

THE LOCATION OF UTILITIES IS APPROXIMATE ONLY, AND THE EXACT LOCATION SHOULD BE DETERMINED BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL PROVE THE LOCATION OF UTILITIES AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION FROM DAMAGE DURING CONSTRUCTION.

GENERAL NOTES:

1. DIMENSIONS ARE SHOWN IN MILLIMETRES.
2. BOTTOM OF EXCAVATION TO BE CONFIRMED BY ARCHITECT AND STRUCTURAL DESIGNER.
3. CONTRACTOR IS RESPONSIBLE FOR CHECKING AND VERIFYING ALL DIMENSIONS AND CONDITIONS ON SITE. ANY DISCREPANCY SHALL BE REPORTED TO ENGINEER.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL MATERIAL RELEVANT TO PROJECT. ANY DEVIATION FROM CONDITIONS SHOWN ON THIS DRAWING MUST BE REPORTED TO ENGINEER.
5. LOADING:

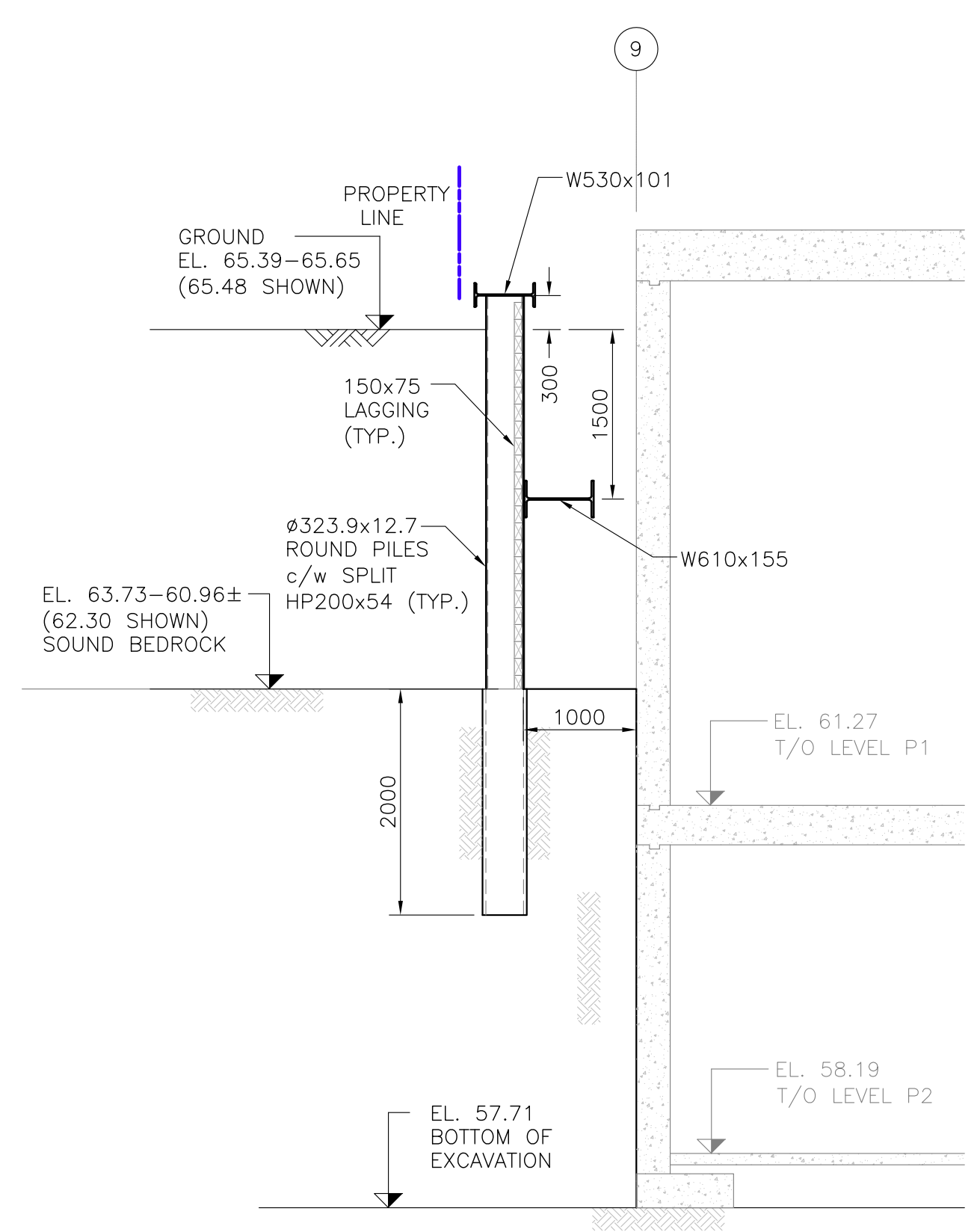
$$K_a \times q$$

$$K_a \times (\gamma H + q)$$

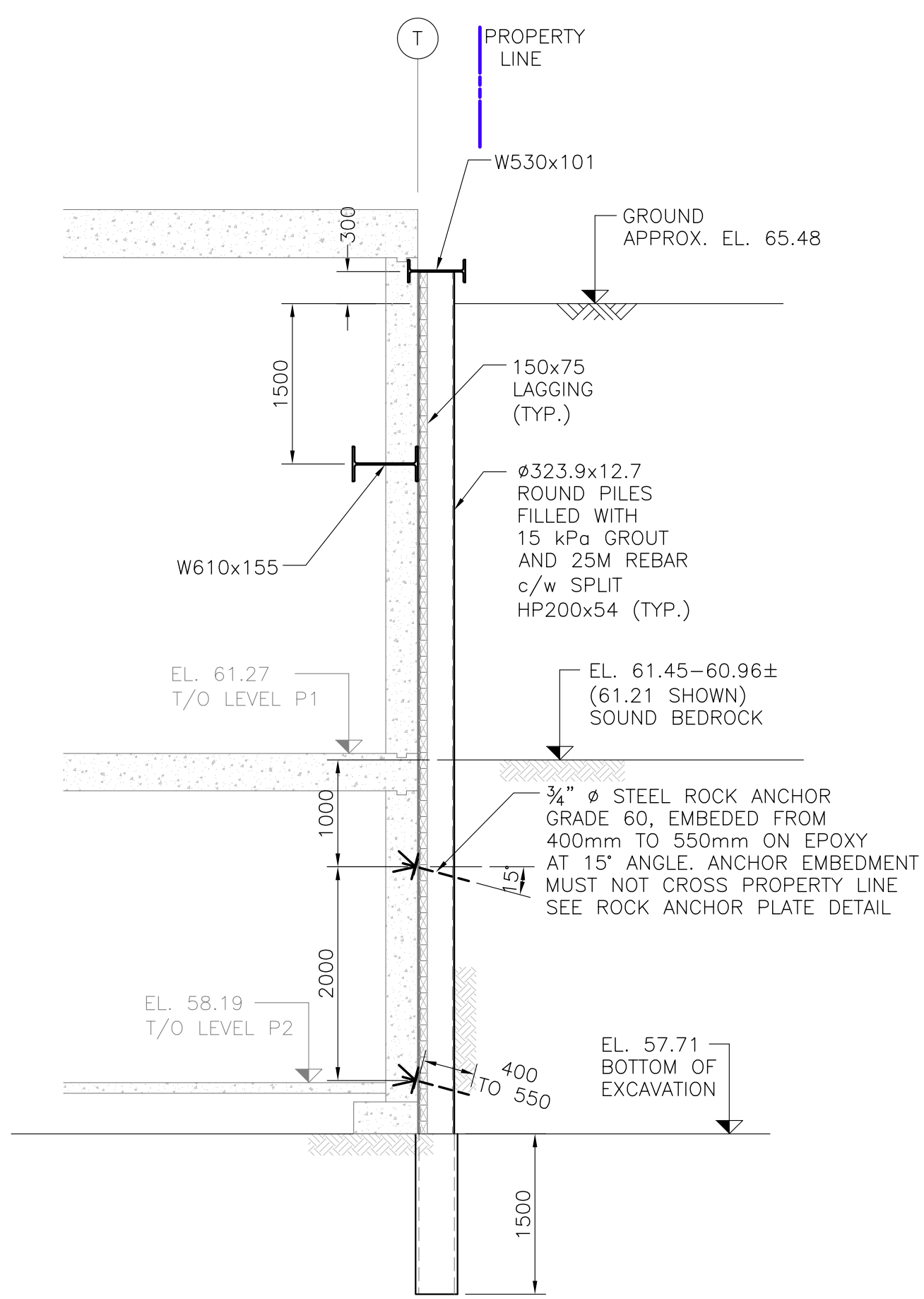
$$K_a = 0.33$$

$$\gamma = 20 \text{ kN/m}^3$$

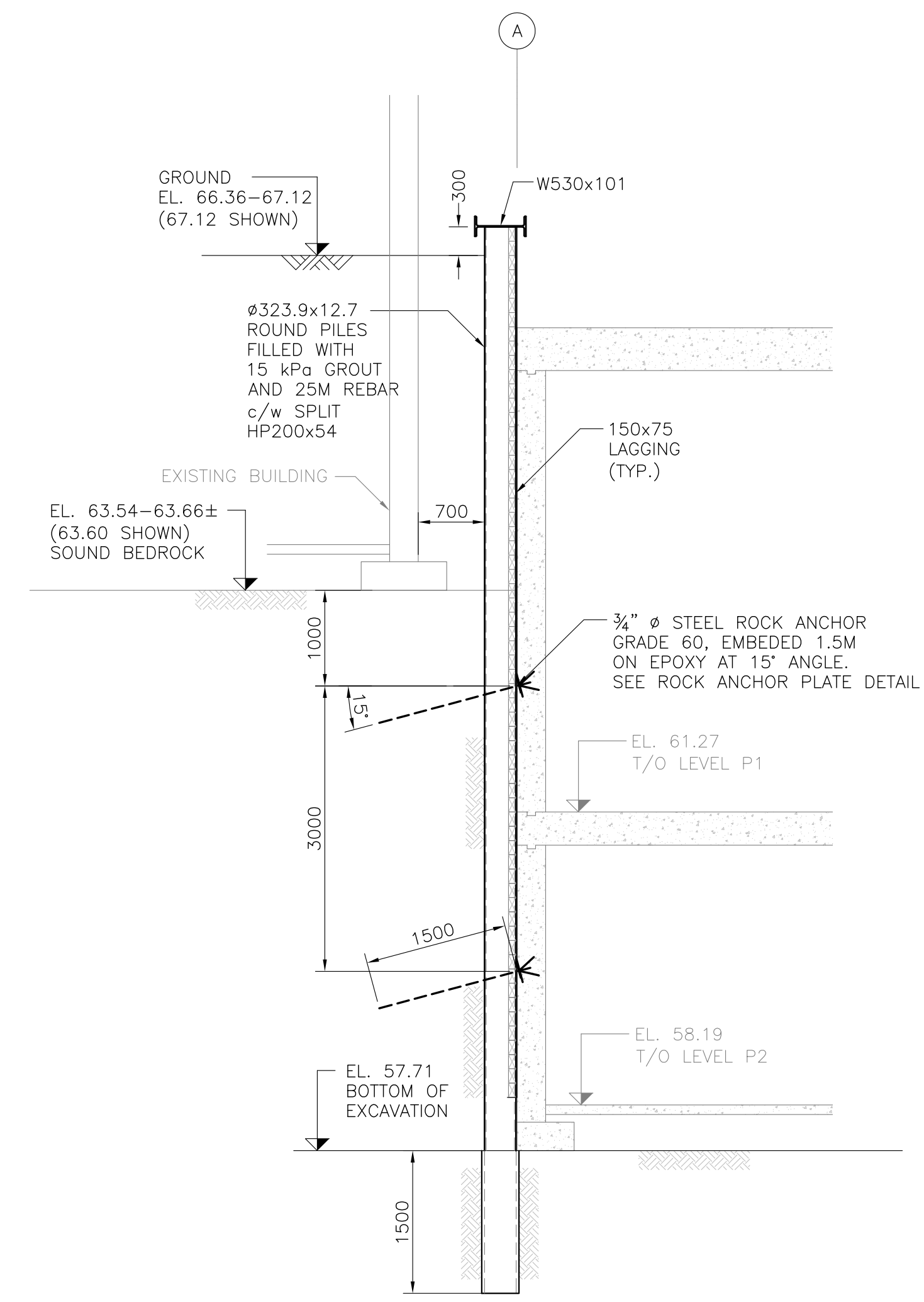
