

Village of Lions Bay
Water Storage Facilities Replacement

March 7, 2018

ADDENDUM # 1

This Addendum forms part of the Contract Documents and is to be read, interpreted and coordinated with all other parts. The cost of all work contained herein shall be included in the Contract Sum. The following revisions supersede the information contained in the original drawings and specifications issued for the above named project to the extent referenced and shall become part thereof.

Contract Documents

SPECIFICATIONS

1. REPLACE Section 01 20 01 – Item 6.2.4 with:

“.4 Payment will be made on the percentage of completed applied to the lump sum price tendered.

.1 Payment for 8.2.1 shall be in addition to Item 5.1

.2 Payment for 8.3.1 shall be in addition to Item 6.1”

2. REPLACE Section 01 20 01 – Item 6.3.4 with:

“.4 Payment will be made on the percentage of completed applied to the lump sum price tendered.

.1 Payment for 8.2.2 shall be in addition to Item 5.1

.2 Payment for 8.3.2 shall be in addition to Item 6.1”

3. ADD Section 31 11 01 – Item 3.1.4:

“.4 If required to comply with applicable regulations and environmental requirements, the Contractor shall have a qualified professional complete a nesting bird survey prior to starting clearing and grubbing activities.”

DRAWINGS

Note that NOT all changes have been clouded in the drawings identified below. It is the responsibility of the Contractor to review the drawings in full.

1. Drawing C-101

REPLACE note “Due to Distance to Monument and poor GPS signal local control established” WTH “AutoCAD file referenced to the local datum will be provided to the successful contractors”.

2. Drawing C-102

REMOVE note “*Due to Distance to Monument and poor GPS signal local control established*”.

3. Drawing C-103

DELETE drawing in its entirety and REPLACE with drawing C-103 REV 1 Issued for Addendum 1

4. Drawing C-202

DELETE drawing in its entirety and REPLACE with drawing C-202 REV 1 Issued for Addendum 1.

5. Drawing C-203

DELETE drawing in its entirety and REPLACE with drawing C-203 REV 1 Issued for Addendum 1.

6. Drawing C-204

ADD Drawing C-204 REV 0 – Issued for Addendum 1.

7. Drawing C-205

ADD Drawing C-205 REV 0 – Issued for Addendum 1.

8. Drawing C-306

DELETE drawing in its entirety and REPLACE with drawing C-306 REV 1 Issued for Addendum 1.

9. Drawing C-307

DELETE drawing in its entirety and REPLACE with drawing C-307 REV 1 Issued for Addendum 1.

10. Drawing C-401

DELETE drawing in its entirety and REPLACE with drawing C-401 REV 1 Issued for Addendum 1.

11. Drawing C-402

DELETE drawing in its entirety and REPLACE with drawing C-402 REV 1 Issued for Addendum 1.

12. Drawing M-001, M-002, M-003

ADD Note 10. Provide flexible Victaulic Couplings, NSF 61 Certified, as required to support the assembly/disassembly of the piping system.

REMOVE Bray Butterfly Valves from the Materials List.

13. Drawing M-005

ADD Note 7. Provide flexible Victaulic Couplings, NSF 61 Certified, as required to support the assembly/disassembly of the piping system.

14. Drawing S-111

ADD Drawing S-111 REV 1 – Issued for Addendum 1.

15. Drawing E-501

DELETE drawing in its entirety and REPLACE with drawing E-501 REV 1 Issued for Addendum 1

Pre-Tender Meeting (February 22, 2018)

Question 1: Hazard materials have been identified in the contract documents. How to quantify the amount?

Answer 1: Refer to Section 02 41 01 – Sitework Demolition and Removal, Item 1.2.4.

Question 2: How much notice must be provided to residents if water needs to be interrupted?

Answer 2: A minimum of 96 hours' notice must be provided to the Village of Lions Bay for any water supply disruption as indicated in Section 01 12 16 – Work Sequencing and Tie-Ins, Item 1.2.1.

Question 3: Clearing and grubbing requires a Nesting Survey if the work is undertaken after end of March. Is the Nesting Survey the Contractor's responsibility?

Answer 3: Refer to Section 31 11 01, Item 3.1.4.

Question 4: What are the allowable work hours at the Village?

Answer 4: Allowable work hours are provided in the Village of Lions Bay Noise Control Bylaw 283, available on the Village of Lions Bay website.

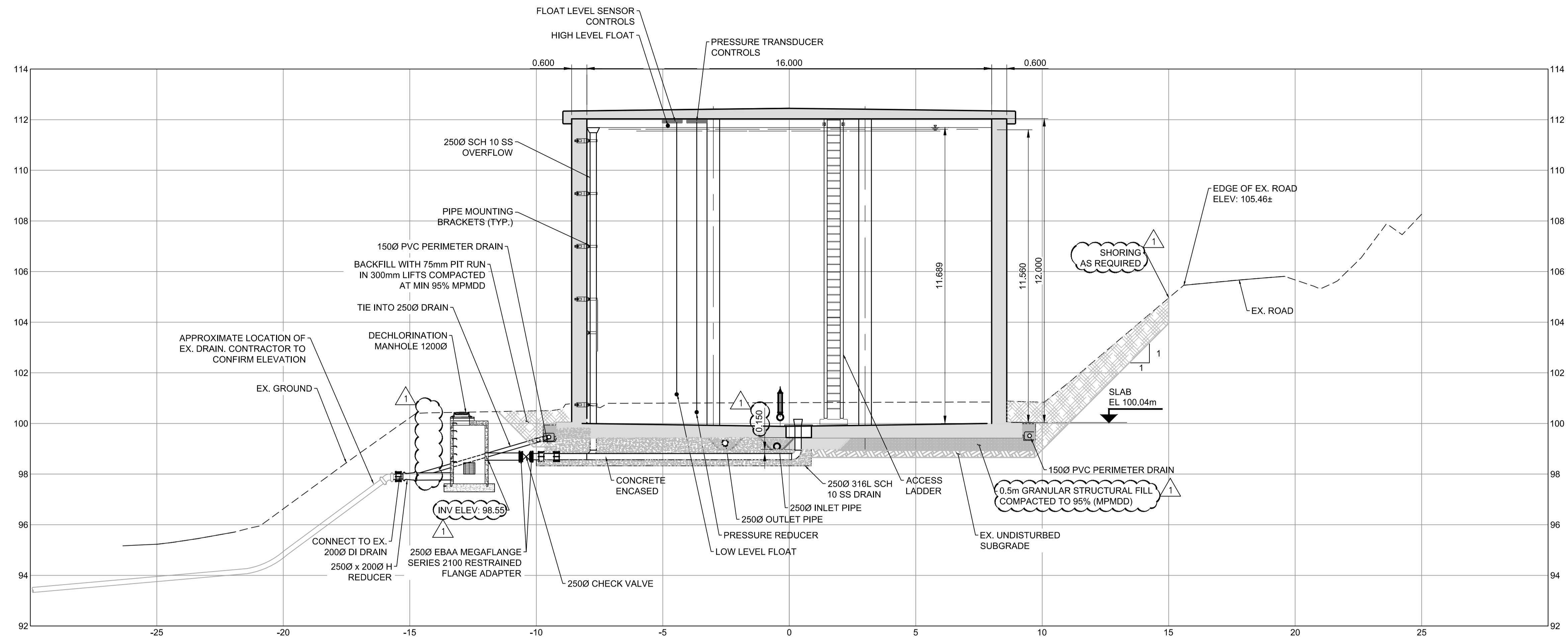
Question 5: With the items that show "Base Scope" and "Optional" work, clarify how these items need to be evaluated? I.e. Optional is in addition to Base or Optional includes Base Scope.

Answer 5: Refer to Section 01 20 01, Item 6.2.4 and Item 6.3.4.

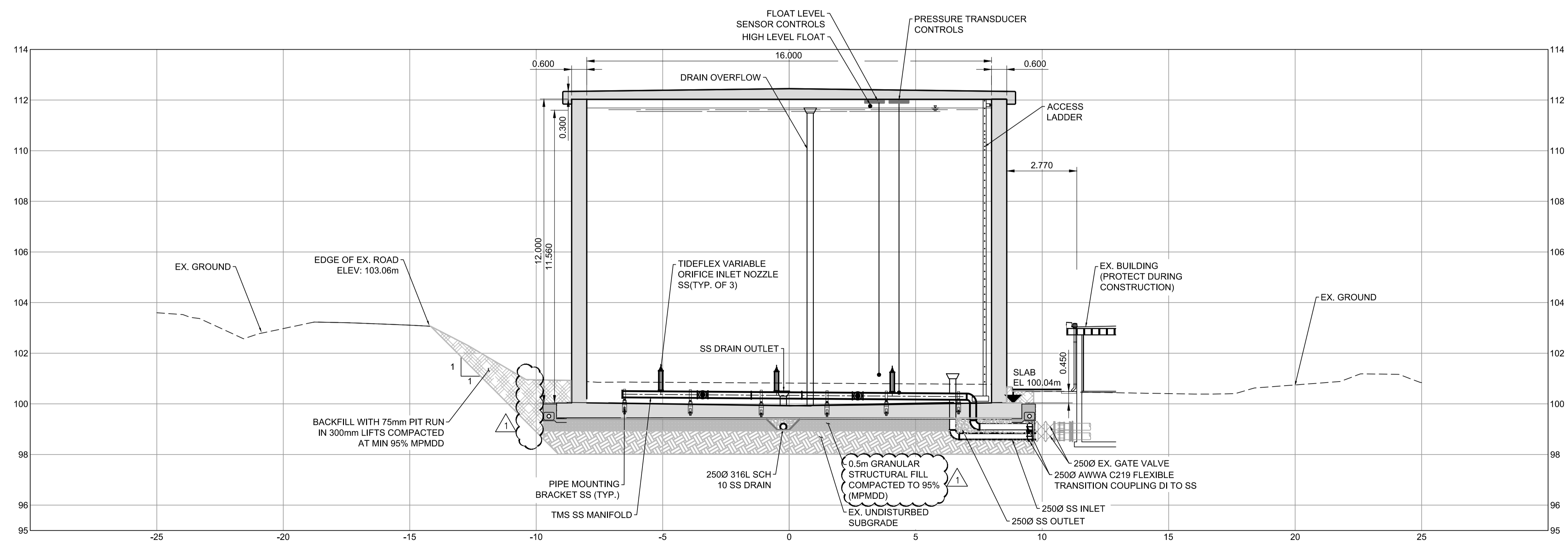
Question 6: Confirm if the Mountain Drive Control Valve Kiosk is located in the road shoulder.

Answer 6: Mountain Drive Control Valve Kiosk is located in the road shoulder.

End of Addendum #1



A SECTION
 C-102 Scale 1:100



B SECTION
 C-102 Scale 1:100

- NOTE:**
- TOPOGRAPHIC SURVEY BY AECOM JUNE 20-21, 2017. CO-ORDINATE SYSTEM: LOCAL. DATUM: LOCAL. DUE TO DISTANCE TO MONUMENT & POOR GPS SIGNAL LOCAL CONTROL ESTABLISHED.
 - TIDFLEX MIXING SYSTEM CONSISTS OF THREE VARIABLE ORIFICE INLET NOZZLES. A MINIMUM DRAW DOWN OF 1.0m IS REQUIRED DAILY IN ORDER TO ACHIEVE A COMPLETE MIXING ON THE FILL CYCLE. THE REPRESENTATIVE VOLUME OF THE DRAW DOWN IS 0.2 ML OR APPROXIMATELY 8.5% OF THE TOTAL STORAGE CAPACITY.



PROJECT
 WATER STORAGE REPLACEMENT PROJECT

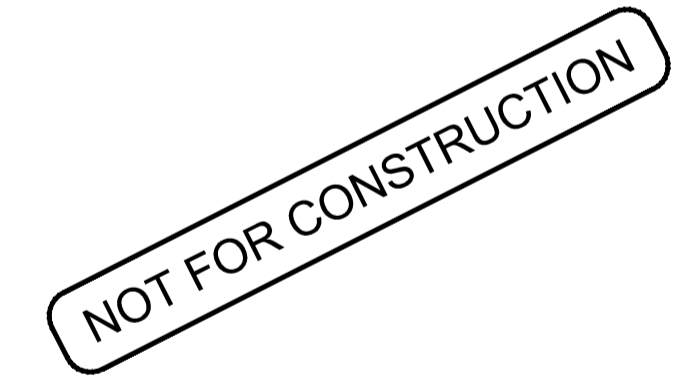
CLIENT
 VILLAGE OF LIONS BAY
 Village of Lions Bay Municipal Hall
 PO Box 141 – 400 Centre Rd
 Lions Bay, BC V0N 2E0
 (604) 921-9333
 www.lionsbay.ca



CONSULTANT
 AECOM
 3292 Production Way, Floor 4
 Burnaby, BC, V5A 4R4
 604.444.6400 tel 604.294.8597 fax
 www.aecom.com

NOTICE:
 THE EXISTENCE, LOCATION AND ELEVATION OF UTILITIES AND/OR CONCEALED STRUCTURES AT THE PROJECT SITE ARE NOT GUARANTEED BY AECOM CANADA LTD.
 THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXISTENCE, LOCATION AND ELEVATION OF ALL SUCH UTILITIES AND/OR STRUCTURES AND IS RESPONSIBLE FOR NOTIFYING THE APPROPRIATE COMPANY, DEPARTMENT OR PERSON(S) OF ITS INTENTION TO CARRY OUT ITS OPERATIONS.

REGISTRATION



ISSUE/REVISION

I/R	DATE	DESCRIPTION
1	03/07/2018	ISSUED FOR ADDENDUM 1
0	02/14/2018	ISSUED FOR TENDER

KEY PLAN

PROJECT NUMBER
 60546407

SHEET TITLE
 HARVEY TANK SECTIONS AND TYPICAL DETAILS

SHEET NUMBER
 C-103

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability, whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.



PROJECT
**WATER STORAGE
 REPLACEMENT
 PROJECT**

CLIENT
**VILLAGE OF
 LIONS BAY**
 Village of Lions Bay Municipal Hall
 PO Box 141 – 400 Centre Rd
 Lions Bay, BC V0N 2E0
 (604) 921-9333
 www.lionsbay.ca



CONSULTANT
AECOM
 3292 Production Way, Floor 4
 Burnaby, BC, V5A 4R4
 604.444.6400 tel 604.294.8597 fax
 www.aecom.com

NOTE:
 THE EXISTENCE, LOCATION AND ELEVATION OF
 UTILITIES AND/OR CONCEALED STRUCTURES AT
 THE PROJECT SITE ARE NOT GUARANTEED BY
 AECOM CANADA LTD.
 THE CONTRACTOR IS RESPONSIBLE FOR
 DETERMINING THE EXISTENCE, LOCATION AND
 ELEVATION OF ALL SUCH UTILITIES AND/OR
 STRUCTURES AND IS RESPONSIBLE FOR
 NOTIFYING THE APPROPRIATE COMPANY,
 DEPARTMENT OR PERSON(S) OF ITS INTENTION
 TO CARRY OUT ITS OPERATIONS.

