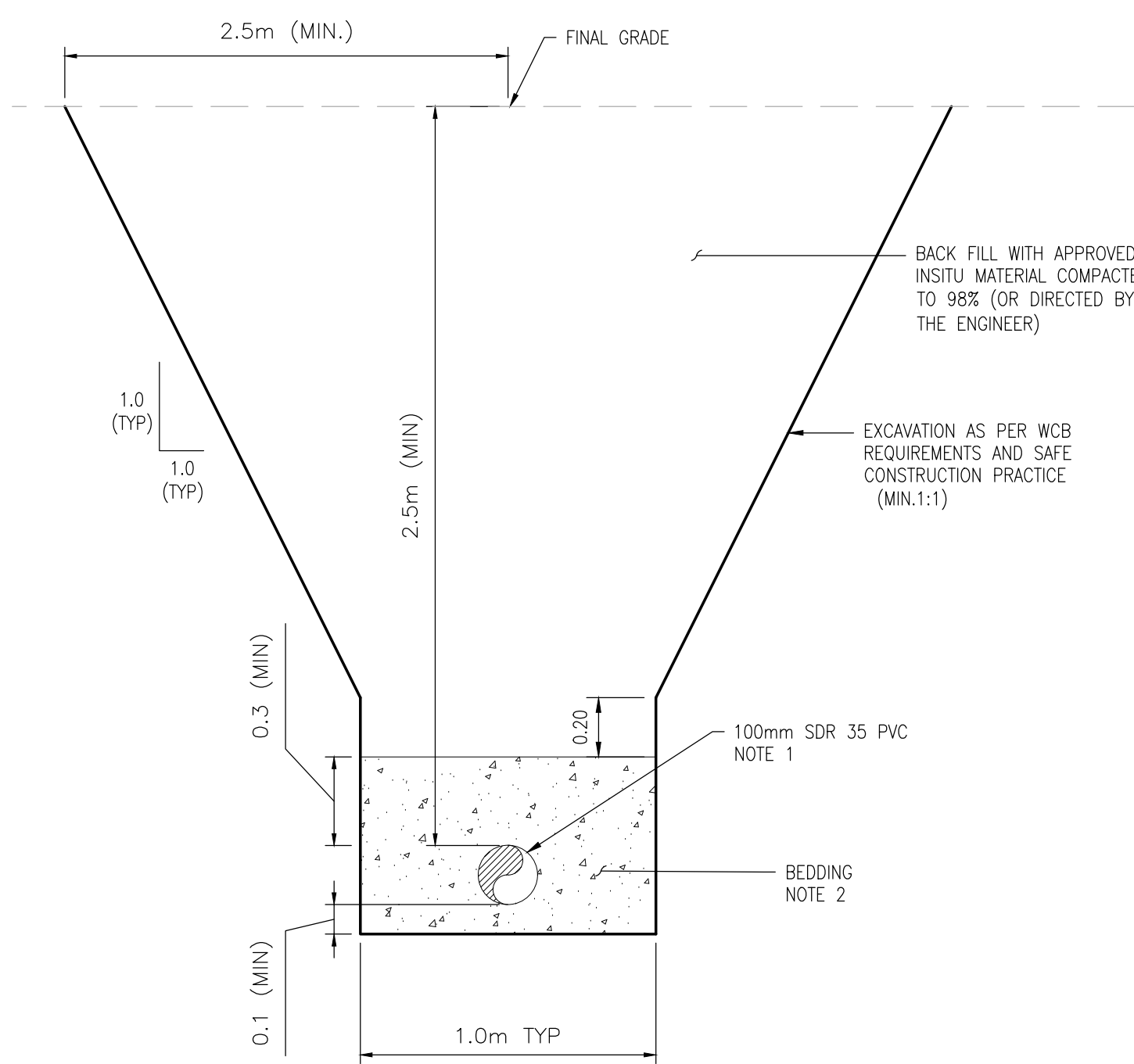


A WATER SUPPLY LINE (TYPICAL)

