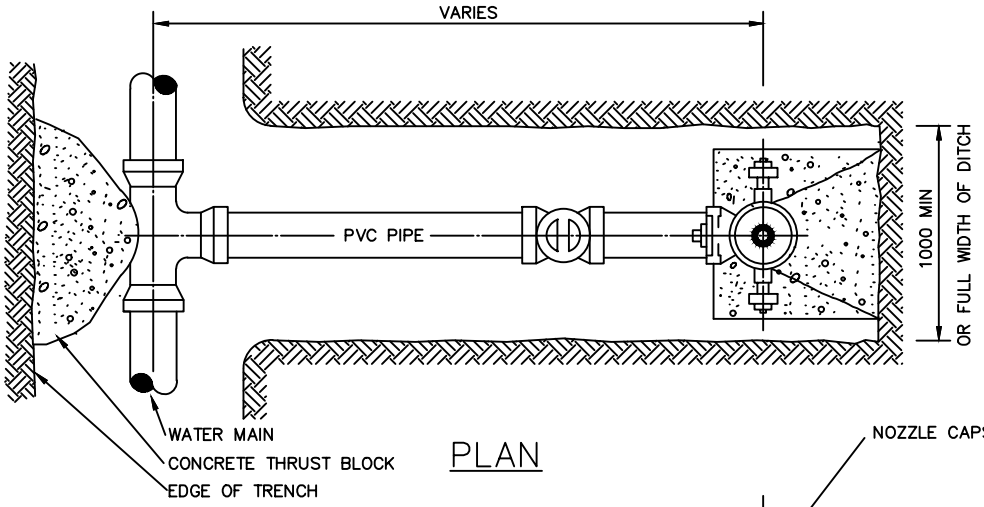
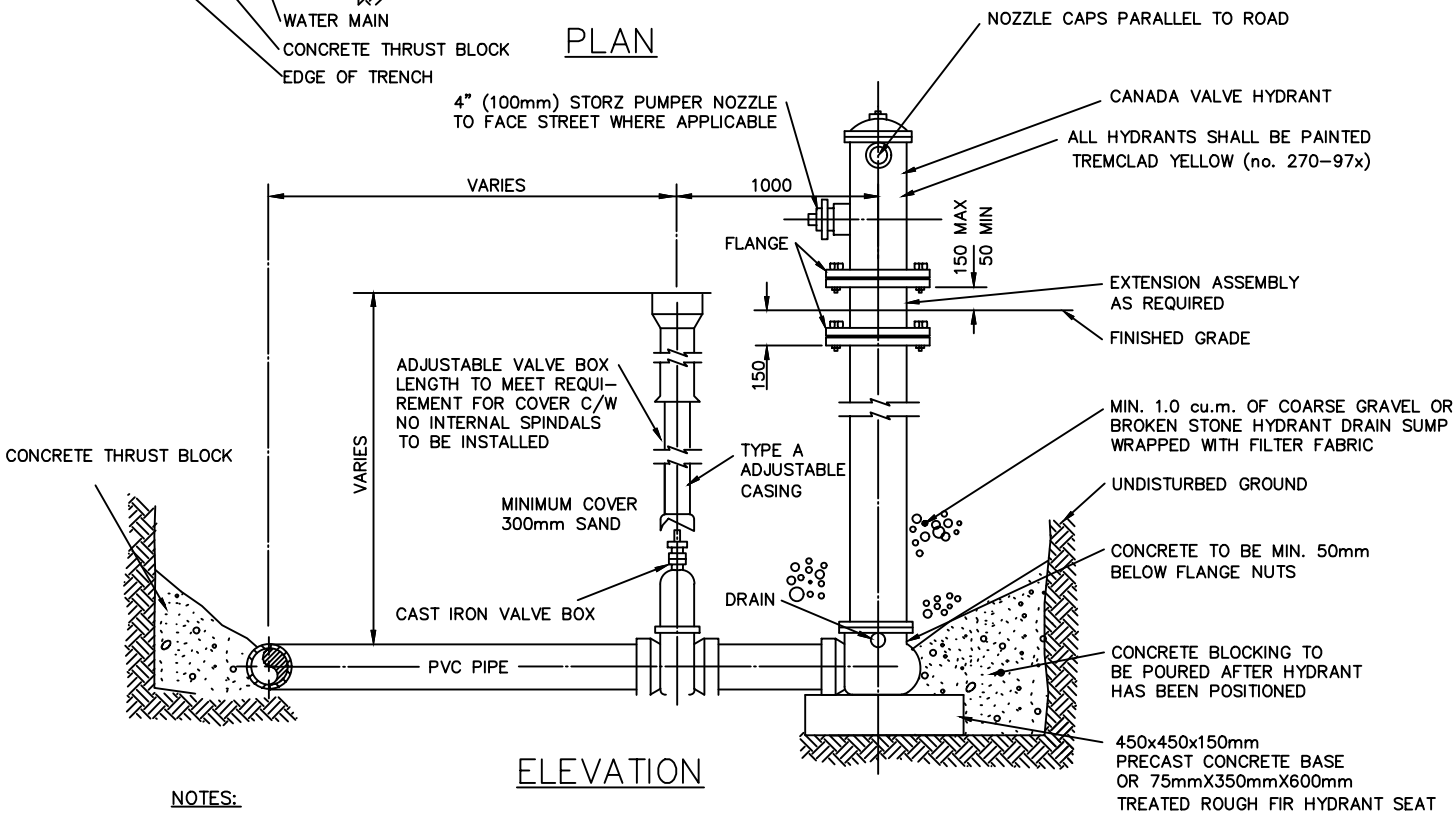


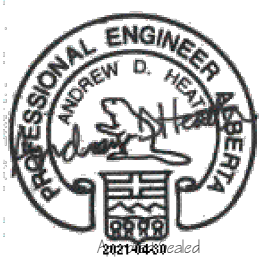

PLAN




ELEVATION

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL FITTINGS TO BE WRAPPED IN POLY PRIOR TO POURING CONCRETE.
3. CONCRETE TO BE 30 MPa @ 28 DAYS.
4. CONCRETE TO BE TYPE 50 (SULPHATE RESISTANT).
5. CONCRETE TO BE CURED FOR A MINIMUM OF 8 HOURS BEFORE BACKFILLING UNLESS OTHERWISE APPROVED BY CITY.
6. HYDRANTS SHALL BE COMPRESSION TYPE CONFORMING TO AWWA C502 COMPLETE WITH UNPLUGGED DRAINS, STAINLESS STEEL BOLTS AND ASPHALTIC COATED BURIED HYDRANT COMPONENTS.
7. PROVIDE CATHODIC PROTECTION AS SHOWN ON STD. DWG. 'TYPICAL ANODE INSTALLATION AT VALVES IRON FITTINGS & HYDRANTS'
8. WHERE HYDRANT VALVE FALLS IN SEPARATE OR MONOLITHIC SIDEWALK, VALVE WILL BE MOVED TO STREETSIDE OF GUTTER.
9. BACKFILL AS PER CITY STANDARDS




# OFF-LINE HYDRANT DETAIL

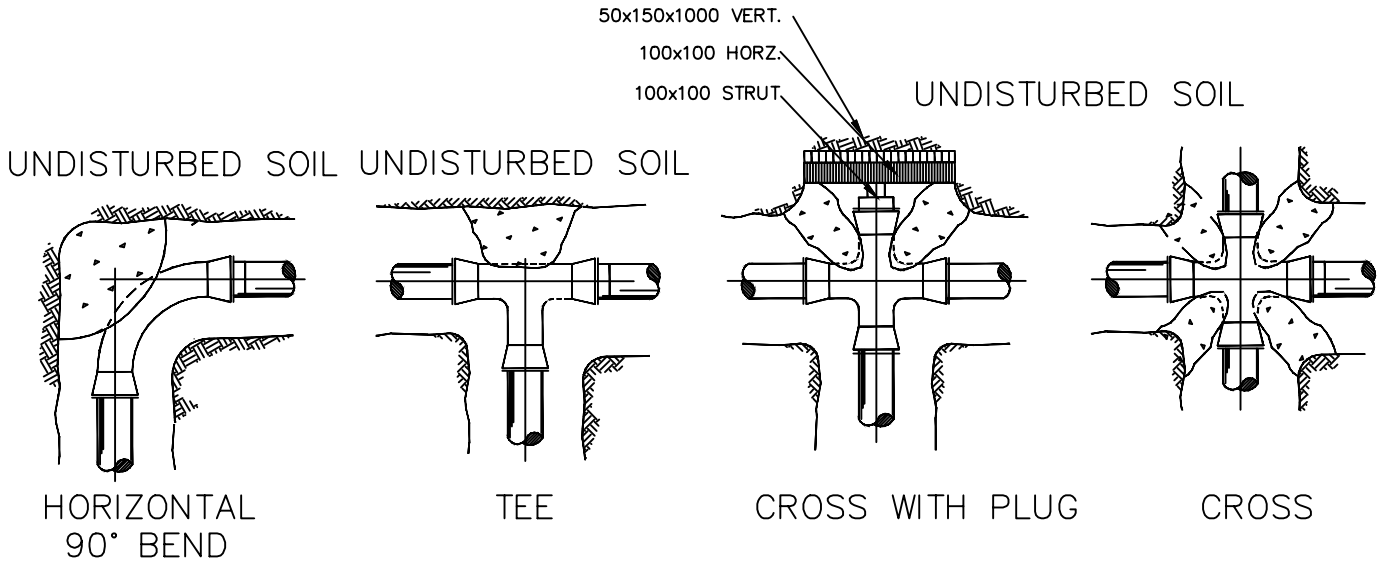
city of Wetaskiwin

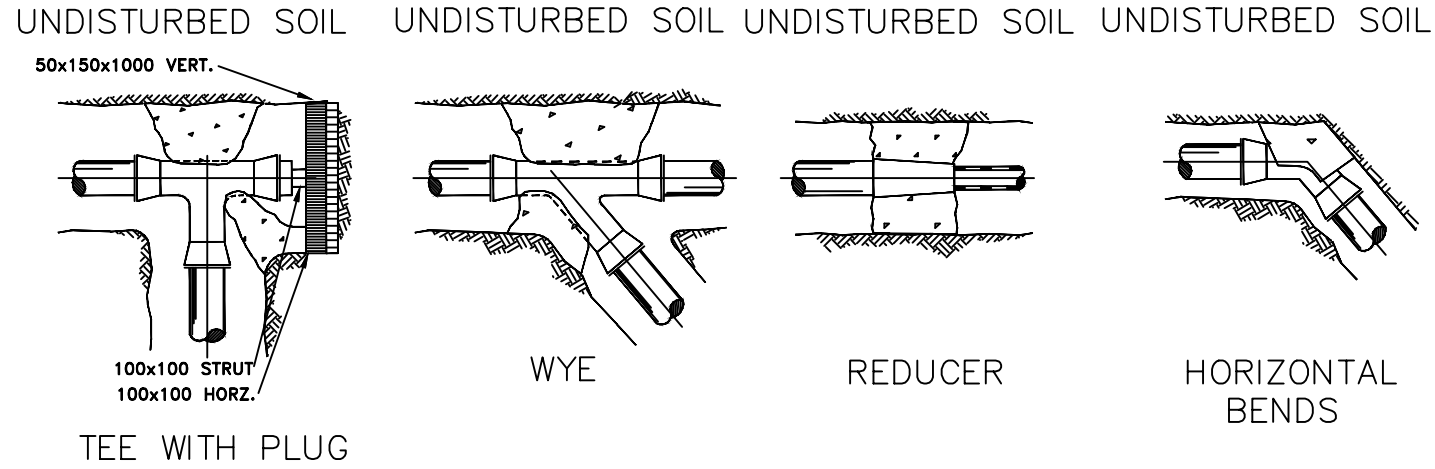
Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.

A-103

Date: MARH, 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI




## NOTES:

1. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES.
2. ALL WOOD PRODUCTS TO BE TREATED.
3. ALL FITTINGS TO BE WRAPPED IN POLY PRIOR TO POURING CONCRETE.
4. ALL CONCRETE TO BE MIN. 30MPa @ 28 DAYS.
5. ALL CONCRETE TO BE TYPE 50 (SULPHATE RESISTANT).
6. ALL CONCRETE TO BE CURED FOR A MINIMUM OF 8 HOURS BEFORE BACKFILLING UNLESS OTHERWISE APPROVED BY CITY.
7. BEFORE PRESSURE TESTING WAIT FOR CONCRETE THRUST BLOCKS TO CURE: MINIMUM OF 3 DAYS IN THE CASE OF HIGH EARLY STRENGTH CONCRETE OR A MINIMUM OF 7 DAYS IN THE CASE OF NORMAL CONCRETE.
8. CONCRETE TO BE CLEAR OF BELLS AND PIPE.
9. MIN 75mm OF CONCRETE REQUIRED UNDER ALL FITTINGS.
10. BEARING SURFACE MUST BE ON UNDISTURBED SOIL.

THRUST AREAS CALCULATED FOR 1035 KPa, TOTAL PRESSURE 1490 MPa BEARING

| | TEE | BRANCH AND CROSS | | | | 11.25° & 22.5° BENDS | | | | | 45° BENDS | | | | | 90° BENDS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DIA. | 350 | 300 | 250 | 200 | 150 | 350 | 300 | 250 | 200 | 150 | 350 | 300 | 250 | 200 | 150 | 350 | 300 | 250 | 200 | 150 |
| A | 1200 | 950 | 750 | 525 | 375 | 375 | 305 | 230 | 200 | 150 | 750 | 560 | 450 | 375 | 305 | | | | | |
| B | 75 | 75 | 75 | 75 | 75 | 150 | 150 | 125 | 100 | 75 | 150 | 150 | 125 | 100 | 75 | 550 | 525 | 350 | 300 | 200 |
| C | | | | | | | | | | | | | | | | 600 | 450 | 400 | 350 | 300 |
| AREA m² | 1.39 | 1.02 | 0.75 | 0.46 | 0.28 | 0.56 | 0.42 | 0.28 | 0.19 | 0.14 | 1.11 | 0.79 | 0.56 | 0.37 | 0.23 | 2.04 | 1.49 | 1.02 | 0.69 | 0.37 |

PROFESSIONAL ENGINEER ANDREW D. HEATH ALBERTA
2021-04-30 Approved Sealed

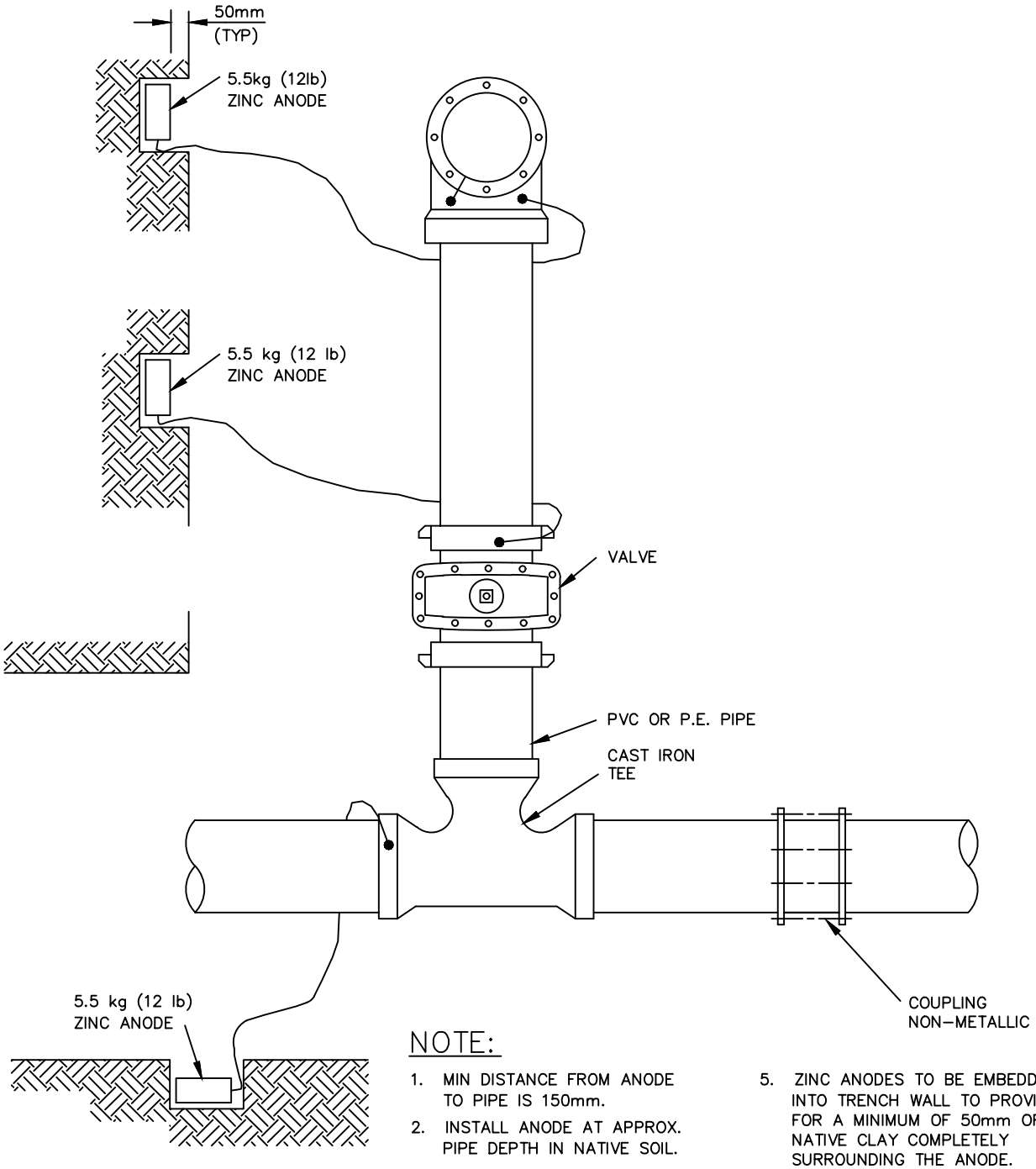
# THRUST BLOCK DETAILS

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
A-107

Date: MARCH, 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI




## NOTE:

1. MIN DISTANCE FROM ANODE TO PIPE IS 150mm.
2. INSTALL ANODE AT APPROX. PIPE DEPTH IN NATIVE SOIL.
3. ALL ZINC ANODES ON FITTINGS AND VALVES ARE 5.5 kg (12 lb).
4. ALL ZINC ANODES ON HYDRANTS ARE 5.5 kg (12lb).
5. ZINC ANODES TO BE EMBEDDED INTO TRENCH WALL TO PROVIDE FOR A MINIMUM OF 50mm OF NATIVE CLAY COMPLETELY SURROUNDING THE ANODE.
6. ANODES TO BE AT LEAST 300mm CLEAR OF THRUST BLOCK.
7. WET THE ANODE WITH WATER PRIOR TO BACKFILL TO ACTIVATE IT.

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-04-30
Approved Sealed

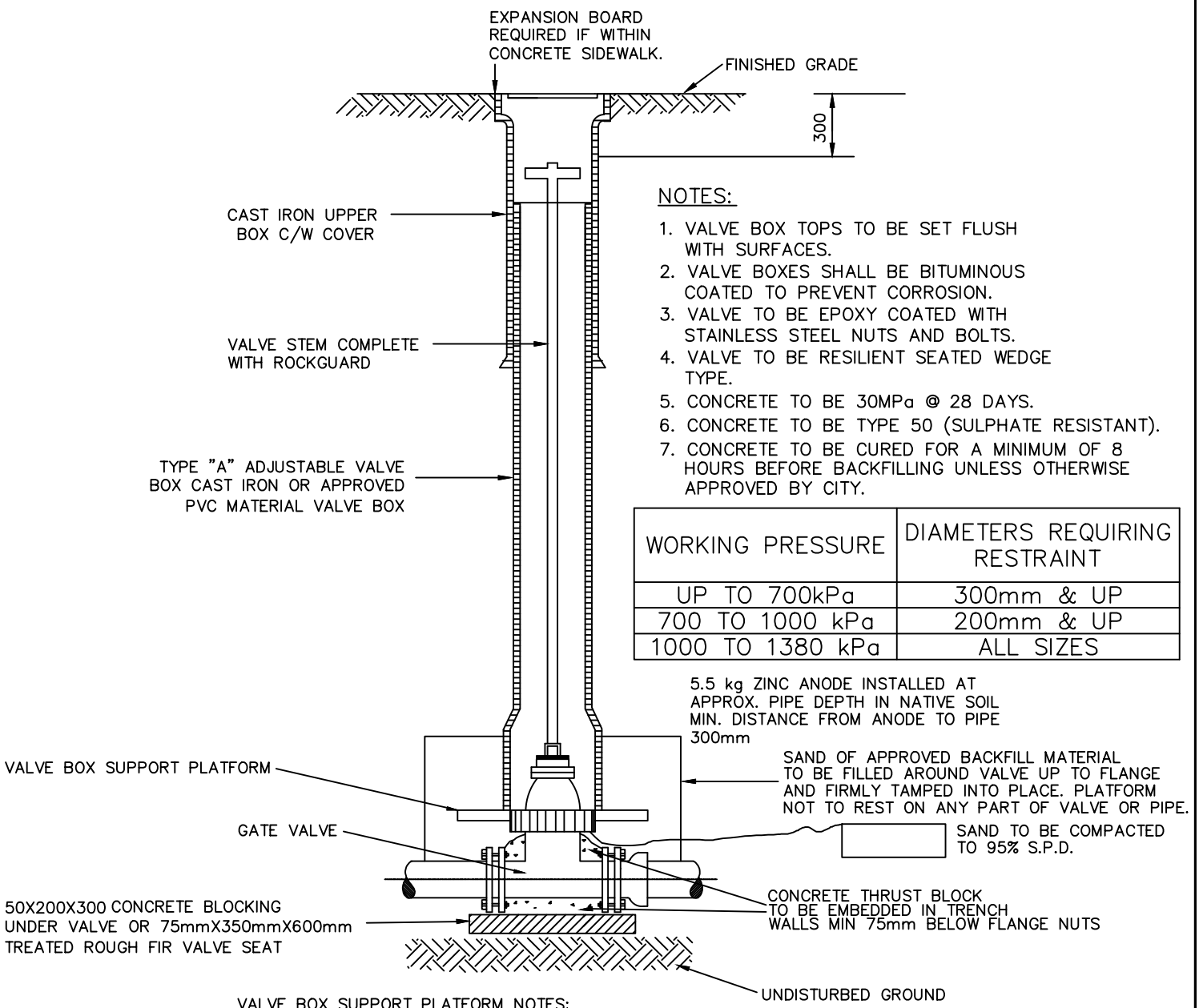
# TYPICAL ANODE INSTALLATION AT VALVES IRON FITTING & HYDRANTS

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
A-117

Date: MARCH, 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI




NOTES:

1. VALVE BOX TOPS TO BE SET FLUSH WITH SURFACES.
2. VALVE BOXES SHALL BE BITUMINOUS COATED TO PREVENT CORROSION.
3. VALVE TO BE EPOXY COATED WITH STAINLESS STEEL NUTS AND BOLTS.
4. VALVE TO BE RESILIENT SEATED WEDGE TYPE.
5. CONCRETE TO BE 30MPa @ 28 DAYS.
6. CONCRETE TO BE TYPE 50 (SULPHATE RESISTANT).
7. CONCRETE TO BE CURED FOR A MINIMUM OF 8 HOURS BEFORE BACKFILLING UNLESS OTHERWISE APPROVED BY CITY.

| WORKING PRESSURE | DIAMETERS REQUIRING RESTRAINT |
|---|---|
| UP TO 700kPa | 300mm & UP |
| 700 TO 1000 kPa | 200mm & UP |
| 1000 TO 1380 kPa | ALL SIZES |

VALVE BOX SUPPORT PLATFORM NOTES:

VALVE BOX SUPPORT PLATFORM CONSISTS OF 2–3 LAYERS OF RECYCLED PLASTIC TIMBERS OR TREATED LUMBER (2X4" OR 2X6" OR 2X8" OR SIMILAR). PLATFORM SHALL BE TAILORED TO VALVE TYPE AND HELD TOGETHER BY NAILS OR SCREWS. PLACE PLATFORM ON TAMPED SAND AT LEVEL WITH THE FLANGE ON THE VALVE. (NOTE IF RECYCLED PLASTIC TIMBERS ARE NOT READILY AVAILABLE, THEN PRESSURE TREATED TIMBERS MAY BE USED AS AN ALTERNATE MATERIAL).

PROFESSIONAL ENGINEER ANDREW D. HEATH ALBERTA
2021-04-30
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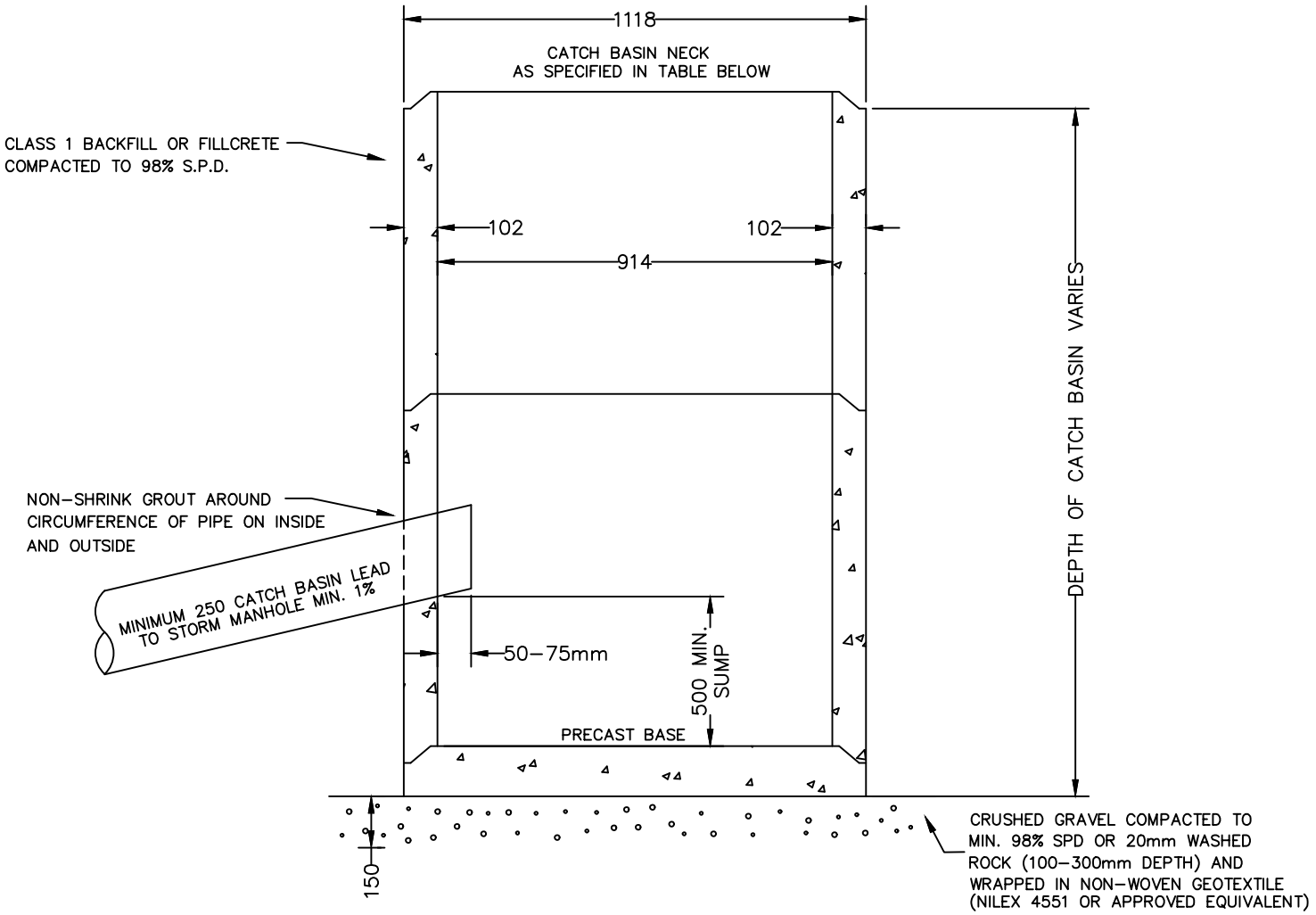
# MAIN VALVE CASING DETAIL

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
A-123

Date: MARCH, 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI




| FRAME AND COVER TYPE | CURB TYPE | TOP (UNDER FRAME AND GRATE) | SLAB TOP SIZE (ON TOP OF BARREL) |
|---|---|---|---|
| SK-7 | ROLLED | K7 TOP | 900mm W/ 635mm OPENING |
| F38 | NONE | NONE | 900mm W/ 635mm OPENING |
| F51 WITH SIDE INLET | VERTICAL | T-TOP | 900mm W/ 914mm OPENING |

## NOTES:

1. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES
2. REFER TO 'STORM CATCH BASIN NECK DETAILS' STANDARD DRAWING
3. REFER TO 'CATCH BASIN TYPICAL INSTALLATION' STANDARD DRAWING
4. ALL JOINTS TO BE FINISHED WITH NON-SHRINK GROUT INSIDE AND OUTSIDE FOR FULL CIRCUMFERENCE
5. WICK DRAINS TO EXTEND 100mm – 150mm INTO CATCH BASIN.
6. ALL PRECAST COMPONENTS MUST MEET A.S.T.M. C478 STANDARDS.

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-04-30
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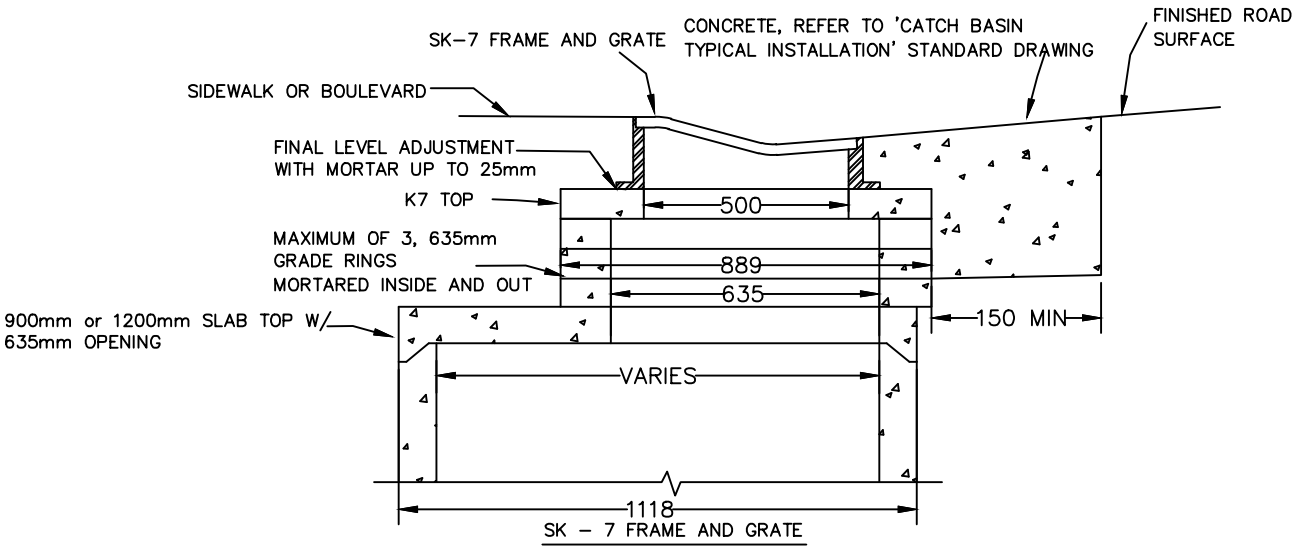
# STORM CATCH BASIN ASSEMBLY C/W 500mm SUMP

city of Wetaskiwin

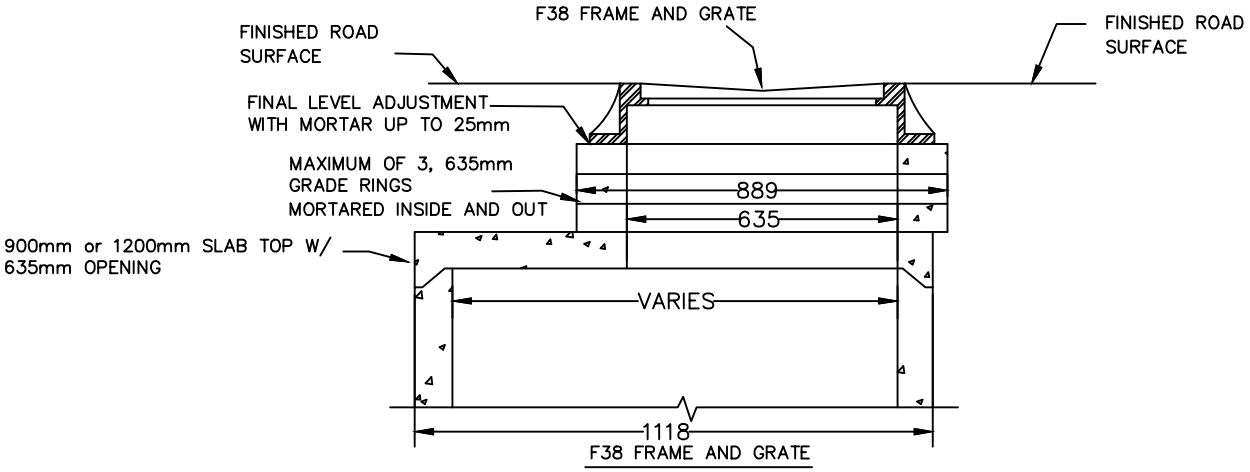
Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
B-114