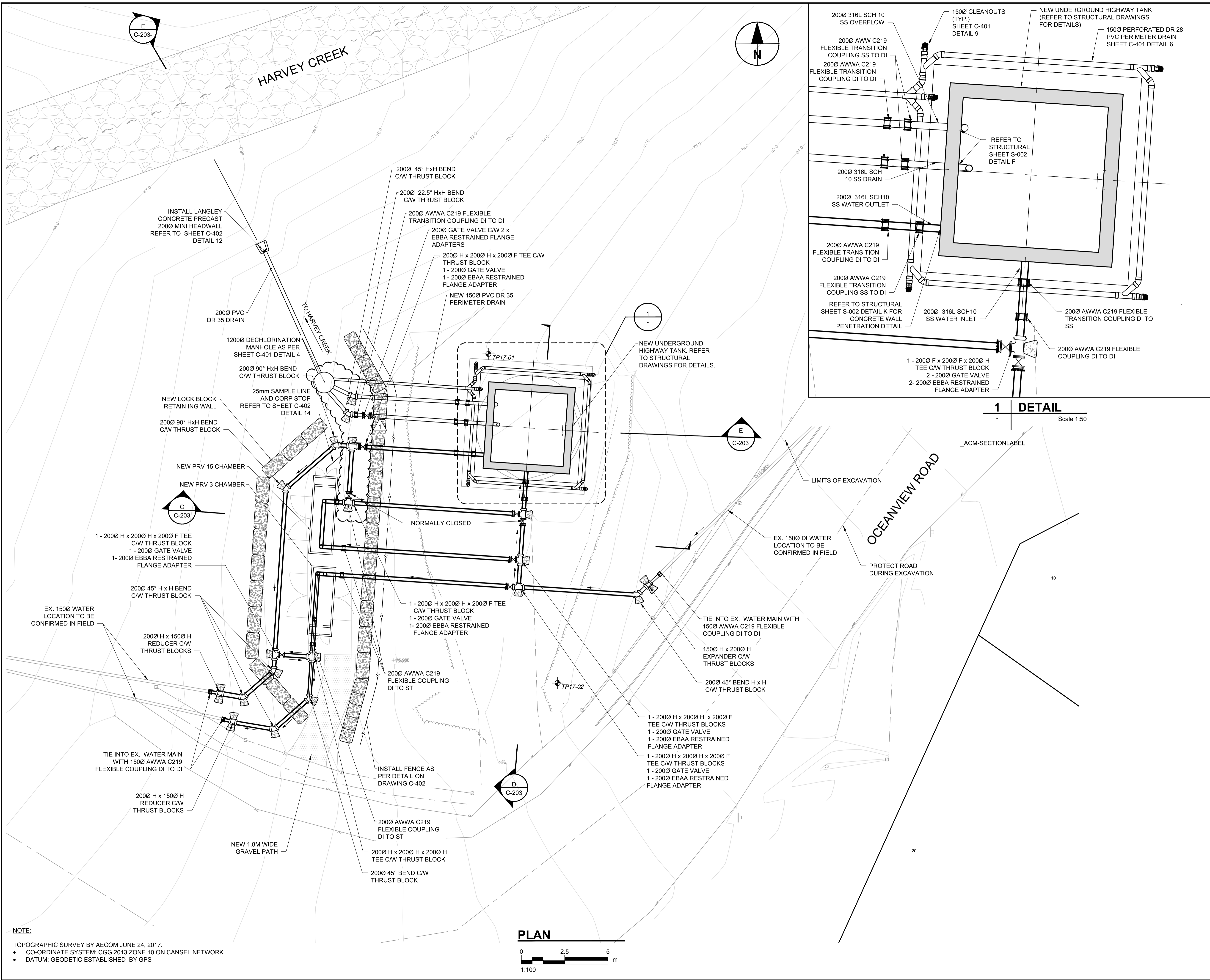
REGISTRATION

ISSUE/REVISION

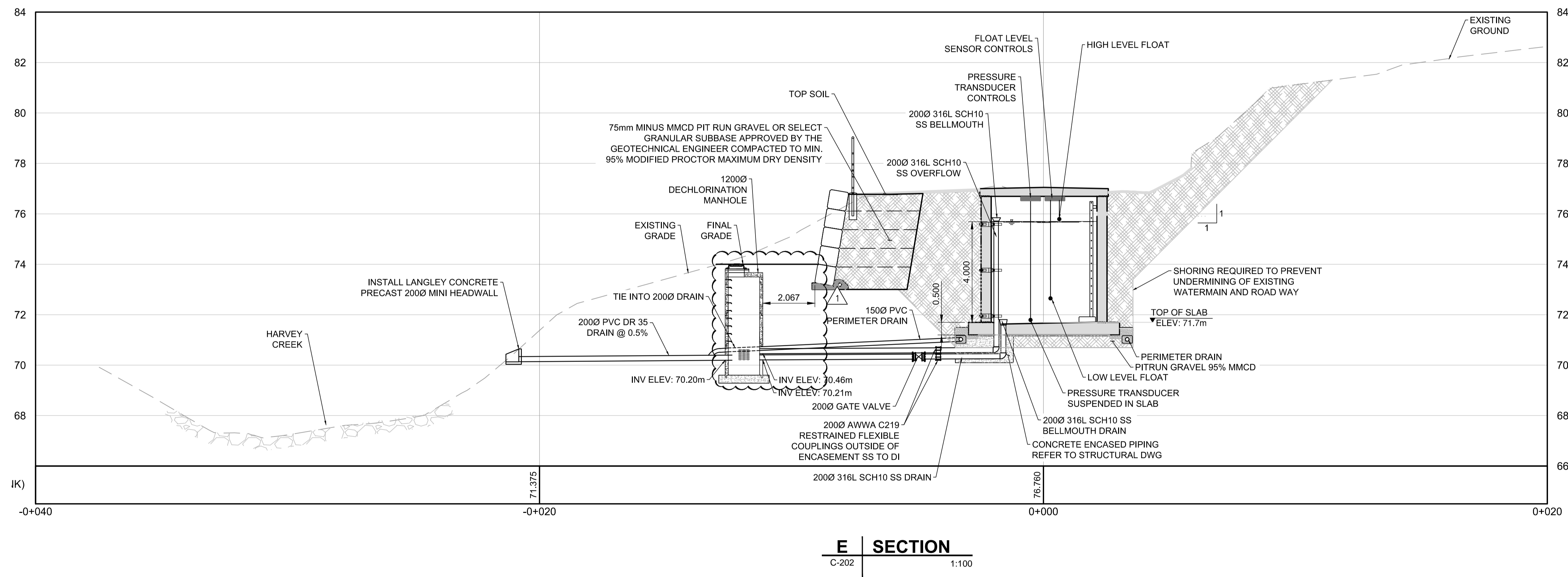
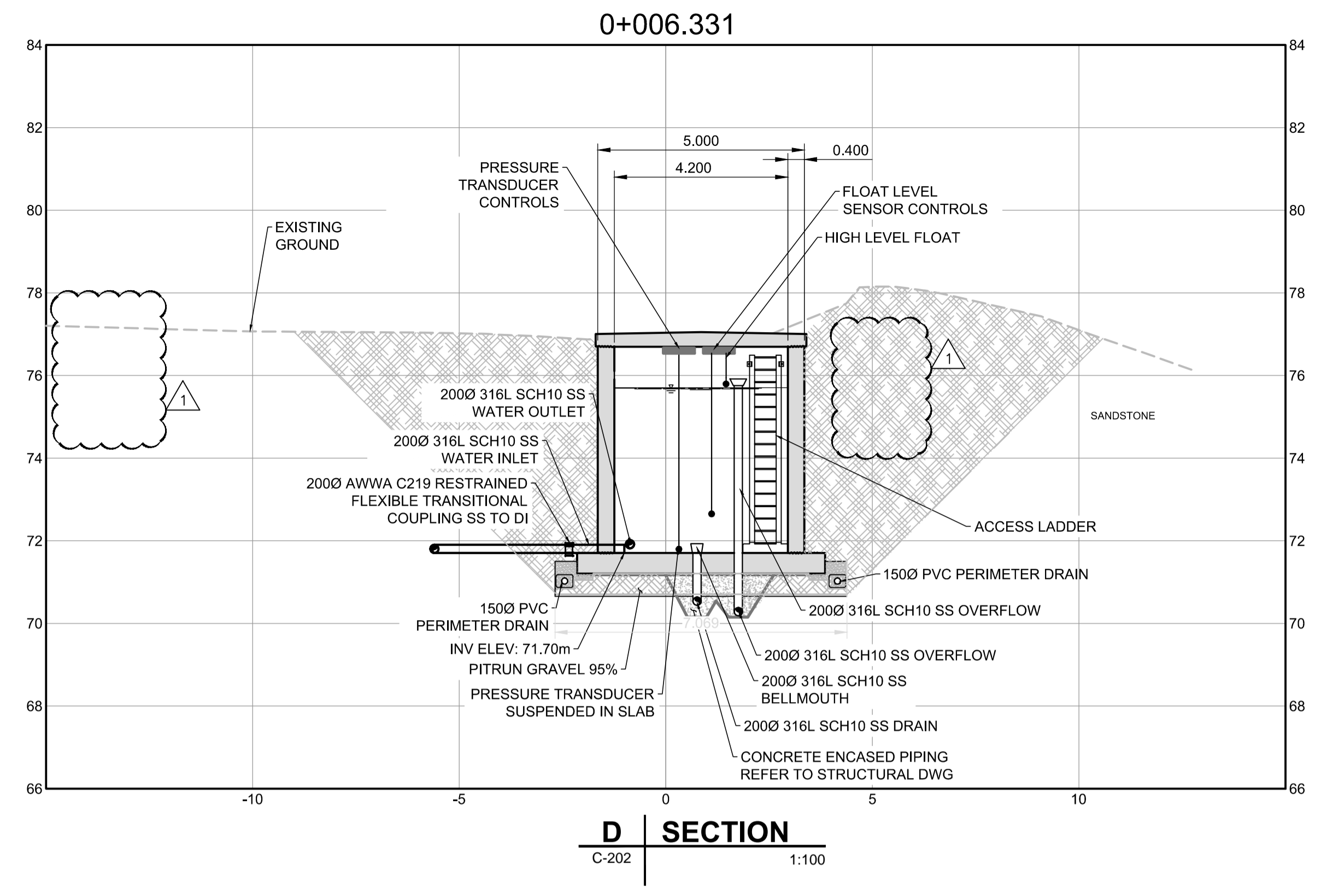
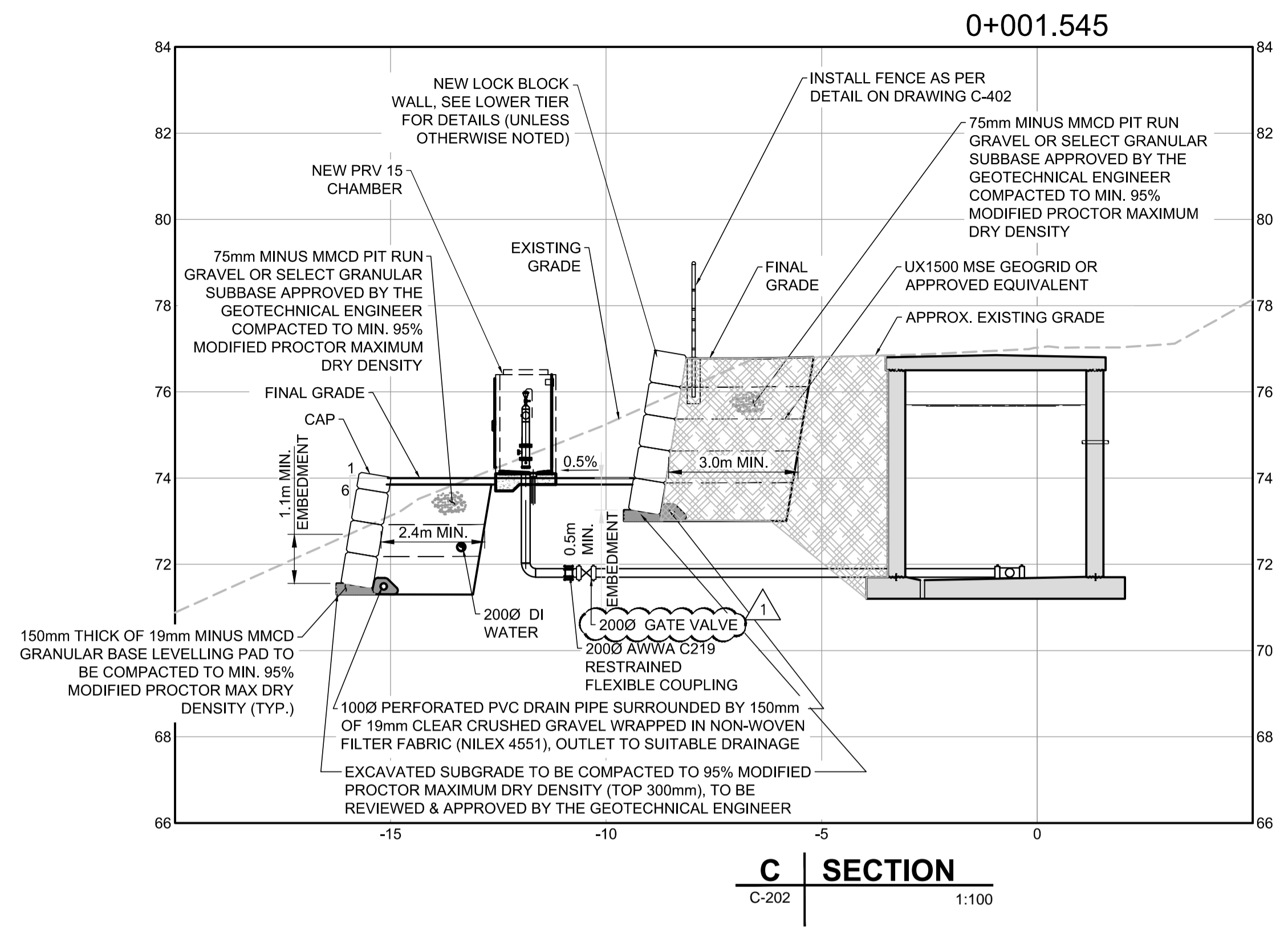
I/R	DATE	DESCRIPTION
1	03/07/2018	ISSUED FOR ADDENDUM 1
0	02/14/2018	ISSUED FOR TENDER

KEY PLAN

PROJECT NUMBER
 60546407
SHEET TITLE
 HIGHWAY TANK
 SITE PLAN
SHEET NUMBER
 C-202



This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability, whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.



PROJECT
 WATER STORAGE REPLACEMENT PROJECT

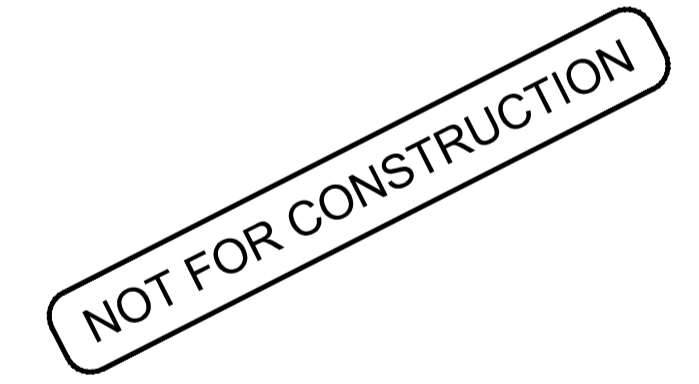
CLIENT
 VILLAGE OF LIONS BAY
 Village of Lions Bay Municipal Hall
 PO Box 141 – 400 Centre Rd
 Lions Bay, BC V0N 2E0
 (604) 921-9333
 www.lionsbay.ca



CONSULTANT
 AECOM
 3292 Production Way, Floor 4
 Burnaby, BC, V5A 4R4
 604.444.6400 tel 604.294.8597 fax
 www.aecom.com

NOTICE:
 THE EXISTENCE, LOCATION AND ELEVATION OF UTILITIES AND/OR CONCEALED STRUCTURES AT THE PROJECT SITE ARE NOT GUARANTEED BY AECOM CANADA LTD.
 THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXISTENCE, LOCATION AND ELEVATION OF ALL SUCH UTILITIES AND/OR STRUCTURES AND IS RESPONSIBLE FOR NOTIFYING THE APPROPRIATE COMPANY, DEPARTMENT OR PERSON(S) OF ITS INTENTION TO CARRY OUT ITS OPERATIONS.

REGISTRATION



ISSUE/REVISION

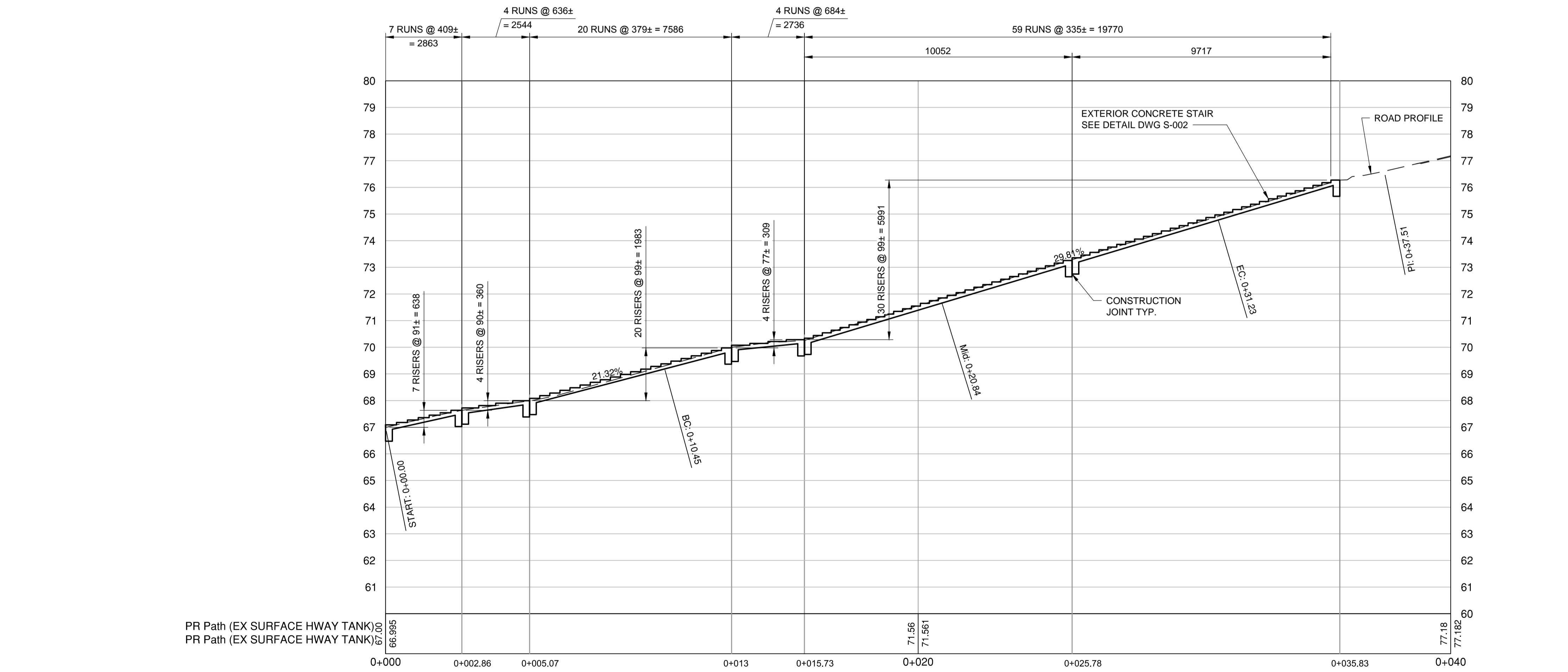
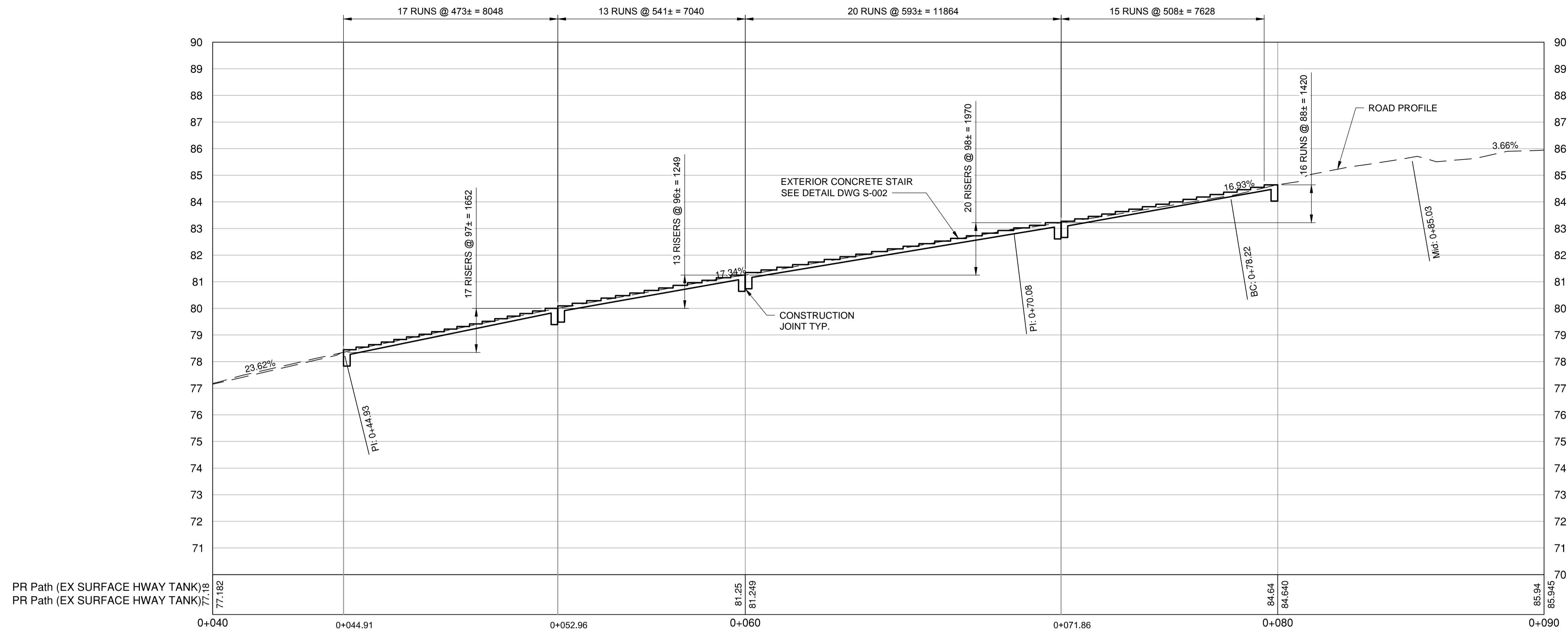
I/R	DATE	DESCRIPTION
1	03/07/2018	ISSUED FOR ADDENDUM 1
0	02/14/2018	ISSUED FOR TENDER

KEY PLAN

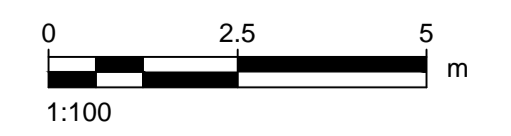
PROJECT NUMBER
 60546407
SHEET TITLE
 HIGHWAY TANK SECTIONS AND TYPICAL DETAILS
SHEET NUMBER
 C-203

NOTE:
 TOPOGRAPHIC SURVEY BY AECOM JUNE 24, 2017.
 • CO-ORDINATE SYSTEM: CGG 2013 ZONE 10 ON CANSEL NETWORK
 • DATUM: GEODETIC ESTABLISHED BY GPS

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or related upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability, whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.