$$q = 12 \text{ kPa}$$
6. MATERIALS:
 - STEEL: - CAN/CSA S16-09
 -ROLLED SECTIONS
 -G40.21-44W(300W)
 - LAGGING:
 -HARDWOOD
7. EXCAVATE AND INSTALL LAGGING IN 4' (1.2m) DEEP SECTIONS. BACKFILL WITH GRANULAR MATERIAL BEHIND LAGGING. WEDGE LAGGING TIGHTLY IN PLACE.
8. ALL WELDING TO BE DONE ACCORDING TO CSA W59-13 BY A CERTIFIED PROFESSIONAL.
9. MONITORING: RECORD PILE LENGTHS, AND ELEVATIONS AND REPORT TO ENGINEER. MONITOR ALIGNMENT OF PILES AT EXTERIOR GRADE LEVEL, MEASUREMENTS TO BE TAKEN BEFORE EXCAVATION COMMENCES AND AT WEEKLY INTERVALS THEREAFTER. RECORD MEASUREMENTS AND REPORT TO ENGINEER.
10. DESIGN IN CONFORMANCE WITH
 - ONTARIO BUILDING CODE 2012.
 - OPSS 539, NOV. 2009
 - OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATION FOR CONSTRUCTION PROJECTS ISSUE DATE APRIL 2012.
11. FOR GEOTECHNICAL INFORMATION PLEASE SEE REPORTS PG4163-1 REV.1 DATED OCT. 3, 2017 AND PG4202-1 REV. 4 BY PATTERSON GROUP DATED JULY 6, 2018.



