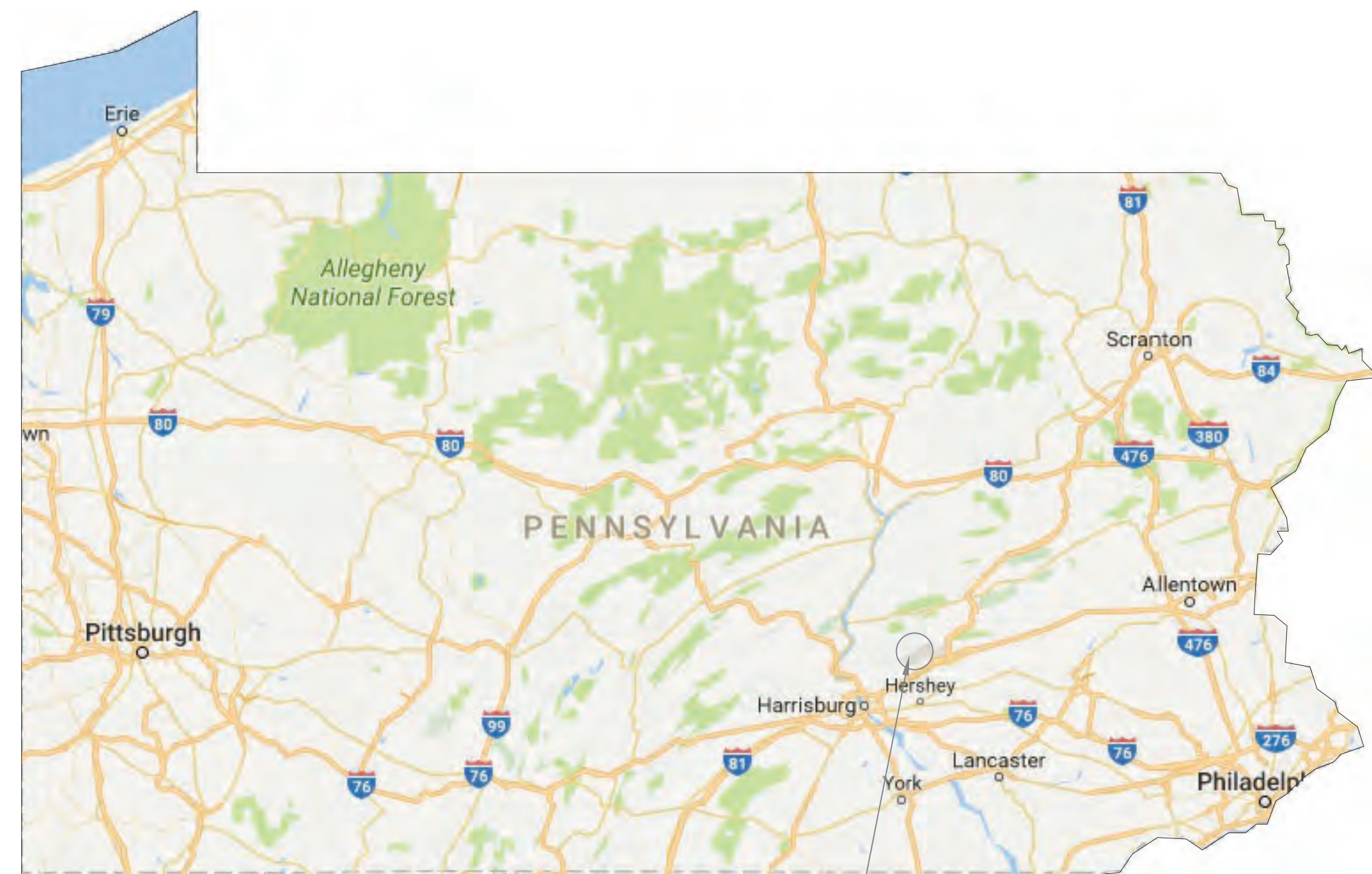


FTIG WATERLINE REPLACEMENT - AREA 8 & 13 FORT INDIANTOWN GAP

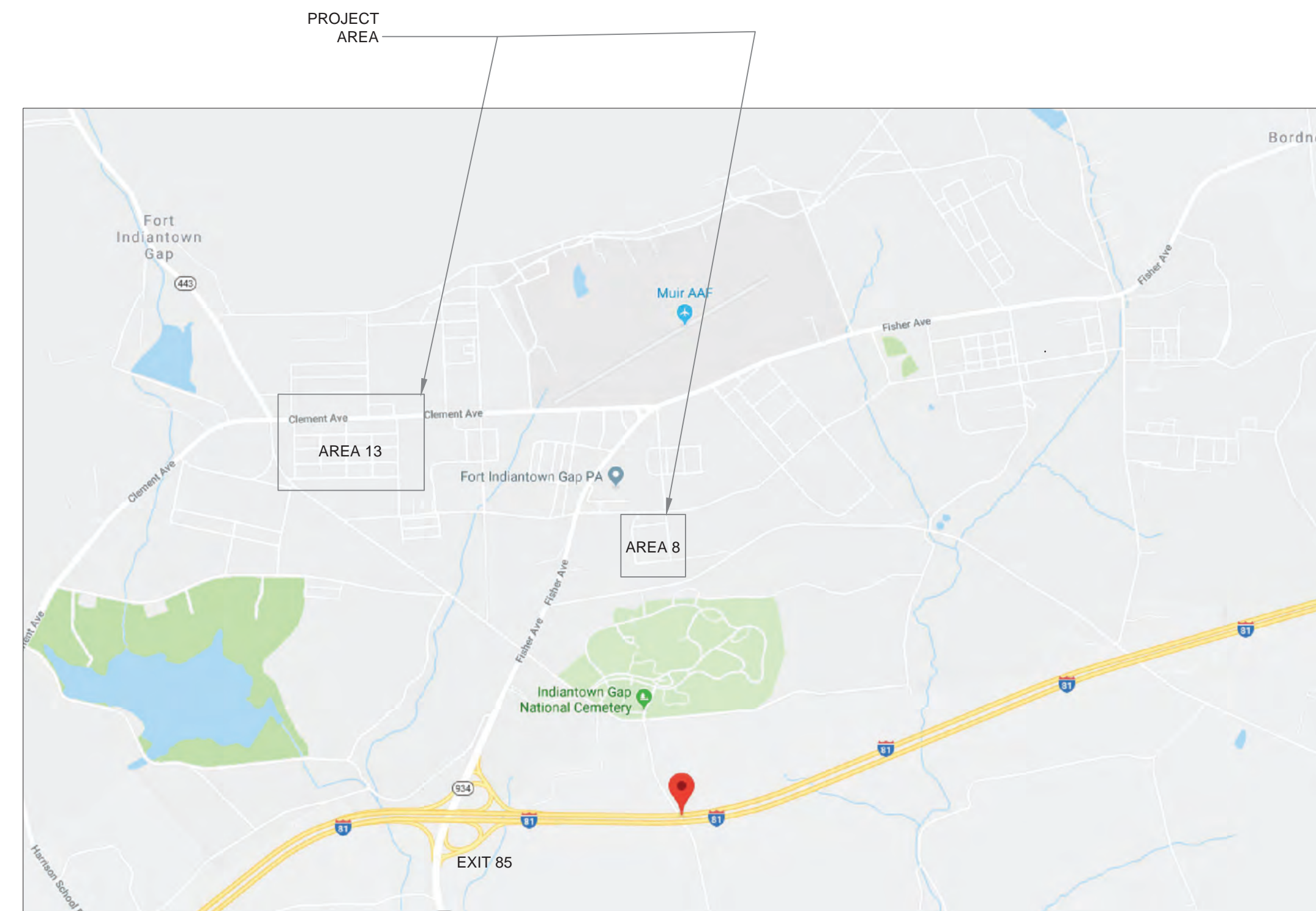
UNION TOWNSHIP, LEBANON COUNTY, PA

PROJECT NUMBERS : 42250042 - AREA 8
42110320 - AREA 13

JOSH SHAPIRO, GOVERNOR
MAJOR GENERAL JOHN R. PIPPY, ADJUTANT GENERAL



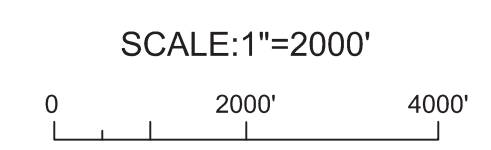
VICINITY MAP
SCALE: 1"=30 MILES



LOCATION MAP
SCALE: 1"=2000'

SHEET INDEX		
SHEET NO.	DWG. NO.	TITLE
1	G.1.0	COVER SHEET
2	G.2.0	NOTES & TABLES
3	C.1.0	WATER LINE KEY SHEET
4	C.1.1	WATER LINE PLAN SHEET - AREA 13 NW
5	C.1.2	WATER LINE PLAN SHEET - AREA 13 SW
6	C.1.3	WATER LINE PLAN SHEET - AREA 13 NE
7	C.1.4	WATER LINE PLAN SHEET - AREA 13 SE
8	C.1.5	WATER LINE PLAN SHEET - AREA 8 West
9	C.1.6	WATER LINE PLAN SHEET - AREA 8 East
10	C.2.0	WATERLINE DETAILS
11	C.2.1	RESTORATION DETAILS
12	C.3.0	E&S NOTES AND DETAILS
13	C.3.1	E&S NOTES AND DETAILS

