

City of Torrington

ENGINEERING DEPARTMENT
(860) 489-2234



140 Main Street • City Hall
Torrington, CT 06790-5245
Fax: (860) 489-2550

ADDENDUM No. 1

DATE ISSUED: February 4, 2020

RE: "RECONSTRUCTION OF VARIOUS ROADS PHASE 2020.1"

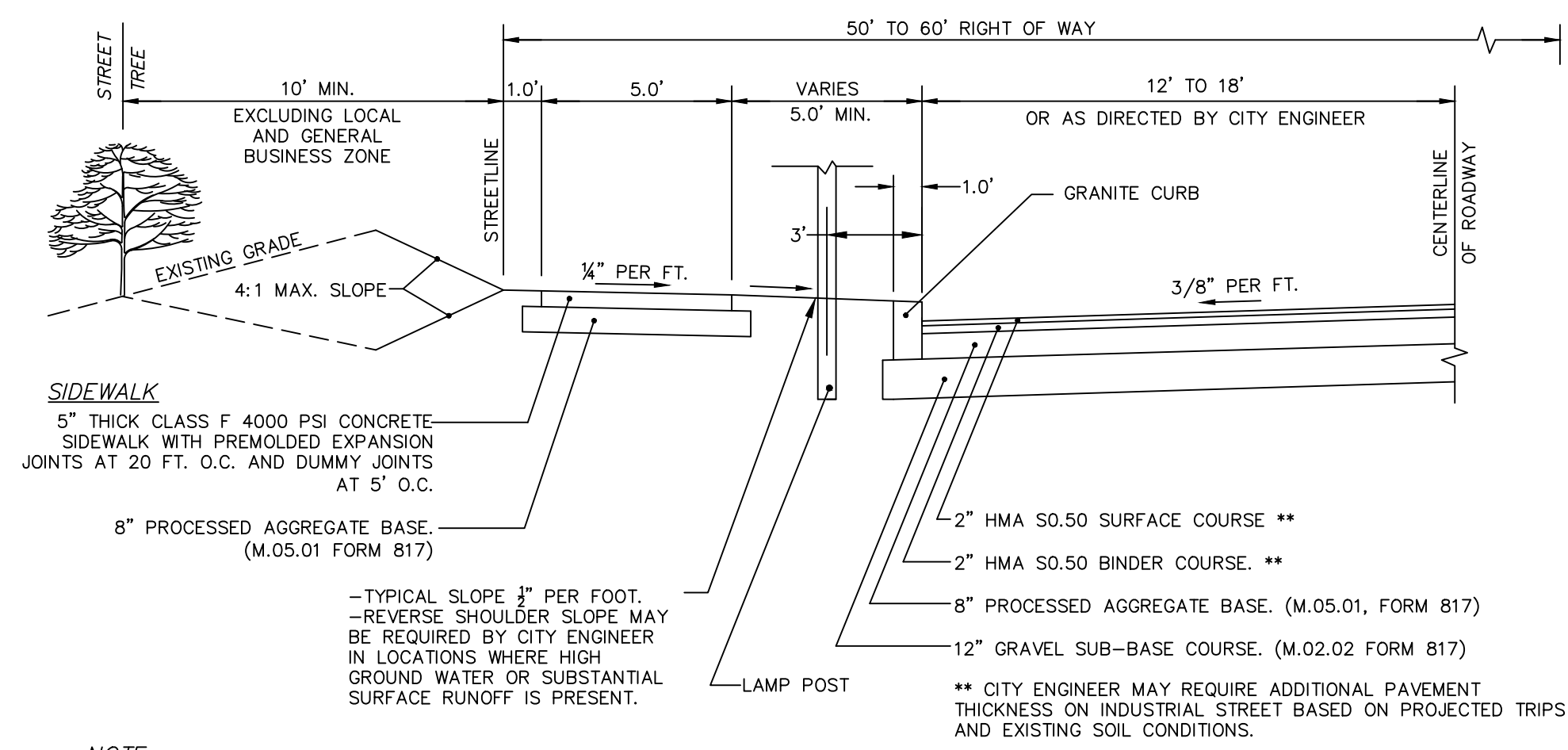
BID # RVR-027-021320

All bidders are hereby advised of the following amendments to the Contract Bid Documents, which are hereby made an integral part of the specifications for the subject project, prepared by The City of Torrington, to the same extent as all other documents. All work shall conform to the standards and provisions of same.

Bids submitted shall be deemed to include the Contract Document information as shown in Addendum No. 1. General bidders shall notify sub-bidders that may be affected by this addendum as applicable. Bidders shall be required to acknowledge receipt of this Addendum in the space provided on the Bid Proposal Form, Page BP-1. Failure to acknowledge this Addendum by the Bidder may result in the rejection of their bid. Bidders are directed to review changes to all portions of the work as changes to one portion may affect the work of another.

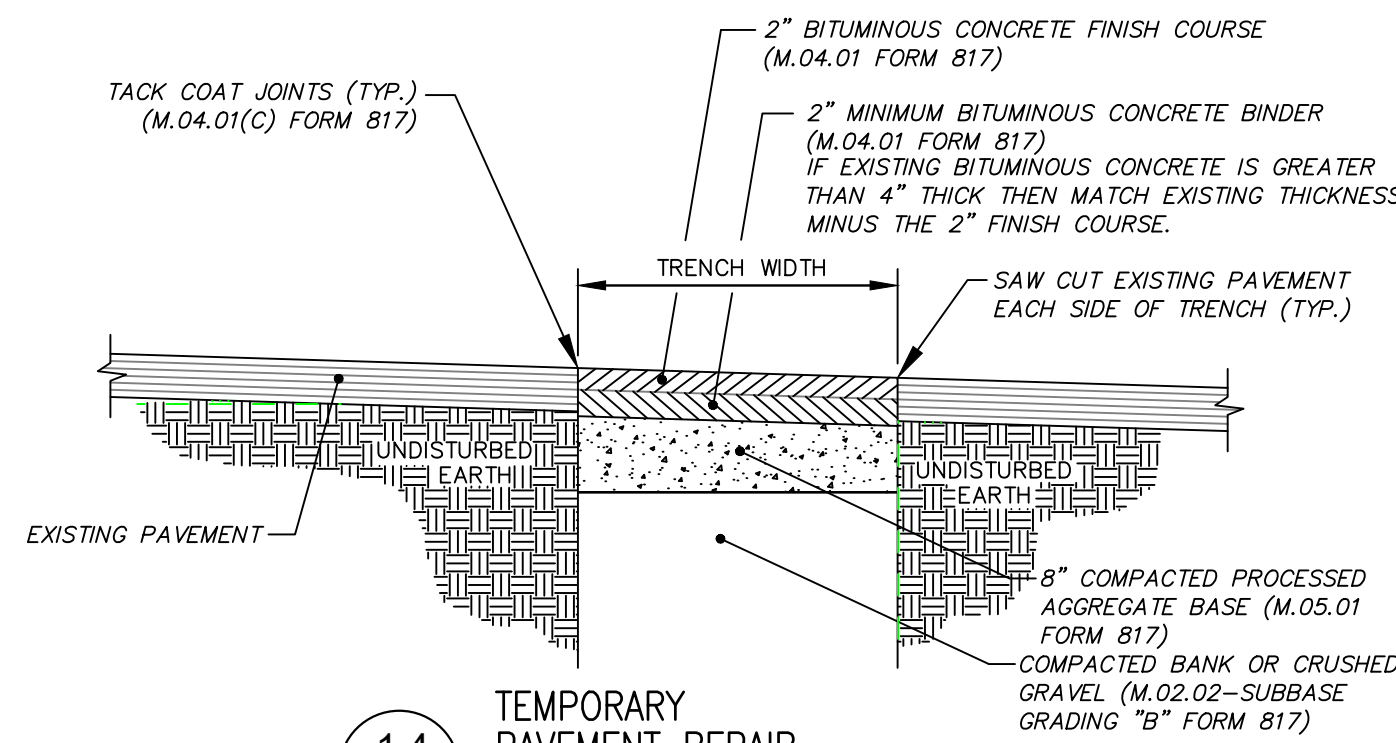
- 1. Replace pages SD-1, SD2A, SD2B, SD3, SD4, SD5, SD8 of Standard Details with the attached Standard Detail Sheets for Addendum #1, dated February 4, 2020.**

END OF ADDENDUM No. 1



NOTE:

IN THE CASE WHERE PLACEMENT OF SURFACE COURSE IS PLANNED TO BE DELAYED MORE THAN 30 DAYS, ALL CATCH BASINS AND MANHOLES WITHIN PAVEMENT AREAS SHALL BE SET FLUSH WITH BINDER SURFACE. THE AREAS ADJACENT TO CATCH BASINS ARE TO BE MILLED TO A DEPTH OF 1 1/2 INCH BY 3 FEET WIDE IMMEDIATELY PRIOR TO PLACEMENT OF FINAL COURSE. MANHOLE FRAMES SHALL BE CUT AND RAISED TO FINAL GRADE PRIOR TO PLACEMENT OF SURFACE COURSE.



NOTES:

- PERMANENT PAVEMENT REPAIR SHALL BE COMPLETED BETWEEN 6 AND 12 MONTHS AFTER TEMPORARY PAVEMENT REPAIR IS INSTALLED.
- SHORING REQUIRED PER OSHA STANDARDS.
- IF EDGE OF TRENCH IS WITHIN TWO (2) FEET OF CURBED GUTTER LINE OR UNPAVED SHOULDER, THEN REMOVE AND REPLACE PAVEMENT.

1.5 PERMANENT PAVEMENT REPAIR
NTS

GENERAL CONCRETE SIDEWALK NOTES:

- MAXIMUM SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE SIDEWALK RAMP OR ACCESSIBLE ROUTE SHOULD NOT EXCEED 20:1.
- CARE SHALL BE TAKEN TO ASSURE UNIFORM GRADE ON THE RAMP, FREE OF SAGS AND ABRUPT GRADE CHANGES.
- ALL RAMP SHALL BE CONSTRUCTED OF CLASS "F" CONCRETE IN ACCORDANCE WITH CONNECTICUT STANDARD SPECIFICATIONS ARTICLE M.03.01.
- SIDEWALK RAMP SHALL HAVE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP. THE SURFACE ALONG ACCESSIBLE ROUTES SHALL BE STABLE, FIRM AND SLIP RESISTANT IN COMPLIANCE WITH ADAAG SECTION 4.5.
- DIAGONAL SIDEWALK RAMP AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
- REMOVAL OF EXISTING SIDEWALK FOR NEW RAMP INSTALLATIONS SHALL BE TO THE NEAREST EXPANSION/CONTRACTION JOINT OR DUMMY JOINT. 12:1 MAY NOT BE ACHIEVABLE DUE TO SIDEWALK GRADE. IN RECOGNITION OF THIS, A MINIMUM LIMIT OF 15' FOR A PARALLEL RAMP SHALL BE USED. REMOVAL SHALL NOT BE FURTHER THAN 2' FROM THE PROPOSED RAMP UNLESS DIRECTED BY THE ENGINEER. SAW CUT REQUIRED FOR DUMMY JOINTS SHALL BE INCLUDED IN THE COST OF "CONCRETE SIDEWALK".
- EXPANSION JOINTS IN CONCRETE SHALL MATCH THOSE IN ADJACENT SIDEWALKS BUT IN NO CASE SHALL THE SPACING BETWEEN EXPANSION JOINTS EXCEED 12' UNLESS OTHERWISE NOTED.
- RAISED ISLANDS IN MARKED CROSSINGS SHALL HAVE SIDEWALK RAMP AT BOTH SIDES AND A LEVEL AREA AT LEAST 4' LONG BETWEEN THE RAMP. IF THIS CAN NOT BE ACHIEVED, THE RAISED ISLAND SHALL BE CUT THROUGH LEVEL WITH THE ROADWAY AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- SIDEWALK RAMP SHALL BE CONSTRUCTED AND PAID FOR UNDER THE ITEM "CONCRETE SIDEWALK", INCLUDING CURBING WITHIN THE LIMITS OF THE NEW SIDEWALK RAMP AND DETECTABLE WARNING STRIPS.
- CURBING WITHIN THE LIMITS OF THE NEW SIDEWALK RAMP SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE REQUIREMENTS OF FORM 814A SECTIONS 8.11 AND 8.13.
- HANDICAP RAMP CONFORMING WITH CONNECTICUT GENERAL STATUTES, SEC. 7-118a, SHALL BE INCORPORATED IN ALL PROPOSED SIDEWALKS AT ALL STREET INTERSECTIONS, AND AT ALL OTHER LOCATIONS WHERE THE GRADE OF A DRIVEWAY OR OTHER FACILITY TAKES PRECEDENCE OVER THE GRADE OF THE PROPOSED SIDEWALK.
- TRANSITION TO FULL HEIGHT CURB. INSTALL STONE CURBING IF ADJACENT CURBING IS STONE. INSTALL CONCRETE CURBING IF ADJACENT CURBING IS CONCRETE OR BITUMINOUS.
- INSTALL THE EDGE OF THE DETECTABLE WARNING 6" FROM THE EDGE OF ROAD.
- TO PERMIT WHEELCHAIR WHEELS TO ROLL BETWEEN DOMES, ALIGN DOMES ON A SQUARE GRID. IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- DETECTABLE WARNING PAD TO BE 2'x4" CAST-IN PLACE COMPOSITE TACTILE WITH INLINE DOME PATTERN WITH EMBEDMENT FLANGES SET FLUSH IN CAST-IN-PLACE CLASS F CONCRETE SIDEWALK.
- FOR BITUMINOUS CONCRETE SIDEWALKS SET DETECTABLE WARNING PAD IN 4" THICK CONCRETE PAD WITH TOP OF DETECTABLE PAD SET FLUSH TO SIDEWALK GRADE. - SEE DETAIL 2.14.

GENERAL NOTES:

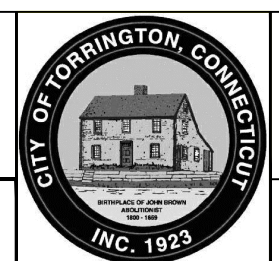
- ALL CONSTRUCTION SHALL COMPLY WITH PROJECT MANUAL; CITY OF TORRINGTON CT STANDARDS AND SPECIFICATIONS, AND STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 817 IN THE ABOVE REFERENCED HIERARCHY. IF SPECIFICATIONS AND PLANS ARE IN CONFLICT, THE MORE STRINGENT SHALL APPLY.
- REFER TO PLANS, DETAILS AND PROJECT MANUAL FOR ADDITIONAL INFORMATION. THE CONTRACTOR SHALL VERIFY ALL ROADWAY CONDITIONS IN THE FIELD AND CONTACT THE CITY ENGINEER IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS, PROJECT SPECIFICATIONS AND/OR FIELD CONDITIONS SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO BIDDING. MISPRINTS, AND TYPOGRAPHICAL ERRORS, SHALL NOT BE CONSIDERED AS LEGITIMATE CLAIMS FOR ADDITIONAL WORK OR ADDITIONAL PAYMENT.
- DO NOT INTERRUPT EXISTING UTILITIES.
- THE CONTRACTOR SHALL ABIDE BY ALL OSHA FEDERAL STATE AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOSTS, ETC. IN CLOSE PROXIMITY TO OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS. ANY UTILITY COMPANY FEES SHALL BE PAID FOR BY THE CONTRACTOR.
- THE CITY OF TORRINGTON IS NOT RESPONSIBLE FOR SITE SAFETY MEASURES TO BE EMPLOYED DURING CONSTRUCTION. THE CITY OF TORRINGTON HAS NO CONTRACTUAL DUTY TO CONTROL THE SAFEST METHODS OR MEANS OF THE WORK, JOB SITE RESPONSIBILITIES, SUPERVISION TO SUPERVISE SAFETY AND DOES NOT VOLUNTARILY ASSUME ANY SUCH DUTY OR RESPONSIBILITY.
- THE CONTRACTOR SHALL COMPLY WITH CFR 29 PART 1926 FOR EXCAVATION TRENCHING AND TRENCH PROTECTION REQUIREMENTS.
- INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE SYSTEMS HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE SYSTEMS ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE SYSTEMS INCLUDING SERVICES. PRIOR TO DEMOLITION OR CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" 72 HOURS BEFORE COMMENCEMENT OF WORK AT 1-800-922-4455" AND VERIFY ALL UTILITY AND STORM DRAINAGE SYSTEM LOCATIONS.
- ALL CONTRACTORS AND SUBCONTRACTORS SHALL OBTAIN COMPLETE DRAWING PLAN SETS FOR BIDDING AND CONSTRUCTION.
- ALL NOTES AND DIMENSIONS DESIGNATED "TYPICAL" APPLY TO ALL LIKE OR SIMILAR CONDITIONS THROUGHOUT THE PROJECT. IF A CONDITION EXISTS THAT THE TYPICAL DIMENSION, DETAIL, OR SECTION DOES NOT APPLY THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR FURTHER DIRECTION.
- CONTRACTOR(S) TO TAKE AND VERIFY ALL DIMENSIONS AND CONDITIONS OF THE WORK AND BE RESPONSIBLE FOR COORDINATION OF SAME. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK.
- ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE PROJECT LIMITS AS SHOWN OR DESCRIBED BY THE CONTRACT DOCUMENTS SHALL BE RESTORED TO NO ADDITIONAL COST TO THE CITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORT OF EXISTING UTILITIES AND REPAIR OR REPLACEMENT COSTS OF UTILITIES DAMAGED DURING CONSTRUCTION OPERATIONS WHETHER ABOVE OR BELOW GRADE.
- ALL UTILITIES LOCATED WITHIN THE PROJECT LIMITS INCLUDING BUT NOT LIMITED TO SEWER, WATER, GAS, ELECTRICITY, AND TELECOMMUNICATIONS, SHALL HAVE THEIR RESPECTIVE COVERS, BOXES, ETC. SHALL BE SET TO FINAL GRADE. COORDINATE WORK WITH RESPECTIVE UTILITY COMPANIES. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THIS ITEM.
- CONTRACTOR SHALL NOT DISTURB ANY AREA OUTSIDE THE LIMITS OF EASEMENTS AND RIGHT-OF-WAY.
- ALL UTILITY AND DRAINAGE STRUCTURES LOCATED WITHIN THE PROJECT LIMITS SHALL BE RESET TO FINISHED GRADE, PER CITY OF TORRINGTON, AND C.D.O.T. STANDARDS AND SPECIFICATIONS.
- ANY DISTURBANCE TO RIGHT OF WAY OUTSIDE THE LIMITS OF CONSTRUCTION AS SHOWN ON THESE PLANS SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER, AT THE EXPENSE OF THE CONTRACTOR.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ALL UTILITY LOCATED WITHIN THE PROJECT LIMITS:
 TORRINGTON WATER COMPANY 860-489-4149
 TORRINGTON SEWER DEPARTMENT 860-489-9167
 CABLE VISION OF LITCHFIELD 860-567-3103
 EVERSOURCE (GAS) 203-596-3069
 EVERSOURCE (ELECTRIC) 860-496-5278

| REVISIONS | | | |
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Plan Showing
STANDARD DETAILS
SECTION 1.0
ROADWAY DETAILS

City of Torrington Engineering Department

FEBRUARY, 2019
Horiz Scale: AS SHOWN
Vert Scale: AS SHOWN

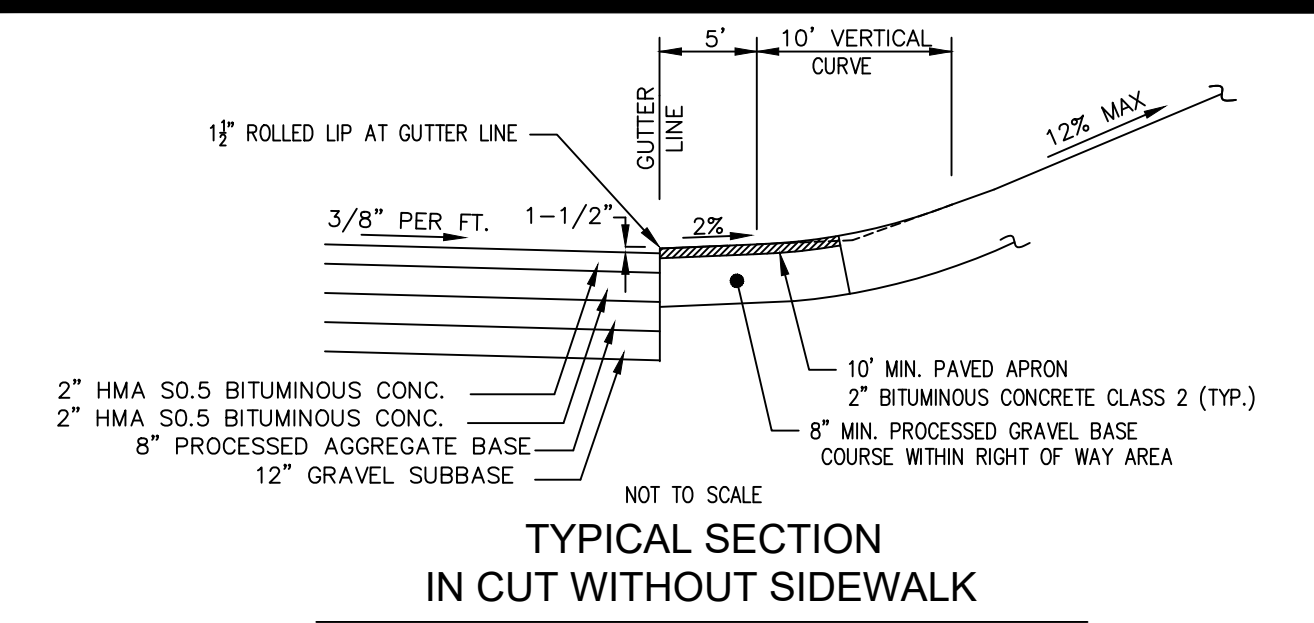


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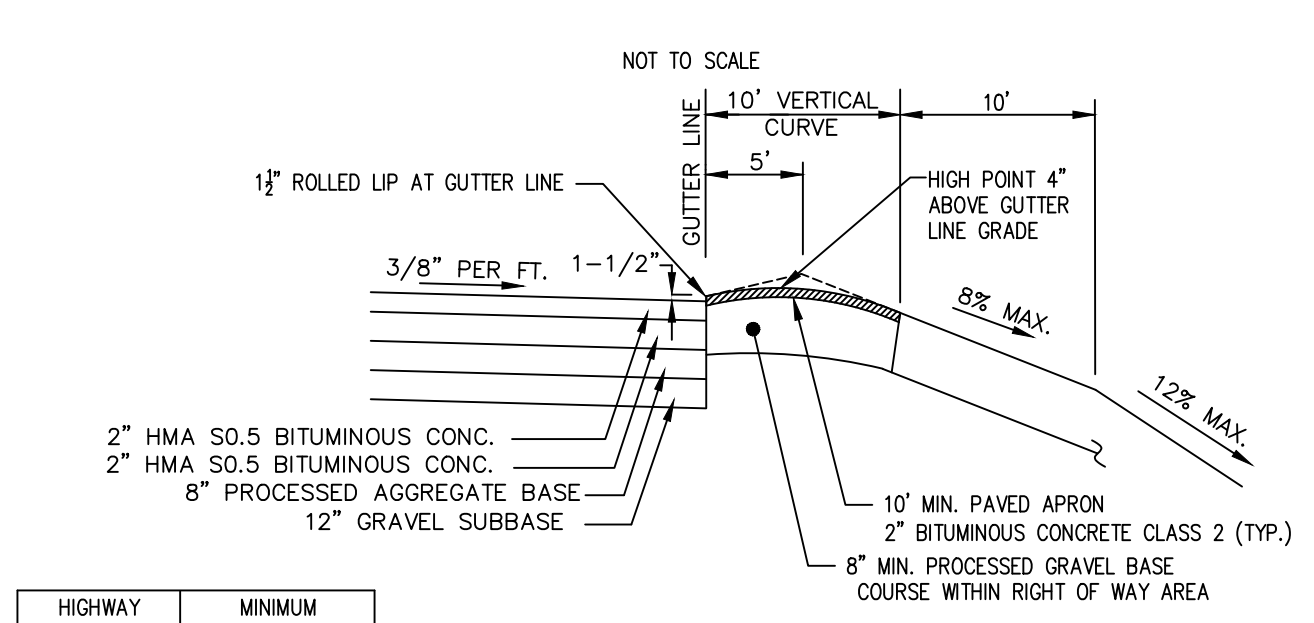
IMPORTANT NOTE:
UNDERGROUND UTILITIES ARE APPROXIMATE
PRIOR TO ANY EXCAVATION OR CONSTRUCTION CONTACT
"CALL BEFORE YOU DIG" 1-800-922-4455

SHEET: SD-1

1 INCH



TYPICAL SECTION IN CUT WITHOUT SIDEWALK



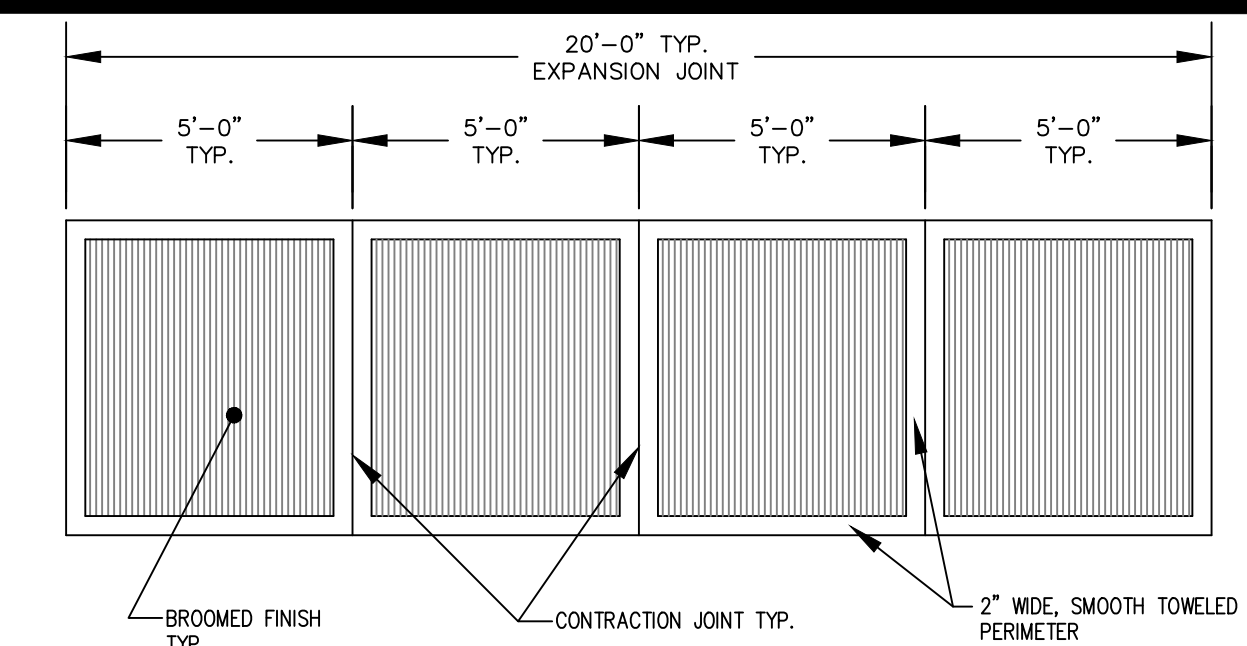
TYPICAL SECTION IN FILL WITHOUT SIDEWALK

| HIGHWAY SPEED LIMIT (MPH) | MINIMUM SIGHT DISTANCE (IN FEET) |
|---------------------------|----------------------------------|
| 25 | 280 |
| 30 | 335 |
| 35 | 390 |
| 40 | 445 |
| 45 | 500 |
| 50 | 555 |
| 55 | 610 |

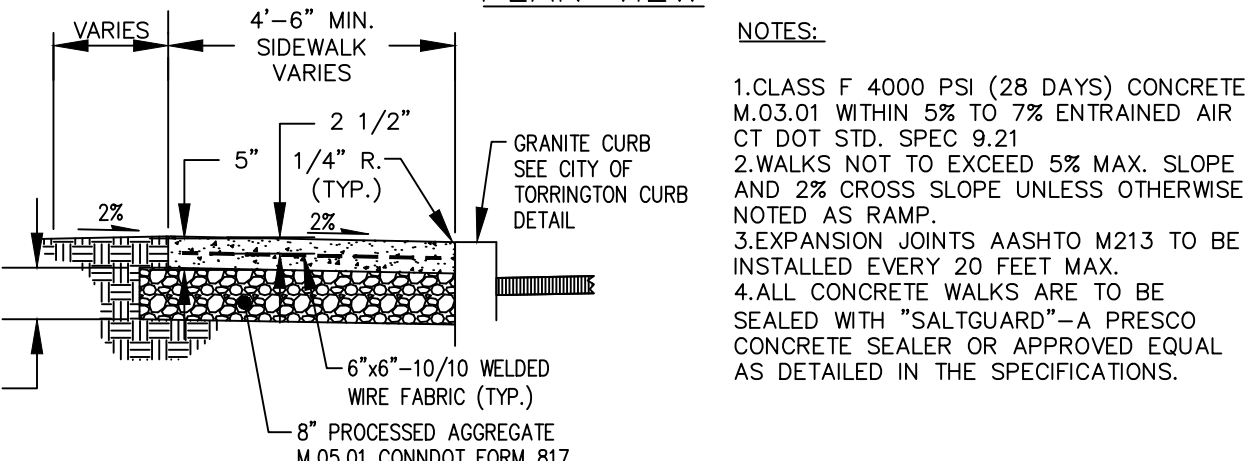
NOTE: DRAINAGE IMPROVEMENTS INCLUDING THE ADDITION OF SWALES, CATCH BASINS, PIPE CULVERTS, RIP RAP AND UNDERDRAINS MAY BE REQUIRED AS A CONDITION OF DRIVEWAY PENDING CITY REVIEW OF SITE CONDITIONS.

