

**NESBITT ENGINEERING, INC.**

SERVING DEVELOPERS, INDUSTRY, BUSINESS AND GOVERNMENT BY PROVIDING PROVEN SOLUTIONS SINCE 1976

# **BREATHITT COUNTY WATER DISTRICT**

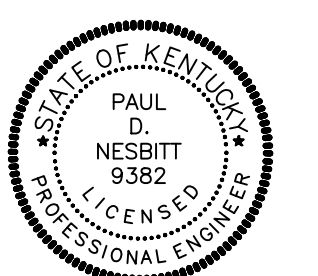
## **FIVE MILE WATERLINE EXTENSION**

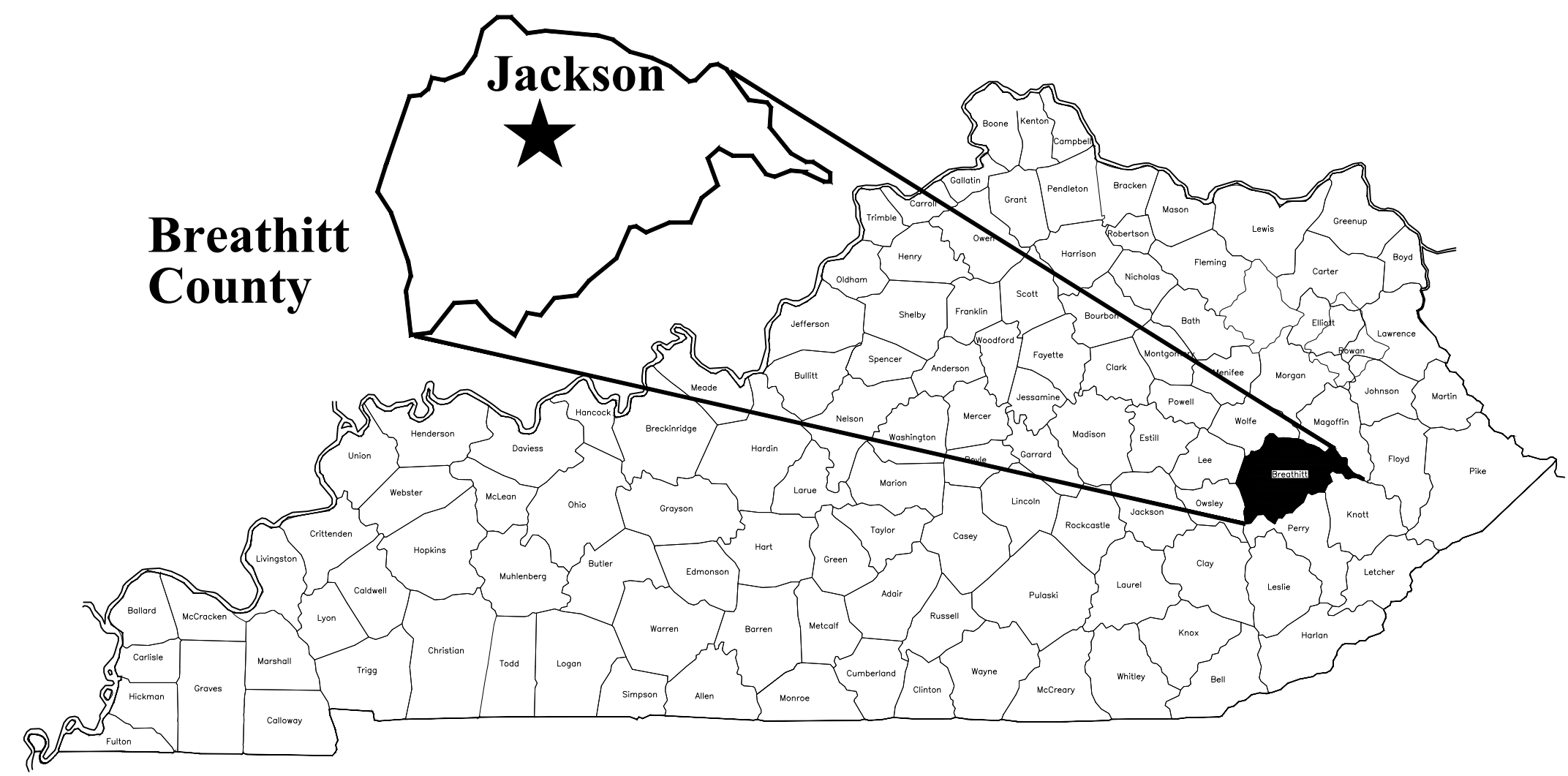
**RECORD DRAWINGS**

**April 2023**

### **WATER COMMISSIONERS**

**BOBBY THORPE JR - CHAIRMAN  
SAMMIE TURNER - VICE CHAIRMAN  
EVA FUGATE - SECRETARY  
CHERYL CAMPBELL - TREASURER  
DAVID INGRAM - MEMBER**





KENTUCKY

A.F.F.	ABOVE FINISHED FLOOR
ALUM	ALUMINUM
APPROX.	APPROXIMATE
BIT	BITUMINOUS
BLDG	BUILDING
BLK	BLOCK
B.M.	BENCH MARK
B'FLY	BUTTERFLY
BOTT	BOTTOM
CHEM	CHEMICAL
C.I.	CAST IRON
C.I.S.P.	CAST IRON SOIL PIPE
E	CENTERLINE
CONC.	CONCRETE
CHLOR	CHLORINE
CL	CLEARANCE
C.W.	COLD WATER
CU	COPPER
C.O.	CLEANOUT
CONT	CONTINUATION
DGA	DENSE GRADED AGGREGATE
D.I.	DUCTILE IRON
DISCH	DISCHARGE
D.I.M.J.	DUCTILE IRON MECHANICAL JOINT
D.I.P.E.	DUCTILE IRON PLAIN END
D.I.P.	DUCTILE IRON PIPE
DEMO	DEMOLITION
DIAG	DIAGONAL
OPER	OPERATOR
OP'NG	OPENING
PE	POLYETHYLENE
P.E.	PLAIN END
PL	PLATE
PROP	PROPOSED
PVC	POLYVINYL CHLORIDE
PRV	PRESSURE RELIEF VALVE
EXIST	EXISTING

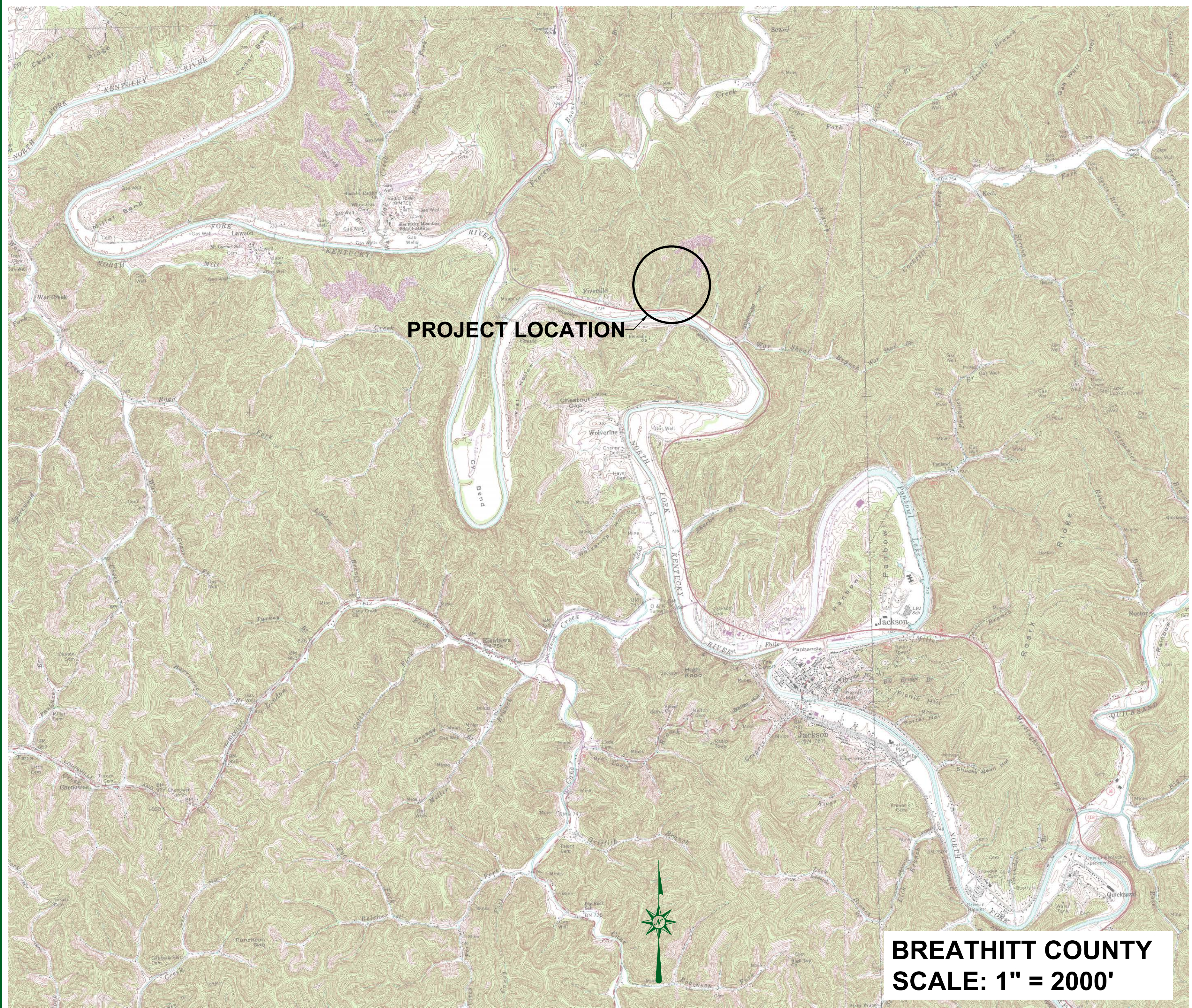
EXT	EXTERIOR
F.D	FLOOR DRAIN
F.F.	FINISHED FLOOR
FLG	FLANGE
FL	FENCELINE
FLOC	FLOCCULATOR
GD	GRADE
DIP	DUCTILE IRON PIPE
H.B.	HOSE BIBB
H	HEIGHT
H.W.	HOT WATER
INFL	INFLUENT
INV.	INVERT
LAV	LAVATORY
L	LENGTH
LOAD'G	LOADING
LNG	LONG
ST	STEEL TUBE
M.H.	MANHOLE
M.J.	MECHANICAL JOINT
MIN.	MINIMUM
MTD.	MOUNTED
MAX.	MAXIMUM
NO.	NUMBER
NRS	NONRISING STEM
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OVERALL DIMENSION
OPER	OPERATOR
DIAG	DIAGONAL
OP'NG	OPENING
PE	POLYETHYLENE
P.E.	PLAIN END
PL	PLATE
PROP	PROPOSED
PVC	POLYVINYL CHLORIDE
PRV	PRESSURE RELIEF VALVE
PRESS	PRESSURE

