

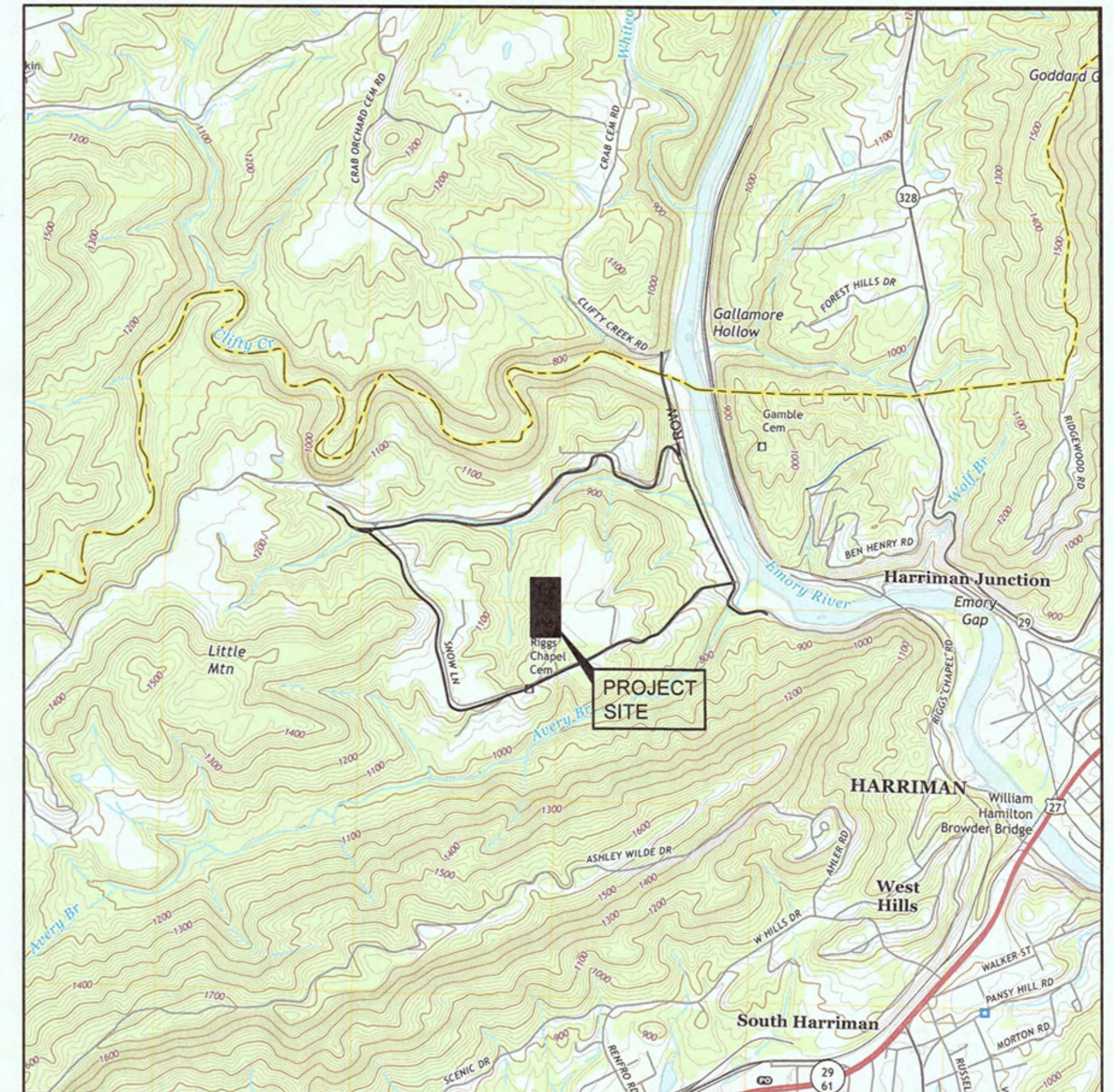


2021 HARRIMAN CDBG WATER SYSTEM IMPROVEMENTS

CONTRACT NO. 14980

APRIL 2023

DRAWING INDEX



LOCATION MAP
SCALE: 1"= 2000'

