

RETAINING WALL NOTES

GENERAL

- ALL CONCRETE WORK, INCLUDING MATERIALS, MIXING, PLACING, CURING AND FORMWORK SHALL BE IN ACCORDANCE WITH CSA A23.1.
- TESTING OF CONCRETE AND CONCRETE MATERIALS SHALL BE IN ACCORDANCE WITH CSA A23.2.
- FALSEWORK AND FORMWORK SHALL BE IN ACCORDANCE WITH CSA S269.1 (R2019).
- UNLESS NOTED OTHERWISE, ALL EXPOSED CORNERS SHALL BE FINISHED WITH 20mm CHAMFER.

REINFORCING STEEL

- REINFORCING STEEL SHALL BE DEFORMED STEEL BARS IN ACCORDANCE WITH CSA G30.18, GRADE 400R.
- ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED, PLACED AND SUPPORTED IN ACCORDANCE WITH THE REINFORCING STEEL INSTITUTE OF CANADA MANUAL OF STANDARD PRACTICE AND CSA A23.3, UNLESS NOTED OTHERWISE.
- UNLESS INDICATED OTHERWISE, REINFORCING TO BE EXTENDED INTO ADJACENT CONCRETE ELEMENTS AND DEVELOPED WITH A STANDARD HOOK OR LAP SPLICE.
- PROVIDE DOWELS TO MATCH REINFORCING IN ALL PIERS, COLUMNS, WALLS AND CURBS. PROVIDE CLASS 'B' TENSION LAP SPLICE UNLESS NOTED OTHERWISE AND FULLY EMBED. / DEVELOP REINFORCING.
- REINFORCING SHALL BE EFFECTIVELY CONTINUOUS AT ALL CORNERS AND INTERSECTIONS. HOOK AND SPLICE AS REQUIRED.
- STANDARD HOOKS SHALL BE USED UNLESS NOTED OTHERWISE.
- SPLICE REINFORCING AS INDICATED ON STRUCTURAL DRAWINGS OR OTHERWISE APPROVED BY THE STRUCTURAL ENGINEER.

CONCRETE COVER

- CONCRETE COVER TO REINFORCING BARS SHALL BE AS FOLLOWS OR AS NOTED ON THE DRAWINGS (WHICHEVER IS GREATER):

FOUNDATIONS - CAST AGAINST SOIL:	75 mm
FOUNDATIONS - NOT CAST AGAINST SOIL:	50 mm
WALLS:	40 mm
- MAINTAIN SPECIFIED CONCRETE COVER AT ALL SLOPES, DEPRESSIONS, CORNERS AND CHANGES IN ELEVATION / THICKNESS.

CONCRETE MIXES

- UNLESS NOTED OTHERWISE, PROPORTION NORMAL DENSITY CONCRETE IN ACCORDANCE WITH CSA A23.1 TO ACHIEVE THE FOLLOWING PERFORMANCE CHARACTERISTICS:

LOCATION	28-DAY STRENGTH	EXPOSURE CLASS	ENTRAINED AIR CONTENT
FOOTINGS	25 MPa	F-2	-
RETAINING WALLS	35 MPa	C-1	5 - 8%
SLAB-ON-GRADE (EXTERIOR)	31 MPa	C-2	5 - 8%

- CONCRETE STRENGTHS NOTED ON SPECIFIC PLANS OR SCHEDULES TAKE PRECEDENCE OVER ABOVE VALUES.
- CONCRETE SHALL BE TYPE GU OR GUB PORTLAND CEMENT UNLESS SPECIFIED OTHERWISE.
- IF BLENDED PORTLAND CEMENT / SLAG IS USED, SLAG CONTENT SHALL NOT BE MORE THAN 25% OF TOTAL MASS OF CEMENT.
- USE OF CALCIUM CHLORIDE IS NOT PERMITTED.
- SUBMIT CONCRETE MIX DESIGNS FOR REVIEW.