PRV	PRESSURE RELIEF VALVE
PRESS	PRESSURE
REDUC	REDUCING
RED	REDUCER
REINF.	REINFORCING
REFRIG.	REFRIGERATOR
RM	ROOM
SAN	SANITARY
SCH.	SCHEDULE
SECT	SECTION
SED	SEDIMENTATION
SEW	SEWER
SHT	SHEET
SOL	SOLUTION
SPEC'S.	SPECIFICATION'S
SQ.	SQUARE
S.S.	STAINLESS STEEL
ST	STEEL TUBE
STL	STEEL
STN.	STAINLESS
SURF	SURFACE
SVCS	SERVICES
T	THICK
T.O.C.	TOP OF CONCRETE
TYP.	TYPICAL
TRANS	TRANSITION
VAC	VACUUM
VAL	VALVE
VTR	VENT THRU ROOF
VERT	VERTICAL
WD	WOOD
W.C.	WATER CLOSET
W/	WITH
W.L.	WATER LEVEL
W.S.E.	WATER SURFACE ELEVATION
WWF	WOVEN WIRE FENCE

# SHEET INDEX

<b>INDEX SHEET</b>	
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<b>D-2</b>	<b>EROSION CONTROL &amp; MISC. DETAILS</b>

**RECORD DRAWINGS**



**PROJECT LOCATION**

**BREATHITT COUNTY**  
**SCALE: 1" = 2000'**

### GENERAL NOTES:

- DIMENSIONS OF EXISTING STRUCTURES, EQUIPMENT, ETC. SHALL BE FIELD CONFIRMED BY THE CONTRACTOR. WHERE CRITICAL DIMENSIONS FOR INSTALLATION OF PROPOSED EQUIPMENT ARE INDICATED ON THE DRAWINGS, THE CONTRACTOR SHALL CONFIRM THESE DIMENSIONS FOR ACTUAL EQUIPMENT FURNISHED. ALL KNOWN DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER.
- THE CONTRACTOR SHALL USE ALL POSSIBLE CARE DURING EXCAVATION ON THIS PROJECT SO AS NOT TO DISTURB ANY EXISTING UTILITY WHETHER SHOWN ON PLANS OR NOT. ANY UTILITY DISTURBED OR DAMAGED BY THE CONTRACTOR DURING HIS CONSTRUCTION OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXTRA COST TO THE OWNER.
- THE CONTRACTOR SHALL CONFINE ALL CONSTRUCTION ACTIVITY TO THE AREA WITHIN EXISTING EASEMENTS AND CONSTRUCTION LIMITS, UNLESS OTHERWISE APPROVED IN WRITING BY THE OWNER.
- THE CONTRACTOR WILL BE SOLELY LIABLE FOR ANY WORK HE PERFORMS OUTSIDE OF LEGAL EASEMENTS OR CONSTRUCTION LIMITS.
- THE CONTRACTOR MUST CONTACT ALL UTILITY OWNERS AND HAVE THEM FIELD LOCATE THEIR EXISTING LINES PRIOR TO ANY CONSTRUCTION ACTIVITY.
- EFFORTS HAVE BEEN MADE TO INDICATE ACCURATE LOCATIONS OF SOME EXISTING STRUCTURES, PIPING AND UTILITIES. HOWEVER THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE AND OTHER EXISTING CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN INFORMATION DEPICTED BY THE CONSTRUCTION DRAWINGS AND ACTUAL FIELD CONDITIONS WHICH WOULD SIGNIFICANTLY ALTER THE DESIGN INTENT OF THE CONSTRUCTION DRAWINGS PRIOR TO COMMENCING HIS CONSTRUCTION OPERATIONS. DIMENSIONS OF EXISTING STRUCTURES AND/OR SITE RESTRICTIONS ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND CONFIRM ALL DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURES AND TOPOGRAPHY IN THE FIELD NECESSARY FOR HIS CONSTRUCTION OPERATION.
- THE CONTRACTOR SHALL USE ALL POSSIBLE CARE DURING EXCAVATION ON THIS PROJECT SO AS NOT TO DISTURB OR DAMAGE ANY EXISTING UTILITY OR STRUCTURE NOT SCHEDULED FOR DEMOLITION WHETHER DEPICTED OR NOT IN THE CONSTRUCTION DRAWINGS. ANY DAMAGE TO THE ABOVE MENTIONED ITEMS CAUSED DIRECTLY OR INDIRECTLY BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED PRIOR TO BEING DAMAGED.
- THE CONTRACTOR SHALL CONTACT AND OBTAIN THE PERMISSION OF EXISTING UTILITY OWNERS 48 HOURS (MIN.) PRIOR TO ANY CONSTRUCTION ACTIVITY INTERRUPTING OPERATION OF SAID UTILITY.
- UNLESS OTHERWISE NOTED, ALL BURIED PIPES SHALL HAVE 30" (MIN.) COVER AS MEASURED FROM FINISHED GRADE TO THE OUTSIDE SURFACE OF THE PIPE.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO WORK ALL APPLICABLE DRAWINGS AND THE APPROPRIATE SPECIFICATIONS AS A UNIT. ANY OMISSIONS, DELETIONS, OR CONFLICTS ARISING AS A RESULT OF FAILURE TO INCORPORATE ALL DRAWINGS AND SPECIFICATIONS WHICH APPLY SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDED COST TO THE OWNER.

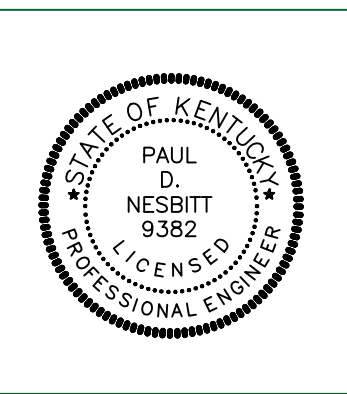
### CONSTRUCTION ON STATE RIGHT-OF-WAY NOTES:

- WATER MAIN/SEWER LINES TO BE CONSTRUCTED WITHIN THE KENTUCKY TRANSPORTATION CABINET RIGHT-OF-WAY. TRENCHES SHALL BE OF A DEPTH SUFFICIENT TO PROVIDE A MINIMUM COVER OF 42" FROM THE EXISTING GROUND SURFACE TO THE TOP OF THE PIPE AND BE LOCATED APPROXIMATELY AS SHOWN UNLESS OTHERWISE NOTED. SEE INDIVIDUAL SHEETS FOR DETAILS.
- ALL BORES UNDER STATE HIGHWAYS RIGHT-OF-WAY SHALL BE A MINIMUM OF 42" DEPTH UNDER BOTTOM OF DITCH LINE TO TOP OF THE PROPOSED BORE AND/OR CASING PIPE ON BOTH SIDES OF THE HIGHWAY.
- ROCK BLASTING: THERE SHALL BE NO BLASTING WITHIN STATE RIGHT-OF-WAY WITHOUT WRITTEN CONSENT FROM THE KENTUCKY TRANSPORTATION CABINET.
- PROTECTION OF EXISTING PAVING: CARE SHALL BE TAKEN BY THE CONTRACTOR TO AVOID CRACKING OR BREAKING THE BITUMINOUS PAVING. ALL DAMAGE TO THE EXISTING PAVING CAUSED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER. PAVING PROTECTION SHALL BE ACCOMPLISHED BY THE USE OF RUBBER AND STREET PADDED MACHINERY OR OTHER APPROVED EQUIPMENT WELL SUITED FOR THIS TYPE OF CONSTRUCTION.
- BANK AND DITCH PROTECTION EXCAVATION: DURING CONSTRUCTION, ALL EMBANKMENTS, REFILLS AND EXCAVATIONS SHALL BE KEPT SHAPED AND DRAINED BY THE CONTRACTOR. DITCHES AND DRAINS ALONG THE HIGHWAYS SHALL BE MAINTAINED IN SUCH A MANNER AS TO DRAIN EFFECTIVELY AT ALL TIMES.
- PRIVATE ENTRANCE ROAD: ALL ROADWAYS AND DRIVEWAYS WITHIN THE WORK LIMITS OF STATE RIGHT-OF-WAYS SHALL BE REFILLED TO THE NATURAL SURFACE OF THE GROUND WITH APPROVED MATERIAL. THE MATERIAL SHALL BE PLACED AND COMPACTED TO A SMOOTHNESS SUITABLE FOR TRAFFIC. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR MAINTAINING THESE ROADWAYS UNTIL THE RESTORATION IS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL NOTE THAT ALL PRIVATE BUSINESSES AND RESIDENCES ALONG THE ROUTE OF THE PROPOSED WATER MAIN/SEWER LINE CONSTRUCTION MUST HAVE ACCESS TO THEIR PROPERTIES AT ALL TIMES DURING CONSTRUCTION.
- PROTECTION OF EXISTING DRAINAGE CULVERTS: ALL LOCATIONS WHERE THE PROPOSED WATER MAIN/SEWER LINE IS PARALLEL WITH OR CROSSING AN EXISTING STORM SEWER, THE COST OF RELATING EXISTING CULVERT PIPES OR THE EXTRA DEPTH REQUIRED TO AVOID THE EXISTING CULVERT IS CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND IS NOT A PAY ITEM.
- SOME EXISTING UTILITIES HAVE NOT BEEN SHOWN: THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE REPRESENTATIVES OF THE VARIOUS UTILITIES WHEN WORKING NEAR ANY EXISTING UTILITY. NO ADDITIONAL PAYMENT TO THE CONTRACTOR WILL BE MADE FOR EXTRA DEPTH REQUIRED TO AVOID ANY EXISTING UTILITY.

