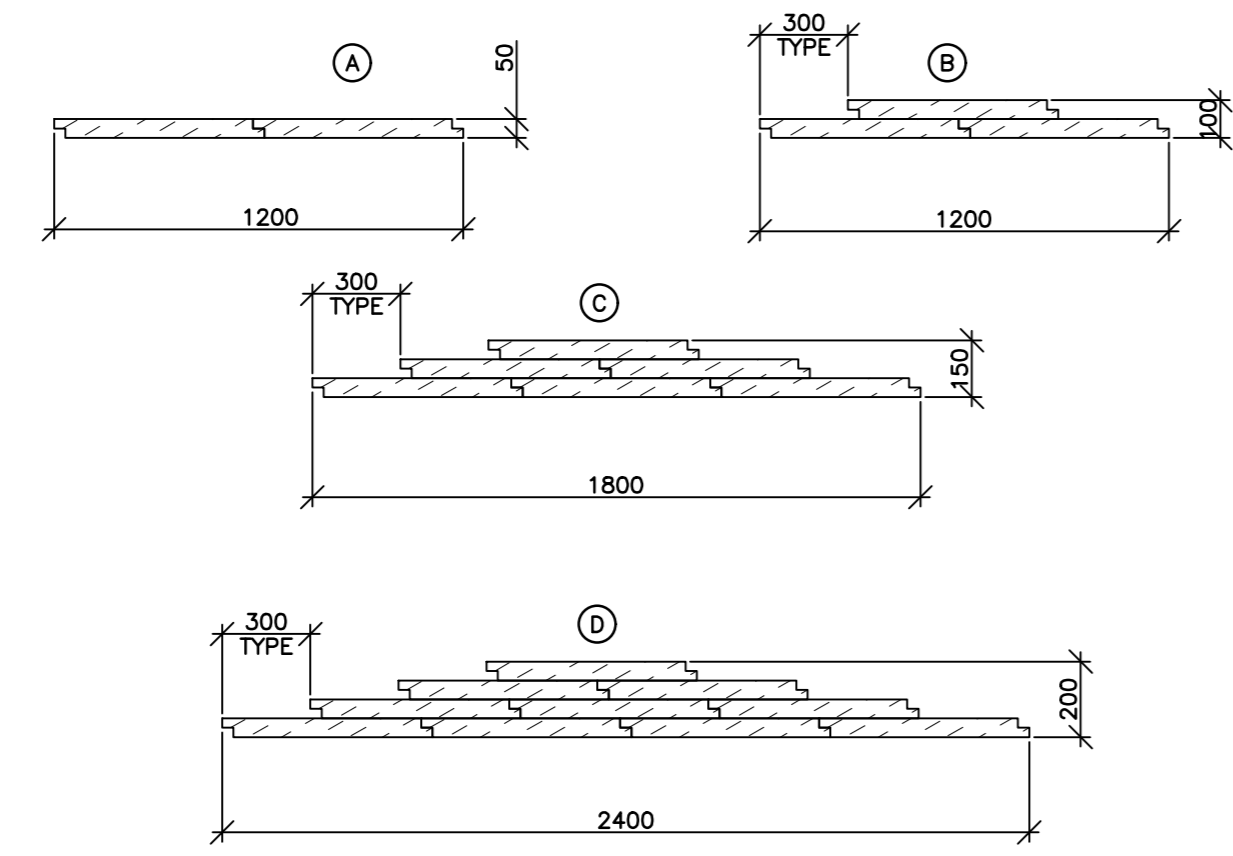
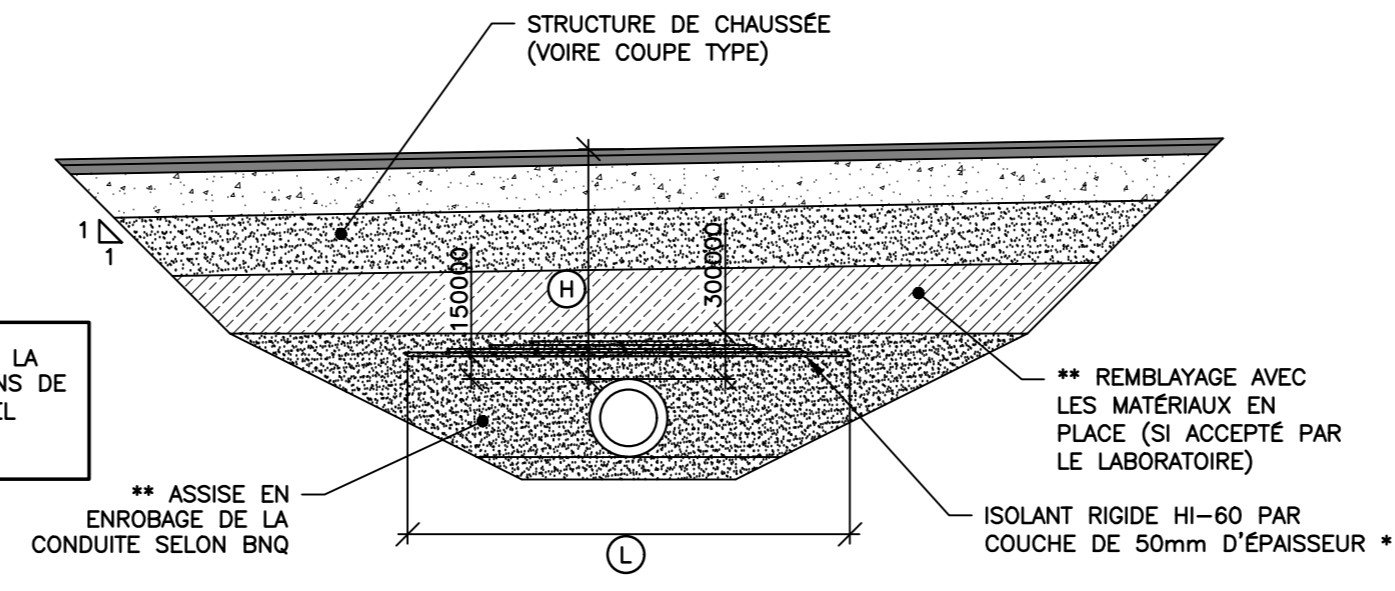


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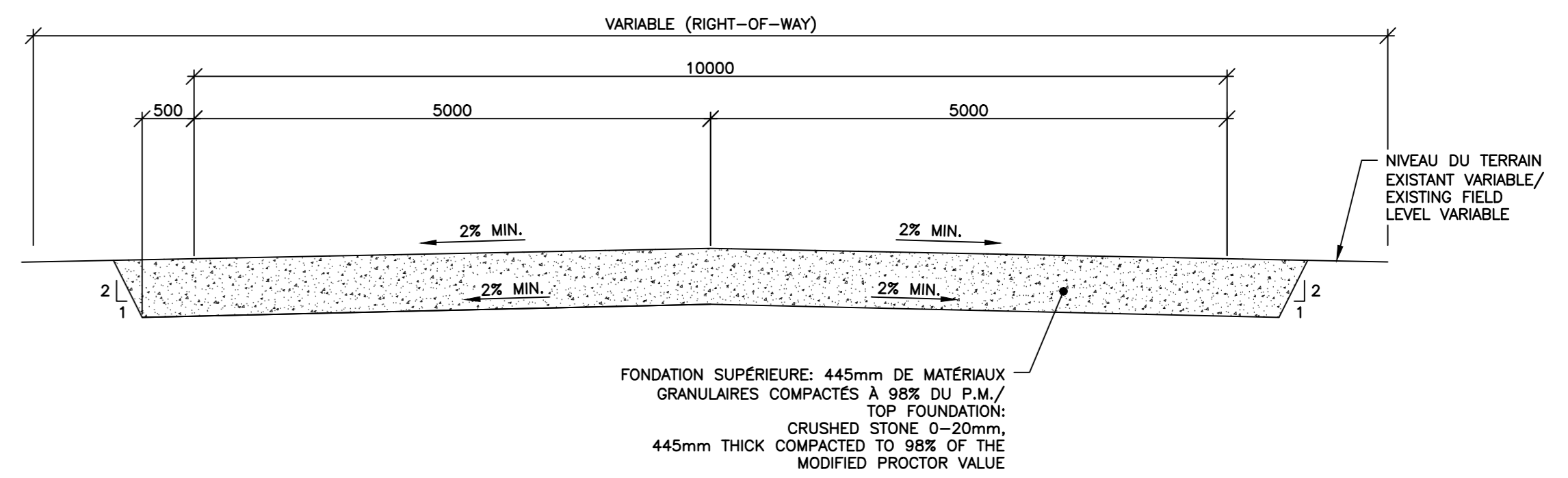
DETAIL - ISOLANT - CHEVAUCHEMENT DES JOINTS
 RAPPORT = AUCUN



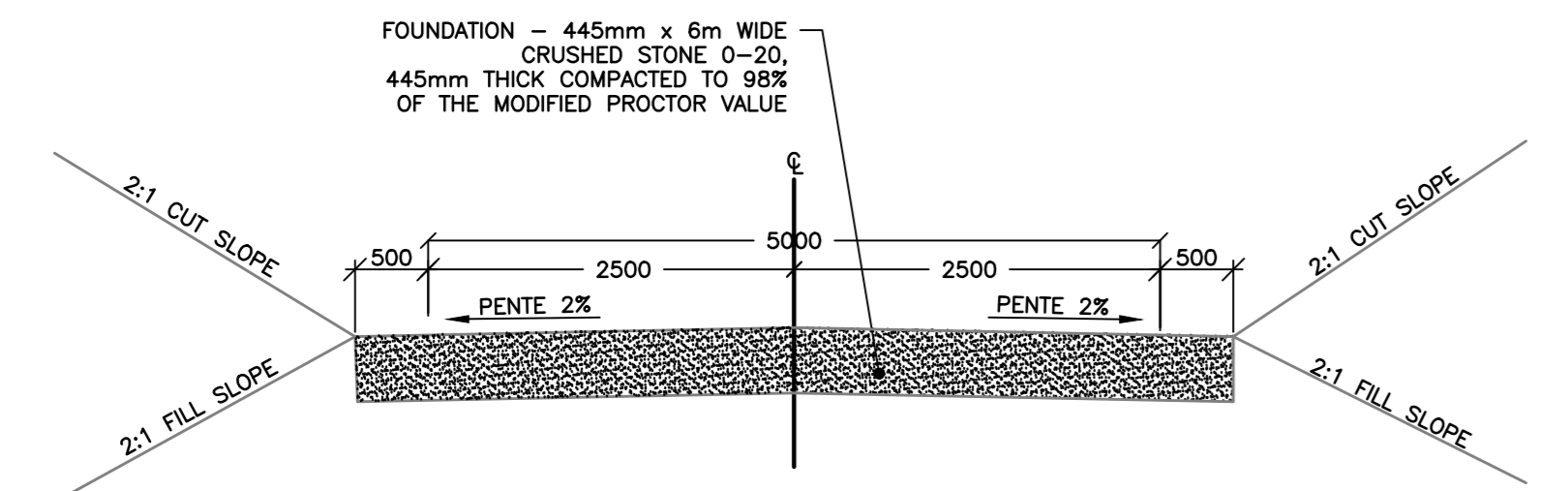
PROFONDEUR DE LA CONDUITE (mm)	LARGEUR DE L'ISOLANT (mm)	EPAISSEUR DE L'ISOLANT (mm)
A 4000-3000	1200	50
B 3000-1500	1200	100
C 1500-1000	1800	150
D 1000-700	2400	200

* CHEVAUCHEMENT DES JOINTS LONGITUDINAUX ET TRANSVERSAUX
 ** LA MISE EN PLACE ET LA COMPACTION DU REMBLAI AU DESSUS DE L'ISOLANT DOIT ETRE FAIT AVEC MINUTIE AFIN D'EVITER D'ENDOMMAGER L'ISOLANT

DETAIL TYPE - MISE EN PLACE D'ISOLANT RIGIDE
 RAPPORT = AUCUN



COUPE TYPE DU CHEMIN / TYPICAL ROAD CROSS-SECTION
 ECHELLE=AUCUNE/SCALE = NONE

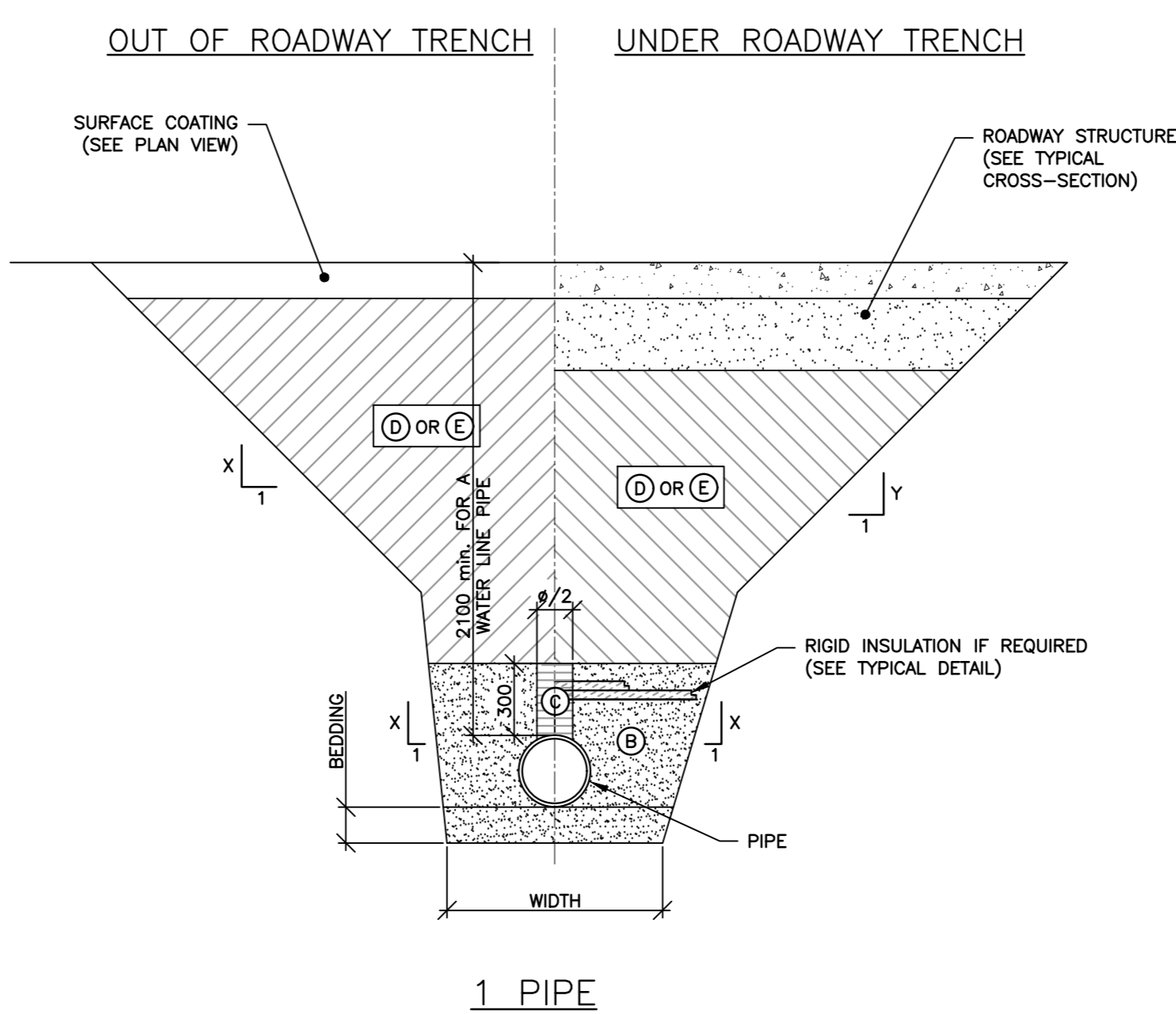


TYPICAL DETAIL - PEDESTRIAN PATH
 SCALE = NONE

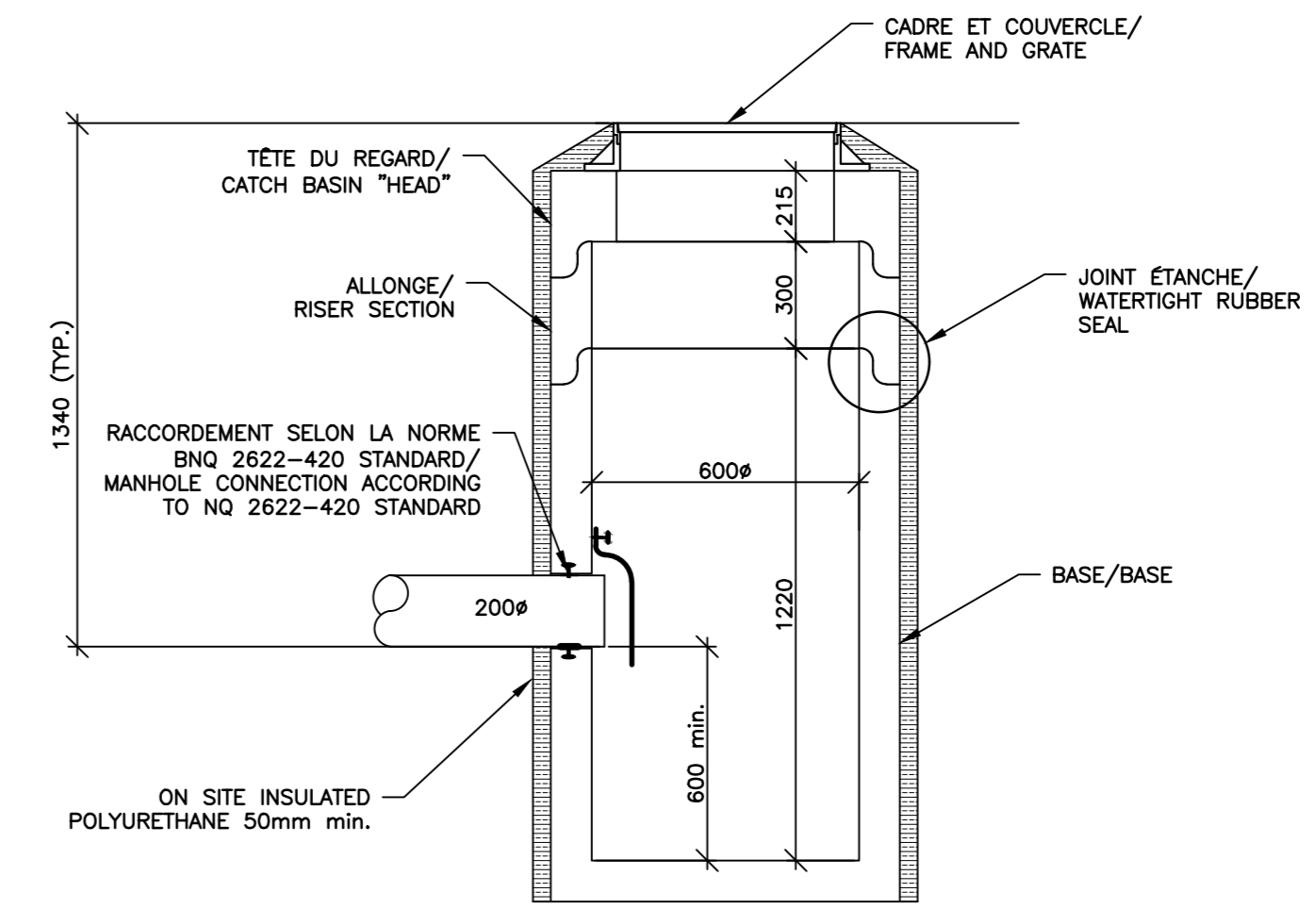
PIPE NOMINAL DIAMETER (mm)	MINIMAL BEDDING THICKNESS IN SOIL OR ROCK	TRENCH BOTTOM WIDTH (mm)
300 AND LESS	150	OUTSIDE ϕ + 600
350 TO 600	150	OUTSIDE ϕ + 900
750 TO 1200	200	OUTSIDE ϕ + 1200

- (A) SEWER OR WATER LINE
- (B) GC-14 GRANULAR MATERIAL COMPACTED @ 90% OF M.P. TEST IN MAXIMUM LAYERS OF 200mm THICK
- (C) UNCOMPACTED CG-14 GRANULAR MATERIAL
- (D) PRIORLY APPROVED CLASS A BORROW MATERIAL COMPACTED @ 90% OF M.P. TEST IN MAXIMUM LAYERS OF 300mm THICK
- (E) PRIORLY APPROVED EXCAVATION MATERIAL COMPACTED @ 90% OF M.P. TEST IN MAXIMUM LAYERS OF 300mm THICK

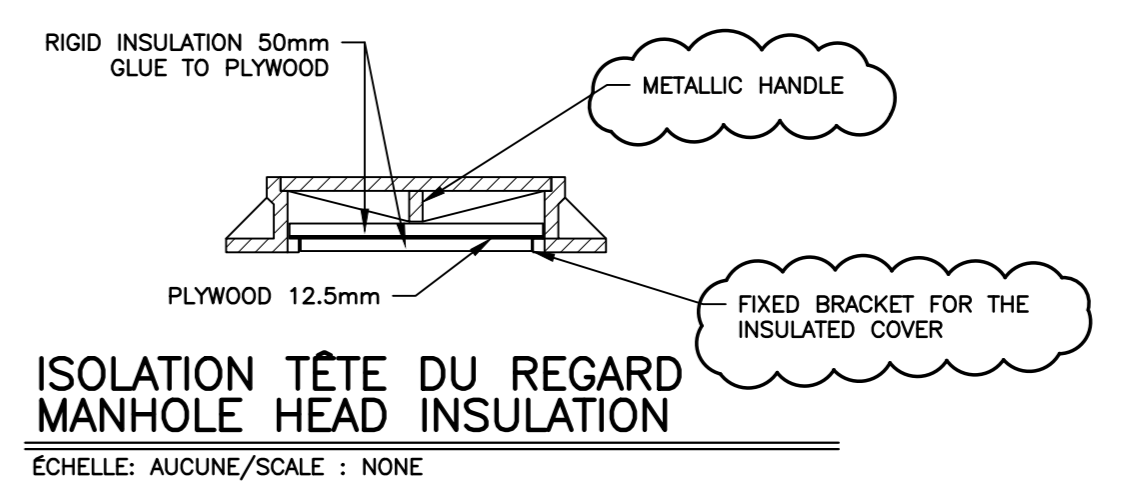
* A 3 METER HORIZONTAL DISTANCE MUST BE APPLIED WHEN THE VERTICAL DISTANCE OF 300mm BETWEEN THE WATER LINE AND THE SEWER CAN NOT BE MET
 X = SLOPE COMPLIANT WITH CHESST REQUIREMENTS
 Y = SLOPE COMPLIANT WITH CHESST REQUIREMENTS WHEN BACKFILLING USING AN EXCAVATION MATERIAL OR A 2H:1V TRANSITION (DOWN TO 2.1m DEPTH) WHEN BACKFILLING USING A BORROW MATERIAL



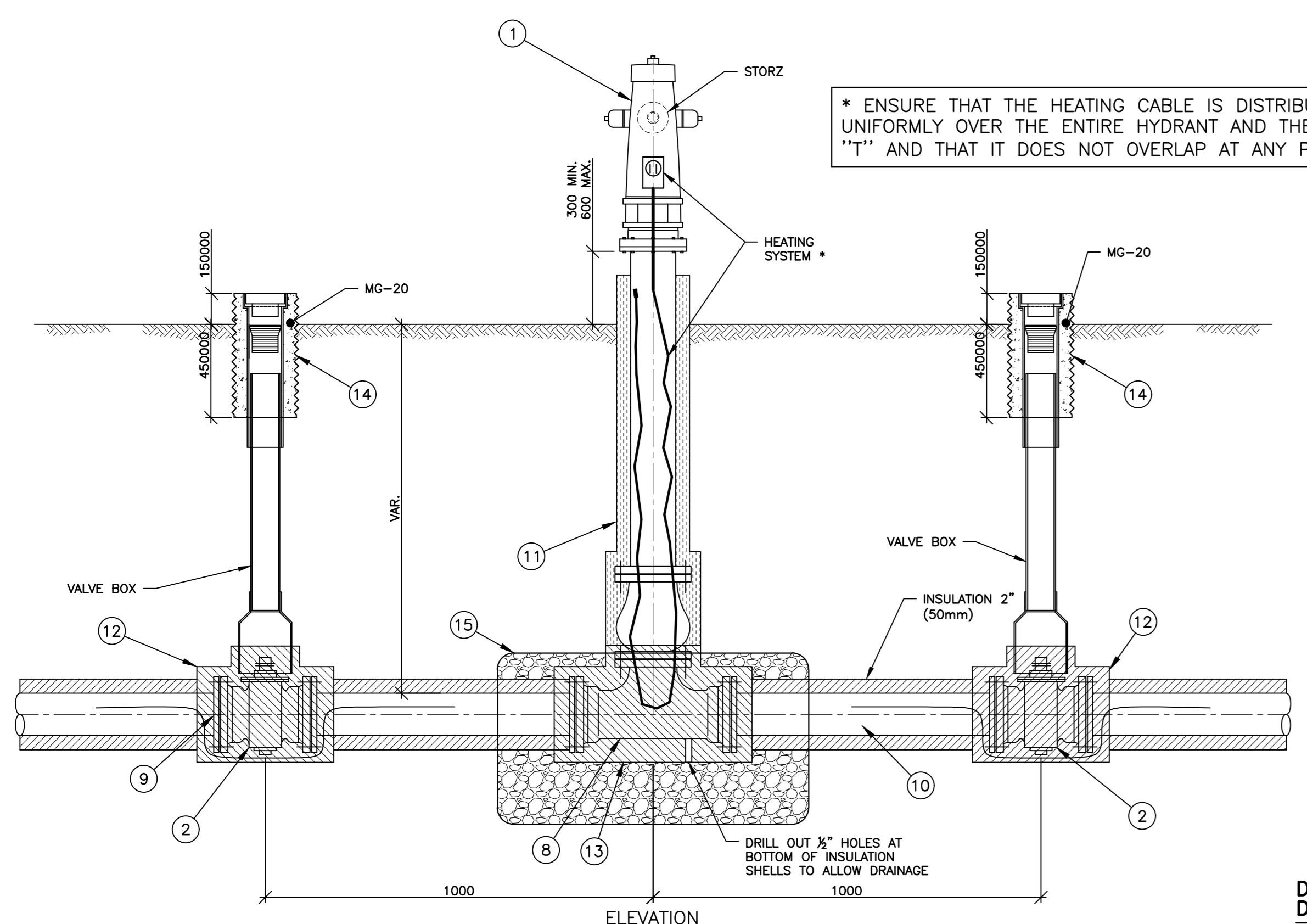
TYPICAL DETAIL - WATER LINE AND SEWER TRENCH
 SCALE : NONE



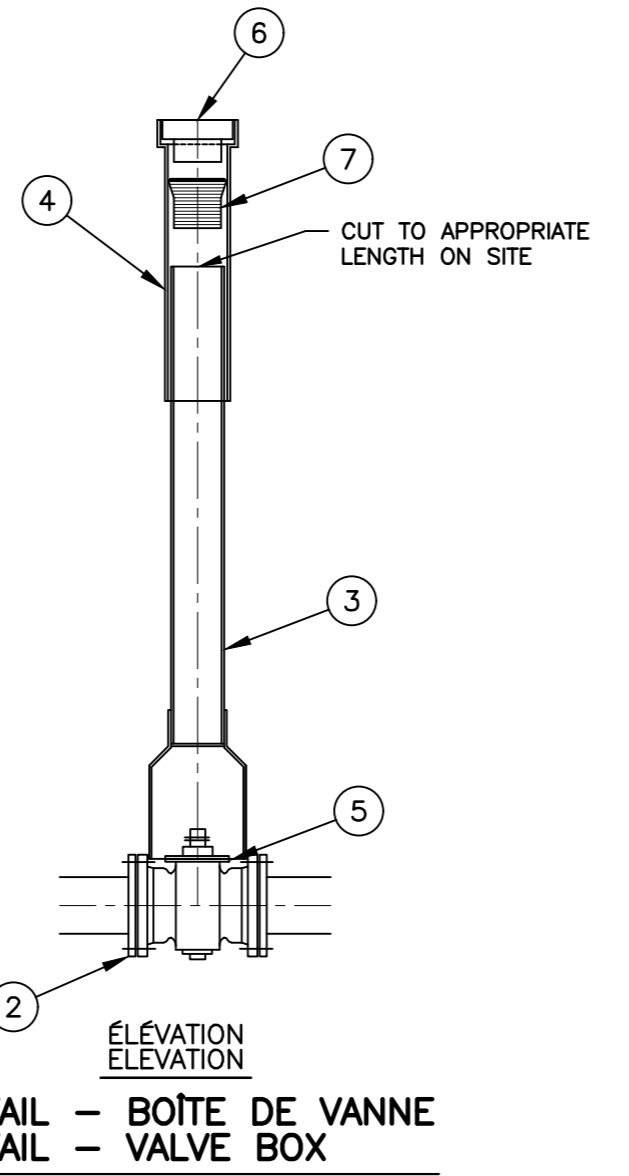
DETAIL TYPE - PUISARD EN BÉTON PRÉFABRIQUÉ
 TYPICAL DETAIL - PRECAST CONCRETE CATCH BASIN
 ECHELLE: AUCUNE/SCALE = NONE



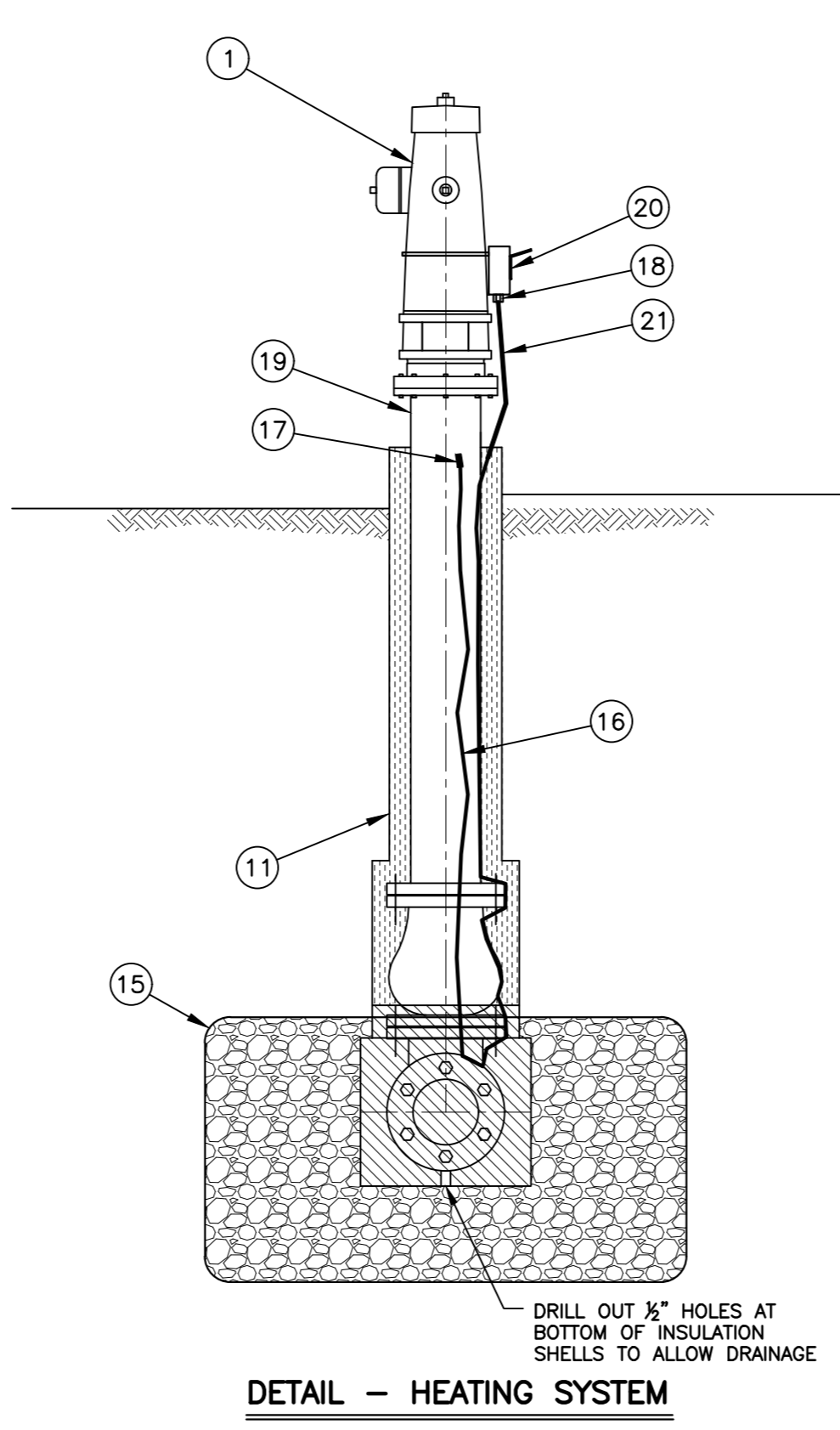
ISOLATION TÊTE DU REGARD MANHOLE HEAD INSULATION
 ECHELLE: AUCUNE/SCALE : NONE



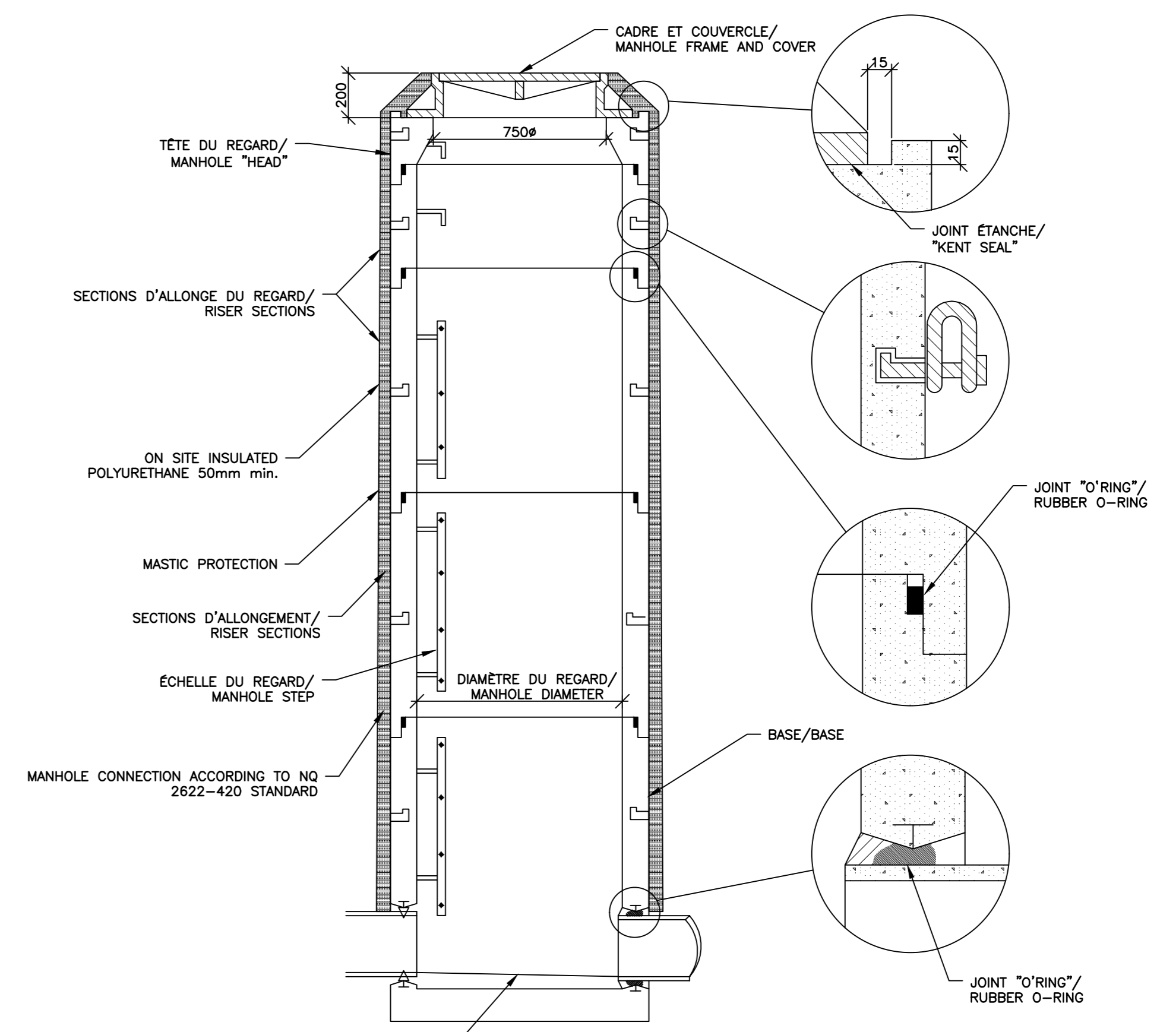
DETAIL TYPE - INSTALLATION POTEAU INCENDIE
 TYPICAL DETAIL - FIRE-HYDRANT INSTALLATION
 ECHELLE: AUCUNE/SCALE : NONE



DETAIL - BOITE DE VANNE
 TYPICAL DETAIL - VALVE BOX



DETAIL - HEATING SYSTEM



DETAIL TYPE - REGARD EN BÉTON PRÉFABRIQUÉ
 TYPICAL DETAIL - PRECAST CONCRETE MANHOLE
 ECHELLE: AUCUNE/SCALE: NONE

No.	Date	Description	By
2	19/03/22	ADDENDUM 03	L.J.-P.
1	19/03/15	ADDENDUM 01	L.J.-P.
0	19/02/14	FOR TENDER	L.J.-P.
B	19/02/01	FOR COMMENTS 95%	L.J.-P.
A	18/07/27	80% DESIGN SUBMISSION	DEM

DESIGNED BY: [Signature] APPROVED BY: [Signature]

