

Town of Osoyoos

Standard Drawings 2023



Revised June 2023

ENGINEERING ■ PLANNING ■ URBAN DESIGN

**Town of Osoyoos
Subdivision and Development Standards
Standards Drawings**

Section C – General

S-Card	Service Card
C-1	Standard Design Drafting Symbols

Section D – Storm Sewers and Drainage

D-1	Rainfall Intensity Duration/Frequency Design Curves
D-2	Overland Flow Time Curves
D-3	Sanitary or Storm Sewer Connections to Main Where Manholes are Required
D-4	Catch Basin Assembly Standard Type
D-5	Catch Basin Assembly Curb-Inlet Type
D-6	Catch Basin Installation Depressed Gutter
D-7	Drainage Drywell
D-8	Storm Sewer Outlet Structure
D-9	Storm Sewer Inlet Structure
D-10	Typical Storm Sewer Manhole

Section R – Roads

R-1	Arterial (Four Lanes)
R-2	Collector Road
R-3	Urban Residential Road
R-4	Urban Local Road (Low Volume)
R-5	Residential Cul - de - Sac
R-6	Industrial Road
R-7	Rural Residential Road
R-8	Typical Curb Types
R-9	Typical Wheelchair Ramp, Curb Radius and Corner Cut
R-10	Sidewalk Cross – Over & Finishing Details
R-11	Paving Stone Sidewalk Runner Bond Pattern
R-12	Paving Stone Sidewalk Railway Pattern
R-13	Extruded Concrete Curb for Islands and Medians
R-14	Concrete Sign Base and Signage
R-15	Protective Bollard
R-16	Typical Tree Planting Detail Softscape
R-17	Typical Boulevard Tree Planting
R-18	Concrete Sign Base and Signage for Round Post

Section S – Sanitary Sewer

S-1	Typical Pipe Bedding and Backfill within the Pipe Zone
S-2	Typical Trench Sections
S-3	Typical Sewer Manhole
S-4	Typical Exterior Drop Manhole
S-5	Typical Sewer Service Connection
S-6	Typical Sewermain Cleanout

S-7	Service Connection Detail in a Cul - de - Sac
S-8	Typical Manhole Benching
S-9	Typical Pressure Sewer Service
S-10	Typical Air Release and Air Vacuum Valve for Sewer Forcemains
S-11	Sewer Service Inspection Chamber

Section SL – Street Lighting

SL-1	Typical Street Light
SL-2	Typical Street Light Complete with Power Base
SL-3	Anchor Base for Street Light without Power Base
SL-4	Anchor Base for Street Light with Power Base
SL-5	Anchor Base for Walkway Light
SL-6	Non Metered Power Base Wiring Detail
SL-7	Power Base Wiring Metered Electrical Service
SL-8	Handhole Wiring Schematic 120v Street Light
SL-9	Metered Power Base Wiring Detail

Section W – Waterworks

W-1	Typical Pipe Bedding and Backfill within the Pipe Zone
W-2	Typical Trench Section
W-3	Typical Water Service
W-4	Typical Thrust Block Details
W-5	Typical Fire Hydrant Assembly
W-6	Above Ground Self-Draining Standpipe
W-7	Below Ground Watermain Blowoff
W-8	Typical Valve Box Details
W-9	Typical Air Release Valve for Watermains
W-9A	Typical Air Release Valve and Interconnect for Watermains
W-10	Typical Lot Service Locations
W-11	Typical Inside Water Meter Installation c/w Copper Meter Setter
W-12	38mm and 50mm Meter Vault for Non-Traffic Areas
W-13	16mm and 25mm Meter Vault for Non-Traffic Areas
W-14	50mm Metered Irrigation Service
W-15	Watermain Relocation
W-16	Typical Irrigation Service

X WATER AND SEWER SERVICE CONNECTION RECORD CARD

X
NAME

X
ADDRESS

LOT X

PLAN X

LEGAL DESCRIPTION



REFERENCE AS-BUILT DRAWING

X

X

DRAWING NUMBER

X

DATE (M/Y)

TRUE

BY

LEGEND



-MANHOLE

-CLEANOUT

-SEWER MAIN

-SEWER SERVICE

-WATER MAIN

-WATER SERVICE

-VALVE

-HYDRANT

-CURB STOP

-GAS MAIN

-UNDERGROUND
ELECTRIC

SEWER

INSTALLATION DATE:	X
SIZE (mm)	X
TYPE	X
LENGTH (m)	X
INV ELEVATION AT PROPERTY LINE (m)	X
DEPTH AT PROPERTY LINE (m)	X
DISTANCE FROM MH TO FITTING AT MAIN (m)	X
MEASURE FROM MH (m)	X
RISER (Y/N)	X
BENDS	X
FITTING AT MAIN	X
DIST. FROM P/L CNR (m)	X

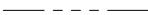
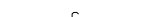
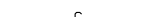
WATER

INSTALLATION DATE:	X
SIZE (mm)	X
TYPE	X
DISTANCE FROM MAIN TO CURB STOP (m)	X
DEPTH AT PROPERTY LINE (m)	X
DIST. FROM P/L CNR (m)	X



DATE OF LAST
REVISION

X

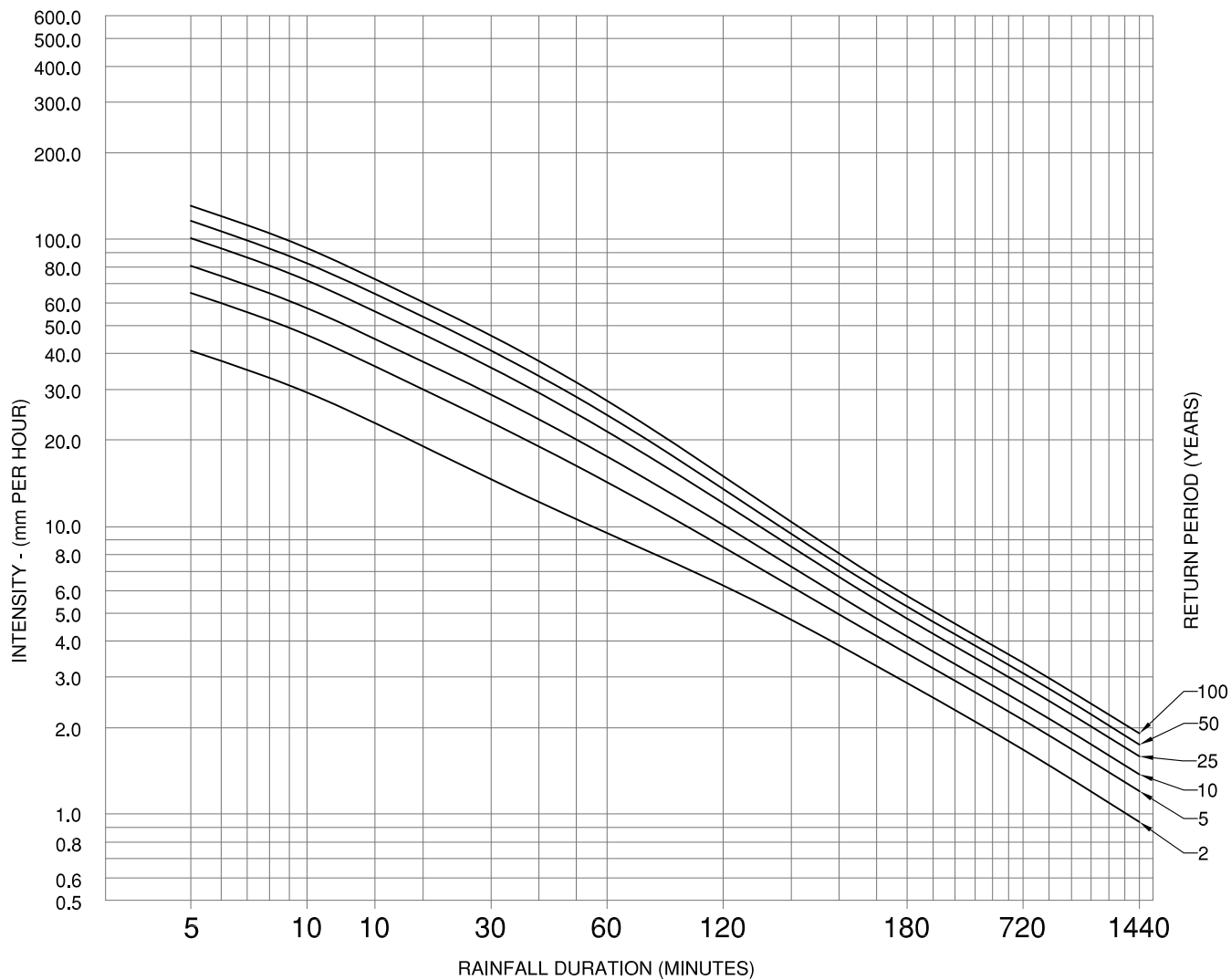
LEGEND		
EXISTING	DESCRIPTION	PROPOSED
     	SANITARY MAIN SANITARY FORCEMAIN SANITARY MANHOLE CLEANOUT LIFT STATION SEPTIC TANK	     
     	STORM MAIN STORM DITCH CULVERT STORM MANHOLE CATCHBASIN STORM DRYWELL	     
          	WATER MAIN WATER SERVICE CURB STOP VALVE STANDPIPE HYDRANT AIR RELEASE VALVE REDUCER SPRINKLER IRRIGATION BOX END CAP	          
         	POWER TEL CABLE STREET LIGHT GAS POWER POLE LAMP STANDARD LIGHT POST POLE ANCHOR JUNCTION BOX	         
  	TEST PIT IRON PIN SURVEY CONTROL	  

TOWN OF OSOYOOS

STANDARD DESIGN
DRAFTING SYMBOLS



DWN. BY: TT	
CHK. BY: SU	
DATE: JUNE 2023	
SCALE: N.T.S.	
DWG. NO.: C-1	REV.:



BASED ON RECORDING RAIN GAUGE DATA FOR THE PERIOD OF 1953 TO 2002
(45 YEARS) - PENTICTON AIRPORT

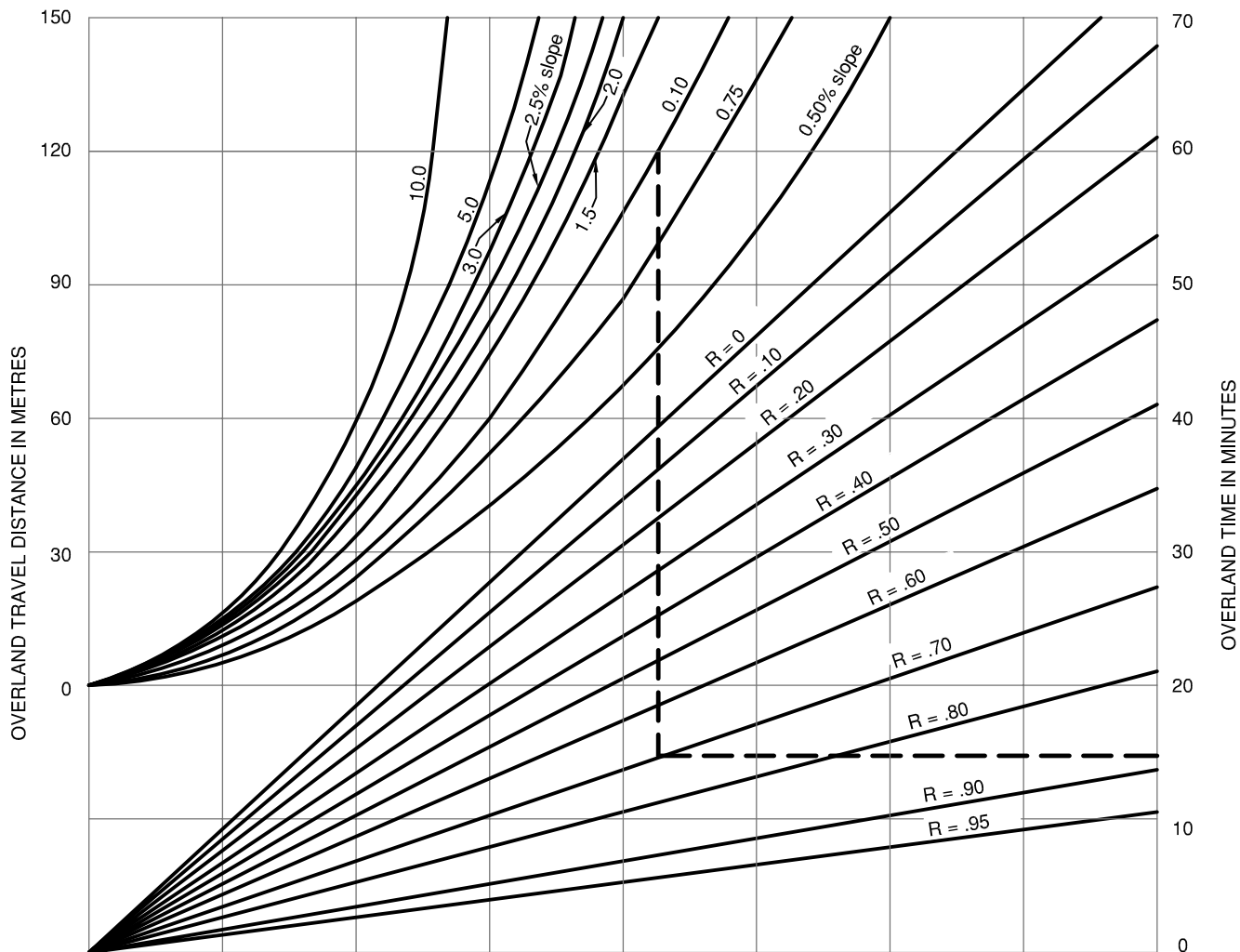
LATITUDE 49° 28'N, LONGITUDE 119° 36'W, ELEVATION 344m

TOWN OF OSOYOOS

RAINFALL INTENSITY
DURATION/FREQUENCY DESIGN CURVES



DWN. BY: TT	
CHK. BY: SU	
DATE: SEPT 2017	
SCALE: N.T.S.	
DWG. NO.: D-1	REV.: 1



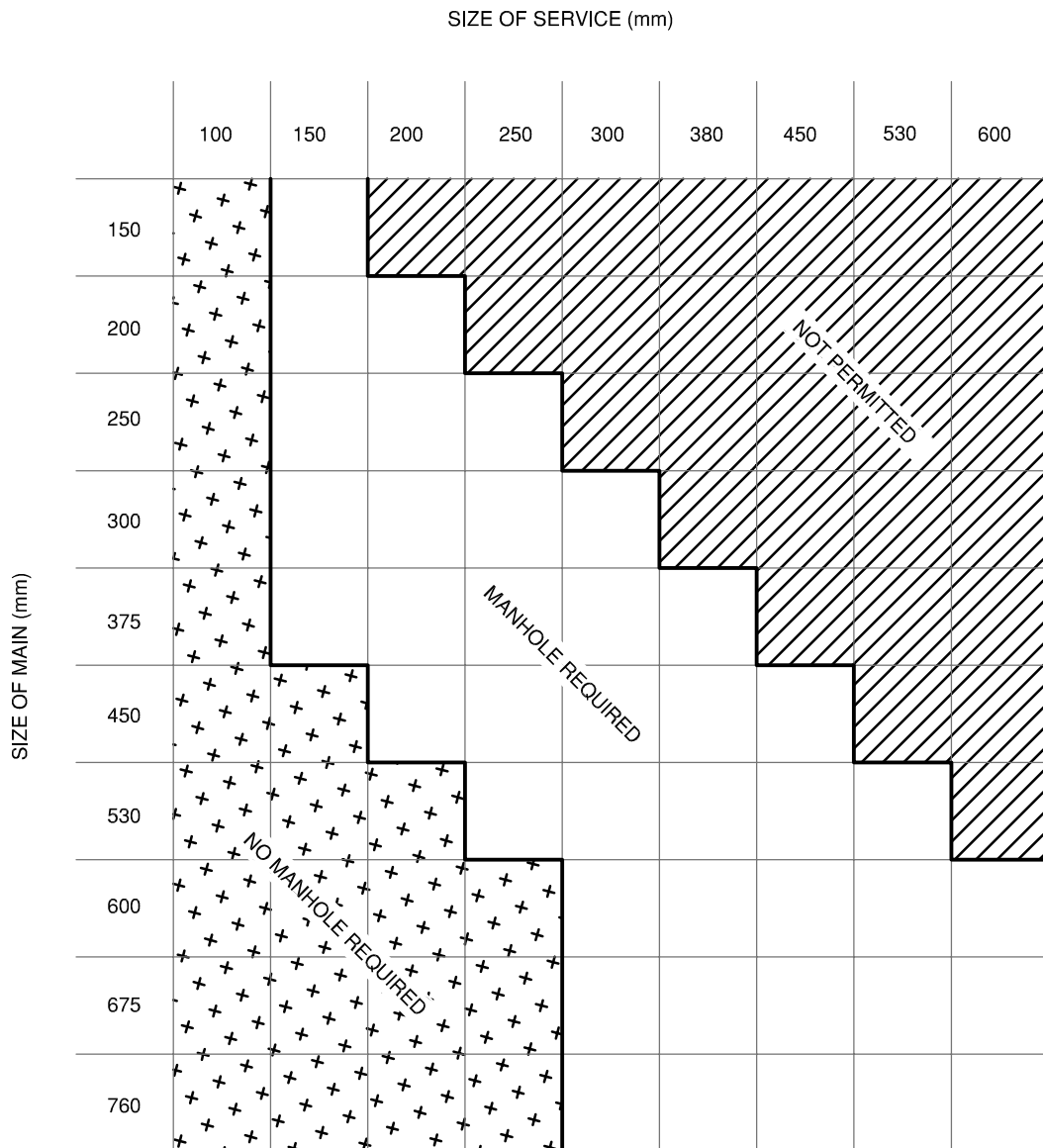
OVERLAND FLOW CURVES FOR ESTIMATING FLOW TIMES.

TOWN OF OSOYOOS

OVERLAND FLOW
TIME CURVES



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
D-2	



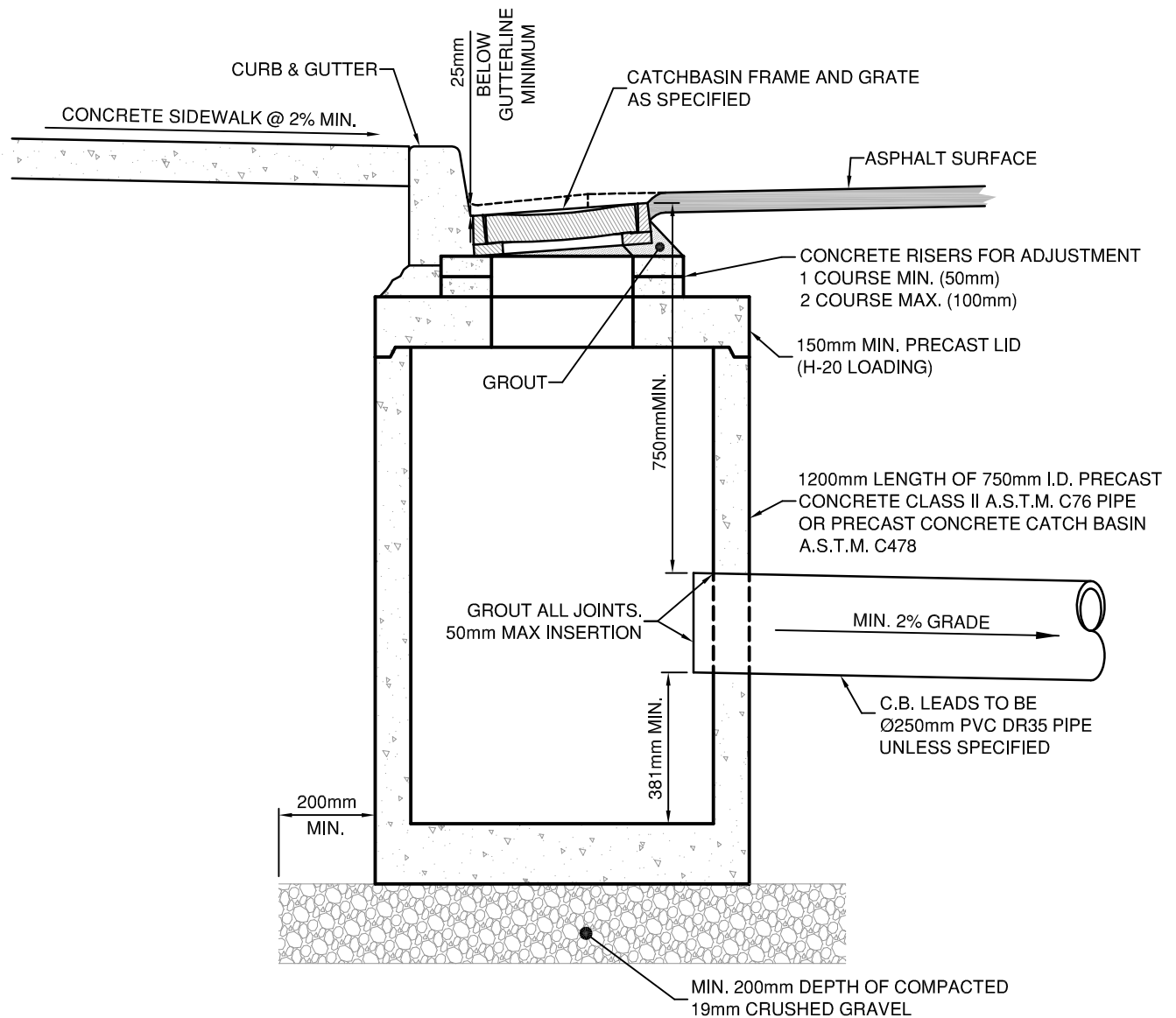
THE ABOVE ARE GUIDELINES ONLY AND FOR
CONNECTIONS TO EXISTING MAINS THE TYPE
AND CONDITION OF EXISTING PIPE MAY
DETERMINE WHEN A MANHOLE IS REQUIRED

TOWN OF OSOYOOS

SANITARY OR STORM SEWER
CONNECTIONS TO MAIN
WHERE MANHOLES ARE REQUIRED



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.: D-3	REV.:



CROSS-SECTION

CASTING SPECIFICATIONS

THE CASTINGS SHALL BE TRUE TO PATTERN AND FREE FROM CRACKS, GAS HOLES, FLAWS, AND EXCESSIVE SHRINKAGE. SURFACES OF THE CASTINGS SHALL BE FREE FROM BURNT SAND AND SHALL BE REASONABLY SMOOTH. RUNNERS, RISER, FINS, AND OTHER CAST ON PIECES SHALL BE REMOVED.

- FRAME MATERIAL SPECIFICATION CAST IRON A.S.T.M. A-48 CLASS 20
- GRATE MATERIAL SPECIFICATION DUCTILE IRON A.S.T.M. A-445 OR CAST STEEL -Grade 60-90 (TABLE II A.S.T.M. DESIGNATION A-148)

APPROVED PATTERNS

MANUFACTURER	DESIGNATION	
	GRATE	FRAME
DOBNEY FOUNDRY CO. Ltd. SURREY & PENTICTON B.C.	B-18 B19A - Mod	B-19 B-19A
MINIMUM WEIGHTS	68 kg	86 kg
"OR APPROVED EQUIVALENTS"		

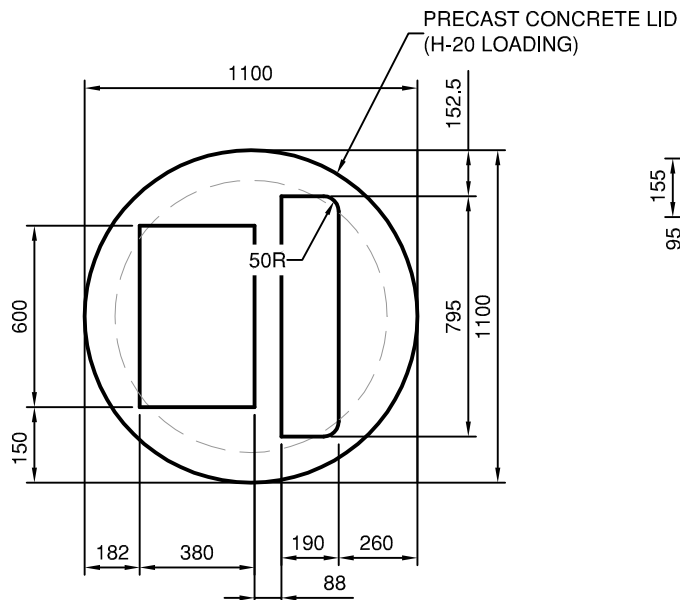
Note: Grates Available in Both Left and Right Hand Patterns

TOWN OF OSOYOOS

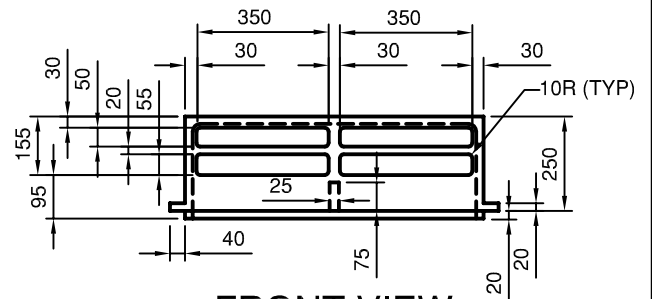
CATCH BASIN ASSEMBLY
STANDARD TYPE



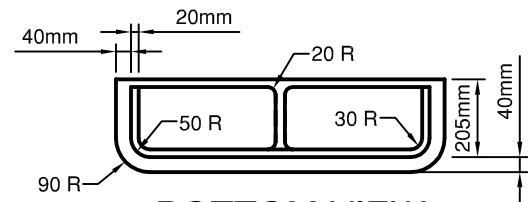
DWN. BY: TT
CHK. BY: SU
DATE: NOV 2012
SCALE: N.T.S.
DWG. NO.: D-4
REV.:



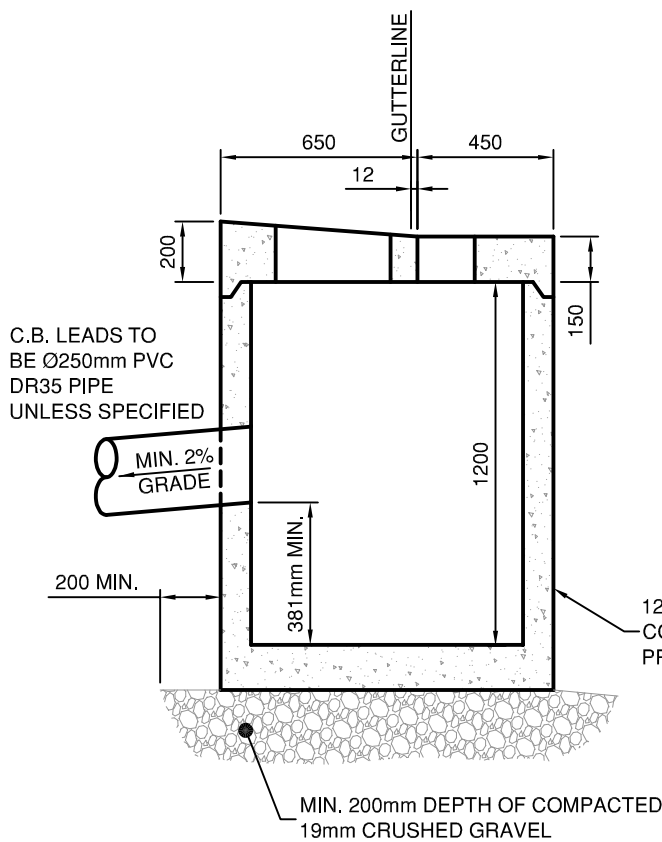
CONCRETE LID PLAN



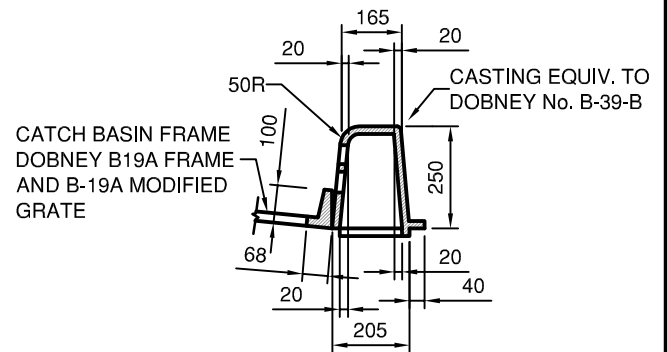
FRONT VIEW



BOTTOM VIEW



CROSS-SECTION



CROSS-SECTION

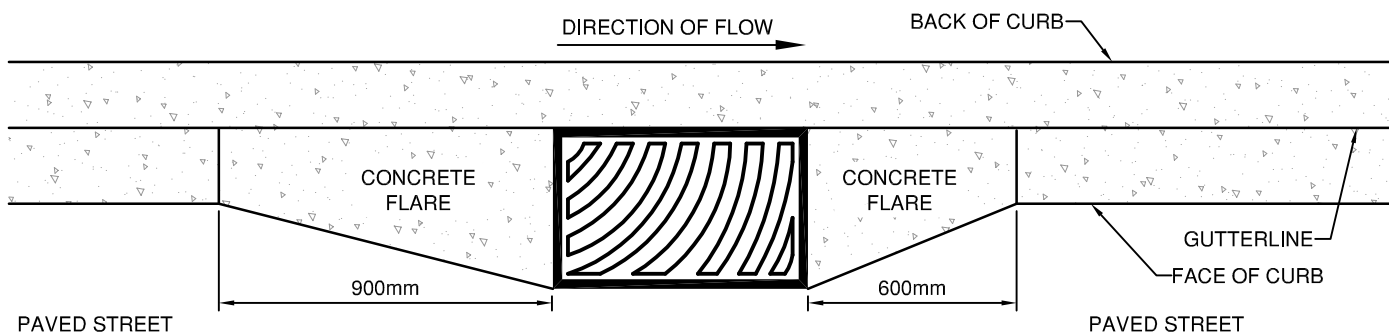
50mm MAX INSERTION OF CATCHBASIN LEAD

TOWN OF OSOYOOS

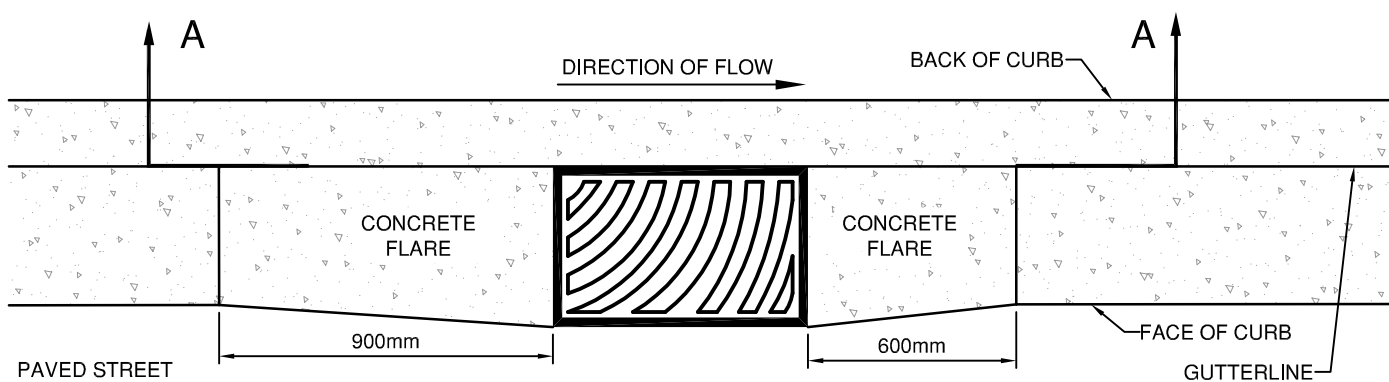
CATCH BASIN ASSEMBLY
CURB-INLET TYPE



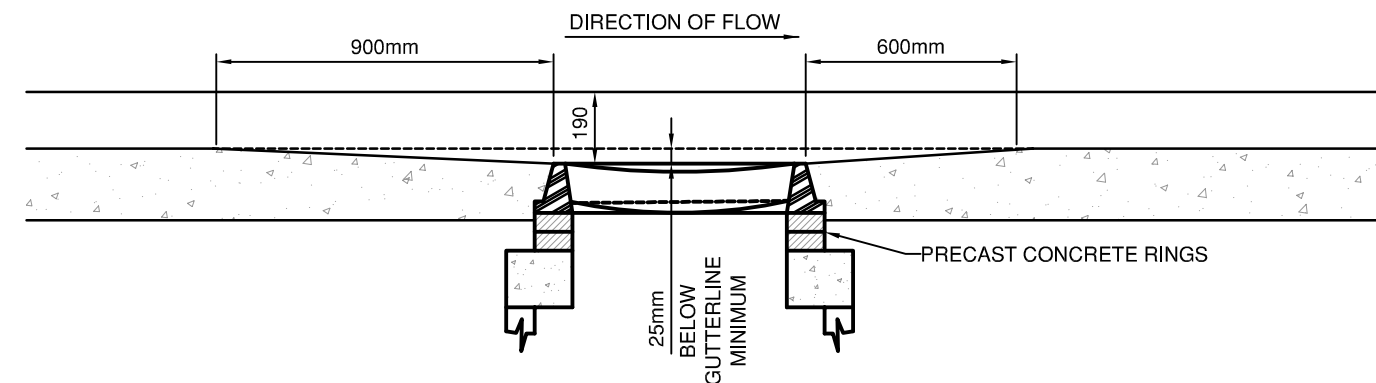
DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
D-5	



ROLLED CURB AND GUTTER



STANDARD CURB AND GUTTER



SECTION A-A

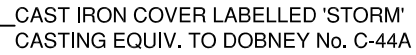
NOTE: ALL DIMENSIONS ARE IN MILLIMETERS

TOWN OF OSOYOOS

CATCH BASIN INSTALLATION
DEPRESSED GUTTER



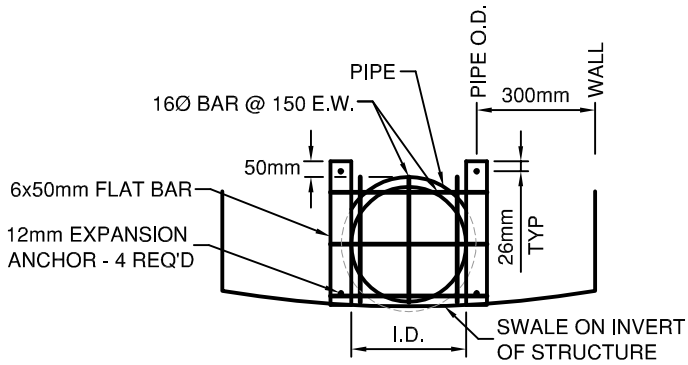
DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
D-6	



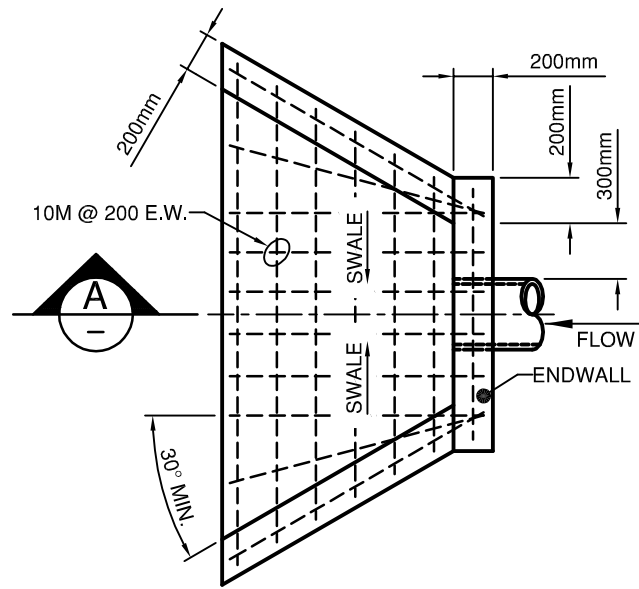
- THE NUMBER AND SPACING OF DRAINAGE DRYWELLS, WILL DEPEND UPON THE AREA BEING DRAINED, AND UPON GROUND CONDITIONS.
- PLACE Min. 150mm of 38mm DRAIN ROCK UNDER PRECAST SLAB FOR UNSTABLE BASE MATERIALS (or AS SPECIFIED by ENGINEER)
- WHEN UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED THE EXCAVATION SLOPE MAY BE MODIFIED. WHEN "FLOWING" SANDS OR GRAVELS ARE ENCOUNTERED, THE EXCAVATION SHALL BE LINED WITH FILTER CLOTH TO PREVENT THE MIGRATION OF NATIVE SOILS INTO THE DRAIN ROCK.