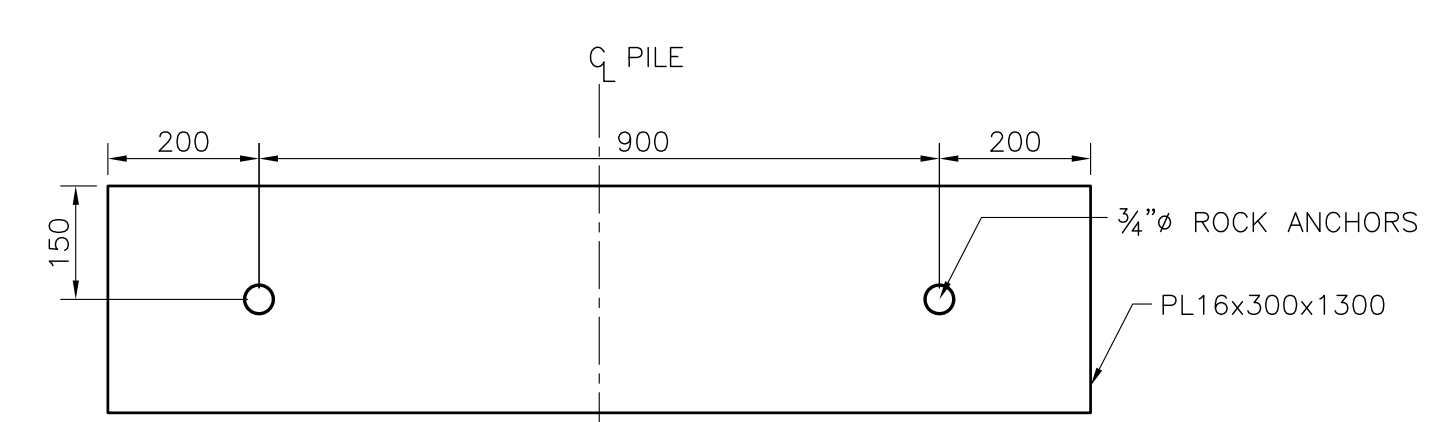
2
1:50



3
1:50



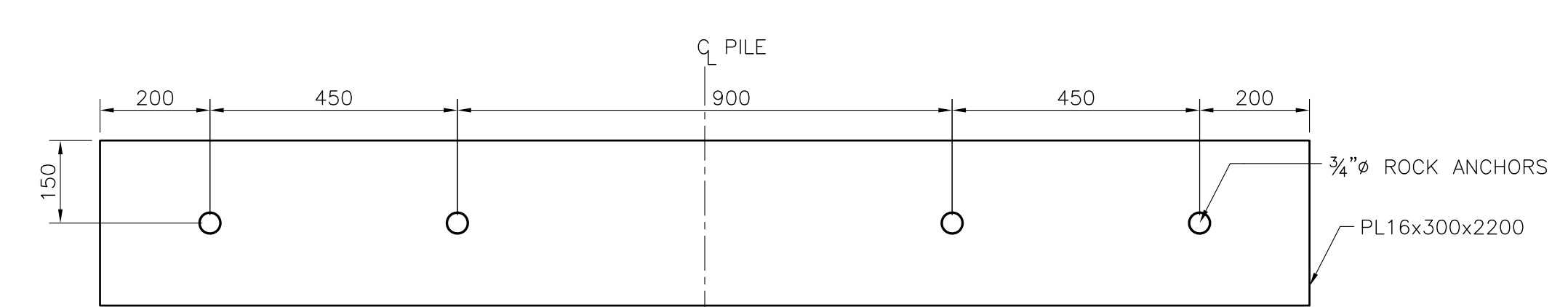
4
1:50



WEST ROCK ANCHOR PLATE DETAIL (TYP.)
1:10

WEST SIDE ROCK ANCHOR NOTES:

- 165kN: WORKING LOAD
- 220kN: TEST LOAD
- 181kN: RELEASE LOAD



EAST ROCK ANCHOR PLATE DETAIL (TYP.)
1:10

EAST SIDE ROCK ANCHOR NOTES:

- 44 TO 61kN: WORKING LOAD
- 59 TO 81kN: TEST LOAD
- 48 TO 66kN: RELEASE LOAD

DERRICK MOODIE
 MANAGER
 PLANNING, INFRASTRUCTURE & ECONOMIC
 DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

APPROVED
 By Laurel McCreight at 8:57 am, Mar 01, 2019



No.	Date	Revision	By:
2	12/10/18	AS PER CITY COMMENTS	B.U.
1	30/08/18	AS PER CLIENT REVIEW	B.U.

REMISZ
Consulting Engineers Ltd.

57 Auriga Dr. Suite 102
Ottawa, ON, K2E 9B2
tel.: (613) 225-1162
fax: (613) 225-4529

Client
HOMESTEAD LAND HOLDINGS

Project
**851 RICHMOND ROAD
EXCAVATION PROTECTION SYSTEM**

Drawing
SECTIONS AND DETAILS

Designed	B.U.	Date	AUGUST 2018
Drawn	S.L.	Scale	AS SHOWN
Checked	R.P.	Sheet	3 OF 3
Project No.	2018-050-1	Dwg. No.	S-03