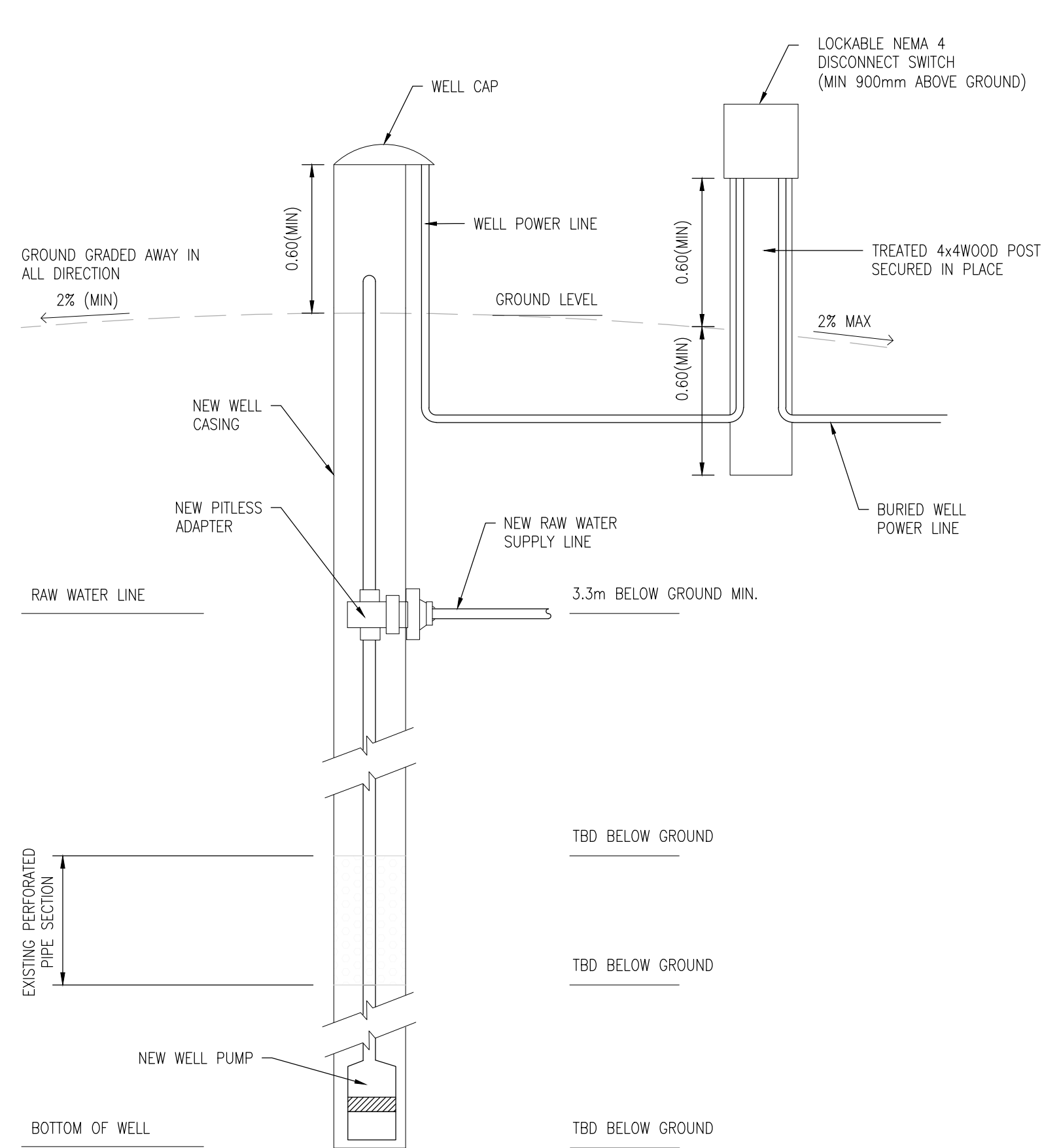
SCALE: NTS
REFER TO SPECIFICATIONS



- NOTES:
- 1) PVC GRAVITY PIPING TO BE SDR 35 AS SUPPLIED BY IPEX OR APPROVED EQUAL.
 - 2) BEDDING TO BE CLASS II MATERIAL (20mm CLEAN TO COURSE GRAIN SOILS, FREE OF ORGANICS AND FROZEN MATERIAL) CLASS II MATERIAL COMPACTED TO 95% SPD. IF INSTALLED UNDER A ROAD WAY, COMPACTED TO 98% SPD.
 - 3) SHALLOW UTILITIES TO BE COMMON TRENCH, HOWEVER FOLLOWING SEPARATION REQUIREMENTS AS PER APPLICABLE CODES AND AS APPROVED BY THE DEPARTMENT REPRESENTATIVES. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO UNDERTAKING WORK.