ALSO, ROAD SHOULDER MAY NEED TO BE CLEARED OF SIGHT LINE OBSTRUCTIONS INCLUDING EXCAVATING EMBANKMENT WHERE APPLICABLE.

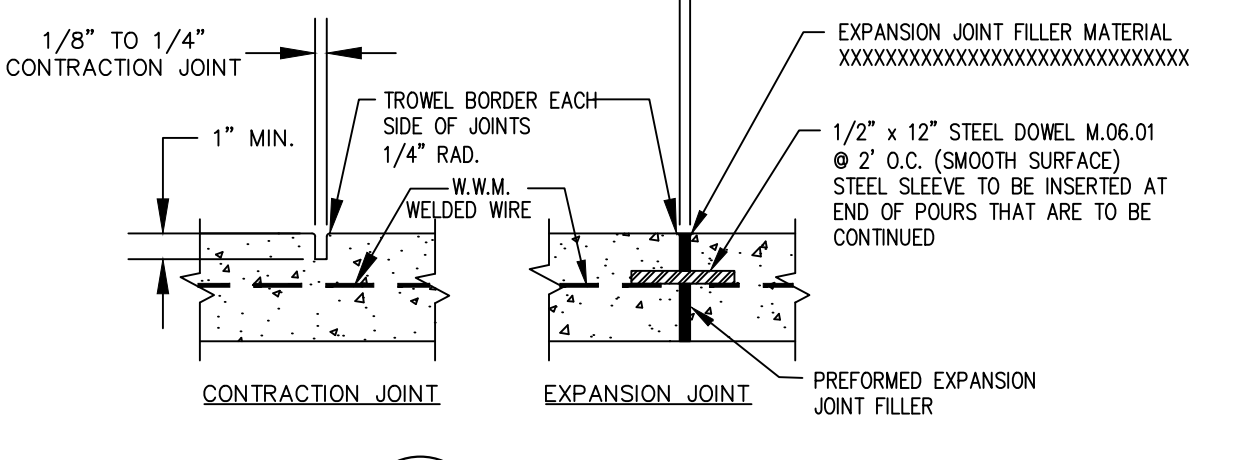
2.1 TYPICAL BITUMINOUS CONCRETE DRIVEWAYS
SEE STANDARD COT DETAIL 2.1



PLAN VIEW



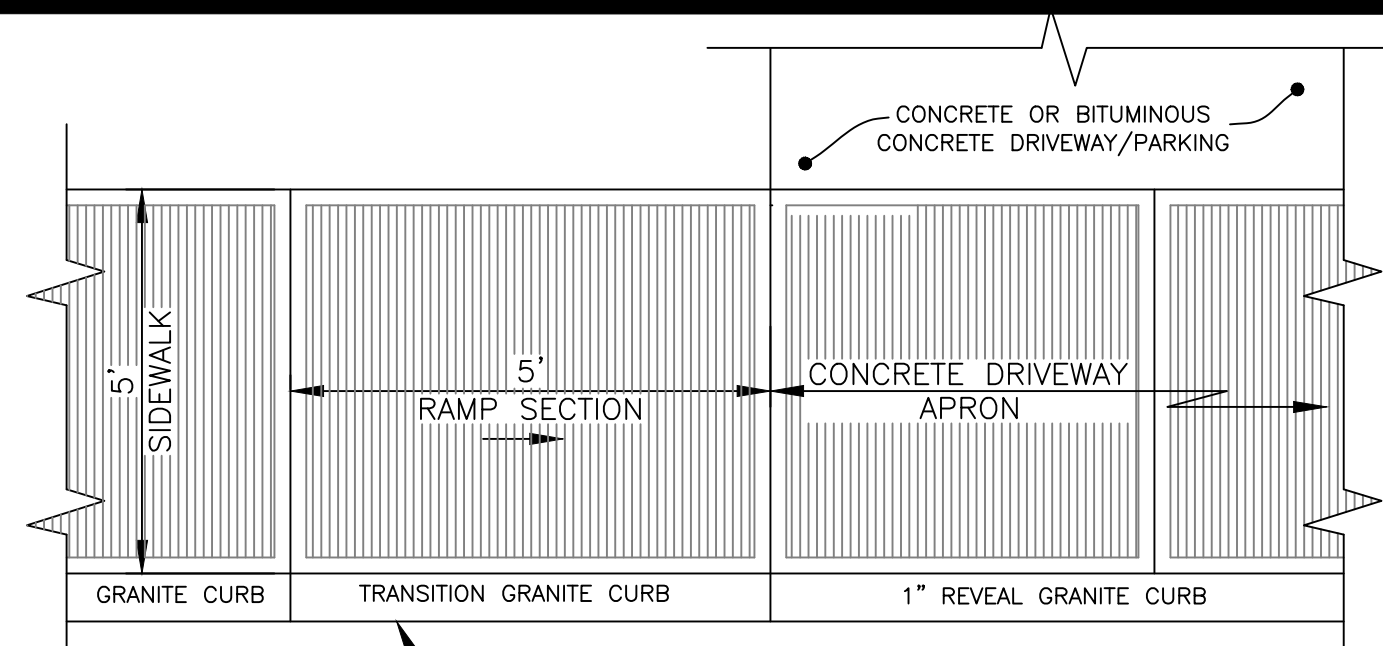
SIDEWALK SECTION ADJACENT TO CURB



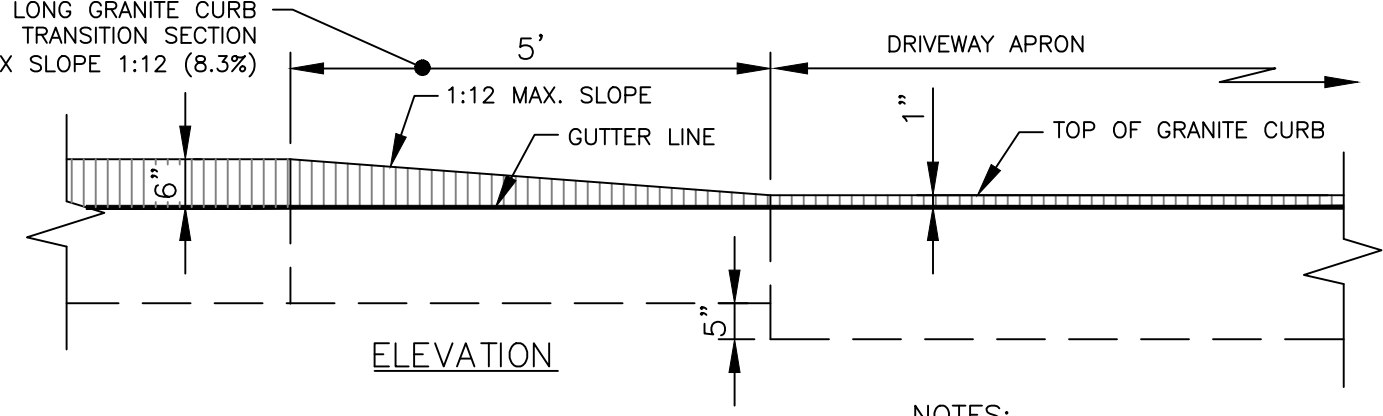
EXPANSION JOINT

- NOTES:
1. CLASS F 4000 PSI (28 DAYS) CONCRETE M.03.01 WITHIN 5% TO 7% ENTRAINED AIR CT DOT STD. SPEC 9.21
 2. WALKS NOT TO EXCEED 5% MAX. SLOPE AND 2% CROSS SLOPE UNLESS OTHERWISE NOTED AS RAMP.
 3. EXPANSION JOINTS AASHTO M213 TO BE INSTALLED EVERY 20 FEET MAX.
 4. ALL CONCRETE WALKS ARE TO BE SEALED WITH "SALTGUARD"-A PRESCO CONCRETE SEALER OR APPROVED EQUAL AS DETAILED IN THE SPECIFICATIONS.

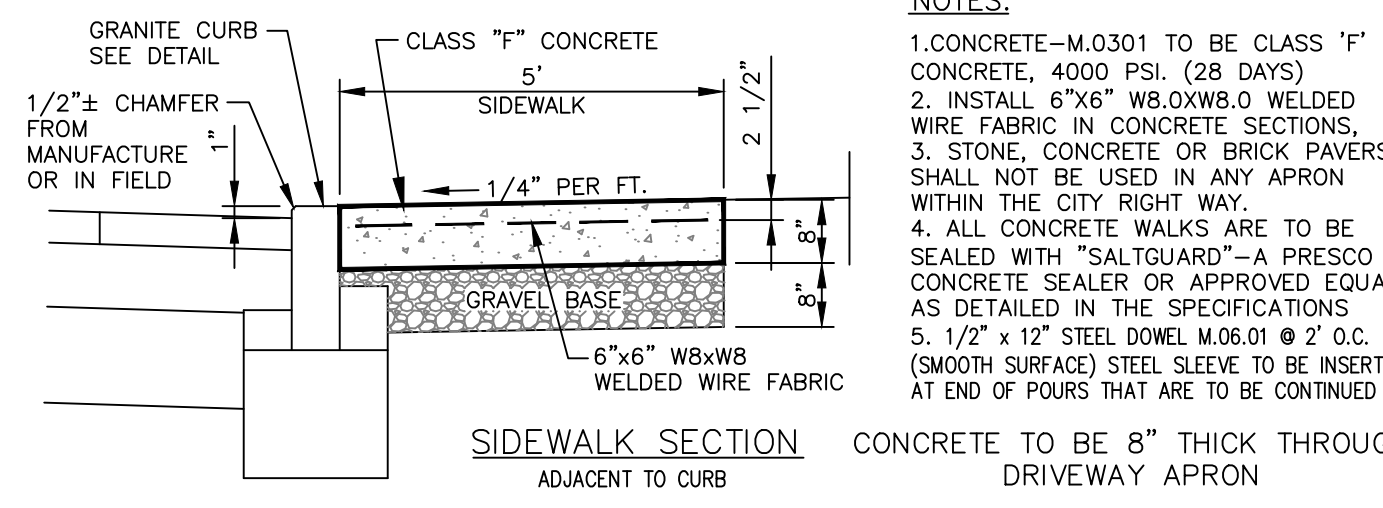
2.2 CONCRETE SIDEWALK
SEE STANDARD COT DETAIL 2.2



PLAN



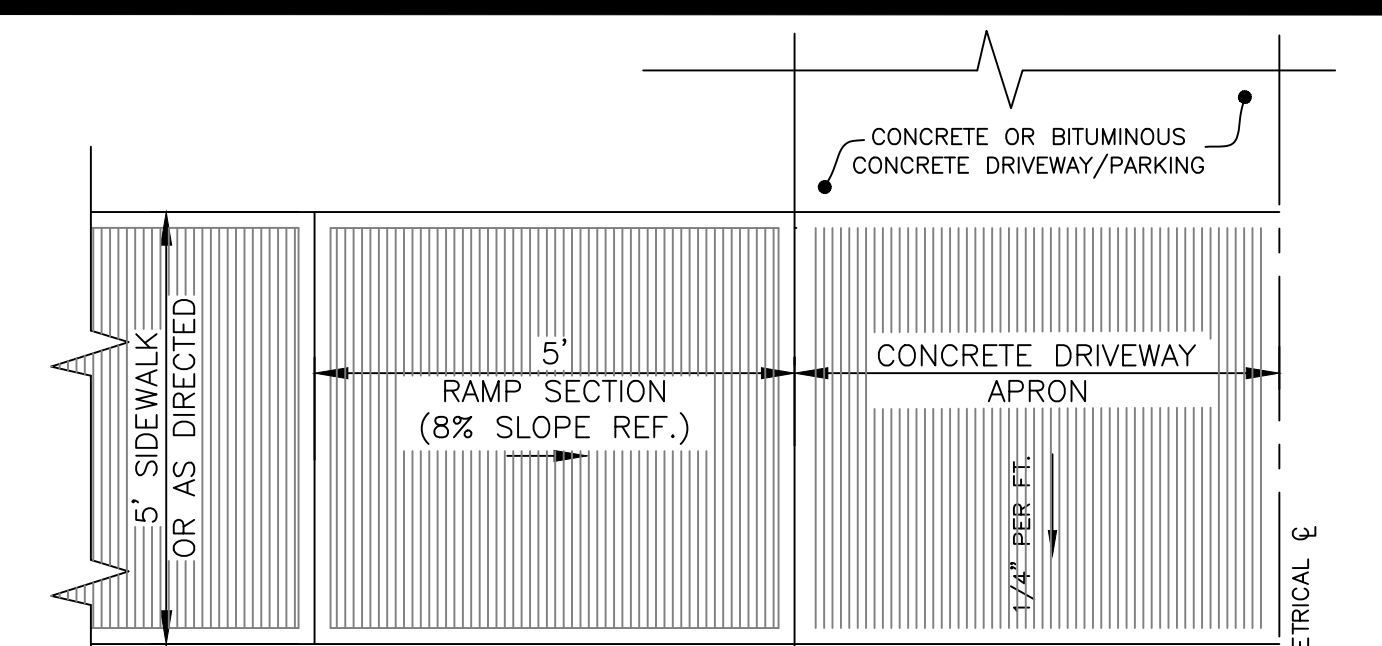
ELEVATION



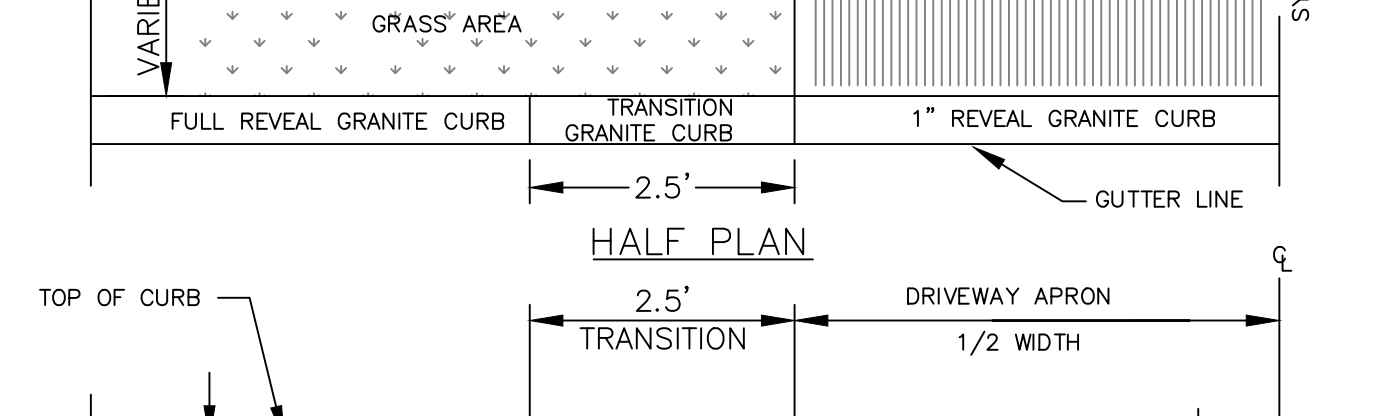
SIDEWALK SECTION ADJACENT TO CURB

- NOTES:
1. CONCRETE-M.0301 TO BE CLASS 'F' CONCRETE, 4000 PSI. (28 DAYS)
 2. INSTALL 6"x6" W8.0xW8.0 WELDED WIRE FABRIC IN CONCRETE SECTIONS.
 3. STONE, CONCRETE OR BRICK PAVERS SHALL NOT BE USED IN ANY APRON WITHIN THE CITY RIGHT WAY.
 4. ALL CONCRETE WALKS ARE TO BE SEALED WITH "SALTGUARD"-A PRESCO CONCRETE SEALER OR APPROVED EQUAL AS DETAILED IN THE SPECIFICATIONS
 5. 1/2" x 12" STEEL DOWEL M.08.01 @ 2' O.C. (SMOOTH SURFACE) STEEL SLEEVE TO BE INSERTED AT END OF POURS THAT ARE TO BE CONTINUED

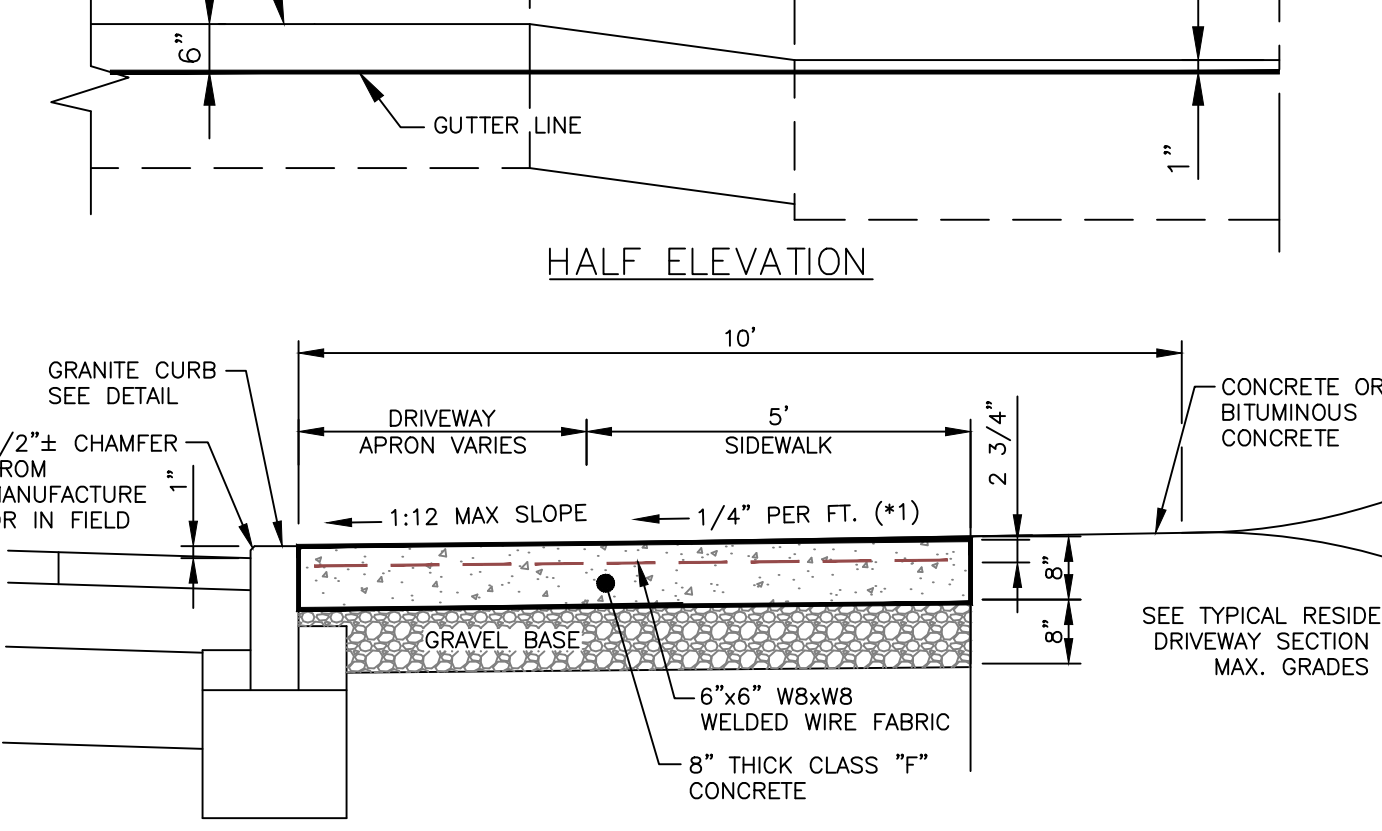
2.3 CONCRETE DRIVEWAY APRON WITH SIDEWALK ADJOINING CURB
SEE STANDARD COT DETAIL 2.3



HALF PLAN

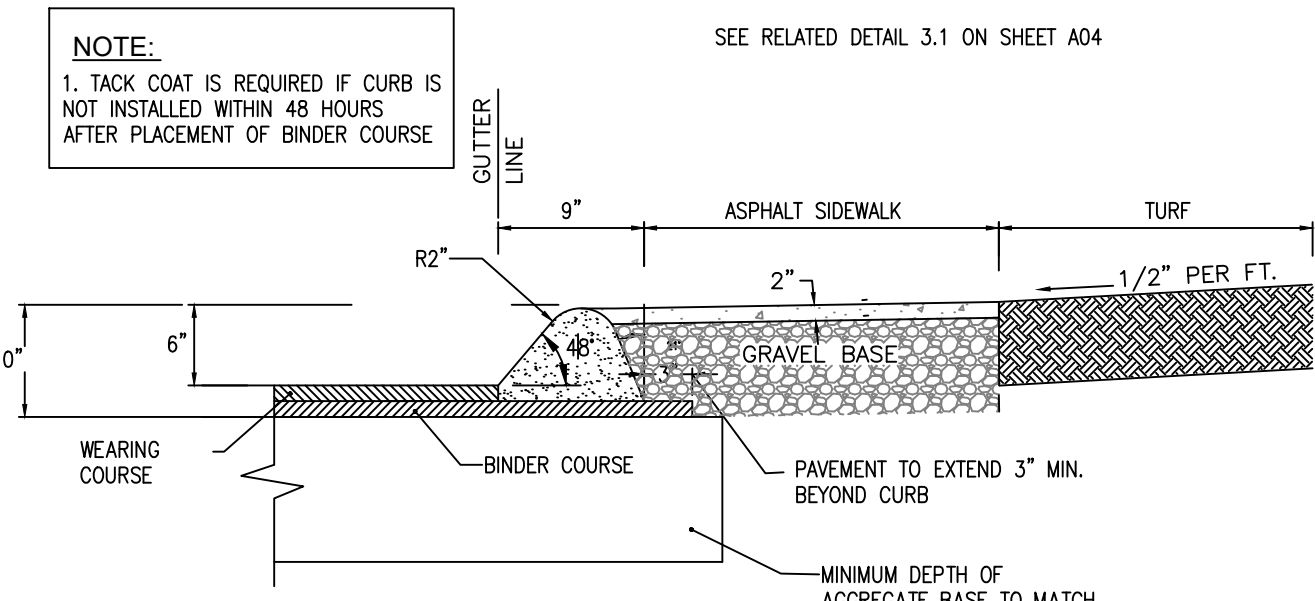


HALF ELEVATION

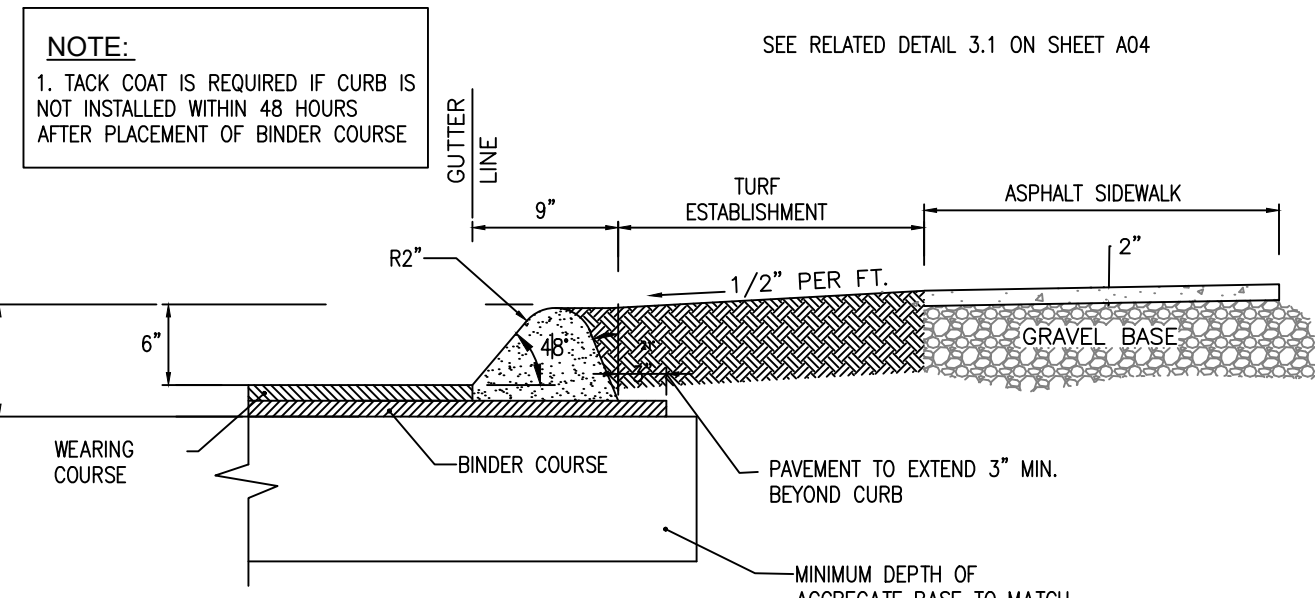


CONCRETE DRIVEWAY APRON WITH GRANITE CURB

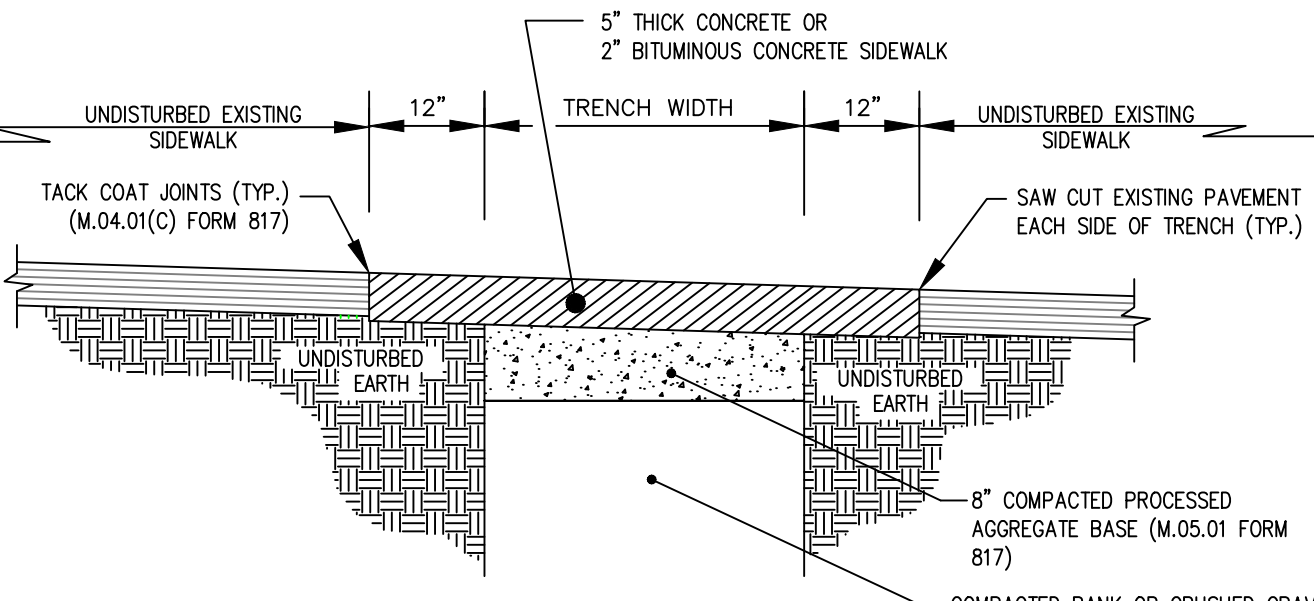
(*1) SIDEWALK CROSS SLOPE TO MEET ADA PROWAG REQUIREMENTS



2.12 BITUMINOUS CONCRETE CURB AND SIDEWALK

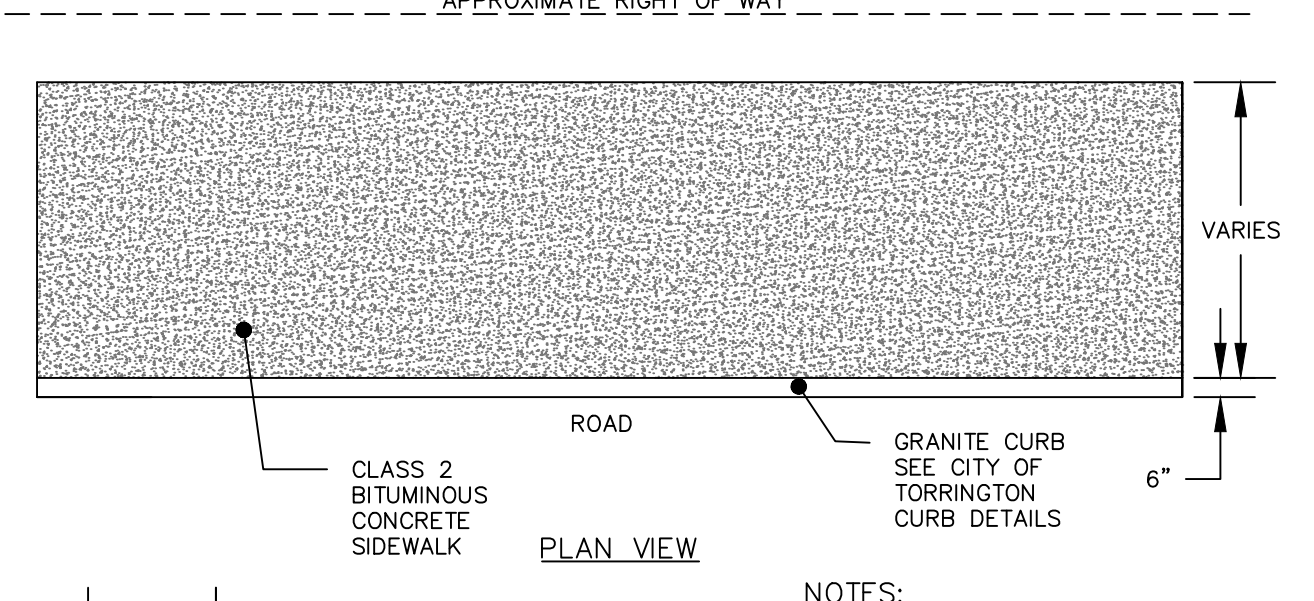


2.13 BITUMINOUS CONCRETE CURB AND SIDEWALK WITH GRASS BOULEVARD

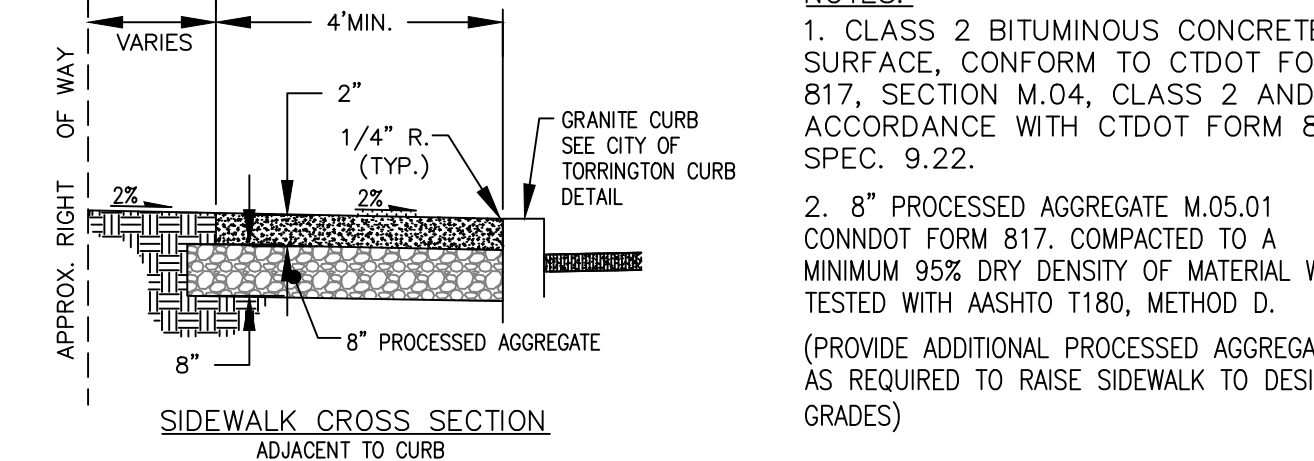


2.5 SIDEWALK TRENCH REPAIR
NTS

1. SEE CITY STANDARD DETAIL FOR CONCRETE SIDEWALKS AND DRIVEWAYS. IF REPAIR IS IN AN EXISTING BITUMINOUS CONCRETE SIDEWALK REPAIR TRENCH WITH 2" OF BITUMINOUS CONCRETE.
2. FINAL PERMANENT CONCRETE SIDEWALK REPAIR TO BE CUT AT EVEN EXPANSION OR CONTROL JOINTS OF FULL SIZE PANELS - NO NEW INTERMEDIATE JOINTS PERMITTED.
3. BITUMINOUS CONCRETE SIDEWALK TO BE REPLACED IN ITS ENTIRE FULL WIDTH.