CIMA+
 T: 514-623-3375
 300-1116, boul. LeMaynard, Québec QC G2K 3J8 CANADA

WHAPMAGOOSTUI FIRST NATION

PROJECT NAME: RESIDENTIAL EXPANSION AND CONSTRUCTION OF A NEW WATER SUPPLY WELL

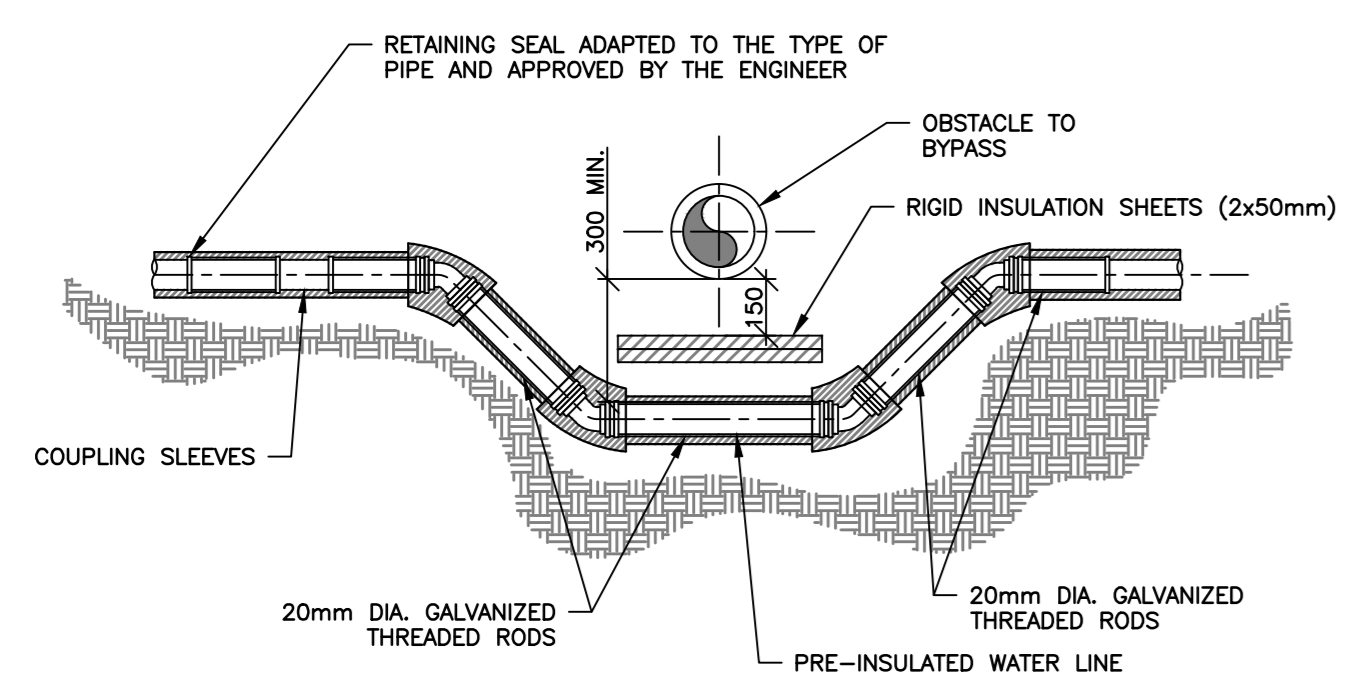
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DISCIPLINE: INFRASTRUCTURE

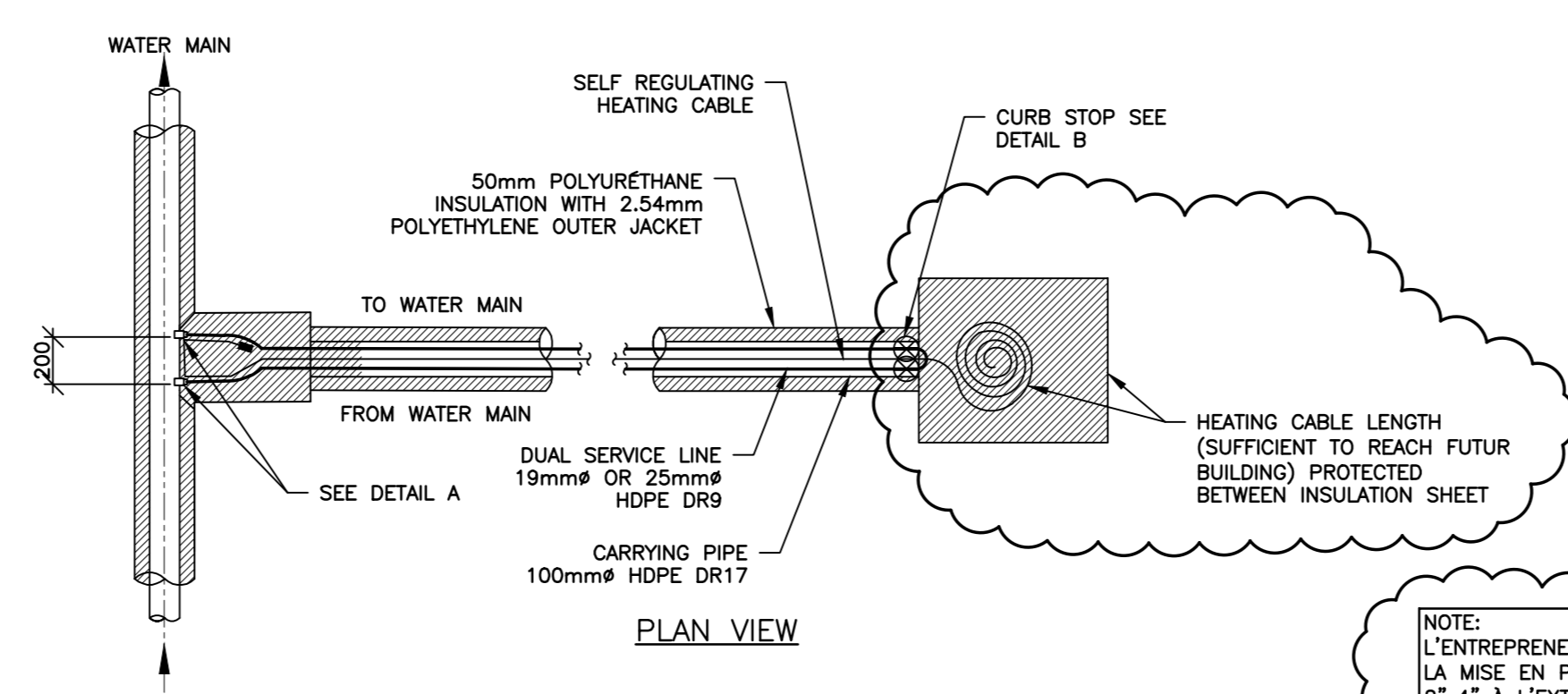
DESIGNED BY: Duane E. Mathers, ASCT, André Hardy DATE: AS NOTED
 APPROVED BY: Duane E. Mathers, ASCT. DATE: 2018/07/27
 APPROVED BY: Andréanne Dumont, Ing. APPROVED BY: Laurier Jureau-Paradis, Ing.
 PROJECT NO: 01825454 DRAWING NO: C07

SHEET No. 7 of 17

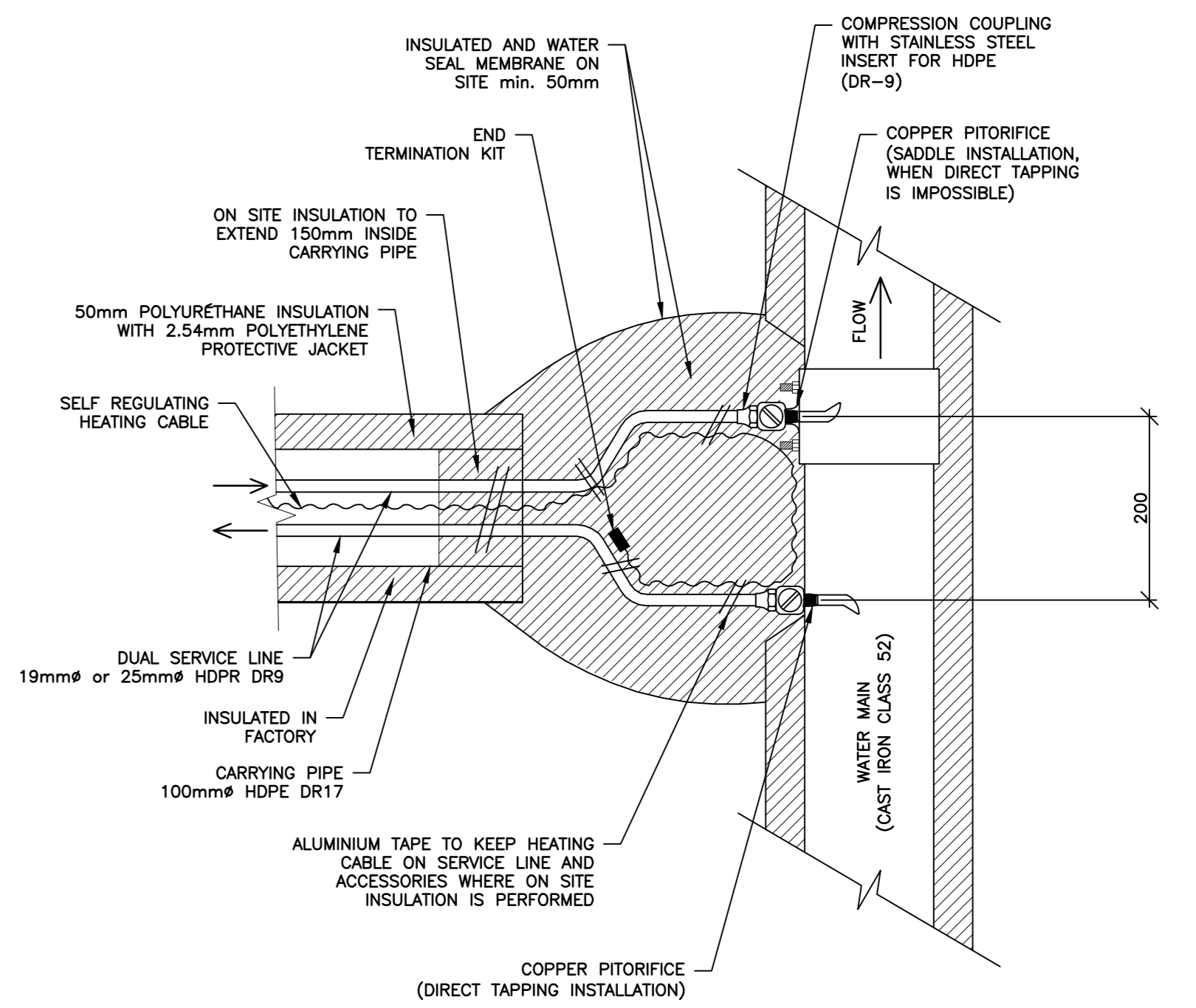
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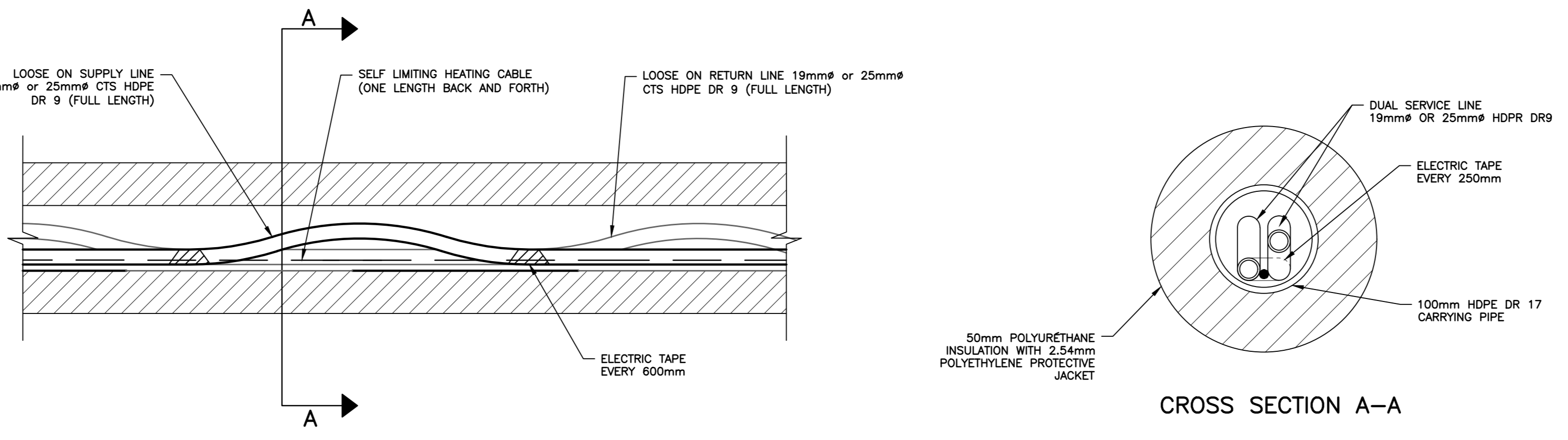
TYPICAL DETAIL – BYPASS OF A PRE-INSULATED WATER LINE
 SCALE: NONE



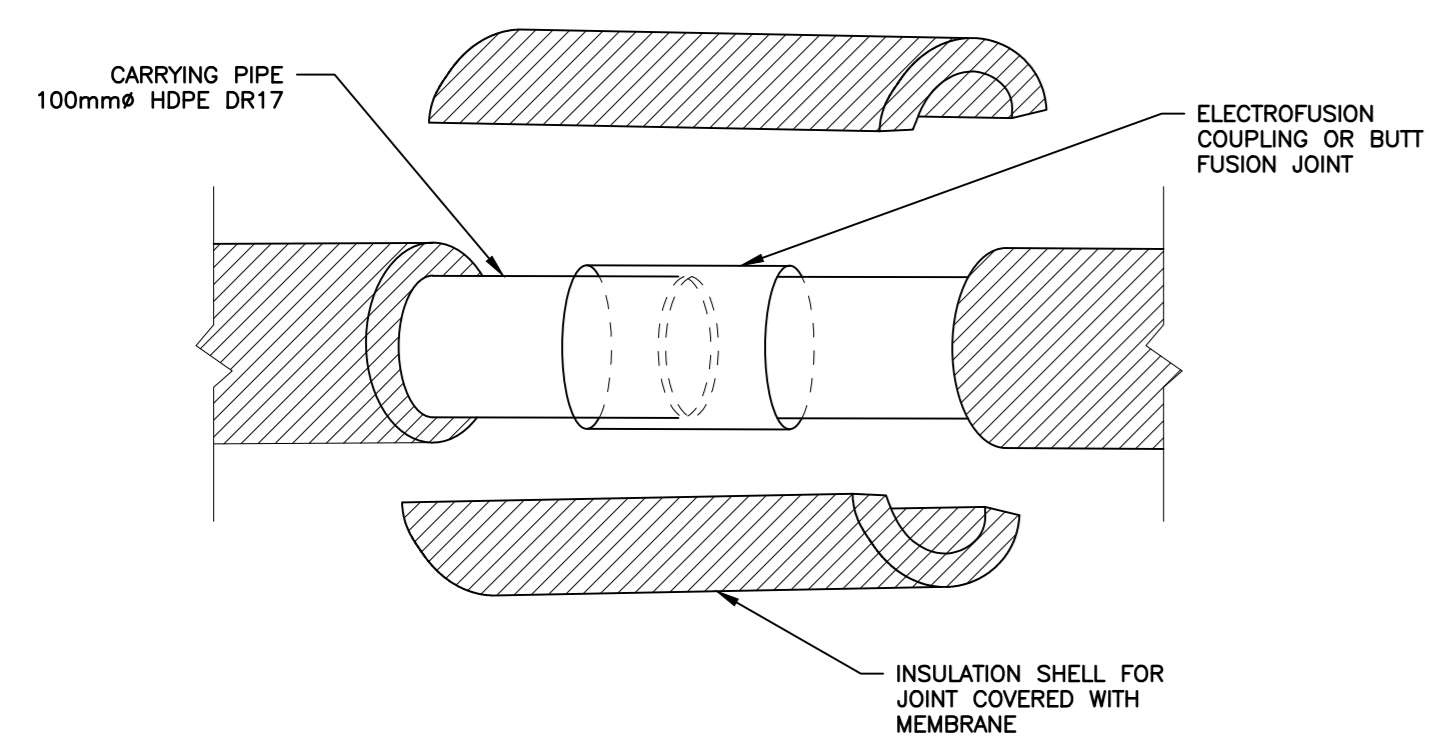
TYPICAL DETAIL – SERVICE CONNECTION FOR VACANT LOT
 SCALE: NONE



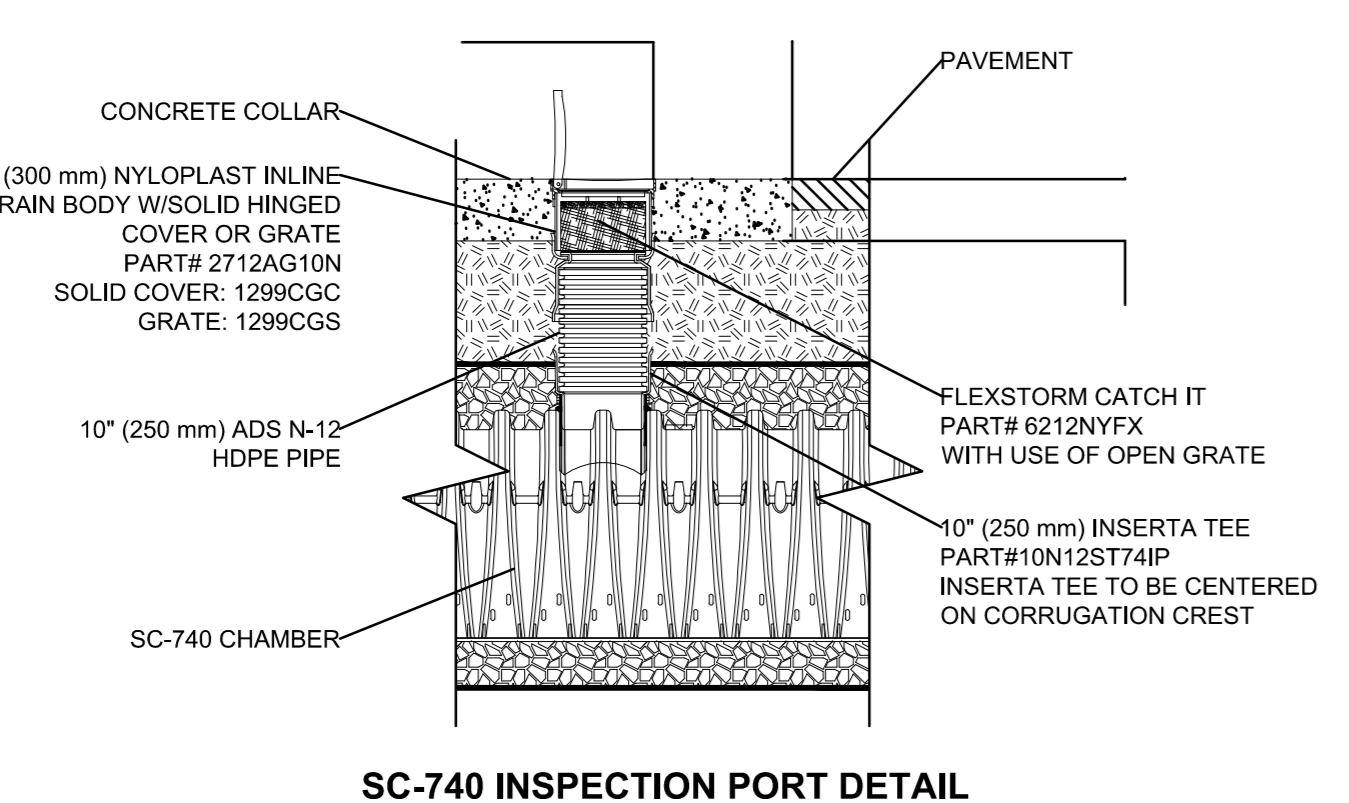
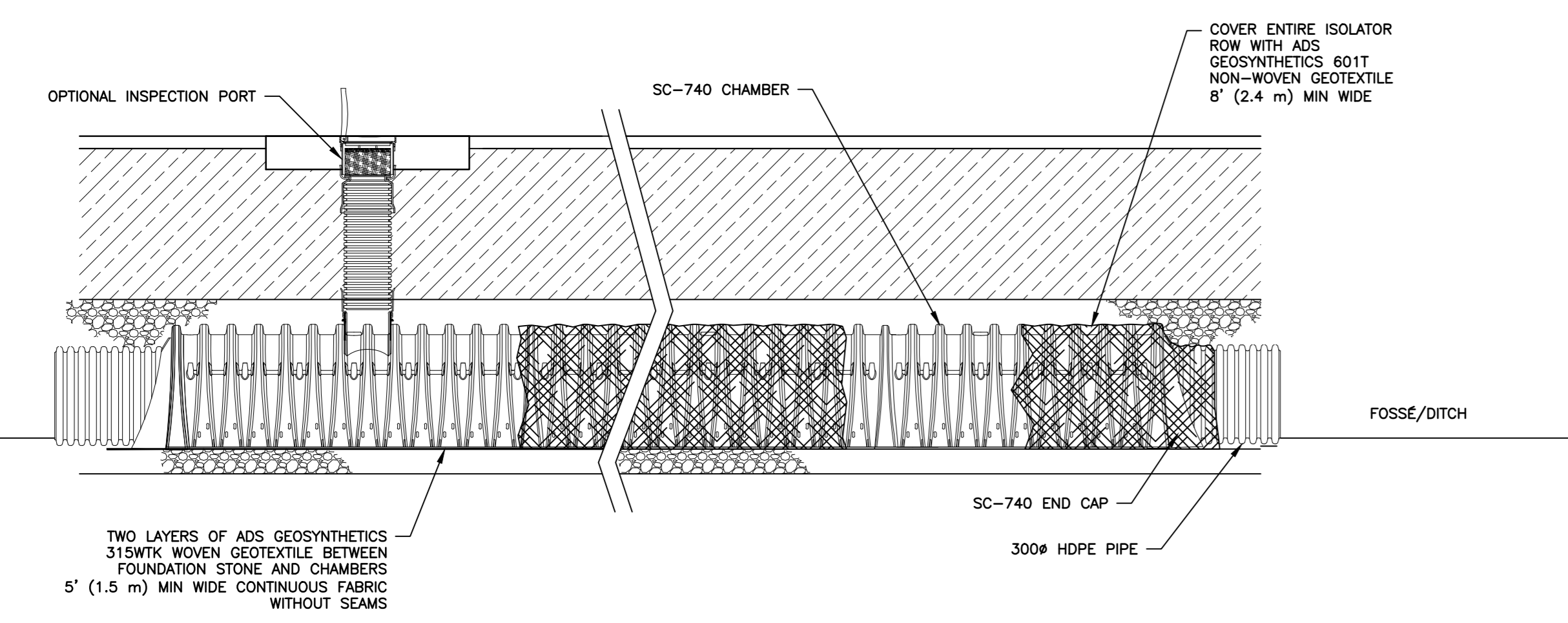
DETAIL A – SERVICE LINE CONNECTION
 SCALE: NONE



TYPICAL DETAIL – CARRYING PIPE WITH SUPPLY LINES
 SCALE: NONE



TYPICAL DETAIL – SERVICE LINE CARRYING PIPE JOINT
 SCALE: NONE

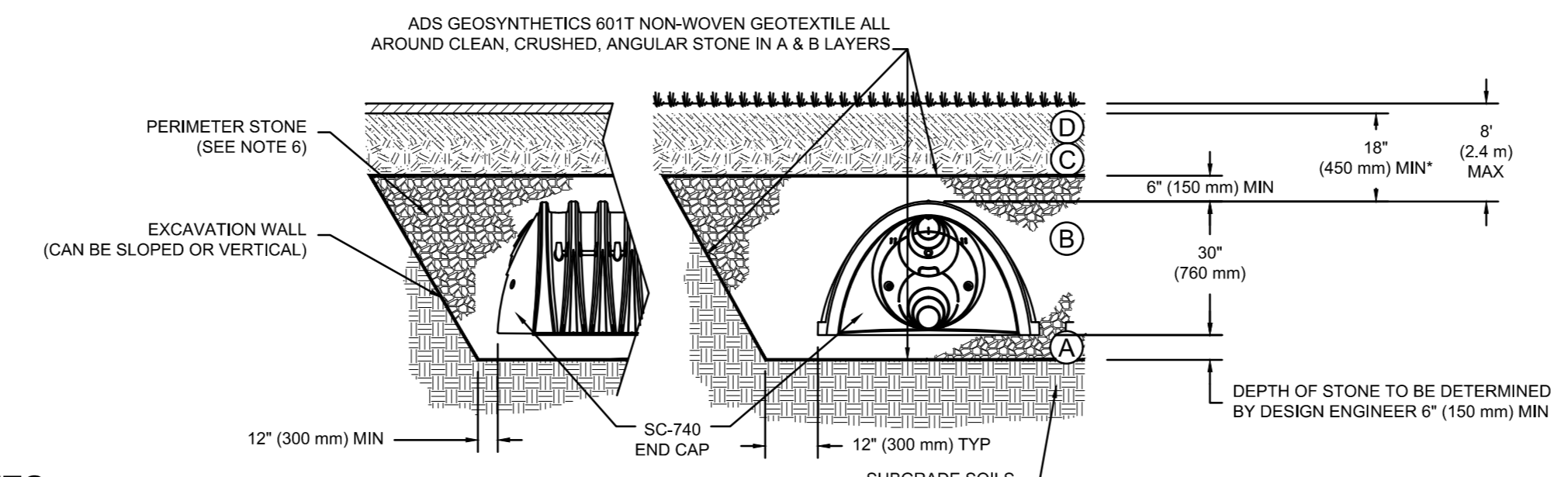


SC-740 INSPECTION PORT DETAIL
 NTS

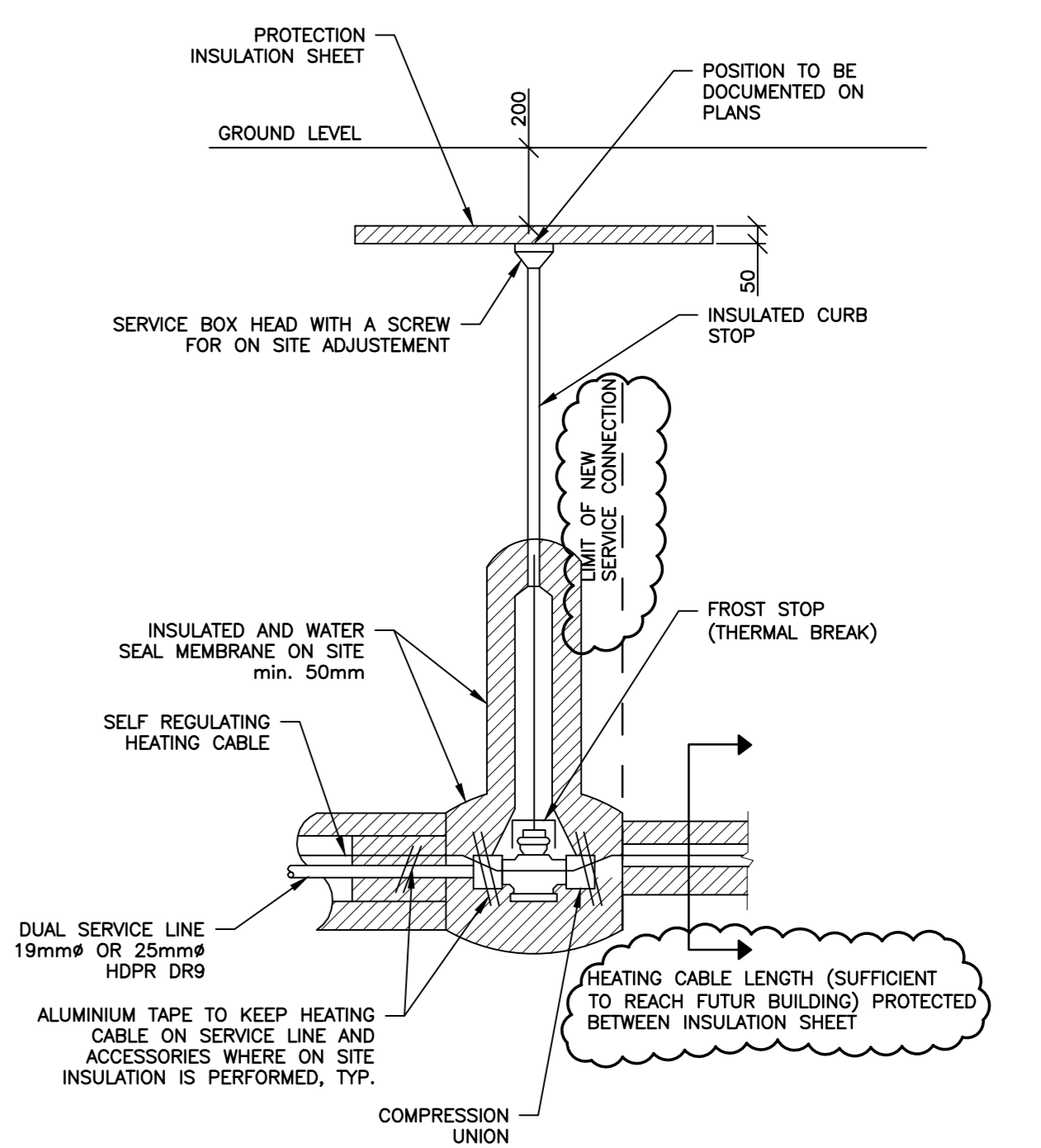
ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBBASE REQUIREMENTS.	N/A
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEUREMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. OR AASHTO M43* 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL-GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (55 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBELEMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ¹

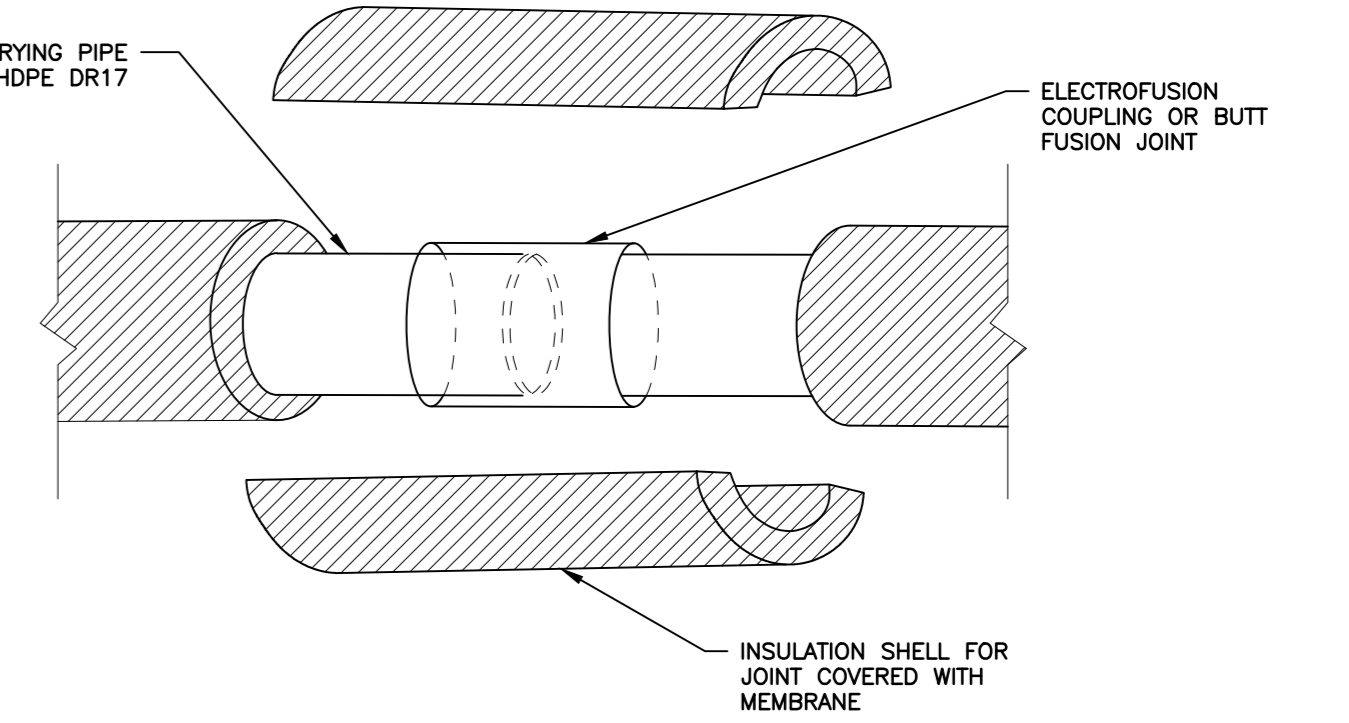
PLEASE NOTE:
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR, FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: 'CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE.'
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) MAX LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



- NOTES:**
- SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
 - SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
 - "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEUREMENT, AND FILL MATERIALS.
 - THE 'SITE DESIGN ENGINEER' REFERS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN AND LAYOUT OF THE STORMTECH CHAMBERS FOR THIS PROJECT.
 - THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
 - PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
 - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



DETAIL B – CURB STOP
 SCALE: NONE



TYPICAL DETAIL – SERVICE LINE CARRYING PIPE JOINT
 SCALE: NONE

No.	Date	Description	By
Z	19/03/22	ADDENDUM 03	L.J.-P.
T	19/03/15	ADDENDUM 01	L.J.-P.
O	19/02/14	FOR TENDER	L.J.-P.
B	19/02/01	FOR COMMENTS 95%	L.J.-P.
A	18/07/27	80% DESIGN SUBMISSION	DEM

DESIGNED BY: [Signature]
 APPROVED BY: [Signature]

