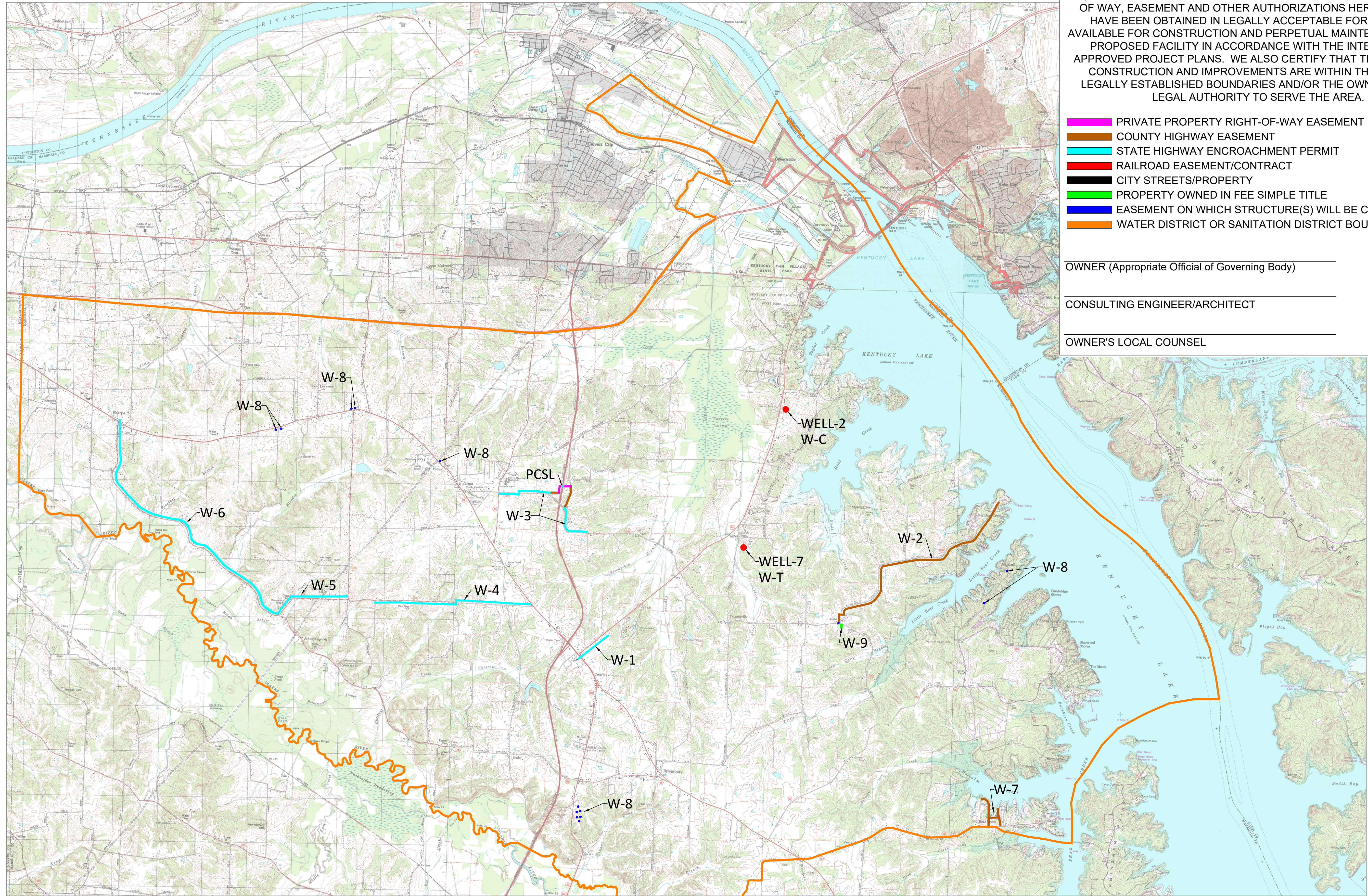


North Marshall Water Carter Brien Pumping Station

Owner: North Marshall Water District - Benton, KY

Engineer: Paul Cloud Engineering - Benton, KY

Superintendent: Roger Colburn - Benton, KY



CERTIFIED RIGHT-OF-WAY MAP

WE, THE UNDERSIGNED, CERTIFY THAT THE COLOR-CODED TITLE, RIGHT OF WAY, EASEMENT AND OTHER AUTHORIZATIONS HERE IN SHOWN, HAVE BEEN OBTAINED IN LEGALLY ACCEPTABLE FORM AND ARE AVAILABLE FOR CONSTRUCTION AND PERPETUAL MAINTENANCE OF THE PROPOSED FACILITY IN ACCORDANCE WITH THE INTENT OF THE APPROVED PROJECT PLANS. WE ALSO CERTIFY THAT THE PROPOSED CONSTRUCTION AND IMPROVEMENTS ARE WITHIN THE OWNER'S LEGALLY ESTABLISHED BOUNDARIES AND/OR THE OWNER HAS THE LEGAL AUTHORITY TO SERVE THE AREA.

- █ PRIVATE PROPERTY RIGHT-OF-WAY EASEMENT
- █ COUNTY HIGHWAY EASEMENT
- █ STATE HIGHWAY ENCROACHMENT PERMIT
- █ RAILROAD EASEMENT/CONTRACT
- █ CITY STREETS/PROPERTY
- █ PROPERTY OWNED IN FEE SIMPLE TITLE
- █ EASEMENT ON WHICH STRUCTURE(S) WILL BE CONSTRUCTED
- █ WATER DISTRICT OR SANITATION DISTRICT BOUNDARY

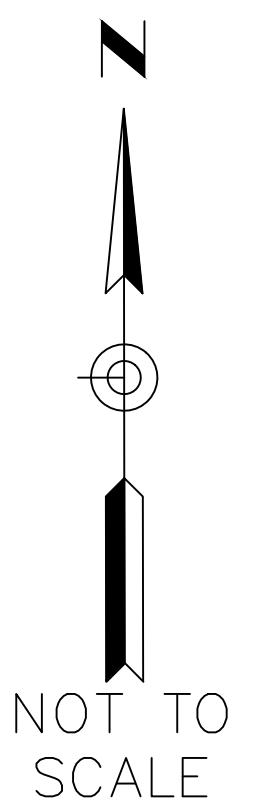
OWNER (Appropriate Official of Governing Body) _____ DATE _____

CONSULTING ENGINEER/ARCHITECT _____ DATE _____

OWNER'S LOCAL COUNSEL _____ DATE _____

LINES

- W-1 HIGHWAY 68/641 BORE
- W-2 LITTLE BEAR HIGHWAY
- W-3 HIGHWAY 1422 LINE UPGRADE
- W-4 GRIGGSTOWN ROAD
- W-5 SALYERS CREEK ROAD
- W-6 SCALE ROAD
- W-7 HALBROOK & GUTHRIE ROADS
- W-8 DISTRICT PRIMARY VALVE REPLACEMENT
- W-9 INLINE CONTROL VALVE
- W-10 ELECTRONIC METERS
- W-C & W-T NEW DEEP WELLS
- PCSL-1 PARKWAY CROSSING