HARRIMAN UTILITY BOARD HARRIMAN, TENNESSEE

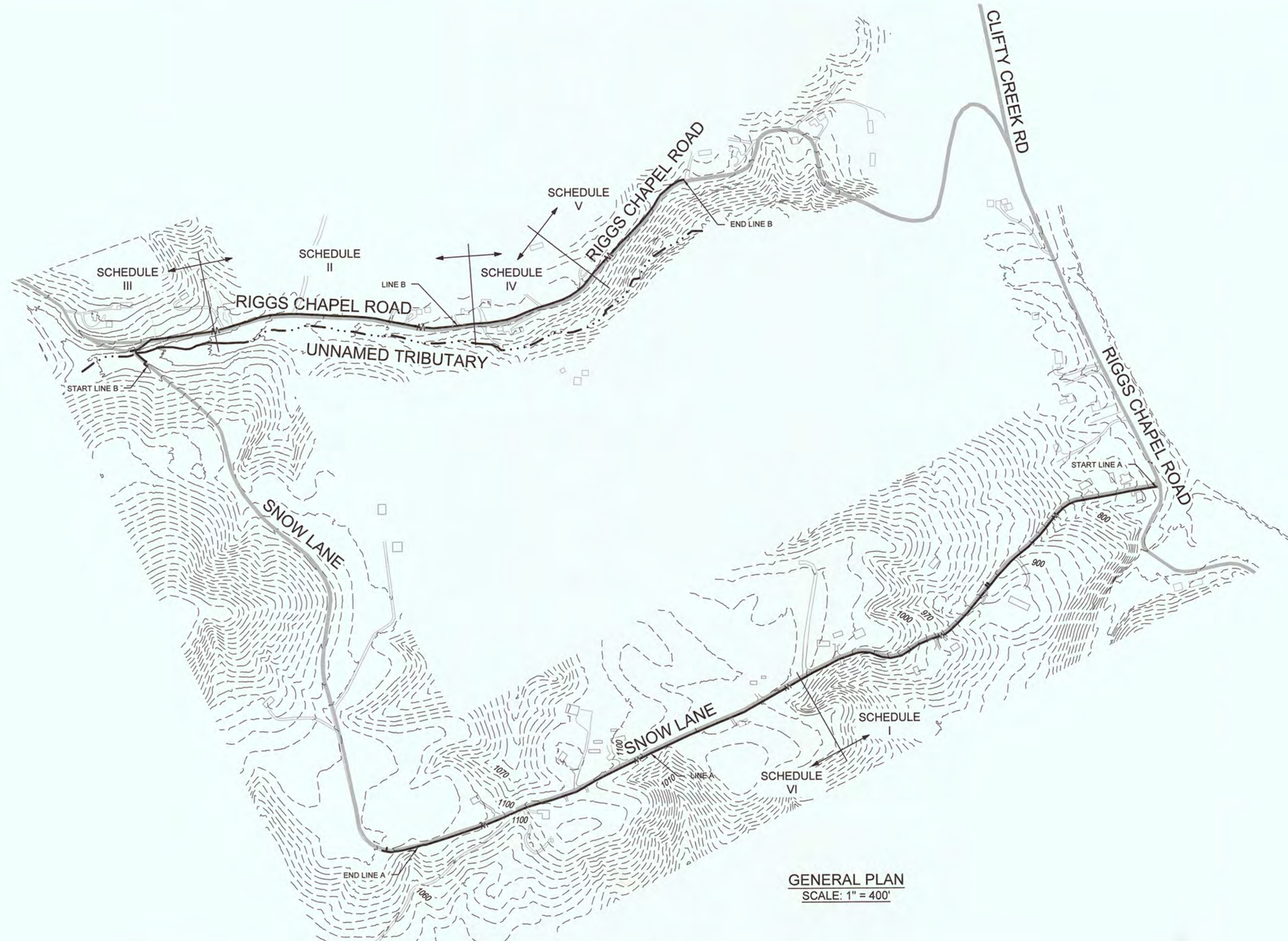
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John King
JOHN KING, PE
TENNESSEE LICENSE NO. 103702
4/10/2023
DATE



I CERTIFY THAT THESE PLANS HAVE BEEN REVIEWED AND APPROVED BY THE HARRIMAN UTILITY BOARD
Candace Vannasdale
CANDACE VANNASDALE, PE
GENERAL MANAGER
04/10/2023
DATE



GENERAL PLAN
SCALE: 1" = 400'