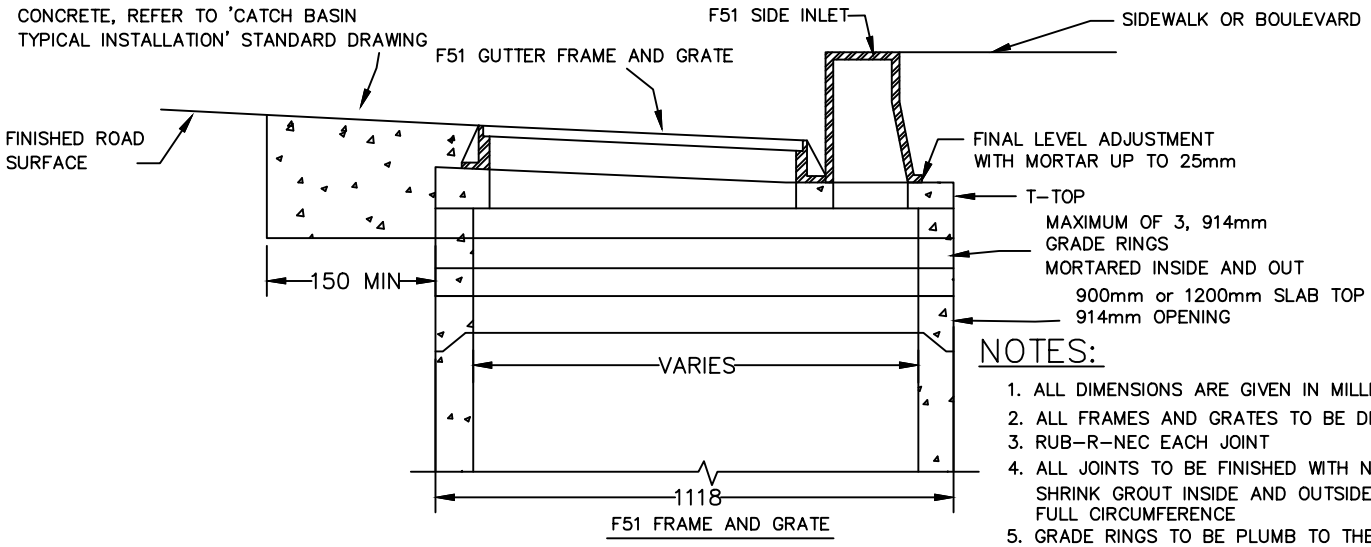
Date: MARCH 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI




SK – 7 FRAME AND GRATE




F38 FRAME AND GRATE




F51 FRAME AND GRATE

## NOTES:

1. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES
2. ALL FRAMES AND GRATES TO BE DIPPED
3. RUB–R–NEC EACH JOINT
4. ALL JOINTS TO BE FINISHED WITH NON–SHRINK GROUT INSIDE AND OUTSIDE FOR FULL CIRCUMFERENCE
5. GRADE RINGS TO BE PLUMB TO THE BARREL AND NOT BE STAGGERED.
6. ALL GRADE RINGS SHALL BE PRECAST CONCRETE

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-04-30
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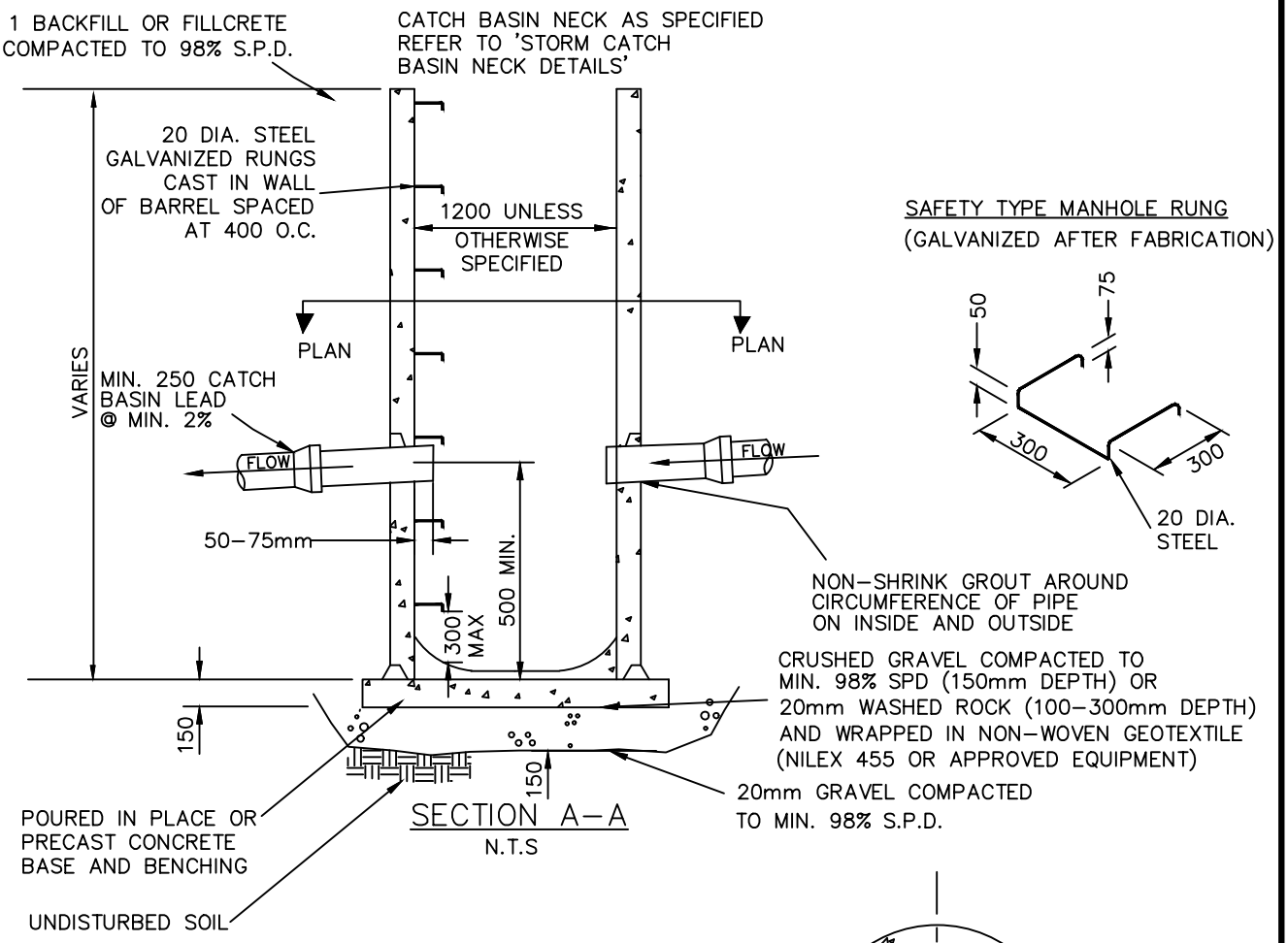
# STORM CATCH BASIN NECK

city of Wetaskiwin


Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8


STD. DWG NO.
B-114A

Date: MARCH 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI




## NOTES:

1. ALL PRECAST MANHOLES MUST CONFORM TO A.S.T.M. C478.
2. POURED IN PLACE CONCRETE SHALL HAVE 28 DAYS COMPRESSIVE STRENGTH 30 MPa.
3. POURED IN PLACE CONCRETE TO BE TYPE 50 (SULPHATE RESISTANT).
4. ALL DIMENSIONS ARE IN MILLIMETRES.
5. MAX. DISTANCE FROM RIM TO TOP RUNG IS 800mm.
6. ALL JOINTS TO BE FINISHED WITH NON–SHRINK GROUT INSIDE AND OUTSIDE FOR FULL CIRCUMFERENCE.
7. RUB–R–NEC EACH JOINT.
8. BACKFILL MANHOLE WITH CLASS 1 BACKFILL OR FILLCRETE COMPACTED TO 98% S.P.D.
9. WICK DRAINS TO EXTEND 100mm – 150mm INTO CATCH BASIN.
10. GRADE RINGS MUST BE PLUMB AND NOT STAGGERED.

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ANDREW D. HEATH
2021-04-30
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# CATCH BASIN MANHOLE

city of Wetaskiwin

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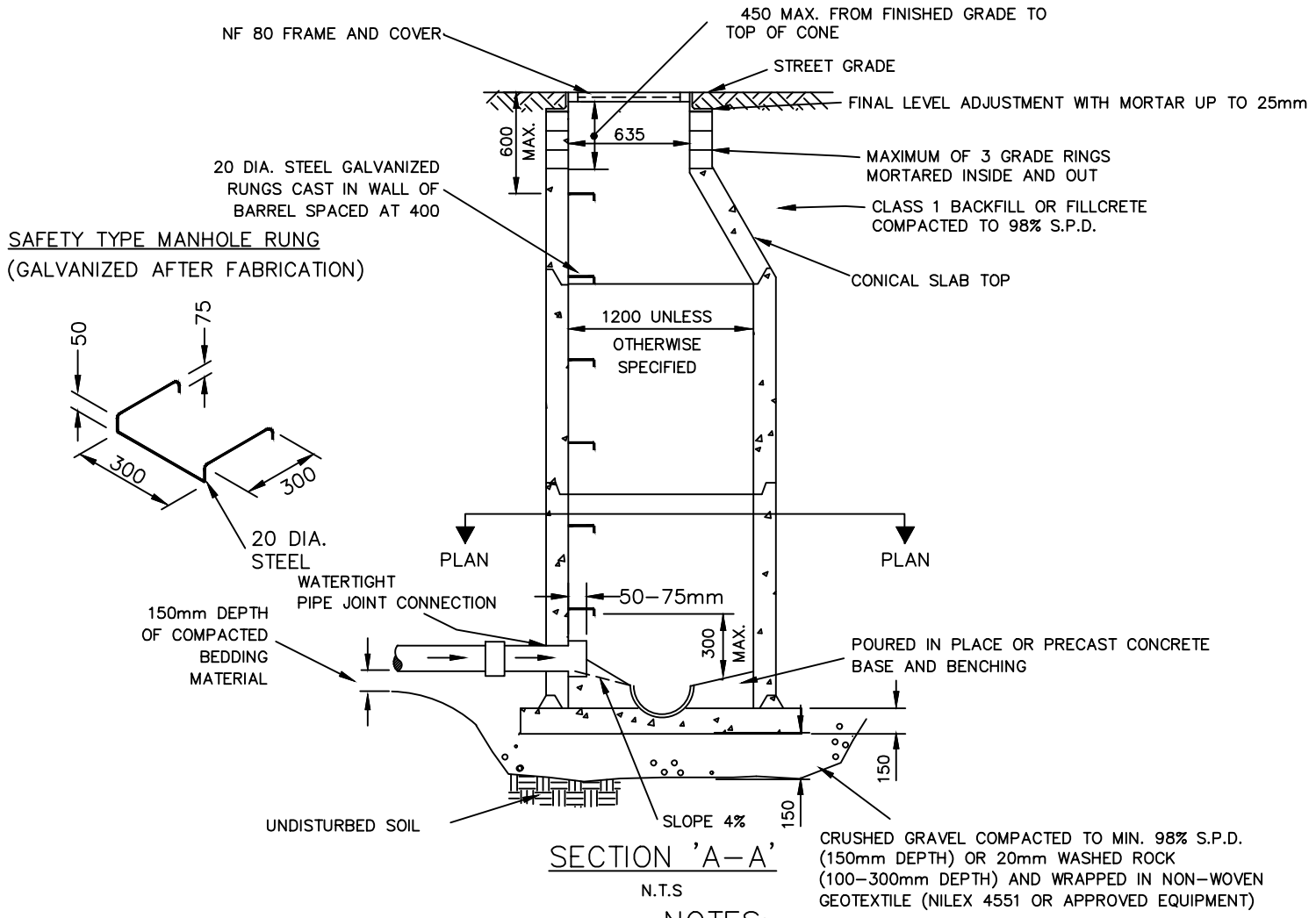
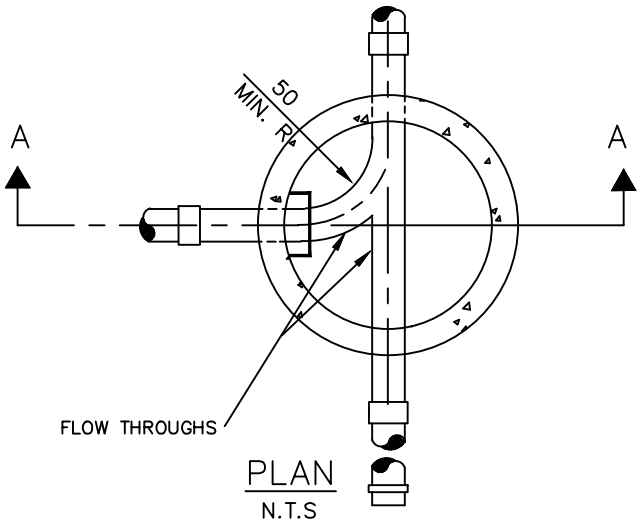
STD. DWG NO.
B-115

Date: MARCH, 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI




SAFETY TYPE MANHOLE RUNG
(GALVANIZED AFTER FABRICATION)

SECTION 'A–A'
N.T.S




PLAN
N.T.S

## NOTES:

1. ALL PRECAST MANHOLES MUST CONFORM TO A.S.T.M SPECIFICATION C478..
2. POURED IN PLACE CONCRETE SHALL HAVE 28 DAYS COMPRESSIVE STRENGTH 30 MPa.
3. POURED IN PLACE CONCRETE TO BE TYPE 50 (SULPHATE RESISTANT).
4. ALL JOINTS TO BE FINISHED WITH NON–SHRINK GROUT INSIDE AND OUTSIDE FOR FULL CIRCUMFERENCE.
5. CHANNELING AND BENCHING TO BE FINISHED TO TROWEL SMOOTHNESS.
6. ALL DIMENSIONS GIVEN IN MILLIMETRES.
7. MAX. DIST FROM RIM TO TOP RUNG IS 600mm.
8. BACKFILL MANHOLE WITH CLASS 1 BACKFILL OR FILLCRETE COMPACTED TO 98% S.P.D.
9. FLAT SLAB TOP CAN BE USED IN PLACE OF CONICAL SLAB TOP IN CASES THAT THE MANHOLE IS LESS THAN 1.8m DEEP.
10. FRAME AND COVER TO BE DIPPED.
11. RUB–R–NEC EACH JOINT.

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-04-30
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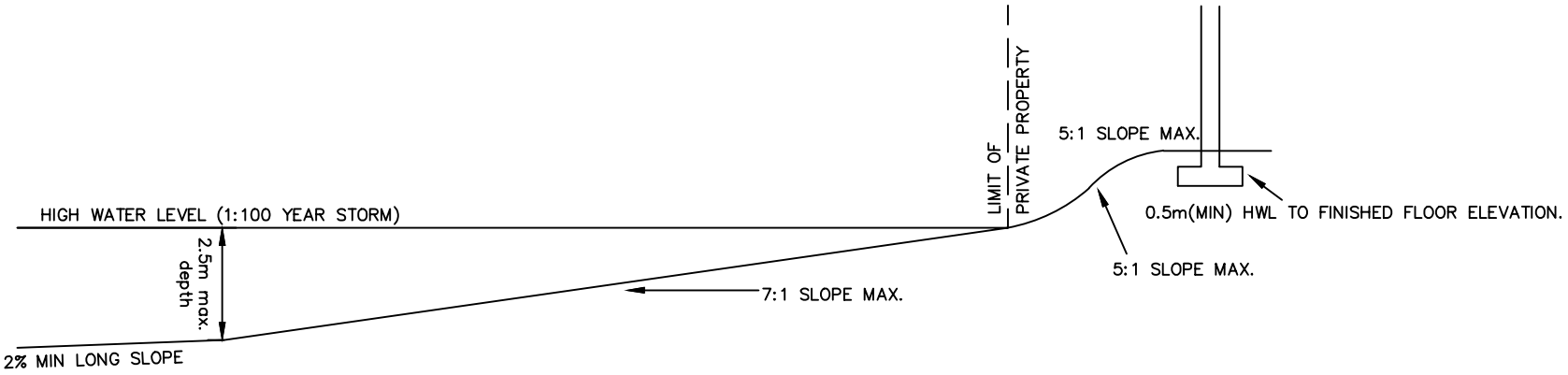
# MANHOLE

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
B-116

Date: MARCH 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI




## NOTES:

1. MAXIMUM ACTIVE STORAGE DEPTH OF THE POND SHALL BE 1.5m.
2. INLET AND OUTLET SHALL BE LOCATED AS FAR FROM EACH OTHER AS POSSIBLE.
3. MINIMUM LANDSCAPING REQUIRES TREES, SHRUBS AND NATIVE GRASS SEED MIX THAT IS DROUGHT TOLERANT AND CAPABLE OF WITHSTANDING WET CONDITIONS.

PROFESSIONAL ENGINEER ANDREW D. HEATH ALBERTA
2021-04-30
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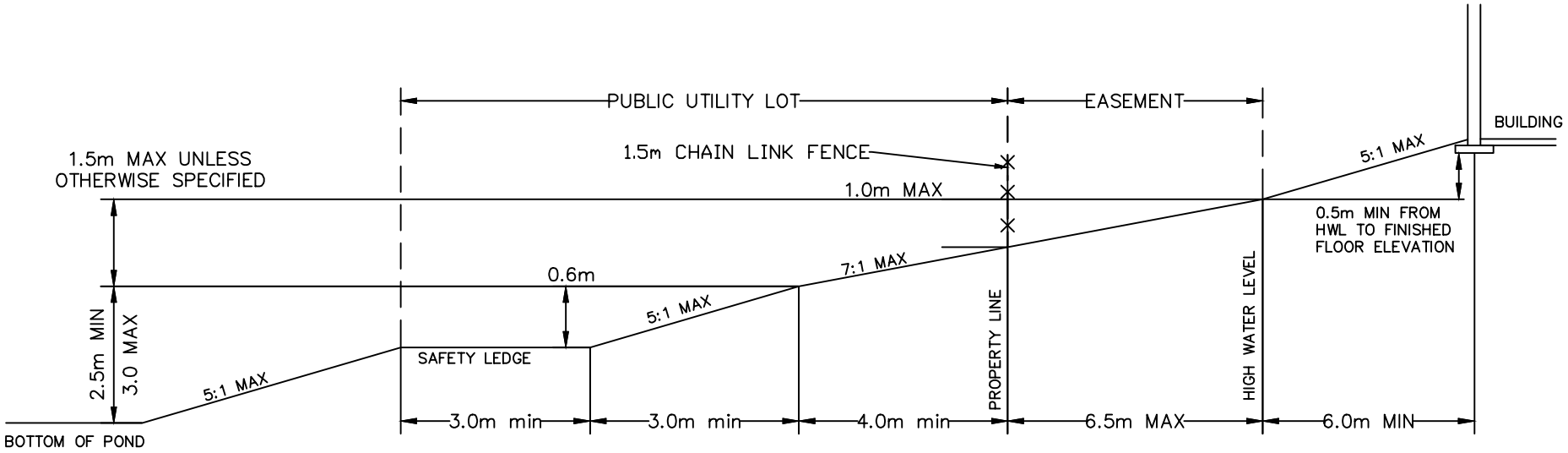
# TYPICAL DRY POND DETAIL

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
B-117

Date: MARCH, 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI




NOTES:
1. INLET AND OUTLET SHALL BE LOCATED AS FAR FROM EACH OTHER AS POSSIBLE.
2. MINIMUM SURFACE AREA OF THE POND AT NORMAL WATER LEVEL SHALL BE 2ha.
3. MINIMUM WIDTH OF THE WATER SURFACE AT NORMAL WATER LEVEL SHALL 25m

PROFESSIONAL ENGINEER ANDREW D. HEATH ALBERTA
2021-04-30
Approved Sealed

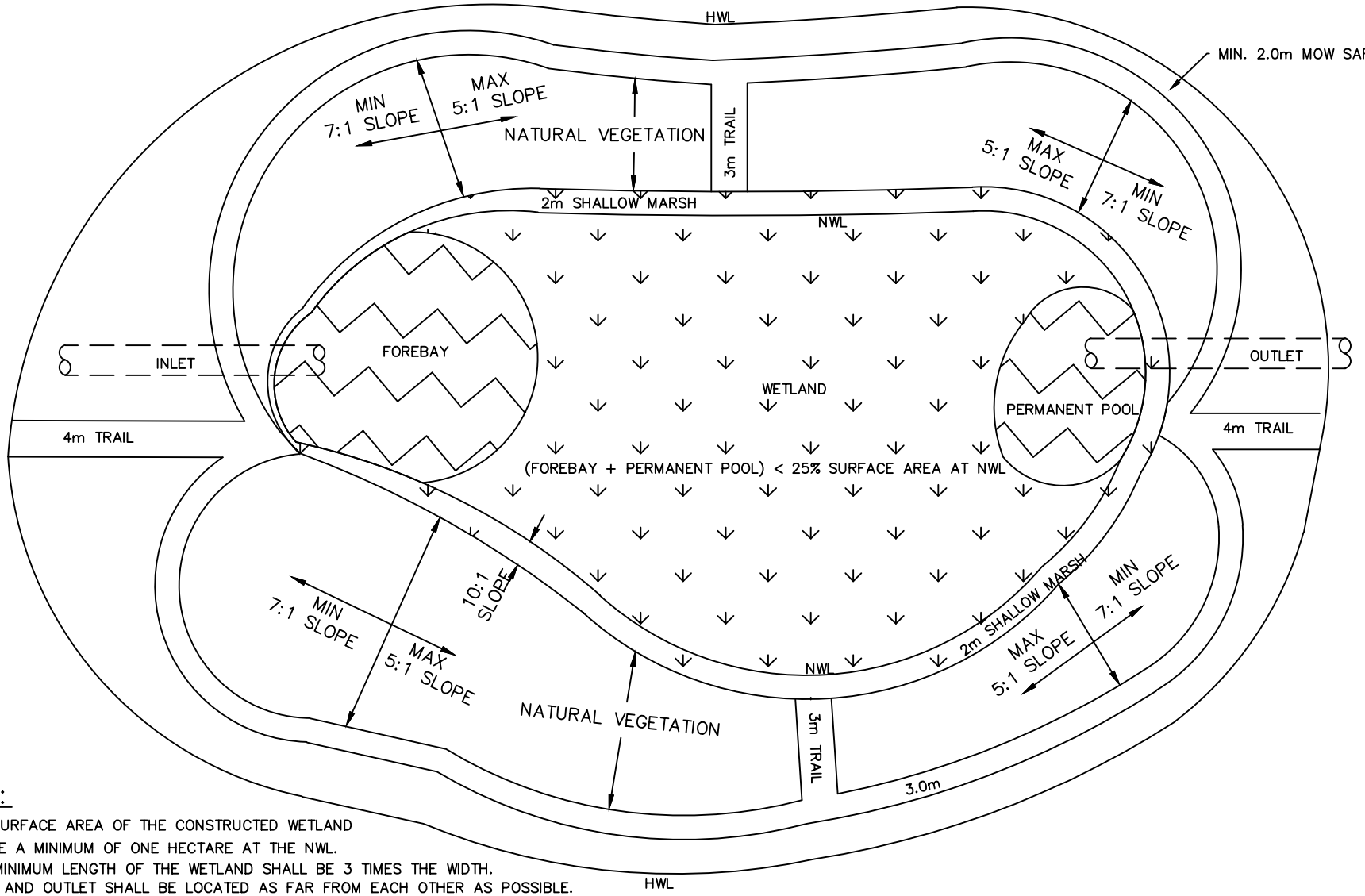
# TYPICAL DRY POND DETAIL

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
B-117A

Date: MARCH, 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI




## NOTES:

1. THE SURFACE AREA OF THE CONSTRUCTED WETLAND SHALL BE A MINIMUM OF ONE HECTARE AT THE NWL.
2. THE MINIMUM LENGTH OF THE WETLAND SHALL BE 3 TIMES THE WIDTH.
3. INLET AND OUTLET SHALL BE LOCATED AS FAR FROM EACH OTHER AS POSSIBLE.

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2021-04-30
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# TYPICAL CONSTRUCTION WETLAND DETAIL

city of Wetaskiwin

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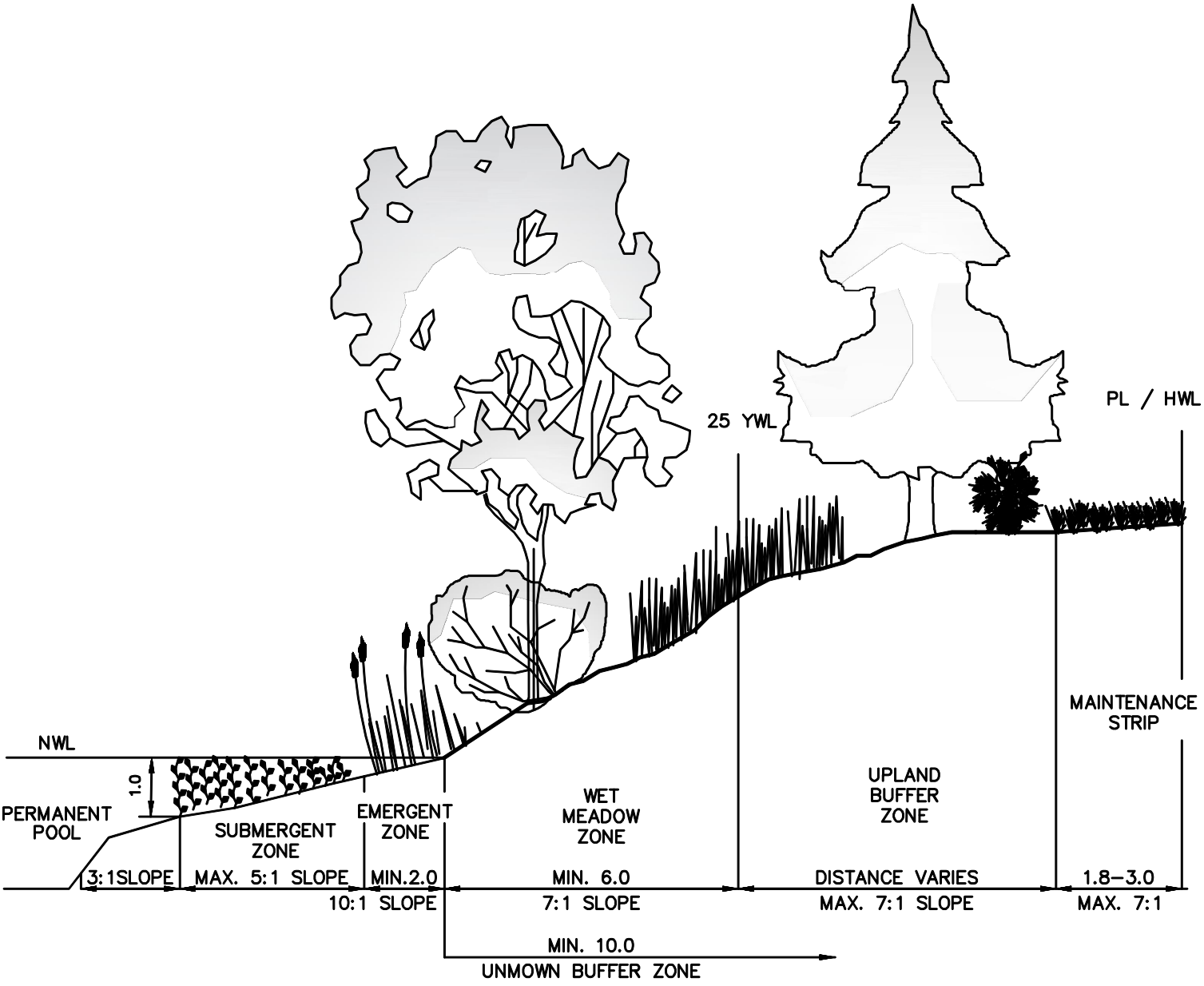
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
B-117B

Date: MARCH, 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI




SPEEDING GUIDELINES:

NWL TO 5 YWL: WET MEADOW SEED MIX.
5YWL TO 25 YWL: NATURALIZATION SEED MIX.
25 YWL AND HIGHER ELEVATIONS: NATURALIZATION, GENERAL PARK SEED MIX OR SOD ARE ACCEPTABLE ALTERNATIVES.
*BE ADVISED THAT SEED MIX PLACEMENT MAY VARY DEPENDING ON EACH CONSTRUCTED/ENGINEERED WETLAND DESIGN.

NOTE:

1. TRAILS TO BE INSTALLED ABOVE THE 25 YWL. SEE DRAWING 61401 FOR DETAILS.
2. SHREDDED WOOD MULCH SHALL NOT BE INSTALLED BELOW THE 25 YWL, EXCLUDING MULCHED AREAS WITHIN INDIVIDUAL TREE WELLS.
3. LIVE SOILS AND PLANT MATERIAL REMOVED FROM EXISTING WETLANDS TO BE UTILIZED WHENEVER AVAILABLE.
4. SUBMERGENT ZONE CAN VARY IN WIDTH AND INCLUDE ZERO SLOPE AREAS AND TERRACES.
5. A MINIMUM 1.0m MAINTENANCE STRIP COMPLETED WITH SOD OR GENERAL PARK SEED MIX IS REQUIRED ALONG BOTH SIDES OF ASPHALT TRAILS.
6. A 1.8m–3.0m MAINTENANCE STRIP COMPLETED WITH SOD OR GENERAL PARK SEED MIX IS REQUIRED ALONG FENCE LINES. EXACT WIDTH AND SURFACE TREATMENT AS PER CONSTRUCTION DRAWINGS.
7. ALL DIMENSIONS ARE IN METRES(m), UNLESS OTHERWISE NOTED.

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-04-30
Approved Sealed

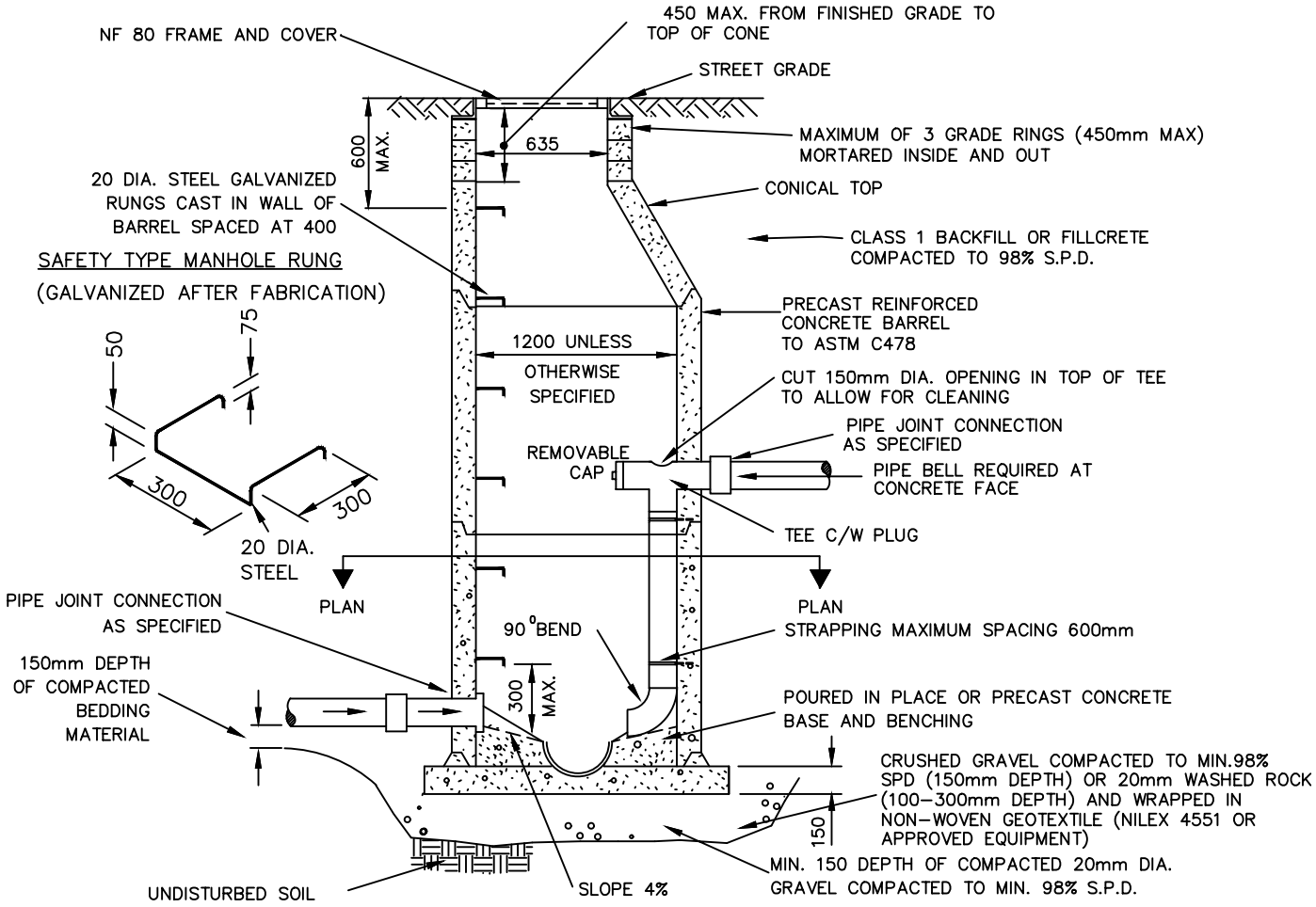
# CONSTRUCTED / ENGINEERED WETALND ZONES

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

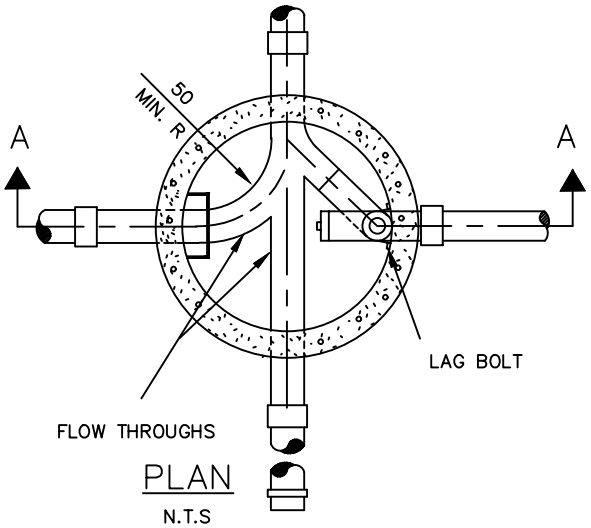
STD. DWG NO.
B - 117C

Date: APRIL 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI




## SECTION 'A–A'

N.T.S

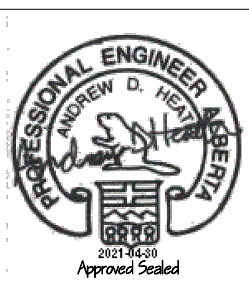



## PLAN

N.T.S

## NOTES:

1. ALL PRECAST MANHOLES MUST CONFORM TO A.S.T.M. SPECIFICATION C478.
2. POURED IN PLACE CONCRETE SHALL HAVE 28 DAYS COMPRESSIVE STRENGTH 30 MPa.
3. POURED IN PLACE CONCRETE TO BE TYPE 50 (SULPHATE RESISTANT).
4. ALL JOINTS TO BE FINISHED WITH NON–SHRINK GROUT INSIDE AND OUTSIDE FOR FULL CIRCUMFERENCE.
5. CHANNELING AND BENCHING TO BE FINISHED TO TROWEL SMOOTHNESS.
6. ALL DIMENSIONS GIVEN IN MILLIMETRES.
7. MAX. DIST FROM RIM TO TOP RUNG IS 800mm.
8. BACKFILL MANHOLE WITH CLASS 1 BACKFILL OR FILLCRETE COMPACTED TO 98% S.P.D.
9. LAG BOLTS AND STRAPPING ARE TO BE INSTALLED IMMEDIATELY BELOW THE TEE AND A CONTINUAL 1.0m VERTICAL SPACING TO THE BASE.
10. DIAMETER SIZE AND TYPE OF VERTICAL PIPE TO MATCH INLET PIPE.
11. FLAT SLAB TOP CAN BE USED IN PLACE OF CONICAL SLAB TOP IN CASES WHERE THE MANHOLE IS LESS THAN 1.8m DEEP.
12. FRAME AND COVER TO BE DIPPED.
13. RUB–R–NEC EACH JOINT.



