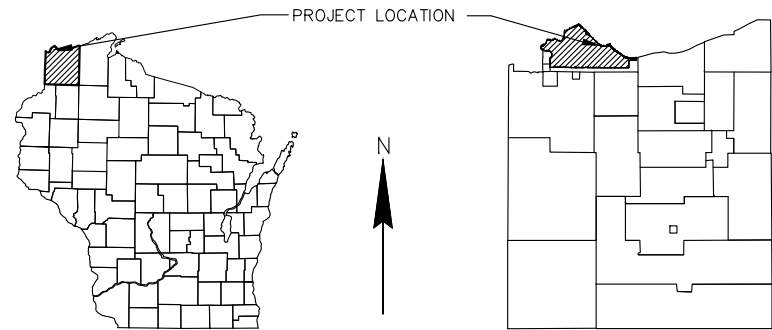


SANITARY STRUCTURE REPLACEMENT MH02340C

BAXTER AVENUE BETWEEN N 19TH & N 18TH STREET

CONSTRUCTION PLAN FOR: REMOVING AND REPLACING SANITARY STRUCTURE



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- 1 TITLE
- 2 ESTIMATED QUANTITIES
- 3 PROJECT OVERVIEW
- 4 PLAN AND PROFILE
- 5 TYPICAL SECTION
- 6 MINIMUM STANDARDS GRAVITY SEWER

LEGEND

- — — — — PROPERTY LINE
- ^{SAN}— SANITARY SEWER
- ^{SS}— COMBINED SEWER
- ^{SS}— STORM SEWER
- - - - - CONSTRUCTION LIMITS
- ^W— EXISTING WATER
- ^{OH}— OVERHEAD ELECTRIC
- ⊙ SANITARY STRUCTURE
- ⊙ INLET
- ⊣ SIGN
- ⊣ POWER POLE

UTILITIES

SUPERIOR WATER, LIGHT & POWER CO.
 GAS & WATER
 TROY AUNE
 2915 HILL AVENUE
 P.O. BOX 519
 SUPERIOR, WI 54880
 218-395-6346
TAUNE@SWLP.COM

SUPERIOR WATER, LIGHT & POWER CO.
 ELECTRIC
 JOHN ALLEN
 2915 HILL AVENUE
 P.O. BOX 519
 SUPERIOR, WI 54880
 715-395-6315
JALLEN@SWLP.COM

CITY OF SUPERIOR PUBLIC WORKS
 TODD JANIGO
 1316 NORTH 14TH STREET
 SUPERIOR, WI 54880
 715-395-7373
JANIGOT@CI.SUPERIOR.WI.US



LOCATION MAP

CITY OF SUPERIOR
 NO SCALE

GOVERNING SPECIFICATIONS:
 THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN,
 SIXTH EDITION WITH ADDENDUM NO. 1 AND NO. 2 SHALL GOVERN THIS PROJECT



NOTE:
 THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON PLANS
 ARE APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE EXACT
 LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND
 AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH
 MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY
 LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.



NOTES	ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY
	204.0110	REMOVING ASPHALTIC SURFACE	SY	27
1	305.0125	BASE AGGREGATE DENSE 1 1/4 INCH (PLAN)	CY	5
1	312.0115	SELECT CRUSHED MATERIAL (PLAN)	CY	10
2,3,4	465.0105	ASPHALTIC SURFACE	TON	5
	619.1000	MOBILIZATION	EA	1
	690.0150	SAWING ASPHALT	LF	38
	SPV.0060.01	SANITARY SEWER CASTING	EA	1
	SPV.0060.02	CONNECT TO EXISTING SANITARY SEWER	EA	3
	SPV.0060.03	SANITARY MANHOLE, 48-INCH	EA	1
	SPV.0090.01	REMOVING SEWER PIPES 6-INCH - 18-INCH	LF	12
	SPV.0090.02	SANITARY SEWER PIPE, 8-INCH - 12-INCH	LF	12