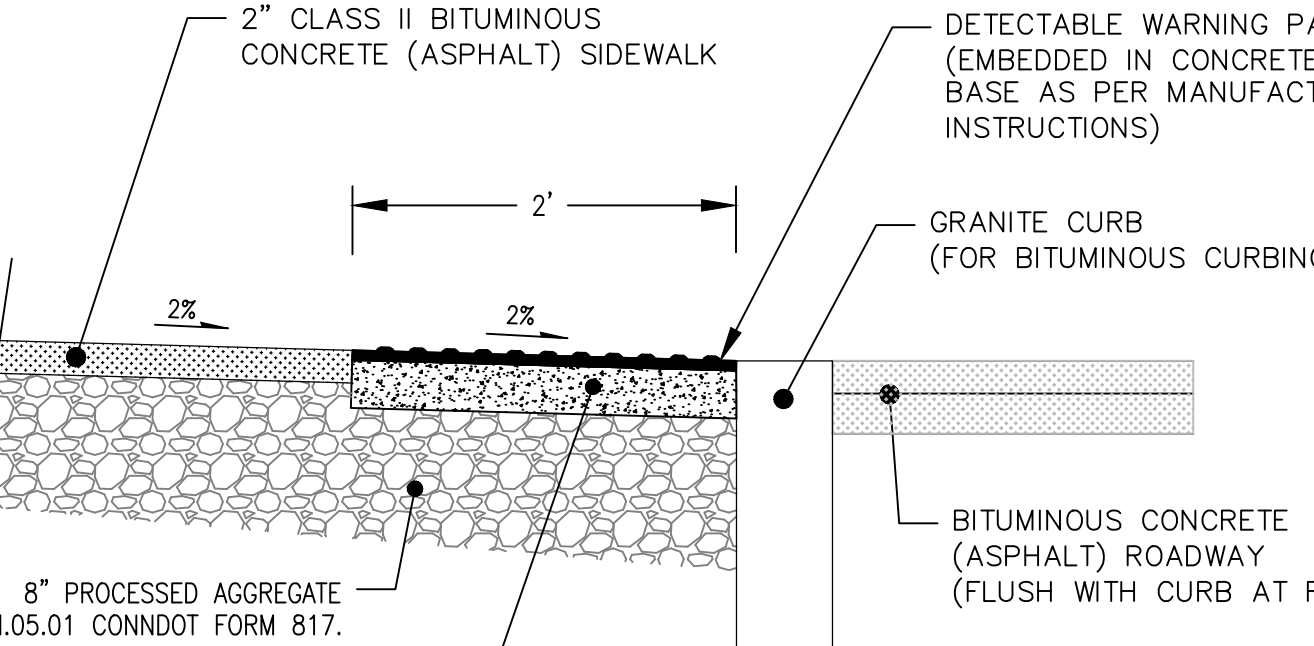
PLAN VIEW



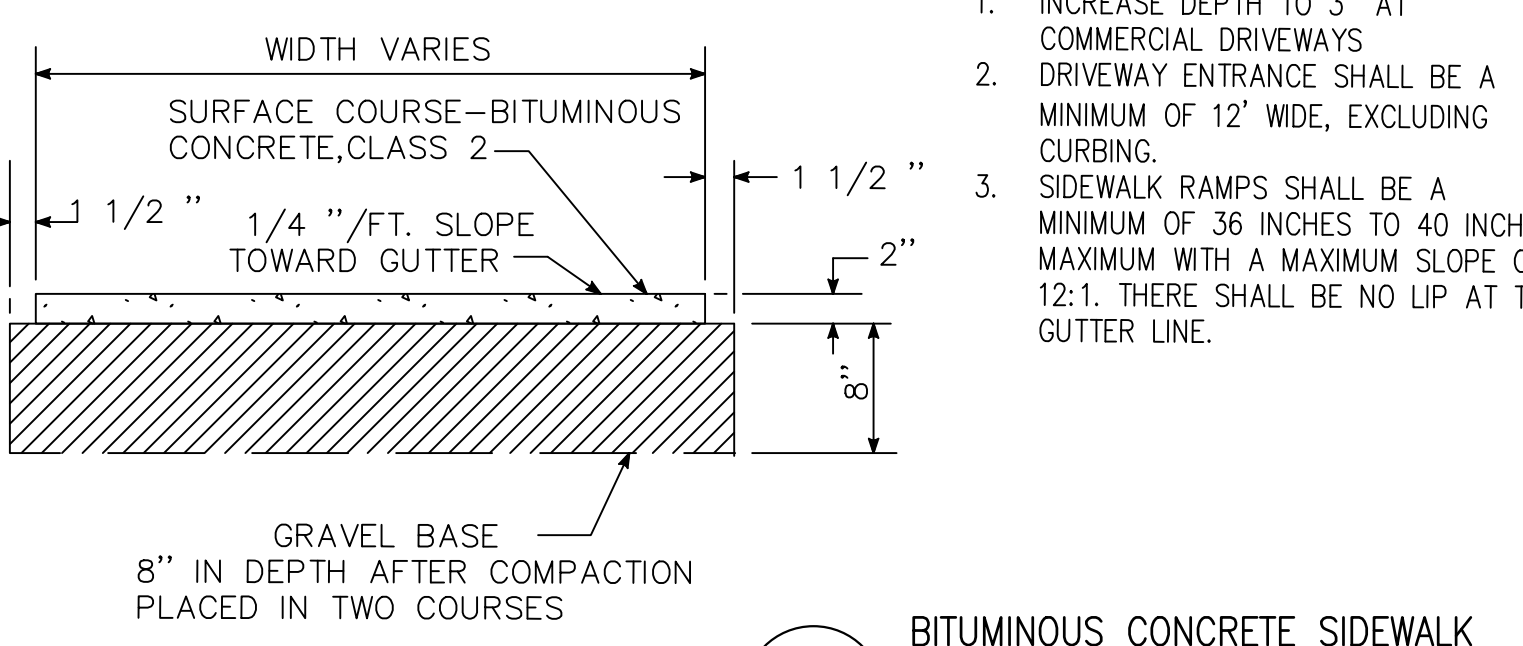
SIDEWALK CROSS SECTION ADJACENT TO CURB

- NOTES:
1. CLASS 2 BITUMINOUS CONCRETE SURFACE, CONFORM TO CTDOT FORM 817, SECTION M.04, CLASS 2 AND IN ACCORDANCE WITH CTDOT FORM 817 SPEC. 9.22.
 2. 8" PROCESSED AGGREGATE M.05.01 CONDOT FORM 817, COMPACTED TO A MINIMUM 95% DRY DENSITY OF MATERIAL WHEN TESTED WITH AASHTO T180, METHOD D. (PROVIDE ADDITIONAL PROCESSED AGGREGATE AS REQUIRED TO RAISE SIDEWALK TO DESIGN GRADES)

2.11 BITUMINOUS CONCRETE SIDEWALK
SEE STANDARD COT DETAIL 2.11



2.14 DETECTABLE WARNING PAD BITUMINOUS CONCRETE SIDEWALK
NTS



A-A BITUMINOUS CONCRETE SIDEWALK TYPICAL SECTION
SEE STANDARD COT DETAIL 2.11

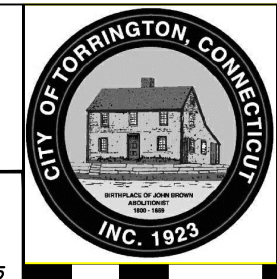
- NOTES:
1. INCREASE DEPTH TO 3" AT COMMERCIAL DRIVEWAYS
 2. DRIVEWAY ENTRANCE SHALL BE A MINIMUM OF 12' WIDE, EXCLUDING CURBING.
 3. SIDEWALK RAMPS SHALL BE A MINIMUM OF 36 INCHES TO 40 INCHES MAXIMUM WITH A MAXIMUM SLOPE OF 12:1. THERE SHALL BE NO LIP AT THE GUTTER LINE.

| REVISIONS | | | |
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Plan Showing STANDARD DETAILS SECTION 2.0 SIDEWALKS AND DRIVEWAYS

City of Torrington Engineering Department

FEBRUARY, 2019
Horiz Scale: AS SHOWN
Vert Scale: AS SHOWN

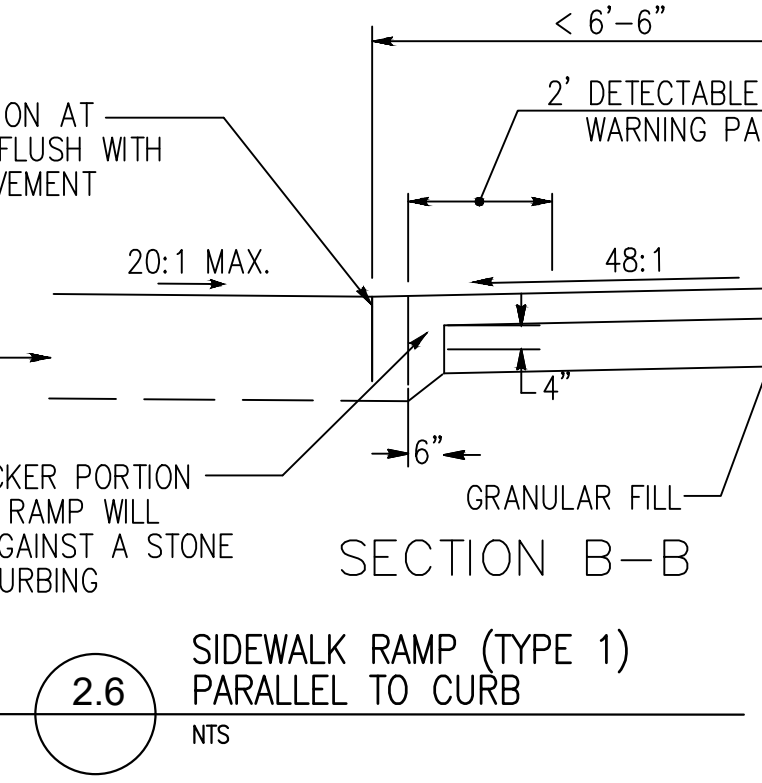
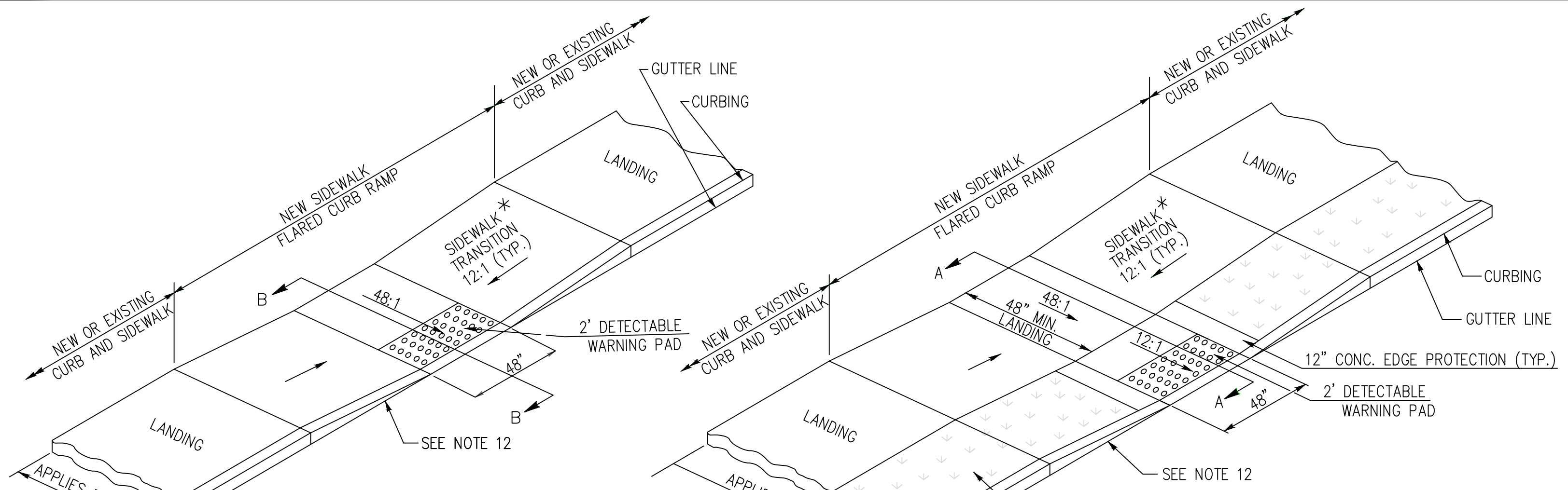


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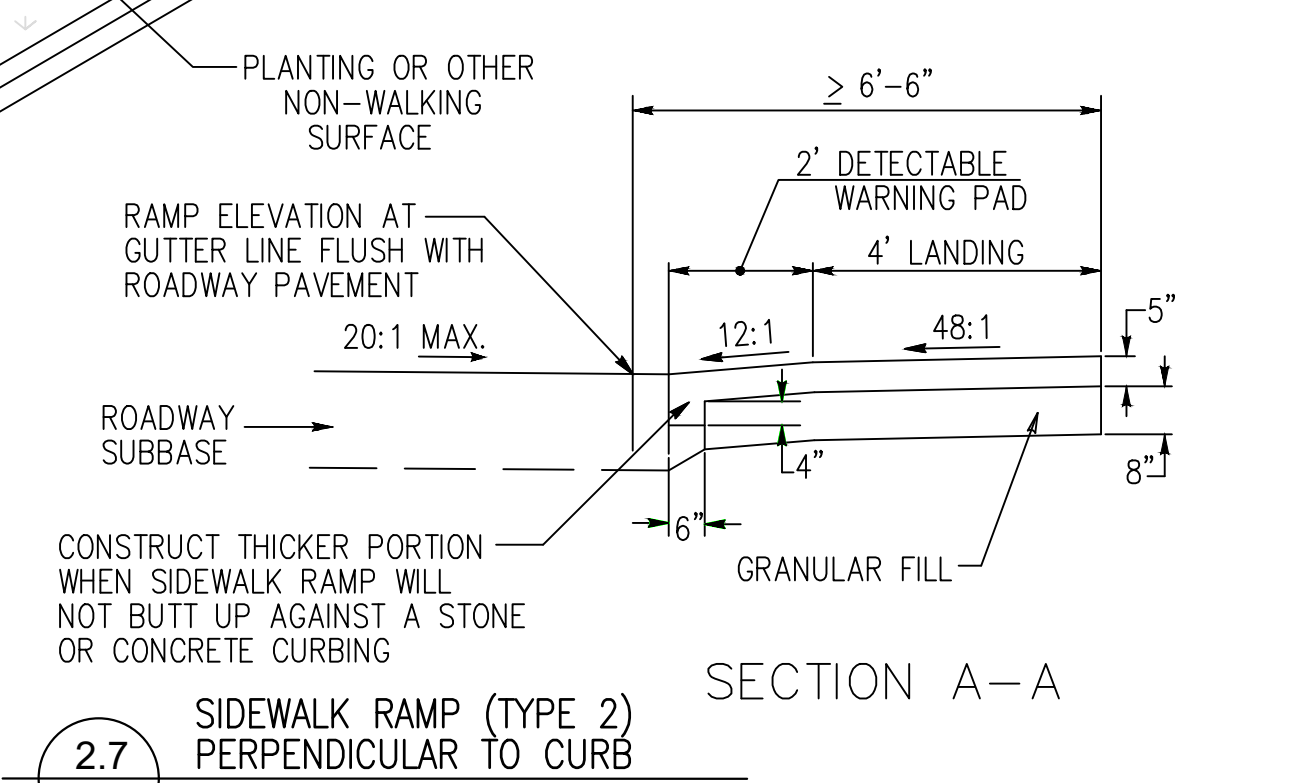
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"CALL BEFORE YOU DIG" 1-800-322-4433

SHEET: SD-2A

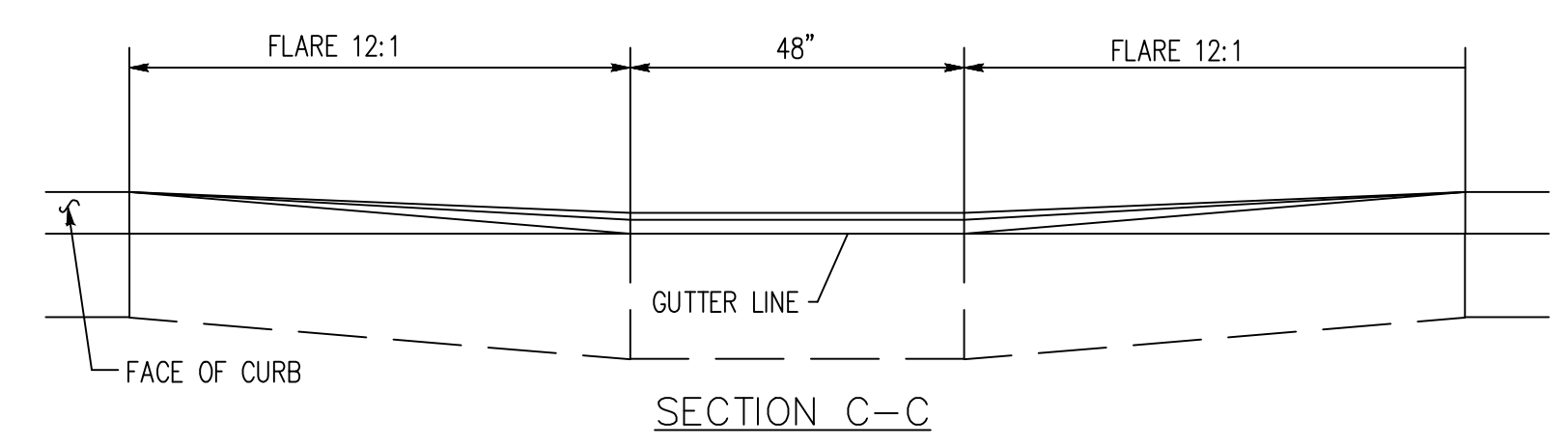
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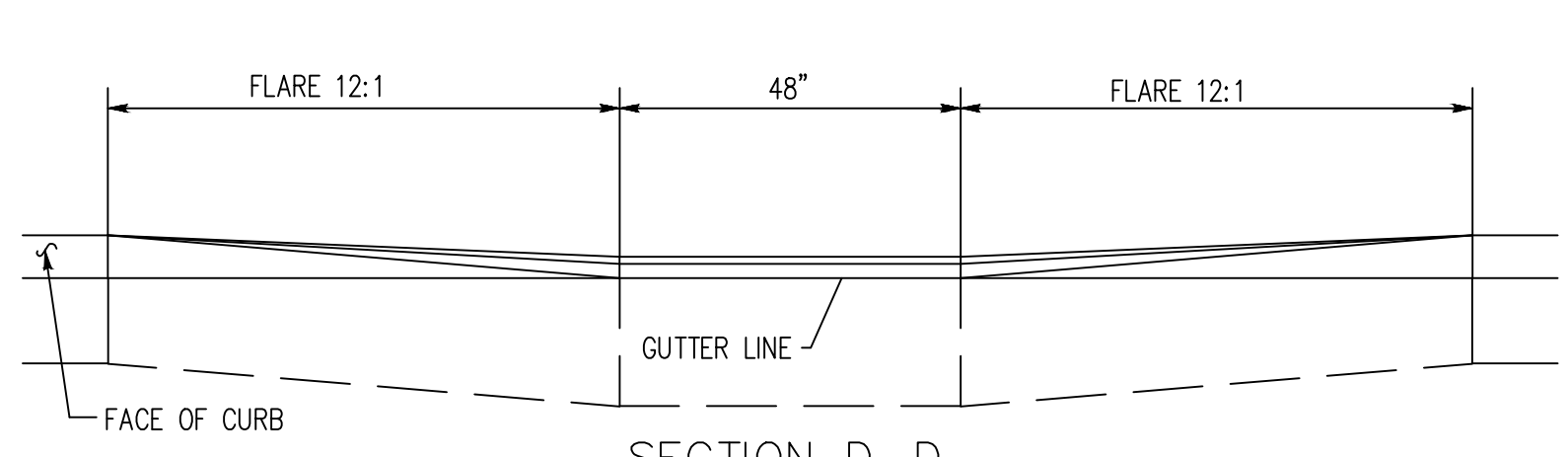
2.6 SIDEWALK RAMP (TYPE 1) PARALLEL TO CURB
NTS