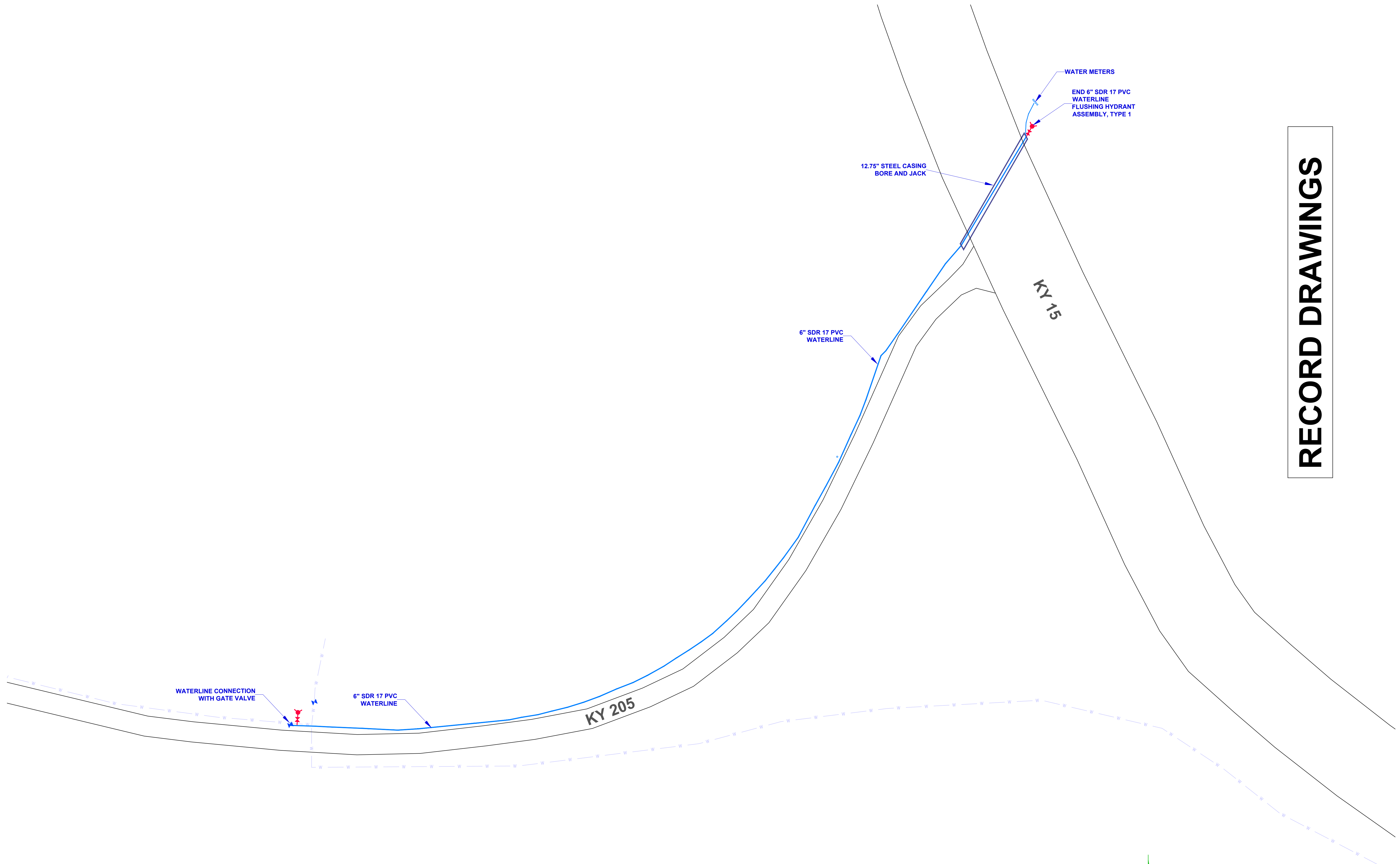
**CALL THE KENTUCKY ONE CALL BEFORE DIGGING:**  
**KENTUCKY UNDERGROUND PROTECTION, INC. 1-800-752-6007**  
A FEDERAL LAW NOW IN EFFECT STATES THAT ANY PERSON WHO ENGAGES IN EXCAVATION ACTIVITIES WITHOUT FIRST USING AN AVAILABLE ONE-CALL NOTIFICATION SYSTEM TO DETERMINE LOCATIONS OF UNDERGROUND FACILITIES; OR WITHOUT HEEDING LOCATION INFORMATION OR MARKINGS AND SUBSEQUENTLY DAMAGES A PIPELINE FACILITY SHALL BE SUBJECT TO A FINE, IMPRISONMENT, OR BOTH. THE LAW ALSO STATES THAT OSHA MAY BE NOTIFIED OF ANY ACCIDENT CAUSED BY AN EXCAVATOR.  
**NATIONAL ONE-CALL REFERRAL NUMBER 1-800-258-0808**



**nesbitt**  
engineering, inc.  
227 N. Upper Street  
Lexington, Kentucky  
40507-1016  
Tel (859) 233-3111  
Fax (859) 259-2717



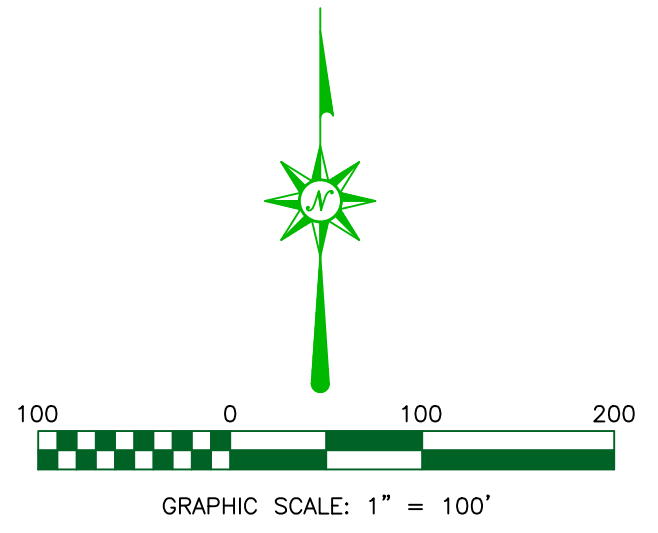
# RECORD DRAWINGS



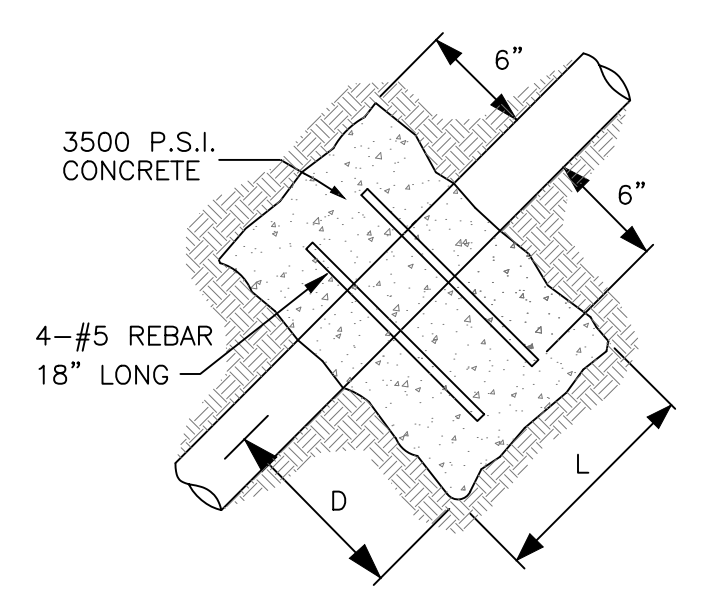
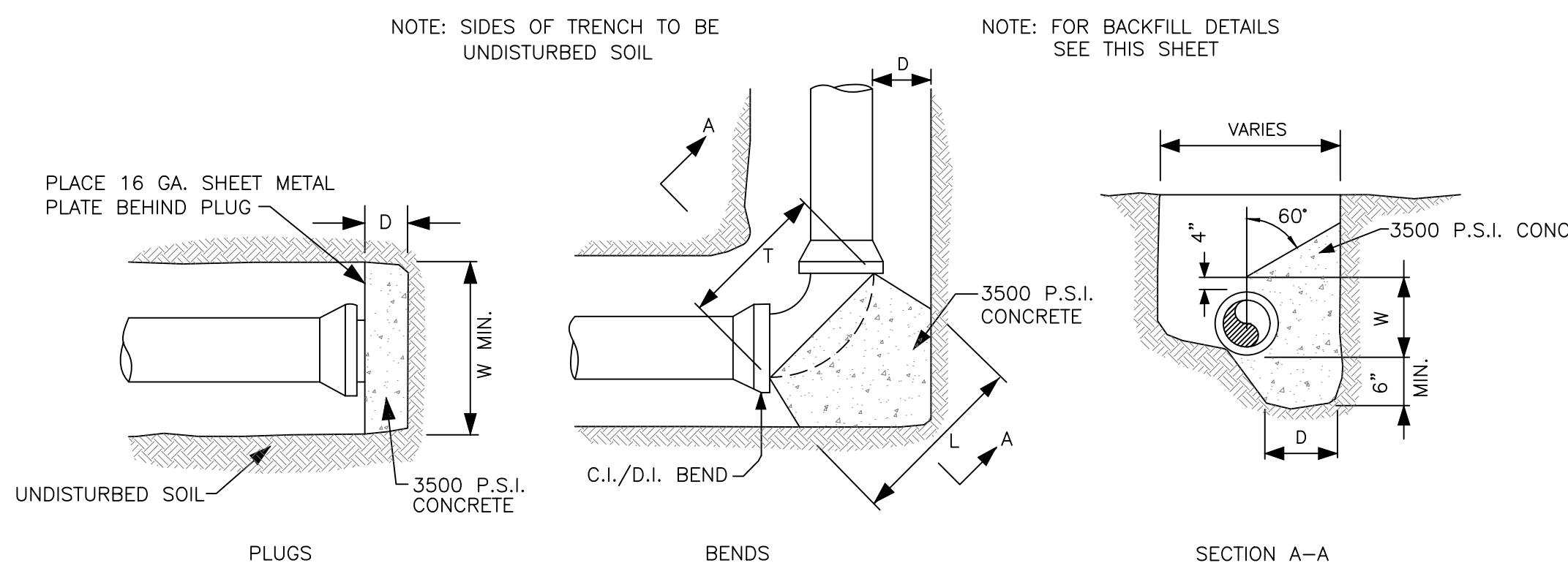
NOTE: PROPERTY INFORMATION PROVIDED BY THE BREATHITT COUNTY PROPERTY VALUATION OFFICE. PROPERTY LINES ARE APPROXIMATE AND DO NOT REFLECT AN ACTUAL FIELD SURVEY.