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND 10 WORKING
DAYS IN DESIGN STAGE - STOP CALL
Pennsylvania One Call System, Inc
1-800-242-1776



REV.	DESCRIPTION	DATE	APPR.	MARK

DATE: 28 MAR 2025	SOLICITATION NO.:
DESIGNED BY: D. STERNER	CONTRACT NO.:
DRAWN BY: K. LLOYD	FILE NUMBER: 42250042 / 42110320
SUBMITTED BY: AS NOTED	FILE NAME:
DESIGNED BY: D. STERNER	FILE NUMBER: 42250042 / 42110320
DRAWN BY: K. LLOYD	FILE NAME:
SUBMITTED BY: AS NOTED	FILE NUMBER: 42250042 / 42110320
DESIGNED BY: D. STERNER	FILE NAME:
DRAWN BY: K. LLOYD	FILE NUMBER: 42250042 / 42110320
SUBMITTED BY: AS NOTED	FILE NAME:

FTIG WATERLINE REPLACEMENT
AREA 8 & 13
COVER SHEET

SHEET IDENTIFICATION
G.1.0
SHEET 1 OF 13

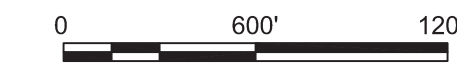


**PLAN
KEYSHEET**
1" = 600'

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND 10 WORKING
DAYS IN DESIGN STAGE - STOP CALL
Pennsylvania One Call System, Inc



1-800-242-1776



SCALE: 1"=600'

DESIGNED BY: D. STERNER	CHECKED BY: K. LLOYD	DATE: 28 MAR 26	SOLICITATION NO.:
DRAWN BY: D. STERNER	IN CHARGE: K. LLOYD	CONTRACT NO.:	
PROJECT NO.:	FILE NAME:	FILE NUMBER:	
DATE:	DATE:	DATE:	

FTIG WATER LINE REPLACEMENT
AREA 8 & 13
WATER LINE PLAN KEY SHEET

SHEET IDENTIFICATION
C.1.0
SHEET 3 OF 13

REV.	DESCRIPTION	DATE	APPR.	MARK	DATE	APPR.

LEGEND

GENERAL NOTES

EXISTING

GENERAL CONSTRUCTION NOTES:

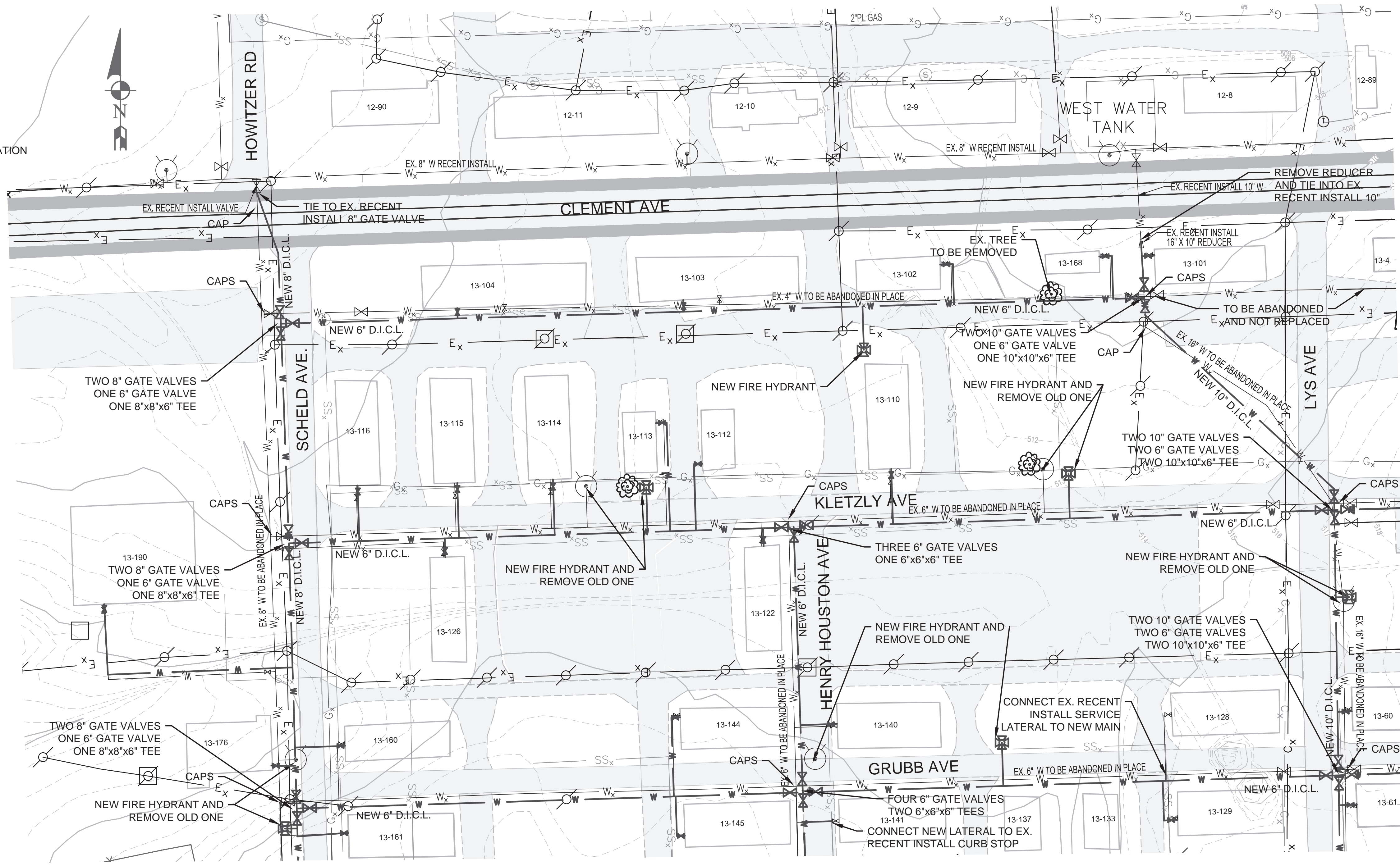
- D STORM DRAIN MANHOLE
- S SANITARY SEWER MANHOLE
- T TELEPHONE MANHOLE
- ET TRANSFORMER
- FH FIRE HYDRANT
- WV WATER VALVE
- WCS WATER CURB STOP
- LP LIGHT POLE
- EP ELECTRIC POLE
- EB ELECTRIC BOX
- SIGN SIGN

1. SEE NOTES SHEET G.2.0.
2. SEE LATERAL SCHEDULE/TABLE SHEET G.2.0.
3. SEE DETAILS SHEETS C.2.0 & C.2.1.
4. SEE E&S SHEETS C.3.0 & C.3.1.

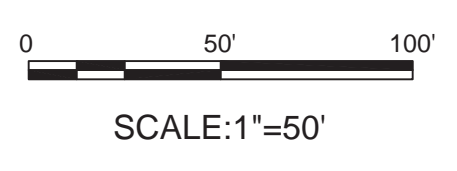
- UNDERGROUND ELECTRIC
- OVERHEAD UTILITY
- UNDERGROUND COMMUNICATION
- STORM DRAIN
- SANITARY SEWER
- GAS
- WATER
- PAVEMENT
- ASPHALT
- GRAVEL
- MINOR CONTOURS
- MAJOR CONTOURS
- BUILDING
- FENCE
- T TREE

PROPOSED

- WATER LINE
- FH FIRE HYDRANT WITH VALVE AND TEE
- WV WATER GATE VALVE
- WCS WATER CURB STOP



MATCHLINE: SEE DWG. C.1.2 FOR CONTINUATION



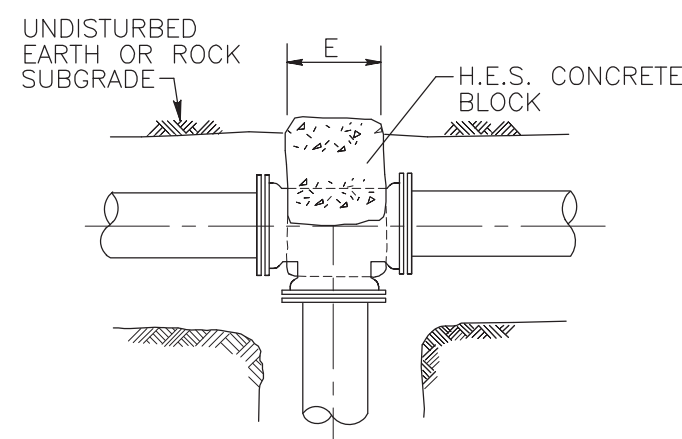
MATCHLINE: SEE DWG. C.1.3 FOR CONTINUATION

REV.	DESCRIPTION	DATE	APPR.	MARK	DATE	APPR.