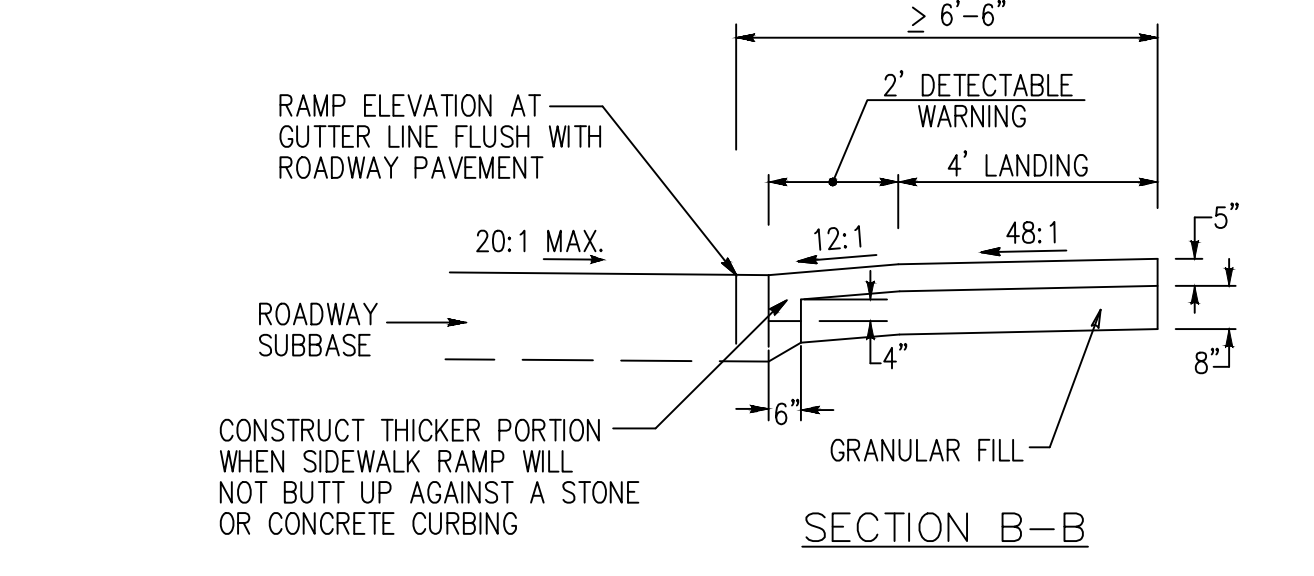
2.7 SIDEWALK RAMP (TYPE 2) PERPENDICULAR TO CURB
NTS



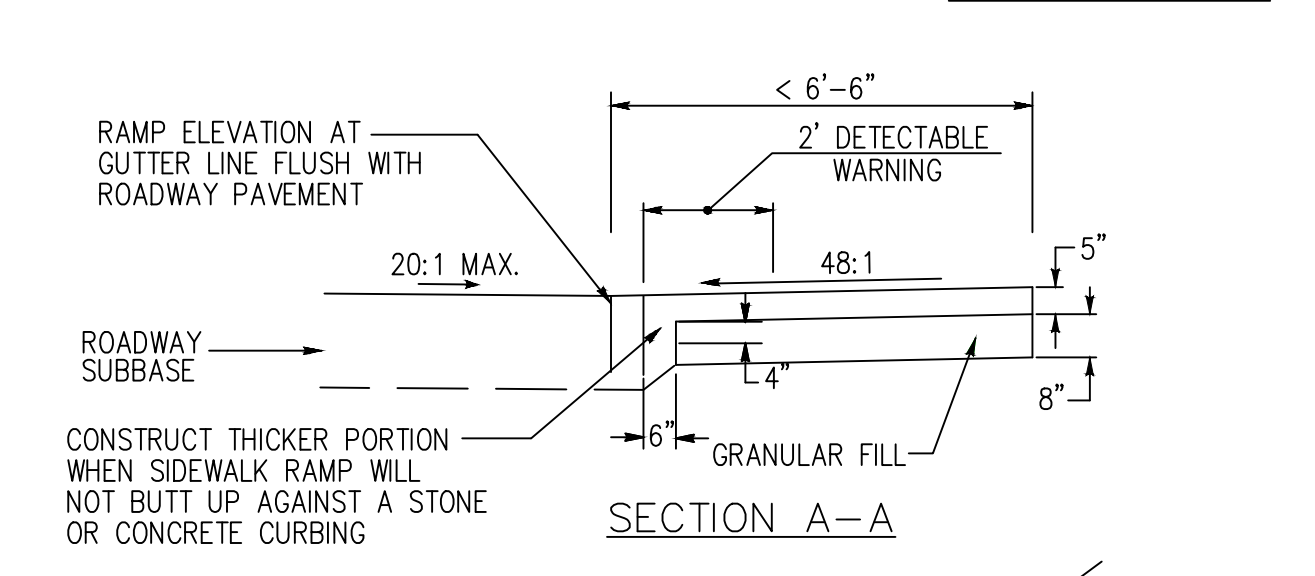
SECTION C-C



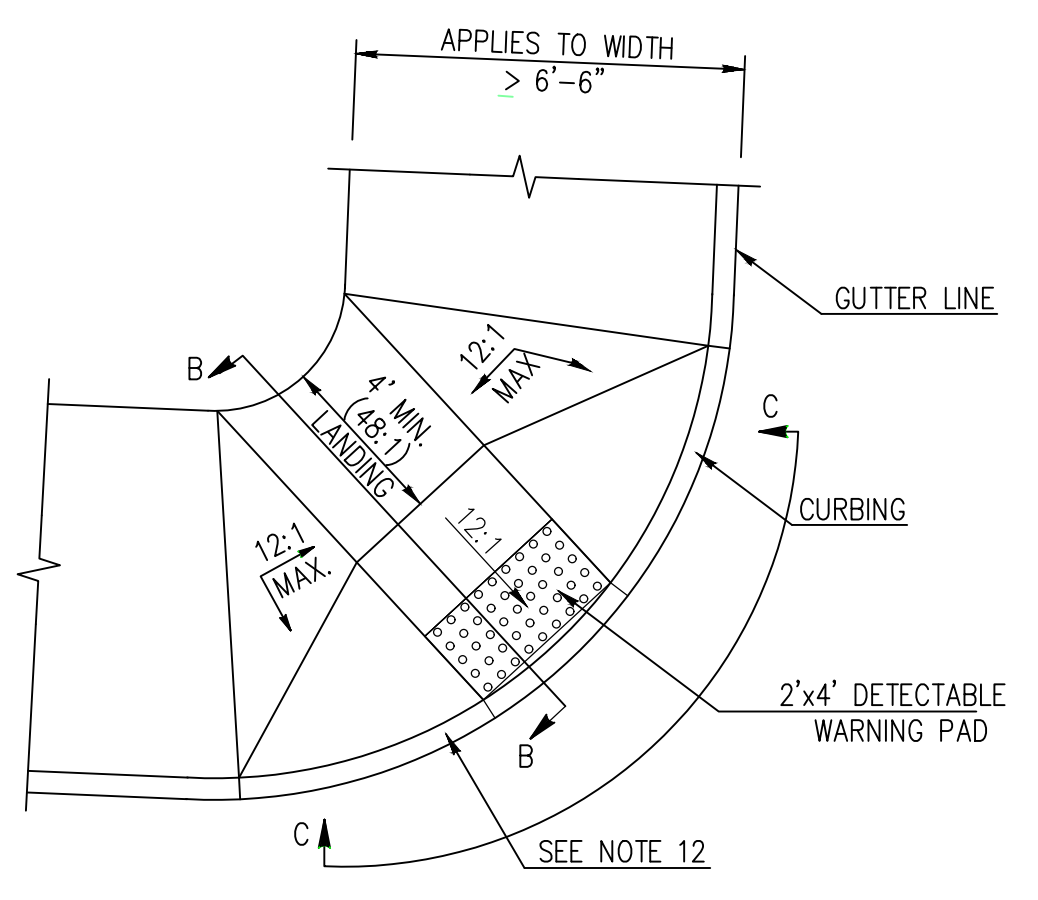
SECTION D-D



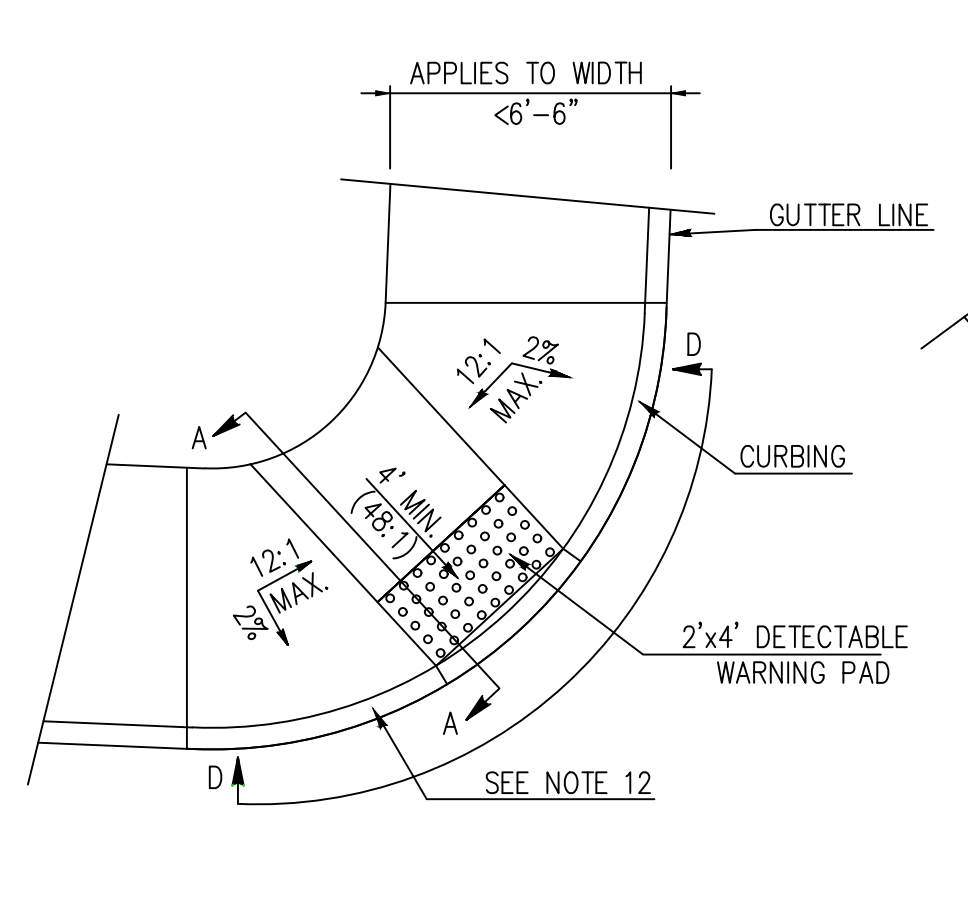
SECTION B-B



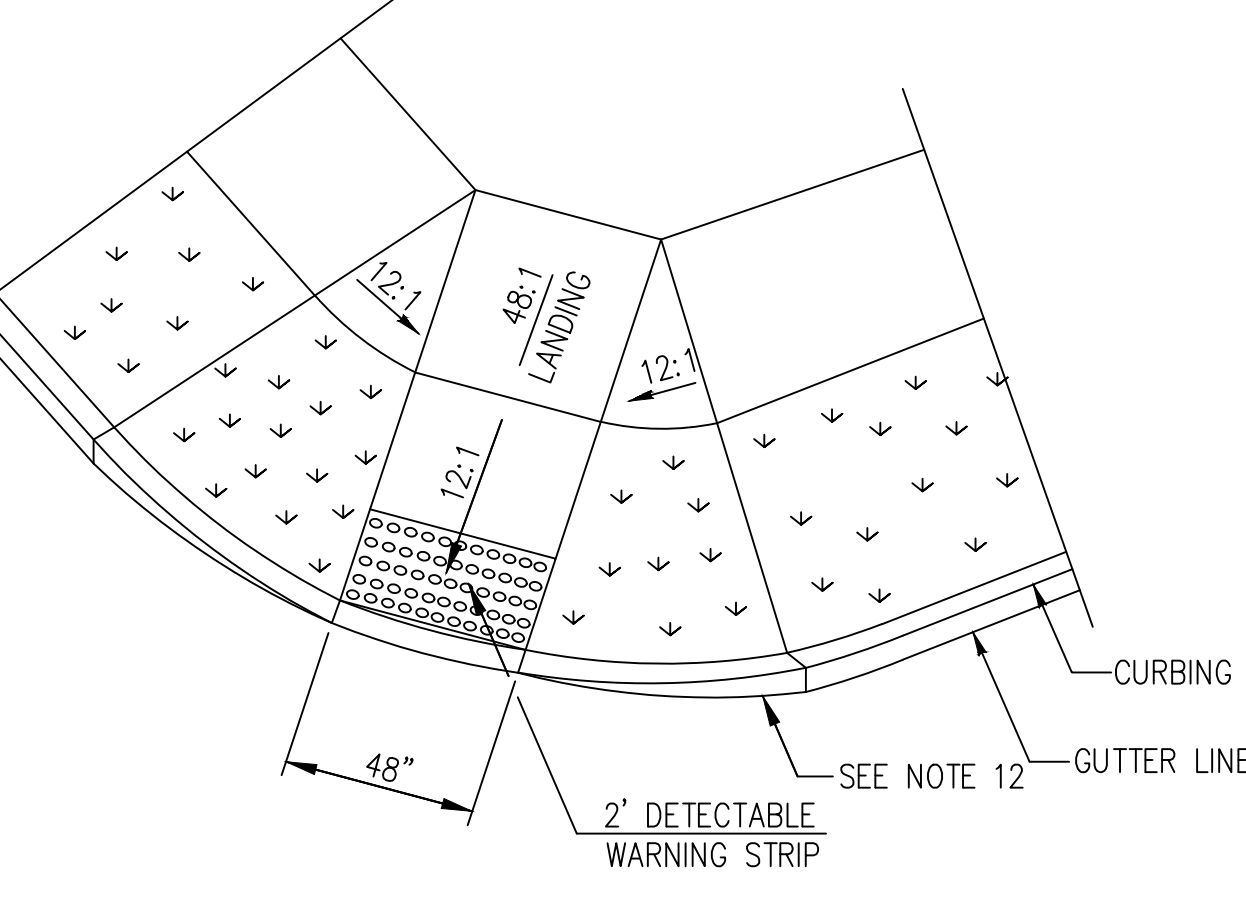
SECTION A-A



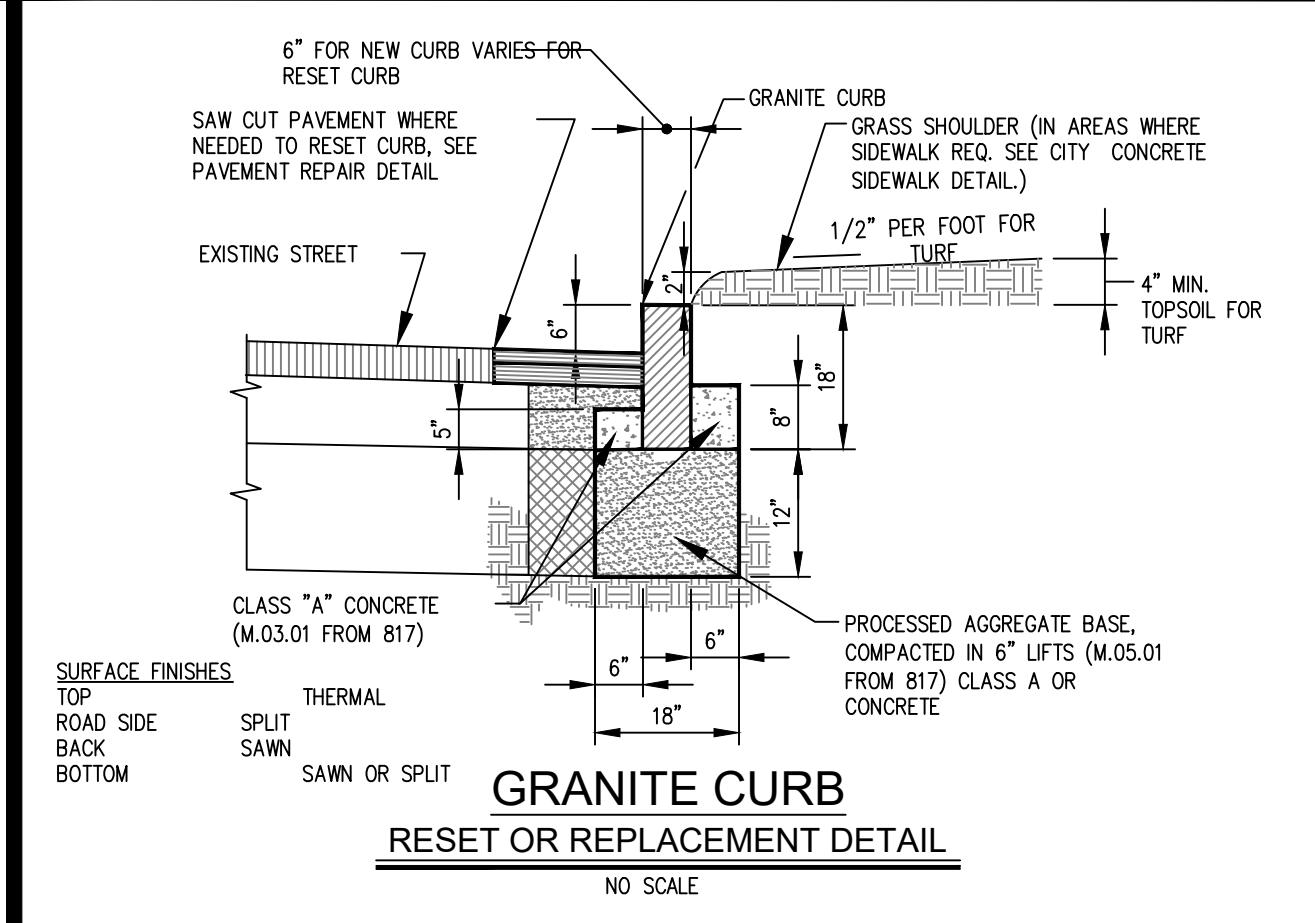
2.8 DIAGONAL SIDEWALK RAMP - TYPE 4A
SEE STANDARD COT DETAIL 2.8



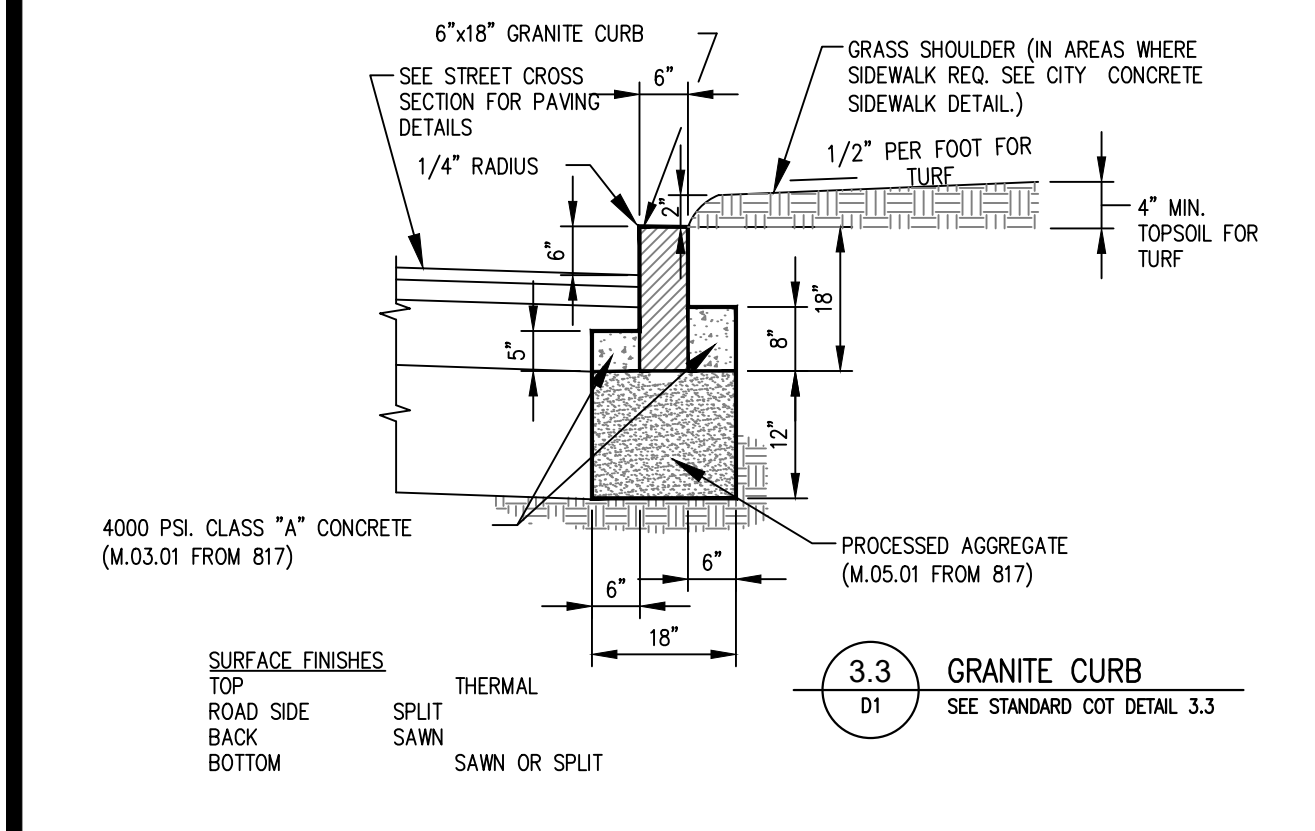
2.9 DIAGONAL SIDEWALK RAMP - TYPE 4B
SEE STANDARD COT DETAIL 2.9



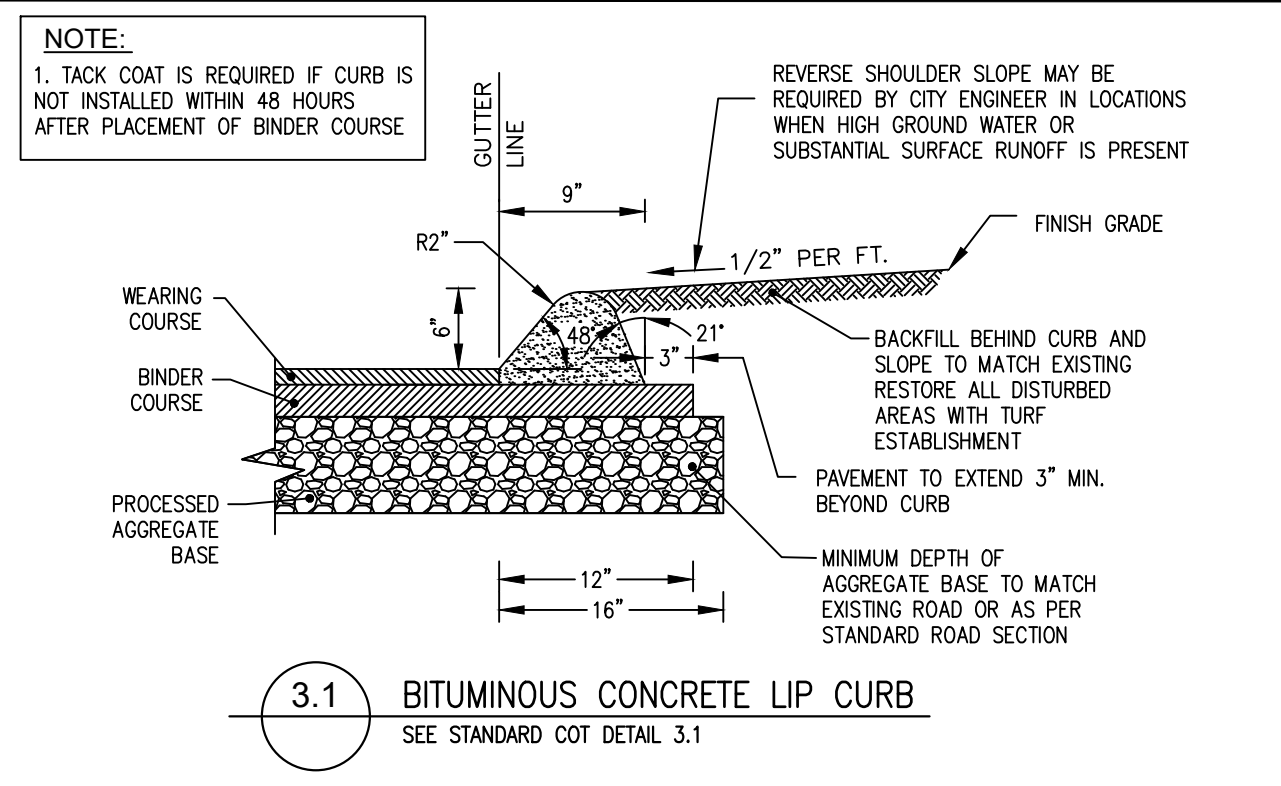
2.10 DIAGONAL SIDEWALK RAMP - TYPE 4C
SEE STANDARD COT DETAIL 2.10



3.1 GRANITE CURB RESET OR REPLACEMENT DETAIL
NO SCALE



3.3 GRANITE CURB FOR NEW CONSTRUCTION
NO SCALE



3.1 BITUMINOUS CONCRETE LIP CURB
SEE STANDARD COT DETAIL 3.1

| REVISIONS | | | |
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Plan Showing
STANDARD DETAILS
SECTION 2.0
SIDEWALKS AND DRIVEWAYS

City of Torrington Engineering Department

FEBRUARY, 2019
Horiz Scale: AS SHOWN
Vert Scale: AS SHOWN

Drawn by: PK
Checked by: PK

SHEET: SD-2B

IMPORTANT NOTE:
UNDERGROUND UTILITIES ARE APPROXIMATE
PROVIDE BY ANY INDICATION OR CONTRACT CONTACT
"CALL BEFORE YOU DIG" 1-800-922-4455

1 INCH

| REVISIONS | | | |
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Plan Showing
STANDARD DETAILS
SECTION 3.0
CURBING

