DEVELOPMENT OF EMPIRICAL EQUATIONS AND TABLES FOR THE DESIGN OF BRIDGE CANTILEVER DECK SLABS UNDER CHBDC TRUCK LOADING

by

Ivan Micovic
B.Eng., Ryerson University, Toronto, Canada, 2013

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in the program of

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Author's Declaration

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Abstract

This study recommends new simplified equations for the transverse moment and shear force at the base of the cantilever overhang due to applied vertical truck loading. This was made possible through a parametric study that utilized finite-element modelling on bridge deck cantilevers with variable lengths and slab thicknesses. Different end stiffening arrangements were considered that are encountered in practice, and included but were not limited to the PL-1, PL-2 and PL-3 New Jersey-type barriers walls, a PL-2 parapet, and a curb supporting intermittent steel posts carrying a guardrail. The barrier length changed from 3 to 12 m and the cantilever length ranged from 1.0 to 3.75 m. Further to the empirical expressions that had been developed, the study is supported by tables that were developed to readily design the cantilever slab, based on vertical loads due to vertical truck loading, as well as horizontal railing loads against the barrier wall.

Acknowledgements

I wish to express my deep appreciation to my supervisor Dr. Khaled Sennah. It is his devotion, effort, patience, and continuous support that helped make this study a success. It is with great excitement that I look forward to working with Dr. Sennah in the future.

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List of Symbols, Abbreviations and Nomenclature

Symbol or Notation	Definition
a	Depth of concrete equivalent rectangular stress block; distance from clamped edge to free end of a cantilever in previous studies
A	Coefficient obtained from graphical design charts to compute transverse moment intensity, M_y (CHBDC 2014)
A'	Coefficient obtained from graphical design charts to compute transverse moment intensity, M_y (Bakht and Jaeger, 1985)
A_s	Area of reinforcing bars on the flexural tension side of a member
B	Coefficients based on different ratios of S/S_c for values of t_1/t_2 to determine M_y (Mufti et al., 1993)
B'	Coefficient obtained from graphical design charts to compute transverse moment intensity, M_y (Bakht and Jaeger, 1985)
b_v	Effective web width
b_w	Web width
C	Transverse distance of load from supported edge of cantilever slab (CHBDC 2014); lowercase in previous studies
c	Distance from extreme compression fibre to neutral axis of concrete section
CHBDC	Canadian Highway Bridge Design Code
d	Effective depth of section; distance from extreme compression fibre to centroid of tensile force
d_v	Effective shear depth of section
E	Young's modulus; modulus of elasticity
E_c	Modulus of elasticity of concrete
E_{frp}	Modulus of elasticity of fibre-reinforced polymers
E_s	Modulus of elasticity of reinforcing steel
f'_c	Compressive strength of concrete
FEA	Finite Element Analysis
GRG	Generalized Reduced Gradient algorithm
I_B	Moment of inertia of barrier wall
I_S	Moment of inertia of slab

Symbol or Notation	Definition
L_b	Length of barrier
L_c	Length of cantilever deck slab
M_{cr}	Cracking moment
M_x	Longitudinal moment
M_y	Transverse moment
S	Centre-to-centre spacing of longitudinal girders
S_c	Transverse distance from the longitudinal external edge to the supported edge of cantilever slabs (CHBDC 2006) or to centreline of web of exterior girder (CHBDC 2014)
S_p	Transverse distance of the free edge to the supported edge of cantilever slabs (CHBDC 2014)
s	Spacing of shear reinforcement (i.e. stirrups)
t_1	Slab thickness at the free end of the cantilever
t_2	Slab thickness at the root of the cantilever
t_d	Thickness of slab
t_r	Slab thickness ratio, t_2/t_1
V_f	Factored shear force
V_c	Shear capacity of concrete section
V_s	Shear capacity of steel reinforcement
V_{frp}	Shear capacity of fibre reinforcement
x	*X* coordinate of point evaluated on a cantilever slab (CHBDC 2014)
y	*Y* coordinate of a point evaluated on a cantilever slab (CHBDC 2014)
α_1	Ratio of average stress in a rectangular compression block to the specified concrete strength
$ß$	Factor used to account for the shear resistance of cracked concrete
λ	Modification factor for density of concrete
θ	Angle of inclination of the principal diagonal compressive stresses to the longitudinal axis of a member
ρ	The reinforcement ratio of a section
ϕ_c	Resistance factor for concrete
ϕ_s	Resistance factor for steel reinforcing bars

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Chapter One: Introduction

1.1. Objectives and Scope

The scope and objectives of this study are the following:

1. Conduct a parametric study utilizing finite element modeling of various cantilever-barrier configurations subjected only to vertical Canadian Highway Bridge Design Code (CHBDC) truck loading to determine the resulting moment and shear at the clamped edge, and study the effects on deflection. The results are correlated with the equation and table for moment that are available in the 2014 version of the CHBDC.
2. Develop equations to determine the resulting moment and shear, as well as design tables for reinforcing the cantilever deck slab.
3. Develop tables to aid in the design of the cantilever slab. To accomplish this objective, the following loading conditions were considered: the case of a truck impact load onto the barrier wall with combined tensile force and moment, and a procedure for combined bending and shear resulting from vertical live loading. The tables are formulated for both glass fibre-reinforced polymers (GFRP) and black steel reinforcing bars.

The following investigations were also conducted in addition to the parametric study:

1. Cl. 5.7.1.4 of the CHBDC (2014); the extent of the transverse negative moment in the interior panel next to the cantilever overhang was examined. This was performed by modeling a bridge with an additional girder and taking the cantilever length as half the girder spacing.

2. The longitudinal bending moment in the direction of traffic was also examined for the cases of an unstiffened cantilever deck slab and slab stiffened with a New Jersey-type barrier, and this is presented in Chapter 4 of the report.

To accomplish the aforementioned objectives, a literature review of previous research, codes, and standards of practice was conducted, a series of finite element analyses was performed, and a parametric study was also carried out to observe the behaviour of different end-stiffened cantilever slabs subjected to live load that are encountered in practice.

1.2. Arrangement of the Report

Chapter 2 sheds light on previous research conducted with respect to the cantilever deck slab overhang. Chapter 3 describes the Finite Elite Analysis (FEA) procedure that was followed, including the SAP2000 program and Open Application Program Interface (API), which enabled the link between SAP2000 and third-party software in this study. Chapter 4 delves into the parametric study that was conducted on all cantilever-barrier configurations and presents the results. These empirical expressions for the interior location of the slab are utilized to develop design tables for both reinforced concrete and sections reinforced with GFRP bars, and are presented together with the design procedure in Chapter 5. The additional objectives of this study, which included an analysis of transverse negative moment and shear into the adjacent interior span, are presented in Chapter 6 of this report. Chapter 7 summarizes the findings of this research and makes recommendations for future studies. Numerous charts, graphs, and tables were generated as part of this study, and for readability of the report, most of this information was allocated as part of the appendices.

Chapter Two: Literature Review

2.1. A Simplified Method to Deck Slab Overhangs

Extensive research has been conducted to analyze cantilever slabs in simplified form without an appreciable loss in accuracy. Bakht and Holland (1976) extended the solution developed by Sawko and Mills in 1971 to outline an expression for the transverse moment per unit length of unstiffened cantilever slabs:

$$M_y = \frac{PA'}{\pi} \frac{1}{\cosh\left(\frac{A'x}{c-y}\right)} \tag{1}$$

The equation allows for the engineer to determine the transverse negative moment at any reference point *x* and *y* due to a concentrated load *P*. Graphical charts were also presented for the value of *A'* for different load-reference points, of various cantilever slabs of varying thickness having ratios of t_2/t_1 of 1.0, 2.0, and 3.0. Bakht and Jaegar (1990) suggested the hyperbolic function in algebraic form:

$$M_y = \frac{2PB}{\pi} \frac{(c-y)^4}{[(c-y)^2 + (Bx)^2]^2} \tag{2}$$

where *B* is equal to *A'*/2. Neither equation proves advantageous over the other, and expressions valid only when *y* is smaller than *c* (Mufti et al., 1993). Likewise, the moment per unit length is determined for semi-infinite cantilever slabs, valid only in the vicinity of the transverse free edge with reference points along the root of the cantilever, based on the following expression (Bakht and Jaeger, 1985):

$$M_y = \frac{PA'}{\pi}\left[\frac{1}{\cosh\left(\frac{A'x}{c}\right)} + B'e^{-\frac{K\bar{x}}{a}}\right] \tag{3}$$

Bakht and Jaeger (1985) specified that the effect of a concentrated load over a cantilever deck slab becomes negligible beyond a length of approximately 2*a* in the longitudinal direction. This is illustrated in Figure 2-1, where the hatched area 2*a* is treated as the cantilever portion of semi-infinite length, while the central portions that are secluded from either end are treated as cantilever plates of infinite length. In subsequent studies, this region was denoted as $3S_c$ (Bakht and Mufti, 2015), where S_c is the transverse distance from the longitudinal free edge to the supported edge of slabs. The coefficients *B'* and *A'* of Equation 3 are obtained from graphical design charts, for different ratios of t_2 / t_1, based on the location of the reference point *x* or *y* divided by the cantilever length *a*. Unlike Equation 2, the equation is valid for reference points only along the root of the cantilever. *K* is obtained from the following expression (Bakht and Jaeger, 1985):

$$K = \frac{a}{c}\frac{A'B'}{2}\frac{1}{\tan^{-1} e^{-Ax^x/c}} \tag{4}$$

A' and *B'* are obtained from graphical design charts that are based on the ratio of *c*/*a* and the linearly-varying thickness of the deck, but also with the consideration of the ratio of the second moment of area of the slab and edge beam (i.e. I_B/I_S), where I_S can be found from:

$$I_S = \frac{a}{48}(t_2^3 + t_2^2 t_1 + t_2 t_1^2 + t_1^3) = \frac{a}{48}\frac{t_2^4 - t_1^4}{t_2 - t_1} \tag{5}$$

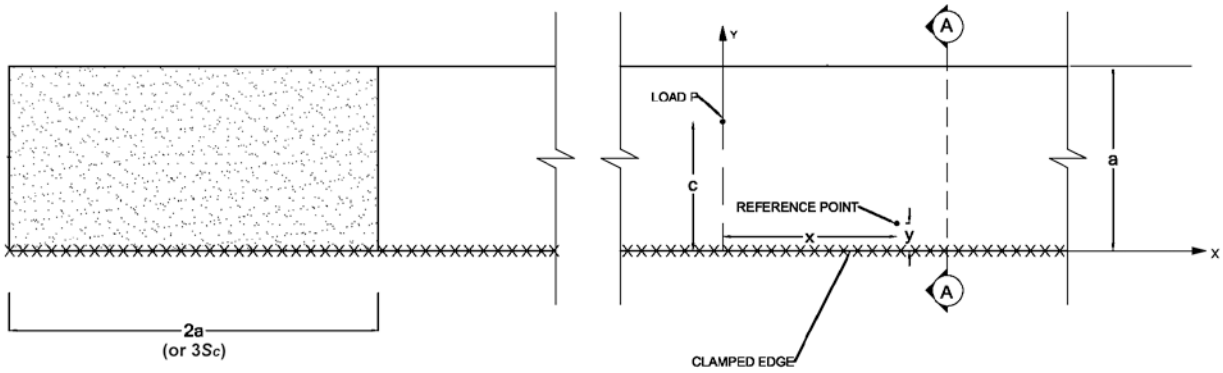


Figure 2-1: Cantilever deck slab reference points (adapted from Bakht and Jaeger, 1985)

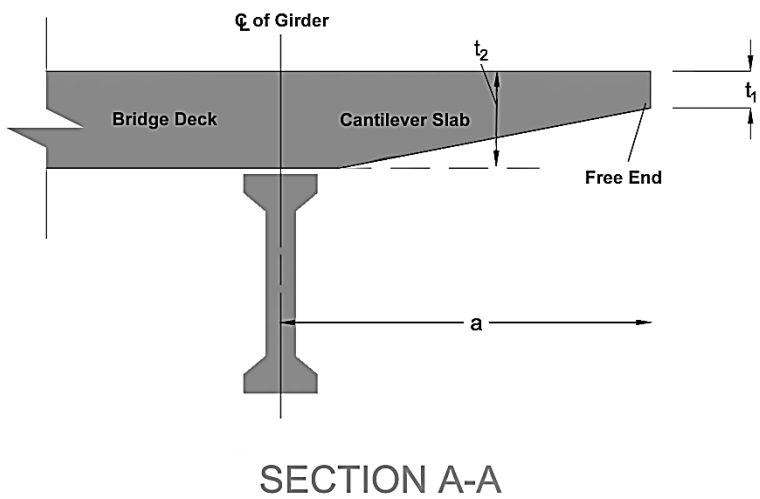


Figure 2-2: Nomenclature for tapered cantilever deck slab

Mufti et al. (1993) presented a simplified method for analyzing moments in the internal deck slab panels of slab-on-girder bridges, propelled by the fact that the solution proposed by Bakht and Holland (1976) provides the moment intensities solely in the deck slab overhangs. No information is provided for the internal panel adjacent to the overhang. Designers would otherwise have to assume that the peak moment intensity at the root of the cantilever varies linearly into the first panel adjacent to the overhang. To this present day, Clause 5.7.1.6.1.2 of the CHBDC (2014) states that,

In the absence of a more refined method of analysis, the transverse moments in the interior panel next to the cantilever overhang may be assumed to vary linearly from the values calculated in accordance with Clause 5.7.1.6.1.1 at the root of the cantilever overhang to zero at the girder next to the exterior girder.

This may lead to an overestimation of the moment in the internal panel and the reinforcement that is required (Mufti et al., 1993). Through their analysis, Mufti et al. (1993) postulated that the following equations provide the transverse moment intensity in considering the internal panel of the bridge:

$$M_y = \frac{2PB}{\pi} \frac{1}{\cosh\left[\frac{2BS_x}{c(S-y)}\right]} \tag{6}$$

and in algebraic form,

$$M_y = \frac{2PB}{\pi} \frac{c^4(S-y)^4}{[c^2(S-y)^2 + S^2(Bx^2)]^2} \tag{7}$$

When $x = 0$, the equations above reduce to the following form for maximum moments:

$$M_y = \frac{2PB}{\pi} \tag{8}$$

Tabulated values of B based on different ratios of S/S_c for various values of t_1/t_2 were also presented. An important aspect discovered was that the distribution of hogging moments from the cantilever slab into the internal panel along y was not just nonlinear, but cannot be linear even if the length of the cantilever slab would be large relative to the length of the internal panel. Mufti et al. (1993) demonstrated this for two slabs, denoted as Slab A and Slab B. Slab B was loaded with half the load of Slab A to create the same moment intensity at the root of the cantilever slab, but its distribution into the internal panel proved quite different, necessitating further analysis.

2.2. Canadian Highway Bridge Design Code Provisions

The research by Bakht and Holland (1976), Dilger et al. (1990), and Mufti et al. (1993) led to the development of ANDECAS (**An**alysis and **De**sign of **Ca**ntilever **S**labs); a program that was compiled in Fortran to determine the transverse negative moments in deck slabs of girder bridges as a result of loading over the overhang, and compute the required reinforcement. ANDECAS4 was subsequently released, handling 4 design trucks, with one being a user-defined truck. These improvements to the existing ANDECAS application were advanced by the research of Xiao (1997), which included addition of a user-defined truck, inclusion of edge-stiffened cantilever slabs, improvements to interpolation methods, and other program enhancements.

The aforementioned research presently serves as the basis of the section on deck slab moments due to loads on the cantilever overhang in the CHBDC (2014). The intensity of the transverse negative moment M_y at the interior location can be determined as stipulated in Cl. 5.7.1.6.1.1:

$$M_y = \frac{2PA}{\pi} \frac{1}{\left[1 + \left[\frac{A \cdot x}{C - y}\right]^2\right]^2} \tag{9}$$

A replaces A' from previous studies, and is obtained from graphical charts, dependent on whether the cantilever slab is edge-stiffened with a cast-in-place barrier or unstiffened. The task of determining M_y at the location of bridge expansion joints, or within a distance of S_p of the transverse free edge, was simplified in the CHBDC (2014) by assuming the design moment in this region as $2M_y$. As an alternative to the equation in Cl. 5.7.1.6.1.1, the maximum transverse negative moment at the root of the cantilever can be determined without calculation from Table 5.10 of the CHBDC (2014).

It is these inferences and conclusions drawn from previous studies, including the assumptions of the CHBDC that necessitated a more rigorous and refined approach that considers the effects of different stiffening arrangements and barrier lengths. The effect of different types of end stiffening arrangements applied onto the slab is important to consider, as it increases the overall flexural rigidity of the section, in turn improving performance and economy by optimizing the amount of reinforcement required. As such, this study is a practical investigation into the different factors that affect the corresponding moment, shear, and deflection of cantilever deck slabs, and examining effects of variables that are presently not considered in the CHBDC.

Chapter Three: Finite Element Analysis

3.1. Finite Element Analysis

Finite Element Analysis (hereafter "FEA") utilizes the optimization variational calculus and numerical analysis to solve large, complex problems. As computing power improved over time and computers were able to handle larger, intricate problems with greater numbers of equilibrium equations could be solved. The principle behind the FEA is the application of a mesh over a larger brick element, and what would otherwise be a more complex structure to analyze. The mesh itself discretizes, or divides the model into smaller elements with interconnecting nodes and a particular number of degrees of freedom. These degrees of freedom would change based on the boundary conditions applied. Generally, a refined mesh will provide detailed results due to the increased number of finite elements, but also requires greater computing power due to the resulting increase in the number of equilibrium equations to be solved. In spite of this, a sensitivity analysis should be performed in order to determine a suitable number of elements. Finite elements are analyzed through the force-displacement matrix, where each element's matrix combines into the global stiffness matrix for analysis, taking the form:

$$[P] = [K][U] \tag{10}$$

$[K]$ is the global stiffness matrix, $[U]$ the nodal displacement vector, and $[P]$ the nodal load vector. Due to its power and accuracy, analysis by finite elements is one of the prescribed methods of analysis in the CHBDC (2014) in accordance with Cl. 5.9.1.

3.2. SAP2000 and API

Developed by Computers and Structures Inc., SAP2000 provides a wide range of capabilities for the practical purposes of structural engineering analysis. It was utilized as part of this study, and in addition to its graphical interface and sophistication, it is able to link to third party applications for user-developed scripts.

The SAP2000 Application Programming Interface (API) enables users to link third-party applications with SAP2000, making it possible to exchange information between the two programs for the purposes of modeling and analyzing design results. For the purpose of this study, it enabled the link between Microsoft Excel and SAP2000, using the Visual Basic for Applications (VBA) programming language. Key elements of code utilized in this report are provided in **Appendix H**, and the code can be repeated for multiple cantilever-barrier configurations to simplify what would have otherwise been a rigorous manual analysis.

3.3. Material Modeling

The deck slab was considered to be made of reinforced concrete, and elastic material properties were used throughout the study. For clarity, materials and area sections were assigned unique names and properties. The compressive strength (f'_c) was considered as 30 MPa for all concrete components with a specific weight of 24 kN/m^3. The modulus of elasticity of concrete (E_c) was defined as $4500\sqrt{f_c'}$ and the Poissons's ratio as 0.2.

3.4. Geometric Modeling and Aspect Ratio of Elements

A three-dimensional finite element model with 6 degrees of freedom at each node was generated to simulate each deck slab cantilever. Thin shell elements were selected to model the cast-in-place barriers and deck, with the elements modeled at mid-thickness (centreline) of the deck slab and barrier wall as shown in Figure 3-2. By utilizing shell elements, the model was simplified to its planar form, and reduced the number of equilibrium equations to be solved.

As the centreline approach was utilized for modeling, this is seen as a conservative approach to obtaining results; the moment at the surface would progressively become larger due to the dispersion angle of the load until it eventually reaches the centroid of the section. Given that the deck slab also tapers towards the free end, the thickness was discretized into 5 individual strips to accurately simulate the behaviour of a variable-thickness slab, and this principle is illustrated in Figure 3-3. The load was applied 300 mm from the curb, and with the actual 600 × 250 mm footprint utilized (87.5 kN or 0.5833 MPa); this meant that the edge of the footprint would be adjacent to the curb. Due to the varying thickness at the base of each stiffening arrangement, the location of the applied live load and its distance from the curb would change in accordance with Table 3-1, read in conjunction with Figure 3-1. It should be noted that this illustration is based solely on a single axle load; the principle is repeated for the two axles or tandem, and the load remains at the same distance from the curb.

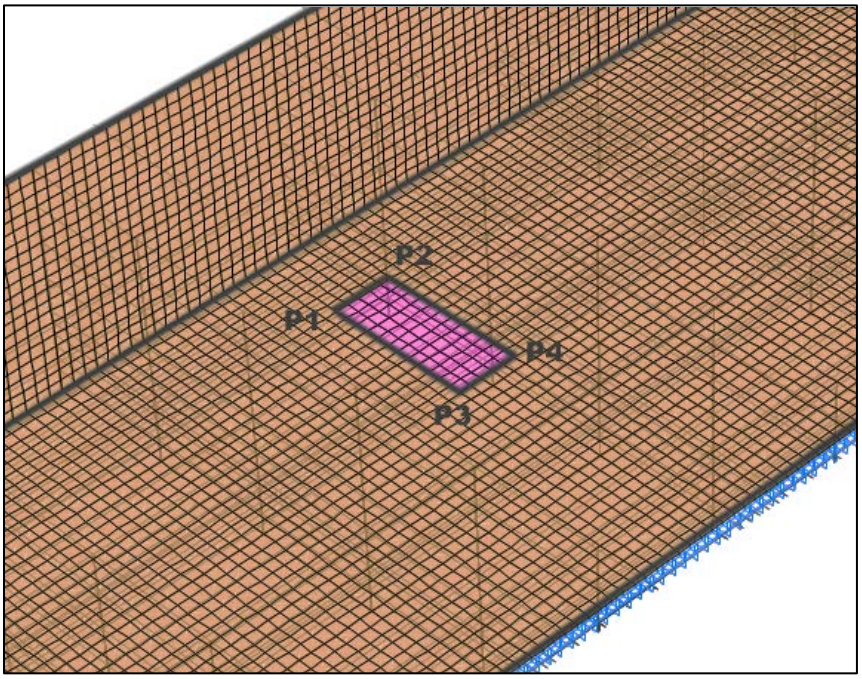


Figure 3-1: Location of applied live load on FEA model

Table 3-1: Locations of applied truck loading on FEA model

Coordinates (units in mm)	PL-3 Barrier	PL-2 Barrier	PL-1 Barrier	PL-2 Parapet	Concrete Curb	Unstiffened Edge
P1	(5900, -350)	(5900, -350)	(5900, -350)	(5900, -100)	(5900, -200)	(5900, -200)
P2	(6150, -350)	(6150, -350)	(6150, -350)	(6150, -100)	(6150, -200)	(6150, -200)
P3	(5900, -950)	(5900, -950)	(5900, -950)	(5900, -700)	(5900, -800)	(5900, -800)
P4	(6150, -950)	(6150, -950)	(6150, -950)	(6150, -700)	(6150, -800)	(6150, -800)

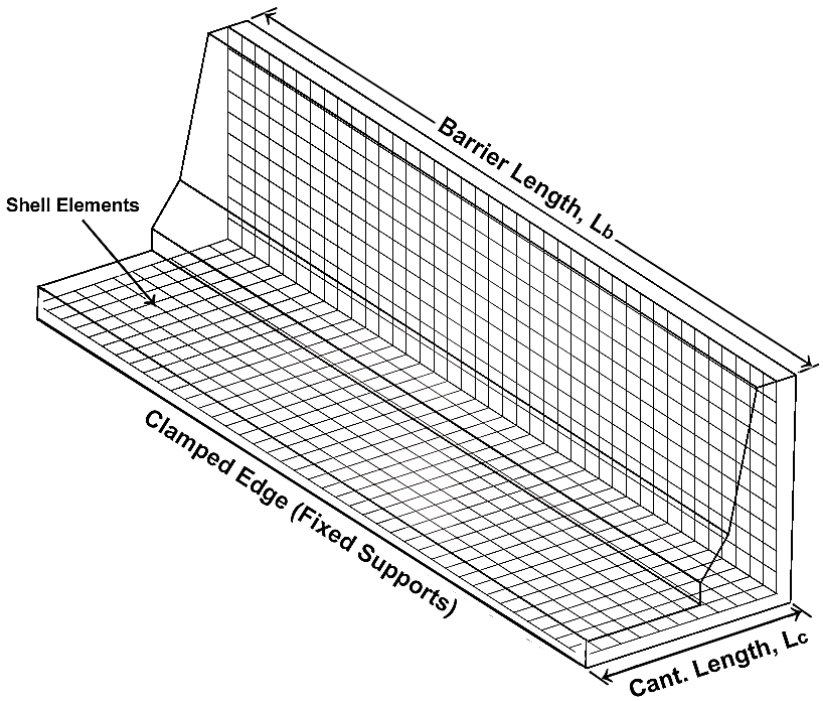


Figure 3-2: Centreline approach utilized for modeling cantilever slabs

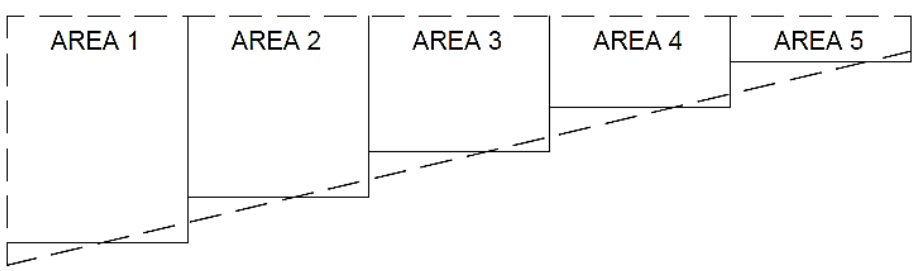


Figure 3-3: Discretized areas used for modeling cantilever slabs

The thin shell elements were each refined at 50 × 50 mm and were kept at an aspect ratio of 1 for all deck slab elements and barrier wall shell elements, with a maximum of 1.1 appearing in some cases at the barrier wall interface with the cantilever slab. In accordance with the software theory manual (CSI), the refined mesh allowed for a detailed observation of the induced moment, shear (derived from the reactions), and deflection, thus preserving the accuracy of the data.

Chapter Four: Parametric Study

A parametric study was conducted on various single-span cantilever-barrier configurations to carry out the following objectives:

1. Study and present the influence of major parameters that affect the transverse moment, shear, and resulting deflection.
2. Establish a comprehensive database that contains various cantilever-barrier arrangements encountered in practice.
3. Develop empirical equations that may be readily used to design the bridge cantilever deck slab, which consider parameters excluded by the CHBDC (2014).

The CHBDC (2014) CL-625 design truck was applied to each model and the resulting empirical equations contain the maximum of the largest, single axle of the truck (175 kN) or the effect of two axles (140 kN each). Similar to the current provisions of the CHBDC (2014), upon determining the results, the designer may apply the appropriate load factor from Chapter 3 of the CHBDC (2014) and the corresponding dynamic load allowance stipulated in Table 4-3.

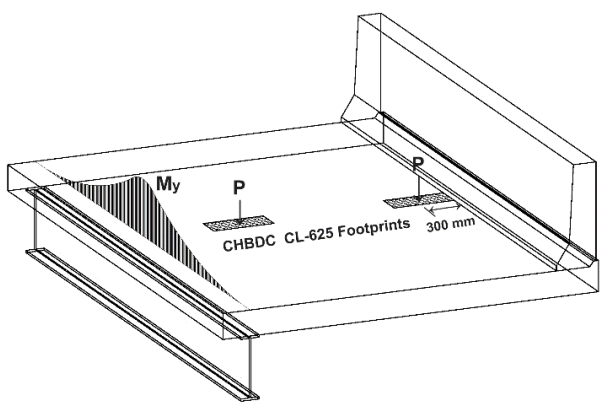


Figure 4-1: Actual footprints utilized with respect to bridge components (theoretical slab shown)

4.1. Cantilever-Barrier Configurations

A total of 4,284 different SAP2000 models were analyzed to study the transverse moment, shear, and deflection induced in the bridge cantilever deck slab by the CHBDC truck loading. The following parameters were considered:

1. The type of edge-stiffening applied: Six (6) different scenarios most commonly occurring in practice were considered, which included edge-stiffening with PL-1, PL-2, and PL-3 barriers (now denoted as "TL" or *Test Level* in lieu of "PL" or *Performance Level* in the 2014 version of the CHBDC), PL-2 parapet, a cast-in-place concrete curb, and an unstiffened edge, representing the case of intermittent steel posts supporting a guardrail.
2. The slab thickness and thickness ratio: Five (5) base slab thicknesses of 200, 225, 250, 300, and 350 mm were considered, including four (4) different thickness ratios for the first 4 thicknesses: t_2/t_1 of 1, 1.2, 1.5, and 2.
3. The length of the cantilever deck slab in the transverse direction: The lengths studied were 0.5, 1, 1.5, 2, 2.5, 3, and 3.75 m. Although the length of 0.5 m is stipulated in this study, its results are excluded from the development of the empirical equations due to its impracticality. As the actual footprint of the design truck was applied, its load on the slab was insufficient in producing meaningful results.
4. The longitudinal slab and barrier length. These values changed from 3, 4.5, 6, 8, 10, and 12 m. It was found that increasing the barrier length beyond a distance of 12 m was asymptotic, and held minimal effect on the transverse moment and shear.

Based on these parameters, a unit length was taken at the maximum location of the clamped edge to determine the transverse moment and shear as well as at the free end to determine the deflection. The change in longitudinal moment, M_x, was also studied, with a unit length taken at

the maximum location near the wheel load, where a more significant sagging moment was observed. This is consistent with the observations made by Bakht and Jaeger (1985), where maximum longitudinal moment is not always at the location of the wheel load. Graphs showing the results of the parametric study are illustrated through **Appendix B** and are compared to baseline results from the CHBDC (2014). For cantilevers stiffened with a New Jersey-shaped barrier, results are compared to Table 5.15 of the 2014 version of the CHBDC, whereas other configurations are compared to Table 5.10 of the previous 2006 version of the CHBDC, since it considers other cast-in-place concrete barrier configurations. Due to the exclusion of maximum results for a cantilever length of 3.75 m, those baseline readings are taken from the 2006 version of the CHBDC for illustration, where it is available. **Appendix A**, presenting the database of results, also compares data to the equation in Cl. 5.7.1.3 of the CHBDC (2014).

4.2. Empirical Equations for the Transverse Moment and Shear

The data gave way to the development of empirical equations that may be readily used based on different cantilever-barrier configurations. The coefficients to the equations were determined statistically by the method of least squares; first by means of evolutionary algorithm (a generic population-based metaheuristic optimization algorithm), and subsequently refined through Generalized Reduced Gradient (GRG) nonlinear regression. Coefficients were further adjusted and their number of digits truncated for clarity and simplified use by designers without a loss in accuracy. A constraint was applied such that the resulting moment and shear were not underestimated greater than 5%. Table 4-1 presents the developed empirical equations for the moment and shear at the interior location, while Figures 4-2 through 4-4 convey the validity of the developed equations compared to the results obtained by means of FEA.

Table 4-1: Empirical equations for transverse negative moment and shear due to live load

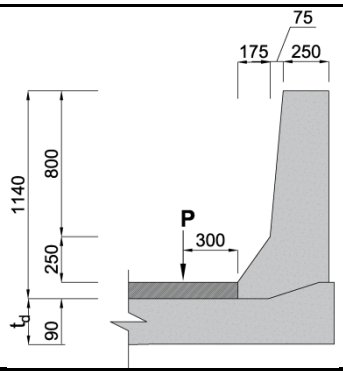
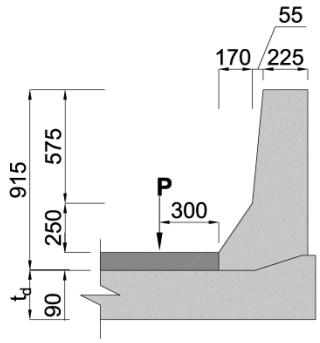
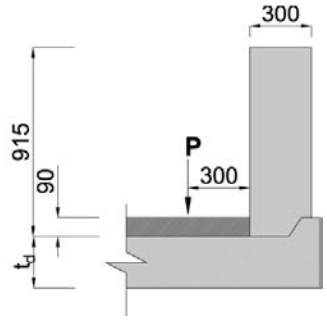
			PL-3 Barrier	PL-2 Barrier	PL-2 Parapet
					
Transverse Moment (kN·m/m)	$L_b \leq 6$	$L_c \leq 2.5$	$42L_c^{1.65}L_b^{-1.16}t_1^{-0.72}t_2^{-0.13} + 7$	$33L_c^{2.1}L_b^{-0.8}t_1^{-0.02}t_2^{0.23} + 15$	$55L_c^{2.1}L_b^{-0.93}t_1^{-0.04}t_2^{0.35} + 18$
		$L_c > 2.5$	$38L_c^{1.95}L_b^{-0.81}t_1^{-0.034}t_2^{0.1} + 2.5$	$37.7L_c^{1.95}L_b^{-0.8}t_1^{-0.03}t_2^{0.11} + 4$	$51L_c^{1.85}L_b^{-0.91}t_1^{-0.03}t_2^{0.11} + 17$
	$L_b > 6$	$L_c \leq 2.5$	$46L_c^{0.88}L_b^{-0.29}t_1^{-0.14}t_2^{0.3} - 3.5$	$47.8L_c^{0.8}L_b^{-0.24}t_1^{-0.1}t_2^{0.26} - 5$	$41L_c^{1.6}L_b^{-0.5}t_1^{-0.24}t_2^{0.57} + 15$
		$L_c > 2.5$	$53L_c^{1.23}L_b^{-0.34}t_1^{-0.07}t_2^{0.16} - 26$	$53L_c^{1.2}L_b^{-0.31}t_1^{-0.07}t_2^{0.17} - 26$	$84L_c^{0.96}L_b^{-0.31}t_1^{-0.06}t_2^{-0.16} - 37$
Transverse Shear (kN/m)	$L_b \leq 6$	$L_c \leq 2$	$-378L_c^{-0.12}L_b^{-0.04}t_1^{-0.01}t_2^{0.03} - 277$	$387L_c^{-0.12}L_b^{-0.03}t_1^{-0.01}t_2^{0.03} - 288$	$832L_c^{-0.02}L_b^{-0.03}t_1^{-0.01}t_2^{0.02} - 725$
		$L_c > 2$	$104L_c^{0.74}L_b^{-0.36}t_1^{-0.33}t_2^{0..074} - 43$	$17340L_c^{0.005}L_b^{-0.003}t_1^{-0.0002}t_2^{0.0005} - 17250$	$107857L_c^{0.0002}L_b^{-0.0004}t_1^{-0.00003}t_2^{0.00008} - 107703$
	$L_b > 6$	$L_c \leq 2$	$255L_c^{-0.24}L_b^{-0.0096}t_1^{-0.02}t_2^{0.06} - 169$	$290L_c^{-0.2}L_b^{-0.007}t_1^{-0.015}t_2^{0.05} - 205$	$40L_c^{-31}L_b^{-0.05}t_1^{-0.2}t_2^{1.3} + 46$
		$L_c > 2$	$31688L_c^{0.0014}L_b^{-0.00034}t_1^{-0.00013}t_2^{0.00033} - 31636$	$32296L_c^{0.0015}L_b^{-0.0002}t_1^{-0.0001}t_2^{0.0004} - 32250$	$32283L_c^{-0.00001}L_b^{-0.0003}t_1^{-0.0001}t_2^{-0.0001} - 32175$

Table 4-1: Empirical equations for transverse negative moment and shear due to live load (cont'd)

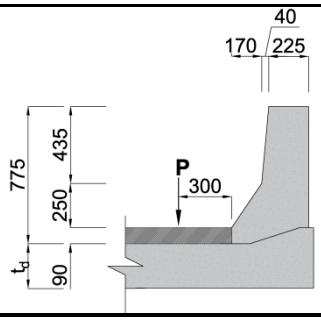
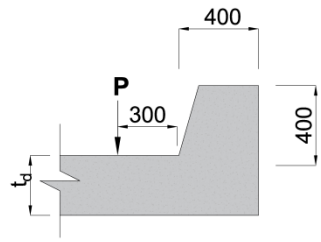
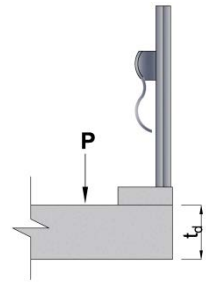
			PL-1 Barrier	Curb	Unstiffened Edge
					
Transverse Moment (kN·m/m)	$L_b \leq 6$	$L_c \leq 2.5$	$44L_c^{1.5}L_b^{-0.6}t_1^{-0.1}t_2^{0.22} + 7$	$46L_c^{1.72}L_b^{-0.67}t_1^{-0.05}t_2^{0.24} + 14$	$24.4L_c^{2.07}L_b^{-0.74}t_1^{-0.28}t_2^{0.28} + 25$
		$L_c > 2.5$	$38L_c^{1.93}L_b^{-0.79}t_1^{-0.03}t_2^{0.1} + 5$	$41.7L_c^{1.9}L_b^{-0.83}t_1^{-0.034}t_2^{0.13} + 20$	$30L_c^{2}L_b^{-0.8}t_1^{-0.14}t_2^{0.14} + 24$
	$L_b > 6$	$L_c \leq 2.5$	$48.6L_c^{0.7}L_b^{-0.18}t_1^{-0.09}t_2^{0.22} - 9$	$46.3L_c^{1.1}L_b^{-0.28}t_1^{-0.12}t_2^{0.38} + 5$	$25L_cL_b^{-0.09}t_1^{-0.3}t_2^{0.3} + 10$
		$L_c > 2.5$	$54.6L_c^{1.17}L_b^{-0.29}t_1^{-0.07}t_2^{0.17} - 28$	$55.4L_c^{1.1}L_b^{-0.25}t_1^{-0.07}t_2^{0.18} - 19$	$63L_c^{0.9}L_b^{-0.17}t_1^{-0.14}t_2^{0.13} - 37$
Transverse Shear (kN/m)	$L_b \leq 6$	$L_c \leq 2$	$456L_c^{-0.1}L_b^{-0.02}t_1^{-0.009}t_2^{0.03} - 357$	$91L_c^{-0.7}L_b^{-0.13}t_1^{-0.06}t_2^{0.26} + 11$	$64L_c^{-0.8}L_b^{-0.08}t_1^{-0.2}t_2^{0.2} + 18$
		$L_c > 2$	$23715L_c^{0.003}L_b^{-0.0019}t_1^{-0.0001}$ $t_2^{0.0004} - 23627$	$1884L_c^{0.01}L_b^{-0.02}t_1^{0.015}t_2^{0.006} - 1696$	$2332L_c^{0.017}L_b^{-0.013}t_1^{0.0026}t_2^{-0.0026}$ $- 2222$
	$L_b > 6$	$L_c \leq 2$	$389L_c^{-0.14}L_b^{-0.004}t_1^{-0.01}$ $t_2^{0.036} - 304$	$87L_c^{-0.73}L_b^{-0.02}t_1^{-0.05}t_2^{0.26}$	$72L_c^{-0.65}L_b^{-0.0006}t_1^{-0.17}t_2^{0.17}$
		$L_c > 2$	$32520L_c^{0.002}L_b^{-0.0002}t_1^{-0.0001}$ $t_2^{0.0003} - 32478$	$31688L_c^{0.001}L_b^{-0.0002}t_1^{-0.0001}$ $t_2^{0.0004} - 31610$	$32112L_c^{0.001}L_b^{-0.0001}t_1^{-0.0004}$ $t_2^{0.0004} - 32050$

Table 4-2: Empirical equations for longitudinal moment due to live load

Longitudinal Moment (kN·m/m)	
$L_c \leq 2.5$	$10 L_c^{0.92} L_b^{0.03} t_1^{0.23} t_2^{-0.24}$
$L_c > 2.5$	$L_c^{0.92} L_b^{0.4} t_1^{0.8} t_2^{-0.9} + 17$

Table 4-3: Dynamic Load Allowances for governing loads

Dynamic Load Allowance, I_D Cl. 3.8.4.5	Transverse Moment due to Live Load Single Axle 1 + 0.4	Transverse Moment due to Live Load Tandem 1 + 0.3	Transverse Shear due to Live Load Single Axle 1 + 0.4	Transverse Shear due to Live Load Tandem 1 + 0.3
Unstiffened Edge Concrete Curb PL-1 Barrier PL-2 Barrier PL-3 Barrier	$L_c < 1.5$	$L_c \geq 1.5$	$L_c < 2$	$L_c \geq 2$
PL-2 Parapet			$L_c < 3$	$L_c \geq 3$

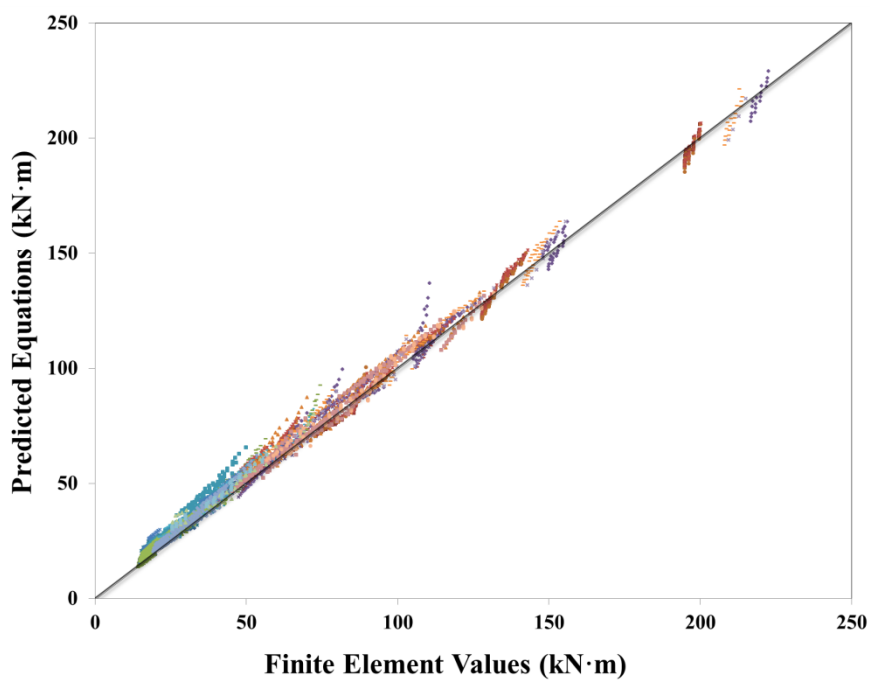


Figure 4-2: Demonstration of accuracy of developed equations: Transverse negative moment

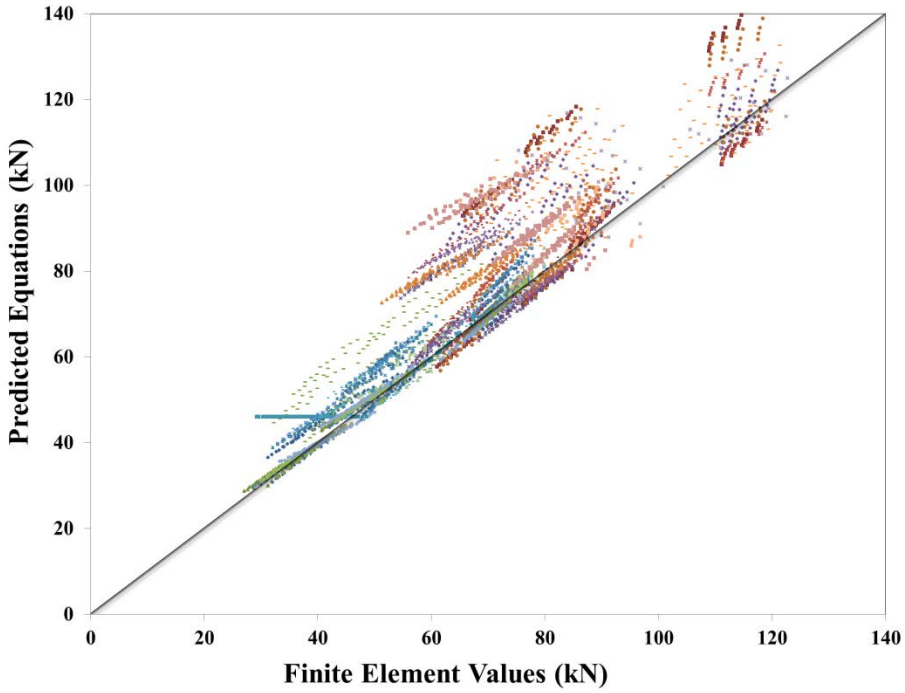


Figure 4-3: Demonstration of accuracy of developed equations: Transverse shear

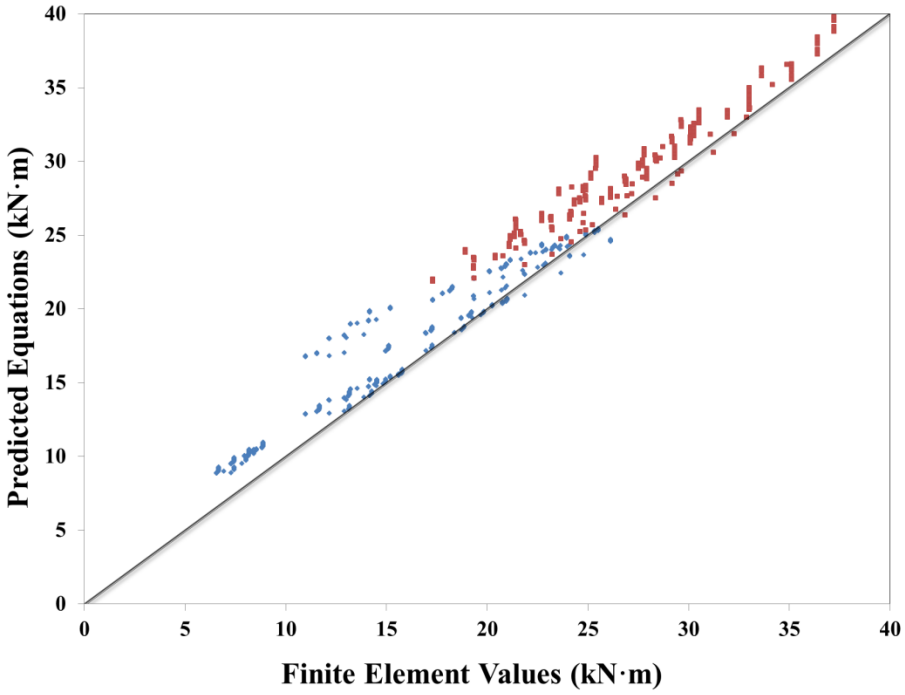


Figure 4-4: Demonstration of accuracy of developed equations: Longitudinal moment

4.3. Analysis of Transverse Moment

4.3.1. Effect of Stiffening Arrangement

The designated stiffening arrangement greatly affected the results of the transverse negative moment. As was postulated, the results between different New Jersey-shaped barriers did not change noticeably due to their similar stiffness (e.g. ~3%), which is why they are grouped together in the CHBDC (2014). An example of the effect of stiffening configuration is illustrated in Table 4-4, where all other parameters are kept constant.

Table 4-4: Effect of end stiffening on transverse negative moment

Stiffening Arrangement	Unstiffened Edge*	Concrete Curb	PL-2 Parapet	PL-1 Barrier	PL-2 Barrier	PL-3 Barrier
Moment	40.2 kN·m	-18%	-28%	-35%	-38%	-41%

*Average transverse negative moment for L_b = 12 m, L_c = 1.5 m across all slab thicknesses

4.3.2. Effect of Barrier Length

The barrier length held a great influence on the variation of transverse negative moment. Through each figure, this result may be readily observed and appreciated. As the barrier length increases, moments that were very large at the clamped edge decrease, and this rate of decrease tends to converge at larger barrier lengths, due to the increased stiffness and load dispersion area.

4.3.3. Effect of Cantilever Length

The general increase of the cantilever overhang led to the increase in the transverse negative moment. This is an anticipated result due to the increased lever arm, as well as the presence of additional wheel loads with cantilever lengths long enough to accommodate them (e.g. a cantilever length of 2.5 m accommodates a full tandem of 140 kN axles).

4.3.4. Effect of Slab Thickness

Increasing the slab thickness and, evidently, the thickness ratio, attributes to the increase in negative moment. It should also be noted that the resisting moment of the section will also increase and in most cases with longer cantilevers, the demand for reinforcement will decrease.

Table 4-5: Effect of slab thickness on transverse negative moment

Thickness Ratio	$t_r = 1$	$t_r = 1.2$	$t_r = 1.5$	$t_r = 2$
Moment	21.2 kN·m*	+18%	+22%	+39%

*Average transverse negative moment for L_b = 12 m, L_c = 1.5 m, t_1 = 225 mm for a PL-2 barrier configuration

4.4. Analysis of Longitudinal Moment

4.4.1. Effect of Stiffening Configuration

When stiffened with a New Jersey-shaped barrier (PL-2 barrier applied), an average moment decrease of 50% was observed across all analyzed models, and is also illustrated in **Appendix B**.

4.4.2. Effect of Barrier Length

Given that longitudinal moments were analyzed, with sagging perpendicular to the clamped edge, the barrier length held little effect on the change in longitudinal moment, as was anticipated.

4.4.3. Effect of Cantilever Length

The overall cantilever length held the most significant effect on the longitudinal moment. This can be attributed to greater lever arms present, in addition to the presence of additional wheel loads with longer cantilevers.

4.4.4. Effect of Slab Thickness

Increasing the slab thickness and, more importantly, the thickness ratio contributes to increasing the longitudinal moment. As with the transverse moment, this is due to the increase of the overall section, but will also contribute to increasing the resistance to various applied factored moment and shear forces.

4.5. Analysis of Transverse Shear

4.5.1. Effect of Stiffening Configuration

Results did not change drastically between different New Jersey-shaped barriers (e.g. 2% between certain PL3 and PL2 models). However, other arrangements portrayed quite well the effect edge stiffening plays. The effect of end-stiffening arrangements on shear forces is illustrated in Table 4-6.

Table 4-6: Effect of end stiffening on transverse vertical shear

Stiffening Arrangement	Unstiffened Edge*	Concrete Curb	PL-2 Parapet	PL-1 Barrier	PL-2 Barrier	PL-3 Barrier
Shear	57.2 kN	-17%	-35%	-13%	-16%	-18%

*Average transverse vertical shear for L_b = 12 m, L_c = 1.5 m across all slab thickness

4.5.2. Effect of Barrier Length

It was found that increasing the barrier length beyond 6 m had very little effect on the shear. This can be attributed to the flow of shear force, and the greater area available for the forces to disperse throughout the slab.

4.5.3. Effect of Cantilever Length

Generally, increasing the cantilever length would decrease the total induced shear force at the clamped edge due to the increased area available for dispersion; however, this was not the case with all cantilevers, as additional wheel loads may be applied to those with longer lengths to accommodate them.

4.5.4. Effect of Slab Thickness

The effect of slab thickness was similar to those observed for induced moments. Increasing the slab thickness or thickness ratio attributes to the increase in shear, but also increases the shear capacity of the concrete section. As with previous sections, Table 4-7 outlines the average increase in shear with each slab thickness ratio.

Table 4-7: Effect of slab thickness on transverse vertical shear

Thickness Ratio	$t_r = 1$	$t_r = 1.2$	$t_r = 1.5$	$t_r = 2$
Shear	36.8 kN *	+7%	+15%	+25%

*Average transverse vertical shear for L_b = 12 m, L_c = 1.5 m, t_1 = 225 mm for a PL-2 barrier configuration

4.6. Analysis of Deflection

4.6.1. Effect of Stiffening Configuration

Due to the increase in stiffness and rigidity, the same effect can readily be observed in analyzing the deflection of different cantilever barrier configurations. Having a PL-2 parapet constructed will decrease induced deflections on an unstiffened edge configuration by 36%, and changing this to a PL-2 (New Jersey) barrier will further decrease deflections by approximately 38%.

4.6.2. Effect of Barrier Length

The increase in stiffness provided by the barrier length resulted in decreasing deflection. This is illustrated in **Appendix B**.

4.6.3. Effect of Cantilever Length

Increasing the cantilever length has the greatest effect in increasing the cantilever deflection. Larger cantilevers also accommodate additional axles, which further increase the cantilever deflection.

4.6.4. Effect of Slab Thickness

The deflection induced by live loads decreases with increased slab thicknesses and thickness ratios due to the increase in section and provided rigidity.

4.7. Applicability to Other Design Codes

The developed equations can be modified for other standards accordingly, such as the AASHTO LRFD (2012) methods adhered to in the United States. For scenarios where two 70 kN wheel loads were found to govern over a single 87.5 kN load, this is representative of the design tandem utilized in AASHTO. For instance, the HL-93 design tandem consists of two axles weighing 25 kips (110 kN) at the same spacing as the CL-625 truck's 140 kN axles; 4 ft. or 1.2 m. Results are to be multiplied by a ratio of 110 kN/140 kN or a factor of 0.8. Once converted, the appropriate load factors and dynamic load allowance, denoted I_M in AASHTO LRFD (2012), are then to be applied. Although there is a slight variation in the size of the truck load footprint, a sensitivity analysis conducted separately from this study found that the conversion may be performed without an appreciable loss of accuracy. Likewise, the same approach can be taken to convert the results for other trucks, such as the CL-625-ONT truck used for designing and evaluating bridges in Ontario (CHBDC 2014).

Chapter Five: Development of Design Tables

Design tables were developed with the required areas of reinforcing steel calculated in accordance with Chapter 8 of the 2014 version of the CHBDC and for GFRP bars with reference to Chapter 16 of the CHBDC (2014) and ISIS Design Manual No. 3 (2007). The following steps outline the design procedure that was followed to develop the tables presented in the appendices.

5.1. Reinforcing Steel Bars

The internal forces of the reinforced concrete section are taken through the concrete's compression and the tension of the steel reinforcing bars, denoted as *C* and *T*, respectively. The two forces are described by the following equations:

$$C = \alpha\varphi_c f_c' ab$$
$$T = \varphi_s A_s f_y \tag{11}$$

With the two components in equilibrium, the resisting moment is calculated by,

$$M_r = \varphi_s A_s f_y \times 0.9d \tag{12}$$

$$M_r = \varphi_s A_s f_y (d - a/2) \tag{13}$$

It was found that utilizing Equation 13 in place of Equation 12 contributes to increasing the resisting moment from only 3 to 9% in this study. Through statistical optimization (GRG nonlinear regression), the design tables calculate the required A_s and also check the section against 1.2 × the cracking moment in accordance with Cl. 8.8.4.3 of the CHBDC (2014) as shown in Equation 14.

$$M_{cr} = 1.2 \times 0.5\sqrt{f_c'}\frac{bh^2}{6} \tag{14}$$

Likewise, the shear capacity of the concrete section was checked per Cl. 8.9.3.4 (CHBDC 2014):

$$V_c = 2.5\varphi_c\lambda\beta f_{cr}b_w d_v \tag{15}$$

The value for f_{cr} was taken as $0.4\sqrt{f_c'}$, and shall not be taken greater than 3.2 MPa. In most cases, the cantilever slab's section is sufficient in handling shear, but may require an amount of shear reinforcing steel, A_v, back-calculated from the following equation based on the simplified approach in Cl. 8.9.3.5 (CHBDC 2014):

$$V_s = \frac{\varphi_s A_v f_y d_v cot\theta}{s} \tag{16}$$

The above equations and variables formed the constraints in the analysis: M_r had to be greater than the total factored moment M_f, and was checked against the cracking moment. Additional shear reinforcement was provided should the reinforced concrete's shear capacity, V_c, be insufficient to handle the factored shear V_f. In addition to the required area of reinforcement, the design tables in **Appendices D – G** prescribe the type of reinforcing bars and spacing to be used.

A similar approach was followed for horizontal railing loads, with an additional check to verify the safety of the design subjected to combined bending and axial force (CHBDC 2014):

$$\frac{M_f}{M_r} + \frac{T_f}{T_r} \leq 1.0 \tag{17}$$

The induced shear and moment were determined from empirical equations developed as part of the present study, whereas the axial tensile force and moment due to railing loads were computed from empirical equations developed by Azimi *et al.* (2014). These equations were deemed acceptable for the design tables developed as part of the study due to the similar variables being taken into account:

- Slab thickness up to 350 mm
- Barrier length up to 12 m
- Cantilever length up to 2 m

Three stiffening arrangements were considered: end stiffening with a PL-3 barrier, PL-2 barrier, and a PL-2 parapet. Empirical expressions for the axial tension and bending moment were also developed by Khederzadeh and Sennah (2014); however, both approaches were deemed acceptable for use in the development of design tables as the following criteria are fulfilled:

- Both studies presented an agreement between the developed expressions compared to their FEA values;
- The two studies consider similar variables when compared to the present study, and can be adequately used to design the deck with loads applied at the inside and end portions onto the barrier.

As the developed design tables, subject to future refinement, are solely due to live load, dead load, and superimposed dead load, it is recommended that the minimum amount of shear reinforcement be provided for the concrete section's design and placement of longitudinal or transverse reinforcement, regardless of the results obtained.

5.2. GFRP Bars

In pursuit of steel-free bridges, fibre-reinforced polymers are becoming more of a viable alternative to black steel reinforcing bars, which are prone to corrosion from brought upon by deicing salts and other aggressive agents during harsh winter months. In addition to design tables using reinforcing steel for moment and shear resistance due to vertical loads, the present study complements these tables with recommendations for GFRP. The reinforcement properties utilized were f_{frpu} = 1188 MPa and E_{frp} = 64,000 GPa. Similarly, the design procedure followed is based on guidelines within the CHBDC (Chapter 16 for fibre-reinforced structures), but in conjunction with ISIS (Intelligent Sensing for Innovative Structures) Manual No. 3 (2007), which provides leading edge standards in utilizing fibre reinforcement.

In designing with fibre-reinforced polymers, a clear cover of 35 ± 10 mm is used (CHBDC 2014), as opposed to the 70 mm prescribed for reinforcing steel, which as discussed, is to be protected against the ingress of chlorides. In accordance with Equation 6.19 of ISIS Manual No. 3 (2007) and Chapter 16 of the CHBDC (2014), the resisting moment shall be 1.5 times that of the cracking moment, as opposed to 1.2 in **Equation 14**, for reinforced concrete components. Cl. 16.8.2.2 of the CHBDC (2014) stipulates that this requirement may be waived such that M_r is 50% greater than the factored moment, M_f.

Following Chapters 6 and 10 of ISIS Manual No. 3 (2007), the factored moment and shear resistance are calculated in the following manner:

$$M_r = A_{frp}\varphi_{frp}f_{frp}\left(d - \frac{\beta c}{2}\right) \tag{18}$$

$$V_c = \left(\frac{260}{1000 + d}\right)\lambda\varphi_c\sqrt{f_c'}b_w d\sqrt{\frac{E_{frp}}{E_s}} \tag{19}$$

The desired mode of failure in designing a GFRP-reinforced section would be in compression, with concrete crushing while the GFRP remains within the elastic limit, and strains not exceeding ultimate values. Conversely, should the GFRP rupture prior to the concrete reaching its ultimate compressive strain, the mode of failure would be sudden.

Therefore, the development of the GFRP design tables was based on the following constraints:

- ensuring that the reinforcement ratio is greater than the balanced reinforcement ratio;
- check for combined bending and tensile force where applicable; and
- sufficient moment, shear, and axial force resistance.

For this reason, the developed design tables involve an iteration process within the equation for f_{frp} (ISIS 2007) to determine a minimized value of A_{frp} as part of the reinforcement ratio that would satisfy the aforementioned constraints:

$$f_{frp} = 0.5E_{frp}\varepsilon_{cu}\left[\left(1 + \frac{4\alpha_1\beta_1\varphi_c f_c'}{\rho_{frp}\varphi_{frp}E_{frp}\varepsilon_{cu}}\right)^{0.5} - 1\right] \tag{20}$$

$$\rho_{frp} = A_{frp}/bd \tag{21}$$

Chapter Six: Additional Investigations

6.1. Extent of Transverse Negative Moment and Shear

To observe the extent of the transverse negative moment in the deck slab adjacent to the exterior girder, an additional span was modeled in accordance with Cl. 5.7.1.4 of the CHBDC. Through VBA and SAP2000 API, both the moment per unit length as well as shear were studied per unit length throughout the structure. The cantilever was taken as half of the slab width, or 0.5*S*, and the results aid the designer in estimating the curtailment of the negative moment reinforcement within the internal span adjacent to the exterior girder. The dissipation of moment to zero, both for the cases of stiffened and unstiffened edges are presented in Table 6-1, proves that the extent of transverse negative moment into the internal span plays a bigger role when designing longer cantilever deck slabs.

Table 6-1: Dissipation of transverse negative moment to zero in internal span

Cantilever Length (m)	Stiffened Edge*	Unstiffened Edge
0.5	10%	20%
1.0	40%	40%
1.5	20%	20%
2.0 – 3.0	*throughout***	*throughout*

*Edge stiffened with New Jersey-type barrier (PL-2)
**See Appendix C for distribution

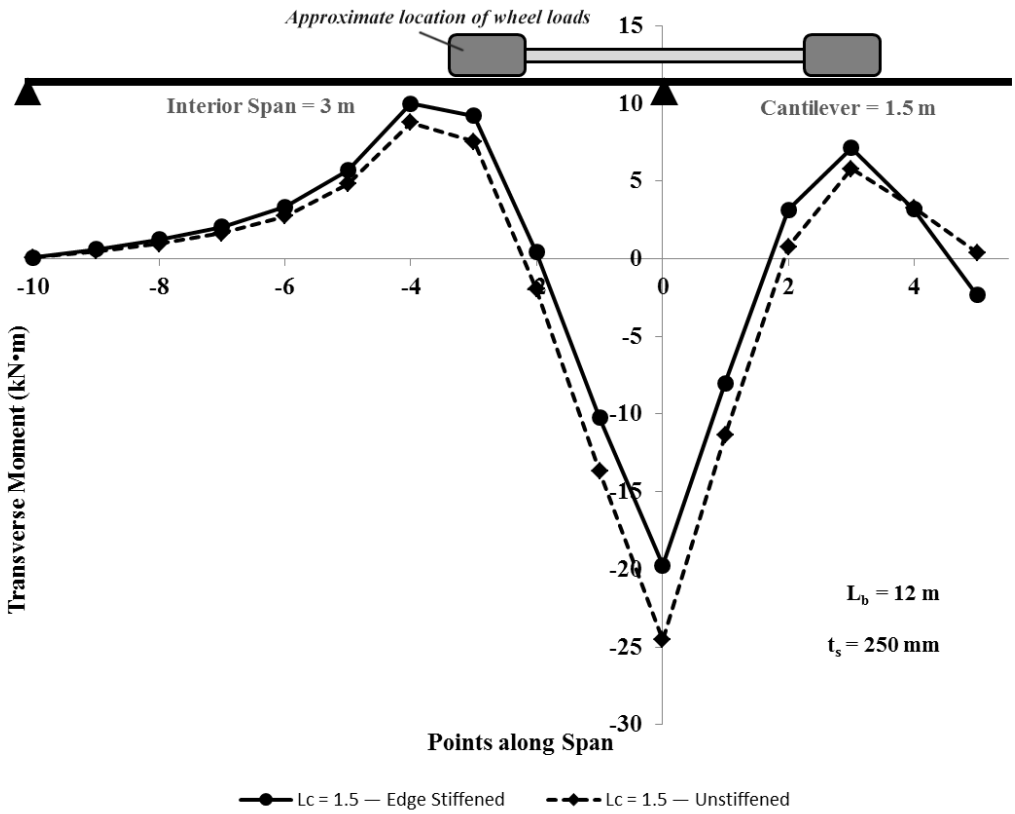


Figure 6-1: Concept for extent of transverse negative moment

All structures were modeled to have L_b of 12 m and were analyzed using cantilevers ranging from length of 0.5 m to 3.0 m. The internal span was divided into 10th points, and the cantilever, being half of the internal span, was divided into 5th points for symmetry. Further to Table 6-1, the results and extent of the nonlinear shear and transverse negative moment are presented in **Appendix C** of the report.

Chapter Seven: Conclusions and Recommendations

7.1. Conclusion

Results obtained from the FEA of numerous bridge prototypes were utilized to develop empirical expressions for the transverse negative moment at the root of the cantilever and shear as a result of live load. The results would allow the designer to make more informed decisions on the actual shear and moment encountered due to live loads, produce a more economical result by saving on reinforcing steel, safeguarding the public, and directly apply results to other codes and standards. The refined, yet simplified equations also take into account parameters that have not yet been considered: the barrier length (L_b), cantilever length (L_c), and different end stiffening arrangements. The report is supplemented with design tables generated for steel reinforcement as well as for GFRP bars. As such, these tables, subject to future refinement, would prove useful when designing cantilever deck slabs. One may relate to the graphical chart that was available for designing the main reinforcement of the cantilever deck slab, originally published in the MTO (Ministry of Transportation of Ontario) Structural Design Manual, and subsequently withdrawn for future revision. The following conclusions can be drawn from this project:

1. The slab thickness ratio plays a major role with respect to transverse negative moment, shear, and deflection. In conjunction with the observations also noted in the parametric study by Parr (1993), it does not appear economical to increase the thickness ratio of the cantilever slab, while Xiao (1997) also concluded that there is no benefit, due to the thinner sections not being able to resist induced moments. In spite of these shared observations, tapering the end

is beneficial as its increased section provides greater shear and moment capacity at the root of the cantilever, while avoiding a thicker concrete slab in the transverse direction. For this reason, one may also save on reinforcement for longer cantilevers by tapering the free end, having the reinforcing demand reduced at the clamped edge. This trend is evident in the design tables, presented in **Appendices D – G** of the report.

2. The end stiffening arrangement is a key parameter to consider and the equations give way to a refined and simplified approach in considering these details. The type of end stiffening plays an instrumental role in resisting moment, shear, and deflection. In practice, designers use parapets, New Jersey-type barriers, curbs, and other arrangements. At present, code provisions consider only unstiffened cantilevers and cantilevers stiffened with a New Jersey-type barrier as part of a simplified approach.
3. The CHBDC (2014) tends to underestimate and overestimate M_y. Recalling the equation for M_y in Cl. 5.7.1.3 of the CHBDC, the moment at the root of the cantilever should be decreasing with increasing the stiffened cantilever length. Section 4.2.3 of this report has demonstrated the opposite effect: increasing the length of the cantilever played a key role in increasing the overall induced moment. The equation in Cl. 5.7.1.3 also relies on graphical design charts, which may result in a loss in accuracy as it is up to the visual interpretations made by the designer.

7.2. Recommendations for Future Research

Based on the results obtained from this practical design-oriented parametric study, the following points of research require further investigations in the future:

1. Study and develop equations for the design moment and shear force for the design of stiffened and unstiffened cantilever deck slabs at the location of the transverse free edge and bridge expansion joints.
2. Study and develop equations for deflection due to truck loading conditions in unstiffened and stiffened cantilever deck slabs at the interior location and transverse free edges.
3. Investigate the applicability of the developed equations for PL-1, PL-2, and PL-3 barriers to other barrier configurations listed in the 2014 version of the CHBDC as TL-1, TL-2, TL-4, and TL-5.
4. Study and develop equations for the applied moment, shear force, and deflection due to truck loading conditions in unstiffened and stiffened cantilever deck slabs, both at the interior location and transverse free edge, considering AASHTO-LRFD truck loading conditions, as well as equivalent vehicle impact loading to barrier walls for TL-1, TL-2, TL-3, TL-4, TL-5, and TL-6 barrier configurations.
5. Investigate the effect of concrete flexural cracking in the response of the studied deck slab cantilevers under truck loading conditions, as well as the equivalent vehicle impact loading to the barrier wall.

Appendix A: Parametric Study Results Database

A1. Unstiffened Edge

Cantilever Length: 0.5 m (all 0.5 m included only for info.)												
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-0.590	-4.549	-5.139	47.120	29.960	77.080	-0.002	-0.010	-0.012
		225	1.200	-0.615	-4.635	-5.250	50.064	30.025	80.088	-0.002	-0.008	-0.009
		250	1.500	-0.640	-4.706	-5.346	53.007	30.074	83.081	-0.001	-0.006	-0.007
		300	2.000	-0.689	-4.815	-5.504	58.896	30.141	89.037	-0.001	-0.004	-0.005
	225	225	1.000	-0.663	-4.549	-5.212	53.010	29.960	82.970	-0.002	-0.007	-0.009
		270	1.200	-0.708	-4.679	-5.388	58.309	30.056	88.364	-0.001	-0.005	-0.006
		338	1.500	-0.776	-4.815	-5.592	66.317	30.142	96.459	-0.001	-0.003	-0.003
		450	2.000	-0.888	-4.951	-5.839	79.511	30.208	109.719	0.000	-0.001	-0.002
	250	250	1.000	-0.737	-4.549	-5.286	58.900	29.960	88.860	-0.001	-0.005	-0.006
		300	1.200	-0.787	-4.679	-5.466	64.787	30.056	94.843	-0.001	-0.003	-0.004
		375	1.500	-0.862	-4.815	-5.676	73.620	30.141	103.762	-0.001	-0.002	-0.003
		500	2.000	-0.987	-4.951	-5.938	88.346	30.208	118.553	0.000	-0.001	-0.001
	300	300	1.000	-0.884	-4.549	-5.433	70.681	29.960	100.641	-0.001	-0.003	-0.004
		360	1.200	-0.944	-4.679	-5.624	77.745	30.056	107.801	-0.001	-0.002	-0.003
		450	1.500	-1.034	-4.815	-5.849	88.345	30.141	118.486	0.000	-0.001	-0.002
		600	2.000	-1.184	-4.951	-6.135	106.015	30.208	136.222	0.000	-0.001	-0.001
	350	350	1.000	-1.032	-4.549	-5.581	82.800	29.954	112.754	-0.001	-0.002	-0.003
4.5	200	200	1.000	-0.589	-4.511	-5.100	47.124	29.920	77.044	-0.002	-0.009	-0.011
		225	1.200	-0.614	-4.598	-5.212	50.070	29.984	80.053	-0.002	-0.007	-0.008
		250	1.500	-0.639	-4.668	-5.308	53.015	30.032	83.048	-0.001	-0.005	-0.006
		300	2.000	-0.689	-4.777	-5.466	58.907	30.099	89.005	-0.001	-0.003	-0.004
	225	225	1.000	-0.663	-4.511	-5.174	53.014	29.920	82.934	-0.002	-0.006	-0.008
		270	1.200	-0.708	-4.642	-5.350	58.287	30.014	88.301	-0.001	-0.004	-0.005
		338	1.500	-0.776	-4.777	-5.553	66.329	30.099	96.428	-0.001	-0.002	-0.003
		450	2.000	-0.888	-4.912	-5.800	79.525	30.164	109.689	0.000	-0.001	-0.002
	250	250	1.000	-0.736	-4.511	-5.247	58.905	29.920	88.825	-0.001	-0.004	-0.006
		300	1.200	-0.786	-4.642	-5.428	64.796	30.014	94.811	-0.001	-0.003	-0.004
		375	1.500	-0.862	-4.777	-5.638	73.633	30.099	103.732	-0.001	-0.002	-0.002
		500	2.000	-0.987	-4.912	-5.899	88.361	30.164	118.525	0.000	-0.001	-0.001
	300	300	1.000	-0.884	-4.511	-5.395	70.686	29.920	100.606	-0.001	-0.003	-0.003
		360	1.200	-0.944	-4.642	-5.585	77.756	30.014	107.770	-0.001	-0.002	-0.002
		450	1.500	-1.034	-4.777	-5.810	88.360	30.099	118.458	0.000	-0.001	-0.001
		600	2.000	-1.184	-4.912	-6.096	106.033	30.164	136.197	0.000	0.000	-0.001
	350	350	1.000	-1.031	-4.511	-5.542	82.467	29.920	112.387	-0.001	-0.002	-0.002
6	200	200	1.000	-0.589	-4.511	-5.100	47.126	29.920	77.046	-0.002	-0.009	-0.011
		225	1.200	-0.614	-4.598	-5.212	50.071	29.984	80.055	-0.002	-0.007	-0.008
		250	1.500	-0.639	-4.668	-5.308	53.017	30.032	83.049	-0.001	-0.005	-0.006
		300	2.000	-0.689	-4.777	-5.466	58.908	30.098	89.006	-0.001	-0.003	-0.004
	225	225	1.000	-0.663	-4.511	-5.174	53.017	29.920	82.937	-0.002	-0.006	-0.008
		270	1.200	-0.708	-4.642	-5.350	58.319	30.014	88.333	-0.001	-0.004	-0.005
		338	1.500	-0.776	-4.777	-5.553	66.330	30.099	96.429	-0.001	-0.002	-0.003
		450	2.000	-0.888	-4.912	-5.800	79.526	30.164	109.690	0.000	-0.001	-0.002
	250	250	1.000	-0.736	-4.511	-5.247	58.908	29.920	88.828	-0.001	-0.004	-0.006
		300	1.200	-0.786	-4.642	-5.428	64.798	30.014	94.813	-0.001	-0.003	-0.004
		375	1.500	-0.862	-4.777	-5.638	73.635	30.098	103.733	-0.001	-0.002	-0.002
		500	2.000	-0.987	-4.912	-5.899	88.362	30.164	118.526	0.000	-0.001	-0.001
	300	300	1.000	-0.884	-4.511	-5.395	70.689	29.920	100.609	-0.001	-0.003	-0.003
		360	1.200	-0.944	-4.642	-5.585	77.758	30.014	107.772	-0.001	-0.002	-0.002
		450	1.500	-1.034	-4.777	-5.810	88.362	30.098	118.460	0.000	-0.001	-0.001
		600	2.000	-1.184	-4.912	-6.096	106.034	30.164	136.198	0.000	0.000	-0.001
	350	350	1.000	-1.031	-4.511	-5.542	82.471	29.920	112.391	-0.001	-0.002	-0.002

Cantilever Length: 0.5 m												
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-0.589	-4.511	-5.100	47.126	29.920	77.046	-0.002	-0.009	-0.011
		240	1.200	-0.614	-4.598	-5.212	50.072	29.984	80.055	-0.002	-0.007	-0.008
		300	1.500	-0.639	-4.668	-5.308	53.017	30.032	83.049	-0.001	-0.005	-0.006
		400	2.000	-0.689	-4.777	-5.466	58.908	30.098	89.006	-0.001	-0.003	-0.004
	225	225	1.000	-0.663	-4.511	-5.174	53.017	29.920	82.937	-0.002	-0.006	-0.008
		270	1.200	-0.708	-4.642	-5.350	58.319	30.014	88.333	-0.001	-0.004	-0.005
		338	1.500	-0.776	-4.777	-5.553	66.330	30.099	96.429	-0.001	-0.002	-0.003
		450	2.000	-0.888	-4.912	-5.800	79.526	30.164	109.690	0.000	-0.001	-0.002
	250	250	1.000	-0.736	-4.511	-5.247	58.908	29.920	88.828	-0.001	-0.004	-0.006
		300	1.200	-0.786	-4.642	-5.428	64.799	30.014	94.813	-0.001	-0.003	-0.004
		375	1.500	-0.862	-4.777	-5.638	73.635	30.098	103.733	-0.001	-0.002	-0.002
		500	2.000	-0.987	-4.912	-5.899	88.362	30.164	118.526	0.000	-0.001	-0.001
	300	300	1.000	-0.884	-4.511	-5.395	70.689	29.920	100.609	-0.001	-0.003	-0.003
		360	1.200	-0.944	-4.642	-5.585	77.758	30.014	107.773	-0.001	-0.002	-0.002
		450	1.500	-1.034	-4.777	-5.810	88.362	30.098	118.460	0.000	-0.001	-0.001
		600	2.000	-1.184	-4.912	-6.096	106.034	30.164	136.198	0.000	0.000	-0.001
	350	350	1.000	-1.031	-4.511	-5.542	82.471	29.920	112.391	-0.001	-0.002	-0.002
10	200	200	1.000	-0.589	-4.511	-5.100	47.126	29.920	77.046	-0.002	-0.009	-0.011
		240	1.200	-0.614	-4.598	-5.212	50.072	29.984	80.055	-0.002	-0.007	-0.008
		300	1.500	-0.639	-4.668	-5.308	53.017	30.032	83.049	-0.001	-0.005	-0.006
		400	2.000	-0.689	-4.777	-5.466	58.908	30.098	89.006	-0.001	-0.003	-0.004
	225	225	1.000	-0.663	-4.511	-5.174	53.017	29.920	82.937	-0.002	-0.006	-0.008
		270	1.200	-0.708	-4.642	-5.350	58.319	30.014	88.333	-0.001	-0.004	-0.005
		338	1.500	-0.776	-4.777	-5.553	66.330	30.099	96.429	-0.001	-0.002	-0.003
		450	2.000	-0.888	-4.912	-5.800	79.526	30.164	109.690	0.000	-0.001	-0.002
	250	250	1.000	-0.736	-4.511	-5.247	58.908	29.920	88.828	-0.001	-0.004	-0.006
		300	1.200	-0.786	-4.642	-5.428	64.799	30.014	94.813	-0.001	-0.003	-0.004
		375	1.500	-0.862	-4.777	-5.638	73.635	30.098	103.733	-0.001	-0.002	-0.002
		500	2.000	-0.987	-4.912	-5.899	88.362	30.164	118.526	0.000	-0.001	-0.001
	300	300	1.000	-0.884	-4.511	-5.395	70.689	29.920	100.609	-0.001	-0.003	-0.003
		360	1.200	-0.944	-4.642	-5.585	77.758	30.014	107.773	-0.001	-0.002	-0.002
		450	1.500	-1.034	-4.777	-5.810	88.362	30.098	118.460	0.000	-0.001	-0.001
		600	2.000	-1.184	-4.912	-6.096	106.034	30.164	136.198	0.000	0.000	-0.001
	350	350	1.000	-1.031	-4.511	-5.542	82.471	29.920	112.391	-0.001	-0.002	-0.002
12	200	200	1.000	-0.589	-4.511	-5.100	47.126	29.920	77.046	-0.002	-0.009	-0.011
		240	1.200	-0.614	-4.598	-5.212	50.072	29.984	80.055	-0.002	-0.007	-0.008
		300	1.500	-0.639	-4.668	-5.308	53.017	30.032	83.049	-0.001	-0.005	-0.006
		400	2.000	-0.689	-4.777	-5.466	58.908	30.098	89.006	-0.001	-0.003	-0.004
	225	225	1.000	-0.663	-4.511	-5.174	53.017	29.920	82.937	-0.002	-0.006	-0.008
		270	1.200	-0.708	-4.642	-5.350	58.319	30.014	88.333	-0.001	-0.004	-0.005
		338	1.500	-0.776	-4.777	-5.553	66.330	30.099	96.429	-0.001	-0.002	-0.003
		450	2.000	-0.888	-4.912	-5.800	79.526	30.164	109.690	0.000	-0.001	-0.002
	250	250	1.000	-0.736	-4.511	-5.247	58.908	29.920	88.828	-0.001	-0.004	-0.006
		300	1.200	-0.786	-4.642	-5.428	64.799	30.014	94.813	-0.001	-0.003	-0.004
		375	1.500	-0.862	-4.777	-5.638	73.635	30.098	103.733	-0.001	-0.002	-0.002
		500	2.000	-0.987	-4.912	-5.899	88.362	30.164	118.526	0.000	-0.001	-0.001
	300	300	1.000	-0.884	-4.511	-5.395	70.689	29.920	100.609	-0.001	-0.003	-0.003
		360	1.200	-0.944	-4.642	-5.585	77.758	30.014	107.773	-0.001	-0.002	-0.002
		450	1.500	-1.034	-4.777	-5.810	88.362	30.098	118.460	0.000	-0.001	-0.001
		600	2.000	-1.184	-4.912	-6.096	106.034	30.164	136.198	0.000	0.000	-0.001
	350	350	1.000	-1.031	-4.511	-5.542	82.471	29.920	112.391	-0.001	-0.002	-0.002

Cantilever Length: 1.0 m															
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L (M_{22} - L)	M_T (M_{22} - T)	M_x (M_{11})	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-2.374	-26.680	-29.054	8.547	-29.000	-8.7%	4.741	74.313	79.054	-0.035	-0.305	-0.339
		240	1.200	-2.474	-27.332	-29.806	8.154			5.033	75.356	80.389	-0.027	-0.235	-0.262
		300	1.500	-2.574	-27.906	-30.480	7.822			5.325	76.267	81.592	-0.022	-0.186	-0.207
		400	2.000	-2.774	-28.867	-31.641	7.293	-31.800	-10.2%	5.911	77.773	83.684	-0.015	-0.123	-0.138
	225	225	1.000	-2.671	-26.680	-29.351	8.547	-29.000	-8.7%	5.334	74.313	79.647	-0.027	-0.214	-0.241
		270	1.200	-2.851	-27.685	-30.536	7.949			5.859	75.917	81.776	-0.019	-0.143	-0.162
		338	1.500	-3.123	-28.875	-31.998	7.289			6.655	77.785	84.441	-0.012	-0.086	-0.098
		450	2.000	-3.571	-30.258	-33.829	6.583	-31.800	-5.1%	7.969	79.920	87.889	-0.006	-0.044	-0.051
	250	250	1.000	-2.967	-26.680	-29.648	8.547	-29.000	-8.7%	5.926	74.313	80.239	-0.022	-0.156	-0.178
		300	1.200	-3.167	-27.685	-30.852	7.949			6.510	75.917	82.427	-0.015	-0.104	-0.119
		375	1.500	-3.467	-28.867	-32.335	7.293			7.388	77.773	85.162	-0.010	-0.063	-0.072
		500	2.000	-3.967	-30.258	-34.226	6.583	-31.800	-5.1%	8.854	79.920	88.774	-0.005	-0.032	-0.037
	300	300	1.000	-3.561	-26.680	-30.241	8.547	-29.000	-8.7%	7.111	74.313	81.425	-0.015	-0.090	-0.106
		360	1.200	-3.801	-27.685	-31.486	7.949			7.813	75.917	83.729	-0.011	-0.060	-0.071
		450	1.500	-4.161	-28.867	-33.028	7.293			8.866	77.773	86.639	-0.007	-0.036	-0.043
		600	2.000	-4.761	-30.258	-35.019	6.583	-31.800	-5.1%	10.625	79.920	90.545	-0.004	-0.019	-0.022
	350	350	1.000	-4.154	-26.680	-30.835	8.547	-29.000	-8.7%	8.297	74.313	82.610	-0.011	-0.057	-0.068
4.5	200	200	1.000	-2.361	-25.725	-28.087	8.829	-29.000	-12.7%	4.714	73.850	78.563	-0.035	-0.271	-0.305
		240	1.200	-2.461	-26.537	-28.998	8.388			5.007	75.014	80.022	-0.027	-0.211	-0.238
		300	1.500	-2.561	-27.238	-29.798	8.017			5.301	76.016	81.317	-0.022	-0.169	-0.191
		400	2.000	-2.760	-28.382	-31.142	7.431	-31.800	-12.0%	5.889	77.643	83.532	-0.015	-0.113	-0.128
	225	225	1.000	-2.657	-25.725	-28.382	8.829	-29.000	-12.7%	5.303	73.850	79.153	-0.027	-0.190	-0.217
		270	1.200	-2.836	-26.969	-29.805	8.158			5.832	75.633	81.464	-0.019	-0.130	-0.148
		338	1.500	-3.107	-28.391	-31.498	7.427			6.631	77.655	84.287	-0.012	-0.079	-0.091
		450	2.000	-3.555	-29.974	-33.529	6.661	-31.800	-6.1%	7.950	79.900	87.850	-0.006	-0.041	-0.048
	250	250	1.000	-2.952	-25.725	-28.677	8.829	-29.000	-12.7%	5.892	73.850	79.742	-0.022	-0.139	-0.161
		300	1.200	-3.151	-26.969	-30.120	8.158			6.480	75.633	82.112	-0.015	-0.094	-0.110
		375	1.500	-3.451	-28.382	-31.832	7.431			7.362	77.643	85.004	-0.009	-0.058	-0.068
		500	2.000	-3.950	-29.974	-33.924	6.661	-31.800	-6.1%	8.833	79.900	88.733	-0.005	-0.030	-0.035
	300	300	1.000	-3.542	-25.725	-29.267	8.829	-29.000	-12.7%	7.070	73.850	80.920	-0.015	-0.080	-0.096
		360	1.200	-3.781	-26.969	-30.750	8.158			7.775	75.633	83.408	-0.010	-0.055	-0.065
		450	1.500	-4.141	-28.382	-32.522	7.431			8.834	77.643	86.477	-0.007	-0.034	-0.040
		600	2.000	-4.740	-29.974	-34.714	6.661	-31.800	-6.1%	10.600	79.900	90.500	-0.004	-0.017	-0.021
	350	350	1.000	-4.132	-25.725	-29.858	8.829	-29.000	-12.7%	8.249	73.850	82.099	-0.011	-0.050	-0.062
6	200	200	1.000	-2.358	-25.621	-27.979	8.875	-29.000	-13.2%	4.712	73.881	78.593	-0.034	-0.265	-0.299
		240	1.200	-2.458	-26.464	-28.922	8.419			5.006	75.045	80.051	-0.027	-0.208	-0.235
		300	1.500	-2.558	-27.187	-29.744	8.038			5.301	76.044	81.344	-0.022	-0.166	-0.188
		400	2.000	-2.758	-28.355	-31.112	7.443	-31.800	-12.1%	5.890	77.664	83.554	-0.015	-0.112	-0.127
	225	225	1.000	-2.652	-25.621	-28.273	8.875	-29.000	-13.2%	5.301	73.881	79.181	-0.027	-0.186	-0.213
		270	1.200	-2.832	-26.911	-29.743	8.183			5.831	75.662	81.492	-0.019	-0.127	-0.146
		338	1.500	-3.104	-28.364	-31.468	7.438			6.632	77.677	84.309	-0.012	-0.078	-0.090
		450	2.000	-3.553	-29.965	-33.518	6.665	-31.800	-6.1%	7.951	79.912	87.864	-0.006	-0.041	-0.047
	250	250	1.000	-2.947	-25.621	-28.568	8.875	-29.000	-13.2%	5.889	73.881	79.770	-0.022	-0.136	-0.158
		300	1.200	-3.147	-26.911	-30.058	8.183			6.478	75.662	82.140	-0.015	-0.093	-0.108
		375	1.500	-3.447	-28.355	-31.802	7.443			7.362	77.664	85.026	-0.009	-0.057	-0.067
		500	2.000	-3.947	-29.965	-33.912	6.665	-31.800	-6.1%	8.835	79.912	88.747	-0.005	-0.030	-0.035
	300	300	1.000	-3.537	-25.621	-29.158	8.875	-29.000	-13.2%	7.067	73.881	80.948	-0.015	-0.078	-0.094
		360	1.200	-3.776	-26.911	-30.687	8.183			7.774	75.662	83.436	-0.010	-0.054	-0.064
		450	1.500	-4.136	-28.355	-32.491	7.443			8.835	77.664	86.499	-0.007	-0.033	-0.040
		600	2.000	-4.737	-29.965	-34.702	6.665	-31.800	-6.1%	10.602	79.912	90.514	-0.004	-0.017	-0.021
	350	350	1.000	-4.126	-25.621	-29.747	8.875	-29.000	-13.2%	8.245	73.881	82.126	-0.011	-0.049	-0.061

Cantilever Length: 1.0 m															
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L (M_{22} - L)	M_T (M_{22} - T)	M_x (M_{11})	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-2.357	-25.610	-27.967	8.880	-29.000	-13.2%	4.712	73.891	78.603	-0.034	-0.265	-0.299
		240	1.200	-2.457	-26.458	-28.915	8.422			5.007	75.051	80.058	-0.027	-0.208	-0.235
		300	1.500	-2.557	-27.183	-29.740	8.040			5.301	76.048	81.350	-0.022	-0.166	-0.188
		400	2.000	-2.757	-28.354	-31.111	7.443	-31.800	-12.2%	5.891	77.666	83.557	-0.015	-0.112	-0.127
	225	225	1.000	-2.651	-25.610	-28.261	8.880	-29.000	-13.2%	5.301	73.891	79.192	-0.027	-0.186	-0.213
		270	1.200	-2.831	-26.906	-29.738	8.185			5.832	75.667	81.499	-0.019	-0.127	-0.146
		338	1.500	-3.104	-28.363	-31.466	7.439			6.633	77.679	84.312	-0.012	-0.078	-0.090
		450	2.000	-3.552	-29.965	-33.517	6.665	-31.800	-6.1%	7.952	79.913	87.865	-0.006	-0.041	-0.047
	250	250	1.000	-2.946	-25.610	-28.556	8.880	-29.000	-13.2%	5.890	73.891	79.781	-0.022	-0.136	-0.158
		300	1.200	-3.146	-26.906	-30.052	8.185			6.480	75.667	82.146	-0.015	-0.093	-0.108
		375	1.500	-3.446	-28.354	-31.800	7.443			7.363	77.666	85.030	-0.009	-0.057	-0.067
		500	2.000	-3.947	-29.965	-33.912	6.665	-31.800	-6.1%	8.836	79.913	88.749	-0.005	-0.030	-0.035
	300	300	1.000	-3.535	-25.610	-29.145	8.880	-29.000	-13.2%	7.068	73.891	80.959	-0.015	-0.078	-0.094
		360	1.200	-3.775	-26.906	-30.682	8.185			7.775	75.667	83.442	-0.010	-0.054	-0.064
		450	1.500	-4.135	-28.354	-32.489	7.443			8.836	77.666	86.502	-0.007	-0.033	-0.040
		600	2.000	-4.736	-29.965	-34.701	6.665	-31.800	-6.1%	10.603	79.913	90.516	-0.004	-0.017	-0.021
	350	350	1.000	-4.124	-25.610	-29.734	8.880	-29.000	-13.2%	8.246	73.891	82.137	-0.011	-0.049	-0.061
10	200	200	1.000	-2.356	-25.610	-27.966	8.881	-29.000	-13.2%	4.713	73.891	78.604	-0.034	-0.265	-0.299
		240	1.200	-2.456	-26.458	-28.915	8.422			5.007	75.052	80.059	-0.027	-0.208	-0.235
		300	1.500	-2.557	-27.183	-29.740	8.040			5.302	76.048	81.350	-0.022	-0.166	-0.188
		400	2.000	-2.757	-28.354	-31.111	7.443	-31.800	-12.2%	5.891	77.666	83.557	-0.015	-0.112	-0.127
	225	225	1.000	-2.651	-25.610	-28.261	8.881	-29.000	-13.2%	5.302	73.891	79.193	-0.027	-0.186	-0.213
		270	1.200	-2.831	-26.906	-29.737	8.185			5.832	75.667	81.499	-0.019	-0.127	-0.146
		338	1.500	-3.104	-28.363	-31.466	7.439			6.633	77.679	84.312	-0.012	-0.078	-0.090
		450	2.000	-3.552	-29.965	-33.517	6.665	-31.800	-6.1%	7.953	79.913	87.865	-0.006	-0.041	-0.047
	250	250	1.000	-2.945	-25.610	-28.555	8.881	-29.000	-13.2%	5.891	73.891	79.782	-0.022	-0.136	-0.158
		300	1.200	-3.146	-26.906	-30.052	8.185			6.480	75.667	82.147	-0.015	-0.093	-0.108
		375	1.500	-3.446	-28.354	-31.800	7.443			7.363	77.666	85.030	-0.009	-0.057	-0.067
		500	2.000	-3.947	-29.965	-33.912	6.665	-31.800	-6.1%	8.836	79.913	88.749	-0.005	-0.030	-0.035
	300	300	1.000	-3.535	-25.610	-29.144	8.881	-29.000	-13.2%	7.069	73.891	80.960	-0.015	-0.078	-0.094
		360	1.200	-3.775	-26.906	-30.681	8.185			7.776	75.667	83.443	-0.010	-0.054	-0.064
		450	1.500	-4.135	-28.354	-32.489	7.443			8.836	77.666	86.503	-0.007	-0.033	-0.040
		600	2.000	-4.736	-29.965	-34.701	6.665	-31.800	-6.1%	10.603	79.913	90.516	-0.004	-0.017	-0.021
	350	350	1.000	-4.124	-25.610	-29.733	8.881	-29.000	-13.2%	8.247	73.891	82.138	-0.011	-0.049	-0.061
12	200	200	1.000	-2.356	-25.610	-27.966	8.881	-29.000	-13.2%	4.713	73.891	78.604	-0.034	-0.265	-0.299
		240	1.200	-2.456	-26.458	-28.915	8.422			5.007	75.052	80.059	-0.027	-0.208	-0.235
		300	1.500	-2.557	-27.183	-29.740	8.040			5.302	76.048	81.350	-0.022	-0.166	-0.188
		400	2.000	-2.757	-28.354	-31.111	7.443	-31.800	-12.2%	5.891	77.666	83.557	-0.015	-0.112	-0.127
	225	225	1.000	-2.651	-25.610	-28.261	8.881	-29.000	-13.2%	5.302	73.891	79.193	-0.027	-0.186	-0.213
		270	1.200	-2.831	-26.906	-29.737	8.185			5.832	75.667	81.499	-0.019	-0.127	-0.146
		338	1.500	-3.103	-28.363	-31.466	7.439			6.633	77.679	84.312	-0.012	-0.078	-0.090
		450	2.000	-3.552	-29.965	-33.517	6.665	-31.800	-6.1%	7.953	79.913	87.865	-0.006	-0.041	-0.047
	250	250	1.000	-2.945	-25.610	-28.555	8.881	-29.000	-13.2%	5.891	73.891	79.782	-0.022	-0.136	-0.158
		300	1.200	-3.146	-26.906	-30.052	8.185			6.480	75.667	82.147	-0.015	-0.093	-0.108
		375	1.500	-3.446	-28.354	-31.800	7.443			7.363	77.666	85.030	-0.009	-0.057	-0.067
		500	2.000	-3.947	-29.965	-33.912	6.665	-31.800	-6.1%	8.836	79.913	88.749	-0.005	-0.030	-0.035
	300	300	1.000	-3.534	-25.610	-29.144	8.881	-29.000	-13.2%	7.069	73.891	80.960	-0.015	-0.078	-0.094
		360	1.200	-3.775	-26.906	-30.681	8.185			7.776	75.667	83.443	-0.010	-0.054	-0.064
		450	1.500	-4.135	-28.354	-32.489	7.443			8.836	77.666	86.503	-0.007	-0.033	-0.040
		600	2.000	-4.736	-29.965	-34.701	6.665	-31.800	-6.1%	10.603	79.913	90.516	-0.004	-0.017	-0.021
	350	350	1.000	-4.124	-25.610	-29.733	8.881	-29.000	-13.2%	8.247	73.891	82.138	-0.011	-0.049	-0.061

Cantilever Length: 1.5 m															
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	M_x	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-5.386	-46.813	-52.199	14.173	-33.900	27.6%	7.229	57.195	64.424	-0.176	-1.536	-1.712
		240	1.200	-5.615	-47.636	-53.251	13.546			7.669	58.313	65.982	-0.138	-1.179	-1.317
		300	1.500	-5.843	-48.377	-54.220	13.014			8.110	59.308	67.418	-0.111	-0.929	-1.040
		400	2.000	-6.298	-49.655	-55.954	12.160	-37.300	24.9%	8.992	61.008	70.000	-0.075	-0.613	-0.688
	225	225	1.000	-6.059	-46.813	-52.872	14.173	-33.900	27.6%	8.132	57.195	65.328	-0.139	-1.079	-1.218
		270	1.200	-6.470	-48.090	-54.561	13.217			8.925	58.923	67.849	-0.095	-0.716	-0.811
		338	1.500	-7.090	-49.666	-56.756	12.153			10.125	61.022	71.147	-0.059	-0.429	-0.488
		450	2.000	-8.108	-51.608	-59.717	10.979	-37.300	27.7%	12.101	63.582	75.683	-0.033	-0.220	-0.253
	250	250	1.000	-6.733	-46.813	-53.546	14.173	-33.900	27.6%	9.036	57.195	66.231	-0.113	-0.787	-0.899
		300	1.200	-7.189	-48.090	-55.280	13.217			9.917	58.923	68.841	-0.077	-0.522	-0.599
		375	1.500	-7.873	-49.655	-57.528	12.160			11.240	61.008	72.248	-0.048	-0.314	-0.362
		500	2.000	-9.009	-51.608	-60.618	10.979	-37.300	27.7%	13.446	63.582	77.028	-0.026	-0.161	-0.187
	300	300	1.000	-8.079	-46.813	-54.892	14.173	-33.900	27.6%	10.843	57.195	68.038	-0.078	-0.455	-0.534
		360	1.200	-8.627	-48.090	-56.718	13.217			11.901	58.923	70.824	-0.054	-0.302	-0.356
		450	1.500	-9.447	-49.655	-59.103	12.160			13.488	61.008	74.496	-0.034	-0.181	-0.215
		600	2.000	-10.811	-51.608	-62.420	10.979	-37.300	27.7%	16.135	63.582	79.717	-0.018	-0.093	-0.111
	350	350	1.000	-9.426	-46.813	-56.239	14.173	-33.900	27.6%	12.650	57.195	69.845	-0.058	-0.287	-0.344
4.5	200	200	1.000	-5.340	-39.503	-44.843	15.210	-33.900	14.2%	7.104	54.223	61.327	-0.176	-1.216	-1.391
		240	1.200	-5.564	-40.695	-46.260	14.501			7.541	55.593	63.135	-0.137	-0.950	-1.087
		300	1.500	-5.789	-41.766	-47.556	13.896			7.980	56.822	64.802	-0.110	-0.760	-0.870
		400	2.000	-6.239	-43.603	-49.842	12.914	-37.300	14.5%	8.857	58.927	67.785	-0.075	-0.514	-0.589
	225	225	1.000	-6.007	-39.503	-45.510	15.210	-33.900	14.2%	7.992	54.223	62.215	-0.139	-0.854	-0.993
		270	1.200	-6.412	-41.352	-47.763	14.127			8.780	56.346	65.126	-0.095	-0.582	-0.677
		338	1.500	-7.023	-43.618	-50.641	12.906			9.973	58.944	68.918	-0.059	-0.360	-0.419
		450	2.000	-8.030	-46.360	-54.390	11.550	-37.300	19.5%	11.943	62.095	74.038	-0.032	-0.192	-0.224
	250	250	1.000	-6.675	-39.503	-46.178	15.210	-33.900	14.2%	8.880	54.223	63.103	-0.112	-0.623	-0.735
		300	1.200	-7.124	-41.352	-48.476	14.127			9.755	56.346	66.102	-0.077	-0.425	-0.501
		375	1.500	-7.798	-43.603	-51.401	12.914			11.072	58.927	69.999	-0.048	-0.263	-0.311
		500	2.000	-8.922	-46.360	-55.282	11.550	-37.300	19.5%	13.270	62.095	75.365	-0.026	-0.140	-0.166
	300	300	1.000	-8.009	-39.503	-47.512	15.210	-33.900	14.2%	10.656	54.223	64.879	-0.078	-0.360	-0.438
		360	1.200	-8.549	-41.352	-49.901	14.127			11.706	56.346	68.053	-0.053	-0.246	-0.299
		450	1.500	-9.358	-43.603	-52.961	12.914			13.286	58.927	72.213	-0.033	-0.152	-0.186
		600	2.000	-10.707	-46.360	-57.066	11.550	-37.300	19.5%	15.924	62.095	78.019	-0.018	-0.081	-0.099
	350	350	1.000	-9.344	-39.503	-48.847	15.210	-33.900	14.2%	12.431	54.223	66.655	-0.057	-0.227	-0.284
6	200	200	1.000	-5.318	-37.572	-42.890	15.618	-33.900	9.8%	7.074	53.889	60.963	-0.175	-1.125	-1.300
		240	1.200	-5.542	-38.969	-44.511	14.843			7.514	55.360	62.874	-0.137	-0.889	-1.025
		300	1.500	-5.767	-40.204	-45.971	14.183			7.954	56.666	64.619	-0.110	-0.717	-0.827
		400	2.000	-6.216	-42.281	-48.496	13.120	-37.300	11.8%	8.835	58.872	67.707	-0.075	-0.491	-0.566
	225	225	1.000	-5.983	-37.572	-43.555	15.618	-33.900	9.8%	7.958	53.889	61.847	-0.138	-0.790	-0.928
		270	1.200	-6.387	-39.728	-46.114	14.435			8.750	56.162	64.912	-0.094	-0.548	-0.642
		338	1.500	-6.997	-42.297	-49.294	13.112			9.948	58.889	68.838	-0.059	-0.344	-0.403
		450	2.000	-8.004	-45.303	-53.307	11.666	-37.300	17.7%	11.924	62.129	74.053	-0.032	-0.186	-0.218
	250	250	1.000	-6.648	-37.572	-44.220	15.618	-33.900	9.8%	8.842	53.889	62.731	-0.112	-0.576	-0.688
		300	1.200	-7.096	-39.728	-46.824	14.435			9.722	56.162	65.884	-0.076	-0.399	-0.476
		375	1.500	-7.769	-42.281	-50.050	13.120			11.044	58.872	69.916	-0.048	-0.252	-0.299
		500	2.000	-8.893	-45.303	-54.196	11.666	-37.300	17.7%	13.249	62.129	75.378	-0.026	-0.135	-0.161
	300	300	1.000	-7.977	-37.572	-45.549	15.618	-33.900	9.8%	10.611	53.889	64.500	-0.078	-0.333	-0.411
		360	1.200	-8.515	-39.728	-48.243	14.435			11.667	56.162	67.828	-0.053	-0.231	-0.284
		450	1.500	-9.323	-42.281	-51.604	13.120			13.253	58.872	72.124	-0.033	-0.146	-0.179
		600	2.000	-10.671	-45.303	-55.974	11.666	-37.300	17.7%	15.899	62.129	78.028	-0.018	-0.078	-0.096
	350	350	1.000	-9.307	-37.572	-46.879	15.618	-33.900	9.8%	12.379	53.889	66.268	-0.057	-0.210	-0.267

Cantilever Length: 1.5 m															
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	M_x	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-5.307	-37.046	-42.353	15.769	-33.900	8.5%	7.067	53.921	60.988	-0.175	-1.098	-1.272
		240	1.200	-5.532	-38.531	-44.063	14.953			7.509	55.402	62.911	-0.136	-0.872	-1.008
		300	1.500	-5.756	-39.829	-45.585	14.265			7.950	56.711	64.661	-0.109	-0.706	-0.816
		400	2.000	-6.206	-41.980	-48.186	13.167	-37.300	11.1%	8.834	58.915	67.748	-0.075	-0.486	-0.560
	225	225	1.000	-5.970	-37.046	-43.016	15.769	-33.900	8.5%	7.951	53.921	61.871	-0.138	-0.771	-0.909
		270	1.200	-6.375	-39.330	-45.705	14.527			8.745	56.206	64.951	-0.094	-0.538	-0.633
		338	1.500	-6.986	-41.997	-48.983	13.159			9.947	58.932	68.879	-0.059	-0.340	-0.399
		450	2.000	-7.994	-45.061	-53.055	11.684	-37.300	17.2%	11.926	62.159	74.085	-0.032	-0.184	-0.216
	250	250	1.000	-6.634	-37.046	-43.680	15.769	-33.900	8.5%	8.834	53.921	62.755	-0.112	-0.562	-0.674
		300	1.200	-7.083	-39.330	-46.413	14.527			9.717	56.206	65.923	-0.076	-0.393	-0.469
		375	1.500	-7.757	-41.980	-49.737	13.167			11.042	58.915	69.957	-0.048	-0.249	-0.296
		500	2.000	-8.882	-45.061	-53.943	11.684	-37.300	17.2%	13.251	62.159	75.410	-0.026	-0.134	-0.160
	300	300	1.000	-7.960	-37.046	-45.006	15.769	-33.900	8.5%	10.601	53.921	64.521	-0.078	-0.325	-0.403
		360	1.200	-8.499	-39.330	-47.830	14.527			11.661	56.206	67.866	-0.053	-0.227	-0.280
		450	1.500	-9.309	-41.980	-51.289	13.167			13.251	58.915	72.165	-0.033	-0.144	-0.177
		600	2.000	-10.659	-45.061	-55.720	11.684	-37.300	17.2%	15.901	62.159	78.060	-0.018	-0.078	-0.096
	350	350	1.000	-9.287	-37.046	-46.333	15.769	-33.900	8.5%	12.368	53.921	66.288	-0.057	-0.205	-0.262
10	200	200	1.000	-5.303	-36.975	-42.278	15.794	-33.900	8.3%	7.068	53.941	61.008	-0.174	-1.093	-1.268
		240	1.200	-5.528	-38.477	-44.006	14.969			7.510	55.417	62.927	-0.136	-0.869	-1.006
		300	1.500	-5.753	-39.785	-45.539	14.275			7.951	56.722	64.674	-0.109	-0.705	-0.814
		400	2.000	-6.204	-41.946	-48.150	13.172	-37.300	11.1%	8.835	58.921	67.757	-0.075	-0.485	-0.560
	225	225	1.000	-5.966	-36.975	-42.941	15.794	-33.900	8.3%	7.951	53.941	61.892	-0.138	-0.768	-0.906
		270	1.200	-6.371	-39.283	-45.654	14.539			8.747	56.219	64.966	-0.094	-0.537	-0.631
		338	1.500	-6.984	-41.963	-48.946	13.163			9.948	58.939	68.887	-0.059	-0.340	-0.398
		450	2.000	-7.993	-45.031	-53.023	11.685	-37.300	17.2%	11.928	62.161	74.089	-0.032	-0.184	-0.216
	250	250	1.000	-6.629	-36.975	-43.604	15.794	-33.900	8.3%	8.835	53.941	62.775	-0.112	-0.560	-0.671
		300	1.200	-7.079	-39.283	-46.362	14.539			9.718	56.219	65.937	-0.076	-0.392	-0.468
		375	1.500	-7.755	-41.946	-49.700	13.172			11.044	58.921	69.965	-0.048	-0.248	-0.296
		500	2.000	-8.881	-45.031	-53.911	11.685	-37.300	17.2%	13.253	62.161	75.415	-0.026	-0.134	-0.160
	300	300	1.000	-7.955	-36.975	-44.930	15.794	-33.900	8.3%	10.602	53.941	64.542	-0.078	-0.324	-0.402
		360	1.200	-8.495	-39.283	-47.778	14.539			11.662	56.219	67.881	-0.053	-0.227	-0.280
		450	1.500	-9.305	-41.946	-51.251	13.172			13.253	58.921	72.174	-0.033	-0.144	-0.177
		600	2.000	-10.657	-45.031	-55.687	11.685	-37.300	17.2%	15.904	62.161	78.065	-0.018	-0.078	-0.096
	350	350	1.000	-9.281	-36.975	-46.256	15.794	-33.900	8.3%	12.369	53.941	66.309	-0.057	-0.204	-0.261
12	200	200	1.000	-5.302	-36.966	-42.268	15.798	-33.900	8.3%	7.068	53.944	61.013	-0.174	-1.093	-1.268
		240	1.200	-5.527	-38.471	-43.999	14.971			7.510	55.420	62.930	-0.136	-0.869	-1.006
		300	1.500	-5.753	-39.781	-45.533	14.276			7.952	56.724	64.676	-0.109	-0.705	-0.814
		400	2.000	-6.203	-41.942	-48.145	13.172	-37.300	11.1%	8.836	58.922	67.758	-0.075	-0.485	-0.560
	225	225	1.000	-5.965	-36.966	-42.931	15.798	-33.900	8.3%	7.952	53.944	61.896	-0.138	-0.768	-0.906
		270	1.200	-6.370	-39.278	-45.648	14.540			8.747	56.221	64.968	-0.094	-0.537	-0.631
		338	1.500	-6.983	-41.959	-48.942	13.163			9.949	58.939	68.889	-0.059	-0.340	-0.398
		450	2.000	-7.992	-45.027	-53.019	11.685	-37.300	17.2%	11.929	62.162	74.090	-0.032	-0.184	-0.216
	250	250	1.000	-6.628	-36.966	-43.594	15.798	-33.900	8.3%	8.836	53.944	62.780	-0.112	-0.560	-0.671
		300	1.200	-7.078	-39.278	-46.356	14.540			9.719	56.221	65.940	-0.076	-0.392	-0.468
		375	1.500	-7.754	-41.942	-49.696	13.172			11.045	58.922	69.967	-0.048	-0.248	-0.296
		500	2.000	-8.880	-45.027	-53.907	11.685	-37.300	17.2%	13.254	62.162	75.416	-0.026	-0.134	-0.160
	300	300	1.000	-7.953	-36.966	-44.919	15.798	-33.900	8.3%	10.603	53.944	64.547	-0.077	-0.324	-0.401
		360	1.200	-8.494	-39.278	-47.772	14.540			11.663	56.221	67.884	-0.053	-0.227	-0.280
		450	1.500	-9.305	-41.942	-51.247	13.172			13.254	58.922	72.176	-0.033	-0.144	-0.177
		600	2.000	-10.656	-45.027	-55.683	11.685	-37.300	17.2%	15.905	62.162	78.066	-0.018	-0.078	-0.096
	350	350	1.000	-9.279	-36.966	-46.245	15.798	-33.900	8.3%	12.370	53.944	66.314	-0.057	-0.204	-0.221

Cantilever Length: 2.0 m															
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	M_x	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-9.648	-67.997	-77.645	17.587	-42.900	36.9%	9.865	54.080	63.945	-0.558	-4.307	-4.865
		240	1.200	-10.062	-68.752	-78.814	16.794			10.468	55.129	65.597	-0.436	-3.301	-3.737
		300	1.500	-10.474	-69.433	-79.907	16.112			11.069	56.059	67.128	-0.350	-2.597	-2.947
		400	2.000	-11.297	-70.607	-81.904	14.997	-44.600	36.8%	12.269	57.638	69.908	-0.239	-1.708	-1.947
	225	225	1.000	-10.854	-67.997	-78.851	17.587	-42.900	36.9%	11.098	54.080	65.178	-0.441	-3.025	-3.466
		270	1.200	-11.598	-69.169	-80.767	16.373			12.182	55.700	67.882	-0.301	-2.002	-2.303
		338	1.500	-12.717	-70.616	-83.333	14.989			13.815	57.651	71.466	-0.188	-1.196	-1.384
		450	2.000	-14.553	-72.406	-86.959	13.429	-44.600	38.4%	16.497	60.011	76.508	-0.103	-0.613	-0.716
	250	250	1.000	-12.060	-67.997	-80.057	17.587	-42.900	36.9%	12.331	54.080	66.411	-0.357	-2.205	-2.562
		300	1.200	-12.887	-69.169	-82.055	16.373			13.536	55.700	69.236	-0.244	-1.460	-1.704
		375	1.500	-14.121	-70.607	-84.728	14.997			15.336	57.638	72.975	-0.153	-0.875	-1.028
		500	2.000	-16.170	-72.406	-88.576	13.429	-44.600	38.4%	18.330	60.011	78.341	-0.084	-0.447	-0.530
	300	300	1.000	-14.472	-67.997	-82.469	17.587	-42.900	36.9%	14.797	54.080	68.877	-0.248	-1.276	-1.524
		360	1.200	-15.464	-69.169	-84.633	16.373			16.243	55.700	71.943	-0.169	-0.845	-1.014
		450	1.500	-16.945	-70.607	-87.552	14.997			18.404	57.638	76.042	-0.106	-0.506	-0.612
		600	2.000	-19.405	-72.406	-91.810	13.429	-44.600	38.4%	21.996	60.011	82.007	-0.058	-0.259	-0.317
	350	350	1.000	-16.884	-67.997	-84.881	17.587	-42.900	36.9%	17.264	54.080	71.344	-0.182	-0.804	-0.986
4.5	200	200	1.000	-9.547	-52.900	-62.447	19.363	-42.900	18.9%	9.560	47.300	56.860	-0.556	-3.185	-3.741
		240	1.200	-9.950	-54.055	-64.005	18.447			10.144	48.471	58.615	-0.435	-2.475	-2.910
		300	1.500	-10.353	-55.108	-65.461	17.659			10.728	49.540	60.268	-0.349	-1.973	-2.322
		400	2.000	-11.158	-56.956	-68.114	16.373	-44.600	21.7%	11.897	51.419	63.316	-0.238	-1.328	-1.566
	225	225	1.000	-10.740	-52.900	-63.640	19.363	-42.900	18.9%	10.755	47.300	58.055	-0.440	-2.237	-2.677
		270	1.200	-11.466	-54.698	-66.164	17.961			11.806	49.124	60.930	-0.300	-1.513	-1.814
		338	1.500	-12.560	-56.971	-69.532	16.363			13.396	51.434	64.830	-0.188	-0.929	-1.117
		450	2.000	-14.361	-59.851	-74.212	14.551	-44.600	25.5%	16.020	54.382	70.402	-0.103	-0.494	-0.597
	250	250	1.000	-11.933	-52.900	-64.833	19.363	-42.900	18.9%	11.950	47.300	59.250	-0.356	-1.631	-1.987
		300	1.200	-12.740	-54.698	-67.438	17.961			13.118	49.124	62.242	-0.243	-1.103	-1.346
		375	1.500	-13.947	-56.956	-70.903	16.373			14.872	51.419	66.290	-0.152	-0.680	-0.832
		500	2.000	-15.957	-59.851	-75.808	14.551	-44.600	25.5%	17.800	54.382	72.182	-0.083	-0.360	-0.443
	300	300	1.000	-14.320	-52.900	-67.220	19.363	-42.900	18.9%	14.341	47.300	61.641	-0.247	-0.944	-1.191
		360	1.200	-15.288	-54.698	-69.986	17.961			15.742	49.124	64.866	-0.169	-0.638	-0.807
		450	1.500	-16.736	-56.956	-73.693	16.373			17.846	51.419	69.265	-0.106	-0.393	-0.499
		600	2.000	-19.148	-59.851	-78.999	14.551	-44.600	25.5%	21.360	54.382	75.742	-0.058	-0.208	-0.266
	350	350	1.000	-16.707	-52.900	-69.607	19.363	-42.900	18.9%	16.731	47.300	64.031	-0.182	-0.594	-0.776
6	200	200	1.000	-9.492	-47.654	-57.146	20.245	-42.900	10.0%	9.468	45.640	55.108	-0.555	-2.772	-3.327
		240	1.200	-9.891	-49.166	-59.057	19.243			10.052	46.995	57.047	-0.434	-2.183	-2.617
		300	1.500	-10.291	-50.539	-60.829	18.379			10.636	48.228	58.864	-0.348	-1.760	-2.108
		400	2.000	-11.089	-52.921	-64.010	16.963	-44.600	15.7%	11.806	50.380	62.186	-0.237	-1.207	-1.444
	225	225	1.000	-10.678	-47.654	-58.332	20.245	-42.900	10.0%	10.652	45.640	56.292	-0.438	-1.947	-2.385
		270	1.200	-11.397	-50.005	-61.403	18.710			11.702	47.748	59.451	-0.299	-1.344	-1.644
		338	1.500	-12.483	-52.940	-65.423	16.952			13.294	50.397	63.691	-0.187	-0.845	-1.032
		450	2.000	-14.273	-56.568	-70.842	14.961	-44.600	21.2%	15.920	53.713	69.632	-0.102	-0.460	-0.563
	250	250	1.000	-11.865	-47.654	-59.519	20.245	-42.900	10.0%	11.835	45.640	57.475	-0.355	-1.419	-1.774
		300	1.200	-12.663	-50.005	-62.669	18.710			13.003	47.748	60.751	-0.243	-0.980	-1.222
		375	1.500	-13.862	-52.921	-66.782	16.963			14.758	50.380	65.137	-0.152	-0.618	-0.770
		500	2.000	-15.859	-56.568	-72.428	14.961	-44.600	21.2%	17.688	53.713	71.401	-0.083	-0.336	-0.419
	300	300	1.000	-14.237	-47.654	-61.891	20.245	-42.900	10.0%	14.202	45.640	59.842	-0.247	-0.821	-1.068
		360	1.200	-15.196	-50.005	-65.202	18.710			15.603	47.748	63.352	-0.168	-0.567	-0.736
		450	1.500	-16.634	-52.921	-69.555	16.963			17.709	50.380	68.089	-0.105	-0.358	-0.463
		600	2.000	-19.031	-56.568	-75.600	14.961	-44.600	21.2%	21.226	53.713	74.939	-0.058	-0.194	-0.252
	350	350	1.000	-16.610	-47.654	-64.264	20.245	-42.900	10.0%	16.569	45.640	62.209	-0.181	-0.517	-0.698

Cantilever Length: 2.0 m															
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	M_x	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-9.454	-45.436	-54.890	20.776	-42.900	5.6%	9.431	45.320	54.751	-0.553	-2.587	-3.140
		240	1.200	-9.853	-47.226	-57.079	19.683			10.017	46.771	56.789	-0.432	-2.060	-2.492
		300	1.500	-10.251	-48.824	-59.075	18.745			10.604	48.077	58.681	-0.347	-1.675	-2.022
		400	2.000	-11.049	-51.539	-62.588	17.221	-44.600	13.5%	11.779	50.323	62.102	-0.237	-1.163	-1.399
	225	225	1.000	-10.636	-45.436	-56.072	20.776	-42.900	5.6%	10.609	45.320	55.929	-0.437	-1.817	-2.254
		270	1.200	-11.353	-48.206	-59.560	19.104			11.666	47.571	59.236	-0.298	-1.275	-1.574
		338	1.500	-12.438	-51.561	-63.999	17.209			13.264	50.341	63.604	-0.186	-0.814	-1.001
		450	2.000	-14.228	-55.562	-69.790	15.100	-44.600	19.7%	15.899	53.735	69.633	-0.102	-0.449	-0.552
	250	250	1.000	-11.817	-45.436	-57.253	20.776	-42.900	5.6%	11.788	45.320	57.108	-0.354	-1.325	-1.678
		300	1.200	-12.615	-48.206	-60.821	19.104			12.962	47.571	60.533	-0.242	-0.930	-1.171
		375	1.500	-13.811	-51.539	-65.351	17.221			14.724	50.323	65.047	-0.151	-0.595	-0.747
		500	2.000	-15.809	-55.562	-71.371	15.100	-44.600	19.7%	17.665	53.735	71.400	-0.083	-0.328	-0.410
	300	300	1.000	-14.181	-45.436	-59.617	20.776	-42.900	5.6%	14.146	45.320	59.466	-0.246	-0.767	-1.012
		360	1.200	-15.138	-48.206	-63.344	19.104			15.554	47.571	63.125	-0.168	-0.538	-0.706
		450	1.500	-16.574	-51.539	-68.113	17.221			17.669	50.323	67.992	-0.105	-0.345	-0.450
		600	2.000	-18.970	-55.562	-74.532	15.100	-44.600	19.7%	21.198	53.735	74.933	-0.057	-0.190	-0.247
	350	350	1.000	-16.544	-45.436	-61.980	20.776	-42.900	5.6%	16.504	45.320	61.824	-0.181	-0.483	-0.663
10	200	200	1.000	-9.437	-44.903	-54.340	20.951	-42.900	4.5%	9.423	45.360	54.783	-0.552	-2.539	-3.091
		240	1.200	-9.836	-46.799	-56.635	19.811			10.012	46.822	56.833	-0.431	-2.030	-2.462
		300	1.500	-10.236	-48.472	-58.708	18.840			10.600	48.131	58.731	-0.346	-1.656	-2.002
		400	2.000	-11.035	-51.281	-62.316	17.276	-44.600	13.0%	11.778	50.376	62.154	-0.236	-1.154	-1.390
	225	225	1.000	-10.617	-44.903	-55.520	20.951	-42.900	4.5%	10.601	45.360	55.961	-0.436	-1.783	-2.219
		270	1.200	-11.335	-47.827	-59.163	19.211			11.660	47.624	59.284	-0.298	-1.259	-1.557
		338	1.500	-12.422	-51.304	-63.726	17.263			13.262	50.394	63.656	-0.186	-0.808	-0.994
		450	2.000	-14.214	-55.383	-69.597	15.120	-44.600	19.5%	15.900	53.778	69.678	-0.102	-0.447	-0.549
	250	250	1.000	-11.797	-44.903	-56.700	20.951	-42.900	4.5%	11.779	45.360	57.139	-0.353	-1.300	-1.653
		300	1.200	-12.595	-47.827	-60.422	19.211			12.956	47.624	60.580	-0.241	-0.918	-1.159
		375	1.500	-13.793	-51.281	-65.075	17.276			14.722	50.376	65.098	-0.151	-0.591	-0.742
		500	2.000	-15.793	-55.383	-71.176	15.120	-44.600	19.5%	17.667	53.778	71.445	-0.083	-0.326	-0.409
	300	300	1.000	-14.156	-44.903	-59.059	20.951	-42.900	4.5%	14.135	45.360	59.495	-0.245	-0.752	-0.997
		360	1.200	-15.114	-47.827	-62.941	19.211			15.547	47.624	63.171	-0.168	-0.531	-0.699
		450	1.500	-16.552	-51.281	-67.834	17.276			17.667	50.376	68.043	-0.105	-0.342	-0.447
		600	2.000	-18.952	-55.383	-74.335	15.120	-44.600	19.5%	21.201	53.778	74.978	-0.057	-0.189	-0.246
	350	350	1.000	-16.516	-44.903	-61.419	20.951	-42.900	4.5%	16.491	45.360	61.851	-0.180	-0.474	-0.654
12	200	200	1.000	-9.430	-44.784	-54.214	20.999	-42.900	4.2%	9.423	45.400	54.823	-0.551	-2.526	-3.077
		240	1.200	-9.830	-46.712	-56.542	19.842			10.012	46.858	56.870	-0.431	-2.023	-2.454
		300	1.500	-10.230	-48.406	-58.636	18.861			10.601	48.164	58.765	-0.346	-1.652	-1.998
		400	2.000	-11.030	-51.236	-62.266	17.285	-44.600	13.0%	11.779	50.404	62.183	-0.236	-1.152	-1.388
	225	225	1.000	-10.609	-44.784	-55.393	20.999	-42.900	4.2%	10.601	45.400	56.001	-0.436	-1.774	-2.210
		270	1.200	-11.329	-47.754	-59.082	19.235			11.661	47.658	59.320	-0.298	-1.256	-1.553
		338	1.500	-12.417	-51.258	-63.675	17.273			13.264	50.422	63.685	-0.186	-0.807	-0.992
		450	2.000	-14.210	-55.350	-69.559	15.123	-44.600	19.4%	15.903	53.800	69.703	-0.102	-0.447	-0.549
	250	250	1.000	-11.788	-44.784	-56.572	20.999	-42.900	4.2%	11.779	45.400	57.179	-0.353	-1.293	-1.646
		300	1.200	-12.587	-47.754	-60.341	19.235			12.957	47.658	60.615	-0.241	-0.915	-1.156
		375	1.500	-13.787	-51.236	-65.023	17.285			14.724	50.404	65.128	-0.151	-0.590	-0.741
		500	2.000	-15.789	-55.350	-71.138	15.123	-44.600	19.4%	17.670	53.800	71.470	-0.083	-0.326	-0.408
	300	300	1.000	-14.146	-44.784	-58.930	20.999	-42.900	4.2%	14.135	45.400	59.535	-0.245	-0.748	-0.993
		360	1.200	-15.105	-47.754	-62.859	19.235			15.548	47.658	63.207	-0.167	-0.530	-0.697
		450	1.500	-16.545	-51.236	-67.780	17.285			17.669	50.404	68.073	-0.105	-0.341	-0.446
		600	2.000	-18.946	-55.350	-74.296	15.123	-44.600	19.4%	21.204	53.800	75.004	-0.057	-0.188	-0.246
	350	350	1.000	-16.503	-44.784	-61.287	20.999	-42.900	4.2%	16.490	45.400	61.890	-0.180	-0.471	-0.651

Cantilever Length: 2.5 m															
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	M_x	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-15.177	-98.797	-113.974	20.133	-90.000	8.9%	12.690	105.640	118.330	-1.363	-9.449	-10.811
		240	1.200	-15.833	-99.515	-115.348	19.253			13.472	106.624	120.096	-1.066	-7.231	-8.297
		300	1.500	-16.488	-100.154	-116.642	18.490			14.251	107.484	121.734	-0.856	-5.682	-6.538
		400	2.000	-17.793	-101.242	-119.035	17.237	-97.400	3.8%	15.801	108.914	124.715	-0.584	-3.728	-4.313
	225	225	1.000	-17.074	-98.797	-115.871	20.133	-90.000	8.9%	14.277	105.640	119.917	-1.077	-6.636	-7.713
		270	1.200	-18.255	-99.907	-118.162	18.782			15.682	107.153	122.835	-0.736	-4.382	-5.119
		338	1.500	-20.030	-101.251	-121.281	17.227			17.791	108.925	126.716	-0.460	-2.610	-3.070
		450	2.000	-22.938	-102.873	-125.810	15.457	-97.400	5.3%	21.242	110.992	132.234	-0.253	-1.334	-1.586
	250	250	1.000	-18.971	-98.797	-117.768	20.133	-90.000	8.9%	15.863	105.640	121.503	-0.872	-4.838	-5.710
		300	1.200	-20.283	-105.682	-125.965	18.993			17.425	118.262	135.686	-0.596	-3.242	-3.838
		375	1.500	-22.241	-101.242	-123.483	17.237			19.751	108.914	128.665	-0.374	-1.909	-2.283
		500	2.000	-25.486	-102.873	-128.359	15.457	-97.400	5.3%	23.603	110.992	134.595	-0.205	-0.972	-1.177
	300	300	1.000	-22.765	-98.797	-121.562	20.133	-90.000	8.9%	19.035	105.640	124.675	-0.606	-2.800	-3.405
		360	1.200	-24.340	-99.907	-124.247	18.782			20.909	107.153	128.062	-0.414	-1.849	-2.263
		450	1.500	-26.689	-101.242	-127.931	17.237			23.701	108.914	132.615	-0.260	-1.105	-1.365
		600	2.000	-30.583	-102.873	-133.456	15.457	-97.400	5.3%	28.323	110.992	139.315	-0.142	-0.563	-0.705
	350	350	1.000	-26.559	-98.797	-125.356	20.133	-90.000	8.9%	22.208	105.640	127.848	-0.445	-1.763	-2.208
4.5	200	200	1.000	-14.997	-73.947	-88.944	22.636	-90.000	-21.7%	12.101	89.460	101.561	-1.360	-6.728	-8.088
		240	1.200	-15.635	-74.957	-90.593	21.565			12.837	90.342	103.180	-1.064	-5.201	-6.265
		300	1.500	-16.272	-75.870	-92.141	20.646			13.573	91.127	104.701	-0.854	-4.126	-4.980
		400	2.000	-17.542	-77.454	-94.996	19.149	-97.400	-25.8%	15.045	92.471	107.516	-0.583	-2.756	-3.339
	225	225	1.000	-16.872	-73.947	-90.819	22.636	-90.000	-21.7%	13.614	89.460	103.074	-1.075	-4.725	-5.800
		270	1.200	-18.019	-75.516	-93.535	20.997			14.939	90.824	105.763	-0.735	-3.170	-3.905
		338	1.500	-19.747	-77.467	-97.214	19.137			16.941	92.482	109.422	-0.459	-1.929	-2.388
		450	2.000	-22.586	-79.915	-102.501	17.039	-97.400	-21.9%	20.238	94.531	114.770	-0.252	-1.016	-1.268
	250	250	1.000	-18.747	-73.947	-92.694	22.636	-90.000	-21.7%	15.126	89.460	104.586	-0.871	-3.445	-4.315
		300	1.200	-20.021	-80.668	-100.690	21.243			16.599	100.882	117.480	-0.595	-2.345	-2.940
		375	1.500	-21.928	-77.454	-99.381	19.149			18.807	92.471	111.277	-0.373	-1.411	-1.784
		500	2.000	-25.096	-79.915	-105.010	17.039	-97.400	-21.9%	22.487	94.531	117.019	-0.204	-0.741	-0.945
	300	300	1.000	-22.496	-73.947	-96.443	22.636	-90.000	-21.7%	18.151	89.460	107.611	-0.605	-1.993	-2.598
		360	1.200	-24.026	-75.516	-99.541	20.997			19.919	90.824	110.742	-0.413	-1.337	-1.751
		450	1.500	-26.313	-77.454	-103.767	19.149			22.568	92.471	115.039	-0.259	-0.817	-1.076
		600	2.000	-30.115	-79.915	-110.030	17.039	-97.400	-21.9%	26.985	94.531	121.516	-0.142	-0.429	-0.570
	350	350	1.000	-26.245	-73.947	-100.192	22.636	-90.000	-21.7%	21.177	89.460	110.637	-0.444	-1.255	-1.700
6	200	200	1.000	-14.894	-64.222	-79.116	23.943	-90.000	-40.1%	11.913	85.460	97.373	-1.357	-5.598	-6.956
		240	1.200	-15.523	-65.551	-81.074	22.773			12.641	86.435	99.076	-1.062	-4.379	-5.441
		300	1.500	-16.150	-66.761	-82.911	21.766			13.370	87.315	100.685	-0.852	-3.512	-4.364
		400	2.000	-17.404	-68.877	-86.282	20.119	-97.400	-41.4%	14.830	88.844	103.675	-0.581	-2.391	-2.972
	225	225	1.000	-16.756	-64.222	-80.978	23.943	-90.000	-40.1%	13.402	85.460	98.862	-1.073	-3.932	-5.005
		270	1.200	-17.886	-66.290	-84.177	22.151			14.713	86.973	101.686	-0.733	-2.687	-3.420
		338	1.500	-19.592	-68.895	-88.487	20.106			16.699	88.857	105.555	-0.458	-1.674	-2.131
		450	2.000	-22.399	-72.183	-94.583	17.783	-97.400	-34.9%	19.976	91.226	111.201	-0.251	-0.907	-1.158
	250	250	1.000	-18.618	-64.222	-82.840	23.943	-90.000	-40.1%	14.891	85.460	100.351	-0.869	-2.866	-3.735
		300	1.200	-19.874	-71.189	-91.063	22.411			16.348	96.788	113.136	-0.594	-1.988	-2.581
		375	1.500	-21.755	-68.877	-90.633	20.119			18.538	88.844	107.382	-0.372	-1.224	-1.596
		500	2.000	-24.888	-72.183	-97.071	17.783	-97.400	-34.9%	22.195	91.226	113.421	-0.203	-0.661	-0.864
	300	300	1.000	-22.342	-64.222	-86.564	23.943	-90.000	-40.1%	17.869	85.460	103.329	-0.603	-1.659	-2.262
		360	1.200	-23.849	-66.290	-90.139	22.151			19.618	86.973	106.590	-0.412	-1.134	-1.546
		450	1.500	-26.106	-68.877	-94.984	20.119			22.245	88.844	111.090	-0.258	-0.708	-0.967
		600	2.000	-29.866	-72.183	-102.049	17.783	-97.400	-34.9%	26.634	91.226	117.860	-0.141	-0.382	-0.524
	350	350	1.000	-26.065	-64.222	-90.287	23.943	-90.000	-40.1%	20.847	85.460	106.307	-0.443	-1.045	-1.488

Cantilever Length: 2.5 m															
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	M_x	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-14.814	-59.089	-73.903	24.897	-90.000	-52.3%	11.818	84.000	95.818	-1.353	-4.982	-6.335
		240	1.200	-15.438	-60.770	-76.208	23.616			12.549	85.089	97.638	-1.058	-3.950	-5.008
		300	1.500	-16.061	-62.288	-78.349	22.511			13.280	86.068	99.347	-0.849	-3.204	-4.052
		400	2.000	-17.308	-64.909	-82.217	20.706	-97.400	-50.1%	14.744	87.753	102.496	-0.579	-2.220	-2.799
	225	225	1.000	-16.666	-59.089	-75.755	24.897	-90.000	-52.3%	13.296	84.000	97.296	-1.069	-3.499	-4.568
		270	1.200	-17.788	-61.699	-79.487	22.934			14.611	85.689	100.299	-0.730	-2.441	-3.171
		338	1.500	-19.484	-64.930	-84.414	20.692			16.601	87.766	104.368	-0.456	-1.555	-2.010
		450	2.000	-22.280	-68.894	-91.174	18.162	-97.400	-41.4%	19.887	90.325	110.211	-0.250	-0.861	-1.111
	250	250	1.000	-18.518	-59.089	-77.607	24.897	-90.000	-52.3%	14.773	84.000	98.773	-0.866	-2.551	-3.417
		300	1.200	-19.765	-66.455	-86.220	23.204			16.234	95.413	111.647	-0.592	-1.805	-2.397
		375	1.500	-21.635	-64.909	-86.544	20.706			18.430	87.753	106.182	-0.370	-1.137	-1.507
		500	2.000	-24.755	-68.894	-93.650	18.162	-97.400	-41.4%	22.096	90.325	112.421	-0.202	-0.628	-0.830
	300	300	1.000	-22.221	-59.089	-81.310	24.897	-90.000	-52.3%	17.728	84.000	101.728	-0.601	-1.476	-2.078
		360	1.200	-23.718	-61.699	-85.417	22.934			19.481	85.689	105.169	-0.411	-1.030	-1.441
		450	1.500	-25.962	-64.909	-90.871	20.706			22.116	87.753	109.868	-0.257	-0.658	-0.915
		600	2.000	-29.706	-68.894	-98.601	18.162	-97.400	-41.4%	26.515	90.325	116.840	-0.141	-0.363	-0.504
	350	350	1.000	-25.925	-59.089	-85.014	24.897	-90.000	-52.3%	20.682	84.000	104.682	-0.442	-0.930	-1.371
10	200	200	1.000	-14.771	-57.353	-72.124	25.346	-90.000	-56.9%	11.788	83.780	95.568	-1.350	-4.763	-6.113
		240	1.200	-15.394	-59.238	-74.632	23.979			12.521	84.912	97.433	-1.055	-3.807	-4.862
		300	1.500	-16.017	-60.919	-76.936	22.807			13.255	85.920	99.175	-0.846	-3.107	-3.953
		400	2.000	-17.264	-63.774	-81.037	20.906	-97.400	-52.7%	14.724	87.642	102.366	-0.577	-2.171	-2.749
	225	225	1.000	-16.618	-57.353	-73.971	25.346	-90.000	-56.9%	13.261	83.780	97.041	-1.067	-3.345	-4.412
		270	1.200	-17.739	-60.269	-78.008	23.255			14.581	85.530	100.112	-0.728	-2.361	-3.090
		338	1.500	-19.434	-63.796	-83.231	20.892			16.579	87.656	104.235	-0.455	-1.521	-1.975
		450	2.000	-22.230	-68.010	-90.241	18.263	-97.400	-43.2%	19.873	90.237	110.110	-0.249	-0.850	-1.099
	250	250	1.000	-18.464	-57.353	-75.817	25.346	-90.000	-56.9%	14.735	83.780	98.515	-0.864	-2.439	-3.302
		300	1.200	-19.710	-64.975	-84.685	23.529			16.202	95.240	111.441	-0.590	-1.747	-2.337
		375	1.500	-21.580	-63.774	-85.353	20.906			18.405	87.642	106.047	-0.369	-1.112	-1.481
		500	2.000	-24.700	-68.010	-92.711	18.263	-97.400	-43.2%	22.081	90.237	112.318	-0.202	-0.619	-0.821
	300	300	1.000	-22.157	-57.353	-79.510	25.346	-90.000	-56.9%	17.682	83.780	101.462	-0.600	-1.411	-2.011
		360	1.200	-23.652	-60.269	-83.921	23.255			19.442	85.530	104.972	-0.410	-0.996	-1.406
		450	1.500	-25.896	-63.774	-89.669	20.906			22.086	87.642	109.728	-0.257	-0.643	-0.900
		600	2.000	-29.640	-68.010	-97.651	18.263	-97.400	-43.2%	26.497	90.237	116.735	-0.140	-0.358	-0.499
	350	350	1.000	-25.850	-57.353	-83.203	25.346	-90.000	-56.9%	20.629	83.780	104.409	-0.441	-0.889	-1.329
12	200	200	1.000	-14.749	-56.800	-71.549	25.529	-90.000	-58.5%	11.780	83.780	95.560	-1.348	-4.689	-6.036
		240	1.200	-15.373	-58.778	-74.151	24.114			12.515	84.918	97.433	-1.054	-3.762	-4.815
		300	1.500	-15.996	-60.526	-76.522	22.907			13.250	85.929	99.180	-0.845	-3.078	-3.924
		400	2.000	-17.244	-63.465	-80.710	20.964	-97.400	-53.5%	14.722	87.650	102.372	-0.576	-2.159	-2.735
	225	225	1.000	-16.593	-56.800	-73.393	25.529	-90.000	-58.5%	13.252	83.780	97.032	-1.065	-3.293	-4.358
		270	1.200	-17.715	-59.852	-77.567	23.368			14.576	85.539	100.114	-0.727	-2.338	-3.065
		338	1.500	-19.412	-63.489	-82.901	20.949			16.577	87.664	104.241	-0.454	-1.512	-1.966
		450	2.000	-22.211	-67.772	-89.984	18.285	-97.400	-43.7%	19.875	90.238	110.113	-0.249	-0.847	-1.096
	250	250	1.000	-18.437	-56.800	-75.237	25.529	-90.000	-58.5%	14.724	83.780	98.504	-0.862	-2.401	-3.263
		300	1.200	-19.683	-64.542	-84.226	23.643			16.195	95.246	111.441	-0.589	-1.729	-2.318
		375	1.500	-21.555	-63.465	-85.021	20.964			18.402	87.650	106.052	-0.369	-1.105	-1.474
		500	2.000	-24.679	-67.772	-92.451	18.285	-97.400	-43.7%	22.083	90.238	112.321	-0.202	-0.617	-0.819
	300	300	1.000	-22.124	-56.800	-78.924	25.529	-90.000	-58.5%	17.669	83.780	101.449	-0.599	-1.389	-1.988
		360	1.200	-23.620	-59.852	-83.472	23.368			19.434	85.539	104.973	-0.409	-0.986	-1.395
		450	1.500	-25.867	-63.465	-89.332	20.964			22.083	87.650	109.733	-0.256	-0.640	-0.896
		600	2.000	-29.615	-67.772	-97.387	18.285	-97.400	-43.7%	26.500	90.238	116.738	-0.140	-0.357	-0.497
	350	350	1.000	-25.811	-56.800	-82.611	25.529	-90.000	-58.5%	20.614	83.780	104.394	-0.440	-0.875	-1.315

Cantilever Length: 3.0 m															
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	M_x	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-21.989	-142.935	-164.924	22.716	-93.500	34.6%	15.742	114.440	130.182	-2.828	-18.749	-21.577
		240	1.200	-22.946	-143.867	-166.813	21.689			16.722	115.951	132.672	-2.213	-14.303	-16.516
		300	1.500	-23.901	-144.687	-168.587	20.803			17.695	117.259	134.954	-1.776	-11.207	-12.983
		400	2.000	-25.802	-146.060	-171.861	19.351	-95.500	34.6%	19.629	119.411	139.039	-1.213	-7.319	-8.532
	225	225	1.000	-24.737	-142.935	-167.672	22.716	-93.500	34.6%	17.710	114.440	132.150	-2.235	-13.168	-15.403
		270	1.200	-26.459	-144.371	-170.830	21.142			19.470	116.757	136.227	-1.528	-8.653	-10.181
		338	1.500	-29.046	-146.070	-175.116	19.339			22.102	119.428	141.529	-0.956	-5.122	-6.078
		450	2.000	-33.280	-148.066	-181.346	17.293	-95.500	35.5%	26.393	122.475	148.868	-0.525	-2.599	-3.124
	250	250	1.000	-27.486	-142.935	-170.421	22.716	-93.500	34.6%	19.678	114.440	134.118	-1.810	-9.599	-11.409
		300	1.200	-29.399	-144.371	-173.770	21.142			21.633	116.757	138.390	-1.238	-6.308	-7.546
		375	1.500	-32.252	-146.060	-178.312	19.351			24.536	119.411	143.947	-0.776	-3.747	-4.524
		500	2.000	-36.978	-148.066	-185.044	17.293	-95.500	35.5%	29.326	122.475	151.801	-0.425	-1.895	-2.320
	300	300	1.000	-32.983	-142.935	-175.918	22.716	-93.500	34.6%	23.614	114.440	138.054	-1.257	-5.555	-6.812
		360	1.200	-35.279	-144.371	-179.650	21.142			25.960	116.757	142.717	-0.860	-3.650	-4.510
		450	1.500	-38.702	-146.060	-184.762	19.351			29.443	119.411	148.854	-0.539	-2.169	-2.708
		600	2.000	-44.374	-148.066	-192.440	17.293	-95.500	35.5%	35.191	122.475	157.666	-0.295	-1.097	-1.392
	350	350	1.000	-38.480	-142.935	-181.415	22.716	-93.500	34.6%	27.549	114.440	141.989	-0.923	-3.498	-4.422
4.5	200	200	1.000	-21.703	-105.456	-127.159	26.126	-93.500	11.3%	14.742	90.000	104.742	-2.824	-13.058	-15.882
		240	1.200	-22.633	-106.707	-129.340	24.806			15.641	91.268	106.909	-2.209	-10.033	-12.243
		300	1.500	-23.561	-107.814	-131.374	23.682			16.538	92.366	108.905	-1.773	-7.916	-9.689
		400	2.000	-25.411	-109.686	-135.097	21.867	-95.500	12.9%	18.330	94.180	112.510	-1.211	-5.238	-6.449
	225	225	1.000	-24.416	-105.456	-129.872	26.126	-93.500	11.3%	16.585	90.000	106.585	-2.231	-9.171	-11.402
		270	1.200	-26.089	-107.386	-133.475	24.111			18.202	91.945	110.147	-1.526	-6.095	-7.621
		338	1.500	-28.605	-109.701	-138.306	21.853			20.639	94.195	114.833	-0.954	-3.667	-4.620
		450	2.000	-32.733	-112.483	-145.216	19.343	-95.500	15.1%	24.644	96.809	121.453	-0.524	-1.905	-2.428
	250	250	1.000	-27.129	-105.456	-132.585	26.126	-93.500	11.3%	18.427	90.000	108.427	-1.807	-6.686	-8.493
		300	1.200	-28.988	-107.386	-136.374	24.111			20.224	91.945	112.170	-1.236	-4.443	-5.679
		375	1.500	-31.763	-109.686	-141.449	21.867			22.912	94.180	117.092	-0.775	-2.682	-3.457
		500	2.000	-36.370	-112.483	-148.853	19.343	-95.500	15.1%	27.382	96.809	124.191	-0.424	-1.388	-1.813
	300	300	1.000	-32.555	-105.456	-138.011	26.126	-93.500	11.3%	22.113	90.000	112.113	-1.255	-3.869	-5.124
		360	1.200	-34.785	-107.386	-142.172	24.111			24.269	91.945	116.214	-0.858	-2.571	-3.430
		450	1.500	-38.116	-109.686	-147.802	21.867			27.495	94.180	121.675	-0.538	-1.552	-2.090
		600	2.000	-43.644	-112.483	-156.127	19.343	-95.500	15.1%	32.859	96.809	129.668	-0.294	-0.804	-1.098
	350	350	1.000	-37.981	-105.456	-143.437	26.126	-93.500	11.3%	25.798	90.000	115.798	-0.922	-2.436	-3.359
6	200	200	1.000	-21.537	-90.161	-111.698	27.937	-93.500	-3.7%	14.416	83.940	98.356	-2.819	-10.545	-13.364
		240	1.200	-22.450	-91.740	-114.189	26.475			15.293	85.238	100.531	-2.205	-8.180	-10.385
		300	1.500	-23.361	-93.154	-116.514	25.232			16.171	86.379	102.550	-1.769	-6.511	-8.281
		400	2.000	-25.179	-95.584	-120.763	23.223	-95.500	0.1%	17.928	88.305	106.233	-1.208	-4.379	-5.587
	225	225	1.000	-24.230	-90.161	-114.391	27.937	-93.500	-3.7%	16.218	83.940	100.158	-2.227	-7.406	-9.633
		270	1.200	-25.871	-92.606	-118.477	25.706			17.797	85.939	103.737	-1.523	-4.996	-6.519
		338	1.500	-28.345	-95.604	-123.948	23.207			20.186	88.320	108.507	-0.951	-3.066	-4.017
		450	2.000	-32.412	-99.303	-131.715	20.421	-95.500	3.8%	24.126	91.189	115.315	-0.522	-1.635	-2.157
	250	250	1.000	-26.922	-90.161	-117.083	27.937	-93.500	-3.7%	18.020	83.940	101.960	-1.804	-5.399	-7.203
		300	1.200	-28.745	-92.606	-121.351	25.706			19.775	85.939	105.714	-1.233	-3.642	-4.875
		375	1.500	-31.474	-95.584	-127.058	23.223			22.410	88.305	110.715	-0.773	-2.242	-3.015
		500	2.000	-36.013	-99.303	-135.316	20.421	-95.500	3.8%	26.807	91.189	117.996	-0.423	-1.192	-1.614
	300	300	1.000	-32.306	-90.161	-122.467	27.937	-93.500	-3.7%	21.623	83.940	105.563	-1.253	-3.124	-4.377
		360	1.200	-34.495	-92.606	-127.101	25.706			23.730	85.939	109.669	-0.856	-2.108	-2.964
		450	1.500	-37.769	-95.584	-133.353	23.223			26.892	88.305	115.196	-0.537	-1.298	-1.834
		600	2.000	-43.216	-99.303	-142.519	20.421	-95.500	3.8%	32.168	91.189	123.357	-0.294	-0.690	-0.983
	350	350	1.000	-37.690	-90.161	-127.851	27.937	-93.500	-3.7%	25.227	83.940	109.167	-0.921	-1.968	-2.888

Cantilever Length: 3.0 m															
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	M_x	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-21.401	-81.261	-102.662	29.325	-93.500	-15.1%	14.241	81.280	95.521	-2.812	-9.020	-11.832
		240	1.200	-22.302	-83.269	-105.571	27.739			15.115	82.703	97.818	-2.199	-7.088	-9.287
		300	1.500	-23.202	-85.075	-108.278	26.382			15.990	83.962	99.953	-1.764	-5.708	-7.472
		400	2.000	-25.003	-88.187	-113.189	24.182	-95.500	-8.3%	17.743	86.099	103.842	-1.203	-3.915	-5.118
	225	225	1.000	-24.076	-81.261	-105.337	29.325	-93.500	-15.1%	16.022	81.280	97.302	-2.221	-6.335	-8.556
		270	1.200	-25.697	-84.375	-110.073	26.900			17.595	83.476	101.071	-1.518	-4.360	-5.878
		338	1.500	-28.146	-88.212	-116.358	24.165			19.978	86.116	106.094	-0.948	-2.741	-3.689
		450	2.000	-32.179	-92.928	-125.107	21.108	-95.500	-2.8%	23.912	89.301	113.214	-0.520	-1.502	-2.022
	250	250	1.000	-26.751	-81.261	-108.012	29.325	-93.500	-15.1%	17.802	81.280	99.082	-1.799	-4.618	-6.418
		300	1.200	-28.553	-84.375	-112.928	26.900			19.550	83.476	103.026	-1.229	-3.179	-4.408
		375	1.500	-31.254	-88.187	-119.440	24.182			22.179	86.099	108.277	-0.770	-2.004	-2.774
		500	2.000	-35.754	-92.928	-128.683	21.108	-95.500	-2.8%	26.569	89.301	115.871	-0.421	-1.095	-1.516
	300	300	1.000	-32.101	-81.261	-113.362	29.325	-93.500	-15.1%	21.362	81.280	102.642	-1.250	-2.673	-3.922
		360	1.200	-34.263	-84.375	-118.639	26.900			23.460	83.476	106.936	-0.854	-1.840	-2.693
		450	1.500	-37.504	-88.187	-125.691	24.182			26.614	86.099	112.713	-0.535	-1.160	-1.695
		600	2.000	-42.905	-92.928	-135.833	21.108	-95.500	-2.8%	31.883	89.301	121.184	-0.292	-0.634	-0.926
	350	350	1.000	-37.451	-81.261	-118.712	29.325	-93.500	-15.1%	24.922	81.280	106.202	-0.918	-1.683	-2.601
10	200	200	1.000	-21.319	-77.654	-98.973	30.106	-93.500	-20.4%	14.172	80.560	94.732	-2.804	-8.378	-11.182
		240	1.200	-22.216	-79.988	-102.204	28.410			15.049	82.066	97.115	-2.193	-6.650	-8.843
		300	1.500	-23.113	-82.072	-105.186	26.960			15.927	83.394	99.321	-1.759	-5.401	-7.159
		400	2.000	-24.909	-85.623	-110.532	24.614	-95.500	-11.5%	17.685	85.631	103.316	-1.200	-3.751	-4.951
	225	225	1.000	-23.984	-77.654	-101.638	30.106	-93.500	-20.4%	15.943	80.560	96.503	-2.216	-5.884	-8.100
		270	1.200	-25.599	-81.266	-106.865	27.514			17.522	82.882	100.405	-1.514	-4.112	-5.626
		338	1.500	-28.040	-85.652	-113.692	24.596			19.913	85.649	105.562	-0.945	-2.627	-3.571
		450	2.000	-32.065	-90.925	-122.990	21.363	-95.500	-5.0%	23.857	88.942	112.799	-0.518	-1.461	-1.979
	250	250	1.000	-26.648	-77.654	-104.302	30.106	-93.500	-20.4%	17.715	80.560	98.275	-1.795	-4.289	-6.084
		300	1.200	-28.443	-81.266	-109.709	27.514			19.469	82.882	102.352	-1.226	-2.998	-4.224
		375	1.500	-31.136	-85.623	-116.759	24.614			22.106	85.631	107.737	-0.768	-1.921	-2.688
		500	2.000	-35.628	-90.925	-126.552	21.363	-95.500	-5.0%	26.508	88.942	115.450	-0.420	-1.065	-1.485
	300	300	1.000	-31.978	-77.654	-109.632	30.106	-93.500	-20.4%	21.258	80.560	101.818	-1.246	-2.482	-3.729
		360	1.200	-34.132	-81.266	-115.398	27.514			23.363	82.882	106.246	-0.851	-1.735	-2.586
		450	1.500	-37.363	-85.623	-122.986	24.614			26.527	85.631	112.158	-0.533	-1.111	-1.645
		600	2.000	-42.753	-90.925	-133.678	21.363	-95.500	-5.0%	31.810	88.942	120.752	-0.291	-0.617	-0.908
	350	350	1.000	-37.308	-77.654	-114.962	30.106	-93.500	-20.4%	24.801	80.560	105.361	-0.916	-1.563	-2.479
12	200	200	1.000	-21.270	-76.221	-97.491	30.515	-93.500	-22.7%	14.145	80.440	94.585	-2.799	-8.109	-10.908
		240	1.200	-22.167	-78.751	-100.919	28.735			15.025	81.979	97.004	-2.188	-6.477	-8.665
		300	1.500	-23.064	-80.991	-104.055	27.221			15.906	83.329	99.235	-1.755	-5.286	-7.040
		400	2.000	-24.860	-84.762	-109.622	24.786	-95.500	-12.7%	17.668	85.591	103.260	-1.197	-3.695	-4.892
	225	225	1.000	-23.929	-76.221	-100.150	30.515	-93.500	-22.7%	15.913	80.440	96.353	-2.211	-5.695	-7.906
		270	1.200	-25.544	-80.127	-105.671	27.799			17.497	82.809	100.307	-1.510	-4.018	-5.528
		338	1.500	-27.985	-84.792	-112.777	24.767			19.895	85.609	105.504	-0.943	-2.588	-3.530
		450	2.000	-32.011	-90.296	-122.307	21.445	-95.500	-5.8%	23.847	88.915	112.763	-0.517	-1.449	-1.966
	250	250	1.000	-26.588	-76.221	-102.809	30.515	-93.500	-22.7%	17.681	80.440	98.121	-1.791	-4.152	-5.943
		300	1.200	-28.382	-80.127	-108.509	27.799			19.442	82.809	102.251	-1.223	-2.929	-4.152
		375	1.500	-31.074	-84.762	-115.837	24.786			22.086	85.591	107.677	-0.766	-1.892	-2.658
		500	2.000	-35.568	-90.296	-125.863	21.445	-95.500	-5.8%	26.497	88.915	115.412	-0.419	-1.056	-1.475
	300	300	1.000	-31.906	-76.221	-108.127	30.515	-93.500	-22.7%	21.217	80.440	101.657	-1.244	-2.403	-3.647
		360	1.200	-34.058	-80.127	-114.185	27.799			23.330	82.809	106.139	-0.850	-1.695	-2.545
		450	1.500	-37.289	-84.762	-122.052	24.786			26.503	85.591	112.094	-0.532	-1.095	-1.627
		600	2.000	-42.681	-90.296	-132.977	21.445	-95.500	-5.8%	31.796	88.915	120.712	-0.291	-0.611	-0.902
	350	350	1.000	-37.223	-76.221	-113.444	30.515	-93.500	-22.7%	24.754	80.440	105.194	-0.914	-1.513	-2.427

Cantilever Length: 3.75 m															
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	M_x	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-34.641	-209.379	-244.020	25.403	-106.600	49.1%	20.814	112.880	133.694	-6.913	-43.781	-50.695
		240	1.200	-36.158	-210.396	-246.555	24.204			22.124	114.693	136.817	-5.410	-33.315	-38.724
		300	1.500	-37.670	-211.296	-248.965	23.160			23.423	116.282	139.705	-4.342	-26.041	-30.383
		400	2.000	-40.679	-212.810	-253.489	21.429	-124.500	41.5%	25.996	118.935	144.931	-2.966	-16.933	-19.899
	225	225	1.000	-38.972	-209.379	-248.351	25.403	-106.600	49.1%	23.415	112.880	136.295	-5.462	-30.749	-36.211
		270	1.200	-41.699	-210.949	-252.648	23.561			25.767	115.671	141.438	-3.736	-20.125	-23.861
		338	1.500	-45.794	-212.822	-258.616	21.416			29.271	118.956	148.227	-2.336	-11.851	-14.187
		450	2.000	-52.496	-215.038	-267.534	18.931	-124.500	42.1%	34.960	122.787	157.747	-1.283	-5.971	-7.254
	250	250	1.000	-43.302	-209.379	-252.681	25.403	-106.600	49.1%	26.017	112.880	138.897	-4.425	-22.416	-26.841
		300	1.200	-46.332	-210.949	-257.281	23.561			28.630	115.671	144.301	-3.026	-14.671	-17.697
		375	1.500	-50.849	-212.810	-263.659	21.429			32.495	118.935	151.430	-1.898	-8.670	-10.568
		500	2.000	-58.329	-215.038	-273.367	18.931	-124.500	42.1%	38.845	122.787	161.631	-1.039	-4.353	-5.392
	300	300	1.000	-51.962	-209.379	-261.341	25.403	-106.600	49.1%	31.220	112.880	144.100	-3.073	-12.972	-16.045
		360	1.200	-55.598	-210.949	-266.547	23.561			34.356	115.671	150.027	-2.102	-8.490	-10.592
		450	1.500	-61.019	-212.810	-273.829	21.429			38.994	118.935	157.929	-1.318	-5.017	-6.335
		600	2.000	-69.995	-215.038	-285.032	18.931	-124.500	42.1%	46.614	122.787	169.400	-0.722	-2.519	-3.241
	350	350	1.000	-60.623	-209.378	-270.001	25.403	-106.600	49.1%	36.420	112.892	149.312	-2.257	-8.169	-10.426
4.5	200	200	1.000	-34.143	-147.909	-182.052	30.257	-106.600	27.9%	18.930	83.880	102.810	-6.900	-29.922	-36.822
		240	1.200	-35.620	-149.300	-184.920	28.608			20.094	85.436	105.530	-5.400	-22.872	-28.272
		300	1.500	-37.092	-150.532	-187.624	27.192			21.254	86.791	108.045	-4.334	-17.958	-22.292
		400	2.000	-40.027	-152.609	-192.636	24.891	-124.500	18.4%	23.564	89.035	112.599	-2.960	-11.778	-14.738
	225	225	1.000	-38.410	-147.909	-186.319	30.257	-106.600	27.9%	21.296	83.880	105.176	-5.452	-21.015	-26.467
		270	1.200	-41.067	-150.057	-191.124	27.734			23.390	86.270	109.660	-3.729	-13.854	-17.583
		338	1.500	-45.059	-152.625	-197.685	24.873			26.532	89.053	115.585	-2.331	-8.244	-10.575
		450	2.000	-51.599	-155.676	-207.276	21.661	-124.500	20.0%	31.677	92.266	123.944	-1.280	-4.220	-5.500
	250	250	1.000	-42.678	-147.909	-190.587	30.257	-106.600	27.9%	23.662	83.880	107.542	-4.416	-15.320	-19.736
		300	1.200	-45.630	-150.057	-195.687	27.734			25.988	86.270	112.259	-3.020	-10.099	-13.120
		375	1.500	-50.033	-152.609	-202.642	24.891			29.455	89.035	118.490	-1.894	-6.030	-7.925
		500	2.000	-57.333	-155.676	-213.009	21.661	-124.500	20.0%	35.197	92.266	127.463	-1.037	-3.076	-4.113
	300	300	1.000	-51.214	-147.909	-199.123	30.257	-106.600	27.9%	28.395	83.880	112.275	-3.067	-8.866	-11.933
		360	1.200	-54.756	-150.057	-204.813	27.734			31.186	86.270	117.457	-2.097	-5.845	-7.942
		450	1.500	-60.040	-152.609	-212.649	24.891			35.346	89.035	124.381	-1.315	-3.490	-4.805
		600	2.000	-68.799	-155.676	-224.475	21.661	-124.500	20.0%	42.236	92.266	134.503	-0.720	-1.780	-2.500
	350	350	1.000	-59.749	-147.909	-207.658	30.257	-106.600	27.9%	33.127	83.880	117.007	-2.253	-5.583	-7.836
6	200	200	1.000	-33.848	-121.803	-155.651	33.006	-106.600	12.5%	18.299	75.420	93.719	-6.892	-23.496	-30.388
		240	1.200	-35.294	-123.561	-158.855	31.095			19.413	76.949	96.362	-5.392	-18.078	-23.471
		300	1.500	-36.736	-125.127	-161.863	29.470			20.525	78.291	98.816	-4.327	-14.284	-18.611
		400	2.000	-39.613	-127.795	-167.408	26.846	-124.500	2.6%	22.748	80.540	103.288	-2.955	-9.481	-12.435
	225	225	1.000	-38.079	-121.803	-159.882	33.006	-106.600	12.5%	20.586	75.420	96.006	-5.446	-16.502	-21.948
		270	1.200	-40.679	-124.521	-165.201	30.090			22.590	77.774	100.365	-3.723	-10.992	-14.716
		338	1.500	-44.593	-127.816	-172.410	26.826			25.613	80.558	106.171	-2.327	-6.636	-8.964
		450	2.000	-51.017	-131.819	-182.836	23.195	-124.500	5.6%	30.587	83.870	114.457	-1.277	-3.468	-4.745
	250	250	1.000	-42.310	-121.803	-164.113	33.006	-106.600	12.5%	22.873	75.420	98.293	-4.411	-12.030	-16.441
		300	1.200	-45.199	-124.521	-169.721	30.090			25.100	77.774	102.875	-3.016	-8.013	-11.029
		375	1.500	-49.516	-127.795	-177.311	26.846			28.435	80.540	108.975	-1.891	-4.854	-6.745
		500	2.000	-56.686	-131.819	-188.505	23.195	-124.500	5.6%	33.986	83.870	117.856	-1.035	-2.528	-3.563
	300	300	1.000	-50.771	-121.803	-172.574	33.006	-106.600	12.5%	27.448	75.420	102.868	-3.063	-6.962	-10.025
		360	1.200	-54.239	-124.521	-178.761	30.090			30.120	77.774	107.895	-2.094	-4.637	-6.732
		450	1.500	-59.420	-127.795	-187.214	26.846			34.122	80.540	114.662	-1.313	-2.809	-4.122
		600	2.000	-68.023	-131.819	-199.842	23.195	-124.500	5.6%	40.783	83.870	124.653	-0.719	-1.463	-2.182
	350	350	1.000	-59.233	-121.803	-181.036	33.006	-106.600	12.5%	32.023	75.420	107.443	-2.251	-4.384	-6.635

Cantilever Length: 3.75 m															
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	M_x	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-33.599	-105.552	-139.151	35.124	-106.600	-1.0%	17.953	71.220	89.173	-6.879	-19.260	-26.139
		240	1.200	-35.019	-107.812	-142.831	33.028			19.048	72.856	91.903	-5.381	-14.975	-20.356
		300	1.500	-36.438	-109.844	-146.282	31.244			20.142	74.312	94.454	-4.317	-11.948	-16.265
		400	2.000	-39.270	-113.354	-152.624	28.360	-124.500	-9.8%	22.334	76.798	99.132	-2.946	-8.070	-11.016
	225	225	1.000	-37.799	-105.552	-143.351	35.124	-106.600	-1.0%	20.198	71.220	91.418	-5.435	-13.527	-18.962
		270	1.200	-40.354	-109.056	-149.410	31.925			22.167	73.749	95.916	-3.715	-9.160	-12.875
		338	1.500	-44.208	-113.382	-157.589	28.338			25.148	76.818	101.966	-2.321	-5.650	-7.970
		450	2.000	-50.545	-118.741	-169.286	24.336	-124.500	-4.8%	30.065	80.573	110.638	-1.273	-3.035	-4.308
	250	250	1.000	-41.998	-105.552	-147.550	35.124	-106.600	-1.0%	22.442	71.220	93.662	-4.403	-9.861	-14.264
		300	1.200	-44.838	-109.056	-153.894	31.925			24.630	73.749	98.379	-3.009	-6.677	-9.686
		375	1.500	-49.088	-113.354	-162.442	28.360			27.917	76.798	104.716	-1.885	-4.132	-6.017
		500	2.000	-56.161	-118.741	-174.902	24.336	-124.500	-4.8%	33.406	80.573	113.978	-1.031	-2.213	-3.244
	300	300	1.000	-50.398	-105.552	-155.950	35.124	-106.600	-1.0%	26.930	71.220	98.150	-3.057	-5.707	-8.764
		360	1.200	-53.806	-109.056	-162.862	31.925			29.556	73.749	103.305	-2.090	-3.864	-5.954
		450	1.500	-58.906	-113.354	-172.259	28.360			33.501	76.798	110.299	-1.309	-2.391	-3.701
		600	2.000	-67.394	-118.741	-186.135	24.336	-124.500	-4.8%	40.087	80.573	120.660	-0.716	-1.281	-1.996
	350	350	1.000	-58.798	-105.552	-164.350	35.124	-106.600	-1.0%	31.419	71.220	102.639	-2.246	-3.594	-5.840
10	200	200	1.000	-33.437	-97.960	-131.397	36.410	-106.600	-8.8%	17.800	69.660	87.460	-6.864	-17.204	-24.068
		240	1.200	-34.845	-100.694	-135.539	34.181			18.892	71.433	90.325	-5.368	-13.515	-18.883
		300	1.500	-36.252	-103.156	-139.409	32.279			19.986	73.015	93.001	-4.305	-10.883	-15.188
		400	2.000	-39.065	-107.403	-146.469	29.198	-124.500	-15.9%	22.176	75.721	97.897	-2.937	-7.463	-10.400
	225	225	1.000	-37.617	-97.960	-135.577	36.410	-106.600	-8.8%	20.025	69.660	89.685	-5.423	-12.083	-17.506
		270	1.200	-40.151	-102.202	-142.353	33.005			21.992	72.403	94.395	-3.705	-8.313	-12.019
		338	1.500	-43.977	-107.437	-151.414	29.174			24.970	75.742	100.713	-2.314	-5.225	-7.539
		450	2.000	-50.277	-113.878	-164.155	24.901	-124.500	-9.3%	29.888	79.812	109.699	-1.269	-2.867	-4.135
	250	250	1.000	-41.797	-97.960	-139.757	36.410	-106.600	-8.8%	22.250	69.660	91.910	-4.393	-8.809	-13.201
		300	1.200	-44.612	-102.202	-146.814	33.005			24.435	72.403	96.838	-3.001	-6.060	-9.062
		375	1.500	-48.832	-107.403	-156.235	29.198			27.720	75.721	103.441	-1.880	-3.821	-5.701
		500	2.000	-55.864	-113.878	-169.742	24.901	-124.500	-9.3%	33.208	79.812	113.020	-1.027	-2.090	-3.117
	300	300	1.000	-50.156	-97.960	-148.116	36.410	-106.600	-8.8%	26.700	69.660	96.360	-3.051	-5.098	-8.148
		360	1.200	-53.535	-102.202	-155.736	33.005			29.322	72.403	101.725	-2.084	-3.507	-5.591
		450	1.500	-58.598	-107.403	-166.001	29.198			33.265	75.721	108.985	-1.305	-2.211	-3.517
		600	2.000	-67.036	-113.878	-180.914	24.901	-124.500	-9.3%	39.850	79.812	119.662	-0.714	-1.209	-1.923
	350	350	1.000	-58.516	-97.960	-156.476	36.410	-106.600	-8.8%	31.150	69.660	100.810	-2.241	-3.210	-5.451
12	200	200	1.000	-33.330	-94.290	-127.620	37.222	-106.600	-13.1%	17.726	65.120	82.846	-6.850	-16.175	-23.024
		240	1.200	-34.733	-97.400	-132.133	34.876			18.821	66.878	85.699	-5.356	-12.814	-18.169
		300	1.500	-36.136	-100.185	-136.321	32.874			19.917	68.442	88.359	-4.295	-10.390	-14.685
		400	2.000	-38.941	-104.947	-143.889	29.639	-124.500	-18.6%	22.113	71.099	93.212	-2.930	-7.202	-10.132
	225	225	1.000	-37.497	-94.290	-131.787	37.222	-106.600	-13.1%	19.941	65.120	85.061	-5.412	-11.360	-16.772
		270	1.200	-40.021	-99.107	-139.129	33.639			21.913	67.837	89.751	-3.697	-7.916	-11.613
		338	1.500	-43.837	-104.986	-148.822	29.614			24.900	71.120	96.019	-2.308	-5.043	-7.351
		450	2.000	-50.126	-112.089	-162.215	25.156	-124.500	-11.1%	29.827	75.074	104.901	-1.265	-2.802	-4.068
	250	250	1.000	-41.663	-94.290	-135.953	37.222	-106.600	-13.1%	22.157	65.120	87.277	-4.384	-8.281	-12.665
		300	1.200	-44.468	-99.107	-143.575	33.639			24.348	67.837	92.186	-2.994	-5.771	-8.765
		375	1.500	-48.677	-104.947	-153.624	29.639			27.642	71.099	98.740	-1.875	-3.687	-5.562
		500	2.000	-55.696	-112.089	-167.784	25.156	-124.500	-11.1%	33.142	75.074	108.215	-1.025	-2.043	-3.068
	300	300	1.000	-49.996	-94.290	-144.286	37.222	-106.600	-13.1%	26.588	65.120	91.708	-3.044	-4.792	-7.837
		360	1.200	-53.362	-99.107	-152.469	33.639			29.218	67.837	97.055	-2.079	-3.340	-5.419
		450	1.500	-58.412	-104.947	-163.359	29.639			33.170	71.099	104.269	-1.302	-2.134	-3.436
		600	2.000	-66.835	-112.089	-178.924	25.156	-124.500	-11.1%	39.770	75.074	114.844	-0.712	-1.182	-1.894
	350	350	1.000	-58.328	-94.290	-152.618	37.222	-106.600	-13.1%	31.020	65.120	96.140	-2.237	-3.018	-5.255

A2. Concrete Curb

Cantilever Length: 0.5 m												
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-2.482	-4.190	-6.672	6.140	28.772	34.912	-0.011	-0.008	-0.019
		240	1.200	-2.506	-4.325	-6.831	6.280	29.051	35.331	-0.009	-0.006	-0.015
		300	1.500	-2.530	-4.444	-6.974	6.440	29.271	35.711	-0.007	-0.005	-0.012
		400	2.000	-2.580	-4.645	-7.225	6.720	29.652	36.372	-0.005	-0.003	-0.008
	225	225	1.000	-2.554	-4.279	-6.833	6.440	29.080	35.520	-0.008	-0.006	-0.014
		270	1.200	-2.599	-4.485	-7.084	6.680	29.476	36.156	-0.005	-0.004	-0.009
		338	1.500	-2.665	-4.730	-7.395	7.080	29.902	36.982	-0.004	-0.002	-0.006
		450	2.000	-2.775	-5.013	-7.788	7.740	30.356	38.096	-0.002	-0.001	-0.003
	250	250	1.000	-2.628	-4.356	-6.984	6.720	29.344	36.064	0.014	-0.004	0.010
		300	1.200	-2.676	-4.561	-7.237	7.020	29.696	36.716	-0.004	-0.003	-0.007
		375	1.500	-2.756	-4.795	-7.551	7.440	30.092	37.532	-0.002	-0.002	-0.004
		500	2.000	15.282	-5.075	10.207	8.180	30.503	38.683	-0.001	-0.001	-0.002
	300	300	1.000	-2.774	-4.483	-7.257	7.320	29.740	37.060	-0.003	-0.003	-0.006
		360	1.200	-2.833	-4.684	-7.517	7.660	30.048	37.708	-0.002	-0.002	-0.004
		450	1.500	-2.921	-4.913	-7.834	8.180	30.386	38.566	-0.002	-0.001	-0.003
		600	2.000	-3.068	-5.168	-8.236	9.060	30.709	39.769	0.000	-0.001	-0.001
	350	350	1.000	-2.921	-4.583	-7.504	7.880	30.034	37.914	-0.002	-0.002	-0.004
4.5	200	200	1.000	-2.476	-3.968	-6.444	6.120	28.578	34.698	-0.011	-0.007	-0.018
		240	1.200	-2.500	-4.116	-6.616	5.720	28.871	34.591	-0.009	-0.005	-0.014
		300	1.500	-2.525	-4.247	-6.772	6.400	29.120	35.520	-0.007	-0.004	-0.011
		400	2.000	-2.574	-4.466	-7.040	6.700	29.515	36.215	-0.004	-0.003	-0.007
	225	225	1.000	-2.549	-4.066	-6.615	6.420	28.900	35.320	0.018	-0.005	0.013
		270	1.200	-2.593	-4.295	-6.888	6.700	29.310	36.010	-0.006	-0.003	-0.009
		338	1.500	-2.661	-4.561	-7.222	7.080	29.764	36.844	-0.003	-0.002	-0.005
		450	2.000	-2.771	-4.865	-7.636	7.740	30.247	37.987	0.004	-0.001	0.003
	250	250	1.000	-2.623	-4.155	-6.778	6.720	29.178	35.898	-0.006	-0.004	-0.010
		300	1.200	-2.671	-4.381	-7.052	7.020	29.559	36.579	-0.004	-0.003	-0.007
		375	1.500	-2.745	-4.640	-7.385	7.440	29.983	37.423	-0.002	-0.002	-0.004
		500	2.000	-2.870	-4.932	-7.802	8.180	30.408	38.588	-0.001	-0.001	-0.002
	300	300	1.000	-2.769	-4.304	-7.073	7.300	29.603	36.903	-0.004	-0.002	-0.006
		360	1.200	-2.828	-4.523	-7.351	7.660	29.939	37.599	-0.002	-0.002	-0.004
		450	1.500	-2.917	-4.768	-7.685	8.180	30.291	38.471	-0.002	-0.001	-0.003
		600	2.000	-3.066	-5.034	-8.100	9.080	30.628	39.708	0.000	-0.001	-0.001
	350	350	1.000	-2.916	-4.422	-7.338	7.900	29.910	37.810	-0.002	-0.002	-0.004
6	200	200	1.000	-2.474	-3.890	-6.364	6.120	28.504	34.624	-0.012	-0.006	-0.018
		240	1.200	-2.499	-4.045	-6.544	6.260	28.796	35.056	-0.009	-0.005	-0.014
		300	1.500	-2.524	-4.182	-6.706	6.420	29.045	35.465	-0.007	-0.004	-0.011
		400	2.000	-2.574	-4.409	-6.983	6.700	29.454	36.154	-0.004	-0.003	-0.007
	225	225	1.000	-2.548	-3.997	-6.545	6.400	28.840	35.240	-0.008	-0.005	-0.013
		270	1.200	-2.592	-4.235	-6.827	6.680	29.249	35.929	-0.006	-0.003	-0.009
		338	1.500	-2.660	-4.509	-7.169	7.080	29.717	36.797	-0.003	-0.002	-0.005
		450	2.000	-2.772	-4.817	-7.589	7.740	30.199	37.939	-0.002	-0.001	-0.003
	250	250	1.000	-2.621	-4.093	-6.714	6.720	29.118	35.838	-0.006	-0.004	-0.010
		300	1.200	-2.671	-4.326	-6.997	7.020	29.498	36.518	-0.004	-0.003	-0.007
		375	1.500	-2.746	-4.591	-7.337	7.460	29.922	37.382	-0.002	-0.002	-0.004
		500	2.000	-2.870	-4.886	-7.756	8.180	30.360	38.540	-0.001	-0.001	-0.002
	300	300	1.000	-2.768	-4.252	-7.020	7.300	29.556	36.856	-0.004	-0.002	-0.006
		360	1.200	-2.828	-4.475	-7.303	7.640	29.892	37.532	-0.002	-0.002	-0.004
		450	1.500	-2.918	-4.722	-7.640	8.200	30.229	38.429	-0.002	-0.001	-0.003
		600	2.000	-3.068	-4.988	-8.056	9.080	30.579	39.659	0.000	-0.001	-0.001
	350	350	1.000	-2.915	-4.375	-7.290	7.900	29.863	37.763	-0.002	-0.002	-0.004

Cantilever Length: 0.5 m												
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-2.474	-3.861	-6.335	6.120	28.484	34.604	-0.012	-0.006	-0.018
		240	1.200	-2.499	-4.020	-6.519	6.280	28.776	35.056	-0.009	-0.005	-0.014
		300	1.500	-2.524	-4.159	-6.683	6.420	29.039	35.459	-0.007	-0.004	-0.011
		400	2.000	-2.574	-4.390	-6.964	6.700	29.448	36.148	-0.004	-0.003	-0.007
	225	225	1.000	-2.548	-3.973	-6.521	6.420	28.820	35.240	-0.008	-0.005	-0.013
		270	1.200	-2.592	-4.215	-6.807	6.680	29.244	35.924	-0.006	-0.003	-0.009
		338	1.500	-2.661	-4.492	-7.153	7.080	29.711	36.791	-0.003	-0.002	-0.005
		450	2.000	-2.773	-4.800	-7.573	7.740	30.194	37.934	-0.002	-0.001	-0.003
	250	250	1.000	-2.621	-4.072	-6.693	6.700	29.112	35.812	-0.006	-0.004	-0.010
		300	1.200	-2.671	-4.308	-6.979	7.020	29.492	36.512	-0.004	-0.003	-0.007
		375	1.500	-2.746	-4.575	-7.321	7.460	29.916	37.376	-0.002	-0.002	-0.004
		500	2.000	-2.872	-4.869	-7.741	8.180	30.355	38.535	-0.001	-0.001	-0.002
	300	300	1.000	-2.768	-4.235	-7.003	7.300	29.551	36.851	-0.004	-0.002	-0.006
		360	1.200	-2.829	-4.458	-7.287	7.640	29.887	37.527	-0.002	-0.002	-0.004
		450	1.500	-2.918	-4.706	-7.624	8.200	30.223	38.423	-0.002	-0.001	-0.003
		600	2.000	-3.068	-4.972	-8.040	9.080	30.574	39.654	0.000	-0.001	-0.001
	350	350	1.000	-2.916	-4.359	-7.275	7.900	29.858	37.758	-0.002	-0.002	-0.004
10	200	200	1.000	-2.474	-3.853	-6.327	6.120	28.484	34.604	-0.012	-0.006	-0.018
		240	1.200	-2.499	-4.014	-6.513	6.280	28.776	35.056	-0.009	-0.005	-0.014
		300	1.500	-2.524	-4.154	-6.678	6.420	29.039	35.459	-0.007	-0.004	-0.011
		400	2.000	-2.574	-4.385	-6.959	6.700	29.448	36.148	-0.004	-0.003	-0.007
	225	225	1.000	-2.548	-3.967	-6.515	6.420	28.820	35.240	-0.008	-0.005	-0.013
		270	1.200	-2.593	-4.209	-6.802	6.680	29.244	35.924	-0.006	-0.003	-0.009
		338	1.500	-2.660	-4.488	-7.148	7.080	29.711	36.791	-0.003	-0.002	-0.005
		450	2.000	-2.773	-4.796	-7.569	7.740	30.194	37.934	-0.002	-0.001	-0.003
	250	250	1.000	-2.262	-4.351	-6.613	6.700	29.112	35.812	-0.006	-0.004	-0.010
		300	1.200	-2.671	-4.304	-6.975	7.020	29.492	36.512	-0.004	-0.003	-0.007
		375	1.500	-2.746	-4.570	-7.316	7.460	29.916	37.376	-0.002	-0.002	-0.004
		500	2.000	-2.872	-4.865	-7.737	8.180	30.355	38.535	-0.001	-0.001	-0.002
	300	300	1.000	-2.768	-4.231	-6.999	7.300	29.551	36.851	-0.008	0.002	-0.006
		360	1.200	-2.829	-4.454	-7.283	7.640	29.887	37.527	-0.002	-0.002	-0.004
		450	1.500	-2.919	-4.701	-7.620	8.200	30.223	38.423	-0.002	-0.001	-0.003
		600	2.000	-3.068	-4.967	-8.035	9.080	30.574	39.654	0.000	-0.001	-0.001
	350	350	1.000	-2.916	-4.355	-7.271	7.900	29.858	37.758	-0.002	-0.002	-0.004
12	200	200	1.000	-2.474	-3.851	-6.325	6.120	28.484	34.604	-0.012	-0.006	-0.018
		240	1.200	-2.499	-4.012	-6.511	6.280	28.776	35.056	-0.009	-0.005	-0.014
		300	1.500	-2.524	-4.152	-6.676	6.420	29.039	35.459	-0.007	-0.004	-0.011
		400	2.000	-2.574	-4.384	-6.958	6.700	29.448	36.148	-0.004	-0.003	-0.007
	225	225	1.000	-2.547	-3.966	-6.513	6.420	28.820	35.240	-0.008	-0.005	-0.013
		270	1.200	-2.593	-4.208	-6.801	6.680	29.244	35.924	-0.006	-0.003	-0.009
		338	1.500	-2.660	-4.486	-7.146	7.080	29.711	36.791	-0.003	-0.002	-0.005
		450	2.000	-2.773	-4.795	-7.568	7.740	30.194	37.934	-0.002	-0.001	-0.003
	250	250	1.000	-2.621	-4.066	-6.687	8.100	28.089	36.189	-0.006	-0.004	-0.010
		300	1.200	-2.671	-4.303	-6.974	7.020	29.492	36.512	-0.004	-0.003	-0.007
		375	1.500	-2.746	-4.569	-7.315	7.460	29.916	37.376	-0.002	-0.002	-0.004
		500	2.000	-2.872	-4.863	-7.735	8.180	30.355	38.535	-0.001	-0.001	-0.002
	300	300	1.000	-2.768	-4.230	-6.998	7.300	29.551	36.851	-0.004	-0.002	-0.006
		360	1.200	-2.829	-4.453	-7.282	7.640	29.887	37.527	-0.002	-0.002	-0.004
		450	1.500	-2.919	-4.700	-7.619	8.200	30.223	38.423	-0.002	-0.001	-0.003
		600	2.000	-3.069	-4.966	-8.035	9.080	30.574	39.654	0.000	-0.001	-0.001
	350	350	1.000	-2.916	-4.354	-7.270	7.900	29.858	37.758	-0.002	-0.002	-0.004