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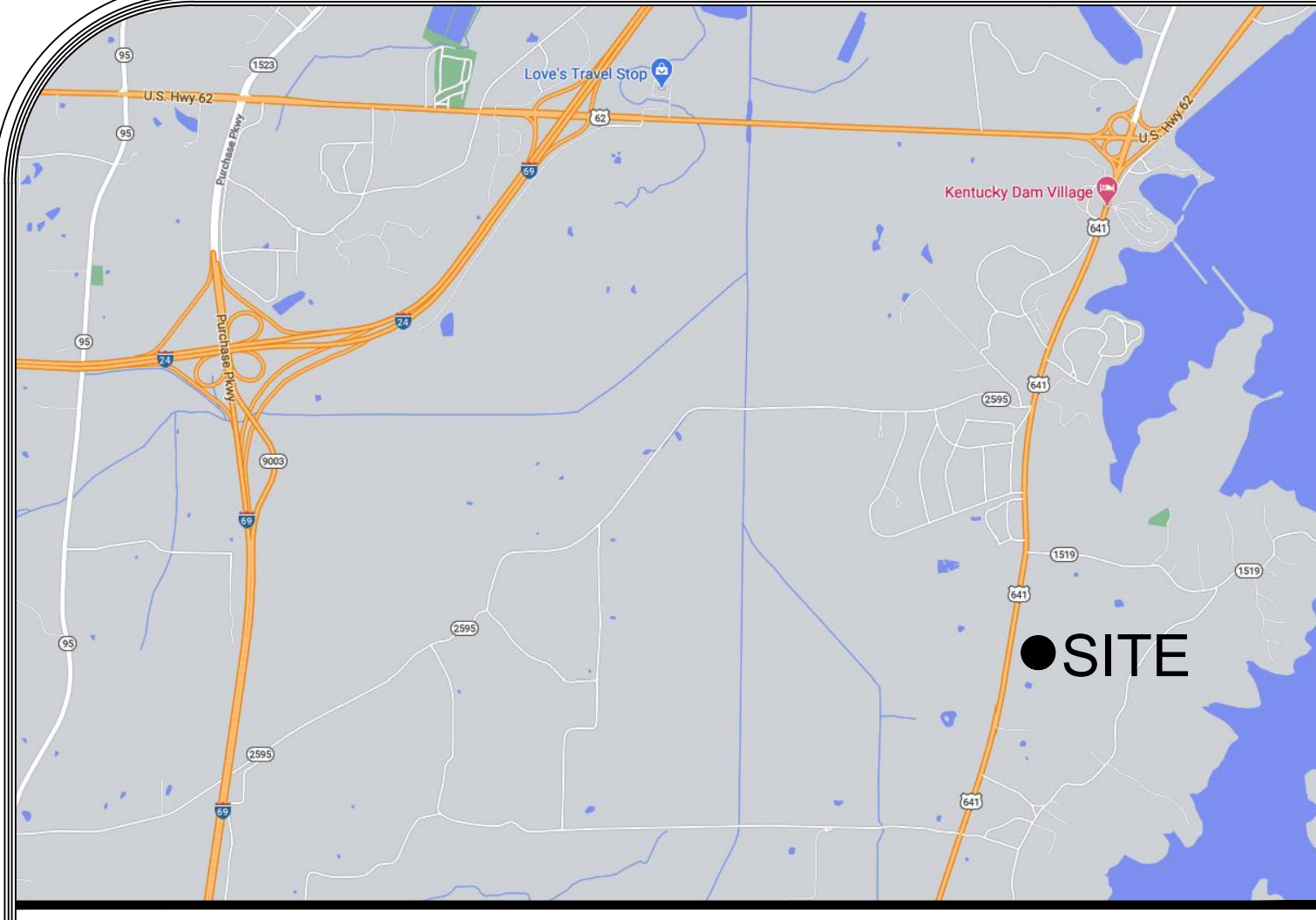
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U-1

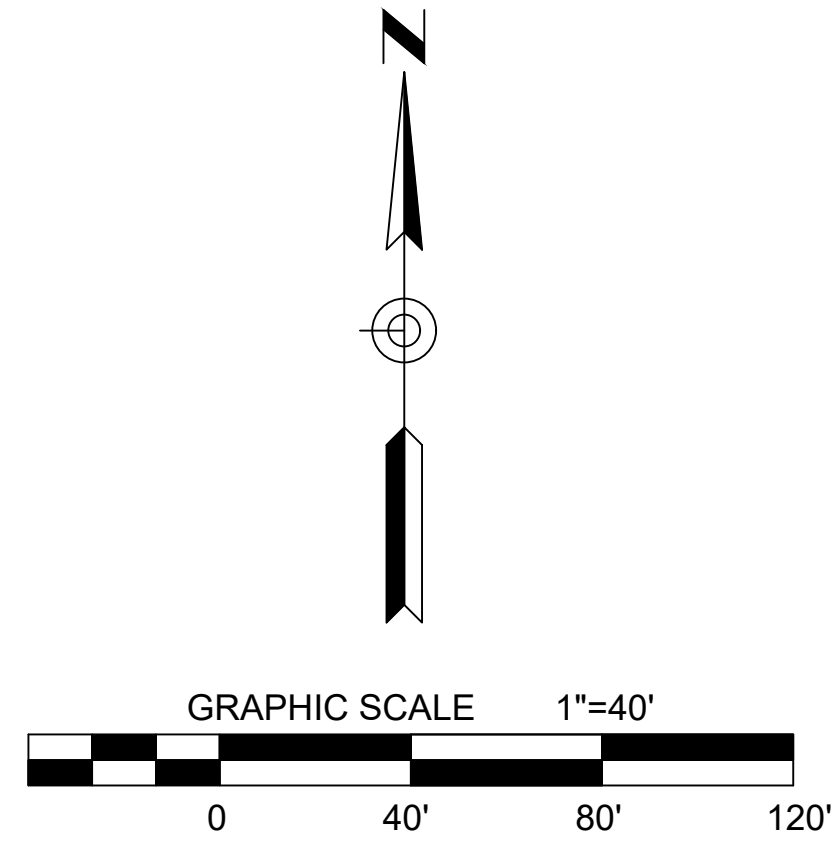
DATE: FEBRUARY 2021
DRAWING NUMBER: U-1
DRAWING REVISION: 05
DRAWING BY: BPC
APPROVED BY: PEC

DESCRIPTION: **MMWD 2020 UPGRADES**

LOCATION:
NORTH MARSHALL WATER DISTRICT
96 CARROLL RD., BENTON, KY 42025



VICINITY MAP
NOT TO SCALE



DRAWING NUMBER:

WC-1

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DATE: FEBRUARY 2021

DRAWING NUMBER: WC-1

DRAWING REVISION: 03

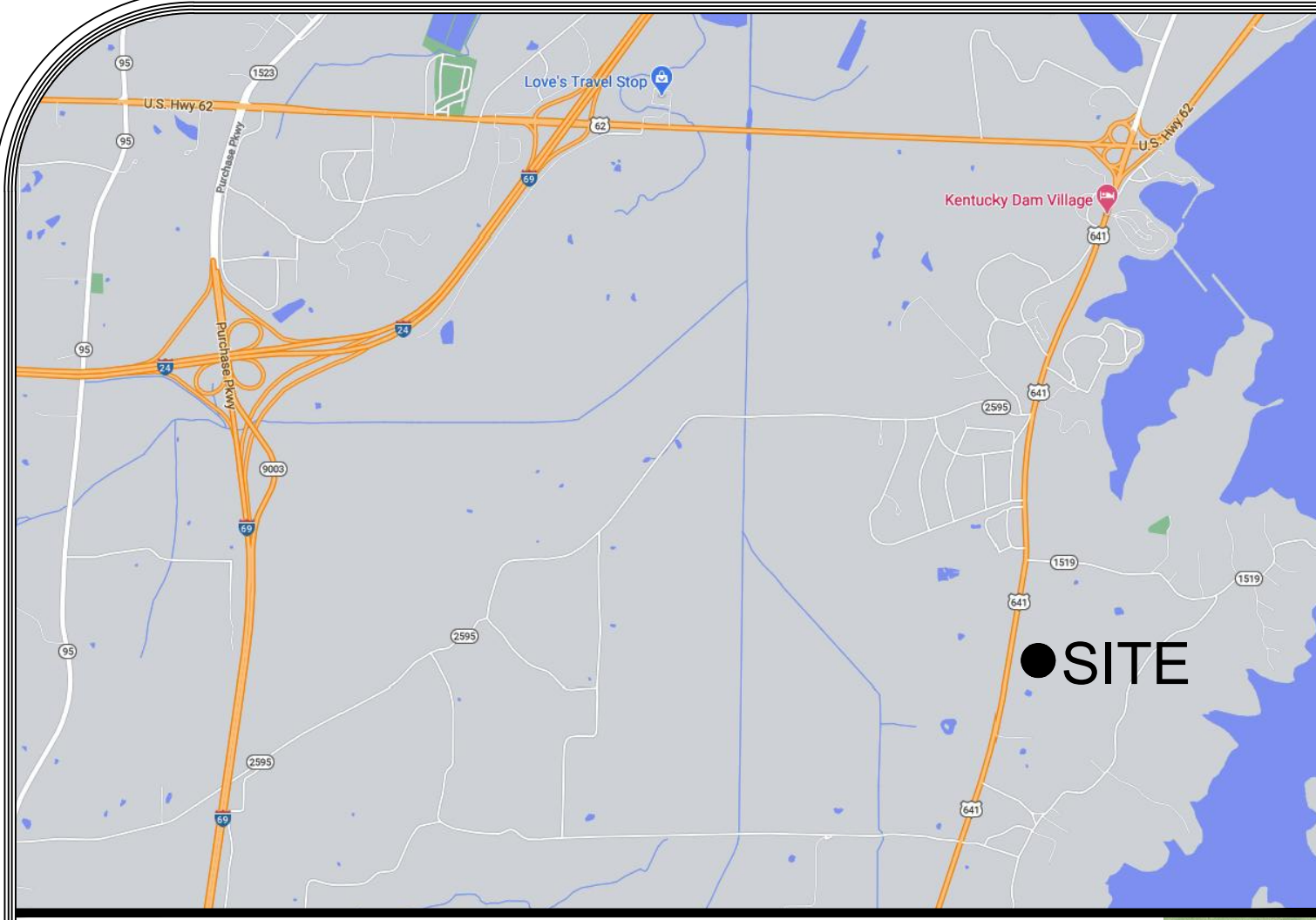
DRAWING BY: BPC

APPROVED BY: PEC

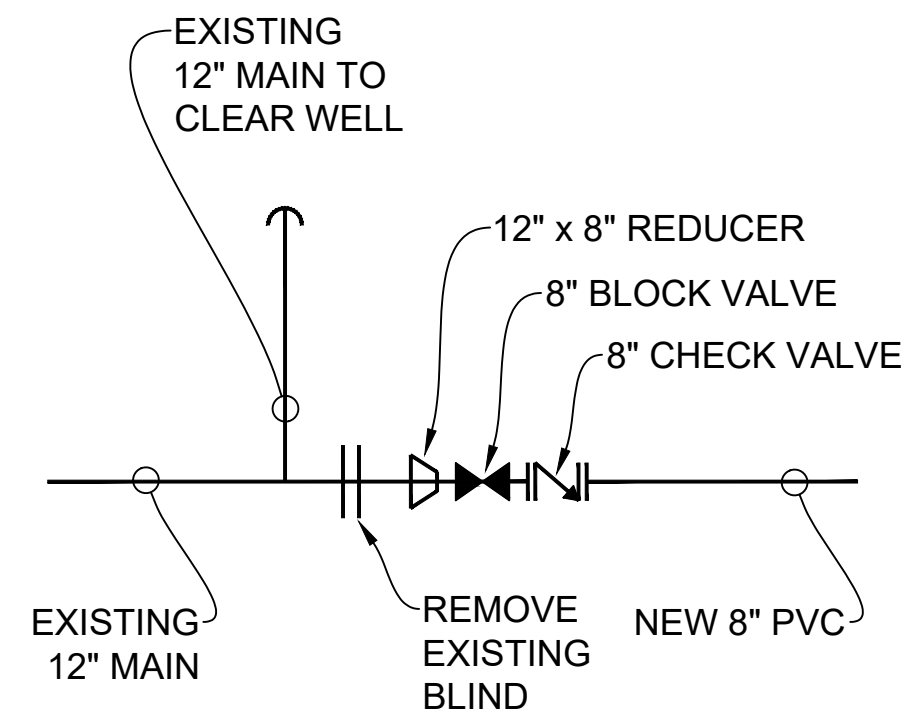
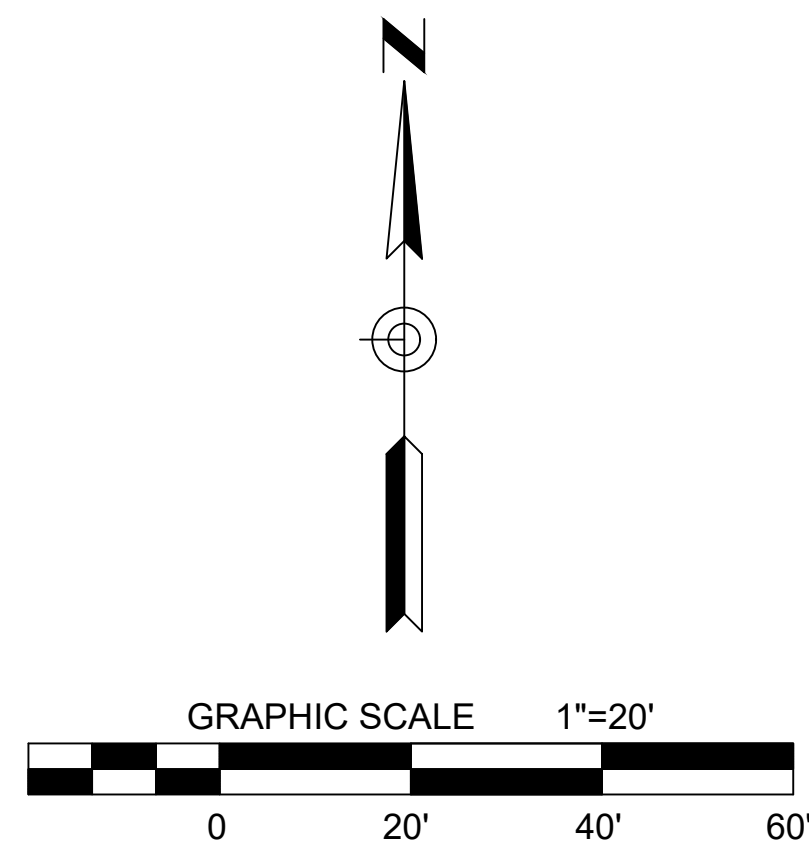
DESCRIPTION:

NEW WELL - SITE
CARTER BRIEN PUMP STATION

LOCATION:
US HIGHWAY 641
BENTON, KENTUCKY 42025



VICINITY MAP
NOT TO SCALE



DETAIL 'A'
N.T.S.