GENERAL NOTES

GRADING AND EXCAVATION

- WHEN SPECIFIC GRADING REQUIREMENTS ARE NOT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL GRADE ALL AREAS WITHIN THE LIMITS OF CONSTRUCTION, OR OTHERWISE DISTURBED BY CONSTRUCTION, TO DRAIN AND TO MATCH THE EXISTING, ADJACENT GROUND.
- THE CONTRACTOR SHALL PERFORM ALL NECESSARY STRIPPING OF EXISTING TOPSOIL ON THE JOBSITE.
- ON THE PROJECT, NEWLY GRADED, EARTH AREAS NOT TO BE PAVED, RIP-RAPPED, OR STABILIZED, SHALL BE SEED IN ACCORDANCE WITH THE SPECIFICATIONS. PRIOR TO SEEDING, A FOUR INCH LAYER OF TOPSOIL SHALL BE PLACED ON THESE AREAS IN ACCORDANCE WITH SAID SPECIFICATIONS.
- THE CONTRACTOR SHALL DISPOSE OF, AT HIS OWN EXPENSE, ALL UNUSABLE AND/OR SURPLUS, EXCAVATED MATERIAL.
- EXCAVATION ADJACENT TO EXISTING PAVEMENT SHALL BE MADE TO A NEAT LINE.
- ALL TREES THAT ARE CUT OR KNOCKED DOWN WITHIN THE LIMITS OF CONSTRUCTION SHALL BE REMOVED AND DISPOSED OF OFF-SITE AT THE CONTRACTOR'S EXPENSE. BURNING SHALL NOT BE PERMITTED.
- BACKFILLING, COMPACTING, AND SITE-CLEANUP SHALL OCCUR DAILY AS PIPE INSTALLATION PROGRESSES.

EROSION/POLLUTION CONTROL

- ALL LOCAL, STATE, AND FEDERAL EROSION CONTROL REQUIREMENTS SHALL BE FOLLOWED DURING CONSTRUCTION. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO CONTROL EROSION AND WATER POLLUTION THROUGHOUT THE CONSTRUCTION PERIOD. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE IN PLACE BEFORE EXCAVATION OPERATIONS BEGIN. CLEARING AND GRUBBING SHALL BE HELD TO A MINIMUM WIDTH NECESSARY TO ACCOMMODATE CONSTRUCTION SLOPES. EMBANKMENTS AND EXCAVATED AREAS SHALL BE PROMPTLY STABILIZED TO MINIMIZE EROSION. BALED STRAW EROSION CHECKS AND SILT FENCE SHALL BE USED ALONG THE TOE OF FILL SLOPES, IN DITCHES, AND IN OTHER AREAS WHERE EROSION IS A PROBLEM AND SILT-LADEN RUNOFF MAY ENTER A DRAINAGE DITCH, STREAM, OR ADJACENT PROPERTY.
- ANY STOCKPILED SOIL OR FILL MATERIAL SHALL BE LOCATED AND TREATED IN A MANNER TO PREVENT SILT ENTERING STREAMS. NO EXCAVATED MATERIAL SHALL BE DISCHARGED INTO DITCHES. THE CONTRACTOR SHALL DISPOSE OF ALL EXCAVATED MATERIAL IN A LOCATION, APPROVED BY THE ENGINEER, ABOVE THE NORMAL HIGH WATER ELEVATION.
- THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO ALL EROSION CONTROL PROVISIONS AS SET FORTH IN THE EROSION & SEDIMENT CONTROL HANDBOOK AVAILABLE FROM THE TENNESSEE DEPARTMENT OF EROSION AND CONSERVATION.
- THE CONTRACTOR SHALL IMPLEMENT EROSION CONTROL MEASURES AS SHOWN ON THE EROSION CONTROL PLAN AND SHALL MAINTAIN THE EROSION CONTROL MEASURES THROUGHOUT THE LENGTH OF THE CONTRACT AS REQUIRED.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY EROSION AND WATER CONTROL MEASURES (SUCH AS WATTLERS, CHECK DAMS, WASHOUTS, AND SILT FENCES, ETC.) AS SHOWN ON THE EROSION CONTROL PLAN AND AS DIRECTED BY THE ENGINEER. THESE TEMPORARY MEASURES SHALL BE COORDINATED WITH THE PERMANENT EROSION CONTROL FEATURES TO ASSURE ECONOMICAL, EFFECTIVE, AND CONTINUOUS EROSION CONTROL THROUGHOUT THE PROJECT.