TOWN OF OSOYOOS DRAINAGE DRYWELL		DWN. BY: TT	
		CHK. BY: SU	
		DATE: NOV 2014	
		SCALE: N.T.S.	
		DWG. NO.: D-7	REV.:

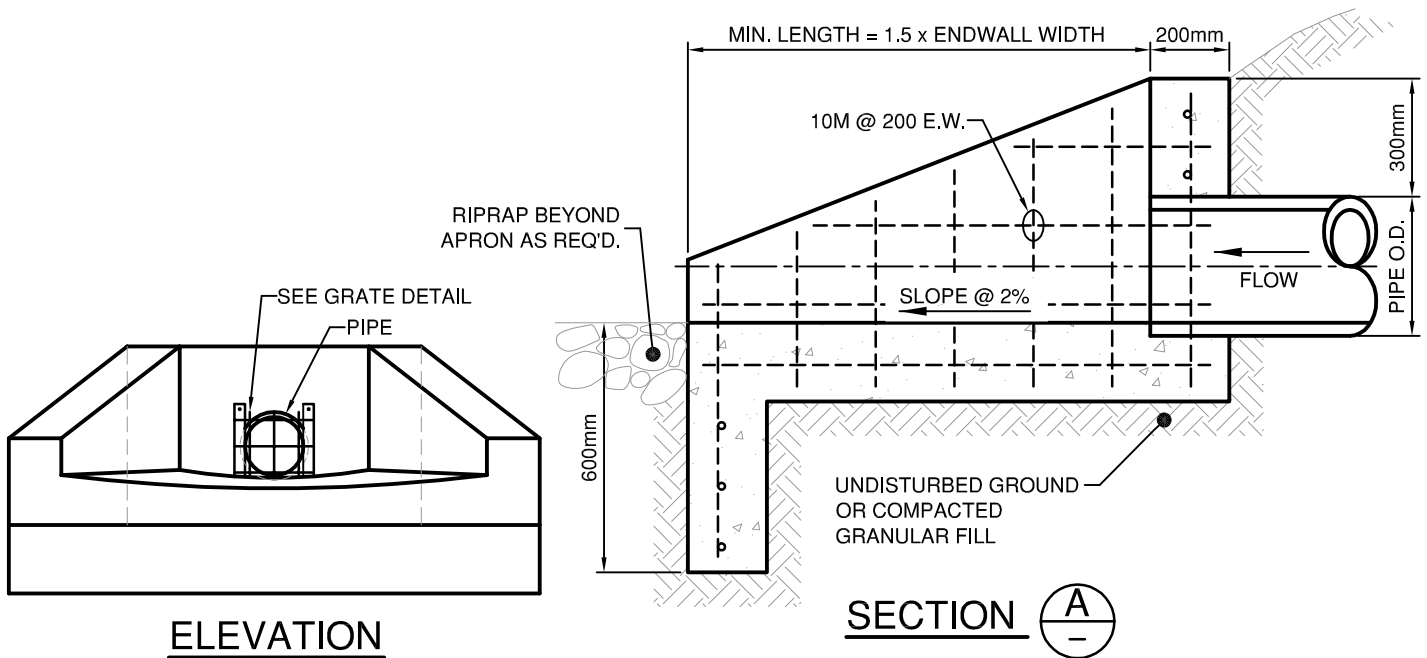
NOTE:
ALL GRATE MATERIALS FINISHED
c/w RUST RESISTANT PAINT.



GRATE DETAIL



PLAN



ELEVATION

SECTION A

NOTES:

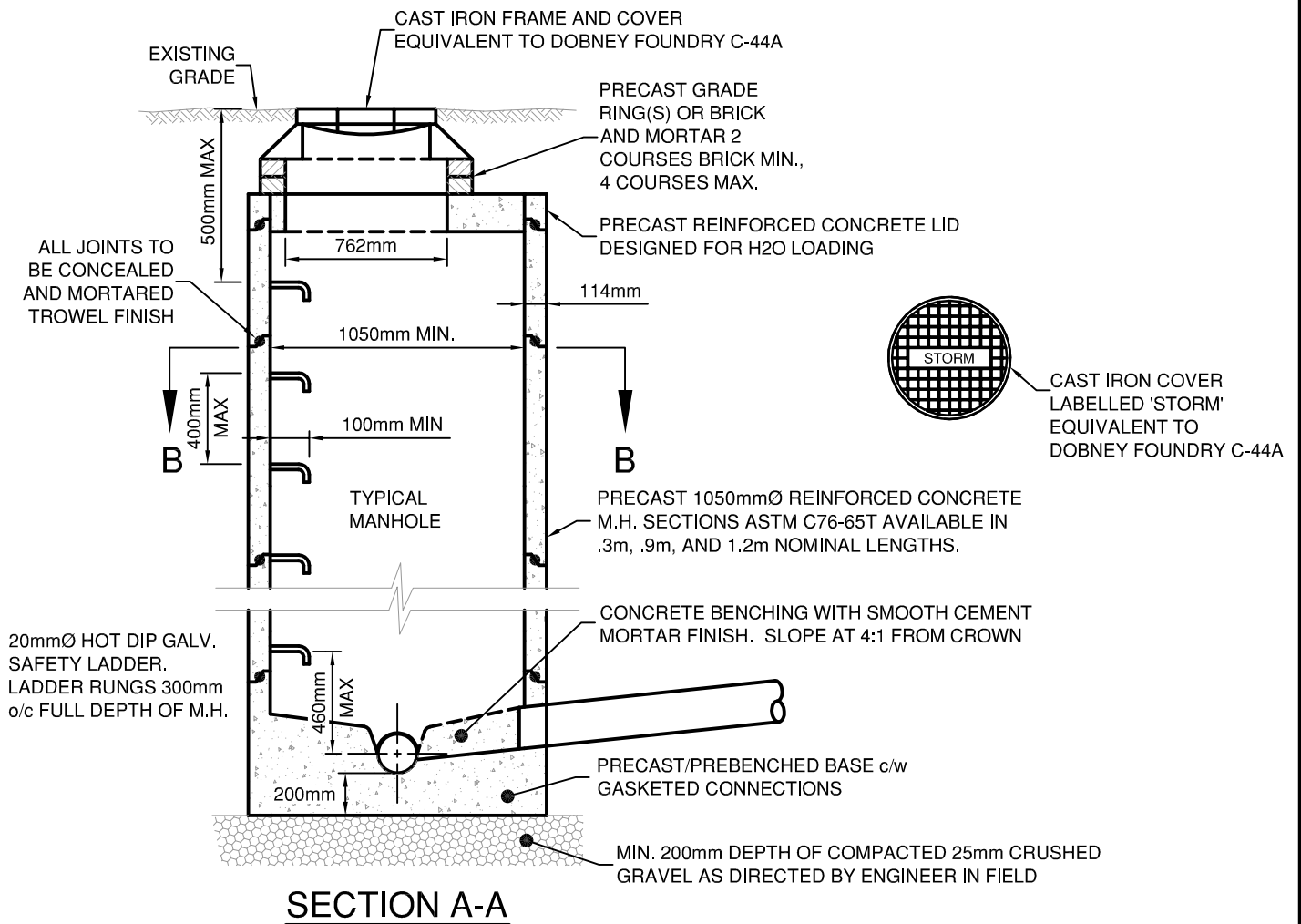
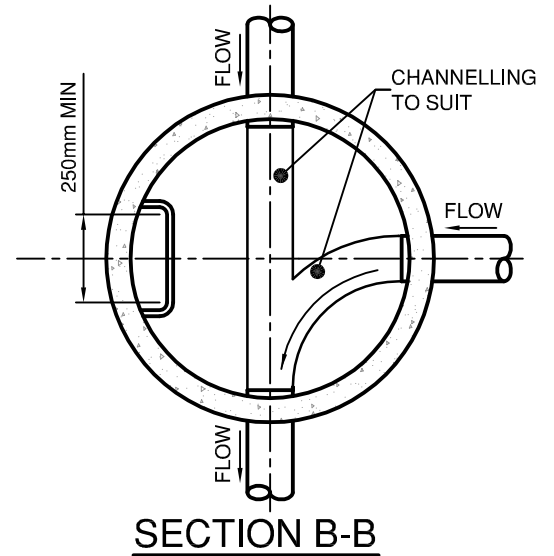
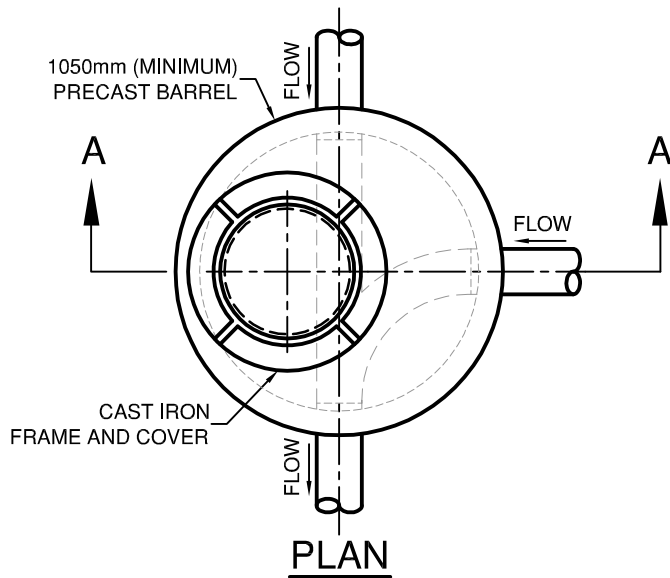
1. 10mm CHAMFER ON ALL EXPOSED EDGES.
2. ALL REINFORCING SPLICES TO BE 40 x BAR DIAMETER.
3. CONCRETE 20MPa @ 28 DAYS.

TOWN OF OSOYOOS

STORM SEWER
OUTLET STRUCTURE



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
D-8	

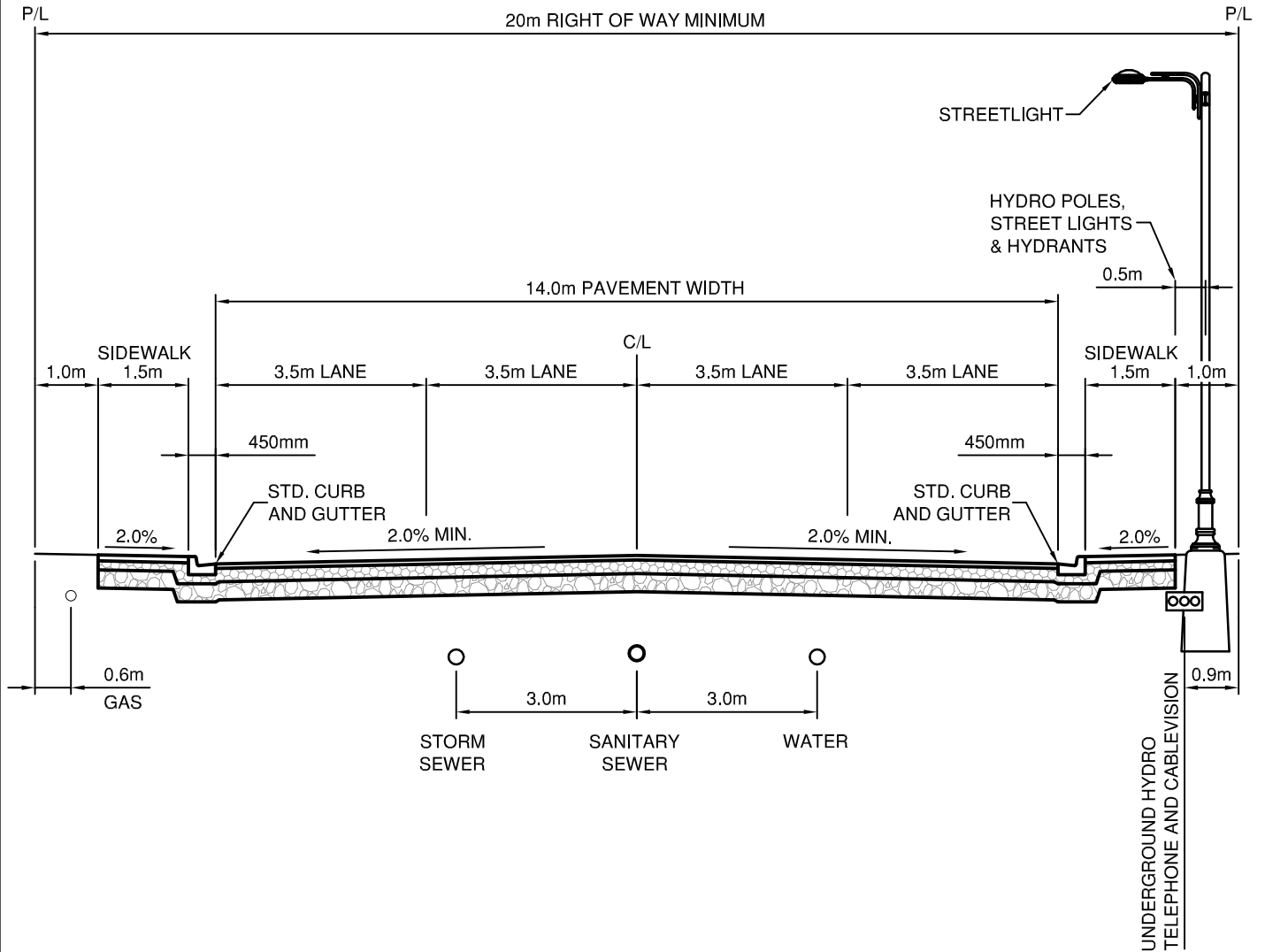


TOWN OF OSOYOOS

TYPICAL STORM SEWER MANHOLE



DWN. BY: TT	
CHK. BY: SU	
DATE: SEP 2015	
SCALE: N.T.S.	
DWG. NO.:	REV.:
D-10	



NOTES:

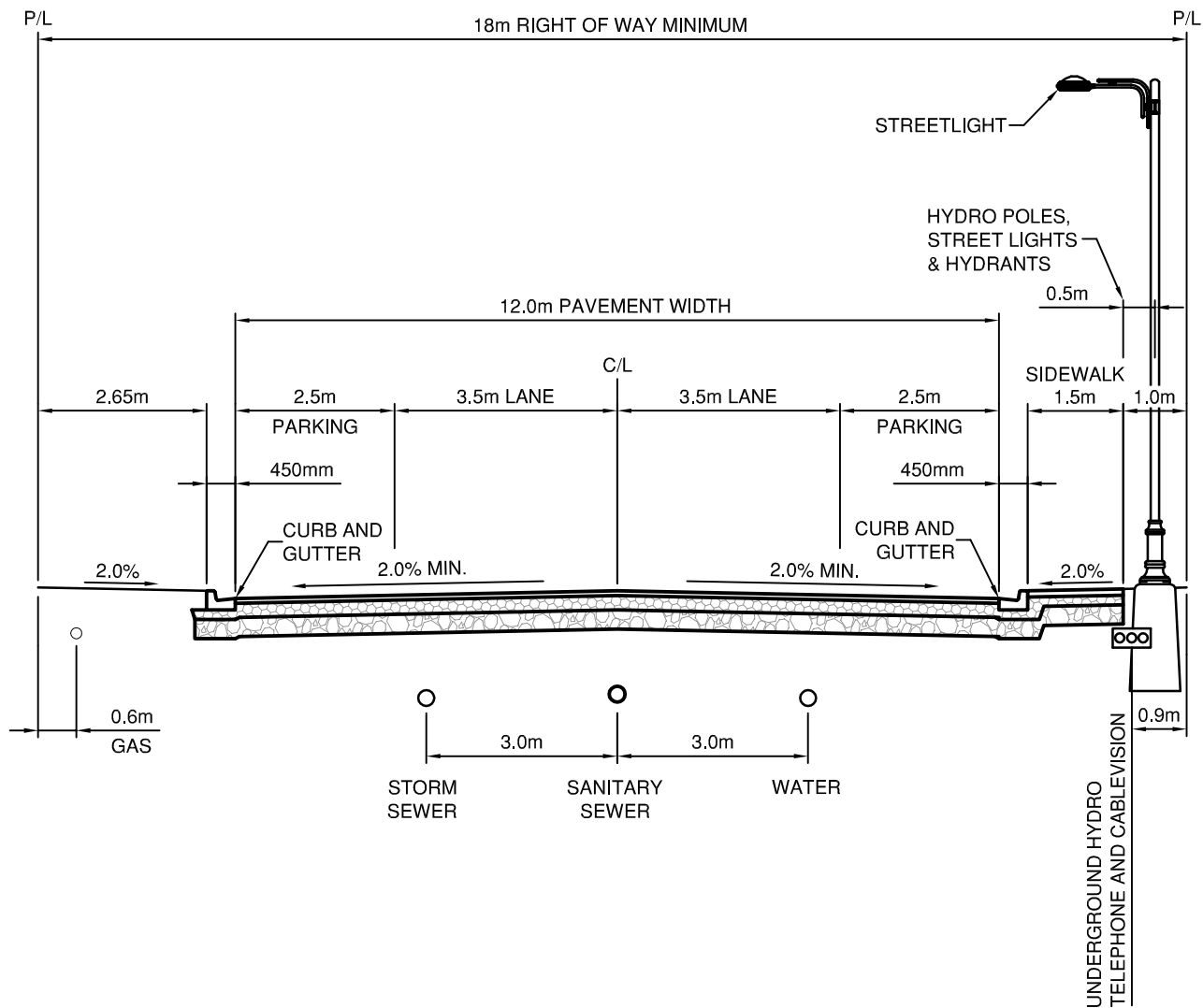
1. PAVED SURFACE - 75mm ASPHALT (COMPACTED THICKNESS)
2. BASE - 150mm CRUSHED GRAVEL (20mm MINUS)
3. SUB-BASE - 300mm PIT RUN GRAVEL (75mm MINUS)
4. STANDARD CURB AND GUTTER
5. STREETLIGHTS AND SIDEWALK MAY BE ONE OR BOTH SIDES AS SPECIFIED ON DESIGN DRAWINGS

TOWN OF OSOYOOS

**ARTERIAL ROAD
(FOUR LANES)**



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
R-1	



NOTES:

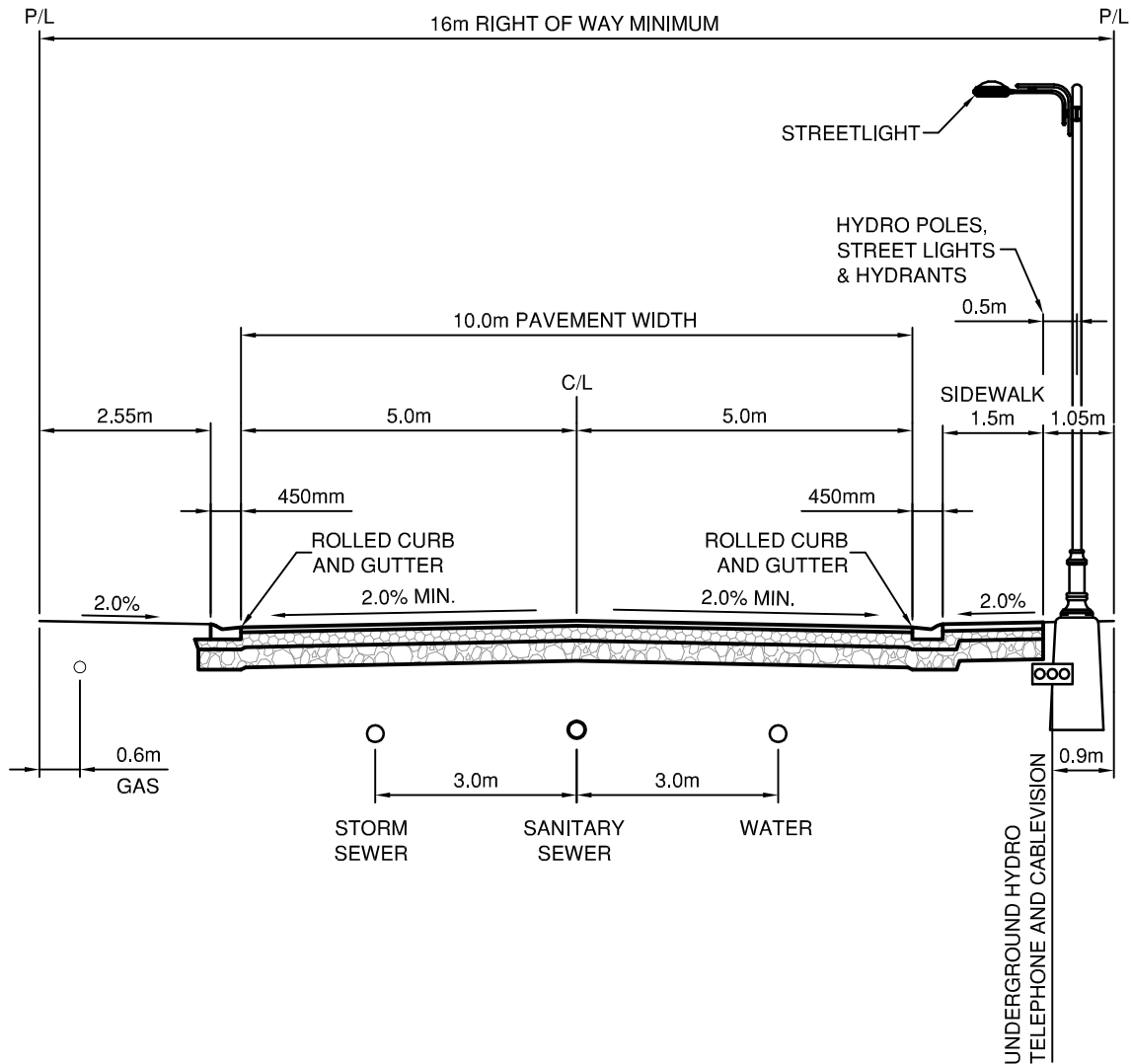
1. PAVED SURFACE - 75mm ASPHALT (COMPACTED THICKNESS)
2. BASE - 150mm CRUSHED GRAVEL (20mm MINUS)
3. SUB-BASE - 300mm PIT RUN GRAVEL (75mm MINUS)
4. STANDARD OR ROLLED CURB AND GUTTER
5. STREETLIGHTS AND SIDEWALK MAY BE ONE OR BOTH SIDES AS SPECIFIED ON DESIGN DRAWINGS

TOWN OF OSOYOOS

**COLLECTOR
ROAD**



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
R-2	



NOTES:

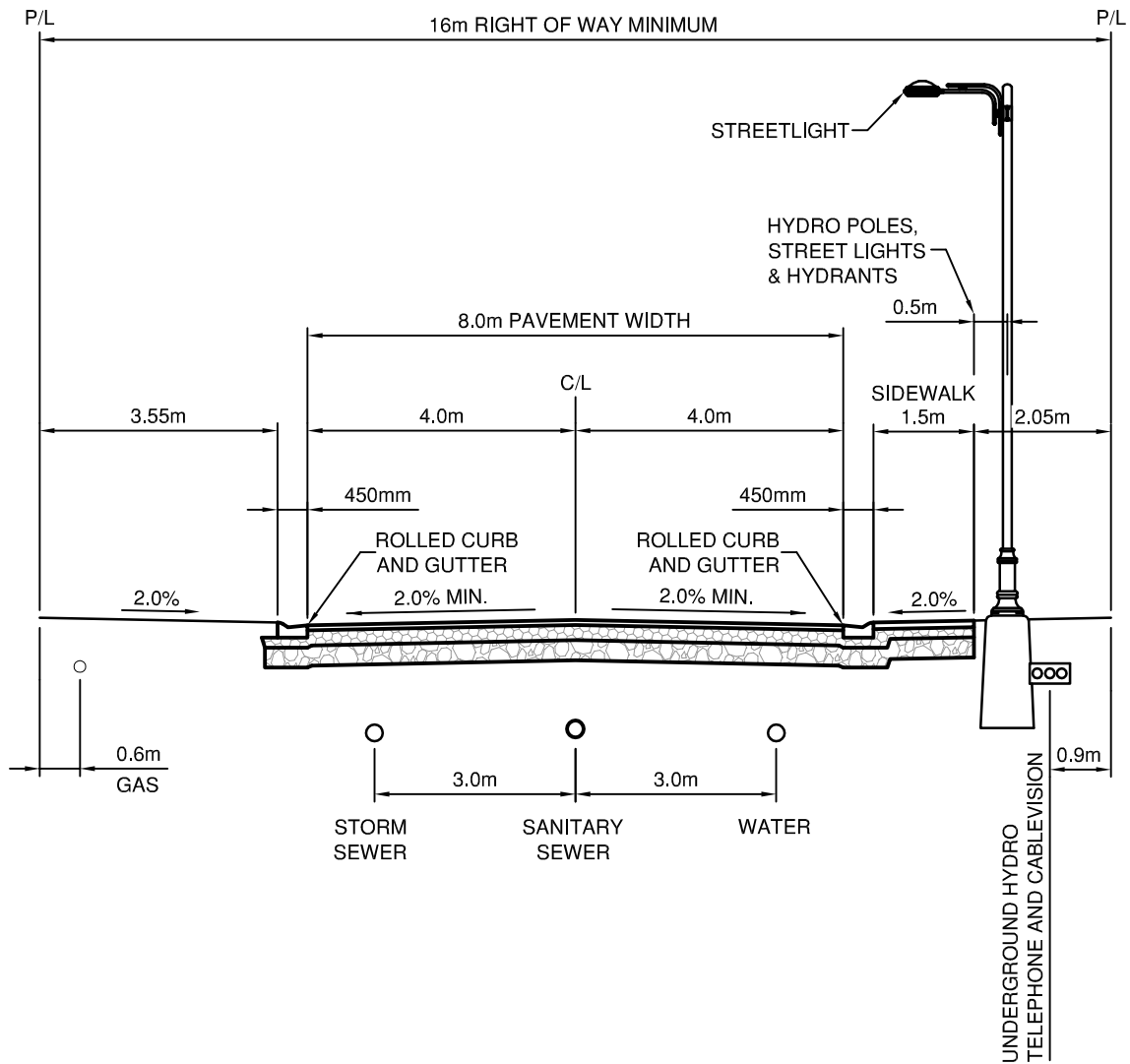
1. PAVED SURFACE - 50mm ASPHALT (COMPACTED THICKNESS)
2. BASE - 150mm CRUSHED GRAVEL (20mm MINUS)
3. SUB-BASE - 250mm PIT RUN GRAVEL (75mm MINUS)
4. ROLLED CURB AND GUTTER
5. STREETLIGHTS AND SIDEWALK MAY BE ONE OR BOTH SIDES AS SPECIFIED ON DESIGN DRAWINGS

TOWN OF OSOYOOS

URBAN RESIDENTIAL ROAD



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
R-3	



NOTES:

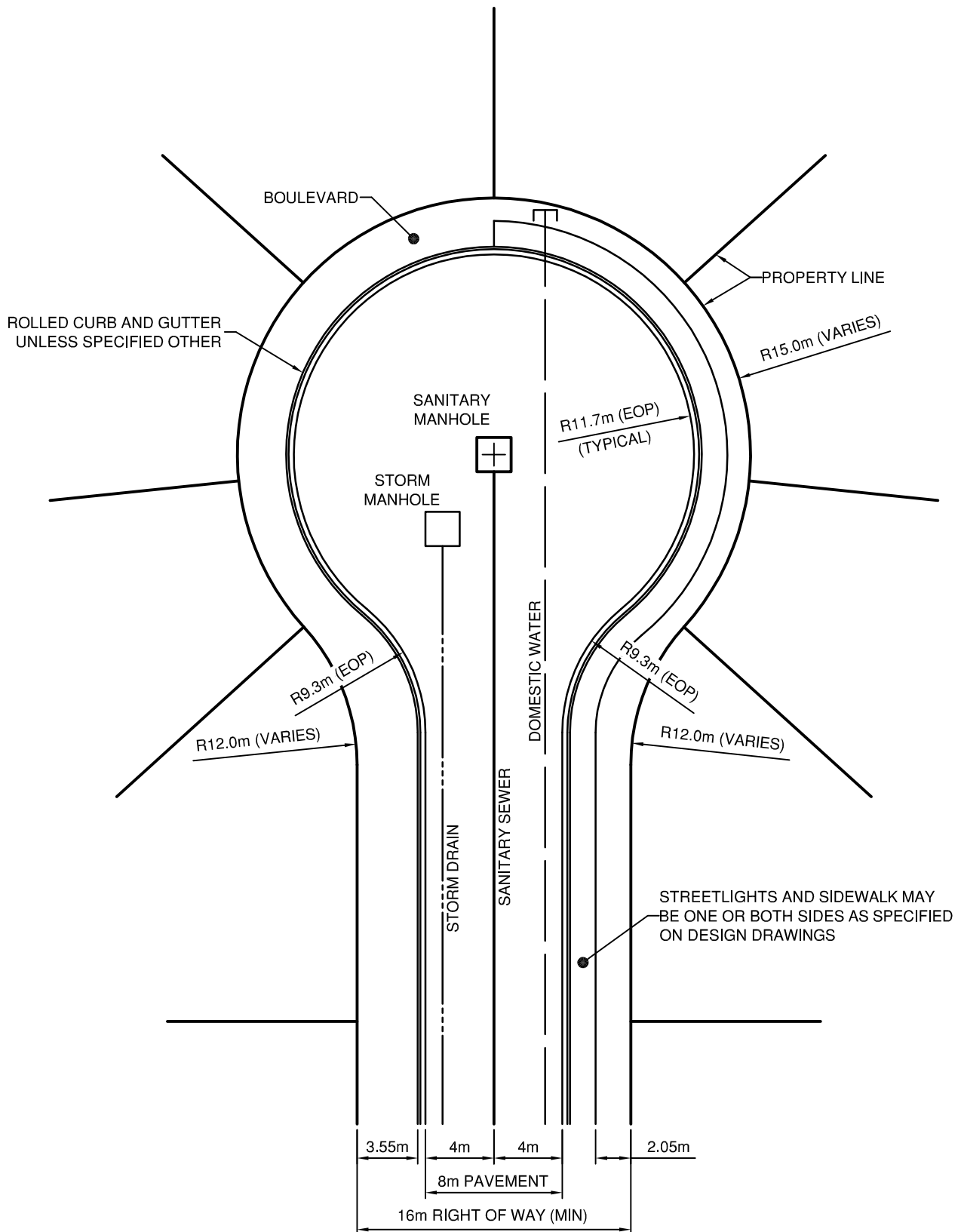
1. PAVED SURFACE - 50mm ASPHALT (COMPACTED THICKNESS)
2. BASE - 150mm CRUSHED GRAVEL (20mm MINUS)
3. SUB-BASE - 250mm PIT RUN GRAVEL (75mm MINUS)
4. ROLLED CURB AND GUTTER
5. STREETLIGHTS AND SIDEWALK MAY BE ONE OR BOTH SIDES AS SPECIFIED ON DESIGN DRAWINGS

TOWN OF OSOYOOS

**URBAN LOCAL ROAD
(LOW VOLUME)**



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
R-4	



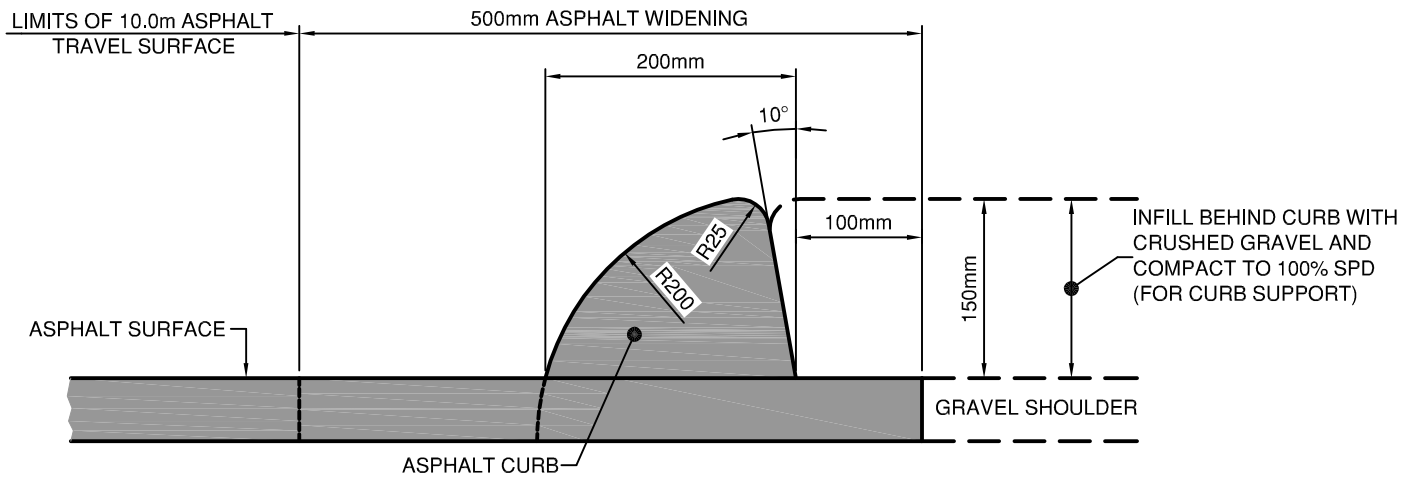
TOWN OF OSOYOOS

RESIDENTIAL
CUL-DE-SAC

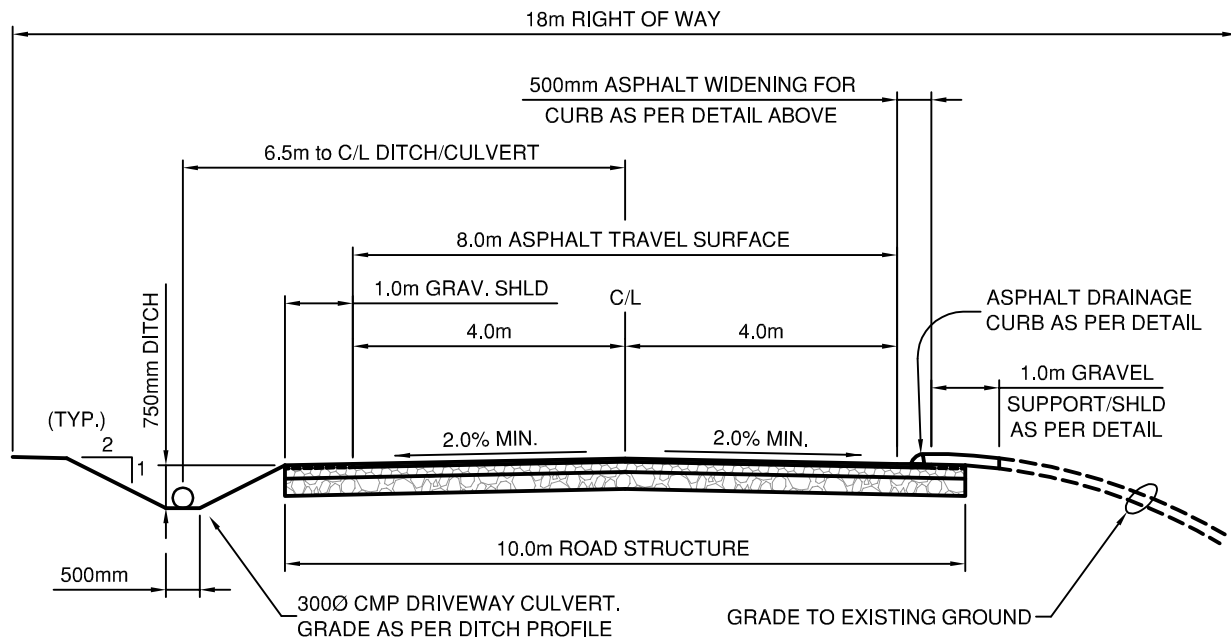


DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
R-5	





DETAIL - ASPHALT DRAINAGE CURB



NOTE:

- DITCHES AND CURBS TO BE CONSTRUCTED AS REQUIRED AND MAY BE CONSTRUCTED ON ONE OR BOTH SIDES.