Cantilever Length: 1.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-6.174	-22.891	-29.065			8.540	64.000	72.540	-0.108	-0.281	-0.389
		240	1.200	-6.277	-23.570	-29.847			8.860	65.500	74.360	-0.084	-0.214	-0.298
		300	1.500	-6.379	-24.200	-30.579			9.160	66.860	76.020	-0.067	-0.168	-0.235
		400	2.000	-6.583	-25.327	-31.910			9.740	69.240	78.980	-0.044	-0.110	-0.154
	225	225	1.000	-6.474	-23.322	-29.796			9.160	65.260	74.420	-0.079	-0.201	-0.280
		270	1.200	-6.659	-24.410	-31.069			9.700	67.600	77.300	-0.054	-0.132	-0.186
		338	1.500	-6.934	-25.809	-32.743			10.480	70.480	80.960	-0.033	-0.079	-0.112
		450	2.000	-7.385	-27.607	-34.992			11.800	73.980	85.780	-0.017	-0.041	-0.058
	250	250	1.000	-6.774	-23.711	-30.485			9.760	66.400	76.160	-0.060	-0.149	-0.209
		300	1.200	-6.978	-24.814	-31.792			10.360	68.700	79.060	0.040	0.099	0.139
		375	1.500	-7.282	-26.205	-33.487			11.220	71.500	82.720	0.113	-0.059	0.054
		500	2.000	-7.783	-27.990	-35.773			12.680	74.900	87.580	-0.013	-0.031	-0.044
	300	300	1.000	-7.372	-24.360	-31.732			10.960	68.260	79.220	-0.037	-0.089	-0.126
		360	1.200	-7.615	-25.469	-33.084			11.660	70.480	82.140	-0.025	-0.059	-0.084
		450	1.500	-7.977	-26.846	-34.823			12.720	73.100	85.820	-0.015	-0.036	-0.051
		600	2.000	-8.577	-28.575	-37.152			14.460	76.260	90.720	-0.008	-0.019	-0.027
	350	350	1.000	-7.968	-24.855	-32.823			12.140	69.660	81.800	-0.025	-0.057	-0.082
4.5	200	200	1.000	-6.159	-20.784	-26.943			8.520	62.600	71.120	-0.108	-0.214	-0.322
		240	1.200	-6.259	-21.645	-27.904			8.820	64.240	73.060	-0.083	-0.167	-0.250
		300	1.500	-6.358	-22.435	-28.793			9.120	65.720	74.840	-0.066	-0.133	-0.199
		400	2.000	-6.557	-23.828	-30.385			9.700	68.240	77.940	-0.182	0.090	-0.092
	225	225	1.000	-6.455	-21.318	-27.773			9.120	63.960	73.080	-0.079	-0.155	-0.234
		270	1.200	-6.633	-22.680	-29.313			9.640	66.480	76.120	-0.053	-0.106	-0.159
		338	1.500	-6.904	-24.401	-31.305			10.420	69.540	79.960	-0.033	-0.065	-0.098
		450	2.000	-7.347	-26.576	-33.923			11.740	73.260	85.000	-0.017	-0.035	-0.052
	250	250	1.000	-6.750	-21.790	-28.540			9.700	65.160	74.860	-0.060	-0.117	-0.177
		300	1.200	-6.949	-23.164	-30.113			10.300	67.620	77.920	-0.040	-0.079	-0.119
		375	1.500	-7.245	-24.878	-32.123			11.160	70.600	81.760	-0.025	-0.049	-0.074
		500	2.000	-7.740	-27.042	-34.782			12.620	74.240	86.860	-0.013	-0.026	-0.039
	300	300	1.000	-7.340	-22.578	-29.918			10.880	67.080	77.960	-0.037	-0.072	-0.109
		360	1.200	-7.577	-23.967	-31.544			11.580	69.460	81.040	-0.025	-0.049	-0.074
		450	1.500	-7.933	-25.672	-33.605			12.620	72.320	84.940	-0.016	-0.030	-0.046
		600	2.000	-8.527	-27.778	-36.305			14.380	75.740	90.120	-0.008	-0.017	-0.025
	350	350	1.000	-7.929	-23.201	-31.130			12.060	68.540	80.600	-0.025	-0.047	-0.072
6	200	200	1.000	-6.146	-19.980	-26.126			8.500	62.120	70.620	-0.108	-0.186	-0.294
		240	1.200	-6.246	-20.923	-27.169			8.800	63.800	72.600	-0.084	-0.146	-0.230
		300	1.500	-6.344	-21.785	-28.129			9.100	65.300	74.400	-0.067	-0.118	-0.185
		400	2.000	-6.542	-23.300	-29.842			9.660	67.900	77.560	-0.044	-0.082	-0.126
	225	225	1.000	-6.440	-20.561	-27.001			9.080	63.500	72.580	-0.079	-0.137	-0.216
		270	1.200	-6.618	-22.057	-28.675			9.620	66.080	75.700	-0.053	-0.095	-0.148
		338	1.500	-6.888	-23.936	-30.824			10.420	69.220	79.640	-0.032	-0.060	-0.092
		450	2.000	-7.331	-26.285	-33.616			11.720	73.060	84.780	-0.017	-0.033	-0.050
	250	250	1.000	-6.735	-21.087	-27.822			9.660	64.720	74.380	-0.059	-0.105	-0.164
		300	1.200	-6.932	-22.603	-29.535			10.260	67.260	77.520	-0.040	-0.073	-0.113
		375	1.500	-7.229	-24.475	-31.704			11.140	70.340	81.480	-0.025	-0.046	-0.071
		500	2.000	-7.724	-26.807	-34.531			12.620	74.080	86.700	-0.013	-0.026	-0.039
	300	300	1.000	-7.322	-21.995	-29.317			10.860	66.720	77.580	-0.037	-0.065	-0.102
		360	1.200	-7.560	-23.526	-31.086			11.560	69.200	80.760	-0.025	-0.046	-0.071
		450	1.500	-7.915	-25.381	-33.296			12.620	72.140	84.760	-0.015	-0.029	-0.044
		600	2.000	-8.511	-27.625	-36.136			14.360	75.660	90.020	-0.009	-0.015	-0.024
	350	350	1.000	-7.910	-22.726	-30.636			12.020	68.280	80.300	-0.025	-0.044	-0.069

Cantilever Length: 1.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-6.136	-19.493	-25.629			8.480	61.820	70.300	-0.108	-0.170	-0.278
		240	1.200	-6.235	-20.505	-26.740			8.780	63.540	72.320	-0.084	-0.136	-0.220
		300	1.500	-6.334	-21.427	-27.761			9.060	65.080	74.140	-0.067	-0.110	-0.177
		400	2.000	-6.532	-23.037	-29.569			9.660	67.720	77.380	-0.044	-0.077	-0.121
	225	225	1.000	-6.430	-20.144	-26.574			9.080	63.240	72.320	-0.079	-0.127	-0.206
		270	1.200	-6.608	-21.747	-28.355			9.600	65.880	75.480	-0.053	-0.090	-0.143
		338	1.500	-6.878	-23.737	-30.615			10.400	69.100	79.500	-0.032	-0.058	-0.090
		450	2.000	-7.324	-26.186	-33.510			11.720	73.000	84.720	-0.017	-0.033	-0.050
	250	250	1.000	-6.723	-20.740	-27.463			9.680	64.500	74.180	-0.060	-0.098	-0.158
		300	1.200	-6.922	-22.356	-29.278			10.260	67.120	77.380	-0.040	-0.070	-0.110
		375	1.500	-7.219	-24.326	-31.545			11.120	70.260	81.380	-0.025	-0.044	-0.069
		500	2.000	-7.718	-26.738	-34.456			12.620	74.040	86.660	-0.013	-0.025	-0.038
	300	300	1.000	-7.310	-21.761	-29.071			10.840	66.600	77.440	-0.038	-0.062	-0.100
		360	1.200	-7.550	-23.373	-30.923			11.560	69.120	80.680	-0.025	-0.044	-0.069
		450	1.500	-7.907	-25.297	-33.204			12.600	72.100	84.700	-0.016	-0.028	-0.044
		600	2.000	-8.507	-27.590	-36.097			14.360	75.640	90.000	-0.008	-0.015	-0.023
	350	350	1.000	-7.898	-22.569	-30.467			12.020	68.200	80.220	-0.025	-0.043	-0.068
10	200	200	1.000	-6.131	-19.299	-25.430			8.480	61.720	70.200	-0.108	-0.162	-0.270
		240	1.200	-6.230	-20.352	-26.582			8.780	63.460	72.240	-0.084	-0.131	-0.215
		300	1.500	-6.330	-21.305	-27.635			9.060	65.020	74.080	-0.066	-0.108	-0.174
		400	2.000	-6.529	-22.960	-29.489			9.660	67.680	77.340	-0.045	-0.075	-0.120
	225	225	1.000	-6.425	-20.000	-26.425			9.060	63.180	72.240	-0.079	-0.123	-0.202
		270	1.200	-6.604	-21.654	-28.258			9.600	65.840	75.440	-0.053	-0.088	-0.141
		338	1.500	-6.875	-23.688	-30.563			10.400	69.080	79.480	-0.033	-0.056	-0.089
		450	2.000	-7.322	-26.168	-33.490			11.720	73.000	84.720	-0.017	-0.033	-0.050
	250	250	1.000	-6.719	-20.635	-27.354			9.660	64.460	74.120	-0.060	-0.095	-0.155
		300	1.200	-6.917	-22.293	-29.210			10.240	67.100	77.340	-0.040	-0.068	-0.108
		375	1.500	-7.217	-24.294	-31.511			11.140	70.240	81.380	-0.025	-0.044	-0.069
		500	2.000	-7.716	-26.727	-34.443			12.600	74.040	86.640	-0.013	-0.025	-0.038
	300	300	1.000	-7.306	-21.706	-29.012			10.840	66.580	77.420	-0.037	-0.062	-0.099
		360	1.200	-7.546	-23.343	-30.889			11.540	69.120	80.660	-0.025	-0.044	-0.069
		450	1.500	-7.906	-25.283	-33.189			12.600	72.100	84.700	-0.016	-0.028	-0.044
		600	2.000	-8.506	-27.585	-36.091			14.360	75.640	90.000	-0.008	-0.015	-0.023
	350	350	1.000	-7.896	-22.538	-30.434			12.000	68.200	80.200	-0.024	-0.043	-0.067
12	200	200	1.000	-6.129	-19.225	-25.354			8.480	61.680	70.160	-0.108	-0.161	-0.269
		240	1.200	-6.228	-20.298	-26.526			8.780	63.440	72.220	-0.084	-0.130	-0.214
		300	1.500	-6.328	-21.266	-27.594			9.080	65.000	74.080	-0.066	-0.107	-0.173
		400	2.000	-6.527	-22.939	-29.466			9.660	67.680	77.340	-0.044	-0.075	-0.119
	225	225	1.000	-6.422	-19.953	-26.375			9.060	63.160	72.220	-0.079	-0.122	-0.201
		270	1.200	-6.602	-21.628	-28.230			9.600	65.840	75.440	-0.053	-0.087	-0.140
		338	1.500	-6.874	-23.677	-30.551			10.400	69.080	79.480	-0.033	-0.057	-0.090
		450	2.000	-7.322	-26.164	-33.486			11.720	73.000	84.720	-0.017	-0.033	-0.050
	250	250	1.000	-6.717	-20.604	-27.321			9.660	64.460	74.120	-0.059	-0.096	-0.155
		300	1.200	-6.916	-22.277	-29.193			10.240	67.100	77.340	-0.040	-0.068	-0.108
		375	1.500	-7.216	-24.288	-31.504			11.120	70.240	81.360	-0.025	-0.044	-0.069
		500	2.000	-7.716	-26.725	-34.441			12.600	74.040	86.640	-0.013	-0.025	-0.038
	300	300	1.000	-7.306	-21.692	-28.998			10.840	66.580	77.420	-0.037	-0.062	-0.099
		360	1.200	-7.545	-23.337	-30.882			11.540	69.120	80.660	-0.025	-0.044	-0.069
		450	1.500	-7.906	-25.280	-33.186			12.600	72.100	84.700	-0.016	-0.028	-0.044
		600	2.000	-8.506	-27.584	-36.090			14.360	75.640	90.000	-0.008	-0.015	-0.023
	350	350	1.000	-7.894	-22.532	-30.426			12.000	68.200	80.200	-0.025	-0.042	-0.067

Cantilever Length: 1.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-11.109	-43.831	-54.940			11.080	46.780	57.860	-0.426	-1.464	-1.890
		240	1.200	-11.345	-44.641	-55.986			11.560	48.120	59.680	-0.330	-1.114	-1.444
		300	1.500	-11.581	-45.413	-56.994			12.000	49.380	61.380	-0.262	-0.871	-1.133
		400	2.000	-12.051	-46.847	-58.898			12.900	51.660	64.560	-0.176	-0.567	-0.743
	225	225	1.000	-11.789	-44.367	-56.156			12.020	47.860	59.880	-0.314	-1.037	-1.351
		270	1.200	-12.214	-45.709	-57.923			12.840	50.040	62.880	-0.212	-0.680	-0.892
		338	1.500	-12.851	-47.527	-60.378			14.060	52.900	66.960	-0.129	-0.403	-0.532
		450	2.000	-13.891	-50.023	-63.914			16.060	56.660	72.720	-0.069	-0.205	-0.274
	250	250	1.000	-12.470	-44.878	-57.348			12.940	48.900	61.840	-0.240	-0.762	-1.002
		300	1.200	-12.940	-46.267	-59.207			13.840	51.120	64.960	-0.162	-0.500	-0.662
		375	1.500	-13.642	-48.111	-61.753			15.200	53.960	69.160	-0.100	-0.298	-0.398
		500	2.000	-14.799	-50.629	-65.428			17.420	57.700	75.120	-0.053	-0.152	-0.205
	300	300	1.000	-13.830	-45.776	-59.606			14.780	50.700	65.480	-0.153	-0.447	-0.600
		360	1.200	-14.393	-47.216	-61.609			15.860	52.940	68.800	-0.102	-0.295	-0.397
		450	1.500	-15.230	-49.086	-64.316			17.460	55.740	73.200	-0.064	-0.176	-0.240
		600	2.000	-16.612	-51.566	-68.178			20.140	59.300	79.440	-0.034	-0.089	-0.123
	350	350	1.000	-15.189	-46.492	-61.681			16.620	52.140	68.760	-0.104	-0.286	-0.390
4.5	200	200	1.000	-11.043	-33.902	-44.945			10.940	42.760	53.700	-0.425	-1.038	-1.463
		240	1.200	-11.272	-35.072	-46.344			11.380	44.400	55.780	-0.329	-0.800	-1.129
		300	1.500	-11.502	-36.180	-47.682			11.820	45.900	57.720	-0.262	-0.634	-0.896
		400	2.000	-11.958	-38.218	-50.176			12.700	48.600	61.300	-0.175	-0.424	-0.599
	225	225	1.000	-11.717	-34.728	-46.445			11.840	44.160	56.000	-0.314	-0.744	-1.058
		270	1.200	-12.128	-36.630	-48.758			12.620	46.740	59.360	-0.211	-0.500	-0.711
		338	1.500	-12.747	-39.167	-51.914			13.820	50.040	63.860	-0.130	-0.305	-0.435
		450	2.000	-13.758	-42.583	-56.341			15.800	54.320	70.120	-0.069	-0.162	-0.231
	250	250	1.000	-12.388	-35.466	-47.854			12.720	45.420	58.140	-0.240	-0.553	-0.793
		300	1.200	-12.845	-37.405	-50.250			13.600	47.980	61.580	-0.162	-0.372	-0.534
		375	1.500	-13.525	-39.948	-53.473			14.920	51.220	66.140	-0.099	-0.229	-0.328
		500	2.000	-14.651	-43.367	-58.018			17.100	55.460	72.560	-0.052	-0.122	-0.174
	300	300	1.000	-13.731	-36.680	-50.411			14.500	47.440	61.940	-0.152	-0.331	-0.483
		360	1.200	-14.276	-38.659	-52.935			15.560	49.940	65.500	-0.103	-0.224	-0.327
		450	1.500	-15.088	-41.213	-56.301			17.140	53.100	70.240	-0.063	-0.139	-0.202
		600	2.000	-16.436	-44.581	-61.017			19.740	57.180	76.920	-0.033	-0.074	-0.107
	350	350	1.000	-15.071	-37.606	-52.677			16.280	48.940	65.220	-0.104	-0.214	-0.318
6	200	200	1.000	-11.023	-30.329	-41.352			10.900	41.720	52.620	-0.424	-0.858	-1.282
		240	1.200	-11.249	-31.698	-42.947			11.340	43.440	54.780	-0.329	-0.671	-1.000
		300	1.500	-11.475	-32.982	-44.457			11.780	45.020	56.800	-1.053	0.538	-0.515
		400	2.000	-11.924	-35.318	-47.242			12.660	47.820	60.480	-0.176	-0.367	-0.543
	225	225	1.000	-11.691	-31.261	-42.952			11.800	43.160	54.960	-0.314	-0.622	-0.936
		270	1.200	-12.096	-33.465	-45.561			12.580	45.840	58.420	-0.211	-0.426	-0.637
		338	1.500	-12.706	-36.369	-49.075			13.760	49.280	63.040	-0.129	-0.268	-0.397
		450	2.000	-13.707	-40.229	-53.936			15.740	53.740	69.480	-0.069	-0.147	-0.216
	250	250	1.000	-12.357	-32.084	-44.441			12.680	44.420	57.100	-0.240	-0.467	-0.707
		300	1.200	-12.806	-34.330	-47.136			13.540	47.100	60.640	0.636	-0.322	0.314
		375	1.500	-13.478	-37.245	-50.723			14.880	50.480	65.360	-0.099	-0.204	-0.303
		500	2.000	-14.594	-41.122	-55.716			17.060	54.920	71.980	-0.053	-0.111	-0.164
	300	300	1.000	-13.687	-33.457	-47.144			14.440	46.480	60.920	-0.152	-0.285	-0.437
		360	1.200	-14.225	-35.760	-49.985			15.480	49.140	64.620	-0.103	-0.197	-0.300
		450	1.500	-15.029	-38.708	-53.737			17.060	52.480	69.540	-0.063	-0.125	-0.188
		600	2.000	-16.368	-42.539	-58.907			19.700	56.760	76.460	-0.033	-0.069	-0.102
	350	350	1.000	-15.016	-34.537	-49.553			16.220	48.040	64.260	-0.104	-0.187	-0.291

Cantilever Length: 1.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-11.001	-28.229	-39.230			10.880	41.120	52.000	-0.424	-0.745	-1.169
		240	1.200	-11.225	-29.741	-40.966			11.300	42.880	54.180	-0.329	-0.591	-0.920
		300	1.500	-11.448	-31.153	-42.601			11.760	44.480	56.240	-0.261	-0.480	-0.741
		400	2.000	-11.894	-33.706	-45.600			12.620	47.360	59.980	-0.175	-0.335	-0.510
	225	225	1.000	-11.664	-29.246	-40.910			11.760	42.580	54.340	-0.313	-0.549	-0.862
		270	1.200	-12.066	-31.689	-43.755			12.560	45.320	57.880	-0.211	-0.385	-0.596
		338	1.500	-12.672	-34.878	-47.550			13.720	48.880	62.600	-0.129	-0.248	-0.377
		450	2.000	-13.672	-39.059	-52.731			15.700	53.480	69.180	-0.069	-0.140	-0.209
	250	250	1.000	-12.327	-30.168	-42.495			12.640	43.860	56.500	-0.240	-0.417	-0.657
		300	1.200	-12.773	-32.667	-45.440			13.500	46.640	60.140	-0.162	-0.293	-0.455
		375	1.500	-13.442	-35.873	-49.315			14.840	50.140	64.980	-0.099	-0.190	-0.289
		500	2.000	-14.558	-40.060	-54.618			17.040	54.720	71.760	-0.052	-0.108	-0.160
	300	300	1.000	-13.650	-31.756	-45.406			14.400	46.020	60.420	-0.151	-0.261	-0.412
		360	1.200	-14.186	-34.321	-48.507			15.460	48.780	64.240	-0.102	-0.184	-0.286
		450	1.500	-14.988	-37.547	-52.535			17.040	52.240	69.280	-0.063	-0.120	-0.183
		600	2.000	-16.330	-41.639	-57.969			19.680	56.660	76.340	-0.033	-0.067	-0.100
	350	350	1.000	-14.974	-33.029	-48.003			16.160	47.700	63.860	-0.103	-0.175	-0.278
10	200	200	1.000	-10.984	-27.215	-38.199			10.860	40.800	51.660	-0.423	-0.693	-1.116
		240	1.200	-11.207	-28.825	-40.032			11.280	42.600	53.880	-0.328	-0.555	-0.883
		300	1.500	-11.430	-30.323	-41.753			11.740	44.240	55.980	-0.260	-0.456	-0.716
		400	2.000	-11.876	-33.014	-44.890			12.600	47.180	59.780	-0.175	-0.322	-0.497
	225	225	1.000	-11.646	-28.333	-39.979			11.740	42.300	54.040	-0.313	-0.516	-0.829
		270	1.200	-12.047	-30.930	-42.977			12.520	45.120	57.640	-0.211	-0.367	-0.578
		338	1.500	-12.654	-34.286	-46.940			13.720	48.740	62.460	-0.129	-0.240	-0.369
		450	2.000	-13.656	-38.620	-52.276			15.700	53.420	69.120	-0.068	-0.138	-0.206
	250	250	1.000	-12.307	-29.358	-41.665			12.620	43.640	56.260	-0.239	-0.397	-0.636
		300	1.200	-12.753	-32.006	-44.759			13.500	46.480	59.980	-0.161	-0.283	-0.444
		375	1.500	-13.423	-35.362	-48.785			14.800	50.060	64.860	-0.099	-0.186	-0.285
		500	2.000	-14.542	-39.672	-54.214			17.020	54.680	71.700	-0.052	-0.106	-0.158
	300	300	1.000	-13.630	-31.114	-44.744			14.380	45.880	60.260	-0.151	-0.252	-0.403
		360	1.200	-14.165	-33.808	-47.973			15.440	48.700	64.140	-0.102	-0.180	-0.282
		450	1.500	-14.970	-37.143	-52.113			17.020	52.200	69.220	-0.063	-0.118	-0.181
		600	2.000	-16.316	-41.307	-57.623			19.680	56.640	76.320	-0.033	-0.067	-0.100
	350	350	1.000	-14.953	-32.506	-47.459			16.140	47.620	63.760	-0.104	-0.170	-0.274
12	200	200	1.000	-10.973	-26.709	-37.682			10.840	40.660	51.500	-0.423	-0.665	-1.088
		240	1.200	-11.196	-28.388	-39.584			11.280	42.480	53.760	-0.328	-0.537	-0.865
		300	1.500	-11.420	-29.943	-41.363			11.720	44.140	55.860	-0.260	-0.444	-0.704
		400	2.000	-11.867	-32.718	-44.585			12.620	47.100	59.720	-0.174	-0.317	-0.491
	225	225	1.000	-11.634	-27.916	-39.550			11.720	42.200	53.920	-0.312	-0.501	-0.813
		270	1.200	-12.037	-30.607	-42.644			12.520	45.060	57.580	-0.211	-0.359	-0.570
		338	1.500	-12.645	-34.048	-46.693			13.720	48.700	62.420	-0.128	-0.238	-0.366
		450	2.000	-13.650	-38.443	-52.093			15.700	53.400	69.100	-0.069	-0.136	-0.205
	250	250	1.000	-12.296	-29.012	-41.308			12.600	43.580	56.180	-0.239	-0.387	-0.626
		300	1.200	-12.743	-31.741	-44.484			13.480	46.440	59.920	-0.161	-0.279	-0.440
		375	1.500	-13.414	-35.162	-48.576			14.820	50.020	64.840	-0.099	-0.184	-0.283
		500	2.000	-14.538	-39.512	-54.050			17.020	54.680	71.700	-0.052	-0.106	-0.158
	300	300	1.000	-13.618	-30.868	-44.486			14.360	45.860	60.220	-0.151	-0.248	-0.399
		360	1.200	-14.156	-33.613	-47.769			15.440	48.680	64.120	-0.102	-0.178	-0.280
		450	1.500	-14.964	-36.982	-51.946			17.020	52.200	69.220	-0.062	-0.118	-0.180
		600	2.000	-16.313	-41.159	-57.472			19.660	56.640	76.300	-0.034	-0.065	-0.099
	350	350	1.000	-14.942	-32.313	-47.255			16.140	47.600	63.740	-0.104	-0.168	-0.272

Cantilever Length: 2.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-17.347	-65.318	-82.665			13.920	47.895	61.815	-1.149	-4.185	-5.334
		240	1.200	-17.775	-65.969	-83.744			14.560	49.010	63.570	-0.891	-3.188	-4.079
		300	1.500	-18.203	-66.594	-84.797			15.180	50.076	65.256	-0.710	-2.494	-3.204
		400	2.000	-19.051	-67.775	-86.826			16.420	52.064	68.484	-0.477	-1.626	-2.103
	225	225	1.000	-18.560	-65.759	-84.319			15.160	48.840	64.000	-0.856	-2.952	-3.808
		270	1.200	-19.330	-66.854	-86.184			16.300	50.706	67.006	-0.578	-1.938	-2.516
		338	1.500	-20.483	-68.370	-88.853			17.980	53.227	71.207	-0.355	-1.145	-1.500
		450	2.000	-22.362	-70.519	-92.881			20.740	56.693	77.433	-0.191	-0.581	-0.772
	250	250	1.000	-19.775	-66.189	-85.964			16.440	49.737	66.177	-0.660	-2.161	-2.821
		300	1.200	-20.629	-67.340	-87.969			17.660	51.700	69.360	-0.445	-1.421	-1.866
		375	1.500	-21.898	-68.901	-90.799			19.520	54.269	73.789	-0.275	-0.845	-1.120
		500	2.000	-23.990	-71.100	-95.090			22.600	57.784	80.384	-0.147	-0.428	-0.575
	300	300	1.000	-22.207	-66.973	-89.180			18.940	51.409	70.349	-0.423	-1.261	-1.684
		360	1.200	-23.227	-68.196	-91.423			20.440	53.421	73.861	-0.286	-0.831	-1.117
		450	1.500	-24.743	-69.818	-94.561			22.660	56.039	78.699	-0.177	-0.494	-0.671
		600	2.000	-27.245	-72.027	-99.272			26.300	59.505	85.805	-0.095	-0.251	-0.346
	350	350	1.000	-24.637	-67.623	-92.260			21.460	52.767	74.227	-0.293	-0.799	-1.092
4.5	200	200	1.000	-17.153	-47.170	-64.323			13.380	38.083	51.463	-1.147	-2.874	-4.021
		240	1.200	-17.568	-48.229	-65.797			13.980	39.467	53.447	-0.889	-2.208	-3.097
		300	1.500	-17.980	-49.256	-67.236			14.560	40.781	55.341	-0.708	-1.742	-2.450
		400	2.000	-18.803	-51.196	-69.999			15.740	43.198	58.938	-0.476	-1.154	-1.630
	225	225	1.000	-18.358	-48.015	-66.373			14.600	39.420	54.020	-0.854	-2.044	-2.898
		270	1.200	-19.101	-49.788	-68.889			15.660	41.649	57.309	-0.577	-1.361	-1.938
		338	1.500	-20.218	-52.240	-72.458			17.280	44.653	61.933	-0.354	-0.823	-1.177
		450	2.000	-22.041	-55.692	-77.733			19.900	48.735	68.635	-0.190	-0.431	-0.621
	250	250	1.000	-19.563	-48.790	-68.353			15.820	40.617	56.437	-0.659	-1.508	-2.167
		300	1.200	-20.386	-50.626	-71.012			17.000	42.893	59.893	-0.445	-1.007	-1.452
		375	1.500	-21.614	-53.113	-74.727			18.760	45.873	64.633	-0.275	-0.612	-0.887
		500	2.000	-23.645	-56.590	-80.235			21.700	49.932	71.632	-0.147	-0.321	-0.468
	300	300	1.000	-21.969	-50.095	-72.064			18.220	42.658	60.878	-0.422	-0.892	-1.314
		360	1.200	-22.953	-52.000	-74.953			19.640	44.911	64.551	-0.285	-0.598	-0.883
		450	1.500	-24.420	-54.523	-78.943			21.760	47.844	69.604	-0.177	-0.364	-0.541
		600	2.000	-26.847	-57.963	-84.810			25.260	51.762	77.022	-0.095	-0.192	-0.287
	350	350	1.000	-24.371	-51.097	-75.468			20.640	44.183	64.823	-0.292	-0.571	-0.863
6	200	200	1.000	-17.100	-40.027	-57.127			13.300	35.500	48.800	-1.146	-2.288	-3.434
		240	1.200	-17.508	-41.408	-58.916			13.900	37.010	50.910	-0.889	-1.776	-2.665
		300	1.500	-17.913	-42.734	-60.647			14.480	38.449	52.929	-0.707	-1.416	-2.123
		400	2.000	-18.721	-45.208	-63.929			15.660	41.050	56.710	-0.476	-0.956	-1.432
	225	225	1.000	-18.296	-41.103	-59.399			14.500	36.940	51.440	-0.853	-1.643	-2.496
		270	1.200	-19.025	-43.371	-62.396			15.540	39.378	54.918	-0.576	-1.115	-1.691
		338	1.500	-20.122	-46.462	-66.584			17.140	42.582	59.722	-0.353	-0.691	-1.044
		450	2.000	-21.918	-50.740	-72.658			19.780	46.901	66.681	-0.189	-0.374	-0.563
	250	250	1.000	-19.489	-42.053	-61.542			15.700	38.217	53.917	-0.658	-1.222	-1.880
		300	1.200	-20.298	-44.379	-64.677			16.860	40.655	57.515	-0.445	-0.831	-1.276
		375	1.500	-21.504	-47.494	-68.998			18.600	43.836	62.436	-0.274	-0.518	-0.792
		500	2.000	-23.505	-51.801	-75.306			21.520	48.154	69.674	-0.147	-0.281	-0.428
	300	300	1.000	-21.873	-43.608	-65.481			18.060	40.283	58.343	-0.422	-0.734	-1.156
		360	1.200	-22.838	-46.007	-68.845			19.460	42.698	62.158	-0.285	-0.502	-0.787
		450	1.500	-24.281	-49.170	-73.451			21.560	45.833	67.393	-0.176	-0.314	-0.490
		600	2.000	-26.676	-53.457	-80.133			25.060	50.058	75.118	-0.095	-0.171	-0.266
	350	350	1.000	-24.252	-44.795	-69.047			20.440	41.816	62.256	-0.291	-0.477	-0.768

Cantilever Length: 2.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-17.068	-35.834	-52.902			13.280	34.261	47.541	-1.144	-1.910	-3.054
		240	1.200	-17.469	-37.476	-54.945			13.860	35.856	49.716	-0.887	-1.504	-2.391
		300	1.500	-17.869	-39.037	-56.906			14.440	37.334	51.774	-0.706	-1.214	-1.920
		400	2.000	-18.669	-41.917	-60.586			15.620	40.014	55.634	-0.475	-0.838	-1.313
	225	225	1.000	-18.253	-37.049	-55.302			14.440	35.740	50.180	-0.853	-1.388	-2.241
		270	1.200	-18.973	-39.726	-58.699			15.500	38.235	53.735	-0.575	-0.963	-1.538
		338	1.500	-20.057	-43.332	-63.389			17.100	41.562	58.662	-0.353	-0.613	-0.966
		450	2.000	-21.838	-48.256	-70.094			19.700	46.090	65.790	-0.189	-0.344	-0.533
	250	250	1.000	-19.437	-38.123	-57.560			15.640	37.011	52.651	-0.657	-1.045	-1.702
		300	1.200	-20.235	-40.875	-61.110			16.800	39.552	56.352	-0.443	-0.728	-1.171
		375	1.500	-21.429	-44.522	-65.951			18.560	42.856	61.416	-0.273	-0.467	-0.740
		500	2.000	-23.415	-49.495	-72.910			21.480	47.384	68.864	-0.146	-0.261	-0.407
	300	300	1.000	-21.800	-39.926	-61.726			17.980	39.113	57.093	-0.422	-0.639	-1.061
		360	1.200	-22.756	-42.783	-65.539			19.380	41.677	61.057	-0.285	-0.447	-0.732
		450	1.500	-24.187	-46.508	-70.695			21.480	45.004	66.484	-0.176	-0.289	-0.465
		600	2.000	-26.570	-51.459	-78.029			25.000	49.440	74.440	-0.094	-0.162	-0.256
	350	350	1.000	-24.162	-41.347	-65.509			20.340	40.730	61.070	-0.291	-0.423	-0.714
10	200	200	1.000	-17.040	-33.795	-50.835			13.240	33.684	46.924	-1.143	-1.720	-2.863
		240	1.200	-17.438	-35.600	-53.038			13.820	35.298	49.118	-0.887	-1.370	-2.257
		300	1.500	-17.836	-37.307	-55.143			14.420	36.797	51.217	-0.705	-1.118	-1.823
		400	2.000	-18.630	-40.442	-59.072			15.580	39.564	55.144	-0.474	-0.785	-1.259
	225	225	1.000	-18.219	-35.121	-53.340			14.420	35.160	49.580	-0.851	-1.265	-2.116
		270	1.200	-18.935	-38.071	-57.006			15.460	37.742	53.202	-0.574	-0.894	-1.468
		338	1.500	-20.015	-42.008	-62.023			17.060	41.154	58.214	-0.353	-0.580	-0.933
		450	2.000	-21.794	-47.308	-69.102			19.680	45.789	65.469	-0.188	-0.333	-0.521
	250	250	1.000	-19.399	-36.319	-55.718			15.600	36.474	52.074	-0.656	-0.963	-1.619
		300	1.200	-20.192	-39.359	-59.551			16.780	39.079	55.859	-0.443	-0.682	-1.125
		375	1.500	-21.383	-43.341	-64.724			18.520	42.515	61.035	-0.273	-0.446	-0.719
		500	2.000	-23.369	-48.674	-72.043			21.440	47.149	68.589	-0.146	-0.254	-0.400
	300	300	1.000	-21.754	-38.371	-60.125			17.940	38.664	56.604	-0.421	-0.600	-1.021
		360	1.200	-22.706	-41.524	-64.230			19.340	41.316	60.656	-0.284	-0.426	-0.710
		450	1.500	-24.135	-45.565	-69.700			21.440	44.751	66.191	-0.175	-0.279	-0.454
		600	2.000	-26.521	-50.818	-77.339			24.980	49.270	74.250	-0.093	-0.160	-0.253
	350	350	1.000	-24.109	-40.003	-64.112			20.300	40.371	60.671	-0.291	-0.400	-0.691
12	200	200	1.000	-17.017	-32.666	-49.683			13.220	33.321	46.541	-1.141	-1.618	-2.759
		240	1.200	-17.414	-34.592	-52.006			13.820	34.955	48.775	-0.886	-1.299	-2.185
		300	1.500	-17.811	-36.406	-54.217			14.400	36.497	50.897	-0.704	-1.069	-1.773
		400	2.000	-18.605	-39.717	-58.322			15.560	39.304	54.864	-0.473	-0.760	-1.233
	225	225	1.000	-18.194	-34.114	-52.308			14.400	34.840	49.240	-0.850	-1.202	-2.052
		270	1.200	-18.908	-37.259	-56.167			15.460	37.463	52.923	-0.573	-0.860	-1.433
		338	1.500	-19.988	-41.410	-61.398			17.060	40.938	57.998	-0.352	-0.567	-0.919
		450	2.000	-21.770	-46.917	-68.687			19.680	45.633	65.313	-0.188	-0.328	-0.516
	250	250	1.000	-19.371	-35.434	-54.805			15.560	36.198	51.758	-0.655	-0.922	-1.577
		300	1.200	-20.165	-38.664	-58.829			16.740	38.867	55.607	-0.442	-0.661	-1.103
		375	1.500	-21.355	-42.843	-64.198			18.500	42.342	60.842	-0.272	-0.438	-0.710
		500	2.000	-23.346	-48.349	-71.695			21.440	47.013	68.453	-0.145	-0.252	-0.397
	300	300	1.000	-21.723	-37.689	-59.412			17.920	38.476	56.396	-0.420	-0.582	-1.002
		360	1.200	-22.677	-41.009	-63.686			19.320	41.168	60.488	-0.284	-0.419	-0.703
		450	1.500	-24.108	-45.204	-69.312			21.440	44.620	66.060	-0.175	-0.276	-0.451
		600	2.000	-26.499	-50.570	-77.069			24.980	49.153	74.133	-0.094	-0.158	-0.252
	350	350	1.000	-24.077	-39.463	-63.540			20.260	40.225	60.485	-0.290	-0.392	-0.682

Cantilever Length: 2.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-24.910	-97.382	-122.292			17.060	101.770	118.830	-2.517	-9.276	-11.793
		240	1.200	-25.590	-97.977	-123.567			17.900	102.653	120.553	-1.955	-7.069	-9.024
		300	1.500	-26.266	-98.535	-124.801			18.720	103.478	122.198	-1.557	-5.533	-7.090
		400	2.000	-27.609	-99.552	-127.161			20.320	104.970	125.290	-1.049	-3.606	-4.655
	225	225	1.000	-26.814	-97.690	-124.504			18.680	102.300	120.980	-1.888	-6.531	-8.419
		270	1.200	-28.033	-98.675	-126.708			20.140	103.773	123.913	-1.277	-4.287	-5.564
		338	1.500	-29.857	-99.981	-129.838			22.320	105.677	127.997	-0.786	-2.535	-3.321
		450	2.000	-32.829	-101.767	-134.596			25.900	108.191	134.091	-0.422	-1.284	-1.706
	250	250	1.000	-28.720	-97.994	-126.714			20.280	102.850	123.130	-1.464	-4.773	-6.237
		300	1.200	-30.071	-104.874	-134.945			21.900	115.652	137.552	-0.991	-3.182	-4.173
		375	1.500	-32.079	-100.368	-132.447			24.300	106.325	130.625	-0.612	-1.862	-2.474
		500	2.000	-35.389	-102.208	-137.597			28.280	108.897	137.177	-0.329	-0.941	-1.270
	300	300	1.000	-32.533	-98.559	-131.092			23.480	103.851	127.331	-0.948	-2.776	-3.724
		360	1.200	-34.149	-99.650	-133.799			25.440	105.442	130.882	-0.643	-1.825	-2.468
		450	1.500	-36.550	-101.056	-137.606			28.300	107.464	135.764	-0.398	-1.086	-1.484
		600	2.000	-40.510	-102.931	-143.441			33.040	110.056	143.096	-0.213	-0.551	-0.764
	350	350	1.000	-36.347	-99.036	-135.383			26.720	104.676	131.396	-0.661	-1.756	-2.417
4.5	200	200	1.000	-24.534	-69.524	-94.058			15.960	82.345	98.305	-2.513	-6.283	-8.796
		240	1.200	-25.189	-70.422	-95.611			16.720	83.281	100.001	-1.951	-4.812	-6.763
		300	1.500	-25.842	-71.282	-97.124			17.460	84.165	101.625	-1.554	-3.786	-5.340
		400	2.000	-27.143	-72.893	-100.036			18.980	85.738	104.718	-1.047	-2.495	-3.542
	225	225	1.000	-26.424	-70.198	-96.622			17.500	83.140	100.640	-1.885	-4.446	-6.331
		270	1.200	-27.600	-71.704	-99.304			18.840	84.678	103.518	-1.274	-2.947	-4.221
		338	1.500	-29.366	-73.762	-103.128			20.880	86.675	107.555	-0.785	-1.767	-2.552
		450	2.000	-32.252	-76.647	-108.899			24.220	89.361	113.581	-0.421	-0.917	-1.338
	250	250	1.000	-28.313	-70.830	-99.143			19.040	83.882	102.922	-1.461	-3.266	-4.727
		300	1.200	-29.618	-77.593	-107.211			20.540	95.424	115.964	-0.989	-2.200	-3.189
		375	1.500	-31.562	-74.502	-106.064			22.760	87.470	110.230	-0.611	-1.308	-1.919
		500	2.000	-34.777	-77.428	-112.205			26.480	90.157	116.637	-0.328	-0.678	-1.006
	300	300	1.000	-32.091	-71.921	-104.012			22.100	85.155	107.255	-0.947	-1.916	-2.863
		360	1.200	-33.652	-73.565	-107.217			23.900	86.746	110.646	-0.641	-1.276	-1.917
		450	1.500	-35.976	-75.718	-111.694			26.580	88.760	115.340	-0.398	-0.771	-1.169
		600	2.000	-39.820	-78.628	-118.448			31.020	91.359	122.379	-0.213	-0.403	-0.616
	350	350	1.000	-35.867	-72.773	-108.640			25.160	86.145	111.305	-0.661	-1.221	-1.882
6	200	200	1.000	-24.398	-57.776	-82.174			15.740	77.591	93.331	-2.510	-4.888	-7.398
		240	1.200	-25.040	-58.976	-84.016			16.480	78.640	95.120	-1.949	-3.773	-5.722
		300	1.500	-25.680	-60.124	-85.804			17.220	79.604	96.824	-1.553	-2.992	-4.545
		400	2.000	-26.956	-62.270	-89.226			18.680	81.359	100.039	-1.046	-2.002	-3.048
	225	225	1.000	-26.275	-58.714	-84.989			17.240	78.520	95.760	-1.883	-3.485	-5.368
		270	1.200	-27.427	-60.699	-88.126			18.560	80.189	98.749	-1.273	-2.341	-3.614
		338	1.500	-29.158	-63.398	-92.556			20.580	82.339	102.919	-0.783	-1.433	-2.216
		450	2.000	-31.991	-67.151	-99.142			23.860	85.230	109.090	-0.421	-0.765	-1.186
	250	250	1.000	-28.150	-59.554	-87.704			18.760	79.329	98.089	-1.460	-2.577	-4.037
		300	1.200	-29.428	-66.499	-95.927			20.220	90.683	110.903	-0.988	-1.761	-2.749
		375	1.500	-31.333	-64.327	-95.660			22.420	83.165	105.585	-0.611	-1.068	-1.679
		500	2.000	-34.488	-68.107	-102.595			26.080	86.038	112.118	-0.327	-0.571	-0.898
	300	300	1.000	-31.898	-60.933	-92.831			21.740	80.671	102.411	-0.946	-1.530	-2.476
		360	1.200	-33.425	-63.044	-96.469			23.500	82.339	105.839	-0.640	-1.035	-1.675
		450	1.500	-35.702	-65.811	-101.513			26.140	84.455	110.595	-0.397	-0.640	-1.037
		600	2.000	-39.476	-69.569	-109.045			30.520	87.260	117.780	-0.213	-0.343	-0.556
	350	350	1.000	-35.639	-61.974	-97.613			24.740	81.651	106.391	-0.659	-0.984	-1.643

Cantilever Length: 2.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-24.334	-50.719	-75.053			15.680	75.587	91.267	-2.508	-3.955	-6.463
		240	1.200	-24.967	-52.208	-77.175			16.400	76.693	93.093	-1.947	-3.091	-5.038
		300	1.500	-25.597	-53.624	-79.221			17.140	77.714	94.854	-1.551	-2.479	-4.030
		400	2.000	-26.854	-56.241	-83.095			18.600	79.552	98.152	-1.045	-1.693	-2.738
	225	225	1.000	-26.196	-51.835	-78.031			17.160	76.540	93.700	-1.881	-2.850	-4.731
		270	1.200	-27.330	-54.266	-81.596			18.480	78.293	96.773	-1.271	-1.953	-3.224
		338	1.500	-29.037	-57.539	-86.576			20.460	80.556	101.016	-0.782	-1.227	-2.009
		450	2.000	-31.834	-62.039	-93.873			23.740	83.585	107.325	-0.419	-0.679	-1.098
	250	250	1.000	-28.056	-52.811	-80.867			18.640	77.374	96.014	-1.458	-2.128	-3.586
		300	1.200	-29.313	-60.022	-89.335			20.100	88.673	108.773	-0.986	-1.486	-2.472
		375	1.500	-31.191	-58.611	-89.802			22.280	81.390	103.670	-0.609	-0.925	-1.534
		500	2.000	-34.309	-63.159	-97.468			25.940	84.419	110.359	-0.326	-0.512	-0.838
	300	300	1.000	-31.769	-54.407	-86.176			21.600	78.701	100.301	-0.945	-1.284	-2.229
		360	1.200	-33.272	-56.987	-90.259			23.340	80.471	103.811	-0.639	-0.888	-1.527
		450	1.500	-35.519	-60.364	-95.883			25.960	82.734	108.694	-0.396	-0.564	-0.960
		600	2.000	-39.255	-64.916	-104.171			30.360	85.729	116.089	-0.212	-0.313	-0.525
	350	350	1.000	-35.477	-55.629	-91.106			24.540	79.705	104.245	-0.658	-0.838	-1.496
10	200	200	1.000	-24.296	-47.329	-71.625			15.640	74.771	90.411	-2.506	-3.474	-5.980
		240	1.200	-24.923	-49.004	-73.927			16.380	75.889	92.269	-1.945	-2.745	-4.690
		300	1.500	-25.548	-50.588	-76.136			17.100	76.940	94.040	-1.548	-2.225	-3.773
		400	2.000	-26.795	-53.498	-80.293			18.560	78.821	97.381	-1.042	-1.548	-2.590
	225	225	1.000	-26.147	-48.544	-74.691			17.120	75.720	92.840	-1.879	-2.529	-4.408
		270	1.200	-27.271	-51.277	-78.548			18.420	77.516	95.936	-1.269	-1.765	-3.034
		338	1.500	-28.964	-54.931	-83.895			20.420	79.837	100.257	-0.780	-1.133	-1.913
		450	2.000	-31.749	-59.903	-91.652			23.680	82.972	106.652	-0.418	-0.643	-1.061
	250	250	1.000	-27.996	-49.620	-77.616			18.580	76.550	95.130	-1.457	-1.906	-3.363
		300	1.200	-29.242	-57.061	-86.303			20.040	87.868	107.908	-0.985	-1.355	-2.340
		375	1.500	-31.108	-56.135	-87.243			22.240	80.701	102.941	-0.608	-0.863	-1.471
		500	2.000	-34.214	-61.165	-95.379			25.880	83.853	109.733	-0.325	-0.489	-0.814
	300	300	1.000	-31.689	-51.422	-83.111			21.520	77.923	99.443	-0.943	-1.170	-2.113
		360	1.200	-33.181	-54.347	-87.528			23.280	79.769	103.049	-0.638	-0.823	-1.461
		450	1.500	-35.417	-58.137	-93.554			25.900	82.125	108.025	-0.395	-0.534	-0.929
		600	2.000	-39.144	-63.156	-102.300			30.300	85.225	115.525	-0.212	-0.303	-0.515
	350	350	1.000	-35.379	-52.834	-88.213			24.460	78.973	103.433	-0.657	-0.772	-1.429
12	200	200	1.000	-24.262	-45.433	-69.695			15.600	74.297	89.897	-2.503	-3.200	-5.703
		240	1.200	-24.885	-47.241	-72.126			16.320	75.446	91.766	-1.942	-2.553	-4.495
		300	1.500	-25.508	-48.944	-74.452			17.080	76.494	93.574	-1.547	-2.086	-3.633
		400	2.000	-26.750	-52.062	-78.812			18.540	78.404	96.944	-1.041	-1.471	-2.512
	225	225	1.000	-26.106	-46.746	-72.852			17.080	75.260	92.340	-1.876	-2.353	-4.229
		270	1.200	-27.226	-49.701	-76.927			18.400	77.085	95.485	-1.268	-1.666	-2.934
		338	1.500	-28.914	-53.626	-82.540			20.380	79.468	99.848	-0.779	-1.087	-1.866
		450	2.000	-31.696	-58.898	-90.594			23.660	82.663	106.323	-0.418	-0.627	-1.045
	250	250	1.000	-27.949	-47.929	-75.878			18.560	76.105	94.665	-1.455	-1.788	-3.243
		300	1.200	-29.191	-55.556	-84.747			20.000	87.446	107.446	-0.983	-1.291	-2.274
		375	1.500	-31.053	-54.948	-86.001			22.200	80.364	102.564	-0.607	-0.834	-1.441
		500	2.000	-34.158	-60.262	-94.420			25.880	83.558	109.438	-0.325	-0.480	-0.805
	300	300	1.000	-31.632	-49.937	-81.569			21.480	77.542	99.022	-0.942	-1.113	-2.055
		360	1.200	-33.121	-53.100	-86.221			23.240	79.435	102.675	-0.637	-0.794	-1.431
		450	1.500	-35.355	-57.141	-92.496			25.880	81.834	107.714	-0.394	-0.521	-0.915
		600	2.000	-39.084	-62.390	-101.474			30.280	84.978	115.258	-0.211	-0.299	-0.510
	350	350	1.000	-35.313	-51.518	-86.831			24.420	78.640	103.060	-0.656	-0.741	-1.397

Cantilever Length: 3.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-33.800	-141.477	-175.277			20.540	111.258	131.798	-4.827	-18.520	-23.347
		240	1.200	-34.788	-142.292	-177.080			21.580	112.627	134.207	-3.751	-14.087	-17.838
		300	1.500	-35.771	-143.025	-178.796			22.600	113.863	136.463	-2.991	-11.007	-13.998
		400	2.000	-37.722	-144.298	-182.020			24.620	115.983	140.603	-2.017	-7.154	-9.171
	225	225	1.000	-36.554	-141.714	-178.268			22.540	111.700	134.240	-3.639	-13.028	-16.667
		270	1.200	-38.326	-143.015	-181.341			24.380	113.908	138.288	-2.464	-8.526	-10.990
		338	1.500	-40.976	-144.634	-185.610			27.120	116.579	143.699	-1.519	-5.021	-6.540
		450	2.000	-45.292	-146.690	-191.982			31.560	119.912	151.472	-0.818	-2.530	-3.348
	250	250	1.000	-39.309	-141.951	-181.260			24.500	112.164	136.664	-2.834	-9.513	-12.347
		300	1.200	-41.274	-143.287	-184.561			26.560	114.415	140.975	-1.920	-6.228	-8.148
		375	1.500	-44.192	-144.934	-189.126			29.560	117.153	146.713	-1.189	-3.683	-4.872
		500	2.000	-49.002	-147.040	-196.042			34.520	120.530	155.050	-0.639	-1.851	-2.490
	300	300	1.000	-44.823	-142.393	-187.216			28.480	113.025	141.505	-1.851	-5.521	-7.372
		360	1.200	-47.173	-143.780	-190.953			30.940	115.342	146.282	-1.254	-3.619	-4.873
		450	1.500	-50.664	-145.480	-196.144			34.520	118.146	152.666	-0.778	-2.141	-2.919
		600	2.000	-56.420	-147.628	-204.048			40.420	121.590	162.010	-0.420	-1.078	-1.498
	350	350	1.000	-50.338	-142.769	-193.107			32.460	113.753	146.213	-1.298	-3.487	-4.785
4.5	200	200	1.000	-33.213	-100.774	-133.987			18.700	83.142	101.842	-4.814	-12.453	-17.267
		240	1.200	-34.168	-101.904	-136.072			19.620	84.443	104.063	-3.741	-9.503	-13.244
		300	1.500	-35.119	-102.947	-138.066			20.560	85.590	106.150	-2.983	-7.450	-10.433
		400	2.000	-37.011	-104.824	-141.835			22.380	87.630	110.010	-2.013	-4.876	-6.889
	225	225	1.000	-35.941	-101.385	-137.326			20.560	83.880	104.440	-3.630	-8.791	-12.421
		270	1.200	-37.655	-103.233	-140.888			18.580	85.959	104.539	-2.457	-5.789	-8.246
		338	1.500	-40.227	-105.623	-145.850			24.720	88.524	113.244	-1.516	-3.442	-4.958
		450	2.000	-44.426	-108.795	-153.221			28.800	91.769	120.569	-0.815	-1.765	-2.580
	250	250	1.000	-38.671	-101.967	-140.638			22.440	84.579	107.019	-2.828	-6.441	-9.269
		300	1.200	-40.573	-103.876	-144.449			24.280	86.697	110.977	-1.916	-4.247	-6.163
		375	1.500	-43.405	-106.311	-149.716			27.020	89.282	116.302	-1.186	-2.538	-3.724
		500	2.000	-48.083	-109.535	-157.618			31.560	92.546	124.106	-0.637	-1.300	-1.937
	300	300	1.000	-44.132	-102.988	-147.120			26.180	85.804	111.984	-1.846	-3.763	-5.609
		360	1.200	-46.408	-104.973	-151.381			28.400	87.960	116.360	-1.252	-2.486	-3.738
		450	1.500	-49.794	-107.465	-157.259			31.660	90.564	122.224	-0.776	-1.490	-2.266
		600	2.000	-55.392	-110.684	-166.076			37.080	93.770	130.850	-0.418	-0.765	-1.183
	350	350	1.000	-49.590	-103.800	-153.390			29.920	86.775	116.695	-1.295	-2.389	-3.684
6	200	200	1.000	-32.946	-83.069	-116.015			18.240	75.942	94.182	-4.810	-9.560	-14.370
		240	1.200	-33.880	-84.542	-118.422			19.120	77.347	96.467	-3.737	-7.337	-11.074
		300	1.500	-34.809	-85.917	-120.726			20.020	78.603	98.623	-2.979	-5.786	-8.765
		400	2.000	-36.664	-88.410	-125.074			21.800	80.795	102.595	-2.010	-3.831	-5.841
	225	225	1.000	-35.658	-84.009	-119.667			20.060	76.860	96.920	-3.626	-6.787	-10.413
		270	1.200	-37.334	-86.412	-123.746			21.660	79.071	100.731	-2.456	-4.513	-6.969
		338	1.500	-39.852	-89.554	-129.406			24.080	81.807	105.887	-1.513	-2.725	-4.238
		450	2.000	-43.969	-93.755	-137.724			28.060	85.254	113.314	-0.814	-1.430	-2.244
	250	250	1.000	-38.371	-84.861	-123.232			21.880	77.684	99.564	-2.825	-4.998	-7.823
		300	1.200	-40.230	-87.328	-127.558			23.660	79.914	103.574	-1.914	-3.331	-5.245
		375	1.500	-43.000	-90.500	-133.500			26.320	82.631	108.951	-1.185	-2.022	-3.207
		500	2.000	-47.587	-94.727	-142.314			30.760	86.060	116.820	-0.637	-1.061	-1.698
	300	300	1.000	-43.793	-86.280	-130.073			25.520	79.034	104.554	-1.844	-2.946	-4.790
		360	1.200	-46.015	-88.811	-134.826			27.660	81.245	108.905	-1.251	-1.969	-3.220
		450	1.500	-49.328	-92.012	-141.340			30.840	83.924	114.764	-0.775	-1.201	-1.976
		600	2.000	-54.814	-96.197	-151.011			36.140	87.278	123.418	-0.418	-0.632	-1.050
	350	350	1.000	-49.207	-87.353	-136.560			29.160	80.045	109.205	-1.294	-1.884	-3.178

Cantilever Length: 3.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-32.811	-72.049	-104.860			18.080	72.843	90.923	-4.805	-7.572	-12.377
		240	1.200	-33.728	-73.899	-107.627			18.980	74.318	93.298	-3.734	-5.867	-9.601
		300	1.500	-34.644	-75.623	-110.267			19.840	75.664	95.504	-2.976	-4.671	-7.647
		400	2.000	-36.467	-78.744	-115.211			21.620	77.988	99.608	-2.007	-3.149	-5.156
	225	225	1.000	-35.504	-73.257	-108.761			19.880	73.820	93.700	-3.623	-5.422	-9.045
		270	1.200	-37.151	-76.240	-113.391			21.460	76.144	97.604	-2.452	-3.666	-6.118
		338	1.500	-39.625	-80.137	-119.762			23.860	79.020	102.880	-1.511	-2.264	-3.775
		450	2.000	-43.678	-85.332	-129.010			27.780	82.653	110.433	-0.812	-1.227	-2.039
	250	250	1.000	-38.195	-74.311	-112.506			21.660	74.687	96.347	-2.822	-4.026	-6.848
		300	1.200	-40.019	-77.353	-117.372			23.420	77.010	100.430	-1.911	-2.729	-4.640
		375	1.500	-42.743	-81.265	-124.008			26.060	79.850	105.910	-1.183	-1.696	-2.879
		500	2.000	-47.260	-86.493	-133.753			30.440	83.483	113.923	-0.634	-0.920	-1.554
	300	300	1.000	-43.569	-76.013	-119.582			25.260	76.033	101.293	-1.842	-2.405	-4.247
		360	1.200	-45.749	-79.120	-124.869			27.340	78.357	105.697	-1.249	-1.637	-2.886
		450	1.500	-49.006	-83.075	-132.081			30.500	81.178	111.678	-0.774	-1.023	-1.797
		600	2.000	-54.415	-88.280	-142.695			35.760	84.737	120.497	-0.416	-0.558	-0.974
	350	350	1.000	-48.934	-77.284	-126.218			28.800	77.047	105.847	-1.292	-1.554	-2.846
10	200	200	1.000	-32.753	-66.688	-99.441			18.040	71.650	89.690	-4.801	-6.518	-11.319
		240	1.200	-33.660	-68.798	-102.458			18.900	73.190	92.090	-3.730	-5.102	-8.832
		300	1.500	-34.565	-70.759	-105.324			19.800	74.547	94.347	-2.973	-4.100	-7.073
		400	2.000	-36.371	-74.294	-110.665			21.560	76.930	98.490	-2.004	-2.812	-4.816
	225	225	1.000	-35.429	-68.034	-103.463			19.820	72.640	92.460	-3.619	-4.710	-8.329
		270	1.200	-37.057	-71.424	-108.481			21.400	75.023	96.423	-2.449	-3.238	-5.687
		338	1.500	-39.508	-75.840	-115.348			23.780	77.975	101.755	-1.509	-2.042	-3.551
		450	2.000	-43.530	-81.706	-125.236			27.700	81.734	109.434	-0.811	-1.136	-1.947
	250	250	1.000	-38.102	-69.204	-107.306			21.580	73.502	95.082	-2.819	-3.524	-6.343
		300	1.200	-39.907	-72.664	-112.571			23.340	75.885	99.225	-1.909	-2.430	-4.339
		375	1.500	-42.605	-77.111	-119.716			25.960	78.837	104.797	-1.181	-1.544	-2.725
		500	2.000	-47.091	-83.033	-130.124			30.340	82.595	112.935	-0.633	-0.860	-1.493
	300	300	1.000	-43.441	-71.114	-114.555			25.120	74.877	99.997	-1.839	-2.135	-3.974
		360	1.200	-45.600	-74.669	-120.269			27.220	77.279	104.499	-1.246	-1.481	-2.727
		450	1.500	-48.831	-79.192	-128.023			205.380	-80.212	125.168	-0.772	-0.945	-1.717
		600	2.000	-54.208	-85.109	-139.317			35.640	83.934	119.574	-0.415	-0.528	-0.943
	350	350	1.000	-48.773	-72.570	-121.343			28.680	75.903	104.583	-1.290	-1.395	-2.685
12	200	200	1.000	-32.708	-63.684	-96.392			18.000	71.033	89.033	-4.797	-5.908	-10.705
		240	1.200	-33.610	-65.977	-99.587			18.880	72.587	91.467	-3.726	-4.668	-8.394
		300	1.500	-34.509	-68.105	-102.614			19.740	73.976	93.716	-2.969	-3.783	-6.752
		400	2.000	-36.304	-71.931	-108.235			21.520	76.389	97.909	-2.002	-2.632	-4.634
	225	225	1.000	-35.372	-65.133	-100.505			19.780	72.020	91.800	-3.616	-4.305	-7.921
		270	1.200	-36.989	-68.827	-105.816			21.340	74.451	95.791	-2.446	-3.004	-5.450
		338	1.500	-39.428	-73.623	-113.051			23.740	77.449	101.189	-1.506	-1.930	-3.436
		450	2.000	-43.438	-79.950	-123.388			27.680	81.288	108.968	-0.810	-1.095	-1.905
	250	250	1.000	-38.033	-66.412	-104.445			21.520	72.897	94.417	-2.815	-3.248	-6.063
		300	1.200	-39.827	-70.192	-110.019			23.300	75.329	98.629	-1.906	-2.273	-4.179
		375	1.500	-42.514	-75.033	-117.547			25.920	78.345	104.265	-1.178	-1.470	-2.648
		500	2.000	-46.988	-81.420	-128.408			30.300	82.202	112.502	-0.631	-0.834	-1.465
	300	300	1.000	-43.349	-68.540	-111.889			25.060	74.305	99.365	-1.837	-1.993	-3.830
		360	1.200	-45.499	-72.439	-117.938			27.160	76.773	103.933	-1.244	-1.402	-2.646
		450	1.500	-48.720	-77.362	-126.082			30.320	79.789	110.109	-0.770	-0.910	-1.680
		600	2.000	-54.089	-83.715	-137.804			35.600	83.609	119.209	-0.414	-0.516	-0.930
	350	350	1.000	-48.663	-70.187	-118.850			28.600	75.383	103.983	-1.287	-1.315	-2.602

Cantilever Length: 3.75 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-49.616	-208.179	-257.795			26.340	110.154	112.800	-10.829	-43.475	-54.304
		240	1.200	-51.176	-209.094	-260.270			27.740	111.810	115.500	-8.424	-33.025	-41.449
		300	1.500	-52.726	-209.911	-262.637			29.120	113.263	118.020	-6.721	-25.772	-32.493
		400	2.000	-55.892	-211.187	-267.079			31.800	115.786	122.680	-4.542	-16.705	-21.247
	225	225	1.000	-53.950	-208.334	-262.284			28.980	110.460	115.680	-8.214	-30.560	-38.774
		270	1.200	-56.744	-209.777	-266.521			31.440	113.085	120.200	-5.568	-19.953	-25.521
		338	1.500	-60.923	-211.541	-272.464			35.120	116.219	126.340	-3.440	-11.709	-15.149
		450	2.000	-67.728	-213.721	-281.449			40.980	120.092	135.240	-1.857	-5.872	-7.729
	250	250	1.000	-58.285	-208.490	-266.775			31.580	110.791	118.540	-6.431	-22.298	-28.729
		300	1.200	-61.384	-209.956	-271.340			34.320	113.441	123.360	-4.362	-14.562	-18.924
		375	1.500	-65.984	-211.738	-277.722			38.340	116.626	129.880	-2.706	-8.580	-11.286
		500	2.000	-73.570	-213.962	-287.532			44.880	120.576	139.520	-1.458	-4.290	-5.748
	300	300	1.000	-66.958	-208.782	-275.740			36.820	111.403	124.260	-4.234	-12.926	-17.160
		360	1.200	-70.664	-210.286	-280.950			40.080	114.129	129.660	-2.875	-8.446	-11.321
		450	1.500	-76.171	-212.109	-288.280			44.880	117.391	137.020	-1.786	-4.979	-6.765
		600	2.000	-86.254	-212.979	-299.233			52.700	121.391	147.980	-0.965	-2.492	-3.457
	350	350	1.000	-75.631	-209.033	-284.664			42.040	111.938	129.900	-2.989	-8.153	-11.142
4.5	200	200	1.000	-48.693	-143.523	-192.216			23.160	77.287	86.040	-10.792	-29.081	-39.873
		240	1.200	-50.207	-144.760	-194.967			24.380	78.787	88.480	-8.393	-22.129	-30.522
		300	1.500	-51.713	-145.895	-197.608			25.560	80.139	90.760	-6.698	-17.301	-23.999
		400	2.000	-54.709	-147.909	-202.618			27.940	82.499	95.060	-4.526	-11.263	-15.789
	225	225	1.000	-52.975	-144.042	-197.017			25.560	78.000	89.020	-8.186	-20.486	-28.672
		270	1.200	-55.691	-146.045	-201.736			27.720	80.384	93.120	-5.550	-13.421	-18.971
		338	1.500	-59.763	-148.603	-208.366			30.940	83.384	98.780	-3.429	-7.921	-11.350
		450	2.000	-66.408	-151.925	-218.333			36.220	87.145	107.120	-1.851	-4.014	-5.865
	250	250	1.000	-57.259	-144.541	-201.800			27.940	78.688	91.960	-6.411	-14.978	-21.389
		300	1.200	-60.273	-146.604	-206.877			30.360	81.122	96.360	-4.348	-9.821	-14.169
		375	1.500	-64.759	-149.204	-213.963			33.900	84.146	102.360	-2.698	-5.823	-8.521
		500	2.000	-72.165	-152.590	-224.755			39.760	87.980	111.340	-1.453	-2.945	-4.398
	300	300	1.000	-65.831	-145.433	-211.264			32.740	79.893	97.740	-4.223	-8.715	-12.938
		360	1.200	-69.439	-147.572	-217.011			35.600	82.425	102.660	-2.868	-5.722	-8.590
		450	1.500	-74.808	-150.240	-225.048			39.860	85.473	109.400	-1.781	-3.399	-5.180
		600	2.000	-83.673	-153.645	-237.318			46.840	89.283	119.480	-0.962	-1.723	-2.685
	350	350	1.000	-74.403	-146.154	-220.557			37.540	80.876	103.340	-2.982	-5.515	-8.497
6	200	200	1.000	-48.167	-114.499	-162.666			22.180	67.010	77.700	-10.776	-22.085	-32.861
		240	1.200	-49.646	-116.139	-165.785			23.300	68.652	80.180	-8.381	-16.863	-25.244
		300	1.500	-51.118	-117.664	-168.782			24.440	70.124	82.540	-6.689	-13.230	-19.919
		400	2.000	-54.051	-120.408	-174.459			26.720	72.683	86.940	-4.519	-8.677	-13.196
	225	225	1.000	-52.423	-115.422	-167.845			24.480	68.000	80.820	-8.175	-15.613	-23.788
		270	1.200	-55.077	-118.094	-173.171			26.540	70.583	85.020	-5.542	-10.294	-15.836
		338	1.500	-59.062	-121.560	-180.622			29.600	73.818	90.760	-3.424	-6.136	-9.560
		450	2.000	-65.576	-126.132	-191.708			34.660	77.897	99.200	-1.848	-3.160	-5.008
	250	250	1.000	-56.680	-116.275	-172.955			26.780	68.917	83.880	-6.402	-11.454	-17.856
		300	1.200	-59.625	-119.020	-178.645			29.080	71.524	88.340	-4.344	-7.561	-11.905
		375	1.500	-64.014	-122.522	-186.536			32.460	74.759	94.400	-2.694	-4.532	-7.226
		500	2.000	-71.272	-127.134	-198.406			38.060	78.838	103.380	-1.452	-2.332	-3.784
	300	300	1.000	-65.193	-117.722	-182.915			31.420	70.438	89.780	-4.218	-6.705	-10.923
		360	1.200	-68.717	-120.543	-189.260			34.140	73.069	94.680	-2.865	-4.436	-7.301
		450	1.500	-73.968	-124.086	-198.054			38.200	76.256	101.380	-1.779	-2.667	-4.446
		600	2.000	-82.654	-128.649	-211.303			44.900	80.239	111.380	-0.960	-1.377	-2.337
	350	350	1.000	-73.700	-118.830	-192.530			36.060	71.597	95.380	-2.979	-4.262	-7.241

Cantilever Length: 3.75 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-47.841	-95.644	-143.485			21.760	62.070	73.760	-10.766	-17.123	-27.889
		240	1.200	-49.289	-97.803	-147.092			22.880	63.861	76.380	-8.373	-13.164	-21.537
		300	1.500	-50.735	-99.813	-150.548			23.980	65.484	78.840	-6.681	-10.400	-17.081
		400	2.000	-53.610	-103.448	-157.058			26.180	68.325	83.420	-4.515	-6.911	-11.426
	225	225	1.000	-52.069	-96.992	-149.061			24.020	63.240	77.000	-8.168	-12.183	-20.351
		270	1.200	-54.669	-100.477	-155.146			26.020	66.057	81.360	-5.537	-8.128	-13.665
		338	1.500	-58.577	-105.012	-163.589			9.020	69.543	67.280	-3.419	-4.931	-8.350
		450	2.000	-64.973	-111.010	-175.983			33.960	73.959	95.920	-1.845	-2.607	-4.452
	250	250	1.000	-56.297	-98.179	-154.476			26.300	64.267	80.140	-6.397	-8.989	-15.386
		300	1.200	-59.181	-101.727	-160.908			28.500	67.084	84.700	-4.338	-6.011	-10.349
		375	1.500	-63.482	-106.272	-169.754			31.820	70.521	90.900	-2.690	-3.668	-6.358
		500	2.000	-70.608	-112.283	-182.891			37.340	74.890	100.080	-1.449	-1.939	-3.388
	300	300	1.000	-64.744	-100.096	-164.840			30.820	65.890	86.020	-4.214	-5.314	-9.528
		360	1.200	-68.192	-103.702	-171.894			33.460	68.683	91.000	-2.860	-3.566	-6.426
		450	1.500	-73.337	-108.258	-181.595			37.440	72.049	97.800	-1.776	-2.186	-3.962
		600	2.000	-81.866	-114.193	-196.059			44.020	76.322	107.960	-0.958	-1.161	-2.119
	350	350	1.000	-73.180	-101.506	-174.686			35.340	67.084	91.540	-2.975	-3.406	-6.381
10	200	200	1.000	-47.704	-86.195	-133.899			21.640	60.188	72.300	-10.758	-14.405	-25.163
		240	1.200	-49.135	-88.763	-137.898			22.740	62.065	74.980	-8.366	-11.166	-19.532
		300	1.500	-50.561	-91.154	-141.715			23.840	63.752	77.500	-6.676	-8.890	-15.566
		400	2.000	-53.405	-95.456	-148.861			26.060	66.699	82.200	-4.509	-5.997	-10.506
	225	225	1.000	-51.909	-87.794	-139.703			23.880	61.400	75.560	-8.162	-10.323	-18.485
		270	1.200	-54.475	-91.910	-146.385			25.860	64.323	80.000	-5.531	-6.982	-12.513
		338	1.500	-58.334	-97.258	-155.592			28.860	67.934	86.040	-3.415	-4.316	-7.731
		450	2.000	-64.663	-104.320	-168.983			33.760	72.568	94.840	-1.841	-2.341	-4.182
	250	250	1.000	-56.109	-89.172	-145.281			26.120	62.446	78.680	-6.391	-7.667	-14.058
		300	1.200	-58.954	-93.348	-152.302			28.320	65.344	83.320	-4.334	-5.200	-9.534
		375	1.500	-63.202	-98.703	-161.905			31.620	68.932	89.640	-2.686	-3.235	-5.921
		500	2.000	-70.255	-105.797	-176.052			37.080	73.542	98.980	-1.445	-1.755	-3.200
	300	300	1.000	-64.498	-91.365	-155.863			30.600	64.061	84.520	-4.209	-4.582	-8.791
		360	1.200	-67.901	-95.611	-163.512			33.220	66.960	89.580	-2.856	-3.122	-5.978
		450	1.500	-72.985	-101.002	-173.987			37.160	70.501	96.500	-1.772	-1.952	-3.724
		600	2.000	-81.433	-108.052	-189.485			43.720	75.039	106.880	-0.956	-1.064	-2.020
	350	350	1.000	-72.877	-92.979	-165.856			35.060	65.249	89.980	-2.971	-2.962	-5.933
12	200	200	1.000	-47.629	-80.858	-128.487			21.600	55.956	71.580	-10.751	-12.780	-23.531
		240	1.200	-49.048	-83.730	-132.778			22.700	57.769	74.300	-8.359	-9.989	-18.348
		300	1.500	-50.463	-86.396	-136.859			23.800	59.404	76.860	-6.669	-8.016	-14.685
		400	2.000	-53.285	-91.186	-144.471			25.980	62.270	81.600	-4.503	-5.484	-9.987
	225	225	1.000	-51.812	-82.610	-134.422			23.820	57.120	74.840	-8.155	-9.225	-17.380
		270	1.200	-54.357	-87.206	-141.563			25.780	59.941	79.320	-5.525	-6.326	-11.851
		338	1.500	-58.188	-93.168	-151.356			28.780	63.457	85.460	-3.410	-3.980	-7.390
		450	2.000	-64.479	-101.024	-165.503			33.700	67.935	94.380	-1.838	-2.206	-4.044
	250	250	1.000	-55.990	-84.121	-140.111			26.040	58.105	77.940	-6.385	-6.896	-13.281
		300	1.200	-58.813	-88.791	-147.604			28.220	60.927	82.640	-4.328	-4.744	-9.072
		375	1.500	-63.031	-94.778	-157.809			31.520	64.420	89.060	-2.682	-3.004	-5.686
		500	2.000	-70.045	-102.692	-172.737			36.980	68.920	98.540	-1.442	-1.666	-3.108
	300	300	1.000	-64.336	-86.551	-150.887			30.480	59.650	83.760	-4.203	-4.168	-8.371
		360	1.200	-67.713	-91.326	-159.039			33.100	62.472	88.900	-2.852	-2.880	-5.732
		450	1.500	-72.766	-97.385	-170.151			37.040	65.965	95.960	-1.769	-1.833	-3.602
		600	2.000	-81.175	-105.269	-186.444			43.600	70.420	106.500	-0.953	-1.020	-1.973
	350	350	1.000	-72.674	-88.370	-161.044			34.900	60.815	89.220	-2.967	-2.716	-5.683

A3. PL-1 Barrier

Cantilever Length: 0.5 m												
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-3.345	-1.163	-4.508	7.866	14.662	22.528	-0.016	-0.001	-0.017
		240	1.200	-3.370	-1.188	-4.557	8.011	14.721	22.733	-0.012	-0.001	-0.013
		300	1.500	-3.394	-1.209	-4.603	8.157	14.771	22.928	-0.010	-0.001	-0.010
		400	2.000	-3.443	-1.244	-4.687	8.446	14.850	23.296	-0.006	-0.001	-0.007
	225	225	1.000	-3.418	-1.178	-4.596	8.158	14.720	22.878	-0.011	-0.001	-0.012
		270	1.200	-3.462	-1.215	-4.677	8.419	14.805	23.224	-0.007	-0.001	-0.008
		338	1.500	-3.528	-1.258	-4.787	8.812	14.897	23.709	-0.005	0.000	-0.005
		450	2.000	-3.636	-1.307	-4.943	9.461	14.991	24.452	-0.002	0.000	-0.003
	250	250	1.000	-3.491	-1.191	-4.683	8.450	14.772	23.221	-0.008	-0.001	-0.009
		300	1.200	-3.540	-1.228	-4.768	8.739	14.851	23.590	-0.006	0.000	-0.006
		375	1.500	-3.612	-1.271	-4.883	9.173	14.935	24.108	-0.003	0.000	-0.004
		500	2.000	-3.733	-1.318	-5.051	9.897	15.021	24.918	-0.002	0.000	-0.002
	300	300	1.000	-3.637	-1.215	-4.852	9.032	14.857	23.888	-0.005	0.000	-0.005
		360	1.200	-3.695	-1.251	-4.946	9.378	14.926	24.304	-0.003	0.000	-0.004
		450	1.500	-3.782	-1.291	-5.073	9.899	14.997	24.896	-0.002	0.000	-0.002
		600	2.000	-3.927	-1.335	-5.261	10.771	15.066	25.837	-0.001	0.000	-0.001
	350	350	1.000	-3.782	-1.233	-5.016	9.613	14.921	24.534	-0.003	0.000	-0.004
4.5	200	200	1.000	-3.339	-1.126	-4.465	7.849	14.621	22.469	-0.016	-0.001	-0.017
		240	1.200	-3.363	-1.153	-4.515	7.993	14.683	22.676	-0.012	-0.001	-0.013
		300	1.500	-3.387	-1.176	-4.562	8.138	14.734	22.872	-0.009	-0.001	-0.010
		400	2.000	-3.435	-1.213	-4.648	8.428	14.816	23.244	-0.006	-0.001	-0.007
	225	225	1.000	-3.411	-1.142	-4.553	8.140	14.680	22.820	-0.011	-0.001	-0.012
		270	1.200	-3.455	-1.183	-4.637	8.401	14.769	23.169	-0.007	-0.001	-0.008
		338	1.500	-3.520	-1.229	-4.749	8.796	14.863	23.659	-0.004	0.000	-0.005
		450	2.000	-3.629	-1.280	-4.909	9.450	14.961	24.410	-0.002	0.000	-0.003
	250	250	1.000	-3.484	-1.157	-4.641	8.432	14.733	23.164	-0.008	-0.001	-0.009
		300	1.200	-3.532	-1.197	-4.729	8.722	14.816	23.538	-0.006	-0.001	-0.006
		375	1.500	-3.604	-1.242	-4.846	9.159	14.903	24.061	-0.003	0.000	-0.004
		500	2.000	-3.726	-1.292	-5.018	9.890	14.992	24.882	-0.002	0.000	-0.002
	300	300	1.000	-3.629	-1.182	-4.812	9.016	14.820	23.836	-0.005	0.000	-0.005
		360	1.200	-3.687	-1.221	-4.908	9.365	14.892	24.257	-0.003	0.000	-0.004
		450	1.500	-3.775	-1.264	-5.039	9.891	14.966	24.858	-0.002	0.000	-0.002
		600	2.000	-3.922	-1.310	-5.232	10.772	15.038	25.810	-0.001	0.000	-0.001
	350	350	1.000	-3.775	-1.203	-4.978	9.601	14.887	24.488	-0.003	0.000	-0.004
6	200	200	1.000	-3.336	-1.114	-4.450	7.843	14.620	22.463	-0.016	-0.001	-0.017
		240	1.200	-3.360	-1.142	-4.502	7.989	14.683	22.672	-0.012	-0.001	-0.013
		300	1.500	-3.385	-1.165	-4.550	8.135	14.736	22.871	-0.009	-0.001	-0.010
		400	2.000	-3.433	-1.205	-4.638	8.428	14.819	23.246	-0.006	-0.001	-0.007
	225	225	1.000	-3.409	-1.131	-4.540	8.136	14.680	22.816	-0.011	-0.001	-0.012
		270	1.200	-3.453	-1.173	-4.626	8.399	14.770	23.170	-0.007	-0.001	-0.008
		338	1.500	-3.519	-1.221	-4.740	8.798	14.867	23.665	-0.004	0.000	-0.005
		450	2.000	-3.630	-1.273	-4.903	9.457	14.967	24.423	-0.002	0.000	-0.003
	250	250	1.000	-3.482	-1.147	-4.628	8.430	14.734	23.164	-0.008	-0.001	-0.009
		300	1.200	-3.530	-1.188	-4.719	8.723	14.819	23.541	-0.005	-0.001	-0.006
		375	1.500	-3.604	-1.234	-4.839	9.163	14.908	24.071	-0.003	0.000	-0.004
		500	2.000	-3.728	-1.285	-5.013	9.899	14.998	24.897	-0.002	0.000	-0.002
	300	300	1.000	-3.628	-1.174	-4.802	9.017	14.823	23.840	-0.005	-0.001	-0.005
		360	1.200	-3.687	-1.214	-4.900	9.370	14.897	24.267	-0.003	0.000	-0.004
		450	1.500	-3.776	-1.257	-5.033	9.899	14.972	24.871	-0.002	0.000	-0.002
		600	2.000	-3.925	-1.303	-5.229	10.783	15.046	25.829	-0.001	0.000	-0.001
	350	350	1.000	-3.774	-1.196	-4.970	9.606	14.891	24.497	-0.003	0.000	-0.004

Cantilever Length: 0.5 m												
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-3.336	-1.108	-4.444	7.846	14.599	22.444	-0.016	-0.001	-0.017
		240	1.200	-3.360	-1.136	-4.497	7.993	14.663	22.655	-0.012	-0.001	-0.013
		300	1.500	-3.385	-1.161	-4.546	8.140	14.716	22.856	-0.009	-0.001	-0.010
		400	2.000	-3.435	-1.201	-4.635	8.434	14.800	23.234	-0.006	-0.001	-0.007
	225	225	1.000	-3.409	-1.126	-4.535	8.140	14.660	22.800	-0.011	-0.001	-0.012
		270	1.200	-3.453	-1.169	-4.622	8.405	14.752	23.157	-0.007	-0.001	-0.008
		338	1.500	-3.521	-1.217	-4.738	8.806	14.849	23.655	-0.004	0.000	-0.005
		450	2.000	-3.633	-1.270	-4.903	9.466	14.950	24.416	-0.002	0.000	-0.003
	250	250	1.000	-3.482	-1.142	-4.624	8.435	14.715	23.149	-0.008	-0.001	-0.009
		300	1.200	-3.532	-1.185	-4.716	8.729	14.801	23.530	-0.005	-0.001	-0.006
		375	1.500	-3.607	-1.231	-4.838	9.171	14.890	24.062	-0.003	0.000	-0.004
		500	2.000	-3.732	-1.282	-5.014	9.909	14.982	24.890	-0.002	0.000	-0.002
	300	300	1.000	-3.629	-1.170	-4.799	9.024	14.805	23.829	-0.005	-0.001	-0.005
		360	1.200	-3.689	-1.211	-4.900	9.378	14.880	24.257	-0.003	0.000	-0.004
		450	1.500	-3.779	-1.254	-5.033	9.909	14.955	24.864	-0.002	0.000	-0.002
		600	2.000	-3.930	-1.301	-5.230	10.793	15.029	25.823	-0.001	0.000	-0.001
	350	350	1.000	-3.776	-1.193	-4.969	9.614	14.874	24.488	-0.003	0.000	-0.004
10	200	200	1.000	-3.336	-1.106	-4.442	7.849	14.598	22.447	-0.016	-0.001	-0.017
		240	1.200	-3.361	-1.134	-4.495	7.997	14.663	22.659	-0.012	-0.001	-0.013
		300	1.500	-3.386	-1.159	-4.545	8.144	14.716	22.860	-0.009	-0.001	-0.010
		400	2.000	-3.436	-1.199	-4.635	8.439	14.801	23.240	-0.006	-0.001	-0.007
	225	225	1.000	-3.410	-1.124	-4.534	8.144	14.660	22.804	-0.011	-0.001	-0.012
		270	1.200	-3.455	-1.167	-4.622	8.409	14.752	23.161	-0.007	-0.001	-0.008
		338	1.500	-3.523	-1.216	-4.739	8.810	14.850	23.661	-0.004	0.000	-0.005
		450	2.000	-3.635	-1.269	-4.904	9.471	14.951	24.422	-0.002	0.000	-0.003
	250	250	1.000	-3.483	-1.141	-4.624	8.439	14.715	23.154	-0.008	-0.001	-0.009
		300	1.200	-3.533	-1.183	-4.716	8.734	14.801	23.535	-0.006	-0.001	-0.006
		375	1.500	-3.609	-1.230	-4.838	9.176	14.891	24.067	-0.003	0.000	-0.004
		500	2.000	-3.734	-1.281	-5.015	9.913	14.983	24.896	-0.002	0.000	-0.002
	300	300	1.000	-3.631	-1.169	-4.799	9.029	14.806	23.834	-0.005	-0.001	-0.005
		360	1.200	-3.691	-1.209	-4.900	9.382	14.880	24.263	-0.003	0.000	-0.004
		450	1.500	-3.781	-1.253	-5.034	9.913	14.956	24.869	-0.002	0.000	-0.002
		600	2.000	-3.932	-1.299	-5.231	10.797	15.030	25.828	-0.001	0.000	-0.001
	350	350	1.000	-3.778	-1.191	-4.969	9.618	14.875	24.493	-0.003	0.000	-0.004
12	200	200	1.000	-3.337	-1.106	-4.443	7.852	14.598	22.450	-0.016	-0.001	-0.017
		240	1.200	-3.362	-1.134	-4.496	7.999	14.663	22.662	-0.012	-0.001	-0.013
		300	1.500	-3.387	-1.159	-4.546	8.146	14.716	22.863	-0.009	-0.001	-0.010
		400	2.000	-3.437	-1.199	-4.636	8.441	14.801	23.242	-0.006	-0.001	-0.007
	225	225	1.000	-3.411	-1.124	-4.535	8.146	14.660	22.806	-0.011	-0.001	-0.012
		270	1.200	-3.456	-1.167	-4.623	8.412	14.752	23.164	-0.007	-0.001	-0.008
		338	1.500	-3.524	-1.216	-4.740	8.813	14.850	23.663	-0.004	0.000	-0.005
		450	2.000	-3.636	-1.269	-4.905	9.473	14.951	24.424	-0.002	0.000	-0.003
	250	250	1.000	-3.484	-1.141	-4.625	8.441	14.715	23.156	-0.008	-0.001	-0.009
		300	1.200	-3.534	-1.183	-4.717	8.736	14.801	23.537	-0.006	-0.001	-0.006
		375	1.500	-3.610	-1.230	-4.840	9.178	14.891	24.070	-0.003	0.000	-0.004
		500	2.000	-3.735	-1.281	-5.016	9.915	14.983	24.898	-0.002	0.000	-0.002
	300	300	1.000	-3.632	-1.169	-4.801	9.031	14.806	23.837	-0.005	-0.001	-0.005
		360	1.200	-3.692	-1.209	-4.901	9.384	14.881	24.265	-0.003	0.000	-0.004
		450	1.500	-3.782	-1.253	-5.035	9.915	14.957	24.872	-0.002	0.000	-0.002
		600	2.000	4.142	-1.299	-0.143	11.236	22.826	25.760	0.001	-0.002	-0.001
	350	350	1.000	-3.779	-1.192	-4.971	9.620	14.875	24.495	-0.003	0.000	-0.004

Cantilever Length: 1.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-7.896	-17.747	-25.643	-25.100	-41.4%	10.255	69.811	80.067	-0.142	-0.157	-0.300
		240	1.200	-7.999	-18.196	-26.195			10.552	70.875	81.427	-0.110	-0.118	-0.228
		300	1.500	-8.102	-18.608	-26.709			10.848	71.824	82.672	-0.087	-0.091	-0.178
		400	2.000	-8.306	-19.339	-27.646	-30.600	-58.2%	11.440	73.452	84.892	-0.058	-0.058	-0.116
	225	225	1.000	-8.195	-17.944	-26.139	-25.100	-39.9%	10.855	70.417	81.272	-0.103	-0.112	-0.215
		270	1.200	-8.380	-18.668	-27.048			11.388	72.091	83.479	-0.069	-0.072	-0.141
		338	1.500	-8.658	-19.594	-28.252			12.191	74.127	86.318	-0.042	-0.042	-0.084
		450	2.000	-9.113	-20.794	-29.906	-30.600	-47.2%	13.509	76.624	90.133	-0.022	-0.021	-0.043
	250	250	1.000	-8.495	-18.142	-26.637	-25.100	-38.3%	11.454	71.025	82.479	-0.077	-0.083	-0.160
		300	1.200	-8.700	-18.887	-27.586			12.046	72.715	84.761	-0.052	-0.053	-0.105
		375	1.500	-9.006	-19.827	-28.832			12.929	74.746	87.676	-0.032	-0.031	-0.063
		500	2.000	-9.511	-21.047	-30.558	-30.600	-45.4%	14.397	77.240	91.637	-0.017	-0.015	-0.032
	300	300	1.000	-9.094	-18.524	-27.617	-25.100	-35.5%	12.652	72.173	84.826	-0.047	-0.049	-0.096
		360	1.200	-9.339	-19.294	-28.633			13.359	73.862	87.220	-0.032	-0.032	-0.064
		450	1.500	-9.704	-20.257	-29.960			14.415	75.865	90.280	-0.019	-0.019	-0.038
		600	2.000	-10.307	-21.479	-31.786	-30.600	-42.5%	16.170	78.275	94.445	-0.010	-0.009	-0.020
	350	350	1.000	-9.692	-18.863	-28.554	-25.100	-33.1%	13.848	73.170	87.018	-0.031	-0.032	-0.063
4.5	200	200	1.000	-7.883	-16.162	-24.045	-25.100	-55.3%	10.248	68.333	78.581	-0.142	-0.113	-0.255
		240	1.200	-7.984	-16.739	-24.723			10.543	69.566	80.108	-0.110	-0.086	-0.196
		300	1.500	-8.085	-17.268	-25.353			10.837	70.661	81.497	-0.087	-0.068	-0.155
		400	2.000	-8.286	-18.204	-26.490	-30.600	-68.1%	11.424	72.524	83.948	-0.058	-0.045	-0.103
	225	225	1.000	-8.180	-16.463	-24.643	-25.100	-52.5%	10.840	69.139	79.979	-0.103	-0.082	-0.185
		270	1.200	-8.362	-17.388	-25.749			11.369	71.046	82.415	-0.069	-0.054	-0.123
		338	1.500	-8.634	-18.561	-27.195			12.166	73.339	85.506	-0.042	-0.033	-0.075
		450	2.000	-9.079	-20.055	-29.134	-30.600	-52.6%	13.476	76.102	89.578	-0.022	-0.017	-0.039
	250	250	1.000	-8.477	-16.751	-25.228	-25.100	-49.8%	11.432	69.898	81.330	-0.077	-0.062	-0.139
		300	1.200	-8.678	-17.695	-26.373			12.018	71.797	83.815	-0.052	-0.041	-0.093
		375	1.500	-8.977	-18.876	-27.852			12.895	74.054	86.949	-0.032	-0.025	-0.057
		500	2.000	-9.472	-20.379	-29.851	-30.600	-50.2%	14.356	76.782	91.137	-0.017	-0.013	-0.030
	300	300	1.000	-9.069	-17.275	-26.344	-25.100	-45.3%	12.611	71.246	83.857	-0.047	-0.038	-0.085
		360	1.200	-9.308	-18.243	-27.551			13.312	73.107	86.419	-0.032	-0.025	-0.057
		450	1.500	-9.665	-19.437	-29.103			14.363	75.299	89.662	-0.019	-0.016	-0.035
		600	2.000	-10.258	-20.923	-31.181	-30.600	-46.3%	16.114	77.906	94.019	-0.010	-0.008	-0.018
	350	350	1.000	-9.659	-17.727	-27.386	-25.100	-41.6%	13.787	72.363	86.151	-0.031	-0.025	-0.057
6	200	200	1.000	-7.876	-15.598	-23.475	-25.100	-60.9%	10.238	67.950	78.188	-0.142	-0.095	-0.237
		240	1.200	-7.976	-16.241	-24.217			10.531	69.234	79.764	-0.110	-0.074	-0.183
		300	1.500	-8.076	-16.826	-24.902			10.823	70.369	81.192	-0.087	-0.059	-0.146
		400	2.000	-8.274	-17.851	-26.126	-30.600	-71.4%	11.408	72.291	83.699	-0.058	-0.040	-0.098
	225	225	1.000	-8.172	-15.944	-24.116	-25.100	-57.4%	10.827	68.797	79.624	-0.103	-0.070	-0.173
		270	1.200	-8.351	-16.965	-25.316			11.353	70.768	82.121	-0.069	-0.047	-0.116
		338	1.500	-8.620	-18.245	-26.865			12.148	73.123	85.270	-0.042	-0.029	-0.071
		450	2.000	-9.062	-19.846	-28.908	-30.600	-54.2%	13.457	75.943	89.400	-0.022	-0.016	-0.038
	250	250	1.000	-8.466	-16.270	-24.736	-25.100	-54.3%	11.415	69.582	80.997	-0.077	-0.053	-0.131
		300	1.200	-8.665	-17.308	-25.973			11.999	71.537	83.536	-0.052	-0.036	-0.088
		375	1.500	-8.961	-18.590	-27.552			12.875	73.851	86.726	-0.032	-0.023	-0.054
		500	2.000	-9.454	-20.196	-29.651	-30.600	-51.5%	14.337	76.636	90.973	-0.017	-0.012	-0.029
	300	300	1.000	-9.055	-16.861	-25.916	-25.100	-48.9%	12.590	70.965	83.554	-0.047	-0.034	-0.081
		360	1.200	-9.292	-17.920	-27.212			13.290	72.880	86.170	-0.032	-0.023	-0.055
		450	1.500	-9.647	-19.209	-28.856			14.342	75.127	89.469	-0.019	-0.015	-0.034
		600	2.000	-10.239	-20.785	-31.024	-30.600	-47.2%	16.098	77.789	93.887	-0.010	-0.008	-0.018
	350	350	1.000	-9.643	-17.372	-27.015	-25.100	-44.5%	13.763	72.117	85.880	-0.031	-0.023	-0.054

Cantilever Length: 1.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-7.868	-15.284	-23.152	-25.100	-64.2%	10.224	67.752	77.977	-0.142	-0.084	-0.226
		240	1.200	-7.967	-15.967	-23.934			10.516	69.053	79.569	-0.109	-0.066	-0.176
		300	1.500	-8.066	-16.586	-24.652			10.809	70.202	81.010	-0.087	-0.053	-0.140
		400	2.000	-8.263	-17.662	-25.926	-30.600	-73.2%	11.394	72.145	83.538	-0.058	-0.037	-0.095
	225	225	1.000	-8.162	-15.658	-23.820	-25.100	-60.3%	10.812	68.603	79.415	-0.103	-0.063	-0.166
		270	1.200	-8.340	-16.740	-25.080			11.338	70.601	81.939	-0.069	-0.044	-0.112
		338	1.500	-8.608	-18.082	-26.690			12.133	72.987	85.121	-0.042	-0.028	-0.069
		450	2.000	-9.051	-19.742	-28.793	-30.600	-55.0%	13.447	75.845	89.291	-0.022	-0.015	-0.037
	250	250	1.000	-8.456	-16.013	-24.469	-25.100	-56.7%	11.399	69.397	80.795	-0.077	-0.049	-0.126
		300	1.200	-8.653	-17.110	-25.763			11.983	71.382	83.366	-0.052	-0.034	-0.086
		375	1.500	-8.949	-18.451	-27.401			12.862	73.730	86.592	-0.032	-0.022	-0.053
		500	2.000	-9.444	-20.111	-29.555	-30.600	-52.2%	14.329	76.553	90.882	-0.017	-0.012	-0.028
	300	300	1.000	-9.043	-16.660	-25.703	-25.100	-50.7%	12.573	70.809	83.382	-0.047	-0.032	-0.079
		360	1.200	-9.280	-17.773	-27.052			13.276	72.756	86.032	-0.032	-0.022	-0.054
		450	1.500	-9.635	-19.111	-28.746			14.331	75.036	89.367	-0.019	-0.014	-0.033
		600	2.000	-10.231	-20.728	-30.959	-30.600	-47.6%	16.094	77.731	93.825	-0.010	-0.008	-0.018
	350	350	1.000	-9.630	-17.218	-26.848	-25.100	-45.8%	13.748	71.993	85.741	-0.031	-0.022	-0.053
10	200	200	1.000	-7.862	-15.135	-22.997	-25.100	-65.8%	10.216	67.637	77.853	-0.142	-0.079	-0.221
		240	1.200	-7.961	-15.839	-23.800			10.509	68.947	79.456	-0.109	-0.063	-0.172
		300	1.500	-8.060	-16.476	-24.535			10.802	70.106	80.907	-0.087	-0.051	-0.138
		400	2.000	-8.257	-17.578	-25.836	-30.600	-74.1%	11.388	72.066	83.454	-0.058	-0.036	-0.093
	225	225	1.000	-8.156	-15.531	-23.687	-25.100	-61.6%	10.804	68.498	79.302	-0.103	-0.060	-0.163
		270	1.200	-8.333	-16.644	-24.978			11.331	70.515	81.846	-0.069	-0.042	-0.111
		338	1.500	-8.603	-18.016	-26.618			12.129	72.923	85.052	-0.042	-0.027	-0.069
		450	2.000	-9.048	-19.704	-28.752	-30.600	-55.3%	13.446	75.806	89.251	-0.022	-0.015	-0.037
	250	250	1.000	-8.449	-15.908	-24.357	-25.100	-57.8%	11.391	69.306	80.697	-0.077	-0.047	-0.124
		300	1.200	-8.647	-17.033	-25.680			11.977	71.311	83.288	-0.052	-0.033	-0.085
		375	1.500	-8.944	-18.400	-27.344			12.858	73.679	86.537	-0.031	-0.021	-0.053
		500	2.000	-9.442	-20.082	-29.524	-30.600	-52.4%	14.329	76.523	90.852	-0.017	-0.012	-0.028
	300	300	1.000	-9.036	-16.588	-25.625	-25.100	-51.3%	12.567	70.744	83.311	-0.047	-0.031	-0.078
		360	1.200	-9.274	-17.722	-26.996			13.271	72.707	85.978	-0.032	-0.022	-0.053
		450	1.500	-9.631	-19.078	-28.709			14.330	75.003	89.333	-0.019	-0.014	-0.033
		600	2.000	-10.230	-20.710	-30.940	-30.600	-47.8%	16.096	77.713	93.809	-0.010	-0.008	-0.018
	350	350	1.000	-9.623	-17.168	-26.791	-25.100	-46.2%	13.743	71.946	85.689	-0.031	-0.021	-0.053
12	200	200	1.000	-7.858	-15.058	-22.916	-25.100	-66.7%	10.212	67.568	77.780	-0.142	-0.077	-0.219
		240	1.200	-7.957	-15.776	-23.733			10.505	68.888	79.394	-0.109	-0.062	-0.171
		300	1.500	-8.056	-16.422	-24.479			10.799	70.055	80.854	-0.087	-0.050	-0.137
		400	2.000	-8.255	-17.541	-25.795	-30.600	-74.5%	11.386	72.028	83.415	-0.058	-0.035	-0.093
	225	225	1.000	-8.152	-15.472	-23.624	-25.100	-62.2%	10.800	68.443	79.243	-0.102	-0.059	-0.161
		270	1.200	-8.330	-16.601	-24.932			11.328	70.474	81.802	-0.069	-0.042	-0.110
		338	1.500	-8.601	-17.989	-26.589			12.128	72.896	85.024	-0.042	-0.027	-0.069
		450	2.000	-9.048	-19.690	-28.737	-30.600	-55.4%	13.447	75.792	89.239	-0.022	-0.015	-0.037
	250	250	1.000	-8.446	-15.862	-24.307	-25.100	-58.2%	11.388	69.263	80.651	-0.077	-0.046	-0.123
		300	1.200	-8.644	-17.001	-25.645			11.976	71.279	83.255	-0.052	-0.033	-0.084
		375	1.500	-8.943	-18.380	-27.322			12.858	73.659	86.517	-0.031	-0.021	-0.053
		500	2.000	-9.442	-20.072	-29.514	-30.600	-52.4%	14.331	76.514	90.844	-0.017	-0.012	-0.028
	300	300	1.000	-9.033	-16.560	-25.593	-25.100	-51.6%	12.565	70.716	83.281	-0.047	-0.031	-0.078
		360	1.200	-9.272	-17.702	-26.974			13.271	72.687	85.958	-0.032	-0.022	-0.053
		450	1.500	-9.631	-19.065	-28.696			14.331	74.991	89.322	-0.019	-0.014	-0.033
		600	2.000	-10.231	-20.705	-30.936	-30.600	-47.8%	16.098	77.708	93.806	-0.010	-0.008	-0.018
	350	350	1.000	-9.621	-17.149	-26.770	-25.100	-46.4%	13.742	71.927	85.670	-0.031	-0.021	-0.053

Cantilever Length: 1.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-13.708	-37.332	-51.040	-27.100	27.4%	12.813	50.205	63.018	-0.539	-1.106	-1.645
		240	1.200	-13.945	-38.014	-51.959			13.267	51.457	64.724	-0.417	-0.832	-1.249
		300	1.500	-14.181	-38.653	-52.835			13.719	52.605	66.324	-0.331	-0.644	-0.975
		400	2.000	-14.652	-39.818	-54.470	-34.000	14.6%	14.622	54.642	69.264	-0.221	-0.411	-0.632
	225	225	1.000	-14.385	-37.589	-51.974	-27.100	27.9%	13.725	50.767	64.492	-0.394	-0.780	-1.174
		270	1.200	-14.811	-38.704	-53.514			14.541	52.780	67.321	-0.265	-0.502	-0.767
		338	1.500	-15.450	-40.187	-55.637			15.769	55.358	71.126	-0.162	-0.290	-0.452
		450	2.000	-16.495	-42.210	-58.705	-34.000	19.5%	17.781	58.729	76.510	-0.086	-0.143	-0.228
	250	250	1.000	-15.062	-37.860	-52.923	-27.100	28.4%	14.640	51.356	65.996	-0.299	-0.571	-0.870
		300	1.200	-15.535	-42.897	-58.433			15.546	56.854	72.400	-0.201	-0.422	-0.623
		375	1.500	-16.239	-40.538	-56.778			16.899	56.044	72.942	-0.123	-0.214	-0.337
		500	2.000	-17.404	-42.628	-60.032	-34.000	20.2%	19.141	59.489	78.631	-0.065	-0.105	-0.170
	300	300	1.000	-16.420	-38.410	-54.830	-27.100	29.4%	16.475	52.543	69.018	-0.186	-0.334	-0.520
		360	1.200	-16.986	-39.633	-56.619			17.560	54.686	72.245	-0.125	-0.216	-0.341
		450	1.500	-17.829	-41.230	-59.059			19.178	57.377	76.555	-0.077	-0.126	-0.203
		600	2.000	-19.221	-43.385	-62.607	-34.000	21.6%	21.862	60.857	82.718	-0.041	-0.062	-0.103
	350	350	1.000	-17.779	-38.933	-56.712	-27.100	30.4%	18.312	53.656	71.968	-0.125	-0.213	-0.338
4.5	200	200	1.000	-13.620	-28.324	-41.944	-27.100	4.3%	12.620	45.781	58.402	-0.538	-0.754	-1.292
		240	1.200	-13.850	-29.238	-43.088			13.065	47.306	60.371	-0.416	-0.572	-0.988
		300	1.500	-14.080	-30.101	-44.181			13.508	48.705	62.214	-0.330	-0.446	-0.777
		400	2.000	-14.538	-31.689	-46.227	-34.000	-7.3%	14.395	51.191	65.586	-0.221	-0.290	-0.511
	225	225	1.000	-14.292	-28.796	-43.088	-27.100	5.9%	13.517	46.671	60.188	-0.393	-0.537	-0.930
		270	1.200	-14.706	-30.301	-45.007			14.316	49.109	63.425	-0.264	-0.351	-0.616
		338	1.500	-15.328	-32.322	-47.650			15.519	52.226	67.746	-0.161	-0.208	-0.369
		450	2.000	-16.348	-35.098	-51.446	-34.000	3.1%	17.496	56.284	73.780	-0.086	-0.106	-0.192
	250	250	1.000	-14.965	-29.266	-44.230	-27.100	7.4%	14.414	47.548	61.962	-0.298	-0.397	-0.695
		300	1.200	-15.424	-33.649	-49.073			15.300	52.999	68.299	-0.201	-0.298	-0.499
		375	1.500	-16.109	-32.898	-49.007			16.625	53.165	69.789	-0.123	-0.155	-0.278
		500	2.000	-17.244	-35.746	-52.990	-34.000	4.9%	18.827	57.260	76.088	-0.065	-0.080	-0.145
	300	300	1.000	-16.309	-30.155	-46.464	-27.100	10.1%	16.205	49.181	65.386	-0.186	-0.237	-0.422
		360	1.200	-16.859	-31.802	-48.661			17.264	51.704	68.968	-0.125	-0.156	-0.281
		450	1.500	-17.678	-33.958	-51.636			18.849	54.862	73.711	-0.077	-0.094	-0.171
		600	2.000	-19.035	-36.860	-55.895	-34.000	7.8%	21.485	58.922	80.407	-0.041	-0.049	-0.090
	350	350	1.000	-17.653	-30.945	-48.598	-27.100	12.4%	17.993	50.593	68.587	-0.125	-0.154	-0.279
6	200	200	1.000	-13.606	-24.784	-38.390	-27.100	-9.3%	12.620	44.370	56.990	-0.538	-0.596	-1.134
		240	1.200	-13.835	-25.854	-39.688			13.063	46.035	59.098	-0.416	-0.457	-0.873
		300	1.500	-14.063	-26.862	-40.925			13.505	47.558	61.063	-0.330	-0.361	-0.691
		400	2.000	-14.516	-28.709	-43.226	-34.000	-18.4%	14.389	50.249	64.637	-0.221	-0.240	-0.461
	225	225	1.000	-14.276	-25.396	-39.672	-27.100	-6.7%	13.511	45.426	58.937	-0.393	-0.430	-0.823
		270	1.200	-14.686	-27.148	-41.834			14.306	48.060	62.366	-0.264	-0.287	-0.551
		338	1.500	-15.302	-29.483	-44.785			15.505	51.401	66.907	-0.161	-0.175	-0.336
		450	2.000	-16.310	-32.643	-48.954	-34.000	-4.2%	17.476	55.702	73.178	-0.085	-0.093	-0.179
	250	250	1.000	-14.945	-25.983	-40.928	-27.100	-4.3%	14.400	46.426	60.826	-0.298	-0.322	-0.620
		300	1.200	-15.399	-30.223	-45.623			15.282	51.918	67.200	-0.200	-0.247	-0.447
		375	1.500	-16.077	-30.170	-46.247			16.603	52.418	69.021	-0.123	-0.133	-0.256
		500	2.000	-17.200	-33.388	-50.588	-34.000	-1.8%	18.800	56.733	75.532	-0.065	-0.071	-0.136
	300	300	1.000	-16.281	-27.058	-43.340	-27.100	-0.2%	16.175	48.214	64.389	-0.185	-0.196	-0.382
		360	1.200	-16.824	-28.954	-45.778			17.230	50.890	68.120	-0.125	-0.133	-0.258
		450	1.500	-17.634	-31.409	-49.043			18.811	54.223	73.034	-0.077	-0.083	-0.159
		600	2.000	-18.977	-34.658	-53.635	-34.000	1.9%	21.444	58.479	79.922	-0.041	-0.045	-0.085
	350	350	1.000	-17.615	-27.997	-45.613	-27.100	3.2%	17.946	49.724	67.670	-0.125	-0.130	-0.255

Cantilever Length: 1.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-13.596	-22.770	-36.366	-27.100	-19.0%	12.610	43.701	56.310	-0.537	-0.496	-1.034
		240	1.200	-13.822	-23.967	-37.789			13.050	45.441	58.492	-0.416	-0.387	-0.802
		300	1.500	-14.048	-25.088	-39.136			13.491	47.027	60.518	-0.330	-0.310	-0.640
		400	2.000	-14.498	-27.120	-41.617	-34.000	-25.4%	14.371	49.813	64.184	-0.221	-0.211	-0.432
	225	225	1.000	-14.262	-23.479	-37.741	-27.100	-15.4%	13.495	44.821	58.316	-0.393	-0.364	-0.757
		270	1.200	-14.668	-25.422	-40.090			14.287	47.554	61.841	-0.264	-0.249	-0.513
		338	1.500	-15.278	-27.976	-43.255			15.483	50.999	66.482	-0.161	-0.157	-0.318
		450	2.000	-16.280	-31.362	-47.641	-34.000	-8.4%	17.451	55.403	72.854	-0.085	-0.087	-0.172
	250	250	1.000	-14.928	-24.149	-39.077	-27.100	-12.2%	14.380	45.862	60.242	-0.298	-0.277	-0.575
		300	1.200	-15.378	-28.369	-43.746			15.259	51.377	66.636	-0.200	-0.218	-0.418
		375	1.500	-16.050	-28.735	-44.784			16.576	52.044	68.620	-0.123	-0.121	-0.243
		500	2.000	-17.166	-32.164	-49.330	-34.000	-5.7%	18.773	56.460	75.233	-0.065	-0.067	-0.132
	300	300	1.000	-16.257	-25.370	-41.627	-27.100	-6.8%	16.146	47.714	63.860	-0.185	-0.174	-0.359
		360	1.200	-16.795	-27.450	-44.245			17.200	50.478	67.678	-0.125	-0.121	-0.245
		450	1.500	-17.599	-30.101	-47.700			18.780	53.907	72.687	-0.076	-0.077	-0.153
		600	2.000	-18.937	-33.533	-52.470	-34.000	-1.4%	21.416	58.260	79.676	-0.041	-0.043	-0.083
	350	350	1.000	-17.584	-26.437	-44.021	-27.100	-2.5%	17.911	49.284	67.195	-0.125	-0.118	-0.242
10	200	200	1.000	-13.585	-21.869	-35.454	-27.100	-23.9%	12.597	43.422	56.019	-0.537	-0.449	-0.986
		240	1.200	-13.810	-23.136	-36.946			13.036	45.188	58.225	-0.415	-0.354	-0.770
		300	1.500	-14.034	-24.316	-38.350			13.476	46.794	60.270	-0.330	-0.287	-0.617
		400	2.000	-14.481	-26.436	-40.917	-34.000	-28.6%	14.355	49.611	63.965	-0.220	-0.199	-0.420
	225	225	1.000	-14.249	-22.631	-36.880	-27.100	-19.7%	13.480	44.552	58.032	-0.393	-0.334	-0.727
		270	1.200	-14.652	-24.679	-39.332			14.270	47.323	61.594	-0.264	-0.233	-0.497
		338	1.500	-15.260	-27.339	-42.599			15.465	50.811	66.276	-0.161	-0.149	-0.310
		450	2.000	-16.260	-30.817	-47.077	-34.000	-10.3%	17.435	55.259	72.695	-0.085	-0.084	-0.169
	250	250	1.000	-14.913	-23.354	-38.266	-27.100	-16.0%	14.362	45.608	59.970	-0.297	-0.257	-0.555
		300	1.200	-15.360	-27.589	-42.949			15.240	51.133	66.374	-0.200	-0.206	-0.406
		375	1.500	-16.029	-28.140	-44.169			16.558	51.873	68.432	-0.122	-0.116	-0.239
		500	2.000	-17.145	-31.653	-48.798	-34.000	-7.4%	18.758	56.336	75.094	-0.065	-0.065	-0.130
	300	300	1.000	-16.238	-24.673	-40.911	-27.100	-9.8%	16.126	47.498	63.624	-0.185	-0.165	-0.350
		360	1.200	-16.773	-26.845	-43.618			17.180	50.304	67.484	-0.124	-0.116	-0.240
		450	1.500	-17.576	-29.577	-47.153			18.762	53.774	72.537	-0.076	-0.075	-0.151
		600	2.000	-18.916	-33.069	-51.985	-34.000	-2.8%	21.404	58.171	79.575	-0.040	-0.042	-0.082
	350	350	1.000	-17.561	-25.820	-43.381	-27.100	-5.0%	17.889	49.108	66.997	-0.125	-0.113	-0.238
12	200	200	1.000	-13.576	-21.394	-34.970	-27.100	-26.7%	12.586	43.256	55.842	-0.537	-0.424	-0.961
		240	1.200	-13.800	-22.704	-36.503			13.026	45.034	58.060	-0.415	-0.338	-0.753
		300	1.500	-14.023	-23.916	-37.939			13.465	46.651	60.116	-0.329	-0.276	-0.605
		400	2.000	-14.469	-26.084	-40.553	-34.000	-30.3%	14.344	49.486	63.830	-0.220	-0.193	-0.413
	225	225	1.000	-14.238	-22.198	-36.436	-27.100	-22.1%	13.468	44.396	57.864	-0.392	-0.319	-0.711
		270	1.200	-14.640	-24.306	-38.946			14.259	47.189	61.449	-0.264	-0.225	-0.489
		338	1.500	-15.247	-27.021	-42.268			15.455	50.703	66.158	-0.161	-0.146	-0.307
		450	2.000	-16.248	-30.546	-46.794	-34.000	-11.3%	17.428	55.183	72.612	-0.085	-0.083	-0.168
	250	250	1.000	-14.900	-22.961	-37.861	-27.100	-18.0%	14.350	45.466	59.816	-0.297	-0.248	-0.545
		300	1.200	-15.347	-27.210	-42.557			15.229	50.999	66.228	-0.200	-0.201	-0.400
		375	1.500	-16.016	-27.850	-43.866			16.549	51.782	68.331	-0.122	-0.114	-0.237
		500	2.000	-17.134	-31.401	-48.535	-34.000	-8.3%	18.752	56.275	75.027	-0.065	-0.065	-0.129
	300	300	1.000	-16.224	-24.347	-40.571	-27.100	-11.3%	16.114	47.388	63.502	-0.185	-0.161	-0.345
		360	1.200	-16.759	-26.561	-43.320			17.169	50.217	67.386	-0.124	-0.114	-0.238
		450	1.500	-17.562	-29.326	-46.888			18.754	53.710	72.464	-0.076	-0.074	-0.150
		600	2.000	-18.906	-32.842	-51.748	-34.000	-3.5%	21.400	58.131	79.531	-0.040	-0.042	-0.082
	350	350	1.000	-17.546	-25.539	-43.085	-27.100	-6.1%	17.875	49.025	66.900	-0.124	-0.111	-0.235

Cantilever Length: 2.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-20.857	-58.811	-79.668	-27.200	53.8%	15.737	47.917	56.142	-1.418	-3.500	-4.918
		240	1.200	-21.289	-59.400	-80.689			16.367	48.960	57.652	-1.099	-2.647	-3.745
		300	1.500	-21.718	-59.960	-81.678			16.994	49.936	59.102	-0.873	-2.056	-2.929
		400	2.000	-22.572	-60.997	-83.569	-31.900	47.7%	18.240	51.715	61.849	-0.585	-1.321	-1.907
	225	225	1.000	-22.066	-59.028	-81.094	-27.200	53.9%	16.975	48.380	57.771	-1.045	-2.463	-3.508
		270	1.200	-22.839	-59.999	-82.838			18.106	50.084	60.339	-0.704	-1.597	-2.301
		338	1.500	-23.998	-61.323	-85.321			19.799	52.351	63.944	-0.431	-0.928	-1.359
		450	2.000	-25.887	-63.190	-89.077	-31.900	49.5%	22.561	55.458	69.326	-0.229	-0.459	-0.689
	250	250	1.000	-23.275	-59.261	-82.537	-27.200	54.1%	18.218	48.876	59.433	-0.798	-1.800	-2.597
		300	1.200	-24.133	-60.273	-84.407			19.472	50.646	62.179	-0.537	-1.168	-1.705
		375	1.500	-25.409	-61.643	-87.052			21.337	52.978	66.011	-0.330	-0.682	-1.013
		500	2.000	-27.514	-63.587	-91.101	-31.900	49.8%	24.415	56.197	71.803	-0.176	-0.337	-0.512
	300	300	1.000	-25.699	-59.748	-85.447	-27.200	54.5%	20.712	49.910	62.799	-0.503	-1.047	-1.550
		360	1.200	-26.725	-60.835	-87.561			22.213	51.790	65.885	-0.339	-0.680	-1.020
		450	1.500	-28.251	-62.295	-90.547			24.444	54.248	70.188	-0.209	-0.398	-0.607
		600	2.000	-30.770	-64.337	-95.107	-31.900	50.4%	28.126	57.586	76.685	-0.111	-0.197	-0.309
	350	350	1.000	-28.126	-60.228	-88.354	-27.200	54.8%	23.215	50.922	66.154	-0.343	-0.663	-1.005
4.5	200	200	1.000	-20.594	-42.041	-62.634	-27.200	35.3%	15.053	36.530	48.097	-1.415	-2.353	-3.769
		240	1.200	-21.007	-42.912	-63.919			15.648	37.731	49.778	-1.096	-1.786	-2.882
		300	1.500	-21.420	-43.752	-65.172			16.242	38.864	51.397	-0.871	-1.393	-2.264
		400	2.000	-22.243	-45.344	-67.587	-31.900	29.6%	17.429	40.947	54.469	-0.584	-0.903	-1.487
	225	225	1.000	-21.793	-42.521	-64.314	-27.200	36.0%	16.258	37.280	49.980	-1.043	-1.664	-2.707
		270	1.200	-22.536	-43.986	-66.522			17.329	39.253	52.836	-0.702	-1.087	-1.790
		338	1.500	-23.656	-46.037	-69.693			18.943	41.905	56.849	-0.430	-0.640	-1.070
		450	2.000	-25.489	-49.013	-74.502	-31.900	34.9%	21.595	45.581	62.826	-0.229	-0.324	-0.553
	250	250	1.000	-22.993	-43.013	-66.006	-27.200	36.8%	17.465	38.043	51.877	-0.796	-1.222	-2.018
		300	1.200	-23.819	-44.556	-68.375			18.654	40.087	54.916	-0.536	-0.800	-1.337
		375	1.500	-25.052	-46.689	-71.741			20.433	42.802	59.150	-0.330	-0.474	-0.804
		500	2.000	-27.096	-49.788	-76.884	-31.900	35.9%	23.389	46.578	65.522	-0.175	-0.241	-0.416
	300	300	1.000	-25.396	-43.976	-69.371	-27.200	38.1%	19.882	39.517	55.628	-0.502	-0.718	-1.220
		360	1.200	-26.385	-45.646	-72.032			21.305	41.663	58.993	-0.339	-0.472	-0.811
		450	1.500	-27.862	-47.924	-75.786			23.435	44.479	63.670	-0.209	-0.282	-0.490
		600	2.000	-30.307	-51.160	-81.467	-31.900	37.6%	26.974	48.323	70.685	-0.111	-0.144	-0.255
	350	350	1.000	-27.799	-44.863	-72.662	-27.200	39.4%	22.299	40.848	59.249	-0.342	-0.460	-0.802
6	200	200	1.000	-20.531	-34.831	-55.362	-27.200	21.9%	14.990	32.970	45.593	-1.414	-1.810	-3.224
		240	1.200	-20.939	-35.944	-56.883			15.582	34.312	47.430	-1.095	-1.383	-2.478
		300	1.500	-21.346	-37.021	-58.368			16.173	35.574	49.193	-0.870	-1.087	-1.957
		400	2.000	-22.159	-39.064	-61.223	-31.900	18.3%	17.354	37.890	52.523	-0.583	-0.715	-1.299
	225	225	1.000	-21.725	-35.542	-57.267	-27.200	23.5%	16.185	33.920	47.669	-1.042	-1.290	-2.332
		270	1.200	-22.459	-37.416	-59.875			17.248	36.105	50.761	-0.702	-0.854	-1.556
		338	1.500	-23.563	-40.039	-63.602			18.852	39.023	55.074	-0.429	-0.513	-0.943
		450	2.000	-25.373	-43.823	-69.196	-31.900	27.2%	21.488	43.031	61.429	-0.229	-0.269	-0.497
	250	250	1.000	-22.919	-36.241	-59.160	-27.200	24.9%	17.379	34.843	49.719	-0.795	-0.955	-1.750
		300	1.200	-23.734	-38.209	-61.943			18.559	37.086	52.982	-0.536	-0.635	-1.171
		375	1.500	-24.950	-40.924	-65.874			20.325	40.046	57.495	-0.329	-0.385	-0.714
		500	2.000	-26.966	-44.836	-71.802	-31.900	28.9%	23.263	44.122	64.217	-0.175	-0.202	-0.377
	300	300	1.000	-25.308	-37.550	-62.857	-27.200	27.6%	19.764	36.537	53.677	-0.502	-0.570	-1.072
		360	1.200	-26.282	-39.668	-65.950			21.176	38.856	57.242	-0.338	-0.382	-0.720
		450	1.500	-27.737	-42.541	-70.278			23.289	41.884	62.166	-0.208	-0.234	-0.442
		600	2.000	-30.149	-46.583	-76.732	-31.900	31.5%	26.807	45.987	69.492	-0.111	-0.124	-0.235
	350	350	1.000	-27.694	-38.713	-66.407	-27.200	29.7%	22.145	37.999	57.416	-0.342	-0.371	-0.712

Cantilever Length: 2.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-20.512	-30.345	-50.857	-27.200	10.4%	14.988	31.165	44.310	-1.413	-1.441	-2.855
		240	1.200	-20.917	-31.699	-52.616			15.579	32.611	46.261	-1.094	-1.115	-2.209
		300	1.500	-21.322	-33.003	-54.325			16.168	33.966	48.125	-0.870	-0.887	-1.756
		400	2.000	-22.128	-35.458	-57.586	-31.900	10.0%	17.346	36.433	51.625	-0.583	-0.597	-1.180
	225	225	1.000	-21.701	-31.263	-52.964	-27.200	13.0%	16.175	32.240	46.509	-1.041	-1.041	-2.082
		270	1.200	-22.429	-33.524	-55.953			17.235	34.568	49.759	-0.701	-0.704	-1.405
		338	1.500	-23.524	-36.651	-60.174			18.834	37.649	54.257	-0.429	-0.436	-0.865
		450	2.000	-25.318	-41.067	-66.385	-31.900	22.3%	21.463	41.829	60.819	-0.228	-0.238	-0.466
	250	250	1.000	-22.890	-32.138	-55.029	-27.200	15.4%	17.360	33.249	48.643	-0.795	-0.781	-1.575
		300	1.200	-23.697	-34.500	-58.197			18.536	35.621	52.051	-0.535	-0.531	-1.067
		375	1.500	-24.902	-37.714	-62.615			20.297	38.726	56.734	-0.329	-0.332	-0.661
		500	2.000	-26.900	-42.245	-69.145	-31.900	24.5%	23.229	42.958	63.647	-0.175	-0.182	-0.357
	300	300	1.000	-25.265	-33.743	-59.008	-27.200	19.4%	19.726	35.052	52.706	-0.501	-0.478	-0.979
		360	1.200	-26.230	-36.263	-62.492			21.134	37.485	56.402	-0.338	-0.328	-0.666
		450	1.500	-27.670	-39.633	-67.303			23.243	40.643	61.483	-0.208	-0.207	-0.415
		600	2.000	-30.062	-44.263	-74.325	-31.900	27.9%	26.758	44.888	68.991	-0.111	-0.114	-0.225
	350	350	1.000	-27.636	-35.151	-62.788	-27.200	22.6%	22.088	36.587	56.512	-0.342	-0.317	-0.658
10	200	200	1.000	-20.499	-28.212	-48.712	-27.200	3.6%	14.978	30.446	43.774	-1.412	-1.254	-2.666
		240	1.200	-20.902	-29.728	-50.631			15.566	31.941	45.776	-1.094	-0.982	-2.076
		300	1.500	-21.304	-31.179	-52.483			16.154	33.336	47.684	-0.869	-0.790	-1.659
		400	2.000	-22.105	-33.880	-55.985	-31.900	5.8%	17.328	35.864	51.250	-0.582	-0.544	-1.126
	225	225	1.000	-21.685	-29.255	-50.940	-27.200	7.0%	16.160	31.560	46.010	-1.041	-0.918	-1.959
		270	1.200	-22.408	-31.767	-54.175			17.217	33.952	49.330	-0.701	-0.634	-1.335
		338	1.500	-23.496	-35.191	-58.686			18.812	37.102	53.905	-0.428	-0.403	-0.831
		450	2.000	-25.280	-39.927	-65.208	-31.900	20.1%	21.439	41.345	60.545	-0.228	-0.226	-0.454
	250	250	1.000	-22.869	-30.242	-53.112	-27.200	10.1%	17.340	32.596	48.170	-0.794	-0.697	-1.491
		300	1.200	-23.671	-32.855	-56.526			18.513	35.029	51.645	-0.535	-0.484	-1.019
		375	1.500	-24.868	-36.357	-61.225			20.272	38.199	56.402	-0.329	-0.310	-0.639
		500	2.000	-26.858	-41.192	-68.050	-31.900	22.6%	23.203	42.494	63.395	-0.174	-0.174	-0.349
	300	300	1.000	-25.235	-32.047	-57.282	-27.200	15.1%	19.697	34.446	52.277	-0.501	-0.436	-0.937
		360	1.200	-26.193	-34.815	-61.008			21.103	36.939	56.041	-0.338	-0.305	-0.643
		450	1.500	-27.626	-38.455	-66.081			23.212	40.160	61.197	-0.208	-0.197	-0.405
		600	2.000	-30.010	-43.352	-73.363	-31.900	26.4%	26.729	44.464	68.785	-0.110	-0.111	-0.221
	350	350	1.000	-27.597	-33.625	-61.222	-27.200	19.1%	22.052	36.026	56.127	-0.341	-0.294	-0.635
12	200	200	1.000	-20.487	-27.080	-47.566	-27.200	-0.4%	14.965	30.075	43.497	-1.412	-1.151	-2.563
		240	1.200	-20.887	-28.702	-49.590			15.552	31.591	45.522	-1.093	-0.912	-2.005
		300	1.500	-21.287	-30.244	-51.531			16.139	33.003	47.448	-0.868	-0.741	-1.609
		400	2.000	-22.085	-33.087	-55.172	-31.900	3.6%	17.312	35.555	51.042	-0.582	-0.517	-1.099
	225	225	1.000	-21.669	-28.207	-49.876	-27.200	3.6%	16.144	31.200	45.743	-1.040	-0.853	-1.893
		270	1.200	-22.388	-30.880	-53.268			17.200	33.623	49.097	-0.700	-0.599	-1.299
		338	1.500	-23.471	-34.474	-57.945			18.794	36.804	53.710	-0.428	-0.387	-0.815
		450	2.000	-25.252	-39.371	-64.623	-31.900	19.0%	21.422	41.078	60.391	-0.228	-0.220	-0.448
	250	250	1.000	-22.850	-29.275	-52.125	-27.200	7.1%	17.322	32.249	47.916	-0.794	-0.655	-1.448
		300	1.200	-23.648	-32.045	-55.693			18.494	34.714	51.426	-0.534	-0.462	-0.996
		375	1.500	-24.841	-35.707	-60.548			20.253	37.916	56.222	-0.328	-0.300	-0.629
		500	2.000	-26.827	-40.688	-67.516	-31.900	21.6%	23.186	42.242	63.259	-0.174	-0.171	-0.345
	300	300	1.000	-25.210	-31.224	-56.433	-27.200	12.9%	19.676	34.131	52.054	-0.500	-0.416	-0.916
		360	1.200	-26.164	-34.136	-60.300			21.082	36.656	55.856	-0.337	-0.295	-0.632
		450	1.500	-27.594	-37.913	-65.507			23.192	39.907	61.051	-0.207	-0.193	-0.400
		600	2.000	-29.977	-42.926	-72.903	-31.900	25.7%	26.713	44.239	68.682	-0.110	-0.110	-0.220
	350	350	1.000	-27.566	-32.916	-60.482	-27.200	17.4%	22.028	35.743	55.936	-0.341	-0.284	-0.625

Cantilever Length: 2.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-29.360	-85.514	-114.874	-62.900	26.4%	19.052	86.385	105.437	-3.047	-8.034	-11.081
		240	1.200	-30.047	-86.006	-116.052			19.882	87.127	107.009	-2.362	-6.095	-8.456
		300	1.500	-30.729	-86.467	-117.196			20.705	87.814	108.519	-1.878	-4.749	-6.627
		400	2.000	-32.082	-87.312	-119.394	-75.800	13.2%	22.334	89.053	111.387	-1.262	-3.067	-4.329
	225	225	1.000	-31.258	-85.666	-116.924	-62.900	26.6%	20.639	86.660	107.299	-2.259	-5.649	-7.908
		270	1.200	-32.486	-86.469	-118.956			22.123	87.865	109.989	-1.524	-3.680	-5.204
		338	1.500	-34.323	-87.546	-121.869			24.333	89.447	113.780	-0.934	-2.151	-3.086
		450	2.000	-37.312	-89.039	-126.351	-75.800	14.9%	27.916	91.597	119.513	-0.499	-1.071	-1.570
	250	250	1.000	-33.157	-85.831	-118.988	-62.900	26.7%	22.231	86.958	109.188	-1.734	-4.123	-5.857
		300	1.200	-34.519	-86.666	-121.184			23.875	88.209	112.083	-1.170	-2.688	-3.858
		375	1.500	-36.540	-87.777	-124.316			26.306	89.839	116.145	-0.721	-1.578	-2.298
		500	2.000	-39.870	-89.334	-129.203	-75.800	15.1%	30.295	92.076	122.372	-0.384	-0.783	-1.168
	300	300	1.000	-36.961	-86.180	-123.141	-62.900	27.0%	25.426	87.587	113.013	-1.105	-2.393	-3.498
		360	1.200	-38.588	-87.074	-125.661			27.388	88.921	116.309	-0.746	-1.561	-2.308
		450	1.500	-41.004	-88.259	-129.263			30.292	90.653	120.945	-0.460	-0.918	-1.378
		600	2.000	-44.988	-89.905	-134.893	-75.800	15.7%	35.061	93.004	128.065	-0.246	-0.457	-0.703
	350	350	1.000	-40.769	-86.531	-127.299	-62.900	27.3%	28.631	88.217	116.847	-0.759	-1.512	-2.271
4.5	200	200	1.000	-28.861	-59.891	-88.752	-62.900	-5.0%	17.650	67.627	85.277	-3.038	-5.372	-8.410
		240	1.200	-29.516	-60.579	-90.096			18.404	68.369	86.774	-2.355	-4.083	-6.438
		300	1.500	-30.170	-61.244	-91.413			19.157	69.069	88.227	-1.873	-3.188	-5.061
		400	2.000	-31.472	-62.505	-93.977	-75.800	-21.3%	20.659	70.363	91.022	-1.258	-2.069	-3.327
	225	225	1.000	-30.740	-60.265	-91.005	-62.900	-4.4%	19.171	68.080	87.251	-2.253	-3.787	-6.040
		270	1.200	-31.918	-61.428	-93.346			20.527	69.311	89.838	-1.519	-2.477	-3.997
		338	1.500	-33.687	-63.065	-96.752			22.570	70.974	93.544	-0.932	-1.459	-2.390
		450	2.000	-36.584	-65.472	-102.056	-75.800	-15.8%	25.921	73.322	99.243	-0.498	-0.736	-1.234
	250	250	1.000	-32.621	-60.654	-93.275	-62.900	-3.7%	20.694	68.550	89.244	-1.730	-2.772	-4.502
		300	1.200	-33.929	-61.887	-95.816			22.202	69.838	92.039	-1.167	-1.816	-2.983
		375	1.500	-35.879	-63.602	-99.481			24.453	71.561	96.014	-0.719	-1.075	-1.794
		500	2.000	-39.108	-66.133	-105.242	-75.800	-14.6%	28.191	74.001	102.192	-0.383	-0.543	-0.926
	300	300	1.000	-36.389	-61.435	-97.824	-62.900	-2.4%	23.750	69.484	93.234	-1.102	-1.619	-2.721
		360	1.200	-37.956	-62.787	-100.743			25.556	70.863	96.419	-0.745	-1.064	-1.808
		450	1.500	-40.292	-64.646	-104.938			28.254	72.687	100.942	-0.459	-0.632	-1.092
		600	2.000	-44.159	-67.333	-111.491	-75.800	-12.6%	32.730	75.223	107.953	-0.246	-0.322	-0.567
	350	350	1.000	-40.161	-62.174	-102.334	-62.900	-1.2%	26.811	70.355	97.167	-0.758	-1.029	-1.787
6	200	200	1.000	-28.682	-48.384	-77.066	-62.900	-30.0%	17.391	62.277	79.668	-3.035	-4.081	-7.116
		240	1.200	-29.323	-49.284	-78.607			18.132	63.114	81.246	-2.352	-3.114	-5.466
		300	1.500	-29.964	-50.161	-80.125			18.873	63.906	82.778	-1.871	-2.442	-4.313
		400	2.000	-31.242	-51.845	-83.087	-75.800	-46.2%	20.352	65.373	85.725	-1.256	-1.600	-2.856
	225	225	1.000	-30.552	-48.980	-79.532	-62.900	-28.4%	18.892	62.880	81.772	-2.251	-2.891	-5.142
		270	1.200	-31.706	-50.516	-82.222			20.225	64.264	84.489	-1.518	-1.907	-3.424
		338	1.500	-33.444	-52.703	-86.147			22.236	66.138	88.374	-0.931	-1.138	-2.068
		450	2.000	-36.293	-55.950	-92.244	-75.800	-35.5%	25.542	68.781	94.322	-0.497	-0.588	-1.085
	250	250	1.000	-32.424	-49.577	-82.001	-62.900	-26.9%	20.394	63.479	83.873	-1.728	-2.127	-3.855
		300	1.200	-33.706	-51.209	-84.915			21.875	64.918	86.793	-1.166	-1.407	-2.573
		375	1.500	-35.621	-53.498	-89.119			24.090	66.843	90.933	-0.718	-0.846	-1.564
		500	2.000	-38.797	-56.895	-95.692	-75.800	-33.2%	27.775	69.563	97.339	-0.383	-0.439	-0.821
	300	300	1.000	-36.170	-50.722	-86.892	-62.900	-24.0%	23.400	64.607	88.007	-1.101	-1.255	-2.356
		360	1.200	-37.706	-52.509	-90.215			25.173	66.125	91.298	-0.744	-0.835	-1.578
		450	1.500	-39.999	-54.977	-94.976			27.825	68.133	95.958	-0.459	-0.506	-0.965
		600	2.000	-43.801	-58.548	-102.349	-75.800	-29.5%	32.237	70.919	103.156	-0.245	-0.265	-0.510
	350	350	1.000	-39.916	-51.761	-91.678	-62.900	-21.5%	26.405	65.606	92.011	-0.757	-0.807	-1.563

Cantilever Length: 2.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-28.620	-40.924	-69.544	-62.900	-53.7%	17.359	59.574	76.933	-3.032	-3.173	-6.205
		240	1.200	-29.256	-42.069	-71.325			18.098	60.505	78.603	-2.350	-2.442	-4.792
		300	1.500	-29.890	-43.186	-73.076			18.836	61.382	80.219	-1.869	-1.931	-3.801
		400	2.000	-31.156	-45.326	-76.482	-75.800	-67.2%	20.311	63.002	83.313	-1.255	-1.288	-2.544
	225	225	1.000	-30.483	-41.753	-72.236	-62.900	-50.6%	18.848	60.300	79.148	-2.249	-2.269	-4.518
		270	1.200	-31.626	-43.701	-75.326			20.176	61.821	81.998	-1.516	-1.520	-3.037
		338	1.500	-33.345	-46.460	-79.806			22.179	63.868	86.047	-0.930	-0.929	-1.859
		450	2.000	-36.165	-50.507	-86.672	-75.800	-50.1%	25.472	66.720	92.192	-0.496	-0.499	-0.995
	250	250	1.000	-32.346	-42.555	-74.901	-62.900	-47.8%	20.337	60.992	81.328	-1.726	-1.686	-3.412
		300	1.200	-33.614	-44.613	-78.227			21.810	62.559	84.369	-1.165	-1.135	-2.300
		375	1.500	-35.508	-47.483	-82.991			24.016	64.642	88.658	-0.717	-0.700	-1.418
		500	2.000	-38.650	-51.681	-90.330	-75.800	-46.7%	27.686	67.555	95.242	-0.382	-0.377	-0.760
	300	300	1.000	-36.071	-44.042	-80.113	-62.900	-42.8%	23.309	62.243	85.552	-1.100	-1.014	-2.113
		360	1.200	-37.588	-46.277	-83.865			25.072	63.875	88.948	-0.743	-0.688	-1.431
		450	1.500	-39.854	-49.340	-89.194			27.713	66.025	93.738	-0.458	-0.429	-0.887
		600	2.000	-43.613	-53.700	-97.313	-75.800	-41.2%	32.110	68.985	101.094	-0.245	-0.234	-0.478
	350	350	1.000	-39.793	-45.358	-85.151	-62.900	-38.7%	26.278	63.318	89.596	-0.756	-0.663	-1.419
10	200	200	1.000	-28.602	-37.198	-65.800	-62.900	-69.1%	17.355	58.458	75.813	-3.031	-2.683	-5.714
		240	1.200	-29.234	-38.533	-67.767			18.092	59.442	77.534	-2.349	-2.087	-4.436
		300	1.500	-29.865	-39.828	-69.693			18.829	60.367	79.196	-1.868	-1.668	-3.536
		400	2.000	-31.124	-42.289	-73.413	-75.800	-79.2%	20.300	62.064	82.365	-1.254	-1.134	-2.389
	225	225	1.000	-30.459	-38.187	-68.646	-62.900	-64.7%	18.837	59.240	78.077	-2.248	-1.941	-4.189
		270	1.200	-31.595	-40.439	-72.034			20.162	60.835	80.997	-1.515	-1.324	-2.840
		338	1.500	-33.304	-43.592	-76.896			22.161	62.968	85.128	-0.929	-0.830	-1.759
		450	2.000	-36.107	-48.123	-84.230	-75.800	-57.5%	25.448	65.912	91.360	-0.496	-0.460	-0.955
	250	250	1.000	-32.316	-39.128	-71.444	-62.900	-60.8%	20.318	59.971	80.289	-1.725	-1.458	-3.183
		300	1.200	-33.575	-41.497	-75.072			21.788	61.607	83.394	-1.164	-1.001	-2.165
		375	1.500	-35.457	-44.756	-80.213			23.989	63.769	87.759	-0.717	-0.633	-1.350
		500	2.000	-38.580	-49.425	-88.006	-75.800	-53.4%	27.656	66.769	94.425	-0.382	-0.352	-0.734
	300	300	1.000	-36.025	-40.854	-76.879	-62.900	-54.0%	23.275	61.277	84.551	-1.099	-0.894	-1.994
		360	1.200	-37.532	-43.407	-80.939			25.034	62.974	88.008	-0.742	-0.620	-1.362
		450	1.500	-39.782	-46.854	-86.636			27.672	65.198	92.871	-0.458	-0.396	-0.853
		600	2.000	-43.521	-51.656	-95.177	-75.800	-46.7%	32.067	68.240	100.308	-0.244	-0.222	-0.466
	350	350	1.000	-39.730	-42.370	-82.100	-62.900	-48.5%	26.227	62.395	88.621	-0.755	-0.594	-1.350
12	200	200	1.000	-28.587	-35.148	-63.734	-62.900	-79.0%	17.344	57.896	75.240	-3.029	-2.401	-5.430
		240	1.200	-29.216	-36.622	-65.839			18.080	58.908	76.988	-2.348	-1.887	-4.235
		300	1.500	-29.845	-38.043	-67.888			18.815	59.858	78.673	-1.867	-1.523	-3.390
		400	2.000	-31.098	-40.718	-71.815	-75.800	-86.2%	20.284	61.593	81.877	-1.253	-1.054	-2.307
	225	225	1.000	-30.439	-36.248	-66.687	-62.900	-73.5%	18.822	58.700	77.522	-2.247	-1.757	-4.004
		270	1.200	-31.570	-38.718	-70.288			20.144	60.336	80.479	-1.514	-1.220	-2.734
		338	1.500	-33.271	-42.129	-75.400			22.140	62.512	84.651	-0.928	-0.780	-1.708
		450	2.000	-36.063	-46.936	-82.999	-75.800	-61.5%	25.425	65.498	90.923	-0.495	-0.442	-0.937
	250	250	1.000	-32.291	-37.291	-69.581	-62.900	-68.7%	20.298	59.448	79.746	-1.725	-1.334	-3.058
		300	1.200	-33.544	-39.877	-73.421			21.765	61.123	82.888	-1.163	-0.931	-2.094
		375	1.500	-35.417	-43.387	-78.804			23.965	63.328	87.292	-0.716	-0.601	-1.317
		500	2.000	-38.529	-48.316	-86.845	-75.800	-56.9%	27.630	66.369	93.999	-0.381	-0.341	-0.722
	300	300	1.000	-35.989	-39.196	-75.185	-62.900	-60.5%	23.246	60.786	84.032	-1.098	-0.833	-1.931
		360	1.200	-37.488	-41.963	-79.451			25.004	62.522	87.526	-0.742	-0.586	-1.328
		450	1.500	-39.729	-45.641	-85.371			27.642	64.787	92.429	-0.457	-0.381	-0.838
		600	2.000	-43.458	-50.669	-94.127	-75.800	-49.6%	32.039	67.867	99.907	-0.244	-0.217	-0.460
	350	350	1.000	-39.682	-40.858	-80.540	-62.900	-53.9%	26.191	61.933	88.124	-0.755	-0.561	-1.315

Cantilever Length: 3.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-39.208	-127.990	-167.198	-62.700	51.0%	22.734	111.230	133.964	-5.743	-16.275	-22.019
		240	1.200	-40.208	-128.658	-168.866			23.787	112.344	136.131	-4.455	-12.345	-16.801
		300	1.500	-41.201	-129.258	-170.459			24.827	113.330	138.156	-3.547	-9.619	-13.166
		400	2.000	-43.169	-130.298	-173.467	-76.500	41.3%	26.875	115.011	141.886	-2.385	-6.215	-8.600
	225	225	1.000	-41.956	-128.102	-170.058	-62.700	51.1%	24.700	111.440	136.140	-4.282	-11.439	-15.721
		270	1.200	-43.745	-129.160	-172.904			26.576	113.195	139.771	-2.891	-7.451	-10.342
		338	1.500	-46.415	-130.473	-176.888			29.353	115.321	144.674	-1.776	-4.355	-6.131
		450	2.000	-50.757	-132.144	-182.901	-76.500	42.1%	33.830	117.962	151.792	-0.951	-2.169	-3.120
	250	250	1.000	-44.705	-128.224	-172.930	-62.700	51.1%	26.670	111.669	138.339	-3.302	-8.346	-11.648
		300	1.200	-46.687	-129.305	-175.991			28.744	113.461	142.204	-2.231	-5.437	-7.669
		375	1.500	-49.625	-130.640	-180.265			31.795	115.621	147.416	-1.376	-3.191	-4.568
		500	2.000	-54.462	-132.363	-186.825	-76.500	42.2%	36.777	118.341	155.119	-0.736	-1.585	-2.321
	300	300	1.000	-50.209	-128.485	-178.694	-62.700	51.2%	30.621	112.157	142.778	-2.120	-4.838	-6.959
		360	1.200	-52.576	-129.609	-182.185			33.092	114.017	147.108	-1.435	-3.154	-4.589
		450	1.500	-56.088	-131.000	-187.089			36.731	116.263	152.994	-0.887	-1.853	-2.739
		600	2.000	-61.876	-132.794	-194.669	-76.500	42.4%	42.681	119.088	161.768	-0.475	-0.922	-1.397
	350	350	1.000	-55.717	-128.748	-184.465	-62.700	51.3%	34.583	112.649	147.232	-1.467	-3.053	-4.520
4.5	200	200	1.000	-38.453	-90.782	-129.235	-62.700	30.9%	20.460	84.766	105.226	-5.724	-10.852	-16.576
		240	1.200	-39.410	-91.633	-131.042			21.386	85.762	107.148	-4.440	-8.240	-12.680
		300	1.500	-40.363	-92.418	-132.781			22.309	86.657	108.965	-3.534	-6.428	-9.963
		400	2.000	-42.260	-93.832	-136.092	-76.500	18.5%	24.146	88.215	112.362	-2.377	-4.165	-6.542
	225	225	1.000	-41.167	-91.093	-132.260	-62.700	31.2%	22.306	85.140	107.446	-4.268	-7.640	-11.908
		270	1.200	-42.885	-92.482	-135.368			23.970	86.739	110.709	-2.881	-4.988	-7.869
		338	1.500	-45.464	-94.300	-139.763			26.469	88.731	115.200	-1.770	-2.929	-4.699
		450	2.000	-49.677	-96.782	-146.459	-76.500	21.0%	30.558	91.316	121.873	-0.948	-1.472	-2.419
	250	250	1.000	-43.885	-91.420	-135.305	-62.700	31.4%	24.157	85.532	109.689	-3.292	-5.584	-8.876
		300	1.200	-45.792	-92.868	-138.659			26.004	87.182	113.187	-2.224	-3.649	-5.873
		375	1.500	-48.633	-94.750	-143.382			28.759	89.226	117.985	-1.372	-2.153	-3.525
		500	2.000	-53.330	-97.344	-150.674	-76.500	21.4%	33.318	91.904	125.223	-0.733	-1.081	-1.814
	300	300	1.000	-49.328	-92.085	-141.413	-62.700	31.9%	27.870	86.326	114.197	-2.114	-3.251	-5.365
		360	1.200	-51.612	-93.636	-145.248			30.084	88.061	118.146	-1.430	-2.128	-3.558
		450	1.500	-55.014	-95.645	-150.659			33.384	90.205	123.589	-0.884	-1.259	-2.143
		600	2.000	-60.641	-98.384	-159.024	-76.500	22.2%	38.844	92.987	131.832	-0.474	-0.635	-1.109
	350	350	1.000	-54.778	-92.725	-147.503	-62.700	32.4%	31.594	87.083	118.677	-1.463	-2.060	-3.523
6	200	200	1.000	-38.100	-73.765	-111.866	-62.700	15.0%	19.880	77.219	97.100	-5.715	-8.194	-13.909
		240	1.200	-39.032	-74.822	-113.855			20.775	78.286	99.062	-4.433	-6.238	-10.671
		300	1.500	-39.962	-75.815	-115.777			21.669	79.252	100.921	-3.529	-4.879	-8.408
		400	2.000	-41.817	-77.641	-119.458	-76.500	1.5%	23.454	80.952	104.406	-2.373	-3.181	-5.554
	225	225	1.000	-40.800	-74.297	-115.097	-62.700	15.6%	21.693	77.740	99.433	-4.261	-5.787	-10.048
		270	1.200	-42.476	-76.053	-118.529			23.303	79.459	102.762	-2.877	-3.798	-6.675
		338	1.500	-44.998	-78.415	-123.413			25.730	81.629	107.359	-1.767	-2.250	-4.017
		450	2.000	-49.132	-81.745	-130.877	-76.500	6.4%	29.718	84.489	114.206	-0.946	-1.149	-2.095
	250	250	1.000	-43.502	-74.837	-118.339	-62.700	16.2%	23.508	78.265	101.773	-3.287	-4.244	-7.531
		300	1.200	-45.364	-76.681	-122.045			25.297	80.037	105.334	-2.221	-2.791	-5.012
		375	1.500	-48.144	-79.138	-127.282			27.972	82.257	110.229	-1.370	-1.664	-3.034
		500	2.000	-52.754	-82.619	-135.372	-76.500	7.4%	32.419	85.203	117.622	-0.732	-0.851	-1.583
	300	300	1.000	-48.912	-75.889	-124.801	-62.700	17.4%	27.145	79.273	106.417	-2.112	-2.488	-4.600
		360	1.200	-51.144	-77.878	-129.022			29.288	81.125	110.413	-1.429	-1.642	-3.071
		450	1.500	-54.476	-80.508	-134.983			32.493	83.433	115.926	-0.883	-0.985	-1.867
		600	2.000	-59.996	-84.169	-144.165	-76.500	9.1%	37.819	86.456	124.275	-0.473	-0.508	-0.981
	350	350	1.000	-54.327	-76.857	-131.184	-62.700	18.4%	30.785	80.184	110.969	-1.462	-1.588	-3.050

Cantilever Length: 3.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-37.939	-62.445	-100.384	-62.700	-0.4%	19.738	73.421	93.159	-5.709	-6.283	-11.992
		240	1.200	-38.857	-63.762	-102.619			20.625	74.585	95.211	-4.429	-4.810	-9.239
		300	1.500	-39.775	-65.010	-104.785			21.512	75.643	97.155	-3.525	-3.786	-7.311
		400	2.000	-41.605	-67.333	-108.938	-76.500	-13.6%	23.284	77.511	100.796	-2.371	-2.500	-4.871
	225	225	1.000	-40.627	-63.235	-103.862	-62.700	0.8%	21.532	74.080	95.612	-4.257	-4.467	-8.724
		270	1.200	-42.279	-65.436	-107.715			23.128	75.949	99.077	-2.874	-2.965	-5.839
		338	1.500	-44.767	-68.432	-113.199			25.535	78.316	103.851	-1.766	-1.788	-3.554
		450	2.000	-48.848	-72.693	-121.541	-76.500	-5.2%	29.493	81.438	110.931	-0.945	-0.941	-1.886
	250	250	1.000	-43.316	-64.008	-107.324	-62.700	2.0%	23.326	74.716	98.042	-3.284	-3.299	-6.583
		300	1.200	-45.151	-66.319	-111.470			25.098	76.631	101.729	-2.219	-2.197	-4.416
		375	1.500	-47.893	-69.429	-117.321			27.750	79.036	106.786	-1.369	-1.337	-2.705
		500	2.000	-52.441	-73.856	-126.297	-76.500	-3.6%	32.162	82.227	114.389	-0.731	-0.706	-1.437
	300	300	1.000	-48.696	-65.455	-114.152	-62.700	4.2%	26.914	75.881	102.795	-2.110	-1.961	-4.071
		360	1.200	-50.894	-67.943	-118.837			29.034	77.862	106.896	-1.427	-1.315	-2.742
		450	1.500	-54.176	-71.252	-125.428			32.209	80.335	112.544	-0.882	-0.807	-1.689
		600	2.000	-59.621	-75.866	-135.487	-76.500	-0.8%	37.492	83.580	121.073	-0.472	-0.431	-0.903
	350	350	1.000	-54.076	-66.745	-120.820	-62.700	6.1%	30.498	76.891	107.390	-1.460	-1.269	-2.729
10	200	200	1.000	-37.895	-56.602	-94.497	-62.700	-10.8%	19.727	71.804	91.531	-5.706	-5.219	-10.925
		240	1.200	-38.808	-58.136	-96.944			20.613	73.033	93.646	-4.426	-4.028	-8.454
		300	1.500	-39.720	-59.593	-99.313			21.499	74.149	95.647	-3.523	-3.196	-6.719
		400	2.000	-41.540	-62.305	-103.845	-76.500	-22.8%	23.267	76.119	99.386	-2.369	-2.145	-4.514
	225	225	1.000	-40.575	-57.587	-98.162	-62.700	-8.9%	21.511	72.540	94.051	-4.255	-3.744	-7.999
		270	1.200	-42.217	-60.145	-102.362			23.104	74.501	97.605	-2.873	-2.522	-5.394
		338	1.500	-44.688	-63.626	-108.314			25.505	76.982	102.487	-1.764	-1.554	-3.318
		450	2.000	-48.742	-68.536	-117.277	-76.500	-11.6%	29.455	80.237	109.692	-0.944	-0.844	-1.788
	250	250	1.000	-43.255	-58.530	-101.785	-62.700	-7.1%	23.294	73.232	96.526	-3.282	-2.790	-6.072
		300	1.200	-45.077	-61.209	-106.285			25.061	75.233	100.294	-2.217	-1.888	-4.106
		375	1.500	-47.799	-64.806	-112.604			27.707	77.742	105.449	-1.368	-1.175	-2.543
		500	2.000	-52.316	-69.878	-122.194	-76.500	-9.5%	32.110	81.059	113.169	-0.730	-0.641	-1.371
	300	300	1.000	-48.612	-60.263	-108.875	-62.700	-4.0%	26.856	74.472	101.328	-2.108	-1.687	-3.795
		360	1.200	-50.792	-63.134	-113.926			28.970	76.531	105.501	-1.426	-1.152	-2.578
		450	1.500	-54.049	-66.936	-120.986			32.138	79.101	111.240	-0.881	-0.724	-1.604
		600	2.000	-59.455	-72.178	-131.632	-76.500	-6.0%	37.414	82.464	119.879	-0.471	-0.399	-0.870
	350	350	1.000	-53.965	-61.785	-115.750	-62.700	-1.5%	30.412	75.532	105.944	-1.459	-1.107	-2.566
12	200	200	1.000	-37.875	-53.277	-91.152	-62.700	-17.7%	19.721	70.986	90.707	-5.704	-4.581	-10.285
		240	1.200	-38.785	-54.984	-93.769			20.605	72.254	92.859	-4.424	-3.569	-7.993
		300	1.500	-39.693	-56.602	-96.295			21.489	73.404	94.893	-3.521	-2.857	-6.378
		400	2.000	-41.505	-59.601	-101.106	-76.500	-28.4%	23.254	75.431	98.685	-2.368	-1.950	-4.317
	225	225	1.000	-40.549	-54.405	-94.954	-62.700	-15.2%	21.499	71.760	93.259	-4.253	-3.320	-7.573
		270	1.200	-42.183	-57.239	-99.422			23.088	73.776	96.864	-2.871	-2.271	-5.142
		338	1.500	-44.643	-61.072	-105.715			25.486	76.320	101.806	-1.763	-1.429	-3.192
		450	2.000	-48.678	-66.403	-115.081	-76.500	-15.2%	29.431	79.644	109.075	-0.943	-0.796	-1.739
	250	250	1.000	-43.221	-55.474	-98.696	-62.700	-13.0%	23.275	72.480	95.754	-3.281	-2.497	-5.778
		300	1.200	-45.034	-58.435	-103.468			25.038	74.533	99.571	-2.216	-1.718	-3.935
		375	1.500	-47.742	-62.379	-110.121			27.680	77.102	104.782	-1.366	-1.092	-2.458
		500	2.000	-52.239	-67.860	-120.099	-76.500	-12.7%	32.081	80.484	112.564	-0.729	-0.610	-1.339
	300	300	1.000	-48.561	-57.426	-105.987	-62.700	-9.2%	26.822	73.761	100.583	-2.107	-1.535	-3.643
		360	1.200	-50.730	-60.583	-111.312			28.933	75.871	104.804	-1.425	-1.066	-2.491
		450	1.500	-53.970	-64.724	-118.694			32.099	78.499	110.598	-0.880	-0.683	-1.563
		600	2.000	-59.353	-70.342	-129.695	-76.500	-8.8%	37.375	81.924	119.299	-0.471	-0.384	-0.855
	350	350	1.000	-53.895	-59.127	-113.022	-62.700	-6.0%	30.364	74.855	105.219	-1.458	-1.021	-2.479

Cantilever Length: 3.75 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-56.481	-194.926	-251.406	-106.600	45.3%	28.898	109.044	137.942	-12.625	-39.341	-51.966
		240	1.200	-58.058	-195.777	-253.834			30.321	110.571	140.892	-9.804	-29.816	-39.620
		300	1.500	-59.623	-196.532	-256.155			31.722	111.916	143.637	-7.811	-23.215	-31.027
		400	2.000	-62.725	-197.817	-260.542	-124.500	37.1%	34.467	114.187	148.654	-5.263	-14.984	-20.246
	225	225	1.000	-60.809	-195.001	-255.810	-106.600	45.3%	31.496	109.200	140.696	-9.473	-27.641	-37.114
		270	1.200	-63.630	-196.330	-259.961			34.024	111.581	145.605	-6.406	-17.979	-24.385
		338	1.500	-67.840	-197.939	-265.779			37.743	114.427	152.170	-3.944	-10.494	-14.437
		450	2.000	-74.684	-199.904	-274.587	-124.500	37.7%	43.695	117.869	161.565	-2.118	-5.217	-7.335
	250	250	1.000	-65.139	-195.083	-260.222	-106.600	45.4%	34.097	109.370	143.466	-7.348	-20.159	-27.507
		300	1.200	-68.264	-196.428	-264.692			36.888	111.779	148.667	-4.973	-13.114	-18.087
		375	1.500	-72.896	-198.047	-270.943			40.969	114.646	155.615	-3.074	-7.684	-10.757
		500	2.000	-80.520	-200.052	-280.572	-124.500	37.8%	47.588	118.160	165.748	-1.648	-3.808	-5.456
	300	300	1.000	-73.802	-195.259	-269.061	-106.600	45.4%	39.308	109.733	149.041	-4.764	-11.677	-16.442
		360	1.200	-77.535	-196.634	-274.169			42.626	112.197	154.823	-3.228	-7.599	-10.827
		450	1.500	-83.074	-198.292	-281.365			47.486	115.135	162.621	-1.999	-4.454	-6.453
		600	2.000	-92.198	-200.348	-292.546	-124.500	37.9%	55.382	118.741	174.123	-1.074	-2.210	-3.284
	350	350	1.000	-82.470	-195.437	-277.907	-106.600	45.5%	44.528	110.102	154.630	-3.323	-7.361	-10.684
4.5	200	200	1.000	-55.341	-134.652	-189.993	-106.600	20.8%	25.090	77.142	102.232	-12.572	-26.191	-38.763
		240	1.200	-56.863	-135.732	-192.594			26.299	78.460	104.760	-9.762	-19.860	-29.622
		300	1.500	-58.376	-136.712	-195.089			27.501	79.638	107.140	-7.777	-15.473	-23.250
		400	2.000	-61.385	-138.433	-199.819	-124.500	10.1%	29.887	81.668	111.556	-5.239	-10.001	-15.240
	225	225	1.000	-59.606	-134.917	-194.523	-106.600	21.0%	27.453	77.500	104.953	-9.434	-18.420	-27.854
		270	1.200	-62.335	-136.646	-198.981			29.621	79.595	109.216	-6.379	-11.995	-18.375
		338	1.500	-66.423	-138.833	-205.256			32.863	82.172	115.035	-3.927	-7.017	-10.944
		450	2.000	-73.092	-141.675	-214.767	-124.500	12.1%	38.142	85.425	123.567	-2.109	-3.506	-5.615
	250	250	1.000	-63.876	-135.198	-199.074	-106.600	21.2%	29.822	77.879	107.700	-7.319	-13.448	-20.767
		300	1.200	-66.902	-136.977	-203.879			32.227	80.026	112.253	-4.952	-8.762	-13.714
		375	1.500	-71.405	-139.215	-210.620			35.797	82.655	118.452	-3.061	-5.148	-8.210
		500	2.000	-78.839	-142.159	-220.998	-124.500	12.4%	41.681	86.013	127.694	-1.641	-2.567	-4.208
	300	300	1.000	-72.424	-135.777	-208.201	-106.600	21.5%	34.574	78.658	113.232	-4.746	-7.808	-12.555
		360	1.200	-76.046	-137.646	-213.692			37.452	80.897	118.350	-3.216	-5.093	-8.308
		450	1.500	-81.437	-139.997	-221.434			41.726	83.638	125.364	-1.991	-2.997	-4.988
		600	2.000	-90.340	-143.076	-233.416	-124.500	13.0%	48.769	87.123	135.892	-1.070	-1.499	-2.569
	350	350	1.000	-80.981	-136.342	-217.323	-106.600	21.8%	39.340	79.414	118.755	-3.311	-4.935	-8.246
6	200	200	1.000	-54.666	-106.897	-161.563	-106.600	0.3%	23.858	66.516	90.374	-12.547	-19.684	-32.231
		240	1.200	-56.144	-108.244	-164.388			24.998	67.902	92.900	-9.742	-14.945	-24.687
		300	1.500	-57.617	-109.486	-167.104			26.134	69.151	95.285	-7.761	-11.660	-19.422
		400	2.000	-60.553	-111.717	-172.270	-124.500	-11.4%	28.401	71.328	99.729	-5.229	-7.562	-12.790
	225	225	1.000	-58.900	-107.412	-166.312	-106.600	0.8%	26.150	67.060	93.210	-9.416	-13.869	-23.285
		270	1.200	-61.556	-109.609	-171.164			28.199	69.281	97.480	-6.367	-9.057	-15.424
		338	1.500	-65.547	-112.469	-178.016			31.283	72.052	103.335	-3.919	-5.325	-9.244
		450	2.000	-72.080	-116.334	-188.414	-124.500	-7.0%	36.338	75.625	111.963	-2.105	-2.686	-4.791
	250	250	1.000	-63.138	-107.942	-171.080	-106.600	1.2%	28.448	67.617	96.065	-7.305	-10.146	-17.451
		300	1.200	-66.087	-110.225	-176.312			30.724	69.901	100.624	-4.943	-6.633	-11.576
		375	1.500	-70.487	-113.177	-183.664			34.123	72.731	106.854	-3.056	-3.921	-6.976
		500	2.000	-77.773	-117.201	-194.973	-124.500	-6.2%	39.762	76.412	116.174	-1.638	-1.977	-3.615
	300	300	1.000	-71.626	-108.991	-180.617	-106.600	2.2%	33.055	68.712	101.767	-4.739	-5.916	-10.655
		360	1.200	-75.161	-111.421	-186.583			35.783	71.094	106.878	-3.210	-3.877	-7.087
		450	1.500	-80.433	-114.551	-194.984			39.857	74.037	113.894	-1.988	-2.300	-4.287
		600	2.000	-89.162	-118.768	-207.930	-124.500	-4.8%	46.612	77.827	124.438	-1.068	-1.166	-2.235
	350	350	1.000	-80.123	-109.976	-190.099	-106.600	3.1%	37.671	69.728	107.399	-3.306	-3.756	-7.062

Cantilever Length: 3.75 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-54.248	-87.989	-142.237	-106.600	-21.2%	23.385	60.838	84.223	-12.530	-14.928	-27.458
		240	1.200	-55.695	-89.694	-145.389			24.499	62.360	86.859	-9.729	-11.372	-21.101
		300	1.500	-57.139	-91.288	-148.427			25.611	63.738	89.349	-7.751	-8.904	-16.656
		400	2.000	-60.020	-94.198	-154.218	-124.500	-32.2%	27.834	66.156	93.990	-5.222	-5.820	-11.042
	225	225	1.000	-58.460	-88.844	-147.304	-106.600	-20.0%	25.642	61.580	87.222	-9.404	-10.561	-19.965
		270	1.200	-61.062	-91.658	-152.720			27.646	64.018	91.663	-6.359	-6.943	-13.302
		338	1.500	-64.980	-95.400	-160.380			30.668	67.083	97.751	-3.914	-4.129	-8.043
		450	2.000	-71.406	-100.578	-171.984	-124.500	-23.8%	35.635	71.070	106.705	-2.102	-2.126	-4.228
	250	250	1.000	-62.676	-89.693	-152.369	-106.600	-18.9%	27.902	62.308	90.210	-7.297	-7.759	-15.056
		300	1.200	-65.566	-92.630	-158.196			30.127	64.805	94.933	-4.937	-5.114	-10.051
		375	1.500	-69.885	-96.498	-166.384			33.458	67.920	101.378	-3.052	-3.062	-6.114
		500	2.000	-77.051	-101.877	-178.928	-124.500	-22.2%	38.997	72.001	110.997	-1.636	-1.580	-3.216
	300	300	1.000	-71.114	-91.305	-162.419	-106.600	-16.8%	32.427	63.667	96.094	-4.733	-4.566	-9.299
		360	1.200	-74.579	-94.441	-169.021			35.092	66.249	101.342	-3.207	-3.023	-6.229
		450	1.500	-79.755	-98.538	-178.292			39.082	69.454	108.535	-1.985	-1.822	-3.807
		600	2.000	-88.337	-104.141	-192.477	-124.500	-19.5%	45.715	73.607	119.322	-1.067	-0.949	-2.016
	350	350	1.000	-79.557	-92.760	-172.317	-106.600	-14.9%	36.953	64.867	101.820	-3.303	-2.924	-6.227
10	200	200	1.000	-54.098	-77.905	-132.003	-106.600	-36.8%	23.294	58.368	81.661	-12.521	-12.206	-24.727
		240	1.200	-55.531	-79.935	-135.466			24.403	59.996	84.398	-9.722	-9.347	-19.069
		300	1.500	-56.962	-81.843	-138.805			25.511	61.471	86.982	-7.745	-7.360	-15.105
		400	2.000	-59.818	-85.349	-145.168	-124.500	-45.9%	27.724	64.065	91.789	-5.218	-4.866	-10.084
	225	225	1.000	-58.296	-79.053	-137.349	-106.600	-34.8%	25.535	59.240	84.775	-9.398	-8.688	-18.086
		270	1.200	-60.874	-82.410	-143.284			27.528	61.836	89.364	-6.354	-5.770	-12.124
		338	1.500	-64.756	-86.908	-151.664			30.536	65.104	95.640	-3.911	-3.486	-7.397
		450	2.000	-71.126	-93.161	-164.287	-124.500	-33.6%	35.481	69.353	104.834	-2.100	-1.841	-3.941
	250	250	1.000	-62.497	-80.163	-142.659	-106.600	-33.0%	27.776	60.070	87.845	-7.292	-6.423	-13.715
		300	1.200	-65.359	-83.665	-149.024			29.988	62.717	92.705	-4.934	-4.282	-9.215
		375	1.500	-69.637	-88.305	-157.941			33.302	66.022	99.323	-3.050	-2.609	-5.658
		500	2.000	-76.737	-94.770	-171.507	-124.500	-31.4%	38.815	70.349	109.164	-1.634	-1.383	-3.017
	300	300	1.000	-70.899	-82.216	-153.115	-106.600	-29.7%	32.256	61.569	93.826	-4.731	-3.826	-8.556
		360	1.200	-74.327	-85.948	-160.275			34.905	64.287	99.192	-3.204	-2.568	-5.772
		450	1.500	-79.450	-90.839	-170.289			38.872	67.665	106.537	-1.984	-1.578	-3.562
		600	2.000	-87.950	-97.529	-185.479	-124.500	-27.7%	45.476	72.047	117.522	-1.065	-0.846	-1.911
	350	350	1.000	-79.300	-84.026	-163.326	-106.600	-26.9%	36.734	62.857	99.591	-3.301	-2.478	-5.779
12	200	200	1.000	-54.044	-71.953	-125.997	-106.600	-48.2%	23.281	57.070	80.351	-12.516	-10.512	-23.028
		240	1.200	-55.470	-74.259	-129.730			24.388	58.769	83.157	-9.717	-8.105	-17.822
		300	1.500	-56.895	-76.431	-133.326			25.494	60.309	85.803	-7.742	-6.425	-14.167
		400	2.000	-59.737	-80.424	-140.162	-124.500	-54.8%	27.704	63.013	90.717	-5.215	-4.307	-9.521
	225	225	1.000	-58.232	-73.335	-131.567	-106.600	-45.4%	25.511	58.020	83.531	-9.394	-7.539	-16.933
		270	1.200	-60.796	-77.145	-137.941			27.501	60.718	88.219	-6.351	-5.068	-11.420
		338	1.500	-64.658	-82.249	-146.907			30.503	64.111	94.614	-3.909	-3.117	-7.026
		450	2.000	-70.994	-89.308	-160.303	-124.500	-39.4%	35.441	68.508	103.949	-2.098	-1.688	-3.787
	250	250	1.000	-62.420	-74.649	-137.069	-106.600	-42.8%	27.740	58.906	86.647	-7.289	-5.615	-12.904
		300	1.200	-65.266	-78.617	-143.883			29.948	61.649	91.597	-4.931	-3.794	-8.725
		375	1.500	-69.520	-83.867	-153.387			33.256	65.071	98.326	-3.047	-2.355	-5.402
		500	2.000	-76.581	-91.136	-167.717	-124.500	-36.6%	38.761	69.539	108.300	-1.633	-1.281	-2.913
	300	300	1.000	-70.793	-77.049	-147.842	-106.600	-38.4%	32.194	60.483	92.678	-4.728	-3.391	-8.119
		360	1.200	-74.200	-81.263	-155.464			34.837	63.290	98.127	-3.202	-2.310	-5.512
		450	1.500	-79.291	-86.773	-166.064			38.798	66.778	105.576	-1.982	-1.447	-3.429
		600	2.000	-87.743	-94.244	-181.987	-124.500	-32.1%	45.395	71.295	116.690	-1.064	-0.795	-1.858
	350	350	1.000	-79.161	-79.137	-158.298	-106.600	-34.7%	36.643	61.823	98.466	-3.299	-2.222	-5.521

A4. PL-2 Parapet

Cantilever Length: 0.5 m												
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-3.101	-6.789	-9.891	7.377	36.687	44.064	-0.014	-0.018	-0.032
		240	1.200	-3.126	-7.047	-10.173	7.523	37.246	44.769	-0.011	-0.014	-0.025
		300	1.500	-3.150	-7.290	-10.441	7.668	37.754	45.423	-0.009	-0.011	-0.020
		400	2.000	-3.199	-7.733	-10.933	7.959	38.645	46.604	-0.006	-0.007	-0.013
	225	225	1.000	-3.174	-6.993	-10.167	7.669	37.340	45.009	-0.010	-0.013	-0.023
		270	1.200	-3.218	-7.420	-10.638	7.931	38.211	46.142	-0.007	-0.009	-0.016
		338	1.500	-3.284	-7.983	-11.267	8.325	39.299	47.624	-0.004	-0.006	-0.010
		450	2.000	-3.392	-8.720	-12.112	8.975	40.640	49.615	-0.002	-0.003	-0.005
	250	250	1.000	-3.247	-7.187	-10.434	7.961	37.929	45.890	-0.008	-0.010	-0.018
		300	1.200	-3.296	-7.631	-10.927	8.251	38.798	47.049	-0.005	-0.007	-0.012
		375	1.500	-3.368	-8.204	-11.572	8.686	39.860	48.546	-0.003	-0.004	-0.007
		500	2.000	-3.489	-8.941	-12.429	9.411	41.151	50.562	-0.002	-0.002	-0.004
	300	300	1.000	-3.393	-7.543	-10.936	8.543	38.950	47.493	-0.005	-0.006	-0.011
		360	1.200	-3.450	-8.010	-11.461	8.891	39.799	48.689	-0.003	-0.004	-0.007
		450	1.500	-3.537	-8.590	-12.128	9.412	40.801	50.213	-0.002	-0.003	-0.005
		600	2.000	-3.682	-9.295	-12.977	10.285	41.949	52.233	-0.001	-0.001	-0.002
	350	350	1.000	-3.538	-7.856	-11.394	9.125	39.797	48.922	-0.003	-0.004	-0.007
4.5	200	200	1.000	-3.094	-6.133	-9.227	7.360	35.738	43.097	-0.014	-0.015	-0.029
		240	1.200	-3.118	-6.433	-9.551	7.504	36.362	43.866	-0.011	-0.012	-0.023
		300	1.500	-3.142	-6.711	-9.853	7.648	36.924	44.572	-0.009	-0.009	-0.018
		400	2.000	-3.189	-7.206	-10.395	7.937	37.892	45.829	-0.006	-0.007	-0.012
	225	225	1.000	-3.166	-6.379	-9.545	7.650	36.460	44.110	-0.010	-0.011	-0.021
		270	1.200	-3.209	-6.866	-10.075	7.910	37.418	45.328	-0.007	-0.008	-0.015
		338	1.500	-3.273	-7.484	-10.758	8.304	38.583	46.886	-0.004	-0.005	-0.009
		450	2.000	-3.381	-8.257	-11.638	8.955	39.974	48.929	-0.002	-0.003	-0.005
	250	250	1.000	-3.238	-6.610	-9.848	7.941	37.104	45.045	-0.008	-0.009	-0.016
		300	1.200	-3.286	-7.108	-10.394	8.230	38.047	46.277	-0.005	-0.006	-0.011
		375	1.500	-3.357	-7.725	-11.082	8.665	39.168	47.834	-0.003	-0.004	-0.007
		500	2.000	-3.478	-8.484	-11.962	9.394	40.491	49.885	-0.002	-0.002	-0.004
	300	300	1.000	-3.382	-7.024	-10.406	8.523	38.202	46.725	-0.005	-0.006	-0.010
		360	1.200	-3.440	-7.530	-10.970	8.872	39.099	47.971	-0.003	-0.004	-0.007
		450	1.500	-3.526	-8.134	-11.661	9.396	40.133	49.529	-0.002	-0.003	-0.004
		600	2.000	-3.673	-8.843	-12.516	10.274	41.295	51.569	-0.001	-0.001	-0.002
	350	350	1.000	-3.527	-7.373	-10.901	9.107	39.091	48.198	-0.003	-0.004	-0.007
6	200	200	1.000	-3.090	-5.975	-9.065	7.352	35.565	42.917	-0.014	-0.013	-0.027
		240	1.200	-3.114	-6.290	-9.404	7.497	36.203	43.700	-0.011	-0.011	-0.022
		300	1.500	-3.138	-6.579	-9.717	7.642	36.773	44.416	-0.009	-0.009	-0.017
		400	2.000	-3.186	-7.086	-10.272	7.934	37.751	45.685	-0.006	-0.006	-0.012
	225	225	1.000	-3.162	-6.238	-9.400	7.644	36.300	43.944	-0.010	-0.010	-0.020
		270	1.200	-3.205	-6.742	-9.947	7.906	37.272	45.178	-0.007	-0.007	-0.014
		338	1.500	-3.271	-7.370	-10.642	8.303	38.446	46.749	-0.004	-0.005	-0.009
		450	2.000	-3.382	-8.147	-11.528	8.961	39.846	48.806	-0.002	-0.003	-0.005
	250	250	1.000	-3.235	-6.481	-9.716	7.936	36.954	44.890	-0.008	-0.008	-0.016
		300	1.200	-2.983	-7.248	-10.231	8.228	37.906	46.134	-0.005	-0.006	-0.011
		375	1.500	-3.356	-7.614	-10.971	8.667	39.035	47.702	-0.003	-0.004	-0.007
		500	2.000	-3.480	-8.376	-11.856	9.402	40.368	49.770	-0.002	-0.002	-0.004
	300	300	1.000	-3.380	-6.910	-10.290	8.522	38.061	46.584	-0.005	-0.005	-0.010
		360	1.200	-3.438	-7.421	-10.859	8.874	38.965	47.839	-0.003	-0.004	-0.007
		450	1.500	-3.527	-8.027	-11.555	9.403	40.007	49.410	-0.002	-0.002	-0.004
		600	2.000	-3.677	-8.738	-12.415	10.286	41.181	51.467	-0.001	-0.001	-0.002
	350	350	1.000	-3.526	-7.266	-10.792	9.110	38.957	48.067	-0.003	-0.004	-0.007

Cantilever Length: 0.5 m												
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-3.090	-5.903	-8.993	7.354	35.458	42.812	-0.014	-0.013	-0.027
		240	1.200	-3.114	-6.224	-9.338	7.500	36.101	43.602	-0.011	-0.010	-0.022
		300	1.500	-3.138	-6.517	-9.656	7.647	36.677	44.324	-0.009	-0.009	-0.017
		400	2.000	-3.188	-7.030	-10.217	7.941	37.662	45.604	-0.006	-0.006	-0.012
	225	225	1.000	-3.162	-6.174	-9.336	7.648	36.200	43.848	-0.010	-0.010	-0.020
		270	1.200	-3.207	-6.683	-9.890	7.912	37.180	45.092	-0.007	-0.007	-0.014
		338	1.500	-3.274	-7.317	-10.592	8.313	38.365	46.678	-0.004	-0.005	-0.009
		450	2.000	-3.387	-8.100	-11.487	8.974	39.781	48.755	-0.002	-0.003	-0.005
	250	250	1.000	-3.236	-6.422	-9.658	7.942	36.859	44.801	-0.008	-0.008	-0.016
		300	1.200	-3.285	-6.937	-10.222	8.236	37.820	46.056	-0.005	-0.006	-0.011
		375	1.500	-3.360	-7.564	-10.925	8.679	38.961	47.639	-0.003	-0.004	-0.007
		500	2.000	-3.486	-8.332	-11.818	9.417	40.309	49.725	-0.002	-0.002	-0.004
	300	300	1.000	-3.382	-6.857	-10.240	8.531	37.977	46.509	-0.005	-0.005	-0.010
		360	1.200	-3.442	-7.372	-10.814	8.885	38.891	47.776	-0.003	-0.004	-0.007
		450	1.500	-3.533	-7.982	-11.515	9.416	39.944	49.361	-0.002	-0.002	-0.004
		600	2.000	-3.684	-8.697	-12.380	10.302	41.129	51.431	-0.001	-0.001	-0.002
	350	350	1.000	-3.530	-7.218	-10.748	9.121	38.884	48.005	-0.003	-0.004	-0.007
10	200	200	1.000	-3.091	-5.870	-8.961	7.359	35.373	42.732	-0.014	-0.013	-0.027
		240	1.200	-3.116	-6.194	-9.309	7.506	36.020	43.527	-0.011	-0.010	-0.022
		300	1.500	-3.141	-6.488	-9.629	7.654	36.600	44.253	-0.009	-0.009	-0.017
		400	2.000	-3.191	-7.004	-10.195	7.949	37.593	45.542	-0.006	-0.006	-0.012
	225	225	1.000	-3.164	-6.144	-9.308	7.654	36.120	43.774	-0.010	-0.010	-0.020
		270	1.200	-3.209	-6.657	-9.866	7.919	37.107	45.026	-0.007	-0.007	-0.014
		338	1.500	-3.278	-7.294	-10.572	8.321	38.300	46.621	-0.004	-0.005	-0.009
		450	2.000	-3.391	-8.080	-11.471	8.982	39.723	48.705	-0.002	-0.003	-0.005
	250	250	1.000	-3.238	-6.395	-9.633	7.949	36.784	44.733	-0.008	-0.008	-0.016
		300	1.200	-3.288	-6.912	-10.201	8.244	37.752	45.996	-0.005	-0.006	-0.011
		375	1.500	-3.364	-7.543	-10.907	8.687	38.899	47.586	-0.003	-0.004	-0.007
		500	2.000	-3.490	-8.313	-11.802	9.425	40.253	49.677	-0.002	-0.002	-0.004
	300	300	1.000	-3.386	-6.834	-10.219	8.539	37.911	46.450	-0.005	-0.005	-0.010
		360	1.200	-3.446	-7.350	-10.797	8.893	38.829	47.723	-0.003	-0.004	-0.007
		450	1.500	-3.537	-7.963	-11.500	9.425	39.887	49.312	-0.002	-0.002	-0.004
		600	2.000	-3.688	-8.678	-12.366	10.309	41.074	51.384	-0.001	-0.001	-0.002
	350	350	1.000	-3.533	-7.197	-10.731	9.129	38.823	47.952	-0.003	-0.004	-0.007
12	200	200	1.000	-3.092	-5.856	-8.948	7.363	35.348	42.711	-0.014	-0.013	-0.027
		240	1.200	-3.118	-6.181	-9.299	7.511	36.000	43.510	-0.011	-0.010	-0.022
		300	1.500	-3.143	-6.477	-9.620	7.658	36.582	44.240	-0.009	-0.009	-0.017
		400	2.000	-3.193	-6.995	-10.188	7.954	37.579	45.533	-0.006	-0.006	-0.012
	225	225	1.000	-3.166	-6.132	-9.298	7.658	36.100	43.758	-0.010	-0.010	-0.020
		270	1.200	-3.212	-6.647	-9.858	7.924	37.092	45.016	-0.007	-0.007	-0.014
		338	1.500	-3.280	-7.286	-10.566	8.325	38.289	46.614	-0.004	-0.005	-0.009
		450	2.000	-3.393	-8.073	-11.466	8.986	39.714	48.700	-0.002	-0.003	-0.005
	250	250	1.000	-3.240	-6.385	-9.625	7.953	36.768	44.721	-0.008	-0.008	-0.016
		300	1.200	-3.291	-6.904	-10.194	8.249	37.739	45.988	-0.005	-0.006	-0.011
		375	1.500	-3.366	-7.536	-10.902	8.691	38.890	47.581	-0.003	-0.004	-0.007
		500	2.000	-3.492	-8.306	-11.797	9.428	40.244	49.673	-0.002	-0.002	-0.004
	300	300	1.000	-3.388	-6.826	-10.213	8.543	37.899	46.442	-0.005	-0.005	-0.010
		360	1.200	-3.448	-7.343	-10.792	8.898	38.820	47.717	-0.003	-0.004	-0.007
		450	1.500	-3.539	-7.956	-11.495	9.428	39.879	49.307	-0.002	-0.002	-0.004
		600	2.000	-3.689	-8.671	-12.360	10.312	41.066	51.379	-0.001	-0.001	-0.002
	350	350	1.000	-3.536	-7.190	-10.726	9.133	38.813	47.947	-0.003	-0.004	-0.007

Cantilever Length: 1.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-7.408	-23.951	-31.359			9.768	55.327	65.095	-0.133	-0.368	-0.501
		240	1.200	-7.511	-24.543	-32.054			10.063	56.701	66.764	-0.102	-0.280	-0.382
		300	1.500	-7.613	-25.106	-32.719			10.358	57.973	68.331	-0.081	-0.218	-0.300
		400	2.000	-7.817	-26.154	-33.971			10.947	60.265	71.212	-0.054	-0.142	-0.197
	225	225	1.000	-7.707	-24.297	-32.004			10.364	56.391	66.755	-0.096	-0.261	-0.357
		270	1.200	-7.891	-25.282	-33.172			10.895	58.610	69.505	-0.065	-0.171	-0.236
		338	1.500	-8.167	-26.631	-34.799			11.695	61.510	73.205	-0.039	-0.102	-0.141
		450	2.000	-8.620	-28.561	-37.181			13.011	65.451	78.462	-0.021	-0.052	-0.073
	250	250	1.000	-8.005	-24.632	-32.637			10.961	57.393	68.354	-0.072	-0.192	-0.265
		300	1.200	-8.209	-25.665	-33.874			11.549	59.674	71.223	-0.049	-0.127	-0.175
		375	1.500	-8.514	-27.070	-35.584			12.431	62.634	75.065	-0.030	-0.076	-0.106
		500	2.000	-9.018	-29.092	-38.110			13.897	66.689	80.586	-0.016	-0.039	-0.055
	300	300	1.000	-8.602	-25.266	-33.868			12.153	59.219	71.372	-0.044	-0.114	-0.159
		360	1.200	-8.846	-26.390	-35.235			12.857	61.609	74.466	-0.030	-0.076	-0.106
		450	1.500	-9.210	-27.908	-37.118			13.913	64.699	78.612	-0.018	-0.046	-0.064
		600	2.000	-9.813	-30.057	-39.870			15.669	68.878	84.547	-0.010	-0.024	-0.034
	350	350	1.000	-9.198	-25.860	-35.058			13.344	60.851	74.195	-0.030	-0.074	-0.103
4.5	200	200	1.000	-7.392	-20.060	-27.452			9.751	51.667	61.418	-0.132	-0.258	-0.390
		240	1.200	-7.493	-20.859	-28.352			10.045	53.305	63.350	-0.102	-0.199	-0.301
		300	1.500	-7.593	-21.623	-29.216			10.339	54.823	65.162	-0.081	-0.158	-0.239
		400	2.000	-7.794	-23.054	-30.848			10.927	57.562	68.488	-0.054	-0.106	-0.160
	225	225	1.000	-7.688	-20.587	-28.275			10.341	53.035	63.376	-0.096	-0.186	-0.282
		270	1.200	-7.869	-21.928	-29.797			10.870	55.674	66.544	-0.064	-0.125	-0.190
		338	1.500	-8.141	-23.777	-31.917			11.668	59.128	70.796	-0.039	-0.078	-0.117
		450	2.000	-8.585	-26.405	-34.990			12.979	63.792	76.771	-0.021	-0.043	-0.063
	250	250	1.000	-7.984	-21.097	-29.081			10.931	54.307	65.237	-0.072	-0.140	-0.212
		300	1.200	-8.184	-22.513	-30.697			11.517	57.015	68.533	-0.048	-0.095	-0.143
		375	1.500	-8.483	-24.441	-32.924			12.396	60.529	72.925	-0.030	-0.059	-0.089
		500	2.000	-8.978	-27.177	-36.156			13.858	65.290	79.149	-0.016	-0.033	-0.048
	300	300	1.000	-8.574	-22.071	-30.645			12.108	56.600	68.708	-0.044	-0.086	-0.130
		360	1.200	-8.814	-23.619	-32.433			12.811	59.429	72.239	-0.030	-0.059	-0.089
		450	1.500	-9.171	-25.692	-34.863			13.863	63.064	76.928	-0.018	-0.038	-0.056
		600	2.000	-9.764	-28.542	-38.305			15.617	67.881	83.498	-0.010	-0.021	-0.031
	350	350	1.000	-9.164	-22.981	-32.145			13.284	58.628	71.913	-0.030	-0.057	-0.087
6	200	200	1.000	-7.385	-18.550	-25.935			9.743	50.454	60.197	-0.132	-0.212	-0.344
		240	1.200	-7.485	-19.494	-26.979			10.036	52.230	62.266	-0.102	-0.166	-0.268
		300	1.500	-7.585	-20.393	-27.978			10.329	53.872	64.201	-0.081	-0.134	-0.215
		400	2.000	-7.783	-22.064	-29.847			10.915	56.822	67.737	-0.054	-0.093	-0.147
	225	225	1.000	-7.680	-19.211	-26.892			10.331	51.970	62.302	-0.096	-0.156	-0.252
		270	1.200	-7.859	-20.791	-28.650			10.859	54.820	65.679	-0.064	-0.108	-0.173
		338	1.500	-8.128	-22.935	-31.063			11.654	58.520	70.175	-0.039	-0.070	-0.109
		450	2.000	-8.570	-25.891	-34.461			12.965	63.430	76.394	-0.021	-0.040	-0.060
	250	250	1.000	-7.975	-19.851	-27.825			10.919	53.372	64.291	-0.072	-0.119	-0.192
		300	1.200	-8.173	-21.510	-29.683			11.505	56.286	67.790	-0.048	-0.084	-0.132
		375	1.500	-8.469	-23.724	-32.193			12.382	60.024	72.406	-0.030	-0.054	-0.084
		500	2.000	-8.962	-26.756	-35.718			13.845	64.990	78.835	-0.016	-0.031	-0.047
	300	300	1.000	-8.563	-21.057	-29.620			12.095	55.882	67.976	-0.044	-0.076	-0.120
		360	1.200	-8.800	-22.842	-31.642			12.796	58.891	71.688	-0.030	-0.054	-0.084
		450	1.500	-9.155	-25.167	-34.321			13.849	62.702	76.551	-0.018	-0.035	-0.053
		600	2.000	-9.746	-28.241	-37.987			15.605	67.650	83.255	-0.010	-0.020	-0.030
	350	350	1.000	-9.150	-22.155	-31.305			13.269	58.069	71.338	-0.030	-0.052	-0.082