CIMA+
 T: 514-893-3375
 300-116, boul. LeMay/pt. St. Charles/pt. St. Charles

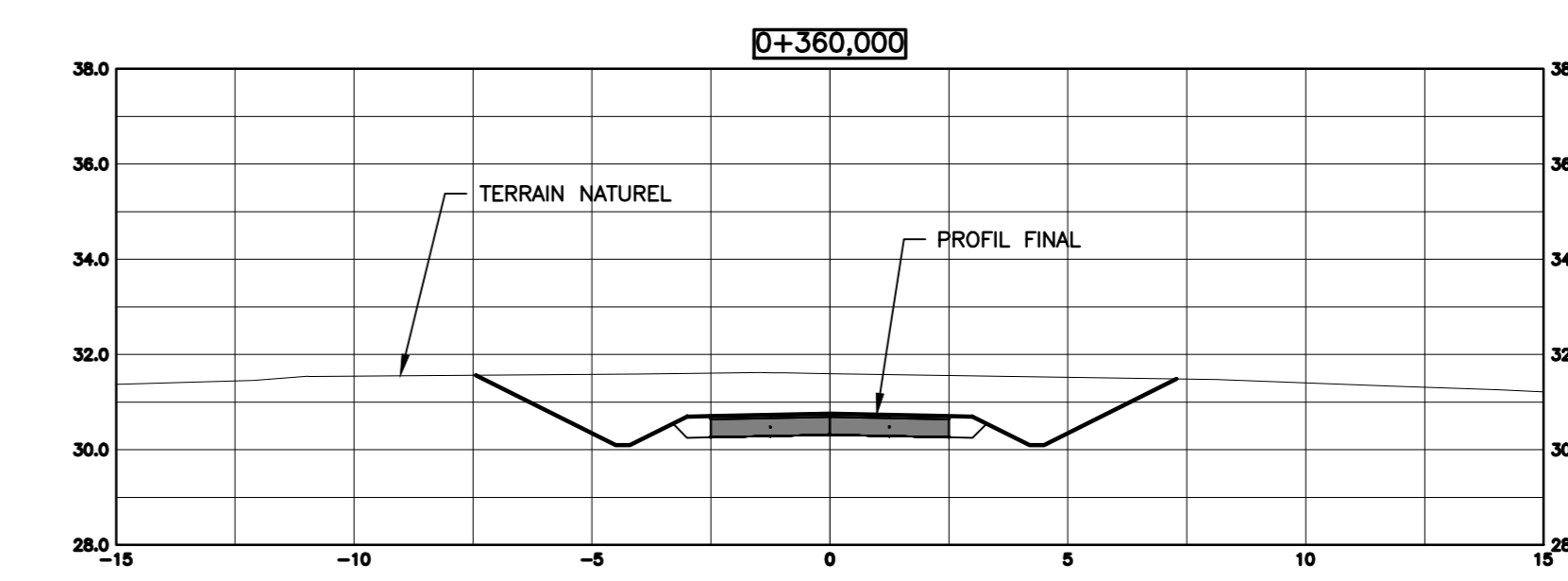
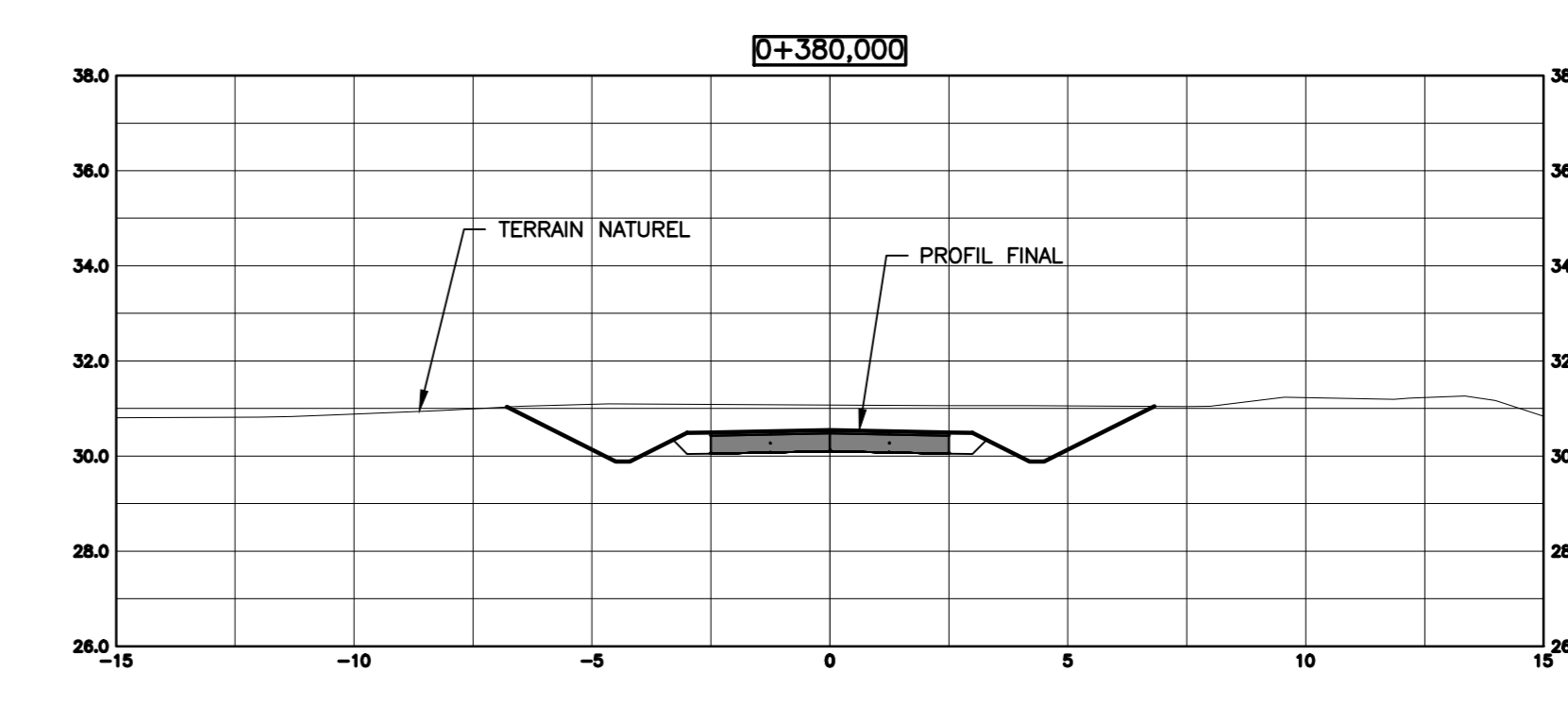
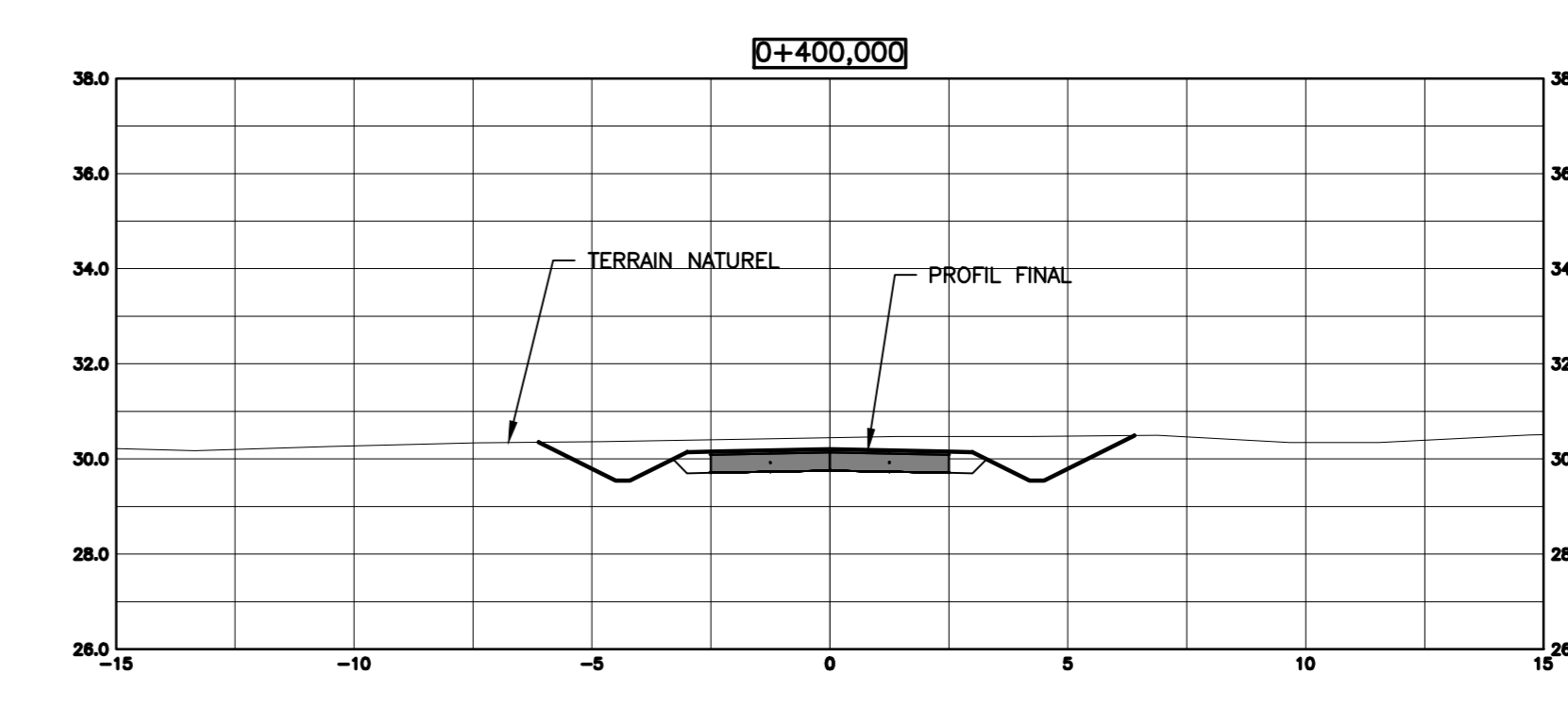
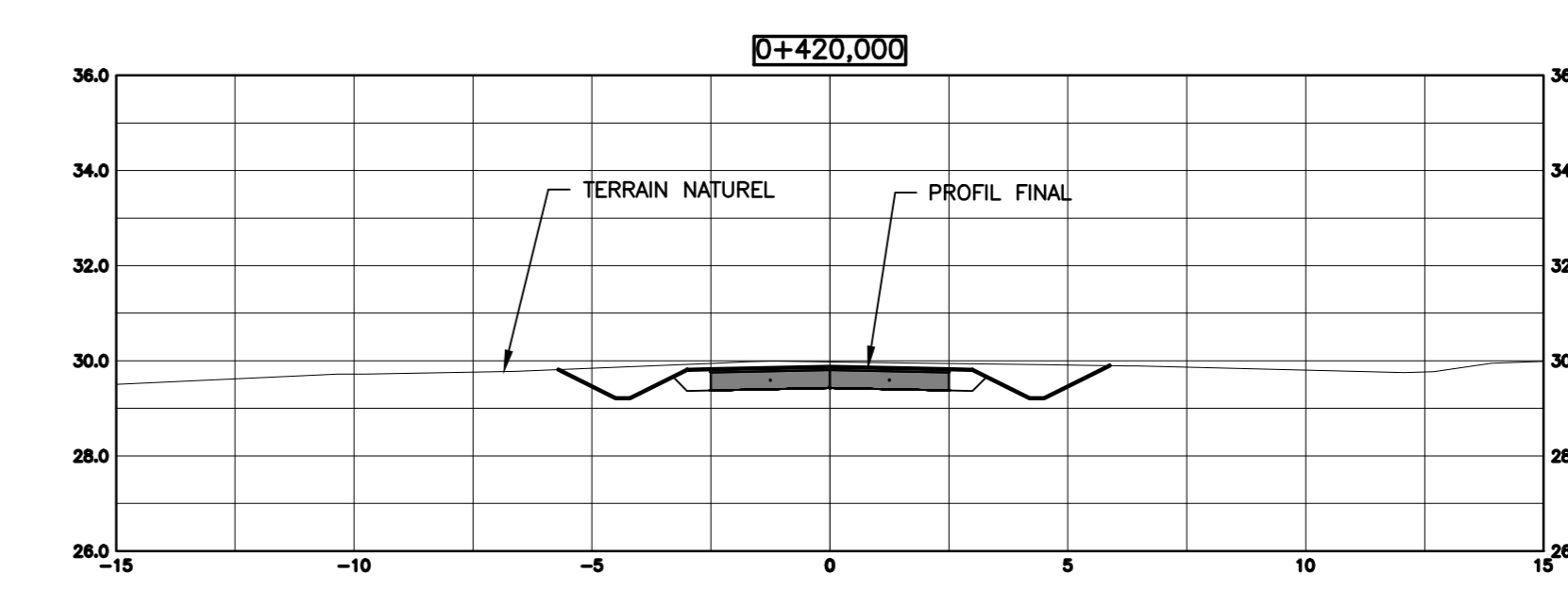
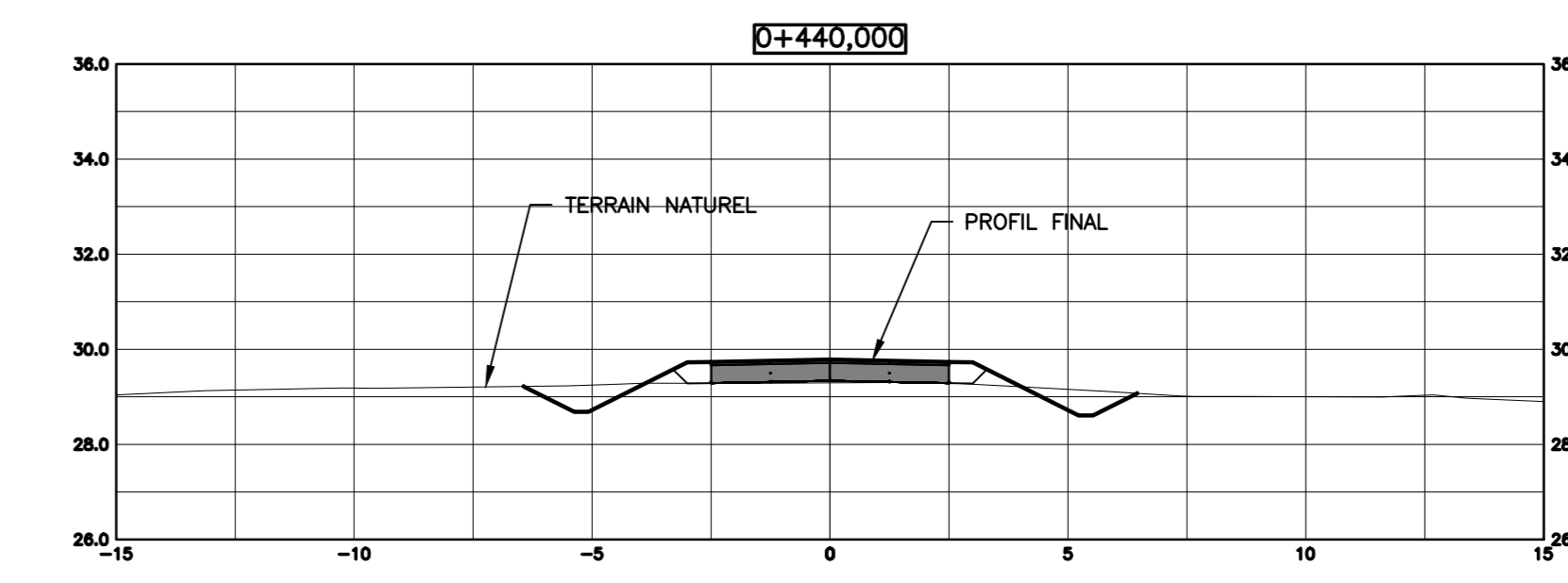
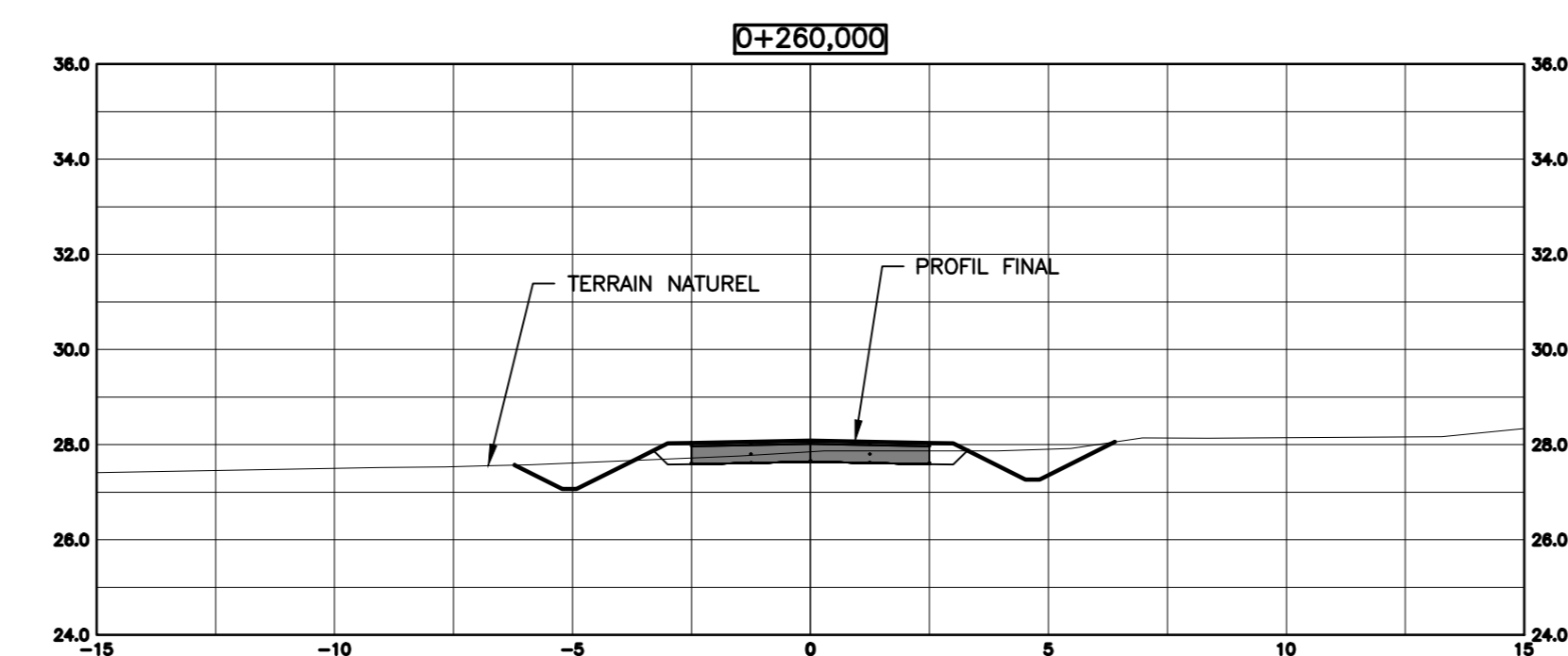
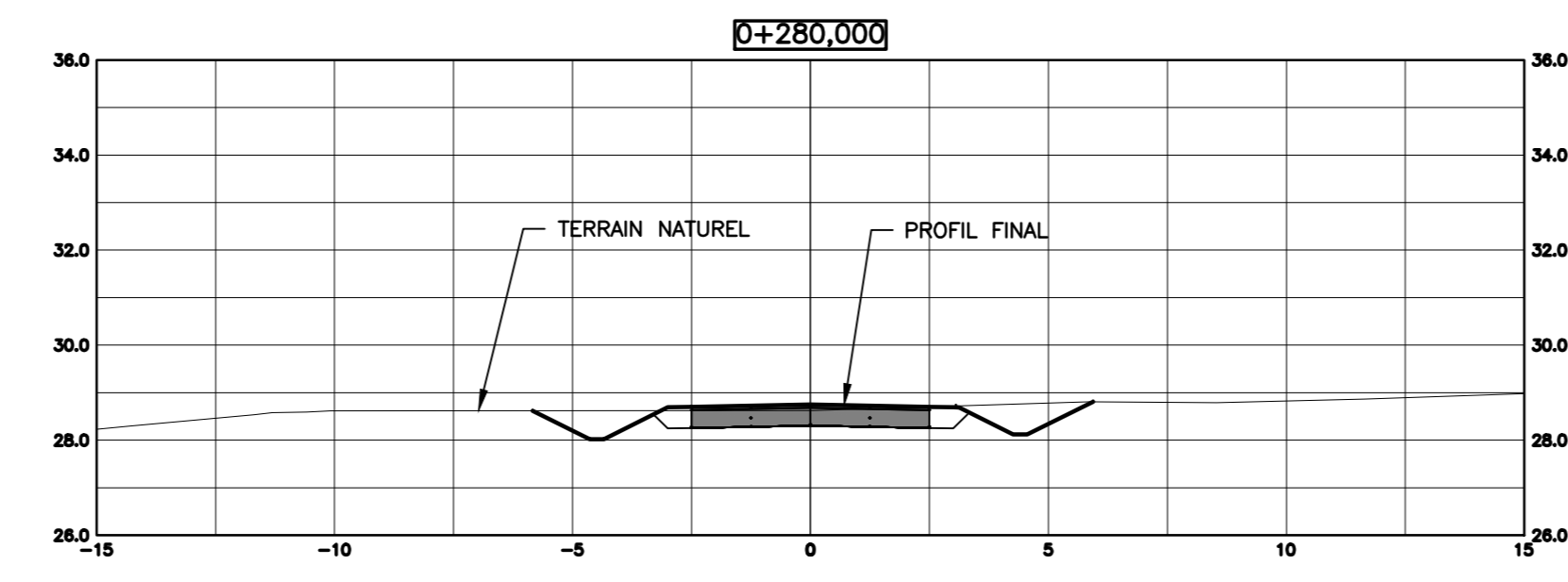
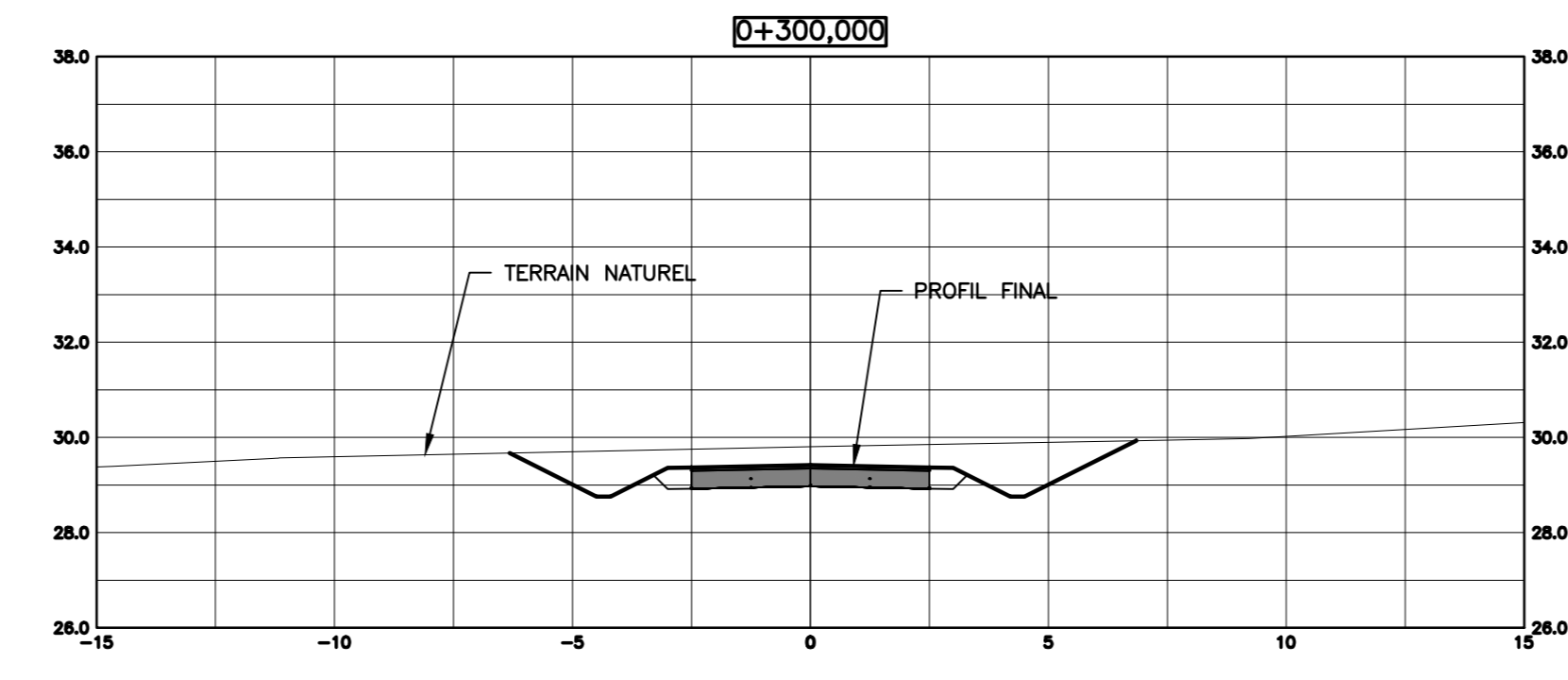
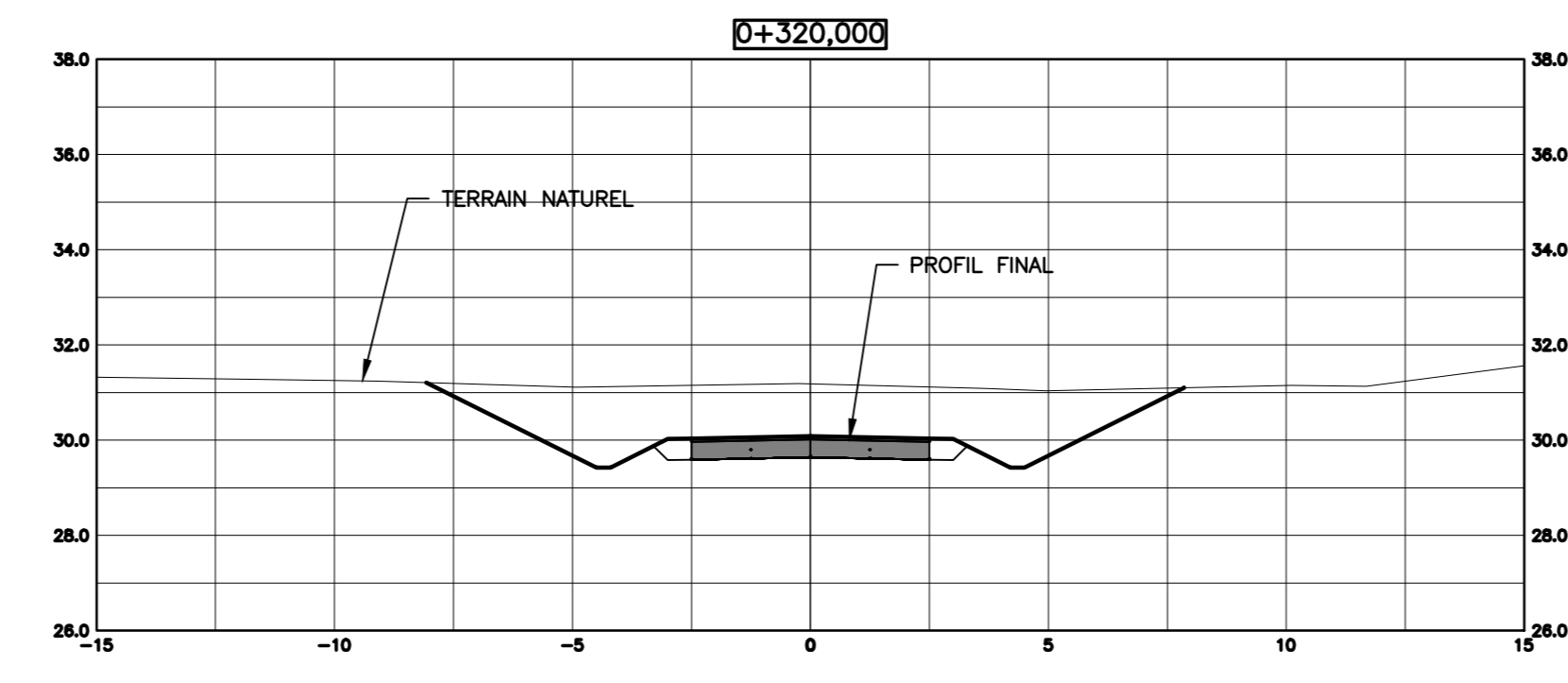
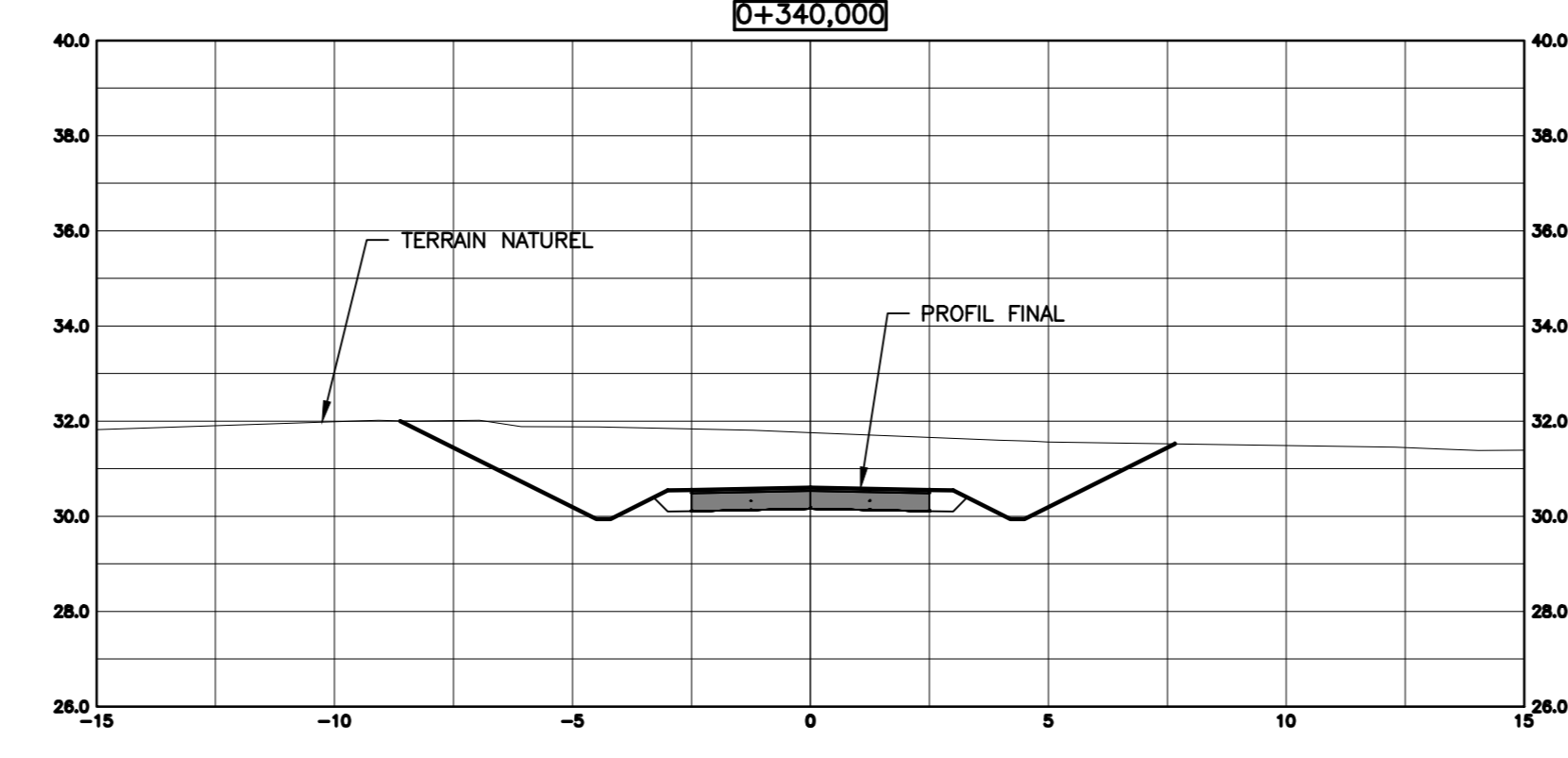
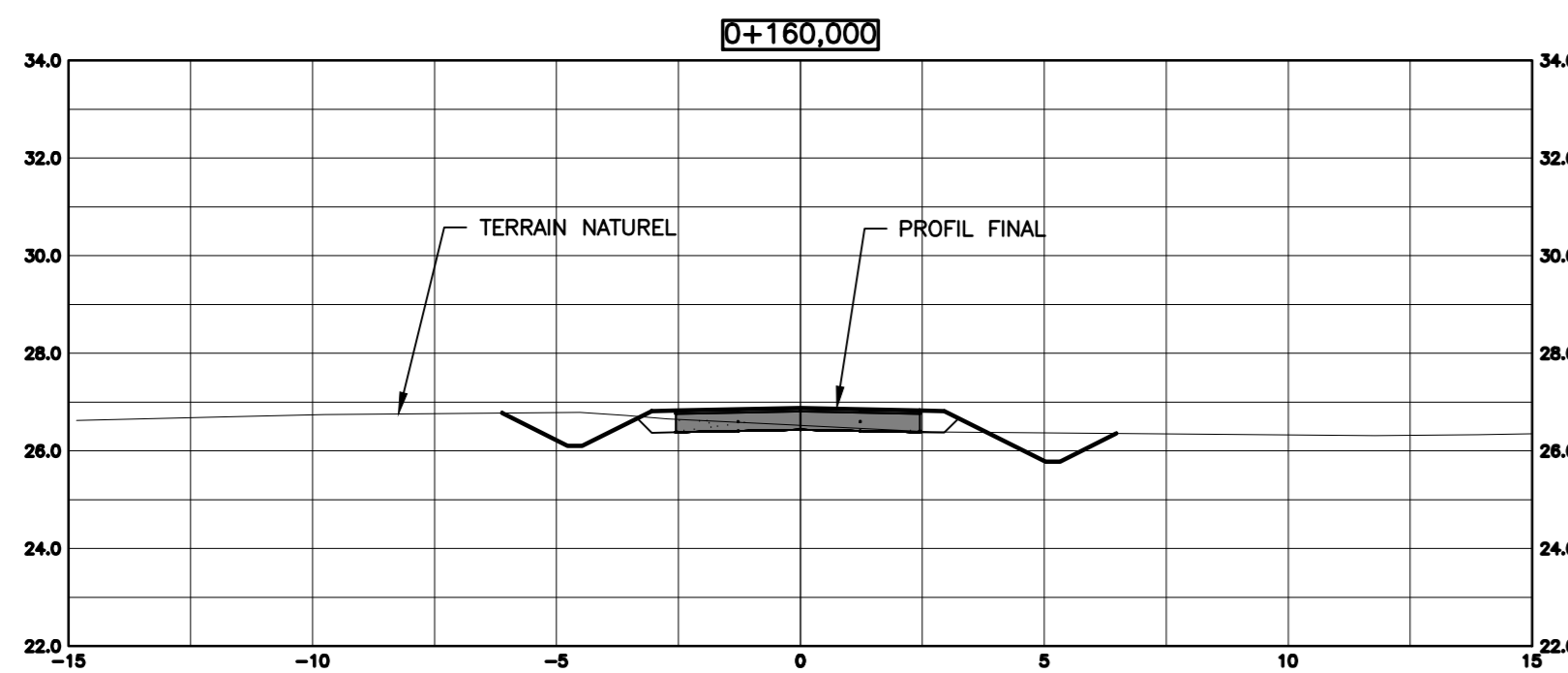
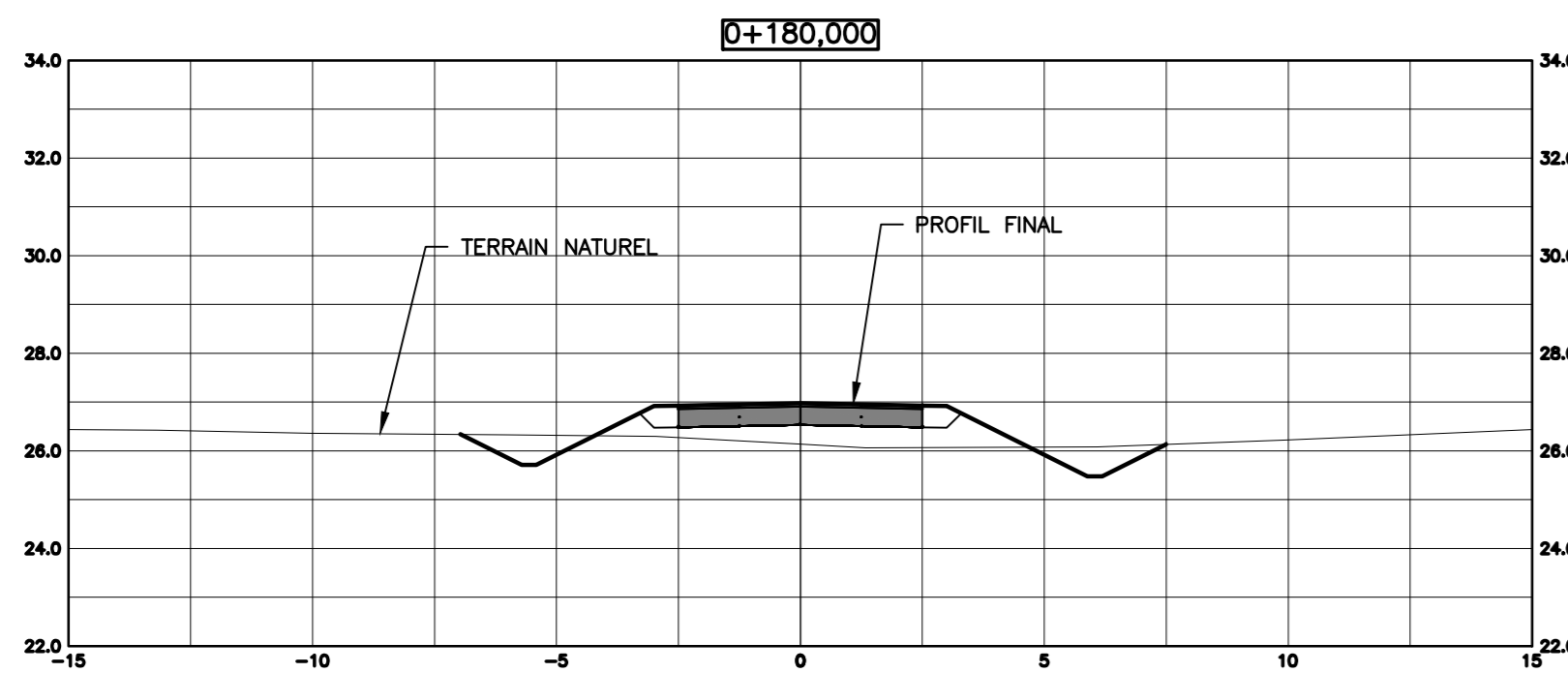
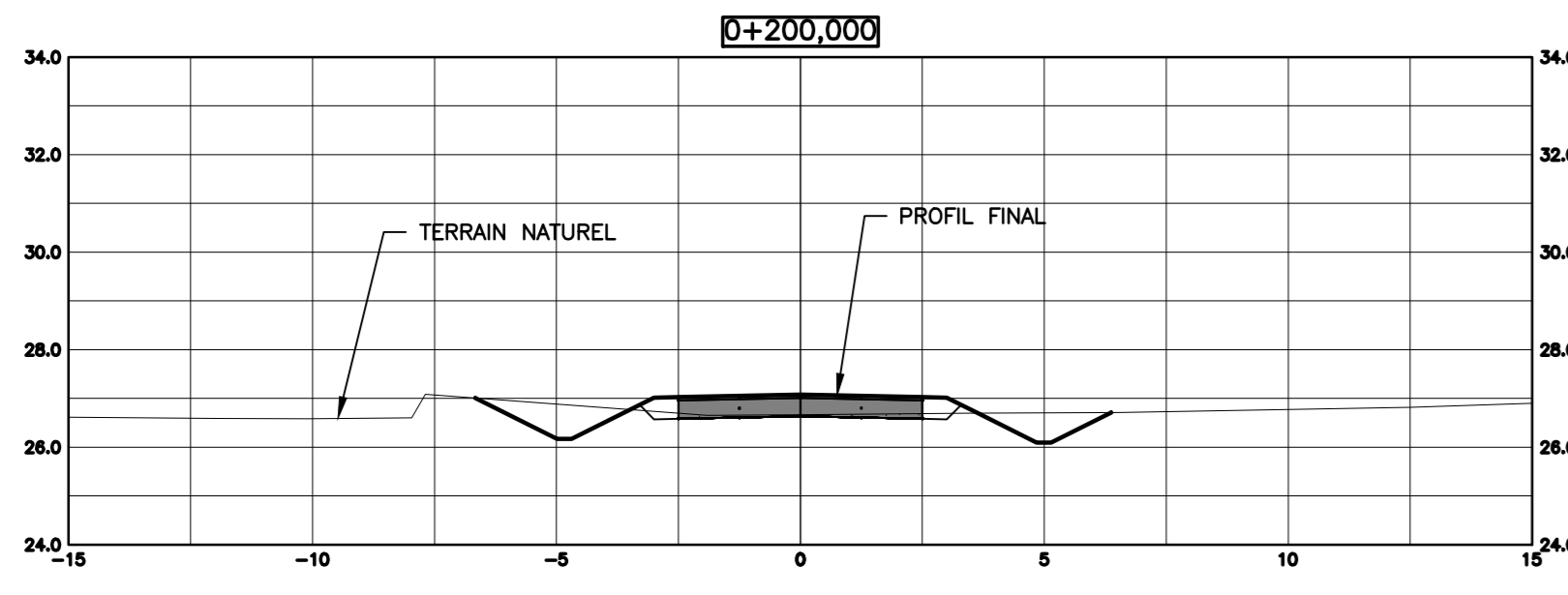
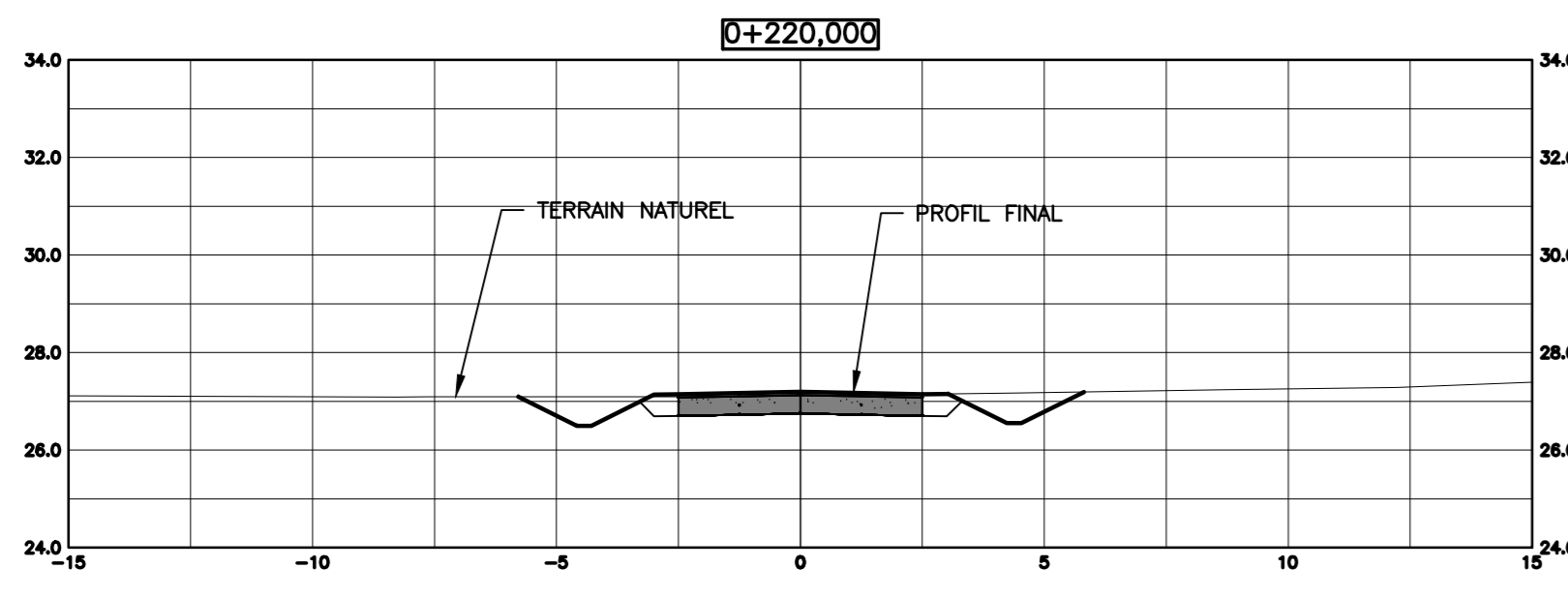
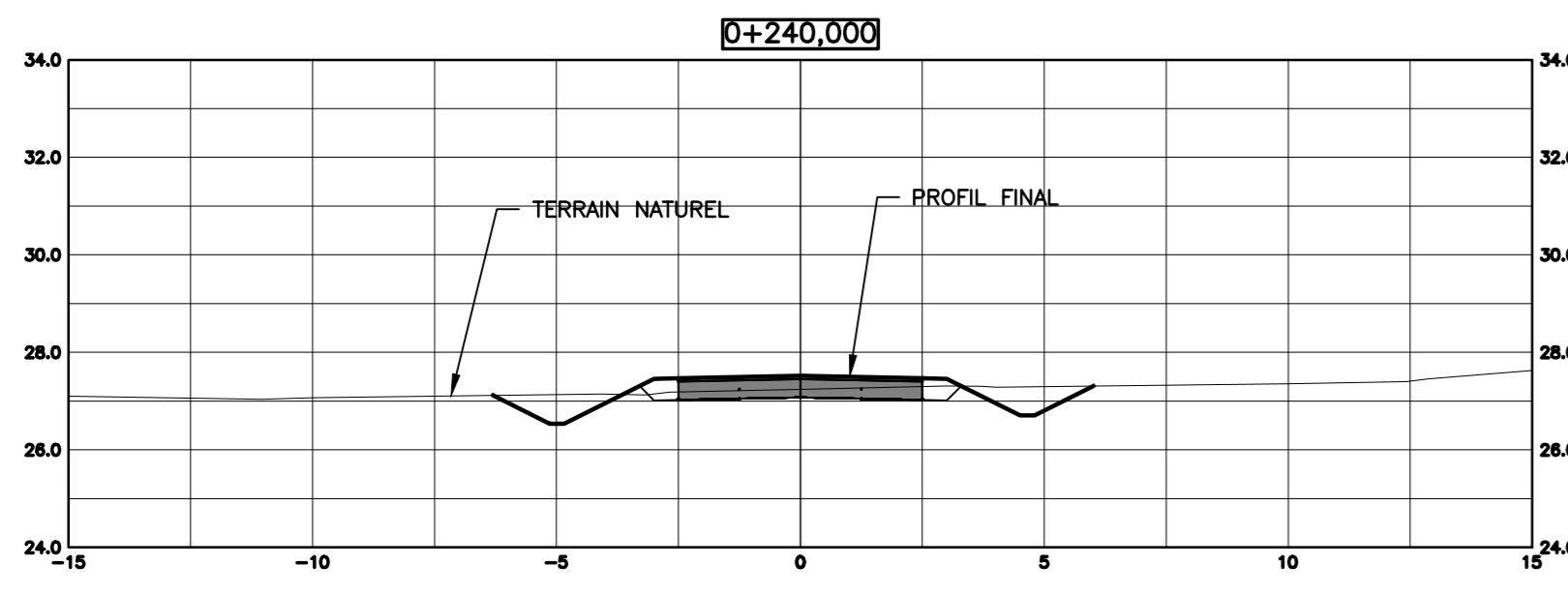
WHAPMAGOOSTUI FIRST NATION

PROJECT NAME:
RESIDENTIAL EXPANSION AND CONSTRUCTION OF A NEW WATER SUPPLY WELL


SHEET TITLE:
DETAILS


INFRASTRUCTURE	
DESIGNED BY: Duane E. Mathers, ASCT., André Hardy	DATE: 2018/07/27
APPROVED BY: Duane E. Mathers, ASCT.	APPROVED BY: Laurie-Janeau Paradis, Ing.
PROJECT NO.:C1825454	DRAWING NO.:C08
SHEET NO. 8 of 17	

MAIN ROAD



No.	Date	Description	By
0	19/03/22	ADDENDUM 03	L.J.-P.

