FOOTING SCHEDULE

MARK	SIZE	REINF'G
F1	1500 x 1500 x 250 DP	5-15M x 1400 T&B EW (H)
F2	1200 x 1200 x 250 DP	4-15M x 1100 T&B EW (H)
WF1	1000 x 250 DP	4-15M CONT. TLL & BUL 1-15M x 900 (H) @ 300 O/C TUL & BLL

NOTES:
1. SEE GENERAL NOTES ALSO.
2. ALL FOOTINGS TO BE CENTERED UNDER PIERS, COLUMNS ORWALLS UNLESS NOTED.
3. WALL FOOTINGS TO EXTEND BEYOND ENDS OF WALLS A DISTANCE EQUAL TO THE SIDE PROJECTIONS.
4. SEE PLANS FOR CONCRETE COMPRESSIVE STRENGTHS.

REINFORCING BAR LAP LENGTH TABLE

CONCRETE STRENGTH (MPa)	REINFORCING BAR LAP LENGTH (mm)			
	10M	15M	20M	25M
20	475	700	850	1325
25	425	600	750	1200
30	400	550	675	1100
35	375	525	625	1000

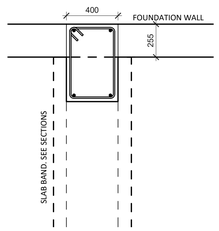
FOR SPECIAL CONDITIONS MULTIPLY THE VALUES LISTED ABOVE BY THE FOLLOWING FACTORS:
1. EPOXY COATED REINFORCING (X 1.5)
2. HORIZONTAL REINFORCING WITH >300 mm CONCRETE BELOW (X 1.3)
3. FOR CONDITIONS 1 & 2 OCCURRING SIMULTANEOUSLY (X 1.7)

CONCRETE PIER SCHEDULE

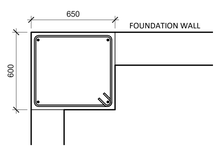
MARK	SIZE	REINF'G
P1	400 x 600	4-25M VERT + 1-10M TIE @ 300 O/C + 4-25M DWLS
P2	600 x 650	4-25M VERT + 1-10M TIE @ 300 O/C + 4-25M DWLS

NOTES:
1. PROVIDE DWLS INTO FTG TO MATCH VERT. PIER REINF'G
2. PROVIDE 3 SETS OF TIES SPACED @ 75 o/c AT TOP OF PIERS.
3. HORIZ FND WALL REINF'G TO EXTEND THRU CONCRETE PIER.
4. TOP OF PIER TO BE AT TOP OF SLAB TYP. U/N. COORDINATE W/ OLYMPIA DRAWINGS
5. SEE PLANS FOR CONCRETE COMPRESSIVE STRENGTHS.