UTILITIES

- LOCATIONS OF UTILITIES, PUBLIC AND/OR PRIVATE, ARE APPROXIMATELY ONLY, AND THE EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD. IT IS POSSIBLE THAT SOME EXISTING FACILITIES ARE NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING ALL UNDERGROUND UTILITY FACILITIES LOCATED AND MARKED PRIOR TO THE BEGINNING OF CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY OWNERS PRIOR TO INTERRUPTING ANY ELECTRICAL, COMMUNICATIONS, GAS, WATER, OR SEWER SERVICES. THE CONTRACTOR SHALL ALSO NOTIFY AFFECTED UTILITY CUSTOMERS AT LEAST 24 HOURS BEFORE INTERRUPTING THE CUSTOMER'S SERVICE. WHERE INDIVIDUAL SERVICES ARE TO BE DISCONTINUED FOR MORE THAN 4 HOURS, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR PROVIDING TEMPORARY SERVICE SATISFACTORY TO THE AFFECTED CUSTOMER. THE REPAIR OR REPLACEMENT OF UTILITY COMPONENTS SHALL CONFORM TO ALL APPLICABLE REQUIREMENTS OF THE UTILITY OWNER. NO SEPARATE PAYMENT SHALL BE MADE FOR THESE ACTIVITIES, AND COMPENSATION, THEREFORE, SHALL BE INCLUDED IN THE CONTRACT PRICES FOR OTHER ITEMS.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. SHOULD SPECIAL EQUIPMENT BE REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR SHALL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FOR FURNISHING SPECIAL EQUIPMENT SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION. WHEN CROSSING SERVICES AND OTHER LINES, HAND EXCAVATION WITH SHOVELS SHALL BE USED TO PREVENT DAMAGE.
- IF ANY UTILITY IS DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY OWNER. REPAIR OF THE UTILITY SHALL THEN BE ACCORDING TO THE OWNER'S INSTRUCTIONS.
- ALL CUTS AND FILLS SHALL BE IN PLACE, AND ALL FILLS COMPACTED, PRIOR TO THE INSTALLATION OF WATER LINES AND APPURTENANCES.
- TRANSITION JOINTS ON PIPES OF DIFFERENT MATERIALS MUST BE APPROVED BY THE ENGINEER, AND CONSTRUCTION MUST BE DONE WITH APPROVED FITTINGS AND/OR ADAPTERS.
- ALL PROPOSED PIPING AND MISCELLANEOUS APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, CONTRACT DRAWINGS, AND SPECIFICATIONS.
- TOPS OF ALL BOXES SHALL BE RAISED FLUSH WITH FINISHED GRADES AND BE VISIBLE.
- THE WATER LINES SHALL BE TESTED AND APPROVED PER THE REQUIREMENTS OF THE SPECIFICATIONS.
- THE CROWN OF THE WATER LINES SHALL BE INSTALLED AT A MINIMUM DEPTH OF 36-INCHES BELOW THE EXISTING SURFACE WITHIN RIGHTS-OF-WAY AND 30-INCHES BELOW THE EXISTING SURFACE IN OTHER AREAS EXCEPT WHERE ADDITIONAL BURIAL IS NEEDED TO ACCOMMODATE INSTALLATION OF APPURTENANCES AND CROSSINGS.
- THE CROWN OF THE WATER LINES SHALL BE INSTALLED AT A MINIMUM DEPTH OF 30-INCHES LOWER THAN THE SURFACE OF ADJACENT ROADWAYS SO AS TO ALLOW FUTURE DRIVEWAY CUTS THAT WILL NOT IMPACT OR DISTURB THE WATER LINE.
- WHERE WATERLINE CROSSES A CULVERT, THE CROWN OF THE WATERLINE SHALL BE AT LEAST 18" BELOW THE CULVERT OR THE WATERLINE SHALL BE ENCASED A MINIMUM OF 5 FEET EACH SIDE OF THE CULVERT.

MISCELLANEOUS

- THE ENGINEER SHALL HAVE THE AUTHORITY TO DESIGNATE AND/OR LIMIT AREAS OF CONSTRUCTION.
- THE OWNER MAKES NO REPRESENTATIONS ABOUT SUBSURFACE CONDITIONS THAT MAY BE ENCOUNTERED WITHIN THE LIMITS OF THE PROJECT. THE CONTRACTOR SHOULD SATISFY HIMSELF BY ONSITE INSPECTIONS, CORE DRILLINGS, OR OTHER METHODS OF THE SUBSURFACE CONDITIONS THAT MAY BE ENCOUNTERED. THE RISK OF ENCOUNTERING AND CORRECTING UNFAVORABLE SUBSURFACE CONDITIONS SHALL BE BORNE SOLELY BY THE CONTRACTOR.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL FIELD LAYOUT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PAYMENT FOR THE TESTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND ORDERING APPROPRIATE TESTS AS REQUIRED.
- THE CONTRACTOR SHALL PROVIDE RECORD DRAWINGS OF THE PROJECT WITHIN TEN (10) DAYS AFTER SUBSTANTIAL COMPLETION OF THE WORK.
- SHOULD THERE BE A CONFLICT BETWEEN THESE GENERAL NOTES, CONTRACT DRAWINGS, AND/OR SPECIFICATIONS, THE MOST RESTRICTIVE INTERPRETATION IN FAVOR OF THE OWNER SHALL PREVAIL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY CLARIFICATION OR INTERPRETATION OF GENERAL NOTES, CONTRACT DRAWINGS, AND/OR SPECIFICATIONS, IN ADVANCE AND IN WRITING, FROM THE ENGINEER.
- MAIN AND SERVICE LINE PIPING INCLUDING APPURTENANCES SHALL "PASS" PRESSURE TESTING PRIOR TO ANY PAYMENT BY THE OWNER FOR THOSE ITEMS.
- ALL POLYETHYLENE SERVICE PIPE SHALL BE CONTINUOUS WITH NO "BUTT FUSED" OR COUPLED CONNECTIONS, EXCEPT AT THE MAIN CONNECTION, METER CONNECTION, AND/OR EXISTING SERVICE LINE CONNECTION.