- NOTE:**
- TOPOGRAPHIC SURVEY BY AECOM JUNE 24, 2017.
 - CO-ORDINATE SYSTEM: CGG 2013 ZONE 10 ON CANSEL NETWORK
 - DATUM: GEODETIC ESTABLISHED BY GPS
 - STAIR ELEVATIONS AND LENGTH SHOWN TO BE VERIFIED WITH FIELD SURVEY.
 - CONTRACTOR TO LAYOUT THE STAIRCASE AND CONFIRM NUMBER OF STAIRS PRIOR TO EXCAVATION, SUBGRADE PREPARATION, OR LAYOUT OF TEMPORARY FORMWORK.



PROJECT
 WATER STORAGE
 REPLACEMENT
 PROJECT

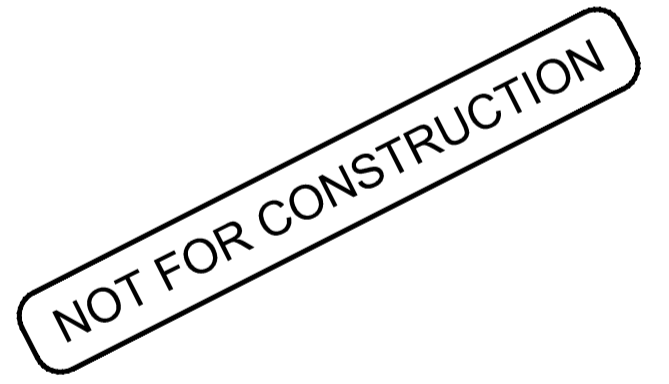
CLIENT
 VILLAGE OF
 LIONS BAY
 Village of Lions Bay Municipal Hall
 PO Box 141 – 400 Centre Rd
 Lions Bay, BC V0N 2E0
 (604) 921-9333
 www.lionsbay.ca



CONSULTANT
 AECOM
 3292 Production Way, Floor 4
 Burnaby, BC, V5A 4R4
 604.444.6400 tel 604.294.8597 fax
 www.aecom.com

NOTICE:
 THE EXISTENCE, LOCATION AND ELEVATION OF UTILITIES AND/OR CONCEALED STRUCTURES AT THE PROJECT SITE ARE NOT GUARANTEED BY AECOM CANADA LTD.
 THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXISTENCE, LOCATION AND ELEVATION OF ALL SUCH UTILITIES AND/OR STRUCTURES AND IS RESPONSIBLE FOR NOTIFYING THE APPROPRIATE COMPANY, DEPARTMENT OR PERSON(S) OF ITS INTENTION TO CARRY OUT ITS OPERATIONS.

REGISTRATION



ISSUE/REVISION

I/R	DATE	DESCRIPTION
0	03/07/2018	ISSUED FOR ADDENDUM 1

KEY PLAN

PROJECT NUMBER

60546407

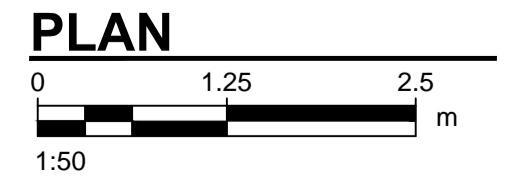
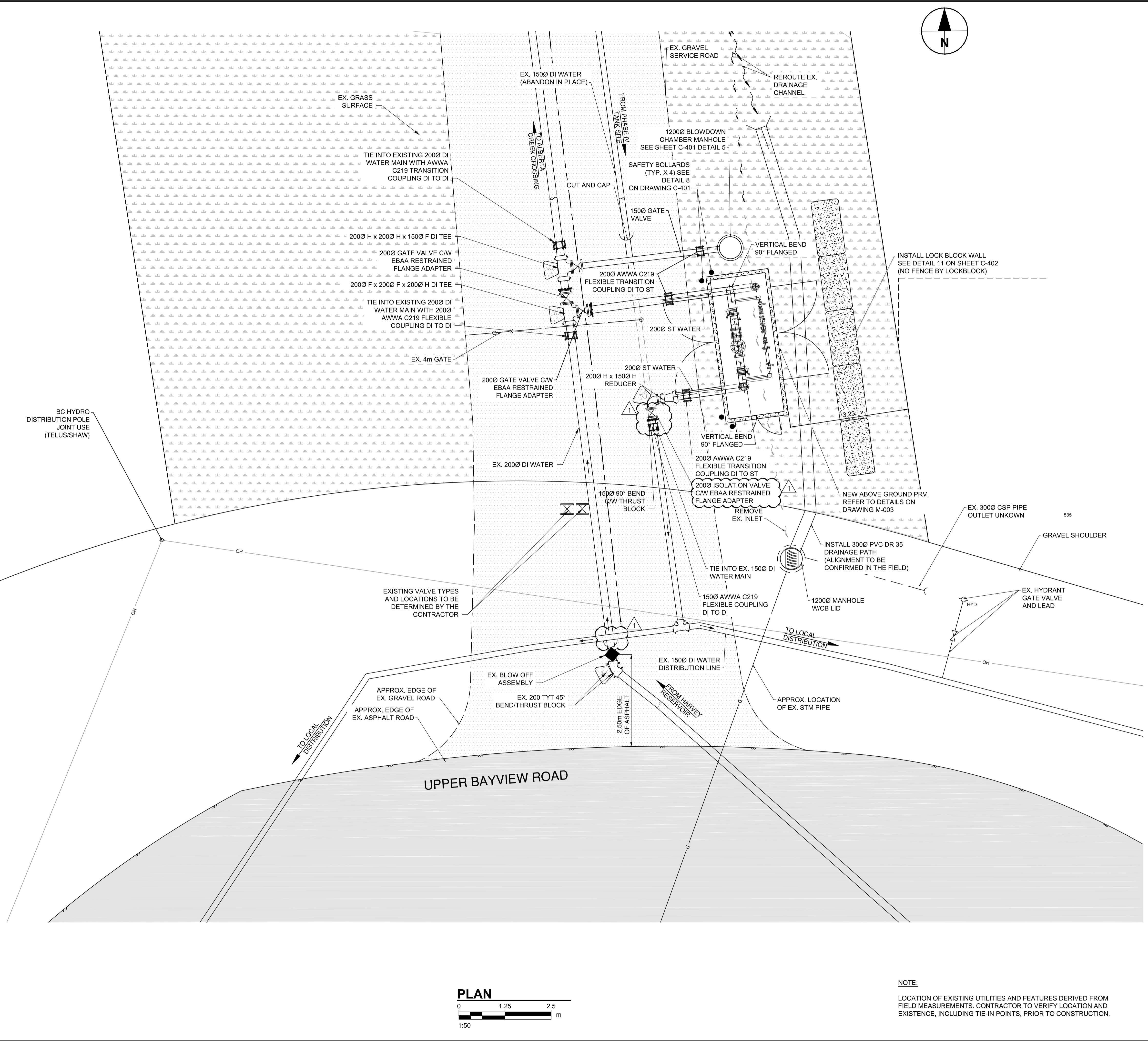
SHEET TITLE

HIGHWAY TANK
 STAIR PROFILE

SHEET NUMBER

C-205

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability, whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.



NOTE:
 LOCATION OF EXISTING UTILITIES AND FEATURES DERIVED FROM FIELD MEASUREMENTS. CONTRACTOR TO VERIFY LOCATION AND EXISTENCE, INCLUDING TIE-IN POINTS, PRIOR TO CONSTRUCTION.



PROJECT
WATER STORAGE REPLACEMENT PROJECT

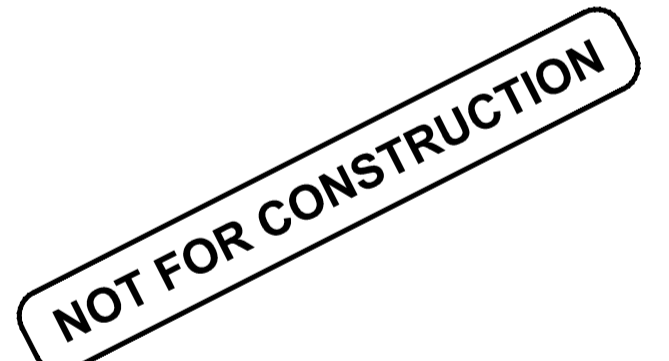
CLIENT
VILLAGE OF LIONS BAY
 Village of Lions Bay Municipal Hall
 PO Box 141 – 400 Centre Rd
 Lions Bay, BC V0N 2E0
 (604) 921-9333
 www.lionsbay.ca



CONSULTANT
AECOM
 3292 Production Way, Floor 4
 Burnaby, BC, V5A 4R4
 604.444.6400 tel 604.294.8597 fax
 www.aecom.com

NOTICE:
 THE EXISTENCE, LOCATION AND ELEVATION OF UTILITIES AND/OR CONCEALED STRUCTURES AT THE PROJECT SITE ARE NOT GUARANTEED BY AECOM CANADA LTD.
 THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXISTENCE, LOCATION AND ELEVATION OF ALL SUCH UTILITIES AND/OR STRUCTURES AND IS RESPONSIBLE FOR NOTIFYING THE APPROPRIATE COMPANY, DEPARTMENT OR PERSON(S) OF ITS INTENTION TO CARRY OUT ITS OPERATIONS.

REGISTRATION



ISSUE/REVISION

I/R	DATE	DESCRIPTION
1	03/07/2018	ISSUED FOR ADDENDUM 1
0	02/14/2018	ISSUED FOR TENDER

KEY PLAN

PROJECT NUMBER

60546407

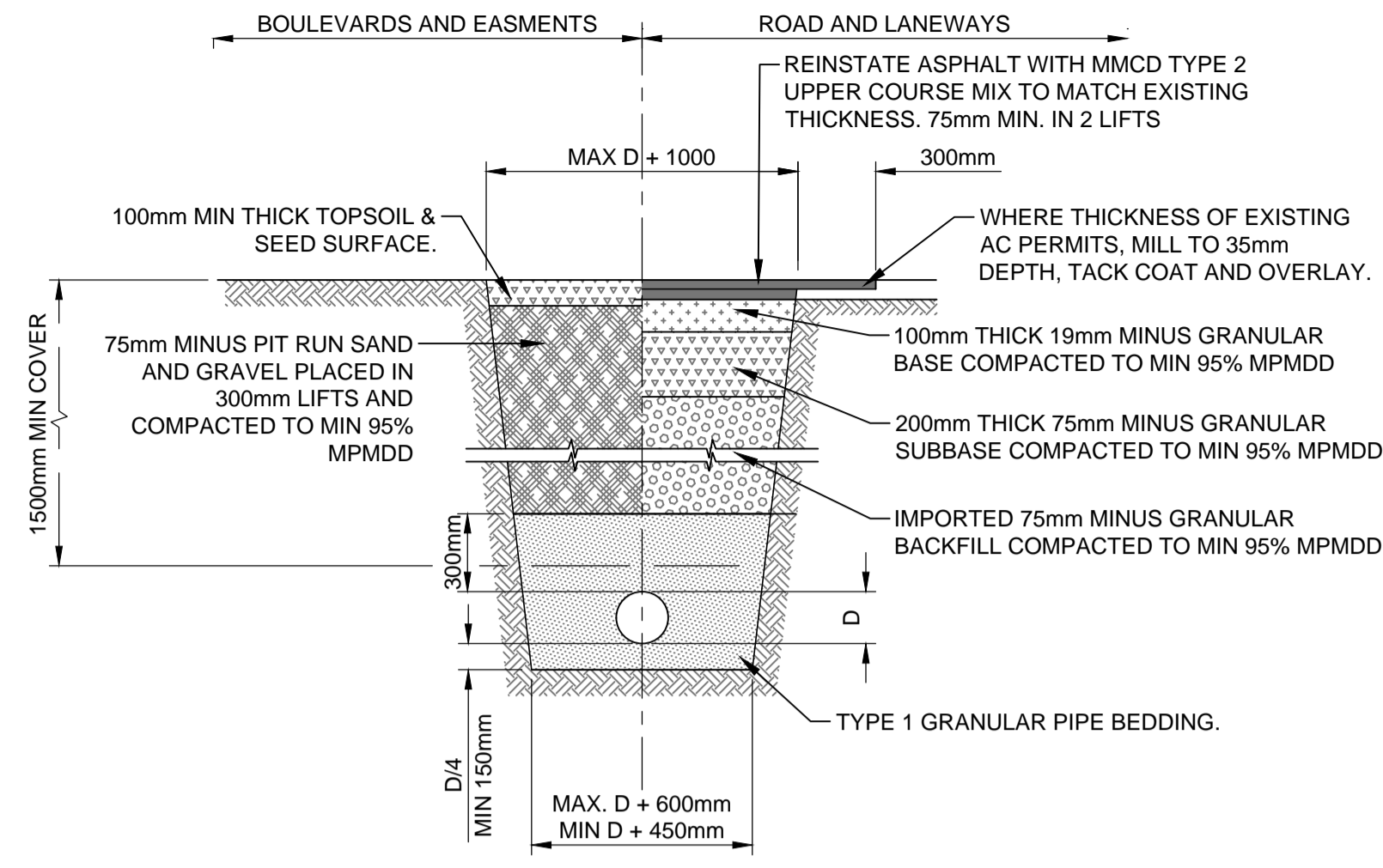
SHEET TITLE

UPPER BAYVIEW PRV 14 SITE PLAN

SHEET NUMBER

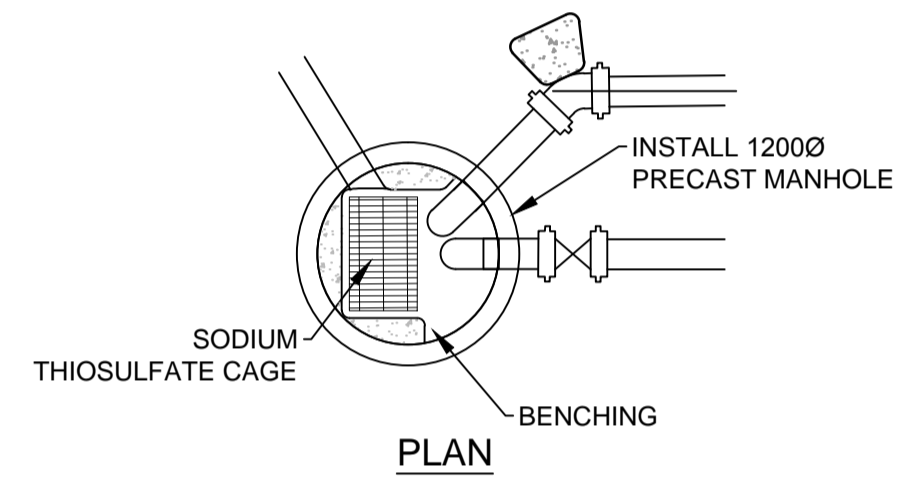
C-306

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability, whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