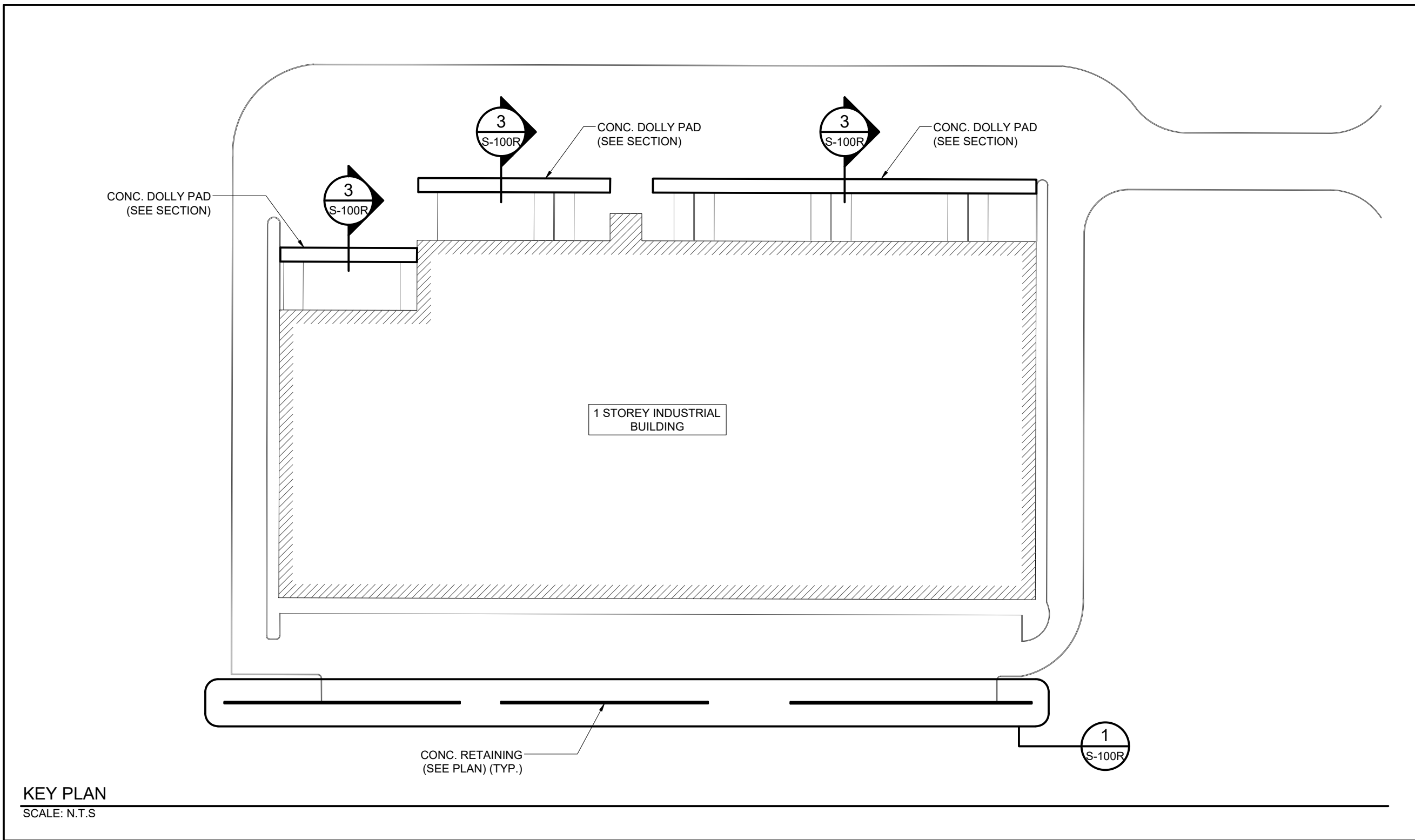
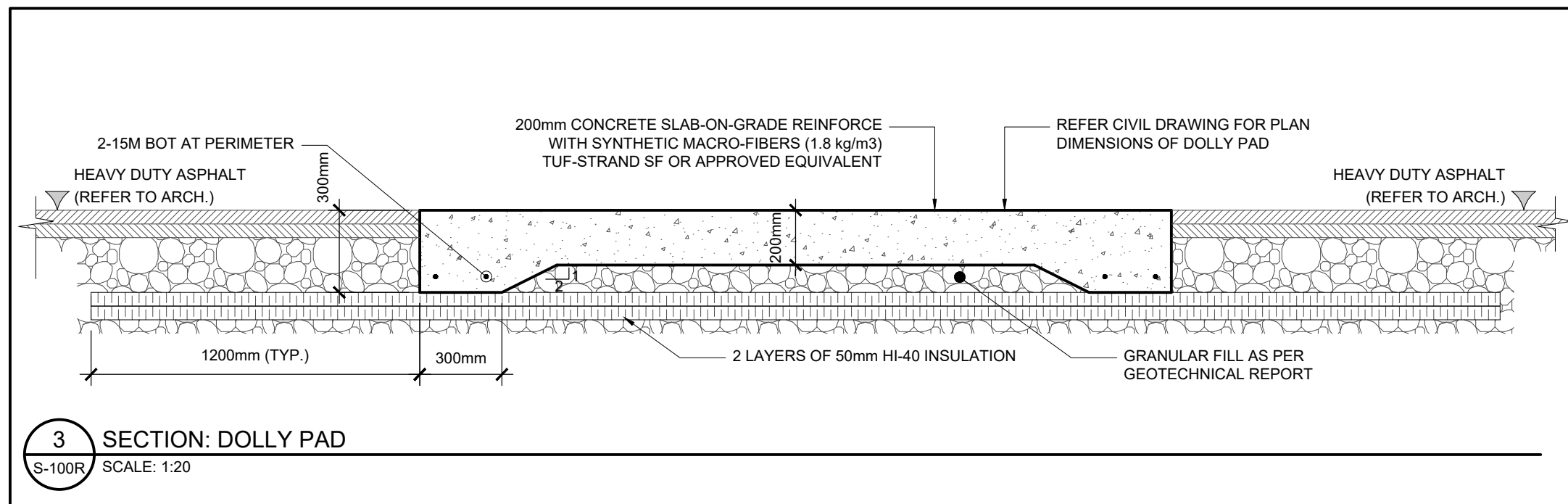