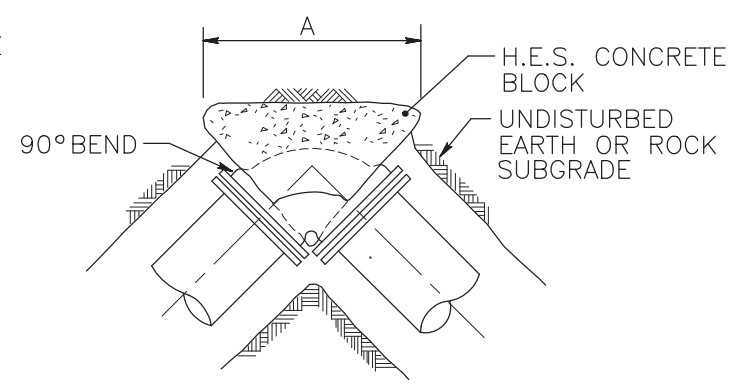
DATE: 24 MAR 26	SOLICITATION NO.:	CONTRACT NO.:	PLOT SCALE: 1\"/>
DESIGNED BY: DONALD E. STERNER	CHG. BY: K. LLOYD	FILE NUMBER: 4255042 / 4310320	FILE NAME:
SUBMITTED BY:		AS NOTED	ANSI D

FTIG WATERLINE REPLACEMENT
AREA 8 & 13
WATERLINE PLAN SHEET - AREA 13 NW

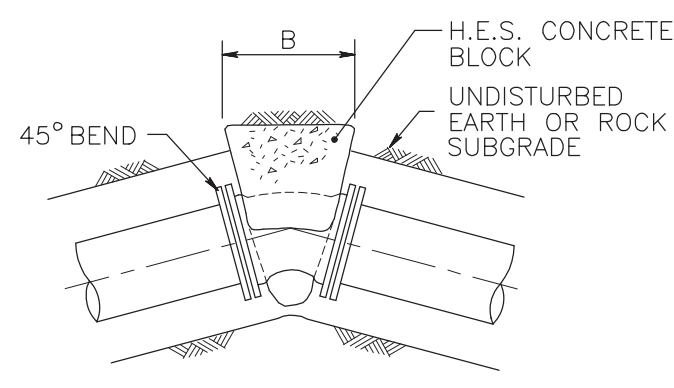
SHEET IDENTIFICATION
C.1.1
SHEET 4 OF 13