PIER DETAILS



P1



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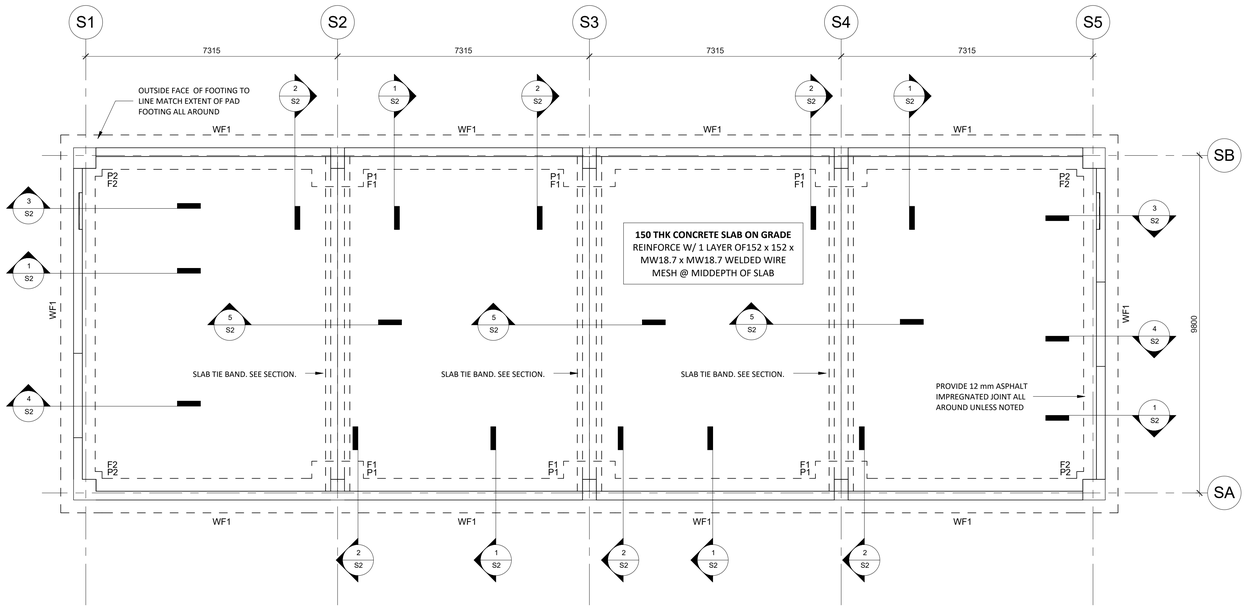
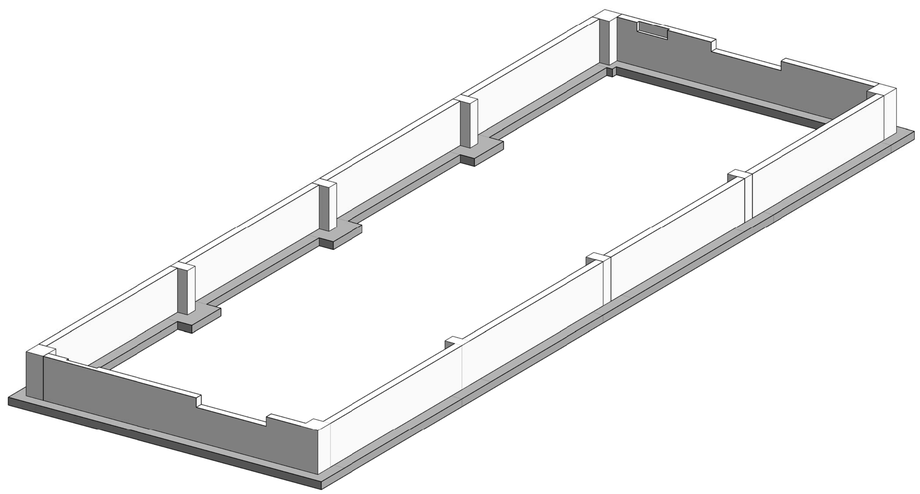


GROUND FLOOR

1 : 75

CONCRETE COMPRESSIVE STRENGTHS:

SLAB ON GRADE: 25 MPa TYPE F2 W/ 4-7% AIR ENTRAINMENT
FOUNDATION WALLS & PIERS: 25 MPa TYPE F2 W/ 4-7% AIR ENTRAINMENT
FOOTINGS: 25 MPa TYPE N