DESIGNED BY: 

APPROVED BY: 

CIMA+

T. 514-822-3815
300-1116, boul. Lévesque, Québec (Q.C.) G1K 9H8 CANADA

 **WHAPMAGOOSTUI FIRST NATION**

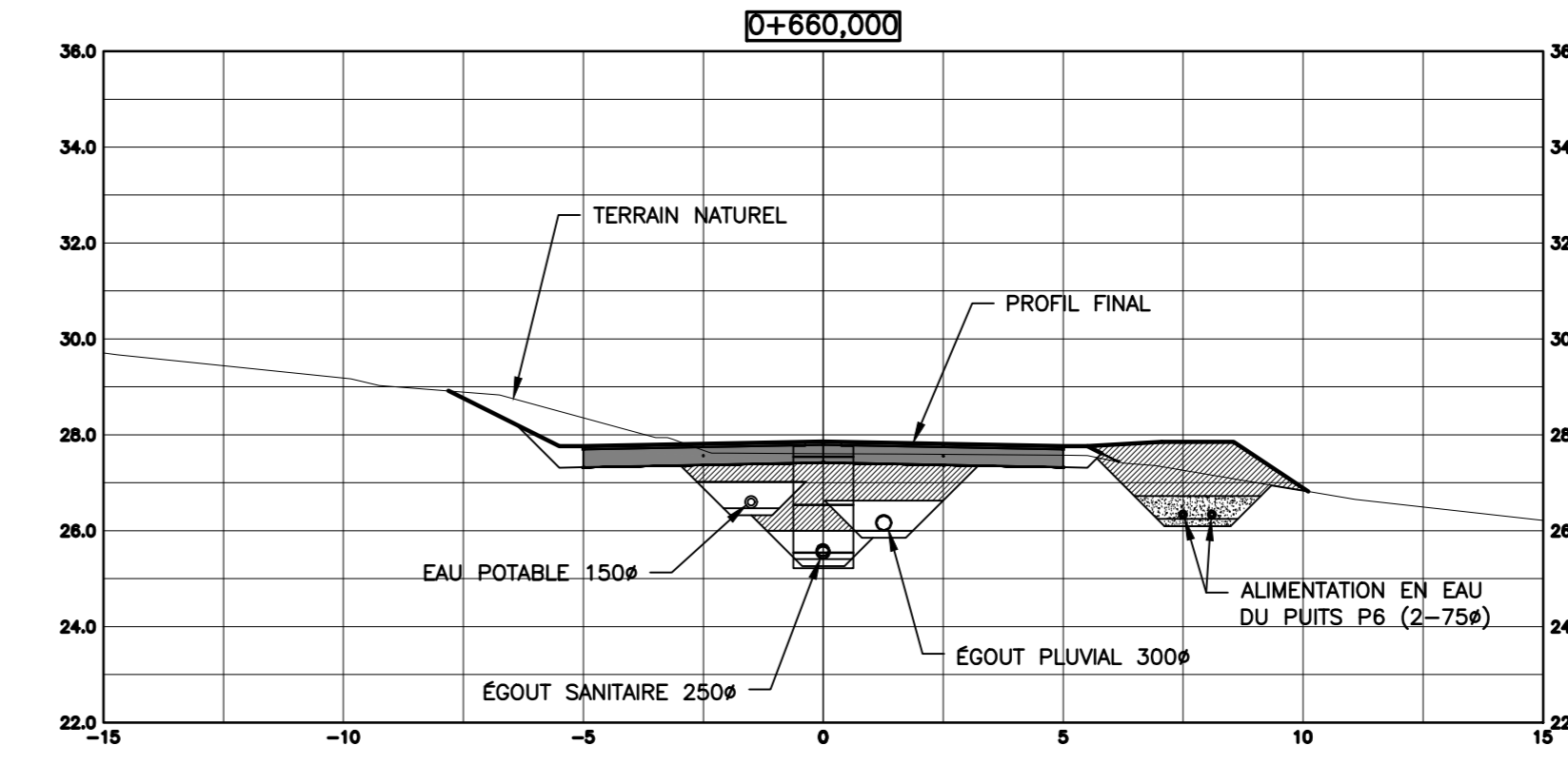
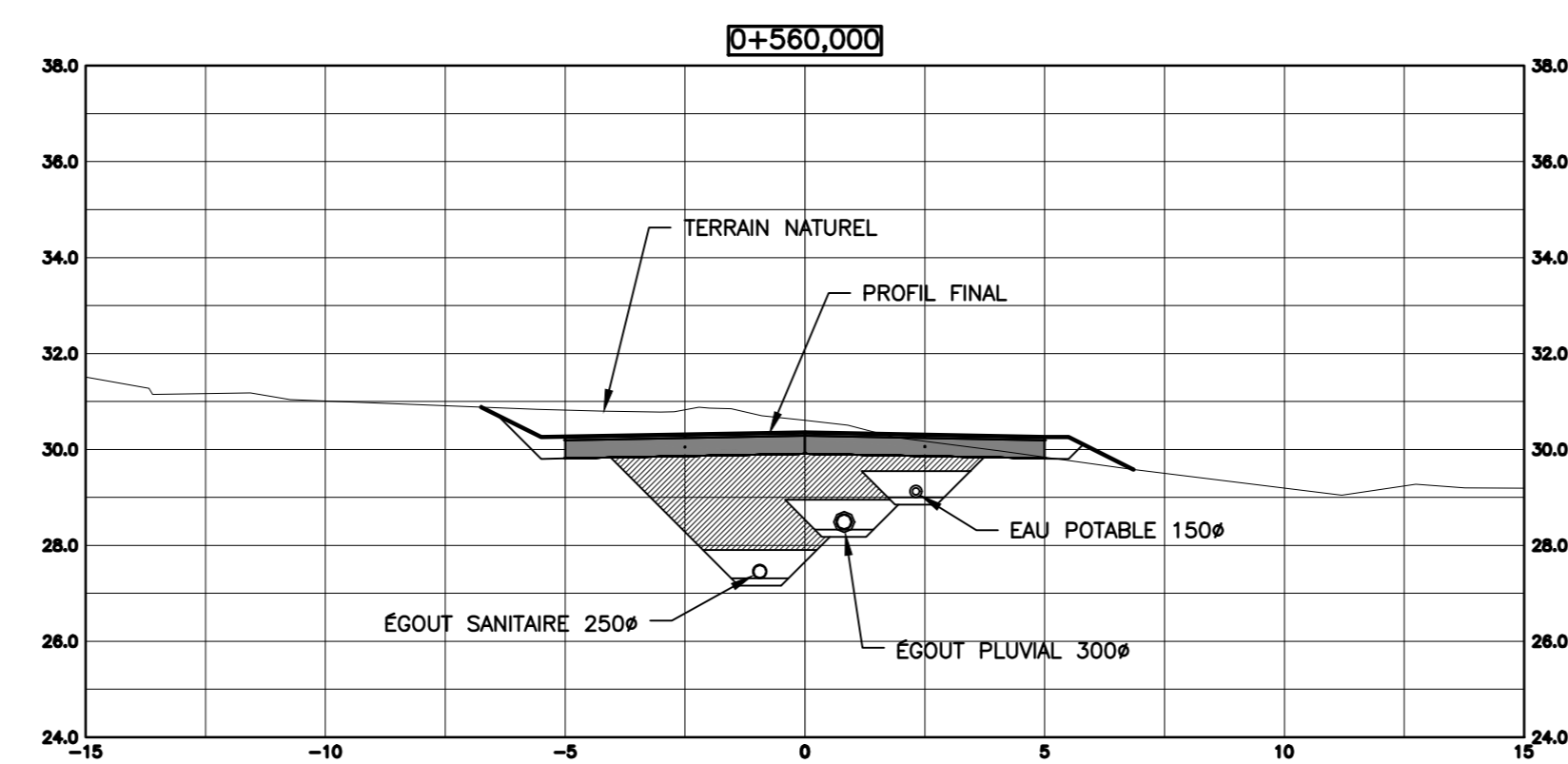
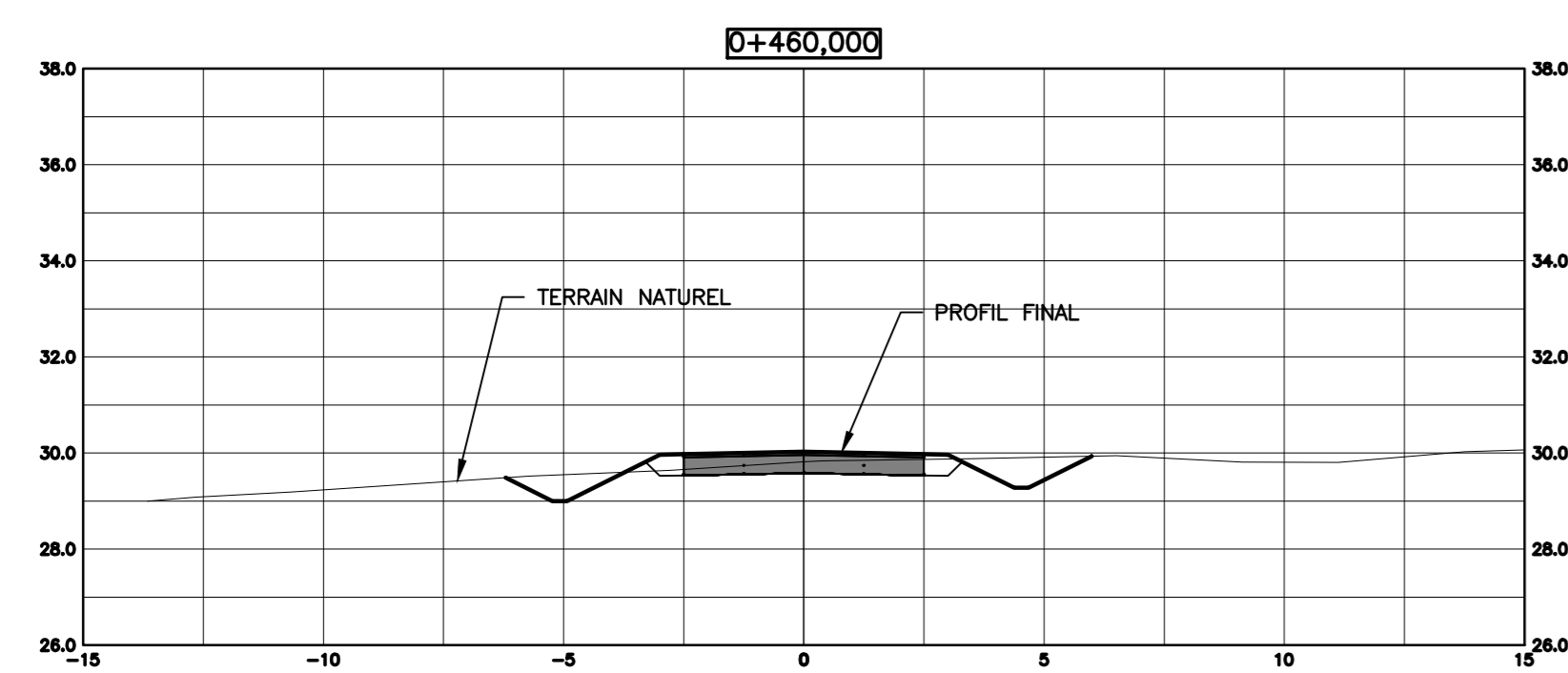
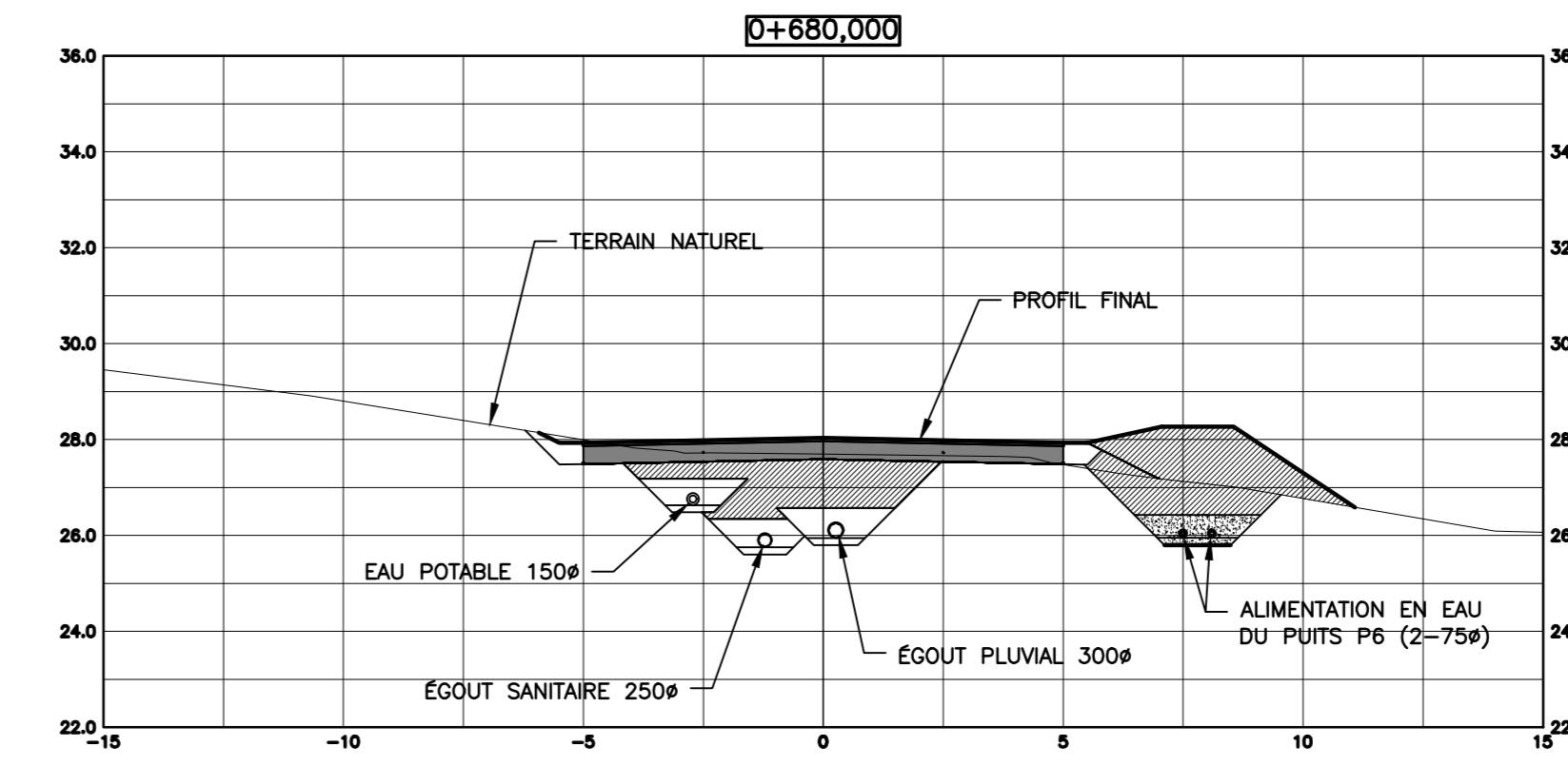
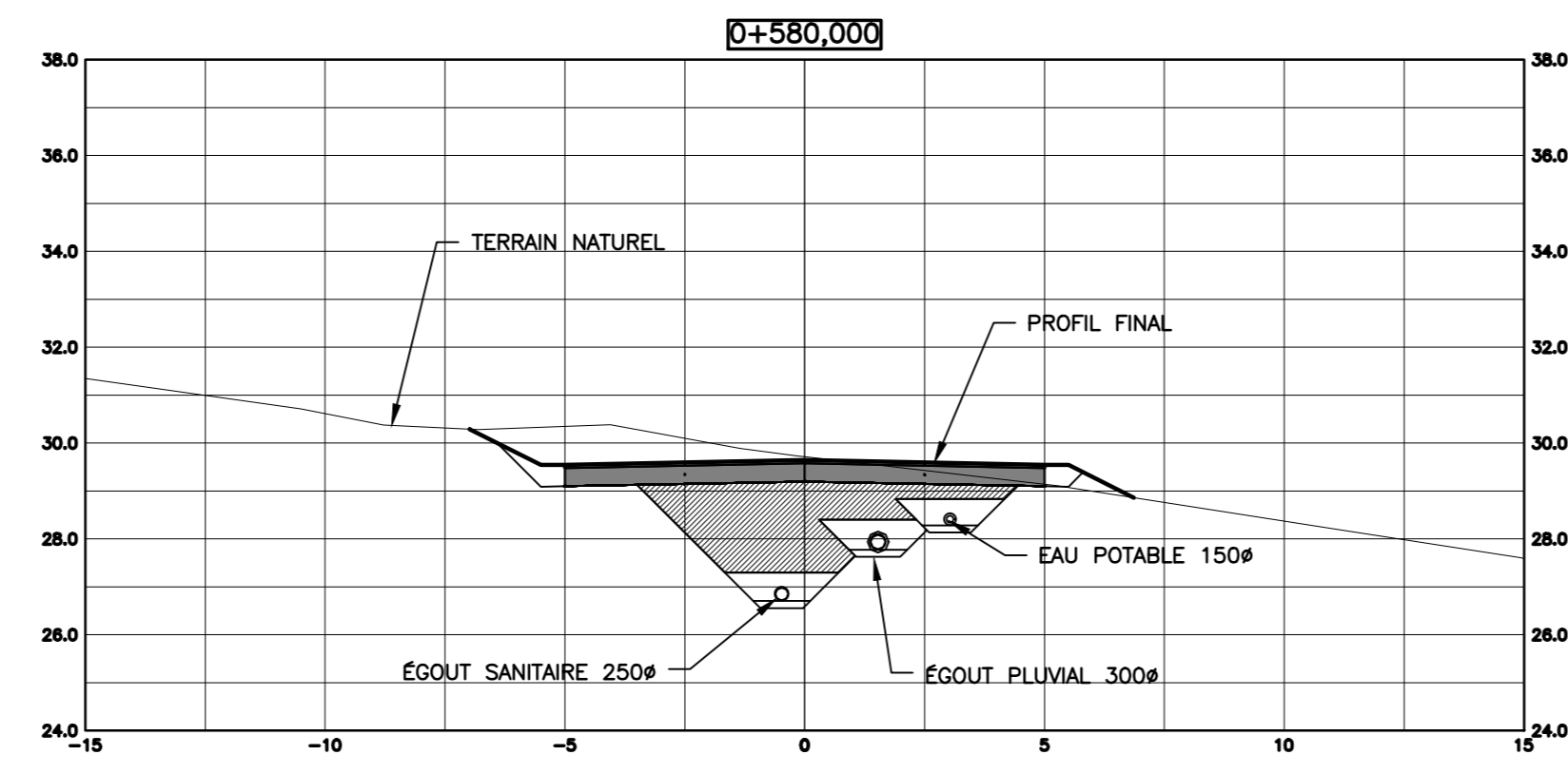
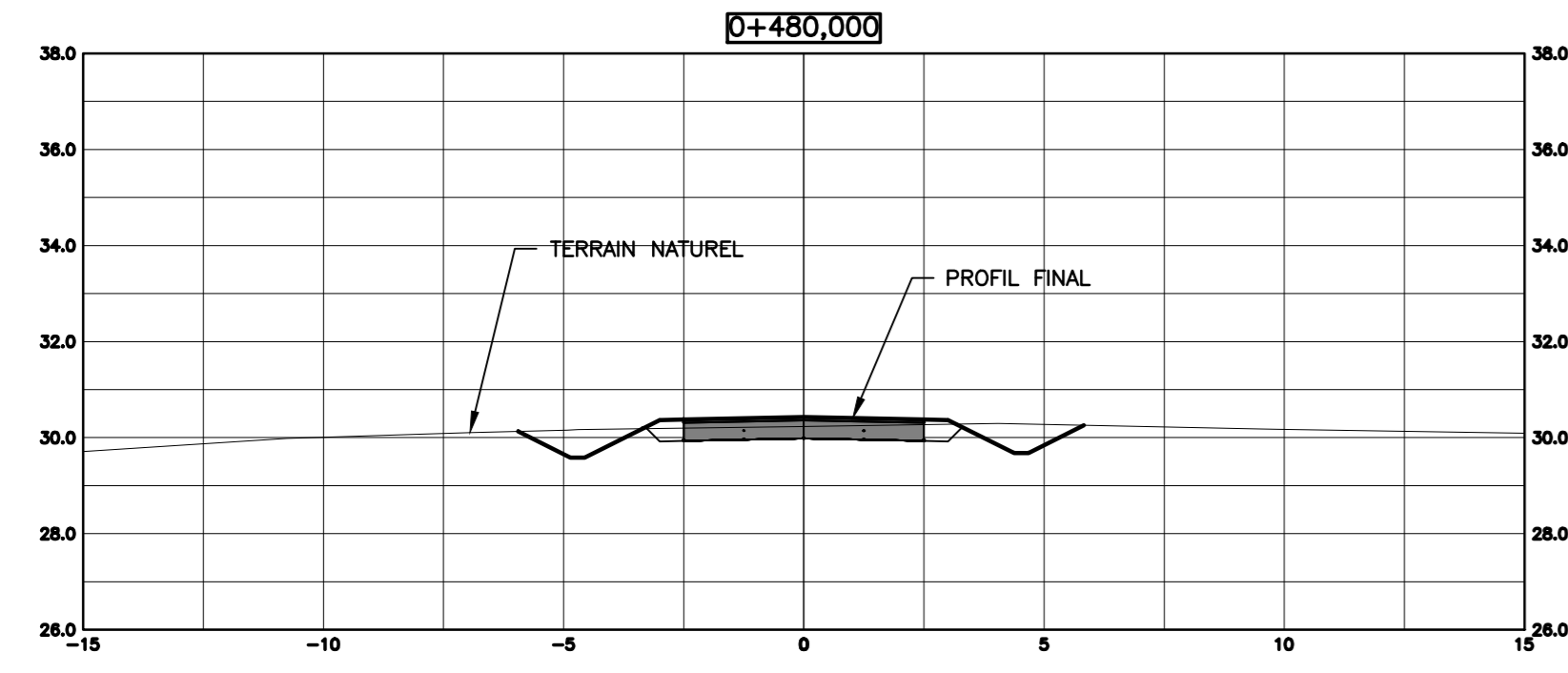
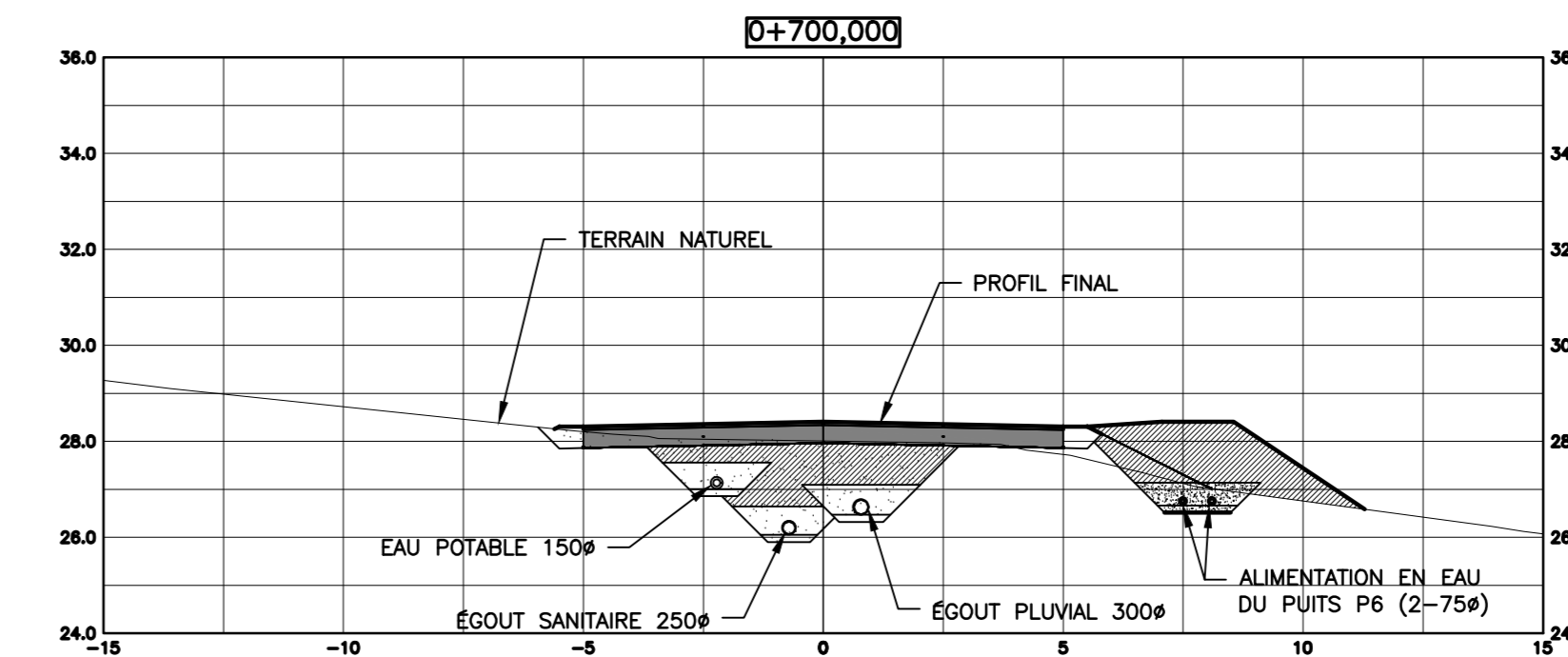
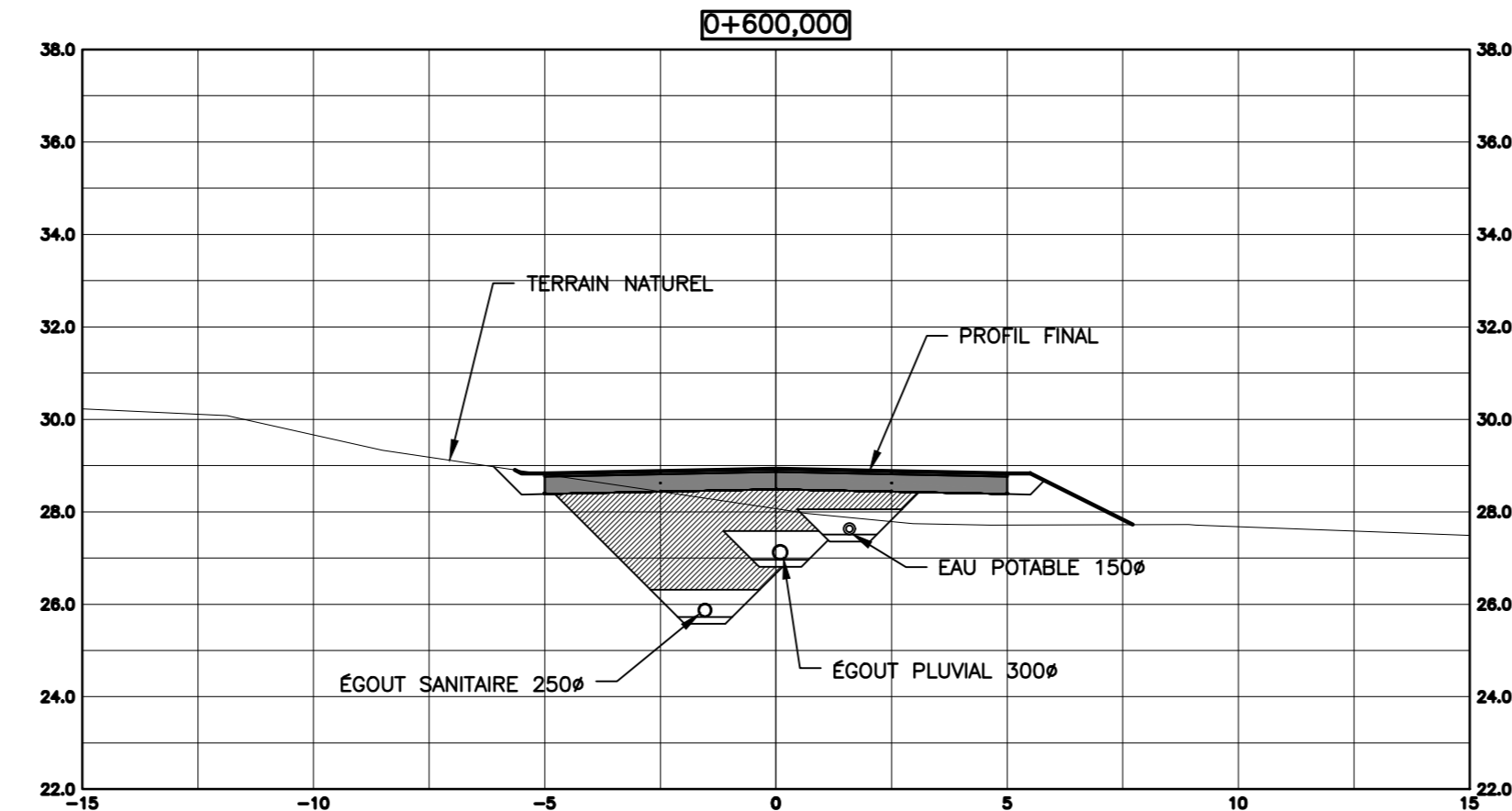
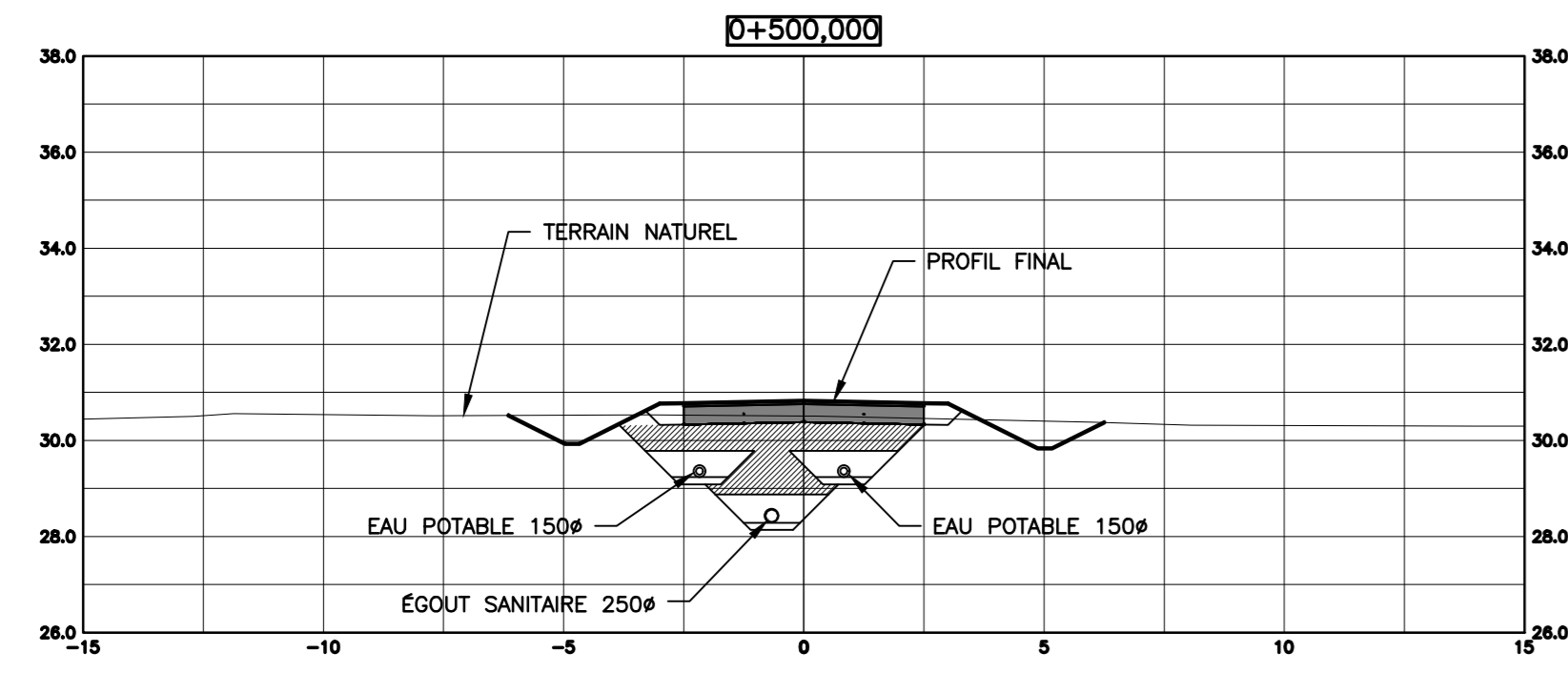
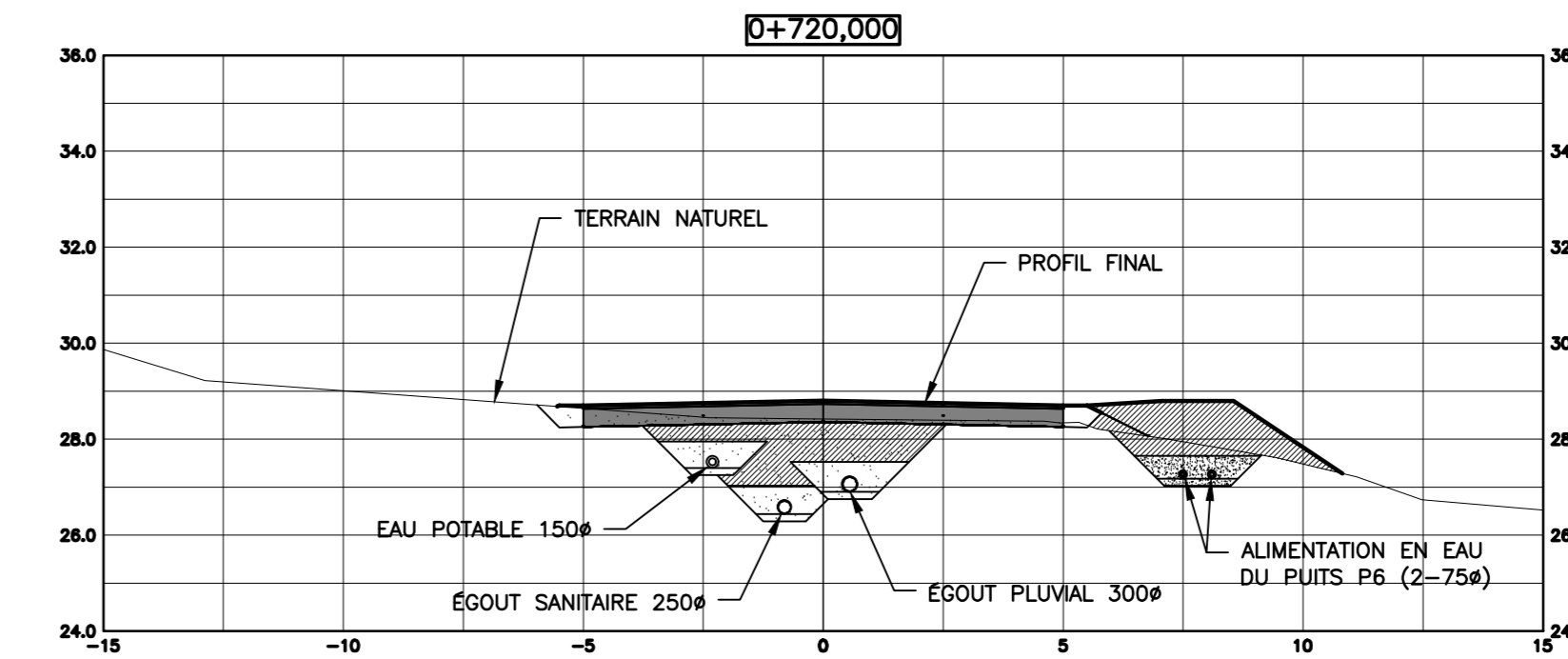
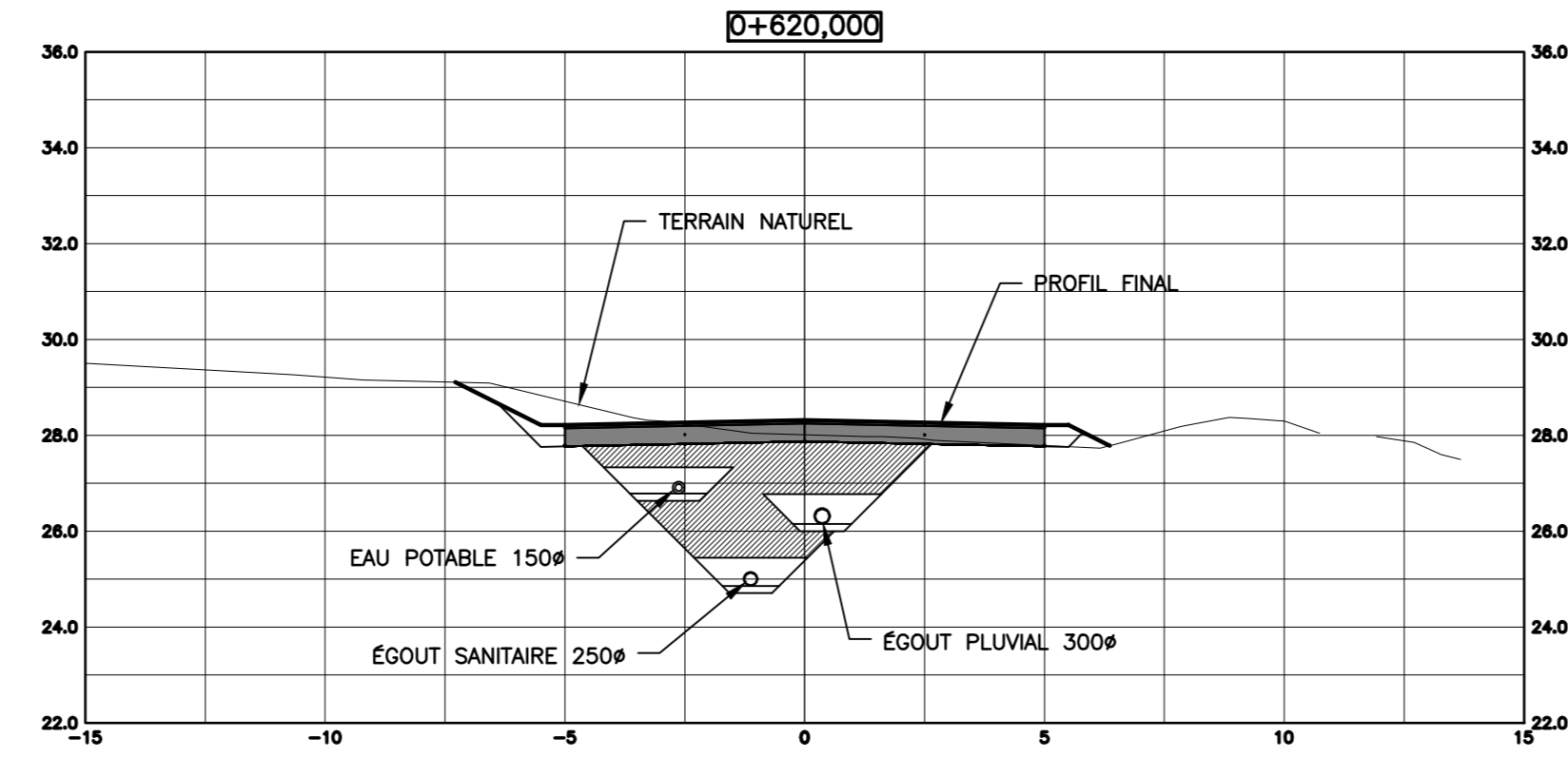
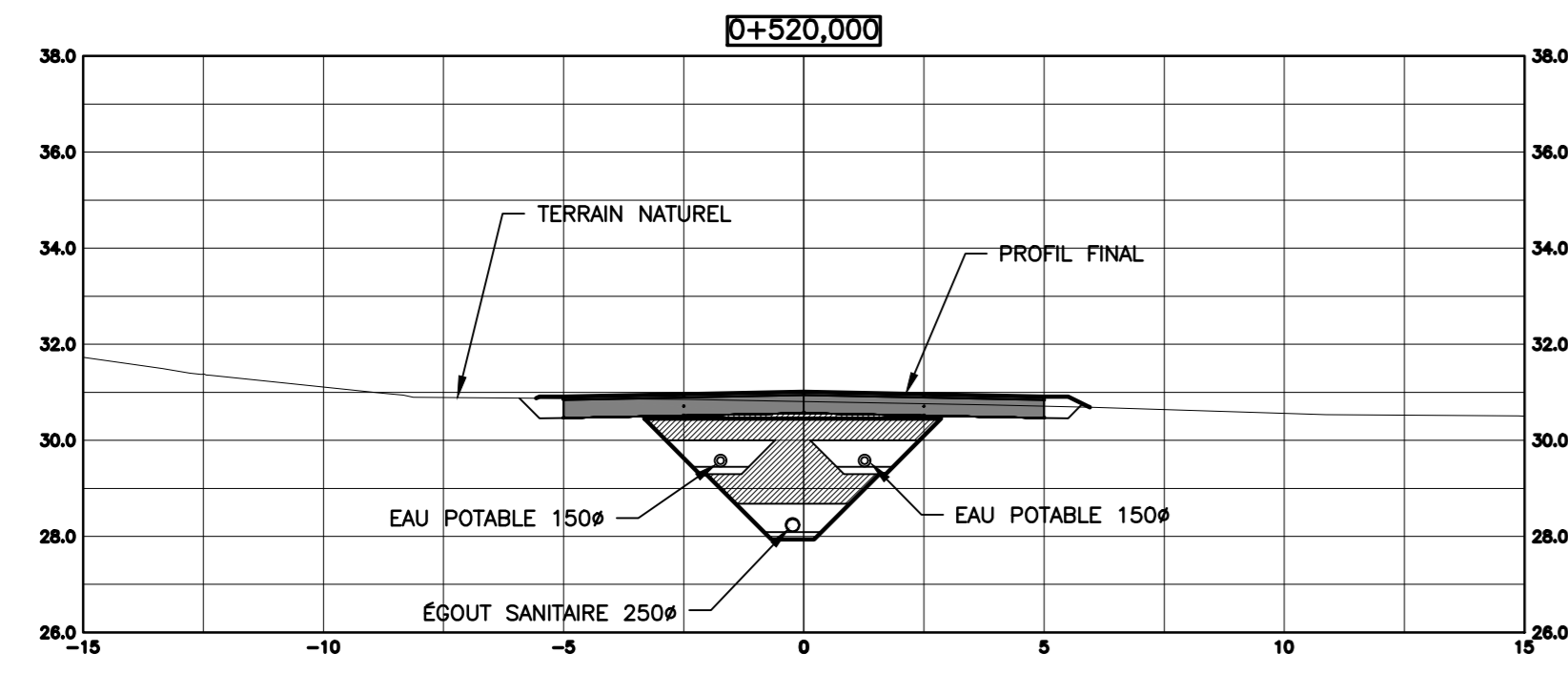
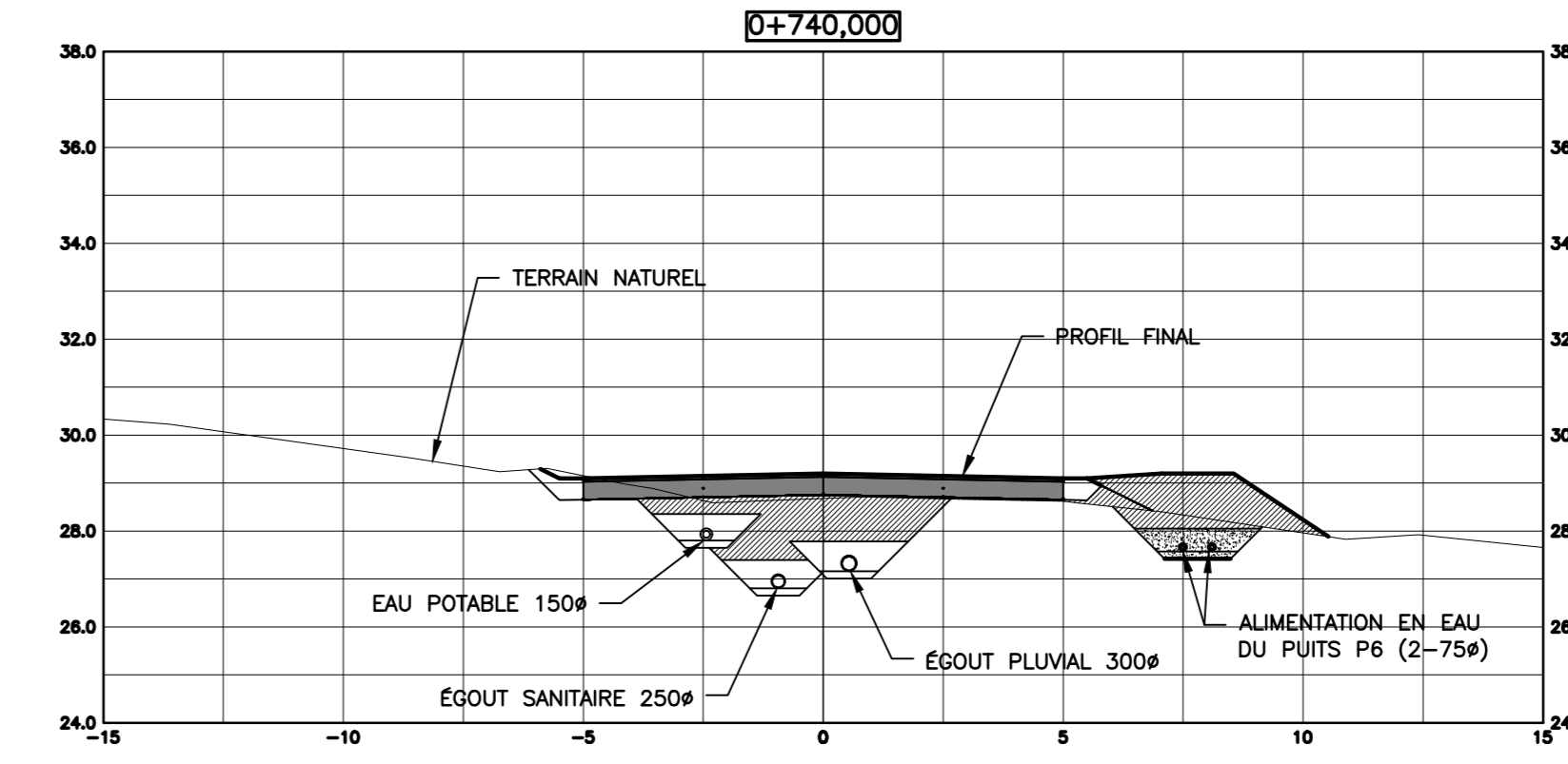
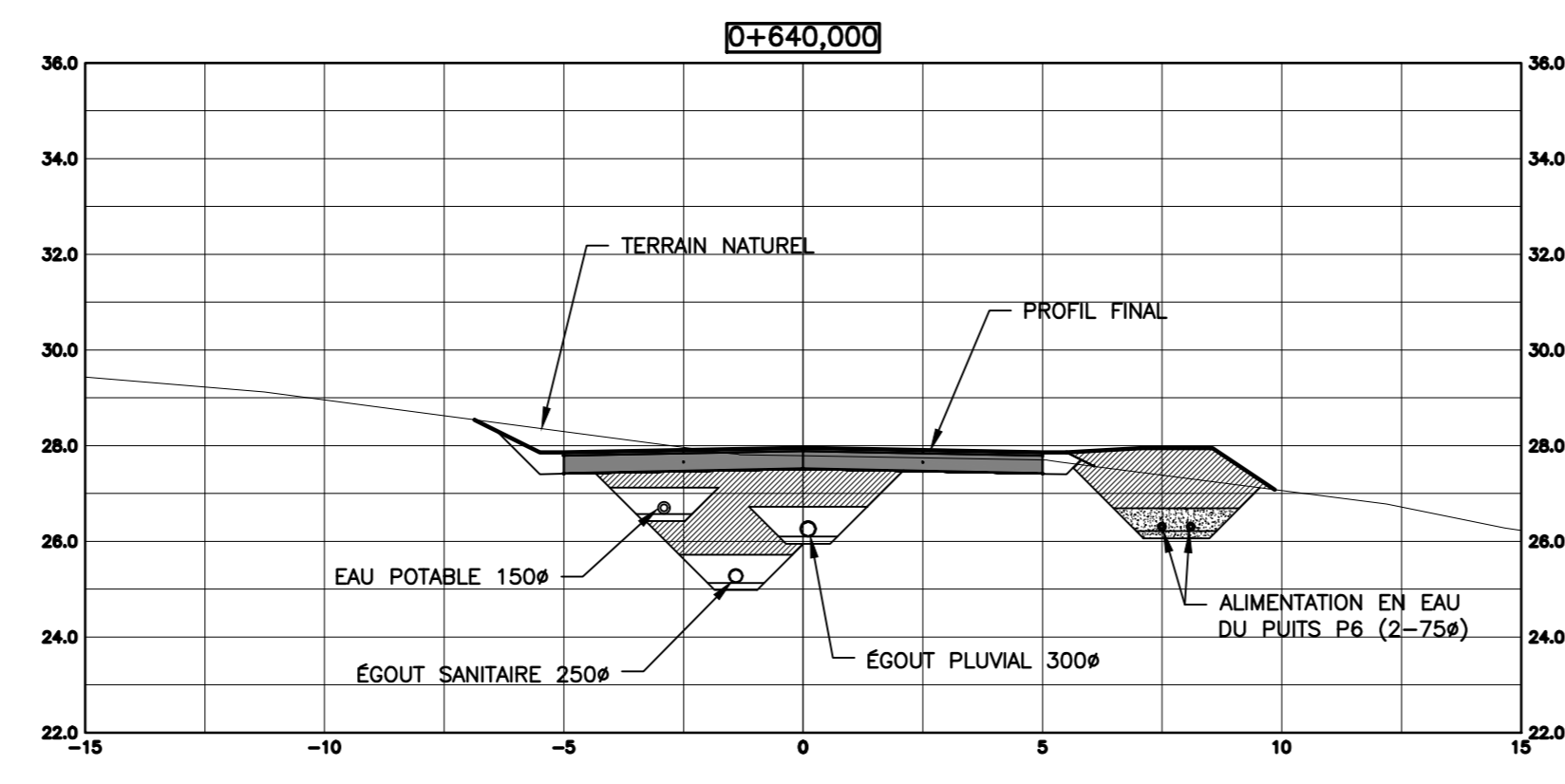
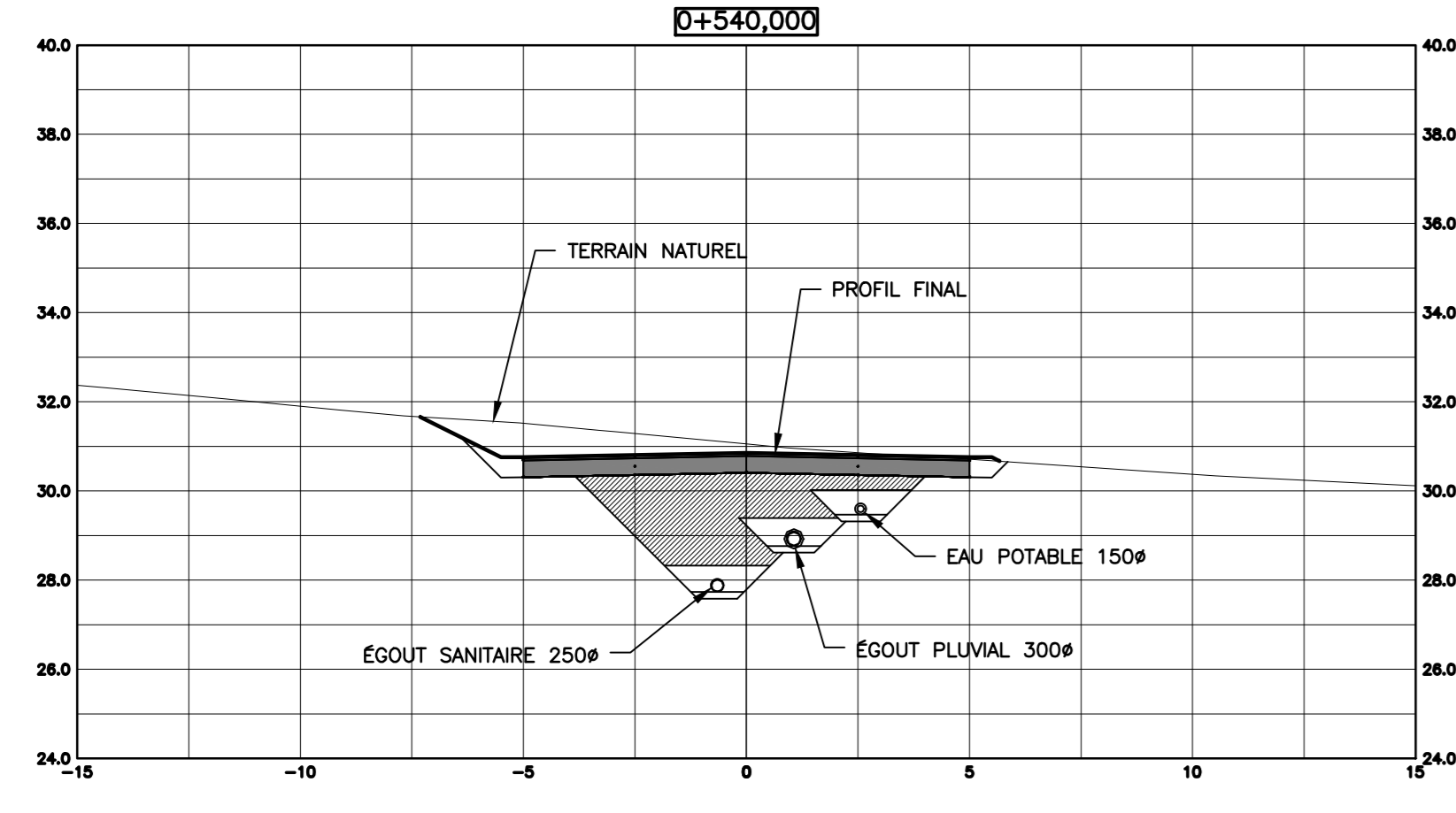
PROJECT NAME:
RESIDENTIAL EXPANSION AND CONSTRUCTION OF A NEW WATER SUPPLY WELL

