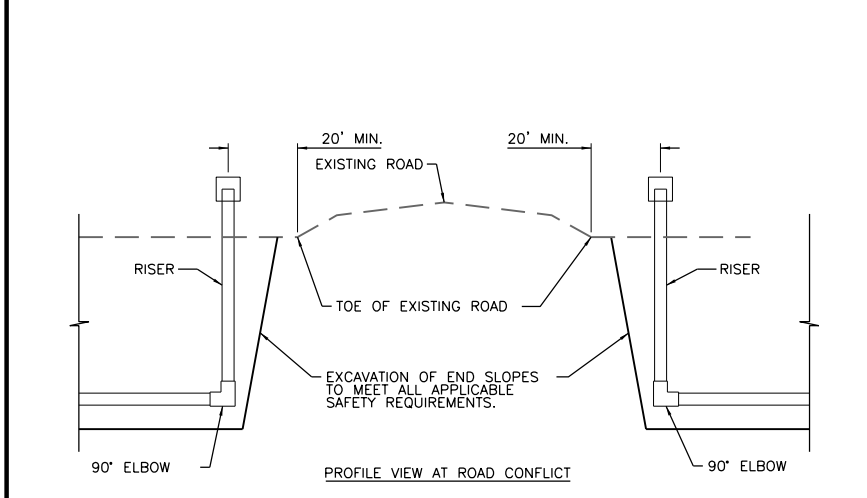
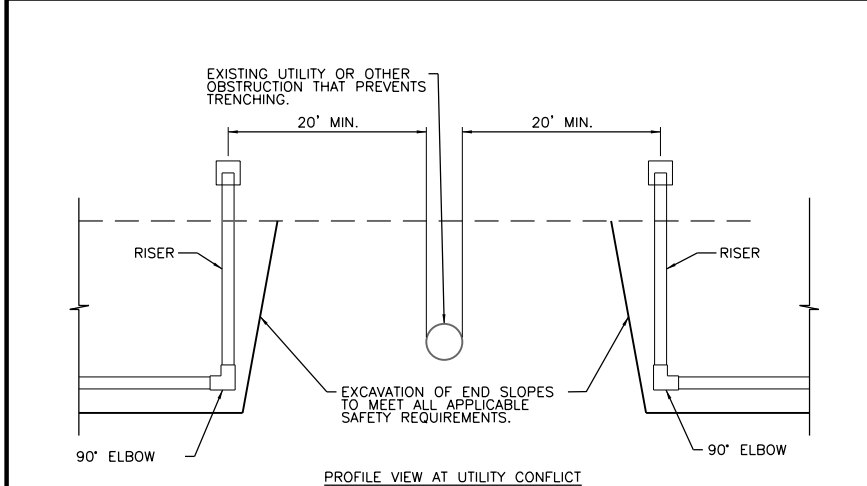
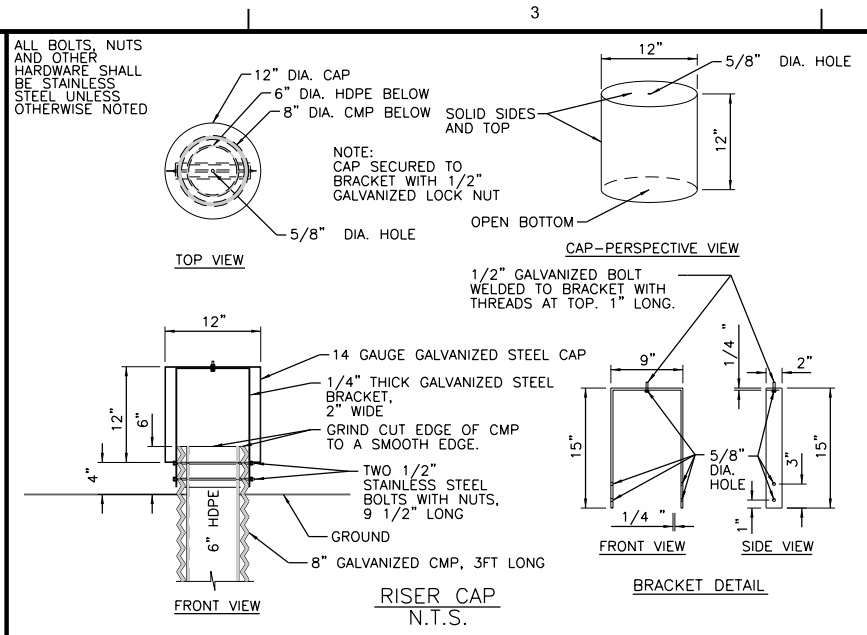


NOTES:
 1) GALVANIZED METAL PIPES SHALL BE 2.875" O.D., 0.203-INCH THICK AND 5.97 lbs./in. ft.
 2) PIPES SHALL BE PAINTED IN ACCORDANCE WITH ASTM D 6386. REFER TO THE AMERICAN GALVANIZERS ASSOCIATION'S "GUIDE TO PREPARING HOT-DIP GALVANIZED STEEL FOR PAINT" (http://www.galvanizeit.org/images/uploads/publicationPDFs/Paint_Guide_Galvanized_Steel.pdf)

DETAIL "A" - TOE DRAIN MARKERS AND SURFACE TREATMENT
N.T.S.