NOTES:

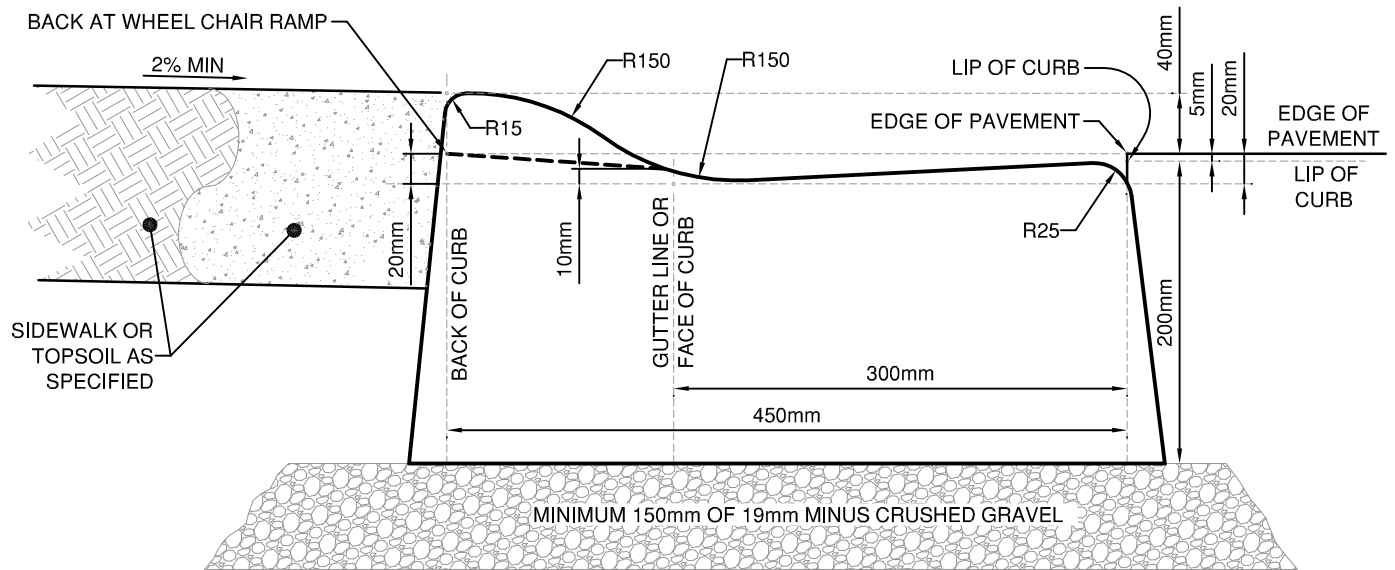
- PAVED SURFACE - 50mm ASPHALT (COMPACTED THICKNESS)
- BASE - 150mm CRUSHED GRAVEL (20mm MINUS)
- SUB-BASE - 250mm PIT RUN GRAVEL (75mm MINUS)
- SCARIFY UPPER 150mm OF SUBGRADE, COMPACT TO 100% SPD
- SHOULDER MATERIAL TO BE 19mm CRUSHED GRAVEL COMPACTED TO 100% SPD

TOWN OF OSOYOOS

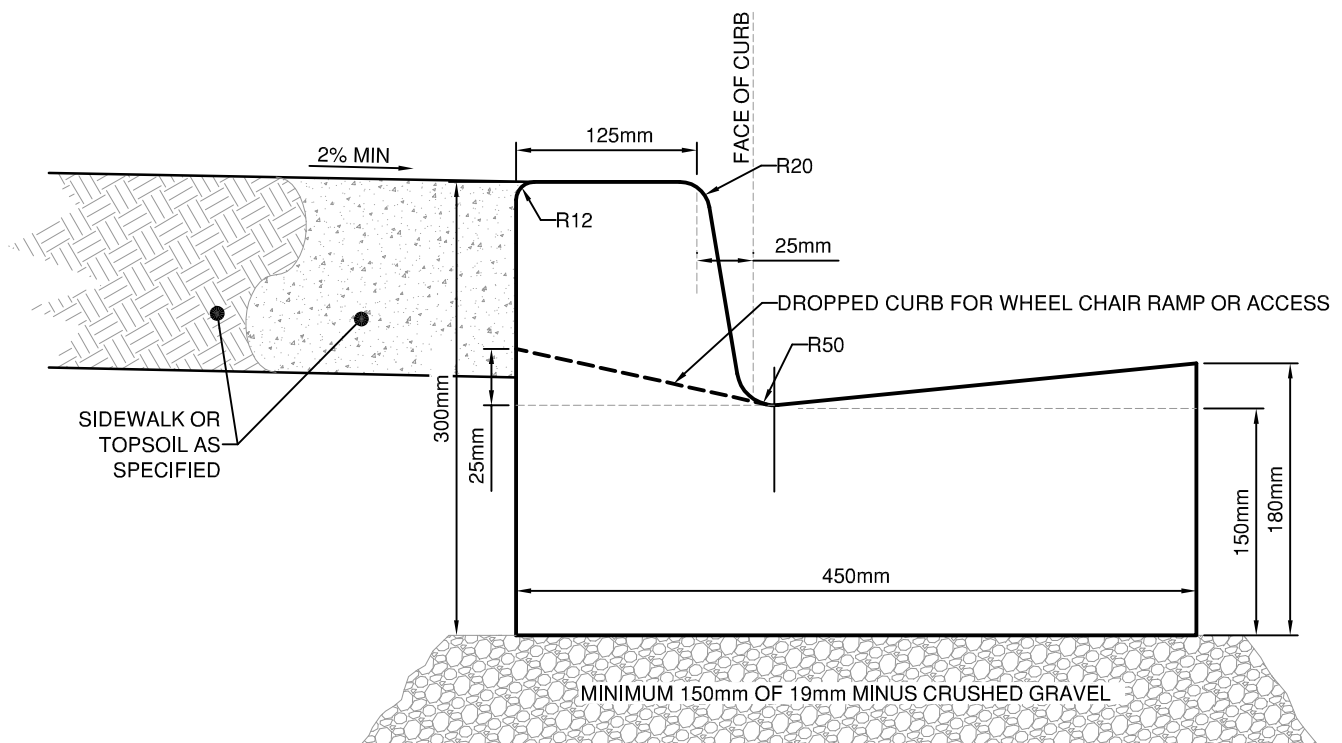
RURAL RESIDENTIAL ROAD



DWN. BY:	TT
CHK. BY:	SU
DATE:	NOV 2012
SCALE:	N.T.S.
DWG. NO.:	REV.:
R-7	



ROLLED CURB AND GUTTER



STANDARD CURB AND GUTTER

NOTE:

ALL COMPACTION TO MINIMUM 100% OF OPTIMUM DRY DENSITY

TOWN OF OSOYOOS

TYPICAL CURB TYPES



DWN. BY: TT

CHK. BY: SU

DATE: NOV 2012

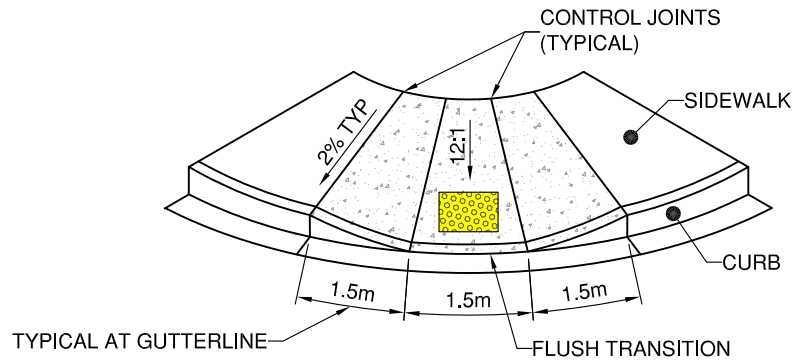
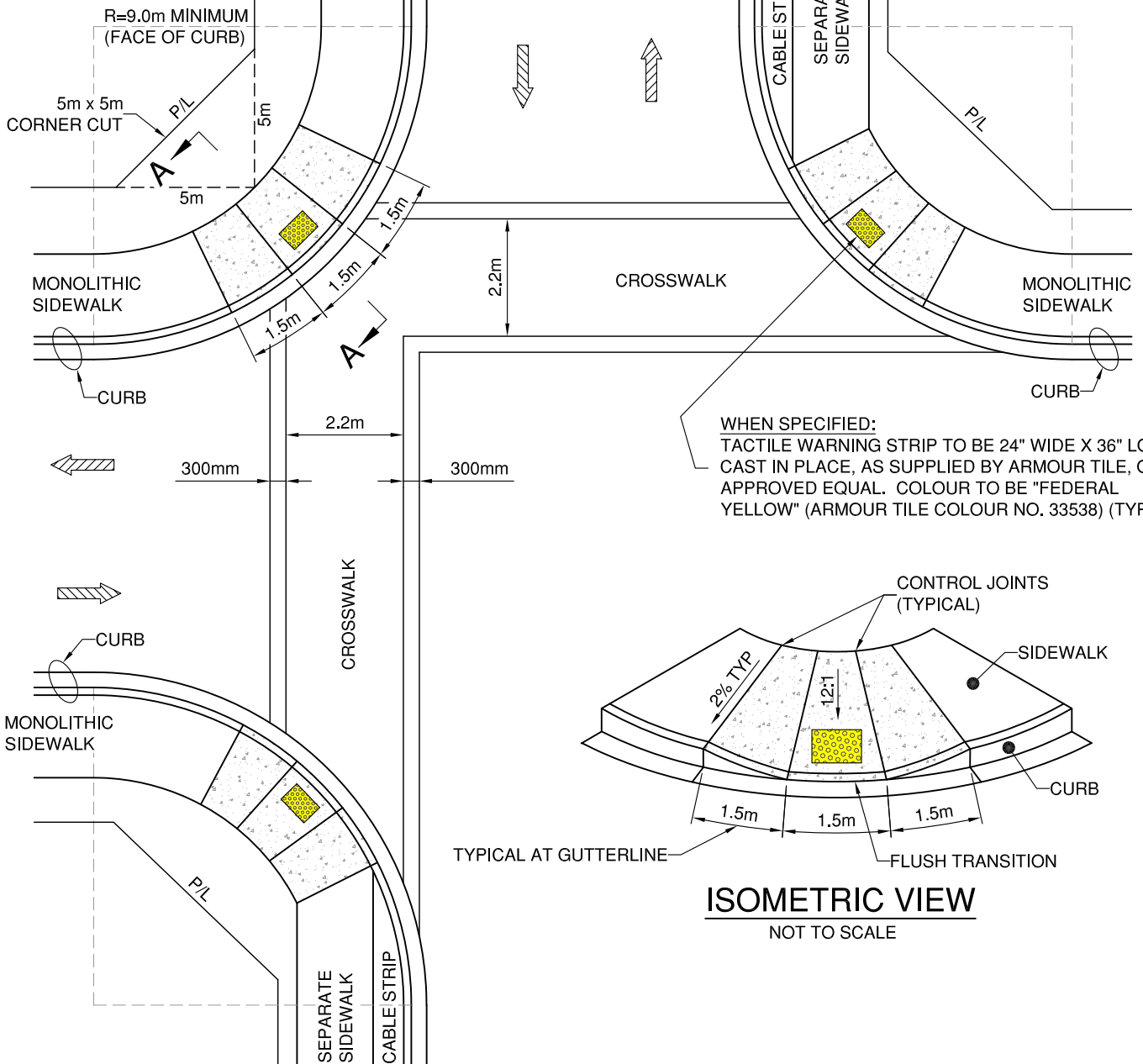
SCALE: N.T.S.

DWG. NO.:

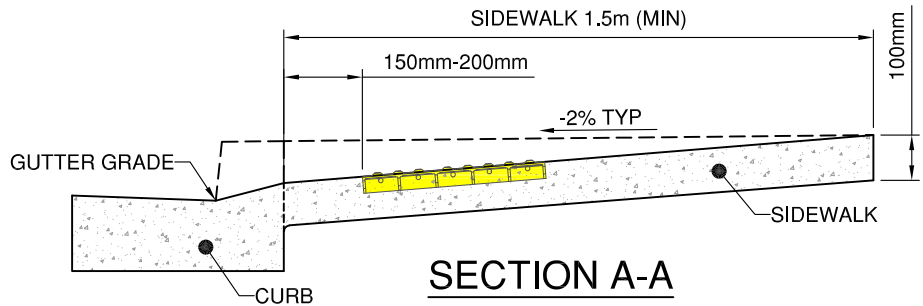
R-8

REV.:

PLAN



ISOMETRIC VIEW NOT TO SCALE

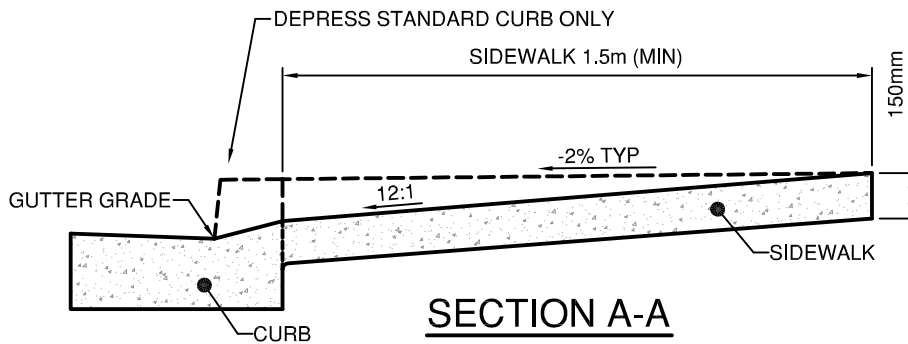
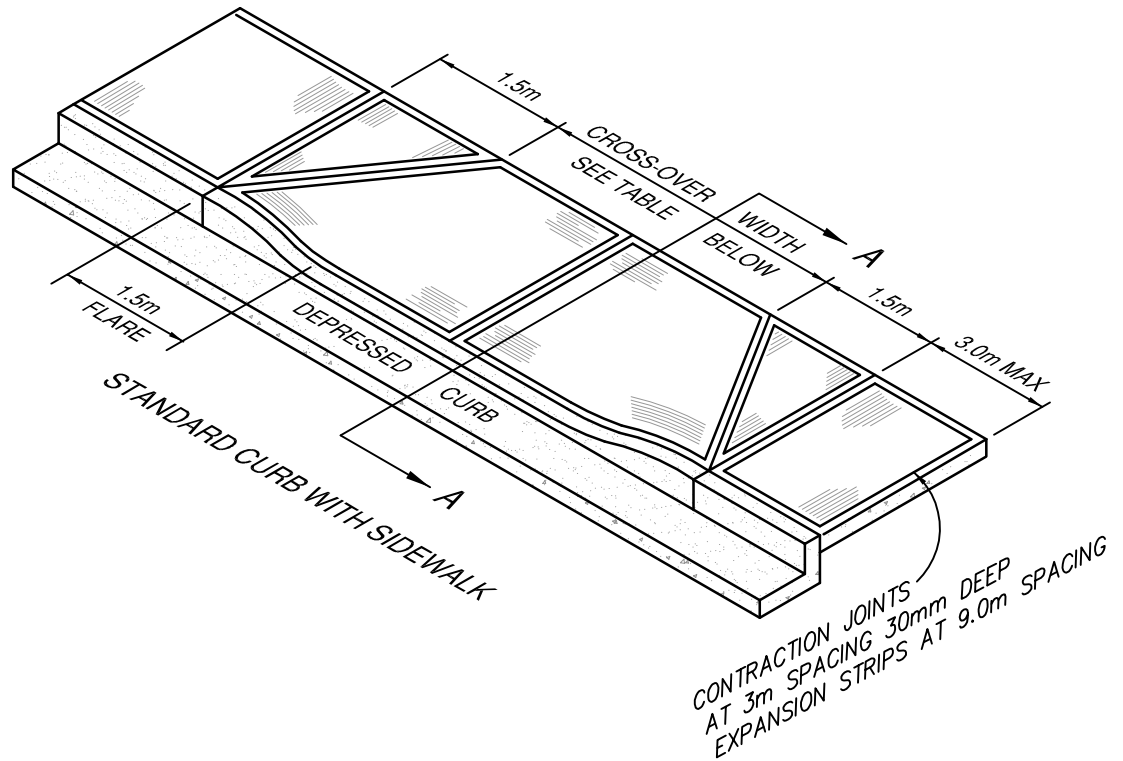


TOWN OF OSOYOOS

TYPICAL WHEELCHAIR RAMP,
CURB RADIUS AND CORNER CUT



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2017	
SCALE: N.T.S.	
DWG. NO.: R-9	REV.: 1



NOTE:
EXPANSION STRIPS SHALL BE
19mm THICK FIBRE BOARD

MINIMUM DISTANCES OR = CLEARANCE REQUIRED FROM TOP OF FLARE TO:

- | | |
|--------------------------------------|--------|
| A) SIDE PROPERTY LINE | = 0.3m |
| B) FLANKING PROPERTY LINE AT CORNERS | = 10m |
| C) BETWEEN CROSS-OVERS | = 1.0m |
| D) HYDRANTS OR STREET SIGNS | = 1.0m |

CROSS - OVER	COMMERCIAL	RESIDENTIAL	LANES
MIN. WIDTH	6.7m	4.0m	5.0m
MAX. WIDTH	9.0m	9.0m	5.0m
THICKNESS OF CONC.	190mm	150mm	190mm
MAX. No. ALLOWED PER PROPERTY	2	1 UNLESS APPROVED	-

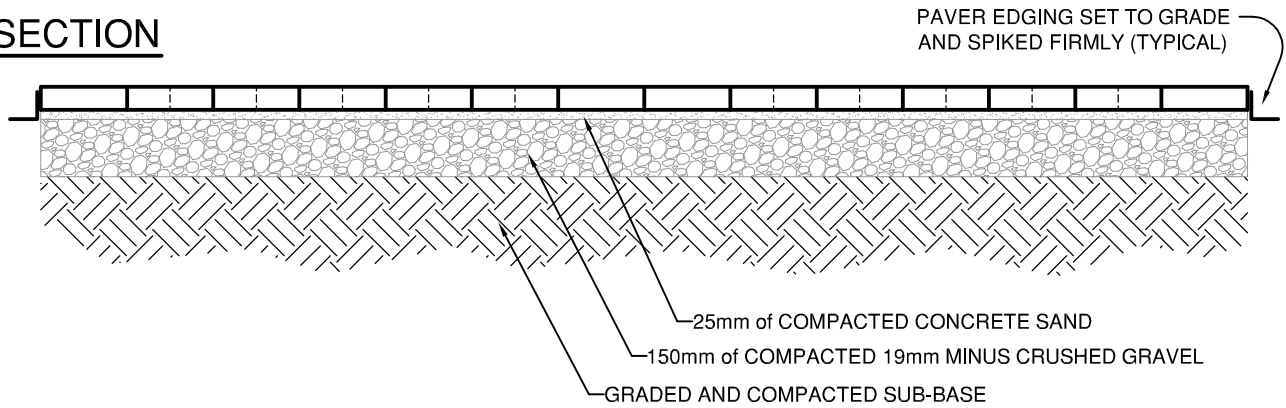
TOWN OF OSOYOOS

SIDEWALK CROSS-OVER
& FINISHING DETAILS

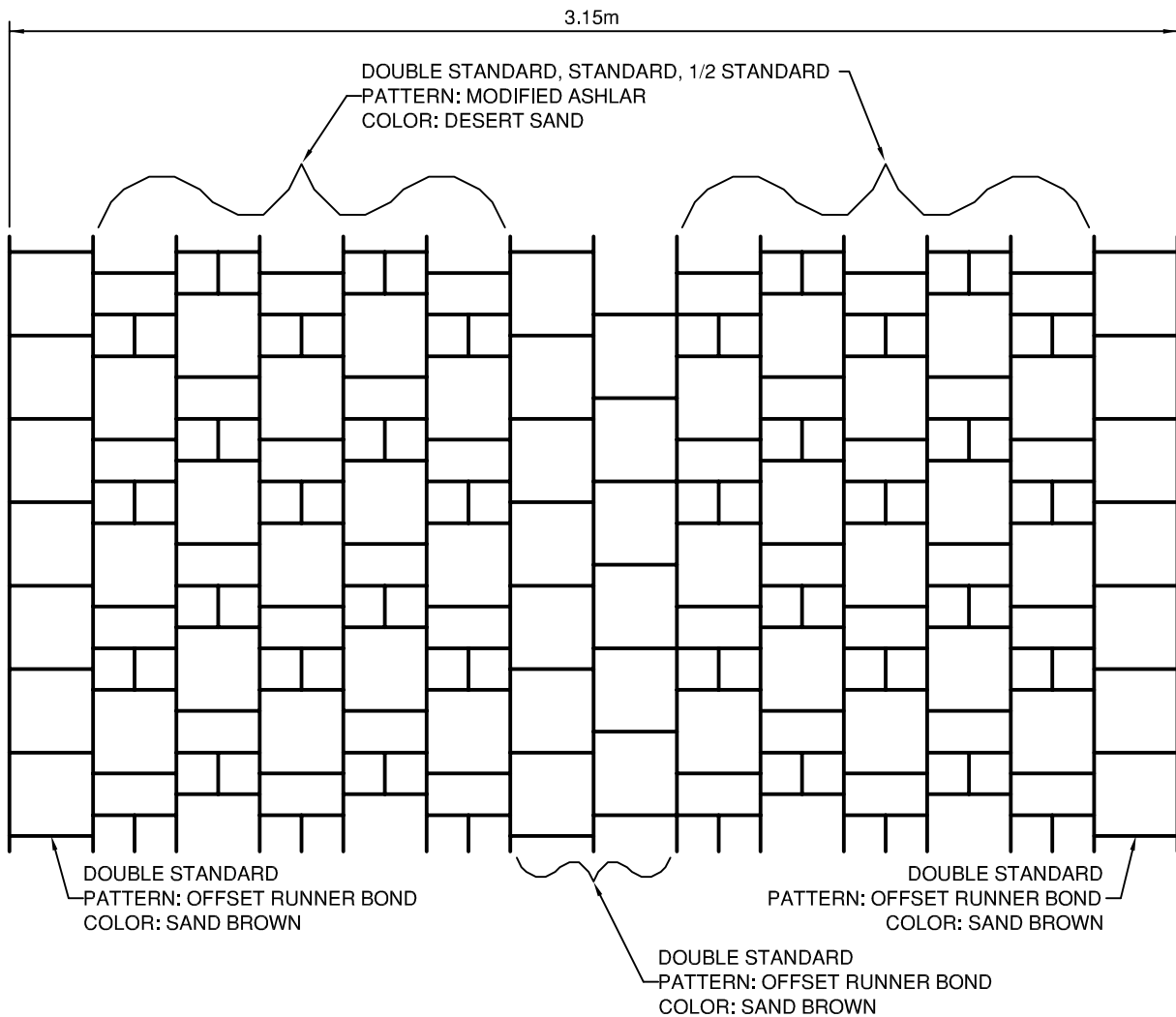


DWN. BY:	TT
CHK. BY:	SU
DATE:	NOV 2012
SCALE:	N.T.S.
DWG. NO.:	REV.:
R-10	

SECTION



PLAN



SPECIFICATIONS:

- AS SUPPLIED BY ABBOTSFORD CONCRETE PRODUCTS
- STANDARD CLASSIC SERIES 60mm THICKNESS

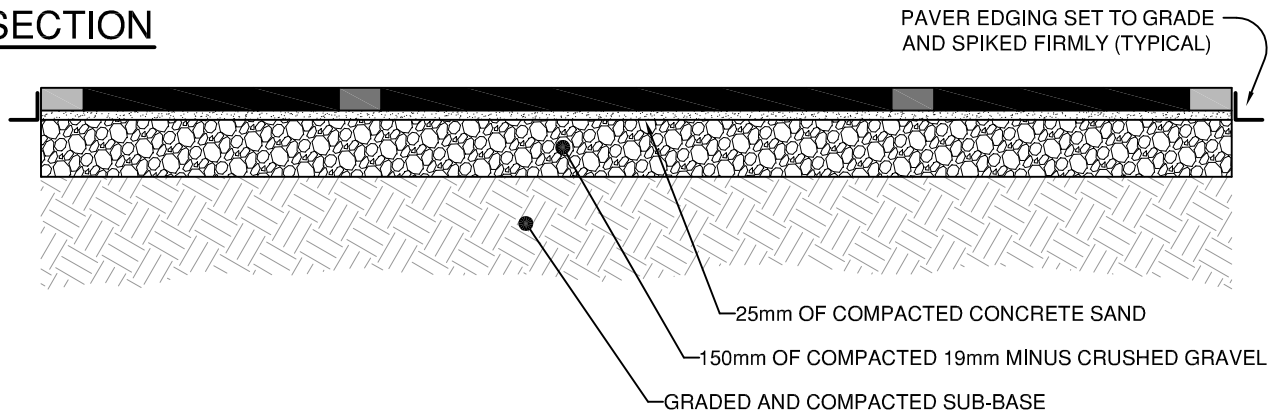
TOWN OF OSOYOOS

PAVING STONE SIDEWALK
RUNNER BOND PATTERN

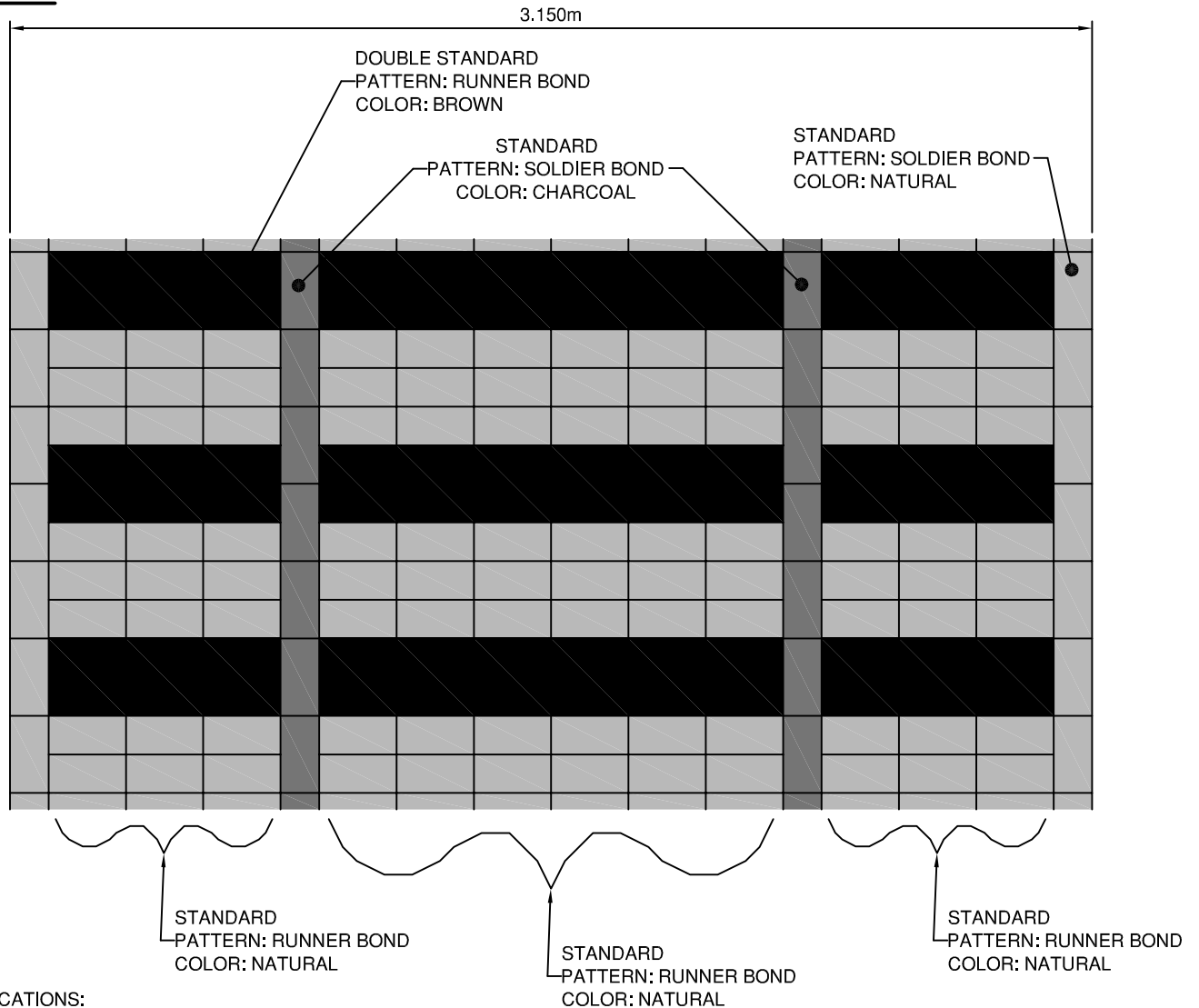


DWN. BY:	TT
CHK. BY:	SU
DATE:	NOV 2012
SCALE:	N.T.S.
DWG. NO.:	R-11
REV.:	

SECTION



PLAN



SPECIFICATIONS:

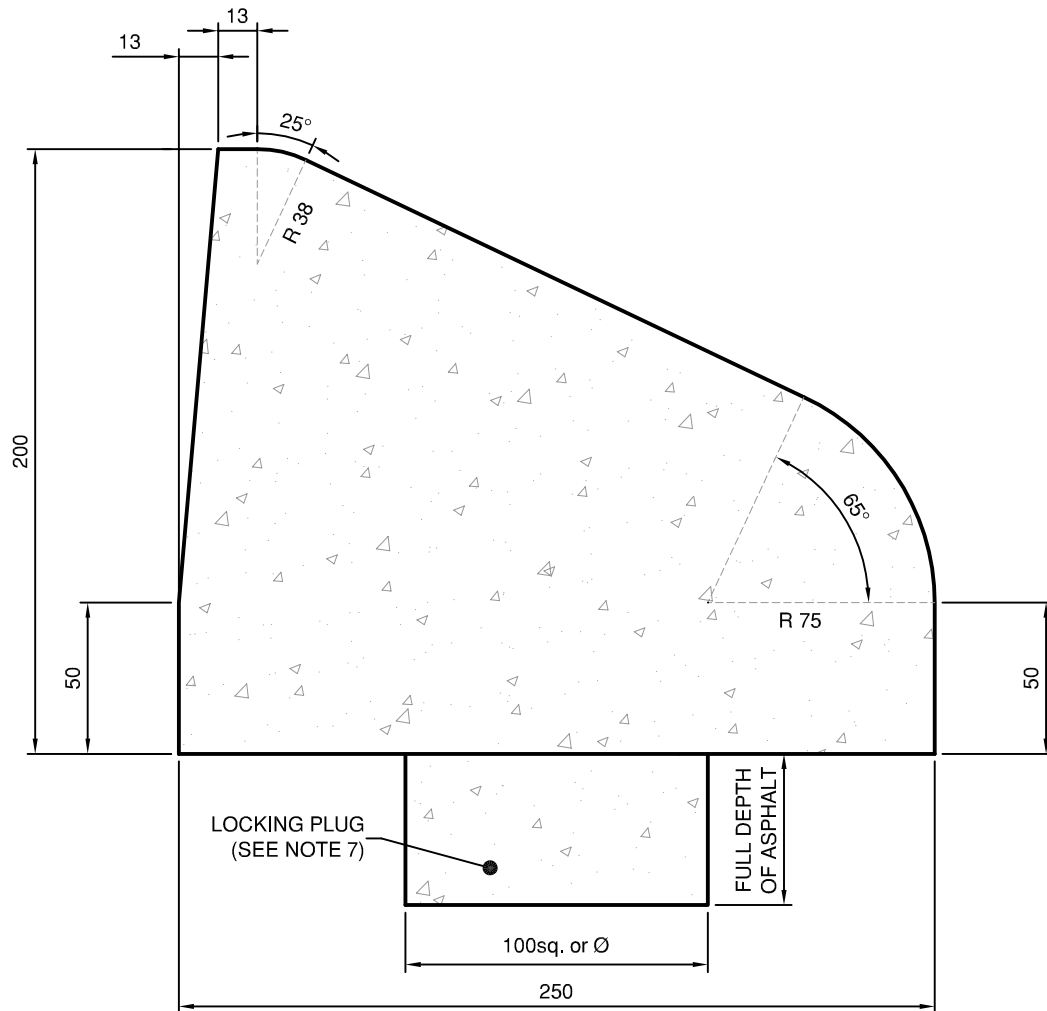
- AS SUPPLIED BY ABBOTSFORD CONCRETE PRODUCTS
- STANDARD CLASSIC SERIES 60mm THICKNESS

TOWN OF OSOYOOS

PAVING STONE SIDEWALK
RAILWAY PATTERN



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
R-12	



NOTES:

THE CONCRETE INCORPORATED IN THE CURB SHALL HAVE:

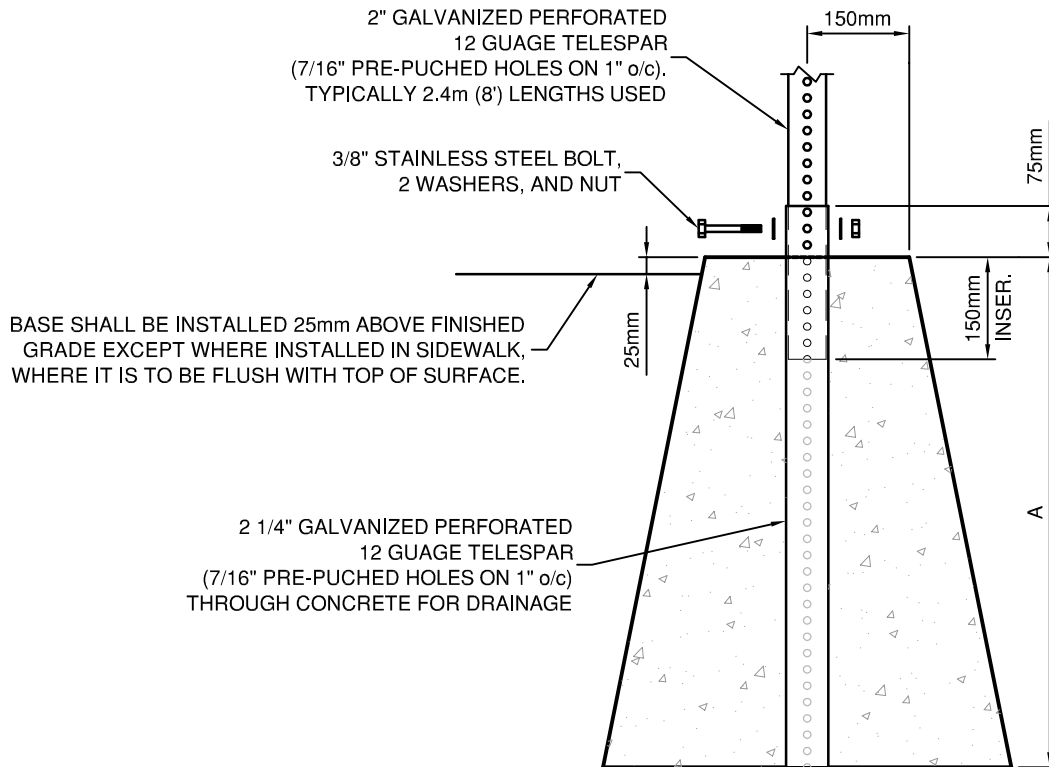
1. MINIMUM COMPRESSIVE STRENGTH OF 30 MPa AT 28 DAYS.
2. COARSE AGGREGATE OF MAXIMUM PARTICLE SIZE NOT EXCEEDING 25mm.
3. MINIMUM CEMENT CONTENT OF 350 kg/m.
4. ENTRAINED AIR OF 6-8%
5. SLUMP: BETWEEN 0mm AND 10mm.
6. MAXIMUM WATER - CEMENT RATIO OF 0.45. CONTRACTION JOINTS SHALL BE CUT AND TOOLED INTO THE CONCRETE TO A DEPTH 60% OF THE THICKNESS OF THE CONCRETE AT INTERVALS OF 3m.
7. PROVIDE 'LOCKING PLUG' or APPROVED ALTERNATIVE. LOCKING PLUG TO BE POSITIONED 500mm EACH SIDE OF CONTROL JOINT. CONTROL JOINTS TO BE AT 3m o/s, MIDWAY ON RADII OVER 90° AND AT END OF RADIUS POINTS. FILL HOLES WITH CEMENT SLURRY AHEAD OF EXTRUDER.
APPROVED ALTERNATIVE IS TO APPLY EPOXY TO ASPHALT AHEAD OF EXTRUSION. COVERAGE SHALL BE Min. 200mm WIDE WITH FULL COVERAGE AROUND ALL RETURNS AND AT 1m c/c ON TANGENTS. COVERAGE SHALL INCLUDE BOTH SIDES OF CONTRACTION JOINTS. APPROVED EPOXY "SIKADUR 32 Hi-Mod" APPLICATION CONDITIONS AS PER MANUF. SPECS.

TOWN OF OSOYOOS

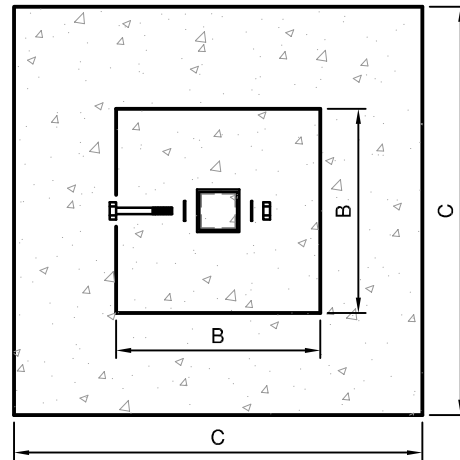
EXTRUDED CONCRETE CURB
FOR ISLANDS & MEDIANS



DWN. BY:	TT
CHK. BY:	SU
DATE:	NOV 2012
SCALE:	N.T.S.
DWG. NO.:	R-13
REV.:	



PLAN VIEW



FRONT VIEW

NOTES:

1. THE BOTTOM OF LOWEST SIGN SHALL BE 2.1m ABOVE THE SIDEWALK, SHOULDER ... UNLESS DIRECTED OTHERWISE.
2. ALL SIGNS SHOULD BE MOUNTED APPROXIMATELY AT RIGHT ANGLES TO THE TRAFFIC FLOW AND FACING THE TRAFFIC THEY ARE INTENDED TO SERVE.
3. SIGNS SHALL NOT OVERHANG ROADWAY / TRAVEL LANE.
4. SIGNS UP TO 750mm HEIGHT SHALL HAVE 2 BOLTS, LARGER SIGNS WILL HAVE A MINIMUM OF 3 BOLTS.
5. SIGNS SHALL BE MOUNTED WITH A 3/8" HEX BOLT, FLAT WASHER, AND NYLON WASHER AGAINST THE SIGN FACE. A FLAT WASHER AND NUT SHALL BE AGAINST THE TELESPEAR. ALL FASTENERS ARE TO BE STAINLESS STEEL.
6. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

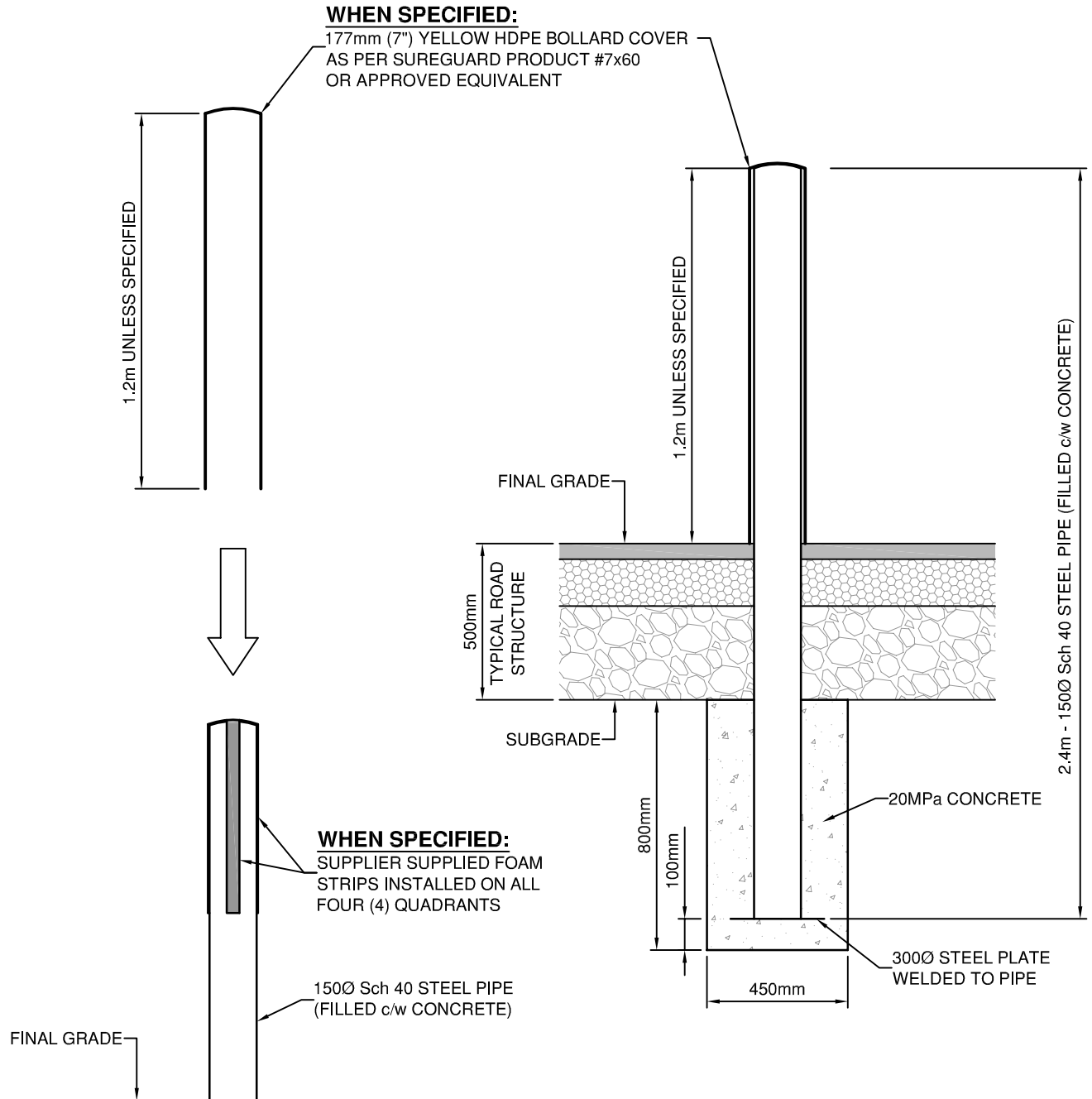
BASE TYPE	APPLICATION	A	B	C
1	SINGLE POST SIGNS IN PAVED ISLANDS OR CONCRETE SIDEWALKS	610	203	305
2	SINGLE OR TWO POST SIGNS IN GRAVEL SHOULDER	750	300	600

TOWN OF OSOYOOS

**CONCRETE SIGN BASE
AND SIGNAGE**



DWN. BY:	TT
CHK. BY:	SU
DATE:	DEC 2013
SCALE:	N.T.S.
DWG. NO.:	REV.:
R-14	



NOTE:

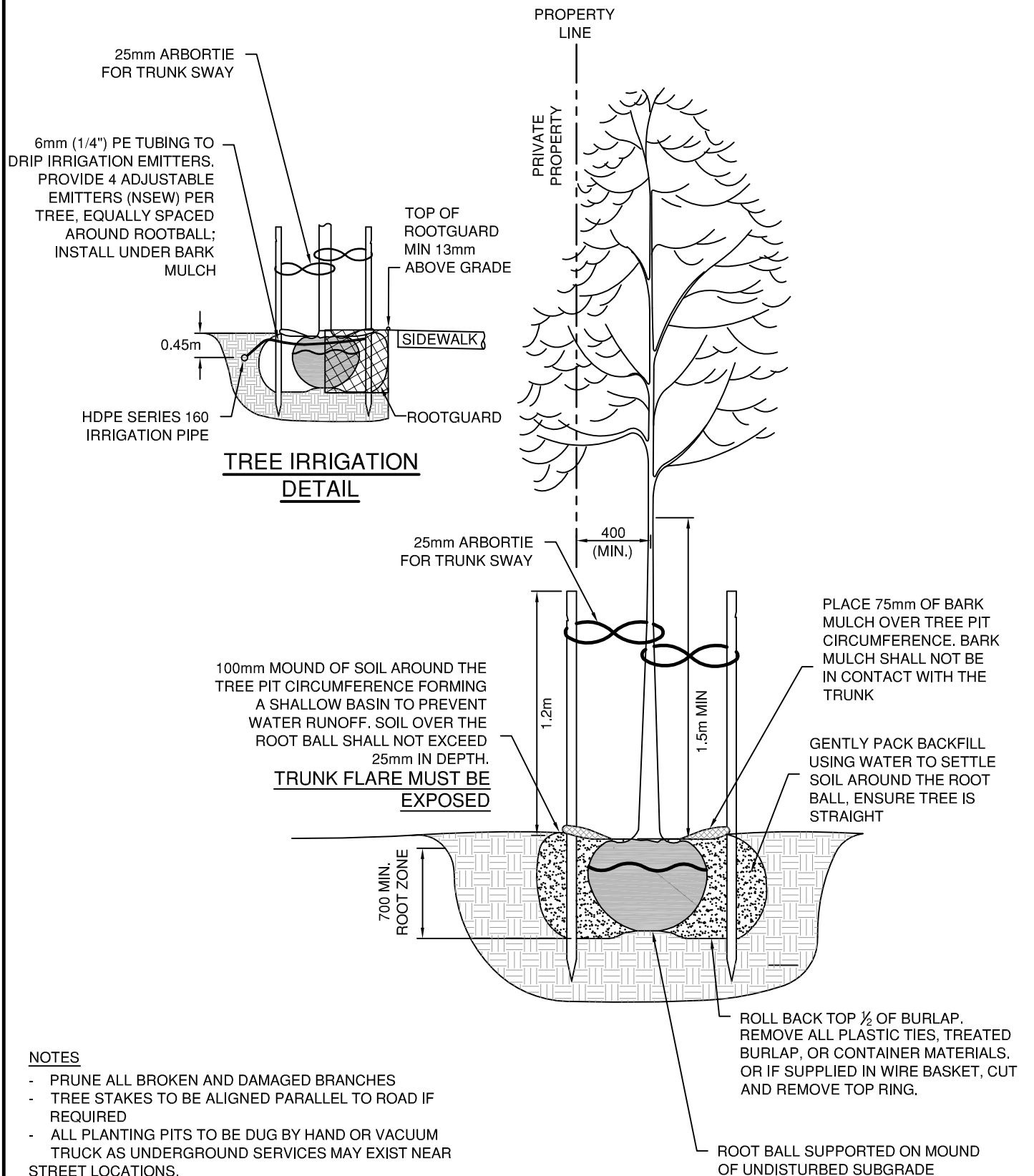
150Ø Sch 40 STEEL PIPE IS TO BE PAINTED c/w 2 COATS OF
ENAMEL PAINT (IN PLACE OF HDPE BOLLARD COVER).
COLOR TO BE SAFETY YELLOW UNLESS SPECIFIED OTHERWISE.