DRAWING TITLE:
MAIN ROAD TYPICAL SECTIONS

DISCIPLINE		SCALE	HOR. : 1:150	VERT. : 1:150
DESIGNER:	Duane E. Mathers, ASCT., André Hardy			
DESIGNER:	Duane E. Mathers, ASCT.			
DATE:	2018/07/27			
APPROVER:	Andréanne Dumont, ing.			
APPROVER:	Laure Jumeau-Paradis, ing.			
PROJECT NO:	Q182545A			
DRAWING NO:	SEC1			
DRAWING NO:	SEC1 of SEC4			

TITLEBLOCK ADVERTISING 3.0

MAIN ROAD



PROJ. DATE: 2018/07/27 09:45:03; CUI: P:\1\Z\018-023\018-023-001\018-023-001.dwg; LAYOUT: Section2 2

No.	Date	Description	By
0	19/03/22	ADDENDUM 03	L.J.-P

DESIGNED BY:

APPROVED BY:

CIMA+
300-116, rue Léonard-Cuvelier St-Jérôme QC J9B 9K9 CANADA

WHAPMAGOOSTUI FIRST NATION

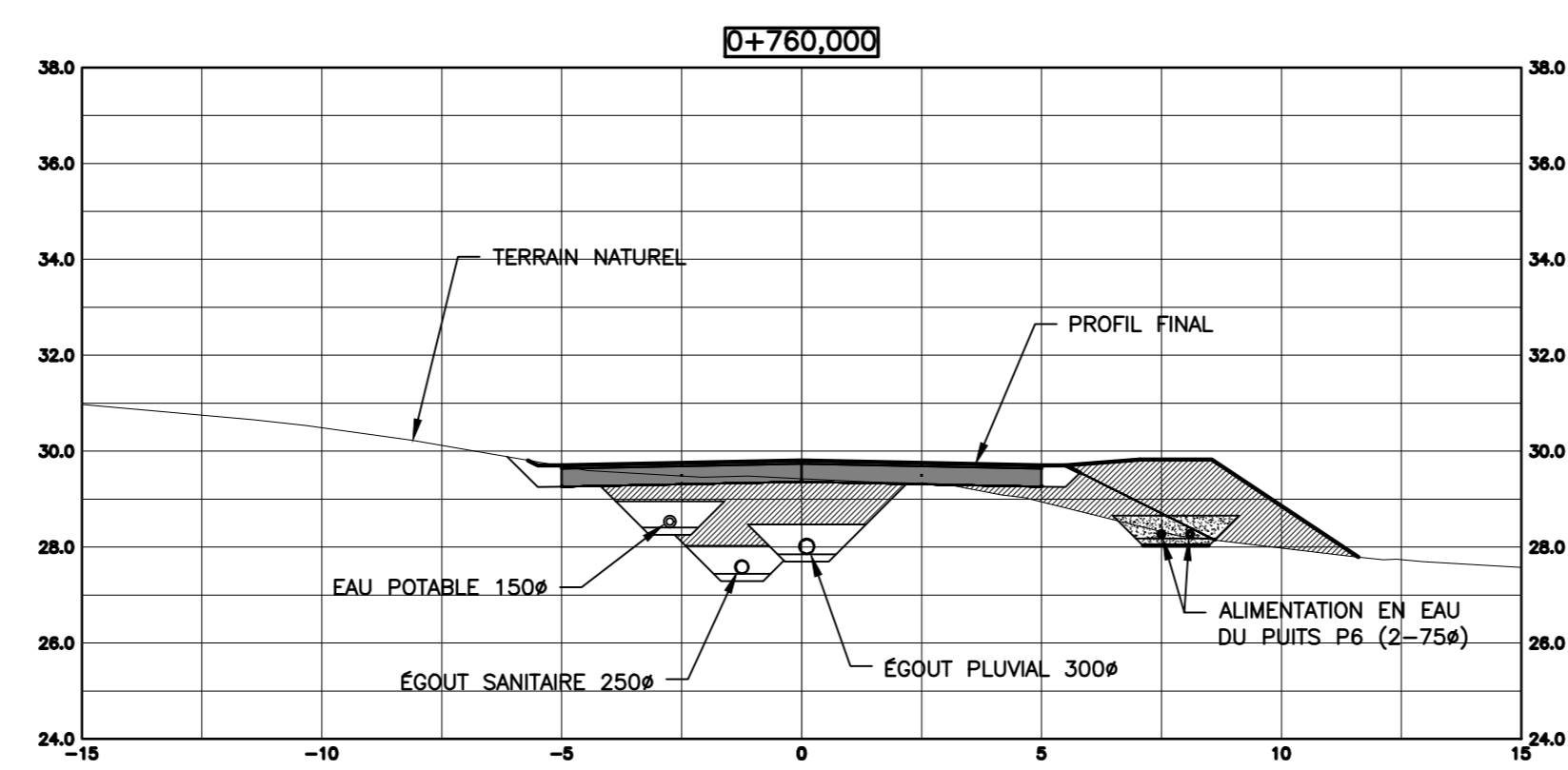
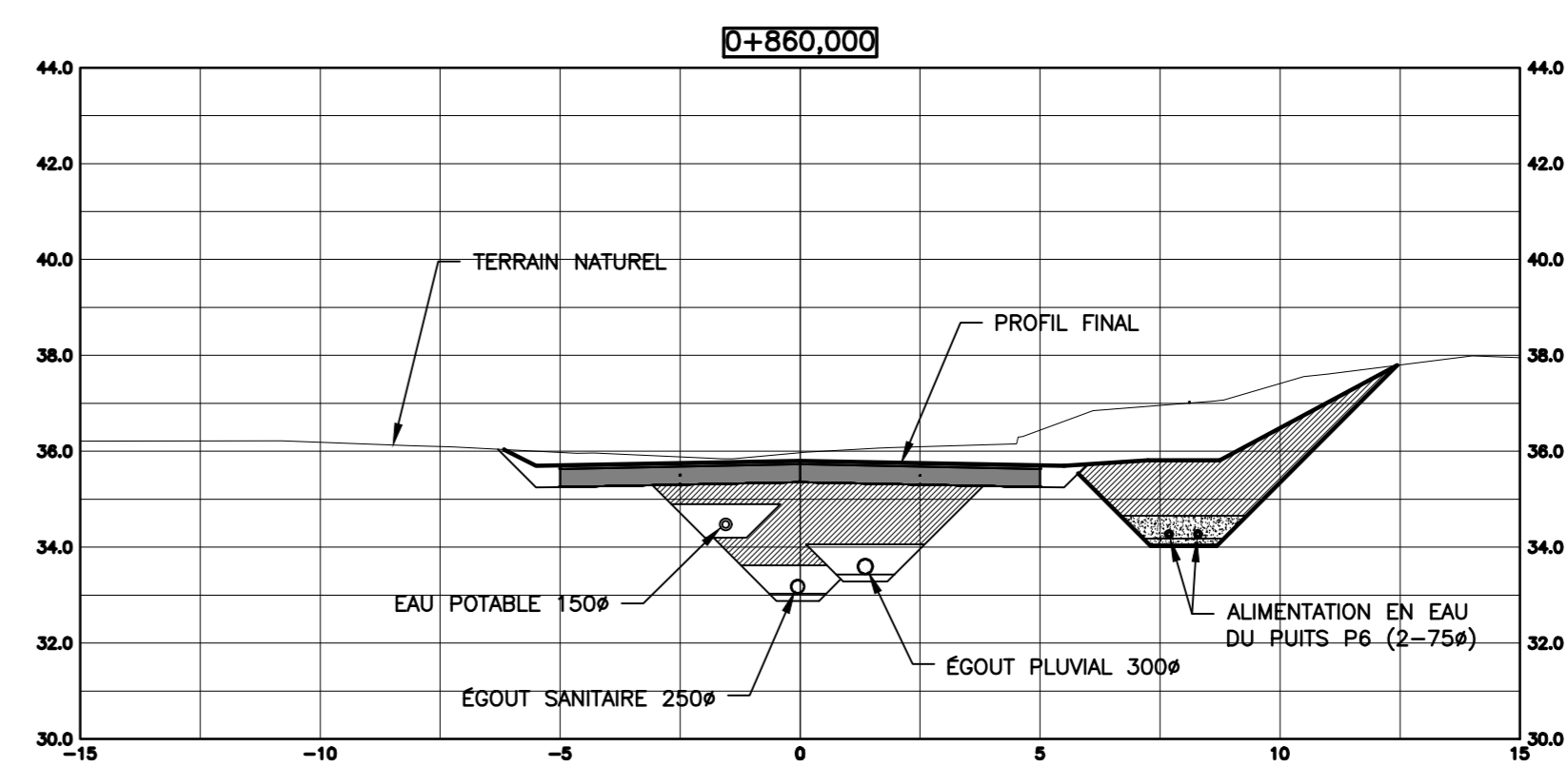
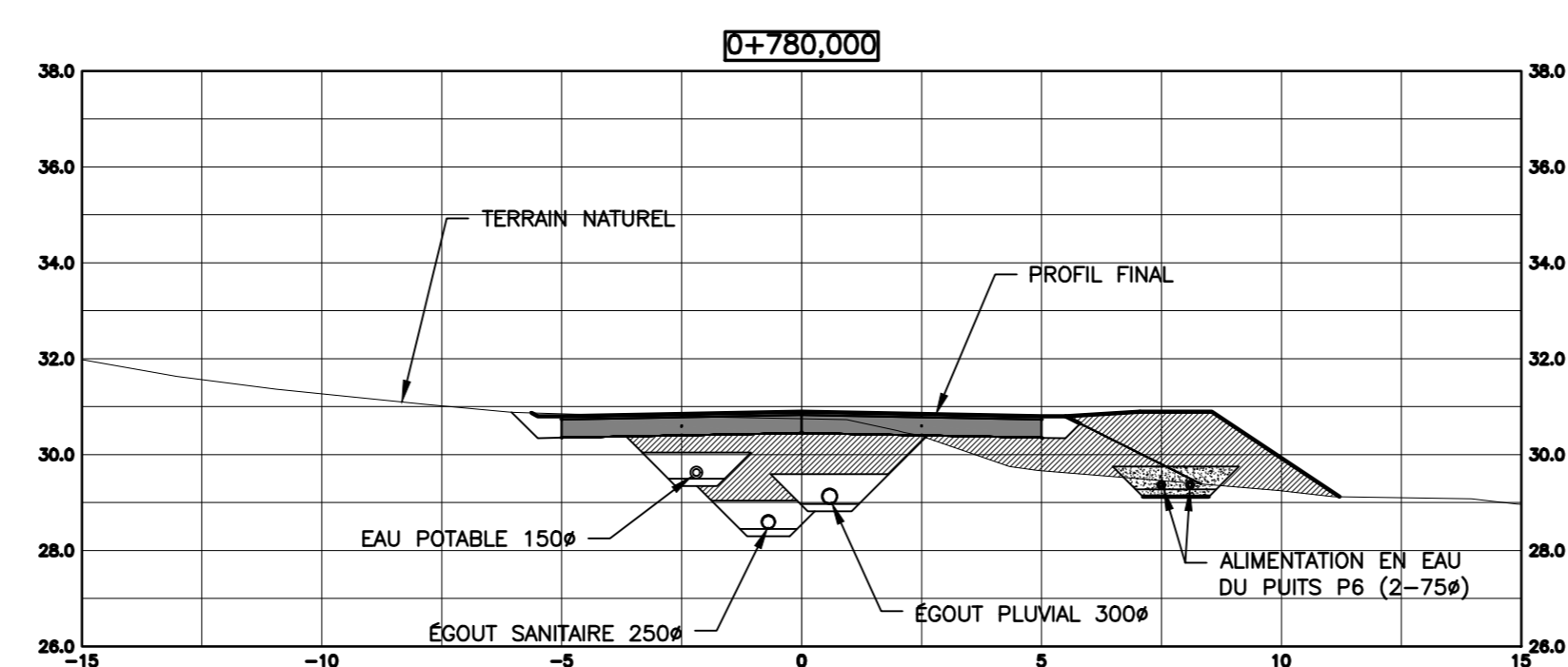
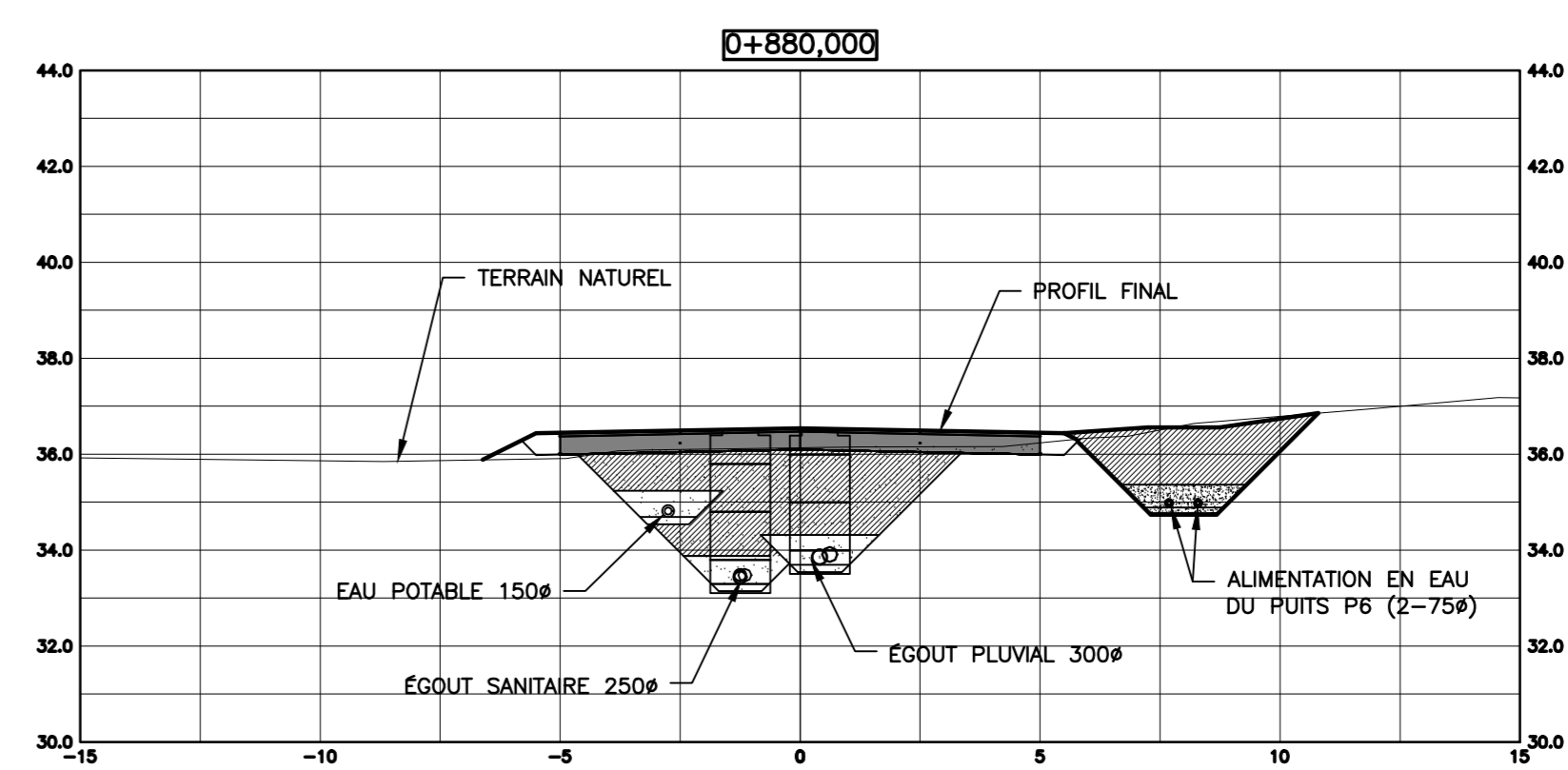
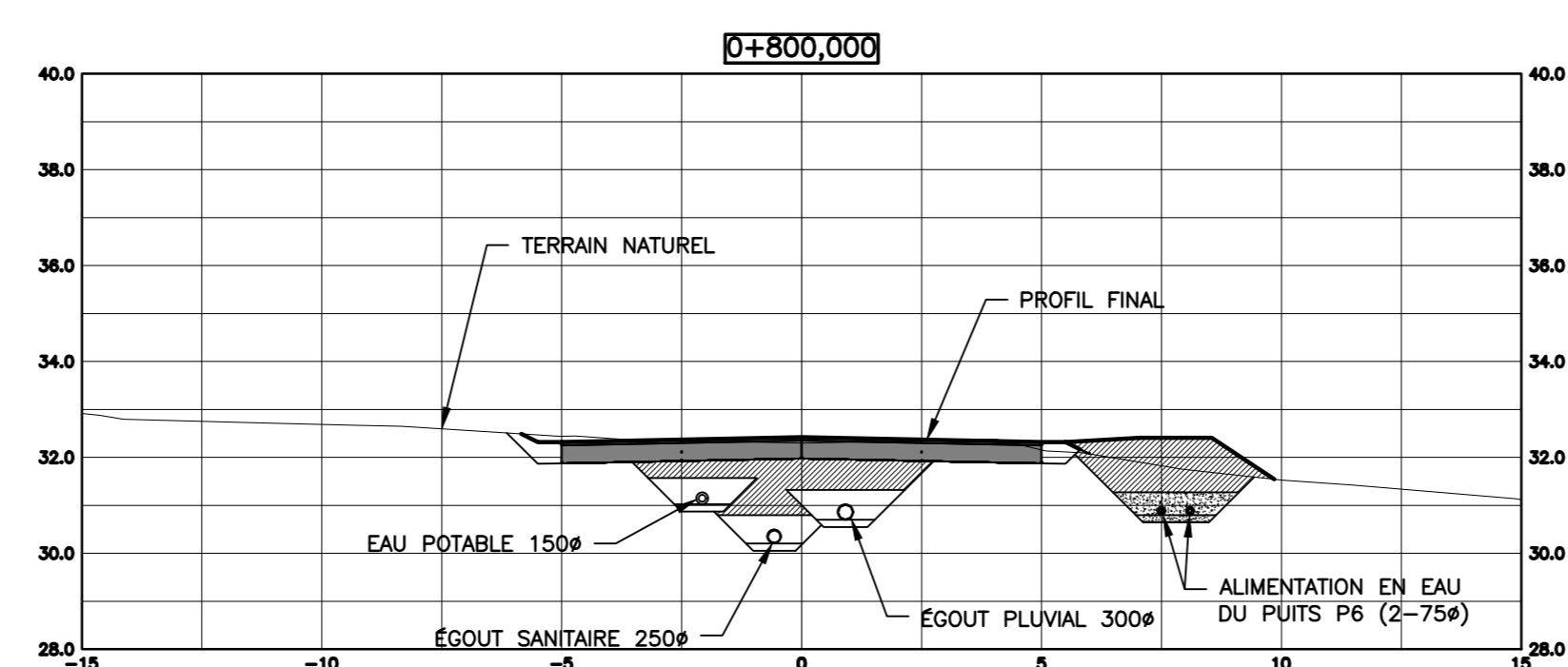
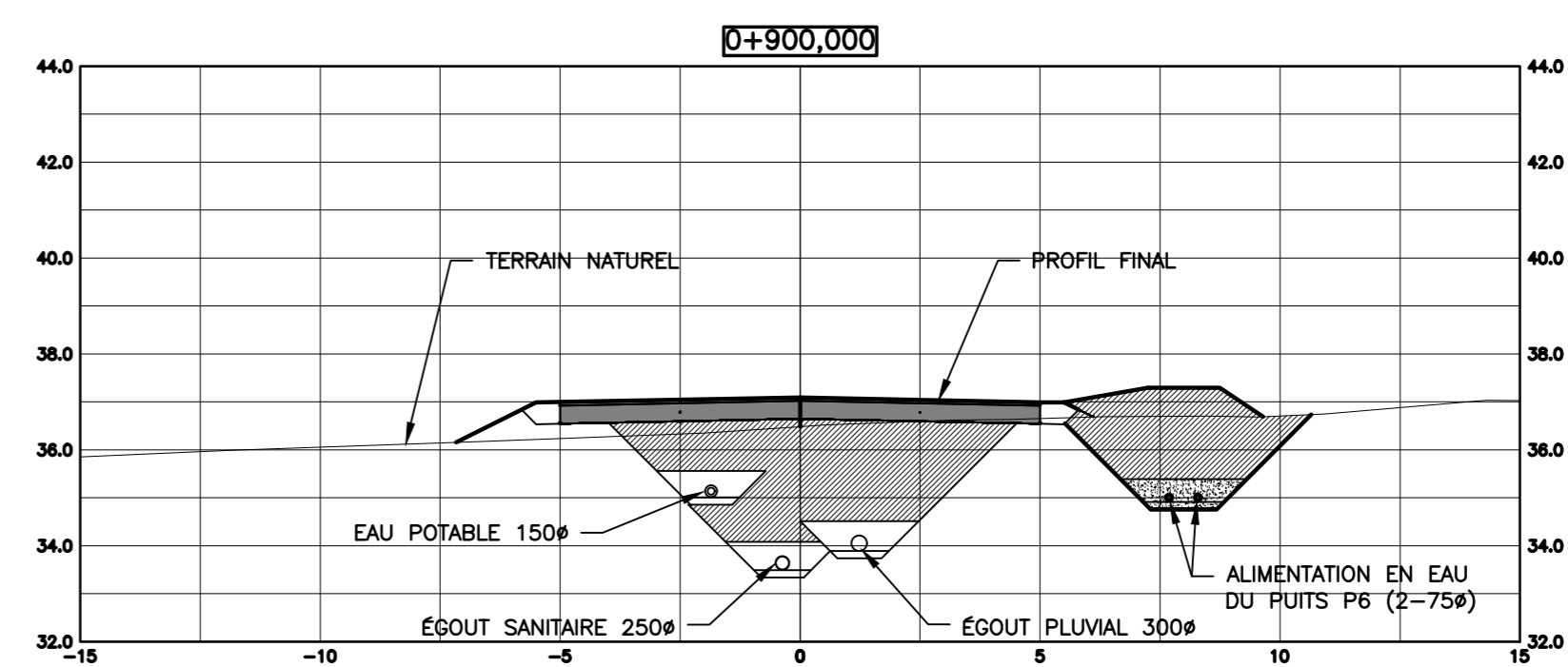
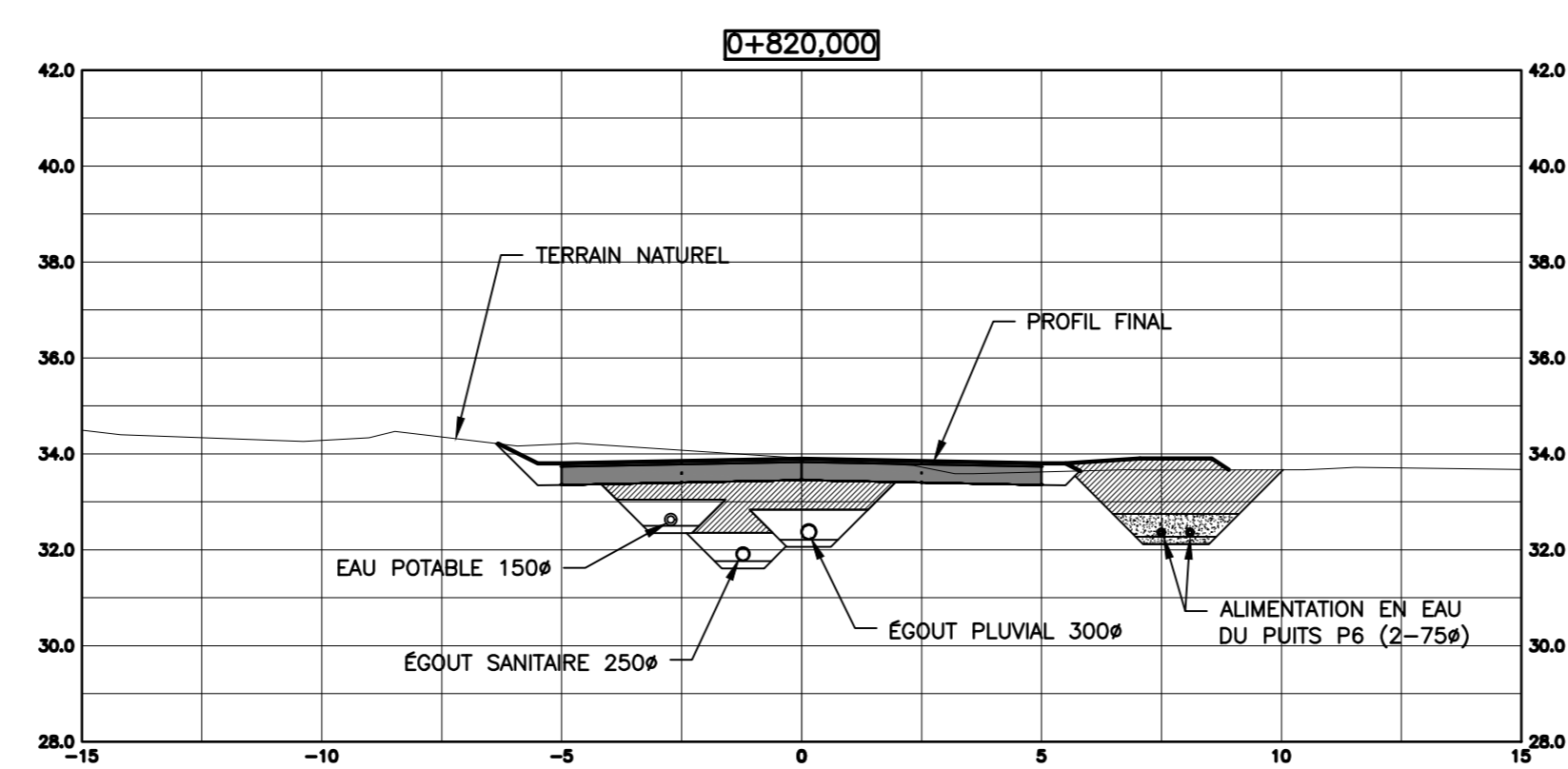
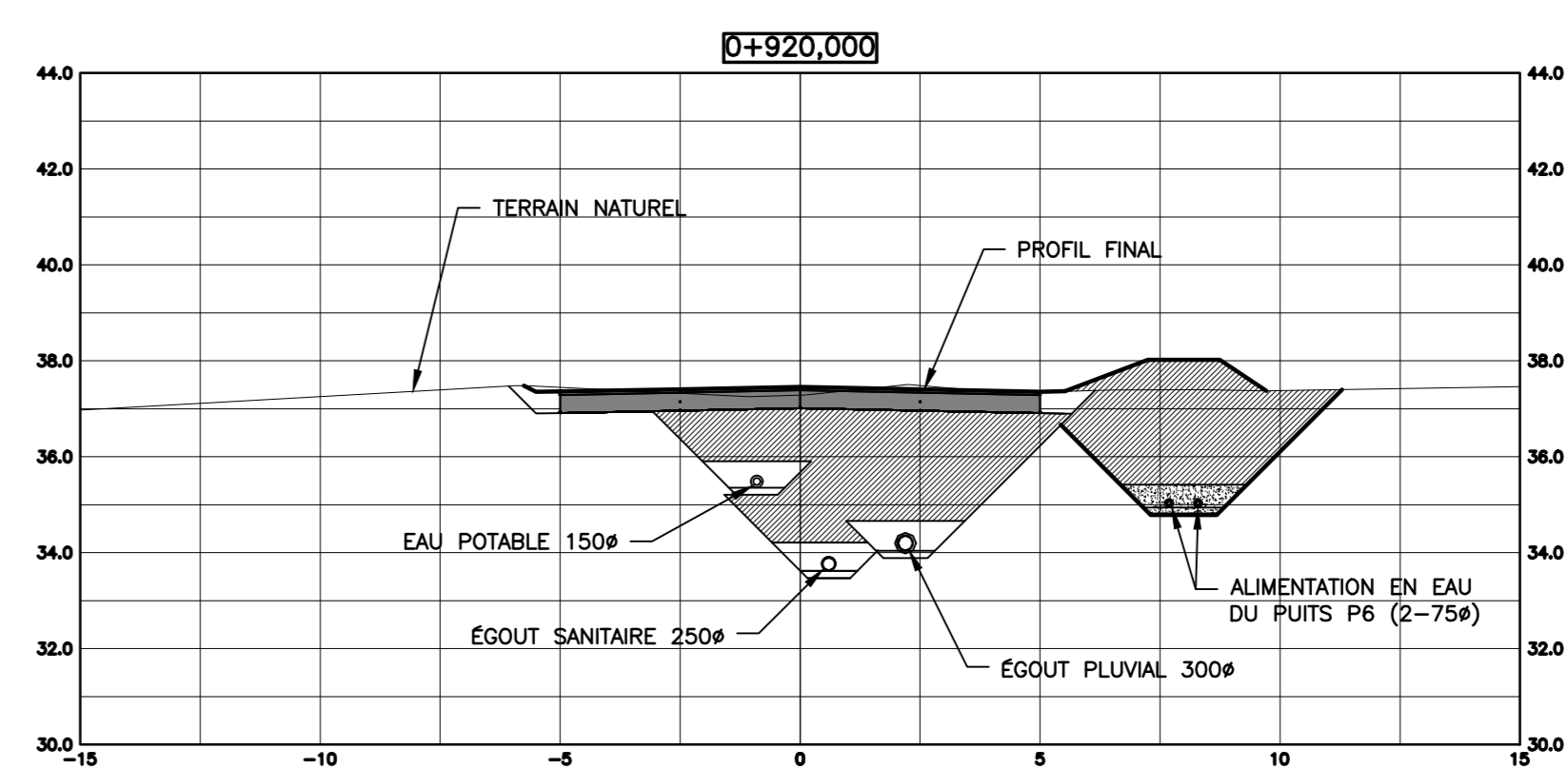
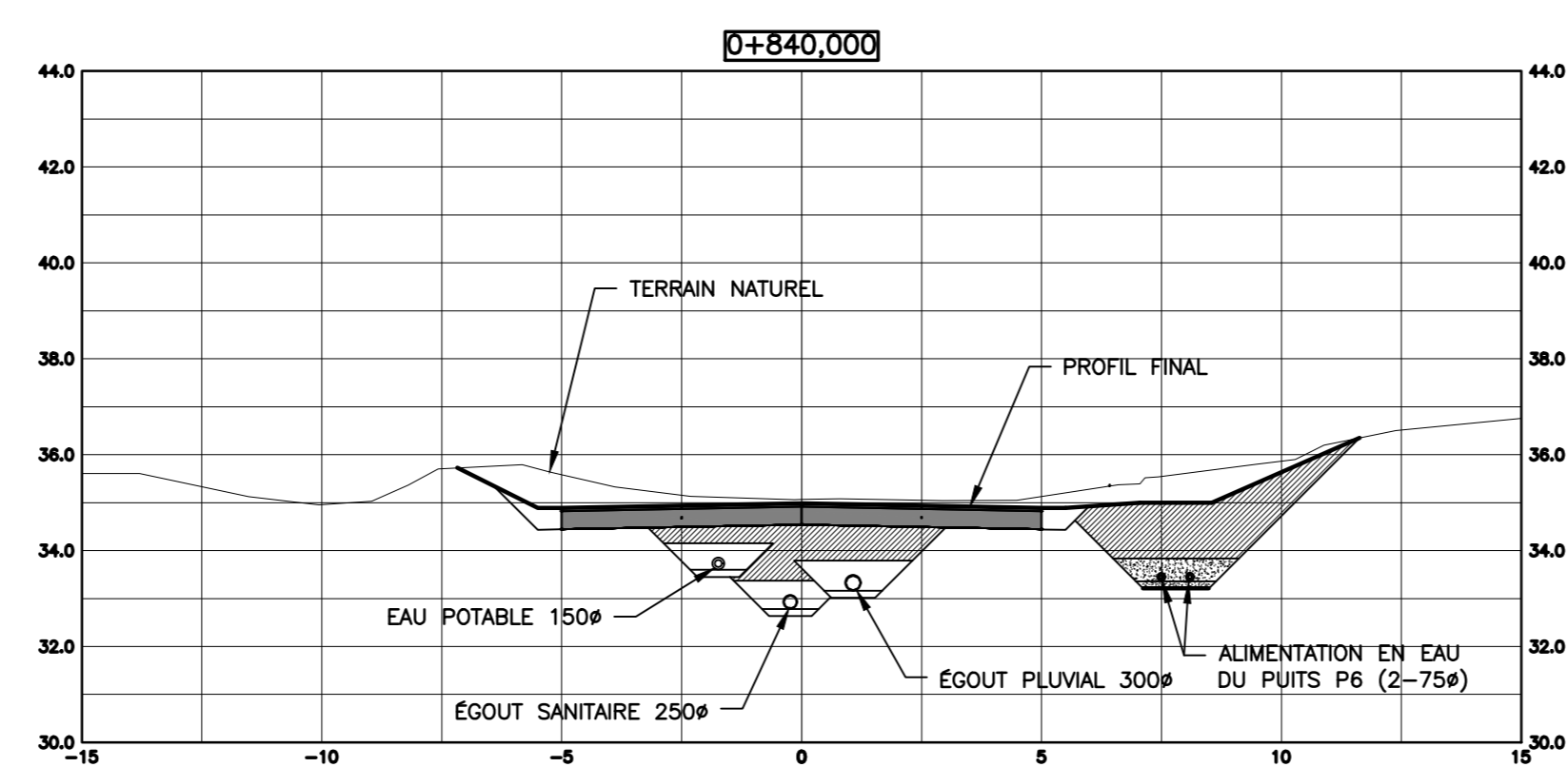
RESIDENTIAL EXPANSION AND CONSTRUCTION OF A NEW WATER SUPPLY WELL

