



VILLAGE OF ALGONQUIN

SPECIFICATIONS AND DETAIL GUIDE FOR PUBLIC IMPROVEMENTS



VILLAGE OF ALGONQUIN DEPARTMENT OF PUBLIC WORKS

June 2022

Prepared by:

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VILLAGE OF ALGONQUIN
PUBLIC WORKS DEPARTMENT

- M E M O R A N D U M -

DATE: June 25, 2022

TO: Contractors, Engineers, Developers

FROM: Robert Mitchard, Public Works Director

SUBJECT: Disclaimer on use of Specifications & Details

This letter is to caution you on the use of the Village of Algonquin standard details and specifications. This information is provided to you with good faith, and much effort of the Village of Algonquin to standardize the construction of its utilities and assets. The files are in Adobe Acrobat PDF format for viewing and insertion into documents. These files were created by the Village of Algonquin in accordance with the subdivision ordinance, and are not to be altered in any way other than scale of the overall file. If it is found during review or construction that the documents have been altered, the project will be immediately closed out or shut down, and corrective action will be considered on a case by case scenario. If you have any questions regarding this letter please feel free to contact me at the information listed below.

If for any reason the information provided (details & specifications) couldn't be read, please Feel free to contact me at the information listed below.

Adobe Acrobat Reader can be downloaded at

<http://www.adobe.com/products/acrobat/readstep2.html>

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Respectfully Submitted,

Robert Mitchard



VILLAGE OF ALGONQUIN
PUBLIC WORKS DEPARTMENT

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DATE: June 25, 2022
TO: Contractors, Engineers, Developers
FROM: Robert Mitchard, Public Works Director
SUBJECT: **Village of Algonquin Staff Contacts**

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Standard Specifications & Details for Construction and Estimating
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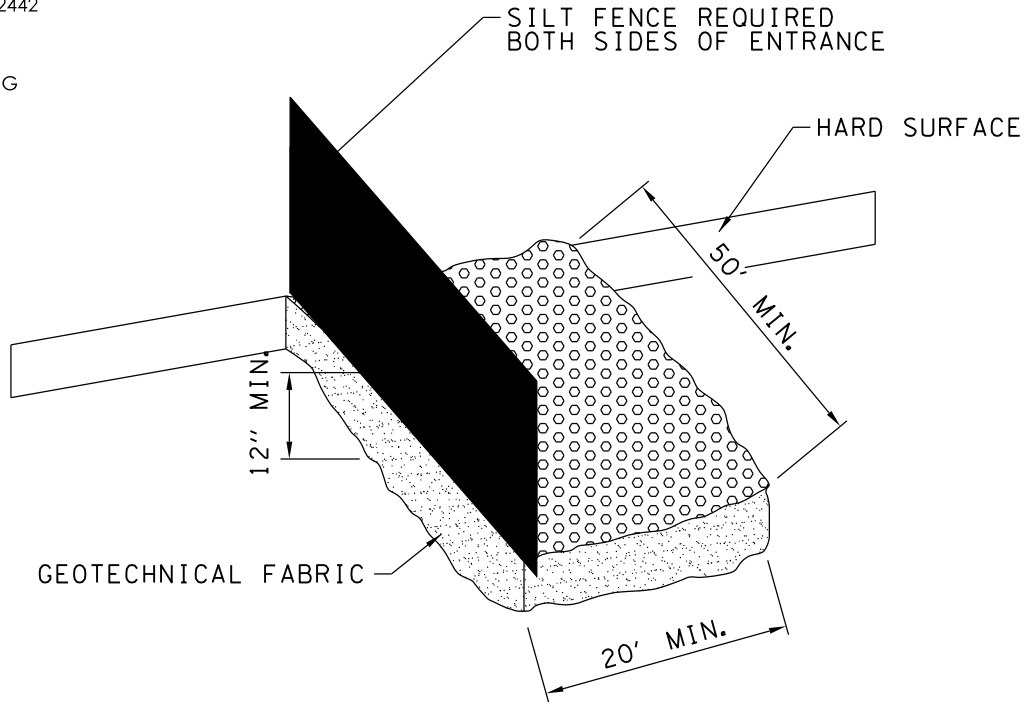
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NOTES:

1. STONE SIZE - USE 3" STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN TWELVE (12) INCHES.
4. WIDTH - TWENTY (20) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. GEOTECHNICAL FABRIC WILL BE PLACED OVER ENTIRE AREA PRIOR TO PLACING OF STONE. FABRIC WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. SILT FENCE SHALL LINE BOTH SIDES OF THE ENTRANCE WAY FOR THE ENTIRE LENGTH. THIS WILL ENCOURAGE THE FULL USE OF THE DESIRED ENTRANCE.

CONSTRUCTION ENTRANCE

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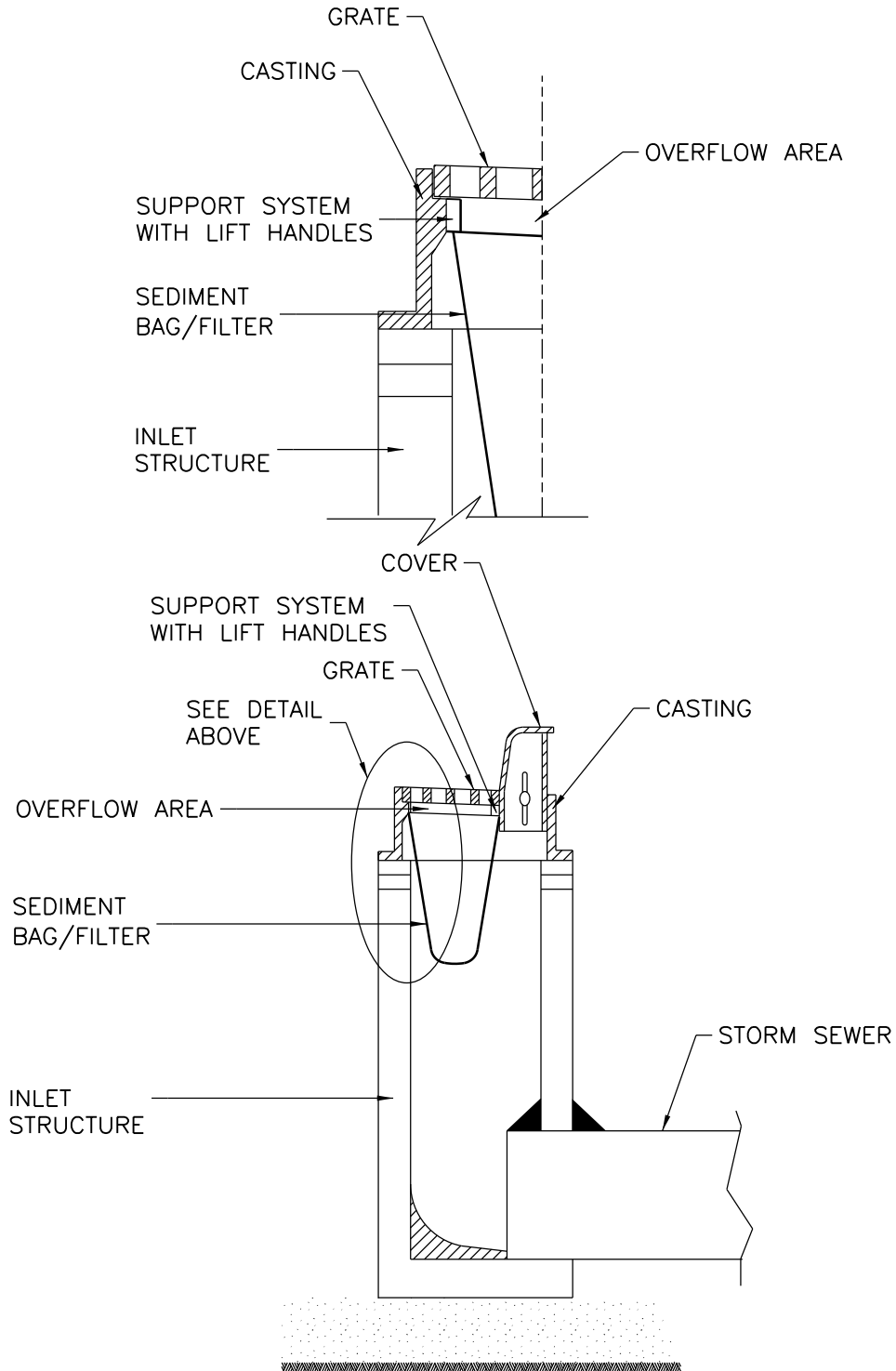
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NOTE:

1. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

INLET FILTER PROTECTION

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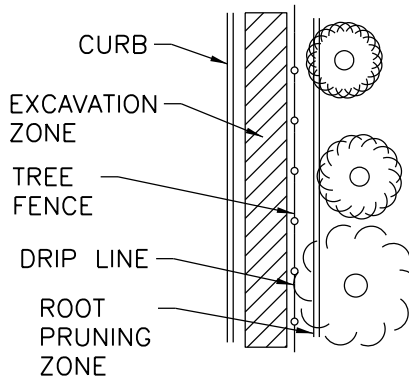
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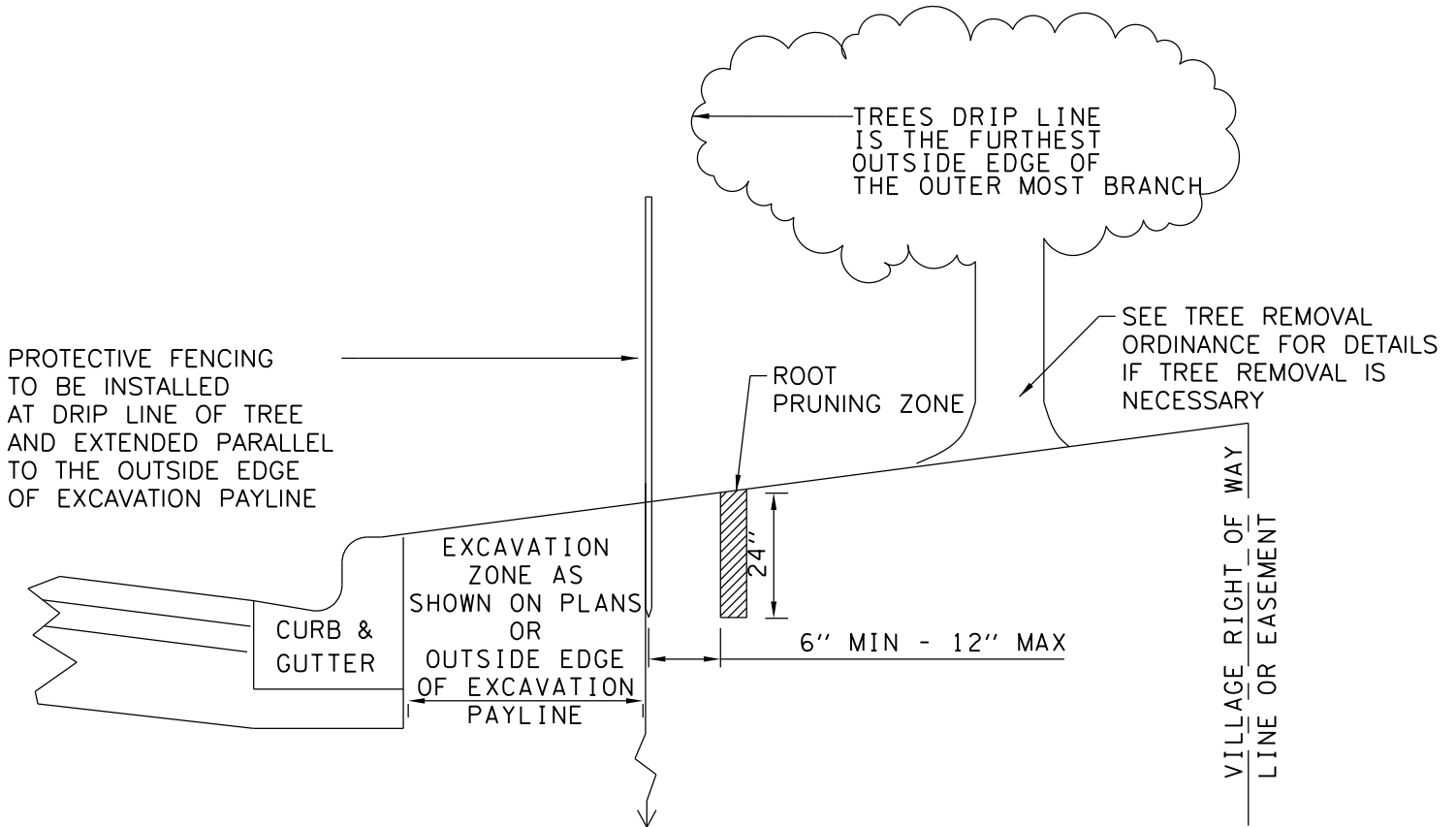
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PLAN VIEW



NOTES:

1. ADDITIONAL TREE PROTECTION MAY BE NECESSARY AT THE DIRECTION OF THE VILLAGE.
2. ALL RAISING AND PRUNING TO BE UNDER THE SUPERVISION OF THE VILLAGE.
3. ALL ROOT PRUNING TO OCCUR PRIOR TO THE INSTALLATION OF PROTECTIVE FENCING.
4. THERE IS TO BE NO STORAGE OF EQUIPMENT, VEHICLES, OR MATERIAL INSIDE THE PROTECTIVE FENCING.
5. ROOT PRUNING EQUIPMENT SHALL CLEANLY CUT ROOTS WITHOUT RIPPING OR TEARING.

TREE PROTECTION & ROOT PRUNING

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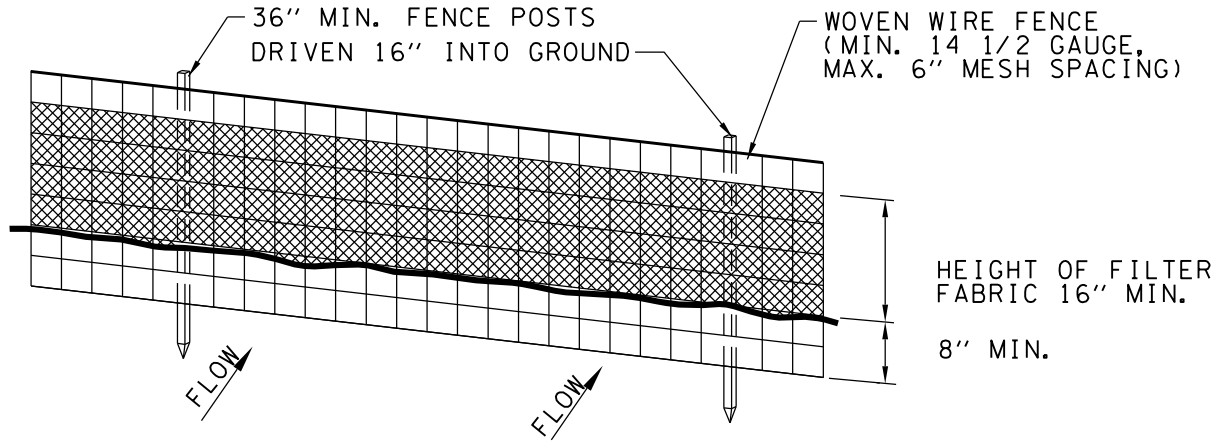
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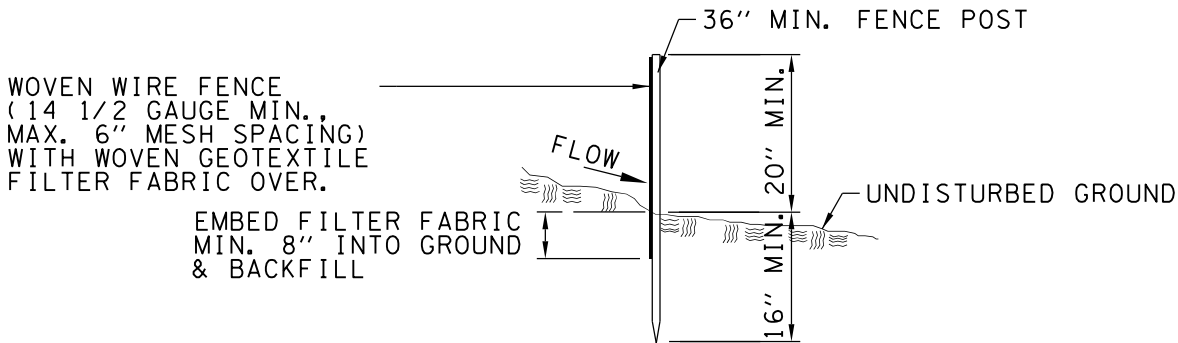
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PERSPECTIVE VIEW



SECTION

NOTES:

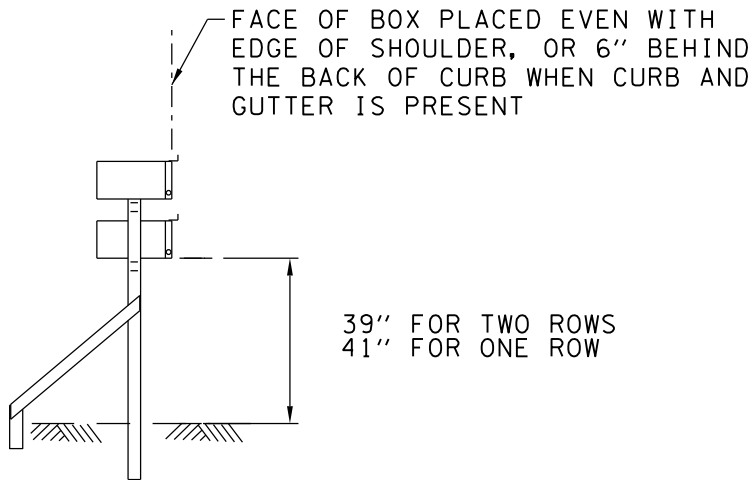
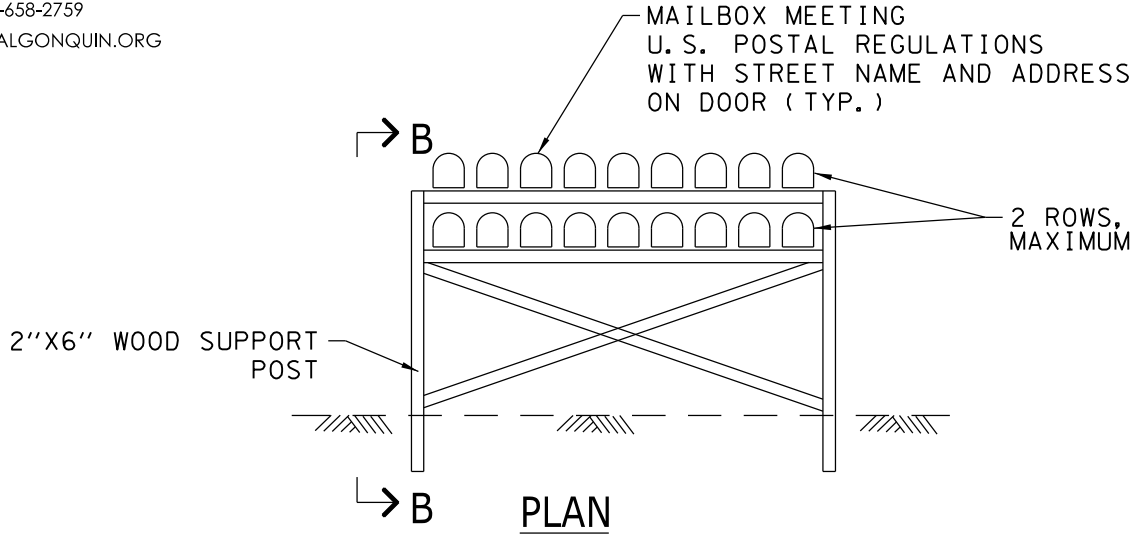
1. WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE OR WHEN COLLECTED SOIL HAS REACHED A DEPTH OF 1/2 THE FABRIC HEIGHT.
5. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

SILTATION CONTROL FENCE	
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SECTION B-B

NOTE:

1. TEMPORARY MAILBOX SHALL BE INSTALLED AT LOCATIONS APPROVED BY THE US POSTMASTER

TEMPORARY GANG MAILBOX INSTALLATION

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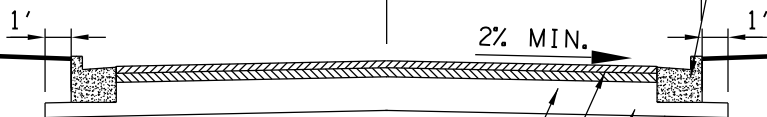


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ROW WIDTH
 (ARTERIAL 100' MIN; COLLECTOR 80' MIN; LOCAL 66' MIN.)

ROAD WIDTH
 (ARTERIAL 48' MIN;
 COLLECTOR 34' MIN;
 LOCAL 31' MIN.)

COMBINATION CONCRETE
 B-6.12 CURB & GUTTER
 (SEE DETAIL)



USE USE TABLE 7 VILLAGE CODE CHAPTER 22
 TO DETERMINE MIX AND THICKNESS
 OF BINDER COURSE *
 (SEE BINDER DETAIL FOR SPECIAL
 INSTALLATION REQUIREMENTS)

USE TABLE 7 VILLAGE CODE CHAPTER 22
 TO DETERMINE MIX AND THICKNESS
 OF SURFACE COURSE *

USE TABLE 7 VILLAGE CODE CHAPTER 22
 TO DETERMINE MIX AND THICKNESS
 OF BINDER COURSE *
 (SEE BINDER DETAIL FOR SPECIAL
 INSTALLATION REQUIREMENTS)

USE TABLE 7 VILLAGE CODE CHAPTER 22
 TO DETERMINE THICKNESS OF GRADE 9
 AGGREGATE BASE COURSE TYPE B *

5' WIDE RESIDENTIAL
 6' WIDE COMMERCIAL/INDUSTRIAL,
 4" P.C.C. SIDEWALK, 1' INSIDE R.O.W.

* PAVEMENT STRUCTURE TO BE CONFIRMED BY GEOTECHNICAL EXPLORATION.

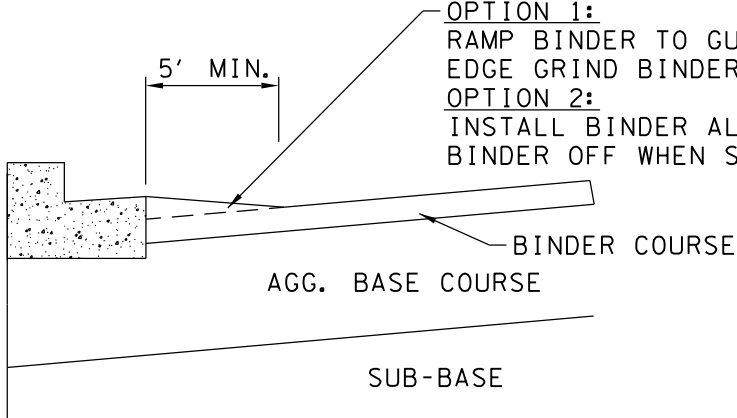
**** THE DETAIL BELOW IS USED WHEN BINDER IS EXPOSED AFTER NOVEMBER 5 ****

OPTION 1:

RAMP BINDER TO GUTTER FLAG OF CURB
 EDGE GRIND BINDER WHEN SURFACE IS READY FOR INSTALLATION

OPTION 2:

INSTALL BINDER ALL OF THE WAY UP TO GUTTER FLAG AND GRIND
 BINDER OFF WHEN SURFACE IS READY FOR INSTALLATION



ROAD CROSS SECTION

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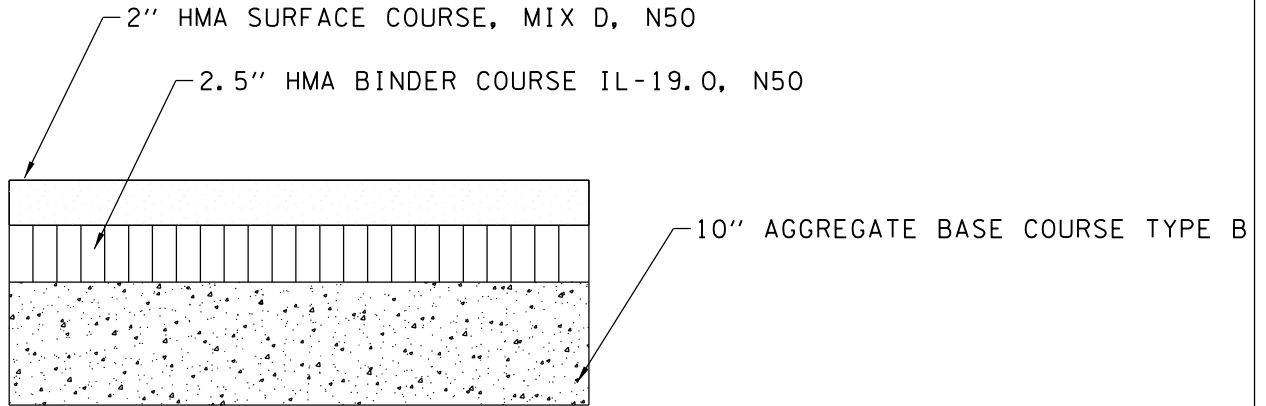
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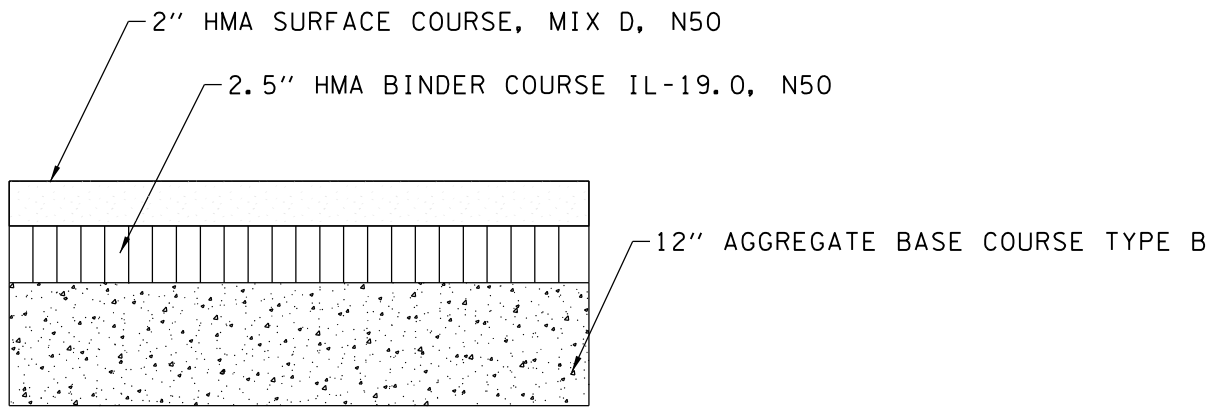
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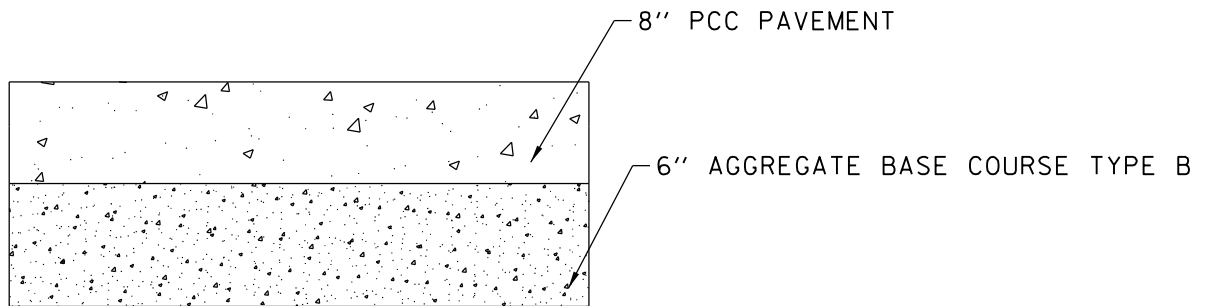
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TYPICAL LOT DESIGN



HEAVY DUTY/TRUCK TRAFFIC AREAS



LOADING DOCK AREA

PARKING LOT PAVEMENTS	
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COMBINATION CONCRETE CURB & GUTTER

8" CONCRETE CROSSWALK OR
 24" CONCRETE STOP BAR
 WHERE INDICATED

4" x 8" UNIT PAVER
 90° HERRINGBONE PATTERN

4" x 8" UNIT PAVER
 SOLDIER COURSE (TYP)

12" CONCRETE BORDER

2-3/4" SAND SET
 UNIT PAVERS

1" HMA BEDDING
 COURSE

6" P.C.C.
 BASE COURSE

3" SUB-BASE GRANULAR
 MATERIAL, TYPE B (CA-6)

WOVEN GEOTEXTILE FABRIC
 OVER TOP OF WEEPHOLE

COMBINATION CONCRETE
 CURB & GUTTER

NO. 4 X 18" EPOXY COATED
 REBAR @ 24" CENTERS

2% SLOPE

2" WEEPHOLES, 24" ON CENTER
 8" FROM EDGE OF PAVEMENT
 FILLED WITH WASHED PEA GRAVEL

4" MIN.

RIGID BASE
 DRAINAGE (SEE DETAIL)

NOTES:

1. AGGREGATE FOR BEDDING SHALL CONFORM TO THE GRADATION FOUND IN TABLE BELOW.
2. FINE AGGREGATE FOR JOINT SAND REPLACEMENT SHALL BE TYPE HP POLYMERIC SAND.
3. MAXIMUM PAVER JOINT WIDTH SHALL BE 1/8".
4. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

GRADING REQUIREMENTS FOR BEDDING AND JOINT SAND

SIEVE SIZE	PERCENT PASSING
3/8 IN	100
NO. 4	95 TO 100
NO. 8	80 TO 100
NO. 16	50 TO 85
NO. 30	25 TO 60
NO. 50	10 TO 30
NO. 100	2 TO 10

UNIT PAVERS OVER RIGID BASE 1 OF 2

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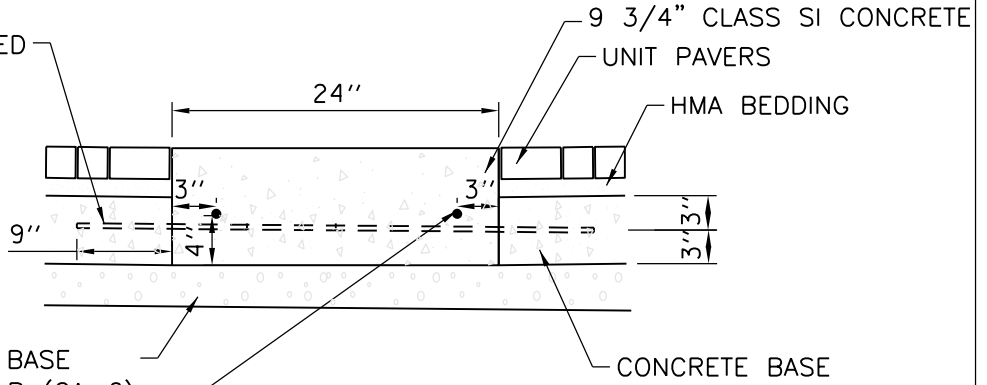
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NO. 4 X 18" EPOXY COATED
 TIE BARS @ 24" CENTERS,
 EACH SIDE (STAGGERED
 AT 12" CENTERS)



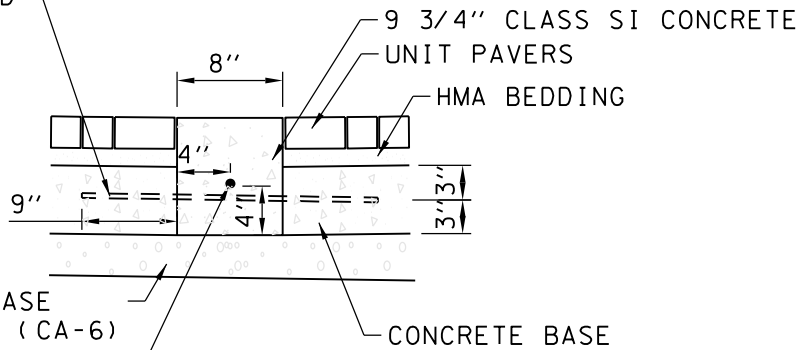
3" AGGREGATE BASE
 COURSE. TYPE B (CA-6)

CONCRETE BASE

2 - #4 EPOXY COATED
 REBARS (CONTINUOUS)

24" CONCRETE STOP BAR

NO. 4 X 15" EPOXY COATED
 TIE BARS @ 24" CENTERS,
 EACH SIDE (STAGGERED
 AT 12" CENTERS)



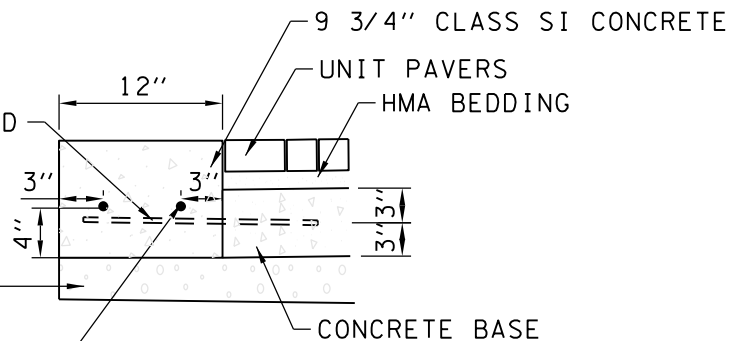
3" AGGREGATE BASE
 COURSE. TYPE B (CA-6)

CONCRETE BASE

2 - #4 EPOXY COATED
 REBARS (CONTINUOUS)

8" CONCRETE CROSSWALK

NO. 4 X 18" EPOXY COATED
 TIE BARS @ 24" CENTERS,
 EACH SIDE (STAGGERED
 AT 12" CENTERS)



3" AGGREGATE BASE
 COURSE. TYPE B (CA-6)

CONCRETE BASE

2 - #4 EPOXY COATED
 REBARS (CONTINUOUS)

12" CONCRETE BORDER

UNIT PAVERS OVER RIGID BASE 2 OF 2

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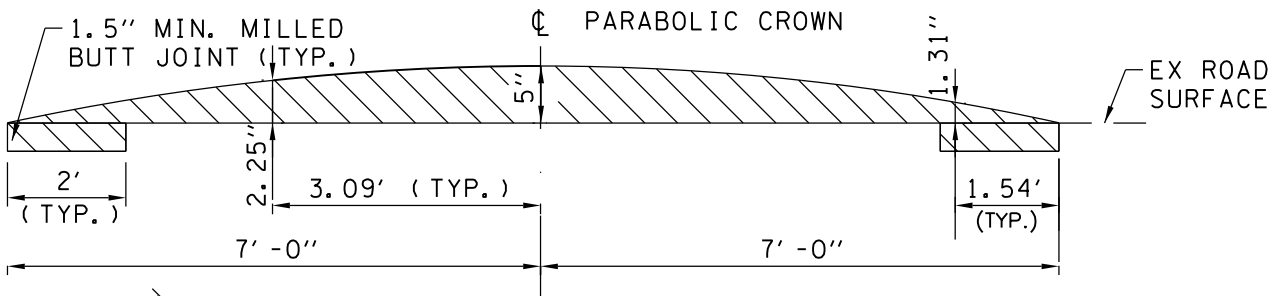
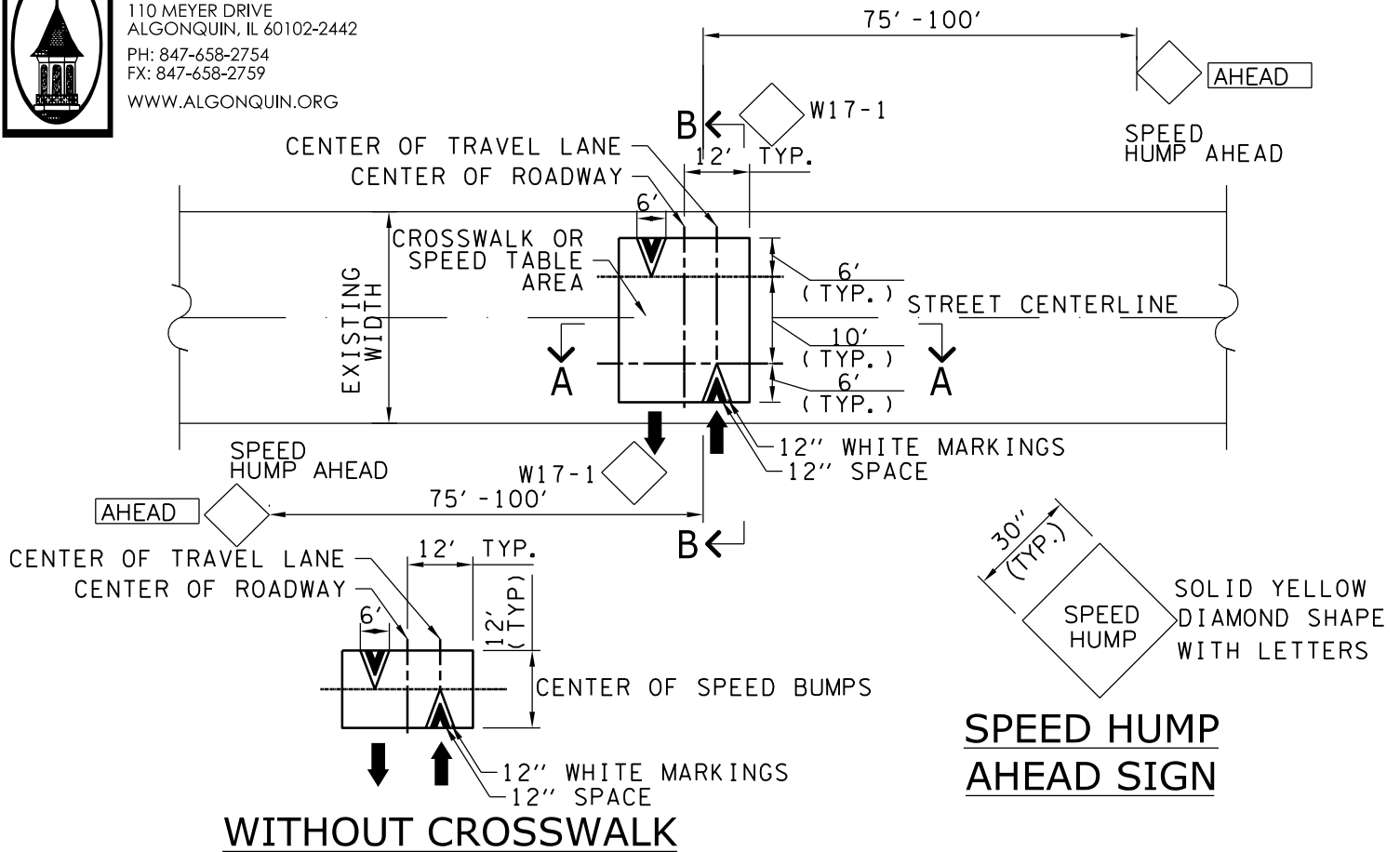
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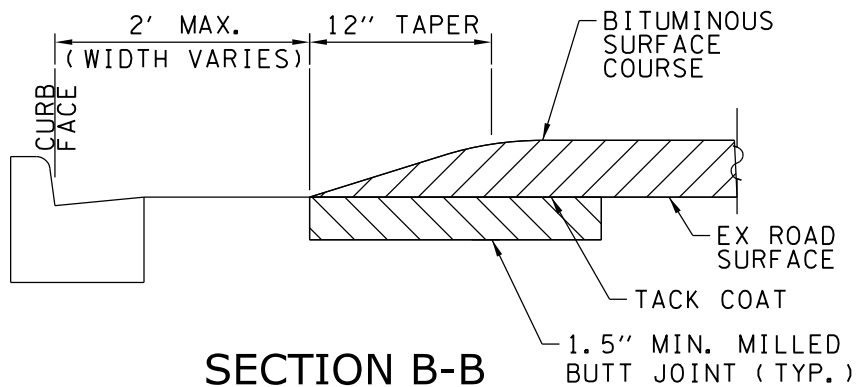
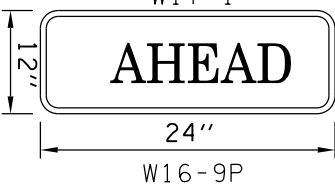
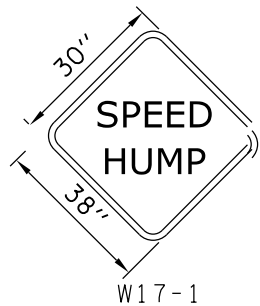
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SECTION A-A



SECTION B-B

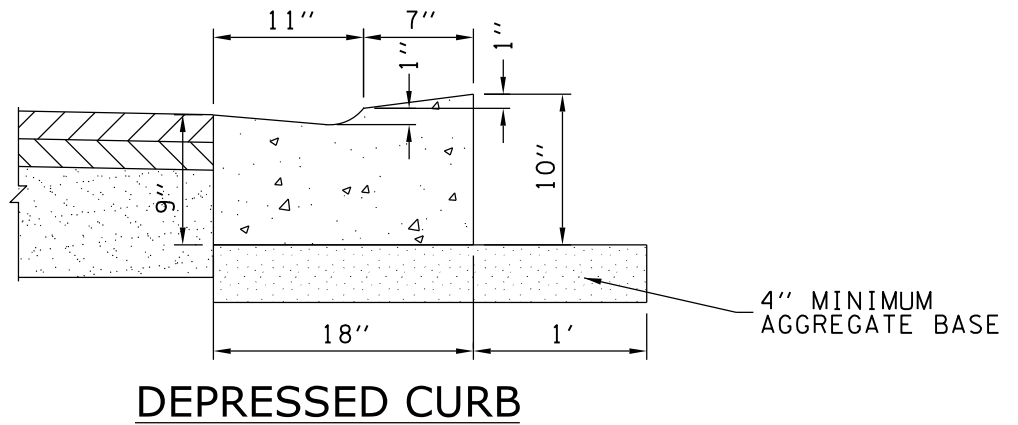
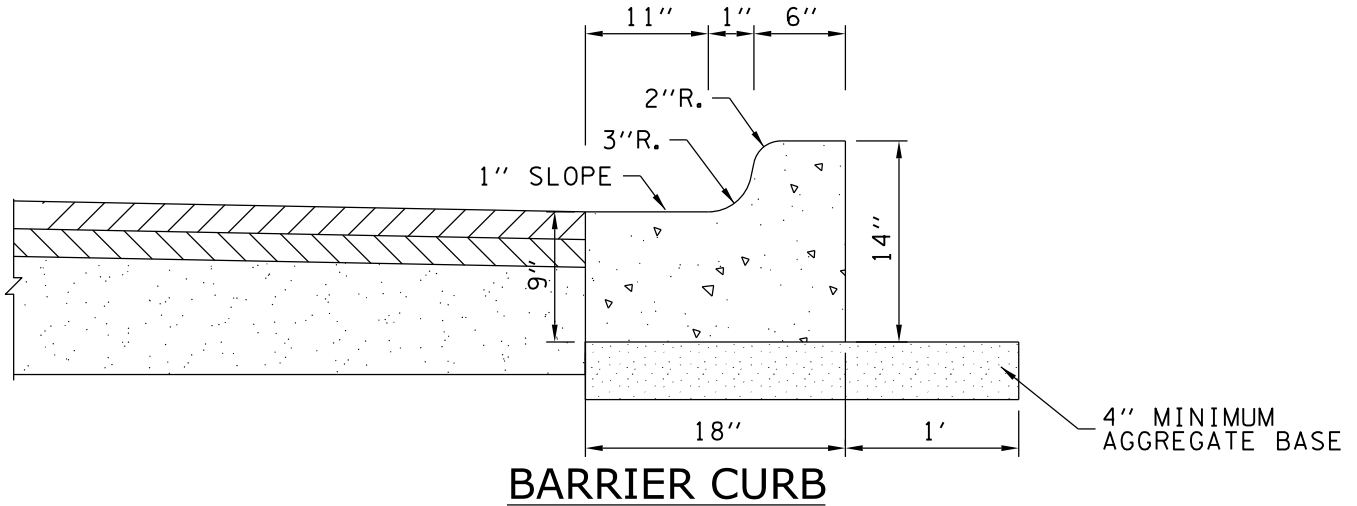
NOTE