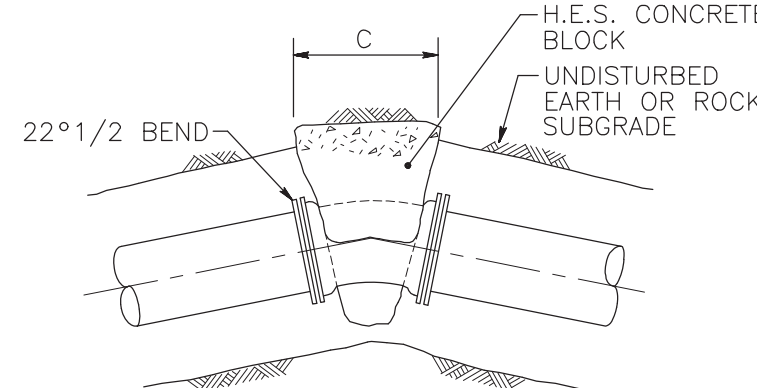
TEE/TAPPING SLEEVE



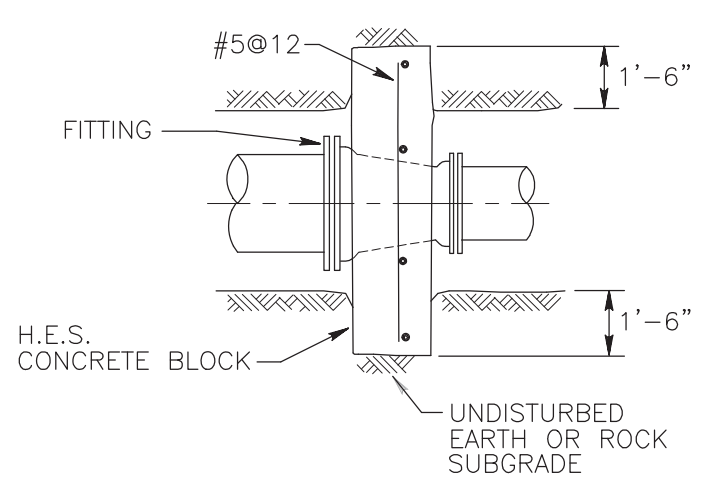
90° BEND



45° BEND

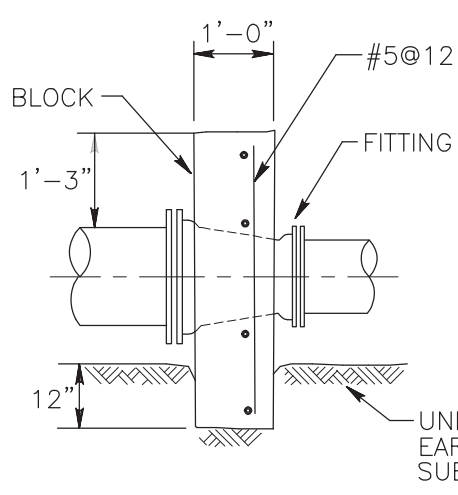


22 1/2° BEND

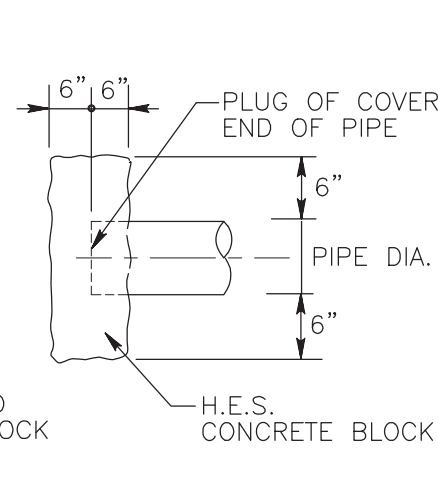


PLAN

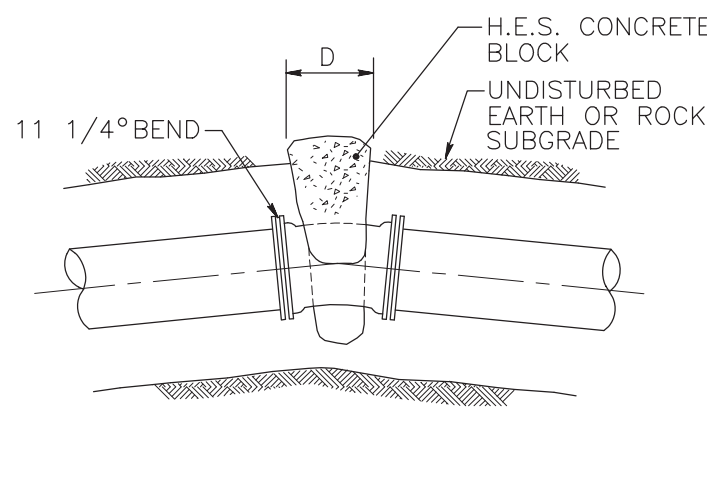
REDUCER



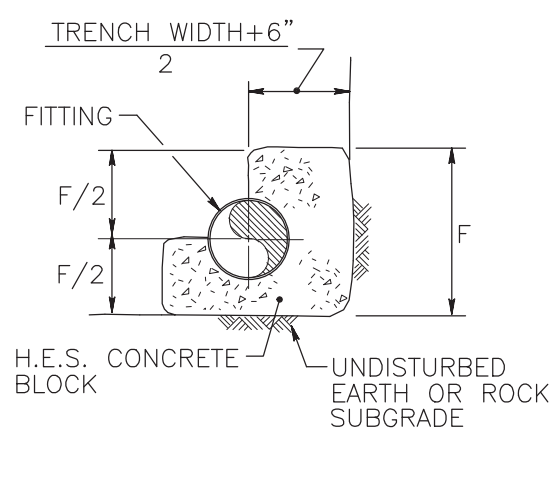
ELEVATION



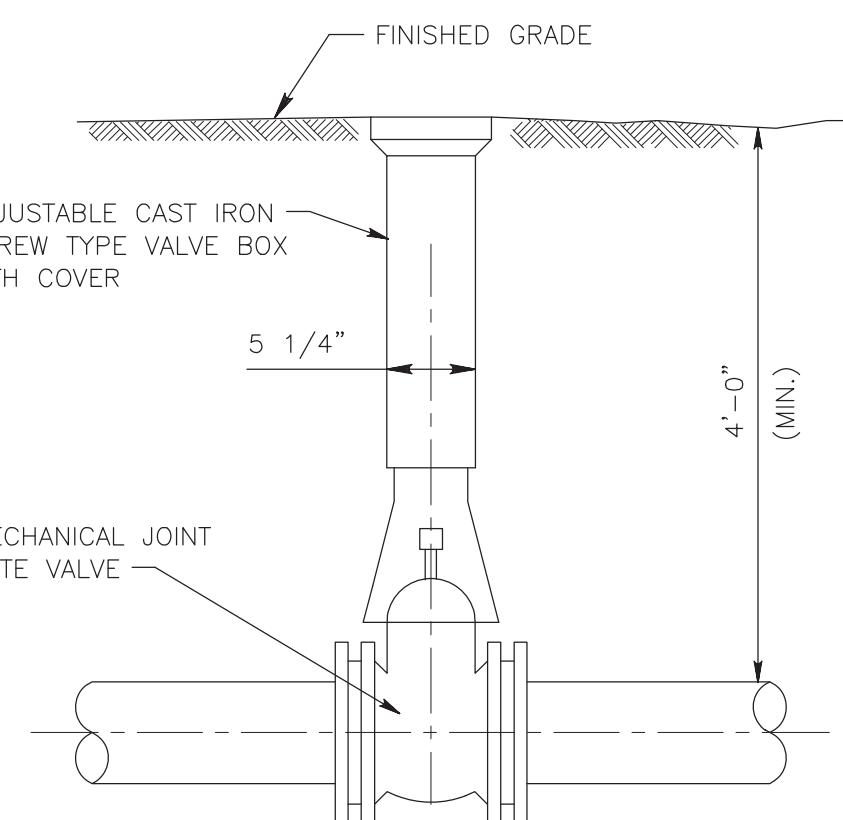
PLUG



11 1/4° BEND

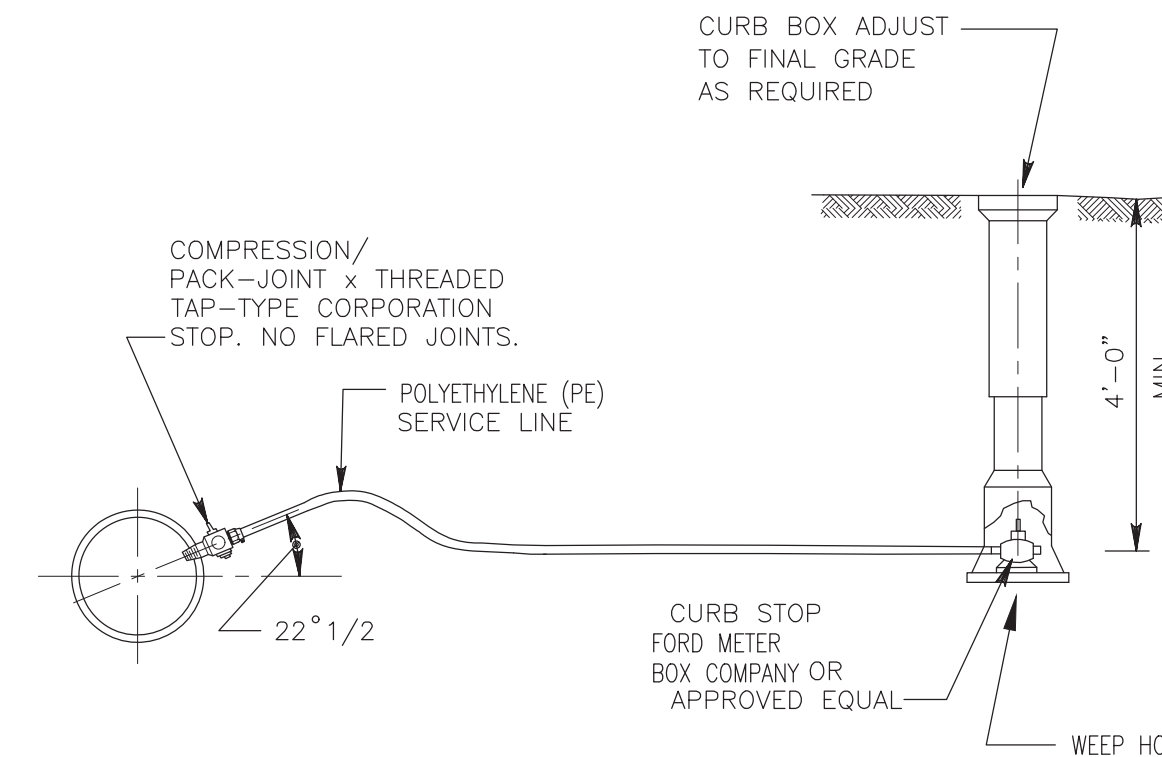


SECTION



VALVE BOX

NO SCALE

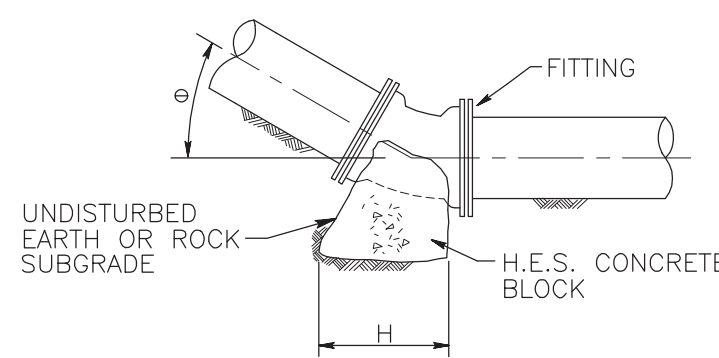


SERVICE LATERAL CONNECTION

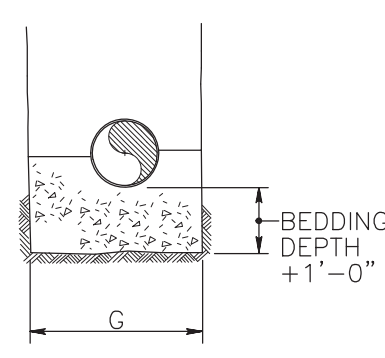
NO SCALE

HORIZONTAL REACTION THRUST BACKINGS

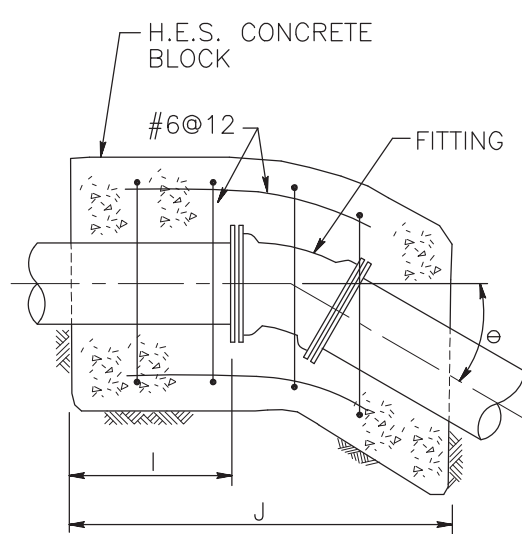
NO SCALE



ELEVATION



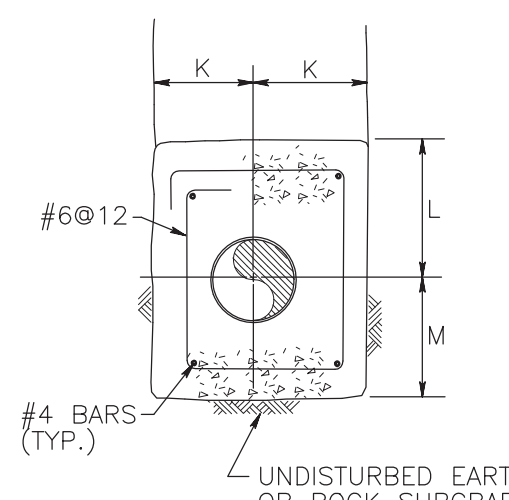
SECTION



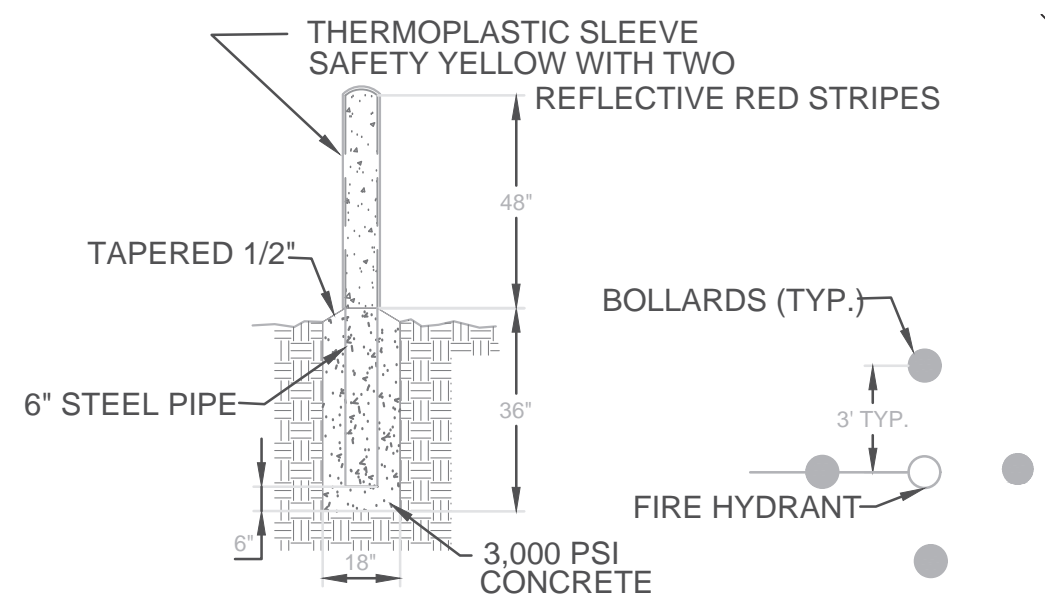
ELEVATION

VERTICAL REACTION THRUST BACKINGS

NO SCALE

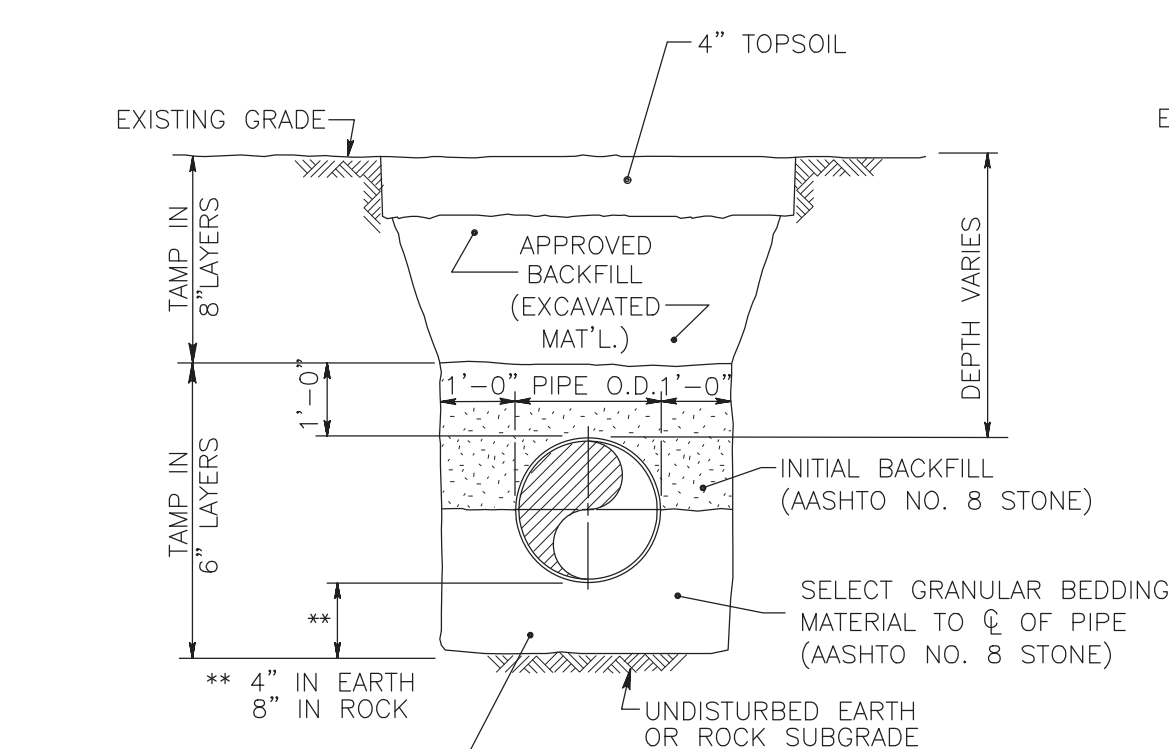


SECTION



BOLLARD DETAIL - TYP