Cantilever Length: 1.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-7.378	-17.774	-25.153			9.733	49.906	59.639	-0.132	-0.187	-0.319
		240	1.200	-7.477	-18.835	-26.312			10.026	51.768	61.794	-0.102	-0.150	-0.252
		300	1.500	-7.576	-19.833	-27.409			10.318	53.480	63.798	-0.081	-0.123	-0.204
		400	2.000	-7.773	-21.656	-29.429			10.904	56.529	67.432	-0.054	-0.087	-0.141
	225	225	1.000	-7.672	-18.552	-26.224			10.321	51.508	61.829	-0.096	-0.141	-0.237
		270	1.200	-7.850	-20.300	-28.150			10.847	54.473	65.320	-0.064	-0.101	-0.165
		338	1.500	-8.118	-22.608	-30.726			11.643	58.273	69.916	-0.039	-0.066	-0.105
		450	2.000	-8.560	-25.687	-34.247			12.956	63.241	76.197	-0.021	-0.039	-0.059
	250	250	1.000	-7.966	-19.293	-27.258			10.908	52.980	63.889	-0.072	-0.110	-0.182
		300	1.200	-8.163	-21.105	-29.268			11.493	55.992	67.485	-0.048	-0.079	-0.127
		375	1.500	-8.458	-23.453	-31.912			12.372	59.805	72.176	-0.030	-0.052	-0.082
		500	2.000	-8.953	-26.578	-35.531			13.838	64.812	78.650	-0.016	-0.030	-0.046
	300	300	1.000	-8.552	-20.650	-29.203			12.083	55.587	67.670	-0.044	-0.072	-0.116
		360	1.200	-8.789	-22.550	-31.339			12.785	58.660	71.446	-0.030	-0.052	-0.081
		450	1.500	-9.144	-24.963	-34.107			13.841	62.512	76.353	-0.018	-0.034	-0.052
		600	2.000	-9.739	-28.095	-37.834			15.603	67.491	83.093	-0.010	-0.020	-0.029
	350	350	1.000	-9.139	-21.842	-30.981			13.258	57.828	71.086	-0.029	-0.050	-0.080
10	200	200	1.000	-7.373	-17.492	-24.865			9.728	49.702	59.429	-0.132	-0.178	-0.310
		240	1.200	-7.472	-18.604	-26.076			10.020	51.590	61.610	-0.102	-0.144	-0.246
		300	1.500	-7.571	-19.639	-27.210			10.313	53.319	63.632	-0.081	-0.119	-0.200
		400	2.000	-7.768	-21.505	-29.273			10.899	56.385	67.285	-0.054	-0.085	-0.139
	225	225	1.000	-7.667	-18.325	-25.992			10.315	51.331	61.646	-0.096	-0.136	-0.232
		270	1.200	-7.844	-20.130	-27.975			10.842	54.322	65.164	-0.064	-0.098	-0.162
		338	1.500	-8.113	-22.477	-30.590			11.640	58.136	69.776	-0.039	-0.065	-0.104
		450	2.000	-8.558	-25.579	-34.137			12.956	63.119	76.075	-0.021	-0.038	-0.059
	250	250	1.000	-7.960	-19.105	-27.065			10.903	52.821	63.724	-0.072	-0.107	-0.179
		300	1.200	-8.157	-20.959	-29.116			11.489	55.849	67.338	-0.048	-0.077	-0.126
		375	1.500	-8.454	-23.333	-31.788			12.369	59.673	72.042	-0.030	-0.051	-0.081
		500	2.000	-8.952	-26.481	-35.432			13.839	64.702	78.541	-0.016	-0.030	-0.045
	300	300	1.000	-8.547	-20.506	-29.053			12.079	55.446	67.524	-0.044	-0.071	-0.115
		360	1.200	-8.784	-22.430	-31.214			12.783	58.529	71.312	-0.030	-0.051	-0.081
		450	1.500	-9.142	-24.861	-34.003			13.841	62.397	76.238	-0.018	-0.034	-0.052
		600	2.000	-9.740	-28.022	-37.762			15.607	67.410	83.017	-0.010	-0.019	-0.029
	350	350	1.000	-9.134	-21.721	-30.855			13.255	57.699	70.954	-0.029	-0.049	-0.079
12	200	200	1.000	-7.370	-17.361	-24.732			9.725	49.582	59.307	-0.132	-0.175	-0.307
		240	1.200	-7.469	-18.490	-25.959			10.018	51.477	61.495	-0.102	-0.142	-0.244
		300	1.500	-7.568	-19.536	-27.104			10.311	53.210	63.521	-0.081	-0.117	-0.198
		400	2.000	-7.766	-21.413	-29.179			10.899	56.282	67.180	-0.054	-0.084	-0.138
	225	225	1.000	-7.664	-18.215	-25.878			10.313	51.219	61.532	-0.096	-0.134	-0.230
		270	1.200	-7.842	-20.035	-27.877			10.841	54.216	65.057	-0.064	-0.097	-0.161
		338	1.500	-8.112	-22.393	-30.505			11.640	58.041	69.681	-0.039	-0.064	-0.104
		450	2.000	-8.559	-25.516	-34.075			12.959	63.051	76.010	-0.021	-0.038	-0.058
	250	250	1.000	-7.957	-19.006	-26.964			10.901	52.714	63.615	-0.072	-0.106	-0.178
		300	1.200	-8.155	-20.871	-29.026			11.488	55.749	67.237	-0.048	-0.076	-0.125
		375	1.500	-8.454	-23.258	-31.712			12.370	59.589	71.959	-0.030	-0.051	-0.080
		500	2.000	-8.954	-26.430	-35.383			13.843	64.649	78.491	-0.016	-0.030	-0.045
	300	300	1.000	-8.545	-20.423	-28.967			12.078	55.351	67.428	-0.044	-0.070	-0.114
		360	1.200	-8.783	-22.357	-31.140			12.783	58.447	71.230	-0.030	-0.051	-0.080
		450	1.500	-9.143	-24.806	-33.948			13.843	62.338	76.181	-0.018	-0.034	-0.052
		600	2.000	-9.743	-27.991	-37.735			15.611	67.380	82.991	-0.010	-0.019	-0.029
	350	350	1.000	-9.133	-21.651	-30.784			13.255	57.621	70.876	-0.029	-0.049	-0.078

Cantilever Length: 1.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-12.978	-47.412	-60.390			12.332	41.588	53.920	-0.507	-1.698	-2.205
		240	1.200	-13.214	-48.029	-61.243			12.784	42.584	55.368	-0.392	-1.292	-1.684
		300	1.500	-13.449	-48.624	-62.074			13.235	43.527	56.762	-0.311	-1.009	-1.321
		400	2.000	-13.918	-49.755	-63.673			14.134	45.275	59.409	-0.209	-0.656	-0.864
	225	225	1.000	-13.654	-47.763	-61.417			13.243	42.296	55.539	-0.371	-1.197	-1.568
		270	1.200	-14.078	-48.799	-62.877			14.055	43.939	57.995	-0.250	-0.784	-1.034
		338	1.500	-14.715	-50.257	-64.971			15.277	46.173	61.450	-0.153	-0.462	-0.615
		450	2.000	-15.755	-52.407	-68.163			17.281	49.347	66.628	-0.081	-0.234	-0.315
	250	250	1.000	-14.330	-48.106	-62.436			14.155	42.979	57.135	-0.282	-0.876	-1.158
		300	1.200	-14.801	-49.199	-63.999			15.056	44.692	59.748	-0.190	-0.575	-0.764
		375	1.500	-15.502	-50.722	-66.224			16.402	46.999	63.401	-0.116	-0.341	-0.457
		500	2.000	-16.662	-52.989	-69.651			18.637	50.306	68.943	-0.062	-0.173	-0.234
	300	300	1.000	-15.684	-48.764	-64.448			15.980	44.264	60.244	-0.176	-0.512	-0.688
		360	1.200	-16.247	-49.962	-66.209			17.059	46.099	63.159	-0.119	-0.337	-0.455
		450	1.500	-17.086	-51.625	-68.711			18.671	48.564	67.235	-0.073	-0.201	-0.274
		600	2.000	-18.474	-54.077	-72.551			21.347	52.068	73.414	-0.039	-0.103	-0.141
	350	350	1.000	-17.038	-49.392	-66.430			17.806	45.457	63.263	-0.119	-0.325	-0.445
4.5	200	200	1.000	-12.884	-34.167	-47.052			12.125	35.118	47.243	-0.506	-1.149	-1.655
		240	1.200	-13.114	-35.032	-48.145			12.568	36.341	48.909	-0.392	-0.879	-1.271
		300	1.500	-13.342	-35.876	-49.218			13.010	37.504	50.514	-0.311	-0.691	-1.002
		400	2.000	-13.798	-37.504	-51.302			13.893	39.673	53.566	-0.208	-0.456	-0.664
	225	225	1.000	-13.554	-34.745	-48.299			13.017	36.101	49.118	-0.371	-0.816	-1.187
		270	1.200	-13.966	-36.221	-50.187			13.813	38.120	51.933	-0.249	-0.541	-0.790
		338	1.500	-14.586	-38.342	-52.928			15.013	40.892	55.904	-0.152	-0.326	-0.478
		450	2.000	-15.602	-41.553	-57.155			16.987	44.880	61.867	-0.081	-0.171	-0.252
	250	250	1.000	-14.224	-35.308	-49.532			13.909	37.031	50.940	-0.282	-0.602	-0.884
		300	1.200	-14.681	-36.882	-51.563			14.792	39.135	53.927	-0.189	-0.401	-0.590
		375	1.500	-15.364	-39.123	-54.487			16.114	42.002	58.116	-0.116	-0.244	-0.360
		500	2.000	-16.497	-42.536	-59.033			18.316	46.163	64.479	-0.062	-0.129	-0.191
	300	300	1.000	-15.564	-36.393	-51.957			15.692	38.748	54.440	-0.176	-0.358	-0.534
		360	1.200	-16.111	-38.152	-54.264			16.749	41.010	57.759	-0.119	-0.240	-0.359
		450	1.500	-16.929	-40.641	-57.569			18.334	44.081	62.415	-0.073	-0.148	-0.220
		600	2.000	-18.285	-44.361	-62.647			20.972	48.487	69.459	-0.039	-0.079	-0.118
	350	350	1.000	-16.904	-37.433	-54.337			17.474	40.321	57.795	-0.119	-0.232	-0.351
6	200	200	1.000	-12.867	-28.457	-41.324			12.119	32.716	44.835	-0.506	-0.894	-1.399
		240	1.200	-13.095	-29.522	-42.616			12.561	34.090	46.650	-0.391	-0.690	-1.082
		300	1.500	-13.322	-30.565	-43.887			13.003	35.396	48.399	-0.311	-0.549	-0.859
		400	2.000	-13.774	-32.582	-46.356			13.886	37.834	51.719	-0.208	-0.369	-0.577
	225	225	1.000	-13.534	-29.223	-42.757			13.006	33.874	46.880	-0.371	-0.642	-1.013
		270	1.200	-13.943	-31.053	-44.996			13.801	36.140	49.941	-0.249	-0.434	-0.683
		338	1.500	-14.558	-33.689	-48.247			15.000	39.250	54.251	-0.152	-0.269	-0.421
		450	2.000	-15.566	-37.652	-53.219			16.974	43.701	60.675	-0.081	-0.148	-0.229
	250	250	1.000	-14.202	-29.972	-44.173			13.893	34.961	48.854	-0.281	-0.480	-0.761
		300	1.200	-14.655	-31.933	-46.587			14.775	37.323	52.098	-0.189	-0.326	-0.515
		375	1.500	-15.332	-34.721	-50.053			16.097	40.534	56.631	-0.116	-0.205	-0.321
		500	2.000	-16.456	-38.909	-55.365			18.298	45.153	63.451	-0.061	-0.114	-0.175
	300	300	1.000	-15.535	-31.422	-46.957			15.665	36.962	52.627	-0.176	-0.292	-0.468
		360	1.200	-16.078	-33.622	-49.699			16.722	39.495	56.218	-0.118	-0.201	-0.320
		450	1.500	-16.888	-36.700	-53.589			18.306	42.913	61.219	-0.073	-0.128	-0.201
		600	2.000	-18.233	-41.184	-59.417			20.944	47.737	68.681	-0.039	-0.072	-0.111
	350	350	1.000	-16.868	-32.805	-49.674			17.436	38.780	56.217	-0.119	-0.194	-0.313

Cantilever Length: 1.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-12.857	-24.947	-37.804			12.111	31.369	43.480	-0.505	-0.729	-1.234
		240	1.200	-13.083	-26.224	-39.308			12.552	32.869	45.422	-0.391	-0.572	-0.963
		300	1.500	-13.309	-27.472	-40.781			12.993	34.294	47.288	-0.310	-0.462	-0.773
		400	2.000	-13.759	-29.864	-43.623			13.875	36.942	50.817	-0.208	-0.321	-0.528
	225	225	1.000	-13.523	-25.922	-39.445			12.996	32.666	45.662	-0.370	-0.534	-0.904
		270	1.200	-13.929	-28.114	-42.043			13.790	35.136	48.925	-0.249	-0.371	-0.620
		338	1.500	-14.540	-31.221	-45.761			14.987	38.498	53.486	-0.152	-0.239	-0.391
		450	2.000	-15.542	-35.736	-51.278			16.959	43.224	60.183	-0.081	-0.137	-0.218
	250	250	1.000	-14.188	-26.875	-41.063			13.881	33.881	47.762	-0.281	-0.407	-0.688
		300	1.200	-14.638	-29.214	-43.852			14.762	36.446	51.208	-0.189	-0.285	-0.474
		375	1.500	-15.311	-32.467	-47.777			16.082	39.896	55.978	-0.116	-0.185	-0.301
		500	2.000	-16.429	-37.157	-53.586			18.282	44.753	63.034	-0.061	-0.107	-0.168
	300	300	1.000	-15.517	-28.699	-44.216			15.649	36.102	51.751	-0.176	-0.256	-0.432
		360	1.200	-16.056	-31.278	-47.334			16.705	38.824	55.529	-0.118	-0.182	-0.300
		450	1.500	-16.861	-34.774	-51.635			18.288	42.438	60.726	-0.073	-0.119	-0.192
		600	2.000	-18.200	-39.640	-57.840			20.927	47.425	68.352	-0.039	-0.069	-0.108
	350	350	1.000	-16.845	-30.385	-47.230			17.416	38.087	55.503	-0.119	-0.175	-0.293
10	200	200	1.000	-12.849	-23.320	-36.169			12.103	30.824	42.927	-0.505	-0.653	-1.157
		240	1.200	-13.074	-24.748	-37.822			12.543	32.400	44.943	-0.391	-0.521	-0.911
		300	1.500	-13.299	-26.128	-39.427			12.984	33.890	46.873	-0.310	-0.426	-0.736
		400	2.000	-13.747	-28.731	-42.477			13.864	36.636	50.501	-0.207	-0.302	-0.510
	225	225	1.000	-13.513	-24.452	-37.965			12.987	32.200	45.187	-0.370	-0.487	-0.857
		270	1.200	-13.917	-26.870	-40.788			13.779	34.778	48.557	-0.249	-0.346	-0.595
		338	1.500	-14.526	-30.210	-44.735			14.976	38.245	53.221	-0.152	-0.228	-0.380
		450	2.000	-15.526	-34.893	-50.419			16.948	43.040	59.988	-0.080	-0.134	-0.214
	250	250	1.000	-14.177	-25.544	-39.721			13.870	33.483	47.353	-0.281	-0.377	-0.658
		300	1.200	-14.625	-28.093	-42.718			14.750	36.144	50.894	-0.189	-0.269	-0.458
		375	1.500	-15.295	-31.538	-46.833			16.070	39.675	55.745	-0.116	-0.179	-0.295
		500	2.000	-16.412	-36.343	-52.755			18.271	44.578	62.849	-0.061	-0.105	-0.166
	300	300	1.000	-15.503	-27.579	-43.082			15.636	35.800	51.436	-0.175	-0.243	-0.418
		360	1.200	-16.039	-30.319	-46.359			16.692	38.590	55.281	-0.118	-0.175	-0.293
		450	1.500	-16.843	-33.935	-50.778			18.275	42.251	60.526	-0.073	-0.116	-0.189
		600	2.000	-18.183	-38.848	-57.031			20.917	47.264	68.181	-0.038	-0.068	-0.106
	350	350	1.000	-16.828	-29.394	-46.222			17.401	37.840	55.241	-0.119	-0.168	-0.286
12	200	200	1.000	-12.843	-22.710	-35.553			12.096	30.583	42.679	-0.505	-0.618	-1.122
		240	1.200	-13.067	-24.239	-37.306			12.537	32.196	44.733	-0.390	-0.498	-0.889
		300	1.500	-13.290	-25.699	-38.990			12.977	33.713	46.690	-0.310	-0.411	-0.721
		400	2.000	-13.737	-28.407	-42.145			13.857	36.492	50.349	-0.207	-0.295	-0.502
	225	225	1.000	-13.506	-23.949	-37.455			12.980	31.998	44.977	-0.370	-0.467	-0.837
		270	1.200	-13.908	-26.496	-40.404			13.772	34.618	48.389	-0.249	-0.337	-0.585
		338	1.500	-14.515	-29.934	-44.450			14.969	38.110	53.079	-0.152	-0.224	-0.376
		450	2.000	-15.516	-34.667	-50.183			16.942	42.913	59.855	-0.080	-0.132	-0.212
	250	250	1.000	-14.168	-25.122	-39.291			13.862	33.308	47.170	-0.281	-0.364	-0.645
		300	1.200	-14.615	-27.774	-42.389			14.742	35.999	50.741	-0.189	-0.263	-0.452
		375	1.500	-15.284	-31.289	-46.573			16.063	39.545	55.608	-0.116	-0.176	-0.292
		500	2.000	-16.402	-36.129	-52.531			18.266	44.455	62.721	-0.061	-0.103	-0.165
	300	300	1.000	-15.492	-27.257	-42.749			15.627	35.653	51.281	-0.175	-0.238	-0.413
		360	1.200	-16.028	-30.060	-46.088			16.683	38.457	55.141	-0.118	-0.172	-0.290
		450	1.500	-16.831	-33.715	-50.547			18.268	42.127	60.396	-0.072	-0.115	-0.187
		600	2.000	-18.175	-38.663	-56.838			20.914	47.162	68.075	-0.038	-0.067	-0.106
	350	350	1.000	-16.815	-29.122	-45.938			17.392	37.706	55.098	-0.119	-0.165	-0.283

Cantilever Length: 2.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-19.875	-69.404	-89.279			15.236	50.716	65.952	-1.342	-4.631	-5.973
		240	1.200	-20.305	-69.878	-90.184			15.864	51.378	67.243	-1.040	-3.530	-4.570
		300	1.500	-20.733	-70.336	-91.069			16.489	52.010	68.500	-0.827	-2.763	-3.590
		400	2.000	-21.584	-71.203	-92.788			17.731	53.194	70.925	-0.555	-1.801	-2.355
	225	225	1.000	-21.083	-69.662	-90.745			16.476	51.174	67.649	-0.992	-3.258	-4.250
		270	1.200	-21.855	-70.459	-92.314			17.602	52.280	69.882	-0.668	-2.139	-2.807
		338	1.500	-23.010	-71.581	-94.590			19.288	53.805	73.093	-0.409	-1.265	-1.674
		450	2.000	-24.893	-73.234	-98.127			22.040	56.008	78.048	-0.218	-0.640	-0.859
	250	250	1.000	-22.292	-69.917	-92.209			17.716	51.623	69.340	-0.758	-2.380	-3.138
		300	1.200	-23.147	-70.759	-93.906			18.965	52.787	71.752	-0.511	-1.564	-2.075
		375	1.500	-24.419	-71.933	-96.351			20.822	54.376	75.198	-0.315	-0.929	-1.243
		500	2.000	-26.517	-73.679	-100.196			23.887	56.690	80.577	-0.167	-0.470	-0.637
	300	300	1.000	-24.712	-70.412	-95.123			20.201	52.488	72.689	-0.480	-1.383	-1.863
		360	1.200	-25.734	-71.338	-97.072			21.694	53.757	75.451	-0.324	-0.910	-1.234
		450	1.500	-27.254	-72.623	-99.878			23.915	55.480	79.395	-0.200	-0.542	-0.742
		600	2.000	-29.765	-74.521	-104.285			27.583	57.969	85.551	-0.107	-0.275	-0.382
	350	350	1.000	-27.133	-70.889	-98.022			22.689	53.314	76.002	-0.328	-0.875	-1.204
4.5	200	200	1.000	-19.617	-47.971	-67.587			14.566	41.588	56.154	-1.339	-3.102	-4.441
		240	1.200	-20.029	-48.644	-68.673			15.159	42.366	57.525	-1.037	-2.371	-3.408
		300	1.500	-20.440	-49.309	-69.748			15.751	43.118	58.869	-0.825	-1.862	-2.686
		400	2.000	-21.259	-50.608	-71.867			16.934	44.549	61.483	-0.553	-1.221	-1.775
	225	225	1.000	-20.813	-48.446	-69.259			15.767	42.251	58.017	-0.989	-2.190	-3.179
		270	1.200	-21.553	-49.609	-71.162			16.832	43.561	60.394	-0.666	-1.446	-2.113
		338	1.500	-22.668	-51.313	-73.980			18.440	45.411	63.852	-0.408	-0.864	-1.272
		450	2.000	-24.494	-53.962	-78.456			21.084	48.176	69.261	-0.218	-0.447	-0.664
	250	250	1.000	-22.009	-48.912	-70.922			16.967	42.888	59.855	-0.757	-1.606	-2.363
		300	1.200	-22.831	-50.162	-72.993			18.151	44.272	62.423	-0.510	-1.063	-1.573
		375	1.500	-24.059	-51.975	-76.034			19.923	46.209	66.132	-0.314	-0.639	-0.953
		500	2.000	-26.097	-54.814	-80.911			22.872	49.129	72.001	-0.167	-0.331	-0.498
	300	300	1.000	-24.404	-49.817	-74.221			19.370	44.089	63.459	-0.479	-0.942	-1.421
		360	1.200	-25.389	-51.232	-76.621			20.788	45.609	66.397	-0.323	-0.626	-0.950
		450	1.500	-26.860	-53.273	-80.133			22.913	47.728	70.641	-0.199	-0.379	-0.579
		600	2.000	-29.301	-56.428	-85.729			26.448	50.894	77.342	-0.106	-0.199	-0.305
	350	350	1.000	-26.799	-50.696	-77.495			21.774	45.217	66.991	-0.328	-0.602	-0.930
6	200	200	1.000	-19.546	-38.336	-57.883			14.489	38.308	52.798	-1.338	-2.366	-3.704
		240	1.200	-19.953	-39.215	-59.168			15.079	39.212	54.291	-1.036	-1.818	-2.854
		300	1.500	-20.358	-40.089	-60.447			15.669	40.087	55.755	-0.824	-1.435	-2.259
		400	2.000	-21.168	-41.812	-62.979			16.847	41.757	58.604	-0.553	-0.953	-1.506
	225	225	1.000	-20.736	-39.009	-59.745			15.678	39.122	54.800	-0.988	-1.681	-2.669
		270	1.200	-21.467	-40.544	-62.010			16.738	40.644	57.383	-0.666	-1.122	-1.788
		338	1.500	-22.567	-42.819	-65.386			18.340	42.802	61.142	-0.408	-0.682	-1.090
		450	2.000	-24.374	-46.395	-70.769			20.974	46.038	67.012	-0.217	-0.364	-0.581
	250	250	1.000	-21.927	-39.670	-61.596			16.866	39.896	56.762	-0.756	-1.241	-1.997
		300	1.200	-22.738	-41.332	-64.069			18.044	41.504	59.548	-0.510	-0.832	-1.342
		375	1.500	-23.950	-43.769	-67.720			19.808	43.765	63.573	-0.313	-0.511	-0.824
		500	2.000	-25.965	-47.613	-73.577			22.747	47.179	69.926	-0.167	-0.275	-0.441
	300	300	1.000	-24.308	-40.962	-65.270			19.242	41.347	60.589	-0.479	-0.739	-1.218
		360	1.200	-25.280	-42.867	-68.147			20.653	43.116	63.769	-0.323	-0.500	-0.823
		450	1.500	-26.733	-45.631	-72.364			22.768	45.589	68.357	-0.199	-0.311	-0.510
		600	2.000	-29.145	-49.891	-79.036			26.290	49.270	75.560	-0.106	-0.170	-0.276
	350	350	1.000	-26.689	-42.222	-68.911			21.619	42.702	64.321	-0.327	-0.480	-0.807

Cantilever Length: 2.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-19.523	-31.956	-51.479			14.483	36.342	50.826	-1.337	-1.854	-3.190
		240	1.200	-19.927	-33.081	-53.008			15.073	37.365	52.437	-1.035	-1.440	-2.475
		300	1.500	-20.330	-34.200	-54.530			15.662	38.354	54.016	-0.823	-1.149	-1.972
		400	2.000	-21.136	-36.408	-57.544			16.840	40.242	57.083	-0.552	-0.781	-1.333
	225	225	1.000	-20.709	-32.866	-53.575			15.666	37.293	52.960	-0.988	-1.334	-2.322
		270	1.200	-21.435	-34.841	-56.276			16.727	39.015	55.742	-0.665	-0.909	-1.574
		338	1.500	-22.530	-37.760	-60.290			18.328	41.451	59.779	-0.407	-0.570	-0.977
		450	2.000	-24.325	-42.279	-66.604			20.961	45.067	66.028	-0.217	-0.318	-0.535
	250	250	1.000	-21.896	-33.765	-55.660			16.849	38.195	55.045	-0.755	-0.998	-1.754
		300	1.200	-22.702	-35.909	-58.611			18.027	40.014	58.040	-0.509	-0.685	-1.194
		375	1.500	-23.907	-39.032	-62.939			19.791	42.559	62.350	-0.313	-0.435	-0.748
		500	2.000	-25.908	-43.840	-69.748			22.729	46.346	69.074	-0.166	-0.245	-0.411
	300	300	1.000	-24.268	-35.525	-59.793			19.215	39.881	59.096	-0.478	-0.610	-1.089
		360	1.200	-25.233	-37.977	-63.210			20.626	41.872	62.498	-0.323	-0.424	-0.747
		450	1.500	-26.676	-41.470	-68.146			22.740	44.627	67.367	-0.199	-0.273	-0.472
		600	2.000	-29.072	-46.658	-75.730			26.261	48.638	74.899	-0.106	-0.156	-0.262
	350	350	1.000	-26.640	-37.213	-63.852			21.578	41.438	63.017	-0.327	-0.406	-0.733
10	200	200	1.000	-19.512	-28.764	-48.276			14.476	35.428	49.904	-1.336	-1.588	-2.924
		240	1.200	-19.915	-30.100	-50.014			15.065	36.534	51.599	-1.035	-1.250	-2.284
		300	1.500	-20.316	-31.424	-51.740			15.654	37.602	53.256	-0.823	-1.010	-1.833
		400	2.000	-21.119	-34.011	-55.129			16.831	39.632	56.463	-0.552	-0.703	-1.255
	225	225	1.000	-20.696	-29.887	-50.583			15.658	36.473	52.130	-0.987	-1.161	-2.148
		270	1.200	-21.420	-32.224	-53.644			16.717	38.331	55.048	-0.665	-0.809	-1.474
		338	1.500	-22.509	-35.620	-58.129			18.316	40.937	59.253	-0.407	-0.523	-0.930
		450	2.000	-24.297	-40.699	-64.996			20.948	44.735	65.683	-0.217	-0.302	-0.518
	250	250	1.000	-21.880	-30.994	-52.874			16.838	37.462	54.301	-0.755	-0.882	-1.637
		300	1.200	-22.683	-33.517	-56.200			18.015	39.417	57.432	-0.509	-0.619	-1.128
		375	1.500	-23.883	-37.106	-60.989			19.777	42.121	61.899	-0.313	-0.404	-0.717
		500	2.000	-25.876	-42.422	-68.298			22.713	46.062	68.775	-0.166	-0.234	-0.401
	300	300	1.000	-24.247	-33.127	-57.374			19.199	39.297	58.496	-0.478	-0.553	-1.031
		360	1.200	-25.208	-35.955	-61.163			20.609	41.413	62.022	-0.322	-0.393	-0.715
		450	1.500	-26.644	-39.866	-66.510			22.722	44.295	67.017	-0.199	-0.259	-0.458
		600	2.000	-29.032	-45.442	-74.473			26.243	48.407	74.650	-0.106	-0.151	-0.257
	350	350	1.000	-26.612	-35.106	-61.718			21.558	40.962	62.520	-0.327	-0.375	-0.702
12	200	200	1.000	-19.503	-27.095	-46.598			14.469	34.978	49.446	-1.335	-2.295	-3.630
		240	1.200	-19.904	-28.601	-48.506			15.057	36.142	51.199	-1.034	-1.829	-2.863
		300	1.500	-20.305	-30.080	-50.385			15.645	37.262	52.907	-0.822	-1.496	-2.318
		400	2.000	-21.104	-32.924	-54.028			16.821	39.372	56.193	-0.551	-1.060	-1.611
	225	225	1.000	-20.686	-28.396	-49.082			15.649	36.086	51.735	-0.987	-1.703	-2.690
		270	1.200	-21.406	-30.998	-52.405			16.707	38.030	54.736	-0.664	-1.210	-1.874
		338	1.500	-22.492	-34.685	-57.177			18.305	40.722	59.027	-0.407	-0.798	-1.204
		450	2.000	-24.276	-40.009	-64.284			20.935	44.580	65.516	-0.216	-0.469	-0.685
	250	250	1.000	-21.868	-29.661	-51.529			16.828	37.131	53.959	-0.755	-1.310	-2.065
		300	1.200	-22.667	-32.437	-55.104			18.003	39.162	57.165	-0.509	-0.937	-1.445
		375	1.500	-23.863	-36.278	-60.141			19.765	41.934	61.699	-0.312	-0.622	-0.935
		500	2.000	-25.852	-41.780	-67.632			22.700	45.915	68.615	-0.166	-0.365	-0.531
	300	300	1.000	-24.230	-32.039	-56.268			19.186	39.043	58.229	-0.478	-0.838	-1.315
		360	1.200	-25.186	-35.075	-60.261			20.594	41.214	61.808	-0.322	-0.603	-0.925
		450	1.500	-26.618	-39.162	-65.781			22.707	44.136	66.843	-0.198	-0.402	-0.601
		600	2.000	-29.004	-44.849	-73.853			26.230	48.270	74.499	-0.106	-0.236	-0.342
	350	350	1.000	-26.589	-34.173	-60.762			21.541	40.752	62.293	-0.327	-0.574	-0.901

Cantilever Length: 2.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-28.115	-105.971	-134.087			18.507	113.564	132.071	-2.897	-10.137	-13.035
		240	1.200	-28.800	-106.519	-135.319			19.334	114.414	133.748	-2.247	-7.729	-9.976
		300	1.500	-29.480	-107.022	-136.502			20.154	115.180	135.334	-1.788	-6.051	-7.839
		400	2.000	-30.829	-107.919	-138.748			21.776	116.520	138.296	-1.201	-3.945	-5.146
	225	225	1.000	-30.014	-106.150	-136.164			20.096	113.889	133.986	-2.154	-7.127	-9.281
		270	1.200	-31.239	-107.037	-138.275			21.574	115.253	136.828	-1.454	-4.680	-6.134
		338	1.500	-33.070	-108.181	-141.251			23.776	116.964	140.740	-0.892	-2.766	-3.659
		450	2.000	-36.052	-109.719	-145.770			27.345	119.202	146.547	-0.477	-1.400	-1.877
	250	250	1.000	-31.913	-106.327	-138.240			21.687	114.211	135.899	-1.658	-5.201	-6.859
		300	1.200	-33.270	-107.244	-140.515			23.324	115.619	138.943	-1.119	-3.417	-4.536
		375	1.500	-35.285	-108.422	-143.708			25.744	117.376	143.120	-0.690	-2.028	-2.718
		500	2.000	-38.606	-110.026	-148.632			29.718	119.703	149.422	-0.368	-1.024	-1.392
	300	300	1.000	-35.712	-106.673	-142.386			24.873	114.836	139.710	-1.060	-3.018	-4.078
		360	1.200	-37.334	-107.648	-144.982			26.826	116.325	143.151	-0.717	-1.984	-2.701
		450	1.500	-39.744	-108.903	-148.647			29.717	118.188	147.905	-0.443	-1.179	-1.622
		600	2.000	-43.717	-110.611	-154.328			34.467	120.655	155.122	-0.237	-0.597	-0.834
	350	350	1.000	-39.514	-107.009	-146.523			28.064	115.440	143.504	-0.731	-1.906	-2.637
4.5	200	200	1.000	-27.638	-74.743	-102.381			17.164	101.085	118.250	-2.889	-6.765	-9.654
		240	1.200	-28.292	-75.420	-103.711			17.916	101.950	119.865	-2.240	-5.165	-7.405
		300	1.500	-28.943	-76.059	-105.002			18.666	102.741	121.407	-1.782	-4.050	-5.832
		400	2.000	-30.240	-77.247	-107.487			20.163	104.159	124.322	-1.198	-2.650	-3.847
	225	225	1.000	-29.515	-75.100	-104.615			18.681	101.580	120.260	-2.148	-4.765	-6.913
		270	1.200	-30.688	-76.230	-106.918			20.032	102.988	123.020	-1.449	-3.139	-4.588
		338	1.500	-32.452	-77.773	-110.224			22.067	104.812	126.879	-0.889	-1.866	-2.755
		450	2.000	-35.338	-80.014	-115.352			25.407	107.322	132.729	-0.476	-0.955	-1.431
	250	250	1.000	-31.392	-75.451	-106.843			20.199	102.060	122.258	-1.653	-3.485	-5.138
		300	1.200	-32.694	-76.644	-109.338			21.699	103.526	125.225	-1.116	-2.298	-3.414
		375	1.500	-34.638	-78.265	-112.902			23.942	105.417	129.359	-0.688	-1.374	-2.062
		500	2.000	-37.857	-80.647	-118.503			27.668	108.052	135.720	-0.367	-0.704	-1.071
	300	300	1.000	-35.149	-76.135	-111.284			23.237	102.976	126.213	-1.057	-2.032	-3.090
		360	1.200	-36.709	-77.448	-114.158			25.035	104.550	129.586	-0.715	-1.344	-2.059
		450	1.500	-39.037	-79.236	-118.273			27.724	106.587	134.310	-0.441	-0.807	-1.248
		600	2.000	-42.894	-81.855	-124.749			32.189	109.424	141.613	-0.236	-0.417	-0.653
	350	350	1.000	-38.909	-76.801	-115.710			26.279	103.850	130.129	-0.729	-1.291	-2.020
6	200	200	1.000	-27.455	-60.374	-87.829			16.897	96.788	113.685	-2.885	-5.115	-8.000
		240	1.200	-28.094	-61.210	-89.304			17.635	97.755	115.390	-2.237	-3.916	-6.153
		300	1.500	-28.732	-62.011	-90.743			18.373	98.648	117.021	-1.780	-3.081	-4.861
		400	2.000	-30.005	-63.533	-93.538			19.848	100.265	120.113	-1.196	-2.031	-3.227
	225	225	1.000	-29.320	-60.896	-90.216			18.391	97.414	115.804	-2.145	-3.616	-5.761
		270	1.200	-30.469	-62.315	-92.784			19.719	98.997	118.715	-1.447	-2.397	-3.844
		338	1.500	-32.200	-64.311	-96.511			21.724	101.079	122.803	-0.888	-1.440	-2.329
		450	2.000	-35.041	-67.315	-102.357			25.023	104.004	129.027	-0.475	-0.753	-1.228
	250	250	1.000	-31.186	-61.409	-92.594			19.885	98.014	117.899	-1.651	-2.656	-4.307
		300	1.200	-32.462	-62.924	-95.386			21.360	99.665	121.025	-1.115	-1.765	-2.879
		375	1.500	-34.370	-65.043	-99.414			23.570	101.829	125.400	-0.687	-1.069	-1.756
		500	2.000	-37.539	-68.266	-105.805			27.250	104.909	132.159	-0.367	-0.561	-0.928
	300	300	1.000	-34.919	-62.412	-97.331			22.875	99.149	122.025	-1.056	-1.563	-2.619
		360	1.200	-36.450	-64.114	-100.563			24.644	100.930	125.574	-0.714	-1.045	-1.758
		450	1.500	-38.737	-66.492	-105.229			27.294	103.272	130.566	-0.441	-0.638	-1.079
		600	2.000	-42.535	-70.072	-112.607			31.705	106.594	138.300	-0.236	-0.340	-0.575
	350	350	1.000	-38.655	-63.396	-102.051			25.868	100.224	126.092	-0.729	-1.003	-1.731

Cantilever Length: 2.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-27.383	-50.656	-78.039			16.852	94.258	111.110	-2.882	-3.931	-6.813
		240	1.200	-28.016	-51.695	-79.711			17.589	95.337	112.926	-2.235	-3.030	-5.265
		300	1.500	-28.649	-52.704	-81.352			18.326	96.337	114.663	-1.778	-2.401	-4.179
		400	2.000	-29.911	-54.644	-84.555			19.799	98.163	117.962	-1.195	-1.607	-2.802
	225	225	1.000	-29.241	-51.376	-80.617			18.335	95.011	113.346	-2.143	-2.802	-4.945
		270	1.200	-30.379	-53.165	-83.544			19.661	96.781	116.442	-1.446	-1.882	-3.328
		338	1.500	-32.095	-55.727	-87.822			21.663	99.134	120.797	-0.887	-1.156	-2.044
		450	2.000	-34.913	-59.632	-94.545			24.957	102.462	127.419	-0.474	-0.627	-1.102
	250	250	1.000	-31.098	-52.088	-83.186			19.818	95.728	115.546	-1.649	-2.076	-3.726
		300	1.200	-32.363	-54.015	-86.378			21.290	97.578	118.869	-1.114	-1.402	-2.515
		375	1.500	-34.254	-56.752	-91.006			23.497	100.027	123.524	-0.686	-0.870	-1.557
		500	2.000	-37.396	-60.938	-98.334			27.172	103.524	130.696	-0.366	-0.476	-0.842
	300	300	1.000	-34.815	-53.491	-88.306			22.784	97.082	119.866	-1.055	-1.245	-2.300
		360	1.200	-36.331	-55.680	-92.010			24.549	99.082	123.631	-0.713	-0.849	-1.562
		450	1.500	-38.597	-58.758	-97.355			27.194	101.728	128.921	-0.440	-0.534	-0.974
		600	2.000	-42.360	-63.358	-105.719			31.598	105.466	137.065	-0.235	-0.297	-0.532
	350	350	1.000	-38.533	-54.859	-93.392			25.751	98.354	124.105	-0.728	-0.813	-1.541
10	200	200	1.000	-27.362	-45.538	-72.900			16.847	93.018	109.865	-2.881	-3.280	-6.161
		240	1.200	-27.993	-46.764	-74.757			17.584	94.178	111.762	-2.234	-2.553	-4.786
		300	1.500	-28.623	-47.959	-76.582			18.321	95.257	113.578	-1.777	-2.042	-3.819
		400	2.000	-29.881	-50.264	-80.145			19.794	97.232	117.026	-1.194	-1.394	-2.588
	225	225	1.000	-29.216	-46.445	-75.661			18.326	93.864	112.190	-2.142	-2.365	-4.507
		270	1.200	-30.350	-48.569	-78.919			19.652	95.772	115.424	-1.445	-1.617	-3.062
		338	1.500	-32.060	-51.611	-83.671			21.654	98.314	119.967	-0.887	-1.020	-1.907
		450	2.000	-34.866	-56.190	-91.056			24.947	101.889	126.836	-0.474	-0.574	-1.048
	250	250	1.000	-31.069	-47.344	-78.414			19.805	94.669	114.475	-1.649	-1.773	-3.421
		300	1.200	-32.329	-49.636	-81.966			21.277	96.664	117.942	-1.113	-1.221	-2.334
		375	1.500	-34.213	-52.876	-87.088			23.484	99.303	122.787	-0.686	-0.779	-1.465
		500	2.000	-37.341	-57.730	-95.072			27.157	103.035	130.192	-0.366	-0.441	-0.807
	300	300	1.000	-34.777	-49.108	-83.886			22.763	96.184	118.947	-1.055	-1.087	-2.141
		360	1.200	-36.286	-51.697	-87.983			24.527	98.333	122.860	-0.713	-0.757	-1.470
		450	1.500	-38.541	-55.288	-93.829			27.171	101.158	128.329	-0.440	-0.490	-0.929
		600	2.000	-42.287	-60.492	-102.779			31.575	105.089	136.664	-0.235	-0.281	-0.516
	350	350	1.000	-38.484	-50.789	-89.273			25.719	97.587	123.306	-0.727	-0.724	-1.451
12	200	200	1.000	-27.350	-42.640	-69.990			16.840	92.350	109.190	-2.880	-2.901	-5.780
		240	1.200	-27.979	-44.034	-72.013			17.577	93.572	111.149	-2.233	-2.282	-4.515
		300	1.500	-28.608	-45.391	-73.998			18.313	94.711	113.024	-1.776	-1.846	-3.622
		400	2.000	-29.862	-47.993	-77.855			19.785	96.791	116.576	-1.193	-1.285	-2.478
	225	225	1.000	-29.201	-43.721	-72.922			18.318	93.266	111.584	-2.141	-2.119	-4.260
		270	1.200	-30.332	-46.131	-76.463			19.643	95.276	114.919	-1.445	-1.476	-2.921
		338	1.500	-32.037	-49.542	-81.579			21.643	97.943	119.586	-0.886	-0.954	-1.840
		450	2.000	-34.835	-54.539	-89.374			24.934	101.647	126.581	-0.473	-0.551	-1.024
	250	250	1.000	-31.052	-44.788	-75.840			19.795	94.138	113.933	-1.648	-1.608	-3.256
		300	1.200	-32.308	-47.375	-79.683			21.266	96.234	117.500	-1.112	-1.129	-2.241
		375	1.500	-34.185	-50.970	-85.155			23.470	98.987	122.457	-0.685	-0.737	-1.422
		500	2.000	-37.304	-56.194	-93.498			27.142	102.824	129.966	-0.365	-0.427	-0.792
	300	300	1.000	-34.753	-46.841	-81.594			22.747	95.761	118.508	-1.054	-1.006	-2.060
		360	1.200	-36.256	-49.716	-85.972			24.510	97.999	122.509	-0.712	-0.714	-1.426
		450	1.500	-38.503	-53.614	-92.117			27.153	100.912	128.065	-0.439	-0.470	-0.910
		600	2.000	-42.238	-59.087	-101.325			31.556	104.912	136.467	-0.235	-0.274	-0.509
	350	350	1.000	-38.451	-48.737	-87.187			25.697	97.238	122.935	-0.727	-0.680	-1.407

Cantilever Length: 3.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-37.695	-149.853	-187.548			22.131	110.939	133.070	-5.485	-20.052	-25.537
		240	1.200	-38.691	-150.655	-189.347			23.178	112.328	135.506	-4.257	-15.259	-19.516
		300	1.500	-39.681	-151.370	-191.051			24.213	113.550	137.763	-3.390	-11.927	-15.317
		400	2.000	-41.644	-152.596	-194.240			26.253	115.617	141.870	-2.281	-7.754	-10.036
	225	225	1.000	-40.443	-149.994	-190.437			24.099	111.220	135.319	-4.100	-14.092	-18.192
		270	1.200	-42.227	-151.258	-193.485			25.966	113.400	139.366	-2.770	-9.226	-11.996
		338	1.500	-44.891	-152.804	-197.694			28.731	116.009	144.740	-1.703	-5.434	-7.137
		450	2.000	-49.223	-154.731	-203.954			33.191	119.196	152.387	-0.913	-2.738	-3.651
	250	250	1.000	-43.193	-150.134	-193.326			26.069	111.499	137.568	-3.170	-10.280	-13.450
		300	1.200	-45.168	-151.421	-196.589			28.133	113.717	141.850	-2.143	-6.732	-8.875
		375	1.500	-48.099	-152.987	-201.086			31.171	116.360	147.531	-1.323	-3.980	-5.304
		500	2.000	-52.926	-154.968	-207.893			36.134	119.633	155.766	-0.708	-2.000	-2.708
	300	300	1.000	-48.693	-150.406	-199.099			30.013	112.042	142.055	-2.044	-5.959	-8.002
		360	1.200	-51.053	-151.737	-202.790			32.471	114.332	146.803	-1.383	-3.904	-5.287
		450	1.500	-54.557	-153.361	-207.918			36.094	117.068	153.163	-0.856	-2.310	-3.166
		600	2.000	-60.332	-155.420	-215.752			42.021	120.466	162.487	-0.459	-1.163	-1.622
	350	350	1.000	-54.196	-150.670	-204.866			33.961	112.568	146.529	-1.419	-3.759	-5.178
4.5	200	200	1.000	-36.977	-105.143	-142.120			19.961	79.450	99.410	-5.466	-13.353	-18.819
		240	1.200	-37.931	-106.116	-144.047			20.884	80.613	101.497	-4.241	-10.169	-14.410
		300	1.500	-38.882	-107.003	-145.884			21.804	81.647	103.451	-3.377	-7.955	-11.333
		400	2.000	-40.774	-108.569	-149.343			23.636	83.420	107.056	-2.273	-5.183	-7.456
	225	225	1.000	-39.689	-105.468	-145.157			21.804	79.860	101.664	-4.086	-9.396	-13.482
		270	1.200	-41.402	-107.038	-148.440			23.462	81.707	105.169	-2.760	-6.162	-8.922
		338	1.500	-43.973	-109.039	-153.012			25.953	83.962	109.914	-1.697	-3.641	-5.338
		450	2.000	-48.175	-111.699	-159.874			30.028	86.821	116.849	-0.910	-1.848	-2.757
	250	250	1.000	-42.403	-105.788	-148.191			23.650	80.261	103.910	-3.159	-6.864	-10.023
		300	1.200	-44.304	-107.411	-151.714			25.490	82.154	107.644	-2.136	-4.505	-6.640
		375	1.500	-47.136	-109.471	-156.607			28.234	84.457	112.690	-1.318	-2.675	-3.993
		500	2.000	-51.821	-112.251	-164.071			32.778	87.420	120.198	-0.705	-1.356	-2.061
	300	300	1.000	-47.835	-106.409	-154.244			27.345	81.030	108.374	-2.037	-3.991	-6.028
		360	1.200	-50.111	-108.133	-158.244			29.549	83.010	112.560	-1.379	-2.624	-4.003
		450	1.500	-53.502	-110.332	-163.834			32.836	85.430	118.266	-0.853	-1.562	-2.415
		600	2.000	-59.114	-113.305	-172.419			38.282	88.553	126.835	-0.457	-0.796	-1.254
	350	350	1.000	-53.270	-107.013	-160.284			31.046	81.767	112.812	-1.415	-2.527	-3.942
6	200	200	1.000	-36.630	-84.526	-121.156			19.391	70.304	89.695	-5.457	-10.053	-15.510
		240	1.200	-37.559	-85.691	-123.250			20.282	71.504	91.786	-4.234	-7.669	-11.903
		300	1.500	-38.486	-86.767	-125.253			21.173	72.577	93.749	-3.372	-6.011	-9.383
		400	2.000	-40.334	-88.711	-129.045			22.952	74.437	97.389	-2.269	-3.934	-6.203
	225	225	1.000	-39.324	-85.035	-124.359			21.196	70.820	92.016	-4.080	-7.090	-11.170
		270	1.200	-40.993	-86.942	-127.936			22.800	72.732	95.532	-2.756	-4.667	-7.423
		338	1.500	-43.507	-89.449	-132.956			25.219	75.101	100.320	-1.694	-2.777	-4.471
		450	2.000	-47.628	-92.931	-140.560			29.196	78.180	107.376	-0.908	-1.429	-2.337
	250	250	1.000	-42.019	-85.533	-127.552			23.002	71.316	94.318	-3.154	-5.193	-8.347
		300	1.200	-43.873	-87.525	-131.398			24.784	73.280	98.064	-2.132	-3.424	-5.557
		375	1.500	-46.644	-90.136	-136.779			27.451	75.707	103.158	-1.316	-2.050	-3.367
		500	2.000	-51.241	-93.814	-145.055			31.888	78.910	110.797	-0.704	-1.057	-1.761
	300	300	1.000	-47.412	-86.503	-133.915			26.618	72.257	98.876	-2.034	-3.038	-5.072
		360	1.200	-49.636	-88.660	-138.295			28.755	74.321	103.075	-1.377	-2.011	-3.387
		450	1.500	-52.957	-91.498	-144.456			31.952	76.885	108.837	-0.851	-1.211	-2.063
		600	2.000	-58.468	-95.500	-153.968			37.273	80.279	117.551	-0.457	-0.631	-1.087
	350	350	1.000	-52.810	-87.449	-140.260			30.239	73.152	103.390	-1.413	-1.936	-3.349

Cantilever Length: 3.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-36.458	-70.415	-106.872			19.233	65.439	84.673	-5.451	-7.651	-13.101
		240	1.200	-37.373	-71.824	-109.197			20.118	66.717	86.835	-4.229	-5.862	-10.091
		300	1.500	-38.286	-73.144	-111.430			21.003	67.866	88.869	-3.368	-4.616	-7.984
		400	2.000	-40.111	-75.574	-115.685			22.770	69.877	92.647	-2.266	-3.053	-5.319
	225	225	1.000	-39.138	-71.147	-110.285			21.019	66.060	87.079	-4.075	-5.425	-9.500
		270	1.200	-40.783	-73.489	-114.272			22.611	68.102	90.713	-2.753	-3.603	-6.356
		338	1.500	-43.264	-76.650	-119.914			25.014	70.666	95.680	-1.692	-2.177	-3.869
		450	2.000	-47.338	-81.183	-128.521			28.969	74.054	103.023	-0.907	-1.151	-2.058
	250	250	1.000	-41.819	-71.866	-113.684			22.806	66.651	89.457	-3.151	-3.997	-7.148
		300	1.200	-43.647	-74.337	-117.984			24.573	68.753	93.326	-2.130	-2.664	-4.794
		375	1.500	-46.382	-77.659	-124.041			27.222	71.386	98.608	-1.315	-1.624	-2.939
		500	2.000	-50.926	-82.479	-133.405			31.635	74.915	106.550	-0.703	-0.864	-1.567
	300	300	1.000	-47.184	-73.275	-120.459			26.380	67.767	94.146	-2.032	-2.369	-4.401
		360	1.200	-49.376	-75.995	-125.371			28.499	69.984	98.482	-1.375	-1.590	-2.966
		450	1.500	-52.655	-79.655	-132.310			31.675	72.772	104.447	-0.850	-0.980	-1.830
		600	2.000	-58.101	-84.915	-143.016			36.964	76.508	113.472	-0.456	-0.529	-0.985
	350	350	1.000	-52.553	-74.652	-127.205			29.956	68.819	98.775	-1.411	-1.530	-2.941
10	200	200	1.000	-36.405	-62.794	-99.200			19.216	63.161	82.377	-5.447	-6.289	-11.736
		240	1.200	-37.316	-64.426	-101.742			20.100	64.502	84.602	-4.227	-4.851	-9.078
		300	1.500	-38.225	-65.968	-104.193			20.985	65.713	86.698	-3.365	-3.847	-7.213
		400	2.000	-40.041	-68.838	-108.879			22.752	67.844	90.596	6.631	-2.582	4.049
	225	225	1.000	-39.078	-63.735	-102.813			20.994	63.860	84.854	-4.073	-4.496	-8.569
		270	1.200	-40.716	-66.475	-107.191			22.585	66.010	88.595	-2.751	-3.026	-5.777
		338	1.500	-43.185	-70.225	-113.410			24.988	68.728	93.716	-1.691	-1.866	-3.557
		450	2.000	-47.239	-75.648	-122.887			28.942	72.338	101.280	-0.906	-1.020	-1.926
	250	250	1.000	-41.752	-64.664	-106.416			22.772	64.525	87.297	-3.149	-3.341	-6.490
		300	1.200	-43.571	-67.574	-111.145			24.539	66.741	91.281	-2.129	-2.261	-4.390
		375	1.500	-46.292	-71.528	-117.820			27.188	69.534	96.722	-1.314	-1.410	-2.724
		500	2.000	-50.813	-77.276	-128.089			31.599	73.285	104.884	-0.703	-0.776	-1.479
	300	300	1.000	-47.102	-66.488	-113.590			26.330	65.776	92.106	-2.031	-2.015	-4.046
		360	1.200	-49.282	-69.710	-118.992			28.448	68.116	96.564	-1.374	-1.377	-2.752
		450	1.500	-52.542	-74.058	-126.601			31.622	71.067	102.689	-0.850	-0.870	-1.720
		600	2.000	-57.957	-80.249	-138.206			36.909	75.003	111.912	-0.455	-0.486	-0.941
	350	350	1.000	-52.453	-68.246	-120.699			29.887	66.944	96.831	-1.410	-1.322	-2.733
12	200	200	1.000	-36.384	-58.279	-94.663			19.211	61.918	81.129	-5.445	-5.458	-10.903
		240	1.200	-37.292	-60.115	-97.407			20.095	63.311	83.406	-4.225	-4.246	-8.471
		300	1.500	-38.200	-61.858	-100.057			20.979	64.572	85.551	-3.364	-3.397	-6.761
		400	2.000	-40.011	-65.114	-105.125			22.747	66.796	89.543	-2.263	-2.319	-4.583
	225	225	1.000	-39.053	-59.421	-98.474			20.986	62.680	83.666	-4.071	-3.942	-8.013
		270	1.200	-40.687	-62.521	-103.208			22.577	64.917	87.494	-2.750	-2.695	-5.445
		338	1.500	-43.149	-66.773	-109.921			24.979	67.752	92.731	-1.690	-1.700	-3.390
		450	2.000	-47.190	-72.865	-120.056			28.932	71.505	100.436	-0.905	-0.957	-1.862
	250	250	1.000	-41.723	-60.550	-102.273			22.761	63.404	86.165	-3.148	-2.960	-6.107
		300	1.200	-43.537	-63.846	-107.382			24.527	65.711	90.239	-2.127	-2.037	-4.165
		375	1.500	-46.249	-68.315	-114.564			27.175	68.618	95.793	-1.313	-1.300	-2.613
		500	2.000	-50.755	-74.711	-125.466			31.584	72.496	104.080	-0.702	-0.736	-1.438
	300	300	1.000	-47.063	-62.746	-109.809			26.310	64.761	91.071	-2.030	-1.818	-3.848
		360	1.200	-49.235	-66.377	-115.612			28.427	67.188	95.615	-1.374	-1.266	-2.639
		450	1.500	-52.483	-71.230	-123.712			31.601	70.238	101.838	-0.849	-0.817	-1.666
		600	2.000	-57.878	-77.983	-135.861			36.886	74.266	111.152	-0.455	-0.467	-0.922
	350	350	1.000	-52.401	-64.809	-117.210			29.857	66.006	95.864	-1.410	-1.212	-2.621

Cantilever Length: 3.75 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-54.557	-216.817	-271.374			28.193	110.645	138.838	-12.120	-46.248	-58.367
		240	1.200	-56.130	-217.710	-273.840			29.608	112.268	141.875	-9.415	-35.157	-44.572
		300	1.500	-57.690	-218.505	-276.195			31.000	113.703	144.703	-7.504	-27.454	-34.958
		400	2.000	-60.785	-219.860	-280.645			33.731	116.136	149.867	-5.059	-17.816	-22.875
	225	225	1.000	-58.886	-216.909	-275.795			30.793	110.840	141.633	-9.118	-32.493	-41.611
		270	1.200	-61.700	-218.305	-280.005			33.307	113.374	146.682	-6.170	-21.236	-27.405
		338	1.500	-65.901	-220.000	-285.901			37.008	116.420	153.428	-3.801	-12.477	-16.278
		450	2.000	-72.732	-222.074	-294.806			42.938	120.112	163.050	-2.044	-6.265	-8.309
	250	250	1.000	-63.216	-217.000	-280.217			33.394	111.034	144.428	-7.089	-23.697	-30.786
		300	1.200	-66.334	-218.411	-284.745			36.171	113.596	149.767	-4.800	-15.489	-20.289
		375	1.500	-70.956	-220.115	-291.071			40.233	116.660	156.893	-2.969	-9.135	-12.104
		500	2.000	-78.567	-222.228	-300.795			46.827	120.424	167.251	-1.594	-4.573	-6.166
	300	300	1.000	-71.878	-217.178	-289.056			38.600	111.412	150.012	-4.614	-13.725	-18.340
		360	1.200	-75.602	-218.617	-294.219			41.902	114.028	155.930	-3.128	-8.974	-12.102
		450	1.500	-81.130	-220.359	-301.489			46.741	117.162	163.903	-1.938	-5.295	-7.233
		600	2.000	-90.239	-222.525	-312.764			54.610	121.021	175.631	-1.043	-2.653	-3.695
	350	350	1.000	-80.541	-217.349	-297.891			43.811	111.776	155.587	-3.228	-8.652	-11.880
4.5	200	200	1.000	-53.472	-147.908	-201.380			24.550	74.961	99.511	-12.067	-30.767	-42.835
		240	1.200	-54.990	-148.981	-203.971			25.756	76.268	102.024	-9.373	-23.397	-32.770
		300	1.500	-56.500	-149.956	-206.457			26.955	77.440	104.394	-7.470	-18.278	-25.748
		400	2.000	-59.502	-151.670	-211.172			29.333	79.466	108.799	-5.036	-11.873	-16.909
	225	225	1.000	-57.737	-148.177	-205.914			26.912	75.340	102.252	-9.080	-21.632	-30.712
		270	1.200	-60.458	-149.890	-210.348			29.073	77.412	106.485	-6.143	-14.149	-20.292
		338	1.500	-64.536	-152.058	-216.594			32.304	79.973	112.278	-3.784	-8.327	-12.111
		450	2.000	-71.191	-154.867	-226.058			37.567	83.211	120.778	-2.034	-4.197	-6.231
	250	250	1.000	-62.003	-148.442	-210.445			29.276	75.712	104.988	-7.060	-15.788	-22.848
		300	1.200	-65.021	-150.198	-215.219			31.672	77.830	109.502	-4.779	-10.331	-15.111
		375	1.500	-69.512	-152.408	-221.920			35.230	80.434	115.664	-2.956	-6.106	-9.063
		500	2.000	-76.930	-155.312	-232.242			41.095	83.771	124.867	-1.587	-3.071	-4.657
	300	300	1.000	-70.539	-148.957	-219.497			34.011	76.431	110.442	-4.596	-9.161	-13.757
		360	1.200	-74.152	-150.794	-224.946			36.877	78.635	115.513	-3.115	-6.000	-9.115
		450	1.500	-79.528	-153.113	-232.641			41.135	81.352	122.487	-1.930	-3.552	-5.482
		600	2.000	-88.413	-156.166	-244.579			48.158	84.841	132.999	-1.038	-1.792	-2.830
	350	350	1.000	-79.081	-149.458	-228.539			38.753	77.125	115.878	-3.216	-5.787	-9.003
6	200	200	1.000	-52.822	-115.866	-168.688			23.362	62.857	86.219	-12.042	-23.089	-35.131
		240	1.200	-54.296	-117.167	-171.462			24.498	64.193	88.691	-9.353	-17.574	-26.926
		300	1.500	-55.765	-118.366	-174.131			25.631	65.399	91.031	-7.454	-13.742	-21.196
		400	2.000	-58.693	-120.515	-179.208			27.892	67.506	95.398	-5.025	-8.948	-13.973
	225	225	1.000	-57.050	-116.339	-173.389			25.648	63.380	89.028	-9.061	-16.255	-25.316
		270	1.200	-59.698	-118.447	-178.145			27.690	65.512	93.202	-6.130	-10.653	-16.783
		338	1.500	-63.677	-121.191	-184.868			30.763	68.183	98.946	-3.776	-6.293	-10.068
		450	2.000	-70.193	-124.898	-195.091			35.804	71.645	107.449	-2.030	-3.196	-5.226
	250	250	1.000	-61.280	-116.802	-178.082			27.936	63.887	91.823	-7.045	-11.882	-18.927
		300	1.200	-64.220	-118.985	-183.205			30.204	66.073	96.277	-4.770	-7.794	-12.564
		375	1.500	-68.606	-121.812	-190.418			33.591	68.800	102.392	-2.950	-4.628	-7.578
		500	2.000	-75.873	-125.687	-201.560			39.214	72.385	111.600	-1.583	-2.349	-3.933
	300	300	1.000	-69.747	-117.701	-187.448			32.518	64.856	97.374	-4.587	-6.918	-11.505
		360	1.200	-73.270	-120.028	-193.298			35.237	67.146	102.383	-3.109	-4.548	-7.657
		450	1.500	-78.527	-123.050	-201.578			39.298	70.012	109.310	-1.926	-2.710	-4.636
		600	2.000	-87.237	-127.199	-214.436			46.039	73.787	119.826	-1.036	-1.384	-2.421
	350	350	1.000	-78.221	-118.578	-196.799			37.107	65.785	102.893	-3.210	-4.387	-7.597

Cantilever Length: 3.75 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-52.402	-93.680	-146.082			22.887	56.192	79.079	-12.024	-17.433	-29.457
		240	1.200	-53.844	-95.291	-149.135			23.997	57.637	81.634	-9.339	-13.300	-22.639
		300	1.500	-55.283	-96.797	-152.079			25.106	58.949	84.055	-7.443	-10.428	-17.870
		400	2.000	-58.155	-99.545	-157.700			27.322	61.260	88.582	-5.017	-6.831	-11.848
	225	225	1.000	-56.604	-94.418	-151.022			25.134	56.860	81.994	-9.048	-12.311	-21.359
		270	1.200	-59.196	-97.068	-156.264			27.131	59.171	86.302	-6.121	-8.109	-14.230
		338	1.500	-63.101	-100.606	-163.707			30.145	62.103	92.248	-3.770	-4.833	-8.604
		450	2.000	-69.512	-105.568	-175.080			35.103	65.981	101.084	-2.027	-2.498	-4.525
	250	250	1.000	-60.807	-95.139	-155.946			27.383	57.498	84.881	-7.036	-9.030	-16.066
		300	1.200	-63.687	-97.909	-161.596			29.601	59.872	89.473	-4.763	-5.961	-10.724
		375	1.500	-67.993	-101.593	-169.586			32.924	62.872	95.796	-2.946	-3.578	-6.524
		500	2.000	-75.144	-106.829	-181.974			38.456	66.899	105.354	-1.581	-1.854	-3.435
	300	300	1.000	-69.220	-96.547	-165.767			31.885	58.707	90.591	-4.582	-5.299	-9.880
		360	1.200	-72.675	-99.551	-172.226			34.545	61.201	95.746	-3.105	-3.514	-6.619
		450	1.500	-77.839	-103.555	-181.394			38.530	64.366	102.896	-1.924	-2.124	-4.048
		600	2.000	-86.413	-109.226	-195.640			45.163	68.615	113.778	-1.035	-1.113	-2.148
	350	350	1.000	-77.641	-97.923	-175.564			36.393	59.855	96.248	-3.207	-3.388	-6.595
10	200	200	1.000	-52.239	-81.498	-133.737			22.784	53.068	75.851	-12.014	-14.155	-26.169
		240	1.200	-53.667	-83.400	-137.067			23.889	54.607	78.496	-9.331	-10.843	-20.174
		300	1.500	-55.093	-85.193	-140.286			24.994	56.009	81.003	-7.437	-8.538	-15.975
		400	2.000	-57.941	-88.507	-146.448			27.204	58.493	85.697	-5.013	-5.646	-10.659
	225	225	1.000	-56.425	-82.484	-138.909			25.015	53.840	78.855	-9.041	-10.046	-19.087
		270	1.200	-58.994	-85.646	-144.639			27.004	56.307	83.311	-6.116	-6.672	-12.788
		338	1.500	-62.867	-89.940	-152.806			30.008	59.463	89.471	-3.767	-4.032	-7.799
		450	2.000	-69.229	-96.083	-165.312			34.952	63.677	98.630	-2.025	-2.135	-4.160
	250	250	1.000	-60.613	-83.452	-144.065			27.247	54.574	81.821	-7.031	-7.409	-14.439
		300	1.200	-63.467	-86.782	-150.249			29.456	57.112	86.569	-4.759	-4.939	-9.699
		375	1.500	-67.738	-91.282	-159.020			32.768	60.347	93.115	-2.944	-3.012	-5.956
		500	2.000	-74.835	-97.785	-172.619			38.284	64.724	103.008	-1.580	-1.603	-3.183
	300	300	1.000	-68.996	-85.350	-154.346			31.714	55.962	87.676	-4.578	-4.398	-8.976
		360	1.200	-72.419	-89.001	-161.420			34.363	58.634	92.997	-3.103	-2.954	-6.057
		450	1.500	-77.539	-93.925	-171.464			38.334	62.047	100.381	-1.922	-1.820	-3.743
		600	2.000	-86.045	-100.954	-186.999			44.946	66.651	111.597	-1.034	-0.983	-2.017
	350	350	1.000	-77.384	-87.195	-164.579			36.184	57.269	93.453	-3.205	-2.845	-6.049
12	200	200	1.000	-52.175	-74.054	-126.230			22.764	51.324	74.089	-12.008	-12.080	-24.089
		240	1.200	-53.598	-76.225	-129.822			23.870	52.938	76.808	-9.327	-9.306	-18.633
		300	1.500	-55.019	-78.283	-133.301			24.975	54.412	79.387	-7.433	-7.372	-14.805
		400	2.000	-57.856	-82.116	-139.973			27.185	57.033	84.218	-5.010	-4.936	-9.946
	225	225	1.000	-56.353	-75.280	-131.633			24.988	52.180	77.168	-9.037	-8.633	-17.670
		270	1.200	-58.912	-78.917	-137.829			26.977	54.773	81.750	-6.113	-5.797	-11.910
		338	1.500	-62.771	-83.903	-146.673			29.981	58.105	88.085	-3.765	-3.565	-7.330
		450	2.000	-69.109	-91.071	-160.179			34.924	62.566	97.490	-2.024	-1.939	-3.962
	250	250	1.000	-60.533	-76.489	-137.021			27.213	52.993	80.206	-7.028	-6.413	-13.440
		300	1.200	-63.375	-80.338	-143.713			29.421	55.664	85.085	-4.757	-4.330	-9.087
		375	1.500	-67.629	-85.574	-153.202			32.733	59.079	91.811	-2.942	-2.691	-5.633
		500	2.000	-74.697	-93.135	-167.832			38.247	63.701	101.947	-1.578	-1.473	-3.051
	300	300	1.000	-68.896	-78.856	-147.752			31.663	54.525	86.188	-4.576	-3.861	-8.438
		360	1.200	-72.304	-83.090	-155.394			34.310	57.337	91.647	-3.101	-2.632	-5.734
		450	1.500	-77.400	-88.801	-166.202			38.279	60.930	99.209	-1.921	-1.656	-3.577
		600	2.000	-85.867	-96.876	-182.743			44.888	65.752	110.641	-1.032	-0.919	-1.951
	350	350	1.000	-77.262	-81.120	-158.381			36.113	55.950	92.063	-3.203	-2.530	-5.733

A5. PL-2 Barrier

Cantilever Length: 0.5 m												
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-3.864	-2.951	-6.815	8.900	23.945	32.845	-0.018	-0.004	-0.022
		240	1.200	-3.889	-3.013	-6.902	9.040	24.040	33.080	-0.014	-0.004	-0.018
		300	1.500	-3.941	-3.013	-6.954	9.200	24.111	33.311	-0.011	-0.004	-0.015
		400	2.000	-3.971	-3.140	-7.111	9.480	24.253	33.733	-0.008	0.000	-0.008
	225	225	1.000	-3.938	-2.987	-6.925	9.180	24.040	33.220	-0.013	-0.004	-0.017
		270	1.200	-3.982	-3.083	-7.065	9.460	24.182	33.642	-0.009	0.000	-0.009
		338	1.500	-4.047	-3.196	-7.243	9.840	24.348	34.188	-0.005	0.000	-0.005
		450	2.000	-4.155	-3.325	-7.480	10.480	24.514	34.994	-0.003	0.000	-0.003
	250	250	1.000	-4.011	-3.021	-7.032	9.500	24.111	33.611	-0.009	-0.004	-0.013
		300	1.200	-4.060	-3.116	-7.176	9.780	24.253	34.033	-0.007	0.000	-0.007
		375	1.500	-4.132	-3.228	-7.360	10.220	24.395	34.615	-0.004	0.000	-0.004
		500	2.000	-4.252	-3.353	-7.605	10.920	24.561	35.481	-0.002	0.000	-0.002
	300	300	1.000	-4.156	-3.083	-7.239	10.080	24.253	34.333	-0.006	0.000	-0.006
		360	1.200	-4.214	-3.176	-7.390	10.400	24.395	34.795	-0.004	0.000	-0.004
		450	1.500	-4.300	-3.284	-7.584	10.940	24.514	35.454	-0.002	0.000	-0.002
		600	2.000	-4.444	-3.401	-7.845	11.800	24.632	36.432	-0.001	0.000	-0.001
	350	350	1.000	-4.301	-3.132	-7.433	10.660	24.372	35.032	-0.004	0.000	-0.004
4.5	200	200	1.000	-3.858	-2.776	-6.634	8.880	23.726	32.606	-0.018	-0.003	-0.021
		240	1.200	-3.882	-2.843	-6.725	9.020	23.844	32.864	-0.014	-0.003	-0.017
		300	1.500	-3.905	-2.902	-6.807	9.180	23.914	33.094	-0.011	0.000	-0.011
		400	2.000	-3.953	-2.997	-6.950	9.460	24.055	33.515	-0.008	0.000	-0.008
	225	225	1.000	-3.930	-2.816	-6.746	9.180	23.820	33.000	-0.012	-0.003	-0.015
		270	1.200	-3.973	-2.919	-6.892	9.420	23.985	33.405	-0.009	0.000	-0.009
		338	1.500	-4.037	-3.037	-7.074	9.820	24.149	33.969	-0.005	0.000	-0.005
		450	2.000	-4.145	-3.171	-7.316	10.480	24.314	34.794	-0.003	0.000	-0.003
	250	250	1.000	-4.002	-2.854	-6.856	9.460	23.914	33.374	-0.010	0.000	-0.010
		300	1.200	-4.050	-2.955	-7.005	9.760	24.055	33.815	-0.007	0.000	-0.007
		375	1.500	-4.121	-3.071	-7.192	10.180	24.220	34.400	-0.004	0.000	-0.004
		500	2.000	-4.242	-3.201	-7.443	10.920	24.361	35.281	-0.002	0.000	-0.002
	300	300	1.000	-4.147	-2.919	-7.066	10.060	24.055	34.115	-0.006	0.000	-0.006
		360	1.200	-4.203	-3.020	-7.223	10.400	24.196	34.596	-0.004	0.000	-0.004
		450	1.500	-4.290	-3.131	-7.421	10.920	24.314	35.234	-0.002	0.000	-0.002
		600	2.000	-4.436	-3.249	-7.685	11.800	24.455	36.255	-0.001	0.000	-0.001
	350	350	1.000	-4.291	-2.974	-7.265	10.640	24.173	34.813	-0.004	0.000	-0.004
6	200	200	1.000	-3.853	-2.722	-6.575	8.880	23.663	32.543	-0.018	-0.003	-0.021
		240	1.200	-3.878	-2.789	-6.667	9.020	23.780	32.800	-0.013	-0.003	-0.016
		300	1.500	-3.901	-2.850	-6.751	9.160	23.874	33.034	-0.011	0.000	-0.011
		400	2.000	-3.950	-2.947	-6.897	9.460	24.015	33.475	-0.008	0.000	-0.008
	225	225	1.000	-3.926	-2.763	-6.689	9.160	23.780	32.940	-0.012	-0.003	-0.015
		270	1.200	-3.969	-2.868	-6.837	9.440	23.921	33.361	-0.009	0.000	-0.009
		338	1.500	-4.035	-2.989	-7.024	9.840	24.085	33.925	-0.005	0.000	-0.005
		450	2.000	-4.144	-3.124	-7.268	10.480	24.273	34.753	-0.003	0.000	-0.003
	250	250	1.000	-3.999	-2.801	-6.800	9.460	23.874	33.334	-0.010	0.000	-0.010
		300	1.200	-4.047	-2.906	-6.953	9.740	24.015	33.755	-0.007	0.000	-0.007
		375	1.500	-4.119	-3.024	-7.143	10.200	24.156	34.356	-0.004	0.000	-0.004
		500	2.000	-4.243	-3.154	-7.397	10.940	24.320	35.260	-0.002	0.000	-0.002
	300	300	1.000	-4.144	-2.870	-7.014	10.040	24.015	34.055	-0.006	0.000	-0.006
		360	1.200	-4.202	-2.972	-7.174	10.380	24.156	34.536	-0.004	0.000	-0.004
		450	1.500	-4.290	-3.085	-7.375	10.940	24.273	35.213	-0.002	0.000	-0.002
		600	2.000	-4.439	-3.203	-7.642	11.800	24.414	36.214	-0.001	0.000	-0.001
	350	350	1.000	-4.289	-2.929	-7.218	10.640	24.132	34.772	-0.004	0.000	-0.004

Cantilever Length: 0.5 m												
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-3.853	-2.692	-6.545	8.880	23.646	32.526	-0.018	-0.003	-0.021
		240	1.200	-3.878	-2.761	-6.639	9.020	23.763	32.783	-0.013	-0.003	-0.016
		300	1.500	-3.902	-2.823	-6.725	9.160	23.857	33.017	-0.011	0.000	-0.011
		400	2.000	-3.950	-2.924	-6.874	9.460	23.998	33.458	-0.008	0.000	-0.008
	225	225	1.000	-3.926	-2.735	-6.661	9.180	23.740	32.920	-0.012	-0.003	-0.015
		270	1.200	-3.969	-2.843	-6.812	9.440	23.904	33.344	-0.009	0.000	-0.009
		338	1.500	-4.037	-2.965	-7.002	9.840	24.068	33.908	-0.005	0.000	-0.005
		450	2.000	-4.149	-3.101	-7.250	10.500	24.256	34.756	-0.003	0.000	-0.003
	250	250	1.000	-3.999	-2.776	-6.775	9.480	23.834	33.314	-0.010	0.000	-0.010
		300	1.200	-4.048	-2.883	-6.931	9.760	23.998	33.758	-0.007	0.000	-0.007
		375	1.500	-4.123	-3.000	-7.123	10.200	24.139	34.339	-0.004	0.000	-0.004
		500	2.000	-4.247	-3.133	-7.380	10.940	24.303	35.243	-0.002	0.000	-0.002
	300	300	1.000	-4.145	-2.847	-6.992	10.060	23.998	34.058	-0.006	0.000	-0.006
		360	1.200	-4.204	-2.950	-7.154	10.420	24.115	34.535	-0.004	0.000	-0.004
		450	1.500	-4.294	-3.062	-7.356	10.940	24.256	35.196	-0.002	0.000	-0.002
		600	2.000	-4.445	-3.181	-7.626	11.820	24.397	36.217	-0.001	0.000	-0.001
	350	350	1.000	-4.292	-2.905	-7.197	10.640	24.115	34.755	-0.004	0.000	-0.004
10	200	200	1.000	-3.853	-2.680	-6.533	8.880	23.626	32.506	-0.018	0.000	-0.018
		240	1.200	-3.878	-2.751	-6.629	9.040	23.720	32.760	-0.013	0.000	-0.013
		300	1.500	-3.903	-2.813	-6.716	9.180	23.814	32.994	-0.011	0.000	-0.011
		400	2.000	-3.953	-2.913	-6.866	9.460	23.978	33.438	-0.008	0.000	-0.008
	225	225	1.000	-3.927	-2.725	-6.652	9.180	23.720	32.900	0.012	-0.002	0.010
		270	1.200	-3.971	-2.833	-6.804	9.440	23.884	33.324	-0.009	0.000	-0.009
		338	1.500	-4.039	-2.956	-6.995	9.840	24.048	33.888	-0.005	0.000	-0.005
		450	2.000	-4.152	-3.092	-7.244	10.500	24.236	34.736	-0.003	0.000	-0.003
	250	250	1.000	-4.000	-2.766	-6.766	9.480	23.814	33.294	-0.010	0.000	-0.010
		300	1.200	-4.050	-2.872	-6.922	9.760	23.978	33.738	-0.007	0.000	-0.007
		375	1.500	-4.126	-2.991	-7.117	10.220	24.118	34.338	-0.004	0.000	-0.004
		500	2.000	-4.251	-3.124	-7.375	10.960	24.283	35.243	-0.002	0.000	-0.002
	300	300	1.000	-4.148	-2.837	-6.985	10.060	23.978	34.038	-0.006	0.000	-0.006
		360	1.200	-4.208	-2.939	-7.147	10.420	24.095	34.515	-0.004	0.000	-0.004
		450	1.500	-4.298	-3.053	-7.351	10.960	24.236	35.196	-0.002	0.000	-0.002
		600	2.000	-4.449	-3.172	-7.621	11.820	24.376	36.196	-0.001	0.000	-0.001
	350	350	1.000	-4.295	-2.896	-7.191	10.660	24.095	34.755	-0.004	0.000	-0.004
12	200	200	1.000	-3.855	-2.677	-6.532	8.880	23.626	32.506	-0.018	-0.002	-0.020
		240	1.200	-3.880	-2.748	-6.628	9.040	23.720	32.760	-0.013	-0.002	-0.015
		300	1.500	-3.905	-2.810	-6.715	9.180	23.814	32.994	-0.011	0.000	-0.011
		400	2.000	-3.954	-2.912	-6.866	9.460	23.978	33.438	-0.008	0.000	-0.008
	225	225	1.000	-3.928	-2.722	-6.650	9.180	23.720	32.900	-0.012	-0.002	-0.014
		270	1.200	-3.974	-2.830	-6.804	9.440	23.884	33.324	-0.009	0.000	-0.009
		338	1.500	-4.041	-2.955	-6.996	9.860	24.048	33.908	-0.005	0.000	-0.005
		450	2.000	-4.214	-2.979	-7.193	10.500	24.236	34.736	-0.003	0.000	-0.003
	250	250	1.000	-4.001	-2.765	-6.766	9.480	23.814	33.294	-0.010	0.000	-0.010
		300	1.200	-4.052	-2.871	-6.923	9.780	23.954	33.734	-0.007	0.000	-0.007
		375	1.500	-4.127	-2.990	-7.117	10.220	24.118	34.338	-0.004	0.000	-0.004
		500	2.000	-4.253	-3.122	-7.375	10.960	24.283	35.243	-0.002	0.000	-0.002
	300	300	1.000	-4.150	-2.836	-6.986	10.060	23.978	34.038	-0.006	0.000	-0.006
		360	1.200	-4.210	-2.938	-7.148	10.420	24.095	34.515	-0.004	0.000	-0.004
		450	1.500	-4.300	-3.052	-7.352	10.960	24.236	35.196	-0.002	0.000	-0.002
		600	2.000	-4.450	-3.171	-7.621	11.840	24.376	36.216	-0.001	0.000	-0.001
	350	350	1.000	-4.297	-2.895	-7.192	10.660	24.095	34.755	-0.004	0.000	-0.004

Cantilever Length: 1.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-8.936	-17.609	-26.545	-25.100	-42.5%	11.300	69.400	80.700	-0.163	-0.158	-0.321
		240	1.200	-9.038	-18.044	-27.082			11.600	70.440	82.040	-0.125	-0.119	-0.244
		300	1.500	-9.142	-18.442	-27.584			11.880	71.380	83.260	-0.100	-0.091	-0.191
		400	2.000	-9.346	-19.151	-28.497	-30.600	-59.8%	12.460	72.980	85.440	-0.067	-0.057	-0.124
	225	225	1.000	-9.235	-17.780	-27.015	-25.100	-41.2%	11.880	69.940	81.820	-0.117	-0.112	-0.229
		270	1.200	-9.420	-18.482	-27.902			12.420	71.580	84.000	-0.079	-0.071	-0.150
		338	1.500	-9.699	-19.381	-29.080			13.220	73.600	86.820	-0.047	-0.042	-0.089
		450	2.000	-10.153	-20.557	-30.710	-30.600	-48.9%	14.540	76.080	90.620	-0.025	-0.021	-0.046
	250	250	1.000	-9.534	-17.958	-27.492	-25.100	-39.8%	12.480	70.500	82.980	-0.088	-0.083	-0.171
		300	1.200	-9.559	-18.681	-28.240			13.080	72.160	85.240	-0.059	-0.053	-0.112
		375	1.500	-10.046	-19.598	-29.644			13.960	74.180	88.140	-0.036	-0.031	-0.067
		500	2.000	-10.553	-20.803	-31.356	-30.600	-47.1%	15.440	76.680	92.120	-0.019	-0.015	-0.034
	300	300	1.000	-10.133	-18.311	-28.444	-25.100	-37.1%	13.680	71.580	85.260	-0.053	-0.049	-0.102
		360	1.200	-10.378	-19.066	-29.444			14.380	73.260	87.640	-0.035	-0.032	-0.067
		450	1.500	-50.776	20.016	-30.760			15.440	75.280	90.720	-0.022	-0.018	-0.040
		600	2.000	-11.349	-21.240	-32.589	-30.600	-44.1%	17.200	77.740	94.940	-0.011	-0.010	-0.021
	350	350	1.000	-10.731	-18.638	-29.369	-25.100	-34.7%	14.860	72.560	87.420	-0.035	-0.032	-0.067
4.5	200	200	1.000	-8.921	-15.896	-24.817	-25.100	-57.9%	11.280	67.680	78.960	-0.162	-0.112	-0.274
		240	1.200	-9.023	-16.453	-25.476			11.560	68.900	80.460	-0.126	-0.084	-0.210
		300	1.500	-9.124	-16.966	-26.090			11.880	69.980	81.860	-0.099	-0.066	-0.165
		400	2.000	-9.325	-17.877	-27.202	-30.600	-71.2%	12.460	71.840	84.300	-0.067	-0.043	-0.110
	225	225	1.000	-9.218	-16.170	-25.388	-25.100	-55.2%	11.880	68.420	80.300	-0.117	-0.080	-0.197
		270	1.200	-9.400	-17.069	-26.469			12.400	70.320	82.720	-0.079	-0.052	-0.131
		338	1.500	-9.672	-18.220	-27.892			13.200	72.620	85.820	-0.048	-0.032	-0.080
		450	2.000	-10.119	-19.708	-29.827	-30.600	-55.3%	14.500	75.440	89.940	-0.025	-0.017	-0.042
	250	250	1.000	-9.514	-16.440	-25.954	-25.100	-52.7%	12.480	69.140	81.620	-0.087	-0.061	-0.148
		300	1.200	-9.716	-17.362	-27.078			13.040	71.060	84.100	-0.059	-0.040	-0.099
		375	1.500	-10.016	-18.529	-28.545			13.940	73.340	87.280	-0.036	-0.023	-0.059
		500	2.000	-10.511	-20.040	-30.551	-30.600	-52.7%	15.380	76.140	91.520	-0.019	-0.012	-0.031
	300	300	1.000	-10.107	-16.946	-27.053	-25.100	-48.1%	13.640	70.480	84.120	-0.053	-0.037	-0.090
		360	1.200	-10.347	-17.903	-28.250			14.340	72.380	86.720	-0.036	-0.025	-0.061
		450	1.500	-10.705	-19.097	-29.802			15.400	74.620	90.020	-0.022	-0.015	-0.037
		600	2.000	-11.298	-20.610	-31.908	-30.600	-48.5%	17.160	77.320	94.480	-0.011	-0.008	-0.019
	350	350	1.000	-10.698	-17.397	-28.095	-25.100	-44.3%	14.820	71.620	86.440	-0.035	-0.025	-0.060
6	200	200	1.000	-8.915	-15.261	-24.176	-25.100	-64.5%	11.280	67.180	78.460	-0.163	-0.090	-0.253
		240	1.200	-9.015	-15.887	-24.902			11.560	68.480	80.040	-0.125	-0.070	-0.195
		300	1.500	-9.114	-16.461	-25.575			11.860	69.620	81.480	-0.099	-0.055	-0.154
		400	2.000	-9.313	-17.473	-26.786	-30.600	-75.1%	12.440	71.560	84.000	-0.066	-0.038	-0.104
	225	225	1.000	-9.210	-15.588	-24.798	-25.100	-61.0%	11.860	68.000	79.860	-0.116	-0.067	-0.183
		270	1.200	-9.389	-16.591	-25.980			12.380	70.000	82.380	-0.079	-0.044	-0.123
		338	1.500	-9.659	-17.860	-27.519			13.180	72.380	85.560	-0.047	-0.028	-0.075
		450	2.000	-10.101	-19.474	-29.575	-30.600	-57.1%	14.500	75.260	89.760	-0.025	-0.015	-0.040
	250	250	1.000	-9.505	-15.902	-25.407	-25.100	-57.8%	12.460	68.780	81.240	-0.087	-0.051	-0.138
		300	1.200	-9.703	-16.926	-26.629			13.040	70.760	83.800	-0.058	-0.035	-0.093
		375	1.500	-10.000	-18.206	-28.206			13.920	73.120	87.040	-0.036	-0.021	-0.057
		500	2.000	-10.493	-19.834	-30.327	-30.600	-54.3%	15.380	75.980	91.360	-0.018	-0.012	-0.030
	300	300	1.000	-10.093	-16.483	-26.576	-25.100	-52.3%	13.640	70.160	83.800	-0.053	-0.032	-0.085
		360	1.200	-10.331	-17.538	-27.869			14.340	72.120	86.460	-0.036	-0.021	-0.057
		450	1.500	-10.685	-18.838	-29.523			15.380	74.440	89.820	-0.022	-0.013	-0.035
		600	2.000	-11.275	-20.454	-31.729	-30.600	-49.6%	17.140	77.200	94.340	-0.011	-0.008	-0.019
	350	350	1.000	-10.681	-16.999	-27.680	-25.100	-47.7%	14.800	71.360	86.160	-0.035	-0.021	-0.056

Cantilever Length: 1.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-8.906	-14.915	-23.821	-25.100	-68.3%	11.260	66.980	78.240	-0.162	-0.080	-0.242
		240	1.200	-9.006	-15.586	-24.592			11.560	68.280	79.840	-0.125	-0.063	-0.188
		300	1.500	-9.104	-16.198	-25.302			11.860	69.440	81.300	-0.099	-0.051	-0.150
		400	2.000	-9.301	-17.268	-26.569	-30.600	-77.2%	12.420	71.420	83.840	-0.066	-0.035	-0.101
	225	225	1.000	-9.200	-15.273	-24.473	-25.100	-64.3%	11.860	67.800	79.660	-0.117	-0.059	-0.176
		270	1.200	-9.378	-16.342	-25.720			12.380	69.820	82.200	-0.078	-0.042	-0.120
		338	1.500	-9.646	-17.680	-27.326			13.180	72.240	85.420	-0.048	-0.025	-0.073
		450	2.000	-10.088	-19.357	-29.445	-30.600	-58.1%	14.480	75.160	89.640	-0.025	-0.015	-0.040
	250	250	1.000	-9.494	-15.616	-25.110	-25.100	-60.7%	12.440	68.580	81.020	-0.088	-0.046	-0.134
		300	1.200	-9.691	-16.705	-26.396			13.020	70.600	83.620	-0.058	-0.032	-0.090
		375	1.500	-9.987	-18.049	-28.036			13.900	73.000	86.900	-0.036	-0.020	-0.056
		500	2.000	-10.479	-19.736	-30.215	-30.600	-55.0%	15.360	75.900	91.260	-0.019	-0.011	-0.030
	300	300	1.000	-10.081	-16.253	-26.334	-25.100	-54.4%	13.620	70.000	83.620	-0.053	-0.030	-0.083
		360	1.200	-10.318	-17.367	-27.685			14.320	71.980	86.300	-0.035	-0.021	-0.056
		450	1.500	-10.672	-18.722	-29.394			15.360	74.340	89.700	-0.022	-0.013	-0.035
		600	2.000	-11.265	-20.383	-31.648	-30.600	-50.1%	17.140	77.120	94.260	-0.012	-0.007	-0.019
	350	350	1.000	-10.667	-16.818	-27.485	-25.100	-49.2%	14.780	71.220	86.000	-0.035	-0.020	-0.055
10	200	200	1.000	-8.900	-14.754	-23.654	-25.100	-70.1%	11.260	66.860	78.120	-0.162	-0.075	-0.237
		240	1.200	-8.999	-15.448	-24.447			11.540	68.180	79.720	-0.125	-0.059	-0.184
		300	1.500	-9.098	-16.077	-25.175			11.840	69.340	81.180	-0.099	-0.048	-0.147
		400	2.000	-9.295	-17.173	-26.468	-30.600	-78.2%	12.440	71.320	83.760	-0.066	-0.033	-0.099
	225	225	1.000	-9.194	-15.131	-24.325	-25.100	-65.9%	11.840	67.700	79.540	-0.117	-0.056	-0.173
		270	1.200	-9.371	-16.233	-25.604			12.360	69.740	82.100	-0.078	-0.040	-0.118
		338	1.500	-9.640	-17.602	-27.242			13.160	72.180	85.340	-0.047	-0.025	-0.072
		450	2.000	-10.084	-19.307	-29.391	-30.600	-58.5%	14.480	75.120	89.600	-0.025	-0.015	-0.040
	250	250	1.000	-9.487	-15.495	-24.982	-25.100	-62.0%	12.440	68.480	80.920	-0.087	-0.044	-0.131
		300	1.200	-9.685	-16.613	-26.298			13.020	70.520	83.540	-0.059	-0.031	-0.090
		375	1.500	-9.981	-17.985	-27.966			13.900	72.920	86.820	-0.036	-0.020	-0.056
		500	2.000	-10.477	-19.696	-30.173	-30.600	-55.4%	15.380	75.840	91.220	-0.019	-0.011	-0.030
	300	300	1.000	-10.074	-16.166	-26.240	-25.100	-55.3%	13.600	69.920	83.520	-0.053	-0.029	-0.082
		360	1.200	-10.311	-17.303	-27.614			14.320	71.920	86.240	-0.036	-0.020	-0.056
		450	1.500	-10.667	-18.678	-29.345			15.380	74.280	89.660	-0.022	-0.013	-0.035
		600	2.000	-11.265	-20.356	-31.621	-30.600	-50.3%	17.120	77.100	94.220	-0.012	-0.007	-0.019
	350	350	1.000	-10.660	-16.754	-27.414	-25.100	-49.8%	14.780	71.160	85.940	-0.035	-0.020	-0.055
12	200	200	1.000	-8.896	-14.666	-23.562	-25.100	-71.1%	11.260	66.780	78.040	-0.162	-0.072	-0.234
		240	1.200	-8.995	-15.373	-24.368			11.540	68.120	79.660	-0.125	-0.058	-0.183
		300	1.500	-9.094	-16.013	-25.107			11.840	69.280	81.120	-0.099	-0.047	-0.146
		400	2.000	-9.292	-17.124	-26.416	-30.600	-78.7%	12.420	71.280	83.700	-0.066	-0.034	-0.100
	225	225	1.000	-9.190	-15.059	-24.249	-25.100	-66.7%	11.820	67.640	79.460	-0.117	-0.055	-0.172
		270	1.200	-9.367	-16.179	-25.546			12.360	69.680	82.040	-0.078	-0.039	-0.117
		338	1.500	-9.638	-17.564	-27.202			13.160	72.140	85.300	-0.047	-0.025	-0.072
		450	2.000	-10.084	-19.285	-29.369	-30.600	-58.7%	14.480	75.100	89.580	-0.025	-0.015	-0.040
	250	250	1.000	-9.483	-15.436	-24.919	-25.100	-62.6%	12.420	68.440	80.860	-0.087	-0.044	-0.131
		300	1.200	-9.681	-16.570	-26.251			13.000	70.480	83.480	-0.058	-0.031	-0.089
		375	1.500	-9.979	-17.955	-27.934			13.900	72.900	86.800	-0.036	-0.020	-0.056
		500	2.000	-10.477	-19.679	-30.156	-30.600	-55.5%	15.360	75.840	91.200	-0.019	-0.011	-0.030
	300	300	1.000	-10.070	-16.127	-26.197	-25.100	-55.6%	13.600	69.880	83.480	-0.053	-0.030	-0.083
		360	1.200	-10.309	-17.274	-27.583			14.300	71.900	86.200	-0.036	-0.020	-0.056
		450	1.500	-10.667	-18.658	-29.325			15.380	74.260	89.640	-0.022	-0.013	-0.035
		600	2.000	-11.267	-20.346	-31.613	-30.600	-50.4%	17.140	77.080	94.220	-0.012	-0.007	-0.019
	350	350	1.000	-10.658	-16.726	-27.384	-25.100	-50.1%	14.780	71.120	85.900	-0.035	-0.020	-0.055

Cantilever Length: 1.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-15.279	-37.301	-52.580	-27.100	27.3%	13.860	49.840	63.700	-0.607	-1.105	-1.712
		240	1.200	-15.517	-37.963	-53.480			14.340	51.040	65.380	-0.469	-0.832	-1.301
		300	1.500	-15.754	-38.582	-54.337			14.780	52.160	66.940	-0.372	-0.643	-1.015
		400	2.000	-16.226	-39.710	-55.936	-34.000	14.4%	15.680	54.140	69.820	-0.249	-0.409	-0.658
	225	225	1.000	-15.955	-37.518	-53.473	-27.100	27.8%	14.780	50.300	65.080	-0.442	-0.779	-1.221
		270	1.200	-16.382	-38.596	-54.978			15.600	52.260	67.860	-0.297	-0.501	-0.798
		338	1.500	-17.024	-40.028	-57.052			16.820	54.760	71.580	-0.181	-0.288	-0.469
		450	2.000	-18.071	-41.989	-60.060	-34.000	19.0%	18.840	58.040	76.880	-0.096	-0.140	-0.236
	250	250	1.000	-16.632	-37.751	-54.383	-27.100	28.2%	15.680	50.820	66.500	-0.333	-0.570	-0.903
		300	1.200	-17.106	-38.868	-55.974			16.600	52.820	69.420	-0.224	-0.368	-0.592
		375	1.500	-17.812	-40.341	-58.153			19.520	53.800	73.320	-0.137	-0.213	-0.350
		500	2.000	-18.980	-42.374	-61.354	-34.000	19.8%	20.200	58.740	78.940	-0.073	-0.104	-0.177
	300	300	1.000	-17.989	-38.240	-56.229	-27.100	29.1%	17.520	51.880	69.400	-0.207	-0.332	-0.539
		360	1.200	-18.557	-39.423	-57.980			18.620	53.960	72.580	-0.139	-0.214	-0.353
		450	1.500	-19.402	-40.978	-60.380			20.240	56.600	76.840	-0.085	-0.125	-0.210
		600	2.000	-20.799	-43.099	-63.898	-34.000	21.1%	22.920	60.060	82.980	-0.045	-0.061	-0.106
	350	350	1.000	-19.347	-38.722	-58.069	-27.100	30.0%	19.360	52.900	72.260	-0.138	-0.211	-0.349
4.5	200	200	1.000	-15.177	-28.056	-43.233	-27.100	3.4%	13.640	45.080	58.720	-0.607	-0.748	-1.355
		240	1.200	-15.407	-28.927	-44.334			14.100	46.540	60.640	-0.468	-0.566	-1.034
		300	1.500	-15.637	-29.749	-45.386			14.540	47.900	62.440	-0.372	-0.439	-0.811
		400	2.000	-16.096	-31.264	-47.360	-34.000	-8.8%	15.420	50.320	65.740	-0.248	-0.285	-0.533
	225	225	1.000	-15.849	-28.461	-44.310	-27.100	4.8%	14.560	45.840	60.400	-0.441	-0.531	-0.972
		270	1.200	-16.263	-29.897	-46.160			15.340	48.220	63.560	-0.297	-0.345	-0.642
		338	1.500	-16.885	-31.834	-48.719			16.540	51.260	67.800	-0.181	-0.203	-0.384
		450	2.000	-17.907	-34.522	-52.429	-34.000	1.5%	18.540	55.240	73.780	-0.096	-0.103	-0.199
	250	250	1.000	-16.520	-28.876	-45.396	-27.100	6.2%	15.440	46.640	62.080	-0.333	-0.392	-0.725
		300	1.200	-16.980	-30.371	-47.351			16.320	49.060	65.380	-0.223	-0.256	-0.479
		375	1.500	-17.666	-32.367	-50.033			17.640	52.140	69.780	-0.137	-0.152	-0.289
		500	2.000	-18.803	-35.149	-53.952	-34.000	3.3%	19.860	56.200	76.060	-0.182	0.077	-0.105
	300	300	1.000	-17.865	-29.692	-47.557	-27.100	8.7%	17.240	48.160	65.400	-0.206	-0.232	-0.438
		360	1.200	-18.414	-31.283	-49.697			18.300	50.640	68.940	-0.138	-0.154	-0.292
		450	1.500	-19.235	-33.388	-52.623			19.880	53.780	73.660	-0.085	-0.092	-0.177
		600	2.000	-20.595	-36.272	-56.867	-34.000	6.3%	22.520	57.880	80.400	-0.044	-0.048	-0.092
	350	350	1.000	-19.208	-30.447	-49.655	-27.100	11.0%	19.020	49.540	68.560	-0.138	-0.151	-0.289
6	200	200	1.000	-15.162	-24.256	-39.418	-27.100	-11.7%	13.660	43.420	57.080	-0.606	-0.583	-1.189
		240	1.200	-15.391	-25.271	-40.662			14.100	45.040	59.140	-0.469	-0.445	-0.914
		300	1.500	-15.619	-26.231	-41.850			14.540	46.520	61.060	-0.372	-0.349	-0.721
		400	2.000	-16.074	-27.998	-44.072	-34.000	-21.4%	15.420	49.160	64.580	-0.248	-0.231	-0.479
	225	225	1.000	-15.832	-24.800	-40.632	-27.100	-9.3%	14.540	44.380	58.920	-0.441	-0.418	-0.859
		270	1.200	-16.242	-26.472	-42.714			15.340	46.960	62.300	-0.296	-0.277	-0.573
		338	1.500	-16.860	-28.721	-45.581			16.540	50.260	66.800	-0.180	-0.168	-0.348
		450	2.000	-17.869	-31.819	-49.688	-34.000	-6.9%	18.520	54.540	73.060	-0.096	-0.088	-0.184
	250	250	1.000	-16.501	-25.336	-41.837	-27.100	-7.0%	15.420	45.320	60.740	-0.333	-0.312	-0.645
		300	1.200	-16.956	-27.074	-44.030			16.320	47.940	64.260	-0.223	-0.208	-0.431
		375	1.500	-17.635	-29.381	-47.016			17.640	51.240	68.880	-0.137	-0.127	-0.264
		500	2.000	-18.760	-32.563	-51.323	-34.000	-4.4%	19.840	55.580	75.420	-0.072	-0.067	-0.139
	300	300	1.000	-17.837	-26.353	-44.190	-27.100	-2.8%	17.220	47.040	64.260	-0.206	-0.189	-0.395
		360	1.200	-18.381	-28.194	-46.575			18.280	49.700	67.980	-0.138	-0.127	-0.265
		450	1.500	-19.192	-30.611	-49.803			19.840	53.060	72.900	-0.085	-0.078	-0.163
		600	2.000	-20.538	-33.874	-54.412	-34.000	-0.4%	22.480	57.380	79.860	-0.045	-0.042	-0.087
	350	350	1.000	-19.172	-27.272	-46.444	-27.100	0.6%	18.980	48.560	67.540	-0.138	-0.124	-0.262

Cantilever Length: 1.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-15.153	-22.009	-37.162	-27.100	-23.1%	13.640	42.600	56.240	-0.606	-0.475	-1.081
		240	1.200	-15.380	-23.152	-38.532			14.080	44.320	58.400	-0.468	-0.368	-0.836
		300	1.500	-15.606	-24.227	-39.833			14.520	45.880	60.400	-0.372	-0.293	-0.665
		400	2.000	-16.057	-26.193	-42.250	-34.000	-29.8%	15.420	48.640	64.060	-0.248	-0.198	-0.446
	225	225	1.000	-15.819	-22.663	-38.482	-27.100	-19.6%	14.520	43.660	58.180	-0.440	-0.347	-0.787
		270	1.200	-16.226	-24.532	-40.758			15.320	46.360	61.680	-0.296	-0.236	-0.532
		338	1.500	-16.838	-27.017	-43.855			16.520	49.800	66.320	-0.180	-0.147	-0.327
		450	2.000	-17.840	-30.371	-48.211	-34.000	-11.9%	18.500	54.220	72.720	-0.096	-0.081	-0.177
	250	250	1.000	-16.486	-23.292	-39.778	-27.100	-16.3%	15.420	44.660	60.080	-0.333	-0.262	-0.595
		300	1.200	-16.936	-25.225	-42.161			16.300	47.400	63.700	-0.223	-0.180	-0.403
		375	1.500	-17.610	-27.759	-45.369			17.620	50.820	68.440	-0.136	-0.114	-0.250
		500	2.000	-18.727	-31.182	-49.909	-34.000	-9.0%	19.820	55.280	75.100	-0.072	-0.062	-0.134
	300	300	1.000	-17.816	-24.466	-42.282	-27.100	-10.8%	17.180	46.480	63.660	-0.206	-0.164	-0.370
		360	1.200	-18.355	-26.501	-44.856			18.240	49.240	67.480	-0.138	-0.114	-0.252
		450	1.500	-19.160	-29.131	-48.291			19.820	52.700	72.520	-0.085	-0.072	-0.157
		600	2.000	-20.498	-32.599	-53.097	-34.000	-4.3%	22.460	57.140	79.600	-0.045	-0.040	-0.085
	350	350	1.000	-19.145	-25.523	-44.668	-27.100	-6.2%	18.960	48.060	67.020	-0.138	-0.111	-0.249
10	200	200	1.000	-15.144	-20.997	-36.141	-27.100	-29.1%	13.636	42.278	55.913	-0.605	-0.422	-1.028
		240	1.200	-15.369	-22.216	-37.585			14.076	44.030	58.106	-0.468	-0.332	-0.800
		300	1.500	-15.593	-23.357	-38.950			14.516	45.627	60.143	-0.371	-0.268	-0.639
		400	2.000	-16.041	-25.424	-41.465	-34.000	-33.7%	15.395	48.434	63.830	-0.248	-0.185	-0.433
	225	225	1.000	-15.808	-21.710	-37.518	-27.100	-24.8%	14.520	43.359	57.879	-0.441	-0.313	-0.754
		270	1.200	-16.212	-23.692	-39.904			15.311	46.117	61.428	-0.296	-0.217	-0.513
		338	1.500	-16.820	-26.297	-43.117			16.507	49.601	66.108	-0.180	-0.139	-0.319
		450	2.000	-17.820	-29.754	-47.574	-34.000	-14.3%	18.476	54.072	72.548	-0.095	-0.078	-0.173
	250	250	1.000	-16.472	-22.395	-38.867	-27.100	-21.0%	15.400	44.380	59.780	-0.332	-0.240	-0.572
		300	1.200	-16.920	-24.438	-41.358			16.280	47.160	63.440	-0.223	-0.169	-0.392
		375	1.500	-17.590	-27.083	-44.673			17.600	50.640	68.240	-0.137	-0.108	-0.245
		500	2.000	-18.705	-30.595	-49.300	-34.000	-11.1%	19.798	55.151	74.949	-0.072	-0.061	-0.133
	300	300	1.000	-17.798	-23.672	-41.470	-27.100	-14.5%	17.160	46.240	63.400	-0.205	-0.153	-0.358
		360	1.200	-18.334	-25.806	-44.140			18.220	49.060	67.280	-0.138	-0.108	-0.246
		450	1.500	-19.137	-28.525	-47.662			19.800	52.560	72.360	-0.084	-0.070	-0.154
		600	2.000	-20.475	-32.057	-52.532	-34.000	-6.1%	22.440	57.040	79.480	-0.045	-0.039	-0.084
	350	350	1.000	-19.123	-24.813	-43.936	-27.100	-9.2%	18.920	47.860	66.780	-0.138	-0.105	-0.243
12	200	200	1.000	-15.135	-20.471	-35.606	-27.100	-32.4%	13.627	42.110	55.737	-0.605	-0.395	-1.000
		240	1.200	-15.359	-21.735	-37.094			14.066	43.877	57.943	-0.468	-0.313	-0.781
		300	1.500	-15.583	-22.912	-38.495			14.506	45.485	59.991	-0.371	-0.255	-0.626
		400	2.000	-16.029	-25.030	-41.060	-34.000	-35.8%	15.385	48.309	63.694	-0.248	-0.178	-0.426
	225	225	1.000	-15.798	-21.224	-37.022	-27.100	-27.7%	14.509	43.198	57.707	-0.440	-0.296	-0.736
		270	1.200	-16.200	-23.271	-39.471			15.300	45.978	61.278	-0.295	-0.208	-0.504
		338	1.500	-16.807	-25.934	-42.741			16.496	49.485	65.981	-0.180	-0.135	-0.315
		450	2.000	-17.807	-29.436	-47.242	-34.000	-15.5%	18.467	53.981	72.449	-0.095	-0.077	-0.172
	250	250	1.000	-16.460	-21.948	-38.408	-27.100	-23.5%	15.391	44.230	59.621	-0.332	-0.230	-0.562
		300	1.200	-16.907	-24.050	-40.957			16.270	47.036	63.306	-0.223	-0.162	-0.385
		375	1.500	-17.576	-26.746	-44.322			17.589	50.543	68.132	-0.136	-0.106	-0.242
		500	2.000	-18.692	-30.295	-48.987	-34.000	-12.2%	19.791	55.073	74.863	-0.072	-0.060	-0.132
	300	300	1.000	-17.784	-23.292	-41.077	-27.100	-16.3%	17.155	46.115	63.270	-0.205	-0.149	-0.354
		360	1.200	-18.319	-25.473	-43.792			18.210	48.951	67.161	-0.138	-0.106	-0.244
		450	1.500	-19.122	-28.226	-47.348			19.794	52.474	72.268	-0.084	-0.069	-0.153
		600	2.000	-20.463	-31.780	-52.244	-34.000	-7.0%	22.438	56.974	79.412	-0.045	-0.039	-0.084
	350	350	1.000	-19.107	-24.481	-43.588	-27.100	-10.7%	18.919	47.756	66.675	-0.137	-0.103	-0.241

Cantilever Length: 2.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-22.979	-58.758	-81.736	-27.200	53.7%	16.857	47.795	64.652	-1.581	-3.499	-5.080
		240	1.200	-23.413	-59.327	-82.740			17.490	48.807	66.297	-1.224	-2.645	-3.868
		300	1.500	-23.845	-59.867	-83.711			18.120	49.753	67.874	-0.972	-2.054	-3.026
		400	2.000	-24.702	-60.866	-85.568	-31.900	47.6%	19.371	51.475	70.846	-0.651	-1.319	-1.970
	225	225	1.000	-24.186	-58.937	-83.123	-27.200	53.8%	18.093	48.180	66.273	-1.159	-2.461	-3.620
		270	1.200	-24.964	-59.870	-84.834			19.228	49.827	69.056	-0.780	-1.595	-2.375
		338	1.500	-26.127	-61.143	-87.270			20.928	52.018	72.945	-0.476	-0.926	-1.402
		450	2.000	-28.023	-62.935	-90.958	-31.900	49.3%	23.697	55.021	78.718	-0.253	-0.457	-0.710
	250	250	1.000	-25.395	-59.134	-84.528	-27.200	54.0%	19.333	48.601	67.934	-0.881	-1.797	-2.678
		300	1.200	-26.257	-60.104	-86.361			20.592	50.308	70.901	-0.593	-1.165	-1.758
		375	1.500	-27.537	-61.418	-88.955			22.463	52.562	75.025	-0.364	-0.680	-1.044
		500	2.000	-29.649	-63.288	-92.938	-31.900	49.6%	25.550	55.682	81.231	-0.193	-0.335	-0.528
	300	300	1.000	-27.817	-59.556	-87.373	-27.200	54.3%	21.824	49.504	71.328	-0.551	-1.044	-1.595
		360	1.200	-28.847	-60.598	-89.445			23.330	51.320	74.650	-0.371	-0.678	-1.049
		450	1.500	-30.379	-62.002	-92.381			25.568	53.706	79.274	-0.228	-0.396	-0.625
		600	2.000	-32.905	-63.983	-96.887	-31.900	50.1%	29.261	56.976	86.236	-0.121	-0.196	-0.317
	350	350	1.000	-30.242	-59.988	-90.230	-27.200	54.7%	24.324	50.420	74.744	-0.373	-0.661	-1.034
4.5	200	200	1.000	-22.677	-41.747	-64.424	-27.200	34.8%	16.085	36.027	52.112	-1.578	-2.343	-3.921
		240	1.200	-23.091	-42.565	-65.656			16.679	37.174	53.854	-1.221	-1.776	-2.997
		300	1.500	-23.504	-43.354	-66.858			17.273	38.255	55.528	-0.970	-1.383	-2.353
		400	2.000	-24.328	-44.847	-69.175	-31.900	28.9%	18.460	40.243	58.703	-0.649	-0.894	-1.543
	225	225	1.000	-23.875	-42.146	-66.021	-27.200	35.5%	17.287	36.660	53.947	-1.157	-1.654	-2.811
		270	1.200	-24.619	-43.519	-68.137			18.357	38.543	56.901	-0.778	-1.078	-1.856
		338	1.500	-25.739	-45.444	-71.183			19.971	41.079	61.050	-0.475	-0.632	-1.107
		450	2.000	-27.574	-48.259	-75.833	-31.900	33.9%	22.624	44.617	67.241	-0.252	-0.318	-0.570
	250	250	1.000	-25.073	-42.565	-67.638	-27.200	36.1%	18.492	37.320	55.812	-0.879	-1.213	-2.092
		300	1.200	-25.900	-44.012	-69.911			19.681	39.276	58.957	-0.592	-0.792	-1.383
		375	1.500	-27.134	-46.021	-73.156			21.460	41.885	63.345	-0.363	-0.467	-0.830
		500	2.000	-29.180	-48.975	-78.155	-31.900	34.9%	24.418	45.548	69.967	-0.192	-0.236	-0.428
	300	300	1.000	-27.474	-43.415	-70.888	-27.200	37.3%	20.905	38.643	59.548	-0.550	-0.711	-1.261
		360	1.200	-28.464	-44.991	-73.455			22.330	40.714	63.044	-0.371	-0.466	-0.836
		450	1.500	-29.943	-47.162	-77.105			24.461	43.455	67.917	-0.228	-0.277	-0.504
		600	2.000	-32.393	-50.299	-82.692	-31.900	36.6%	28.005	47.251	75.255	-0.121	-0.141	-0.262
	350	350	1.000	-29.876	-44.229	-74.105	-27.200	38.5%	23.320	39.887	63.207	-0.372	-0.454	-0.826
6	200	200	1.000	-22.605	-34.239	-56.844	-27.200	20.6%	16.017	32.134	48.151	-1.576	-1.788	-3.364
		240	1.200	-23.013	-35.270	-58.284			16.609	33.410	50.020	-1.220	-1.362	-2.582
		300	1.500	-23.421	-36.270	-59.691			17.201	34.613	51.814	-0.969	-1.067	-2.035
		400	2.000	-24.234	-38.173	-62.407	-31.900	16.4%	18.383	36.825	55.207	-0.649	-0.698	-1.346
	225	225	1.000	-23.798	-34.845	-58.643	-27.200	21.9%	17.211	32.960	50.171	-1.156	-1.270	-2.426
		270	1.200	-24.532	-36.587	-61.119			18.275	35.048	53.324	-0.777	-0.836	-1.614
		338	1.500	-25.637	-39.043	-64.681			19.881	37.854	57.734	-0.475	-0.499	-0.974
		450	2.000	-27.449	-42.642	-70.092	-31.900	25.2%	22.520	41.748	64.268	-0.252	-0.258	-0.511
	250	250	1.000	-24.992	-35.458	-60.449	-27.200	23.3%	18.404	33.787	52.191	-0.878	-0.937	-1.815
		300	1.200	-25.807	-37.297	-63.103			19.585	35.943	55.529	-0.591	-0.619	-1.210
		375	1.500	-27.024	-39.858	-66.882			21.354	38.809	60.163	-0.363	-0.373	-0.735
		500	2.000	-29.044	-43.618	-72.661	-31.900	26.9%	24.296	42.808	67.104	-0.192	-0.194	-0.386
	300	300	1.000	-27.379	-36.648	-64.027	-27.200	25.8%	20.789	35.361	56.150	-0.549	-0.557	-1.106
		360	1.200	-28.355	-38.650	-67.004			22.203	37.618	59.821	-0.370	-0.371	-0.741
		450	1.500	-29.812	-41.405	-71.217			24.320	40.592	64.913	-0.228	-0.225	-0.453
		600	2.000	-32.228	-45.366	-77.595	-31.900	29.7%	27.842	44.686	72.528	-0.121	-0.119	-0.240
	350	350	1.000	-29.765	-37.748	-67.513	-27.200	27.9%	23.171	36.774	59.945	-0.372	-0.361	-0.733

Cantilever Length: 2.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-22.586	-29.403	-51.989	-27.200	7.5%	16.021	30.026	46.047	-1.575	-1.403	-2.978
		240	1.200	-22.991	-30.656	-53.648			16.612	31.411	48.023	-1.219	-1.080	-2.298
		300	1.500	-23.396	-31.870	-55.266			17.203	32.712	49.915	-0.968	-0.854	-1.822
		400	2.000	-24.204	-34.172	-58.376	-31.900	6.6%	18.382	35.093	53.475	-0.648	-0.571	-1.219
	225	225	1.000	-23.775	-30.215	-53.990	-27.200	10.0%	17.208	31.000	48.208	-1.155	-1.008	-2.163
		270	1.200	-24.504	-32.325	-56.829			18.270	33.245	51.515	-0.777	-0.676	-1.453
		338	1.500	-25.600	-35.281	-60.882			19.872	36.239	56.111	-0.474	-0.415	-0.890
		450	2.000	-27.398	-39.547	-66.945	-31.900	19.3%	22.505	40.349	62.854	-0.252	-0.224	-0.476
	250	250	1.000	-24.964	-31.010	-55.974	-27.200	12.3%	18.394	31.938	50.332	-0.878	-0.753	-1.630
		300	1.200	-25.772	-33.229	-59.002			19.573	34.239	53.811	-0.591	-0.508	-1.099
		375	1.500	-26.980	-36.295	-63.274			21.337	37.276	58.612	-0.362	-0.315	-0.677
		500	2.000	-28.982	-40.716	-69.698	-31.900	21.7%	24.272	41.468	65.740	-0.192	-0.171	-0.363
	300	300	1.000	-27.340	-32.510	-59.850	-27.200	16.3%	20.763	33.662	54.425	-0.549	-0.458	-1.007
		360	1.200	-28.307	-34.913	-63.220			22.173	36.047	58.220	-0.370	-0.312	-0.682
		450	1.500	-29.751	-38.181	-67.932			24.286	39.171	63.457	-0.227	-0.196	-0.423
		600	2.000	-32.146	-42.781	-74.927	-31.900	25.4%	27.803	43.429	71.232	-0.121	-0.108	-0.229
	350	350	1.000	-29.713	-33.876	-63.589	-27.200	19.7%	23.127	35.174	58.301	-0.372	-0.303	-0.675
10	200	200	1.000	-22.575	-27.029	-49.604	-27.200	-0.6%	16.014	29.144	45.159	-1.574	-1.199	-2.773
		240	1.200	-22.979	-28.444	-51.422			16.604	30.588	47.192	-1.218	-0.934	-2.152
		300	1.500	-23.381	-29.806	-53.188			17.192	31.940	49.132	-0.967	-0.748	-1.715
		400	2.000	-24.184	-32.371	-56.555	-31.900	1.5%	18.369	34.402	52.771	-0.647	-0.510	-1.158
	225	225	1.000	-23.761	-27.977	-51.738	-27.200	2.8%	17.198	30.180	47.378	-1.154	-0.873	-2.027
		270	1.200	-24.486	-30.343	-54.829			18.256	32.504	50.760	-0.776	-0.598	-1.374
		338	1.500	-25.576	-33.618	-59.194			19.854	35.586	55.440	-0.474	-0.377	-0.851
		450	2.000	-27.364	-38.247	-65.611	-31.900	16.6%	22.484	39.778	62.262	-0.252	-0.210	-0.462
	250	250	1.000	-24.946	-28.892	-53.839	-27.200	5.9%	18.379	31.161	49.540	-0.877	-0.660	-1.537
		300	1.200	-25.750	-31.371	-57.121			19.554	33.534	53.089	-0.590	-0.455	-1.045
		375	1.500	-26.950	-34.748	-61.699			21.315	36.650	57.966	-0.362	-0.290	-0.652
		500	2.000	-28.943	-39.514	-68.457	-31.900	19.3%	24.248	40.915	65.163	-0.192	-0.162	-0.354
	300	300	1.000	-27.315	-30.608	-57.923	-27.200	11.1%	20.740	32.947	53.687	-0.549	-0.411	-0.960
		360	1.200	-28.275	-33.272	-61.548			22.147	35.399	57.547	-0.370	-0.287	-0.656
		450	1.500	-29.711	-36.836	-66.547			24.258	38.593	62.851	-0.227	-0.184	-0.411
		600	2.000	-32.097	-41.734	-73.831	-31.900	23.6%	27.776	42.909	70.685	-0.120	-0.104	-0.224
	350	350	1.000	-29.680	-32.160	-61.840	-27.200	15.4%	23.097	34.511	57.608	-0.371	-0.277	-0.649
12	200	200	1.000	-22.564	-25.753	-48.317	-27.200	-5.6%	16.005	28.703	44.708	-1.574	-1.085	-2.658
		240	1.200	-22.966	-27.281	-50.247			16.592	30.176	46.768	-1.218	-0.854	-2.072
		300	1.500	-23.367	-28.744	-52.110			17.180	31.551	48.731	-0.967	-0.691	-1.658
		400	2.000	-24.166	-31.470	-55.636	-31.900	-1.4%	18.354	34.047	52.401	-0.647	-0.480	-1.127
	225	225	1.000	-23.747	-26.794	-50.541	-27.200	-1.5%	17.185	29.760	46.945	-1.154	-0.800	-1.954
		270	1.200	-24.468	-29.333	-53.802			18.242	32.123	50.365	-0.776	-0.558	-1.333
		338	1.500	-25.554	-32.800	-58.354			19.838	35.242	55.080	-0.474	-0.358	-0.832
		450	2.000	-27.336	-37.612	-64.949	-31.900	15.2%	22.466	39.463	61.929	-0.251	-0.204	-0.455
	250	250	1.000	-24.930	-27.795	-52.725	-27.200	2.1%	18.364	30.758	49.122	-0.877	-0.612	-1.489
		300	1.200	-25.729	-30.445	-56.174			19.537	33.168	52.706	-0.590	-0.429	-1.019
		375	1.500	-26.925	-34.002	-60.927			21.297	36.319	57.616	-0.362	-0.278	-0.640
		500	2.000	-28.912	-38.931	-67.844	-31.900	18.1%	24.230	40.610	64.839	-0.191	-0.158	-0.350
	300	300	1.000	-27.292	-29.666	-56.958	-27.200	8.3%	20.720	32.577	53.297	-0.548	-0.388	-0.937
		360	1.200	-28.249	-32.488	-60.737			22.127	35.062	57.189	-0.369	-0.275	-0.644
		450	1.500	-29.680	-36.204	-65.884			24.237	38.285	62.522	-0.227	-0.179	-0.406
		600	2.000	-32.063	-41.227	-73.290	-31.900	22.6%	27.757	42.622	70.379	-0.120	-0.102	-0.222
	350	350	1.000	-29.651	-31.342	-60.993	-27.200	13.2%	23.074	34.171	57.244	-0.371	-0.265	-0.636

Cantilever Length: 2.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-32.046	-85.500	-117.546	-62.900	26.4%	20.272	86.314	106.586	-3.365	-8.032	-11.397
		240	1.200	-32.738	-85.978	-118.716			21.110	87.034	108.144	-2.607	-6.092	-8.698
		300	1.500	-33.425	-86.425	-119.850			21.940	87.700	109.640	-2.072	-4.745	-6.817
		400	2.000	-34.785	-87.242	-122.027	-75.800	13.1%	23.580	88.899	112.479	-1.390	-3.064	-4.453
	225	225	1.000	-33.943	-85.625	-119.568	-62.900	26.5%	21.857	86.540	108.397	-2.483	-5.646	-8.129
		270	1.200	-35.179	-86.401	-121.580			23.353	87.705	111.058	-1.672	-3.677	-5.349
		338	1.500	-37.025	-87.438	-124.464			25.577	89.230	114.807	-1.024	-2.148	-3.172
		450	2.000	-40.026	-88.875	-128.901	-75.800	14.7%	29.176	91.300	120.476	-0.545	-1.068	-1.613
	250	250	1.000	-35.841	-85.763	-121.604	-62.900	26.7%	23.446	86.789	110.235	-1.897	-4.120	-6.017
		300	1.200	-37.210	-86.566	-123.777			25.101	87.995	113.096	-1.279	-2.684	-3.963
		375	1.500	-39.241	-87.635	-126.875			27.546	89.565	117.111	-0.786	-1.574	-2.361
		500	2.000	-42.582	-89.132	-131.715	-75.800	15.0%	31.553	91.720	123.273	-0.418	-0.781	-1.199
	300	300	1.000	-39.642	-86.063	-125.706	-62.900	26.9%	26.636	87.332	113.967	-1.199	-2.390	-3.589
		360	1.200	-41.277	-86.921	-128.198			28.610	88.615	117.225	-0.809	-1.558	-2.367
		450	1.500	-43.703	-88.061	-131.764			31.528	90.284	121.813	-0.498	-0.915	-1.413
		600	2.000	-47.700	-89.651	-137.351	-75.800	15.4%	36.317	92.564	128.881	-0.266	-0.455	-0.720
	350	350	1.000	-43.449	-86.375	-129.824	-62.900	27.2%	29.837	87.893	117.730	-0.819	-1.509	-2.327
4.5	200	200	1.000	-31.483	-59.713	-91.196	-62.900	-5.3%	18.705	67.287	85.991	-3.355	-5.360	-8.715
		240	1.200	-32.140	-60.358	-92.498			19.459	67.990	87.449	-2.599	-4.070	-6.669
		300	1.500	-32.795	-60.979	-93.774			20.212	68.652	88.863	-2.066	-3.175	-5.241
		400	2.000	-34.099	-62.158	-96.256	-75.800	-21.9%	21.714	69.872	91.586	-1.385	-2.057	-3.442
	225	225	1.000	-33.360	-60.018	-93.378	-62.900	-4.8%	20.221	67.660	87.881	-2.476	-3.775	-6.251
		270	1.200	-34.539	-61.103	-95.642			21.578	68.822	90.399	-1.668	-2.466	-4.133
		338	1.500	-36.312	-62.629	-98.941			23.621	70.391	94.012	-1.021	-1.448	-2.469
		450	2.000	-39.212	-64.882	-104.094	-75.800	-16.8%	26.974	72.613	99.587	-0.544	-0.728	-1.271
	250	250	1.000	-35.239	-60.343	-95.582	-62.900	-4.2%	21.741	68.056	89.797	-1.892	-2.761	-4.653
		300	1.200	-36.548	-61.491	-98.039			23.249	69.272	92.520	-1.275	-1.805	-3.080
		375	1.500	-38.501	-63.093	-101.594			25.501	70.901	96.402	-0.784	-1.066	-1.850
		500	2.000	-41.735	-65.474	-107.210	-75.800	-15.8%	29.241	73.226	102.467	-0.417	-0.535	-0.952
	300	300	1.000	-39.002	-61.017	-100.019	-62.900	-3.1%	24.790	68.869	93.660	-1.196	-1.609	-2.805
		360	1.200	-40.571	-62.280	-102.851			26.598	70.178	96.776	-0.807	-1.055	-1.862
		450	1.500	-42.911	-64.030	-106.941			29.298	71.922	101.220	-0.497	-0.625	-1.122
		600	2.000	-46.784	-66.597	-113.381	-75.800	-13.8%	33.779	74.378	108.157	-0.265	-0.316	-0.581
	350	350	1.000	-42.770	-61.679	-104.449	-62.900	-2.0%	27.847	69.658	97.505	-0.817	-1.021	-1.838
6	200	200	1.000	-31.279	-47.946	-79.226	-62.900	-31.2%	18.416	61.631	80.047	-3.351	-4.053	-7.404
		240	1.200	-31.921	-48.772	-80.693			19.157	62.416	81.573	-2.596	-3.087	-5.682
		300	1.500	-32.562	-49.577	-82.138			19.897	63.158	83.055	-2.063	-2.416	-4.479
		400	2.000	-33.840	-51.123	-84.963	-75.800	-48.3%	21.376	64.534	85.910	-1.384	-1.576	-2.960
	225	225	1.000	-33.147	-48.442	-81.589	-62.900	-29.8%	19.914	62.140	82.054	-2.473	-2.865	-5.338
		270	1.200	-34.301	-49.851	-84.153			21.247	63.440	84.687	-1.665	-1.883	-3.548
		338	1.500	-36.040	-51.867	-87.906			23.258	65.205	88.464	-1.020	-1.117	-2.137
		450	2.000	-38.891	-54.896	-93.787	-75.800	-38.1%	26.566	67.717	94.282	-0.543	-0.573	-1.116
	250	250	1.000	-35.017	-48.952	-83.969	-62.900	-28.5%	21.414	62.659	84.074	-1.890	-2.104	-3.993
		300	1.200	-36.299	-50.453	-86.752			22.895	64.016	86.911	-1.274	-1.386	-2.659
		375	1.500	-38.215	-52.576	-90.791			25.112	65.842	90.953	-0.783	-0.828	-1.611
		500	2.000	-41.395	-55.777	-97.171	-75.800	-35.9%	28.800	68.453	97.252	-0.416	-0.426	-0.842
	300	300	1.000	-38.759	-49.965	-88.723	-62.900	-25.9%	24.417	63.673	88.090	-1.194	-1.237	-2.431
		360	1.200	-40.296	-51.626	-91.922			26.191	65.121	91.312	-0.806	-0.819	-1.625
		450	1.500	-42.592	-53.949	-96.541			28.846	67.054	95.900	-0.496	-0.493	-0.989
		600	2.000	-46.400	-57.385	-103.785	-75.800	-32.1%	33.264	69.779	103.043	-0.265	-0.256	-0.521
	350	350	1.000	-42.503	-50.920	-93.424	-62.900	-23.5%	27.420	64.607	92.027	-0.816	-0.792	-1.608

Cantilever Length: 2.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-31.210	-40.114	-71.325	-62.900	-56.8%	18.386	58.644	77.030	-3.348	-3.116	-6.464
		240	1.200	-31.846	-41.155	-73.001			19.126	59.518	78.643	-2.593	-2.389	-4.982
		300	1.500	-32.481	-42.173	-74.653			19.865	60.343	80.208	-2.061	-1.883	-3.944
		400	2.000	-33.747	-44.134	-77.882	-75.800	-71.7%	21.341	61.872	83.213	-1.382	-1.247	-2.629
	225	225	1.000	-33.072	-40.826	-73.898	-62.900	-54.1%	19.875	59.280	79.155	-2.471	-2.220	-4.691
		270	1.200	-34.215	-42.606	-76.821			21.204	60.717	81.921	-1.664	-1.478	-3.142
		338	1.500	-35.937	-45.157	-81.093			23.210	62.663	85.873	-1.019	-0.895	-1.914
		450	2.000	-38.761	-48.973	-87.734	-75.800	-54.8%	26.507	65.410	91.917	-0.542	-0.475	-1.017
	250	250	1.000	-34.934	-41.533	-76.467	-62.900	-51.4%	21.363	59.903	81.266	-1.888	-1.643	-3.531
		300	1.200	-36.203	-43.428	-79.631			22.838	61.393	84.231	-1.272	-1.099	-2.371
		375	1.500	-38.100	-46.105	-84.204			25.048	63.389	88.436	-0.782	-0.672	-1.454
		500	2.000	-41.247	-50.111	-91.358	-75.800	-51.3%	28.723	66.221	94.944	-0.416	-0.359	-0.774
	300	300	1.000	-38.658	-42.887	-81.546	-62.900	-46.7%	24.337	61.066	85.403	-1.193	-0.982	-2.176
		360	1.200	-40.178	-44.977	-85.155			26.103	62.638	88.741	-0.805	-0.663	-1.468
		450	1.500	-42.448	-47.888	-90.336			28.748	64.728	93.476	-0.496	-0.410	-0.906
		600	2.000	-46.215	-52.141	-98.356	-75.800	-45.4%	33.151	67.653	100.804	-0.264	-0.222	-0.486
	350	350	1.000	-42.381	-44.135	-86.516	-62.900	-42.5%	27.307	62.102	89.409	-0.815	-0.640	-1.455
10	200	200	1.000	-31.193	-36.074	-67.267	-62.900	-74.4%	18.388	57.314	75.701	-3.346	-2.600	-5.946
		240	1.200	-31.826	-37.290	-69.115			19.126	58.244	77.370	-2.592	-2.011	-4.603
		300	1.500	-32.458	-38.475	-70.933			19.864	59.121	78.985	-2.060	-1.599	-3.659
		400	2.000	-33.719	-40.752	-74.470	-75.800	-86.0%	21.337	60.740	82.077	-1.381	-1.078	-2.460
	225	225	1.000	-33.050	-36.947	-69.997	-62.900	-70.2%	19.871	58.020	77.891	-2.469	-1.871	-4.340
		270	1.200	-34.188	-39.017	-73.205			21.198	59.539	80.737	-1.663	-1.266	-2.929
		338	1.500	-35.900	-41.961	-77.861			23.199	61.586	84.785	-1.018	-0.786	-1.803
		450	2.000	-38.709	-46.294	-85.003	-75.800	-63.7%	26.491	64.448	90.940	-0.542	-0.431	-0.973
	250	250	1.000	-34.907	-37.797	-72.704	-62.900	-66.4%	21.352	58.695	80.047	-1.887	-1.399	-3.286
		300	1.200	-36.169	-39.993	-76.162			22.825	60.262	83.087	-1.272	-0.953	-2.224
		375	1.500	-38.055	-43.067	-81.122			25.030	62.352	87.382	-0.782	-0.598	-1.379
		500	2.000	-41.185	-47.583	-88.768	-75.800	-59.3%	28.701	65.289	93.990	-0.415	-0.330	-0.745
	300	300	1.000	-38.619	-39.404	-78.022	-62.900	-59.6%	24.312	59.933	84.245	-1.193	-0.853	-2.046
		360	1.200	-40.129	-41.811	-81.940			26.075	61.577	87.652	-0.805	-0.587	-1.392
		450	1.500	-42.385	-45.124	-87.509			28.717	63.752	92.469	-0.495	-0.373	-0.868
		600	2.000	-46.131	-49.859	-95.990	-75.800	-52.0%	33.116	66.768	99.885	-0.264	-0.208	-0.472
	350	350	1.000	-42.327	-40.870	-83.197	-62.900	-53.9%	27.268	61.024	88.292	-0.814	-0.566	-1.380
12	200	200	1.000	-31.180	-33.793	-64.974	-62.900	-86.1%	18.381	56.639	75.020	-3.345	-2.293	-5.638
		240	1.200	-31.811	-35.146	-66.957			19.117	57.604	76.722	-2.591	-1.792	-4.382
		300	1.500	-32.441	-36.460	-68.901			19.854	58.513	78.366	-2.059	-1.439	-3.498
		400	2.000	-33.696	-38.963	-72.659	-75.800	-94.5%	21.325	60.181	81.506	-1.380	-0.987	-2.368
	225	225	1.000	-33.034	-34.785	-67.819	-62.900	-80.8%	19.860	57.380	77.240	-2.468	-1.669	-4.137
		270	1.200	-34.167	-37.076	-71.243			21.184	58.949	80.133	-1.662	-1.149	-2.811
		338	1.500	-35.872	-40.296	-76.168			23.183	61.051	84.234	-1.017	-0.729	-1.746
		450	2.000	-38.670	-44.943	-83.612	-75.800	-68.7%	26.471	63.968	90.439	-0.541	-0.410	-0.951
	250	250	1.000	-34.887	-35.743	-70.630	-62.900	-76.0%	21.337	58.081	79.418	-1.886	-1.262	-3.148
		300	1.200	-36.143	-38.164	-74.307			22.807	59.695	82.502	-1.271	-0.874	-2.145
		375	1.500	-38.021	-41.508	-79.529			25.010	61.836	86.845	-0.781	-0.560	-1.341
		500	2.000	-41.139	-46.319	-87.457	-75.800	-63.6%	28.678	64.822	93.500	-0.415	-0.316	-0.731
	300	300	1.000	-38.589	-37.544	-76.133	-62.900	-67.5%	24.289	59.360	83.650	-1.192	-0.784	-1.976
		360	1.200	-40.092	-40.177	-80.269			26.050	61.048	87.098	-0.804	-0.549	-1.353
		450	1.500	-42.338	-43.742	-86.080			28.690	63.268	91.958	-0.495	-0.356	-0.850
		600	2.000	-46.071	-48.727	-94.798	-75.800	-55.6%	33.089	66.324	99.413	-0.263	-0.202	-0.466
	350	350	1.000	-42.287	-39.173	-81.460	-62.900	-60.6%	27.238	60.485	87.723	-0.814	-0.528	-1.342

Cantilever Length: 3.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-42.469	-127.977	-170.446	-62.700	51.0%	24.077	111.168	135.245	-6.295	-16.272	-22.567
		240	1.200	-43.477	-128.635	-172.112			25.143	112.266	137.408	-4.880	-12.342	-17.221
		300	1.500	-44.476	-129.225	-173.701			26.194	113.236	139.429	-3.882	-9.615	-13.497
		400	2.000	-46.456	-130.245	-176.701	-76.500	41.3%	28.262	114.885	143.147	-2.607	-6.210	-8.817
	225	225	1.000	-45.216	-128.069	-173.285	-62.700	51.0%	26.040	111.340	137.380	-4.669	-11.435	-16.104
		270	1.200	-47.016	-129.107	-176.123			27.936	113.064	141.000	-3.149	-7.446	-10.595
		338	1.500	-49.701	-130.392	-180.093			30.737	115.145	145.882	-1.931	-4.351	-6.282
		450	2.000	-54.061	-132.021	-186.081	-76.500	42.1%	35.242	117.722	152.963	-1.031	-2.165	-3.196
	250	250	1.000	-47.964	-128.171	-176.135	-62.700	51.1%	28.008	111.531	139.539	-3.584	-8.341	-11.926
		300	1.200	-49.957	-129.229	-179.186			30.101	113.287	143.388	-2.419	-5.433	-7.852
		375	1.500	-52.909	-130.533	-183.442			33.176	115.398	148.574	-1.490	-3.187	-4.677
		500	2.000	-57.764	-132.211	-189.975	-76.500	42.1%	38.186	118.051	156.237	-0.794	-1.581	-2.376
	300	300	1.000	-53.465	-128.394	-181.859	-62.700	51.2%	31.953	111.949	143.902	-2.284	-4.834	-7.118
		360	1.200	-55.844	-129.492	-185.335			34.443	113.768	148.211	-1.543	-3.150	-4.693
		450	1.500	-59.370	-130.849	-190.219			38.107	115.962	154.068	-0.952	-1.849	-2.801
		600	2.000	-65.175	-132.598	-197.773	-76.500	42.3%	44.086	118.721	162.807	-0.509	-0.919	-1.428
	350	350	1.000	-58.972	-128.627	-187.599	-62.700	51.3%	35.910	112.386	148.296	-1.570	-3.049	-4.619
4.5	200	200	1.000	-41.627	-90.625	-132.252	-62.700	30.8%	21.557	84.475	106.033	-6.273	-10.836	-17.109
		240	1.200	-42.587	-91.441	-134.028			22.485	85.439	107.924	-4.862	-8.224	-13.086
		300	1.500	-43.543	-92.192	-135.735			23.410	86.301	109.711	-3.868	-6.412	-10.280
		400	2.000	-45.445	-93.539	-138.984	-76.500	18.2%	25.250	87.797	113.047	-2.597	-4.150	-6.747
	225	225	1.000	-44.338	-90.877	-135.215	-62.700	31.0%	23.399	84.780	108.179	-4.653	-7.624	-12.277
		270	1.200	-46.061	-92.202	-138.263			25.065	86.319	111.384	-3.138	-4.973	-8.110
		338	1.500	-48.646	-93.928	-142.573			27.567	88.228	115.796	-1.924	-2.915	-4.839
		450	2.000	-52.867	-96.277	-149.144	-76.500	20.5%	31.661	90.698	122.359	-1.028	-1.460	-2.488
	250	250	1.000	-47.053	-91.147	-138.200	-62.700	31.2%	25.245	85.106	110.351	-3.572	-5.569	-9.141
		300	1.200	-48.964	-92.524	-141.489			27.095	86.692	113.787	-2.411	-3.635	-6.046
		375	1.500	-51.811	-94.309	-146.120			29.853	88.651	118.504	-1.485	-2.141	-3.625
		500	2.000	-56.518	-96.771	-153.288	-76.500	20.9%	34.418	91.217	125.635	-0.792	-1.071	-1.862
	300	300	1.000	-52.490	-91.714	-144.204	-62.700	31.6%	28.950	85.787	114.737	-2.276	-3.238	-5.514
		360	1.200	-54.779	-93.188	-147.966			31.167	87.456	118.623	-1.538	-2.116	-3.655
		450	1.500	-58.188	-95.099	-153.287			34.471	89.520	123.991	-0.949	-1.250	-2.199
		600	2.000	-63.824	-97.723	-161.548	-76.500	21.7%	39.940	92.214	132.154	-0.507	-0.628	-1.135
	350	350	1.000	-57.935	-92.280	-150.215	-62.700	32.1%	32.666	86.460	119.126	-1.565	-2.049	-3.615
6	200	200	1.000	-41.230	-73.363	-114.593	-62.700	14.5%	20.913	76.668	97.581	-6.263	-8.156	-14.419
		240	1.200	-42.163	-74.355	-116.517			21.807	77.688	99.495	-4.854	-6.201	-11.055
		300	1.500	-43.093	-75.283	-118.376			22.701	78.608	101.309	-3.861	-4.844	-8.705
		400	2.000	-44.949	-76.985	-121.934	-76.500	0.6%	24.485	80.224	104.709	-2.593	-3.149	-5.742
	225	225	1.000	-43.925	-73.799	-117.724	-62.700	15.0%	22.721	77.100	99.821	-4.646	-5.752	-10.398
		270	1.200	-45.602	-75.441	-121.043			24.330	78.741	103.071	-3.133	-3.766	-6.898
		338	1.500	-48.126	-77.643	-125.769			26.757	80.806	107.563	-1.921	-2.222	-4.143
		450	2.000	-52.263	-80.756	-133.019	-76.500	5.3%	30.746	83.530	114.276	-1.026	-1.128	-2.154
	250	250	1.000	-46.624	-74.253	-120.877	-62.700	15.6%	24.532	77.547	102.079	-3.567	-4.212	-7.779
		300	1.200	-48.487	-75.976	-124.463			26.320	79.240	105.561	-2.407	-2.762	-5.169
		375	1.500	-51.269	-78.274	-129.543			28.996	81.360	110.357	-1.482	-1.640	-3.122
		500	2.000	-55.883	-81.551	-137.434	-76.500	6.2%	33.446	84.185	117.631	-0.790	-0.833	-1.623
	300	300	1.000	-52.028	-75.166	-127.194	-62.700	16.6%	28.162	78.434	106.596	-2.273	-2.463	-4.736
		360	1.200	-54.261	-77.035	-131.296			30.306	80.214	110.521	-1.536	-1.620	-3.156
		450	1.500	-57.596	-79.518	-137.114			33.514	82.440	115.954	-0.948	-0.967	-1.915
		600	2.000	-63.124	-83.024	-146.148	-76.500	7.9%	38.846	85.385	124.231	-0.507	-0.495	-1.002
	350	350	1.000	-57.438	-76.041	-133.478	-62.700	17.5%	31.797	79.268	111.065	-1.563	-1.569	-3.132

Cantilever Length: 3.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-41.048	-61.658	-102.706	-62.700	-1.7%	20.759	72.554	93.314	-6.256	-6.209	-12.465
		240	1.200	-41.966	-62.873	-104.840			21.647	73.663	95.310	-4.849	-4.741	-9.590
		300	1.500	-42.883	-64.023	-106.907			22.534	74.667	97.201	-3.857	-3.721	-7.578
		400	2.000	-44.714	-66.164	-110.878	-76.500	-15.6%	24.306	76.441	100.748	-2.590	-2.443	-5.034
	225	225	1.000	-43.733	-62.323	-106.056	-62.700	-0.6%	22.551	73.120	95.671	-4.641	-4.402	-9.043
		270	1.200	-45.385	-64.356	-109.741			24.148	74.902	99.050	-3.129	-2.907	-6.036
		338	1.500	-47.874	-67.131	-115.006			26.557	77.160	103.717	-1.919	-1.741	-3.660
		450	2.000	-51.959	-71.123	-123.082	-76.500	-7.6%	30.518	80.155	110.674	-1.025	-0.906	-1.931
	250	250	1.000	-46.420	-62.991	-109.411	-62.700	0.5%	24.344	73.681	98.025	-3.563	-3.242	-6.805
		300	1.200	-48.255	-65.134	-113.389			26.117	75.514	101.631	-2.405	-2.148	-4.552
		375	1.500	-50.999	-68.033	-119.032			28.771	77.822	106.593	-1.481	-1.297	-2.778
		500	2.000	-55.553	-72.225	-127.779	-76.500	-5.9%	33.188	80.909	114.097	-0.789	-0.678	-1.468
	300	300	1.000	-51.796	-64.284	-116.080	-62.700	2.5%	27.930	74.743	102.673	-2.271	-1.918	-4.189
		360	1.200	-53.996	-66.615	-120.611			30.053	76.656	106.709	-1.535	-1.279	-2.814
		450	1.500	-57.283	-69.750	-127.033			33.232	79.059	112.291	-0.947	-0.779	-1.726
		600	2.000	-62.737	-74.210	-136.947	-76.500	-3.1%	38.523	82.248	120.772	-0.506	-0.413	-0.919
	350	350	1.000	-57.174	-65.485	-122.658	-62.700	4.3%	31.514	75.699	107.214	-1.562	-1.237	-2.798
10	200	200	1.000	-41.001	-55.451	-96.452	-62.700	-13.1%	20.754	70.728	91.483	-6.252	-5.105	-11.356
		240	1.200	-41.915	-56.859	-98.773			21.641	71.901	93.542	-4.846	-3.923	-8.769
		300	1.500	-42.827	-58.197	-101.024			22.527	72.965	95.492	-3.854	-3.099	-6.954
		400	2.000	-44.648	-60.699	-105.347	-76.500	-26.0%	24.298	74.846	99.143	-2.588	-2.064	-4.652
	225	225	1.000	-43.680	-56.302	-99.982	-62.700	-11.4%	22.538	71.380	93.918	-4.638	-3.646	-8.284
		270	1.200	-45.323	-58.661	-103.984			24.132	73.258	97.391	-3.127	-2.438	-5.565
		338	1.500	-47.797	-61.898	-109.695			26.538	75.640	102.178	-1.918	-1.488	-3.406
		450	2.000	-51.858	-66.544	-118.401	-76.500	-15.0%	30.493	78.792	109.284	-1.024	-0.799	-1.822
	250	250	1.000	-46.359	-57.137	-103.496	-62.700	-9.7%	24.321	72.008	96.329	-3.561	-2.706	-6.267
		300	1.200	-48.183	-59.623	-107.806			26.091	73.933	100.024	-2.403	-1.818	-4.221
		375	1.500	-50.909	-62.997	-113.906			28.741	76.357	105.098	-1.480	-1.121	-2.601
		500	2.000	-55.435	-67.852	-123.287	-76.500	-12.7%	33.150	79.591	112.742	-0.789	-0.605	-1.394
	300	300	1.000	-51.716	-58.722	-110.439	-62.700	-6.8%	27.885	73.167	101.051	-2.270	-1.626	-3.896
		360	1.200	-53.900	-61.425	-115.325			30.003	75.166	105.169	-1.533	-1.103	-2.636
		450	1.500	-57.164	-65.055	-122.219			33.177	77.677	110.853	-0.946	-0.688	-1.634
		600	2.000	-62.581	-70.175	-132.756	-76.500	-9.0%	38.460	81.000	119.460	-0.505	-0.377	-0.882
	350	350	1.000	-57.072	-60.174	-117.246	-62.700	-4.2%	31.444	74.191	105.635	-1.561	-1.064	-2.625
12	200	200	1.000	-40.983	-51.823	-92.806	-62.700	-21.0%	20.753	69.758	90.511	-6.249	-4.425	-10.675
		240	1.200	-41.894	-53.392	-95.286			21.639	70.973	92.612	-4.844	-3.428	-8.272
		300	1.500	-42.803	-54.884	-97.688			22.524	72.077	94.600	-3.853	-2.731	-6.583
		400	2.000	-44.618	-57.671	-102.289	-76.500	-32.6%	24.292	74.024	98.316	-2.587	-1.847	-4.434
	225	225	1.000	-43.657	-52.820	-96.477	-62.700	-18.7%	22.532	70.460	92.992	-4.636	-3.190	-7.826
		270	1.200	-45.294	-55.445	-100.739			24.124	72.400	96.524	-3.126	-2.164	-5.290
		338	1.500	-47.759	-59.036	-106.795			26.526	74.858	101.384	-1.917	-1.348	-3.264
		450	2.000	-51.802	-64.138	-115.940	-76.500	-19.3%	30.476	78.096	108.572	-1.023	-0.744	-1.767
	250	250	1.000	-46.330	-53.786	-100.116	-62.700	-16.6%	24.309	71.126	95.435	-3.560	-2.389	-5.949
		300	1.200	-48.146	-56.548	-104.695			26.076	73.110	99.186	-2.402	-1.631	-4.033
		375	1.500	-50.861	-60.279	-111.140			28.722	75.605	104.328	-1.479	-1.027	-2.506
		500	2.000	-55.368	-65.579	-120.947	-76.500	-16.7%	33.128	78.919	112.047	-0.788	-0.569	-1.357
	300	300	1.000	-51.674	-55.605	-107.278	-62.700	-12.8%	27.860	72.341	100.201	-2.269	-1.461	-3.729
		360	1.200	-53.848	-58.595	-112.443			29.976	74.396	104.372	-1.532	-1.007	-2.540
		450	1.500	-57.096	-62.581	-119.678			33.147	76.972	110.119	-0.945	-0.642	-1.587
		600	2.000	-62.490	-68.112	-130.603	-76.500	-12.3%	38.427	80.364	118.791	-0.505	-0.360	-0.864
	350	350	1.000	-57.013	-57.256	-114.269	-62.700	-9.5%	31.407	73.409	104.816	-1.560	-0.970	-2.530

Cantilever Length: 3.75 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-60.612	-194.901	-255.514	-106.600	45.3%	30.445	108.973	139.417	-13.706	-39.335	-53.041
		240	1.200	-62.201	-195.745	-257.947			31.890	110.487	142.377	-10.635	-29.810	-40.445
		300	1.500	-63.777	-196.494	-260.271			33.309	111.820	145.129	-8.468	-23.209	-31.677
		400	2.000	-66.896	-197.766	-264.662	-124.500	37.0%	36.086	114.068	150.153	-5.697	-14.977	-20.675
	225	225	1.000	-64.940	-194.963	-259.903	-106.600	45.3%	33.040	109.100	142.140	-10.232	-27.635	-37.867
		270	1.200	-67.779	-196.279	-264.058			35.602	111.457	147.059	-6.911	-17.972	-24.884
		338	1.500	-72.010	-197.869	-269.879			39.359	114.270	153.629	-4.248	-10.488	-14.735
		450	2.000	-78.878	-199.806	-278.684	-124.500	37.7%	45.357	117.661	163.018	-2.276	-5.212	-7.488
	250	250	1.000	-69.269	-195.031	-264.300	-106.600	45.3%	35.640	109.242	144.881	-7.901	-20.153	-28.054
		300	1.200	-72.412	-196.361	-268.772			38.464	111.623	150.087	-5.341	-13.108	-18.449
		375	1.500	-77.065	-197.959	-275.023			42.583	114.452	157.035	-3.296	-7.678	-10.974
		500	2.000	-84.714	-199.933	-284.647	-124.500	37.7%	49.247	117.911	167.158	-1.763	-3.804	-5.566
	300	300	1.000	-77.930	-195.182	-273.112	-106.600	45.4%	40.845	109.552	150.398	-5.084	-11.672	-16.756
		360	1.200	-81.681	-196.538	-278.219			44.197	111.984	156.180	-3.441	-7.594	-11.034
		450	1.500	-87.240	-198.172	-285.412			49.094	114.879	163.973	-2.127	-4.450	-6.577
		600	2.000	-96.389	-200.197	-296.586	-124.500	37.8%	57.037	118.428	175.465	-1.140	-2.206	-3.347
	350	350	1.000	-86.596	-195.340	-281.936	-106.600	45.4%	46.061	109.879	155.940	-3.524	-7.357	-10.881
4.5	200	200	1.000	-59.363	-134.492	-193.855	-106.600	20.7%	26.282	76.891	103.174	-13.646	-26.168	-39.814
		240	1.200	-60.892	-135.542	-196.434			27.498	78.177	105.675	-10.588	-19.837	-30.425
		300	1.500	-62.412	-136.495	-198.907			28.706	79.324	108.030	-8.429	-15.450	-23.879
		400	2.000	-65.431	-138.161	-203.593	-124.500	9.9%	31.101	81.295	112.395	-5.671	-9.980	-15.651
	225	225	1.000	-63.625	-134.705	-198.330	-106.600	20.9%	28.640	77.180	105.820	-10.188	-18.397	-28.585
		270	1.200	-66.364	-136.380	-202.744			30.818	79.216	110.033	-6.881	-11.974	-18.855
		338	1.500	-70.465	-138.491	-208.956			34.070	81.711	115.782	-4.229	-6.998	-11.227
		450	2.000	-77.149	-141.222	-218.371	-124.500	11.8%	39.362	84.848	124.210	-2.265	-3.490	-5.755
	250	250	1.000	-67.890	-134.935	-202.825	-106.600	21.0%	31.004	77.491	108.494	-7.868	-13.427	-21.295
		300	1.200	-70.927	-136.654	-207.581			33.418	79.574	112.991	-5.318	-8.742	-14.060
		375	1.500	-75.442	-138.810	-214.253			36.999	82.116	119.115	-3.282	-5.131	-8.413
		500	2.000	-82.893	-141.639	-224.532	-124.500	12.1%	42.896	85.356	128.253	-1.755	-2.553	-4.308
	300	300	1.000	-76.431	-135.424	-211.855	-106.600	21.3%	35.745	78.151	113.896	-5.064	-7.790	-12.854
		360	1.200	-80.064	-137.225	-217.289			38.632	80.320	118.952	-3.427	-5.077	-8.503
		450	1.500	-85.467	-139.490	-224.957			42.917	82.973	125.890	-2.118	-2.984	-5.102
		600	2.000	-94.388	-142.461	-236.850	-124.500	12.6%	49.976	86.354	136.331	-1.136	-1.488	-2.624
	350	350	1.000	-84.982	-135.918	-220.900	-106.600	21.6%	40.501	78.815	119.316	-3.511	-4.920	-8.431
6	200	200	1.000	-58.613	-106.502	-165.116	-106.600	-0.1%	24.926	66.035	90.961	-13.617	-19.634	-33.251
		240	1.200	-60.094	-107.788	-167.882			26.066	67.371	93.437	-10.565	-14.897	-25.462
		300	1.500	-61.570	-108.971	-170.541			27.203	68.573	95.776	-8.411	-11.614	-20.025
		400	2.000	-64.509	-111.086	-175.595	-124.500	-12.1%	29.471	70.660	100.130	-5.659	-7.519	-13.177
	225	225	1.000	-62.841	-106.920	-169.761	-106.600	0.3%	27.212	66.480	93.692	-10.168	-13.822	-23.990
		270	1.200	-65.501	-109.007	-174.508			29.262	68.614	97.876	-6.867	-9.013	-15.880
		338	1.500	-69.498	-111.715	-181.212			32.346	71.270	103.616	-4.220	-5.287	-9.506
		450	2.000	-76.037	-115.366	-191.403	-124.500	-7.9%	37.403	74.686	112.089	-2.261	-2.656	-4.916
	250	250	1.000	-67.074	-107.358	-174.433	-106.600	0.7%	29.503	66.945	96.448	-7.853	-10.103	-17.955
		300	1.200	-70.027	-109.524	-179.552			31.780	69.139	100.920	-5.307	-6.594	-11.901
		375	1.500	-74.432	-112.319	-186.751			35.181	71.855	107.035	-3.275	-3.887	-7.162
		500	2.000	-81.726	-116.134	-197.860	-124.500	-7.2%	40.823	75.390	116.213	-1.752	-1.951	-3.703
	300	300	1.000	-75.552	-108.256	-183.808	-106.600	1.5%	34.098	67.891	101.989	-5.055	-5.881	-10.936
		360	1.200	-79.091	-110.563	-189.654			36.829	70.185	107.014	-3.420	-3.846	-7.266
		450	1.500	-84.369	-113.540	-197.910			40.906	73.025	113.931	-2.114	-2.274	-4.389
		600	2.000	-93.109	-117.584	-210.694	-124.500	-5.9%	47.668	76.707	124.375	-1.134	-1.148	-2.282
	350	350	1.000	-84.040	-109.130	-193.170	-106.600	2.3%	38.705	68.800	107.505	-3.505	-3.728	-7.233

Cantilever Length: 3.75 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-58.146	-87.202	-145.348	-106.600	-22.2%	24.407	60.055	84.462	-13.598	-14.824	-28.422
		240	1.200	-59.593	-88.800	-148.393			25.519	61.511	87.031	-10.550	-11.274	-21.824
		300	1.500	-61.036	-90.291	-151.327			26.631	62.828	89.460	-8.399	-8.812	-17.211
		400	2.000	-63.918	-93.004	-156.921	-124.500	-33.9%	28.853	65.133	93.987	-5.650	-5.739	-11.389
	225	225	1.000	-62.352	-87.911	-150.263	-106.600	-21.3%	26.659	60.680	87.339	-10.154	-10.468	-20.622
		270	1.200	-64.954	-90.543	-155.497			28.662	63.012	91.674	-6.857	-6.860	-13.717
		338	1.500	-68.873	-94.039	-162.912			31.684	65.943	97.626	-4.214	-4.059	-8.273
		450	2.000	-75.302	-98.896	-174.199	-124.500	-25.9%	36.653	69.761	106.414	-2.258	-2.073	-4.331
	250	250	1.000	-66.562	-88.631	-155.193	-106.600	-20.3%	28.915	61.307	90.222	-7.842	-7.677	-15.519
		300	1.200	-69.453	-91.382	-160.835			31.139	63.703	94.843	-5.300	-5.041	-10.341
		375	1.500	-73.774	-95.010	-168.783			34.471	66.693	101.164	-3.271	-3.003	-6.274
		500	2.000	-80.945	-100.096	-181.041	-124.500	-24.4%	40.014	70.629	110.643	-1.749	-1.537	-3.286
	300	300	1.000	-74.991	-90.046	-165.036	-106.600	-18.4%	33.432	62.521	95.953	-5.048	-4.502	-9.550
		360	1.200	-78.458	-93.000	-171.458			36.099	65.013	101.112	-3.416	-2.969	-6.385
		450	1.500	-83.638	-96.887	-180.524			40.092	68.121	108.213	-2.112	-1.779	-3.891
		600	2.000	-92.231	-102.281	-194.512	-124.500	-21.7%	46.734	72.189	118.923	-1.132	-0.920	-2.052
	350	350	1.000	-83.427	-91.373	-174.800	-106.600	-16.7%	37.953	63.632	101.585	-3.501	-2.876	-6.377
10	200	200	1.000	-57.980	-76.708	-134.688	-106.600	-39.0%	24.312	57.344	81.656	-13.587	-12.039	-25.626
		240	1.200	-59.412	-78.592	-138.004			25.421	58.900	84.321	-10.541	-9.192	-19.734
		300	1.500	-60.843	-80.361	-141.204			26.529	60.310	86.839	-8.392	-7.216	-15.608
		400	2.000	-63.699	-83.613	-147.312	-124.500	-48.9%	28.744	62.786	91.530	-5.646	-4.742	-10.388
	225	225	1.000	-62.173	-77.683	-139.856	-106.600	-37.2%	26.551	58.100	84.651	-10.146	-8.542	-18.688
		270	1.200	-64.751	-80.803	-145.554			28.545	60.588	89.133	-6.852	-5.643	-12.494
		338	1.500	-68.635	-84.995	-153.630			31.555	63.723	95.278	-4.211	-3.383	-7.593
		450	2.000	-75.011	-90.885	-165.896	-124.500	-37.0%	36.505	67.819	104.324	-2.256	-1.767	-4.023
	250	250	1.000	-66.369	-78.647	-145.016	-106.600	-35.5%	28.790	58.836	87.626	-7.837	-6.296	-14.133
		300	1.200	-69.232	-81.915	-151.148			31.004	61.384	92.387	-5.296	-4.173	-9.470
		375	1.500	-73.514	-86.268	-159.782			34.321	64.571	98.892	-3.268	-2.523	-5.792
		500	2.000	-80.624	-92.422	-173.046	-124.500	-34.7%	39.841	68.776	108.617	-1.748	-1.324	-3.072
	300	300	1.000	-74.766	-80.494	-155.259	-106.600	-32.4%	33.268	60.213	93.481	-5.045	-3.732	-8.777
		360	1.200	-78.198	-84.011	-162.209			35.921	62.849	98.770	-3.414	-2.490	-5.904
		450	1.500	-83.328	-88.672	-172.001			39.894	66.144	106.038	-2.110	-1.520	-3.630
		600	2.000	-91.844	-95.169	-187.013	-124.500	-30.8%	46.507	70.464	116.971	-1.131	-0.808	-1.939
	350	350	1.000	-83.165	-82.192	-165.357	-106.600	-29.7%	37.746	61.439	99.185	-3.499	-2.410	-5.908
12	200	200	1.000	-57.923	-70.377	-128.300	-106.600	-51.5%	24.300	55.889	80.189	-13.581	-10.273	-23.854
		240	1.200	-57.936	-74.365	-132.301			24.340	58.719	83.059	-14.650	-2.033	-16.683
		300	1.500	-60.774	-74.521	-135.295			26.520	58.989	85.509	-8.388	-6.226	-14.614
		400	2.000	-63.619	-78.229	-141.848	-124.500	-59.1%	28.740	61.572	90.312	-5.643	-4.140	-9.783
	225	225	1.000	-62.108	-71.576	-133.684	-106.600	-48.9%	26.540	56.720	83.260	-10.141	-7.336	-17.477
		270	1.200	-64.674	-75.115	-139.789			28.520	59.326	87.846	-6.849	-4.896	-11.745
		338	1.500	-68.540	-79.890	-148.430			31.540	62.583	94.123	-4.209	-2.982	-7.191
		450	2.000	-74.887	-86.598	-161.485	-124.500	-43.8%	36.480	66.851	103.331	-2.254	-1.598	-3.852
	250	250	1.000	-66.300	-72.734	-139.034	-106.600	-46.6%	28.760	57.529	86.289	-7.834	-5.442	-13.276
		300	1.200	-69.143	-76.450	-145.593			30.980	60.179	91.159	-5.293	-3.651	-8.944
		375	1.500	-73.404	-81.402	-154.806			34.280	63.504	97.784	-3.266	-2.247	-5.513
		500	2.000	-80.479	-88.386	-168.865	-124.500	-40.9%	39.800	67.862	107.662	-1.746	-1.209	-2.955
	300	300	1.000	-74.668	-74.946	-149.614	-106.600	-42.2%	33.220	59.011	92.231	-5.043	-3.268	-8.311
		360	1.200	-78.081	-78.936	-157.017			35.880	61.729	97.609	-3.412	-2.211	-5.623
		450	1.500	-83.182	-84.222	-167.404			39.820	65.166	104.986	-2.109	-1.376	-3.485
		600	2.000	-91.633	-91.543	-183.176	-124.500	-36.0%	46.440	69.636	116.076	-1.129	-0.751	-1.880
	350	350	1.000	-83.039	-76.951	-159.990	-106.600	-38.5%	37.660	60.314	97.974	-3.497	-2.136	-5.633

A6. PL-3 Barrier

Cantilever Length: 0.5 m												
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-4.748	-1.155	-5.903	10.680	14.622	25.302	-0.022	-0.001	-0.023
		240	1.200	-4.774	-1.178	-5.952	10.820	14.695	25.515	-0.017	-0.001	-0.018
		300	1.500	-4.798	-1.199	-5.997	10.980	14.738	25.718	-0.013	-0.001	-0.014
		400	2.000	-4.847	-1.236	-6.083	11.260	14.825	26.085	-0.009	0.000	-0.009
	225	225	1.000	-4.822	-1.168	-5.990	10.960	14.680	25.640	-0.016	-0.001	-0.017
		270	1.200	-4.866	-1.206	-6.072	11.220	14.782	26.002	-0.011	0.000	-0.011
		338	1.500	-4.932	-1.251	-6.183	11.620	14.883	26.503	-0.007	0.000	-0.007
		450	2.000	-5.039	-1.303	-6.342	12.280	14.985	27.265	-0.003	0.000	-0.003
	250	250	1.000	-4.895	-1.181	-6.076	11.260	14.738	25.998	-0.011	-0.001	-0.012
		300	1.200	-4.943	-1.220	-6.163	11.540	14.825	26.365	-0.008	0.000	-0.008
		375	1.500	-5.016	-1.264	-6.280	11.980	14.927	26.907	-0.005	0.000	-0.005
		500	2.000	-5.135	-1.316	-6.451	12.700	15.028	27.728	-0.003	0.000	-0.003
	300	300	1.000	-5.040	-1.206	-6.246	11.840	14.825	26.665	-0.007	0.000	-0.007
		360	1.200	-5.098	-1.244	-6.342	12.180	14.912	27.092	-0.005	0.000	-0.005
		450	1.500	-5.184	-1.287	-6.471	12.700	14.999	27.699	-0.003	0.000	-0.003
		600	2.000	-5.326	-1.336	-6.662	13.560	15.087	28.647	-0.002	0.000	-0.002
	350	350	1.000	-5.185	-1.226	-6.411	12.420	14.898	27.318	-0.005	0.000	-0.005
4.5	200	200	1.000	-4.740	-1.105	-5.845	10.640	14.542	25.182	-0.022	-0.001	-0.023
		240	1.200	-4.764	-1.132	-5.896	10.780	14.614	25.394	-0.017	-0.001	-0.018
		300	1.500	-4.787	-1.156	-5.943	10.920	14.672	25.592	-0.014	0.000	-0.014
		400	2.000	-4.834	-1.196	-6.030	11.220	14.759	25.979	-0.009	0.000	-0.009
	225	225	1.000	-4.812	-1.121	-5.933	10.940	14.600	25.540	-0.015	-0.001	-0.016
		270	1.200	-4.854	-1.163	-6.017	11.200	14.701	25.901	-0.011	0.000	-0.011
		338	1.500	-4.917	-1.213	-6.130	11.580	14.817	26.397	-0.007	0.000	-0.007
		450	2.000	-5.022	-1.269	-6.291	12.220	14.933	27.153	-0.003	0.000	-0.003
	250	250	1.000	-4.883	-1.136	-6.019	11.220	14.658	25.878	-0.012	0.000	-0.012
		300	1.200	-4.930	-1.179	-6.109	11.500	14.759	26.259	-0.008	0.000	-0.008
		375	1.500	-5.000	-1.227	-6.227	11.940	14.860	26.800	-0.005	0.000	-0.005
		500	2.000	-5.118	-1.282	-6.400	12.660	14.976	27.636	-0.003	0.000	-0.003
	300	300	1.000	-5.027	-1.163	-6.190	11.800	14.759	26.559	-0.007	0.000	-0.007
		360	1.200	-5.083	-1.205	-6.288	12.140	14.846	26.986	-0.005	0.000	-0.005
		450	1.500	-5.167	-1.252	-6.419	12.560	14.933	27.493	-0.003	0.000	-0.003
		600	2.000	-5.310	-1.303	-6.613	13.520	15.034	28.554	-0.002	0.000	-0.002
	350	350	1.000	-5.169	-1.187	-6.356	12.380	14.846	27.226	-0.005	0.000	-0.005
6	200	200	1.000	-4.734	-1.090	-5.824	10.640	14.528	25.168	-0.022	-0.001	-0.023
		240	1.200	-4.757	-1.118	-5.875	10.780	14.600	25.380	-0.017	-0.001	-0.018
		300	1.500	-4.781	-1.143	-5.924	10.920	14.658	25.578	-0.014	0.000	-0.014
		400	2.000	-4.827	-1.184	-6.011	11.200	14.759	25.959	-0.009	0.000	-0.009
	225	225	1.000	-4.806	-1.107	-5.913	10.920	14.600	25.520	-0.015	-0.001	-0.016
		270	1.200	-4.847	-1.151	-5.998	11.180	14.701	25.881	-0.011	0.000	-0.011
		338	1.500	-4.912	-1.201	-6.113	11.560	14.817	26.377	-0.007	0.000	-0.007
		450	2.000	-5.019	-1.258	-6.277	12.220	14.933	27.153	-0.003	0.000	-0.003
	250	250	1.000	-4.877	-1.123	-6.000	11.200	14.658	25.858	-0.012	0.000	-0.012
		300	1.200	-4.924	-1.167	-6.091	11.500	14.759	26.259	-0.008	0.000	-0.008
		375	1.500	-4.995	-1.216	-6.211	11.940	14.860	26.800	-0.005	0.000	-0.005
		500	2.000	-5.115	-1.272	-6.387	12.680	14.962	27.642	-0.003	0.000	-0.003
	300	300	1.000	-5.021	-1.151	-6.172	11.780	14.759	26.539	-0.007	0.000	-0.007
		360	1.200	-5.078	-1.194	-6.272	12.140	14.846	26.986	-0.005	0.000	-0.005
		450	1.500	-5.164	-1.242	-6.406	12.660	14.933	27.593	-0.003	0.000	-0.003
		600	2.000	-5.311	-1.294	-6.605	13.560	15.020	28.580	-0.002	0.000	-0.002
	350	350	1.000	-5.165	-1.176	-6.341	12.380	14.832	27.212	-0.005	0.000	-0.005

Cantilever Length: 0.5 m												
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-4.732	-1.081	-5.813	10.640	14.522	25.162	-0.022	0.000	-0.023
		240	1.200	-4.756	-1.110	-5.866	10.780	14.594	25.374	-0.017	0.000	-0.018
		300	1.500	-4.780	-1.136	-5.916	10.920	14.652	25.572	-0.014	0.000	-0.014
		400	2.000	-4.828	-1.178	-6.006	11.200	14.754	25.954	-0.009	0.000	-0.009
	225	225	1.000	-4.804	-1.099	-5.903	10.940	14.580	25.520	-0.016	-0.001	-0.016
		270	1.200	-4.847	-1.144	-5.991	11.180	14.696	25.876	-0.011	0.000	-0.011
		338	1.500	-4.913	-1.195	-6.108	11.600	14.797	26.397	-0.007	0.000	-0.007
		450	2.000	-5.023	-1.254	-6.277	12.240	14.927	27.167	-0.003	0.000	-0.003
	250	250	1.000	-4.876	-1.116	-5.992	11.220	14.638	25.858	-0.012	0.000	-0.012
		300	1.200	-4.925	-1.160	-6.085	11.520	14.739	26.259	-0.008	0.000	-0.008
		375	1.500	-4.997	-1.211	-6.208	11.940	14.855	26.795	-0.005	0.000	-0.005
		500	2.000	-5.122	-1.267	-6.389	12.700	14.956	27.656	-0.003	0.000	-0.003
	300	300	1.000	-5.022	-1.145	-6.167	11.820	14.739	26.559	-0.007	0.000	-0.007
		360	1.200	-5.080	-1.189	-6.269	12.140	14.840	26.980	-0.005	0.000	-0.005
		450	1.500	-5.169	-1.237	-6.406	12.680	14.927	27.607	-0.003	0.000	-0.003
		600	2.000	-5.320	-1.289	-6.609	13.580	15.014	28.594	-0.002	0.000	-0.002
	350	350	1.000	-5.167	-1.171	-6.338	12.400	14.826	27.226	-0.005	0.000	-0.005
10	200	200	1.000	-4.733	-1.078	-5.811	10.640	14.522	25.162	-0.022	0.000	-0.023
		240	1.200	-4.757	-1.107	-5.864	10.780	14.594	25.374	-0.018	0.000	-0.018
		300	1.500	-4.781	-1.133	-5.914	10.920	14.652	25.572	-0.014	0.000	-0.014
		400	2.000	-4.831	-1.175	-6.006	11.220	14.754	25.974	-0.009	0.000	-0.009
	225	225	1.000	-4.805	-1.096	-5.901	10.940	14.580	25.520	-0.016	-0.001	-0.016
		270	1.200	-4.850	-1.141	-5.991	11.200	14.681	25.881	-0.011	0.000	-0.011
		338	1.500	-4.917	-1.193	-6.110	11.600	14.797	26.397	-0.007	0.000	-0.007
		450	2.000	-5.030	-1.251	-6.281	12.260	14.927	27.187	-0.003	0.000	-0.003
	250	250	1.000	-4.879	-1.113	-5.992	11.240	14.638	25.878	-0.012	0.000	-0.012
		300	1.200	-4.928	-1.158	-6.086	11.520	14.739	26.259	-0.008	0.000	-0.008
		375	1.500	-5.003	-1.209	-6.212	11.960	14.855	26.815	-0.005	0.000	-0.005
		500	2.000	-5.129	-1.265	-6.394	12.700	14.956	27.656	-0.003	0.000	-0.003
	300	300	1.000	-5.025	-1.143	-6.168	11.820	14.739	26.559	-0.007	0.000	-0.007
		360	1.200	-5.085	-1.187	-6.272	12.160	14.840	27.000	-0.005	0.000	-0.005
		450	1.500	-5.175	-1.235	-6.410	12.700	14.927	27.627	-0.003	0.000	-0.003
		600	2.000	-5.327	-1.287	-6.614	13.600	15.014	28.614	-0.002	0.000	-0.002
	350	350	1.000	-5.172	-1.168	-6.340	12.400	14.826	27.226	-0.005	0.000	-0.005
12	200	200	1.000	-4.734	-1.077	-5.811	10.640	14.522	25.162	-0.022	0.000	-0.023
		240	1.200	-4.759	-1.106	-5.865	10.780	14.594	25.374	-0.018	0.000	-0.018
		300	1.500	-4.784	-1.132	-5.916	10.940	14.652	25.592	-0.014	0.000	-0.014
		400	2.000	-4.833	-1.175	-6.008	11.220	14.754	25.974	-0.009	0.000	-0.009
	225	225	1.000	-4.808	-1.095	-5.903	10.940	14.580	25.520	-0.016	-0.001	-0.016
		270	1.200	-4.852	-1.141	-5.993	11.220	14.681	25.901	-0.011	0.000	-0.011
		338	1.500	-4.921	-1.192	-6.113	11.620	14.797	26.417	-0.007	0.000	-0.007
		450	2.000	-5.034	-1.251	-6.285	12.260	14.927	27.187	-0.003	0.000	-0.003
	250	250	1.000	-4.881	-1.113	-5.994	11.240	14.638	25.878	-0.012	0.000	-0.012
		300	1.200	-4.931	-1.157	-6.088	11.540	14.739	26.279	-0.008	0.000	-0.008
		375	1.500	-5.006	-1.208	-6.214	11.960	14.855	26.815	-0.005	0.000	-0.005
		500	2.000	-5.133	-1.265	-6.398	12.720	14.956	27.676	-0.003	0.000	-0.003
	300	300	1.000	-5.028	-1.143	-6.171	11.840	14.739	26.579	-0.007	0.000	-0.007
		360	1.200	-5.089	-1.186	-6.275	12.160	14.840	27.000	-0.005	0.000	-0.005
		450	1.500	-5.179	-1.235	-6.414	12.700	14.927	27.627	-0.003	0.000	-0.003
		600	2.000	-5.331	-1.287	-6.618	13.600	15.014	28.614	-0.002	0.000	-0.002
	350	350	1.000	-5.176	-1.168	-6.344	12.420	14.826	27.246	-0.005	0.000	-0.005

Cantilever Length: 1.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-10.705	-17.476	-28.181	-25.100	-43.6%	13.060	69.000	82.060	-0.197	-0.157	-0.354
		240	1.200	-10.808	-17.896	-28.704			13.360	70.020	83.380	-0.152	-0.118	-0.270
		300	1.500	-10.911	-18.281	-29.192			13.640	70.940	84.580	-0.121	-0.090	-0.211
		400	2.000	-11.117	-18.963	-30.080	-30.600	-61.4%	14.240	72.480	86.720	-0.080	-0.058	-0.138
	225	225	1.000	-11.004	-17.619	-28.623	-25.100	-42.5%	13.640	69.460	83.100	-0.142	-0.111	-0.253
		270	1.200	-11.190	-18.295	-29.485			14.180	71.060	85.240	-0.094	-0.072	-0.166
		338	1.500	-11.469	-19.163	-30.632			14.980	73.040	88.020	-0.057	-0.041	-0.098
		450	2.000	-11.925	-20.303	-32.228	-30.600	-50.7%	16.300	75.480	91.780	-0.030	-0.020	-0.050
	250	250	1.000	-11.303	-17.771	-29.074	-25.100	-41.2%	14.240	69.940	84.180	-0.106	-0.081	-0.187
		300	1.200	-11.509	-18.469	-29.978			14.840	71.580	86.420	-0.071	-0.052	-0.123
		375	1.500	-11.816	-19.357	-31.173			15.720	73.560	89.280	-0.042	-0.031	-0.073
		500	2.000	-12.325	-20.533	-32.858	-30.600	-49.0%	17.200	76.040	93.240	-0.022	-0.015	-0.037
	300	300	1.000	-11.902	-18.086	-29.988	-25.100	-38.8%	15.440	70.920	86.360	-0.064	-0.048	-0.112
		360	1.200	-12.148	-18.819	-30.967			16.140	72.600	88.740	-0.043	-0.031	-0.074
		450	1.500	-12.515	-19.748	-32.263			17.220	74.600	91.820	-0.026	-0.018	-0.044
		600	2.000	-13.122	-20.961	-34.083	-30.600	-46.0%	18.980	77.100	96.080	-0.014	-0.008	-0.022
	350	350	1.000	-12.500	-18.392	-30.892	-25.100	-36.5%	16.640	71.860	88.500	-0.042	-0.031	-0.073
4.5	200	200	1.000	-10.688	-15.620	-26.308	-25.100	-60.7%	13.040	66.980	80.020	-0.196	-0.109	-0.305
		240	1.200	-10.789	-16.153	-26.942			13.340	68.160	81.500	-0.152	-0.081	-0.233
		300	1.500	-10.890	-16.643	-27.533			13.620	69.240	82.860	-0.120	-0.063	-0.183
		400	2.000	-11.091	-17.518	-28.609	-30.600	-74.7%	14.220	71.060	85.280	-0.080	-0.041	-0.121
	225	225	1.000	-10.984	-15.855	-26.839	-25.100	-58.3%	13.640	67.620	81.260	-0.142	-0.077	-0.219
		270	1.200	-11.166	-16.717	-27.883			14.180	69.500	83.680	-0.094	-0.051	-0.145
		338	1.500	-11.439	-17.829	-29.268			14.960	71.800	86.760	-0.057	-0.030	-0.087
		450	2.000	-11.886	-19.289	-31.175	-30.600	-58.6%	16.280	74.620	90.900	-0.030	-0.015	-0.045
	250	250	1.000	-11.281	-16.094	-27.375	-25.100	-56.0%	14.220	68.300	82.520	-0.105	-0.058	-0.163
		300	1.200	-11.483	-16.983	-28.466			14.800	70.200	85.000	-0.070	-0.039	-0.109
		375	1.500	-11.783	-18.119	-29.902			15.700	72.480	88.180	-0.043	-0.022	-0.065
		500	2.000	-12.280	-19.616	-31.896	-30.600	-56.0%	17.160	75.320	92.480	-0.022	-0.012	-0.034
	300	300	1.000	-11.873	-16.563	-28.436	-25.100	-51.5%	15.420	69.560	84.980	-0.063	-0.036	-0.099
		360	1.200	-12.114	-17.495	-29.609			16.120	71.480	87.600	-0.042	-0.023	-0.065
		450	1.500	-12.472	-18.675	-31.147			17.180	73.760	90.940	-0.026	-0.014	-0.040
		600	2.000	-13.064	-20.203	-33.267	-30.600	-51.5%	18.920	76.560	95.480	-0.014	-0.007	-0.021
	350	350	1.000	-12.464	-16.998	-29.462	-25.100	-47.7%	16.580	70.720	87.300	-0.041	-0.023	-0.064
6	200	200	1.000	-10.681	-14.883	-25.564	-25.100	-68.6%	13.020	66.320	79.340	-0.196	-0.088	-0.284
		240	1.200	-10.781	-15.484	-26.265			13.700	67.580	81.280	-0.151	-0.067	-0.218
		300	1.500	-10.881	-16.037	-26.918			13.620	68.720	82.340	-0.121	-0.052	-0.173
		400	2.000	-11.079	-17.021	-28.100	-30.600	-79.8%	14.220	70.660	84.880	-0.080	-0.036	-0.116
	225	225	1.000	-10.976	-15.176	-26.152	-25.100	-65.4%	13.640	67.060	80.700	-0.142	-0.063	-0.205
		270	1.200	-11.155	-16.146	-27.301			14.160	69.060	83.220	-0.094	-0.042	-0.136
		338	1.500	-11.425	-17.388	-28.813			14.940	71.480	86.420	-0.057	-0.026	-0.083
		450	2.000	-11.866	-18.999	-30.865	-30.600	-61.1%	16.260	74.420	90.680	-0.030	-0.014	-0.044
	250	250	1.000	-11.271	-15.465	-26.736	-25.100	-62.3%	14.220	67.800	82.020	-0.105	-0.048	-0.153
		300	1.200	-11.469	-16.462	-27.931			14.800	69.800	84.600	-0.070	-0.033	-0.103
		375	1.500	-11.765	-17.725	-29.490			15.680	72.200	87.880	-0.042	-0.021	-0.063
		500	2.000	-12.257	-19.365	-31.622	-30.600	-58.0%	17.120	75.160	92.280	-0.022	-0.011	-0.033
	300	300	1.000	-11.859	-16.018	-27.877	-25.100	-56.7%	15.400	69.180	84.580	-0.063	-0.030	-0.093
		360	1.200	-12.096	-17.057	-29.153			16.080	71.180	87.260	-0.042	-0.021	-0.063
		450	1.500	-12.450	-18.358	-30.808			17.160	73.540	90.700	-0.026	-0.012	-0.038
		600	2.000	-13.038	-20.012	-33.050	-30.600	-52.9%	18.880	76.440	95.320	-0.014	-0.007	-0.021
	350	350	1.000	-12.447	-16.525	-28.972	-25.100	-51.9%	16.580	70.380	86.960	-0.041	-0.021	-0.062