NOTE: PER KTC-DOH REQUIREMENTS THERE MUST BE A MINIMUM COVER OF 42" IN STATE ROW. THERE SHALL BE NO SURFACE APPURTENANCES IN THE DITCHLINE.

LEGEND	
	NEW
	EXISTING
	GATE VALVE AND BOX
	HYDRANT ASSEMBLY INCLUDING REDUCER
	AIR RELIEF VALVE (ARV)
	REDUCER (SIZE AS INDICATED)
	SERVICE METER
	WATER LINE (SIZE AS INDICATED)
	STEEL ENCASED PIPE (SIZE AND BORE OR OPEN TRENCH AS NOTED)
	EXISTING RIGHT OF WAY



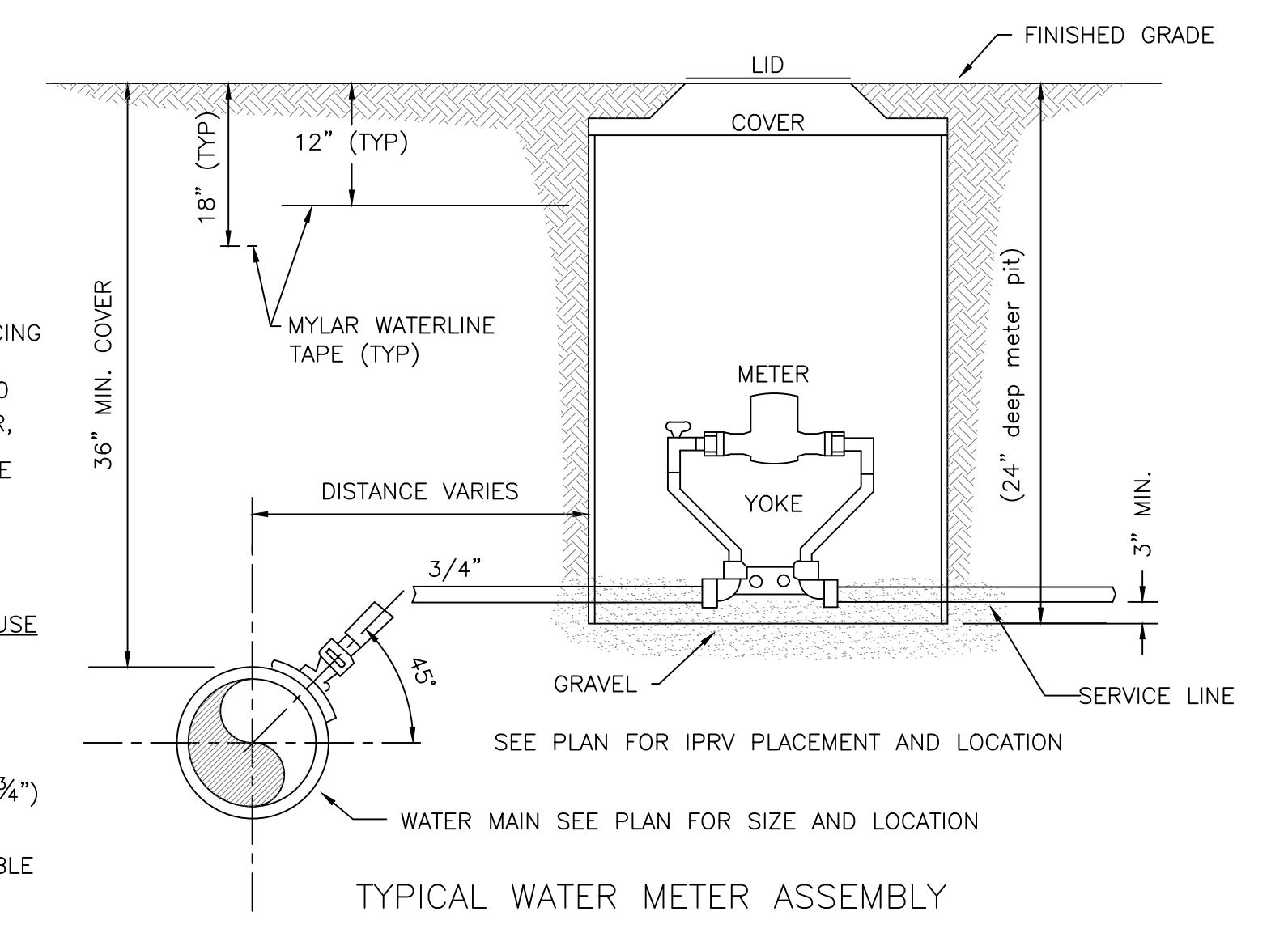
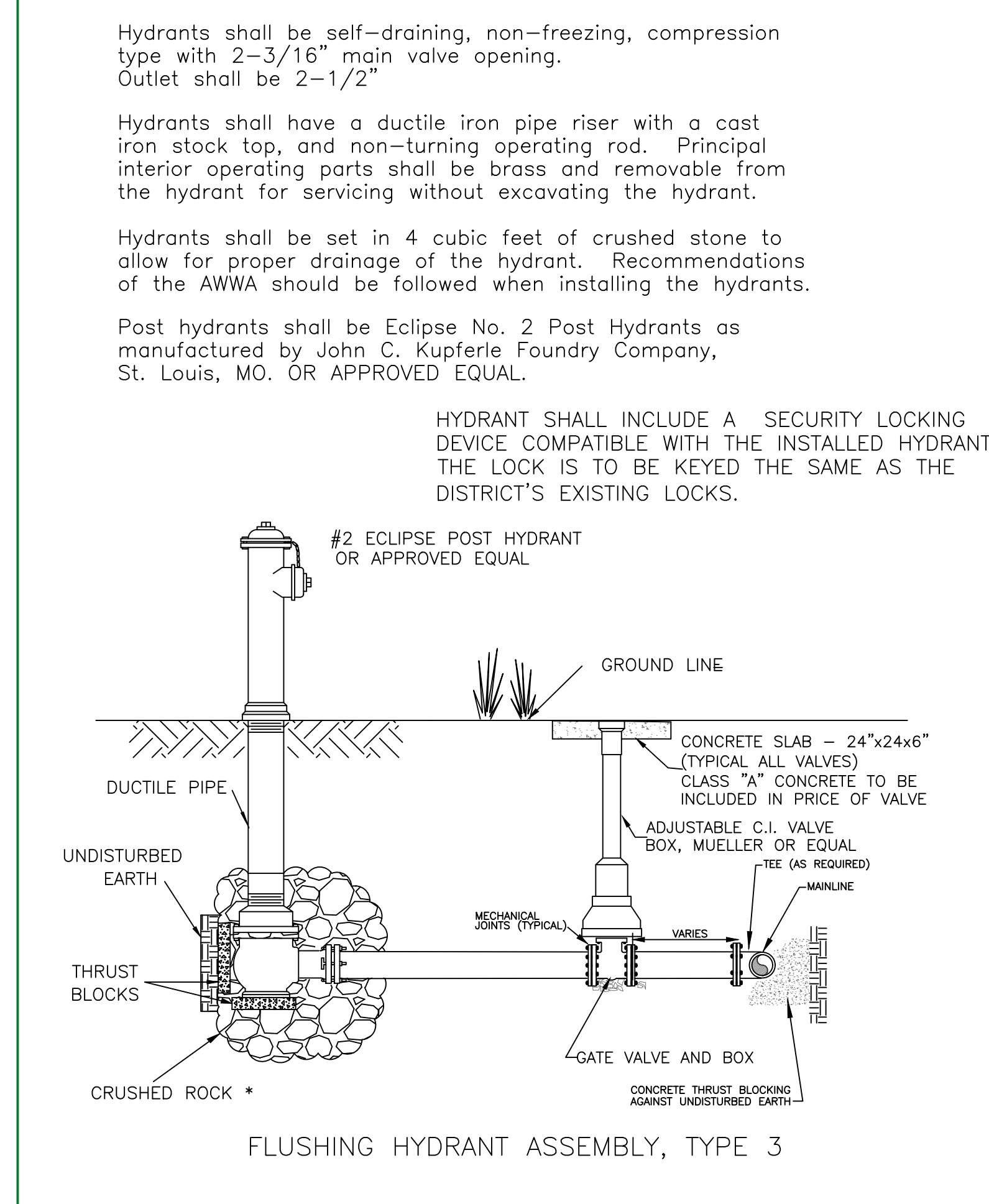
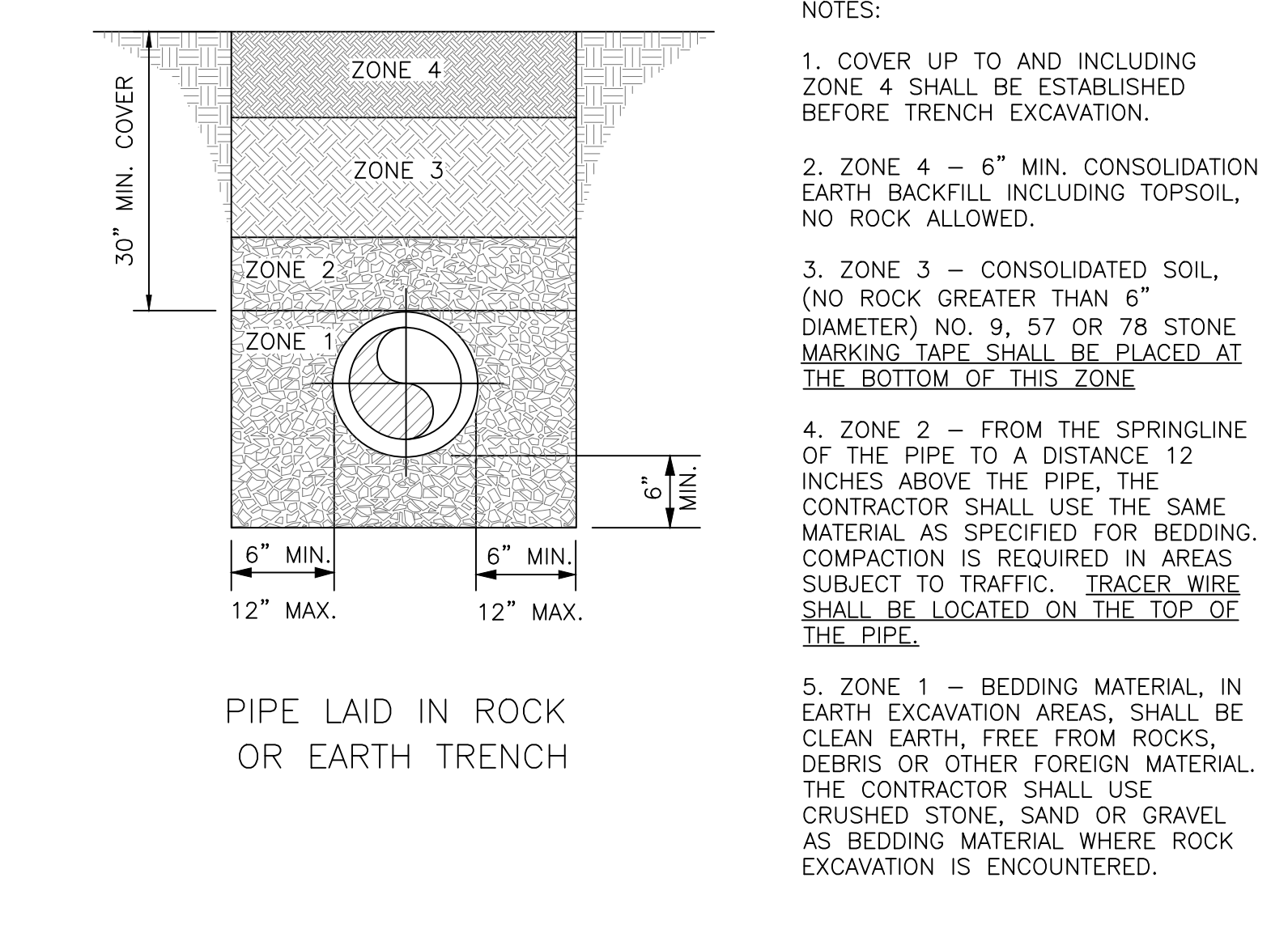
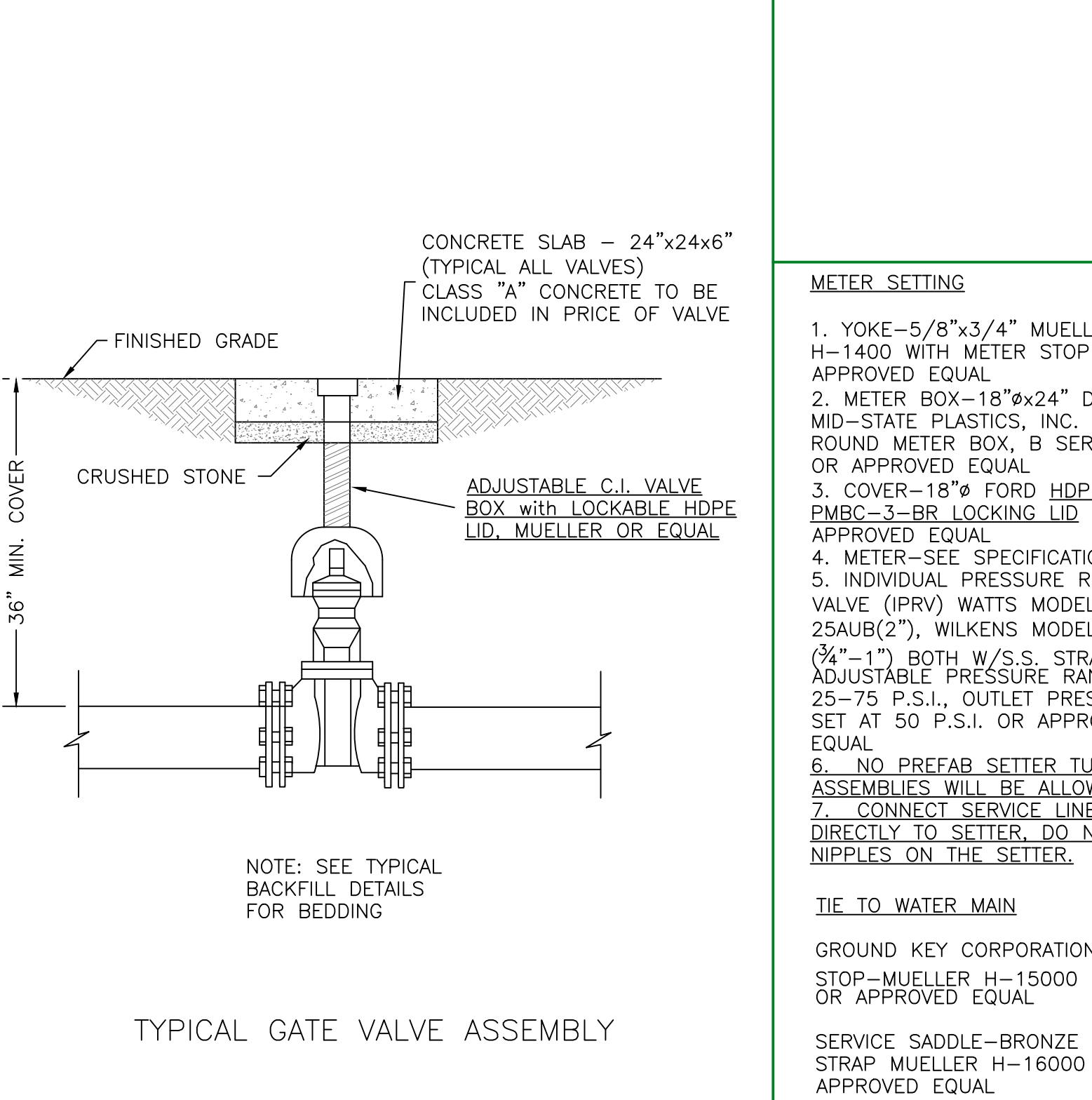
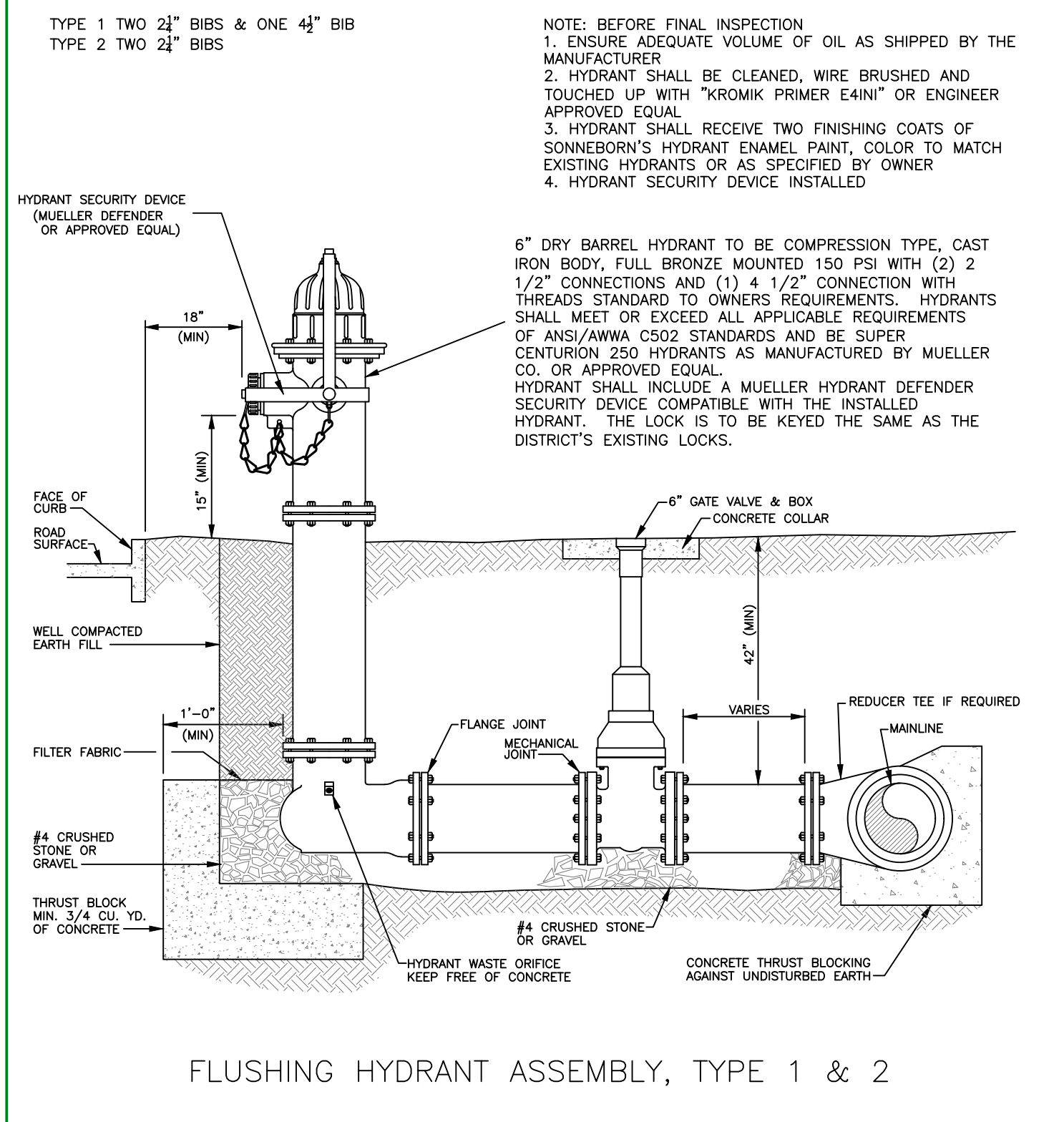
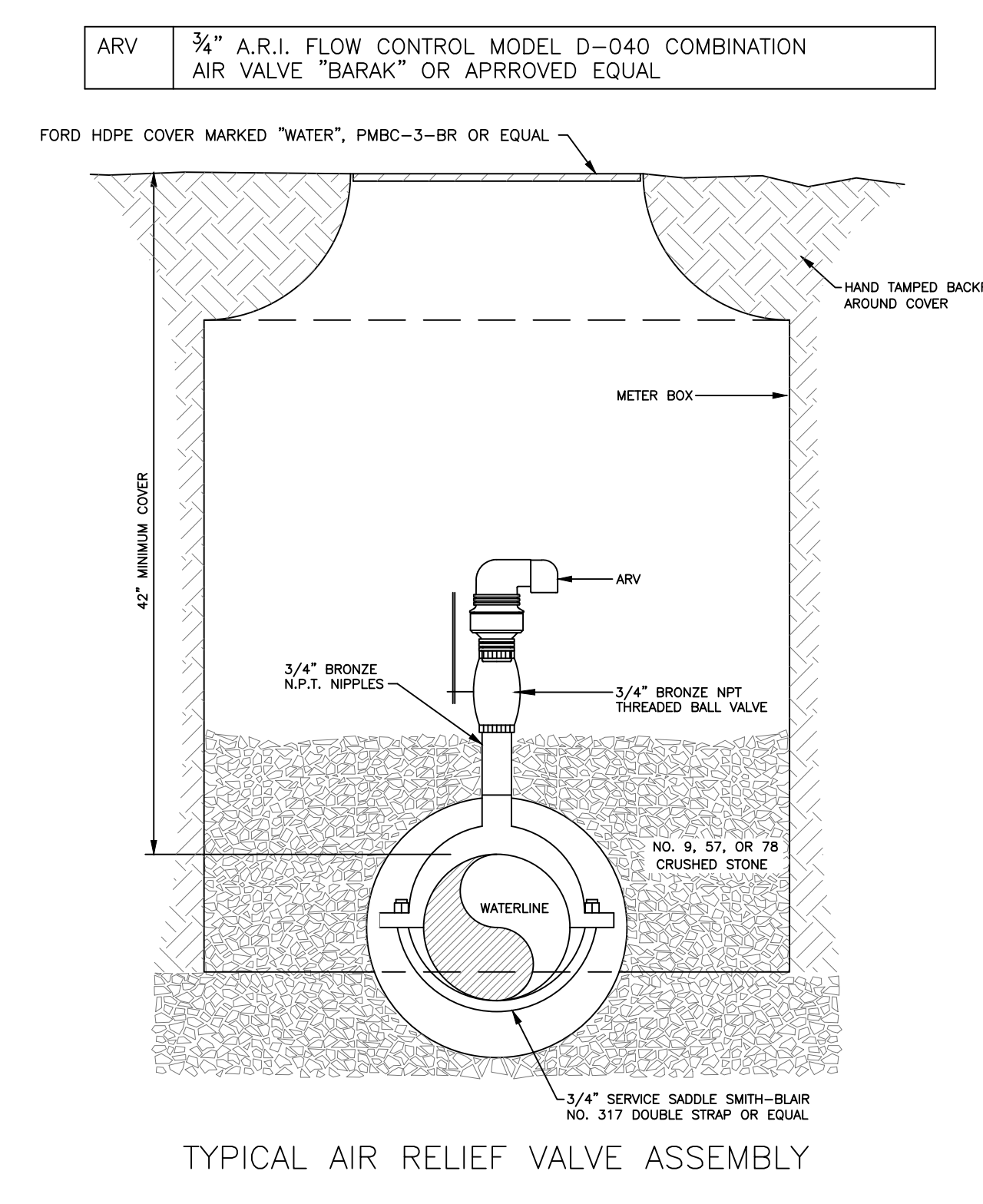
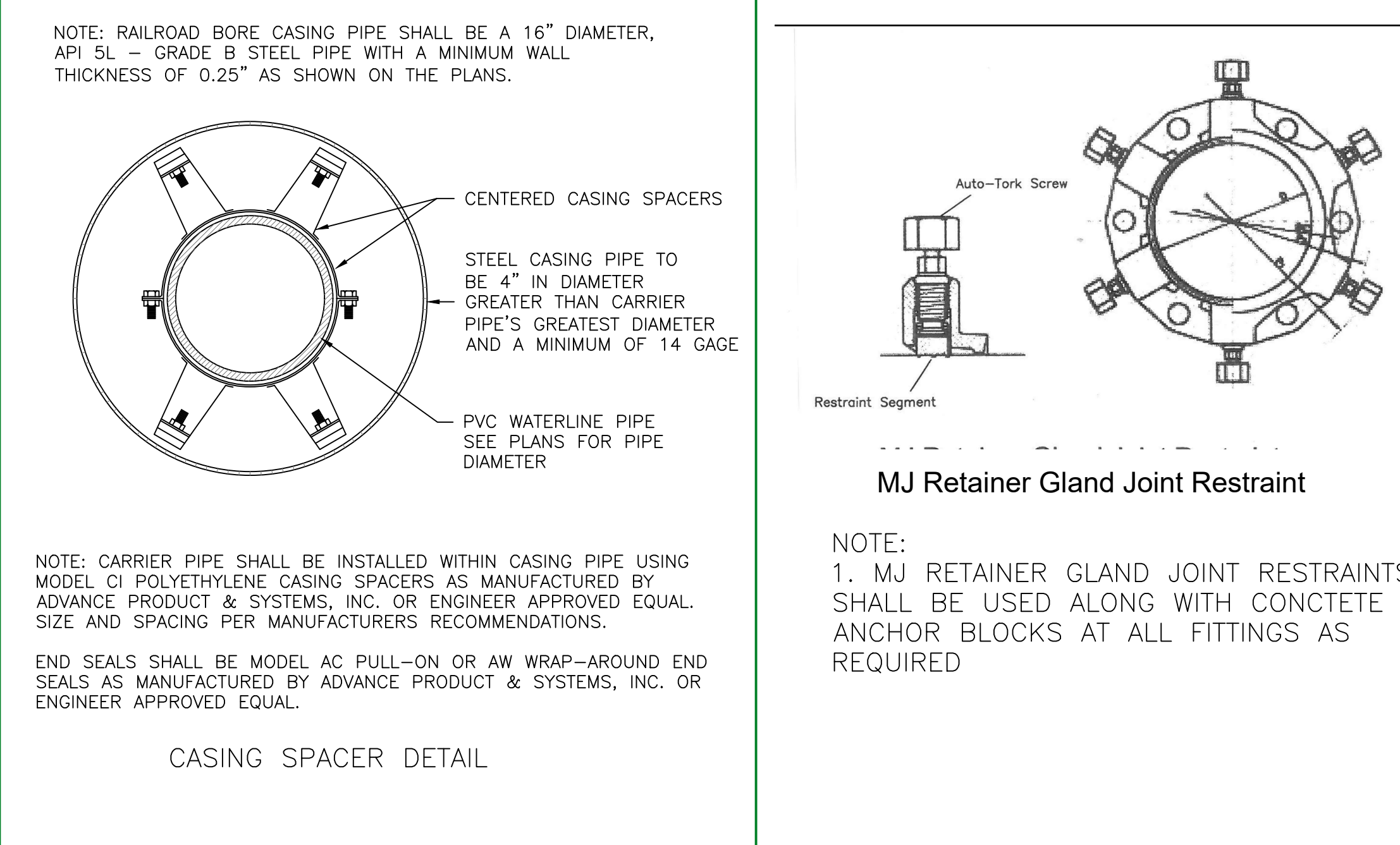
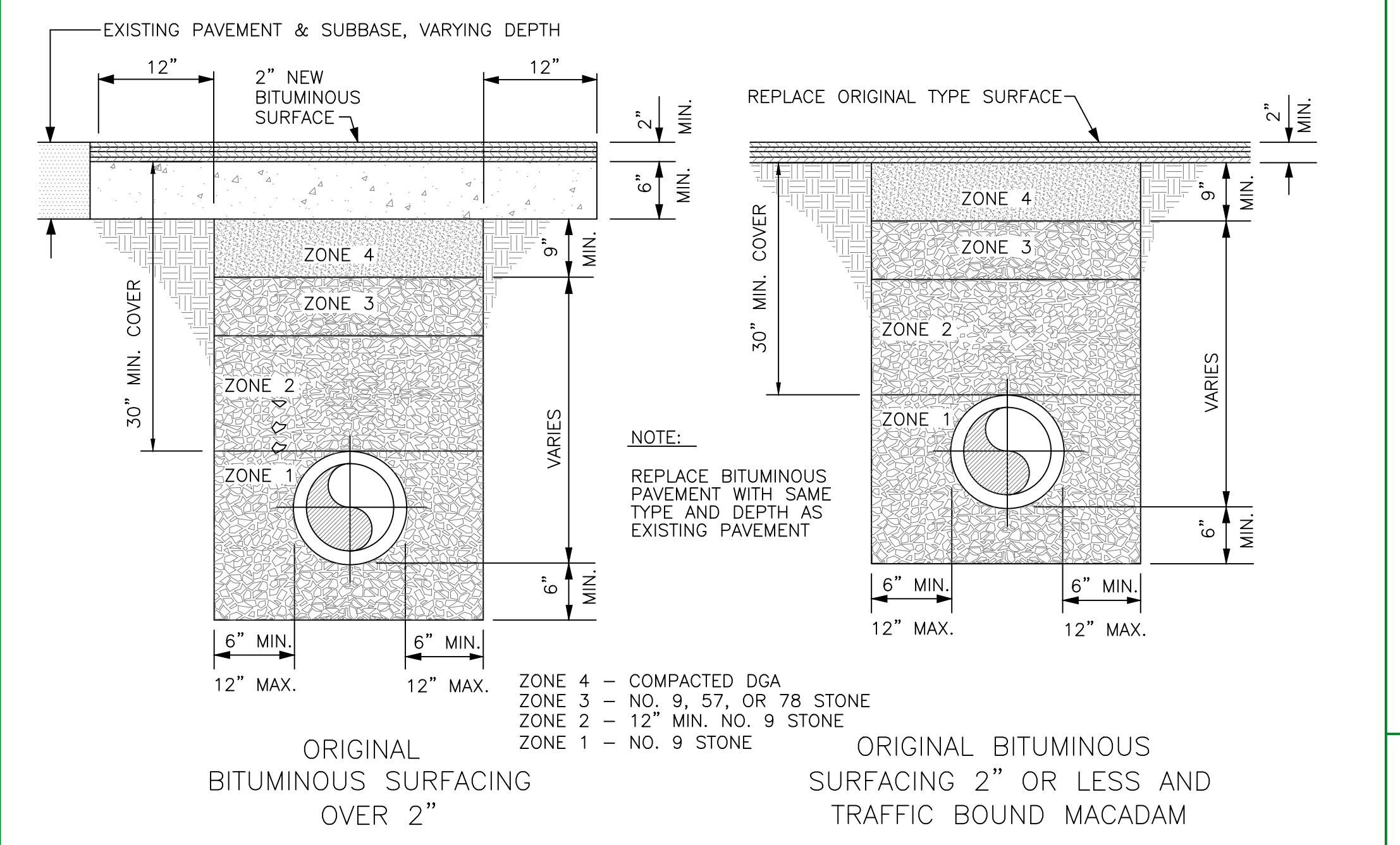