DESCRIPTION:
NEW WELL - DETAIL
CARTER BRIEN PUMP STATION

LOCATION:
US HIGHWAY 641
BENTON, KENTUCKY 42025

DATE: FEBRUARY 2021
DRAWING NUMBER: WC-2
DRAWING REVISION: 03
DRAWING BY: BPC
APPROVED BY: PEC

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BENTON, KY 42025

DRAWING NUMBER:
WC-2

KENTUCKY WATER WELL DATA - NEARBY WELLS

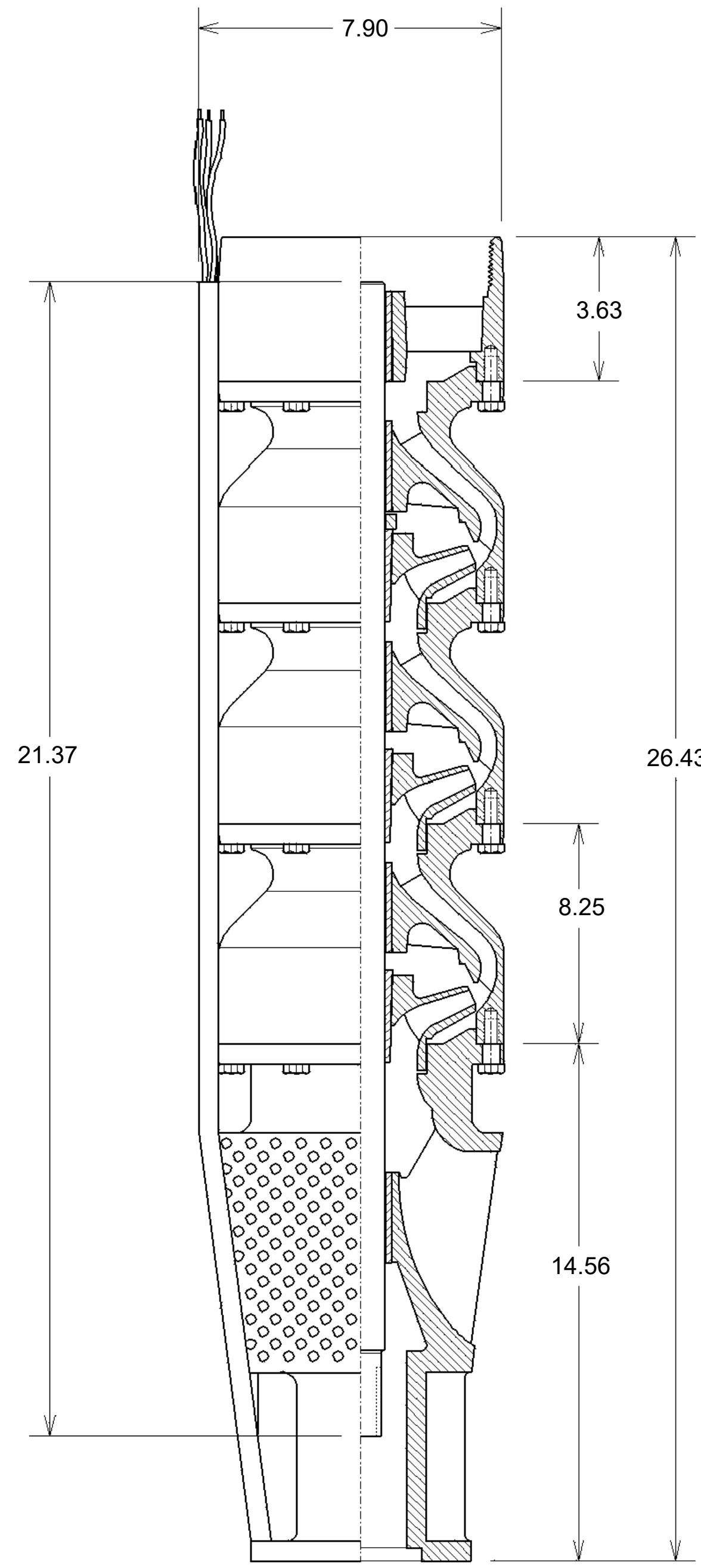
AKGWA NUMBER	Latitude	Longitude	PUBLIC ID	AI Number	Quadrangle	County	Construction Date	Status	Primary Use	Surface Elevation	Depth to Bedrock	Total Depth	Static Water Level	Owner_BusinessName	Casing Size	Driller LName	Driller FName	Driller Certification No	Regulatory Program
6211	36.976616	-88.294341	790319	2955	Briensburg	Marshall	4/19/1988	ACTIVE	PUBLIC - COMMUNITY	405	94	315	58	North Marshall Water District	10"	Fondaw	Bill	28	Water Withdrawal
49540	36.976111	-88.293611	790319	2955	Briensburg	Marshall	7/3/1999	ACTIVE	Test Well	400	183	290	58	North Marshall Water District	6"	Fondaw	Billy	334	Drinking Water

ADJOINING WATER WELL DATA

AKGWA NUMBER	Feet Below Surface		Hole Diameter	Casing (ID) Diameter	Casing Type	Well Yield (GPM)	Feet Below Surface		Description
	From	To					From	To	
6211	0	104'	15"	10"	Steel	1300	0	40'	Red Clay & Gravel Mix
	104'	315'	10"		Open Hole		41'	94'	Yellow Sand & Clay
							94'	311'	Limestone
							311'	315'	Broken Lime
49540	0	186'	8.75"	6"	Steel	500+	0	3'	Reddish Brown Clay & Gravel
	186'	290'	6"		Open Hole		3'	14'	Brown Clay
							14'	22'	Red Clay & Gravel Mix
							22'	23'	Flint
							23'	37'	Red Clay & Gravel Mix
							37'	40'	Red Sandy Clay
							40'	59'	Dry Red Sand
							59'	82'	White Clay & Yellow Sand
							82'	92'	White Clay & Gravel Mix
							92'	174'	Dry Red Sand
						174'	183'	Red Sandy Clay	
						183'	184'	Fractured Limestone	
						184'	290'	Limestone	