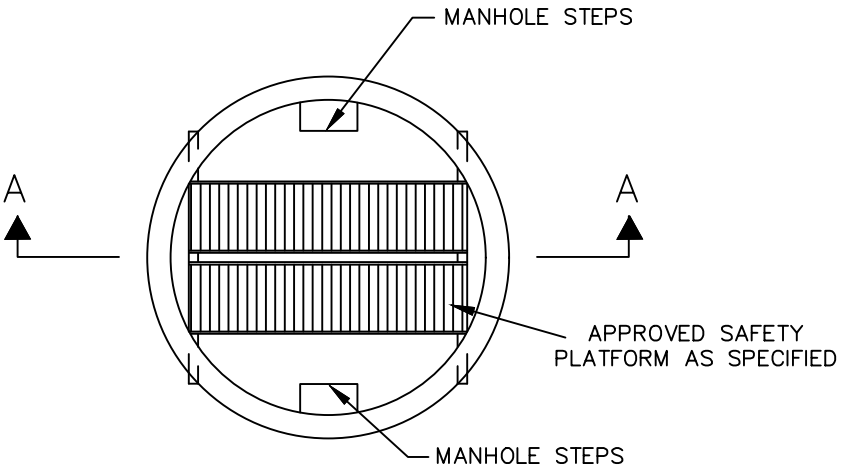

# INTERIOR DROP MANHOLE DETAIL

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

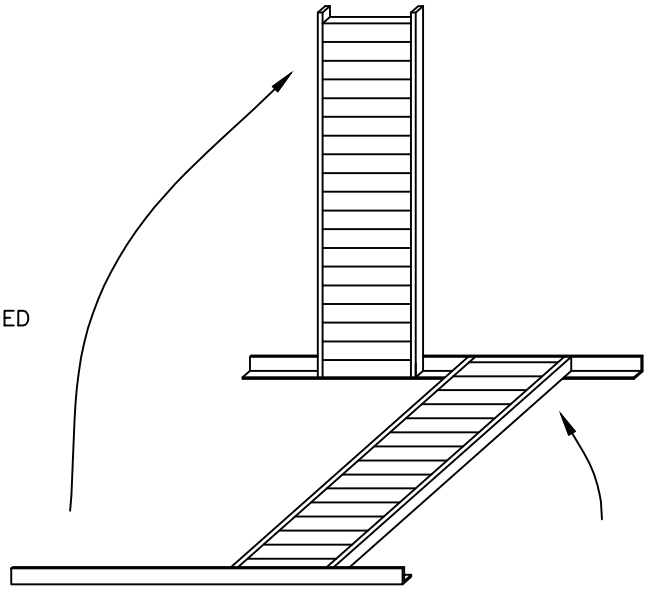
STD. DWG NO.
B-118

Date: MARCH 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI



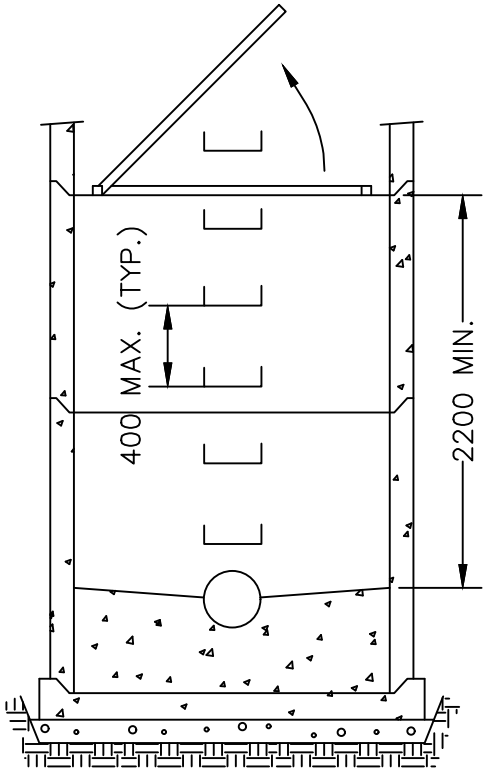

PLAN VIEW

N.T.S



ISOMETRIC VIEW

N.T.S




SECTION 'A–A'

N.T.S

## NOTES:

1. TO BE INSTALLED ON MANHOLES GREATER THAN 5.0m DEEP

2. MAXIMUM SPACING BETWEEN PLATFORMS TO BE 5.0m.

3. ALUMINUM GRATES TO BE MSU MISSISSAUGA OR APPROVED EQUAL

4. TO BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-04-30
Approved Sealed

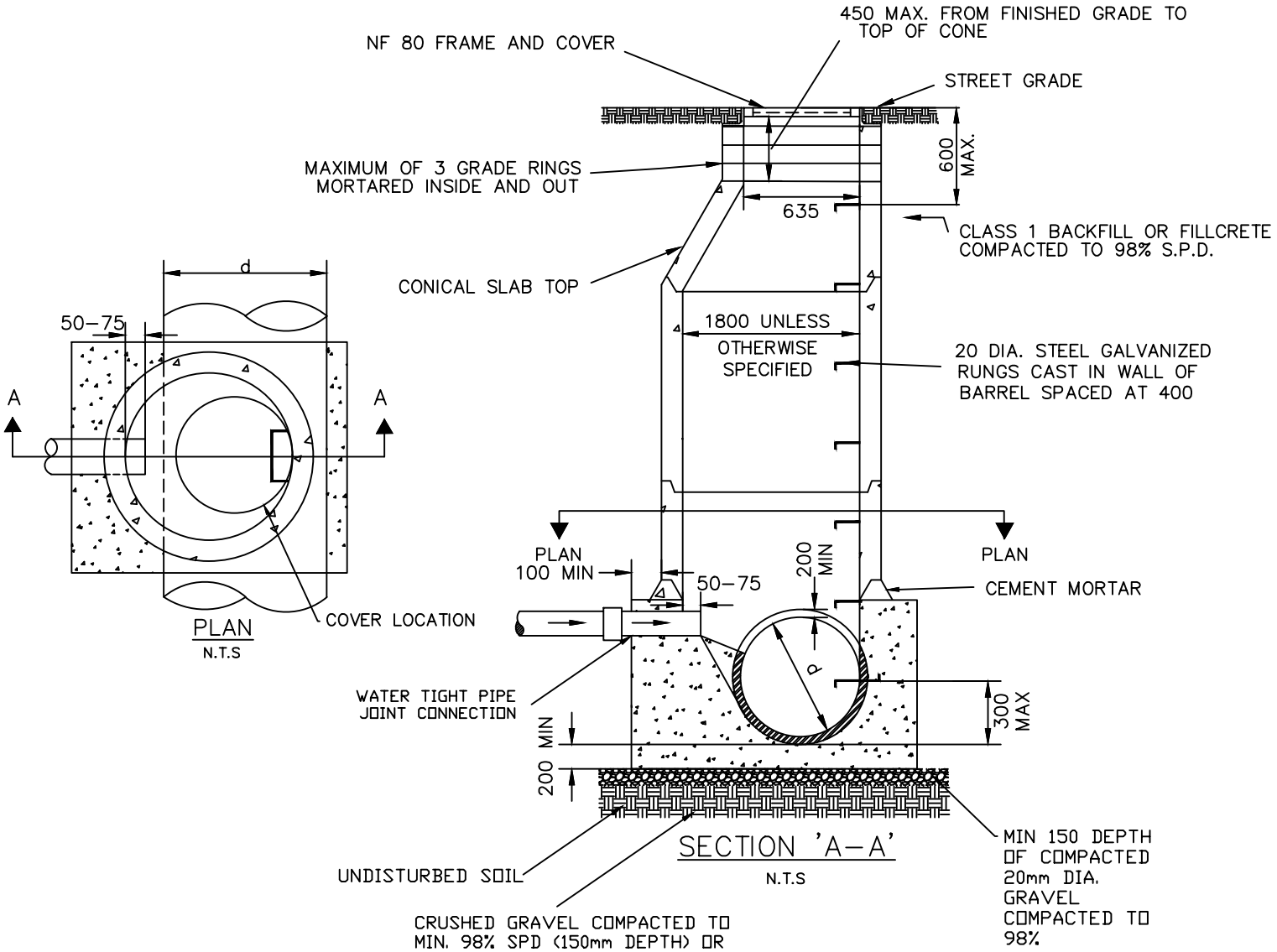
# MANHOLE SAFETY PLATFORM

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
B-119

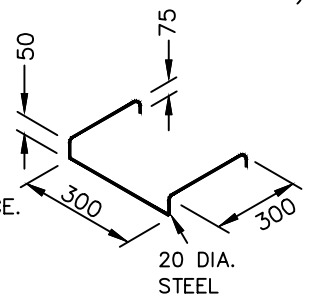
Date: MARCH 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI

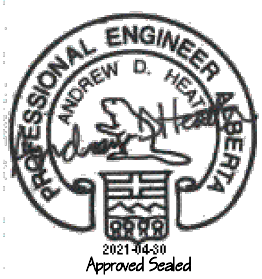



## NOTES:

1. PIPE DIAMETER FOR PERCHED MANHOLE SHALL BE D=600mm TO 1050mm.
2. SAFETY STEPS TO BE SPACED AT 400 MAX.
3. CHANNELING AND BENCHING TO BE FINISHED TO TROWEL SMOOTHNESS.
4. ALL PRECAST MANHOLES MUST CONFORM TO A.S.T.M SPECIFICATION C478.
5. POURED IN PLACE CONCRETE SHALL HAVE 28 DAYS COMPRESSIVE STRENGTH 30 MPa.
6. POURED IN PLACE CONCRETE TO BE TYPE 50 (SULPHATE RESISTANT).
7. ALL JOINTS TO BE FINISHED WITH NON–SHRINK GROUT INSIDE AND OUTSIDE FOR FULL CIRCUMFERENCE.
8. ALL DIMENSIONS GIVEN IN MILLIMETRES.
9. MAX. DIST FROM RIM TO TOP RUNG IS 600mm.
10. BACKFILL MANHOLE WITH CLASS 1 BACKFILL OR FILLCRETE COMPACTED TO 98% S.P.D.
11. FLAT SLAB TOP CAN BE USED IN PLACE OF CONICAL SLAB TOP IN CASES WHERE THE MANHOLE IS LESS THAN 1.8m DEEP.
12. FRAME AND COVER TO BE DIPPED.
13. RUB–R–NEC EACH JOINT.
14. MATCH PIPE CROWN ELEVATIONS.
15. GRADE RINGS MUST BE PLUMB TO THE BARREL AND NOT STAGGERED.

SAFETY TYPE MANHOLE RUNG
(GALVANIZED AFTER FABRICATION)



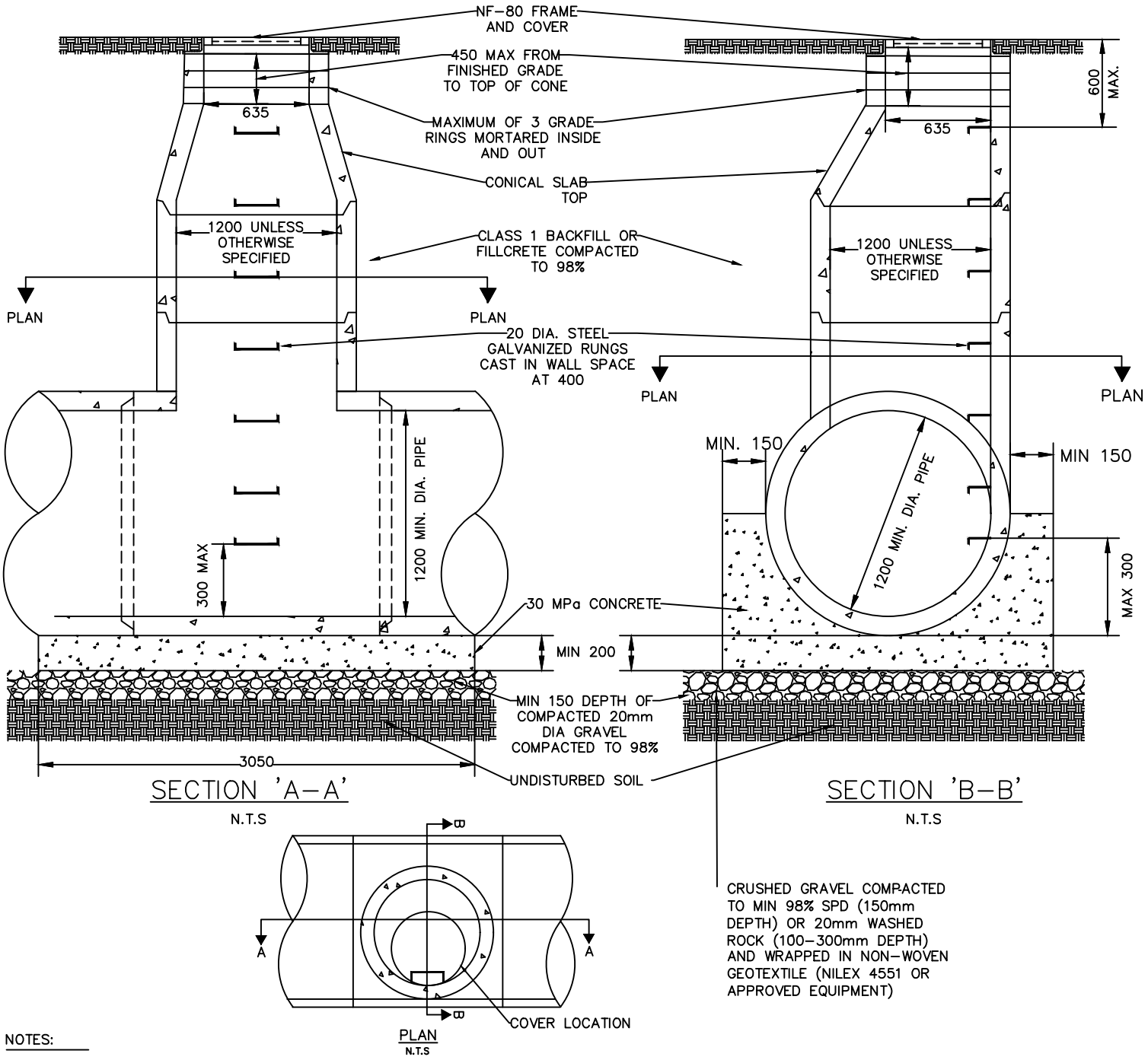

# PERCHED MANHOLE

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
B-120

Date: MARCH 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI




NOTES:

1. ALL DIMENSIONS GIVEN IN MILLIMETERS.
2. THIS TYPE OF MANHOLE IS TO BE BUILT ONLY ON MAINS OF 1200mm DIAMETER OR LARGER AND WHERE THERE IS NO CHANGE IN DIRECTION OF FLOW.
3. ALL PRECAST MANHOLES MUST CONFORM TO A.S.T.M. SPECIFICATION C478.
4. SAFETY STEPS TO BE SPACED AT 400 MAX.
5. MAX. DIST FROM RIM TO TOP RUNG IS 600mm.
6. FLAT SLAB TOP CAN BE USED IN PLACE OF CONICAL SLAB TOP IN CASES WHERE THE MANHOLE IS LESS THAN 1.8m DEEP.
7. CHANNELING AND BENCHING TO BE FINISHED TO TROWEL SMOOTHNESS.
8. BACKFILL MANHOLE WITH CLASS 1 BACKFILL OR FILLCRETE COMPACTED TO 98% S.P.D.
9. ALL JOINTS TO BE FINISHED WITH NON-SHRINK GROUT INSIDE AND OUTSIDE FOR FULL CIRCUMFERENCE.
10. RUB-R-NEC EACH JOINT.
11. POURED IN PLACE CONCRETE SHALL HAVE 28 DAYS COMPRESSIVE STRENGTH.
12. POURED IN PLACE CONCRETE TO BE TYPE 50 (SULPHATE RESISTANT).
13. FRAME AND COVER TO BE DIPPED.

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-04-30
Approved Sealed

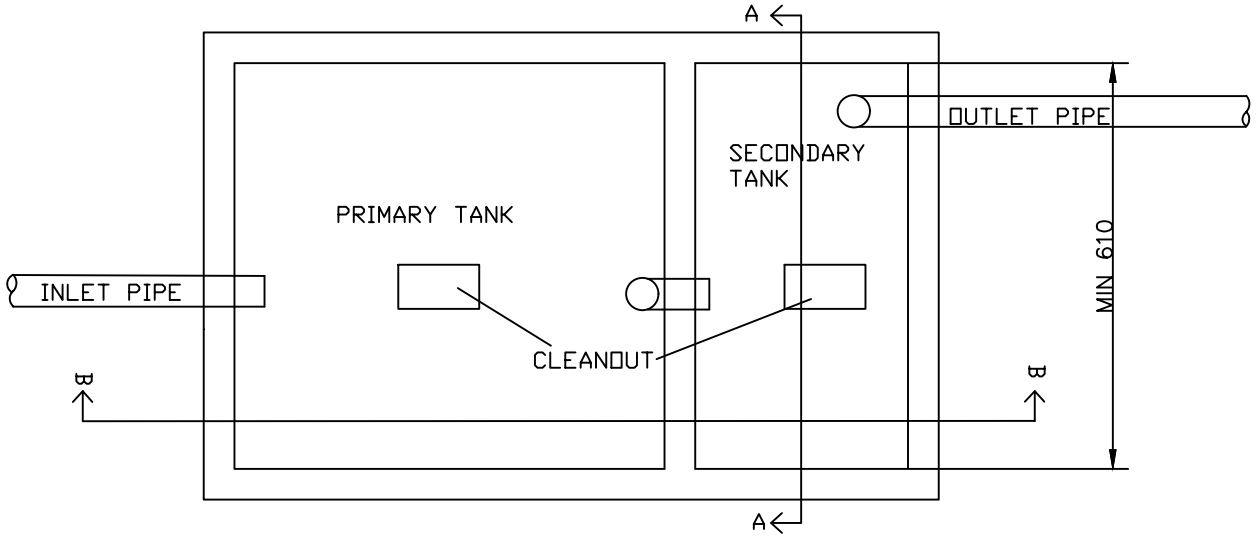
# T-RISER MANHOLE

city of Wetaskiwin

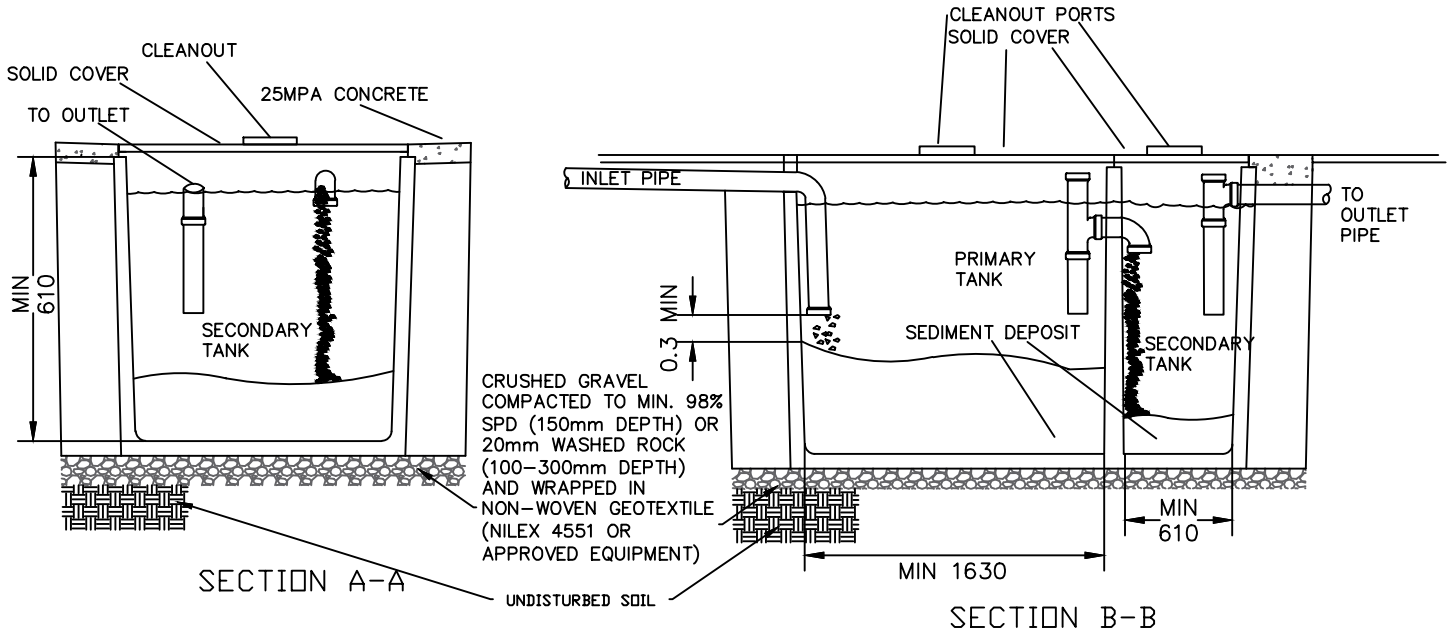
**Planning and Engineering**
**4705 - 50 Avenue**
**Wetaskiwin, Alberta**
**T9A 0R8**

STD. DWG NO.
B-121

Date: MARCH 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI




PLAN VIEW




NOTES
1. ALL DIMENSIONS GIVEN IN MILLIMETERS.
2. BACKFILL WITH CLASS 1 BACKFILL OR FILLCRETE COMPACTED TO 98% S.P.D.
3. ALL JOINTS TO BE FINISHED WITH NON–SHRINK GROUT INSIDE AND OUTSIDE FOR FULL CIRCUMFERENCE.
4. POURED IN PLACE CONCRETE SHALL HAVE 28 DAYS COMPRESSIVE STRENGTH 30 MPa.
5. POURED IN PLACE CONCRETE TO BE TYPE 50 (SULPHATE RESISTANT).
6. CONFIRM SIZING REQUIREMENTS WITH THE CITY OF WETASKIWIN.

PROFESSIONAL ENGINEER ALBERTA ANDREW D. HEATH
2021-04-30
Approved Sealed

# TYPICAL OIL GRIT INTERCEPTOR

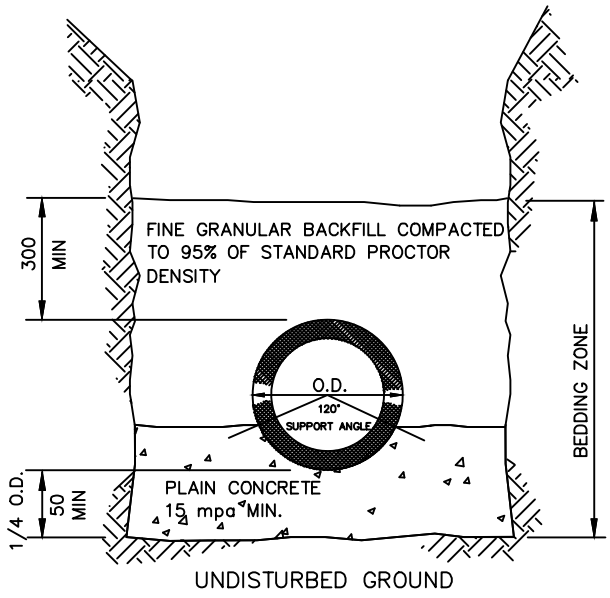
city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

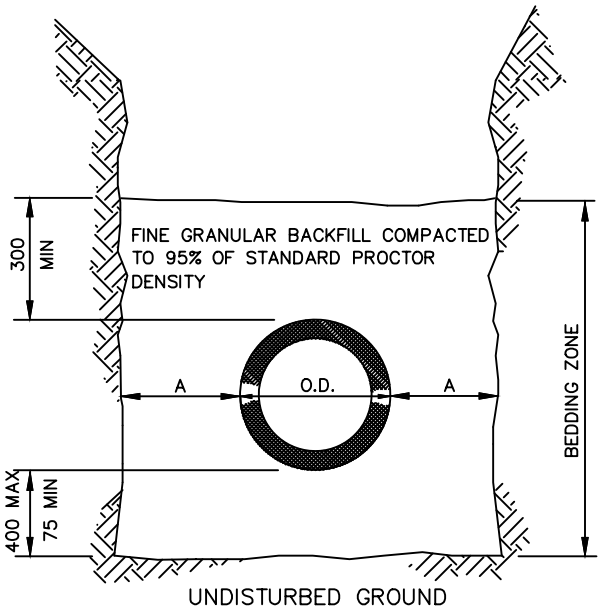
STD. DWG NO.
B-122

Date: MARCH 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI

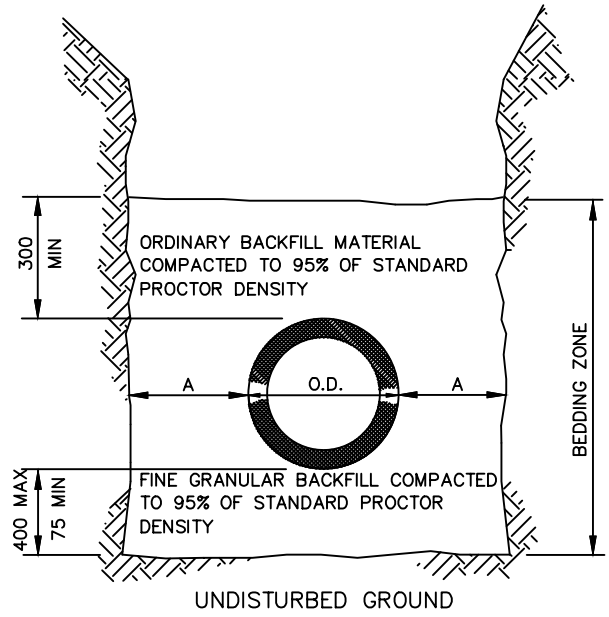
## CLASS 'A' BEDDING



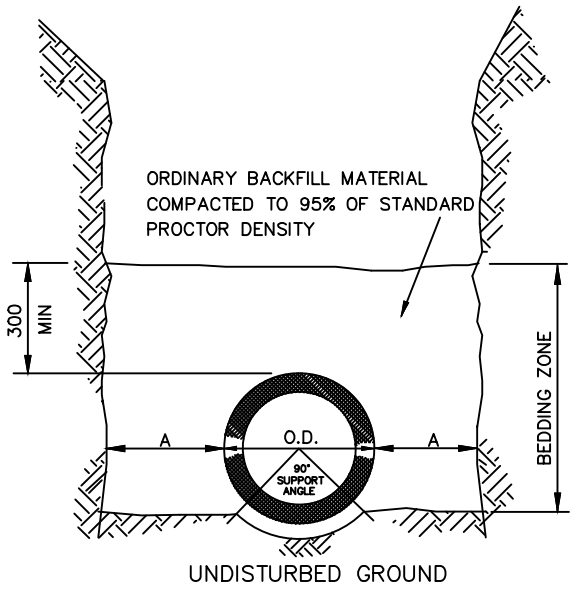

## CLASS 'B' BEDDING




## CLASS 'C' BEDDING




## CLASS 'D' BEDDING




## NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED
2. ALL MATERIAL TO BE PLACED AND COMPACTED IN 150mm LAYERS
3. WHERE INSTRUCTED OR AS SHOWN ON DRAWINGS REPLACE FINE GRANULAR WITH COARSE GRANULAR MATERIAL
4. TRENCH WALL CLEARANCE: $200 \leq A \leq 300$
5. IF A > 300 BACKFILL MUST BE COMPACTED TO 100% OF STANDARD PRCOTOR DENSITY
6. APPLICABLE ONLY TO SINGLE PIPE INSTALLATIONS IN TRENCHES EXCAVATED IN UNDISTURBED GROUND
7. UNLESS OTHERWISE INSTRUCTED USE CLASS 'B' BEDDING WITH FINE GRANULAR MATERIAL

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-04-30
Approved Sealed

# PIPE BEDDING DETAILS

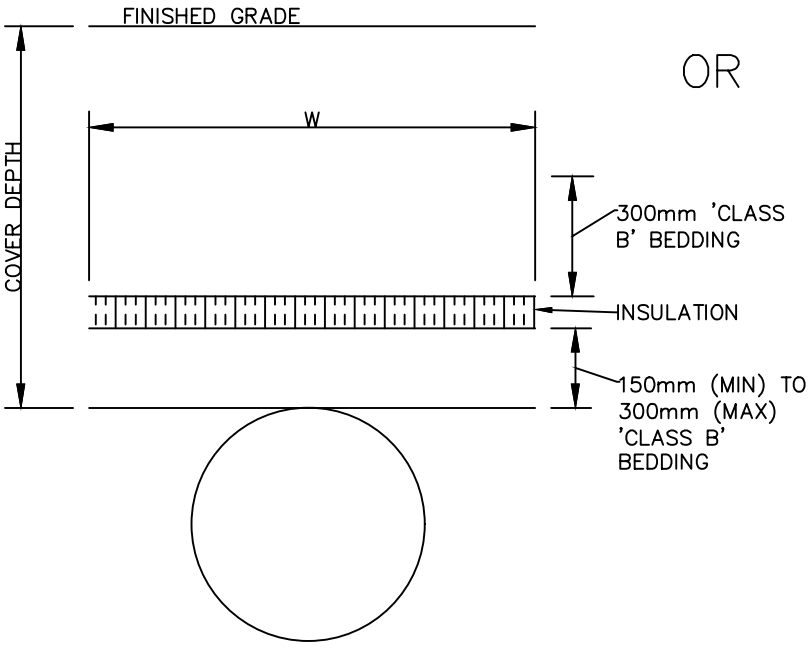
city of Wetaskiwin


Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8


STD. DWG NO.
C-101

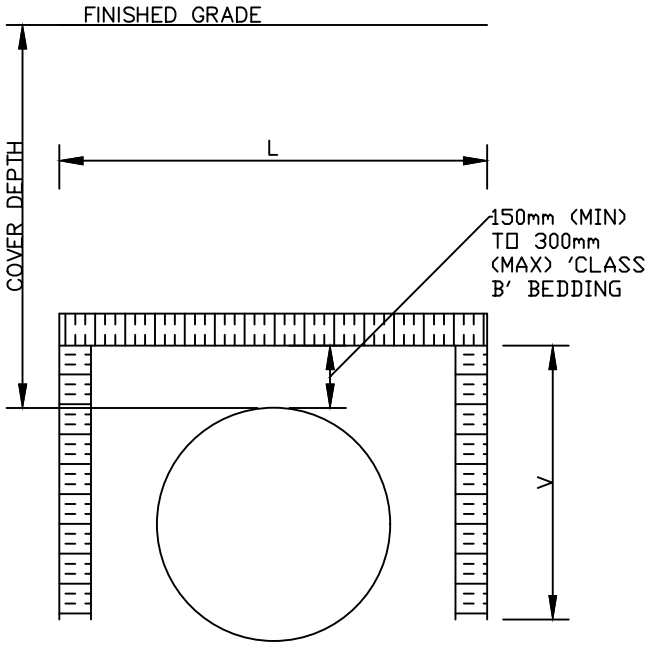
Date: MARCH 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI

| COVER DEPTH m | THICKNESS mm (IN) | WIDTH (W) m |
|---|---|---|
| 1.1 - 1.4 | 90 (3.5) | 3.4 |
| 1.4 - 1.7 | 75 (3.0) | 2.8 |
| 1.7 - 2.0 | 75 (3.0) | 2.2 |
| 2.0 - 2.3 | 50 (2.0) | 1.6 |
| 2.3 - 2.75 | 50 (2.0) | 1.0 |
| >2.75 | - | - |




HORIZONTAL

OR




INVERTED U

W= L+2V
V TO BE LESS THAN OR EQUAL TO L

NOTES:
1. ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. APPLICABLE WHEN USING FILLCRETE, GRANULAR OR CLAY BACKFILL FOR WATER MAINS WITH DEPTH OF COVER LESS THAN 2.75m
3. USE DOW HI-40 STYROFOAM BOARD (MIN 50mm THICK), OR APPROVED EQUAL.
4. STORM SEWER ONLY REQUIRES INSULATION WHEN THE COVER DEPTH IS LESS THAN 1.8m.
5. INSULATION IS TO BE USED AS A FINAL SOLUTION. DESIGN SHOULD AIM TO INCREASE THE COVER DEPTH RATHER THAN USING INSULATION.
6. REFER TO THE CITY OF WETASKIWIN MUNICIPAL ENGINEERING STANDARDS FOR FURTHER DETAILS ON DEPTH

PROFESSIONAL ENGINEER ANDREW D. HEATH ALBERTA
2021-04-30
Approved Sealed

# WATER, STORM AND SANITARY INSULATION REQUIREMENTS

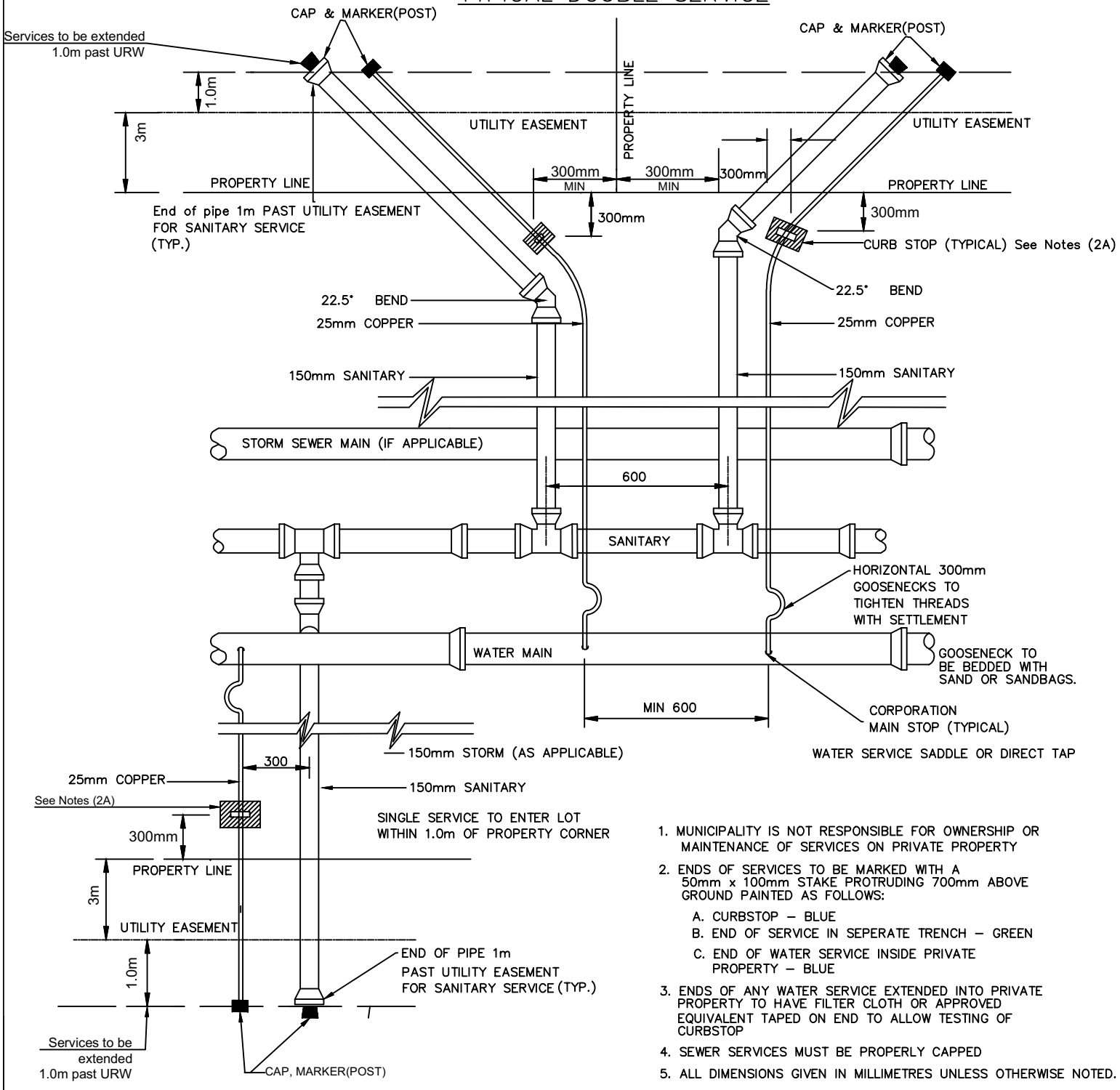
city of Wetaskiwin


Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8


STD. DWG NO.
C-102

Date: MARCH 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI

# TYPICAL DOUBLE SERVICE




## TYPICAL SINGLE SERVICE

1. MUNICIPALITY IS NOT RESPONSIBLE FOR OWNERSHIP OR MAINTENANCE OF SERVICES ON PRIVATE PROPERTY
2. ENDS OF SERVICES TO BE MARKED WITH A 50mm x 100mm STAKE PROTRUDING 700mm ABOVE GROUND PAINTED AS FOLLOWS:
   A. CURBSTOP – BLUE
   B. END OF SERVICE IN SEPERATE TRENCH – GREEN
   C. END OF WATER SERVICE INSIDE PRIVATE PROPERTY – BLUE
3. ENDS OF ANY WATER SERVICE EXTENDED INTO PRIVATE PROPERTY TO HAVE FILTER CLOTH OR APPROVED EQUIVALENT TAPED ON END TO ALLOW TESTING OF CURBSTOP
4. SEWER SERVICES MUST BE PROPERLY CAPPED
5. ALL DIMENSIONS GIVEN IN MILLIMETRES UNLESS OTHERWISE NOTED.
6. TAPPED MAINSTOPS TO BE STAGGERED FROM CROWN TO 30 DEGREES OF PIPE WITH 1–3 THREADS SHOWINGS.