- ON NON-CURB ROADS SPEED HUMPS WILL SPAN FROM ROAD EDGE TO ROAD EDGE WITH A MILLED BUTT JOINT ALONG EACH EDGE

SPECIAL USE ONLY	
SPEED HUMP	
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VILLAGE OF ALGONQUIN
 PUBLIC WORKS DEPARTMENT
 110 MEYER DRIVE
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NOTES:

1. EXPANSION JOINTS SHALL BE CONSTRUCTED ACCORDING TO EXPANSION JOINT DETAIL.
2. CONSTRUCTION JOINTS SHALL BE SAWCUT TO A DEPTH OF 1/2 THICKNESS OF CURB EVERY 10 FEET (MAXIMUM).
3. CONCRETE SHALL BE IDOT CLASS PV 3500 PSI@ 14 DAYS, 3" SLUMP, 6% AIR ENTRAINED.
4. PROTECTIVE COAT SHALL BE APPLIED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATION 420.18 AS DIRECTED BY THE VILLAGE.
5. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

B6.12 CURB & GUTTER

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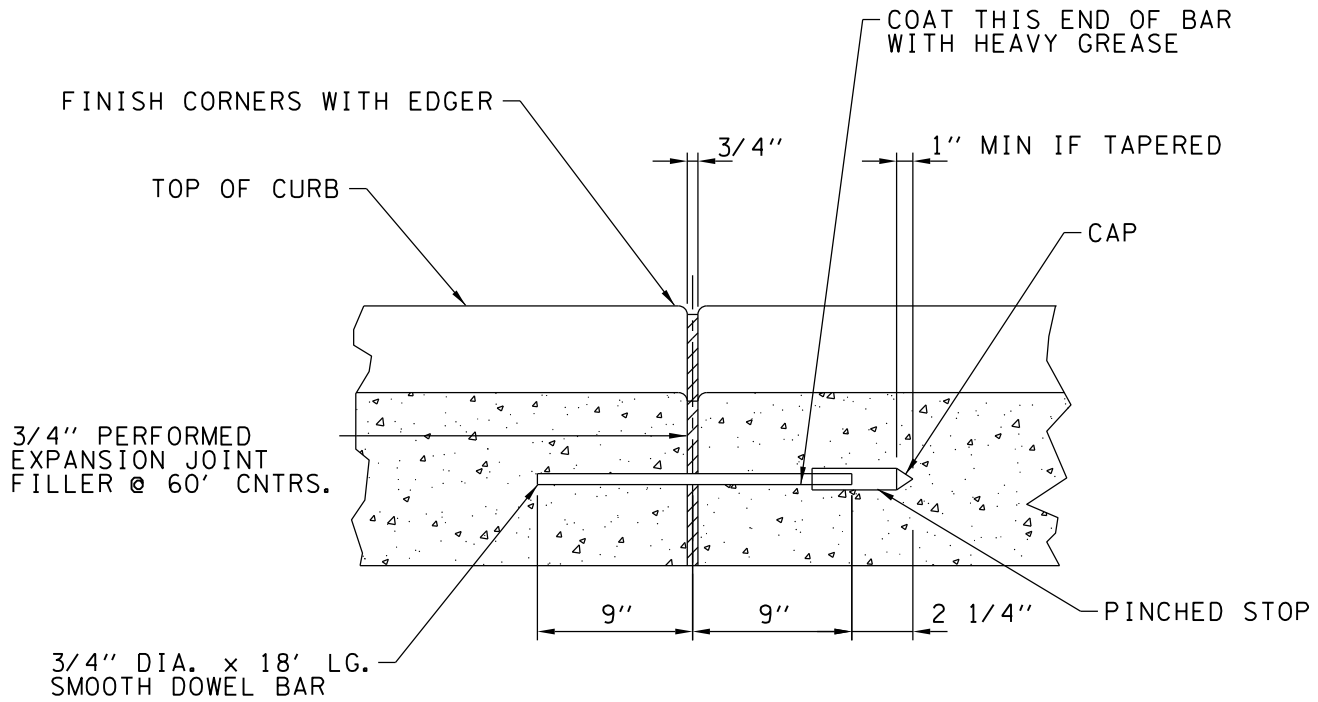
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NOTES:

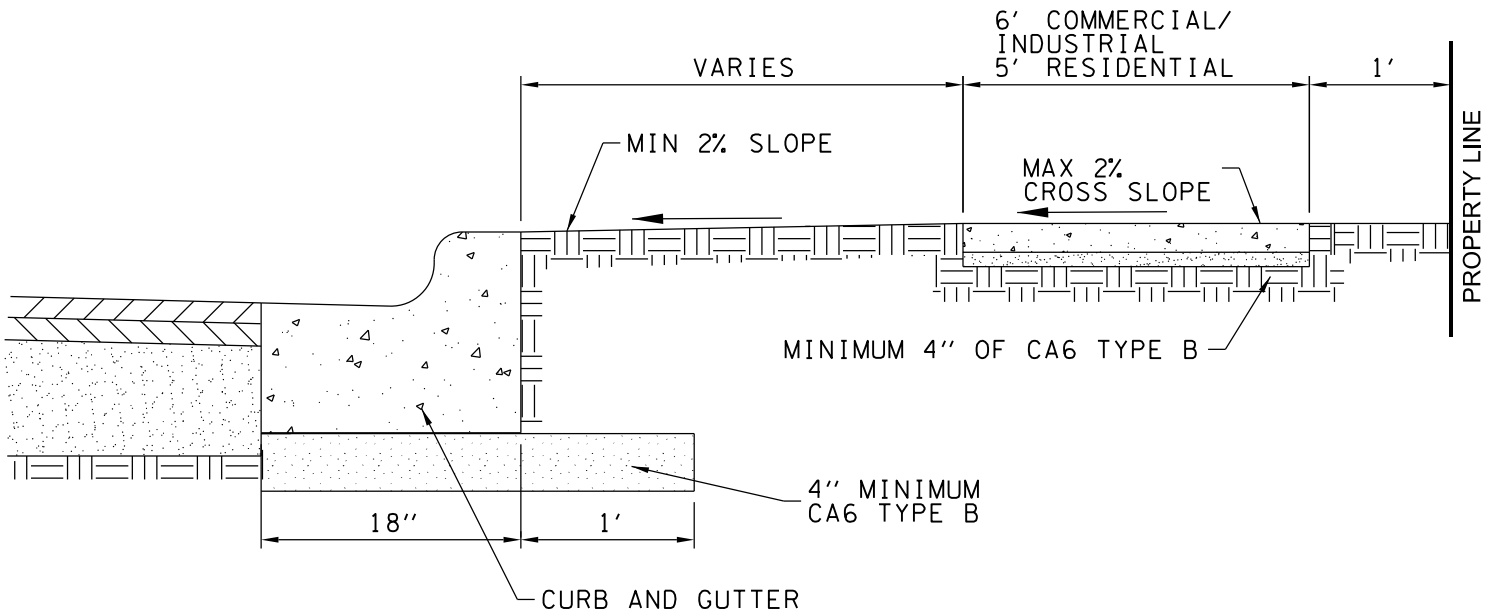
1. ALL EXPANSION JOINTS SHALL BE PROVIDED WITH (2) 3/4" DIA. X 18" LONG COATED SMOOTH DOWEL BAR CONFORMING TO ARTICLE 442.06 OF THE IDOT STANDARD SPECIFICATIONS. THE DOWEL BAR SHALL BE FITTED WITH A CAP HAVING A PINCHED STOP THAT WILL PROVIDE 1" OF EXPANSION.
2. EXPANSION JOINTS SHALL BE CONSTRUCTED AT 60 FOOT INTERVALS, AT ALL POINTS OF TANGENCY, AT THE END OF EACH DAYS PLACEMENT, OR 5' ON EITHER SIDE OF A STRUCTURE CASTING THAT FALLS WITHIN THE CURB LINE.

CURB EXPANSION JOINT	
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... \Curb Expansion.dgn



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NOTES:

1. THE CONCRETE SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 424 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. THE CONCRETE SHALL CONFORM TO SECTION 1020 CLASS PV AND SHALL BE A HAVE A 3-INCH SLUMP AND SHALL DEVELOP A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT 14 DAYS.
3. SIDEWALK SHALL BE 5" THICK (MINIMUM). THE SIDEWALK PORTION OF THE DRIVEWAY SHALL MATCH THE DEPTH OF THE DRIVEWAY AND BE POURED SEPARATELY.
4. NO CHLORIDE ADDITIVE WILL BE PERMITTED IN THE CONCRETE.
5. ALL SIDEWALKS MUST CONFORM TO THE AMERICANS WITH DISABILITIES ACT. THE MAXIMUM ALLOWABLE RUNNING SLOPE IS 1:20.
6. TOOLED CONTROL JOINTS SHALL BE INSTALLED ON 5' CENTERS.
7. FIBER EXPANSION JOINTS SHALL BE INSTALLED AT 50' CENTERS MAX AND WHERE THE SIDEWALK ABUTTS CURB OR EXISTING SIDEWALK, AND AT THE END OF EACH POUR.
8. THE SIDEWALK SHALL HAVE A BROOM FINISH.
9. A PROTECTIVE SURFACE TREATMENT CONSISTENT TO IDOT ARTICLE 420.21 SHALL BE APPLIED.

SIDEWALK

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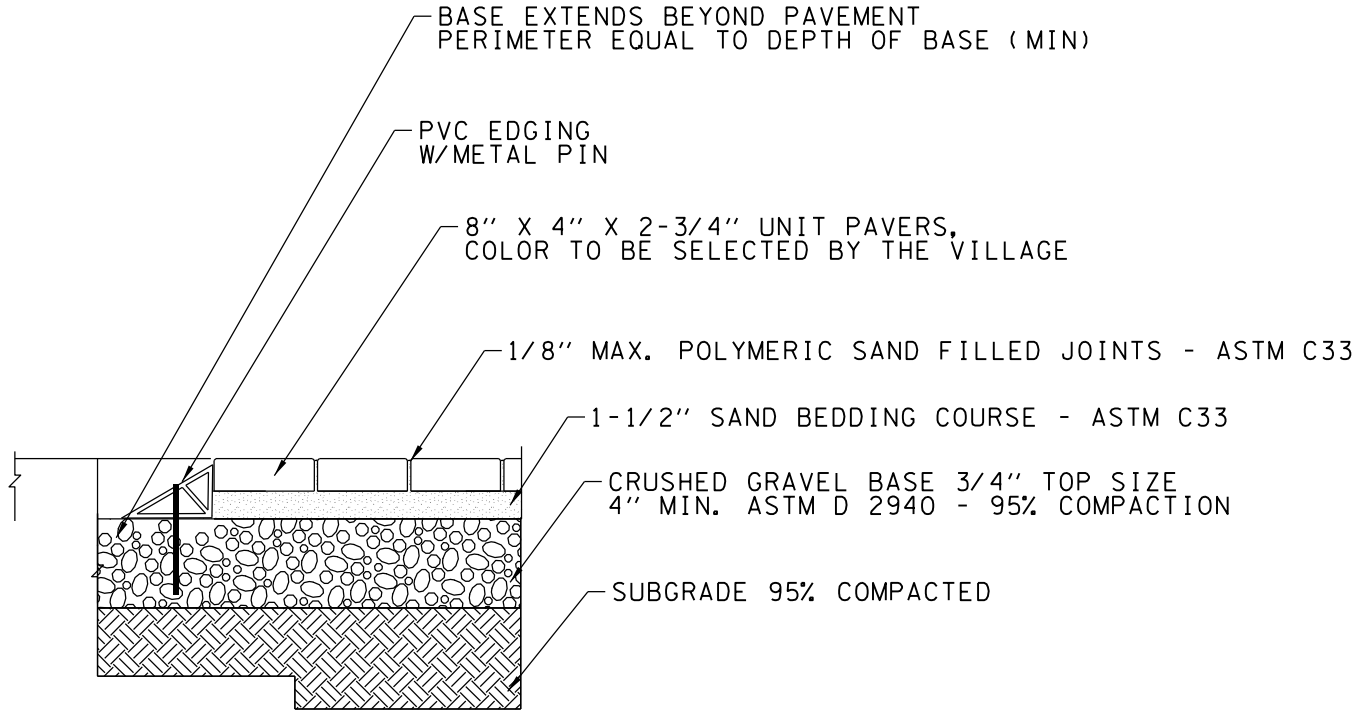
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NOTES:

1. GRADING REQUIREMENTS FOR BEDDING AND JOINT SAND

SIEVE SIZE	PERCENT PASSING
3/8 IN	100
NO. 4	95 TO 100
NO. 8	80 TO 100
NO. 16	50 TO 85
NO. 30	25 TO 60
NO. 50	10 TO 30
NO. 100	2 TO 10

2. SEE VOA APPROVED PRODUCTS LIST FOR MANUFACTURER & MODEL NUMBERS.

UNIT PAVERS SIDEWALK

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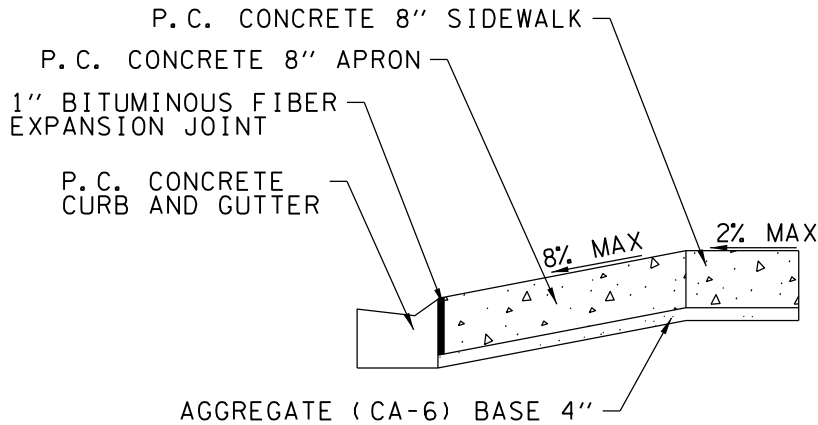
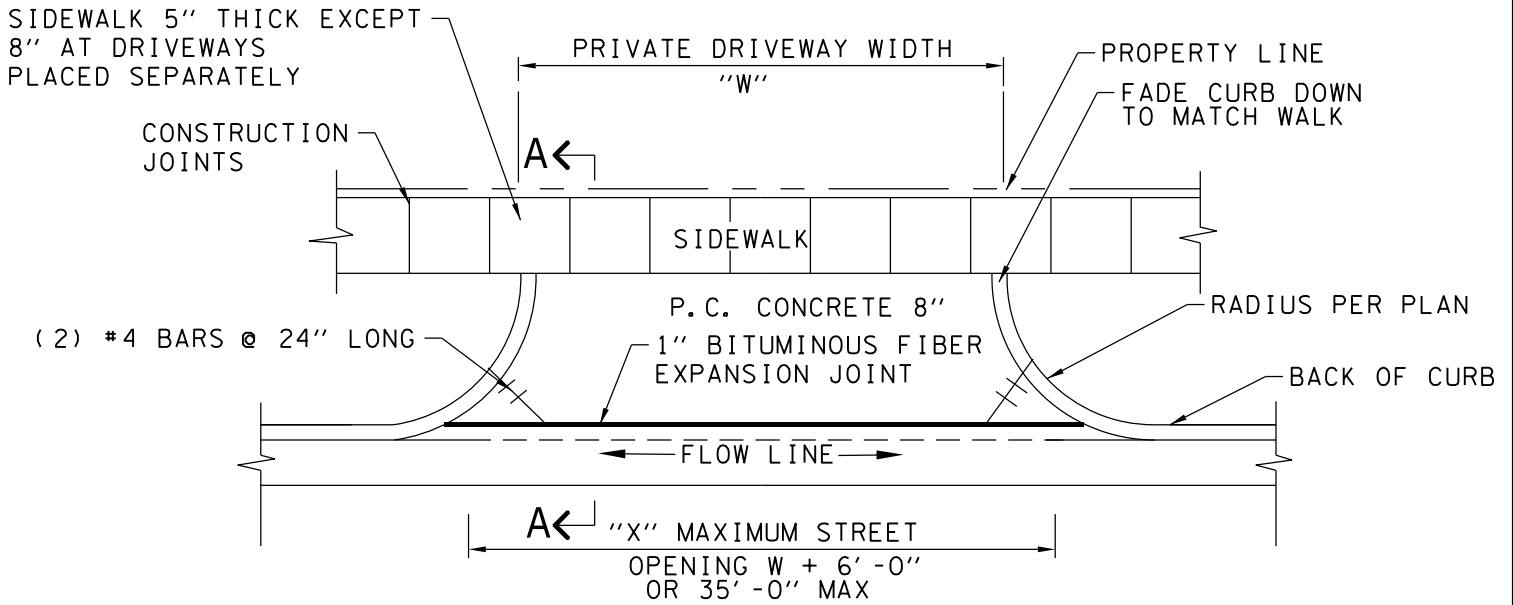
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SECTION A-A

NOTES:

1. PORTLAND CEMENT CONCRETE SHALL CONFORM TO IDOT CLASS PV, 3500 PSI @ 14 DAYS, SLUMP 3", AND 6% AIR ENTRAINMENT.
2. CONSTRUCTION JOINTS SHALL BE PLACED IN A UNIFORM MANNER THAT ALLOWS NO SINGLE SLAB TO BE MORE THAN A 10' X 10' SECTION.
3. WHERE THE PROPOSED ENTRANCE IS FRONTED BY BARRIER CURB OR THERE IS A DESIRE TO CHANGE A PORTION OF THE EXISTING CURB AND GUTTER CROSS SECTION, THE HEAD OF THE CURB SHALL BE REMOVED BY SAWCUT. TRANSITION FROM FULL TO DEPRESSED CURB SHALL BE ACCOMPLISHED IN A MINIMUM OF ONE LINEAL FOOT.
4. A MINIMUM OF FOUR (4) INCHES OF CA-6, TYPE B MUST BE PLACED AND COMPACTED PRIOR TO CONCRETE PLACEMENT.
5. APRON IS TO BE PLACED SEPARATELY FROM SIDEWALK AND CURB.

COMMERCIAL / INDUSTRIAL APRON

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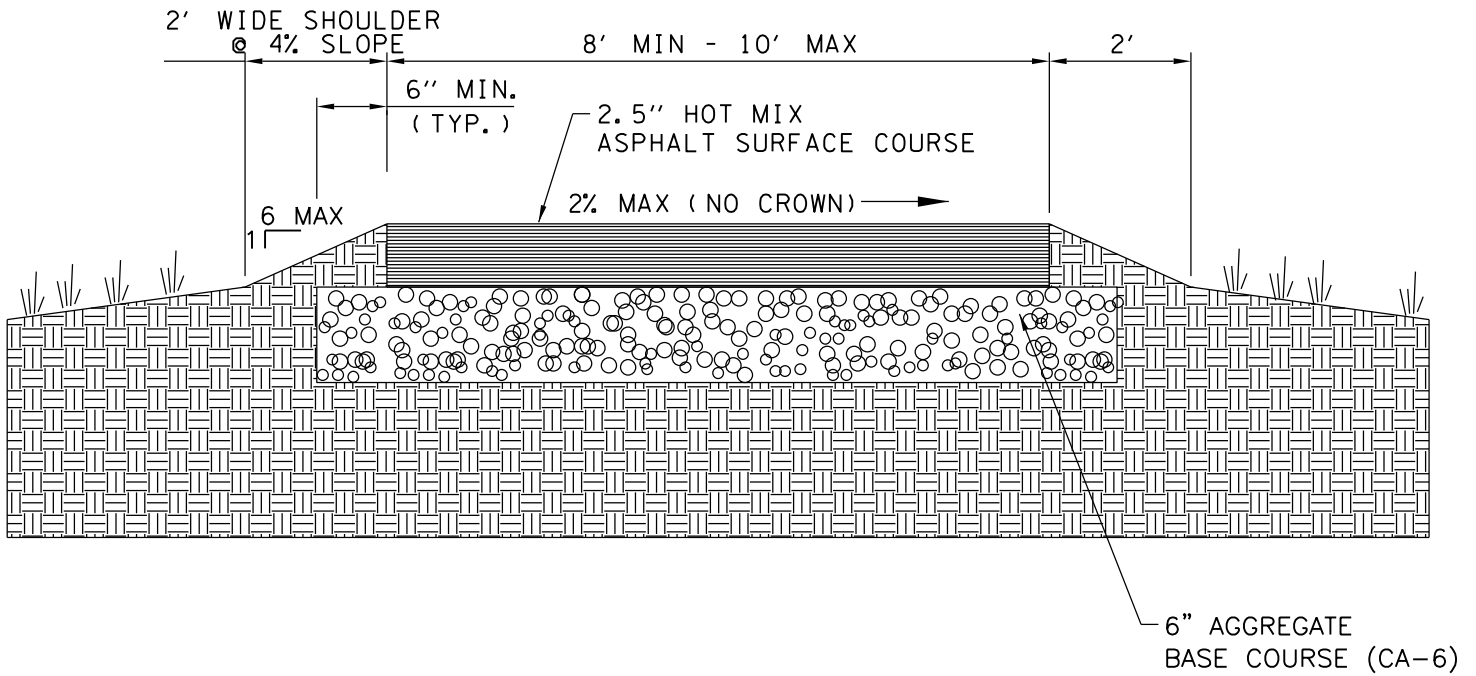
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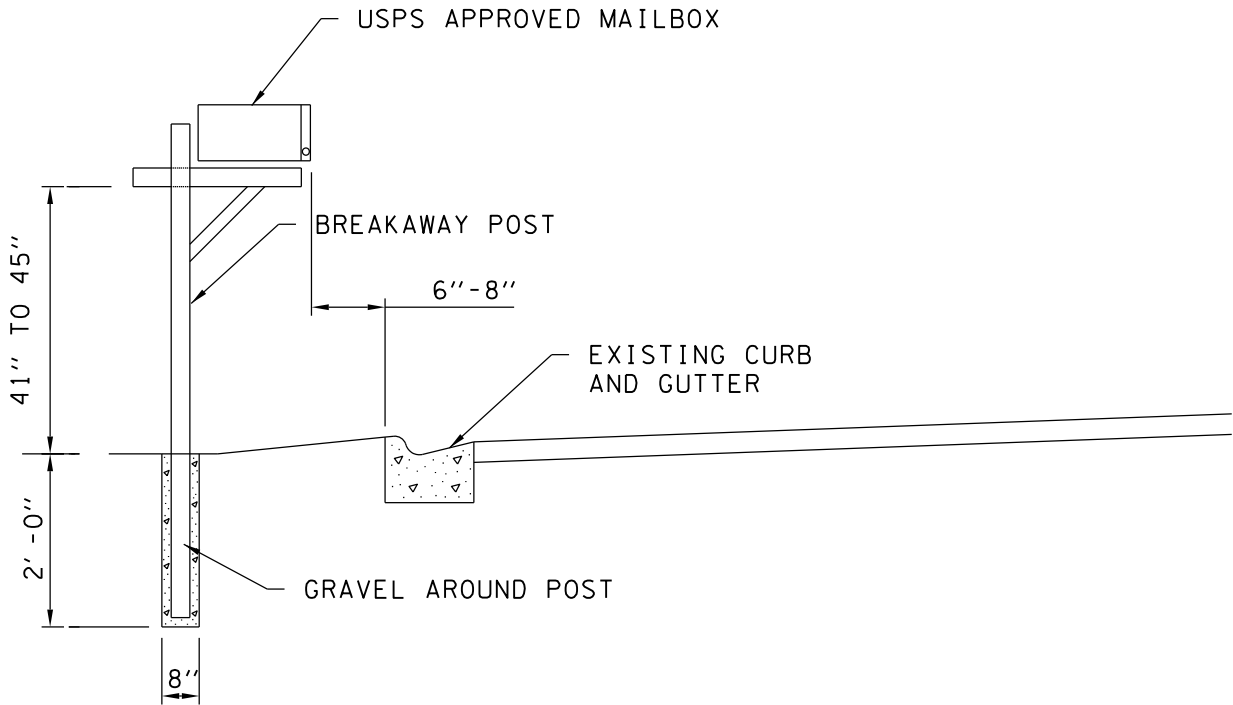


...\\BITUMINOUS MULTI USE PATH.dgn

BITUMINOUS MULTI USE PATH	
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NOTES:

1. ADDRESS NUMBER SHALL BE CLEARLY LABELED ON MAILBOX DOOR.
2. ALL MAILBOX POSTS AND HORIZONTAL SUPPORT ARMS SHALL BE MADE OF 4"X4" CHEMICALLY TREATED LUMBER. POSTS AND SUPPORT ARMS SHALL BE ATTACHED USING GALVANIZED SCREWS.
3. MAILBOX POSTS SHALL NOT BE REINFORCED OR FORTIFIED SO AS TO PREVENT OR HAMPER ITS DESTRUCTION UPON BEING STRUCK BY THE VEHICLE.
4. NO MASONRY OR STONE MAILBOX ENCLOSURES ARE ALLOWED.

DOMESTIC MAILBOX

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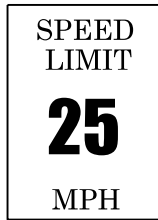
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STREET NAME SIGNAGE



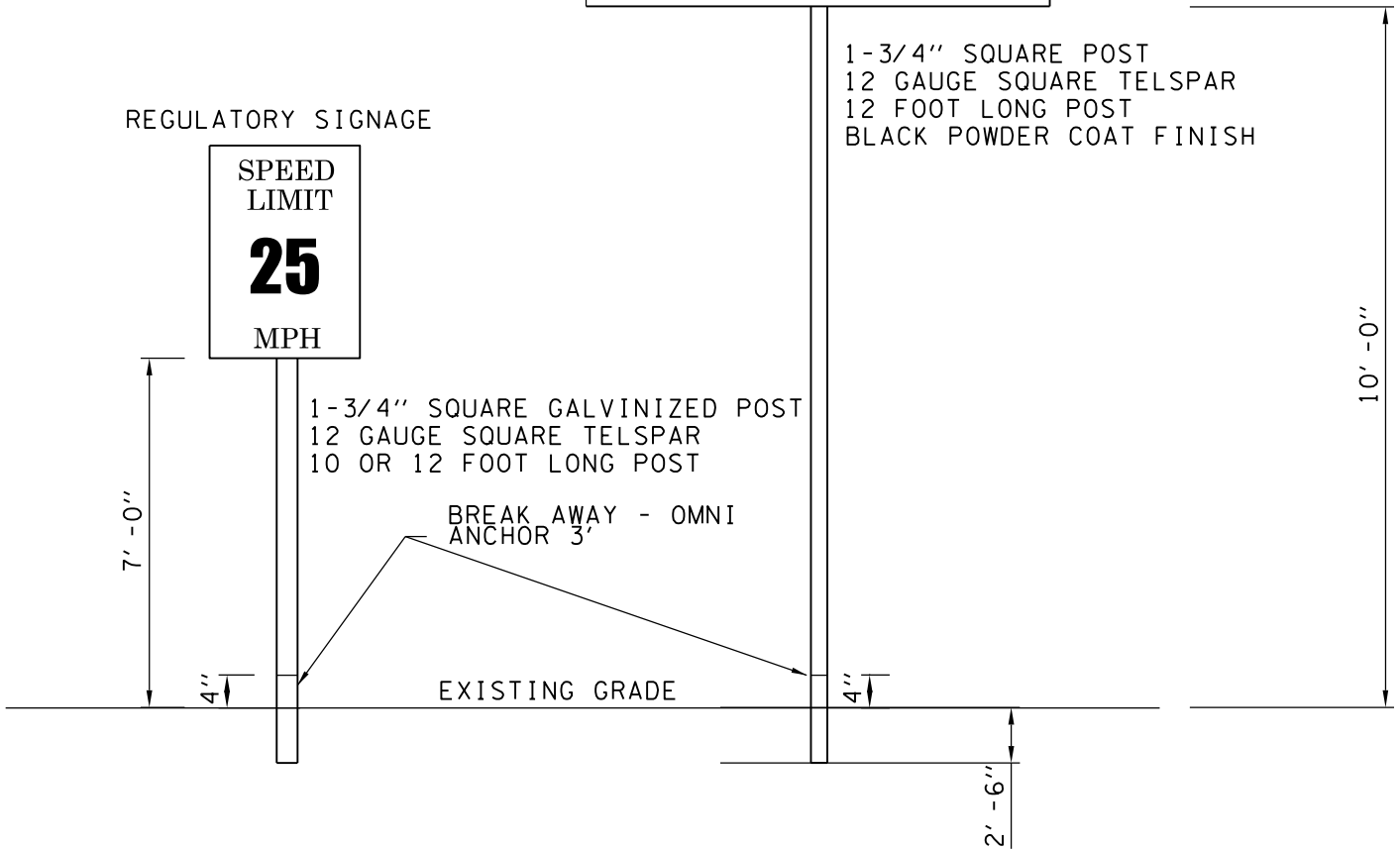
1-3/4" SQUARE POST
 12 GAUGE SQUARE TELSPAR
 12 FOOT LONG POST
 BLACK POWDER COAT FINISH

REGULATORY SIGNAGE



1-3/4" SQUARE GALVINIZED POST
 12 GAUGE SQUARE TELSPAR
 10 OR 12 FOOT LONG POST

BREAK AWAY - OMNI
 ANCHOR 3'



NOTES:

1. ALL SIGNAGE IS TO BE PLACED 3 (THREE) FEET BEHIND BACK OF CURB OR EDGE OF SHOULDER.
2. ALL SIGNS ARE TO BE FACED CORRECTLY.
3. ALL SIGNS SHALL BE CLEAN AND READABLE.
4. ALL EXISTING SIGNAGE SHALL BE INSTALLED IN SOME FASHION AT THE END OF EACH WORKING DAY.
5. ALL SIGNS SHALL MEET THE M. U. T. C. D. CODE.
6. ALL SIGNS ARE TO BE MADE OF DIAMOND GRADE REFLECTIVE SHEETING.
7. WHERE THERE IS A SHOULDER SIGN SHOULD BE 11' FROM PAVEMENT EDGE.

STREET SIGNAGE

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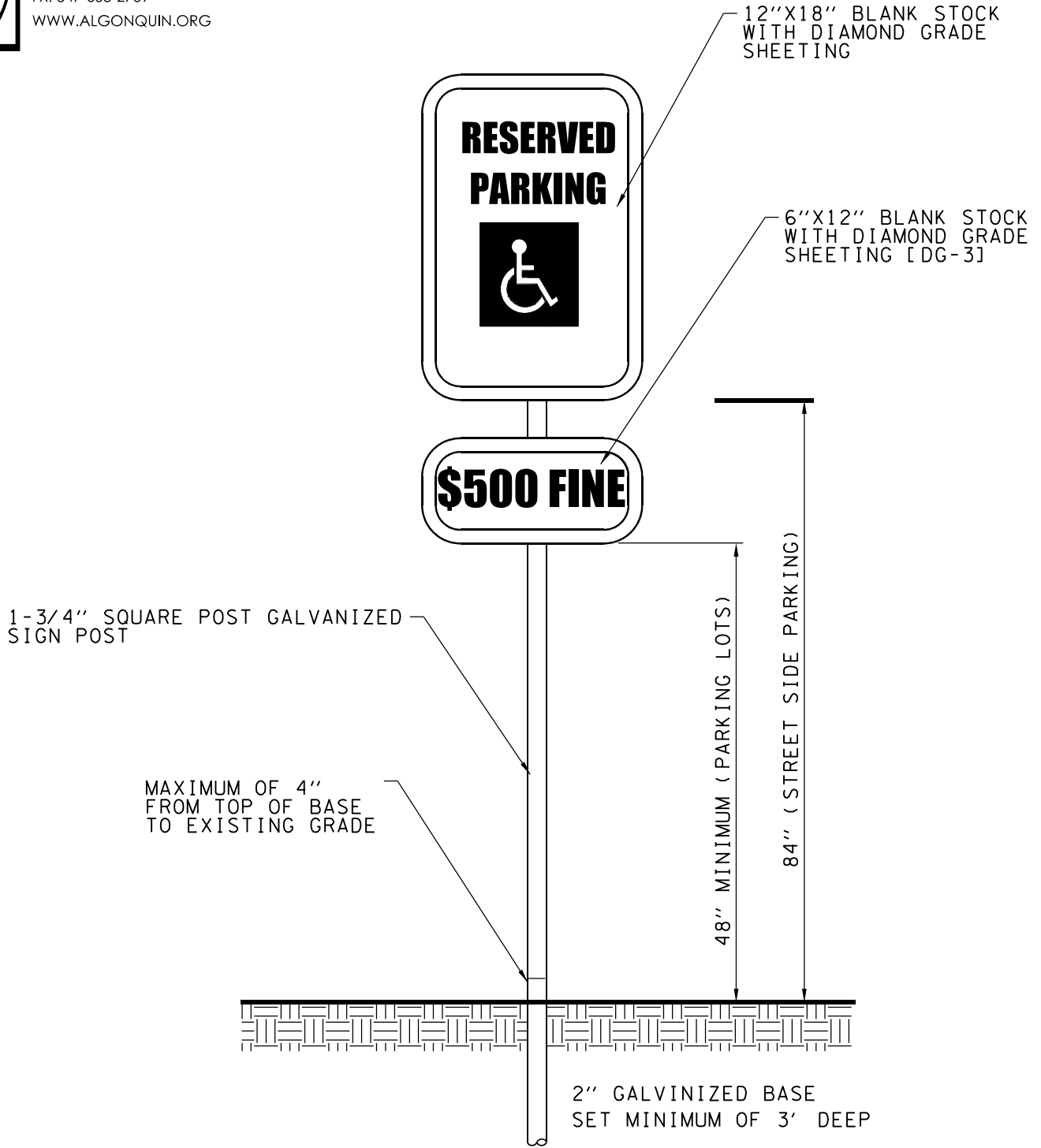
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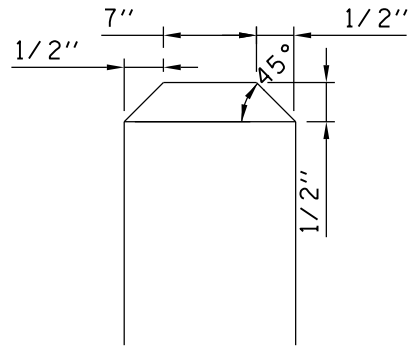


ACCESSIBLE SIGNAGE	
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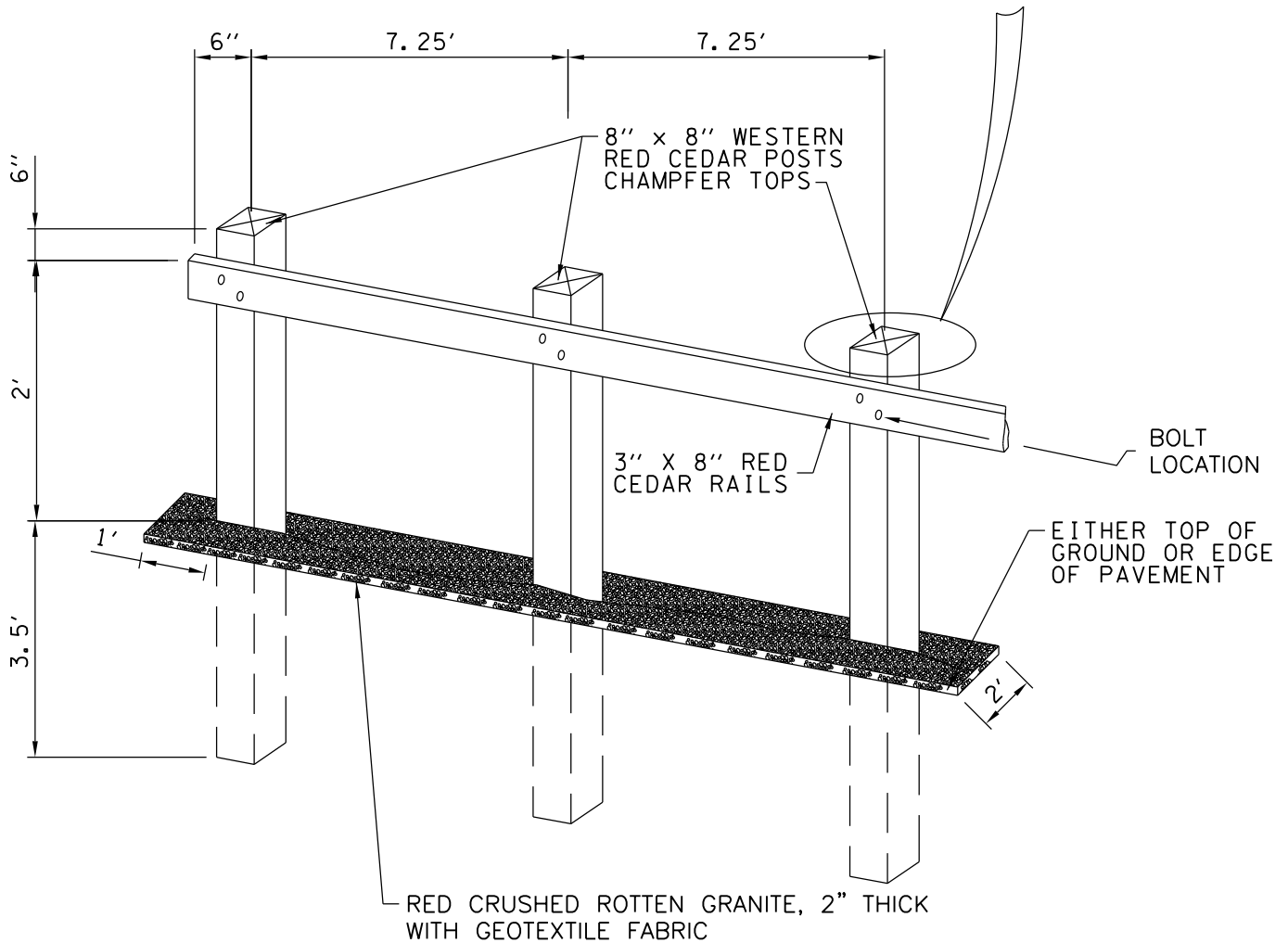
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CHAMBER DETAIL



NOTES:

1. INSTALLATION TO INCLUDE ALL POSTS SET IN 42" CONCRETE ENCASEMENT.
2. ALL RAILS SHALL BE BOLTED WITH 12" LONG GALVANIZED CARRIAGE BOLTS, NUTS, AND WASHERS COATED WITH ANTI-SEIZE LUBRICANT; BOLT DIAMETER 1/2". NUTS AND BOLTS TO BE COUNTERSUNK INTO THE BACK OF UPRIGHT POSTS AND FLUSH WITH THE SURFACE.

RED CEDAR RAIL

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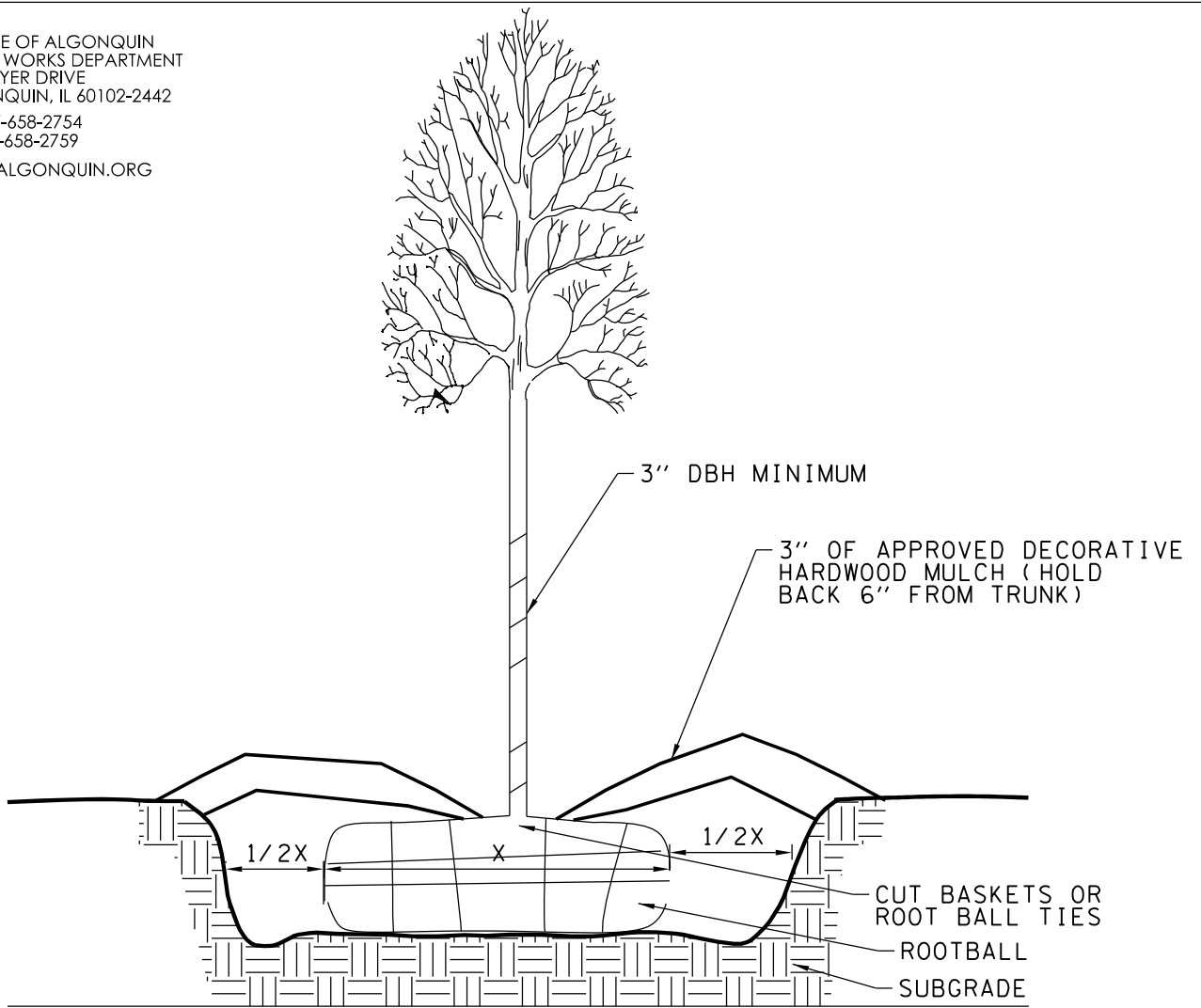
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...\\Cedar Guard Rail.dgn



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NOTES:

1. ALL PARKWAYS WITHIN THE DEDICATED STREET AREA OR OTHER PUBLIC USE AREAS SHALL BE GRADED WITH SIX INCHES (6") OF TOPSOIL AND SEEDED OR SODDED IN AN APPROVED MANNER.
2. A LIST OF THE APPROVED TREE SPECIES IS AVAILABLE FROM THE PUBLIC WORKS DEPARTMENT.
3. THERE WILL BE NO MORE THAN TWENTY (20%) PERCENT OF ANY SPECIES . MORE THAN TEN (10%) PERCENT OF ANY GENUS.
4. TREES SHALL BE BALLED AND BURLAPED AND GROWN ACCORDING TO GOOD NURSERY PRACTICES AS SPECIFIED IN THE ARBORICULTURAL SPECIFICATIONS MANUAL. SYNTHETIC BURLAP AND ROPE PRODUCTS SHALL NOT BE USED.
5. ALL TREES SHALL BE PLANTED IN A PLUMB POSITION, WITH THE BASAL FLARE RESIDING AT GRADE OR SLIGHTLY ABOVE. STAKING OF THE TREES SHALL ONLY BE PERFORMED IF NECESSARY. STAKES WILL REMAIN ON THE SPECIMENS FOR NO LONGER THAN ONE (1) YEAR.
6. NO SOIL AMENDMENTS SHALL BE ALLOWED.
7. 3" OF APPROVED DECORATIVE MULCH WILL BE INSTALLED AT THE TIME OF PLANTING (OVER THE ENTIRE ROOT ZONE).