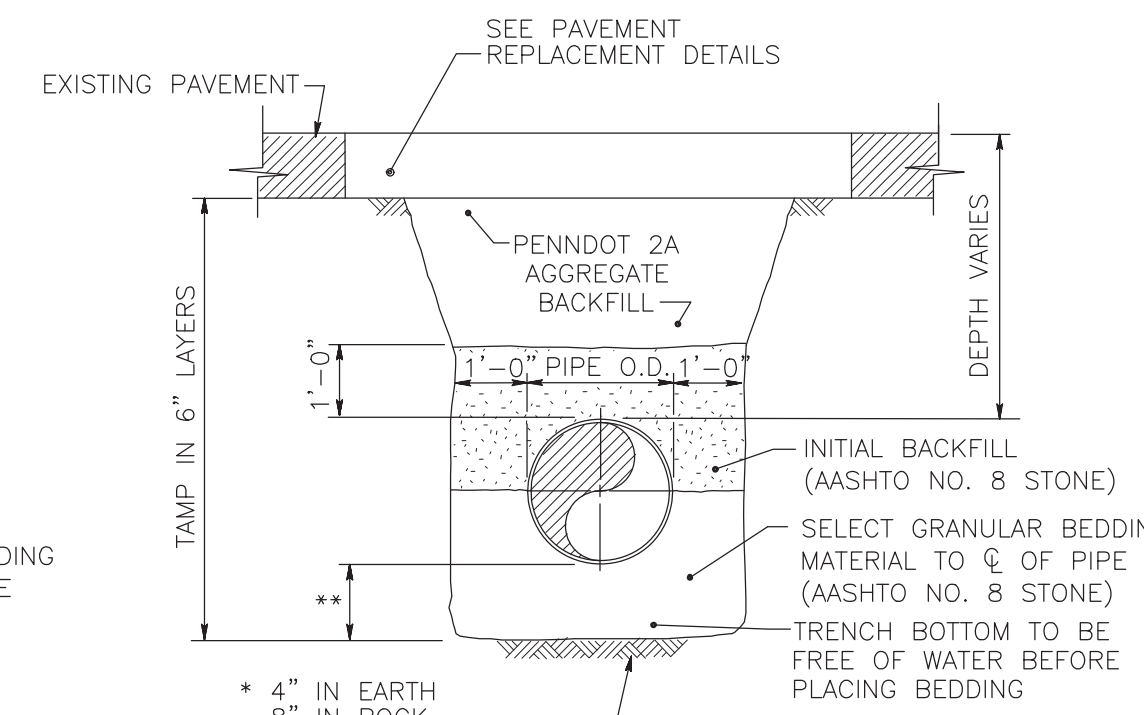
NOT TO SCALE



UNPAVED AREAS

UTILITY PIPELINE TRENCH

NO SCALE

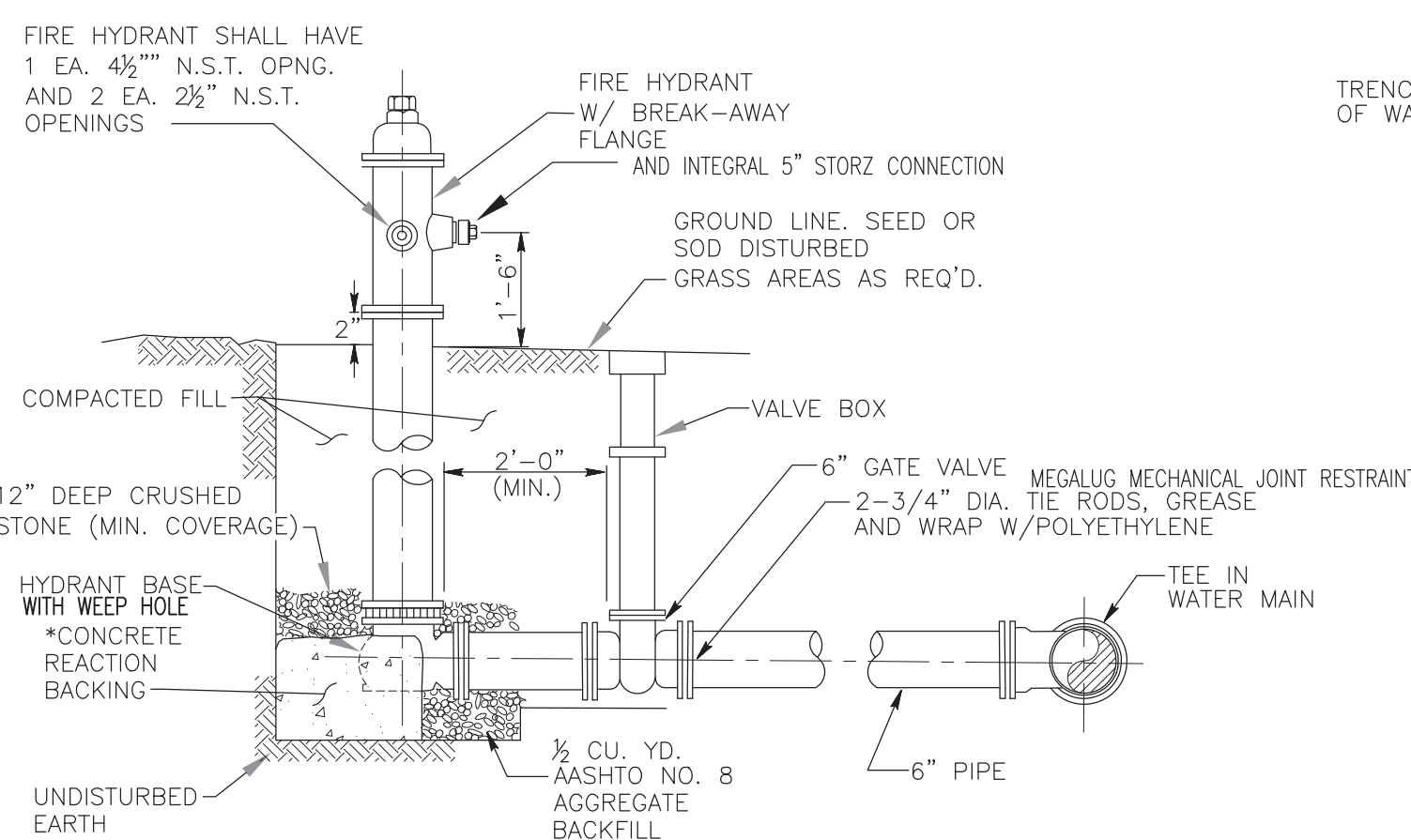


PAVED AREAS

TABLE OF REACTION THRUST BACKING DIMENSIONS														
PIPE DIA.	TEST PRESSURE (PSI)	A	B	C	D	E	F	G	H	I	J	K	L	M
		45	22 1/2	11 1/4	45	22 1/2	11 1/4	45	22 1/2	11 1/4	K	L	M	
6"	200	3'-9 1/2"	3'-11"-0 1/4"	0'-2"-9 1/4"	6'-2"-6 1/4"	1'-3 1/4"	0'-11"-0 1/4"	0'-3"-0 1/4"	0'-11"-3 1/4"	0'-9"	6'-6 1/4"	3'-3 1/2"	6'-11"-3 1/4"	6'-11"-0"
8"	200	4'-9 1/2"	6'-11"-0 1/4"	0'-3"-6 1/2"	8'-2"-0 1/4"	1'-3 1/4"	0'-4"-0 1/4"	0'-11"-9 1/4"	8'-0 1/4"	4'-0 1/2"	6'-11"-4 1/2"	0'-11"-3 1/4"		
10"	200	5'-6 1/4"	0'-11"-9 1/4"	0'-4"-0 1/4"	10'-3"-0 1/4"	1'-9 1/4"	0'-5"-3 1/2"	0'-11"-0 1/4"	10'-0 1/4"	5'-3 1/2"	0'-11"-5 1/2"	0'-11"-6 1/4"		
12"	200	6'-6 1/4"	6'-2"-0 1/4"	0'-4"-9 1/4"	0'-3"-0 1/4"	6'-2"-0 1/4"	0'-5"-6 1/2"	0'-11"-0 1/4"	11'-9 1/4"	6'-0 1/4"	6'-0 1/4"	0'-11"-6 1/4"	6'-11"-6 1/4"	