DRAWING LIST

G E N E R A L N O T E S

1. ANY DEVIATION FROM THE CONDITIONS SHOWN ON THESE DRAWINGS MUST BE REPORTED TO THE ENGINEER.
2. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF PART 4 OF THE O.B.C. (2012 EDITION) ONTARIO REGULATION 332/12 (AS AMENDED)
3. STANDARDS
   -CSA STANDARD A23.3-04 DESIGN OF CONCRETE STRUCTURES
4. ANY MODIFICATIONS TO EXISTING STRUCTURES ARE TO BE LIMITED TO WORK NOTED ON THESE DRAWINGS. ANY ADDITIONAL OR PROPOSED MODIFICATIONS TO EXISTING STRUCTURES MUST BE APPROVED BY THE ENGINEER
5. FOUNDATIONS
   .1 ALL FOOTINGS ARE TO BEAR ON THE NATIVE, UNDISTURBED GLACIAL TILL ON ENGINEERED FILL.
   .2 BEARING CAPACITY USED IN THE FOOTING DESIGN IS ASSUMED TO BE SLS = 150 kPa / ULS = 300 kPa
   .3 BEARING SURFACE IS TO BE INSPECTED BY GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE.
   .4 FOR FURTHER INFORMATION SEE GEOTECHNICAL REPORT No. 62788.04 PREPARED BY GEMTEC CONSULTING ENGINEERS AND SCIENTISTS LIMITED
6. SLABS ON GRADE
   .1 SLABS ON GRADE TO BE UNREINFORCED UNLESS NOTED.
   .2 FOR COMPOSITION & COMPACTION OF FILL SUPPORTING SLABS ON GRADE SEE GEOTECHNICAL REPORT.
   .3 PROVIDE 12 mm ASPHALT IMPREGNATED FIBREBOARD BETWEEN SLABS ON GRADE & FOUNDATION WALLS OR COLUMNS.
   .4 SAWCUT SLAB ON GRADE TO (1/4 x SLAB DEPTH) 8 HOURS AFTER CONCRETE PLACEMENT.
   .5 SPACE SAWCUTS ON A 4500 mm x 4500 mm MAXIMUM GRID. AVOID LONG & NARROW SAWCUT PATTERNS. LOCATE SAWCUTS ALONG COLUMN LINES WHERE POSSIBLE. CONTRACTOR IS TO PROVIDE THE ENGINEER WITH DOCUMENTATION SHOWING PROPOSED SAWCUT LOCATIONS FOR APPROVAL UNLESS SAWCUTS LOCATIONS ARE OTHERWISE INDICATED ON THESE DRAWINGS.
7. MATERIALS
   .1 CONCRETE STRENGTH AT 28 DAYS TO BE AS NOTED ON THESE DRAWINGS AND SPECIFICATIONS.
   .2 REINFORCING STEEL TO BE DEFORMED GRADE 400R WITH Fy= 400 MPa.
8. CONCRETE COVER
   .1 FOOTINGS — 75 mm BOTTOM, 50 mm SIDES
   .2 WALLS — 40 mm UNLESS NOTED OTHERWISE, 40 mm
9. REINFORCING STEEL DESIGNATION

   8-20M x 1500 T/B

8	=	NUMBER OF BARS
20M	=	SIZE OF BARS
1500	=	LENGTH OF BARS
T	=	BAR LOCATION - TOP
B	=	BAR LOCATION - BOT

   LENGTH OF BARS DOES NOT INCLUDE HOOKS OR BENDS
10. DOWELS
    DOWELS TO FOOTINGS TO BE OF SAME DIAMETER AS THE LOWEST LIFT OF VERTICAL REINFORCING IN COLUMNS, PIERS OR WALLS.
11. REINFORCING STEEL SPLICES
    REINFORCING STEEL SPLICES TO BE AS NOTED IN REINFORCING BAR LAP LENGTH TABLE ON S1 U/N.
12. OPENINGS
    .1 AT OPENINGS IN WALLS PROVIDE 2-20M T & B OF OPENING EXTENDING 600 mm MIN. BEYOND CORNERS OF OPENINGS.
16. LEGEND

B	=	BOTTOM
B1	=	BOTTOM LOWER LAYER
B2	=	BOTTOM UPPER LAYER
BLL	=	BOTTOM LOWER LAYER
BUL	=	BOTTOM UPPER LAYER
CONT	=	CONTINUOUS
DP	=	DEPTH
DWL	=	DOWELS
EF	=	EACH FACE
EL	=	ELEVATION
ES	=	EACH SIDE
EW	=	EACH WAY
F1	=	PAD FOOTING NUMBER
H	=	HORIZONTAL
(H)	=	HOOKED BAR
O/C	=	ON CENTER
P1	=	PIER NUMBER/PILE NUMBER
T	=	TOP
T1	=	TOP UPPER LAYER
T2	=	TOP LOWER LAYER
TLL	=	TOP LOWER LAYER
TUL	=	TOP UPPER LAYER
U/N	=	UNLESS NOTED OTHERWISE
V	=	VERTICAL
WF1	=	WALL FOOTING NUMBER

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PROJECT
SURGENOR TRUCK CENTRE
RENOVATION - STORAGE BUILDING

ARCHITECT
PYE & RICHARDS ARCHITECTS INC.