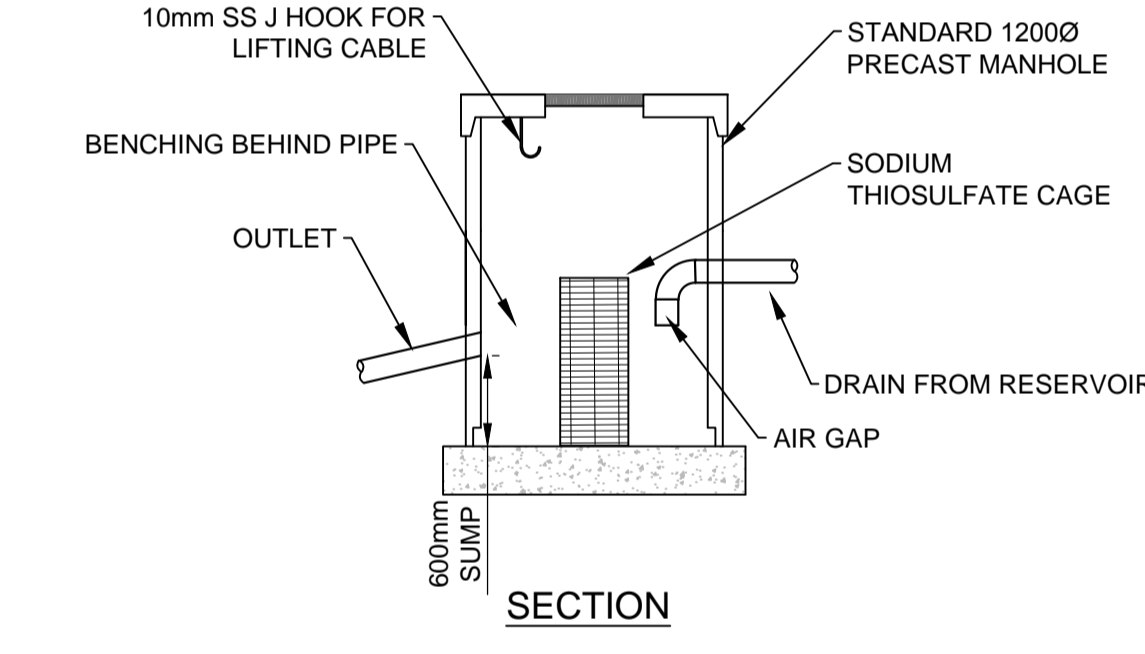


TYPICAL TRENCH DETAIL

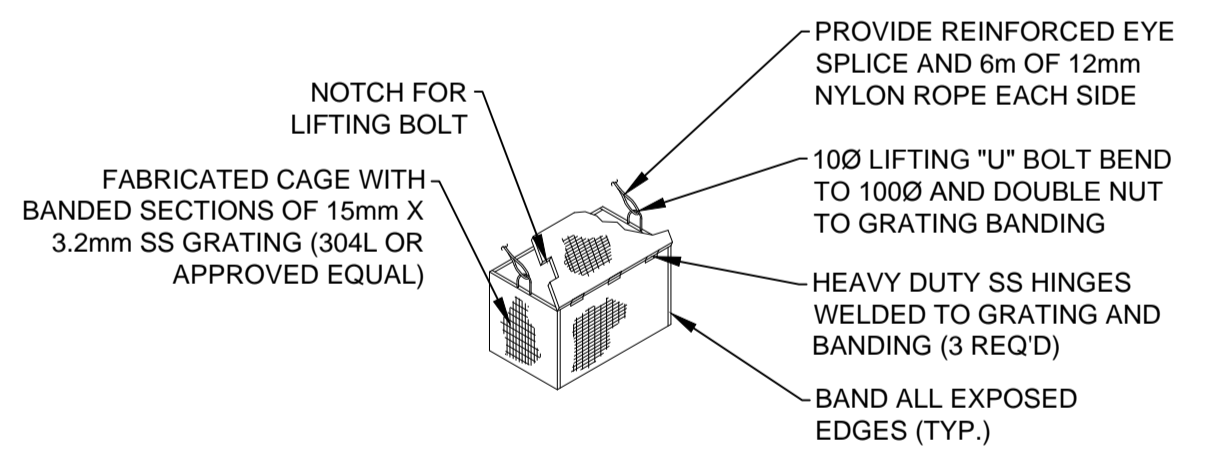
Scale: 1:25



PLAN

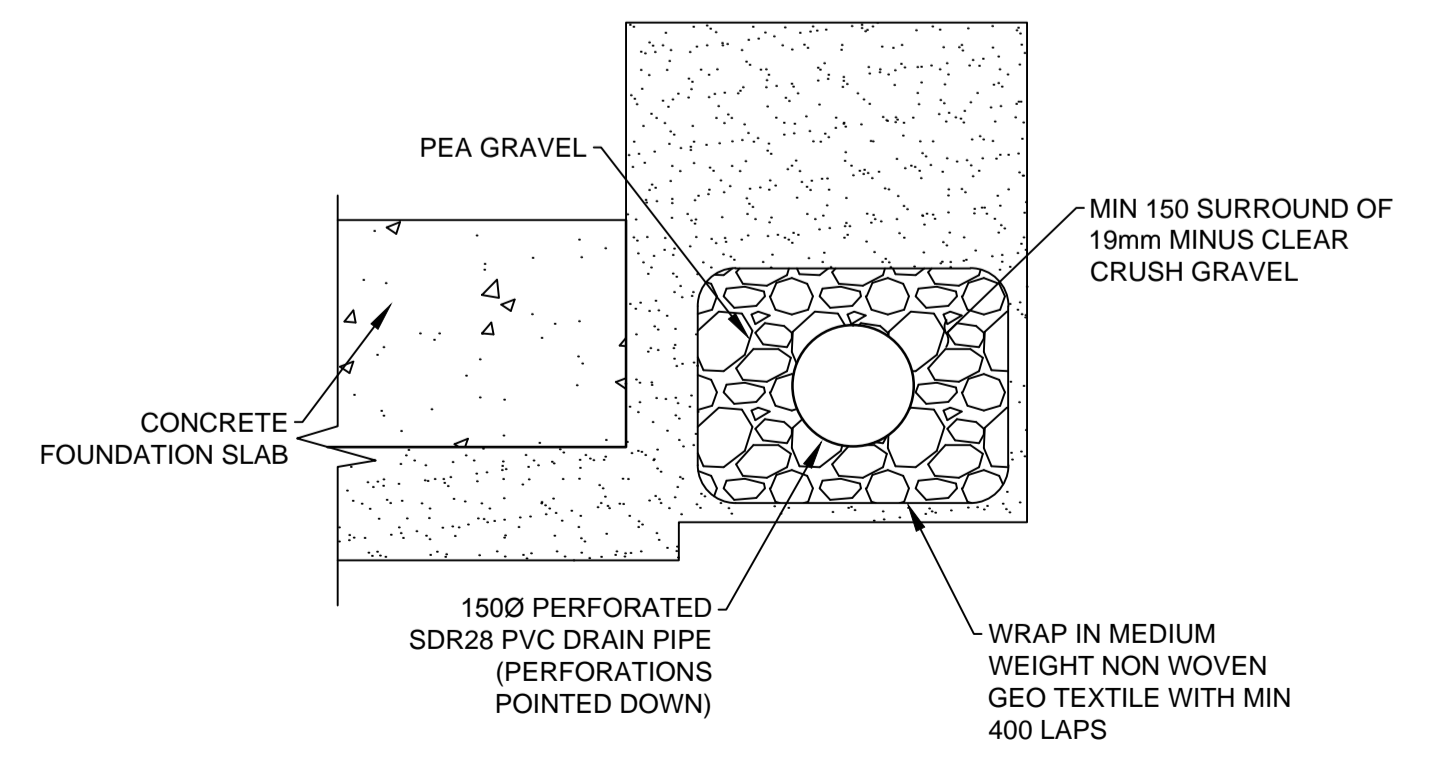


SECTION



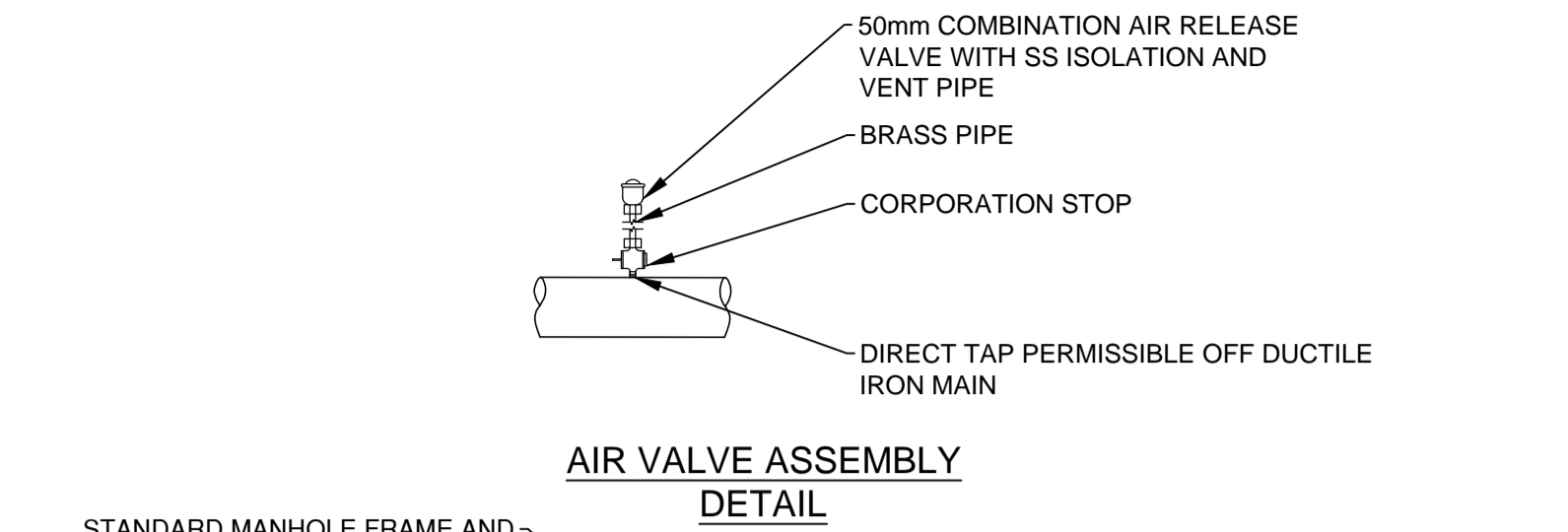
SODIUM THIOSULFATE CAGE SECTION

DECHLORINATION MANHOLE DETAILS
 Scale: N.T.S

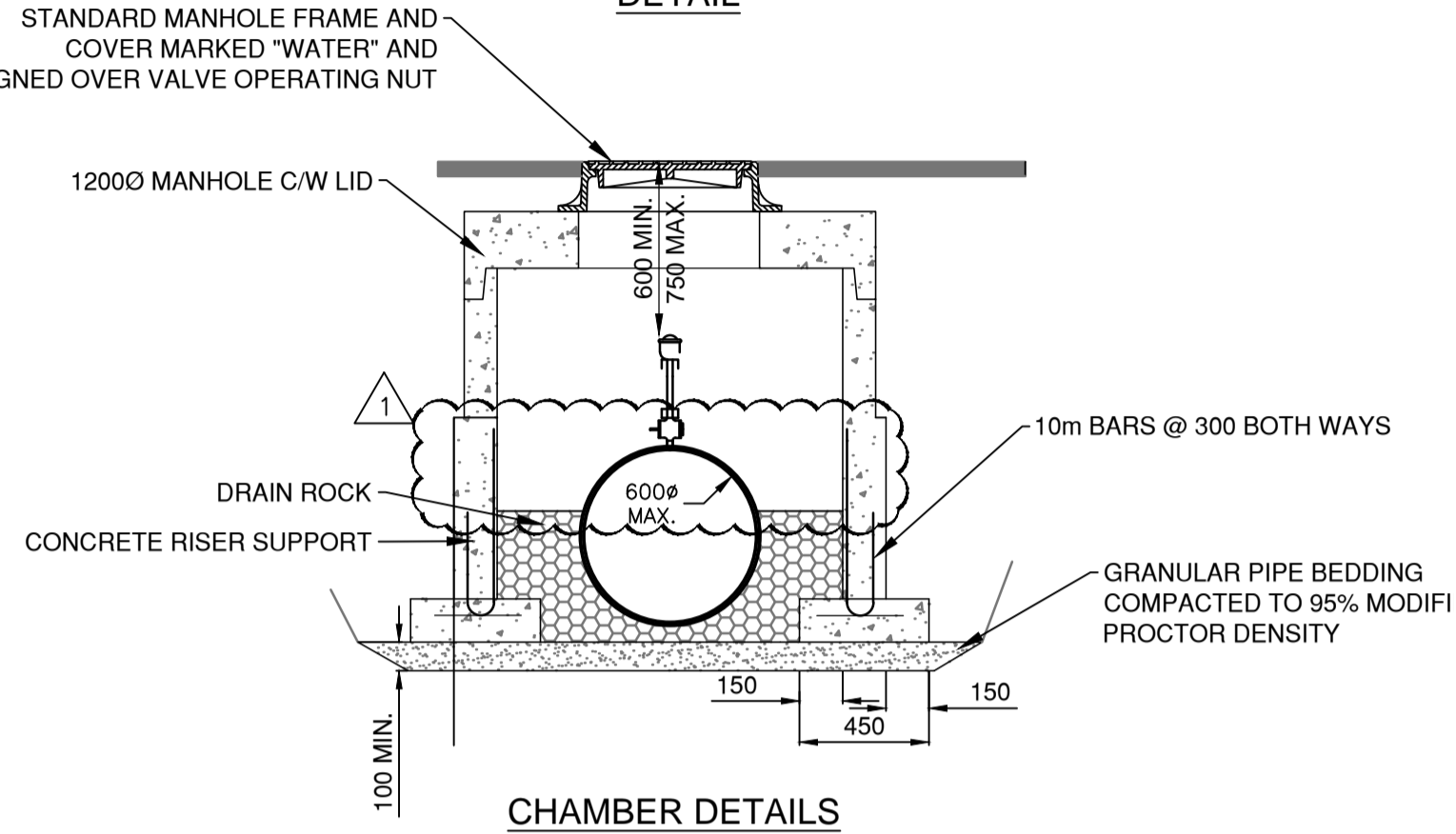


HARVEY - PERFORATED PERIMETER DRAIN DETAIL
 Scale: N.T.S

AIR VALVE SIZE	CORPORATION STOP SIZE
50	40

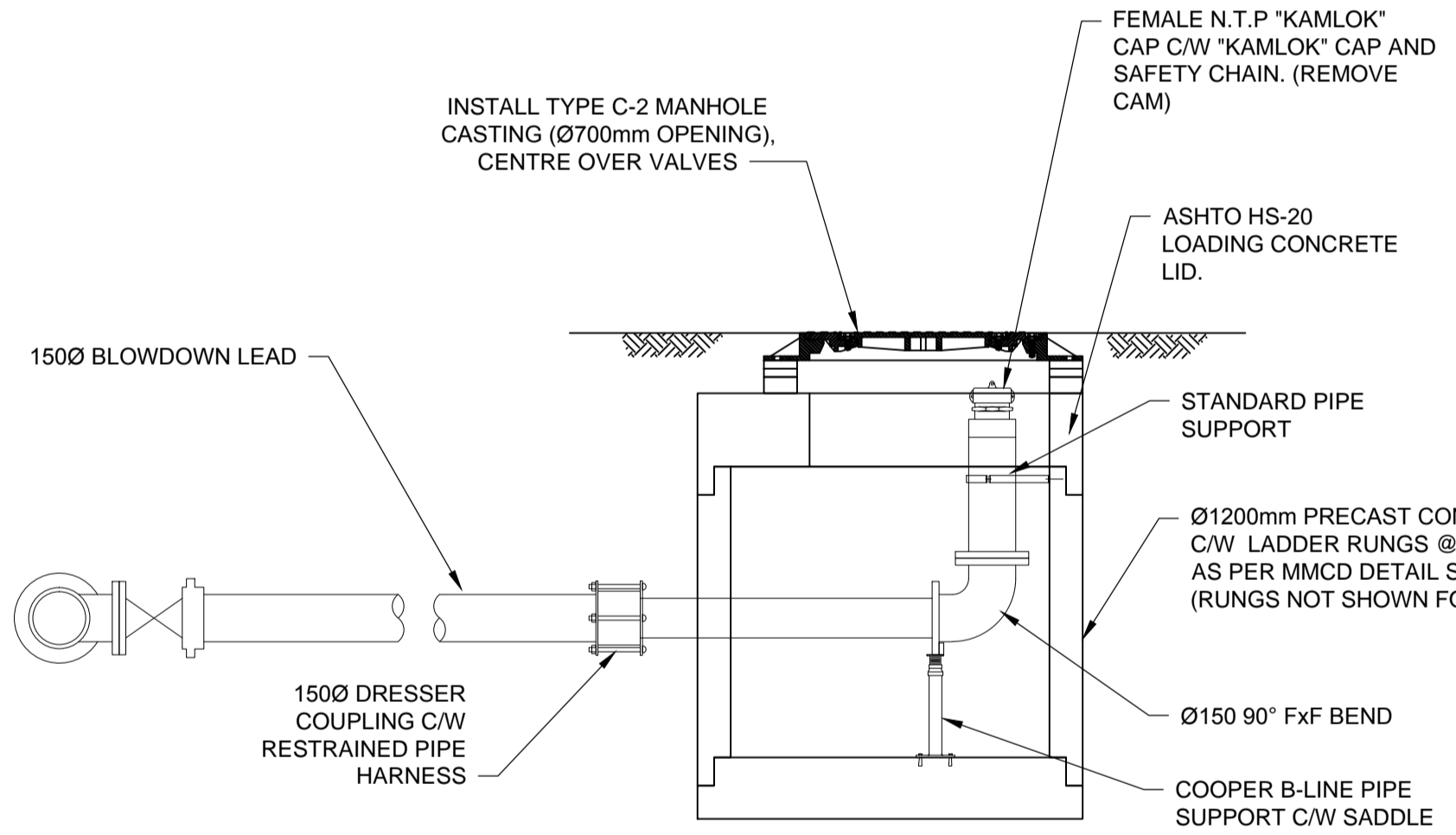


AIR VALVE ASSEMBLY DETAIL

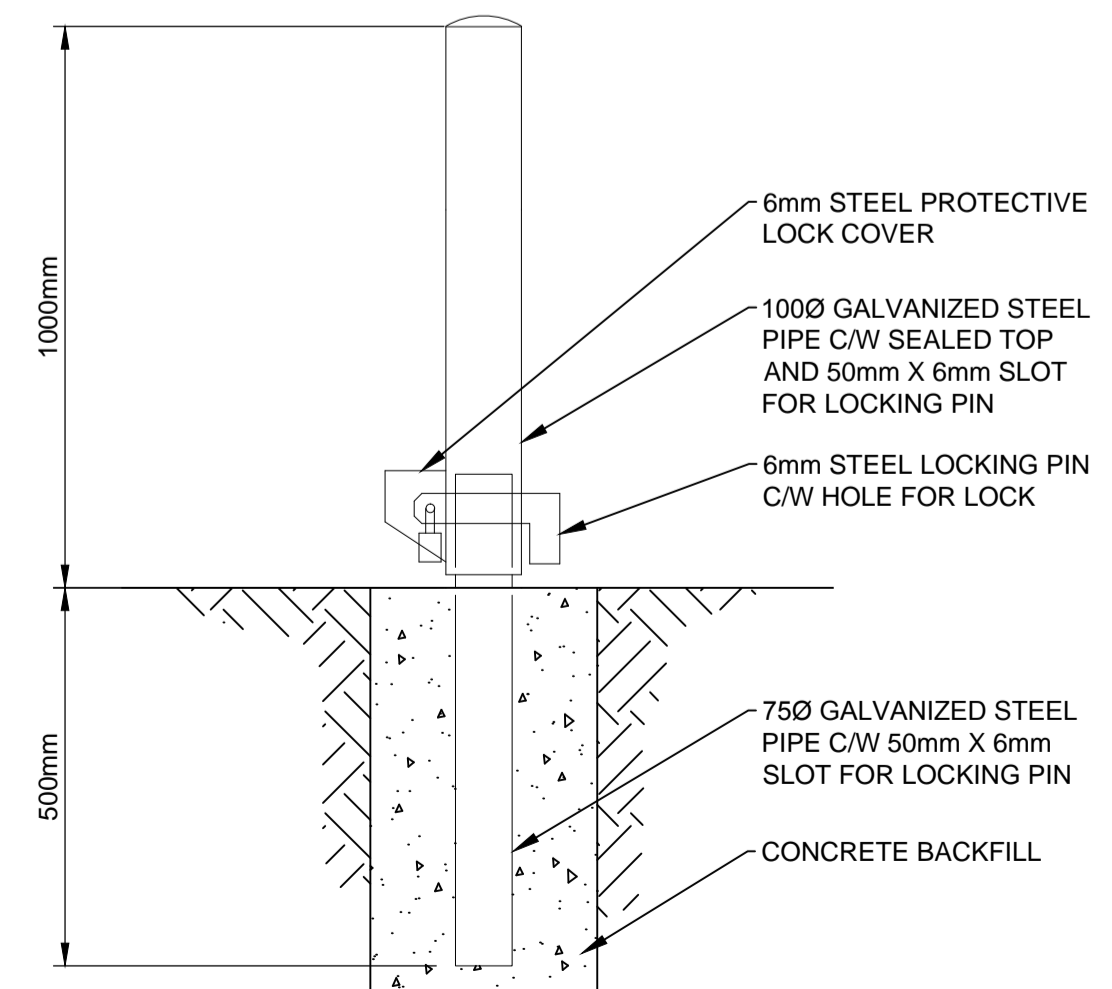


CHAMBER DETAILS

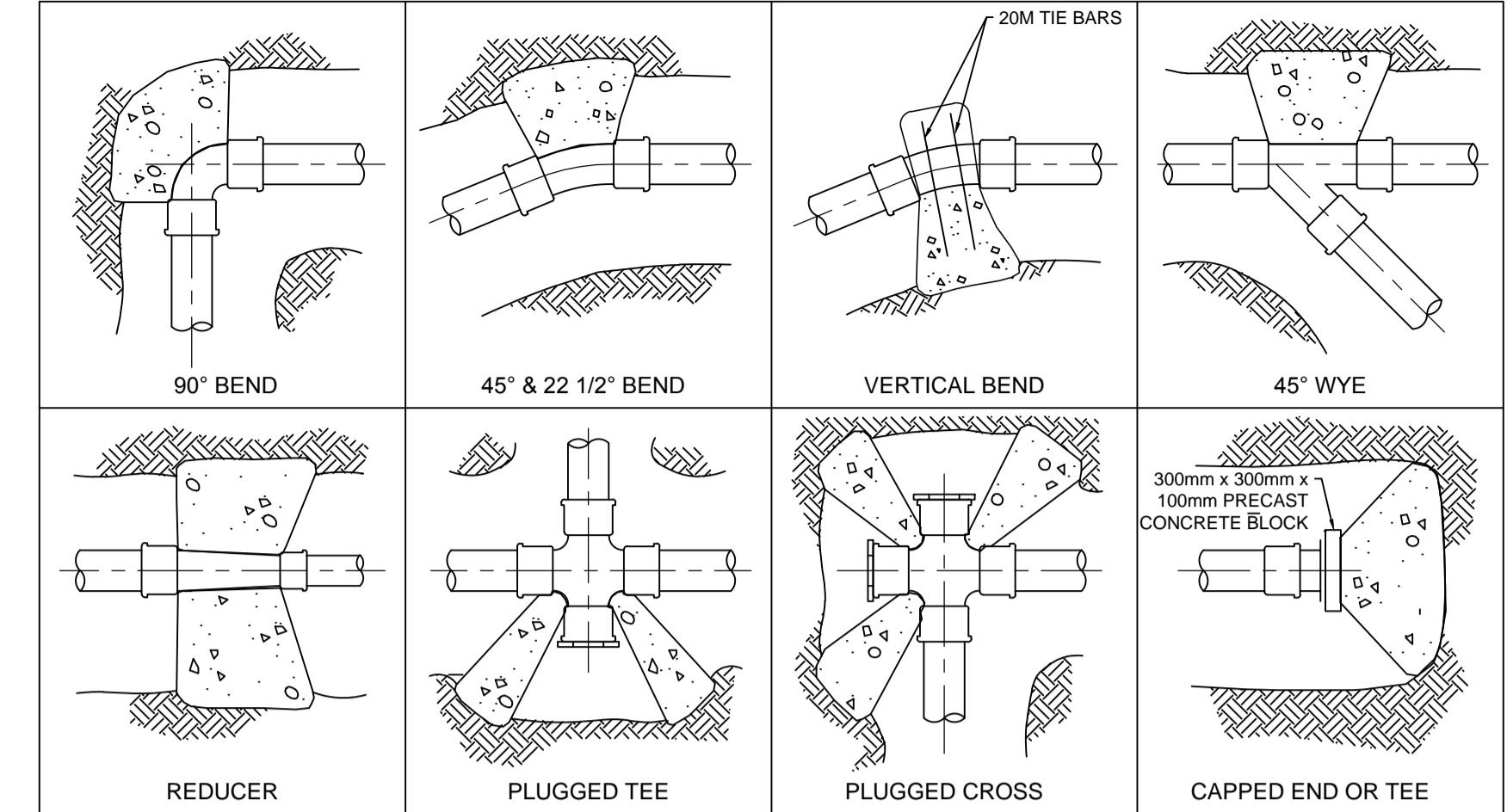
AIR VALVE ASSEMBLY & CHAMBER DETAILS
 Scale: N.T.S



BLOWDOWN DETAIL
 Scale: N.T.S



LOCKABLE BOLLARD
 Scale: N.T.S

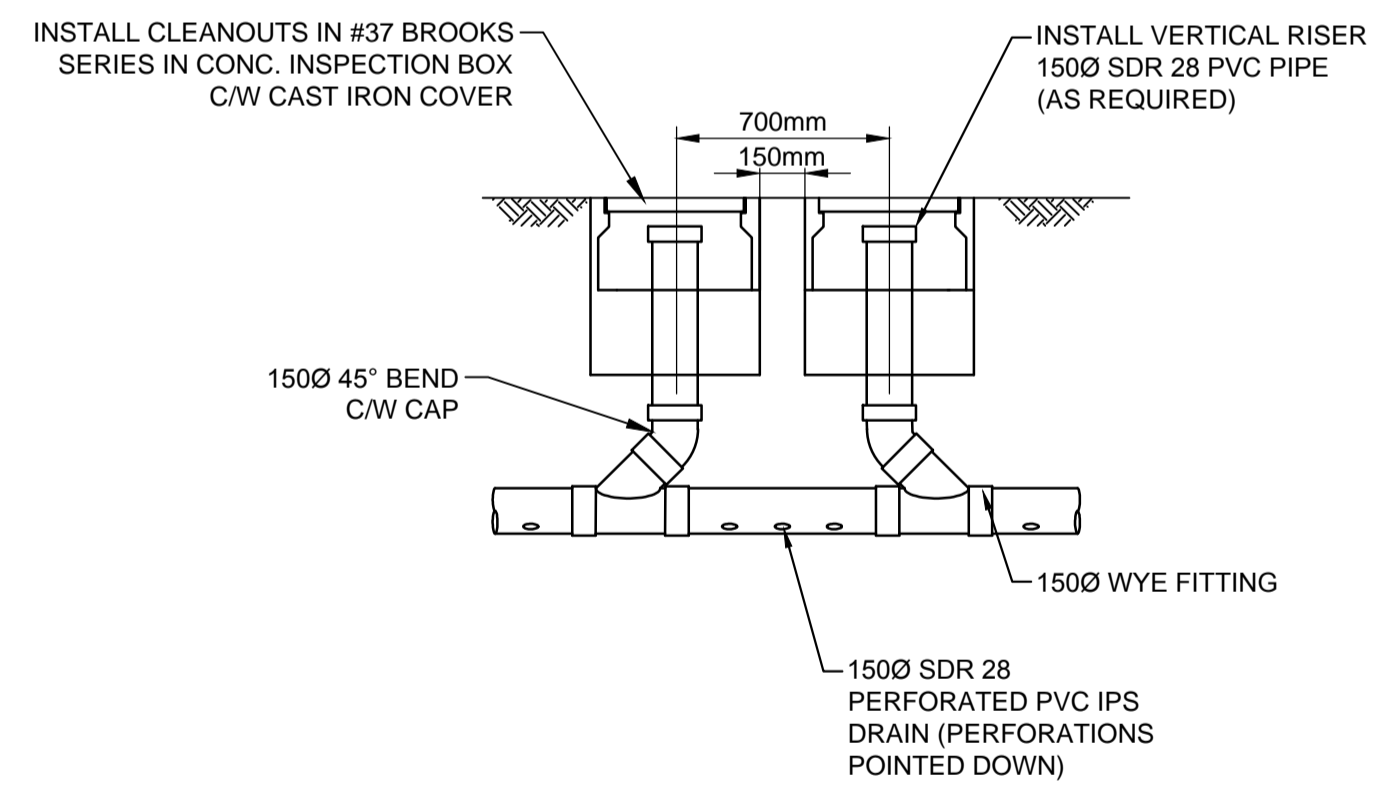


MIN. THRUST AREA BASED ON WATER PRESSURE OF 700 KPa AND SOIL BEARING CAPACITY OF 50 KPa

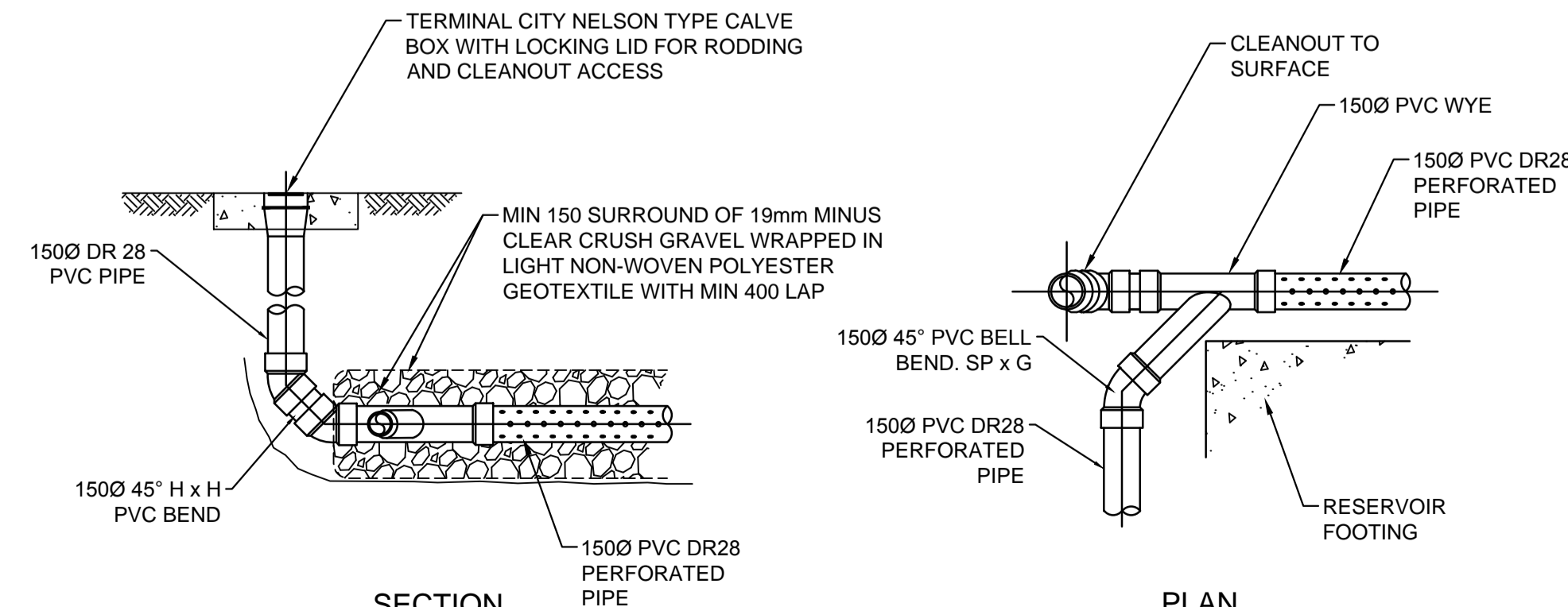
FITTING	PIPE DIAMETER IN MILLIMETRES	MIN. THRUST AREA IN SQ. METRES	FITTING	PIPE DIAMETER IN MILLIMETRES	MIN. THRUST AREA IN SQ. METRES
90° BEND	100	0.2	22 1/2° BEND	100	0.1
	150	0.4		150	0.2
	200	0.7		200	0.2
	250	1.1		250	0.3
	300	1.6		300	0.5
45° BEND OR WYE	100	0.2	CAPPED END OR TEE	100	0.2
	150	0.3		150	0.3
	200	0.4		200	0.5
	250	0.6		250	0.8
	300	0.9		300	1.1

- NOTE:**
- VALUES GIVEN IN TABLE ARE BASED ON A SOIL BEARING CAPACITY OF 50KPa. FOR SOFT CLAY AND SATURATED SAND-CLAY SOILS IN AN UNDISTURBED STATE.
 - FOR FIRM DRY CLAY OR COMPACT SAND OR GRAVEL, DIVIDE THRUST AREAS BY 2.0