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-04-30
Approved Sealed

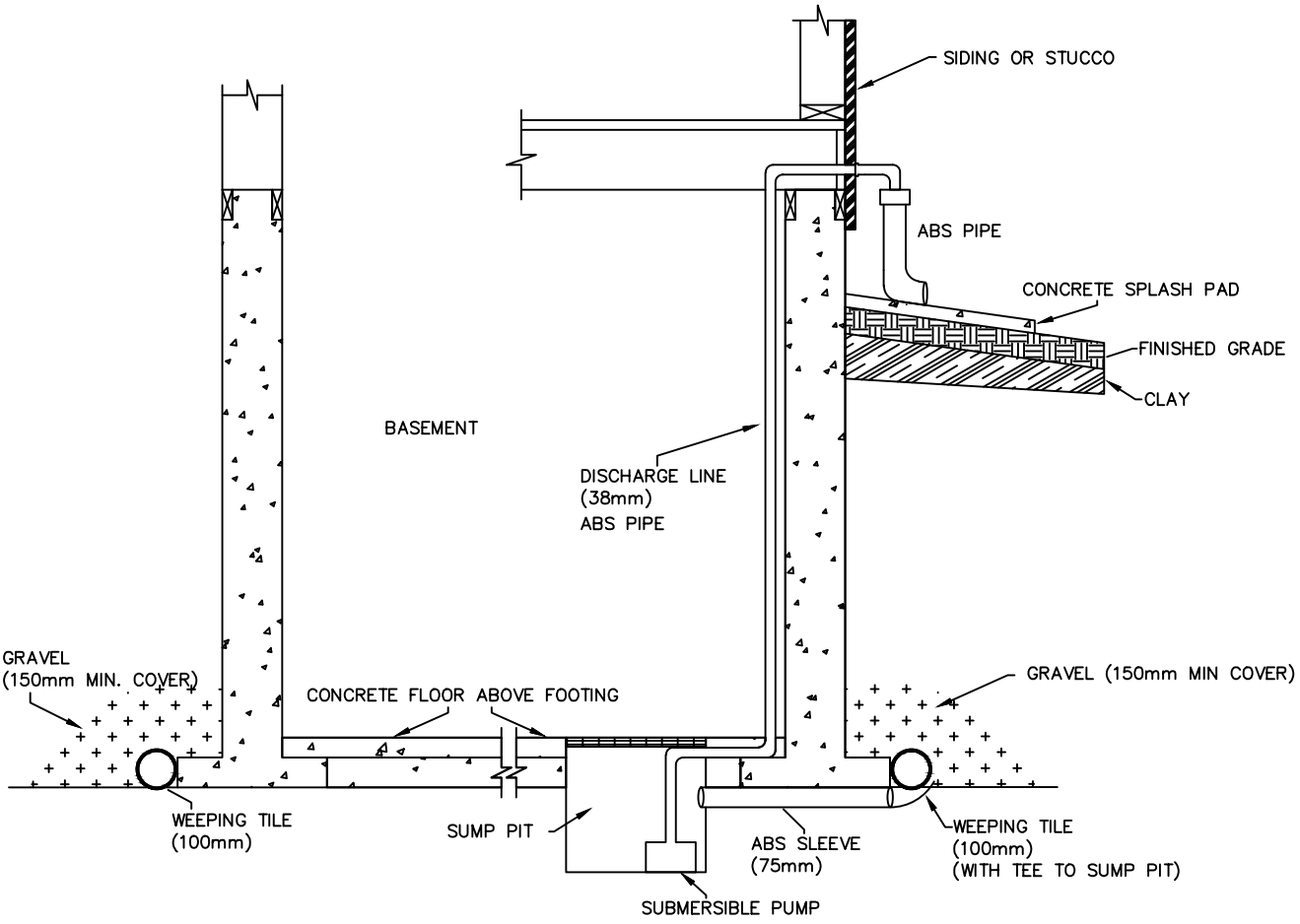
# TYPICAL SINGLE SERVICE LAYOUT

city of Wetaskiwin


Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8


STD. DWG NO.
C-109

Date: MARCH 2021 Scale: N.T.S. Drawn: E.TAPOVETI




NOTE:
1.) SUMP PUMP DETAIL IS A CONCEPTUAL SKETCH FOR "INFORMATION ONLY". BUILDING OWNER SHALL BE RESPONSIBLE FOR SUMP PUMP INSTALLATION TO CURRENT BUILDING CODE STANDARDS.

PROFESSIONAL ENGINEER ANDREW D. HEATH ALBERTA
2021-04-30
Approved Sealed

# SUMP PUMP / SURFACE DISCARGE

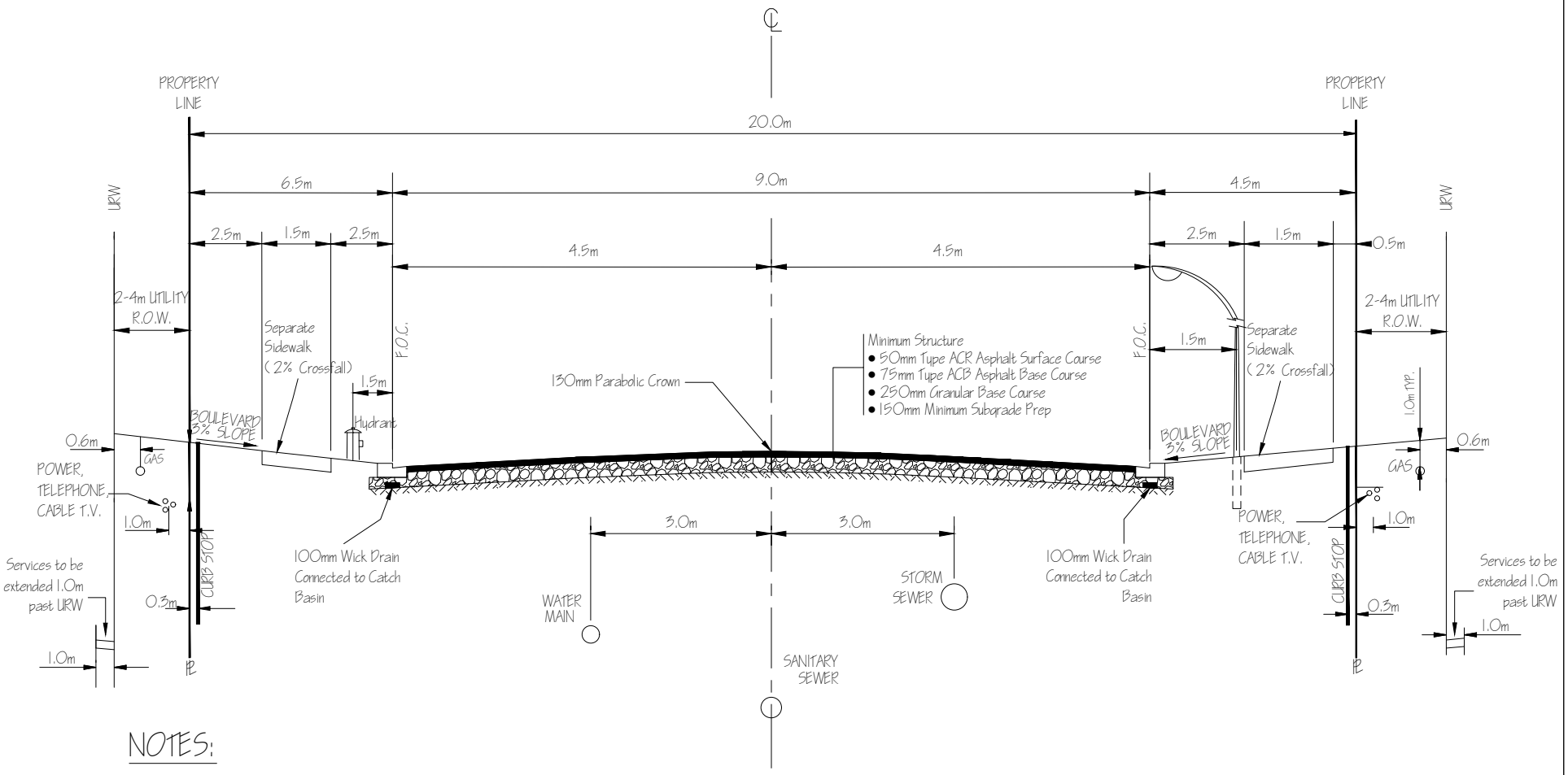
* FOR INFORMATION ONLY

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
C-111

Date: MARCH 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI




## NOTES:

1. ALL DIMENSIONS IN METRES, UNLESS OTHERWISE NOTED.
2. ALL ROAD STRUCTURES ARE SUBJECT TO THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND THE FIELD CONDITIONS AT THE TIME OF CONSTRUCTION.
3. TRANSFORMERS AND SWITCHBOXES MUST BE LOCATED OUTSIDE OF THE SIGHT LINES AT INTERSECTIONS, AND AS CLOSE TO PROPERTY LINES AS IS PRACTICABLE.

## SECTION

N.T.S

| REVISIONS | | |
|---|---|---|
| Date | Details | Drawn |
| 03/28/19 | UPDATED DIMENSIONS | TW |
| | | |
| | | |
| | | |
| | | |

Engineering and Development
Box 6210
Wetaskiwin, Alberta
T9A 2E9
(Physical Address - 4705 - 50 Ave)

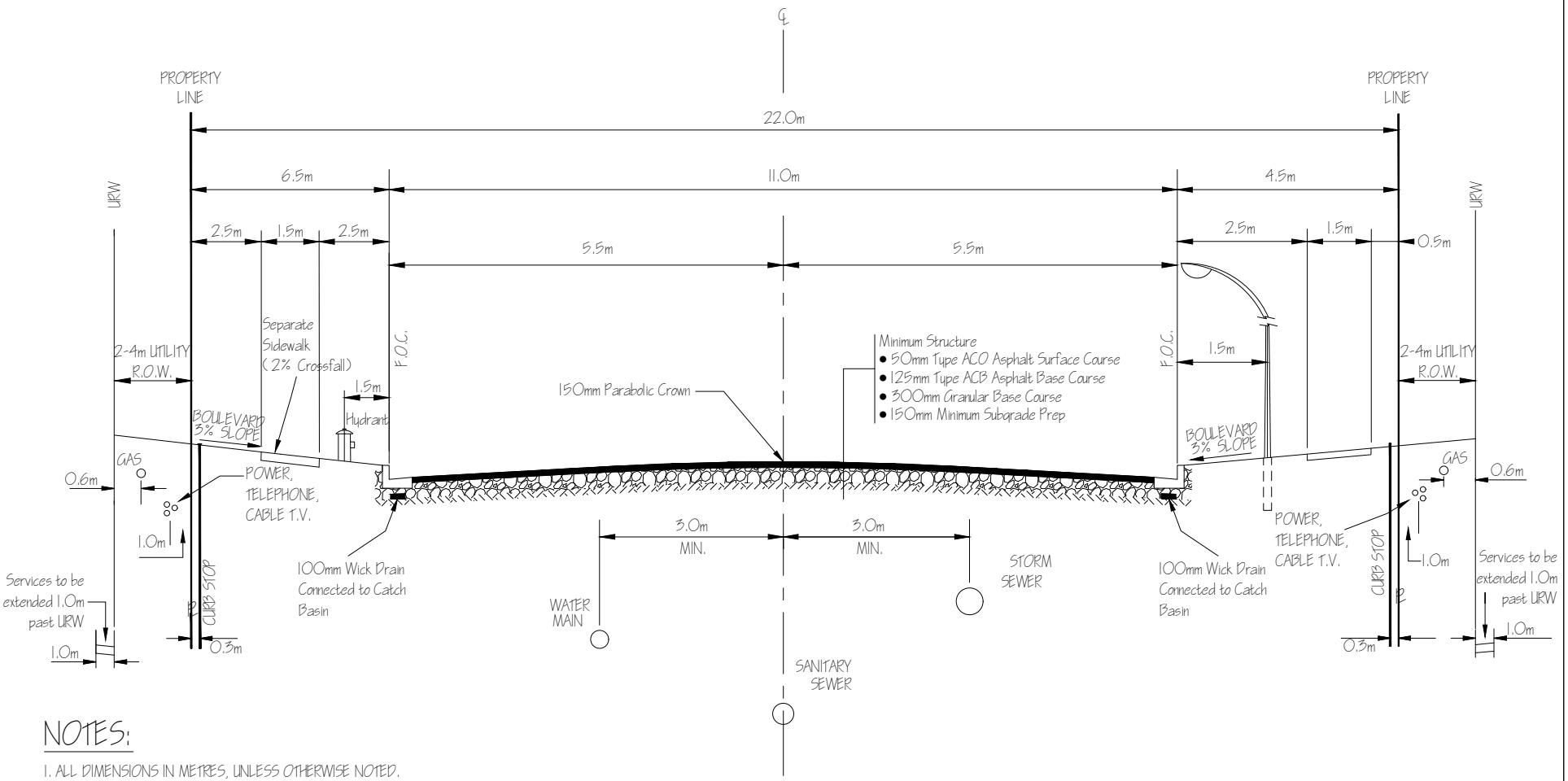
# 9.0m LOCAL RESIDENTIAL

Reviewed by:

Date: November 2018 | Scale: N.T.S. | Drawn: T. WOOD

STD. DWG NO.

D-110




## NOTES:

1. ALL DIMENSIONS IN METRES, UNLESS OTHERWISE NOTED.
2. ALL ROAD STRUCTURES ARE SUBJECT TO THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND THE FIELD CONDITIONS AT THE TIME OF CONSTRUCTION.
3. TRANSFORMERS AND SWITCHBOXES MUST BE LOCATED OUTSIDE OF THE SIGHT LINES AT INTERSECTIONS, AND AS CLOSE TO PROPERTY LINES AS IS PRACTICABLE.

## SECTION

N.T.S

| REVISIONS | | |
|---|---|---|
| Date | Details | Drawn |
| 03/28/19 | UPDATED DIMENSIONS | TW |
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| | | |

Engineering and Development
Box 6210
Wetaskiwin, Alberta
T9A 2E9
(Physical Address - 4705 - 50 Ave)

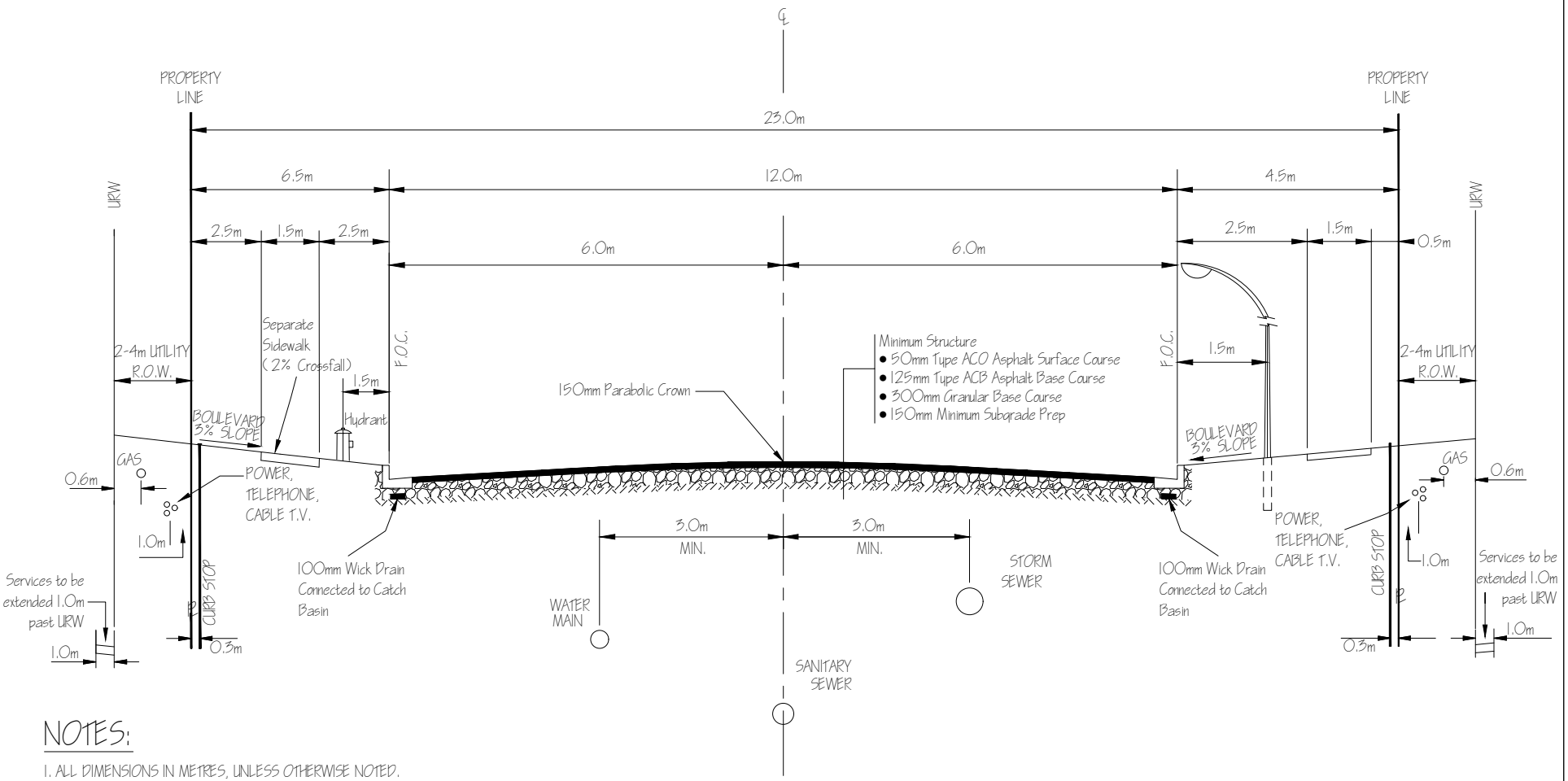
# 11.0m Minor Collector (Residential & Commercial)

Reviewed by:

Date: November 2018 | Scale: N.T.S. | Drawn: T. WOOD

STD. DWG NO.

D-111




## NOTES:

1. ALL DIMENSIONS IN METRES, UNLESS OTHERWISE NOTED.
2. ALL ROAD STRUCTURES ARE SUBJECT TO THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND THE FIELD CONDITIONS AT THE TIME OF CONSTRUCTION.
3. TRANSFORMERS AND SWITCHBOXES MUST BE LOCATED OUTSIDE OF THE SIGHT LINES AT INTERSECTIONS, AND AS CLOSE TO PROPERTY LINES AS IS PRACTICABLE.

## SECTION

N.T.S

| REVISIONS | | |
|---|---|---|
| Date | Details | Drawn |
| 03/28/19 | UPDATED DIMENSIONS | TW |
| | | |
| | | |
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| | | |

Engineering and Development
Box 6210
Wetaskiwin, Alberta
T9A 2E9
(Physical Address - 4705 - 50 Ave)

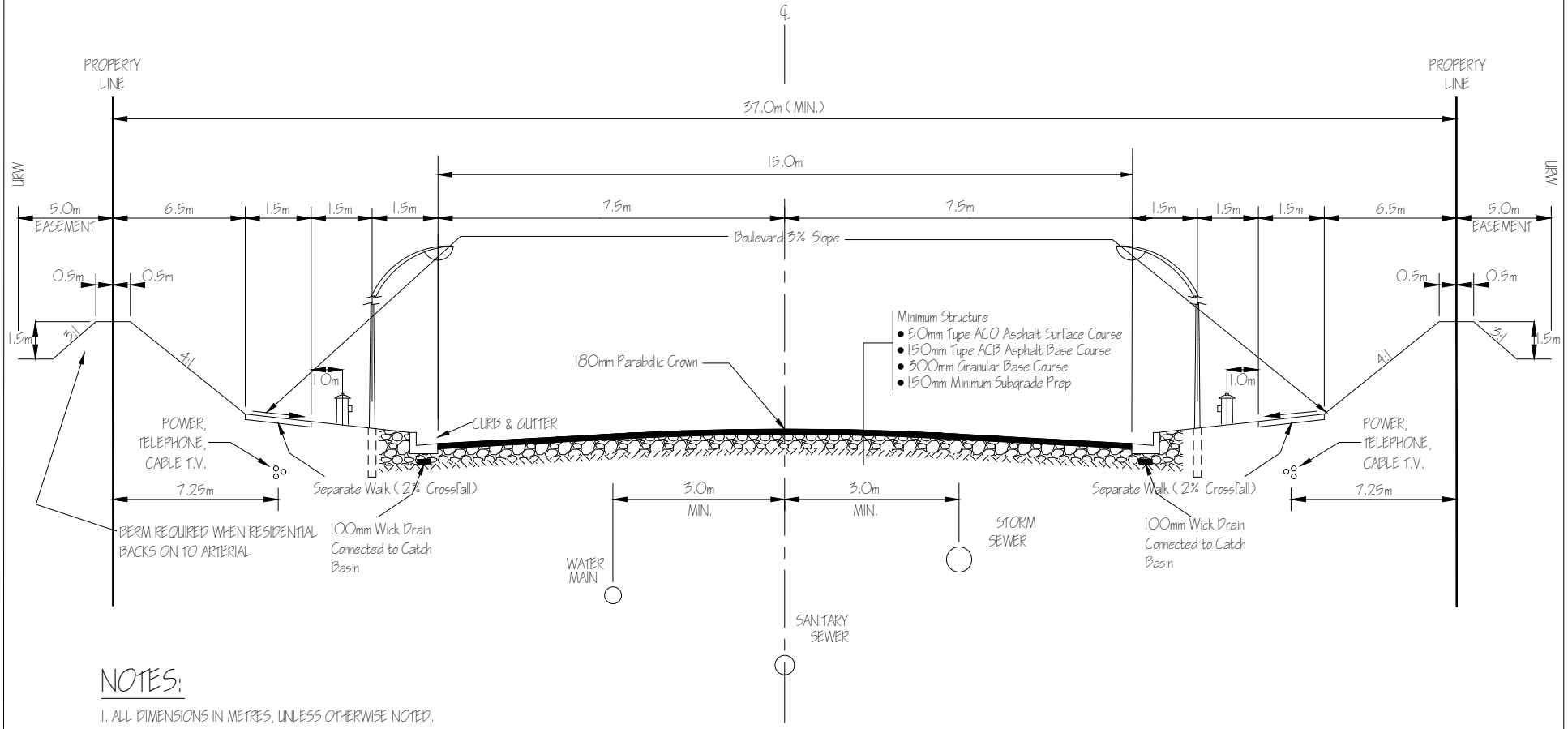
# 12.0m Major Collector (Residential & Commercial)

Reviewed by:

Date: November 2018 | Scale: N.T.S. | Drawn: T. WOOD

STD. DWG NO.

D-112




## NOTES:

1. ALL DIMENSIONS IN METRES, UNLESS OTHERWISE NOTED.
2. ALL ROAD STRUCTURES ARE SUBJECT TO THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND THE FIELD CONDITIONS AT THE TIME OF CONSTRUCTION.
3. TRANSFORMERS AND SWITCHBOXES MUST BE LOCATED OUTSIDE OF THE SIGHT LINES AT INTERSECTIONS, AND AS CLOSE TO PROPERTY LINES AS IS PRACTICABLE.

## SECTION

N.T.S

| REVISIONS | | |
|---|---|---|
| Date | Details | Drawn |
| 03/28/19 | UPDATED DIMENSIONS | TW |
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| | | |
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| | | |

Engineering and Development
Box 6210
Wetaskiwin, Alberta
T9A 2E9
(Physical Address - 4705 - 50 Ave)

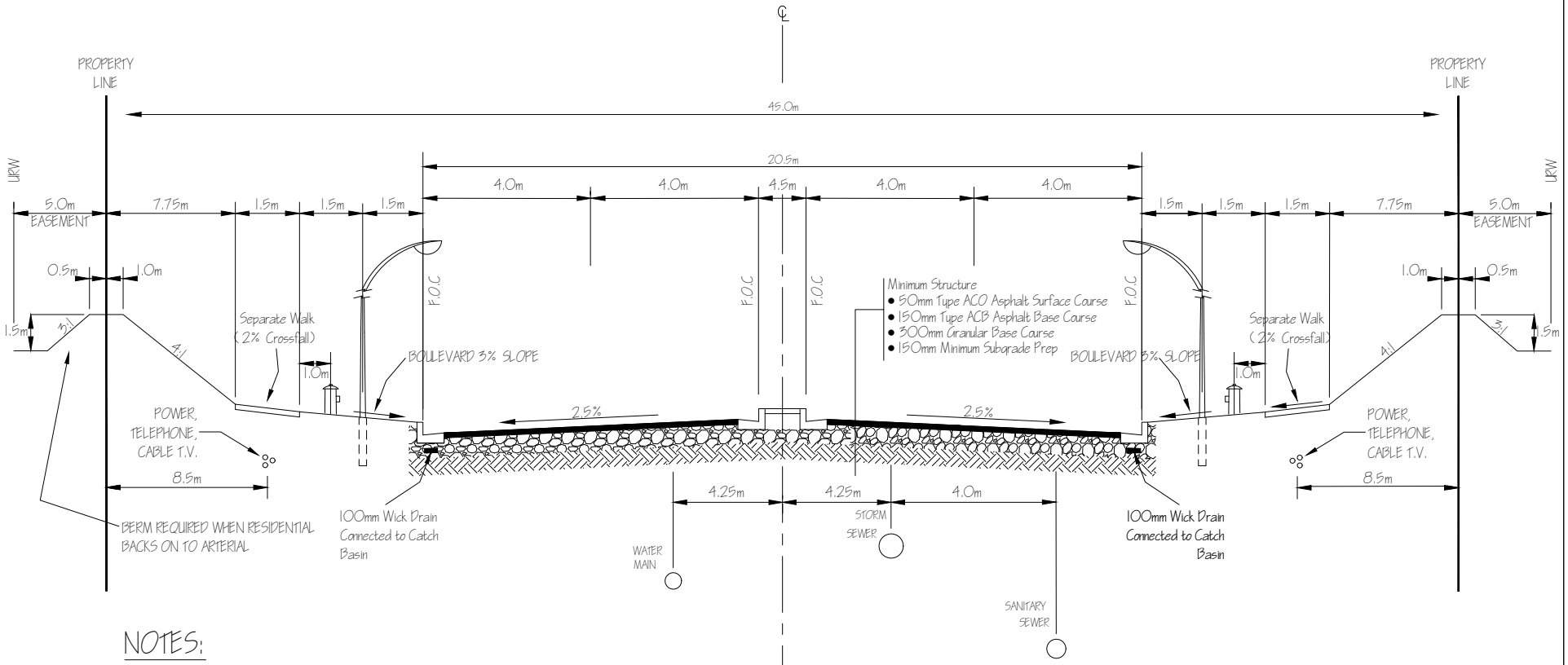
# 15.0m UNDIVIDED ARTERIAL

Reviewed by:

Date: November 2018 | Scale: N.T.S. | Drawn: T. WOOD

STD. DWG NO.

D-113




## NOTES:

1. ALL DIMENSIONS IN METRES, UNLESS OTHERWISE NOTED.
2. ALL ROAD STRUCTURES ARE SUBJECT TO THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND THE FIELD CONDITIONS AT THE TIME OF CONSTRUCTION.
3. TRANSFORMERS AND SWITCHBOXES MUST BE LOCATED OUTSIDE OF THE SIGHT LINES AT INTERSECTIONS, AND AS CLOSE TO PROPERTY LINES AS IS PRACTICABLE.

## SECTION

N.T.S

| REVISIONS | | |
|---|---|---|
| Date | Details | Drawn |
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Engineering and Development
Box 6210
Wetaskiwin, Alberta
T9A 2E9
(Physical Address - 4705 - 50 Ave)

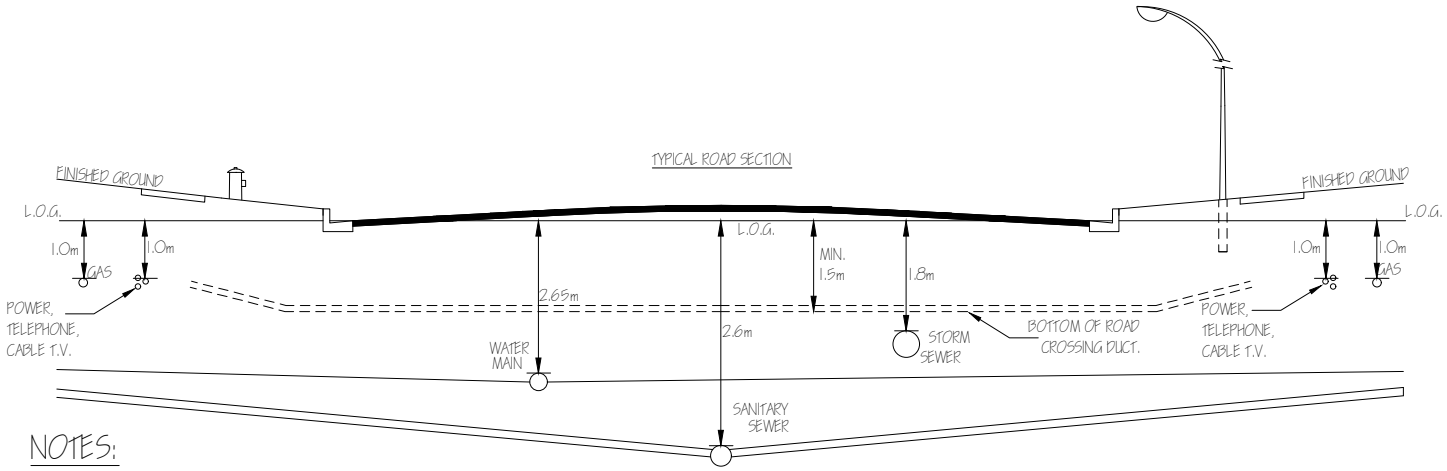
# 20.5m DIVIDED ARTERIAL

Reviewed by:

STD. DWG NO.

D-114

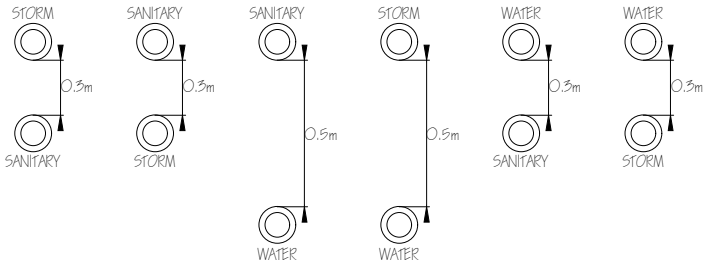
Date: November 2018 | Scale: N.T.S. | Drawn: T. WOOD



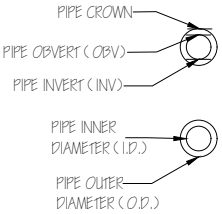

MINIMUM DEPTH OF COVER

## NOTES:

1. ALL DIMENSIONS IN METRES, UNLESS OTHERWISE NOTED.
2. THE MINIMUM DEPTH OF COVER FOR SANITARY, STORM AND WATER MAINS INDICATED ABOVE CONSIDER FROST PROTECTION REQUIREMENTS ONLY.
3. THE DESIGNED DEPTH OF COVER FOR SANITARY, STORM AND WATER MAINS SHALL BE ENGINEERED WITH CONSIDERATION TO:
   i. ADEQUATE DEPTH OF COVER FOR LOT SERVICES AT PROPERTY LINE.
   ii. OVERALL DEPTH OF COVER REQUIREMENTS FOR THE ENTIRE DEVELOPMENT AREA.
   iii. PIPE CROSSING CONFLICTS.
4. DIRECTIONAL DRILLING OF SHALLOW UTILITIES SHALL ADHERE TO THE DEPTH RANGE SPECIFIED FOR A ROAD CROSSING DUCT.
5. SHALLOW STORM PIPES SHALL HAVE 1.8m MIN DEPTH OF COVER AND 2.9m MAX DEPTH OF COVER.