DRAWING
FOUNDATION PLAN

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CONSULTING STRUCTURAL ENGINEERS
102-1737 WOODWARD DR. OTTAWA ON. K2C 0P9
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Email <cunliffe@cunliffe.ca>

ENGINEERS SEAL

FOR FOUNDATIONS ONLY

SCALE: As indicated

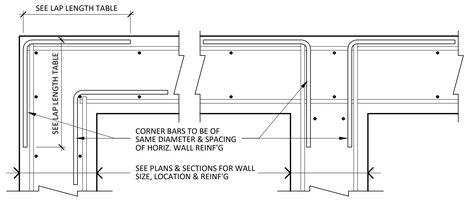
DRAWN: G.N.

REVIEWED: J.C.C.

PROJECT No.: 17-179

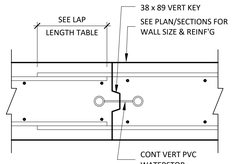
REVISION No.: 1

SHEET No.: S1



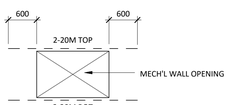
TYPICAL WALL INTERSECTION REINFORCEMENT

CONCRETE WALLS WITH 2 SHEETS OF REINFORCING (WALL THICKNESS GREATER THAN 215 mm) NOT APPLICABLE TO SHEARWALLS. SEE SHEARWALL ELEVATION DRAWINGS.

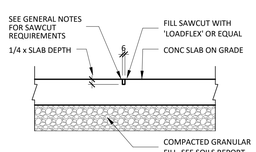


TYPICAL WALL CONSTRUCTION JOINT DETAIL

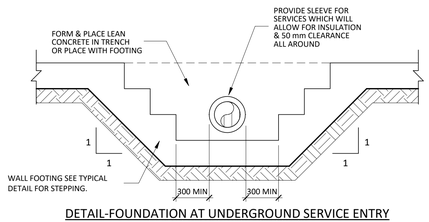
MAXIMUM SPACING OF CONSTRUCTION JOINTS TO BE 20 meters



