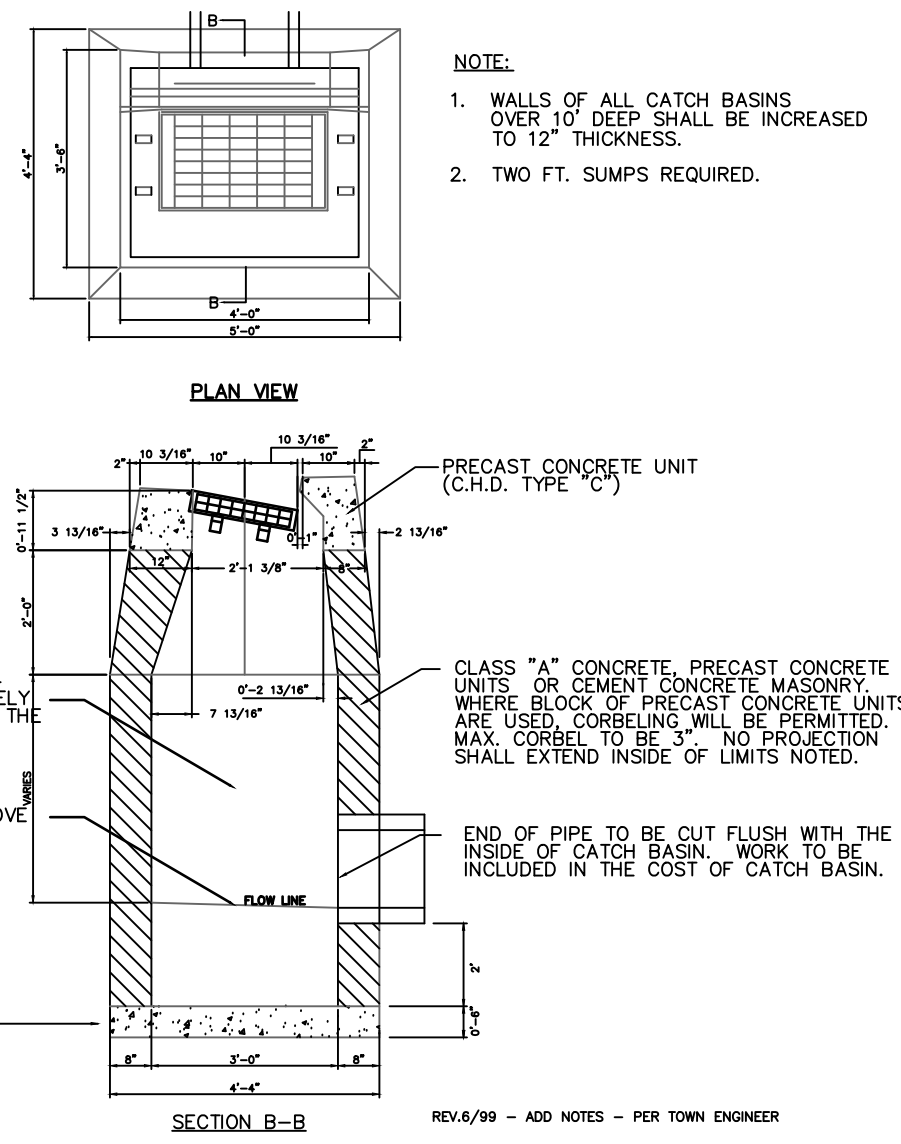


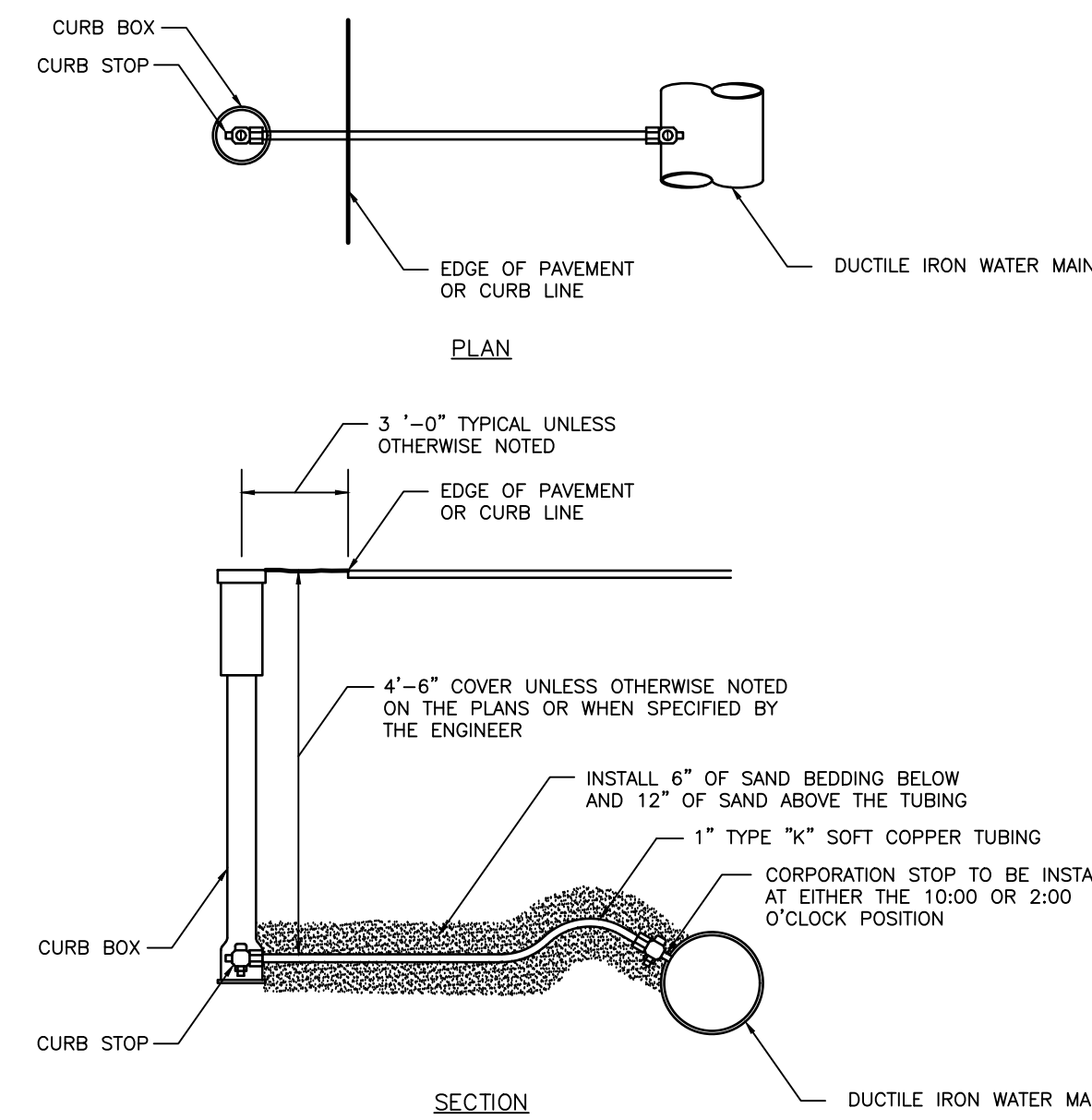
STANDARD STORM MANHOLE

N.T.S.



STANDARD TYPE C'' CATCH BASIN

N.T.S.



TYPICAL SERVICE CONNECTION DETAIL

NOT TO SCALE

- NOTES:**
- CONTRACTOR TO RESTORE ALL AREAS DAMAGED DURING CONSTRUCTION TO ORIGINAL CONDITION TO THE ENGINEER'S SATISFACTION.
 - CONTRACTOR TO NOTIFY CALL BEFORE YOU DIG AT 1-800-922-4455 AT LEAST 72 HOURS PRIOR TO START OF CONSTRUCTION.
 - UNIFORMED POLICE OFFICERS MAY BE REQUIRED FOR ALL WORK IN ROADWAY.
 - CONTRACTOR TO PROVIDE TRENCH REPAIR IN ROADWAY TO EDGE OF EXISTING ROADWAY.
 - CONTRACTOR TO REMOVE AND RESET NEWSPAPER AND MAIL BOXES AS REQUIRED.
 - ACCESS TO INDIVIDUAL HOMES TO BE PROVIDED AS REQUIRED. SAFE VEHICULAR ACCESS SHALL BE PROVIDED TO ALL BUILDINGS AND RESIDENCES AT END OF EACH DAY.
 - ALL WORK TO BE DONE IN ACCORDANCE WITH PART VI OF THE MUTCD. CONTRACTOR SOLELY RESPONSIBLE FOR SITE SAFETY AND ENVIRONMENTAL COMPLIANCE.
 - ALL WORK TO BE DONE IN ACCORDANCE WITH DOT FORM 817 AND TOWN OF WATERTOWN STANDARDS, TO THE SATISFACTION OF THE TOWN ENGINEER.
 - ALL ELEVATIONS BASED UPON PROJECT DATUM.
 - TOWN OF WATERTOWN TO PROVIDE BASELINE SURVEY INFORMATION, AND BENCH MARK.
 - CONTRACTOR TO CONNECT ALL EXISTING LEADERS AND DRAINS TO DRAINAGE SYSTEM.