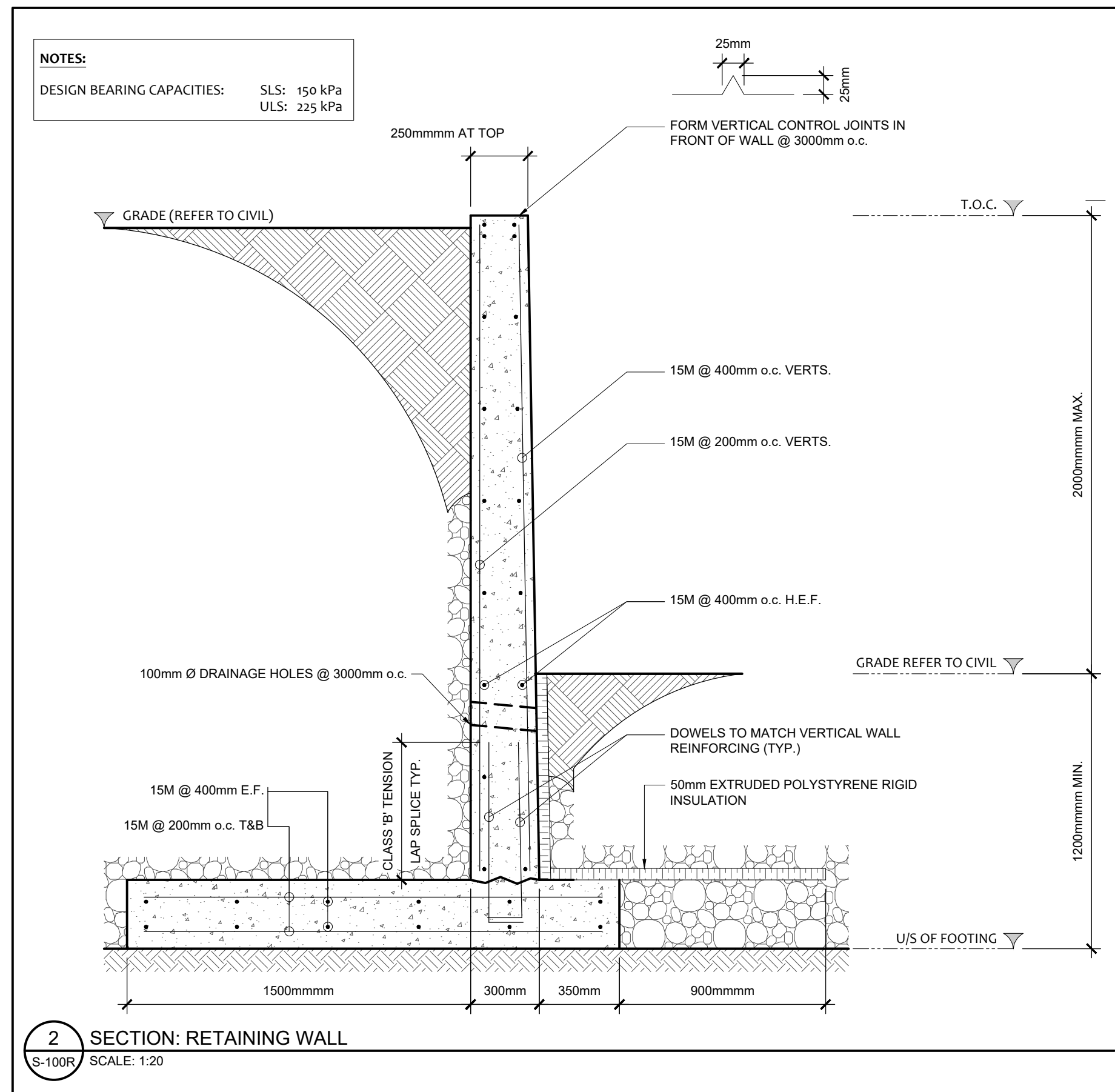
DESIGN LOADS