 - FOR CROSSES USE 45° BEND VALUE IN EACH QUADRANT.
 - WHERE PIPE SIZE DIFFERS IN ANY ONE FITTING, USE THE VALUE FOR THE MAX. SIZE.
 - THRUST BLOCKS OF 15 MPa CONCRETE.
 - WHERE 1030 KPa OR 1380KPa WATER PRESSURE ARE USED, MULTIPLY THRUST AREAS BY 1.5 AND 2.0 RESPECTIVELY. ALLOW FOR TEST PRESSURES IN SELECTION OF THRUST AREAS.
 - THRUST BLOCK CONCRETE SHALL NOT ENCR OACH ON THE PIPE, BUT SHALL BEAR ON THE FITTING ONLY.
 - FOR VOLUME OF ANCHOR BLOCKS FOR THE VERTICAL BEND, REFER TO PIPELINE DRAWINGS. USE 2-20m BAR PER m3 CONCRETE.

THRUST BLOCK DETAILS
 Scale: N.T.S



HARVEY TANK CLEANOUT DRAIN DETAIL
 Scale: 1:25



HIGHWAY TANK CLEANOUT DRAIN DETAIL
 Scale: 1:25



PROJECT
WATER STORAGE REPLACEMENT PROJECT

CLIENT
VILLAGE OF LIONS BAY
 Village of Lions Bay Municipal Hall
 PO Box 141 – 400 Centre Rd
 Lions Bay, BC V0N 2E0
 (604) 921-9333
 www.lionsbay.ca



CONSULTANT
 AECOM
 3292 Production Way, Floor 4
 Burnaby, BC, V5A 4R4
 604.444.6400 tel 604.294.8597 fax
 www.aecom.com

NOTE:
 THE EXISTENCE, LOCATION AND ELEVATION OF UTILITIES AND/OR CONCEALED STRUCTURES AT THE PROJECT SITE ARE NOT GUARANTEED BY AECOM CANADA LTD.
 THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXISTENCE, LOCATION AND ELEVATION OF ALL SUCH UTILITIES AND/OR STRUCTURES AND IS RESPONSIBLE FOR NOTIFYING THE APPROPRIATE COMPANY, DEPARTMENT OR PERSON(S) OF ITS INTENTION TO CARRY OUT ITS OPERATIONS.

REGISTRATION

ISSUE/REVISION

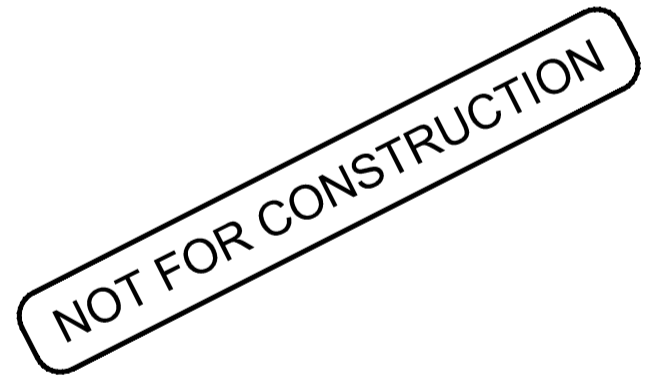
I/R	DATE	DESCRIPTION
1	03/07/2018	ISSUED FOR ADDENDUM 1
0	02/14/2018	ISSUED FOR TENDER