Cantilever Length: 1.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t2 / t1	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-10.672	-14.473	-25.145	-25.100	-73.4%	13.040	66.020	79.060	-0.196	-0.074	-0.270
		240	1.200	-10.770	-15.126	-25.896			13.320	67.340	80.660	-0.151	-0.058	-0.209
		300	1.500	-10.870	-15.723	-26.593			13.600	68.520	82.120	-0.120	-0.046	-0.166
		400	2.000	-11.066	-16.777	-27.843	-30.600	-82.4%	14.200	70.500	84.700	-0.080	-0.031	-0.111
	225	225	1.000	-10.966	-14.804	-25.770	-25.100	-69.5%	13.620	66.820	80.440	-0.141	-0.055	-0.196
		270	1.200	-11.143	-15.850	-26.993			14.140	68.860	83.000	-0.094	-0.038	-0.132
		338	1.500	-11.410	-17.176	-28.586			14.940	71.320	86.260	-0.057	-0.024	-0.081
		450	2.000	-11.849	-18.866	-30.715	-30.600	-62.2%	16.240	74.320	90.560	-0.030	-0.013	-0.043
	250	250	1.000	-11.259	-15.127	-26.386	-25.100	-65.9%	14.200	67.580	81.780	-0.105	-0.042	-0.147
		300	1.200	-11.456	-16.198	-27.654			14.800	69.620	84.420	-0.070	-0.030	-0.100
		375	1.500	-11.749	-17.539	-29.288			15.660	72.080	87.740	-0.043	-0.019	-0.062
		500	2.000	-12.240	-19.251	-31.491	-30.600	-59.0%	17.120	75.060	92.180	-0.022	-0.011	-0.033
	300	300	1.000	-11.845	-15.741	-27.586	-25.100	-59.5%	15.360	69.000	84.360	-0.063	-0.027	-0.090
		360	1.200	-12.080	-16.850	-28.930			16.080	71.020	87.100	-0.042	-0.019	-0.061
		450	1.500	-12.433	-18.218	-30.651			17.120	73.440	90.560	-0.026	-0.012	-0.038
		600	2.000	-13.023	-19.928	-32.951	-30.600	-53.6%	18.880	76.360	95.240	-0.014	-0.007	-0.021
	350	350	1.000	-12.431	-16.302	-28.733	-25.100	-54.0%	16.540	70.240	86.780	-0.041	-0.019	-0.060
10	200	200	1.000	-10.665	-14.291	-24.956	-25.100	-75.6%	13.020	65.920	78.940	-0.197	-0.067	-0.264
		240	1.200	-10.763	-14.970	-25.733			13.320	67.240	80.560	-0.151	-0.054	-0.205
		300	1.500	-10.862	-15.588	-26.450			13.600	68.420	82.020	-0.120	-0.043	-0.163
		400	2.000	-11.057	-16.673	-27.730	-30.600	-83.5%	14.180	70.440	84.620	-0.080	-0.030	-0.110
	225	225	1.000	-10.958	-14.642	-25.600	-25.100	-71.4%	13.600	66.720	80.320	-0.141	-0.051	-0.192
		270	1.200	-11.135	-15.725	-26.860			14.120	68.780	82.900	-0.094	-0.036	-0.130
		338	1.500	-11.402	-17.086	-28.488			14.920	71.260	86.180	-0.057	-0.023	-0.080
		450	2.000	-11.842	-18.806	-30.648	-30.600	-62.7%	16.240	74.260	90.500	-0.030	-0.013	-0.043
	250	250	1.000	-11.251	-14.984	-26.235	-25.100	-67.5%	14.200	67.480	81.680	-0.105	-0.040	-0.145
		300	1.200	-11.447	-16.090	-27.537			14.780	69.540	84.320	-0.070	-0.028	-0.098
		375	1.500	-11.742	-17.462	-29.204			15.660	72.000	87.660	-0.043	-0.017	-0.060
		500	2.000	-12.235	-19.200	-31.435	-30.600	-59.4%	17.120	75.000	92.120	-0.022	-0.011	-0.033
	300	300	1.000	-11.837	-15.633	-27.470	-25.100	-60.6%	15.380	68.900	84.280	-0.063	-0.027	-0.090
		360	1.200	-12.072	-16.771	-28.843			16.060	70.960	87.020	-0.042	-0.019	-0.061
		450	1.500	-12.426	-18.163	-30.589			17.120	73.380	90.500	-0.026	-0.012	-0.038
		600	2.000	-13.021	-19.892	-32.913	-30.600	-53.8%	18.880	76.320	95.200	-0.014	-0.007	-0.021
	350	350	1.000	-12.422	-16.222	-28.644	-25.100	-54.7%	16.540	70.160	86.700	-0.041	-0.019	-0.060
12	200	200	1.000	-10.660	-14.192	-24.852	-25.100	-76.9%	13.020	65.840	78.860	-0.196	-0.064	-0.260
		240	1.200	-10.758	-14.885	-25.643			13.300	67.180	80.480	-0.152	-0.050	-0.202
		300	1.500	-10.857	-15.514	-26.371			13.600	68.360	81.960	-0.120	-0.041	-0.161
		400	2.000	-11.054	-16.614	-27.668	-30.600	-84.2%	14.180	70.380	84.560	-0.080	-0.029	-0.109
	225	225	1.000	-10.954	-14.556	-25.510	-25.100	-72.4%	13.600	66.640	80.240	-0.141	-0.049	-0.190
		270	1.200	-11.131	-15.659	-26.790			14.120	68.720	82.840	-0.094	-0.034	-0.128
		338	1.500	-11.399	-17.038	-28.437			14.920	71.200	86.120	-0.057	-0.023	-0.080
		450	2.000	-11.842	-18.774	-30.616	-30.600	-63.0%	16.240	74.220	90.460	-0.029	-0.013	-0.042
	250	250	1.000	-11.246	-14.912	-26.158	-25.100	-68.3%	14.180	67.420	81.600	-0.105	-0.038	-0.143
		300	1.200	-11.444	-16.035	-27.479			14.760	69.500	84.260	-0.071	-0.026	-0.097
		375	1.500	-11.740	-17.422	-29.162			15.660	71.960	87.620	-0.043	-0.017	-0.060
		500	2.000	-12.236	-19.174	-31.410	-30.600	-59.6%	17.120	74.980	92.100	-0.022	-0.011	-0.033
	300	300	1.000	-11.833	-15.582	-27.415	-25.100	-61.1%	15.360	68.860	84.220	-0.063	-0.025	-0.088
		360	1.200	-12.069	-16.732	-28.801			16.060	70.920	86.980	-0.042	-0.019	-0.061
		450	1.500	-12.426	-18.134	-30.560			17.120	73.360	90.480	-0.026	-0.012	-0.038
		600	2.000	-13.024	-19.874	-32.898	-30.600	-54.0%	18.880	76.300	95.180	-0.014	-0.007	-0.021
	350	350	1.000	-12.419	-16.183	-28.602	-25.100	-55.1%	16.540	70.120	86.660	-0.041	-0.019	-0.060

Cantilever Length: 1.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-17.954	-37.277	-55.231	-27.100	27.3%	15.660	49.480	65.140	-0.725	-1.102	-1.827
		240	1.200	-18.193	-37.919	-56.112			16.120	50.660	66.780	-0.560	-0.828	-1.388
		300	1.500	-18.432	-38.518	-56.950			16.580	51.740	68.320	-0.443	-0.641	-1.084
		400	2.000	-18.906	-39.607	-58.513	-34.000	14.2%	17.480	53.660	71.140	-0.295	-0.408	-0.703
	225	225	1.000	-18.629	-37.451	-56.080	-27.100	27.6%	16.580	49.860	66.440	-0.524	-0.777	-1.301
		270	1.200	-19.059	-38.491	-57.550			17.380	51.760	69.140	-0.351	-0.499	-0.850
		338	1.500	-19.703	-39.872	-59.575			18.620	54.180	72.800	-0.213	-0.287	-0.500
		450	2.000	-20.755	-41.758	-62.513	-34.000	18.6%	20.660	57.340	78.000	-0.113	-0.139	-0.252
	250	250	1.000	-19.306	-37.643	-56.949	-27.100	28.0%	17.480	50.280	67.760	-0.393	-0.568	-0.961
		300	1.200	-19.782	-38.718	-58.500			18.400	52.220	70.620	-0.264	-0.365	-0.629
		375	1.500	-20.492	-40.135	-60.627			19.740	54.700	74.440	-0.162	-0.210	-0.372
		500	2.000	-21.664	-42.095	-63.759	-34.000	19.2%	22.020	57.960	79.980	-0.085	-0.102	-0.187
	300	300	1.000	-20.662	-38.060	-58.722	-27.100	28.8%	19.300	51.200	70.500	-0.241	-0.331	-0.572
		360	1.200	-21.233	-39.198	-60.431			20.400	53.220	73.620	-0.162	-0.213	-0.375
		450	1.500	-22.081	-40.700	-62.781			22.020	55.800	77.820	-0.099	-0.124	-0.223
		600	2.000	-23.483	-42.764	-66.247	-34.000	20.5%	24.740	59.180	83.920	-0.052	-0.061	-0.113
	350	350	1.000	-22.020	-38.488	-60.508	-27.100	29.6%	21.160	52.120	73.280	-0.160	-0.210	-0.370
4.5	200	200	1.000	-17.828	-27.802	-45.630	-27.100	2.5%	15.420	44.360	59.780	-0.723	-0.743	-1.466
		240	1.200	-18.059	-28.626	-46.685			15.860	45.780	61.640	-0.558	-0.560	-1.118
		300	1.500	-18.289	-29.403	-47.692			16.300	47.080	63.380	-0.443	-0.434	-0.877
		400	2.000	-18.747	-30.835	-49.582	-34.000	-10.3%	17.180	49.400	66.580	-0.296	-0.279	-0.575
	225	225	1.000	-18.499	-28.127	-46.626	-27.100	3.7%	16.300	45.000	61.300	-0.524	-0.525	-1.049
		270	1.200	-18.914	-29.482	-48.396			17.100	47.280	64.380	-0.351	-0.340	-0.691
		338	1.500	-19.537	-31.311	-50.848			18.300	50.220	68.520	-0.213	-0.198	-0.411
		450	2.000	-20.559	-33.868	-54.427	-34.000	-0.4%	20.280	54.080	74.360	-0.113	-0.099	-0.212
	250	250	1.000	-19.170	-28.472	-47.642	-27.100	4.8%	17.180	45.680	62.860	-0.393	-0.386	-0.779
		300	1.200	-19.630	-29.884	-49.514			18.080	48.000	66.080	-0.264	-0.250	-0.514
		375	1.500	-20.317	-31.774	-52.091			19.420	50.980	70.400	-0.161	-0.147	-0.308
		500	2.000	-21.456	-34.440	-55.896	-34.000	1.3%	21.620	54.960	76.580	-0.084	-0.075	-0.159
	300	300	1.000	-20.513	-29.179	-49.692	-27.100	7.1%	18.980	47.020	66.000	-0.240	-0.228	-0.468
		360	1.200	-21.064	-30.690	-51.754			20.060	49.440	69.500	-0.162	-0.149	-0.311
		450	1.500	-21.886	-32.706	-54.592			21.640	52.520	74.160	-0.099	-0.088	-0.187
		600	2.000	-23.248	-35.517	-58.765	-34.000	4.3%	24.280	56.600	80.880	-0.052	-0.045	-0.097
	350	350	1.000	-21.855	-29.865	-51.720	-27.100	9.3%	20.780	48.300	69.080	-0.159	-0.147	-0.306
6	200	200	1.000	-17.811	-23.713	-41.524	-27.100	-14.3%	15.400	42.420	57.820	-0.722	-0.572	-1.294
		240	1.200	-18.039	-24.662	-42.701			15.860	43.980	59.840	-0.558	-0.434	-0.992
		300	1.500	-18.268	-25.559	-43.827			16.300	45.420	61.720	-0.442	-0.339	-0.781
		400	2.000	-18.723	-27.217	-45.940	-34.000	-24.9%	17.180	47.960	65.140	-0.295	-0.221	-0.516
	225	225	1.000	-18.480	-24.164	-42.644	-27.100	-12.2%	16.300	43.240	59.540	-0.523	-0.407	-0.930
		270	1.200	-18.891	-25.729	-44.620			17.100	45.740	62.840	-0.351	-0.268	-0.619
		338	1.500	-19.509	-27.850	-47.359			18.300	48.940	67.240	-0.213	-0.159	-0.372
		450	2.000	-20.521	-30.815	-51.336	-34.000	-10.3%	20.280	53.160	73.440	-0.112	-0.083	-0.195
	250	250	1.000	-19.149	-24.624	-43.773	-27.100	-10.1%	17.200	44.060	61.260	-0.392	-0.303	-0.695
		300	1.200	-19.604	-26.256	-45.860			18.080	46.620	64.700	-0.263	-0.200	-0.463
		375	1.500	-20.284	-28.448	-48.732			19.400	49.860	69.260	-0.161	-0.120	-0.281
		500	2.000	-21.412	-31.525	-52.937	-34.000	-7.9%	21.600	54.160	75.760	-0.084	-0.063	-0.147
	300	300	1.000	-20.485	-25.531	-46.016	-27.100	-6.1%	18.980	45.660	64.640	-0.240	-0.182	-0.422
		360	1.200	-21.030	-27.280	-48.310			20.040	48.280	68.320	-0.161	-0.121	-0.282
		450	1.500	-21.843	-29.607	-51.450			21.600	51.620	73.220	-0.098	-0.075	-0.173
		600	2.000	-23.190	-32.828	-56.018	-34.000	-3.6%	24.240	55.980	80.220	-0.052	-0.039	-0.091
	350	350	1.000	-21.820	-26.386	-48.206	-27.100	-2.7%	20.740	47.120	67.860	-0.159	-0.120	-0.279

Cantilever Length: 1.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-17.801	-21.157	-38.958	-27.100	-28.1%	15.420	41.340	56.760	-0.722	-0.452	-1.174
		240	1.200	-18.028	-22.222	-40.250			15.840	43.020	58.860	-0.558	-0.348	-0.906
		300	1.500	-18.255	-23.230	-41.485			16.300	44.540	60.840	-0.442	-0.275	-0.717
		400	2.000	-18.706	-25.086	-43.792	-34.000	-35.5%	17.180	47.260	64.440	-0.295	-0.184	-0.479
	225	225	1.000	-18.468	-21.720	-40.188	-27.100	-24.8%	16.300	42.300	58.600	-0.522	-0.328	-0.850
		270	1.200	-18.876	-23.474	-42.350			17.100	44.940	62.040	-0.350	-0.221	-0.571
		338	1.500	-19.488	-25.839	-45.327			18.280	48.340	66.620	-0.213	-0.135	-0.348
		450	2.000	-20.492	-29.099	-49.591	-34.000	-16.8%	20.260	52.760	73.020	-0.112	-0.074	-0.186
	250	250	1.000	-19.134	-22.278	-41.412	-27.100	-21.6%	17.180	43.220	60.400	-0.392	-0.247	-0.639
		300	1.200	-19.586	-24.104	-43.690			18.060	45.920	63.980	-0.263	-0.167	-0.430
		375	1.500	-20.260	-26.534	-46.794			19.400	49.320	68.720	-0.160	-0.105	-0.265
		500	2.000	-21.378	-29.895	-51.273	-34.000	-13.7%	21.580	53.800	75.380	-0.084	-0.057	-0.141
	300	300	1.000	-20.465	-23.353	-43.818	-27.100	-16.0%	18.960	44.960	63.920	-0.240	-0.152	-0.392
		360	1.200	-21.005	-25.299	-46.304			20.000	47.720	67.720	-0.161	-0.105	-0.266
		450	1.500	-21.811	-27.862	-49.673			21.600	51.180	72.780	-0.099	-0.066	-0.165
		600	2.000	-23.149	-31.334	-54.483	-34.000	-8.5%	24.220	55.700	79.920	-0.052	-0.036	-0.088
	350	350	1.000	-21.794	-24.356	-46.150	-27.100	-11.3%	20.720	46.520	67.240	-0.159	-0.103	-0.262
10	200	200	1.000	-17.792	-19.956	-37.748	-27.100	-35.8%	15.400	40.920	56.320	-0.722	-0.392	-1.114
		240	1.200	-18.017	-21.101	-39.118			15.860	42.640	58.500	-0.557	-0.306	-0.863
		300	1.500	-18.243	-22.179	-40.422			16.280	44.220	60.500	-0.441	-0.246	-0.687
		400	2.000	-18.691	-24.152	-42.843	-34.000	-40.8%	17.160	47.000	64.160	-0.294	-0.168	-0.462
	225	225	1.000	-18.457	-20.587	-39.044	-27.100	-31.6%	16.300	41.920	58.220	-0.522	-0.289	-0.811
		270	1.200	-18.861	-22.464	-41.325			17.060	44.660	61.720	-0.350	-0.199	-0.549
		338	1.500	-19.471	-24.966	-44.437			18.260	48.120	66.380	-0.213	-0.125	-0.338
		450	2.000	-20.470	-28.358	-48.828	-34.000	-19.9%	20.240	52.600	72.840	-0.112	-0.071	-0.183
	250	250	1.000	-19.121	-21.206	-40.327	-27.100	-27.8%	17.180	42.880	60.060	-0.391	-0.221	-0.612
		300	1.200	-19.570	-23.152	-42.722			18.060	45.640	63.700	-0.263	-0.153	-0.416
		375	1.500	-20.241	-25.712	-45.953			19.380	49.120	68.500	-0.161	-0.097	-0.258
		500	2.000	-21.354	-29.190	-50.544	-34.000	-16.5%	21.560	53.660	75.220	-0.085	-0.054	-0.139
	300	300	1.000	-20.448	-22.391	-42.839	-27.100	-21.0%	18.940	44.680	63.620	-0.239	-0.140	-0.379
		360	1.200	-20.985	-24.452	-45.437			19.980	47.500	67.480	-0.160	-0.099	-0.259
		450	1.500	-21.787	-27.126	-48.913			21.560	51.020	72.580	-0.098	-0.064	-0.162
		600	2.000	-23.122	-30.680	-53.802	-34.000	-10.8%	24.200	55.580	79.780	-0.052	-0.036	-0.088
	350	350	1.000	-21.773	-23.490	-45.263	-27.100	-15.4%	20.700	46.280	66.980	-0.159	-0.096	-0.255
12	200	200	1.000	-17.784	-19.331	-37.115	-27.100	-40.2%	15.380	40.740	56.120	-0.721	-0.362	-1.083
		240	1.200	-18.008	-20.528	-38.536			15.840	42.480	58.320	-0.557	-0.286	-0.843
		300	1.500	-18.232	-21.649	-39.881			16.260	44.080	60.340	-0.441	-0.231	-0.672
		400	2.000	-18.679	-23.687	-42.366	-34.000	-43.5%	17.140	46.880	64.020	-0.295	-0.160	-0.455
	225	225	1.000	-18.448	-20.006	-38.454	-27.100	-35.5%	16.280	41.740	58.020	-0.522	-0.269	-0.791
		270	1.200	-18.850	-21.958	-40.808			17.080	44.500	61.580	-0.350	-0.188	-0.538
		338	1.500	-19.457	-24.534	-43.991			18.260	48.000	66.260	-0.213	-0.121	-0.334
		450	2.000	-20.455	-27.979	-48.434	-34.000	-21.5%	20.240	52.500	72.740	-0.112	-0.070	-0.182
	250	250	1.000	-19.110	-20.667	-39.777	-27.100	-31.1%	17.160	42.720	59.880	-0.391	-0.209	-0.600
		300	1.200	-19.557	-22.684	-42.241			18.020	45.520	63.540	-0.263	-0.146	-0.409
		375	1.500	-20.226	-25.308	-45.534			19.360	49.020	68.380	-0.161	-0.095	-0.256
		500	2.000	-21.340	-28.827	-50.167	-34.000	-17.9%	21.540	53.580	75.120	-0.084	-0.054	-0.138
	300	300	1.000	-20.435	-21.926	-42.361	-27.100	-23.6%	18.920	44.540	63.460	-0.239	-0.135	-0.374
		360	1.200	-20.969	-24.045	-45.014			19.980	47.380	67.360	-0.230	-0.096	-0.326
		450	1.500	-21.771	-26.763	-48.534			21.560	50.920	72.480	-0.098	-0.063	-0.161
		600	2.000	-23.109	-30.336	-53.445	-34.000	-12.1%	24.200	55.500	79.700	-0.051	-0.036	-0.087
	350	350	1.000	-21.758	-23.081	-44.839	-27.100	-17.4%	20.700	46.160	66.860	-0.159	-0.093	-0.252

Cantilever Length: 2.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-26.589	-58.710	-85.299	-27.200	53.7%	18.760	47.689	66.449	-1.858	-3.498	-5.356
		240	1.200	-27.028	-59.260	-86.288			19.420	48.669	68.089	-1.437	-2.643	-4.080
		300	1.500	-27.464	-59.781	-87.245			20.040	49.602	69.642	-1.140	-2.053	-3.193
		400	2.000	-28.329	-60.744	-89.073	-31.900	47.5%	21.300	51.251	72.551	-0.762	-1.317	-2.079
	225	225	1.000	-27.795	-58.852	-86.647	-27.200	53.8%	20.000	48.000	68.000	-1.354	-2.459	-3.813
		270	1.200	-28.580	-59.749	-88.329			21.160	49.578	70.738	-0.910	-1.592	-2.502
		338	1.500	-29.753	-60.968	-90.721			22.860	51.705	74.565	-0.554	-0.924	-1.478
		450	2.000	-31.660	-62.682	-94.342	-31.900	49.1%	25.660	54.574	80.234	-0.294	-0.455	-0.749
	250	250	1.000	-29.003	-59.010	-88.013	-27.200	53.9%	21.240	48.335	69.575	-1.022	-1.796	-2.818
		300	1.200	-29.872	-59.939	-89.811			22.500	49.984	72.484	-0.687	-1.163	-1.850
		375	1.500	-31.163	-61.194	-92.357			24.380	52.159	76.539	-0.421	-0.677	-1.098
		500	2.000	-33.286	-62.981	-96.267	-31.900	49.4%	27.500	55.147	82.647	-0.222	-0.334	-0.556
	300	300	1.000	-31.423	-59.362	-90.785	-27.200	54.2%	23.720	49.100	72.820	-0.633	-1.042	-1.675
		360	1.200	-32.462	-60.354	-92.816			25.240	50.845	76.085	-0.426	-0.676	-1.102
		450	1.500	-34.002	-61.696	-95.698			27.500	53.139	80.639	-0.261	-0.395	-0.656
		600	2.000	-36.542	-63.597	-100.139	-31.900	49.8%	31.220	56.295	87.515	-0.139	-0.194	-0.333
	350	350	1.000	-33.850	-59.735	-93.585	-27.200	54.5%	26.240	49.888	76.128	-0.425	-0.659	-1.084
4.5	200	200	1.000	-26.226	-41.470	-67.696	-27.200	34.4%	17.840	35.591	53.431	-1.854	-2.333	-4.187
		240	1.200	-26.641	-42.235	-68.876			18.440	36.681	55.121	-1.433	-1.766	-3.199
		300	1.500	-27.054	-42.971	-70.025			19.040	37.704	56.744	-1.137	-1.373	-2.510
		400	2.000	-27.879	-44.360	-72.239	-31.900	28.1%	20.220	39.595	59.815	-0.761	-0.884	-1.645
	225	225	1.000	-27.421	-41.781	-69.202	-27.200	34.9%	19.040	36.080	55.120	-1.350	-1.645	-2.995
		270	1.200	-28.166	-43.055	-71.221			20.120	37.860	57.980	-0.907	-1.069	-1.976
		338	1.500	-29.288	-44.841	-74.129			21.740	40.262	62.002	-0.553	-0.624	-1.177
		450	2.000	-31.125	-47.454	-78.579	-31.900	32.8%	24.380	43.621	68.001	-0.293	-0.311	-0.604
	250	250	1.000	-28.618	-42.115	-70.733	-27.200	35.4%	20.260	36.614	56.874	-1.020	-1.204	-2.224
		300	1.200	-29.446	-43.454	-72.900			21.440	38.482	59.922	-0.686	-0.783	-1.469
		375	1.500	-30.682	-45.317	-75.999			23.220	40.951	64.171	-0.419	-0.461	-0.880
		500	2.000	-32.732	-48.072	-80.804	-31.900	33.6%	26.180	44.444	70.624	-0.222	-0.230	-0.452
	300	300	1.000	-31.015	-42.822	-73.837	-27.200	36.5%	22.660	37.748	60.408	-0.632	-0.702	-1.334
		360	1.200	-32.008	-44.282	-76.290			24.080	39.728	63.808	-0.425	-0.459	-0.884
		450	1.500	-33.488	-46.307	-79.795			26.200	42.353	68.553	-0.260	-0.272	-0.532
		600	2.000	-35.943	-49.274	-85.217	-31.900	35.3%	29.760	46.023	75.783	-0.138	-0.136	-0.274
	350	350	1.000	-33.416	-43.528	-76.944	-27.200	37.5%	25.060	38.861	63.921	-0.423	-0.448	-0.871
6	200	200	1.000	-26.138	-33.659	-59.797	-27.200	19.2%	17.780	31.292	49.072	-1.852	-1.769	-3.621
		240	1.200	-26.546	-34.602	-61.148			18.360	32.499	50.859	-1.431	-1.344	-2.775
		300	1.500	-26.954	-35.515	-62.469			18.960	33.619	52.579	-1.136	-1.049	-2.185
		400	2.000	-27.766	-37.253	-65.019	-31.900	14.4%	20.140	35.710	55.850	-0.760	-0.681	-1.441
	225	225	1.000	-27.330	-34.138	-61.468	-27.200	20.3%	18.960	31.960	50.920	-1.350	-1.252	-2.602
		270	1.200	-28.064	-35.726	-63.790			20.020	33.943	53.963	-0.906	-0.820	-1.726
		338	1.500	-29.169	-37.973	-67.142			21.620	36.593	58.213	-0.553	-0.484	-1.037
		450	2.000	-30.983	-41.297	-72.280	-31.900	22.8%	24.260	40.300	64.560	-0.292	-0.248	-0.540
	250	250	1.000	-28.522	-34.639	-63.161	-27.200	21.5%	20.140	32.671	52.811	-1.019	-0.921	-1.940
		300	1.200	-29.336	-36.318	-65.654			21.340	34.697	56.037	-0.685	-0.605	-1.290
		375	1.500	-30.555	-38.671	-69.226			23.100	37.434	60.534	-0.419	-0.361	-0.780
		500	2.000	-32.577	-42.177	-74.754	-31.900	24.4%	26.040	41.270	67.310	-0.222	-0.185	-0.407
	300	300	1.000	-30.906	-35.653	-66.559	-27.200	23.7%	22.540	34.050	56.590	-0.631	-0.544	-1.175
		360	1.200	-31.883	-37.494	-69.377			23.960	36.206	60.166	-0.425	-0.359	-0.784
		450	1.500	-33.342	-40.058	-73.400			26.060	39.072	65.132	-0.261	-0.216	-0.477
		600	2.000	-35.763	-43.827	-79.590	-31.900	27.2%	29.600	43.080	72.680	-0.138	-0.112	-0.250
	350	350	1.000	-33.291	-36.630	-69.921	-27.200	25.7%	24.920	35.343	60.263	-0.423	-0.351	-0.774

Cantilever Length: 2.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-26.116	-28.421	-54.537	-27.200	4.3%	17.780	28.777	46.557	-1.850	-1.366	-3.216
		240	1.200	-26.521	-29.554	-56.075			18.360	30.086	48.446	-1.431	-1.044	-2.475
		300	1.500	-26.927	-30.651	-57.578			18.960	31.310	50.270	-1.135	-0.822	-1.957
		400	2.000	-27.735	-32.746	-60.481	-31.900	2.6%	20.140	33.569	53.709	-0.758	-0.543	-1.301
	225	225	1.000	-27.304	-29.087	-56.391	-27.200	6.5%	18.980	29.600	48.580	-1.348	-0.975	-2.323
		270	1.200	-28.034	-30.999	-59.033			20.020	31.732	51.752	-0.905	-0.648	-1.553
		338	1.500	-29.132	-33.706	-62.838			21.620	34.583	56.203	-0.552	-0.392	-0.944
		450	2.000	-30.932	-37.693	-68.625	-31.900	15.4%	24.280	38.531	62.811	-0.292	-0.208	-0.500
	250	250	1.000	-28.492	-29.759	-58.251	-27.200	8.6%	20.160	30.423	50.583	-1.018	-0.725	-1.743
		300	1.200	-29.302	-31.780	-61.082			21.320	32.619	53.939	-0.684	-0.484	-1.168
		375	1.500	-30.511	-34.610	-65.121			23.100	35.533	58.633	-0.419	-0.296	-0.715
		500	2.000	-32.518	-38.793	-71.311	-31.900	17.8%	26.060	39.586	65.646	-0.221	-0.158	-0.379
	300	300	1.000	-30.868	-31.074	-61.942	-27.200	12.5%	22.520	32.007	54.527	-0.631	-0.436	-1.067
		360	1.200	-31.837	-33.290	-65.127			23.940	34.287	58.227	-0.424	-0.294	-0.718
		450	1.500	-33.284	-36.361	-69.645			26.040	37.327	63.367	-0.260	-0.183	-0.443
		600	2.000	-35.684	-40.816	-76.500	-31.900	21.8%	29.580	41.529	71.109	-0.138	-0.099	-0.237
	350	350	1.000	-33.242	-32.317	-65.559	-27.200	15.8%	24.900	33.421	58.321	-0.423	-0.286	-0.709
10	200	200	1.000	-26.105	-25.726	-51.831	-27.200	-5.7%	17.780	27.640	45.420	-1.790	-1.144	-2.934
		240	1.200	-26.509	-27.004	-53.513			18.360	29.020	47.380	-1.430	-0.884	-2.314
		300	1.500	-26.913	-28.242	-55.155			18.960	30.295	49.255	-1.134	-0.703	-1.837
		400	2.000	-27.717	-30.596	-58.313	-31.900	-4.3%	20.120	32.658	52.778	-0.758	-0.473	-1.231
	225	225	1.000	-27.291	-26.527	-53.818	-27.200	-2.5%	18.960	28.560	47.520	-1.348	-0.826	-2.174
		270	1.200	-28.017	-28.682	-56.699			20.020	30.776	50.796	-0.905	-0.559	-1.464
		338	1.500	-29.110	-31.712	-60.822			21.620	33.724	55.344	-0.551	-0.347	-0.898
		450	2.000	-30.901	-36.112	-67.013	-31.900	11.7%	24.260	37.801	62.061	-0.292	-0.191	-0.483
	250	250	1.000	-28.476	-27.321	-55.797	-27.200	0.4%	20.140	29.438	49.578	-1.017	-0.621	-1.638
		300	1.200	-29.282	-29.595	-58.877			21.320	31.717	53.037	-0.683	-0.424	-1.107
		375	1.500	-30.485	-32.751	-63.236			23.080	34.728	57.808	-0.419	-0.265	-0.684
		500	2.000	-32.482	-37.335	-69.817	-31.900	14.6%	26.020	38.909	64.929	-0.221	-0.147	-0.368
	300	300	1.000	-30.847	-28.855	-59.702	-27.200	5.7%	22.520	31.090	53.610	-0.630	-0.383	-1.013
		360	1.200	-31.810	-31.338	-63.148			23.920	33.473	57.393	-0.424	-0.264	-0.688
		450	1.500	-33.248	-34.738	-67.986			26.040	36.589	62.629	-0.260	-0.168	-0.428
		600	2.000	-35.638	-39.558	-75.196	-31.900	19.4%	29.560	40.875	70.435	-0.137	-0.095	-0.232
	350	350	1.000	-33.213	-30.300	-63.513	-27.200	10.2%	24.860	32.595	57.455	-0.422	-0.257	-0.679
12	200	200	1.000	-26.095	-24.221	-50.316	-27.200	-12.3%	17.780	27.083	44.863	-1.849	-1.013	-2.862
		240	1.200	-26.497	-25.612	-52.109			18.360	28.498	46.858	-1.429	-0.792	-2.221
		300	1.500	-26.899	-26.954	-53.853			18.960	29.808	48.768	-1.134	-0.635	-1.769
		400	2.000	-27.700	-29.489	-57.189	-31.900	-8.2%	20.120	32.221	52.341	-0.757	-0.437	-1.194
	225	225	1.000	-27.279	-25.121	-52.400	-27.200	-8.3%	18.960	28.040	47.000	-1.347	-0.741	-2.088
		270	1.200	-28.002	-27.455	-55.457			20.000	30.307	50.307	-0.905	-0.510	-1.415
		338	1.500	-29.089	-30.705	-59.794			21.600	33.324	54.924	-0.551	-0.324	-0.875
		450	2.000	-30.875	-35.340	-66.215	-31.900	9.7%	24.240	37.442	61.682	-0.291	-0.183	-0.474
	250	250	1.000	-28.462	-26.005	-54.467	-27.200	-4.6%	20.120	28.955	49.075	-1.017	-0.563	-1.580
		300	1.200	-29.264	-28.461	-57.725			21.300	31.285	52.585	-0.684	-0.390	-1.074
		375	1.500	-30.462	-31.829	-62.291			23.060	34.343	57.403	-0.419	-0.251	-0.670
		500	2.000	-32.452	-36.627	-69.079	-31.900	12.9%	26.020	38.545	64.565	-0.221	-0.142	-0.363
	300	300	1.000	-30.827	-27.708	-58.535	-27.200	1.8%	22.480	30.661	53.141	-0.629	-0.355	-0.984
		360	1.200	-31.785	-30.372	-62.157			23.900	33.074	56.974	-0.423	-0.249	-0.672
		450	1.500	-33.220	-33.958	-67.178			26.000	36.236	62.236	-0.259	-0.162	-0.421
		600	2.000	-35.602	-38.942	-74.544	-31.900	18.1%	29.540	40.542	70.082	-0.137	-0.093	-0.230
	350	350	1.000	-33.189	-29.297	-62.486	-27.200	7.2%	24.840	32.200	57.040	-0.422	-0.242	-0.664

Cantilever Length: 2.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-36.617	-85.489	-122.106	-62.900	26.4%	22.360	86.237	108.597	-3.907	-8.028	-11.935
		240	1.200	-37.318	-85.954	-123.272			23.200	86.950	110.150	-3.024	-6.088	-9.112
		300	1.500	-38.013	-86.387	-124.400			24.040	87.601	111.641	-2.401	-4.742	-7.143
		400	2.000	-39.387	-87.178	-126.565	-75.800	13.1%	25.720	88.742	114.462	-1.608	-3.060	-4.668
	225	225	1.000	-38.513	-85.587	-124.100	-62.900	26.5%	23.940	86.420	110.360	-2.863	-5.643	-8.506
		270	1.200	-39.763	-86.337	-126.100			25.460	87.540	113.000	-1.926	-3.673	-5.599
		338	1.500	-41.626	-87.335	-128.961			27.700	89.027	116.727	-1.176	-2.144	-3.320
		450	2.000	-44.647	-88.713	-133.360	-75.800	14.6%	31.340	91.003	122.343	-0.624	-1.065	-1.689
	250	250	1.000	-40.410	-85.698	-126.108	-62.900	26.6%	25.520	86.624	112.144	-2.175	-4.116	-6.291
		300	1.200	-41.793	-86.470	-128.263			27.200	87.785	114.985	-1.464	-2.680	-4.144
		375	1.500	-43.840	-87.495	-131.335			29.660	89.292	118.952	-0.898	-1.571	-2.469
		500	2.000	-47.203	-88.928	-136.131	-75.800	14.8%	33.720	91.349	125.069	-0.475	-0.778	-1.253
	300	300	1.000	-44.210	-85.945	-130.155	-62.900	26.8%	28.720	87.072	115.792	-1.359	-2.387	-3.746
		360	1.200	-45.858	-86.765	-132.623			30.720	88.294	119.014	-0.916	-1.555	-2.471
		450	1.500	-48.302	-87.854	-136.156			33.640	89.903	123.543	-0.563	-0.912	-1.475
		600	2.000	-52.319	-89.380	-141.699	-75.800	15.2%	38.480	92.082	130.562	-0.300	-0.452	-0.752
	350	350	1.000	-48.015	-86.212	-134.227	-62.900	27.0%	31.900	87.561	119.461	-0.920	-1.506	-2.426
4.5	200	200	1.000	-35.949	-59.550	-95.499	-62.900	-5.6%	20.500	66.968	87.468	-3.896	-5.348	-9.244
		240	1.200	-36.609	-60.152	-96.761			21.260	67.621	88.881	-3.014	-4.059	-7.073
		300	1.500	-37.267	-60.731	-97.998			22.000	68.255	90.255	-2.394	-3.164	-5.558
		400	2.000	-38.575	-61.824	-100.399	-75.800	-22.6%	23.520	69.397	92.917	-1.602	-2.046	-3.648
	225	225	1.000	-37.824	-59.782	-97.606	-62.900	-5.2%	22.020	67.240	89.260	-2.855	-3.764	-6.619
		270	1.200	-39.007	-60.787	-99.794			23.360	68.346	91.706	-1.919	-2.455	-4.374
		338	1.500	-40.785	-62.195	-102.980			25.440	69.795	95.235	-1.173	-1.437	-2.610
		450	2.000	-43.691	-64.271	-107.962	-75.800	-17.9%	28.780	71.880	100.660	-0.623	-0.719	-1.342
	250	250	1.000	-39.700	-60.037	-99.737	-62.900	-4.8%	23.540	67.566	91.106	-2.168	-2.750	-4.918
		300	1.200	-41.013	-61.095	-102.108			25.060	68.690	93.750	-1.459	-1.795	-3.254
		375	1.500	-42.972	-62.568	-105.540			27.300	70.212	97.512	-0.895	-1.056	-1.951
		500	2.000	-46.213	-64.765	-110.978	-75.800	-17.0%	31.060	72.387	103.447	-0.475	-0.528	-1.003
	300	300	1.000	-43.458	-60.584	-104.042	-62.900	-3.8%	26.580	68.237	94.817	-1.355	-1.600	-2.955
		360	1.200	-45.031	-61.745	-106.776			28.400	69.451	97.851	-0.913	-1.047	-1.960
		450	1.500	-47.377	-63.359	-110.736			31.100	71.082	102.182	-0.561	-0.617	-1.178
		600	2.000	-51.259	-65.750	-117.009	-75.800	-15.3%	35.580	73.420	109.000	-0.298	-0.311	-0.609
	350	350	1.000	-47.222	-61.143	-108.365	-62.900	-2.9%	29.620	68.907	98.527	-0.917	-1.014	-1.931
6	200	200	1.000	-35.705	-47.528	-83.233	-62.900	-32.3%	20.160	61.019	81.179	-3.890	-4.029	-7.919
		240	1.200	-36.347	-48.278	-84.625			20.920	61.734	82.654	-3.009	-3.063	-6.072
		300	1.500	-36.988	-49.006	-85.994			21.640	62.431	84.071	-2.390	-2.392	-4.782
		400	2.000	-38.267	-50.402	-88.669	-75.800	-50.4%	23.120	63.703	86.823	-1.600	-1.554	-3.154
	225	225	1.000	-37.570	-47.911	-85.481	-62.900	-31.3%	21.660	61.420	83.080	-2.851	-2.841	-5.692
		270	1.200	-38.724	-49.182	-87.906			22.980	62.622	85.602	-1.918	-1.860	-3.778
		338	1.500	-40.464	-50.998	-91.462			25.020	64.243	89.263	-1.171	-1.098	-2.269
		450	2.000	-43.317	-53.740	-97.057	-75.800	-41.0%	28.320	66.578	94.898	-0.622	-0.557	-1.179
	250	250	1.000	-39.436	-48.317	-87.753	-62.900	-30.2%	23.160	61.838	84.998	-2.165	-2.082	-4.247
		300	1.200	-40.719	-49.669	-90.388			24.640	63.093	87.733	-1.457	-1.366	-2.823
		375	1.500	-42.637	-51.584	-94.221			26.860	64.783	91.643	-0.894	-0.810	-1.704
		500	2.000	-45.819	-54.503	-100.322	-75.800	-39.1%	30.540	67.240	97.780	-0.473	-0.413	-0.886
	300	300	1.000	-43.173	-49.153	-92.326	-62.900	-28.0%	26.160	62.692	88.852	-1.353	-1.219	-2.572
		360	1.200	-44.712	-50.654	-95.366			27.920	64.051	91.971	-0.912	-0.803	-1.715
		450	1.500	-47.010	-52.772	-99.782			30.580	65.863	96.443	-0.560	-0.480	-1.040
		600	2.000	-50.823	-55.963	-106.786	-75.800	-35.4%	35.000	68.459	103.459	-0.298	-0.246	-0.544
	350	350	1.000	-46.914	-49.975	-96.889	-62.900	-25.9%	29.160	63.511	92.671	-0.916	-0.778	-1.694

Cantilever Length: 2.5 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-35.622	-39.305	-74.927	-62.900	-60.0%	20.140	57.652	77.792	-3.886	-3.068	-6.954
		240	1.200	-36.258	-40.229	-76.487			20.880	58.453	79.333	-3.007	-2.343	-5.350
		300	1.500	-36.892	-41.132	-78.024			21.620	59.219	80.839	-2.388	-1.838	-4.226
		400	2.000	-38.159	-42.876	-81.035	-75.800	-76.8%	23.100	60.633	83.733	-1.599	-1.207	-2.806
	225	225	1.000	-37.482	-39.869	-77.351	-62.900	-57.8%	21.620	58.180	79.800	-2.849	-2.175	-5.024
		270	1.200	-38.625	-41.449	-80.074			22.940	59.508	82.448	-1.915	-1.437	-3.352
		338	1.500	-40.347	-43.726	-84.073			24.960	61.314	86.274	-1.170	-0.861	-2.031
		450	2.000	-43.175	-47.185	-90.360	-75.800	-60.6%	28.260	63.886	92.146	-0.621	-0.449	-1.070
	250	250	1.000	-39.342	-40.447	-79.789	-62.900	-55.5%	23.120	58.691	81.811	-2.163	-1.604	-3.767
		300	1.200	-40.612	-42.133	-82.745			24.580	60.088	84.668	-1.456	-1.063	-2.519
		375	1.500	-42.510	-44.539	-87.049			26.800	61.944	88.744	-0.893	-0.643	-1.536
		500	2.000	-45.662	-48.214	-93.876	-75.800	-57.2%	30.500	64.618	95.118	-0.473	-0.337	-0.810
	300	300	1.000	-43.063	-41.595	-84.658	-62.900	-51.2%	26.100	59.713	85.813	-1.352	-0.951	-2.303
		360	1.200	-44.585	-43.474	-88.059			27.860	61.195	89.055	-0.911	-0.635	-1.546
		450	1.500	-46.859	-46.134	-92.993			30.500	63.170	93.670	-0.560	-0.388	-0.948
		600	2.000	-50.633	-50.133	-100.766	-75.800	-51.2%	34.900	65.998	100.898	-0.297	-0.208	-0.505
	350	350	1.000	-46.784	-42.694	-89.478	-62.900	-47.3%	29.060	60.667	89.727	-0.915	-0.616	-1.531
10	200	200	1.000	-35.603	-34.894	-70.497	-62.900	-80.3%	20.140	56.070	76.210	-3.884	-2.520	-6.404
		240	1.200	-36.237	-35.963	-72.200			20.880	56.930	77.810	-3.006	-1.937	-4.943
		300	1.500	-36.869	-37.011	-73.880			21.620	57.738	79.358	-2.386	-1.531	-3.917
		400	2.000	-38.131	-39.035	-77.166	-75.800	-94.2%	23.100	59.255	82.355	-1.597	-1.020	-2.617
	225	225	1.000	-37.460	-35.604	-73.064	-62.900	-76.7%	21.640	56.660	78.300	-2.846	-1.802	-4.648
		270	1.200	-38.598	-37.436	-76.034			22.960	58.075	81.035	-1.914	-1.206	-3.120
		338	1.500	-40.313	-40.074	-80.387			24.960	59.996	84.956	-1.169	-0.738	-1.907
		450	2.000	-43.127	-44.054	-87.181	-75.800	-72.1%	28.260	62.708	90.968	-0.620	-0.397	-1.017
	250	250	1.000	-39.315	-36.316	-75.631	-62.900	-73.2%	23.120	57.250	80.370	-2.163	-1.338	-3.501
		300	1.200	-40.580	-38.271	-78.851			24.600	58.715	83.315	-1.455	-0.901	-2.356
		375	1.500	-42.469	-41.052	-83.521			26.800	60.687	87.487	-0.892	-0.558	-1.450
		500	2.000	-45.606	-45.259	-90.865	-75.800	-67.5%	30.460	63.500	93.960	-0.473	-0.302	-0.775
	300	300	1.000	-43.027	-37.705	-80.732	-62.900	-66.8%	26.080	58.362	84.442	-1.352	-0.807	-2.159
		360	1.200	-44.540	-39.883	-84.423			27.840	59.929	87.769	-0.911	-0.549	-1.460
		450	1.500	-46.802	-42.945	-89.747			30.480	62.001	92.481	-0.559	-0.345	-0.904
		600	2.000	-50.557	-47.476	-98.033	-75.800	-59.7%	34.900	64.932	99.832	-0.297	-0.190	-0.487
	350	350	1.000	-46.737	-39.025	-85.762	-62.900	-61.2%	29.020	59.389	88.409	-0.914	-0.532	-1.446
12	200	200	1.000	-35.591	-32.304	-67.895	-62.900	-94.7%	20.140	55.207	75.347	-3.882	-2.184	-6.066
		240	1.200	-36.223	-33.495	-69.718			20.880	56.111	76.991	-3.004	-1.692	-4.696
		300	1.500	-36.854	-34.660	-71.514			21.600	56.965	78.565	-2.385	-1.349	-3.734
		400	2.000	-38.112	-36.905	-75.017	-75.800	-105.4%	23.100	58.522	81.622	-1.596	-0.914	-2.510
	225	225	1.000	-37.445	-33.129	-70.574	-62.900	-89.9%	21.620	55.860	77.480	-2.846	-1.576	-4.422
		270	1.200	-38.580	-35.166	-73.746			22.960	57.317	80.277	-1.913	-1.071	-2.984
		338	1.500	-40.289	-38.082	-78.371			24.940	59.309	84.249	-1.168	-0.669	-1.837
		450	2.000	-43.093	-42.420	-85.513	-75.800	-78.7%	28.240	62.106	90.346	-0.620	-0.371	-0.991
	250	250	1.000	-39.298	-33.947	-73.245	-62.900	-85.3%	23.100	56.480	79.580	-2.161	-1.183	-3.344
		300	1.200	-40.557	-36.118	-76.675			24.560	58.003	82.563	-1.454	-0.809	-2.263
		375	1.500	-42.440	-39.181	-81.621			26.780	60.029	86.809	-0.892	-0.512	-1.404
		500	2.000	-45.564	-43.736	-89.300	-75.800	-73.3%	30.460	62.909	93.369	-0.472	-0.286	-0.758
	300	300	1.000	-43.003	-35.533	-78.536	-62.900	-77.0%	26.040	57.652	83.692	-1.351	-0.727	-2.078
		360	1.200	-44.510	-37.941	-82.451			27.820	59.259	87.079	-0.910	-0.505	-1.415
		450	1.500	-46.763	-41.285	-88.048			30.460	61.386	91.846	-0.559	-0.323	-0.882
		600	2.000	-50.503	-46.125	-96.628	-75.800	-64.3%	34.860	64.383	99.243	-0.297	-0.183	-0.480
	350	350	1.000	-46.704	-37.033	-83.737	-62.900	-69.8%	29.000	58.707	87.707	-0.914	-0.488	-1.402

Cantilever Length: 3.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-48.016	-127.967	-175.983	-62.700	51.0%	26.360	111.114	137.474	-7.233	-16.269	-23.502
		240	1.200	-49.038	-128.614	-177.652			27.460	112.186	139.646	-5.602	-12.338	-17.940
		300	1.500	-50.050	-129.195	-179.245			28.520	113.152	141.672	-4.452	-9.611	-14.063
		400	2.000	-52.049	-130.197	-182.246	-76.500	41.2%	30.620	114.770	145.390	-2.975	-6.220	-9.195
	225	225	1.000	-50.762	-128.038	-178.800	-62.700	51.0%	28.320	111.240	139.560	-5.328	-11.431	-16.759
		270	1.200	-52.584	-129.057	-181.641			30.260	112.942	143.202	-3.587	-7.442	-11.029
		338	1.500	-55.294	-130.314	-185.608			33.100	114.980	148.080	-2.196	-4.347	-6.543
		450	2.000	-59.684	-131.900	-191.584	-76.500	42.0%	37.660	117.481	155.141	-1.168	-2.162	-3.330
	250	250	1.000	-53.509	-128.120	-181.629	-62.700	51.1%	30.300	111.387	141.687	-4.064	-8.338	-12.402
		300	1.200	-55.523	-129.156	-184.679			32.420	113.110	145.530	-2.739	-5.429	-8.168
		375	1.500	-58.500	-130.428	-188.928			35.540	115.169	150.709	-1.683	-3.183	-4.866
		500	2.000	-63.385	-132.058	-195.443	-76.500	42.1%	40.600	117.754	158.354	-0.894	-1.579	-2.473
	300	300	1.000	-59.009	-128.302	-187.311	-62.700	51.1%	34.220	111.744	145.964	-2.562	-4.830	-7.392
		360	1.200	-61.408	-129.373	-190.781			36.760	113.509	150.269	-1.729	-3.146	-4.875
		450	1.500	-64.960	-130.693	-195.653			40.460	115.653	156.113	-1.063	-1.847	-2.910
		600	2.000	-70.796	-132.391	-203.187	-76.500	42.2%	46.500	118.321	164.821	-0.567	-0.916	-1.483
	350	350	1.000	-64.514	-128.502	-193.016	-62.700	51.2%	38.200	112.102	150.302	-1.745	-3.046	-4.791
4.5	200	200	1.000	-47.032	-90.481	-137.513	-62.700	30.7%	23.440	84.179	107.619	-7.207	-10.821	-18.028
		240	1.200	-47.998	-91.264	-139.262			24.360	85.125	109.485	-5.581	-8.208	-13.789
		300	1.500	-48.961	-91.981	-140.942			25.300	85.940	111.240	-4.435	-6.396	-10.831
		400	2.000	-50.873	-93.259	-144.132	-76.500	18.0%	27.140	87.387	114.527	-2.973	-4.135	-7.108
	225	225	1.000	-49.740	-90.672	-140.412	-62.700	30.8%	25.280	84.420	109.700	-5.309	-7.609	-12.918
		270	1.200	-51.473	-91.932	-143.405			26.940	85.903	112.843	-3.574	-4.958	-8.532
		338	1.500	-54.069	-93.562	-147.631			29.460	87.720	117.180	-2.187	-2.901	-5.088
		450	2.000	-58.305	-95.764	-154.069	-76.500	20.1%	33.560	90.057	123.617	-1.164	-1.448	-2.612
	250	250	1.000	-52.452	-90.881	-143.333	-62.700	31.0%	27.100	84.680	111.780	-4.050	-5.554	-9.604
		300	1.200	-54.373	-92.184	-146.557			28.960	86.200	115.160	-2.729	-3.621	-6.350
		375	1.500	-57.231	-93.864	-151.095			31.740	88.054	119.794	-1.677	-2.129	-3.806
		500	2.000	-61.952	-96.169	-158.121	-76.500	20.5%	36.320	90.483	126.803	-0.891	-1.062	-1.953
	300	300	1.000	-57.883	-91.335	-149.218	-62.700	31.4%	30.820	85.217	116.037	-2.553	-3.225	-5.778
		360	1.200	-60.181	-92.722	-152.903			33.040	86.812	119.852	-1.822	-1.962	-3.784
		450	1.500	-63.601	-94.518	-158.119			36.340	88.777	125.117	-1.060	-1.240	-2.300
		600	2.000	-69.254	-96.985	-166.239	-76.500	21.1%	41.820	91.355	133.175	-0.564	-0.621	-1.185
	350	350	1.000	-63.322	-91.806	-155.128	-62.700	31.7%	34.520	85.792	120.312	-1.739	-2.039	-3.778
6	200	200	1.000	-46.562	-72.982	-119.544	-62.700	14.1%	22.680	76.140	98.820	-7.195	-8.125	-15.320
		240	1.200	-47.497	-73.908	-121.405			23.580	77.100	100.680	-5.571	-6.171	-11.742
		300	1.500	-48.429	-74.771	-123.200			24.480	77.971	102.451	-4.427	-4.815	-9.242
		400	2.000	-50.287	-76.343	-126.630	-76.500	-0.2%	26.260	79.501	105.761	-2.968	-3.121	-6.089
	225	225	1.000	-49.254	-73.314	-122.568	-62.700	14.5%	24.500	76.460	100.960	-5.300	-5.722	-11.022
		270	1.200	-50.933	-74.835	-125.768			26.100	78.025	104.125	-3.568	-3.738	-7.306
		338	1.500	-53.460	-76.859	-130.319			28.520	79.963	108.483	-2.183	-2.196	-4.379
		450	2.000	-57.601	-79.708	-137.309	-76.500	4.0%	32.500	82.523	115.023	-1.162	-1.107	-2.269
	250	250	1.000	-51.948	-73.669	-125.617	-62.700	14.9%	26.300	76.816	103.116	-4.044	-4.185	-8.229
		300	1.200	-53.814	-75.259	-129.073			28.080	78.434	106.514	-2.724	-2.737	-5.461
		375	1.500	-56.599	-77.369	-133.968			30.760	80.425	111.185	-1.674	-1.617	-3.291
		500	2.000	-61.218	-80.377	-141.595	-76.500	4.8%	35.220	83.075	118.295	-0.890	-0.814	-1.704
	300	300	1.000	-57.344	-74.410	-131.754	-62.700	15.7%	29.900	77.562	107.462	-2.549	-2.439	-4.988
		360	1.200	-59.581	-76.130	-135.711			32.040	79.252	111.292	-1.720	-1.599	-3.319
		450	1.500	-62.919	-78.419	-141.338			35.260	81.350	116.610	-1.059	-0.948	-2.007
		600	2.000	-68.456	-81.676	-150.132	-76.500	6.3%	39.800	84.871	124.671	-0.564	-0.482	-1.046
	350	350	1.000	-62.747	-75.146	-137.893	-62.700	16.6%	33.540	78.274	111.814	-1.737	-1.549	-3.286

Cantilever Length: 3.0 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-46.347	-60.883	-107.230	-62.700	-3.0%	22.520	71.689	94.209	-7.186	-6.144	-13.330
		240	1.200	-47.265	-61.990	-109.255			23.380	72.748	96.128	-5.564	-4.680	-10.244
		300	1.500	-48.182	-63.032	-111.214			24.280	73.685	97.965	-4.422	-3.661	-8.083
		400	2.000	-50.012	-64.964	-114.976	-76.500	-17.8%	26.040	75.351	101.391	-2.964	-2.390	-5.354
	225	225	1.000	-49.028	-61.401	-110.429	-62.700	-2.1%	24.300	72.140	96.440	-5.294	-4.342	-9.636
		270	1.200	-50.680	-63.243	-113.923			25.900	73.824	99.724	-3.563	-2.853	-6.416
		338	1.500	-53.169	-65.748	-118.917			28.300	75.941	104.241	-2.180	-1.694	-3.874
		450	2.000	-57.256	-69.362	-126.618	-76.500	-10.3%	32.260	78.753	111.013	-1.160	-0.870	-2.030
	250	250	1.000	-51.711	-61.936	-113.647	-62.700	-1.2%	26.080	72.609	98.689	-4.039	-3.188	-7.227
		300	1.200	-53.545	-63.877	-117.422			27.860	74.344	102.204	-2.721	-2.100	-4.821
		375	1.500	-56.290	-66.501	-122.791			30.520	76.514	107.034	-1.672	-1.256	-2.928
		500	2.000	-60.849	-70.328	-131.177	-76.500	-8.8%	34.940	79.430	114.370	-0.888	-0.648	-1.536
	300	300	1.000	-57.081	-63.010	-120.091	-62.700	0.5%	29.660	73.529	103.189	-2.546	-1.875	-4.421
		360	1.200	-59.281	-65.130	-124.411			31.800	75.334	107.134	-1.718	-1.241	-2.959
		450	1.500	-62.572	-67.996	-130.568			34.960	77.625	112.585	-1.057	-0.749	-1.806
		600	2.000	-68.034	-72.149	-140.183	-76.500	-6.0%	40.260	80.680	120.940	-0.563	-0.392	-0.955
	350	350	1.000	-62.453	-64.044	-126.497	-62.700	2.1%	33.240	74.379	107.619	-1.735	-1.202	-2.937
10	200	200	1.000	-46.292	-54.273	-100.565	-62.700	-15.5%	22.500	69.588	92.088	-7.181	-4.999	-12.180
		240	1.200	-47.206	-55.536	-102.742			23.400	70.686	94.086	-5.560	-3.824	-9.384
		300	1.500	-48.118	-56.734	-104.852			13.480	80.946	94.426	-4.418	-3.007	-7.425
		400	2.000	-49.939	-58.971	-108.910	-76.500	-29.7%	26.060	73.448	99.508	-2.962	-1.982	-4.944
	225	225	1.000	-48.968	-54.951	-103.919	-62.700	-14.1%	24.280	70.120	94.400	-5.290	-3.552	-8.842
		270	1.200	-50.612	-57.066	-107.678			25.880	71.887	97.767	-3.561	-2.355	-5.916
		338	1.500	-53.088	-59.971	-113.059			28.280	74.135	102.415	-2.179	-1.419	-3.598
		450	2.000	-57.153	-64.196	-121.349	-76.500	-19.2%	32.260	77.103	109.363	-1.159	-0.749	-1.908
	250	250	1.000	-52.120	-55.091	-107.211	-62.700	-13.8%	26.080	70.652	96.732	-4.037	-2.623	-6.660
		300	1.200	-53.470	-57.869	-111.339			27.840	72.470	100.310	-2.719	-1.746	-4.465
		375	1.500	-56.199	-60.917	-117.116			30.500	74.770	105.270	-1.670	-1.063	-2.733
		500	2.000	-60.732	-65.382	-126.114	-76.500	-17.0%	34.920	77.841	112.761	-0.888	-0.564	-1.452
	300	300	1.000	-56.999	-56.977	-113.976	-62.700	-10.0%	29.620	71.681	101.301	-2.544	-1.563	-4.107
		360	1.200	-59.186	-59.428	-118.614			31.740	73.586	105.326	-1.716	-1.049	-2.765
		450	1.500	-62.456	-62.760	-125.216			34.940	75.970	110.910	-0.975	-0.646	-1.621
		600	2.000	-67.884	-67.586	-135.470	-76.500	-13.2%	40.220	79.196	119.416	-0.563	-0.349	-0.912
	350	350	1.000	-62.354	-58.254	-120.608	-62.700	-7.6%	33.200	72.608	105.808	-1.734	-1.015	-2.749
12	200	200	1.000	-46.273	-50.278	-96.551	-62.700	-24.7%	22.500	68.423	90.923	-7.178	-4.273	-11.451
		240	1.200	-47.185	-51.677	-98.862			23.400	69.565	92.965	-5.558	-3.288	-8.846
		300	1.500	-48.095	-53.007	-101.102			24.280	70.605	94.885	-4.416	-2.602	-7.018
		400	2.000	-49.911	-55.499	-105.410	-76.500	-37.8%	26.060	72.429	98.489	-2.960	-1.738	-4.698
	225	225	1.000	-48.946	-51.089	-100.035	-62.700	-22.7%	24.280	69.020	93.300	-5.288	-3.058	-8.346
		270	1.200	-50.585	-53.436	-104.021			25.880	70.844	96.724	-3.560	-2.051	-5.611
		338	1.500	-53.053	-56.671	-109.724			28.280	73.179	101.459	-2.178	-1.258	-3.436
		450	2.000	-57.105	-61.362	-118.467	-76.500	-24.7%	32.240	76.265	108.505	-1.158	-0.682	-1.840
	250	250	1.000	-51.618	-51.895	-103.513	-62.700	-20.8%	26.060	69.600	95.660	-4.035	-2.275	-6.310
		300	1.200	-53.437	-54.377	-107.814			27.840	71.475	99.315	-2.718	-1.535	-4.253
		375	1.500	-56.158	-57.767	-113.925			30.700	73.844	104.544	-1.670	-0.952	-2.622
		500	2.000	-60.674	-62.706	-123.380	-76.500	-22.0%	34.900	77.032	111.932	-0.887	-0.520	-1.407
	300	300	1.000	-56.962	-53.462	-110.424	-62.700	-17.3%	29.620	70.691	100.311	-2.543	-1.376	-3.919
		360	1.200	-59.141	-56.186	-115.327			31.740	72.651	104.391	-1.716	-0.938	-2.654
		450	1.500	-62.398	-59.883	-122.281			34.920	75.123	110.043	-1.055	-0.591	-1.646
		600	2.000	-67.805	-65.173	-132.978	-76.500	-17.4%	40.200	78.429	118.629	-0.562	-0.328	-0.890
	350	350	1.000	-62.304	-54.947	-117.251	-62.700	-14.1%	33.160	71.679	104.839	-1.733	-0.907	-2.640

Cantilever Length: 3.75 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
3	200	200	1.000	-67.641	-194.880	-262.521	-106.600	45.3%	33.100	108.940	142.040	-15.544	-39.329	-54.873
		240	1.200	-69.250	-195.718	-264.968			34.560	110.463	145.023	-12.049	-29.804	-41.853
		300	1.500	-70.843	-196.461	-267.304			36.000	111.786	147.786	-9.584	-23.203	-32.787
		400	2.000	-73.991	-197.720	-271.711	-124.500	37.0%	38.840	114.008	152.848	-6.437	-14.971	-21.408
	225	225	1.000	-71.968	-194.929	-266.897	-106.600	45.3%	35.680	109.040	144.720	-11.522	-27.629	-39.151
		270	1.200	-74.837	-196.232	-271.069			38.300	111.387	149.687	-7.771	-17.966	-25.737
		338	1.500	-79.105	-197.803	-276.908			42.120	114.157	156.277	-4.766	-10.481	-15.247
		450	2.000	-86.016	-199.713	-285.729	-124.500	37.7%	48.200	117.503	165.703	-2.544	-5.207	-7.751
	250	250	1.000	-76.296	-194.983	-271.279	-106.600	45.3%	38.280	109.165	147.445	-8.842	-20.147	-28.989
		300	1.200	-79.469	-196.298	-275.767			41.160	111.511	152.671	-5.968	-13.101	-19.069
		375	1.500	-84.157	-197.876	-282.033			45.340	114.307	159.647	-3.674	-7.673	-11.347
		500	2.000	-91.850	-199.818	-291.668	-124.500	37.7%	52.100	117.702	169.802	-1.959	-3.799	-5.758
	300	300	1.000	-84.956	-195.106	-280.062	-106.600	45.4%	43.480	109.414	152.894	-5.629	-11.666	-17.295
		360	1.200	-88.736	-196.445	-285.181			46.880	111.811	158.691	-3.804	-7.588	-11.392
		450	1.500	-94.332	-198.053	-292.385			51.860	114.657	166.517	-2.347	-4.444	-6.791
		600	2.000	-103.524	-200.043	-303.567	-124.500	37.8%	59.880	118.152	178.032	-1.254	-2.202	-3.456
	350	350	1.000	-93.620	-195.241	-288.861	-106.600	45.4%	48.700	109.689	158.389	-3.867	-7.351	-11.218
4.5	200	200	1.000	-66.210	-134.345	-200.555	-106.600	20.7%	28.320	76.646	104.966	-15.474	-26.148	-41.622
		240	1.200	-67.751	-135.370	-203.121			29.560	77.884	107.444	-11.994	-19.817	-31.811
		300	1.500	-69.283	-136.295	-205.578			30.780	79.003	109.783	-9.540	-15.430	-24.970
		400	2.000	-72.322	-137.908	-210.230	-124.500	9.7%	33.180	80.908	114.088	-6.406	-9.961	-16.367
	225	225	1.000	-70.469	-134.505	-204.974	-106.600	20.7%	30.660	76.860	107.520	-11.472	-18.377	-29.849
		270	1.200	-73.227	-136.130	-209.357			32.860	78.836	111.696	-7.735	-11.954	-19.689
		338	1.500	-77.352	-138.162	-215.514			36.140	81.241	117.381	-4.743	-6.981	-11.724
		450	2.000	-84.065	-140.774	-224.839	-124.500	11.6%	41.460	84.241	125.701	-2.532	-3.475	-6.007
	250	250	1.000	-74.731	-134.683	-209.414	-106.600	20.9%	33.040	77.098	110.138	-8.804	-13.407	-22.211
		300	1.200	-77.786	-136.342	-214.128			35.480	79.098	114.578	-5.940	-8.725	-14.665
		375	1.500	-82.325	-138.411	-220.736			39.080	81.551	120.631	-3.658	-5.115	-8.773
		500	2.000	-89.805	-141.110	-230.915	-124.500	11.8%	44.980	84.670	129.650	-1.950	-2.539	-4.489
	300	300	1.000	-83.264	-135.071	-218.335	-106.600	21.1%	37.760	77.622	115.382	-5.605	-7.773	-13.378
		360	1.200	-86.916	-136.800	-223.716			40.660	79.717	120.377	-3.787	-5.061	-8.848
		450	1.500	-92.342	-138.966	-231.308			44.960	82.265	127.225	-2.336	-2.970	-5.306
		600	2.000	-101.292	-141.802	-243.094	-124.500	12.2%	52.060	85.503	137.563	-1.248	-1.479	-2.727
	350	350	1.000	-91.807	-135.478	-227.285	-106.600	21.3%	42.500	78.170	120.670	-3.851	-4.905	-8.756
6	200	200	1.000	-65.339	-106.129	-171.468	-106.600	-0.4%	26.760	65.552	92.312	-15.440	-19.589	-35.029
		240	1.200	-66.825	-107.357	-174.182			27.900	66.851	94.751	-11.967	-14.853	-26.820
		300	1.500	-68.307	-108.480	-176.787			29.040	67.987	97.027	-9.518	-11.572	-21.090
		400	2.000	-71.255	-110.476	-181.731	-124.500	-12.7%	31.320	69.981	101.301	-6.391	-7.480	-13.871
	225	225	1.000	-69.561	-106.444	-176.005	-106.600	-0.1%	29.040	65.900	94.940	-11.447	-13.780	-25.227
		270	1.200	-72.230	-108.420	-180.650			31.080	67.941	99.021	-7.718	-8.973	-16.691
		338	1.500	-76.236	-110.965	-187.201			34.180	70.468	104.648	-4.732	-5.251	-9.983
		450	2.000	-82.790	-114.367	-197.157	-124.500	-8.9%	39.240	73.691	112.931	-2.527	-2.626	-5.153
	250	250	1.000	-73.789	-106.783	-180.572	-106.600	0.2%	31.320	66.248	97.568	-8.785	-10.062	-18.847
		300	1.200	-76.749	-108.825	-185.574			33.600	68.358	101.958	-5.928	-6.557	-12.485
		375	1.500	-81.165	-111.442	-192.607			37.000	70.932	107.932	-3.650	-3.855	-7.505
		500	2.000	-88.472	-114.997	-203.469	-124.500	-8.3%	42.660	74.271	116.931	-1.946	-1.925	-3.871
	300	300	1.000	-82.254	-107.500	-189.754	-106.600	0.8%	35.920	67.013	102.933	-5.503	-5.847	-11.350
		360	1.200	-85.801	-109.665	-195.466			38.640	69.216	107.856	-3.778	-3.816	-7.594
		450	1.500	-91.091	-112.450	-203.541			42.720	71.906	114.626	-2.331	-2.249	-4.580
		600	2.000	-99.846	-116.242	-216.088	-124.500	-7.1%	49.480	75.430	124.910	-1.245	-1.129	-2.374
	350	350	1.000	-90.731	-108.222	-198.953	-106.600	1.5%	40.500	67.778	108.278	-3.844	-3.699	-7.543

Cantilever Length: 3.75 m														
Barrier Length (m)	Slab Thickness and t1 (mm)	t2	t1 / t2	M_D	M_L	M_T	CHBDC	% Diff.	V_D	V_L	V_T	Δ_D	Δ_L	Δ_T
8	200	200	1.000	-64.792	-86.438	-151.230	-106.600	-23.3%	26.160	59.280	85.440	-15.416	-14.736	-30.152
		240	1.200	-66.240	-87.927	-154.167			27.340	60.667	88.007	-11.948	-11.189	-23.137
		300	1.500	-67.684	-89.308	-156.992			28.400	61.918	90.318	-9.503	-8.731	-18.234
		400	2.000	-70.566	-91.807	-162.373	-124.500	-35.6%	30.600	64.102	94.702	-6.381	-5.665	-12.046
	225	225	1.000	-68.992	-86.982	-155.974	-106.600	-22.6%	28.400	59.780	88.180	-11.430	-10.386	-21.816
		270	1.200	-71.594	-89.418	-161.012			30.420	61.986	92.406	-7.706	-6.785	-14.491
		338	1.500	-75.464	-92.629	-168.093			33.420	64.762	98.182	-4.725	-3.993	-8.718
		450	2.000	-81.947	-97.072	-179.019	-124.500	-28.3%	38.400	68.356	106.756	-2.522	-2.022	-4.544
	250	250	1.000	-73.194	-87.551	-160.745	-106.600	-21.8%	30.660	60.280	90.940	-8.772	-7.601	-16.373
		300	1.200	-76.086	-90.088	-166.174			32.880	62.555	95.435	-5.919	-4.973	-10.892
		375	1.500	-80.409	-93.420	-173.829			36.220	65.376	101.596	-3.644	-2.945	-6.589
		500	2.000	-87.585	-98.093	-185.678	-124.500	-26.9%	41.760	69.106	110.866	-1.942	-1.492	-3.434
	300	300	1.000	-81.610	-88.703	-170.313	-106.600	-20.2%	35.160	61.304	96.464	-5.586	-4.440	-10.026
		360	1.200	-85.079	-91.428	-176.507			37.840	63.670	101.510	-3.773	-2.915	-6.688
		450	1.500	-90.262	-95.014	-185.276			41.820	66.627	108.447	-2.327	-1.735	-4.062
		600	2.000	-98.866	-100.036	-198.902	-124.500	-24.5%	48.480	70.517	118.997	-1.243	-0.887	-2.130
	350	350	1.000	-90.035	-89.823	-179.858	-106.600	-18.7%	39.680	62.259	101.939	-3.838	-2.826	-6.664
10	200	200	1.000	-64.597	-88.954	-153.551	-106.600	-19.8%	26.060	56.292	82.352	-15.403	-11.888	-27.291
		240	1.200	-66.029	-75.515	-141.544			27.180	57.755	84.935	-11.938	-9.050	-20.988
		300	1.500	-67.460	-77.242	-144.702			28.260	59.106	87.366	-9.494	-7.083	-16.577
		400	2.000	-70.315	-78.854	-149.169	-124.500	-57.9%	30.480	61.424	91.904	-6.375	-4.625	-11.000
	225	225	1.000	-68.785	-76.278	-145.063	-106.600	-39.8%	28.280	56.900	85.180	-11.420	-8.407	-19.827
		270	1.200	-71.361	-79.126	-150.487			30.280	59.263	89.543	-7.700	-5.522	-13.222
		338	1.500	-75.246	-82.932	-158.178			33.300	62.212	95.512	-4.720	-3.280	-8.000
		450	2.000	-81.625	-88.293	-169.918	-124.500	-41.0%	38.240	66.083	104.323	-2.520	-1.689	-4.209
	250	250	1.000	-72.976	-77.056	-150.032	-106.600	-38.3%	30.520	57.508	88.028	-8.765	-6.174	-14.939
		300	1.200	-75.838	-80.036	-155.874			32.760	59.916	92.676	-5.914	-4.066	-9.980
		375	1.500	-80.121	-83.999	-164.120			36.060	62.955	99.015	-3.641	-2.435	-6.076
		500	2.000	-87.237	-89.645	-176.882	-124.500	-38.9%	41.580	66.939	108.519	-1.940	-1.259	-3.199
	300	300	1.000	-81.361	-78.590	-159.951	-106.600	-35.6%	35.000	58.701	93.701	-5.581	-3.635	-9.216
		360	1.200	-84.795	-81.810	-166.605			37.660	61.199	98.859	-3.770	-2.408	-6.178
		450	1.500	-89.931	-86.097	-176.028			41.640	64.350	105.990	-2.326	-1.454	-3.780
		600	2.000	-98.459	-92.176	-190.635	-124.500	-35.1%	48.260	68.514	116.774	-1.242	-0.763	-2.005
	350	350	1.000	-89.753	-80.053	-169.806	-106.600	-33.2%	39.480	59.781	99.261	-3.836	-2.334	-6.170
12	200	200	1.000	-64.533	-68.761	-133.294	-106.600	-55.0%	26.040	54.607	80.647	-15.395	-10.053	-25.448
		240	1.200	-65.959	-70.695	-136.654			27.160	56.150	83.310	-11.931	-7.682	-19.613
		300	1.500	-67.384	-72.512	-139.896			28.260	57.537	85.797	-9.489	-6.035	-15.524
		400	2.000	-70.229	-75.857	-146.086	-124.500	-64.1%	30.480	59.975	90.455	-6.371	-3.975	-10.346
	225	225	1.000	-68.714	-69.719	-138.433	-106.600	-52.9%	28.280	55.300	83.580	-11.415	-7.141	-18.556
		270	1.200	-71.280	-72.923	-144.203			30.280	57.761	88.041	-7.695	-4.726	-12.421
		338	1.500	-75.148	-77.245	-152.393			33.300	60.848	94.148	-4.718	-2.842	-7.560
		450	2.000	-81.501	-83.376	-164.877	-124.500	-49.3%	38.240	64.897	103.137	-2.518	-1.496	-4.014
	250	250	1.000	-72.896	-70.677	-143.573	-106.600	-50.8%	30.500	55.993	86.493	-8.940	-5.272	-14.212
		300	1.200	-75.746	-74.039	-149.785			32.720	58.499	91.219	-5.911	-3.502	-9.413
		375	1.500	-80.010	-78.545	-158.555			36.040	61.653	97.693	-3.639	-2.127	-5.766
		500	2.000	-87.096	-84.997	-172.093	-124.500	-46.5%	41.560	65.837	107.397	-1.939	-1.127	-3.066
	300	300	1.000	-81.262	-72.539	-153.801	-106.600	-47.0%	34.960	57.291	92.251	-5.579	-3.136	-8.715
		360	1.200	-84.680	-76.187	-160.867			37.600	59.908	97.508	-3.769	-2.102	-5.871
		450	1.500	-89.790	-81.070	-170.860			41.600	63.174	104.774	-2.324	-1.292	-3.616
		600	2.000	-98.279	-87.996	-186.275	-124.500	-41.5%	48.200	67.514	115.714	-1.242	-0.695	-1.937
	350	350	1.000	-89.631	-74.304	-163.935	-106.600	-43.5%	39.400	58.477	97.877	-3.834	-2.036	-5.870

Appendix B: Parametric Study — Effects of Variables

The following charts outline the effect of barrier length (L_b), overhang deck thickness (t_d), and cantilever length (L_c) on the design forces using finite element modeling. The changes in moment, shear, and deflection are plotted against the barrier length in the *X* axis, and include their respective dynamic load allowances as outlined in Table 4.10. This allows results to be compared to the values outlined in Tables 5.15 and 5.10 of the 2014 and 2006 versions of the CHBDC, respectively.

B1. PL-3 Barrier

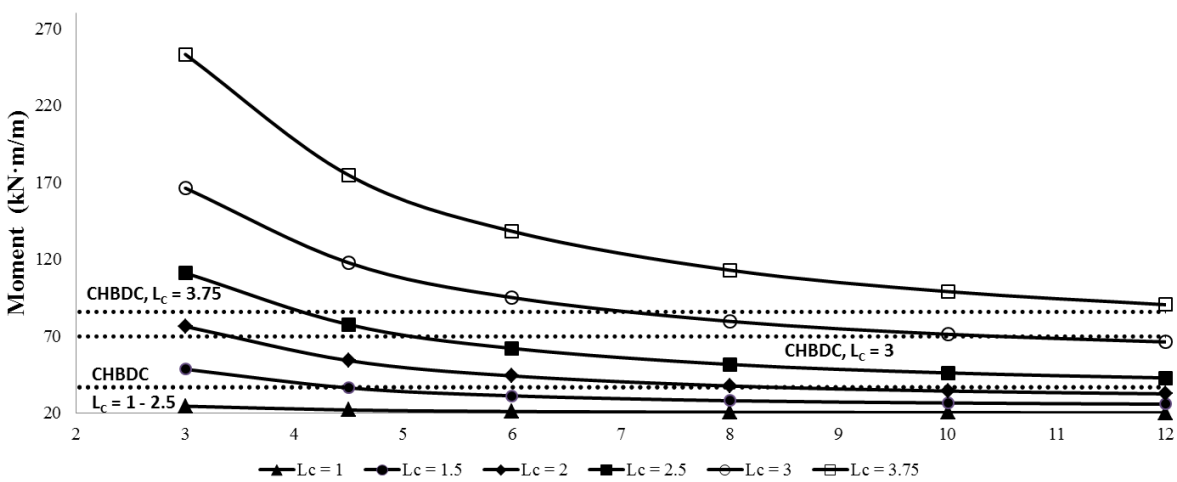


Figure B-1: Effect of cantilever length on transverse moment

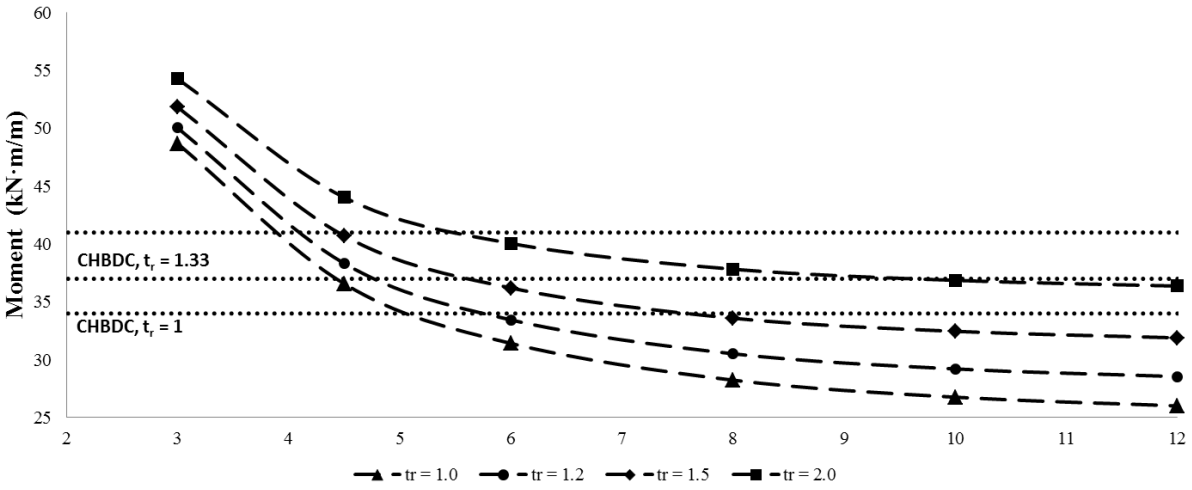


Figure B-2: Effect of slab thickness ratio on transverse Moment

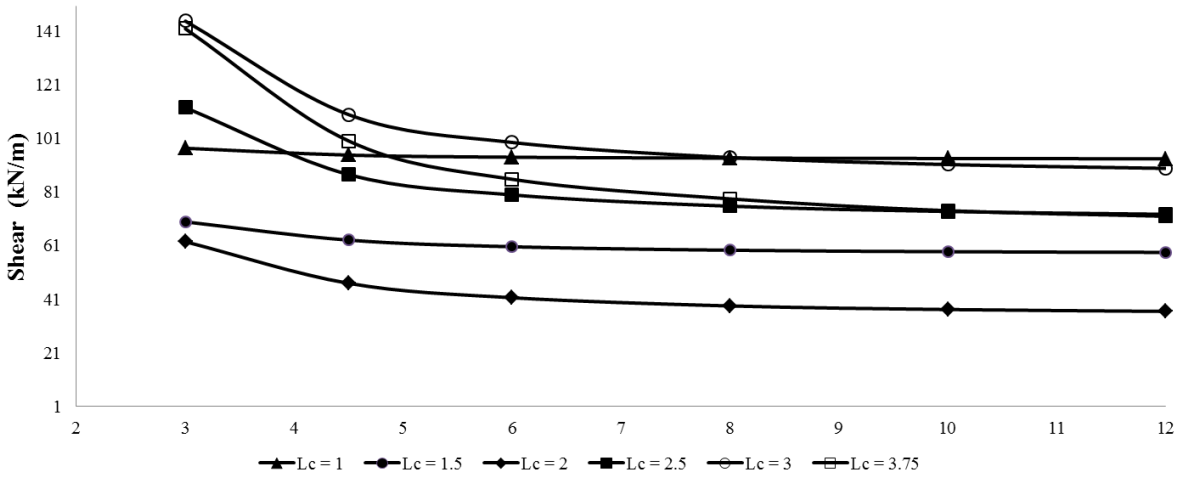


Figure B-3: Effect of cantilever length on transverse shear

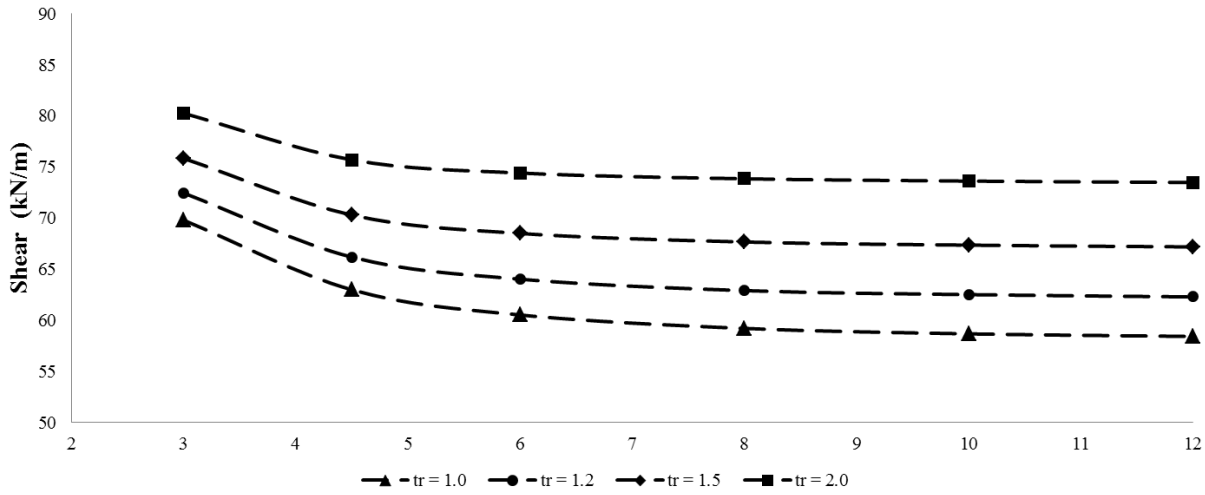


Figure B-4: Effect of slab thickness ratio on transverse shear

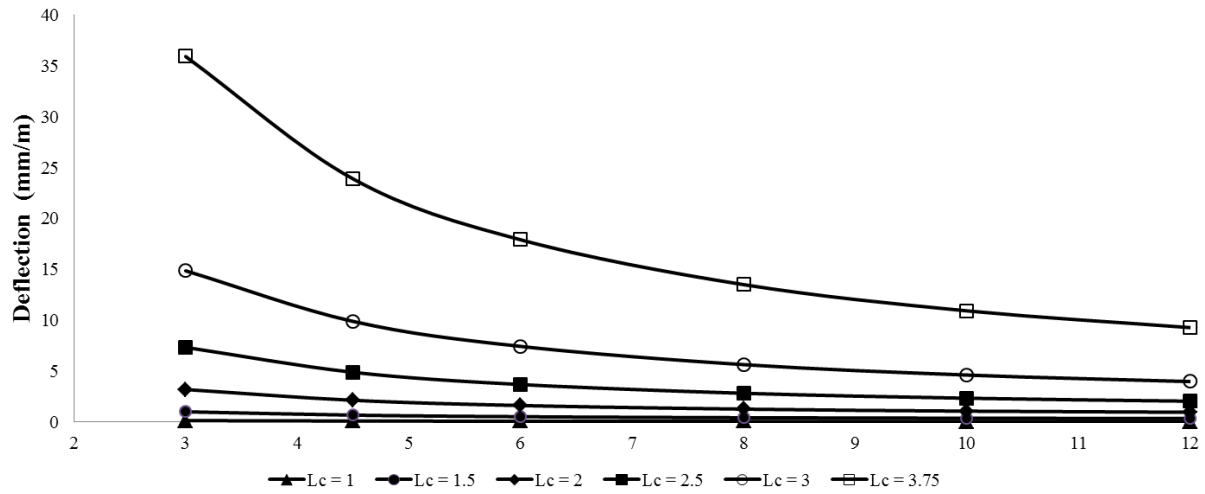


Figure B-5: Effect of cantilever length on deflection

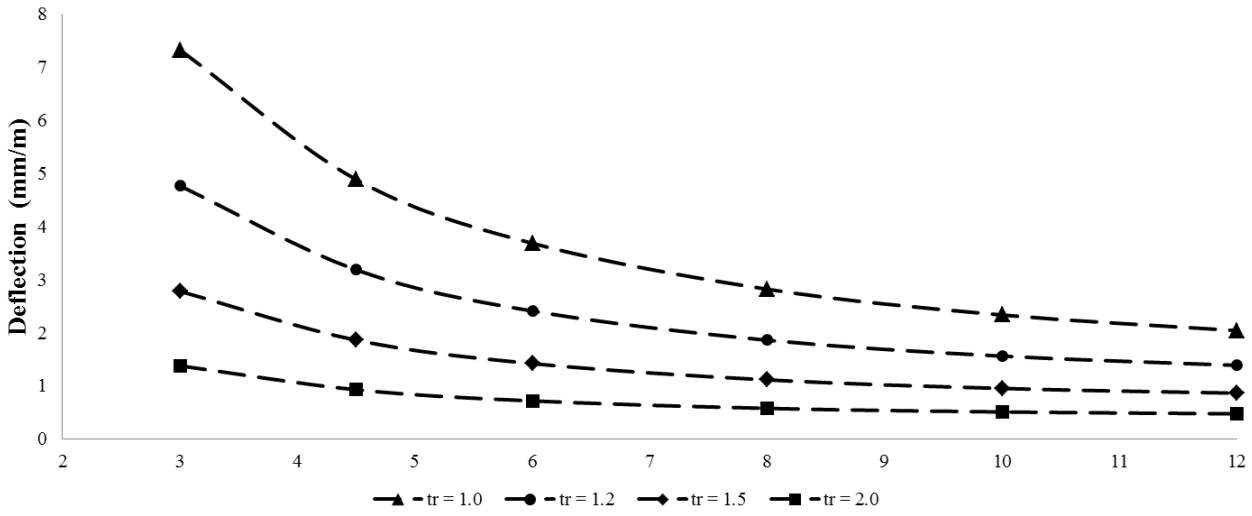


Figure B-6: Effect of slab thickness ratio on deflection

B2. PL-2 Barrier

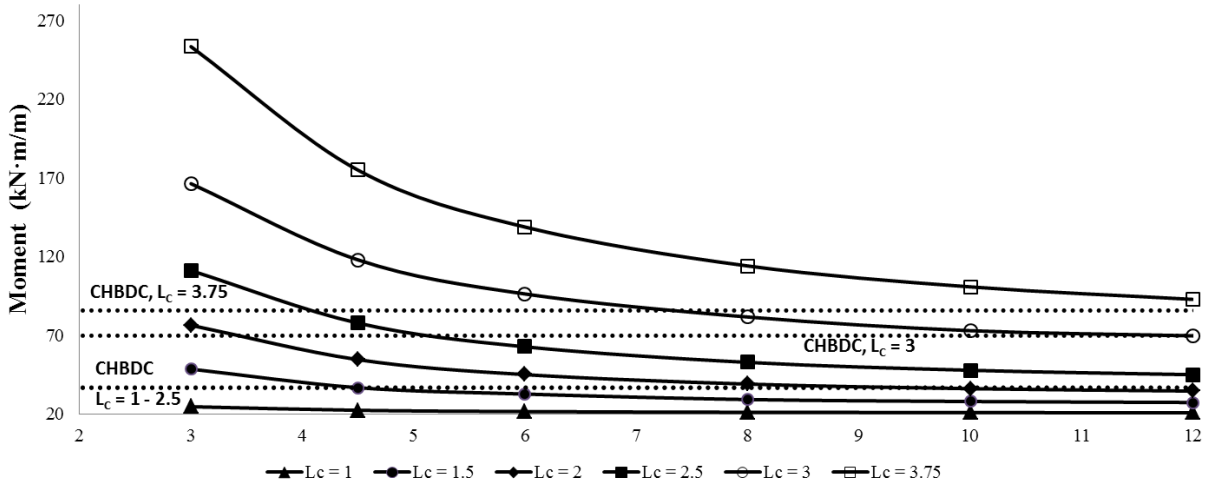


Figure B-7: Effect of cantilever length on transverse moment

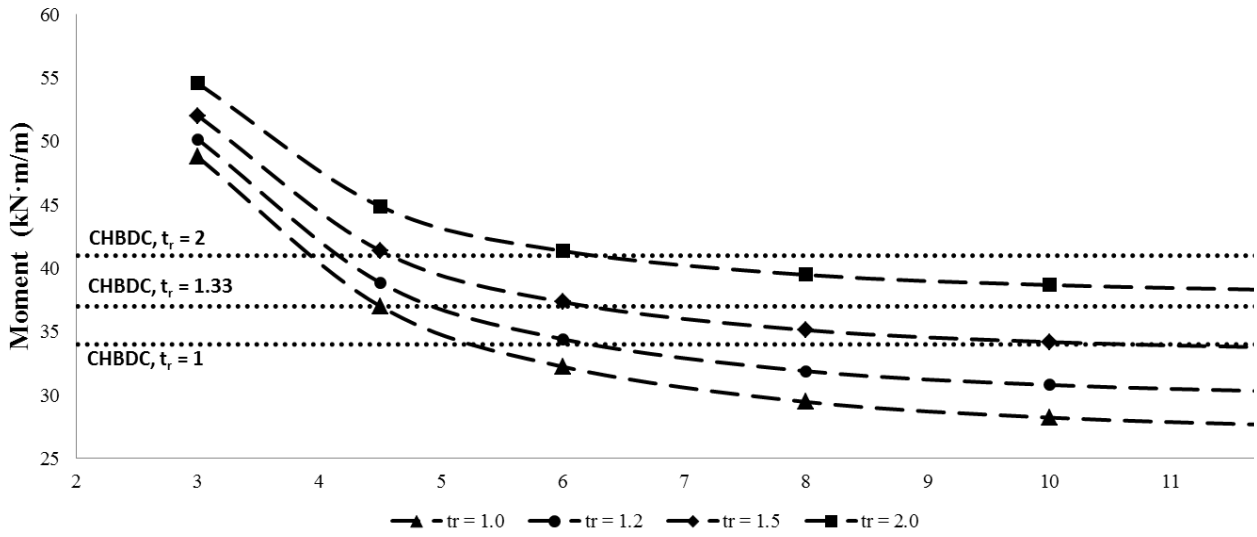


Figure B-8: Effect of slab thickness ratio on transverse moment

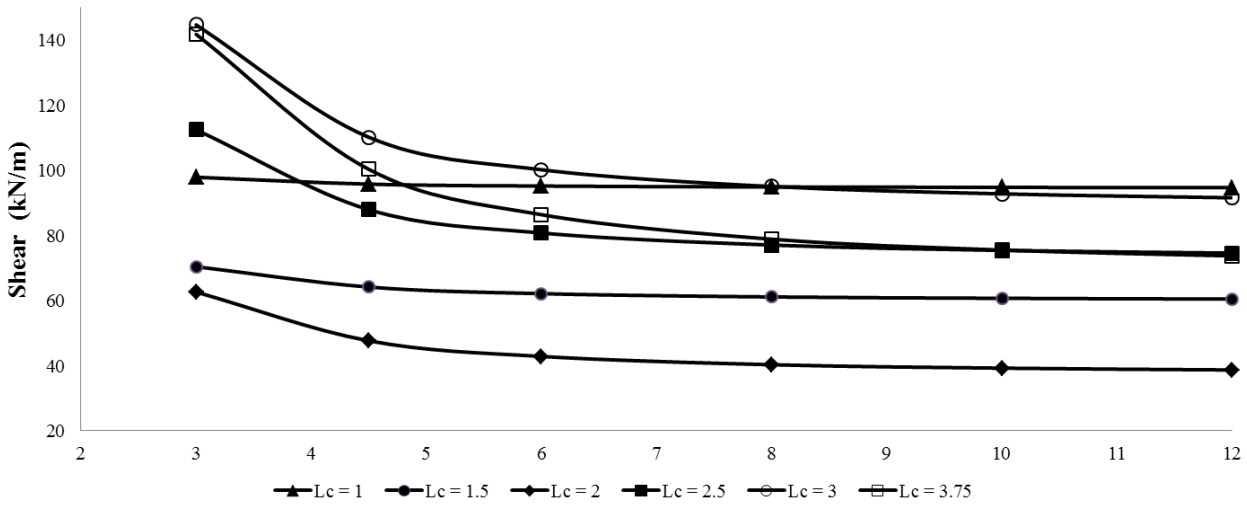


Figure B-9: Effect of cantilever length on transverse shear

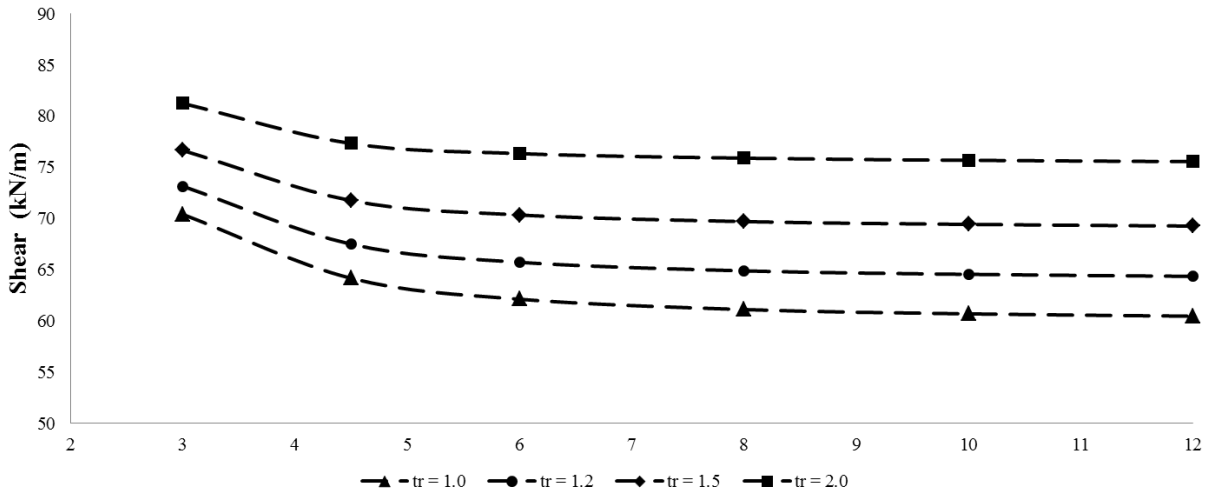


Figure B-10: Effect of slab thickness ratio on transverse shear

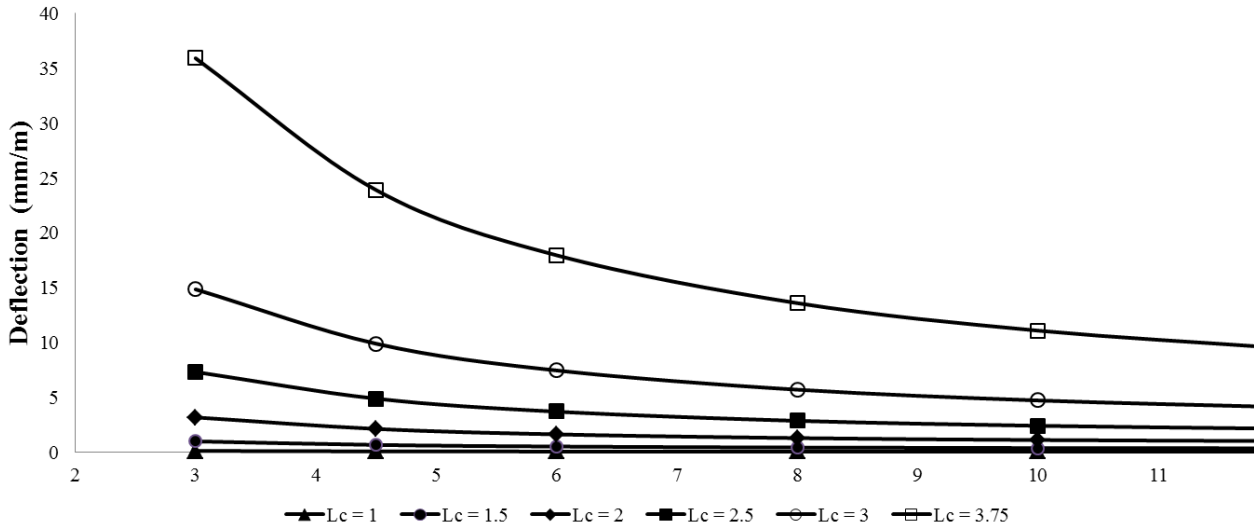


Figure B-11: Effect of cantilever length on deflection

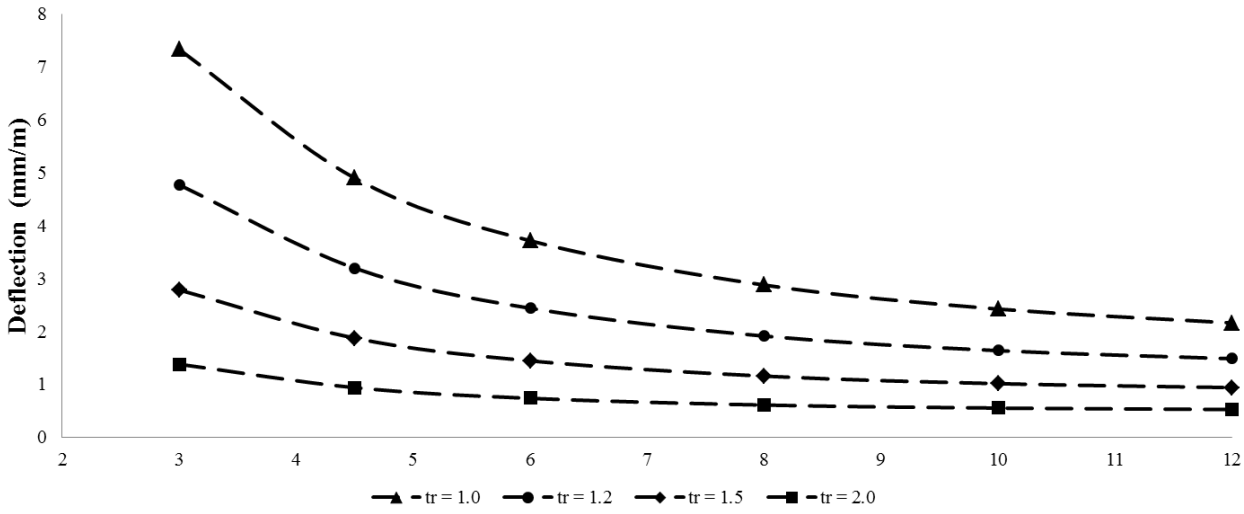


Figure B-12: Effect of slab thickness ratio on deflection

B3. PL-2 Parapet

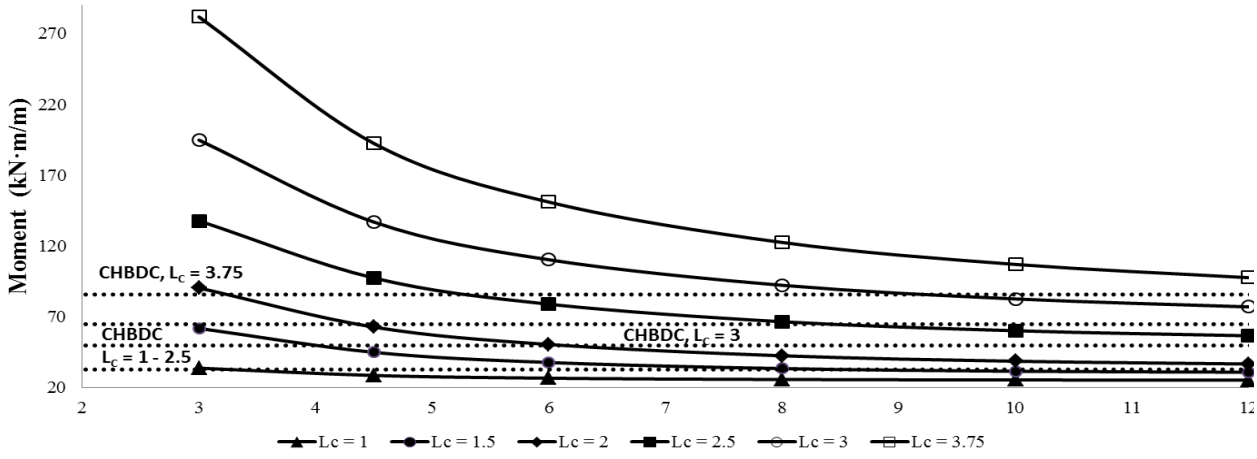


Figure B-13: Effect of cantilever length on transverse moment

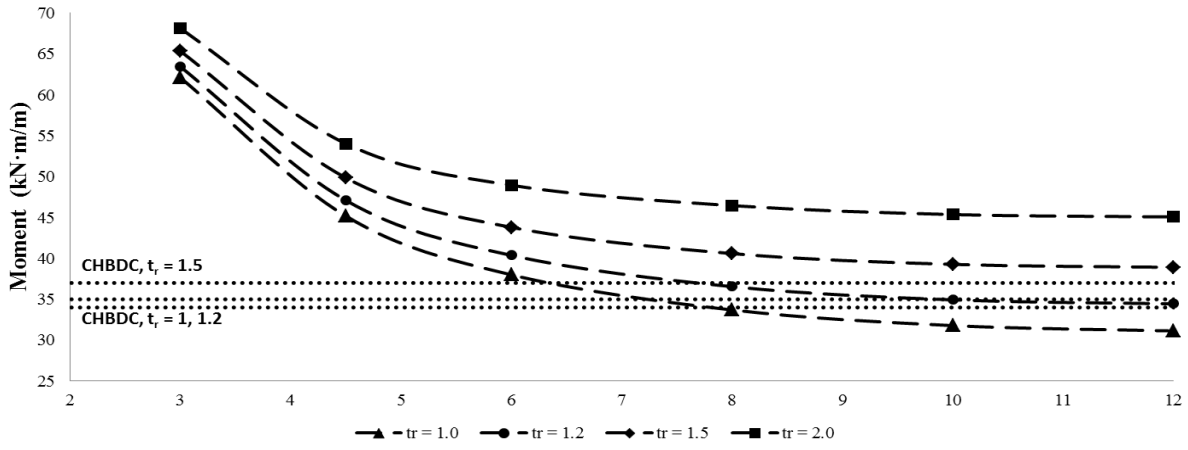


Figure B-14: Effect of slab thickness ratio on transverse moment

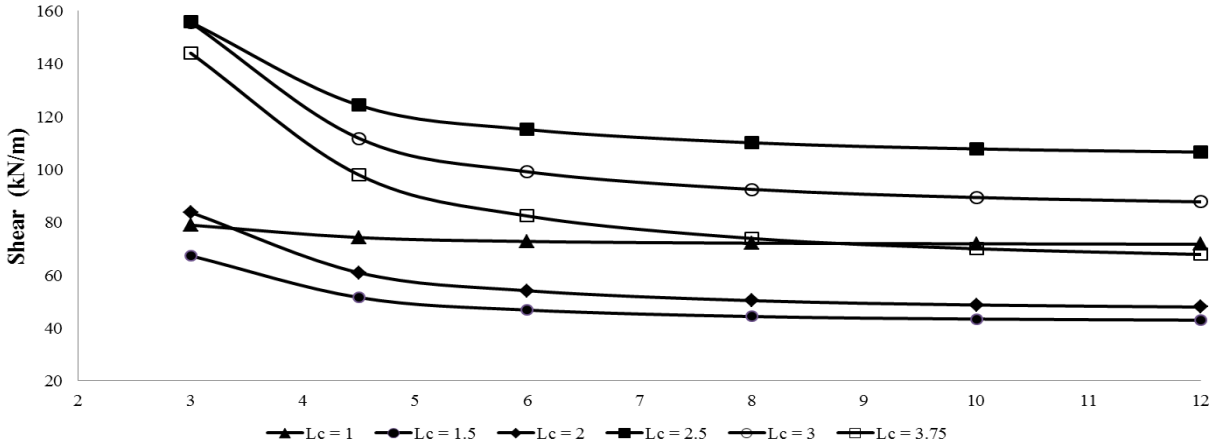


Figure B-15: Effect of cantilever length on transverse shear

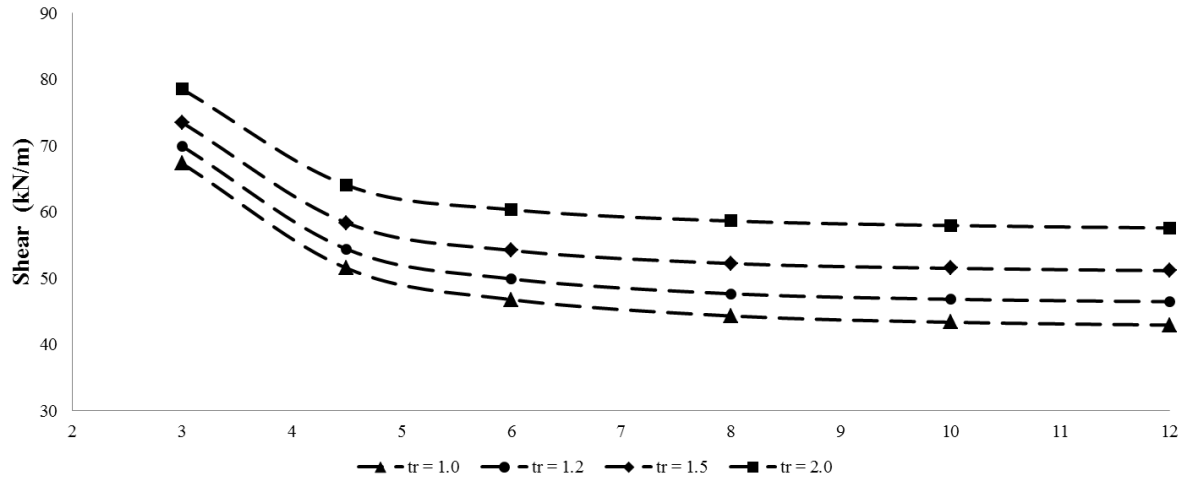


Figure B-16: Effect of slab thickness ratio on transverse shear

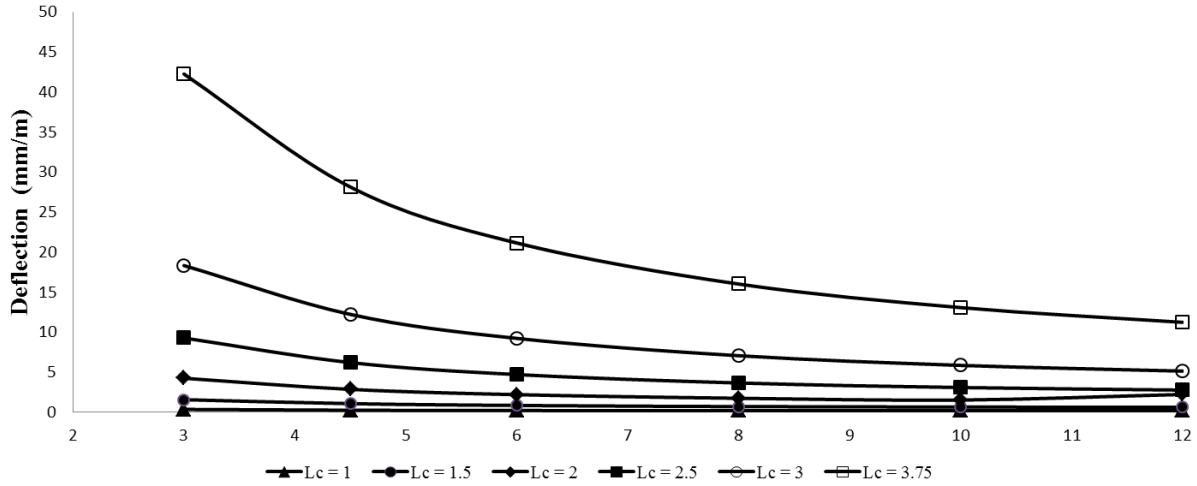


Figure B-17: Effect of cantilever length on deflection

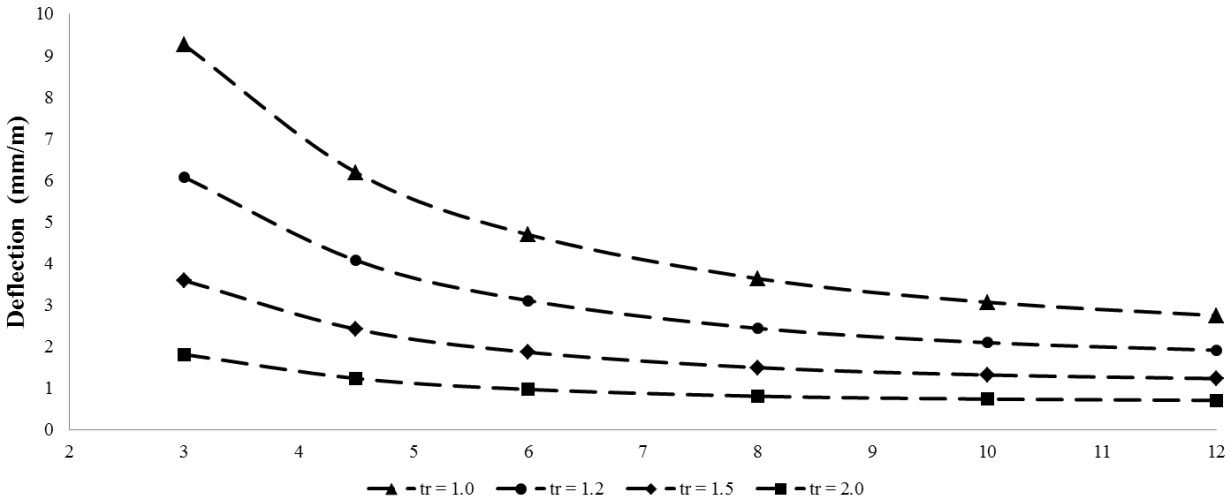


Figure B-18: Effect of slab thickness ratio on deflection

B4. PL-1 Barrier

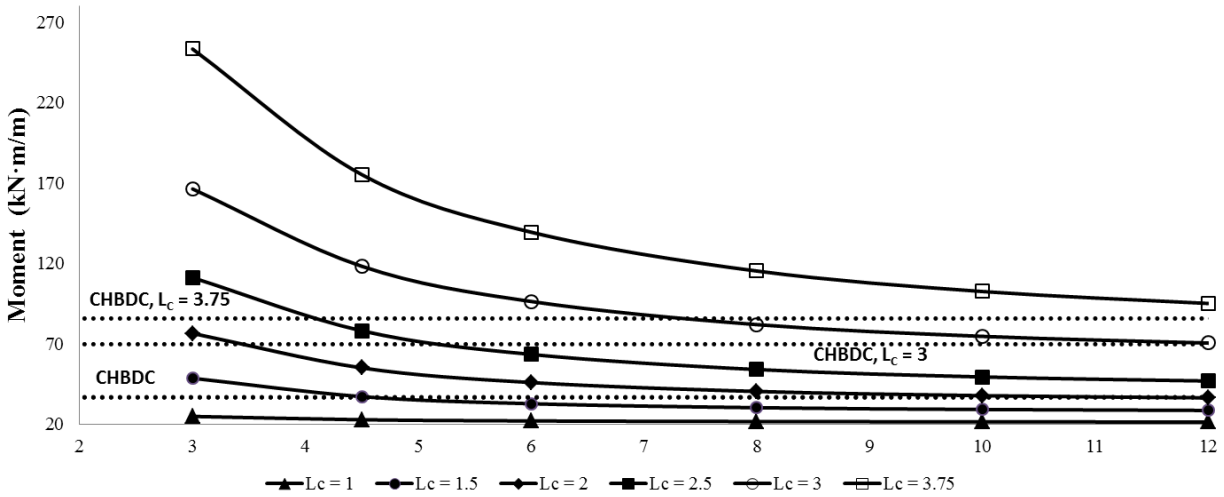


Figure B-19: Effect of cantilever length on transverse moment

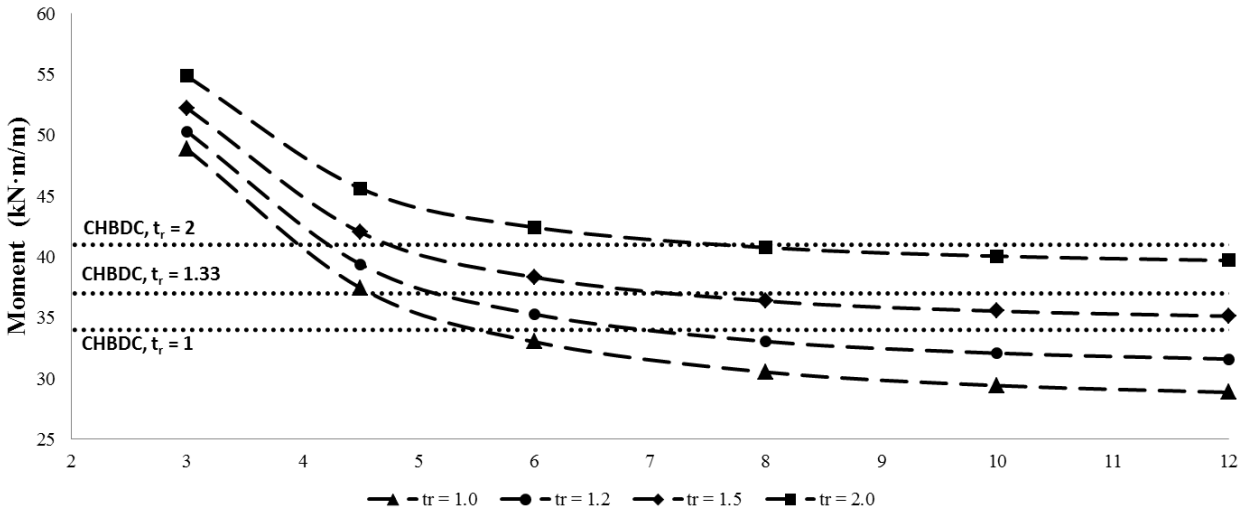


Figure B-20: Effect of slab thickness ratio on transverse moment

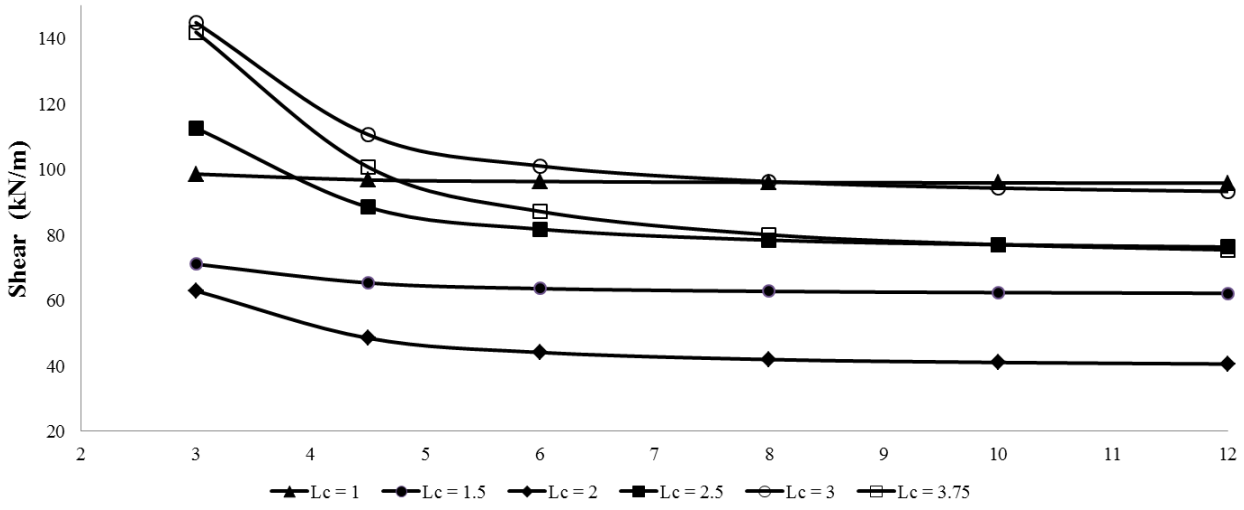


Figure B-21: Effect of cantilever length on transverse shear

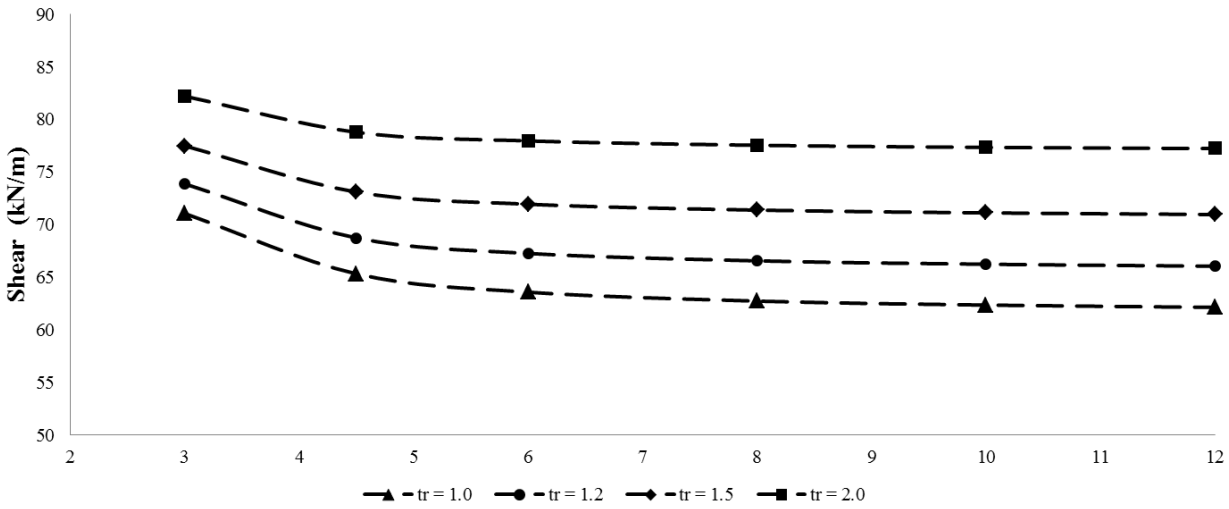


Figure B-22: Effect of slab thickness ratio on transverse shear

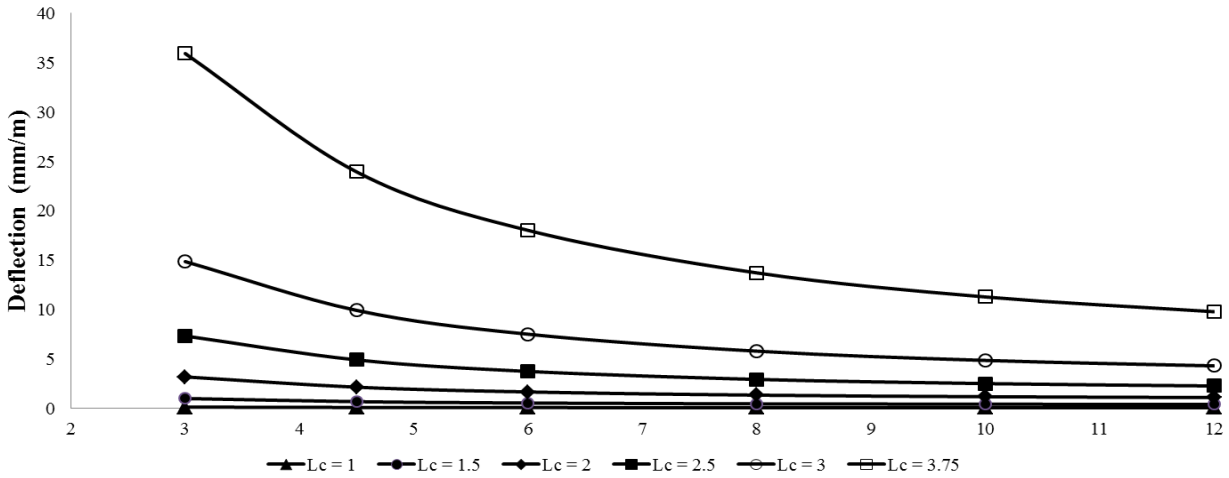


Figure B-23: Effect of cantilever length on deflection

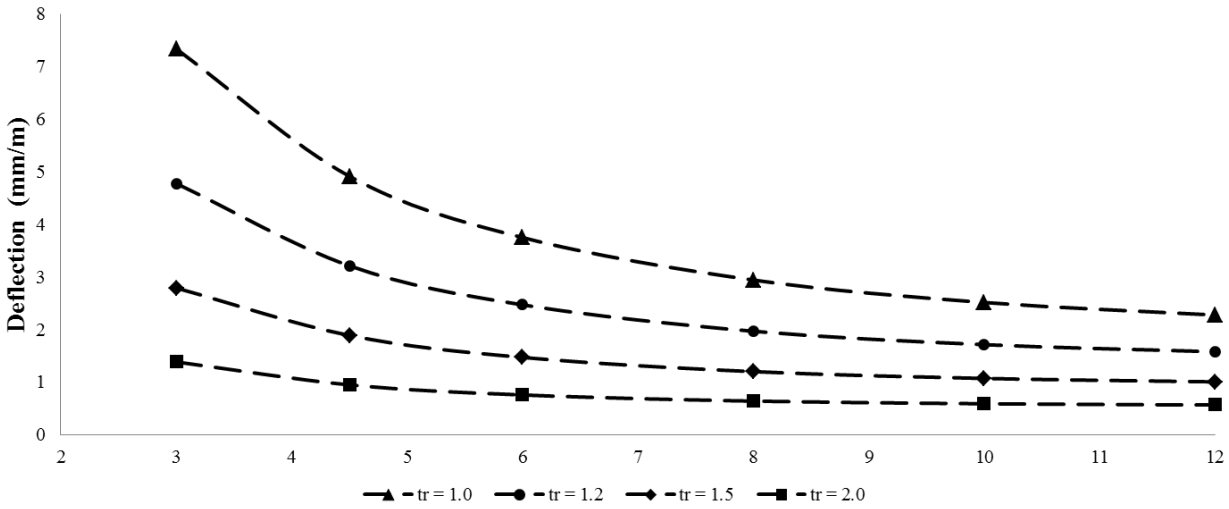


Figure B-24: Effect of slab thickness ratio on deflection

B5. Concrete Curb

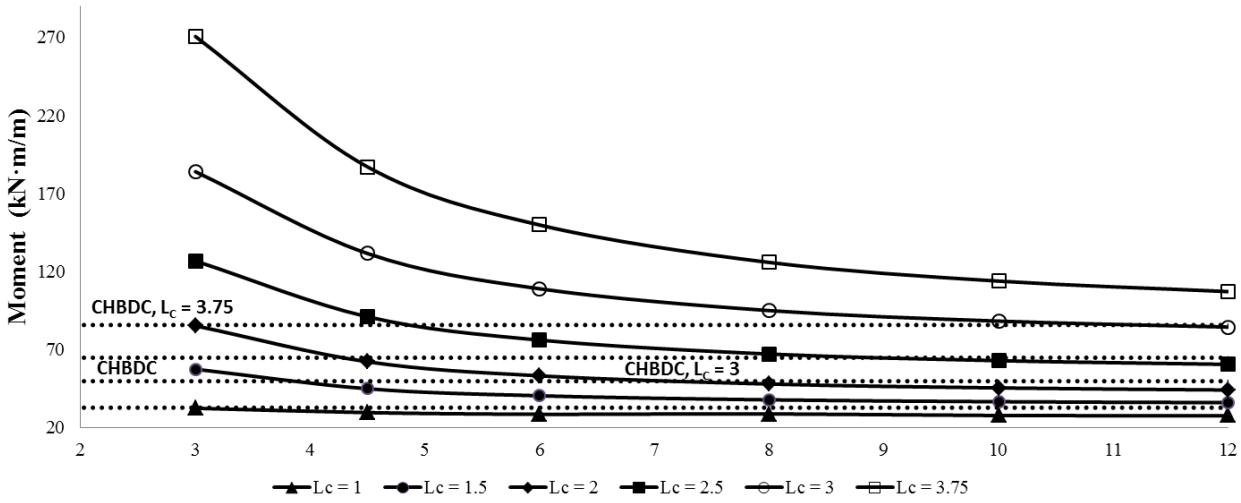


Figure B-25: Effect of cantilever length on transverse moment

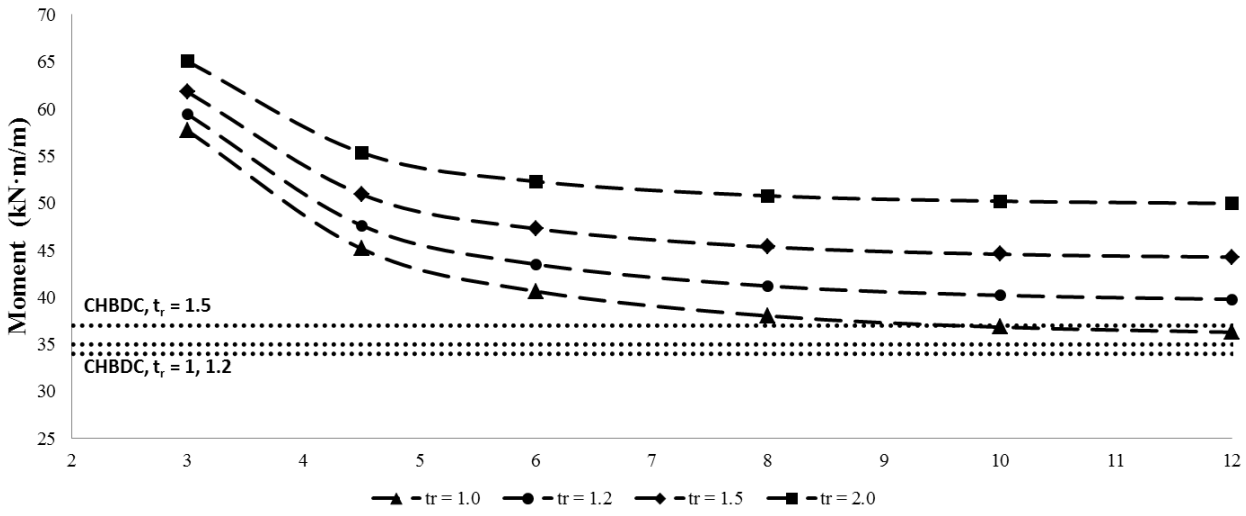


Figure B-26: Effect of slab thickness ratio on transverse moment

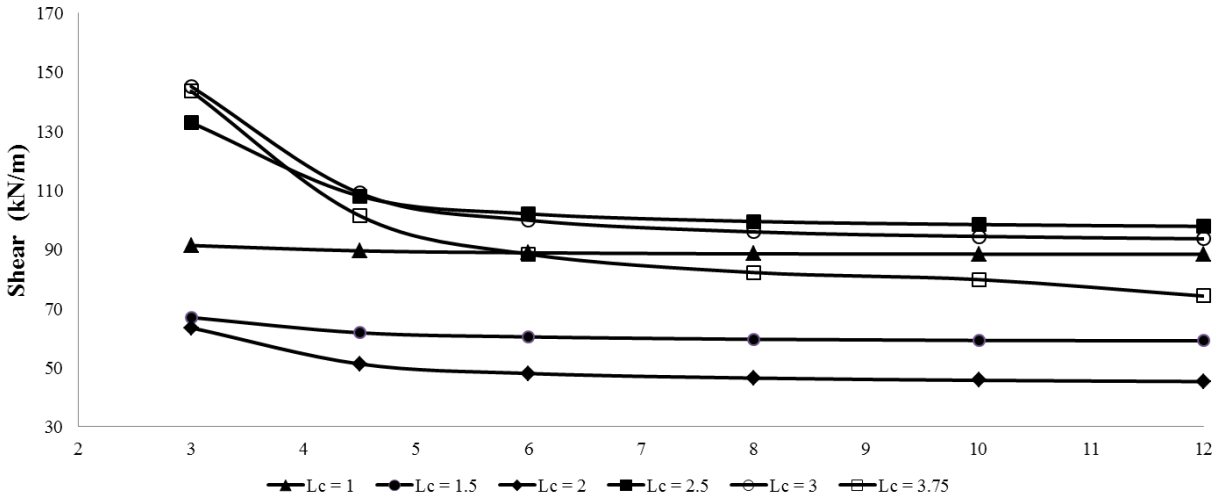


Figure B-27: Effect of cantilever length on transverse shear

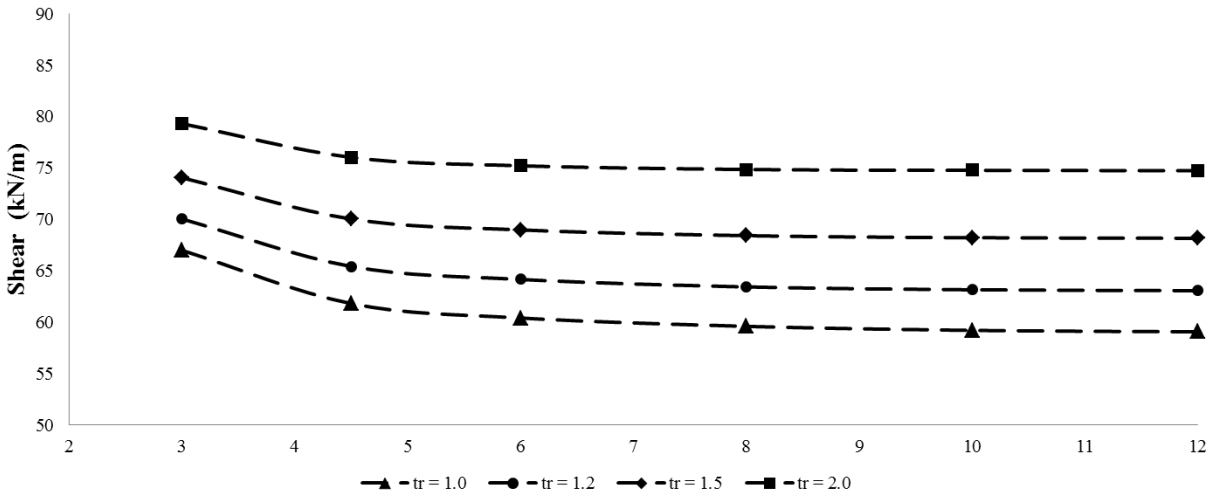


Figure B-28: Effect of slab thickness ratio on transverse shear

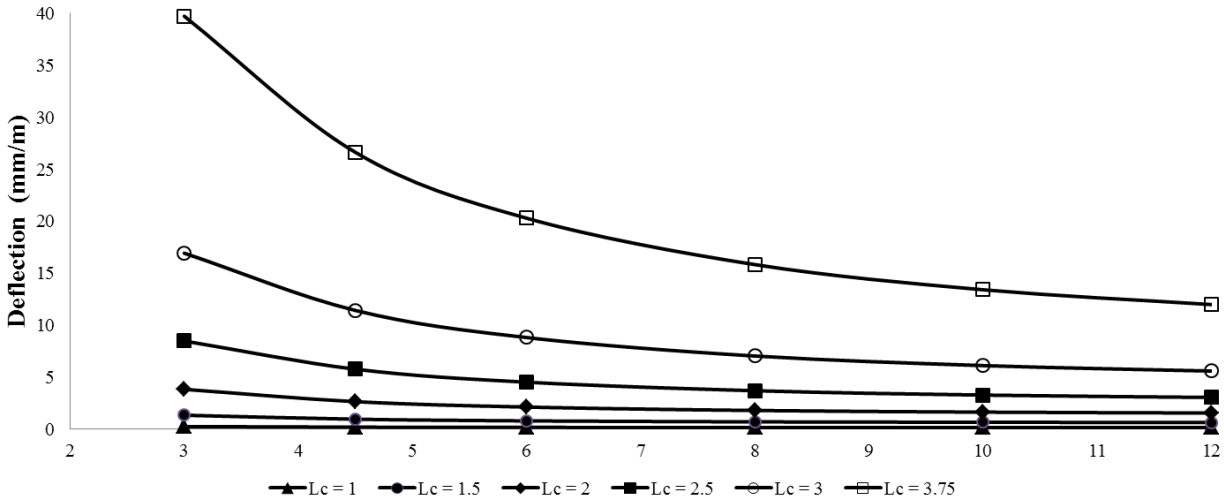


Figure B-29: Effect of cantilever length on deflection

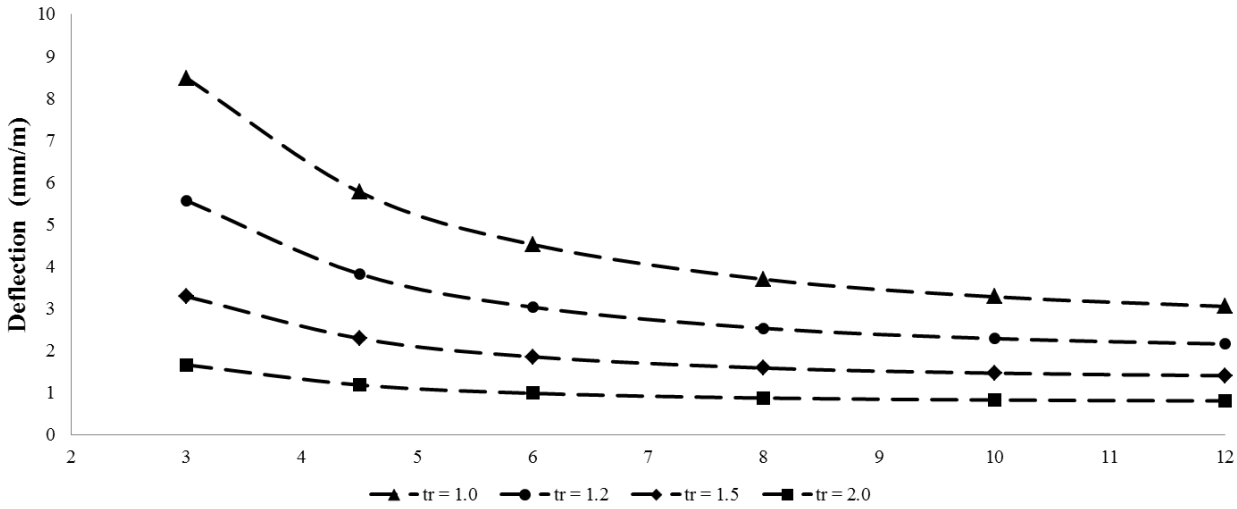


Figure B-30: Effect of slab thickness ratio on deflection

B6. Unstiffened Edge

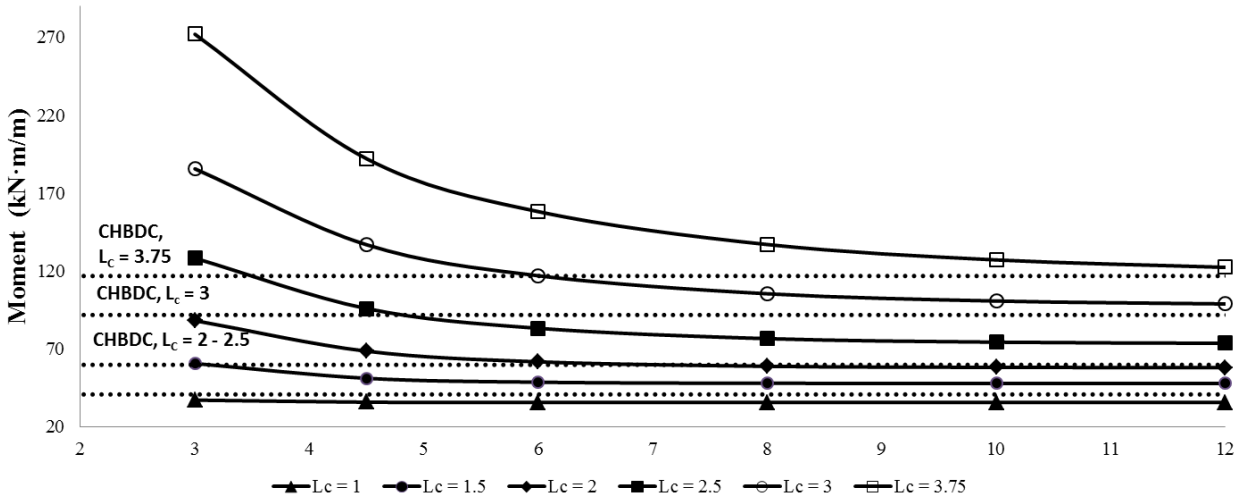


Figure B-31: Effect of cantilever length on transverse moment

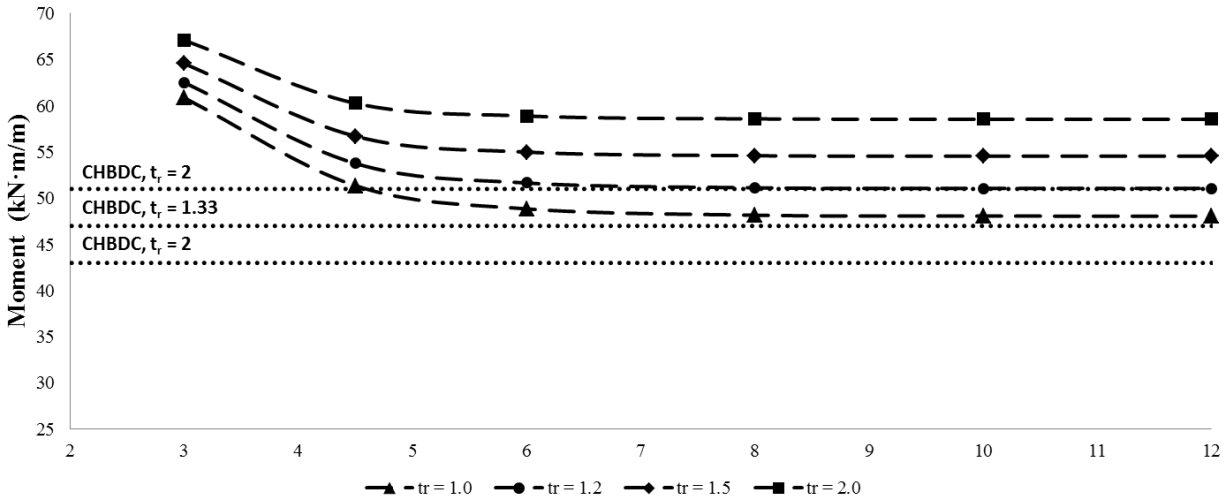


Figure B-32: Effect of slab thickness ratio on transverse moment

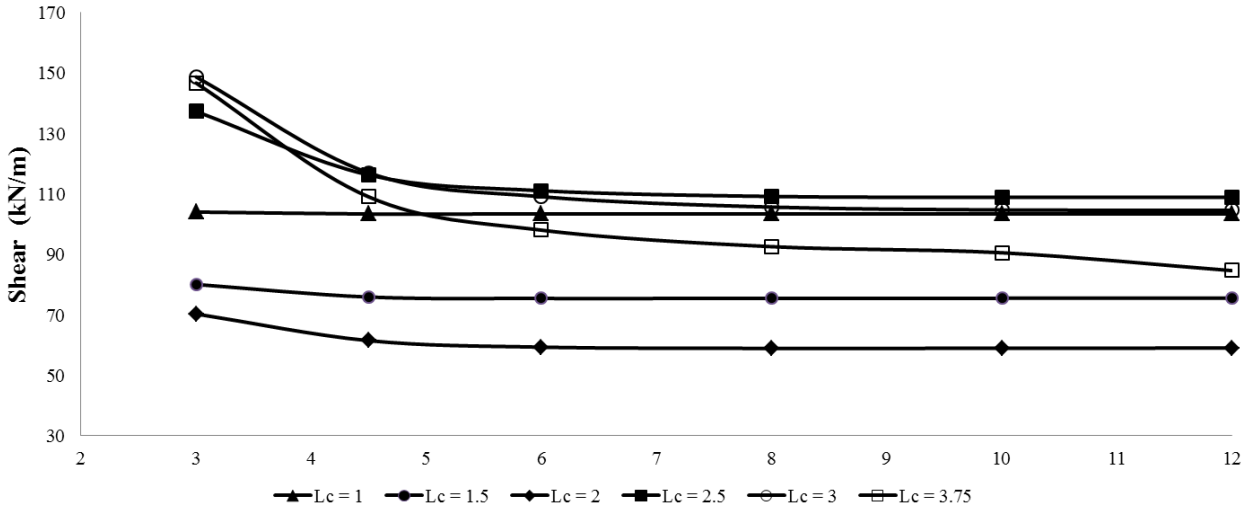


Figure B-33: Effect of cantilever length on transverse shear

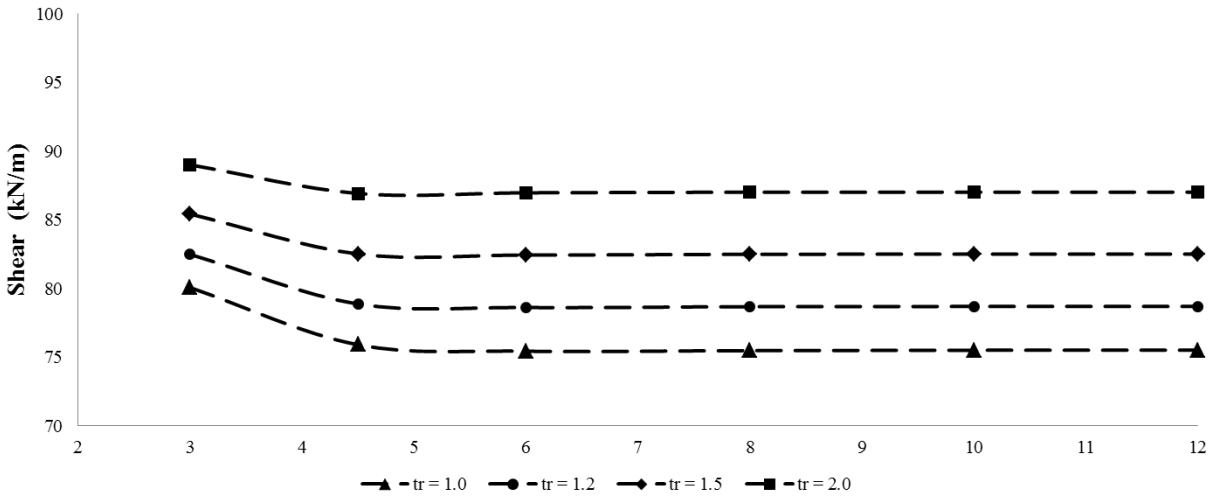


Figure B-34: Effect of slab thickness ratio on transverse shear

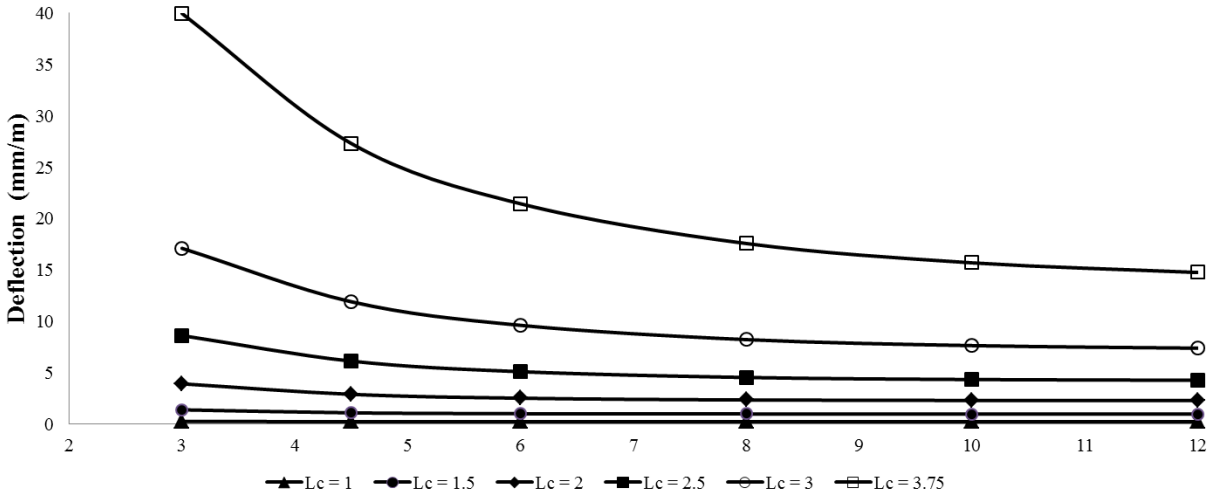


Figure B-35: Effect of cantilever length on deflection

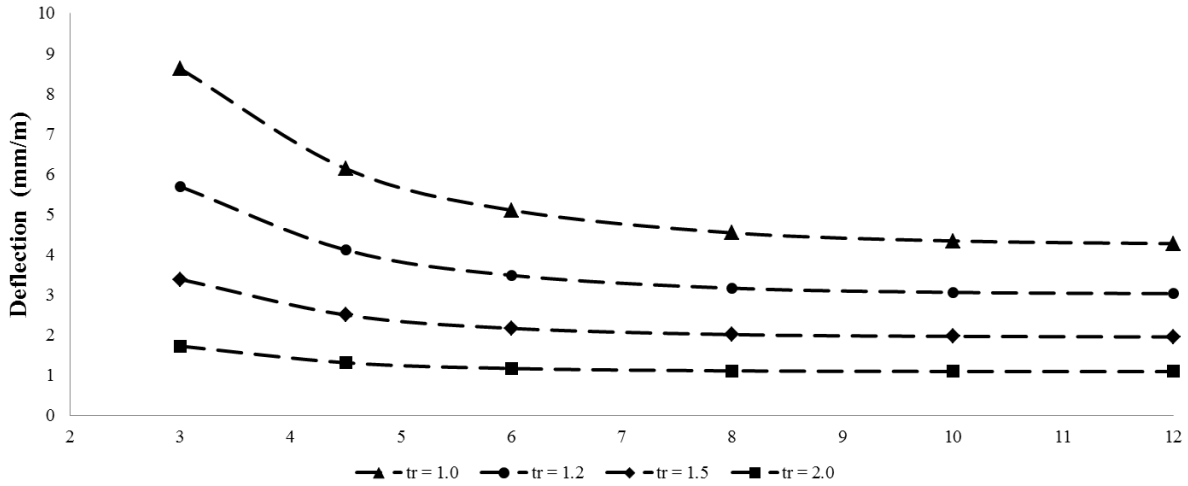


Figure B-36: Effect of slab thickness ratio on deflection

B7. Analysis of Longitudinal Moment

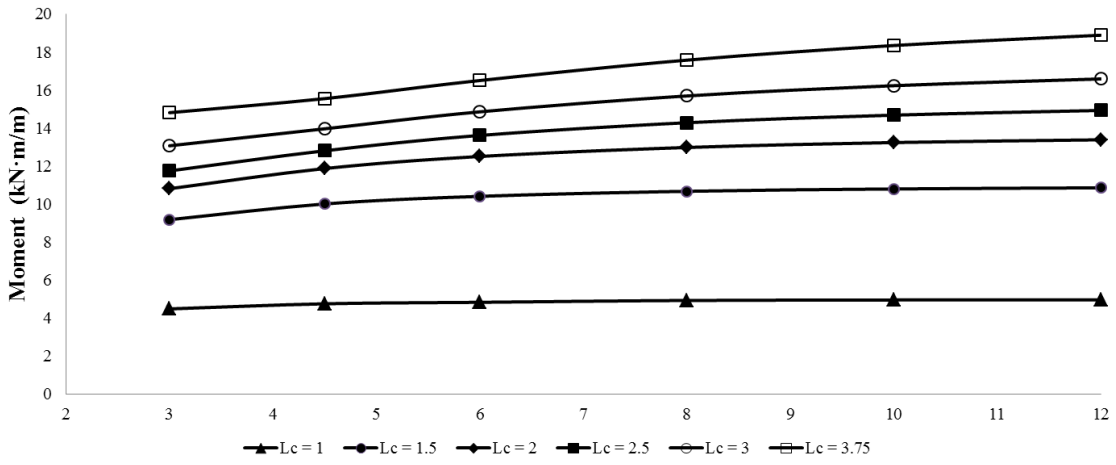


Figure B-37: Effect of cantilever length on longitudinal moment — End stiffened with New Jersey barrier

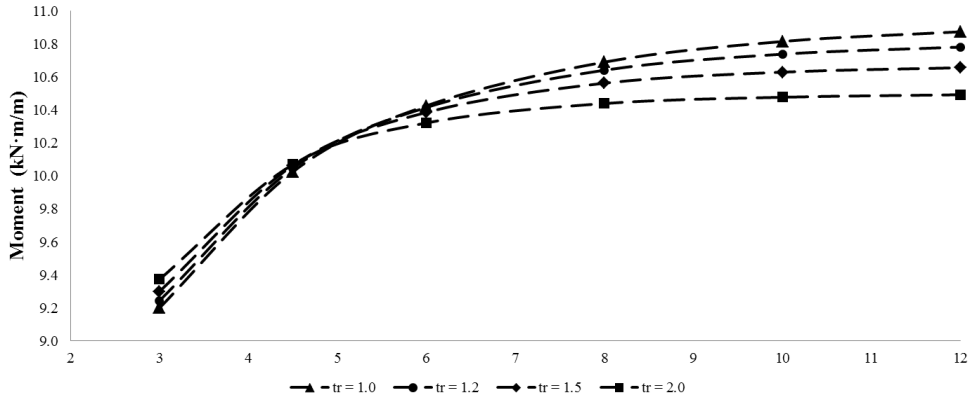


Figure B-38: Effect of slab thickness ratio on longitudinal moment — End stiffened with New Jersey barrier

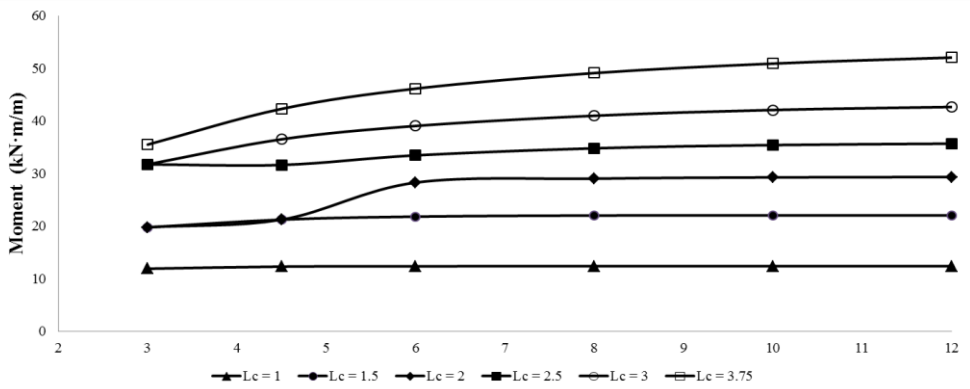


Figure B-39: Effect of cantilever length on longitudinal moment — Unstiffened edge

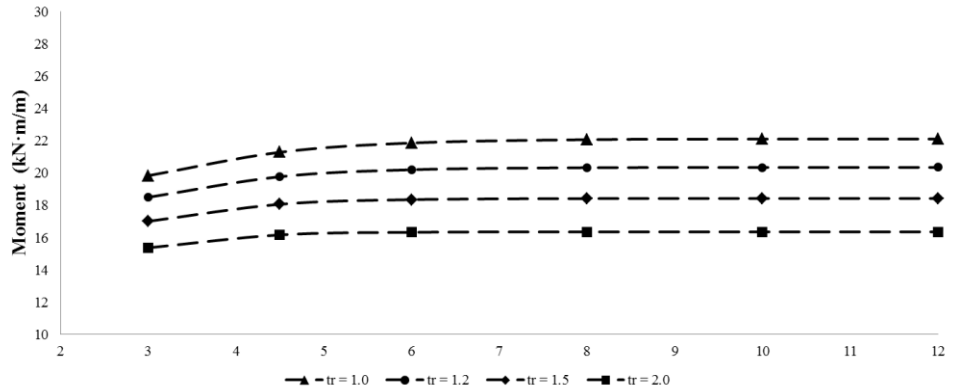


Figure B-40: Effect of slab thickness ratio on longitudinal moment — Unstiffened edge

Appendix C: Extent of Transverse Negative Moment and Shear in the Internal Panel

C1. Extent of Transverse Negative Moment into Internal Panel

C1.1. Unstiffened Edge

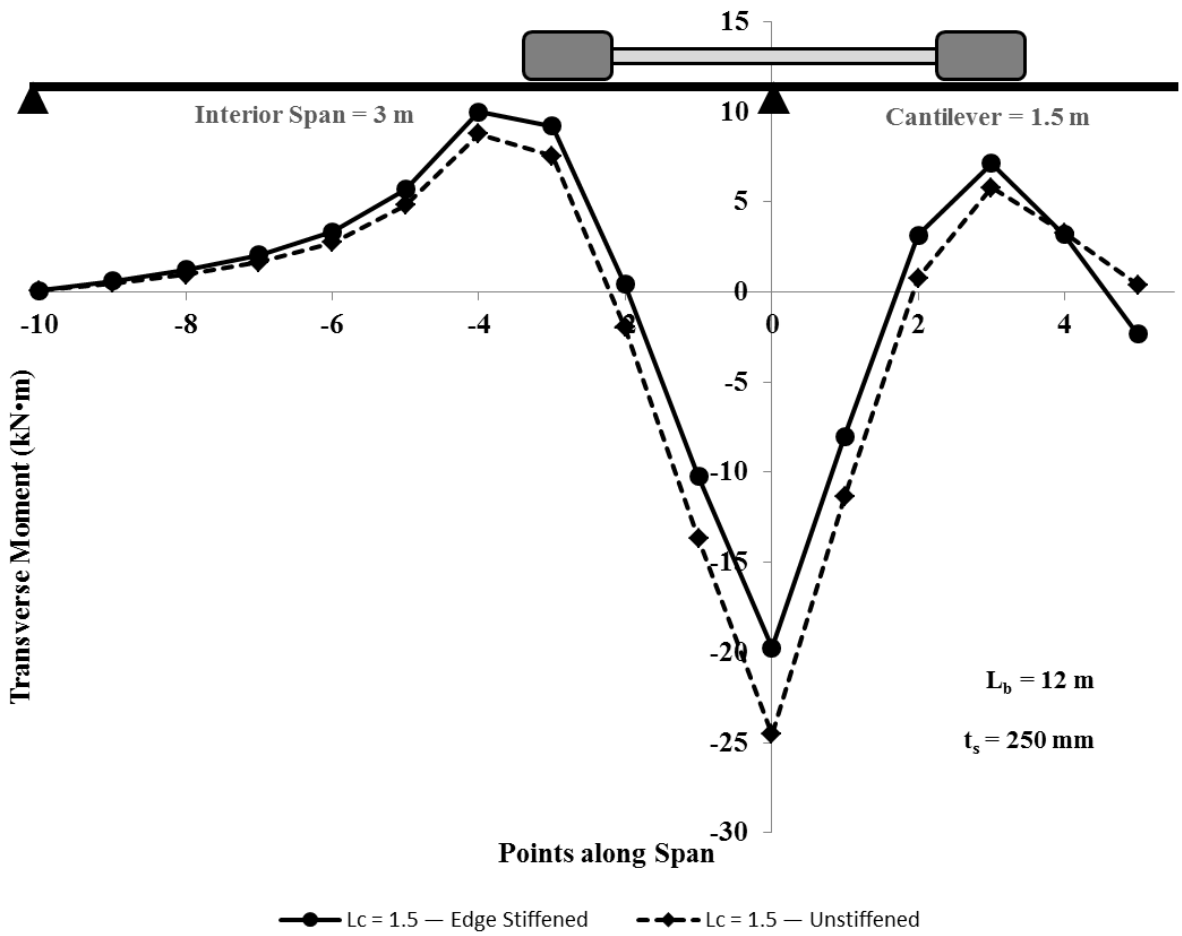


Figure C-1: Concept used for loading and analyzing internal panel (Moment)

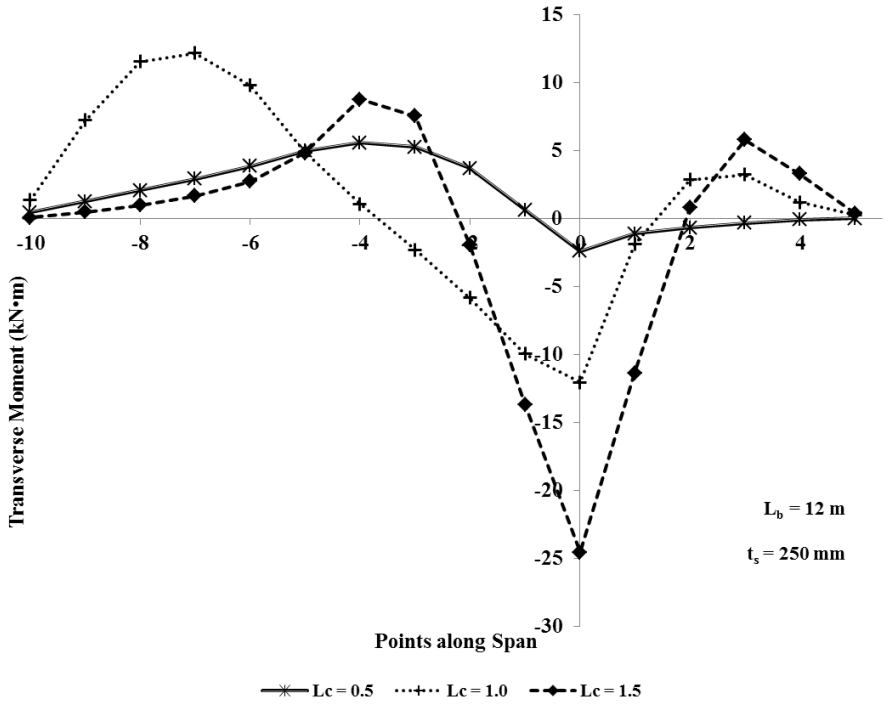


Figure C-2: Extent of transverse negative moment into internal panel (L_c 0.5 - 1.5, Unstiffened)

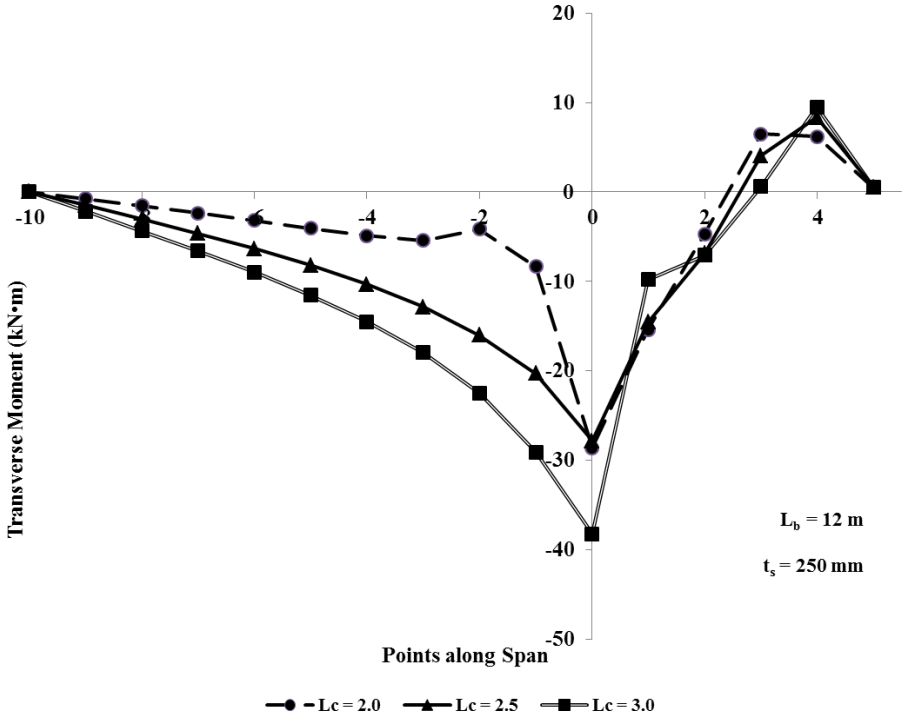


Figure C-3: Extent of transverse negative moment into internal panel (L_c 2 – 3, Unstiffened)

C1.2. Edge Stiffened with New Jersey-type Barrier

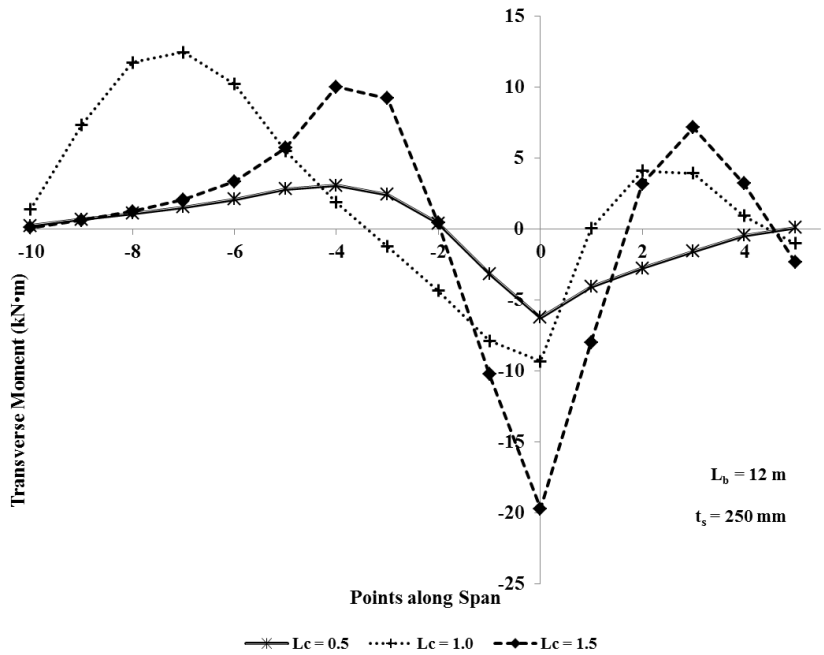


Figure C-4: Extent of transverse negative moment into internal panel (L_c 0.5 - 1.5, Stiffened)

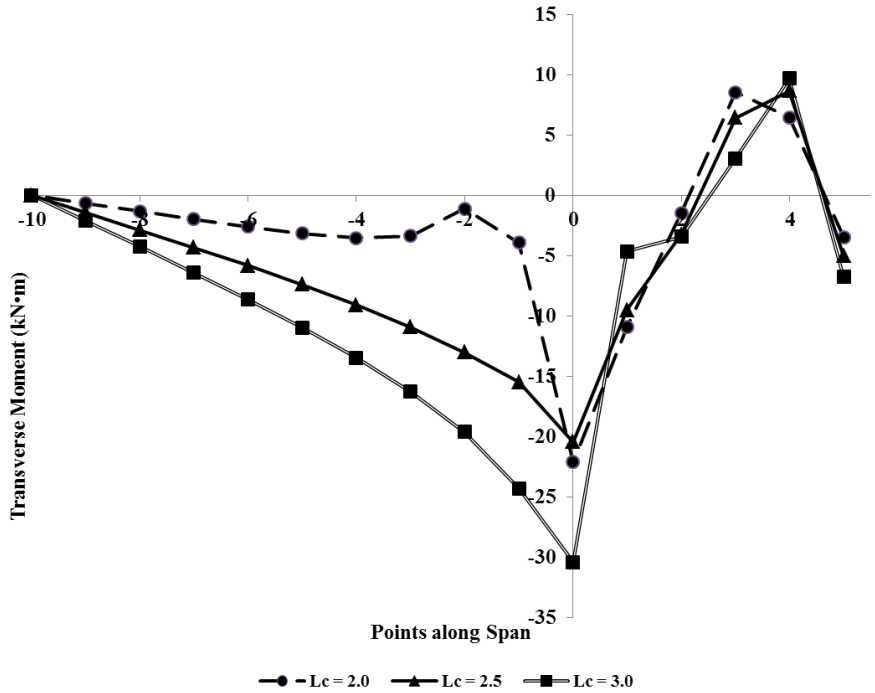


Figure C-5: Extent of transverse negative moment into internal panel (L_c 2 - 3, Stiffe**ned)**

C2. Extent of Shear into Internal Panel

C2.1. Unstiffened Edge

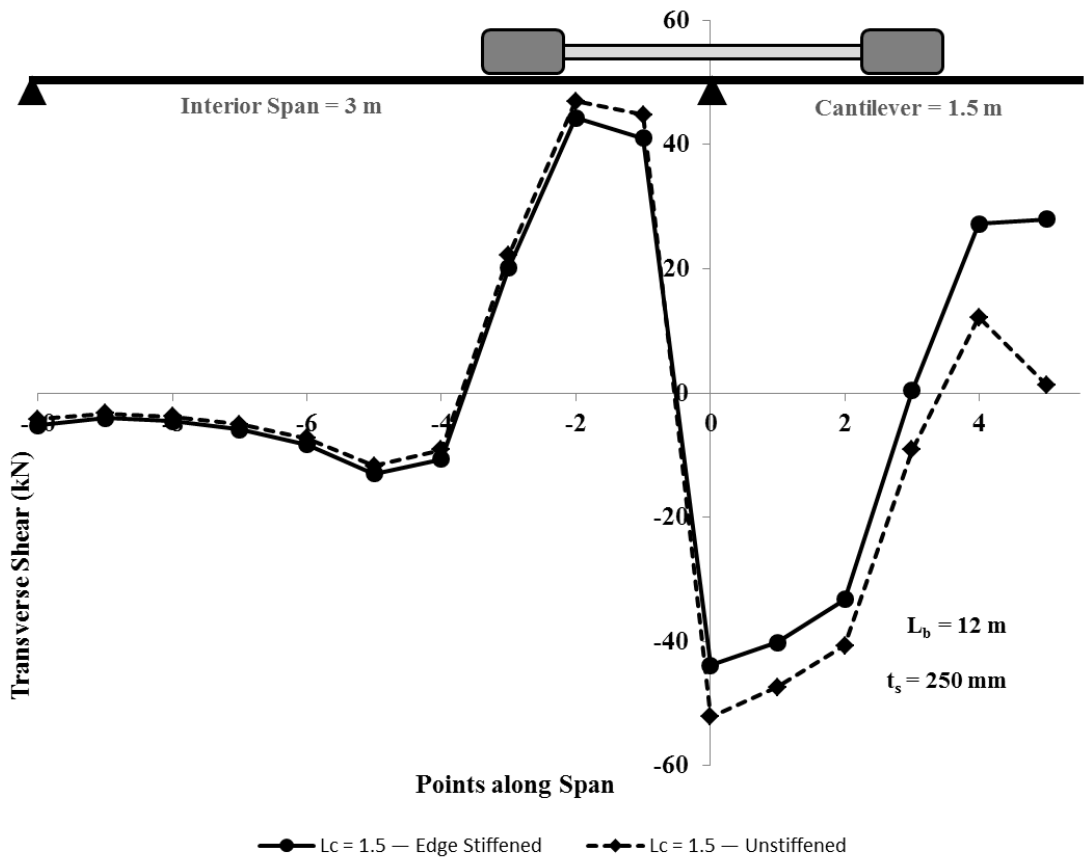


Figure C-6: Concept used for loading and analyzing internal panel (Shear)

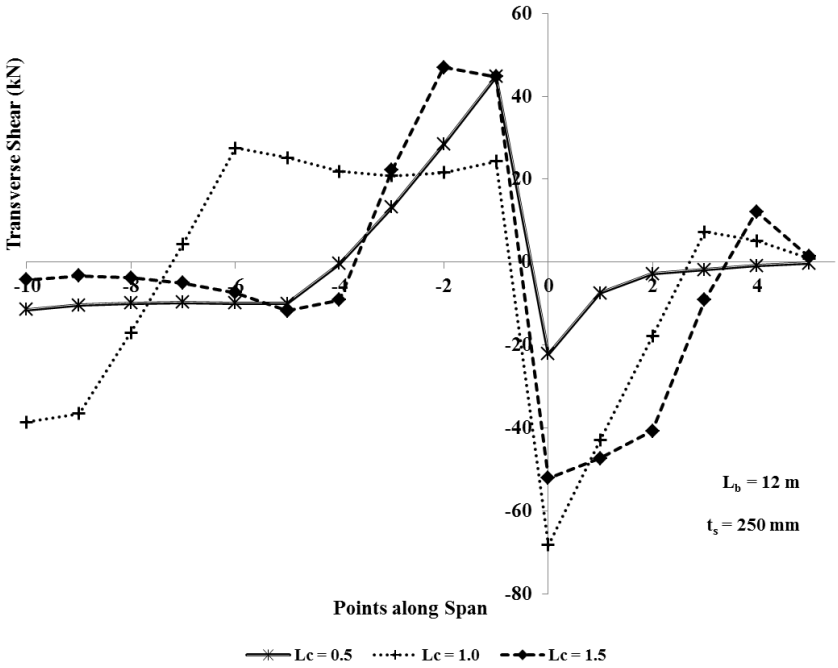


Figure C-7: Extent of transverse shear into internal panel (L_c 0.5 - 1.5, Unstiffened)

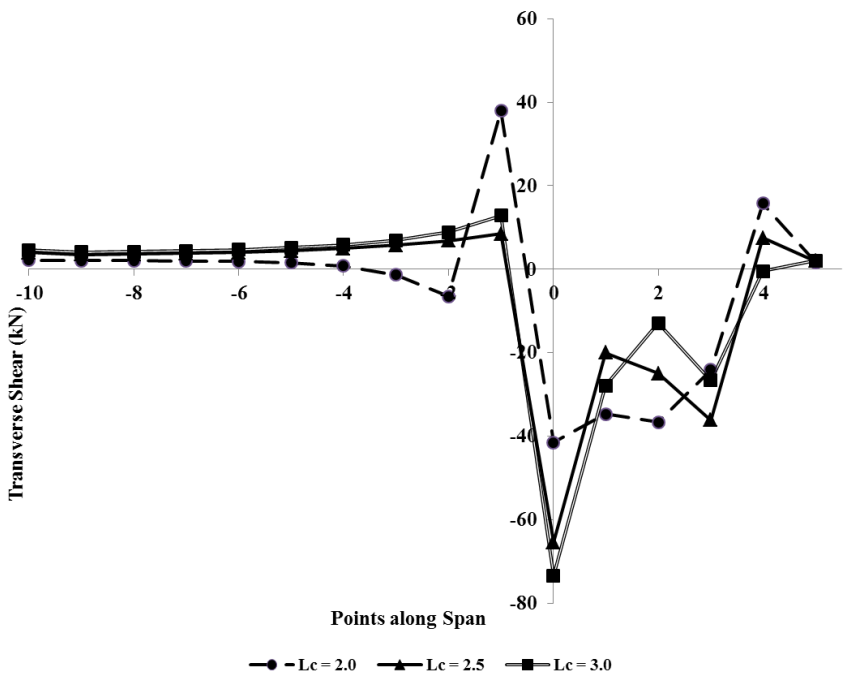


Figure C-8: Extent of transverse shear into internal panel (L_c 2 – 3, Unstiffened)

C2.2. Edge Stiffened with New Jersey-type Barrier

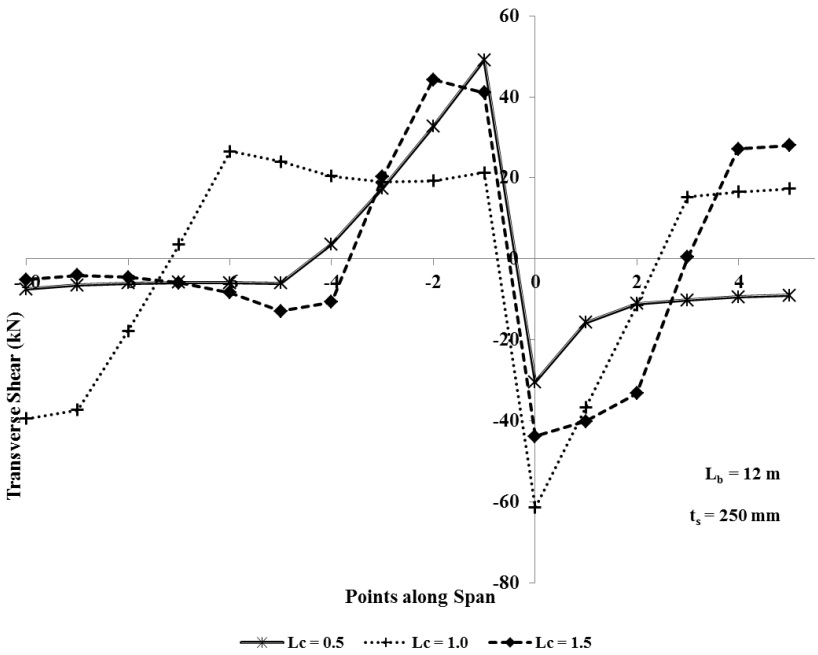


Figure C-9: Extent of transverse shear into internal panel (L_c 0.5 - 1.5, Stiffened)

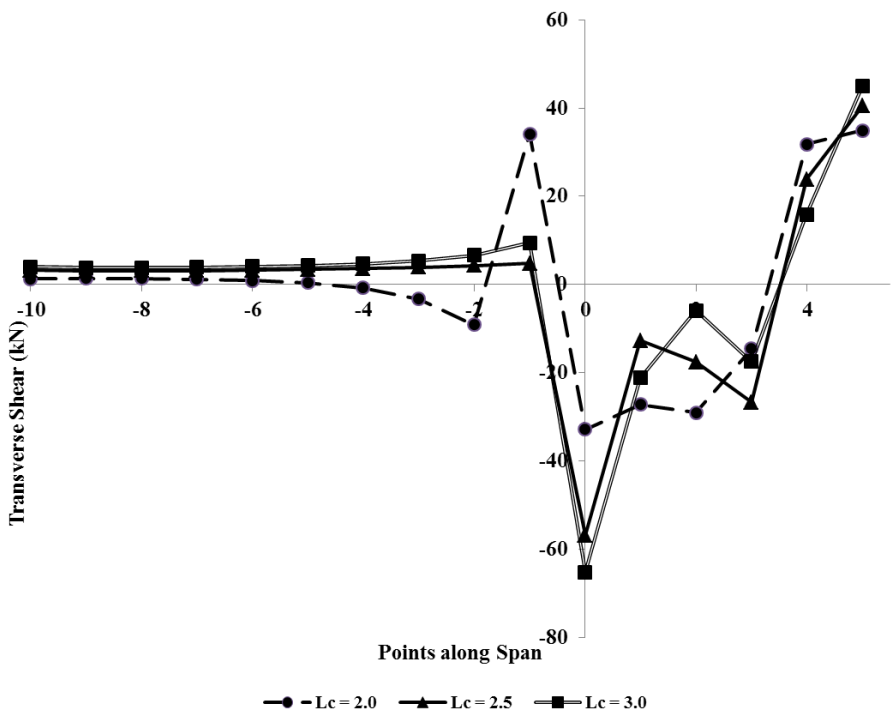


Figure C-10: Extent of transverse shear into internal panel (L_c 2 - 3, Stiffened)