GROUND LEVEL SURCHARGE (LIVE LOAD):	12 kPa
ACTIVE SOIL PRESSURE COEFFICIENT (Ka):	0.33
UNIT WEIGHT OF BACKFILL:	20 kN-m ³

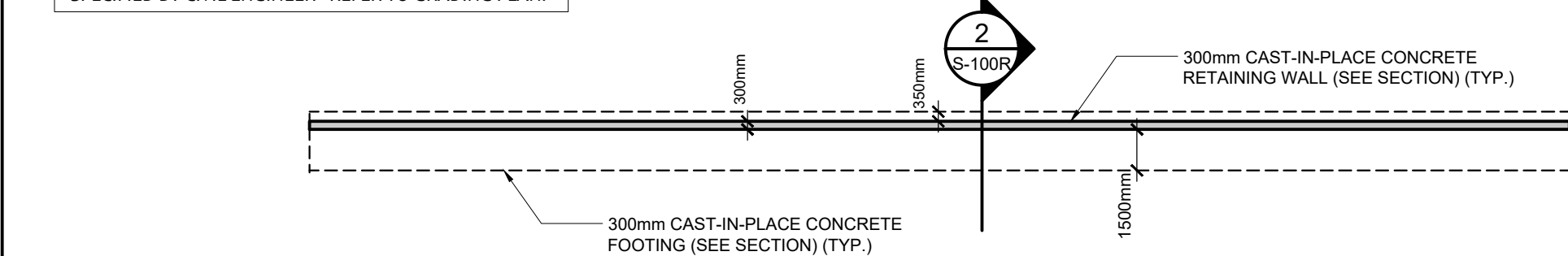
DESIGN BEARING PRESSURES

IN ACCORDANCE WITH RECOMMENDATIONS OF GEOTECHNICAL REPORT "PROPOSED INDUSTRIAL BUILDING, 3113 CARP RD, OTTAWA, ONTARIO - REPORT #P06306-1 REV. 2" BY PATERSON GROUP, DATED APRIL 19, 2024 (TO BE CONFIRMED ON SITE DURING CONSTRUCTION):