MAIN ROAD TYPICAL SECTIONS

INFRASTRUCTURE

DESIGNER: Duane E. Mathers, ASCT, André Hardy	SCALE: HOR. : 1:150 VERT. : 1:150
DRAWN: Duane E. Mathers, ASCT	DATE: 2018/07/27
APPROVED: André Hardy, ing	APPREVED: Laure Juneau-Paradis, ing
PROJECT NO: 0182545A	DRAWING NO:
SHEET NO: SEC2 of SEC4	SEC2

MAIN ROAD



No.	Date	Description	By
0	18/03/22	ADDENDUM 03	L.J.-P.

DESIGNED BY: APPROVED BY:

CIMA+
 1-888-235-2355
 300-116, rue Lévesque Québec Q1G 2K8 CANADA

**WHAPMAGOOSTUI
 FIRST NATION**

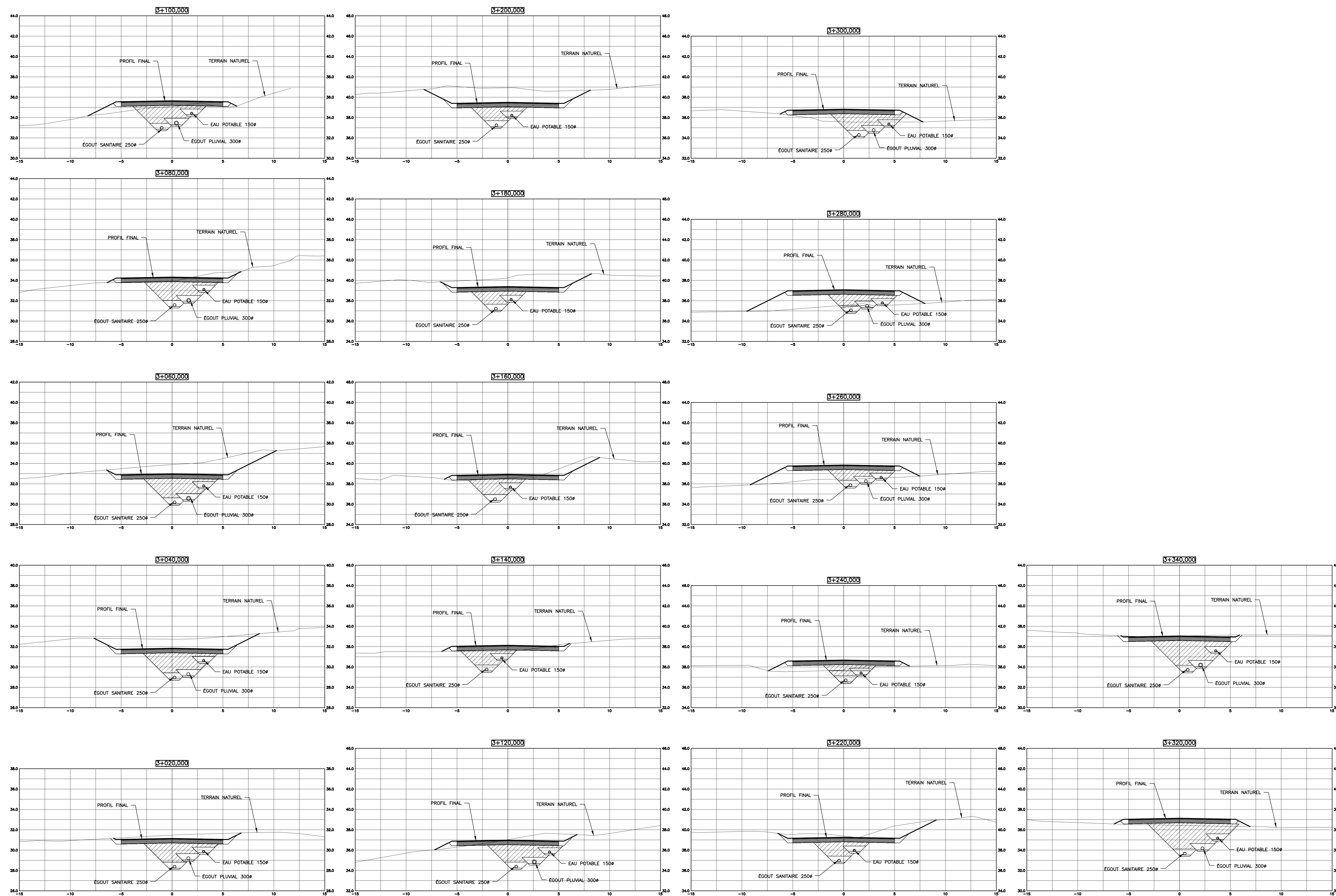
PROJECT NAME:
**RESIDENTIAL EXPANSION AND
 CONSTRUCTION OF A NEW
 WATER SUPPLY WELL**

SHEET TITLE:
**MAIN ROAD
 TYPICAL SECTIONS**

DISCIPLINE:
INFRASTRUCTURE

DESIGNER: Duane E. Mathers, ASCT, Andre Hardy	SCALE: HORIZ. : 1:150 VERT. : 1:150
DESIGNED: Duane E. Mathers, ASCT.	DATE: 2018/07/27
DRAWN: Andréanne Dumont, ing.	APPROVED: Laurie Juneau-Paradis, ing.
PROJECT NO: Q182545A	DRAWING NO: SEC3
SHEET NO: SEC3 of SEC4	

"C" STREET



No.	Date	Description	By
0	18/03/22	ADDENDUM 03	L.J.-P.

DESIGNED BY: APPROVED BY:

CIMA+
 118 82 3095
 300 - 118, rue Lévesque, Québec, QC G1K 9H8 CANADA

**WHAPMAGOOSTUI
 FIRST NATION**

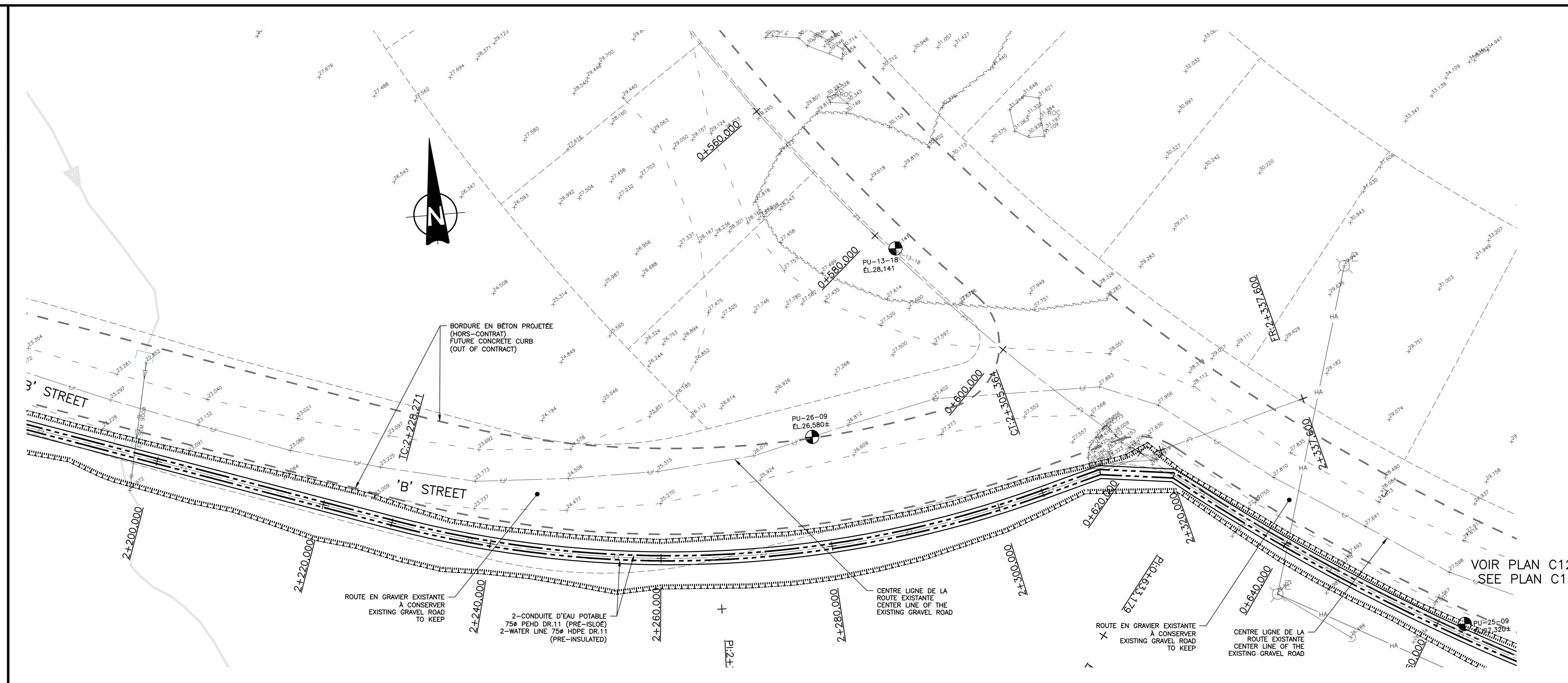
PROJECT NAME:
**RESIDENTIAL EXPANSION AND
 CONSTRUCTION OF A NEW
 WATER SUPPLY WELL**

BEST TITLE:
**"C" STREET
 TYPICAL SECTIONS**

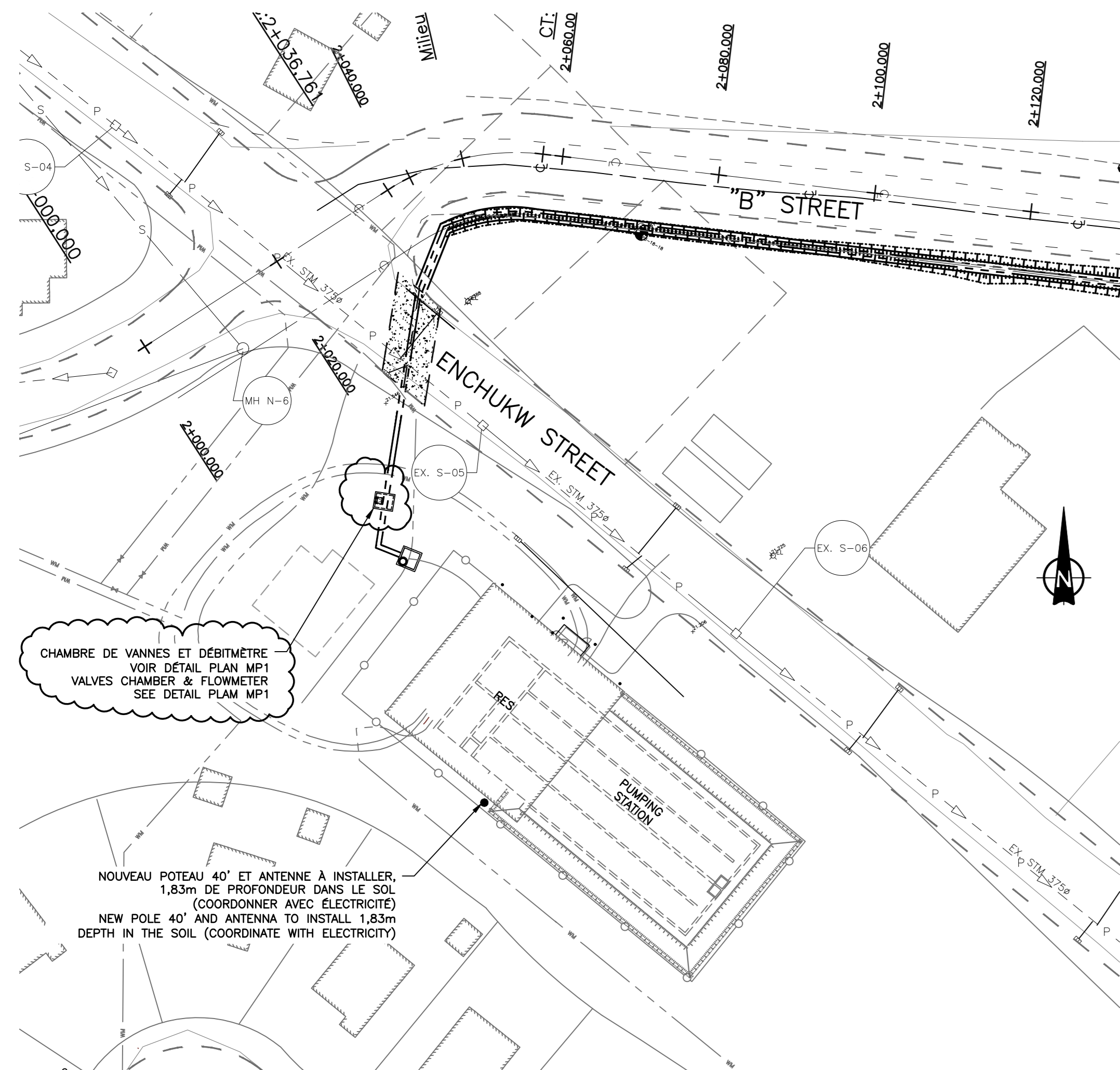
DISCIPLINE:
INFRASTRUCTURE

DESIGNER: Duane E. Mathers, ASCT., André Hardy	SCALE: HORL : 1:150 VERT. : 1:150
DESIGNED BY: Duane E. Mathers, ASCT.	DATE: 2018/07/27
DRAWN BY: Andréanne Dumont, ing.	APPROVED BY: Laure Juneau-Paradis, ing.
PROJECT NO: Q182545A	DRAWING NO. SEC4
SHEET NO: SEC4 of SEC4	

VOIR PLAN C10/
SEE PLAN C10

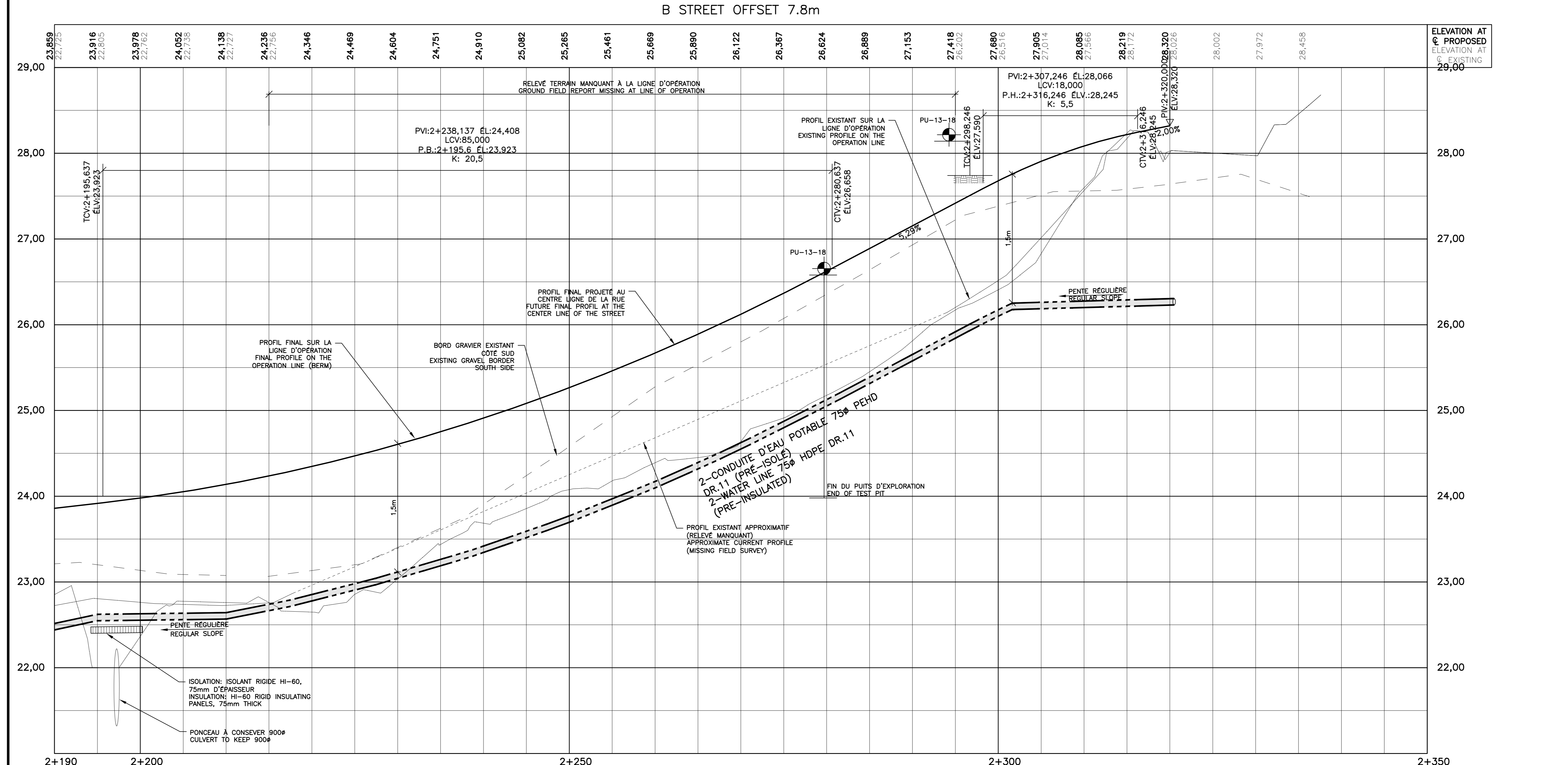


VOIR PLAN C12/
SEE PLAN C12



**PLAN DE LOCALISATION
STATION DE POMPAGE & RÉSERVOIR**
LOCATION PLAN PUMPING
STATION AND RESERVOIR

RAPPORT: 1:500



EXISTING	PROPOSED
	SURVEY MARK
	LOT LINE
	BUILDING
	TOP OF SLOPE
	BOTTOM OF SLOPE
	WOODED BOUNDARY
	FENCE
	HEDGE
	CONTOUR LINE
	WATER LINE (plan)
	WATER LINE (profile)
	FIRE HYDRANT
	VALVE
	SERVICE CONNECTION
	DITCH (plan)
	STORM SEWER LINE (plan)
	DOMESTIC SEWER LINE (plan)
	STORM SEWER LINE (profile)
	DOMESTIC SEWER LINE (profile)
	STORM MANHOLE
	CATCHBASIN
	CENTER LINE
	GRAVEL SHOULDER
	CURB
	SIDEWALK
	SAFETY BARRIER
	RETAINING WALL
	RAILROAD
	LAMP POST
	UNDERGROUND TELEPHONE NETWORK
	OVERHEAD TELEPHONE NETWORK
	UNDERGROUND CABLE NETWORK
	OVERHEAD CABLE NETWORK
	TELEPHONE POST
	ELECTRIC POST
	COMMUNICATION MANHOLE
	UNDERGROUND ELECTRIC NETWORK
	OVERHEAD ELECTRIC NETWORK
	ELECTRIC MANHOLE
	GAS LINE
	UNDERGROUND LIGHTING NETWORK
	OVERHEAD LIGHTING NETWORK

No.	Date	Description	By
1	1993/22	ADDENDUM 03	A.D.
2	1993/14	FOR TENDER	A.D.
3	1993/01	FOR COMMENTS 98%	A.D.
4	18/09/28	90% DESIGN SUBMISSION	DEM

DESIGNED BY: APPROVED BY:

CIMAT
1, 118 82-885
300-116, rue Lévesque, Québec, QC G1K 9H9 CANADA

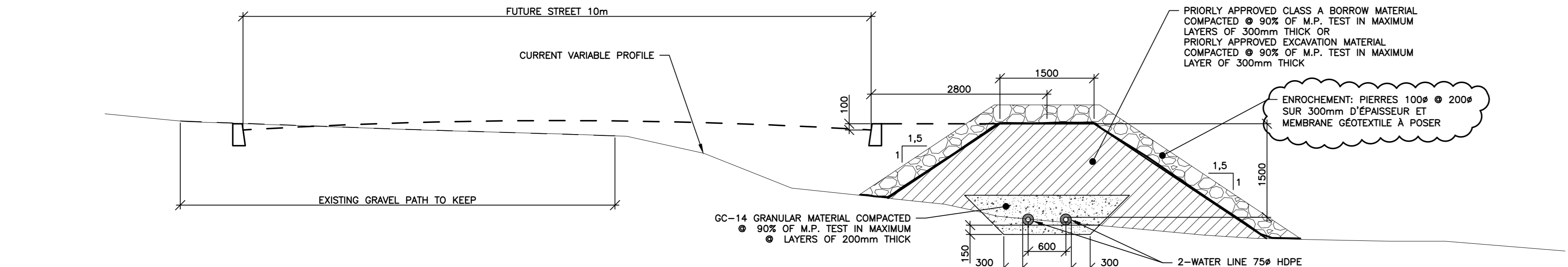
**WHAPMAGOOSTUI
FIRST NATION**

PROJECT NAME:
**RESIDENTIAL EXPANSION AND
CONSTRUCTION OF A NEW
WATER SUPPLY WELL**

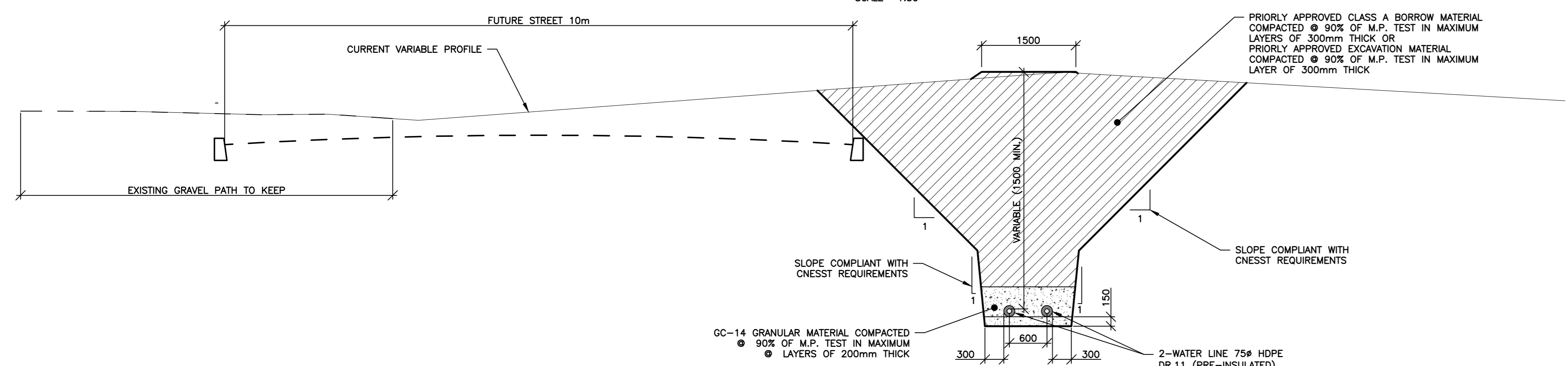
DRAWING TITLE:
**'B' STREET
2+200 @ 2+320**

