Know what’s below. Call before you dig.
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LEGEND

X = TREE CLEARING & GRUBBING (APPROXIMATE SIZE)

= BRUSH CLEARING & GRUBBING (UNLESS OTHERWISE NOTED)
LEGEND

X = TREE CLEARING & GRUBBING (APPROXIMATE SIZE)
□ = BRUSH CLEARING & GRUBBING (UNLESS OTHERWISE NOTED)
OUTLET CONTROL STRUCTURE

DETAIL

NOTE: ALL GRADE SCREEN MATERIALS TO BE STAINLESS STEEL.

GRATE SCREEN DETAIL

NOTE: ALL GRADE SCREEN MATERIALS TO BE STAINLESS STEEL.
**GENERAL NOTES**

STRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION.

DRAWKINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL DIMENSIONS ARE IN FEET AND INCHES. ALL ELEVATIONS ARE IN FEET.

BEVEL EDGES OF CONCRETE 1/4" UNLESS NOTED OTHERWISE.

CONCRETE TO BE AIR ENTRAINED WITH AN AIR CONTENT OF 6% (±1%).

BACKFILL THE EXCAVATED SPACE BETWEEN THE INLET STRUCTURE, WINGWALLS, WITH TYPE B STRUCTURE BACKFILL. BACKFILL MATERIAL, PLACEMENT, AND COMPACTION TO BE PER SECTION 210 OF THE STANDARD SPECIFICATIONS.

IN CONCRETE, ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

**FOOTING, TYP.**

#4 CORNER BARS AT 12" MAX.

WINGWALL

#4 BARS AT 1'-6" MAX.

#4 DOWELS AT 12" MAX.

CENTERED IN WALL.

ALTERNATE LEG TO SUPPORT FTG BARS.

#4 BARS AT 1'-0" MAX.

#4 BARS AT 6" MAX.

2'-0"

APRON SLAB

IN BAGS AT 1'-0" MAX.

IN BAGS AT 1'-6" MAX.

IN BAGS AT 6" MAX.

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**DESIGN DATA**

**MATERIAL PROPERTIES**
- CONCRETE MASONRY
  - f'c = 3,500 PSI
- HIGH-STRENGTH STEEL REINFORCEMENT
  - fy = 60,000 PSI

**GENERAL NOTES**
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. CURRENT EDITION.
- DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCREASE IDENTIFIED CONCRETE COSTS/WASTE STRUCTURE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.
- INLET STRUCTURE SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN THICKNESS WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.
- DRAWINGS SHALL NOT BE SCALED.
- BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
- ALL ELEVATIONS ARE IN FEET AND INCHES, ALL DIMENSIONS ARE IN FEET.
- BEVEL EDGES OF CONCRETE 3/4" UNLESS NOTED OTHERWISE.
- CONCRETE TO BE AIR-ENTRAINED WITH AN AIR CONTENT OF 6% (±1%).
- PRECAST INLET STRUCTURE SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.
- PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

**PLAN - INLET**

- INLET GRATE STEP
- INLET Curb
- 2" DIA. PIPE
- 16" DIAMETER OUTLET PIPES
- PROP. CAST IRON GRATES
- PROP. CAST IRON GRATES
- #5 BARS SPACED 12" MAX.
- #5 BARS
- INLET CURB SPACED 12" MAX.
- INLET CURB LIMITS
- INLET GRATE STEP SLOPE UP ALONG SIDES TO PROVIDE FULL GRATE SUPPORT.

**INLET CURB**
- #4 INLET CURB SPACED 12" MAX.
- #4 LONGITUDINAL BAR. RUNS LENGTH OF CURB.

**INLET STRUCTURE**
- PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON
THIS DRAWING SHALL CONFORM TO THE REQUIREMENTS OF THE
STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ALTERNATIVE DESIGN WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH
MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE
OTHERWISE PRECAST OR CAST-IN-PLACE CONCRETE.

THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SCREWED INTO
THE ENDWALL WITH CEMENT MIXTURE PRIOR TO BACKFILLING AROUND THE STRUCTURE.
THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED Flush WITH THE
ROADWAY SLOPE. ADJACENT ENDWALLS SHALL BE ADJUSTED TO FIT
THE Sides AND TOP OF THE ENDWALL. EXACT PLACEMENT OF THE OUTALL PIPE
AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS
AND FLOW DIRECTION OF THE ROADSIDE DITCH.

THE OUTALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS
OF THE SPECIFICATION FOR POLY VINYL CHLORIDE PVC PLASTIC DRAINAGE AND HEAD
PIPE AND FITTINGS. ASTM DESIGNATION D 3345, SCH 40 PVC OR THE STANDARD
SPECIFICATION FOR TYPE P, POLY VINYL CHLORIDE PVC DRAIN PIPE AND FITTINGS, ASTM
DESIGNATION D 3345, TYPE P50 OR 213 PVC DRAIN PIPE, ALL JOINTS SHALL BE TOLERANT
REINFORCED.

THE OUTALL PIPE INCLUDING ALL FITTINGs AND THE RODENT SHIELD SHALL BE
MEASURED AND PAID FOR AS PIPE UNDERDRAIN IMPERFORATED.

THE RODENT SHIELD SHALL BE A PVC SLEEVE SIMILAR TO THIS DETAIL. THE SLEEVE
IS REMOVABLE AS A FLOOR STAND, A PIPE COUPLING IS REQUIRED FOR THE
ATTACHMENT OF THIS SLEEVE TO THE OUTALL PIPE. THE SLEEVE SHALL BE FASTENED TO
THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-InCH STAINLESS STEEL SHEET METAL
SCREWS.

NOTE: DIMENSIONS ARE APPROXIMATE. THE CRATE IS SIZED TO FIT INTO A PIPE COUPLING.