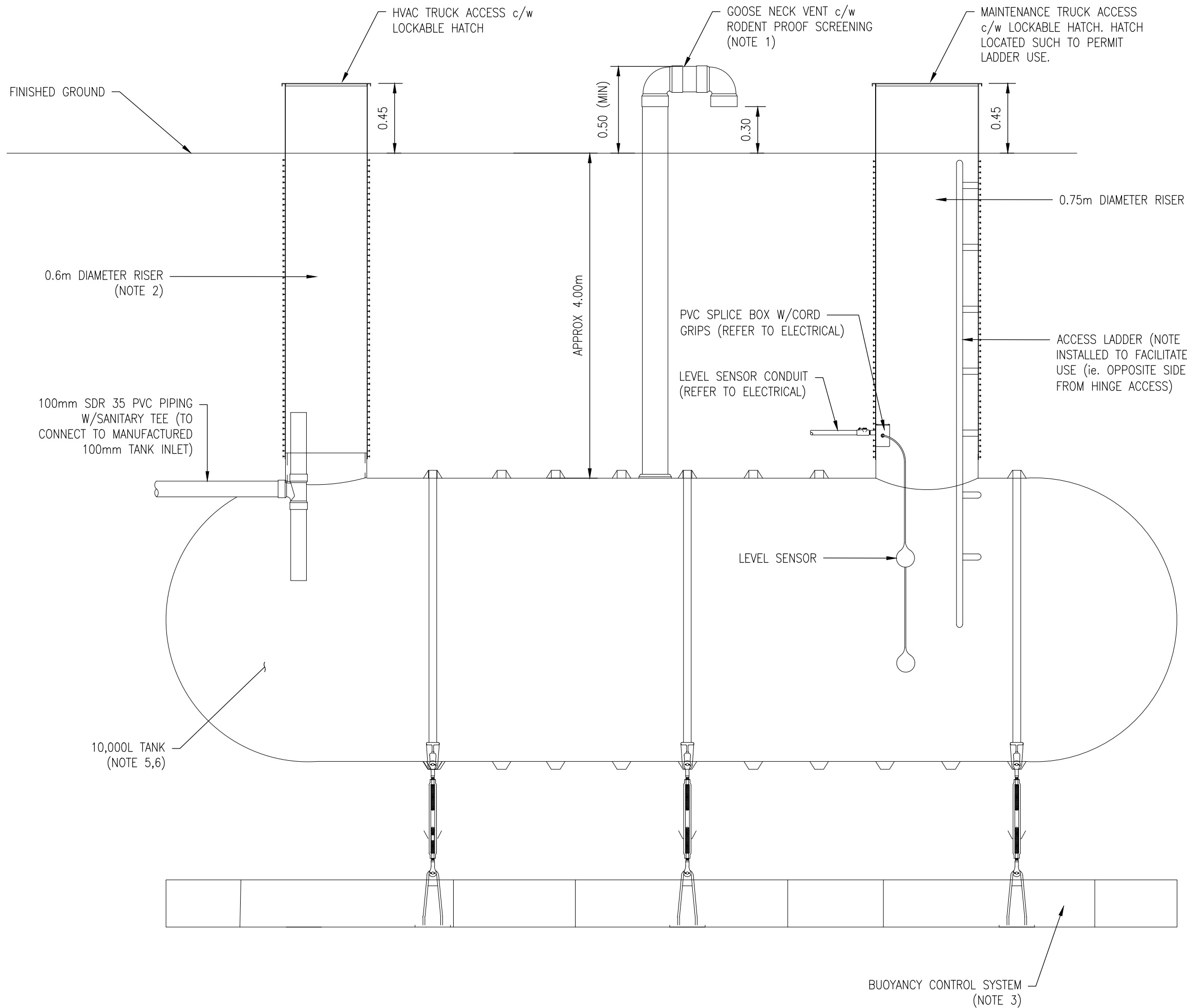
B2 WASTE WATER (TYPICAL)

SCALE: NTS
REFER TO SPECIFICATIONS



C WATER WELL (TYPICAL)