TOWN OF OSOYOOS

PROTECTIVE BOLLARD



DWN. BY: TT	
CHK. BY: TRU	
DATE: MAY 2015	
SCALE: N.T.S.	
DWG. NO.:	REV.:
R-15	

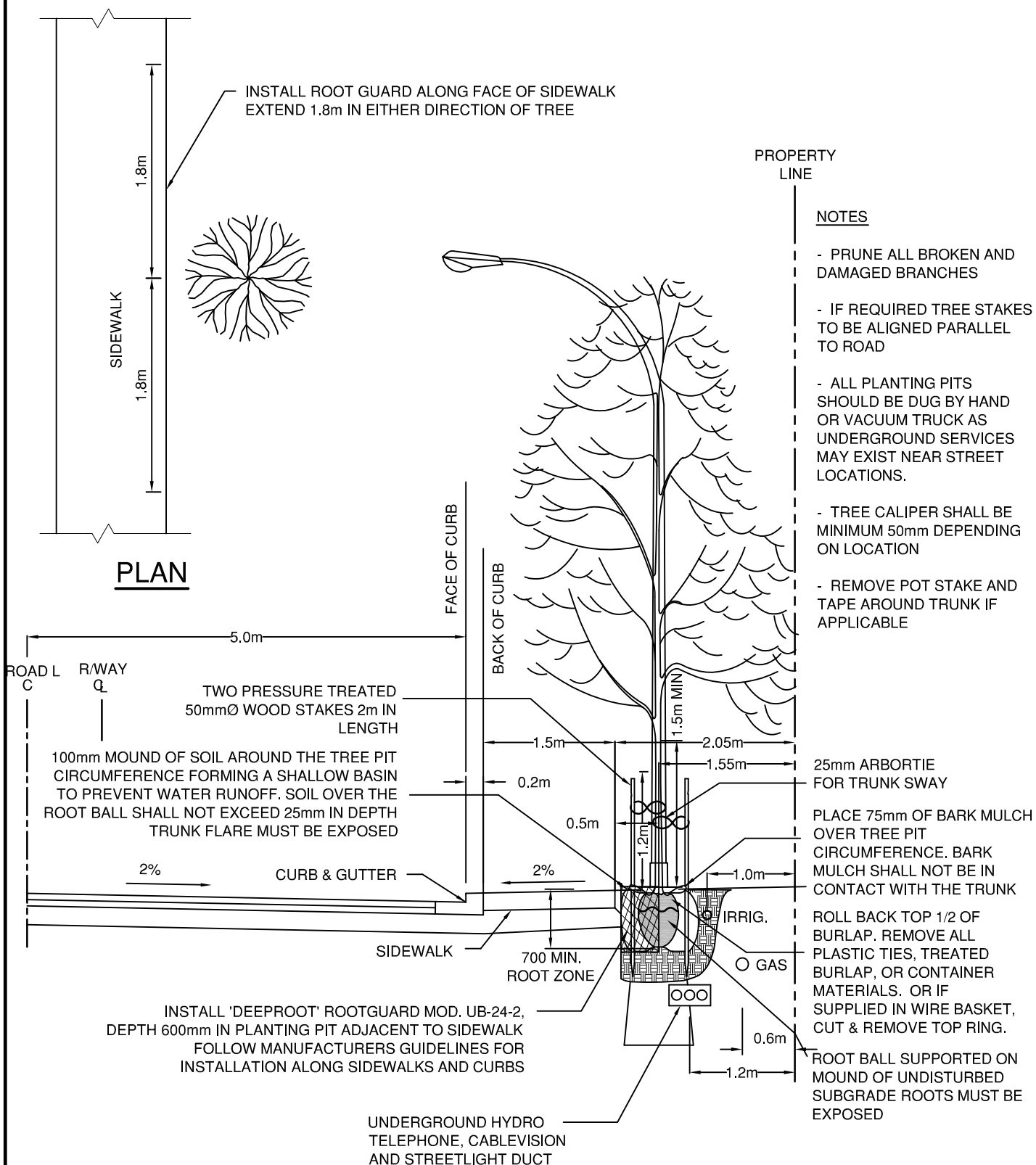


TOWN OF OSOYOOS

TYPICAL TREE PLANTING DETAIL
SOFTSCAPE



DWN. BY: EB	
CHK. BY: TRU	
DATE: JUL 2015	
SCALE: N.T.S.	
DWG. NO.:	REV.:
R-16	



TOWN OF OSOYOOS

TYPICAL BOULEVARD TREE PLANTING



DWN. BY:	EB
CHK. BY:	TRU
DATE:	JUL 2015
SCALE:	N.T.S.
DWG. NO.:	R-17
REV.:	

DRILL 15Ø HOLE IN PIPE AND WELD
NUT TO PIPE PRIOR TO GALVANIZING
RETAP THREADS AFTER
GALVANIZING

1/2" Ø (UNC) x 1 1/4" LONG
STAINLESS STEEL HEX HEAD BOLT

1/4" Ø - 20 x 3 1/2" LONG
BOLT AND NUT (STAINLESS STEEL)

DRILL PIPE TO SUIT

PIPE SLEEVE TO BE GALVANIZED
AFTER FABRICATION

CONCRETE SHALL HAVE ATTAINED A
COMPRESSIVE STRENGTH OF 30MPa
PRIOR TO POST INSTALLATION

2 1/2" (I.D.) ASTM A53 GRADE
B SCHEDULE 40 PIPE SLEEVE

MAINTAIN PIPE THROUGH CONCRETE
FOR DRAINAGE

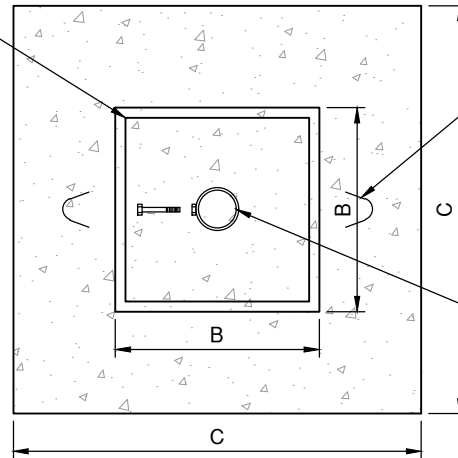
PLAN VIEW

INSTALL PIPE SLEEVE PLUMB

NOTES:

1. THE BOTTOM OF LOWEST SIGN SHALL BE 2.1m ABOVE THE SIDEWALK, SHOULDER ... UNLESS DIRECTED OTHERWISE.
2. ALL SIGNS SHOULD BE MOUNTED APPROXIMATELY AT RIGHT ANGLES TO THE TRAFFIC FLOW AND FACING THE TRAFFIC THEY ARE INTENDED TO SERVE.
3. SIGNS SHALL NOT OVERHANG ROADWAY / TRAVEL LANE.
4. BASE SHALL BE INSTALLED 25MM ABOVE FINISHED GRADE EXCEPT WHERE INSTALLED IN SIDEWALK IT SHALL BE FLUSH WITH TOP OF SURFACE WITH NO CHAMFERED EDGE.
5. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

12mm CHAMFERED EDGE



LIFTING STRAP
(TYPICAL)

LOCATE PIPE SLEEVE
IN CENTRE OF BASE

TOP VIEW

BASE TYPE	APPLICATION	APPROX. MASS	VOLUME OF CONCRETE	A	B	C
A	SINGLE POST SIGNS IN PAVED ISLANDS OR CONCRETE SIDEWALKS	34 kg	0.015 m ³	400	160	230
B	SINGLE OR TWO POST SIGNS IN GRAVEL SHOULDER UP TO 1.0 x 1.2m	166 kg	0.068 m ³	470	300	460
C	TWO POST SIGNS IN GRAVEL SHOULDER UP TO 1.0 X 1.2m ≤ 1.2 x 2.4m	390 kg	0.16 m ³	750	330	600

TOWN OF OSOYOOS

**CONCRETE SIGN BASE
AND SIGNAGE FOR ROUND POST**



DWN. BY: TT/DL

CHK. BY: SU

DATE: FEB 2019

SCALE: N.T.S.

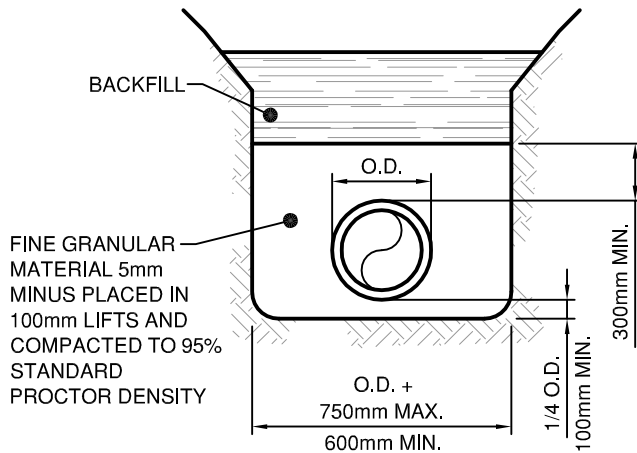
DWG. NO.:

R-18

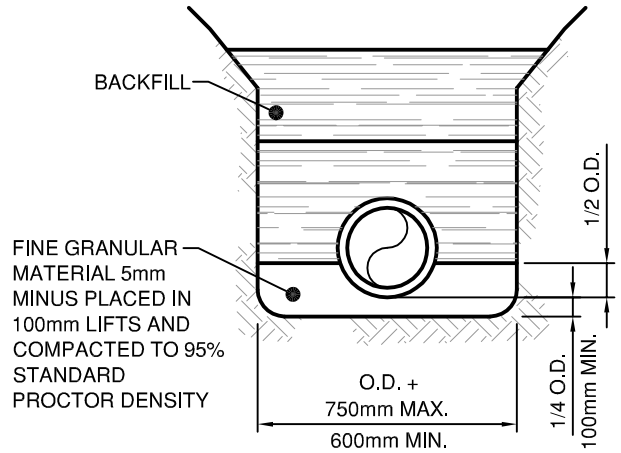
REV.:

CLASS "B" BEDDING

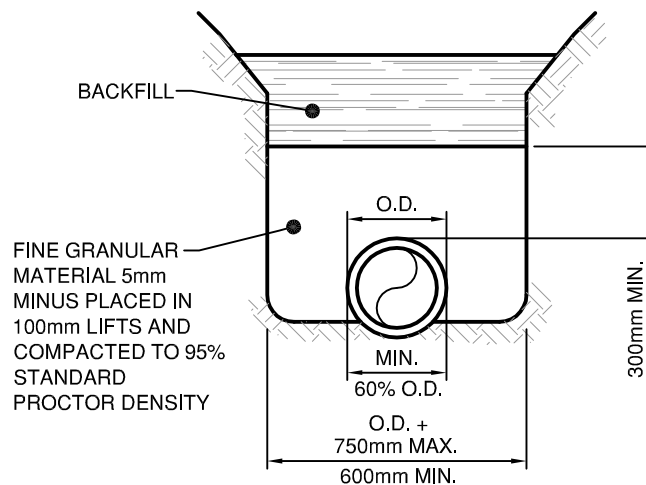
FOR PVC PIPE:



FOR ALL OTHER PIPE:



CLASS "C" BEDDING



TOWN OF OSOYOOS

TYPICAL PIPE BEDDING AND BACKFILL
WITHIN PIPE ZONE

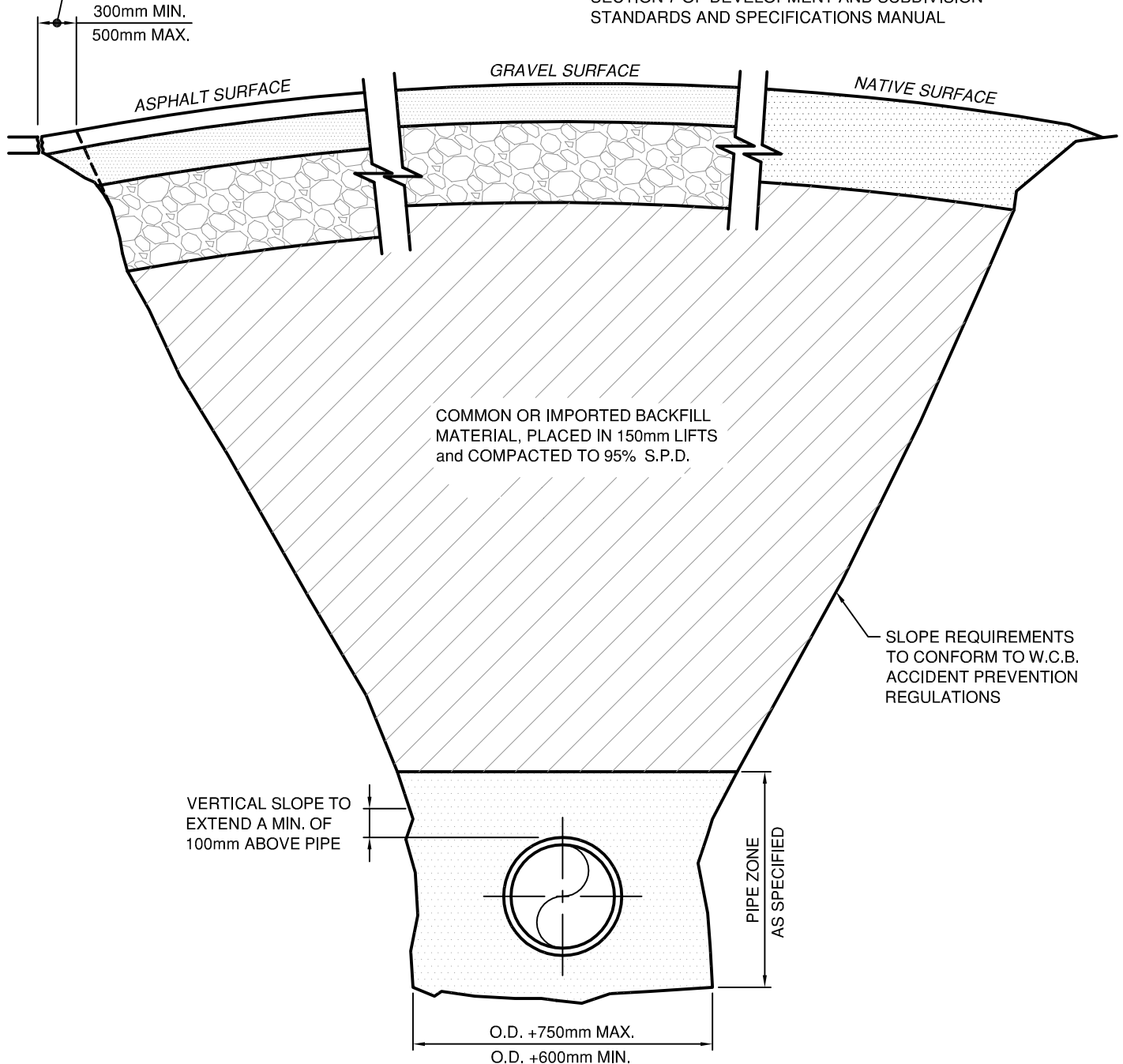


DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.: S-1	REV.:

ASPHALT TIE:

AFTER THE INSTALLATION OF ROAD BASES, SAWCUT EXISTING ASPHALT BACK FROM EXCAVATION EDGE, COMPACT CRUSHED GRAVEL BASE COURSE TO 100% S.P.D. and PAINT CUT EDGE OF ASPHALT WITH AN APPROVED BITUMINOUS BONDING AGENT PRIOR TO ASPHALT PLACEMENT.

SURFACE RESTORATION and BASE GRAVELS AS PER SECTION 7 OF DEVELOPMENT AND SUBDIVISION STANDARDS AND SPECIFICATIONS MANUAL

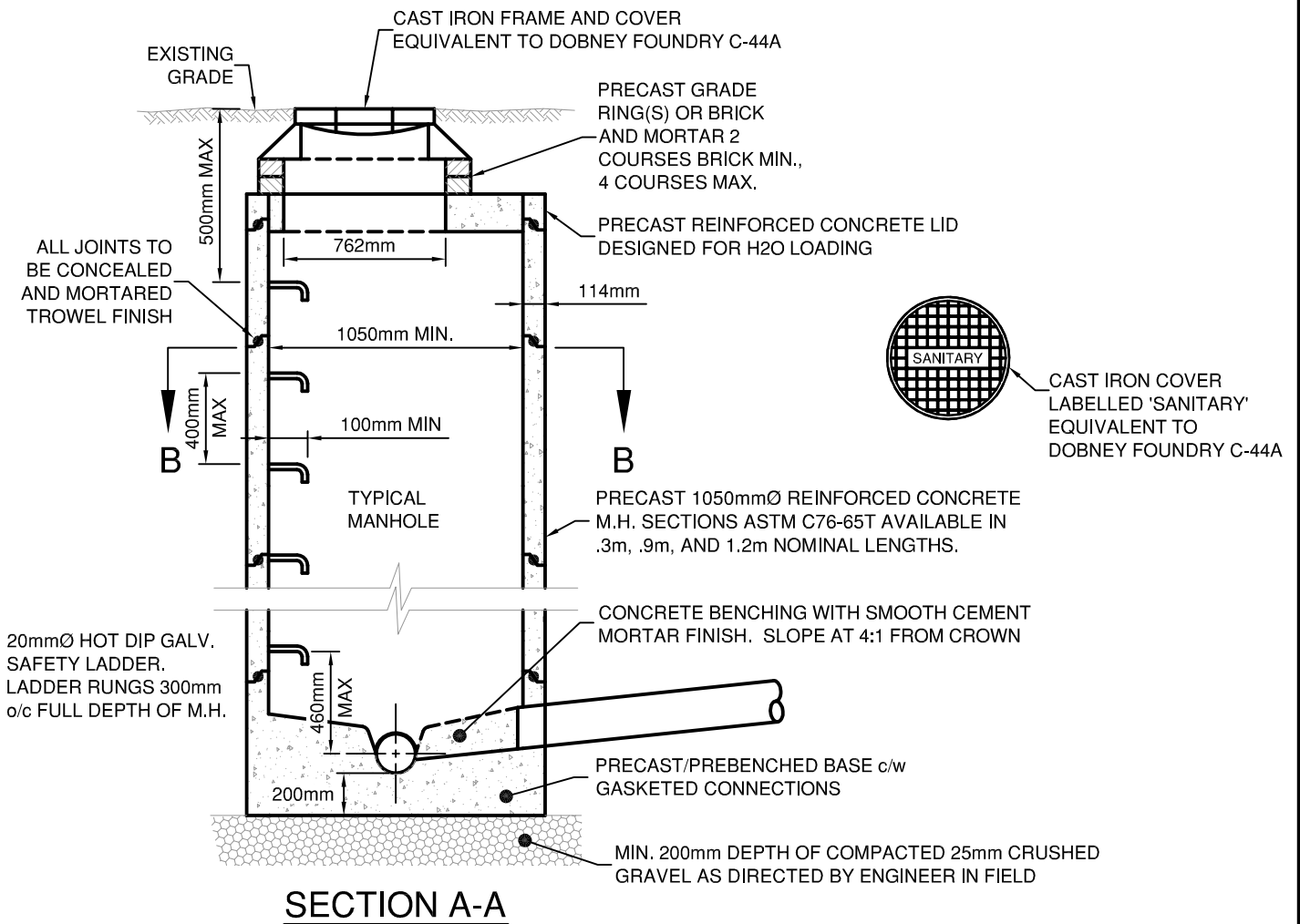
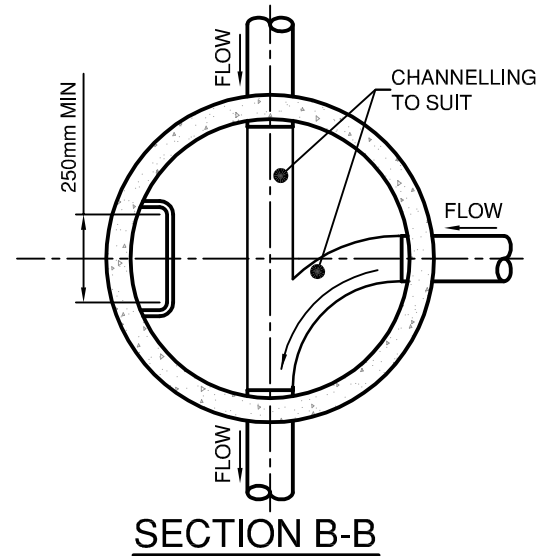
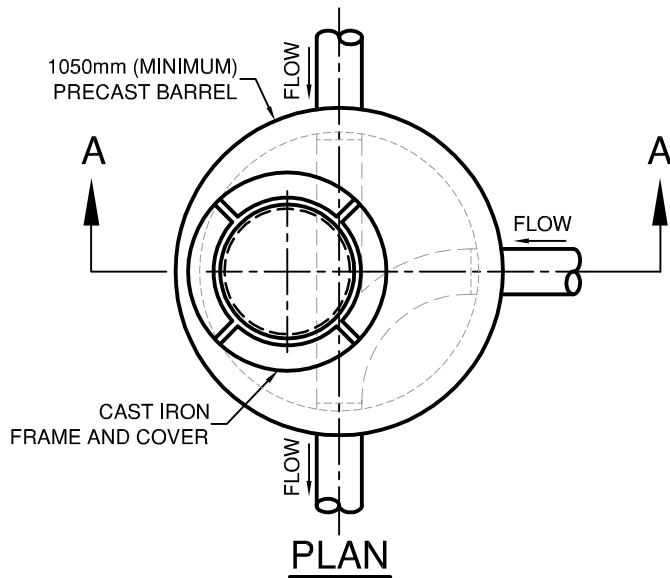


TOWN OF OSOYOOS

TYPICAL TRENCH SECTION



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
S-2	

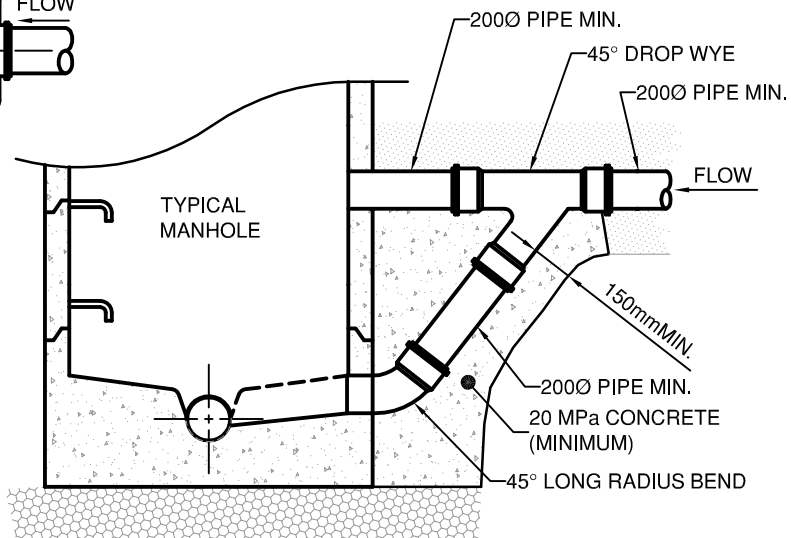
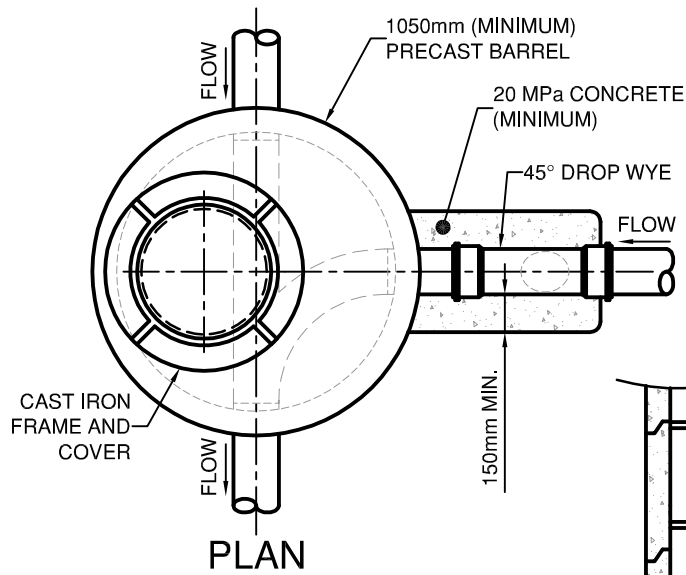


TOWN OF OSOYOOS

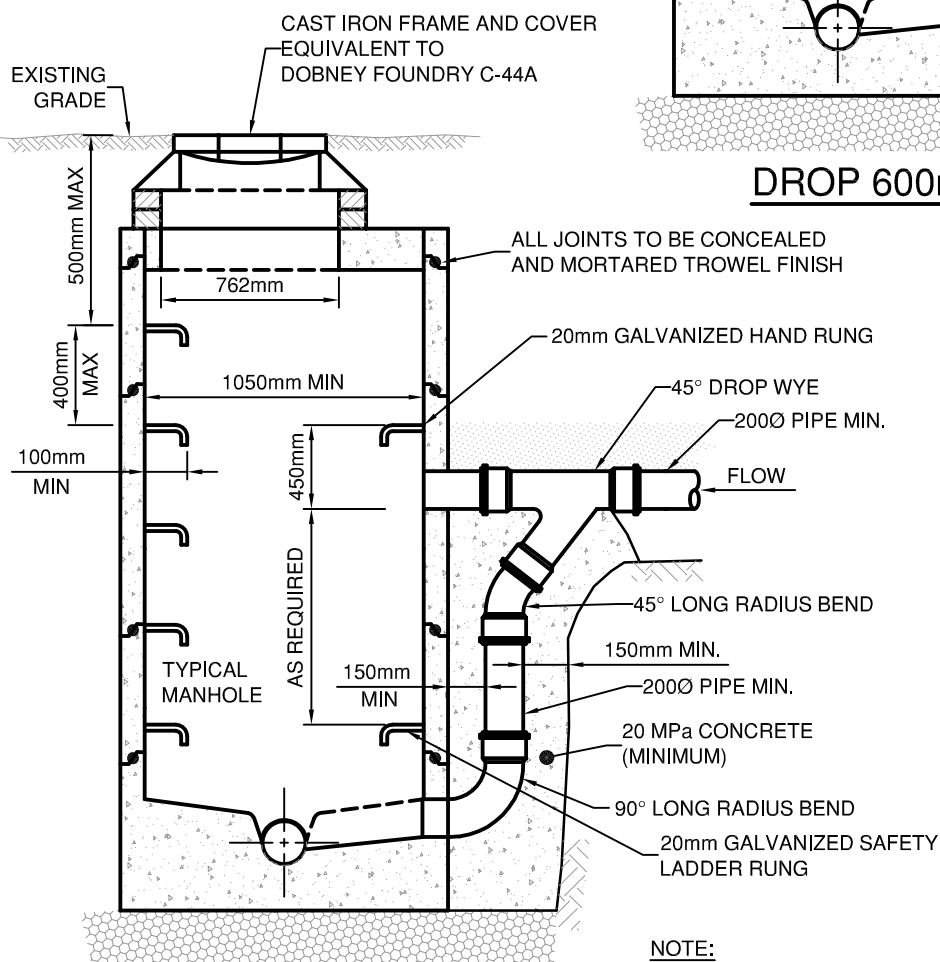
TYPICAL SEWER MANHOLE



DWN. BY: TT	
CHK. BY: SU	
DATE: SEP 2015	
SCALE: N.T.S.	
DWG. NO.: S-3	REV.:



DROP 600mm TO 1500mm



CAST IRON COVER LABELLED 'SANITARY' EQUIVALENT TO DOBNEY FOUNDRY C-44A

20mmØ HOT DIP GALV. SAFETY LADDER. LADDER RUNGS 300mm o/c FULL DEPTH OF M.H.

DROP GREATER THAN 1500mm

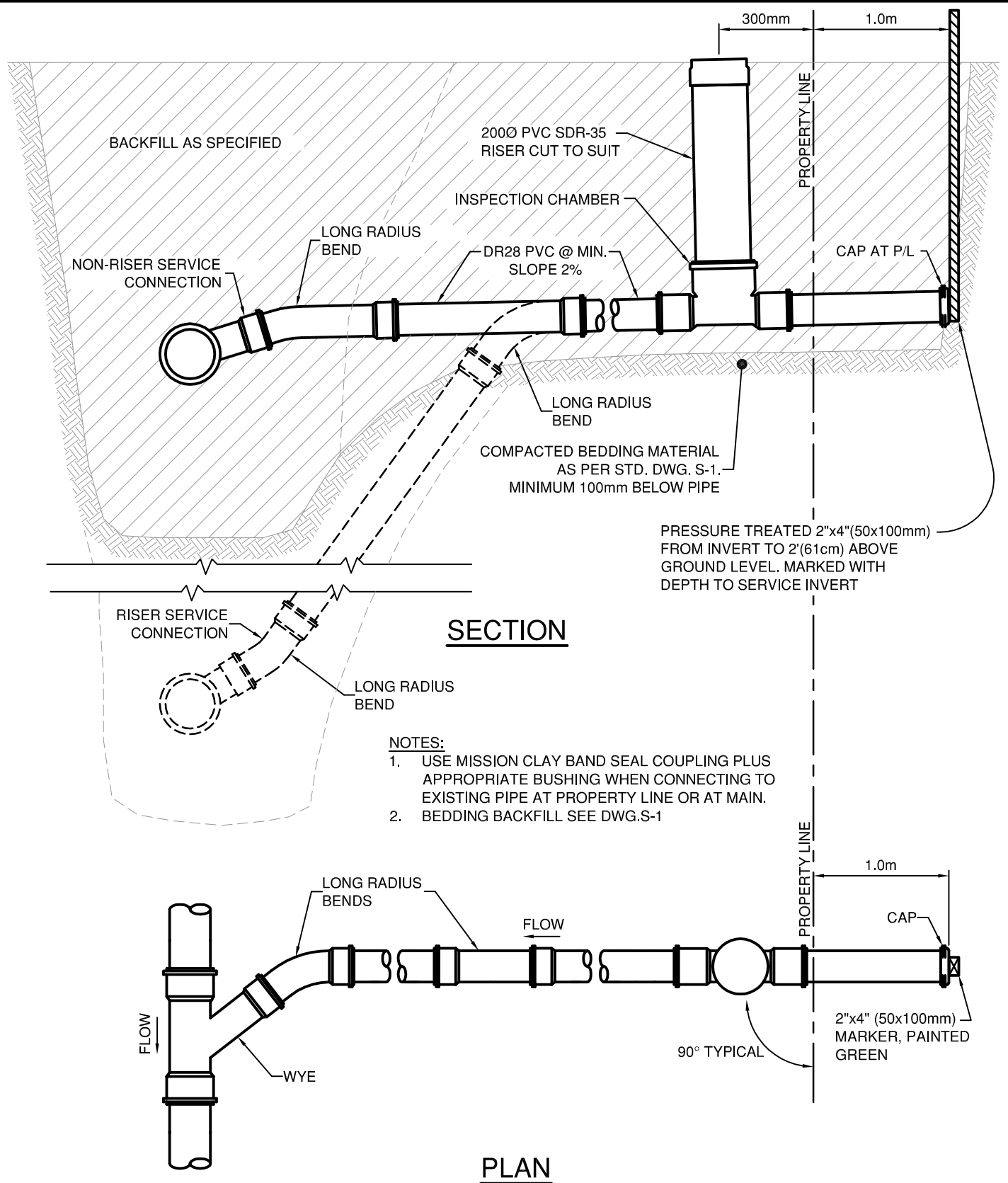
NOTE:
INSIDE RAMPS SHALL BE UTILIZED WHERE THE ELEVATION OF THE INVERT IS LESS THAN 600mm ABOVE THE INVERT OF THE CENTER OF THE MANHOLE.