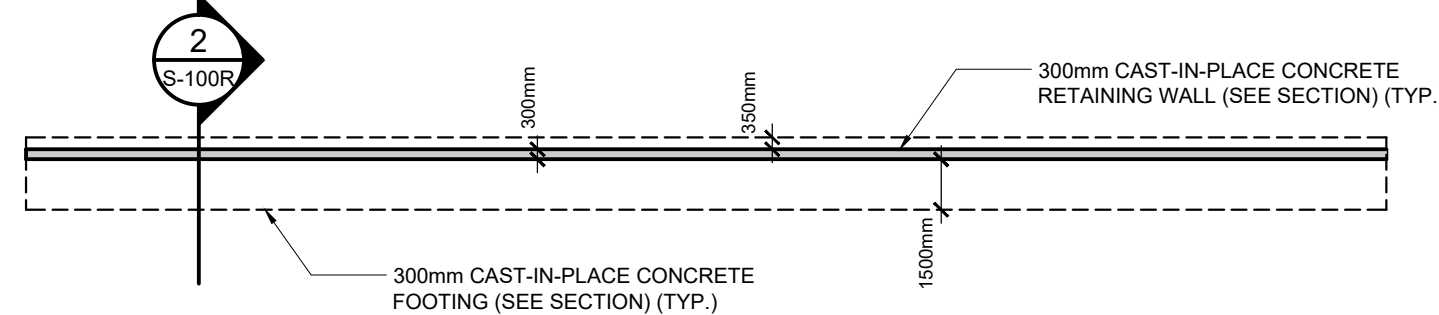
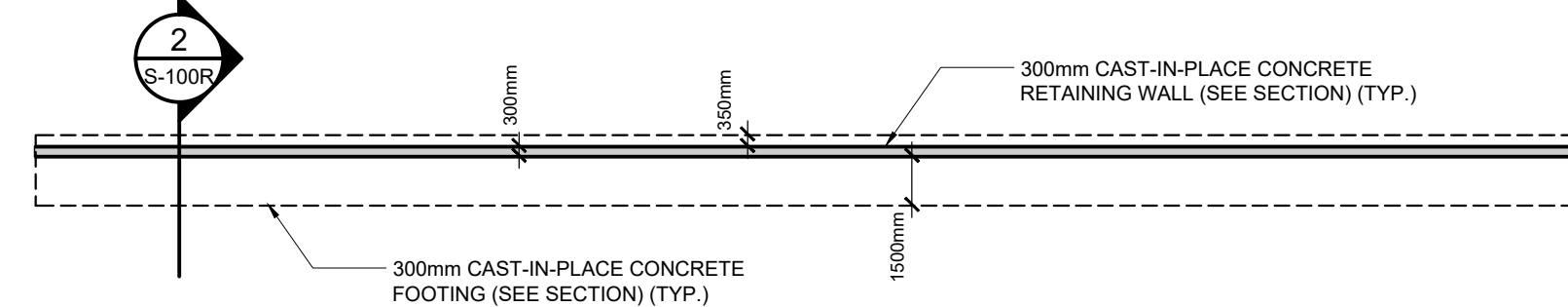
SERVICEABILITY LIMIT STATE (SLS):	150 kPa
ULTIMATE LIMIT STATE (ULS):	225 kPa



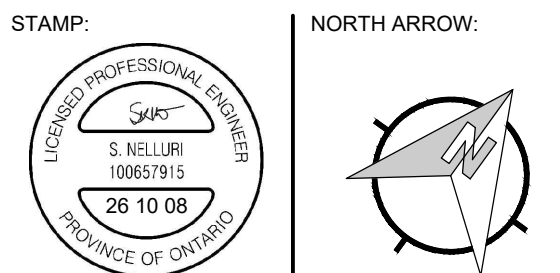
NOTE: TOP OF WALL ELEVATIONS TO BE DETERMINED AND SPECIFIED BY CIVIL ENGINEER - REFER TO GRADING PLAN.



1 PLAN: RETAINING WALL
S-100R SCALE: 1:225



1	26 10 08	ISSUED FOR PERMIT
#	DATE	DESCRIPTION



PROJECT NAME AND ADDRESS:
PROPOSED 1 STOREY WAREHOUSE
3113 CARP ROAD, OTTAWA, ONTARIO

DRAWING NAME:
RETAINING WALL

DESIGNED BY: S. NELLURI

DRAWN BY: A. WITTICH

START DATE: 26 07 21

PROJECT #: 25-062

S-100R