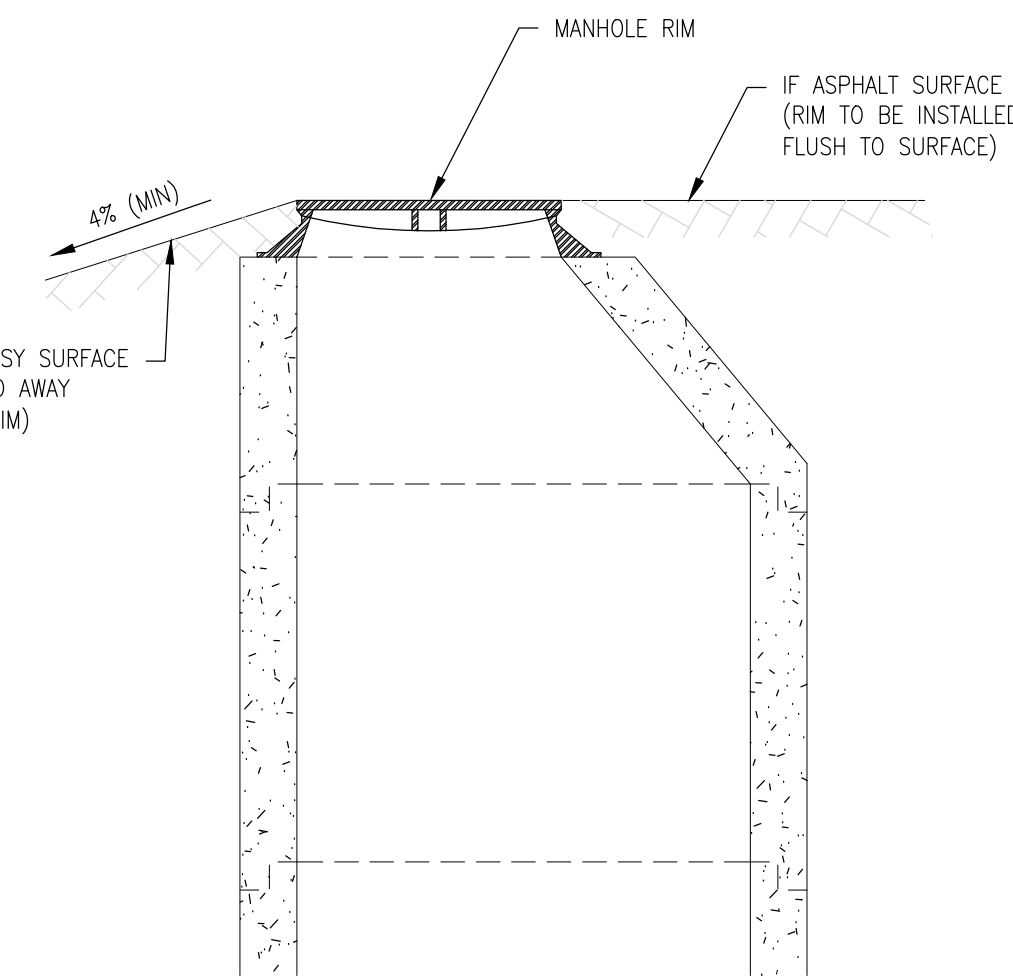
SCALE: NTS
REFER TO DWG U403, NOTE 2 & SPECIFICATIONS



D WASTEWATER TANK (TYPICAL)