TREE PLANTING

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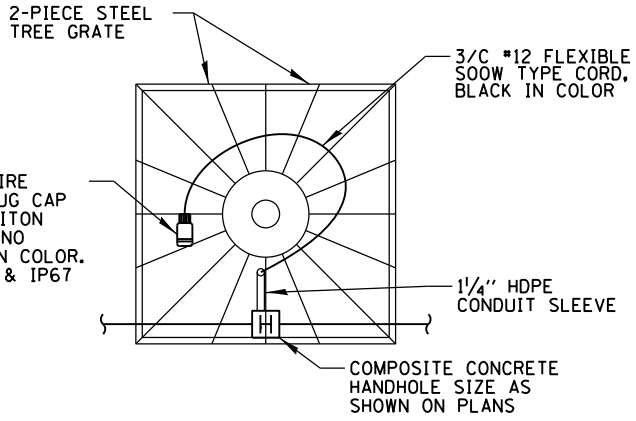
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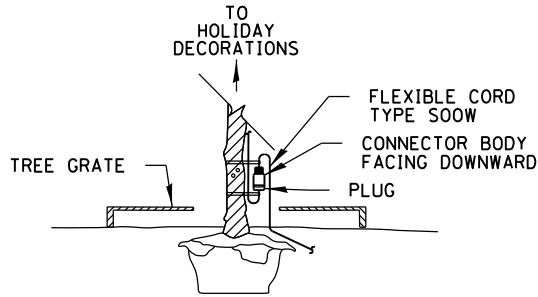


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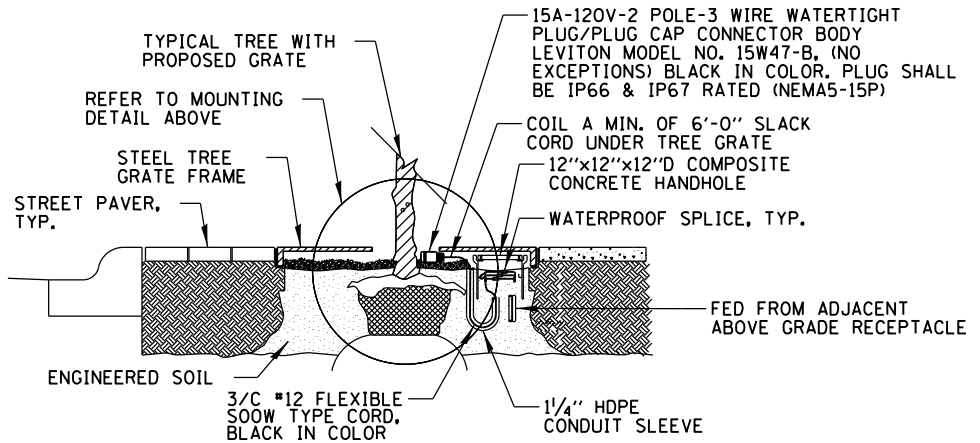
15A-120V-2 POLE-3 WIRE
 WATERTIGHT PLUG/PLUG CAP
 CONNECTOR BODY LEVITON
 MODEL NO. 15W47-B, (NO
 EXCEPTIONS) BLACK IN COLOR.
 PLUG SHALL BE IP66 & IP67
 RATED (NEMA5-15P)



PLAN VIEW



MOUNTING DETAIL FOR IN USE SERVICE



NOTES:

1. THE PROPOSED WATERTIGHT CORD CONNECTORS SHOWN SHALL BE USED IN CONJUNCTION WITH ONLY CORRESPONDING LEVITON WATERTIGHT PLUG MODEL NO. 14W47-B, (NO EXCEPTIONS) BLACK IN COLOR, RATED IN-USE PER NEC.
2. CONTRACTOR SHALL SUPPLY SEPARATE CORD SET, 10 FT. IN LENGTH AND BLACK IN COLOR, WITH MATCHING CONNECTOR ENDS (ONE END W/ PLUG AND ONE END W/ RECEPTACLE).
3. ALL MATERIAL & LABOR TO PERFORM THE WORK SHOWN ABOVE SHALL BE INCLUDED IN UNIT PRICE FOR "OUTLET SPECIAL". HANDHOLE SHALL BE PAID FOR SEPARATELY.
4. ALL TREE GRATE RECEPTACLES SHALL BE GFI PROTECTED THRU ADJACENT ABOVE GRADE GFI RECEPTACLE IN RAISED PLANTERS AS SHOWN ON PLAN DRAWINGS.

URBAN TREE PLANTING WELL WITH ELECTRICAL OUTLET

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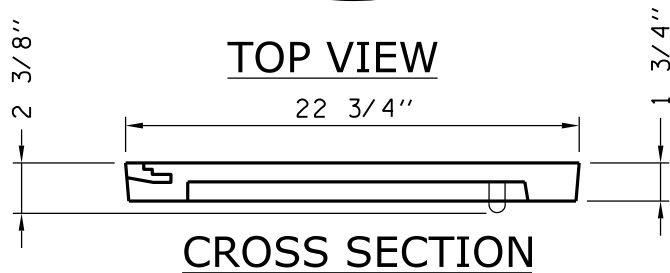
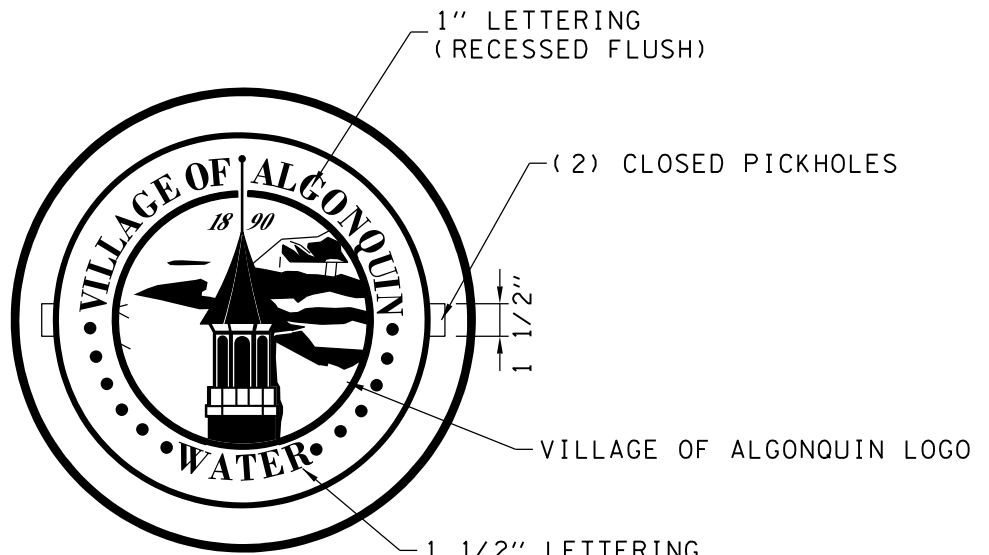
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NOTES:

1. ALL LIDS SHALL HAVE SELF-SEALING GASKETS.
2. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

MANHOLE COVER W/LOGO

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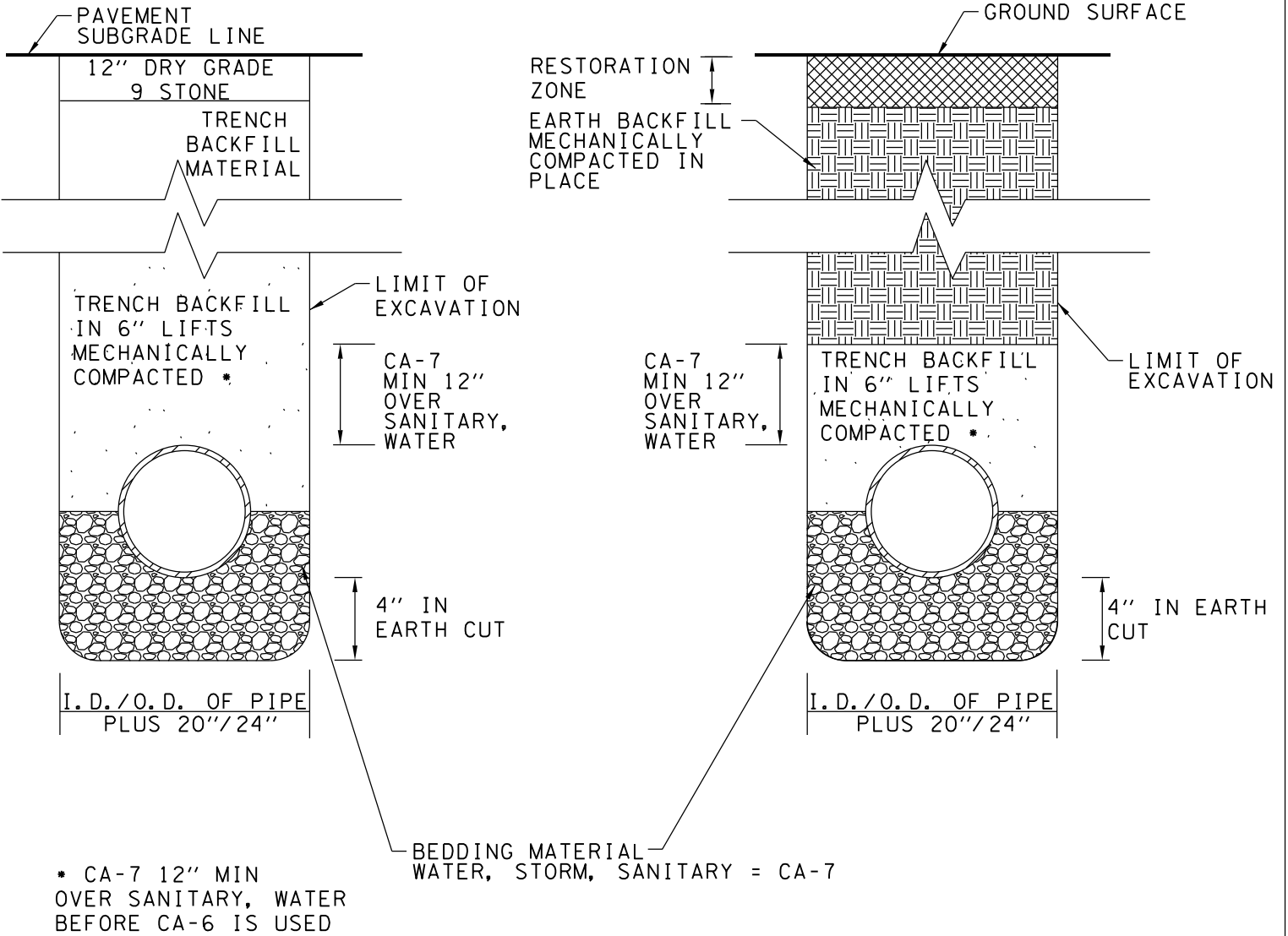
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MINIMUM TRENCH WIDTH
 PAY LINE: PIPE SIZES UP TO 24",
 USE I.D. PLUS 20"
 OVER 24", USE O.D. PLUS 24"

MINIMUM TRENCH WIDTH
 PAY LINE: PIPE SIZES UP TO 24",
 USE I.D. PLUS 20"
 OVER 24", USE O.D. PLUS 24"

IN PAVED AREA

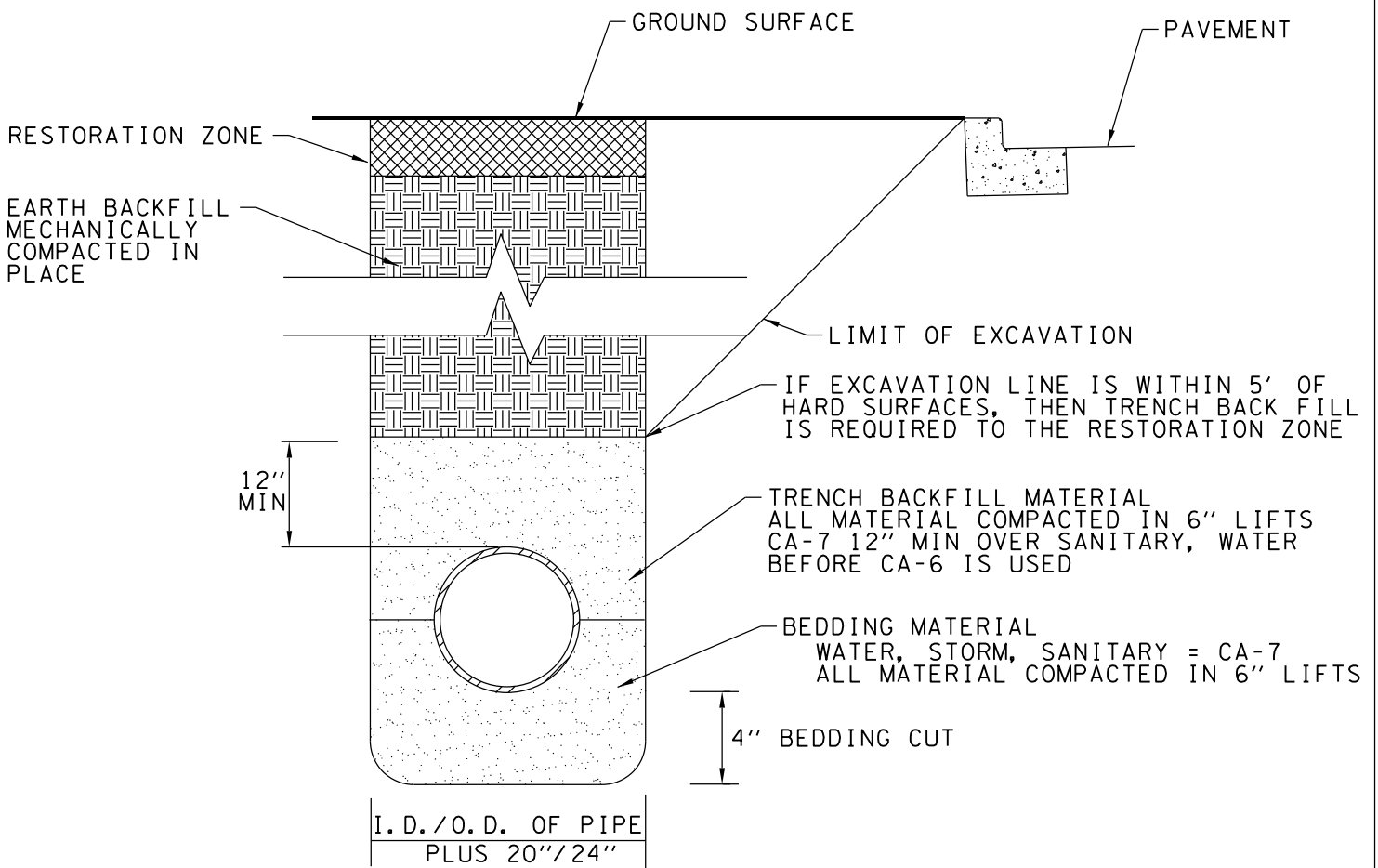
IN UNPAVED AREA

TRENCH SECTIONS	
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...Trench Sections.dgn



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MINIMUM TRENCH WIDTH PAY LIMITS: PIPE SIZES UP TO 24", USE I. D. PLUS 20"
 OVER 24", USE O. D. PLUS 24"

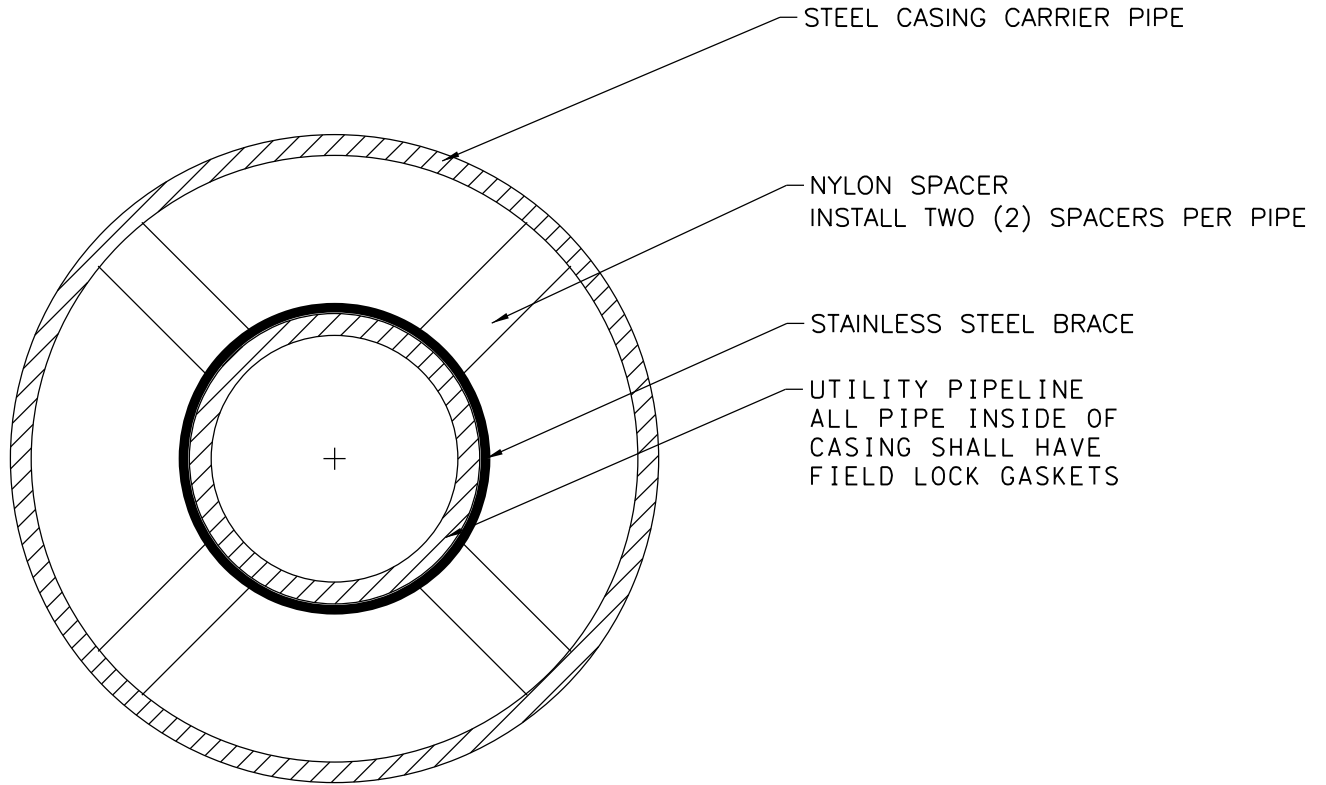
HARD SURFACE IS DEFINED AS BUT NOT LIMITED TO:
 STREETS, LOTS, CONCRETE, ASPHALT, CURB AND UTILITY ACCESS DRIVES

TRENCH ADJACENT TO HARD SURFACES EXISTING OR PROPOSED	
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...Trench Adjacent to Pavement.dgn



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NOTES:

1. CASING PIPE SHALL BE MADE OF STEEL OF MINIMUM THICKNESS OF $1/2$ INCH WITH MINIMUM YIELD STRENGTH OF 35,000 PSI CONFORMING TO ASTM A139 GRADE A WITH CONTINUOUS FIELD WELDED BUTT JOINTS IN CONFORMANCE WITH AWWA C206.
2. ENDS OF CASING PIPE SHALL HAVE A PREFORMED RUBBER SEAL.
3. ALL CARRIER PIPES INSIDE OF CASING SHALL HAVE RESTRAINED JOINTS.
4. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

CASING PIPE

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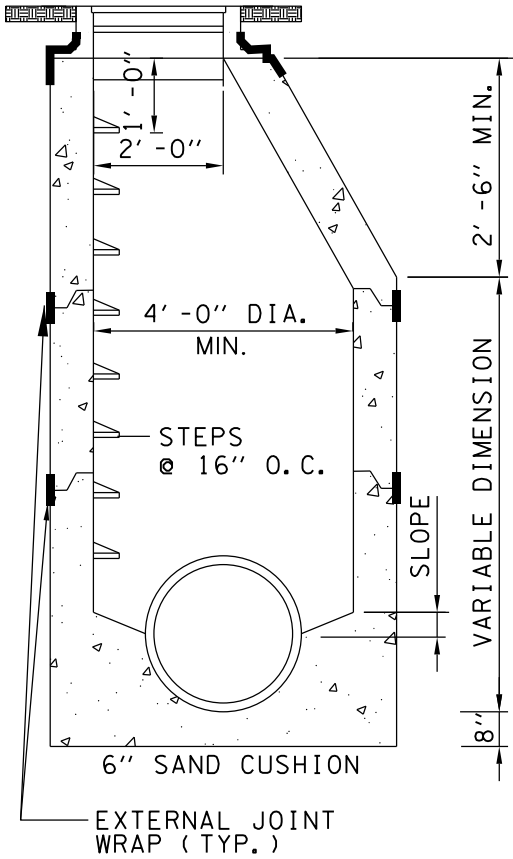
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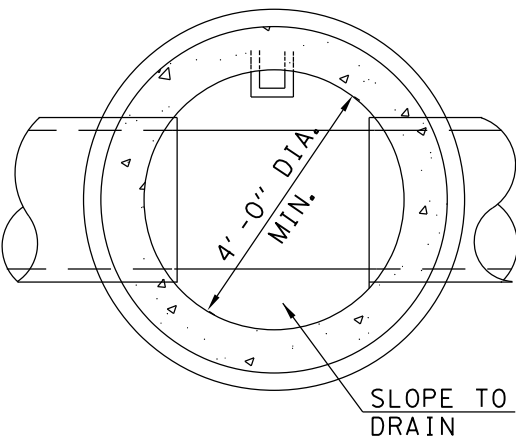


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NOTES:



PROFILE VIEW



PLAN VIEW

1. STRUCTURE SHALL BE PRECAST REINFORCED CONCRETE WITH MINIMUM WALL THICKNESS OF 5" FOR 4'-0" INSIDE DIAMETER AND 6" FOR 5'-0" INSIDE DIAMETER STRUCTURES.
2. STRUCTURES SHALL BE 4'-0" INSIDE DIAMETER FOR MAIN SEWER 18" DIAMETER AND LESS, AND STRUCTURE DEPTH OF 20' OR LESS. STRUCTURES SHALL BE 5'-0" INSIDE DIAMETER FOR MAIN SEWER 21" DIAMETER AND LARGER, AND STRUCTURE DEPTH MORE THAN 20'.
3. STRUCTURE BOTTOMS SHALL BE PRECAST REINFORCED CONCRETE WITH FIRST VERTICAL SECTION PRECAST INTEGRALLY WITH IT.
4. ALL EXTERIOR SURFACES OF STRUCTURE SHALL HAVE A FACTORY APPLIED BITUMINOUS COATING.
5. ALL JOINTS BETWEEN PRECAST ELEMENTS, ADJUSTING RINGS, AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT. BARREL SECTIONS SHALL BE SEALED USING EITHER A BUTYL RUBBER JOINT SEALANT OR A RUBBER GASKET. A 9" WIDE POLYETHYLENE EXTERNAL SEAL SHALL BE APPLIED TO ALL STRUCTURE JOINTS.
6. STRUCTURE STEPS SHALL BE MADE OF STEEL REINFORCED PLASTIC USING AN APPROVED PLASTIC MEETING ASTM D4101, TYPE 11, GRADE 49108, OVER #3 GRADE 60, ASTM AG15 REINFORCING BAR. STEPS SHALL BE AT 16" CENTERS.
7. A MAXIMUM OF TWO (2) ADJUSTMENT RINGS FOR A MAXIMUM ADJUSTMENT OF 8" IS ALLOWED. THE TOP ADJUSTMENT RING SHALL BE MADE OF RECYCLED RUBBER WHEN THE STRUCTURE IS INSTALLED IN A PAVED TRAFFIC AREA.
8. EXTERNAL CHIMNEY SEALS SHALL BE INSTALLED WHICH SHALL CAPTURE AT LEAST 4" OF THE STRUCTURE FRAME, ALL OF THE ADJUSTING RINGS, AND 4" OF THE UPPER CONE SECTION.
9. STRUCTURE LID SHALL HAVE A 1" CONCEALED PICKHOLE AND HAVE THE WORD "SANITARY" AND VILLAGE LOGO CAST INTO IT.
10. THE RIM ELEVATION FOR STRUCTURES WITHIN THE FLOODPLAIN MUST BE SET 24" ABOVE THE BASE FLOOD ELEVATION. FRAME AND LID MUST BE WATER-TIGHT LOCK DOWN.
11. PIPE CONNECTIONS SHALL BE MADE WITH THE USE OF PRECAST OPENINGS AND FLEXIBLE MANHOLE COUPLINGS. CONNECTIONS TO EXISTING STRUCTURES SHALL BE MADE WITH THE USE OF MACHINE -CORED OPENINGS AND FLEXIBLE MANHOLE COUPLINGS.
12. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

SANITARY MANHOLE

Village of Algonquin Specifications & Details Guide

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Revision Date 06/25/2022

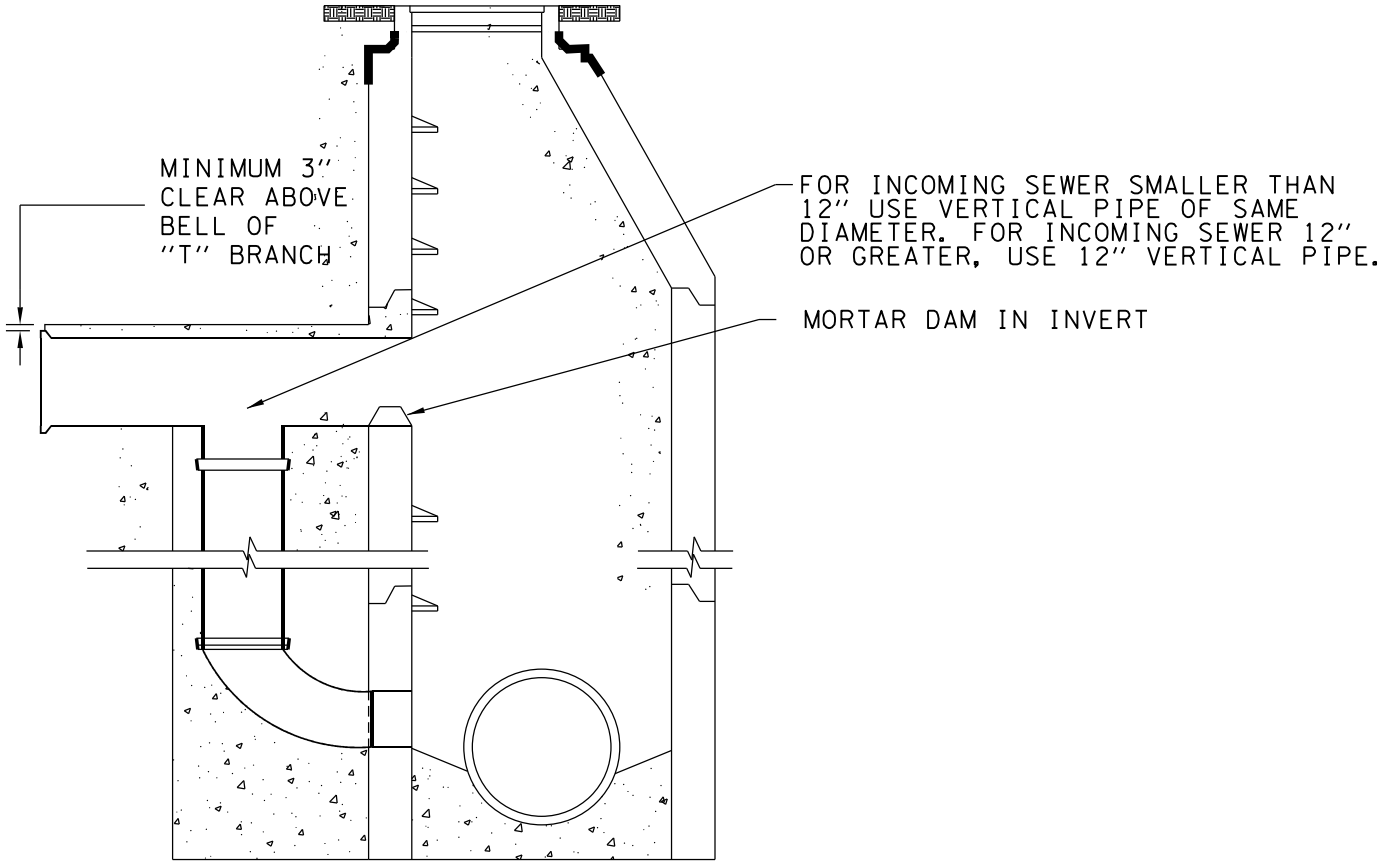
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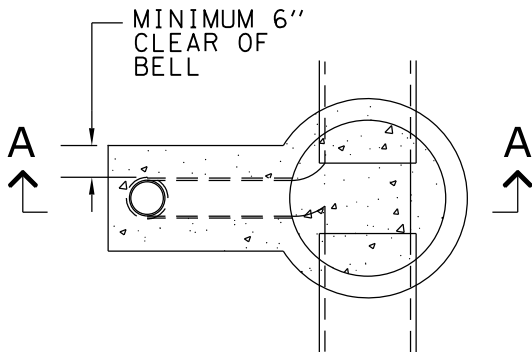
A FOUR INCH PRECAST RING SHALL BE FACTORY INSTALLED ON ALL FLATOP STRUCTURES



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SECTION A-A



PLAN VIEW

NOTES:

1. FRAME, LID, ADJUSTING RINGS, AND STRUCTURE PER SANITARY SEWER MANHOLE DETAIL.
2. A DROP MANHOLE SHALL BE CONSTRUCTED WHEN THE INVERT OF THE INFLUENT SEWER IS 2.0 FEET OR MORE ABOVE THE OULET OR MAIN SEWER INVERT.
3. SEE APPROVED VILLAGE OF ALGONQUIN PRODUCT LIST FOR MANUFACTURER AND MODEL NUMBERS.

A FOUR INCH PRECAST RING SHALL BE FACTORY INSTALLED ON ALL FLATOP STRUCTURES

SANITARY DROP MANHOLE	
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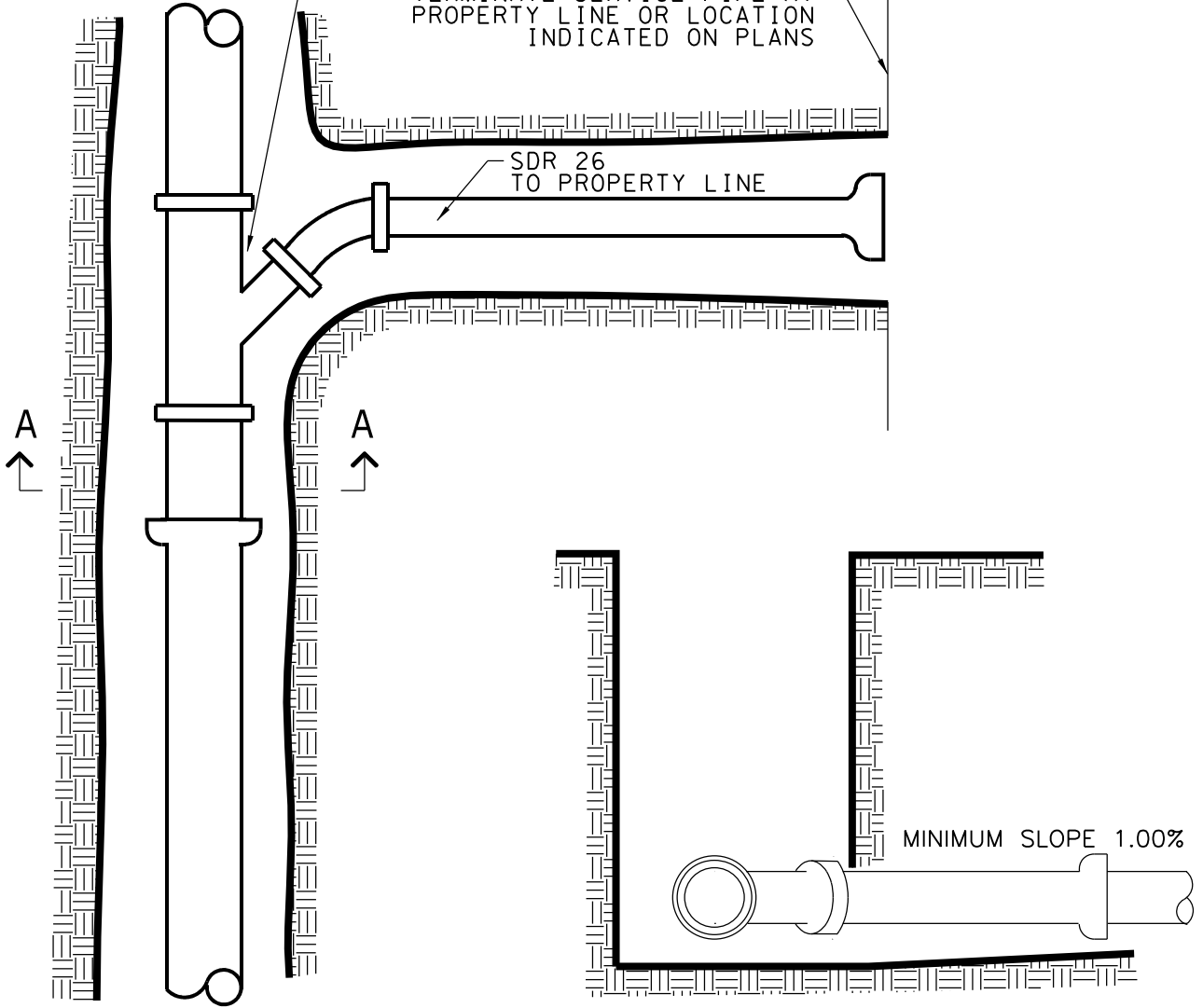


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STANDARD SANITARY TEE AND 45 BEND OR
 STANDARD WYE WITH 45 BEND. BRANCH SIZE
 AS INDICATED ON PLAN OR AS SPECIFIED.

TERMINATE SERVICE PIPE AT
 PROPERTY LINE OR LOCATION
 INDICATED ON PLANS

SDR 26
 TO PROPERTY LINE



SECTION A-A

MINIMUM 4" APPROVED, COMPACTED GRANULAR BEDDING
 AND BACKFILL 12" ABOVE SERVICE LINE

NOTES:

1. TEE OR WYE FITTING SHALL BE ROTATED UP FROM HORIZONTAL PLANE TO PROVIDE 1% MINIMUM SLOPE FOR SERVICE LINE.
2. END PIPE OF SERVICE LINE SHALL BE SEALED WITH A WATERTIGHT STOPPER SECURED WITH A WOODEN 4x4 POST; TOP OF POST SHALL EXTEND ABOVE FINISHED GRADE WITH UPPER 12" PAINTED GREEN.
3. PIPE SHALL BE BEDDED AND BACKFILLED IN ACCORDANCE WITH VILLAGE OF ALGONQUIN STANDARD DETAIL FOR TRENCH SECTIONS.
4. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

SANITARY SERVICE

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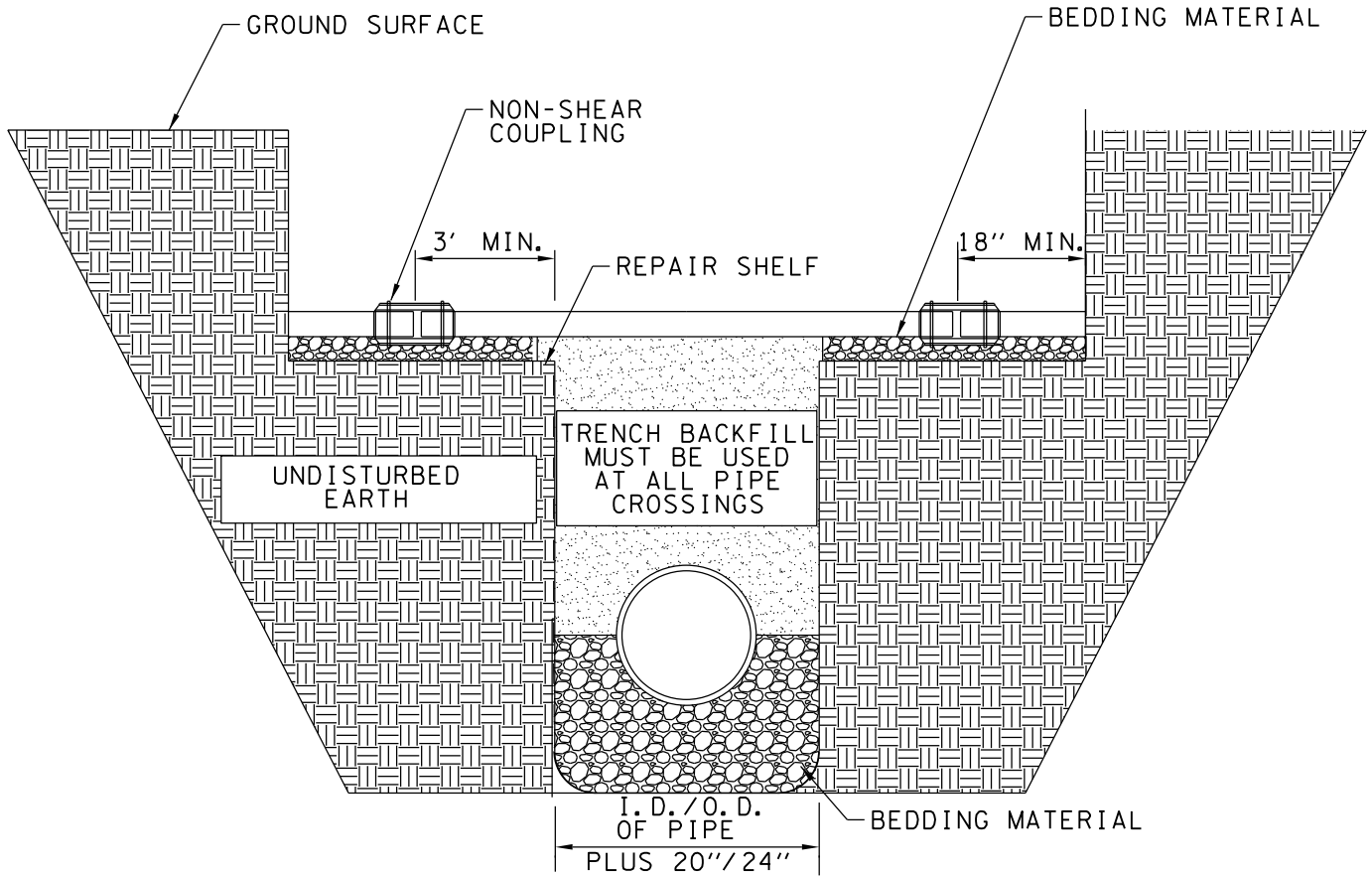
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...Sanitary Service Flat.dgn



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NOTES:

1. COUPLINGS ARE TO BE NON-SHEAR TYPE
2. THE DISRUPTED PIPE SHALL BE REPAIRED WITH PVC SDR-26 OR IF THE DEPTH IS >15' USE EPOXY LINED DUCTILE IRON
3. FIELD CUTS ON PIPE SHALL BE NO CLOSER THAN 18 INCHES FROM EXISTING BELL OR SPIGOT.
4. WHEN AT ALL POSSIBLE, USE EXISTING BELL OR SPIGOT TO ELIMINATE THE USE OF (2) COUPLINGS
5. GRADE MUST BE MAINTAINED FOR ALL GRAVITY STATUS
6. SEE APPROVED VILLAGE OF ALGONQUIN PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

SANITARY SEWER REPAIR @ CROSSING

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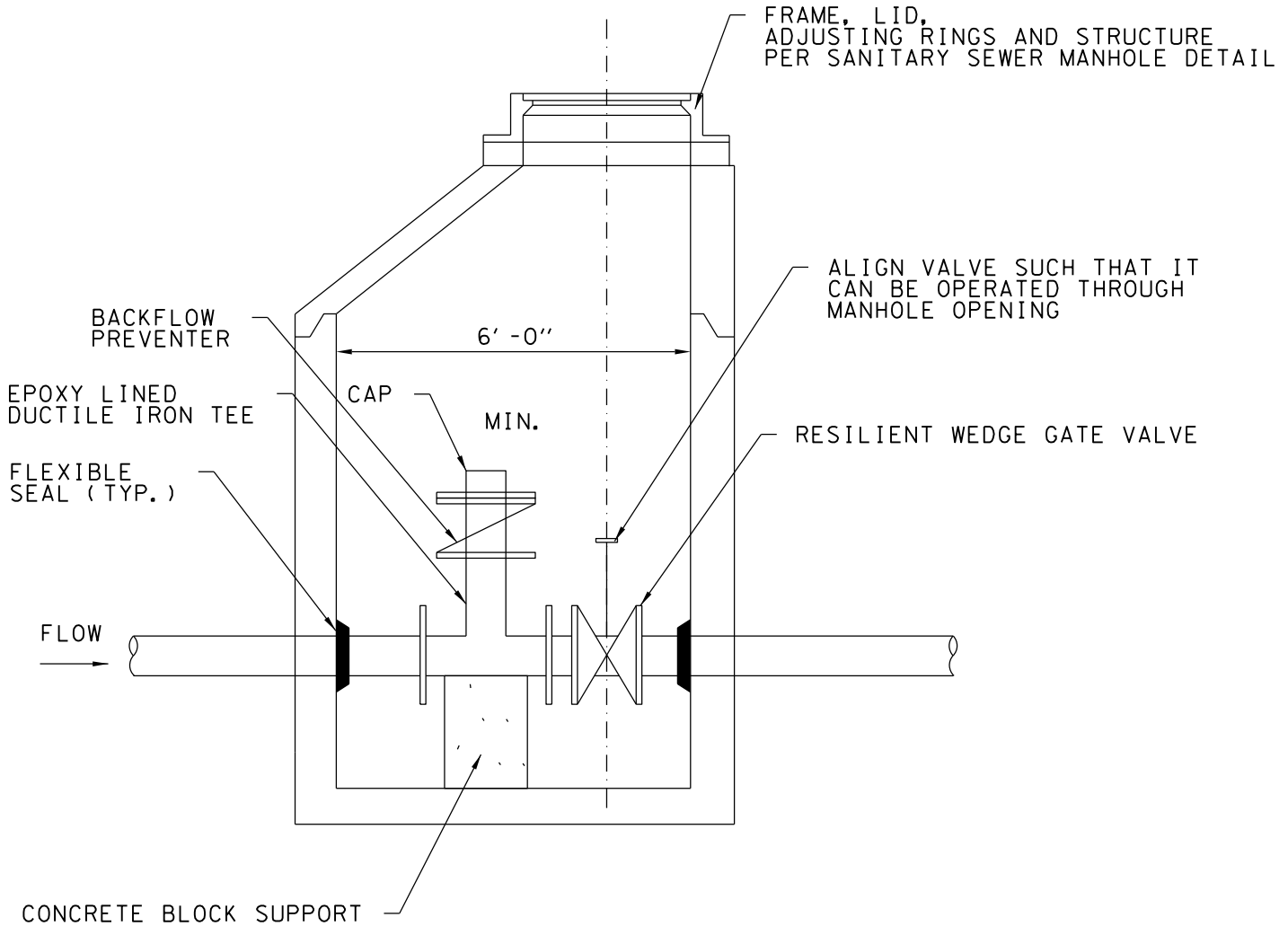
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NOTE:

1. SEE APPROVED VILLAGE OF ALGONQUIN PRODUCT LIST FOR MANUFACTURER AND MODEL NUMBERS.

A FOUR INCH PRECAST RING SHALL BE FACTORY INSTALLED ON ALL FLATOP STRUCTURES

FORCEMAIN BYPASS PUMPING STR.