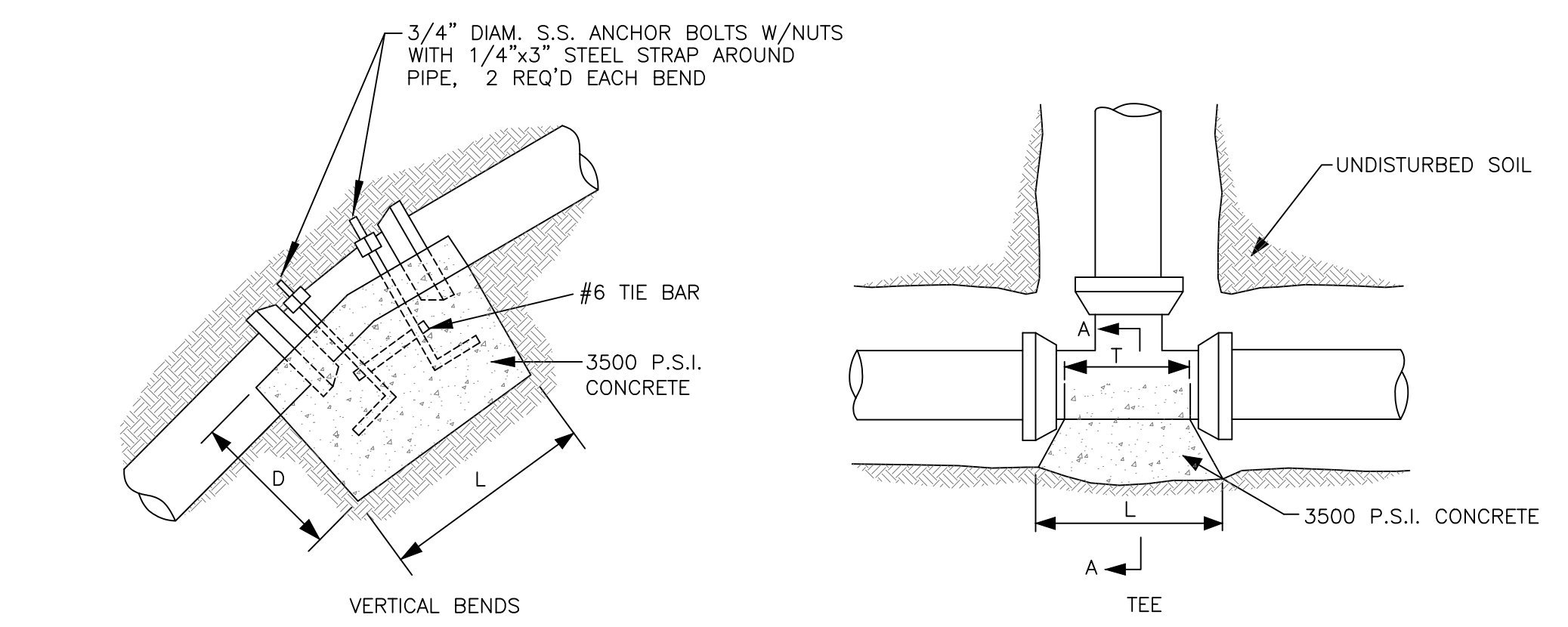
<b>nesbitt engineering, inc.</b> <small>providing proven solutions since 1976</small>	<b>WATERLINE EXTENSION</b>
BREATHITT COUNTY WATER DISTRICT FIVE MILE WATERLINE EXTENSION <small>job no. 998-51</small>	1137 MAIN STREET JACKSON, KY 41339
<small>drawn by: MMS</small>	<small>date: 5/1/2023</small>
	SHEET NO. <b>C-1</b>