NOTES:	
1	TO BE PAID AS COMPACTED IN PLACE VOLUME
2	CALCULATED AT A RATE OF 110 LB PER SQUARE YARD-INCH
3	SHALL CONFORM TO REQUIREMENTS OF HMA PAVEMENT TYPE E-1 PG58-34
4	TACK COAT INCIDENTAL





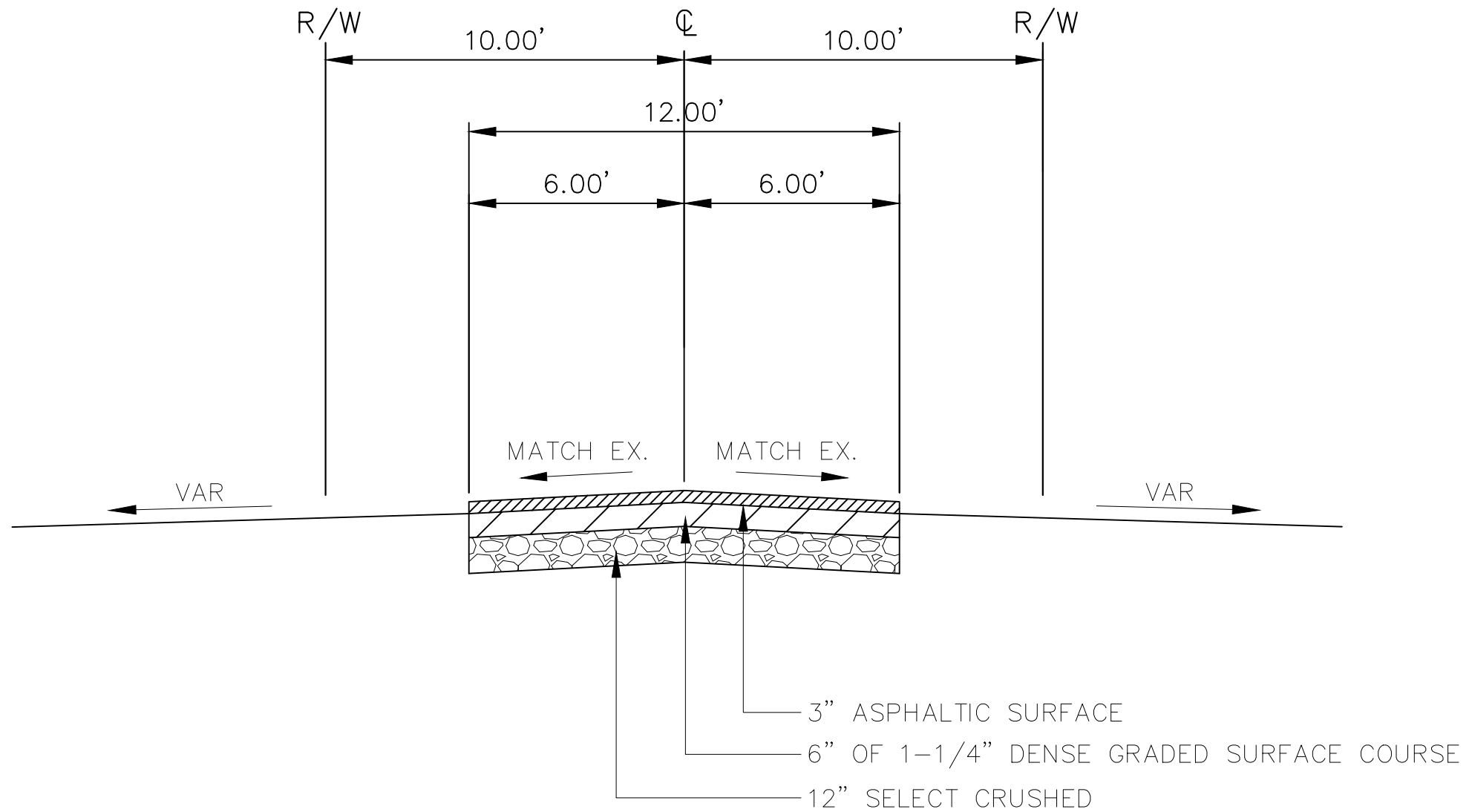
GENERAL NOTES:

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. ANY REQUIRED UTILITY RELOCATION WORK SHALL BE COORDINATED BY THE CONTRACTOR

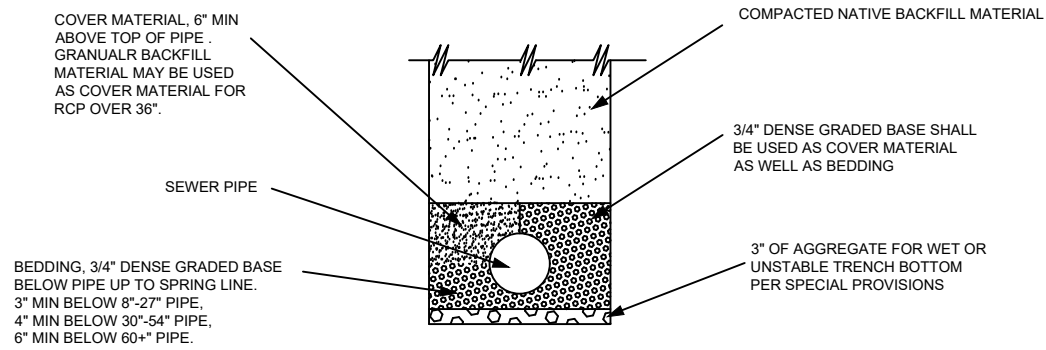
ALL AREAS OUTSIDE OF THE PROJECT LIMITS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION AT NO ADDITIONAL COST TO THE CITY. THIS SHALL INCLUDE CONTRACTOR STAGING AREAS FOR EQUIPMENT AND MATERIALS.



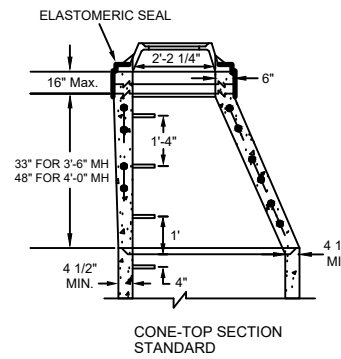
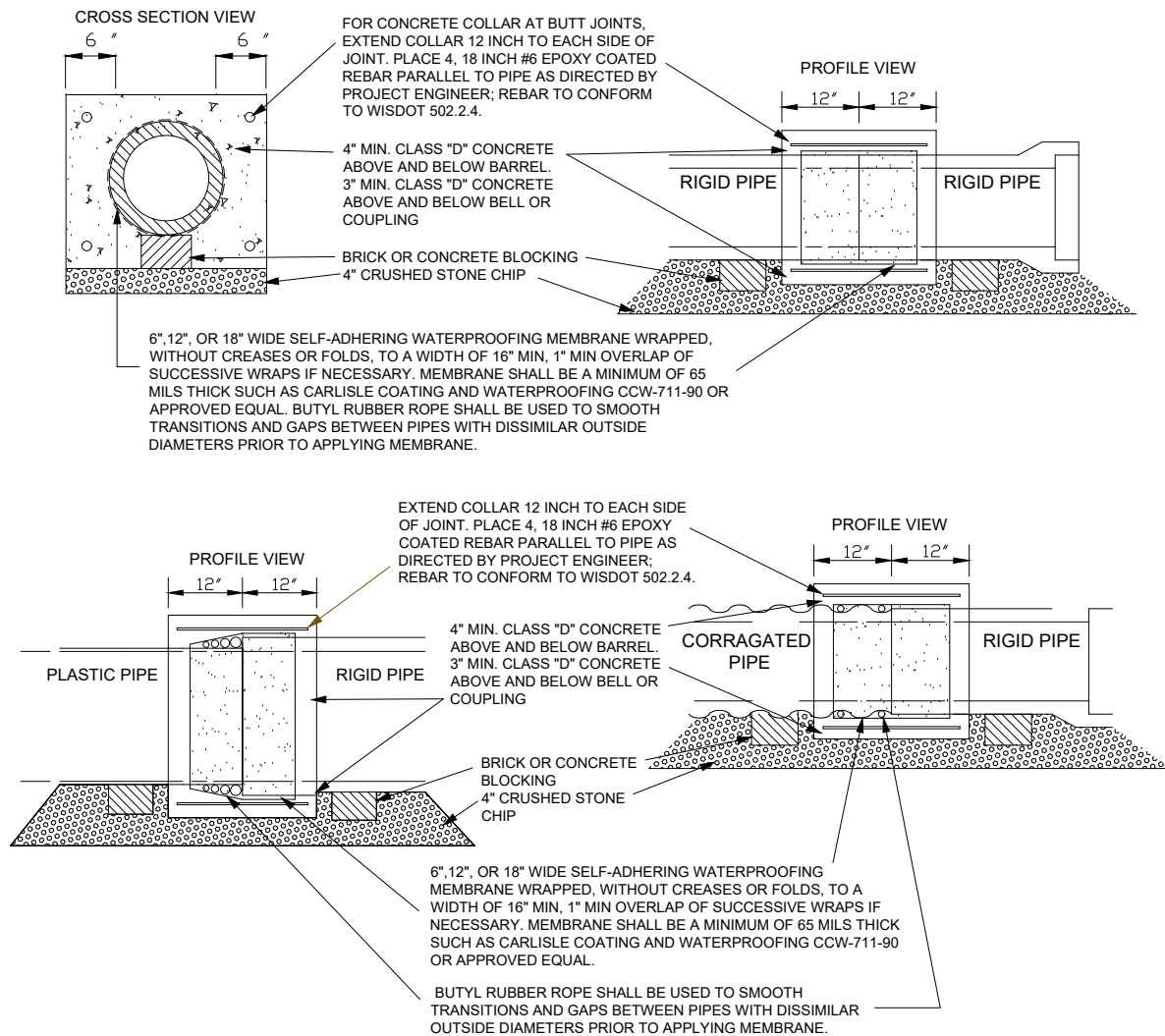