TOWN OF OSOYOOS

TYPICAL EXTERIOR
DROP MANHOLE



DWN. BY:	TT
CHK. BY:	SU
DATE:	SEP 2015
SCALE:	N.T.S.
DWG. NO.:	S-4
REV.:	

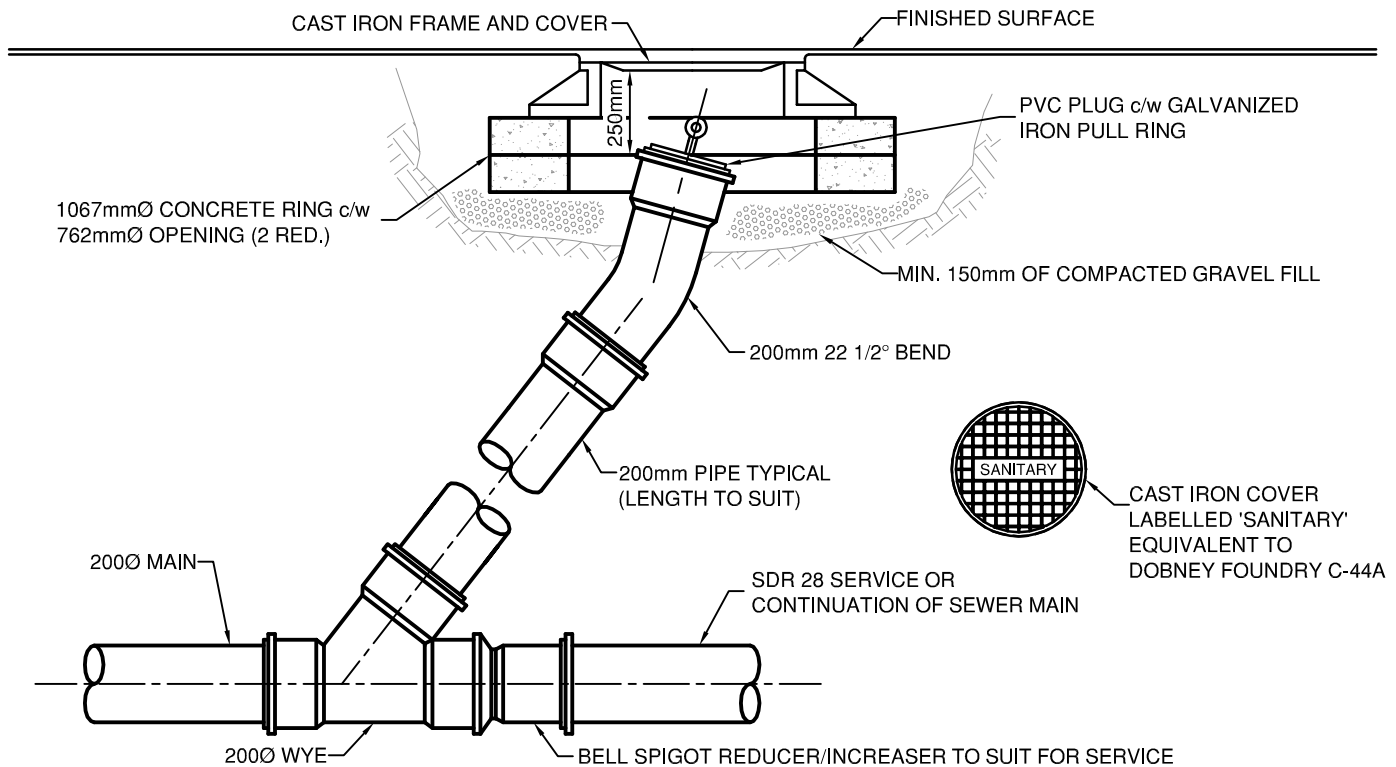


TOWN OF OSOYOOS

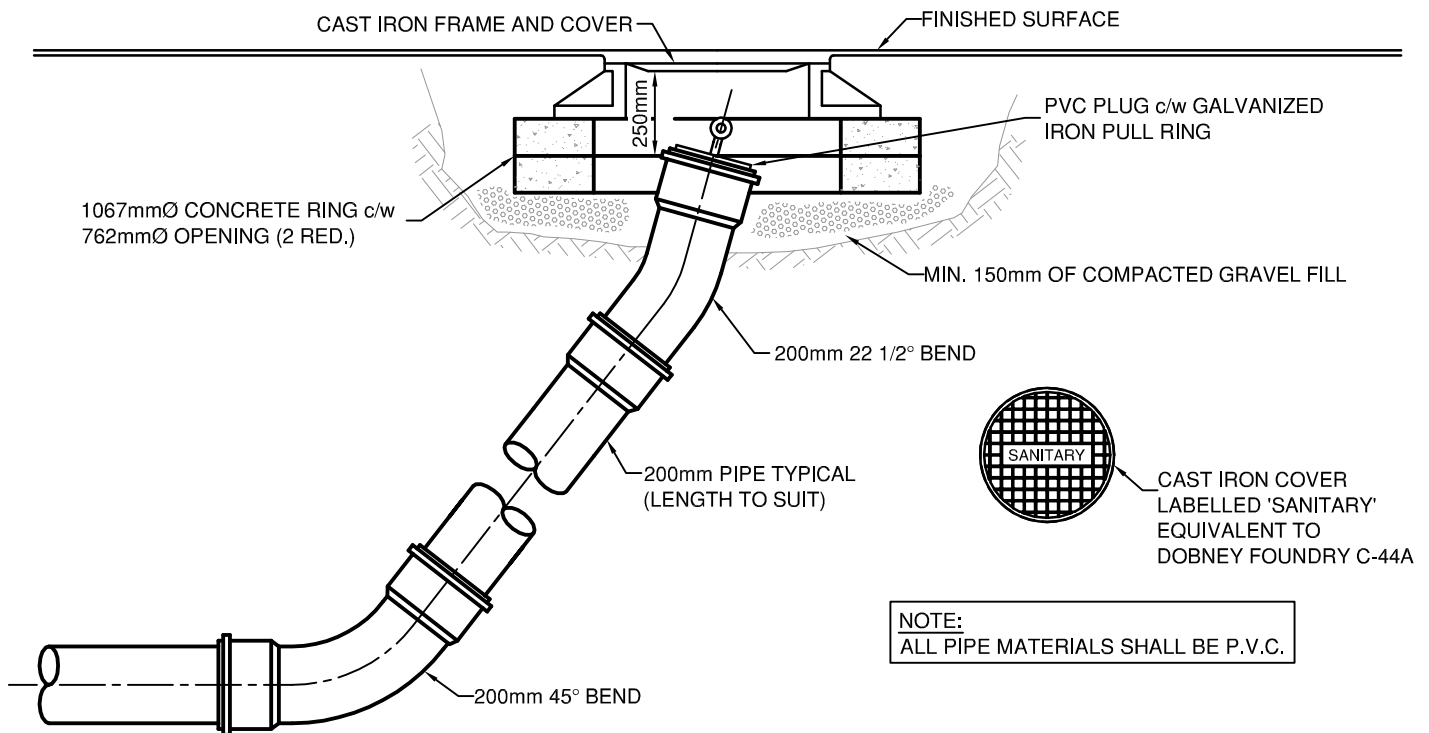
TYPICAL SEWER SERVICE CONNECTION



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
S-5	



MID-MAIN or END MAIN with SERVICE



NOTE:
ALL PIPE MATERIALS SHALL BE P.V.C.

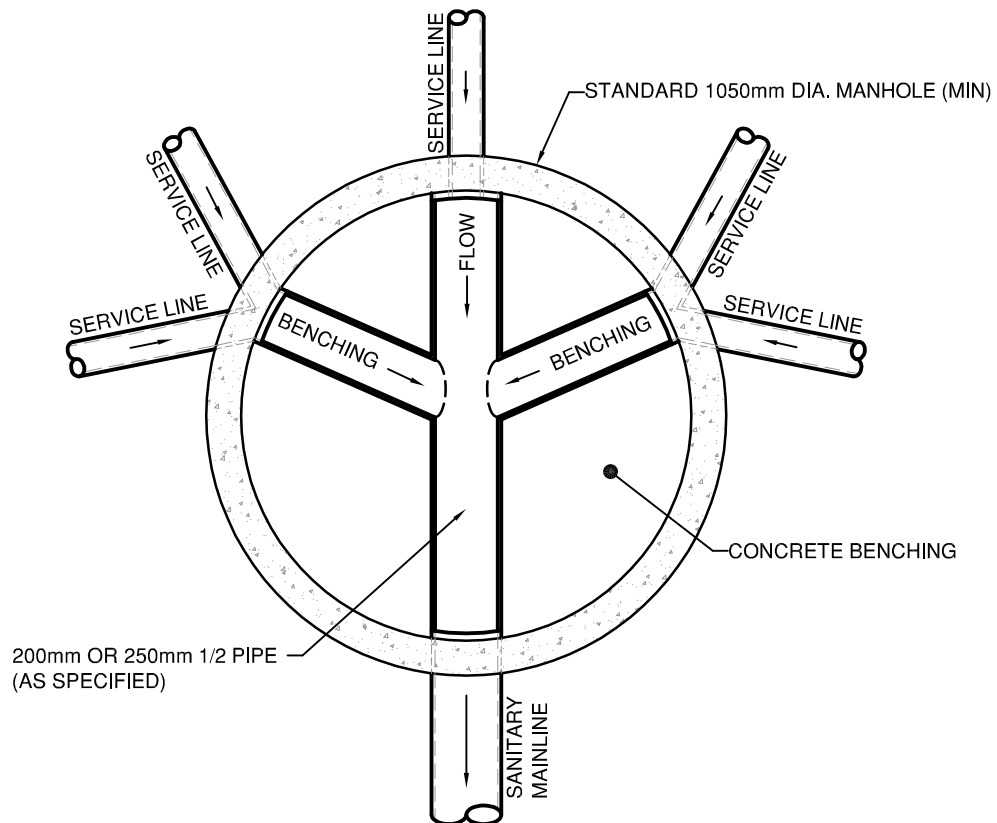
END MAIN or TEMPORARY CLEANOUT

TOWN OF OSOYOOS

TYPICAL SEWERMAIN
CLEANOUT

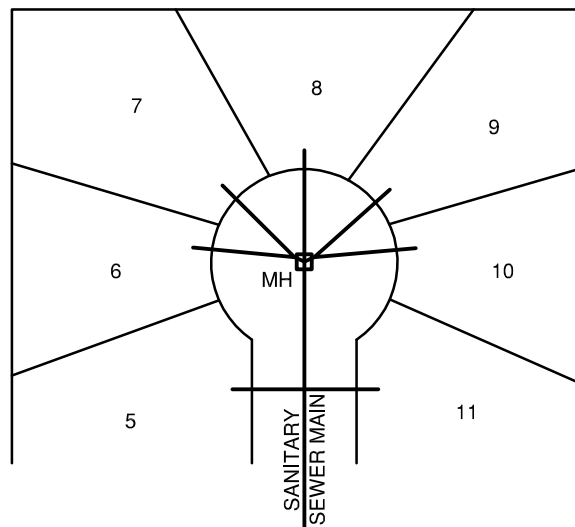
Osoyoos
Canada's warmest welcome™

DWN. BY:	TT
CHK. BY:	SU
DATE:	SEP 2015
SCALE:	N.T.S.
DWG. NO.:	REV.:
S-6	



NOTE:

1. SANITARY MAIN TO GO STRAIGHT THROUGH MANHOLE WITH 1/2 PIPE TO OPPOSITE WALL.
2. MAXIMUM HEIGHT OF INLET 300mm ABOVE INVERT OF OUTLET



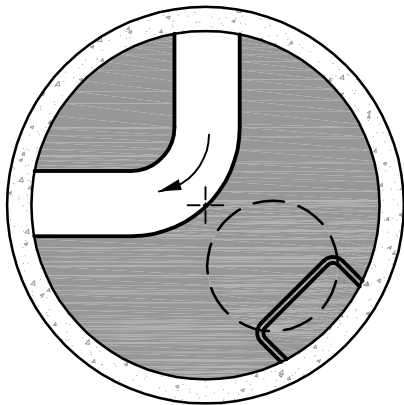
TYPICAL SITE PLAN

TOWN OF OSOYOOS

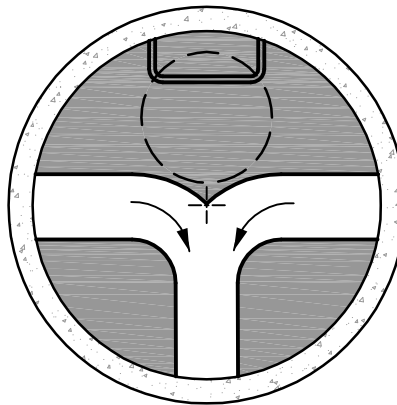
SERVICE CONNECTION DETAIL
IN A CUL-DE-SAC



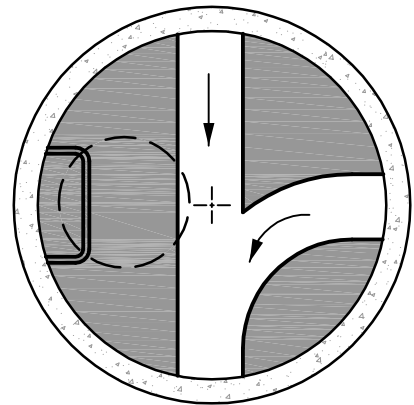
DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.: S-7	REV.:



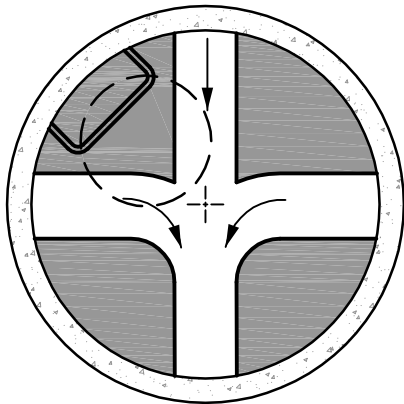
1. RIGHT ANGLE BEND



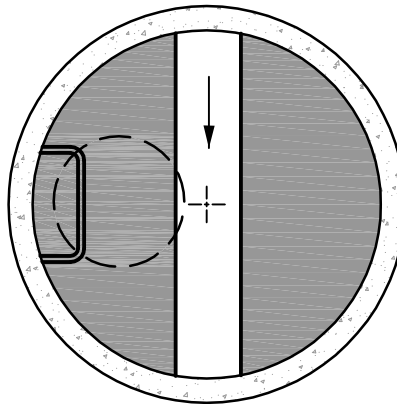
2. TEE CONNECTION



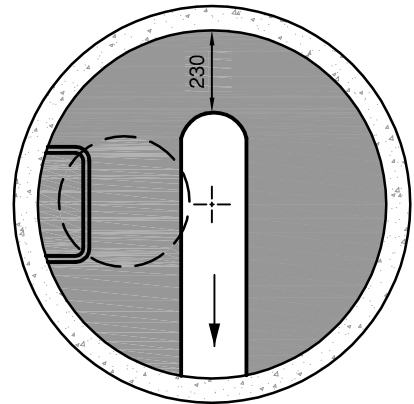
3. THREE WAY JUNCTION



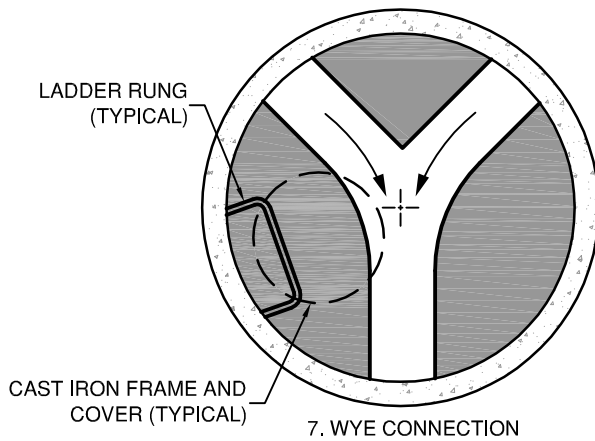
4. FOUR WAY JUNCTION



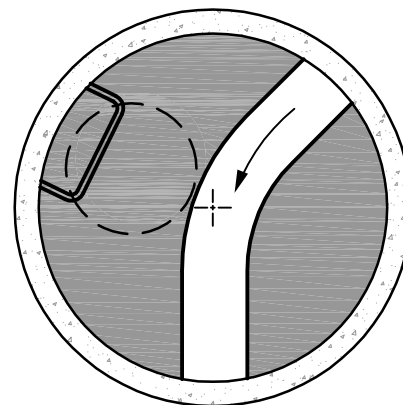
5. STRAIGHT THROUGH



6. DEAD END



7. WYE CONNECTION



8. 45° BEND

NOTES:

1. ALL CHANNELS SHALL BE TROWEL FINISHED. BENCHING (SHADED AREAS) SHALL BE BROOM FINISHED.
2. MANHOLE RUNG LOCATIONS SHALL BE AS SHOWN UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DRAWINGS.



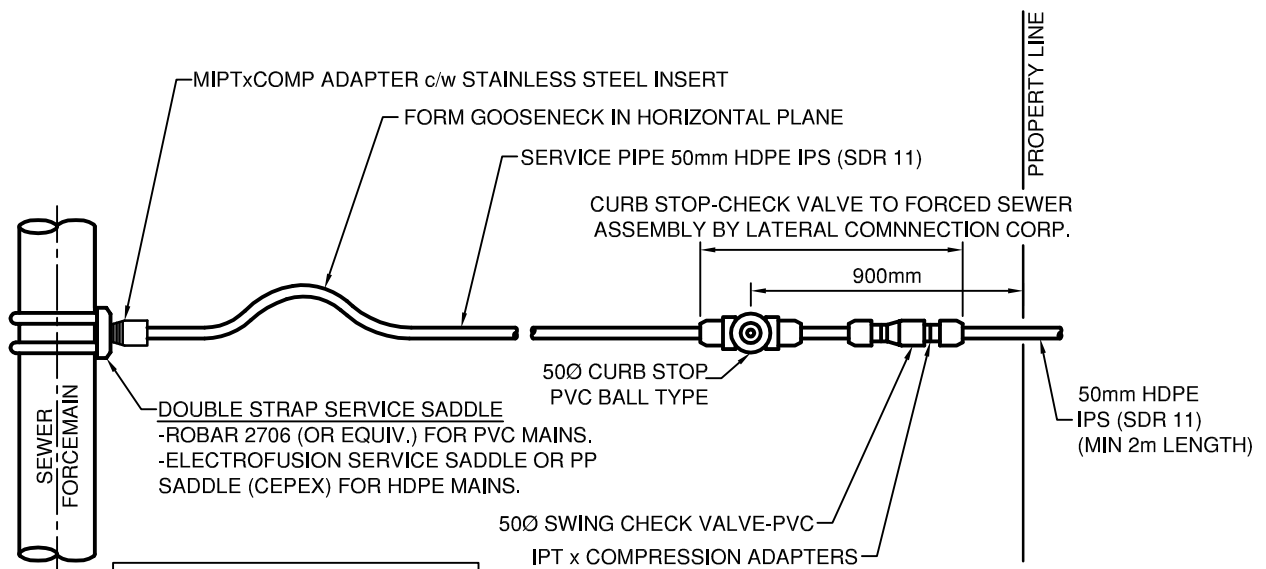
CAST IRON COVER LABELLED 'SANITARY' OR 'STORM' EQUIVALENT TO DOBNEY FOUNDRY C-44A

TOWN OF OSOYOOS

TYPICAL
MANHOLE BENCHING

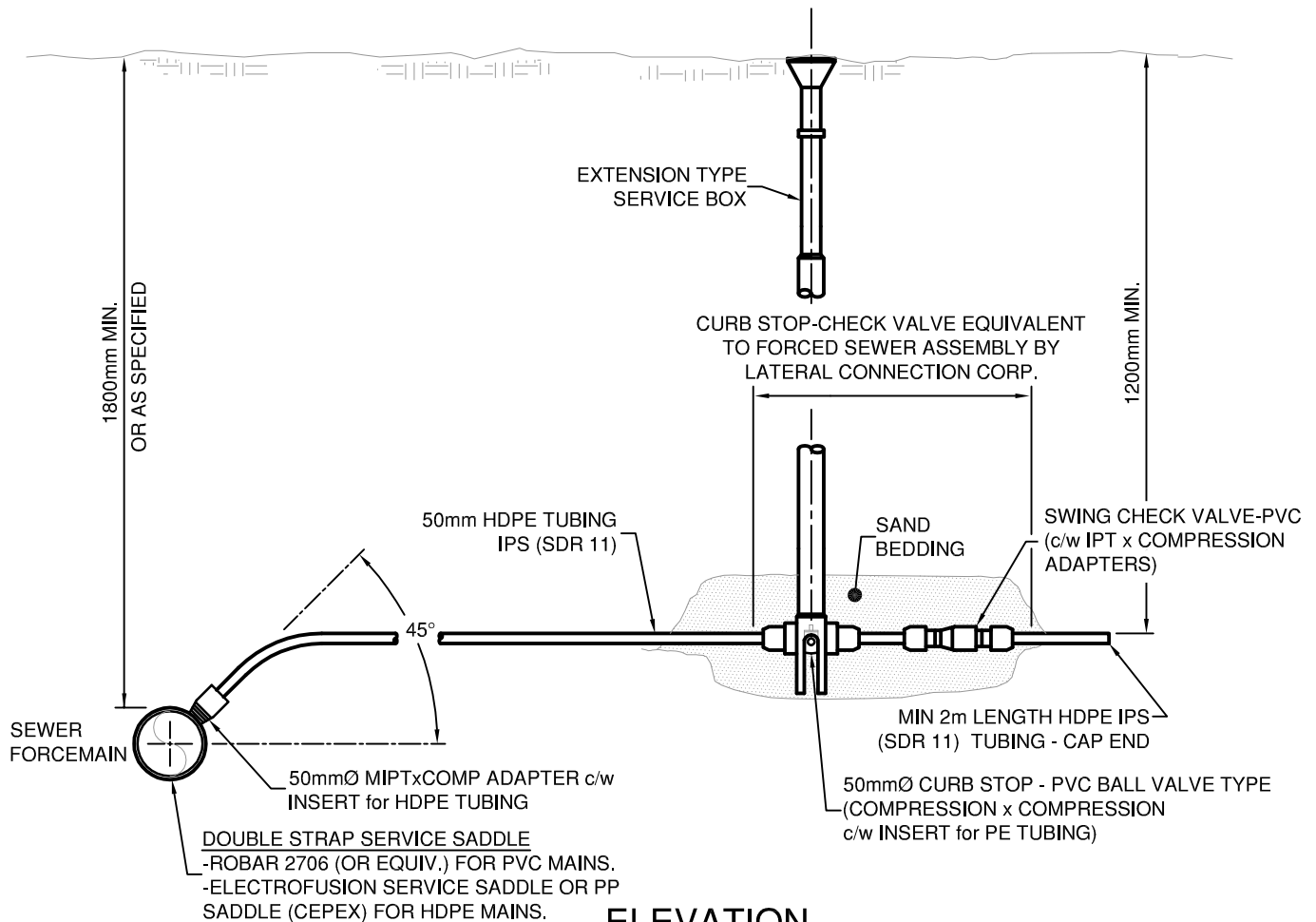


DWN. BY: TT	
CHK. BY: SU	
DATE: SEP 2015	
SCALE: N.T.S.	
DWG. NO.: S-8	REV.:



PLAN

NOTE:
ALL PIPING AND FITTINGS TO BE BRASS OR BRONZE



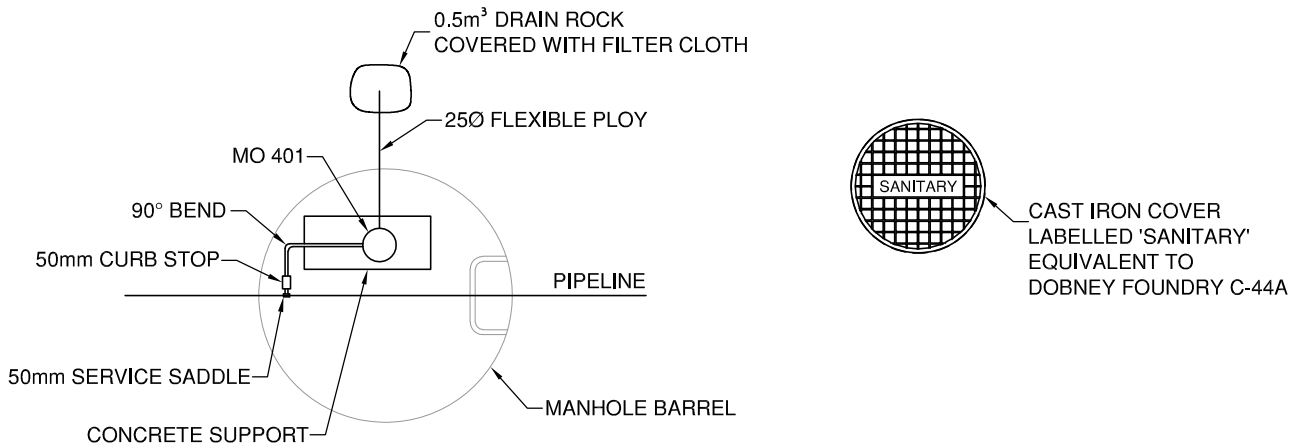
ELEVATION

TOWN OF OSOYOOS

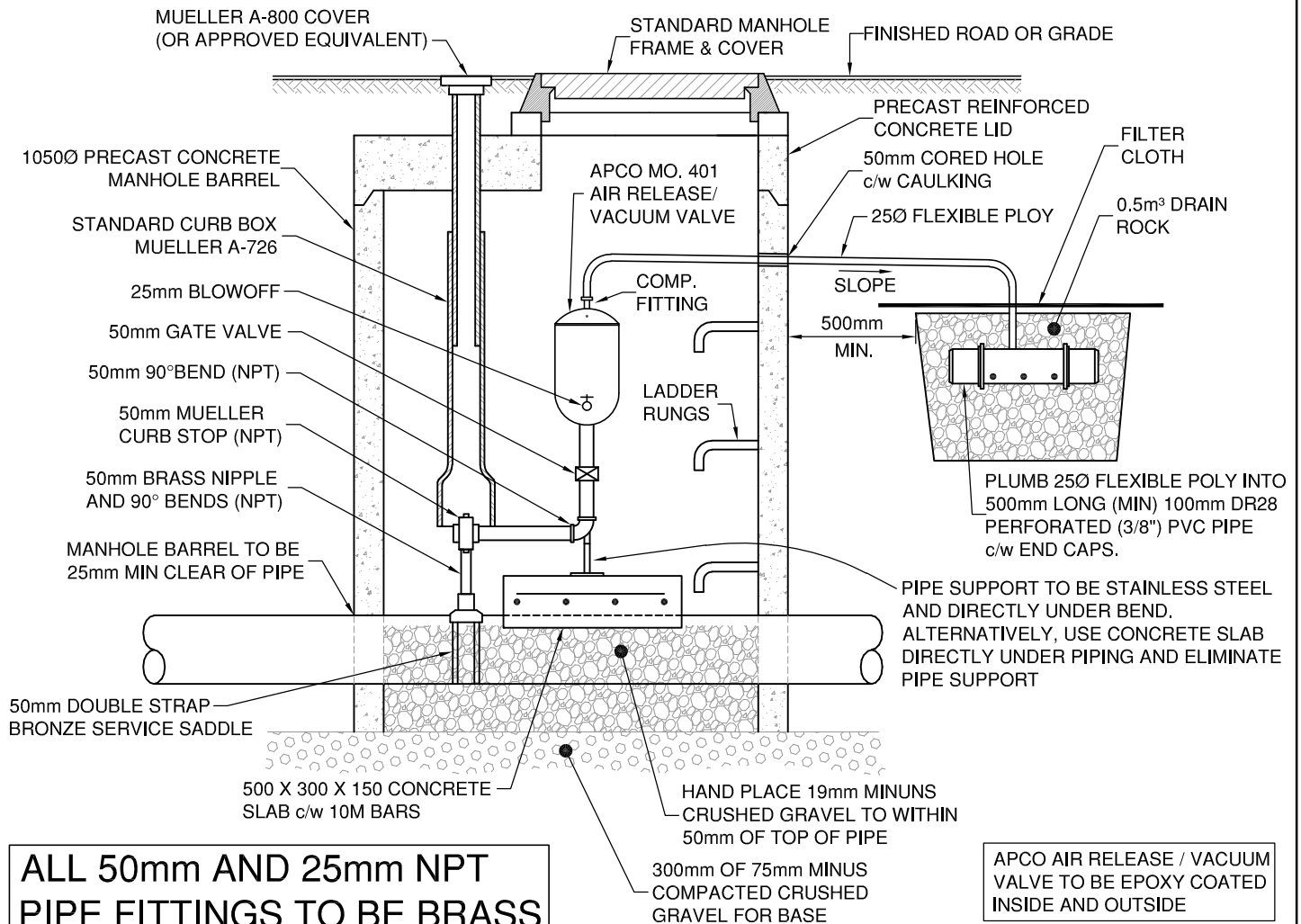
TYPICAL PRESSURE
SEWER SERVICE



DWN. BY:	TT
CHK. BY:	SU
DATE:	JAN 2016
SCALE:	N.T.S.
DWG. NO.:	S-9
REV.:	



SCHEMATIC OF PIPING LAYOUT-PLAN

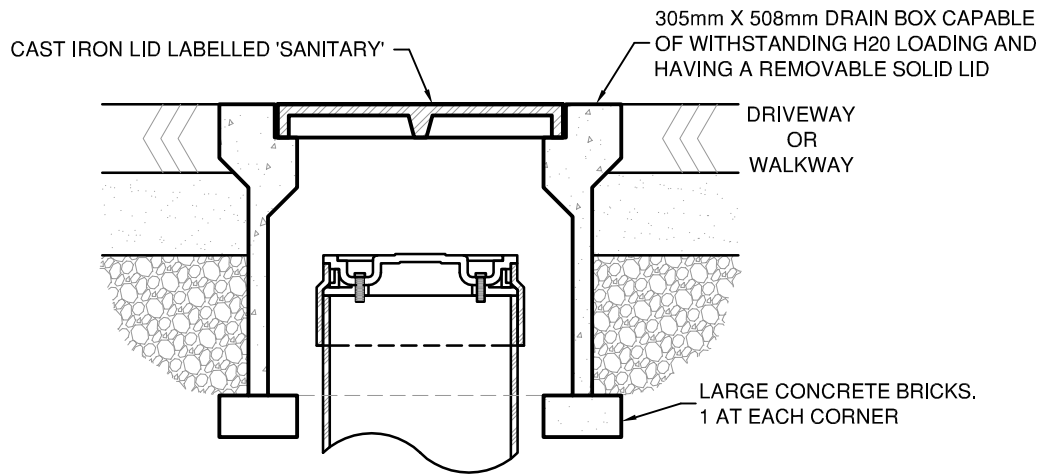


TOWN OF OSOYOOS

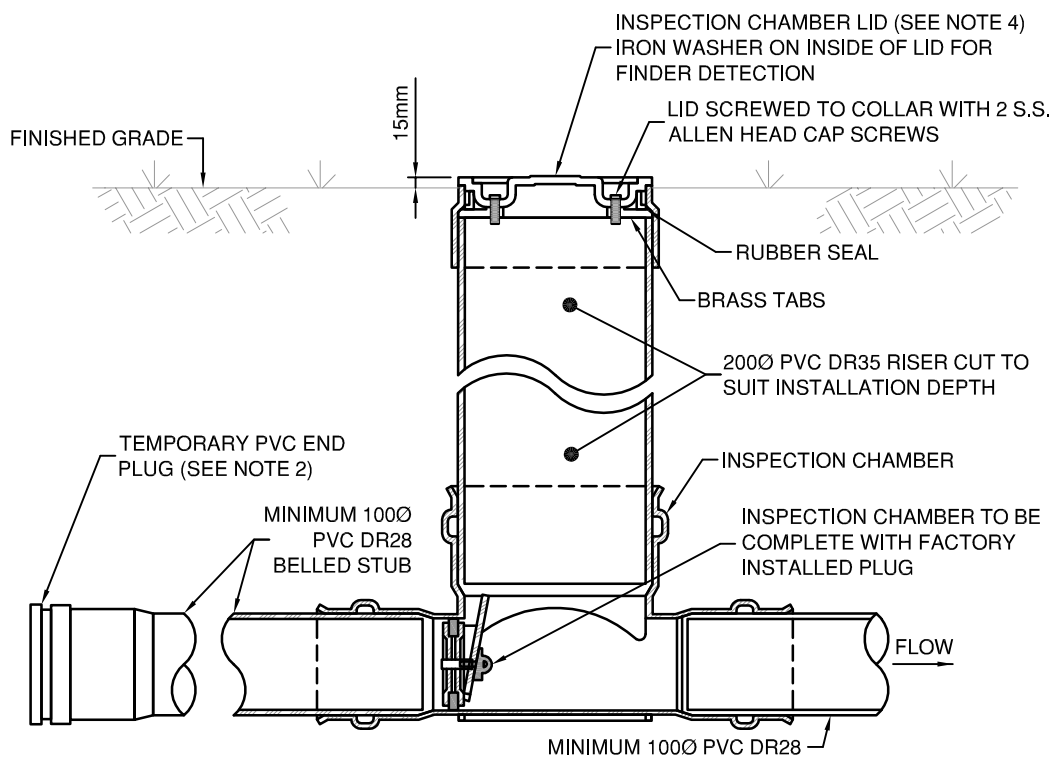
TYPICAL AIR RELEASE AND AIR VACUUM VALVE
FOR SEWER FORCEMAINS



DWN. BY:	TT
CHK. BY:	SU
DATE:	SEP 2015
SCALE:	N.T.S.
DWG. NO.:	REV.:
S-10	



INSTALLATION IN DRIVEWAY



INSTALLATION IN BOULEVARD

NOTES:

1. INSPECTION CHAMBER TO BE APPROVED MANUFACTURED FITTING.
2. PAINT INSPECTION CHAMBER LID AND RISER RED (MIN 500mm).
3. PAINT UPSTREAM BELL AND END PLUG RED, FOR A MINIMUM OF 500mm BELOW BELL, AT TIME OF INSTALLATION.
4. REFER TO SPECIFICATION DRAWING S-5 TYPICAL 100mm SANITARY INSTALLATION.

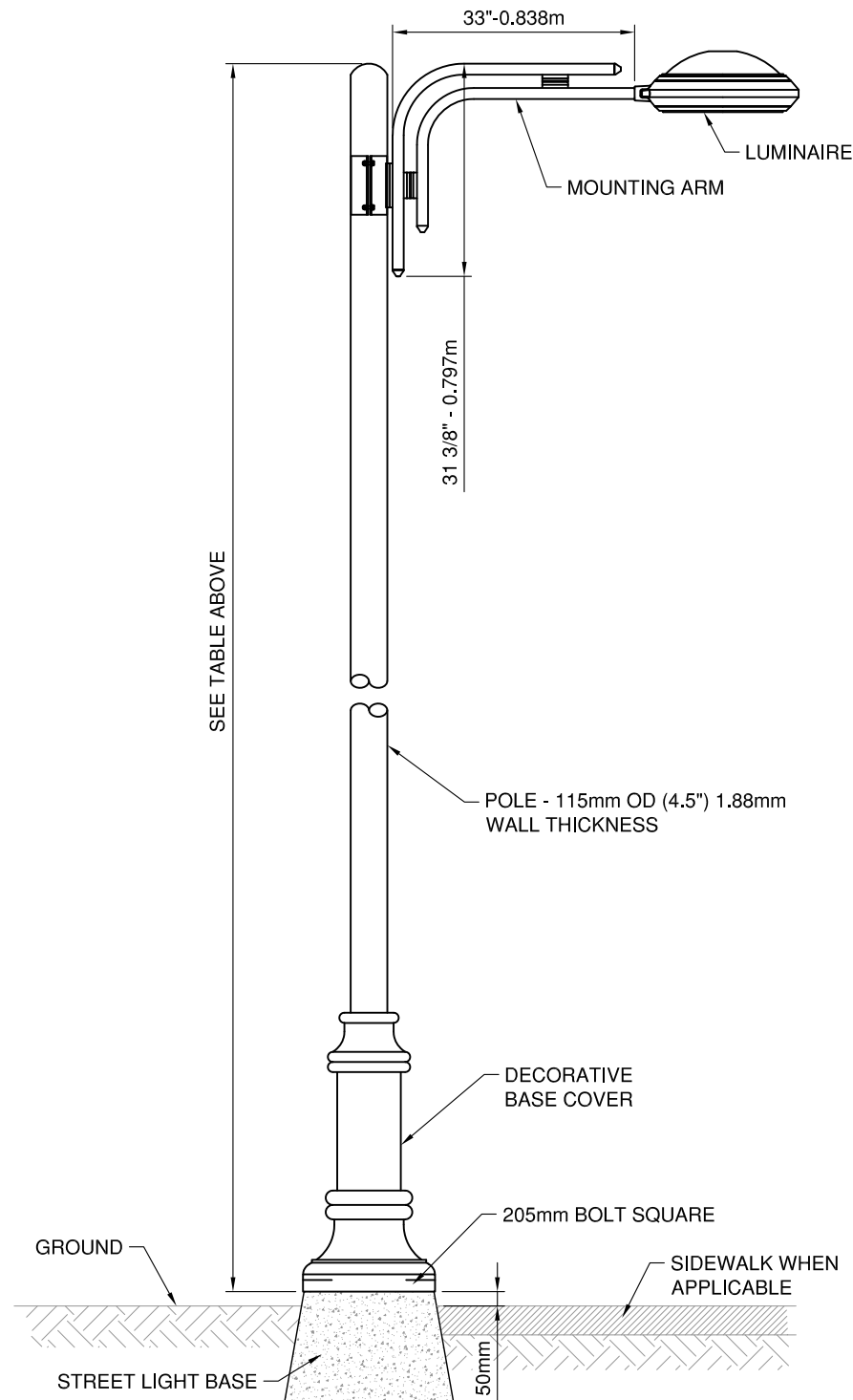
TOWN OF OSOYOOS

SEWER SERVICE
INSPECTION CHAMBER



DWN. BY:	TT
CHK. BY:	SU
DATE:	NOV 2012
SCALE:	N.T.S.
DWG. NO.:	S-11
REV.:	

	COLLECTOR ARTERIAL	LOCAL RESIDENTIAL	WALKWAY
POLE HEIGHT	8.0m	6.0m	4.5m
POLE SPEC	NOVA POLE NSR 8m	NOVA POLE NSR 6m	NOVA POLE NSR 4.5m
BASE COVER	NOVA POLE NEWPORT 38	NOVA POLE NEWPORT 38	NOVA POLE NEWPORT 38
MOUNTING ARM	LUMCA CONCEPT 10 CF44	LUMCA CONCEPT 10 CF44	LUMCA CONCEPT 10 CF44
LUMINAIRE	LUMCA CONCEPT 10 CP 0401	LUMCA CONCEPT 10 CP 0401	LUMCA CONCEPT 10 CP 0401
VOLTAGE	240v OR 120v	240v OR 120v	240v OR 120v
LAMP	106W LED (UNLESS SPECIFIED)	48W LED (UNLESS SPECIFIED)	40W LED (UNLESS SPECIFIED)



NOTES:

1. POLE, BASE COVER AND MOUNTING ARM TO BE POWDER COATED WITH TIGER DRYLAC COLOR RAL 7034
2. ANCHOR BOLTS IN BASE TO BE 25mm