Appendix D: Reinforcing Steel Design Tables — Truck Loading

D1. PL-3 Barrier

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1	3	200	200	55.232	181.478	55	133	182	860	15M	@ 200	10M	275
1	3	200	240	56.651	184.938	57	160	186	730	15M	@ 250	10M	650
1	3	200	300	58.200	188.609	58	200	201	600	15M	@ 325	OK FOR	SHEAR
1	3	200	400	60.652	194.127	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	3	225	225	55.931	183.269	56	150	185	770	15M	@ 250	10M	450
1	3	225	270	57.763	187.725	58	180	189	670	15M	@ 250	OK FOR	SHEAR
1	3	225	338	60.164	193.397	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	3	225	450	63.424	200.789	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	3	250	250	56.652	185.131	57	166	186	700	15M	@ 250	10M	875
1	3	250	300	58.560	189.755	59	200	201	610	15M	@ 250	OK FOR	SHEAR
1	3	250	375	61.042	195.523	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	3	250	500	64.452	203.201	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	3	300	300	58.120	188.904	58	200	201	600	15M	@ 325	OK FOR	SHEAR
1	3	300	360	60.160	193.742	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	3	300	450	62.811	199.798	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	3	300	600	66.427	207.860	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	3	350	350	59.566	192.581	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	4.5	200	200	50.794	176.647	51	133	178	790	15M	@ 250	10M	300
1	4.5	200	240	52.557	180.620	53	160	182	680	15M	@ 250	10M	775
1	4.5	200	300	54.504	184.869	55	200	201	570	15M	@ 325	OK FOR	SHEAR
1	4.5	200	400	57.548	191.140	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	4.5	225	225	51.709	178.890	52	150	180	710	15M	@ 250	10M	525
1	4.5	225	270	53.979	184.012	54	180	185	620	15M	@ 250	OK FOR	SHEAR
1	4.5	225	338	56.953	190.422	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	4.5	225	450	60.964	198.718	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	4.5	250	250	52.634	181.204	53	166	182	660	15M	@ 250	OK FOR	SHEAR
1	4.5	250	300	54.992	186.422	55	200	201	570	15M	@ 325	OK FOR	SHEAR
1	4.5	250	375	58.056	192.929	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	4.5	250	500	62.215	201.440	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	4.5	300	300	54.461	185.643	54	200	201	570	15M	@ 325	OK FOR	SHEAR
1	4.5	300	360	56.968	191.053	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	4.5	300	450	60.206	197.751	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	4.5	300	600	64.553	206.503	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	4.5	350	350	56.205	189.796	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	6	200	200	49.032	175.052	49	133	176	760	15M	@ 250	10M	325
1	6	200	240	50.996	179.714	51	160	181	660	15M	@ 250	10M	800
1	6	200	300	53.180	183.773	53	200	201	550	15M	@ 325	OK FOR	SHEAR
1	6	200	400	56.499	190.289	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	6	225	225	50.083	177.557	50	150	179	690	15M	@ 250	10M	550
1	6	225	270	52.607	182.941	53	180	184	610	15M	@ 250	OK FOR	SHEAR
1	6	225	338	55.887	189.637	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	6	225	450	60.250	198.218	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	6	250	250	51.125	180.014	51	166	181	640	15M	@ 250	OK FOR	SHEAR
1	6	250	300	53.735	185.470	54	200	201	560	15M	@ 325	OK FOR	SHEAR
1	6	250	375	57.097	192.238	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	6	250	500	61.590	201.011	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	6	300	300	53.147	184.715	53	200	201	550	15M	@ 325	OK FOR	SHEAR
1	6	300	360	55.904	190.291	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	6	300	450	59.425	197.203	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	6	300	600	64.067	206.169	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	6	350	350	55.059	188.987	67	233	234	600	15M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1	8	200	200	48.045	174.362	48	133	175	750	15M	@ 250	10M	325
1	8	200	240	50.153	178.660	50	160	180	650	15M	@ 250	10M	850
1	8	200	300	52.502	183.320	53	200	201	550	15M	@ 325	OK FOR	SHEAR
1	8	200	400	55.969	189.874	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	8	225	225	49.186	176.962	49	150	178	680	15M	@ 250	10M	575
1	8	225	270	51.888	182.441	52	180	184	600	15M	@ 325	OK FOR	SHEAR
1	8	225	338	55.364	189.256	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	8	225	450	59.913	197.956	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	8	250	250	50.306	179.467	50	166	180	630	15M	@ 250	OK FOR	SHEAR
1	8	250	300	53.092	185.042	53	200	201	550	15M	@ 325	OK FOR	SHEAR
1	8	250	375	56.635	191.929	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	8	250	500	61.299	200.773	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	8	300	300	52.471	184.238	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	8	300	360	55.392	189.910	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	8	300	450	59.072	196.917	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	8	300	600	63.849	205.979	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	8	350	350	54.509	188.605	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	10	200	200	47.604	174.100	48	133	175	740	15M	@ 250	10M	325
1	10	200	240	49.783	178.446	50	160	180	650	15M	@ 250	10M	850
1	10	200	300	52.207	183.129	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	10	200	400	55.728	189.706	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	10	225	225	48.791	176.700	49	150	178	670	15M	@ 250	10M	575
1	10	225	270	51.581	182.227	52	180	184	590	15M	@ 325	OK FOR	SHEAR
1	10	225	338	55.140	189.089	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	10	225	450	59.762	197.813	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	10	250	250	49.956	179.229	50	166	180	620	15M	@ 250	OK FOR	SHEAR
1	10	250	300	52.824	184.827	53	200	201	550	15M	@ 325	OK FOR	SHEAR
1	10	250	375	56.443	191.738	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	10	250	500	61.171	200.630	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	10	300	300	52.204	184.024	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	10	300	360	55.195	189.743	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	10	300	450	58.932	196.775	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	10	300	600	63.761	205.884	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	10	350	350	54.308	188.415	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	12	200	200	47.362	173.909	47	133	175	740	15M	@ 250	10M	325
1	12	200	240	49.580	178.278	50	160	180	640	15M	@ 250	10M	850
1	12	200	300	52.043	182.987	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	12	200	400	55.594	189.586	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	12	225	225	48.581	176.509	49	150	178	670	15M	@ 250	10M	575
1	12	225	270	51.419	182.084	51	180	183	590	15M	@ 325	OK FOR	SHEAR
1	12	225	338	55.022	188.946	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	12	225	450	59.686	197.718	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	12	250	250	49.779	179.062	50	166	180	620	15M	@ 250	OK FOR	SHEAR
1	12	250	300	52.689	184.708	53	200	201	550	15M	@ 325	OK FOR	SHEAR
1	12	250	375	56.345	191.643	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	12	250	500	61.110	200.583	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	12	300	300	52.078	183.905	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	12	300	360	55.098	189.648	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	12	300	450	58.863	196.727	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	12	300	600	63.722	205.836	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	12	350	350	54.211	188.320	67	233	234	600	15M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1.5	3	200	200	105.753	139.727	106	133	141	1640	25M	@ 250	OK FOR	SHEAR
1.5	3	200	240	107.899	143.920	108	160	161	1390	15M	@ 150	OK FOR	SHEAR
1.5	3	200	300	110.310	148.475	110	200	201	1140	15M	@ 150	OK FOR	SHEAR
1.5	3	200	400	114.270	155.686	114	266	267	890	15M	@ 200	OK FOR	SHEAR
1.5	3	225	225	106.941	141.735	107	150	151	1470	25M	@ 325	OK FOR	SHEAR
1.5	3	225	270	109.717	147.217	110	180	181	1260	15M	@ 150	OK FOR	SHEAR
1.5	3	225	338	113.492	154.465	113	225	226	1040	15M	@ 150	OK FOR	SHEAR
1.5	3	225	450	118.855	164.434	119	299	300	820	15M	@ 200	OK FOR	SHEAR
1.5	3	250	250	108.171	143.815	108	166	167	1340	15M	@ 150	OK FOR	SHEAR
1.5	3	250	300	111.078	149.536	111	200	201	1150	15M	@ 150	OK FOR	SHEAR
1.5	3	250	375	115.011	157.047	115	250	251	950	15M	@ 200	OK FOR	SHEAR
1.5	3	250	500	120.678	167.541	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	3	300	300	110.704	148.189	111	200	201	1140	15M	@ 150	OK FOR	SHEAR
1.5	3	300	360	113.864	154.316	114	240	241	980	15M	@ 200	OK FOR	SHEAR
1.5	3	300	450	118.147	162.401	118	299	300	820	15M	@ 200	OK FOR	SHEAR
1.5	3	300	600	124.315	173.709	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	3	350	350	113.265	152.610	113	233	234	1000	15M	@ 200	OK FOR	SHEAR
1.5	4.5	200	200	86.696	127.253	87	133	134	1340	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	240	89.424	132.137	89	160	161	1160	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	300	92.518	137.521	93	200	201	960	15M	@ 200	OK FOR	SHEAR
1.5	4.5	200	400	97.694	145.975	98	266	267	760	15M	@ 250	OK FOR	SHEAR
1.5	4.5	225	225	88.229	129.833	88	150	151	1220	15M	@ 150	OK FOR	SHEAR
1.5	4.5	225	270	91.755	136.219	92	180	181	1050	15M	@ 150	OK FOR	SHEAR
1.5	4.5	225	338	96.591	144.656	97	225	226	890	15M	@ 200	OK FOR	SHEAR
1.5	4.5	225	450	103.530	156.219	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	4.5	250	250	89.804	132.507	90	166	167	1110	15M	@ 150	OK FOR	SHEAR
1.5	4.5	250	300	93.512	139.109	94	200	201	970	15M	@ 200	OK FOR	SHEAR
1.5	4.5	250	375	98.562	147.809	99	250	251	820	15M	@ 200	OK FOR	SHEAR
1.5	4.5	250	500	105.885	159.921	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	300	92.997	137.856	93	200	201	960	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	360	97.035	144.912	97	240	241	840	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	450	102.527	154.138	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	4.5	300	600	110.443	167.017	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	4.5	350	350	96.141	143.063	96	233	234	850	15M	@ 200	OK FOR	SHEAR
1.5	6	200	200	78.447	122.612	78	133	134	1220	15M	@ 150	OK FOR	SHEAR
1.5	6	200	240	81.571	127.930	82	160	161	1050	15M	@ 150	OK FOR	SHEAR
1.5	6	200	300	85.149	133.829	85	200	201	880	15M	@ 200	OK FOR	SHEAR
1.5	6	200	400	91.073	142.880	91	266	267	710	15M	@ 250	OK FOR	SHEAR
1.5	6	225	225	80.275	125.644	80	150	151	1110	15M	@ 150	OK FOR	SHEAR
1.5	6	225	270	84.327	132.554	84	180	181	970	15M	@ 200	OK FOR	SHEAR
1.5	6	225	338	89.890	141.610	90	225	226	830	15M	@ 200	OK FOR	SHEAR
1.5	6	225	450	97.842	154.029	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	6	250	250	82.124	128.675	82	166	167	1020	15M	@ 150	OK FOR	SHEAR
1.5	6	250	300	86.380	135.824	86	200	201	890	15M	@ 200	OK FOR	SHEAR
1.5	6	250	375	92.177	145.119	92	250	251	760	15M	@ 250	OK FOR	SHEAR
1.5	6	250	500	100.525	157.993	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	6	300	300	85.788	134.619	86	200	201	890	15M	@ 200	OK FOR	SHEAR
1.5	6	300	360	90.417	142.127	90	240	241	780	15M	@ 250	OK FOR	SHEAR
1.5	6	300	450	96.683	151.948	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	6	300	600	105.621	165.493	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	6	350	350	89.334	140.206	89	233	234	790	15M	@ 250	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1.5	8	200	200	73.261	120.066	73	133	134	1140	15M	@ 150	OK FOR	SHEAR
1.5	8	200	240	76.747	125.630	77	160	161	990	15M	@ 200	OK FOR	SHEAR
1.5	8	200	300	80.770	131.947	81	200	201	840	15M	@ 200	OK FOR	SHEAR
1.5	8	200	400	87.241	141.344	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1.5	8	225	225	75.359	123.407	75	150	151	1040	15M	@ 150	OK FOR	SHEAR
1.5	8	225	270	79.889	130.650	80	180	181	920	15M	@ 200	OK FOR	SHEAR
1.5	8	225	338	86.069	140.158	86	225	226	790	15M	@ 250	OK FOR	SHEAR
1.5	8	225	450	94.781	153.053	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	8	250	250	77.442	126.652	77	166	167	960	15M	@ 200	OK FOR	SHEAR
1.5	8	250	300	82.190	134.134	82	200	201	850	15M	@ 200	OK FOR	SHEAR
1.5	8	250	375	88.597	143.834	89	250	251	730	15M	@ 250	OK FOR	SHEAR
1.5	8	250	500	97.678	157.113	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	8	300	300	81.515	132.929	82	200	201	840	15M	@ 200	OK FOR	SHEAR
1.5	8	300	360	86.646	140.746	87	240	241	750	15M	@ 250	OK FOR	SHEAR
1.5	8	300	450	93.517	150.901	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	8	300	600	103.117	164.803	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	8	350	350	85.420	138.754	85	233	234	760	15M	@ 250	OK FOR	SHEAR
1.5	10	200	200	70.806	119.042	71	133	134	1100	15M	@ 150	OK FOR	SHEAR
1.5	10	200	240	74.528	124.814	75	160	161	960	15M	@ 200	OK FOR	SHEAR
1.5	10	200	300	78.831	131.233	79	200	201	820	15M	@ 200	OK FOR	SHEAR
1.5	10	200	400	85.555	140.752	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1.5	10	225	225	73.068	122.502	73	150	151	1010	15M	@ 150	OK FOR	SHEAR
1.5	10	225	270	77.906	129.935	78	180	181	900	15M	@ 200	OK FOR	SHEAR
1.5	10	225	338	84.440	139.610	84	225	226	780	15M	@ 250	OK FOR	SHEAR
1.5	10	225	450	93.507	152.649	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	10	250	250	75.301	125.843	75	166	167	930	15M	@ 200	OK FOR	SHEAR
1.5	10	250	300	80.352	133.468	80	200	201	830	15M	@ 200	OK FOR	SHEAR
1.5	10	250	375	87.096	143.334	87	250	251	720	15M	@ 250	OK FOR	SHEAR
1.5	10	250	500	96.498	156.755	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	10	300	300	79.641	132.239	80	200	201	820	15M	@ 200	OK FOR	SHEAR
1.5	10	300	360	85.064	140.199	85	240	241	730	15M	@ 250	OK FOR	SHEAR
1.5	10	300	450	92.229	150.472	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	10	300	600	102.074	164.493	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	10	350	350	83.779	138.159	84	233	234	740	15M	@ 250	OK FOR	SHEAR
1.5	12	200	200	69.519	118.590	70	133	134	1080	15M	@ 150	OK FOR	SHEAR
1.5	12	200	240	73.388	124.408	73	160	161	950	15M	@ 200	OK FOR	SHEAR
1.5	12	200	300	77.858	130.899	78	200	201	810	15M	@ 200	OK FOR	SHEAR
1.5	12	200	400	84.686	140.462	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1.5	12	225	225	71.888	122.050	72	150	151	990	15M	@ 200	OK FOR	SHEAR
1.5	12	225	270	76.915	129.579	77	180	181	880	15M	@ 200	OK FOR	SHEAR
1.5	12	225	338	83.639	139.325	84	225	226	770	15M	@ 250	OK FOR	SHEAR
1.5	12	225	450	92.859	152.411	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	12	250	250	74.220	125.438	74	166	167	920	15M	@ 200	OK FOR	SHEAR
1.5	12	250	300	79.452	133.134	79	200	201	820	15M	@ 200	OK FOR	SHEAR
1.5	12	250	375	86.365	143.072	86	250	251	720	15M	@ 250	OK FOR	SHEAR
1.5	12	250	500	95.895	156.541	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	12	300	300	78.742	131.882	79	200	201	820	15M	@ 200	OK FOR	SHEAR
1.5	12	300	360	84.317	139.913	84	240	241	730	15M	@ 250	OK FOR	SHEAR
1.5	12	300	450	91.606	150.234	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	12	300	600	101.531	164.303	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	12	350	350	83.018	137.873	83	233	234	740	15M	@ 250	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	3	200	200	150.515	123.317	151	133	134	2330	25M	@ 200	OK FOR	SHEAR
2	3	200	240	152.433	126.676	152	160	161	1970	25M	@ 250	OK FOR	SHEAR
2	3	200	300	154.570	130.370	155	200	201	1600	25M	@ 250	OK FOR	SHEAR
2	3	200	400	158.268	136.537	158	266	267	1230	15M	@ 150	OK FOR	SHEAR
2	3	225	225	152.231	125.431	152	150	151	2090	25M	@ 200	OK FOR	SHEAR
2	3	225	270	154.875	130.000	155	180	181	1780	25M	@ 250	OK FOR	SHEAR
2	3	225	338	158.598	136.325	159	225	226	1450	25M	@ 325	OK FOR	SHEAR
2	3	225	450	164.140	145.462	164	299	300	1130	15M	@ 150	OK FOR	SHEAR
2	3	250	250	153.981	127.593	154	166	167	1910	25M	@ 250	OK FOR	SHEAR
2	3	250	300	156.787	132.427	157	200	201	1620	25M	@ 250	OK FOR	SHEAR
2	3	250	375	160.718	139.064	161	250	251	1330	15M	@ 150	OK FOR	SHEAR
2	3	250	500	166.661	148.826	167	333	334	1030	15M	@ 150	OK FOR	SHEAR
2	3	300	300	157.554	132.109	158	200	201	1630	25M	@ 250	OK FOR	SHEAR
2	3	300	360	160.682	137.448	161	240	241	1380	15M	@ 150	OK FOR	SHEAR
2	3	300	450	165.079	144.782	165	299	300	1140	15M	@ 150	OK FOR	SHEAR
2	3	300	600	171.737	155.601	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	3	350	350	161.174	136.722	161	233	234	1430	25M	@ 325	OK FOR	SHEAR
2	4.5	200	200	118.293	100.513	118	133	134	1830	25M	@ 250	OK FOR	SHEAR
2	4.5	200	240	120.766	104.182	121	160	161	1560	25M	@ 250	OK FOR	SHEAR
2	4.5	200	300	123.573	108.277	124	200	201	1280	15M	@ 150	OK FOR	SHEAR
2	4.5	200	400	128.598	115.202	129	266	267	1000	15M	@ 200	OK FOR	SHEAR
2	4.5	225	225	120.324	102.976	120	150	151	1660	25M	@ 250	OK FOR	SHEAR
2	4.5	225	270	123.667	107.989	124	180	181	1420	25M	@ 325	OK FOR	SHEAR
2	4.5	225	338	128.444	114.951	128	225	226	1180	15M	@ 150	OK FOR	SHEAR
2	4.5	225	450	135.670	125.136	136	299	300	940	15M	@ 200	OK FOR	SHEAR
2	4.5	250	250	122.403	105.555	122	166	167	1520	25M	@ 250	OK FOR	SHEAR
2	4.5	250	300	125.969	110.874	126	200	201	1300	15M	@ 150	OK FOR	SHEAR
2	4.5	250	375	131.032	118.168	131	250	251	1080	15M	@ 150	OK FOR	SHEAR
2	4.5	250	500	138.784	129.015	139	333	334	860	15M	@ 200	OK FOR	SHEAR
2	4.5	300	300	126.638	110.805	127	200	201	1310	15M	@ 150	OK FOR	SHEAR
2	4.5	300	360	130.635	116.644	131	240	241	1130	15M	@ 150	OK FOR	SHEAR
2	4.5	300	450	136.302	124.671	136	299	300	940	15M	@ 200	OK FOR	SHEAR
2	4.5	300	600	144.947	136.610	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	4.5	350	350	130.875	116.008	131	233	234	1160	15M	@ 150	OK FOR	SHEAR
2	6	200	200	103.776	92.548	104	133	134	1610	25M	@ 250	OK FOR	SHEAR
2	6	200	240	106.723	96.548	107	160	161	1380	15M	@ 150	OK FOR	SHEAR
2	6	200	300	110.109	101.018	110	200	201	1140	15M	@ 150	OK FOR	SHEAR
2	6	200	400	116.199	108.547	116	266	267	900	15M	@ 200	OK FOR	SHEAR
2	6	225	225	106.136	95.382	106	150	151	1460	25M	@ 325	OK FOR	SHEAR
2	6	225	270	110.097	100.865	110	180	181	1260	15M	@ 150	OK FOR	SHEAR
2	6	225	338	115.780	108.414	116	225	226	1060	15M	@ 150	OK FOR	SHEAR
2	6	225	450	124.403	119.454	124	299	300	860	15M	@ 200	OK FOR	SHEAR
2	6	250	250	108.538	98.309	109	166	167	1350	15M	@ 150	OK FOR	SHEAR
2	6	250	300	112.770	104.051	113	200	201	1170	15M	@ 150	OK FOR	SHEAR
2	6	250	375	118.796	111.975	119	250	251	980	15M	@ 200	OK FOR	SHEAR
2	6	250	500	128.021	123.649	137	333	334	850	15M	@ 200	OK FOR	SHEAR
2	6	300	300	113.364	104.118	113	200	201	1170	15M	@ 150	OK FOR	SHEAR
2	6	300	360	118.108	110.398	118	240	241	1020	15M	@ 150	OK FOR	SHEAR
2	6	300	450	124.830	119.005	125	299	300	860	15M	@ 200	OK FOR	SHEAR
2	6	300	600	135.045	131.766	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	6	350	350	118.122	109.720	118	233	234	1050	15M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	8	200	200	94.067	87.871	22	133	134	340	15M	@ 500	OK FOR	SHEAR
2	8	200	240	97.512	92.149	32	160	161	410	15M	@ 325	OK FOR	SHEAR
2	8	200	300	101.518	97.008	49	200	201	510	15M	@ 325	OK FOR	SHEAR
2	8	200	400	108.594	104.920	88	266	267	680	15M	@ 250	OK FOR	SHEAR
2	8	225	225	96.796	91.079	28	150	151	390	15M	@ 500	OK FOR	SHEAR
2	8	225	270	101.411	96.904	40	180	181	460	15M	@ 325	OK FOR	SHEAR
2	8	225	338	108.023	104.943	63	225	226	580	15M	@ 325	OK FOR	SHEAR
2	8	225	450	117.982	116.611	111	299	300	770	15M	@ 250	OK FOR	SHEAR
2	8	250	250	99.536	94.262	34	166	167	430	15M	@ 325	OK FOR	SHEAR
2	8	250	300	104.461	100.368	49	200	201	510	15M	@ 325	OK FOR	SHEAR
2	8	250	375	111.447	108.759	77	250	251	640	15M	@ 250	OK FOR	SHEAR
2	8	250	500	122.036	121.013	137	333	334	850	15M	@ 200	OK FOR	SHEAR
2	8	300	300	104.958	100.494	49	200	201	510	15M	@ 325	OK FOR	SHEAR
2	8	300	360	110.456	107.093	71	240	241	610	15M	@ 250	OK FOR	SHEAR
2	8	300	450	118.199	116.139	111	299	300	770	15M	@ 250	OK FOR	SHEAR
2	8	300	600	129.793	129.407	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	8	350	350	110.238	106.386	67	233	234	600	15M	@ 325	OK FOR	SHEAR
2	10	200	200	89.059	85.739	89	133	134	1380	15M	@ 150	OK FOR	SHEAR
2	10	200	240	92.877	90.185	93	160	161	1200	15M	@ 150	OK FOR	SHEAR
2	10	200	300	97.355	95.271	97	200	201	1010	15M	@ 150	OK FOR	SHEAR
2	10	200	400	105.042	103.340	105	266	267	820	15M	@ 200	OK FOR	SHEAR
2	10	225	225	92.058	89.140	92	150	151	1270	15M	@ 150	OK FOR	SHEAR
2	10	225	270	97.168	95.195	97	180	181	1120	15M	@ 150	OK FOR	SHEAR
2	10	225	338	104.439	103.476	104	225	226	960	15M	@ 200	OK FOR	SHEAR
2	10	225	450	115.242	115.442	115	299	300	800	15M	@ 250	OK FOR	SHEAR
2	10	250	250	95.042	92.451	95	166	167	1180	15M	@ 150	OK FOR	SHEAR
2	10	250	300	100.481	98.785	100	200	201	1040	15M	@ 150	OK FOR	SHEAR
2	10	250	375	108.132	107.394	108	250	251	900	15M	@ 200	OK FOR	SHEAR
2	10	250	500	119.544	119.945	137	333	334	850	15M	@ 200	OK FOR	SHEAR
2	10	300	300	100.904	98.871	101	200	201	1040	15M	@ 150	OK FOR	SHEAR
2	10	300	360	106.944	105.695	107	240	241	920	15M	@ 200	OK FOR	SHEAR
2	10	300	450	115.355	114.961	115	299	300	800	15M	@ 250	OK FOR	SHEAR
2	10	300	600	127.703	128.434	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	10	350	350	106.585	104.928	107	233	234	950	15M	@ 200	OK FOR	SHEAR
2	12	200	200	86.253	84.697	86	133	134	1340	15M	@ 150	OK FOR	SHEAR
2	12	200	240	90.348	89.237	90	160	161	1170	15M	@ 150	OK FOR	SHEAR
2	12	200	300	95.172	94.446	95	200	201	980	15M	@ 200	OK FOR	SHEAR
2	12	200	400	103.205	102.605	103	266	267	800	15M	@ 250	OK FOR	SHEAR
2	12	225	225	89.450	88.183	89	150	151	1230	15M	@ 150	OK FOR	SHEAR
2	12	225	270	94.924	94.337	95	180	181	1090	15M	@ 150	OK FOR	SHEAR
2	12	225	338	102.643	102.783	103	225	226	940	15M	@ 200	OK FOR	SHEAR
2	12	225	450	113.932	114.863	114	299	300	790	15M	@ 250	OK FOR	SHEAR
2	12	250	250	92.615	91.556	93	166	167	1150	15M	@ 150	OK FOR	SHEAR
2	12	250	300	98.424	98.013	98	200	201	1020	15M	@ 150	OK FOR	SHEAR
2	12	250	375	106.508	106.741	107	250	251	880	15M	@ 200	OK FOR	SHEAR
2	12	250	500	118.366	119.385	137	333	334	850	15M	@ 200	OK FOR	SHEAR
2	12	300	300	98.813	98.078	99	200	201	1020	15M	@ 150	OK FOR	SHEAR
2	12	300	360	105.220	105.003	105	240	241	910	15M	@ 200	OK FOR	SHEAR
2	12	300	450	114.020	114.365	114	299	300	790	15M	@ 250	OK FOR	SHEAR
2	12	300	600	126.715	127.930	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	12	350	350	104.784	104.241	105	233	234	930	15M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2.5	3	200	200	220.658	221.892	221	133	223	3410	25M	@ 150	10M	150
2.5	3	200	240	222.678	224.869	223	160	226	2870	25M	@ 150	10M	250
2.5	3	200	300	224.855	228.046	225	200	229	2320	25M	@ 200	10M	725
2.5	3	200	400	228.670	233.495	229	266	267	1770	25M	@ 250	OK FOR	SHEAR
2.5	3	225	225	223.120	224.189	223	150	226	3070	25M	@ 150	10M	200
2.5	3	225	270	226.060	228.465	226	180	230	2590	25M	@ 150	10M	375
2.5	3	225	338	230.211	234.406	230	225	236	2110	25M	@ 200	OK FOR	SHEAR
2.5	3	225	450	236.479	243.098	236	299	300	1630	25M	@ 250	OK FOR	SHEAR
2.5	3	250	250	225.610	226.531	226	166	227	2790	25M	@ 150	10M	275
2.5	3	250	300	228.752	231.087	229	200	232	2360	25M	@ 200	10M	675
2.5	3	250	375	233.174	237.338	233	250	251	1920	25M	@ 250	OK FOR	SHEAR
2.5	3	250	500	239.959	246.711	240	333	334	1490	25M	@ 325	OK FOR	SHEAR
2.5	3	300	300	230.644	231.351	231	200	233	2380	25M	@ 200	10M	650
2.5	3	300	360	234.195	236.426	234	240	241	2010	25M	@ 200	OK FOR	SHEAR
2.5	3	300	450	239.218	243.451	239	299	300	1650	25M	@ 250	OK FOR	SHEAR
2.5	3	300	600	246.965	254.028	247	399	400	1280	15M	@ 150	OK FOR	SHEAR
2.5	3	350	350	235.721	236.237	236	233	237	2080	25M	@ 200	OK FOR	SHEAR
2.5	4.5	200	200	171.999	187.263	172	133	188	2660	25M	@ 150	10M	250
2.5	4.5	200	240	174.368	190.151	174	160	191	2250	25M	@ 200	10M	550
2.5	4.5	200	300	176.988	193.220	177	200	201	1830	25M	@ 250	OK FOR	SHEAR
2.5	4.5	200	400	181.805	198.770	182	266	267	1410	25M	@ 325	OK FOR	SHEAR
2.5	4.5	225	225	174.701	189.721	175	150	191	2400	25M	@ 200	10M	375
2.5	4.5	225	270	178.082	193.910	178	180	195	2040	25M	@ 200	OK FOR	SHEAR
2.5	4.5	225	338	182.962	199.790	183	225	226	1680	25M	@ 250	OK FOR	SHEAR
2.5	4.5	225	450	190.498	208.664	190	299	300	1310	15M	@ 150	OK FOR	SHEAR
2.5	4.5	250	250	177.450	192.307	177	166	193	2200	25M	@ 200	10M	650
2.5	4.5	250	300	181.089	196.754	181	200	201	1870	25M	@ 250	OK FOR	SHEAR
2.5	4.5	250	375	186.313	202.995	186	250	251	1540	25M	@ 250	OK FOR	SHEAR
2.5	4.5	250	500	194.490	212.584	194	333	334	1210	15M	@ 150	OK FOR	SHEAR
2.5	4.5	300	300	183.027	197.520	183	200	201	1890	25M	@ 250	OK FOR	SHEAR
2.5	4.5	300	360	187.179	202.539	187	240	241	1610	25M	@ 250	OK FOR	SHEAR
2.5	4.5	300	450	193.142	209.586	193	299	300	1330	15M	@ 150	OK FOR	SHEAR
2.5	4.5	300	600	202.466	220.419	202	399	400	1050	15M	@ 150	OK FOR	SHEAR
2.5	4.5	350	350	188.634	202.733	189	233	234	1670	25M	@ 250	OK FOR	SHEAR
2.5	6	200	200	149.582	176.214	150	133	177	2310	25M	@ 200	10M	325
2.5	6	200	240	152.352	179.317	152	160	181	1960	25M	@ 250	10M	800
2.5	6	200	300	155.456	182.645	155	200	201	1600	25M	@ 250	OK FOR	SHEAR
2.5	6	200	400	161.281	188.638	161	266	267	1250	15M	@ 150	OK FOR	SHEAR
2.5	6	225	225	152.578	178.971	153	150	180	2100	25M	@ 200	10M	525
2.5	6	225	270	156.477	183.425	156	180	185	1790	25M	@ 250	OK FOR	SHEAR
2.5	6	225	338	162.159	189.742	162	225	226	1490	25M	@ 325	OK FOR	SHEAR
2.5	6	225	450	171.009	199.276	171	299	300	1180	15M	@ 150	OK FOR	SHEAR
2.5	6	250	250	155.621	181.770	156	166	182	1930	25M	@ 250	OK FOR	SHEAR
2.5	6	250	300	159.835	186.541	160	200	201	1650	25M	@ 250	OK FOR	SHEAR
2.5	6	250	375	165.926	193.240	166	250	251	1370	15M	@ 150	OK FOR	SHEAR
2.5	6	250	500	175.521	203.521	176	333	334	1090	15M	@ 150	OK FOR	SHEAR
2.5	6	300	300	161.760	187.408	162	200	201	1670	25M	@ 250	OK FOR	SHEAR
2.5	6	300	360	166.575	192.765	167	240	241	1430	25M	@ 325	OK FOR	SHEAR
2.5	6	300	450	173.524	200.283	174	299	300	1200	15M	@ 150	OK FOR	SHEAR
2.5	6	300	600	184.413	211.785	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	6	350	350	167.874	192.963	168	233	234	1490	25M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2.5	8	200	200	134.305	169.982	134	133	171	2080	25M	@ 200	10M	375
2.5	8	200	240	137.562	173.327	138	160	175	1770	25M	@ 250	OK FOR	SHEAR
2.5	8	200	300	141.256	176.976	141	200	201	1460	25M	@ 325	OK FOR	SHEAR
2.5	8	200	400	148.193	183.444	148	266	267	1150	15M	@ 150	OK FOR	SHEAR
2.5	8	225	225	137.668	173.035	138	150	174	1890	25M	@ 250	10M	650
2.5	8	225	270	142.210	177.833	142	180	181	1630	25M	@ 250	OK FOR	SHEAR
2.5	8	225	338	148.845	184.624	149	225	226	1360	15M	@ 150	OK FOR	SHEAR
2.5	8	225	450	159.180	194.805	159	299	300	1100	15M	@ 150	OK FOR	SHEAR
2.5	8	250	250	141.060	176.071	141	166	177	1750	25M	@ 250	OK FOR	SHEAR
2.5	8	250	300	145.967	181.201	146	200	201	1510	25M	@ 250	OK FOR	SHEAR
2.5	8	250	375	153.072	188.356	153	250	251	1270	15M	@ 150	OK FOR	SHEAR
2.5	8	250	500	164.228	199.265	164	333	334	1020	15M	@ 150	OK FOR	SHEAR
2.5	8	300	300	147.828	182.119	148	200	201	1530	25M	@ 250	OK FOR	SHEAR
2.5	8	300	360	153.426	187.816	153	240	241	1320	15M	@ 150	OK FOR	SHEAR
2.5	8	300	450	161.492	195.763	161	299	300	1110	15M	@ 150	OK FOR	SHEAR
2.5	8	300	600	174.045	207.882	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	8	350	350	154.499	187.978	154	233	234	1370	15M	@ 150	OK FOR	SHEAR
2.5	10	200	200	126.112	167.016	126	133	168	1950	25M	@ 250	10M	400
2.5	10	200	240	129.772	170.543	130	160	172	1670	25M	@ 250	OK FOR	SHEAR
2.5	10	200	300	133.964	174.384	134	200	201	1380	15M	@ 150	OK FOR	SHEAR
2.5	10	200	400	141.717	181.149	142	266	267	1100	15M	@ 150	OK FOR	SHEAR
2.5	10	225	225	129.778	170.252	130	150	172	1790	25M	@ 250	10M	725
2.5	10	225	270	134.855	175.281	135	180	181	1550	25M	@ 250	OK FOR	SHEAR
2.5	10	225	338	142.259	182.357	142	225	226	1300	15M	@ 150	OK FOR	SHEAR
2.5	10	225	450	153.699	192.921	154	299	300	1060	15M	@ 150	OK FOR	SHEAR
2.5	10	250	250	133.447	173.463	133	166	174	1650	25M	@ 250	OK FOR	SHEAR
2.5	10	250	300	138.925	178.808	139	200	201	1430	25M	@ 325	OK FOR	SHEAR
2.5	10	250	375	146.827	186.247	147	250	251	1210	15M	@ 150	OK FOR	SHEAR
2.5	10	250	500	159.115	197.488	159	333	334	990	15M	@ 200	OK FOR	SHEAR
2.5	10	300	300	140.716	179.722	141	200	201	1450	25M	@ 325	OK FOR	SHEAR
2.5	10	300	360	146.944	185.649	147	240	241	1270	15M	@ 150	OK FOR	SHEAR
2.5	10	300	450	155.863	193.862	156	299	300	1070	15M	@ 150	OK FOR	SHEAR
2.5	10	300	600	169.547	206.303	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	10	350	350	147.843	185.752	148	233	234	1310	15M	@ 150	OK FOR	SHEAR
2.5	12	200	200	121.286	165.400	121	133	166	1880	25M	@ 250	10M	425
2.5	12	200	240	125.278	169.038	125	160	170	1620	25M	@ 250	OK FOR	SHEAR
2.5	12	200	300	129.876	173.021	130	200	201	1340	15M	@ 150	OK FOR	SHEAR
2.5	12	200	400	138.200	179.938	138	266	267	1070	15M	@ 150	OK FOR	SHEAR
2.5	12	225	225	125.194	168.772	125	150	170	1720	25M	@ 250	10M	800
2.5	12	225	270	130.712	173.939	131	180	181	1500	25M	@ 325	OK FOR	SHEAR
2.5	12	225	338	138.710	181.183	139	225	226	1270	15M	@ 150	OK FOR	SHEAR
2.5	12	225	450	150.922	191.976	151	299	300	1040	15M	@ 150	OK FOR	SHEAR
2.5	12	250	250	129.087	172.061	129	166	173	1600	25M	@ 250	OK FOR	SHEAR
2.5	12	250	300	135.026	177.536	135	200	201	1390	15M	@ 150	OK FOR	SHEAR
2.5	12	250	375	143.533	185.151	144	250	251	1190	15M	@ 150	OK FOR	SHEAR
2.5	12	250	500	156.571	196.604	157	333	334	970	15M	@ 200	OK FOR	SHEAR
2.5	12	300	300	136.768	178.453	137	200	201	1410	25M	@ 325	OK FOR	SHEAR
2.5	12	300	360	143.488	184.517	143	240	241	1240	15M	@ 150	OK FOR	SHEAR
2.5	12	300	450	153.011	192.881	153	299	300	1050	15M	@ 150	OK FOR	SHEAR
2.5	12	300	600	167.371	205.484	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	12	350	350	144.269	184.583	144	233	234	1280	15M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3	3	200	200	325.249	278.700	325	133	280	5030	25M	@ 100	10M	75
3	3	200	240	328.104	282.961	328	160	284	4230	25M	@ 100	10M	125
3	3	200	300	331.080	287.313	331	200	289	3410	25M	@ 150	10M	225
3	3	200	400	336.054	294.284	336	266	295	2600	25M	@ 150	10M	975
3	3	225	225	328.682	281.324	329	150	283	4520	25M	@ 100	10M	100
3	3	225	270	332.842	287.315	333	180	289	3810	25M	@ 125	10M	175
3	3	225	338	338.527	295.109	339	225	296	3100	25M	@ 150	10M	325
3	3	225	450	346.868	305.963	347	299	307	2380	25M	@ 200	OK FOR	SHEAR
3	3	250	250	332.137	284.016	332	166	285	4110	25M	@ 100	10M	150
3	3	250	300	336.560	290.268	337	200	292	3470	25M	@ 150	10M	225
3	3	250	375	342.595	298.444	343	250	300	2830	25M	@ 150	10M	525
3	3	250	500	351.615	310.079	352	333	334	2180	25M	@ 200	OK FOR	SHEAR
3	3	300	300	339.090	289.489	339	200	291	3490	25M	@ 150	10M	225
3	3	300	360	344.043	296.336	344	240	298	2960	25M	@ 150	10M	425
3	3	300	450	350.862	305.388	351	299	306	2410	25M	@ 200	OK FOR	SHEAR
3	3	300	600	361.153	318.380	361	399	400	1860	25M	@ 250	OK FOR	SHEAR
3	3	350	350	346.082	295.034	346	233	296	3060	25M	@ 150	10M	400
3	4.5	200	200	254.776	230.040	255	133	231	3940	25M	@ 125	10M	125
3	4.5	200	240	257.959	233.862	258	160	235	3320	25M	@ 150	10M	225
3	4.5	200	300	261.340	237.792	261	200	239	2690	25M	@ 150	10M	550
3	4.5	200	400	267.193	244.309	267	266	267	2070	25M	@ 200	OK FOR	SHEAR
3	4.5	225	225	258.402	232.803	258	150	234	3550	25M	@ 125	10M	175
3	4.5	225	270	262.967	238.214	263	180	240	3010	25M	@ 150	10M	300
3	4.5	225	338	269.299	245.425	269	225	247	2460	25M	@ 200	OK FOR	SHEAR
3	4.5	225	450	278.726	255.728	279	299	300	1920	25M	@ 250	OK FOR	SHEAR
3	4.5	250	250	262.070	235.586	262	166	236	3240	25M	@ 150	10M	250
3	4.5	250	300	266.944	241.321	267	200	243	2750	25M	@ 150	10M	500
3	4.5	250	375	273.688	248.930	274	250	251	2260	25M	@ 200	OK FOR	SHEAR
3	4.5	250	500	283.902	260.023	284	333	334	1760	25M	@ 250	OK FOR	SHEAR
3	4.5	300	300	269.482	241.289	269	200	243	2780	25M	@ 150	10M	500
3	4.5	300	360	274.976	247.627	275	240	249	2360	25M	@ 200	OK FOR	SHEAR
3	4.5	300	450	282.623	256.116	283	299	300	1940	25M	@ 250	OK FOR	SHEAR
3	4.5	300	600	294.275	268.631	294	399	400	1520	25M	@ 250	OK FOR	SHEAR
3	4.5	350	350	276.938	247.053	277	233	248	2450	25M	@ 200	OK FOR	SHEAR
3	6	200	200	221.968	214.817	222	133	216	3430	25M	@ 150	10M	150
3	6	200	240	225.539	218.766	226	160	220	2910	25M	@ 150	10M	275
3	6	200	300	229.381	222.843	229	200	224	2370	25M	@ 200	10M	875
3	6	200	400	236.207	229.747	236	266	267	1830	25M	@ 250	OK FOR	SHEAR
3	6	225	225	225.863	217.756	226	150	219	3100	25M	@ 150	10M	225
3	6	225	270	230.926	223.368	231	180	225	2650	25M	@ 150	10M	425
3	6	225	338	238.016	230.846	238	225	232	2180	25M	@ 200	OK FOR	SHEAR
3	6	225	450	248.694	241.664	249	299	300	1710	25M	@ 250	OK FOR	SHEAR
3	6	250	250	229.807	220.755	230	166	221	2840	25M	@ 150	10M	325
3	6	250	300	235.233	226.709	235	200	228	2430	25M	@ 200	10M	750
3	6	250	375	242.803	234.625	243	250	251	2000	25M	@ 250	OK FOR	SHEAR
3	6	250	500	254.375	246.229	254	333	334	1580	25M	@ 250	OK FOR	SHEAR
3	6	300	300	237.768	226.837	238	200	228	2450	25M	@ 200	10M	750
3	6	300	360	243.900	233.391	244	240	241	2100	25M	@ 200	OK FOR	SHEAR
3	6	300	450	252.492	242.207	252	299	300	1740	25M	@ 250	OK FOR	SHEAR
3	6	300	600	265.663	255.963	266	399	400	1370	15M	@ 150	OK FOR	SHEAR
3	6	350	350	245.727	232.884	246	233	234	2170	25M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3	8	200	200	199.380	206.481	199	133	207	3080	25M	@ 150	10M	175
3	8	200	240	203.462	210.667	203	160	212	2620	25M	@ 150	10M	325
3	8	200	300	207.909	215.052	208	200	216	2140	25M	@ 200	OK FOR	SHEAR
3	8	200	400	215.936	222.407	216	266	267	1670	25M	@ 250	OK FOR	SHEAR
3	8	225	225	203.653	209.697	204	150	211	2800	25M	@ 150	10M	250
3	8	225	270	209.384	215.645	209	180	217	2400	25M	@ 200	10M	525
3	8	225	338	217.470	223.592	217	225	226	1990	25M	@ 250	OK FOR	SHEAR
3	8	225	450	229.731	235.072	230	299	300	1580	25M	@ 250	OK FOR	SHEAR
3	8	250	250	207.961	212.954	208	166	214	2570	25M	@ 150	10M	375
3	8	250	300	214.113	219.243	214	200	221	2210	25M	@ 200	OK FOR	SHEAR
3	8	250	375	222.749	227.627	223	250	251	1840	25M	@ 250	OK FOR	SHEAR
3	8	250	500	236.010	239.908	236	333	334	1460	25M	@ 325	OK FOR	SHEAR
3	8	300	300	216.591	219.451	217	200	221	2230	25M	@ 200	OK FOR	SHEAR
3	8	300	360	223.547	226.338	224	240	241	1920	25M	@ 250	OK FOR	SHEAR
3	8	300	450	233.331	235.613	233	299	300	1610	25M	@ 250	OK FOR	SHEAR
3	8	300	600	248.338	249.282	248	399	400	1280	15M	@ 150	OK FOR	SHEAR
3	8	350	350	225.143	225.782	225	233	234	1990	25M	@ 250	OK FOR	SHEAR
3	10	200	200	187.079	202.559	187	133	204	2890	25M	@ 150	10M	200
3	10	200	240	191.609	206.947	192	160	208	2470	25M	@ 200	10M	350
3	10	200	300	196.594	211.522	197	200	213	2030	25M	@ 200	OK FOR	SHEAR
3	10	200	400	205.602	219.230	206	266	267	1590	25M	@ 250	OK FOR	SHEAR
3	10	225	225	191.685	205.976	192	150	207	2640	25M	@ 150	10M	275
3	10	225	270	198.010	212.153	198	180	214	2270	25M	@ 200	10M	550
3	10	225	338	206.962	220.447	207	225	226	1900	25M	@ 250	OK FOR	SHEAR
3	10	225	450	220.535	232.373	221	299	300	1520	25M	@ 250	OK FOR	SHEAR
3	10	250	250	195.755	209.418	196	166	210	2420	25M	@ 200	10M	400
3	10	250	300	203.094	215.910	203	200	217	2090	25M	@ 200	OK FOR	SHEAR
3	10	250	375	212.642	224.640	213	250	251	1760	25M	@ 250	OK FOR	SHEAR
3	10	250	500	227.271	237.342	227	333	334	1410	25M	@ 325	OK FOR	SHEAR
3	10	300	300	205.493	216.145	205	200	218	2120	25M	@ 200	OK FOR	SHEAR
3	10	300	360	213.160	223.277	213	240	241	1830	25M	@ 250	OK FOR	SHEAR
3	10	300	450	223.944	232.861	224	299	300	1540	25M	@ 250	OK FOR	SHEAR
3	10	300	600	240.389	246.967	240	399	400	1240	15M	@ 150	OK FOR	SHEAR
3	10	350	350	214.547	222.673	215	233	234	1900	25M	@ 250	OK FOR	SHEAR
3	12	200	200	179.641	200.375	180	133	201	2780	25M	@ 150	10M	200
3	12	200	240	184.556	204.889	185	160	206	2380	25M	@ 200	10M	375
3	12	200	300	190.005	209.629	190	200	211	1960	25M	@ 250	OK FOR	SHEAR
3	12	200	400	199.774	217.541	200	266	267	1550	25M	@ 250	OK FOR	SHEAR
3	12	225	225	184.530	203.953	185	150	205	2540	25M	@ 150	10M	275
3	12	225	270	191.365	210.284	191	180	212	2190	25M	@ 200	10M	600
3	12	225	338	201.036	218.810	201	225	226	1840	25M	@ 250	OK FOR	SHEAR
3	12	225	450	215.629	231.023	216	299	300	1480	25M	@ 325	OK FOR	SHEAR
3	12	250	250	189.409	207.491	189	166	208	2340	25M	@ 200	10M	425
3	12	250	300	196.740	214.161	197	200	216	2030	25M	@ 200	OK FOR	SHEAR
3	12	250	375	207.036	223.322	207	250	251	1710	25M	@ 250	OK FOR	SHEAR
3	12	250	500	222.700	236.069	223	333	334	1380	15M	@ 150	OK FOR	SHEAR
3	12	300	300	199.071	214.401	199	200	216	2050	25M	@ 200	OK FOR	SHEAR
3	12	300	360	207.336	221.685	207	240	241	1780	25M	@ 250	OK FOR	SHEAR
3	12	300	450	218.914	231.477	219	299	300	1510	25M	@ 250	OK FOR	SHEAR
3	12	300	600	236.374	245.809	236	399	400	1220	15M	@ 150	OK FOR	SHEAR
3	12	350	350	208.561	221.039	209	233	234	1840	25M	@ 250	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3.75	3	200	200	480.158	264.796	480	133	266	7420	25M	@ 50	10M	100
3.75	3	200	240	484.130	270.380	484	160	272	6230	25M	@ 75	10M	150
3.75	3	200	300	488.237	276.130	488	200	278	5030	25M	@ 100	10M	275
3.75	3	200	400	495.067	285.096	495	266	286	3830	25M	@ 125	OK FOR	SHEAR
3.75	3	225	225	485.442	268.089	485	150	269	6670	25M	@ 75	10M	125
3.75	3	225	270	491.329	275.859	491	180	277	5620	25M	@ 75	10M	200
3.75	3	225	338	499.397	285.906	499	225	287	4570	25M	@ 100	10M	375
3.75	3	225	450	511.271	299.796	511	299	300	3510	25M	@ 125	OK FOR	SHEAR
3.75	3	250	250	490.737	271.455	491	166	272	6070	25M	@ 75	10M	150
3.75	3	250	300	497.010	279.537	497	200	281	5120	25M	@ 100	10M	250
3.75	3	250	375	505.595	290.065	506	250	292	4170	25M	@ 100	10M	625
3.75	3	250	500	518.470	304.870	518	333	334	3210	25M	@ 150	OK FOR	SHEAR
3.75	3	300	300	501.360	278.187	501	200	280	5160	25M	@ 100	10M	250
3.75	3	300	360	508.406	286.992	508	240	288	4360	25M	@ 100	10M	525
3.75	3	300	450	518.138	298.578	518	299	300	3560	25M	@ 125	OK FOR	SHEAR
3.75	3	300	600	532.900	315.092	533	399	400	2750	25M	@ 150	OK FOR	SHEAR
3.75	3	350	350	512.009	284.993	512	233	286	4520	25M	@ 100	10M	475
3.75	4.5	200	200	366.614	198.963	367	133	200	5660	25M	@ 75	10M	200
3.75	4.5	200	240	371.002	203.689	371	160	205	4780	25M	@ 100	10M	375
3.75	4.5	200	300	375.612	208.595	376	200	210	3870	25M	@ 125	OK FOR	SHEAR
3.75	4.5	200	400	383.400	216.525	383	266	267	2960	25M	@ 150	OK FOR	SHEAR
3.75	4.5	225	225	372.026	202.203	372	150	204	5110	25M	@ 100	10M	300
3.75	4.5	225	270	378.404	208.831	378	180	210	4330	25M	@ 100	10M	625
3.75	4.5	225	338	387.191	217.620	387	225	226	3540	25M	@ 125	OK FOR	SHEAR
3.75	4.5	225	450	400.177	230.058	400	299	300	2750	25M	@ 150	OK FOR	SHEAR
3.75	4.5	250	250	377.476	205.540	377	166	206	4670	25M	@ 100	10M	450
3.75	4.5	250	300	384.275	212.504	384	200	214	3960	25M	@ 125	OK FOR	SHEAR
3.75	4.5	250	375	393.628	221.773	394	250	251	3250	25M	@ 150	OK FOR	SHEAR
3.75	4.5	250	500	407.700	235.147	408	333	334	2520	25M	@ 150	OK FOR	SHEAR
3.75	4.5	300	300	388.449	212.261	388	200	214	4000	25M	@ 125	OK FOR	SHEAR
3.75	4.5	300	360	396.095	219.969	396	240	241	3400	25M	@ 150	OK FOR	SHEAR
3.75	4.5	300	450	406.696	230.270	407	299	300	2790	25M	@ 150	OK FOR	SHEAR
3.75	4.5	300	600	422.790	245.325	423	399	400	2180	25M	@ 200	OK FOR	SHEAR
3.75	4.5	350	350	399.469	219.054	399	233	234	3530	25M	@ 125	OK FOR	SHEAR
3.75	6	200	200	313.419	176.478	313	133	177	4840	25M	@ 100	10M	325
3.75	6	200	240	318.282	181.240	318	160	183	4100	25M	@ 100	10M	750
3.75	6	200	300	323.460	186.208	323	200	201	3330	25M	@ 150	OK FOR	SHEAR
3.75	6	200	400	332.359	194.362	332	266	267	2570	25M	@ 150	OK FOR	SHEAR
3.75	6	225	225	319.082	179.926	319	150	181	4380	25M	@ 100	10M	500
3.75	6	225	270	326.036	186.547	326	180	188	3730	25M	@ 125	OK FOR	SHEAR
3.75	6	225	338	335.676	195.435	336	225	226	3070	25M	@ 150	OK FOR	SHEAR
3.75	6	225	450	349.999	208.099	350	299	300	2410	25M	@ 200	OK FOR	SHEAR
3.75	6	250	250	324.800	183.373	325	166	184	4020	25M	@ 100	10M	975
3.75	6	250	300	332.228	190.424	332	200	201	3420	25M	@ 150	OK FOR	SHEAR
3.75	6	250	375	342.496	199.768	342	250	251	2820	25M	@ 150	OK FOR	SHEAR
3.75	6	250	500	358.015	213.388	358	333	334	2220	25M	@ 200	OK FOR	SHEAR
3.75	6	300	300	336.319	190.458	336	200	201	3470	25M	@ 150	OK FOR	SHEAR
3.75	6	300	360	344.685	198.227	345	240	241	2960	25M	@ 150	OK FOR	SHEAR
3.75	6	300	450	356.322	208.623	356	299	300	2450	25M	@ 200	OK FOR	SHEAR
3.75	6	300	600	374.028	223.943	374	399	400	1930	25M	@ 250	OK FOR	SHEAR
3.75	6	350	350	347.863	197.519	348	233	234	3070	25M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3.75	8	200	200	276.366	164.119	276	133	165	4270	25M	@ 100	10M	450
3.75	8	200	240	281.888	169.209	282	160	171	3630	25M	@ 125	OK FOR	SHEAR
3.75	8	200	300	287.842	174.462	288	200	201	2970	25M	@ 150	OK FOR	SHEAR
3.75	8	200	400	298.253	183.124	298	266	267	2310	25M	@ 200	OK FOR	SHEAR
3.75	8	225	225	282.445	167.840	282	150	169	3880	25M	@ 125	10M	850
3.75	8	225	270	290.219	174.821	290	180	181	3320	25M	@ 150	OK FOR	SHEAR
3.75	8	225	338	300.998	184.152	301	225	226	2750	25M	@ 150	OK FOR	SHEAR
3.75	8	225	450	317.263	197.550	317	299	300	2180	25M	@ 200	OK FOR	SHEAR
3.75	8	250	250	288.574	171.586	289	166	172	3570	25M	@ 125	OK FOR	SHEAR
3.75	8	250	300	296.891	178.947	297	200	201	3060	25M	@ 150	OK FOR	SHEAR
3.75	8	250	375	308.442	188.780	308	250	251	2540	25M	@ 150	OK FOR	SHEAR
3.75	8	250	500	325.979	203.132	326	333	334	2020	25M	@ 200	OK FOR	SHEAR
3.75	8	300	300	300.874	179.100	301	200	201	3100	25M	@ 150	OK FOR	SHEAR
3.75	8	300	360	310.242	187.201	310	240	241	2670	25M	@ 150	OK FOR	SHEAR
3.75	8	300	450	323.311	198.084	323	299	300	2220	25M	@ 200	OK FOR	SHEAR
3.75	8	300	600	343.229	214.109	343	399	400	1770	25M	@ 250	OK FOR	SHEAR
3.75	8	350	350	313.123	186.497	313	233	234	2770	25M	@ 150	OK FOR	SHEAR
3.75	10	200	200	255.120	158.462	255	133	159	3940	25M	@ 125	10M	550
3.75	10	200	240	261.225	163.727	261	160	165	3370	25M	@ 150	OK FOR	SHEAR
3.75	10	200	300	268.172	169.285	268	200	201	2760	25M	@ 150	OK FOR	SHEAR
3.75	10	200	400	279.584	178.414	280	266	267	2160	25M	@ 200	OK FOR	SHEAR
3.75	10	225	225	262.421	162.388	262	150	164	3610	25M	@ 125	OK FOR	SHEAR
3.75	10	225	270	270.977	169.695	271	180	181	3100	25M	@ 150	OK FOR	SHEAR
3.75	10	225	338	282.943	179.441	283	225	226	2590	25M	@ 150	OK FOR	SHEAR
3.75	10	225	450	300.884	193.407	301	299	300	2070	25M	@ 200	OK FOR	SHEAR
3.75	10	250	250	268.943	166.337	269	166	167	3330	25M	@ 150	OK FOR	SHEAR
3.75	10	250	300	278.095	174.026	278	200	201	2870	25M	@ 150	OK FOR	SHEAR
3.75	10	250	375	290.840	184.295	291	250	251	2400	25M	@ 200	OK FOR	SHEAR
3.75	10	250	500	310.213	199.191	310	333	334	1920	25M	@ 250	OK FOR	SHEAR
3.75	10	300	300	281.948	174.190	282	200	201	2910	25M	@ 150	OK FOR	SHEAR
3.75	10	300	360	292.248	182.570	292	240	241	2510	25M	@ 150	OK FOR	SHEAR
3.75	10	300	450	306.638	193.888	307	299	300	2110	25M	@ 200	OK FOR	SHEAR
3.75	10	300	600	328.536	210.478	329	399	400	1700	25M	@ 250	OK FOR	SHEAR
3.75	10	350	350	294.826	181.809	295	233	234	2610	25M	@ 150	OK FOR	SHEAR
3.75	12	200	200	243.354	155.295	243	133	156	3760	25M	@ 125	10M	625
3.75	12	200	240	250.029	160.749	250	160	162	3220	25M	@ 150	OK FOR	SHEAR
3.75	12	200	300	257.377	166.526	257	200	201	2650	25M	@ 150	OK FOR	SHEAR
3.75	12	200	400	270.290	175.955	270	266	267	2090	25M	@ 200	OK FOR	SHEAR
3.75	12	225	225	250.217	159.428	250	150	161	3440	25M	@ 150	OK FOR	SHEAR
3.75	12	225	270	259.466	166.953	259	180	181	2970	25M	@ 150	OK FOR	SHEAR
3.75	12	225	338	272.429	177.007	272	225	226	2490	25M	@ 200	OK FOR	SHEAR
3.75	12	225	450	291.858	191.369	292	299	300	2010	25M	@ 200	OK FOR	SHEAR
3.75	12	250	250	257.080	163.536	257	166	167	3180	25M	@ 150	OK FOR	SHEAR
3.75	12	250	300	266.973	171.419	267	200	201	2750	25M	@ 150	OK FOR	SHEAR
3.75	12	250	375	280.767	181.972	281	250	251	2320	25M	@ 200	OK FOR	SHEAR
3.75	12	250	500	301.694	197.310	302	333	334	1870	25M	@ 250	OK FOR	SHEAR
3.75	12	300	300	270.705	171.591	271	200	201	2790	25M	@ 150	OK FOR	SHEAR
3.75	12	300	360	281.830	180.210	282	240	241	2420	25M	@ 200	OK FOR	SHEAR
3.75	12	300	450	297.366	191.813	297	299	300	2040	25M	@ 200	OK FOR	SHEAR
3.75	12	300	600	320.888	208.772	321	399	400	1660	25M	@ 250	OK FOR	SHEAR
3.75	12	350	350	284.145	179.388	284	233	234	2510	25M	@ 150	OK FOR	SHEAR

D2. PL-2 Barrier

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1	3	200	200	53.426	180.318	53	133	181	830	15M	@ 200	10M	300
1	3	200	240	54.583	183.153	55	160	184	710	15M	@ 250	10M	700
1	3	200	300	55.655	185.727	56	200	201	580	15M	@ 325	OK FOR	SHEAR
1	3	200	400	57.588	190.231	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	3	225	225	54.192	182.299	54	150	184	750	15M	@ 250	10M	475
1	3	225	270	56.084	186.851	56	180	188	650	15M	@ 250	OK FOR	SHEAR
1	3	225	338	58.559	192.618	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	3	225	450	61.902	200.105	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	3	250	250	54.974	184.352	55	166	185	680	15M	@ 250	10M	925
1	3	250	300	56.725	189.023	57	200	201	590	15M	@ 325	OK FOR	SHEAR
1	3	250	375	59.492	194.887	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	3	250	500	62.968	202.613	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	3	300	300	56.533	188.363	57	200	201	590	15M	@ 325	OK FOR	SHEAR
1	3	300	360	58.624	193.201	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	3	300	450	14.086	199.281	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	3	300	600	64.963	207.247	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	3	350	350	58.029	192.111	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	4.5	200	200	49.331	176.201	49	133	177	770	15M	@ 250	10M	325
1	4.5	200	240	50.779	179.440	51	160	181	660	15M	@ 250	10M	800
1	4.5	200	300	52.121	182.395	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	4.5	200	400	54.530	187.517	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	4.5	225	225	50.339	178.682	50	150	180	700	15M	@ 250	10M	525
1	4.5	225	270	52.697	183.828	53	180	185	610	15M	@ 250	OK FOR	SHEAR
1	4.5	225	338	55.763	190.262	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	4.5	225	450	59.841	198.533	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	4.5	250	250	51.337	181.115	51	166	182	640	15M	@ 250	OK FOR	SHEAR
1	4.5	250	300	53.774	186.357	54	200	201	560	15M	@ 325	OK FOR	SHEAR
1	4.5	250	375	56.911	192.863	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	4.5	250	500	61.102	201.255	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	4.5	300	300	53.253	185.697	53	200	201	550	15M	@ 325	OK FOR	SHEAR
1	4.5	300	360	55.819	191.059	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	4.5	300	450	59.090	197.662	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	4.5	300	600	63.403	206.200	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	4.5	350	350	55.036	189.826	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	6	200	200	47.812	175.011	48	133	176	740	15M	@ 250	10M	325
1	6	200	240	49.422	178.441	49	160	180	640	15M	@ 250	10M	850
1	6	200	300	50.907	181.514	51	200	201	530	15M	@ 325	OK FOR	SHEAR
1	6	200	400	53.554	186.827	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	6	225	225	48.945	177.658	49	150	179	680	15M	@ 250	10M	550
1	6	225	270	51.547	183.042	52	180	184	590	15M	@ 325	OK FOR	SHEAR
1	6	225	338	54.891	189.667	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	6	225	450	59.262	198.105	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	6	250	250	50.046	180.235	50	166	181	620	15M	@ 250	OK FOR	SHEAR
1	6	250	300	52.721	185.643	53	200	201	550	15M	@ 325	OK FOR	SHEAR
1	6	250	375	56.123	192.316	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	6	250	500	60.590	200.875	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	6	300	300	52.134	184.935	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	6	300	360	54.931	190.440	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	6	300	450	58.450	197.209	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	6	300	600	63.004	205.890	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	6	350	350	54.068	189.183	67	233	234	600	15M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1	8	200	200	46.978	174.511	47	133	175	730	15M	@ 250	10M	325
1	8	200	240	48.695	177.965	49	160	179	630	15M	@ 250	10M	900
1	8	200	300	50.269	181.085	50	200	201	520	15M	@ 325	OK FOR	SHEAR
1	8	200	400	53.052	186.470	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	8	225	225	48.183	177.182	48	150	179	670	15M	@ 250	10M	550
1	8	225	270	50.941	182.614	51	180	184	590	15M	@ 325	OK FOR	SHEAR
1	8	225	338	54.447	189.333	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	8	225	450	58.968	197.843	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	8	250	250	49.352	179.735	49	166	180	610	15M	@ 250	OK FOR	SHEAR
1	8	250	300	52.180	185.238	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	8	250	375	55.734	192.006	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	8	250	500	60.340	200.660	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	8	300	300	51.572	184.530	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	8	300	360	54.508	190.083	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	8	300	450	58.158	196.947	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	8	300	600	62.823	205.700	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	8	350	350	53.620	188.826	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	10	200	200	46.588	174.225	47	133	175	720	15M	@ 250	10M	325
1	10	200	240	48.358	177.703	48	160	179	630	15M	@ 250	10M	900
1	10	200	300	49.974	180.823	50	200	201	520	15M	@ 325	OK FOR	SHEAR
1	10	200	400	52.819	186.256	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	10	225	225	47.838	176.920	48	150	178	660	15M	@ 250	10M	575
1	10	225	270	50.673	182.399	51	180	184	580	15M	@ 325	OK FOR	SHEAR
1	10	225	338	54.254	189.167	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	10	225	450	58.845	197.748	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	10	250	250	49.056	179.497	49	166	180	610	15M	@ 250	OK FOR	SHEAR
1	10	250	300	51.954	185.048	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	10	250	375	55.575	191.816	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	10	250	500	60.242	200.541	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	10	300	300	51.357	184.316	51	200	201	530	15M	@ 325	OK FOR	SHEAR
1	10	300	360	54.347	189.940	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	10	300	450	58.047	196.829	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	10	300	600	62.758	205.628	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	10	350	350	53.460	188.683	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	12	200	200	46.373	174.035	46	133	175	720	15M	@ 250	10M	325
1	12	200	240	48.175	177.560	48	160	179	620	15M	@ 250	10M	900
1	12	200	300	49.817	180.681	50	200	201	520	15M	@ 325	OK FOR	SHEAR
1	12	200	400	52.699	186.137	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	12	225	225	47.662	176.753	48	150	178	660	15M	@ 250	10M	575
1	12	225	270	50.540	182.257	51	180	184	580	15M	@ 325	OK FOR	SHEAR
1	12	225	338	54.161	189.071	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	12	225	450	58.792	197.700	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	12	250	250	48.910	179.377	49	166	180	610	15M	@ 250	OK FOR	SHEAR
1	12	250	300	51.847	184.929	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	12	250	375	55.501	191.768	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	12	250	500	60.202	200.517	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	12	300	300	51.259	184.221	51	200	201	530	15M	@ 325	OK FOR	SHEAR
1	12	300	360	54.276	189.868	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	12	300	450	58.000	196.781	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	12	300	600	62.737	205.605	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	12	350	350	53.391	188.588	67	233	234	600	15M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1.5	3	200	200	110.285	138.424	110	133	139	1710	25M	@ 250	OK FOR	SHEAR
1.5	3	200	240	112.145	141.856	112	160	161	1450	25M	@ 325	OK FOR	SHEAR
1.5	3	200	300	113.904	145.049	114	200	201	1180	15M	@ 150	OK FOR	SHEAR
1.5	3	200	400	117.152	150.842	117	266	267	910	15M	@ 200	OK FOR	SHEAR
1.5	3	225	225	111.611	140.623	112	150	151	1540	25M	@ 250	OK FOR	SHEAR
1.5	3	225	270	114.689	146.271	115	180	181	1320	15M	@ 150	OK FOR	SHEAR
1.5	3	225	338	118.869	153.685	119	225	226	1090	15M	@ 150	OK FOR	SHEAR
1.5	3	225	450	124.791	163.916	125	299	300	860	15M	@ 200	OK FOR	SHEAR
1.5	3	250	250	112.979	142.940	113	166	167	1400	15M	@ 150	OK FOR	SHEAR
1.5	3	250	300	116.204	148.804	116	200	201	1200	15M	@ 150	OK FOR	SHEAR
1.5	3	250	375	120.558	154.641	121	250	251	1000	15M	@ 200	OK FOR	SHEAR
1.5	3	250	500	126.798	167.214	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	3	300	300	115.770	147.671	116	200	201	1200	15M	@ 150	OK FOR	SHEAR
1.5	3	300	360	119.268	153.941	119	240	241	1030	15M	@ 150	OK FOR	SHEAR
1.5	3	300	450	123.984	162.169	124	299	300	860	15M	@ 200	OK FOR	SHEAR
1.5	3	300	600	130.707	173.619	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	3	350	350	118.547	152.307	119	233	234	1050	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	200	88.157	126.831	88	133	134	1370	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	240	90.508	130.858	91	160	161	1170	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	300	92.740	134.623	93	200	201	960	15M	@ 200	OK FOR	SHEAR
1.5	4.5	200	400	96.896	141.438	97	266	267	750	15M	@ 250	OK FOR	SHEAR
1.5	4.5	225	225	89.928	129.744	90	150	151	1240	15M	@ 150	OK FOR	SHEAR
1.5	4.5	225	270	93.842	136.344	94	180	181	1080	15M	@ 150	OK FOR	SHEAR
1.5	4.5	225	338	99.198	145.019	99	225	226	910	15M	@ 200	OK FOR	SHEAR
1.5	4.5	225	450	106.824	156.892	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	4.5	250	250	91.723	132.704	92	166	167	1140	15M	@ 150	OK FOR	SHEAR
1.5	4.5	250	300	95.831	139.519	96	200	201	990	15M	@ 200	OK FOR	SHEAR
1.5	4.5	250	375	101.405	148.434	101	250	251	840	15M	@ 200	OK FOR	SHEAR
1.5	4.5	250	500	109.392	160.761	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	300	95.276	138.481	95	200	201	990	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	360	99.724	145.656	100	240	241	860	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	450	105.718	155.025	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	4.5	300	600	114.215	167.951	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	4.5	350	350	98.685	143.902	99	233	234	880	15M	@ 200	OK FOR	SHEAR
1.5	6	200	200	79.096	122.904	79	133	134	1230	15M	@ 150	OK FOR	SHEAR
1.5	6	200	240	81.786	127.288	82	160	161	1060	15M	@ 150	OK FOR	SHEAR
1.5	6	200	300	84.344	131.338	84	200	201	870	15M	@ 200	OK FOR	SHEAR
1.5	6	200	400	89.096	138.677	89	266	267	690	15M	@ 250	OK FOR	SHEAR
1.5	6	225	225	81.195	126.245	81	150	151	1120	15M	@ 150	OK FOR	SHEAR
1.5	6	225	270	85.665	133.345	86	180	181	980	15M	@ 200	OK FOR	SHEAR
1.5	6	225	338	91.761	142.639	92	225	226	840	15M	@ 200	OK FOR	SHEAR
1.5	6	225	450	100.345	155.202	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	6	250	250	83.274	129.538	83	166	167	1030	15M	@ 150	OK FOR	SHEAR
1.5	6	250	300	87.955	136.854	88	200	201	910	15M	@ 200	OK FOR	SHEAR
1.5	6	250	375	94.262	146.292	94	250	251	780	15M	@ 250	OK FOR	SHEAR
1.5	6	250	500	103.186	159.261	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	6	300	300	87.298	135.792	87	200	201	900	15M	@ 200	OK FOR	SHEAR
1.5	6	300	360	92.330	143.395	92	240	241	800	15M	@ 250	OK FOR	SHEAR
1.5	6	300	450	99.056	153.263	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	6	300	600	108.438	166.713	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	6	350	350	91.086	141.521	91	233	234	810	15M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1.5	8	200	200	73.739	120.929	74	133	134	1140	15M	@ 150	OK FOR	SHEAR
1.5	8	200	240	76.730	125.550	77	160	161	990	15M	@ 200	OK FOR	SHEAR
1.5	8	200	300	79.559	129.791	80	200	201	820	15M	@ 200	OK FOR	SHEAR
1.5	8	200	400	84.779	137.440	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1.5	8	225	225	76.093	124.507	76	150	151	1050	15M	@ 150	OK FOR	SHEAR
1.5	8	225	270	81.029	131.893	81	180	181	930	15M	@ 200	OK FOR	SHEAR
1.5	8	225	338	87.679	141.521	88	225	226	810	15M	@ 200	OK FOR	SHEAR
1.5	8	225	450	96.864	154.416	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	8	250	250	78.390	127.967	78	166	167	970	15M	@ 200	OK FOR	SHEAR
1.5	8	250	300	83.530	135.545	84	200	201	860	15M	@ 200	OK FOR	SHEAR
1.5	8	250	375	90.372	145.268	90	250	251	750	15M	@ 250	OK FOR	SHEAR
1.5	8	250	500	99.858	158.523	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	8	300	300	82.781	134.411	83	200	201	860	15M	@ 200	OK FOR	SHEAR
1.5	8	300	360	88.270	142.252	88	240	241	760	15M	@ 250	OK FOR	SHEAR
1.5	8	300	450	95.495	152.383	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	8	300	600	105.356	166.118	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	8	350	350	86.891	140.307	87	233	234	770	15M	@ 250	OK FOR	SHEAR
1.5	10	200	200	71.318	120.156	71	133	134	1110	15M	@ 150	OK FOR	SHEAR
1.5	10	200	240	74.489	124.855	74	160	161	960	15M	@ 200	OK FOR	SHEAR
1.5	10	200	300	77.473	129.183	77	200	201	800	15M	@ 250	OK FOR	SHEAR
1.5	10	200	400	82.930	136.920	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1.5	10	225	225	73.812	123.791	74	150	151	1020	15M	@ 150	OK FOR	SHEAR
1.5	10	225	270	79.015	131.304	79	180	181	910	15M	@ 200	OK FOR	SHEAR
1.5	10	225	338	85.943	141.031	86	225	226	790	15M	@ 250	OK FOR	SHEAR
1.5	10	225	450	95.370	154.035	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	10	250	250	76.238	127.277	76	166	167	950	15M	@ 200	OK FOR	SHEAR
1.5	10	250	300	81.638	134.949	82	200	201	850	15M	@ 200	OK FOR	SHEAR
1.5	10	250	375	88.737	144.816	89	250	251	740	15M	@ 250	OK FOR	SHEAR
1.5	10	250	500	98.435	158.190	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	10	300	300	80.870	133.816	81	200	201	840	15M	@ 200	OK FOR	SHEAR
1.5	10	300	360	86.592	141.799	87	240	241	750	15M	@ 250	OK FOR	SHEAR
1.5	10	300	450	94.027	152.025	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	10	300	600	104.039	165.856	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	10	350	350	85.175	139.783	85	233	234	760	15M	@ 250	OK FOR	SHEAR
1.5	12	200	200	70.055	119.747	70	133	134	1090	15M	@ 150	OK FOR	SHEAR
1.5	12	200	240	73.333	124.479	73	160	161	950	15M	@ 200	OK FOR	SHEAR
1.5	12	200	300	76.403	128.834	76	200	201	790	15M	@ 250	OK FOR	SHEAR
1.5	12	200	400	81.980	136.609	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1.5	12	225	225	72.643	123.394	73	150	151	1000	15M	@ 200	OK FOR	SHEAR
1.5	12	225	270	77.998	130.961	78	180	181	900	15M	@ 200	OK FOR	SHEAR
1.5	12	225	338	85.065	140.742	85	225	226	780	15M	@ 250	OK FOR	SHEAR
1.5	12	225	450	94.597	153.809	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	12	250	250	75.161	126.909	75	166	167	930	15M	@ 200	OK FOR	SHEAR
1.5	12	250	300	80.701	134.641	81	200	201	840	15M	@ 200	OK FOR	SHEAR
1.5	12	250	375	87.919	144.572	88	250	251	730	15M	@ 250	OK FOR	SHEAR
1.5	12	250	500	97.705	157.994	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	12	300	300	79.949	133.512	80	200	201	830	15M	@ 200	OK FOR	SHEAR
1.5	12	300	360	85.781	141.528	86	240	241	740	15M	@ 250	OK FOR	SHEAR
1.5	12	300	450	93.297	151.813	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	12	300	600	103.366	165.697	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	12	350	350	84.366	139.535	84	233	234	750	15M	@ 250	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	3	200	200	164.567	130.613	165	133	134	2550	25M	@ 150	OK FOR	SHEAR
2	3	200	240	166.346	133.610	166	160	161	2140	25M	@ 200	OK FOR	SHEAR
2	3	200	300	168.057	136.458	168	200	201	1730	25M	@ 250	OK FOR	SHEAR
2	3	200	400	171.295	141.764	171	266	267	1330	15M	@ 150	OK FOR	SHEAR
2	3	225	225	166.412	132.948	166	150	151	2290	25M	@ 200	OK FOR	SHEAR
2	3	225	270	169.408	137.952	169	180	181	1940	25M	@ 250	OK FOR	SHEAR
2	3	225	338	173.616	144.831	174	225	226	1590	25M	@ 250	OK FOR	SHEAR
2	3	225	450	179.852	154.791	180	299	300	1240	15M	@ 150	OK FOR	SHEAR
2	3	250	250	168.297	135.367	168	166	167	2080	25M	@ 200	OK FOR	SHEAR
2	3	250	300	171.476	140.651	171	200	201	1770	25M	@ 250	OK FOR	SHEAR
2	3	250	375	175.917	147.876	176	250	251	1450	25M	@ 325	OK FOR	SHEAR
2	3	250	500	182.584	158.475	183	333	334	1130	15M	@ 150	OK FOR	SHEAR
2	3	300	300	172.137	140.351	172	200	201	1780	25M	@ 250	OK FOR	SHEAR
2	3	300	360	175.675	146.172	176	240	241	1510	25M	@ 250	OK FOR	SHEAR
2	3	300	450	180.617	154.131	181	299	300	1240	15M	@ 150	OK FOR	SHEAR
2	3	300	600	188.026	165.788	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	3	350	350	176.002	145.376	176	233	234	1560	25M	@ 250	OK FOR	SHEAR
2	4.5	200	200	126.612	103.681	127	133	134	1960	25M	@ 250	OK FOR	SHEAR
2	4.5	200	240	128.916	106.929	129	160	161	1660	25M	@ 250	OK FOR	SHEAR
2	4.5	200	300	131.155	110.030	131	200	201	1350	15M	@ 150	OK FOR	SHEAR
2	4.5	200	400	135.443	115.847	135	266	267	1050	15M	@ 150	OK FOR	SHEAR
2	4.5	225	225	128.930	106.522	129	150	151	1770	25M	@ 250	OK FOR	SHEAR
2	4.5	225	270	132.857	111.968	133	180	181	1520	25M	@ 250	OK FOR	SHEAR
2	4.5	225	338	138.456	119.509	138	225	226	1270	15M	@ 150	OK FOR	SHEAR
2	4.5	225	450	146.879	130.512	147	299	300	1010	15M	@ 150	OK FOR	SHEAR
2	4.5	250	250	131.295	109.426	131	166	167	1630	25M	@ 250	OK FOR	SHEAR
2	4.5	250	300	135.484	115.176	135	200	201	1400	15M	@ 150	OK FOR	SHEAR
2	4.5	250	375	141.407	123.076	141	250	251	1170	15M	@ 150	OK FOR	SHEAR
2	4.5	250	500	150.389	134.723	150	333	334	930	15M	@ 200	OK FOR	SHEAR
2	4.5	300	300	136.053	115.246	136	200	201	1410	25M	@ 325	OK FOR	SHEAR
2	4.5	300	360	140.726	121.533	141	240	241	1210	15M	@ 150	OK FOR	SHEAR
2	4.5	300	450	147.297	130.149	147	299	300	1020	15M	@ 150	OK FOR	SHEAR
2	4.5	300	600	157.170	142.789	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	4.5	350	350	140.735	120.893	141	233	234	1250	15M	@ 150	OK FOR	SHEAR
2	6	200	200	109.932	94.995	110	133	134	1700	25M	@ 250	OK FOR	SHEAR
2	6	200	240	112.702	98.527	113	160	161	1450	25M	@ 325	OK FOR	SHEAR
2	6	200	300	115.400	101.895	115	200	201	1190	15M	@ 150	OK FOR	SHEAR
2	6	200	400	120.581	108.201	121	266	267	940	15M	@ 200	OK FOR	SHEAR
2	6	225	225	112.703	98.253	113	150	151	1550	25M	@ 250	OK FOR	SHEAR
2	6	225	270	117.434	104.146	117	180	181	1350	15M	@ 150	OK FOR	SHEAR
2	6	225	338	124.189	112.272	124	225	226	1140	15M	@ 150	OK FOR	SHEAR
2	6	225	450	134.317	124.046	134	299	300	930	15M	@ 200	OK FOR	SHEAR
2	6	250	250	115.490	101.513	115	166	167	1430	25M	@ 325	OK FOR	SHEAR
2	6	250	300	120.531	107.696	121	200	201	1250	15M	@ 150	OK FOR	SHEAR
2	6	250	375	127.653	116.152	128	250	251	1060	15M	@ 150	OK FOR	SHEAR
2	6	250	500	138.386	128.520	138	333	334	860	15M	@ 200	OK FOR	SHEAR
2	6	300	300	120.984	107.854	121	200	201	1250	15M	@ 150	OK FOR	SHEAR
2	6	300	360	126.580	114.538	127	240	241	1090	15M	@ 150	OK FOR	SHEAR
2	6	300	450	134.417	123.652	134	299	300	930	15M	@ 200	OK FOR	SHEAR
2	6	300	600	146.072	136.925	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	6	350	350	126.279	113.834	126	233	234	1120	15M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	8	200	200	99.221	90.342	99	133	134	1540	25M	@ 250	OK FOR	SHEAR
2	8	200	240	102.478	94.112	102	160	161	1320	15M	@ 150	OK FOR	SHEAR
2	8	200	300	105.645	97.695	106	200	201	1090	15M	@ 150	OK FOR	SHEAR
2	8	200	400	111.703	104.373	112	266	267	870	15M	@ 200	OK FOR	SHEAR
2	8	225	225	102.443	93.919	102	150	151	1410	25M	@ 325	OK FOR	SHEAR
2	8	225	270	107.981	100.154	108	180	181	1240	15M	@ 150	OK FOR	SHEAR
2	8	225	338	115.830	108.693	116	225	226	1060	15M	@ 150	OK FOR	SHEAR
2	8	225	450	127.415	120.937	127	299	300	880	15M	@ 200	OK FOR	SHEAR
2	8	250	250	105.626	97.415	106	166	167	1310	15M	@ 150	OK FOR	SHEAR
2	8	250	300	111.502	103.913	112	200	201	1150	15M	@ 150	OK FOR	SHEAR
2	8	250	375	119.725	112.742	120	250	251	990	15M	@ 200	OK FOR	SHEAR
2	8	250	500	131.899	125.529	137	333	334	850	15M	@ 200	OK FOR	SHEAR
2	8	300	300	111.794	104.067	112	200	201	1160	15M	@ 150	OK FOR	SHEAR
2	8	300	360	118.264	111.029	118	240	241	1020	15M	@ 150	OK FOR	SHEAR
2	8	300	450	127.220	120.470	127	299	300	880	15M	@ 200	OK FOR	SHEAR
2	8	300	600	140.259	134.100	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	8	350	350	117.660	110.246	118	233	234	1040	15M	@ 150	OK FOR	SHEAR
2	10	200	200	93.962	88.385	94	133	134	1460	25M	@ 325	OK FOR	SHEAR
2	10	200	240	97.573	92.282	98	160	161	1260	15M	@ 150	OK FOR	SHEAR
2	10	200	300	101.067	95.976	101	200	201	1050	15M	@ 150	OK FOR	SHEAR
2	10	200	400	107.699	102.830	108	266	267	840	15M	@ 200	OK FOR	SHEAR
2	10	225	225	97.481	92.094	97	150	151	1340	15M	@ 150	OK FOR	SHEAR
2	10	225	270	103.579	98.500	104	180	181	1190	15M	@ 150	OK FOR	SHEAR
2	10	225	338	112.124	107.228	112	225	226	1030	15M	@ 150	OK FOR	SHEAR
2	10	225	450	124.501	119.649	125	299	300	860	15M	@ 200	OK FOR	SHEAR
2	10	250	250	100.926	95.679	101	166	167	1250	15M	@ 150	OK FOR	SHEAR
2	10	250	300	107.369	102.335	107	200	201	1110	15M	@ 150	OK FOR	SHEAR
2	10	250	375	116.272	111.334	116	250	251	960	15M	@ 200	OK FOR	SHEAR
2	10	250	500	129.196	124.279	137	333	334	850	15M	@ 200	OK FOR	SHEAR
2	10	300	300	107.560	102.460	108	200	201	1110	15M	@ 150	OK FOR	SHEAR
2	10	300	360	114.601	109.568	115	240	241	990	15M	@ 200	OK FOR	SHEAR
2	10	300	450	124.199	119.159	124	299	300	860	15M	@ 200	OK FOR	SHEAR
2	10	300	600	137.887	132.919	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	10	350	350	113.827	108.744	114	233	234	1010	15M	@ 150	OK FOR	SHEAR
2	12	200	200	91.130	87.398	91	133	134	1410	25M	@ 325	OK FOR	SHEAR
2	12	200	240	94.989	91.358	95	160	161	1230	15M	@ 150	OK FOR	SHEAR
2	12	200	300	98.702	95.103	99	200	201	1020	15M	@ 150	OK FOR	SHEAR
2	12	200	400	105.686	102.028	106	266	267	820	15M	@ 200	OK FOR	SHEAR
2	12	225	225	94.850	91.150	95	150	151	1310	15M	@ 150	OK FOR	SHEAR
2	12	225	270	101.327	97.641	101	180	181	1160	15M	@ 150	OK FOR	SHEAR
2	12	225	338	110.291	106.449	110	225	226	1010	15M	@ 150	OK FOR	SHEAR
2	12	225	450	123.065	118.931	123	299	300	850	15M	@ 200	OK FOR	SHEAR
2	12	250	250	98.482	94.770	98	166	167	1220	15M	@ 150	OK FOR	SHEAR
2	12	250	300	105.297	101.506	105	200	201	1090	15M	@ 150	OK FOR	SHEAR
2	12	250	375	114.592	110.579	115	250	251	950	15M	@ 200	OK FOR	SHEAR
2	12	250	500	127.871	123.581	137	333	334	850	15M	@ 200	OK FOR	SHEAR
2	12	300	300	105.451	101.618	105	200	201	1090	15M	@ 150	OK FOR	SHEAR
2	12	300	360	112.835	108.799	113	240	241	970	15M	@ 200	OK FOR	SHEAR
2	12	300	450	122.765	118.454	123	299	300	850	15M	@ 200	OK FOR	SHEAR
2	12	300	600	136.726	132.261	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	12	350	350	111.986	107.964	112	233	234	990	15M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2.5	3	200	200	240.101	221.426	240	133	222	3710	25M	@ 125	10M	150
2.5	3	200	240	241.986	224.023	242	160	225	3120	25M	@ 150	10M	250
2.5	3	200	300	243.799	226.490	244	200	228	2510	25M	@ 150	10M	750
2.5	3	200	400	247.237	231.108	247	266	267	1910	25M	@ 250	OK FOR	SHEAR
2.5	3	225	225	242.652	223.827	243	150	225	3330	25M	@ 150	10M	200
2.5	3	225	270	245.851	228.197	246	180	230	2820	25M	@ 150	10M	375
2.5	3	225	338	250.359	234.236	250	225	235	2290	25M	@ 200	OK FOR	SHEAR
2.5	3	225	450	257.134	243.129	257	299	300	1770	25M	@ 250	OK FOR	SHEAR
2.5	3	250	250	245.235	226.285	245	166	227	3030	25M	@ 150	10M	275
2.5	3	250	300	248.654	230.936	249	200	232	2560	25M	@ 150	10M	675
2.5	3	250	375	253.452	237.338	253	250	251	2090	25M	@ 200	OK FOR	SHEAR
2.5	3	250	500	260.772	246.910	261	333	334	1610	25M	@ 250	OK FOR	SHEAR
2.5	3	300	300	250.461	231.311	250	200	233	2580	25M	@ 150	10M	650
2.5	3	300	360	254.318	236.517	254	240	241	2190	25M	@ 200	OK FOR	SHEAR
2.5	3	300	450	259.748	243.708	260	299	300	1790	25M	@ 250	OK FOR	SHEAR
2.5	3	300	600	268.058	254.492	268	399	400	1380	15M	@ 150	OK FOR	SHEAR
2.5	3	350	350	255.717	236.393	256	233	238	2260	25M	@ 200	OK FOR	SHEAR
2.5	4.5	200	200	182.435	177.494	182	133	178	2820	25M	@ 150	10M	300
2.5	4.5	200	240	184.649	179.953	185	160	181	2380	25M	@ 200	10M	800
2.5	4.5	200	300	186.808	182.319	187	200	201	1930	25M	@ 250	OK FOR	SHEAR
2.5	4.5	200	400	190.977	186.819	191	266	267	1480	25M	@ 325	OK FOR	SHEAR
2.5	4.5	225	225	185.362	180.139	185	150	181	2550	25M	@ 150	10M	500
2.5	4.5	225	270	189.175	184.334	189	180	186	2170	25M	@ 200	OK FOR	SHEAR
2.5	4.5	225	338	194.674	190.254	195	225	226	1780	25M	@ 250	OK FOR	SHEAR
2.5	4.5	225	450	203.134	199.189	203	299	300	1400	15M	@ 150	OK FOR	SHEAR
2.5	4.5	250	250	188.335	182.838	188	166	184	2330	25M	@ 200	10M	975
2.5	4.5	250	300	192.443	187.334	192	200	201	1990	25M	@ 250	OK FOR	SHEAR
2.5	4.5	250	375	198.326	193.638	198	250	251	1640	25M	@ 250	OK FOR	SHEAR
2.5	4.5	250	500	207.471	203.264	207	333	334	1290	15M	@ 150	OK FOR	SHEAR
2.5	4.5	300	300	194.339	188.295	194	200	201	2000	25M	@ 250	OK FOR	SHEAR
2.5	4.5	300	360	199.015	193.356	199	240	241	1710	25M	@ 250	OK FOR	SHEAR
2.5	4.5	300	450	205.690	200.450	206	299	300	1420	25M	@ 325	OK FOR	SHEAR
2.5	4.5	300	600	216.011	211.256	216	399	400	1120	15M	@ 150	OK FOR	SHEAR
2.5	4.5	350	350	200.325	193.706	200	233	234	1770	25M	@ 250	OK FOR	SHEAR
2.5	6	200	200	156.186	164.648	156	133	166	2420	25M	@ 200	10M	425
2.5	6	200	240	158.782	167.272	159	160	169	2050	25M	@ 200	OK FOR	SHEAR
2.5	6	200	300	161.329	169.801	161	200	201	1670	25M	@ 250	OK FOR	SHEAR
2.5	6	200	400	166.281	174.617	166	266	267	1290	15M	@ 150	OK FOR	SHEAR
2.5	6	225	225	159.523	167.571	160	150	169	2190	25M	@ 200	10M	850
2.5	6	225	270	164.023	172.043	164	180	181	1880	25M	@ 250	OK FOR	SHEAR
2.5	6	225	338	170.563	178.359	171	225	226	1560	25M	@ 250	OK FOR	SHEAR
2.5	6	225	450	180.679	187.878	181	299	300	1240	15M	@ 150	OK FOR	SHEAR
2.5	6	250	250	162.894	170.519	163	166	171	2020	25M	@ 200	OK FOR	SHEAR
2.5	6	250	300	167.751	175.295	168	200	201	1730	25M	@ 250	OK FOR	SHEAR
2.5	6	250	375	174.741	181.989	175	250	251	1440	25M	@ 325	OK FOR	SHEAR
2.5	6	250	500	185.630	192.185	186	333	334	1150	15M	@ 150	OK FOR	SHEAR
2.5	6	300	300	169.622	176.363	170	200	201	1750	25M	@ 250	OK FOR	SHEAR
2.5	6	300	360	175.138	181.692	175	240	241	1510	25M	@ 250	OK FOR	SHEAR
2.5	6	300	450	183.028	189.150	183	299	300	1260	15M	@ 150	OK FOR	SHEAR
2.5	6	300	600	195.190	200.474	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	6	350	350	176.228	182.031	176	233	234	1560	25M	@ 250	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2.5	8	200	200	138.795	158.012	139	133	159	2150	25M	@ 200	10M	550
2.5	8	200	240	141.858	160.830	142	160	162	1830	25M	@ 250	OK FOR	SHEAR
2.5	8	200	300	144.868	163.541	145	200	201	1500	25M	@ 325	OK FOR	SHEAR
2.5	8	200	400	150.724	168.691	151	266	267	1170	15M	@ 150	OK FOR	SHEAR
2.5	8	225	225	142.602	161.203	143	150	163	1960	25M	@ 250	OK FOR	SHEAR
2.5	8	225	270	147.908	165.975	148	180	181	1700	25M	@ 250	OK FOR	SHEAR
2.5	8	225	338	155.610	172.682	156	225	226	1430	25M	@ 325	OK FOR	SHEAR
2.5	8	225	450	167.433	182.710	167	299	300	1150	15M	@ 150	OK FOR	SHEAR
2.5	8	250	250	146.399	164.365	146	166	167	1810	25M	@ 250	OK FOR	SHEAR
2.5	8	250	300	152.109	169.429	152	200	201	1570	25M	@ 250	OK FOR	SHEAR
2.5	8	250	375	160.301	176.491	160	250	251	1320	15M	@ 150	OK FOR	SHEAR
2.5	8	250	500	172.931	187.162	173	333	334	1070	15M	@ 150	OK FOR	SHEAR
2.5	8	300	300	153.861	170.506	154	200	201	1590	25M	@ 250	OK FOR	SHEAR
2.5	8	300	360	160.302	176.099	160	240	241	1380	15M	@ 150	OK FOR	SHEAR
2.5	8	300	450	169.460	183.892	169	299	300	1170	15M	@ 150	OK FOR	SHEAR
2.5	8	300	600	183.380	195.640	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	8	350	350	161.086	176.359	161	233	234	1430	25M	@ 325	OK FOR	SHEAR
2.5	10	200	200	129.846	155.074	130	133	156	2010	25M	@ 200	10M	625
2.5	10	200	240	133.291	158.016	133	160	161	1720	25M	@ 250	OK FOR	SHEAR
2.5	10	200	300	136.670	160.840	137	200	201	1410	25M	@ 325	OK FOR	SHEAR
2.5	10	200	400	143.214	166.185	143	266	267	1110	15M	@ 150	OK FOR	SHEAR
2.5	10	225	225	134.003	158.414	134	150	160	1840	25M	@ 250	OK FOR	SHEAR
2.5	10	225	270	139.943	163.364	140	180	181	1610	25M	@ 250	OK FOR	SHEAR
2.5	10	225	338	148.504	170.289	149	225	226	1360	15M	@ 150	OK FOR	SHEAR
2.5	10	225	450	161.451	180.565	161	299	300	1110	15M	@ 150	OK FOR	SHEAR
2.5	10	250	250	138.110	161.684	138	166	167	1710	25M	@ 250	OK FOR	SHEAR
2.5	10	250	300	144.478	166.915	144	200	201	1490	25M	@ 325	OK FOR	SHEAR
2.5	10	250	375	153.535	174.179	154	250	251	1270	15M	@ 150	OK FOR	SHEAR
2.5	10	250	500	167.271	185.076	167	333	334	1040	15M	@ 150	OK FOR	SHEAR
2.5	10	300	300	146.115	167.972	146	200	201	1510	25M	@ 250	OK FOR	SHEAR
2.5	10	300	360	153.248	173.720	153	240	241	1320	15M	@ 150	OK FOR	SHEAR
2.5	10	300	450	163.276	181.697	163	299	300	1130	15M	@ 150	OK FOR	SHEAR
2.5	10	300	600	178.236	193.643	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	10	350	350	153.805	173.929	154	233	234	1360	15M	@ 150	OK FOR	SHEAR
2.5	12	200	200	124.790	153.574	125	133	155	1930	25M	@ 250	10M	650
2.5	12	200	240	128.536	156.592	129	160	161	1660	25M	@ 250	OK FOR	SHEAR
2.5	12	200	300	132.196	159.482	132	200	201	1370	15M	@ 150	OK FOR	SHEAR
2.5	12	200	400	139.233	164.934	139	266	267	1080	15M	@ 150	OK FOR	SHEAR
2.5	12	225	225	129.206	156.986	129	150	158	1780	25M	@ 250	OK FOR	SHEAR
2.5	12	225	270	135.629	162.042	136	180	181	1560	25M	@ 250	OK FOR	SHEAR
2.5	12	225	338	144.790	169.087	145	225	226	1330	15M	@ 150	OK FOR	SHEAR
2.5	12	225	450	158.417	179.479	158	299	300	1090	15M	@ 150	OK FOR	SHEAR
2.5	12	250	250	133.547	160.309	134	166	167	1650	25M	@ 250	OK FOR	SHEAR
2.5	12	250	300	140.404	165.639	140	200	201	1450	25M	@ 325	OK FOR	SHEAR
2.5	12	250	375	150.048	173.014	150	250	251	1240	15M	@ 150	OK FOR	SHEAR
2.5	12	250	500	164.421	184.016	164	333	334	1020	15M	@ 150	OK FOR	SHEAR
2.5	12	300	300	141.968	166.678	142	200	201	1470	25M	@ 325	OK FOR	SHEAR
2.5	12	300	360	149.591	172.521	150	240	241	1290	15M	@ 150	OK FOR	SHEAR
2.5	12	300	450	160.166	180.596	160	299	300	1100	15M	@ 150	OK FOR	SHEAR
2.5	12	300	600	175.662	192.629	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	12	350	350	150.007	172.703	150	233	234	1330	15M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3	3	200	200	353.620	282.504	354	133	283	5460	25M	@ 100	10M	75
3	3	200	240	356.284	286.209	356	160	288	4590	25M	@ 100	10M	125
3	3	200	300	358.787	289.614	359	200	291	3700	25M	@ 125	10M	225
3	3	200	400	363.417	295.742	363	266	297	2810	25M	@ 150	10M	925
3	3	225	225	357.119	285.241	357	150	287	4910	25M	@ 100	10M	100
3	3	225	270	361.574	291.326	362	180	293	4140	25M	@ 100	10M	150
3	3	225	338	367.635	299.286	368	225	300	3360	25M	@ 150	10M	300
3	3	225	450	376.467	310.386	376	299	311	2590	25M	@ 150	OK FOR	SHEAR
3	3	250	250	360.642	288.024	361	166	289	4460	25M	@ 100	10M	125
3	3	250	300	365.372	294.417	365	200	296	3760	25M	@ 125	10M	225
3	3	250	375	371.797	302.773	372	250	304	3070	25M	@ 150	10M	500
3	3	250	500	381.330	314.646	381	333	334	2360	25M	@ 200	OK FOR	SHEAR
3	3	300	300	367.737	293.683	368	200	295	3790	25M	@ 125	10M	225
3	3	300	360	373.017	300.690	373	240	302	3200	25M	@ 150	10M	400
3	3	300	450	380.248	309.934	380	299	311	2610	25M	@ 150	OK FOR	SHEAR
3	3	300	600	391.080	323.208	391	399	400	2020	25M	@ 200	OK FOR	SHEAR
3	3	350	350	374.860	299.396	375	233	301	3310	25M	@ 150	10M	350
3	4.5	200	200	270.062	220.491	270	133	221	4170	25M	@ 100	10M	150
3	4.5	200	240	273.018	223.734	273	160	225	3520	25M	@ 125	10M	250
3	4.5	200	300	275.825	226.748	276	200	228	2840	25M	@ 150	10M	750
3	4.5	200	400	281.083	232.263	281	266	267	2170	25M	@ 200	OK FOR	SHEAR
3	4.5	225	225	273.872	223.373	274	150	225	3760	25M	@ 125	10M	200
3	4.5	225	270	278.868	228.775	279	180	230	3190	25M	@ 150	10M	375
3	4.5	225	338	285.783	235.997	286	225	237	2620	25M	@ 150	OK FOR	SHEAR
3	4.5	225	450	296.041	246.366	296	299	300	2040	25M	@ 200	OK FOR	SHEAR
3	4.5	250	250	277.727	226.310	278	166	227	3430	25M	@ 150	10M	275
3	4.5	250	300	283.064	232.035	283	200	233	2920	25M	@ 150	10M	650
3	4.5	250	375	290.425	239.673	290	250	251	2400	25M	@ 200	OK FOR	SHEAR
3	4.5	250	500	301.512	250.823	302	333	334	1870	25M	@ 250	OK FOR	SHEAR
3	4.5	300	300	285.505	232.260	286	200	234	2940	25M	@ 150	10M	625
3	4.5	300	360	291.507	238.609	292	240	241	2500	25M	@ 200	OK FOR	SHEAR
3	4.5	300	450	299.823	247.135	300	299	300	2060	25M	@ 200	OK FOR	SHEAR
3	4.5	300	600	312.386	259.652	312	399	400	1610	25M	@ 250	OK FOR	SHEAR
3	4.5	350	350	293.288	238.207	293	233	239	2590	25M	@ 150	OK FOR	SHEAR
3	6	200	200	231.436	202.462	231	133	203	3580	25M	@ 125	10M	200
3	6	200	240	234.748	205.791	235	160	207	3020	25M	@ 150	10M	350
3	6	200	300	237.915	208.897	238	200	210	2450	25M	@ 200	OK FOR	SHEAR
3	6	200	400	243.904	214.608	244	266	267	1890	25M	@ 250	OK FOR	SHEAR
3	6	225	225	235.634	205.588	236	150	207	3240	25M	@ 150	10M	275
3	6	225	270	241.275	211.145	241	180	213	2760	25M	@ 150	10M	575
3	6	225	338	249.170	218.622	249	225	226	2280	25M	@ 200	OK FOR	SHEAR
3	6	225	450	261.015	229.428	261	299	300	1800	25M	@ 250	OK FOR	SHEAR
3	6	250	250	239.876	208.749	240	166	209	2970	25M	@ 150	10M	400
3	6	250	300	245.920	214.637	246	200	216	2540	25M	@ 150	OK FOR	SHEAR
3	6	250	375	254.336	222.533	254	250	251	2100	25M	@ 200	OK FOR	SHEAR
3	6	250	500	267.115	234.115	267	333	334	1650	25M	@ 250	OK FOR	SHEAR
3	6	300	300	248.378	215.065	248	200	216	2560	25M	@ 150	OK FOR	SHEAR
3	6	300	360	255.188	221.572	255	240	241	2190	25M	@ 200	OK FOR	SHEAR
3	6	300	450	264.678	230.340	265	299	300	1820	25M	@ 250	OK FOR	SHEAR
3	6	300	600	279.060	243.248	279	399	400	1440	25M	@ 325	OK FOR	SHEAR
3	6	350	350	256.803	221.271	257	233	234	2270	25M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3	8	200	200	205.349	193.187	205	133	194	3180	25M	@ 150	10M	225
3	8	200	240	209.137	196.702	209	160	198	2700	25M	@ 150	10M	450
3	8	200	300	212.780	199.987	213	200	201	2190	25M	@ 200	OK FOR	SHEAR
3	8	200	400	219.707	206.034	220	266	267	1700	25M	@ 250	OK FOR	SHEAR
3	8	225	225	210.042	196.588	210	150	198	2890	25M	@ 150	10M	325
3	8	225	270	216.517	202.443	217	180	204	2480	25M	@ 200	10M	800
3	8	225	338	225.638	210.324	226	225	226	2070	25M	@ 200	OK FOR	SHEAR
3	8	225	450	239.360	221.697	239	299	300	1650	25M	@ 250	OK FOR	SHEAR
3	8	250	250	214.742	199.979	215	166	201	2660	25M	@ 150	10M	500
3	8	250	300	221.680	206.158	222	200	208	2290	25M	@ 200	OK FOR	SHEAR
3	8	250	375	231.380	214.442	231	250	251	1910	25M	@ 250	OK FOR	SHEAR
3	8	250	500	246.110	226.566	246	333	334	1520	25M	@ 250	OK FOR	SHEAR
3	8	300	300	224.052	206.629	224	200	208	2310	25M	@ 200	OK FOR	SHEAR
3	8	300	360	231.843	213.405	232	240	241	1990	25M	@ 250	OK FOR	SHEAR
3	8	300	450	242.715	222.529	243	299	300	1670	25M	@ 250	OK FOR	SHEAR
3	8	300	600	259.116	235.928	259	399	400	1340	15M	@ 150	OK FOR	SHEAR
3	8	350	350	233.158	213.044	233	233	234	2060	25M	@ 200	OK FOR	SHEAR
3	10	200	200	191.576	189.146	192	133	190	2960	25M	@ 150	10M	250
3	10	200	240	195.784	192.801	196	160	194	2520	25M	@ 150	10M	500
3	10	200	300	199.837	196.216	200	200	201	2060	25M	@ 200	OK FOR	SHEAR
3	10	200	400	207.551	202.497	208	266	267	1610	25M	@ 250	OK FOR	SHEAR
3	10	225	225	196.671	192.727	197	150	194	2700	25M	@ 150	10M	350
3	10	225	270	203.857	198.791	204	180	200	2340	25M	@ 200	10M	950
3	10	225	338	213.979	206.941	214	225	226	1960	25M	@ 250	OK FOR	SHEAR
3	10	225	450	229.119	218.652	229	299	300	1580	25M	@ 250	OK FOR	SHEAR
3	10	250	250	201.732	196.255	202	166	197	2500	25M	@ 200	10M	575
3	10	250	300	209.415	202.632	209	200	204	2160	25M	@ 200	OK FOR	SHEAR
3	10	250	375	220.142	211.169	220	250	251	1820	25M	@ 250	OK FOR	SHEAR
3	10	250	500	236.303	223.609	236	333	334	1460	25M	@ 325	OK FOR	SHEAR
3	10	300	300	211.664	203.091	212	200	204	2180	25M	@ 200	OK FOR	SHEAR
3	10	300	360	220.257	210.051	220	240	241	1890	25M	@ 250	OK FOR	SHEAR
3	10	300	450	232.197	219.409	232	299	300	1600	25M	@ 250	OK FOR	SHEAR
3	10	300	600	250.012	233.093	250	399	400	1290	15M	@ 150	OK FOR	SHEAR
3	10	350	350	221.299	209.627	221	233	234	1960	25M	@ 250	OK FOR	SHEAR
3	12	200	200	183.537	187.001	184	133	188	2840	25M	@ 150	10M	250
3	12	200	240	188.097	190.749	188	160	192	2420	25M	@ 200	10M	525
3	12	200	300	192.487	194.249	192	200	201	1990	25M	@ 250	OK FOR	SHEAR
3	12	200	400	200.822	200.675	201	266	267	1550	25M	@ 250	OK FOR	SHEAR
3	12	225	225	188.949	190.686	189	150	192	2600	25M	@ 150	10M	375
3	12	225	270	196.714	196.885	197	180	198	2250	25M	@ 200	OK FOR	SHEAR
3	12	225	338	207.609	205.199	208	225	226	1900	25M	@ 250	OK FOR	SHEAR
3	12	225	450	223.735	217.095	224	299	300	1540	25M	@ 250	OK FOR	SHEAR
3	12	250	250	194.292	194.291	194	166	195	2400	25M	@ 200	10M	600
3	12	250	300	202.575	200.796	203	200	202	2090	25M	@ 200	OK FOR	SHEAR
3	12	250	375	214.078	209.485	214	250	251	1770	25M	@ 250	OK FOR	SHEAR
3	12	250	500	231.200	222.095	231	333	334	1430	25M	@ 325	OK FOR	SHEAR
3	12	300	300	204.723	201.237	205	200	203	2110	25M	@ 200	OK FOR	SHEAR
3	12	300	360	213.941	208.317	214	240	241	1840	25M	@ 250	OK FOR	SHEAR
3	12	300	450	226.649	217.816	227	299	300	1560	25M	@ 250	OK FOR	SHEAR
3	12	300	600	245.345	231.647	245	399	400	1270	15M	@ 150	OK FOR	SHEAR
3	12	350	350	214.780	207.853	215	233	234	1900	25M	@ 250	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3.75	3	200	200	536.976	287.674	537	133	289	8290	25M	@ 50	10M	75
3.75	3	200	240	540.748	292.755	541	160	294	6960	25M	@ 75	10M	125
3.75	3	200	300	544.294	297.404	544	200	299	5610	25M	@ 75	10M	200
3.75	3	200	400	550.847	305.703	551	266	307	4260	25M	@ 100	10M	700
3.75	3	225	225	542.306	291.070	542	150	292	7450	25M	@ 50	10M	100
3.75	3	225	270	548.621	299.353	549	180	301	6280	25M	@ 75	10M	150
3.75	3	225	338	557.211	310.078	557	225	311	5090	25M	@ 100	10M	275
3.75	3	225	450	569.734	324.769	570	299	325	3910	25M	@ 125	OK FOR	SHEAR
3.75	3	250	250	547.651	294.502	548	166	295	6770	25M	@ 75	10M	125
3.75	3	250	300	554.361	303.155	554	200	305	5710	25M	@ 75	10M	200
3.75	3	250	375	563.475	314.349	563	250	316	4640	25M	@ 100	10M	400
3.75	3	250	500	577.018	329.990	577	333	334	3570	25M	@ 125	OK FOR	SHEAR
3.75	3	300	300	558.378	301.436	558	200	303	5750	25M	@ 75	10M	200
3.75	3	300	360	565.876	310.830	566	240	312	4860	25M	@ 100	10M	350
3.75	3	300	450	576.158	323.106	576	299	324	3960	25M	@ 125	OK FOR	SHEAR
3.75	3	300	600	591.612	340.480	592	399	400	3050	25M	@ 150	OK FOR	SHEAR
3.75	3	350	350	569.125	308.416	569	233	310	5020	25M	@ 100	10M	325
3.75	4.5	200	200	401.972	211.779	402	133	213	6210	25M	@ 75	10M	175
3.75	4.5	200	240	406.128	216.080	406	160	217	5230	25M	@ 100	10M	300
3.75	4.5	200	300	410.058	220.064	410	200	221	4220	25M	@ 100	OK FOR	SHEAR
3.75	4.5	200	400	417.364	227.293	417	266	267	3230	25M	@ 150	OK FOR	SHEAR
3.75	4.5	225	225	407.557	215.246	408	150	217	5600	25M	@ 75	10M	225
3.75	4.5	225	270	414.547	222.358	415	180	224	4750	25M	@ 100	10M	425
3.75	4.5	225	338	424.133	231.777	424	225	233	3880	25M	@ 125	OK FOR	SHEAR
3.75	4.5	225	450	438.189	245.059	438	299	300	3010	25M	@ 150	OK FOR	SHEAR
3.75	4.5	250	250	413.183	218.769	413	166	219	5110	25M	@ 100	10M	325
3.75	4.5	250	300	420.628	226.270	421	200	228	4330	25M	@ 100	10M	750
3.75	4.5	250	375	430.811	236.186	431	250	251	3550	25M	@ 125	OK FOR	SHEAR
3.75	4.5	250	500	446.004	250.424	446	333	334	2760	25M	@ 150	OK FOR	SHEAR
3.75	4.5	300	300	424.514	225.919	425	200	227	4370	25M	@ 100	10M	775
3.75	4.5	300	360	432.854	234.176	433	240	241	3720	25M	@ 125	OK FOR	SHEAR
3.75	4.5	300	450	444.343	245.182	444	299	300	3050	25M	@ 150	OK FOR	SHEAR
3.75	4.5	300	600	461.615	261.125	462	399	400	2380	25M	@ 200	OK FOR	SHEAR
3.75	4.5	350	350	435.867	233.093	436	233	234	3850	25M	@ 125	OK FOR	SHEAR
3.75	6	200	200	339.216	186.159	339	133	187	5240	25M	@ 100	10M	250
3.75	6	200	240	343.834	190.480	344	160	192	4430	25M	@ 100	10M	525
3.75	6	200	300	348.219	194.500	348	200	201	3590	25M	@ 125	OK FOR	SHEAR
3.75	6	200	400	356.420	201.833	356	266	267	2760	25M	@ 150	OK FOR	SHEAR
3.75	6	225	225	345.212	189.886	345	150	191	4740	25M	@ 100	10M	375
3.75	6	225	270	353.016	197.063	353	180	198	4040	25M	@ 100	OK FOR	SHEAR
3.75	6	225	338	363.796	206.633	364	225	226	3330	25M	@ 150	OK FOR	SHEAR
3.75	6	225	450	379.713	220.251	380	299	300	2610	25M	@ 150	OK FOR	SHEAR
3.75	6	250	250	351.260	193.663	351	166	194	4340	25M	@ 100	10M	625
3.75	6	250	300	359.591	201.245	360	200	203	3710	25M	@ 125	OK FOR	SHEAR
3.75	6	250	375	371.054	211.326	371	250	251	3060	25M	@ 150	OK FOR	SHEAR
3.75	6	250	500	388.237	225.909	388	333	334	2400	25M	@ 200	OK FOR	SHEAR
3.75	6	300	300	363.418	201.268	363	200	203	3740	25M	@ 125	OK FOR	SHEAR
3.75	6	300	360	372.762	209.614	373	240	241	3200	25M	@ 150	OK FOR	SHEAR
3.75	6	300	450	385.677	220.782	386	299	300	2650	25M	@ 150	OK FOR	SHEAR
3.75	6	300	600	405.102	237.036	405	399	400	2090	25M	@ 200	OK FOR	SHEAR
3.75	6	350	350	375.534	208.804	376	233	234	3320	25M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3.75	8	200	200	296.001	172.320	296	133	173	4570	25M	@ 100	10M	350
3.75	8	200	240	301.269	176.874	301	160	178	3880	25M	@ 125	10M	950
3.75	8	200	300	306.296	181.118	306	200	201	3160	25M	@ 150	OK FOR	SHEAR
3.75	8	200	400	315.749	188.879	316	266	267	2440	25M	@ 200	OK FOR	SHEAR
3.75	8	225	225	302.616	176.404	303	150	178	4160	25M	@ 100	10M	575
3.75	8	225	270	311.554	183.962	312	180	185	3570	25M	@ 125	OK FOR	SHEAR
3.75	8	225	338	323.982	194.064	324	225	226	2960	25M	@ 150	OK FOR	SHEAR
3.75	8	225	450	342.433	208.466	342	299	300	2350	25M	@ 200	OK FOR	SHEAR
3.75	8	250	250	309.258	180.498	309	166	181	3820	25M	@ 125	OK FOR	SHEAR
3.75	8	250	300	318.807	188.462	319	200	201	3290	25M	@ 150	OK FOR	SHEAR
3.75	8	250	375	332.009	199.067	332	250	251	2740	25M	@ 150	OK FOR	SHEAR
3.75	8	250	500	351.856	214.417	352	333	334	2180	25M	@ 200	OK FOR	SHEAR
3.75	8	300	300	322.499	188.600	322	200	201	3320	25M	@ 150	OK FOR	SHEAR
3.75	8	300	360	333.190	197.309	333	240	241	2860	25M	@ 150	OK FOR	SHEAR
3.75	8	300	450	347.994	208.969	348	299	300	2390	25M	@ 200	OK FOR	SHEAR
3.75	8	300	600	370.228	225.930	370	399	400	1910	25M	@ 250	OK FOR	SHEAR
3.75	8	350	350	335.556	196.481	336	233	234	2960	25M	@ 150	OK FOR	SHEAR
3.75	10	200	200	272.611	166.215	273	133	167	4210	25M	@ 100	10M	400
3.75	10	200	240	278.493	170.985	278	160	172	3590	25M	@ 125	OK FOR	SHEAR
3.75	10	200	300	284.120	175.431	284	200	201	2930	25M	@ 150	OK FOR	SHEAR
3.75	10	200	400	294.733	183.561	295	266	267	2280	25M	@ 200	OK FOR	SHEAR
3.75	10	225	225	279.797	170.572	280	150	172	3840	25M	@ 125	10M	725
3.75	10	225	270	289.785	178.463	290	180	181	3320	25M	@ 150	OK FOR	SHEAR
3.75	10	225	338	303.710	189.004	304	225	226	2780	25M	@ 150	OK FOR	SHEAR
3.75	10	225	450	324.378	203.997	324	299	300	2230	25M	@ 200	OK FOR	SHEAR
3.75	10	250	250	286.963	174.886	287	166	176	3550	25M	@ 125	OK FOR	SHEAR
3.75	10	250	300	297.621	183.173	298	200	201	3070	25M	@ 150	OK FOR	SHEAR
3.75	10	250	375	312.379	194.197	312	250	251	2580	25M	@ 150	OK FOR	SHEAR
3.75	10	250	500	334.511	210.114	335	333	334	2070	25M	@ 200	OK FOR	SHEAR
3.75	10	300	300	301.119	183.303	301	200	201	3100	25M	@ 150	OK FOR	SHEAR
3.75	10	300	360	313.012	192.312	313	240	241	2690	25M	@ 150	OK FOR	SHEAR
3.75	10	300	450	329.469	204.361	329	299	300	2270	25M	@ 200	OK FOR	SHEAR
3.75	10	300	600	354.047	221.845	354	399	400	1830	25M	@ 250	OK FOR	SHEAR
3.75	10	350	350	314.952	191.386	315	233	234	2780	25M	@ 150	OK FOR	SHEAR
3.75	12	200	200	258.551	162.985	259	133	164	4000	25M	@ 125	10M	450
3.75	12	200	240	267.379	169.288	267	160	171	3440	25M	@ 150	OK FOR	SHEAR
3.75	12	200	300	271.129	172.500	271	200	201	2800	25M	@ 150	OK FOR	SHEAR
3.75	12	200	400	282.738	180.873	283	266	267	2190	25M	@ 200	OK FOR	SHEAR
3.75	12	225	225	266.222	167.510	266	150	169	3660	25M	@ 125	10M	850
3.75	12	225	270	277.122	175.645	277	180	181	3170	25M	@ 150	OK FOR	SHEAR
3.75	12	225	338	292.314	186.467	292	225	226	2670	25M	@ 150	OK FOR	SHEAR
3.75	12	225	450	314.755	201.827	315	299	300	2160	25M	@ 200	OK FOR	SHEAR
3.75	12	250	250	273.812	171.961	274	166	173	3390	25M	@ 150	OK FOR	SHEAR
3.75	12	250	300	285.436	180.483	285	200	201	2940	25M	@ 150	OK FOR	SHEAR
3.75	12	250	375	301.493	191.790	301	250	251	2490	25M	@ 200	OK FOR	SHEAR
3.75	12	250	500	325.416	208.045	325	333	334	2010	25M	@ 200	OK FOR	SHEAR
3.75	12	300	300	288.741	180.590	289	200	201	2980	25M	@ 150	OK FOR	SHEAR
3.75	12	300	360	301.655	189.788	302	240	241	2590	25M	@ 150	OK FOR	SHEAR
3.75	12	300	450	319.459	202.112	319	299	300	2200	25M	@ 200	OK FOR	SHEAR
3.75	12	300	600	345.779	219.935	346	399	400	1780	25M	@ 250	OK FOR	SHEAR
3.75	12	350	350	303.219	188.797	303	233	234	2680	25M	@ 150	OK FOR	SHEAR

D3. PL-2 Parapet

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1	3	200	200	66.687	144.985	67	133	146	1030	15M	@ 150	OK FOR	SHEAR
1	3	200	240	68.218	148.611	68	160	161	880	15M	@ 200	OK FOR	SHEAR
1	3	200	300	69.680	151.991	70	200	201	720	15M	@ 250	OK FOR	SHEAR
1	3	200	400	72.420	158.153	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	3	225	225	67.869	148.234	68	150	151	940	15M	@ 200	OK FOR	SHEAR
1	3	225	270	70.433	154.152	70	180	181	810	15M	@ 200	OK FOR	SHEAR
1	3	225	338	73.977	162.014	74	225	226	680	15M	@ 250	OK FOR	SHEAR
1	3	225	450	79.112	172.972	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	3	250	250	69.023	151.335	69	166	167	860	15M	@ 200	OK FOR	SHEAR
1	3	250	300	71.728	157.470	72	200	201	740	15M	@ 250	OK FOR	SHEAR
1	3	250	375	75.437	165.572	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	3	250	500	80.853	176.982	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	3	300	300	71.249	157.111	71	200	201	740	15M	@ 250	OK FOR	SHEAR
1	3	300	360	74.216	163.644	74	240	241	640	15M	@ 250	OK FOR	SHEAR
1	3	300	450	78.267	172.266	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	3	300	600	84.104	184.318	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	3	350	350	73.377	162.425	73	233	234	650	15M	@ 250	OK FOR	SHEAR
1	4.5	200	200	57.405	136.255	57	133	137	890	15M	@ 200	OK FOR	SHEAR
1	4.5	200	240	59.429	140.507	59	160	161	770	15M	@ 250	OK FOR	SHEAR
1	4.5	200	300	61.368	144.472	61	200	201	640	15M	@ 250	OK FOR	SHEAR
1	4.5	200	400	65.014	151.695	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	4.5	225	225	59.015	140.220	59	150	151	810	15M	@ 200	OK FOR	SHEAR
1	4.5	225	270	62.425	147.135	62	180	181	720	15M	@ 250	OK FOR	SHEAR
1	4.5	225	338	67.150	156.312	67	225	226	620	15M	@ 250	OK FOR	SHEAR
1	4.5	225	450	73.939	168.986	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	4.5	250	250	60.585	143.953	61	166	167	750	15M	@ 250	OK FOR	SHEAR
1	4.5	250	300	64.196	151.103	64	200	201	670	15M	@ 250	OK FOR	SHEAR
1	4.5	250	375	69.142	160.520	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	4.5	250	500	76.249	173.608	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	4.5	300	300	63.611	150.824	64	200	201	660	15M	@ 250	OK FOR	SHEAR
1	4.5	300	360	67.582	158.399	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	4.5	300	450	72.945	168.315	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	4.5	300	600	80.439	181.883	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	4.5	350	350	66.484	157.063	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	6	200	200	53.805	133.358	54	133	134	840	15M	@ 200	OK FOR	SHEAR
1	6	200	240	56.170	137.937	56	160	161	730	15M	@ 250	OK FOR	SHEAR
1	6	200	300	58.430	142.197	58	200	201	610	15M	@ 250	OK FOR	SHEAR
1	6	200	400	62.644	149.921	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	6	225	225	55.732	137.673	56	150	151	770	15M	@ 250	OK FOR	SHEAR
1	6	225	270	59.706	145.089	60	180	181	690	15M	@ 250	OK FOR	SHEAR
1	6	225	338	65.131	154.850	65	225	226	600	15M	@ 325	OK FOR	SHEAR
1	6	225	450	72.699	168.106	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	6	250	250	57.607	141.715	58	166	167	720	15M	@ 250	OK FOR	SHEAR
1	6	250	300	61.795	149.352	62	200	201	640	15M	@ 250	OK FOR	SHEAR
1	6	250	375	67.418	159.302	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	6	250	500	75.228	172.877	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	6	300	300	61.184	149.098	61	200	201	630	15M	@ 250	OK FOR	SHEAR
1	6	300	360	65.717	157.103	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	6	300	450	71.675	167.436	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	6	300	600	79.702	181.320	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	6	350	350	64.501	155.714	67	233	234	600	15M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1	8	200	200	51.950	132.043	52	133	134	810	15M	@ 200	OK FOR	SHEAR
1	8	200	240	54.593	136.824	55	160	161	710	15M	@ 250	OK FOR	SHEAR
1	8	200	300	57.088	141.250	57	200	201	590	15M	@ 325	OK FOR	SHEAR
1	8	200	400	61.661	149.209	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	8	225	225	54.153	136.561	54	150	151	750	15M	@ 250	OK FOR	SHEAR
1	8	225	270	58.526	144.249	59	180	181	670	15M	@ 250	OK FOR	SHEAR
1	8	225	338	64.342	154.247	64	225	226	590	15M	@ 325	OK FOR	SHEAR
1	8	225	450	72.201	167.648	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	8	250	250	56.268	140.769	56	166	167	700	15M	@ 250	OK FOR	SHEAR
1	8	250	300	60.818	148.638	61	200	201	630	15M	@ 250	OK FOR	SHEAR
1	8	250	375	66.762	158.768	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	8	250	500	74.792	172.443	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	8	300	300	60.204	148.383	60	200	201	620	15M	@ 250	OK FOR	SHEAR
1	8	300	360	65.010	156.540	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	8	300	450	71.178	166.974	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	8	300	600	79.346	180.937	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	8	350	350	63.743	155.126	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	10	200	200	51.272	131.549	51	133	134	800	15M	@ 250	OK FOR	SHEAR
1	10	200	240	54.036	136.395	54	160	161	700	15M	@ 250	OK FOR	SHEAR
1	10	200	300	56.619	140.862	57	200	201	590	15M	@ 325	OK FOR	SHEAR
1	10	200	400	61.296	148.863	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	10	225	225	53.606	136.132	54	150	151	740	15M	@ 250	OK FOR	SHEAR
1	10	225	270	58.116	143.883	58	180	181	670	15M	@ 250	OK FOR	SHEAR
1	10	225	338	64.023	153.917	64	225	226	590	15M	@ 325	OK FOR	SHEAR
1	10	225	450	71.941	167.357	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	10	250	250	55.814	140.383	56	166	167	690	15M	@ 250	OK FOR	SHEAR
1	10	250	300	60.464	148.294	60	200	201	630	15M	@ 250	OK FOR	SHEAR
1	10	250	375	66.472	158.451	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	10	250	500	74.559	172.184	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	10	300	300	59.855	148.041	60	200	201	620	15M	@ 250	OK FOR	SHEAR
1	10	300	360	64.717	156.225	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	10	300	450	70.933	166.700	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	10	300	600	79.173	180.750	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	10	350	350	63.449	154.816	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	12	200	200	50.957	131.262	51	133	134	790	15M	@ 250	OK FOR	SHEAR
1	12	200	240	53.762	136.122	54	160	161	700	15M	@ 250	OK FOR	SHEAR
1	12	200	300	56.369	140.599	56	200	201	590	15M	@ 325	OK FOR	SHEAR
1	12	200	400	61.074	148.615	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	12	225	225	53.341	135.863	53	150	151	740	15M	@ 250	OK FOR	SHEAR
1	12	225	270	57.886	143.630	58	180	181	670	15M	@ 250	OK FOR	SHEAR
1	12	225	338	63.822	153.691	64	225	226	590	15M	@ 325	OK FOR	SHEAR
1	12	225	450	71.792	167.198	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	12	250	250	55.577	140.127	56	166	167	690	15M	@ 250	OK FOR	SHEAR
1	12	250	300	60.253	148.055	60	200	201	630	15M	@ 250	OK FOR	SHEAR
1	12	250	375	66.292	158.251	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	12	250	500	74.441	172.061	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	12	300	300	59.653	147.814	60	200	201	620	15M	@ 250	OK FOR	SHEAR
1	12	300	360	64.542	156.030	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	12	300	450	70.802	166.561	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	12	300	600	79.105	180.684	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	12	350	350	63.283	154.631	67	233	234	600	15M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1.5	3	200	200	131.587	116.950	132	133	134	2040	25M	@ 200	OK FOR	SHEAR
1.5	3	200	240	133.338	119.864	133	160	161	1720	25M	@ 250	OK FOR	SHEAR
1.5	3	200	300	135.038	122.649	135	200	201	1390	15M	@ 150	OK FOR	SHEAR
1.5	3	200	400	138.290	127.888	138	266	267	1070	15M	@ 150	OK FOR	SHEAR
1.5	3	225	225	133.233	119.728	133	150	151	1830	25M	@ 250	OK FOR	SHEAR
1.5	3	225	270	136.208	124.615	136	180	181	1560	25M	@ 250	OK FOR	SHEAR
1.5	3	225	338	140.441	131.397	140	225	226	1290	15M	@ 150	OK FOR	SHEAR
1.5	3	225	450	146.809	141.355	147	299	300	1010	15M	@ 150	OK FOR	SHEAR
1.5	3	250	250	134.861	122.450	135	166	167	1670	25M	@ 250	OK FOR	SHEAR
1.5	3	250	300	138.026	127.606	138	200	201	1430	25M	@ 325	OK FOR	SHEAR
1.5	3	250	375	142.494	134.712	142	250	251	1180	15M	@ 150	OK FOR	SHEAR
1.5	3	250	500	149.281	145.266	149	333	334	930	15M	@ 200	OK FOR	SHEAR
1.5	3	300	300	138.053	127.697	138	200	201	1430	25M	@ 325	OK FOR	SHEAR
1.5	3	300	360	141.578	133.360	142	240	241	1220	15M	@ 150	OK FOR	SHEAR
1.5	3	300	450	146.544	141.159	147	299	300	1010	15M	@ 150	OK FOR	SHEAR
1.5	3	300	600	154.044	152.709	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	3	350	350	141.170	132.728	141	233	234	1250	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	200	99.951	101.303	100	133	134	1550	25M	@ 250	OK FOR	SHEAR
1.5	4.5	200	240	102.284	104.746	102	160	161	1320	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	300	104.568	108.045	105	200	201	1080	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	400	108.990	114.267	109	266	267	850	15M	@ 200	OK FOR	SHEAR
1.5	4.5	225	225	102.131	104.713	102	150	151	1410	25M	@ 325	OK FOR	SHEAR
1.5	4.5	225	270	106.137	110.474	106	180	181	1220	15M	@ 150	OK FOR	SHEAR
1.5	4.5	225	338	111.929	118.510	112	225	226	1030	15M	@ 150	OK FOR	SHEAR
1.5	4.5	225	450	120.792	130.372	121	299	300	830	15M	@ 200	OK FOR	SHEAR
1.5	4.5	250	250	104.275	107.996	104	166	167	1290	15M	@ 150	OK FOR	SHEAR
1.5	4.5	250	300	108.568	114.065	109	200	201	1120	15M	@ 150	OK FOR	SHEAR
1.5	4.5	250	375	114.722	122.474	115	250	251	950	15M	@ 200	OK FOR	SHEAR
1.5	4.5	250	500	124.204	135.020	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	300	108.464	114.223	108	200	201	1120	15M	@ 150	OK FOR	SHEAR
1.5	4.5	300	360	113.309	120.876	113	240	241	980	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	450	120.212	130.085	120	299	300	830	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	600	130.695	143.738	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	4.5	350	350	112.547	120.105	113	233	234	1000	15M	@ 200	OK FOR	SHEAR
1.5	6	200	200	86.341	95.579	86	133	134	1340	15M	@ 150	OK FOR	SHEAR
1.5	6	200	240	89.148	99.379	89	160	161	1150	15M	@ 150	OK FOR	SHEAR
1.5	6	200	300	91.903	103.019	92	200	201	950	15M	@ 200	OK FOR	SHEAR
1.5	6	200	400	97.247	109.879	97	266	267	760	15M	@ 250	OK FOR	SHEAR
1.5	6	225	225	88.965	99.399	89	150	151	1230	15M	@ 150	OK FOR	SHEAR
1.5	6	225	270	93.810	105.747	94	180	181	1080	15M	@ 150	OK FOR	SHEAR
1.5	6	225	338	100.822	114.588	101	225	226	930	15M	@ 200	OK FOR	SHEAR
1.5	6	225	450	111.464	127.549	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	6	250	250	91.547	103.052	92	166	167	1140	15M	@ 150	OK FOR	SHEAR
1.5	6	250	300	96.758	109.731	97	200	201	1000	15M	@ 200	OK FOR	SHEAR
1.5	6	250	375	104.208	118.961	104	250	251	860	15M	@ 200	OK FOR	SHEAR
1.5	6	250	500	115.524	132.594	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	6	300	300	96.600	109.940	97	200	201	1000	15M	@ 200	OK FOR	SHEAR
1.5	6	300	360	102.485	117.238	102	240	241	880	15M	@ 200	OK FOR	SHEAR
1.5	6	300	450	110.785	127.273	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	6	300	600	123.070	141.919	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	6	350	350	101.491	116.394	101	233	234	900	15M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1.5	8	200	200	77.974	92.363	78	133	134	1210	15M	@ 150	OK FOR	SHEAR
1.5	8	200	240	81.287	96.464	81	160	161	1050	15M	@ 150	OK FOR	SHEAR
1.5	8	200	300	84.527	100.385	85	200	201	870	15M	@ 200	OK FOR	SHEAR
1.5	8	200	400	90.759	107.744	91	266	267	710	15M	@ 250	OK FOR	SHEAR
1.5	8	225	225	81.094	96.512	81	150	151	1120	15M	@ 150	OK FOR	SHEAR
1.5	8	225	270	86.798	103.343	87	180	181	1000	15M	@ 200	OK FOR	SHEAR
1.5	8	225	338	94.927	112.784	95	225	226	870	15M	@ 200	OK FOR	SHEAR
1.5	8	225	450	106.874	126.397	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	8	250	250	84.161	100.467	84	166	167	1040	15M	@ 150	OK FOR	SHEAR
1.5	8	250	300	90.267	107.629	90	200	201	930	15M	@ 200	OK FOR	SHEAR
1.5	8	250	375	98.816	117.424	99	250	251	820	15M	@ 200	OK FOR	SHEAR
1.5	8	250	500	111.321	131.622	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	8	300	300	90.097	107.873	90	200	201	930	15M	@ 200	OK FOR	SHEAR
1.5	8	300	360	96.881	115.620	97	240	241	840	15M	@ 200	OK FOR	SHEAR
1.5	8	300	450	106.168	126.121	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	8	300	600	119.356	141.157	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	8	350	350	95.703	114.718	96	233	234	850	15M	@ 200	OK FOR	SHEAR
1.5	10	200	200	74.093	91.057	74	133	134	1150	15M	@ 150	OK FOR	SHEAR
1.5	10	200	240	77.762	95.336	78	160	161	1010	15M	@ 150	OK FOR	SHEAR
1.5	10	200	300	81.316	99.411	81	200	201	840	15M	@ 200	OK FOR	SHEAR
1.5	10	200	400	88.047	107.004	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1.5	10	225	225	77.584	95.393	78	150	151	1070	15M	@ 150	OK FOR	SHEAR
1.5	10	225	270	83.825	102.479	84	180	181	960	15M	@ 200	OK FOR	SHEAR
1.5	10	225	338	92.502	112.166	93	225	226	850	15M	@ 200	OK FOR	SHEAR
1.5	10	225	450	104.849	125.945	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	10	250	250	80.980	99.507	81	166	167	1010	15M	@ 150	OK FOR	SHEAR
1.5	10	250	300	87.584	106.896	88	200	201	910	15M	@ 200	OK FOR	SHEAR
1.5	10	250	375	96.587	116.884	97	250	251	800	15M	@ 250	OK FOR	SHEAR
1.5	10	250	500	109.364	131.193	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	10	300	300	87.414	107.141	87	200	201	900	15M	@ 200	OK FOR	SHEAR
1.5	10	300	360	94.580	115.046	95	240	241	820	15M	@ 200	OK FOR	SHEAR
1.5	10	300	450	104.150	125.659	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	10	300	600	117.451	140.761	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	10	350	350	93.323	114.113	93	233	234	830	15M	@ 200	OK FOR	SHEAR
1.5	12	200	200	72.635	90.475	73	133	134	1130	15M	@ 150	OK FOR	SHEAR
1.5	12	200	240	76.542	94.843	77	160	161	990	15M	@ 200	OK FOR	SHEAR
1.5	12	200	300	80.285	98.982	80	200	201	830	15M	@ 200	OK FOR	SHEAR
1.5	12	200	400	87.267	106.651	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1.5	12	225	225	76.378	94.903	76	150	151	1050	15M	@ 150	OK FOR	SHEAR
1.5	12	225	270	82.922	102.089	83	180	181	950	15M	@ 200	OK FOR	SHEAR
1.5	12	225	338	91.835	111.837	92	225	226	840	15M	@ 200	OK FOR	SHEAR
1.5	12	225	450	104.300	125.635	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	12	250	250	79.966	99.080	80	166	167	990	15M	@ 200	OK FOR	SHEAR
1.5	12	250	300	86.813	106.541	87	200	201	900	15M	@ 200	OK FOR	SHEAR
1.5	12	250	375	95.981	116.564	96	250	251	800	15M	@ 250	OK FOR	SHEAR
1.5	12	250	500	108.842	130.895	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	12	300	300	86.634	106.780	87	200	201	900	15M	@ 200	OK FOR	SHEAR
1.5	12	300	360	93.949	114.721	94	240	241	810	15M	@ 200	OK FOR	SHEAR
1.5	12	300	450	103.613	125.358	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	12	300	600	117.001	140.514	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	12	350	350	92.662	113.784	93	233	234	820	15M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	3	200	200	184.371	135.124	184	133	136	2850	25M	@ 150	OK FOR	SHEAR
2	3	200	240	185.935	137.342	186	160	161	2400	25M	@ 200	OK FOR	SHEAR
2	3	200	300	187.460	139.489	187	200	201	1930	25M	@ 250	OK FOR	SHEAR
2	3	200	400	190.399	143.595	190	266	267	1470	25M	@ 325	OK FOR	SHEAR
2	3	225	225	186.391	137.623	186	150	151	2560	25M	@ 150	OK FOR	SHEAR
2	3	225	270	189.079	141.420	189	180	181	2170	25M	@ 200	OK FOR	SHEAR
2	3	225	338	192.943	146.814	193	225	226	1770	25M	@ 250	OK FOR	SHEAR
2	3	225	450	198.857	154.984	199	299	300	1370	15M	@ 150	OK FOR	SHEAR
2	3	250	250	188.405	140.106	188	166	167	2330	25M	@ 200	OK FOR	SHEAR
2	3	250	300	191.292	144.176	191	200	201	1970	25M	@ 250	OK FOR	SHEAR
2	3	250	375	195.412	149.915	195	250	251	1610	25M	@ 250	OK FOR	SHEAR
2	3	250	500	201.788	158.708	202	333	334	1250	15M	@ 150	OK FOR	SHEAR
2	3	300	300	192.402	144.999	192	200	201	1980	25M	@ 250	OK FOR	SHEAR
2	3	300	360	195.675	149.594	196	240	241	1680	25M	@ 250	OK FOR	SHEAR
2	3	300	450	200.341	156.067	200	299	300	1380	15M	@ 150	OK FOR	SHEAR
2	3	300	600	207.546	165.969	208	399	400	1070	15M	@ 150	OK FOR	SHEAR
2	3	350	350	196.363	149.809	196	233	234	1740	25M	@ 250	OK FOR	SHEAR
2	4.5	200	200	136.693	114.148	137	133	134	2120	25M	@ 200	OK FOR	SHEAR
2	4.5	200	240	138.676	116.578	139	160	161	1790	25M	@ 250	OK FOR	SHEAR
2	4.5	200	300	140.638	118.950	141	200	201	1450	25M	@ 325	OK FOR	SHEAR
2	4.5	200	400	144.493	123.533	144	266	267	1120	15M	@ 150	OK FOR	SHEAR
2	4.5	225	225	139.179	117.053	139	150	151	1910	25M	@ 250	OK FOR	SHEAR
2	4.5	225	270	142.638	121.228	143	180	181	1640	25M	@ 250	OK FOR	SHEAR
2	4.5	225	338	147.740	127.246	148	225	226	1350	15M	@ 150	OK FOR	SHEAR
2	4.5	225	450	155.786	136.529	156	299	300	1070	15M	@ 150	OK FOR	SHEAR
2	4.5	250	250	141.645	119.902	142	166	167	1750	25M	@ 250	OK FOR	SHEAR
2	4.5	250	300	145.393	124.380	145	200	201	1500	25M	@ 325	OK FOR	SHEAR
2	4.5	250	375	150.874	130.788	151	250	251	1250	15M	@ 150	OK FOR	SHEAR
2	4.5	250	500	159.593	140.780	160	333	334	990	15M	@ 200	OK FOR	SHEAR
2	4.5	300	300	146.519	125.439	147	200	201	1510	25M	@ 250	OK FOR	SHEAR
2	4.5	300	360	150.828	130.500	151	240	241	1300	15M	@ 150	OK FOR	SHEAR
2	4.5	300	450	157.104	137.733	157	299	300	1080	15M	@ 150	OK FOR	SHEAR
2	4.5	300	600	167.006	148.972	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	4.5	350	350	151.335	130.817	151	233	234	1340	15M	@ 150	OK FOR	SHEAR
2	6	200	200	115.317	106.807	115	133	134	1790	25M	@ 250	OK FOR	SHEAR
2	6	200	240	117.747	109.512	118	160	161	1520	25M	@ 250	OK FOR	SHEAR
2	6	200	300	120.164	112.153	120	200	201	1240	15M	@ 150	OK FOR	SHEAR
2	6	200	400	124.943	117.258	125	266	267	970	15M	@ 200	OK FOR	SHEAR
2	6	225	225	118.232	110.031	118	150	151	1630	25M	@ 250	OK FOR	SHEAR
2	6	225	270	122.500	114.669	122	180	181	1410	25M	@ 325	OK FOR	SHEAR
2	6	225	338	128.848	121.359	129	225	226	1180	15M	@ 150	OK FOR	SHEAR
2	6	225	450	138.919	131.672	139	299	300	960	15M	@ 200	OK FOR	SHEAR
2	6	250	250	121.120	113.168	121	166	167	1500	25M	@ 325	OK FOR	SHEAR
2	6	250	300	125.767	118.136	126	200	201	1300	15M	@ 150	OK FOR	SHEAR
2	6	250	375	132.608	125.249	133	250	251	1100	15M	@ 150	OK FOR	SHEAR
2	6	250	500	143.520	136.321	144	333	334	890	15M	@ 200	OK FOR	SHEAR
2	6	300	300	126.834	119.227	127	200	201	1310	15M	@ 150	OK FOR	SHEAR
2	6	300	360	132.211	124.828	132	240	241	1140	15M	@ 150	OK FOR	SHEAR
2	6	300	450	140.063	132.832	140	299	300	970	15M	@ 200	OK FOR	SHEAR
2	6	300	600	152.370	145.193	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	6	350	350	132.475	125.073	132	233	234	1170	15M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	8	200	200	101.190	102.455	101	133	134	1570	25M	@ 250	OK FOR	SHEAR
2	8	200	240	104.159	105.422	104	160	161	1340	15M	@ 150	OK FOR	SHEAR
2	8	200	300	107.116	108.316	107	200	201	1110	15M	@ 150	OK FOR	SHEAR
2	8	200	400	112.963	113.903	113	266	267	880	15M	@ 200	OK FOR	SHEAR
2	8	225	225	104.623	105.976	105	150	151	1440	25M	@ 325	OK FOR	SHEAR
2	8	225	270	109.858	111.054	110	180	181	1260	15M	@ 150	OK FOR	SHEAR
2	8	225	338	117.624	118.359	118	225	226	1080	15M	@ 150	OK FOR	SHEAR
2	8	225	450	129.765	129.511	130	299	300	900	15M	@ 200	OK FOR	SHEAR
2	8	250	250	108.032	109.390	108	166	167	1340	15M	@ 150	OK FOR	SHEAR
2	8	250	300	113.740	114.821	114	200	201	1180	15M	@ 150	OK FOR	SHEAR
2	8	250	375	122.087	122.563	122	250	251	1010	15M	@ 150	OK FOR	SHEAR
2	8	250	500	135.113	134.457	137	333	334	850	15M	@ 200	OK FOR	SHEAR
2	8	300	300	114.770	115.954	115	200	201	1190	15M	@ 150	OK FOR	SHEAR
2	8	300	360	121.346	122.047	121	240	241	1050	15M	@ 150	OK FOR	SHEAR
2	8	300	450	130.798	130.673	131	299	300	900	15M	@ 200	OK FOR	SHEAR
2	8	300	600	145.139	143.761	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	8	350	350	121.346	122.231	121	233	234	1080	15M	@ 150	OK FOR	SHEAR
2	10	200	200	94.120	100.425	94	133	134	1460	25M	@ 325	OK FOR	SHEAR
2	10	200	240	97.556	103.576	98	160	161	1260	15M	@ 150	OK FOR	SHEAR
2	10	200	300	100.964	106.644	101	200	201	1040	15M	@ 150	OK FOR	SHEAR
2	10	200	400	107.644	112.542	108	266	267	840	15M	@ 200	OK FOR	SHEAR
2	10	225	225	98.024	104.152	98	150	151	1350	15M	@ 150	OK FOR	SHEAR
2	10	225	270	104.057	109.530	104	180	181	1190	15M	@ 150	OK FOR	SHEAR
2	10	225	338	112.869	117.209	113	225	226	1040	15M	@ 150	OK FOR	SHEAR
2	10	225	450	126.239	128.761	126	299	300	870	15M	@ 200	OK FOR	SHEAR
2	10	250	250	101.890	107.757	102	166	167	1260	15M	@ 150	OK FOR	SHEAR
2	10	250	300	108.430	113.489	108	200	201	1120	15M	@ 150	OK FOR	SHEAR
2	10	250	375	117.803	121.580	118	250	251	970	15M	@ 200	OK FOR	SHEAR
2	10	250	500	131.942	133.812	137	333	334	850	15M	@ 200	OK FOR	SHEAR
2	10	300	300	109.446	114.645	109	200	201	1130	15M	@ 150	OK FOR	SHEAR
2	10	300	360	116.849	121.012	117	240	241	1010	15M	@ 150	OK FOR	SHEAR
2	10	300	450	127.214	129.917	127	299	300	880	15M	@ 200	OK FOR	SHEAR
2	10	300	600	142.402	143.230	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	10	350	350	116.658	121.154	117	233	234	1030	15M	@ 150	OK FOR	SHEAR
2	12	200	200	90.421	99.422	90	133	134	1400	15M	@ 150	OK FOR	SHEAR
2	12	200	240	94.232	102.701	94	160	161	1220	15M	@ 150	OK FOR	SHEAR
2	12	200	300	97.981	105.881	98	200	201	1010	15M	@ 150	OK FOR	SHEAR
2	12	200	400	105.224	111.956	105	266	267	820	15M	@ 200	OK FOR	SHEAR
2	12	225	225	94.716	103.288	95	150	151	1300	15M	@ 150	OK FOR	SHEAR
2	12	225	270	101.332	108.852	101	180	181	1160	15M	@ 150	OK FOR	SHEAR
2	12	225	338	110.782	116.720	111	225	226	1020	15M	@ 150	OK FOR	SHEAR
2	12	225	450	124.688	128.404	125	299	300	860	15M	@ 200	OK FOR	SHEAR
2	12	250	250	98.931	107.011	99	166	167	1230	15M	@ 150	OK FOR	SHEAR
2	12	250	300	106.025	112.911	106	200	201	1100	15M	@ 150	OK FOR	SHEAR
2	12	250	375	115.948	121.151	116	250	251	960	15M	@ 200	OK FOR	SHEAR
2	12	250	500	130.494	133.471	137	333	334	850	15M	@ 200	OK FOR	SHEAR
2	12	300	300	107.019	114.067	107	200	201	1110	15M	@ 150	OK FOR	SHEAR
2	12	300	360	114.877	120.554	115	240	241	990	15M	@ 200	OK FOR	SHEAR
2	12	300	450	125.629	129.548	126	299	300	870	15M	@ 200	OK FOR	SHEAR
2	12	300	600	141.059	142.910	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	12	350	350	114.567	120.669	115	233	234	1020	15M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2.5	3	200	200	280.625	279.531	281	133	280	4340	25M	@ 100	10M	75
2.5	3	200	240	282.658	282.400	283	160	284	3640	25M	@ 125	10M	125
2.5	3	200	300	284.584	285.077	285	200	286	2930	25M	@ 150	10M	250
2.5	3	200	400	288.185	289.986	288	266	291	2230	25M	@ 200	OK FOR	SHEAR
2.5	3	225	225	283.298	282.156	283	150	283	3890	25M	@ 125	10M	100
2.5	3	225	270	286.727	286.944	287	180	288	3280	25M	@ 150	10M	175
2.5	3	225	338	291.454	293.367	291	225	294	2670	25M	@ 150	10M	350
2.5	3	225	450	298.430	302.595	298	299	303	2050	25M	@ 200	OK FOR	SHEAR
2.5	3	250	250	285.969	284.777	286	166	285	3540	25M	@ 125	10M	150
2.5	3	250	300	289.624	289.851	290	200	291	2990	25M	@ 150	10M	225
2.5	3	250	375	294.646	296.639	295	250	298	2430	25M	@ 200	10M	550
2.5	3	250	500	302.175	306.551	302	333	334	1870	25M	@ 250	OK FOR	SHEAR
2.5	3	300	300	291.293	289.981	291	200	291	3000	25M	@ 150	10M	225
2.5	3	300	360	295.393	295.615	295	240	297	2540	25M	@ 150	10M	450
2.5	3	300	450	301.058	303.201	301	299	304	2070	25M	@ 200	OK FOR	SHEAR
2.5	3	300	600	309.601	314.353	310	399	400	1600	25M	@ 250	OK FOR	SHEAR
2.5	3	350	350	296.597	295.143	297	233	296	2620	25M	@ 150	10M	400
2.5	4.5	200	200	211.038	250.341	211	133	251	3260	25M	@ 150	10M	100
2.5	4.5	200	240	213.317	253.153	213	160	254	2750	25M	@ 150	10M	175
2.5	4.5	200	300	215.511	255.801	216	200	257	2220	25M	@ 200	10M	375
2.5	4.5	200	400	219.693	260.732	220	266	267	1700	25M	@ 250	OK FOR	SHEAR
2.5	4.5	225	225	214.079	253.253	214	150	255	2940	25M	@ 150	10M	150
2.5	4.5	225	270	217.983	257.987	218	180	259	2500	25M	@ 200	10M	225
2.5	4.5	225	338	223.509	264.460	224	225	266	2050	25M	@ 200	10M	575
2.5	4.5	225	450	231.926	274.015	232	299	300	1600	25M	@ 250	OK FOR	SHEAR
2.5	4.5	250	250	217.108	256.135	217	166	257	2690	25M	@ 150	10M	175
2.5	4.5	250	300	221.306	261.176	221	200	263	2280	25M	@ 200	10M	325
2.5	4.5	250	375	227.220	268.046	227	250	270	1880	25M	@ 250	OK FOR	SHEAR
2.5	4.5	250	500	236.347	278.341	236	333	334	1460	25M	@ 325	OK FOR	SHEAR
2.5	4.5	300	300	223.127	261.807	223	200	263	2300	25M	@ 200	10M	325
2.5	4.5	300	360	227.902	267.443	228	240	269	1960	25M	@ 250	10M	875
2.5	4.5	300	450	234.646	275.170	235	299	300	1610	25M	@ 250	OK FOR	SHEAR
2.5	4.5	300	600	245.063	286.798	245	399	400	1270	15M	@ 150	OK FOR	SHEAR
2.5	4.5	350	350	229.110	267.387	229	233	269	2030	25M	@ 200	10M	700
2.5	6	200	200	179.063	240.523	179	133	241	2770	25M	@ 150	10M	125
2.5	6	200	240	181.676	243.547	182	160	245	2340	25M	@ 200	10M	200
2.5	6	200	300	184.213	246.404	184	200	248	1900	25M	@ 250	10M	450
2.5	6	200	400	189.105	251.749	189	266	267	1460	25M	@ 325	OK FOR	SHEAR
2.5	6	225	225	182.454	243.698	182	150	245	2510	25M	@ 150	10M	150
2.5	6	225	270	186.969	248.790	187	180	250	2140	25M	@ 200	10M	275
2.5	6	225	338	193.457	255.798	193	225	257	1770	25M	@ 250	10M	750
2.5	6	225	450	203.507	266.221	204	299	300	1400	15M	@ 150	OK FOR	SHEAR
2.5	6	250	250	185.826	246.818	186	166	247	2300	25M	@ 200	10M	200
2.5	6	250	300	190.706	252.237	191	200	254	1970	25M	@ 250	10M	400
2.5	6	250	375	197.680	259.673	198	250	261	1630	25M	@ 250	OK FOR	SHEAR
2.5	6	250	500	208.605	270.894	209	333	334	1290	15M	@ 150	OK FOR	SHEAR
2.5	6	300	300	192.524	252.915	193	200	254	1990	25M	@ 250	10M	400
2.5	6	300	360	198.121	258.973	198	240	260	1700	25M	@ 250	OK FOR	SHEAR
2.5	6	300	450	206.122	267.329	206	299	300	1420	25M	@ 325	OK FOR	SHEAR
2.5	6	300	600	218.592	279.965	219	399	400	1130	15M	@ 150	OK FOR	SHEAR
2.5	6	350	350	199.181	258.882	199	233	260	1760	25M	@ 250	10M	925

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2.5	8	200	200	157.499	234.878	157	133	236	2440	25M	@ 200	10M	125
2.5	8	200	240	160.556	238.146	161	160	239	2070	25M	@ 200	10M	200
2.5	8	200	300	163.543	241.241	164	200	243	1690	25M	@ 250	10M	500
2.5	8	200	400	169.346	247.044	169	266	267	1310	15M	@ 150	OK FOR	SHEAR
2.5	8	225	225	161.320	238.320	161	150	240	2220	25M	@ 200	10M	175
2.5	8	225	270	166.640	243.824	167	180	245	1910	25M	@ 250	10M	275
2.5	8	225	338	174.360	251.426	174	225	253	1600	25M	@ 250	10M	850
2.5	8	225	450	186.372	262.735	186	299	300	1280	15M	@ 150	OK FOR	SHEAR
2.5	8	250	250	165.122	241.686	165	166	242	2040	25M	@ 200	10M	225
2.5	8	250	300	170.899	247.542	171	200	249	1760	25M	@ 250	10M	425
2.5	8	250	375	179.216	255.600	179	250	257	1480	25M	@ 325	OK FOR	SHEAR
2.5	8	250	500	192.238	267.739	192	333	334	1190	15M	@ 150	OK FOR	SHEAR
2.5	8	300	300	172.684	248.238	173	200	250	1780	25M	@ 250	10M	425
2.5	8	300	360	179.338	254.776	179	240	256	1540	25M	@ 250	OK FOR	SHEAR
2.5	8	300	450	188.862	263.796	189	299	300	1300	15M	@ 150	OK FOR	SHEAR
2.5	8	300	600	203.544	277.343	204	399	400	1050	15M	@ 150	OK FOR	SHEAR
2.5	8	350	350	180.169	254.608	180	233	256	1590	25M	@ 250	OK FOR	SHEAR
2.5	10	200	200	146.163	232.132	146	133	233	2260	25M	@ 200	10M	125
2.5	10	200	240	149.630	235.579	150	160	237	1930	25M	@ 250	10M	200
2.5	10	200	300	153.027	238.849	153	200	240	1580	25M	@ 250	10M	525
2.5	10	200	400	159.631	244.981	160	266	267	1240	15M	@ 150	OK FOR	SHEAR
2.5	10	225	225	150.392	235.775	150	150	237	2070	25M	@ 200	10M	175
2.5	10	225	270	156.447	241.583	156	180	243	1790	25M	@ 250	10M	300
2.5	10	225	338	165.223	249.602	165	225	251	1510	25M	@ 250	10M	925
2.5	10	225	450	178.708	261.456	179	299	300	1230	15M	@ 150	OK FOR	SHEAR
2.5	10	250	250	154.604	239.331	155	166	240	1910	25M	@ 250	10M	225
2.5	10	250	300	161.181	245.506	161	200	247	1660	25M	@ 250	10M	450
2.5	10	250	375	170.601	253.985	171	250	255	1410	25M	@ 325	OK FOR	SHEAR
2.5	10	250	500	185.084	266.640	185	333	334	1150	15M	@ 150	OK FOR	SHEAR
2.5	10	300	300	162.952	246.228	163	200	248	1680	25M	@ 250	10M	450
2.5	10	300	360	170.484	253.093	170	240	255	1470	25M	@ 325	OK FOR	SHEAR
2.5	10	300	450	181.126	262.509	181	299	300	1250	15M	@ 150	OK FOR	SHEAR
2.5	10	300	600	197.121	276.482	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	10	350	350	171.114	252.875	171	233	254	1510	25M	@ 250	OK FOR	SHEAR
2.5	12	200	200	139.744	230.647	140	133	232	2160	25M	@ 200	10M	125
2.5	12	200	240	143.580	234.232	144	160	236	1850	25M	@ 250	10M	225
2.5	12	200	300	147.333	237.632	147	200	239	1520	25M	@ 250	10M	550
2.5	12	200	400	154.590	243.995	155	266	267	1200	15M	@ 150	OK FOR	SHEAR
2.5	12	225	225	144.355	234.445	144	150	236	1990	25M	@ 250	10M	175
2.5	12	225	270	151.037	240.476	151	180	242	1730	25M	@ 250	10M	300
2.5	12	225	338	160.623	248.770	161	225	250	1470	25M	@ 325	10M	950
2.5	12	225	450	175.023	260.906	175	299	300	1210	15M	@ 150	OK FOR	SHEAR
2.5	12	250	250	148.933	238.144	149	166	239	1840	25M	@ 250	10M	225
2.5	12	250	300	156.158	244.541	156	200	246	1610	25M	@ 250	10M	450
2.5	12	250	375	166.356	253.270	166	250	255	1370	15M	@ 150	OK FOR	SHEAR
2.5	12	250	500	181.643	266.157	182	333	334	1130	15M	@ 150	OK FOR	SHEAR
2.5	12	300	300	157.913	245.274	158	200	247	1630	25M	@ 250	10M	450
2.5	12	300	360	166.069	252.335	166	240	254	1430	25M	@ 325	OK FOR	SHEAR
2.5	12	300	450	177.380	261.945	177	299	300	1220	15M	@ 150	OK FOR	SHEAR
2.5	12	300	600	193.959	276.066	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	12	350	350	166.539	252.078	167	233	253	1470	25M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3	3	200	200	396.237	279.663	396	133	281	6120	25M	@ 75	10M	75
3	3	200	240	399.206	283.989	399	160	285	5140	25M	@ 100	10M	125
3	3	200	300	401.974	287.933	402	200	289	4140	25M	@ 100	10M	225
3	3	200	400	407.039	294.949	407	266	296	3150	25M	@ 150	10M	950
3	3	225	225	399.847	282.646	400	150	284	5490	25M	@ 100	10M	100
3	3	225	270	404.781	289.704	405	180	291	4630	25M	@ 100	10M	175
3	3	225	338	411.393	298.789	411	225	300	3760	25M	@ 125	10M	300
3	3	225	450	420.851	311.184	421	299	312	2890	25M	@ 150	OK FOR	SHEAR
3	3	250	250	403.455	285.627	403	166	286	4990	25M	@ 100	10M	150
3	3	250	300	408.670	293.006	409	200	294	4210	25M	@ 100	10M	225
3	3	250	375	415.649	302.492	416	250	304	3430	25M	@ 150	10M	500
3	3	250	500	425.817	315.679	426	333	334	2630	25M	@ 150	OK FOR	SHEAR
3	3	300	300	410.658	291.560	411	200	293	4230	25M	@ 100	10M	225
3	3	300	360	416.431	299.571	416	240	301	3580	25M	@ 125	10M	425
3	3	300	450	424.224	309.966	424	299	311	2920	25M	@ 150	OK FOR	SHEAR
3	3	300	600	435.705	324.586	436	399	400	2250	25M	@ 200	OK FOR	SHEAR
3	3	350	350	417.844	297.459	418	233	299	3690	25M	@ 125	10M	375
3	4.5	200	200	296.566	207.468	297	133	208	4580	25M	@ 100	10M	175
3	4.5	200	240	299.863	211.147	300	160	212	3860	25M	@ 125	10M	325
3	4.5	200	300	302.962	214.535	303	200	216	3120	25M	@ 150	OK FOR	SHEAR
3	4.5	200	400	308.694	220.653	309	266	267	2390	25M	@ 200	OK FOR	SHEAR
3	4.5	225	225	300.540	210.587	301	150	212	4130	25M	@ 100	10M	250
3	4.5	225	270	306.064	216.658	306	180	218	3500	25M	@ 150	10M	500
3	4.5	225	338	313.572	224.630	314	225	226	2870	25M	@ 150	OK FOR	SHEAR
3	4.5	225	450	324.493	235.839	324	299	300	2230	25M	@ 200	OK FOR	SHEAR
3	4.5	250	250	304.504	213.687	305	166	214	3770	25M	@ 125	10M	375
3	4.5	250	300	310.370	220.079	310	200	221	3200	25M	@ 150	OK FOR	SHEAR
3	4.5	250	375	318.323	228.461	318	250	251	2630	25M	@ 150	OK FOR	SHEAR
3	4.5	250	500	330.087	240.463	330	333	334	2040	25M	@ 200	OK FOR	SHEAR
3	4.5	300	300	312.394	219.820	312	200	221	3220	25M	@ 150	OK FOR	SHEAR
3	4.5	300	360	318.935	226.843	319	240	241	2740	25M	@ 150	OK FOR	SHEAR
3	4.5	300	450	327.864	236.134	328	299	300	2250	25M	@ 200	OK FOR	SHEAR
3	4.5	300	600	341.170	249.572	341	399	400	1760	25M	@ 250	OK FOR	SHEAR
3	4.5	350	350	320.252	225.891	320	233	234	2830	25M	@ 150	OK FOR	SHEAR
3	6	200	200	250.587	186.572	251	133	188	3870	25M	@ 125	10M	250
3	6	200	240	254.276	190.294	254	160	192	3280	25M	@ 150	10M	525
3	6	200	300	257.766	193.733	258	200	201	2660	25M	@ 150	OK FOR	SHEAR
3	6	200	400	264.281	199.980	264	266	267	2040	25M	@ 200	OK FOR	SHEAR
3	6	225	225	254.944	189.879	255	150	191	3500	25M	@ 150	10M	375
3	6	225	270	261.163	196.028	261	180	197	2990	25M	@ 150	OK FOR	SHEAR
3	6	225	338	269.719	204.167	270	225	226	2470	25M	@ 200	OK FOR	SHEAR
3	6	225	450	282.360	215.744	282	299	300	1940	25M	@ 250	OK FOR	SHEAR
3	6	250	250	259.279	193.143	259	166	194	3210	25M	@ 150	10M	625
3	6	250	300	265.907	199.621	266	200	201	2740	25M	@ 150	OK FOR	SHEAR
3	6	250	375	275.000	208.185	275	250	251	2270	25M	@ 200	OK FOR	SHEAR
3	6	250	500	288.647	220.587	289	333	334	1790	25M	@ 250	OK FOR	SHEAR
3	6	300	300	267.894	199.562	268	200	201	2760	25M	@ 150	OK FOR	SHEAR
3	6	300	360	275.329	206.686	275	240	241	2370	25M	@ 200	OK FOR	SHEAR
3	6	300	450	285.588	216.189	286	299	300	1960	25M	@ 250	OK FOR	SHEAR
3	6	300	600	301.045	230.074	301	399	400	1550	25M	@ 250	OK FOR	SHEAR
3	6	350	350	276.464	205.883	276	233	234	2440	25M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3	8	200	200	219.194	175.632	219	133	177	3390	25M	@ 150	10M	325
3	8	200	240	223.406	179.517	223	160	181	2880	25M	@ 150	10M	800
3	8	200	300	227.420	183.118	227	200	201	2350	25M	@ 200	OK FOR	SHEAR
3	8	200	400	234.980	189.684	235	266	267	1820	25M	@ 250	OK FOR	SHEAR
3	8	225	225	224.028	179.147	224	150	180	3080	25M	@ 150	10M	525
3	8	225	270	231.179	185.570	231	180	187	2650	25M	@ 150	OK FOR	SHEAR
3	8	225	338	241.141	194.120	241	225	226	2210	25M	@ 200	OK FOR	SHEAR
3	8	225	450	256.048	206.354	256	299	300	1760	25M	@ 250	OK FOR	SHEAR
3	8	250	250	228.834	182.597	229	166	183	2830	25M	@ 150	OK FOR	SHEAR
3	8	250	300	236.489	189.364	236	200	201	2440	25M	@ 200	OK FOR	SHEAR
3	8	250	375	247.113	198.360	247	250	251	2040	25M	@ 200	OK FOR	SHEAR
3	8	250	500	263.217	211.455	263	333	334	1630	25M	@ 250	OK FOR	SHEAR
3	8	300	300	238.387	189.351	238	200	201	2460	25M	@ 200	OK FOR	SHEAR
3	8	300	360	247.029	196.793	247	240	241	2120	25M	@ 200	OK FOR	SHEAR
3	8	300	450	259.052	206.768	259	299	300	1780	25M	@ 250	OK FOR	SHEAR
3	8	300	600	277.212	221.371	277	399	400	1430	25M	@ 325	OK FOR	SHEAR
3	8	350	350	247.872	195.968	248	233	234	2190	25M	@ 200	OK FOR	SHEAR
3	10	200	200	202.290	170.576	202	133	172	3130	25M	@ 150	10M	350
3	10	200	240	206.988	174.601	207	160	176	2670	25M	@ 150	OK FOR	SHEAR
3	10	200	300	211.487	178.338	211	200	201	2180	25M	@ 200	OK FOR	SHEAR
3	10	200	400	220.009	185.169	220	266	267	1700	25M	@ 250	OK FOR	SHEAR
3	10	225	225	207.576	174.255	208	150	176	2850	25M	@ 150	10M	600
3	10	225	270	215.598	180.915	216	180	182	2470	25M	@ 200	OK FOR	SHEAR
3	10	225	338	226.847	189.806	227	225	226	2080	25M	@ 200	OK FOR	SHEAR
3	10	225	450	243.697	202.530	244	299	300	1680	25M	@ 250	OK FOR	SHEAR
3	10	250	250	212.838	177.858	213	166	179	2630	25M	@ 150	OK FOR	SHEAR
3	10	250	300	221.451	184.877	221	200	201	2280	25M	@ 200	OK FOR	SHEAR
3	10	250	375	233.455	194.226	233	250	251	1930	25M	@ 250	OK FOR	SHEAR
3	10	250	500	251.583	207.809	252	333	334	1560	25M	@ 250	OK FOR	SHEAR
3	10	300	300	223.290	184.893	223	200	201	2300	25M	@ 200	OK FOR	SHEAR
3	10	300	360	233.025	192.604	233	240	241	2000	25M	@ 250	OK FOR	SHEAR
3	10	300	450	246.548	202.935	247	299	300	1700	25M	@ 250	OK FOR	SHEAR
3	10	300	600	266.726	217.979	267	399	400	1380	15M	@ 150	OK FOR	SHEAR
3	10	350	350	233.596	191.742	234	233	234	2070	25M	@ 200	OK FOR	SHEAR
3	12	200	200	192.286	167.823	192	133	169	2970	25M	@ 150	10M	400
3	12	200	240	197.432	171.962	197	160	173	2540	25M	@ 150	OK FOR	SHEAR
3	12	200	300	202.373	175.810	202	200	201	2090	25M	@ 200	OK FOR	SHEAR
3	12	200	400	211.743	182.847	212	266	267	1640	25M	@ 250	OK FOR	SHEAR
3	12	225	225	198.013	171.637	198	150	173	2720	25M	@ 150	10M	700
3	12	225	270	206.824	178.490	207	180	181	2370	25M	@ 200	OK FOR	SHEAR
3	12	225	338	219.175	187.639	219	225	226	2010	25M	@ 200	OK FOR	SHEAR
3	12	225	450	237.489	200.675	237	299	300	1630	25M	@ 250	OK FOR	SHEAR
3	12	250	250	203.711	175.368	204	166	176	2520	25M	@ 150	OK FOR	SHEAR
3	12	250	300	213.171	182.586	213	200	201	2200	25M	@ 200	OK FOR	SHEAR
3	12	250	375	226.302	192.187	226	250	251	1870	25M	@ 250	OK FOR	SHEAR
3	12	250	500	245.845	206.049	246	333	334	1520	25M	@ 250	OK FOR	SHEAR
3	12	300	300	214.972	182.624	215	200	201	2220	25M	@ 200	OK FOR	SHEAR
3	12	300	360	225.604	190.529	226	240	241	1940	25M	@ 250	OK FOR	SHEAR
3	12	300	450	240.225	201.078	240	299	300	1650	25M	@ 250	OK FOR	SHEAR
3	12	300	600	261.624	216.323	262	399	400	1350	15M	@ 150	OK FOR	SHEAR
3	12	350	350	225.937	189.634	226	233	234	2000	25M	@ 250	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3.75	3	200	200	578.144	288.668	578	133	290	8930	25M	@ 50	10M	75
3.75	3	200	240	582.004	293.951	582	160	295	7490	25M	@ 50	10M	125
3.75	3	200	300	585.633	298.795	586	200	300	6030	25M	@ 75	10M	200
3.75	3	200	400	592.342	307.448	592	266	308	4580	25M	@ 100	10M	675
3.75	3	225	225	583.542	292.219	584	150	294	8010	25M	@ 50	10M	100
3.75	3	225	270	590.003	300.836	590	180	302	6750	25M	@ 75	10M	150
3.75	3	225	338	598.790	312.009	599	225	313	5470	25M	@ 100	10M	275
3.75	3	225	450	611.571	327.284	612	299	328	4200	25M	@ 100	OK FOR	SHEAR
3.75	3	250	250	588.940	295.769	589	166	296	7280	25M	@ 50	10M	125
3.75	3	250	300	595.798	304.764	596	200	306	6140	25M	@ 75	10M	200
3.75	3	250	375	605.111	316.409	605	250	318	4990	25M	@ 100	10M	375
3.75	3	250	500	618.915	332.640	619	333	334	3830	25M	@ 125	OK FOR	SHEAR
3.75	3	300	300	599.726	302.850	600	200	304	6180	25M	@ 75	10M	200
3.75	3	300	360	607.376	312.594	607	240	314	5210	25M	@ 100	10M	350
3.75	3	300	450	617.859	325.327	618	299	326	4240	25M	@ 100	OK FOR	SHEAR
3.75	3	300	600	633.576	343.299	634	399	400	3260	25M	@ 150	OK FOR	SHEAR
3.75	3	350	350	610.501	309.909	611	233	311	5390	25M	@ 100	10M	300
3.75	4.5	200	200	424.553	205.435	425	133	206	6560	25M	@ 75	10M	175
3.75	4.5	200	240	428.745	209.770	429	160	211	5520	25M	@ 75	10M	325
3.75	4.5	200	300	432.714	213.798	433	200	215	4460	25M	@ 100	OK FOR	SHEAR
3.75	4.5	200	400	440.103	221.130	440	266	267	3400	25M	@ 150	OK FOR	SHEAR
3.75	4.5	225	225	430.265	209.106	430	150	210	5910	25M	@ 75	10M	250
3.75	4.5	225	270	437.316	216.280	437	180	218	5010	25M	@ 100	10M	500
3.75	4.5	225	338	447.001	225.817	447	225	227	4090	25M	@ 100	OK FOR	SHEAR
3.75	4.5	225	450	461.194	239.287	461	299	300	3170	25M	@ 150	OK FOR	SHEAR
3.75	4.5	250	250	435.970	212.766	436	166	213	5390	25M	@ 100	10M	375
3.75	4.5	250	300	443.472	220.322	443	200	222	4570	25M	@ 100	10M	975
3.75	4.5	250	375	453.746	230.346	454	250	251	3740	25M	@ 125	OK FOR	SHEAR
3.75	4.5	250	500	469.065	244.760	469	333	334	2900	25M	@ 150	OK FOR	SHEAR
3.75	4.5	300	300	447.352	220.036	447	200	221	4610	25M	@ 100	OK FOR	SHEAR
3.75	4.5	300	360	455.746	228.347	456	240	241	3910	25M	@ 125	OK FOR	SHEAR
3.75	4.5	300	450	467.322	239.461	467	299	300	3210	25M	@ 150	OK FOR	SHEAR
3.75	4.5	300	600	484.732	255.600	485	399	400	2500	25M	@ 200	OK FOR	SHEAR
3.75	4.5	350	350	458.709	227.261	459	233	234	4050	25M	@ 100	OK FOR	SHEAR
3.75	6	200	200	352.960	177.258	353	133	178	5450	25M	@ 100	10M	300
3.75	6	200	240	357.602	181.575	358	160	183	4610	25M	@ 100	10M	750
3.75	6	200	300	362.016	185.601	362	200	201	3730	25M	@ 125	OK FOR	SHEAR
3.75	6	200	400	370.280	192.970	370	266	267	2860	25M	@ 150	OK FOR	SHEAR
3.75	6	225	225	359.079	181.158	359	150	182	4930	25M	@ 100	10M	500
3.75	6	225	270	366.915	188.319	367	180	190	4200	25M	@ 100	OK FOR	SHEAR
3.75	6	225	338	377.754	197.911	378	225	226	3460	25M	@ 150	OK FOR	SHEAR
3.75	6	225	450	393.765	211.611	394	299	300	2710	25M	@ 150	OK FOR	SHEAR
3.75	6	250	250	365.178	185.024	365	166	186	4510	25M	@ 100	10M	875
3.75	6	250	300	373.529	192.577	374	200	201	3850	25M	@ 125	OK FOR	SHEAR
3.75	6	250	375	385.041	202.669	385	250	251	3170	25M	@ 150	OK FOR	SHEAR
3.75	6	250	500	402.325	217.340	402	333	334	2490	25M	@ 200	OK FOR	SHEAR
3.75	6	300	300	377.326	192.664	377	200	201	3890	25M	@ 125	OK FOR	SHEAR
3.75	6	300	360	386.695	200.987	387	240	241	3320	25M	@ 150	OK FOR	SHEAR
3.75	6	300	450	399.684	212.194	400	299	300	2750	25M	@ 150	OK FOR	SHEAR
3.75	6	300	600	419.304	228.627	419	399	400	2160	25M	@ 200	OK FOR	SHEAR
3.75	6	350	350	389.433	200.225	389	233	234	3440	25M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3.75	8	200	200	303.425	161.960	303	133	163	4690	25M	@ 100	10M	475
3.75	8	200	240	308.716	166.485	309	160	168	3980	25M	@ 125	OK FOR	SHEAR
3.75	8	200	300	313.770	170.715	314	200	201	3230	25M	@ 150	OK FOR	SHEAR
3.75	8	200	400	323.289	178.481	323	266	267	2500	25M	@ 200	OK FOR	SHEAR
3.75	8	225	225	310.098	166.133	310	150	167	4260	25M	@ 100	10M	950
3.75	8	225	270	319.064	173.637	319	180	181	3650	25M	@ 125	OK FOR	SHEAR
3.75	8	225	338	331.570	183.733	332	225	226	3030	25M	@ 150	OK FOR	SHEAR
3.75	8	225	450	350.229	198.251	350	299	300	2410	25M	@ 200	OK FOR	SHEAR
3.75	8	250	250	316.736	170.241	317	166	171	3920	25M	@ 125	OK FOR	SHEAR
3.75	8	250	300	326.314	178.149	326	200	201	3360	25M	@ 150	OK FOR	SHEAR
3.75	8	250	375	339.622	188.768	340	250	251	2800	25M	@ 150	OK FOR	SHEAR
3.75	8	250	500	359.776	204.303	360	333	334	2230	25M	@ 200	OK FOR	SHEAR
3.75	8	300	300	329.942	178.314	330	200	201	3400	25M	@ 150	OK FOR	SHEAR
3.75	8	300	360	340.727	187.019	341	240	241	2930	25M	@ 150	OK FOR	SHEAR
3.75	8	300	450	355.772	198.795	356	299	300	2450	25M	@ 200	OK FOR	SHEAR
3.75	8	300	600	378.595	216.146	379	399	400	1950	25M	@ 250	OK FOR	SHEAR
3.75	8	350	350	343.088	186.262	343	233	234	3030	25M	@ 150	OK FOR	SHEAR
3.75	10	200	200	276.306	154.930	276	133	156	4270	25M	@ 100	10M	625
3.75	10	200	240	282.224	159.658	282	160	161	3640	25M	@ 125	OK FOR	SHEAR
3.75	10	200	300	287.898	164.084	288	200	201	2970	25M	@ 150	OK FOR	SHEAR
3.75	10	200	400	298.639	172.225	299	266	267	2310	25M	@ 200	OK FOR	SHEAR
3.75	10	225	225	283.509	159.315	284	150	161	3900	25M	@ 125	OK FOR	SHEAR
3.75	10	225	270	293.579	167.154	294	180	181	3360	25M	@ 150	OK FOR	SHEAR
3.75	10	225	338	307.716	177.732	308	225	226	2820	25M	@ 150	OK FOR	SHEAR
3.75	10	225	450	328.928	192.980	329	299	300	2260	25M	@ 200	OK FOR	SHEAR
3.75	10	250	250	290.674	163.616	291	166	167	3590	25M	@ 125	OK FOR	SHEAR
3.75	10	250	300	301.458	171.877	301	200	201	3110	25M	@ 150	OK FOR	SHEAR
3.75	10	250	375	316.529	182.998	317	250	251	2610	25M	@ 150	OK FOR	SHEAR
3.75	10	250	500	339.415	199.291	339	333	334	2100	25M	@ 200	OK FOR	SHEAR
3.75	10	300	300	304.928	172.043	305	200	201	3140	25M	@ 150	OK FOR	SHEAR
3.75	10	300	360	317.104	181.128	317	240	241	2720	25M	@ 150	OK FOR	SHEAR
3.75	10	300	450	334.131	193.436	334	299	300	2300	25M	@ 200	OK FOR	SHEAR
3.75	10	300	600	359.871	211.545	360	399	400	1860	25M	@ 250	OK FOR	SHEAR
3.75	10	350	350	319.071	180.296	319	233	234	2820	25M	@ 150	OK FOR	SHEAR
3.75	12	200	200	259.780	151.055	260	133	152	4020	25M	@ 100	10M	750
3.75	12	200	240	266.283	155.948	266	160	161	3430	25M	@ 150	OK FOR	SHEAR
3.75	12	200	300	272.537	160.532	273	200	201	2810	25M	@ 150	OK FOR	SHEAR
3.75	12	200	400	284.415	168.976	284	266	267	2200	25M	@ 200	OK FOR	SHEAR
3.75	12	225	225	267.502	155.614	268	150	157	3680	25M	@ 125	OK FOR	SHEAR
3.75	12	225	270	278.610	163.731	279	180	181	3190	25M	@ 150	OK FOR	SHEAR
3.75	12	225	338	294.259	174.699	294	225	226	2690	25M	@ 150	OK FOR	SHEAR
3.75	12	225	450	317.706	190.491	318	299	300	2180	25M	@ 200	OK FOR	SHEAR
3.75	12	250	250	275.189	160.081	275	166	167	3400	25M	@ 150	OK FOR	SHEAR
3.75	12	250	300	287.106	168.633	287	200	201	2960	25M	@ 150	OK FOR	SHEAR
3.75	12	250	375	303.782	180.154	304	250	251	2510	25M	@ 150	OK FOR	SHEAR
3.75	12	250	500	328.974	196.985	329	333	334	2040	25M	@ 200	OK FOR	SHEAR
3.75	12	300	300	290.457	168.806	290	200	201	2990	25M	@ 150	OK FOR	SHEAR
3.75	12	300	360	303.903	178.197	304	240	241	2610	25M	@ 150	OK FOR	SHEAR
3.75	12	300	450	322.641	190.900	323	299	300	2220	25M	@ 200	OK FOR	SHEAR
3.75	12	300	600	350.646	209.489	351	399	400	1810	25M	@ 250	OK FOR	SHEAR
3.75	12	350	350	305.498	177.296	305	233	234	2700	25M	@ 150	OK FOR	SHEAR