SUBMERSIBLE PUMP DATA

MODEL	Motor Size	"A"	"B"	"C"	One Stage "D"	"E"	OneStage Shaft Length	Disch. Sizes	First Stage Weight	Add'l Stage Weight
SC	4	8.25	4.63	3.31	16.19	5.64	12.88	3,4	44	13
	6	10.56	4.63		18.50		13.63		49	
ST	4	8.25	4.81	3.31	16.38	5.64	13.06	3,4	44	13
	6	10.56	4.81		18.69		13.81		49	
SRWA	4	8.38	4.00	3.31	15.69	5.64	13.25	3,4	44	13
	6	10.56	4.00		17.88		13.75		49	
6C	4	8.44	5.13	3.75	17.31	6.28	13.63	3,4,5	50	17
	6	10.56	5.13		19.44		14.25		55	
	8	12.50	5.13		21.38		15.38		60	
6DH	4	4.94	5.50	3.75	14.19	5.88	10.63	3,4	41	16
	6	9.75	5.50		19.00		13.75		53	
6RA	6	10.56	3.75	3.75	18.06	5.94	12.88	3,4	90	20
7C	6	12.88	6.38	3.75	22.88	7.50	18.50	5,6	75	28
	8	14.56	6.38		24.56		19.25		87	
7RA	6	8.44	4.50	3.75	16.56	7.90	11.50	3,4	105	28
7T	6	12.88	7.09	3.75	23.59	7.50	19.06	5,6	78	31
	8	14.56	7.09		25.28		19.94		90	
7WA	6	12.88	5.50	3.75	22.00	7.50	17.75	5,6	68	30
	8	14.56	5.50		23.69		18.50		80	
8FD	6	12.88	8.25	3.63	24.75	7.90	20.50	6	125	34
81	6	12.88	6.38	3.63	22.88	7.90	18.13	4,5,6	90	33
	8	14.56	6.38		24.56		18.88		102	
BRA	6	12.88	5.00	3.63	21.50	7.90	17.25	4,5,6	165	36
	8	14.56	5.00		23.19		18.13		177	
8RJ	6	12.88	6.50	3.63	23.00	7.90	17.50	5,6	90	34
	8	14.56	6.50		24.69		18.88		102	
9RA	6	12.88	5.50	3.63	22.00	7.90	17.50	4,5,6	185	46
	8	14.56	5.50		23.69		18.50		197	
9RC	6	15.13	8.50	3.63	28.13	9.81	24.25	5,6,8	194	64
	8	13.25	8.50		26.25		21.50		206	
	10	13.25	8.50		26.25		20.50		206	
9T	6	15.13	9.25	3.63	28.88	9.81	25.00	5,6,8	200	70
	8	13.25	9.25		27.00		22.25		212	
	10	13.25	9.25		27.00		21.25		212	
9WA	6	15.13	6.63	3.63	26.25	9.81	22.38	5,6,8	158	58
	8	13.25	6.63		24.38		19.63		170	
	10	13.25	6.63		24.38		18.63		170	
10DH	8	13.25	9.25	4.50	27.00	10.00	22.00	6,8	185	65
	10	13.25	9.25		27.00		21.00		190	
	12	13.25	9.25		27.00		21.00		190	
10RA	6	15.13	6.63	4.50	26.25	10.00	22.38	4,6,8	280	76
	8	13.25	6.63		24.38		19.63		285	
	10	13.25	6.63		24.38		18.63		285	
10RJ	6	15.13	8.40	4.50	28.03	10.00	23.38	6,8	187	60
	8	13.25	8.40		26.15		20.75		192	
	10	13.25	8.40		26.15		19.75		192	
10WA	6	15.13	7.63	4.50	27.25	10.00	23.38	4,6,8	183	56
	8	13.25	7.63		25.38		20.63		188	
	10	13.25	7.63		25.38		19.63		188	
11C	8	13.25	9.88	5.13	28.25	11.50	23.75	6,8,10	285	97
	10	13.25	9.88		28.25		23.75		285	
	12	13.25	9.88		28.25		22.75		285	
11RA	6	14.44	8.00	5.88	28.31	12.10	24.25	6,8,10	415	103
	8	13.25	8.00		27.13		22.25		415	
	10	13.25	8.00		27.13		21.25		415	



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437 CACTUS DRIVE
BENTON, KY 42025