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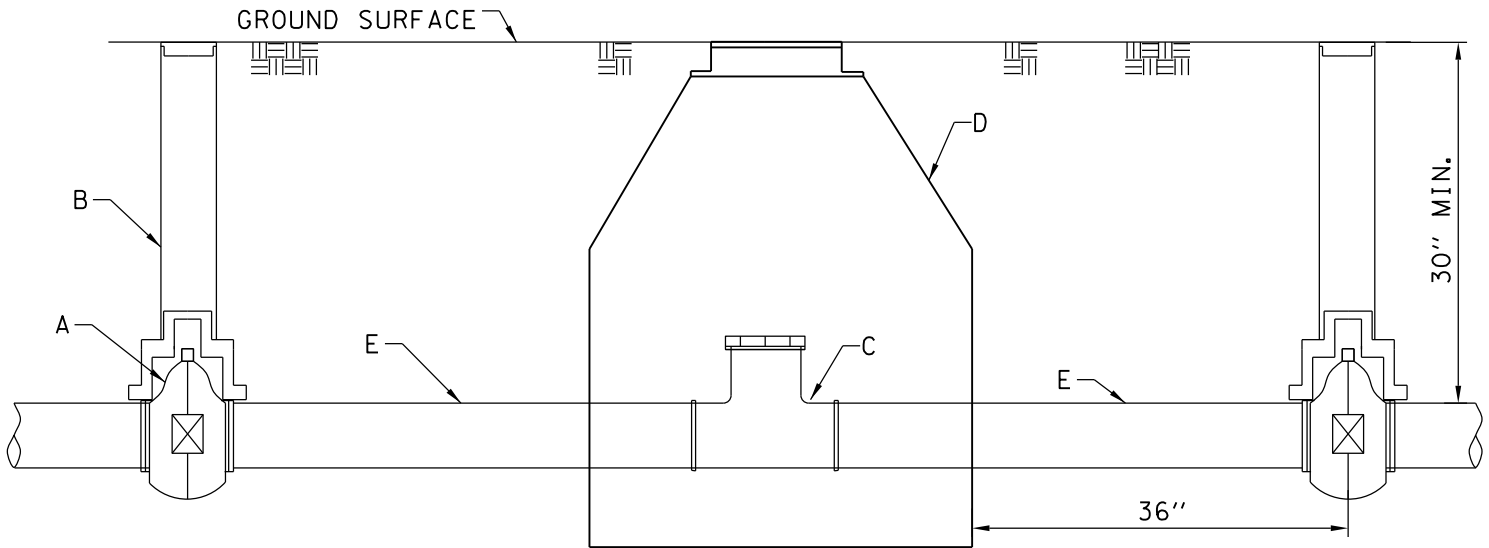
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NOTES:

1. THE SETUP INCLUDES THE FOLLOWING:
 - A (2) MUELLER A-2360 RESILIENT WEDGE GATE VALVES
 - B (2) VALVE BOXES WITH VALVE BOX STABILIZERS
 - C (1) EPOXY LINED DUCTILE IRON TEE WITH TEE FACING STRAIGHT UP W/CAP
 - D (1) 4' DIA. MANHOLE PER VILLAGE SANITARY MH DETAIL
 - E (2) SECTIONS OF EPOXY COATED DUCTILE IRON PIPE
2. SEE APPROVED VILLAGE OF ALGONQUIN PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

A FOUR INCH PRECAST RING SHALL BE FACTORY INSTALLED ON ALL FLATOP STRUCTURES

FORCE MAIN CLEAN-OUT

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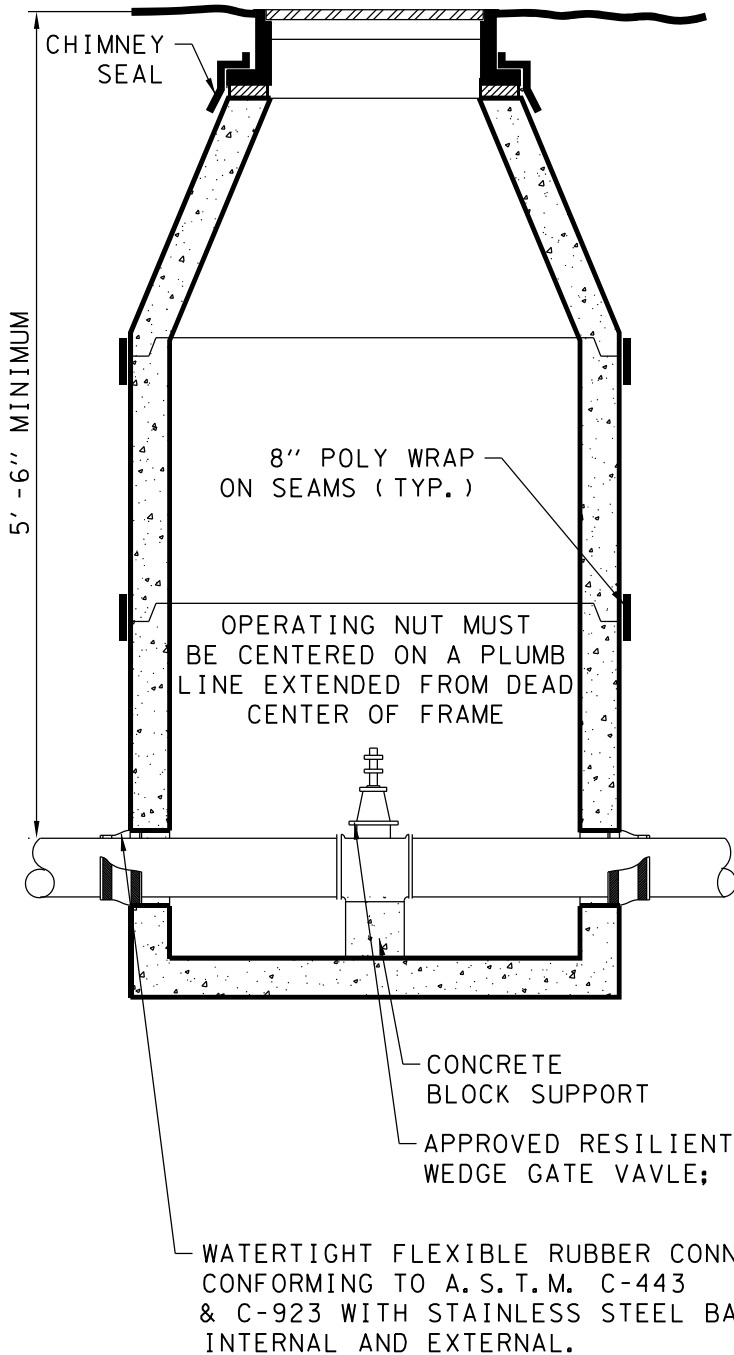
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NOTES:

1. ALL VALVES MUST BE ENCLOSED IN A VAULT UNLESS OTHERWISE SPECIFIED.
2. STRUCTURE SHALL BE PRECAST REINFORCED CONCRETE WITH MINIMUM WALL THICKNESS OF 5" FOR 4'-0" INSIDE DIAMETER AND 6" FOR 5'-0" INSIDE DIAMETER STRUCTURES.
3. STRUCTURE SHALL BE 4'-0" INSIDE DIAMETER FOR 8" VALVES AND LESS. STRUCTURE SHALL BE 5'-0" INSIDE DIAMETER FOR 10" VALVES AND LARGER.
4. STRUCTURE BOTTOMS SHALL BE PRECAST REINFORCED CONCRETE WITH FIRST VERTICAL SECTION PRECAST INTEGRALLY WITH IT.
5. ALL EXTERIOR SURFACES OF STRUCTURE SHALL HAVE A FACTORY APPLIED BITUMINOUS COATING.
6. ALL JOINTS BETWEEN PRECAST ELEMENTS, ADJUSTING RINGS, AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT. BARREL SECTIONS SHALL BE SEALED USING EITHER A BUTYL RUBBER JOINT SEALANT OR A RUBBER GASKET. A 9" WIDE POLYETHYLENE EXTERNAL SEAL SHALL BE APPLIED TO ALL STRUCTURE JOINTS.
7. OPERATING NUT OF VALVE MUST BE CENTERED ON A PLUMB LINE EXTENDED FROM CENTER OF FRAME OPENING.
8. A MAXIMUM OF TWO (2) ADJUSTMENT RINGS FOR A MAXIMUM ADJUSTMENT OF 8" IS ALLOWED. THE TOP ADJUSTMENT RING SHALL BE MADE OF RECYCLED RUBBER WHEN THE STRUCTURE IS INSTALLED IN A PAVED TRAFFIC AREA.
9. EXTERNAL CHIMNEY SEALS SHALL BE INSTALLED WHICH SHALL CAPTURE AT LEAST 4" OF THE STRUCTURE FRAME, ALL OF THE ADJUSTING RINGS, AND 4" OF THE UPPER CONE SECTION.
10. STRUCTURE LID SHALL HAVE A TWO, 1" CONCEALED PICKHOLES AND HAVE THE WORD "WATER" AND VILLAGE LOGO CAST INTO IT.
11. THE RIM ELEVATION FOR STRUCTURES WITHIN THE FLOODPLAIN MUST BE SET 24" ABOVE THE BASE FLOOD ELEVATION. FRAME AND LID MUST BE WATER-TIGHT LOCK DOWN.
12. PIPE PENETRATIONS SHALL BE MADE WITH THE USE OF PRECAST OPENINGS AND FLEXIBLE RUBBER CONNECTORS.
13. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.



A FOUR INCH PRECAST RING SHALL BE FACTORY INSTALLED ON ALL FLATOP STRUCTURES

VALVE AND VAULT

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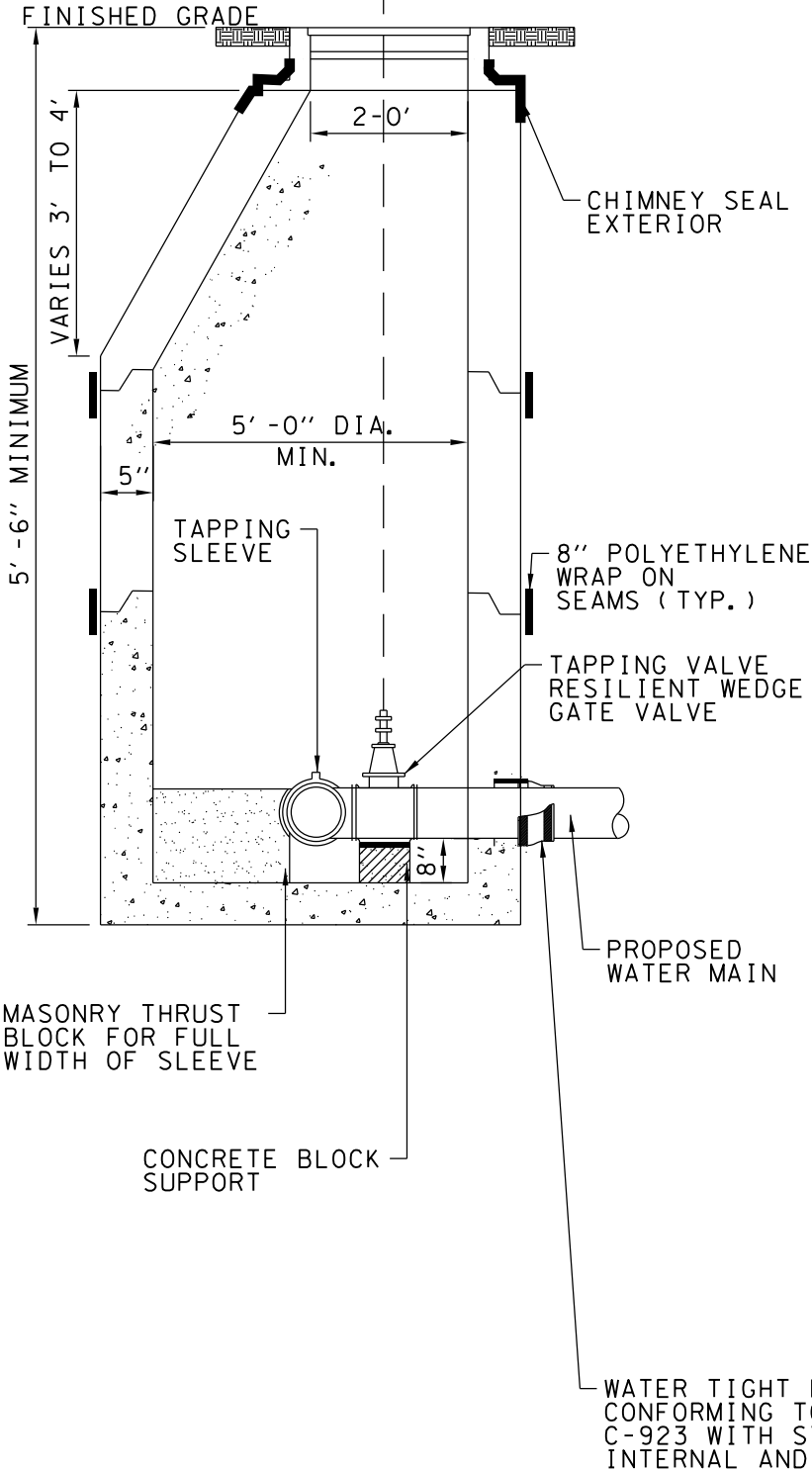
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USE ECCENTRIC
 CONE TO CENTER
 OPERATING NUT



NOTES:

1. ALL VALVES MUST BE ENCLOSED IN A VAULT UNLESS OTHERWISE SPECIFIED.
2. STRUCTURE SHALL BE PRECAST REINFORCED CONCRETE WITH MINIMUM WALL THICKNESS OF 5" FOR 4'-0" INSIDE DIAMETER AND 6" FOR 5'-0" INSIDE DIAMETER STRUCTURES.
3. STRUCTURE SHALL BE 4'-0" INSIDE DIAMETER FOR 8" VALVES AND LESS. STRUCTURE SHALL BE 5'-0" INSIDE DIAMETER FOR 10" VALVES AND LARGER.
4. STRUCTURE BOTTOMS SHALL BE PRECAST REINFORCED CONCRETE WITH FIRST VERTICAL SECTION PRECAST INTEGRALLY WITH IT.
5. ALL EXTERIOR SURFACES OF STRUCTURE SHALL HAVE A FACTORY APPLIED BITUMINOUS COATING.
6. ALL JOINTS BETWEEN PRECAST ELEMENTS, ADJUSTING RINGS, AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT. BARREL SECTIONS SHALL BE SEALED USING EITHER A BUTYL RUBBER JOINT SEALANT OR A RUBBER GASKET. A 9" WIDE POLYETHYLENE EXTERNAL SEAL SHALL BE APPLIED TO ALL STRUCTURE JOINTS.
7. OPERATING NUT OF VALVE MUST BE CENTERED ON A PLUMB LINE EXTENDED FROM CENTER OF FRAME OPENING.
8. A MAXIMUM OF TWO (2) ADJUSTMENT RINGS FOR A MAXIMUM ADJUSTMENT OF 8" IS ALLOWED. THE TOP ADJUSTMENT RING SHALL BE MADE OF RECYCLED RUBBER WHEN THE STRUCTURE IS INSTALLED IN A PAVED TRAFFIC AREA.
9. EXTERNAL CHIMNEY SEALS SHALL BE INSTALLED WHICH SHALL CAPTURE AT LEAST 4" OF THE STRUCTURE FRAME, ALL OF THE ADJUSTING RINGS, AND 4" OF THE UPPER CONE SECTION.
10. STRUCTURE LID SHALL HAVE A TWO, 1" CONCEALED PICKHOLES AND HAVE THE WORD "WATER" AND VILLAGE LOGO CAST INTO IT.
11. THE RIM ELEVATION FOR STRUCTURES WITHIN THE FLOODPLAIN MUST BE SET 24" ABOVE THE BASE FLOOD ELEVATION. FRAME AND LID MUST BE WATER-TIGHT LOCK DOWN.
12. PIPE PENETRATIONS SHALL BE MADE WITH THE USE OF PRECAST OPENINGS AND FLEXIBLE RUBBER CONNECTORS.
13. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

PRESSURE CONNECTION AND VAULT

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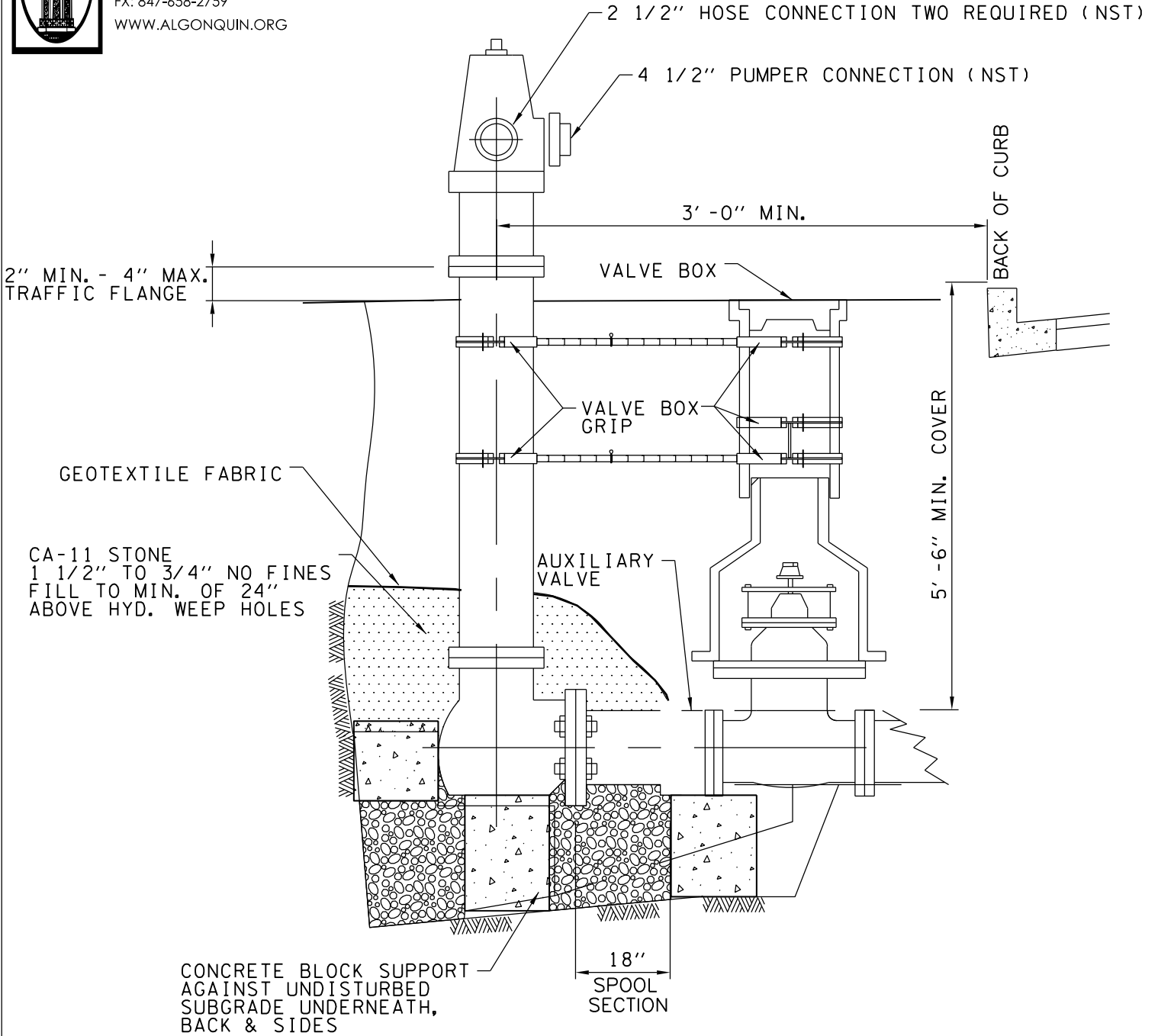
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A FOUR INCH PRECAST RING SHALL BE FACTORY INSTALLED ON ALL FLATOP STRUCTURES

...Pressure Connection Vault.dgn



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NOTES:

1. HYDRANT SHALL HAVE FRESH COAT OF PAINT.
2. CONCRETE THRUST BLOCKING SHALL NOT BLOCK OR OBSTRUCT WEEP HOLES.
3. ALL FITTINGS SHALL BE RESTRAINED.
4. SEE APPROVED VILLAGE OF ALGONQUIN PRODUCT LIST FOR MANUFACTURER AND MODEL NUMBERS.

FIRE HYDRANT

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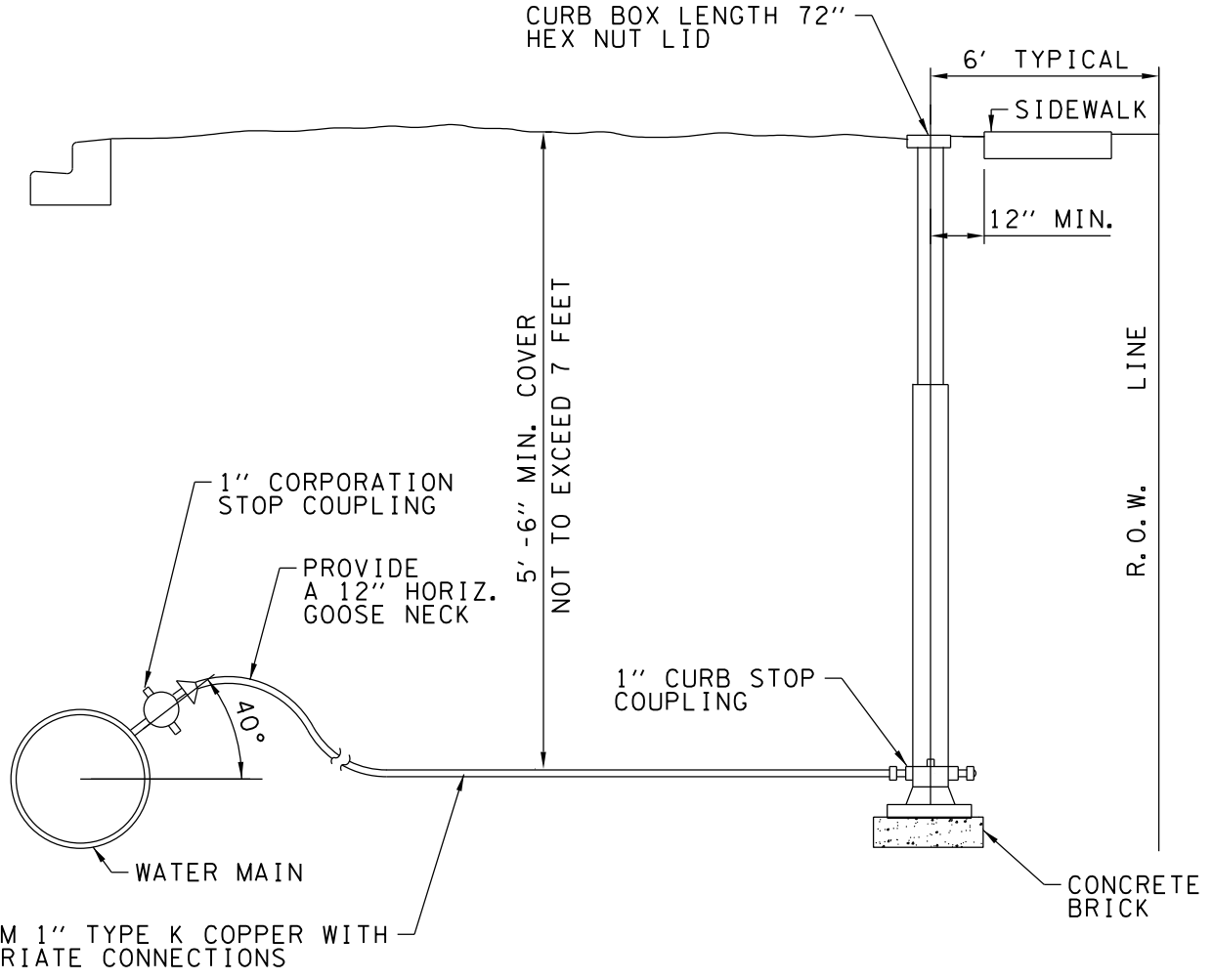
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MINIMUM 1" TYPE K COPPER WITH APPROPRIATE CONNECTIONS

NOTES:

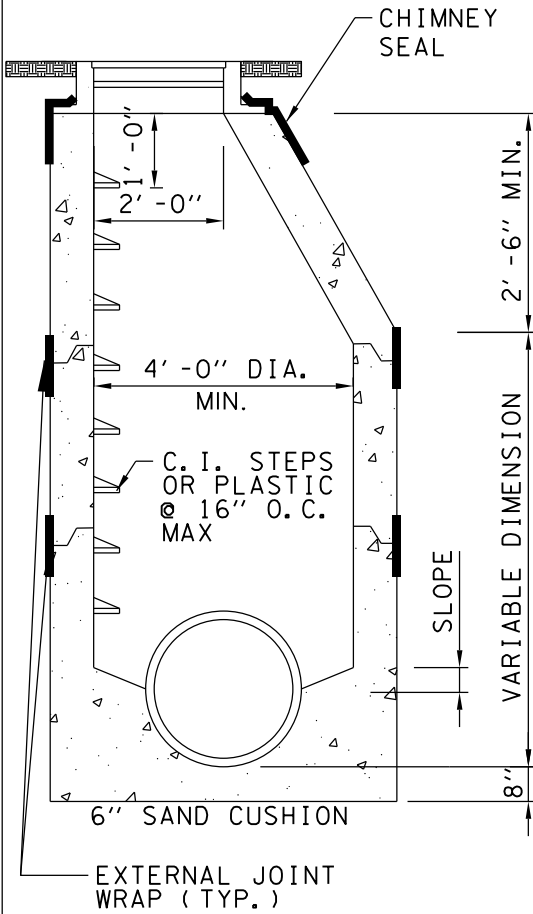
1. ALL TAPS ON DUCTILE IRON PIPE (1 1/4" AND BELOW) SHALL BE DONE USING DIRECT TAP METHOD WATER SERVICE CONNECTIONS TO WATER MAINS SHALL USE THE DRILLING AND TAPPING METHOD INTO A PRESSURIZED MAIN. ALL TAPS 1 1/2" AND GREATER REQUIRE A SADDLE.
2. WHERE STORM LINES ARE BETWEEN B-BOX AND HOUSE AND SHALLOWER THAN WATER SERVICE A SCHEDULE 40 PVC PIPE SHALL BE INSTALLED UNDER STORM LINE
3. IF CURB BOX IS INSTALLED IN PAVEMENT AREAS USE TRAFFIC RATED (B-BOX COVER)
4. SEE APPROVED VILLAGE OF ALGONQUIN PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.
5. LOCATION OF B-BOX IS TO FOLLOW THE PLAN & PROFILE ENGINEERING PRINT.

DOMESTIC WATER SERVICE	
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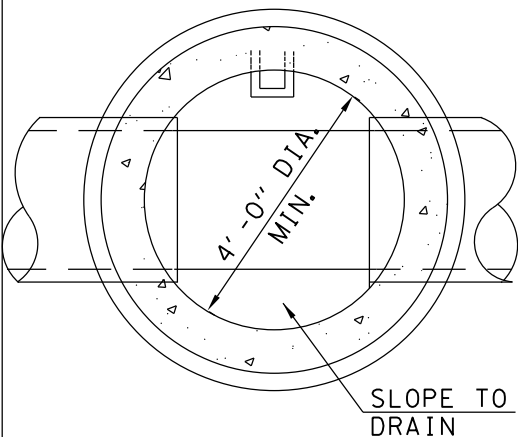
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PROFILE VIEW



PLAN VIEW

NOTES:

1. STRUCTURE SHALL BE PRECAST REINFORCED CONCRETE WITH MINIMUM WALL THICKNESS OF 5" FOR 4'-0" INSIDE DIAMETER AND 6" FOR 5'-0" INSIDE DIAMETER STRUCTURES.
2. STRUCTURES SHALL BE 4'-0" INSIDE DIAMETER FOR MAIN SEWER 18" DIAMETER AND LESS, AND STRUCTURE DEPTH OF 20' OR LESS. STRUCTURES SHALL BE 5'-0" INSIDE DIAMETER FOR MAIN SEWER 21" DIAMETER AND LARGER, AND STRUCTURE DEPTH MORE THAN 20'.
3. STRUCTURE BOTTOMS SHALL BE PRECAST REINFORCED CONCRETE WITH FIRST VERTICAL SECTION PRECAST INTEGRALLY WITH IT.
4. ALL JOINTS BETWEEN PRECAST ELEMENTS, ADJUSTING RINGS, AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT. BARREL SECTIONS SHALL BE SEALED USING EITHER A BUTYL RUBBER JOINT SEALANT OR A RUBBER GASKET. A 9" WIDE POLYETHYLENE EXTERNAL SEAL SHALL BE APPLIED TO ALL STRUCTURE JOINTS.
5. STRUCTURE STEPS SHALL BE MADE OF STEEL REINFORCED PLASTIC USING AN APPROVED PLASTIC MEETING ASTM D4101, TYPE 11, GRADE 49108, OVER #3 GRADE 60, ASTM A615 REINFORCING BAR. STEPS SHALL BE AT 16" CENTERS.
6. A MAXIMUM OF TWO (2) ADJUSTMENT RINGS FOR A MAXIMUM ADJUSTMENT OF 8" IS ALLOWED. THE TOP ADJUSTMENT RING SHALL BE MADE OF RECYCLED RUBBER WHEN THE STRUCTURE IS INSTALLED IN A PAVED TRAFFIC AREA.
7. EXTERNAL CHIMNEY SEALS SHALL BE INSTALLED WHICH SHALL CAPTURE AT LEAST 4" OF THE STRUCTURE FRAME, ALL OF THE ADJUSTING RINGS, AND 4" OF THE UPPER CONE SECTION.
8. STRUCTURE WITH CLOSED LIDS SHALL HAVE A 1" CONCEALED PICKHOLE AND HAVE THE WORD "STORM" AND VILLAGE LOGO CAST INTO IT. STRUCTURES WITH OPEN LIDS SHALL BE AS PER VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST.
9. PIPE CONNECTIONS SHALL BE MADE WITH THE USE OF PRECAST OPENINGS. CONNECTIONS TO EXISTING STRUCTURES SHALL BE MADE WITH THE USE OF MACHINE-CORED OPENINGS. THE INTERNAL AND EXTERNAL PIPE PENETRATIONS SHALL BE TUCKPOINTED.
10. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

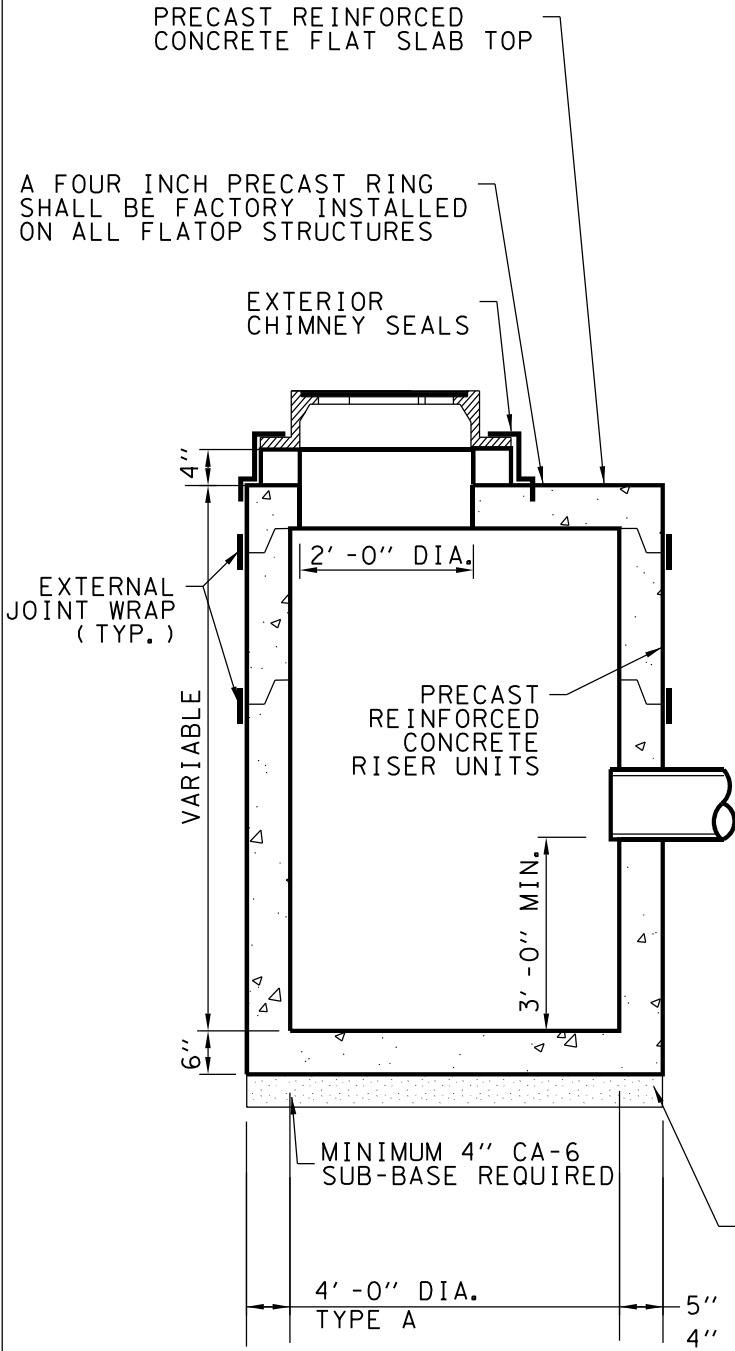
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STORM MANHOLE	
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...Storm Manhole.dgn



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NOTES:

1. STRUCTURE SHALL BE PRECAST REINFORCED CONCRETE WITH MINIMUM WALL THICKNESS OF 4".
2. STRUCTURE BOTTOMS SHALL BE PRECAST REINFORCED CONCRETE WITH FIRST VERTICAL SECTION PRECAST INTEGRALLY WITH IT.
3. ALL JOINTS BETWEEN PRECAST ELEMENTS, ADJUSTING RINGS, AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT. BARREL SECTIONS SHALL BE SEALED USING EITHER A BUTYL RUBBER JOINT SEALANT OR A RUBBER GASKET. A 9" WIDE POLYETHYLENE EXTERNAL SEAL SHALL BE APPLIED TO ALL STRUCTURE JOINTS.
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5. EXTERNAL CHIMNEY SEALS SHALL BE INSTALLED WHICH SHALL CAPTURE AT LEAST 4" OF THE STRUCTURE FRAME, ALL OF THE ADJUSTING RINGS, AND 4" OF THE UPPER CONE SECTION EXCEPT FOR CATCH BASINS IN YARD AREAS USING TYPE 8 FRAMES.
6. MANUFACTURER AND MODEL NUMBER FOR FRAMES AND GRATES SHALL BE AS SPECIFIED IN THE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST.
7. PIPE CONNECTIONS SHALL BE MADE WITH THE USE OF PRECAST OPENINGS. CONNECTIONS TO EXISTING STRUCTURES SHALL BE MADE WITH THE USE OF MACHINE-CORED OPENINGS. THE INTERNAL AND EXTERNAL PIPE PENETRATIONS SHALL BE TUCKPOINTED.

CATCH BASIN TYPES A & B

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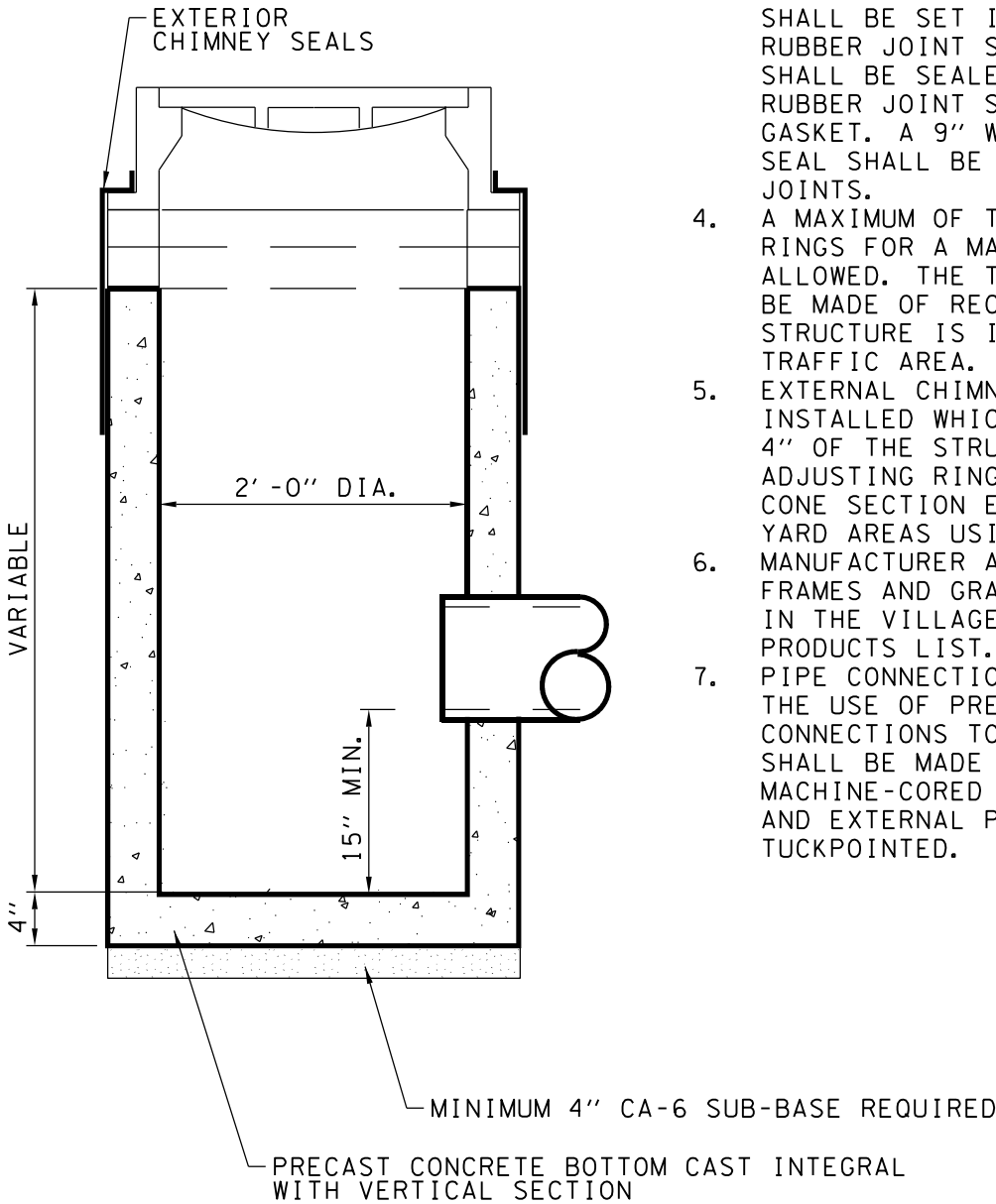
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NOTES:

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2. STRUCTURE BOTTOMS SHALL BE PRECAST REINFORCED CONCRETE WITH FIRST VERTICAL SECTION PRECAST INTEGRALLY WITH IT.
3. ALL JOINTS BETWEEN PRECAST ELEMENTS, ADJUSTING RINGS, AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT. BARREL SECTIONS SHALL BE SEALED USING EITHER A BUTYL RUBBER JOINT SEALANT OR A RUBBER GASKET. A 9" WIDE POLYETHYLENE EXTERNAL SEAL SHALL BE APPLIED TO ALL STRUCTURE JOINTS.
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5. EXTERNAL CHIMNEY SEALS SHALL BE INSTALLED WHICH SHALL CAPTURE AT LEAST 4" OF THE STRUCTURE FRAME, ALL OF THE ADJUSTING RINGS, AND 4" OF THE UPPER CONE SECTION EXCEPT FOR CATCH BASINS IN YARD AREAS USING TYPE 8 FRAMES.
6. MANUFACTURER AND MODEL NUMBER FOR FRAMES AND GRATES SHALL BE AS SPECIFIED IN THE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST.
7. PIPE CONNECTIONS SHALL BE MADE WITH THE USE OF PRECAST OPENINGS. CONNECTIONS TO EXISTING STRUCTURES SHALL BE MADE WITH THE USE OF MACHINE-CORED OPENINGS. THE INTERNAL AND EXTERNAL PIPE PENETRATIONS SHALL BE TUCKPOINTED.