PIPE TRENCH DETAIL

MINIMUM RECOMMENDED COVER BASED ON ROADWAY TRAFFIC LOADS

PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	27"
8"	33"
10"	39"
12"	45"
15"	51"
18"	57"
24"	63"
30"	69"
36"	75"
42"	81"
48"	87"
54"	93"
60"	99"

MINIMUM RECOMMENDED COVER BASED ON STREET TRAFFIC LOADS

PIPE DIAM.	MIN. TRENCH WIDTH
12"	48"
18"	54"
24"	60"
30"	66"
36"	72"
42"	78"
48"	84"
54"	90"
60"	96"

MINIMUM RECOMMENDED COVER BASED ON HIGHWAY TRAFFIC LOADS

PIPE DIAM.	MIN. TRENCH WIDTH
12"	60"
18"	66"
24"	72"
30"	78"
36"	84"
42"	90"
48"	96"
54"	102"
60"	108"

NOTES:

- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2222 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF FIBERGLASS REINFORCED PLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS" LATEST EDITION.
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL, AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING GEOTEXTILE MATING.
- SECOND: SUITABLE MATERIAL SHALL BE CLASS 1 OR 2. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 6" (150mm) FOR 12" (300mm) PIPE (150mm) FOR 30" (750mm) PIPE.
- MINIMUM COVER: SUITABLE MATERIAL SHALL BE CLASS 1 OR 2. IN NON TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) 18" FROM BOTTOM OF PIPE TO FINISH SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOORING. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 18" FOR 12" (300mm) PIPE AND 24" OF COVER FOR 30" (750mm) PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

PIPE TRENCH DETAIL

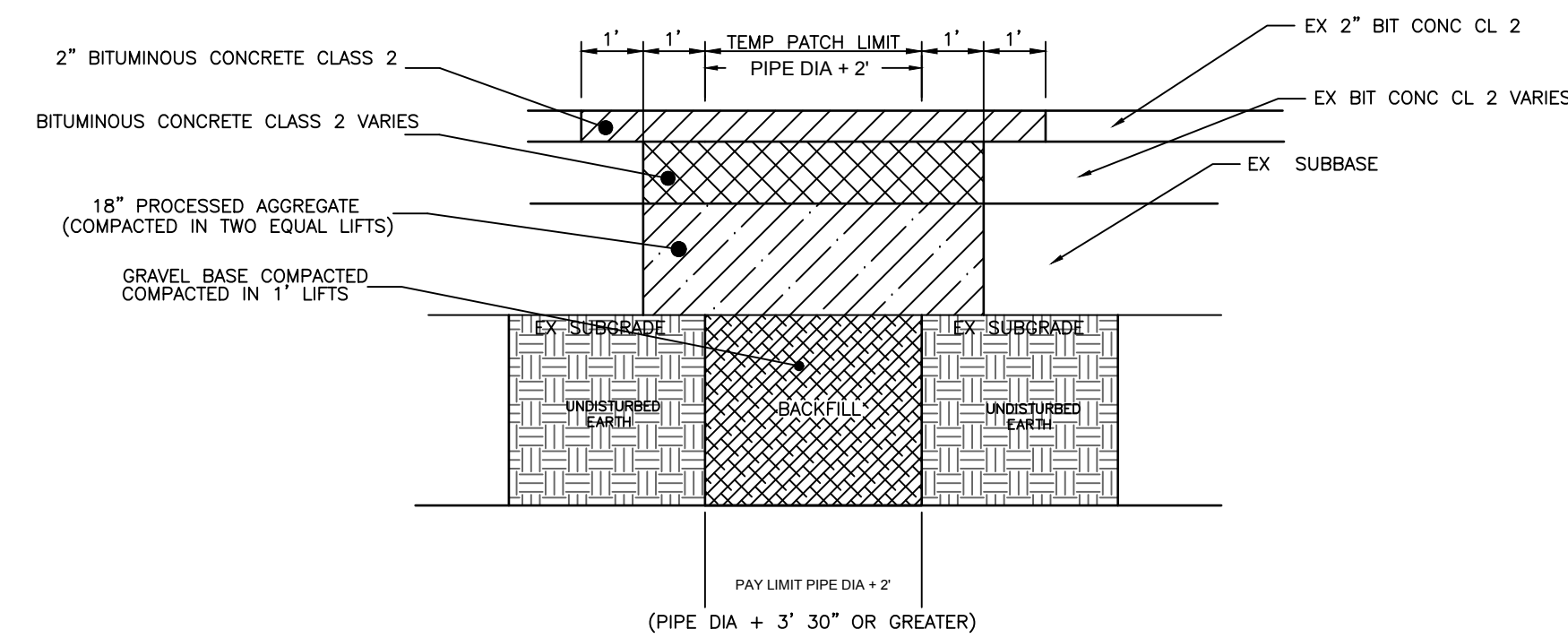
SCALE: N.T.S.