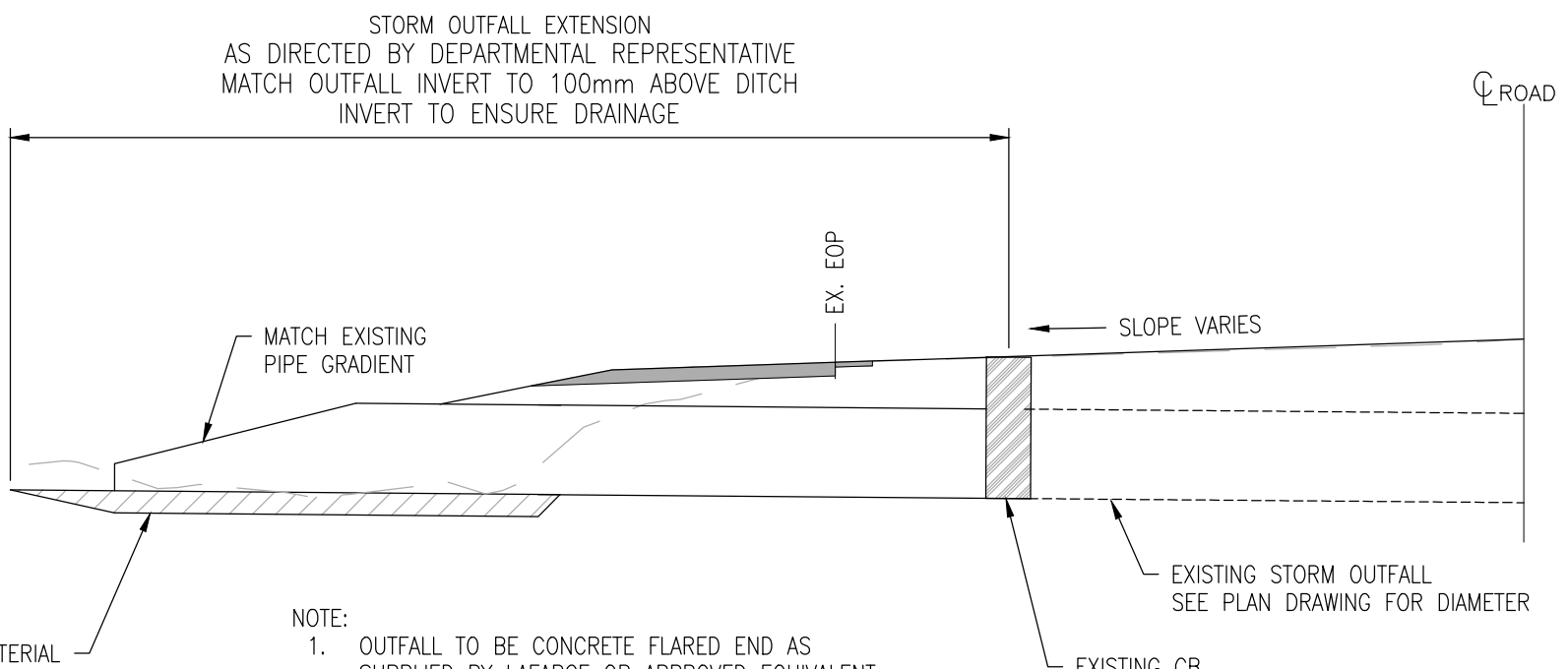
SCALE: NTS
REFER TO SPECIFICATIONS

- NOTES:
- 1) VENT AND SCREENING TO BE STAINLESS STEEL. VENT PIPE TO BE MINIMUM DIAMETER OF 100mm (4") NOMINAL PIPE SIZE, SCH 40.
 - 2) IF FIBERGLASS RISERS USED, TO BE FLANGED TYPE MANWAY (AS SUPPLIED BY ZCL COMPOSITES, OR APPROVED EQUAL). IF CONCRETE RISERS USED, TO BE STANDARD CONCRETE MANHOLES AS PER CITY OF EDMONTON DESIGN AND CONSTRUCTION STANDARDS (VOLUME 3, DRAINAGE)
 - 3) BUOYANCY CONTROL SYSTEM TO BE AS SUPPLIED BY TANK MANUFACTURE AND BUOYANCY CALCULATIONS INCLUDED WITH SHOP DRAWINGS c/w ENGINEERING STAMP
 - 4) ACCESS LADDER TO BE TYPE 1A (EXTRA HEAVY DUTY, AMERICAN LADDER INSTITUTE) SUITABLE FOR 300lbs LOADS
 - 5) VOLUME OF TANK MEASURED FROM THE INVERT OF THE INLET PIPE
 - 6) TANK ACCESS AND VENTING PIPE TO BE PROTECTED WITH BOLLARDS OR SUITABLE RUNDLE STONES TO THE SATISFACTION OF THE DEPARTMENT REPRESENTATIVE.



E MANHOLE GRADING (TYPICAL)

SCALE: NTS
REFER TO SPECIFICATIONS



F OUTFALL DETAIL (TYPICAL)

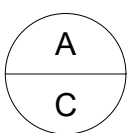
SCALE: NTS
REFER TO SPECIFICATIONS

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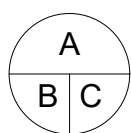
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Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé
1	2018.02.14	SHALLOW UTILITIES ALIGNMENT	AI	ADT	NJ
0	2017.12.08	ISSUED FOR TENDER		ADT	SB



A detail number
numéro de détail
B source drawing no.
de dessin no.
C detail on drawing no.
détail sur dessin no.



Consultant's Stamp Sceau de l'expert-conseil	Eng. Stamp Sceau de l'ingénieur
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Client	Parks Canada Agency Western and Northern Region	L'Agence Parcs Canada Ouest et Nord du Canada
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Consultant's Name Nom de l'expert-conseil	McElhanney McElhanney Consulting Services Ltd.
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Project Title Titre du projet	HIGHWAY 16 PARK EAST GATE IMPROVEMENTS
	JASPER NATIONAL PARK AB

Drawing Title Titre du dessin	UTILITIES TYPICAL DETAILS
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Surveyed by / Arpenté par MCSL	Drawn by / Dessiné par AI	Date 2017.12.08
Designed by / Conçu par ADT	Reviewed by / Révisé par SB	Scale / Echelle AS SHOWN

Parks Canada Project Manager / Administrateur de Projets Parcs Canada		
Client Acceptance / Acceptation du client	Approved by / Approuvé par	
Project No. / No. du projet 201605	Asset No. / No. du-bien	Sheet No. No. de la feuille U501
Drawing Reference No. / No. de référence du dessin 2511-00763-00		