City of Torrington Engineering Department

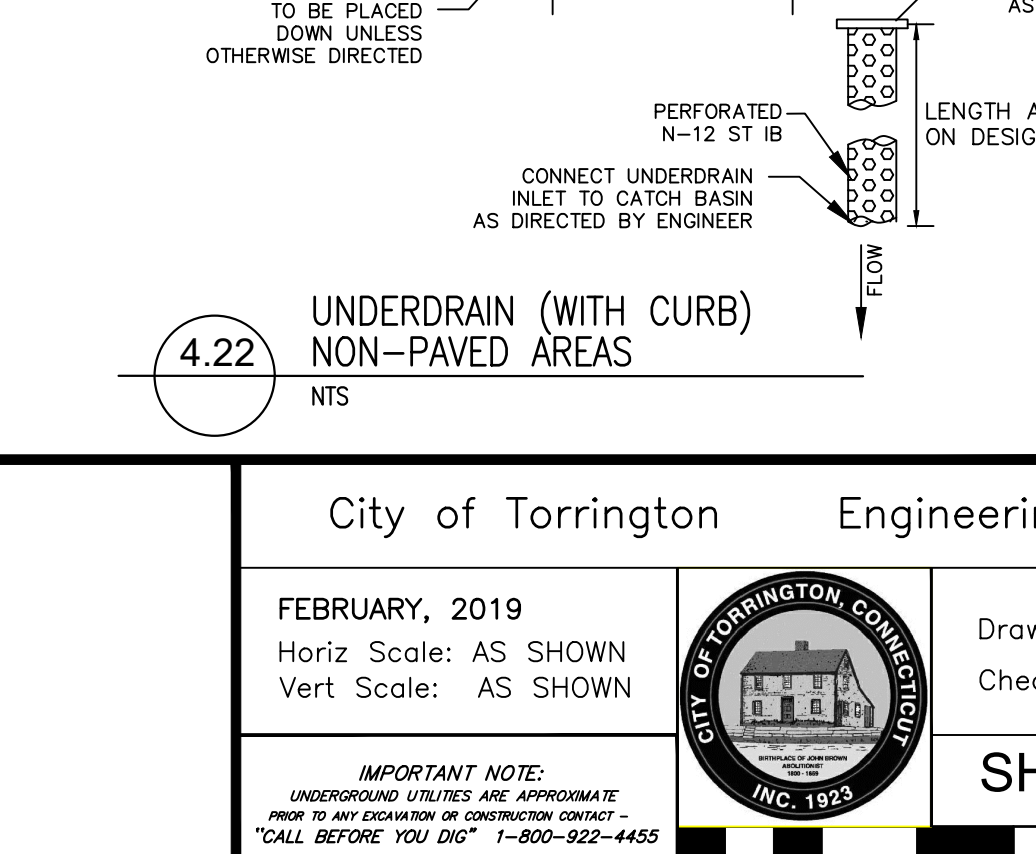
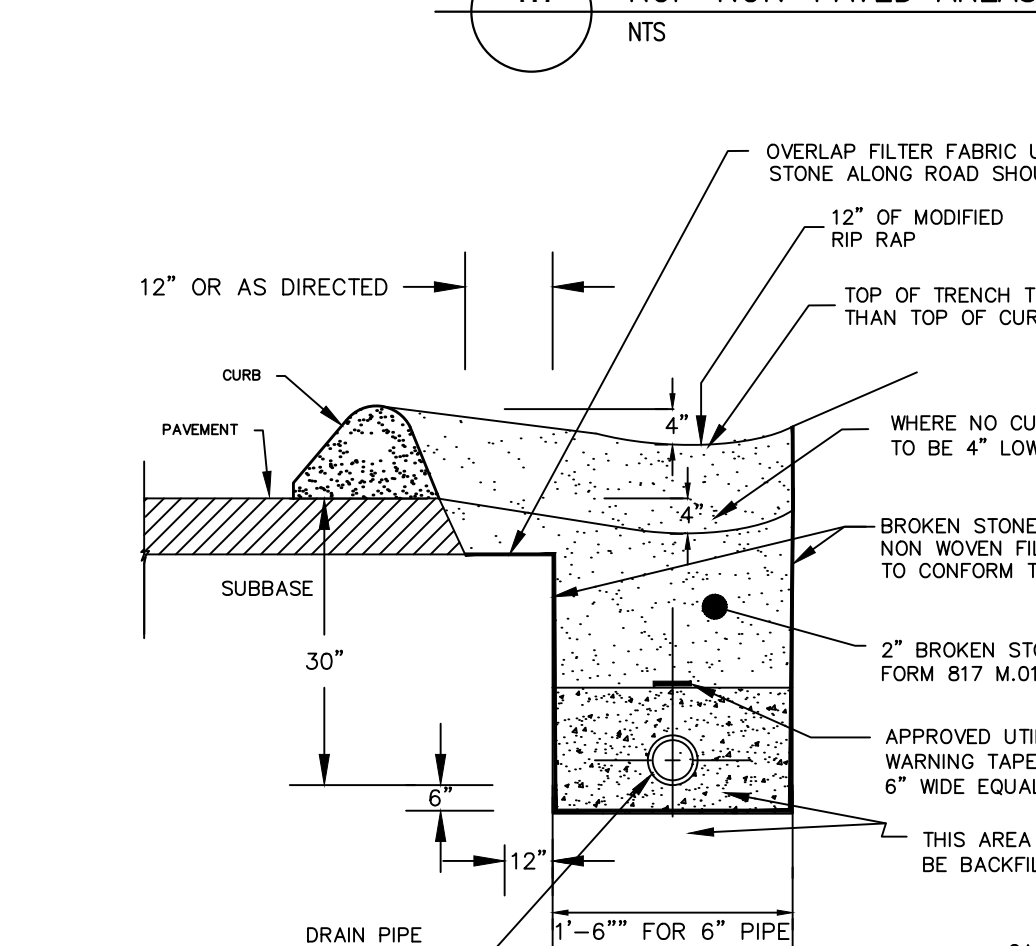
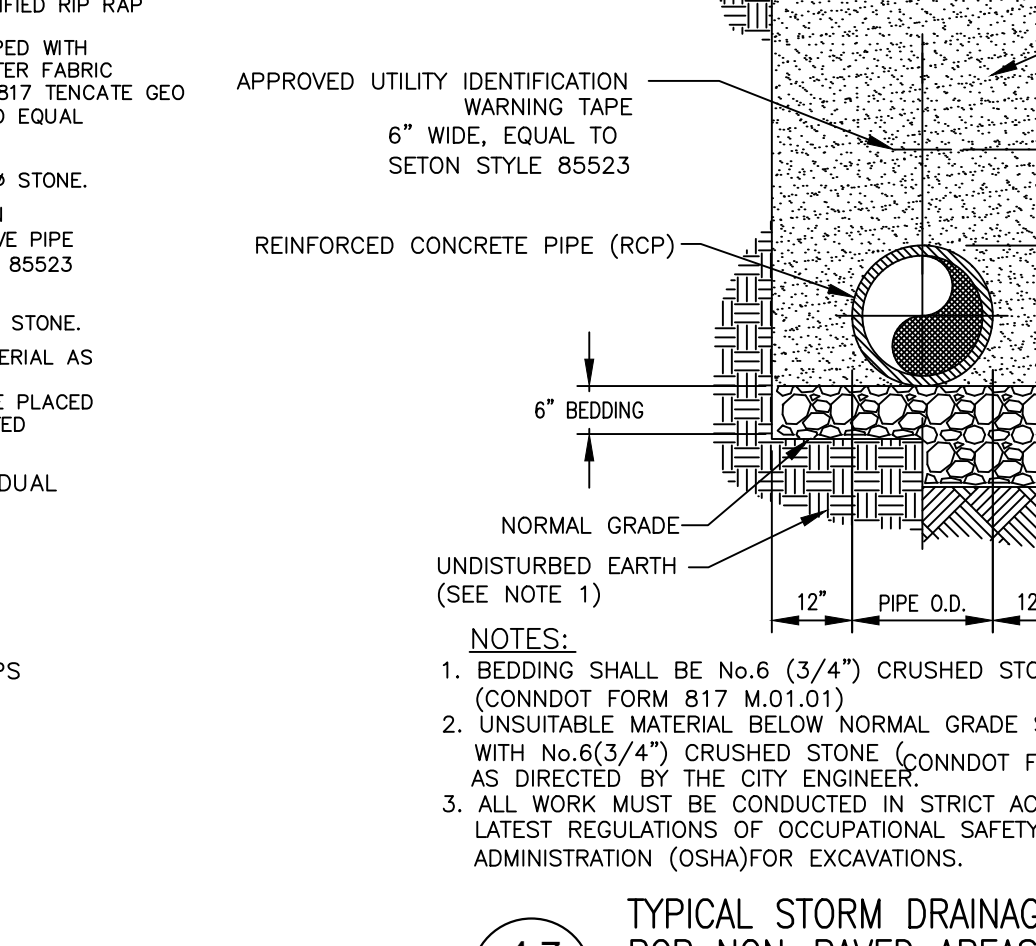
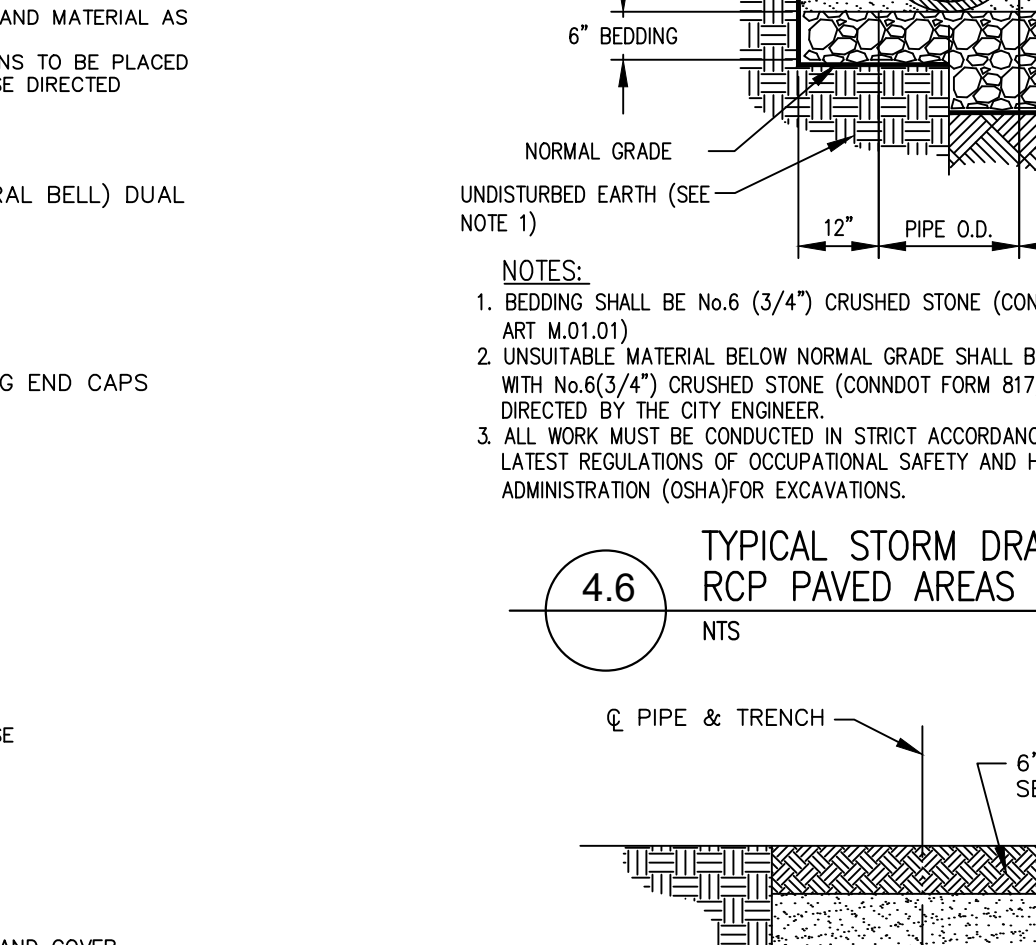
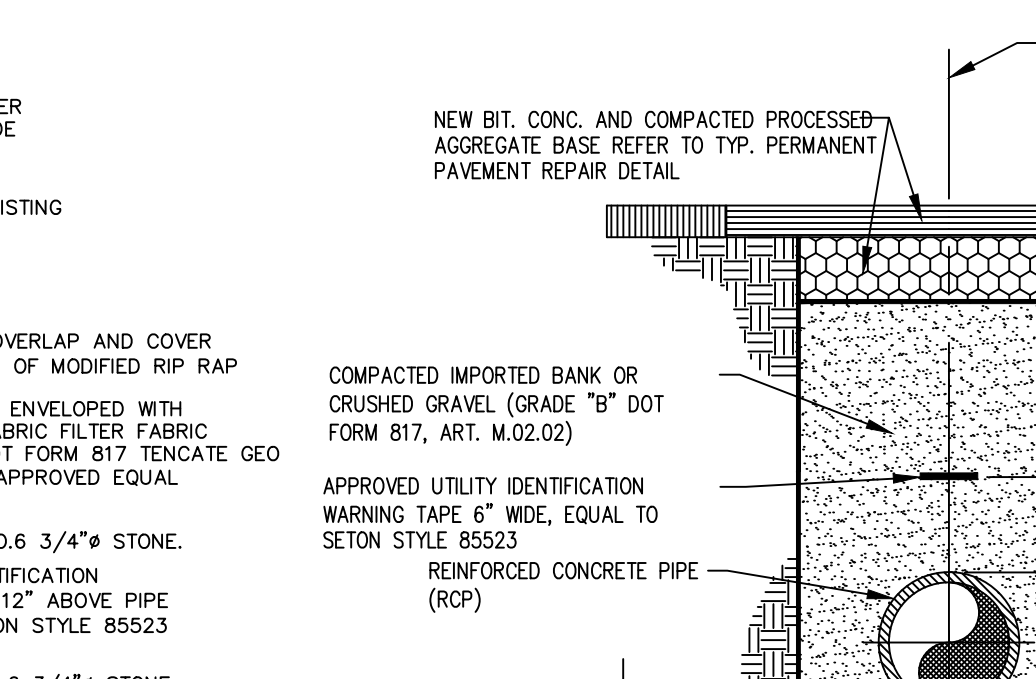
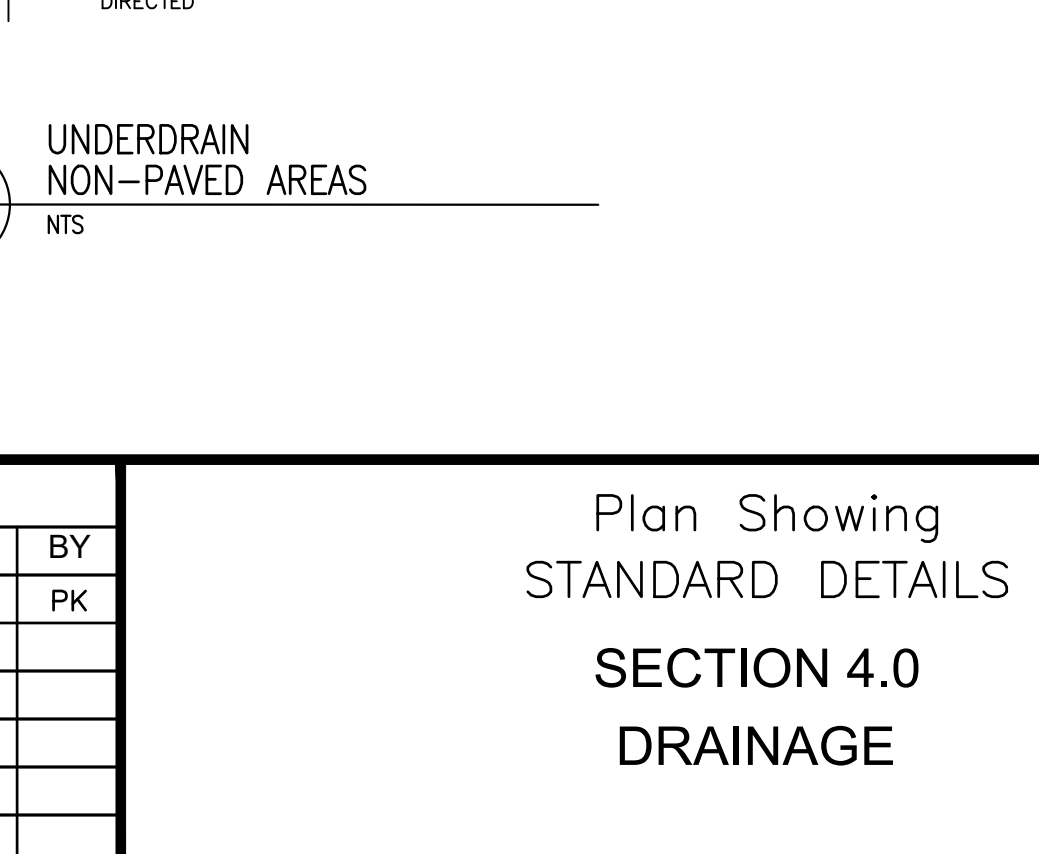
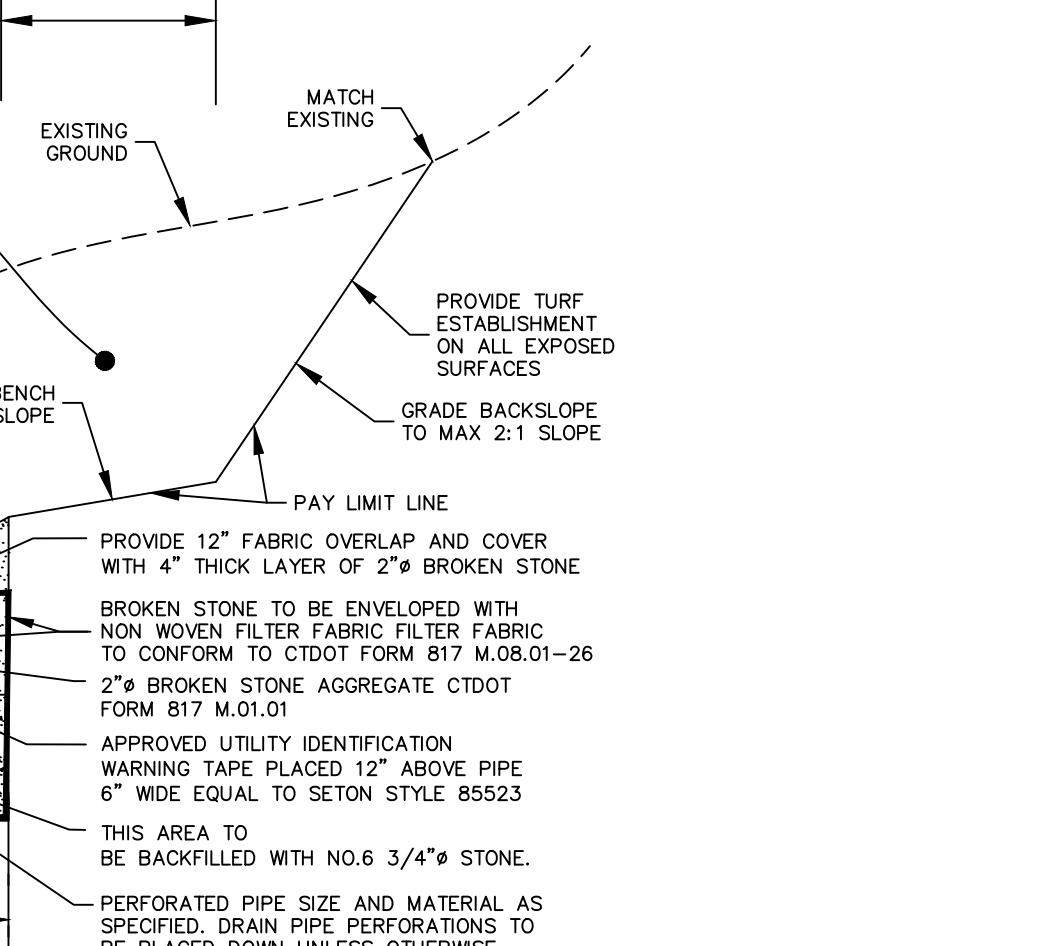
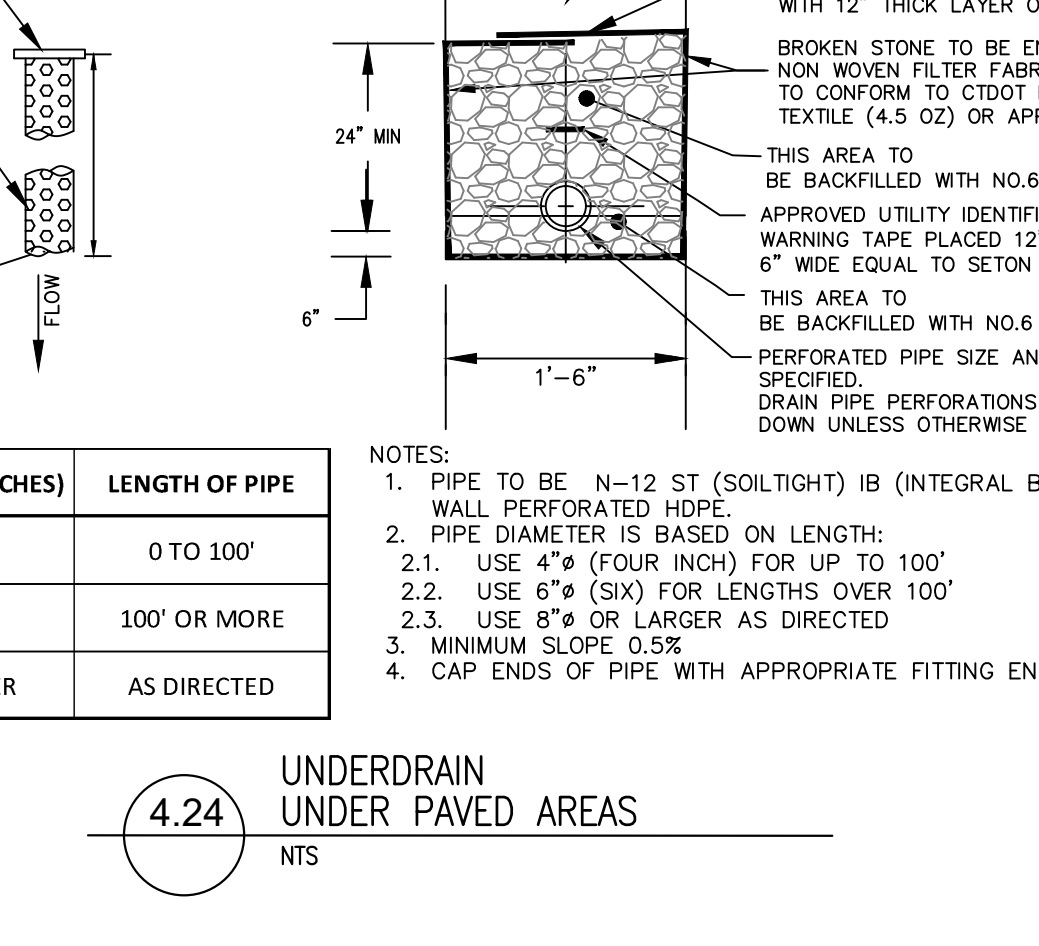
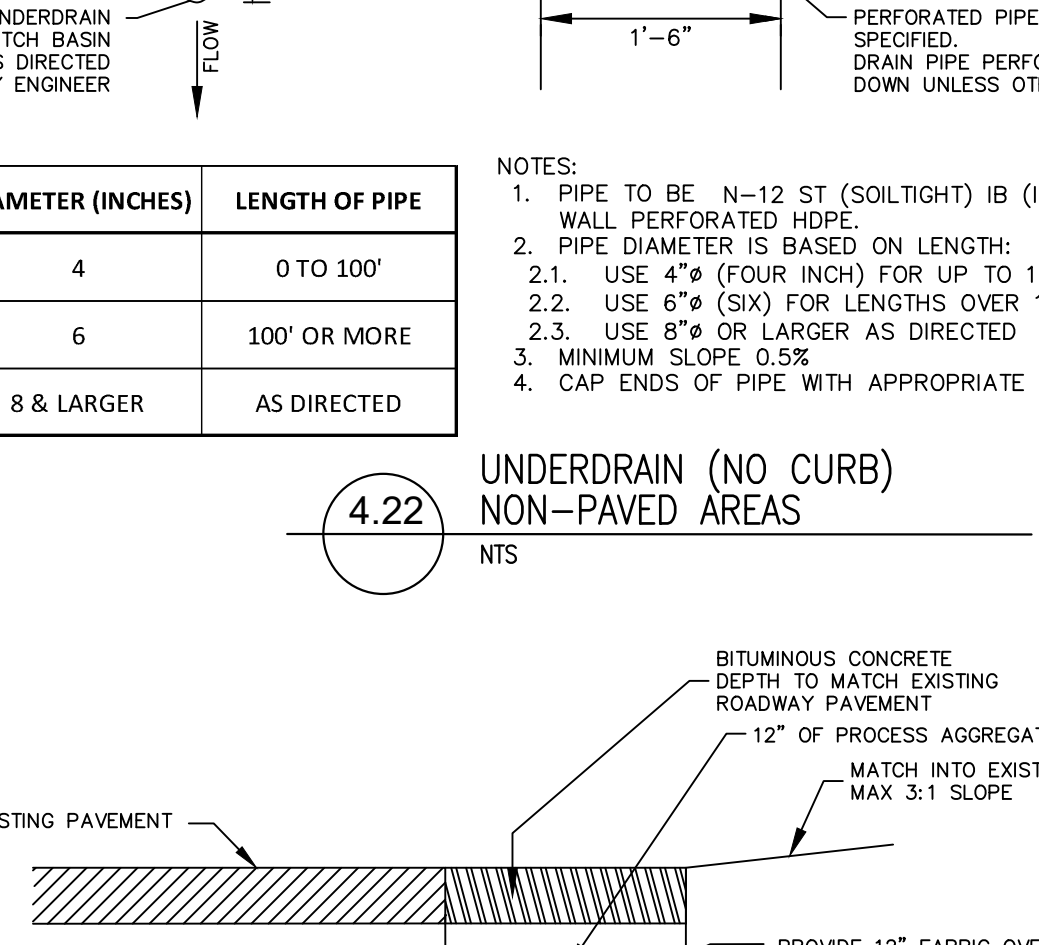
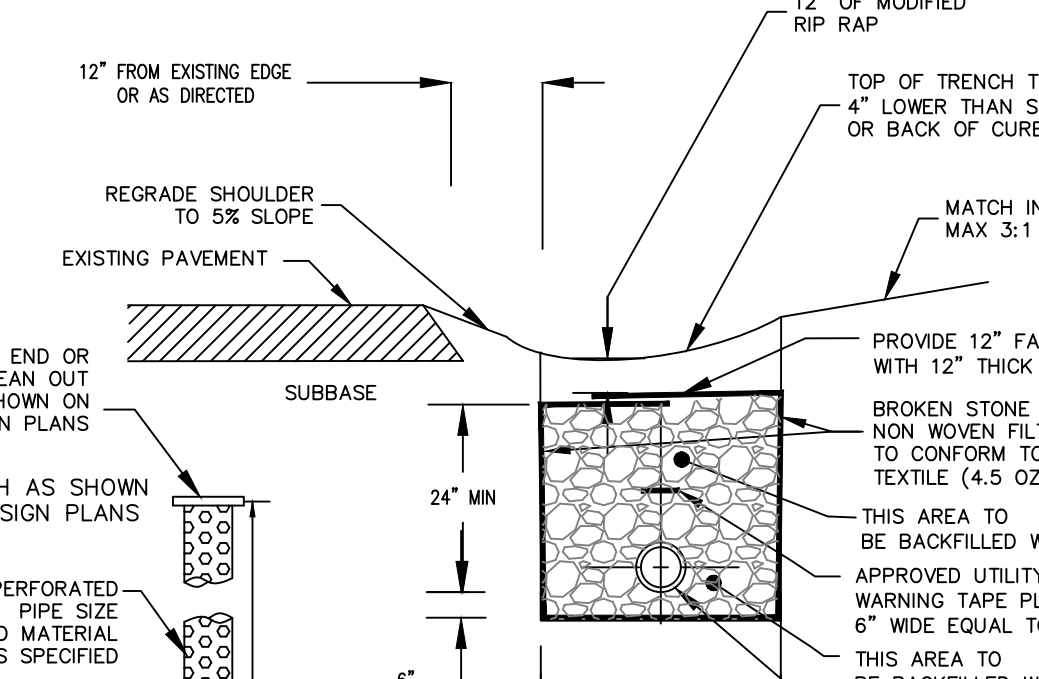
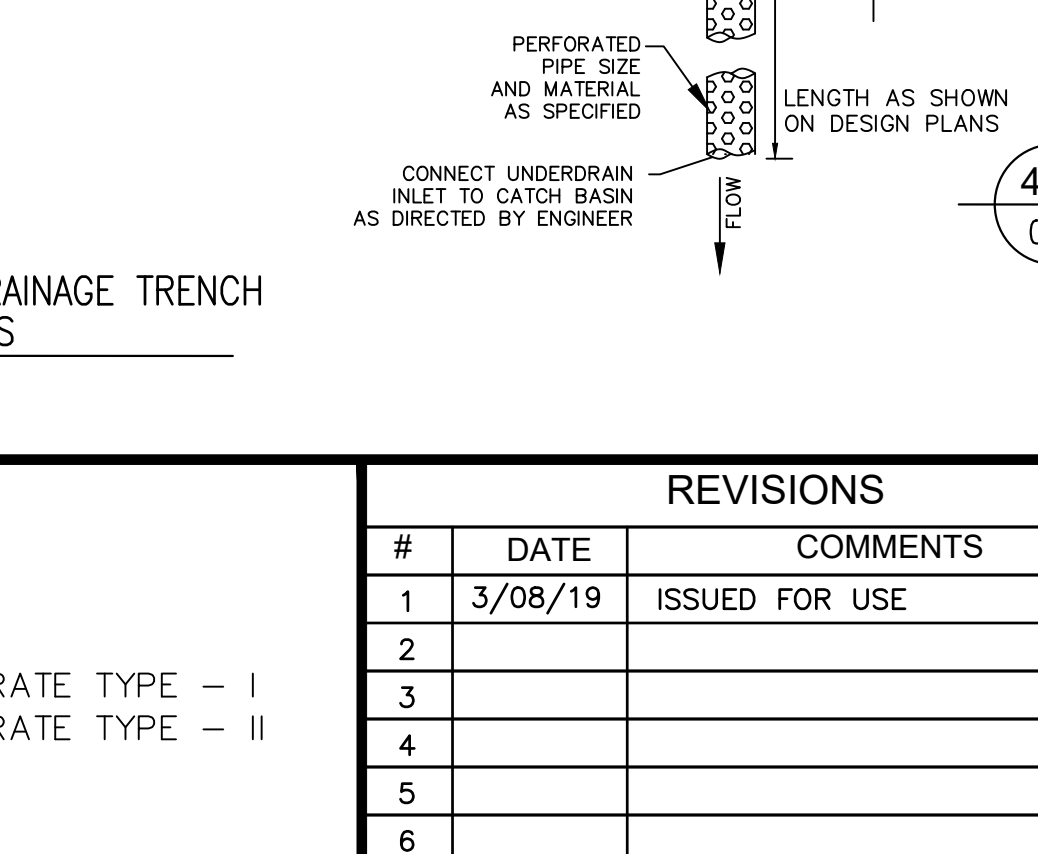
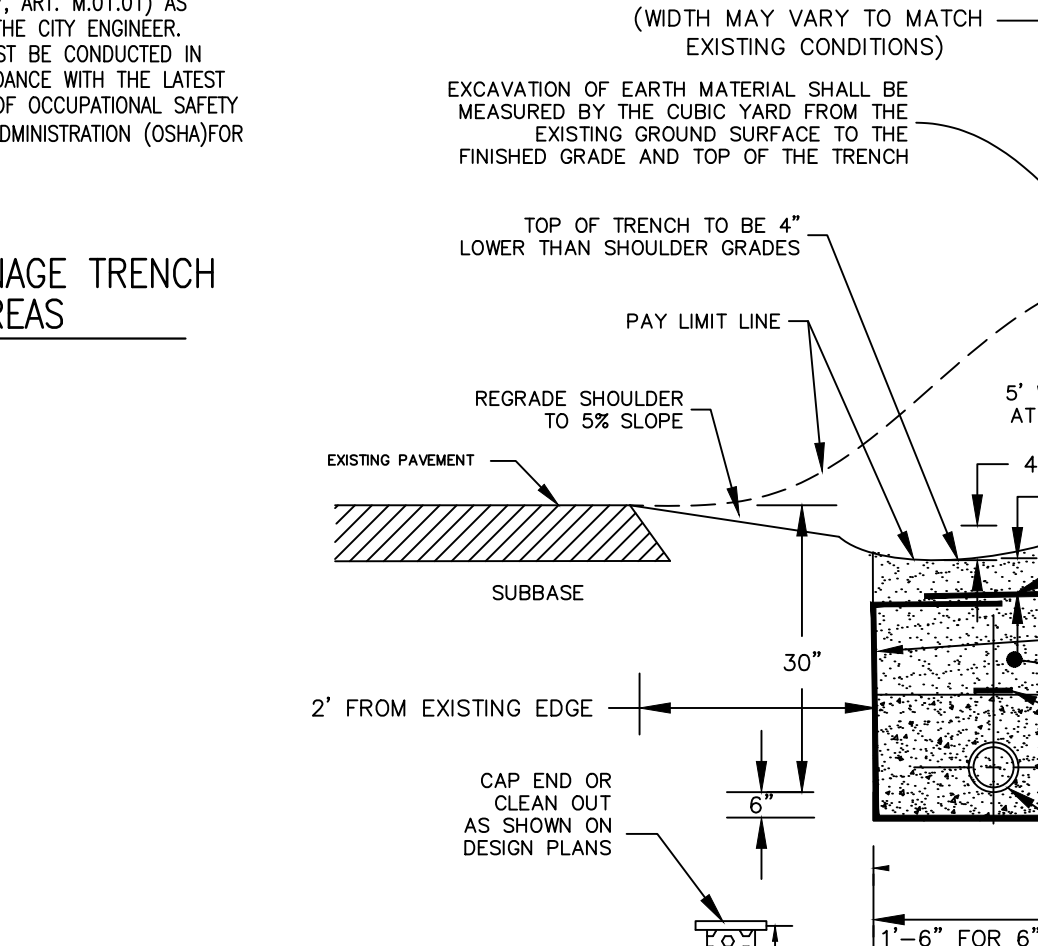