KEY PLAN

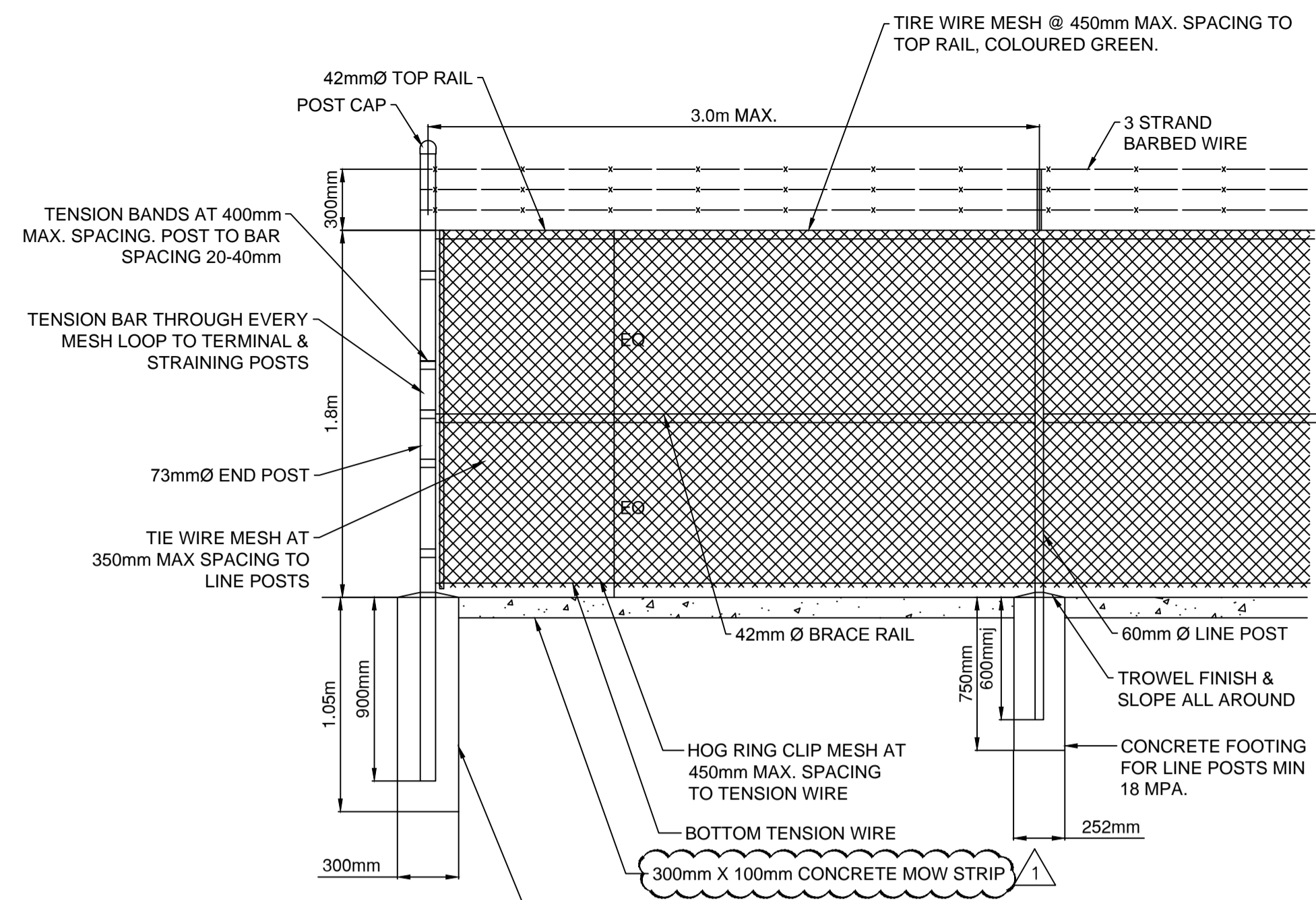
PROJECT NUMBER
 60546407

SHEET TITLE
 STANDARD DETAILS

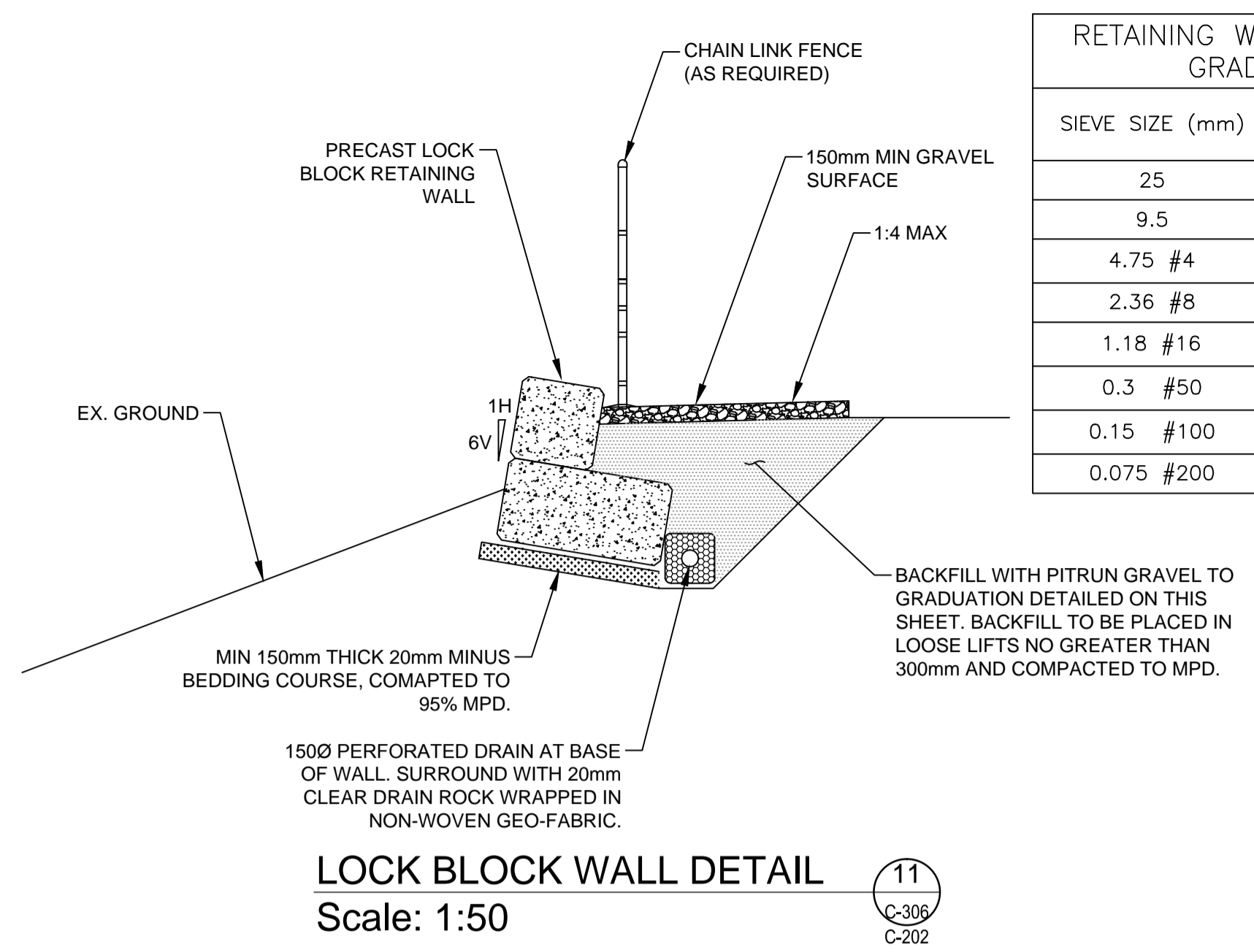
SHEET NUMBER
 C-401



This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability, whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.



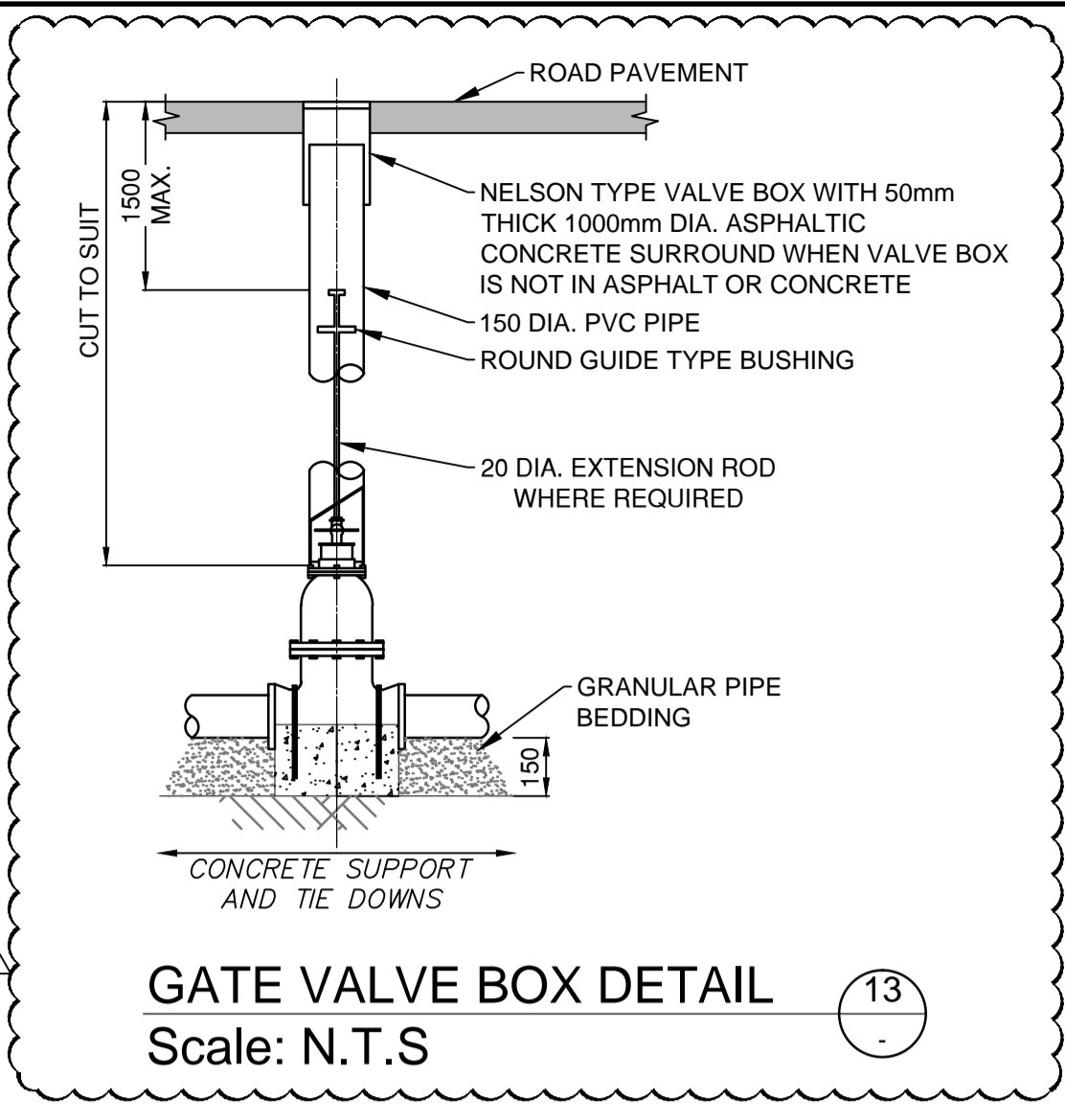
HARVEY SITE FENCE DETAIL
 Scale: 1:25



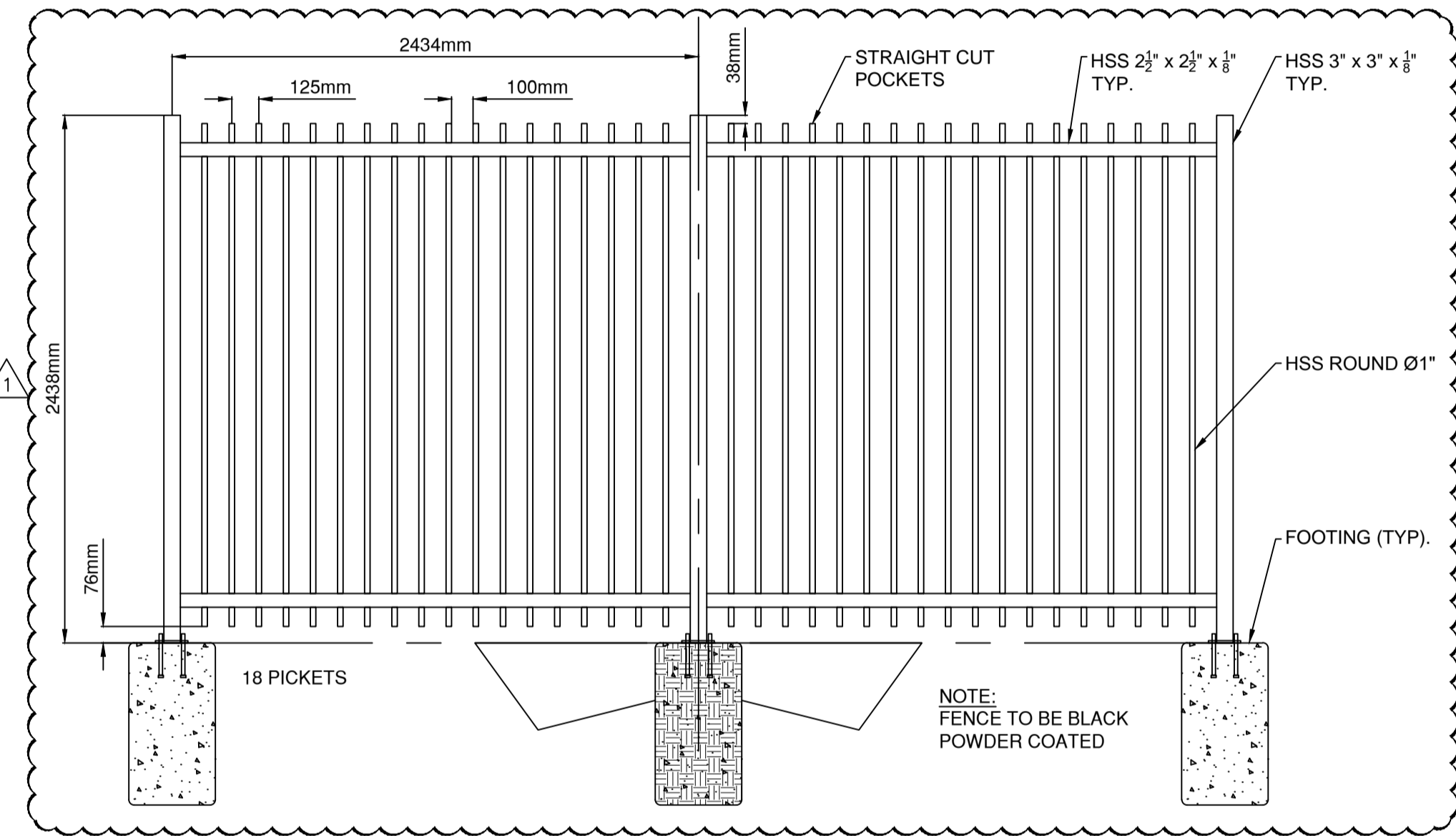
LOCK BLOCK WALL DETAIL
 Scale: 1:50

RETAINING WALL BACKFILL GRADATION

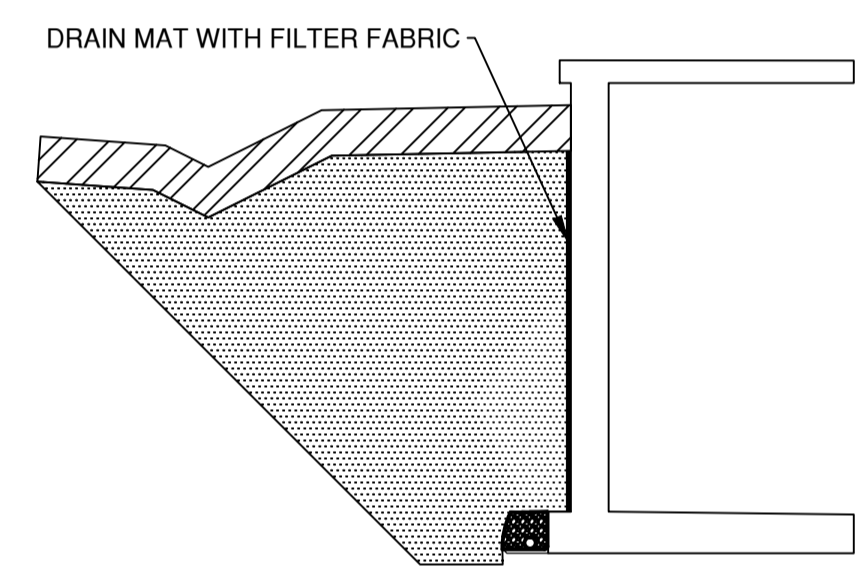
SIEVE SIZE (mm)	PERCENT PASSING
25	100
9.5	60-100
4.75 #4	40-100
2.36 #8	20-80
1.18 #16	0-65
0.3 #50	0-30
0.15 #100	0-10
0.075 #200	0-5