14"	200	7'-6 1/4"	3'-2"-3 1/4"	3'-5"-6 1/4"	6'-3"-3 1/4"	6'-2"-6 1/4"	6'-11"-6 1/4"	6'-3"-0 1/4"	12'-6 1/4"	6'-6 1/4"	6'-3"-3 1/4"	8'-3"-0 1/2"	0'-12"-0"	

NOTES:

- REACTION THRUST BACKING DIMENSIONS HAVE BEEN CALCULATED USING A SOIL BEARING CAPACITY OF 2000 POUNDS PER SQUARE FOOT AND A TEST PRESSURE OF 200 POUNDS PER SQUARE INCH.
- ALL FITTINGS, VALVES AND HYDRANTS SHALL BE MECHANICAL JOINT AND SHALL HAVE MEGALUG FOLLOWER GLANDS INSTALLED TO MANUFACTURER'S SPECIFICATIONS.



FIRE HYDRANT

NO SCALE

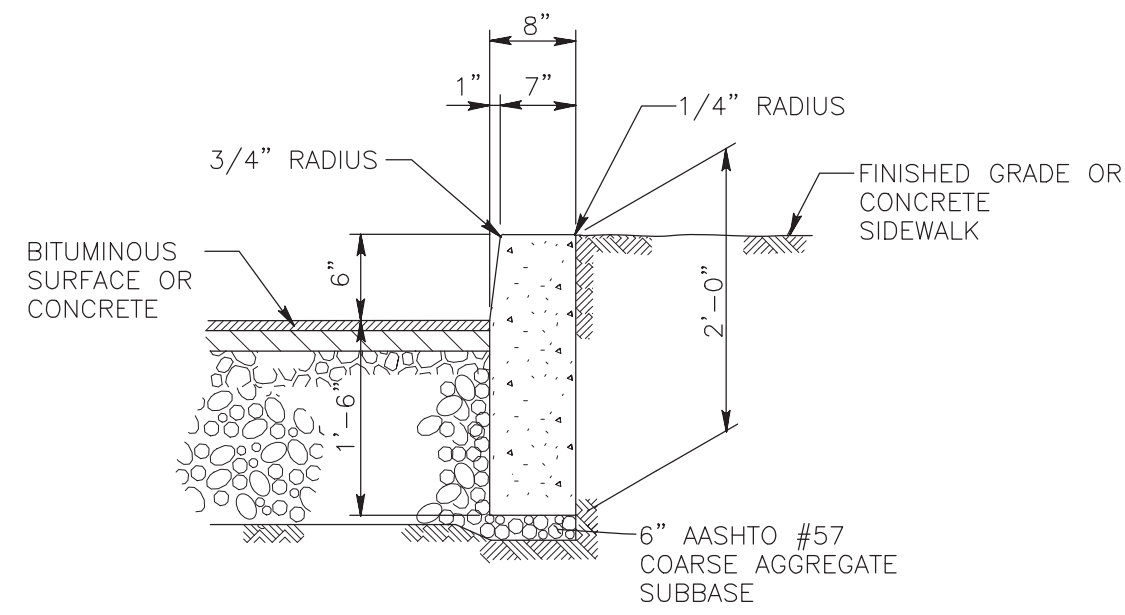
* PROVIDE A MINIMUM OF 3 SQ.FT. BEARING AREA.

REV.	DESCRIPTION	DATE	APPR.

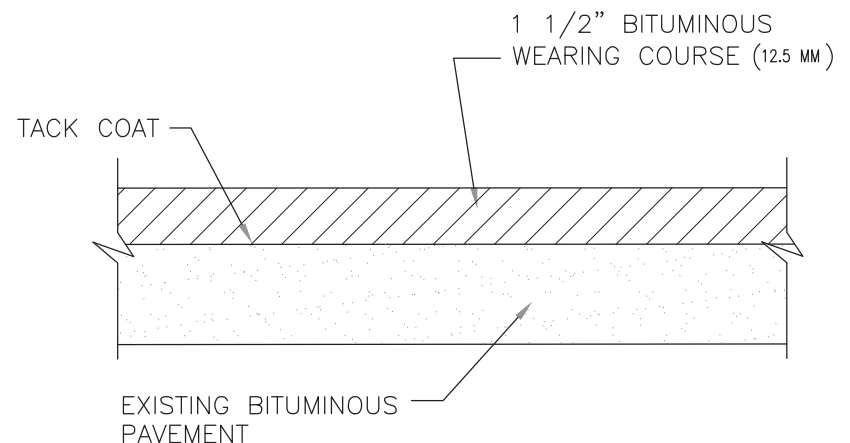
DATE: 28 MAR 20	SOLICITATION NO.:	CONTRACT NO.:
DESIGNED BY: D. STERNER	FILE NUMBER: 4225042 / 42110320	FILE NAME:
CHECKED BY: K. LLOYD	AS NOTED	ANSI D
DESIGNED BY: D. STERNER	FILE NUMBER: 4225042 / 42110320	FILE NAME:
CHECKED BY: K. LLOYD	AS NOTED	ANSI D