UTILITY OWNERS

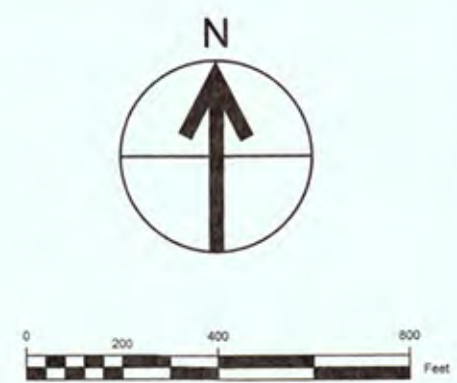
HARRIMAN UTILITY BOARD
300 NORTH ROANE STREET
HARRIMAN, TN 37748
ELECTRIC - HEATH LEWIS (865)719-9248
GAS, WATER, & SEWER - FRANKIE DAVIS (865)882-1772

AT&T TENNESSEE
9733 PARKSIDE DRIVE
KNOXVILLE, TN 37924
(865)539-8579

XFINITY / COMCAST
5720 ASHEVILLE HIGHWAY
KNOXVILLE, TN 37924
(865)862-5060



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Call before you dig.



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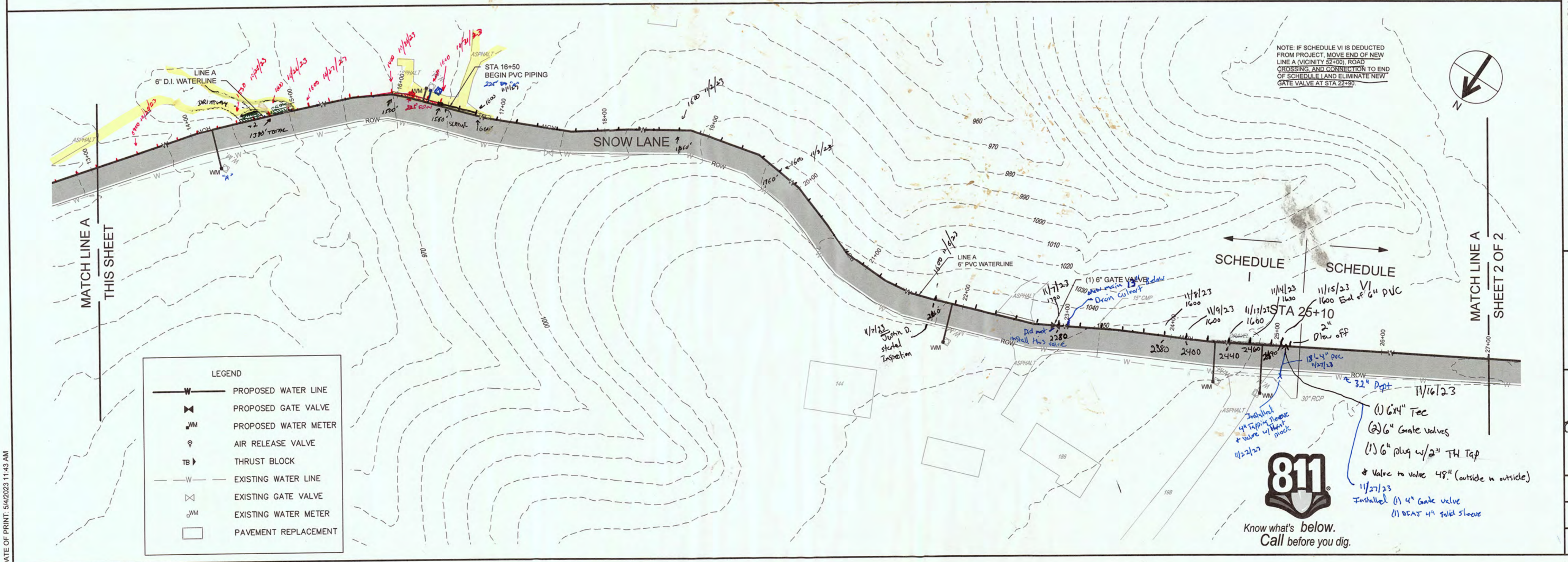
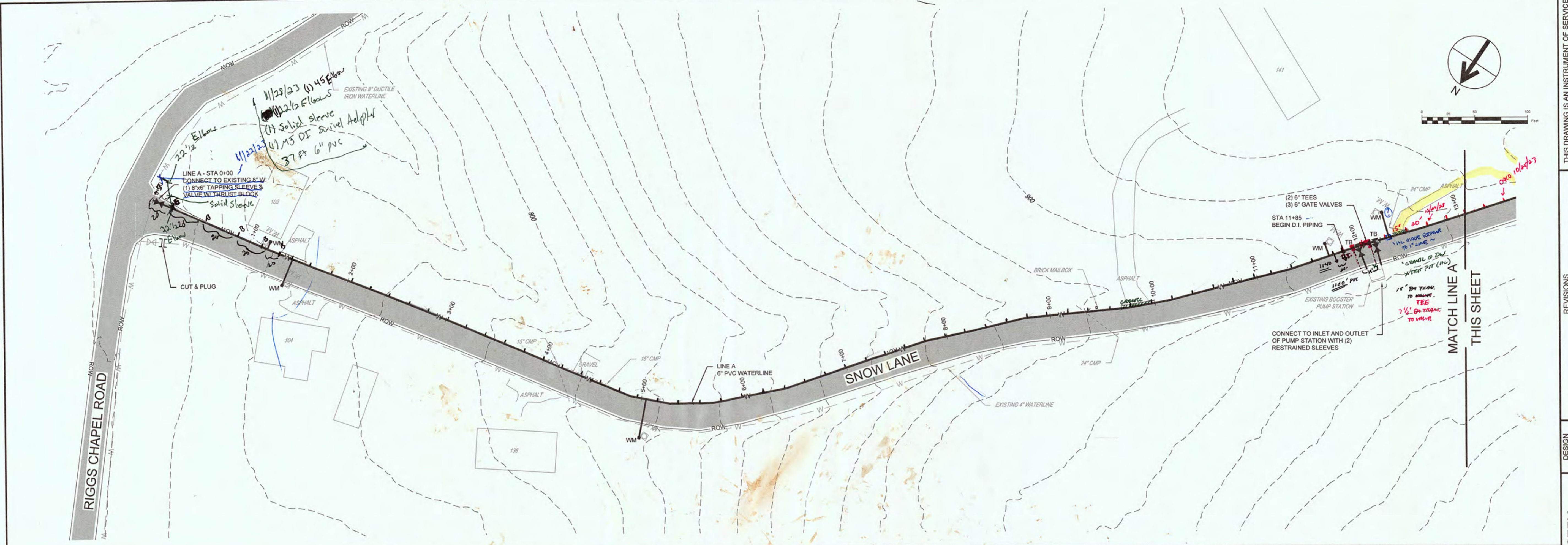
NO.	DESIGNATIONS	REVISIONS			
		DATE	BY	APPD	

DESIGN	JLK	JLK	TAB	CHECKED	JLK	APPROVED	JLK

2021 HARRIMAN CDBG WATER SYSTEM
IMPROVEMENTS
CONTRACT NO. 14980
GENERAL PLAN



JOB NO.	K22014
ISSUE DATE	04/10/2023
DRAWING NO.	2.0



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NO.	DESIGNATIONS	DATE	BY	APPD