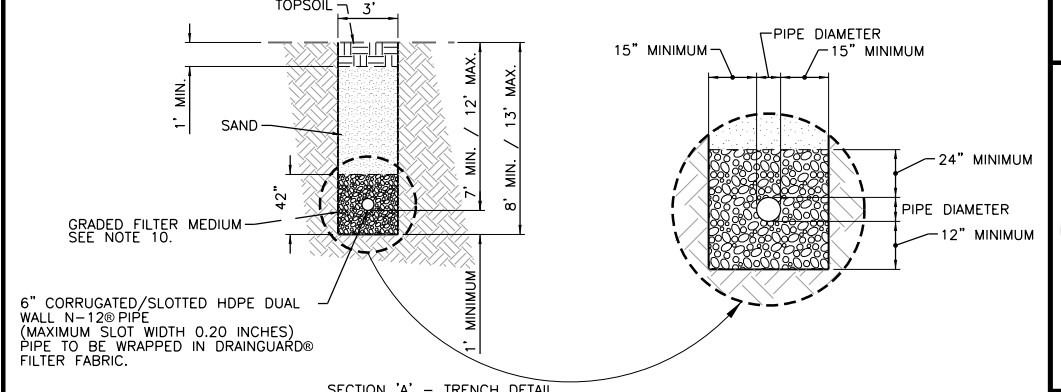
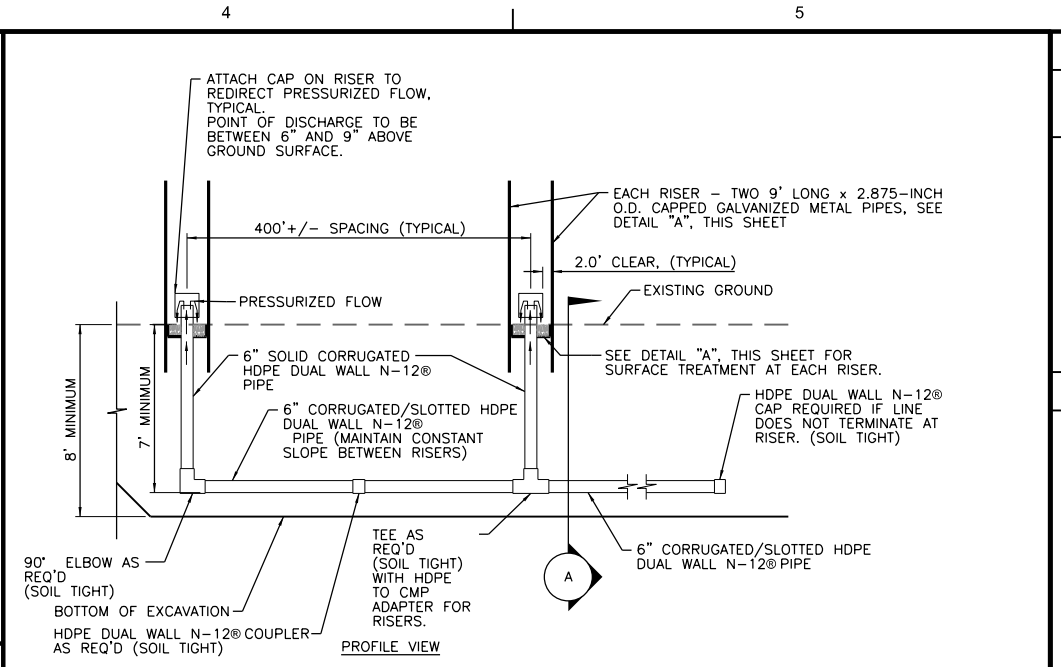
Clarification for Section A - Trench Detail on this sheet. Ignore the "Sand" note on Section A - Trench Detail on Sheet G-0.03. Unsuitable backfill material should be as specified below:

a. Sheet G-0.03 - To clarify the Excavation Zone Notes on "Excavation Zones - Section View" detail. All suitable excavated material may be used for earth fill. New filter media (C33 sand) must be installed around toe drain pipe as shown and described in the "Section A - Trench Detail" and on Sheet G-0.02. However, all excavated soil (including the existing filter media around the existing toe drains) may be used to backfill the trench once the new pipe and filter media is installed. Unsuitable backfill material shall be considered stones larger than 3-inches in diameter, soil with greater than 10% organic material such as grass or tree roots.