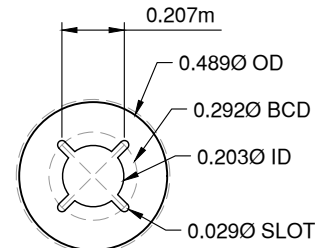
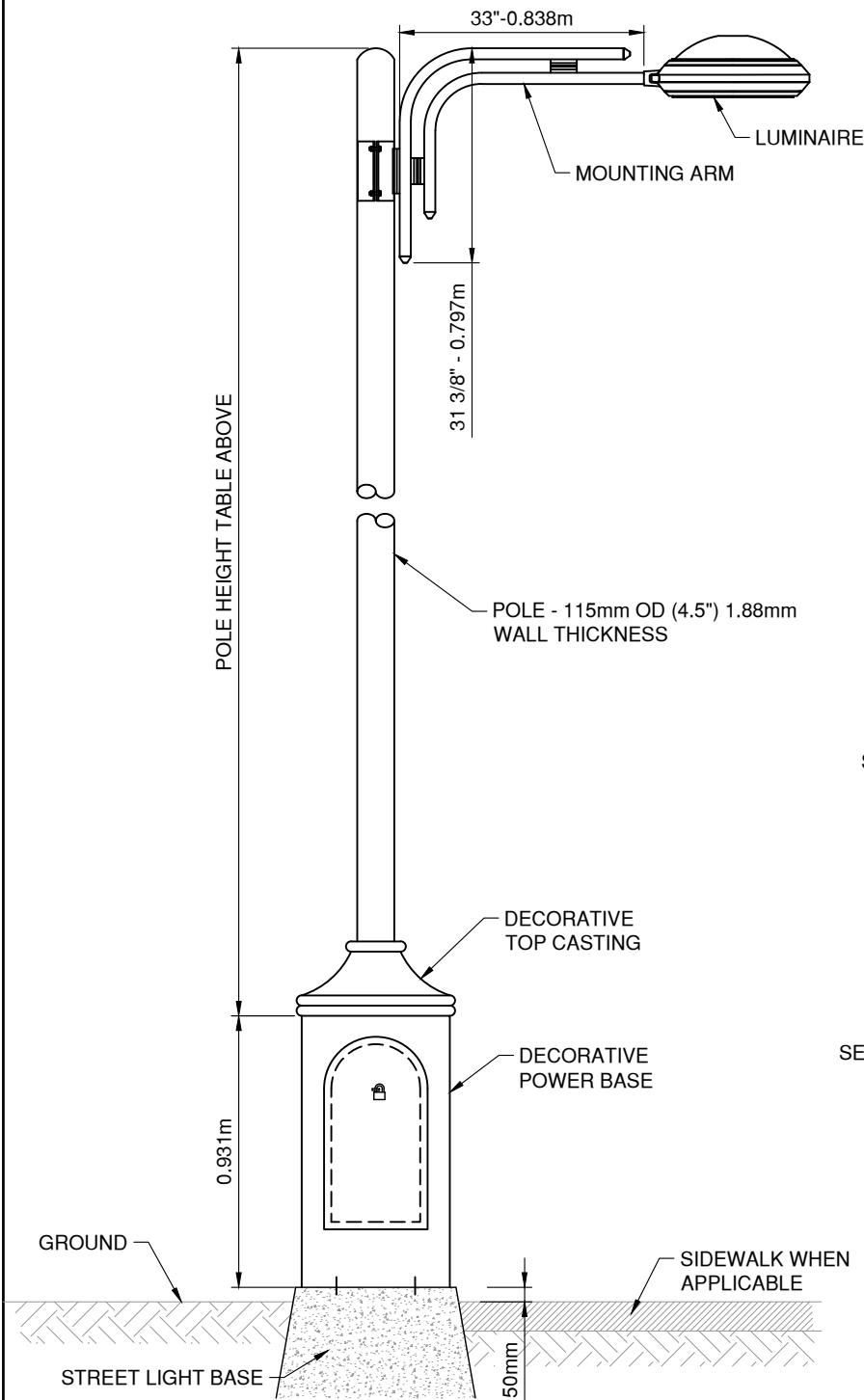
TOWN OF OSOYOOS

TYPICAL STREET LIGHT

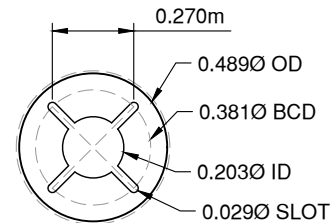


DWN. BY:	TT
CHK. BY:	SU
DATE:	JAN 2019
SCALE:	N.T.S.
DWG. NO.:	SL-1
REV.:	

	COLLECTOR ARTERIAL	LOCAL RESIDENTIAL	WALKWAY
POLE HEIGHT	7.1m	5.1m	3.6m
POLE SPEC	NOVA POLE NSR 8M	NOVA POLE NSR 6M	NOVA POLE NSR 4.5M
POWER BASE	NOVA POLE DTB-36 c/w DECORATIVE TOP CASTING	NOVA POLE DTB-36 c/w DECORATIVE TOP CASTING	NOVA POLE DTB-36 c/w DECORATIVE TOP CASTING
MOUNTING ARM	LUMCA CONCEPT 10 CF44	LUMCA CONCEPT 10 CF44	LUMCA CONCEPT 10 CF44
LUMINAIRE	LUMCA CONCEPT 10 CP 0401	LUMCA CONCEPT 10 CP 0401	LUMCA CONCEPT 10 CP 0401
VOLTAGE	240v OR 120v	240v OR 120v	240v OR 120v
LAMP	106W LED (UNLESS SPECIFIED)	48W LED (UNLESS SPECIFIED)	40W LED (UNLESS SPECIFIED)



SERVICE BASE TOP PLATE PLAN



SERVICE BASE BOTTOM PLATE PLAN

NOTES:

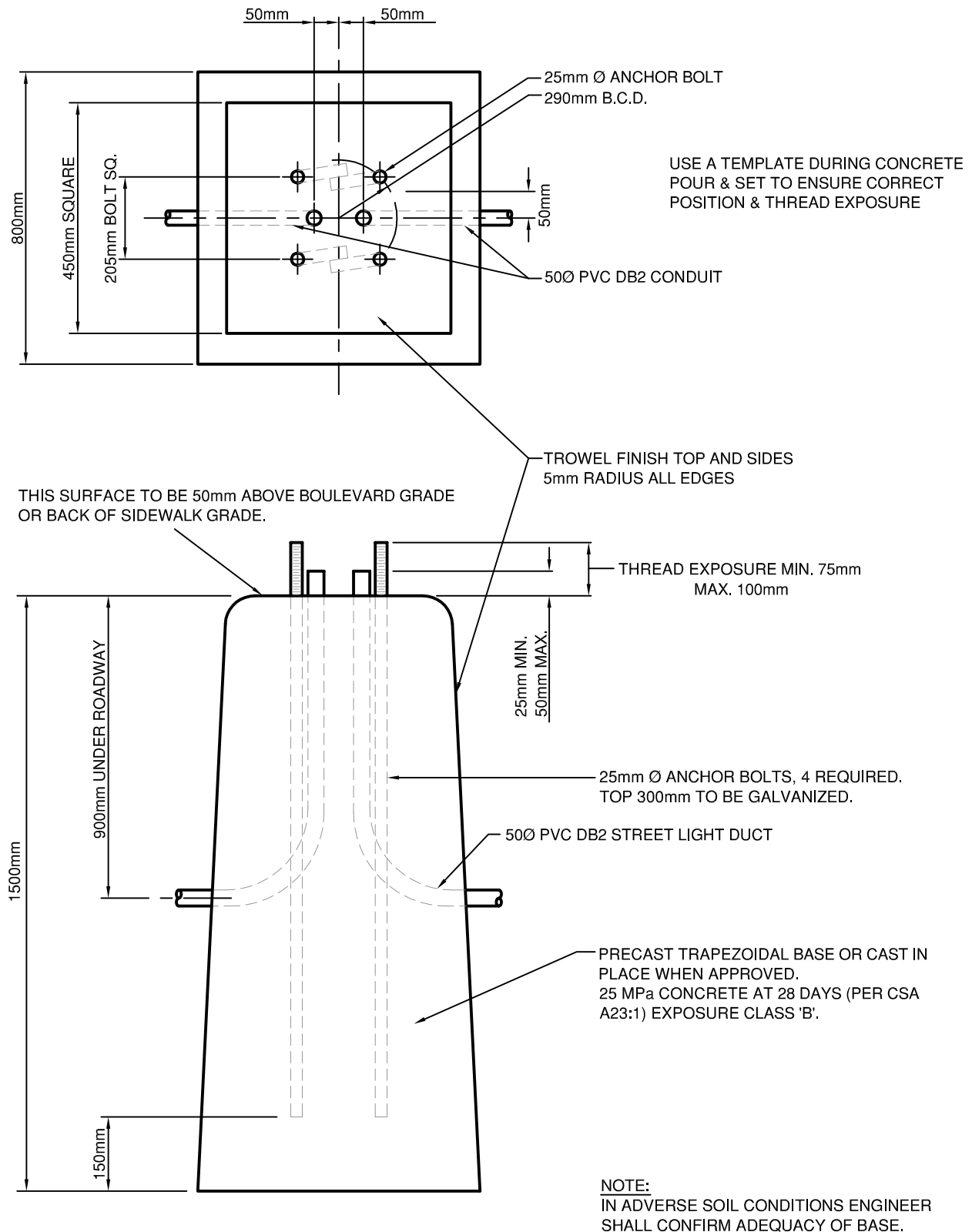
- POLE, BASE COVER AND MOUNTING ARM TO BE POWDER COATED WITH TIGER DRYLAC COLOR RAL 7034
- ANCHOR BOLTS IN BASE TO BE 25mm

TOWN OF OSOYOOS

TYPICAL STREET LIGHT
c/w POWER BASE



DWN. BY:	TT
CHK. BY:	SU
DATE:	NOV 2012
SCALE:	N.T.S.
DWG. NO.:	SL-2
REV.:	

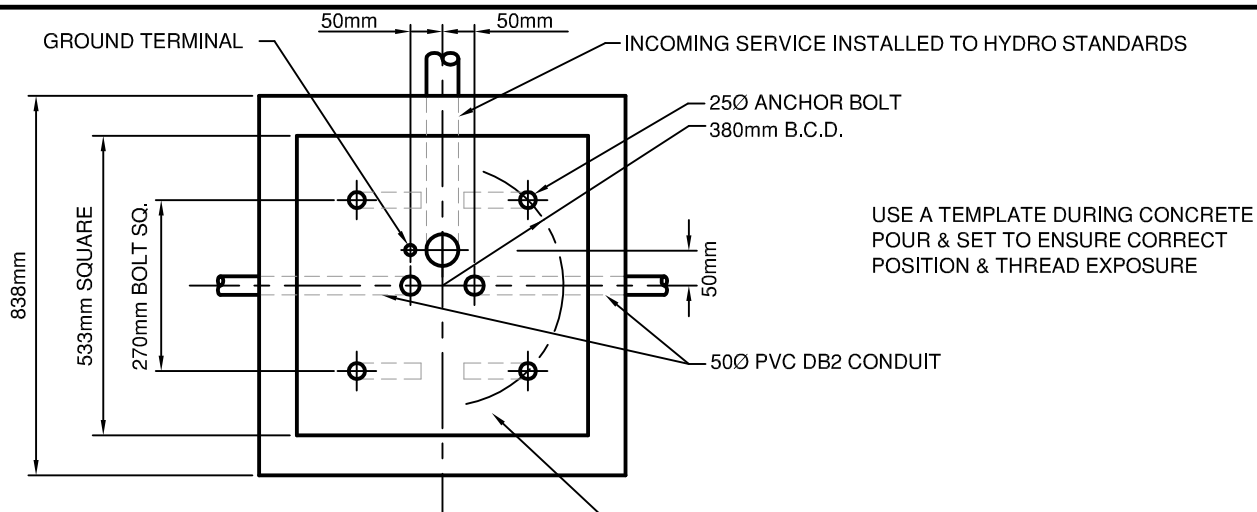


TOWN OF OSOYOOS

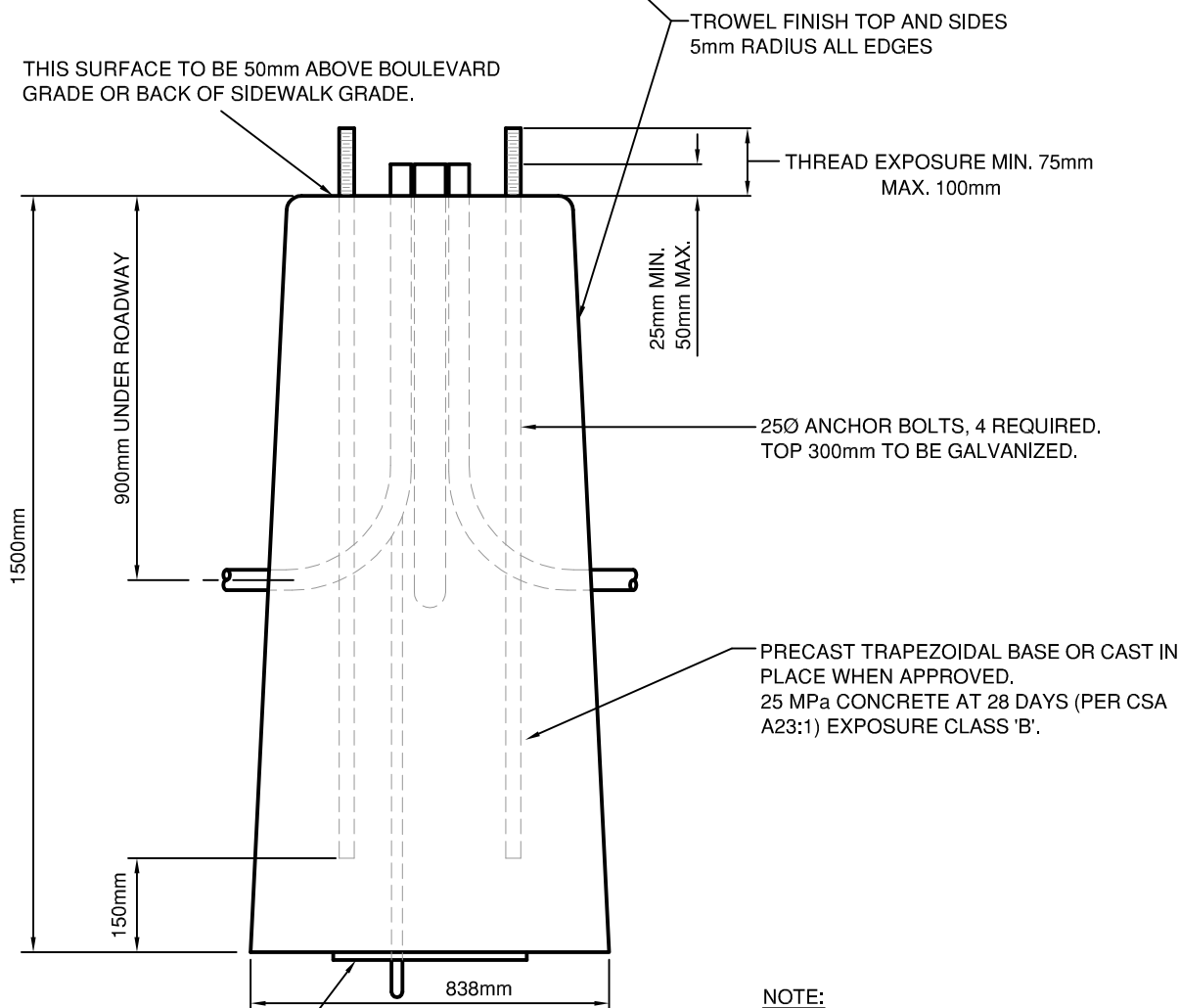
ANCHOR BASE FOR STREET LIGHT
WITHOUT POWER BASE



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
SL-3	



THIS SURFACE TO BE 50mm ABOVE BOULEVARD GRADE OR BACK OF SIDEWALK GRADE.



NO.6 STRANDED GROUND WIRE TO A COPPERWELD PLATE ELECTRODE HAVING NOT LESS THAN 0.2m² OF SURFACE AREA AND SHALL BE NOT LESS THAN 1.5mm IN THICKNESS.

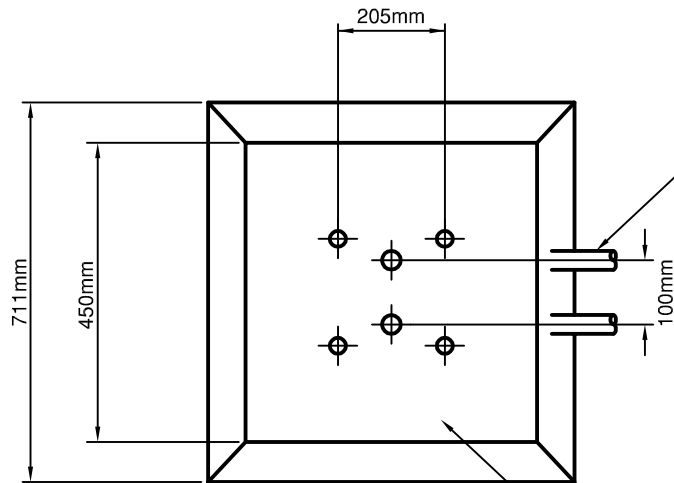
NOTE:
IN ADVERSE SOIL CONDITIONS ENGINEER SHALL CONFIRM ADEQUACY OF BASE

TOWN OF OSOYOOS

ANCHOR BASE FOR STREET LIGHT
WITH POWER BASE



DWN. BY:	TT
CHK. BY:	SU
DATE:	SEP 2015
SCALE:	N.T.S.
DWG. NO.:	SL-4
REV.:	

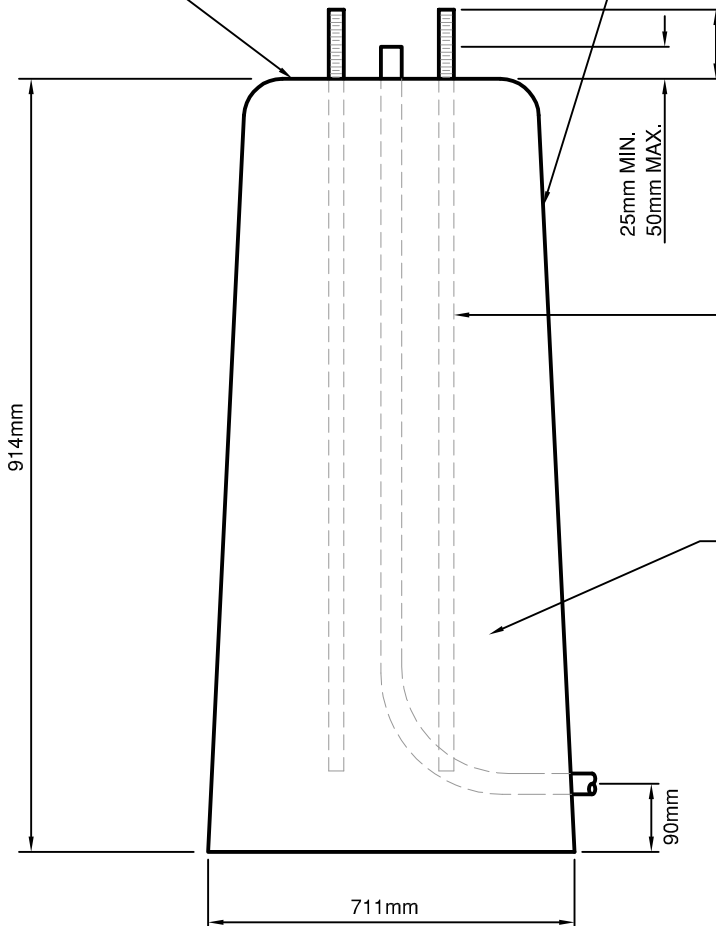


50Ø PVC DB2 DUCT
(ORIENTATE DUCTS TO SUIT LAYOUT)

USE A TEMPLATE DURING CONCRETE POUR
& SET TO ENSURE CORRECT POSITION &
THREAD EXPOSURE

THIS SURFACE TO BE 75-100mm ABOVE BOULEVARD GRADE
OR BACK OF SIDEWALK GRADE.

TROWEL FINISH TOP AND SIDES
5mm RADIUS ALL EDGES



THREAD EXPOSURE MIN. 75mm
MAX. 100mm

25mm MIN.
50mm MAX.

25mm Ø ANCHOR BOLTS, 4 REQUIRED.
TOP 300mm TO BE GALVANIZED.
OVERALL LENGTH 900mm MIN.

PRECAST TRAPEZOIDAL BASE OR CAST IN
PLACE WHEN APPROVED.
25 MPa CONCRETE AT 28 DAYS (PER CSA A23:1)
EXPOSURE CLASS 'B'.

MIN. 75mm WELL COMPACTED DRAIN ROCK
UNDER LAMP BASE

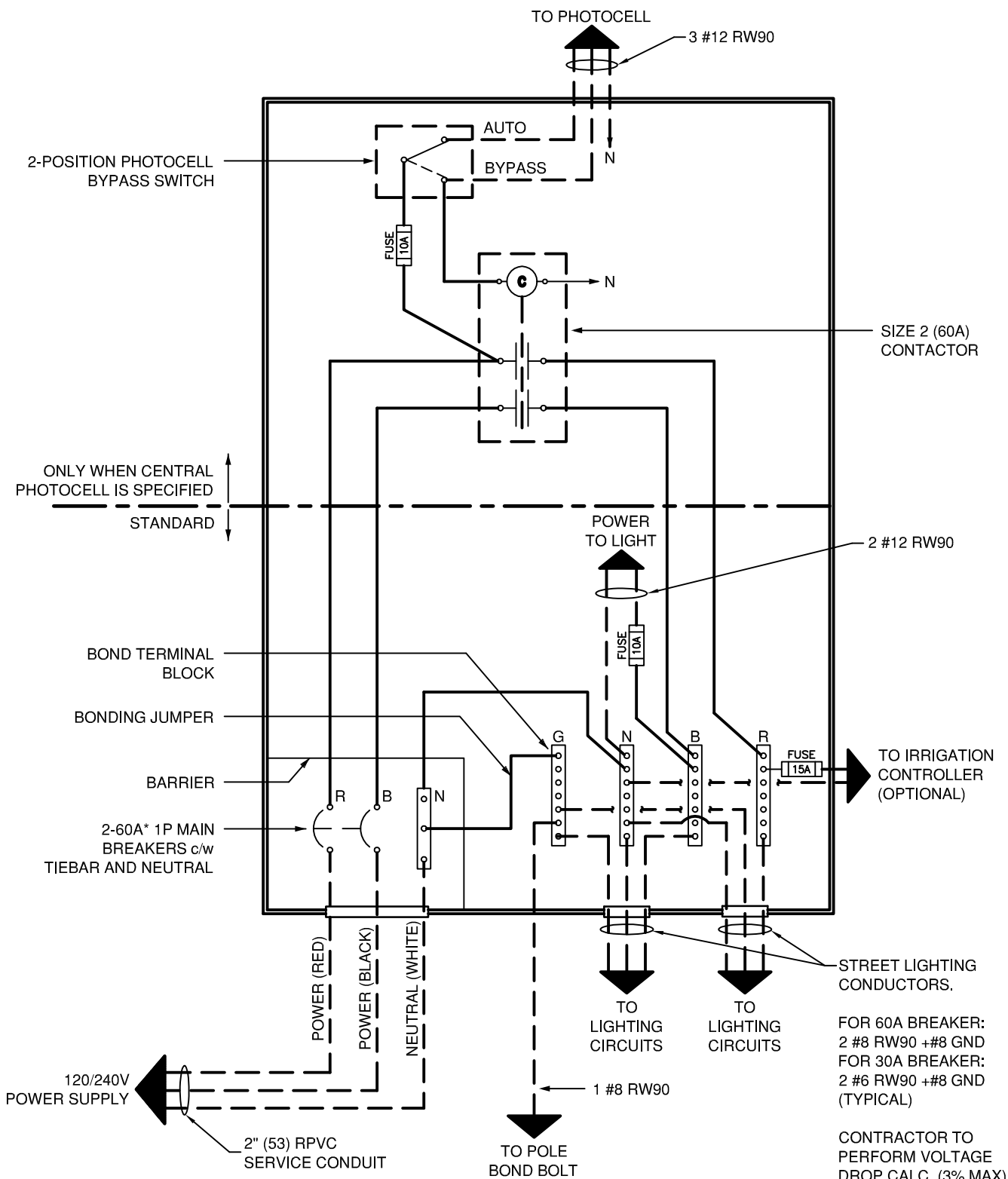
NOTE:
IN ADVERSE SOIL CONDITIONS ENGINEER SHALL
CONFIRM ADEQUACY OF BASE.

TOWN OF OSOYOOS

ANCHOR BASE FOR
WALKWAY LIGHT



DWN. BY: TT	
CHK. BY: SU	
DATE: SEP 2015	
SCALE: N.T.S.	
DWG. NO.:	REV.:
SL-5	



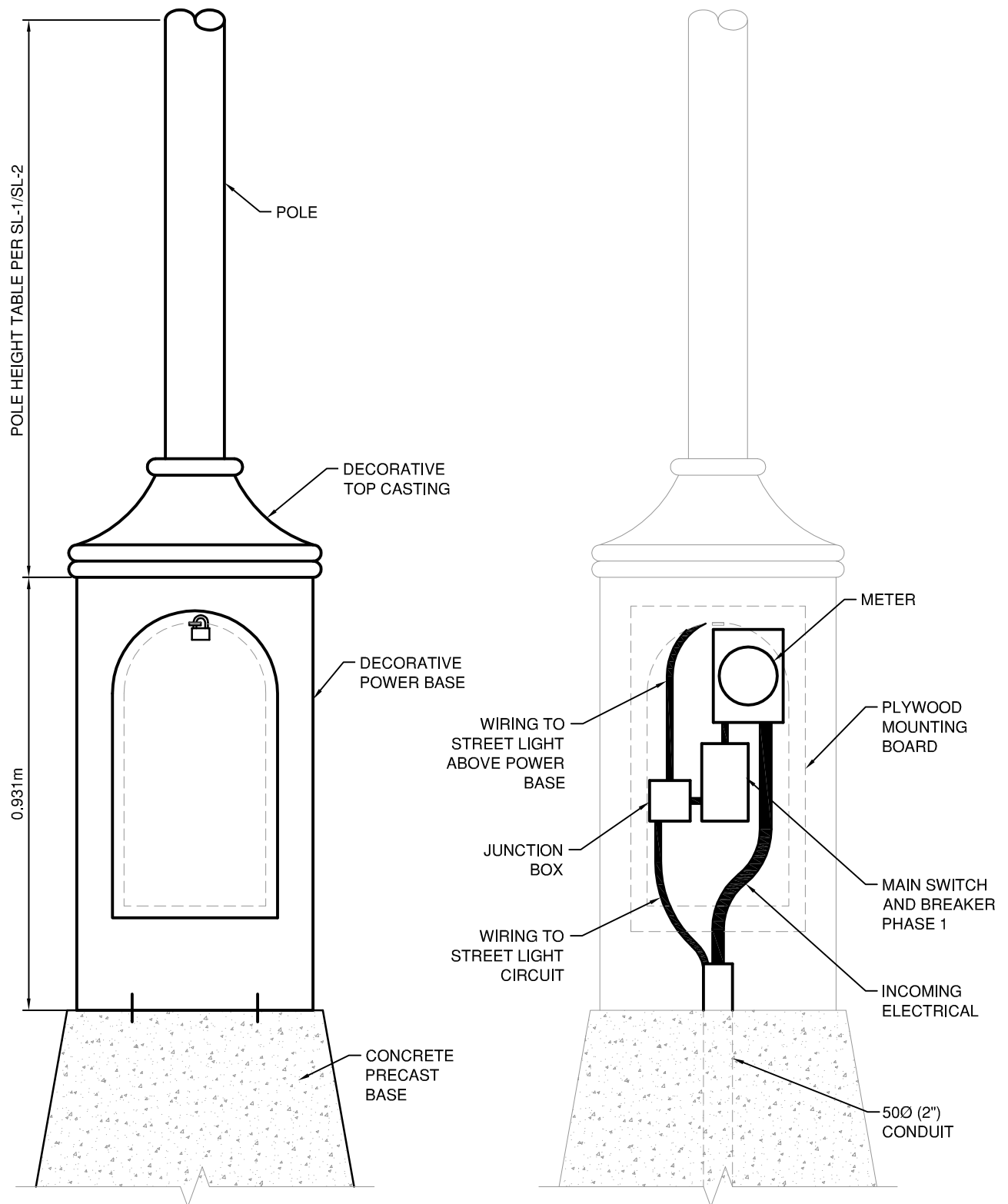
* USE 60A MAIN BREAKER FOR >10 LIGHTS PER DIRECTION.
USE 30A MAIN BREAKER FOR MAX. 10 LIGHTS PER DIRECTION.

TOWN OF OSOYOOS

NON METERED POWER BASE
WIRING DETAIL



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
SL-6	



TOWN OF OSOYOOS

POWER BASE WIRING
METERED ELECTRICAL SERVICE



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
SL-7	

CONDUCTORS TO BE COPPER AND SIZED
ACCORDING TO CANADIAN ELECTRICAL CODE
WITH MINIMUM SIZE NO. 8 STRANDED

NO.14, RW - 90 x-LINK
STRANDED TO LUMINAIRE

NO.12 RW-90 TO BE USED IN
TRAFFIC SIGNAL POLES

FUSE HOLDER - BUSS
HEB. - AA c/w BUSS
1AO51A BOOTS & 5 AMP.
FUSE

SOLDERLESS INSULATED
CONNECTORS TAPED WITH
BLACK PVC TAPE AFTER
INSTALLATION

IN TRAFFIC SIGNAL POLE BASES, NO
SPLICES ARE ALLOWED. ALL SPLICES
TO BE IN JUNCTION BOXES

"HANDHOLE"

NO. 8 STRANDED Gnd. WIRE

GROUNDING STUD LOCATED IN POLE
10mm-16 UNC, c/w NUT & 2 CADMIUM
PLATED FLAT WASHERS

NO. 8 STRANDED
GREEN BONDING
CONDUCTOR

CONDUCTORS TO BE RW-90 or
TWU-40 MIN. NO. 8 MAX. 2
CURRENT CARRYING
CONDUCTORS IN CONDUIT

ABOVE NOTE DOES NOT APPLY TO
ALL TRAFFIC SIGNAL POLES

SEE POLE & DWGS. FOR SERVICE BASE
SPECS. THIS WILL BE NECESSARY WHEN
MORE THAN 2 CONDUITS ENTER A POLE

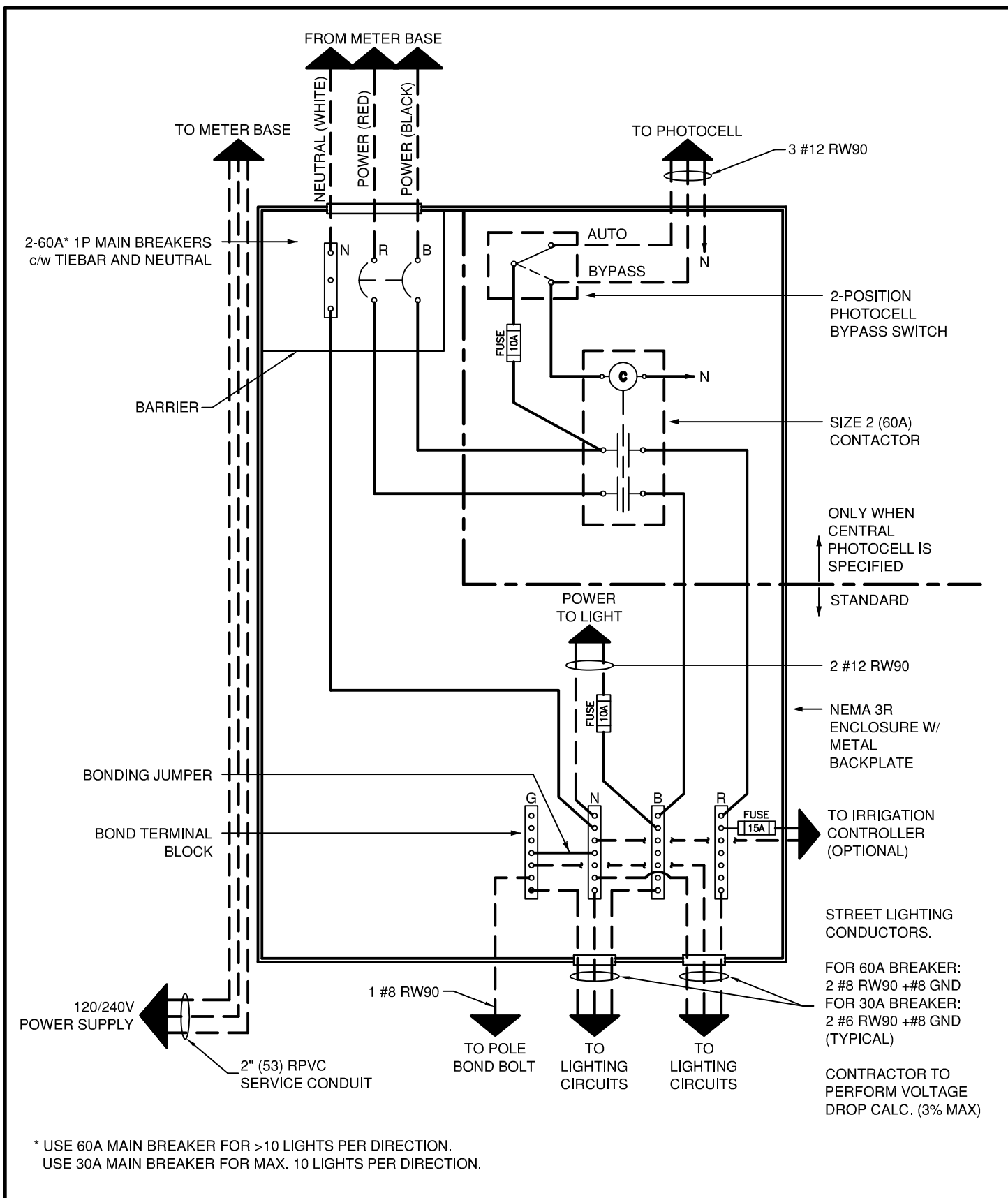
GROUND ELECTRODE ONLY REQUIRED AT MAIN SERVICE.
ONLY BONDING REQUIRED AT EACH POLE

TOWN OF OSOYOOS

HANDHOLE WIRING SCHEMATIC
120V STREET LIGHT



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
SL-8	



TOWN OF OSOYOOS

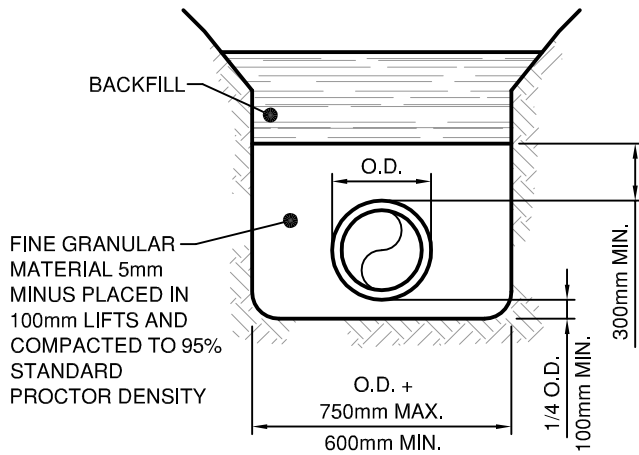
METERED POWER BASE WIRING DETAIL



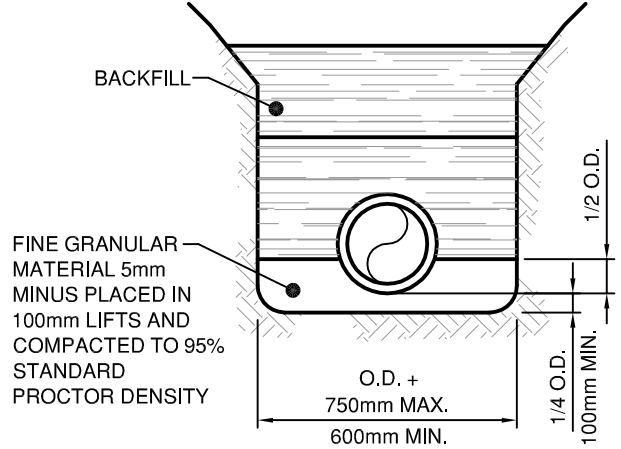
DWN. BY:	TT
CHK. BY:	SU
DATE:	NOV 2012
SCALE:	N.T.S.
DWG. NO.:	SL-9
REV.:	

CLASS "B" BEDDING

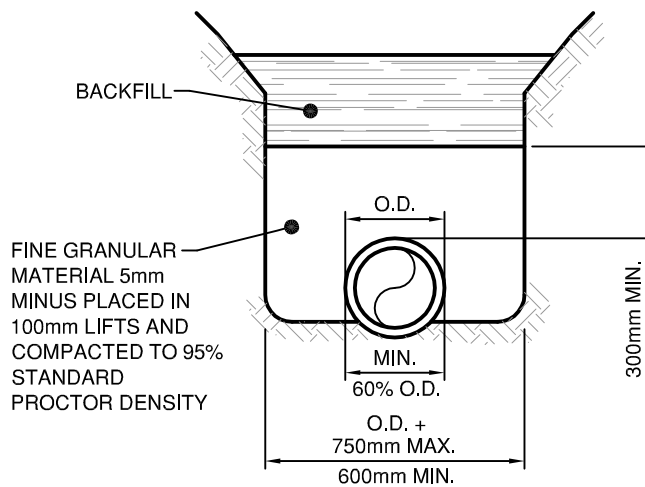
FOR PVC PIPE:



FOR ALL OTHER PIPE:



CLASS "C" BEDDING



TOWN OF OSOYOOS

TYPICAL PIPE BEDDING AND BACKFILL
WITHIN THE PIPE ZONE

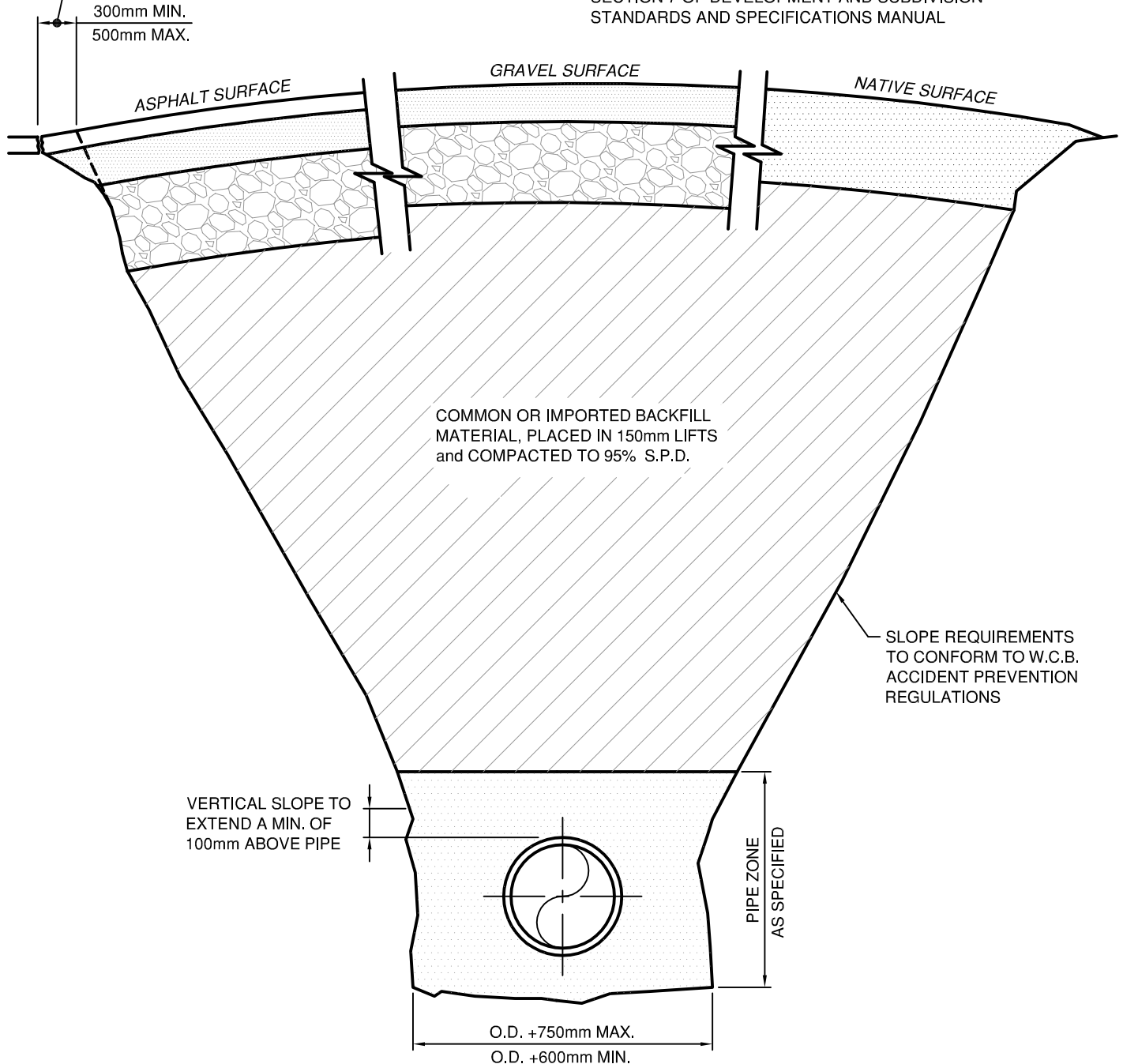


DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
W-1	

ASPHALT TIE:

AFTER THE INSTALLATION OF ROAD BASES, SAWCUT EXISTING ASPHALT BACK FROM EXCAVATION EDGE, COMPACT CRUSHED GRAVEL BASE COURSE TO 100% S.P.D. and PAINT CUT EDGE OF ASPHALT WITH AN APPROVED BITUMINOUS BONDING AGENT PRIOR TO ASPHALT PLACEMENT.