TYPICAL FINISHED SECTION
ALLEY
NOT TO SCALE

TYPICAL TRENCH BOTTOM DETAIL



CONCRETE COLLAR DETAIL 8"- 42" PIPE



TYPE I FRAME/CHIMNEY JOINT REQUIRED ON ALL SANITARY MANHOLES UNLESS OTHERWISE SPECIFIED. ELASTOMERIC WATERPROOFING SEALER APPLIED TO EXTERIOR AND INTERIOR CHIMNEY SEAL.

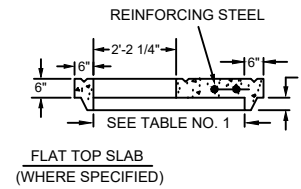
FLAT TOP SLAB MAY ONLY BE USED FOR 5'-0" AND 6'-0" DIA. MANHOLES AND WITH PERMISSION OF THE ENVIRONMENTAL SERVICES DIVISION OF PUBLIC WORKS OR WHERE SHOWN ON THE PLANS. FLAT TOP SLAB MUST HAVE A MINIMUM 6" ADJUSTING RING (1 FULL RING) INSTALLED.

ADJUST FRAME TO GRADE WITH BRICK OR CONCRETE RINGS OF VARIABLE THICKNESS, MAXIMUM RING HEIGHT = 6", MINIMUM RING HEIGHT = 2". CONCRETE RINGS SHALL BE REINFORCED WITH ONE LINE OF STEEL CENTERED WITHIN THE RING. WHERE NECESSARY, RINGS SHALL BE GROOVED TO RECEIVE STEP. THE CHIMNEY SHALL BE CONSTRUCTED SO THAT AS FEW ADJUSTING RINGS AS POSSIBLE SHALL BE USED TO BRING MANHOLE TO GRADE.

CONCRETE AND STEEL REINFORCEMENT SHALL CONFORM TO DESIGNATION C-478 REQUIREMENTS OF ASTM SPECIFICATIONS.