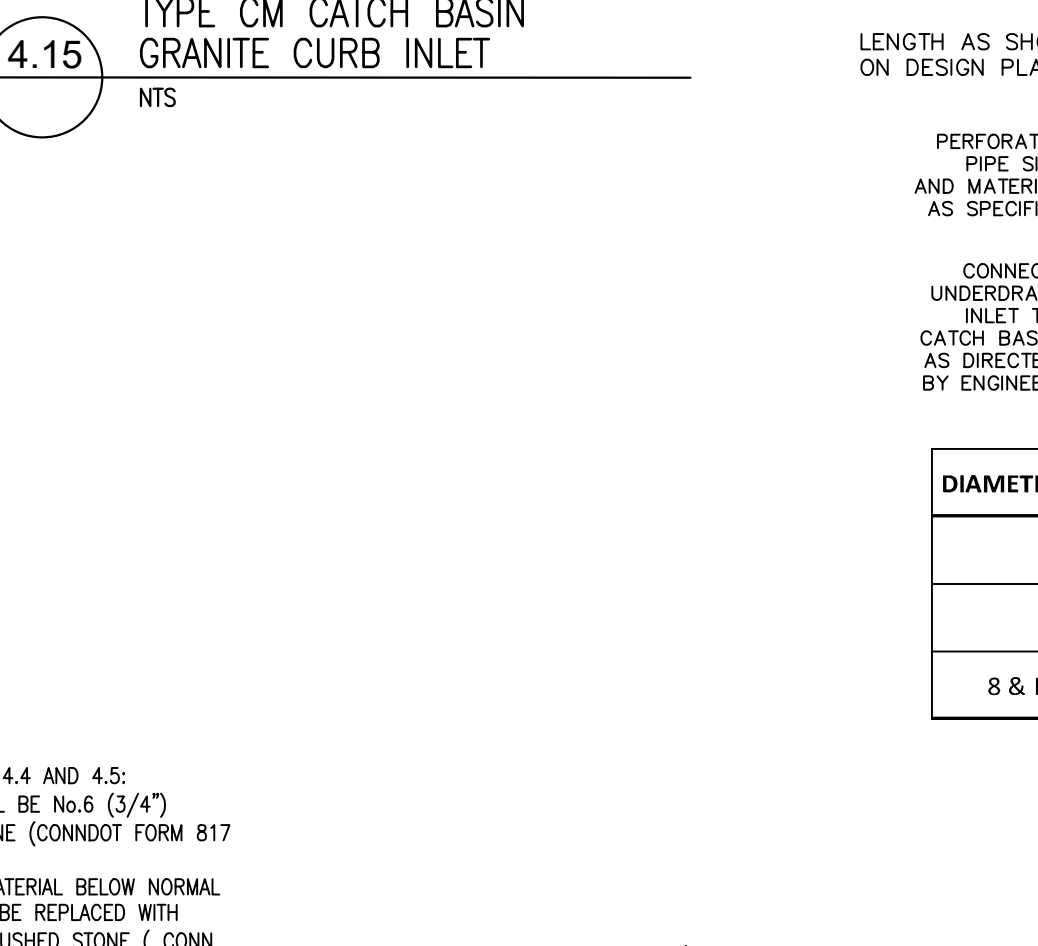
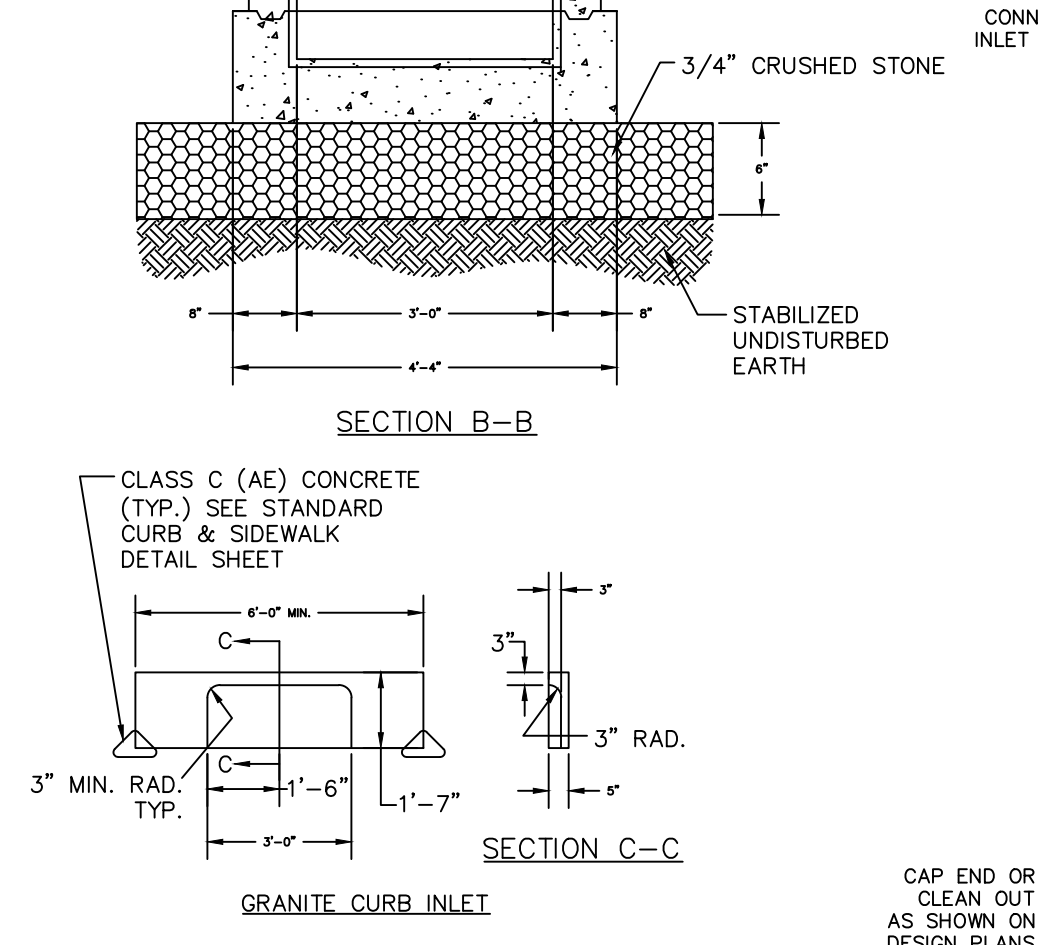
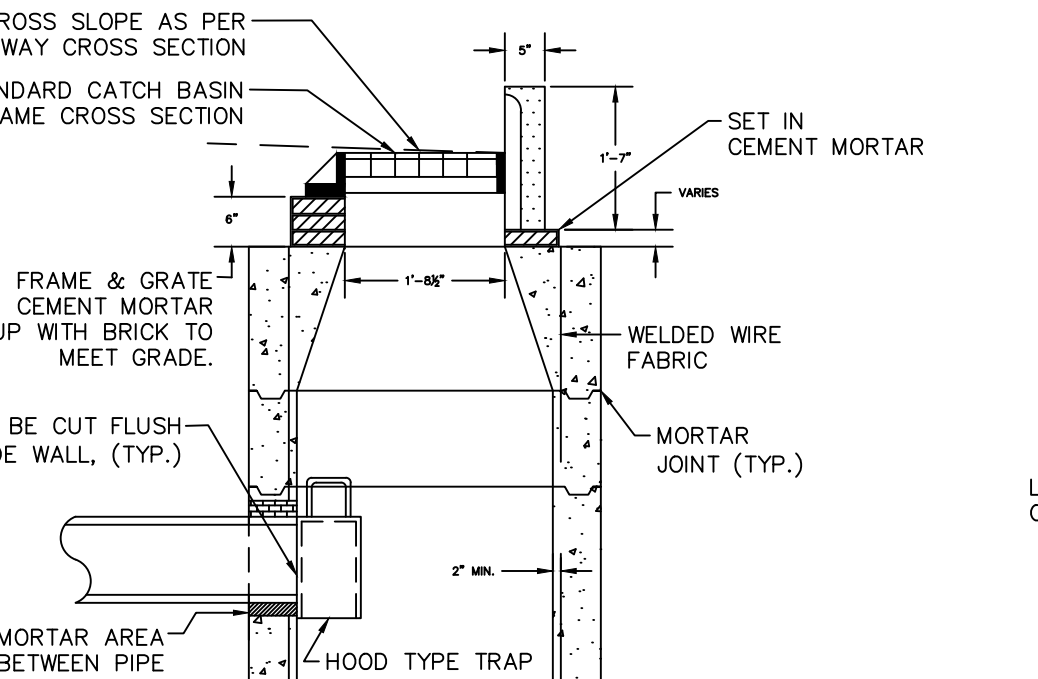
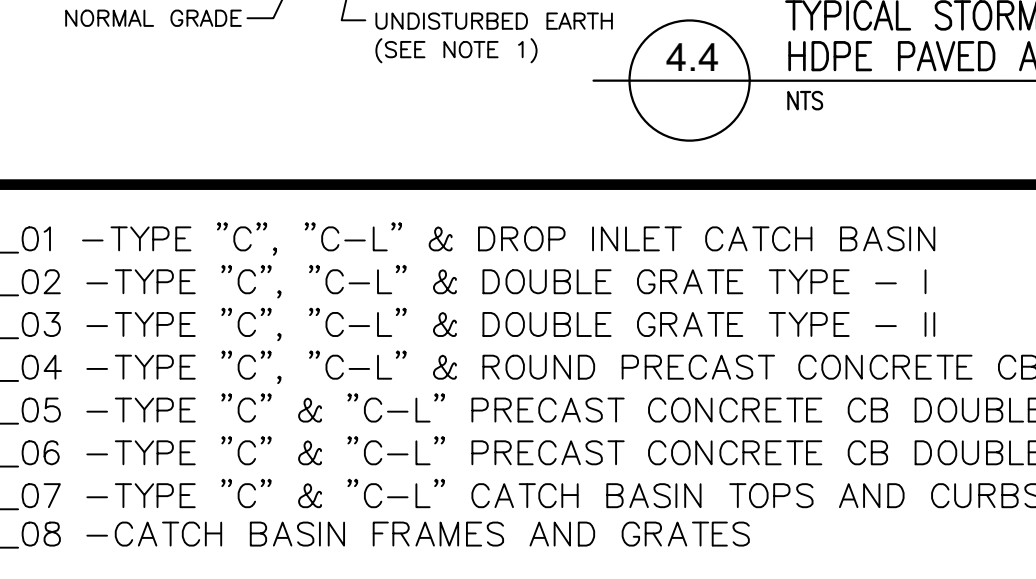
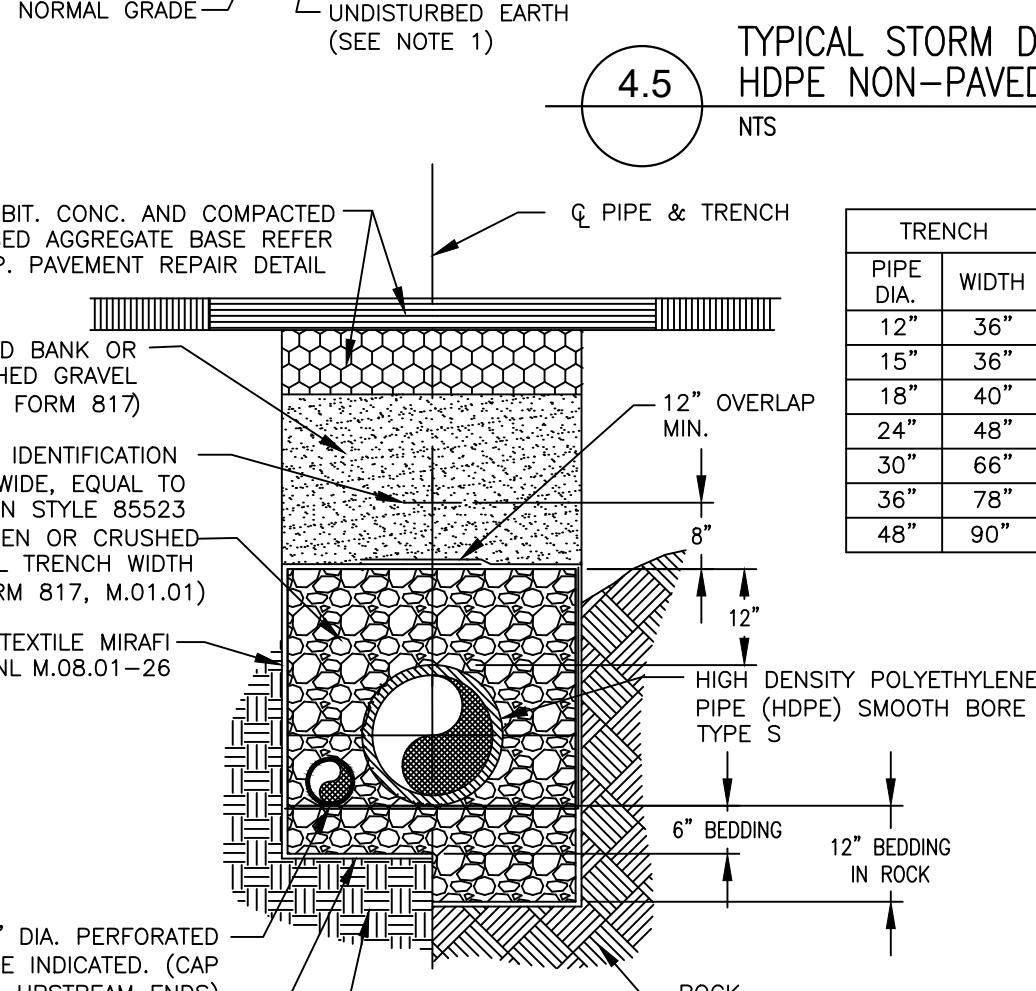
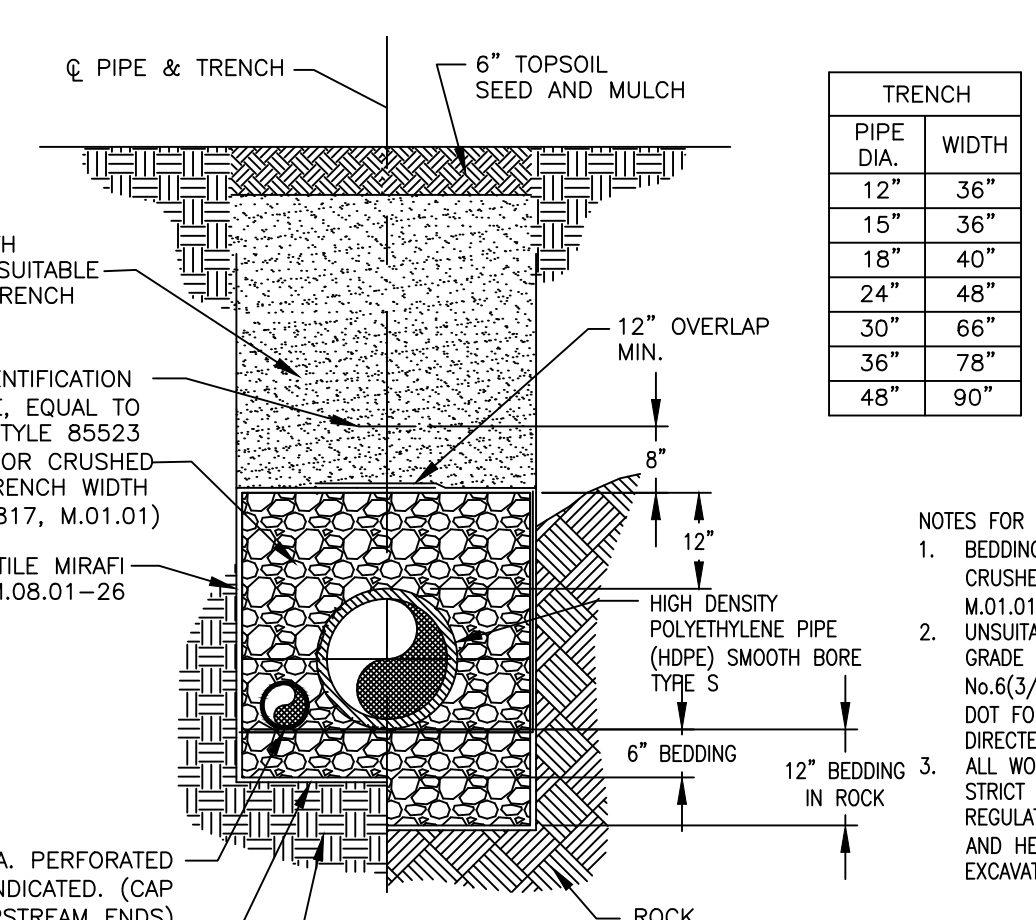
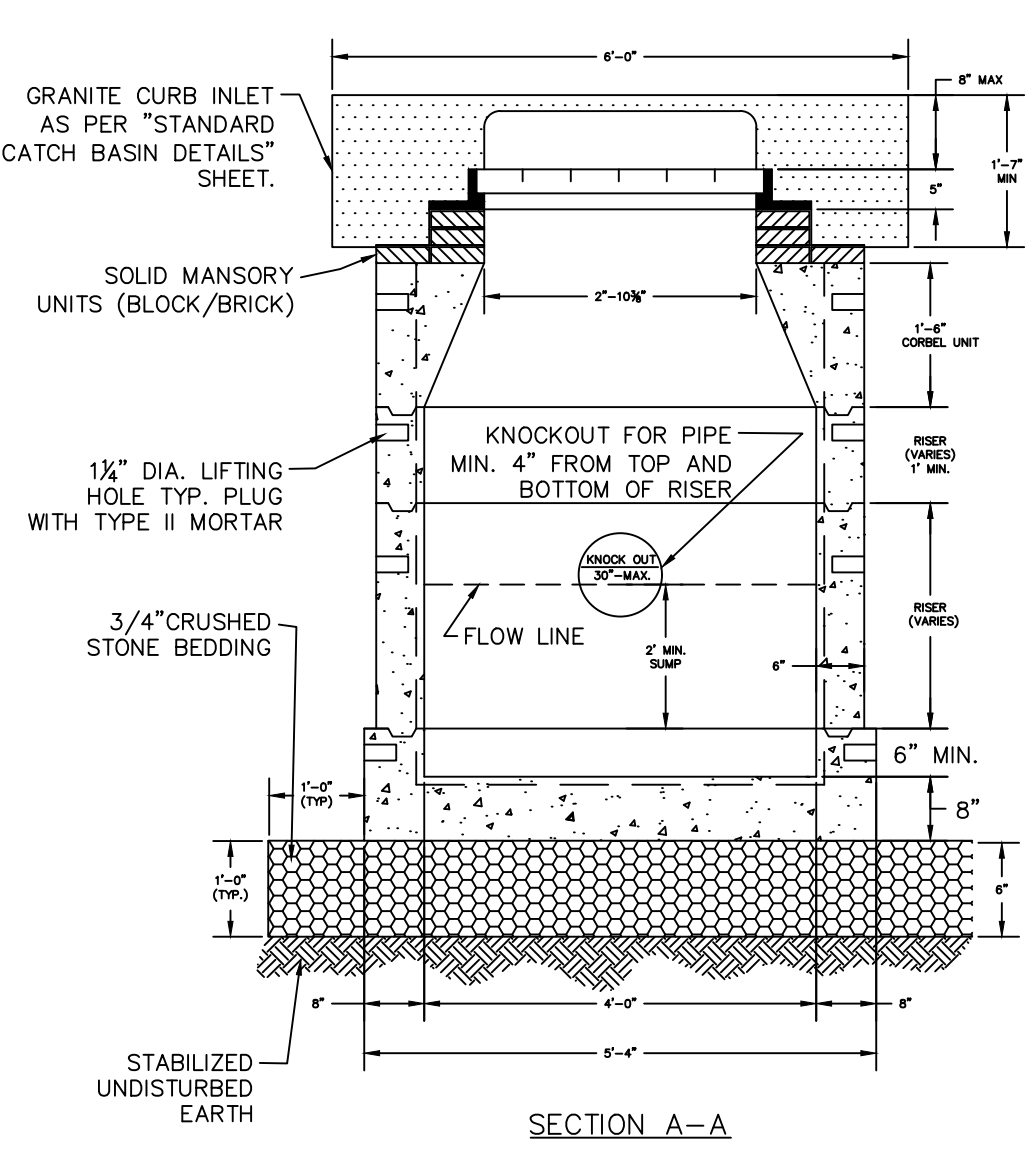
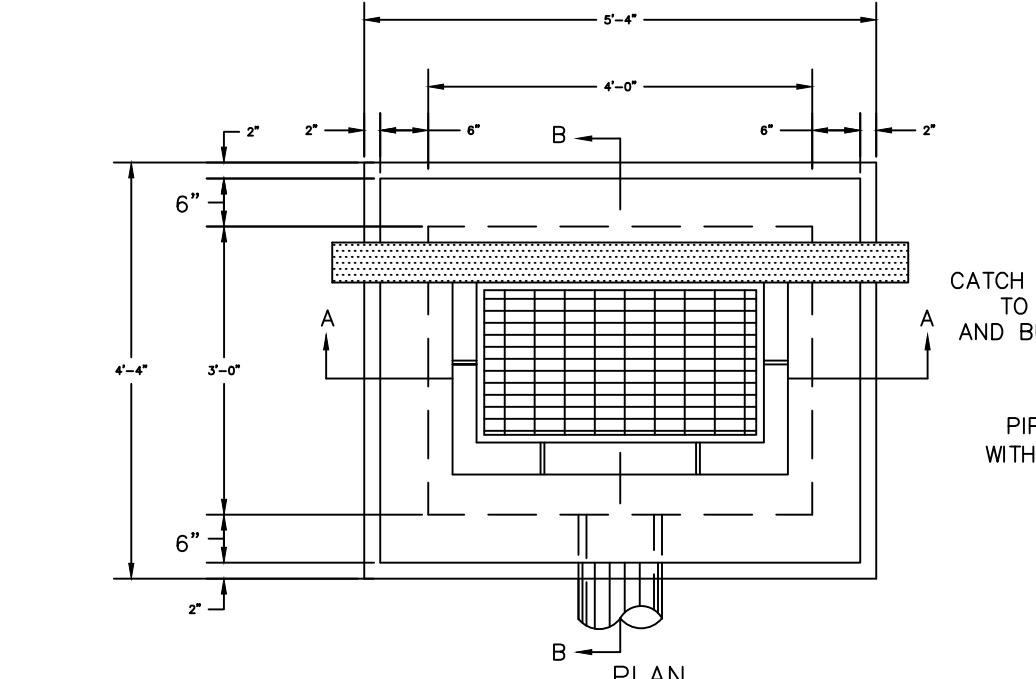
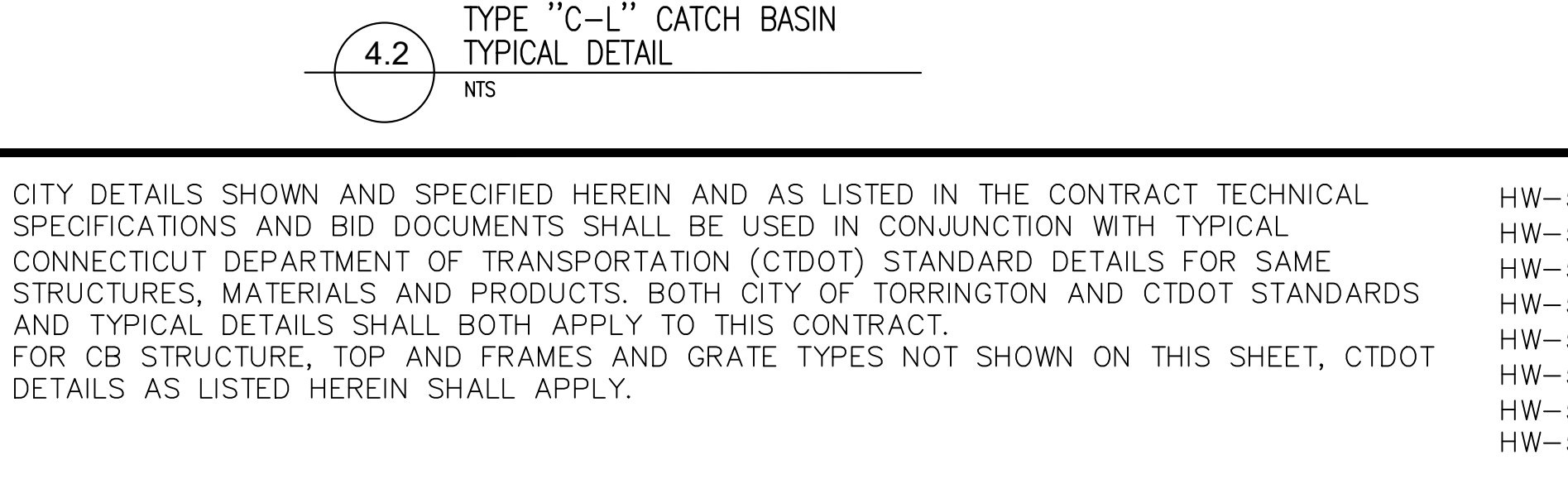
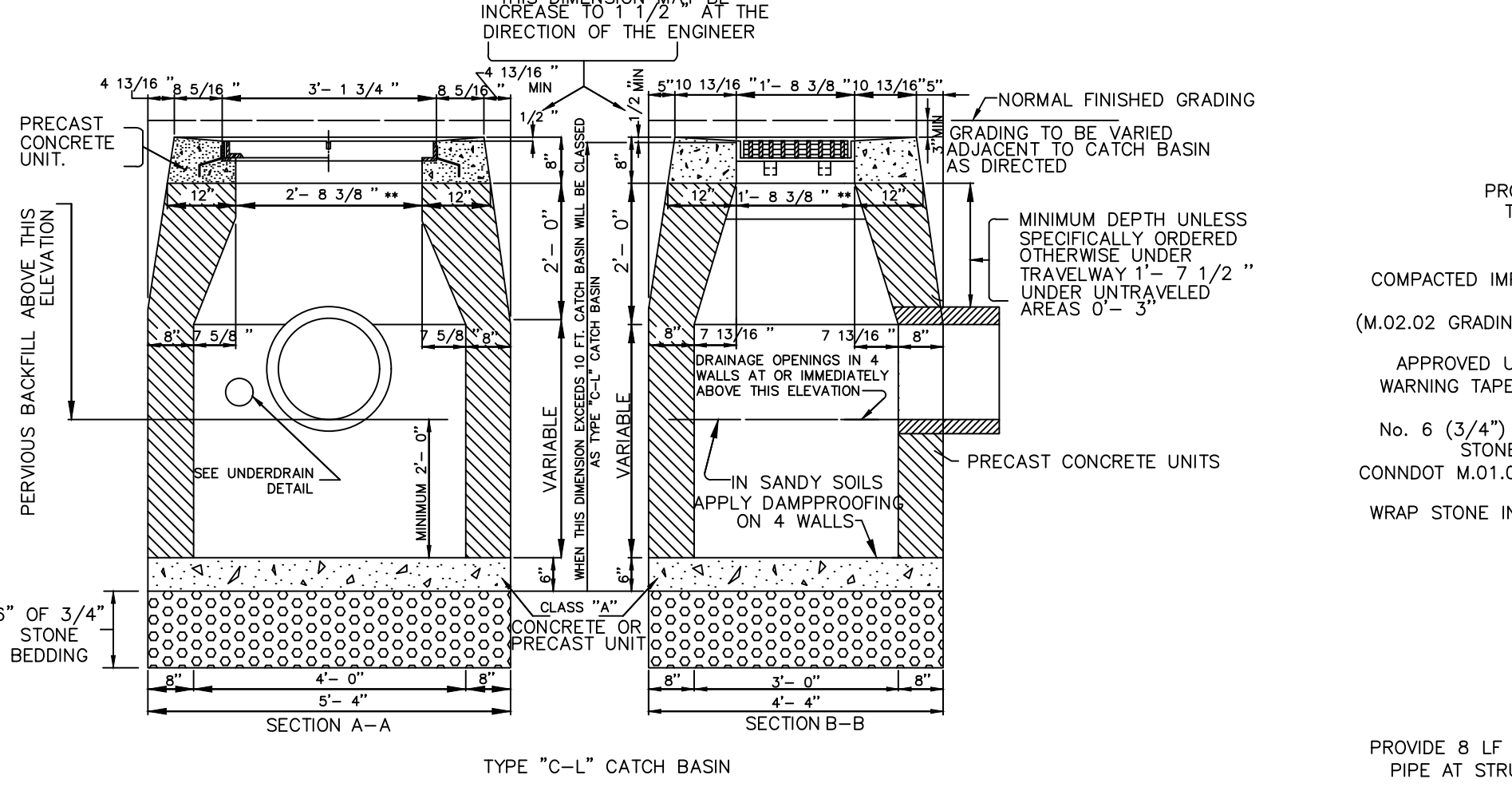
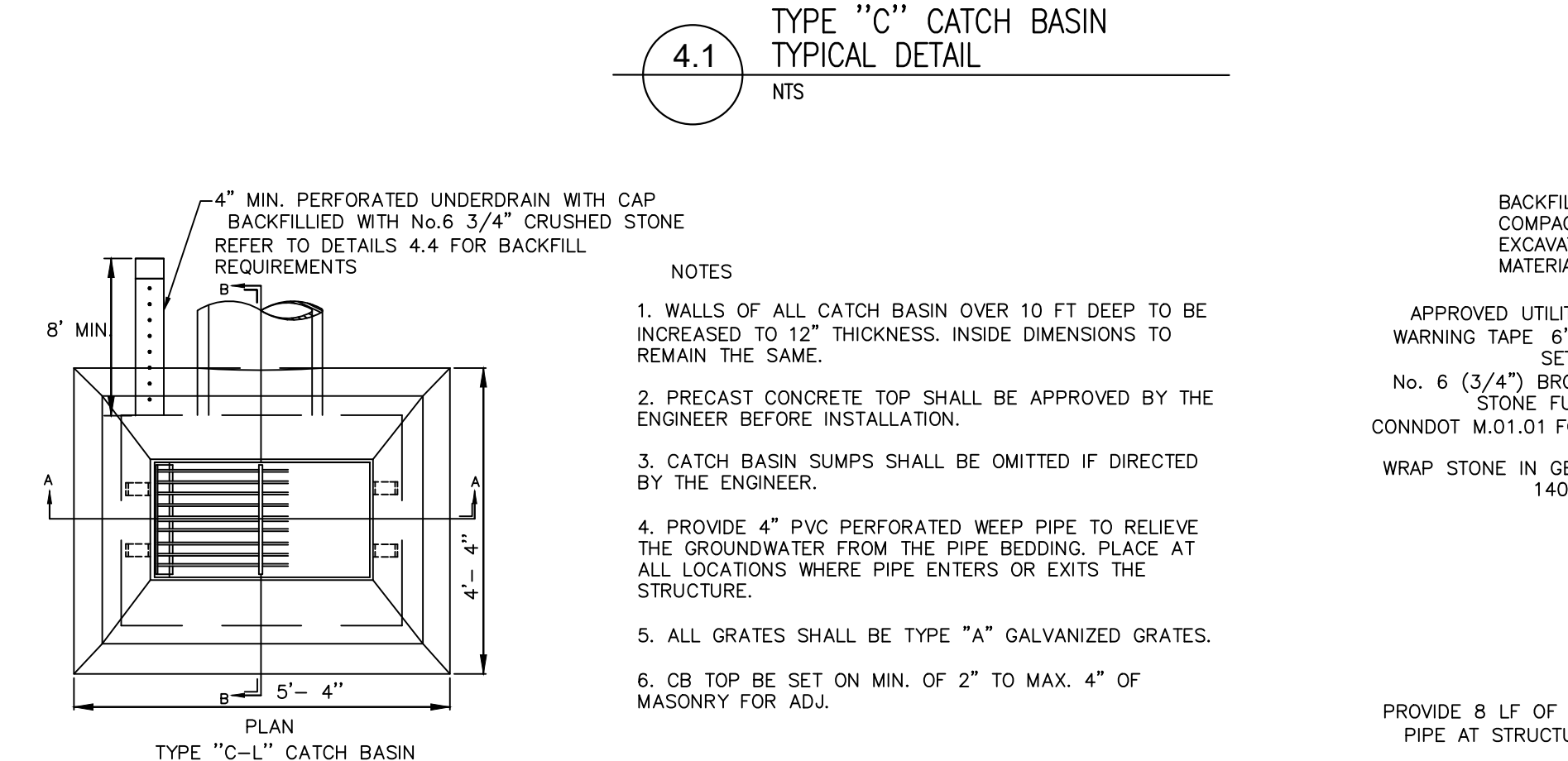
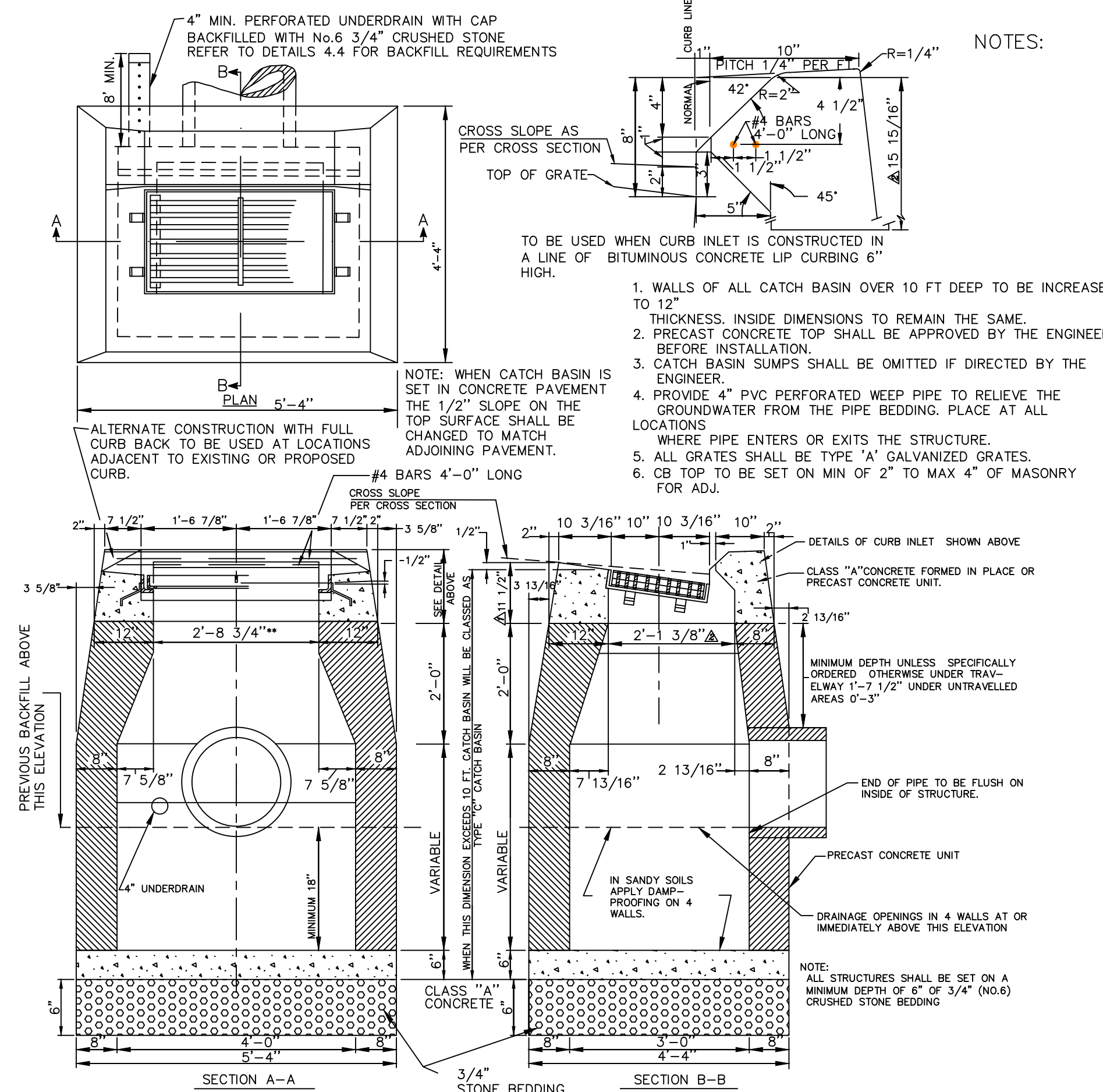
FEBRUARY, 2019
Horiz Scale: AS SHOWN
Vert Scale: AS SHOWN