FTIG WATERLINE REPLACEMENT
 AREA 8 & 13
 WATERLINE DETAILS

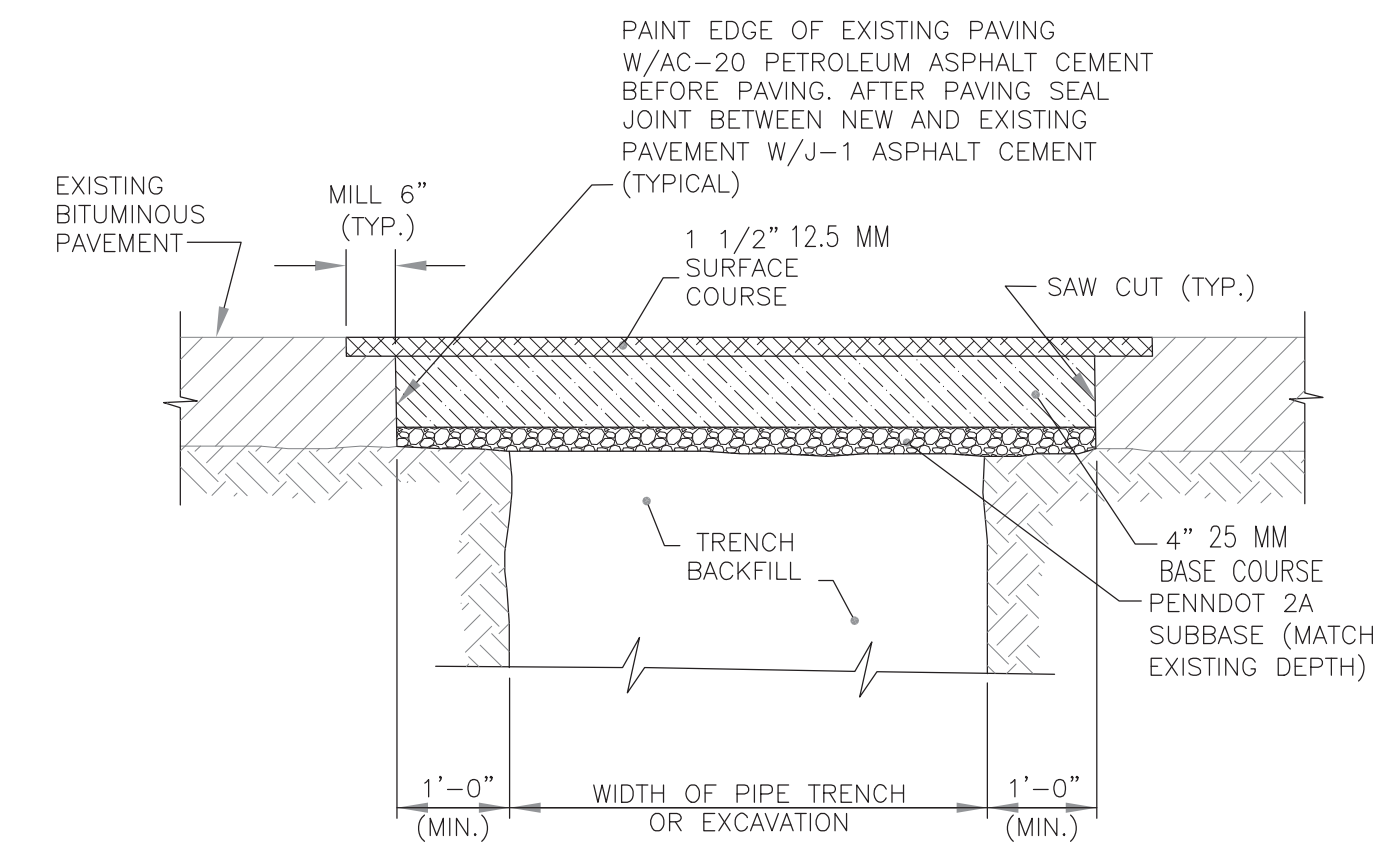
SHEET IDENTIFICATION
C.2.0
 SHEET 10 OF 13