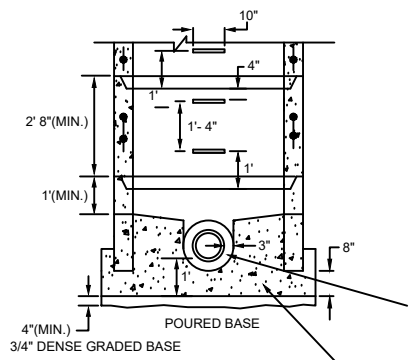
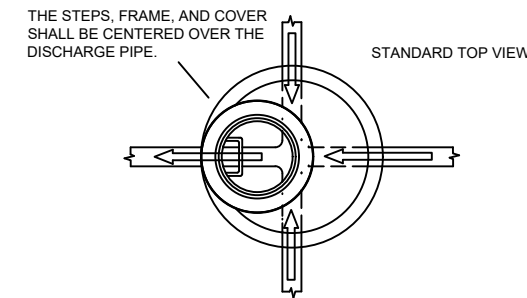
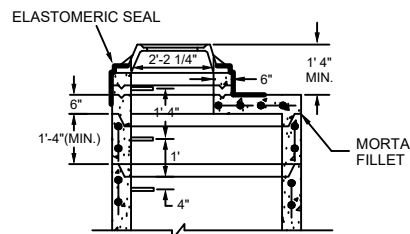
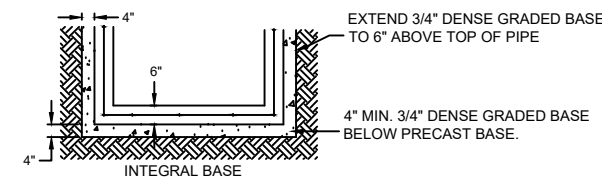
JOINTS SHALL BE WATERTIGHT AND SHALL BE MADE USING BUTYL RUBBER GASKETS. ALL JOINTS SHALL CONFORM TO ASTM-C443 VARIATIONS IN DIAMETER, DEFECTIVE OR DAMAGED ENDS, OR OTHER CONDITIONS WHICH, IN THE OPINION OF THE PROJECT ENGINEER, PREVENT MAKING A SATISFACTORY JOINT SHALL BE CONSIDERED CAUSE FOR REJECTION.

AREA OF CIRCUMFERENTIAL STEEL = 0.12 SQ INCH PER LINEAL FOOT.



4" MIN. 3/4" DENSE GRADED BASE UNDER CONCRETE BASE.

PRECAST BASE RISER SECTION WITH A SEPARATE PRECAST BASE SLAB SHALL NOT BE CONSIDERED GENERALLY ACCEPTABLE UNDER THIS SPECIFICATION.



THE FLOW CHANNEL THROUGH MANHOLES SHALL BE MADE TO CONFORM TO THE SHAPE AND SLOPE OF THE SEWERS AND SHALL EXTEND VERTICALLY FROM THE SPRINGLINE TO THE CROWN OF THE DISCHARGE PIPE. THE THROUGH MANHOLE FLOW CHANNEL SHALL BE THE SAME DIAMETER AS THE LARGER OF THE ADJOINING SEWERS.

BENCH SLOPE { STORM MANHOLE 1 INCH PER FOOT
SANITARY MANHOLE 2 INCH PER FOOT

SPACE BETWEEN PIPE AND PRECAST MANHOLE WALL TO BE FILLED WITH BRICK MORTARED IN PLACE EXCEPT THAT AN APPROVED FLEXIBLE WATERTIGHT PIPE TO MANHOLE SEAL IS REQUIRED FOR ALL SANITARY SEWER CONNECTIONS. THE ANNULAR SPACE BETWEEN THE PIPE AND MANHOLE WALL SHALL BE FILLED WITH FLEXIBLE BUTYL RUBBER GASKET MATERIAL.