Drawn by: PK
Checked by: PK

SHEET: SD-3

IMPORTANT NOTE:
UNDERGROUND UTILITIES ARE APPROXIMATE
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"CALL BEFORE YOU DIG" 1-800-922-4455

1 INCH



CITY DETAILS SHOWN AND SPECIFIED HEREIN AND AS LISTED IN THE CONTRACT TECHNICAL SPECIFICATIONS AND BID DOCUMENTS SHALL BE USED IN CONJUNCTION WITH TYPICAL CONNECTICUT DEPARTMENT OF TRANSPORTATION (CTDOT) STANDARD DETAILS FOR SAME STRUCTURES, MATERIALS AND PRODUCTS. BOTH CITY OF TORRINGTON AND CTDOT STANDARDS AND TYPICAL DETAILS SHALL BOTH APPLY TO THIS CONTRACT. FOR CB STRUCTURE, TOP AND FRAMES AND GRATE TYPES NOT SHOWN ON THIS SHEET, CTDOT DETAILS AS LISTED HEREIN SHALL APPLY.

HW-507_01 -TYPE "C", "C-L" & DROP INLET CATCH BASIN
 HW-507_02 -TYPE "C", "C-L" & DOUBLE GRATE TYPE - I
 HW-507_03 -TYPE "C", "C-L" & DOUBLE GRATE TYPE - II
 HW-507_04 -TYPE "C", "C-L" & ROUND PRECAST CONCRETE CB
 HW-507_05 -TYPE "C" & "C-L" PRECAST CONCRETE CB DOUBLE GRATE TYPE - I
 HW-507_06 -TYPE "C" & "C-L" PRECAST CONCRETE CB DOUBLE GRATE TYPE - II
 HW-507_07 -TYPE "C" & "C-L" CATCH BASIN TOPS AND CURBS
 HW-507_08 -CATCH BASIN FRAMES AND GRATES

| REVISIONS | | | |
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Plan Showing
STANDARD DETAILS
SECTION 4.0
DRAINAGE

City of Torrington Engineering Department

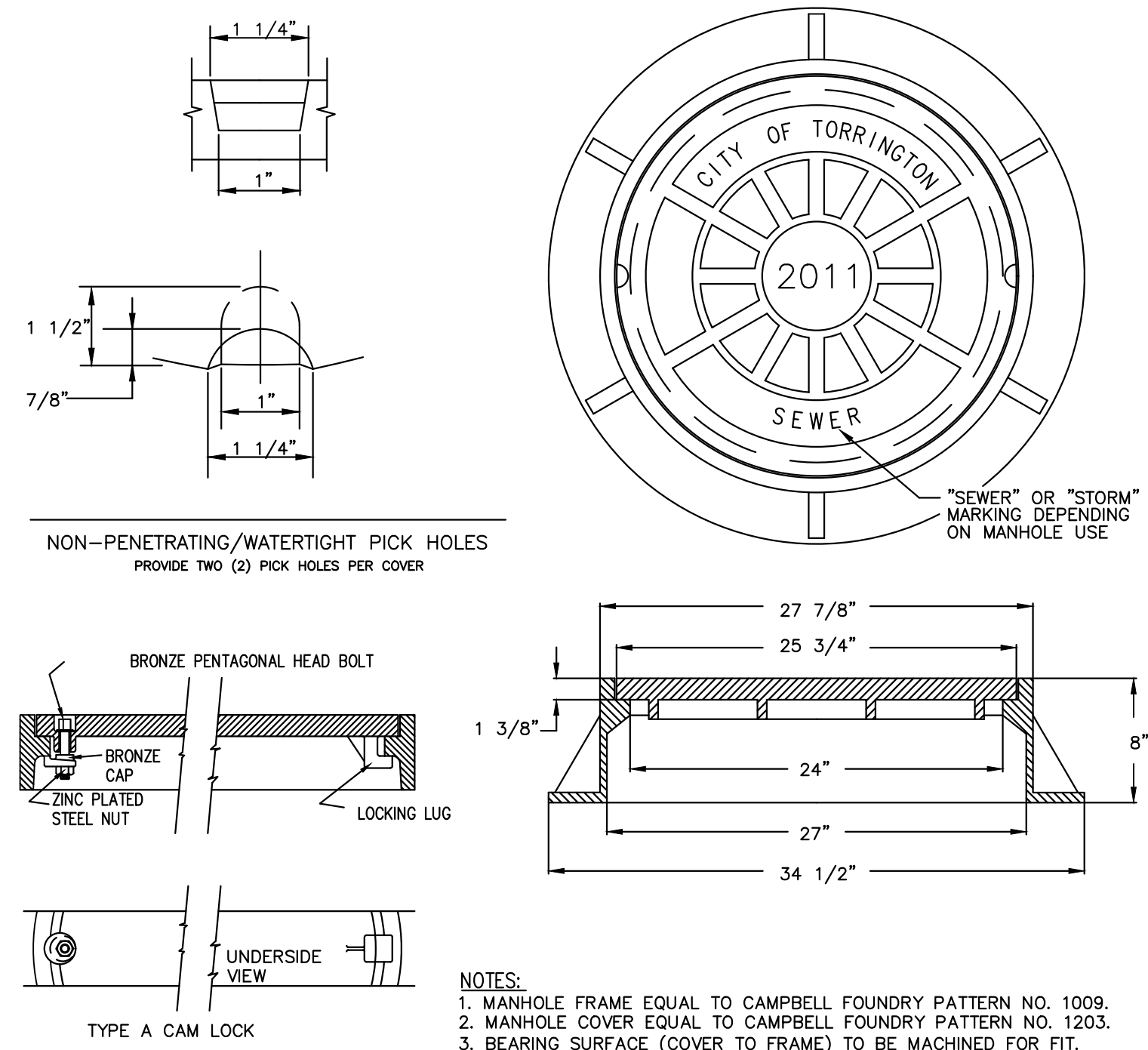
FEBRUARY, 2019
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 Vert Scale: AS SHOWN

IMPORTANT NOTES:
 UNDERGROUND UTILITIES ARE APPROXIMATE
 REFER TO ANY DIMENSION OF CONTRACTOR CONTACT
 "CALL BEFORE YOU DIG" 1-800-922-4455

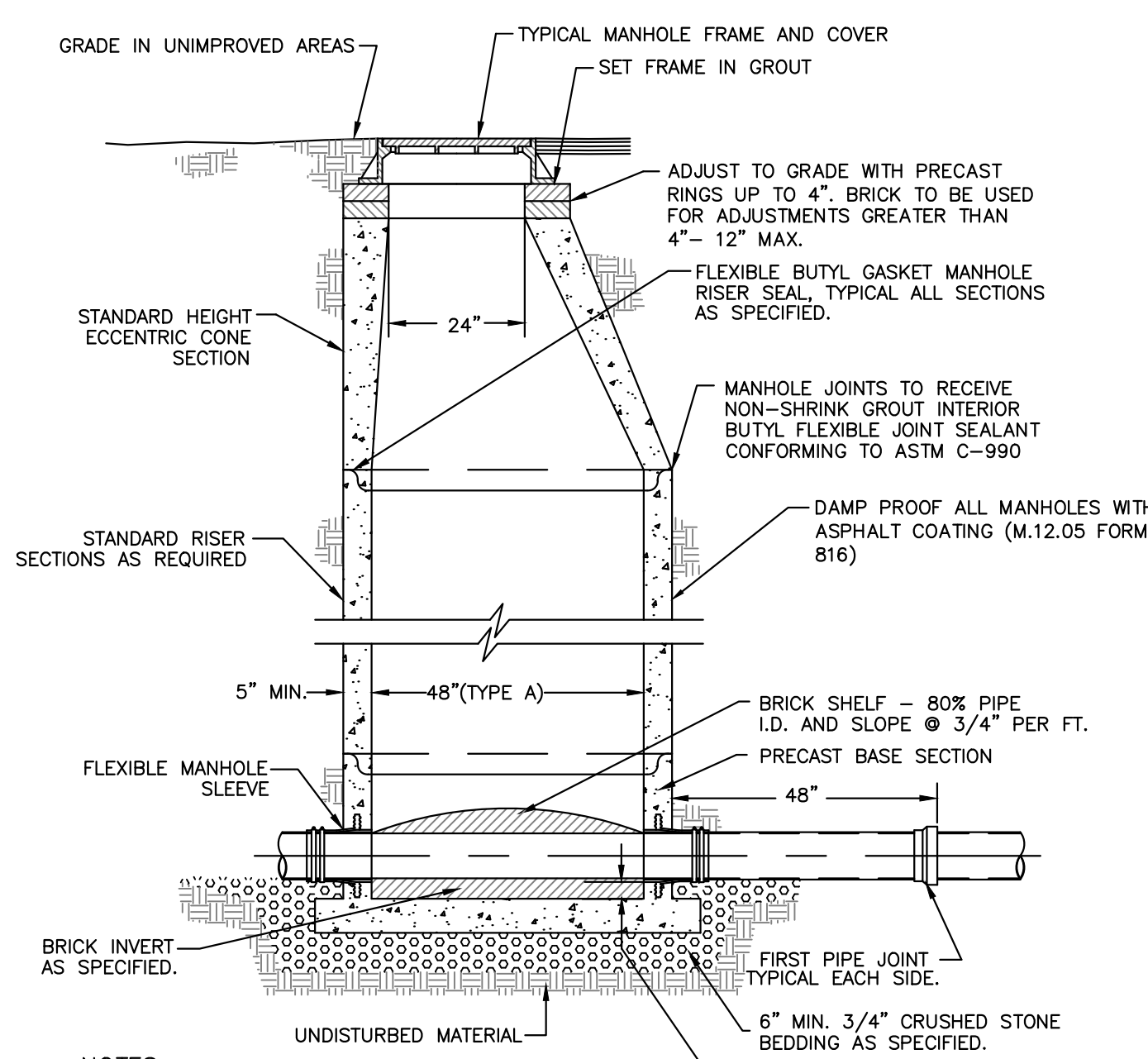
City of Torrington
 Drawn by: PK
 Checked by: PK

SHEET: SD-4

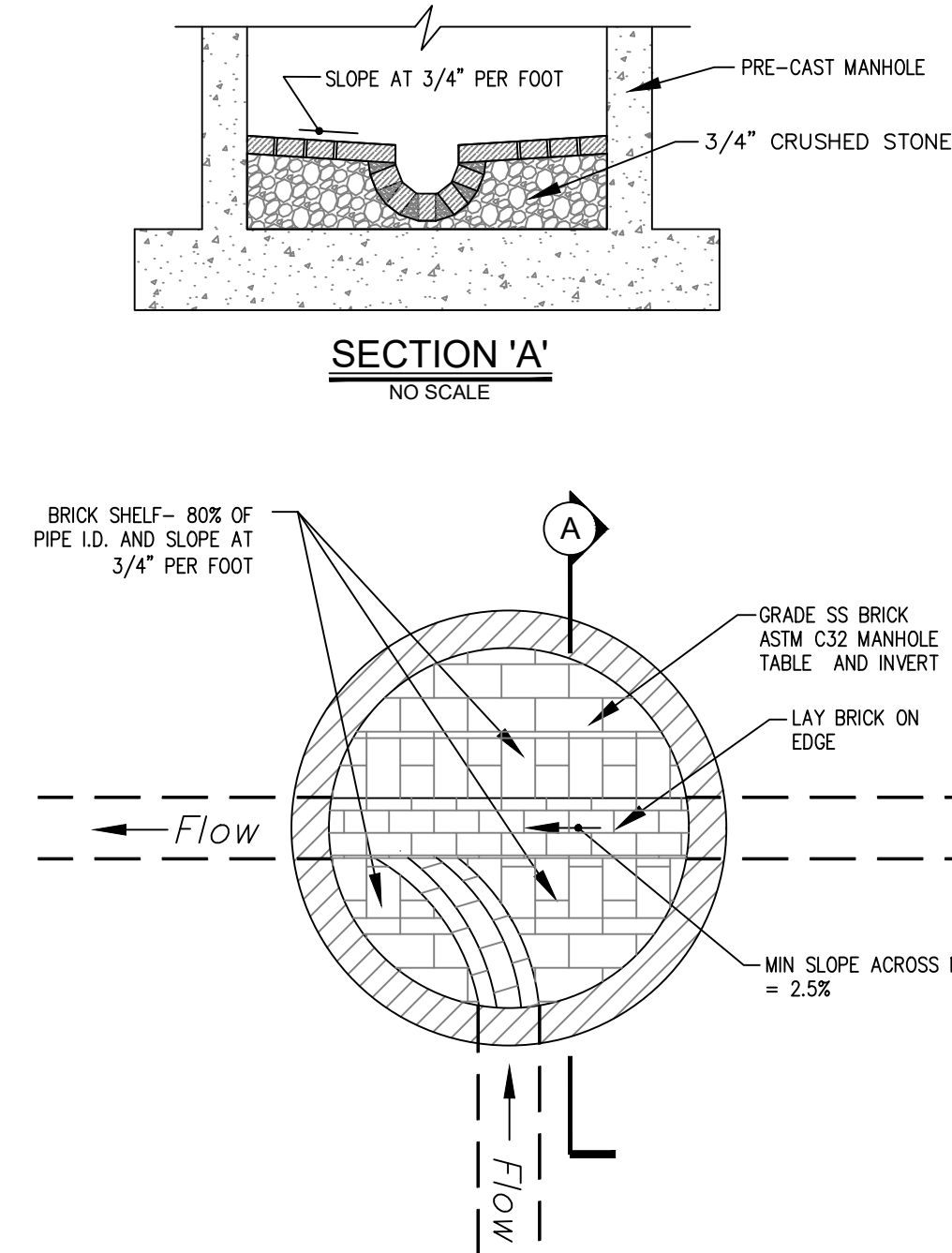
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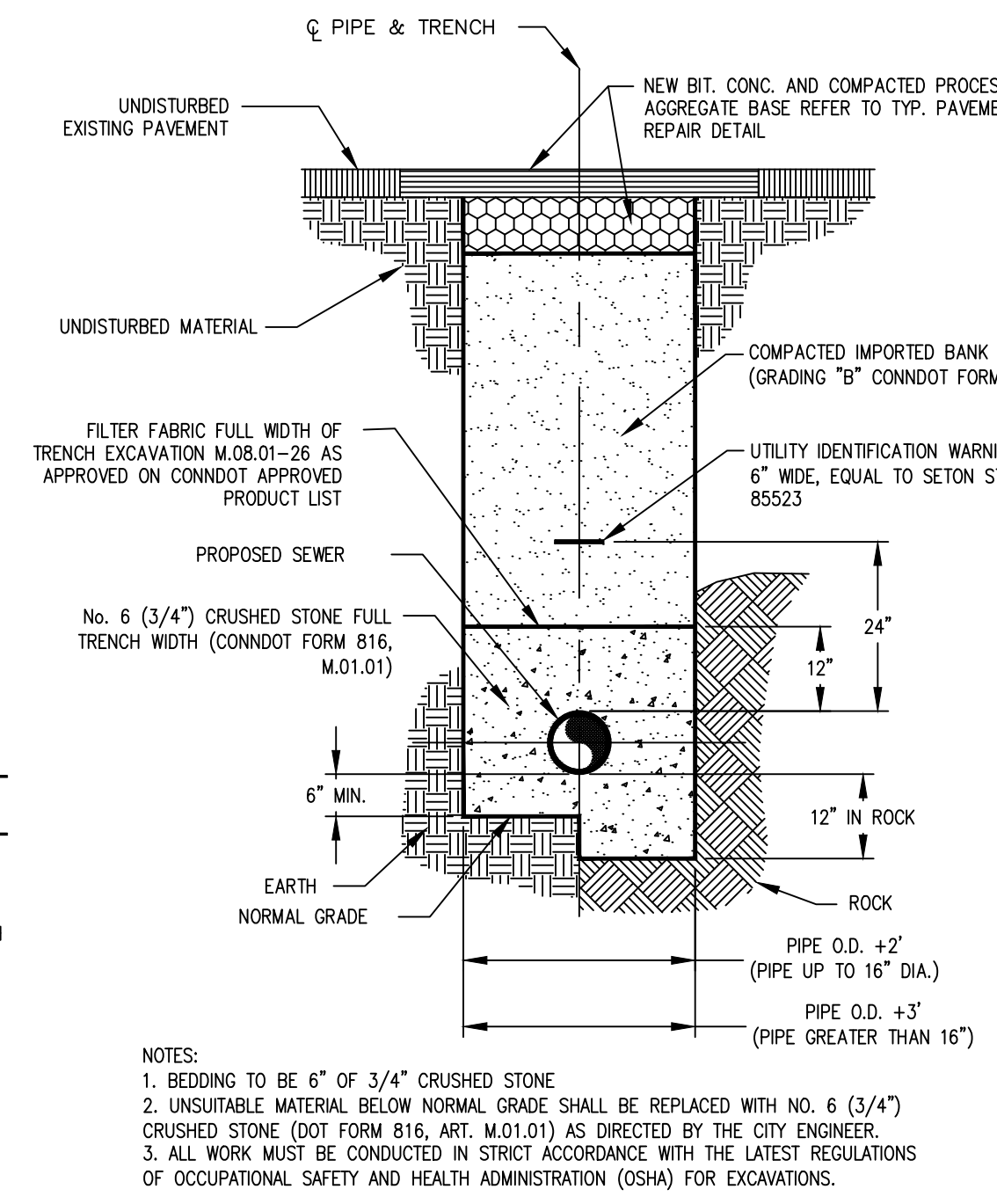
5.1 SANITARY AND STORM SEWER MANHOLE FRAME AND COVER DETAIL
NTS



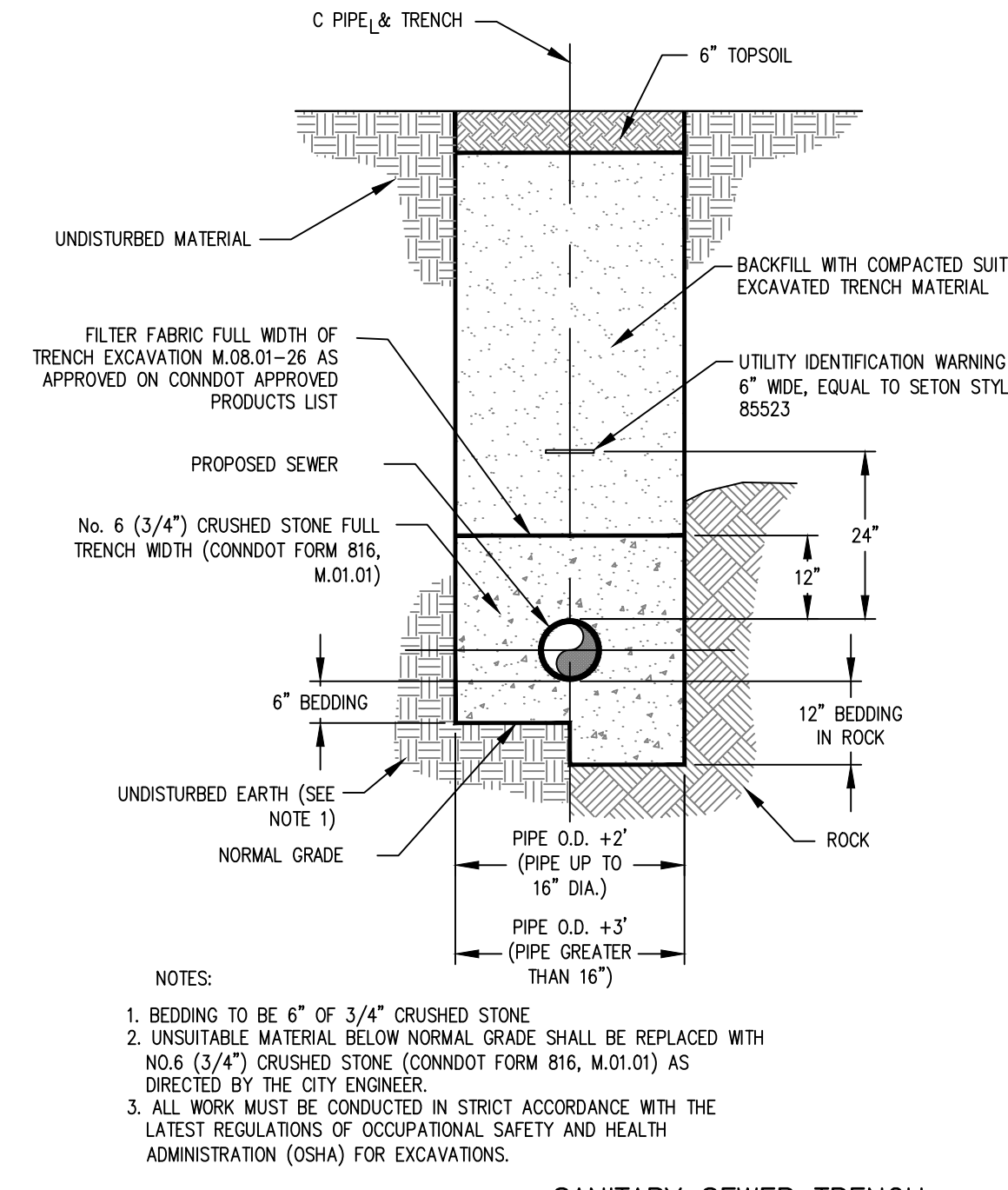
5.2 PRE-CAST CONCRETE MANHOLE DETAIL
NTS