DRAWING NUMBER: **WC-3**

DATE: SEPTEMBER 2020

DRAWING NUMBER: WC-3

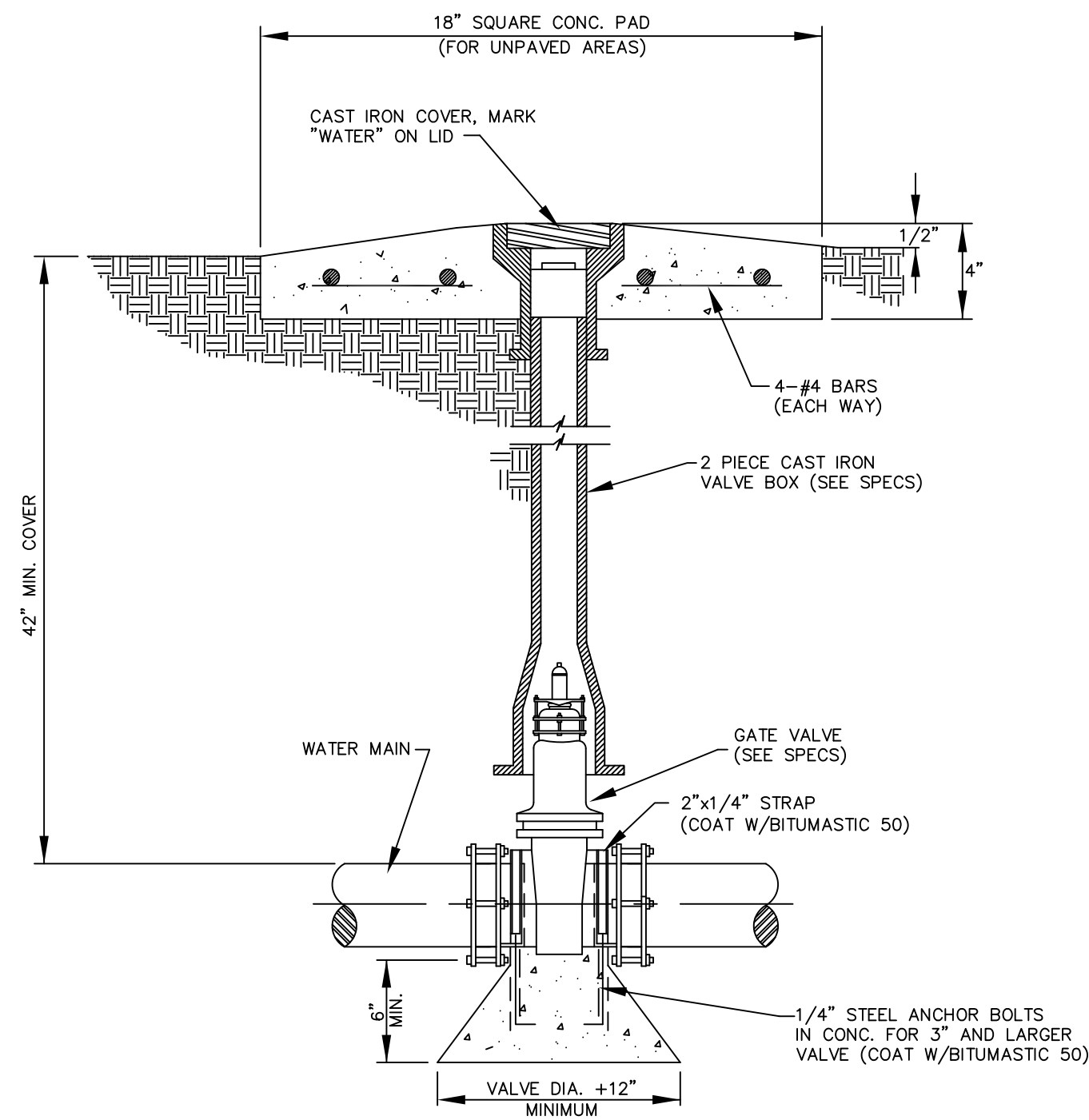
DRAWING REVISION: 01

DRAWING BY: BPC

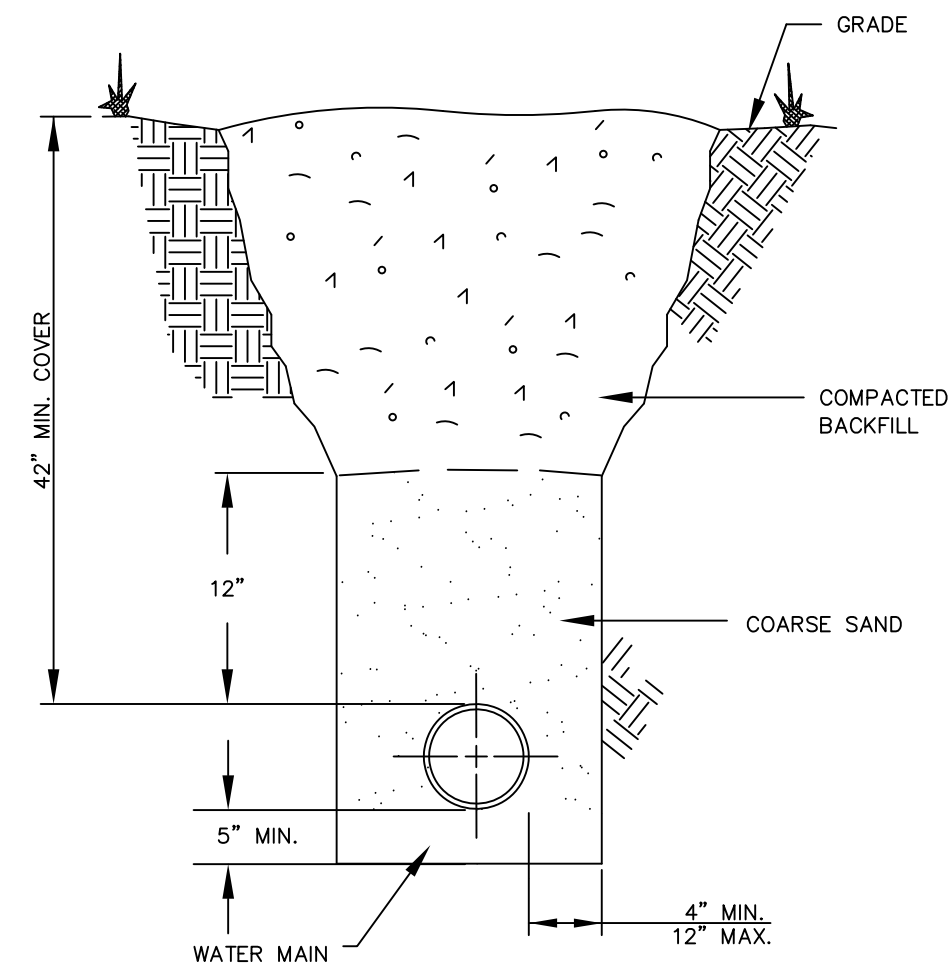
APPROVED BY: PEC

DESCRIPTION: NEW WELL - DETAIL
CARTER BRIEN PUMP STATION

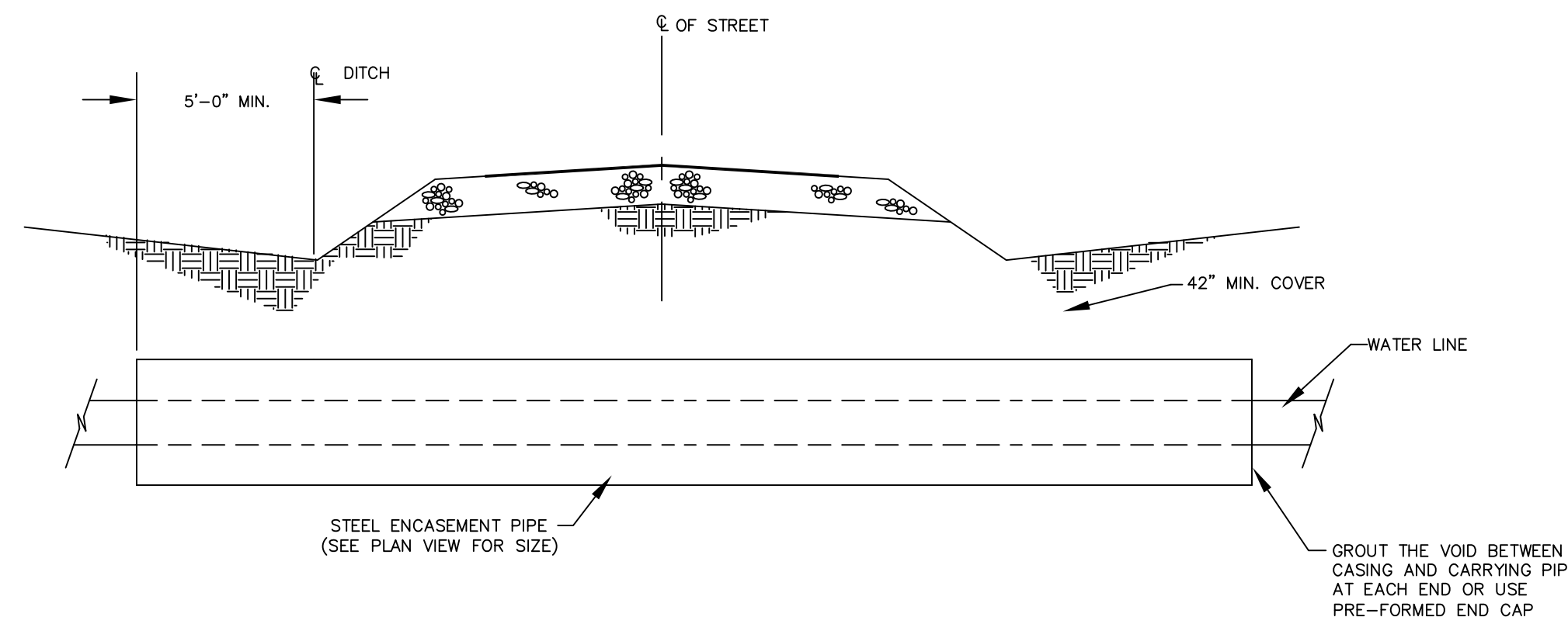
LOCATION: US HIGHWAY 641
BENTON, KENTUCKY 42025