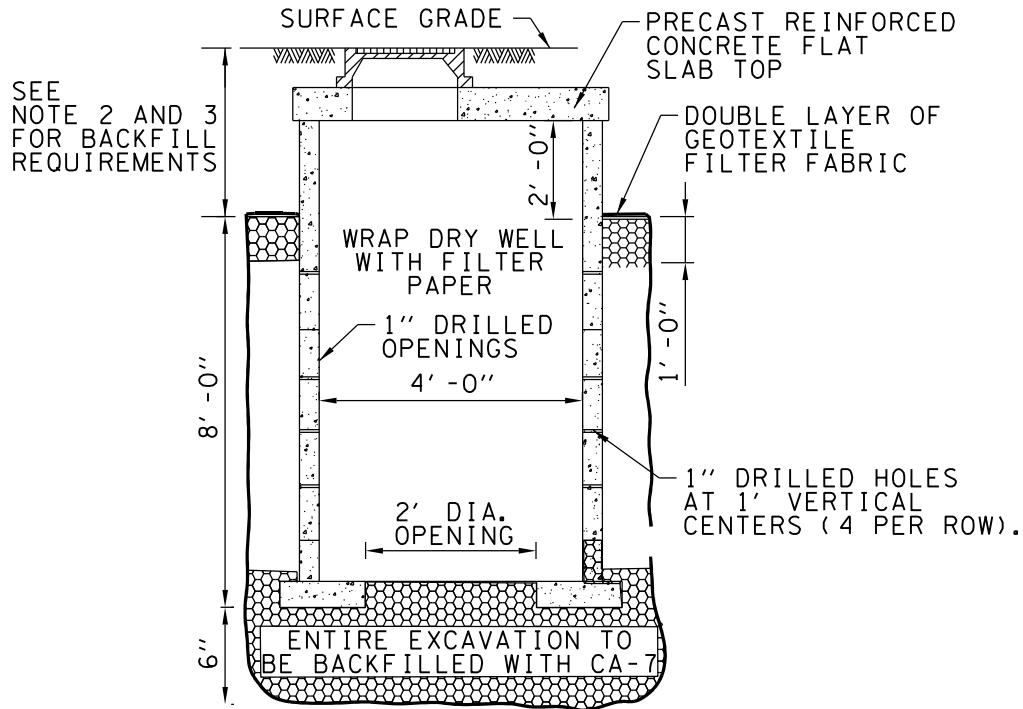


... \Catch Basin Type C.dgn

SPECIAL USE ONLY	
CATCH BASIN TYPE C	
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NOTES:

1. DRYWELL STRUCTURE SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE VILLAGE OF ALGONQUIN STANDARD DETAIL FOR A STORM MANHOLE. SEE APPROVED VILLAGE OF ALGONQUIN APPROVED PRODUCT LIST FOR MANUFACTURER AND MODEL NUMBERS.
2. WHEN A DRYWELL IS CONSTRUCTED WITHIN A TURF AREA, THAT PORTION EXCAVATED ABOVE THE GEOTEXTILE FILTER FABRIC SHALL BE BACKFILLED WITH CA-7 AND THE FINAL SIX (6) INCHES, MINIMUM, WITH TOPSOIL IN CONFORMANCE WITH VILLAGE RESTORATION STANDARDS.
3. WHEN DRYWELL IS LOCATED WITHIN A PAVEMENT AREA, THAT PORTION EXCAVATED ABOVE THE GEOTEXTILE FILTER FABRIC SHALL BE BACKFILLED WITH IDOT CA-6 AGGREGATE BASE COURSE TYPE B TO THE BOTTOM OF THE PAVEMENT SUB-BASE ELEVATION.
4. DRY WELL CONSTRUCTION SHALL BE ALLOWED IN ONLY IN SPECIAL CASES, SERVING LIMITED AREAS, AND ONLY WHEN SOIL BORINGS INDICATE THAT EXISTING GROUND WILL SUPPORT THEIR USE. THE USE OF DRYWELLS REQUIRES THE WRITTEN APPROVAL OF THE VILLAGE.
5. ALL JOINTS BETWEEN PRECAST ELEMENTS, ADJUSTING RINGS, AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT. BARREL SECTIONS SHALL BE SEALED USING EITHER A BUTYL RUBBER JOINT SEALANT OR A RUBBER GASKET. A 9" WIDE POLYETHYLENE EXTERNAL SEAL SHALL BE APPLIED TO ALL STRUCTURE JOINTS.
6. A MAXIMUM OF TWO (2) ADJUSTMENT RINGS FOR A MAXIMUM ADJUSTMENT OF 8" IS ALLOWED. THE TOP ADJUSTMENT RING SHALL BE MADE OF RECYCLED RUBBER WHEN THE STRUCTURE IS INSTALLED IN A PAVED TRAFFIC AREA.

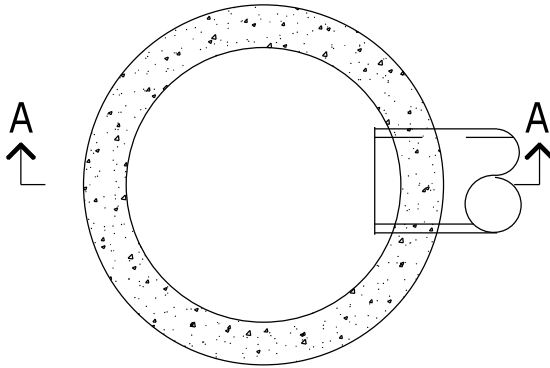
A FOUR INCH PRECAST RING SHALL BE FACTORY INSTALLED ON ALL FLATOP STRUCTURES

SPECIAL USE ONLY	
DRYWELL MANHOLE	
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...Drywell Manhole.dgn

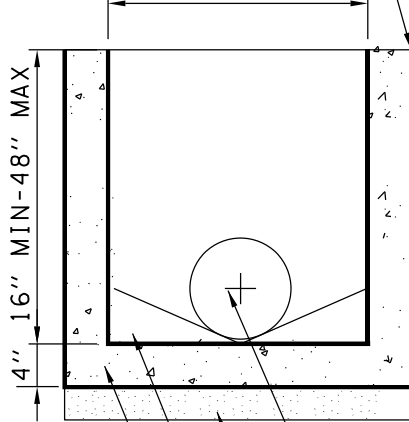


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PLAN

PRECAST REINFORCED CONCRETE
 RISER SECTION - MINIMUM 4"
 WALL THICKNESS
 2'-0" DIA.



OUTLET PIPE
 TUCKPOINT BOTH
 INTERNAL & EXTERNAL
 PIPE PENETRATIONS

4" CA-6 COMPACTED BASE

CONCRETE FILLETS
 AT 15 DEGREE SLOPE

PRECAST CONCRETE BOTTOM
 CAST INTEGRAL WITH VERTICAL
 SECTION INLET SHALL BE ONE
 CONTINUOUS PIECE

SECTION A-A

NOTES:

1. STRUCTURE SHALL BE PRECAST REINFORCED CONCRETE WITH MINIMUM WALL THICKNESS OF 4".
2. STRUCTURE BOTTOMS SHALL BE PRECAST REINFORCED CONCRETE WITH FIRST VERTICAL SECTION PRECAST INTEGRALLY WITH IT.
3. ALL JOINTS BETWEEN PRECAST ELEMENTS, ADJUSTING RINGS, AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT. BARREL SECTIONS SHALL BE SEALED USING EITHER A BUTYL RUBBER JOINT SEALANT OR A RUBBER GASKET. A 9" WIDE POLYETHYLENE EXTERNAL SEAL SHALL BE APPLIED TO ALL STRUCTURE JOINTS.
4. A MAXIMUM OF TWO (2) ADJUSTMENT RINGS FOR A MAXIMUM ADJUSTMENT OF 8" IS ALLOWED. THE TOP ADJUSTMENT RING SHALL BE MADE OF RECYCLED RUBBER WHEN THE STRUCTURE IS INSTALLED IN A PAVED TRAFFIC AREA.
5. EXTERNAL CHIMNEY SEALS SHALL BE INSTALLED WHICH SHALL CAPTURE AT LEAST 4" OF THE STRUCTURE FRAME, ALL OF THE ADJUSTING RINGS, AND 4" OF THE UPPER CONE SECTION EXCEPT FOR INLETS IN YARD AREAS USING TYPE 8 FRAMES.
6. MANUFACTURER AND MODEL NUMBER FOR FRAMES AND GRATES SHALL BE AS SPECIFIED IN THE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST.
7. PIPE CONNECTIONS SHALL BE MADE WITH THE USE OF PRECAST OPENINGS. CONNECTIONS TO EXISTING STRUCTURES SHALL BE MADE WITH THE USE OF MACHINE-CORED OPENINGS. THE INTERNAL AND EXTERNAL PIPE PENETRATIONS SHALL BE TUCKPOINTED.

INLET TYPE A

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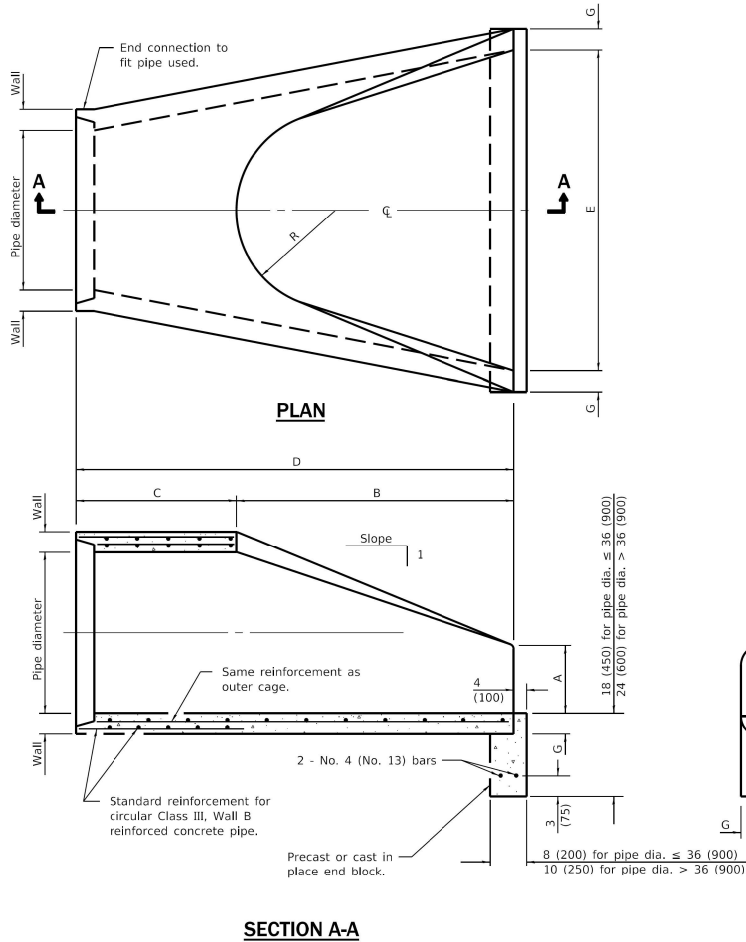
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PIPE DIA.	APPROX. QTY. lbs. (kg)	WALL	A	B	C	D	E	G	R	APPROX. SLOPE
12 (300)	530 (240)	2 (51)	4 (102)	24 (610)	4'-0 1/2" (1.241 m)	6'-0 1/2" (1.851 m)	24 (610)	2 (51)	9 (229)	1:2.4
15 (375)	740 (335)	2 1/2 (57)	6 (152)	27 (686)	3'-10" (1.168 m)	6'-1" (1.854 m)	30 (762)	2 1/2 (57)	11 (280)	1:2.4
18 (450)	990 (450)	2 1/2 (64)	9 (229)	27 (686)	3'-10" (1.168 m)	6'-1" (1.854 m)	36 (914)	2 1/2 (64)	12 (305)	1:2.4
21 (525)	1280 (580)	2 1/2 (70)	9 (229)	35 (889)	3'-7 1/2" (1.105 m)	6'-1" (1.854 m)	3'-6" (1.067 m)	2 1/2 (70)	13 (330)	1:2.4
24 (600)	1520 (690)	3 (76)	9 1/2 (241)	3'-7 1/2" (1.105 m)	30 (762)	6'-1 1/2" (1.867 m)	4'-0" (1.219 m)	3 (76)	14 (356)	1:2.5
27 (675)	1930 (875)	3 1/2 (83)	10 1/2 (267)	4'-0" (1.219 m)	25 1/2 (648)	6'-1 1/2" (1.867 m)	4'-6" (1.372 m)	3 1/2 (83)	14 1/2 (368)	1:2.4
30 (750)	2190 (995)	3 1/2 (89)	12 (305)	4'-6" (1.375 m)	19 3/4 (502)	6'-1 3/4" (1.874 m)	5'-0" (1.524 m)	3 1/2 (89)	15 (381)	1:2.5
33 (825)	3200 (1450)	3 3/4 (95)	13 1/2 (343)	4'-10 1/2" (1.486 m)	39 3/4 (997)	8'-1 3/4" (2.483 m)	5'-6" (1.676 m)	3 3/4 (95)	17 1/2 (445)	1:2.5
36 (900)	4100 (1860)	4 (102)	15 (381)	5'-3" (1.6 m)	34 3/4 (883)	8'-1 3/4" (2.483 m)	6'-0" (1.829 m)	4 (102)	20 (508)	1:2.5
42 (1050)	5380 (2440)	4 1/2 (114)	21 (533)	5'-3" (1.6 m)	35 (889)	8'-2" (2.489 m)	6'-6" (1.981 m)	4 1/2 (114)	22 (559)	1:2.5
48 (1200)	6550 (2970)	5 (127)	24 (610)	6'-0" (1.829 m)	26 (660)	8'-2" (2.489 m)	7'-0" (2.134 m)	5 (127)	22 (559)	1:2.5
54 (1350)	8240 (3740)	5 1/2 (140)	27 (686)	5'-5" (1.651 m)	35 (889)	8'-4" (2.54 m)	7'-6" (2.286 m)	5 1/2 (140)	24 (610)	1:2.0
60 (1500)	8730 (3960)	6 (152)	35 (889)	5'-0" (1.524 m)	39 (991)	8'-3" (2.515 m)	8'-0" (2.438 m)	5 (127)	*	1:1.9
66 (1650)	10710 (4860)	6 1/2 (165)	30 (762)	6'-0" (1.829 m)	27 (686)	8'-3" (2.515 m)	8'-6" (2.591 m)	5 1/2 (140)	*	1:1.7
72 (1800)	12520 (5680)	7 (178)	36 (914)	6'-6" (1.981 m)	21 (533)	8'-3" (2.514 m)	9'-0" (2.743 m)	6 (152)	*	1:1.8
78 (1950)	14770 (6700)	7 1/2 (191)	36 (914)	7'-6" (2.286 m)	21 (533)	9'-3" (2.819 m)	9'-6" (2.896 m)	6 1/2 (165)	*	1:1.8
84 (2100)	18160 (8240)	8 (203)	36 (914)	7'-6 1/2" (2.299 m)	21 (533)	9'-3 1/2" (2.832 m)	10'-0" (3.048 m)	6 1/2 (165)	*	1:1.6

* Radius as furnished by manufacturer

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches (millimeters) unless otherwise shown.

FLARED END SECTION

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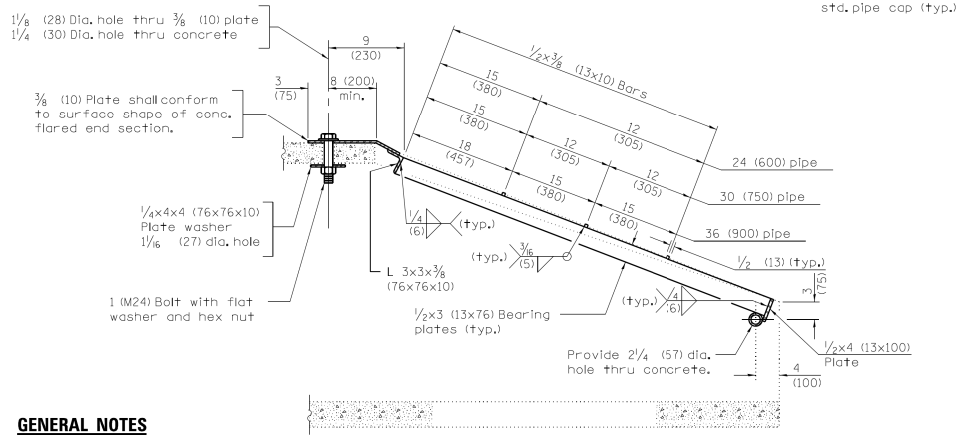
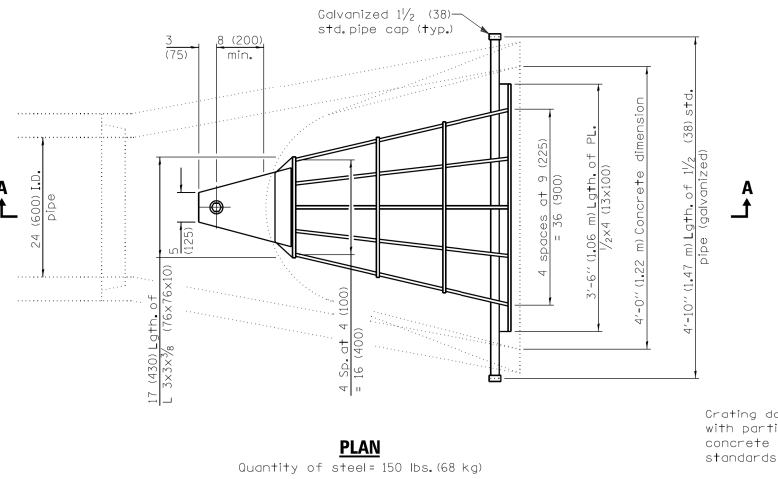
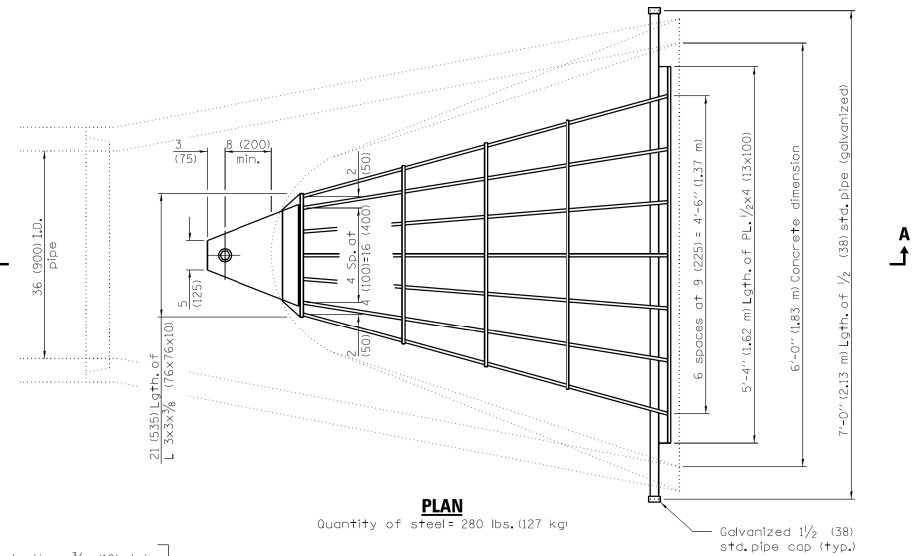
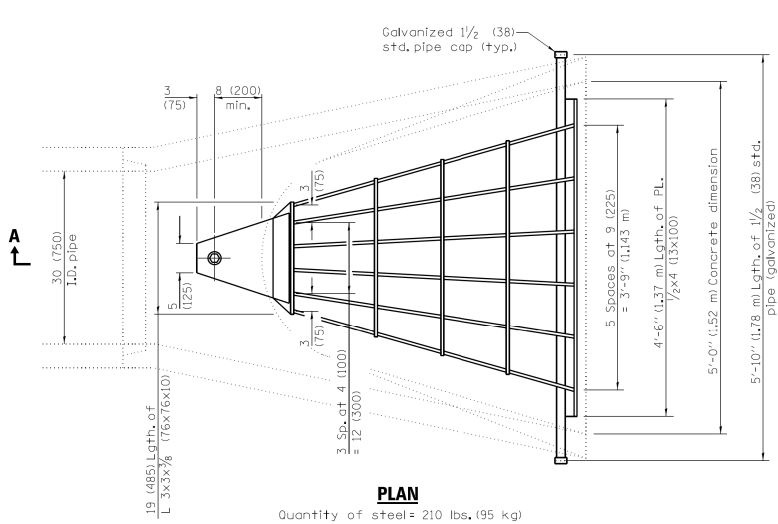
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NOTES:

- GRATINGS SHALL BE REQUIRED FOR ALL FLARED END SECTIONS, LARGER THAN 12 INCHES, EXCEPT WHEN INSTALLED AS PART OF A DRIVEWAY CULVERT.
- SEE APPROVED VILLAGE OF ALGONQUIN PRODUCT LIST FOR MANUFACTURER AND MODEL NUMBERS.



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GENERAL NOTES

Grating details shown are intended for use with particular sizes of precast reinforced concrete flared end sections as shown on standards 542301 and 542306.

Approximate quantity of steel shown includes total quantity of grating, bolts, nuts, washers and steel pipe.

Holes in the precast concrete flared end sections shall be cored to the diameter's noted. If core-out on the other end of the hole occurs, the hole shall be filled with grout to correct the diameter of the hole.

All dimensions are in inches (millimeters) unless otherwise shown.

GRATING FOR CONCRETE FES

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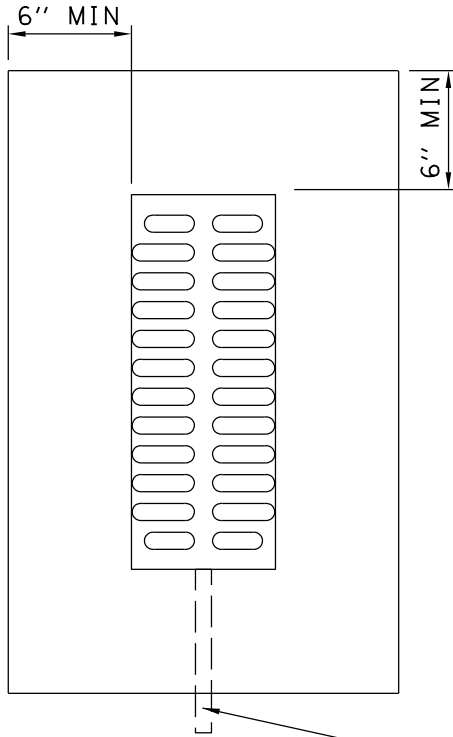
...\\Grating for Flared End Section.dgn



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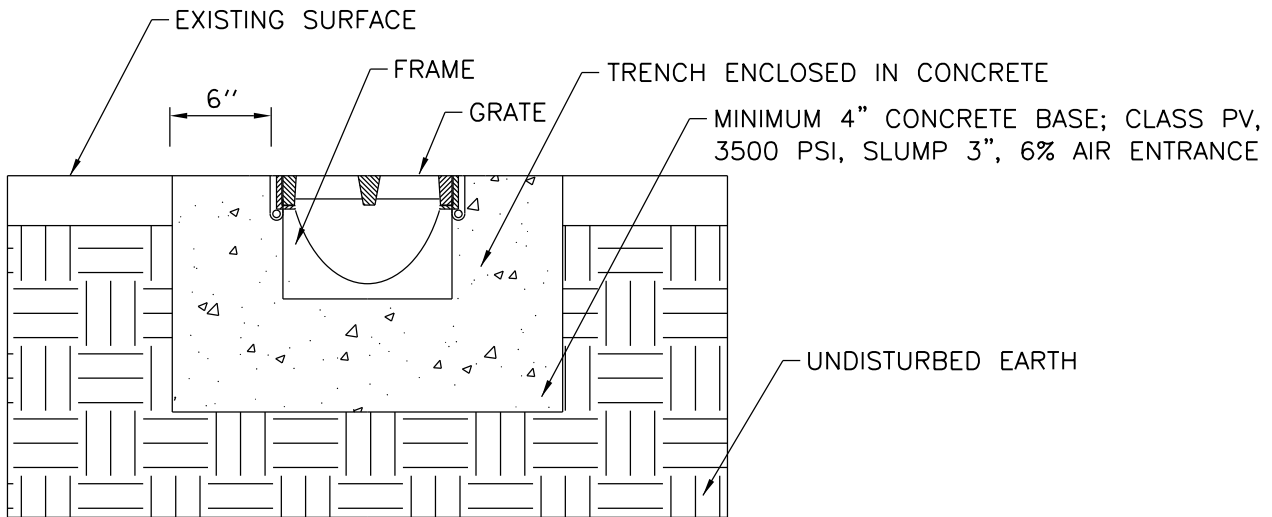
NOTES:

1. TO BE USED ONLY WITH APPROVAL OF PUBLIC WORKS DIRECTOR
2. TRENCH DRAIN TO BE MANUFACTURED FOR FERROUS OR NON-FERROUS MATERIALS CAPABLE OF SUPPORTING H25 LOAD RATING.
3. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4. SEE APPROVED VILLAGE OF ALGONQUIN PRODUCTS FOR MANUFACTURER AND MODEL NUMBERS.



PLAN

OUTLET PIPE; DIAMETER AND MATERIAL PER PLAN



SECTION

SPECIAL USE ONLY

LINEAR DRIVEWAY DRAIN

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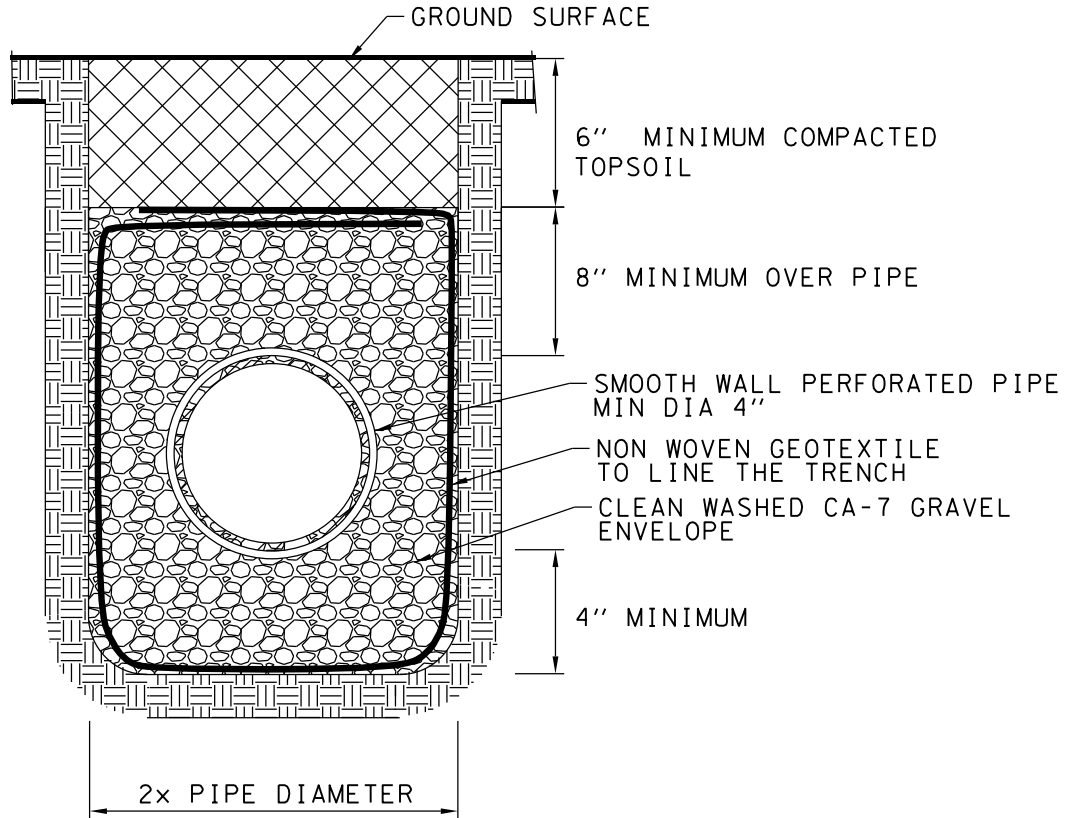
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NOTE:

1. SEE APPROVED VILLAGE OF ALGONQUIN PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

DRAIN TILE AND UNDERDRAINS

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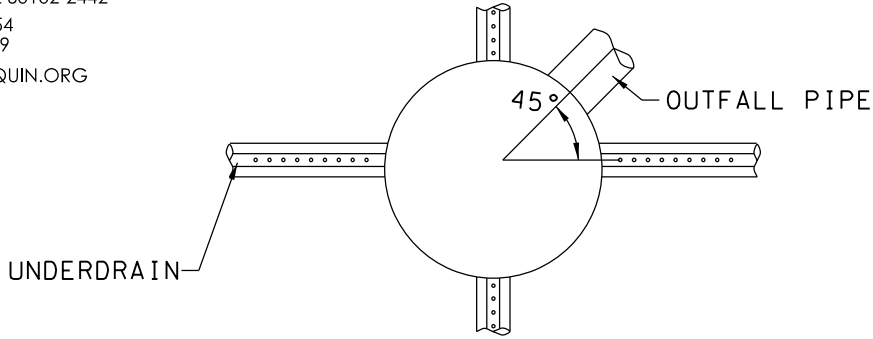
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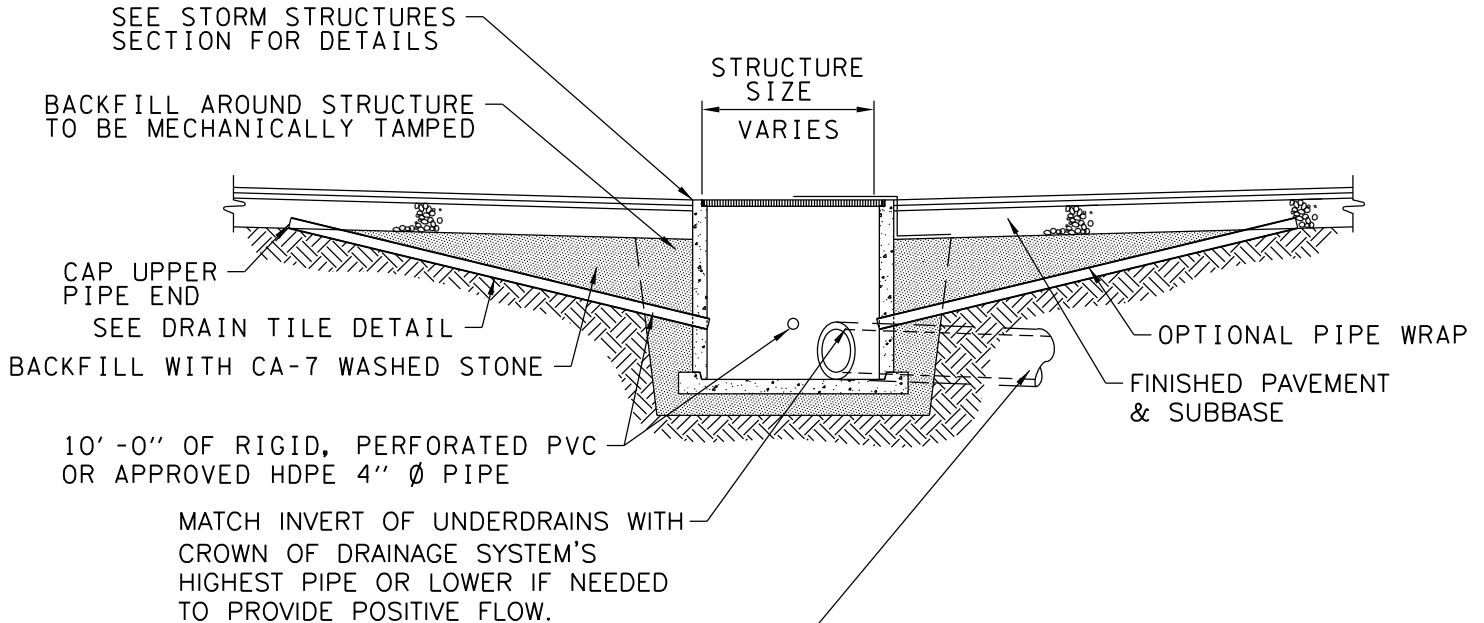
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PLAN VIEW



TRENCH SECTION

NOTES:

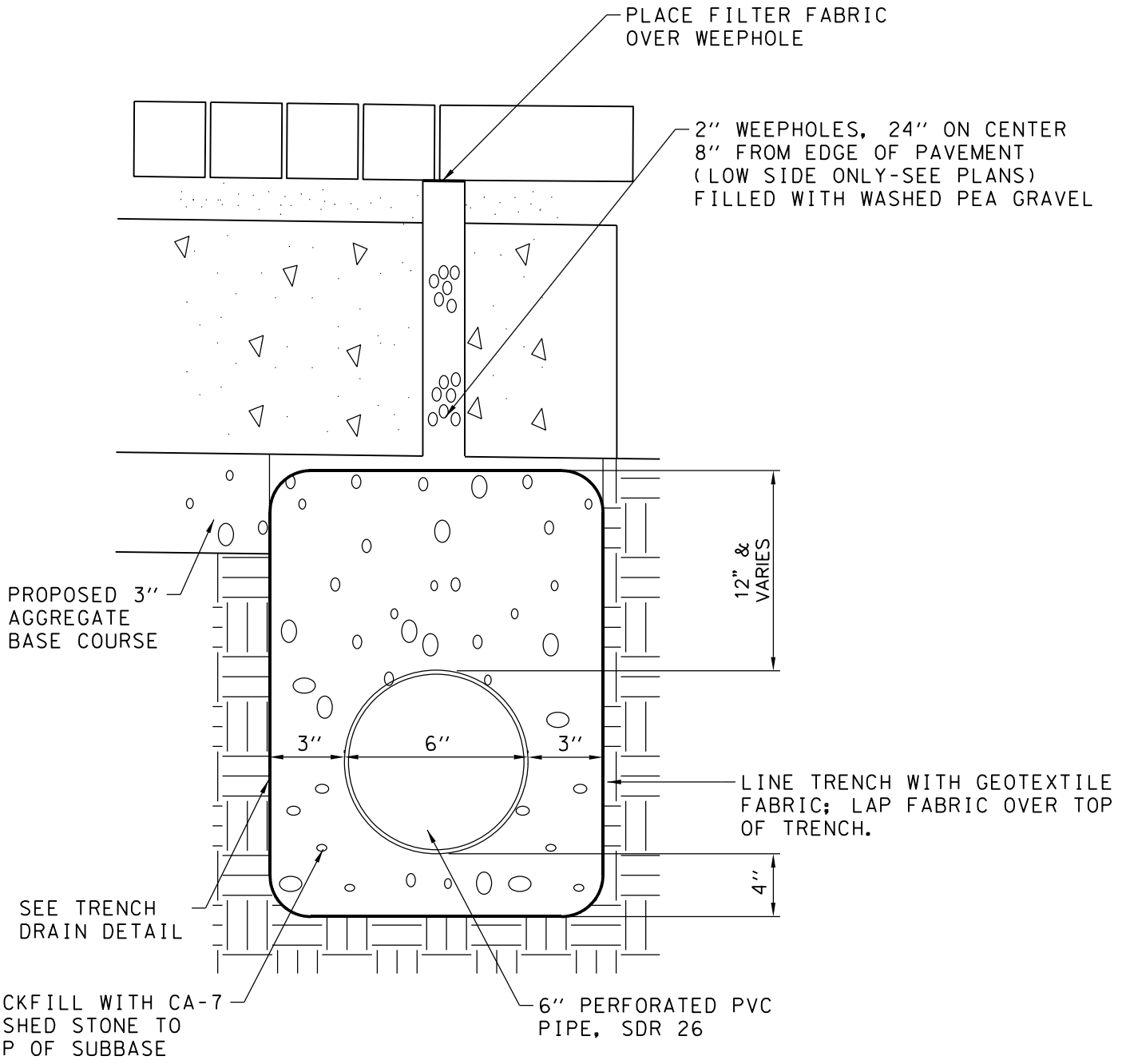
1. SEE APPROVED VILLAGE OF ALGONQUIN PRODUCT LIST FOR MANUFACTURER AND MODEL NUMBERS.
2. DRAIN PIPE ORIENTATION MAY BE SUBJECT TO FIELD DETERMINATION BY THE ONSITE ENGINEER INSPECTION.

STORM STRUCTURE UNDERDRAIN	
Village of Algonquin Specifications & Details Guide	
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Approved By: Public Works Director	Effective Date 06/25/2022

...Storm Structure Underdrain.dgn



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NOTE:

1. PRIOR TO PLACING HMA BEDDING COURSE, CONTRACTOR SHALL TEST THE WEEPHOLES FOR FLOW IN AN APPROVED MANNER IN THE PRESENCE OF THE ENGINEER

RIGID BASE DRAINAGE

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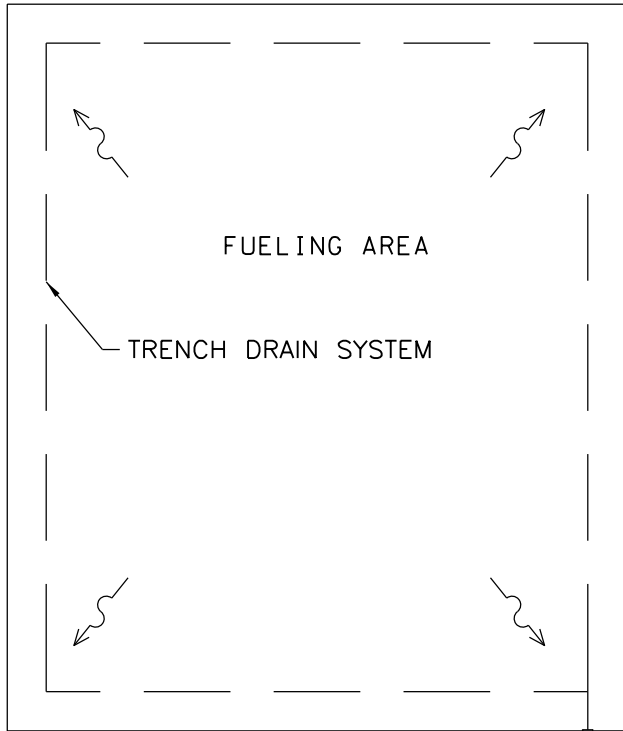
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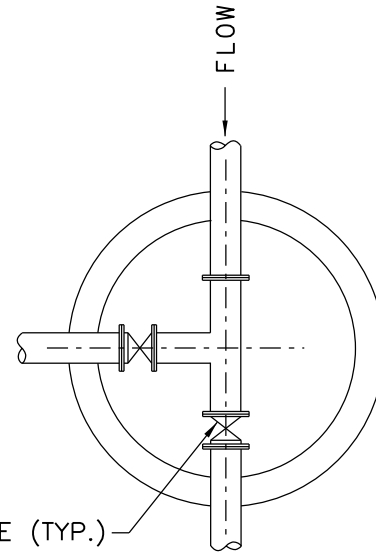
...Pavers over Rigid Base_Drainage_3.dgn



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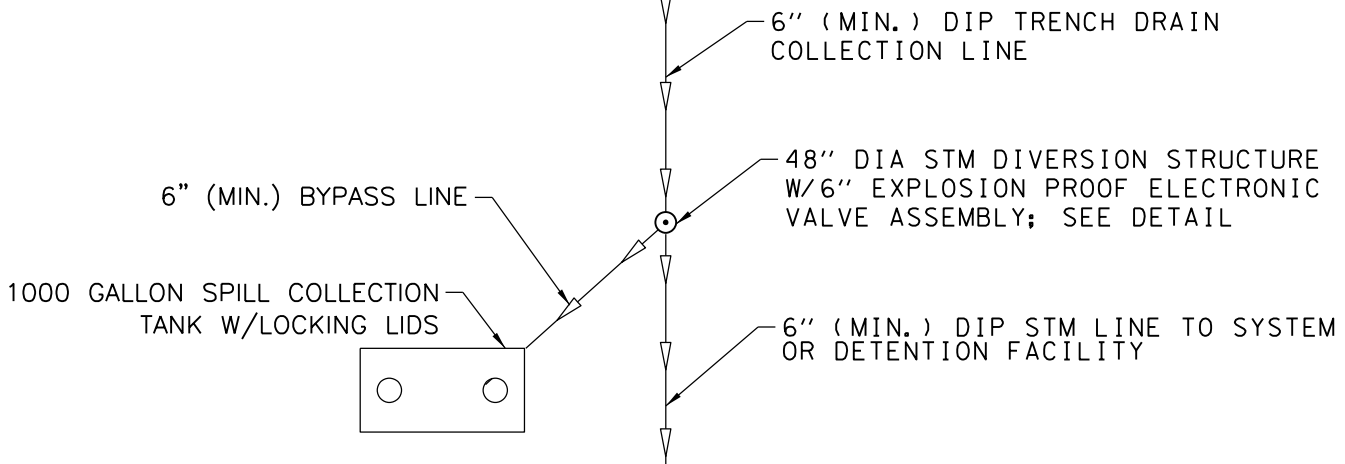


CANOPY OVERHANG LIMIT



CONTROL VALVE (TYP.)