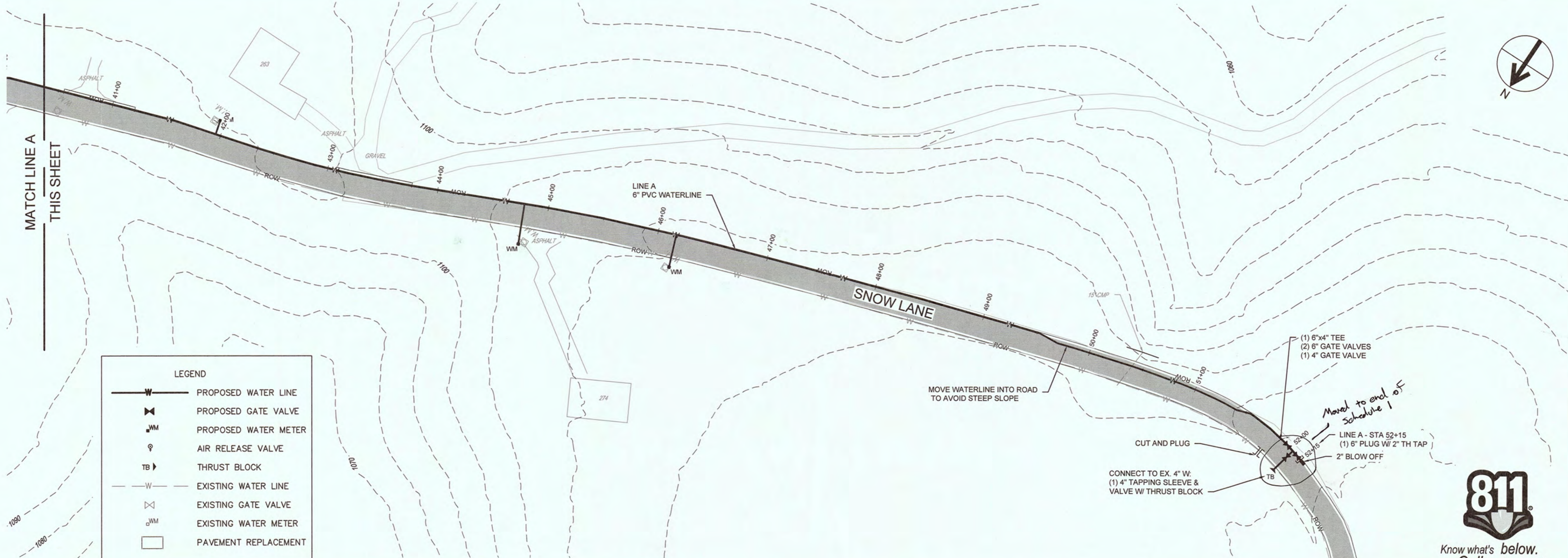
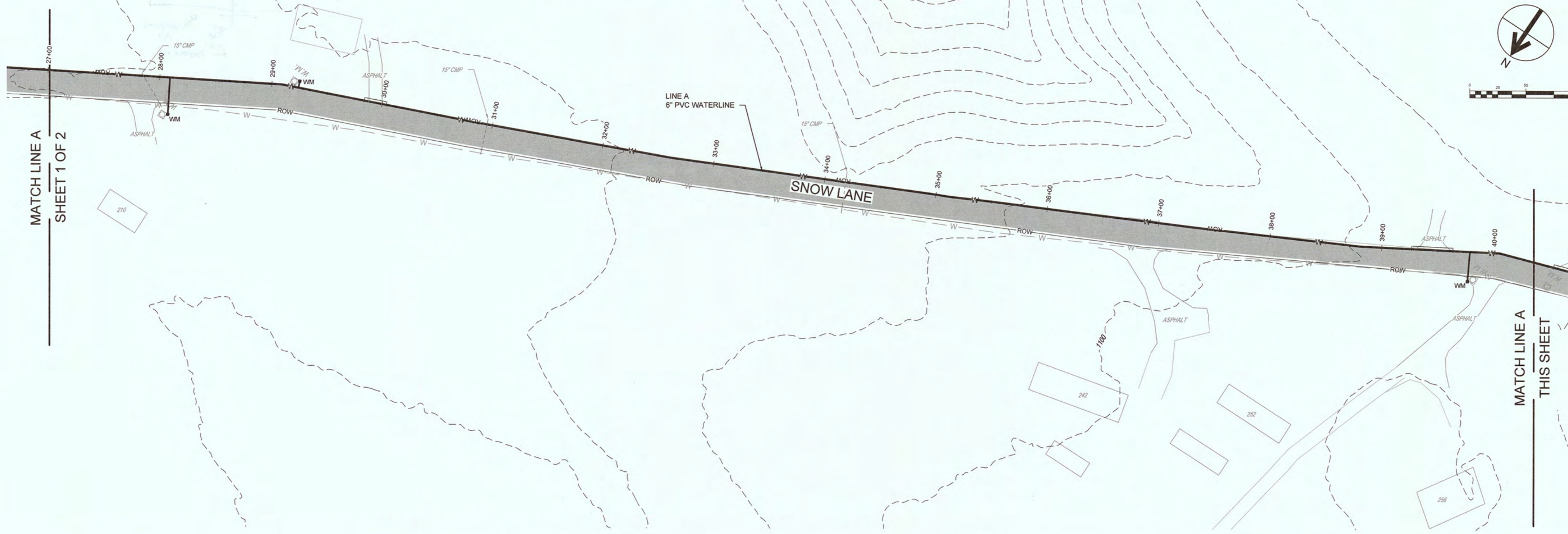
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2021 HARRIMAN CDBG WATER SYSTEM IMPROVEMENTS
 CONTRACT NO. 14980
 WATERLINE PLAN - LINE A
 SHEET 1 OF 2