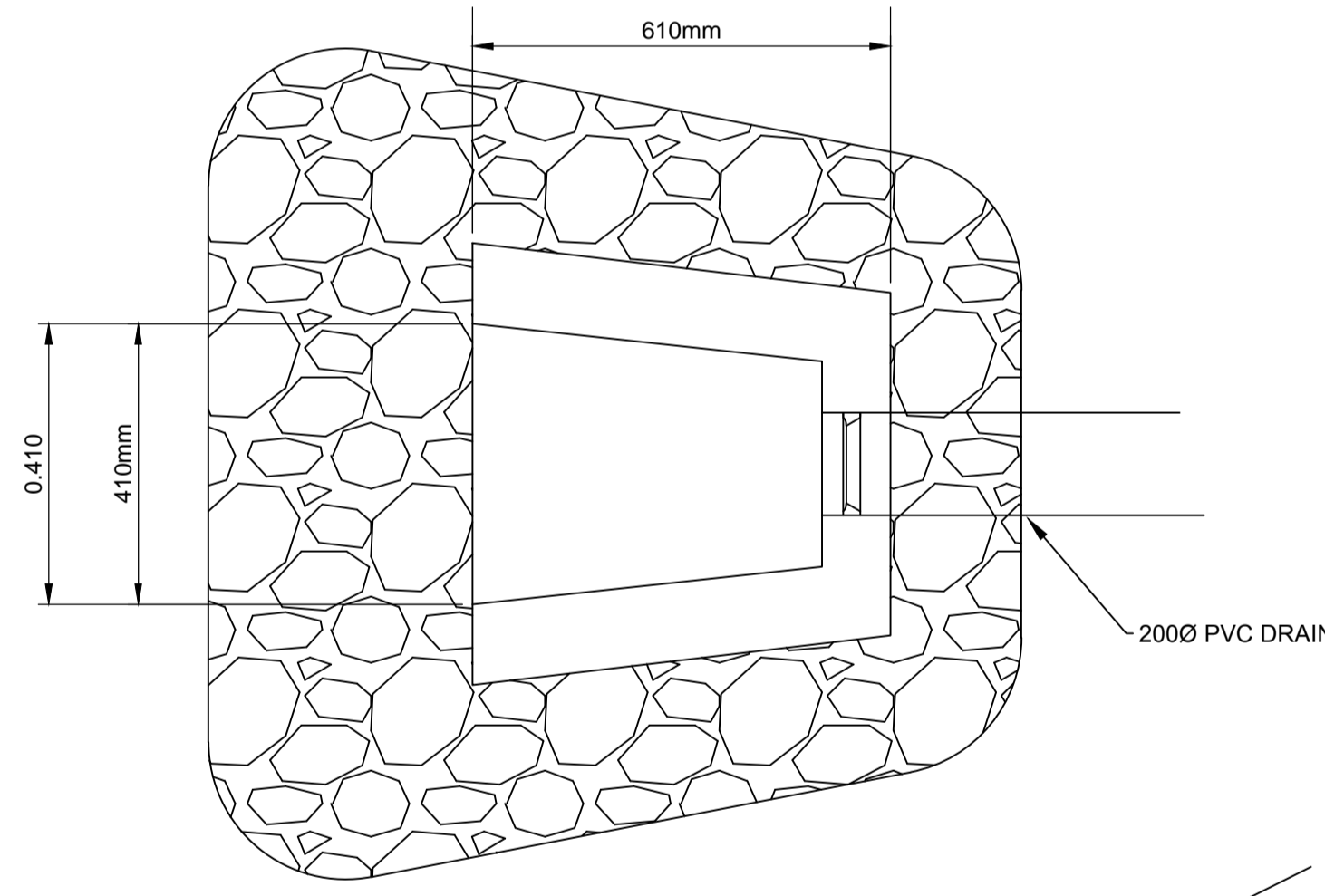
GATE VALVE BOX DETAIL
 Scale: N.T.S



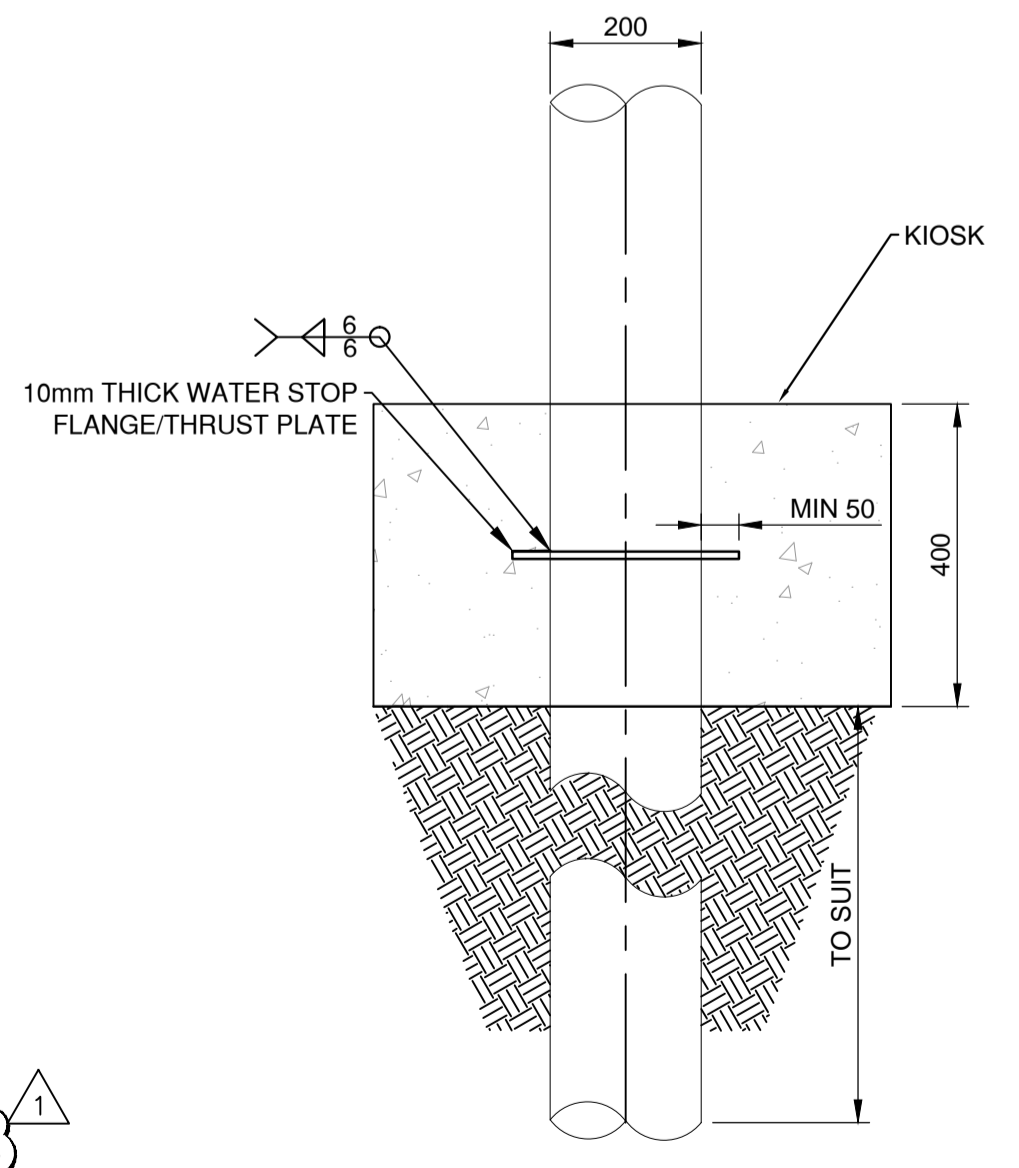
HIGHWAY SITE FENCE DETAIL
 Scale: 1:25



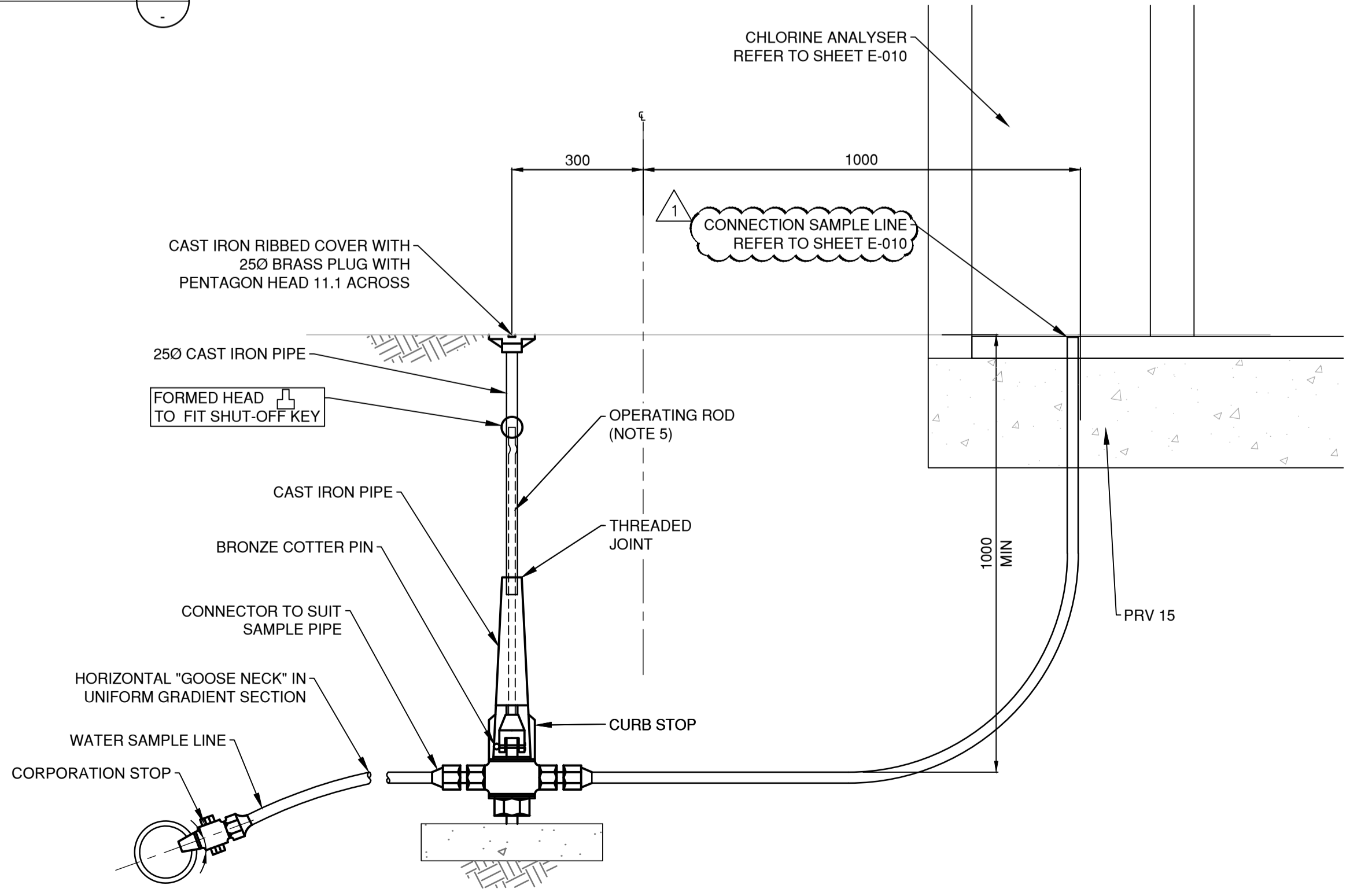
HIGHWAY - PERFORATED PERIMETER DRAIN DETAIL
 Scale: N.T.S



HEADWALL OUTLET- AT HIGHWAY
 Scale: N.T.S



THRUST PLATE DETAIL
 Scale: 1:10



WATER SAMPLE LINE DETAIL
 Scale: N.T.S



PROJECT
WATER STORAGE REPLACEMENT PROJECT

CLIENT
VILLAGE OF LIONS BAY
 Village of Lions Bay Municipal Hall
 PO Box 141 - 400 Centre Rd
 Lions Bay, BC V0N 2E0
 (604) 921-9333
 www.lionsbay.ca



CONSULTANT
 AECOM
 3292 Production Way, Floor 4
 Burnaby, BC, V5A 4R4
 604.444.6400 tel 604.294.8597 fax
 www.aecom.com

NOTICE:
 THE EXISTENCE, LOCATION AND ELEVATION OF UTILITIES AND/OR CONCEALED STRUCTURES AT THE PROJECT SITE ARE NOT GUARANTEED BY AECOM CANADA LTD.
 THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXISTENCE, LOCATION AND ELEVATION OF ALL SUCH UTILITIES AND/OR STRUCTURES AND IS RESPONSIBLE FOR NOTIFYING THE APPROPRIATE COMPANY, DEPARTMENT OR PERSON(S) OF ITS INTENTION TO CARRY OUT ITS OPERATIONS.

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
1	03/07/2018	ISSUED FOR ADDENDUM 1
0	02/14/2018	ISSUED FOR TENDER

KEY PLAN

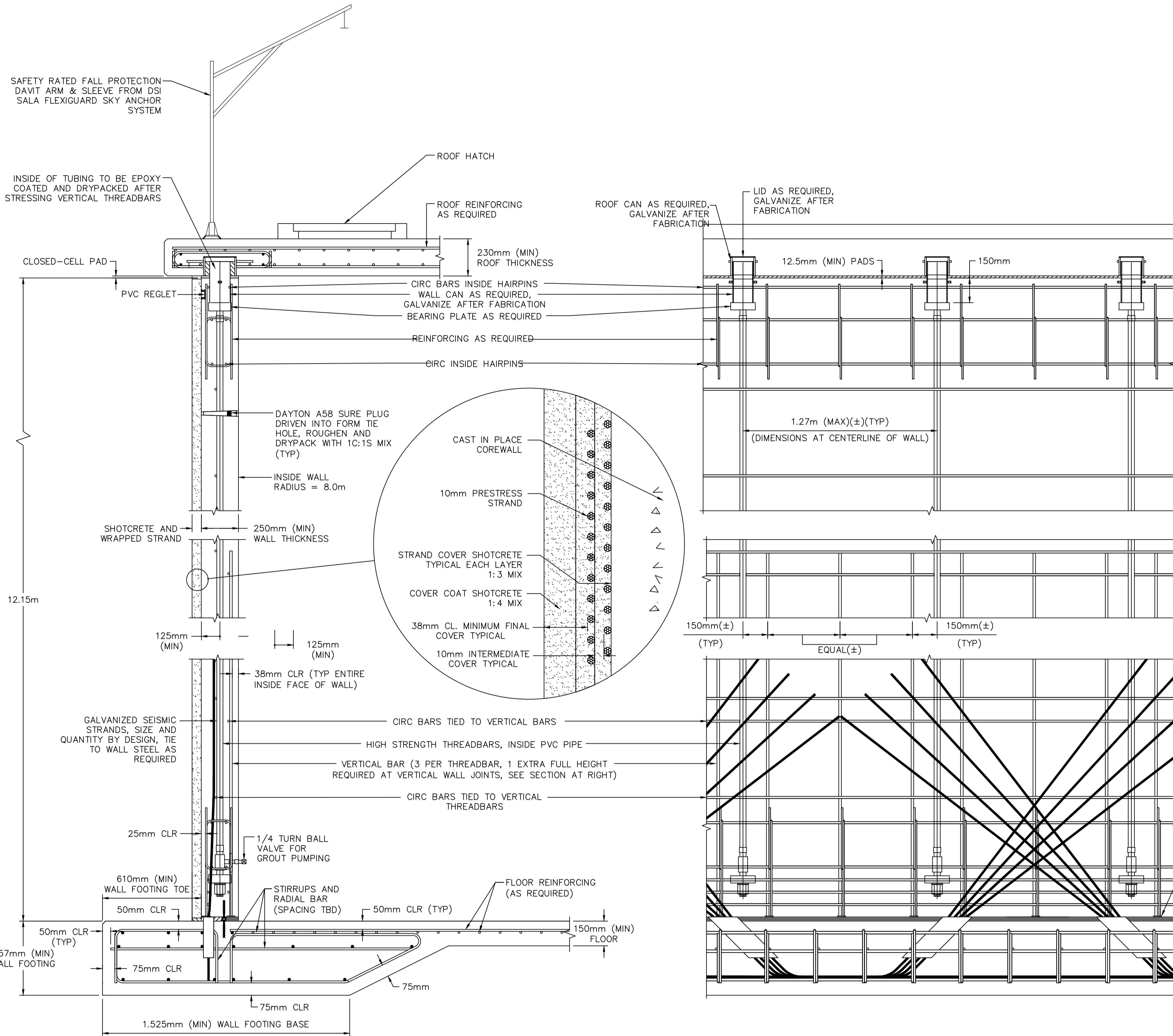
PROJECT NUMBER
 60546407
SHEET TITLE
 STANDARD DETAILS
SHEET NUMBER
 C-402

NOT FOR CONSTRUCTION

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability, whatsoever, to any party that modifies this drawing without AECOM's express written consent. All measurements must be obtained from stated dimensions.

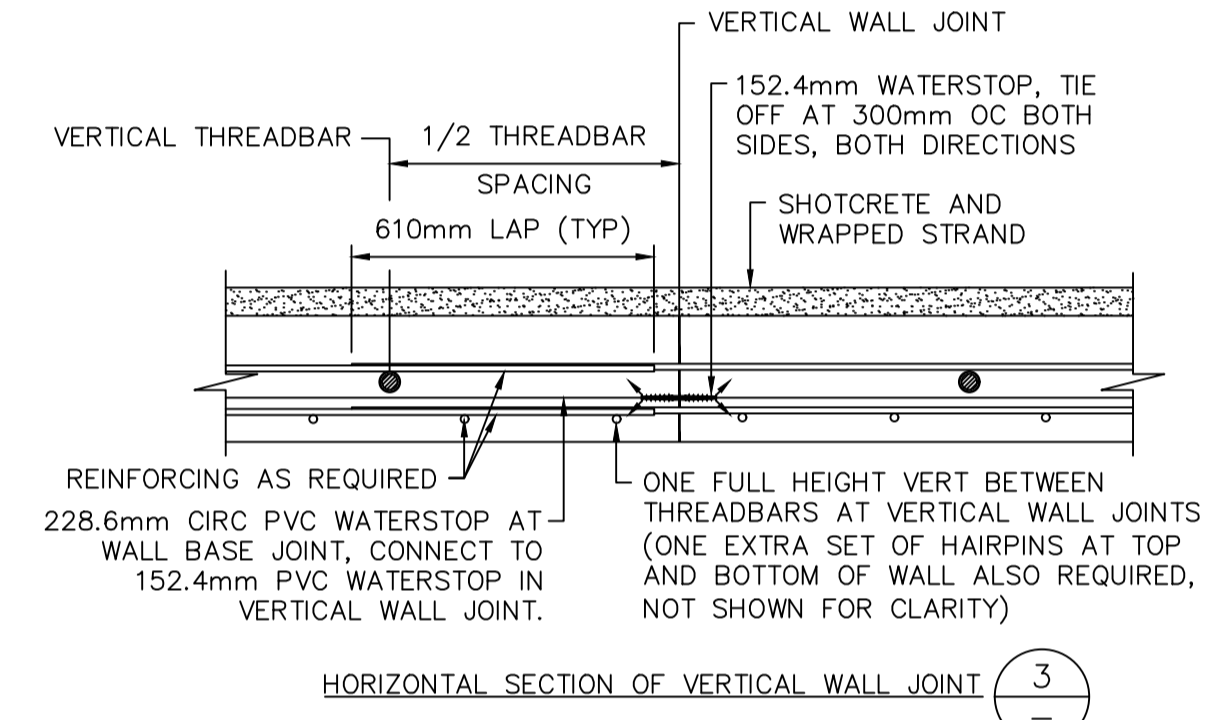


I/R	DATE	DESCRIPTION
1	07/03/2018	ISSUED FOR ADDENDUM 1

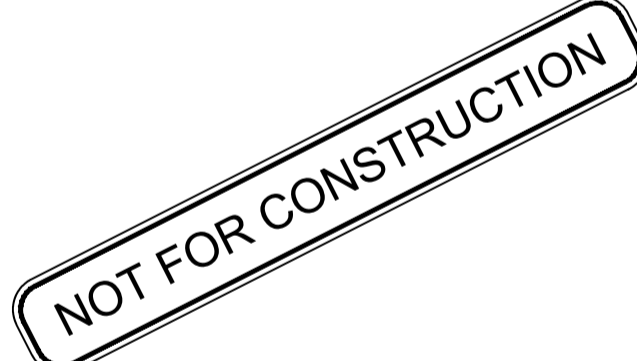
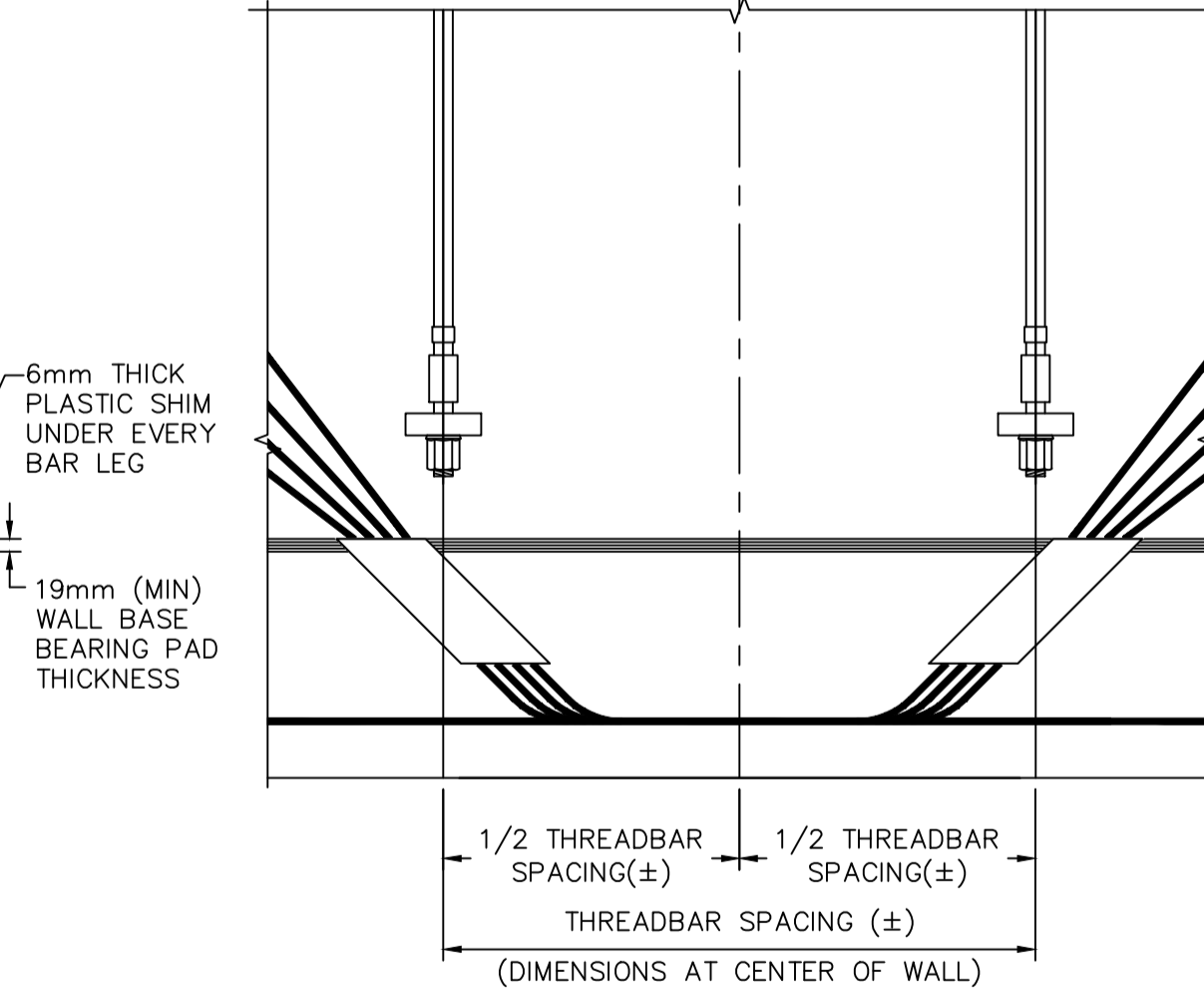