DETAIL



NOTES:

1. CONTROL VALVES SHALL BE ELECTRICALLY ACTIVATED, 120V POWER, NEMA 4 RATING FOR ON-OFF SERVICE WITH MANUAL OVERRIDE.
2. DIAMETER OF VALVES SHALL MATCH INFLOW AND OUTFLOW PIPING.
3. ALL STRUCTURE AND PIPE MATERIALS TO BE CONCRETE OR DIP; NO HDPE OR PVC STRUCTURES OR PIPES ALLOWED.
4. DIVERSION STRUCTURE SHALL BE CONSTRUCTED AS PER VILLAGE OF ALGONQUIN STANDARD DETAIL FOR SANITARY MANHOLE.
5. ALL PIPE GASKETS TO BE SOLVENT RESISTANT.
6. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

FUEL SPILL COLLECTION

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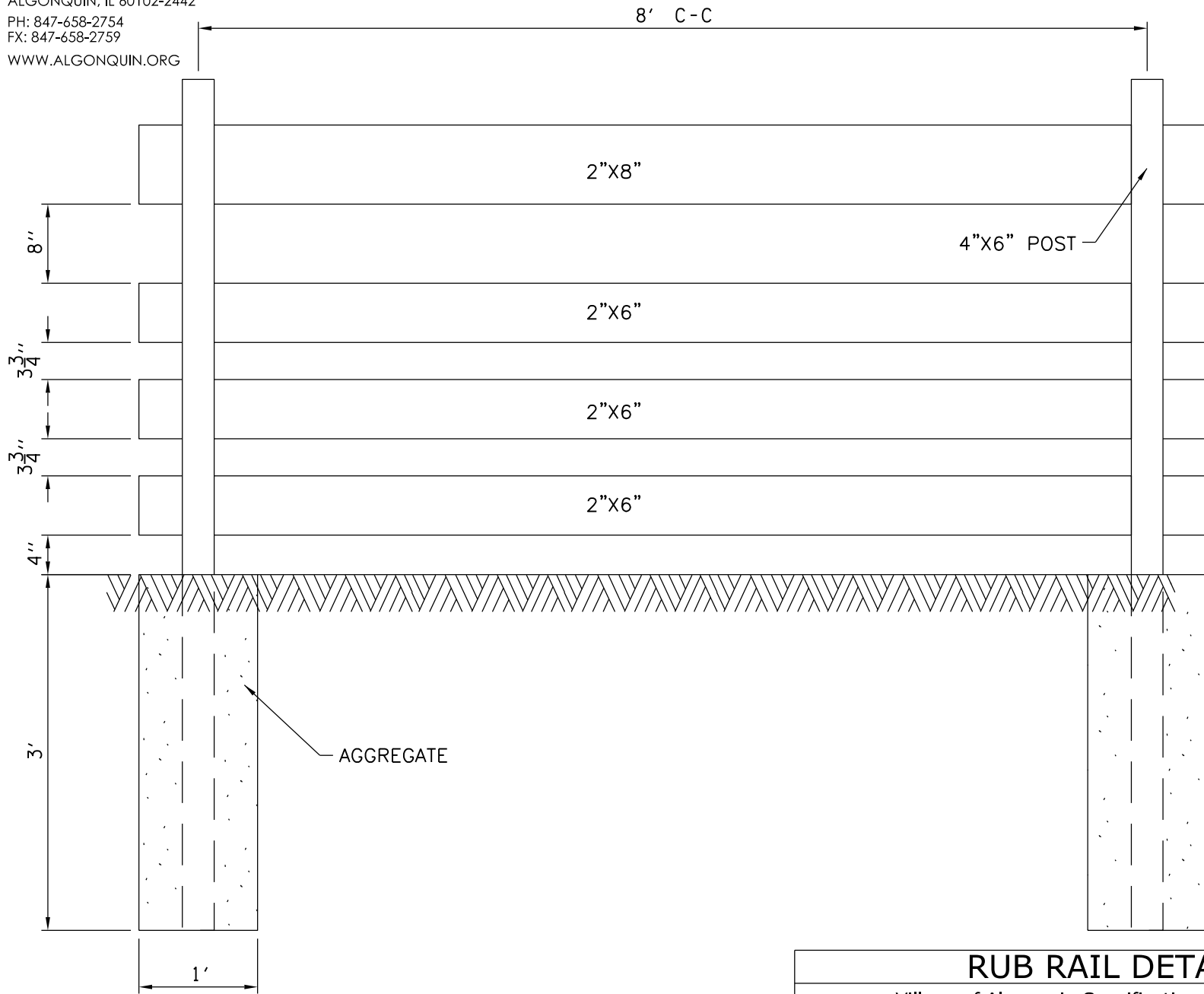
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RUB RAIL DETAIL

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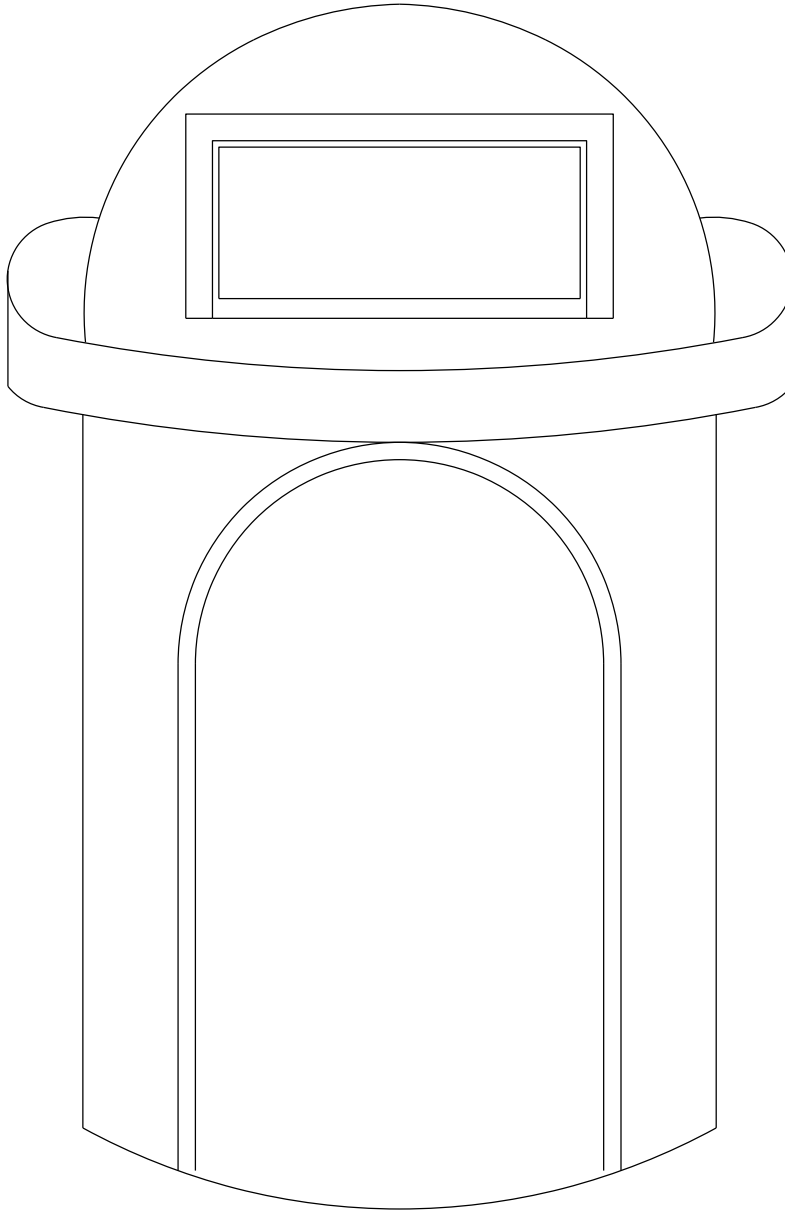
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SMART INDUSTRY PRODUCTS MODEL S7107A-00,
BLACK LID AND BLACK BODY, DOME TOP WITH
DOOR OR APPROVED EQUAL

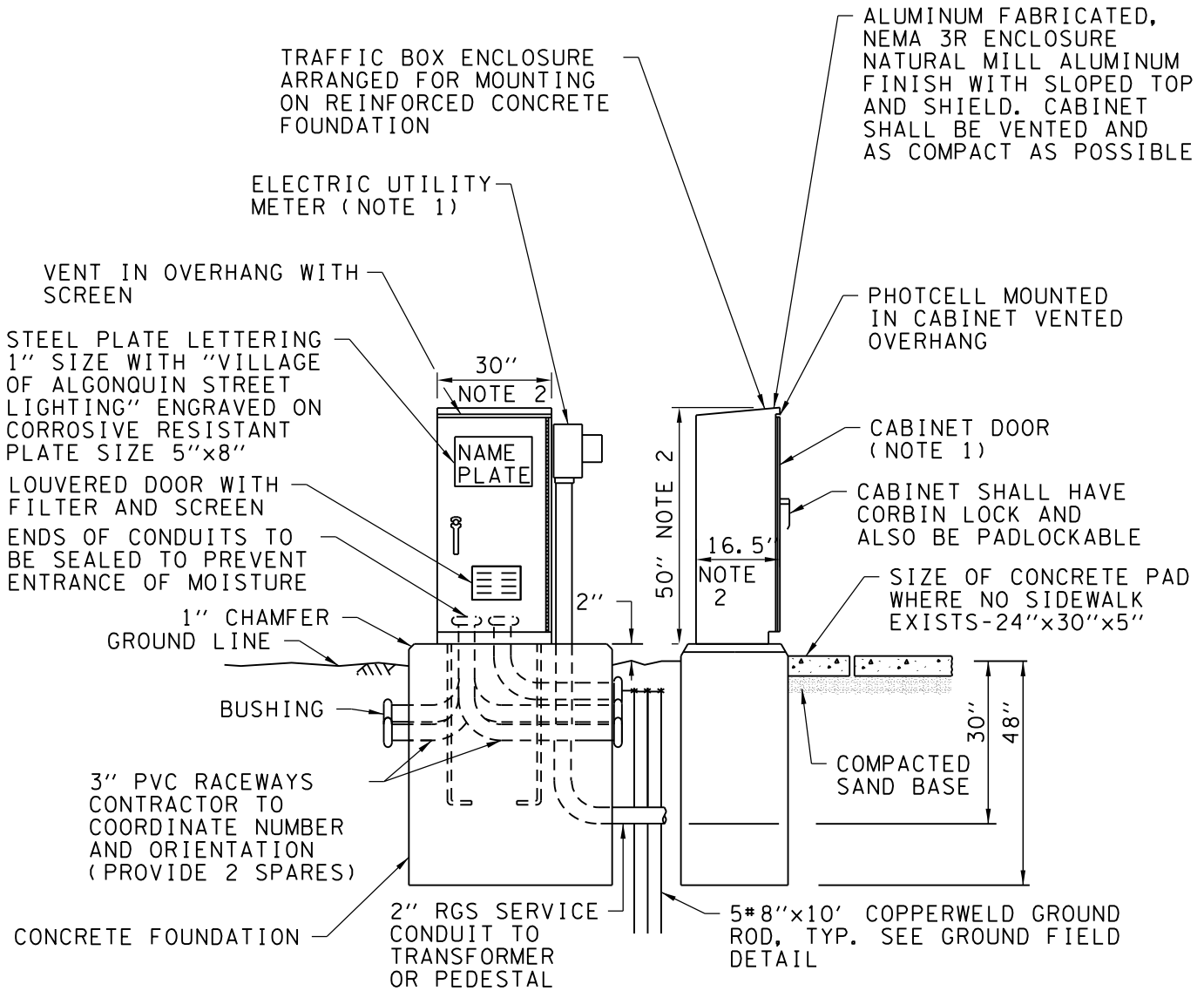


GARBAGE CAN	
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... \CAD Files 2022 \Garbage Can.dgn



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NOTES:

1. SEE DETAIL FOR CABINET METER FITTING & DOOR ORIENTATION.
2. CABINET DIMENSIONS SHOWN ARE APPROXIMATE, CABINET SHALL BE AS COMPACT AS POSSIBLE, CONTRACTOR TO COORDINATE.

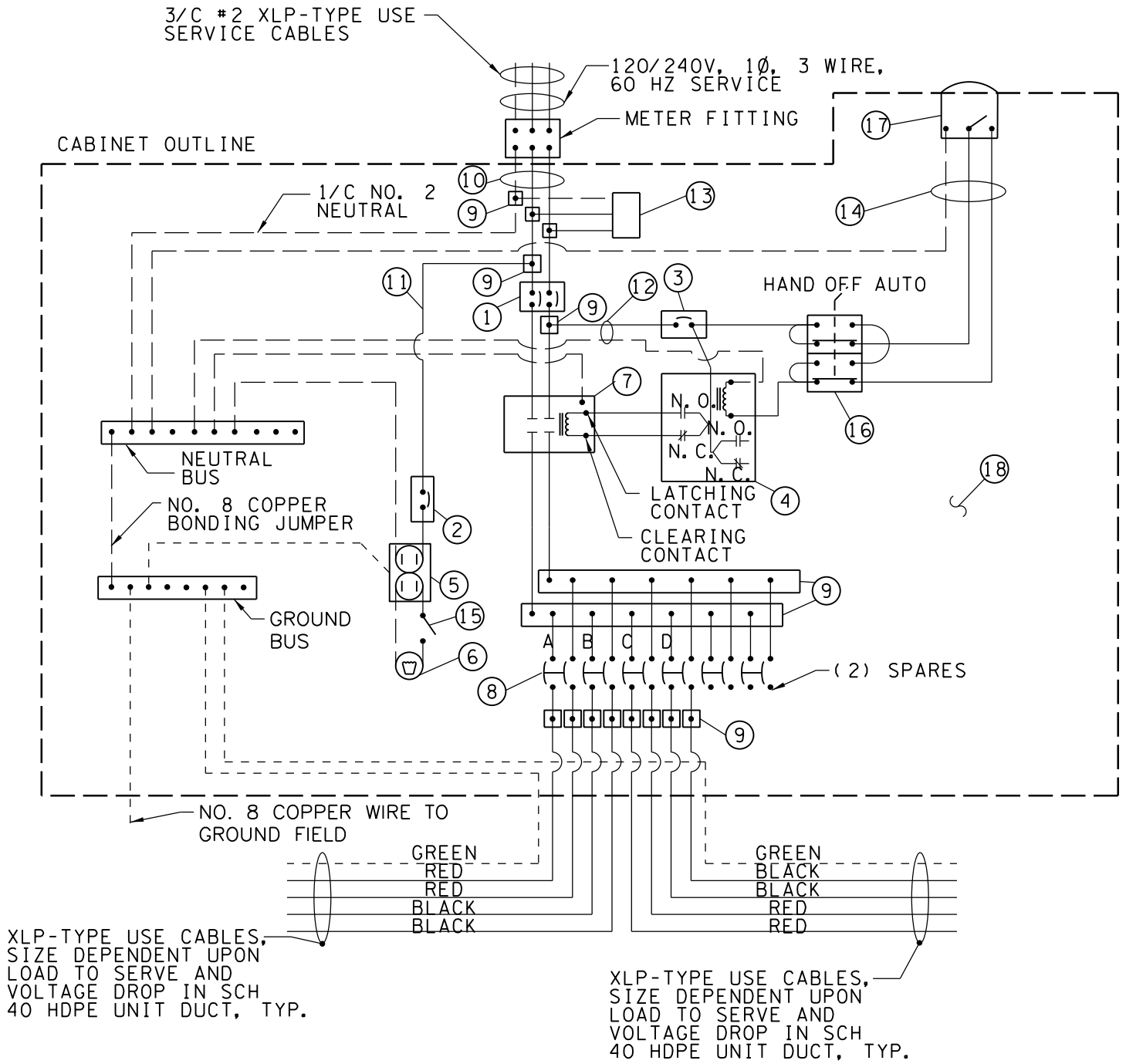
STANDARD DETAIL	
LIGHTING CONTROLLER CABINET & FOUNDATION	
Village of Algonquin Specifications & Details Guide	
Drawn By: CBBEL	Revision Date 06/25/2022
Approved By: Public Works Director	Effective Date 06/25/2022

... \01_Lighting Controller Cabinet.dgn



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————— PHASE CONDUCTOR
 - - - - - NEUTRAL CONDUCTOR
 - - - - - GROUND CONDUCTOR



STANDARD DETAIL	
LIGHTING CONTROLLER WIRING DIAGRAM	
Village of Algonquin Specifications & Details Guide	
Drawn By: CBBEL	Revision Date 06/25/2022
Approved By: Public Works Director	Effective Date 06/25/2022

... \02_Lighting Controller Wiring.dgn



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ITEM	SPECIFICATION	MFG./MODEL NO. OR APPROVED EQUAL
① MAIN CIRCUIT BREAKER	100 AMPERE, 2P, 240V SERVICE RATING, 10KAIC	SIEMENS NO. ED22B100
② LAMPHOLDER CIRCUIT BREAKER	20 AMPERE, 1P, 120V RATING, 10KAIC	SIEMENS NO. ED21B020
③ PHOTOELECTRIC CONTROL CIRCUIT BREAKER	15 AMPERE, 1P, 120V RATING, 10KAIC	SIEMENS NO. ED21B015
④ AUXILIARY RELAY	120 V OPERATED DPDT 60 HZ COIL 2 NO & 2 NC CONTACTS	MAGNECRAFT NO. 389 FXBXC1 - 120A
⑤ CABINET RECEPTACLE AND BOX	COMMERCIAL GRADE GFCI 20A/120V, MOUNTED IN A WEATHERPROOF CAST ALUMINUM SINGLE GANG BOX WITH WEATHERPROOF COVER	RECEPTACLE: LEVITON NO. 8899, BOX: APPLETON NO. WSM150 COVER: APPLETON NO. WHG1
⑥ CABINET LIGHT AND BOX	120V WEATHERPROOF LAMPHOLDER MOUNTED IN A CAST ALUMINUM BOX & EXT. GRADE 100W LAMP	LIGHT & BOX: RAB NO. VX100DG
⑦ CONTACTOR	100 AMPERE, 2 POLE, 120 V COIL, MECH HELD	SQUARE D NO. 8903 S00 10 V02
⑧ BRANCH LINE CIRCUIT BREAKERS	6 - 20 AMPERE, 2P, 240V RATING, 10KAIC	SIEMENS NO. ED22B020
⑨ POWER DISTRIBUTION BLOCK	600 VOLT, INSULATED, SIZE AS REQUIRED	MARATHON
⑩ SERVICE CABLES	3-600V (XLP-TYPE USE) NO. 2	N/A
⑪ LAMPHOLDER WIRE	2-600V XLP NO. 12	N/A
⑫ CONTROL WIRE	2-600V XLP NO. 12	N/A
⑬ SURGE ARRESTOR	10 K AMPERE RATING	SQUARE D NO. SDSA 1175
⑭ PHOTOELECTRIC CONTROL WIRE	3-600V XLP NO. 12	N/A
⑮ DOOR SWITCH	20A/120V, DOOR MOUNTED SNAP ACTION TYPE PLUNGER SWITCH	OMRON NO. A-20GQ-K
⑯ HAND-AUTO-OFF CONTROL SWITCH	20A, 3 POS. MTD IN CAST ALUM. ENCLOSURE	SQUARE D NO. 9001 KYK 111
⑰ PHOTOCCELL	120V, MTD. ON CABINET, DELAY TYPE, SPST-NC	FISHER PIERCE NO. FPFA-105M
⑱ BACK PANEL	1/2" THICK SOLID PHENOLIC LAMINATE	ARBORON

NOTES:

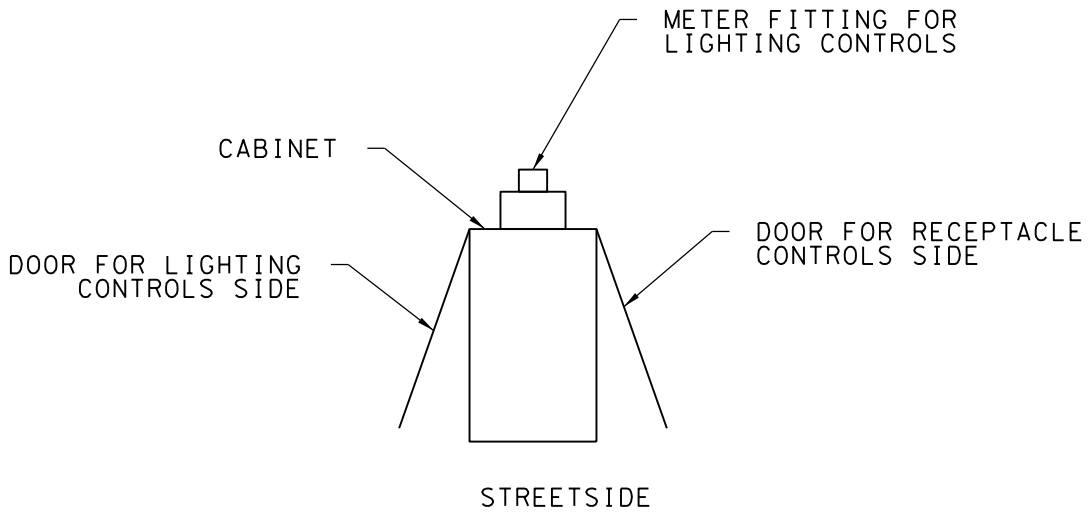
1. ALL ITEMS LISTED IN LIGHTING CONTROLLER COMPONENT SCHEDULE SHALL BE CONSIDERED INCIDENTAL TO THE PRICE BID FOR "LIGHTING CONTROLLER" INCLUDING CABINET AND FOUNDATION.
2. THE LIGHTING CONTROLLER TOGETHER WITH ALL OF ITS COMPONENTS SHALL BE UL LISTED AS AN "ENCLOSED INDUSTRIAL CONTROL PANEL" UNDER UL508A.
3. CONNECTION OF SURGE ARRESTOR TO LINE SIDE OF MAIN CIRCUIT BREAKER SHALL NOT BE "DOUBLE LUGGED."

STANDARD DETAIL	
LIGHTING CONTROLLER COMPONENT SCHEDULE	
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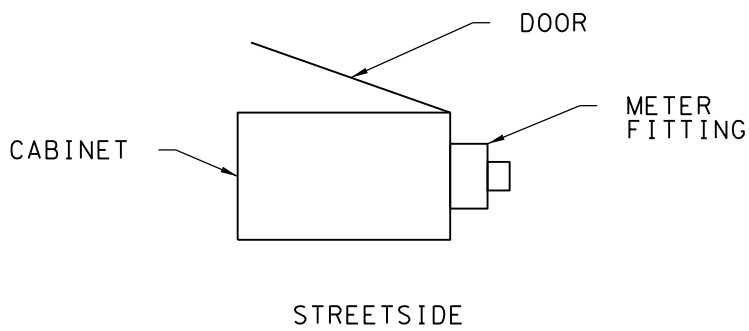
... \03_Lighting Controller Component Schedule.dgn



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DOUBLE DOOR



SINGLE DOOR

STANDARD DETAIL

CABINET ORIENTATION

Village of Algonquin Specifications & Details Guide

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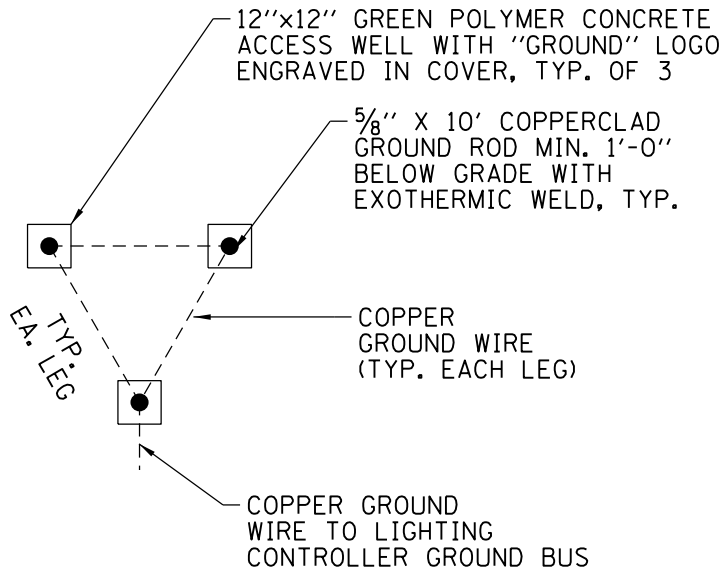
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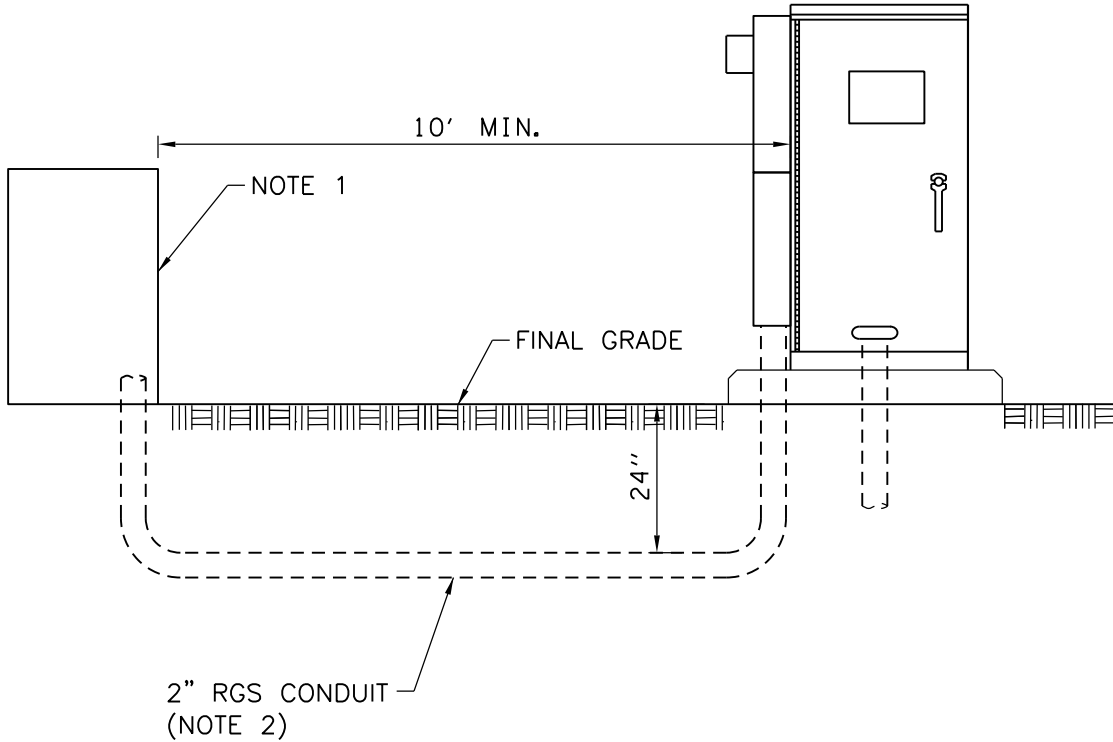


STANDARD DETAIL	
GROUND FIELD DETAIL	
Village of Algonquin Specifications & Details Guide	
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... \05_Ground Field Detail.dgn



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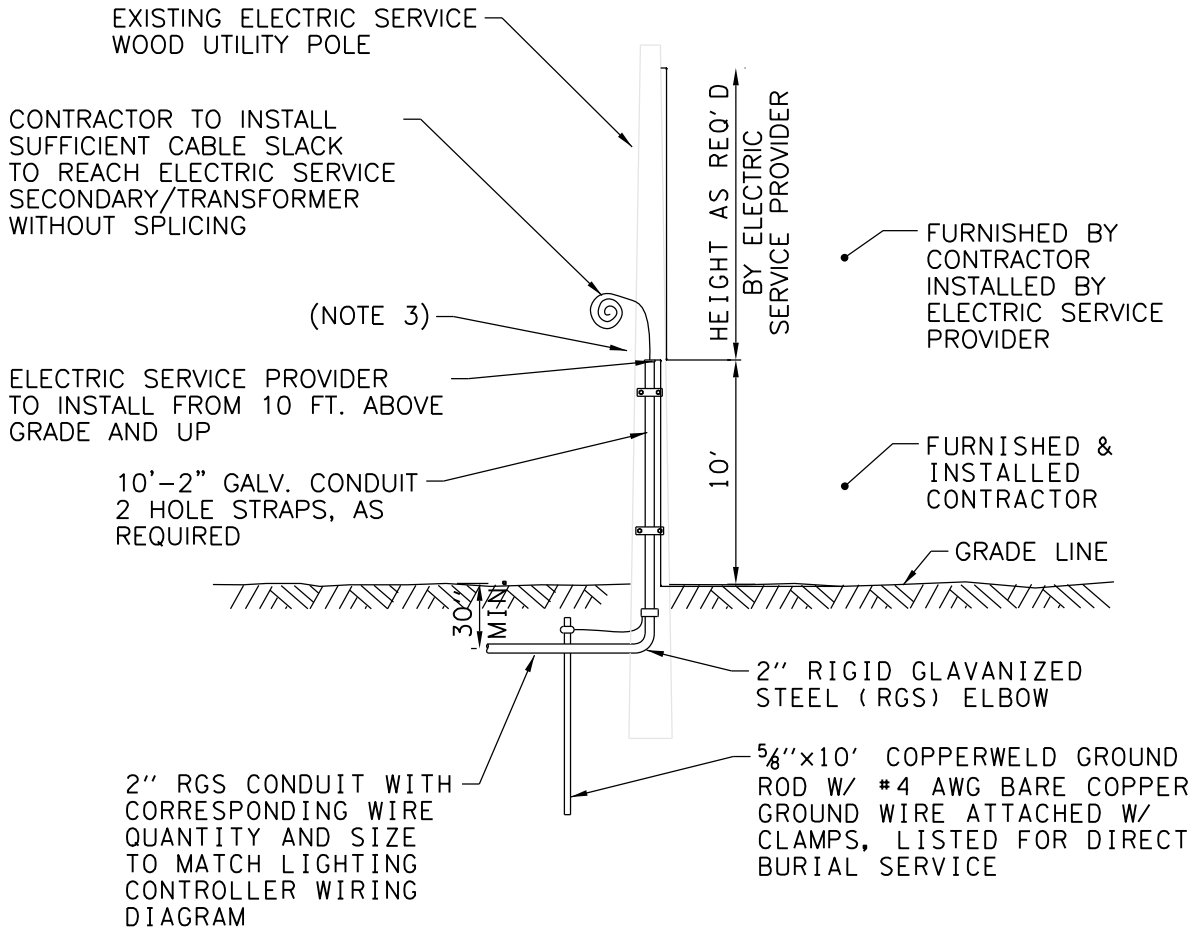
NOTES:

1. ELECTRIC SERVICE PEDESTAL OR TRANSFORMER LOCATED IN EASEMENT. COM ED WILL PROVIDE CONNECTORS FOR CABLES AND CONNECT CABLES WITHIN THE COM ED ENCLOSURE. COM ED WILL IDENTIFY CUSTOMER'S STREET LIGHT CABLE.
2. WIRE SIZE TO MATCH WIRE SIZE CALLED OUT IN LIGHTING CONTROLLER WIRING DIAGRAM.

STANDARD DETAIL	
UNDERGROUND SERVICE INSTALLATION	
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NOTES:

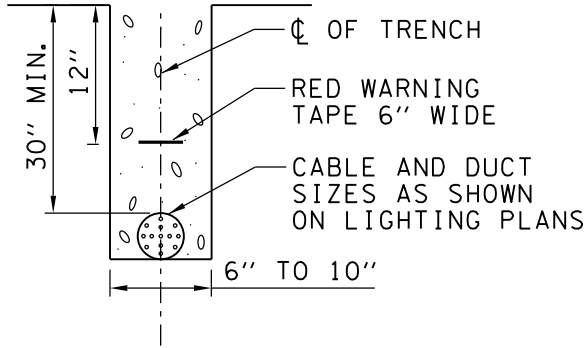
1. ALL WORK SHALL CONFORM TO ELECTRIC SERVICE PROVIDER'S BOOK OF "INFORMATION AND REQUIREMENTS FOR THE SUPPLY OF ELECTRIC SERVICE."
2. FURNISHING AND INSTALLING ALL MATERIAL SHOWN ABOVE (EXCEPT FOR POLE) SHALL BE INCLUDED IN THE PRICE BID FOR "ELECTRIC SERVICE INSTALLATION". THE HORIZONTAL SERVICE CONDUIT AND WIRING FROM POLE TO CONTROLLER SHALL BE PAID FOR SEPARATELY.
3. CONTRACTOR TO PROVIDE A CONDUIT BUSHING AND SEALING COMPOUND AT TOP OF RISER.

STANDARD DETAIL	
OVERHEAD SERVICE INSTALLATION	
Village of Algonquin Specifications & Details Guide	
Drawn By: CBBEL	Revision Date 06/25/2022
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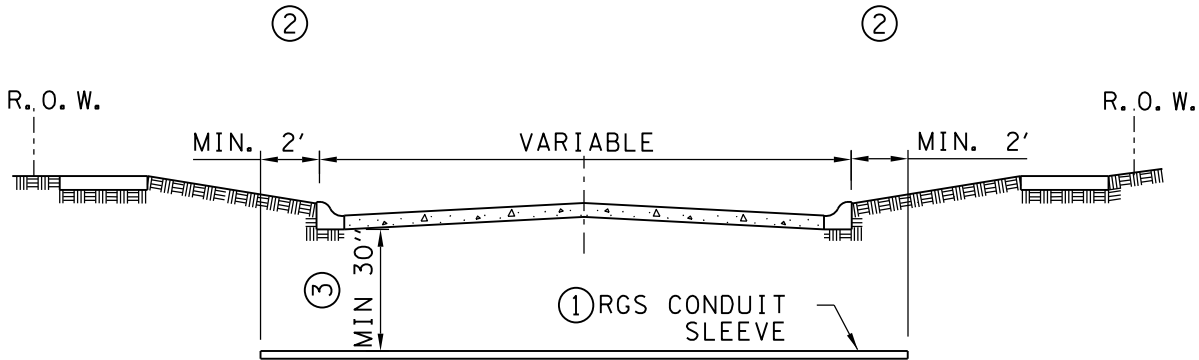
... \07_Overhead Service Installation.dgn



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TRENCH CROSS SECTION



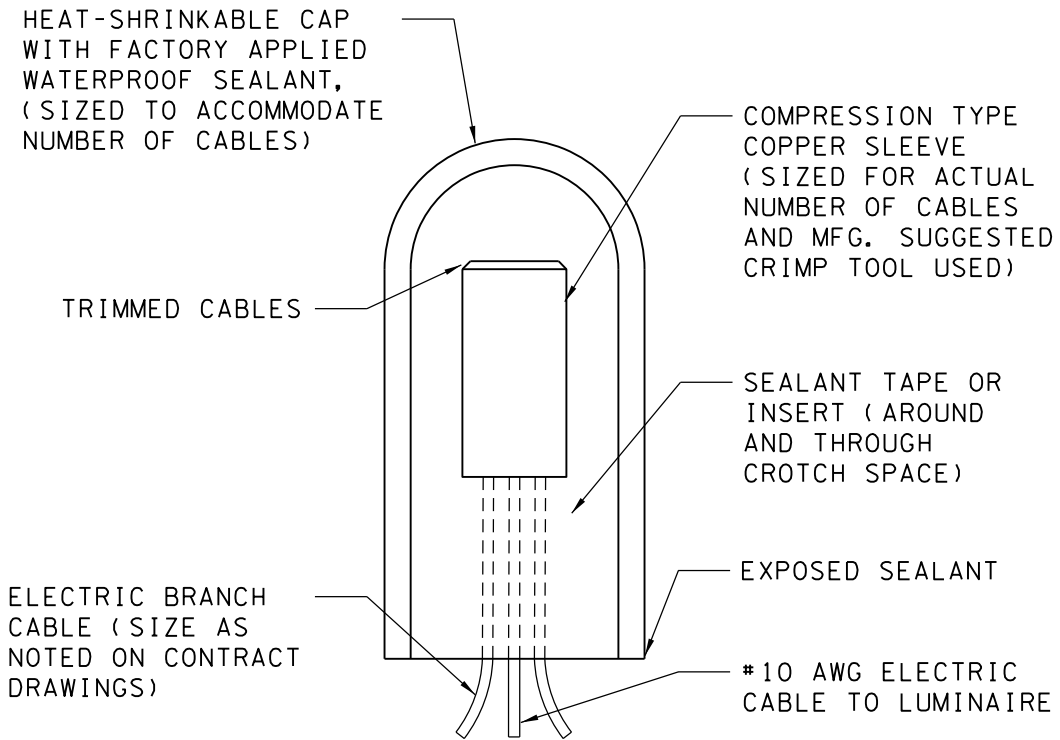
ROADWAY CROSSING

- ① SLEEVE SHALL BE HEAVY WALL RIGID GALVANIZED STEEL (RGS) CONDUIT.
- ② SLEEVE SHALL EXTEND A MINIMUM OF 2 FT. BEYOND BACK OF CURB.
- ③ SLEEVE SHALL BE A MINIMUM OF 30" BELOW ROADWAY OR CURB BOTTOM.

STANDARD DETAIL	
CONDUIT DETAIL	
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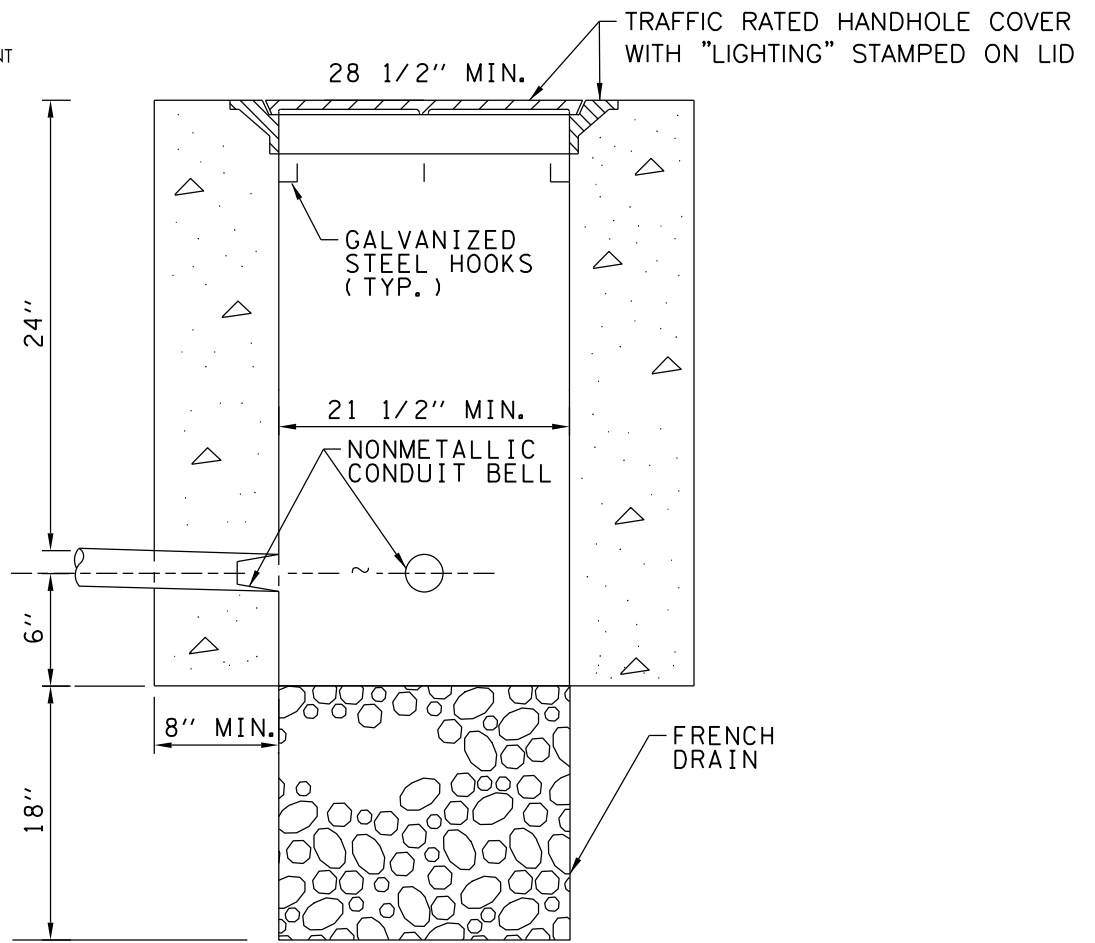


STANDARD DETAIL	
ELECTRIC CABLE SPLICE DETAIL	
Village of Algonquin Specifications & Details Guide	
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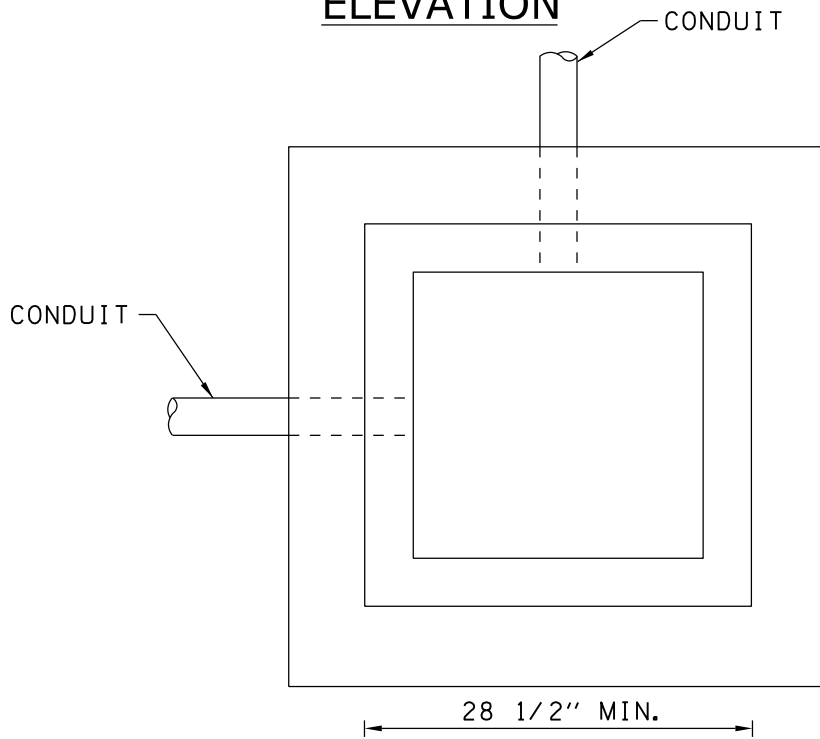
...\\09_Splicing Detail.dgn



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ELEVATION

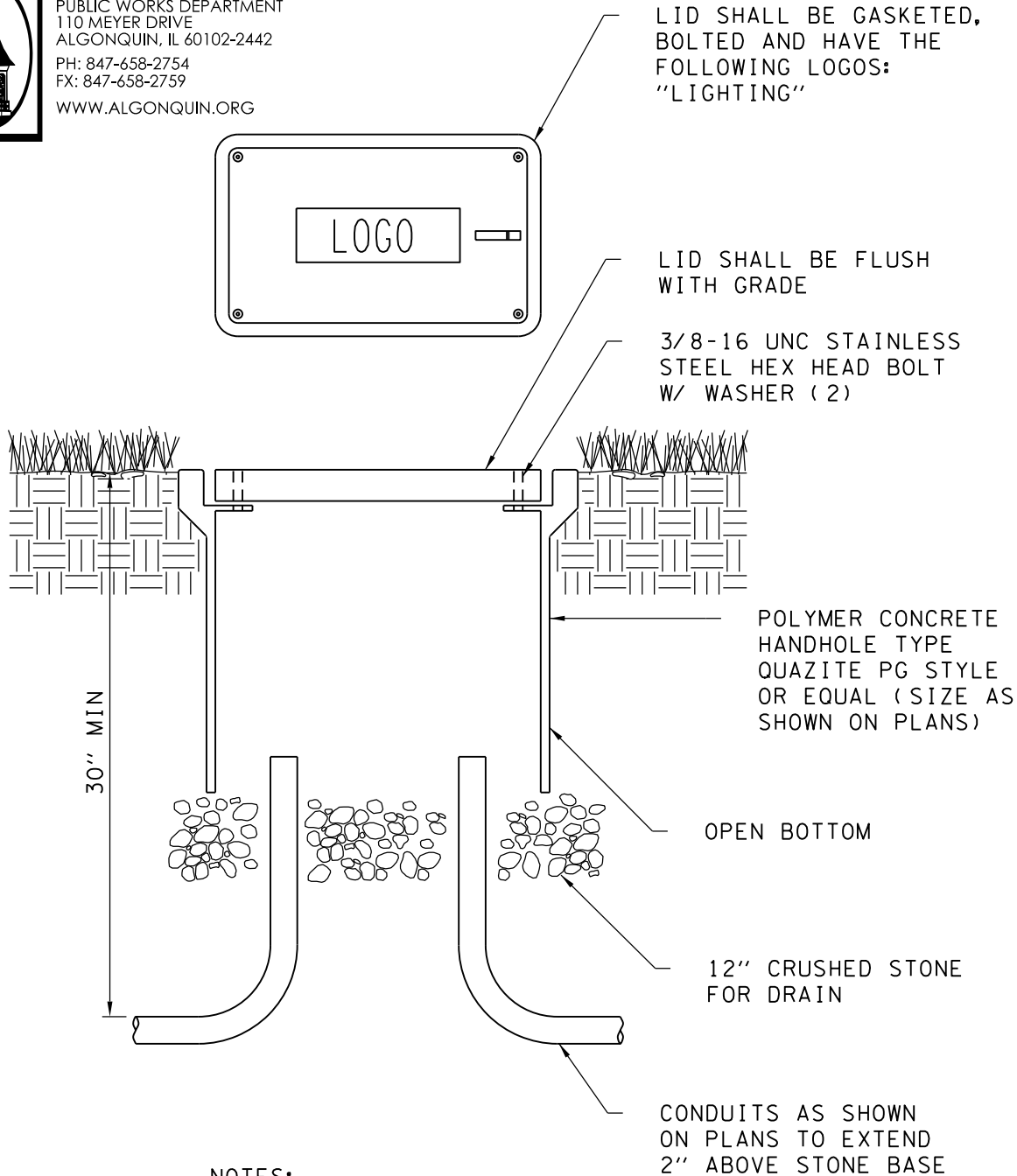


PLAN

STANDARD DETAIL	
CONCRETE HANDHOLE	
Village of Algonquin Specifications & Details Guide	
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NOTES:

1. ALL SPLICES SHALL BE WATERPROOF. SEE SPLICING DETAIL.
2. POLYMER CONCRETE HANDHOLE AND LID SHALL BE GREY.
3. BOX & LID SHALL MEET/EXCEED ANSI TIER 15 LOADING REQUIREMENTS REQUIREMENTS AND BE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI/SCTE 77 "SPECIFICATIONS FOR UNDERGROUND ENCLOSURE INTEGRITY", AND THE PROVISIONS OF PARAGRAPHS 5.2.3 AND 5.2.4 OF WESTER UNDERGROUND COMMITTEE GUIDE 3.6.