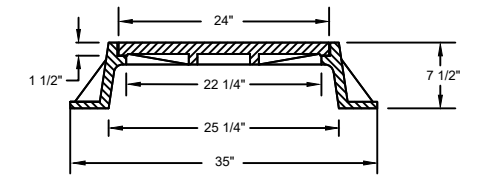
CLASS "D" CONCRETE, 12" MIN. BELOW BOTTOM OF PIPE

TABLE NO. 1

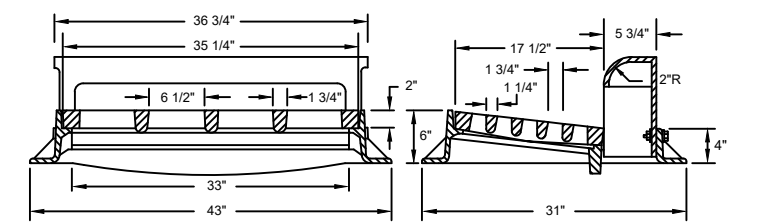
PIPE DIA	MANHOLE DIA	WALL THICKNESS
8" THRU 30"	4'-0"	5"
36"	5'-0"	6"
42"	6'-0"	7"

PRECAST MANHOLE

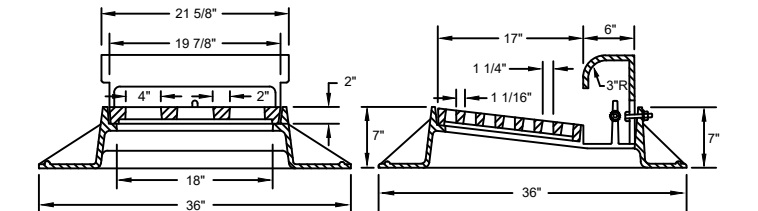
MANHOLE CASTING DIMENSIONS



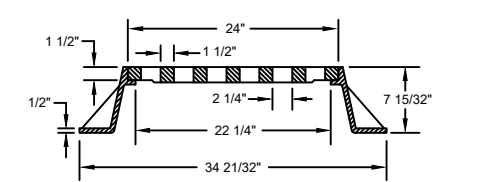
TYPICAL CURB INLET CASTING DIMENSIONS FOR RECTANGULAR STRUCTURES



TYPICAL CURB INLET CASTING DIMENSIONS FOR CIRCULAR STRUCTURES



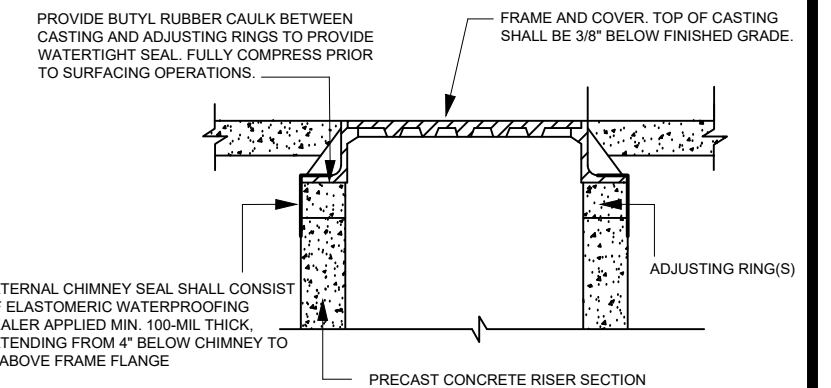
CASTING DIMENSIONS FOR GRATED MANHOLE COVERS AND CIRCULAR INLETS IN NON-CURB INSTALLATIONS



ALL MANHOLE CASTINGS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-48, CLASS NO. 30-B AND SHALL BE FREE FROM CRACKS, HOLES, SWELLS, AND COLD SHUTS.

COVERS SHALL BE "SELF-SEALING", "T-SEAL" OR "GASKET SEALED" COVERS WITH "SANITARY" OR "STORM" LABELS AS APPLICABLE, OR OTHER LABELS APPROVED AS EQUAL.

EXTERNAL CHIMNEY SEAL



EXTERNAL CHIMNEY SEAL SHALL CONSIST OF ELASTOMERIC WATERPROOFING SEALER APPLIED MIN. 100-MIL THICK, EXTENDING FROM 4" BELOW CHIMNEY TO 2" ABOVE FRAME FLANGE