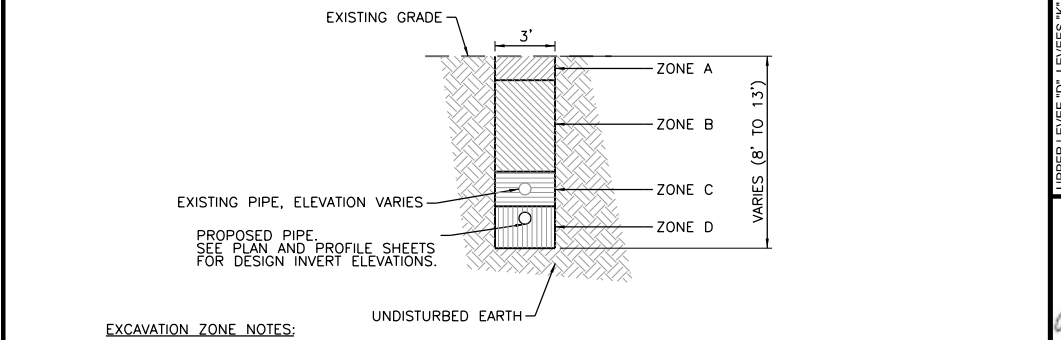


NOTES:
 1. UTILITY LOCATING IS THE RESPONSIBILITY OF THE CONTRACTOR. ADDITIONAL RISERS (NOT SHOWN ON PLAN & PROFILE SHEETS) WILL BE REQUIRED WHEN UTILITIES OR OTHER OBSTRUCTIONS ARE ENCOUNTERED.

LEVEE TOE DRAIN - TERMINATION AT ROADS AND UTILITY CONFLICTS
N.T.S.



NOTES:
 1) ALL EXISTING TOE-DRAIN PIPE TO BE REMOVED AND DISPOSED OF.
 2) ALL EXISTING FILTER MEDIA TO BE REMOVED AND DISPOSED OF.
 3) ALL EXISTING RISER CAPS SHALL BE SALVAGED TO WICHITA FLOOD CONTROL.
 4) HORIZONTAL TRENCH DRAINS SHALL BE A MINIMUM OF 7 FEET DEEP TO PIPE INVERT.
 5) MAINTAIN CONSTANT SLOPE OF HORIZONTAL PIPE RUNS BETWEEN VERTICAL RISERS. TRENCH DEPTHS GREATER THAN 7 FEET MAY BE NECESSARY.
 6) EXCAVATION SLOPES FOR TOE DRAIN INSTALLATION SHALL MEET ALL APPLICABLE SAFETY REQUIREMENTS.
 7) ALL CONNECTORS SHALL BE SOIL TIGHT.
 8) ALL TOE DRAIN PIPE SHALL BE PERFORATED HDPE DUAL WALL N-12@ PIPE OR EQUIVALENT WITH 0.20 INCH MAXIMUM SLOT WIDTH AND A MINIMUM PIPE STIFFNESS OF 46 PSI.
 9) CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR CAP ON RISER PIPE DISCHARGE.
 10) FILTER MEDIA SHALL CONSIST OF HARD DURABLE STONE MEETING ASTM C33 SPECIFICATION FOR CONCRETE AGGREGATE. REFER TO GENERAL NOTES SHEET FOR GRADATION REQUIREMENTS.



EXCAVATION ZONE NOTES:
 ZONE A - EXCAVATE AND STOCKPILE 1' DEPTH OF TOPSOIL MATERIAL.
 ZONE B - EXCAVATE AND STOCKPILE MATERIAL THAT IS SUITABLE FOR BACKFILL AFTER NEW TRENCH DRAIN INSTALLATION. DISPOSE OF ANY OBJECTIONABLE MATERIAL ENCOUNTERED. LOWER LIMIT OF ZONE B IS EQUAL TO THE UPPER LIMIT OF EXISTING FILTER MEDIA.
 ZONE C - EXCAVATE AND DISPOSE OF EXISTING TRENCH DRAIN PIPE AND FILTER MEDIA.
 ZONE D - IF NECESSARY, CONTINUE EXCAVATION UNTIL AN ELEVATION OF 1-FOOT BELOW THE PROPOSED PIPE INVERT IS REACHED. ALL NOTES FOR ZONE B ABOVE ALSO APPLY TO ZONE D.

(ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NOTES ON SHEET G-0.02)

EXCAVATION ZONES - SECTION VIEW

LEVEE TOE DRAIN DETAIL
N.T.S.

DATE	APP'D
DESCRIPTION	MARK
 AMEC Earth & Environmental, Inc. 1129 SW Winemaker Topeka, Kansas 66604 Phone: (785) 272-6830 Fax: (785) 272-6878	
 THE CITY OF WICHITA, KANSAS 455 N. Main Wichita, KS 67202	
UPPER LEVEE 'D', LEVEES 'K', 'L', 'M', 'N' AND 'P' TOE DRAIN INSTALLATION WICHITA-VALLEY CENTER LOCAL FLOOD PROTECTION PROJECT WICHITA, KANSAS	
PREPARED FOR THE CITY OF WICHITA, KANSAS 455 N. Main Wichita, KS 67202	
DESIGNED BY: Larry Sample, PE	DATE: 08-13-2012
DWN BY: RES	APP BY: L. SAMPLE
FILE NAME: 04_TOE DRAIN DETAILS.dgn	
AMEC PROJ. NO. 5-6150-0001	
TOE DRAIN DETAILS	
G-0.03	
SHEET 4 OF 21	