SURFACE RESTORATION and BASE GRAVELS AS PER SECTION 7 OF DEVELOPMENT AND SUBDIVISION STANDARDS AND SPECIFICATIONS MANUAL



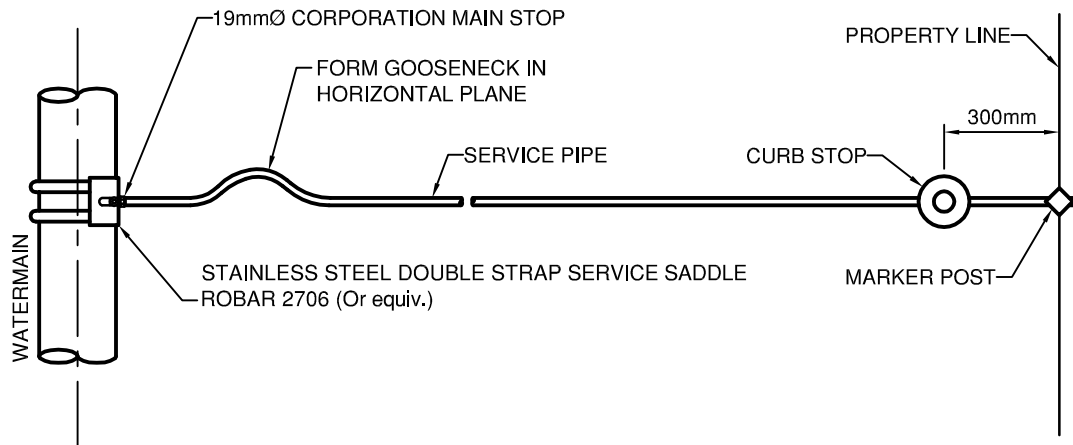
TOWN OF OSOYOOS

TYPICAL TRENCH SECTION



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
W-2	

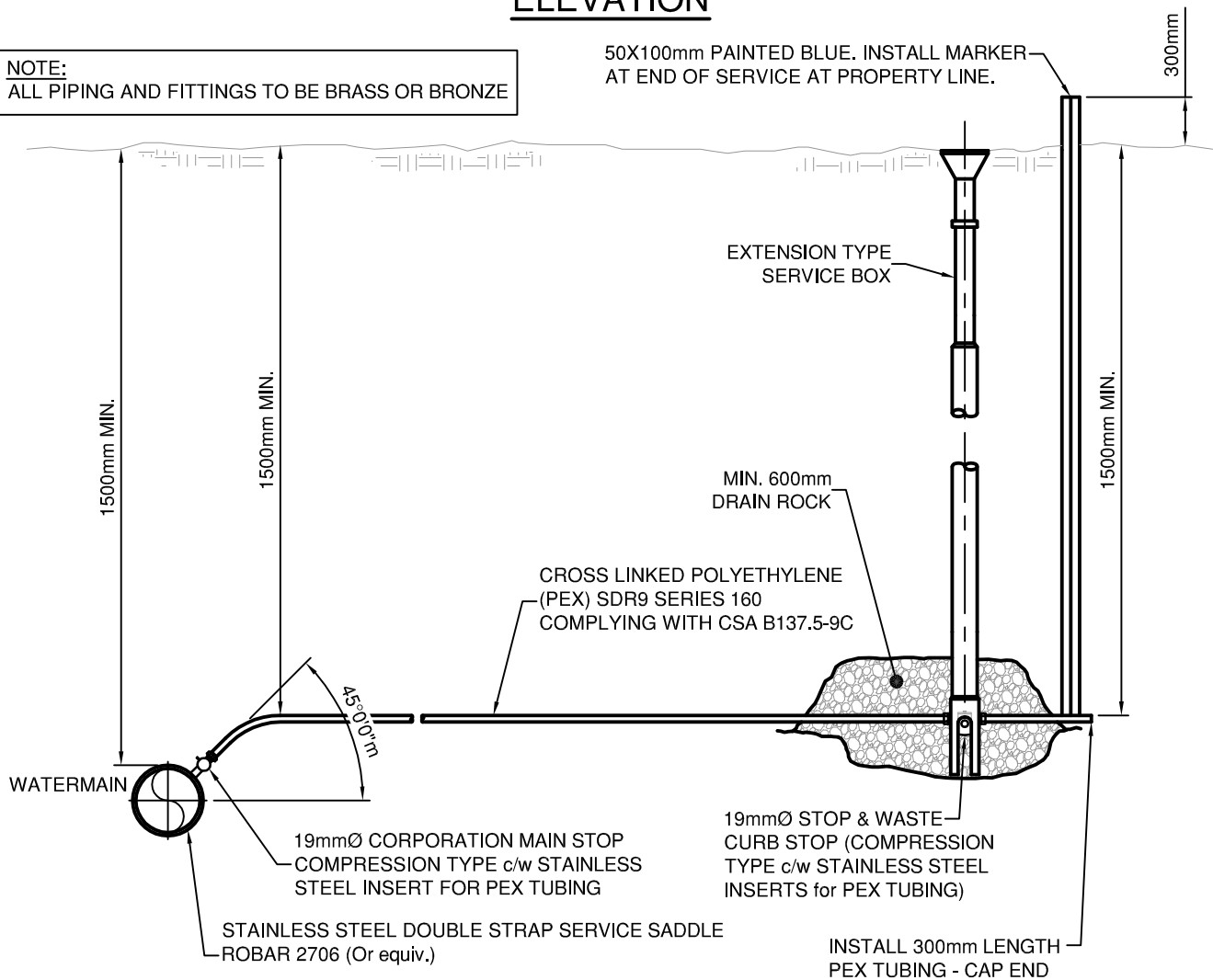
PLAN



ELEVATION

NOTE:
ALL PIPING AND FITTINGS TO BE BRASS OR BRONZE

50X100mm PAINTED BLUE. INSTALL MARKER
AT END OF SERVICE AT PROPERTY LINE.



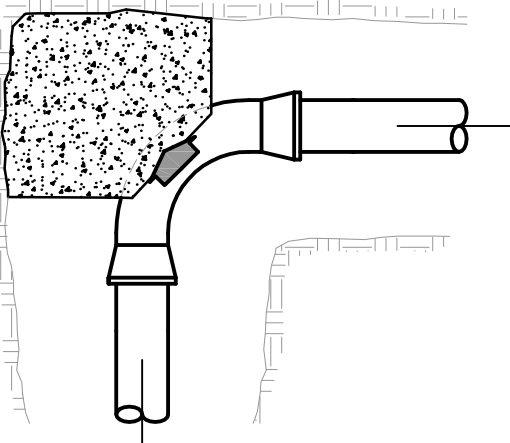
TOWN OF OSOYOOS

TYPICAL WATER SERVICE

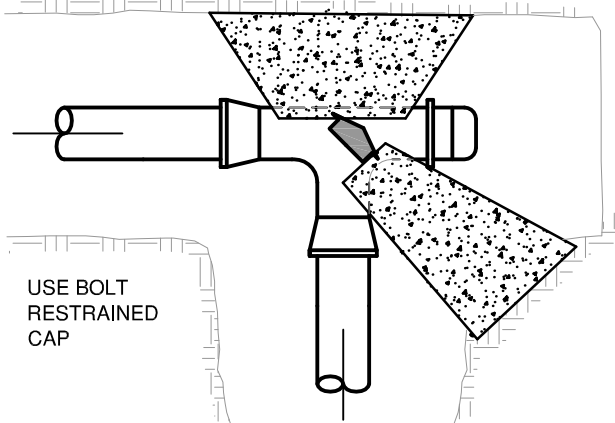
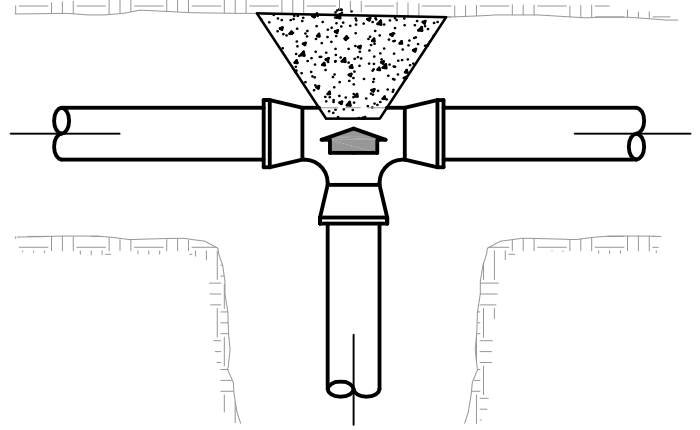


DWN. BY:	TT
CHK. BY:	SU
DATE:	JAN 2016
SCALE:	N.T.S.
DWG. NO.:	W-3
REV.:	

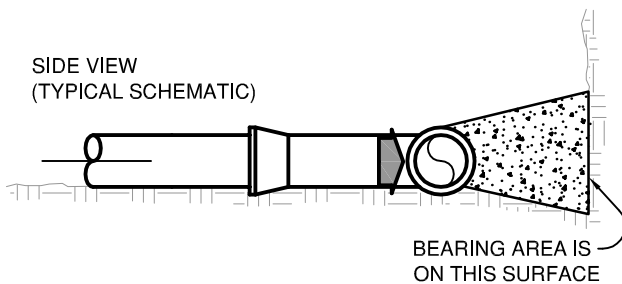
HORIZONTAL 90° BEND



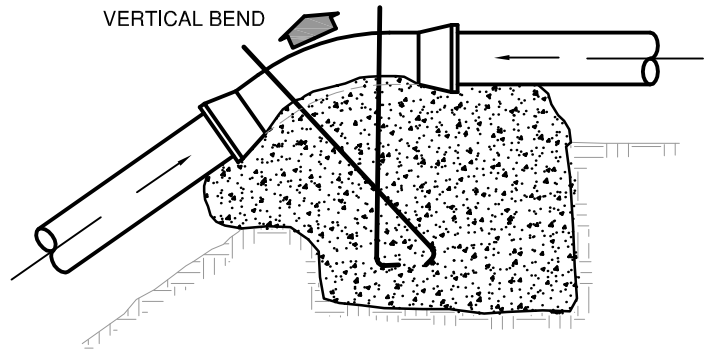
TEE



SIDE VIEW
(TYPICAL SCHEMATIC)



VERTICAL BEND



NOTES:

1.  DENOTES THRUST DIRECTION
2. CONCRETE STRENGTH - 25 MPa @ 28 DAYS
3. BEARING AREAS BASED ON 1050 KPa TEST PRESSURES
4. FOR GREATER TEST PRESSURES INCREASE BEARING AREA BY RATIO TP/1050
5. ALL THRUST BLOCK BEARING AREAS ON UNDISTURBED GROUND.
6. BEARING AREA BASED ON SOFT CLAY (0.048 MPa OR 1000 LBS/FT²)
7. PROVIDE POLYETHYLENE BARRIER BETWEEN FITTING AND CONCRETE

THRUST BLOCK BEARING AREA IN m²

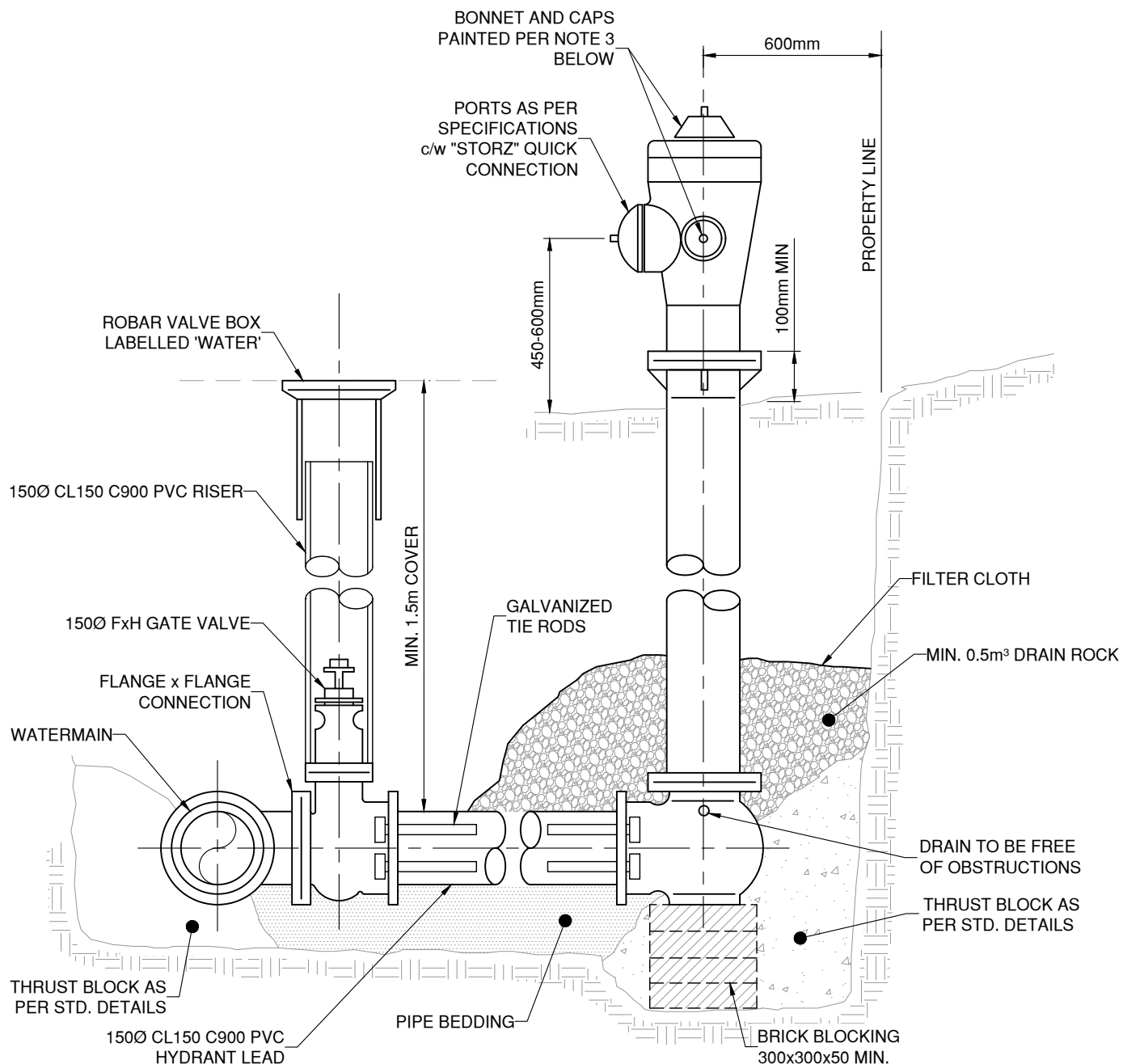
PIPE SIZE	TEES/ DEAD ENDS	90° BENDS	45° BENDS & VERTICAL BEND	22 1/2° BEND & SMALLER
100	0.2	0.3	0.15	0.1
150	0.4	0.6	0.30	0.15
200	0.7	1.0	0.55	0.30
250	1.2	1.6	0.9	0.45
300	1.6	2.2	1.2	0.60

TOWN OF OSOYOOS

TYPICAL THRUST BLOCK DETAILS



DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.: W-4	REV.:



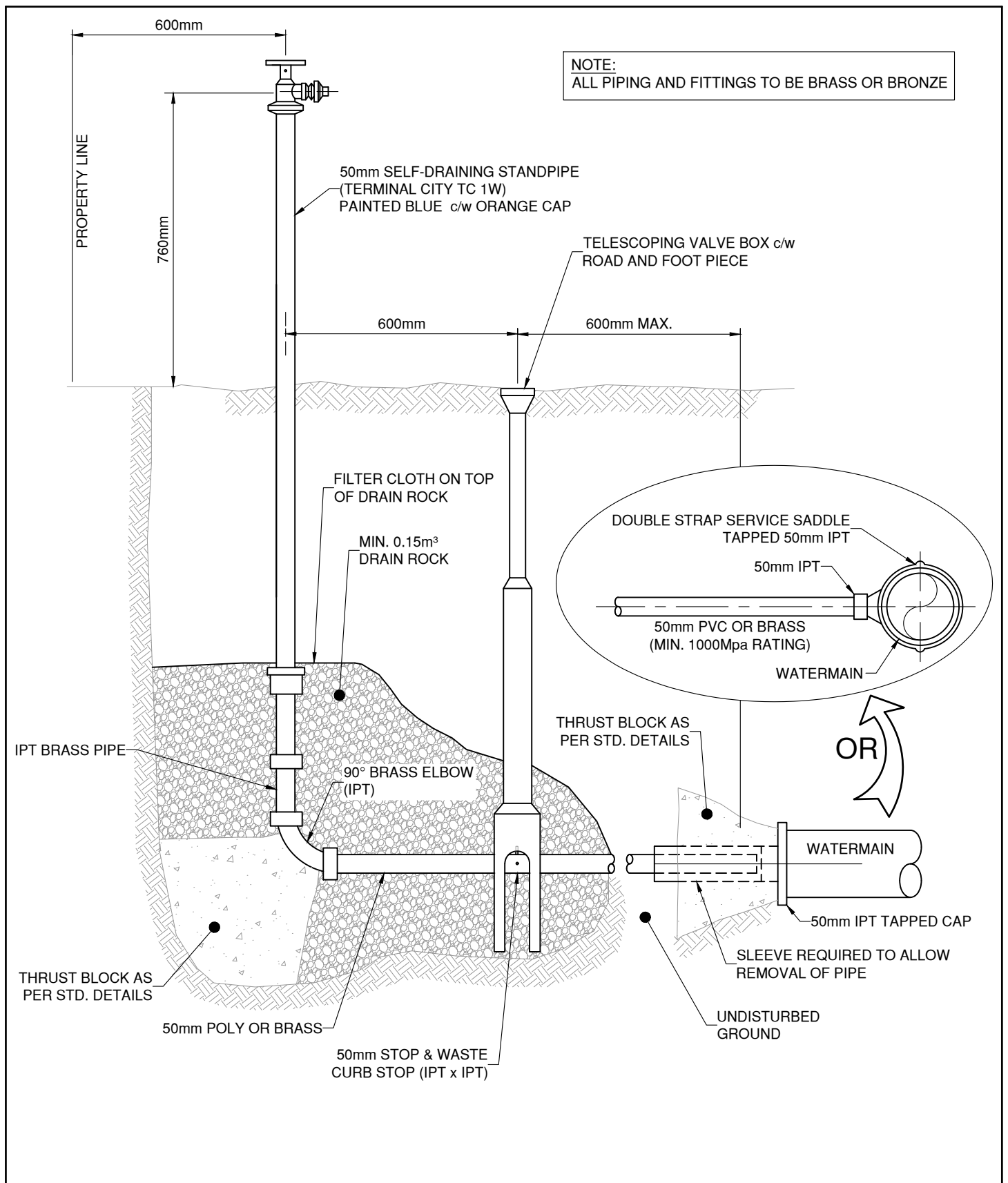
1. FIRE HYDRANTS SHALL BE 150Ø COMPRESSION TYPE and EACH SHALL CONTAIN
 - a) 1 PUMPER PORT : 146mm O.D. (5.7609 inch) - 4 THREADS PER INCH
 - b) 2 -(2 1/2") 65.5mm OUTLETS B.C. FIRE HOSE THREAD STANDARDS
2. MANUFACTURER: TERMINAL CITY C71-P
3. HYDRANT BODY TO BE PAINTED RED or as SPECIFIED.
 BONNET AND CAPS PAINTED AS FOLLOWS
 - 0 TO 500 GPM (CLASS C) - RED
 - 500 TO 999 GPM (CLASS B) - ORANGE
 - 1,000 TO 1,499 GPM (CLASS A) - GREEN
 - 1,500 TO 1,500+ GPM (CLASS AA) - LIGHT BLUE
4. THRUST BLOCK AND/OR TIE ROD SUPPORT TO MAIN VARY PENDING CONDITIONS AND ENGINEERS DIRECTION.
5. HYDRANT TO BE INSTALLED WITH PUMPER PORT FACING STREET.
6. HYDRANTS NOT IN USE MUST BE KEPT 'BAGGED' with SUITABLE BURLAP or BLACK POLY.
7. PROVIDE SUITABLE SUPPORT TO THE HYDRANT TO MAINTAIN PLUMBNESS DURING SET UP OF THRUST BLOCK.

TOWN OF OSOYOOS

TYPICAL FIRE HYDRANT ASSEMBLY



DWN. BY:	TT
CHK. BY:	SU
DATE:	NOV 2020
SCALE:	N.T.S.
DWG. NO.:	W-5
REV.:	

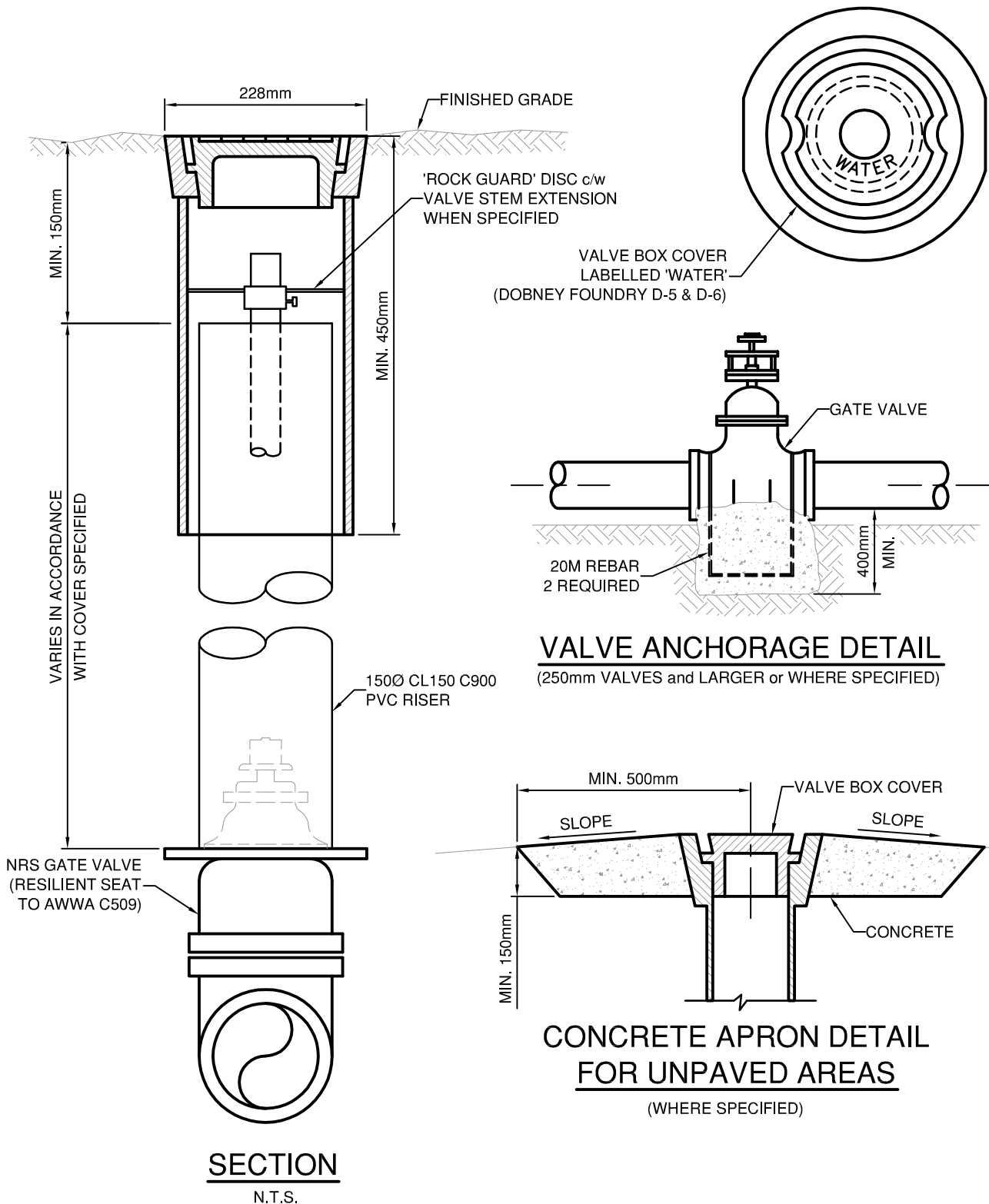


TOWN OF OSOYOOS

ABOVE GROUND
SELF-DRAINING STANDPIPE

Osoyoos
Canada's warmest welcome**

DWN. BY:	TT
CHK. BY:	SU
DATE:	NOV 2020
SCALE:	N.T.S.
DWG. NO.:	W-6
REV.:	



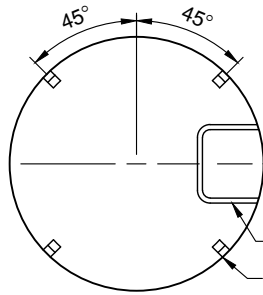
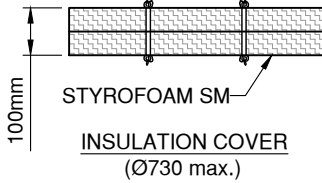
TOWN OF OSOYOOS

TYPICAL VALVE BOX DETAILS

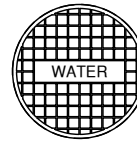


DWN. BY:	TT
CHK. BY:	SU
DATE:	SEP 2015
SCALE:	N.T.S.
DWG. NO.:	W-8
REV.:	

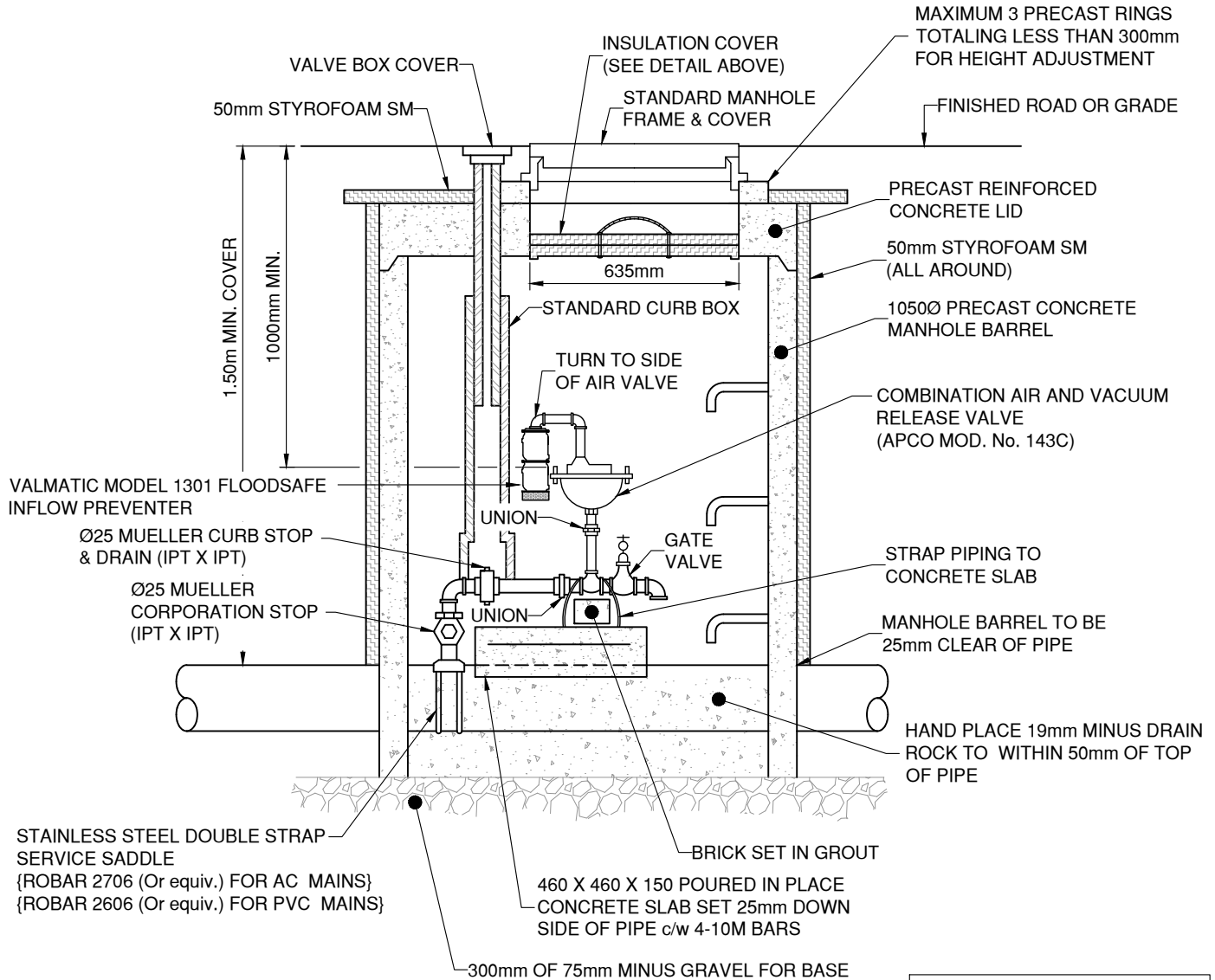
Ø6mm NYLON ROPE
KNOTTED ABOVE AND
BELOW SM AS SHOWN



LADDER RUNGS
4 - 50 X 50 X 6 ANGLES ATTACHED
TO PRECAST LID TO SUPPORT
INSULATION COVER (GRIND
EDGES SMOOTH)



CAST IRON COVER
LABELLED 'WATER'
EQUIVALENT TO
DOBNEY FOUNDRY C-44A



NOTE:
ALL PIPING AND FITTINGS TO BE BRASS OR BRONZE

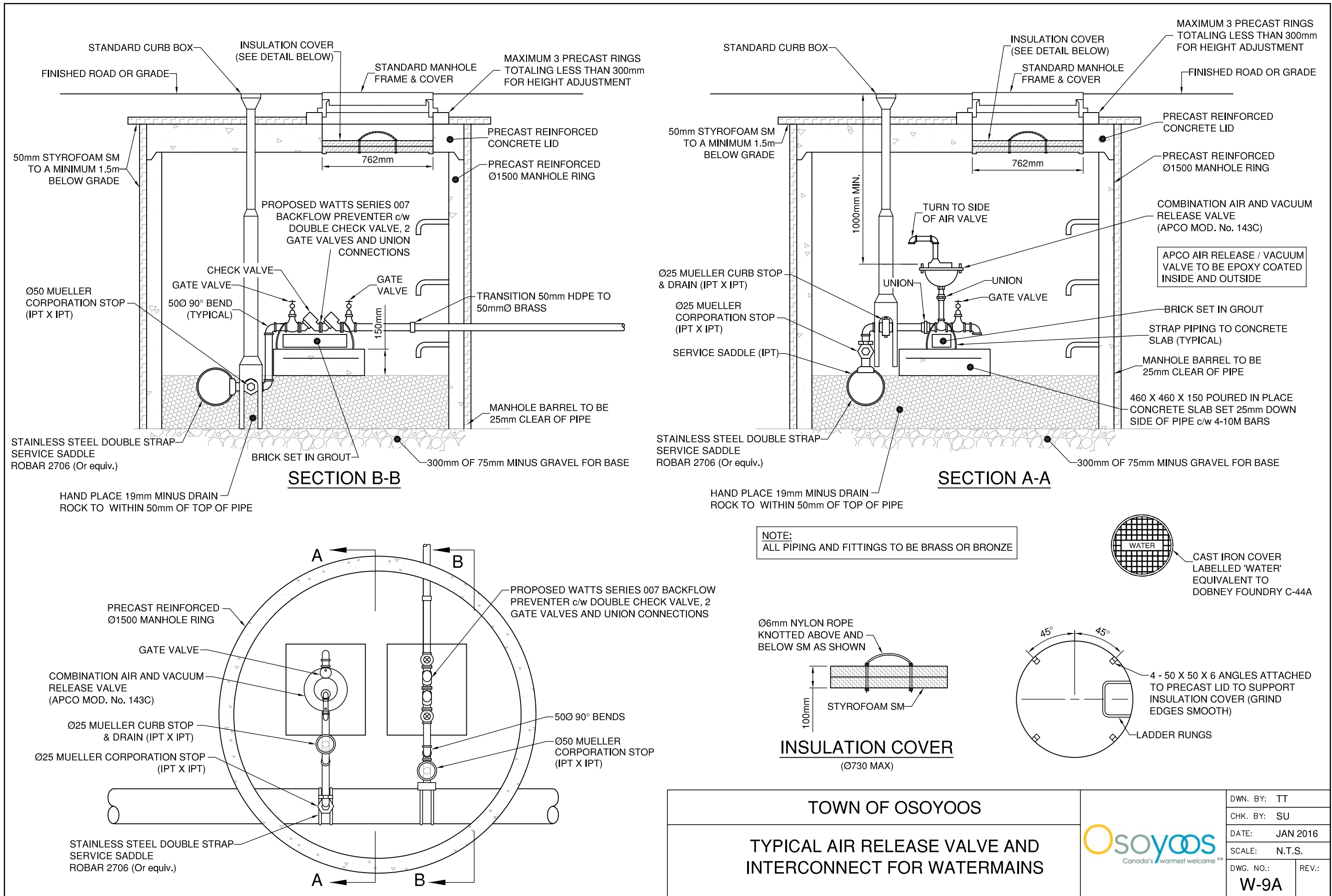
APCO AIR RELEASE / VACUUM
VALVE TO BE EPOXY COATED
INSIDE AND OUTSIDE

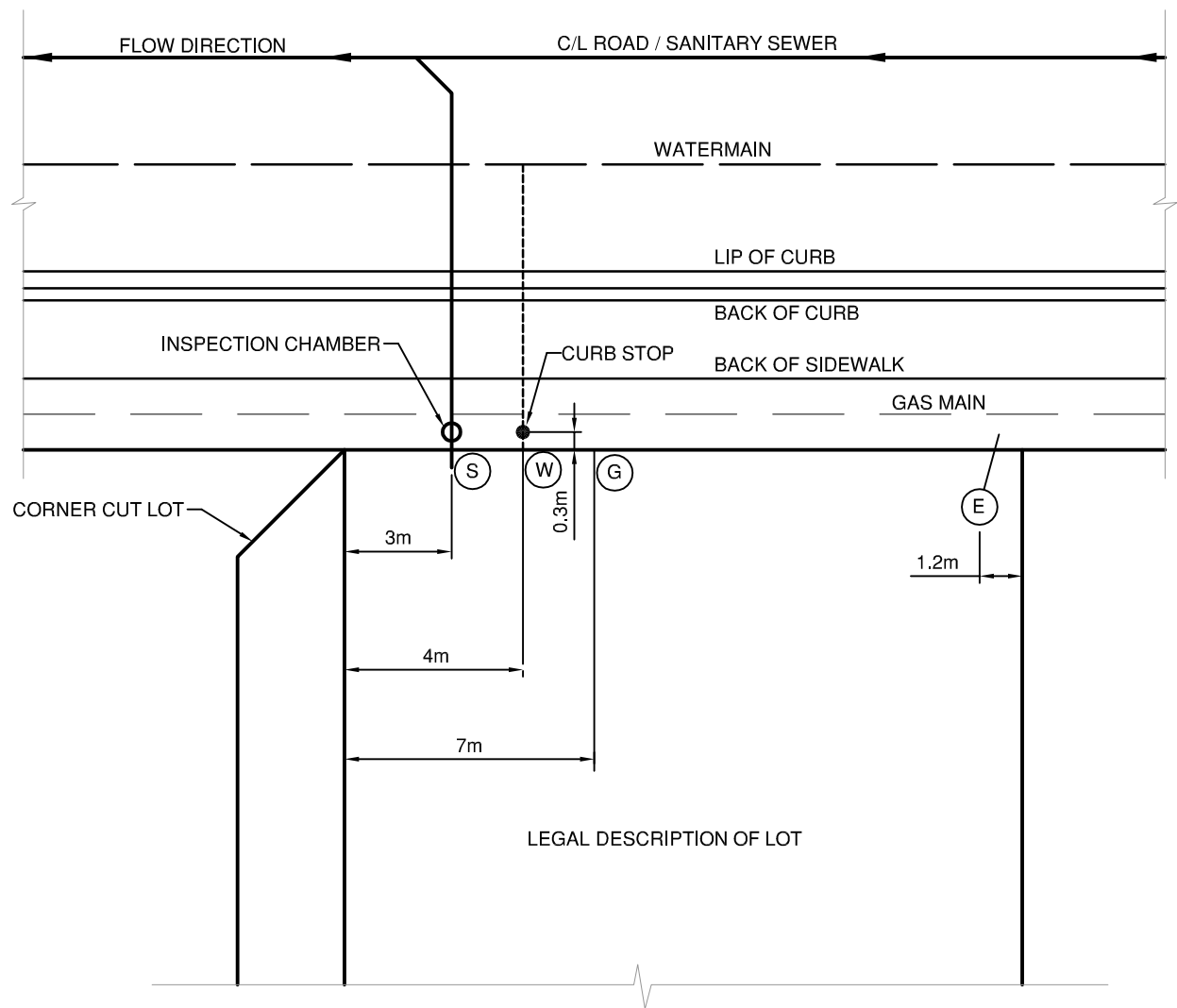
TOWN OF OSOYOOS

TYPICAL AIR RELEASE VALVE
FOR WATERMAINS

Osoyoos
Canada's warmest welcome**

DWN. BY:	TT
CHK. BY:	SU
DATE:	NOV 2020
SCALE:	N.T.S.
DWG. NO.:	W-9
REV.:	