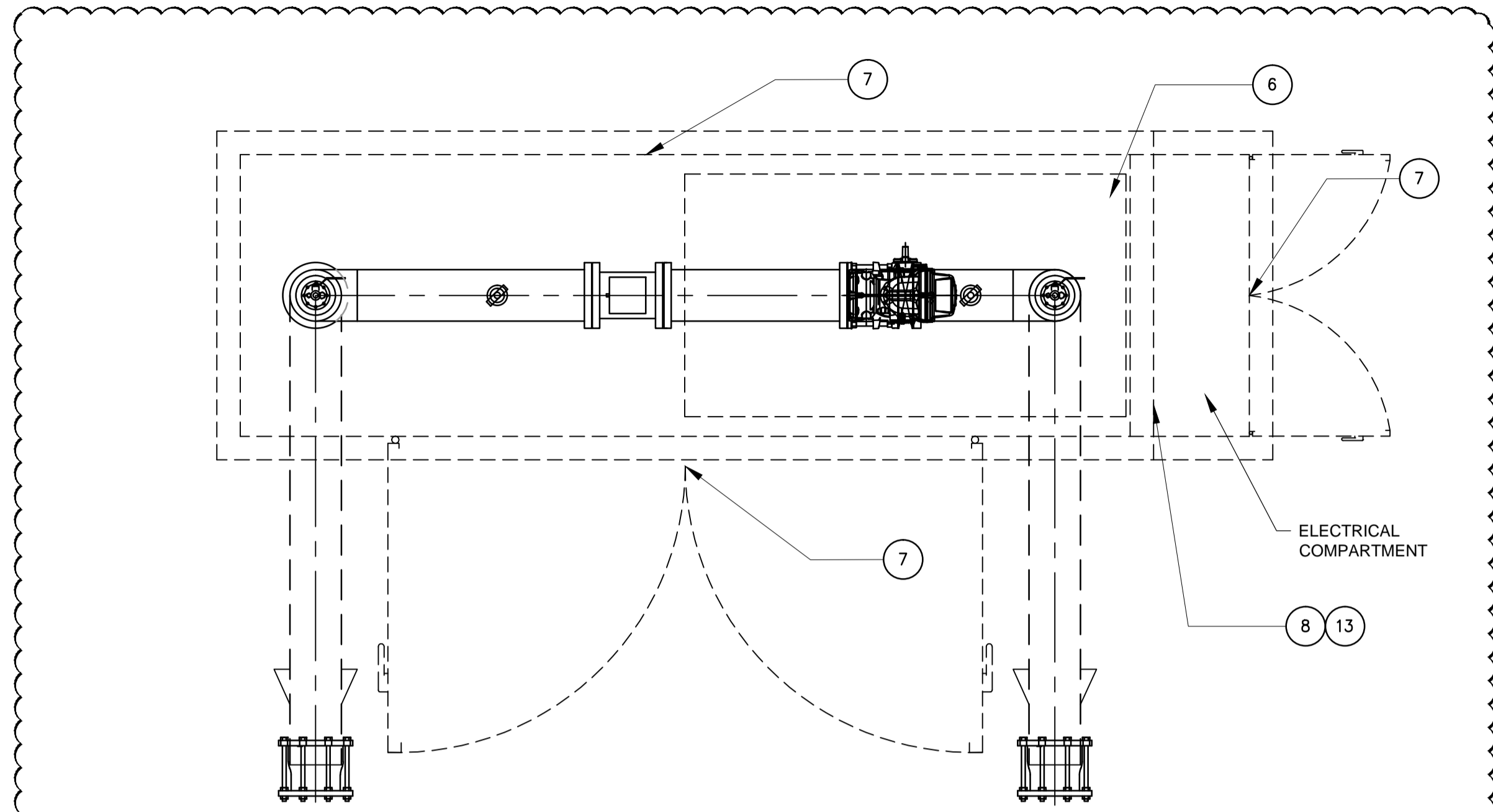
NOTES:

- 1) TIE OFF ALL WATERSTOPS AT 300mm OC ON BOTH SIDES AND IN BOTH DIRECTIONS.
- 2) CONCRETE INTERIOR AND EXTERIOR TO THE WALL FOOTING WATERSTOP SHALL RECEIVE A SMOOTH AND HARD STEEL TROWELED FINISH.
- 3) MAINTAIN CLEARANCE BETWEEN THE INDIVIDUAL STRANDS IN THE BASE RESTRAINT CABLE SETS (DO NOT BUNDLE).
- 4) BASE RESTRAINT CABLES MAY BE BENT PRIOR TO INSTALLATION.
- 5) BASE RESTRAINT CABLES TO BE DETERMINED BY TANK CONTRACTOR.
- 6) FLARE CABLES IN TANK FOOTING 150mm± CENTER TO CENTER TO FLARING IN THE TANK WALL.
- 7) ROOF SCUPPERS SHALL BE PROVIDED AS REQUIRED FOR PROPER ROOF DRAINAGE. (NOT SHOWN FOR CLARITY) SCUPPER SPACING NOT TO EXCEED 13m.

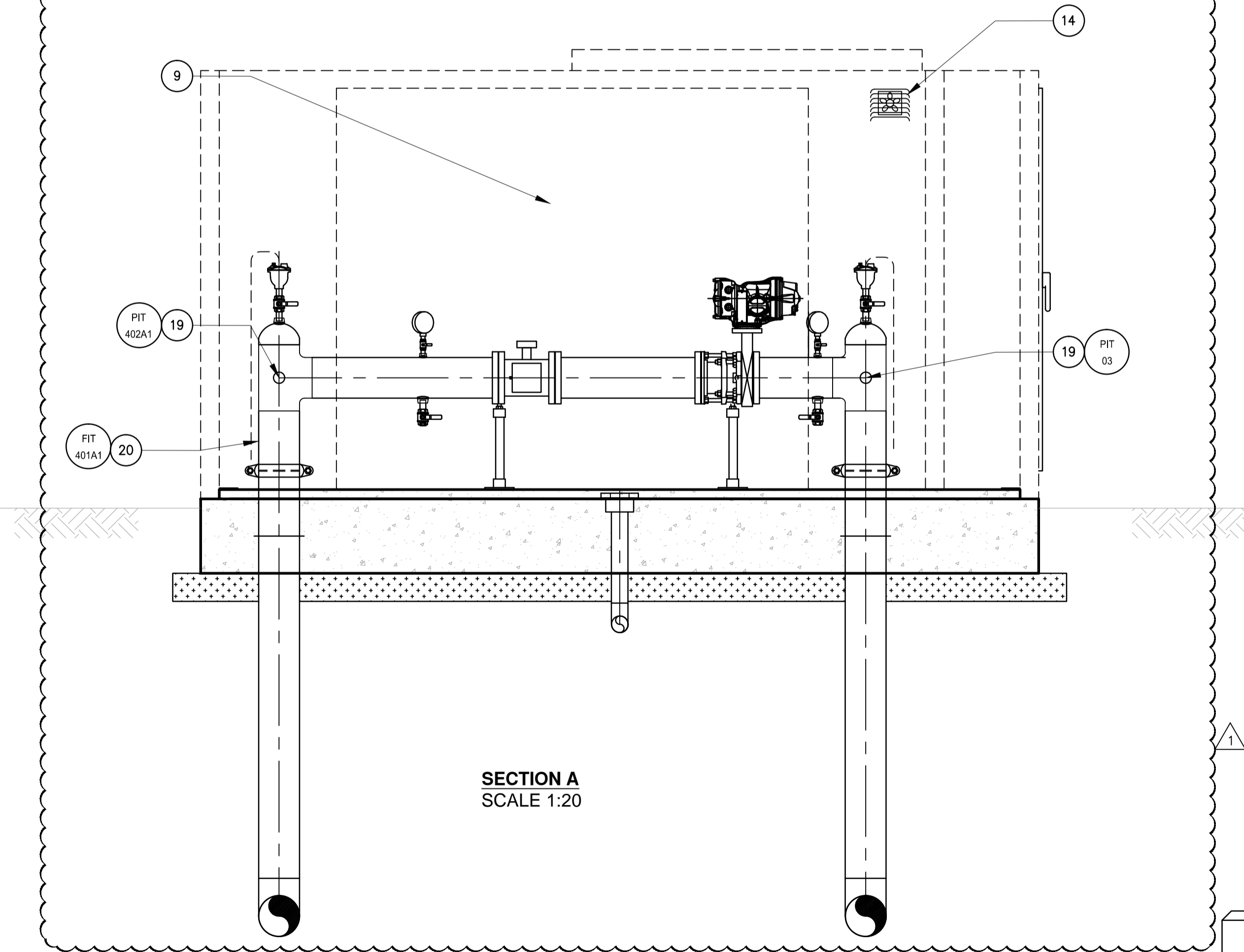


VERTICAL WALL JOINT (TYP), AT THE CONTRACTOR'S OPTION SOME OR ALL OF THE BASE RESTRAINT CABLES AT THE WALL JOINT MAY BE BENT BACK SO THEY DO NOT INTERFERE WITH THE WALL JOINT. IF CABLES ARE TO BE BENT BACK, BOTTOM 450mm (MIN) OF CABLE TO BE PLACED AT 45°

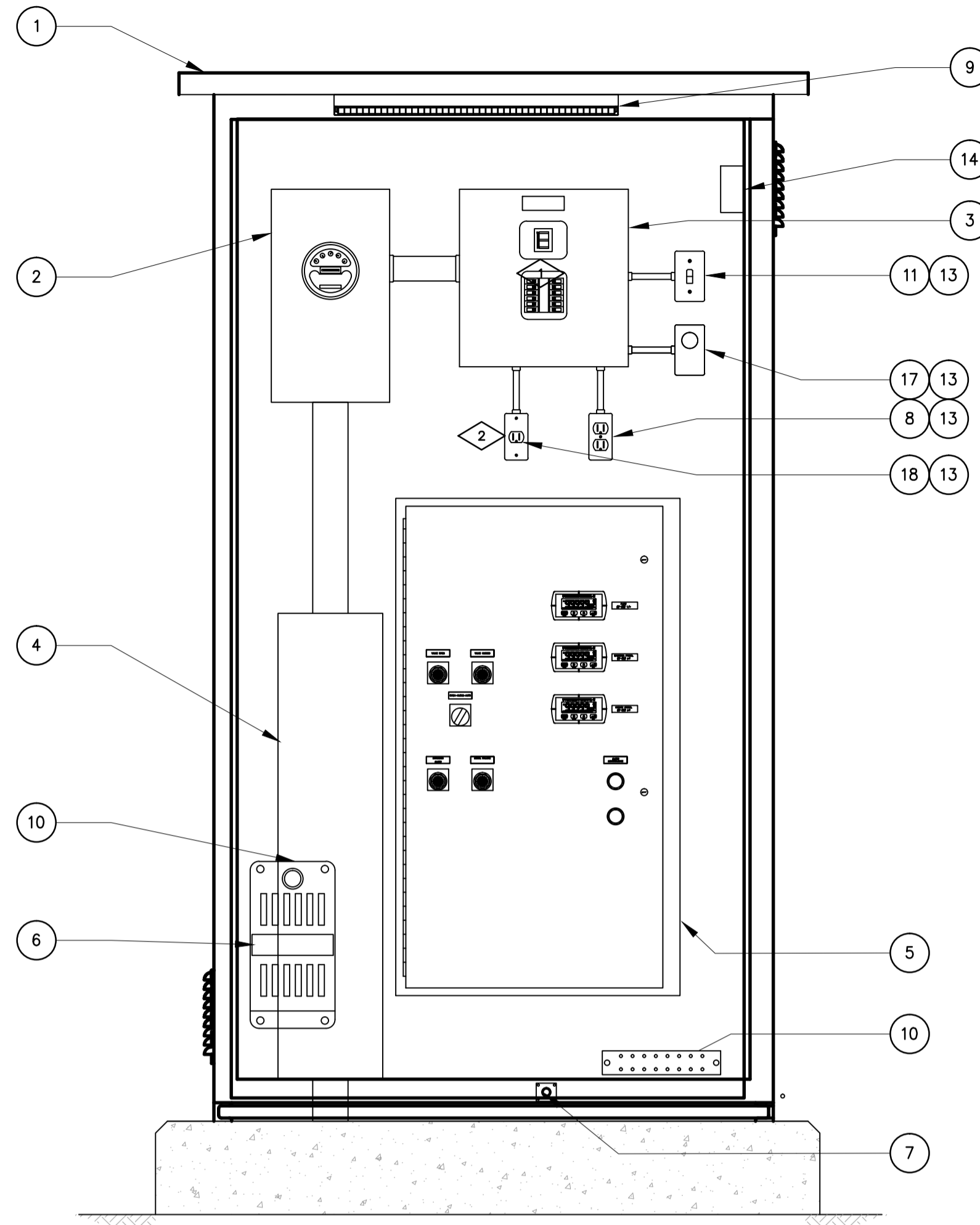




KIOSK ELECTRICAL LAYOUT
 SCALE 1:20



SECTION A
 SCALE 1:20



KIOSK ELECTRICAL COMPARTMENT
 SCALE 1:10

GENERAL NOTES

- REFER TO CONTRACT DRAWING M-003 AND SUPPLEMENTAL SPECIFICATIONS SECTION 13 34 20.
- THIS DRAWING REPRESENTS SUGGESTED LAYOUT OF KIOSK ELECTRICAL COMPONENTS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL ELECTRICAL COMPONENTS BASED ON ACTUAL PHYSICAL DIMENSIONS OF THE SUPPLIED EQUIPMENT AND KIOSK. FINAL LAYOUT AND KIOSK SIZE WILL BE DETERMINED AT SHOP DRAWING APPROVAL STAGE. FUSES REQUIRED FOR CONNECTIONS SHALL BE DETERMINED BASED ON ACTUAL INSTRUMENTATION PROVIDED.
- BILL OF MATERIALS PROVIDED FOR INFORMATION ONLY AND DOES NOT SHOW ALL EQUIPMENT AND MATERIALS REQUIRED. THE CONTRACTOR IS TO DO A COMPLETE TAKE-OFF FROM DRAWINGS AND SPECIFICATIONS AND PROVIDE ALL MATERIALS REQUIRED FOR A COMPLETE FUNCTIONAL ASSEMBLY.
- ENSURE INTERNAL COMPONENTS ARE ACCESSIBLE AND ALL PANEL DOORS CAN FULLY OPEN
- IDENTIFY ALL DEVICES WITH LAMACOID LABELS.
- ALL KIOSK LIGHTING WILL BE ACTIVATED BY DOOR LIMIT SWITCH OF THE RESPECTIVE COMPARTMENT.
- BILL OF MATERIAL IS NOT COMPLETE. FOR ALL OTHER COMPONENTS REFER TO DRAWING M-003.

## KIOSK - BILL OF MATERIAL		
ITEM No.	QTY.	DESCRIPTION
1	1	INSULATED KIOSK ENCLOSURE (SEE NOTE 1).
2	1	4JAW UTILITY METER BASE, 100A, 120V/240, 1 PH, 3W SERVICE, TYPE 3R. (METER BY UTILITY)
3	1	PANELBOARD c/w 100A, 2P MAIN BREAKER, 100A CU BUS, 12 CCTS. BREAKERS, BREAKERS AS SHOWN ON DRAWING; SQUARE D CAT. No. CQ116M100C100 OR APPROVED EQUAL
4	1	ALUMINUM PULLBOX; 1000 (H) X 225 (W) X 225 (D)
5	1	LOCAL CONTROL PANEL (REFER TO DRAWING E-402)
6	2	200W, 120V HEATER c/w FAN AND TEMPERATURE CONTROL, HOFFMAN CAT. No. DAH2001A, OR APPROVED EQUAL.
7	3	LIMIT SWITCH; ALLEN BRADLEY CAT. No. 802M-XY5 c/w LEVER, CAT. No. 802T-W2B (NOT SHOWN FOR CLARITY)
8	2	15 AMP GFCI DUPLEX RECEPTACLE
9	2	120V LED LUMINAIRE, STRIP, SUITABLE FOR WET LOCATION
10	1	51mm (W) x 254mm (L) x 7mm (D) COPPER GROUND BUS, WITH 6mm HOLES & SCREWS SPACED 25mm; STORM COPPER CAT.# SCGB-1 OR APPROVED EQUAL
11	1	15 AMP, 120V LIGHT SWITCH
13	5	100mm (H) x 60 (W) x 48 (D) 1 GANG UTILITY BOX, SURFACE MOUNT, IBERVILLE OR APPROVED EQUAL
14	2	120VAC FILTERED FAN 250 CFM
15	1	457mm x 457mm FOLDING SHELF; HOFFMAN CAT.# AASHLF1818 (NOT SHOWN FOR CLARITY)
16	1	DRAWING POCKET (NOT SHOWN FOR CLARITY)
17	1	CONVENTIONAL COOLING THERMOSTAT
18	1	15A, SINGLE RECEPTACLE
19	2	PRESSURE INDICATING TRANSMITTER, REFER TO SPECIFICATION 5.2 DRAWING E-001
20	1	BI-DIRECTIONAL FLOW INDICATING TRANSMITTER, REFER TO SPECIFICATION 5.1 DRAWING E-001

BILL OF MATERIAL IS FOR REFERENCE ONLY AND MAY NOT INCLUDE ALL REQUIRED COMPONENTS.

NAMEPLATE SCHEDULE			
ITEM No.	TYPE	EQUIPMENT DESCRIPTOR 1	EQUIPMENT DESCRIPTOR 2
1	1	PANEL 'A'	
2	1	CONTROL PANEL ONLY	
3	1	LIGHT	
4	1	VENTILATION	
5	1	RECEPTACLE	
6	1	HEATER	

REFER TO E-010 FOR NAMEPLATE TYPE DETAILS



PROJECT
WATER STORAGE REPLACEMENT PROJECT

CLIENT
VILLAGE OF LIONS BAY
 Village of Lions Bay Municipal Hall
 PO Box 141 – 400 Centre Rd
 Lions Bay, BC V0N 2E0
 (604) 921-9333
 www.lionsbay.ca



CONSULTANT
 AECOM
 3292 Production Way, Floor 4
 Burnaby, BC, V5A 4R4
 604.444.6400 tel 604.294.8597 fax
 www.aecom.com

NOTICE:
 THE EXISTENCE, LOCATION AND ELEVATION OF UTILITIES AND/OR CONCEALED STRUCTURES AT THE PROJECT SITE ARE NOT GUARANTEED BY AECOM CANADA LTD.
 THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXISTENCE, LOCATION AND ELEVATION OF ALL SUCH UTILITIES AND/OR STRUCTURES AND IS RESPONSIBLE FOR NOTIFYING THE APPROPRIATE COMPANY, DEPARTMENT OR PERSON(S) OF ITS INTENTION TO CARRY OUT ITS OPERATIONS.

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
1	03/07/2018	ISSUED FOR ADDENDUM 1
0	2018/02/14	ISSUED FOR TENDER

KEY PLAN

PROJECT NUMBER

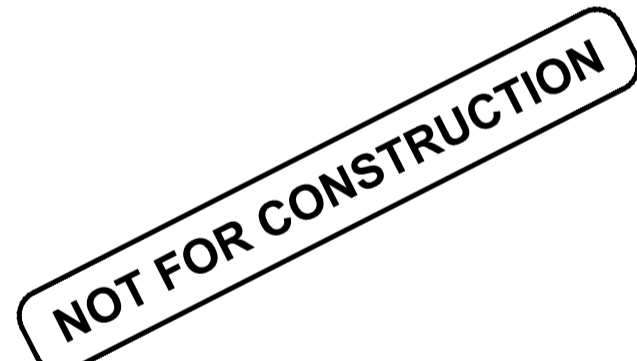
60546407

SHEET TITLE

MOUNTAIN DRIVE PRV STATION ELECTRICAL SITE PLAN

SHEET NUMBER

E-501



This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability, whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.