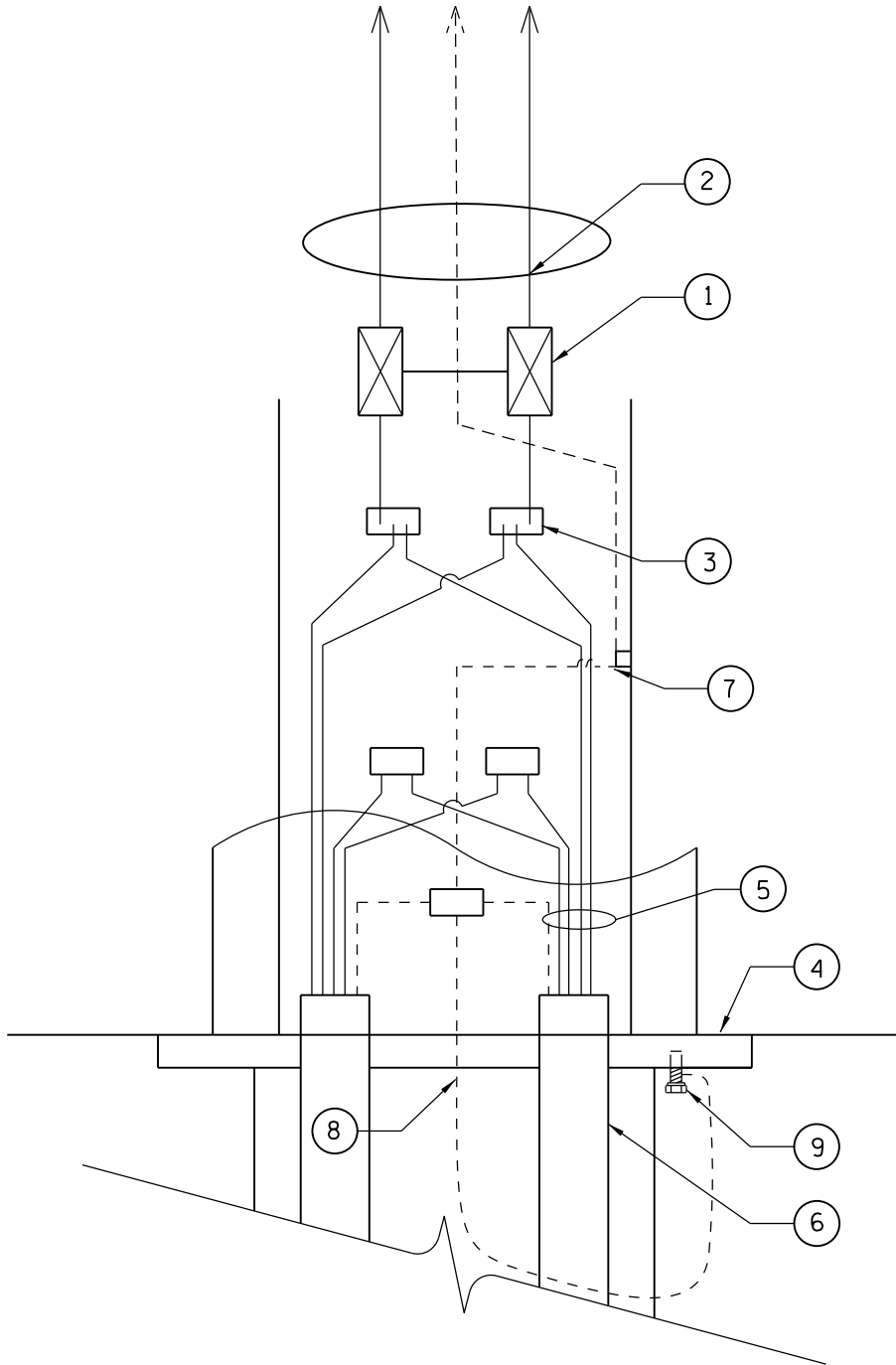
STANDARD DETAIL	
JUNCTION BOX DETAIL	
Village of Algonquin Specifications & Details Guide	
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TO 240V
 LUMINAIRE

———— PHASE CONDUCTOR
 - - - - - GROUND CONDUCTOR



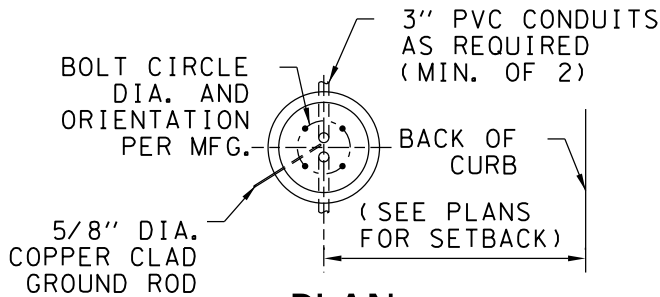
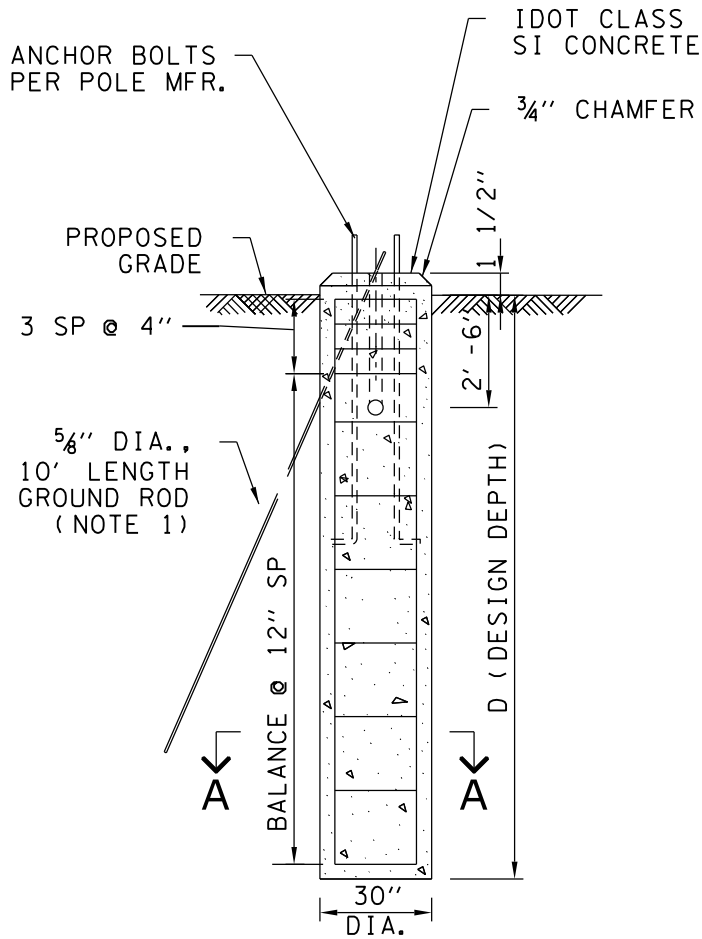
- ① CONNECTOR KIT METHOD WITH A 5 AMP FUSE INSIDE A TWO POLE FUSE HOLDER AND INSULATING BOOTS
- ② NO. 10 A.W.G. WIRE
- ③ MULTIPLE COMPRESSION FITTINGS (SPLICE)
- ④ POLE FOUNDATION
- ⑤ WIRE AS SHOWN ON PLANS
- ⑥ CABLES IN DUCT AS SHOWN ON PLANS
- ⑦ POLE GROUND LUG
- ⑧ #6 SOLID GROUND WIRE CONNECTED TO METAL POLE FOUNDATION
- ⑨ 3/8" GALV. HEX BOLT & LOCKWASHER WITH COMPRESSION TERMINAL FOR GROUND WIRE CONNECTION TO METAL POLE FOUNDATION

...\\12_Handhole Wiring Diagram.dgn

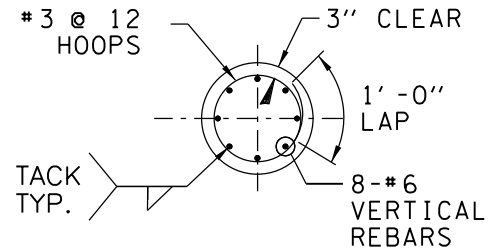
STANDARD DETAIL	
HANDHOLE WIRING DIAGRAM	
Village of Algonquin Specifications & Details Guide	
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PLAN



SECTION A-A

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION
SOFT CLAY ($Q_u=0.375$ TON/SF)	13' -0"
MEDIUM CLAY ($Q_u=0.75$ TON/SF)	9' -6"
STIFF CLAY ($Q_u=1.50$ TON/SF)	7' -0"
LOOSE SAND ($\phi=34^\circ$)	9' -0"
MEDIUM SAND ($\phi=37.5^\circ$)	8' -3"
DENSE SAND ($\phi=40^\circ$)	7' -9"

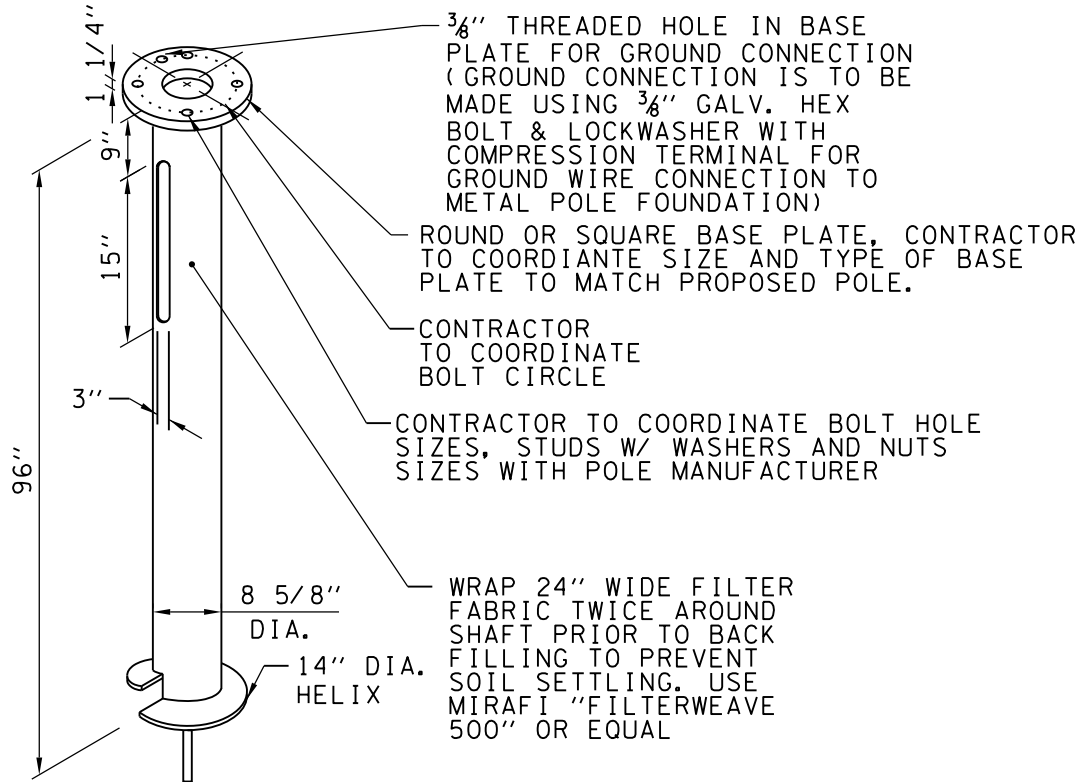
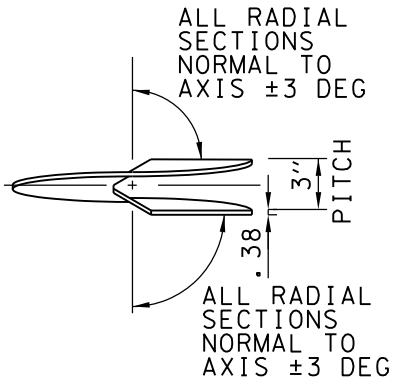
NOTES:

- GROUND ROD SHALL BE CAST INTO CONCRETE FOUNDATION WITH 8 FEET IN CONTACT WITH SOIL.
- FOUNDATIONS SHALL BE VIBRATED IN ACCORDANCE WITH IDOT STANDARD PRACTICES.

SPECIAL DETAIL	
CONCRETE FOUNDATION DETAIL	
Village of Algonquin Specifications & Details Guide	
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HELIX SIDE VIEW

HELIX FOUNDATION

NOTES:

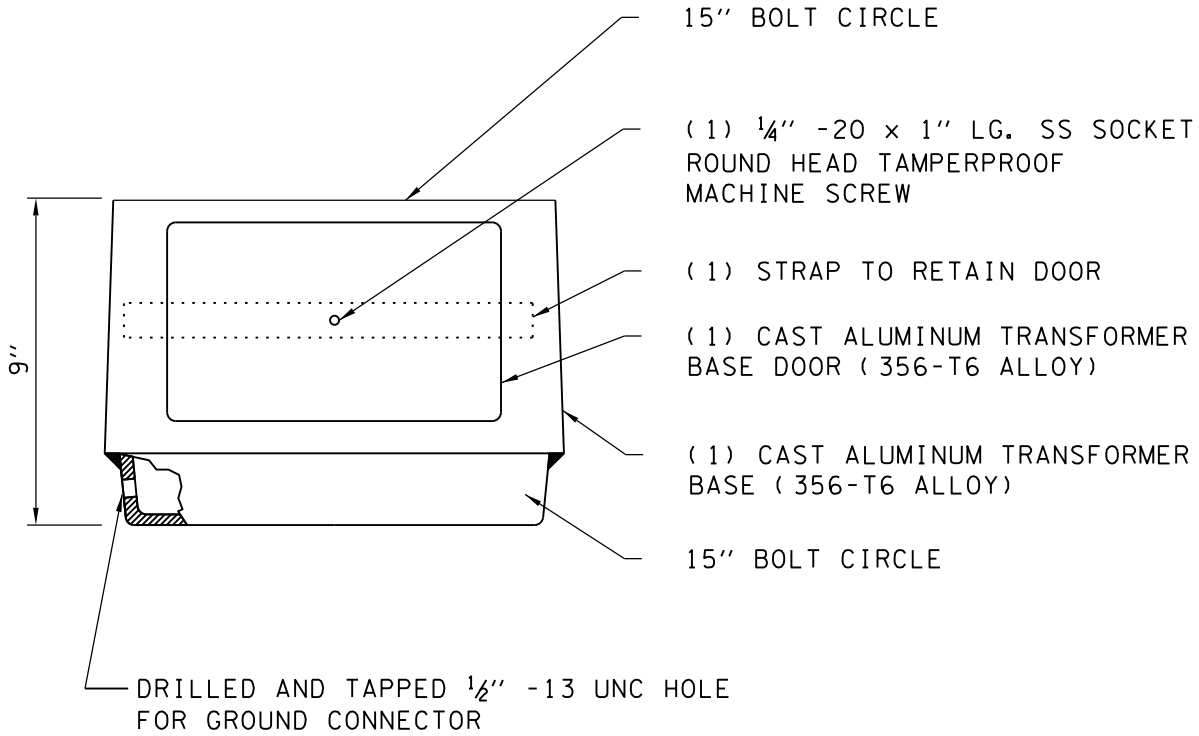
1. FINISH: HOT DIP GALVANIZED PER AASHTO M111 (LATEST REVISION).
2. BASEPLATE TO BE PERPENDICULAR TO SHAFT AXIS (± 1 DEG) AND HOLE CENTERLINE CONCENTRIC ($\pm .188$) TO SHAFT AXIS.
3. STENCIL MIN $\frac{1}{2}$ IN. LETTERS MANUFACTURER'S NUMBER AFTER GALVANIZING.
4. PILOT POINT AND SHAFT AXES TO BE CONCENTRIC (± 125 FIM) AND IN LINE (± 2 DEG).
5. FLAME CUT SLOT PERPENDICULAR TO THE BASEPLATE.
6. PREHEAT, TUMBLEBLAST, HANDGRIND, AND CLEAN BASEPLATE, HELIX, AND PILOT POINT ON ALL WELDED AREAS.
7. FLAMECUT IRREGULARITIES PERMISSIBLE: (1) VALLEYS NOT TO EXCEED $\frac{3}{32}$ IN. BELOW NOMINAL SURFACE LEVEL, (2) PEAKS OR POSITIVE IRREGULARITIES NOT TO EXCEED $\frac{1}{32}$ IN. ABOVE NOMINAL SURFACE LEVEL OR INTERSECTIONS OF NOMINAL SURFACES.
8. MANUFACTURER TO HAVE IN EFFECT INDUSTRY RECOGNIZED WRITTEN QUALITY CONTROL FOR ALL MATERIALS AND MANUFACTURING PROCESSES.
9. ALL MATERIAL IS TO BE NEW, UNUSED AND MILL TRACEABLE MEETING THE FOLLOWING SPECIFICATIONS:
 BASEPLATE: ASTM A36-(LATEST REVISION) STRUCTURAL (CONFORM TO AASHTO TECH. BUL. #270)
 SHAFT: ASTM A252 (LATEST REVISION) GRADE 2, STEEL PIPE PILES. ALT. MATERIAL: ASTM A53 (LATEST REVISION) TYPE E OR S, GRADE B, STEEL PIPE OR ASTM A500 (LATEST REVISION) GRADE B, STRUCTURAL STEEL TUBING.
 HELIX: ASTM A635 (LATEST REVISION) $\frac{3}{8}$ " THICK HOT ROLLED STEEL PLATE OR COIL.
 PILOT POINT: ASTM A575 (LATEST REVISION) $1\frac{1}{4}$ " DIA. HOT ROLLED STEEL BAR.
 BOLTS: 1" DIA. HOT DIP GALVANIZED STUDS IN ACCORDANCE WITH AASHTO M314 OR ASTM F1554.
10. BASEPLATE IS PERMANENTLY STAMPED WITH MANUFACTURER'S IDENTIFICATION "ABC" IN $\frac{1}{2}$ " LETTERS AND DATE CODE IN $\frac{1}{4}$ " LETTERS.

STANDARD DETAIL	
METAL HELIX FOUNDATION	
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...\\14_Metal Foundation Detail.dgn



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NOTES:

1. BEFORE INSTALLATION OF BREAKAWAY BASE, USER SHOULD CONSULT WITH AUTHORIZED DISTRIBUTOR REGARDING USERS PROPOSED APPLICATION, LOAD REQUIREMENTS AND INSTALLATION METHODS. FAILURES CAN RESULT FROM USERS MISAPPLICATION OR IMPROPER INSTALLATION. TO APPROACH OPTIMUM STATIC LOADS, USE THE LARGEST POSSIBLE BOLT CIRCLES. SHIMS SHALL NOT BE ALLOWED.
2. SHALL BE FACTORY PAINTED BLACK IF UTILIZED IN HISTORIC DISTRICT AND UNPAINTED IN COMMERCIAL AND COMMERCIAL COLLECTOR ROADWAYS.

SPECIAL USE DETAIL	
TRANSFORMER BASE DETAIL	
Village of Algonquin Specifications & Details Guide	
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...\\15_Transformer Base Detail.dgn



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BREAKAWAY COUPLINGS
 WITH BOTTOM AND TOP
 WASHERS

(2) PC. ALUM. COVER. SKIRT
 WITH (4) STAINLESS STEEL
 SCREWS

ROUGH
 FOUNDATION

2 1/2" ANCHOR BOLT
 PROJECTION (MAX)

ANCHOR
 BOLTS

NOTES:

1. SHALL BE FACTORY PAINTED BLACK IF UTILIZED IN HISTORIC DISTRICT AND UNPAINTED IN COMMERCIAL AND COMMERCIAL COLLECTOR ROADWAYS.

SPECIAL USE DETAIL

BREAKAWAY COUPLING DETAIL

Village of Algonquin Specifications & Details Guide

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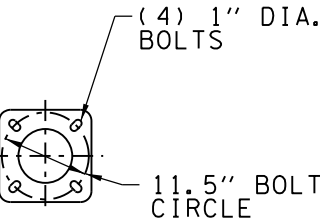
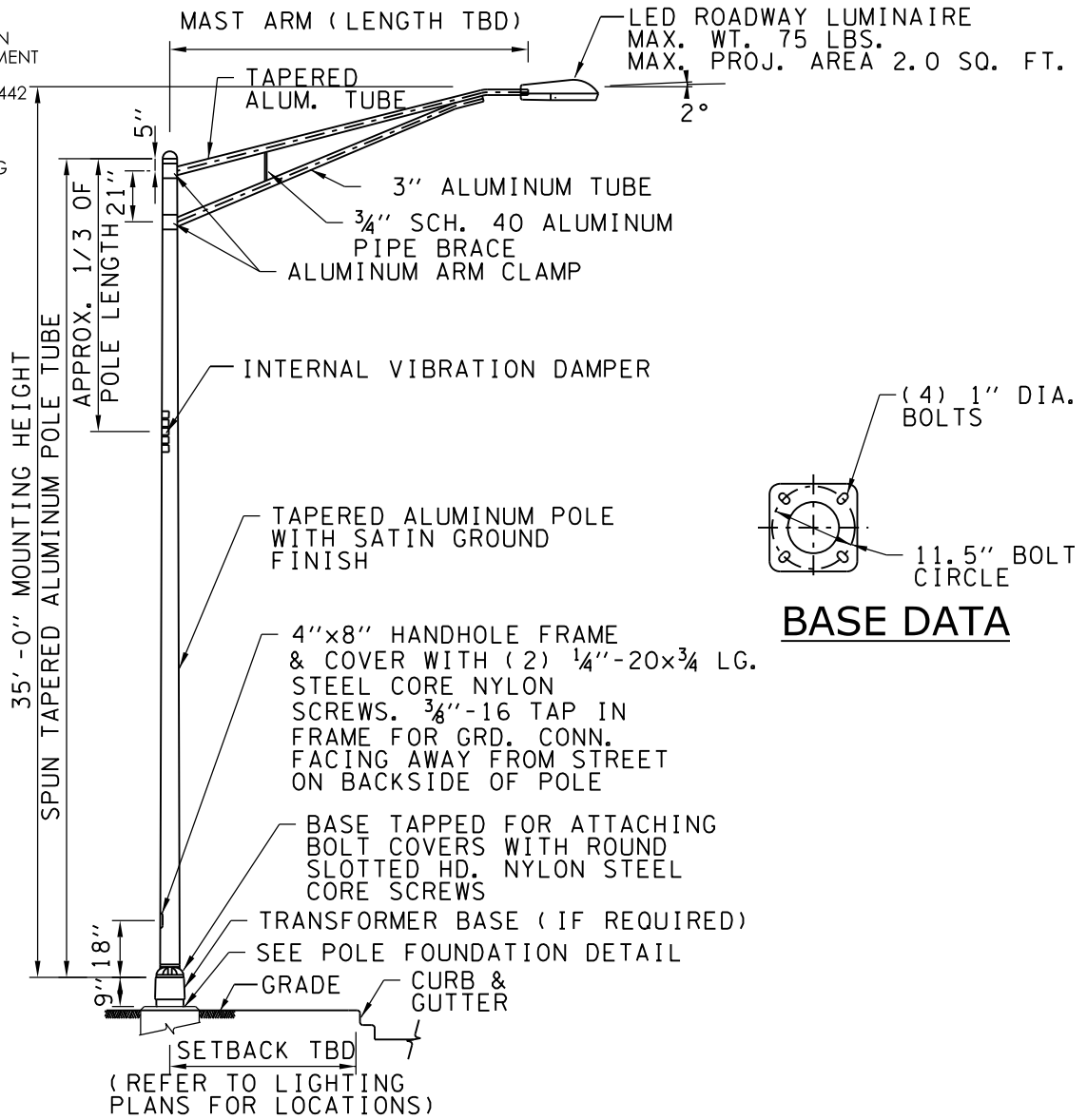
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Approved By: Public Works Director

Effective Date 06/25/2022



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BASE DATA

REQUIRED LIGHTING VALUES

ROAD TYPE	PEDESTRIAN CONFLICT AREA	MAX. MAINTAINED AVG. ILLUMINANCE VALUES (Fc)	ILLUMINANCE UNIFORMITY Eavg/Emin	AVG. LUMINANCE (cd/m²)	LUMINANCE UNIFORMITY Lavg/Lmin	LUMINANCE UNIFORMITY Lmax/Lmin	VEILING LUMINANCE RATIO Lvmax/Lavg
COMMERCIAL COLLECTOR	MEDIUM	1.3	3.0:1	0.9	3.0:1	5.0:1	0.3

NOTES:

- LIGHT POLES SHALL MEET WIND LOADING & VIBRATION REQUIREMENTS ACCORDING TO THE LATEST AASHTO STANDARDS AND ARTICLE 1069.01 IN STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL STEEL SHALL BE FROM A DOMESTIC SOURCE.
- THE LIGHT STANDARD SHALL MEET THE ILLUMINATION REQUIREMENTS AS SPECIFIED IN THE LUMINAIRE PERFORMANCE TABLES IN THE SPECIFICATIONS. ALL LUMINAIRES SHALL HAVE A MULTI-TAP BALLAST WIRED FOR 240 VOLTS OPERATION.
- ALL LIGHT STANDARDS SHALL BE STERNBERG OR APPROVED EQUAL.
- LIGHT POLE SHALL BE U/L LISTED.
- ANTI-SEIZE LUBRICANT SHALL BE APPLIED TO ALL BOLTED AREAS DURING INSTALLATION.

MATERIAL SPECIFICATIONS	
POLE	6063-T4
ARM TUBES	6063-T6
ANCHOR BASE & TRANSFORMER BASE	A356-T6
SMALL HARDWARE	AISI 300 SERIES STAINLESS STEEL
EXTRUSIONS	6063-T6
T-BASE CONN HRDW	ASTM-A307
H. H. FRAME	A356-T6
BOLT COVERS	ASTM-825 (A356)

Commercial Collector Roadway	
LIGHT STANDARD AND LUMINAIRE DETAIL	
Village of Algonquin Specifications & Details Guide	
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...17_Commercial Collector Roadway Details.dgn



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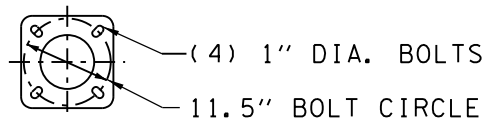
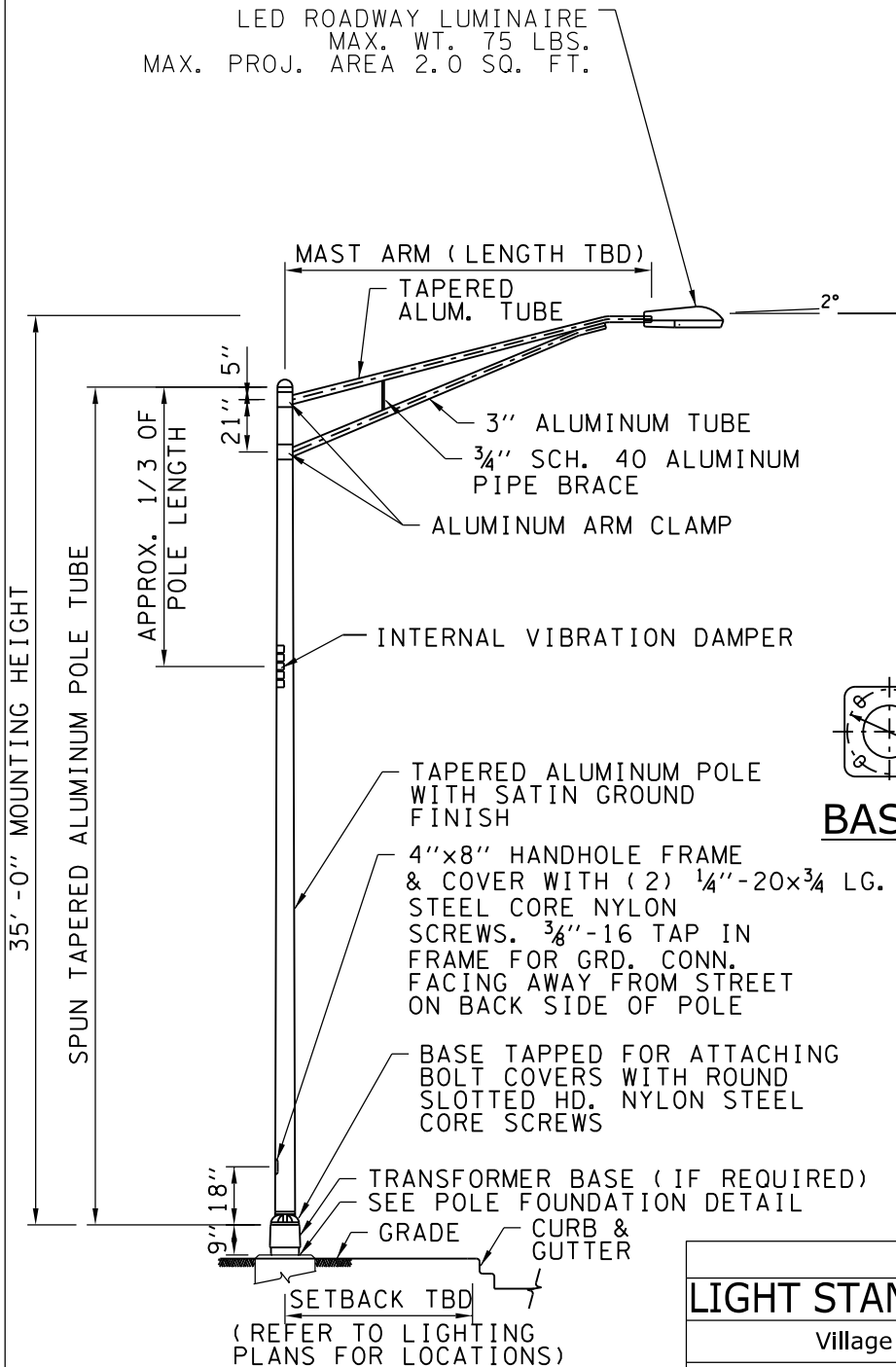
REQUIRED LIGHTING VALUES

ROAD TYPE	PEDESTRIAN CONFLICT AREA	MAX. MAINTAINED AVG. ILLUMINANCE VALUES (Fc)	ILLUMINANCE UNIFORMITY Eavg/Emin	AVG. LUMINANCE (cd/m ²)	LUMINANCE UNIFORMITY Lavg/Lmin	LUMINANCE UNIFORMITY Lmax/Lmin	VEILING LUMINANCE RATIO LVmax/Lavg
COMMERCIAL	LOW	0.6	4.0:1	0.4	4.0:1	8.0:1	0.4

NOTES:

1. LIGHT POLES SHALL MEET WIND LOADING & VIBRATION REQUIREMENTS ACCORDING TO THE LATEST AASHTO STANDARDS AND ARTICLE 1069.01 IN STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL STEEL SHALL BE FROM A DOMESTIC SOURCE.
2. THE LIGHT STANDARD SHALL MEET THE ILLUMINATION REQUIREMENTS AS SPECIFIED IN THE LUMINAIRE PERFORMANCE TABLES IN THE SPECIFICATIONS. ALL LUMINAIRES SHALL HAVE A MULTI-TAP BALLAST WIRED FOR 240 VOLTS OPERATION.
3. ALL LIGHT STANDARDS SHALL BE STERNBERG OR APPROVED EQUAL.
4. LIGHT POLE SHALL BE U/L LISTED.
5. ANTI-SEIZE LUBRICANT SHALL BE APPLIED TO ALL BOLTED AREAS DURING INSTALLATION.

LED ROADWAY LUMINAIRE
 MAX. WT. 75 LBS.
 MAX. PROJ. AREA 2.0 SQ. FT.



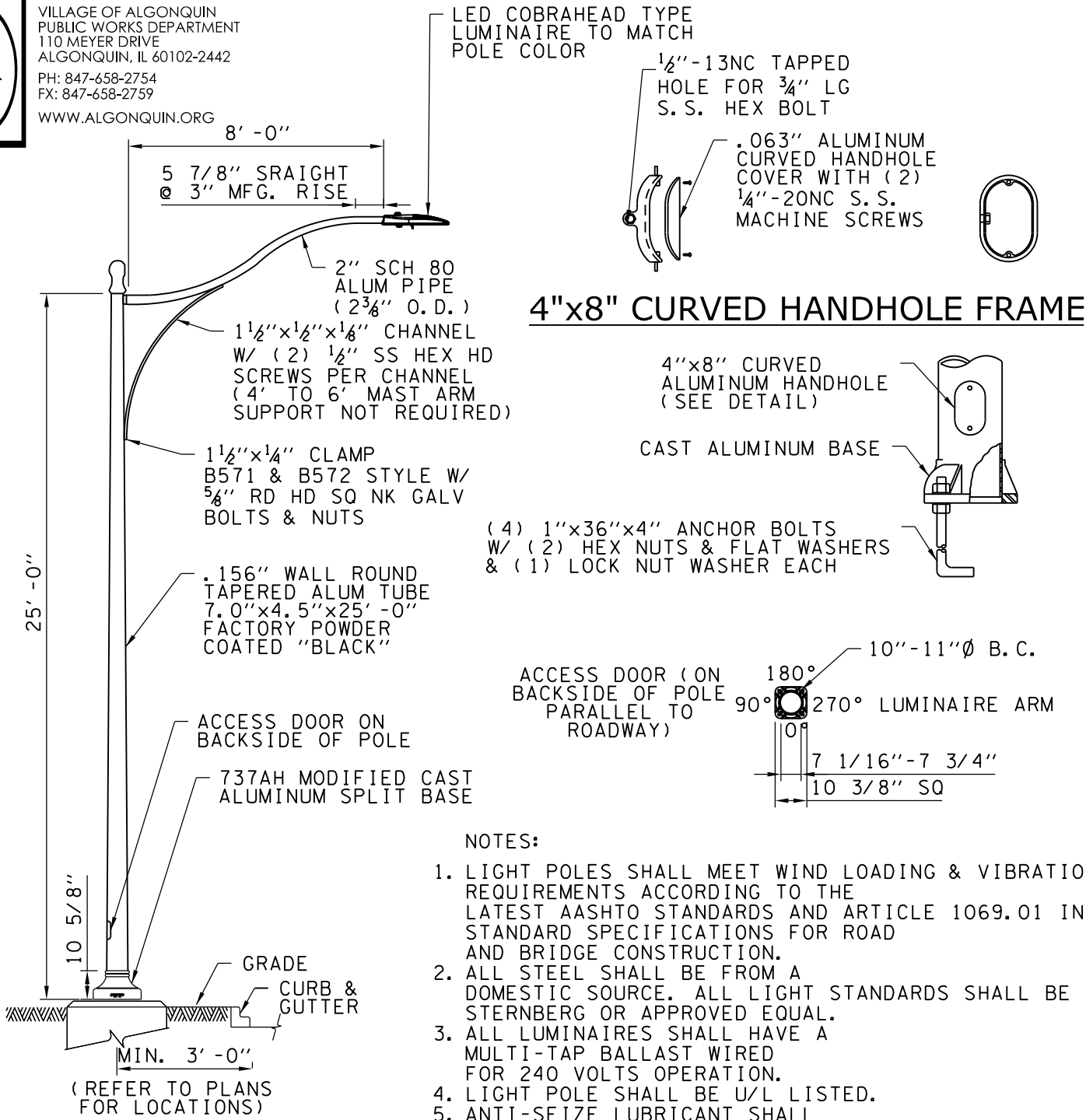
BASE DATA

MATERIAL SPECIFICATIONS	
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ARM TUBES	6063-T6
ANCHOR BASE & TRANSFORMER BASE	A356-T6
SMALL HARDWARE	AISI 300 SERIES STAINLESS STEEL
EXTRUSIONS	6063-T6
T-BASE CONN HRDW	ASTM-A307
H. H. FRAME	A356-T6
BOLT COVERS	ASTM-825 (A356)

Commercial Roadway	
LIGHT STANDARD AND LUMINAIRE DETAIL	
Village of Algonquin Specifications & Details Guide	
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Approved By: Public Works Director	Effective Date 06/25/2022



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LED COBRAHEAD TYPE
 LUMINAIRE TO MATCH
 POLE COLOR

1/2" - 13NC TAPPED
 HOLE FOR 3/4" LG
 S. S. HEX BOLT

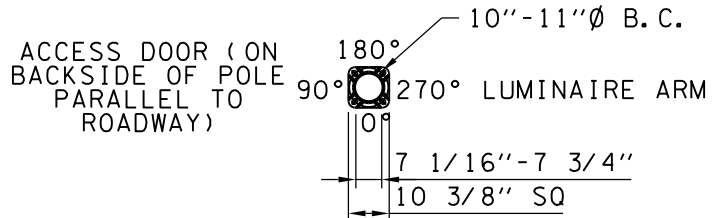
.063" ALUMINUM
 CURVED HANDHOLE
 COVER WITH (2)
 1/4" - 20NC S. S.
 MACHINE SCREWS

4"x8" CURVED HANDHOLE FRAME

4"x8" CURVED
 ALUMINUM HANDHOLE
 (SEE DETAIL)

CAST ALUMINUM BASE

(4) 1"x36"x4" ANCHOR BOLTS
 W/ (2) HEX NUTS & FLAT WASHERS
 & (1) LOCK NUT WASHER EACH



NOTES:

1. LIGHT POLES SHALL MEET WIND LOADING & VIBRATION REQUIREMENTS ACCORDING TO THE LATEST AASHTO STANDARDS AND ARTICLE 1069.01 IN STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. ALL STEEL SHALL BE FROM A DOMESTIC SOURCE. ALL LIGHT STANDARDS SHALL BE STERNBERG OR APPROVED EQUAL.
3. ALL LUMINAIRES SHALL HAVE A MULTI-TAP BALLAST WIRED FOR 240 VOLTS OPERATION.
4. LIGHT POLE SHALL BE U/L LISTED.
5. ANTI-SEIZE LUBRICANT SHALL BE APPLIED TO ALL BOLTED AREAS DURING INSTALLATION.