- Ⓢ SANITARY SERVICE
- Ⓦ WATER SERVICE
- Ⓖ GAS SERVICE
- Ⓔ ELECTRICAL SERVICE

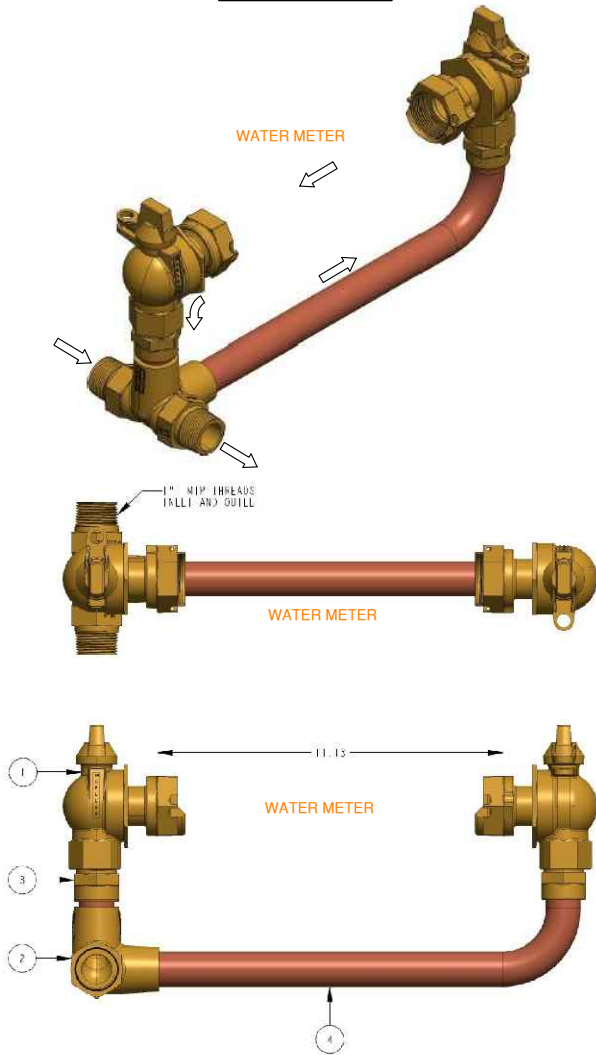
TOWN OF OSOYOOS

TYPICAL LOT SERVICE LOCATIONS

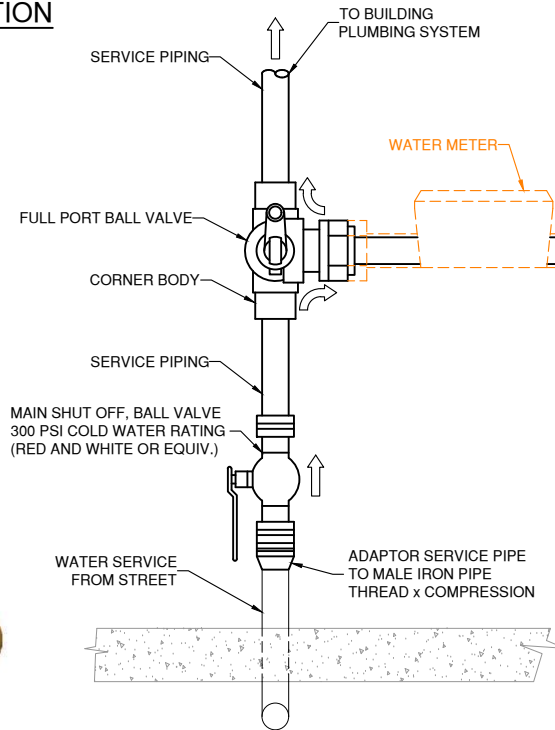


DWN. BY: TT	
CHK. BY: SU	
DATE: NOV 2012	
SCALE: N.T.S.	
DWG. NO.:	REV.:
W-10	

**SAMPLE - BALL VALVE ON INLET & OUTLET OPTION
(RETROFITS)**



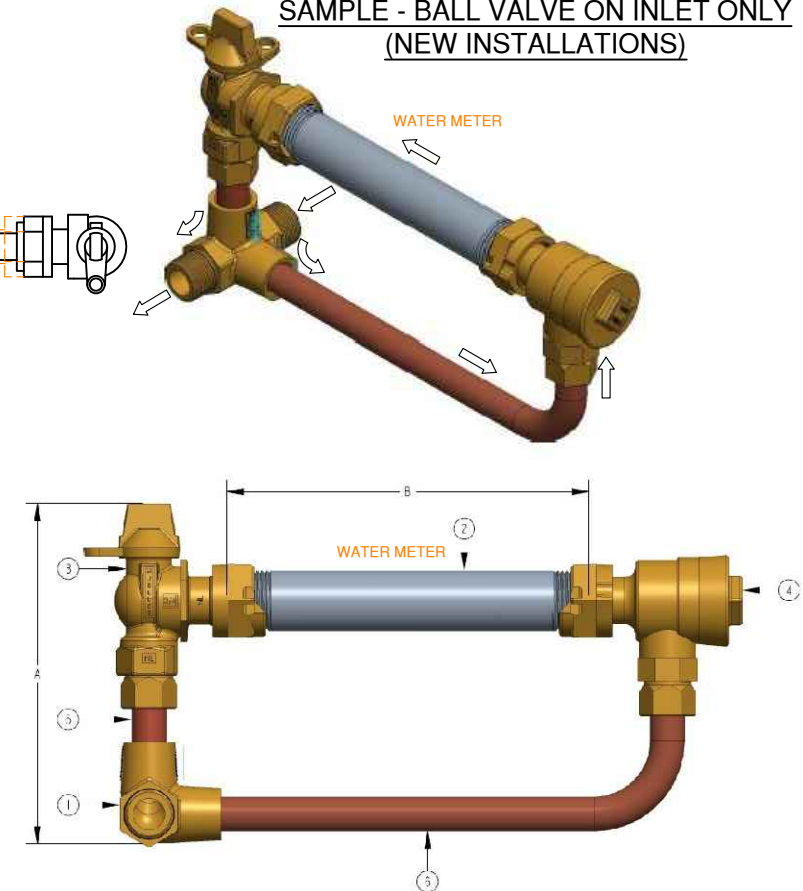
ITEM #	PART #	QUANTITY	DESCRIPTION
1	330B24265	2	1" FULL PORT BALL VALVE
2	525277E	1	1" CORNER BODY
3	681447E	1	INLET TUBE SUB ASSEMBLY *LLB*
4	681448E	1	OUTLET TUBE SUB ASSEMBLY *LLB*



SERVICE SIZE	METER SIZE (LAYING LENGTH)	ACCEPTABLE MANUFACTURER
19mm (3/4")	5/8"x3/4" (191mm)	
19mm (3/4")	3/4" (229mm)	
25mm (1")	1" (273mm)	
38mm (1.5")	1.5" (330mm)	
50mm (2")	2" (432/387mm)	

* REFER TO DESIGN DRAWINGS FOR METER TYPE

**SAMPLE - BALL VALVE ON INLET ONLY
(NEW INSTALLATIONS)**



METER SIZE	5/8"	5/8" x 3/4"	3/4"	1"
A (minimum)	7 3/8"	7 3/8"	7 1/2"	9"
B	7 3/4"	7 3/4"	9 1/4"	11"
BODY	525276E	525276E	525319E	525277E
METER JUMPER	700220	700220	700439	700250
FULL PORT BALL VALVE	203B242655IN	215B242655IN	215B242655IN	330B24265N
ASSE DUAL ANGLE CHECK VALVE	203HI4244AN	215HI4244AN	215HI4244AN	330HI4244N

ITEM #	PART #	QUANTITY	DESCRIPTION
1		1	BODY
2		1	METER JUMPER
3	B242655IN	1	FULL PORT BALL VALVE
4	H14244AN	1	ASSE DUAL ANGLE CHECK VALVE
5		1	INLET TUBE SUB ASSEMBLY
6		1	OUTLET TUBE SUB ASSEMBLY

TOWN OF OSOYOOS

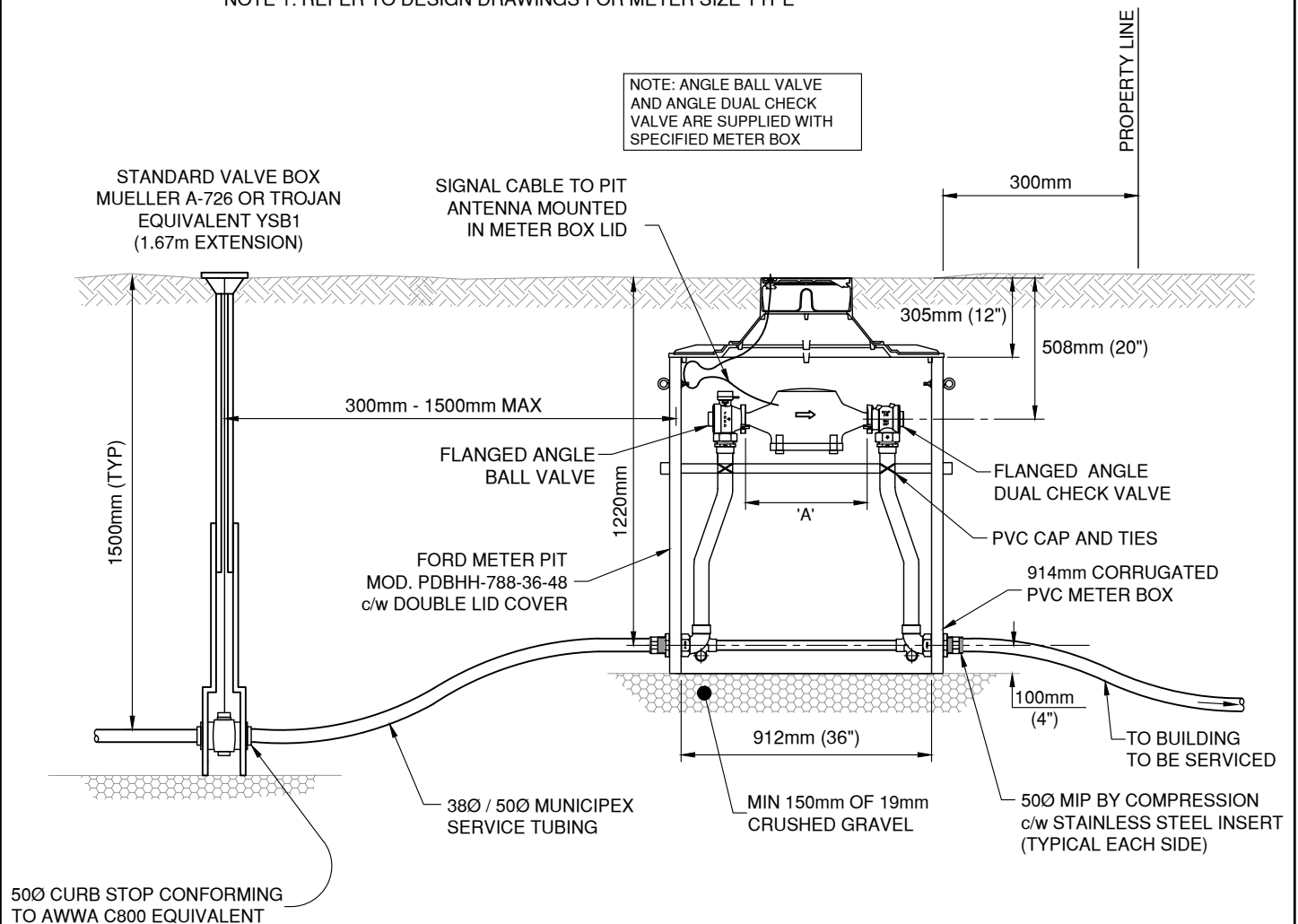
**TYPICAL INSIDE WATER METER
INSTALLATION c/w COPPER METER SETTER**



DWN. BY: TT
CHK. BY: SU
DATE: APRIL 2023
SCALE: N.T.S.
DWG. NO.: W-11
REV.: 2

ITEM	38Ø (1½") SERVICE	50Ø (2") SERVICE	50Ø (2") SERVICE
METER TYPE (NOTE 1)	STANDARD	STANDARD or COMPOUND	
METER	NEPTUNE T-10	NEPTUNE T-10	NEPTUNE TRU/FLO
REGISTER	NEPTUNE E-CODER R900i (RW)	NEPTUNE E-CODER R900i (RW)	NEPTUNE E-CODER R900i (RW)
UNITS	CUBIC METRES	CUBIC METRES	CUBIC METRES
RADIO READ ANTENNA	NEPTUNE 20' PIT ANTENNA	NEPTUNE 20' PIT ANTENNA	NEPTUNE 20' PIT ANTENNA (2 REQ'D)
METER BOX	FORD PDBHH-688-36-48-KT	FORD PDBHH-788-36-48-KT	FORD PDBHH-788-36-48-KT
METER BOX LID	FORD W3	FORD W3	FORD W3
RING EXTENSION	FORD No.5 EXTENSION	FORD No. 5 EXTENSION	FORD No. 5 EXTENSION
LAYING LENGTH ('A' MIN)	330 mm	432 mm	387 mm

NOTE 1: REFER TO DESIGN DRAWINGS FOR METER SIZE TYPE



R2 (APR 2021) - METER PIT MOVED OFF PRIVATE PROPERTY

TOWN OF OSOYOOS

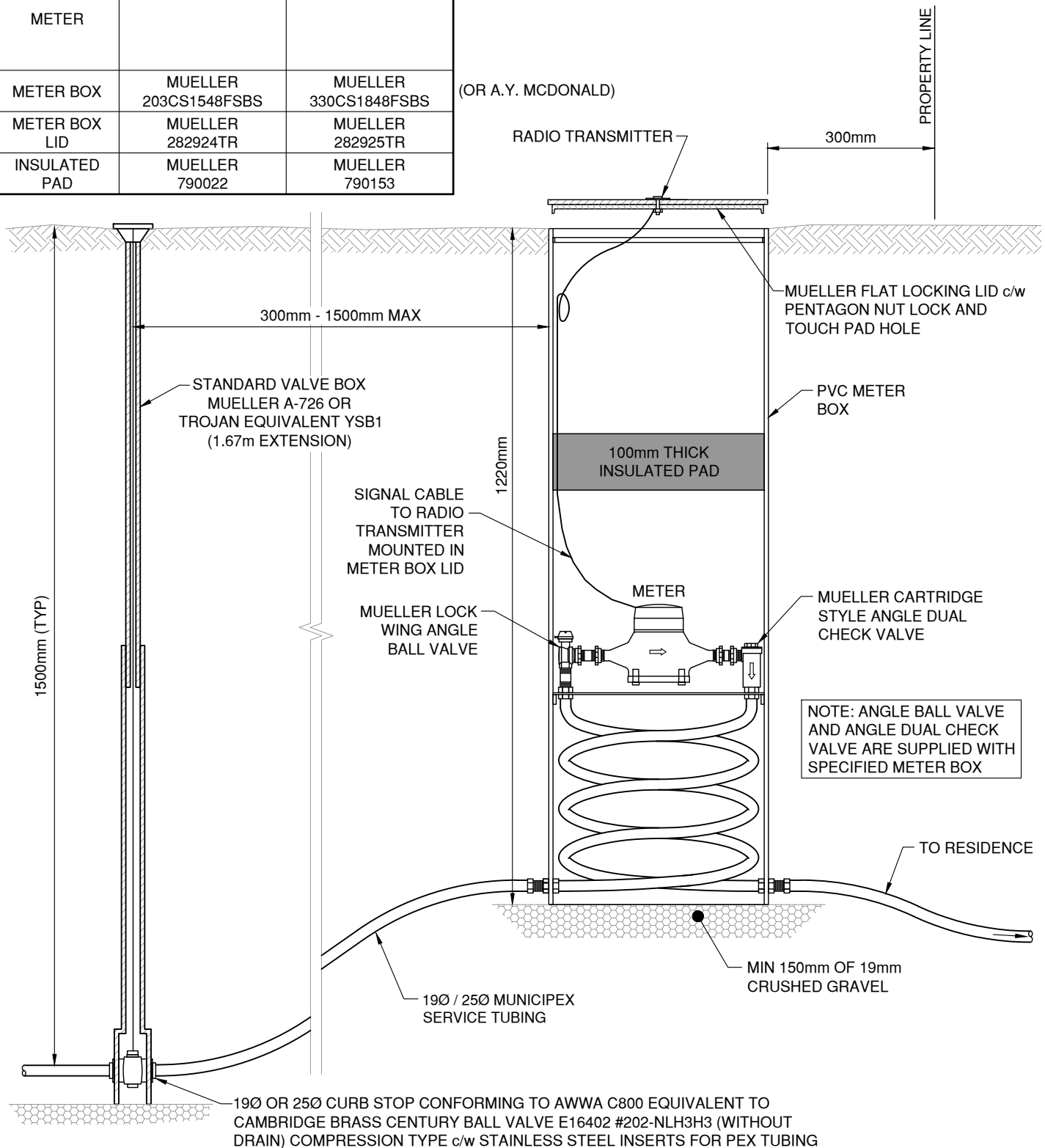
38mm & 50mm METER VAULT
FOR NON-TRAFFIC AREAS



DWN. BY:	TT
CHK. BY:	SU
DATE:	APR 2021
SCALE:	N.T.S.
DWG. NO.:	W-12
REV.:	2

ITEM	19Ø (3/4") SERVICE	25Ø (1") SERVICE
METER		
METER BOX	MUELLER 203CS1548FSBS	MUELLER 330CS1848FSBS
METER BOX LID	MUELLER 282924TR	MUELLER 282925TR
INSULATED PAD	MUELLER 790022	MUELLER 790153

(OR A.Y. MCDONALD)



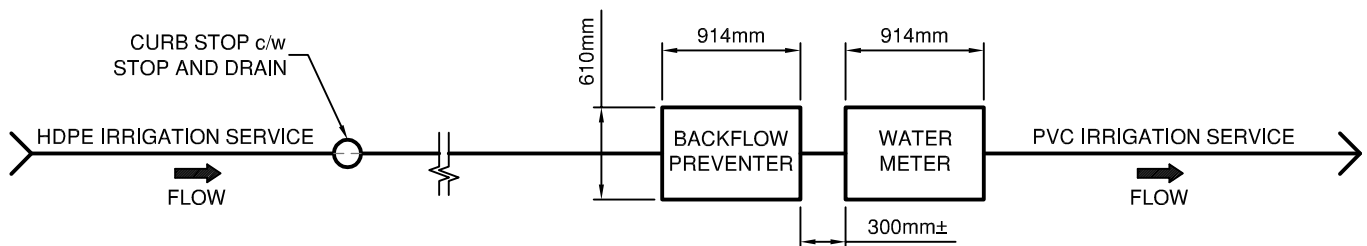
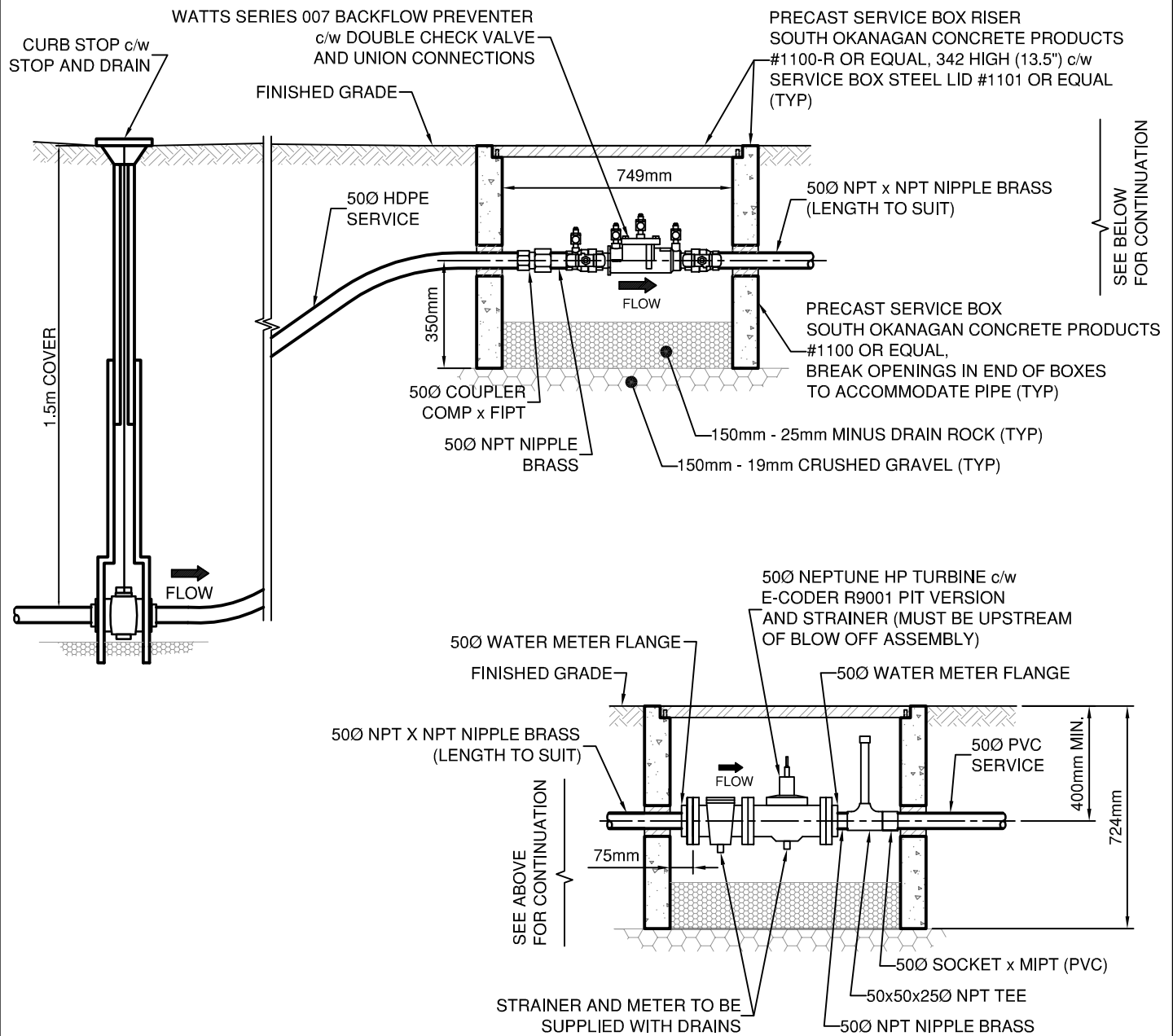
R1 (APR 2021) - METER PIT MOVED OFF PRIVATE PROPERTY

TOWN OF OSOYOOS

19mm & 25mm METER VAULT
FOR NON-TRAFFIC AREAS



DWN. BY:	TT
CHK. BY:	SU
DATE:	APRIL 2023
SCALE:	N.T.S.
DWG. NO.:	W-13
REV.:	2



SCHEMATIC

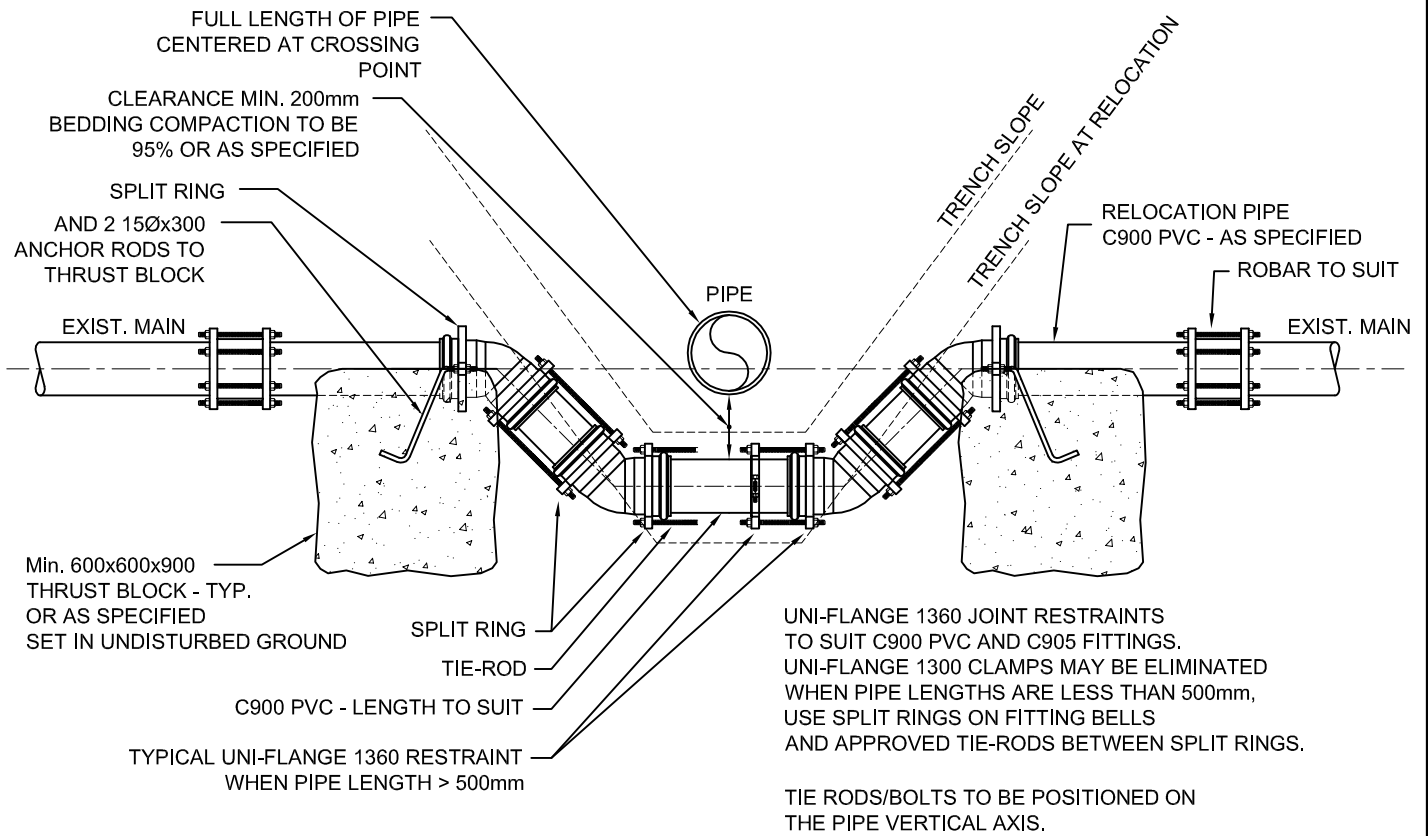
SCALE 1:50

TOWN OF OSOYOOS

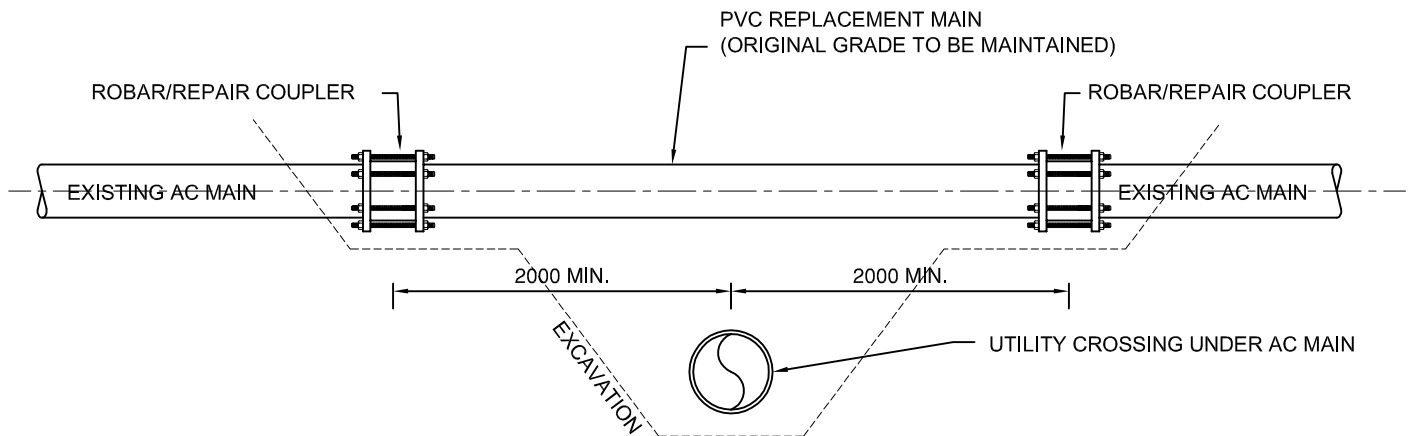
50mm METERED
IRRIGATION SERVICE



DWN. BY: EB	
CHK. BY: TRU	
DATE: MAY 2015	
SCALE: 1:20	
DWG. NO.:	REV.:
W-14	



RELOCATION UNDER UTILITY



REPLACEMENT OVER UTILITY

NOTES

1. ALL RELOCATION PIPE AND FITTINGS TO BE C900/C905 PVC AND MEET OR EXCEED EXISTING MAIN CLASS.
2. ALL RESTRAINERS TO BE UNI-FLANGE SERIES 1300/1360 FOR C900/C905 PIPE AND FITTINGS OR APPROVED EQUAL.
3. THRUST BLOCKS MAY BE ELIMINATED, BY RESTRAINING EXISTING PIPE JOINTS, AS DIRECTED AND APPROVED BY ENGINEER.
4. WHEN TYING TO EXIST A.C. MAINS THRUST BLOCKS MUST BE USED.
5. UNSHRINKABLE FILL OF MAX. 0.40MPa MAY BE USED IN RELOCATION ZONE WHEN APPROVED BY ENGINEER.

TOWN OF OSOYOOS

WATERMAIN RELOCATION



DWN. BY: TT

CHK. BY: TT

DATE: AUG 2016

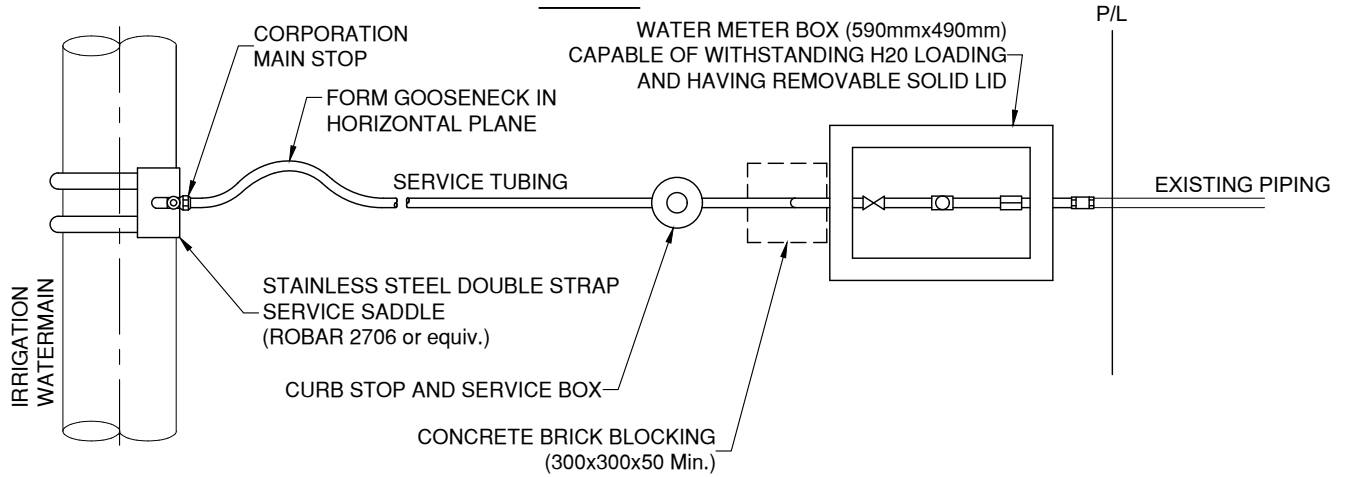
SCALE: N.T.S.

DWG. NO.:

W-15

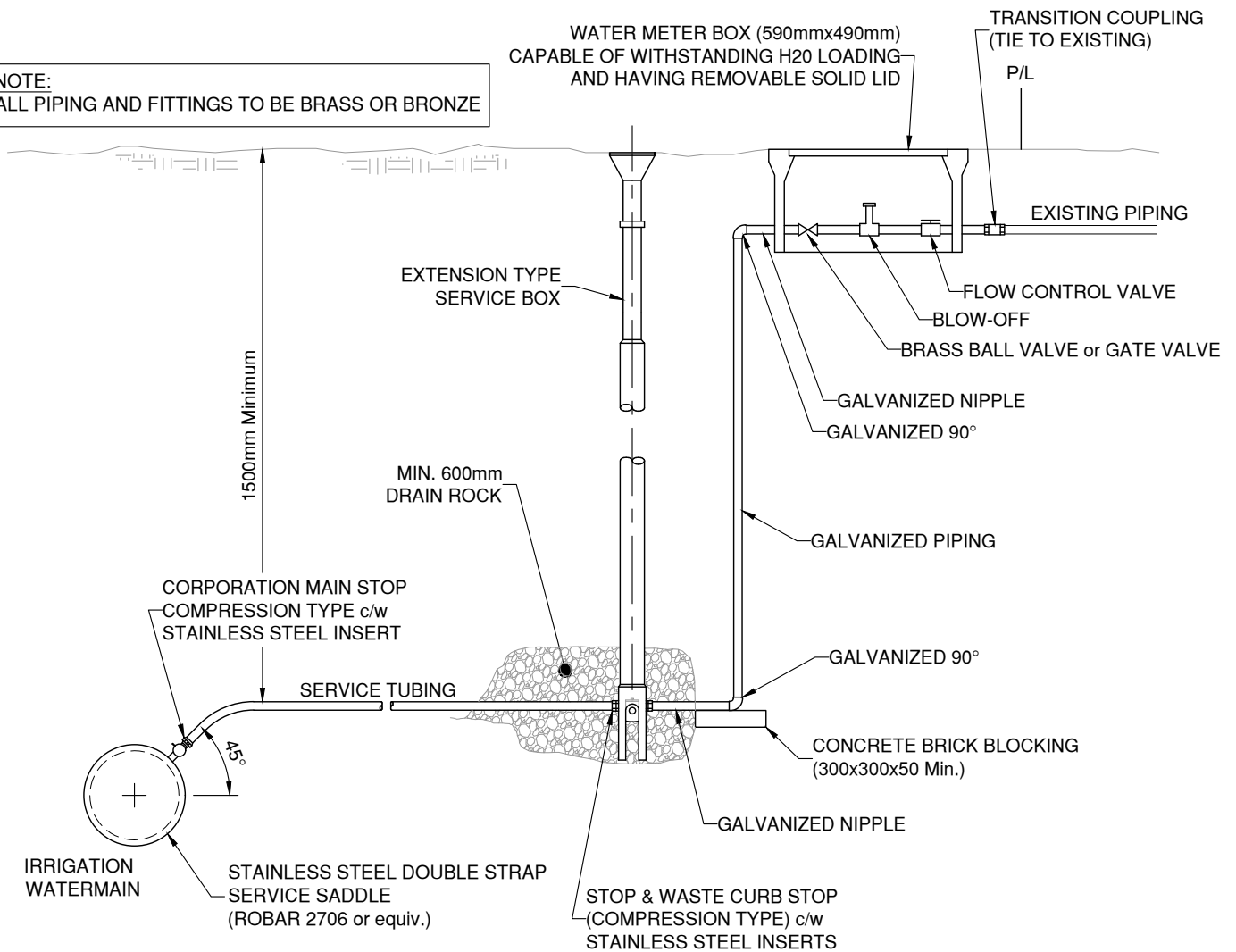
REV.:

PLAN



ELEVATION

NOTE:
ALL PIPING AND FITTINGS TO BE BRASS OR BRONZE



TOWN OF OSOYOOS

TYPICAL IRRIGATION SERVICE



DWN. BY:	TT
CHK. BY:	SU
DATE:	JUNE 2021
SCALE:	N.T.S.
DWG. NO.:	W-16
REV.:	