D4. PL-1 Barrier

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1	3	200	200	52.506	180.044	53	133	181	820	15M	@ 200	10M	300
1	3	200	240	53.698	182.931	54	160	184	700	15M	@ 250	10M	700
1	3	200	300	54.802	185.545	55	200	201	570	15M	@ 325	OK FOR	SHEAR
1	3	200	400	56.788	190.130	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	3	225	225	53.333	182.205	53	150	184	740	15M	@ 250	10M	475
1	3	225	270	55.279	186.829	55	180	188	640	15M	@ 250	OK FOR	SHEAR
1	3	225	338	57.816	192.639	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	3	225	450	61.217	200.163	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	3	250	250	54.166	184.371	54	166	185	670	15M	@ 250	10M	925
1	3	250	300	56.183	189.104	56	200	201	580	15M	@ 325	OK FOR	SHEAR
1	3	250	375	58.788	194.997	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	3	250	500	62.298	202.694	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	3	300	300	55.791	188.542	56	200	201	580	15M	@ 325	OK FOR	SHEAR
1	3	300	360	57.920	193.407	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	3	300	450	60.648	199.443	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	3	300	600	64.281	207.285	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	3	350	350	57.316	192.349	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	4.5	200	200	48.717	176.517	49	133	177	760	15M	@ 250	10M	325
1	4.5	200	240	50.212	179.804	50	160	181	650	15M	@ 250	10M	800
1	4.5	200	300	51.593	182.763	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	4.5	200	400	54.061	187.903	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	4.5	225	225	49.791	179.145	50	150	180	690	15M	@ 250	10M	525
1	4.5	225	270	52.210	184.319	52	180	186	600	15M	@ 325	OK FOR	SHEAR
1	4.5	225	338	55.329	190.733	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	4.5	225	450	59.418	198.881	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	4.5	250	250	50.833	181.663	51	166	182	630	15M	@ 250	OK FOR	SHEAR
1	4.5	250	300	53.320	186.885	53	200	201	550	15M	@ 325	OK FOR	SHEAR
1	4.5	250	375	56.489	193.309	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	4.5	250	500	60.661	201.554	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	4.5	300	300	52.791	186.285	53	200	201	550	15M	@ 325	OK FOR	SHEAR
1	4.5	300	360	55.382	191.556	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	4.5	300	450	58.652	198.033	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	4.5	300	600	62.899	206.338	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	4.5	350	350	54.574	190.355	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	6	200	200	47.369	175.593	47	133	177	740	15M	@ 250	10M	325
1	6	200	240	49.017	178.999	49	160	180	640	15M	@ 250	10M	850
1	6	200	300	50.530	182.052	51	200	201	520	15M	@ 325	OK FOR	SHEAR
1	6	200	400	53.209	187.328	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	6	225	225	48.546	178.316	49	150	180	670	15M	@ 250	10M	525
1	6	225	270	51.191	183.637	51	180	185	590	15M	@ 325	OK FOR	SHEAR
1	6	225	338	54.560	190.196	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	6	225	450	58.902	198.479	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	6	250	250	49.676	180.890	50	166	182	620	15M	@ 250	OK FOR	SHEAR
1	6	250	300	52.383	186.243	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	6	250	375	55.791	192.802	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	6	250	500	60.206	201.184	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	6	300	300	51.788	185.590	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	6	300	360	54.593	190.988	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	6	300	450	58.087	197.599	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	6	300	600	62.549	206.041	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	6	350	350	53.711	189.740	67	233	234	600	15M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1	8	200	200	46.611	175.106	47	133	176	720	15M	@ 250	10M	325
1	8	200	240	48.355	178.552	48	160	180	630	15M	@ 250	10M	850
1	8	200	300	49.947	181.637	50	200	201	520	15M	@ 325	OK FOR	SHEAR
1	8	200	400	52.746	186.963	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	8	225	225	47.854	177.835	48	150	179	660	15M	@ 250	10M	550
1	8	225	270	50.642	183.221	51	180	185	580	15M	@ 325	OK FOR	SHEAR
1	8	225	338	54.157	189.856	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	8	225	450	58.641	198.233	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	8	250	250	49.051	180.429	49	166	181	610	15M	@ 250	OK FOR	SHEAR
1	8	250	300	51.899	185.856	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	8	250	375	55.447	192.498	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	8	250	500	59.991	200.977	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	8	300	300	51.296	185.200	51	200	201	530	15M	@ 325	OK FOR	SHEAR
1	8	300	360	54.228	190.677	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	8	300	450	57.839	197.370	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	8	300	600	62.403	205.899	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	8	350	350	53.327	189.427	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	10	200	200	46.249	174.821	46	133	176	720	15M	@ 250	10M	325
1	10	200	240	48.044	178.291	48	160	180	620	15M	@ 250	10M	850
1	10	200	300	49.677	181.399	50	200	201	520	15M	@ 325	OK FOR	SHEAR
1	10	200	400	52.538	186.768	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	10	225	225	47.545	177.576	48	150	179	660	15M	@ 250	10M	550
1	10	225	270	50.406	183.009	50	180	184	580	15M	@ 325	OK FOR	SHEAR
1	10	225	338	53.994	189.699	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	10	225	450	58.545	198.138	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	10	250	250	48.792	180.204	49	166	181	610	15M	@ 250	OK FOR	SHEAR
1	10	250	300	51.708	185.678	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	10	250	375	55.318	192.372	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	10	250	500	59.919	200.907	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	10	300	300	51.117	185.038	51	200	201	530	15M	@ 325	OK FOR	SHEAR
1	10	300	360	54.100	190.555	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	10	300	450	57.755	197.289	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	10	300	600	62.359	205.859	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	10	350	350	53.200	189.310	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	12	200	200	46.061	174.653	46	133	176	720	15M	@ 250	10M	325
1	12	200	240	47.888	178.147	48	160	179	620	15M	@ 250	10M	900
1	12	200	300	49.546	181.275	50	200	201	510	15M	@ 325	OK FOR	SHEAR
1	12	200	400	52.445	186.678	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	12	225	225	47.398	177.441	47	150	179	660	15M	@ 250	10M	550
1	12	225	270	50.301	182.907	50	180	184	580	15M	@ 325	OK FOR	SHEAR
1	12	225	338	53.927	189.633	63	225	226	580	15M	@ 325	OK FOR	SHEAR
1	12	225	450	58.512	198.107	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	12	250	250	48.678	180.097	49	166	181	610	15M	@ 250	OK FOR	SHEAR
1	12	250	300	51.627	185.601	52	200	201	540	15M	@ 325	OK FOR	SHEAR
1	12	250	375	55.267	192.323	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	12	250	500	59.896	200.885	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	12	300	300	51.045	184.969	51	200	201	530	15M	@ 325	OK FOR	SHEAR
1	12	300	360	54.050	190.507	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	12	300	450	57.726	197.261	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	12	300	600	62.348	205.849	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	12	350	350	53.152	189.265	67	233	234	600	15M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1.5	3	200	200	108.472	138.037	108	133	139	1680	25M	@ 250	OK FOR	SHEAR
1.5	3	200	240	110.380	141.561	110	160	161	1420	25M	@ 325	OK FOR	SHEAR
1.5	3	200	300	112.185	144.835	112	200	201	1160	15M	@ 150	OK FOR	SHEAR
1.5	3	200	400	115.522	150.766	116	266	267	900	15M	@ 200	OK FOR	SHEAR
1.5	3	225	225	109.896	140.468	110	150	151	1510	25M	@ 250	OK FOR	SHEAR
1.5	3	225	270	113.060	146.239	113	180	181	1300	15M	@ 150	OK FOR	SHEAR
1.5	3	225	338	117.356	153.846	117	225	226	1080	15M	@ 150	OK FOR	SHEAR
1.5	3	225	450	123.427	164.284	123	299	300	850	15M	@ 200	OK FOR	SHEAR
1.5	3	250	250	111.355	142.968	111	166	167	1380	15M	@ 150	OK FOR	SHEAR
1.5	3	250	300	123.911	157.140	124	200	201	1280	15M	@ 150	OK FOR	SHEAR
1.5	3	250	375	119.141	156.835	119	250	251	990	15M	@ 200	OK FOR	SHEAR
1.5	3	250	500	125.512	167.727	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	3	300	300	114.293	147.994	114	200	201	1180	15M	@ 150	OK FOR	SHEAR
1.5	3	300	360	117.883	154.396	118	240	241	1020	15M	@ 150	OK FOR	SHEAR
1.5	3	300	450	122.695	162.744	123	299	300	850	15M	@ 200	OK FOR	SHEAR
1.5	3	300	600	129.495	174.245	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	3	350	350	117.168	152.848	117	233	234	1040	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	200	86.928	127.276	87	133	134	1350	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	240	89.379	131.438	89	160	161	1150	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	300	91.709	135.302	92	200	201	950	15M	@ 200	OK FOR	SHEAR
1.5	4.5	200	400	96.037	142.281	96	266	267	750	15M	@ 250	OK FOR	SHEAR
1.5	4.5	225	225	88.858	130.469	89	150	151	1220	15M	@ 150	OK FOR	SHEAR
1.5	4.5	225	270	92.935	137.231	93	180	181	1070	15M	@ 150	OK FOR	SHEAR
1.5	4.5	225	338	98.492	146.094	98	225	226	900	15M	@ 200	OK FOR	SHEAR
1.5	4.5	225	450	106.324	158.124	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	4.5	250	250	90.783	133.634	91	166	167	1130	15M	@ 150	OK FOR	SHEAR
1.5	4.5	250	300	101.767	147.670	102	200	201	1050	15M	@ 150	OK FOR	SHEAR
1.5	4.5	250	375	100.801	149.654	101	250	251	830	15M	@ 200	OK FOR	SHEAR
1.5	4.5	250	500	108.940	162.045	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	300	94.512	139.669	95	200	201	980	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	360	99.092	146.946	99	240	241	850	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	450	105.206	156.362	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	4.5	300	600	113.741	169.190	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	4.5	350	350	98.005	145.176	98	233	234	870	15M	@ 200	OK FOR	SHEAR
1.5	6	200	200	78.486	123.916	78	133	134	1220	15M	@ 150	OK FOR	SHEAR
1.5	6	200	240	81.306	128.411	81	160	161	1050	15M	@ 150	OK FOR	SHEAR
1.5	6	200	300	83.980	132.567	84	200	201	870	15M	@ 200	OK FOR	SHEAR
1.5	6	200	400	88.921	140.031	89	266	267	690	15M	@ 250	OK FOR	SHEAR
1.5	6	225	225	80.746	127.499	81	150	151	1110	15M	@ 150	OK FOR	SHEAR
1.5	6	225	270	85.407	134.722	85	180	181	980	15M	@ 200	OK FOR	SHEAR
1.5	6	225	338	91.704	144.114	92	225	226	840	15M	@ 200	OK FOR	SHEAR
1.5	6	225	450	100.436	156.714	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	6	250	250	82.946	130.946	83	166	167	1030	15M	@ 150	OK FOR	SHEAR
1.5	6	250	300	93.583	145.076	94	200	201	970	15M	@ 200	OK FOR	SHEAR
1.5	6	250	375	94.269	147.851	94	250	251	780	15M	@ 250	OK FOR	SHEAR
1.5	6	250	500	103.275	160.755	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	6	300	300	87.109	137.332	87	200	201	900	15M	@ 200	OK FOR	SHEAR
1.5	6	300	360	92.271	144.967	92	240	241	800	15M	@ 250	OK FOR	SHEAR
1.5	6	300	450	99.086	154.796	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	6	300	600	108.431	168.084	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	6	350	350	90.944	143.052	91	233	234	810	15M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1.5	8	200	200	73.681	122.311	74	133	134	1140	15M	@ 150	OK FOR	SHEAR
1.5	8	200	240	76.801	126.983	77	160	161	990	15M	@ 200	OK FOR	SHEAR
1.5	8	200	300	79.739	131.286	80	200	201	830	15M	@ 200	OK FOR	SHEAR
1.5	8	200	400	85.114	138.973	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1.5	8	225	225	76.167	126.040	76	150	151	1050	15M	@ 150	OK FOR	SHEAR
1.5	8	225	270	81.279	133.495	81	180	181	930	15M	@ 200	OK FOR	SHEAR
1.5	8	225	338	88.090	143.130	88	225	226	810	15M	@ 200	OK FOR	SHEAR
1.5	8	225	450	97.349	155.973	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	8	250	250	78.560	129.580	79	166	167	980	15M	@ 200	OK FOR	SHEAR
1.5	8	250	300	89.143	143.761	89	200	201	920	15M	@ 200	OK FOR	SHEAR
1.5	8	250	375	90.820	146.929	91	250	251	750	15M	@ 250	OK FOR	SHEAR
1.5	8	250	500	100.323	160.074	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	8	300	300	83.061	136.107	83	200	201	860	15M	@ 200	OK FOR	SHEAR
1.5	8	300	360	88.658	143.951	89	240	241	770	15M	@ 250	OK FOR	SHEAR
1.5	8	300	450	95.932	154.006	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	8	300	600	105.706	167.531	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	8	350	350	87.193	141.962	87	233	234	770	15M	@ 250	OK FOR	SHEAR
1.5	10	200	200	71.522	121.634	72	133	134	1110	15M	@ 150	OK FOR	SHEAR
1.5	10	200	240	74.809	126.364	75	160	161	970	15M	@ 200	OK FOR	SHEAR
1.5	10	200	300	77.885	130.714	78	200	201	810	15M	@ 200	OK FOR	SHEAR
1.5	10	200	400	83.467	138.472	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1.5	10	225	225	74.133	125.383	74	150	151	1020	15M	@ 150	OK FOR	SHEAR
1.5	10	225	270	79.492	132.927	79	180	181	910	15M	@ 200	OK FOR	SHEAR
1.5	10	225	338	86.551	142.660	87	225	226	800	15M	@ 250	OK FOR	SHEAR
1.5	10	225	450	96.029	155.612	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	10	250	250	76.649	128.953	77	166	167	950	15M	@ 200	OK FOR	SHEAR
1.5	10	250	300	87.267	143.158	87	200	201	900	15M	@ 200	OK FOR	SHEAR
1.5	10	250	375	89.380	146.502	89	250	251	740	15M	@ 250	OK FOR	SHEAR
1.5	10	250	500	99.080	159.762	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	10	300	300	81.381	135.568	81	200	201	840	15M	@ 200	OK FOR	SHEAR
1.5	10	300	360	87.192	143.511	87	240	241	750	15M	@ 250	OK FOR	SHEAR
1.5	10	300	450	94.656	153.670	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	10	300	600	104.576	167.303	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	10	350	350	85.697	141.516	86	233	234	760	15M	@ 250	OK FOR	SHEAR
1.5	12	200	200	70.382	121.226	70	133	134	1090	15M	@ 150	OK FOR	SHEAR
1.5	12	200	240	73.766	125.985	74	160	161	950	15M	@ 200	OK FOR	SHEAR
1.5	12	200	300	76.920	130.360	77	200	201	800	15M	@ 250	OK FOR	SHEAR
1.5	12	200	400	82.616	138.163	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1.5	12	225	225	73.090	124.996	73	150	151	1010	15M	@ 150	OK FOR	SHEAR
1.5	12	225	270	78.589	132.594	79	180	181	900	15M	@ 200	OK FOR	SHEAR
1.5	12	225	338	85.779	142.392	86	225	226	790	15M	@ 250	OK FOR	SHEAR
1.5	12	225	450	95.369	155.423	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	12	250	250	75.700	128.601	76	166	167	940	15M	@ 200	OK FOR	SHEAR
1.5	12	250	300	86.349	142.825	86	200	201	890	15M	@ 200	OK FOR	SHEAR
1.5	12	250	375	88.675	146.273	89	250	251	730	15M	@ 250	OK FOR	SHEAR
1.5	12	250	500	98.467	159.610	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	12	300	300	80.587	135.293	81	200	201	830	15M	@ 200	OK FOR	SHEAR
1.5	12	300	360	86.499	143.291	86	240	241	750	15M	@ 250	OK FOR	SHEAR
1.5	12	300	450	94.043	153.507	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	12	300	600	104.024	167.204	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	12	350	350	85.010	141.302	85	233	234	750	15M	@ 250	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	3	200	200	162.139	120.526	162	133	134	2510	25M	@ 150	OK FOR	SHEAR
2	3	200	240	163.959	123.390	164	160	161	2110	25M	@ 200	OK FOR	SHEAR
2	3	200	300	165.711	126.117	166	200	201	1710	25M	@ 250	OK FOR	SHEAR
2	3	200	400	169.028	131.209	169	266	267	1310	15M	@ 150	OK FOR	SHEAR
2	3	225	225	164.069	122.948	164	150	151	2260	25M	@ 200	OK FOR	SHEAR
2	3	225	270	167.142	127.751	167	180	181	1920	25M	@ 250	OK FOR	SHEAR
2	3	225	338	171.461	134.367	171	225	226	1570	25M	@ 250	OK FOR	SHEAR
2	3	225	450	177.852	143.963	178	299	300	1230	15M	@ 150	OK FOR	SHEAR
2	3	250	250	166.036	125.443	166	166	167	2060	25M	@ 200	OK FOR	SHEAR
2	3	250	300	169.302	130.525	169	200	201	1750	25M	@ 250	OK FOR	SHEAR
2	3	250	375	173.860	137.480	174	250	251	1440	25M	@ 325	OK FOR	SHEAR
2	3	250	500	180.682	147.681	181	333	334	1120	15M	@ 150	OK FOR	SHEAR
2	3	300	300	170.021	130.526	170	200	201	1750	25M	@ 250	OK FOR	SHEAR
2	3	300	360	173.654	136.128	174	240	241	1490	25M	@ 325	OK FOR	SHEAR
2	3	300	450	178.712	143.775	179	299	300	1230	15M	@ 150	OK FOR	SHEAR
2	3	300	600	186.246	154.943	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	3	350	350	173.994	135.575	174	233	234	1540	25M	@ 250	OK FOR	SHEAR
2	4.5	200	200	124.760	99.370	125	133	134	1930	25M	@ 250	OK FOR	SHEAR
2	4.5	200	240	127.181	102.601	127	160	161	1640	25M	@ 250	OK FOR	SHEAR
2	4.5	200	300	129.534	105.688	130	200	201	1340	15M	@ 150	OK FOR	SHEAR
2	4.5	200	400	134.039	111.478	134	266	267	1040	15M	@ 150	OK FOR	SHEAR
2	4.5	225	225	127.261	102.388	127	150	151	1750	25M	@ 250	OK FOR	SHEAR
2	4.5	225	270	131.391	107.808	131	180	181	1510	25M	@ 250	OK FOR	SHEAR
2	4.5	225	338	137.267	115.301	137	225	226	1260	15M	@ 150	OK FOR	SHEAR
2	4.5	225	450	146.043	126.188	146	299	300	1010	15M	@ 150	OK FOR	SHEAR
2	4.5	250	250	129.788	105.434	130	166	167	1610	25M	@ 250	OK FOR	SHEAR
2	4.5	250	300	134.189	111.146	134	200	201	1390	15M	@ 150	OK FOR	SHEAR
2	4.5	250	375	140.383	118.969	140	250	251	1160	15M	@ 150	OK FOR	SHEAR
2	4.5	250	500	149.685	130.428	150	333	334	930	15M	@ 200	OK FOR	SHEAR
2	4.5	300	300	134.800	111.425	135	200	201	1390	15M	@ 150	OK FOR	SHEAR
2	4.5	300	360	139.679	117.630	140	240	241	1200	15M	@ 150	OK FOR	SHEAR
2	4.5	300	450	146.485	126.086	146	299	300	1010	15M	@ 150	OK FOR	SHEAR
2	4.5	300	600	156.571	138.387	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	4.5	350	350	139.644	117.115	140	233	234	1240	15M	@ 150	OK FOR	SHEAR
2	6	200	200	108.752	92.770	109	133	134	1680	25M	@ 250	OK FOR	SHEAR
2	6	200	240	111.702	96.330	112	160	161	1440	25M	@ 325	OK FOR	SHEAR
2	6	200	300	114.571	99.721	115	200	201	1180	15M	@ 150	OK FOR	SHEAR
2	6	200	400	120.061	106.055	120	266	267	930	15M	@ 200	OK FOR	SHEAR
2	6	225	225	111.756	96.221	112	150	151	1540	25M	@ 250	OK FOR	SHEAR
2	6	225	270	116.778	102.137	117	180	181	1340	15M	@ 150	OK FOR	SHEAR
2	6	225	338	123.900	110.261	124	225	226	1140	15M	@ 150	OK FOR	SHEAR
2	6	225	450	134.435	121.935	134	299	300	930	15M	@ 200	OK FOR	SHEAR
2	6	250	250	114.733	99.613	115	166	167	1420	25M	@ 325	OK FOR	SHEAR
2	6	250	300	120.061	105.794	120	200	201	1240	15M	@ 150	OK FOR	SHEAR
2	6	250	375	127.520	114.200	128	250	251	1050	15M	@ 150	OK FOR	SHEAR
2	6	250	500	138.585	126.382	139	333	334	860	15M	@ 200	OK FOR	SHEAR
2	6	300	300	120.492	106.074	120	200	201	1240	15M	@ 150	OK FOR	SHEAR
2	6	300	360	126.342	112.693	126	240	241	1090	15M	@ 150	OK FOR	SHEAR
2	6	300	450	134.439	121.660	134	299	300	930	15M	@ 200	OK FOR	SHEAR
2	6	300	600	146.265	134.596	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	6	350	350	125.926	112.037	126	233	234	1120	15M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	8	200	200	98.815	89.407	99	133	134	1530	25M	@ 250	OK FOR	SHEAR
2	8	200	240	102.294	93.209	102	160	161	1320	15M	@ 150	OK FOR	SHEAR
2	8	200	300	105.662	96.814	106	200	201	1090	15M	@ 150	OK FOR	SHEAR
2	8	200	400	112.054	103.506	112	266	267	870	15M	@ 200	OK FOR	SHEAR
2	8	225	225	102.271	93.132	102	150	151	1410	25M	@ 325	OK FOR	SHEAR
2	8	225	270	108.141	99.382	108	180	181	1240	15M	@ 150	OK FOR	SHEAR
2	8	225	338	116.364	107.893	116	225	226	1070	15M	@ 150	OK FOR	SHEAR
2	8	225	450	128.277	119.989	128	299	300	880	15M	@ 200	OK FOR	SHEAR
2	8	250	250	105.632	96.713	106	166	167	1310	15M	@ 150	OK FOR	SHEAR
2	8	250	300	111.820	103.197	112	200	201	1160	15M	@ 150	OK FOR	SHEAR
2	8	250	375	120.367	111.952	120	250	251	1000	15M	@ 200	OK FOR	SHEAR
2	8	250	500	132.779	124.522	137	333	334	850	15M	@ 200	OK FOR	SHEAR
2	8	300	300	112.028	103.408	112	200	201	1160	15M	@ 150	OK FOR	SHEAR
2	8	300	360	118.754	110.301	119	240	241	1020	15M	@ 150	OK FOR	SHEAR
2	8	300	450	127.930	119.588	128	299	300	880	15M	@ 200	OK FOR	SHEAR
2	8	300	600	141.033	132.885	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	8	350	350	117.986	109.526	118	233	234	1050	15M	@ 150	OK FOR	SHEAR
2	10	200	200	94.086	88.038	94	133	134	1460	25M	@ 325	OK FOR	SHEAR
2	10	200	240	97.921	91.950	98	160	161	1260	15M	@ 150	OK FOR	SHEAR
2	10	200	300	101.608	95.648	102	200	201	1050	15M	@ 150	OK FOR	SHEAR
2	10	200	400	108.539	102.481	109	266	267	840	15M	@ 200	OK FOR	SHEAR
2	10	225	225	97.814	91.846	98	150	151	1350	15M	@ 150	OK FOR	SHEAR
2	10	225	270	104.233	98.246	104	180	181	1200	15M	@ 150	OK FOR	SHEAR
2	10	225	338	113.104	106.917	113	225	226	1040	15M	@ 150	OK FOR	SHEAR
2	10	225	450	125.714	119.172	126	299	300	870	15M	@ 200	OK FOR	SHEAR
2	10	250	250	101.417	95.485	101	166	167	1260	15M	@ 150	OK FOR	SHEAR
2	10	250	300	108.153	102.111	108	200	201	1120	15M	@ 150	OK FOR	SHEAR
2	10	250	375	117.329	111.022	117	250	251	970	15M	@ 200	OK FOR	SHEAR
2	10	250	500	130.402	123.751	137	333	334	850	15M	@ 200	OK FOR	SHEAR
2	10	300	300	108.243	102.281	108	200	201	1120	15M	@ 150	OK FOR	SHEAR
2	10	300	360	115.511	109.316	116	240	241	1000	15M	@ 200	OK FOR	SHEAR
2	10	300	450	125.276	118.757	125	299	300	860	15M	@ 200	OK FOR	SHEAR
2	10	300	600	138.959	132.209	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	10	350	350	114.566	108.497	115	233	234	1020	15M	@ 150	OK FOR	SHEAR
2	12	200	200	91.568	87.331	92	133	134	1420	25M	@ 325	OK FOR	SHEAR
2	12	200	240	95.635	91.292	96	160	161	1240	15M	@ 150	OK FOR	SHEAR
2	12	200	300	99.521	95.029	100	200	201	1030	15M	@ 150	OK FOR	SHEAR
2	12	200	400	106.763	101.920	107	266	267	830	15M	@ 200	OK FOR	SHEAR
2	12	225	225	95.478	91.162	95	150	151	1320	15M	@ 150	OK FOR	SHEAR
2	12	225	270	102.248	97.634	102	180	181	1170	15M	@ 150	OK FOR	SHEAR
2	12	225	338	111.491	106.382	111	225	226	1020	15M	@ 150	OK FOR	SHEAR
2	12	225	450	124.451	118.717	124	299	300	860	15M	@ 200	OK FOR	SHEAR
2	12	250	250	99.256	94.829	99	166	167	1230	15M	@ 150	OK FOR	SHEAR
2	12	250	300	106.335	101.531	106	200	201	1100	15M	@ 150	OK FOR	SHEAR
2	12	250	375	115.859	110.521	116	250	251	960	15M	@ 200	OK FOR	SHEAR
2	12	250	500	129.252	123.334	137	333	334	850	15M	@ 200	OK FOR	SHEAR
2	12	300	300	106.394	101.696	106	200	201	1100	15M	@ 150	OK FOR	SHEAR
2	12	300	360	113.976	108.808	114	240	241	980	15M	@ 200	OK FOR	SHEAR
2	12	300	450	124.038	118.326	124	299	300	860	15M	@ 200	OK FOR	SHEAR
2	12	300	600	137.978	131.858	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	12	350	350	112.961	107.983	113	233	234	1000	15M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2.5	3	200	200	236.908	220.118	237	133	221	3660	25M	@ 125	10M	150
2.5	3	200	240	238.819	222.753	239	160	224	3080	25M	@ 150	10M	250
2.5	3	200	300	240.657	225.259	241	200	227	2480	25M	@ 200	10M	775
2.5	3	200	400	244.147	229.952	244	266	267	1890	25M	@ 250	OK FOR	SHEAR
2.5	3	225	225	239.521	222.630	240	150	224	3290	25M	@ 150	10M	200
2.5	3	225	270	242.771	227.076	243	180	228	2780	25M	@ 150	10M	400
2.5	3	225	338	247.354	233.223	247	225	234	2260	25M	@ 200	OK FOR	SHEAR
2.5	3	225	450	254.241	242.273	254	299	300	1750	25M	@ 250	OK FOR	SHEAR
2.5	3	250	250	242.165	225.198	242	166	226	3000	25M	@ 150	10M	300
2.5	3	250	300	245.643	229.935	246	200	231	2530	25M	@ 150	10M	675
2.5	3	250	375	250.524	236.456	251	250	251	2070	25M	@ 200	OK FOR	SHEAR
2.5	3	250	500	257.961	246.188	258	333	334	1600	25M	@ 250	OK FOR	SHEAR
2.5	3	300	300	247.502	230.423	248	200	232	2550	25M	@ 150	10M	675
2.5	3	300	360	251.428	235.727	251	240	241	2160	25M	@ 200	OK FOR	SHEAR
2.5	3	300	450	256.947	243.038	257	299	300	1770	25M	@ 250	OK FOR	SHEAR
2.5	3	300	600	265.365	253.957	265	399	400	1370	15M	@ 150	OK FOR	SHEAR
2.5	3	350	350	252.845	235.661	253	233	237	2240	25M	@ 200	OK FOR	SHEAR
2.5	4.5	200	200	179.683	176.980	180	133	178	2780	25M	@ 150	10M	300
2.5	4.5	200	240	181.990	179.526	182	160	181	2350	25M	@ 200	10M	800
2.5	4.5	200	300	184.242	181.977	184	200	201	1900	25M	@ 250	OK FOR	SHEAR
2.5	4.5	200	400	188.593	186.639	189	266	267	1460	25M	@ 325	OK FOR	SHEAR
2.5	4.5	225	225	182.764	179.806	183	150	181	2510	25M	@ 150	10M	500
2.5	4.5	225	270	186.748	184.155	187	180	186	2140	25M	@ 200	OK FOR	SHEAR
2.5	4.5	225	338	192.488	190.283	192	225	226	1760	25M	@ 250	OK FOR	SHEAR
2.5	4.5	225	450	201.284	199.492	201	299	300	1390	15M	@ 150	OK FOR	SHEAR
2.5	4.5	250	250	185.881	182.673	186	166	183	2300	25M	@ 200	OK FOR	SHEAR
2.5	4.5	250	300	190.175	187.328	190	200	201	1960	25M	@ 250	OK FOR	SHEAR
2.5	4.5	250	375	196.306	193.838	196	250	251	1620	25M	@ 250	OK FOR	SHEAR
2.5	4.5	250	500	205.774	203.716	206	333	334	1280	15M	@ 150	OK FOR	SHEAR
2.5	4.5	300	300	192.128	188.404	192	200	201	1980	25M	@ 250	OK FOR	SHEAR
2.5	4.5	300	360	196.997	193.619	197	240	241	1690	25M	@ 250	OK FOR	SHEAR
2.5	4.5	300	450	203.909	200.889	204	299	300	1400	15M	@ 150	OK FOR	SHEAR
2.5	4.5	300	600	214.486	211.865	214	399	400	1110	15M	@ 150	OK FOR	SHEAR
2.5	4.5	350	350	198.287	194.004	198	233	234	1750	25M	@ 250	OK FOR	SHEAR
2.5	6	200	200	154.037	164.846	154	133	166	2380	25M	@ 200	10M	425
2.5	6	200	240	156.796	167.586	157	160	169	2020	25M	@ 200	OK FOR	SHEAR
2.5	6	200	300	159.503	170.224	160	200	201	1650	25M	@ 250	OK FOR	SHEAR
2.5	6	200	400	164.757	175.242	165	266	267	1280	15M	@ 150	OK FOR	SHEAR
2.5	6	225	225	157.598	167.980	158	150	169	2170	25M	@ 200	10M	850
2.5	6	225	270	162.378	172.639	162	180	181	1860	25M	@ 250	OK FOR	SHEAR
2.5	6	225	338	169.296	179.194	169	225	226	1550	25M	@ 250	OK FOR	SHEAR
2.5	6	225	450	179.892	189.000	180	299	300	1240	15M	@ 150	OK FOR	SHEAR
2.5	6	250	250	161.165	171.106	161	166	172	2000	25M	@ 250	OK FOR	SHEAR
2.5	6	250	300	166.308	176.063	166	200	201	1720	25M	@ 250	OK FOR	SHEAR
2.5	6	250	375	173.666	182.976	174	250	251	1430	25M	@ 325	OK FOR	SHEAR
2.5	6	250	500	184.985	193.410	185	333	334	1150	15M	@ 150	OK FOR	SHEAR
2.5	6	300	300	168.190	177.206	168	200	201	1740	25M	@ 250	OK FOR	SHEAR
2.5	6	300	360	173.982	182.689	174	240	241	1500	25M	@ 325	OK FOR	SHEAR
2.5	6	300	450	182.187	190.309	182	299	300	1250	15M	@ 150	OK FOR	SHEAR
2.5	6	300	600	194.642	201.760	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	6	350	350	174.982	183.020	175	233	234	1550	25M	@ 250	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2.5	8	200	200	137.476	158.835	137	133	160	2130	25M	@ 200	10M	525
2.5	8	200	240	140.770	161.778	141	160	163	1820	25M	@ 250	OK FOR	SHEAR
2.5	8	200	300	143.999	164.604	144	200	201	1490	25M	@ 325	OK FOR	SHEAR
2.5	8	200	400	150.247	169.953	150	266	267	1160	15M	@ 150	OK FOR	SHEAR
2.5	8	225	225	141.544	162.226	142	150	164	1950	25M	@ 250	OK FOR	SHEAR
2.5	8	225	270	147.219	167.182	147	180	181	1690	25M	@ 250	OK FOR	SHEAR
2.5	8	225	338	155.382	174.108	155	225	226	1420	25M	@ 325	OK FOR	SHEAR
2.5	8	225	450	167.709	184.364	168	299	300	1160	15M	@ 150	OK FOR	SHEAR
2.5	8	250	250	145.552	165.540	146	166	167	1800	25M	@ 250	OK FOR	SHEAR
2.5	8	250	300	151.623	170.772	152	200	201	1570	25M	@ 250	OK FOR	SHEAR
2.5	8	250	375	160.238	178.023	160	250	251	1320	15M	@ 150	OK FOR	SHEAR
2.5	8	250	500	173.284	188.866	173	333	334	1070	15M	@ 150	OK FOR	SHEAR
2.5	8	300	300	153.308	171.873	153	200	201	1580	25M	@ 250	OK FOR	SHEAR
2.5	8	300	360	160.069	177.596	160	240	241	1380	15M	@ 150	OK FOR	SHEAR
2.5	8	300	450	169.555	185.515	170	299	300	1170	15M	@ 150	OK FOR	SHEAR
2.5	8	300	600	183.703	197.333	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	8	350	350	160.683	177.812	161	233	234	1420	25M	@ 325	OK FOR	SHEAR
2.5	10	200	200	129.220	156.363	129	133	157	2000	25M	@ 250	10M	575
2.5	10	200	240	132.928	159.422	133	160	161	1720	25M	@ 250	OK FOR	SHEAR
2.5	10	200	300	136.547	162.350	137	200	201	1410	25M	@ 325	OK FOR	SHEAR
2.5	10	200	400	143.497	167.868	143	266	267	1110	15M	@ 150	OK FOR	SHEAR
2.5	10	225	225	133.634	159.870	134	150	161	1840	25M	@ 250	OK FOR	SHEAR
2.5	10	225	270	139.974	164.986	140	180	181	1610	25M	@ 250	OK FOR	SHEAR
2.5	10	225	338	148.993	172.096	149	225	226	1370	15M	@ 150	OK FOR	SHEAR
2.5	10	225	450	162.370	182.549	162	299	300	1120	15M	@ 150	OK FOR	SHEAR
2.5	10	250	250	137.942	163.262	138	166	167	1710	25M	@ 250	OK FOR	SHEAR
2.5	10	250	300	144.688	168.641	145	200	201	1490	25M	@ 325	OK FOR	SHEAR
2.5	10	250	375	154.150	176.062	154	250	251	1270	15M	@ 150	OK FOR	SHEAR
2.5	10	250	500	168.216	187.092	168	333	334	1040	15M	@ 150	OK FOR	SHEAR
2.5	10	300	300	146.208	169.696	146	200	201	1510	25M	@ 250	OK FOR	SHEAR
2.5	10	300	360	153.657	175.559	154	240	241	1320	15M	@ 150	OK FOR	SHEAR
2.5	10	300	450	163.976	183.640	164	299	300	1130	15M	@ 150	OK FOR	SHEAR
2.5	10	300	600	179.075	195.637	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	10	350	350	154.003	175.709	154	233	234	1360	15M	@ 150	OK FOR	SHEAR
2.5	12	200	200	124.670	155.107	125	133	156	1930	25M	@ 250	10M	625
2.5	12	200	240	128.685	158.228	129	160	161	1660	25M	@ 250	OK FOR	SHEAR
2.5	12	200	300	132.579	161.209	133	200	201	1370	15M	@ 150	OK FOR	SHEAR
2.5	12	200	400	139.994	166.806	140	266	267	1090	15M	@ 150	OK FOR	SHEAR
2.5	12	225	225	129.325	158.658	129	150	160	1780	25M	@ 250	OK FOR	SHEAR
2.5	12	225	270	136.140	163.859	136	180	181	1560	25M	@ 250	OK FOR	SHEAR
2.5	12	225	338	145.720	171.063	146	225	226	1340	15M	@ 150	OK FOR	SHEAR
2.5	12	225	450	159.693	181.606	160	299	300	1100	15M	@ 150	OK FOR	SHEAR
2.5	12	250	250	133.851	162.083	134	166	167	1660	25M	@ 250	OK FOR	SHEAR
2.5	12	250	300	141.072	167.545	141	200	201	1460	25M	@ 325	OK FOR	SHEAR
2.5	12	250	375	151.075	175.057	151	250	251	1250	15M	@ 150	OK FOR	SHEAR
2.5	12	250	500	165.703	186.177	166	333	334	1030	15M	@ 150	OK FOR	SHEAR
2.5	12	300	300	142.500	168.577	142	200	201	1470	25M	@ 325	OK FOR	SHEAR
2.5	12	300	360	150.413	174.524	150	240	241	1290	15M	@ 150	OK FOR	SHEAR
2.5	12	300	450	161.232	182.694	161	299	300	1110	15M	@ 150	OK FOR	SHEAR
2.5	12	300	600	176.817	194.779	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	12	350	350	150.604	174.647	151	233	234	1330	15M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3	3	200	200	349.735	281.030	350	133	282	5400	25M	@ 100	10M	75
3	3	200	240	352.412	284.755	352	160	286	4540	25M	@ 100	10M	125
3	3	200	300	354.929	288.182	355	200	290	3660	25M	@ 125	10M	225
3	3	200	400	359.589	294.355	360	266	295	2780	25M	@ 150	10M	975
3	3	225	225	353.281	283.854	353	150	285	4850	25M	@ 100	10M	100
3	3	225	270	357.765	289.984	358	180	291	4100	25M	@ 100	10M	175
3	3	225	338	363.871	298.014	364	225	299	3330	25M	@ 150	10M	325
3	3	225	450	372.774	309.223	373	299	310	2560	25M	@ 150	OK FOR	SHEAR
3	3	250	250	356.850	286.724	357	166	287	4410	25M	@ 100	10M	125
3	3	250	300	361.616	293.172	362	200	295	3730	25M	@ 125	10M	225
3	3	250	375	368.092	301.607	368	250	303	3040	25M	@ 150	10M	500
3	3	250	500	377.704	313.598	378	333	334	2340	25M	@ 200	OK FOR	SHEAR
3	3	300	300	364.030	292.543	364	200	294	3750	25M	@ 125	10M	225
3	3	300	360	369.355	299.618	369	240	301	3170	25M	@ 150	10M	425
3	3	300	450	376.645	308.949	377	299	310	2590	25M	@ 150	OK FOR	SHEAR
3	3	300	600	387.553	322.332	388	399	400	2000	25M	@ 250	OK FOR	SHEAR
3	3	350	350	371.221	298.385	371	233	300	3280	25M	@ 150	10M	375
3	4.5	200	200	266.600	219.815	267	133	221	4120	25M	@ 100	10M	150
3	4.5	200	240	269.628	223.129	270	160	224	3470	25M	@ 150	10M	250
3	4.5	200	300	272.507	226.213	273	200	228	2810	25M	@ 150	10M	750
3	4.5	200	400	277.909	231.862	278	266	267	2150	25M	@ 200	OK FOR	SHEAR
3	4.5	225	225	270.544	222.858	271	150	224	3720	25M	@ 125	10M	200
3	4.5	225	270	275.676	228.388	276	180	230	3160	25M	@ 150	10M	375
3	4.5	225	338	282.787	235.789	283	225	237	2590	25M	@ 150	OK FOR	SHEAR
3	4.5	225	450	293.328	246.408	293	299	300	2020	25M	@ 200	OK FOR	SHEAR
3	4.5	250	250	274.528	225.946	275	166	227	3400	25M	@ 150	10M	275
3	4.5	250	300	280.016	231.809	280	200	233	2890	25M	@ 150	10M	650
3	4.5	250	375	287.584	239.631	288	250	251	2370	25M	@ 200	OK FOR	SHEAR
3	4.5	250	500	298.954	251.022	299	333	334	1850	25M	@ 250	OK FOR	SHEAR
3	4.5	300	300	282.530	232.157	283	200	234	2910	25M	@ 150	10M	625
3	4.5	300	360	288.698	238.648	289	240	241	2480	25M	@ 200	OK FOR	SHEAR
3	4.5	300	450	297.220	247.345	297	299	300	2040	25M	@ 200	OK FOR	SHEAR
3	4.5	300	600	310.025	260.047	310	399	400	1600	25M	@ 250	OK FOR	SHEAR
3	4.5	350	350	290.485	238.298	290	233	239	2570	25M	@ 150	OK FOR	SHEAR
3	6	200	200	228.570	202.443	229	133	203	3530	25M	@ 125	10M	200
3	6	200	240	232.025	205.874	232	160	207	2990	25M	@ 150	10M	350
3	6	200	300	235.333	209.080	235	200	210	2430	25M	@ 200	OK FOR	SHEAR
3	6	200	400	241.595	214.979	242	266	267	1870	25M	@ 250	OK FOR	SHEAR
3	6	225	225	232.984	205.768	233	150	207	3200	25M	@ 150	10M	275
3	6	225	270	238.877	211.500	239	180	213	2740	25M	@ 150	10M	575
3	6	225	338	247.122	219.208	247	225	226	2260	25M	@ 200	OK FOR	SHEAR
3	6	225	450	259.442	230.313	259	299	300	1780	25M	@ 250	OK FOR	SHEAR
3	6	250	250	237.420	209.106	237	166	210	2940	25M	@ 150	10M	400
3	6	250	300	243.730	215.170	244	200	217	2510	25M	@ 150	OK FOR	SHEAR
3	6	250	375	252.496	223.286	252	250	251	2080	25M	@ 200	OK FOR	SHEAR
3	6	250	500	265.720	235.132	266	333	334	1650	25M	@ 250	OK FOR	SHEAR
3	6	300	300	246.237	215.697	246	200	217	2540	25M	@ 150	OK FOR	SHEAR
3	6	300	360	253.312	222.363	253	240	241	2180	25M	@ 200	OK FOR	SHEAR
3	6	300	450	263.121	231.309	263	299	300	1810	25M	@ 250	OK FOR	SHEAR
3	6	300	600	277.837	244.382	278	399	400	1430	25M	@ 325	OK FOR	SHEAR
3	6	350	350	254.875	222.080	255	233	234	2250	25M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3	8	200	200	203.358	193.877	203	133	195	3140	25M	@ 150	10M	225
3	8	200	240	207.371	197.516	207	160	199	2670	25M	@ 150	10M	425
3	8	200	300	211.230	200.916	211	200	202	2180	25M	@ 200	OK FOR	SHEAR
3	8	200	400	218.560	207.173	219	266	267	1690	25M	@ 250	OK FOR	SHEAR
3	8	225	225	208.330	197.487	208	150	199	2860	25M	@ 150	10M	325
3	8	225	270	215.176	203.532	215	180	205	2470	25M	@ 200	10M	775
3	8	225	338	224.784	211.652	225	225	226	2060	25M	@ 200	OK FOR	SHEAR
3	8	225	450	239.097	223.300	239	299	300	1650	25M	@ 250	OK FOR	SHEAR
3	8	250	250	213.265	201.045	213	166	202	2640	25M	@ 150	10M	500
3	8	250	300	220.574	207.404	221	200	209	2270	25M	@ 200	OK FOR	SHEAR
3	8	250	375	230.736	215.901	231	250	251	1900	25M	@ 250	OK FOR	SHEAR
3	8	250	500	245.980	228.247	246	333	334	1520	25M	@ 250	OK FOR	SHEAR
3	8	300	300	222.920	207.925	223	200	209	2300	25M	@ 200	OK FOR	SHEAR
3	8	300	360	231.054	214.846	231	240	241	1990	25M	@ 250	OK FOR	SHEAR
3	8	300	450	242.306	224.123	242	299	300	1670	25M	@ 250	OK FOR	SHEAR
3	8	300	600	259.037	237.635	259	399	400	1340	15M	@ 150	OK FOR	SHEAR
3	8	350	350	232.225	214.459	232	233	234	2050	25M	@ 200	OK FOR	SHEAR
3	10	200	200	190.392	190.290	190	133	191	2940	25M	@ 150	10M	225
3	10	200	240	194.879	194.069	195	160	195	2510	25M	@ 150	10M	475
3	10	200	300	199.193	197.598	199	200	201	2050	25M	@ 200	OK FOR	SHEAR
3	10	200	400	207.370	204.074	207	266	267	1610	25M	@ 250	OK FOR	SHEAR
3	10	225	225	195.786	194.058	196	150	195	2690	25M	@ 150	10M	350
3	10	225	270	203.408	200.303	203	180	202	2330	25M	@ 200	10M	875
3	10	225	338	214.067	208.667	214	225	226	1960	25M	@ 250	OK FOR	SHEAR
3	10	225	450	229.782	220.601	230	299	300	1580	25M	@ 250	OK FOR	SHEAR
3	10	250	250	201.085	197.727	201	166	198	2490	25M	@ 200	10M	550
3	10	250	300	209.191	204.269	209	200	206	2160	25M	@ 200	OK FOR	SHEAR
3	10	250	375	220.407	212.990	220	250	251	1820	25M	@ 250	OK FOR	SHEAR
3	10	250	500	237.037	225.603	237	333	334	1470	25M	@ 325	OK FOR	SHEAR
3	10	300	300	211.343	204.741	211	200	206	2180	25M	@ 200	OK FOR	SHEAR
3	10	300	360	220.304	211.829	220	240	241	1890	25M	@ 250	OK FOR	SHEAR
3	10	300	450	232.617	221.311	233	299	300	1600	25M	@ 250	OK FOR	SHEAR
3	10	300	600	250.686	235.075	251	399	400	1290	15M	@ 150	OK FOR	SHEAR
3	10	350	350	221.131	211.351	221	233	234	1960	25M	@ 250	OK FOR	SHEAR
3	12	200	200	183.020	188.475	183	133	189	2830	25M	@ 150	10M	250
3	12	200	240	187.884	192.339	188	160	194	2420	25M	@ 200	10M	500
3	12	200	300	192.550	195.941	193	200	201	1990	25M	@ 250	OK FOR	SHEAR
3	12	200	400	201.352	202.539	201	266	267	1560	25M	@ 250	OK FOR	SHEAR
3	12	225	225	188.722	192.319	189	150	194	2590	25M	@ 150	10M	350
3	12	225	270	196.947	198.681	197	180	200	2260	25M	@ 200	10M	950
3	12	225	338	208.369	207.182	208	225	226	1910	25M	@ 250	OK FOR	SHEAR
3	12	225	450	224.993	219.262	225	299	300	1550	25M	@ 250	OK FOR	SHEAR
3	12	250	250	194.292	196.041	194	166	197	2400	25M	@ 200	10M	575
3	12	250	300	203.009	202.694	203	200	204	2090	25M	@ 200	OK FOR	SHEAR
3	12	250	375	214.976	211.544	215	250	251	1770	25M	@ 250	OK FOR	SHEAR
3	12	250	500	232.485	224.297	232	333	334	1440	25M	@ 325	OK FOR	SHEAR
3	12	300	300	205.013	203.129	205	200	205	2110	25M	@ 200	OK FOR	SHEAR
3	12	300	360	214.591	210.325	215	240	241	1850	25M	@ 250	OK FOR	SHEAR
3	12	300	450	227.631	219.933	228	299	300	1570	25M	@ 250	OK FOR	SHEAR
3	12	300	600	246.508	233.834	247	399	400	1270	15M	@ 150	OK FOR	SHEAR
3	12	350	350	215.172	209.797	215	233	234	1900	25M	@ 250	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3.75	3	200	200	532.072	285.976	532	133	287	8220	25M	@ 50	10M	75
3.75	3	200	240	535.845	291.057	536	160	292	6900	25M	@ 75	10M	125
3.75	3	200	300	539.393	295.711	539	200	297	5560	25M	@ 75	10M	200
3.75	3	200	400	545.955	304.024	546	266	305	4220	25M	@ 100	10M	725
3.75	3	225	225	537.432	289.437	537	150	291	7380	25M	@ 50	10M	100
3.75	3	225	270	543.756	297.733	544	180	299	6220	25M	@ 75	10M	150
3.75	3	225	338	552.362	308.487	552	225	310	5050	25M	@ 100	10M	275
3.75	3	225	450	564.917	323.236	565	299	324	3880	25M	@ 125	OK FOR	SHEAR
3.75	3	250	250	542.810	292.934	543	166	294	6710	25M	@ 75	10M	125
3.75	3	250	300	549.532	301.608	550	200	303	5660	25M	@ 75	10M	200
3.75	3	250	375	558.668	312.841	559	250	314	4600	25M	@ 100	10M	400
3.75	3	250	500	572.249	328.550	572	333	334	3540	25M	@ 125	OK FOR	SHEAR
3.75	3	300	300	553.595	299.990	554	200	301	5700	25M	@ 75	10M	200
3.75	3	300	360	561.112	309.417	561	240	311	4820	25M	@ 100	10M	350
3.75	3	300	450	571.423	321.742	571	299	322	3920	25M	@ 125	OK FOR	SHEAR
3.75	3	300	600	586.917	339.187	587	399	400	3020	25M	@ 150	OK FOR	SHEAR
3.75	3	350	350	564.390	307.069	564	233	308	4980	25M	@ 100	10M	325
3.75	4.5	200	200	397.500	210.902	397	133	212	6140	25M	@ 75	10M	175
3.75	4.5	200	240	401.712	215.267	402	160	217	5170	25M	@ 100	10M	300
3.75	4.5	200	300	405.695	219.313	406	200	221	4180	25M	@ 100	OK FOR	SHEAR
3.75	4.5	200	400	413.110	226.663	413	266	267	3190	25M	@ 150	OK FOR	SHEAR
3.75	4.5	225	225	403.204	214.529	403	150	216	5540	25M	@ 75	10M	225
3.75	4.5	225	270	410.300	221.760	410	180	223	4700	25M	@ 100	10M	450
3.75	4.5	225	338	420.039	231.347	420	225	232	3840	25M	@ 125	OK FOR	SHEAR
3.75	4.5	225	450	434.321	244.871	434	299	300	2980	25M	@ 150	OK FOR	SHEAR
3.75	4.5	250	250	408.948	218.209	409	166	219	5060	25M	@ 100	10M	325
3.75	4.5	250	300	416.511	225.841	417	200	227	4290	25M	@ 100	10M	775
3.75	4.5	250	375	426.861	235.935	427	250	251	3520	25M	@ 125	OK FOR	SHEAR
3.75	4.5	250	500	442.288	250.417	442	333	334	2740	25M	@ 150	OK FOR	SHEAR
3.75	4.5	300	300	420.485	225.633	420	200	227	4330	25M	@ 100	10M	775
3.75	4.5	300	360	428.963	234.037	429	240	241	3680	25M	@ 125	OK FOR	SHEAR
3.75	4.5	300	450	440.627	245.222	441	299	300	3030	25M	@ 150	OK FOR	SHEAR
3.75	4.5	300	600	458.115	261.375	458	399	400	2360	25M	@ 200	OK FOR	SHEAR
3.75	4.5	350	350	432.002	233.025	432	233	234	3820	25M	@ 125	OK FOR	SHEAR
3.75	6	200	200	335.352	185.940	335	133	187	5180	25M	@ 100	10M	250
3.75	6	200	240	340.102	190.371	340	160	192	4380	25M	@ 100	10M	525
3.75	6	200	300	344.616	194.495	345	200	201	3550	25M	@ 125	OK FOR	SHEAR
3.75	6	200	400	353.067	202.026	353	266	267	2730	25M	@ 150	OK FOR	SHEAR
3.75	6	225	225	341.570	189.894	342	150	191	4690	25M	@ 100	10M	375
3.75	6	225	270	349.611	197.260	350	180	199	4000	25M	@ 125	OK FOR	SHEAR
3.75	6	225	338	360.722	207.085	361	225	226	3300	25M	@ 150	OK FOR	SHEAR
3.75	6	225	450	377.104	221.047	377	299	300	2590	25M	@ 150	OK FOR	SHEAR
3.75	6	250	250	347.826	193.882	348	166	195	4300	25M	@ 100	10M	600
3.75	6	250	300	356.411	201.660	356	200	203	3670	25M	@ 125	OK FOR	SHEAR
3.75	6	250	375	368.215	211.994	368	250	251	3040	25M	@ 150	OK FOR	SHEAR
3.75	6	250	500	385.850	226.896	386	333	334	2390	25M	@ 200	OK FOR	SHEAR
3.75	6	300	300	360.331	201.830	360	200	203	3710	25M	@ 125	OK FOR	SHEAR
3.75	6	300	360	369.944	210.369	370	240	241	3180	25M	@ 150	OK FOR	SHEAR
3.75	6	300	450	383.187	221.760	383	299	300	2630	25M	@ 150	OK FOR	SHEAR
3.75	6	300	600	402.981	238.242	403	399	400	2080	25M	@ 200	OK FOR	SHEAR
3.75	6	350	350	372.704	209.614	373	233	234	3290	25M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3.75	8	200	200	293.062	172.825	293	133	174	4530	25M	@ 100	10M	350
3.75	8	200	240	298.568	177.525	299	160	179	3850	25M	@ 125	10M	900
3.75	8	200	300	303.823	181.905	304	200	201	3130	25M	@ 150	OK FOR	SHEAR
3.75	8	200	400	313.711	189.917	314	266	267	2430	25M	@ 200	OK FOR	SHEAR
3.75	8	225	225	300.007	177.173	300	150	178	4120	25M	@ 100	10M	575
3.75	8	225	270	309.349	184.964	309	180	186	3540	25M	@ 125	OK FOR	SHEAR
3.75	8	225	338	322.319	195.365	322	225	226	2950	25M	@ 150	OK FOR	SHEAR
3.75	8	225	450	341.475	210.137	341	299	300	2350	25M	@ 200	OK FOR	SHEAR
3.75	8	250	250	306.941	181.494	307	166	182	3800	25M	@ 125	OK FOR	SHEAR
3.75	8	250	300	316.902	189.683	317	200	201	3270	25M	@ 150	OK FOR	SHEAR
3.75	8	250	375	330.633	200.564	331	250	251	2730	25M	@ 150	OK FOR	SHEAR
3.75	8	250	500	351.118	216.228	351	333	334	2170	25M	@ 200	OK FOR	SHEAR
3.75	8	300	300	320.631	189.928	321	200	201	3300	25M	@ 150	OK FOR	SHEAR
3.75	8	300	360	331.720	198.833	332	240	241	2850	25M	@ 150	OK FOR	SHEAR
3.75	8	300	450	346.983	210.701	347	299	300	2390	25M	@ 200	OK FOR	SHEAR
3.75	8	300	600	369.664	227.841	370	399	400	1910	25M	@ 250	OK FOR	SHEAR
3.75	8	350	350	333.977	198.011	334	233	234	2950	25M	@ 150	OK FOR	SHEAR
3.75	10	200	200	270.596	167.256	271	133	168	4180	25M	@ 100	10M	400
3.75	10	200	240	276.803	172.184	277	160	174	3570	25M	@ 125	OK FOR	SHEAR
3.75	10	200	300	282.737	176.775	283	200	201	2910	25M	@ 150	OK FOR	SHEAR
3.75	10	200	400	293.914	185.164	294	266	267	2270	25M	@ 200	OK FOR	SHEAR
3.75	10	225	225	278.172	171.873	278	150	173	3820	25M	@ 125	10M	700
3.75	10	225	270	288.686	180.002	289	180	181	3310	25M	@ 150	OK FOR	SHEAR
3.75	10	225	338	303.284	190.834	303	225	226	2780	25M	@ 150	OK FOR	SHEAR
3.75	10	225	450	324.746	206.157	325	299	300	2230	25M	@ 200	OK FOR	SHEAR
3.75	10	250	250	285.665	176.396	286	166	177	3530	25M	@ 125	OK FOR	SHEAR
3.75	10	250	300	296.840	184.901	297	200	201	3060	25M	@ 150	OK FOR	SHEAR
3.75	10	250	375	312.227	196.181	312	250	251	2580	25M	@ 150	OK FOR	SHEAR
3.75	10	250	500	335.036	212.360	335	333	334	2070	25M	@ 200	OK FOR	SHEAR
3.75	10	300	300	300.285	185.086	300	200	201	3100	25M	@ 150	OK FOR	SHEAR
3.75	10	300	360	312.647	194.271	313	240	241	2690	25M	@ 150	OK FOR	SHEAR
3.75	10	300	450	329.604	206.497	330	299	300	2270	25M	@ 200	OK FOR	SHEAR
3.75	10	300	600	354.589	224.105	355	399	400	1830	25M	@ 250	OK FOR	SHEAR
3.75	10	350	350	314.367	193.306	314	233	234	2780	25M	@ 150	OK FOR	SHEAR
3.75	12	200	200	257.378	164.372	257	133	165	3980	25M	@ 125	10M	450
3.75	12	200	240	264.187	169.456	264	160	171	3400	25M	@ 150	OK FOR	SHEAR
3.75	12	200	300	270.695	174.187	271	200	201	2790	25M	@ 150	OK FOR	SHEAR
3.75	12	200	400	282.932	182.815	283	266	267	2190	25M	@ 200	OK FOR	SHEAR
3.75	12	225	225	265.458	169.148	265	150	170	3650	25M	@ 125	10M	800
3.75	12	225	270	276.955	177.498	277	180	181	3170	25M	@ 150	OK FOR	SHEAR
3.75	12	225	338	292.870	188.600	293	225	226	2680	25M	@ 150	OK FOR	SHEAR
3.75	12	225	450	316.074	204.242	316	299	300	2170	25M	@ 200	OK FOR	SHEAR
3.75	12	250	250	273.389	173.782	273	166	174	3380	25M	@ 150	OK FOR	SHEAR
3.75	12	250	300	285.573	182.493	286	200	201	2940	25M	@ 150	OK FOR	SHEAR
3.75	12	250	375	302.280	194.024	302	250	251	2490	25M	@ 200	OK FOR	SHEAR
3.75	12	250	500	326.817	210.505	327	333	334	2020	25M	@ 200	OK FOR	SHEAR
3.75	12	300	300	288.739	182.612	289	200	201	2980	25M	@ 150	OK FOR	SHEAR
3.75	12	300	360	302.142	191.986	302	240	241	2600	25M	@ 150	OK FOR	SHEAR
3.75	12	300	450	320.426	204.448	320	299	300	2200	25M	@ 200	OK FOR	SHEAR
3.75	12	300	600	347.080	222.346	347	399	400	1790	25M	@ 250	OK FOR	SHEAR
3.75	12	350	350	303.396	190.911	303	233	234	2680	25M	@ 150	OK FOR	SHEAR

D5. Concrete Curb

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1	3	200	200	62.683	164.154	63	133	165	970	15M	@ 200	10M	450
1	3	200	240	64.422	168.108	64	160	169	830	15M	@ 200	OK FOR	SHEAR
1	3	200	300	66.044	171.705	66	200	201	680	15M	@ 250	OK FOR	SHEAR
1	3	200	400	68.971	178.065	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	3	225	225	64.068	167.897	64	150	169	880	15M	@ 200	10M	850
1	3	225	270	66.880	174.114	67	180	181	770	15M	@ 250	OK FOR	SHEAR
1	3	225	338	70.539	181.905	71	225	226	650	15M	@ 250	OK FOR	SHEAR
1	3	225	450	75.360	191.819	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	3	250	250	65.354	171.330	65	166	172	810	15M	@ 200	OK FOR	SHEAR
1	3	250	300	68.224	177.524	68	200	201	710	15M	@ 250	OK FOR	SHEAR
1	3	250	375	71.899	185.220	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	3	250	500	76.749	195.064	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	3	300	300	67.616	177.197	68	200	201	700	15M	@ 250	OK FOR	SHEAR
1	3	300	360	70.547	183.321	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	3	300	450	74.259	190.828	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	3	300	600	79.094	200.437	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	3	350	350	69.510	181.945	70	233	234	620	15M	@ 250	OK FOR	SHEAR
1	4.5	200	200	57.650	160.798	58	133	162	900	15M	@ 200	10M	475
1	4.5	200	240	59.819	165.061	60	160	166	770	15M	@ 250	OK FOR	SHEAR
1	4.5	200	300	61.818	168.944	62	200	201	640	15M	@ 250	OK FOR	SHEAR
1	4.5	200	400	65.372	175.637	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	4.5	225	225	59.276	164.755	59	150	166	820	15M	@ 200	OK FOR	SHEAR
1	4.5	225	270	62.731	171.377	63	180	181	720	15M	@ 250	OK FOR	SHEAR
1	4.5	225	338	67.152	179.595	67	225	226	620	15M	@ 250	OK FOR	SHEAR
1	4.5	225	450	72.860	190.033	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	4.5	250	250	60.753	168.307	61	166	169	760	15M	@ 250	OK FOR	SHEAR
1	4.5	250	300	64.262	174.882	64	200	201	670	15M	@ 250	OK FOR	SHEAR
1	4.5	250	375	68.697	183.006	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	4.5	250	500	74.441	193.421	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	4.5	300	300	63.337	174.293	63	200	201	660	15M	@ 250	OK FOR	SHEAR
1	4.5	300	360	66.927	180.797	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	4.5	300	450	71.412	188.852	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	4.5	300	600	77.137	199.103	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	4.5	350	350	65.526	179.183	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	6	200	200	55.721	159.632	56	133	161	870	15M	@ 200	10M	500
1	6	200	240	58.085	163.990	58	160	165	750	15M	@ 250	OK FOR	SHEAR
1	6	200	300	60.254	167.920	60	200	201	630	15M	@ 250	OK FOR	SHEAR
1	6	200	400	64.098	174.780	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	6	225	225	57.456	163.612	57	150	165	790	15M	@ 250	OK FOR	SHEAR
1	6	225	270	61.230	170.401	61	180	181	710	15M	@ 250	OK FOR	SHEAR
1	6	225	338	66.026	178.834	66	225	226	610	15M	@ 250	OK FOR	SHEAR
1	6	225	450	72.149	189.533	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	6	250	250	59.062	167.212	59	166	168	730	15M	@ 250	OK FOR	SHEAR
1	6	250	300	62.907	173.977	63	200	201	650	15M	@ 250	OK FOR	SHEAR
1	6	250	375	67.718	182.363	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	6	250	500	73.863	193.041	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	6	300	300	61.928	173.412	62	200	201	640	15M	@ 250	OK FOR	SHEAR
1	6	300	360	65.857	180.154	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	6	300	450	70.698	188.423	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	6	300	600	76.754	198.889	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	6	350	350	64.373	178.517	67	233	234	600	15M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1	8	200	200	54.550	158.894	55	133	160	850	15M	@ 200	10M	525
1	8	200	240	57.077	163.347	57	160	165	740	15M	@ 250	OK FOR	SHEAR
1	8	200	300	59.390	167.349	59	200	201	620	15M	@ 250	OK FOR	SHEAR
1	8	200	400	63.460	174.352	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	8	225	225	56.452	162.993	56	150	164	780	15M	@ 250	OK FOR	SHEAR
1	8	225	270	60.481	169.901	60	180	181	700	15M	@ 250	OK FOR	SHEAR
1	8	225	338	65.541	178.524	66	225	226	600	15M	@ 325	OK FOR	SHEAR
1	8	225	450	71.905	189.390	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	8	250	250	58.222	166.712	58	166	167	720	15M	@ 250	OK FOR	SHEAR
1	8	250	300	62.307	173.644	62	200	201	650	15M	@ 250	OK FOR	SHEAR
1	8	250	375	67.352	182.149	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	8	250	500	73.691	192.945	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	8	300	300	61.356	173.102	61	200	201	640	15M	@ 250	OK FOR	SHEAR
1	8	300	360	65.481	179.964	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	8	300	450	70.488	188.304	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	8	300	600	76.666	198.841	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	8	350	350	63.985	178.326	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	10	200	200	54.082	158.656	54	133	160	840	15M	@ 200	10M	525
1	10	200	240	56.707	163.157	57	160	164	730	15M	@ 250	OK FOR	SHEAR
1	10	200	300	59.095	167.206	59	200	201	610	15M	@ 250	OK FOR	SHEAR
1	10	200	400	63.273	174.257	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	10	225	225	56.103	162.827	56	150	164	770	15M	@ 250	OK FOR	SHEAR
1	10	225	270	60.254	169.805	60	180	181	690	15M	@ 250	OK FOR	SHEAR
1	10	225	338	65.421	178.477	65	225	226	600	15M	@ 325	OK FOR	SHEAR
1	10	225	450	71.859	189.390	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	10	250	250	57.967	166.593	58	166	167	720	15M	@ 250	OK FOR	SHEAR
1	10	250	300	62.151	173.572	62	200	201	640	15M	@ 250	OK FOR	SHEAR
1	10	250	375	67.273	182.125	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	10	250	500	73.663	192.921	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	10	300	300	61.221	173.055	61	200	201	640	15M	@ 250	OK FOR	SHEAR
1	10	300	360	65.405	179.940	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	10	300	450	70.454	188.304	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	10	300	600	76.653	198.841	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	10	350	350	63.909	178.302	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	12	200	200	53.903	158.561	54	133	160	840	15M	@ 200	10M	525
1	12	200	240	56.576	163.109	57	160	164	730	15M	@ 250	OK FOR	SHEAR
1	12	200	300	59.000	167.182	59	200	201	610	15M	@ 250	OK FOR	SHEAR
1	12	200	400	63.220	174.257	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	12	225	225	55.988	162.779	56	150	164	770	15M	@ 250	OK FOR	SHEAR
1	12	225	270	60.190	169.805	60	180	181	690	15M	@ 250	OK FOR	SHEAR
1	12	225	338	65.393	178.477	65	225	226	600	15M	@ 325	OK FOR	SHEAR
1	12	225	450	71.850	189.390	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	12	250	250	57.891	166.593	58	166	167	720	15M	@ 250	OK FOR	SHEAR
1	12	250	300	62.112	173.572	62	200	201	640	15M	@ 250	OK FOR	SHEAR
1	12	250	375	67.258	182.101	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	12	250	500	73.658	192.921	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	12	300	300	61.187	173.055	61	200	201	630	15M	@ 250	OK FOR	SHEAR
1	12	300	360	65.389	179.940	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	12	300	450	70.447	188.304	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	12	300	600	76.650	198.841	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	12	350	350	63.892	178.302	67	233	234	600	15M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1.5	3	200	200	120.821	127.805	121	133	134	1870	25M	@ 250	OK FOR	SHEAR
1.5	3	200	240	123.031	131.570	123	160	161	1590	25M	@ 250	OK FOR	SHEAR
1.5	3	200	300	125.152	135.097	125	200	201	1290	15M	@ 150	OK FOR	SHEAR
1.5	3	200	400	129.130	141.603	129	266	267	1000	15M	@ 200	OK FOR	SHEAR
1.5	3	225	225	122.913	131.503	123	150	151	1690	25M	@ 250	OK FOR	SHEAR
1.5	3	225	270	126.616	137.676	127	180	181	1450	25M	@ 325	OK FOR	SHEAR
1.5	3	225	338	131.707	145.947	132	225	226	1210	15M	@ 150	OK FOR	SHEAR
1.5	3	225	450	138.896	157.295	139	299	300	960	15M	@ 200	OK FOR	SHEAR
1.5	3	250	250	124.946	135.083	125	166	167	1550	25M	@ 250	OK FOR	SHEAR
1.5	3	250	300	128.817	141.446	129	200	201	1330	15M	@ 150	OK FOR	SHEAR
1.5	3	250	375	134.048	149.837	134	250	251	1110	15M	@ 150	OK FOR	SHEAR
1.5	3	250	500	141.428	161.403	141	333	334	880	15M	@ 200	OK FOR	SHEAR
1.5	3	300	300	128.716	141.575	129	200	201	1330	15M	@ 150	OK FOR	SHEAR
1.5	3	300	360	132.817	148.202	133	240	241	1140	15M	@ 150	OK FOR	SHEAR
1.5	3	300	450	138.273	156.786	138	299	300	950	15M	@ 200	OK FOR	SHEAR
1.5	3	300	600	145.834	168.475	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	3	350	350	132.051	147.210	132	233	234	1170	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	200	97.110	118.069	97	133	134	1500	25M	@ 325	OK FOR	SHEAR
1.5	4.5	200	240	100.170	122.501	100	160	161	1290	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	300	103.083	126.599	103	200	201	1070	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	400	108.480	134.081	108	266	267	840	15M	@ 200	OK FOR	SHEAR
1.5	4.5	225	225	99.886	122.481	100	150	151	1380	15M	@ 150	OK FOR	SHEAR
1.5	4.5	225	270	104.905	129.558	105	180	181	1200	15M	@ 150	OK FOR	SHEAR
1.5	4.5	225	338	111.686	138.852	112	225	226	1030	15M	@ 150	OK FOR	SHEAR
1.5	4.5	225	450	121.029	151.414	121	299	300	840	15M	@ 200	OK FOR	SHEAR
1.5	4.5	250	250	102.447	126.536	102	166	167	1270	15M	@ 150	OK FOR	SHEAR
1.5	4.5	250	300	107.610	133.685	108	200	201	1110	15M	@ 150	OK FOR	SHEAR
1.5	4.5	250	375	114.478	142.980	114	250	251	950	15M	@ 200	OK FOR	SHEAR
1.5	4.5	250	500	123.967	155.687	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	300	106.948	133.480	107	200	201	1110	15M	@ 150	OK FOR	SHEAR
1.5	4.5	300	360	112.313	140.702	112	240	241	970	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	450	119.366	150.119	119	299	300	820	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	600	128.999	162.949	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	4.5	350	350	110.761	139.186	111	233	234	980	15M	@ 200	OK FOR	SHEAR
1.5	6	200	200	88.584	115.546	89	133	134	1370	15M	@ 150	OK FOR	SHEAR
1.5	6	200	240	92.112	120.168	92	160	161	1190	15M	@ 150	OK FOR	SHEAR
1.5	6	200	300	95.439	124.456	95	200	201	990	15M	@ 200	OK FOR	SHEAR
1.5	6	200	400	101.537	132.176	102	266	267	790	15M	@ 250	OK FOR	SHEAR
1.5	6	225	225	91.603	120.053	92	150	151	1260	15M	@ 150	OK FOR	SHEAR
1.5	6	225	270	97.334	127.368	97	180	181	1120	15M	@ 150	OK FOR	SHEAR
1.5	6	225	338	104.977	136.971	105	225	226	960	15M	@ 200	OK FOR	SHEAR
1.5	6	225	450	115.366	149.962	115	299	300	800	15M	@ 250	OK FOR	SHEAR
1.5	6	250	250	94.360	124.108	94	166	167	1170	15M	@ 150	OK FOR	SHEAR
1.5	6	250	300	100.245	131.519	100	200	201	1040	15M	@ 150	OK FOR	SHEAR
1.5	6	250	375	107.990	141.171	108	250	251	890	15M	@ 200	OK FOR	SHEAR
1.5	6	250	500	118.555	154.354	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	6	300	300	99.224	131.123	99	200	201	1030	15M	@ 150	OK FOR	SHEAR
1.5	6	300	360	105.352	138.702	105	240	241	910	15M	@ 200	OK FOR	SHEAR
1.5	6	300	450	113.333	148.547	113	299	300	780	15M	@ 250	OK FOR	SHEAR
1.5	6	300	600	124.058	161.901	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	6	350	350	103.390	136.972	103	233	234	920	15M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1.5	8	200	200	83.558	114.094	84	133	134	1290	15M	@ 150	OK FOR	SHEAR
1.5	8	200	240	87.425	118.787	87	160	161	1130	15M	@ 150	OK FOR	SHEAR
1.5	8	200	300	91.055	123.147	91	200	201	940	15M	@ 200	OK FOR	SHEAR
1.5	8	200	400	97.665	131.033	98	266	267	760	15M	@ 250	OK FOR	SHEAR
1.5	8	225	225	86.775	118.625	87	150	151	1200	15M	@ 150	OK FOR	SHEAR
1.5	8	225	270	93.070	126.106	93	180	181	1070	15M	@ 150	OK FOR	SHEAR
1.5	8	225	338	101.388	135.971	101	225	226	930	15M	@ 200	OK FOR	SHEAR
1.5	8	225	450	112.539	149.295	113	299	300	780	15M	@ 250	OK FOR	SHEAR
1.5	8	250	250	89.766	122.727	90	166	167	1110	15M	@ 150	OK FOR	SHEAR
1.5	8	250	300	96.246	130.376	96	200	201	1000	15M	@ 200	OK FOR	SHEAR
1.5	8	250	375	104.681	140.314	105	250	251	870	15M	@ 200	OK FOR	SHEAR
1.5	8	250	500	115.985	153.854	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	8	300	300	95.131	129.980	95	200	201	980	15M	@ 200	OK FOR	SHEAR
1.5	8	300	360	101.879	137.821	102	240	241	880	15M	@ 200	OK FOR	SHEAR
1.5	8	300	450	110.520	147.952	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	8	300	600	121.870	161.639	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	8	350	350	99.751	136.091	100	233	234	880	15M	@ 200	OK FOR	SHEAR
1.5	10	200	200	81.126	113.309	81	133	134	1260	15M	@ 150	OK FOR	SHEAR
1.5	10	200	240	85.224	118.097	85	160	161	1100	15M	@ 150	OK FOR	SHEAR
1.5	10	200	300	89.056	122.552	89	200	201	920	15M	@ 200	OK FOR	SHEAR
1.5	10	200	400	95.997	130.581	96	266	267	750	15M	@ 250	OK FOR	SHEAR
1.5	10	225	225	84.580	117.935	85	150	151	1170	15M	@ 150	OK FOR	SHEAR
1.5	10	225	270	91.243	125.582	91	180	181	1050	15M	@ 150	OK FOR	SHEAR
1.5	10	225	338	99.958	135.638	100	225	226	920	15M	@ 200	OK FOR	SHEAR
1.5	10	225	450	111.476	149.152	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	10	250	250	87.812	122.180	88	166	167	1090	15M	@ 150	OK FOR	SHEAR
1.5	10	250	300	94.649	129.995	95	200	201	980	15M	@ 200	OK FOR	SHEAR
1.5	10	250	375	103.442	140.075	103	250	251	860	15M	@ 200	OK FOR	SHEAR
1.5	10	250	500	115.043	153.735	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	10	300	300	93.580	129.623	94	200	201	970	15M	@ 200	OK FOR	SHEAR
1.5	10	300	360	100.634	137.607	101	240	241	870	15M	@ 200	OK FOR	SHEAR
1.5	10	300	450	109.536	147.833	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	10	300	600	121.063	161.592	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	10	350	350	98.481	135.876	98	233	234	870	15M	@ 200	OK FOR	SHEAR
1.5	12	200	200	79.908	112.951	80	133	134	1240	15M	@ 150	OK FOR	SHEAR
1.5	12	200	240	84.171	117.811	84	160	161	1090	15M	@ 150	OK FOR	SHEAR
1.5	12	200	300	88.141	122.290	88	200	201	910	15M	@ 200	OK FOR	SHEAR
1.5	12	200	400	95.281	130.415	95	266	267	740	15M	@ 250	OK FOR	SHEAR
1.5	12	225	225	83.573	117.673	84	150	151	1150	15M	@ 150	OK FOR	SHEAR
1.5	12	225	270	90.462	125.439	90	180	181	1040	15M	@ 150	OK FOR	SHEAR
1.5	12	225	338	99.381	135.543	99	225	226	910	15M	@ 200	OK FOR	SHEAR
1.5	12	225	450	111.047	149.105	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	12	250	250	86.976	122.013	87	166	167	1080	15M	@ 150	OK FOR	SHEAR
1.5	12	250	300	94.007	129.876	94	200	201	970	15M	@ 200	OK FOR	SHEAR
1.5	12	250	375	102.956	140.004	103	250	251	850	15M	@ 200	OK FOR	SHEAR
1.5	12	250	500	114.656	153.735	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	12	300	300	92.980	129.551	93	200	201	960	15M	@ 200	OK FOR	SHEAR
1.5	12	300	360	100.159	137.559	100	240	241	860	15M	@ 200	OK FOR	SHEAR
1.5	12	300	450	109.146	147.833	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1.5	12	300	600	120.708	161.568	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	12	350	350	98.009	135.829	98	233	234	870	15M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	3	200	200	172.307	127.310	172	133	134	2670	25M	@ 150	OK FOR	SHEAR
2	3	200	240	174.259	130.542	174	160	161	2250	25M	@ 200	OK FOR	SHEAR
2	3	200	300	176.154	133.643	176	200	201	1820	25M	@ 250	OK FOR	SHEAR
2	3	200	400	179.783	139.523	180	266	267	1390	15M	@ 150	OK FOR	SHEAR
2	3	225	225	174.738	130.887	175	150	151	2400	25M	@ 200	OK FOR	SHEAR
2	3	225	270	178.081	136.380	178	180	181	2040	25M	@ 200	OK FOR	SHEAR
2	3	225	338	182.816	143.967	183	225	226	1670	25M	@ 250	OK FOR	SHEAR
2	3	225	450	189.819	154.939	190	299	300	1310	15M	@ 150	OK FOR	SHEAR
2	3	250	250	177.146	134.405	177	166	167	2190	25M	@ 200	OK FOR	SHEAR
2	3	250	300	180.714	140.208	181	200	201	1860	25M	@ 250	OK FOR	SHEAR
2	3	250	375	185.688	148.118	186	250	251	1530	25M	@ 250	OK FOR	SHEAR
2	3	250	500	193.058	159.581	193	333	334	1200	15M	@ 150	OK FOR	SHEAR
2	3	300	300	181.798	141.101	182	200	201	1880	25M	@ 250	OK FOR	SHEAR
2	3	300	360	185.724	147.347	186	240	241	1600	25M	@ 250	OK FOR	SHEAR
2	3	300	450	191.127	155.796	191	299	300	1320	15M	@ 150	OK FOR	SHEAR
2	3	300	600	199.013	167.824	199	399	400	1030	15M	@ 150	OK FOR	SHEAR
2	3	350	350	186.149	147.125	186	233	234	1650	25M	@ 250	OK FOR	SHEAR
2	4.5	200	200	131.967	104.977	132	133	134	2040	25M	@ 200	OK FOR	SHEAR
2	4.5	200	240	134.806	108.757	135	160	161	1740	25M	@ 250	OK FOR	SHEAR
2	4.5	200	300	137.570	112.357	138	200	201	1420	25M	@ 325	OK FOR	SHEAR
2	4.5	200	400	142.846	119.114	143	266	267	1110	15M	@ 150	OK FOR	SHEAR
2	4.5	225	225	135.281	109.397	135	150	151	1860	25M	@ 250	OK FOR	SHEAR
2	4.5	225	270	140.090	115.595	140	180	181	1610	25M	@ 250	OK FOR	SHEAR
2	4.5	225	338	146.849	124.177	147	225	226	1350	15M	@ 150	OK FOR	SHEAR
2	4.5	225	450	156.667	136.344	157	299	300	1080	15M	@ 150	OK FOR	SHEAR
2	4.5	250	250	138.439	113.506	138	166	167	1710	25M	@ 250	OK FOR	SHEAR
2	4.5	250	300	143.485	119.952	143	200	201	1480	25M	@ 325	OK FOR	SHEAR
2	4.5	250	375	150.454	128.649	150	250	251	1240	15M	@ 150	OK FOR	SHEAR
2	4.5	250	500	160.577	141.148	161	333	334	1000	15M	@ 200	OK FOR	SHEAR
2	4.5	300	300	144.210	120.897	144	200	201	1490	25M	@ 325	OK FOR	SHEAR
2	4.5	300	360	149.603	127.579	150	240	241	1290	15M	@ 150	OK FOR	SHEAR
2	4.5	300	450	156.937	136.605	157	299	300	1080	15M	@ 150	OK FOR	SHEAR
2	4.5	300	600	167.453	149.465	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	4.5	350	350	149.307	127.172	149	233	234	1320	15M	@ 150	OK FOR	SHEAR
2	6	200	200	116.118	99.175	116	133	134	1800	25M	@ 250	OK FOR	SHEAR
2	6	200	240	119.660	103.230	120	160	161	1540	25M	@ 250	OK FOR	SHEAR
2	6	200	300	123.076	107.107	123	200	201	1270	15M	@ 150	OK FOR	SHEAR
2	6	200	400	129.513	114.270	130	266	267	1000	15M	@ 200	OK FOR	SHEAR
2	6	225	225	119.931	103.796	120	150	151	1650	25M	@ 250	OK FOR	SHEAR
2	6	225	270	125.818	110.432	126	180	181	1440	25M	@ 325	OK FOR	SHEAR
2	6	225	338	133.966	119.433	134	225	226	1230	15M	@ 150	OK FOR	SHEAR
2	6	225	450	145.575	132.145	146	299	300	1000	15M	@ 200	OK FOR	SHEAR
2	6	250	250	123.462	108.058	123	166	167	1530	25M	@ 250	OK FOR	SHEAR
2	6	250	300	129.573	114.838	130	200	201	1340	15M	@ 150	OK FOR	SHEAR
2	6	250	375	137.906	123.956	138	250	251	1140	15M	@ 150	OK FOR	SHEAR
2	6	250	500	149.825	137.004	150	333	334	930	15M	@ 200	OK FOR	SHEAR
2	6	300	300	129.760	115.457	130	200	201	1340	15M	@ 150	OK FOR	SHEAR
2	6	300	360	136.220	122.474	136	240	241	1170	15M	@ 150	OK FOR	SHEAR
2	6	300	450	144.942	131.921	145	299	300	1000	15M	@ 200	OK FOR	SHEAR
2	6	300	600	157.290	145.459	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	6	350	350	135.238	121.700	135	233	234	1200	15M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	8	200	200	106.814	96.412	107	133	134	1650	25M	@ 250	OK FOR	SHEAR
2	8	200	240	110.923	100.631	111	160	161	1430	25M	@ 325	OK FOR	SHEAR
2	8	200	300	114.853	104.595	115	200	201	1190	15M	@ 150	OK FOR	SHEAR
2	8	200	400	122.177	111.934	122	266	267	950	15M	@ 200	OK FOR	SHEAR
2	8	225	225	110.920	101.072	111	150	151	1530	25M	@ 250	OK FOR	SHEAR
2	8	225	270	117.700	107.858	118	180	181	1350	15M	@ 150	OK FOR	SHEAR
2	8	225	338	126.971	117.131	127	225	226	1160	15M	@ 150	OK FOR	SHEAR
2	8	225	450	139.989	130.258	140	299	300	970	15M	@ 200	OK FOR	SHEAR
2	8	250	250	114.715	105.320	115	166	167	1420	25M	@ 325	OK FOR	SHEAR
2	8	250	300	121.753	112.329	122	200	201	1260	15M	@ 150	OK FOR	SHEAR
2	8	250	375	131.247	121.742	131	250	251	1090	15M	@ 150	OK FOR	SHEAR
2	8	250	500	144.620	135.253	145	333	334	900	15M	@ 200	OK FOR	SHEAR
2	8	300	300	121.535	112.774	122	200	201	1260	15M	@ 150	OK FOR	SHEAR
2	8	300	360	128.997	120.122	129	240	241	1110	15M	@ 150	OK FOR	SHEAR
2	8	300	450	138.945	129.994	139	299	300	960	15M	@ 200	OK FOR	SHEAR
2	8	300	600	152.745	144.021	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	8	350	350	127.509	119.180	128	233	234	1130	15M	@ 150	OK FOR	SHEAR
2	10	200	200	102.273	95.089	102	133	134	1580	25M	@ 250	OK FOR	SHEAR
2	10	200	240	106.740	99.352	107	160	161	1380	15M	@ 150	OK FOR	SHEAR
2	10	200	300	110.990	103.384	111	200	201	1150	15M	@ 150	OK FOR	SHEAR
2	10	200	400	118.871	110.890	119	266	267	920	15M	@ 200	OK FOR	SHEAR
2	10	225	225	106.618	99.766	107	150	151	1470	25M	@ 325	OK FOR	SHEAR
2	10	225	270	113.998	106.721	114	180	181	1310	15M	@ 150	OK FOR	SHEAR
2	10	225	338	123.994	116.182	124	225	226	1140	15M	@ 150	OK FOR	SHEAR
2	10	225	450	137.842	129.568	138	299	300	950	15M	@ 200	OK FOR	SHEAR
2	10	250	250	110.682	104.087	111	166	167	1370	15M	@ 150	OK FOR	SHEAR
2	10	250	300	118.351	111.260	118	200	201	1220	15M	@ 150	OK FOR	SHEAR
2	10	250	375	128.580	120.940	129	250	251	1060	15M	@ 150	OK FOR	SHEAR
2	10	250	500	142.751	134.686	143	333	334	890	15M	@ 200	OK FOR	SHEAR
2	10	300	300	118.043	111.735	118	200	201	1220	15M	@ 150	OK FOR	SHEAR
2	10	300	360	126.153	119.275	126	240	241	1090	15M	@ 150	OK FOR	SHEAR
2	10	300	450	136.799	129.387	137	299	300	940	15M	@ 200	OK FOR	SHEAR
2	10	300	600	151.270	143.622	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	10	350	350	124.475	118.338	124	233	234	1100	15M	@ 150	OK FOR	SHEAR
2	12	200	200	99.750	94.263	100	133	134	1540	25M	@ 250	OK FOR	SHEAR
2	12	200	240	104.482	98.593	104	160	161	1350	15M	@ 150	OK FOR	SHEAR
2	12	200	300	108.968	102.697	109	200	201	1130	15M	@ 150	OK FOR	SHEAR
2	12	200	400	117.238	110.293	117	266	267	910	15M	@ 200	OK FOR	SHEAR
2	12	225	225	104.363	99.035	104	150	151	1440	25M	@ 325	OK FOR	SHEAR
2	12	225	270	112.170	106.105	112	180	181	1290	15M	@ 150	OK FOR	SHEAR
2	12	225	338	122.639	115.704	123	225	226	1130	15M	@ 150	OK FOR	SHEAR
2	12	225	450	136.950	129.223	137	299	300	940	15M	@ 200	OK FOR	SHEAR
2	12	250	250	108.692	103.428	109	166	167	1350	15M	@ 150	OK FOR	SHEAR
2	12	250	300	116.783	110.743	117	200	201	1210	15M	@ 150	OK FOR	SHEAR
2	12	250	375	127.446	120.534	127	250	251	1050	15M	@ 150	OK FOR	SHEAR
2	12	250	500	142.005	134.386	142	333	334	880	15M	@ 200	OK FOR	SHEAR
2	12	300	300	116.499	111.294	116	200	201	1200	15M	@ 150	OK FOR	SHEAR
2	12	300	360	124.981	118.925	125	240	241	1080	15M	@ 150	OK FOR	SHEAR
2	12	300	450	135.968	129.097	136	299	300	940	15M	@ 200	OK FOR	SHEAR
2	12	300	600	150.696	143.364	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	12	350	350	123.244	117.968	123	233	234	1090	15M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2.5	3	200	200	257.796	251.728	258	133	253	3980	25M	@ 125	10M	100
2.5	3	200	240	259.928	254.689	260	160	256	3350	25M	@ 150	10M	175
2.5	3	200	300	261.971	257.496	262	200	259	2700	25M	@ 150	10M	350
2.5	3	200	400	265.830	262.714	266	266	267	2060	25M	@ 200	OK FOR	SHEAR
2.5	3	225	225	260.762	254.844	261	150	256	3580	25M	@ 125	10M	150
2.5	3	225	270	264.400	259.851	264	180	261	3030	25M	@ 150	10M	225
2.5	3	225	338	269.477	266.676	269	225	268	2470	25M	@ 200	10M	550
2.5	3	225	450	276.989	276.526	277	299	300	1910	25M	@ 250	OK FOR	SHEAR
2.5	3	250	250	263.721	257.979	264	166	259	3260	25M	@ 150	10M	175
2.5	3	250	300	280.547	288.216	281	200	290	2890	25M	@ 150	10M	225
2.5	3	250	375	272.998	270.484	273	250	272	2250	25M	@ 200	OK FOR	SHEAR
2.5	3	250	500	281.036	280.944	281	333	334	1740	25M	@ 250	OK FOR	SHEAR
2.5	3	300	300	269.546	264.032	270	200	265	2780	25M	@ 150	10M	325
2.5	3	300	360	273.895	269.899	274	240	271	2350	25M	@ 200	10M	825
2.5	3	300	450	279.885	277.801	280	299	300	1920	25M	@ 250	OK FOR	SHEAR
2.5	3	300	600	288.780	289.217	289	399	400	1490	25M	@ 325	OK FOR	SHEAR
2.5	3	350	350	275.175	269.743	275	233	271	2430	25M	@ 200	10M	650
2.5	4.5	200	200	195.779	207.479	196	133	208	3030	25M	@ 150	10M	175
2.5	4.5	200	240	198.550	210.461	199	160	212	2560	25M	@ 150	10M	325
2.5	4.5	200	300	201.233	213.302	201	200	215	2080	25M	@ 200	OK FOR	SHEAR
2.5	4.5	200	400	206.356	218.602	206	266	267	1600	25M	@ 250	OK FOR	SHEAR
2.5	4.5	225	225	199.536	211.084	200	150	212	2740	25M	@ 150	10M	250
2.5	4.5	225	270	204.276	216.091	204	180	217	2340	25M	@ 200	10M	525
2.5	4.5	225	338	210.942	222.952	211	225	226	1930	25M	@ 250	OK FOR	SHEAR
2.5	4.5	225	450	220.781	232.898	221	299	300	1520	25M	@ 250	OK FOR	SHEAR
2.5	4.5	250	250	203.199	214.573	203	166	215	2510	25M	@ 150	10M	350
2.5	4.5	250	300	219.712	241.879	220	200	243	2270	25M	@ 200	10M	500
2.5	4.5	250	375	215.215	226.966	215	250	251	1780	25M	@ 250	OK FOR	SHEAR
2.5	4.5	250	500	225.539	237.367	226	333	334	1400	15M	@ 150	OK FOR	SHEAR
2.5	4.5	300	300	210.145	221.057	210	200	222	2170	25M	@ 200	10M	975
2.5	4.5	300	360	215.650	226.733	216	240	241	1850	25M	@ 250	OK FOR	SHEAR
2.5	4.5	300	450	223.197	234.402	223	299	300	1540	25M	@ 250	OK FOR	SHEAR
2.5	4.5	300	600	234.243	245.471	234	399	400	1210	15M	@ 150	OK FOR	SHEAR
2.5	4.5	350	350	216.559	226.917	217	233	234	1920	25M	@ 250	OK FOR	SHEAR
2.5	6	200	200	169.652	196.709	170	133	198	2620	25M	@ 150	10M	200
2.5	6	200	240	173.075	199.916	173	160	201	2230	25M	@ 200	10M	400
2.5	6	200	300	176.381	202.934	176	200	204	1820	25M	@ 250	OK FOR	SHEAR
2.5	6	200	400	182.654	208.564	183	266	267	1410	25M	@ 325	OK FOR	SHEAR
2.5	6	225	225	173.978	200.562	174	150	202	2390	25M	@ 200	10M	300
2.5	6	225	270	179.746	205.834	180	180	207	2060	25M	@ 200	10M	700
2.5	6	225	338	187.789	213.011	188	225	226	1720	25M	@ 250	OK FOR	SHEAR
2.5	6	225	450	199.483	223.335	199	299	300	1370	15M	@ 150	OK FOR	SHEAR
2.5	6	250	250	178.084	204.173	178	166	205	2200	25M	@ 200	10M	450
2.5	6	250	300	194.966	231.019	195	200	232	2010	25M	@ 200	10M	675
2.5	6	250	375	192.451	217.044	192	250	251	1590	25M	@ 250	OK FOR	SHEAR
2.5	6	250	500	204.593	227.786	205	333	334	1270	15M	@ 150	OK FOR	SHEAR
2.5	6	300	300	185.629	210.715	186	200	212	1920	25M	@ 250	OK FOR	SHEAR
2.5	6	300	360	192.126	216.515	192	240	241	1650	25M	@ 250	OK FOR	SHEAR
2.5	6	300	450	200.976	224.360	201	299	300	1380	15M	@ 150	OK FOR	SHEAR
2.5	6	300	600	213.809	235.813	214	399	400	1100	15M	@ 150	OK FOR	SHEAR
2.5	6	350	350	192.420	216.482	192	233	234	1700	25M	@ 250	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2.5	8	200	200	153.979	192.208	154	133	193	2380	25M	@ 200	10M	225
2.5	8	200	240	158.031	195.517	158	160	197	2040	25M	@ 200	10M	450
2.5	8	200	300	161.916	198.661	162	200	201	1670	25M	@ 250	OK FOR	SHEAR
2.5	8	200	400	169.207	204.475	169	266	267	1310	15M	@ 150	OK FOR	SHEAR
2.5	8	225	225	158.681	196.090	159	150	197	2180	25M	@ 200	10M	325
2.5	8	225	270	165.414	201.548	165	180	203	1900	25M	@ 250	10M	825
2.5	8	225	338	174.696	208.926	175	225	226	1600	25M	@ 250	OK FOR	SHEAR
2.5	8	225	450	187.997	219.555	188	299	300	1290	15M	@ 150	OK FOR	SHEAR
2.5	8	250	250	163.068	199.709	163	166	200	2020	25M	@ 200	10M	525
2.5	8	250	300	180.514	226.432	181	200	228	1860	25M	@ 250	10M	750
2.5	8	250	375	179.649	212.952	180	250	251	1480	25M	@ 325	OK FOR	SHEAR
2.5	8	250	500	193.442	224.038	193	333	334	1200	15M	@ 150	OK FOR	SHEAR
2.5	8	300	300	171.052	206.194	171	200	208	1770	25M	@ 250	OK FOR	SHEAR
2.5	8	300	360	178.559	212.193	179	240	241	1540	25M	@ 250	OK FOR	SHEAR
2.5	8	300	450	188.716	220.339	189	299	300	1300	15M	@ 150	OK FOR	SHEAR
2.5	8	300	600	203.261	232.238	203	399	400	1050	15M	@ 150	OK FOR	SHEAR
2.5	8	350	350	178.203	211.941	178	233	234	1580	25M	@ 250	OK FOR	SHEAR
2.5	10	200	200	146.442	190.357	146	133	191	2270	25M	@ 200	10M	225
2.5	10	200	240	150.897	193.717	151	160	195	1950	25M	@ 250	10M	475
2.5	10	200	300	155.147	196.902	155	200	201	1600	25M	@ 250	OK FOR	SHEAR
2.5	10	200	400	163.075	202.811	163	266	267	1260	15M	@ 150	OK FOR	SHEAR
2.5	10	225	225	151.349	194.230	151	150	196	2080	25M	@ 200	10M	350
2.5	10	225	270	158.737	199.759	159	180	201	1820	25M	@ 250	10M	925
2.5	10	225	338	168.845	207.289	169	225	226	1550	25M	@ 250	OK FOR	SHEAR
2.5	10	225	450	183.174	218.129	183	299	300	1260	15M	@ 150	OK FOR	SHEAR
2.5	10	250	250	155.945	197.817	156	166	198	1930	25M	@ 250	10M	550
2.5	10	250	300	173.885	224.582	174	200	226	1790	25M	@ 250	10M	825
2.5	10	250	375	174.077	211.383	174	250	251	1440	25M	@ 325	OK FOR	SHEAR
2.5	10	250	500	188.922	222.716	189	333	334	1170	15M	@ 150	OK FOR	SHEAR
2.5	10	300	300	164.359	204.378	164	200	206	1700	25M	@ 250	OK FOR	SHEAR
2.5	10	300	360	172.614	210.572	173	240	241	1490	25M	@ 325	OK FOR	SHEAR
2.5	10	300	450	183.673	218.920	184	299	300	1260	15M	@ 150	OK FOR	SHEAR
2.5	10	300	600	199.237	231.053	199	399	400	1030	15M	@ 150	OK FOR	SHEAR
2.5	10	350	350	171.907	210.228	172	233	234	1520	25M	@ 250	OK FOR	SHEAR
2.5	12	200	200	142.211	189.261	142	133	190	2200	25M	@ 200	10M	250
2.5	12	200	240	146.954	192.664	147	160	194	1900	25M	@ 250	10M	500
2.5	12	200	300	151.466	195.892	151	200	201	1560	25M	@ 250	OK FOR	SHEAR
2.5	12	200	400	159.847	201.865	160	266	267	1240	15M	@ 150	OK FOR	SHEAR
2.5	12	225	225	147.326	193.166	147	150	194	2030	25M	@ 200	10M	350
2.5	12	225	270	155.201	198.784	155	180	200	1780	25M	@ 250	10M	950
2.5	12	225	338	165.900	206.426	166	225	226	1520	25M	@ 250	OK FOR	SHEAR
2.5	12	225	450	180.890	217.421	181	299	300	1250	15M	@ 150	OK FOR	SHEAR
2.5	12	250	250	152.152	196.809	152	166	197	1880	25M	@ 250	10M	575
2.5	12	250	300	170.498	223.600	170	200	225	1760	25M	@ 250	10M	850
2.5	12	250	375	171.389	210.590	171	250	251	1420	25M	@ 325	OK FOR	SHEAR
2.5	12	250	500	186.858	222.065	187	333	334	1160	15M	@ 150	OK FOR	SHEAR
2.5	12	300	300	161.010	203.488	161	200	205	1660	25M	@ 250	OK FOR	SHEAR
2.5	12	300	360	169.786	209.783	170	240	241	1460	25M	@ 325	OK FOR	SHEAR
2.5	12	300	450	181.397	218.255	181	299	300	1250	15M	@ 150	OK FOR	SHEAR
2.5	12	300	600	197.472	230.483	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	12	350	350	168.919	209.444	169	233	234	1490	25M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3	3	200	200	373.053	278.461	373	133	279	5760	25M	@ 75	10M	75
3	3	200	240	376.038	282.733	376	160	284	4840	25M	@ 100	10M	125
3	3	200	300	378.838	286.689	379	200	288	3900	25M	@ 125	10M	225
3	3	200	400	383.994	293.797	384	266	295	2970	25M	@ 150	10M	975
3	3	225	225	376.881	281.836	377	150	283	5180	25M	@ 100	10M	100
3	3	225	270	381.883	288.923	382	180	290	4370	25M	@ 100	10M	175
3	3	225	338	388.641	298.114	389	225	299	3550	25M	@ 125	10M	325
3	3	225	450	398.362	310.809	398	299	311	2740	25M	@ 150	OK FOR	SHEAR
3	3	250	250	380.710	285.213	381	166	286	4710	25M	@ 100	10M	150
3	3	250	300	386.020	292.661	386	200	294	3980	25M	@ 125	10M	225
3	3	250	375	393.163	302.310	393	250	304	3240	25M	@ 150	10M	500
3	3	250	500	403.588	315.727	404	333	334	2500	25M	@ 200	OK FOR	SHEAR
3	3	300	300	388.304	291.891	388	200	293	4000	25M	@ 125	10M	225
3	3	300	360	394.190	299.966	394	240	301	3390	25M	@ 150	10M	425
3	3	300	450	402.136	310.458	402	299	311	2760	25M	@ 150	OK FOR	SHEAR
3	3	300	600	413.790	325.148	414	399	400	2130	25M	@ 200	OK FOR	SHEAR
3	3	350	350	395.754	298.277	396	233	299	3500	25M	@ 150	10M	375
3	4.5	200	200	282.394	214.114	282	133	215	4360	25M	@ 100	10M	175
3	4.5	200	240	286.036	218.095	286	160	219	3680	25M	@ 125	10M	275
3	4.5	200	300	289.484	221.757	289	200	223	2980	25M	@ 150	10M	925
3	4.5	200	400	295.902	228.450	296	266	267	2290	25M	@ 200	OK FOR	SHEAR
3	4.5	225	225	287.018	217.978	287	150	219	3940	25M	@ 125	10M	225
3	4.5	225	270	293.159	220.197	293	180	222	3360	25M	@ 150	10M	450
3	4.5	225	338	301.528	233.233	302	225	234	2760	25M	@ 150	OK FOR	SHEAR
3	4.5	225	450	313.577	245.300	314	299	300	2160	25M	@ 200	OK FOR	SHEAR
3	4.5	250	250	291.581	221.780	292	166	222	3610	25M	@ 125	10M	300
3	4.5	250	300	298.081	228.668	298	200	230	3070	25M	@ 150	10M	700
3	4.5	250	375	306.861	237.668	307	250	251	2530	25M	@ 150	OK FOR	SHEAR
3	4.5	250	500	319.600	250.330	320	333	334	1980	25M	@ 250	OK FOR	SHEAR
3	4.5	300	300	300.389	228.973	300	200	230	3100	25M	@ 150	10M	700
3	4.5	300	360	307.507	236.404	308	240	241	2640	25M	@ 150	OK FOR	SHEAR
3	4.5	300	450	317.078	246.070	317	299	300	2180	25M	@ 200	OK FOR	SHEAR
3	4.5	300	600	330.910	259.659	331	399	400	1710	25M	@ 250	OK FOR	SHEAR
3	4.5	350	350	308.733	235.608	309	233	237	2730	25M	@ 150	OK FOR	SHEAR
3	6	200	200	242.945	197.651	243	133	199	3760	25M	@ 125	10M	200
3	6	200	240	247.321	201.812	247	160	203	3190	25M	@ 150	10M	400
3	6	200	300	251.475	205.667	251	200	207	2590	25M	@ 150	OK FOR	SHEAR
3	6	200	400	259.210	212.648	259	266	267	2010	25M	@ 200	OK FOR	SHEAR
3	6	225	225	248.278	201.864	248	150	203	3410	25M	@ 150	10M	300
3	6	225	270	255.601	208.670	256	180	210	2930	25M	@ 150	10M	625
3	6	225	338	265.566	217.620	266	225	226	2430	25M	@ 200	OK FOR	SHEAR
3	6	225	450	279.791	230.015	280	299	300	1920	25M	@ 250	OK FOR	SHEAR
3	6	250	250	253.417	205.870	253	166	207	3130	25M	@ 150	10M	425
3	6	250	300	261.099	212.934	261	200	214	2690	25M	@ 150	OK FOR	SHEAR
3	6	250	375	271.432	222.130	271	250	251	2240	25M	@ 200	OK FOR	SHEAR
3	6	250	500	286.279	235.036	286	333	334	1770	25M	@ 250	OK FOR	SHEAR
3	6	300	300	263.058	213.219	263	200	215	2710	25M	@ 150	OK FOR	SHEAR
3	6	300	360	271.318	220.674	271	240	241	2330	25M	@ 200	OK FOR	SHEAR
3	6	300	450	282.369	230.411	282	299	300	1940	25M	@ 250	OK FOR	SHEAR
3	6	300	600	298.201	244.183	298	399	400	1540	25M	@ 250	OK FOR	SHEAR
3	6	350	350	271.926	219.823	272	233	234	2400	25M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3	8	200	200	218.429	190.609	218	133	192	3380	25M	@ 150	10M	225
3	8	200	240	223.618	194.950	224	160	196	2880	25M	@ 150	10M	475
3	8	200	300	228.527	198.957	229	200	201	2360	25M	@ 200	OK FOR	SHEAR
3	8	200	400	237.613	206.228	238	266	267	1840	25M	@ 250	OK FOR	SHEAR
3	8	225	225	224.331	194.929	224	150	196	3080	25M	@ 150	10M	350
3	8	225	270	232.900	201.961	233	180	203	2670	25M	@ 150	10M	825
3	8	225	338	244.481	211.198	244	225	226	2240	25M	@ 200	OK FOR	SHEAR
3	8	225	450	260.825	223.931	261	299	300	1790	25M	@ 250	OK FOR	SHEAR
3	8	250	250	229.890	198.981	230	166	200	2840	25M	@ 150	10M	525
3	8	250	300	238.800	206.228	239	200	208	2460	25M	@ 200	OK FOR	SHEAR
3	8	250	375	250.716	215.672	251	250	251	2070	25M	@ 200	OK FOR	SHEAR
3	8	250	500	267.689	228.957	268	333	334	1660	25M	@ 250	OK FOR	SHEAR
3	8	300	300	240.100	206.276	240	200	208	2480	25M	@ 200	OK FOR	SHEAR
3	8	300	360	249.583	213.907	250	240	241	2150	25M	@ 200	OK FOR	SHEAR
3	8	300	450	262.232	223.935	262	299	300	1800	25M	@ 250	OK FOR	SHEAR
3	8	300	600	280.225	238.112	280	399	400	1450	25M	@ 325	OK FOR	SHEAR
3	8	350	350	249.346	212.766	249	233	234	2200	25M	@ 200	OK FOR	SHEAR
3	10	200	200	206.512	187.926	207	133	189	3190	25M	@ 150	10M	250
3	10	200	240	212.263	192.361	212	160	194	2740	25M	@ 150	10M	500
3	10	200	300	217.683	196.440	218	200	201	2250	25M	@ 200	OK FOR	SHEAR
3	10	200	400	227.663	203.819	228	266	267	1760	25M	@ 250	OK FOR	SHEAR
3	10	225	225	212.698	192.250	213	150	194	2920	25M	@ 150	10M	350
3	10	225	270	222.144	199.413	222	180	201	2550	25M	@ 150	10M	925
3	10	225	338	234.844	208.793	235	225	226	2150	25M	@ 200	OK FOR	SHEAR
3	10	225	450	252.633	221.803	253	299	300	1740	25M	@ 250	OK FOR	SHEAR
3	10	250	250	218.491	196.266	218	166	197	2700	25M	@ 150	10M	575
3	10	250	300	228.303	203.645	228	200	205	2350	25M	@ 200	OK FOR	SHEAR
3	10	250	375	241.369	213.313	241	250	251	1990	25M	@ 250	OK FOR	SHEAR
3	10	250	500	259.839	226.875	260	333	334	1610	25M	@ 250	OK FOR	SHEAR
3	10	300	300	229.118	203.553	229	200	205	2360	25M	@ 200	OK FOR	SHEAR
3	10	300	360	239.567	211.381	240	240	241	2060	25M	@ 200	OK FOR	SHEAR
3	10	300	450	253.439	77.119	253	299	300	1740	25M	@ 250	OK FOR	SHEAR
3	10	300	600	272.968	236.193	273	399	400	1410	25M	@ 325	OK FOR	SHEAR
3	10	350	350	238.735	210.094	239	233	234	2110	25M	@ 200	OK FOR	SHEAR
3	12	200	200	199.818	186.514	200	133	187	3090	25M	@ 150	10M	250
3	12	200	240	205.969	191.004	206	160	192	2650	25M	@ 150	10M	525
3	12	200	300	211.750	195.106	212	200	201	2180	25M	@ 200	OK FOR	SHEAR
3	12	200	400	222.360	202.574	222	266	267	1720	25M	@ 250	OK FOR	SHEAR
3	12	225	225	206.218	190.831	206	150	192	2830	25M	@ 150	10M	375
3	12	225	270	216.322	198.076	216	180	199	2480	25M	@ 200	OK FOR	SHEAR
3	12	225	338	229.848	207.581	230	225	226	2100	25M	@ 200	OK FOR	SHEAR
3	12	225	450	248.644	220.793	249	299	300	1710	25M	@ 250	OK FOR	SHEAR
3	12	250	250	212.239	194.859	212	166	196	2630	25M	@ 150	10M	600
3	12	250	300	222.745	202.367	223	200	204	2300	25M	@ 200	OK FOR	SHEAR
3	12	250	375	236.668	212.177	237	250	251	1950	25M	@ 250	OK FOR	SHEAR
3	12	250	500	256.152	225.957	256	333	334	1590	25M	@ 250	OK FOR	SHEAR
3	12	300	300	223.321	202.217	223	200	204	2300	25M	@ 200	OK FOR	SHEAR
3	12	300	360	234.517	210.191	235	240	241	2020	25M	@ 200	OK FOR	SHEAR
3	12	300	450	249.262	220.648	249	299	300	1710	25M	@ 250	OK FOR	SHEAR
3	12	300	600	269.744	235.427	270	399	400	1390	15M	@ 150	OK FOR	SHEAR
3	12	350	350	233.337	208.848	233	233	234	2060	25M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3.75	3	200	200	553.125	256.926	553	133	258	8540	25M	@ 50	10M	100
3.75	3	200	240	557.018	261.839	557	160	263	7170	25M	@ 50	10M	150
3.75	3	200	300	560.684	266.330	561	200	268	5770	25M	@ 75	10M	300
3.75	3	200	400	567.303	274.470	567	266	275	4380	25M	@ 100	OK FOR	SHEAR
3.75	3	225	225	558.668	260.691	559	150	262	7670	25M	@ 50	10M	125
3.75	3	225	270	565.210	268.766	565	180	270	6470	25M	@ 75	10M	200
3.75	3	225	338	574.123	279.300	574	225	280	5250	25M	@ 100	10M	425
3.75	3	225	450	587.106	293.891	587	299	300	4030	25M	@ 100	OK FOR	SHEAR
3.75	3	250	250	564.215	264.458	564	166	265	6970	25M	@ 75	10M	175
3.75	3	250	300	571.172	272.918	571	200	274	5880	25M	@ 75	10M	275
3.75	3	250	375	580.631	283.959	581	250	285	4780	25M	@ 100	10M	750
3.75	3	250	500	594.649	299.516	595	333	334	3680	25M	@ 125	OK FOR	SHEAR
3.75	3	300	300	575.266	271.939	575	200	273	5920	25M	@ 75	10M	275
3.75	3	300	360	583.039	281.173	583	240	283	5000	25M	@ 100	10M	600
3.75	3	300	450	593.675	293.299	594	299	300	4080	25M	@ 100	OK FOR	SHEAR
3.75	3	300	600	607.697	310.492	608	399	400	3130	25M	@ 150	OK FOR	SHEAR
3.75	3	350	350	586.229	279.248	586	233	280	5180	25M	@ 100	10M	525
3.75	4.5	200	200	409.128	191.619	409	133	193	6320	25M	@ 75	10M	225
3.75	4.5	200	240	413.678	196.061	414	160	197	5330	25M	@ 100	10M	450
3.75	4.5	200	300	417.993	200.163	418	200	202	4310	25M	@ 100	OK FOR	SHEAR
3.75	4.5	200	400	426.040	207.706	426	266	267	3290	25M	@ 150	OK FOR	SHEAR
3.75	4.5	225	225	415.412	195.915	415	150	197	5710	25M	@ 75	10M	325
3.75	4.5	225	270	423.098	203.243	423	180	205	4840	25M	@ 100	10M	775
3.75	4.5	225	338	433.637	213.064	434	225	226	3970	25M	@ 125	OK FOR	SHEAR
3.75	4.5	225	450	448.954	226.871	449	299	300	3080	25M	@ 150	OK FOR	SHEAR
3.75	4.5	250	250	421.657	200.138	422	166	201	5210	25M	@ 100	10M	500
3.75	4.5	250	300	429.831	207.876	430	200	209	4430	25M	@ 100	OK FOR	SHEAR
3.75	4.5	250	375	440.961	218.130	441	250	251	3640	25M	@ 125	OK FOR	SHEAR
3.75	4.5	250	500	457.331	232.779	457	333	334	2830	25M	@ 150	OK FOR	SHEAR
3.75	4.5	300	300	433.913	208.290	434	200	210	4470	25M	@ 100	OK FOR	SHEAR
3.75	4.5	300	360	442.971	216.752	443	240	241	3800	25M	@ 125	OK FOR	SHEAR
3.75	4.5	300	450	455.309	227.918	455	299	300	3130	25M	@ 150	OK FOR	SHEAR
3.75	4.5	300	600	473.472	243.863	473	399	400	2440	25M	@ 200	OK FOR	SHEAR
3.75	4.5	350	350	445.793	216.004	446	233	234	3940	25M	@ 125	OK FOR	SHEAR
3.75	6	200	200	344.353	171.231	344	133	172	5320	25M	@ 100	10M	350
3.75	6	200	240	349.753	175.865	350	160	177	4500	25M	@ 100	OK FOR	SHEAR
3.75	6	200	300	354.888	180.184	355	200	201	3660	25M	@ 125	OK FOR	SHEAR
3.75	6	200	400	364.473	188.048	364	266	267	2820	25M	@ 150	OK FOR	SHEAR
3.75	6	225	225	351.500	175.975	351	150	177	4830	25M	@ 100	10M	600
3.75	6	225	270	360.590	183.623	361	180	185	4130	25M	@ 100	OK FOR	SHEAR
3.75	6	225	338	373.031	193.778	373	225	226	3410	25M	@ 150	OK FOR	SHEAR
3.75	6	225	450	390.953	208.027	391	299	300	2690	25M	@ 150	OK FOR	SHEAR
3.75	6	250	250	358.494	180.573	358	166	181	4430	25M	@ 100	OK FOR	SHEAR
3.75	6	250	300	368.093	188.558	368	200	201	3790	25M	@ 125	OK FOR	SHEAR
3.75	6	250	375	381.100	199.097	381	250	251	3140	25M	@ 150	OK FOR	SHEAR
3.75	6	250	500	400.002	213.993	400	333	334	2470	25M	@ 200	OK FOR	SHEAR
3.75	6	300	300	371.908	189.189	372	200	201	3830	25M	@ 125	OK FOR	SHEAR
3.75	6	300	360	382.370	197.727	382	240	241	3280	25M	@ 150	OK FOR	SHEAR
3.75	6	300	450	396.502	208.985	397	299	300	2720	25M	@ 150	OK FOR	SHEAR
3.75	6	300	600	417.009	225.008	417	399	400	2150	25M	@ 200	OK FOR	SHEAR
3.75	6	350	350	384.565	197.079	385	233	234	3400	25M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3.75	8	200	200	302.293	161.514	302	133	162	4670	25M	@ 100	10M	475
3.75	8	200	240	308.802	166.466	309	160	168	3980	25M	@ 125	OK FOR	SHEAR
3.75	8	200	300	314.977	171.058	315	200	201	3250	25M	@ 150	OK FOR	SHEAR
3.75	8	200	400	326.462	179.423	326	266	267	2520	25M	@ 150	OK FOR	SHEAR
3.75	8	225	225	310.345	166.583	310	150	168	4260	25M	@ 100	10M	875
3.75	8	225	270	321.166	174.660	321	180	181	3680	25M	@ 125	OK FOR	SHEAR
3.75	8	225	338	335.877	161.285	336	225	226	3070	25M	@ 150	OK FOR	SHEAR
3.75	8	225	450	356.809	200.113	357	299	300	2450	25M	@ 200	OK FOR	SHEAR
3.75	8	250	250	318.042	171.388	318	166	172	3930	25M	@ 125	OK FOR	SHEAR
3.75	8	250	300	329.344	179.705	329	200	201	3390	25M	@ 150	OK FOR	SHEAR
3.75	8	250	375	344.548	190.617	345	250	251	2840	25M	@ 150	OK FOR	SHEAR
3.75	8	250	500	366.385	206.046	366	333	334	2270	25M	@ 200	OK FOR	SHEAR
3.75	8	300	300	332.413	180.083	332	200	201	3430	25M	@ 150	OK FOR	SHEAR
3.75	8	300	360	344.521	188.881	345	240	241	2960	25M	@ 150	OK FOR	SHEAR
3.75	8	300	450	360.764	200.440	361	299	300	2480	25M	@ 200	OK FOR	SHEAR
3.75	8	300	600	384.115	216.948	384	399	400	1980	25M	@ 250	OK FOR	SHEAR
3.75	8	350	350	345.655	187.913	346	233	234	3050	25M	@ 150	OK FOR	SHEAR
3.75	10	200	200	281.246	157.861	281	133	159	4350	25M	@ 100	10M	550
3.75	10	200	240	288.639	162.973	289	160	164	3720	25M	@ 125	OK FOR	SHEAR
3.75	10	200	300	295.632	167.701	296	200	201	3050	25M	@ 150	OK FOR	SHEAR
3.75	10	200	400	308.553	176.316	309	266	267	2390	25M	@ 200	OK FOR	SHEAR
3.75	10	225	225	289.825	162.997	290	150	164	3980	25M	@ 125	OK FOR	SHEAR
3.75	10	225	270	302.001	171.277	302	180	181	3460	25M	@ 150	OK FOR	SHEAR
3.75	10	225	338	318.451	182.172	318	225	226	2910	25M	@ 150	OK FOR	SHEAR
3.75	10	225	450	341.653	197.412	342	299	300	2350	25M	@ 200	OK FOR	SHEAR
3.75	10	250	250	297.910	167.797	298	166	168	3680	25M	@ 125	OK FOR	SHEAR
3.75	10	250	300	310.554	176.292	311	200	201	3200	25M	@ 150	OK FOR	SHEAR
3.75	10	250	375	327.486	187.500	327	250	251	2700	25M	@ 150	OK FOR	SHEAR
3.75	10	250	500	351.628	203.364	352	333	334	2180	25M	@ 200	OK FOR	SHEAR
3.75	10	300	300	312.824	176.437	313	200	201	3220	25M	@ 150	OK FOR	SHEAR
3.75	10	300	360	326.292	185.436	326	240	241	2800	25M	@ 150	OK FOR	SHEAR
3.75	10	300	450	344.307	197.316	344	299	300	2370	25M	@ 200	OK FOR	SHEAR
3.75	10	300	600	370.025	214.356	370	399	400	1910	25M	@ 250	OK FOR	SHEAR
3.75	10	350	350	326.445	184.188	326	233	234	2880	25M	@ 150	OK FOR	SHEAR
3.75	12	200	200	269.360	152.722	269	133	154	4160	25M	@ 100	10M	675
3.75	12	200	240	277.411	157.818	277	160	161	3570	25M	@ 125	OK FOR	SHEAR
3.75	12	200	300	285.000	162.541	285	200	201	2940	25M	@ 150	OK FOR	SHEAR
3.75	12	200	400	298.973	171.123	299	266	267	2310	25M	@ 200	OK FOR	SHEAR
3.75	12	225	225	278.252	157.810	278	150	159	3820	25M	@ 125	OK FOR	SHEAR
3.75	12	225	270	291.462	166.035	291	180	181	3340	25M	@ 150	OK FOR	SHEAR
3.75	12	225	338	309.236	176.954	309	225	226	2830	25M	@ 150	OK FOR	SHEAR
3.75	12	225	450	334.148	192.181	334	299	300	2300	25M	@ 200	OK FOR	SHEAR
3.75	12	250	250	286.605	162.525	287	166	167	3540	25M	@ 125	OK FOR	SHEAR
3.75	12	250	300	300.314	171.014	300	200	201	3100	25M	@ 150	OK FOR	SHEAR
3.75	12	250	375	318.605	182.246	319	250	251	2630	25M	@ 150	OK FOR	SHEAR
3.75	12	250	500	344.514	198.168	345	333	334	2130	25M	@ 200	OK FOR	SHEAR
3.75	12	300	300	301.990	171.069	302	200	201	3110	25M	@ 150	OK FOR	SHEAR
3.75	12	300	360	316.596	180.087	317	240	241	2720	25M	@ 150	OK FOR	SHEAR
3.75	12	300	450	336.049	192.087	336	299	300	2310	25M	@ 200	OK FOR	SHEAR
3.75	12	300	600	363.564	209.235	364	399	400	1880	25M	@ 250	OK FOR	SHEAR
3.75	12	350	350	316.015	178.797	316	233	234	2790	25M	@ 150	OK FOR	SHEAR

D6. Unstiffened Edge

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1	3	200	200	67.141	184.141	67	133	185	1040	15M	@ 150	10M	275
1	3	200	240	68.812	186.974	69	160	188	890	15M	@ 200	10M	600
1	3	200	300	70.299	189.491	70	200	201	730	15M	@ 250	OK FOR	SHEAR
1	3	200	400	72.826	193.780	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	3	225	225	67.497	184.852	67	150	186	930	15M	@ 200	10M	450
1	3	225	270	70.104	189.300	70	180	191	810	15M	@ 200	OK FOR	SHEAR
1	3	225	338	73.263	194.701	73	225	226	670	15M	@ 250	OK FOR	SHEAR
1	3	225	450	77.092	201.358	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	3	250	250	67.853	185.563	68	166	186	840	15M	@ 200	10M	875
1	3	250	300	70.484	190.081	70	200	201	730	15M	@ 250	OK FOR	SHEAR
1	3	250	375	73.658	195.553	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	3	250	500	77.568	202.421	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	3	300	300	68.566	186.986	69	200	201	710	15M	@ 250	OK FOR	SHEAR
1	3	300	360	71.244	191.644	71	240	241	620	15M	@ 250	OK FOR	SHEAR
1	3	300	450	74.491	197.326	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	3	300	600	78.521	204.546	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	3	350	350	69.278	188.408	69	233	234	620	15M	@ 250	OK FOR	SHEAR
1	4.5	200	200	64.853	183.005	65	133	184	1010	15M	@ 150	10M	275
1	4.5	200	240	66.903	186.129	67	160	187	870	15M	@ 200	10M	625
1	4.5	200	300	68.692	188.865	69	200	201	710	15M	@ 250	OK FOR	SHEAR
1	4.5	200	400	71.654	193.443	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	4.5	225	225	65.207	183.712	65	150	185	900	15M	@ 200	10M	450
1	4.5	225	270	68.383	188.590	68	180	190	790	15M	@ 250	OK FOR	SHEAR
1	4.5	225	338	72.092	194.363	72	225	226	660	15M	@ 250	OK FOR	SHEAR
1	4.5	225	450	76.397	201.289	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	4.5	250	250	65.562	184.419	66	166	185	810	15M	@ 200	10M	925
1	4.5	250	300	68.761	189.367	69	200	201	710	15M	@ 250	OK FOR	SHEAR
1	4.5	250	375	72.482	195.210	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	4.5	250	500	76.871	202.348	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	4.5	300	300	66.270	185.833	66	200	201	690	15M	@ 250	OK FOR	SHEAR
1	4.5	300	360	69.517	190.922	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	4.5	300	450	73.310	196.977	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	4.5	300	600	77.819	204.468	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	4.5	350	350	66.978	187.247	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	6	200	200	64.600	183.077	65	133	184	1000	15M	@ 200	10M	275
1	6	200	240	66.727	186.200	67	160	188	860	15M	@ 200	10M	600
1	6	200	300	68.567	188.931	69	200	201	710	15M	@ 250	OK FOR	SHEAR
1	6	200	400	71.587	193.495	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	6	225	225	64.954	183.784	65	150	185	900	15M	@ 200	10M	450
1	6	225	270	68.239	188.658	68	180	190	790	15M	@ 250	OK FOR	SHEAR
1	6	225	338	72.024	194.415	72	225	226	660	15M	@ 250	OK FOR	SHEAR
1	6	225	450	76.373	201.319	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	6	250	250	65.308	184.490	65	166	185	810	15M	@ 200	10M	925
1	6	250	300	68.617	189.435	69	200	201	710	15M	@ 250	OK FOR	SHEAR
1	6	250	375	72.414	195.262	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	6	250	500	76.847	202.379	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	6	300	300	66.015	185.904	66	200	201	680	15M	@ 250	OK FOR	SHEAR
1	6	300	360	69.372	190.990	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	6	300	450	73.241	197.029	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	6	300	600	77.794	204.499	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	6	350	350	66.722	187.317	67	233	234	600	15M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1	8	200	200	64.573	183.101	65	133	184	1000	15M	@ 200	10M	275
1	8	200	240	66.712	186.217	67	160	188	860	15M	@ 200	10M	600
1	8	200	300	68.558	188.943	69	200	201	710	15M	@ 250	OK FOR	SHEAR
1	8	200	400	71.583	193.501	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	8	225	225	64.927	183.807	65	150	185	900	15M	@ 200	10M	450
1	8	225	270	68.228	188.672	68	180	190	790	15M	@ 250	OK FOR	SHEAR
1	8	225	338	72.021	194.422	72	225	226	660	15M	@ 250	OK FOR	SHEAR
1	8	225	450	76.372	201.321	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	8	250	250	65.280	184.514	65	166	185	810	15M	@ 200	10M	925
1	8	250	300	68.606	189.449	69	200	201	710	15M	@ 250	OK FOR	SHEAR
1	8	250	375	72.410	195.268	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	8	250	500	76.846	202.382	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	8	300	300	65.987	185.928	66	200	201	680	15M	@ 250	OK FOR	SHEAR
1	8	300	360	69.361	191.004	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	8	300	450	73.238	197.035	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	8	300	600	77.793	204.502	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	8	350	350	66.694	187.342	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	10	200	200	64.572	183.102	65	133	184	1000	15M	@ 200	10M	275
1	10	200	240	66.711	186.218	67	160	188	860	15M	@ 200	10M	600
1	10	200	300	68.557	188.943	69	200	201	710	15M	@ 250	OK FOR	SHEAR
1	10	200	400	71.583	193.501	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	10	225	225	64.925	183.809	65	150	185	900	15M	@ 200	10M	450
1	10	225	270	68.228	188.672	68	180	190	790	15M	@ 250	OK FOR	SHEAR
1	10	225	338	72.021	194.422	72	225	226	660	15M	@ 250	OK FOR	SHEAR
1	10	225	450	76.372	201.322	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	10	250	250	65.279	184.516	65	166	185	810	15M	@ 200	10M	925
1	10	250	300	68.605	189.450	69	200	201	710	15M	@ 250	OK FOR	SHEAR
1	10	250	375	72.410	195.269	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	10	250	500	76.846	202.382	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	10	300	300	65.986	185.930	66	200	201	680	15M	@ 250	OK FOR	SHEAR
1	10	300	360	69.360	191.005	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	10	300	450	73.237	197.036	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	10	300	600	77.793	204.503	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	10	350	350	66.693	187.344	67	233	234	600	15M	@ 325	OK FOR	SHEAR
1	12	200	200	64.572	183.103	65	133	184	1000	15M	@ 200	10M	275
1	12	200	240	66.711	186.218	67	160	188	860	15M	@ 200	10M	600
1	12	200	300	68.557	188.943	69	200	201	710	15M	@ 250	OK FOR	SHEAR
1	12	200	400	71.583	193.501	88	266	267	680	15M	@ 250	OK FOR	SHEAR
1	12	225	225	64.925	183.809	65	150	185	900	15M	@ 200	10M	450
1	12	225	270	68.228	188.672	68	180	190	790	15M	@ 250	OK FOR	SHEAR
1	12	225	338	72.021	194.422	72	225	226	660	15M	@ 250	OK FOR	SHEAR
1	12	225	450	76.372	201.322	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	12	250	250	65.279	184.516	65	166	185	810	15M	@ 200	10M	925
1	12	250	300	68.605	189.450	69	200	201	710	15M	@ 250	OK FOR	SHEAR
1	12	250	375	72.410	195.269	77	250	251	640	15M	@ 250	OK FOR	SHEAR
1	12	250	500	76.846	202.382	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1	12	300	300	65.986	185.930	66	200	201	680	15M	@ 250	OK FOR	SHEAR
1	12	300	360	69.360	191.005	71	240	241	610	15M	@ 250	OK FOR	SHEAR
1	12	300	450	73.237	197.036	111	299	300	770	15M	@ 250	OK FOR	SHEAR
1	12	300	600	77.793	204.503	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1	12	350	350	66.692	187.344	67	233	234	600	15M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1.5	3	200	200	121.051	147.972	121	133	149	1870	25M	@ 250	10M	875
1.5	3	200	240	123.285	151.160	123	160	161	1590	25M	@ 250	OK FOR	SHEAR
1.5	3	200	300	125.322	154.058	125	200	201	1290	15M	@ 150	OK FOR	SHEAR
1.5	3	200	400	128.910	159.163	129	266	267	1000	15M	@ 200	OK FOR	SHEAR
1.5	3	225	225	121.859	149.056	122	150	151	1680	25M	@ 250	OK FOR	SHEAR
1.5	3	225	270	125.392	154.121	125	180	181	1440	25M	@ 325	OK FOR	SHEAR
1.5	3	225	338	129.885	160.554	130	225	226	1190	15M	@ 150	OK FOR	SHEAR
1.5	3	225	450	135.731	169.019	136	299	300	940	15M	@ 200	OK FOR	SHEAR
1.5	3	250	250	122.667	150.140	123	166	167	1520	25M	@ 250	OK FOR	SHEAR
1.5	3	250	300	126.254	155.311	126	200	201	1300	15M	@ 150	OK FOR	SHEAR
1.5	3	250	375	130.799	161.860	131	250	251	1080	15M	@ 150	OK FOR	SHEAR
1.5	3	250	500	136.812	170.633	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	3	300	300	124.283	152.309	124	200	201	1280	15M	@ 150	OK FOR	SHEAR
1.5	3	300	360	127.980	157.691	128	240	241	1100	15M	@ 150	OK FOR	SHEAR
1.5	3	300	450	132.689	164.558	133	299	300	920	15M	@ 200	OK FOR	SHEAR
1.5	3	300	600	138.974	173.860	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	3	350	350	125.898	154.478	126	233	234	1120	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	200	103.597	140.748	104	133	142	1600	25M	@ 250	OK FOR	SHEAR
1.5	4.5	200	240	106.705	144.534	107	160	161	1380	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	300	109.524	147.985	110	200	201	1130	15M	@ 150	OK FOR	SHEAR
1.5	4.5	200	400	114.434	154.049	114	266	267	890	15M	@ 200	OK FOR	SHEAR
1.5	4.5	225	225	104.398	141.814	104	150	151	1440	25M	@ 325	OK FOR	SHEAR
1.5	4.5	225	270	109.283	147.812	109	180	181	1250	15M	@ 150	OK FOR	SHEAR
1.5	4.5	225	338	115.410	155.428	115	225	226	1060	15M	@ 150	OK FOR	SHEAR
1.5	4.5	225	450	123.144	165.289	123	299	300	850	15M	@ 200	OK FOR	SHEAR
1.5	4.5	250	250	105.199	142.880	105	166	167	1300	15M	@ 150	OK FOR	SHEAR
1.5	4.5	250	300	110.138	148.983	110	200	201	1140	15M	@ 150	OK FOR	SHEAR
1.5	4.5	250	375	116.305	156.706	116	250	251	960	15M	@ 200	OK FOR	SHEAR
1.5	4.5	250	500	124.215	166.882	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	300	106.801	145.011	107	200	201	1100	15M	@ 150	OK FOR	SHEAR
1.5	4.5	300	360	111.848	151.324	112	240	241	960	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	450	118.177	159.363	118	299	300	820	15M	@ 200	OK FOR	SHEAR
1.5	4.5	300	600	126.356	170.066	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	4.5	350	350	108.403	147.142	108	233	234	960	15M	@ 200	OK FOR	SHEAR
1.5	6	200	200	98.976	139.917	99	133	141	1530	25M	@ 250	OK FOR	SHEAR
1.5	6	200	240	102.568	143.947	103	160	161	1320	15M	@ 150	OK FOR	SHEAR
1.5	6	200	300	105.779	147.581	106	200	201	1090	15M	@ 150	OK FOR	SHEAR
1.5	6	200	400	111.259	153.890	111	266	267	860	15M	@ 200	OK FOR	SHEAR
1.5	6	225	225	99.773	140.978	100	150	151	1370	15M	@ 150	OK FOR	SHEAR
1.5	6	225	270	105.388	147.337	105	180	181	1210	15M	@ 150	OK FOR	SHEAR
1.5	6	225	338	112.236	155.267	112	225	226	1030	15M	@ 150	OK FOR	SHEAR
1.5	6	225	450	120.598	165.348	121	299	300	830	15M	@ 200	OK FOR	SHEAR
1.5	6	250	250	100.571	142.040	101	166	167	1250	15M	@ 150	OK FOR	SHEAR
1.5	6	250	300	106.240	148.504	106	200	201	1100	15M	@ 150	OK FOR	SHEAR
1.5	6	250	375	113.124	156.540	113	250	251	940	15M	@ 200	OK FOR	SHEAR
1.5	6	250	500	121.665	166.938	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	6	300	300	102.167	144.162	102	200	201	1060	15M	@ 150	OK FOR	SHEAR
1.5	6	300	360	107.943	150.837	108	240	241	930	15M	@ 200	OK FOR	SHEAR
1.5	6	300	450	114.989	159.191	115	299	300	790	15M	@ 250	OK FOR	SHEAR
1.5	6	300	600	123.799	170.117	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	6	350	350	103.762	146.284	104	233	234	920	15M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1.5	8	200	200	97.710	139.984	98	133	141	1510	25M	@ 250	OK FOR	SHEAR
1.5	8	200	240	101.514	144.039	102	160	161	1310	15M	@ 150	OK FOR	SHEAR
1.5	8	200	300	104.873	147.684	105	200	201	1080	15M	@ 150	OK FOR	SHEAR
1.5	8	200	400	110.532	153.990	111	266	267	860	15M	@ 200	OK FOR	SHEAR
1.5	8	225	225	98.506	141.044	99	150	151	1360	15M	@ 150	OK FOR	SHEAR
1.5	8	225	270	104.428	147.437	104	180	181	1200	15M	@ 150	OK FOR	SHEAR
1.5	8	225	338	111.509	155.367	112	225	226	1020	15M	@ 150	OK FOR	SHEAR
1.5	8	225	450	120.010	165.422	120	299	300	830	15M	@ 200	OK FOR	SHEAR
1.5	8	250	250	99.302	142.104	99	166	167	1230	15M	@ 150	OK FOR	SHEAR
1.5	8	250	300	105.278	148.603	105	200	201	1090	15M	@ 150	OK FOR	SHEAR
1.5	8	250	375	112.394	156.640	112	250	251	930	15M	@ 200	OK FOR	SHEAR
1.5	8	250	500	121.076	167.012	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	8	300	300	100.895	144.225	101	200	201	1040	15M	@ 150	OK FOR	SHEAR
1.5	8	300	360	106.978	150.935	107	240	241	920	15M	@ 200	OK FOR	SHEAR
1.5	8	300	450	114.256	159.290	114	299	300	790	15M	@ 250	OK FOR	SHEAR
1.5	8	300	600	123.208	170.192	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	8	350	350	102.487	146.345	102	233	234	910	15M	@ 200	OK FOR	SHEAR
1.5	10	200	200	97.537	140.032	98	133	141	1510	25M	@ 250	OK FOR	SHEAR
1.5	10	200	240	101.383	144.077	101	160	161	1310	15M	@ 150	OK FOR	SHEAR
1.5	10	200	300	104.766	147.714	105	200	201	1080	15M	@ 150	OK FOR	SHEAR
1.5	10	200	400	110.448	154.008	110	266	267	860	15M	@ 200	OK FOR	SHEAR
1.5	10	225	225	98.333	141.092	98	150	151	1350	15M	@ 150	OK FOR	SHEAR
1.5	10	225	270	104.312	147.470	104	180	181	1200	15M	@ 150	OK FOR	SHEAR
1.5	10	225	338	111.424	155.385	111	225	226	1020	15M	@ 150	OK FOR	SHEAR
1.5	10	225	450	119.937	165.430	120	299	300	830	15M	@ 200	OK FOR	SHEAR
1.5	10	250	250	99.128	142.153	99	166	167	1230	15M	@ 150	OK FOR	SHEAR
1.5	10	250	300	105.161	148.636	105	200	201	1090	15M	@ 150	OK FOR	SHEAR
1.5	10	250	375	112.309	156.658	112	250	251	930	15M	@ 200	OK FOR	SHEAR
1.5	10	250	500	121.002	167.021	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	10	300	300	100.719	144.273	101	200	201	1040	15M	@ 150	OK FOR	SHEAR
1.5	10	300	360	106.860	150.968	107	240	241	920	15M	@ 200	OK FOR	SHEAR
1.5	10	300	450	114.170	159.309	114	299	300	790	15M	@ 250	OK FOR	SHEAR
1.5	10	300	600	123.134	170.202	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	10	350	350	102.310	146.393	102	233	234	910	15M	@ 200	OK FOR	SHEAR
1.5	12	200	200	97.514	140.042	98	133	141	1510	25M	@ 250	OK FOR	SHEAR
1.5	12	200	240	101.367	144.084	101	160	161	1310	15M	@ 150	OK FOR	SHEAR
1.5	12	200	300	104.753	147.718	105	200	201	1080	15M	@ 150	OK FOR	SHEAR
1.5	12	200	400	110.438	154.010	110	266	267	860	15M	@ 200	OK FOR	SHEAR
1.5	12	225	225	98.310	141.102	98	150	151	1350	15M	@ 150	OK FOR	SHEAR
1.5	12	225	270	104.298	147.475	104	180	181	1200	15M	@ 150	OK FOR	SHEAR
1.5	12	225	338	111.415	155.388	111	225	226	1020	15M	@ 150	OK FOR	SHEAR
1.5	12	225	450	119.928	165.431	120	299	300	830	15M	@ 200	OK FOR	SHEAR
1.5	12	250	250	99.105	142.163	99	166	167	1230	15M	@ 150	OK FOR	SHEAR
1.5	12	250	300	105.148	148.641	105	200	201	1090	15M	@ 150	OK FOR	SHEAR
1.5	12	250	375	112.299	156.661	112	250	251	930	15M	@ 200	OK FOR	SHEAR
1.5	12	250	500	120.993	167.022	137	333	334	850	15M	@ 200	OK FOR	SHEAR
1.5	12	300	300	100.696	144.283	101	200	201	1040	15M	@ 150	OK FOR	SHEAR
1.5	12	300	360	106.847	150.974	107	240	241	920	15M	@ 200	OK FOR	SHEAR
1.5	12	300	450	114.160	159.312	114	299	300	790	15M	@ 250	OK FOR	SHEAR
1.5	12	300	600	123.125	170.203	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
1.5	12	350	350	102.286	146.404	102	233	234	910	15M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	3	200	200	168.989	136.113	169	133	137	2610	25M	@ 150	OK FOR	SHEAR
2	3	200	240	171.155	139.155	171	160	161	2210	25M	@ 200	OK FOR	SHEAR
2	3	200	300	173.153	141.933	173	200	201	1790	25M	@ 250	OK FOR	SHEAR
2	3	200	400	176.735	146.863	177	266	267	1370	15M	@ 150	OK FOR	SHEAR
2	3	225	225	170.436	137.593	170	150	151	2340	25M	@ 200	OK FOR	SHEAR
2	3	225	270	173.919	142.475	174	180	181	1990	25M	@ 250	OK FOR	SHEAR
2	3	225	338	178.460	148.745	178	225	226	1630	25M	@ 250	OK FOR	SHEAR
2	3	225	450	184.619	157.179	185	299	300	1270	15M	@ 150	OK FOR	SHEAR
2	3	250	250	171.883	139.073	172	166	167	2130	25M	@ 200	OK FOR	SHEAR
2	3	250	300	175.465	144.099	175	200	201	1810	25M	@ 250	OK FOR	SHEAR
2	3	250	375	180.124	150.543	180	250	251	1490	25M	@ 325	OK FOR	SHEAR
2	3	250	500	186.560	159.379	187	333	334	1160	15M	@ 150	OK FOR	SHEAR
2	3	300	300	174.778	142.032	175	200	201	1800	25M	@ 250	OK FOR	SHEAR
2	3	300	360	178.558	147.347	179	240	241	1540	25M	@ 250	OK FOR	SHEAR
2	3	300	450	183.513	154.224	184	299	300	1260	15M	@ 150	OK FOR	SHEAR
2	3	300	600	190.440	163.778	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	3	350	350	177.672	144.992	178	233	234	1570	25M	@ 250	OK FOR	SHEAR
2	4.5	200	200	135.503	120.764	136	133	134	2100	25M	@ 200	OK FOR	SHEAR
2	4.5	200	240	138.539	124.053	139	160	161	1790	25M	@ 250	OK FOR	SHEAR
2	4.5	200	300	141.351	127.116	141	200	201	1460	25M	@ 325	OK FOR	SHEAR
2	4.5	200	400	146.401	132.671	146	266	267	1130	15M	@ 150	OK FOR	SHEAR
2	4.5	225	225	136.935	122.198	137	150	151	1880	25M	@ 250	OK FOR	SHEAR
2	4.5	225	270	141.780	127.490	142	180	181	1630	25M	@ 250	OK FOR	SHEAR
2	4.5	225	338	148.117	134.504	148	225	226	1360	15M	@ 150	OK FOR	SHEAR
2	4.5	225	450	156.642	144.167	157	299	300	1080	15M	@ 150	OK FOR	SHEAR
2	4.5	250	250	138.367	123.632	138	166	167	1710	25M	@ 250	OK FOR	SHEAR
2	4.5	250	300	143.309	129.064	143	200	201	1480	25M	@ 325	OK FOR	SHEAR
2	4.5	250	375	149.748	136.240	150	250	251	1240	15M	@ 150	OK FOR	SHEAR
2	4.5	250	500	158.557	146.303	159	333	334	980	15M	@ 200	OK FOR	SHEAR
2	4.5	300	300	141.231	126.500	141	200	201	1460	25M	@ 325	OK FOR	SHEAR
2	4.5	300	360	146.367	132.213	146	240	241	1260	15M	@ 150	OK FOR	SHEAR
2	4.5	300	450	153.095	139.809	153	299	300	1060	15M	@ 150	OK FOR	SHEAR
2	4.5	300	600	162.387	150.575	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	4.5	350	350	144.095	129.369	144	233	234	1280	15M	@ 150	OK FOR	SHEAR
2	6	200	200	123.843	116.985	124	133	134	1920	25M	@ 250	OK FOR	SHEAR
2	6	200	240	127.665	120.680	128	160	161	1650	25M	@ 250	OK FOR	SHEAR
2	6	200	300	131.177	124.106	131	200	201	1350	15M	@ 150	OK FOR	SHEAR
2	6	200	400	137.400	130.265	137	266	267	1070	15M	@ 150	OK FOR	SHEAR
2	6	225	225	125.267	118.405	125	150	151	1720	25M	@ 250	OK FOR	SHEAR
2	6	225	270	131.327	124.326	131	180	181	1510	25M	@ 250	OK FOR	SHEAR
2	6	225	338	139.116	132.089	139	225	226	1280	15M	@ 150	OK FOR	SHEAR
2	6	225	450	149.282	142.567	149	299	300	1030	15M	@ 150	OK FOR	SHEAR
2	6	250	250	126.691	119.825	127	166	167	1570	25M	@ 250	OK FOR	SHEAR
2	6	250	300	132.846	125.886	133	200	201	1370	15M	@ 150	OK FOR	SHEAR
2	6	250	375	140.727	133.807	141	250	251	1160	15M	@ 150	OK FOR	SHEAR
2	6	250	500	151.185	144.690	151	333	334	940	15M	@ 200	OK FOR	SHEAR
2	6	300	300	129.538	122.666	130	200	201	1340	15M	@ 150	OK FOR	SHEAR
2	6	300	360	135.886	129.007	136	240	241	1170	15M	@ 150	OK FOR	SHEAR
2	6	300	450	144.054	137.349	144	299	300	990	15M	@ 200	OK FOR	SHEAR
2	6	300	600	154.992	148.935	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	6	350	350	132.386	125.506	132	233	234	1170	15M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	8	200	200	118.896	116.233	119	133	134	1840	25M	@ 250	OK FOR	SHEAR
2	8	200	240	123.331	120.144	123	160	161	1590	25M	@ 250	OK FOR	SHEAR
2	8	200	300	127.341	123.734	127	200	201	1320	15M	@ 150	OK FOR	SHEAR
2	8	200	400	134.298	130.107	134	266	267	1040	15M	@ 150	OK FOR	SHEAR
2	8	225	225	120.315	117.647	120	150	151	1660	25M	@ 250	OK FOR	SHEAR
2	8	225	270	127.298	123.889	127	180	181	1460	25M	@ 325	OK FOR	SHEAR
2	8	225	338	136.013	131.928	136	225	226	1250	15M	@ 150	OK FOR	SHEAR
2	8	225	450	147.004	142.591	147	299	300	1010	15M	@ 150	OK FOR	SHEAR
2	8	250	250	121.733	119.062	122	166	167	1510	25M	@ 250	OK FOR	SHEAR
2	8	250	300	128.812	125.445	129	200	201	1330	15M	@ 150	OK FOR	SHEAR
2	8	250	375	137.613	133.641	138	250	251	1140	15M	@ 150	OK FOR	SHEAR
2	8	250	500	148.901	144.711	149	333	334	920	15M	@ 200	OK FOR	SHEAR
2	8	300	300	124.569	121.891	125	200	201	1290	15M	@ 150	OK FOR	SHEAR
2	8	300	360	131.840	128.555	132	240	241	1140	15M	@ 150	OK FOR	SHEAR
2	8	300	450	140.928	137.175	141	299	300	970	15M	@ 200	OK FOR	SHEAR
2	8	300	600	152.695	148.951	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	8	350	350	127.405	124.720	127	233	234	1130	15M	@ 150	OK FOR	SHEAR
2	10	200	200	117.699	116.312	118	133	134	1820	25M	@ 250	OK FOR	SHEAR
2	10	200	240	122.367	120.249	122	160	161	1580	25M	@ 250	OK FOR	SHEAR
2	10	200	300	126.545	123.849	127	200	201	1310	15M	@ 150	OK FOR	SHEAR
2	10	200	400	133.712	130.223	134	266	267	1040	15M	@ 150	OK FOR	SHEAR
2	10	225	225	119.114	117.726	119	150	151	1640	25M	@ 250	OK FOR	SHEAR
2	10	225	270	126.439	124.000	126	180	181	1450	25M	@ 325	OK FOR	SHEAR
2	10	225	338	135.426	132.043	135	225	226	1240	15M	@ 150	OK FOR	SHEAR
2	10	225	450	146.591	142.688	147	299	300	1010	15M	@ 150	OK FOR	SHEAR
2	10	250	250	120.530	119.139	121	166	167	1490	25M	@ 325	OK FOR	SHEAR
2	10	250	300	127.951	125.555	128	200	201	1320	15M	@ 150	OK FOR	SHEAR
2	10	250	375	137.022	133.756	137	250	251	1130	15M	@ 150	OK FOR	SHEAR
2	10	250	500	148.486	144.808	148	333	334	920	15M	@ 200	OK FOR	SHEAR
2	10	300	300	123.361	121.966	123	200	201	1270	15M	@ 150	OK FOR	SHEAR
2	10	300	360	130.973	128.664	131	240	241	1130	15M	@ 150	OK FOR	SHEAR
2	10	300	450	140.333	137.289	140	299	300	970	15M	@ 200	OK FOR	SHEAR
2	10	300	600	152.277	149.048	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	10	350	350	126.192	124.793	126	233	234	1120	15M	@ 150	OK FOR	SHEAR
2	12	200	200	117.427	116.400	117	133	134	1820	25M	@ 250	OK FOR	SHEAR
2	12	200	240	122.168	120.330	122	160	161	1580	25M	@ 250	OK FOR	SHEAR
2	12	200	300	126.391	123.923	126	200	201	1310	15M	@ 150	OK FOR	SHEAR
2	12	200	400	133.605	130.286	134	266	267	1040	15M	@ 150	OK FOR	SHEAR
2	12	225	225	118.842	117.814	119	150	151	1640	25M	@ 250	OK FOR	SHEAR
2	12	225	270	126.268	124.077	126	180	181	1450	25M	@ 325	OK FOR	SHEAR
2	12	225	338	135.318	132.107	135	225	226	1240	15M	@ 150	OK FOR	SHEAR
2	12	225	450	146.513	142.741	147	299	300	1010	15M	@ 150	OK FOR	SHEAR
2	12	250	250	120.256	119.227	120	166	167	1490	25M	@ 325	OK FOR	SHEAR
2	12	250	300	127.779	125.632	128	200	201	1320	15M	@ 150	OK FOR	SHEAR
2	12	250	375	136.914	133.820	137	250	251	1130	15M	@ 150	OK FOR	SHEAR
2	12	250	500	148.407	144.861	148	333	334	920	15M	@ 200	OK FOR	SHEAR
2	12	300	300	123.086	122.054	123	200	201	1270	15M	@ 150	OK FOR	SHEAR
2	12	300	360	130.800	128.742	131	240	241	1130	15M	@ 150	OK FOR	SHEAR
2	12	300	450	140.223	137.354	140	299	300	970	15M	@ 200	OK FOR	SHEAR
2	12	300	600	152.196	149.102	197	399	400	1020	15M	@ 150	OK FOR	SHEAR
2	12	350	350	125.915	124.881	126	233	234	1120	15M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2.5	3	200	200	249.243	255.038	249	133	256	3850	25M	@ 125	10M	100
2.5	3	200	240	251.618	258.150	252	160	259	3240	25M	@ 150	10M	150
2.5	3	200	300	253.816	260.984	254	200	262	2620	25M	@ 150	10M	325
2.5	3	200	400	257.787	266.006	258	266	267	1990	25M	@ 250	OK FOR	SHEAR
2.5	3	225	225	251.520	256.941	252	150	258	3460	25M	@ 150	10M	150
2.5	3	225	270	255.390	261.972	255	180	263	2930	25M	@ 150	10M	225
2.5	3	225	338	260.490	268.419	260	225	270	2380	25M	@ 200	10M	525
2.5	3	225	450	267.563	277.128	268	299	300	1840	25M	@ 250	OK FOR	SHEAR
2.5	3	250	250	253.796	258.845	254	166	260	3140	25M	@ 150	10M	175
2.5	3	250	300	270.588	288.613	271	200	290	2790	25M	@ 150	10M	225
2.5	3	250	375	263.124	270.746	263	250	272	2170	25M	@ 200	OK FOR	SHEAR
2.5	3	250	500	270.622	279.960	271	333	334	1680	25M	@ 250	OK FOR	SHEAR
2.5	3	300	300	258.350	262.652	258	200	264	2660	25M	@ 150	10M	325
2.5	3	300	360	262.692	268.245	263	240	270	2260	25M	@ 200	10M	850
2.5	3	300	450	268.462	275.486	268	299	300	1850	25M	@ 250	OK FOR	SHEAR
2.5	3	300	600	276.738	285.625	277	399	400	1430	25M	@ 325	OK FOR	SHEAR
2.5	3	350	350	262.903	266.459	263	233	268	2320	25M	@ 200	10M	700
2.5	4.5	200	200	194.110	218.573	194	133	220	3000	25M	@ 150	10M	150
2.5	4.5	200	240	197.108	221.407	197	160	223	2540	25M	@ 150	10M	250
2.5	4.5	200	300	199.888	224.024	200	200	225	2060	25M	@ 200	10M	850
2.5	4.5	200	400	204.914	228.760	205	266	267	1590	25M	@ 250	OK FOR	SHEAR
2.5	4.5	225	225	196.359	220.388	196	150	222	2700	25M	@ 150	10M	225
2.5	4.5	225	270	201.203	224.992	201	180	226	2310	25M	@ 200	10M	400
2.5	4.5	225	338	207.589	231.058	208	225	232	1900	25M	@ 250	OK FOR	SHEAR
2.5	4.5	225	450	216.405	239.546	216	299	300	1490	25M	@ 325	OK FOR	SHEAR
2.5	4.5	250	250	198.609	222.203	199	166	223	2460	25M	@ 200	10M	300
2.5	4.5	250	300	214.993	249.212	215	200	251	2220	25M	@ 200	10M	400
2.5	4.5	250	375	210.176	233.273	210	250	251	1740	25M	@ 250	OK FOR	SHEAR
2.5	4.5	250	500	219.417	242.244	219	333	334	1360	15M	@ 150	OK FOR	SHEAR
2.5	4.5	300	300	203.108	225.833	203	200	227	2100	25M	@ 200	10M	775
2.5	4.5	300	360	208.411	230.968	208	240	241	1790	25M	@ 250	OK FOR	SHEAR
2.5	4.5	300	450	215.439	237.787	215	299	300	1480	25M	@ 325	OK FOR	SHEAR
2.5	4.5	300	600	225.439	247.641	225	399	400	1160	15M	@ 150	OK FOR	SHEAR
2.5	4.5	350	350	207.607	229.464	208	233	234	1840	25M	@ 250	OK FOR	SHEAR
2.5	6	200	200	172.494	209.507	172	133	210	2670	25M	@ 150	10M	175
2.5	6	200	240	176.185	212.535	176	160	214	2270	25M	@ 200	10M	300
2.5	6	200	300	179.612	215.354	180	200	217	1850	25M	@ 250	OK FOR	SHEAR
2.5	6	200	400	185.794	220.487	186	266	267	1440	25M	@ 325	OK FOR	SHEAR
2.5	6	225	225	174.728	211.294	175	150	213	2400	25M	@ 200	10M	250
2.5	6	225	270	180.655	216.211	181	180	218	2070	25M	@ 200	10M	500
2.5	6	225	338	188.458	222.757	188	225	226	1730	25M	@ 250	OK FOR	SHEAR
2.5	6	225	450	199.094	231.924	199	299	300	1370	15M	@ 150	OK FOR	SHEAR
2.5	6	250	250	176.962	213.080	177	166	214	2190	25M	@ 200	10M	375
2.5	6	250	300	193.866	239.865	194	200	241	2000	25M	@ 250	10M	525
2.5	6	250	375	191.015	224.936	191	250	251	1580	25M	@ 250	OK FOR	SHEAR
2.5	6	250	500	202.080	234.588	202	333	334	1250	15M	@ 150	OK FOR	SHEAR
2.5	6	300	300	181.430	216.654	181	200	218	1870	25M	@ 250	OK FOR	SHEAR
2.5	6	300	360	187.810	222.096	188	240	241	1620	25M	@ 250	OK FOR	SHEAR
2.5	6	300	450	196.237	229.385	196	299	300	1350	15M	@ 150	OK FOR	SHEAR
2.5	6	300	600	208.054	239.915	208	399	400	1080	15M	@ 150	OK FOR	SHEAR
2.5	6	350	350	185.899	220.228	186	233	234	1640	25M	@ 250	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2.5	8	200	200	161.054	206.167	161	133	207	2490	25M	@ 200	10M	175
2.5	8	200	240	165.517	209.450	166	160	211	2130	25M	@ 200	10M	325
2.5	8	200	300	169.620	212.490	170	200	214	1750	25M	@ 250	OK FOR	SHEAR
2.5	8	200	400	176.909	217.971	177	266	267	1370	15M	@ 150	OK FOR	SHEAR
2.5	8	225	225	163.276	207.940	163	150	209	2250	25M	@ 200	10M	250
2.5	8	225	270	170.391	213.249	170	180	215	1950	25M	@ 250	10M	550
2.5	8	225	338	179.566	220.230	180	225	226	1650	25M	@ 250	OK FOR	SHEAR
2.5	8	225	450	191.682	229.826	192	299	300	1320	15M	@ 150	OK FOR	SHEAR
2.5	8	250	250	165.498	209.713	165	166	210	2050	25M	@ 200	10M	400
2.5	8	250	300	183.274	236.688	183	200	238	1890	25M	@ 250	10M	550
2.5	8	250	375	182.101	222.394	182	250	251	1500	25M	@ 325	OK FOR	SHEAR
2.5	8	250	500	194.653	232.478	195	333	334	1210	15M	@ 150	OK FOR	SHEAR
2.5	8	300	300	169.942	213.258	170	200	215	1750	25M	@ 250	OK FOR	SHEAR
2.5	8	300	360	177.506	219.093	178	240	241	1530	25M	@ 250	OK FOR	SHEAR
2.5	8	300	450	187.294	226.817	187	299	300	1290	15M	@ 150	OK FOR	SHEAR
2.5	8	300	600	200.594	237.781	201	399	400	1040	15M	@ 150	OK FOR	SHEAR
2.5	8	350	350	174.387	216.804	174	233	234	1540	25M	@ 250	OK FOR	SHEAR
2.5	10	200	200	157.166	205.644	157	133	207	2430	25M	@ 200	10M	175
2.5	10	200	240	162.079	209.025	162	160	210	2090	25M	@ 200	10M	325
2.5	10	200	300	166.540	212.135	167	200	214	1720	25M	@ 250	OK FOR	SHEAR
2.5	10	200	400	174.346	217.702	174	266	267	1350	15M	@ 150	OK FOR	SHEAR
2.5	10	225	225	159.381	207.412	159	150	209	2190	25M	@ 200	10M	250
2.5	10	225	270	167.171	212.865	167	180	214	1920	25M	@ 250	10M	550
2.5	10	225	338	177.001	219.959	177	225	226	1620	25M	@ 250	OK FOR	SHEAR
2.5	10	225	450	189.669	229.617	190	299	300	1310	15M	@ 150	OK FOR	SHEAR
2.5	10	250	250	161.597	209.180	162	166	210	2000	25M	@ 250	10M	400
2.5	10	250	300	179.936	236.267	180	200	238	1860	25M	@ 250	10M	550
2.5	10	250	375	179.525	222.119	180	250	251	1480	25M	@ 325	OK FOR	SHEAR
2.5	10	250	500	192.633	232.267	193	333	334	1190	15M	@ 150	OK FOR	SHEAR
2.5	10	300	300	166.029	212.717	166	200	214	1710	25M	@ 250	OK FOR	SHEAR
2.5	10	300	360	174.266	218.697	174	240	241	1500	25M	@ 325	OK FOR	SHEAR
2.5	10	300	450	184.704	226.536	185	299	300	1270	15M	@ 150	OK FOR	SHEAR
2.5	10	300	600	198.561	237.566	199	399	400	1030	15M	@ 150	OK FOR	SHEAR
2.5	10	350	350	170.460	216.253	170	233	234	1510	25M	@ 250	OK FOR	SHEAR
2.5	12	200	200	155.917	205.634	156	133	207	2410	25M	@ 200	10M	175
2.5	12	200	240	161.037	209.032	161	160	210	2080	25M	@ 200	10M	325
2.5	12	200	300	165.648	212.149	166	200	214	1710	25M	@ 250	OK FOR	SHEAR
2.5	12	200	400	173.642	217.718	174	266	267	1350	15M	@ 150	OK FOR	SHEAR
2.5	12	225	225	158.130	207.401	158	150	209	2170	25M	@ 200	10M	250
2.5	12	225	270	166.222	212.876	166	180	214	1910	25M	@ 250	10M	550
2.5	12	225	338	176.295	219.974	176	225	226	1620	25M	@ 250	OK FOR	SHEAR
2.5	12	225	450	189.120	229.621	189	299	300	1300	15M	@ 150	OK FOR	SHEAR
2.5	12	250	250	160.342	209.168	160	166	210	1990	25M	@ 250	10M	400
2.5	12	250	300	178.949	236.273	179	200	238	1850	25M	@ 250	10M	550
2.5	12	250	375	178.815	222.134	179	250	251	1480	25M	@ 325	OK FOR	SHEAR
2.5	12	250	500	192.082	232.271	192	333	334	1190	15M	@ 150	OK FOR	SHEAR
2.5	12	300	300	164.767	212.702	165	200	214	1700	25M	@ 250	OK FOR	SHEAR
2.5	12	300	360	173.308	218.706	173	240	241	1490	25M	@ 325	OK FOR	SHEAR
2.5	12	300	450	183.988	226.551	184	299	300	1270	15M	@ 150	OK FOR	SHEAR
2.5	12	300	600	198.005	237.571	198	399	400	1020	15M	@ 150	OK FOR	SHEAR
2.5	12	350	350	169.192	216.236	169	233	234	1500	25M	@ 325	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3	3	200	200	362.101	279.735	362	133	281	5600	25M	@ 75	10M	75
3	3	200	240	365.309	284.248	365	160	286	4700	25M	@ 100	10M	125
3	3	200	300	368.266	288.308	368	200	290	3790	25M	@ 125	10M	225
3	3	200	400	373.582	295.383	374	266	296	2890	25M	@ 150	10M	950
3	3	225	225	365.399	282.096	365	150	283	5020	25M	@ 100	10M	100
3	3	225	270	370.639	289.329	371	180	291	4240	25M	@ 100	10M	175
3	3	225	338	377.499	298.388	377	225	300	3450	25M	@ 150	10M	300
3	3	225	450	386.990	310.272	387	299	311	2660	25M	@ 150	OK FOR	SHEAR
3	3	250	250	368.697	284.457	369	166	285	4560	25M	@ 100	10M	150
3	3	250	300	374.167	291.924	374	200	293	3860	25M	@ 125	10M	225
3	3	250	375	381.322	301.272	381	250	303	3140	25M	@ 150	10M	500
3	3	250	500	391.428	313.791	391	333	334	2420	25M	@ 200	OK FOR	SHEAR
3	3	300	300	375.294	289.180	375	200	291	3870	25M	@ 125	10M	225
3	3	300	360	381.222	297.116	381	240	299	3270	25M	@ 150	10M	425
3	3	300	450	389.063	307.161	389	299	308	2670	25M	@ 150	OK FOR	SHEAR
3	3	300	600	400.302	320.830	400	399	400	2060	25M	@ 200	OK FOR	SHEAR
3	3	350	350	381.891	293.903	382	233	295	3370	25M	@ 150	10M	400
3	4.5	200	200	278.930	224.521	279	133	225	4310	25M	@ 100	10M	150
3	4.5	200	240	282.810	228.403	283	160	230	3640	25M	@ 125	10M	225
3	4.5	200	300	286.369	231.907	286	200	233	2950	25M	@ 150	10M	650
3	4.5	200	400	292.727	238.065	293	266	267	2260	25M	@ 200	OK FOR	SHEAR
3	4.5	225	225	282.186	226.733	282	150	228	3880	25M	@ 125	10M	200
3	4.5	225	270	288.459	232.972	288	180	234	3300	25M	@ 150	10M	350
3	4.5	225	338	296.594	240.868	297	225	242	2710	25M	@ 150	OK FOR	SHEAR
3	4.5	225	450	307.695	251.452	308	299	300	2120	25M	@ 200	OK FOR	SHEAR
3	4.5	250	250	285.441	228.944	285	166	230	3530	25M	@ 125	10M	275
3	4.5	250	300	291.937	235.399	292	200	237	3010	25M	@ 150	10M	575
3	4.5	250	375	300.350	243.564	300	250	251	2480	25M	@ 200	OK FOR	SHEAR
3	4.5	250	500	312.059	254.738	312	333	334	1930	25M	@ 250	OK FOR	SHEAR
3	4.5	300	300	291.952	233.366	292	200	235	3010	25M	@ 150	10M	600
3	4.5	300	360	298.894	240.253	299	240	242	2570	25M	@ 150	OK FOR	SHEAR
3	4.5	300	450	307.973	249.063	308	299	300	2120	25M	@ 200	OK FOR	SHEAR
3	4.5	300	600	320.788	261.310	321	399	400	1660	25M	@ 250	OK FOR	SHEAR
3	4.5	350	350	298.463	237.789	298	233	239	2640	25M	@ 150	OK FOR	SHEAR
3	6	200	200	244.929	210.737	245	133	212	3790	25M	@ 125	10M	175
3	6	200	240	249.512	214.659	250	160	216	3210	25M	@ 150	10M	300
3	6	200	300	253.730	218.235	254	200	220	2620	25M	@ 150	OK FOR	SHEAR
3	6	200	400	261.284	224.598	261	266	267	2020	25M	@ 200	OK FOR	SHEAR
3	6	225	225	248.159	212.900	248	150	214	3410	25M	@ 150	10M	250
3	6	225	270	255.533	219.214	256	180	221	2930	25M	@ 150	10M	450
3	6	225	338	265.126	227.343	265	225	228	2430	25M	@ 200	OK FOR	SHEAR
3	6	225	450	278.182	238.411	278	299	300	1910	25M	@ 250	OK FOR	SHEAR
3	6	250	250	251.390	215.062	251	166	216	3110	25M	@ 150	10M	350
3	6	250	300	258.982	221.587	259	200	223	2670	25M	@ 150	10M	925
3	6	250	375	268.838	229.977	269	250	251	2220	25M	@ 200	OK FOR	SHEAR
3	6	250	500	282.504	241.628	283	333	334	1750	25M	@ 250	OK FOR	SHEAR
3	6	300	300	257.851	219.387	258	200	221	2660	25M	@ 150	OK FOR	SHEAR
3	6	300	360	265.881	226.333	266	240	241	2280	25M	@ 200	OK FOR	SHEAR
3	6	300	450	276.391	235.355	276	299	300	1900	25M	@ 250	OK FOR	SHEAR
3	6	300	600	291.147	248.061	291	399	400	1500	25M	@ 325	OK FOR	SHEAR
3	6	350	350	264.312	223.711	264	233	234	2340	25M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3	8	200	200	225.096	204.650	225	133	206	3480	25M	@ 150	10M	175
3	8	200	240	230.616	208.842	231	160	210	2970	25M	@ 150	10M	325
3	8	200	300	235.688	212.676	236	200	214	2430	25M	@ 200	OK FOR	SHEAR
3	8	200	400	244.724	219.501	245	266	267	1890	25M	@ 250	OK FOR	SHEAR
3	8	225	225	228.306	206.786	228	150	208	3140	25M	@ 150	10M	275
3	8	225	270	237.135	213.527	237	180	215	2720	25M	@ 150	10M	550
3	8	225	338	248.551	222.221	249	225	226	2280	25M	@ 200	OK FOR	SHEAR
3	8	225	450	263.814	233.982	264	299	300	1810	25M	@ 250	OK FOR	SHEAR
3	8	250	250	231.516	208.922	232	166	210	2860	25M	@ 150	10M	400
3	8	250	300	240.561	215.873	241	200	217	2480	25M	@ 200	OK FOR	SHEAR
3	8	250	375	252.225	224.824	252	250	251	2080	25M	@ 200	OK FOR	SHEAR
3	8	250	500	268.105	237.170	268	333	334	1660	25M	@ 250	OK FOR	SHEAR
3	8	300	300	237.936	213.194	238	200	215	2450	25M	@ 200	OK FOR	SHEAR
3	8	300	360	247.414	220.566	247	240	241	2130	25M	@ 200	OK FOR	SHEAR
3	8	300	450	259.726	230.147	260	299	300	1790	25M	@ 250	OK FOR	SHEAR
3	8	300	600	276.686	243.547	277	399	400	1430	25M	@ 325	OK FOR	SHEAR
3	8	350	350	244.356	217.467	244	233	234	2160	25M	@ 200	OK FOR	SHEAR
3	10	200	200	217.026	202.975	217	133	204	3360	25M	@ 150	10M	200
3	10	200	240	223.261	207.356	223	160	209	2880	25M	@ 150	10M	350
3	10	200	300	228.944	211.345	229	200	213	2360	25M	@ 200	OK FOR	SHEAR
3	10	200	400	238.946	218.398	239	266	267	1850	25M	@ 250	OK FOR	SHEAR
3	10	225	225	220.224	205.101	220	150	206	3030	25M	@ 150	10M	275
3	10	225	270	230.145	212.128	230	180	213	2640	25M	@ 150	10M	575
3	10	225	338	242.767	221.111	243	225	226	2220	25M	@ 200	OK FOR	SHEAR
3	10	225	450	259.250	233.122	259	299	300	1780	25M	@ 250	OK FOR	SHEAR
3	10	250	250	223.422	207.227	223	166	208	2760	25M	@ 150	10M	425
3	10	250	300	233.558	214.465	234	200	216	2410	25M	@ 200	OK FOR	SHEAR
3	10	250	375	246.419	223.704	246	250	251	2030	25M	@ 200	OK FOR	SHEAR
3	10	250	500	263.525	236.303	264	333	334	1630	25M	@ 250	OK FOR	SHEAR
3	10	300	300	229.817	211.478	230	200	213	2370	25M	@ 200	OK FOR	SHEAR
3	10	300	360	240.385	219.137	240	240	241	2070	25M	@ 200	OK FOR	SHEAR
3	10	300	450	253.892	229.009	254	299	300	1750	25M	@ 250	OK FOR	SHEAR
3	10	300	600	272.076	242.665	272	399	400	1400	15M	@ 150	OK FOR	SHEAR
3	10	350	350	236.213	215.730	236	233	234	2090	25M	@ 200	OK FOR	SHEAR
3	12	200	200	213.801	202.678	214	133	204	3310	25M	@ 150	10M	200
3	12	200	240	220.469	207.134	220	160	208	2840	25M	@ 150	10M	350
3	12	200	300	226.495	211.175	226	200	213	2340	25M	@ 200	OK FOR	SHEAR
3	12	200	400	236.984	218.290	237	266	267	1830	25M	@ 250	OK FOR	SHEAR
3	12	225	225	216.992	204.799	217	150	206	2980	25M	@ 150	10M	275
3	12	225	270	227.561	211.936	228	180	213	2610	25M	@ 150	10M	575
3	12	225	338	240.801	221.001	241	225	226	2200	25M	@ 200	OK FOR	SHEAR
3	12	225	450	257.795	233.051	258	299	300	1770	25M	@ 250	OK FOR	SHEAR
3	12	250	250	220.182	206.921	220	166	208	2720	25M	@ 150	10M	425
3	12	250	300	230.967	214.269	231	200	216	2380	25M	@ 200	OK FOR	SHEAR
3	12	250	375	244.442	223.590	244	250	251	2020	25M	@ 200	OK FOR	SHEAR
3	12	250	500	262.063	236.231	262	333	334	1620	25M	@ 250	OK FOR	SHEAR
3	12	300	300	226.563	211.165	227	200	213	2340	25M	@ 200	OK FOR	SHEAR
3	12	300	360	237.779	218.935	238	240	241	2040	25M	@ 200	OK FOR	SHEAR
3	12	300	450	251.900	228.891	252	299	300	1730	25M	@ 250	OK FOR	SHEAR
3	12	300	600	270.599	242.590	271	399	400	1400	15M	@ 150	OK FOR	SHEAR
3	12	350	350	232.945	215.408	233	233	234	2060	25M	@ 200	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3.75	3	200	200	537.807	284.752	538	133	286	8310	25M	@ 50	10M	75
3.75	3	200	240	541.876	290.330	542	160	292	6980	25M	@ 75	10M	125
3.75	3	200	300	545.676	295.402	546	200	297	5620	25M	@ 75	10M	200
3.75	3	200	400	552.634	304.352	553	266	305	4270	25M	@ 100	10M	725
3.75	3	225	225	543.003	287.874	543	150	289	7460	25M	@ 50	10M	100
3.75	3	225	270	549.745	296.864	550	180	298	6290	25M	@ 75	10M	150
3.75	3	225	338	558.798	308.328	559	225	309	5110	25M	@ 100	10M	275
3.75	3	225	450	571.738	323.621	572	299	324	3930	25M	@ 125	OK FOR	SHEAR
3.75	3	250	250	548.199	290.996	548	166	292	6780	25M	@ 75	10M	125
3.75	3	250	300	555.305	300.300	555	200	302	5720	25M	@ 75	10M	200
3.75	3	250	375	564.838	312.151	565	250	314	4650	25M	@ 100	10M	400
3.75	3	250	500	578.737	328.283	579	333	334	3580	25M	@ 125	OK FOR	SHEAR
3.75	3	300	300	558.592	297.240	559	200	299	5750	25M	@ 75	10M	200
3.75	3	300	360	566.425	307.171	566	240	309	4860	25M	@ 100	10M	375
3.75	3	300	450	577.042	319.950	577	299	321	3960	25M	@ 125	OK FOR	SHEAR
3.75	3	300	600	592.736	337.606	593	399	400	3050	25M	@ 150	OK FOR	SHEAR
3.75	3	350	350	568.983	303.505	569	233	305	5020	25M	@ 100	10M	350
3.75	4.5	200	200	401.359	218.401	401	133	219	6200	25M	@ 75	10M	150
3.75	4.5	200	240	406.207	223.237	406	160	225	5230	25M	@ 100	10M	250
3.75	4.5	200	300	410.696	227.624	411	200	229	4230	25M	@ 100	10M	725
3.75	4.5	200	400	418.807	235.354	419	266	267	3240	25M	@ 150	OK FOR	SHEAR
3.75	4.5	225	225	406.481	221.241	406	150	223	5580	25M	@ 75	10M	200
3.75	4.5	225	270	414.415	229.036	414	180	230	4740	25M	@ 100	10M	375
3.75	4.5	225	338	424.883	238.955	425	225	240	3890	25M	@ 125	OK FOR	SHEAR
3.75	4.5	225	450	439.473	252.232	439	299	300	3020	25M	@ 150	OK FOR	SHEAR
3.75	4.5	250	250	411.602	224.080	412	166	225	5090	25M	@ 100	10M	300
3.75	4.5	250	300	419.891	232.155	420	200	234	4330	25M	@ 100	10M	625
3.75	4.5	250	375	430.815	242.423	431	250	251	3550	25M	@ 125	OK FOR	SHEAR
3.75	4.5	250	500	446.353	256.456	446	333	334	2760	25M	@ 150	OK FOR	SHEAR
3.75	4.5	300	300	421.845	229.759	422	200	231	4350	25M	@ 100	10M	675
3.75	4.5	300	360	430.842	238.392	431	240	241	3700	25M	@ 125	OK FOR	SHEAR
3.75	4.5	300	450	442.823	249.493	443	299	300	3040	25M	@ 150	OK FOR	SHEAR
3.75	4.5	300	600	460.113	264.903	460	399	400	2370	25M	@ 200	OK FOR	SHEAR
3.75	4.5	350	350	432.088	235.438	432	233	237	3820	25M	@ 125	OK FOR	SHEAR
3.75	6	200	200	343.311	198.947	343	133	200	5310	25M	@ 100	10M	200
3.75	6	200	240	348.932	203.664	349	160	205	4490	25M	@ 100	10M	375
3.75	6	200	300	354.123	207.963	354	200	209	3650	25M	@ 125	OK FOR	SHEAR
3.75	6	200	400	363.472	215.601	363	266	267	2810	25M	@ 150	OK FOR	SHEAR
3.75	6	225	225	348.388	201.692	348	150	203	4790	25M	@ 100	10M	300
3.75	6	225	270	357.517	209.300	358	180	211	4090	25M	@ 100	10M	625
3.75	6	225	338	369.495	219.080	369	225	226	3380	25M	@ 150	OK FOR	SHEAR
3.75	6	225	450	386.050	232.368	386	299	300	2650	25M	@ 150	OK FOR	SHEAR
3.75	6	250	250	353.466	204.437	353	166	205	4370	25M	@ 100	10M	450
3.75	6	250	300	362.941	212.312	363	200	214	3740	25M	@ 125	OK FOR	SHEAR
3.75	6	250	375	375.356	222.426	375	250	251	3090	25M	@ 150	OK FOR	SHEAR
3.75	6	250	500	392.853	236.446	393	333	334	2430	25M	@ 200	OK FOR	SHEAR
3.75	6	300	300	363.620	209.927	364	200	211	3750	25M	@ 125	OK FOR	SHEAR
3.75	6	300	360	373.789	218.336	374	240	241	3210	25M	@ 150	OK FOR	SHEAR
3.75	6	300	450	387.239	229.250	387	299	300	2660	25M	@ 150	OK FOR	SHEAR
3.75	6	300	600	406.457	244.603	406	399	400	2100	25M	@ 200	OK FOR	SHEAR
3.75	6	350	350	373.774	215.416	374	233	234	3300	25M	@ 150	OK FOR	SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
3.75	8	200	200	307.098	189.251	307	133	190	4750	25M	@ 100	10M	250
3.75	8	200	240	313.796	194.179	314	160	196	4040	25M	@ 100	10M	475
3.75	8	200	300	319.991	198.710	320	200	201	3300	25M	@ 150	OK FOR	SHEAR
3.75	8	200	400	331.145	206.835	331	266	267	2560	25M	@ 150	OK FOR	SHEAR
3.75	8	225	225	312.138	191.944	312	150	193	4290	25M	@ 100	10M	375
3.75	8	225	270	322.949	199.896	323	180	201	3700	25M	@ 125	10M	925
3.75	8	225	338	337.133	210.256	337	225	226	3080	25M	@ 150	OK FOR	SHEAR
3.75	8	225	450	356.581	224.455	357	299	300	2450	25M	@ 200	OK FOR	SHEAR
3.75	8	250	250	317.178	194.637	317	166	195	3920	25M	@ 125	10M	600
3.75	8	250	300	328.329	202.852	328	200	204	3380	25M	@ 150	OK FOR	SHEAR
3.75	8	250	375	342.927	213.535	343	250	251	2830	25M	@ 150	OK FOR	SHEAR
3.75	8	250	500	363.321	228.463	363	333	334	2250	25M	@ 200	OK FOR	SHEAR
3.75	8	300	300	327.257	200.023	327	200	201	3370	25M	@ 150	OK FOR	SHEAR
3.75	8	300	360	339.090	208.763	339	240	241	2910	25M	@ 150	OK FOR	SHEAR
3.75	8	300	450	354.708	220.235	355	299	300	2440	25M	@ 200	OK FOR	SHEAR
3.75	8	300	600	376.799	236.481	377	399	400	1940	25M	@ 250	OK FOR	SHEAR
3.75	8	350	350	337.337	205.409	337	233	234	2980	25M	@ 150	OK FOR	SHEAR
3.75	10	200	200	290.126	185.619	290	133	187	4480	25M	@ 100	10M	250
3.75	10	200	240	297.858	190.848	298	160	192	3840	25M	@ 125	10M	525
3.75	10	200	300	304.988	195.657	305	200	201	3140	25M	@ 150	OK FOR	SHEAR
3.75	10	200	400	317.749	204.265	318	266	267	2460	25M	@ 200	OK FOR	SHEAR
3.75	10	225	225	295.142	188.289	295	150	190	4050	25M	@ 100	10M	400
3.75	10	225	270	307.556	196.712	308	180	198	3520	25M	@ 125	OK FOR	SHEAR
3.75	10	225	338	323.718	207.666	324	225	226	2960	25M	@ 150	OK FOR	SHEAR
3.75	10	225	450	345.512	222.559	346	299	300	2380	25M	@ 200	OK FOR	SHEAR
3.75	10	250	250	300.157	190.959	300	166	192	3710	25M	@ 125	10M	675
3.75	10	250	300	312.910	199.644	313	200	201	3230	25M	@ 150	OK FOR	SHEAR
3.75	10	250	375	329.469	210.918	329	250	251	2720	25M	@ 150	OK FOR	SHEAR
3.75	10	250	500	352.216	226.544	352	333	334	2180	25M	@ 200	OK FOR	SHEAR
3.75	10	300	300	310.189	196.299	310	200	201	3200	25M	@ 150	OK FOR	SHEAR
3.75	10	300	360	323.617	205.508	324	240	241	2780	25M	@ 150	OK FOR	SHEAR
3.75	10	300	450	341.188	217.571	341	299	300	2350	25M	@ 200	OK FOR	SHEAR
3.75	10	300	600	365.623	234.514	366	399	400	1890	25M	@ 250	OK FOR	SHEAR
3.75	10	350	350	320.220	201.639	320	233	234	2830	25M	@ 150	OK FOR	SHEAR
3.75	12	200	200	281.887	175.496	282	133	176	4360	25M	@ 100	10M	325
3.75	12	200	240	290.443	180.696	290	160	182	3740	25M	@ 125	10M	775
3.75	12	200	300	298.282	185.467	298	200	201	3070	25M	@ 150	OK FOR	SHEAR
3.75	12	200	400	312.173	193.975	312	266	267	2410	25M	@ 200	OK FOR	SHEAR
3.75	12	225	225	286.886	178.155	287	150	179	3940	25M	@ 125	10M	550
3.75	12	225	270	300.562	186.528	301	180	188	3440	25M	@ 150	OK FOR	SHEAR
3.75	12	225	338	318.132	197.365	318	225	226	2910	25M	@ 150	OK FOR	SHEAR
3.75	12	225	450	341.377	212.016	341	299	300	2350	25M	@ 200	OK FOR	SHEAR
3.75	12	250	250	291.886	180.814	292	166	181	3610	25M	@ 125	OK FOR	SHEAR
3.75	12	250	300	305.898	189.449	306	200	201	3150	25M	@ 150	OK FOR	SHEAR
3.75	12	250	375	323.855	200.609	324	250	251	2670	25M	@ 150	OK FOR	SHEAR
3.75	12	250	500	348.061	215.993	348	333	334	2150	25M	@ 200	OK FOR	SHEAR
3.75	12	300	300	301.885	186.132	302	200	201	3110	25M	@ 150	OK FOR	SHEAR
3.75	12	300	360	316.570	195.293	317	240	241	2720	25M	@ 150	OK FOR	SHEAR
3.75	12	300	450	335.538	207.243	336	299	300	2310	25M	@ 200	OK FOR	SHEAR
3.75	12	300	600	361.428	223.947	361	399	400	1860	25M	@ 250	OK FOR	SHEAR
3.75	12	350	350	311.884	191.449	312	233	234	2760	25M	@ 150	OK FOR	SHEAR

Appendix E: Reinforcing Steel Design Tables — Railing Loads

E1. PL-3 Barrier — Inner Portion

Cantilever Length: 0.5							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	86	161	101	3116	20M	@ 125
3	0.225	90	161	109	2499	20M	@ 150
3	0.250	93	161	117	2170	20M	@ 200
3	0.300	99	161	132	1803	20M	@ 250
3	0.350	106	161	147	1598	20M	@ 250
4.5	0.200	80	153	94	2829	20M	@ 150
4.5	0.225	84	154	103	2322	20M	@ 200
4.5	0.250	87	156	111	2041	20M	@ 200
4.5	0.300	94	159	127	1726	20M	@ 250
4.5	0.350	102	162	143	1550	20M	@ 250
6	0.200	78	153	92	2738	20M	@ 150
6	0.225	82	154	101	2266	20M	@ 200
6	0.250	85	156	109	2001	20M	@ 200
6	0.300	93	159	125	1701	20M	@ 250
6	0.350	100	162	141	1534	20M	@ 250
8	0.200	77	153	92	2709	20M	@ 150
8	0.225	81	154	100	2250	20M	@ 200
8	0.250	85	156	109	1991	20M	@ 250
8	0.300	93	159	125	1697	20M	@ 250
8	0.350	100	162	141	1533	20M	@ 250
10	0.200	78	153	92	2726	20M	@ 150
10	0.225	82	154	101	2263	20M	@ 200
10	0.250	86	156	109	2003	20M	@ 200
10	0.300	93	159	126	1708	20M	@ 250
10	0.350	101	162	142	1543	20M	@ 250
12	0.200	79	153	93	2764	20M	@ 150
12	0.225	83	154	102	2291	20M	@ 200
12	0.250	87	156	110	2026	20M	@ 200
12	0.300	95	159	127	1726	20M	@ 250
12	0.350	102	162	144	1559	20M	@ 250
Cantilever Length: 1							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.225	101	161	120	2825	20M	@ 100
3	0.250	104	161	128	2420	20M	@ 100
3	0.300	112	161	144	1985	20M	@ 125
3	0.350	119	161	160	1745	20M	@ 150
4.5	0.225	94	150	112	2586	20M	@ 100
4.5	0.250	98	152	120	2246	20M	@ 125
4.5	0.300	105	155	137	1874	20M	@ 125
4.5	0.350	113	158	153	1670	20M	@ 150
6	0.225	91	150	109	2497	20M	@ 100
6	0.250	95	152	117	2181	20M	@ 125
6	0.300	103	155	134	1832	20M	@ 125
6	0.350	110	158	151	1640	20M	@ 150
8	0.225	89	150	107	2445	20M	@ 100
8	0.250	93	152	116	2143	20M	@ 125
8	0.300	101	155	132	1808	20M	@ 125
8	0.350	109	158	149	1623	20M	@ 150
10	0.225	88	150	107	2427	20M	@ 100
10	0.250	92	152	115	2131	20M	@ 125
10	0.300	100	155	132	1801	20M	@ 125
10	0.350	109	158	149	1618	20M	@ 150
12	0.225	88	150	106	2425	20M	@ 100
12	0.250	92	152	115	2130	20M	@ 125
12	0.300	101	155	132	1802	20M	@ 125
12	0.350	109		149	1620	20M	@ 150

Cantilever Length: 1.5							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.225	146	161	162	4480	25M	@ 100
3	0.250	152	161	174	3567	25M	@ 125
3	0.300	163	161	194	2786	20M	@ 100
3	0.350	174	161	214	2405	20M	@ 100
4.5	0.225	139	146	154	4082	25M	@ 100
4.5	0.250	145	148	165	3330	20M	@ 75
4.5	0.300	156	151	186	2647	20M	@ 100
4.5	0.350	168	154	206	2311	20M	@ 125
6	0.225	135	146	150	3926	25M	@ 125
6	0.250	141	148	161	3236	20M	@ 75
6	0.300	153	151	183	2598	20M	@ 100
6	0.350	165	154	203	2274	20M	@ 125
8	0.225	132	146	148	3823	25M	@ 125
8	0.250	138	148	159	3167	20M	@ 75
8	0.300	151	151	181	2566	20M	@ 100
8	0.350	163	154	202	2252	20M	@ 125
10	0.225	131	146	147	3776	25M	@ 125
10	0.250	137	148	158	3144	20M	@ 75
10	0.300	150	151	179	2545	20M	@ 100
10	0.350	162	154	201	2238	20M	@ 125
12	0.225	131	146	146	3758	25M	@ 125
12	0.250	137	148	158	3133	20M	@ 75
12	0.300	150	151	179	2545	20M	@ 100
12	0.350	162	154	201	2238	20M	@ 125

Cantilever Length: 2							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.225	149	161	165	4615	25M	@ 100
3	0.250	155	161	177	3660	25M	@ 125
3	0.300	168	161	198	2862	20M	@ 100
3	0.350	180	161	220	2477	20M	@ 100
4.5	0.225	144	142	158	4269	25M	@ 100
4.5	0.250	150	144	170	3455	25M	@ 125
4.5	0.300	163	147	191	2745	20M	@ 100
4.5	0.350	176	150	213	2392	20M	@ 100
6	0.225	141	142	155	4141	25M	@ 100
6	0.250	147	144	167	3381	25M	@ 125
6	0.300	160	147	189	2703	20M	@ 100
6	0.350	173	150	211	2362	20M	@ 125
8	0.225	139	142	154	4057	25M	@ 100
8	0.250	145	144	165	3340	20M	@ 75
8	0.300	158	147	187	2675	20M	@ 100
8	0.350	172	150	209	2344	20M	@ 125
10	0.225	137	142	153	4012	25M	@ 100
10	0.250	144	144	164	3303	20M	@ 75
10	0.300	158	147	186	2656	20M	@ 100
10	0.350	171	150	208	2330	20M	@ 125
12	0.225	137	142	152	3990	25M	@ 100
12	0.250	144	144	164	3290	20M	@ 75
12	0.300	157	147	186	2649	20M	@ 100
12	0.350	170	150	208	2330	20M	@ 125

E2. PL-3 Barrier — End Portion

Cantilever Length: 0.5							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.225	126	165	144	3649	25M	@ 150
3	0.250	126	166	150	2937	20M	@ 150
3	0.300	130	169	164	2296	20M	@ 200
3	0.350	137	171	180	1991	20M	@ 250
4.5	0.225	108	163	127	3044	20M	@ 125
4.5	0.250	112	165	136	2592	20M	@ 150
4.5	0.300	120	169	154	2141	20M	@ 200
4.5	0.350	130	173	174	1913	20M	@ 250
6	0.225	103	163	122	2905	20M	@ 150
6	0.250	108	165	132	2512	20M	@ 150
6	0.300	118	169	152	2108	20M	@ 200
6	0.350	129	173	172	1898	20M	@ 250
8	0.225	102	163	121	2862	20M	@ 150
8	0.250	107	165	131	2493	20M	@ 200
8	0.300	118	169	152	2108	20M	@ 200
8	0.350	129	173	173	1906	20M	@ 250
10	0.225	102	163	121	2871	20M	@ 150
10	0.250	108	165	132	2507	20M	@ 150
10	0.300	119	169	153	2125	20M	@ 200
10	0.350	131	173	175	1923	20M	@ 250
12	0.225	103	163	122	2902	20M	@ 150
12	0.250	109	165	133	2534	20M	@ 150
12	0.300	121	169	154	2145	20M	@ 200
12	0.350	133	173	176	1945	20M	@ 250

Cantilever Length: 1							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.225	137	165	155	4105	25M	@ 150
3	0.250	138	166	161	3225	20M	@ 125
3	0.300	143	169	176	2496	20M	@ 150
3	0.350	151	171	193	2152	20M	@ 200
4.5	0.225	118	161	137	3394	25M	@ 200
4.5	0.250	123	163	146	2843	20M	@ 150
4.5	0.300	132	167	165	2314	20M	@ 200
4.5	0.350	142	171	185	2050	20M	@ 200
6	0.225	113	161	131	3205	20M	@ 125
6	0.250	118	163	142	2734	20M	@ 150
6	0.300	129	167	162	2265	20M	@ 200
6	0.350	140	171	183	2024	20M	@ 200
8	0.225	111	161	129	3123	20M	@ 125
8	0.250	116	163	140	2687	20M	@ 150
8	0.300	128	167	161	2246	20M	@ 200
8	0.350	139	171	182	2017	20M	@ 200
10	0.225	110	161	128	3101	20M	@ 125
10	0.250	116	163	139	2678	20M	@ 150
10	0.300	128	167	161	2246	20M	@ 200
10	0.350	140	171	183	2021	20M	@ 200
12	0.225	110	161	128	3104	20M	@ 125
12	0.250	116	163	139	2684	20M	@ 150
12	0.300	128	167	161	2251	20M	@ 200
12	0.350	141	171	183	2030	20M	@ 200