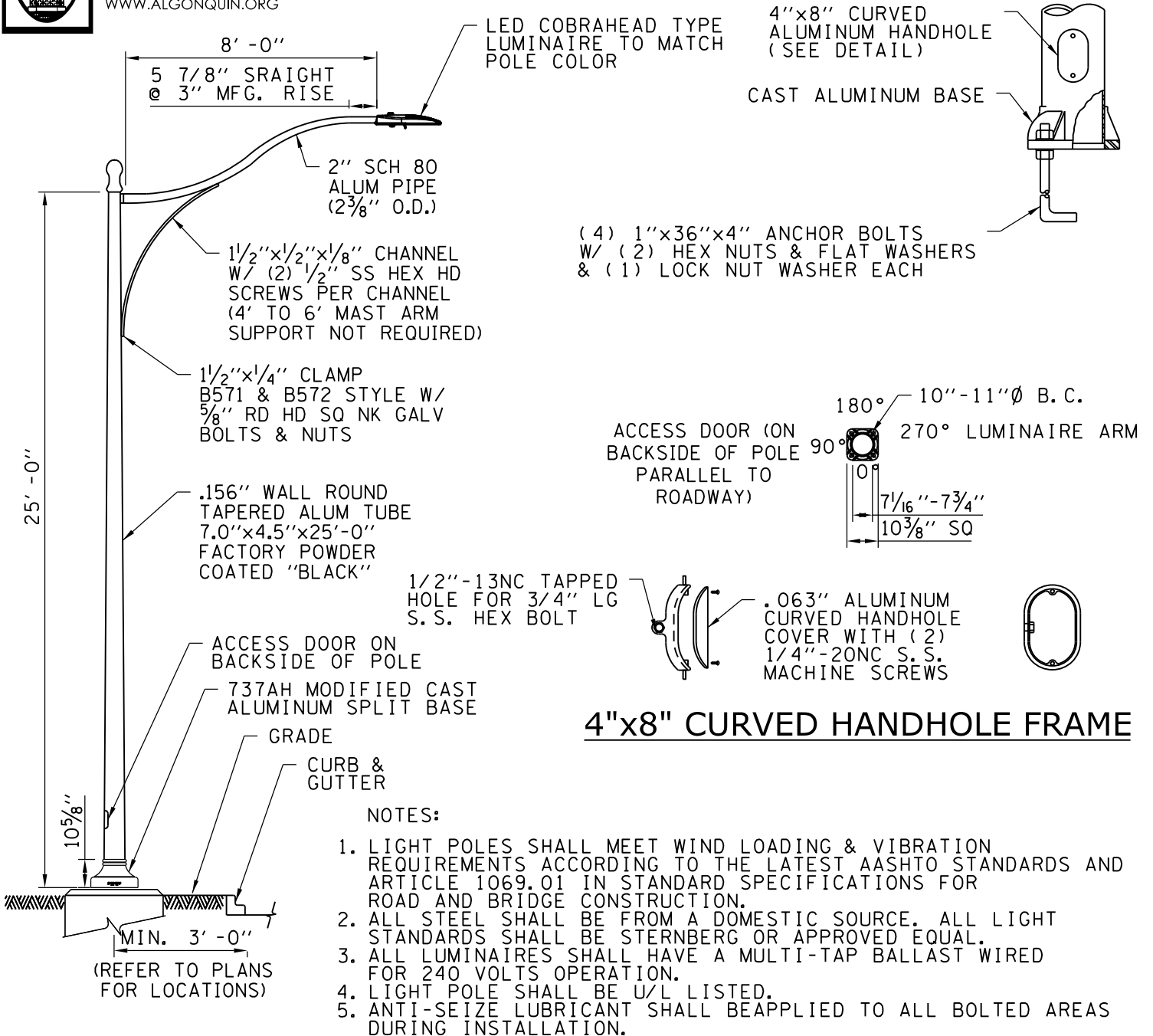
REQUIRED LIGHTING VALUES

ROAD TYPE	PEDESTRIAN CONFLICT AREA	MAX. MAINTAINED AVG. VALUES (Fc)	ILLUMINANCE UNIFORMITY Eavg/Emin	AVG. LUMINANCE (cd/m²)	LUMINANCE UNIFORMITY Lavg/Lmin	LUMINANCE UNIFORMITY Lmax/Lmin	VEILING LUMINANCE RATIO Lvmax/Lavg
LOCAL COLLECTOR	LOW	0.4	4.0:1	0.4	4.0:1	8.0:1	0.4

Local Collector Roadway	
LIGHT STANDARD AND LUMINAIRE POLE DETAIL	
Village of Algonquin Specifications & Details Guide	
Drawn By: CBBEL	Revision Date 06/25/2022
Approved By: Public Works Director	Effective Date 06/25/2022



VILLAGE OF ALGONQUIN
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REQUIRED LIGHTING VALUES

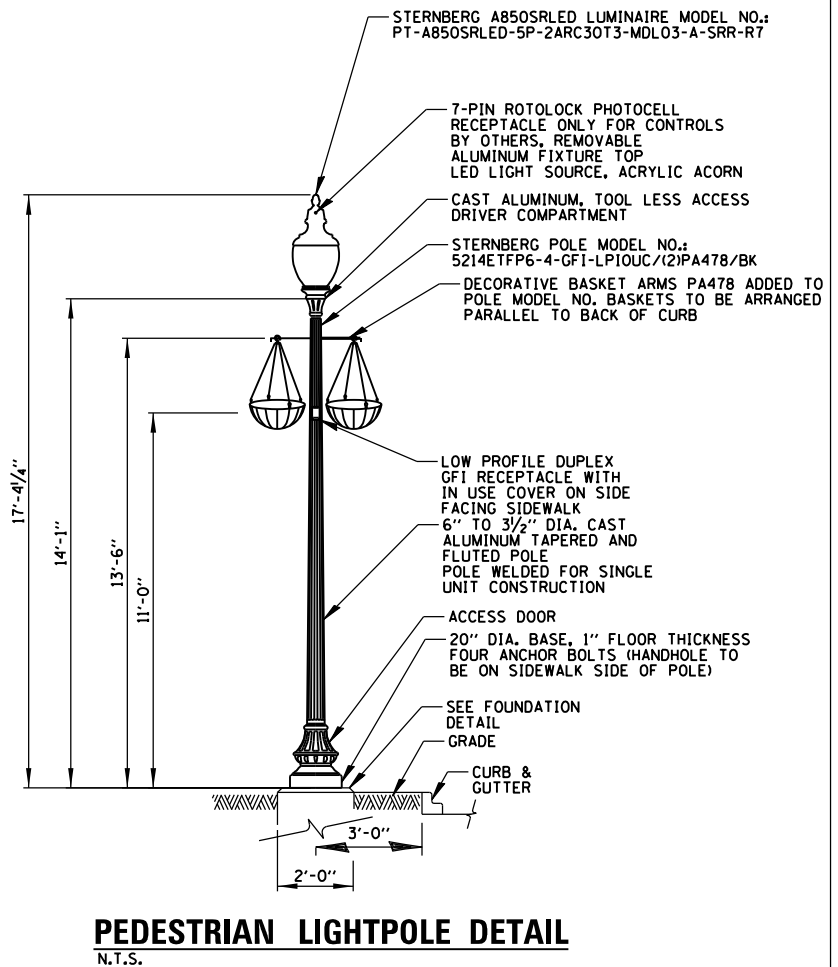
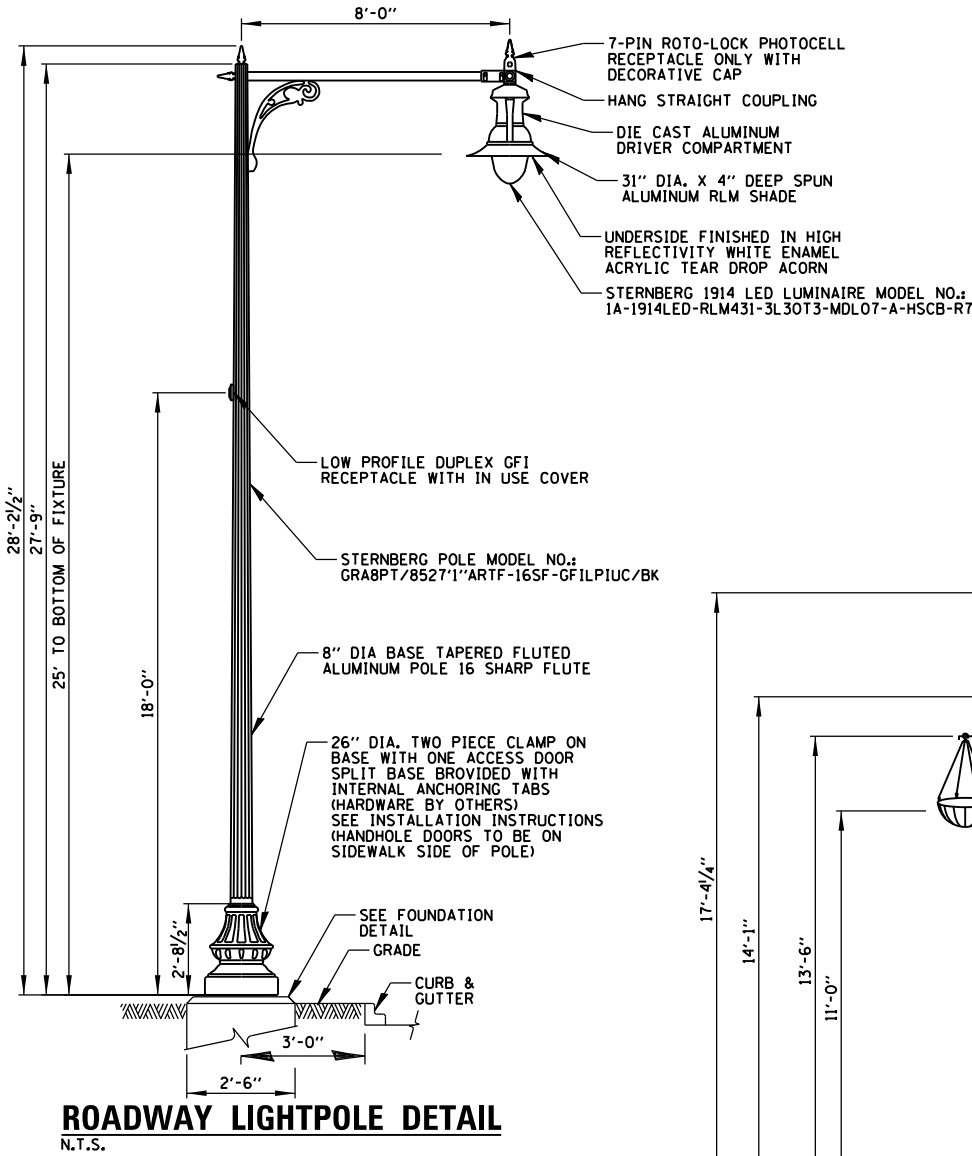
ROAD TYPE	PEDESTRIAN CONFLICT AREA	MAX. MAINTAINED AVG. VALUES (Fc)	UNIFORMITY Eavg/Emin	AVG. LUMINANCE (cd/m ²)	UNIFORMITY Lavg/Lmin	UNIFORMITY Lmax/Lmin	VEILING LUMINANCE RATIO LVmax/Lavg
LOCAL	LOW	0.4	6.0:1	0.3	6.0:1	10.0:1	0.4

Local Roadway	
LIGHT STANDARD AND LUMINAIRE POLE DETAIL	
Village of Algonquin Specifications & Details Guide	
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... \20_Local Roadway Details.dgn



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HISTORIC DISTRICT LIGHTING DETAIL	
LIGHTING DETAIL 1	
Village of Algonquin Specifications & Details Guide	
Drawn By: CBBEL	Revision Date 06/25/2022
Approved By: Public Works Director	Effective Date 06/25/2022

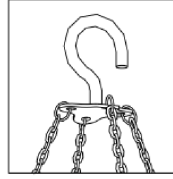
...01_Lighting Detail_1.dgn



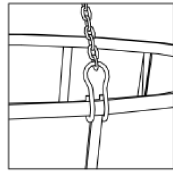
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 PHONE: (760) 707-5400
 FAX: (760) 603-0812
 www.plantersunlimited.com

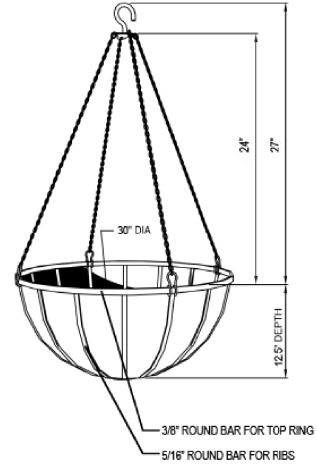


TOP MOUNT DETAIL



BASKET ATTACHMENT DETAIL

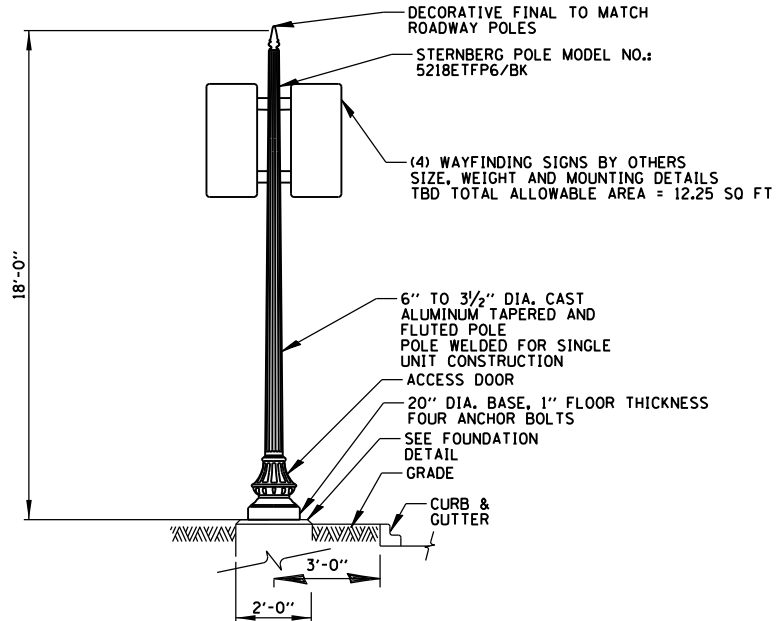
BASKET PART #: B-HB-XL-30
 LINER PART #: B-HBL-XL-30



NOTES:
 1. DRAWINGS NOT TO SCALE.
 2. POWDER-COATED BLACK IRON

PLANTER BASKET DETAILS

N.T.S.



WAYFINDING SIGN DETAIL

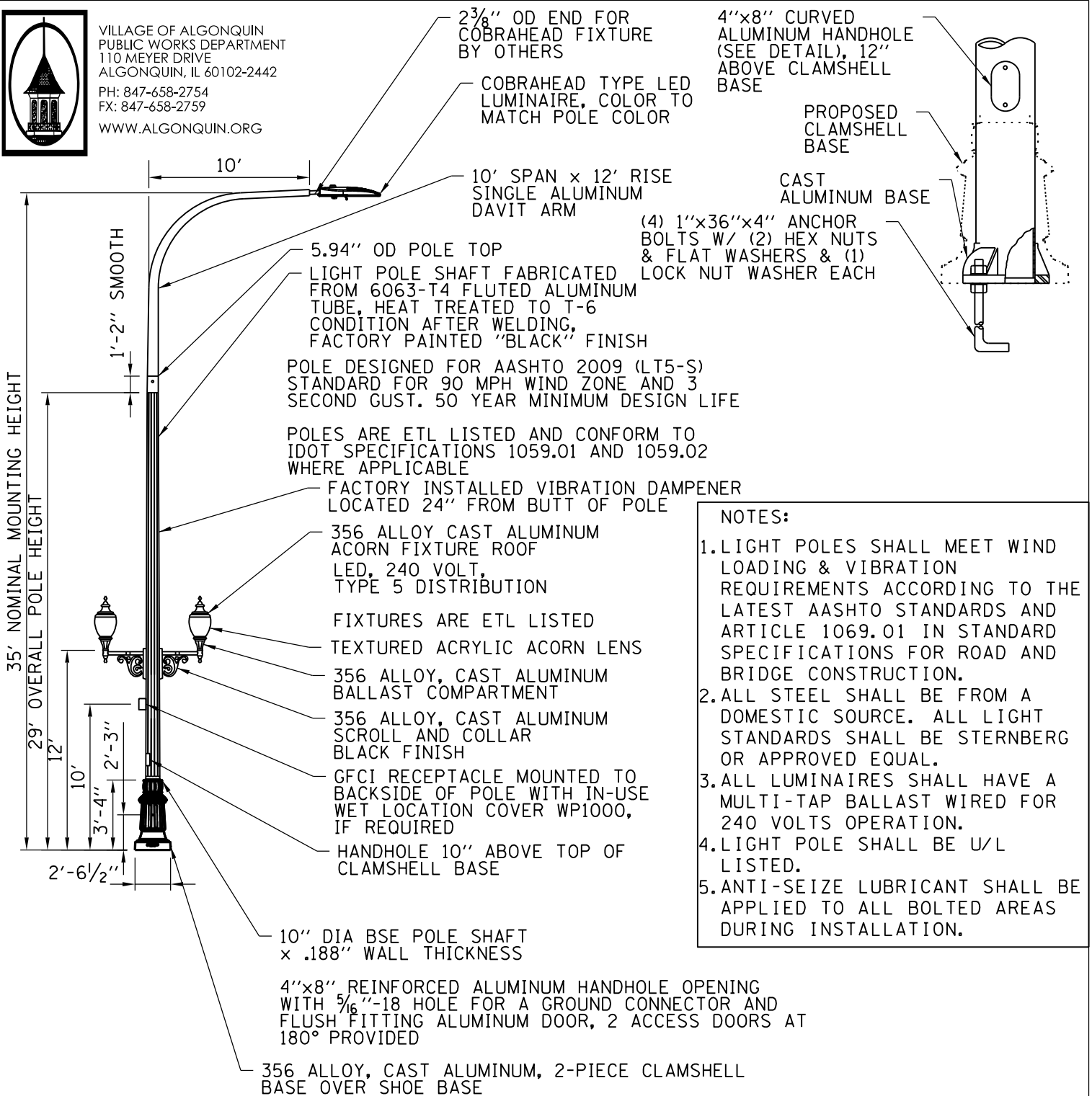
N.T.S.

HISTORIC DISTRICT/ LIGHTING DETAIL	
LIGHTING DETAIL 2	
Village of Algonquin Specifications & Details Guide	
Drawn By: CBBEL	Revision Date 06/25/2022
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...\\02_Lighting Detail_2.dgn



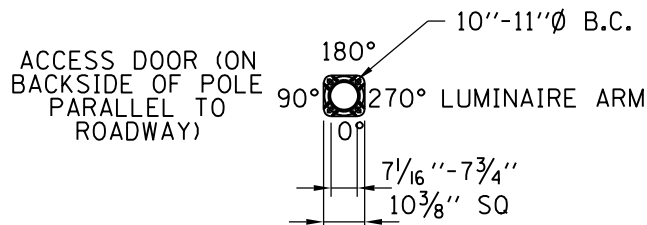
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- NOTES:**
1. LIGHT POLES SHALL MEET WIND LOADING & VIBRATION REQUIREMENTS ACCORDING TO THE LATEST AASHTO STANDARDS AND ARTICLE 1069.01 IN STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
 2. ALL STEEL SHALL BE FROM A DOMESTIC SOURCE. ALL LIGHT STANDARDS SHALL BE STERNBERG OR APPROVED EQUAL.
 3. ALL LUMINAIRES SHALL HAVE A MULTI-TAP BALLAST WIRED FOR 240 VOLTS OPERATION.
 4. LIGHT POLE SHALL BE U/L LISTED.
 5. ANTI-SEIZE LUBRICANT SHALL BE APPLIED TO ALL BOLTED AREAS DURING INSTALLATION.

REQUIRED LIGHTING VALUES

ROAD TYPE	PEDESTRIAN CONFLICT AREA	MAX. MAINTAINED AVG. ILLUMINANCE VALUES (Fc)	ILLUMINANCE UNIFORMITY Eavg/Emin	AVG. LUMINANCE (cd/m²)	LUMINANCE UNIFORMITY Lavg/Lmin	LUMINANCE UNIFORMITY Lmax/Lmin	VEILING LUMINANCE RATIO LVmax/Lavg
COMMERC.	LOW	0.6	4.0:1	0.4	4.0:1	8.0:1	0.4



HISTORIC DISTRICT LIGHTING DETAIL	
COMMERCIAL ROADWAY POLE DETAIL	
Village of Algonquin Specifications & Details Guide	
Drawn By: CBBEL	Revision Date 06/25/2022
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2 3/8" OD END FOR
COBRAHEAD FIXTURE
BY OTHERS

4"x8" CURVED
ALUMINUM HANDHOLE
(SEE DETAIL), 12"
ABOVE CLAMSHELL
BASE

COBRAHEAD TYPE LED
LUMINAIRE, COLOR TO
MATCH POLE COLOR

PROPOSED
CLAMSHELL
BASE

CAST
ALUMINUM BASE

10'
10' SPAN x 12' RISE
SINGLE ALUMINUM
DAVIT ARM

(4) 1"x36"x4" ANCHOR
BOLTS W/ (2) HEX NUTS
& FLAT WASHERS & (1)
LOCK NUT WASHER EACH

5.94" OD POLE TOP
LIGHT POLE SHAFT FABRICATED
FROM 6063-T4 FLUTED ALUMINUM
TUBE, HEAT TREATED TO T-6
CONDITION AFTER WELDING,
FACTORY PAINTED "BLACK" FINISH

POLE DESIGNED FOR AASHTO 2009 (LT5-S)
STANDARD FOR 90 MPH WIND ZONE AND 3
SECOND GUST, 50 YEAR MINIMUM DESIGN LIFE

POLES ARE ETL LISTED AND CONFORM TO
IDOT SPECIFICATIONS 1059.01 AND 1059.02
WHERE APPLICABLE

35' NOMINAL MOUNTING HEIGHT
29' OVERALL POLE HEIGHT
1' - 2" SMOOTH

FACTORY INSTALLED VIBRATION DAMPENER
LOCATED 24" FROM BUTT OF POLE
356 ALLOY CAST ALUMINUM
ACORN FIXTURE ROOF
LED, 240 VOLT,
TYPE 5 DISTRIBUTION

FIXTURES ARE ETL LISTED
TEXTURED ACRYLIC ACORN LENS
356 ALLOY, CAST ALUMINUM BALLAST
COMPARTMENT
356 ALLOY, CAST ALUMINUM
SCROLL AND COLLAR
BLACK FINISH

GFCI RECEPTACLE MOUNTED TO
BACKSIDE OF POLE WITH IN-USE
WET LOCATION COVER WP1000,
IF REQUIRED
HANDHOLE 10" ABOVE TOP OF
CLAMSHELL BASE

10" DIA BSE POLE SHAFT
x .188" WALL THICKNESS

4"x8" REINFORCED ALUMINUM HANDHOLE OPENING
WITH 5/16"-18 HOLE FOR A GROUND CONNECTOR AND
FLUSH FITTING ALUMINUM DOOR, 2 ACCESS DOORS AT
180° PROVIDED

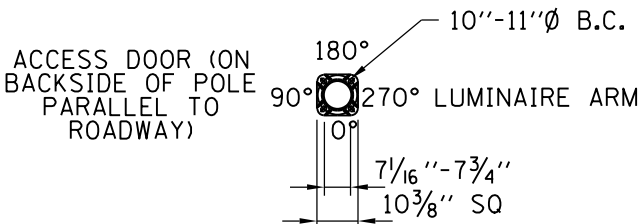
356 ALLOY, CAST ALUMINUM, 2-PIECE CLAMSHELL
BASE OVER SHOE BASE

NOTES:

1. LIGHT POLES SHALL MEET WIND LOADING & VIBRATION REQUIREMENTS ACCORDING TO THE LATEST AASHTO STANDARDS AND ARTICLE 1069.01 IN STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. ALL STEEL SHALL BE FROM A DOMESTIC SOURCE. ALL LIGHT STANDARDS SHALL BE STERNBERG OR APPROVED EQUAL.
3. ALL LUMINAIRES SHALL HAVE A MULTI-TAP BALLAST WIRED FOR 240 VOLTS OPERATION.
4. LIGHT POLE SHALL BE U/L LISTED.
5. ANTI-SEIZE LUBRICANT SHALL BE APPLIED TO ALL BOLTED AREAS DURING INSTALLATION.

REQUIRED LIGHTING VALUES

ROAD TYPE	PEDESTRIAN CONFLICT AREA	MAX. MAINTAINED AVG. ILLUMINANCE VALUES (Fc)	ILLUMINANCE UNIFORMITY Eavg/Emin	AVG. LUMINANCE (cd/m²)	LUMINANCE UNIFORMITY Lavg/Lmin	LUMINANCE UNIFORMITY Lmax/Lmin	VEILING LUMINANCE RATIO LVmax/Lavg
COMMERCIAL COLLECTOR	MEDIUM	1.3	3.0:1	0.9	3.0:1	5.0:1	0.3



HISTORIC DISTRICT LIGHTING DETAIL	
COMMERCIAL COLLECTOR ROADWAY POLE DETAIL	
Village of Algonquin Specifications & Details Guide	
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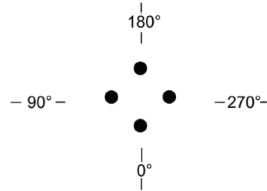
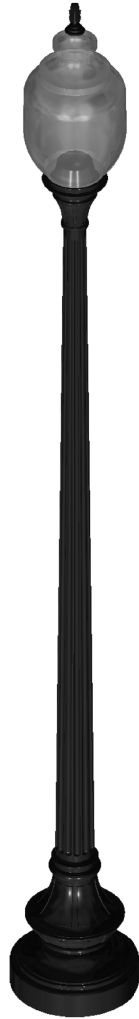
...\\04_Commercial Collector Pole Detail.dgn



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555 Lawrence Avenue | Roselle, IL 60172 | p 847.588.3400 | www.sternberglighting.com
 CONCEPTUAL ASSEMBLY DRAWING, SUBJECT TO ENGINEERING VERIFICATION BY THE FACTORY



(4) 3/4" X 18" Anchor Bolts, 16" Bolt Circle,
 Diamond pattern

Access Door Orientation: 0°
 Street Side Orientation: 180°

CENTER POST TOP FIXTURE: A75LED

The A75LED Columbia is a stylized Victorian acorn fixture which consists of a decorative cast aluminum fitter, cast ballast housing assembly and a high efficiency polycarbonate or acrylic prismatic acorn globe. It shall be appointed with a cast aluminum decorative 4-vane finial.

PT FITTER: 5P

Fitter: 5P

PT LIGHT SOURCE: -4L30T3-MDL06

Array: 4 LEDs, 40W=MD_02, 55W=MD_03, 75W=MD_05, 98W=MD06 (4L)
 Color Temp: 3000K (30)
 Distribution: Type 3 (T3)
 Driver: MDL06 (630mA, 120-277V) (MDL06)

PT FIXTURE OPTIONS: -A

Lens: Acrylic Lens (A)

POLE: 5212'0" TFP6-3-C

The 20" diameter cast 356 aluminum alloy base and aluminum shaft shall be a one-piece construction. The pole shall be U.L. or E.T.L. listed in U.S. and Canada. All pole heights to have a tolerance of ± 2"

Model: 5200 Barrington (52)
 Height: 12 Ft 0 In (TFP6-3) (12'0")
 Shaft Type: Fluted Tapered 6-3 inch 356 Aluminum Alloy (TFP6-3)
 Gauge: Varied Wall Thickness (Cast) (C)

FINISH: BK

Assembly shall be powder coated to Black Smooth finish. Prior to coating, the assembly shall be chemically cleaned and etched in a 5-stage washing system which includes alkaline cleaning, rinsing, phosphoric etching, reverse osmosis water rinsing, and non-chrome sealing to ensure corrosion resistance.

Wind Load Evaluation

This assembly, as configured, MEETS AASHTO requirements for wind loading

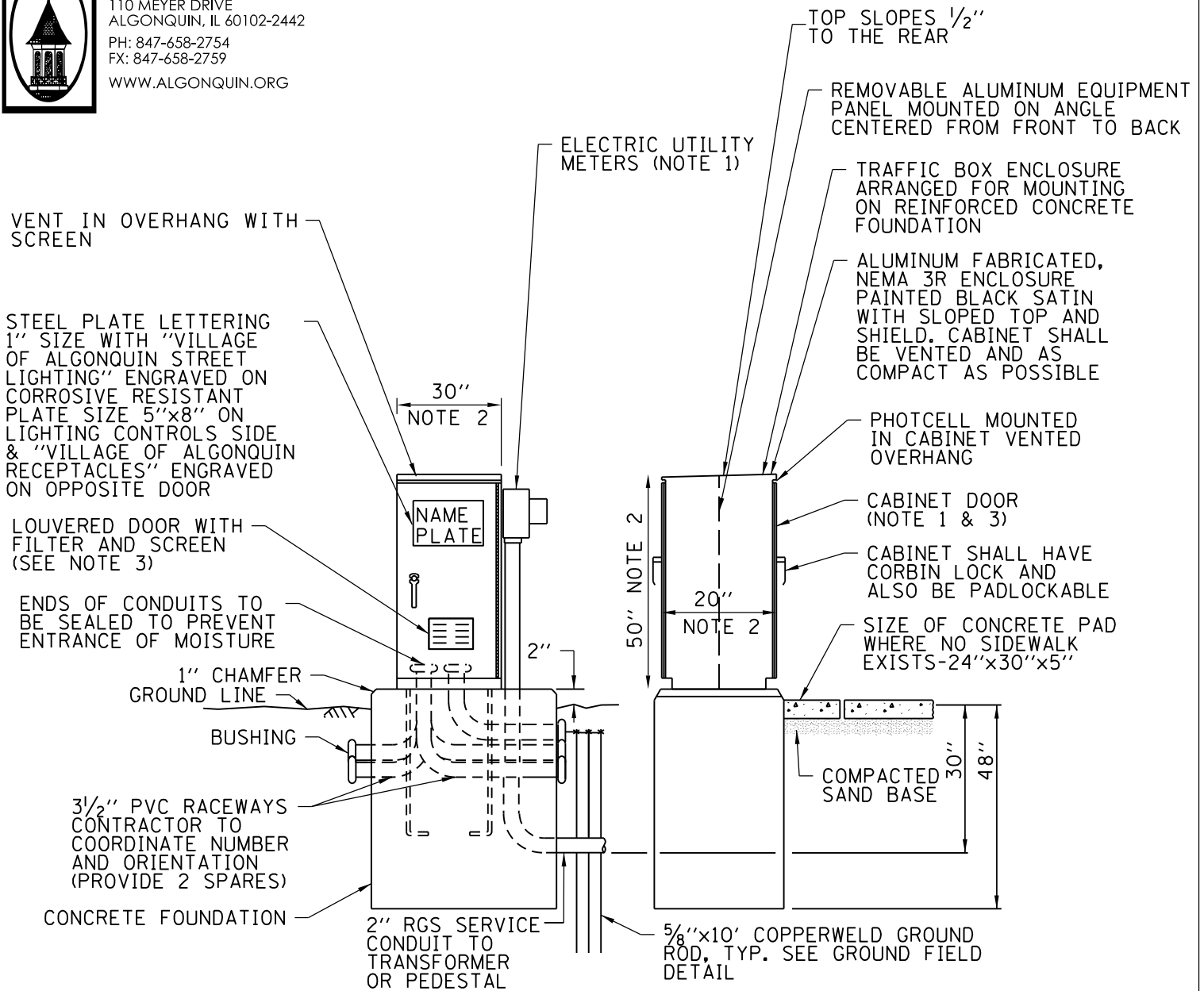
Wind Speed: 90 mph
 Gust Factor: 1.14

HISTORIC DISTRICT/PARKS LIGHTING DETAIL	
ORNAMENTAL POST TOP POLE DETAIL	
Village of Algonquin Specifications & Details Guide	
Drawn By: CBBEL	Revision Date 06/25/2022
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...\\05_Acorn Pole Detail.dgn



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NOTES:

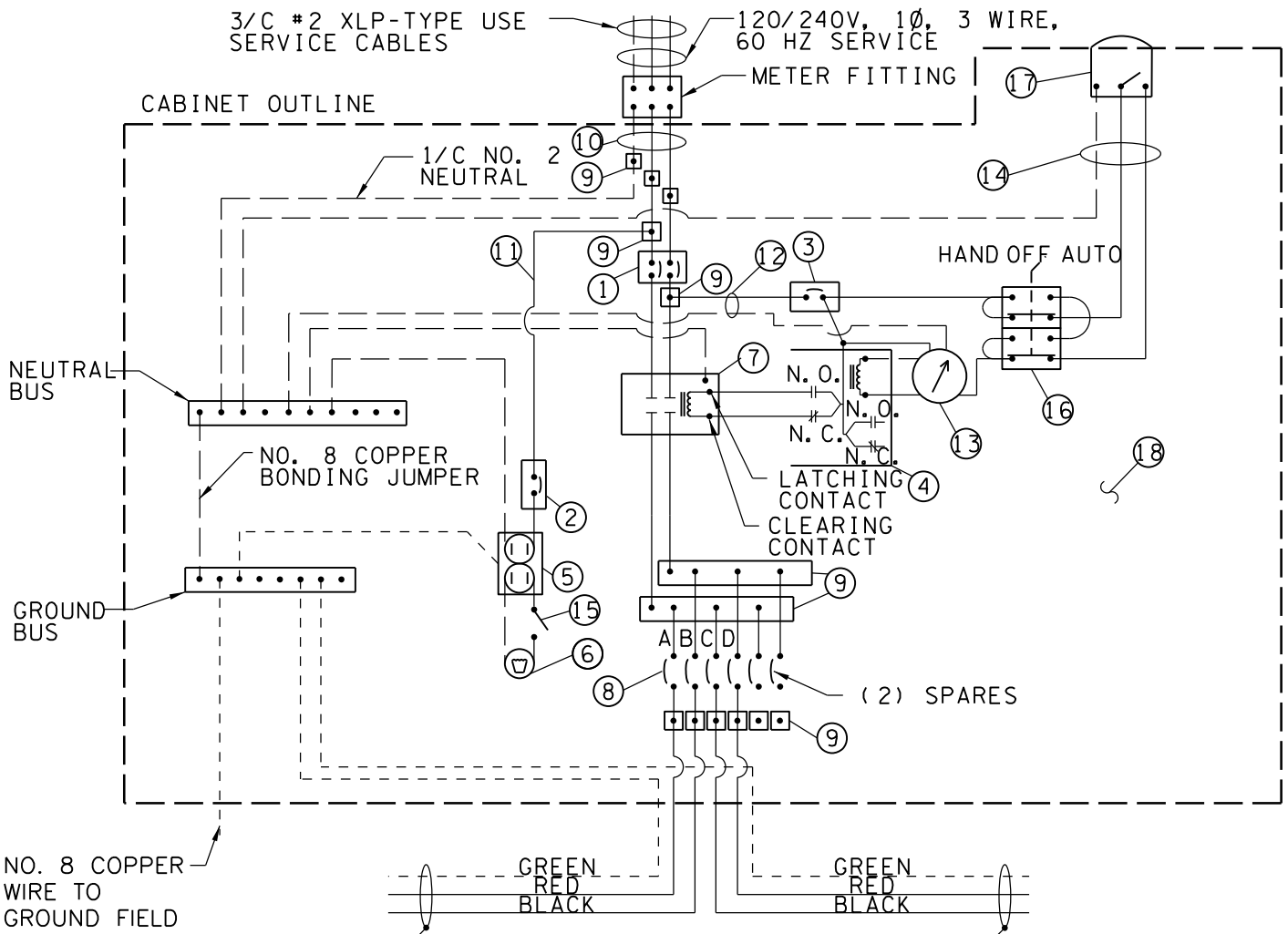
1. SEE DETAIL FOR CABINET METER FITTING & DOOR ORIENTATION.
2. CABINET DIMENSIONS SHOWN ARE APPROXIMATE, CABINET SHALL BE AS COMPACT AS POSSIBLE, CONTRACTOR TO COORDINATE.
3. BOTH FRONT AND REAR DOORS ARE TO BE THE SAME WITH S. S. HANDLES, THREE POINT LATCHING, PADLOCK HASPS, NEOPRENE GASKETS ALL AROUND, CONTINUOUS S. S. HINGES, AND LOUVERS WITH FILTER AND SCREEN.
4. TWO 1/8" ALUMINUM EQUIPMENT PANELS ARE MOUNTED ON 'C' CHANNELS AND CENTERED IN CABINET.
5. FRONT AND REAR DOORS HINGED ON CABINET RIGHT SIDE.

HISTORIC DISTRICT/PARKS LIGHTING DETAIL	
LIGHTING CONTROLLER CABINET & FOUNDATION	
Village of Algonquin Specifications & Details Guide	
Drawn By: CBBEL	Revision Date 06/25/2022
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————— PHASE CONDUCTOR
 - - - - - NEUTRAL CONDUCTOR
 - - - - - GROUND CONDUCTOR



XLP-TYPE USE CABLES,
 SIZE DEPENDENT UPON
 LOAD TO SERVE AND
 VOLTAGE DROP IN SCH
 40 HDPE UNIT DUCT, TYP.

XLP-TYPE USE CABLES,
 SIZE DEPENDENT UPON
 LOAD TO SERVE AND
 VOLTAGE DROP IN SCH
 40 HDPE UNIT DUCT, TYP.

HISTORIC DISTRICT/PARKS LIGHTING DETAIL	
RECEPTACLE CONTROLLER WIRING DIAGRAM	
Village of Algonquin Specifications & Details Guide	
Drawn By: CBBEL	Revision Date 06/25/2022
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...\\07_Receptacle Controller Wiring.dgn



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ITEM	SPECIFICATION	MFG./MODEL NO. OR APPROVED EQUAL
① MAIN CIRCUIT BREAKER	100 AMPERE, 2P, 240V SERVICE RATING, 10KAIC	SIEMENS NO. ED22B100
② LAMPHOLDER CIRCUIT BREAKER	20 AMPERE, 1P, 120V RATING, 10KAIC	SIEMENS NO. ED21B020
③ PHOTOELECTRIC CONTROL CIRCUIT BREAKER	15 AMPERE, 1P, 120V RATING, 10KAIC	SIEMENS NO. ED21B015
④ AUXILIARY RELAY	120 V OPERATED DPDT 60 HZ COIL 2 NO & 2 NC CONTACTS	MAGNECRAFT NO. 389 FXBXC1 - 120A
⑤ CABINET RECEPTACLE AND BOX	COMMERCIAL GRADE GFCI 20A/120V, MOUNTED IN A WEATHERPROOF CAST ALUMINUM SINGLE GANG BOX WITH WEATHERPROOF COVER	RECEPTACLE: LEVITON NO. 8899, BOX: APPLETON NO. WSM150 COVER: APPLETON NO. WHG1
⑥ CABINET LIGHT AND BOX	120V WEATHERPROOF LAMPHOLDER MOUNTED IN A CAST ALUMINUM BOX & EXT. GRADE 100W LAMP	LIGHT & BOX: RAB NO. VX100DG
⑦ CONTACTOR	100 AMPERE, 2 POLE, 120 V COIL, MECH HELD	SQUARE D NO. 8903 S00 10 V02
⑧ BRANCH LINE CIRCUIT BREAKERS	50 AMPERE, 1P, 120V RATING, 10KAIC, GFCI	CUTLER/HAMMER NO. EHD1050
⑨ POWER DISTRIBUTION BLOCK	600 VOLT, INSULATED, SIZE AS REQUIRED	MARATHON
⑩ SERVICE CABLES	3-600V (XLP-TYPE USE) NO. 2	N/A
⑪ LAMPHOLDER WIRE	2-600V XLP NO. 12	N/A
⑫ CONTROL WIRE	2-600V XLP NO. 12	N/A
⑬ TIMECLOCK	2-POLE SINGLE THROW, 20 AMPS PER POLE	TORK ASTRONOMIC TIME SWITCH DZS200BP
⑭ PHOTOELECTRIC CONTROL WIRE	3-600V XLP NO. 12	N/A
⑮ DOOR SWITCH	20A/120V, DOOR MOUNTED SNAP ACTION TYPE PLUNGER SWITCH	OMRON NO. A-20G0-K
⑯ HAND-AUTO-OFF CONTROL SWITCH	20A, 3 POS. MTD IN CAST ALUM. ENCLOSURE	SQUARE D NO. 9001 KYK 111
⑰ PHOTOCCELL	120V, MTD. ON CABINET, DELAY TYPE, SPST-NC	FISHER PIERCE NO. FPFA-105M
⑱ BACK PANEL	1/2" THICK SOLID PHENOLIC LAMINATE	ARBORON

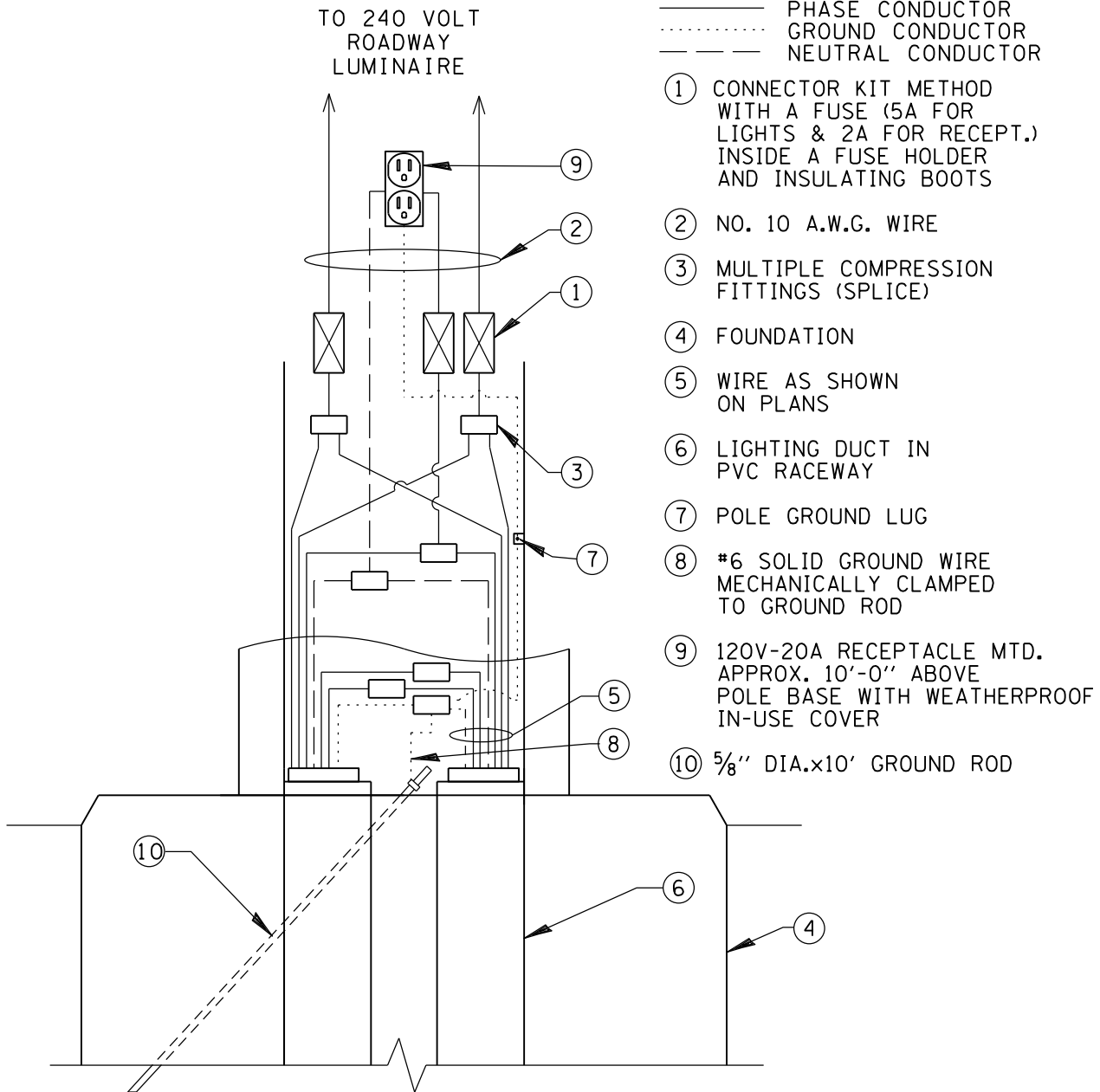
NOTES:

1. ALL ITEMS LISTED IN LIGHTING CONTROLLER COMPONENT SCHEDULE SHALL BE CONSIDERED INCIDENTAL TO THE PRICE BID FOR "LIGHTING CONTROLLER" INCLUDING CABINET AND FOUNDATION.
2. THE LIGHTING CONTROLLER TOGETHER WITH ALL OF ITS COMPONENTS SHALL BE UL LISTED AS AN "ENCLOSED INDUSTRIAL CONTROL PANEL" UNDER UL508A.
3. CONNECTION OF SURGE ARRESTOR TO LINE SIDE OF MAIN CIRCUIT BREAKER SHALL NOT BE "DOUBLE LUGGED."

HISTORIC DISTRICT/PARKS LIGHTING DETAIL	
RECEPTACLE CONTROLLER COMPONENT SCHEDULE	
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... \09_Handhole Wiring Diagram.dgn

HISTORIC DISTRICT/PARKS LIGHTING DETAIL	
HANDHOLE WIRING DIAGRAM	
Village of Algonquin Specifications & Details Guide	
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