BITUMINOUS CONCRETE LIP CURB PLACED ON BASE COURSE

SCALE: N.T.S.

CULVERT & PIPE UNDERDRAIN IN THE SAME TRENCH

SCALE: 1" = 2'-0"



STANDARD STREET TRENCH PATCH DETAIL

NOT TO SCALE

CONSTRUCTION SEQUENCE

- CONTACT ENGINEERING DEPARTMENT (860) 945-5240 48 HRS PRIOR TO START OF CONSTRUCTION TO ARRANGE INSPECTION AND COMPACTION TESTING SERVICES
- SAW CUT FULL DEPTH (4") BIT CONC PAVEMENT A MINIMUM OF ONE FOOT BEYOND LIMITS OF TEMPORARY PATCH TO NEAT, SQUARE LINES
- REMOVE EXISTING MATERIAL TO A REQUIRED DEPTH AND COMPACT EXISTING SUBGRADE
- PLACE PROCESSED AGGREGATE (COMPACTED IN TWO EQUAL LIFTS)
- TACK COAT VERTICAL FACE OF EXISTING CLASS BITUMINOUS CONCRETE (2" MINIMUM)
- PLACE REQUIRED BITUMINOUS CONCRETE CLASS 2 (COMPACTED IN TWO EQUAL LIFTS)
- SAW CUT BITUMINOUS CONCRETE PAVEMENT TO A DEPTH OF 2", A MINIMUM OF ONE FOOT BEYOND THE LIMITS OF CLASS 2 PATCH (AND OR FULL LANE WIDTH OR FULL ROADWAY WIDTH DEPENDING ON WHERE TRENCH OR PATCH IS IN ROAD.)
- REMOVE EXISTING BITUMINOUS CONCRETE TO A DEPTH OF 2"
- TACK COAT VERTICAL FACE AND HORIZONTAL SURFACE OF BITUMINOUS CONCRETE
- PLACE 2" (MIN.) BITUMINOUS CONCRETE CLASS 2 (COMPACTED IN TWO EQUAL LIFTS)
- MINIMUM PAVEMENT THICKNESS FOR TRENCH IS FOUR INCHES (4").

BITUMINOUS CONCRETE DRIVEWAY

SCALE: N.T.S.

UNDERDRAIN

SCALE: 1" = 2'-0"

NO.	REVISIONS	BY	DATE	DES BY:	DATE:	SUBMITTED BY:	DATE:	<p>TOWN OF WATERTOWN DEPARTMENT OF PUBLIC WORKS DIVISION OF ENGINEERING</p>	<p>PROJECT TITLE: MIDDLEBURY ROAD AND VAILL ROAD DRAINAGE IMPROVEMENTS</p>	<p>DRAWING TITLE: MISCELLANEOUS DETAILS</p>	<p>PROJECT NO.</p> <p>FILE NO.</p> <p>DRAWING NO. 4</p> <p>SHEET NO. 4 OF 4</p>
				DRN BY:		APPROVED BY:	DATE:				
				CHK BY:	SCALE:						
				APPD BY:		ENGINEER:					