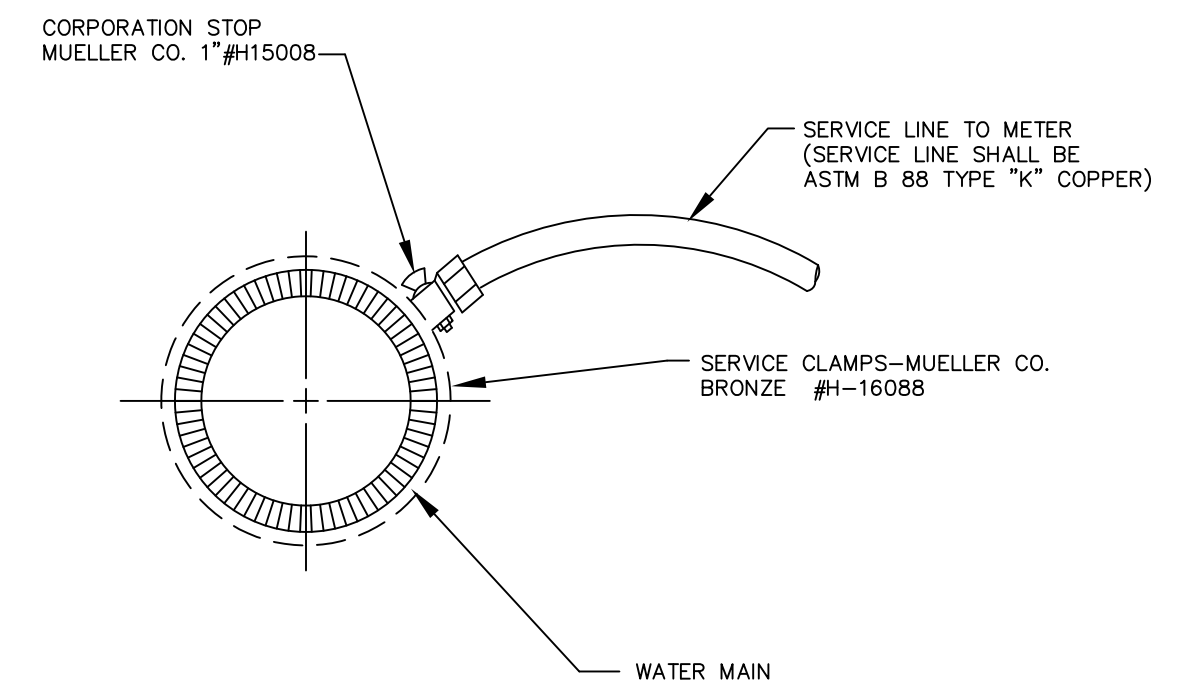
GATE VALVE
SCALE: N.T.S.



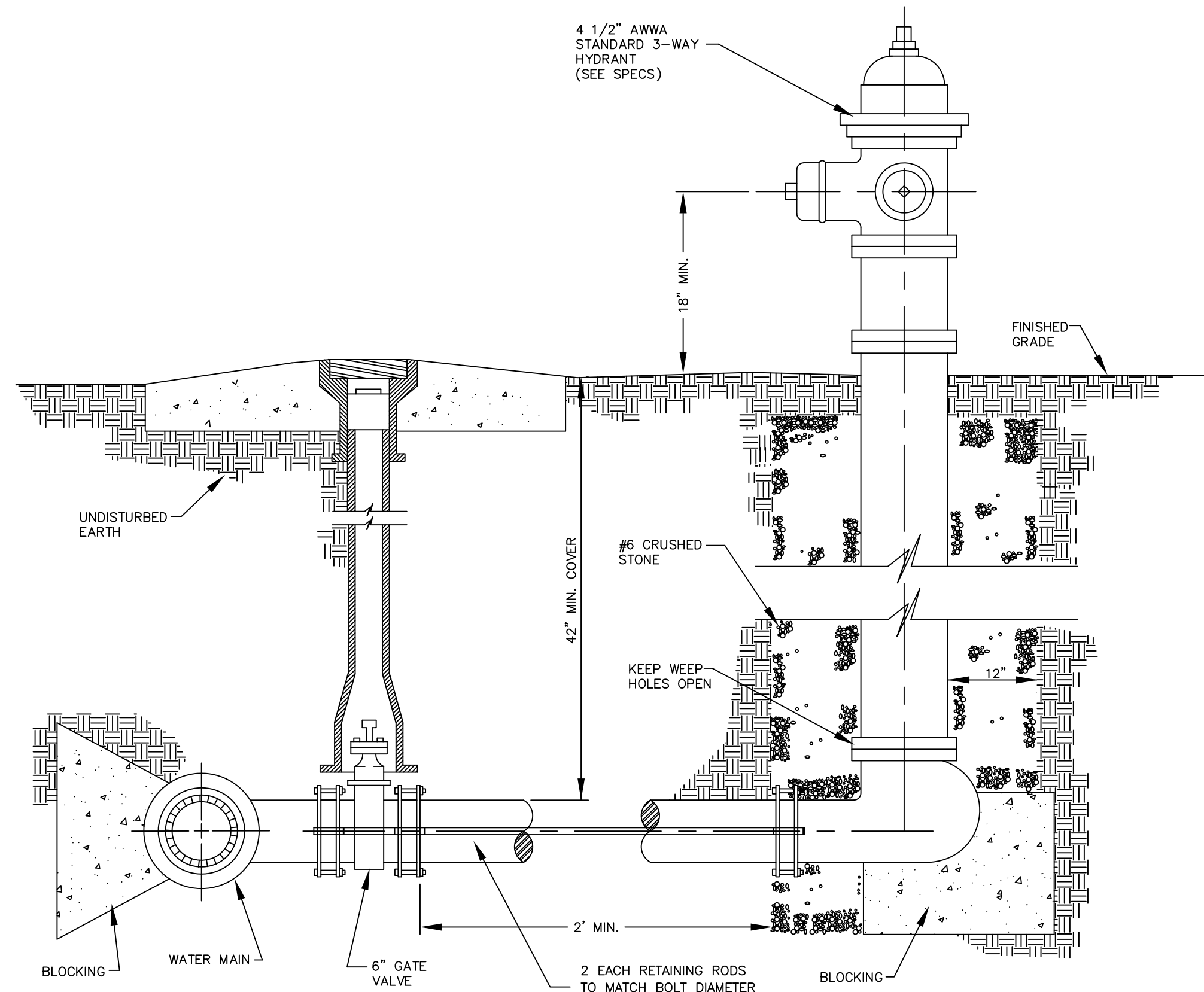
TRENCH SECTION
SCALE: N.T.S.