Cantilever Length: 1.5							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.225	140	165	157	4195	25M	@ 150
3	0.250	141	166	164	3307	20M	@ 125
3	0.300	147	169	180	2558	20M	@ 150
3	0.350	155	171	198	2204	20M	@ 200
4.5	0.225	124	159	142	3585	25M	@ 150
4.5	0.250	128	161	151	2977	20M	@ 150
4.5	0.300	139	165	171	2412	20M	@ 200
4.5	0.350	150	169	192	2134	20M	@ 200
6	0.225	120	159	138	3422	25M	@ 200
6	0.250	125	161	148	2894	20M	@ 150
6	0.300	137	165	169	2380	20M	@ 200
6	0.350	149	169	191	2120	20M	@ 200
8	0.225	118	159	136	3352	25M	@ 200
8	0.250	124	161	147	2857	20M	@ 150
8	0.300	136	165	169	2372	20M	@ 200
8	0.350	148	169	191	2118	20M	@ 200
10	0.225	117	159	135	3330	20M	@ 125
10	0.250	123	161	146	2848	20M	@ 150
10	0.300	136	165	169	2372	20M	@ 200
10	0.350	149	169	191	2123	20M	@ 200
12	0.225	117	159	135	3327	20M	@ 125
12	0.250	123	161	146	2850	20M	@ 150
12	0.300	136	165	169	2372	20M	@ 200
12	0.350	149	169	192	2130	20M	@ 200

Cantilever Length: 2							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.225	143	165	160	4342	25M	@ 125
3	0.250	145	166	168	3401	25M	@ 200
3	0.300	152	169	184	2629	20M	@ 150
3	0.350	161	171	204	2278	20M	@ 200
4.5	0.225	129	159	146	3762	25M	@ 150
4.5	0.250	134	161	157	3114	20M	@ 125
4.5	0.300	145	165	178	2521	20M	@ 150
4.5	0.350	158	169	200	2231	20M	@ 200
6	0.225	126	159	143	3641	25M	@ 150
6	0.250	132	161	154	3055	20M	@ 125
6	0.300	144	165	177	2503	20M	@ 150
6	0.350	157	169	200	2226	20M	@ 200
8	0.225	125	159	142	3593	25M	@ 150
8	0.250	131	161	154	3034	20M	@ 125
8	0.300	144	165	177	2500	20M	@ 150
8	0.350	158	169	200	2230	20M	@ 200
10	0.225	124	159	142	3580	25M	@ 150
10	0.250	131	161	154	3032	20M	@ 125
10	0.300	144	165	177	2507	20M	@ 150
10	0.350	158	169	200	2236	20M	@ 200
12	0.225	124	159	142	3581	25M	@ 150
12	0.250	131	161	154	3036	20M	@ 125
12	0.300	145	165	177	2507	20M	@ 150
12	0.350	159	169	201	2244	20M	@ 200

E3. PL-2 Barrier — Inner Portion

Cantilever Length: 0.5							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	51	113	62	1653	20M	@ 250
3	0.225	52	114	68	1417	20M	@ 325
3	0.250	54	115	73	1267	20M	@ 325
3	0.300	58	117	83	1088	15M	@ 150
3	0.350	61	120	93	983	15M	@ 200
4.5	0.200	44	109	56	1452	20M	@ 325
4.5	0.225	46	111	61	1264	20M	@ 325
4.5	0.250	48	113	66	1145	15M	@ 150
4.5	0.300	52	116	76	1000	15M	@ 200
4.5	0.350	55	120	87	916	15M	@ 200
6	0.200	42	109	54	1395	20M	@ 325
6	0.225	44	111	59	1221	20M	@ 325
6	0.250	46	113	64	1110	15M	@ 150
6	0.300	50	116	74	974	15M	@ 200
6	0.350	53	120	85	897	15M	@ 200
8	0.200	41	109	53	1372	20M	@ 325
8	0.225	43	111	58	1204	20M	@ 325
8	0.250	45	113	63	1096	15M	@ 150
8	0.300	49	116	74	966	15M	@ 200
8	0.350	53	120	84	890	15M	@ 200
10	0.200	41	109	53	1372	20M	@ 325
10	0.225	43	111	58	1205	20M	@ 325
10	0.250	45	113	63	1097	15M	@ 150
10	0.300	49	116	74	968	15M	@ 200
10	0.350	53	120	84	893	15M	@ 200
12	0.200	42	109	54	1381	20M	@ 325
12	0.225	44	111	59	1213	20M	@ 325
12	0.250	46	113	64	1105	15M	@ 150
12	0.300	50	116	74	973	15M	@ 200
12	0.350	54	120	85	899	15M	@ 200

Cantilever Length: 1							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	63	111	75	2053	20M	@ 200
3	0.225	66	112	80	1721	20M	@ 250
3	0.250	68	113	85	1518	20M	@ 250
3	0.300	72	116	96	1278	20M	@ 325
3	0.350	76	118	107	1141	15M	@ 150
4.5	0.200	57	107	68	1825	20M	@ 250
4.5	0.225	59	108	73	1549	20M	@ 250
4.5	0.250	61	110	78	1381	20M	@ 325
4.5	0.300	65	114	89	1181	15M	@ 150
4.5	0.350	70	117	100	1066	15M	@ 150
6	0.200	54	107	66	1751	20M	@ 250
6	0.225	57	108	71	1497	20M	@ 250
6	0.250	59	110	76	1338	20M	@ 325
6	0.300	63	114	87	1150	15M	@ 150
6	0.350	67	117	98	1042	15M	@ 150
8	0.200	53	107	64	1714	20M	@ 250
8	0.225	55	108	70	1470	20M	@ 325
8	0.250	58	110	75	1317	20M	@ 325
8	0.300	62	114	86	1134	15M	@ 150
8	0.350	66	117	97	1031	15M	@ 150
10	0.200	53	107	64	1704	20M	@ 250
10	0.225	55	108	69	1462	20M	@ 325
10	0.250	57	110	75	1312	20M	@ 325
10	0.300	62	114	86	1132	15M	@ 150
10	0.350	66	117	97	1028	15M	@ 150
12	0.200	53	107	64	1704	20M	@ 250
12	0.225	55	108	69	1463	20M	@ 325
12	0.250	57	110	75	1313	20M	@ 325
12	0.300	62	114	86	1134	15M	@ 150
12	0.350	66	117	97	1031	15M	@ 150

Cantilever Length: 1.5							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	66	110	77	2144	20M	@ 200
3	0.225	69	111	83	1790	20M	@ 250
3	0.250	71	112	89	1579	20M	@ 250
3	0.300	76	114	100	1333	20M	@ 325
3	0.350	81	117	111	1192	20M	@ 325
4.5	0.200	63	104	73	2009	20M	@ 200
4.5	0.225	65	106	79	1693	20M	@ 250
4.5	0.250	68	108	85	1500	20M	@ 250
4.5	0.300	73	111	96	1278	20M	@ 325
4.5	0.350	78	115	108	1150	15M	@ 150
6	0.200	62	104	72	1978	20M	@ 250
6	0.225	64	106	78	1671	20M	@ 250
6	0.250	67	108	84	1485	20M	@ 325
6	0.300	72	111	95	1265	20M	@ 325
6	0.350	77	115	107	1141	15M	@ 150
8	0.200	61	104	72	1964	20M	@ 250
8	0.225	64	106	78	1661	20M	@ 250
8	0.250	66	108	83	1477	20M	@ 325
8	0.300	72	111	95	1262	20M	@ 325
8	0.350	77	115	107	1138	15M	@ 150
10	0.200	61	104	72	1962	20M	@ 250
10	0.225	64	106	78	1660	20M	@ 250
10	0.250	66	108	83	1477	20M	@ 325
10	0.300	72	111	95	1262	20M	@ 325
10	0.350	77	115	107	1138	15M	@ 150
12	0.200	61	104	72	1965	20M	@ 250
12	0.225	64	106	78	1663	20M	@ 250
12	0.250	67	108	83	1480	20M	@ 325
12	0.300	72	111	95	1262	20M	@ 325
12	0.350	77	115	107	1141	15M	@ 150

Cantilever Length: 2							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	69	108	79	2230	20M	@ 200
3	0.225	72	109	86	1868	20M	@ 250
3	0.250	75	110	92	1653	20M	@ 250
3	0.300	81	113	105	1401	20M	@ 325
3	0.350	88	115	118	1261	20M	@ 325
4.5	0.200	68	102	78	2171	20M	@ 200
4.5	0.225	71	103	84	1822	20M	@ 250
4.5	0.250	74	105	90	1614	20M	@ 250
4.5	0.300	80	109	103	1373	20M	@ 325
4.5	0.350	86	112	115	1237	20M	@ 325
6	0.200	68	102	78	2180	20M	@ 200
6	0.225	71	103	84	1828	20M	@ 250
6	0.250	74	105	90	1618	20M	@ 250
6	0.300	80	109	103	1376	20M	@ 325
6	0.350	86	112	116	1238	20M	@ 325
8	0.200	68	102	79	2197	20M	@ 200
8	0.225	72	103	85	1839	20M	@ 250
8	0.250	75	105	91	1627	20M	@ 250
8	0.300	81	109	103	1381	20M	@ 325
8	0.350	87	112	116	1242	20M	@ 325
10	0.200	69	102	79	2210	20M	@ 200
10	0.225	72	103	85	1849	20M	@ 250
10	0.250	75	105	91	1634	20M	@ 250
10	0.300	81	109	104	1386	20M	@ 325
10	0.350	87	112	116	1246	20M	@ 325
12	0.200	69	102	79	2219	20M	@ 200
12	0.225	72	103	85	1857	20M	@ 250
12	0.250	75	105	92	1639	20M	@ 250
12	0.300	81	109	104	1391	20M	@ 325
12	0.350	87	112	117	1249	20M	@ 325

E4. PL-2 Barrier — End Portion

Cantilever Length: 0.5							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	60	144	75	2068	20M	@ 200
3	0.225	64	145	82	1779	20M	@ 250
3	0.250	67	145	90	1602	20M	@ 250
3	0.300	74	147	104	1395	20M	@ 325
3	0.350	80	148	119	1275	20M	@ 325
4.5	0.200	59	144	74	2020	20M	@ 200
4.5	0.225	62	145	81	1746	20M	@ 250
4.5	0.250	66	145	88	1578	20M	@ 250
4.5	0.300	73	147	103	1378	20M	@ 325
4.5	0.350	79	148	118	1264	20M	@ 325
6	0.200	58	144	73	2003	20M	@ 200
6	0.225	62	145	81	1734	20M	@ 250
6	0.250	65	145	88	1568	20M	@ 250
6	0.300	72	147	103	1372	20M	@ 325
6	0.350	79	148	117	1259	20M	@ 325
8	0.200	58	144	73	1992	20M	@ 250
8	0.225	62	145	80	1726	20M	@ 250
8	0.250	65	145	88	1562	20M	@ 250
8	0.300	72	147	102	1367	20M	@ 325
8	0.350	79	148	117	1256	20M	@ 325
10	0.200	58	144	73	1987	20M	@ 250
10	0.225	61	145	80	1722	20M	@ 250
10	0.250	65	145	87	1559	20M	@ 250
10	0.300	72	147	102	1367	20M	@ 325
10	0.350	79	148	117	1254	20M	@ 325
12	0.200	58	144	72	1983	20M	@ 250
12	0.225	61	145	80	1719	20M	@ 250
12	0.250	65	145	87	1557	20M	@ 250
12	0.300	72	147	102	1364	20M	@ 325
12	0.350	78	148	117	1254	20M	@ 325
Cantilever Length: 1							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	72	142	85	2450	20M	@ 200
3	0.225	75	143	93	2058	20M	@ 200
3	0.250	79	144	101	1829	20M	@ 250
3	0.300	86	145	116	1565	20M	@ 250
3	0.350	94	147	131	1417	20M	@ 325
4.5	0.200	70	142	83	2379	20M	@ 200
4.5	0.225	73	143	91	2011	20M	@ 200
4.5	0.250	77	144	99	1795	20M	@ 250
4.5	0.300	85	145	115	1544	20M	@ 250
4.5	0.350	92	147	130	1401	20M	@ 325
6	0.200	69	142	83	2358	20M	@ 200
6	0.225	73	143	91	1996	20M	@ 200
6	0.250	77	144	99	1783	20M	@ 250
6	0.300	84	145	114	1536	20M	@ 250
6	0.350	92	147	129	1395	20M	@ 325
8	0.200	69	142	83	2344	20M	@ 200
8	0.225	72	143	90	1987	20M	@ 250
8	0.250	76	144	98	1776	20M	@ 250
8	0.300	84	145	114	1529	20M	@ 250
8	0.350	91	147	129	1391	20M	@ 325
10	0.200	68	142	82	2337	20M	@ 200
10	0.225	72	143	90	1982	20M	@ 250
10	0.250	76	144	98	1772	20M	@ 250
10	0.300	84	145	114	1529	20M	@ 250
10	0.350	91	147	129	1389	20M	@ 325
12	0.200	68	142	82	2333	20M	@ 200
12	0.225	72	143	90	1979	20M	@ 250
12	0.250	76	144	98	1770	20M	@ 250
12	0.300	83	145	113	1526	20M	@ 250
12	0.350	91	147	129	1389	20M	@ 325

Cantilever Length: 1.5							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	73	140	86	2488	20M	@ 200
3	0.225	77	141	94	2091	20M	@ 200
3	0.250	81	142	102	1860	20M	@ 250
3	0.300	89	143	118	1597	20M	@ 250
3	0.350	97	145	134	1447	20M	@ 325
4.5	0.200	73	140	87	2508	20M	@ 150
4.5	0.225	77	141	95	2110	20M	@ 200
4.5	0.250	82	142	103	1879	20M	@ 250
4.5	0.300	90	143	119	1614	20M	@ 250
4.5	0.350	98	145	135	1464	20M	@ 325
6	0.200	74	140	87	2536	20M	@ 150
6	0.225	78	141	96	2129	20M	@ 200
6	0.250	82	142	104	1895	20M	@ 250
6	0.300	91	143	120	1624	20M	@ 250
6	0.350	99	145	136	1474	20M	@ 325
8	0.200	75	140	88	2560	20M	@ 150
8	0.225	79	141	96	2143	20M	@ 200
8	0.250	83	142	104	1905	20M	@ 250
8	0.300	91	143	121	1633	20M	@ 250
8	0.350	100	145	137	1479	20M	@ 325
10	0.200	75	140	88	2560	20M	@ 150
10	0.225	79	141	97	2151	20M	@ 200
10	0.250	83	142	105	1909	20M	@ 250
10	0.300	91	143	121	1636	20M	@ 250
10	0.350	100	145	137	1482	20M	@ 325
12	0.200	75	140	88	2560	20M	@ 150
12	0.225	79	141	97	2151	20M	@ 200
12	0.250	83	142	105	1911	20M	@ 250
12	0.300	92	143	121	1638	20M	@ 250
12	0.350	100	145	137	1483	20M	@ 325

Cantilever Length: 2							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	75	139	89	2579	20M	@ 150
3	0.225	80	139	97	2160	20M	@ 200
3	0.250	84	140	105	1921	20M	@ 250
3	0.300	93	142	122	1650	20M	@ 250
3	0.350	102	143	138	1499	20M	@ 250
4.5	0.200	76	139	89	2602	20M	@ 150
4.5	0.225	81	139	98	2189	20M	@ 200
4.5	0.250	85	140	107	1952	20M	@ 250
4.5	0.300	95	142	124	1680	20M	@ 250
4.5	0.350	104	143	141	1528	20M	@ 250
6	0.200	78	139	91	2672	20M	@ 150
6	0.225	82	139	100	2233	20M	@ 200
6	0.250	87	140	108	1988	20M	@ 250
6	0.300	97	142	126	1707	20M	@ 250
6	0.350	106	143	143	1547	20M	@ 250
8	0.200	79	139	92	2727	20M	@ 150
8	0.225	84	139	101	2271	20M	@ 200
8	0.250	88	140	110	2014	20M	@ 200
8	0.300	98	142	127	1724	20M	@ 250
8	0.350	107	143	144	1561	20M	@ 250
10	0.200	80	139	93	2756	20M	@ 150
10	0.225	84	139	102	2289	20M	@ 200
10	0.250	89	140	110	2028	20M	@ 200
10	0.300	98	142	128	1736	20M	@ 250
10	0.350	108	143	144	1568	20M	@ 250
12	0.200	80	139	93	2771	20M	@ 150
12	0.225	85	139	102	2299	20M	@ 200
12	0.250	89	140	111	2035	20M	@ 200
12	0.300	99	142	128	1736	20M	@ 250
12	0.350	108	143	145	1572	20M	@ 250

E5. PL-2 Parapet — Inner Portion

Cantilever Length: 0.5							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	84	107	94	2797	20M	@ 150
3	0.225	83	109	97	2149	20M	@ 200
3	0.250	83	111	100	1803	20M	@ 250
3	0.300	83	114	107	1428	20M	@ 325
3	0.350	84	117	115	1228	20M	@ 325
4.5	0.200	56	109	67	1816	20M	@ 250
4.5	0.225	58	110	72	1535	20M	@ 250
4.5	0.250	60	112	77	1362	20M	@ 325
4.5	0.300	64	114	88	1161	15M	@ 150
4.5	0.350	68	117	99	1048	15M	@ 150
6	0.200	49	109	60	1590	20M	@ 250
6	0.225	51	110	66	1375	20M	@ 325
6	0.250	53	112	71	1240	20M	@ 325
6	0.300	58	114	82	1080	15M	@ 150
6	0.350	62	117	93	989	15M	@ 200
8	0.200	45	109	57	1484	20M	@ 325
8	0.225	48	110	62	1296	20M	@ 325
8	0.250	50	112	68	1177	15M	@ 150
8	0.300	55	114	79	1036	15M	@ 150
8	0.350	60	117	90	957	15M	@ 200
10	0.200	44	109	56	1442	20M	@ 325
10	0.225	46	110	61	1263	20M	@ 325
10	0.250	48	112	66	1150	15M	@ 150
10	0.300	53	114	77	1017	15M	@ 150
10	0.350	58	117	89	942	15M	@ 200
12	0.200	43	109	55	1421	20M	@ 325
12	0.225	45	110	60	1247	20M	@ 325
12	0.250	48	112	66	1137	15M	@ 150
12	0.300	52	114	77	1007	15M	@ 150
12	0.350	57	117	88	934	15M	@ 200

Cantilever Length: 1							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	92	105	102	3152	20M	@ 125
3	0.225	92	106	105	2379	20M	@ 200
3	0.250	92	108	108	1986	20M	@ 250
3	0.300	93	112	116	1565	20M	@ 250
3	0.350	95	115	125	1343	20M	@ 325
4.5	0.200	64	107	75	2072	20M	@ 200
4.5	0.225	67	108	81	1733	20M	@ 250
4.5	0.250	69	110	86	1531	20M	@ 250
4.5	0.300	74	113	97	1294	20M	@ 325
4.5	0.350	79	115	109	1162	15M	@ 150
6	0.200	57	107	68	1829	20M	@ 250
6	0.225	59	108	74	1563	20M	@ 250
6	0.250	62	110	79	1401	20M	@ 325
6	0.300	68	113	91	1210	20M	@ 325
6	0.350	73	115	103	1101	15M	@ 150
8	0.200	53	107	64	1705	20M	@ 250
8	0.225	56	108	70	1476	20M	@ 325
8	0.250	59	110	76	1333	20M	@ 325
8	0.300	64	113	88	1163	15M	@ 150
8	0.350	70	115	100	1066	15M	@ 150
10	0.200	51	107	63	1656	20M	@ 250
10	0.225	54	108	68	1439	20M	@ 325
10	0.250	57	110	74	1303	20M	@ 325
10	0.300	63	113	86	1142	15M	@ 150
10	0.350	69	115	99	1050	15M	@ 150
12	0.200	50	107	62	1630	20M	@ 250
12	0.225	53	108	68	1418	20M	@ 325
12	0.250	56	110	74	1287	20M	@ 325
12	0.300	62	113	86	1130	15M	@ 150
12	0.350	68	115	98	1041	15M	@ 150

Cantilever Length: 1.5							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	100	102	109	3539	25M	@ 150
3	0.225	101	104	113	2618	20M	@ 150
3	0.250	101	106	117	2172	20M	@ 200
3	0.300	103	109	126	1706	20M	@ 250
3	0.350	106	112	135	1462	20M	@ 325
4.5	0.200	72	105	83	2349	20M	@ 200
4.5	0.225	75	107	89	1940	20M	@ 250
4.5	0.250	78	108	95	1701	20M	@ 250
4.5	0.300	84	111	107	1430	20M	@ 325
4.5	0.350	90	114	119	1276	20M	@ 325
6	0.200	65	105	75	2082	20M	@ 200
6	0.225	68	107	82	1760	20M	@ 250
6	0.250	71	108	88	1568	20M	@ 250
6	0.300	77	111	101	1343	20M	@ 325
6	0.350	84	114	114	1215	20M	@ 325
8	0.200	61	105	72	1951	20M	@ 250
8	0.225	64	107	78	1669	20M	@ 250
8	0.250	67	108	84	1497	20M	@ 250
8	0.300	74	111	97	1295	20M	@ 325
8	0.350	81	114	110	1180	15M	@ 150
10	0.200	59	105	70	1895	20M	@ 250
10	0.225	62	107	76	1628	20M	@ 250
10	0.250	66	108	83	1465	20M	@ 325
10	0.300	72	111	96	1272	20M	@ 325
10	0.350	79	114	109	1163	15M	@ 150
12	0.200	58	105	69	1865	20M	@ 250
12	0.225	61	107	75	1606	20M	@ 250
12	0.250	65	108	82	1447	20M	@ 325
12	0.300	72	111	95	1260	20M	@ 325
12	0.350	78	114	108	1154	15M	@ 150

Cantilever Length: 2							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	112	100	120	4249	25M	@ 125
3	0.225	112	101	125	2974	20M	@ 150
3	0.250	114	103	129	2438	20M	@ 200
3	0.300	117	107	139	1904	20M	@ 250
3	0.350	121	110	149	1627	20M	@ 250
4.5	0.200	83	103	93	2767	20M	@ 150
4.5	0.225	87	105	100	2237	20M	@ 200
4.5	0.250	90	106	106	1943	20M	@ 250
4.5	0.300	97	109	120	1620	20M	@ 250
4.5	0.350	104	112	133	1440	20M	@ 325
6	0.200	76	103	86	2466	20M	@ 200
6	0.225	79	105	93	2046	20M	@ 200
6	0.250	83	106	100	1804	20M	@ 250
6	0.300	91	109	114	1529	20M	@ 250
6	0.350	99	112	128	1376	20M	@ 325
8	0.200	72	103	82	2317	20M	@ 200
8	0.225	76	105	89	1946	20M	@ 250
8	0.250	80	106	96	1729	20M	@ 250
8	0.300	88	109	110	1479	20M	@ 325
8	0.350	96	112	125	1340	20M	@ 325
10	0.200	70	103	80	2253	20M	@ 200
10	0.225	74	105	87	1902	20M	@ 250
10	0.250	78	106	94	1695	20M	@ 250
10	0.300	86	109	109	1457	20M	@ 325
10	0.350	94	112	123	1322	20M	@ 325
12	0.200	69	103	79	2219	20M	@ 200
12	0.225	73	105	86	1878	20M	@ 250
12	0.250	77	106	93	1676	20M	@ 250
12	0.300	85	109	108	1443	20M	@ 325
12	0.350	93	112	122	1312	20M	@ 325

E6. PL-2 Parapet — End Portion

Cantilever Length: 0.5							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	66	144	80	2250	20M	@ 200
3	0.225	70	145	88	1922	20M	@ 250
3	0.250	73	145	96	1722	20M	@ 250
3	0.300	80	147	110	1482	20M	@ 325
3	0.350	86	148	125	1341	20M	@ 325
4.5	0.200	64	144	79	2203	20M	@ 200
4.5	0.225	68	145	87	1889	20M	@ 250
4.5	0.250	72	145	94	1698	20M	@ 250
4.5	0.300	79	147	109	1468	20M	@ 325
4.5	0.350	85	148	124	1329	20M	@ 325
6	0.200	64	144	78	2186	20M	@ 200
6	0.225	68	145	86	1877	20M	@ 250
6	0.250	71	145	94	1689	20M	@ 250
6	0.300	78	147	109	1461	20M	@ 325
6	0.350	85	148	123	1324	20M	@ 325
8	0.200	64	144	78	2175	20M	@ 200
8	0.225	67	145	86	1870	20M	@ 250
8	0.250	71	145	94	1683	20M	@ 250
8	0.300	78	147	108	1456	20M	@ 325
8	0.350	85	148	123	1321	20M	@ 325
10	0.200	63	144	78	2169	20M	@ 200
10	0.225	67	145	86	1866	20M	@ 250
10	0.250	71	145	94	1680	20M	@ 250
10	0.300	78	147	108	1456	20M	@ 325
10	0.350	84	148	123	1319	20M	@ 325
12	0.200	63	144	78	2166	20M	@ 200
12	0.225	67	145	86	1863	20M	@ 250
12	0.250	71	145	93	1677	20M	@ 250
12	0.300	78	147	108	1453	20M	@ 325
12	0.350	84	148	123	1319	20M	@ 325

Cantilever Length: 1							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	73	142	87	2522	20M	@ 150
3	0.225	78	143	96	2125	20M	@ 200
3	0.250	82	144	104	1893	20M	@ 250
3	0.300	90	145	120	1621	20M	@ 250
3	0.350	98	147	135	1464	20M	@ 325
4.5	0.200	72	142	85	2450	20M	@ 200
4.5	0.225	76	143	94	2078	20M	@ 200
4.5	0.250	80	144	102	1858	20M	@ 250
4.5	0.300	89	145	118	1600	20M	@ 250
4.5	0.350	96	147	134	1448	20M	@ 325
6	0.200	71	142	85	2427	20M	@ 200
6	0.225	75	143	93	2063	20M	@ 200
6	0.250	80	144	102	1847	20M	@ 250
6	0.300	88	145	118	1592	20M	@ 250
6	0.350	96	147	133	1442	20M	@ 325
8	0.200	71	142	84	2414	20M	@ 200
8	0.225	75	143	93	2053	20M	@ 200
8	0.250	79	144	101	1839	20M	@ 250
8	0.300	88	145	117	1585	20M	@ 250
8	0.350	95	147	133	1439	20M	@ 325
10	0.200	70	142	84	2407	20M	@ 200
10	0.225	75	143	93	2048	20M	@ 200
10	0.250	79	144	101	1836	20M	@ 250
10	0.300	87	145	117	1585	20M	@ 250
10	0.350	95	147	133	1436	20M	@ 325
12	0.200	70	142	84	2402	20M	@ 200
12	0.225	75	143	93	2045	20M	@ 200
12	0.250	79	144	101	1833	20M	@ 250
12	0.300	87	145	117	1583	20M	@ 250
12	0.350	95	147	133	1436	20M	@ 325

Cantilever Length: 1.5							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	80	140	93	2781	20M	@ 150
3	0.225	85	141	102	2311	20M	@ 200
3	0.250	90	142	111	2047	20M	@ 200
3	0.300	99	143	128	1744	20M	@ 250
3	0.350	108	145	145	1572	20M	@ 250
4.5	0.200	77	140	91	2659	20M	@ 150
4.5	0.225	82	141	100	2235	20M	@ 200
4.5	0.250	87	142	109	1992	20M	@ 250
4.5	0.300	97	143	126	1711	20M	@ 250
4.5	0.350	106	145	143	1548	20M	@ 250
6	0.200	76	140	90	2629	20M	@ 150
6	0.225	81	141	99	2215	20M	@ 200
6	0.250	86	142	108	1977	20M	@ 250
6	0.300	96	143	125	1701	20M	@ 250
6	0.350	105	145	142	1540	20M	@ 250
8	0.200	76	140	89	2612	20M	@ 150
8	0.225	81	141	99	2204	20M	@ 200
8	0.250	86	142	107	1968	20M	@ 250
8	0.300	95	143	125	1693	20M	@ 250
8	0.350	105	145	142	1536	20M	@ 250
10	0.200	76	140	89	2604	20M	@ 150
10	0.225	81	141	98	2198	20M	@ 200
10	0.250	86	142	107	1964	20M	@ 250
10	0.300	95	143	125	1693	20M	@ 250
10	0.350	104	145	141	1533	20M	@ 250
12	0.200	76	140	89	2599	20M	@ 150
12	0.225	81	141	98	2195	20M	@ 200
12	0.250	86	142	107	1961	20M	@ 250
12	0.300	95	143	124	1690	20M	@ 250
12	0.350	104	145	141	1533	20M	@ 250

Cantilever Length: 2							
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	A_s (mm^2)	Type	Spacing
3	0.200	91	140	104	3255	20M	@ 125
3	0.225	96	141	113	2627	20M	@ 150
3	0.250	101	142	123	2295	20M	@ 200
3	0.300	112	143	141	1935	20M	@ 250
3	0.350	122	145	158	1732	20M	@ 250
4.5	0.200	86	140	98	3005	20M	@ 125
4.5	0.225	91	141	108	2481	20M	@ 200
4.5	0.250	97	142	118	2196	20M	@ 200
4.5	0.300	108	143	137	1876	20M	@ 250
4.5	0.350	118	145	155	1693	20M	@ 250
6	0.200	85	140	97	2960	20M	@ 150
6	0.225	90	141	107	2454	20M	@ 200
6	0.250	96	142	117	2176	20M	@ 200
6	0.300	107	143	136	1862	20M	@ 250
6	0.350	117	145	154	1683	20M	@ 250
8	0.200	84	140	97	2936	20M	@ 150
8	0.225	90	141	107	2439	20M	@ 200
8	0.250	95	142	117	2164	20M	@ 200
8	0.300	106	143	135	1852	20M	@ 250
8	0.350	117	145	154	1677	20M	@ 250
10	0.200	84	140	97	2926	20M	@ 150
10	0.225	90	141	107	2432	20M	@ 200
10	0.250	95	142	116	2159	20M	@ 200
10	0.300	106	143	135	1852	20M	@ 250
10	0.350	117	145	154	1674	20M	@ 250
12	0.200	84	140	97	2920	20M	@ 150
12	0.225	89	141	107	2428	20M	@ 200
12	0.250	95	142	116	2156	20M	@ 200
12	0.300	106	143	135	1848	20M	@ 250
12	0.350	116	145	154	1674	20M	@ 250

Appendix F: GFRP Design Tables — Railing Loads

F1. PL-3 Barrier

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1	3	200	200	55.232	181.478	92	93	183	570	No. 16	@ 325	No. 16	@	150
1	3	200	240	56.651	184.938	133	112	186	680	No. 16	@ 250	No. 12	@	125
1	3	200	300	58.200	188.609	208	139	189	850	No. 20	@ 325	No. 12	@	225
1	3	200	400	60.652	194.127	369	173	196	1130	No. 20	@ 250	No. 12	@	675
1	3	225	225	55.931	183.269	117	105	185	640	No. 16	@ 250	No. 12	@	100
1	3	225	270	57.763	187.725	168	125	188	760	No. 16	@ 250	No. 12	@	150
1	3	225	338	60.164	193.397	264	153	195	950	No. 20	@ 250	No. 12	@	300
1	3	225	450	63.424	200.789	468	187	201	1270	No. 20	@ 200	OK FOR		SHEAR
1	3	250	250	56.652	185.131	144	116	186	710	No. 16	@ 250	No. 12	@	125
1	3	250	300	58.560	189.755	208	139	190	850	No. 20	@ 325	No. 12	@	225
1	3	250	375	61.042	195.523	325	165	197	1060	No. 20	@ 250	No. 12	@	450
1	3	250	500	64.452	203.201	577	201	204	1410	No. 20	@ 200	OK FOR		SHEAR
1	3	300	300	58.120	188.904	208	139	190	850	No. 20	@ 325	No. 12	@	225
1	3	300	360	60.160	193.742	299	160	195	1020	No. 20	@ 250	No. 12	@	400
1	3	300	450	62.811	199.798	468	187	200	1270	No. 20	@ 200	OK FOR		SHEAR
1	3	300	600	66.427	207.860	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	3	350	350	59.566	192.581	283	157	194	990	No. 20	@ 250	No. 12	@	350
1	4.5	200	200	50.794	176.647	92	93	178	560	No. 16	@ 325	No. 16	@	150
1	4.5	200	240	52.557	180.620	132	112	182	670	No. 16	@ 250	No. 12	@	125
1	4.5	200	300	54.504	184.869	207	139	185	840	No. 20	@ 325	No. 12	@	250
1	4.5	200	400	57.548	191.140	368	173	193	1120	No. 20	@ 250	No. 12	@	775
1	4.5	225	225	51.709	178.890	116	105	180	630	No. 16	@ 250	No. 12	@	100
1	4.5	225	270	53.979	184.012	168	125	185	760	No. 16	@ 250	No. 12	@	175
1	4.5	225	338	56.953	190.422	263	153	192	940	No. 20	@ 325	No. 12	@	325
1	4.5	225	450	60.964	198.718	466	187	199	1260	No. 20	@ 250	OK FOR		SHEAR
1	4.5	250	250	52.634	181.204	144	116	182	700	No. 16	@ 250	No. 12	@	125
1	4.5	250	300	54.992	186.422	207	139	187	840	No. 20	@ 325	No. 12	@	225
1	4.5	250	375	58.056	192.929	323	165	194	1050	No. 20	@ 250	No. 12	@	500
1	4.5	250	500	62.215	201.440	575	201	202	1390	No. 20	@ 200	OK FOR		SHEAR
1	4.5	300	300	54.461	185.643	207	139	186	840	No. 20	@ 325	No. 12	@	225
1	4.5	300	360	56.968	191.053	298	160	192	1010	No. 20	@ 250	No. 12	@	425
1	4.5	300	450	60.206	197.751	466	187	198	1260	No. 20	@ 250	OK FOR		SHEAR
1	4.5	300	600	64.553	206.503	828	227	228	1670	No. 25	@ 250	OK FOR		SHEAR
1	4.5	350	350	56.205	189.796	282	157	191	980	No. 20	@ 250	No. 12	@	400
1	6	200	200	49.032	175.052	92	93	176	570	No. 16	@ 325	No. 16	@	150
1	6	200	240	50.996	179.714	133	112	181	680	No. 16	@ 250	No. 12	@	125
1	6	200	300	53.180	183.773	208	139	184	850	No. 20	@ 325	No. 12	@	250
1	6	200	400	56.499	190.289	369	173	192	1130	No. 20	@ 250	No. 12	@	800
1	6	225	225	50.083	177.557	117	105	179	640	No. 16	@ 250	No. 12	@	100
1	6	225	270	52.607	182.941	168	125	183	760	No. 16	@ 250	No. 12	@	175
1	6	225	338	55.887	189.637	264	153	191	950	No. 20	@ 250	No. 12	@	325
1	6	225	450	60.250	198.218	468	187	199	1270	No. 20	@ 200	OK FOR		SHEAR
1	6	250	250	51.125	180.014	144	116	181	710	No. 16	@ 250	No. 12	@	150
1	6	250	300	53.735	185.470	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	6	250	375	57.097	192.238	325	165	193	1060	No. 20	@ 250	No. 12	@	500
1	6	250	500	61.590	201.011	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	6	300	300	53.147	184.715	208	139	185	850	No. 20	@ 325	No. 12	@	250
1	6	300	360	55.904	190.291	299	160	191	1020	No. 20	@ 250	No. 12	@	450
1	6	300	450	59.425	197.203	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	6	300	600	64.067	206.169	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	6	350	350	55.059	188.987	283	157	190	990	No. 20	@ 250	No. 12	@	400

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1	8	200	200	48.045	174.362	92	93	175	570	No. 16	@ 325	No. 16	@	150
1	8	200	240	50.153	178.660	133	112	180	680	No. 16	@ 250	No. 12	@	125
1	8	200	300	52.502	183.320	208	139	184	850	No. 20	@ 325	No. 12	@	250
1	8	200	400	55.969	189.874	369	173	191	1130	No. 20	@ 250	No. 12	@	850
1	8	225	225	49.186	176.962	117	105	178	640	No. 16	@ 250	No. 12	@	100
1	8	225	270	51.888	182.441	168	125	183	760	No. 16	@ 250	No. 12	@	175
1	8	225	338	55.364	189.256	264	153	191	950	No. 20	@ 250	No. 12	@	325
1	8	225	450	59.913	197.956	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	8	250	250	50.306	179.467	144	116	180	710	No. 16	@ 250	No. 12	@	150
1	8	250	300	53.092	185.042	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	8	250	375	56.635	191.929	325	165	193	1060	No. 20	@ 250	No. 12	@	500
1	8	250	500	61.299	200.773	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	8	300	300	52.471	184.238	208	139	185	850	No. 20	@ 325	No. 12	@	250
1	8	300	360	55.392	189.910	299	160	191	1020	No. 20	@ 250	No. 12	@	450
1	8	300	450	59.072	196.917	468	187	197	1270	No. 20	@ 200	OK FOR		SHEAR
1	8	300	600	63.849	205.979	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	8	350	350	54.509	188.605	283	157	190	990	No. 20	@ 250	No. 12	@	400
1	10	200	200	47.604	174.100	92	93	175	570	No. 16	@ 325	No. 16	@	150
1	10	200	240	49.783	178.446	133	112	180	680	No. 16	@ 250	No. 12	@	125
1	10	200	300	52.207	183.129	208	139	184	850	No. 20	@ 325	No. 12	@	250
1	10	200	400	55.728	189.706	369	173	191	1130	No. 20	@ 250	No. 12	@	850
1	10	225	225	48.791	176.700	117	105	178	640	No. 16	@ 250	No. 12	@	100
1	10	225	270	51.581	182.227	168	125	183	760	No. 16	@ 250	No. 12	@	175
1	10	225	338	55.140	189.089	264	153	190	950	No. 20	@ 250	No. 12	@	350
1	10	225	450	59.762	197.813	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	10	250	250	49.956	179.229	144	116	180	710	No. 16	@ 250	No. 12	@	150
1	10	250	300	52.824	184.827	208	139	185	850	No. 20	@ 325	No. 12	@	250
1	10	250	375	56.443	191.738	325	165	193	1060	No. 20	@ 250	No. 12	@	500
1	10	250	500	61.171	200.630	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	10	300	300	52.204	184.024	208	139	185	850	No. 20	@ 325	No. 12	@	250
1	10	300	360	55.195	189.743	299	160	191	1020	No. 20	@ 250	No. 12	@	450
1	10	300	450	58.932	196.775	468	187	197	1270	No. 20	@ 200	OK FOR		SHEAR
1	10	300	600	63.761	205.884	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	10	350	350	54.308	188.415	283	157	190	990	No. 20	@ 250	No. 12	@	400
1	12	200	200	47.362	173.909	92	93	175	570	No. 16	@ 325	No. 16	@	150
1	12	200	240	49.580	178.278	133	112	180	680	No. 16	@ 250	No. 12	@	125
1	12	200	300	52.043	182.987	208	139	184	850	No. 20	@ 325	No. 12	@	250
1	12	200	400	55.594	189.586	369	173	191	1130	No. 20	@ 250	No. 12	@	850
1	12	225	225	48.581	176.509	117	105	178	640	No. 16	@ 250	No. 12	@	100
1	12	225	270	51.419	182.084	168	125	183	760	No. 16	@ 250	No. 12	@	175
1	12	225	338	55.022	188.946	264	153	190	950	No. 20	@ 250	No. 12	@	350
1	12	225	450	59.686	197.718	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	12	250	250	49.779	179.062	144	116	180	710	No. 16	@ 250	No. 12	@	150
1	12	250	300	52.689	184.708	208	139	185	850	No. 20	@ 325	No. 12	@	250
1	12	250	375	56.345	191.643	325	165	193	1060	No. 20	@ 250	No. 12	@	500
1	12	250	500	61.110	200.583	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	12	300	300	52.078	183.905	208	139	185	850	No. 20	@ 325	No. 12	@	250
1	12	300	360	55.098	189.648	299	160	191	1020	No. 20	@ 250	No. 12	@	450
1	12	300	450	58.863	196.727	468	187	197	1270	No. 20	@ 200	OK FOR		SHEAR
1	12	300	600	63.722	205.836	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	12	350	350	54.211	188.320	283	157	190	990	No. 20	@ 250	No. 12	@	400

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1.5	3	200	200	105.753	139.727	106	93	141	780	No. 16	@ 250	No. 12	@	150
1.5	3	200	240	107.899	143.920	133	112	145	680	No. 16	@ 250	No. 12	@	275
1.5	3	200	300	110.310	148.475	208	139	149	850	No. 20	@ 325	OK FOR		SHEAR
1.5	3	200	400	114.270	155.686	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	3	225	225	106.941	141.735	117	105	143	640	No. 16	@ 250	No. 12	@	225
1.5	3	225	270	109.717	147.217	168	125	148	760	No. 16	@ 250	No. 12	@	450
1.5	3	225	338	113.492	154.465	264	153	156	950	No. 20	@ 250	OK FOR		SHEAR
1.5	3	225	450	118.855	164.434	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	3	250	250	108.171	143.815	144	116	145	710	No. 16	@ 250	No. 12	@	325
1.5	3	250	300	111.078	149.536	208	139	150	850	No. 20	@ 325	OK FOR		SHEAR
1.5	3	250	375	115.011	157.047	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	3	250	500	120.678	167.541	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	3	300	300	110.704	148.189	208	139	149	850	No. 20	@ 325	OK FOR		SHEAR
1.5	3	300	360	113.864	154.316	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	3	300	450	118.147	162.401	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	3	300	600	124.315	173.709	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	3	350	350	113.265	152.610	287	157	158	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	200	200	86.696	127.253	92	93	128	570	No. 16	@ 325	No. 12	@	200
1.5	4.5	200	240	89.424	132.137	133	112	134	680	No. 16	@ 250	No. 12	@	425
1.5	4.5	200	300	92.518	137.521	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	200	400	97.694	145.975	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	225	225	88.229	129.833	117	105	131	640	No. 16	@ 250	No. 12	@	325
1.5	4.5	225	270	91.755	136.219	168	125	137	760	No. 16	@ 250	No. 12	@	875
1.5	4.5	225	338	96.591	144.656	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	225	450	103.530	156.219	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	250	250	89.804	132.507	144	116	133	710	No. 16	@ 250	No. 12	@	550
1.5	4.5	250	300	93.512	139.109	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	250	375	98.562	147.809	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	250	500	105.885	159.921	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	300	300	92.997	137.856	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	300	360	97.035	144.912	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	300	450	102.527	154.138	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	300	600	110.443	167.017	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	4.5	350	350	96.141	143.063	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	6	200	200	78.447	122.612	92	93	124	570	No. 16	@ 325	No. 12	@	250
1.5	6	200	240	81.571	127.930	133	112	129	680	No. 16	@ 250	No. 12	@	550
1.5	6	200	300	85.149	133.829	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	200	400	91.073	142.880	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	6	225	225	80.275	125.644	117	105	127	640	No. 16	@ 250	No. 12	@	375
1.5	6	225	270	84.327	132.554	168	125	133	760	No. 16	@ 250	OK FOR		SHEAR
1.5	6	225	338	89.890	141.610	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	6	225	450	97.842	154.029	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	6	250	250	82.124	128.675	144	116	130	710	No. 16	@ 250	No. 12	@	675
1.5	6	250	300	86.380	135.824	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	250	375	92.177	145.119	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	6	250	500	100.525	157.993	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	6	300	300	85.788	134.619	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	300	360	90.417	142.127	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	6	300	450	96.683	151.948	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	6	300	600	105.621	165.493	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	6	350	350	89.334	140.206	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1.5	8	200	200	73.261	120.066	92	93	121	570	No. 16	@ 325	No. 12	@	275
1.5	8	200	240	76.747	125.630	133	112	127	680	No. 16	@ 250	No. 12	@	625
1.5	8	200	300	80.770	131.947	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	8	200	400	87.241	141.344	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	8	225	225	75.359	123.407	117	105	125	640	No. 16	@ 250	No. 12	@	425
1.5	8	225	270	79.889	130.650	168	125	131	760	No. 16	@ 250	OK FOR		SHEAR
1.5	8	225	338	86.069	140.158	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	8	225	450	94.781	153.053	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	8	250	250	77.442	126.652	144	116	127	710	No. 16	@ 250	No. 12	@	875
1.5	8	250	300	82.190	134.134	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	8	250	375	88.597	143.834	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	8	250	500	97.678	157.113	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	8	300	300	81.515	132.929	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	8	300	360	86.646	140.746	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	8	300	450	93.517	150.901	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	8	300	600	103.117	164.803	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	8	350	350	85.420	138.754	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	10	200	200	70.806	119.042	92	93	120	570	No. 16	@ 325	No. 12	@	275
1.5	10	200	240	74.528	124.814	133	112	126	680	No. 16	@ 250	No. 12	@	650
1.5	10	200	300	78.831	131.233	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	10	200	400	85.555	140.752	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	10	225	225	73.068	122.502	117	105	124	640	No. 16	@ 250	No. 12	@	450
1.5	10	225	270	77.906	129.935	168	125	130	760	No. 16	@ 250	OK FOR		SHEAR
1.5	10	225	338	84.440	139.610	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	10	225	450	93.507	152.649	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	10	250	250	75.301	125.843	144	116	127	710	No. 16	@ 250	No. 12	@	875
1.5	10	250	300	80.352	133.468	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	10	250	375	87.096	143.334	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	10	250	500	96.498	156.755	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	10	300	300	79.641	132.239	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	10	300	360	85.064	140.199	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	10	300	450	92.229	150.472	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	10	300	600	102.074	164.493	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	10	350	350	83.779	138.159	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	12	200	200	69.519	118.590	92	93	120	570	No. 16	@ 325	No. 12	@	275
1.5	12	200	240	73.388	124.408	133	112	126	680	No. 16	@ 250	No. 12	@	650
1.5	12	200	300	77.858	130.899	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	12	200	400	84.686	140.462	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	12	225	225	71.888	122.050	117	105	124	640	No. 16	@ 250	No. 12	@	450
1.5	12	225	270	76.915	129.579	168	125	130	760	No. 16	@ 250	OK FOR		SHEAR
1.5	12	225	338	83.639	139.325	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	12	225	450	92.859	152.411	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	12	250	250	74.220	125.438	144	116	126	710	No. 16	@ 250	No. 12	@	975
1.5	12	250	300	79.452	133.134	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	12	250	375	86.365	143.072	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	12	250	500	95.895	156.541	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	12	300	300	78.742	131.882	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	12	300	360	84.317	139.913	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	12	300	450	91.606	150.234	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	12	300	600	101.531	164.303	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	12	350	350	83.018	137.873	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2	3	200	200	150.515	123.317	151	93	124	1940	No. 25	@ 250	No. 12	@	250
2	3	200	240	152.433	126.676	152	112	128	940	No. 20	@ 325	No. 12	@	575
2	3	200	300	154.570	130.370	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	3	200	400	158.268	136.537	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	3	225	225	152.231	125.431	152	105	127	1210	No. 20	@ 250	No. 12	@	375
2	3	225	270	154.875	130.000	168	125	131	760	No. 16	@ 250	OK FOR		SHEAR
2	3	225	338	158.598	136.325	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	3	225	450	164.140	145.462	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	3	250	250	153.981	127.593	154	116	128	820	No. 20	@ 325	No. 12	@	800
2	3	250	300	156.787	132.427	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	3	250	375	160.718	139.064	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	3	250	500	166.661	148.826	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	3	300	300	157.554	132.109	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	3	300	360	160.682	137.448	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	3	300	450	165.079	144.782	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	3	300	600	171.737	155.601	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	3	350	350	161.174	136.722	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
2	4.5	200	200	118.293	100.513	118	93	102	1030	No. 20	@ 250	No. 12	@	850
2	4.5	200	240	120.766	104.182	133	112	113	680	No. 16	@ 250	OK FOR		SHEAR
2	4.5	200	300	123.573	108.277	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	200	400	128.598	115.202	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	4.5	225	225	120.324	102.976	120	105	106	680	No. 16	@ 250	OK FOR		SHEAR
2	4.5	225	270	123.667	107.989	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
2	4.5	225	338	128.444	114.951	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	4.5	225	450	135.670	125.136	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	4.5	250	250	122.403	105.555	144	116	117	710	No. 16	@ 250	OK FOR		SHEAR
2	4.5	250	300	125.969	110.874	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	250	375	131.032	118.168	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	4.5	250	500	138.784	129.015	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	4.5	300	300	126.638	110.805	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	300	360	130.635	116.644	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	4.5	300	450	136.302	124.671	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	4.5	300	600	144.947	136.610	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	4.5	350	350	130.875	116.008	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
2	6	200	200	103.776	92.548	104	93	94	750	No. 16	@ 250	OK FOR		SHEAR
2	6	200	240	106.723	96.548	133	112	113	680	No. 16	@ 250	OK FOR		SHEAR
2	6	200	300	110.109	101.018	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	200	400	116.199	108.547	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	6	225	225	106.136	95.382	117	105	106	640	No. 16	@ 250	OK FOR		SHEAR
2	6	225	270	110.097	100.865	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
2	6	225	338	115.780	108.414	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	6	225	450	124.403	119.454	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	6	250	250	108.538	98.309	144	116	117	710	No. 16	@ 250	OK FOR		SHEAR
2	6	250	300	112.770	104.051	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	250	375	118.796	111.975	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	6	250	500	128.021	123.649	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	6	300	300	113.364	104.118	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	300	360	118.108	110.398	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	6	300	450	124.830	119.005	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	6	300	600	135.045	131.766	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	6	350	350	118.122	109.720	288	157	158	1030	No. 20	@ 250	OK FOR		SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	8	200	200	94.067	87.871	95	93	94	600	No. 16	@ 325	OK FOR	SHEAR
2	8	200	240	97.512	92.149	135	112	113	700	No. 16	@ 250	OK FOR	SHEAR
2	8	200	300	101.518	97.008	209	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	8	200	400	108.594	104.920	373	173	174	1150	No. 20	@ 250	OK FOR	SHEAR
2	8	225	225	96.796	91.079	118	105	106	650	No. 16	@ 250	OK FOR	SHEAR
2	8	225	270	101.411	96.904	172	125	126	800	No. 16	@ 250	OK FOR	SHEAR
2	8	225	338	108.023	104.943	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
2	8	225	450	117.982	116.611	473	187	188	1300	No. 20	@ 200	OK FOR	SHEAR
2	8	250	250	99.536	94.262	148	116	117	750	No. 16	@ 250	OK FOR	SHEAR
2	8	250	300	104.461	100.368	209	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	8	250	375	111.447	108.759	331	165	166	1100	No. 20	@ 250	OK FOR	SHEAR
2	8	250	500	122.036	121.013	585	201	202	1450	No. 25	@ 325	OK FOR	SHEAR
2	8	300	300	104.958	100.494	209	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	8	300	360	110.456	107.093	304	160	161	1050	No. 20	@ 250	OK FOR	SHEAR
2	8	300	450	118.199	116.139	473	187	188	1300	No. 20	@ 200	OK FOR	SHEAR
2	8	300	600	129.793	129.407	835	227	228	1700	No. 25	@ 250	OK FOR	SHEAR
2	8	350	350	110.238	106.386	285	157	158	1000	No. 20	@ 250	OK FOR	SHEAR
2	10	200	200	89.059	85.739	92	93	94	570	No. 16	@ 325	OK FOR	SHEAR
2	10	200	240	92.877	90.185	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
2	10	200	300	97.355	95.271	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	10	200	400	105.042	103.340	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
2	10	225	225	92.058	89.140	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
2	10	225	270	97.168	95.195	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
2	10	225	338	104.439	103.476	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
2	10	225	450	115.242	115.442	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	10	250	250	95.042	92.451	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
2	10	250	300	100.481	98.785	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	10	250	375	108.132	107.394	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
2	10	250	500	119.544	119.945	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
2	10	300	300	100.904	98.871	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	10	300	360	106.944	105.695	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
2	10	300	450	115.355	114.961	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	10	300	600	127.703	128.434	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
2	10	350	350	106.585	104.928	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR
2	12	200	200	86.253	84.697	92	93	94	570	No. 16	@ 325	OK FOR	SHEAR
2	12	200	240	90.348	89.237	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
2	12	200	300	95.172	94.446	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	12	200	400	103.205	102.605	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
2	12	225	225	89.450	88.183	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
2	12	225	270	94.924	94.337	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
2	12	225	338	102.643	102.783	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
2	12	225	450	113.932	114.863	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	12	250	250	92.615	91.556	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
2	12	250	300	98.424	98.013	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	12	250	375	106.508	106.741	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
2	12	250	500	118.366	119.385	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
2	12	300	300	98.813	98.078	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	12	300	360	105.220	105.003	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
2	12	300	450	114.020	114.365	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	12	300	600	126.715	127.930	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
2	12	350	350	104.784	104.241	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2.5	3	200	200	220.658	221.892	221	93	223	6500	No. 32	@ 100	No. 16	@	100
2.5	3	200	240	222.678	224.869	306	112	226	6750	No. 32	@ 100	No. 16	@	125
2.5	3	200	300	224.855	228.046	228	139	229	1050	No. 20	@ 250	No. 16	@	225
2.5	3	200	400	228.670	233.495	373	173	235	1150	No. 20	@ 250	No. 12	@	250
2.5	3	225	225	223.120	224.189	224	105	226	3500	No. 32	@ 200	No. 16	@	125
2.5	3	225	270	226.060	228.465	228	125	229	1600	No. 25	@ 250	No. 16	@	175
2.5	3	225	338	230.211	234.406	264	153	236	950	No. 20	@ 250	No. 16	@	275
2.5	3	225	450	236.479	243.098	473	187	244	1300	No. 20	@ 200	No. 12	@	300
2.5	3	250	250	225.610	226.531	227	116	227	2200	No. 25	@ 200	No. 16	@	150
2.5	3	250	300	228.752	231.087	232	139	232	1100	No. 20	@ 250	No. 16	@	200
2.5	3	250	375	233.174	237.338	331	165	239	1100	No. 20	@ 250	No. 12	@	175
2.5	3	250	500	239.959	246.711	585	201	247	1450	No. 25	@ 325	No. 12	@	400
2.5	3	300	300	230.644	231.351	232	139	232	1100	No. 20	@ 250	No. 16	@	200
2.5	3	300	360	234.195	236.426	304	160	238	1050	No. 20	@ 250	No. 12	@	175
2.5	3	300	450	239.218	243.451	473	187	244	1300	No. 20	@ 200	No. 12	@	300
2.5	3	300	600	246.965	254.028	835	227	255	1700	No. 25	@ 250	No. 12	@	825
2.5	3	350	350	235.721	236.237	285	157	238	1000	No. 20	@ 250	No. 16	@	300
2.5	4.5	200	200	171.999	187.263	172	93	188	2850	No. 32	@ 250	No. 16	@	125
2.5	4.5	200	240	174.368	190.151	174	112	192	1310	No. 20	@ 200	No. 12	@	100
2.5	4.5	200	300	176.988	193.220	208	139	194	850	No. 20	@ 325	No. 12	@	200
2.5	4.5	200	400	181.805	198.770	369	173	200	1130	No. 20	@ 250	No. 12	@	575
2.5	4.5	225	225	174.701	189.721	175	105	191	1730	No. 25	@ 250	No. 16	@	175
2.5	4.5	225	270	178.082	193.910	193	125	194	1060	No. 20	@ 250	No. 12	@	150
2.5	4.5	225	338	182.962	199.790	264	153	201	950	No. 20	@ 250	No. 12	@	275
2.5	4.5	225	450	190.498	208.664	468	187	209	1270	No. 20	@ 200	No. 12	@	775
2.5	4.5	250	250	177.450	192.307	180	116	193	1200	No. 20	@ 250	No. 12	@	125
2.5	4.5	250	300	181.089	196.754	212	139	197	890	No. 20	@ 325	No. 12	@	200
2.5	4.5	250	375	186.313	202.995	325	165	204	1060	No. 20	@ 250	No. 12	@	375
2.5	4.5	250	500	194.490	212.584	577	201	213	1410	No. 20	@ 200	OK FOR		SHEAR
2.5	4.5	300	300	183.027	197.520	214	139	198	910	No. 20	@ 325	No. 12	@	175
2.5	4.5	300	360	187.179	202.539	299	160	204	1010	No. 20	@ 250	No. 12	@	300
2.5	4.5	300	450	193.142	209.586	468	187	210	1270	No. 20	@ 200	No. 12	@	750
2.5	4.5	300	600	202.466	220.419	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	4.5	350	350	188.634	202.733	283	157	204	990	No. 20	@ 250	No. 12	@	275
2.5	6	200	200	149.582	176.214	150	93	177	1910	No. 25	@ 250	No. 16	@	150
2.5	6	200	240	152.352	179.317	152	112	181	940	No. 20	@ 325	No. 12	@	125
2.5	6	200	300	155.456	182.645	208	139	183	850	No. 20	@ 325	No. 12	@	250
2.5	6	200	400	161.281	188.638	369	173	190	1130	No. 20	@ 250	No. 12	@	900
2.5	6	225	225	152.578	178.971	153	105	180	1220	No. 20	@ 250	No. 12	@	100
2.5	6	225	270	156.477	183.425	168	125	184	760	No. 16	@ 250	No. 12	@	175
2.5	6	225	338	162.159	189.742	264	153	191	950	No. 20	@ 250	No. 12	@	325
2.5	6	225	450	171.009	199.276	468	187	200	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	6	250	250	155.621	181.770	156	116	183	850	No. 20	@ 325	No. 12	@	125
2.5	6	250	300	159.835	186.541	208	139	187	850	No. 20	@ 325	No. 12	@	225
2.5	6	250	375	165.926	193.240	325	165	194	1060	No. 20	@ 250	No. 12	@	500
2.5	6	250	500	175.521	203.521	577	201	204	1410	No. 20	@ 200	OK FOR		SHEAR
2.5	6	300	300	161.760	187.408	208	139	188	850	No. 20	@ 325	No. 12	@	225
2.5	6	300	360	166.575	192.765	299	160	194	1020	No. 20	@ 250	No. 12	@	400
2.5	6	300	450	173.524	200.283	468	187	201	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	6	300	600	184.413	211.785	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	6	350	350	167.874	192.963	283	157	194	990	No. 20	@ 250	No. 12	@	350

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2.5	8	200	200	134.305	169.982	134	93	171	1430	No. 25	@ 325	No. 12	@	100
2.5	8	200	240	137.562	173.327	138	112	175	730	No. 16	@ 250	No. 12	@	125
2.5	8	200	300	141.256	176.976	208	139	178	850	No. 20	@ 325	No. 12	@	300
2.5	8	200	400	148.193	183.444	369	173	185	1130	No. 20	@ 250	OK FOR		SHEAR
2.5	8	225	225	137.668	173.035	138	105	174	940	No. 20	@ 325	No. 12	@	125
2.5	8	225	270	142.210	177.833	168	125	178	760	No. 16	@ 250	No. 12	@	175
2.5	8	225	338	148.845	184.624	264	153	186	950	No. 20	@ 250	No. 12	@	400
2.5	8	225	450	159.180	194.805	468	187	195	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	8	250	250	141.060	176.071	144	116	177	710	No. 16	@ 250	No. 12	@	150
2.5	8	250	300	145.967	181.201	208	139	182	850	No. 20	@ 325	No. 12	@	250
2.5	8	250	375	153.072	188.356	325	165	190	1060	No. 20	@ 250	No. 12	@	575
2.5	8	250	500	164.228	199.265	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2.5	8	300	300	147.828	182.119	208	139	183	850	No. 20	@ 325	No. 12	@	250
2.5	8	300	360	153.426	187.816	299	160	189	1020	No. 20	@ 250	No. 12	@	475
2.5	8	300	450	161.492	195.763	468	187	196	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	8	300	600	174.045	207.882	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	8	350	350	154.499	187.978	283	157	189	990	No. 20	@ 250	No. 12	@	425
2.5	10	200	200	126.112	167.016	126	93	168	1210	No. 20	@ 250	No. 12	@	100
2.5	10	200	240	129.772	170.543	133	112	172	680	No. 16	@ 250	No. 12	@	150
2.5	10	200	300	133.964	174.384	208	139	175	850	No. 20	@ 325	No. 12	@	325
2.5	10	200	400	141.717	181.149	369	173	183	1130	No. 20	@ 250	OK FOR		SHEAR
2.5	10	225	225	129.778	170.252	130	105	172	820	No. 20	@ 325	No. 12	@	125
2.5	10	225	270	134.855	175.281	168	125	176	760	No. 16	@ 250	No. 12	@	200
2.5	10	225	338	142.259	182.357	264	153	184	950	No. 20	@ 250	No. 12	@	425
2.5	10	225	450	153.699	192.921	468	187	193	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	10	250	250	133.447	173.463	144	116	174	710	No. 16	@ 250	No. 12	@	150
2.5	10	250	300	138.925	178.808	208	139	179	850	No. 20	@ 325	No. 12	@	275
2.5	10	250	375	146.827	186.247	325	165	187	1060	No. 20	@ 250	No. 12	@	650
2.5	10	250	500	159.115	197.488	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2.5	10	300	300	140.716	179.722	208	139	180	850	No. 20	@ 325	No. 12	@	275
2.5	10	300	360	146.944	185.649	299	160	187	1020	No. 20	@ 250	No. 12	@	500
2.5	10	300	450	155.863	193.862	468	187	194	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	10	300	600	169.547	206.303	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	10	350	350	147.843	185.752	283	157	187	990	No. 20	@ 250	No. 12	@	450
2.5	12	200	200	121.286	165.400	121	93	166	1100	No. 20	@ 250	No. 12	@	100
2.5	12	200	240	125.278	169.038	133	112	171	680	No. 16	@ 250	No. 12	@	150
2.5	12	200	300	129.876	173.021	208	139	174	850	No. 20	@ 325	No. 12	@	325
2.5	12	200	400	138.200	179.938	369	173	181	1130	No. 20	@ 250	OK FOR		SHEAR
2.5	12	225	225	125.194	168.772	125	105	170	750	No. 16	@ 250	No. 12	@	125
2.5	12	225	270	130.712	173.939	168	125	174	760	No. 16	@ 250	No. 12	@	200
2.5	12	225	338	138.710	181.183	264	153	183	950	No. 20	@ 250	No. 12	@	425
2.5	12	225	450	150.922	191.976	468	187	192	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	12	250	250	129.087	172.061	144	116	173	710	No. 16	@ 250	No. 12	@	150
2.5	12	250	300	135.026	177.536	208	139	178	850	No. 20	@ 325	No. 12	@	300
2.5	12	250	375	143.533	185.151	325	165	186	1060	No. 20	@ 250	No. 12	@	675
2.5	12	250	500	156.571	196.604	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2.5	12	300	300	136.768	178.453	208	139	179	850	No. 20	@ 325	No. 12	@	275
2.5	12	300	360	143.488	184.517	299	160	186	1020	No. 20	@ 250	No. 12	@	525
2.5	12	300	450	153.011	192.881	468	187	193	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	12	300	600	167.371	205.484	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	12	350	350	144.269	184.583	283	157	186	990	No. 20	@ 250	No. 12	@	450

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
3	6	200	200	221.968	214.817	222	93	216	6600	No. 32	@ 100	No. 16	@	100
3	6	200	240	225.539	218.766	226	112	220	2600	No. 32	@ 250	No. 16	@	150
3	6	200	300	229.381	222.843	232	139	223	1100	No. 20	@ 250	No. 16	@	225
3	6	200	400	236.207	229.747	370	173	231	1130	No. 20	@ 250	No. 12	@	250
3	6	225	225	225.863	217.756	225	105	219	3550	No. 32	@ 200	No. 16	@	125
3	6	225	270	230.926	223.368	231	125	224	1650	No. 25	@ 250	No. 16	@	175
3	6	225	338	238.016	230.846	264	153	232	950	No. 20	@ 250	No. 12	@	150
3	6	225	450	248.694	241.664	473	187	242	1300	No. 20	@ 200	No. 12	@	300
3	6	250	250	229.807	220.755	231	116	222	2300	No. 32	@ 325	No. 16	@	150
3	6	250	300	235.233	226.709	237	139	227	1150	No. 20	@ 250	No. 16	@	225
3	6	250	375	242.803	234.625	331	165	236	1100	No. 20	@ 250	No. 12	@	200
3	6	250	500	254.375	246.229	585	201	247	1450	No. 25	@ 325	No. 12	@	400
3	6	300	300	237.768	226.837	241	139	227	1200	No. 20	@ 250	No. 16	@	225
3	6	300	360	243.900	233.391	316	160	234	1150	No. 20	@ 250	No. 12	@	175
3	6	300	450	252.492	242.207	473	187	243	1300	No. 20	@ 200	No. 12	@	300
3	6	300	600	265.663	255.963	835	227	257	1700	No. 25	@ 250	No. 12	@	775
3	6	350	350	245.727	232.884	285	157	234	1000	No. 20	@ 250	No. 12	@	175
3	8	200	200	199.380	206.481	199	93	208	4500	No. 32	@ 150	No. 16	@	100
3	8	200	240	203.462	210.667	203	112	212	1950	No. 25	@ 250	No. 16	@	150
3	8	200	300	207.909	215.052	209	139	216	850	No. 20	@ 325	No. 12	@	150
3	8	200	400	215.936	222.407	373	173	224	1150	No. 20	@ 250	No. 12	@	300
3	8	225	225	203.653	209.697	204	105	211	2650	No. 32	@ 250	No. 16	@	125
3	8	225	270	209.384	215.645	210	125	216	1300	No. 20	@ 200	No. 16	@	200
3	8	225	338	217.470	223.592	264	153	225	950	No. 20	@ 250	No. 12	@	175
3	8	225	450	229.731	235.072	473	187	236	1300	No. 20	@ 200	No. 12	@	350
3	8	250	250	207.961	212.954	208	116	214	1750	No. 25	@ 250	No. 16	@	175
3	8	250	300	214.113	219.243	209	139	220	850	No. 20	@ 325	No. 16	@	250
3	8	250	375	222.749	227.627	331	165	229	1100	No. 20	@ 250	No. 12	@	225
3	8	250	500	236.010	239.908	585	201	241	1450	No. 25	@ 325	No. 12	@	475
3	8	300	300	216.591	219.451	219	139	220	950	No. 20	@ 250	No. 16	@	250
3	8	300	360	223.547	226.338	304	160	227	1050	No. 20	@ 250	No. 12	@	200
3	8	300	450	233.331	235.613	473	187	236	1300	No. 20	@ 200	No. 12	@	350
3	8	300	600	248.338	249.282	835	227	251	1700	No. 25	@ 250	No. 12	@	975
3	8	350	350	225.143	225.782	285	157	227	1000	No. 20	@ 250	No. 12	@	175
3	10	200	200	187.079	202.559	187	93	204	3680	No. 32	@ 200	No. 16	@	125
3	10	200	240	191.609	206.947	192	112	208	1670	No. 25	@ 250	No. 16	@	150
3	10	200	300	196.594	211.522	208	139	212	850	No. 20	@ 325	No. 12	@	150
3	10	200	400	205.602	219.230	370	173	221	1130	No. 20	@ 250	No. 12	@	325
3	10	225	225	191.685	205.976	192	105	207	2220	No. 32	@ 325	No. 16	@	150
3	10	225	270	198.010	212.153	200	125	213	1150	No. 20	@ 250	No. 16	@	200
3	10	225	338	206.962	220.447	264	153	222	950	No. 20	@ 250	No. 12	@	175
3	10	225	450	220.535	232.373	473	187	233	1300	No. 20	@ 200	No. 12	@	375
3	10	250	250	195.755	209.418	196	116	210	1500	No. 25	@ 250	No. 16	@	175
3	10	250	300	203.094	215.910	209	139	217	850	No. 20	@ 325	No. 12	@	150
3	10	250	375	212.642	224.640	331	165	226	1100	No. 20	@ 250	No. 12	@	225
3	10	250	500	227.271	237.342	585	201	238	1450	No. 25	@ 325	No. 12	@	525
3	10	300	300	205.493	216.145	209	139	217	850	No. 20	@ 325	No. 12	@	150
3	10	300	360	213.160	223.277	304	160	224	1050	No. 20	@ 250	No. 12	@	200
3	10	300	450	223.944	232.861	473	187	233	1300	No. 20	@ 200	No. 12	@	375
3	10	300	600	240.389	246.967	835	227	248	1700	No. 25	@ 250	OK FOR		SHEAR
3	10	350	350	214.547	222.673	285	157	224	1000	No. 20	@ 250	No. 12	@	200
3	12	200	200	179.641	200.375	180	93	201	3250	No. 32	@ 200	No. 16	@	125
3	12	200	240	184.556	204.889	185	112	206	1520	No. 25	@ 250	No. 16	@	175
3	12	200	300	190.005	209.629	209	139	210	850	No. 20	@ 325	No. 12	@	150
3	12	200	400	199.774	217.541	373	173	219	1150	No. 20	@ 250	No. 12	@	325
3	12	225	225	184.530	203.953	185	105	205	2000	No. 25	@ 200	No. 16	@	150
3	12	225	270	191.365	210.284	191	125	211	1040	No. 20	@ 250	No. 16	@	200
3	12	225	338	201.036	218.810	264	153	220	950	No. 20	@ 250	No. 12	@	175
3	12	225	450	215.629	231.023	473	187	232	1300	No. 20	@ 200	No. 12	@	375
3	12	250	250	189.409	207.491	189	116	208	1370	No. 20	@ 200	No. 16	@	175
3	12	250	300	196.740	214.161	209	139	215	850	No. 20	@ 325	No. 12	@	150
3	12	250	375	207.036	223.322	331	165	225	1100	No. 20	@ 250	No. 12	@	225
3	12	250	500	222.700	236.069	585	201	237	1450	No. 25	@ 325	No. 12	@	525
3	12	300	300	199.071	214.401	209	139	215	850	No. 20	@ 325	No. 12	@	150
3	12	300	360	207.336	221.685	304	160	223	1050	No. 20	@ 250	No. 12	@	200
3	12	300	450	218.914	231.477	473	187	232	1300	No. 20	@ 200	No. 12	@	375
3	12	300	600	236.374	245.809	835	227	247	1700	No. 25	@ 250	OK FOR		SHEAR
3	12	350	350	208.561	221.039	285	157	222	1000	No. 20	@ 250	No. 12	@	200

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
3.75	8	200	200	276.366	164.119	276	93	165	17600	No. 32	@ 50	No. 12	@	100
3.75	8	200	240	281.888	169.209	282	112	171	5110	No. 32	@ 150	No. 12	@	150
3.75	8	200	300	287.842	174.462	288	139	175	1890	No. 25	@ 250	No. 12	@	325
3.75	8	200	400	298.253	183.124	369	173	185	1130	No. 20	@ 250	OK FOR		SHEAR
3.75	8	225	225	282.445	167.840	282	105	169	7560	No. 32	@ 100	No. 12	@	125
3.75	8	225	270	290.219	174.821	290	125	175	3070	No. 32	@ 250	No. 12	@	200
3.75	8	225	338	300.998	184.152	301	153	186	1310	No. 20	@ 200	No. 12	@	400
3.75	8	225	450	317.263	197.550	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
3.75	8	250	250	288.574	171.586	289	116	172	4420	No. 32	@ 150	No. 12	@	150
3.75	8	250	300	296.891	178.947	297	139	180	2050	No. 25	@ 200	No. 12	@	275
3.75	8	250	375	308.442	188.780	325	165	190	1060	No. 20	@ 250	No. 12	@	575
3.75	8	250	500	325.979	203.132	577	201	204	1410	No. 20	@ 200	OK FOR		SHEAR
3.75	8	300	300	300.874	179.100	301	139	180	2120	No. 25	@ 200	No. 12	@	275
3.75	8	300	360	310.242	187.201	310	160	188	1110	No. 20	@ 250	No. 12	@	500
3.75	8	300	450	323.311	198.084	468	187	199	1270	No. 20	@ 200	OK FOR		SHEAR
3.75	8	300	600	343.229	214.109	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
3.75	8	350	350	313.123	186.497	313	157	188	1260	No. 20	@ 250	No. 12	@	425
3.75	10	200	200	255.120	158.462	255	93	160	11700	No. 32	@ 50	No. 12	@	100
3.75	10	200	240	261.225	163.727	261	112	165	4010	No. 32	@ 200	No. 12	@	175
3.75	10	200	300	268.172	169.285	268	139	170	1580	No. 25	@ 250	No. 12	@	375
3.75	10	200	400	279.584	178.414	369	173	180	1130	No. 20	@ 250	OK FOR		SHEAR
3.75	10	225	225	262.421	162.388	262	105	164	5810	No. 32	@ 125	No. 12	@	125
3.75	10	225	270	270.977	169.695	271	125	170	2540	No. 32	@ 250	No. 12	@	225
3.75	10	225	338	282.943	179.441	283	153	181	1130	No. 20	@ 250	No. 12	@	450
3.75	10	225	450	300.884	193.407	468	187	194	1270	No. 20	@ 200	OK FOR		SHEAR
3.75	10	250	250	268.943	166.337	269	116	167	3560	No. 32	@ 200	No. 12	@	175
3.75	10	250	300	278.095	174.026	278	139	175	1730	No. 25	@ 250	No. 12	@	325
3.75	10	250	375	290.840	184.295	325	165	186	1060	No. 20	@ 250	No. 12	@	675
3.75	10	250	500	310.213	199.191	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
3.75	10	300	300	281.948	174.190	282	139	175	1790	No. 25	@ 250	No. 12	@	325
3.75	10	300	360	292.248	182.570	299	160	184	1020	No. 20	@ 250	No. 12	@	575
3.75	10	300	450	306.638	193.888	468	187	194	1270	No. 20	@ 200	OK FOR		SHEAR
3.75	10	300	600	328.536	210.478	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
3.75	10	350	350	294.826	181.809	295	157	183	1090	No. 20	@ 250	No. 12	@	525
3.75	12	200	200	243.354	155.295	243	93	156	9490	No. 32	@ 75	No. 12	@	100
3.75	12	200	240	250.029	160.749	250	112	162	3510	No. 32	@ 200	No. 12	@	175
3.75	12	200	300	257.377	166.526	257	139	167	1420	No. 25	@ 325	No. 12	@	400
3.75	12	200	400	270.290	175.955	373	173	177	1150	No. 20	@ 250	OK FOR		SHEAR
3.75	12	225	225	250.217	159.428	269	105	161	6350	No. 32	@ 125	No. 12	@	150
3.75	12	225	270	259.466	166.953	259	125	167	2250	No. 32	@ 325	No. 12	@	250
3.75	12	225	338	272.429	177.007	272	153	178	1030	No. 20	@ 250	No. 12	@	525
3.75	12	225	450	291.858	191.369	473	187	192	1300	No. 20	@ 200	OK FOR		SHEAR
3.75	12	250	250	257.080	163.536	257	116	164	3120	No. 32	@ 250	No. 12	@	200
3.75	12	250	300	266.973	171.419	267	139	172	1560	No. 25	@ 250	No. 12	@	350
3.75	12	250	375	280.767	181.972	331	165	183	1100	No. 20	@ 250	No. 12	@	800
3.75	12	250	500	301.694	197.310	581	201	202	1430	No. 25	@ 325	OK FOR		SHEAR
3.75	12	300	300	270.705	171.591	271	139	172	1610	No. 25	@ 250	No. 12	@	350
3.75	12	300	360	281.830	180.210	301	160	181	1030	No. 20	@ 250	No. 12	@	650
3.75	12	300	450	297.366	191.813	470	187	192	1280	No. 20	@ 200	OK FOR		SHEAR
3.75	12	300	600	320.888	208.772	835	227	228	1700	No. 25	@ 250	OK FOR		SHEAR
3.75	12	350	350	284.145	179.388	284	157	181	1000	No. 20	@ 250	No. 12	@	550

F2. PL-2 Barrier

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1	3	200	200	53.426	180.318	92	93	181	570	No. 16	@ 325	No. 16	@	150
1	3	200	240	54.583	183.153	133	112	185	680	No. 16	@ 250	No. 12	@	125
1	3	200	300	55.655	185.727	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	3	200	400	57.588	190.231	369	173	192	1130	No. 20	@ 250	No. 12	@	800
1	3	225	225	54.192	182.299	117	105	184	640	No. 16	@ 250	No. 12	@	100
1	3	225	270	56.084	186.851	168	125	187	760	No. 16	@ 250	No. 12	@	150
1	3	225	338	58.559	192.618	264	153	194	950	No. 20	@ 250	No. 12	@	300
1	3	225	450	61.902	200.105	468	187	201	1270	No. 20	@ 200	OK FOR		SHEAR
1	3	250	250	54.974	184.352	144	116	185	710	No. 16	@ 250	No. 12	@	125
1	3	250	300	56.725	189.023	208	139	190	850	No. 20	@ 325	No. 12	@	225
1	3	250	375	59.492	194.887	325	165	196	1060	No. 20	@ 250	No. 12	@	450
1	3	250	500	62.968	202.613	577	201	203	1410	No. 20	@ 200	OK FOR		SHEAR
1	3	300	300	56.533	188.363	208	139	189	850	No. 20	@ 325	No. 12	@	225
1	3	300	360	58.624	193.201	299	160	194	1020	No. 20	@ 250	No. 12	@	400
1	3	300	450	14.086	199.281	468	187	200	1270	No. 20	@ 200	OK FOR		SHEAR
1	3	300	600	64.963	207.247	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	3	350	350	58.029	192.111	283	157	193	990	No. 20	@ 250	No. 12	@	375
1	4.5	200	200	49.331	176.201	92	93	177	570	No. 16	@ 325	No. 16	@	150
1	4.5	200	240	50.779	179.440	133	112	181	680	No. 16	@ 250	No. 12	@	125
1	4.5	200	300	52.121	182.395	208	139	183	850	No. 20	@ 325	No. 12	@	250
1	4.5	200	400	54.530	187.517	369	173	189	1130	No. 20	@ 250	No. 12	@	975
1	4.5	225	225	50.339	178.682	117	105	180	640	No. 16	@ 250	No. 12	@	100
1	4.5	225	270	52.697	183.828	168	125	184	760	No. 16	@ 250	No. 12	@	175
1	4.5	225	338	55.763	190.262	264	153	192	950	No. 20	@ 250	No. 12	@	325
1	4.5	225	450	59.841	198.533	468	187	199	1270	No. 20	@ 200	OK FOR		SHEAR
1	4.5	250	250	51.337	181.115	144	116	182	710	No. 16	@ 250	No. 12	@	125
1	4.5	250	300	53.774	186.357	208	139	187	850	No. 20	@ 325	No. 12	@	225
1	4.5	250	375	56.911	192.863	325	165	194	1060	No. 20	@ 250	No. 12	@	500
1	4.5	250	500	61.102	201.255	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	4.5	300	300	53.253	185.697	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	4.5	300	360	55.819	191.059	299	160	192	1020	No. 20	@ 250	No. 12	@	425
1	4.5	300	450	59.090	197.662	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	4.5	300	600	63.403	206.200	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	4.5	350	350	55.036	189.826	283	157	191	990	No. 20	@ 250	No. 12	@	400
1	6	200	200	47.812	175.011	92	93	176	570	No. 16	@ 325	No. 16	@	150
1	6	200	240	49.422	178.441	133	112	180	680	No. 16	@ 250	No. 12	@	125
1	6	200	300	50.907	181.514	208	139	182	850	No. 20	@ 325	No. 12	@	250
1	6	200	400	53.554	186.827	369	173	188	1130	No. 20	@ 250	OK FOR		SHEAR
1	6	225	225	48.945	177.658	117	105	179	640	No. 16	@ 250	No. 12	@	100
1	6	225	270	51.547	183.042	168	125	184	760	No. 16	@ 250	No. 12	@	175
1	6	225	338	54.891	189.667	264	153	191	950	No. 20	@ 250	No. 12	@	325
1	6	225	450	59.262	198.105	468	187	199	1270	No. 20	@ 200	OK FOR		SHEAR
1	6	250	250	50.046	180.235	144	116	181	710	No. 16	@ 250	No. 12	@	150
1	6	250	300	52.721	185.643	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	6	250	375	56.123	192.316	325	165	194	1060	No. 20	@ 250	No. 12	@	500
1	6	250	500	60.590	200.875	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	6	300	300	52.134	184.935	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	6	300	360	54.931	190.440	299	160	192	1020	No. 20	@ 250	No. 12	@	425
1	6	300	450	58.450	197.209	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	6	300	600	63.004	205.890	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	6	350	350	54.068	189.183	283	157	191	990	No. 20	@ 250	No. 12	@	400

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1	8	200	200	46.978	174.511	92	93	176	570	No. 16	@ 325	No. 16	@	150
1	8	200	240	48.695	177.965	133	112	179	680	No. 16	@ 250	No. 12	@	125
1	8	200	300	50.269	181.085	208	139	182	850	No. 20	@ 325	No. 12	@	250
1	8	200	400	53.052	186.470	369	173	188	1130	No. 20	@ 250	OK FOR		SHEAR
1	8	225	225	48.183	177.182	117	105	179	640	No. 16	@ 250	No. 12	@	100
1	8	225	270	50.941	182.614	168	125	183	760	No. 16	@ 250	No. 12	@	175
1	8	225	338	54.447	189.333	264	153	191	950	No. 20	@ 250	No. 12	@	325
1	8	225	450	58.968	197.843	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	8	250	250	49.352	179.735	144	116	181	710	No. 16	@ 250	No. 12	@	150
1	8	250	300	52.180	185.238	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	8	250	375	55.734	192.006	325	165	193	1060	No. 20	@ 250	No. 12	@	500
1	8	250	500	60.340	200.660	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	8	300	300	51.572	184.530	208	139	185	850	No. 20	@ 325	No. 12	@	250
1	8	300	360	54.508	190.083	299	160	191	1020	No. 20	@ 250	No. 12	@	450
1	8	300	450	58.158	196.947	468	187	197	1270	No. 20	@ 200	OK FOR		SHEAR
1	8	300	600	62.823	205.700	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	8	350	350	53.620	188.826	283	157	190	990	No. 20	@ 250	No. 12	@	400
1	10	200	200	46.588	174.225	92	93	175	570	No. 16	@ 325	No. 16	@	150
1	10	200	240	48.358	177.703	133	112	179	680	No. 16	@ 250	No. 12	@	125
1	10	200	300	49.974	180.823	208	139	181	850	No. 20	@ 325	No. 12	@	275
1	10	200	400	52.819	186.256	369	173	188	1130	No. 20	@ 250	OK FOR		SHEAR
1	10	225	225	47.838	176.920	117	105	178	640	No. 16	@ 250	No. 12	@	100
1	10	225	270	50.673	182.399	168	125	183	760	No. 16	@ 250	No. 12	@	175
1	10	225	338	54.254	189.167	264	153	191	950	No. 20	@ 250	No. 12	@	325
1	10	225	450	58.845	197.748	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	10	250	250	49.056	179.497	144	116	180	710	No. 16	@ 250	No. 12	@	150
1	10	250	300	51.954	185.048	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	10	250	375	55.575	191.816	325	165	193	1060	No. 20	@ 250	No. 12	@	500
1	10	250	500	60.242	200.541	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	10	300	300	51.357	184.316	208	139	185	850	No. 20	@ 325	No. 12	@	250
1	10	300	360	54.347	189.940	299	160	191	1020	No. 20	@ 250	No. 12	@	450
1	10	300	450	58.047	196.829	468	187	197	1270	No. 20	@ 200	OK FOR		SHEAR
1	10	300	600	62.758	205.628	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	10	350	350	53.460	188.683	283	157	190	990	No. 20	@ 250	No. 12	@	400
1	12	200	200	46.373	174.035	92	93	175	570	No. 16	@ 325	No. 16	@	150
1	12	200	240	48.175	177.560	133	112	179	680	No. 16	@ 250	No. 12	@	125
1	12	200	300	49.817	180.681	208	139	181	850	No. 20	@ 325	No. 12	@	275
1	12	200	400	52.699	186.137	369	173	188	1130	No. 20	@ 250	OK FOR		SHEAR
1	12	225	225	47.662	176.753	117	105	178	640	No. 16	@ 250	No. 12	@	100
1	12	225	270	50.540	182.257	168	125	183	760	No. 16	@ 250	No. 12	@	175
1	12	225	338	54.161	189.071	264	153	190	950	No. 20	@ 250	No. 12	@	350
1	12	225	450	58.792	197.700	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	12	250	250	48.910	179.377	144	116	180	710	No. 16	@ 250	No. 12	@	150
1	12	250	300	51.847	184.929	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	12	250	375	55.501	191.768	325	165	193	1060	No. 20	@ 250	No. 12	@	500
1	12	250	500	60.202	200.517	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	12	300	300	51.259	184.221	208	139	185	850	No. 20	@ 325	No. 12	@	250
1	12	300	360	54.276	189.868	299	160	191	1020	No. 20	@ 250	No. 12	@	450
1	12	300	450	58.000	196.781	468	187	197	1270	No. 20	@ 200	OK FOR		SHEAR
1	12	300	600	62.737	205.605	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	12	350	350	53.391	188.588	283	157	190	990	No. 20	@ 250	No. 12	@	400

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1.5	3	200	200	110.285	138.424	110	93	139	870	No. 20	@ 325	No. 12	@	150
1.5	3	200	240	112.145	141.856	133	112	143	680	No. 16	@ 250	No. 12	@	300
1.5	3	200	300	113.904	145.049	208	139	146	850	No. 20	@ 325	OK FOR		SHEAR
1.5	3	200	400	117.152	150.842	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	3	225	225	111.611	140.623	117	105	142	640	No. 16	@ 250	No. 12	@	225
1.5	3	225	270	114.689	146.271	168	125	147	760	No. 16	@ 250	No. 12	@	475
1.5	3	225	338	118.869	153.685	264	153	155	950	No. 20	@ 250	OK FOR		SHEAR
1.5	3	225	450	124.791	163.916	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	3	250	250	112.979	142.940	144	116	144	710	No. 16	@ 250	No. 12	@	325
1.5	3	250	300	116.204	148.804	208	139	149	850	No. 20	@ 325	OK FOR		SHEAR
1.5	3	250	375	120.558	154.641	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	3	250	500	126.798	167.214	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	3	300	300	115.770	147.671	208	139	148	850	No. 20	@ 325	OK FOR		SHEAR
1.5	3	300	360	119.268	153.941	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	3	300	450	123.984	162.169	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	3	300	600	130.707	173.619	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	3	350	350	118.547	152.307	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	200	200	88.157	126.831	92	93	128	570	No. 16	@ 325	No. 12	@	200
1.5	4.5	200	240	90.508	130.858	133	112	132	680	No. 16	@ 250	No. 12	@	450
1.5	4.5	200	300	92.740	134.623	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	200	400	96.896	141.438	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	225	225	89.928	129.744	117	105	131	640	No. 16	@ 250	No. 12	@	325
1.5	4.5	225	270	93.842	136.344	168	125	137	760	No. 16	@ 250	No. 12	@	875
1.5	4.5	225	338	99.198	145.019	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	225	450	106.824	156.892	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	250	250	91.723	132.704	144	116	134	710	No. 16	@ 250	No. 12	@	525
1.5	4.5	250	300	95.831	139.519	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	250	375	101.405	148.434	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	250	500	109.392	160.761	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	300	300	95.276	138.481	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	300	360	99.724	145.656	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	300	450	105.718	155.025	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	300	600	114.215	167.951	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	4.5	350	350	98.685	143.902	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	6	200	200	79.096	122.904	92	93	124	570	No. 16	@ 325	No. 12	@	250
1.5	6	200	240	81.786	127.288	133	112	129	680	No. 16	@ 250	No. 12	@	550
1.5	6	200	300	84.344	131.338	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	200	400	89.096	138.677	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	6	225	225	81.195	126.245	117	105	128	640	No. 16	@ 250	No. 12	@	375
1.5	6	225	270	85.665	133.345	168	125	134	760	No. 16	@ 250	OK FOR		SHEAR
1.5	6	225	338	91.761	142.639	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	6	225	450	100.345	155.202	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	6	250	250	83.274	129.538	144	116	130	710	No. 16	@ 250	No. 12	@	675
1.5	6	250	300	87.955	136.854	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	250	375	94.262	146.292	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	6	250	500	103.186	159.261	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	6	300	300	87.298	135.792	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	300	360	92.330	143.395	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	6	300	450	99.056	153.263	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	6	300	600	108.438	166.713	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	6	350	350	91.086	141.521	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1.5	8	200	200	73.739	120.929	92	93	122	570	No. 16	@ 325	No. 12	@	250
1.5	8	200	240	76.730	125.550	133	112	127	680	No. 16	@ 250	No. 12	@	625
1.5	8	200	300	79.559	129.791	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	8	200	400	84.779	137.440	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	8	225	225	76.093	124.507	117	105	126	640	No. 16	@ 250	No. 12	@	400
1.5	8	225	270	81.029	131.893	168	125	132	760	No. 16	@ 250	OK FOR		SHEAR
1.5	8	225	338	87.679	141.521	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	8	225	450	96.864	154.416	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	8	250	250	78.390	127.967	144	116	129	710	No. 16	@ 250	No. 12	@	750
1.5	8	250	300	83.530	135.545	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	8	250	375	90.372	145.268	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	8	250	500	99.858	158.523	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	8	300	300	82.781	134.411	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	8	300	360	88.270	142.252	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	8	300	450	95.495	152.383	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	8	300	600	105.356	166.118	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	8	350	350	86.891	140.307	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	10	200	200	71.318	120.156	92	93	121	570	No. 16	@ 325	No. 12	@	275
1.5	10	200	240	74.489	124.855	133	112	126	680	No. 16	@ 250	No. 12	@	650
1.5	10	200	300	77.473	129.183	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	10	200	400	82.930	136.920	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	10	225	225	73.812	123.791	117	105	125	640	No. 16	@ 250	No. 12	@	425
1.5	10	225	270	79.015	131.304	168	125	132	760	No. 16	@ 250	OK FOR		SHEAR
1.5	10	225	338	85.943	141.031	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	10	225	450	95.370	154.035	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	10	250	250	76.238	127.277	144	116	128	710	No. 16	@ 250	No. 12	@	800
1.5	10	250	300	81.638	134.949	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	10	250	375	88.737	144.816	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	10	250	500	98.435	158.190	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	10	300	300	80.870	133.816	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	10	300	360	86.592	141.799	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	10	300	450	94.027	152.025	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	10	300	600	104.039	165.856	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	10	350	350	85.175	139.783	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	12	200	200	70.055	119.747	92	93	121	570	No. 16	@ 325	No. 12	@	275
1.5	12	200	240	73.333	124.479	133	112	126	680	No. 16	@ 250	No. 12	@	650
1.5	12	200	300	76.403	128.834	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	12	200	400	81.980	136.609	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	12	225	225	72.643	123.394	117	105	125	640	No. 16	@ 250	No. 12	@	425
1.5	12	225	270	77.998	130.961	168	125	132	760	No. 16	@ 250	OK FOR		SHEAR
1.5	12	225	338	85.065	140.742	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	12	225	450	94.597	153.809	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	12	250	250	75.161	126.909	144	116	128	710	No. 16	@ 250	No. 12	@	800
1.5	12	250	300	80.701	134.641	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	12	250	375	87.919	144.572	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	12	250	500	97.705	157.994	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	12	300	300	79.949	133.512	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	12	300	360	85.781	141.528	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	12	300	450	93.297	151.813	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	12	300	600	103.366	165.697	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	12	350	350	84.366	139.535	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2	3	200	200	164.567	130.613	165	93	132	2500	No. 32	@ 250	No. 12	@	200
2	3	200	240	166.346	133.610	166	112	135	1150	No. 20	@ 250	No. 12	@	400
2	3	200	300	168.057	136.458	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	3	200	400	171.295	141.764	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	3	225	225	166.412	132.948	166	105	134	1500	No. 25	@ 250	No. 12	@	300
2	3	225	270	169.408	137.952	172	125	138	800	No. 16	@ 250	No. 12	@	800
2	3	225	338	173.616	144.831	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	3	225	450	179.852	154.791	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	3	250	250	168.297	135.367	171	116	136	1050	No. 20	@ 250	No. 12	@	475
2	3	250	300	171.476	140.651	208	139	141	850	No. 20	@ 325	OK FOR		SHEAR
2	3	250	375	175.917	147.876	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	3	250	500	182.584	158.475	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	3	300	300	172.137	140.351	208	139	141	850	No. 20	@ 325	OK FOR		SHEAR
2	3	300	360	175.675	146.172	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	3	300	450	180.617	154.131	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	3	300	600	188.026	165.788	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	3	350	350	176.002	145.376	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
2	4.5	200	200	126.612	103.681	127	93	105	1230	No. 20	@ 250	No. 12	@	650
2	4.5	200	240	128.916	106.929	133	112	113	680	No. 16	@ 250	OK FOR		SHEAR
2	4.5	200	300	131.155	110.030	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	200	400	135.443	115.847	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	4.5	225	225	128.930	106.522	129	105	108	800	No. 16	@ 250	OK FOR		SHEAR
2	4.5	225	270	132.857	111.968	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
2	4.5	225	338	138.456	119.509	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	4.5	225	450	146.879	130.512	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	4.5	250	250	131.295	109.426	144	116	117	710	No. 16	@ 250	OK FOR		SHEAR
2	4.5	250	300	135.484	115.176	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	250	375	141.407	123.076	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	4.5	250	500	150.389	134.723	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	4.5	300	300	136.053	115.246	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	300	360	140.726	121.533	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	4.5	300	450	147.297	130.149	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	4.5	300	600	157.170	142.789	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	4.5	350	350	140.735	120.893	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
2	6	200	200	109.932	94.995	110	93	96	860	No. 20	@ 325	OK FOR		SHEAR
2	6	200	240	112.702	98.527	133	112	113	680	No. 16	@ 250	OK FOR		SHEAR
2	6	200	300	115.400	101.895	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	200	400	120.581	108.201	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	6	225	225	112.703	98.253	117	105	106	640	No. 16	@ 250	OK FOR		SHEAR
2	6	225	270	117.434	104.146	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
2	6	225	338	124.189	112.272	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	6	225	450	134.317	124.046	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	6	250	250	115.490	101.513	144	116	117	710	No. 16	@ 250	OK FOR		SHEAR
2	6	250	300	120.531	107.696	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	250	375	127.653	116.152	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	6	250	500	138.386	128.520	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	6	300	300	120.984	107.854	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	300	360	126.580	114.538	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	6	300	450	134.417	123.652	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	6	300	600	146.072	136.925	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	6	350	350	126.279	113.834	284	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	8	200	200	99.221	90.342	99	93	94	670	No. 16	@ 250	OK FOR	SHEAR
2	8	200	240	102.478	94.112	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
2	8	200	300	105.645	97.695	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	8	200	400	111.703	104.373	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
2	8	225	225	102.443	93.919	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
2	8	225	270	107.981	100.154	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
2	8	225	338	115.830	108.693	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
2	8	225	450	127.415	120.937	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	8	250	250	105.626	97.415	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
2	8	250	300	111.502	103.913	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	8	250	375	119.725	112.742	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
2	8	250	500	131.899	125.529	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
2	8	300	300	111.794	104.067	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	8	300	360	118.264	111.029	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
2	8	300	450	127.220	120.470	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	8	300	600	140.259	134.100	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
2	8	350	350	117.660	110.246	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR
2	10	200	200	93.962	88.385	95	93	94	600	No. 16	@ 325	OK FOR	SHEAR
2	10	200	240	97.573	92.282	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
2	10	200	300	101.067	95.976	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	10	200	400	107.699	102.830	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
2	10	225	225	97.481	92.094	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
2	10	225	270	103.579	98.500	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
2	10	225	338	112.124	107.228	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
2	10	225	450	124.501	119.649	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	10	250	250	100.926	95.679	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
2	10	250	300	107.369	102.335	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	10	250	375	116.272	111.334	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
2	10	250	500	129.196	124.279	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
2	10	300	300	107.560	102.460	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	10	300	360	114.601	109.568	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
2	10	300	450	124.199	119.159	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	10	300	600	137.887	132.919	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
2	10	350	350	113.827	108.744	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR
2	12	200	200	91.130	87.398	92	93	94	570	No. 16	@ 325	OK FOR	SHEAR
2	12	200	240	94.989	91.358	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
2	12	200	300	98.702	95.103	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	12	200	400	105.686	102.028	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
2	12	225	225	94.850	91.150	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
2	12	225	270	101.327	97.641	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
2	12	225	338	110.291	106.449	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
2	12	225	450	123.065	118.931	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	12	250	250	98.482	94.770	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
2	12	250	300	105.297	101.506	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	12	250	375	114.592	110.579	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
2	12	250	500	127.871	123.581	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
2	12	300	300	105.451	101.618	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	12	300	360	112.835	108.799	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
2	12	300	450	122.765	118.454	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	12	300	600	136.726	132.261	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
2	12	350	350	111.986	107.964	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2.5	4.5	200	200	182.435	177.494	182	93	179	3400	No. 32	@ 200	No. 16	@	150
2.5	4.5	200	240	184.649	179.953	185	112	181	1520	No. 25	@ 250	No. 12	@	125
2.5	4.5	200	300	186.808	182.319	208	139	183	850	No. 20	@ 325	No. 12	@	250
2.5	4.5	200	400	190.977	186.819	369	173	188	1130	No. 20	@ 250	OK FOR		SHEAR
2.5	4.5	225	225	185.362	180.139	185	105	182	2030	No. 25	@ 200	No. 12	@	100
2.5	4.5	225	270	189.175	184.334	189	125	185	1010	No. 20	@ 250	No. 12	@	175
2.5	4.5	225	338	194.674	190.254	264	153	192	950	No. 20	@ 250	No. 12	@	325
2.5	4.5	225	450	203.134	199.189	468	187	200	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	4.5	250	250	188.335	182.838	188	116	184	1350	No. 20	@ 200	No. 12	@	125
2.5	4.5	250	300	192.443	187.334	208	139	188	850	No. 20	@ 325	No. 12	@	225
2.5	4.5	250	375	198.326	193.638	325	165	195	1060	No. 20	@ 250	No. 12	@	475
2.5	4.5	250	500	207.471	203.264	577	201	204	1410	No. 20	@ 200	OK FOR		SHEAR
2.5	4.5	300	300	194.339	188.295	208	139	189	850	No. 20	@ 325	No. 12	@	225
2.5	4.5	300	360	199.015	193.356	299	160	194	1020	No. 20	@ 250	No. 12	@	400
2.5	4.5	300	450	205.690	200.450	468	187	201	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	4.5	300	600	216.011	211.256	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	4.5	350	350	200.325	193.706	283	157	195	990	No. 20	@ 250	No. 12	@	350
2.5	6	200	200	156.186	164.648	156	93	166	2160	No. 25	@ 200	No. 12	@	100
2.5	6	200	240	158.782	167.272	159	112	169	1040	No. 20	@ 250	No. 12	@	150
2.5	6	200	300	161.329	169.801	208	139	170	850	No. 20	@ 325	No. 12	@	375
2.5	6	200	400	166.281	174.617	369	173	176	1130	No. 20	@ 250	OK FOR		SHEAR
2.5	6	225	225	159.523	167.571	160	105	169	1360	No. 20	@ 200	No. 12	@	125
2.5	6	225	270	164.023	172.043	168	125	173	760	No. 16	@ 250	No. 12	@	200
2.5	6	225	338	170.563	178.359	264	153	180	950	No. 20	@ 250	No. 12	@	475
2.5	6	225	450	180.679	187.878	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	6	250	250	162.894	170.519	163	116	171	940	No. 20	@ 325	No. 12	@	175
2.5	6	250	300	167.751	175.295	208	139	176	850	No. 20	@ 325	No. 12	@	300
2.5	6	250	375	174.741	181.989	325	165	183	1060	No. 20	@ 250	No. 12	@	800
2.5	6	250	500	185.630	192.185	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2.5	6	300	300	169.622	176.363	208	139	177	850	No. 20	@ 325	No. 12	@	300
2.5	6	300	360	175.138	181.692	299	160	183	1020	No. 20	@ 250	No. 12	@	600
2.5	6	300	450	183.028	189.150	468	187	190	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	6	300	600	195.190	200.474	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	6	350	350	176.228	182.031	283	157	183	990	No. 20	@ 250	No. 12	@	525
2.5	8	200	200	138.795	158.012	140	93	159	1600	No. 25	@ 250	No. 12	@	100
2.5	8	200	240	141.858	160.830	143	112	162	800	No. 16	@ 250	No. 12	@	175
2.5	8	200	300	144.868	163.541	208	139	164	850	No. 20	@ 325	No. 12	@	450
2.5	8	200	400	150.724	168.691	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2.5	8	225	225	142.602	161.203	138	105	163	940	No. 20	@ 325	No. 12	@	150
2.5	8	225	270	147.908	165.975	168	125	167	760	No. 16	@ 250	No. 12	@	250
2.5	8	225	338	155.610	172.682	264	153	174	950	No. 20	@ 250	No. 12	@	625
2.5	8	225	450	167.433	182.710	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	8	250	250	146.399	164.365	144	116	165	710	No. 16	@ 250	No. 12	@	175
2.5	8	250	300	152.109	169.429	208	139	170	850	No. 20	@ 325	No. 12	@	375
2.5	8	250	375	160.301	176.491	325	165	178	1060	No. 20	@ 250	OK FOR		SHEAR
2.5	8	250	500	172.931	187.162	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2.5	8	300	300	153.861	170.506	208	139	171	850	No. 20	@ 325	No. 12	@	350
2.5	8	300	360	160.302	176.099	299	160	177	1020	No. 20	@ 250	No. 12	@	825
2.5	8	300	450	169.460	183.892	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	8	300	600	183.380	195.640	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	8	350	350	161.086	176.359	283	157	178	990	No. 20	@ 250	No. 12	@	650

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2.5	10	200	200	129.846	155.074	130	93	156	1300	No. 20	@ 200	No. 12	@	100
2.5	10	200	240	133.291	158.016	133	112	159	680	No. 16	@ 250	No. 12	@	175
2.5	10	200	300	136.670	160.840	208	139	161	850	No. 20	@ 325	No. 12	@	525
2.5	10	200	400	143.214	166.185	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2.5	10	225	225	134.003	158.414	135	105	160	900	No. 20	@ 325	No. 12	@	150
2.5	10	225	270	139.943	163.364	168	125	164	760	No. 16	@ 250	No. 12	@	250
2.5	10	225	338	148.504	170.289	264	153	172	950	No. 20	@ 250	No. 12	@	675
2.5	10	225	450	161.451	180.565	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	10	250	250	138.110	161.684	144	116	163	710	No. 16	@ 250	No. 12	@	200
2.5	10	250	300	144.478	166.915	208	139	168	850	No. 20	@ 325	No. 12	@	400
2.5	10	250	375	153.535	174.179	325	165	175	1060	No. 20	@ 250	OK FOR		SHEAR
2.5	10	250	500	167.271	185.076	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2.5	10	300	300	146.115	167.972	208	139	169	850	No. 20	@ 325	No. 12	@	375
2.5	10	300	360	153.248	173.720	299	160	175	1020	No. 20	@ 250	No. 12	@	925
2.5	10	300	450	163.276	181.697	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	10	300	600	178.236	193.643	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	10	350	350	153.805	173.929	283	157	175	990	No. 20	@ 250	No. 12	@	750
2.5	12	200	200	124.790	153.574	126	93	155	1200	No. 20	@ 250	No. 12	@	125
2.5	12	200	240	128.536	156.592	133	112	158	680	No. 16	@ 250	No. 12	@	200
2.5	12	200	300	132.196	159.482	208	139	160	850	No. 20	@ 325	No. 12	@	550
2.5	12	200	400	139.233	164.934	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2.5	12	225	225	129.206	156.986	129	105	158	800	No. 16	@ 250	No. 12	@	150
2.5	12	225	270	135.629	162.042	168	125	163	760	No. 16	@ 250	No. 12	@	275
2.5	12	225	338	144.790	169.087	264	153	170	950	No. 20	@ 250	No. 12	@	775
2.5	12	225	450	158.417	179.479	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	12	250	250	133.547	160.309	144	116	161	710	No. 16	@ 250	No. 12	@	200
2.5	12	250	300	140.404	165.639	208	139	166	850	No. 20	@ 325	No. 12	@	425
2.5	12	250	375	150.048	173.014	325	165	174	1060	No. 20	@ 250	OK FOR		SHEAR
2.5	12	250	500	164.421	184.016	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2.5	12	300	300	141.968	166.678	208	139	167	850	No. 20	@ 325	No. 12	@	400
2.5	12	300	360	149.591	172.521	299	160	174	1020	No. 20	@ 250	OK FOR		SHEAR
2.5	12	300	450	160.166	180.596	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	12	300	600	175.662	192.629	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	12	350	350	150.007	172.703	283	157	174	990	No. 20	@ 250	No. 12	@	800

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
3	8	200	200	205.349	193.187	205	93	194	5000	No. 32	@ 150	No. 16	@	125
3	8	200	240	209.137	196.702	209	112	198	2100	No. 25	@ 200	No. 16	@	175
3	8	200	300	212.780	199.987	214	139	201	900	No. 20	@ 325	No. 12	@	175
3	8	200	400	219.707	206.034	373	173	207	1150	No. 20	@ 250	No. 12	@	450
3	8	225	225	210.042	196.588	211	105	198	2900	No. 32	@ 250	No. 16	@	150
3	8	225	270	216.517	202.443	219	125	203	1450	No. 25	@ 325	No. 12	@	125
3	8	225	338	225.638	210.324	264	153	212	950	No. 20	@ 250	No. 12	@	200
3	8	225	450	239.360	221.697	473	187	222	1300	No. 20	@ 200	No. 12	@	500
3	8	250	250	214.742	199.979	215	116	201	1900	No. 25	@ 250	No. 16	@	200
3	8	250	300	221.680	206.158	223	139	207	1000	No. 20	@ 250	No. 12	@	150
3	8	250	375	231.380	214.442	331	165	216	1100	No. 20	@ 250	No. 12	@	275
3	8	250	500	246.110	226.566	585	201	227	1450	No. 25	@ 325	No. 12	@	750
3	8	300	300	224.052	206.629	228	139	207	1050	No. 20	@ 250	No. 12	@	150
3	8	300	360	231.843	213.405	304	160	214	1050	No. 20	@ 250	No. 12	@	250
3	8	300	450	242.715	222.529	473	187	223	1300	No. 20	@ 200	No. 12	@	475
3	8	300	600	259.116	235.928	835	227	237	1700	No. 25	@ 250	OK FOR		SHEAR
3	8	350	350	233.158	213.044	285	157	214	1000	No. 20	@ 250	No. 12	@	225
3	10	200	200	191.576	189.146	192	93	190	3970	No. 32	@ 200	No. 16	@	125
3	10	200	240	195.784	192.801	196	112	194	1770	No. 25	@ 250	No. 16	@	200
3	10	200	300	199.837	196.216	208	139	197	850	No. 20	@ 325	No. 12	@	200
3	10	200	400	207.551	202.497	369	173	204	1130	No. 20	@ 250	No. 12	@	500
3	10	225	225	196.671	192.727	197	105	194	2390	No. 32	@ 325	No. 16	@	175
3	10	225	270	203.857	198.791	204	125	199	1210	No. 20	@ 250	No. 12	@	125
3	10	225	338	213.979	206.941	264	153	208	950	No. 20	@ 250	No. 12	@	225
3	10	225	450	229.119	218.652	468	187	219	1270	No. 20	@ 200	No. 12	@	525
3	10	250	250	201.732	196.255	202	116	197	1610	No. 25	@ 250	No. 16	@	200
3	10	250	300	209.415	202.632	209	139	203	860	No. 20	@ 325	No. 12	@	175
3	10	250	375	220.142	211.169	325	165	212	1060	No. 20	@ 250	No. 12	@	300
3	10	250	500	236.303	223.609	577	201	224	1410	No. 20	@ 200	No. 12	@	825
3	10	300	300	211.664	203.091	212	139	204	880	No. 20	@ 325	No. 12	@	175
3	10	300	360	220.257	210.051	299	160	211	1020	No. 20	@ 250	No. 12	@	275
3	10	300	450	232.197	219.409	468	187	220	1270	No. 20	@ 200	No. 12	@	525
3	10	300	600	250.012	233.093	831	227	235	1690	No. 25	@ 250	OK FOR		SHEAR
3	10	350	350	221.299	209.627	283	157	211	990	No. 20	@ 250	No. 12	@	250
3	12	200	200	183.537	187.001	184	93	188	3470	No. 32	@ 200	No. 16	@	125
3	12	200	240	188.097	190.749	188	112	192	1600	No. 25	@ 250	No. 12	@	100
3	12	200	300	192.487	194.249	208	139	195	850	No. 20	@ 325	No. 12	@	200
3	12	200	400	200.822	200.675	369	173	202	1130	No. 20	@ 250	No. 12	@	525
3	12	225	225	188.949	190.686	189	105	192	2140	No. 25	@ 200	No. 16	@	175
3	12	225	270	196.714	196.885	197	125	197	1110	No. 20	@ 250	No. 12	@	125
3	12	225	338	207.609	205.199	264	153	207	950	No. 20	@ 250	No. 12	@	225
3	12	225	450	223.735	217.095	468	187	218	1270	No. 20	@ 200	No. 12	@	550
3	12	250	250	194.292	194.291	194	116	195	1460	No. 25	@ 325	No. 12	@	100
3	12	250	300	202.575	200.796	208	139	201	850	No. 20	@ 325	No. 12	@	175
3	12	250	375	214.078	209.485	325	165	211	1060	No. 20	@ 250	No. 12	@	300
3	12	250	500	231.200	222.095	577	201	223	1410	No. 20	@ 200	No. 12	@	875
3	12	300	300	204.723	201.237	208	139	202	850	No. 20	@ 325	No. 12	@	175
3	12	300	360	213.941	208.317	299	160	209	1020	No. 20	@ 250	No. 12	@	275
3	12	300	450	226.649	217.816	468	187	218	1270	No. 20	@ 200	No. 12	@	550
3	12	300	600	245.345	231.647	831	227	233	1690	No. 25	@ 250	OK FOR		SHEAR
3	12	350	350	214.780	207.853	283	157	209	990	No. 20	@ 250	No. 12	@	250
3.75	12	200	240	267.379	169.288	267	112	171	4300	No. 32	@ 150	No. 12	@	150
3.75	12	200	300	271.129	172.500	273	139	173	1650	No. 25	@ 250	No. 12	@	325
3.75	12	200	400	282.738	180.873	370	173	182	1130	No. 20	@ 250	OK FOR		SHEAR
3.75	12	225	270	277.122	175.645	277	125	176	2700	No. 32	@ 250	No. 12	@	200
3.75	12	225	338	292.314	186.467	296	153	188	1250	No. 20	@ 250	No. 12	@	375
3.75	12	225	450	314.755	201.827	473	187	202	1300	No. 20	@ 200	OK FOR		SHEAR
3.75	12	250	250	273.812	171.961	274	116	173	3750	No. 32	@ 200	No. 12	@	150
3.75	12	250	300	285.436	180.483	286	139	181	1850	No. 25	@ 250	No. 12	@	275
3.75	12	250	375	301.493	191.790	331	165	193	1100	No. 20	@ 250	No. 12	@	500
3.75	12	250	500	325.416	208.045	581	201	209	1430	No. 25	@ 325	OK FOR		SHEAR
3.75	12	300	300	288.741	180.590	289	139	181	1900	No. 25	@ 250	No. 12	@	275
3.75	12	300	360	301.655	189.788	301	160	191	1030	No. 20	@ 250	No. 12	@	450
3.75	12	300	450	319.459	202.112	470	187	203	1280	No. 20	@ 200	OK FOR		SHEAR
3.75	12	300	600	345.779	219.935	835	227	228	1700	No. 25	@ 250	OK FOR		SHEAR
3.75	12	350	350	303.219	188.797	308	157	190	1200	No. 20	@ 250	No. 12	@	400

F3. PL-2 Parapet

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1	3	200	200	66.687	144.985	92	93	146	570	No. 16	@ 325	No. 12	@	125
1	3	200	240	68.218	148.611	133	112	150	680	No. 16	@ 250	No. 12	@	225
1	3	200	300	69.680	151.991	208	139	153	850	No. 20	@ 325	No. 12	@	825
1	3	200	400	72.420	158.153	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1	3	225	225	67.869	148.234	117	105	150	640	No. 16	@ 250	No. 12	@	175
1	3	225	270	70.433	154.152	168	125	155	760	No. 16	@ 250	No. 12	@	350
1	3	225	338	73.977	162.014	264	153	163	950	No. 20	@ 250	OK FOR		SHEAR
1	3	225	450	79.112	172.972	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1	3	250	250	69.023	151.335	144	116	152	710	No. 16	@ 250	No. 12	@	250
1	3	250	300	71.728	157.470	208	139	158	850	No. 20	@ 325	No. 12	@	600
1	3	250	375	75.437	165.572	325	165	167	1060	No. 20	@ 250	OK FOR		SHEAR
1	3	250	500	80.853	176.982	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	3	300	300	71.249	157.111	208	139	158	850	No. 20	@ 325	No. 12	@	600
1	3	300	360	74.216	163.644	299	160	165	1020	No. 20	@ 250	OK FOR		SHEAR
1	3	300	450	78.267	172.266	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1	3	300	600	84.104	184.318	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	3	350	350	73.377	162.425	283	157	164	990	No. 20	@ 250	OK FOR		SHEAR
1	4.5	200	200	57.405	136.255	92	93	137	570	No. 16	@ 325	No. 12	@	175
1	4.5	200	240	59.429	140.507	133	112	142	680	No. 16	@ 250	No. 12	@	300
1	4.5	200	300	61.368	144.472	208	139	145	850	No. 20	@ 325	OK FOR		SHEAR
1	4.5	200	400	65.014	151.695	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1	4.5	225	225	59.015	140.220	117	105	142	640	No. 16	@ 250	No. 12	@	225
1	4.5	225	270	62.425	147.135	168	125	148	760	No. 16	@ 250	No. 12	@	450
1	4.5	225	338	67.150	156.312	264	153	158	950	No. 20	@ 250	OK FOR		SHEAR
1	4.5	225	450	73.939	168.986	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1	4.5	250	250	60.585	143.953	144	116	145	710	No. 16	@ 250	No. 12	@	325
1	4.5	250	300	64.196	151.103	208	139	152	850	No. 20	@ 325	No. 12	@	900
1	4.5	250	375	69.142	160.520	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1	4.5	250	500	76.249	173.608	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	4.5	300	300	63.611	150.824	208	139	151	850	No. 20	@ 325	No. 12	@	975
1	4.5	300	360	67.582	158.399	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1	4.5	300	450	72.945	168.315	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1	4.5	300	600	80.439	181.883	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	4.5	350	350	66.484	157.063	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1	6	200	200	53.805	133.358	92	93	134	570	No. 16	@ 325	No. 12	@	175
1	6	200	240	56.170	137.937	133	112	139	680	No. 16	@ 250	No. 12	@	325
1	6	200	300	58.430	142.197	208	139	143	850	No. 20	@ 325	OK FOR		SHEAR
1	6	200	400	62.644	149.921	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1	6	225	225	55.732	137.673	117	105	139	640	No. 16	@ 250	No. 12	@	250
1	6	225	270	59.706	145.089	168	125	146	760	No. 16	@ 250	No. 12	@	500
1	6	225	338	65.131	154.850	264	153	156	950	No. 20	@ 250	OK FOR		SHEAR
1	6	225	450	72.699	168.106	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1	6	250	250	57.607	141.715	144	116	143	710	No. 16	@ 250	No. 12	@	350
1	6	250	300	61.795	149.352	208	139	150	850	No. 20	@ 325	OK FOR		SHEAR
1	6	250	375	67.418	159.302	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1	6	250	500	75.228	172.877	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	6	300	300	61.184	149.098	208	139	150	850	No. 20	@ 325	OK FOR		SHEAR
1	6	300	360	65.717	157.103	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1	6	300	450	71.675	167.436	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1	6	300	600	79.702	181.320	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	6	350	350	64.501	155.714	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1	8	200	200	51.950	132.043	92	93	133	570	No. 16	@ 325	No. 12	@	175
1	8	200	240	54.593	136.824	133	112	138	680	No. 16	@ 250	No. 12	@	350
1	8	200	300	57.088	141.250	208	139	142	850	No. 20	@ 325	OK FOR		SHEAR
1	8	200	400	61.661	149.209	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1	8	225	225	54.153	136.561	117	105	138	640	No. 16	@ 250	No. 12	@	250
1	8	225	270	58.526	144.249	168	125	145	760	No. 16	@ 250	No. 12	@	525
1	8	225	338	64.342	154.247	264	153	156	950	No. 20	@ 250	OK FOR		SHEAR
1	8	225	450	72.201	167.648	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1	8	250	250	56.268	140.769	144	116	142	710	No. 16	@ 250	No. 12	@	375
1	8	250	300	60.818	148.638	208	139	149	850	No. 20	@ 325	OK FOR		SHEAR
1	8	250	375	66.762	158.768	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1	8	250	500	74.792	172.443	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	8	300	300	60.204	148.383	208	139	149	850	No. 20	@ 325	OK FOR		SHEAR
1	8	300	360	65.010	156.540	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1	8	300	450	71.178	166.974	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1	8	300	600	79.346	180.937	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	8	350	350	63.743	155.126	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1	10	200	200	51.272	131.549	92	93	133	570	No. 16	@ 325	No. 12	@	175
1	10	200	240	54.036	136.395	133	112	138	680	No. 16	@ 250	No. 12	@	350
1	10	200	300	56.619	140.862	208	139	141	850	No. 20	@ 325	OK FOR		SHEAR
1	10	200	400	61.296	148.863	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1	10	225	225	53.606	136.132	117	105	138	640	No. 16	@ 250	No. 12	@	250
1	10	225	270	58.116	143.883	168	125	144	760	No. 16	@ 250	No. 12	@	550
1	10	225	338	64.023	153.917	264	153	155	950	No. 20	@ 250	OK FOR		SHEAR
1	10	225	450	71.941	167.357	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1	10	250	250	55.814	140.383	144	116	141	710	No. 16	@ 250	No. 12	@	375
1	10	250	300	60.464	148.294	208	139	149	850	No. 20	@ 325	OK FOR		SHEAR
1	10	250	375	66.472	158.451	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1	10	250	500	74.559	172.184	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	10	300	300	59.855	148.041	208	139	149	850	No. 20	@ 325	OK FOR		SHEAR
1	10	300	360	64.717	156.225	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1	10	300	450	70.933	166.700	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1	10	300	600	79.173	180.750	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	10	350	350	63.449	154.816	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1	12	200	200	50.957	131.262	92	93	132	570	No. 16	@ 325	No. 12	@	200
1	12	200	240	53.762	136.122	133	112	138	680	No. 16	@ 250	No. 12	@	350
1	12	200	300	56.369	140.599	208	139	141	850	No. 20	@ 325	OK FOR		SHEAR
1	12	200	400	61.074	148.615	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1	12	225	225	53.341	135.863	117	105	137	640	No. 16	@ 250	No. 12	@	275
1	12	225	270	57.886	143.630	168	125	144	760	No. 16	@ 250	No. 12	@	550
1	12	225	338	63.822	153.691	264	153	155	950	No. 20	@ 250	OK FOR		SHEAR
1	12	225	450	71.792	167.198	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1	12	250	250	55.577	140.127	144	116	141	710	No. 16	@ 250	No. 12	@	375
1	12	250	300	60.253	148.055	208	139	149	850	No. 20	@ 325	OK FOR		SHEAR
1	12	250	375	66.292	158.251	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1	12	250	500	74.441	172.061	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	12	300	300	59.653	147.814	208	139	148	850	No. 20	@ 325	OK FOR		SHEAR
1	12	300	360	64.542	156.030	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1	12	300	450	70.802	166.561	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1	12	300	600	79.105	180.684	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	12	350	350	63.283	154.631	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1.5	3	200	200	131.587	116.950	132	93	118	1350	No. 20	@ 200	No. 12	@	300
1.5	3	200	240	133.338	119.864	135	112	121	700	No. 16	@ 250	OK FOR		SHEAR
1.5	3	200	300	135.038	122.649	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	3	200	400	138.290	127.888	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	3	225	225	133.233	119.728	135	105	121	900	No. 20	@ 325	No. 12	@	525
1.5	3	225	270	136.208	124.615	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
1.5	3	225	338	140.441	131.397	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	3	225	450	146.809	141.355	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	3	250	250	134.861	122.450	144	116	123	710	No. 16	@ 250	OK FOR		SHEAR
1.5	3	250	300	138.026	127.606	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	3	250	375	142.494	134.712	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	3	250	500	149.281	145.266	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	3	300	300	138.053	127.697	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	3	300	360	141.578	133.360	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	3	300	450	146.544	141.159	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	3	300	600	154.044	152.709	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	3	350	350	141.170	132.728	287	157	158	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	200	200	99.951	101.303	100	93	102	680	No. 16	@ 250	No. 12	@	850
1.5	4.5	200	240	102.284	104.746	133	112	113	680	No. 16	@ 250	OK FOR		SHEAR
1.5	4.5	200	300	104.568	108.045	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	200	400	108.990	114.267	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	225	225	102.131	104.713	117	105	106	640	No. 16	@ 250	OK FOR		SHEAR
1.5	4.5	225	270	106.137	110.474	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
1.5	4.5	225	338	111.929	118.510	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	225	450	120.792	130.372	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	250	250	104.275	107.996	144	116	117	710	No. 16	@ 250	OK FOR		SHEAR
1.5	4.5	250	300	108.568	114.065	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	250	375	114.722	122.474	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	250	500	124.204	135.020	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	300	300	108.464	114.223	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	300	360	113.309	120.876	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	300	450	120.212	130.085	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	300	600	130.695	143.738	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	4.5	350	350	112.547	120.105	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	6	200	200	86.341	95.579	92	93	97	570	No. 16	@ 325	OK FOR		SHEAR
1.5	6	200	240	89.148	99.379	133	112	113	680	No. 16	@ 250	OK FOR		SHEAR
1.5	6	200	300	91.903	103.019	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	200	400	97.247	109.879	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	6	225	225	88.965	99.399	117	105	106	640	No. 16	@ 250	OK FOR		SHEAR
1.5	6	225	270	93.810	105.747	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
1.5	6	225	338	100.822	114.588	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	6	225	450	111.464	127.549	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	6	250	250	91.547	103.052	144	116	117	710	No. 16	@ 250	OK FOR		SHEAR
1.5	6	250	300	96.758	109.731	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	250	375	104.208	118.961	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	6	250	500	115.524	132.594	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	6	300	300	96.600	109.940	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	300	360	102.485	117.238	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	6	300	450	110.785	127.273	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	6	300	600	123.070	141.919	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	6	350	350	101.491	116.394	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
1.5	8	200	200	77.974	92.363	92	93	94	570	No. 16	@ 325	OK FOR	SHEAR
1.5	8	200	240	81.287	96.464	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
1.5	8	200	300	84.527	100.385	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
1.5	8	200	400	90.759	107.744	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
1.5	8	225	225	81.094	96.512	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
1.5	8	225	270	86.798	103.343	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
1.5	8	225	338	94.927	112.784	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
1.5	8	225	450	106.874	126.397	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
1.5	8	250	250	84.161	100.467	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
1.5	8	250	300	90.267	107.629	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
1.5	8	250	375	98.816	117.424	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
1.5	8	250	500	111.321	131.622	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
1.5	8	300	300	90.097	107.873	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
1.5	8	300	360	96.881	115.620	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
1.5	8	300	450	106.168	126.121	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
1.5	8	300	600	119.356	141.157	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
1.5	8	350	350	95.703	114.718	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR
1.5	10	200	200	74.093	91.057	92	93	94	570	No. 16	@ 325	OK FOR	SHEAR
1.5	10	200	240	77.762	95.336	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
1.5	10	200	300	81.316	99.411	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
1.5	10	200	400	88.047	107.004	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
1.5	10	225	225	77.584	95.393	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
1.5	10	225	270	83.825	102.479	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
1.5	10	225	338	92.502	112.166	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
1.5	10	225	450	104.849	125.945	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
1.5	10	250	250	80.980	99.507	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
1.5	10	250	300	87.584	106.896	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
1.5	10	250	375	96.587	116.884	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
1.5	10	250	500	109.364	131.193	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
1.5	10	300	300	87.414	107.141	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
1.5	10	300	360	94.580	115.046	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
1.5	10	300	450	104.150	125.659	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
1.5	10	300	600	117.451	140.761	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
1.5	10	350	350	93.323	114.113	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR
1.5	12	200	200	72.635	90.475	92	93	94	570	No. 16	@ 325	OK FOR	SHEAR
1.5	12	200	240	76.542	94.843	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
1.5	12	200	300	80.285	98.982	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
1.5	12	200	400	87.267	106.651	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
1.5	12	225	225	76.378	94.903	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
1.5	12	225	270	82.922	102.089	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
1.5	12	225	338	91.835	111.837	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
1.5	12	225	450	104.300	125.635	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
1.5	12	250	250	79.966	99.080	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
1.5	12	250	300	86.813	106.541	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
1.5	12	250	375	95.981	116.564	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
1.5	12	250	500	108.842	130.895	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
1.5	12	300	300	86.634	106.780	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
1.5	12	300	360	93.949	114.721	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
1.5	12	300	450	103.613	125.358	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
1.5	12	300	600	117.001	140.514	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
1.5	12	350	350	92.662	113.784	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2	3	200	200	184.371	135.124	184	93	136	3500	No. 32	@ 200	No. 12	@	175
2	3	200	240	185.935	137.342	186	112	139	1550	No. 25	@ 250	No. 12	@	325
2	3	200	300	187.460	139.489	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	3	200	400	190.399	143.595	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	3	225	225	186.391	137.623	188	105	139	2100	No. 25	@ 200	No. 12	@	250
2	3	225	270	189.079	141.420	193	125	142	1050	No. 20	@ 250	No. 12	@	600
2	3	225	338	192.943	146.814	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	3	225	450	198.857	154.984	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	3	250	250	188.405	140.106	189	116	141	1350	No. 20	@ 200	No. 12	@	375
2	3	250	300	191.292	144.176	208	139	145	850	No. 20	@ 325	OK FOR		SHEAR
2	3	250	375	195.412	149.915	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	3	250	500	201.788	158.708	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	3	300	300	192.402	144.999	208	139	146	850	No. 20	@ 325	OK FOR		SHEAR
2	3	300	360	195.675	149.594	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	3	300	450	200.341	156.067	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	3	300	600	207.546	165.969	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	3	350	350	196.363	149.809	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
2	4.5	200	200	136.693	114.148	137	93	115	1500	No. 25	@ 250	No. 12	@	350
2	4.5	200	240	138.676	116.578	139	112	118	750	No. 16	@ 250	OK FOR		SHEAR
2	4.5	200	300	140.638	118.950	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	200	400	144.493	123.533	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	4.5	225	225	139.179	117.053	140	105	119	980	No. 20	@ 250	No. 12	@	625
2	4.5	225	270	142.638	121.228	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
2	4.5	225	338	147.740	127.246	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	4.5	225	450	155.786	136.529	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	4.5	250	250	141.645	119.902	144	116	121	710	No. 16	@ 250	OK FOR		SHEAR
2	4.5	250	300	145.393	124.380	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	250	375	150.874	130.788	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	4.5	250	500	159.593	140.780	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	4.5	300	300	146.519	125.439	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	300	360	150.828	130.500	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	4.5	300	450	157.104	137.733	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	4.5	300	600	167.006	148.972	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	4.5	350	350	151.335	130.817	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
2	6	200	200	115.317	106.807	116	93	108	980	No. 20	@ 250	No. 12	@	500
2	6	200	240	117.747	109.512	133	112	113	680	No. 16	@ 250	OK FOR		SHEAR
2	6	200	300	120.164	112.153	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	200	400	124.943	117.258	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	6	225	225	118.232	110.031	120	105	111	680	No. 16	@ 250	OK FOR		SHEAR
2	6	225	270	122.500	114.669	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
2	6	225	338	128.848	121.359	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	6	225	450	138.919	131.672	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	6	250	250	121.120	113.168	144	116	117	710	No. 16	@ 250	OK FOR		SHEAR
2	6	250	300	125.767	118.136	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	250	375	132.608	125.249	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	6	250	500	143.520	136.321	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	6	300	300	126.834	119.227	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	300	360	132.211	124.828	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	6	300	450	140.063	132.832	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	6	300	600	152.370	145.193	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	6	350	350	132.475	125.073	288	157	158	1030	No. 20	@ 250	OK FOR		SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	8	200	200	101.190	102.455	101	93	104	700	No. 16	@ 250	No. 12	@ 700
2	8	200	240	104.159	105.422	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
2	8	200	300	107.116	108.316	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	8	200	400	112.963	113.903	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
2	8	225	225	104.623	105.976	117	105	107	640	No. 16	@ 250	OK FOR	SHEAR
2	8	225	270	109.858	111.054	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
2	8	225	338	117.624	118.359	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
2	8	225	450	129.765	129.511	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	8	250	250	108.032	109.390	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
2	8	250	300	113.740	114.821	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	8	250	375	122.087	122.563	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
2	8	250	500	135.113	134.457	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
2	8	300	300	114.770	115.954	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	8	300	360	121.346	122.047	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
2	8	300	450	130.798	130.673	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	8	300	600	145.139	143.761	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
2	8	350	350	121.346	122.231	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR
2	10	200	200	94.120	100.425	95	93	101	600	No. 16	@ 325	No. 12	@ 975
2	10	200	240	97.556	103.576	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
2	10	200	300	100.964	106.644	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	10	200	400	107.644	112.542	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
2	10	225	225	98.024	104.152	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
2	10	225	270	104.057	109.530	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
2	10	225	338	112.869	117.209	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
2	10	225	450	126.239	128.761	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	10	250	250	101.890	107.757	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
2	10	250	300	108.430	113.489	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	10	250	375	117.803	121.580	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
2	10	250	500	131.942	133.812	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
2	10	300	300	109.446	114.645	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	10	300	360	116.849	121.012	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
2	10	300	450	127.214	129.917	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	10	300	600	142.402	143.230	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
2	10	350	350	116.658	121.154	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR
2	12	200	200	90.421	99.422	92	93	100	570	No. 16	@ 325	OK FOR	SHEAR
2	12	200	240	94.232	102.701	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
2	12	200	300	97.981	105.881	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	12	200	400	105.224	111.956	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
2	12	225	225	94.716	103.288	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
2	12	225	270	101.332	108.852	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
2	12	225	338	110.782	116.720	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
2	12	225	450	124.688	128.404	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	12	250	250	98.931	107.011	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
2	12	250	300	106.025	112.911	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	12	250	375	115.948	121.151	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
2	12	250	500	130.494	133.471	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
2	12	300	300	107.019	114.067	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	12	300	360	114.877	120.554	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
2	12	300	450	125.629	129.548	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	12	300	600	141.059	142.910	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
2	12	350	350	114.567	120.669	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2.5	4.5	200	200	211.038	250.341	211	93	251	5500	No. 32	@ 150	No. 16	@	75
2.5	4.5	200	240	213.317	253.153	214	112	255	2250	No. 32	@ 325	No. 16	@	100
2.5	4.5	200	300	215.511	255.801	216	139	256	930	No. 20	@ 325	No. 16	@	175
2.5	4.5	200	400	219.693	260.732	369	173	262	1130	No. 20	@ 250	No. 16	@	300
2.5	4.5	225	225	214.079	253.253	215	105	255	3100	No. 32	@ 250	No. 16	@	100
2.5	4.5	225	270	217.983	257.987	218	125	259	1430	No. 25	@ 325	No. 16	@	125
2.5	4.5	225	338	223.509	264.460	264	153	266	950	No. 20	@ 250	No. 16	@	200
2.5	4.5	225	450	231.926	274.015	468	187	275	1270	No. 20	@ 200	No. 16	@	350
2.5	4.5	250	250	217.108	256.135	218	116	257	1980	No. 25	@ 200	No. 16	@	100
2.5	4.5	250	300	221.306	261.176	223	139	262	1000	No. 20	@ 250	No. 16	@	150
2.5	4.5	250	375	227.220	268.046	325	165	269	1060	No. 20	@ 250	No. 16	@	225
2.5	4.5	250	500	236.347	278.341	577	201	279	1410	No. 20	@ 200	No. 12	@	250
2.5	4.5	300	300	223.127	261.807	226	139	262	1030	No. 20	@ 250	No. 16	@	150
2.5	4.5	300	360	227.902	267.443	299	160	269	1010	No. 20	@ 250	No. 16	@	225
2.5	4.5	300	450	234.646	275.170	468	187	276	1270	No. 20	@ 200	No. 16	@	325
2.5	4.5	300	600	245.063	286.798	831	227	288	1690	No. 25	@ 250	No. 12	@	375
2.5	4.5	350	350	229.110	267.387	283	157	269	990	No. 20	@ 250	No. 16	@	200
2.5	6	200	200	179.063	240.523	180	93	242	3250	No. 32	@ 200	No. 16	@	75
2.5	6	200	240	181.676	243.547	182	112	245	1450	No. 25	@ 325	No. 16	@	125
2.5	6	200	300	184.213	246.404	208	139	247	850	No. 20	@ 325	No. 16	@	175
2.5	6	200	400	189.105	251.749	369	173	253	1130	No. 20	@ 250	No. 12	@	175
2.5	6	225	225	182.454	243.698	183	105	245	1950	No. 25	@ 250	No. 16	@	100
2.5	6	225	270	186.969	248.790	187	125	249	980	No. 20	@ 250	No. 16	@	150
2.5	6	225	338	193.457	255.798	264	153	257	950	No. 20	@ 250	No. 16	@	225
2.5	6	225	450	203.507	266.221	468	187	267	1270	No. 20	@ 200	No. 12	@	200
2.5	6	250	250	185.826	246.818	186	116	248	1300	No. 20	@ 200	No. 16	@	125
2.5	6	250	300	190.706	252.237	208	139	253	850	No. 20	@ 325	No. 16	@	175
2.5	6	250	375	197.680	259.673	325	165	261	1060	No. 20	@ 250	No. 16	@	250
2.5	6	250	500	208.605	270.894	577	201	272	1410	No. 20	@ 200	No. 12	@	275
2.5	6	300	300	192.524	252.915	208	139	254	850	No. 20	@ 325	No. 16	@	175
2.5	6	300	360	198.121	258.973	299	160	260	1020	No. 20	@ 250	No. 16	@	225
2.5	6	300	450	206.122	267.329	468	187	268	1270	No. 20	@ 200	No. 16	@	375
2.5	6	300	600	218.592	279.965	831	227	281	1690	No. 25	@ 250	No. 12	@	425
2.5	6	350	350	199.181	258.882	283	157	260	990	No. 20	@ 250	No. 16	@	225

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2.5	8	200	200	157.499	234.878	158	93	236	2230	No. 32	@ 325	No. 16	@	75
2.5	8	200	240	160.556	238.146	161	112	240	1080	No. 20	@ 250	No. 16	@	125
2.5	8	200	300	163.543	241.241	208	139	242	850	No. 20	@ 325	No. 16	@	200
2.5	8	200	400	169.346	247.044	369	173	248	1130	No. 20	@ 250	No. 12	@	200
2.5	8	225	225	161.320	238.320	162	105	240	1430	No. 25	@ 325	No. 16	@	100
2.5	8	225	270	166.640	243.824	168	125	244	760	No. 16	@ 250	No. 16	@	150
2.5	8	225	338	174.360	251.426	264	153	253	950	No. 20	@ 250	No. 16	@	225
2.5	8	225	450	186.372	262.735	468	187	263	1270	No. 20	@ 200	No. 12	@	225
2.5	8	250	250	165.122	241.686	167	116	243	1000	No. 20	@ 250	No. 16	@	125
2.5	8	250	300	170.899	247.542	208	139	248	850	No. 20	@ 325	No. 16	@	175
2.5	8	250	375	179.216	255.600	325	165	257	1060	No. 20	@ 250	No. 16	@	275
2.5	8	250	500	192.238	267.739	577	201	268	1410	No. 20	@ 200	No. 12	@	275
2.5	8	300	300	172.684	248.238	208	139	249	850	No. 20	@ 325	No. 16	@	175
2.5	8	300	360	179.338	254.776	299	160	256	1020	No. 20	@ 250	No. 16	@	250
2.5	8	300	450	188.862	263.796	468	187	264	1270	No. 20	@ 200	No. 12	@	225
2.5	8	300	600	203.544	277.343	831	227	279	1690	No. 25	@ 250	No. 12	@	450
2.5	8	350	350	180.169	254.608	283	157	256	990	No. 20	@ 250	No. 16	@	225
2.5	10	200	200	146.163	232.132	147	93	233	1830	No. 25	@ 250	No. 16	@	75
2.5	10	200	240	149.630	235.579	150	112	237	900	No. 20	@ 325	No. 16	@	125
2.5	10	200	300	153.027	238.849	208	139	239	850	No. 20	@ 325	No. 16	@	200
2.5	10	200	400	159.631	244.981	369	173	246	1130	No. 20	@ 250	No. 12	@	200
2.5	10	225	225	150.392	235.775	151	105	237	1180	No. 20	@ 250	No. 16	@	100
2.5	10	225	270	156.447	241.583	168	125	242	760	No. 16	@ 250	No. 16	@	150
2.5	10	225	338	165.223	249.602	264	153	251	950	No. 20	@ 250	No. 16	@	225
2.5	10	225	450	178.708	261.456	468	187	262	1270	No. 20	@ 200	No. 12	@	225
2.5	10	250	250	154.604	239.331	156	116	240	850	No. 20	@ 325	No. 16	@	125
2.5	10	250	300	161.181	245.506	208	139	246	850	No. 20	@ 325	No. 16	@	175
2.5	10	250	375	170.601	253.985	325	165	255	1060	No. 20	@ 250	No. 16	@	275
2.5	10	250	500	185.084	266.640	577	201	267	1410	No. 20	@ 200	No. 12	@	275
2.5	10	300	300	162.952	246.228	208	139	247	850	No. 20	@ 325	No. 16	@	175
2.5	10	300	360	170.484	253.093	299	160	254	1020	No. 20	@ 250	No. 16	@	250
2.5	10	300	450	181.126	262.509	468	187	263	1270	No. 20	@ 200	No. 12	@	225
2.5	10	300	600	197.121	276.482	831	227	278	1690	No. 25	@ 250	No. 12	@	450
2.5	10	350	350	171.114	252.875	283	157	254	990	No. 20	@ 250	No. 16	@	225
2.5	12	200	200	139.744	230.647	140	93	232	1600	No. 25	@ 250	No. 16	@	75
2.5	12	200	240	143.580	234.232	145	112	236	830	No. 20	@ 325	No. 16	@	125
2.5	12	200	300	147.333	237.632	208	139	238	850	No. 20	@ 325	No. 16	@	200
2.5	12	200	400	154.590	243.995	369	173	245	1130	No. 20	@ 250	No. 12	@	200
2.5	12	225	225	144.355	234.445	145	105	236	1080	No. 20	@ 250	No. 16	@	100
2.5	12	225	270	151.037	240.476	168	125	241	760	No. 16	@ 250	No. 16	@	150
2.5	12	225	338	160.623	248.770	264	153	250	950	No. 20	@ 250	No. 16	@	225
2.5	12	225	450	175.023	260.906	468	187	261	1270	No. 20	@ 200	No. 12	@	225
2.5	12	250	250	148.933	238.144	150	116	239	780	No. 16	@ 250	No. 16	@	125
2.5	12	250	300	156.158	244.541	208	139	245	850	No. 20	@ 325	No. 16	@	175
2.5	12	250	375	166.356	253.270	325	165	255	1060	No. 20	@ 250	No. 16	@	275
2.5	12	250	500	181.643	266.157	577	201	267	1410	No. 20	@ 200	No. 12	@	275
2.5	12	300	300	157.913	245.274	208	139	246	850	No. 20	@ 325	No. 16	@	175
2.5	12	300	360	166.069	252.335	299	160	253	1020	No. 20	@ 250	No. 16	@	250
2.5	12	300	450	177.380	261.945	468	187	262	1270	No. 20	@ 200	No. 12	@	225
2.5	12	300	600	193.959	276.066	831	227	278	1690	No. 25	@ 250	No. 12	@	450
2.5	12	350	350	166.539	252.078	283	157	253	990	No. 20	@ 250	No. 16	@	250

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
3	6	200	200	250.587	186.572	250	93	188	10700	No. 32	@ 75	No. 16	@	125
3	6	200	240	254.276	190.294	255	112	192	3730	No. 32	@ 200	No. 12	@	100
3	6	200	300	257.766	193.733	258	139	194	1430	No. 25	@ 325	No. 12	@	200
3	6	200	400	264.281	199.980	370	173	201	1130	No. 20	@ 250	No. 12	@	550
3	6	225	225	254.944	189.879	255	105	191	5250	No. 32	@ 150	No. 16	@	175
3	6	225	270	261.163	196.028	262	125	197	2300	No. 32	@ 325	No. 12	@	125
3	6	225	338	269.719	204.167	270	153	206	1000	No. 20	@ 250	No. 12	@	225
3	6	225	450	282.360	215.744	473	187	216	1300	No. 20	@ 200	No. 12	@	600
3	6	250	250	259.279	193.143	260	116	194	3230	No. 32	@ 200	No. 12	@	125
3	6	250	300	265.907	199.621	267	139	200	1550	No. 25	@ 250	No. 12	@	175
3	6	250	375	275.000	208.185	331	165	209	1100	No. 20	@ 250	No. 12	@	325
3	6	250	500	288.647	220.587	585	201	221	1450	No. 25	@ 325	No. 12	@	975
3	6	300	300	267.894	199.562	268	139	200	1580	No. 25	@ 250	No. 12	@	175
3	6	300	360	275.329	206.686	316	160	208	1150	No. 20	@ 250	No. 12	@	275
3	6	300	450	285.588	216.189	473	187	217	1300	No. 20	@ 200	No. 12	@	575
3	6	300	600	301.045	230.074	835	227	232	1700	No. 25	@ 250	OK FOR		SHEAR
3	6	350	350	276.464	205.883	285	157	207	1000	No. 20	@ 250	No. 12	@	250
3	8	200	200	219.194	175.632	220	93	177	6330	No. 32	@ 125	No. 16	@	150
3	8	200	240	223.406	179.517	224	112	181	2550	No. 32	@ 250	No. 12	@	125
3	8	200	300	227.420	183.118	228	139	184	1050	No. 20	@ 250	No. 12	@	250
3	8	200	400	234.980	189.684	373	173	191	1150	No. 20	@ 250	No. 12	@	850
3	8	225	225	224.028	179.147	225	105	181	3530	No. 32	@ 200	No. 12	@	100
3	8	225	270	231.179	185.570	233	125	186	1700	No. 25	@ 250	No. 12	@	150
3	8	225	338	241.141	194.120	264	153	196	950	No. 20	@ 250	No. 12	@	300
3	8	225	450	256.048	206.354	473	187	207	1300	No. 20	@ 200	No. 12	@	875
3	8	250	250	228.834	182.597	229	116	183	2250	No. 32	@ 325	No. 12	@	125
3	8	250	300	236.489	189.364	237	139	190	1150	No. 20	@ 250	No. 12	@	225
3	8	250	375	247.113	198.360	331	165	200	1100	No. 20	@ 250	No. 12	@	400
3	8	250	500	263.217	211.455	585	201	212	1450	No. 25	@ 325	OK FOR		SHEAR
3	8	300	300	238.387	189.351	239	139	190	1180	No. 20	@ 250	No. 12	@	225
3	8	300	360	247.029	196.793	304	160	198	1050	No. 20	@ 250	No. 12	@	350
3	8	300	450	259.052	206.768	473	187	207	1300	No. 20	@ 200	No. 12	@	875
3	8	300	600	277.212	221.371	835	227	228	1700	No. 25	@ 250	OK FOR		SHEAR
3	8	350	350	247.872	195.968	285	157	197	1000	No. 20	@ 250	No. 12	@	325
3	10	200	200	202.290	170.576	203	93	172	4780	No. 32	@ 150	No. 12	@	75
3	10	200	240	206.988	174.601	214	112	176	2250	No. 32	@ 325	No. 12	@	125
3	10	200	300	211.487	178.338	214	139	179	900	No. 20	@ 325	No. 12	@	275
3	10	200	400	220.009	185.169	370	173	187	1130	No. 20	@ 250	OK FOR		SHEAR
3	10	225	225	207.576	174.255	208	105	176	2800	No. 32	@ 250	No. 12	@	100
3	10	225	270	215.598	180.915	216	125	181	1400	No. 20	@ 200	No. 12	@	175
3	10	225	338	226.847	189.806	264	153	191	950	No. 20	@ 250	No. 12	@	325
3	10	225	450	243.697	202.530	473	187	203	1300	No. 20	@ 200	OK FOR		SHEAR
3	10	250	250	212.838	177.858	213	116	179	1850	No. 25	@ 250	No. 12	@	150
3	10	250	300	221.451	184.877	223	139	185	1000	No. 20	@ 250	No. 12	@	250
3	10	250	375	233.455	194.226	331	165	195	1100	No. 20	@ 250	No. 12	@	475
3	10	250	500	251.583	207.809	585	201	208	1450	No. 25	@ 325	OK FOR		SHEAR
3	10	300	300	223.290	184.893	226	139	185	1030	No. 20	@ 250	No. 12	@	250
3	10	300	360	233.025	192.604	304	160	194	1050	No. 20	@ 250	No. 12	@	400
3	10	300	450	246.548	202.935	473	187	203	1300	No. 20	@ 200	OK FOR		SHEAR
3	10	300	600	266.726	217.979	835	227	228	1700	No. 25	@ 250	OK FOR		SHEAR
3	10	350	350	233.596	191.742	285	157	193	1000	No. 20	@ 250	No. 12	@	375
3	12	200	200	192.286	167.823	193	93	169	4050	No. 32	@ 150	No. 12	@	100
3	12	200	240	197.432	171.962	198	112	173	1830	No. 25	@ 250	No. 12	@	150
3	12	200	300	202.373	175.810	209	139	176	850	No. 20	@ 325	No. 12	@	300
3	12	200	400	211.743	182.847	373	173	184	1150	No. 20	@ 250	OK FOR		SHEAR
3	12	225	225	198.013	171.637	199	105	173	2450	No. 32	@ 250	No. 12	@	125
3	12	225	270	206.824	178.490	208	125	179	1280	No. 20	@ 200	No. 12	@	175
3	12	225	338	219.175	187.639	264	153	189	950	No. 20	@ 250	No. 12	@	350
3	12	225	450	237.489	200.675	473	187	201	1300	No. 20	@ 200	OK FOR		SHEAR
3	12	250	250	203.711	175.368	204	116	176	1650	No. 25	@ 250	No. 12	@	150
3	12	250	300	213.171	182.586	214	139	183	900	No. 20	@ 325	No. 12	@	250
3	12	250	375	226.302	192.187	331	165	193	1100	No. 20	@ 250	No. 12	@	500
3	12	250	500	245.845	206.049	585	201	207	1450	No. 25	@ 325	OK FOR		SHEAR
3	12	300	300	214.972	182.624	216	139	183	930	No. 20	@ 325	No. 12	@	250
3	12	300	360	225.604	190.529	304	160	192	1050	No. 20	@ 250	No. 12	@	425
3	12	300	450	240.225	201.078	473	187	202	1300	No. 20	@ 200	OK FOR		SHEAR
3	12	300	600	261.624	216.323	835	227	228	1700	No. 25	@ 250	OK FOR		SHEAR
3	12	350	350	225.937	189.634	285	157	191	1000	No. 20	@ 250	No. 12	@	400

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
3.75	8	200	240	308.716	166.485	282	112	168	5110	No. 32	@ 150	No. 12	@	150
3.75	8	200	300	313.770	170.715	288	139	171	1890	No. 25	@ 250	No. 12	@	350
3.75	8	200	400	323.289	178.481	369	173	180	1130	No. 20	@ 250	OK FOR		SHEAR
3.75	8	225	225	310.098	166.133	282	105	168	7560	No. 32	@ 100	No. 12	@	125
3.75	8	225	270	319.064	173.637	290	125	174	3070	No. 32	@ 250	No. 12	@	200
3.75	8	225	338	331.570	183.733	301	153	185	1310	No. 20	@ 200	No. 12	@	400
3.75	8	225	450	350.229	198.251	468	187	199	1270	No. 20	@ 200	OK FOR		SHEAR
3.75	8	250	250	316.736	170.241	289	116	171	4420	No. 32	@ 150	No. 12	@	175
3.75	8	250	300	326.314	178.149	297	139	179	2050	No. 25	@ 200	No. 12	@	275
3.75	8	250	375	339.622	188.768	325	165	190	1060	No. 20	@ 250	No. 12	@	575
3.75	8	250	500	359.776	204.303	577	201	205	1410	No. 20	@ 200	OK FOR		SHEAR
3.75	8	300	300	329.942	178.314	301	139	179	2120	No. 25	@ 200	No. 12	@	275
3.75	8	300	360	340.727	187.019	310	160	188	1110	No. 20	@ 250	No. 12	@	500
3.75	8	300	450	355.772	198.795	468	187	199	1270	No. 20	@ 200	OK FOR		SHEAR
3.75	8	300	600	378.595	216.146	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
3.75	8	350	350	343.088	186.262	313	157	188	1260	No. 20	@ 250	No. 12	@	425
3.75	10	200	240	282.224	159.658	283	112	161	5150	No. 32	@ 150	No. 12	@	175
3.75	10	200	300	287.898	164.084	288	139	165	1890	No. 25	@ 250	No. 12	@	450
3.75	10	200	400	298.639	172.225	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
3.75	10	225	225	283.509	159.315	283	105	161	7600	No. 32	@ 100	No. 12	@	150
3.75	10	225	270	293.579	167.154	294	125	168	3180	No. 32	@ 250	No. 12	@	225
3.75	10	225	338	307.716	177.732	308	153	179	1380	No. 20	@ 200	No. 12	@	500
3.75	10	225	450	328.928	192.980	468	187	193	1270	No. 20	@ 200	OK FOR		SHEAR
3.75	10	250	250	290.674	163.616	291	116	164	4550	No. 32	@ 150	No. 12	@	200
3.75	10	250	300	301.458	171.877	303	139	172	2150	No. 25	@ 200	No. 12	@	350
3.75	10	250	375	316.529	182.998	325	165	184	1060	No. 20	@ 250	No. 12	@	750
3.75	10	250	500	339.415	199.291	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
3.75	10	300	300	304.928	172.043	305	139	173	2200	No. 25	@ 200	No. 12	@	325
3.75	10	300	360	317.104	181.128	319	160	182	1180	No. 20	@ 250	No. 12	@	625
3.75	10	300	450	334.131	193.436	468	187	194	1270	No. 20	@ 200	OK FOR		SHEAR
3.75	10	300	600	359.871	211.545	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
3.75	10	350	350	319.071	180.296	320	157	182	1330	No. 20	@ 200	No. 12	@	525
3.75	12	200	240	266.283	155.948	267	112	157	4300	No. 32	@ 150	No. 12	@	200
3.75	12	200	300	272.537	160.532	273	139	161	1650	No. 25	@ 250	No. 12	@	525
3.75	12	200	400	284.415	168.976	370	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
3.75	12	225	225	267.502	155.614	268	105	157	6250	No. 32	@ 125	No. 12	@	150
3.75	12	225	270	278.610	163.731	279	125	164	2750	No. 32	@ 250	No. 12	@	250
3.75	12	225	338	294.259	174.699	296	153	176	1250	No. 20	@ 250	No. 12	@	550
3.75	12	225	450	317.706	190.491	473	187	191	1300	No. 20	@ 200	OK FOR		SHEAR
3.75	12	250	250	275.189	160.081	277	116	161	3880	No. 32	@ 200	No. 12	@	200
3.75	12	250	300	287.106	168.633	289	139	169	1900	No. 25	@ 250	No. 12	@	375
3.75	12	250	375	303.782	180.154	331	165	181	1100	No. 20	@ 250	No. 12	@	900
3.75	12	250	500	328.974	196.985	581	201	202	1430	No. 25	@ 325	OK FOR		SHEAR
3.75	12	300	300	290.457	168.806	292	139	169	1950	No. 25	@ 250	No. 12	@	375
3.75	12	300	360	303.903	178.197	304	160	179	1050	No. 20	@ 250	No. 12	@	725
3.75	12	300	450	322.641	190.900	470	187	191	1280	No. 20	@ 200	OK FOR		SHEAR
3.75	12	300	600	350.646	209.489	835	227	228	1700	No. 25	@ 250	OK FOR		SHEAR
3.75	12	350	350	305.498	177.296	308	157	179	1200	No. 20	@ 250	No. 12	@	600

F4. PL-1 Barrier

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1	3	200	200	52.506	180.044	92	93	181	570	No. 16	@ 325	No. 12	@	75
1	3	200	240	53.698	182.931	133	112	184	680	No. 16	@ 250	No. 12	@	125
1	3	200	300	54.802	185.545	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	3	200	400	56.788	190.130	369	173	192	1130	No. 20	@ 250	No. 12	@	800
1	3	225	225	53.333	182.205	117	105	184	640	No. 16	@ 250	No. 12	@	100
1	3	225	270	55.279	186.829	168	125	187	760	No. 16	@ 250	No. 12	@	150
1	3	225	338	57.816	192.639	264	153	194	950	No. 20	@ 250	No. 12	@	300
1	3	225	450	61.217	200.163	468	187	201	1270	No. 20	@ 200	OK FOR		SHEAR
1	3	250	250	54.166	184.371	144	116	185	710	No. 16	@ 250	No. 12	@	125
1	3	250	300	56.183	189.104	208	139	190	850	No. 20	@ 325	No. 12	@	225
1	3	250	375	58.788	194.997	325	165	196	1060	No. 20	@ 250	No. 12	@	450
1	3	250	500	62.298	202.694	577	201	203	1410	No. 20	@ 200	OK FOR		SHEAR
1	3	300	300	55.791	188.542	208	139	189	850	No. 20	@ 325	No. 12	@	225
1	3	300	360	57.920	193.407	299	160	194	1020	No. 20	@ 250	No. 12	@	400
1	3	300	450	60.648	199.443	468	187	200	1270	No. 20	@ 200	OK FOR		SHEAR
1	3	300	600	64.281	207.285	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	3	350	350	57.316	192.349	283	157	194	990	No. 20	@ 250	No. 12	@	350
1	4.5	200	200	48.717	176.517	92	93	178	570	No. 16	@ 325	No. 12	@	75
1	4.5	200	240	50.212	179.804	133	112	181	680	No. 16	@ 250	No. 12	@	125
1	4.5	200	300	51.593	182.763	208	139	183	850	No. 20	@ 325	No. 12	@	250
1	4.5	200	400	54.061	187.903	369	173	189	1130	No. 20	@ 250	No. 12	@	975
1	4.5	225	225	49.791	179.145	117	105	181	640	No. 16	@ 250	No. 12	@	100
1	4.5	225	270	52.210	184.319	168	125	185	760	No. 16	@ 250	No. 12	@	175
1	4.5	225	338	55.329	190.733	264	153	192	950	No. 20	@ 250	No. 12	@	325
1	4.5	225	450	59.418	198.881	468	187	199	1270	No. 20	@ 200	OK FOR		SHEAR
1	4.5	250	250	50.833	181.663	144	116	182	710	No. 16	@ 250	No. 12	@	125
1	4.5	250	300	53.320	186.885	208	139	187	850	No. 20	@ 325	No. 12	@	225
1	4.5	250	375	56.489	193.309	325	165	195	1060	No. 20	@ 250	No. 12	@	475
1	4.5	250	500	60.661	201.554	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	4.5	300	300	52.791	186.285	208	139	187	850	No. 20	@ 325	No. 12	@	225
1	4.5	300	360	55.382	191.556	299	160	193	1020	No. 20	@ 250	No. 12	@	425
1	4.5	300	450	58.652	198.033	468	187	199	1270	No. 20	@ 200	OK FOR		SHEAR
1	4.5	300	600	62.899	206.338	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	4.5	350	350	54.574	190.355	283	157	192	990	No. 20	@ 250	No. 12	@	375
1	6	200	200	47.369	175.593	92	93	177	570	No. 16	@ 325	No. 12	@	75
1	6	200	240	49.017	178.999	133	112	180	680	No. 16	@ 250	No. 12	@	125
1	6	200	300	50.530	182.052	208	139	183	850	No. 20	@ 325	No. 12	@	250
1	6	200	400	53.209	187.328	369	173	189	1130	No. 20	@ 250	No. 12	@	975
1	6	225	225	48.546	178.316	117	105	180	640	No. 16	@ 250	No. 12	@	100
1	6	225	270	51.191	183.637	168	125	184	760	No. 16	@ 250	No. 12	@	175
1	6	225	338	54.560	190.196	264	153	192	950	No. 20	@ 250	No. 12	@	325
1	6	225	450	58.902	198.479	468	187	199	1270	No. 20	@ 200	OK FOR		SHEAR
1	6	250	250	49.676	180.890	144	116	182	710	No. 16	@ 250	No. 12	@	125
1	6	250	300	52.383	186.243	208	139	187	850	No. 20	@ 325	No. 12	@	225
1	6	250	375	55.791	192.802	325	165	194	1060	No. 20	@ 250	No. 12	@	500
1	6	250	500	60.206	201.184	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	6	300	300	51.788	185.590	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	6	300	360	54.593	190.988	299	160	192	1020	No. 20	@ 250	No. 12	@	425
1	6	300	450	58.087	197.599	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	6	300	600	62.549	206.041	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	6	350	350	53.711	189.740	283	157	191	990	No. 20	@ 250	No. 12	@	400

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1	8	200	200	46.611	175.106	92	93	176	570	No. 16	@ 325	No. 12	@	75
1	8	200	240	48.355	178.552	133	112	180	680	No. 16	@ 250	No. 12	@	125
1	8	200	300	49.947	181.637	208	139	182	850	No. 20	@ 325	No. 12	@	250
1	8	200	400	52.746	186.963	369	173	188	1130	No. 20	@ 250	OK FOR		SHEAR
1	8	225	225	47.854	177.835	117	105	179	640	No. 16	@ 250	No. 12	@	100
1	8	225	270	50.642	183.221	168	125	184	760	No. 16	@ 250	No. 12	@	175
1	8	225	338	54.157	189.856	264	153	191	950	No. 20	@ 250	No. 12	@	325
1	8	225	450	58.641	198.233	468	187	199	1270	No. 20	@ 200	OK FOR		SHEAR
1	8	250	250	49.051	180.429	144	116	181	710	No. 16	@ 250	No. 12	@	150
1	8	250	300	51.899	185.856	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	8	250	375	55.447	192.498	325	165	194	1060	No. 20	@ 250	No. 12	@	500
1	8	250	500	59.991	200.977	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	8	300	300	51.296	185.200	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	8	300	360	54.228	190.677	299	160	192	1020	No. 20	@ 250	No. 12	@	425
1	8	300	450	57.839	197.370	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	8	300	600	62.403	205.899	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	8	350	350	53.327	189.427	283	157	191	990	No. 20	@ 250	No. 12	@	400
1	10	200	200	46.249	174.821	92	93	176	570	No. 16	@ 325	No. 12	@	75
1	10	200	240	48.044	178.291	133	112	180	680	No. 16	@ 250	No. 12	@	125
1	10	200	300	49.677	181.399	208	139	182	850	No. 20	@ 325	No. 12	@	250
1	10	200	400	52.538	186.768	369	173	188	1130	No. 20	@ 250	OK FOR		SHEAR
1	10	225	225	47.545	177.576	117	105	179	640	No. 16	@ 250	No. 12	@	100
1	10	225	270	50.406	183.009	168	125	184	760	No. 16	@ 250	No. 12	@	175
1	10	225	338	53.994	189.699	264	153	191	950	No. 20	@ 250	No. 12	@	325
1	10	225	450	58.545	198.138	468	187	199	1270	No. 20	@ 200	OK FOR		SHEAR
1	10	250	250	48.792	180.204	144	116	181	710	No. 16	@ 250	No. 12	@	150
1	10	250	300	51.708	185.678	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	10	250	375	55.318	192.372	325	165	194	1060	No. 20	@ 250	No. 12	@	500
1	10	250	500	59.919	200.907	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	10	300	300	51.117	185.038	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	10	300	360	54.100	190.555	299	160	192	1020	No. 20	@ 250	No. 12	@	425
1	10	300	450	57.755	197.289	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	10	300	600	62.359	205.859	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	10	350	350	53.200	189.310	283	157	191	990	No. 20	@ 250	No. 12	@	400
1	12	200	200	46.061	174.653	92	93	176	570	No. 16	@ 325	No. 12	@	75
1	12	200	240	47.888	178.147	133	112	180	680	No. 16	@ 250	No. 12	@	125
1	12	200	300	49.546	181.275	208	139	182	850	No. 20	@ 325	No. 12	@	250
1	12	200	400	52.445	186.678	369	173	188	1130	No. 20	@ 250	OK FOR		SHEAR
1	12	225	225	47.398	177.441	117	105	179	640	No. 16	@ 250	No. 12	@	100
1	12	225	270	50.301	182.907	168	125	183	760	No. 16	@ 250	No. 12	@	175
1	12	225	338	53.927	189.633	264	153	191	950	No. 20	@ 250	No. 12	@	325
1	12	225	450	58.512	198.107	468	187	199	1270	No. 20	@ 200	OK FOR		SHEAR
1	12	250	250	48.678	180.097	144	116	181	710	No. 16	@ 250	No. 12	@	150
1	12	250	300	51.627	185.601	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	12	250	375	55.267	192.323	325	165	194	1060	No. 20	@ 250	No. 12	@	500
1	12	250	500	59.896	200.885	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	12	300	300	51.045	184.969	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	12	300	360	54.050	190.507	299	160	192	1020	No. 20	@ 250	No. 12	@	425
1	12	300	450	57.726	197.261	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	12	300	600	62.348	205.849	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	12	350	350	53.152	189.265	283	157	191	990	No. 20	@ 250	No. 12	@	400

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1.5	3	200	200	108.472	138.037	108	93	139	830	No. 20	@ 325	No. 12	@	150
1.5	3	200	240	110.380	141.561	133	112	143	680	No. 16	@ 250	No. 12	@	300
1.5	3	200	300	112.185	144.835	208	139	145	850	No. 20	@ 325	OK FOR		SHEAR
1.5	3	200	400	115.522	150.766	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	3	225	225	109.896	140.468	117	105	142	640	No. 16	@ 250	No. 12	@	225
1.5	3	225	270	113.060	146.239	168	125	147	760	No. 16	@ 250	No. 12	@	475
1.5	3	225	338	117.356	153.846	264	153	155	950	No. 20	@ 250	OK FOR		SHEAR
1.5	3	225	450	123.427	164.284	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	3	250	250	111.355	142.968	144	116	144	710	No. 16	@ 250	No. 12	@	325
1.5	3	250	300	123.911	157.140	208	139	158	850	No. 20	@ 325	No. 12	@	600
1.5	3	250	375	119.141	156.835	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	3	250	500	125.512	167.727	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	3	300	300	114.293	147.994	208	139	149	850	No. 20	@ 325	OK FOR		SHEAR
1.5	3	300	360	117.883	154.396	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	3	300	450	122.695	162.744	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	3	300	600	129.495	174.245	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	3	350	350	117.168	152.848	284	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	200	200	86.928	127.276	92	93	128	570	No. 16	@ 325	No. 12	@	200
1.5	4.5	200	240	89.379	131.438	133	112	133	680	No. 16	@ 250	No. 12	@	425
1.5	4.5	200	300	91.709	135.302	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	200	400	96.037	142.281	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	225	225	88.858	130.469	117	105	132	640	No. 16	@ 250	No. 12	@	325
1.5	4.5	225	270	92.935	137.231	168	125	138	760	No. 16	@ 250	No. 12	@	800
1.5	4.5	225	338	98.492	146.094	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	225	450	106.324	158.124	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	250	250	90.783	133.634	144	116	134	710	No. 16	@ 250	No. 12	@	525
1.5	4.5	250	300	101.767	147.670	208	139	148	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	250	375	100.801	149.654	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	250	500	108.940	162.045	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	300	300	94.512	139.669	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	300	360	99.092	146.946	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	300	450	105.206	156.362	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	300	600	113.741	169.190	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	4.5	350	350	98.005	145.176	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	6	200	200	78.486	123.916	92	93	125	570	No. 16	@ 325	No. 12	@	225
1.5	6	200	240	81.306	128.411	133	112	130	680	No. 16	@ 250	No. 12	@	500
1.5	6	200	300	83.980	132.567	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	200	400	88.921	140.031	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	6	225	225	80.746	127.499	117	105	129	640	No. 16	@ 250	No. 12	@	350
1.5	6	225	270	85.407	134.722	168	125	135	760	No. 16	@ 250	OK FOR		SHEAR
1.5	6	225	338	91.704	144.114	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	6	225	450	100.436	156.714	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	6	250	250	82.946	130.946	144	116	132	710	No. 16	@ 250	No. 12	@	600
1.5	6	250	300	93.583	145.076	208	139	146	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	250	375	94.269	147.851	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	6	250	500	103.275	160.755	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	6	300	300	87.109	137.332	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	300	360	92.271	144.967	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	6	300	450	99.086	154.796	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	6	300	600	108.431	168.084	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	6	350	350	90.944	143.052	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1.5	8	200	200	73.681	122.311	92	93	123	570	No. 16	@ 325	No. 12	@	250
1.5	8	200	240	76.801	126.983	133	112	128	680	No. 16	@ 250	No. 12	@	575
1.5	8	200	300	79.739	131.286	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	8	200	400	85.114	138.973	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	8	225	225	76.167	126.040	117	105	127	640	No. 16	@ 250	No. 12	@	375
1.5	8	225	270	81.279	133.495	168	125	134	760	No. 16	@ 250	OK FOR		SHEAR
1.5	8	225	338	88.090	143.130	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	8	225	450	97.349	155.973	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	8	250	250	78.560	129.580	144	116	130	710	No. 16	@ 250	No. 12	@	675
1.5	8	250	300	89.143	143.761	208	139	144	850	No. 20	@ 325	OK FOR		SHEAR
1.5	8	250	375	90.820	146.929	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	8	250	500	100.323	160.074	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	8	300	300	83.061	136.107	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	8	300	360	88.658	143.951	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	8	300	450	95.932	154.006	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	8	300	600	105.706	167.531	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	8	350	350	87.193	141.962	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	10	200	200	71.522	121.634	92	93	123	570	No. 16	@ 325	No. 12	@	250
1.5	10	200	240	74.809	126.364	133	112	128	680	No. 16	@ 250	No. 12	@	575
1.5	10	200	300	77.885	130.714	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	10	200	400	83.467	138.472	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	10	225	225	74.133	125.383	117	105	127	640	No. 16	@ 250	No. 12	@	375
1.5	10	225	270	79.492	132.927	168	125	133	760	No. 16	@ 250	OK FOR		SHEAR
1.5	10	225	338	86.551	142.660	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	10	225	450	96.029	155.612	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	10	250	250	76.649	128.953	144	116	130	710	No. 16	@ 250	No. 12	@	675
1.5	10	250	300	87.267	143.158	208	139	144	850	No. 20	@ 325	OK FOR		SHEAR
1.5	10	250	375	89.380	146.502	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	10	250	500	99.080	159.762	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	10	300	300	81.381	135.568	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	10	300	360	87.192	143.511	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	10	300	450	94.656	153.670	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	10	300	600	104.576	167.303	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	10	350	350	85.697	141.516	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	12	200	200	70.382	121.226	92	93	122	570	No. 16	@ 325	No. 12	@	250
1.5	12	200	240	73.766	125.985	133	112	127	680	No. 16	@ 250	No. 12	@	625
1.5	12	200	300	76.920	130.360	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	12	200	400	82.616	138.163	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	12	225	225	73.090	124.996	117	105	126	640	No. 16	@ 250	No. 12	@	400
1.5	12	225	270	78.589	132.594	168	125	133	760	No. 16	@ 250	OK FOR		SHEAR
1.5	12	225	338	85.779	142.392	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	12	225	450	95.369	155.423	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	12	250	250	75.700	128.601	144	116	129	710	No. 16	@ 250	No. 12	@	750
1.5	12	250	300	86.349	142.825	208	139	143	850	No. 20	@ 325	OK FOR		SHEAR
1.5	12	250	375	88.675	146.273	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	12	250	500	98.467	159.610	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	12	300	300	80.587	135.293	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	12	300	360	86.499	143.291	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	12	300	450	94.043	153.507	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	12	300	600	104.024	167.204	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	12	350	350	85.010	141.302	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2	3	200	200	162.139	120.526	162	93	122	2400	No. 32	@ 325	No. 12	@	250
2	3	200	240	163.959	123.390	164	112	125	1130	No. 20	@ 250	No. 12	@	700
2	3	200	300	165.711	126.117	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	3	200	400	169.028	131.209	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	3	225	225	164.069	122.948	164	105	124	1470	No. 25	@ 325	No. 12	@	450
2	3	225	270	167.142	127.751	168	125	128	760	No. 16	@ 250	OK FOR		SHEAR
2	3	225	338	171.461	134.367	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	3	225	450	177.852	143.963	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	3	250	250	166.036	125.443	166	116	126	990	No. 20	@ 250	No. 12	@	975
2	3	250	300	169.302	130.525	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	3	250	375	173.860	137.480	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	3	250	500	180.682	147.681	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	3	300	300	170.021	130.526	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	3	300	360	173.654	136.128	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	3	300	450	178.712	143.775	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	3	300	600	186.246	154.943	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	3	350	350	173.994	135.575	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
2	4.5	200	200	124.760	99.370	125	93	100	1180	No. 20	@ 250	OK FOR		SHEAR
2	4.5	200	240	127.181	102.601	133	112	113	680	No. 16	@ 250	OK FOR		SHEAR
2	4.5	200	300	129.534	105.688	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	200	400	134.039	111.478	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	4.5	225	225	127.261	102.388	127	105	106	780	No. 16	@ 250	OK FOR		SHEAR
2	4.5	225	270	131.391	107.808	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
2	4.5	225	338	137.267	115.301	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	4.5	225	450	146.043	126.188	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	4.5	250	250	129.788	105.434	144	116	117	710	No. 16	@ 250	OK FOR		SHEAR
2	4.5	250	300	134.189	111.146	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	250	375	140.383	118.969	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	4.5	250	500	149.685	130.428	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	4.5	300	300	134.800	111.425	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	300	360	139.679	117.630	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	4.5	300	450	146.485	126.086	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	4.5	300	600	156.571	138.387	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	4.5	350	350	139.644	117.115	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
2	6	200	200	108.752	92.770	109	93	94	840	No. 20	@ 325	OK FOR		SHEAR
2	6	200	240	111.702	96.330	133	112	113	680	No. 16	@ 250	OK FOR		SHEAR
2	6	200	300	114.571	99.721	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	200	400	120.061	106.055	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	6	225	225	111.756	96.221	117	105	106	640	No. 16	@ 250	OK FOR		SHEAR
2	6	225	270	116.778	102.137	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
2	6	225	338	123.900	110.261	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	6	225	450	134.435	121.935	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	6	250	250	114.733	99.613	144	116	117	710	No. 16	@ 250	OK FOR		SHEAR
2	6	250	300	120.061	105.794	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	250	375	127.520	114.200	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	6	250	500	138.585	126.382	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	6	300	300	120.492	106.074	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	300	360	126.342	112.693	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	6	300	450	134.439	121.660	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	6	300	600	146.265	134.596	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	6	350	350	125.926	112.037	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	8	200	200	98.815	89.407	99	93	94	660	No. 16	@ 250	OK FOR	SHEAR
2	8	200	240	102.294	93.209	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
2	8	200	300	105.662	96.814	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	8	200	400	112.054	103.506	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
2	8	225	225	102.271	93.132	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
2	8	225	270	108.141	99.382	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
2	8	225	338	116.364	107.893	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
2	8	225	450	128.277	119.989	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	8	250	250	105.632	96.713	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
2	8	250	300	111.820	103.197	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	8	250	375	120.367	111.952	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
2	8	250	500	132.779	124.522	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
2	8	300	300	112.028	103.408	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	8	300	360	118.754	110.301	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
2	8	300	450	127.930	119.588	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	8	300	600	141.033	132.885	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
2	8	350	350	117.986	109.526	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR
2	10	200	200	94.086	88.038	95	93	94	600	No. 16	@ 325	OK FOR	SHEAR
2	10	200	240	97.921	91.950	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
2	10	200	300	101.608	95.648	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	10	200	400	108.539	102.481	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
2	10	225	225	97.814	91.846	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
2	10	225	270	104.233	98.246	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
2	10	225	338	113.104	106.917	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
2	10	225	450	125.714	119.172	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	10	250	250	101.417	95.485	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
2	10	250	300	108.153	102.111	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	10	250	375	117.329	111.022	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
2	10	250	500	130.402	123.751	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
2	10	300	300	108.243	102.281	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	10	300	360	115.511	109.316	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
2	10	300	450	125.276	118.757	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	10	300	600	138.959	132.209	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
2	10	350	350	114.566	108.497	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR
2	12	200	200	91.568	87.331	92	93	94	570	No. 16	@ 325	OK FOR	SHEAR
2	12	200	240	95.635	91.292	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
2	12	200	300	99.521	95.029	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	12	200	400	106.763	101.920	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
2	12	225	225	95.478	91.162	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
2	12	225	270	102.248	97.634	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
2	12	225	338	111.491	106.382	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
2	12	225	450	124.451	118.717	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	12	250	250	99.256	94.829	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
2	12	250	300	106.335	101.531	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	12	250	375	115.859	110.521	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
2	12	250	500	129.252	123.334	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
2	12	300	300	106.394	101.696	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	12	300	360	113.976	108.808	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
2	12	300	450	124.038	118.326	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	12	300	600	137.978	131.858	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
2	12	350	350	112.961	107.983	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2.5	3	200	200	236.908	220.118	237	93	221	8500	No. 32	@ 100	No. 12	@	50
2.5	3	200	240	238.819	222.753	306	112	224	6750	No. 32	@ 100	No. 12	@	75
2.5	3	200	300	240.657	225.259	241	139	226	1200	No. 20	@ 250	No. 12	@	125
2.5	3	200	400	244.147	229.952	373	173	231	1150	No. 20	@ 250	No. 12	@	250
2.5	3	225	225	239.521	222.630	240	105	224	4300	No. 32	@ 150	No. 12	@	50
2.5	3	225	270	242.771	227.076	244	125	228	1900	No. 25	@ 250	No. 12	@	100
2.5	3	225	338	247.354	233.223	264	153	235	950	No. 20	@ 250	No. 12	@	150
2.5	3	225	450	254.241	242.273	473	187	243	1300	No. 20	@ 200	No. 12	@	300
2.5	3	250	250	242.165	225.198	243	116	226	2650	No. 32	@ 250	No. 12	@	75
2.5	3	250	300	245.643	229.935	249	139	231	1300	No. 20	@ 200	No. 12	@	125
2.5	3	250	375	250.524	236.456	328	165	238	1080	No. 20	@ 250	No. 12	@	200
2.5	3	250	500	257.961	246.188	581	201	247	1430	No. 25	@ 325	No. 12	@	400
2.5	3	300	300	247.502	230.423	249	139	231	1300	No. 20	@ 200	No. 12	@	125
2.5	3	300	360	251.428	235.727	301	160	237	1030	No. 20	@ 250	No. 12	@	175
2.5	3	300	450	256.947	243.038	470	187	244	1280	No. 20	@ 200	No. 12	@	300
2.5	3	300	600	265.365	253.957	835	227	255	1700	No. 25	@ 250	No. 12	@	825
2.5	3	350	350	252.845	235.661	285	157	237	1000	No. 20	@ 250	No. 12	@	150
2.5	4.5	200	200	179.683	176.980	180	93	178	3250	No. 32	@ 200	No. 12	@	75
2.5	4.5	200	240	181.990	179.526	182	112	181	1460	No. 25	@ 325	No. 12	@	125
2.5	4.5	200	300	184.242	181.977	208	139	183	850	No. 20	@ 325	No. 12	@	250
2.5	4.5	200	400	188.593	186.639	369	173	188	1130	No. 20	@ 250	OK FOR		SHEAR
2.5	4.5	225	225	182.764	179.806	183	105	181	1950	No. 25	@ 250	No. 12	@	100
2.5	4.5	225	270	186.748	184.155	187	125	185	980	No. 20	@ 250	No. 12	@	175
2.5	4.5	225	338	192.488	190.283	264	153	192	950	No. 20	@ 250	No. 12	@	325
2.5	4.5	225	450	201.284	199.492	468	187	200	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	4.5	250	250	185.881	182.673	186	116	184	1310	No. 20	@ 200	No. 12	@	125
2.5	4.5	250	300	190.175	187.328	208	139	188	850	No. 20	@ 325	No. 12	@	225
2.5	4.5	250	375	196.306	193.838	325	165	195	1060	No. 20	@ 250	No. 12	@	475
2.5	4.5	250	500	205.774	203.716	577	201	204	1410	No. 20	@ 200	OK FOR		SHEAR
2.5	4.5	300	300	192.128	188.404	208	139	189	850	No. 20	@ 325	No. 12	@	225
2.5	4.5	300	360	196.997	193.619	299	160	195	1020	No. 20	@ 250	No. 12	@	400
2.5	4.5	300	450	203.909	200.889	468	187	201	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	4.5	300	600	214.486	211.865	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	4.5	350	350	198.287	194.004	283	157	195	990	No. 20	@ 250	No. 12	@	350
2.5	6	200	200	154.037	164.846	154	93	166	2070	No. 25	@ 200	No. 12	@	100
2.5	6	200	240	156.796	167.586	157	112	169	1010	No. 20	@ 250	No. 12	@	150
2.5	6	200	300	159.503	170.224	208	139	171	850	No. 20	@ 325	No. 12	@	350
2.5	6	200	400	164.757	175.242	369	173	177	1130	No. 20	@ 250	OK FOR		SHEAR
2.5	6	225	225	157.598	167.980	158	105	169	1320	No. 20	@ 200	No. 12	@	125
2.5	6	225	270	162.378	172.639	168	125	173	760	No. 16	@ 250	No. 12	@	200
2.5	6	225	338	169.296	179.194	264	153	181	950	No. 20	@ 250	No. 12	@	450
2.5	6	225	450	179.892	189.000	468	187	190	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	6	250	250	161.165	171.106	161	116	172	920	No. 20	@ 325	No. 12	@	150
2.5	6	250	300	166.308	176.063	208	139	177	850	No. 20	@ 325	No. 12	@	300
2.5	6	250	375	173.666	182.976	325	165	184	1060	No. 20	@ 250	No. 12	@	750
2.5	6	250	500	184.985	193.410	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2.5	6	300	300	168.190	177.206	208	139	178	850	No. 20	@ 325	No. 12	@	300
2.5	6	300	360	173.982	182.689	299	160	184	1020	No. 20	@ 250	No. 12	@	575
2.5	6	300	450	182.187	190.309	468	187	191	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	6	300	600	194.642	201.760	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	6	350	350	174.982	183.020	283	157	184	990	No. 20	@ 250	No. 12	@	500