MINIMUM VERTICAL SEPARATION BETWEEN MAINS




## NOTES:

1. ALL DIMENSIONS IN METRES, UNLESS OTHERWISE NOTED.
2. UNDER NORMAL CONDITIONS, WATER MAINS SHALL CROSS ABOVE SEWERS WITH A SUFFICIENT VERTICAL SEPARATION TO ALLOW FOR PROPER BEDDING AND STRUCTURAL SUPPORT OF THE WATER AND SEWER MAINS.
3. WHERE IT IS NECESSARY FOR THE WATERMAIN TO CROSS BELOW THE SEWER, THE WATERMAIN SHALL BE PROTECTED BY THE FOLLOWING:
   i. A VERTICAL SEPARATION OF AT LEAST 0.5m FROM THE OUTER DIAMETER (O.D.) OF THE WATERMAIN PIPE CROWN TO THE OUTER DIAMETER (O.D.) OF THE SEWER INVERT;
   ii. STRUCTURAL SUPPORT OF THE SEWER TO PREVENT EXCESSIVE JOINT DEFLECTION AND SETTLING; AND
   iii. CENTERING OF THE LENGTH OF WATERMAIN AT THE POINT OF CROSSING SO THE JOINTS ARE EQUIDISTANT FROM THE SEWER BEING CROSSED.

| REVISIONS | | |
|---|---|---|
| Date | Details | Drawn |
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Engineering and Development
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

# DEPTH OF COVER & VERTICAL SEPARATION DETAILS

Reviewed by:

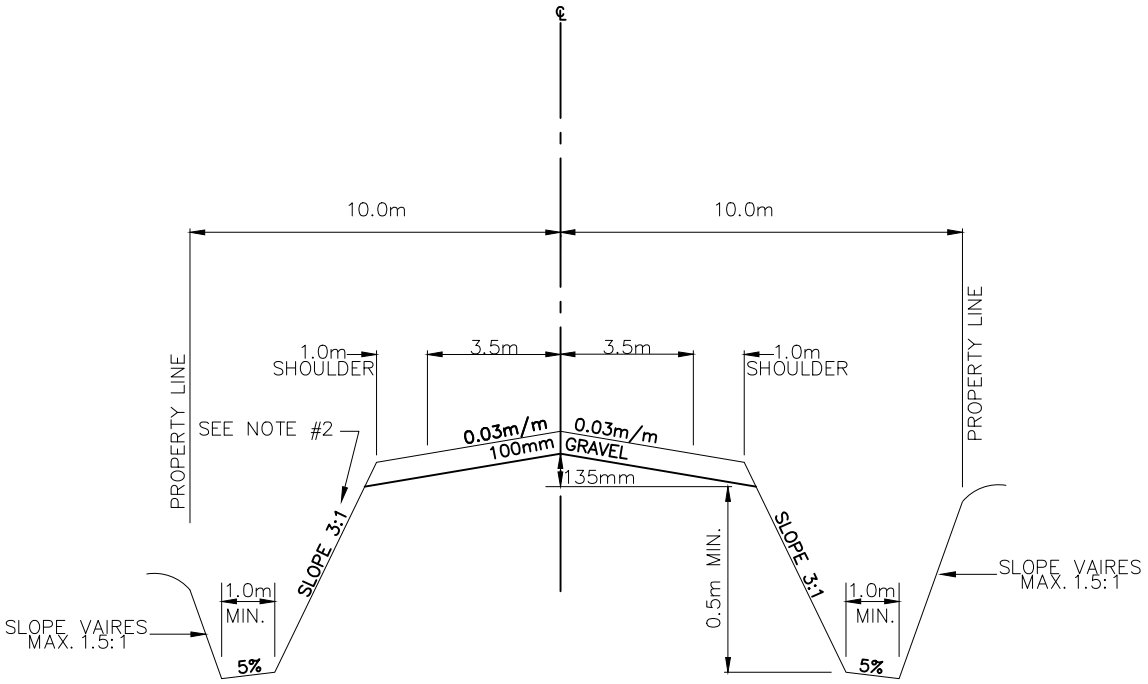
STD. DWG NO.

D-115

Date: November 2018 | Scale: N.T.S. | Drawn: T. WOOD

# City of Wetaskiwin

# RURAL RESIDENTIAL ROAD




GRAVEL RECOMMENDATION:

DESIGNATION 4 CLASS 20 (MODIFIED)
MINIMUM 100mm THICKNESS
TO BE CONFIRMED BY ENGINEER

NOTES:

1. ENGINEERING FABRIC TO BE PLACED WHEN A WET SUBGRADE IS ENCOUNTERED, AS DIRECTED BY THE ENGINEER.
2. SIDESLOPE DEPENDS ON DESIGN SPEED AND TRAFFIC VOLUME, REFER TO TAC GUIDELINES

| REVISIONS | | |
|---|---|---|
| Date | Details | Drawn |
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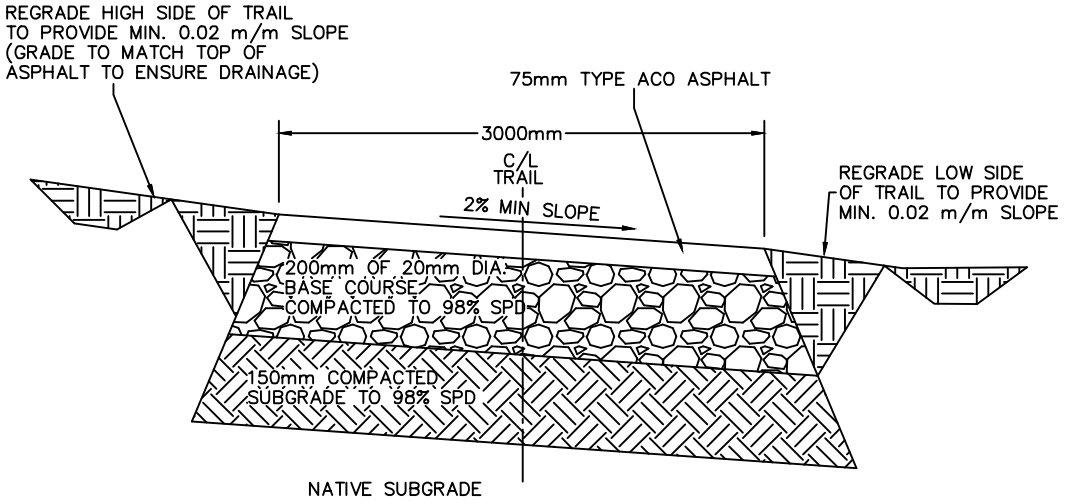
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

RURAL RESIDENTIAL ROAD
STANDARD CROSS-SECTION

Reviewed by:

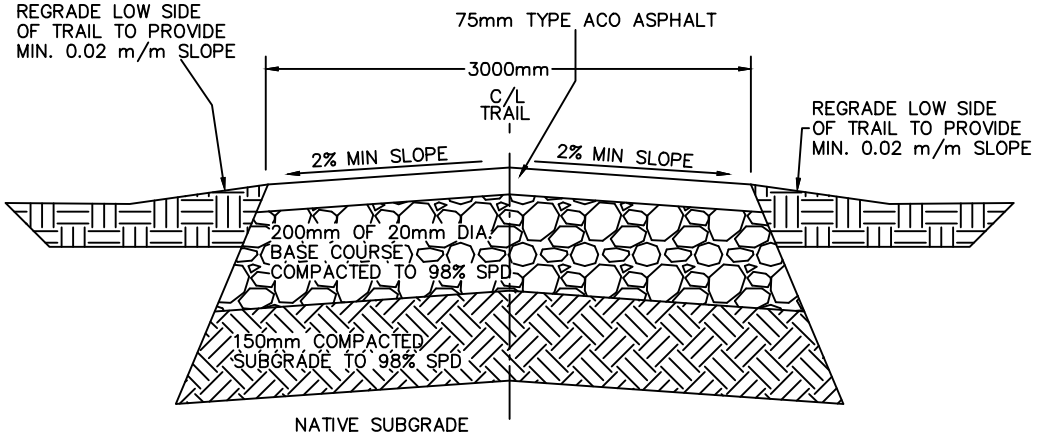
STD. DWG NO.
D-116

Date: March 2019 | Scale: N.T.S. | Drawn: T. WOOD




## TYPICAL TRAIL SECTION – CROSSFALL

NTS




## TYPICAL TRAIL SECTION – CROWN

NTS

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS
2. MAKE ALL JOINTS WITH EXISTING VEGETATION SMOOTH AND CONTINUOUS, WHERE NECESSARY TRIM BACK ROOTS AND CLEAR DEBRIS
3. FOR 3.0m SHARED–PATH WIDTH, A 100mm SOLID YELLOW CENTER LINE IS REQUIRED AT THE DISCRETION OF THE CITY.

ALTERNATE STRUCTURE

- 75mm ACO ASPHALT
- 300mm 20mm GRAVEL ON WOVEN GEOTEXTILE FABRIC EXTENDED UP EDGES OF GRAVEL ON NATIVE GROUND.
- ASSUMES NO SIGNIFICANT WORK TO THE NATIVE SUBGRADE, DUE TO UNFORSEEN CONDITIONS OR MINIMUM UTILITY COVER.

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-02-24
D-117
Approved Sealed

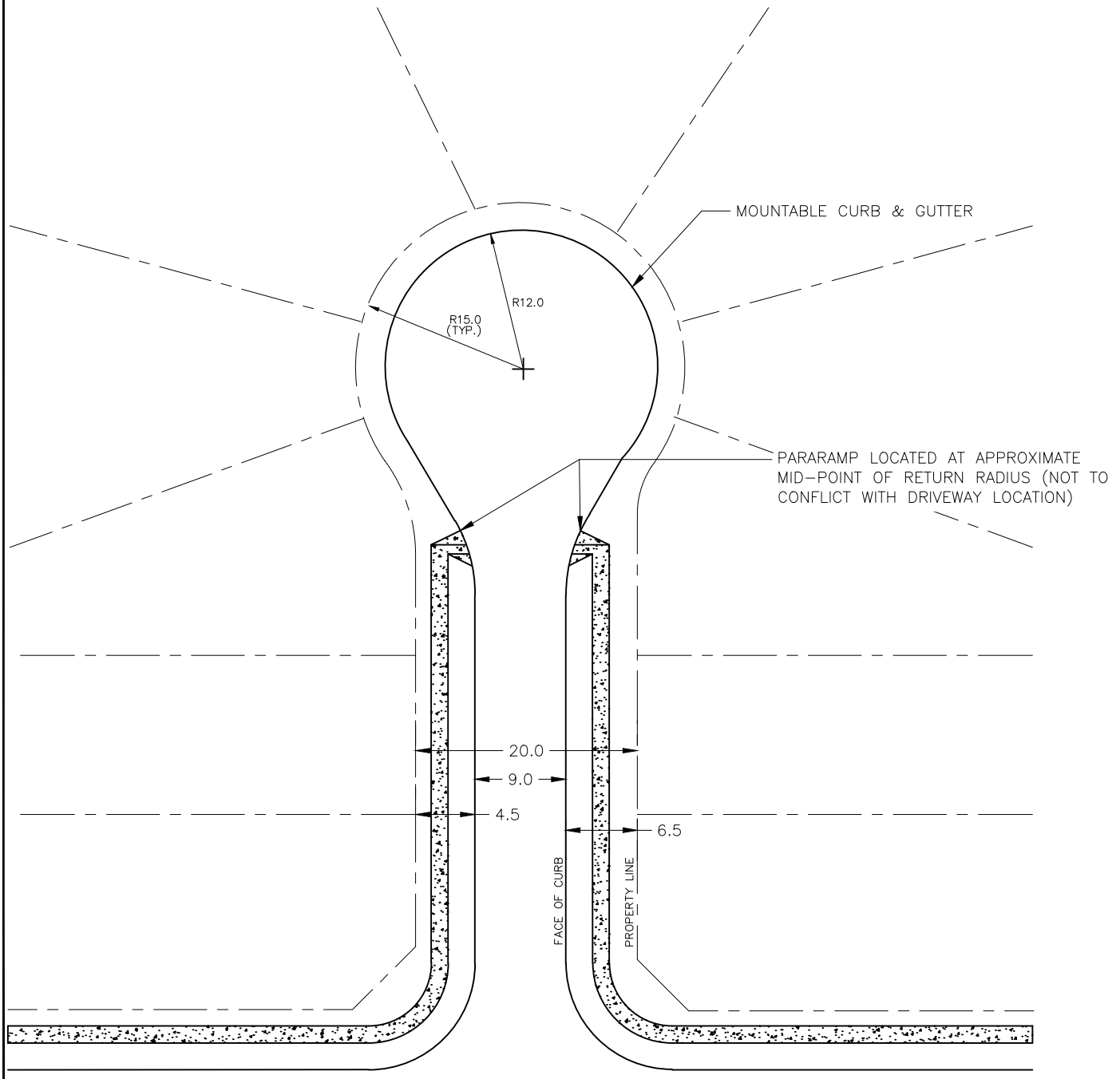
# ASPHALT TRAIL

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
D - 117

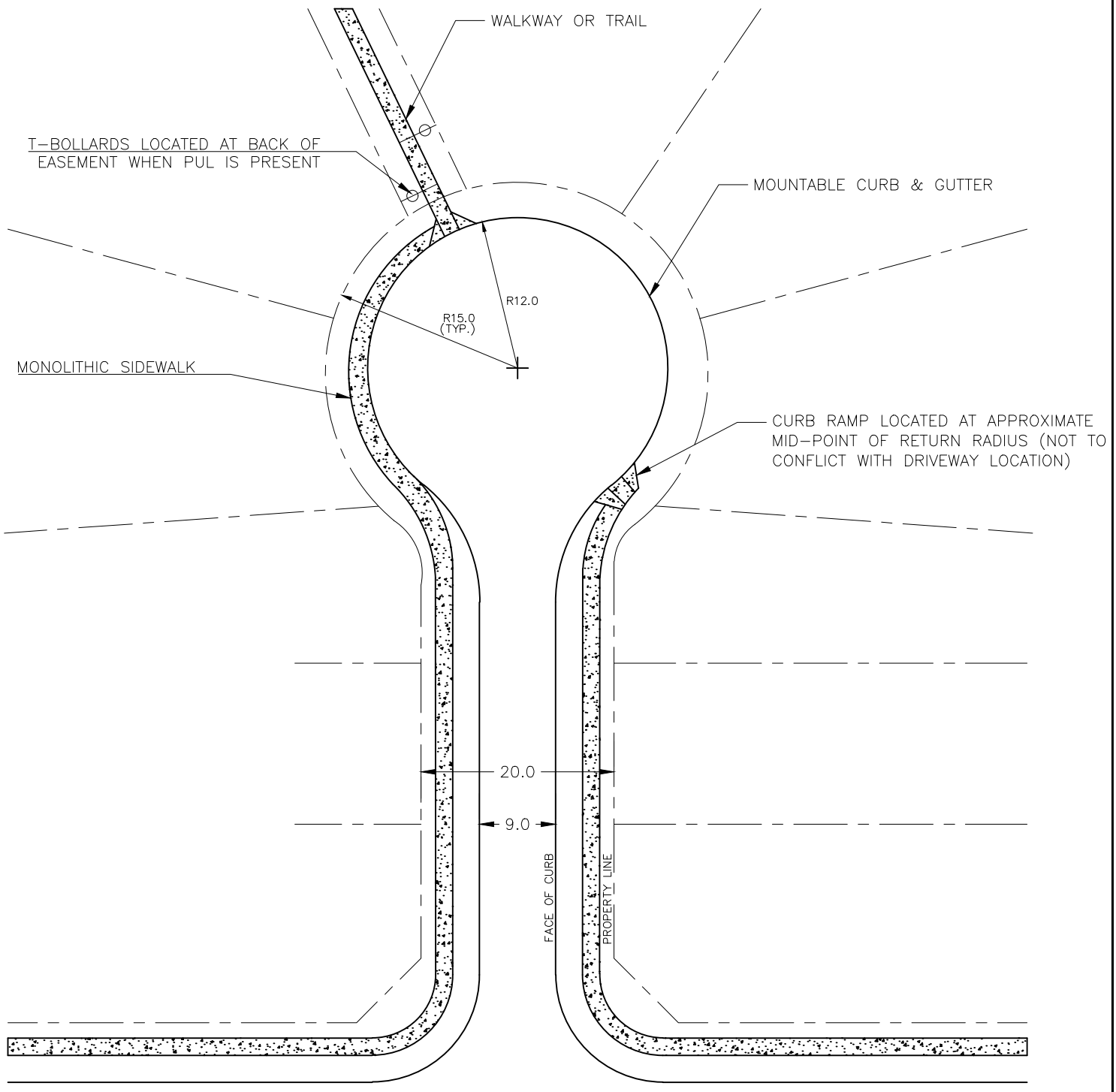
| Date: JANUARY 2021 | Scale: N.T.S. | Drawn: M. MATHIESON | Checked: | Revision: 01 |
|---|---|---|---|---|




NOTES:
1. ALL DIMENSIONS IN METERS.

| REVISIONS | | | | | |
|---|---|---|---|---|---|
| Date | Details | Drawn | | | |
| | | | Engineering and Development<br>4705 - 50 Avenue<br>Wetaskiwin, Alberta<br>T9A 0R8 | CUL-DE-SAC BULB - NO WALKWAY | |
| | | | Reviewed by: | | STD. DWG NO. |
| | | | Date: MARCH 2019 | Scale: N.T.S. | Drawn: T. WOOD |

D-118




NOTES:
1. SIDEWALK TO END AT PROPERTY LINE PRIOR TO CURB RETURN.
2. ALL DIMENSIONS IN METERS.

| REVISIONS | | |
|---|---|---|
| Date | Details | Drawn |
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city of Wetaskiwin

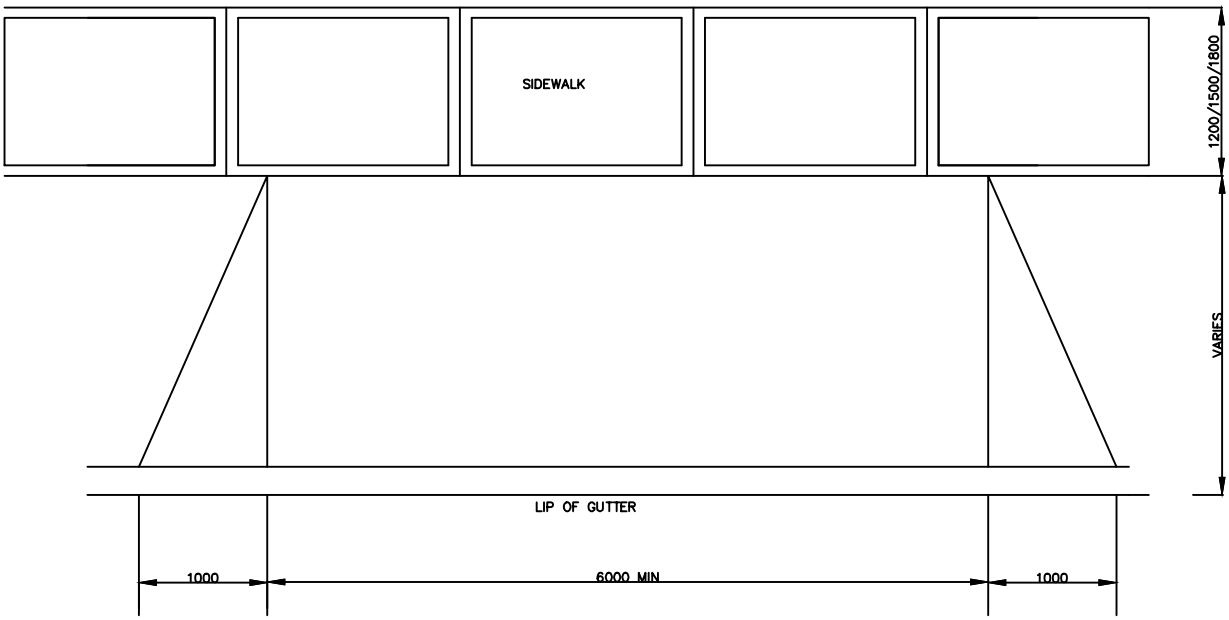
Engineering and Development
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

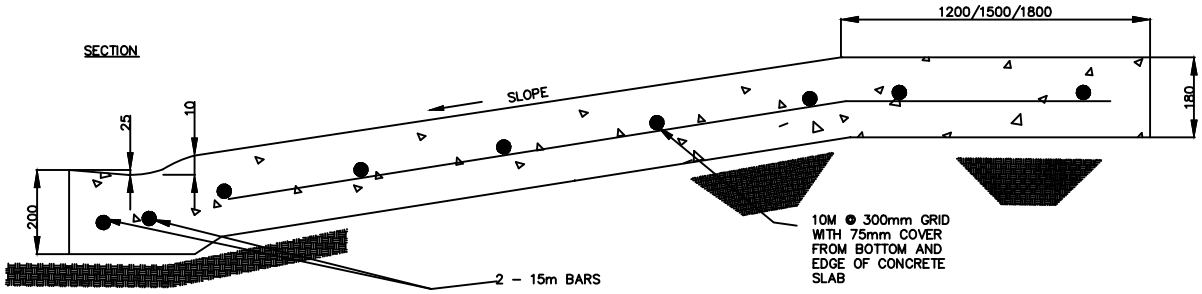
# CUL-DE-SAC BULB - MONOLITHIC SIDEWALK

Reviewed by:

STD. DWG NO.
D-119

Date: APRIL 2019 | Scale: N.T.S. | Drawn: T. WOOD




NOTES:
1. CONCRETE SHALL BE CLASS C, 30 MPa COMPRESSIVE STRENGTH AT 28 DAYS WITH >5.5% and <8.0% AIR ENTRAINMENT.
2. SUBGRADE TO BE COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).
3. GRANULAR BASE SHALL BE MINIMUM 150mm THICKNESS COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).
4. CROSSING DEPTH IS VARIABLE AND DEPENDANT ON BOULEVARD WIDTH.

ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED

PROFESSIONAL ENGINEER ANDREW D. HEATH ALBERTA
2021-02-24
D-120
Approved Sealed

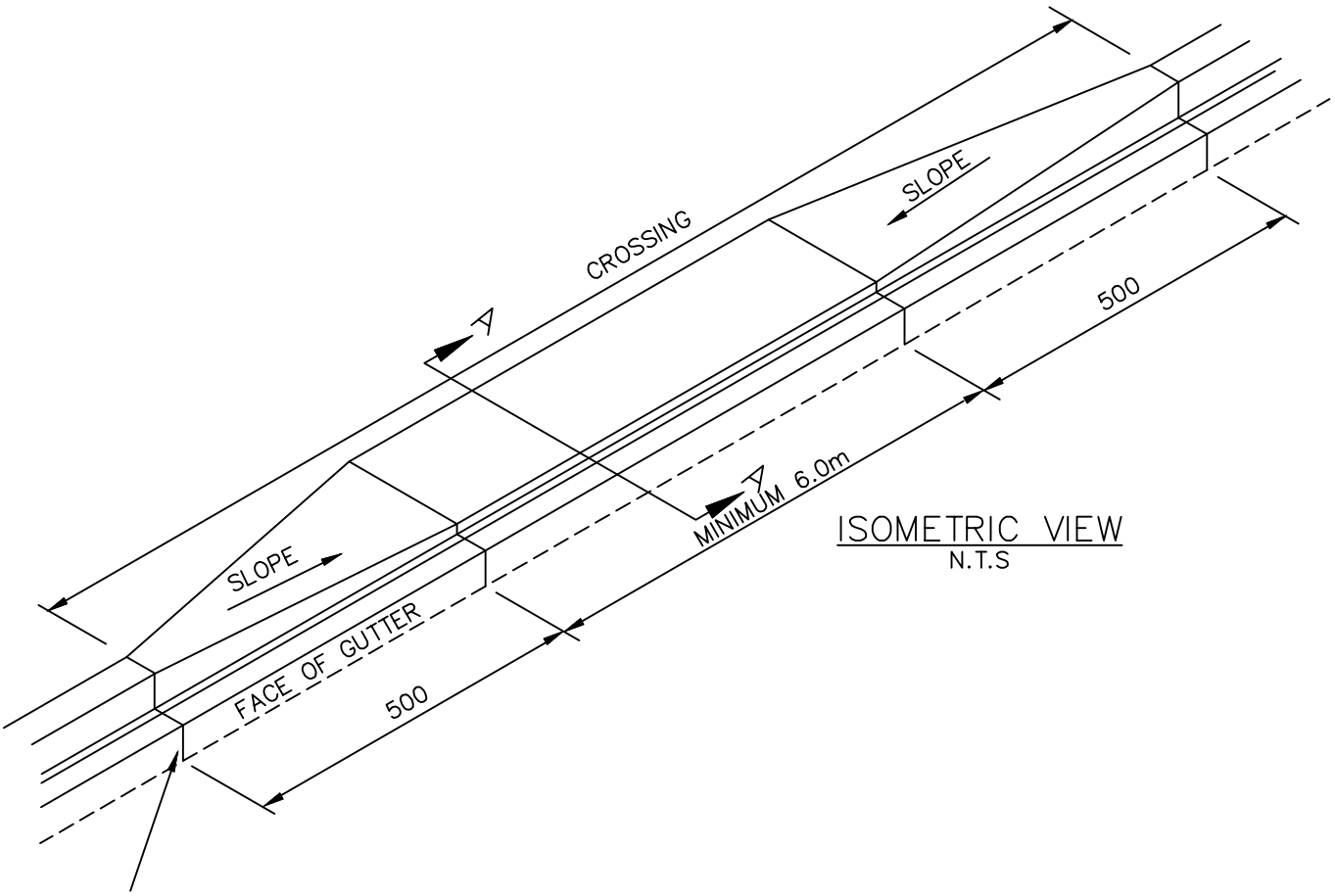
# LANE OR COMMERCIAL CROSSING

city of Wetaskiwin

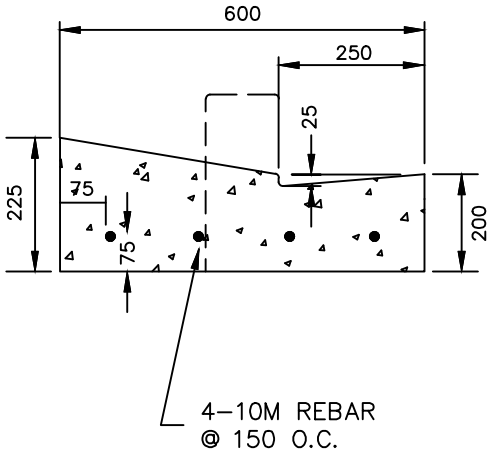
Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
D - 120

| Date: FEBRUARY 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI | Checked: | Revision: 01 |
|---|---|---|---|---|




ISOMETRIC VIEW
N.T.S




SECTION A – A

## NOTES:

1. CONCRETE SHALL BE CLASS C, 30 MPa COMPRESSIVE STRENGTH AT 28 DAYS WITH >5.5% and <8.0% AIR ENTRAINMENT.
2. ALL DIMENSIONS ARE IN MILLIMETERS.
2. SUBGRADE TO BE COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).
3. GRANULAR BASE SHALL BE MINIMUM 150mm THICKNESS COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).

PROFESSIONAL ENGINEER ANDREW D. HEATH ALBERTA
2021-02-24
D-121
Approved Sealed

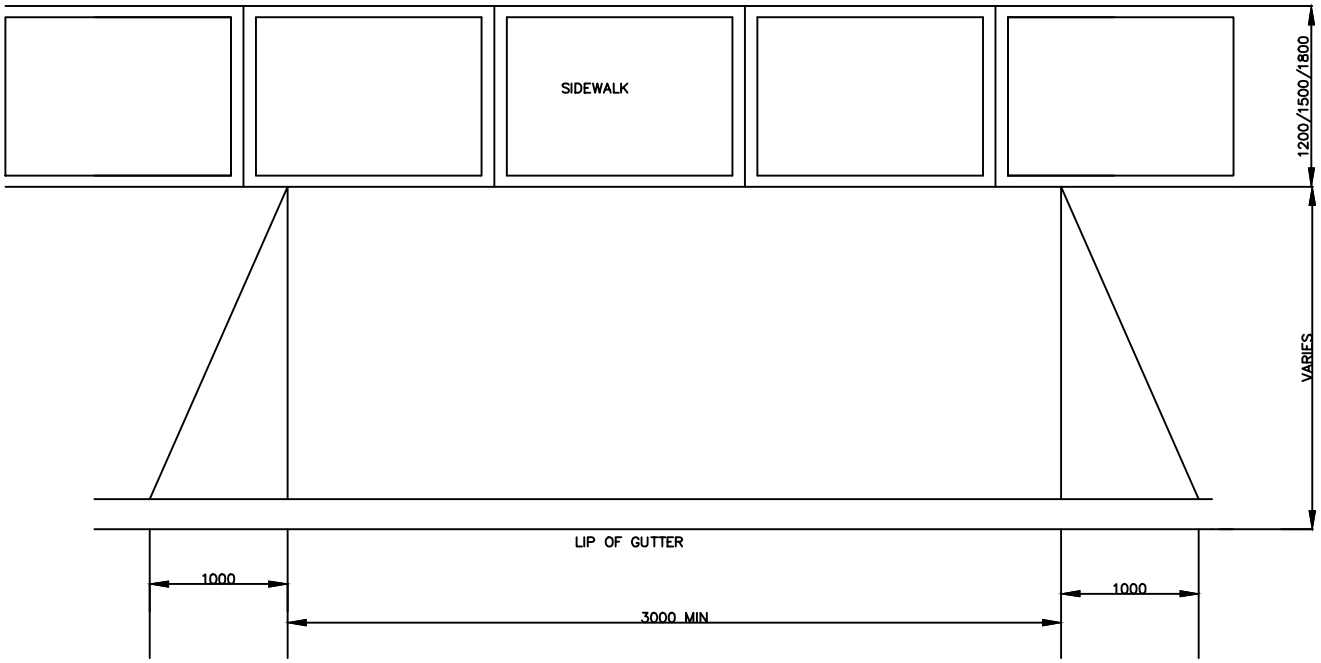
# INDUSTRIAL / COMMERCIAL CURB & GUTTER CROSSING

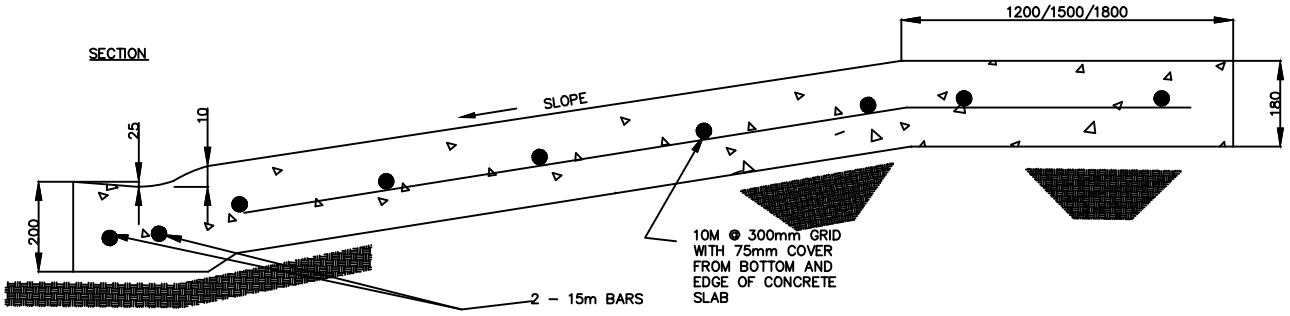
city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
D - 121

| Date: JANUARY 2021 | Scale: N.T.S. | Drawn: M. MATHIESON | Checked: | Revision: 01 |
|---|---|---|---|---|




NOTES:
1. CONCRETE SHALL BE CLASS C, 30 MPa COMPRESSIVE STRENGTH AT 28 DAYS WITH >5.5% and <8.0% AIR ENTRAINMENT.
2. SUBGRADE TO BE COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).
3. GRANULAR BASE SHALL BE MINIMUM 150mm THICKNESS COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).
4. CROSSING DEPTH IS VARIABLE AND DEPENDANT ON BOULEVARD WIDTH.

ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-02-24
D-122
Approved Sealed

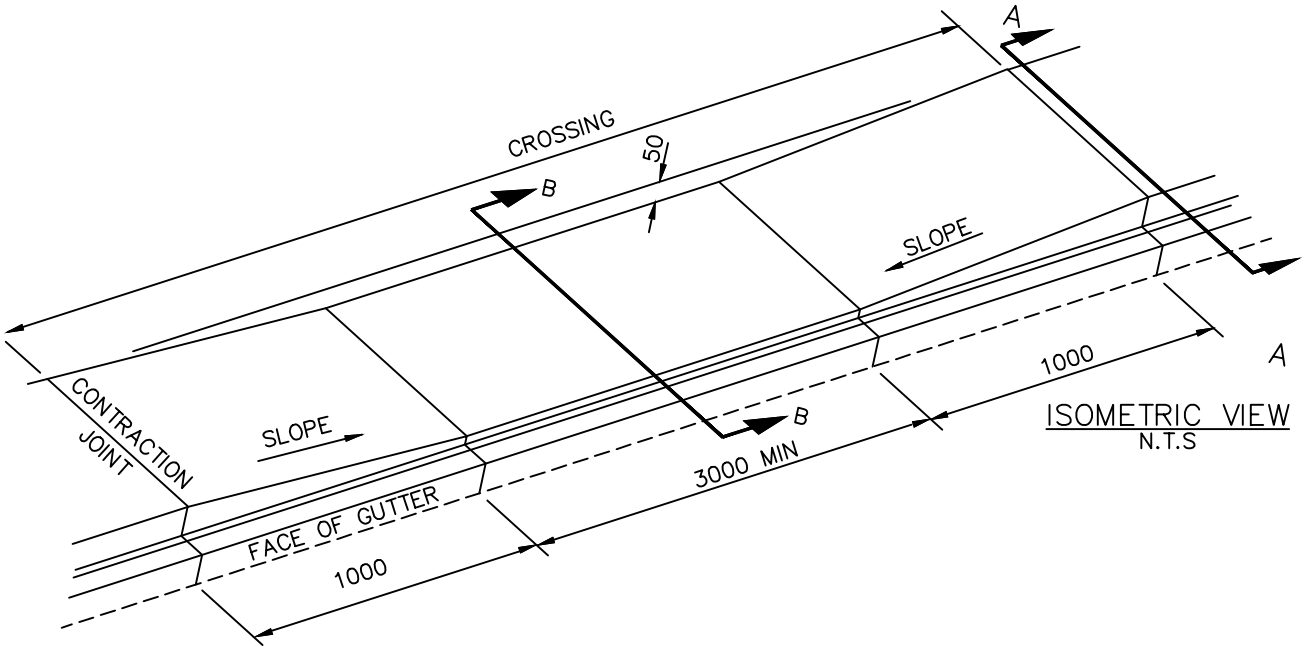
# RESIDENTIAL CROSSING

city of Wetaskiwin

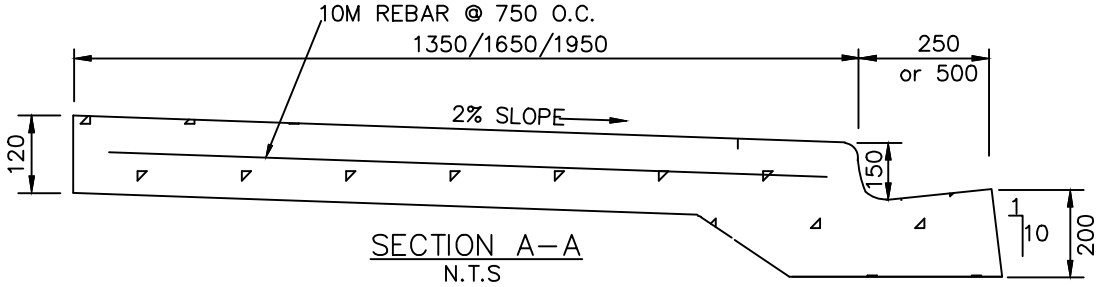
Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
D - 122

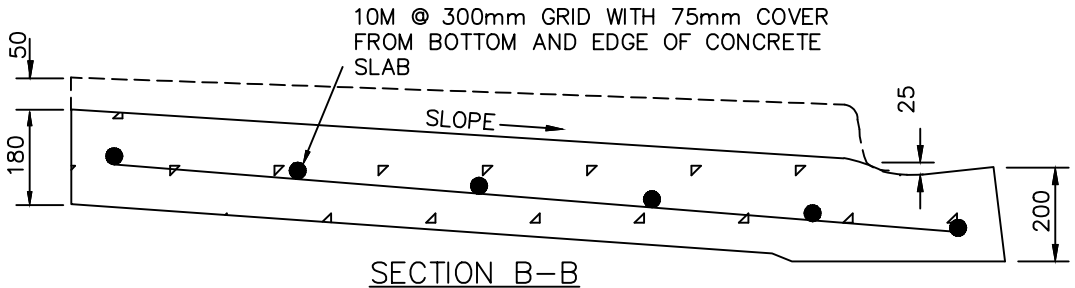
| Date: JANUARY 2021 | Scale: N.T.S. | Drawn: M. MATHIESON | Checked: | Revision: 01 |
|---|---|---|---|---|




ISOMETRIC VIEW
N.T.S




SECTION A–A
N.T.S




SECTION B–B
N.T.S

NOTES:

1. CONCRETE SHALL BE CLASS C 30 MPa COMPRESSIVE STRENGTH AT 28 DAYS WITH >5.5% AND <8.0% AIR ENTRAINMENT.
2. ALL DIMENSIONS ARE IN MILLIMETRES.
3. DROP BACK OF CROSSING 50mm FOR WIDTH OF CROSSING
4. MIN. DEPTH OF CROSSING TO BE 1.4m IF PLACED WITHOUT SIDEWALK
5. SUBGRADE TO BE COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).
6. GRANULAR BASE SHALL BE MINIMUM 150mm THICKNESS COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-02-24
D-123
Approved Sealed

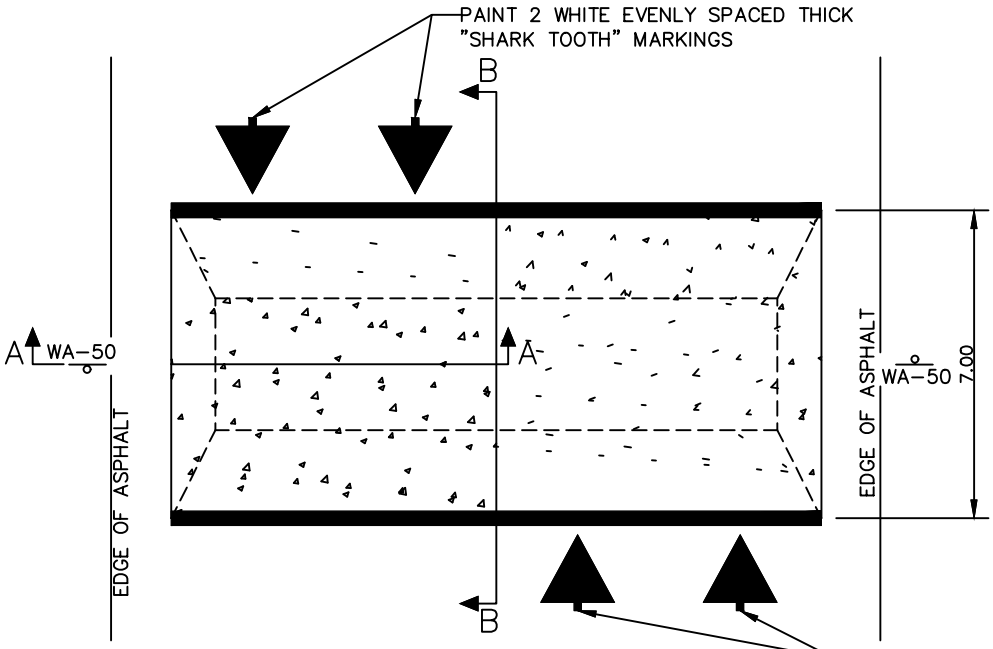
# TYPICAL MONOLITHIC LANE OR DRIVEWAY CROSSING

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

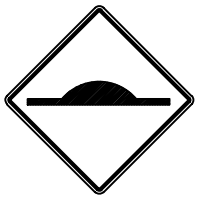
STD. DWG NO.
D - 123

| Date: JANUARY 2021 | Scale: N.T.S. | Drawn: M. MATHIESON | Checked: | Revision: 01 |
|---|---|---|---|---|




TWO WAY STREET/LANE

N.T.S.

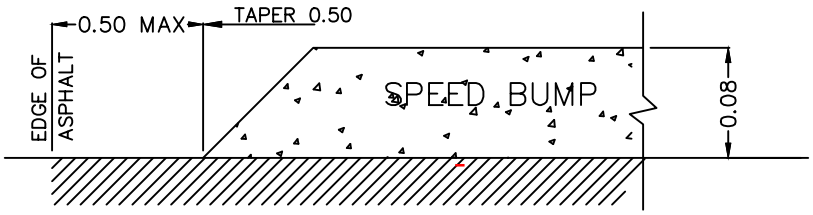


WA-50

450mm X 450mm
SPEED BUMP

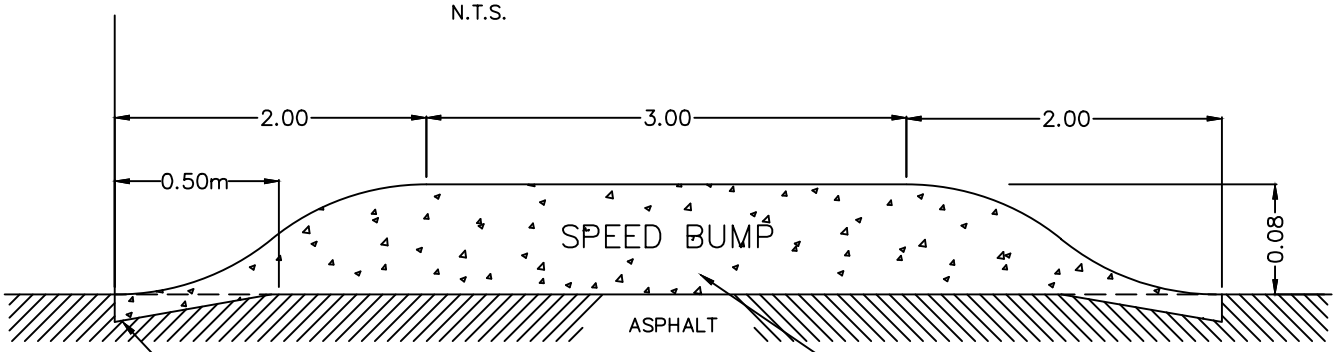
## NOTES:

1. PAINT 1.0m WIDE WHITE LINE ACROSS BOTH FACES OF BUMP.
2. PAINT 0.6m WIDE CHEVRON PATTERN ON ENTIRE TOP SURFACE.




SECTION A – A

N.T.S.




SECTION B – B

N.T.S.

## SINUSOIDAL SPEED BUMP DEVELOPMENT:

| DISTANCE (M) | 0.000 | 0.125 | 0.250 | 0.375 | 0.500 | 0.625 | 0.750 | 0.875 | 1.000 | 1.125 | 1.250 | 1.375 | 1.500 | 1.625 | 1.750 | 1.875 | 2.000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINISHED HEIGHT (mm) | 0 | 1 | 3 | 7 | 12 | 18 | 26 | 32 | 40 | 48 | 55 | 62 | 68 | 73 | 77 | 79 | 80 |

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-02-24
D-124
Approved Sealed

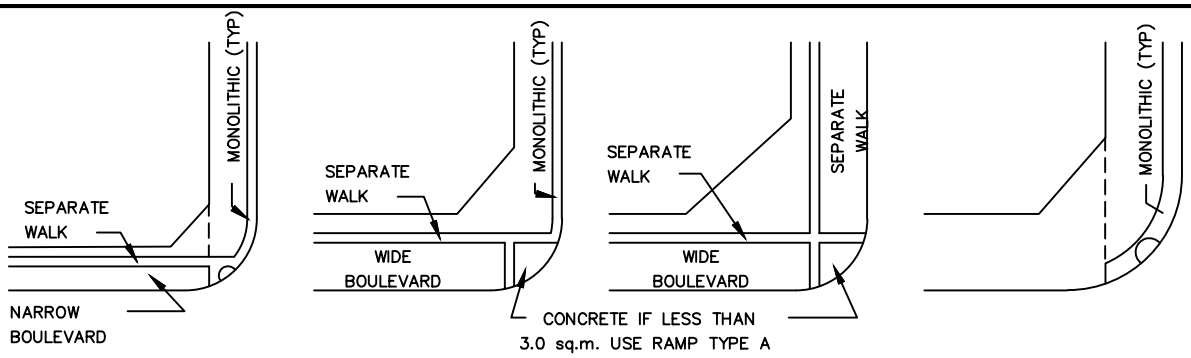
# ASPHALT SPEED BUMP

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

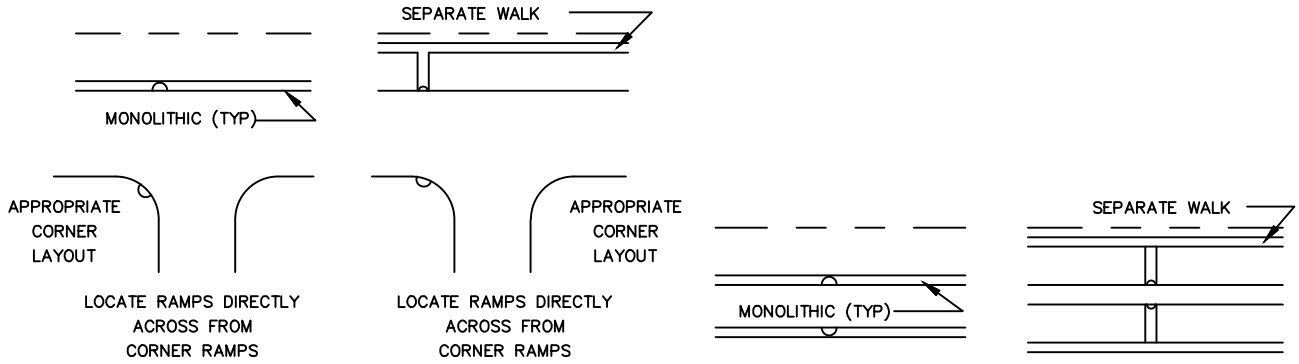
STD. DWG NO.
D - 124

Date: FEBURUARY 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI | Checked: | Revision: 01



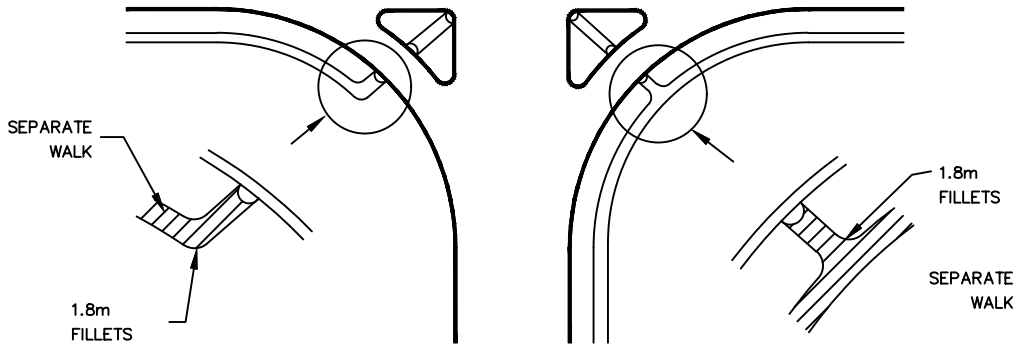

RAMP TYPE A | RAMP TYPE B | RAMP TYPE B | RAMP TYPE A

## CORNER LAYOUT




RAMP TYPE C | RAMP TYPE D | RAMP TYPE C | RAMP TYPE D

## TANGENT LAYOUT




RAMP TYPE D

## INTERSECTION LAYOUT

N.T.S.

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-02-24
D-125
Approved Sealed

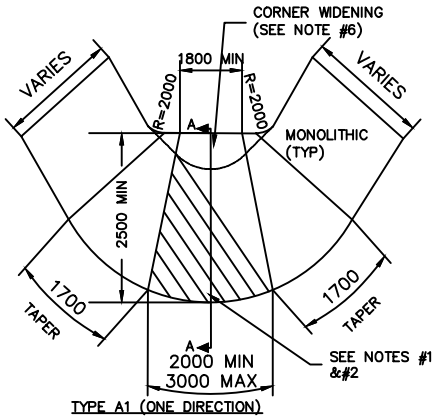
# RAMP LOCATIONS

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

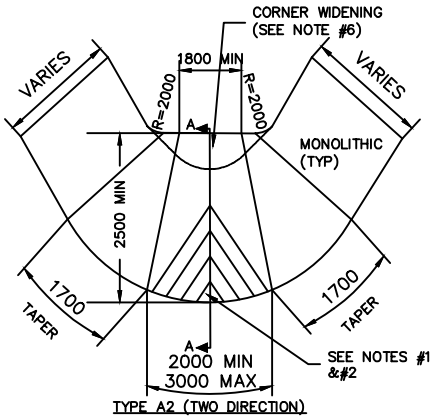
STD. DWG NO.
D - 125

| Date: JANUARY 2021 | Scale: N.T.S. | Drawn: M. MATHIESON | Checked: | Revision: 01 |
|---|---|---|---|---|



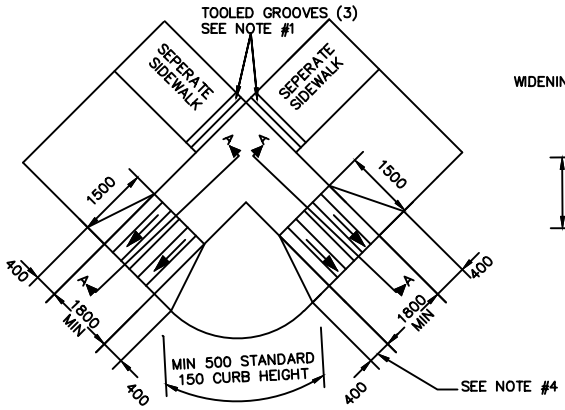

TYPE A1 (ONE DIRECTION)

N.T.S.



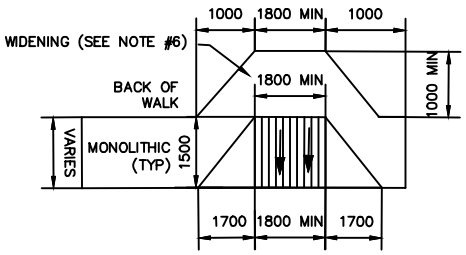

TYPE A2 (TWO DIRECTION)

N.T.S.



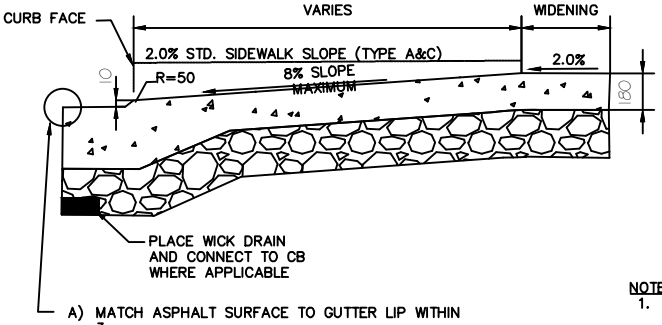

TYPE B

N.T.S.




TYPE C

N.T.S.

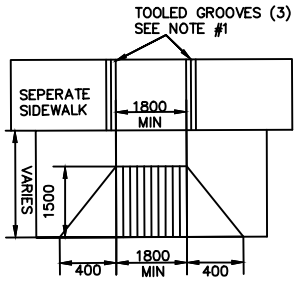



A) MATCH ASPHALT SURFACE TO GUTTER LIP WITHIN 3mm.

B) IF ASPHALT TOPLIFT IS DEFERRED, PLACE ASPHALT RAMP FOR THE WIDTH OF CURB RAMP, AND EXTENDING MINIMUM 1.0m INTO ROAD.

TYPICAL CROSS SECTION A–A

N.T.S.




TYPE D

N.T.S.

ALL DIMENSIONS IN MILLIMETERS
UNLESS OTHERWISE SPECIFIED

NOTES:

1. CONCRETE SHALL BE CLASS C, 30MPa COMPRESSIVE STRENGTH AT 28 DAYS WITH >5.5% AND <8.0% AIR ENTRAINMENT.
2. TOOLED GROOVES 5mm WIDE x 10mm DEEP, BROOM FINISH. GROOVE SPACING 150mm O.C. ADJACENT TO CURB.
3. GROOVES TO BE IN DIRECTION OF TRAVEL.
4. WHEN REQUIRED, TRANSITION FROM STRAIGHT FACE OF CURB TO ROLLED FACE OF CURB AT CURB RAMP.
5. CURBS AND RAMPS TO BE POURED MONOLITHICALLY.
6. WIDTH OF RAMP MUST EQUAL WIDTH OF WALK (MIN. 1.5m, MAX 3.0m) EXCEPT "TYPE A."
7. PROVIDE 1.0m WIDENING (AT 2.0% X-FALL) FROM BACK OF CURB RAMP (TYPES A&C) WHERE ROAD RIGHT OF WAY ALLOWS.
8. SUBGRADE TO BE COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).
9. GRANULAR BASE SHALL BE MINIMUM 150mm THICKNESS COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-02-24
D-126
Approved Sealed

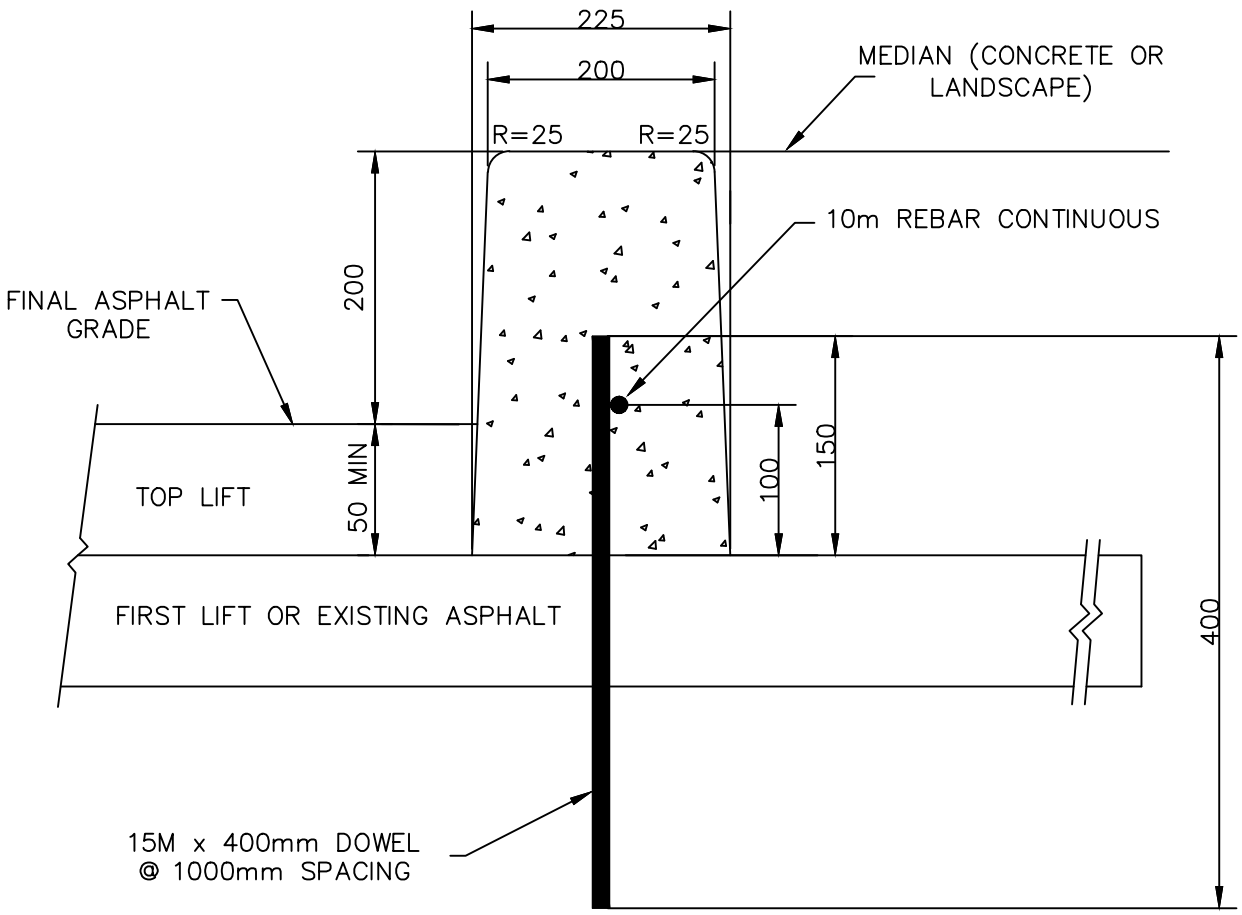
# TYPES OF RAMPS

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
D - 126

| Date: FEBRUARY 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI | Checked: | Revision: 01 |
|---|---|---|---|---|




## NOTES:

1. CONCRETE SHALL BE CLASS C, 30MPa COMPRESSIVE STRENGTH AT 28 DAYS WITH >5.5% AND <8.0% AIR ENTRAINMENT.
2. ALL DIMENSIONS ARE IN MILLIMETRES.
3. 200mm CURB HEIGHT ABOVE FINAL PAVEMENT ELEVATION

PROFESSIONAL ENGINEER ANDREW D. HEATH ALBERTA
2021-02-24
D-139
Approved Sealed

# PINNED CONCRETE CURB

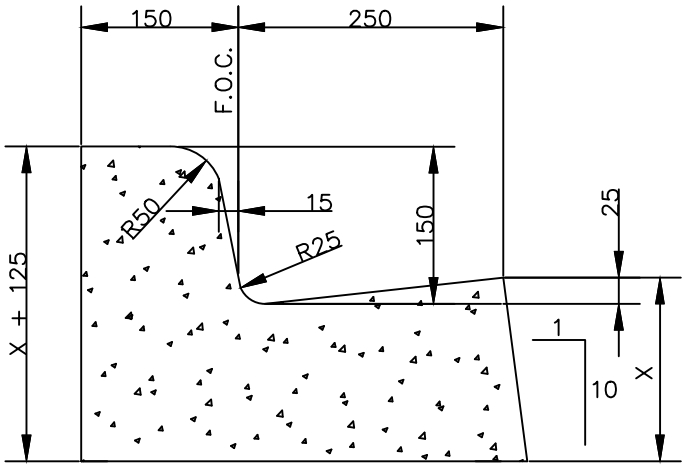
city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

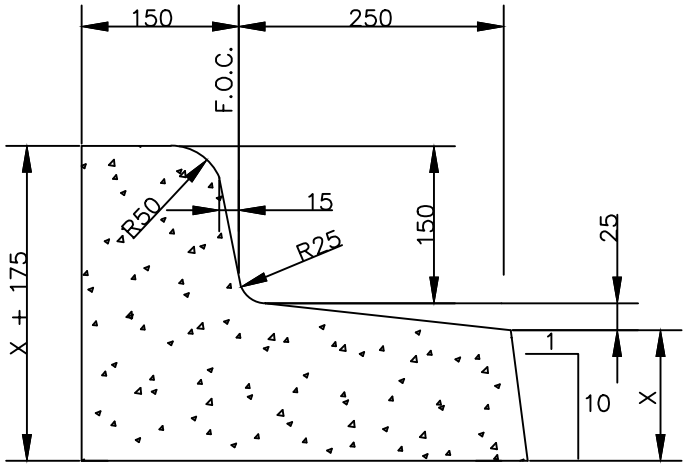
STD. DWG NO.
D - 139

| Date: FEBRUARY 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI | Checked: | Revision: 01 |
|---|---|---|---|---|

# STANDARD GUTTER




# REVERSE GUTTER




NOTES

1. CONCRETE SHALL BE CLASS C, 30MPa COMPRESSIVE STRENGTH AT 28 DAYS WITH >5.5% AND <8.0% AIR ENTRAINMENT.
2. SUBGRADE TO BE COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).
3. GRANULAR BASE SHALL BE MINIMUM 150mm THICKNESS COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).

ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-02-24
D-140
Approved Sealed

150mm STD. CURB AND 250mm GUTTER

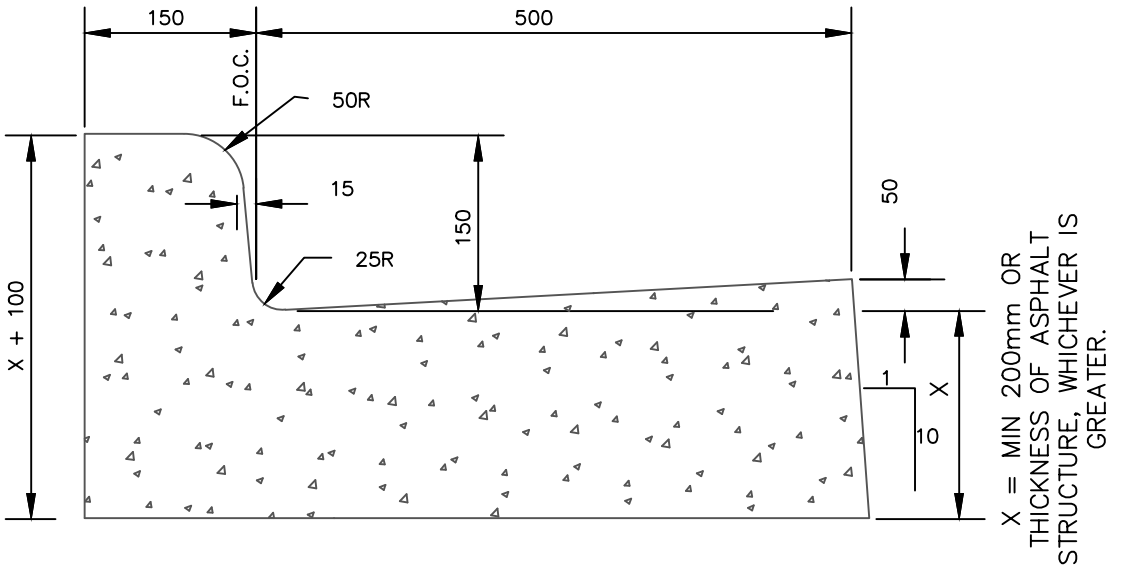
city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

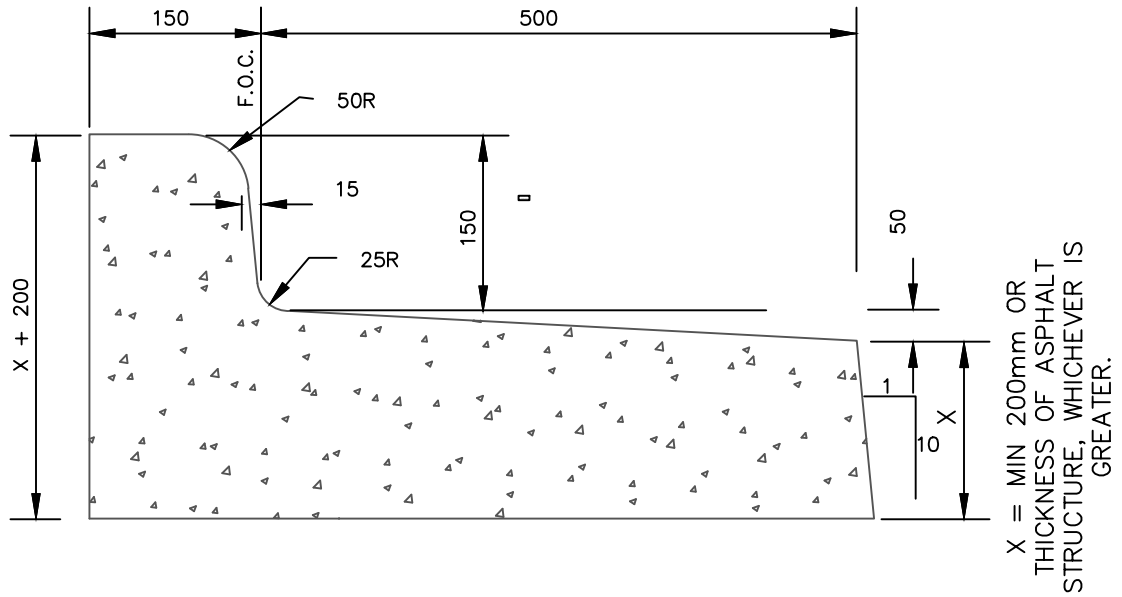
STD. DWG NO.
D - 140

| Date: FEBRUARY 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI | Checked: | Revision: 01 |
|---|---|---|---|---|

## STANDARD GUTTER




## REVERSE GUTTER




NOTES

1. CONCRETE SHALL BE CLASS C, 30MPa COMPRESSIVE STRENGTH AT 28 DAYS WITH >5.5% AND <8.0% AIR ENTRAINMENT.
2. SUBGRADE TO BE COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).
3. GRANULAR BASE SHALL BE MINIMUM 150mm THICKNESS COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).

ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-02-24
D-141
Approved Sealed

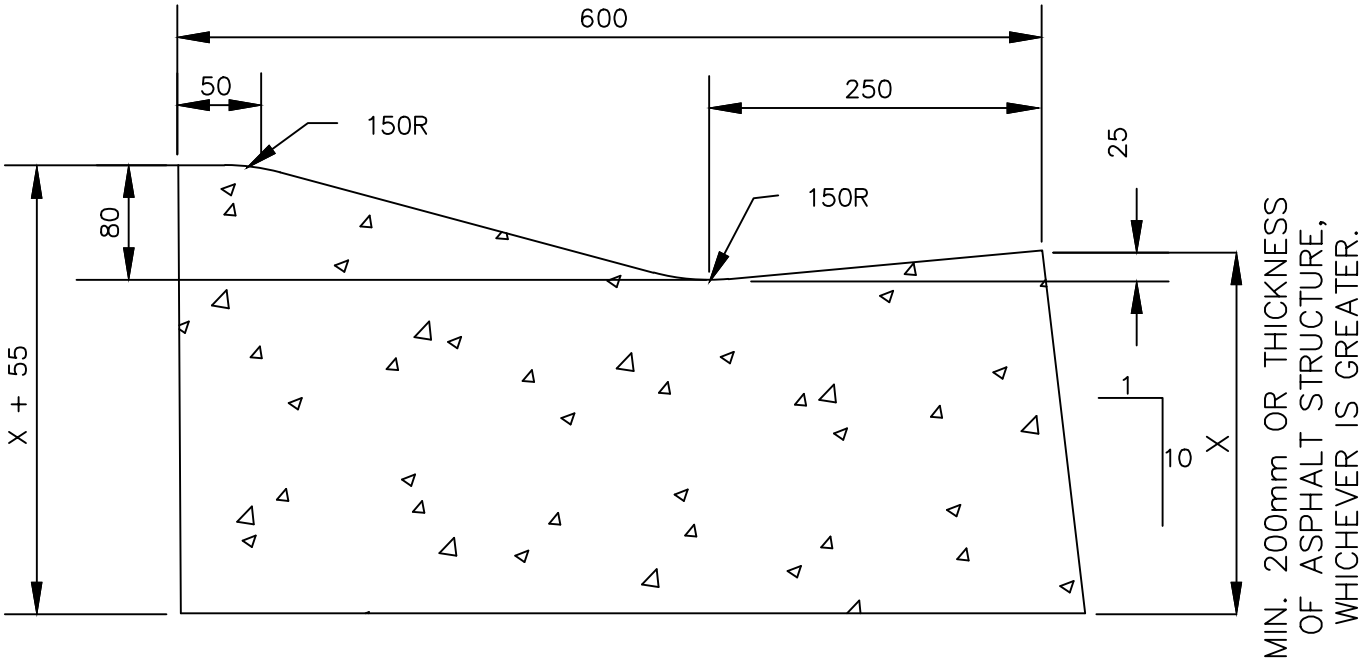
# 150MM STD. CURB AND 500MM GUTTER

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
D-141

| Date: FEBRUARY 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI | Checked: | Revision: 01 |
|---|---|---|---|---|




NOTES

1. CONCRETE SHALL BE CLASS C, 30MPa COMPRESSIVE STRENGTH AT 28 DAYS WITH >5.5% AND <8.0%AIR ENTRAINMENT.
2. SUBGRADE TO BE COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).
3. GRANULAR BASE SHALL BE MINIMUM 150mm THICKNESS COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).

ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED

PROFESSIONAL ENGINEER ANDREW D. HEATH ALBERTA
2021-02-24
D-142
Approved Sealed

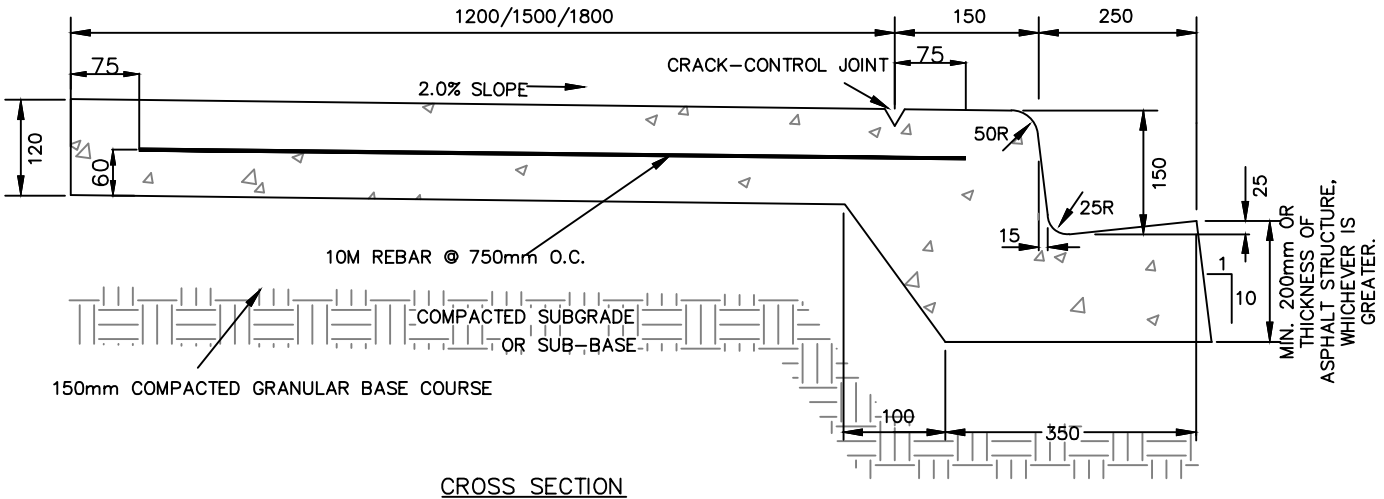
# 400mm ROLLED CURB AND 250mm GUTTER

city of Wetaskiwin

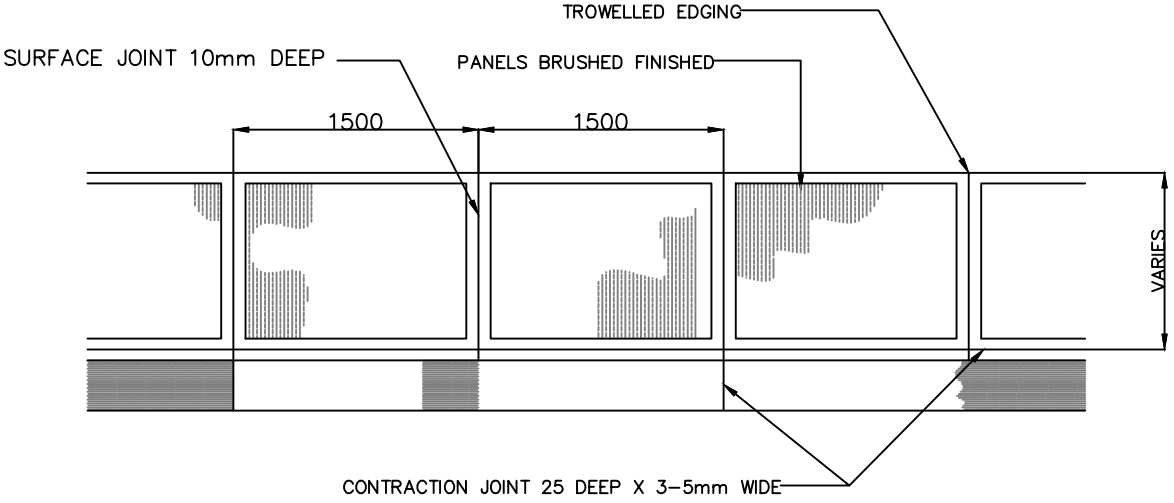
Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
D - 142

| Date: JANUARY 2021 | Scale: N.T.S. | Drawn: M. MATHIESON | Checked: | Revision: 01 |
|---|---|---|---|---|




CROSS SECTION




PLAN VIEW

NOTES:
1. CONCRETE SHALL BE CLASS C, 30MPa COMPRESSIVE STRENGTH AT 28 DAYS WITH >5.5% AND <8.0% AIR ENTRAINMENT.
2. CONTRACTION JOINTS SHALL BE 50mm DEEP IN CURB AND GUTTER AND 25mm DEEP IN SIDEWALKS.
3. MAXIMUM SPACING BETWEEN CRACK-CONTROL JOINTS SHALL BE 3.0m.
4. SUBGRADE TO BE COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).
5. GRANULAR BASE SHALL BE MINIMUM 150mm THICKNESS COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).

ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED

PROFESSIONAL ENGINEER ANDREW D. HEATH ALBERTA
2021-02-24
D-143
Approved Sealed

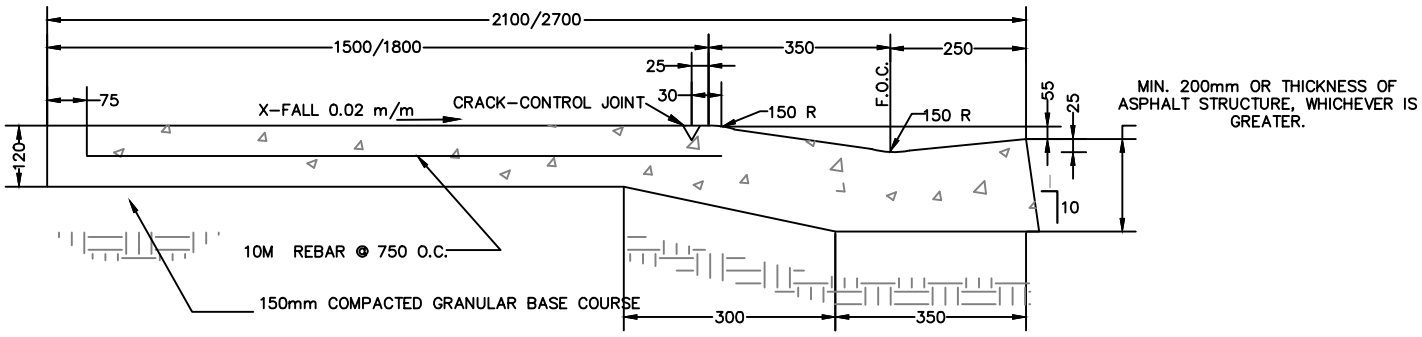
# 1200mm/1500mm/1800mm MONOLITHIC SIDEWALK

city of Wetaskiwin

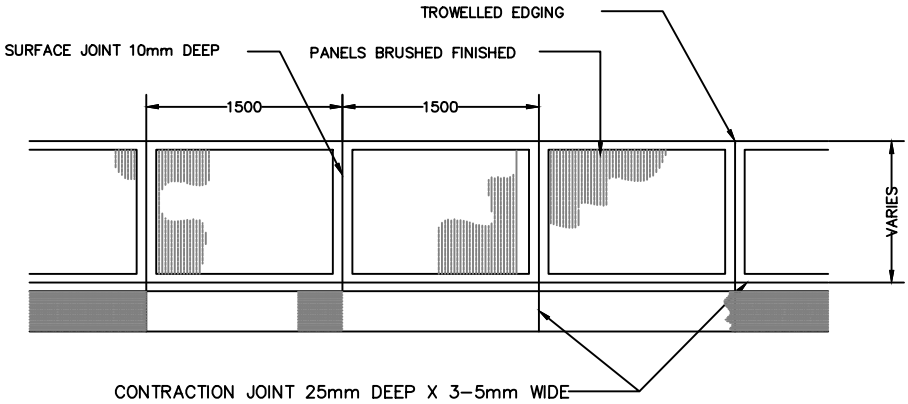
Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
D - 143

| Date: JANUARY 2021 | Scale: N.T.S. | Drawn: M. MATHIESON | Checked: | Revision: 01 |
|---|---|---|---|---|




CROSS SECTION




NOTES:

1.) CONCRETE SHALL BE CLASS C, 30MPa COMPRESSIVE STRENGTH AT 28 DAYS WITH >5.5% AIR ENTRAINMENT AND <8.0% AIR ENTRAINMENT.
2.) CONTRACTION JOINTS SHALL BE 50MM DEEP IN CURB AND GUTTER AND 25MM DEEP IN SIDEWALKS.
3.) MAXIMUM SPACING BETWEEN CRACK-CONTROL JOINTS SHALL BE 3.0M.
4.) GRANULAR BASE SHALL BE MINIMUM 150MM THICKNESS COMPACTED TO 1000% STANDARD PROCTOR DENSITY (SPD).

PLAN VIEW

ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED

PROFESSIONAL ENGINEER ANDREW D. HEATH ALBERTA
2021-02-24
D-144
Approved Sealed

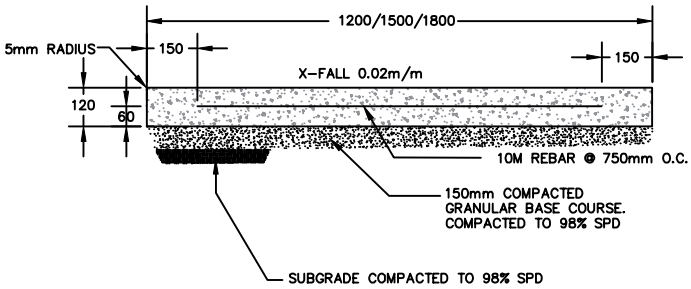
# 1200mm/1500mm/1800mm ROLLED MONOLITHIC SIDEWALK

city of Wetaskiwin

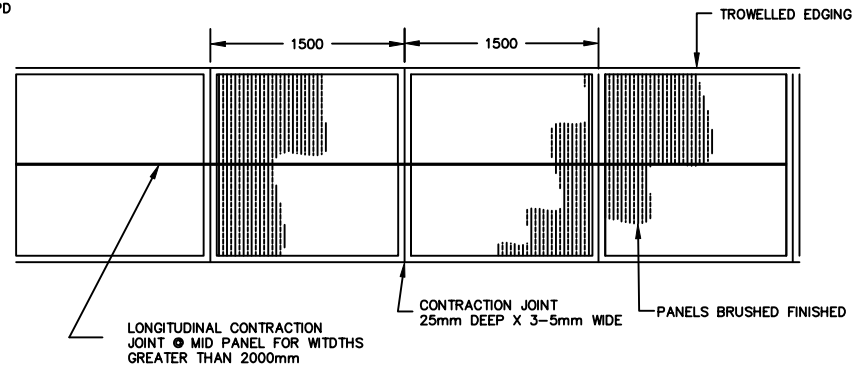
Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

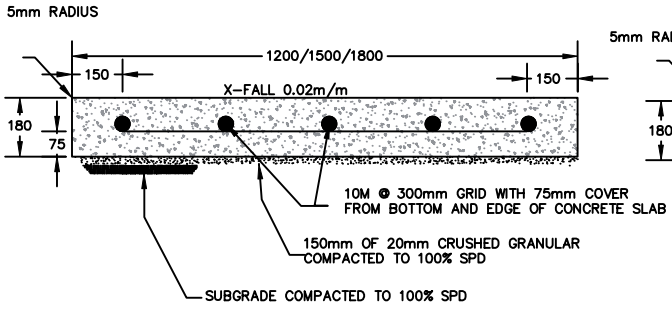
STD. DWG NO.
D - 144

| Date: FEBRUARY 3, 2021 | Scale: N.T.S. | Drawn: E. TAPOVETI | Checked: | Revision: 01 |
|---|---|---|---|---|

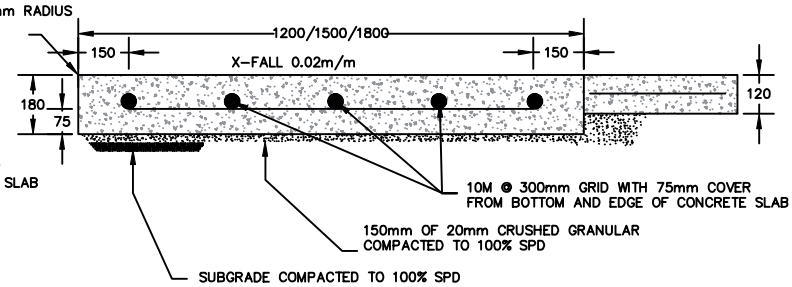



STANDARD SIDEWALK

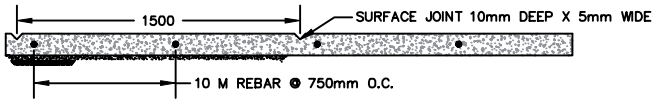



DRIVEWAY SECTION




TRANSITION




PROFILE SECTION

ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED

NOTE:
1.)CONCRETE SHALL BE CLASS C, 30MPa COMPRESSIVE STRENGTH AT 28 DAYS WITH 5.5% AND 8.0% AIR ENTRAINMENT.
2.)CONTRACTION JOINTS SHALL BE 50mm DEEP IN CURB AND GUTTER AND 25mm DEEP IN SIDEWALK.
3.) MAXIMUM SPACING BETWEEN CRACK-CONTROL JOINTS SHALL BE 3.0m.
4.) SUBGRADE TO BE COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).
5.) GRANULAR BASE SHALL BE MINIMUM 150mm THICKNESS COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD)

PROFESSIONAL ENGINEER ALBERTA
ANDREW D. HEATH
2021-02-24
D-145
Approved Sealed

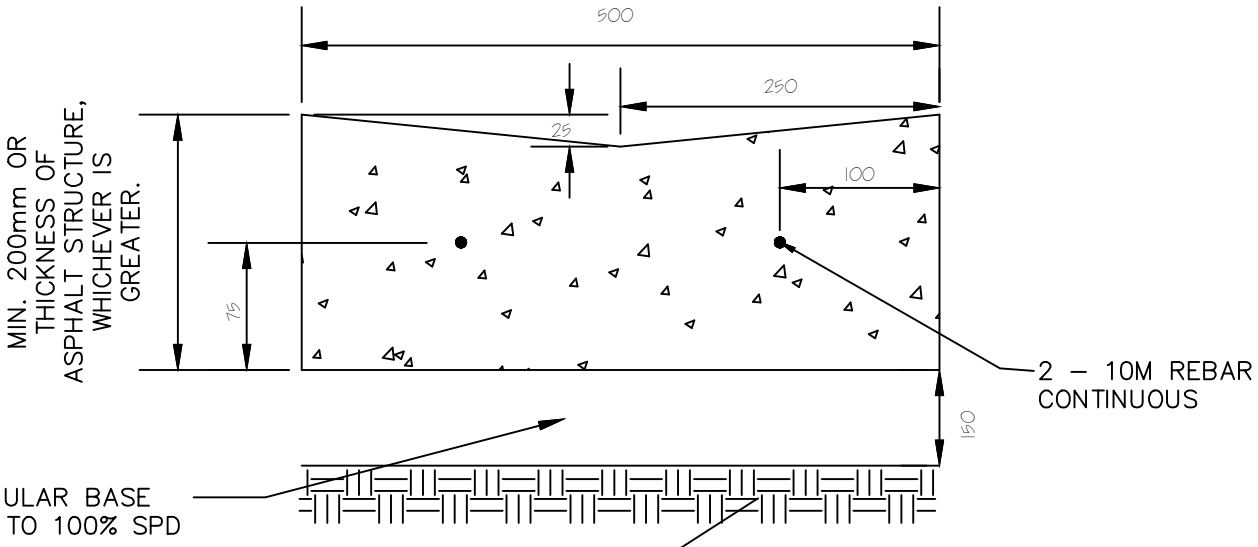
# 1200mm/1500mm/1800mm SEPARATE SIDEWALK

city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

STD. DWG NO.
D - 145

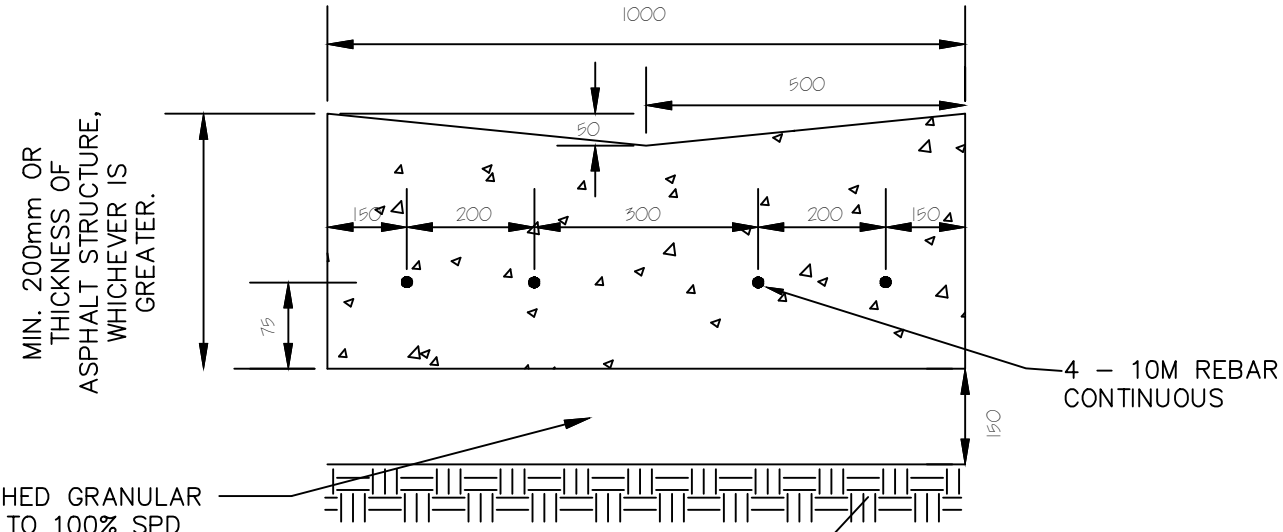
| Date: FEBRUARY 19, 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI | Checked: | Revision: 01 |
|---|---|---|---|---|




## 500mm CONCRETE SWALE

NOTES

1. CONCRETE SHALL BE CLASS C, 30MPa COMPRESSIVE STRENGTH AT 28 DAYS WITH >5.5% AND <8.0% AIR ENTRAINMENT.
2. SUBGRADE TO BE COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).
3. GRANULAR BASE SHALL BE MINIMUM 150mm THICKNESS COMPACTED TO 100% STANDARD PROCTOR DENSITY (SPD).




ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED

## 1000mm CONCRETE SWALE

PROFESSIONAL ENGINEER ANDREW D. HEATH ALBERTA
2021-02-24
D-146
Approved Sealed

# 500mm/1000mm CONCRETE DRAINAGE SWALE

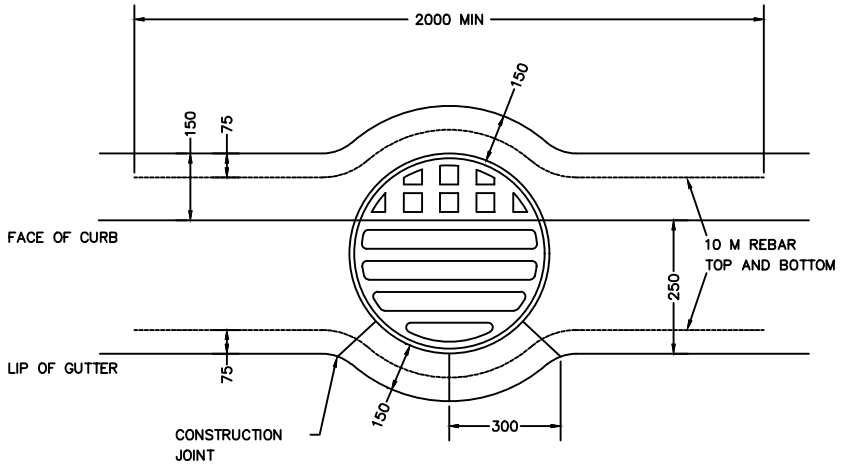
city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

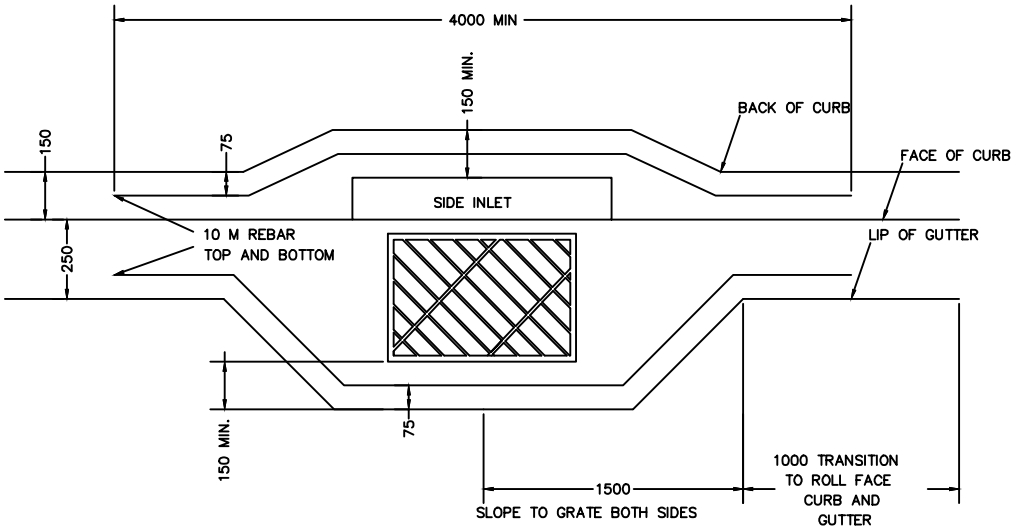
STD. DWG NO.
D - 146

| Date: FEBRAURY 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI | Checked: | Revision: |
|---|---|---|---|---|

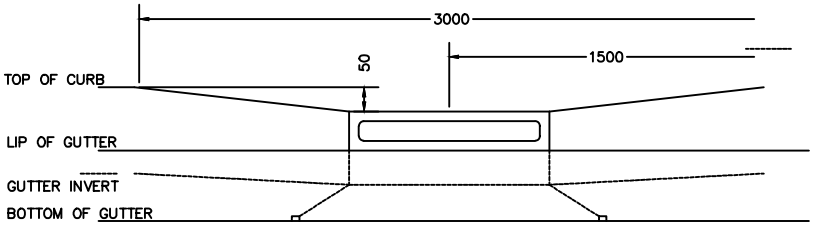
F-36 TOP VIEW



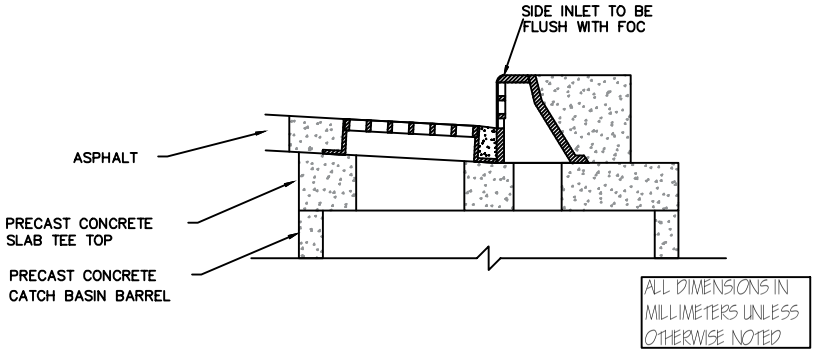

F-51 TOP VIEW




TYPICAL CATCH BASIN FRONT VIEW




F-51 SIDE VIEW




PROFESSIONAL ENGINEER ASSOCIATION OF ALBERTA
ANDREW D. HEATH
2021-02-24
D-147
Approved Sealed

# CATCH BASIN FRAME & GRATE INSTALLATION ( 150 CURB & 250 GUTTER )

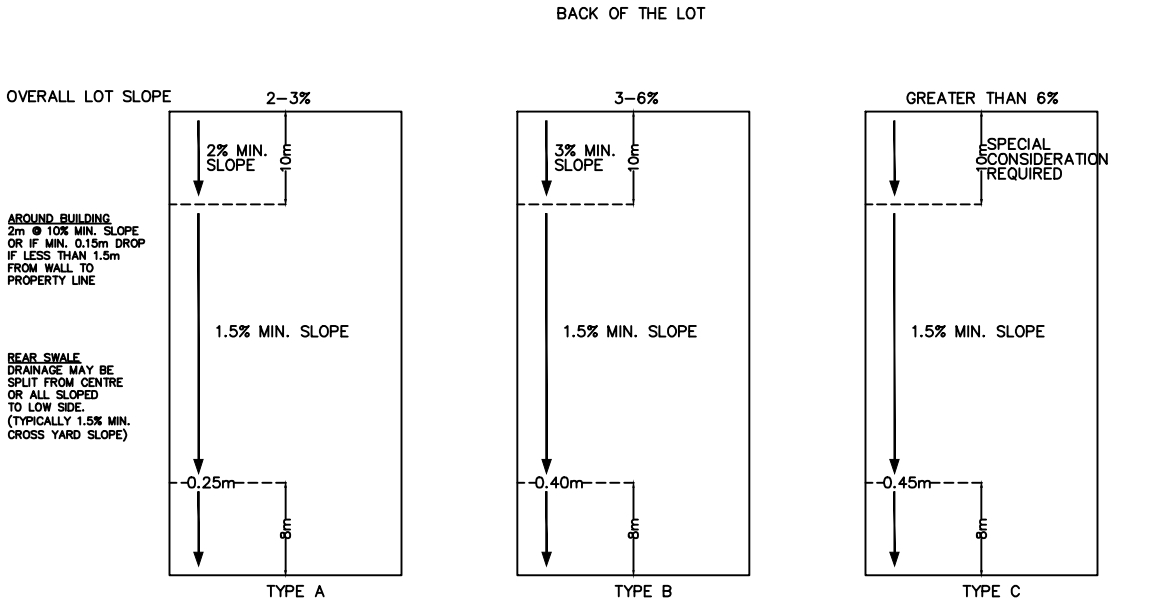
city of Wetaskiwin

Planning and Engineering
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

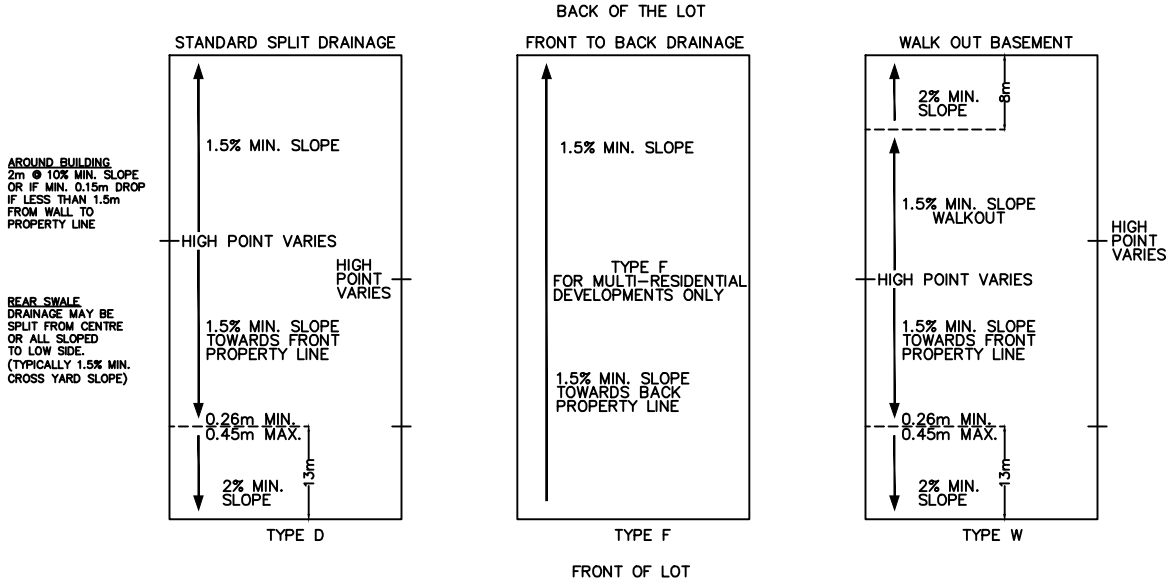
STD. DWG NO.
D-147

| Date: FEBRUARY 2021 | Scale: N.T.S. | Drawn: E.TAPOVETI | Checked: | Revision: 01 |
|---|---|---|---|---|

## TYPICAL LOT GRADING DETAILS – REAR TO FRONT DRAINAGE




## TYPICAL LOT GRADING DETAILS – SPLIT/FRONT TO BACK DRAINAGE




| REVISIONS | | |
|---|---|---|
| Date | Details | Drawn |
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city of Wetaskiwin

Engineering and Development
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

# TYPICAL LOT GRADING

Reviewed by:

STD. DWG NO.

E-101

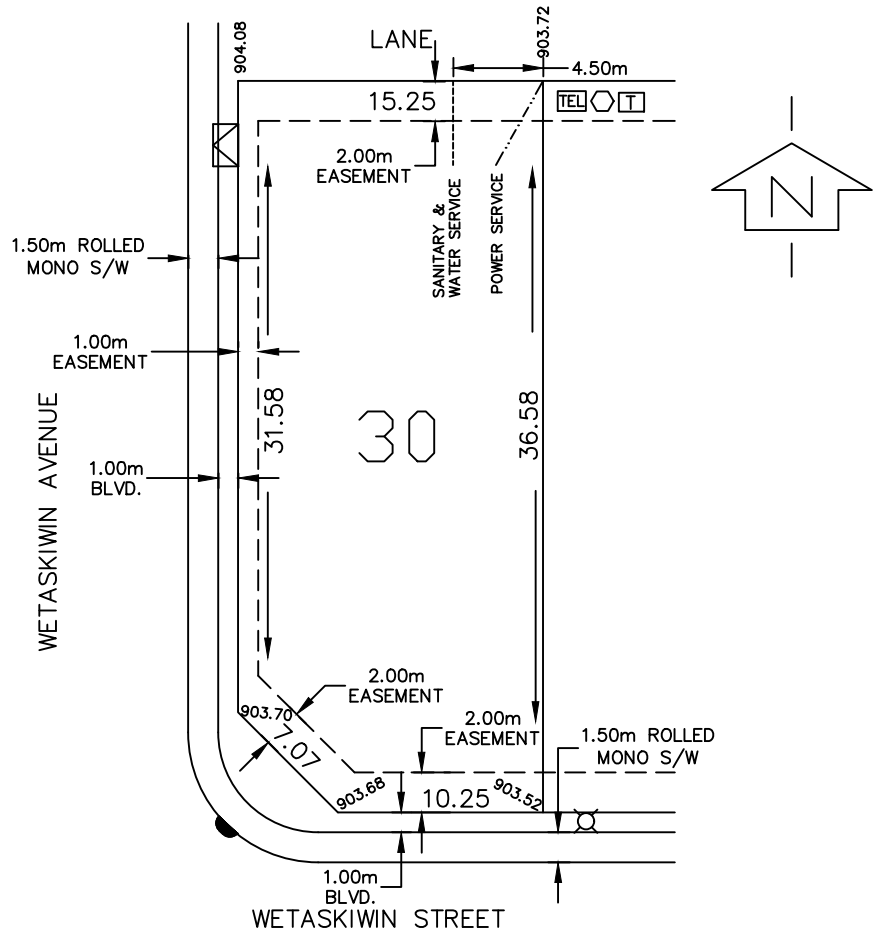
Date: OCTOBER 2018 | Scale: N.T.S. | Drawn: T. WOOD

# Building Grade Certificate

| Issued by: | No. |
|---|---|
| | |

1. When excavating in a right of way (easement), check for utilities.
2. Standing at the water shutoff and facing the building, the sanitary service is on the left side of the water service.
3. All dimensions are in metres and decimals thereof. The elevations are in metres above geodetic mean sea level.
4. Elevations noted on the Certificate are within 100mm of actual.
5. The builder must construct to within 100mm of the design landscape elevation and illustrated drainage patterns unless otherwise approved by the Development Officer.
6. If the information on this Certificate has been prepared by a private developer or their agent, the City of Wetaskiwin accepts no responsibility for its accuracy.

Refer to Engineering Standard Drawing E–101 for slopes of each lot type.