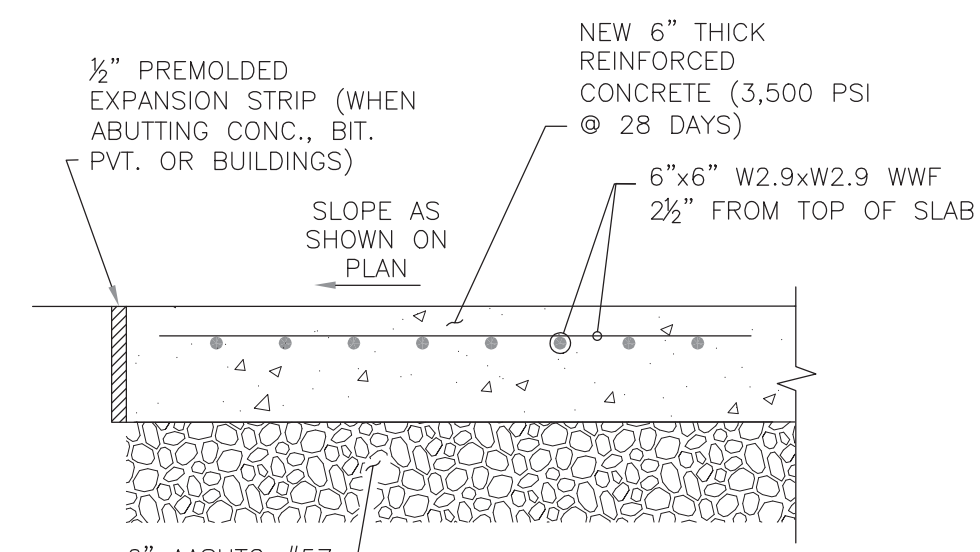
6" CONCRETE CURB SECTION
NO SCALE



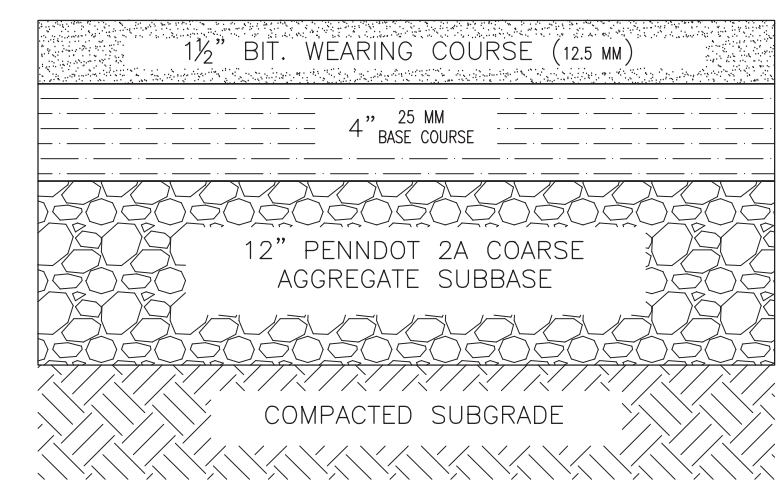
TYPICAL BITUMINOUS PAVEMENT OVERLAY
NO SCALE



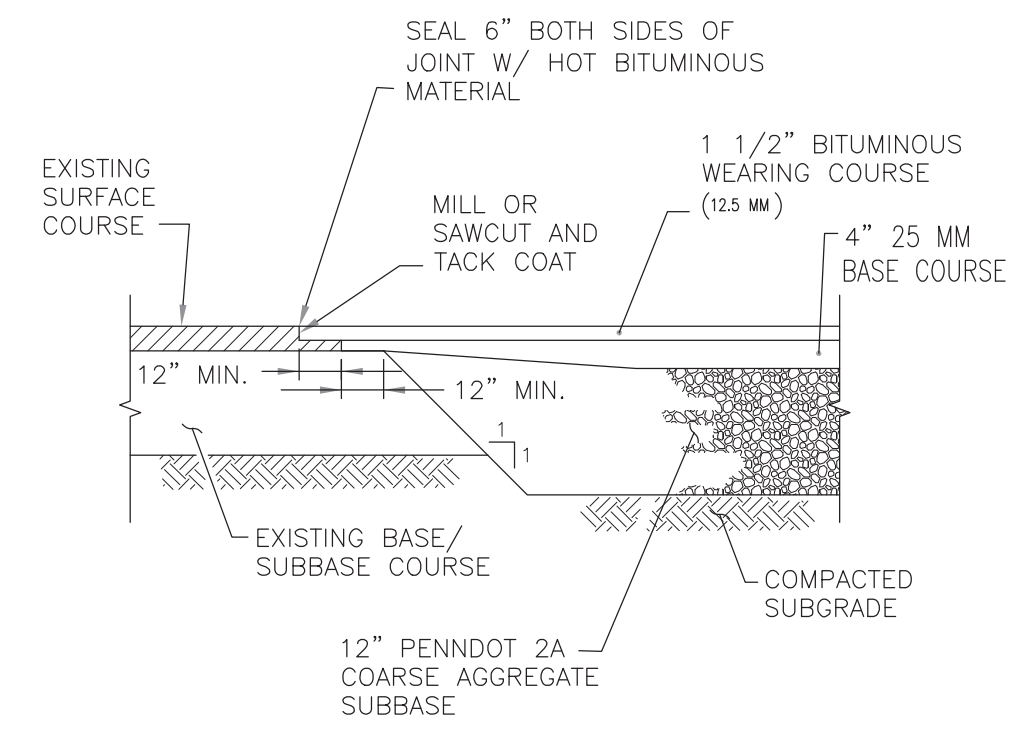
PAVEMENT REPLACEMENT
NO SCALE



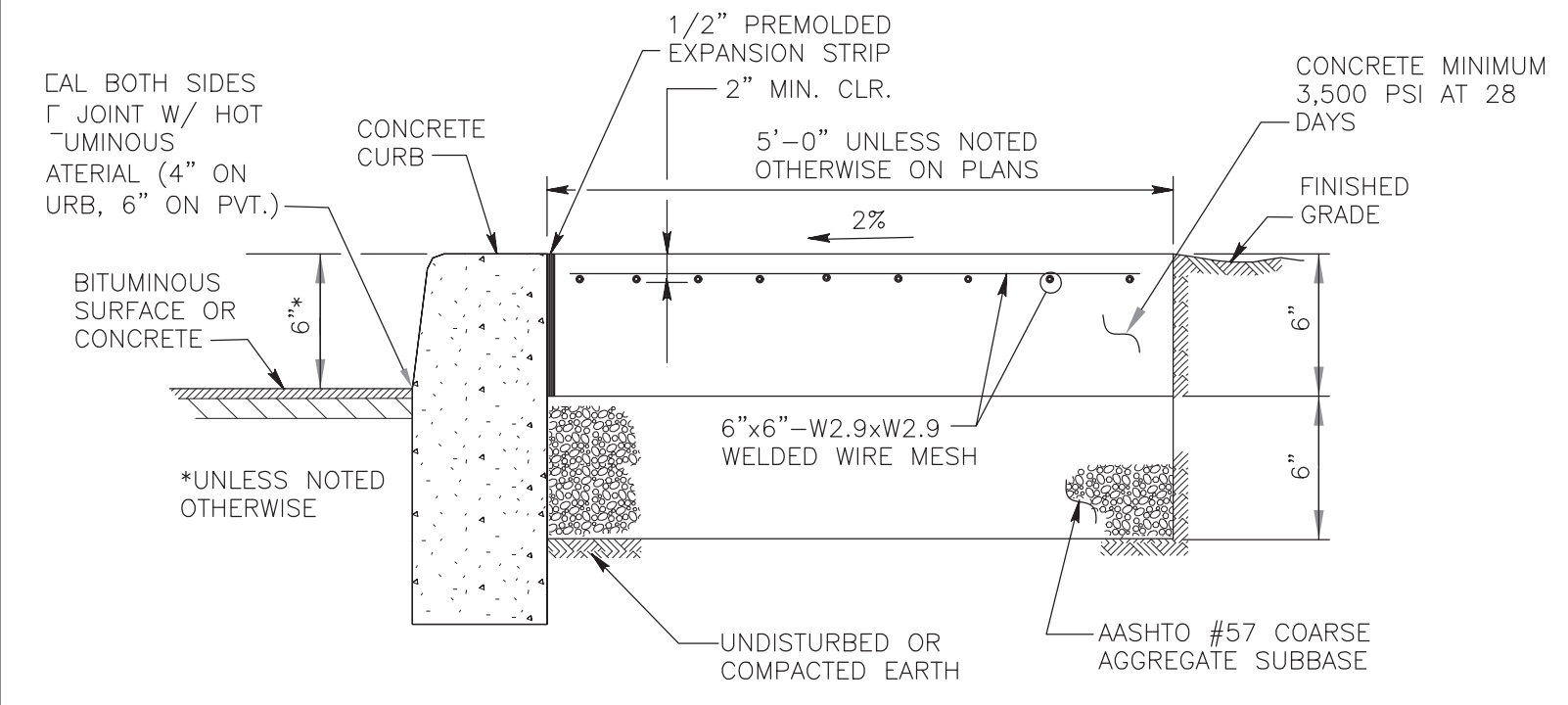
CONCRETE SIDEWALK
NO SCALE



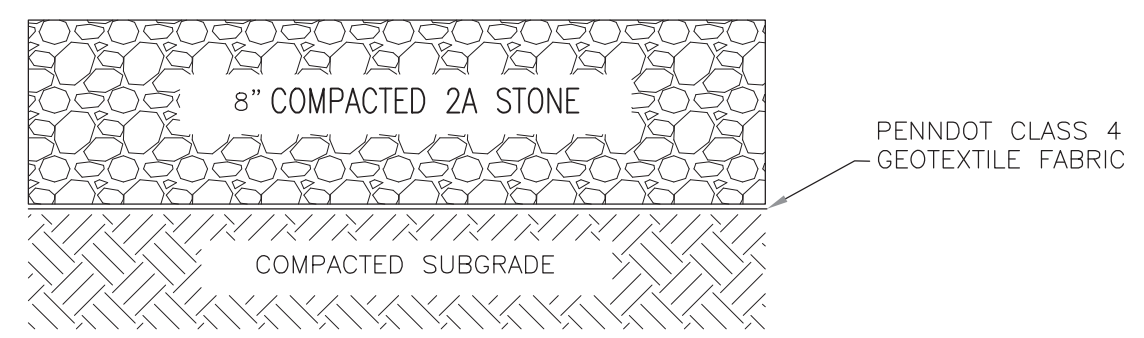
BITUMINOUS PAVEMENT SECTION
NO SCALE



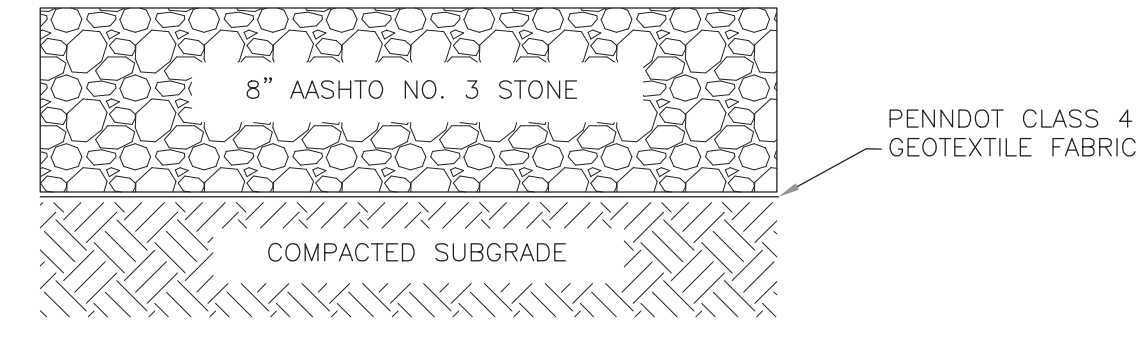
TRANSITION BETWEEN NEW PAVEMENT AND EXISTING PAVEMENT DETAIL
NO SCALE



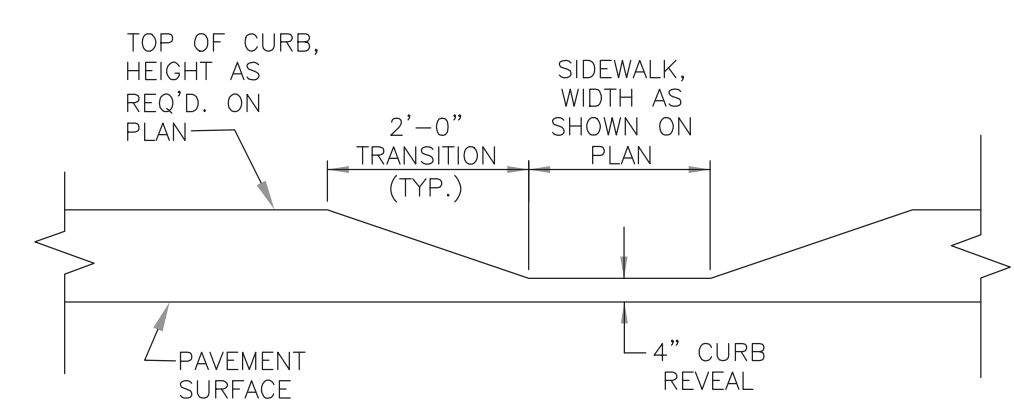
SIDEWALK SECTION AT CURB
NO SCALE



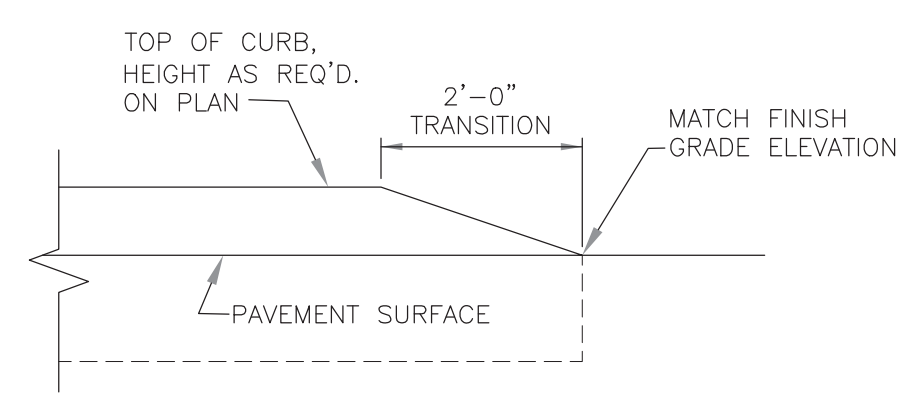
GRAVEL PAVEMENT SECTION
NO SCALE



AASHTO NO. 3 GROUND COVER
NO SCALE



CURB TAPER AT SIDEWALK
NO SCALE



CURB END TRANSITION
NO SCALE

REV.	DESCRIPTION	DATE	APPR.	MARK

DATE: 2025 MAR 28	SOLICITATION NO.:
DESIGNED BY: D. STERNER	CONTRACT NO.:
CHECKED BY: K. LLOYD	FILE NUMBER: 4255042 / 4211030
SUBMITTED BY:	AS NOTED
PROJECT: FTIG WATERLINE REPLACEMENT	FILE NAME:
SCALE: AS NOTED	ANSI D

FTIG WATERLINE REPLACEMENT
AREA 8 & 13
RESTORATION DETAILS

SHEET IDENTIFICATION
C.2.1
SHEET 9 OF 13