DISCIPLINE:
INFRASTRUCTURE

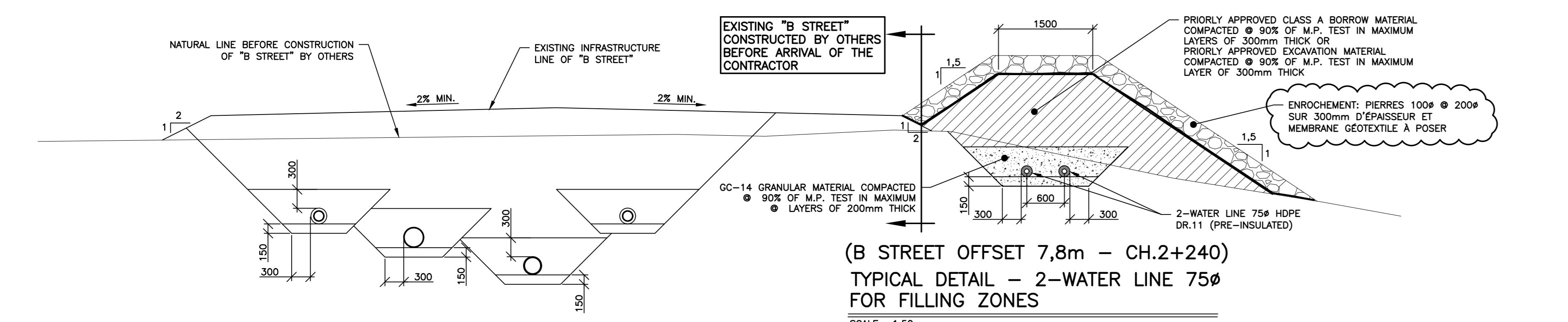
DESIGNER: Duane E. Mathers, ASCT, André Hardy	SCALE:	HOR.: 1:250 VER.: 1:25
DESIGNER: Duane E. Mathers, ASCT.	DATE:	2018/09/28
DRAWER: Yves Durand, ing./Andréanne Dumont, ing.	APPROVER:	Laurie Juneau-Paradis, ing.
PROJECT NO: Q182578A	DRAWING NO:	C11
SHEET NO: 11 of 17		



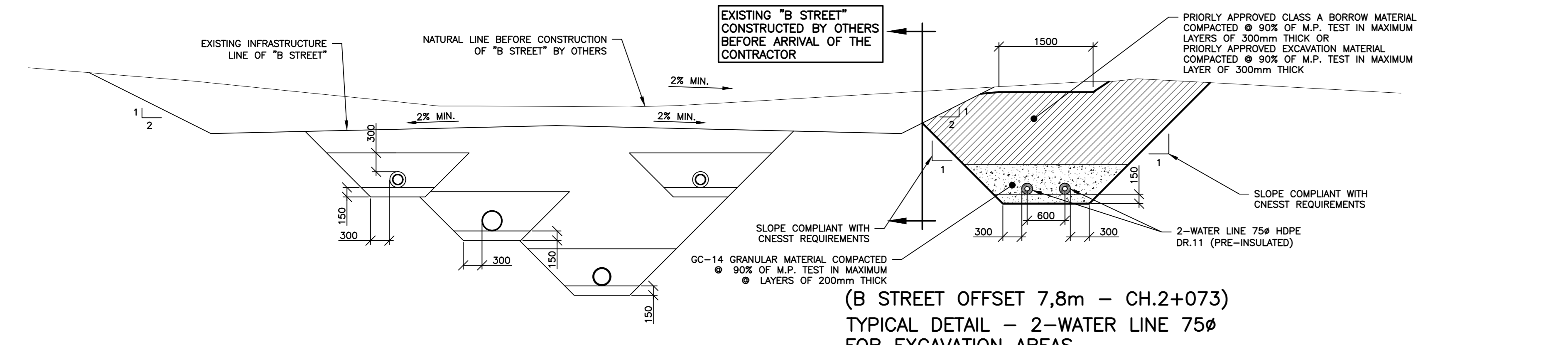
(MAIN ROAD - CH.0+780)
TYPICAL DETAIL - 2-WATER LINE 75Ø
FOR FILLING ZONES
SCALE= 1:50



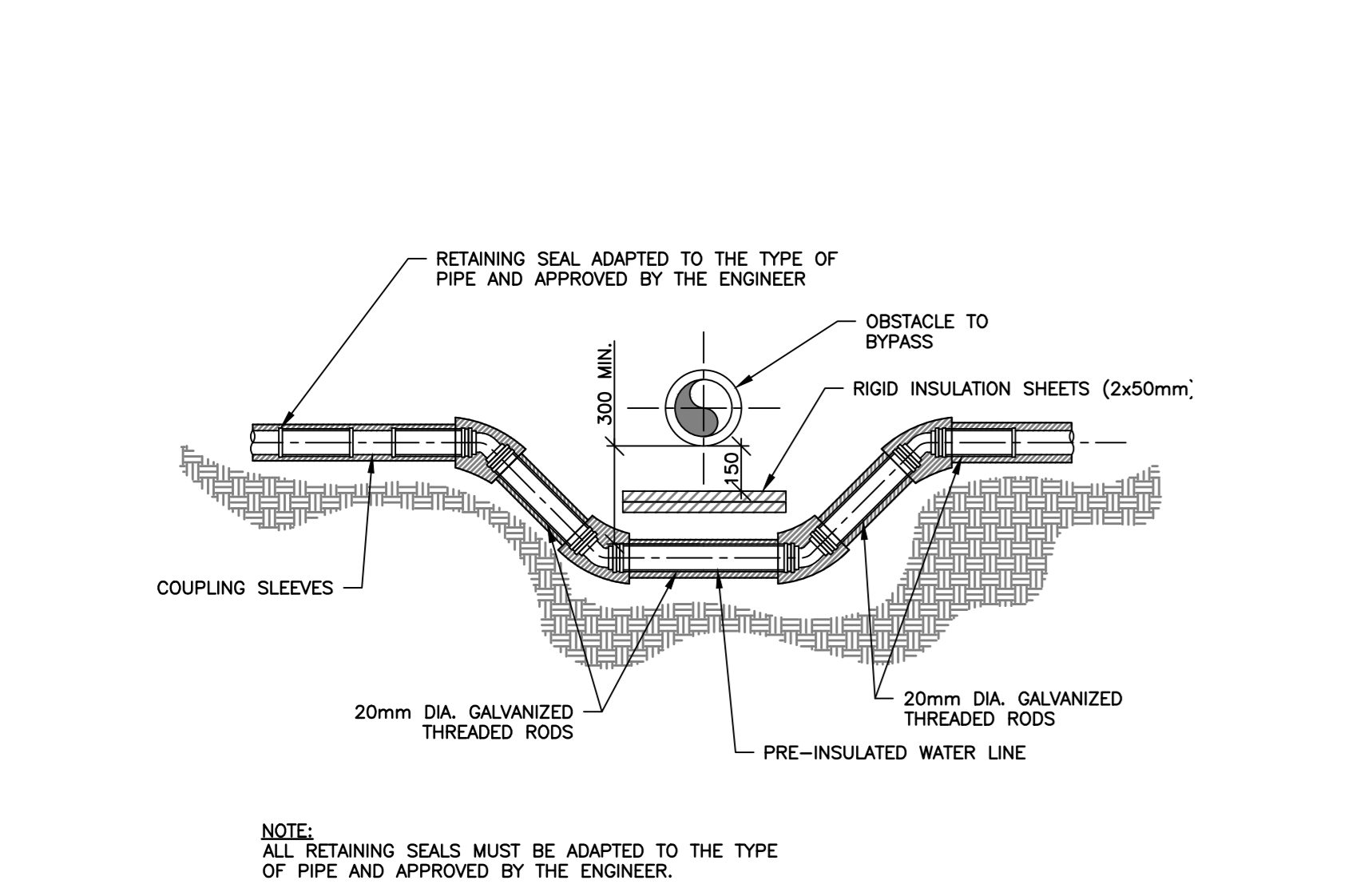
(MAIN ROAD - CH.0+960)
TYPICAL DETAIL - 2-WATER LINE 75Ø
FOR EXCAVATION AREAS
SCALE= 1:50



(B STREET OFFSET 7,8m - CH.2+240)
TYPICAL DETAIL - 2-WATER LINE 75Ø
FOR FILLING ZONES
SCALE= 1:50



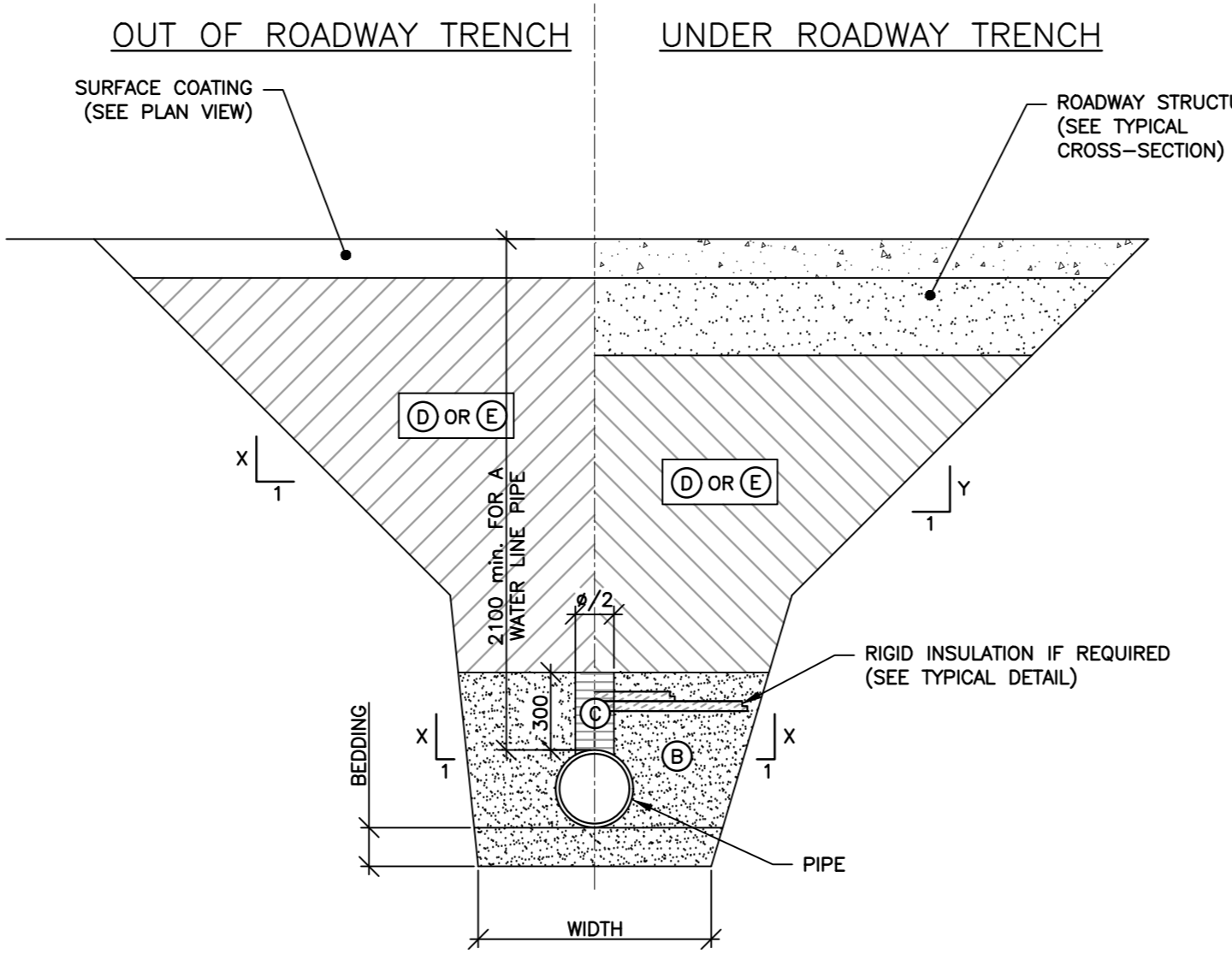
(B STREET OFFSET 7,8m - CH.2+073)
TYPICAL DETAIL - 2-WATER LINE 75Ø
FOR EXCAVATION AREAS
SCALE= 1:50



TYPICAL DETAIL - BYPASS OF A PRE-INSULATED
WATER LINE
SCALE : NONE

PIPE NOMINAL DIAMETER (mm)	MINIMAL BEDDING THICKNESS IN SOIL OR ROCK	TRENCH BOTTOM WIDTH (mm)
300 AND LESS	150	OUTSIDE Ø + 600
350 TO 600	150	OUTSIDE Ø + 900
750 TO 1200	200	OUTSIDE Ø + 1200

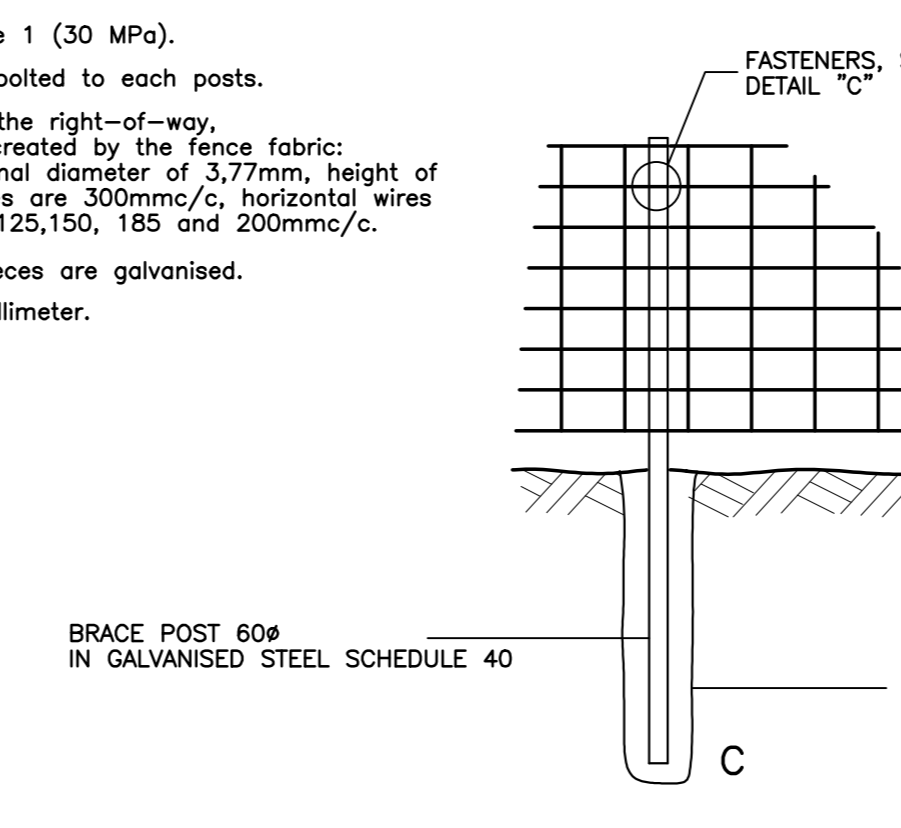
- (A) SEWER OR WATER LINE
 - (B) GC-14 GRANULAR MATERIAL COMPACTED @ 90% OF M.P. TEST IN MAXIMUM LAYERS OF 200mm THICK
 - (C) UNCOMPACTED GC-14 GRANULAR MATERIAL
 - (D) PRIORLY APPROVED CLASS A BORROW MATERIAL COMPACTED @ 90% OF M.P. TEST IN MAXIMUM LAYERS OF 300mm THICK
 - (E) PRIORLY APPROVED EXCAVATION MATERIAL COMPACTED @ 90% OF M.P. TEST IN MAXIMUM LAYERS OF 300mm THICK
- *A 3 METER HORIZONTAL DISTANCE MUST BE APPLIED WHEN THE VERTICAL DISTANCE OF 300mm BETWEEN THE WATER LINE AND THE SEWER CAN NOT BE MET
- X = SLOPE COMPLIANT WITH CNESST REQUIREMENTS
- Y = SLOPE COMPLIANT WITH CNESST REQUIREMENTS WHEN BACKFILLING USING AN EXCAVATION MATERIAL OR A 2%1%V TRANSITION (DOWN TO 2,1% DEPTH) WHEN BACKFILLING USING A BORROW MATERIAL



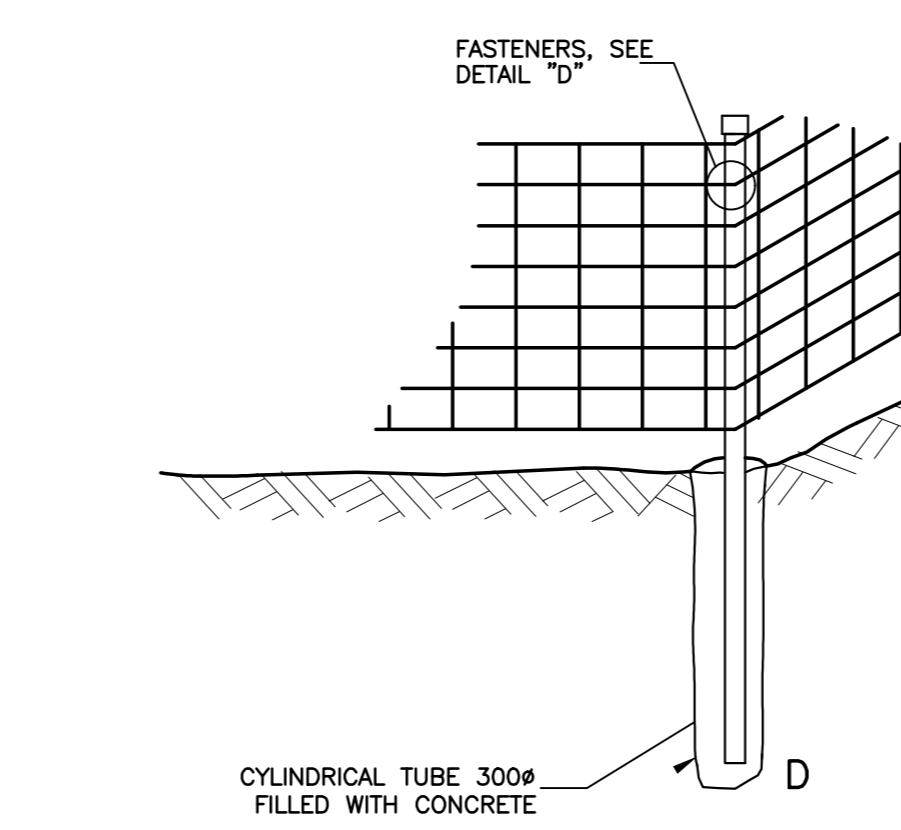
TYPICAL DETAIL - WATER LINE AND SEWER TRENCH
SCALE : NONE

GALVANISED STEEL POST TYPES			
GATEPOST	A	90Ø, SCHEDULE 40 x 2600	O
INTERMEDIATE POST	B	30 x 30 x 3,5 x 2600	T
LINE POST	C	90Ø, SCHEDULE 40 x 2600	O
ANGLE POST	D	90Ø, SCHEDULE 40 x 2600	O

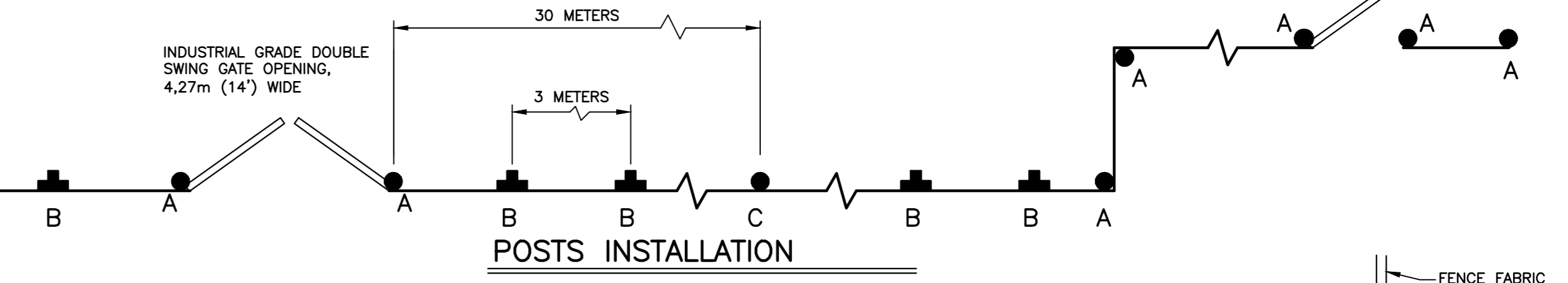
NOTES:
- Concrete cement: type 1 (30 MPa).
- Frame members are bolted to each posts.
- Posts are placed on the right-of-way, within the perimeter created by the fence fabric: 10 wires with a nominal diameter of 3,77mm, height of 1200mm, vertical wires are 300mm/c, horizontal wires are at 75, 90, 100, 125, 150, 185 and 200mm/c.
- All of the metallic pieces are galvanised.
- Dimensions are in millimeter.



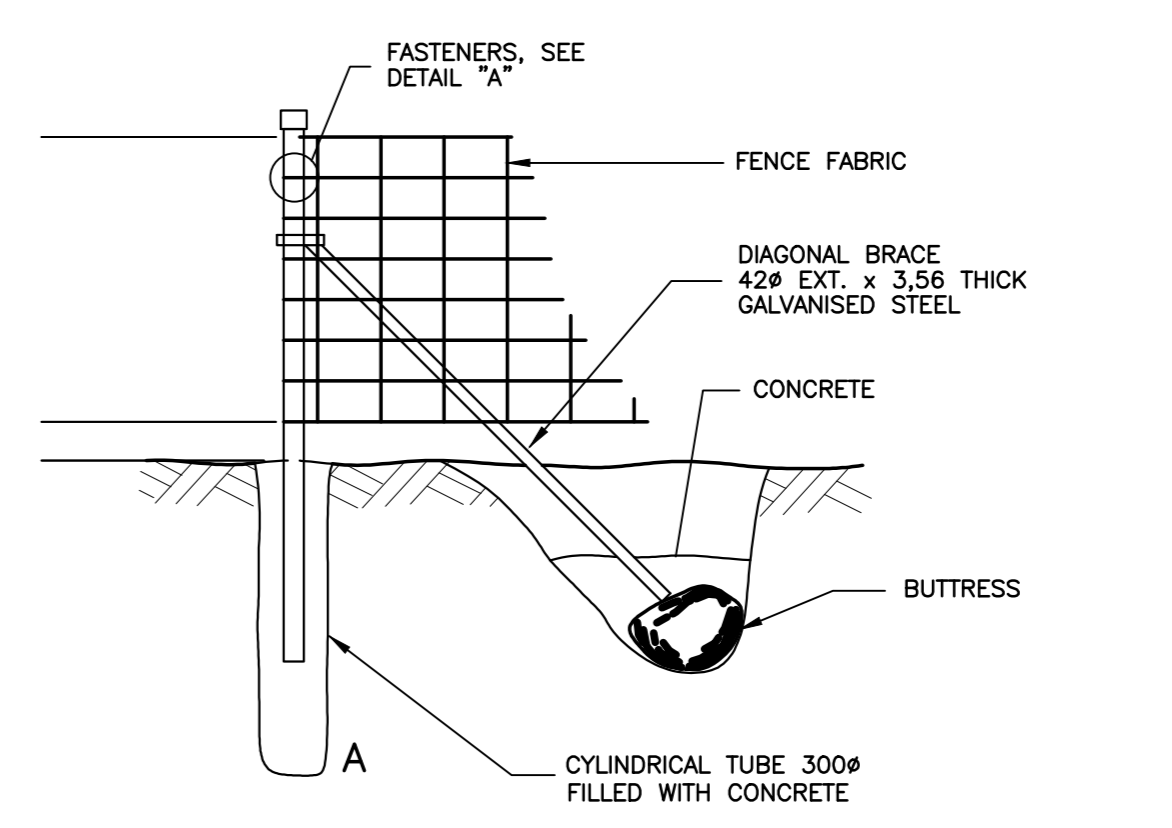
(EVERY 30 METERS AND EACH ANGLE DEVIATION SUPERIOR TO 20°)
LINE POSTS
SCALE=NONE



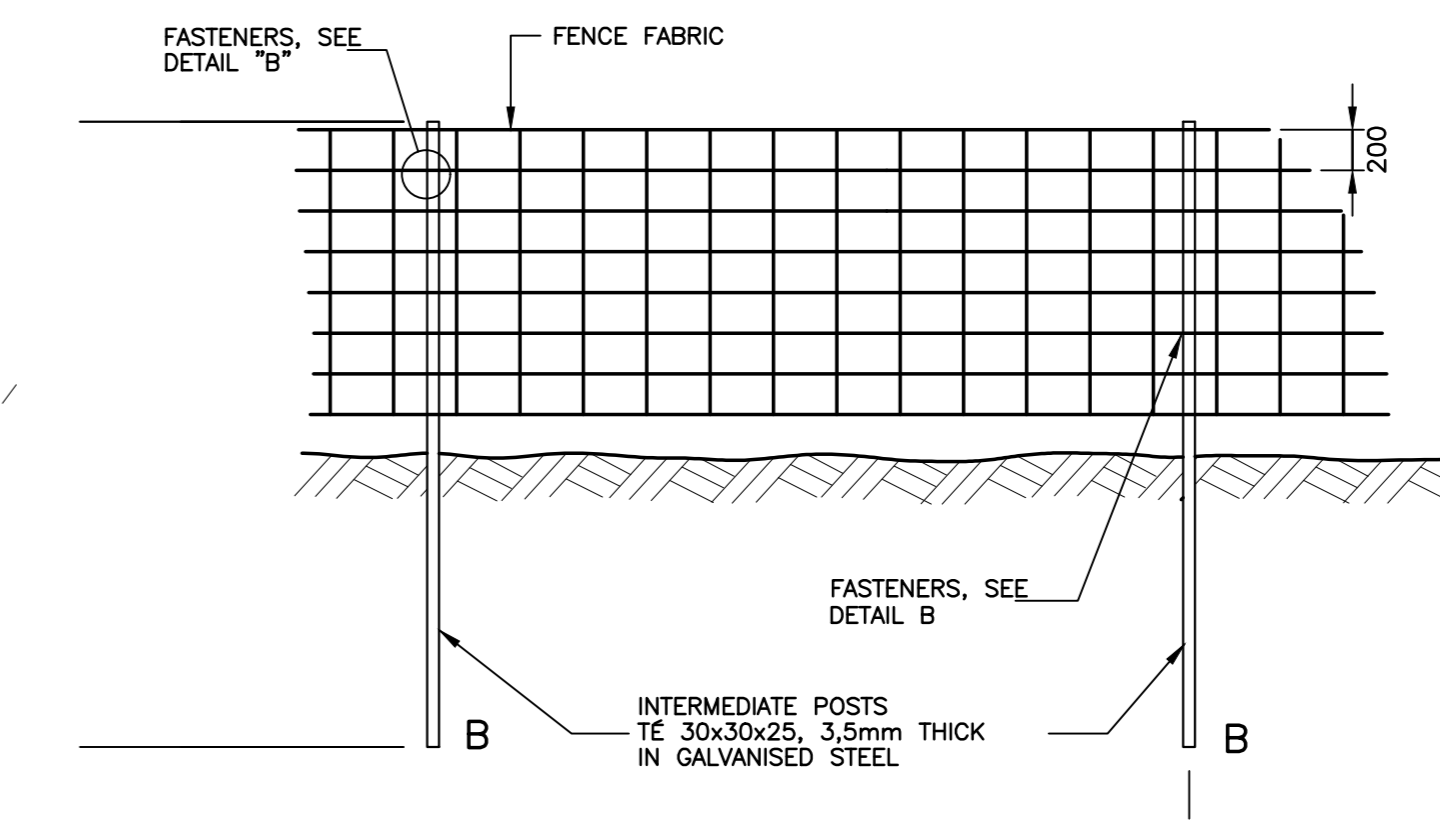
(FOR EACH DEFLECTION SUPERIOR TO 10°)
ANGLE POSTS
SCALE=NONE



POSTS INSTALLATION
SCALE=NONE

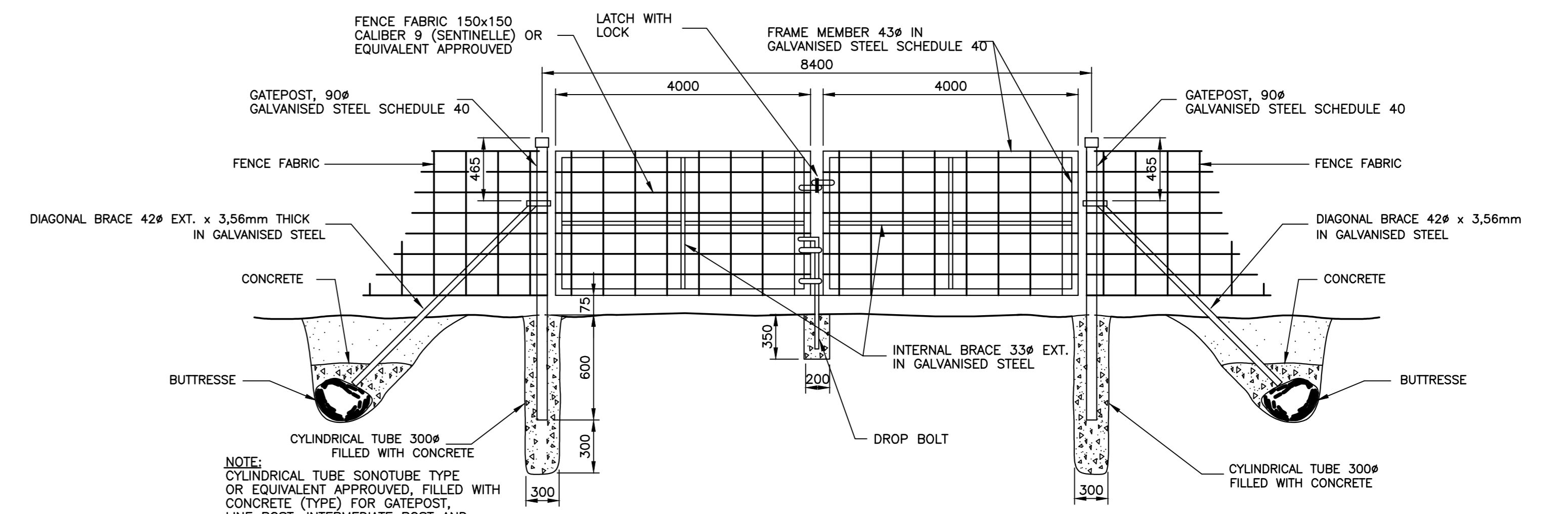


GATEPOSTS
SCALE=NONE

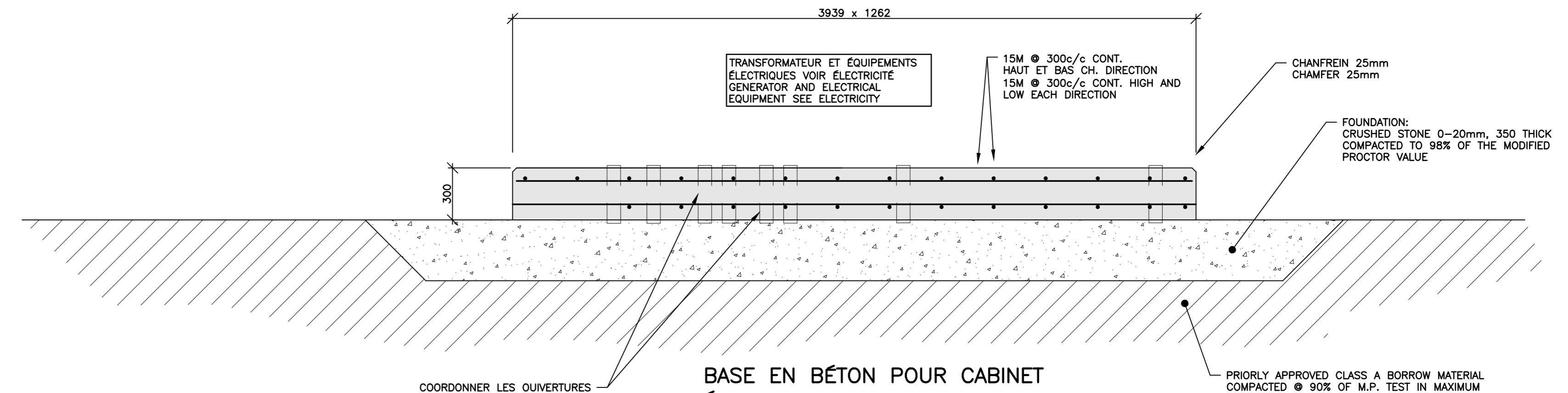


INTERMEDIATE POSTS
SCALE=NONE

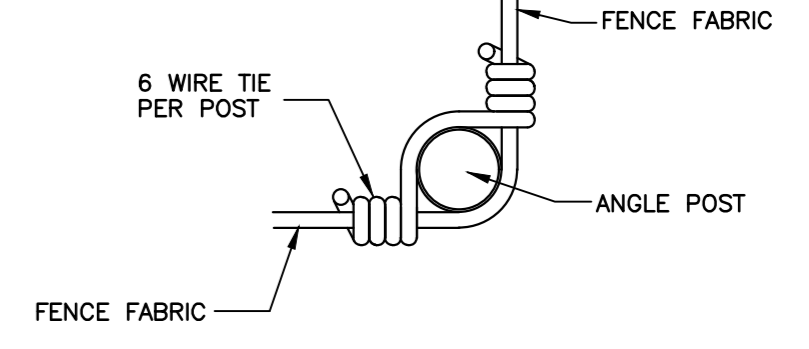
RECTANGULAR MESH FENCE - TYPE DETAIL
SCALE=NONE



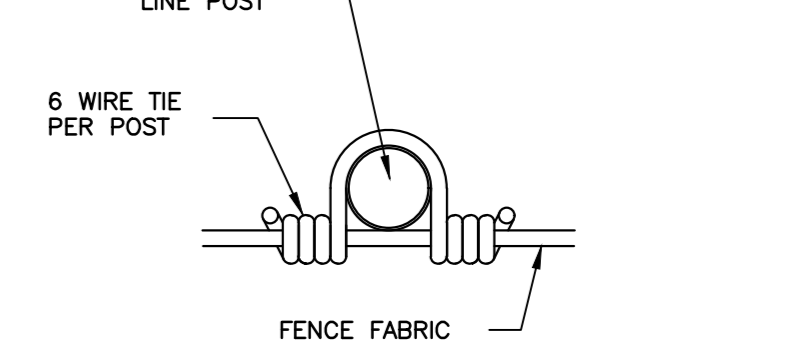
DOUBLE SWING GATE OPENING DETAIL
SCALE=NONE



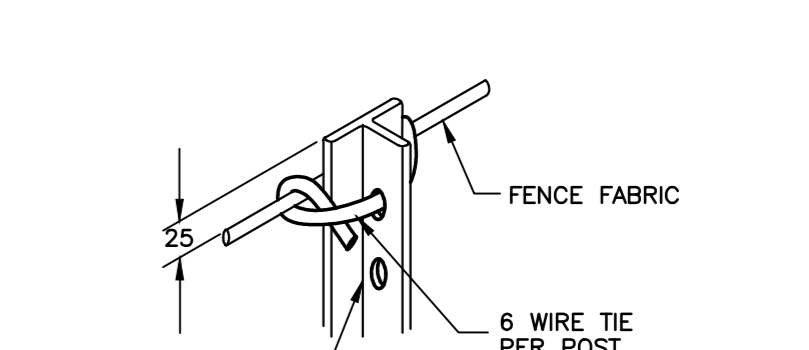
BASE EN BÉTON POUR CABINET ÉLECTRIQUE ET TRANSFORMATEUR
CONCRETE BASE FOR ELECTRIC CABINET AND TRANSFORMATEUR
ÉCHELLE: 1:20/SCALE 1:20



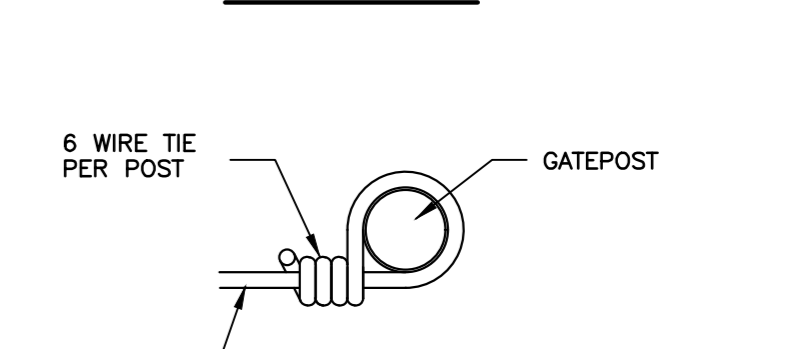
DETAIL "D"



DETAIL "C"



DETAIL "B"



DETAIL "A"

FENCE FABRIC FASTENERS
SCALE=NONE

No.	Date	Description	By
2	2019/03/22	ADDENDUM 03	A.D.
1	2019/03/15	ADDENDUM 01	A.D.
0	19/02/14	FOR TENDER	A.D.
B	19/02/01	FOR COMMENTS 95%	A.D.
A	18/09/28	80% DESIGN SUBMISSION	DEM

DESIGNED BY: [Signature]

APPROVED BY: [Signature]