PIPE CROSSING UNDER EXISTING PAVED STREET
(AS NOTED ON DRAWING)

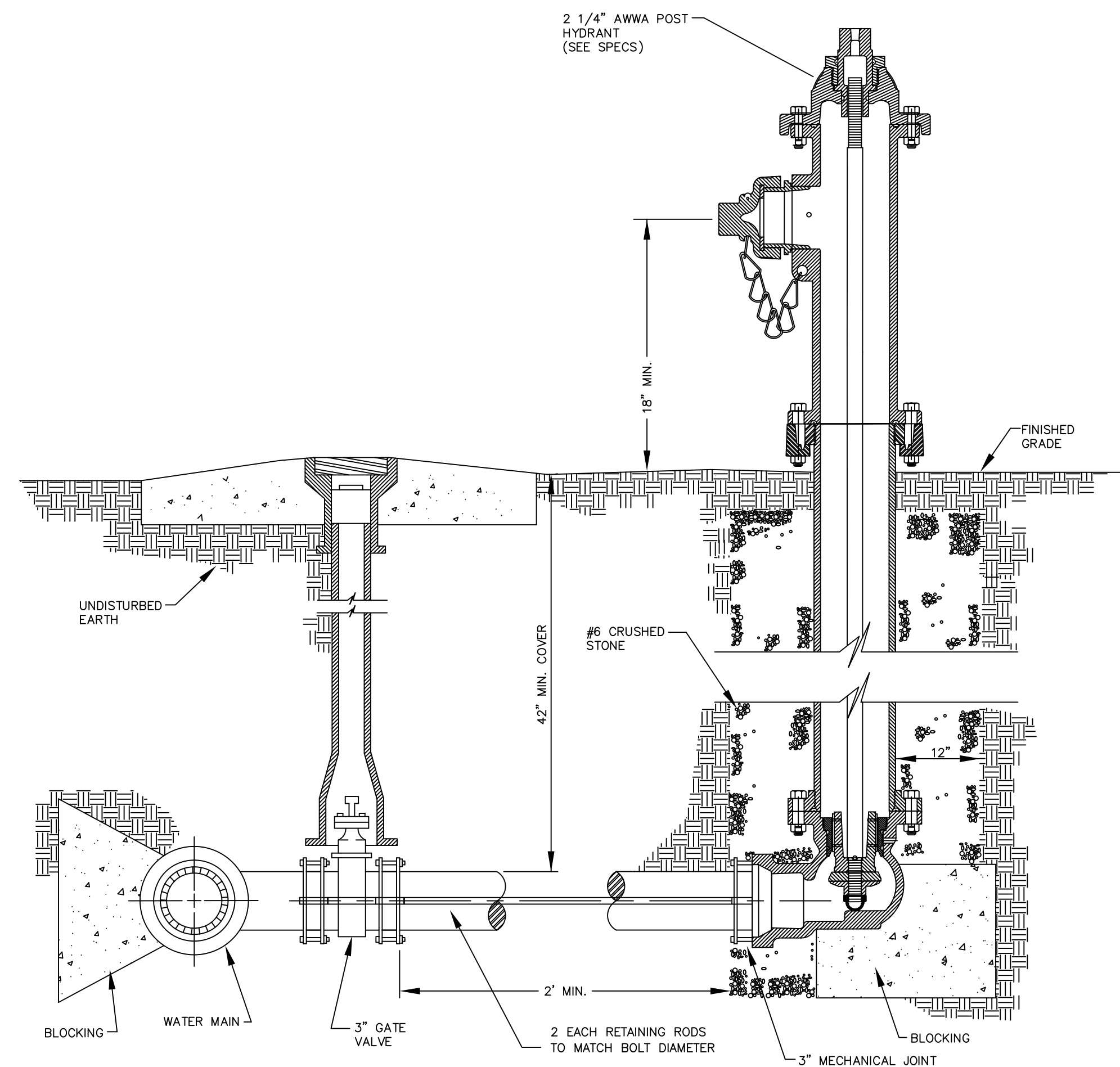


WATER MAIN TAPPING DETAIL
SCALE: N.T.S.



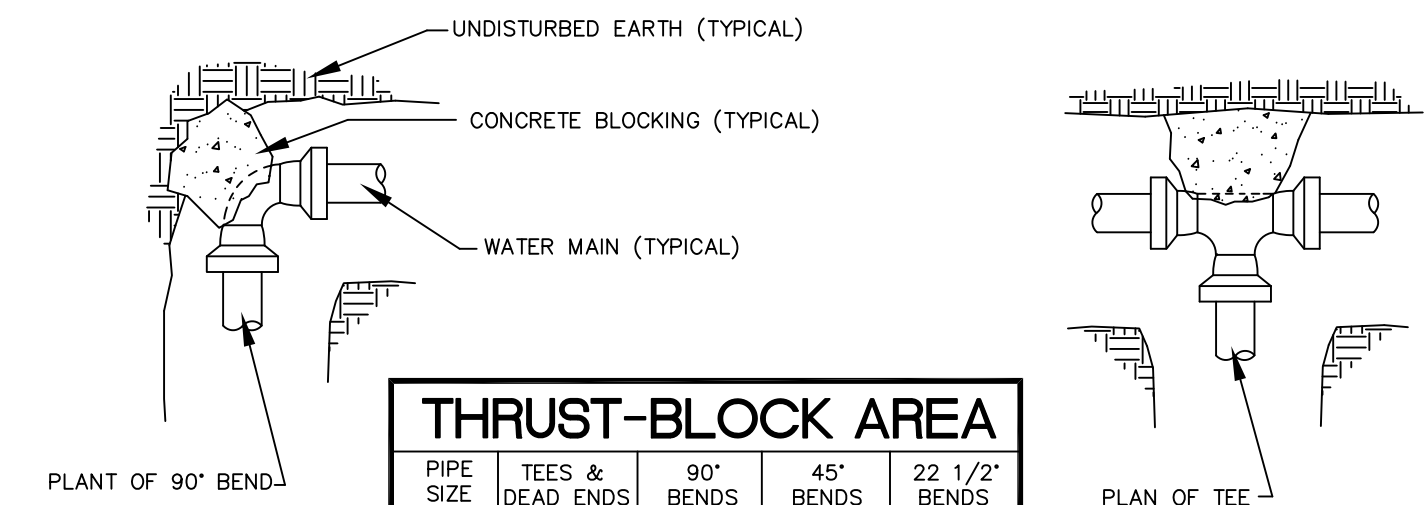
SECTIONAL ELEVATION: BRANCH TYPE HYDRANT
SCALE: N.T.S.

NOTE: A HYDRANT CONNECTING PIECE AND HYDRANT ANCHORING TEE MAY BE USED IN LIEU OF THE RODDED CONNECTIONS.



SECTIONAL ELEVATION: POST FLUSH HYDRANT
SCALE: N.T.S.

NOTE: A HYDRANT CONNECTING PIECE AND HYDRANT ANCHORING TEE MAY BE USED IN LIEU OF THE RODDED CONNECTIONS.



PIPE SIZE	TEES & DEAD ENDS	90° BENDS	45° BENDS	22 1/2° BENDS
4"	1 SQ. FT.	1.5 SQ. FT.	1 SQ. FT.	0.5 SQ. FT.
6"	2 SQ. FT.	3 SQ. FT.	2 SQ. FT.	1 SQ. FT.