5.5 TYPICAL CATCH BASIN AND MANHOLE PAVED INVERT
NTS



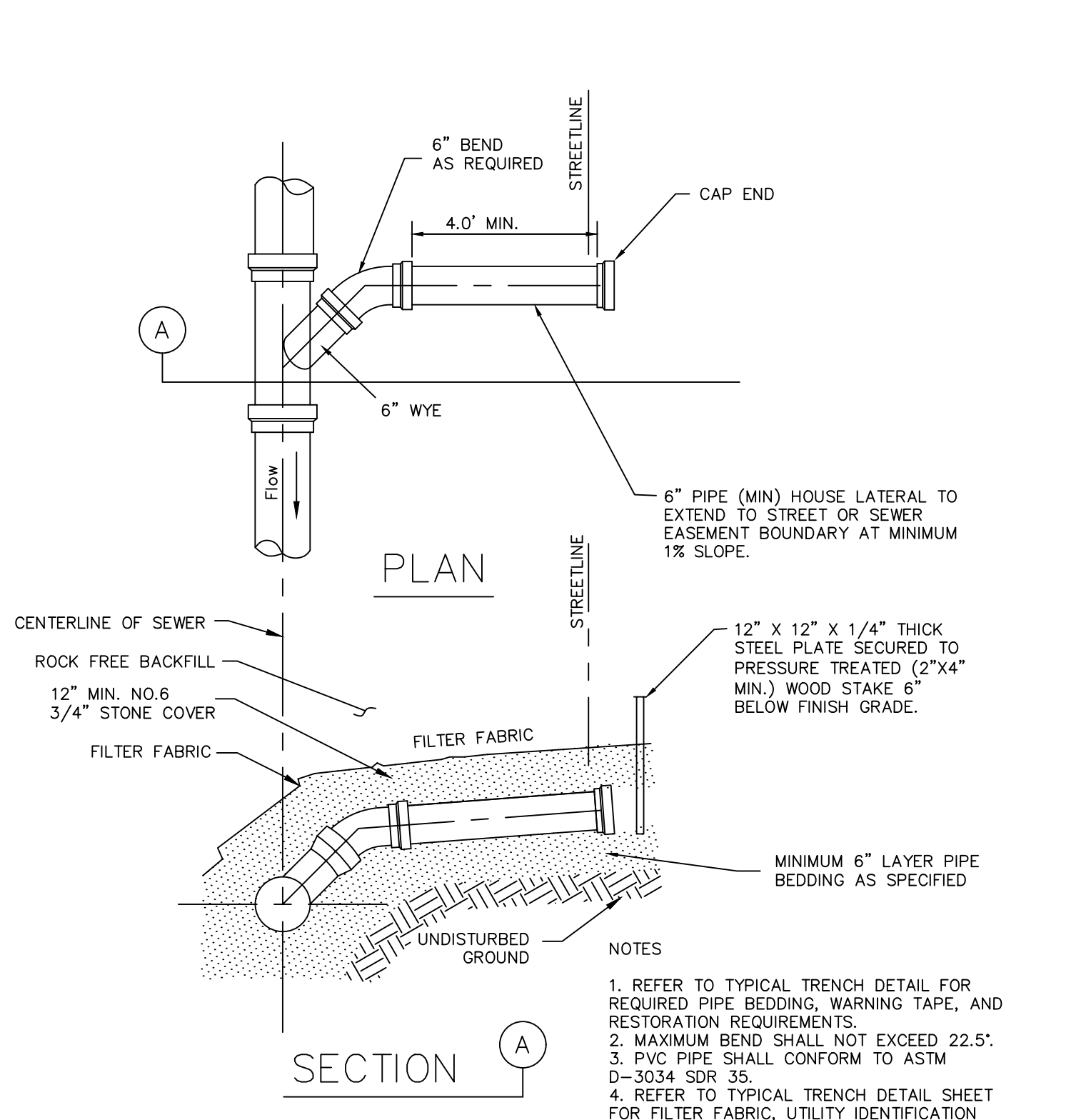
5.8 SANITARY SEWER TRENCH UNDER PAVEMENT
NTS



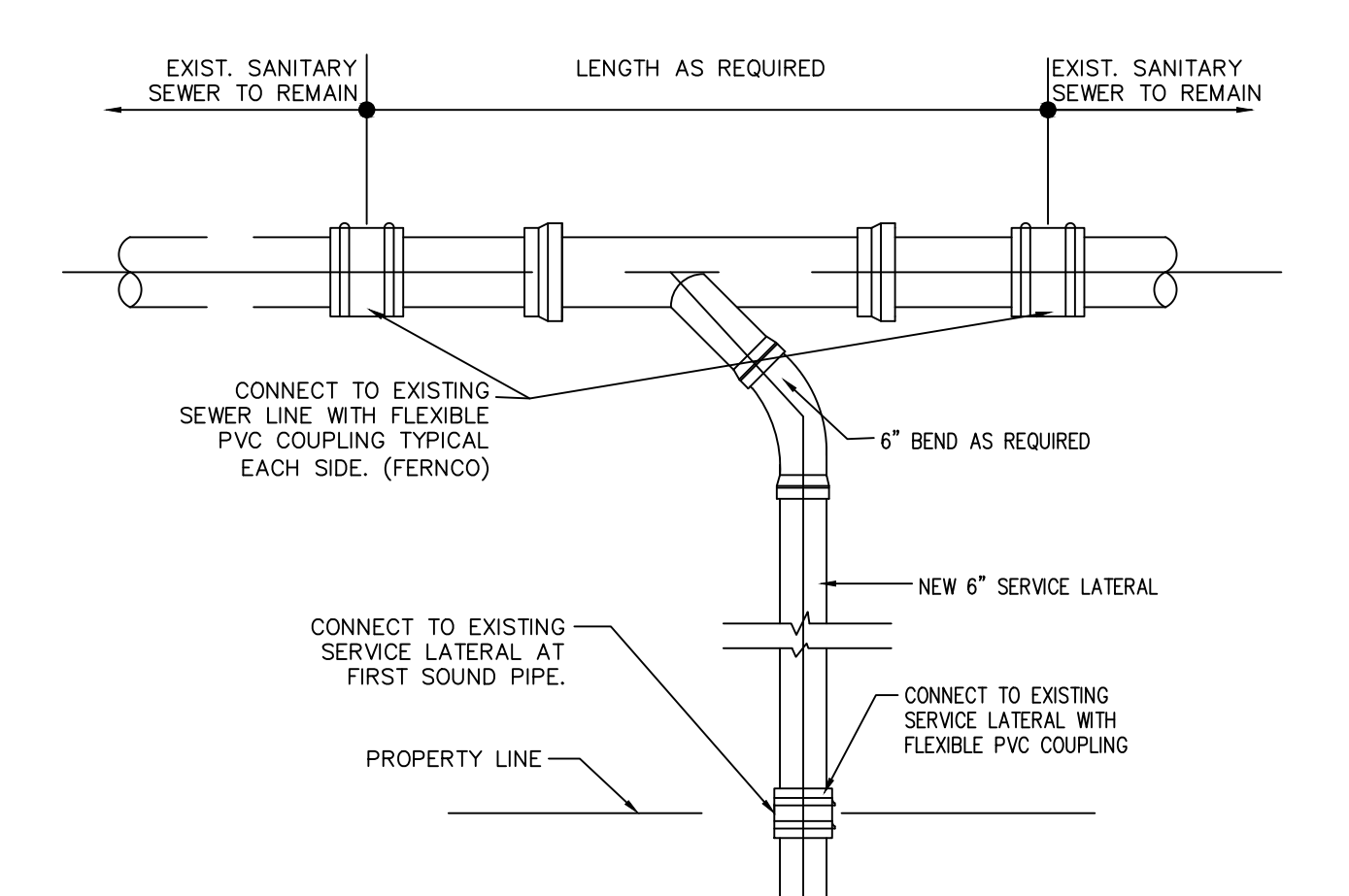
5.9 SANITARY SEWER TRENCH UNDER NON-PAVED AREAS
NTS

- NOTES:
1. MANHOLE FRAME EQUAL TO CAMPBELL FOUNDRY PATTERN NO. 1009.
 2. MANHOLE COVER EQUAL TO CAMPBELL FOUNDRY PATTERN NO. 1203.
 3. BEARING SURFACE (COVER TO FRAME) TO BE MACHINED FOR FIT.
 4. MATERIAL TO BE GRAY CAST IRON, ASTM A48-83, CLASS 30B.
 5. CASTINGS TO MEET AASHTO HS-20-44 (M818) HIGHWAY LOADINGS.
 6. ALL TEXT SHOWN ON COVER TO BE 1 1/2\"/>

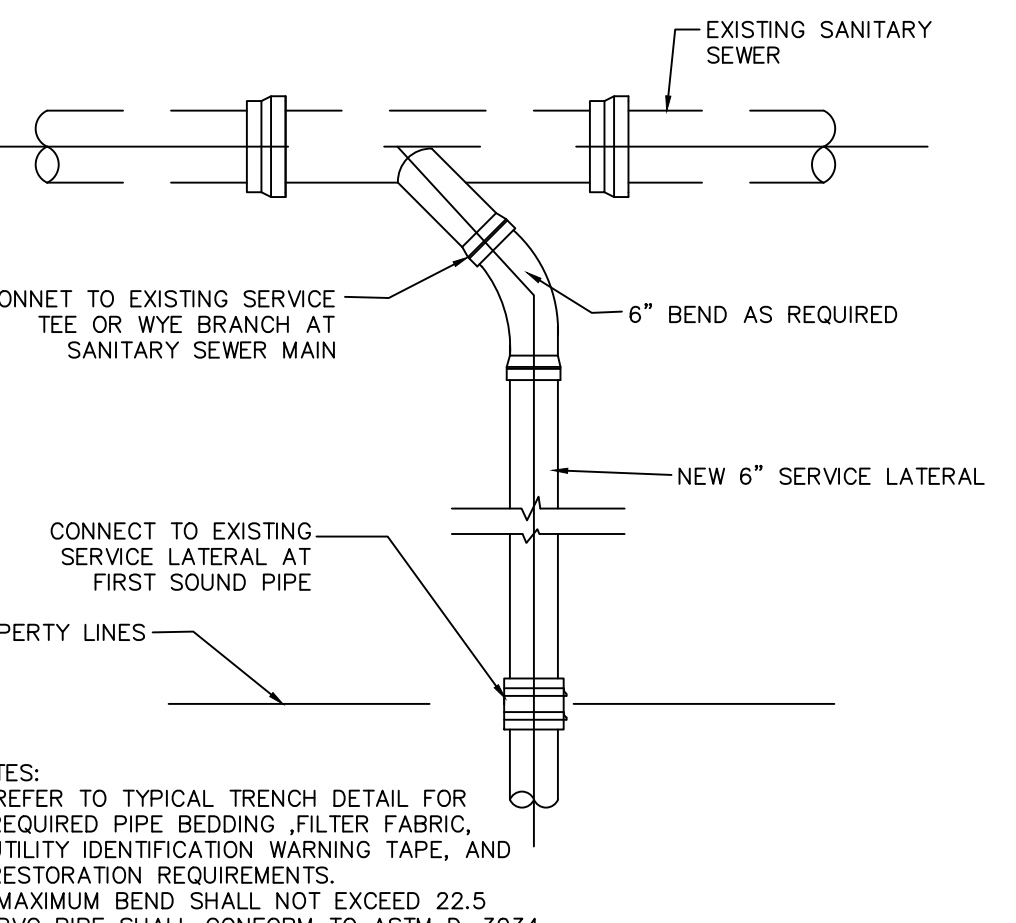
- NOTES:
1. REINFORCED CONCRETE MANHOLE SECTIONS CONFORMING TO ASTM C-478.
 2. RUBBER LIFT HOLE PLUGS TO BE INSERTED FROM THE OUTSIDE AND HOLE FILLED WITH NON-SHRINK INSIDE AND OUTSIDE.
 3. TYPE "A" MANHOLE SHALL BE 48" IN DIAMETER.
 4. TYPE "B" MANHOLE SHALL BE SAME AS "A" EXCEPT IT SHALL BE 60" IN DIAMETER.
 5. TYPE "C" MANHOLE SHALL BE SAME AS "A" EXCEPT IT SHALL BE 72" IN DIAMETER.
 6. TYPE "D" MANHOLE SHALL BE SAME AS "A" EXCEPT IT SHALL BE 84" IN DIAMETER.
 7. TYPE "E" MANHOLE SHALL BE SAME AS "A" EXCEPT IT SHALL BE 96" IN DIAMETER.
 8. ALL MANHOLE BASES SHALL BE REDUCED TO 48" DIAMETER STD RISER SECTIONS UNLESS INDICATED OTHERWISE ON THE CONTRACT DRAWINGS.
 9. THERE WILL BE NO STEPS IN ANY MANHOLE.
 10. VACUUM TEST REQUIRED.
 11. RISER SHALL CONTAIN NO INTERIOR STEPS OR HOLES FOR STEPS.



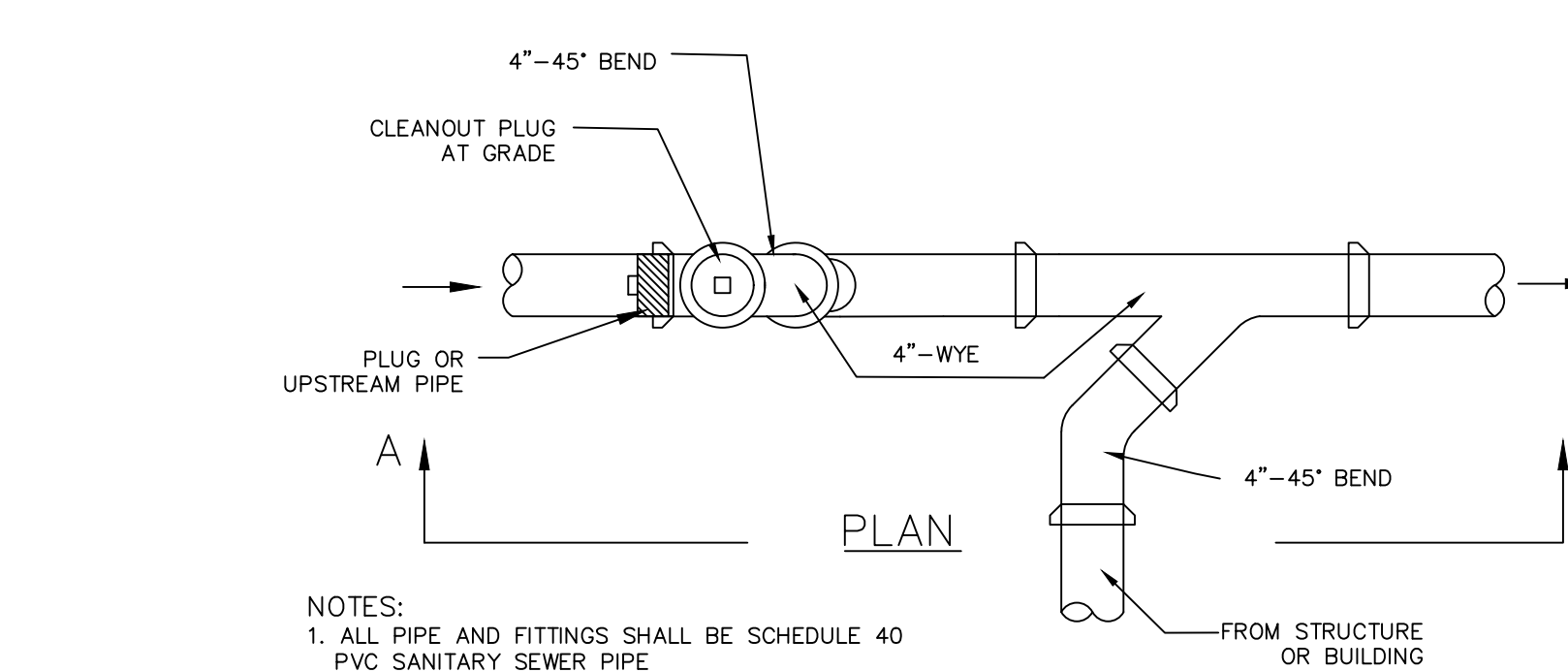
5.10 SANITARY SEWER LATERAL INSTALLATION WITH NEW MAIN
NTS



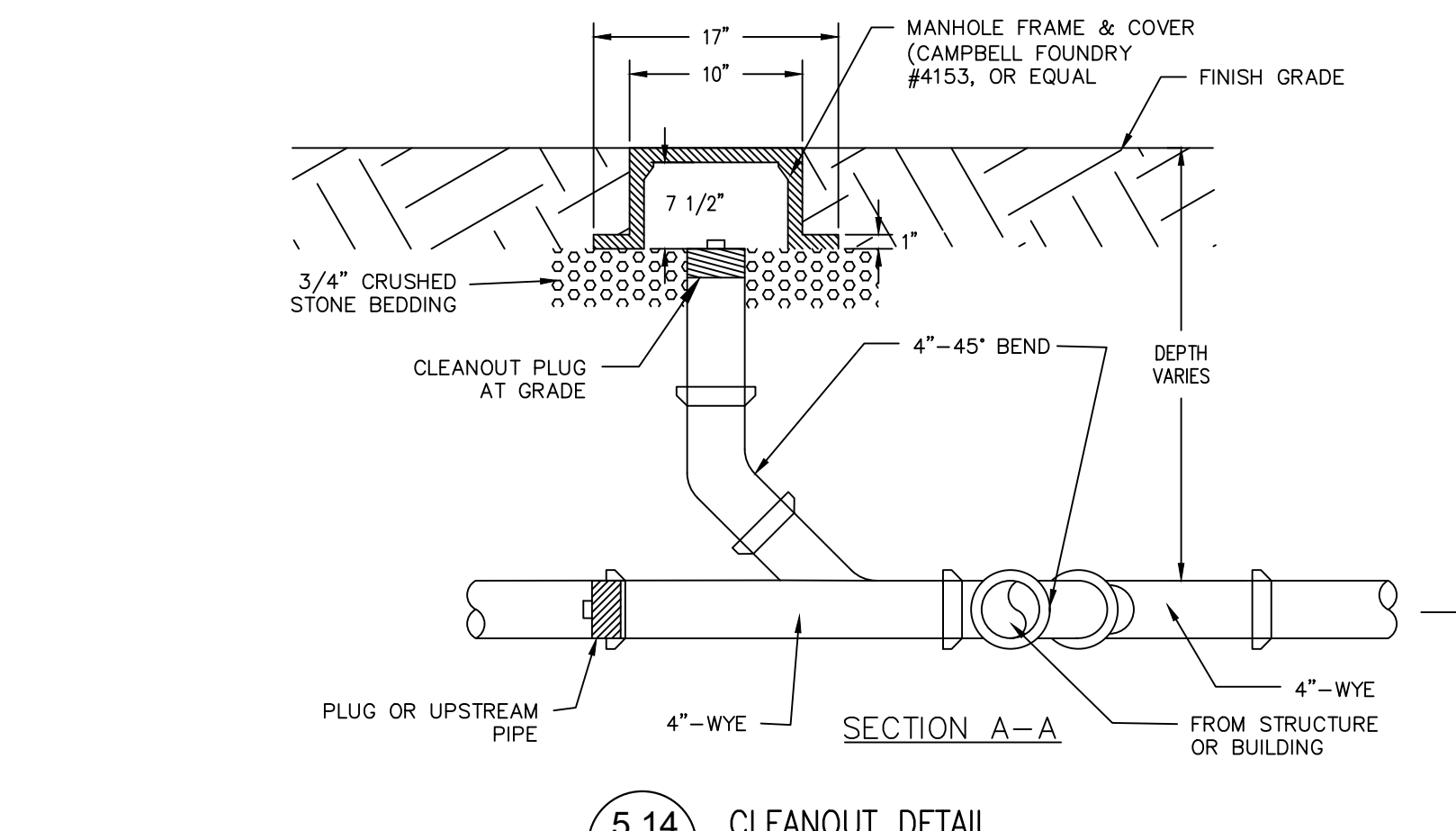
5.11 SANITARY SEWER LATERAL REPLACEMENT WITH NEW MAIN
NTS



5.12 SANITARY SEWER LATERAL REPLACEMENT TO EXISTING WYE
NTS



5.14 CLEANOUT DETAIL
NTS



- NOTES:
1. REFER TO TYPICAL TRENCH DETAIL FOR REQUIRED PIPE BEDDING, WARNING TAPE, AND RESTORATION REQUIREMENTS.
 2. MAXIMUM BEND SHALL NOT EXCEED 22.5°.
 3. PVC PIPE SHALL CONFORM TO ASTM D-3034 SDR 35.
 4. REFER TO TYPICAL TRENCH DETAIL SHEET FOR FILTER FABRIC, UTILITY IDENTIFICATION

- NOTES:
1. REFER TO TYPICAL TRENCH DETAIL FOR REQUIRED PIPE BEDDING, IDENTIFICATION WARNING TAPE, AND RESTORATION REQUIREMENTS.
 2. MAXIMUM BEND SHALL NOT EXCEED 22.5°.
 3. PVC PIPE SHALL CONFORM TO ASTM D-3034 SDR 35.
 4. FILTER FABRIC, UTILITY

- NOTES:
1. REFER TO TYPICAL TRENCH DETAIL FOR REQUIRED PIPE BEDDING, FILTER FABRIC, UTILITY IDENTIFICATION WARNING TAPE, AND RESTORATION REQUIREMENTS.
 2. MAXIMUM BEND SHALL NOT EXCEED 22.5°.
 3. PVC PIPE SHALL CONFORM TO ASTM D-3034 SDR 35.

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Plan Showing
STANDARD DETAILS
SECTION 5.0
SANITARY SEWER

City of Torrington Engineering Department

FEBRUARY, 2019
Horiz Scale: AS SHOWN
Vert Scale: AS SHOWN

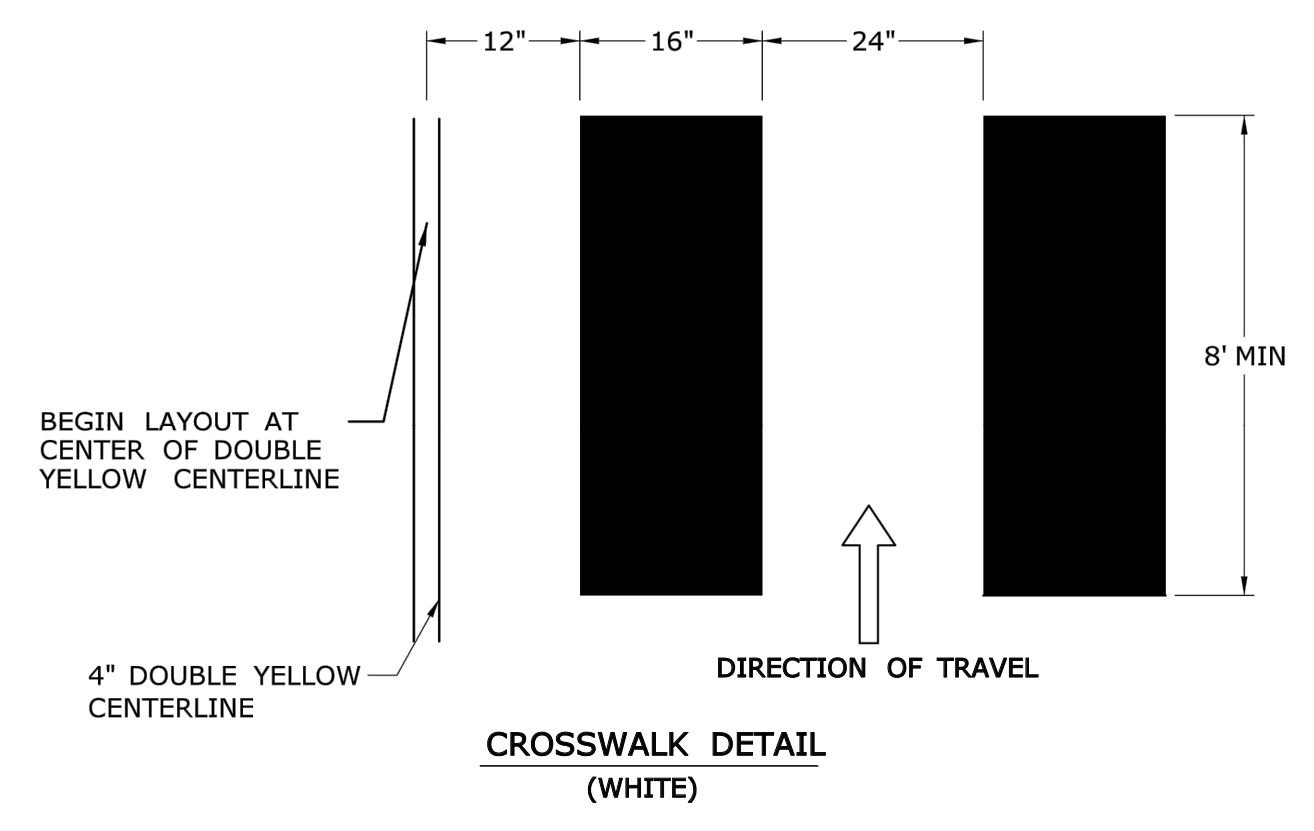


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SHEET: SD-5

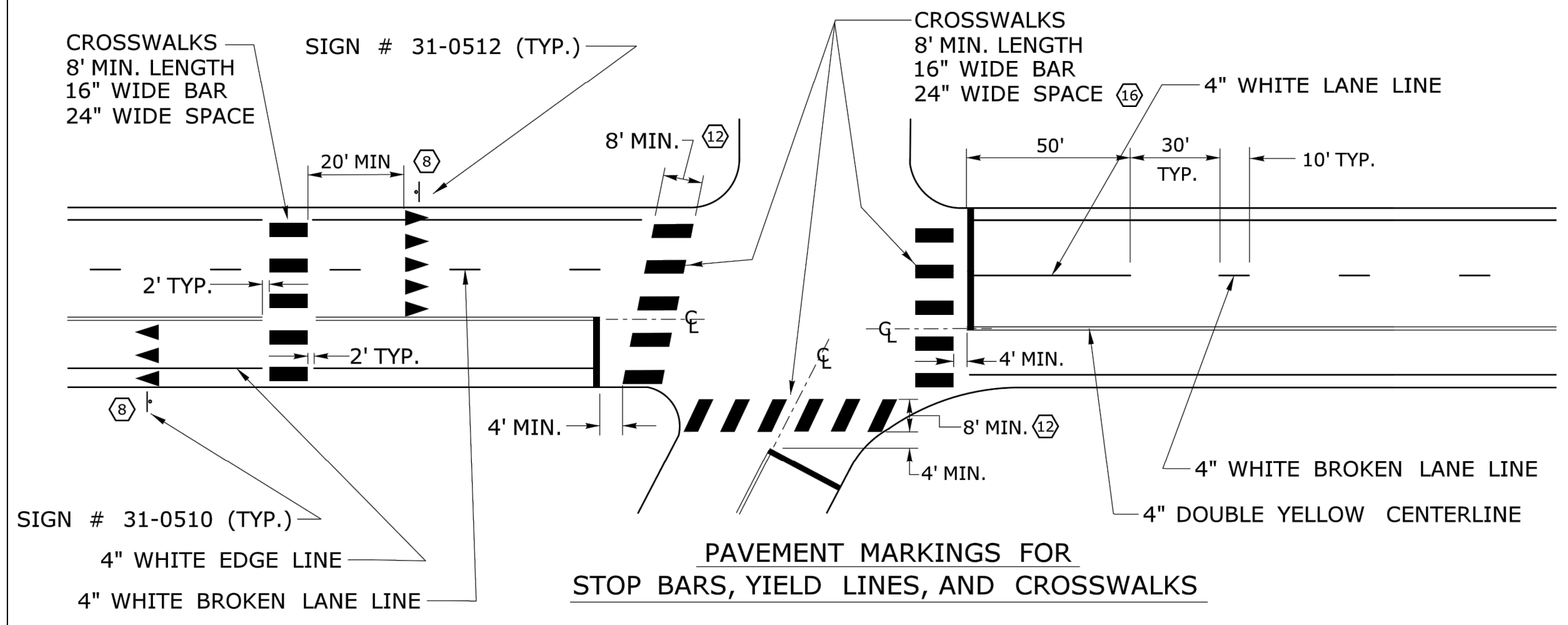
IMPORTANT NOTE:
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"CALL BEFORE YOU DIG" 1-800-922-4455

1 INCH



**CROSSWALK DETAIL
(WHITE)**

8.7 PAVEMENT MARKINGS
CROSSWALK DETAIL
NTS



**PAVEMENT MARKINGS FOR
STOP BARS, YIELD LINES, AND CROSSWALKS**

8.9 PAVEMENT MARKINGS
STOP BARS, YIELD LINES AND CROSSWALKS
NTS

NOTES FOR PAVEMENT MARKINGS

- NOTES:
STOP BARS AND YIELD LINES
- STOP BARS AND YIELD LINES SHALL BE WHITE.
 - STOP BARS SHALL BE 12" MIN. UNLESS OTHERWISE NOTED ON PLANS.
 - STOP BARS TO BE PLACED A MINIMUM OF 4' IN ADVANCE OF THE NEAREST EDGE OF CROSSWALK AND SHOULD BE PLACED 90° TO THE CENTERLINE OF THE ROADWAY.
 - IN THE ABSENCE OF A MARKED CROSSWALK THE STOP BAR SHOULD BE PLACED 90° TO THE CENTERLINE OF THE ROADWAY, AT THE DESIRED STOPPING POINT AT LEAST 5' AND NO MORE THAN 30' FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY.
 - THE STOP SIGN SHOULD BE PLACED IN LINE WITH THE STOP BAR. HOWEVER, IF THE STOP SIGN CANNOT BE LOCATED EXACTLY WHERE VEHICLES ARE EXPECTED TO STOP, THE STOP BAR SHOULD BE PLACED AT THE STOPPING POINT.
 - FOR STOP BARS AT RAMP SEE DETAILS "R", "S", "T", & "U" AND NOTES ON TRAFFIC STANDARD SHEET TR-1210 07 "PAVEMENT MARKINGS FOR DIVIDED HIGHWAYS EXIT RAMP".
 - FOR YIELD LINE INSTALLATIONS, ONLY FULL TRIANGLES ARE TO BE INSTALLED.
 - MID-BLOCK CROSSWALKS ARE CROSSWALKS LOCATED MORE THAN 50 FEET FROM A SIGNALIZED OR UNSIGNALIZED INTERSECTION. YIELD LINES ASSOCIATED WITH MIDBLOCK CROSSWALKS SHALL BE INSTALLED AND SHOULD BE LOCATED 20 TO 50 FEET IN ADVANCE OF THE NEAREST CROSSWALK LINE OR AS DIRECTED BY THE ENGINEER.
 - WHERE A YIELD LINE EXISTS ON AN APPROACH TO A CROSSWALK, THE APPROPRIATE "YIELD TO PEDESTRIANS" SIGN IS REQUIRED.
 - FOR CROSSWALKS AT UNSIGNALIZED INTERSECTIONS WITH MINOR STREET STOP CONTROL, YIELD LINES SHALL BE INSTALLED ON MULTI-LANE APPROACHES, BUT NOT SINGLE LANE APPROACHES.
 - THE YIELD SIGN SHOULD BE PLACED IN LINE WITH A YIELD LINE. HOWEVER, IF THE YIELD SIGN CANNOT BE LOCATED EXACTLY WHERE VEHICLES ARE EXPECTED TO YIELD, THE YIELD LINE SHOULD BE PLACED AT THE YIELDING POINT.

CROSSWALKS

- CROSSWALK MARKINGS SHALL BE WHITE.
- AT LOCATIONS WHERE THE CROSSWALK IS SKEWED, BARS TO BE PARALLEL TO ϵ AND ENDS OF BARS TO BE PARALLEL. THE LENGTH OF THE BARS WILL VARY DEPENDING ON THE ANGLE OF SKEW.
- BARS SHOULD BE NO CLOSER THAN 1' FROM EDGE OF ROAD.
- ONLY FULL LENGTH BARS ARE TO BE INSTALLED.
- DECORATIVE CROSSWALKS SHALL BE BANDED FROM CURB TO CURB WITH A MINIMUM 12" WIDE WHITE TRANSVERSE LINE ALONG EACH EDGE.
- 24" WIDE SPACE TO BE CENTERED ON YELLOW CENTERLINE.

PAVEMENT MARKINGS FOR TURNING LANES

- INSTALL AT LEAST TWO ARROWS PER LANE WHERE STORAGE LENGTH IS GREATER THAN 150 FEET.



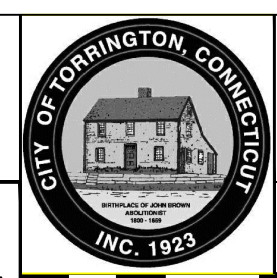
8.8 PAVEMENT MARKINGS
TYPICAL DETAILS
NTS

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Plan Showing
STANDARD DETAILS
SECTION 8.0
MISCELLANEOUS

City of Torrington Engineering Department

FEBRUARY, 2019
Horiz Scale: AS SHOWN
Vert Scale: AS SHOWN



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Checked by: PK

IMPORTANT NOTE:
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SHEET: SD-8

1 INCH

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