TYPICAL DETAIL AT CONCRETE WALL OPENING U/N

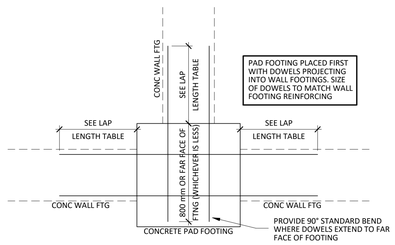


TYPICAL SAWCUT IN SLAB ON GRADE DETAIL

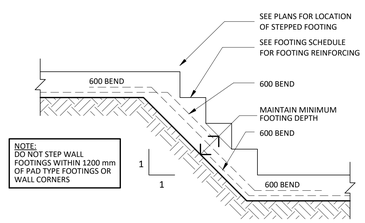


DETAIL-FOUNDATION AT UNDERGROUND SERVICE ENTRY

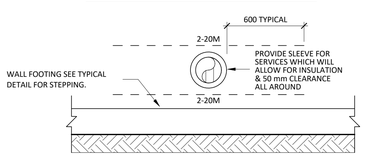
SEE PLANS AND MECHANICAL FOR LOCATION



PLAN DETAIL AT INTERSECTION OF
PAD FOOTING & WALL FOOTINGS

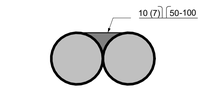


TYPICAL STEPPED WALL FOOTING DETAIL



DETAIL-FOUNDATION AT SAN & STORM ENTRY

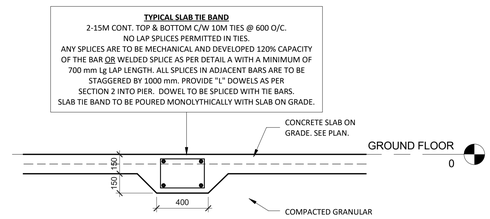
SEE PLANS AND MECHANICAL FOR LOCATION



A / S2 PLAN DETAIL

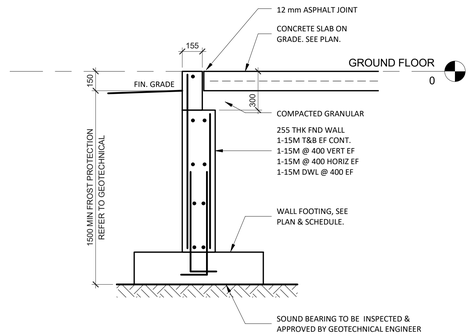
1 : 2

TYPICAL SLAB TIE BAND
2-15M CONT. TOP & BOTTOM C/W 10M TIES @ 600 O/C.
NO LAP SPLICES PERMITTED IN TIES.
ANY SPLICES ARE TO BE MECHANICAL AND DEVELOPED 120% CAPACITY OF THE BAR OR WELDED SPLICE AS PER DETAIL A WITH A MINIMUM OF 700 mm l_d LAP LENGTH. ALL SPLICES IN ADJACENT BARS ARE TO BE STAGGERED BY 1000 mm. PROVIDE "L" DOWELS AS PER SECTION 2 INTO PIER. DOWEL TO BE SPLICED WITH TIE BARS.
SLAB TIE BAND TO BE POURED MONOLYTHICALLY WITH SLAB ON GRADE.



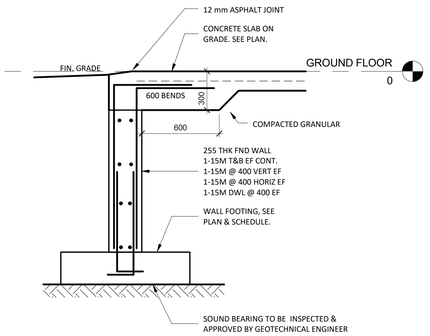
5 / S1 S2 SECTION

1 : 20



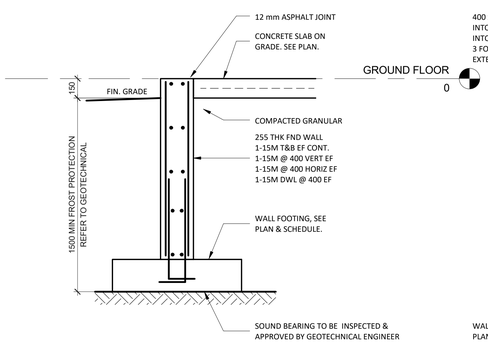
3 / S1 S2 SECTION

1 : 20



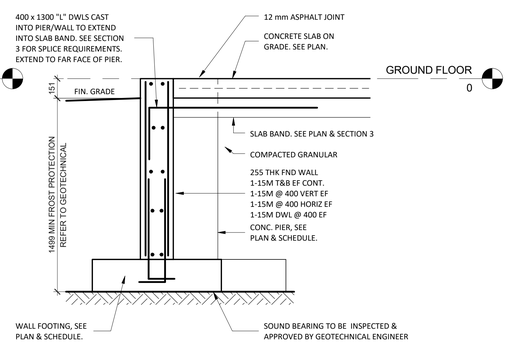
4 / S1 S2 SECTION

1 : 20



1 / S1 S2 SECTION

1 : 20



2 / S1 S2 SECTION

1 : 20

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ENGINEERS SEAL

SCALE
As indicated

DRAWN
G.N.

REVIEWED
J.C.C.

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SHEET No.
S2

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