CIMA+

T: 514-693-3375
300-1160, boul. Lebourgeois, Québec QC G2K 3J8 CANADA

WHAPMAGOOSTUI FIRST NATION

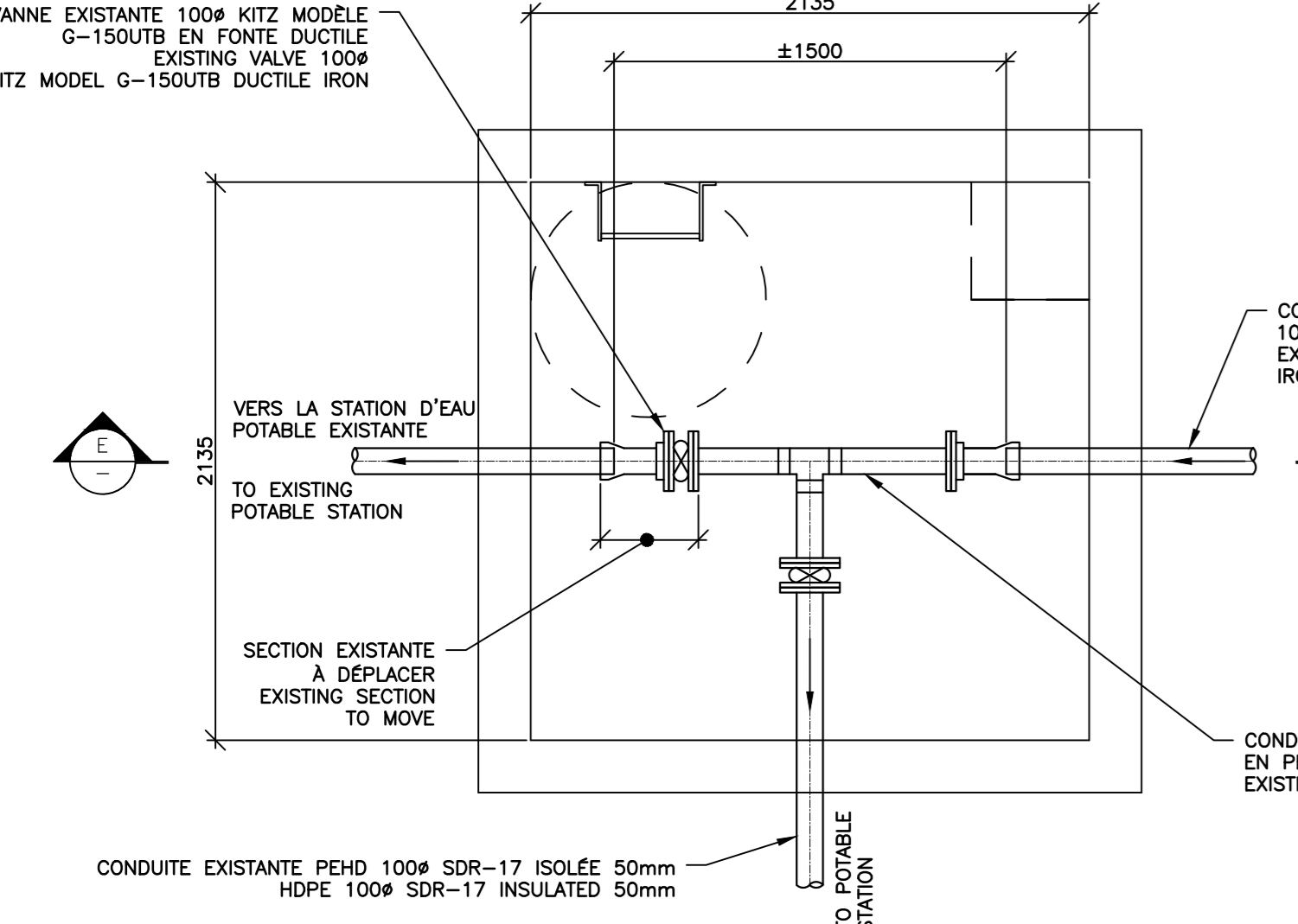
PROJECT NAME:
RESIDENTIAL EXPANSION AND CONSTRUCTION OF A NEW WATER SUPPLY WELL

SHEET TITLE:
DETAILS

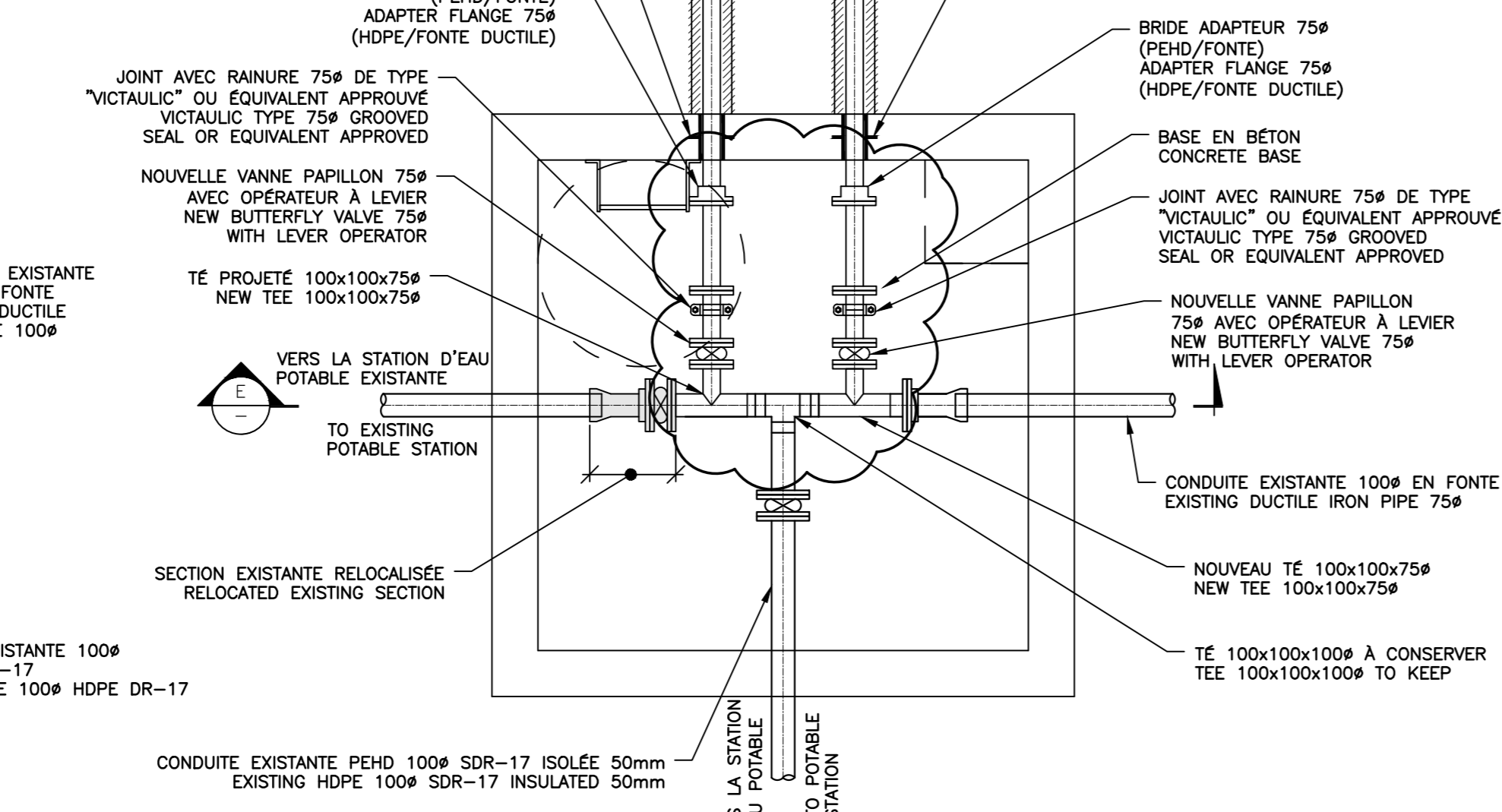
DISCIPLINE:
INFRASTRUCTURE

DESIGNED BY: Duane E. Mathers, ASCT, André Hardy
DATE: 2018/09/28
AS NOTED

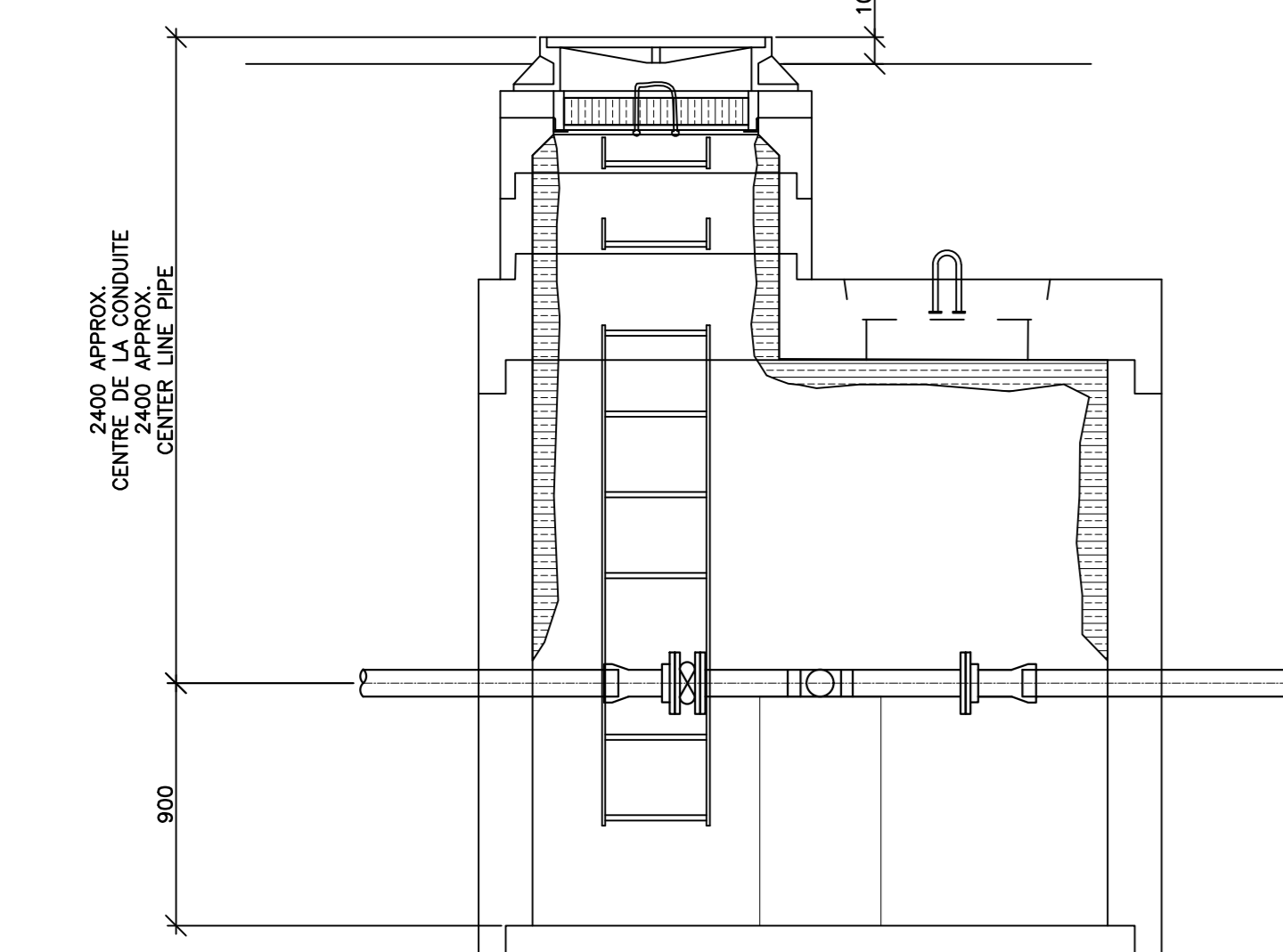
APPROVED BY: Yves Durond, Ing. Andriane Dumont, Ing. Laurin Jureau Paradis, Ing.
PROJECT NO.: 0182576A
DRAWING NO.:
SHEET NO.: 17 of 17
C17



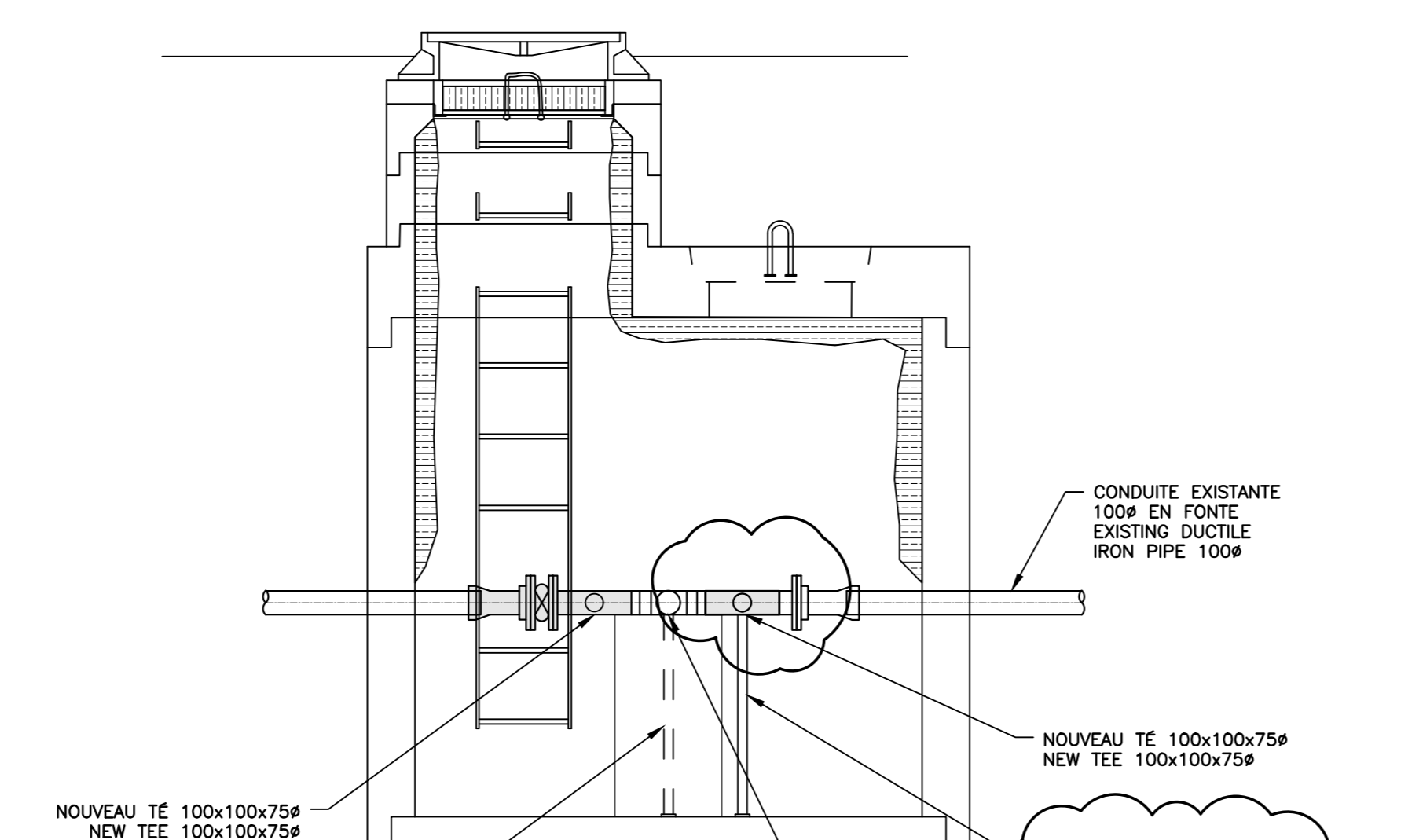
VUE EN PLAN PLAN VIEW
ÉCHELLE/SCALE= 1: 25



VUE EN PLAN PLAN VIEW
ÉCHELLE/SCALE= 1: 25



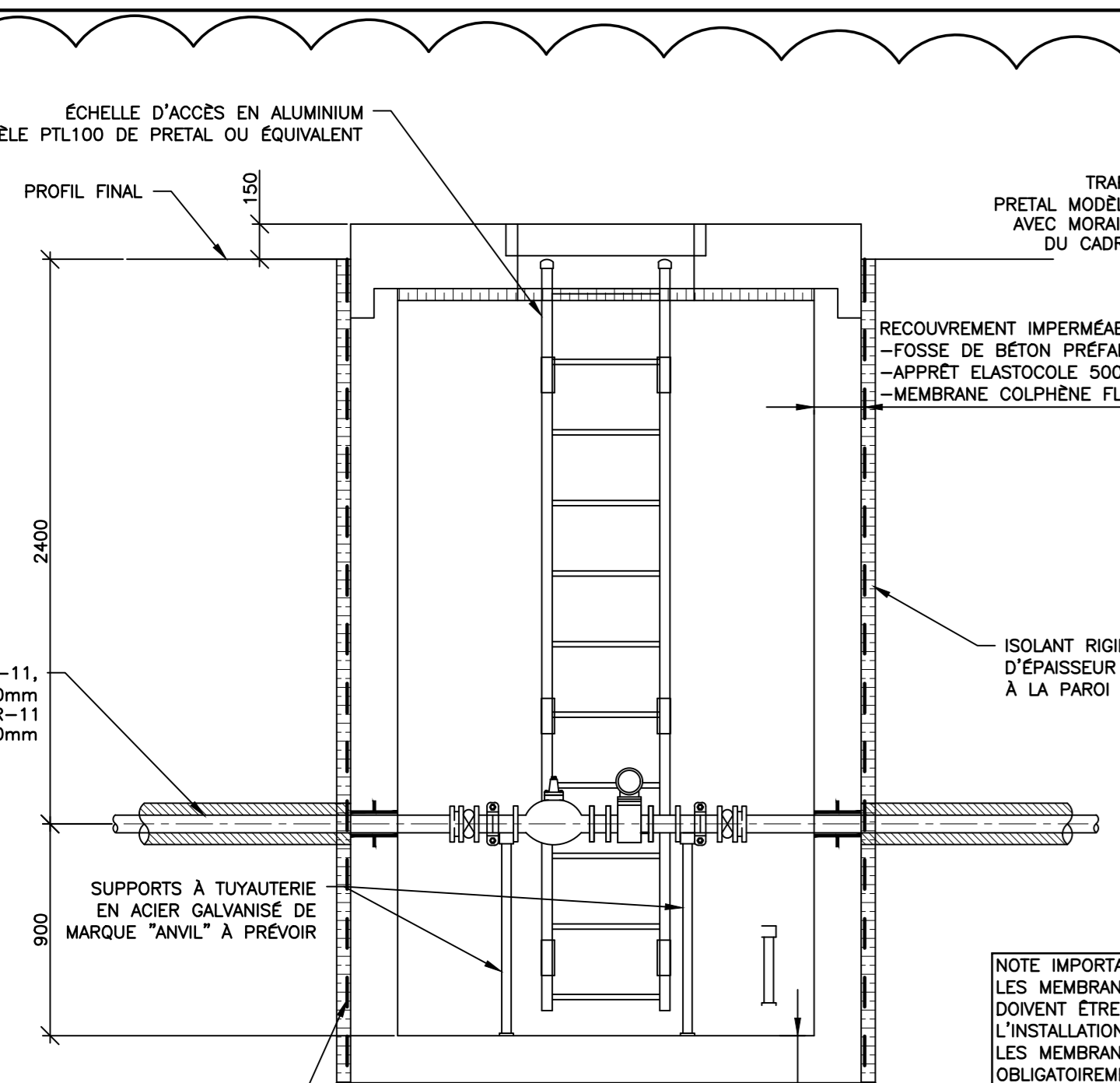
SECTION TYPE CROSS SECTION E
ÉCHELLE/SCALE= 1: 25



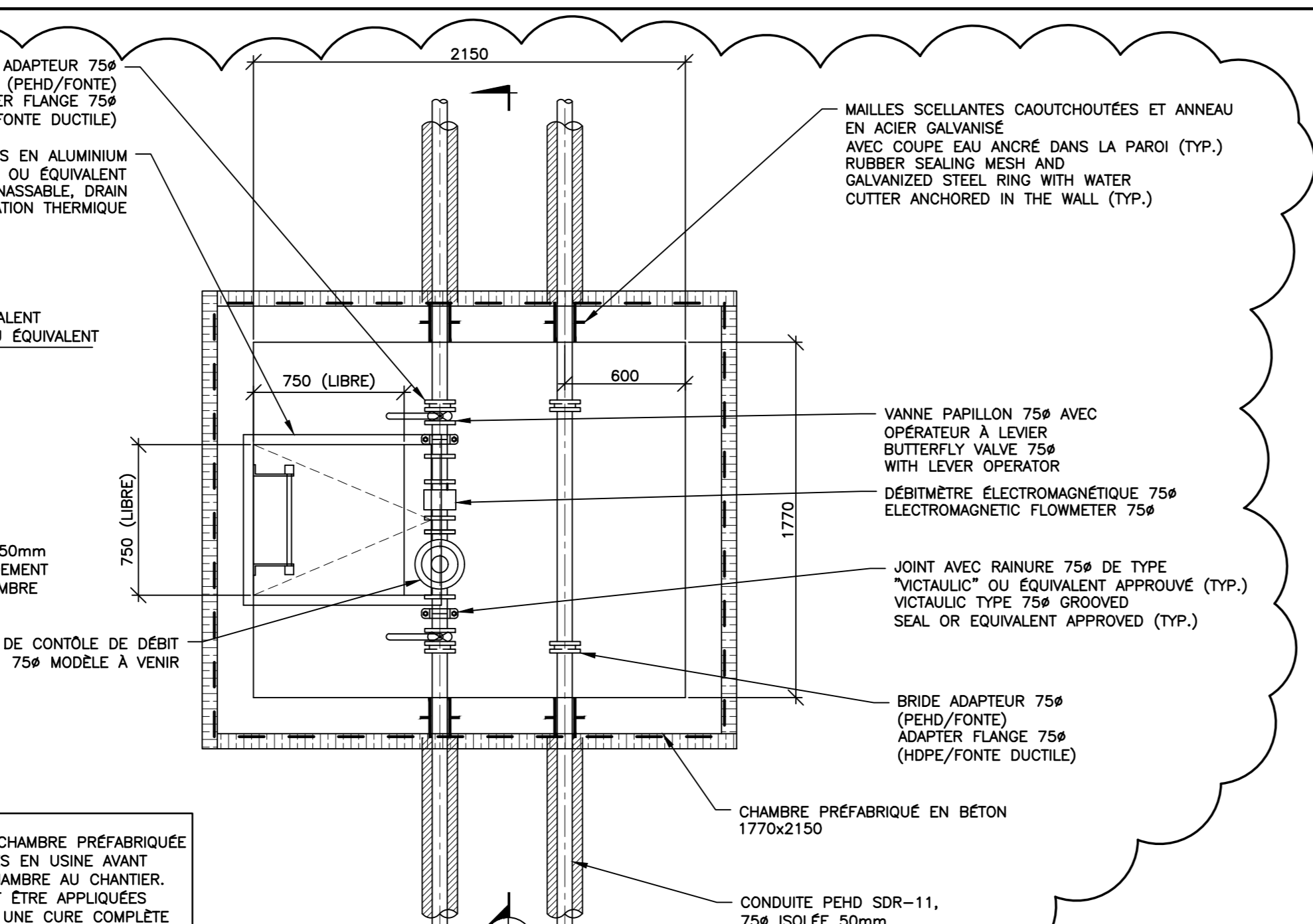
SECTION TYPE CROSS SECTION E
ÉCHELLE/SCALE= 1: 25

CHAMBRE DE VANNE VC-4 SITUATION EXISTANTE VALVES CHAMBER VC-4 EXISTING SITUATION

CHAMBRE DE VANNE VC-4 SITUATION PROJÉTÉE VALVES CHAMBER VC-4 PROJECTED DEVELOPMENT

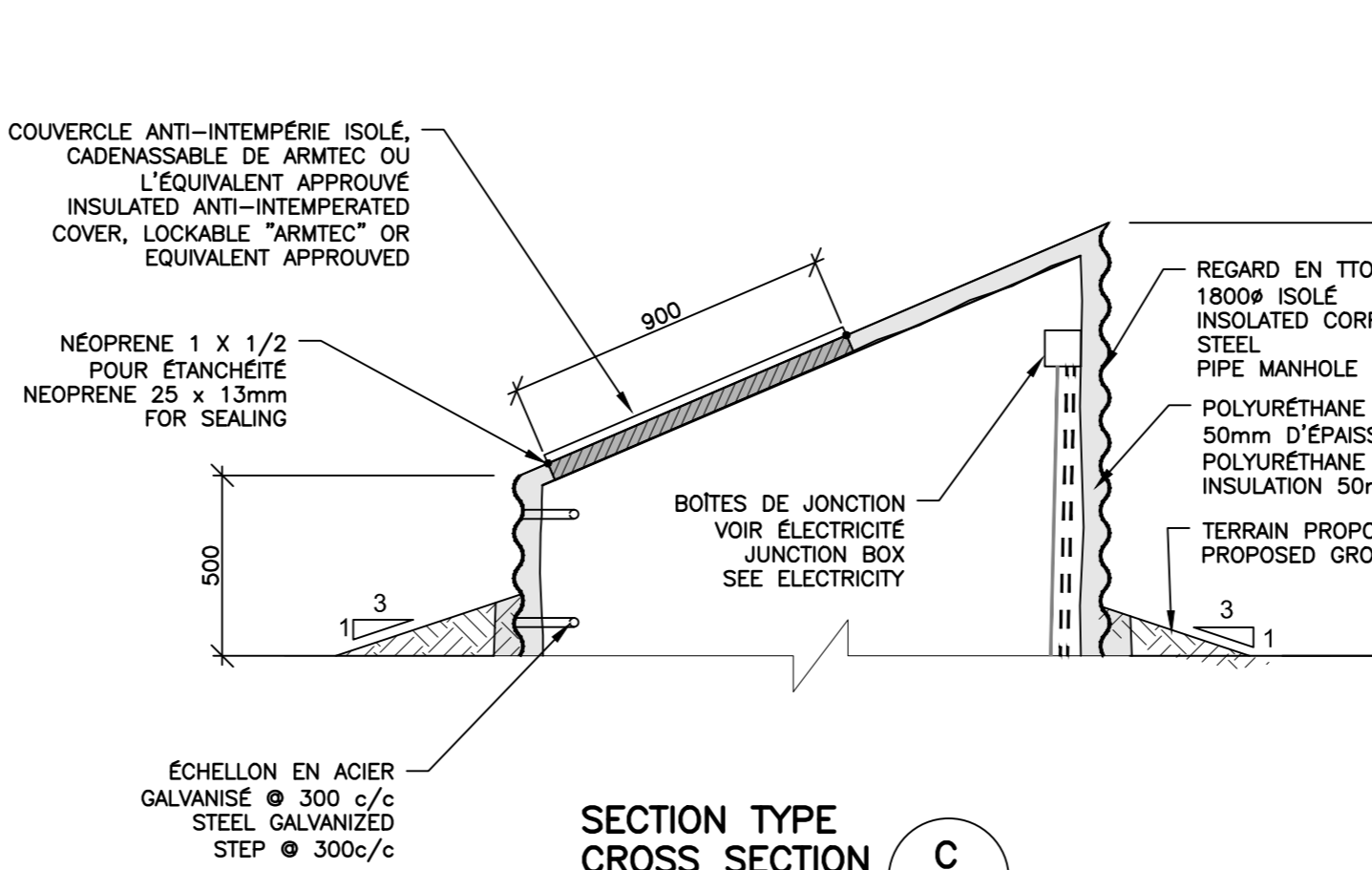


SECTION TYPE CROSS SECTION B
ÉCHELLE/SCALE= 1: 25

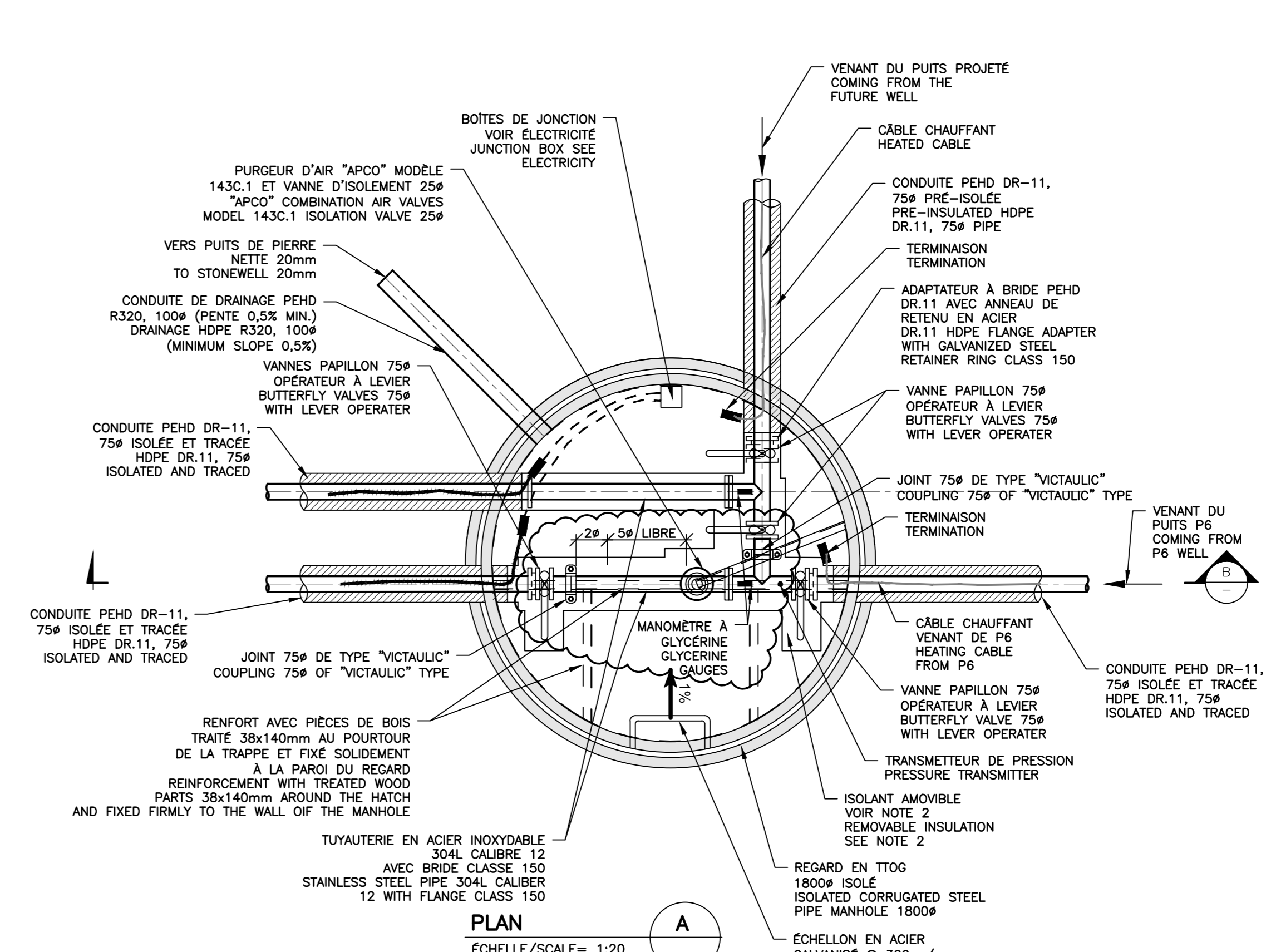


VUE EN PLAN PLAN VIEW A
ÉCHELLE/SCALE= 1: 25

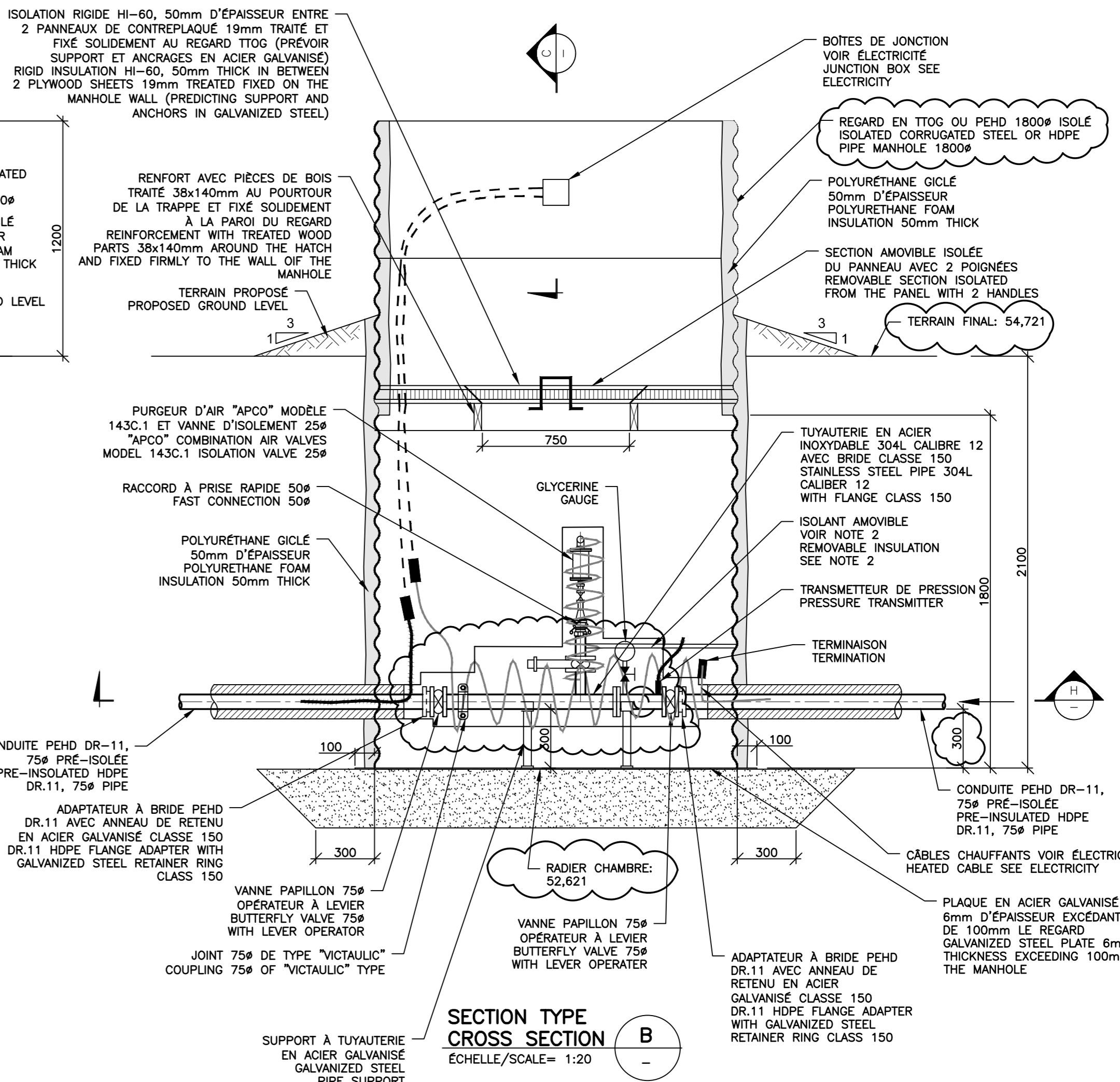
CHAMBRE DE VANNE ET DÉBITMÈTRE VALVES CHAMBER & FLOWMETER



SECTION TYPE CROSS SECTION C
ÉCHELLE/SCALE= 1:20



PLAN A
ÉCHELLE/SCALE= 1:20



SECTION TYPE CROSS SECTION B
ÉCHELLE/SCALE= 1:20

DÉTAIL - CHAMBRE DE VANNE ET PURGEUR D'AIR VALVES CHAMBER & AIR/VACUUM VALVE

- LÉGENDE: (CÂBLE CHAUFFANT) LEGEND: (HEATING CABLE)**
- - - - - CÂBLE D'ALIMENTATION VOIR ÉLECTRICITÉ POWER CABLE SEE ELECTRICITY
 - - - - - CÂBLE CHAUFFANT AUTORÉGULANT 120V, SELF REGULATING HEATING CABLE 120V.
 - - - - - CÂBLE CHAUFFANT À PUISSANCE CONSTANTE "LONG LINE" 600V. HEATING CABLE WITH CONSTANT POWER "LONG LINE" 600V.

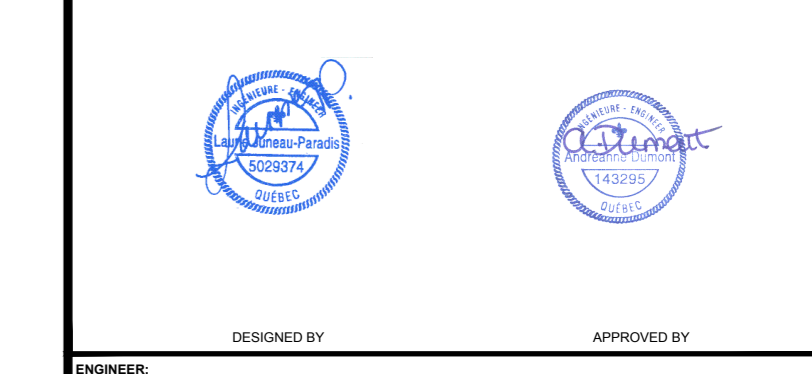
NOTES

- 1- LE RACCORDEMENT DES CÂBLES CHAUFFANTS DOIT ÊTRE EFFECTUÉ PAR L'ENTREPRENEUR EN ÉLECTRICITÉ.
- 2- COUVERTURES ISOLANTES AMOVIBLES IMPERMÉABLES ET RÉUTILISABLES TELLES QUE ISOTEX-CRYOGEL-1700 CONFECTIONNÉE EN USINE, DE TISSU DE FIBRE DE VERRE IMPRÉGNÉE DE SILICONE À L'INTÉRIEUR ET À L'EXTÉRIEUR ET ISOLÉE À L'AIDE DE DEUX COUCHES DE 10 mm D'ÉPAISSEUR DE CRYOGEL 2 ; C/A ATTACHES VELCRO, FILS D'ACIER INOXYDABLE 10 BRINS, PINS ET CROCHETS EN ACIER INOXYDABLE, CORDONS DE FIBRES DE VERRE IMPRÉGNÉS DE SILICONE, ET MUNIES D'ÉTIQUETTES SPÉCIFIQUES À L'EMPLACEMENT ET AU POSITIONNEMENT DE CHAQUE D'ELLES.

NOTES

- 1- THE CONNECTION OF THE HEATING CABLES MUST BE MADE BY THE ELECTRICITY CONTRACTOR.
- 2- REMOVABLE AND REUSABLE INSULATED COVERS SUCH AS ISOTEX-CRYOGEL-1700 MADE FROM FACTORY, SILICONE IMPREGNATED FABRIC INSIDE AND OUTSIDE AND INSULATED USING 10mm CRYOGEL THICKNESS LAYERS 2 C/A VELCRO FASTENERS, STAINLESS STEEL WIRES, STAINLESS STILL PINS AND HOOKS, SILICONE-IMPREGNATED GLASS FIBER CORDS AND LABEL SPECIFIC TO THE LOCATION AND POSITIONING OF EACH OF THEM SAME.

No.	Date	Description	By
1	18/03/22	ADDENDUM 03	A.D.
2	18/02/14	FOR TENDER	A.D.
3	18/02/01	FOR COMMENTS 58%	A.D.
4	18/09/28	80% DESIGN SUBMISSION	DEM



RESIDENTIAL EXPANSION AND CONSTRUCTION OF A NEW WATER SUPPLY WELL

VALVE CHAMBER, FLOWMETER AND VALVE CHAMBER VC-4 TO MODIFY

INFRASTRUCTURE

DESIGNED BY: André Hardy	SCALE: AS NOTED
DESIGNED BY: André Hardy	DATE: 2018/09/28
DESIGNED BY: Yves Durand, ing./Andréanne Dumont, ing.	DATE: 2018/09/28
PROJECT NO: Q182578A	DRAWING NO: MP1