DIMENSIONS FOR THRUST AND ANCHOR BLOCKS

PIPE SIZE	3"	4"	6"	8"	10"	12"	14"	18"	24"
PLUGS									
D	6"	6"	6"	6"	6"	6"	6"	6"	6"
L&W	16"	18"	20"	22"	24"	26"	28"	32"	38"
EIGHT BEND (45°), 1/16 BEND (22-1/2°)									
D	6"	6"	6"	6"	6"	6"	6"	6"	6"
L	14"	16"	18"	20"	22"	24"	26"	30"	36"
T	12"	14"	16"	18"	20"	22"	24"	28"	34"
W	6"	8"	12"	14"	16"	18"	20"	24"	30"
QUARTER BEND (90°)									
D	6"	6"	8"	10"	10"	10"	12"	12"	14"
L	18"	21"	24"	27"	30"	33"	36"	38"	44"
T	12"	14"	16"	18"	20"	22"	24"	28"	34"
W	6"	8"	12"	16"	18"	20"	22"	26"	32"
VERTICAL BEND & STRAIGHT PIPE									
D	12"	12"	15"	15"	18"	18"	20"	24"	30"
L	18"	18"	24"	24"	30"	30"	32"	36"	42"
T	12"	14"	16"	18"	20"	22"	24"	28"	34"

NOTE: SEE PLAN SHEETS FOR SIZE AND LOCATION OF PIPE



LAST PLOTTED: \_\_\_\_\_

LAST SAVED: \_\_\_\_\_

REVISIONS:

**RECORD DRAWINGS**

FIVE MILE WATERLINE EXTENSION  
BREATHITT COUNTY WATER DISTRICT  
1137 MAIN STREET  
JACKSON, KY 41339

STANDARD DETAILS - WATER

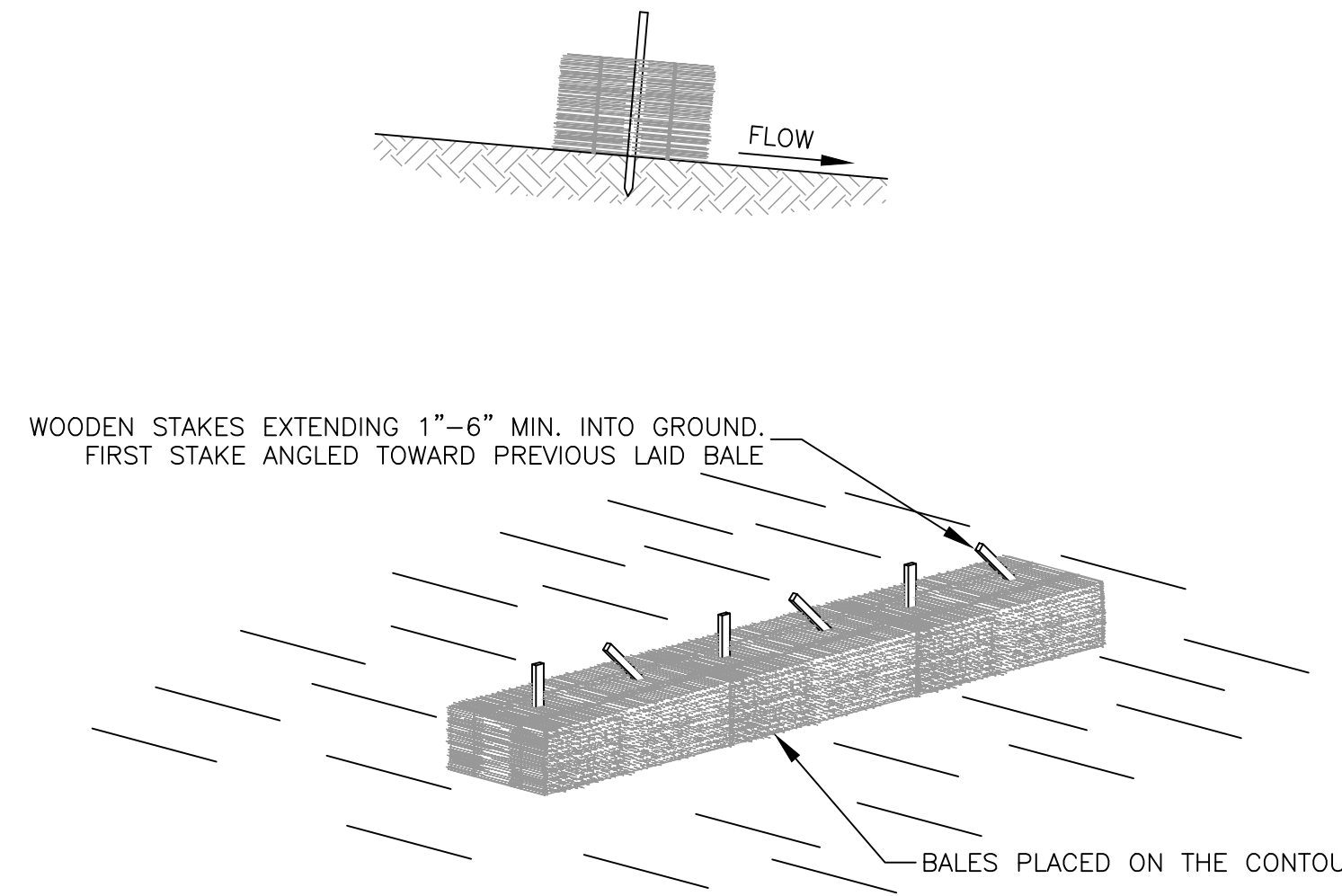
STATE OF KENTUCKY  
PAUL D. NESBITT  
9382  
LICENSED PROFESSIONAL ENGINEER

nesbitt engineering, inc.  
providing proven solutions since 1976  
FIVE MILE WATERLINE EXTENSION  
BREATHITT COUNTY WATER DISTRICT

designed by: rmm  
checked by: rmm  
date: 5/1/2023

NOT TO SCALE

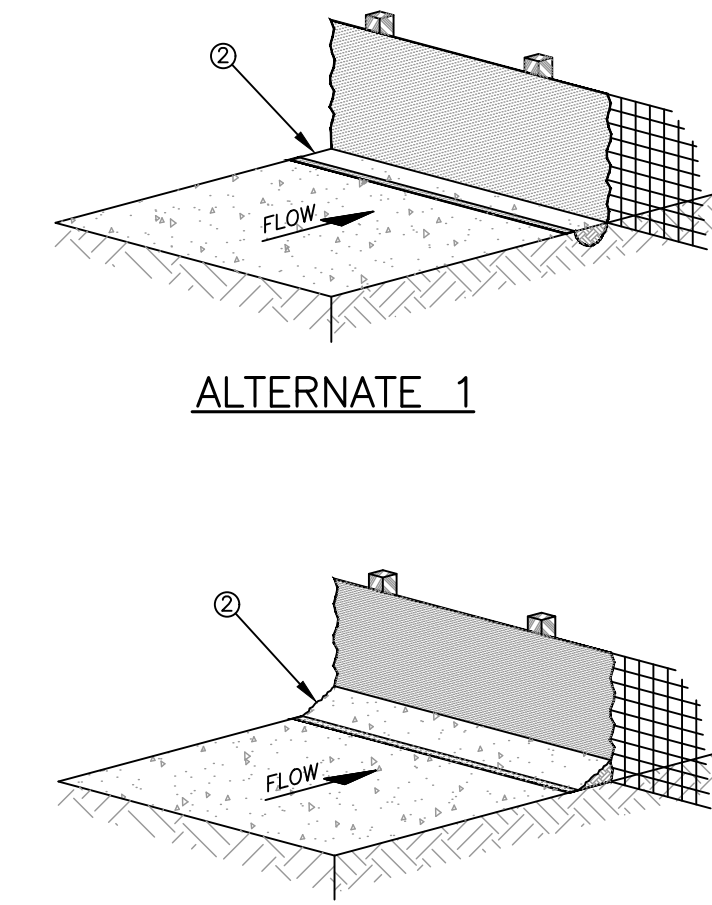
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NOTE:  
TEMPORARY BALE SILT CHECKS SHALL BE PLACED WHERE NEEDED TO PROVIDE PROPER EROSION CONTROL UNTIL REVEGETATION IS COMPLETED.

**STRAW BALE SILT CHECK  
SEDIMENTATION CONTROL**

NOT TO SCALE

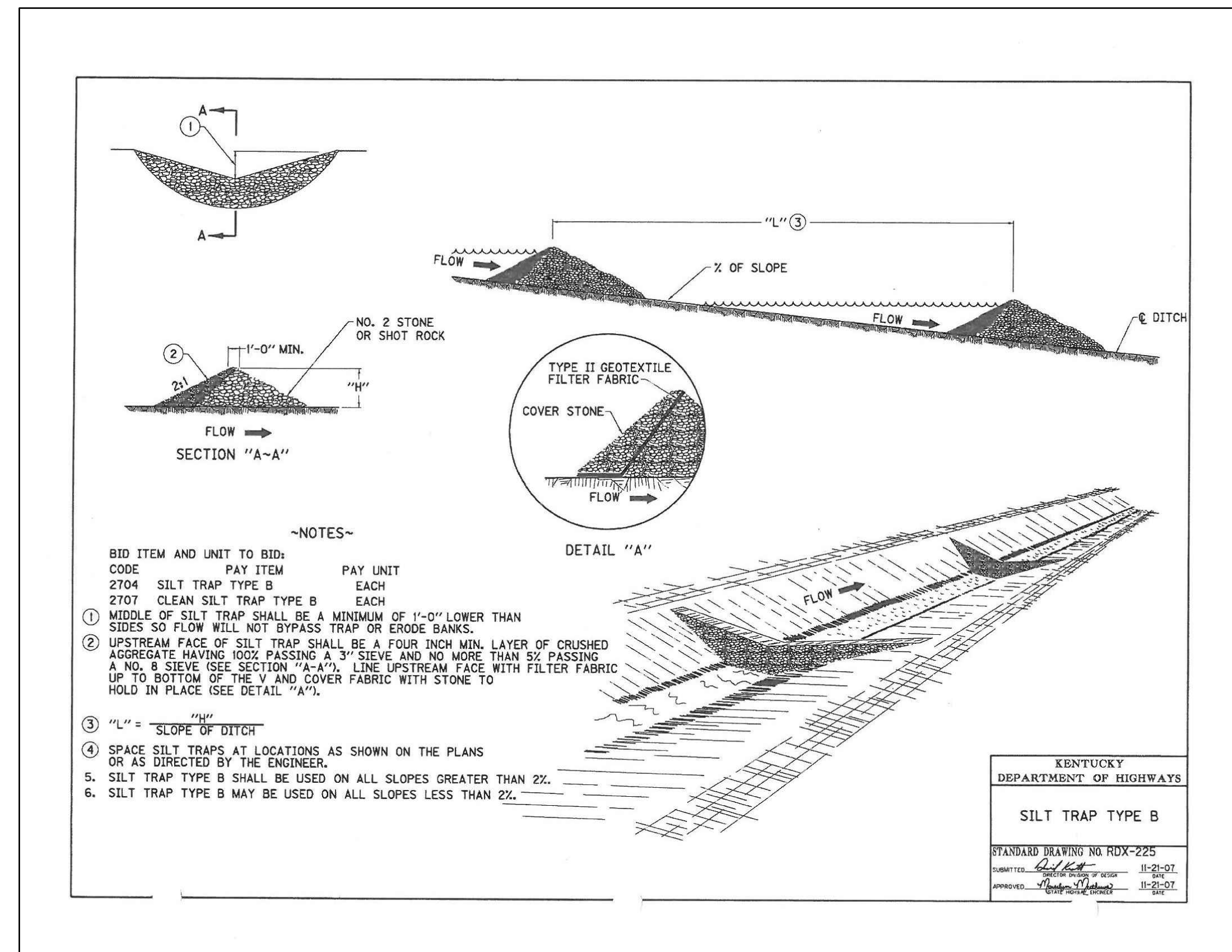


NOTES  
1. MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.  
2. THE BOTTOM 12 INCHES OF FABRIC SHALL BE BURIED IN A 6 INCH TRENCH CUT INTO THE GROUND OR COVERED BY 6 INCHES OF FILL MATERIAL, TO PREVENT SEDIMENT ESCAPING UNDER FENCE. ALL EARTHWORK SHALL BE ON THE UPSTREAM SIDE OF FENCE.

**SILT CHECK FENCE  
SEDIMENTATION CONTROL**

NOT TO SCALE

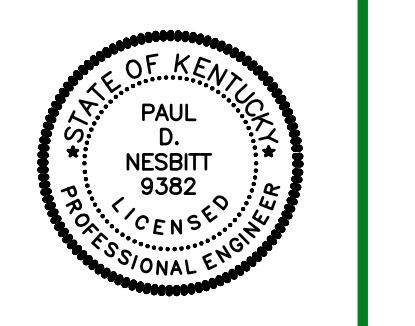
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BREATHITT COUNTY WATER DISTRICT  
1137 MAIN STREET  
JACKSON, KY 41339

EROSION CONTROL & MISC. DETAILS



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FIVE MILE WATERLINE EXTENSION  
BREATHITT COUNTY WATER DISTRICT

job no.: 998-51  
file name: NOT TO SCALE

drawn by: mms  
date: 6/1/2021