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2.5	8	200	200	137.476	158.835	138	93	160	1530	No. 25	@ 250	No. 12	@	100
2.5	8	200	240	140.770	161.778	141	112	163	780	No. 16	@ 250	No. 12	@	175
2.5	8	200	300	143.999	164.604	208	139	165	850	No. 20	@ 325	No. 12	@	450
2.5	8	200	400	150.247	169.953	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2.5	8	225	225	141.544	162.226	143	105	164	1030	No. 20	@ 250	No. 12	@	125
2.5	8	225	270	147.219	167.182	168	125	168	760	No. 16	@ 250	No. 12	@	225
2.5	8	225	338	155.382	174.108	264	153	175	950	No. 20	@ 250	No. 12	@	600
2.5	8	225	450	167.709	184.364	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	8	250	250	145.552	165.540	146	116	166	730	No. 16	@ 250	No. 12	@	175
2.5	8	250	300	151.623	170.772	208	139	171	850	No. 20	@ 325	No. 12	@	350
2.5	8	250	375	160.238	178.023	325	165	179	1060	No. 20	@ 250	OK FOR		SHEAR
2.5	8	250	500	173.284	188.866	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2.5	8	300	300	153.308	171.873	208	139	172	850	No. 20	@ 325	No. 12	@	350
2.5	8	300	360	160.069	177.596	299	160	179	1020	No. 20	@ 250	No. 12	@	725
2.5	8	300	450	169.555	185.515	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	8	300	600	183.703	197.333	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	8	350	350	160.683	177.812	283	157	179	990	No. 20	@ 250	No. 12	@	600
2.5	10	200	200	129.220	156.363	129	93	157	1290	No. 20	@ 200	No. 12	@	100
2.5	10	200	240	132.928	159.422	133	112	161	680	No. 16	@ 250	No. 12	@	175
2.5	10	200	300	136.547	162.350	208	139	163	850	No. 20	@ 325	No. 12	@	475
2.5	10	200	400	143.497	167.868	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2.5	10	225	225	133.634	159.870	134	105	161	880	No. 20	@ 325	No. 12	@	150
2.5	10	225	270	139.974	164.986	168	125	166	760	No. 16	@ 250	No. 12	@	250
2.5	10	225	338	148.993	172.096	264	153	173	950	No. 20	@ 250	No. 12	@	650
2.5	10	225	450	162.370	182.549	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	10	250	250	137.942	163.262	144	116	164	710	No. 16	@ 250	No. 12	@	200
2.5	10	250	300	144.688	168.641	208	139	169	850	No. 20	@ 325	No. 12	@	375
2.5	10	250	375	154.150	176.062	325	165	177	1060	No. 20	@ 250	OK FOR		SHEAR
2.5	10	250	500	168.216	187.092	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2.5	10	300	300	146.208	169.696	208	139	170	850	No. 20	@ 325	No. 12	@	375
2.5	10	300	360	153.657	175.559	299	160	177	1020	No. 20	@ 250	No. 12	@	825
2.5	10	300	450	163.976	183.640	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	10	300	600	179.075	195.637	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	10	350	350	154.003	175.709	283	157	177	990	No. 20	@ 250	No. 12	@	675
2.5	12	200	200	124.670	155.107	125	93	156	1180	No. 20	@ 250	No. 12	@	100
2.5	12	200	240	128.685	158.228	133	112	160	680	No. 16	@ 250	No. 12	@	175
2.5	12	200	300	132.579	161.209	208	139	162	850	No. 20	@ 325	No. 12	@	500
2.5	12	200	400	139.994	166.806	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2.5	12	225	225	129.325	158.658	129	105	160	810	No. 20	@ 325	No. 12	@	150
2.5	12	225	270	136.140	163.859	168	125	164	760	No. 16	@ 250	No. 12	@	250
2.5	12	225	338	145.720	171.063	264	153	172	950	No. 20	@ 250	No. 12	@	675
2.5	12	225	450	159.693	181.606	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	12	250	250	133.851	162.083	144	116	163	710	No. 16	@ 250	No. 12	@	200
2.5	12	250	300	141.072	167.545	208	139	168	850	No. 20	@ 325	No. 12	@	400
2.5	12	250	375	151.075	175.057	325	165	176	1060	No. 20	@ 250	OK FOR		SHEAR
2.5	12	250	500	165.703	186.177	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2.5	12	300	300	142.500	168.577	208	139	169	850	No. 20	@ 325	No. 12	@	375
2.5	12	300	360	150.413	174.524	299	160	176	1020	No. 20	@ 250	No. 12	@	875
2.5	12	300	450	161.232	182.694	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2.5	12	300	600	176.817	194.779	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	12	350	350	150.604	174.647	283	157	176	990	No. 20	@ 250	No. 12	@	700

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
3	6	200	200	228.570	202.443	229	93	204	7360	No. 32	@ 100	No. 12	@	50
3	6	200	240	232.025	205.874	232	112	207	2820	No. 32	@ 250	No. 12	@	75
3	6	200	300	235.333	209.080	235	139	210	1140	No. 20	@ 250	No. 12	@	150
3	6	200	400	241.595	214.979	369	173	216	1130	No. 20	@ 250	No. 12	@	350
3	6	225	225	232.984	205.768	233	105	207	3940	No. 32	@ 200	No. 12	@	75
3	6	225	270	238.877	211.500	239	125	212	1810	No. 25	@ 250	No. 12	@	100
3	6	225	338	247.122	219.208	264	153	221	950	No. 20	@ 250	No. 12	@	175
3	6	225	450	259.442	230.313	468	187	231	1270	No. 20	@ 200	No. 12	@	375
3	6	250	250	237.420	209.106	237	116	210	2490	No. 32	@ 250	No. 12	@	100
3	6	250	300	243.730	215.170	244	139	216	1240	No. 20	@ 250	No. 12	@	150
3	6	250	375	252.496	223.286	325	165	225	1060	No. 20	@ 250	No. 12	@	225
3	6	250	500	265.720	235.132	577	201	236	1410	No. 20	@ 200	No. 12	@	550
3	6	300	300	246.237	215.697	246	139	216	1270	No. 20	@ 200	No. 12	@	150
3	6	300	360	253.312	222.363	299	160	223	1020	No. 20	@ 250	No. 12	@	200
3	6	300	450	263.121	231.309	468	187	232	1270	No. 20	@ 200	No. 12	@	375
3	6	300	600	277.837	244.382	831	227	246	1690	No. 25	@ 250	OK FOR		SHEAR
3	6	350	350	254.875	222.080	283	157	223	990	No. 20	@ 250	No. 12	@	200
3	8	200	200	203.358	193.877	203	93	195	4830	No. 32	@ 150	No. 12	@	75
3	8	200	240	207.371	197.516	207	112	199	2070	No. 25	@ 200	No. 12	@	100
3	8	200	300	211.230	200.916	211	139	202	880	No. 20	@ 325	No. 12	@	175
3	8	200	400	218.560	207.173	369	173	209	1130	No. 20	@ 250	No. 12	@	425
3	8	225	225	208.330	197.487	208	105	199	2820	No. 32	@ 250	No. 12	@	75
3	8	225	270	215.176	203.532	215	125	204	1390	No. 20	@ 200	No. 12	@	125
3	8	225	338	224.784	211.652	264	153	213	950	No. 20	@ 250	No. 12	@	200
3	8	225	450	239.097	223.300	468	187	224	1270	No. 20	@ 200	No. 12	@	475
3	8	250	250	213.265	201.045	213	116	202	1860	No. 25	@ 250	No. 12	@	100
3	8	250	300	220.574	207.404	221	139	208	980	No. 20	@ 250	No. 12	@	150
3	8	250	375	230.736	215.901	325	165	217	1060	No. 20	@ 250	No. 12	@	275
3	8	250	500	245.980	228.247	577	201	229	1410	No. 20	@ 200	No. 12	@	675
3	8	300	300	222.920	207.925	223	139	209	1000	No. 20	@ 250	No. 12	@	150
3	8	300	360	231.054	214.846	299	160	216	1020	No. 20	@ 250	No. 12	@	250
3	8	300	450	242.306	224.123	468	187	225	1270	No. 20	@ 200	No. 12	@	450
3	8	300	600	259.037	237.635	831	227	239	1690	No. 25	@ 250	OK FOR		SHEAR
3	8	350	350	232.225	214.459	283	157	216	990	No. 20	@ 250	No. 12	@	225
3	10	200	200	190.392	190.290	190	93	191	3890	No. 32	@ 200	No. 12	@	75
3	10	200	240	194.879	194.069	195	112	196	1750	No. 25	@ 250	No. 12	@	100
3	10	200	300	199.193	197.598	208	139	198	850	No. 20	@ 325	No. 12	@	175
3	10	200	400	207.370	204.074	369	173	205	1130	No. 20	@ 250	No. 12	@	475
3	10	225	225	195.786	194.058	196	105	196	2360	No. 32	@ 325	No. 12	@	75
3	10	225	270	203.408	200.303	203	125	201	1200	No. 20	@ 250	No. 12	@	125
3	10	225	338	214.067	208.667	264	153	210	950	No. 20	@ 250	No. 12	@	225
3	10	225	450	229.782	220.601	468	187	221	1270	No. 20	@ 200	No. 12	@	500
3	10	250	250	201.085	197.727	201	116	199	1600	No. 25	@ 250	No. 12	@	100
3	10	250	300	209.191	204.269	209	139	205	860	No. 20	@ 325	No. 12	@	175
3	10	250	375	220.407	212.990	325	165	214	1060	No. 20	@ 250	No. 12	@	275
3	10	250	500	237.037	225.603	577	201	226	1410	No. 20	@ 200	No. 12	@	775
3	10	300	300	211.343	204.741	211	139	205	880	No. 20	@ 325	No. 12	@	175
3	10	300	360	220.304	211.829	299	160	213	1020	No. 20	@ 250	No. 12	@	250
3	10	300	450	232.617	221.311	468	187	222	1270	No. 20	@ 200	No. 12	@	500
3	10	300	600	250.686	235.075	831	227	237	1690	No. 25	@ 250	OK FOR		SHEAR
3	10	350	350	221.131	211.351	283	157	213	990	No. 20	@ 250	No. 12	@	225
3	12	200	200	183.020	188.475	183	93	190	3440	No. 32	@ 200	No. 12	@	75
3	12	200	240	187.884	192.339	188	112	194	1590	No. 25	@ 250	No. 12	@	100
3	12	200	300	192.550	195.941	208	139	197	850	No. 20	@ 325	No. 12	@	200
3	12	200	400	201.352	202.539	369	173	204	1130	No. 20	@ 250	No. 12	@	500
3	12	225	225	188.722	192.319	189	105	194	2130	No. 25	@ 200	No. 12	@	75
3	12	225	270	196.947	198.681	197	125	199	1110	No. 20	@ 250	No. 12	@	125
3	12	225	338	208.369	207.182	264	153	209	950	No. 20	@ 250	No. 12	@	225
3	12	225	450	224.993	219.262	468	187	220	1270	No. 20	@ 200	No. 12	@	525
3	12	250	250	194.292	196.041	194	116	197	1460	No. 25	@ 325	No. 12	@	100
3	12	250	300	203.009	202.694	208	139	203	850	No. 20	@ 325	No. 12	@	175
3	12	250	375	214.976	211.544	325	165	213	1060	No. 20	@ 250	No. 12	@	300
3	12	250	500	232.485	224.297	577	201	225	1410	No. 20	@ 200	No. 12	@	800
3	12	300	300	205.013	203.129	208	139	204	850	No. 20	@ 325	No. 12	@	175
3	12	300	360	214.591	210.325	299	160	211	1020	No. 20	@ 250	No. 12	@	275
3	12	300	450	227.631	219.933	468	187	220	1270	No. 20	@ 200	No. 12	@	525
3	12	300	600	246.508	233.834	831	227	235	1690	No. 25	@ 250	OK FOR		SHEAR
3	12	350	350	215.172	209.797	283	157	211	990	No. 20	@ 250	No. 12	@	250

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
3.75	8	200	200	293.062	172.825	294	93	174	26000	No. 32	@ 25	No. 12	@	75
3.75	8	200	240	298.568	177.525	299	112	179	6200	No. 32	@ 125	No. 12	@	125
3.75	8	200	300	303.823	181.905	304	139	183	2180	No. 25	@ 200	No. 12	@	250
3.75	8	200	400	313.711	189.917	369	173	191	1130	No. 20	@ 250	No. 12	@	850
3.75	8	225	225	300.007	177.173	301	105	179	9700	No. 32	@ 75	No. 12	@	100
3.75	8	225	270	309.349	184.964	310	125	186	3700	No. 32	@ 200	No. 12	@	150
3.75	8	225	338	322.319	195.365	323	153	197	1550	No. 25	@ 250	No. 12	@	300
3.75	8	225	450	341.475	210.137	468	187	211	1270	No. 20	@ 200	No. 12	@	725
3.75	8	250	250	306.941	181.494	307	116	182	5400	No. 32	@ 150	No. 12	@	125
3.75	8	250	300	316.902	189.683	317	139	190	2430	No. 32	@ 250	No. 12	@	225
3.75	8	250	375	330.633	200.564	331	165	202	1100	No. 20	@ 250	No. 12	@	375
3.75	8	250	500	351.118	216.228	577	201	217	1410	No. 20	@ 200	OK FOR		SHEAR
3.75	8	300	300	320.631	189.928	321	139	191	2510	No. 32	@ 250	No. 12	@	225
3.75	8	300	360	331.720	198.833	332	160	200	1300	No. 20	@ 200	No. 12	@	350
3.75	8	300	450	346.983	210.701	468	187	211	1270	No. 20	@ 200	No. 12	@	725
3.75	8	300	600	369.664	227.841	831	227	229	1690	No. 25	@ 250	OK FOR		SHEAR
3.75	8	350	350	333.977	198.011	335	157	199	1480	No. 25	@ 250	No. 12	@	325
3.75	10	200	200	270.596	167.256	271	93	168	15650	No. 32	@ 50	No. 12	@	100
3.75	10	200	240	276.803	172.184	277	112	174	4800	No. 32	@ 150	No. 12	@	150
3.75	10	200	300	282.737	176.775	283	139	177	1800	No. 25	@ 250	No. 12	@	300
3.75	10	200	400	293.914	185.164	369	173	187	1130	No. 20	@ 250	OK FOR		SHEAR
3.75	10	225	225	278.172	171.873	279	105	173	7200	No. 32	@ 100	No. 12	@	125
3.75	10	225	270	288.686	180.002	289	125	181	3030	No. 32	@ 250	No. 12	@	175
3.75	10	225	338	303.284	190.834	304	153	192	1340	No. 20	@ 200	No. 12	@	325
3.75	10	225	450	324.746	206.157	468	187	207	1270	No. 20	@ 200	No. 12	@	875
3.75	10	250	250	285.665	176.396	286	116	177	4300	No. 32	@ 150	No. 12	@	150
3.75	10	250	300	296.840	184.901	297	139	185	2050	No. 25	@ 200	No. 12	@	250
3.75	10	250	375	312.227	196.181	325	165	197	1060	No. 20	@ 250	No. 12	@	450
3.75	10	250	500	335.036	212.360	577	201	213	1410	No. 20	@ 200	OK FOR		SHEAR
3.75	10	300	300	300.285	185.086	302	139	186	2130	No. 25	@ 200	No. 12	@	225
3.75	10	300	360	312.647	194.271	313	160	195	1130	No. 20	@ 250	No. 12	@	400
3.75	10	300	450	329.604	206.497	468	187	207	1270	No. 20	@ 200	No. 12	@	875
3.75	10	300	600	354.589	224.105	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
3.75	10	350	350	314.367	193.306	315	157	195	1280	No. 20	@ 200	No. 12	@	350
3.75	12	200	200	257.378	164.372	258	93	165	12350	No. 32	@ 50	No. 12	@	100
3.75	12	200	240	264.187	169.456	265	112	171	4200	No. 32	@ 150	No. 12	@	150
3.75	12	200	300	270.695	174.187	271	139	175	1620	No. 25	@ 250	No. 12	@	325
3.75	12	200	400	282.932	182.815	370	173	184	1130	No. 20	@ 250	OK FOR		SHEAR
3.75	12	225	225	265.458	169.148	269	105	171	6350	No. 32	@ 125	No. 12	@	125
3.75	12	225	270	276.955	177.498	277	125	178	2700	No. 32	@ 250	No. 12	@	175
3.75	12	225	338	292.870	188.600	293	153	190	1230	No. 20	@ 250	No. 12	@	350
3.75	12	225	450	316.074	204.242	473	187	205	1300	No. 20	@ 200	No. 12	@	975
3.75	12	250	250	273.389	173.782	274	116	175	3750	No. 32	@ 200	No. 12	@	150
3.75	12	250	300	285.573	182.493	286	139	183	1850	No. 25	@ 250	No. 12	@	250
3.75	12	250	375	302.280	194.024	331	165	195	1100	No. 20	@ 250	No. 12	@	475
3.75	12	250	500	326.817	210.505	581	201	211	1430	No. 25	@ 325	OK FOR		SHEAR
3.75	12	300	300	288.739	182.612	289	139	183	1900	No. 25	@ 250	No. 12	@	250
3.75	12	300	360	302.142	191.986	304	160	193	1050	No. 20	@ 250	No. 12	@	425
3.75	12	300	450	320.426	204.448	470	187	205	1280	No. 20	@ 200	No. 12	@	975
3.75	12	300	600	347.080	222.346	835	227	228	1700	No. 25	@ 250	OK FOR		SHEAR
3.75	12	350	350	303.396	190.911	305	157	192	1180	No. 20	@ 250	No. 12	@	375

F5. Concrete Curb

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1	3	200	200	62.683	164.154	92	93	165	570	No. 16	@ 325	No. 12	@	100
1	3	200	240	64.422	168.108	133	112	170	680	No. 16	@ 250	No. 12	@	150
1	3	200	300	66.044	171.705	208	139	172	850	No. 20	@ 325	No. 12	@	350
1	3	200	400	68.971	178.065	369	173	179	1130	No. 20	@ 250	OK FOR		SHEAR
1	3	225	225	64.068	167.897	117	105	169	640	No. 16	@ 250	No. 12	@	125
1	3	225	270	66.880	174.114	168	125	175	760	No. 16	@ 250	No. 12	@	200
1	3	225	338	70.539	181.905	264	153	183	950	No. 20	@ 250	No. 12	@	425
1	3	225	450	75.360	191.819	468	187	192	1270	No. 20	@ 200	OK FOR		SHEAR
1	3	250	250	65.354	171.330	144	116	172	710	No. 16	@ 250	No. 12	@	150
1	3	250	300	68.224	177.524	208	139	178	850	No. 20	@ 325	No. 12	@	300
1	3	250	375	71.899	185.220	325	165	186	1060	No. 20	@ 250	No. 12	@	675
1	3	250	500	76.749	195.064	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	3	300	300	67.616	177.197	208	139	178	850	No. 20	@ 325	No. 12	@	300
1	3	300	360	70.547	183.321	299	160	184	1020	No. 20	@ 250	No. 12	@	575
1	3	300	450	74.259	190.828	468	187	191	1270	No. 20	@ 200	OK FOR		SHEAR
1	3	300	600	79.094	200.437	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	3	350	350	69.510	181.945	283	157	183	990	No. 20	@ 250	No. 12	@	525
1	4.5	200	200	57.650	160.798	92	93	162	570	No. 16	@ 325	No. 12	@	100
1	4.5	200	240	59.819	165.061	133	112	167	680	No. 16	@ 250	No. 12	@	150
1	4.5	200	300	61.818	168.944	208	139	170	850	No. 20	@ 325	No. 12	@	375
1	4.5	200	400	65.372	175.637	369	173	177	1130	No. 20	@ 250	OK FOR		SHEAR
1	4.5	225	225	59.276	164.755	117	105	166	640	No. 16	@ 250	No. 12	@	125
1	4.5	225	270	62.731	171.377	168	125	172	760	No. 16	@ 250	No. 12	@	200
1	4.5	225	338	67.152	179.595	264	153	181	950	No. 20	@ 250	No. 12	@	450
1	4.5	225	450	72.860	190.033	468	187	191	1270	No. 20	@ 200	OK FOR		SHEAR
1	4.5	250	250	60.753	168.307	144	116	169	710	No. 16	@ 250	No. 12	@	175
1	4.5	250	300	64.262	174.882	208	139	175	850	No. 20	@ 325	No. 12	@	325
1	4.5	250	375	68.697	183.006	325	165	184	1060	No. 20	@ 250	No. 12	@	750
1	4.5	250	500	74.441	193.421	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	4.5	300	300	63.337	174.293	208	139	175	850	No. 20	@ 325	No. 12	@	325
1	4.5	300	360	66.927	180.797	299	160	182	1020	No. 20	@ 250	No. 12	@	625
1	4.5	300	450	71.412	188.852	468	187	189	1270	No. 20	@ 200	OK FOR		SHEAR
1	4.5	300	600	77.137	199.103	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	4.5	350	350	65.526	179.183	283	157	181	990	No. 20	@ 250	No. 12	@	550
1	6	200	200	55.721	159.632	92	93	161	570	No. 16	@ 325	No. 12	@	100
1	6	200	240	58.085	163.990	133	112	165	680	No. 16	@ 250	No. 12	@	175
1	6	200	300	60.254	167.920	208	139	169	850	No. 20	@ 325	No. 12	@	375
1	6	200	400	64.098	174.780	369	173	176	1130	No. 20	@ 250	OK FOR		SHEAR
1	6	225	225	57.456	163.612	117	105	165	640	No. 16	@ 250	No. 12	@	125
1	6	225	270	61.230	170.401	168	125	171	760	No. 16	@ 250	No. 12	@	225
1	6	225	338	66.026	178.834	264	153	180	950	No. 20	@ 250	No. 12	@	475
1	6	225	450	72.149	189.533	468	187	190	1270	No. 20	@ 200	OK FOR		SHEAR
1	6	250	250	59.062	167.212	144	116	168	710	No. 16	@ 250	No. 12	@	175
1	6	250	300	62.907	173.977	208	139	175	850	No. 20	@ 325	No. 12	@	325
1	6	250	375	67.718	182.363	325	165	184	1060	No. 20	@ 250	No. 12	@	750
1	6	250	500	73.863	193.041	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	6	300	300	61.928	173.412	208	139	174	850	No. 20	@ 325	No. 12	@	325
1	6	300	360	65.857	180.154	299	160	181	1020	No. 20	@ 250	No. 12	@	650
1	6	300	450	70.698	188.423	468	187	189	1270	No. 20	@ 200	OK FOR		SHEAR
1	6	300	600	76.754	198.889	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	6	350	350	64.373	178.517	283	157	180	990	No. 20	@ 250	No. 12	@	575

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1	8	200	200	54.550	158.894	92	93	160	570	No. 16	@ 325	No. 12	@	100
1	8	200	240	57.077	163.347	133	112	165	680	No. 16	@ 250	No. 12	@	175
1	8	200	300	59.390	167.349	208	139	168	850	No. 20	@ 325	No. 12	@	400
1	8	200	400	63.460	174.352	369	173	176	1130	No. 20	@ 250	OK FOR		SHEAR
1	8	225	225	56.452	162.993	117	105	164	640	No. 16	@ 250	No. 12	@	125
1	8	225	270	60.481	169.901	168	125	170	760	No. 16	@ 250	No. 12	@	225
1	8	225	338	65.541	178.524	264	153	180	950	No. 20	@ 250	No. 12	@	475
1	8	225	450	71.905	189.390	468	187	190	1270	No. 20	@ 200	OK FOR		SHEAR
1	8	250	250	58.222	166.712	144	116	168	710	No. 16	@ 250	No. 12	@	175
1	8	250	300	62.307	173.644	208	139	174	850	No. 20	@ 325	No. 12	@	325
1	8	250	375	67.352	182.149	325	165	183	1060	No. 20	@ 250	No. 12	@	800
1	8	250	500	73.691	192.945	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	8	300	300	61.356	173.102	208	139	174	850	No. 20	@ 325	No. 12	@	325
1	8	300	360	65.481	179.964	299	160	181	1020	No. 20	@ 250	No. 12	@	650
1	8	300	450	70.488	188.304	468	187	189	1270	No. 20	@ 200	OK FOR		SHEAR
1	8	300	600	76.666	198.841	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	8	350	350	63.985	178.326	283	157	180	990	No. 20	@ 250	No. 12	@	575
1	10	200	200	54.082	158.656	92	93	160	570	No. 16	@ 325	No. 12	@	100
1	10	200	240	56.707	163.157	133	112	165	680	No. 16	@ 250	No. 12	@	175
1	10	200	300	59.095	167.206	208	139	168	850	No. 20	@ 325	No. 12	@	400
1	10	200	400	63.273	174.257	369	173	176	1130	No. 20	@ 250	OK FOR		SHEAR
1	10	225	225	56.103	162.827	117	105	164	640	No. 16	@ 250	No. 12	@	125
1	10	225	270	60.254	169.805	168	125	170	760	No. 16	@ 250	No. 12	@	225
1	10	225	338	65.421	178.477	264	153	180	950	No. 20	@ 250	No. 12	@	475
1	10	225	450	71.859	189.390	468	187	190	1270	No. 20	@ 200	OK FOR		SHEAR
1	10	250	250	57.967	166.593	144	116	167	710	No. 16	@ 250	No. 12	@	175
1	10	250	300	62.151	173.572	208	139	174	850	No. 20	@ 325	No. 12	@	325
1	10	250	375	67.273	182.125	325	165	183	1060	No. 20	@ 250	No. 12	@	800
1	10	250	500	73.663	192.921	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	10	300	300	61.221	173.055	208	139	174	850	No. 20	@ 325	No. 12	@	325
1	10	300	360	65.405	179.940	299	160	181	1020	No. 20	@ 250	No. 12	@	650
1	10	300	450	70.454	188.304	468	187	189	1270	No. 20	@ 200	OK FOR		SHEAR
1	10	300	600	76.653	198.841	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	10	350	350	63.909	178.302	283	157	180	990	No. 20	@ 250	No. 12	@	575
1	12	200	200	53.903	158.561	92	93	160	570	No. 16	@ 325	No. 12	@	100
1	12	200	240	56.576	163.109	133	112	165	680	No. 16	@ 250	No. 12	@	175
1	12	200	300	59.000	167.182	208	139	168	850	No. 20	@ 325	No. 12	@	400
1	12	200	400	63.220	174.257	369	173	176	1130	No. 20	@ 250	OK FOR		SHEAR
1	12	225	225	55.988	162.779	117	105	164	640	No. 16	@ 250	No. 12	@	125
1	12	225	270	60.190	169.805	168	125	170	760	No. 16	@ 250	No. 12	@	225
1	12	225	338	65.393	178.477	264	153	180	950	No. 20	@ 250	No. 12	@	475
1	12	225	450	71.850	189.390	468	187	190	1270	No. 20	@ 200	OK FOR		SHEAR
1	12	250	250	57.891	166.593	144	116	167	710	No. 16	@ 250	No. 12	@	175
1	12	250	300	62.112	173.572	208	139	174	850	No. 20	@ 325	No. 12	@	325
1	12	250	375	67.258	182.101	325	165	183	1060	No. 20	@ 250	No. 12	@	800
1	12	250	500	73.658	192.921	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1	12	300	300	61.187	173.055	208	139	174	850	No. 20	@ 325	No. 12	@	325
1	12	300	360	65.389	179.940	299	160	181	1020	No. 20	@ 250	No. 12	@	650
1	12	300	450	70.447	188.304	468	187	189	1270	No. 20	@ 200	OK FOR		SHEAR
1	12	300	600	76.650	198.841	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	12	350	350	63.892	178.302	283	157	180	990	No. 20	@ 250	No. 12	@	575

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1.5	3	200	200	120.821	127.805	122	93	129	1100	No. 20	@ 250	No. 12	@	200
1.5	3	200	240	123.031	131.570	133	112	133	680	No. 16	@ 250	No. 12	@	425
1.5	3	200	300	125.152	135.097	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	3	200	400	129.130	141.603	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	3	225	225	122.913	131.503	124	105	133	730	No. 16	@ 250	No. 12	@	300
1.5	3	225	270	126.616	137.676	168	125	138	760	No. 16	@ 250	No. 12	@	800
1.5	3	225	338	131.707	145.947	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	3	225	450	138.896	157.295	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	3	250	250	124.946	135.083	144	116	136	710	No. 16	@ 250	No. 12	@	475
1.5	3	250	300	128.817	141.446	208	139	142	850	No. 20	@ 325	OK FOR		SHEAR
1.5	3	250	375	134.048	149.837	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	3	250	500	141.428	161.403	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	3	300	300	128.716	141.575	208	139	142	850	No. 20	@ 325	OK FOR		SHEAR
1.5	3	300	360	132.817	148.202	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	3	300	450	138.273	156.786	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	3	300	600	145.834	168.475	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	3	350	350	132.051	147.210	287	157	158	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	200	200	97.110	118.069	92	93	119	570	No. 16	@ 325	No. 12	@	300
1.5	4.5	200	240	100.170	122.501	133	112	124	680	No. 16	@ 250	No. 12	@	775
1.5	4.5	200	300	103.083	126.599	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	200	400	108.480	134.081	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	225	225	99.886	122.481	117	105	124	640	No. 16	@ 250	No. 12	@	450
1.5	4.5	225	270	104.905	129.558	168	125	130	760	No. 16	@ 250	OK FOR		SHEAR
1.5	4.5	225	338	111.686	138.852	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	225	450	121.029	151.414	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	250	250	102.447	126.536	144	116	127	710	No. 16	@ 250	No. 12	@	875
1.5	4.5	250	300	107.610	133.685	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	250	375	114.478	142.980	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	250	500	123.967	155.687	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	300	300	106.948	133.480	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	300	360	112.313	140.702	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	300	450	119.366	150.119	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	300	600	128.999	162.949	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	4.5	350	350	110.761	139.186	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	6	200	200	88.584	115.546	92	93	117	570	No. 16	@ 325	No. 12	@	325
1.5	6	200	240	92.112	120.168	133	112	122	680	No. 16	@ 250	No. 12	@	925
1.5	6	200	300	95.439	124.456	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	200	400	101.537	132.176	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	6	225	225	91.603	120.053	117	105	122	640	No. 16	@ 250	No. 12	@	500
1.5	6	225	270	97.334	127.368	168	125	128	760	No. 16	@ 250	OK FOR		SHEAR
1.5	6	225	338	104.977	136.971	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	6	225	450	115.366	149.962	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	6	250	250	94.360	124.108	144	116	125	710	No. 16	@ 250	OK FOR		SHEAR
1.5	6	250	300	100.245	131.519	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	250	375	107.990	141.171	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	6	250	500	118.555	154.354	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	6	300	300	99.224	131.123	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	300	360	105.352	138.702	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	6	300	450	113.333	148.547	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	6	300	600	124.058	161.901	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	6	350	350	103.390	136.972	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1.5	8	200	200	83.558	114.094	92	93	115	570	No. 16	@ 325	No. 12	@	350
1.5	8	200	240	87.425	118.787	133	112	120	680	No. 16	@ 250	OK FOR		SHEAR
1.5	8	200	300	91.055	123.147	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	8	200	400	97.665	131.033	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	8	225	225	86.775	118.625	117	105	120	640	No. 16	@ 250	No. 12	@	575
1.5	8	225	270	93.070	126.106	168	125	127	760	No. 16	@ 250	OK FOR		SHEAR
1.5	8	225	338	101.388	135.971	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	8	225	450	112.539	149.295	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	8	250	250	89.766	122.727	144	116	124	710	No. 16	@ 250	OK FOR		SHEAR
1.5	8	250	300	96.246	130.376	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	8	250	375	104.681	140.314	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	8	250	500	115.985	153.854	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	8	300	300	95.131	129.980	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	8	300	360	101.879	137.821	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	8	300	450	110.520	147.952	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	8	300	600	121.870	161.639	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	8	350	350	99.751	136.091	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	10	200	200	81.126	113.309	92	93	114	570	No. 16	@ 325	No. 12	@	350
1.5	10	200	240	85.224	118.097	133	112	120	680	No. 16	@ 250	OK FOR		SHEAR
1.5	10	200	300	89.056	122.552	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	10	200	400	95.997	130.581	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	10	225	225	84.580	117.935	117	105	119	640	No. 16	@ 250	No. 12	@	625
1.5	10	225	270	91.243	125.582	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
1.5	10	225	338	99.958	135.638	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	10	225	450	111.476	149.152	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	10	250	250	87.812	122.180	144	116	123	710	No. 16	@ 250	OK FOR		SHEAR
1.5	10	250	300	94.649	129.995	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	10	250	375	103.442	140.075	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	10	250	500	115.043	153.735	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	10	300	300	93.580	129.623	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	10	300	360	100.634	137.607	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	10	300	450	109.536	147.833	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	10	300	600	121.063	161.592	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	10	350	350	98.481	135.876	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	12	200	200	79.908	112.951	92	93	114	570	No. 16	@ 325	No. 12	@	350
1.5	12	200	240	84.171	117.811	133	112	119	680	No. 16	@ 250	OK FOR		SHEAR
1.5	12	200	300	88.141	122.290	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	12	200	400	95.281	130.415	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	12	225	225	83.573	117.673	117	105	119	640	No. 16	@ 250	No. 12	@	625
1.5	12	225	270	90.462	125.439	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
1.5	12	225	338	99.381	135.543	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
1.5	12	225	450	111.047	149.105	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	12	250	250	86.976	122.013	144	116	123	710	No. 16	@ 250	OK FOR		SHEAR
1.5	12	250	300	94.007	129.876	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	12	250	375	102.956	140.004	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	12	250	500	114.656	153.735	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	12	300	300	92.980	129.551	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
1.5	12	300	360	100.159	137.559	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	12	300	450	109.146	147.833	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	12	300	600	120.708	161.568	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	12	350	350	98.009	135.829	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2	3	200	200	172.307	127.310	173	93	128	2900	No. 32	@ 250	No. 12	@	200
2	3	200	240	174.259	130.542	175	112	132	1330	No. 20	@ 200	No. 12	@	450
2	3	200	300	176.154	133.643	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	3	200	400	179.783	139.523	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	3	225	225	174.738	130.887	175	105	132	1730	No. 25	@ 250	No. 12	@	325
2	3	225	270	178.081	136.380	179	125	137	880	No. 20	@ 325	No. 12	@	875
2	3	225	338	182.816	143.967	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	3	225	450	189.819	154.939	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	3	250	250	177.146	134.405	178	116	135	1180	No. 20	@ 250	No. 12	@	500
2	3	250	300	180.714	140.208	208	139	141	850	No. 20	@ 325	OK FOR		SHEAR
2	3	250	375	185.688	148.118	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	3	250	500	193.058	159.581	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	3	300	300	181.798	141.101	208	139	142	850	No. 20	@ 325	OK FOR		SHEAR
2	3	300	360	185.724	147.347	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	3	300	450	191.127	155.796	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	3	300	600	199.013	167.824	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	3	350	350	186.149	147.125	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
2	4.5	200	200	131.967	104.977	132	93	106	1350	No. 20	@ 200	No. 12	@	600
2	4.5	200	240	134.806	108.757	135	112	113	700	No. 16	@ 250	OK FOR		SHEAR
2	4.5	200	300	137.570	112.357	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	200	400	142.846	119.114	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	4.5	225	225	135.281	109.397	137	105	111	930	No. 20	@ 325	OK FOR		SHEAR
2	4.5	225	270	140.090	115.595	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
2	4.5	225	338	146.849	124.177	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	4.5	225	450	156.667	136.344	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	4.5	250	250	138.439	113.506	144	116	117	710	No. 16	@ 250	OK FOR		SHEAR
2	4.5	250	300	143.485	119.952	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	250	375	150.454	128.649	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	4.5	250	500	160.577	141.148	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	4.5	300	300	144.210	120.897	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	300	360	149.603	127.579	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	4.5	300	450	156.937	136.605	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	4.5	300	600	167.453	149.465	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	4.5	350	350	149.307	127.172	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
2	6	200	200	116.118	99.175	104	93	100	750	No. 16	@ 250	OK FOR		SHEAR
2	6	200	240	119.660	103.230	133	112	113	680	No. 16	@ 250	OK FOR		SHEAR
2	6	200	300	123.076	107.107	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	200	400	129.513	114.270	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	6	225	225	119.931	103.796	120	105	106	680	No. 16	@ 250	OK FOR		SHEAR
2	6	225	270	125.818	110.432	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
2	6	225	338	133.966	119.433	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	6	225	450	145.575	132.145	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	6	250	250	123.462	108.058	144	116	117	710	No. 16	@ 250	OK FOR		SHEAR
2	6	250	300	129.573	114.838	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	250	375	137.906	123.956	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	6	250	500	149.825	137.004	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	6	300	300	129.760	115.457	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	300	360	136.220	122.474	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	6	300	450	144.942	131.921	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	6	300	600	157.290	145.459	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	6	350	350	135.238	121.700	288	157	158	1030	No. 20	@ 250	OK FOR		SHEAR

									Summary				
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.	
2	8	200	200	106.814	96.412	107	93	97	800	No. 16	@ 250	OK FOR	SHEAR
2	8	200	240	110.923	100.631	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
2	8	200	300	114.853	104.595	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	8	200	400	122.177	111.934	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
2	8	225	225	110.920	101.072	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
2	8	225	270	117.700	107.858	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
2	8	225	338	126.971	117.131	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
2	8	225	450	139.989	130.258	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	8	250	250	114.715	105.320	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
2	8	250	300	121.753	112.329	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	8	250	375	131.247	121.742	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
2	8	250	500	144.620	135.253	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
2	8	300	300	121.535	112.774	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	8	300	360	128.997	120.122	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
2	8	300	450	138.945	129.994	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	8	300	600	152.745	144.021	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
2	8	350	350	127.509	119.180	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR
2	10	200	200	102.273	95.089	103	93	96	730	No. 16	@ 250	OK FOR	SHEAR
2	10	200	240	106.740	99.352	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
2	10	200	300	110.990	103.384	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	10	200	400	118.871	110.890	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
2	10	225	225	106.618	99.766	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
2	10	225	270	113.998	106.721	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
2	10	225	338	123.994	116.182	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
2	10	225	450	137.842	129.568	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	10	250	250	110.682	104.087	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
2	10	250	300	118.351	111.260	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	10	250	375	128.580	120.940	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
2	10	250	500	142.751	134.686	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
2	10	300	300	118.043	111.735	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	10	300	360	126.153	119.275	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
2	10	300	450	136.799	129.387	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	10	300	600	151.270	143.622	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
2	10	350	350	124.475	118.338	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR
2	12	200	200	99.750	94.263	100	93	95	680	No. 16	@ 250	OK FOR	SHEAR
2	12	200	240	104.482	98.593	133	112	113	680	No. 16	@ 250	OK FOR	SHEAR
2	12	200	300	108.968	102.697	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	12	200	400	117.238	110.293	369	173	174	1130	No. 20	@ 250	OK FOR	SHEAR
2	12	225	225	104.363	99.035	117	105	106	640	No. 16	@ 250	OK FOR	SHEAR
2	12	225	270	112.170	106.105	168	125	126	760	No. 16	@ 250	OK FOR	SHEAR
2	12	225	338	122.639	115.704	264	153	154	950	No. 20	@ 250	OK FOR	SHEAR
2	12	225	450	136.950	129.223	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	12	250	250	108.692	103.428	144	116	117	710	No. 16	@ 250	OK FOR	SHEAR
2	12	250	300	116.783	110.743	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	12	250	375	127.446	120.534	325	165	166	1060	No. 20	@ 250	OK FOR	SHEAR
2	12	250	500	142.005	134.386	577	201	202	1410	No. 20	@ 200	OK FOR	SHEAR
2	12	300	300	116.499	111.294	208	139	140	850	No. 20	@ 325	OK FOR	SHEAR
2	12	300	360	124.981	118.925	299	160	161	1020	No. 20	@ 250	OK FOR	SHEAR
2	12	300	450	135.968	129.097	468	187	188	1270	No. 20	@ 200	OK FOR	SHEAR
2	12	300	600	150.696	143.364	831	227	228	1690	No. 25	@ 250	OK FOR	SHEAR
2	12	350	350	123.244	117.968	283	157	158	990	No. 20	@ 250	OK FOR	SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2.5	3	200	200	257.796	251.728	258	93	253	12250	No. 32	@ 50	No. 12	@	25
2.5	3	200	240	259.928	254.689	306	112	256	6750	No. 32	@ 100	No. 12	@	50
2.5	3	200	300	261.971	257.496	262	139	258	1480	No. 25	@ 250	No. 12	@	75
2.5	3	200	400	265.830	262.714	373	173	264	1150	No. 20	@ 250	No. 12	@	150
2.5	3	225	225	260.762	254.844	261	105	256	5700	No. 32	@ 125	No. 12	@	50
2.5	3	225	270	264.400	259.851	266	125	260	2400	No. 32	@ 325	No. 12	@	75
2.5	3	225	338	269.477	266.676	270	153	268	1000	No. 20	@ 250	No. 12	@	100
2.5	3	225	450	276.989	276.526	473	187	277	1300	No. 20	@ 200	No. 12	@	175
2.5	3	250	250	263.721	257.979	265	116	259	3400	No. 32	@ 200	No. 12	@	50
2.5	3	250	300	280.547	288.216	281	139	289	1780	No. 25	@ 250	No. 12	@	75
2.5	3	250	375	272.998	270.484	331	165	272	1100	No. 20	@ 250	No. 12	@	125
2.5	3	250	500	281.036	280.944	585	201	282	1450	No. 25	@ 325	No. 12	@	225
2.5	3	300	300	269.546	264.032	270	139	265	1600	No. 25	@ 250	No. 12	@	75
2.5	3	300	360	273.895	269.899	304	160	271	1050	No. 20	@ 250	No. 12	@	125
2.5	3	300	450	279.885	277.801	473	187	278	1300	No. 20	@ 200	No. 12	@	175
2.5	3	300	600	288.780	289.217	835	227	291	1700	No. 25	@ 250	No. 12	@	350
2.5	3	350	350	275.175	269.743	285	157	271	1000	No. 20	@ 250	No. 12	@	100
2.5	4.5	200	200	195.779	207.479	196	93	209	4260	No. 32	@ 150	No. 12	@	50
2.5	4.5	200	240	198.550	210.461	199	112	212	1840	No. 25	@ 250	No. 12	@	75
2.5	4.5	200	300	201.233	213.302	208	139	214	850	No. 20	@ 325	No. 12	@	150
2.5	4.5	200	400	206.356	218.602	369	173	220	1130	No. 20	@ 250	No. 12	@	325
2.5	4.5	225	225	199.536	211.084	200	105	213	2490	No. 32	@ 250	No. 12	@	75
2.5	4.5	225	270	204.276	216.091	204	125	217	1220	No. 20	@ 250	No. 12	@	100
2.5	4.5	225	338	210.942	222.952	264	153	224	950	No. 20	@ 250	No. 12	@	175
2.5	4.5	225	450	220.781	232.898	468	187	233	1270	No. 20	@ 200	No. 12	@	375
2.5	4.5	250	250	203.199	214.573	203	116	215	1640	No. 25	@ 250	No. 12	@	75
2.5	4.5	250	300	219.712	241.879	220	139	242	970	No. 20	@ 250	No. 12	@	100
2.5	4.5	250	375	215.215	226.966	325	165	228	1060	No. 20	@ 250	No. 12	@	225
2.5	4.5	250	500	225.539	237.367	577	201	238	1410	No. 20	@ 200	No. 12	@	525
2.5	4.5	300	300	210.145	221.057	210	139	222	870	No. 20	@ 325	No. 12	@	125
2.5	4.5	300	360	215.650	226.733	299	160	228	1020	No. 20	@ 250	No. 12	@	200
2.5	4.5	300	450	223.197	234.402	468	187	235	1270	No. 20	@ 200	No. 12	@	350
2.5	4.5	300	600	234.243	245.471	831	227	247	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	4.5	350	350	216.559	226.917	283	157	228	990	No. 20	@ 250	No. 12	@	175
2.5	6	200	200	169.652	196.709	170	93	198	2750	No. 32	@ 250	No. 12	@	50
2.5	6	200	240	173.075	199.916	174	112	201	1300	No. 20	@ 200	No. 12	@	100
2.5	6	200	300	176.381	202.934	208	139	204	850	No. 20	@ 325	No. 12	@	175
2.5	6	200	400	182.654	208.564	369	173	210	1130	No. 20	@ 250	No. 12	@	400
2.5	6	225	225	173.978	200.562	174	105	202	1700	No. 25	@ 250	No. 12	@	75
2.5	6	225	270	179.746	205.834	181	125	206	900	No. 20	@ 325	No. 12	@	125
2.5	6	225	338	187.789	213.011	264	153	214	950	No. 20	@ 250	No. 12	@	200
2.5	6	225	450	199.483	223.335	468	187	224	1270	No. 20	@ 200	No. 12	@	475
2.5	6	250	250	178.084	204.173	179	116	205	1190	No. 20	@ 250	No. 12	@	100
2.5	6	250	300	194.966	231.019	208	139	232	850	No. 20	@ 325	No. 12	@	125
2.5	6	250	375	192.451	217.044	325	165	218	1060	No. 20	@ 250	No. 12	@	275
2.5	6	250	500	204.593	227.786	577	201	228	1410	No. 20	@ 200	No. 12	@	700
2.5	6	300	300	185.629	210.715	208	139	211	850	No. 20	@ 325	No. 12	@	150
2.5	6	300	360	192.126	216.515	299	160	218	1020	No. 20	@ 250	No. 12	@	225
2.5	6	300	450	200.976	224.360	468	187	225	1270	No. 20	@ 200	No. 12	@	450
2.5	6	300	600	213.809	235.813	831	227	237	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	6	350	350	192.420	216.482	283	157	218	990	No. 20	@ 250	No. 12	@	200

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2.5	8	200	200	153.979	192.208	154	93	193	2050	No. 25	@ 200	No. 12	@	75
2.5	8	200	240	158.031	195.517	159	112	197	1040	No. 20	@ 250	No. 12	@	100
2.5	8	200	300	161.916	198.661	208	139	199	850	No. 20	@ 325	No. 12	@	175
2.5	8	200	400	169.207	204.475	369	173	206	1130	No. 20	@ 250	No. 12	@	450
2.5	8	225	225	158.681	196.090	159	105	198	1350	No. 20	@ 200	No. 12	@	75
2.5	8	225	270	165.414	201.548	168	125	202	760	No. 16	@ 250	No. 12	@	125
2.5	8	225	338	174.696	208.926	264	153	210	950	No. 20	@ 250	No. 12	@	225
2.5	8	225	450	187.997	219.555	468	187	220	1270	No. 20	@ 200	No. 12	@	525
2.5	8	250	250	163.068	199.709	164	116	201	950	No. 20	@ 250	No. 12	@	100
2.5	8	250	300	180.514	226.432	208	139	227	850	No. 20	@ 325	No. 12	@	125
2.5	8	250	375	179.649	212.952	325	165	214	1060	No. 20	@ 250	No. 12	@	275
2.5	8	250	500	193.442	224.038	577	201	225	1410	No. 20	@ 200	No. 12	@	800
2.5	8	300	300	171.052	206.194	208	139	207	850	No. 20	@ 325	No. 12	@	150
2.5	8	300	360	178.559	212.193	299	160	213	1020	No. 20	@ 250	No. 12	@	250
2.5	8	300	450	188.716	220.339	468	187	221	1270	No. 20	@ 200	No. 12	@	500
2.5	8	300	600	203.261	232.238	831	227	234	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	8	350	350	178.203	211.941	283	157	213	990	No. 20	@ 250	No. 12	@	225
2.5	10	200	200	146.442	190.357	147	93	191	1830	No. 25	@ 250	No. 12	@	75
2.5	10	200	240	150.897	193.717	152	112	195	930	No. 20	@ 325	No. 12	@	100
2.5	10	200	300	155.147	196.902	208	139	197	850	No. 20	@ 325	No. 12	@	200
2.5	10	200	400	163.075	202.811	369	173	204	1130	No. 20	@ 250	No. 12	@	500
2.5	10	225	225	151.349	194.230	152	105	196	1200	No. 20	@ 250	No. 12	@	75
2.5	10	225	270	158.737	199.759	168	125	200	760	No. 16	@ 250	No. 12	@	125
2.5	10	225	338	168.845	207.289	264	153	209	950	No. 20	@ 250	No. 12	@	225
2.5	10	225	450	183.174	218.129	468	187	219	1270	No. 20	@ 200	No. 12	@	525
2.5	10	250	250	155.945	197.817	156	116	199	850	No. 20	@ 325	No. 12	@	100
2.5	10	250	300	173.885	224.582	208	139	225	850	No. 20	@ 325	No. 12	@	125
2.5	10	250	375	174.077	211.383	325	165	213	1060	No. 20	@ 250	No. 12	@	300
2.5	10	250	500	188.922	222.716	577	201	223	1410	No. 20	@ 200	No. 12	@	875
2.5	10	300	300	164.359	204.378	208	139	205	850	No. 20	@ 325	No. 12	@	175
2.5	10	300	360	172.614	210.572	299	160	212	1020	No. 20	@ 250	No. 12	@	250
2.5	10	300	450	183.673	218.920	468	187	219	1270	No. 20	@ 200	No. 12	@	525
2.5	10	300	600	199.237	231.053	831	227	232	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	10	350	350	171.907	210.228	283	157	212	990	No. 20	@ 250	No. 12	@	225
2.5	12	200	200	142.211	189.261	143	93	190	1700	No. 25	@ 250	No. 12	@	75
2.5	12	200	240	146.954	192.664	147	112	194	850	No. 20	@ 325	No. 12	@	100
2.5	12	200	300	151.466	195.892	208	139	196	850	No. 20	@ 325	No. 12	@	200
2.5	12	200	400	159.847	201.865	369	173	203	1130	No. 20	@ 250	No. 12	@	500
2.5	12	225	225	147.326	193.166	148	105	195	1130	No. 20	@ 250	No. 12	@	75
2.5	12	225	270	155.201	198.784	168	125	199	760	No. 16	@ 250	No. 12	@	125
2.5	12	225	338	165.900	206.426	264	153	208	950	No. 20	@ 250	No. 12	@	225
2.5	12	225	450	180.890	217.421	468	187	218	1270	No. 20	@ 200	No. 12	@	550
2.5	12	250	250	152.152	196.809	154	116	198	830	No. 20	@ 325	No. 12	@	100
2.5	12	250	300	170.498	223.600	208	139	224	850	No. 20	@ 325	No. 12	@	125
2.5	12	250	375	171.389	210.590	325	165	212	1060	No. 20	@ 250	No. 12	@	300
2.5	12	250	500	186.858	222.065	577	201	223	1410	No. 20	@ 200	No. 12	@	875
2.5	12	300	300	161.010	203.488	208	139	204	850	No. 20	@ 325	No. 12	@	175
2.5	12	300	360	169.786	209.783	299	160	211	1020	No. 20	@ 250	No. 12	@	275
2.5	12	300	450	181.397	218.255	468	187	219	1270	No. 20	@ 200	No. 12	@	525
2.5	12	300	600	197.472	230.483	831	227	232	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	12	350	350	168.919	209.444	283	157	211	990	No. 20	@ 250	No. 12	@	250

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
3	6	200	200	242.945	197.651	243	93	199	9500	No. 32	@ 75	No. 12	@	50
3	6	200	240	247.321	201.812	248	112	203	3430	No. 32	@ 200	No. 12	@	100
3	6	200	300	251.475	205.667	252	139	206	1350	No. 20	@ 200	No. 12	@	175
3	6	200	400	259.210	212.648	370	173	214	1130	No. 20	@ 250	No. 12	@	375
3	6	225	225	248.278	201.864	249	105	203	4850	No. 32	@ 150	No. 12	@	75
3	6	225	270	255.601	208.670	256	125	209	2180	No. 25	@ 200	No. 12	@	125
3	6	225	338	265.566	217.620	267	153	219	980	No. 20	@ 250	No. 12	@	200
3	6	225	450	279.791	230.015	473	187	231	1300	No. 20	@ 200	No. 12	@	375
3	6	250	250	253.417	205.870	254	116	207	3000	No. 32	@ 250	No. 12	@	100
3	6	250	300	261.099	212.934	262	139	214	1480	No. 25	@ 250	No. 12	@	150
3	6	250	375	271.432	222.130	331	165	223	1100	No. 20	@ 250	No. 12	@	250
3	6	250	500	286.279	235.036	585	201	236	1450	No. 25	@ 325	No. 12	@	550
3	6	300	300	263.058	213.219	265	139	214	1530	No. 25	@ 250	No. 12	@	150
3	6	300	360	271.318	220.674	316	160	222	1150	No. 20	@ 250	No. 12	@	225
3	6	300	450	282.369	230.411	473	187	231	1300	No. 20	@ 200	No. 12	@	375
3	6	300	600	298.201	244.183	835	227	246	1700	No. 25	@ 250	OK FOR		SHEAR
3	6	350	350	271.926	219.823	285	157	221	1000	No. 20	@ 250	No. 12	@	200
3	8	200	200	218.429	190.609	219	93	192	6230	No. 32	@ 125	No. 12	@	75
3	8	200	240	223.618	194.950	224	112	196	2550	No. 32	@ 250	No. 12	@	100
3	8	200	300	228.527	198.957	230	139	200	1080	No. 20	@ 250	No. 12	@	175
3	8	200	400	237.613	206.228	373	173	208	1150	No. 20	@ 250	No. 12	@	425
3	8	225	225	224.331	194.929	225	105	196	3530	No. 32	@ 200	No. 12	@	75
3	8	225	270	232.900	201.961	233	125	203	1700	No. 25	@ 250	No. 12	@	125
3	8	225	338	244.481	211.198	264	153	213	950	No. 20	@ 250	No. 12	@	200
3	8	225	450	260.825	223.931	473	187	224	1300	No. 20	@ 200	No. 12	@	475
3	8	250	250	229.890	198.981	230	116	200	2280	No. 32	@ 325	No. 12	@	100
3	8	250	300	238.800	206.228	239	139	207	1180	No. 20	@ 250	No. 12	@	150
3	8	250	375	250.716	215.672	331	165	217	1100	No. 20	@ 250	No. 12	@	275
3	8	250	500	267.689	228.957	585	201	230	1450	No. 25	@ 325	No. 12	@	650
3	8	300	300	240.100	206.276	241	139	207	1200	No. 20	@ 250	No. 12	@	150
3	8	300	360	249.583	213.907	304	160	215	1050	No. 20	@ 250	No. 12	@	250
3	8	300	450	262.232	223.935	473	187	224	1300	No. 20	@ 200	No. 12	@	475
3	8	300	600	280.225	238.112	835	227	240	1700	No. 25	@ 250	OK FOR		SHEAR
3	8	350	350	249.346	212.766	285	157	214	1000	No. 20	@ 250	No. 12	@	225
3	10	200	200	206.512	187.926	207	93	189	5100	No. 32	@ 150	No. 12	@	75
3	10	200	240	212.263	192.361	213	112	194	2230	No. 32	@ 325	No. 12	@	100
3	10	200	300	217.683	196.440	219	139	197	950	No. 20	@ 250	No. 12	@	200
3	10	200	400	227.663	203.819	370	173	205	1130	No. 20	@ 250	No. 12	@	475
3	10	225	225	212.698	192.250	213	105	194	3000	No. 32	@ 250	No. 12	@	75
3	10	225	270	222.144	199.413	224	125	200	1530	No. 25	@ 250	No. 12	@	125
3	10	225	338	234.844	208.793	264	153	210	950	No. 20	@ 250	No. 12	@	225
3	10	225	450	252.633	221.803	473	187	222	1300	No. 20	@ 200	No. 12	@	500
3	10	250	250	218.491	196.266	219	116	197	2000	No. 25	@ 200	No. 12	@	100
3	10	250	300	228.303	203.645	230	139	204	1080	No. 20	@ 250	No. 12	@	175
3	10	250	375	241.369	213.313	331	165	215	1100	No. 20	@ 250	No. 12	@	275
3	10	250	500	259.839	226.875	585	201	227	1450	No. 25	@ 325	No. 12	@	750
3	10	300	300	229.118	203.553	230	139	204	1080	No. 20	@ 250	No. 12	@	175
3	10	300	360	239.567	211.381	304	160	212	1050	No. 20	@ 250	No. 12	@	250
3	10	300	450	253.439	77.119	473	187	188	1300	No. 20	@ 200	OK FOR		SHEAR
3	10	300	600	272.968	236.193	835	227	238	1700	No. 25	@ 250	OK FOR		SHEAR
3	10	350	350	238.735	210.094	285	157	211	1000	No. 20	@ 250	No. 12	@	250
3	12	200	200	199.818	186.514	200	93	188	4600	No. 32	@ 150	No. 12	@	75
3	12	200	240	205.969	191.004	206	112	192	2030	No. 25	@ 200	No. 12	@	100
3	12	200	300	211.750	195.106	212	139	196	880	No. 20	@ 325	No. 12	@	200
3	12	200	400	222.360	202.574	373	173	204	1150	No. 20	@ 250	No. 12	@	500
3	12	225	225	206.218	190.831	207	105	192	2750	No. 32	@ 250	No. 12	@	100
3	12	225	270	216.322	198.076	218	125	199	1430	No. 25	@ 325	No. 12	@	125
3	12	225	338	229.848	207.581	264	153	209	950	No. 20	@ 250	No. 12	@	225
3	12	225	450	248.644	220.793	473	187	221	1300	No. 20	@ 200	No. 12	@	500
3	12	250	250	212.239	194.859	213	116	196	1850	No. 25	@ 250	No. 12	@	100
3	12	250	300	222.745	202.367	223	139	203	1000	No. 20	@ 250	No. 12	@	175
3	12	250	375	236.668	212.177	331	165	213	1100	No. 20	@ 250	No. 12	@	300
3	12	250	500	256.152	225.957	585	201	227	1450	No. 25	@ 325	No. 12	@	750
3	12	300	300	223.321	202.217	223	139	203	1000	No. 20	@ 250	No. 12	@	175
3	12	300	360	234.517	210.191	304	160	211	1050	No. 20	@ 250	No. 12	@	275
3	12	300	450	249.262	220.648	473	187	221	1300	No. 20	@ 200	No. 12	@	500
3	12	300	600	269.744	235.427	835	227	237	1700	No. 25	@ 250	OK FOR		SHEAR
3	12	350	350	233.337	208.848	285	157	210	1000	No. 20	@ 250	No. 12	@	250

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
3.75	8	200	200	302.293	161.514	303	93	163	33000	No. 32	@ 25	No. 12	@	100
3.75	8	200	240	308.802	166.466	309	112	168	7000	No. 32	@ 100	No. 12	@	150
3.75	8	200	300	314.977	171.058	316	139	172	2400	No. 32	@ 325	No. 12	@	350
3.75	8	200	400	326.462	179.423	369	173	181	1130	No. 20	@ 250	OK FOR		SHEAR
3.75	8	225	225	310.345	166.583	311	105	168	11050	No. 32	@ 75	No. 12	@	125
3.75	8	225	270	321.166	174.660	322	125	175	4150	No. 32	@ 150	No. 12	@	200
3.75	8	225	338	335.877	161.285	337	153	163	1730	No. 25	@ 250	OK FOR		SHEAR
3.75	8	225	450	356.809	200.113	468	187	201	1270	No. 20	@ 200	OK FOR		SHEAR
3.75	8	250	250	318.042	171.388	319	116	172	6100	No. 32	@ 125	No. 12	@	150
3.75	8	250	300	329.344	179.705	330	139	180	2700	No. 32	@ 250	No. 12	@	275
3.75	8	250	375	344.548	190.617	346	165	192	1230	No. 20	@ 250	No. 12	@	525
3.75	8	250	500	366.385	206.046	577	201	207	1410	No. 20	@ 200	OK FOR		SHEAR
3.75	8	300	300	332.413	180.083	333	139	181	2780	No. 32	@ 250	No. 12	@	275
3.75	8	300	360	344.521	188.881	345	160	190	1430	No. 25	@ 325	No. 12	@	450
3.75	8	300	450	360.764	200.440	468	187	201	1270	No. 20	@ 200	OK FOR		SHEAR
3.75	8	300	600	384.115	216.948	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
3.75	8	350	350	345.655	187.913	346	157	189	1600	No. 25	@ 250	No. 12	@	425
3.75	10	200	200	281.246	157.861	282	93	159	19750	No. 32	@ 25	No. 12	@	100
3.75	10	200	240	288.639	162.973	290	112	164	5580	No. 32	@ 150	No. 12	@	175
3.75	10	200	300	295.632	167.701	296	139	168	2030	No. 25	@ 200	No. 12	@	400
3.75	10	200	400	308.553	176.316	369	173	178	1130	No. 20	@ 250	OK FOR		SHEAR
3.75	10	225	225	289.825	162.997	290	105	164	8400	No. 32	@ 100	No. 12	@	125
3.75	10	225	270	302.001	171.277	303	125	172	3480	No. 32	@ 200	No. 12	@	200
3.75	10	225	338	318.451	182.172	319	153	184	1500	No. 25	@ 250	No. 12	@	425
3.75	10	225	450	341.653	197.412	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
3.75	10	250	250	297.910	167.797	298	116	169	4900	No. 32	@ 150	No. 12	@	175
3.75	10	250	300	310.554	176.292	311	139	177	2300	No. 32	@ 325	No. 12	@	300
3.75	10	250	375	327.486	187.500	328	165	189	1080	No. 20	@ 250	No. 12	@	600
3.75	10	250	500	351.628	203.364	577	201	204	1410	No. 20	@ 200	OK FOR		SHEAR
3.75	10	300	300	312.824	176.437	313	139	177	2350	No. 32	@ 325	No. 12	@	300
3.75	10	300	360	326.292	185.436	327	160	187	1250	No. 20	@ 250	No. 12	@	500
3.75	10	300	450	344.307	197.316	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
3.75	10	300	600	370.025	214.356	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
3.75	10	350	350	326.445	184.188	328	157	186	1400	No. 20	@ 200	No. 12	@	450
3.75	12	200	200	269.360	152.722	270	93	154	15500	No. 32	@ 50	No. 12	@	125
3.75	12	200	240	277.411	157.818	278	112	159	4850	No. 32	@ 150	No. 12	@	175
3.75	12	200	300	285.000	162.541	286	139	163	1850	No. 25	@ 250	No. 12	@	475
3.75	12	200	400	298.973	171.123	370	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
3.75	12	225	225	278.252	157.810	279	105	159	7250	No. 32	@ 100	No. 12	@	150
3.75	12	225	270	291.462	166.035	292	125	167	3130	No. 32	@ 250	No. 12	@	250
3.75	12	225	338	309.236	176.954	310	153	178	1400	No. 20	@ 200	No. 12	@	525
3.75	12	225	450	334.148	192.181	473	187	193	1300	No. 20	@ 200	OK FOR		SHEAR
3.75	12	250	250	286.605	162.525	287	116	163	4350	No. 32	@ 150	No. 12	@	200
3.75	12	250	300	300.314	171.014	301	139	172	2110	No. 25	@ 200	No. 12	@	350
3.75	12	250	375	318.605	182.246	331	165	183	1100	No. 20	@ 250	No. 12	@	800
3.75	12	250	500	344.514	198.168	581	201	202	1430	No. 25	@ 325	OK FOR		SHEAR
3.75	12	300	300	301.990	171.069	302	139	172	2130	No. 25	@ 200	No. 12	@	350
3.75	12	300	360	316.596	180.087	317	160	181	1160	No. 20	@ 250	No. 12	@	650
3.75	12	300	450	336.049	192.087	470	187	193	1280	No. 20	@ 200	OK FOR		SHEAR
3.75	12	300	600	363.564	209.235	835	227	228	1700	No. 25	@ 250	OK FOR		SHEAR
3.75	12	350	350	316.015	178.797	317	157	180	1290	No. 20	@ 200	No. 12	@	575

F6. Unstiffened Edge

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1	3	200	200	67.141	184.141	92	93	185	570	No. 16	@ 325	No. 12	@	75
1	3	200	240	68.812	186.974	133	112	188	680	No. 16	@ 250	No. 12	@	100
1	3	200	300	70.299	189.491	208	139	190	850	No. 20	@ 325	No. 12	@	225
1	3	200	400	72.826	193.780	369	173	195	1130	No. 20	@ 250	No. 12	@	700
1	3	225	225	67.497	184.852	117	105	186	640	No. 16	@ 250	No. 12	@	100
1	3	225	270	70.104	189.300	168	125	190	760	No. 16	@ 250	No. 12	@	150
1	3	225	338	73.263	194.701	264	153	196	950	No. 20	@ 250	No. 12	@	300
1	3	225	450	77.092	201.358	468	187	202	1270	No. 20	@ 200	OK FOR		SHEAR
1	3	250	250	67.853	185.563	144	116	186	710	No. 16	@ 250	No. 12	@	125
1	3	250	300	70.484	190.081	208	139	191	850	No. 20	@ 325	No. 12	@	225
1	3	250	375	73.658	195.553	325	165	197	1060	No. 20	@ 250	No. 12	@	450
1	3	250	500	77.568	202.421	577	201	203	1410	No. 20	@ 200	OK FOR		SHEAR
1	3	300	300	68.566	186.986	208	139	188	850	No. 20	@ 325	No. 12	@	225
1	3	300	360	71.244	191.644	299	160	193	1020	No. 20	@ 250	No. 12	@	425
1	3	300	450	74.491	197.326	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	3	300	600	78.521	204.546	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	3	350	350	69.278	188.408	283	157	190	990	No. 20	@ 250	No. 12	@	400
1	4.5	200	200	64.853	183.005	92	93	184	570	No. 16	@ 325	No. 12	@	75
1	4.5	200	240	66.903	186.129	133	112	188	680	No. 16	@ 250	No. 12	@	100
1	4.5	200	300	68.692	188.865	208	139	189	850	No. 20	@ 325	No. 12	@	225
1	4.5	200	400	71.654	193.443	369	173	195	1130	No. 20	@ 250	No. 12	@	700
1	4.5	225	225	65.207	183.712	117	105	185	640	No. 16	@ 250	No. 12	@	100
1	4.5	225	270	68.383	188.590	168	125	189	760	No. 16	@ 250	No. 12	@	150
1	4.5	225	338	72.092	194.363	264	153	196	950	No. 20	@ 250	No. 12	@	300
1	4.5	225	450	76.397	201.289	468	187	202	1270	No. 20	@ 200	OK FOR		SHEAR
1	4.5	250	250	65.562	184.419	144	116	185	710	No. 16	@ 250	No. 12	@	125
1	4.5	250	300	68.761	189.367	208	139	190	850	No. 20	@ 325	No. 12	@	225
1	4.5	250	375	72.482	195.210	325	165	196	1060	No. 20	@ 250	No. 12	@	450
1	4.5	250	500	76.871	202.348	577	201	203	1410	No. 20	@ 200	OK FOR		SHEAR
1	4.5	300	300	66.270	185.833	208	139	186	850	No. 20	@ 325	No. 12	@	225
1	4.5	300	360	69.517	190.922	299	160	192	1020	No. 20	@ 250	No. 12	@	425
1	4.5	300	450	73.310	196.977	468	187	197	1270	No. 20	@ 200	OK FOR		SHEAR
1	4.5	300	600	77.819	204.468	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	4.5	350	350	66.978	187.247	283	157	189	990	No. 20	@ 250	No. 12	@	425
1	6	200	200	64.600	183.077	92	93	184	570	No. 16	@ 325	No. 12	@	75
1	6	200	240	66.727	186.200	133	112	188	680	No. 16	@ 250	No. 12	@	100
1	6	200	300	68.567	188.931	208	139	190	850	No. 20	@ 325	No. 12	@	225
1	6	200	400	71.587	193.495	369	173	195	1130	No. 20	@ 250	No. 12	@	700
1	6	225	225	64.954	183.784	117	105	185	640	No. 16	@ 250	No. 12	@	100
1	6	225	270	68.239	188.658	168	125	189	760	No. 16	@ 250	No. 12	@	150
1	6	225	338	72.024	194.415	264	153	196	950	No. 20	@ 250	No. 12	@	300
1	6	225	450	76.373	201.319	468	187	202	1270	No. 20	@ 200	OK FOR		SHEAR
1	6	250	250	65.308	184.490	144	116	185	710	No. 16	@ 250	No. 12	@	125
1	6	250	300	68.617	189.435	208	139	190	850	No. 20	@ 325	No. 12	@	225
1	6	250	375	72.414	195.262	325	165	197	1060	No. 20	@ 250	No. 12	@	450
1	6	250	500	76.847	202.379	577	201	203	1410	No. 20	@ 200	OK FOR		SHEAR
1	6	300	300	66.015	185.904	208	139	187	850	No. 20	@ 325	No. 12	@	225
1	6	300	360	69.372	190.990	299	160	192	1020	No. 20	@ 250	No. 12	@	425
1	6	300	450	73.241	197.029	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	6	300	600	77.794	204.499	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	6	350	350	66.722	187.317	283	157	189	990	No. 20	@ 250	No. 12	@	425

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1	8	200	200	64.573	183.101	92	93	184	570	No. 16	@ 325	No. 12	@	75
1	8	200	240	66.712	186.217	133	112	188	680	No. 16	@ 250	No. 12	@	100
1	8	200	300	68.558	188.943	208	139	190	850	No. 20	@ 325	No. 12	@	225
1	8	200	400	71.583	193.501	369	173	195	1130	No. 20	@ 250	No. 12	@	700
1	8	225	225	64.927	183.807	117	105	185	640	No. 16	@ 250	No. 12	@	100
1	8	225	270	68.228	188.672	168	125	189	760	No. 16	@ 250	No. 12	@	150
1	8	225	338	72.021	194.422	264	153	196	950	No. 20	@ 250	No. 12	@	300
1	8	225	450	76.372	201.321	468	187	202	1270	No. 20	@ 200	OK FOR		SHEAR
1	8	250	250	65.280	184.514	144	116	185	710	No. 16	@ 250	No. 12	@	125
1	8	250	300	68.606	189.449	208	139	190	850	No. 20	@ 325	No. 12	@	225
1	8	250	375	72.410	195.268	325	165	197	1060	No. 20	@ 250	No. 12	@	450
1	8	250	500	76.846	202.382	577	201	203	1410	No. 20	@ 200	OK FOR		SHEAR
1	8	300	300	65.987	185.928	208	139	187	850	No. 20	@ 325	No. 12	@	225
1	8	300	360	69.361	191.004	299	160	192	1020	No. 20	@ 250	No. 12	@	425
1	8	300	450	73.238	197.035	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	8	300	600	77.793	204.502	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	8	350	350	66.694	187.342	283	157	189	990	No. 20	@ 250	No. 12	@	425
1	10	200	200	64.572	183.102	92	93	184	570	No. 16	@ 325	No. 12	@	75
1	10	200	240	66.711	186.218	133	112	188	680	No. 16	@ 250	No. 12	@	100
1	10	200	300	68.557	188.943	208	139	190	850	No. 20	@ 325	No. 12	@	225
1	10	200	400	71.583	193.501	369	173	195	1130	No. 20	@ 250	No. 12	@	700
1	10	225	225	64.925	183.809	117	105	185	640	No. 16	@ 250	No. 12	@	100
1	10	225	270	68.228	188.672	168	125	189	760	No. 16	@ 250	No. 12	@	150
1	10	225	338	72.021	194.422	264	153	196	950	No. 20	@ 250	No. 12	@	300
1	10	225	450	76.372	201.322	468	187	202	1270	No. 20	@ 200	OK FOR		SHEAR
1	10	250	250	65.279	184.516	144	116	185	710	No. 16	@ 250	No. 12	@	125
1	10	250	300	68.605	189.450	208	139	190	850	No. 20	@ 325	No. 12	@	225
1	10	250	375	72.410	195.269	325	165	197	1060	No. 20	@ 250	No. 12	@	450
1	10	250	500	76.846	202.382	577	201	203	1410	No. 20	@ 200	OK FOR		SHEAR
1	10	300	300	65.986	185.930	208	139	187	850	No. 20	@ 325	No. 12	@	225
1	10	300	360	69.360	191.005	299	160	192	1020	No. 20	@ 250	No. 12	@	425
1	10	300	450	73.237	197.036	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	10	300	600	77.793	204.503	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	10	350	350	66.693	187.344	283	157	189	990	No. 20	@ 250	No. 12	@	425
1	12	200	200	64.572	183.103	92	93	184	570	No. 16	@ 325	No. 12	@	75
1	12	200	240	66.711	186.218	133	112	188	680	No. 16	@ 250	No. 12	@	100
1	12	200	300	68.557	188.943	208	139	190	850	No. 20	@ 325	No. 12	@	225
1	12	200	400	71.583	193.501	369	173	195	1130	No. 20	@ 250	No. 12	@	700
1	12	225	225	64.925	183.809	117	105	185	640	No. 16	@ 250	No. 12	@	100
1	12	225	270	68.228	188.672	168	125	189	760	No. 16	@ 250	No. 12	@	150
1	12	225	338	72.021	194.422	264	153	196	950	No. 20	@ 250	No. 12	@	300
1	12	225	450	76.372	201.322	468	187	202	1270	No. 20	@ 200	OK FOR		SHEAR
1	12	250	250	65.279	184.516	144	116	185	710	No. 16	@ 250	No. 12	@	125
1	12	250	300	68.605	189.450	208	139	190	850	No. 20	@ 325	No. 12	@	225
1	12	250	375	72.410	195.269	325	165	197	1060	No. 20	@ 250	No. 12	@	450
1	12	250	500	76.846	202.382	577	201	203	1410	No. 20	@ 200	OK FOR		SHEAR
1	12	300	300	65.986	185.930	208	139	187	850	No. 20	@ 325	No. 12	@	225
1	12	300	360	69.360	191.005	299	160	192	1020	No. 20	@ 250	No. 12	@	425
1	12	300	450	73.237	197.036	468	187	198	1270	No. 20	@ 200	OK FOR		SHEAR
1	12	300	600	77.793	204.503	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1	12	350	350	66.692	187.344	283	157	189	990	No. 20	@ 250	No. 12	@	425

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1.5	3	200	200	121.051	147.972	122	93	149	1100	No. 20	@ 250	No. 12	@	125
1.5	3	200	240	123.285	151.160	133	112	153	680	No. 16	@ 250	No. 12	@	225
1.5	3	200	300	125.322	154.058	208	139	155	850	No. 20	@ 325	No. 12	@	725
1.5	3	200	400	128.910	159.163	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	3	225	225	121.859	149.056	122	105	151	700	No. 16	@ 250	No. 12	@	175
1.5	3	225	270	125.392	154.121	168	125	155	760	No. 16	@ 250	No. 12	@	350
1.5	3	225	338	129.885	160.554	264	153	162	950	No. 20	@ 250	OK FOR		SHEAR
1.5	3	225	450	135.731	169.019	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	3	250	250	122.667	150.140	144	116	151	710	No. 16	@ 250	No. 12	@	275
1.5	3	250	300	126.254	155.311	208	139	156	850	No. 20	@ 325	No. 12	@	675
1.5	3	250	375	130.799	161.860	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	3	250	500	136.812	170.633	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	3	300	300	124.283	152.309	208	139	153	850	No. 20	@ 325	No. 12	@	825
1.5	3	300	360	127.980	157.691	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	3	300	450	132.689	164.558	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	3	300	600	138.974	173.860	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	3	350	350	125.898	154.478	287	157	158	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	200	200	103.597	140.748	104	93	142	750	No. 16	@ 250	No. 12	@	150
1.5	4.5	200	240	106.705	144.534	133	112	146	680	No. 16	@ 250	No. 12	@	275
1.5	4.5	200	300	109.524	147.985	208	139	149	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	200	400	114.434	154.049	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	225	225	104.398	141.814	117	105	143	640	No. 16	@ 250	No. 12	@	225
1.5	4.5	225	270	109.283	147.812	168	125	148	760	No. 16	@ 250	No. 12	@	450
1.5	4.5	225	338	115.410	155.428	264	153	157	950	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	225	450	123.144	165.289	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	250	250	105.199	142.880	144	116	144	710	No. 16	@ 250	No. 12	@	325
1.5	4.5	250	300	110.138	148.983	208	139	150	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	250	375	116.305	156.706	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	250	500	124.215	166.882	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	300	300	106.801	145.011	208	139	146	850	No. 20	@ 325	OK FOR		SHEAR
1.5	4.5	300	360	111.848	151.324	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	4.5	300	450	118.177	159.363	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	4.5	300	600	126.356	170.066	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	4.5	350	350	108.403	147.142	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	6	200	200	98.976	139.917	100	93	141	680	No. 16	@ 250	No. 12	@	150
1.5	6	200	240	102.568	143.947	133	112	145	680	No. 16	@ 250	No. 12	@	275
1.5	6	200	300	105.779	147.581	208	139	148	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	200	400	111.259	153.890	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	6	225	225	99.773	140.978	117	105	142	640	No. 16	@ 250	No. 12	@	225
1.5	6	225	270	105.388	147.337	168	125	148	760	No. 16	@ 250	No. 12	@	450
1.5	6	225	338	112.236	155.267	264	153	157	950	No. 20	@ 250	OK FOR		SHEAR
1.5	6	225	450	120.598	165.348	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	6	250	250	100.571	142.040	144	116	143	710	No. 16	@ 250	No. 12	@	350
1.5	6	250	300	106.240	148.504	208	139	149	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	250	375	113.124	156.540	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	6	250	500	121.665	166.938	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	6	300	300	102.167	144.162	208	139	145	850	No. 20	@ 325	OK FOR		SHEAR
1.5	6	300	360	107.943	150.837	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	6	300	450	114.989	159.191	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	6	300	600	123.799	170.117	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	6	350	350	103.762	146.284	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
1.5	8	200	200	97.710	139.984	100	93	141	680	No. 16	@ 250	No. 12	@	150
1.5	8	200	240	101.514	144.039	133	112	146	680	No. 16	@ 250	No. 12	@	275
1.5	8	200	300	104.873	147.684	208	139	148	850	No. 20	@ 325	OK FOR		SHEAR
1.5	8	200	400	110.532	153.990	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	8	225	225	98.506	141.044	117	105	142	640	No. 16	@ 250	No. 12	@	225
1.5	8	225	270	104.428	147.437	168	125	148	760	No. 16	@ 250	No. 12	@	450
1.5	8	225	338	111.509	155.367	264	153	157	950	No. 20	@ 250	OK FOR		SHEAR
1.5	8	225	450	120.010	165.422	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	8	250	250	99.302	142.104	144	116	143	710	No. 16	@ 250	No. 12	@	350
1.5	8	250	300	105.278	148.603	208	139	149	850	No. 20	@ 325	OK FOR		SHEAR
1.5	8	250	375	112.394	156.640	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	8	250	500	121.076	167.012	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	8	300	300	100.895	144.225	208	139	145	850	No. 20	@ 325	OK FOR		SHEAR
1.5	8	300	360	106.978	150.935	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	8	300	450	114.256	159.290	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	8	300	600	123.208	170.192	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	8	350	350	102.487	146.345	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	10	200	200	97.537	140.032	100	93	141	680	No. 16	@ 250	No. 12	@	150
1.5	10	200	240	101.383	144.077	133	112	146	680	No. 16	@ 250	No. 12	@	275
1.5	10	200	300	104.766	147.714	208	139	148	850	No. 20	@ 325	OK FOR		SHEAR
1.5	10	200	400	110.448	154.008	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	10	225	225	98.333	141.092	117	105	143	640	No. 16	@ 250	No. 12	@	225
1.5	10	225	270	104.312	147.470	168	125	148	760	No. 16	@ 250	No. 12	@	450
1.5	10	225	338	111.424	155.385	264	153	157	950	No. 20	@ 250	OK FOR		SHEAR
1.5	10	225	450	119.937	165.430	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	10	250	250	99.128	142.153	144	116	143	710	No. 16	@ 250	No. 12	@	350
1.5	10	250	300	105.161	148.636	208	139	149	850	No. 20	@ 325	OK FOR		SHEAR
1.5	10	250	375	112.309	156.658	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	10	250	500	121.002	167.021	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	10	300	300	100.719	144.273	208	139	145	850	No. 20	@ 325	OK FOR		SHEAR
1.5	10	300	360	106.860	150.968	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	10	300	450	114.170	159.309	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	10	300	600	123.134	170.202	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	10	350	350	102.310	146.393	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
1.5	12	200	200	97.514	140.042	100	93	141	680	No. 16	@ 250	No. 12	@	150
1.5	12	200	240	101.367	144.084	133	112	146	680	No. 16	@ 250	No. 12	@	275
1.5	12	200	300	104.753	147.718	208	139	148	850	No. 20	@ 325	OK FOR		SHEAR
1.5	12	200	400	110.438	154.010	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
1.5	12	225	225	98.310	141.102	117	105	143	640	No. 16	@ 250	No. 12	@	225
1.5	12	225	270	104.298	147.475	168	125	148	760	No. 16	@ 250	No. 12	@	450
1.5	12	225	338	111.415	155.388	264	153	157	950	No. 20	@ 250	OK FOR		SHEAR
1.5	12	225	450	119.928	165.431	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	12	250	250	99.105	142.163	144	116	143	710	No. 16	@ 250	No. 12	@	350
1.5	12	250	300	105.148	148.641	208	139	149	850	No. 20	@ 325	OK FOR		SHEAR
1.5	12	250	375	112.299	156.661	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
1.5	12	250	500	120.993	167.022	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
1.5	12	300	300	100.696	144.283	208	139	145	850	No. 20	@ 325	OK FOR		SHEAR
1.5	12	300	360	106.847	150.974	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
1.5	12	300	450	114.160	159.312	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
1.5	12	300	600	123.125	170.203	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
1.5	12	350	350	102.286	146.404	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2	3	200	200	168.989	136.113	169	93	137	2700	No. 32	@ 250	No. 12	@	175
2	3	200	240	171.155	139.155	173	112	141	1280	No. 20	@ 200	No. 12	@	300
2	3	200	300	173.153	141.933	208	139	143	850	No. 20	@ 325	OK FOR		SHEAR
2	3	200	400	176.735	146.863	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	3	225	225	170.436	137.593	171	105	139	1630	No. 25	@ 250	No. 12	@	250
2	3	225	270	173.919	142.475	174	125	143	830	No. 20	@ 325	No. 12	@	575
2	3	225	338	178.460	148.745	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	3	225	450	184.619	157.179	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	3	250	250	171.883	139.073	172	116	140	1080	No. 20	@ 250	No. 12	@	400
2	3	250	300	175.465	144.099	208	139	145	850	No. 20	@ 325	OK FOR		SHEAR
2	3	250	375	180.124	150.543	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	3	250	500	186.560	159.379	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	3	300	300	174.778	142.032	208	139	143	850	No. 20	@ 325	OK FOR		SHEAR
2	3	300	360	178.558	147.347	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	3	300	450	183.513	154.224	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	3	300	600	190.440	163.778	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	3	350	350	177.672	144.992	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
2	4.5	200	200	135.503	120.764	136	93	122	1480	No. 25	@ 250	No. 12	@	250
2	4.5	200	240	138.539	124.053	139	112	126	750	No. 16	@ 250	No. 12	@	650
2	4.5	200	300	141.351	127.116	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	200	400	146.401	132.671	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	4.5	225	225	136.935	122.198	137	105	124	930	No. 20	@ 325	No. 12	@	450
2	4.5	225	270	141.780	127.490	168	125	128	760	No. 16	@ 250	OK FOR		SHEAR
2	4.5	225	338	148.117	134.504	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	4.5	225	450	156.642	144.167	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	4.5	250	250	138.367	123.632	144	116	124	710	No. 16	@ 250	OK FOR		SHEAR
2	4.5	250	300	143.309	129.064	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	250	375	149.748	136.240	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	4.5	250	500	158.557	146.303	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	4.5	300	300	141.231	126.500	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	4.5	300	360	146.367	132.213	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	4.5	300	450	153.095	139.809	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	4.5	300	600	162.387	150.575	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	4.5	350	350	144.095	129.369	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
2	6	200	200	123.843	116.985	124	93	118	1150	No. 20	@ 250	No. 12	@	300
2	6	200	240	127.665	120.680	133	112	122	680	No. 16	@ 250	No. 12	@	925
2	6	200	300	131.177	124.106	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	200	400	137.400	130.265	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	6	225	225	125.267	118.405	126	105	120	750	No. 16	@ 250	No. 12	@	575
2	6	225	270	131.327	124.326	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
2	6	225	338	139.116	132.089	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	6	225	450	149.282	142.567	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	6	250	250	126.691	119.825	144	116	121	710	No. 16	@ 250	OK FOR		SHEAR
2	6	250	300	132.846	125.886	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	250	375	140.727	133.807	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	6	250	500	151.185	144.690	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	6	300	300	129.538	122.666	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	6	300	360	135.886	129.007	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	6	300	450	144.054	137.349	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	6	300	600	154.992	148.935	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	6	350	350	132.386	125.506	288	157	158	1030	No. 20	@ 250	OK FOR		SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2	8	200	200	118.896	116.233	119	93	117	1050	No. 20	@ 250	No. 12	@	325
2	8	200	240	123.331	120.144	135	112	122	700	No. 16	@ 250	No. 12	@	925
2	8	200	300	127.341	123.734	209	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	8	200	400	134.298	130.107	373	173	174	1150	No. 20	@ 250	OK FOR		SHEAR
2	8	225	225	120.315	117.647	121	105	119	680	No. 16	@ 250	No. 12	@	625
2	8	225	270	127.298	123.889	172	125	126	800	No. 16	@ 250	OK FOR		SHEAR
2	8	225	338	136.013	131.928	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	8	225	450	147.004	142.591	473	187	188	1300	No. 20	@ 200	OK FOR		SHEAR
2	8	250	250	121.733	119.062	148	116	120	750	No. 16	@ 250	OK FOR		SHEAR
2	8	250	300	128.812	125.445	209	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	8	250	375	137.613	133.641	331	165	166	1100	No. 20	@ 250	OK FOR		SHEAR
2	8	250	500	148.901	144.711	585	201	202	1450	No. 25	@ 325	OK FOR		SHEAR
2	8	300	300	124.569	121.891	209	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	8	300	360	131.840	128.555	304	160	161	1050	No. 20	@ 250	OK FOR		SHEAR
2	8	300	450	140.928	137.175	473	187	188	1300	No. 20	@ 200	OK FOR		SHEAR
2	8	300	600	152.695	148.951	835	227	228	1700	No. 25	@ 250	OK FOR		SHEAR
2	8	350	350	127.405	124.720	285	157	158	1000	No. 20	@ 250	OK FOR		SHEAR
2	10	200	200	117.699	116.312	118	93	117	1030	No. 20	@ 250	No. 12	@	325
2	10	200	240	122.367	120.249	133	112	122	680	No. 16	@ 250	No. 12	@	925
2	10	200	300	126.545	123.849	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	10	200	400	133.712	130.223	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	10	225	225	119.114	117.726	120	105	119	680	No. 16	@ 250	No. 12	@	625
2	10	225	270	126.439	124.000	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
2	10	225	338	135.426	132.043	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	10	225	450	146.591	142.688	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	10	250	250	120.530	119.139	144	116	120	710	No. 16	@ 250	OK FOR		SHEAR
2	10	250	300	127.951	125.555	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	10	250	375	137.022	133.756	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	10	250	500	148.486	144.808	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	10	300	300	123.361	121.966	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	10	300	360	130.973	128.664	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	10	300	450	140.333	137.289	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	10	300	600	152.277	149.048	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	10	350	350	126.192	124.793	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR
2	12	200	200	117.427	116.400	118	93	117	1030	No. 20	@ 250	No. 12	@	325
2	12	200	240	122.168	120.330	133	112	122	680	No. 16	@ 250	No. 12	@	925
2	12	200	300	126.391	123.923	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	12	200	400	133.605	130.286	369	173	174	1130	No. 20	@ 250	OK FOR		SHEAR
2	12	225	225	118.842	117.814	119	105	119	660	No. 16	@ 250	No. 12	@	625
2	12	225	270	126.268	124.077	168	125	126	760	No. 16	@ 250	OK FOR		SHEAR
2	12	225	338	135.318	132.107	264	153	154	950	No. 20	@ 250	OK FOR		SHEAR
2	12	225	450	146.513	142.741	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	12	250	250	120.256	119.227	144	116	120	710	No. 16	@ 250	OK FOR		SHEAR
2	12	250	300	127.779	125.632	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	12	250	375	136.914	133.820	325	165	166	1060	No. 20	@ 250	OK FOR		SHEAR
2	12	250	500	148.407	144.861	577	201	202	1410	No. 20	@ 200	OK FOR		SHEAR
2	12	300	300	123.086	122.054	208	139	140	850	No. 20	@ 325	OK FOR		SHEAR
2	12	300	360	130.800	128.742	299	160	161	1020	No. 20	@ 250	OK FOR		SHEAR
2	12	300	450	140.223	137.354	468	187	188	1270	No. 20	@ 200	OK FOR		SHEAR
2	12	300	600	152.196	149.102	831	227	228	1690	No. 25	@ 250	OK FOR		SHEAR
2	12	350	350	125.915	124.881	283	157	158	990	No. 20	@ 250	OK FOR		SHEAR

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2.5	3	200	200	249.243	255.038	250	93	256	10750	No. 32	@ 75	No. 12	@	25
2.5	3	200	240	251.618	258.150	306	112	260	6750	No. 32	@ 100	No. 12	@	50
2.5	3	200	300	253.816	260.984	254	139	262	1380	No. 20	@ 200	No. 12	@	75
2.5	3	200	400	257.787	266.006	373	173	267	1150	No. 20	@ 250	No. 12	@	150
2.5	3	225	225	251.520	256.941	252	105	258	5050	No. 32	@ 150	No. 12	@	50
2.5	3	225	270	255.390	261.972	256	125	263	2180	No. 25	@ 200	No. 12	@	75
2.5	3	225	338	260.490	268.419	264	153	270	950	No. 20	@ 250	No. 12	@	100
2.5	3	225	450	267.563	277.128	473	187	278	1300	No. 20	@ 200	No. 12	@	175
2.5	3	250	250	253.796	258.845	254	116	260	3000	No. 32	@ 250	No. 12	@	50
2.5	3	250	300	270.588	288.613	272	139	289	1630	No. 25	@ 250	No. 12	@	75
2.5	3	250	375	263.124	270.746	331	165	272	1100	No. 20	@ 250	No. 12	@	125
2.5	3	250	500	270.622	279.960	585	201	281	1450	No. 25	@ 325	No. 12	@	225
2.5	3	300	300	258.350	262.652	260	139	263	1450	No. 25	@ 325	No. 12	@	75
2.5	3	300	360	262.692	268.245	304	160	269	1050	No. 20	@ 250	No. 12	@	125
2.5	3	300	450	268.462	275.486	473	187	276	1300	No. 20	@ 200	No. 12	@	175
2.5	3	300	600	276.738	285.625	835	227	287	1700	No. 25	@ 250	No. 12	@	375
2.5	3	350	350	262.903	266.459	285	157	268	1000	No. 20	@ 250	No. 12	@	100
2.5	4.5	200	200	194.110	218.573	195	93	220	4200	No. 32	@ 150	No. 12	@	50
2.5	4.5	200	240	197.108	221.407	198	112	223	1830	No. 25	@ 250	No. 12	@	75
2.5	4.5	200	300	199.888	224.024	208	139	225	850	No. 20	@ 325	No. 12	@	125
2.5	4.5	200	400	204.914	228.760	369	173	230	1130	No. 20	@ 250	No. 12	@	250
2.5	4.5	225	225	196.359	220.388	197	105	222	2400	No. 32	@ 325	No. 12	@	75
2.5	4.5	225	270	201.203	224.992	202	125	226	1180	No. 20	@ 250	No. 12	@	100
2.5	4.5	225	338	207.589	231.058	264	153	232	950	No. 20	@ 250	No. 12	@	150
2.5	4.5	225	450	216.405	239.546	468	187	240	1270	No. 20	@ 200	No. 12	@	325
2.5	4.5	250	250	198.609	222.203	199	116	223	1550	No. 25	@ 250	No. 12	@	75
2.5	4.5	250	300	214.993	249.212	216	139	250	930	No. 20	@ 325	No. 12	@	100
2.5	4.5	250	375	210.176	233.273	325	165	235	1060	No. 20	@ 250	No. 12	@	200
2.5	4.5	250	500	219.417	242.244	577	201	243	1410	No. 20	@ 200	No. 12	@	450
2.5	4.5	300	300	203.108	225.833	214	139	226	910	No. 20	@ 325	No. 12	@	125
2.5	4.5	300	360	208.411	230.968	299	160	232	1010	No. 20	@ 250	No. 12	@	175
2.5	4.5	300	450	215.439	237.787	468	187	238	1270	No. 20	@ 200	No. 12	@	325
2.5	4.5	300	600	225.439	247.641	831	227	249	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	4.5	350	350	207.607	229.464	283	157	231	990	No. 20	@ 250	No. 12	@	175
2.5	6	200	200	172.494	209.507	173	93	211	2900	No. 32	@ 250	No. 12	@	50
2.5	6	200	240	176.185	212.535	177	112	214	1350	No. 20	@ 200	No. 12	@	75
2.5	6	200	300	179.612	215.354	208	139	216	850	No. 20	@ 325	No. 12	@	150
2.5	6	200	400	185.794	220.487	369	173	222	1130	No. 20	@ 250	No. 12	@	300
2.5	6	225	225	174.728	211.294	175	105	213	1730	No. 25	@ 250	No. 12	@	75
2.5	6	225	270	180.655	216.211	181	125	217	900	No. 20	@ 325	No. 12	@	100
2.5	6	225	338	188.458	222.757	264	153	224	950	No. 20	@ 250	No. 12	@	175
2.5	6	225	450	199.094	231.924	468	187	232	1270	No. 20	@ 200	No. 12	@	375
2.5	6	250	250	176.962	213.080	177	116	214	1150	No. 20	@ 250	No. 12	@	100
2.5	6	250	300	193.866	239.865	208	139	240	850	No. 20	@ 325	No. 12	@	100
2.5	6	250	375	191.015	224.936	325	165	226	1060	No. 20	@ 250	No. 12	@	225
2.5	6	250	500	202.080	234.588	577	201	235	1410	No. 20	@ 200	No. 12	@	550
2.5	6	300	300	181.430	216.654	208	139	217	850	No. 20	@ 325	No. 12	@	150
2.5	6	300	360	187.810	222.096	299	160	223	1020	No. 20	@ 250	No. 12	@	200
2.5	6	300	450	196.237	229.385	468	187	230	1270	No. 20	@ 200	No. 12	@	400
2.5	6	300	600	208.054	239.915	831	227	241	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	6	350	350	185.899	220.228	283	157	222	990	No. 20	@ 250	No. 12	@	200

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
2.5	8	200	200	161.054	206.167	162	93	207	2400	No. 32	@ 325	No. 12	@	50
2.5	8	200	240	165.517	209.450	166	112	211	1150	No. 20	@ 250	No. 12	@	75
2.5	8	200	300	169.620	212.490	208	139	213	850	No. 20	@ 325	No. 12	@	150
2.5	8	200	400	176.909	217.971	369	173	219	1130	No. 20	@ 250	No. 12	@	325
2.5	8	225	225	163.276	207.940	164	105	209	1450	No. 25	@ 325	No. 12	@	75
2.5	8	225	270	170.391	213.249	172	125	214	800	No. 16	@ 250	No. 12	@	100
2.5	8	225	338	179.566	220.230	264	153	222	950	No. 20	@ 250	No. 12	@	175
2.5	8	225	450	191.682	229.826	468	187	230	1270	No. 20	@ 200	No. 12	@	400
2.5	8	250	250	165.498	209.713	167	116	211	1000	No. 20	@ 250	No. 12	@	100
2.5	8	250	300	183.274	236.688	208	139	237	850	No. 20	@ 325	No. 12	@	100
2.5	8	250	375	182.101	222.394	325	165	224	1060	No. 20	@ 250	No. 12	@	225
2.5	8	250	500	194.653	232.478	577	201	233	1410	No. 20	@ 200	No. 12	@	600
2.5	8	300	300	169.942	213.258	208	139	214	850	No. 20	@ 325	No. 12	@	150
2.5	8	300	360	177.506	219.093	299	160	220	1020	No. 20	@ 250	No. 12	@	225
2.5	8	300	450	187.294	226.817	468	187	227	1270	No. 20	@ 200	No. 12	@	425
2.5	8	300	600	200.594	237.781	831	227	239	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	8	350	350	174.387	216.804	283	157	218	990	No. 20	@ 250	No. 12	@	200
2.5	10	200	200	157.166	205.644	158	93	207	2230	No. 32	@ 325	No. 12	@	50
2.5	10	200	240	162.079	209.025	163	112	211	1100	No. 20	@ 250	No. 12	@	75
2.5	10	200	300	166.540	212.135	208	139	213	850	No. 20	@ 325	No. 12	@	150
2.5	10	200	400	174.346	217.702	369	173	219	1130	No. 20	@ 250	No. 12	@	325
2.5	10	225	225	159.381	207.412	160	105	209	1380	No. 20	@ 200	No. 12	@	75
2.5	10	225	270	167.171	212.865	168	125	213	760	No. 16	@ 250	No. 12	@	100
2.5	10	225	338	177.001	219.959	264	153	221	950	No. 20	@ 250	No. 12	@	175
2.5	10	225	450	189.669	229.617	468	187	230	1270	No. 20	@ 200	No. 12	@	400
2.5	10	250	250	161.597	209.180	162	116	210	930	No. 20	@ 325	No. 12	@	100
2.5	10	250	300	179.936	236.267	208	139	237	850	No. 20	@ 325	No. 12	@	100
2.5	10	250	375	179.525	222.119	325	165	223	1060	No. 20	@ 250	No. 12	@	250
2.5	10	250	500	192.633	232.267	577	201	233	1410	No. 20	@ 200	No. 12	@	600
2.5	10	300	300	166.029	212.717	208	139	213	850	No. 20	@ 325	No. 12	@	150
2.5	10	300	360	174.266	218.697	299	160	220	1020	No. 20	@ 250	No. 12	@	225
2.5	10	300	450	184.704	226.536	468	187	227	1270	No. 20	@ 200	No. 12	@	425
2.5	10	300	600	198.561	237.566	831	227	239	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	10	350	350	170.460	216.253	283	157	218	990	No. 20	@ 250	No. 12	@	200
2.5	12	200	200	155.917	205.634	156	93	207	2130	No. 25	@ 200	No. 12	@	50
2.5	12	200	240	161.037	209.032	161	112	211	1080	No. 20	@ 250	No. 12	@	75
2.5	12	200	300	165.648	212.149	208	139	213	850	No. 20	@ 325	No. 12	@	150
2.5	12	200	400	173.642	217.718	369	173	219	1130	No. 20	@ 250	No. 12	@	325
2.5	12	225	225	158.130	207.401	159	105	209	1350	No. 20	@ 200	No. 12	@	75
2.5	12	225	270	166.222	212.876	168	125	213	760	No. 16	@ 250	No. 12	@	100
2.5	12	225	338	176.295	219.974	264	153	221	950	No. 20	@ 250	No. 12	@	175
2.5	12	225	450	189.120	229.621	468	187	230	1270	No. 20	@ 200	No. 12	@	400
2.5	12	250	250	160.342	209.168	162	116	210	930	No. 20	@ 325	No. 12	@	100
2.5	12	250	300	178.949	236.273	208	139	237	850	No. 20	@ 325	No. 12	@	100
2.5	12	250	375	178.815	222.134	325	165	223	1060	No. 20	@ 250	No. 12	@	250
2.5	12	250	500	192.082	232.271	577	201	233	1410	No. 20	@ 200	No. 12	@	600
2.5	12	300	300	164.767	212.702	208	139	213	850	No. 20	@ 325	No. 12	@	150
2.5	12	300	360	173.308	218.706	299	160	220	1020	No. 20	@ 250	No. 12	@	225
2.5	12	300	450	183.988	226.551	468	187	227	1270	No. 20	@ 200	No. 12	@	425
2.5	12	300	600	198.005	237.571	831	227	239	1690	No. 25	@ 250	OK FOR		SHEAR
2.5	12	350	350	169.192	216.236	283	157	218	990	No. 20	@ 250	No. 12	@	200

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
3	6	200	200	244.929	210.737	245	93	212	9700	No. 32	@ 75	No. 12	@	50
3	6	200	240	249.512	214.659	250	112	216	3500	No. 32	@ 200	No. 12	@	75
3	6	200	300	253.730	218.235	254	139	219	1380	No. 20	@ 200	No. 12	@	125
3	6	200	400	261.284	224.598	370	173	226	1130	No. 20	@ 250	No. 12	@	275
3	6	225	225	248.159	212.900	249	105	214	4850	No. 32	@ 150	No. 12	@	75
3	6	225	270	255.533	219.214	256	125	220	2180	No. 25	@ 200	No. 12	@	100
3	6	225	338	265.126	227.343	267	153	229	980	No. 20	@ 250	No. 12	@	150
3	6	225	450	278.182	238.411	473	187	239	1300	No. 20	@ 200	No. 12	@	325
3	6	250	250	251.390	215.062	252	116	216	2950	No. 32	@ 250	No. 12	@	75
3	6	250	300	258.982	221.587	259	139	222	1440	No. 25	@ 325	No. 12	@	125
3	6	250	375	268.838	229.977	331	165	231	1100	No. 20	@ 250	No. 12	@	200
3	6	250	500	282.504	241.628	585	201	242	1450	No. 25	@ 325	No. 12	@	475
3	6	300	300	257.851	219.387	258	139	220	1430	No. 25	@ 325	No. 12	@	125
3	6	300	360	265.881	226.333	316	160	227	1150	No. 20	@ 250	No. 12	@	200
3	6	300	450	276.391	235.355	473	187	236	1300	No. 20	@ 200	No. 12	@	350
3	6	300	600	291.147	248.061	835	227	250	1700	No. 25	@ 250	OK FOR		SHEAR
3	6	350	350	264.312	223.711	285	157	225	1000	No. 20	@ 250	No. 12	@	200
3	8	200	200	225.096	204.650	226	93	206	7000	No. 32	@ 100	No. 12	@	50
3	8	200	240	230.616	208.842	231	112	210	2780	No. 32	@ 250	No. 12	@	75
3	8	200	300	235.688	212.676	237	139	213	1150	No. 20	@ 250	No. 12	@	150
3	8	200	400	244.724	219.501	373	173	221	1150	No. 20	@ 250	No. 12	@	325
3	8	225	225	228.306	206.786	229	105	208	3750	No. 32	@ 200	No. 12	@	75
3	8	225	270	237.135	213.527	238	125	214	1780	No. 25	@ 250	No. 12	@	100
3	8	225	338	248.551	222.221	264	153	224	950	No. 20	@ 250	No. 12	@	175
3	8	225	450	263.814	233.982	473	187	234	1300	No. 20	@ 200	No. 12	@	350
3	8	250	250	231.516	208.922	232	116	210	2330	No. 32	@ 325	No. 12	@	100
3	8	250	300	240.561	215.873	241	139	216	1200	No. 20	@ 250	No. 12	@	150
3	8	250	375	252.225	224.824	331	165	226	1100	No. 20	@ 250	No. 12	@	225
3	8	250	500	268.105	237.170	585	201	238	1450	No. 25	@ 325	No. 12	@	525
3	8	300	300	237.936	213.194	239	139	214	1180	No. 20	@ 250	No. 12	@	150
3	8	300	360	247.414	220.566	304	160	222	1050	No. 20	@ 250	No. 12	@	225
3	8	300	450	259.726	230.147	473	187	231	1300	No. 20	@ 200	No. 12	@	375
3	8	300	600	276.686	243.547	835	227	245	1700	No. 25	@ 250	OK FOR		SHEAR
3	8	350	350	244.356	217.467	285	157	219	1000	No. 20	@ 250	No. 12	@	200
3	10	200	200	217.026	202.975	218	93	204	6200	No. 32	@ 125	No. 12	@	50
3	10	200	240	223.261	207.356	224	112	209	2550	No. 32	@ 250	No. 12	@	75
3	10	200	300	228.944	211.345	230	139	212	1080	No. 20	@ 250	No. 12	@	150
3	10	200	400	238.946	218.398	370	173	220	1130	No. 20	@ 250	No. 12	@	325
3	10	225	225	220.224	205.101	221	105	207	3330	No. 32	@ 200	No. 12	@	75
3	10	225	270	230.145	212.128	231	125	213	1650	No. 25	@ 250	No. 12	@	100
3	10	225	338	242.767	221.111	264	153	223	950	No. 20	@ 250	No. 12	@	175
3	10	225	450	259.250	233.122	473	187	234	1300	No. 20	@ 200	No. 12	@	350
3	10	250	250	223.422	207.227	224	116	208	2130	No. 25	@ 200	No. 12	@	100
3	10	250	300	233.558	214.465	234	139	215	1130	No. 20	@ 250	No. 12	@	150
3	10	250	375	246.419	223.704	331	165	225	1100	No. 20	@ 250	No. 12	@	225
3	10	250	500	263.525	236.303	585	201	237	1450	No. 25	@ 325	No. 12	@	525
3	10	300	300	229.817	211.478	230	139	212	1080	No. 20	@ 250	No. 12	@	150
3	10	300	360	240.385	219.137	304	160	220	1050	No. 20	@ 250	No. 12	@	225
3	10	300	450	253.892	229.009	473	187	230	1300	No. 20	@ 200	No. 12	@	400
3	10	300	600	272.076	242.665	835	227	244	1700	No. 25	@ 250	OK FOR		SHEAR
3	10	350	350	236.213	215.730	285	157	217	1000	No. 20	@ 250	No. 12	@	225
3	12	200	200	213.801	202.678	214	93	204	5800	No. 32	@ 125	No. 12	@	50
3	12	200	240	220.469	207.134	221	112	209	2450	No. 32	@ 250	No. 12	@	75
3	12	200	300	226.495	211.175	212	139	212	880	No. 20	@ 325	No. 12	@	150
3	12	200	400	236.984	218.290	373	173	220	1150	No. 20	@ 250	No. 12	@	325
3	12	225	225	216.992	204.799	205	105	206	2700	No. 32	@ 250	No. 12	@	75
3	12	225	270	227.561	211.936	213	125	212	1350	No. 20	@ 200	No. 12	@	100
3	12	225	338	240.801	221.001	264	153	222	950	No. 20	@ 250	No. 12	@	175
3	12	225	450	257.795	233.051	473	187	234	1300	No. 20	@ 200	No. 12	@	350
3	12	250	250	220.182	206.921	207	116	208	1730	No. 25	@ 250	No. 12	@	100
3	12	250	300	230.967	214.269	216	139	215	930	No. 20	@ 325	No. 12	@	150
3	12	250	375	244.442	223.590	331	165	225	1100	No. 20	@ 250	No. 12	@	225
3	12	250	500	262.063	236.231	585	201	237	1450	No. 25	@ 325	No. 12	@	525
3	12	300	300	226.563	211.165	212	139	212	880	No. 20	@ 325	No. 12	@	150
3	12	300	360	237.779	218.935	304	160	220	1050	No. 20	@ 250	No. 12	@	225
3	12	300	450	251.900	228.891	473	187	229	1300	No. 20	@ 200	No. 12	@	400
3	12	300	600	270.599	242.590	835	227	244	1700	No. 25	@ 250	OK FOR		SHEAR
3	12	350	350	232.945	215.408	285	157	217	1000	No. 20	@ 250	No. 12	@	225

									Summary					
L_c	L_b	t_1	t_2	M_f	V_f	M_r	V_c	V_r	A_s (req.)	Flexural Reinf.		Shear Reinf.		
3.75	8	200	200	307.098	189.251	276	93	190	17600	No. 32	@ 50	No. 12	@	75
3.75	8	200	240	313.796	194.179	282	112	196	5110	No. 32	@ 150	No. 12	@	100
3.75	8	200	300	319.991	198.710	288	139	199	1890	No. 25	@ 250	No. 12	@	175
3.75	8	200	400	331.145	206.835	369	173	208	1130	No. 20	@ 250	No. 12	@	425
3.75	8	225	225	312.138	191.944	282	105	193	7560	No. 32	@ 100	No. 12	@	100
3.75	8	225	270	322.949	199.896	290	125	200	3070	No. 32	@ 250	No. 12	@	125
3.75	8	225	338	337.133	210.256	301	153	212	1310	No. 20	@ 200	No. 12	@	200
3.75	8	225	450	356.581	224.455	468	187	225	1270	No. 20	@ 200	No. 12	@	450
3.75	8	250	250	317.178	194.637	318	116	195	6050	No. 32	@ 125	No. 12	@	100
3.75	8	250	300	328.329	202.852	329	139	203	2680	No. 32	@ 250	No. 12	@	175
3.75	8	250	375	342.927	213.535	343	165	215	1200	No. 20	@ 250	No. 12	@	275
3.75	8	250	500	363.321	228.463	577	201	229	1410	No. 20	@ 200	No. 12	@	675
3.75	8	300	300	327.257	200.023	301	139	201	2120	No. 25	@ 200	No. 12	@	175
3.75	8	300	360	339.090	208.763	340	160	210	1380	No. 20	@ 200	No. 12	@	275
3.75	8	300	450	354.708	220.235	468	187	221	1270	No. 20	@ 200	No. 12	@	500
3.75	8	300	600	376.799	236.481	831	227	238	1690	No. 25	@ 250	OK FOR		SHEAR
3.75	8	350	350	337.337	205.409	339	157	207	1530	No. 25	@ 250	No. 12	@	250
3.75	10	200	200	290.126	185.619	291	93	187	24000	No. 32	@ 25	No. 12	@	75
3.75	10	200	240	297.858	190.848	298	112	192	6150	No. 32	@ 125	No. 12	@	100
3.75	10	200	300	304.988	195.657	305	139	196	2200	No. 25	@ 200	No. 12	@	200
3.75	10	200	400	317.749	204.265	369	173	206	1130	No. 20	@ 250	No. 12	@	450
3.75	10	225	225	295.142	188.289	296	105	190	9100	No. 32	@ 75	No. 12	@	100
3.75	10	225	270	307.556	196.712	308	125	197	3650	No. 32	@ 200	No. 12	@	125
3.75	10	225	338	323.718	207.666	325	153	209	1580	No. 25	@ 250	No. 12	@	225
3.75	10	225	450	345.512	222.559	468	187	223	1270	No. 20	@ 200	No. 12	@	475
3.75	10	250	250	300.157	190.959	301	116	192	5030	No. 32	@ 150	No. 12	@	125
3.75	10	250	300	312.910	199.644	313	139	200	2350	No. 32	@ 325	No. 12	@	175
3.75	10	250	375	329.469	210.918	331	165	212	1100	No. 20	@ 250	No. 12	@	300
3.75	10	250	500	352.216	226.544	577	201	227	1410	No. 20	@ 200	No. 12	@	750
3.75	10	300	300	310.189	196.299	311	139	197	2300	No. 32	@ 325	No. 12	@	200
3.75	10	300	360	323.617	205.508	324	160	207	1230	No. 20	@ 250	No. 12	@	275
3.75	10	300	450	341.188	217.571	468	187	218	1270	No. 20	@ 200	No. 12	@	550
3.75	10	300	600	365.623	234.514	831	227	236	1690	No. 25	@ 250	OK FOR		SHEAR
3.75	10	350	350	320.220	201.639	323	157	203	1350	No. 20	@ 200	No. 12	@	275
3.75	12	200	200	281.887	175.496	281	93	177	19580	No. 32	@ 25	No. 12	@	75
3.75	12	200	240	290.443	180.696	291	112	182	5700	No. 32	@ 125	No. 12	@	125
3.75	12	200	300	298.282	185.467	299	139	186	2080	No. 25	@ 200	No. 12	@	225
3.75	12	200	400	312.173	193.975	373	173	195	1150	No. 20	@ 250	No. 12	@	700
3.75	12	225	225	286.886	178.155	287	105	180	8000	No. 32	@ 100	No. 12	@	100
3.75	12	225	270	300.562	186.528	301	125	187	3400	No. 32	@ 200	No. 12	@	150
3.75	12	225	338	318.132	197.365	319	153	199	1500	No. 25	@ 250	No. 12	@	275
3.75	12	225	450	341.377	212.016	473	187	213	1300	No. 20	@ 200	No. 12	@	675
3.75	12	250	250	291.886	180.814	292	116	182	4600	No. 32	@ 150	No. 12	@	125
3.75	12	250	300	305.898	189.449	307	139	190	2230	No. 32	@ 325	No. 12	@	225
3.75	12	250	375	323.855	200.609	331	165	202	1100	No. 20	@ 250	No. 12	@	375
3.75	12	250	500	348.061	215.993	581	201	217	1430	No. 25	@ 325	OK FOR		SHEAR
3.75	12	300	300	301.885	186.132	302	139	187	2130	No. 25	@ 200	No. 12	@	225
3.75	12	300	360	316.570	195.293	318	160	196	1170	No. 20	@ 250	No. 12	@	375
3.75	12	300	450	335.538	207.243	470	187	208	1280	No. 20	@ 200	No. 12	@	825
3.75	12	300	600	361.428	223.947	835	227	228	1700	No. 25	@ 250	OK FOR		SHEAR
3.75	12	350	350	311.884	191.449	313	157	193	1250	No. 20	@ 250	No. 12	@	375

Appendix G: GFRP Design Tables — Railing Loads

G1. PL-3 Barrier — Inner Portion

Cantilever Length: 0.5								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	86	161	103	972	1824	No. 20	@ 150
3	0.225	90	161	119	650	1473	No. 20	@ 200
3	0.250	93	161	138	489	1321	No. 20	@ 200
3	0.300	99	161	189	340	1247	No. 20	@ 250
3	0.350	106	161	253	277	1290	No. 20	@ 200
4.5	0.200	80	153	98	858	1669	No. 20	@ 150
4.5	0.225	84	154	114	584	1378	No. 20	@ 200
4.5	0.250	87	156	134	447	1259	No. 20	@ 200
4.5	0.300	94	159	186	323	1218	No. 20	@ 250
4.5	0.350	102	162	251	271	1280	No. 20	@ 200
6	0.200	78	153	96	822	1621	No. 20	@ 150
6	0.225	82	154	112	565	1350	No. 20	@ 200
6	0.250	85	156	133	436	1242	No. 20	@ 250
6	0.300	93	159	185	318	1211	No. 20	@ 250
6	0.350	100	162	251	269	1276	No. 20	@ 200
8	0.200	77	153	95	810	1605	No. 20	@ 150
8	0.225	81	154	112	559	1342	No. 20	@ 200
8	0.250	85	156	133	433	1238	No. 20	@ 250
8	0.300	93	159	185	317	1210	No. 20	@ 250
8	0.350	100	162	251	269	1276	No. 20	@ 200
10	0.200	78	153	96	817	1614	No. 20	@ 150
10	0.225	82	154	112	564	1349	No. 20	@ 200
10	0.250	86	156	133	437	1243	No. 20	@ 250
10	0.300	93	159	185	320	1213	No. 20	@ 250
10	0.350	101	162	251	270	1278	No. 20	@ 200
12	0.200	79	153	96	832	1635	No. 20	@ 150
12	0.225	83	154	113	573	1363	No. 20	@ 200
12	0.250	87	156	134	443	1252	No. 20	@ 250
12	0.300	95	159	186	323	1218	No. 20	@ 250
12	0.350	102	162	252	272	1282	No. 20	@ 200

Cantilever Length: 1								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	97	161	113	1168	2085	No. 20	@ 125
3	0.225	101	161	128	767	1638	No. 20	@ 150
3	0.250	104	161	146	564	1434	No. 20	@ 200
3	0.300	112	161	195	377	1306	No. 20	@ 200
3	0.350	119	161	258	299	1327	No. 20	@ 200
4.5	0.200	90	149	106	1016	1882	No. 20	@ 150
4.5	0.225	94	150	121	674	1508	No. 20	@ 200
4.5	0.250	98	152	140	503	1343	No. 20	@ 200
4.5	0.300	105	155	190	348	1259	No. 20	@ 200
4.5	0.350	113	158	254	284	1301	No. 20	@ 200
6	0.200	87	149	103	959	1806	No. 20	@ 150
6	0.225	91	150	118	643	1462	No. 20	@ 200
6	0.250	95	152	138	484	1314	No. 20	@ 200
6	0.300	103	155	188	339	1245	No. 20	@ 250
6	0.350	110	158	253	279	1294	No. 20	@ 200
8	0.200	85	149	101	925	1760	No. 20	@ 150
8	0.225	89	150	117	624	1436	No. 20	@ 200
8	0.250	93	152	137	473	1297	No. 20	@ 200
8	0.300	101	155	188	334	1237	No. 20	@ 250
8	0.350	109	158	253	277	1290	No. 20	@ 200
10	0.200	84	149	100	913	1744	No. 20	@ 150
10	0.225	88	150	117	618	1426	No. 20	@ 200
10	0.250	92	152	136	469	1292	No. 20	@ 200
10	0.300	100	155	187	333	1235	No. 20	@ 250
10	0.350	109	158	253	276	1289	No. 20	@ 200
12	0.200	84	149	100	911	1742	No. 20	@ 150
12	0.225	88	150	117	617	1426	No. 20	@ 200
12	0.250	92	152	136	469	1292	No. 20	@ 200
12	0.300	101	155	187	333	1235	No. 20	@ 250
12	0.350	109	158	253	276	1289	No. 20	@ 200

Cantilever Length: 1.5								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	141	161	153	2082	3255	No. 25	@ 125
3	0.225	146	161	166	1343	2419	No. 25	@ 200
3	0.250	152	161	183	956	1992	No. 20	@ 125
3	0.300	163	161	225	581	1622	No. 20	@ 150
3	0.350	174	161	283	418	1524	No. 20	@ 200
4.5	0.200	133	145	144	1874	2994	No. 25	@ 125
4.5	0.225	139	146	158	1211	2244	No. 20	@ 125
4.5	0.250	145	148	174	864	1865	No. 20	@ 150
4.5	0.300	156	151	218	532	1548	No. 20	@ 200
4.5	0.350	168	154	277	391	1479	No. 20	@ 200
6	0.200	129	145	140	1785	2880	No. 25	@ 150
6	0.225	135	146	154	1159	2173	No. 20	@ 125
6	0.250	141	148	171	831	1818	No. 20	@ 150
6	0.300	153	151	216	517	1525	No. 20	@ 200
6	0.350	165	154	276	383	1466	No. 20	@ 200
8	0.200	126	145	138	1724	2803	No. 25	@ 150
8	0.225	132	146	152	1123	2126	No. 20	@ 125
8	0.250	138	148	169	809	1786	No. 20	@ 150
8	0.300	151	151	214	507	1509	No. 20	@ 200
8	0.350	163	154	275	378	1458	No. 20	@ 200
10	0.200	125	145	136	1695	2767	No. 25	@ 150
10	0.225	131	146	151	1107	2103	No. 20	@ 125
10	0.250	137	148	168	798	1772	No. 20	@ 150
10	0.300	150	151	214	503	1503	No. 20	@ 200
10	0.350	162	154	274	376	1455	No. 20	@ 200
12	0.200	124	145	136	1684	2752	No. 25	@ 150
12	0.225	131	146	151	1100	2095	No. 20	@ 125
12	0.250	137	148	168	795	1766	No. 20	@ 150
12	0.300	150	151	214	502	1501	No. 20	@ 200
12	0.350	162	154	274	376	1454	No. 20	@ 200

Cantilever Length: 2								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	Chk.	A_{frp} (mm^2)	Type	Spacing
3	0.200	143	161	143	1.00	2963	No. 25	@ 125
3	0.225	149	161	149	1.00	2065	No. 20	@ 125
3	0.250	155	161	155	1.00	1570	No. 20	@ 200
3	0.300	168	161	168	1.00	1043	No. 20	@ 250
3	0.350	180	161	226	0.80	1088	No. 20	@ 250
4.5	0.200	137	141	137	1.00	2788	No. 25	@ 150
4.5	0.225	144	142	144	1.00	1953	No. 20	@ 125
4.5	0.250	150	144	150	1.00	1492	No. 20	@ 200
4.5	0.300	163	147	163	1.00	999	No. 20	@ 250
4.5	0.350	176	150	223	0.79	1068	No. 20	@ 250
6	0.200	134	141	134	1.00	2696	No. 25	@ 150
6	0.225	141	142	141	1.00	1894	No. 20	@ 125
6	0.250	147	144	147	1.00	1450	No. 20	@ 200
6	0.300	160	147	160	1.00	975	No. 20	@ 250
6	0.350	173	150	223	0.78	1068	No. 20	@ 250
8	0.200	132	141	132	1.00	2632	No. 25	@ 150
8	0.225	139	142	139	1.00	1852	No. 20	@ 150
8	0.250	145	144	145	1.00	1420	No. 20	@ 200
8	0.300	158	147	158	1.00	958	No. 20	@ 250
8	0.350	172	150	223	0.77	1068	No. 20	@ 250
10	0.200	131	141	131	1.00	2599	No. 25	@ 150
10	0.225	137	142	137	1.00	1831	No. 20	@ 150
10	0.250	144	144	144	1.00	1405	No. 20	@ 200
10	0.300	158	147	158	1.00	949	No. 20	@ 250
10	0.350	171	150	223	0.77	1068	No. 20	@ 250
12	0.200	130	141	130	1.00	2583	No. 25	@ 150
12	0.225	137	142	137	1.00	1821	No. 20	@ 150
12	0.250	144	144	144	1.00	1398	No. 20	@ 200
12	0.300	157	147	157	1.00	945	No. 20	@ 250
12	0.350	170	150	223	0.77	1068	No. 20	@ 250

G2. PL-3 Barrier — End Portion

Cantilever Length: 0.5								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	126	164	139	1764	2854	No. 25	@ 150
3	0.225	126	165	148	1069	2053	No. 20	@ 125
3	0.250	126	166	163	739	1687	No. 20	@ 150
3	0.300	130	169	207	457	1431	No. 20	@ 200
3	0.350	137	171	269	350	1411	No. 20	@ 200
4.5	0.200	105	161	119	1309	2268	No. 25	@ 200
4.5	0.225	108	163	133	849	1752	No. 20	@ 150
4.5	0.250	112	165	152	622	1519	No. 20	@ 200
4.5	0.300	120	169	201	420	1374	No. 20	@ 200
4.5	0.350	130	173	266	338	1393	No. 20	@ 200
6	0.200	99	161	114	1199	2126	No. 20	@ 125
6	0.225	103	163	130	798	1681	No. 20	@ 150
6	0.250	108	165	149	596	1481	No. 20	@ 200
6	0.300	118	169	200	413	1362	No. 20	@ 200
6	0.350	129	173	266	336	1389	No. 20	@ 200
8	0.200	97	161	112	1160	2073	No. 20	@ 125
8	0.225	102	163	129	782	1659	No. 20	@ 150
8	0.250	107	165	149	590	1472	No. 20	@ 200
8	0.300	118	169	200	412	1362	No. 20	@ 200
8	0.350	129	173	266	337	1391	No. 20	@ 200
10	0.200	97	161	112	1159	2072	No. 20	@ 125
10	0.225	102	163	129	785	1664	No. 20	@ 150
10	0.250	108	165	149	595	1478	No. 20	@ 200
10	0.300	119	169	201	416	1368	No. 20	@ 200
10	0.350	131	173	267	340	1396	No. 20	@ 200
12	0.200	98	161	113	1173	2090	No. 20	@ 125
12	0.225	103	163	130	796	1679	No. 20	@ 150
12	0.250	109	165	150	603	1491	No. 20	@ 200
12	0.300	121	169	201	422	1376	No. 20	@ 200
12	0.350	133	173	267	344	1401	No. 20	@ 200

Cantilever Length: 1								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	138	164	150	2018	3175	No. 25	@ 125
3	0.225	137	165	159	1225	2262	No. 20	@ 125
3	0.250	138	166	172	841	1832	No. 20	@ 150
3	0.300	143	169	214	507	1509	No. 20	@ 200
3	0.350	151	171	275	378	1459	No. 20	@ 200
4.5	0.200	115	159	129	1514	2534	No. 25	@ 150
4.5	0.225	118	161	142	972	1921	No. 20	@ 125
4.5	0.250	123	163	160	703	1635	No. 20	@ 150
4.5	0.300	132	167	207	459	1435	No. 20	@ 200
4.5	0.350	142	171	271	360	1429	No. 20	@ 200
6	0.200	108	159	123	1380	2362	No. 25	@ 200
6	0.225	113	161	137	906	1831	No. 20	@ 150
6	0.250	118	163	156	667	1584	No. 20	@ 150
6	0.300	129	167	205	447	1416	No. 20	@ 200
6	0.350	140	171	270	355	1421	No. 20	@ 200
8	0.200	105	159	120	1317	2280	No. 25	@ 200
8	0.225	111	161	135	877	1790	No. 20	@ 150
8	0.250	116	163	155	652	1562	No. 20	@ 200
8	0.300	128	167	205	443	1409	No. 20	@ 200
8	0.350	139	171	270	354	1419	No. 20	@ 200
10	0.200	104	159	119	1297	2253	No. 20	@ 125
10	0.225	110	161	135	869	1779	No. 20	@ 150
10	0.250	116	163	154	649	1558	No. 20	@ 200
10	0.300	128	167	205	443	1410	No. 20	@ 200
10	0.350	140	171	270	355	1420	No. 20	@ 200
12	0.200	104	159	119	1294	2250	No. 20	@ 125
12	0.225	110	161	135	870	1781	No. 20	@ 150
12	0.250	116	163	155	651	1561	No. 20	@ 200
12	0.300	128	167	205	445	1413	No. 20	@ 200
12	0.350	141	171	270	357	1423	No. 20	@ 200

Cantilever Length: 1.5								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	140	164	152	2066	3236	No. 25	@ 125
3	0.225	140	165	161	1259	2307	No. 25	@ 200
3	0.250	141	166	175	867	1868	No. 20	@ 150
3	0.300	147	169	217	523	1533	No. 20	@ 200
3	0.350	155	171	277	389	1475	No. 20	@ 200
4.5	0.200	120	157	133	1620	2670	No. 25	@ 150
4.5	0.225	124	159	146	1039	2012	No. 20	@ 125
4.5	0.250	128	161	164	748	1699	No. 20	@ 150
4.5	0.300	139	165	211	482	1471	No. 20	@ 200
4.5	0.350	150	169	274	373	1450	No. 20	@ 200
6	0.200	115	157	128	1506	2524	No. 25	@ 150
6	0.225	120	159	143	985	1938	No. 20	@ 125
6	0.250	125	161	161	720	1660	No. 20	@ 150
6	0.300	137	165	209	474	1458	No. 20	@ 200
6	0.350	149	169	273	371	1446	No. 20	@ 200
8	0.200	112	157	126	1451	2453	No. 25	@ 200
8	0.225	118	159	141	960	1904	No. 20	@ 125
8	0.250	124	161	160	708	1642	No. 20	@ 150
8	0.300	136	165	209	471	1454	No. 20	@ 200
8	0.350	148	169	273	370	1446	No. 20	@ 200
10	0.200	111	157	125	1431	2427	No. 25	@ 200
10	0.225	117	159	141	952	1893	No. 20	@ 125
10	0.250	123	161	160	705	1638	No. 20	@ 150
10	0.300	136	165	209	471	1454	No. 20	@ 200
10	0.350	149	169	273	371	1447	No. 20	@ 200
12	0.200	111	157	125	1425	2419	No. 25	@ 200
12	0.225	117	159	141	951	1892	No. 20	@ 125
12	0.250	123	161	160	706	1639	No. 20	@ 150
12	0.300	136	165	209	473	1456	No. 20	@ 200
12	0.350	149	169	273	373	1449	No. 20	@ 200

Cantilever Length: 2								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	142	164	154	2123	3307	No. 25	@ 125
3	0.225	143	165	164	1302	2365	No. 25	@ 200
3	0.250	145	166	178	900	1915	No. 20	@ 125
3	0.300	152	169	220	544	1566	No. 20	@ 200
3	0.350	161	171	280	403	1499	No. 20	@ 200
4.5	0.200	125	157	137	1720	2798	No. 25	@ 150
4.5	0.225	129	159	151	1107	2103	No. 20	@ 125
4.5	0.250	134	161	168	797	1769	No. 20	@ 150
4.5	0.300	145	165	215	511	1515	No. 20	@ 200
4.5	0.350	158	169	277	392	1480	No. 20	@ 200
6	0.200	121	157	133	1626	2679	No. 25	@ 150
6	0.225	126	159	148	1064	2046	No. 20	@ 125
6	0.250	132	161	166	776	1740	No. 20	@ 150
6	0.300	144	165	214	506	1507	No. 20	@ 200
6	0.350	157	169	277	391	1479	No. 20	@ 200
8	0.200	119	157	132	1585	2625	No. 25	@ 150
8	0.225	125	159	147	1047	2023	No. 20	@ 125
8	0.250	131	161	166	769	1729	No. 20	@ 150
8	0.300	144	165	214	505	1506	No. 20	@ 200
8	0.350	158	169	277	392	1481	No. 20	@ 200
10	0.200	118	157	131	1571	2607	No. 25	@ 150
10	0.225	124	159	147	1042	2016	No. 20	@ 125
10	0.250	131	161	166	768	1728	No. 20	@ 150
10	0.300	144	165	214	506	1508	No. 20	@ 200
10	0.350	158	169	278	393	1483	No. 20	@ 200
12	0.200	118	157	131	1567	2603	No. 25	@ 150
12	0.225	124	159	147	1042	2017	No. 20	@ 125
12	0.250	131	161	166	769	1730	No. 20	@ 150
12	0.300	145	165	215	508	1510	No. 20	@ 200
12	0.350	159	169	278	394	1485	No. 20	@ 200

G3. PL-2 Barrier — Inner Portion

Cantilever Length: 0.5								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	51	113	71	388	1007	No. 20	@ 250
3	0.225	52	114	88	280	922	No. 20	@ 325
3	0.250	54	115	109	229	915	No. 20	@ 325
3	0.300	58	117	161	183	984	No. 20	@ 250
3	0.350	61	120	226	164	1094	No. 20	@ 250
4.5	0.200	44	109	67	322	908	No. 20	@ 325
4.5	0.225	46	111	85	243	864	No. 20	@ 325
4.5	0.250	48	113	106	205	876	No. 20	@ 325
4.5	0.300	52	116	159	172	964	No. 20	@ 250
4.5	0.350	55	120	225	158	1084	No. 20	@ 250
6	0.200	42	109	66	305	882	No. 20	@ 325
6	0.225	44	111	84	234	849	No. 20	@ 325
6	0.250	46	113	105	200	867	No. 20	@ 325
6	0.300	50	116	159	169	960	No. 20	@ 250
6	0.350	53	120	225	157	1081	No. 20	@ 250
8	0.200	41	109	65	298	873	No. 25	@ 500
8	0.225	43	111	84	231	844	No. 25	@ 500
8	0.250	45	113	105	198	864	No. 20	@ 325
8	0.300	49	116	159	168	958	No. 20	@ 250
8	0.350	53	120	224	156	1080	No. 20	@ 250
10	0.200	41	109	65	298	873	No. 25	@ 500
10	0.225	43	111	84	231	844	No. 25	@ 500
10	0.250	45	113	105	198	864	No. 20	@ 325
10	0.300	49	116	159	168	958	No. 20	@ 250
10	0.350	53	120	224	156	1080	No. 20	@ 250
12	0.200	42	109	66	301	877	No. 25	@ 500
12	0.225	44	111	84	233	847	No. 25	@ 500
12	0.250	46	113	105	199	866	No. 20	@ 325
12	0.300	50	116	159	169	960	No. 20	@ 250
12	0.350	54	120	225	157	1081	No. 20	@ 250

Cantilever Length: 1								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	63	111	80	532	1218	No. 20	@ 250
3	0.225	66	112	95	359	1044	No. 20	@ 250
3	0.250	68	113	115	276	992	No. 20	@ 250
3	0.300	72	116	165	205	1022	No. 20	@ 250
3	0.350	76	118	229	177	1116	No. 20	@ 250
4.5	0.200	57	107	75	442	1087	No. 20	@ 250
4.5	0.225	59	108	91	308	966	No. 20	@ 250
4.5	0.250	61	110	111	244	941	No. 20	@ 325
4.5	0.300	65	114	163	190	996	No. 20	@ 250
4.5	0.350	70	117	227	169	1102	No. 20	@ 250
6	0.200	54	107	73	416	1049	No. 20	@ 250
6	0.225	57	108	90	294	944	No. 20	@ 250
6	0.250	59	110	110	236	927	No. 20	@ 325
6	0.300	63	114	162	186	989	No. 20	@ 250
6	0.350	67	117	227	166	1098	No. 20	@ 250
8	0.200	53	107	72	404	1031	No. 20	@ 250
8	0.225	55	108	89	288	934	No. 20	@ 325
8	0.250	58	110	110	232	921	No. 20	@ 325
8	0.300	62	114	162	184	986	No. 20	@ 250
8	0.350	66	117	227	165	1096	No. 20	@ 250
10	0.200	53	107	72	400	1026	No. 20	@ 250
10	0.225	55	108	89	286	931	No. 20	@ 325
10	0.250	57	110	109	231	920	No. 20	@ 325
10	0.300	62	114	161	184	986	No. 20	@ 250
10	0.350	66	117	227	165	1096	No. 20	@ 250
12	0.200	53	107	72	400	1026	No. 20	@ 250
12	0.225	55	108	89	286	932	No. 20	@ 325
12	0.250	57	110	109	232	920	No. 20	@ 325
12	0.300	62	114	161	184	986	No. 20	@ 250
12	0.350	66	117	227	165	1096	No. 20	@ 250

Cantilever Length: 1.5								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	66	110	82	564	1262	No. 20	@ 200
3	0.225	69	111	97	377	1073	No. 20	@ 250
3	0.250	71	112	116	288	1011	No. 20	@ 250
3	0.300	76	114	166	211	1032	No. 20	@ 250
3	0.350	81	117	230	180	1122	No. 20	@ 250
4.5	0.200	63	104	79	509	1185	No. 20	@ 250
4.5	0.225	65	106	94	345	1022	No. 20	@ 250
4.5	0.250	68	108	114	266	976	No. 20	@ 250
4.5	0.300	73	111	164	199	1012	No. 20	@ 250
4.5	0.350	78	115	229	174	1111	No. 20	@ 250
6	0.200	62	104	78	498	1168	No. 20	@ 250
6	0.225	64	106	94	338	1013	No. 20	@ 250
6	0.250	67	108	113	263	970	No. 20	@ 250
6	0.300	72	111	164	198	1010	No. 20	@ 250
6	0.350	77	115	228	173	1109	No. 20	@ 250
8	0.200	61	104	78	493	1160	No. 20	@ 250
8	0.225	64	106	93	336	1009	No. 20	@ 250
8	0.250	66	108	113	261	968	No. 20	@ 250
8	0.300	72	111	164	197	1009	No. 20	@ 250
8	0.350	77	115	228	172	1109	No. 20	@ 250
10	0.200	61	104	78	492	1159	No. 20	@ 250
10	0.225	64	106	93	335	1008	No. 20	@ 250
10	0.250	66	108	113	261	968	No. 20	@ 250
10	0.300	72	111	164	197	1009	No. 20	@ 250
10	0.350	77	115	228	173	1109	No. 20	@ 250
12	0.200	61	104	78	493	1161	No. 20	@ 250
12	0.225	64	106	93	336	1010	No. 20	@ 250
12	0.250	67	108	113	262	969	No. 20	@ 250
12	0.300	72	111	164	198	1009	No. 20	@ 250
12	0.350	77	115	228	173	1109	No. 20	@ 250

Cantilever Length: 2								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	69	108	84	599	1312	No. 20	@ 200
3	0.225	72	109	99	400	1107	No. 20	@ 250
3	0.250	75	110	118	303	1035	No. 20	@ 250
3	0.300	81	113	168	219	1046	No. 20	@ 250
3	0.350	88	115	231	185	1131	No. 20	@ 250
4.5	0.200	68	102	82	571	1273	No. 20	@ 200
4.5	0.225	71	103	97	380	1077	No. 20	@ 250
4.5	0.250	74	105	116	288	1012	No. 20	@ 250
4.5	0.300	80	109	166	210	1030	No. 20	@ 250
4.5	0.350	86	112	230	179	1121	No. 20	@ 250
6	0.200	68	102	83	575	1278	No. 20	@ 200
6	0.225	71	103	97	382	1080	No. 20	@ 250
6	0.250	74	105	116	289	1013	No. 20	@ 250
6	0.300	80	109	166	210	1031	No. 20	@ 250
6	0.350	86	112	230	179	1121	No. 20	@ 250
8	0.200	68	102	83	581	1287	No. 20	@ 200
8	0.225	72	103	98	385	1085	No. 20	@ 250
8	0.250	75	105	117	291	1016	No. 20	@ 250
8	0.300	81	109	166	211	1032	No. 20	@ 250
8	0.350	87	112	230	180	1122	No. 20	@ 250
10	0.200	69	102	83	587	1295	No. 20	@ 200
10	0.225	72	103	98	388	1089	No. 20	@ 250
10	0.250	75	105	117	293	1019	No. 20	@ 250
10	0.300	81	109	167	212	1033	No. 20	@ 250
10	0.350	87	112	230	180	1123	No. 20	@ 250
12	0.200	69	102	84	592	1302	No. 20	@ 200
12	0.225	72	103	98	391	1093	No. 20	@ 250
12	0.250	75	105	117	295	1022	No. 20	@ 250
12	0.300	81	109	167	212	1034	No. 20	@ 250
12	0.350	87	112	230	181	1123	No. 20	@ 250

G4. PL-2 Barrier — End Portion

Cantilever Length: 0.5								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	60	144	81	555	1250	No. 20	@ 250
3	0.225	64	145	99	403	1112	No. 20	@ 250
3	0.250	67	145	121	326	1072	No. 20	@ 250
3	0.300	74	147	174	255	1106	No. 20	@ 250
3	0.350	80	148	240	223	1197	No. 20	@ 250
4.5	0.200	59	144	80	538	1226	No. 20	@ 250
4.5	0.225	62	145	99	394	1098	No. 20	@ 250
4.5	0.250	66	145	120	321	1064	No. 20	@ 250
4.5	0.300	73	147	174	252	1102	No. 20	@ 250
4.5	0.350	79	148	240	221	1195	No. 20	@ 250
6	0.200	58	144	80	532	1218	No. 20	@ 250
6	0.225	62	145	98	391	1093	No. 20	@ 250
6	0.250	65	145	120	319	1061	No. 20	@ 250
6	0.300	72	147	174	251	1100	No. 20	@ 250
6	0.350	79	148	240	221	1194	No. 20	@ 250
8	0.200	58	144	80	529	1212	No. 20	@ 250
8	0.225	62	145	98	389	1090	No. 20	@ 250
8	0.250	65	145	120	318	1059	No. 20	@ 250
8	0.300	72	147	173	251	1099	No. 20	@ 250
8	0.350	79	148	240	221	1194	No. 20	@ 250
10	0.200	58	144	80	527	1209	No. 20	@ 250
10	0.225	61	145	98	388	1088	No. 20	@ 250
10	0.250	65	145	120	317	1058	No. 20	@ 250
10	0.300	72	147	173	250	1099	No. 20	@ 250
10	0.350	79	148	240	220	1193	No. 20	@ 250
12	0.200	58	144	80	525	1207	No. 20	@ 250
12	0.225	61	145	98	387	1087	No. 20	@ 250
12	0.250	65	145	120	317	1057	No. 20	@ 250
12	0.300	72	147	173	250	1098	No. 20	@ 250
12	0.350	78	148	240	220	1193	No. 20	@ 250

Cantilever Length: 1								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	72	142	142	1832	2941	No. 25	@ 150
3	0.225	75	143	143	986	1940	No. 20	@ 125
3	0.250	79	144	144	540	1398	No. 20	@ 200
3	0.300	86	145	179	280	1149	No. 20	@ 250
3	0.350	94	147	244	238	1223	No. 20	@ 250
4.5	0.200	70	142	142	1832	2941	No. 25	@ 150
4.5	0.225	73	143	143	986	1940	No. 20	@ 125
4.5	0.250	77	144	144	540	1398	No. 20	@ 200
4.5	0.300	85	145	178	277	1143	No. 20	@ 250
4.5	0.350	92	147	243	236	1220	No. 20	@ 250
6	0.200	69	142	142	1832	2941	No. 25	@ 150
6	0.225	73	143	143	986	1940	No. 20	@ 125
6	0.250	77	144	144	540	1398	No. 20	@ 200
6	0.300	84	145	178	275	1140	No. 20	@ 250
6	0.350	92	147	243	235	1218	No. 20	@ 250
8	0.200	69	142	87	662	1400	No. 20	@ 200
8	0.225	72	143	104	465	1205	No. 20	@ 250
8	0.250	76	144	125	366	1135	No. 20	@ 250
8	0.300	84	145	178	274	1139	No. 20	@ 250
8	0.350	91	147	243	235	1218	No. 20	@ 250
10	0.200	68	142	87	659	1396	No. 20	@ 200
10	0.225	72	143	104	464	1202	No. 20	@ 250
10	0.250	76	144	125	365	1133	No. 20	@ 250
10	0.300	84	145	177	274	1138	No. 20	@ 250
10	0.350	91	147	243	234	1217	No. 20	@ 250
12	0.200	68	142	87	657	1394	No. 20	@ 200
12	0.225	72	143	104	463	1201	No. 20	@ 250
12	0.250	76	144	125	365	1132	No. 20	@ 250
12	0.300	83	145	177	274	1138	No. 20	@ 250
12	0.350	91	147	243	234	1217	No. 20	@ 250

Cantilever Length: 1.5								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	73	140	90	718	1478	No. 20	@ 200
3	0.225	77	141	107	497	1252	No. 20	@ 250
3	0.250	81	142	127	386	1165	No. 20	@ 250
3	0.300	89	143	179	284	1154	No. 20	@ 250
3	0.350	97	145	244	240	1226	No. 20	@ 250
4.5	0.200	73	140	91	726	1489	No. 20	@ 200
4.5	0.225	77	141	108	503	1261	No. 20	@ 200
4.5	0.250	82	142	128	391	1173	No. 20	@ 250
4.5	0.300	90	143	180	287	1159	No. 20	@ 250
4.5	0.350	98	145	245	242	1230	No. 20	@ 250
6	0.200	74	140	91	737	1504	No. 20	@ 200
6	0.225	78	141	108	510	1270	No. 20	@ 200
6	0.250	82	142	128	395	1179	No. 20	@ 250
6	0.300	91	143	180	289	1163	No. 20	@ 250
6	0.350	99	145	245	243	1232	No. 20	@ 250
8	0.200	75	140	92	744	1514	No. 20	@ 200
8	0.225	79	141	108	514	1277	No. 20	@ 200
8	0.250	83	142	129	398	1184	No. 20	@ 250
8	0.300	91	143	180	290	1165	No. 20	@ 250
8	0.350	100	145	245	244	1233	No. 20	@ 250
10	0.200	75	140	92	747	1518	No. 20	@ 200
10	0.225	79	141	109	516	1279	No. 20	@ 200
10	0.250	83	142	129	399	1185	No. 20	@ 250
10	0.300	91	143	180	291	1166	No. 20	@ 250
10	0.350	100	145	245	244	1234	No. 20	@ 250
12	0.200	75	140	92	748	1520	No. 20	@ 200
12	0.225	79	141	109	517	1280	No. 20	@ 200
12	0.250	83	142	129	400	1186	No. 20	@ 250
12	0.300	92	143	180	291	1166	No. 20	@ 250
12	0.350	100	145	245	244	1234	No. 20	@ 250

Cantilever Length: 2								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	75	139	92	753	1527	No. 20	@ 200
3	0.225	80	139	109	518	1283	No. 20	@ 200
3	0.250	84	140	129	400	1187	No. 20	@ 250
3	0.300	93	142	180	291	1167	No. 20	@ 250
3	0.350	102	143	245	244	1234	No. 20	@ 250
4.5	0.200	76	139	93	763	1540	No. 20	@ 200
4.5	0.225	81	139	110	528	1297	No. 20	@ 200
4.5	0.250	85	140	130	409	1200	No. 20	@ 250
4.5	0.300	95	142	181	297	1176	No. 20	@ 250
4.5	0.350	104	143	246	248	1241	No. 20	@ 250
6	0.200	78	139	94	790	1578	No. 20	@ 150
6	0.225	82	139	111	544	1320	No. 20	@ 200
6	0.250	87	140	131	419	1215	No. 20	@ 250
6	0.300	97	142	182	301	1183	No. 20	@ 250
6	0.350	106	143	247	251	1245	No. 20	@ 250
8	0.200	79	139	95	812	1608	No. 20	@ 150
8	0.225	84	139	112	556	1338	No. 20	@ 200
8	0.250	88	140	132	426	1227	No. 20	@ 250
8	0.300	98	142	183	305	1189	No. 20	@ 250
8	0.350	107	143	247	252	1248	No. 20	@ 250
10	0.200	80	139	96	824	1623	No. 20	@ 150
10	0.225	84	139	112	563	1347	No. 20	@ 200
10	0.250	89	140	132	430	1233	No. 20	@ 250
10	0.300	98	142	183	306	1192	No. 20	@ 250
10	0.350	108	143	247	253	1250	No. 20	@ 250
12	0.200	80	139	96	830	1632	No. 20	@ 150
12	0.225	85	139	113	566	1352	No. 20	@ 200
12	0.250	89	140	132	432	1236	No. 20	@ 250
12	0.300	99	142	183	307	1193	No. 20	@ 250
12	0.350	108	143	248	254	1251	No. 20	@ 250

G5. PL-2 Parapet — Inner Portion

Cantilever Length: 0.5								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	84	107	96	829	1630	No. 20	@ 150
3	0.225	83	109	107	491	1243	No. 20	@ 250
3	0.250	83	111	122	340	1094	No. 20	@ 250
3	0.300	83	114	169	224	1054	No. 20	@ 250
3	0.350	84	117	231	185	1130	No. 20	@ 250
4.5	0.200	56	109	75	441	1086	No. 20	@ 250
4.5	0.225	58	110	91	306	962	No. 20	@ 250
4.5	0.250	60	112	111	242	937	No. 20	@ 325
4.5	0.300	64	114	162	188	993	No. 20	@ 250
4.5	0.350	68	117	227	167	1099	No. 20	@ 250
6	0.200	49	109	70	364	972	No. 20	@ 250
6	0.225	51	110	87	267	901	No. 20	@ 325
6	0.250	53	112	108	220	901	No. 20	@ 325
6	0.300	58	114	160	179	977	No. 20	@ 250
6	0.350	62	117	226	162	1090	No. 20	@ 250
8	0.200	45	109	68	331	922	No. 20	@ 325
8	0.225	48	110	85	249	873	No. 20	@ 325
8	0.250	50	112	107	209	883	No. 20	@ 325
8	0.300	55	114	160	174	968	No. 20	@ 250
8	0.350	60	117	225	159	1085	No. 20	@ 250
10	0.200	44	109	67	318	902	No. 20	@ 325
10	0.225	46	110	85	242	862	No. 20	@ 325
10	0.250	48	112	106	205	876	No. 20	@ 325
10	0.300	53	114	159	172	964	No. 20	@ 250
10	0.350	58	117	225	158	1083	No. 20	@ 250
12	0.200	43	109	66	312	893	No. 20	@ 325
12	0.225	45	110	84	239	856	No. 20	@ 325
12	0.250	48	112	106	203	872	No. 20	@ 325
12	0.300	52	114	159	171	963	No. 20	@ 250
12	0.350	57	117	225	157	1082	No. 20	@ 250

Cantilever Length: 1								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	92	105	103	969	1820	No. 20	@ 150
3	0.225	92	106	113	570	1358	No. 20	@ 200
3	0.250	92	108	128	387	1167	No. 20	@ 250
3	0.300	93	112	172	243	1086	No. 20	@ 250
3	0.350	95	115	234	194	1147	No. 20	@ 250
4.5	0.200	64	107	80	536	1223	No. 20	@ 250
4.5	0.225	67	108	95	359	1044	No. 20	@ 250
4.5	0.250	69	110	115	275	990	No. 20	@ 250
4.5	0.300	74	113	165	203	1019	No. 20	@ 250
4.5	0.350	79	115	229	176	1115	No. 20	@ 250
6	0.200	57	107	75	444	1090	No. 20	@ 250
6	0.225	59	108	91	311	971	No. 20	@ 250
6	0.250	62	110	111	248	947	No. 20	@ 250
6	0.300	68	113	163	192	1000	No. 20	@ 250
6	0.350	73	115	228	170	1105	No. 20	@ 250
8	0.200	53	107	72	402	1028	No. 20	@ 250
8	0.225	56	108	89	289	937	No. 20	@ 325
8	0.250	59	110	110	235	925	No. 20	@ 325
8	0.300	64	113	162	187	990	No. 20	@ 250
8	0.350	70	115	227	167	1099	No. 20	@ 250
10	0.200	51	107	71	384	1002	No. 20	@ 250
10	0.225	54	108	88	280	922	No. 20	@ 325
10	0.250	57	110	109	229	916	No. 20	@ 325
10	0.300	63	113	161	184	986	No. 20	@ 250
10	0.350	69	115	227	166	1096	No. 20	@ 250
12	0.200	50	107	71	375	988	No. 20	@ 250
12	0.225	53	108	88	275	914	No. 20	@ 325
12	0.250	56	110	109	226	911	No. 20	@ 325
12	0.300	62	113	161	183	984	No. 20	@ 250
12	0.350	68	115	226	165	1095	No. 20	@ 250

Cantilever Length: 1.5								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	100	102	110	1117	2017	No. 20	@ 125
3	0.225	101	104	119	656	1481	No. 20	@ 200
3	0.250	101	106	133	439	1246	No. 20	@ 250
3	0.300	103	109	176	264	1122	No. 20	@ 250
3	0.350	106	112	236	204	1165	No. 20	@ 250
4.5	0.200	72	105	86	644	1376	No. 20	@ 200
4.5	0.225	75	107	101	419	1136	No. 20	@ 250
4.5	0.250	78	108	119	312	1050	No. 20	@ 250
4.5	0.300	84	111	168	221	1049	No. 20	@ 250
4.5	0.350	90	114	232	186	1132	No. 20	@ 250
6	0.200	65	105	80	538	1226	No. 20	@ 250
6	0.225	68	107	96	365	1053	No. 20	@ 250
6	0.250	71	108	115	281	1000	No. 20	@ 250
6	0.300	77	111	166	208	1027	No. 20	@ 250
6	0.350	84	114	230	179	1121	No. 20	@ 250
8	0.200	61	105	78	488	1154	No. 20	@ 250
8	0.225	64	107	94	338	1013	No. 20	@ 250
8	0.250	67	108	114	266	975	No. 20	@ 250
8	0.300	74	111	165	202	1016	No. 20	@ 250
8	0.350	81	114	229	176	1115	No. 20	@ 250
10	0.200	59	105	76	467	1123	No. 20	@ 250
10	0.225	62	107	93	327	995	No. 20	@ 250
10	0.250	66	108	113	259	964	No. 20	@ 250
10	0.300	72	111	164	199	1011	No. 20	@ 250
10	0.350	79	114	229	174	1112	No. 20	@ 250
12	0.200	58	105	76	456	1107	No. 20	@ 250
12	0.225	61	107	92	321	986	No. 20	@ 250
12	0.250	65	108	112	255	958	No. 20	@ 250
12	0.300	72	111	164	197	1008	No. 20	@ 250
12	0.350	78	114	229	173	1110	No. 20	@ 250

Cantilever Length: 2								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	112	100	121	1337	2305	No. 25	@ 200
3	0.225	112	101	129	787	1666	No. 20	@ 150
3	0.250	114	103	142	521	1370	No. 20	@ 200
3	0.300	117	107	182	299	1180	No. 20	@ 250
3	0.350	121	110	240	222	1196	No. 20	@ 250
4.5	0.200	83	103	95	814	1610	No. 20	@ 150
4.5	0.225	87	105	109	518	1282	No. 20	@ 200
4.5	0.250	90	106	126	373	1146	No. 20	@ 250
4.5	0.300	97	109	173	249	1097	No. 20	@ 250
4.5	0.350	104	112	235	201	1160	No. 20	@ 250
6	0.200	76	103	89	691	1440	No. 20	@ 200
6	0.225	79	105	103	452	1185	No. 20	@ 250
6	0.250	83	106	122	336	1087	No. 20	@ 250
6	0.300	91	109	171	234	1071	No. 20	@ 250
6	0.350	99	112	234	194	1147	No. 20	@ 250
8	0.200	72	103	86	631	1357	No. 20	@ 200
8	0.225	76	105	101	420	1138	No. 20	@ 250
8	0.250	80	106	120	317	1057	No. 20	@ 250
8	0.300	88	109	169	226	1058	No. 20	@ 250
8	0.350	96	112	233	190	1140	No. 20	@ 250
10	0.200	70	103	84	605	1321	No. 20	@ 200
10	0.225	74	105	100	406	1116	No. 20	@ 250
10	0.250	78	106	119	309	1044	No. 20	@ 250
10	0.300	86	109	168	223	1052	No. 20	@ 250
10	0.350	94	112	232	188	1137	No. 20	@ 250
12	0.200	69	103	84	592	1302	No. 20	@ 200
12	0.225	73	105	99	399	1105	No. 20	@ 250
12	0.250	77	106	118	304	1037	No. 20	@ 250
12	0.300	85	109	168	221	1049	No. 20	@ 250
12	0.350	93	112	232	187	1135	No. 20	@ 250

G6. PL-2 Parapet — End Portion

Cantilever Length: 0.5								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	66	144	85	626	1350	No. 20	@ 200
3	0.225	70	145	103	446	1177	No. 20	@ 250
3	0.250	73	145	124	355	1117	No. 20	@ 250
3	0.300	80	147	177	269	1129	No. 20	@ 250
3	0.350	86	148	242	230	1210	No. 20	@ 250
4.5	0.200	64	144	84	608	1325	No. 20	@ 200
4.5	0.225	68	145	102	437	1162	No. 20	@ 250
4.5	0.250	72	145	123	349	1108	No. 20	@ 250
4.5	0.300	79	147	176	266	1125	No. 20	@ 250
4.5	0.350	85	148	242	229	1208	No. 20	@ 250
6	0.200	64	144	84	601	1315	No. 20	@ 200
6	0.225	68	145	102	433	1157	No. 20	@ 250
6	0.250	71	145	123	347	1104	No. 20	@ 250
6	0.300	78	147	176	265	1123	No. 20	@ 250
6	0.350	85	148	242	228	1207	No. 20	@ 250
8	0.200	64	144	84	597	1310	No. 20	@ 200
8	0.225	67	145	102	431	1153	No. 20	@ 250
8	0.250	71	145	123	345	1102	No. 20	@ 250
8	0.300	78	147	176	264	1122	No. 20	@ 250
8	0.350	85	148	242	228	1206	No. 20	@ 250
10	0.200	63	144	84	595	1306	No. 20	@ 200
10	0.225	67	145	102	429	1151	No. 20	@ 250
10	0.250	71	145	123	345	1101	No. 20	@ 250
10	0.300	78	147	176	264	1122	No. 20	@ 250
10	0.350	84	148	242	228	1206	No. 20	@ 250
12	0.200	63	144	84	594	1304	No. 20	@ 200
12	0.225	67	145	101	429	1150	No. 20	@ 250
12	0.250	71	145	123	344	1100	No. 20	@ 250
12	0.300	78	147	176	264	1121	No. 20	@ 250
12	0.350	84	148	242	228	1206	No. 20	@ 250

Cantilever Length: 1								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	73	142	91	732	1498	No. 20	@ 200
3	0.225	78	143	108	510	1270	No. 20	@ 200
3	0.250	82	144	129	396	1181	No. 20	@ 250
3	0.300	90	145	180	290	1165	No. 20	@ 250
3	0.350	98	147	245	244	1233	No. 20	@ 250
4.5	0.200	72	142	90	703	1458	No. 20	@ 200
4.5	0.225	76	143	107	494	1247	No. 20	@ 250
4.5	0.250	80	144	128	387	1167	No. 20	@ 250
4.5	0.300	89	145	180	286	1158	No. 20	@ 250
4.5	0.350	96	147	245	242	1230	No. 20	@ 250
6	0.200	71	142	89	694	1446	No. 20	@ 200
6	0.225	75	143	106	489	1240	No. 20	@ 250
6	0.250	80	144	127	384	1162	No. 20	@ 250
6	0.300	88	145	179	285	1156	No. 20	@ 250
6	0.350	96	147	245	241	1228	No. 20	@ 250
8	0.200	71	142	89	689	1438	No. 20	@ 200
8	0.225	75	143	106	486	1236	No. 20	@ 250
8	0.250	79	144	127	382	1160	No. 20	@ 250
8	0.300	88	145	179	284	1155	No. 20	@ 250
8	0.350	95	147	244	240	1228	No. 20	@ 250
10	0.200	70	142	89	686	1434	No. 20	@ 200
10	0.225	75	143	106	485	1234	No. 20	@ 250
10	0.250	79	144	127	381	1158	No. 20	@ 250
10	0.300	87	145	179	284	1154	No. 20	@ 250
10	0.350	95	147	244	240	1227	No. 20	@ 250
12	0.200	70	142	89	685	1432	No. 20	@ 200
12	0.225	75	143	106	484	1232	No. 20	@ 250
12	0.250	79	144	127	381	1157	No. 20	@ 250
12	0.300	87	145	179	283	1154	No. 20	@ 250
12	0.350	95	147	244	240	1227	No. 20	@ 250

Cantilever Length: 1.5								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	80	140	97	834	1638	No. 20	@ 150
3	0.225	85	141	113	571	1360	No. 20	@ 200
3	0.250	90	142	133	437	1243	No. 20	@ 250
3	0.300	99	143	184	311	1198	No. 20	@ 250
3	0.350	108	145	248	256	1254	No. 20	@ 250
4.5	0.200	77	140	94	786	1572	No. 20	@ 150
4.5	0.225	82	141	111	545	1322	No. 20	@ 200
4.5	0.250	87	142	131	421	1219	No. 20	@ 250
4.5	0.300	97	143	183	304	1188	No. 20	@ 250
4.5	0.350	106	145	247	253	1249	No. 20	@ 250
6	0.200	76	140	93	774	1555	No. 20	@ 200
6	0.225	81	141	110	539	1312	No. 20	@ 200
6	0.250	86	142	131	417	1213	No. 20	@ 250
6	0.300	96	143	182	302	1185	No. 20	@ 250
6	0.350	105	145	247	252	1247	No. 20	@ 250
8	0.200	76	140	93	767	1546	No. 20	@ 200
8	0.225	81	141	110	535	1307	No. 20	@ 200
8	0.250	86	142	131	415	1210	No. 20	@ 250
8	0.300	95	143	182	301	1183	No. 20	@ 250
8	0.350	105	145	247	251	1246	No. 20	@ 250
10	0.200	76	140	93	764	1542	No. 20	@ 200
10	0.225	81	141	110	533	1304	No. 20	@ 200
10	0.250	86	142	130	414	1208	No. 20	@ 250
10	0.300	95	143	182	301	1182	No. 20	@ 250
10	0.350	104	145	247	251	1245	No. 20	@ 250
12	0.200	76	140	93	762	1539	No. 20	@ 200
12	0.225	81	141	110	532	1302	No. 20	@ 200
12	0.250	86	142	130	413	1207	No. 20	@ 250
12	0.300	95	143	182	300	1182	No. 20	@ 250
12	0.350	104	145	247	251	1245	No. 20	@ 250

Cantilever Length: 2								
Barrier Length (m)	Slab Thickness (m)	M_f (kN•m/m)	P_f (kN/m)	M_r (kN•m/m)	T_r (kN/m)	A_{frp} (mm^2)	Type	Spacing
3	0.200	91	140	106	1019	1886	No. 20	@ 125
3	0.225	96	141	121	682	1519	No. 20	@ 200
3	0.250	101	142	141	510	1353	No. 20	@ 200
3	0.300	112	143	190	348	1259	No. 20	@ 200
3	0.350	122	145	253	279	1293	No. 20	@ 200
4.5	0.200	86	140	101	922	1756	No. 20	@ 150
4.5	0.225	91	141	118	631	1446	No. 20	@ 200
4.5	0.250	97	142	137	480	1308	No. 20	@ 200
4.5	0.300	108	143	188	336	1240	No. 20	@ 250
4.5	0.350	118	145	252	273	1283	No. 20	@ 200
6	0.200	85	140	100	905	1733	No. 20	@ 150
6	0.225	90	141	117	621	1431	No. 20	@ 200
6	0.250	96	142	137	474	1299	No. 20	@ 200
6	0.300	107	143	187	333	1235	No. 20	@ 250
6	0.350	117	145	251	271	1281	No. 20	@ 200
8	0.200	84	140	100	896	1721	No. 20	@ 150
8	0.225	90	141	116	616	1424	No. 20	@ 200
8	0.250	95	142	137	471	1294	No. 20	@ 200
8	0.300	106	143	187	332	1233	No. 20	@ 250
8	0.350	117	145	251	271	1279	No. 20	@ 200
10	0.200	84	140	99	892	1716	No. 20	@ 150
10	0.225	90	141	116	614	1421	No. 20	@ 200
10	0.250	95	142	136	469	1292	No. 20	@ 200
10	0.300	106	143	187	331	1232	No. 20	@ 250
10	0.350	117	145	251	270	1279	No. 20	@ 200
12	0.200	84	140	99	889	1713	No. 20	@ 150
12	0.225	89	141	116	612	1419	No. 20	@ 200
12	0.250	95	142	136	468	1291	No. 20	@ 200
12	0.300	106	143	187	331	1231	No. 20	@ 250
12	0.350	116	145	251	270	1278	No. 20	@ 200

Appendix H: Key Elements of SAP2000 API Codes

H1. Analysis of Transverse Shear and Moment

Code:

```
Sub Results_Analysis()

   'dimension variables
        Dim SapObject As SAP2000v.SapObject ‘enter version
        Dim SapModel As cSapModel
        Dim FileName As String
        Dim coordinates As Range
        Dim ret As Long
        Dim NumberResults As Long
        Dim Obj() As String
        Dim Elm() As String
        Dim PointElm() As String
        Dim LoadCase() As String
        Dim StepType() As String
        Dim StepNum() As Double
        Dim U1() As Double
        Dim U2() As Double
        Dim U3() As Double
        Dim R1() As Double
        Dim R2() As Double
        Dim R3() As Double
        Dim F1() As Double
        Dim F2() As Double
        Dim F3() As Double
        Dim M1() As Double
        Dim M2() As Double
        Dim M3() As Double
        Dim F11() As Double
        Dim F22() As Double
        Dim F12() As Double
        Dim FMax() As Double
        Dim FMin() As Double
        Dim FAngle() As Double
        Dim FVM() As Double
        Dim M11() As Double
        Dim M22() As Double
        Dim M12() As Double
        Dim MMax() As Double
        Dim MMin() As Double
        Dim MAngle() As Double
        Dim V13() As Double
        Dim V23() As Double
        Dim VMax() As Double
```

```
        Dim VAngle() As Double

'set coordinates range in the Excel sheet
        Set coordinates = Range("CW2:CZ81")

    'create SAP2000 object
        Set SapObject = New SAP2000v.SapObject ‘enter version

    'start SAP2000 application
        SapObject.ApplicationStart

    'create SAPModel object
        Set SapModel = SapObject.SapModel

    'initialize model
        ret = SapModel.InitializeNewModel

    'open model
        FileName = "C:\..."
        ret = SapModel.File.OpenFile(FileName)

    'lock or unlock model
        ret = SapModel.SetModelIsLocked(False)

    'assign self-weight multiplier
        ret = SapModel.LoadPatterns.SetSelfWTMultiplier("DEAD", 0)

    'run analysis
        ret = SapModel.Analyze.RunAnalysis

    'clear all case and combo output selections
        ret = SapModel.Results.Setup.DeselectAllCasesAndCombosForOutput

    'set case and combo output selections
        ret = SapModel.Results.Setup.SetCaseSelectedForOutput("DEAD")

    'select joints to analyze and obtain their displacements; non-point
boolean values irrelevant for range
        ret = SapModel.SelectObj.CoordinateRange(5500, 6500, 0, 0, 0, 0,
False, "Global", False, True, True, True, True, True)
        ret = SapModel.Results.JointDispl("3", SelectionElm, NumberResults,
Obj, Elm, LoadCase, StepType, StepNum, U1, U2, U3, R1, R2, R3)

    'write joint displacements to Excel sheet; 21 points spanning 1 m
        For i = 0 To 20
            coordinates(i + 1, 2).Value = U3(i)
        Next i

    'clear selection of free end to make way for selecting fixed end
        ret = SapModel.SelectObj.ClearSelection

    'select joints to analyze and obtain their reactions; non-point boolean
values irrelevant for range
        ret = SapModel.SelectObj.CoordinateRange(5500, 6500, -1000, -1000, 0,
0, False, "Global", False, True, True, True, True, True)
```

```
        ret = SapModel.Results.JointReact("3", SelectionElm, NumberResults,
Obj, Elm, LoadCase, StepType, StepNum, F1, F2, F3, M1, M2, M3)

    'write joint reactions to Excel sheet; 21 reactions spanning 1 m
        For i = 0 To 20
            coordinates(i + 1, 3).Value = F3(i)
        Next i

    'clear selection of fixed joints to make way for selecting mesh elements
        ret = SapModel.SelectObj.ClearSelection

    'get area moments
        ret = SapModel.SelectObj.CoordinateRange(5500, 6500, -1000, -950, 0,
0, False, "Global", False, False, False, True, False, False)
        ret = SapModel.Results.AreaForceShell("3", SelectionElm,
NumberResults, Obj, Elm, PointElm, LoadCase, StepType, StepNum, F11, F22,
F12, FMax, FMin, FAngle, FVM, M11, M22, M12, MMax, MMin, MAngle, V13, V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
        For i = 0 To 79
            coordinates(i + 1, 4).Value = M22(i)
        Next i

    'clear selection
        ret = SapModel.SelectObj.ClearSelection

    'close SAP2000
        SapObject.ApplicationExit False
        Set SapModel = Nothing
        Set SapObject = Nothing

End Sub
```

H2. Examination of Extent of Shear and Negative Moment into Internal Span

Code:

```
Sub Results_Analysis()

   'dimension variables
        Dim SapObject As SAP2000v.SapObject 'enter version
        Dim SapModel As cSapModel
        Dim FileName As String
        Dim coordinates As Range
        Dim ret As Long
        Dim NumberResults As Long
        Dim Obj() As String
        Dim Elm() As String
        Dim PointElm() As String
        Dim LoadCase() As String
        Dim StepType() As String
        Dim StepNum() As Double
        Dim U1() As Double
```

```
        Dim U2() As Double
        Dim U3() As Double
        Dim R1() As Double
        Dim R2() As Double
        Dim R3() As Double
        Dim F1() As Double
        Dim F2() As Double
        Dim F3() As Double
        Dim M1() As Double
        Dim M2() As Double
        Dim M3() As Double
        Dim F11() As Double
        Dim F22() As Double
        Dim F12() As Double
        Dim FMax() As Double
        Dim FMin() As Double
        Dim FAngle() As Double
        Dim FVM() As Double
        Dim M11() As Double
        Dim M22() As Double
        Dim M12() As Double
        Dim MMax() As Double
        Dim MMin() As Double
        Dim MAngle() As Double
        Dim V13() As Double
        Dim V23() As Double
        Dim VMax() As Double
        Dim VAngle() As Double

    'set coordinates range in the Excel sheet
        Set coordinates = Range("A2:Q81")

    'create SAP2000 object
        Set SapObject = New SAP2000v.SapObject ‘enter version

    'start SAP2000 application
SapObject.ApplicationStart

    'createSAPModel object
        Set SapModel = SapObject.SapModel

    'initialize model
ret = SapModel.InitializeNewModel

    'open model
FileName = "C:\...

    'run analysis
ret = SapModel.Analyze.RunAnalysis

    'clear all case and combo output selections
ret = SapModel.Results.Setup.DeselectAllCasesAndCombosForOutput

    'set case and combo output selections
ret = SapModel.Results.Setup.SetCaseSelectedForOutput("DEAD")
```

```
    'get area moments, transverse - cantilever 0 of 5
ret = SapModel.SelectObj.CoordinateRange(5500, 6500, -50, 0, 0, 0, False,
"Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults, Obj, Elm, PointElm, LoadCase, StepType, StepNum, F11, F22,
F12, FMax, FMin, FAngle, FVM, M11, M22, M12, MMax, MMin, MAngle, V13, V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
For i = 0 To 79
coordinates(i + 1, 2).Value = M22(i)
        Next i

    'clear selection
ret = SapModel.SelectObj.ClearSelection


    'get area moments, transverse - cantilever 1 of 5
ret = SapModel.SelectObj.CoordinateRange(5500, 6500, -200, -150, 0, 0, False,
"Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults, Obj, Elm, PointElm, LoadCase, StepType, StepNum, F11, F22,
F12, FMax, FMin, FAngle, FVM, M11, M22, M12, MMax, MMin, MAngle, V13, V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
For i = 0 To 79
coordinates(i + 1, 3).Value = M22(i)
        Next i

    'clear selection
ret = SapModel.SelectObj.ClearSelection

    'get area moments, transverse - cantilever 2 of 5
ret = SapModel.SelectObj.CoordinateRange(5500, 6500, -400, -350, 0, 0, False,
"Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults, Obj, Elm, PointElm, LoadCase, StepType, StepNum, F11, F22,
F12, FMax, FMin, FAngle, FVM, M11, M22, M12, MMax, MMin, MAngle, V13, V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
For i = 0 To 79
coordinates(i + 1, 4).Value = M22(i)
        Next i

    'clear selection
ret = SapModel.SelectObj.ClearSelection

    'get area moments, transverse - cantilever 3 of 5
ret = SapModel.SelectObj.CoordinateRange(5500, 6500, -600, -550, 0, 0, False,
```

```
"Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults, Obj, Elm, PointElm, LoadCase, StepType, StepNum, F11, F22,
F12, FMax, FMin, FAngle, FVM, M11, M22, M12, MMax, MMin, MAngle, V13, V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
For i = 0 To 79
coordinates(i + 1, 5).Value = M22(i)
        Next i

    'clear selection
ret = SapModel.SelectObj.ClearSelection

    'get area moments, transverse - cantilever 4 of 5
ret = SapModel.SelectObj.CoordinateRange(5500, 6500, -800, -750, 0, 0, False,
"Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults, Obj, Elm, PointElm, LoadCase, StepType, StepNum, F11, F22,
F12, FMax, FMin, FAngle, FVM, M11, M22, M12, MMax, MMin, MAngle, V13, V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
For i = 0 To 79
coordinates(i + 1, 6).Value = M22(i)
        Next i

    'clear selection
ret = SapModel.SelectObj.ClearSelection

    'get area moments, transverse - cantilever 5 of 5
ret  =  SapModel.SelectObj.CoordinateRange(5500,  6500,  -1000,  -950,  0,  0,
False, "Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults, Obj, Elm, PointElm, LoadCase, StepType, StepNum, F11, F22,
F12, FMax, FMin, FAngle, FVM, M11, M22, M12, MMax, MMin, MAngle, V13, V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
For i = 0 To 79
coordinates(i + 1, 7).Value = M22(i)
        Next i

    'clear selection
ret = SapModel.SelectObj.ClearSelection

    'get area moments, transverse - between girders 1 of 10
ret  =  SapModel.SelectObj.CoordinateRange(5500,  6500,  -1200,  -1150,  0,  0,
False, "Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults, Obj, Elm, PointElm, LoadCase, StepType, StepNum, F11, F22,
F12, FMax, FMin, FAngle, FVM, M11, M22, M12, MMax, MMin, MAngle, V13, V23,
```

```
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
For i = 0 To 79
coordinates(i + 1, 8).Value = M22(i)
        Next i

    'clear selection
ret = SapModel.SelectObj.ClearSelection

    'get area moments, transverse - between girders 2 of 10
ret  =  SapModel.SelectObj.CoordinateRange(5500,  6500,  -1400,  -1350,  0,  0,
False, "Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults,  Obj,  Elm,  PointElm,  LoadCase,  StepType,  StepNum,  F11,  F22,
F12,  FMax,  FMin,  FAngle,  FVM,  M11,  M22,  M12,  MMax,  MMin,  MAngle,  V13,  V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
For i = 0 To 79
coordinates(i + 1, 9).Value = M22(i)
        Next i

    'clear selection
ret = SapModel.SelectObj.ClearSelection

    'get area moments, transverse - between girders 3 of 10
ret  =  SapModel.SelectObj.CoordinateRange(5500,  6500,  -1600,  -1550,  0,  0,
False, "Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults,  Obj,  Elm,  PointElm,  LoadCase,  StepType,  StepNum,  F11,  F22,
F12,  FMax,  FMin,  FAngle,  FVM,  M11,  M22,  M12,  MMax,  MMin,  MAngle,  V13,  V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
For i = 0 To 79
coordinates(i + 1, 10).Value = M22(i)
        Next i

    'clear selection
ret = SapModel.SelectObj.ClearSelection

    'get area moments, transverse - between girders 4 of 10
ret  =  SapModel.SelectObj.CoordinateRange(5500,  6500,  -1800,  -1750,  0,  0,
False, "Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults,  Obj,  Elm,  PointElm,  LoadCase,  StepType,  StepNum,  F11,  F22,
F12,  FMax,  FMin,  FAngle,  FVM,  M11,  M22,  M12,  MMax,  MMin,  MAngle,  V13,  V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
```

```
For i = 0 To 79
coordinates(i + 1, 11).Value = M22(i)
        Next i

    'clear selection
ret = SapModel.SelectObj.ClearSelection

    'get area moments, transverse - between girders 5 of 10
ret  =  SapModel.SelectObj.CoordinateRange(5500,  6500,  -2000,  -1950,  0,  0,
False, "Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults, Obj, Elm, PointElm, LoadCase, StepType, StepNum, F11, F22,
F12, FMax, FMin, FAngle, FVM, M11, M22, M12, MMax, MMin, MAngle, V13, V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
For i = 0 To 79
coordinates(i + 1, 12).Value = M22(i)
        Next i
    'clear selection
ret = SapModel.SelectObj.ClearSelection

    'get area moments, transverse - between girders 6 of 10
ret  =  SapModel.SelectObj.CoordinateRange(5500,  6500,  -2200,  -2150,  0,  0,
False, "Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults, Obj, Elm, PointElm, LoadCase, StepType, StepNum, F11, F22,
F12, FMax, FMin, FAngle, FVM, M11, M22, M12, MMax, MMin, MAngle, V13, V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
For i = 0 To 79
coordinates(i + 1, 13).Value = M22(i)
        Next i
    'clear selection
ret = SapModel.SelectObj.ClearSelection

    'get area moments, transverse - between girders 7 of 10
ret  =  SapModel.SelectObj.CoordinateRange(5500,  6500,  -2400,  -2350,  0,  0,
False, "Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults, Obj, Elm, PointElm, LoadCase, StepType, StepNum, F11, F22,
F12, FMax, FMin, FAngle, FVM, M11, M22, M12, MMax, MMin, MAngle, V13, V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
For i = 0 To 79
coordinates(i + 1, 14).Value = M22(i)
        Next i

    'clear selection
ret = SapModel.SelectObj.ClearSelection
```

```
    'get area moments, transverse - between girders 8 of 10
ret  =  SapModel.SelectObj.CoordinateRange(5500,  6500,  -2600,  -2550,  0,  0,
False, "Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults, Obj, Elm, PointElm, LoadCase, StepType, StepNum, F11, F22,
F12, FMax, FMin, FAngle, FVM, M11, M22, M12, MMax, MMin, MAngle, V13, V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
For i = 0 To 79
coordinates(i + 1, 15).Value = M22(i)
        Next i

    'clear selection
ret = SapModel.SelectObj.ClearSelection

    'get area moments, transverse - between girders 9 of 10
ret  =  SapModel.SelectObj.CoordinateRange(5500,  6500,  -2800,  -2750,  0,  0,
False, "Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults, Obj, Elm, PointElm, LoadCase, StepType, StepNum, F11, F22,
F12, FMax, FMin, FAngle, FVM, M11, M22, M12, MMax, MMin, MAngle, V13, V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
For i = 0 To 79
coordinates(i + 1, 16).Value = M22(i)
        Next i
    'clear selection
ret = SapModel.SelectObj.ClearSelection

    'get area moments, transverse - between girders 10 of 10
ret  =  SapModel.SelectObj.CoordinateRange(5500,  6500,  -3000,  -2950,  0,  0,
False, "Global", False, False, False, True, False, False)
        ret     =     SapModel.Results.AreaForceShell("3",     SelectionElm,
NumberResults, Obj, Elm, PointElm, LoadCase, StepType, StepNum, F11, F22,
F12, FMax, FMin, FAngle, FVM, M11, M22, M12, MMax, MMin, MAngle, V13, V23,
VMax, VAngle)

    'write data to file; total of 4 M22 values per element, with 20 elements
taken, 50 x 50 mm ea.
For i = 0 To 79
coordinates(i + 1, 17).Value = M22(i)
        Next i
    'clear selection
ret = SapModel.SelectObj.ClearSelection

    'close SAP2000
SapObject.ApplicationExit False
        Set SapModel = Nothing
        Set SapObject = Nothing
End Sub
```

H3. Examination of Longitudinal Moment (Stiffened Edge Example)

Code:

```
Sub Results_Analysis()

   'dimension variables
        Dim SapObject As SAP2000v.SapObject ‘enter version
        Dim SapModel As cSapModel
        Dim FileName As String
        Dim coordinates As Range
        Dim ret As Long
        Dim NumberResults As Long
        Dim Obj() As String
        Dim Elm() As String
        Dim PointElm() As String
        Dim LoadCase() As String
        Dim StepType() As String
        Dim StepNum() As Double
        Dim U1() As Double
        Dim U2() As Double
        Dim U3() As Double
        Dim R1() As Double
        Dim R2() As Double
        Dim R3() As Double
        Dim F1() As Double
        Dim F2() As Double
        Dim F3() As Double
        Dim M1() As Double
        Dim M2() As Double
        Dim M3() As Double
        Dim F11() As Double
        Dim F22() As Double
        Dim F12() As Double
        Dim FMax() As Double
        Dim FMin() As Double
        Dim FAngle() As Double
        Dim FVM() As Double
        Dim M11() As Double
        Dim M22() As Double
        Dim M12() As Double
        Dim MMax() As Double
        Dim MMin() As Double
        Dim MAngle() As Double
        Dim V13() As Double
        Dim V23() As Double
        Dim VMax() As Double
        Dim VAngle() As Double

    'set coordinates range in the Excel sheet
        Set coordinates = Range("A2:B81")

    'create SAP2000 object
        Set SapObject = New SAP2000v.SapObject ‘enter version
```

```
    'start SAP2000 application
        SapObject.ApplicationStart

    'create SAPModel object
        Set SapModel = SapObject.SapModel

    'initialize model
        ret = SapModel.InitializeNewModel

    'open model
        FileName = "C:\..."
        ret = SapModel.File.OpenFile(FileName)

    'lock or unlock model
        ret = SapModel.SetModelIsLocked(False)

    'assign self-weight multiplier
        ret = SapModel.LoadPatterns.SetSelfWTMultiplier("DEAD", 0)

    'run analysis
        ret = SapModel.Analyze.RunAnalysis

    'clear all case and combo output selections
        ret = SapModel.Results.Setup.DeselectAllCasesAndCombosForOutput

    'set case and combo output selections
        ret = SapModel.Results.Setup.SetCaseSelectedForOutput("DEAD")

    'get area moments, longitudinal
        ret = SapModel.SelectObj.CoordinateRange(6000, 6050, -1000, 0, 0, 0,
False, "Global", False, False, False, True, False, False)
        ret = SapModel.Results.AreaForceShell("3", SelectionElm, NumberResults,
Obj, Elm, PointElm, LoadCase, StepType, StepNum, F11, F22, F12, FMax, FMin,
FAngle, FVM, M11, M22, M12, MMax, MMin, MAngle, V13, V23, VMax, VAngle)

    'write data to file; total of 4 M11 values per element, with 20 elements
taken, 50 x 50 mm ea.
        For i = 0 To 79
            coordinates(i + 1, 2).Value = M11(i)
        Next i
    'clear selection
        ret = SapModel.SelectObj.ClearSelection

    'close SAP2000
        SapObject.ApplicationExit False
        Set SapModel = Nothing
        Set SapObject = Nothing

End Sub
```

References

[1] Azimi, H., Sennah, K., Tropynina, E., Goremykin, S., Lucic, S. and Lam, M (2014). "Anchorage Capacity of Concrete Bridge Barriers Reinforced with GFRP Bars with Headed Ends". *Journal of Bridge Engineering*. dio: 10.1061/(ASCE)BE.1943-5592.0000606.

[2] AASHTO. (2012). *AASHTO-LRFD bridge design specifications*, 6th Ed., AASHTO, Washington, DC.

[3] Bakht, B. & Holland, D.A. (1976) "A manual method for the elastic analysis of wide cantilever slabs of linearly varying thickness." Canadian Journal of Civil Engineering, 3(4): 523-530, 10.1139/l76-057.

[4] Bakht, B., & Jaeger, L. G. (1985). *Bridge analysis simplified.* New York: McGraw-Hill.

[5] Bakht, B., & Mufti, A. A. (2015). *Bridges: Analysis, design, structural health monitoring, and rehabilitaion.* Cham, Switzerland: Springer.

[6] Canadian Standards Association (CSA). (2006). "Canadian highway bridge design code (CHBDC)." *CAN/CSA-S6.1-06*, Toronto.

[7] Canadian Standards Association (CSA). (2014). "Canadian highway bridge design code (CHBDC)." *CAN/CSA-S6.1-14*, Toronto.

[8] Canadian Standards Association (CSA). (2014). "Commentary on CAN/CSA-S6-06, Canadian highway bridge design code (CHBDC)." *CAN/CSA-S6.1-14*, Toronto.

[9] Computers and Structures, Inc. (CSI). *Integrated structural analysis and design software*, *SAP2000*, CS, Berkley, CA.

[10] ISIS. (2007). "Reinforcing concrete structures with fibre reinforced polymers." *Design manual no. 3*, Intelligent sensing for innovative structures. ISIS Canada Research Network, Winnipeg, MB.

[11] Jaeger, L.G. & Bakht, B. (1990). "Rationalization of simplified methods of analyzing cantilever slabs." Canadian Journal of Civil Engineering, 17(5): 865-867.

[12] Khederzadeh, H. R., Sennah, K. (2014). Processing from CSCE '14: *International Structural Specialty Conference*. NS: Halifax.

[13] Mufti, A. A., Bakht, B. and Jaeger, L (1993). "Moments in Deck Slabs due to Cantilever Loads". *Journal of Structural Engineering*. dio: 10.1061/(ASCE)0733-9445(1993)119:6(1761)

[14] Parr, S (1993). Analysis and Design of Deck Slab Overhangs of Girder Bridges (Doctoral dissertation). University of Toronto. (0-315-87236-5).

[15] Xiao, Y (1997). "Analyses of Reinforced Concrete Cantilever Bridge Decks under the Live Truck Loads" (Doctoral dissertation). Technical University of Nova Scotia.