- TRANSFORMER
- ELECTRICAL BOX
- TELUS PEDESTAL
- CA.T.V. PEDESTAL
- MAIL BOX
- LIGHT STANDARD
- HYDRANT
- CATCH BASINS
- DRAINAGE PATTERN

TOP OF FOOTING ELEVATIONS:
Max. depth below average sidewalk= 2.15
Lowest elevation= 901.48

AS–BUILT SEWER INVERT ELEVATIONS:
Sanitary at right of way line= 900.48
Storm at right of way line= 900.48

DESIGN LANDSCAPE ELEVATIONS:
Elevation at the front of house= 903.95
Elevation at the rear of house= 903.95

Civic Address: 50 – WETASKIWIN STREET
Lot: 30 Block: 1 Plan No.: 102–2345
Developer: ABC DEVELOPMENTS Scale: 1:300
Drawn By: XYZ ENGINEERING SERVICES LTD. Date: 02/11/24
Approved By: Date:
Received By: Date:

I certify that the final landscape grade will be (front)_____ (rear)_____
Signature of owner or representative _____
Print full name _____

REVISIONS

| Date | Details | Drawn |
|---|---|---|
| 2018/11/15 | CHANGED TITLE BLOCK | MJK |
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city of Wetaskiwin

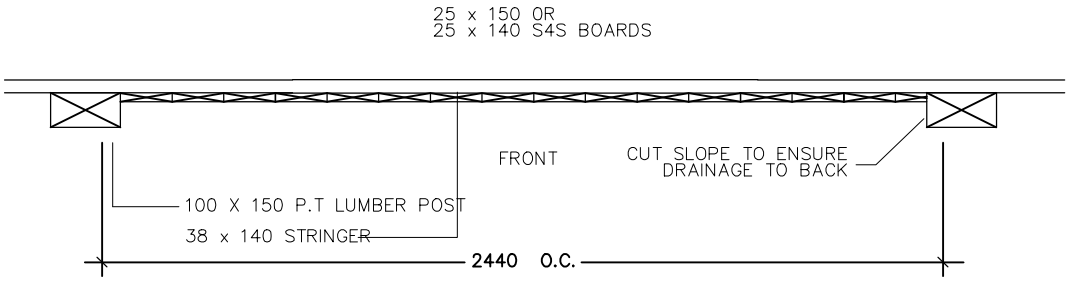
Engineering & Development
4705 – 50 AVE
WETASKIWIN, AB
T9A 0R8

BUILDING GRADE CERTIFICATE

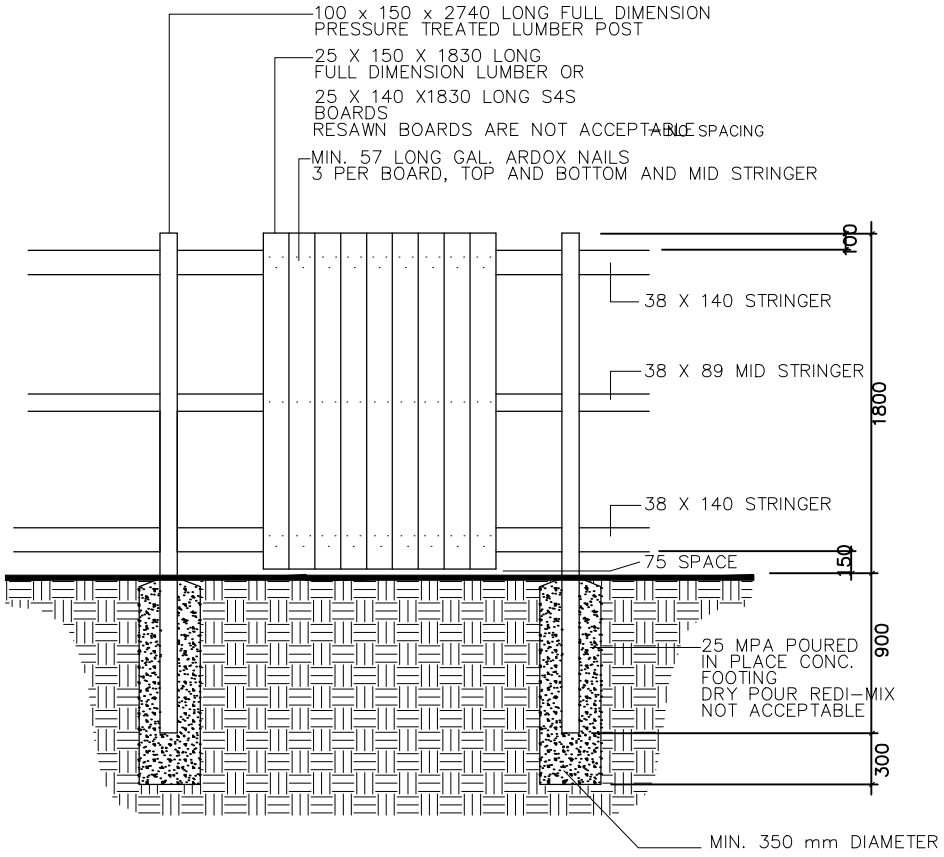
REVIEW BY:

STD. DWG NO.
E–102

Date: November 2018 | Scale: N.T.S. | Drawn: M.Kallenabch




FENCE PLAN




FENCE SECTION

| REVISIONS | | |
|---|---|---|
| Details | | Drawn |
| 2018/11/15 | Changed Title Block | MJK |
| 2019/03/28 | UPDATED DIMENSIONS | TW |
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Engineering and Development
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

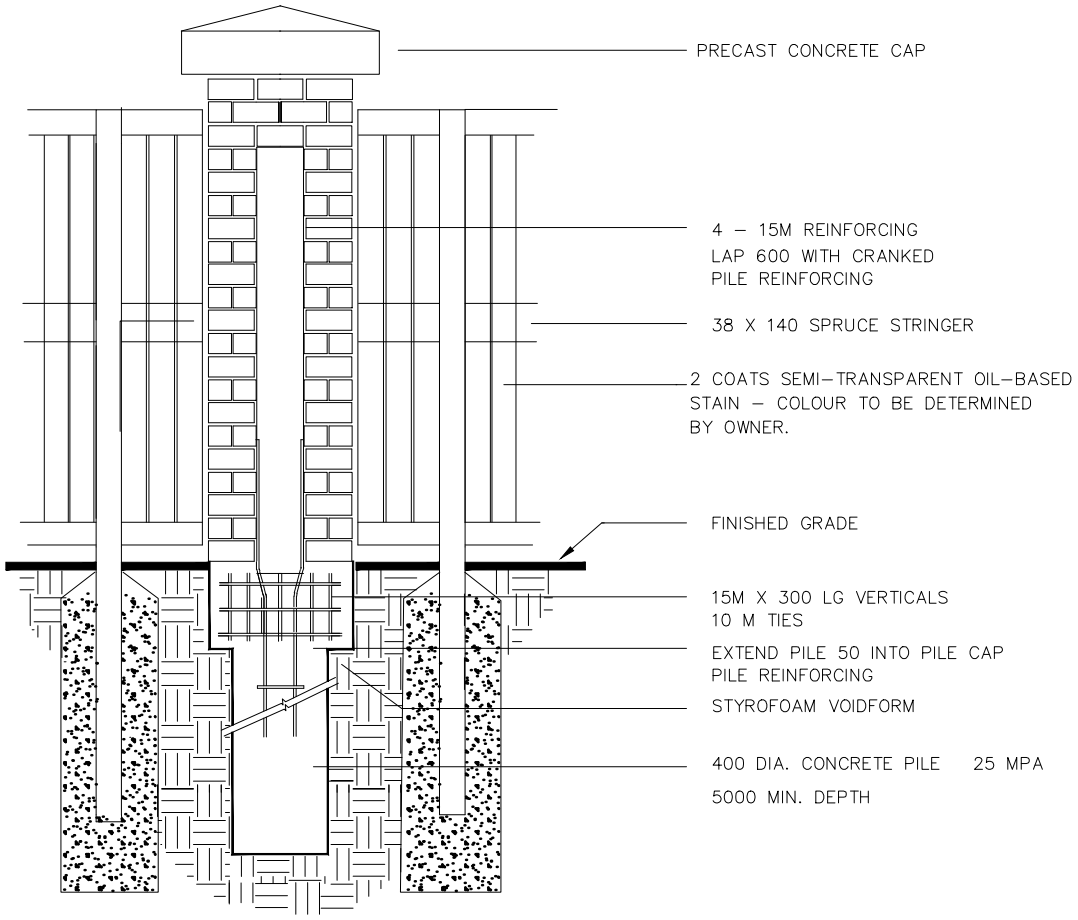
# WOOD SCREEN FENCE

Reviewed by:

STD. DWG NO.

L-004

Date: November 2018 | Scale: N.T.S. | Drawn: M. Kallenbach




| REVISIONS | | |
|---|---|---|
| Details | | Drawn |
| 2018/11/16 | Changed Title Block | MJK |
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Engineering and Development
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

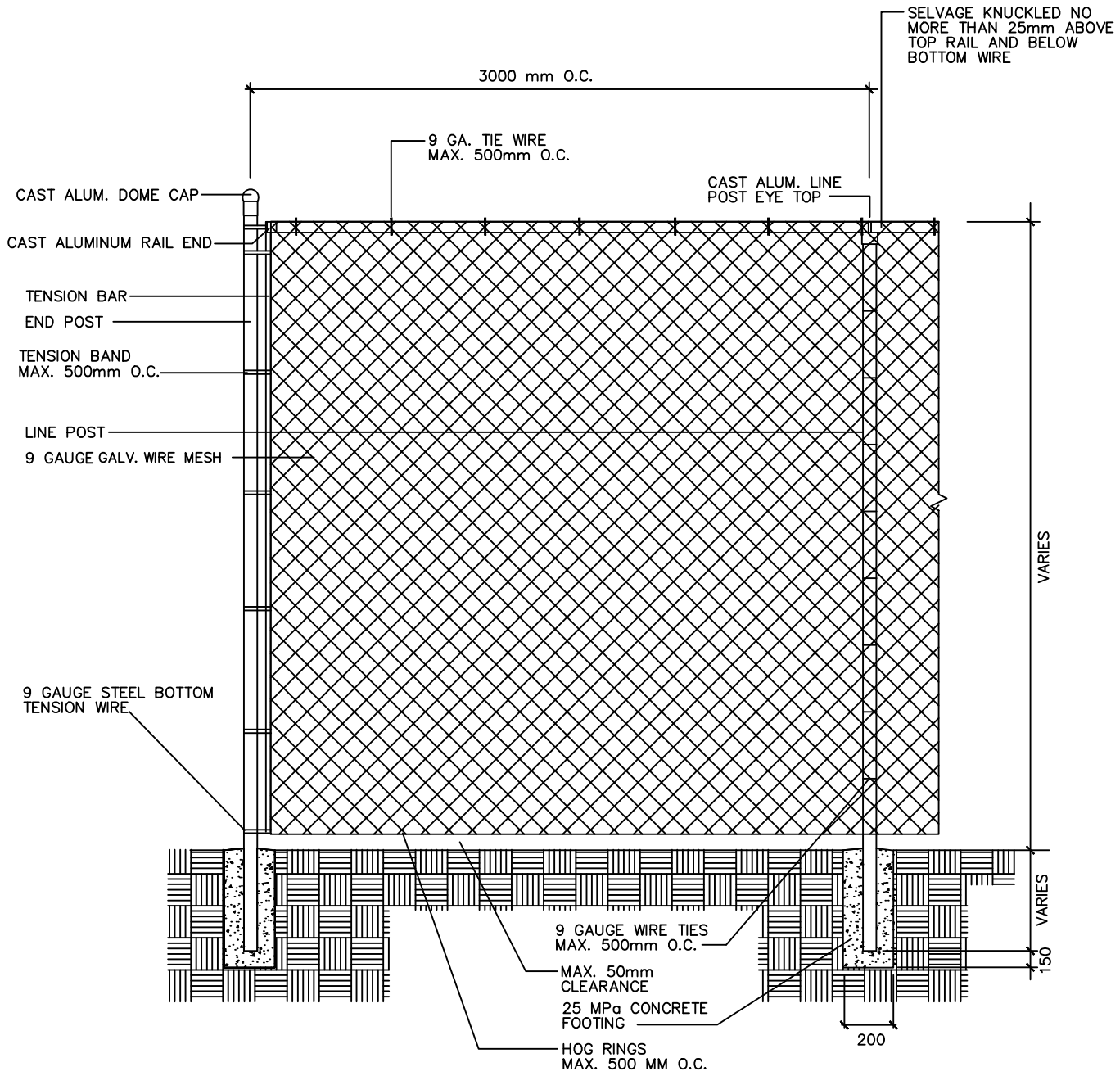
# WOOD SCREEN FENCE
# BRICK COLUMN DETAIL

Reviewed by:

STD. DWG NO.

L-005

Date: September 2018 | Scale: N.T.S. | Drawn: M. Kallenbach




| REVISIONS | | |
|---|---|---|
| Details | | Drawn |
| 2018/11/15 | Changed Title Block Updated Dimensions | MJK |
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city of Wetaskiwin

Engineering and Development
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

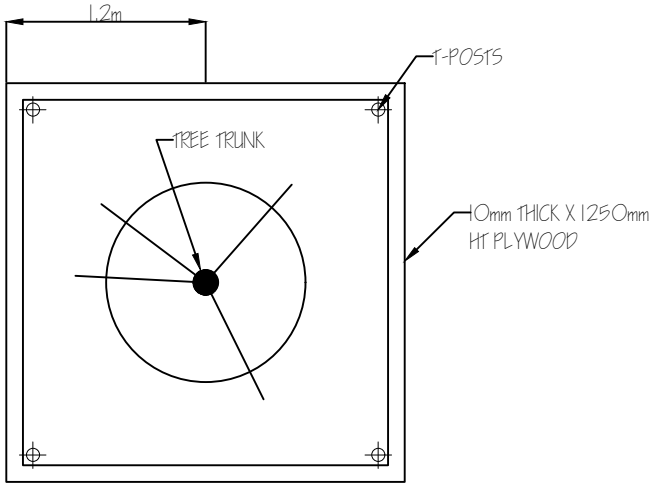
# CHAIN LINK FENCE

Reviewed by:

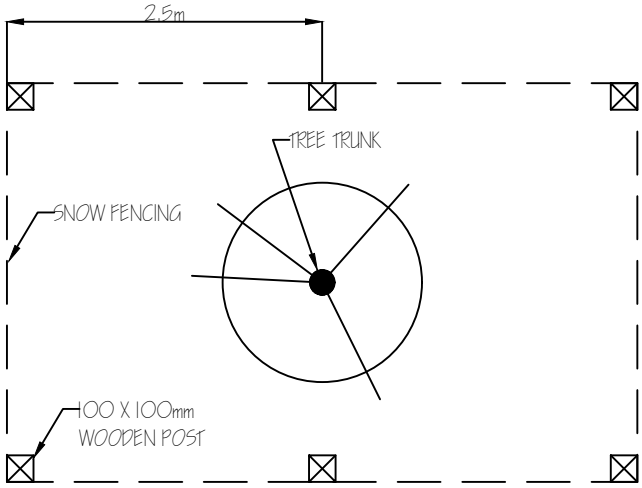
STD. DWG NO.

L-006

Date: November 2018 | Scale: N.T.S. | Drawn: M. Kallenbach




DETAIL A - TRESS WITHIN 1-3M OF ACTIVE CONSTRUCTION




DETAIL B - TRESS WITHIN 3-5M OF ACTIVE CONSTRUCTION

NOTES:

1. SPECIFICATIONS: ALL COMPONENTS AND WORKMANSHIP SHALL CONFORM TO MUNICIPAL ENGINEERING STANDARDS.
2. DETAIL A - TREES WITHIN 1-3m OF CONSTRUCTION ACTIVITY REQUIRE:
   -10mm PLYWOOD AND 1.25m HEIGHT ENCLOSURES SEPARATING TREE FROM THE PROJECT SITE.
   -PLYWOOD TO BE SECURELY FASTENED TO T-POSTS WITH WIRE.
3. DETAIL B - TREES WITHIN 3-5m OF CONSTRUCTION ACTIVITY REQUIRE:
   -A STANDARD "SAFETY ORANGE" SNOW FENCE TO BE PLACED A MIN. OF 2.5m FROM THE TREE TRUNK.
   -EXACT SIZE AND SHAPE TO BE DETERMINED ON SITE.
4. EXCAVATION WITHIN 2m OF EXISTING TREES REQUIRES:
   -TREE TO BE TRANSPLANTED IF FEASIBLE,
   -IF TRANSPLANTING TREE IS NOT FEASIBLE, TREE IS THE BE REMOVED AND THE VALUE OF THE TREE ASSESSED BY FORESTRY.
   -THE DEVELOPER/ CONTRACTOR IS RESPONSIBLE FOR THE ASSESSED VALUE.
5. EXCAVATION BEYOND 2m OF EXISTING TREES REQUIRES:
   -PRIOR TO DIGGING, ALL TREE ROOTS TO BE SEVERED WITH A "ROOT-CUTTER" TO A DEPTH OF 350mm TO 500mm.
   -IMMEDIATELY AFTER EXCAVATION, PRUNE ALL EXPOSED ROOTS FLUSH WITH THE EXCAVATION WALL.
6. INSTALL AND MAINTAIN TREE PROTECTION THROUGHOUT THE CONSTRUCTION PROCESS IN A CLEAN AND SAFE CONDITION.
7. TREE PROTECTION REQUIREMENTS ARE AS SHOWN ON LANDSCAPE DRAWINGS AND AS DIRECTED BY CITY OF WETASKIWIN ONSITE.
8. ALL EQUIPMENT, SOIL BUILDING MATERIALS & OTHER DEBRIS SHALL BE KEPT OUTSIDE THE HOARDING.
9. IN THE EVENT THE TREE PROTECTION IS PUNCTURED AND DAMAGE OCCURS TO THE TREE(S) WITHIN THE TREE PROTECTION, THE PROJECT MANAGER IS TO BE ADVISED IMMEDIATELY IN ORDER THAT THE DAMAGE BE ASSESSED BY FORESTRY & CORRECTIVE ACTION TAKEN.
10. ON MANY CONSTRUCTION PROJECTS STANDARD "SAFETY ORANGE" SNOW FENCING IS ALL THAT MAY BE REQUIRED. THIS WILL SERVE AS A 'HEADS-UP' WARNING TO WORKERS OR EQUIPMENT OPERATORS THAT ANY ACTIVITY BEND THE FENCE MAY CAUSE TREE DAMAGE.

| REVISIONS | | |
|---|---|---|
| Date | Details | Drawn |
| 2018/11/21 | Updated Notes | MJK |
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| | | |
| | | |
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city of Wetaskiwin

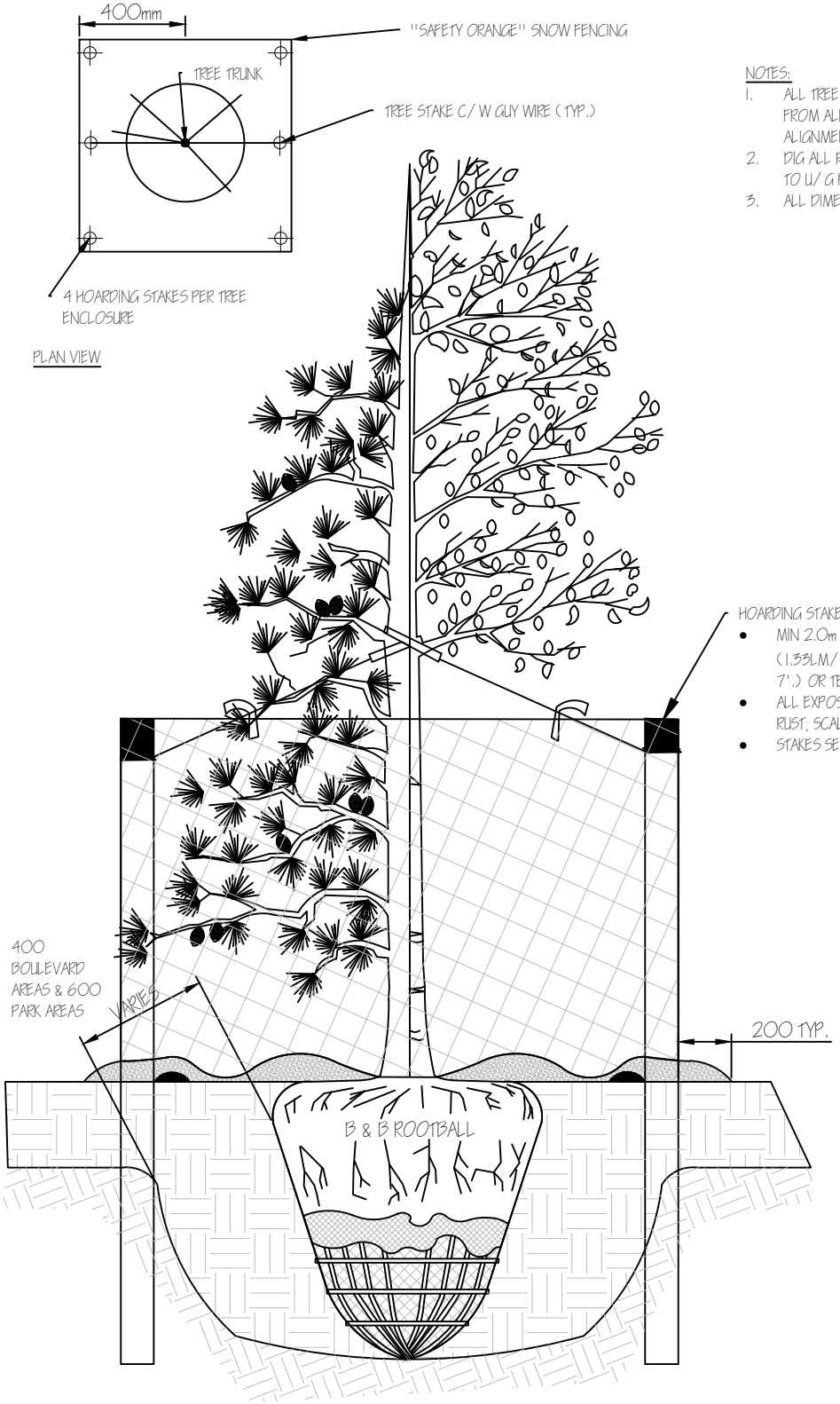
Engineering and Development
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

# LARGE TREE TREE PROTECTION ZONE

REVIEWED BY:

STD. DWG NO.
L-007

Date: November 2018 | Scale: N.T.S. | Drawn: A. Stewart




NOTES:

1. ALL TREE STAKES TO MAINTAIN MINIMUM 1.0m CLEARANCE FROM ALL U/G POWER, TELEPHONE AND GAS ALIGNMENTS
2. DIG ALL ROOT HOLED BY HAND WHEN CLOSER THAT 1.0m TO U/G POWER, TELEPHONE AND GAS ALIGNMENTS
3. ALL DIMENSIONS IN MILLIMETERS

| REVISIONS | | |
|---|---|---|
| Date | Details | Drawn |
| 2018/11/21 | Updated Drawing | MJK |
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city of Wetaskiwin

Engineering & Development
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

# SMALL TREE - TREE PROTECTION ZONE( MAX. 80MM CAL.)

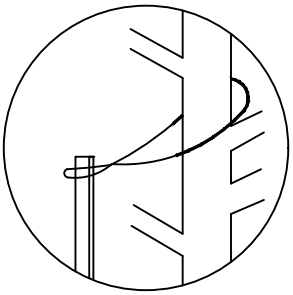
REVIEWED BY:

STD. DWG NO.
L-008

Date: November2018 | Scale: N.T.S. | Drawn: A. Stewart

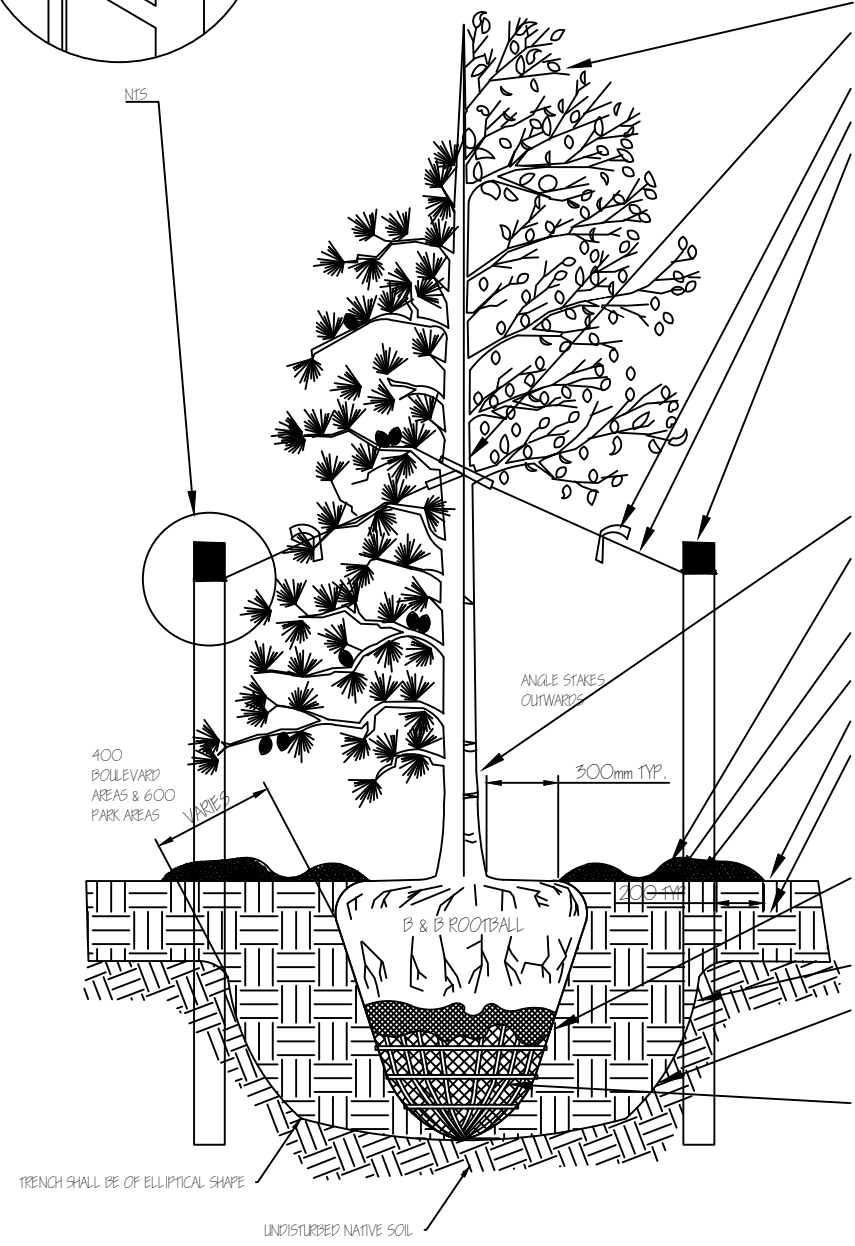
NOTES:

1. IF MINIMUM UTILITY SETBACKS PERMIT POSITION TREE STAKES INTO DIRECTION OF PREVAILING WINDS.
2. ALL TREE STAKES TO MAINTAIN MINIMUM 1.0m CLEARANCE FROM ALL U/G POWER, TELEPHONE AND GAS ALIGNMENTS.
3. DIG ALL ROOT HOLES BY HAND WHEN CLOSER THAN 1.0m TO U/G POWER, TELEPHONE AND GAS ALIGNMENTS
4. WIDTH OF TREE TRENCH SHALL BE 25mm DEEPER THAN THE ROOTBALL, REPLACE WITH IMPORTED TOPSOIL FLAT TAMPED WITH FOOT PRESSURE TO PREVENT ROOTBALL FROM SHIFTING OR LEANING, AND A MINIMUM BETWEEN 1.8m-2.0m LONG. THE BOTTOM AND SIDES OF THE TREE TRENCH MUST BE ROUGHENED SO EXISTING AND FILLED SOIL WILL BIND TOGETHER, SOIL FILLING THE TRENCH SHALL BE AMENDED WITH COMPOST OR OTHER ORGANIC MATTER TO A MAXIMUM OF 5% BY WEIGHT. MYCORRHIZEA SHALL BE ADDED BY EITHER INCORPORATING NATIVE LEAF LITTER AND SOIL OR PURCHASED COMMERCIALLY.
5. IN AREAS OF SLOWLY DRAINING SOILS, THE ROOTBALL MAY BE SET UP TO 75mm OR $\frac{1}{8}$ OF THE DEPTH OF THE ROOTBALL ABOVE THE ADJACENT SOIL LEVEL.
6. REMOVE ALL TAGS, LABELS, STRINGS, ETC. FROM PLANTS.



CONIFEROUS
LESS THAN 2.5m HT.

DECIDUOUS
LESS THAN 80mm CAL.




PRUNE DEAD, BROKEN, OR DISEASED TREE LIMBS

RUBBER BLACK HOSE - 20mm DIAMETER OF SUFFICIENT LENGTH TO EXTEND PAST THE TRUNK BY 100mm. POSITIONED APPROX. $\frac{2}{3}$ HT. FOR ALL TREES

FLUORESCENT ORANGE FLAGGING ON ALL GUY WIRES

GALVANIZED GUY WIRES No. 12 MIN. TO ALLOW TREE TRUNK EXPANSION

2 STAKES PER TREE. ALL EXPOSED PORTIONS OF TREE STAKES FREE OF RUST, SCALED, PRIMED AND PAINTED BROWN. TREE STAKES MIN 2.0 LIN. M. LENGTH PLAIN T-POSTS (1.33LBS/FT) C/W 1 $\frac{1}{2}$" X 1 $\frac{3}{8}$" X 7' PUNCHED 7 HOLES. TREE STAKE SET MIN. 600mm INTO UNDISTURBED SOIL. TOP 300mm OF ALL TREE STAKES PAINTED TO CITY OF WETASKIWIN ANNUAL COLOUR CODES. LARGE TREES TO HAVE STAKING REQUIREMENTS APPROVED BY CITY OF WETASKIWIN.

TRUNK FLARE SHALL BE SLIGHTLY VISIBLE ABOVE FINISHED GRADE

100mm MIN. ORGANIC MULCH MUST NOT BE PLACED WITHIN 300mm OF TREE TRUNK TO ALLOW FOR AIR CIRCULATION, AND PREVENT PEST, DISEASE ATTACK, AND RODENT DAMAGE

WATERING SAUCERS 100mm HIGH IMMEDIATELY OUTSIDE THE AREA OF THE ROOTBALL OF EACH TREE

SOD OVER 200mm IMPORTED TOPSOIL

RE-ESTABLISH ANY DAMAGE SEED/SOD TO CITY STANDARDS

BACKFILL WITH SAME SOIL THAT IS TAKEN OUT OF TRENCH. ADD PEAT MOSS TO LIGHTEN THE SOIL IF HEAVY CLAY IS PRESENT. ADD COMPOST AND IMPORTED TOPSOIL TO BACKFILL MIXING THOROUGHLY. MODERATELY COMPACT BACKFILL USING WATER TO SETTLE SOIL AROUND ROOTBALL TO ENSURE STABILITY OF ROOTBALL.

FOLD $\frac{1}{3}$ WIRE BASKET AND BURLAP FROM TOP OF ROOTBALL, POSITION TOP OF ROOTBALL ABOVE FINISHED GRADE WITH TRUNK FLARE SLIGHTLY VISIBLE. BURLAP TO BE BIO-DEGRADABLE NATURAL FIBRE. MIN. ROOTBALL SIZE AS PER SPECIFICATIONS.

SCARIFY WALL OF TREE TRENCH TO BIND EXISTING SOIL WITH FILL SOIL

ENSURE ANY VOIDS ARE FILLED WITH TOPSOIL

ROOTPLUG MINIMUM SIZE AS PER SPECIFICATION. FOR EVERY 25mm OF D.B.H. ABOVE MIN. ADD 600mm TO SPADE WIDTH

| REVISIONS | | |
|---|---|---|
| Date | Details | Drawn |
| 2018/11/22 | Updated Drawing | MJK |
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city of Wetaskiwin

Engineering & Development
4705 - 50 Avenue
Wetaskiwin, Alberta
T9A 0R8

# Typical Tree Planting Detail

REVIEWED BY:

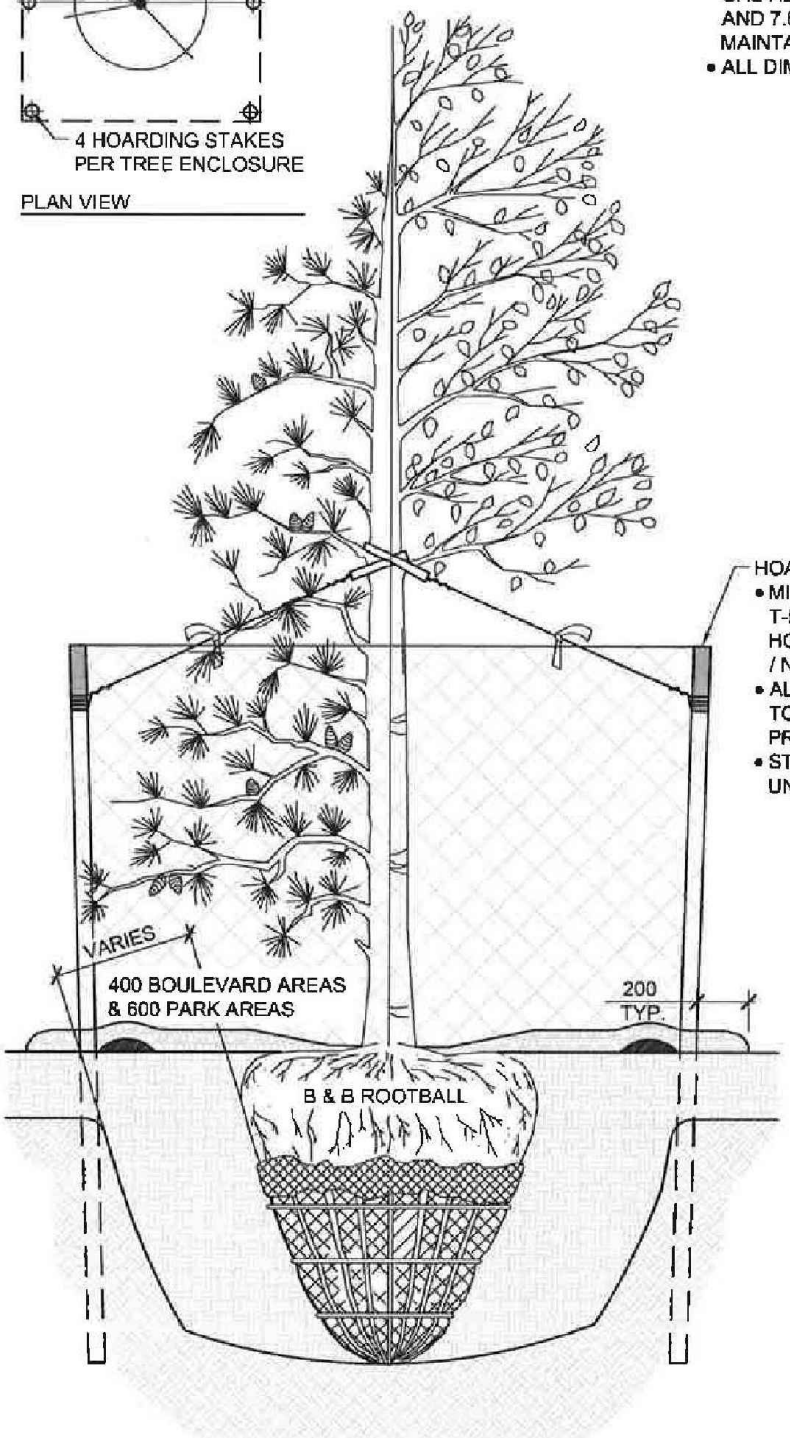
STD. DWG NO.
L-009

Date: November 2018 | Scale: N.T.S. | Drawn: A. Stewart


PLAN VIEW

NOTES:

- ALL TREE STAKES TO MAINTAIN MINIMUM 1.0m CLEARANCE FROM ALL U/G POWER, TELEPHONE AND GAS ALIGNMENTS.
- DIG ALL ROOT HOLES BY HAND WHEN CLOSER THAN 1.0m TO U/G POWER, TELEPHONE AND GAS ALIGNMENTS (REFER TO SECTION 7.6.2 AND 7.6.3 WHEN CLEARANCE CANNOT BE MAINTAINED FOR ANY EXCAVATIONS).
- ALL DIMENSIONS IN MILLIMETERS.




ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED

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|---|---|---|
| Date | Details | Drawn |
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city of Wetaskiwin

# SMALL TREE - TREE PROTECTION ZONE (MAX. 80MM CAL.)

ENGINEERING & DEVELOPMENT
Phone: 361-4432
email: engineering@wetaskiwin.ca
BOX 6210
WETASKIWIN, AB T9A 2E9
4705 - 51 ST (Physical)

STD. DWG NO.

Date: December 2017 | Scale: N.T.S. | Drawn: A. Stewart