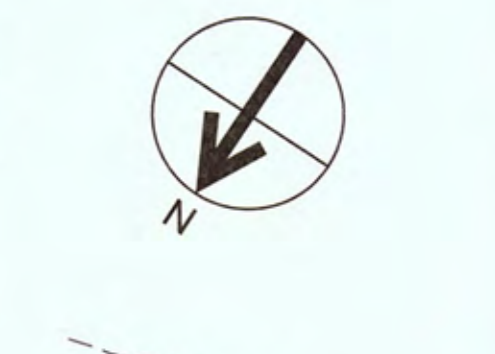
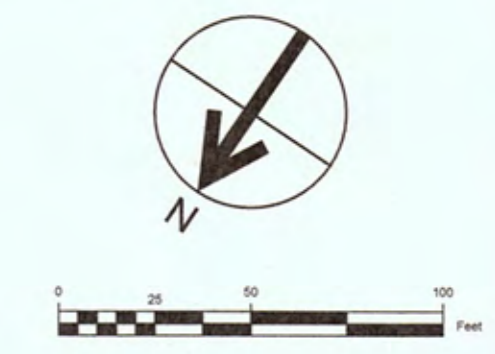


JOB NO.	K22014
ISSUE DATE	04/10/2023
DRAWING NO.	3.0





LEGEND	
	PROPOSED WATER LINE
	PROPOSED GATE VALVE
	PROPOSED WATER METER
	AIR RELEASE VALVE
	THRUST BLOCK
	EXISTING WATER LINE
	EXISTING GATE VALVE
	EXISTING WATER METER
	PAVEMENT REPLACEMENT



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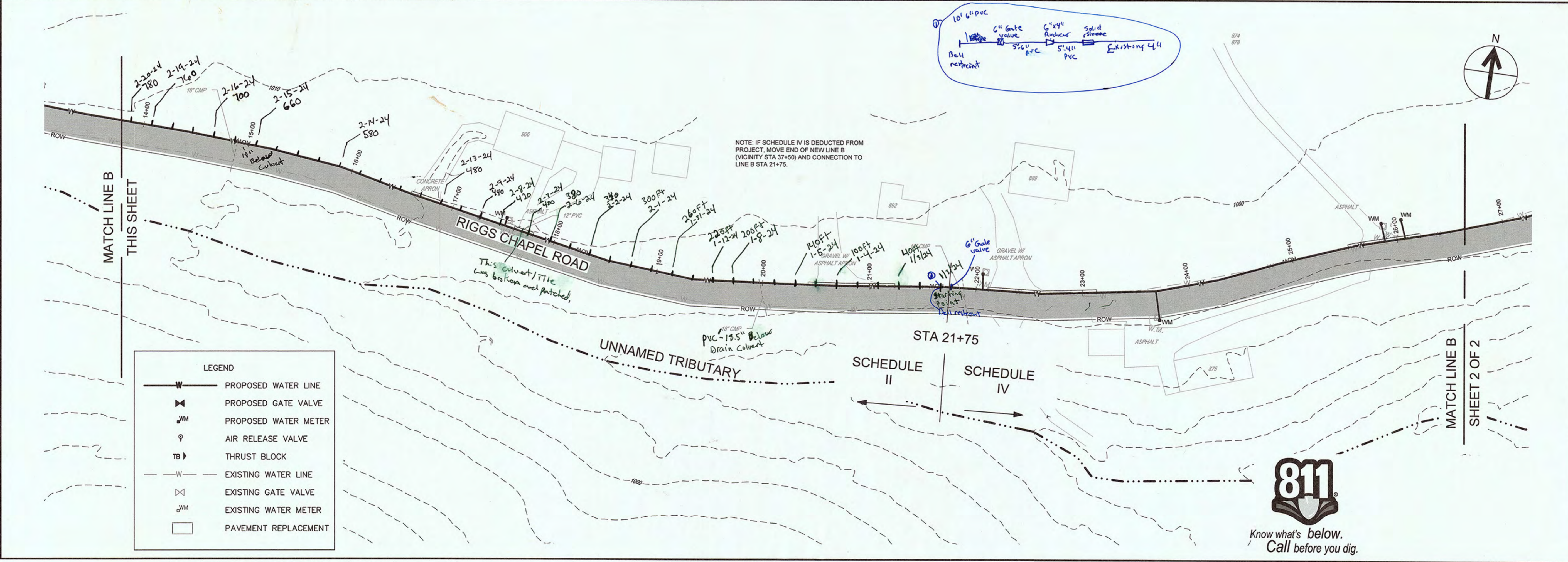
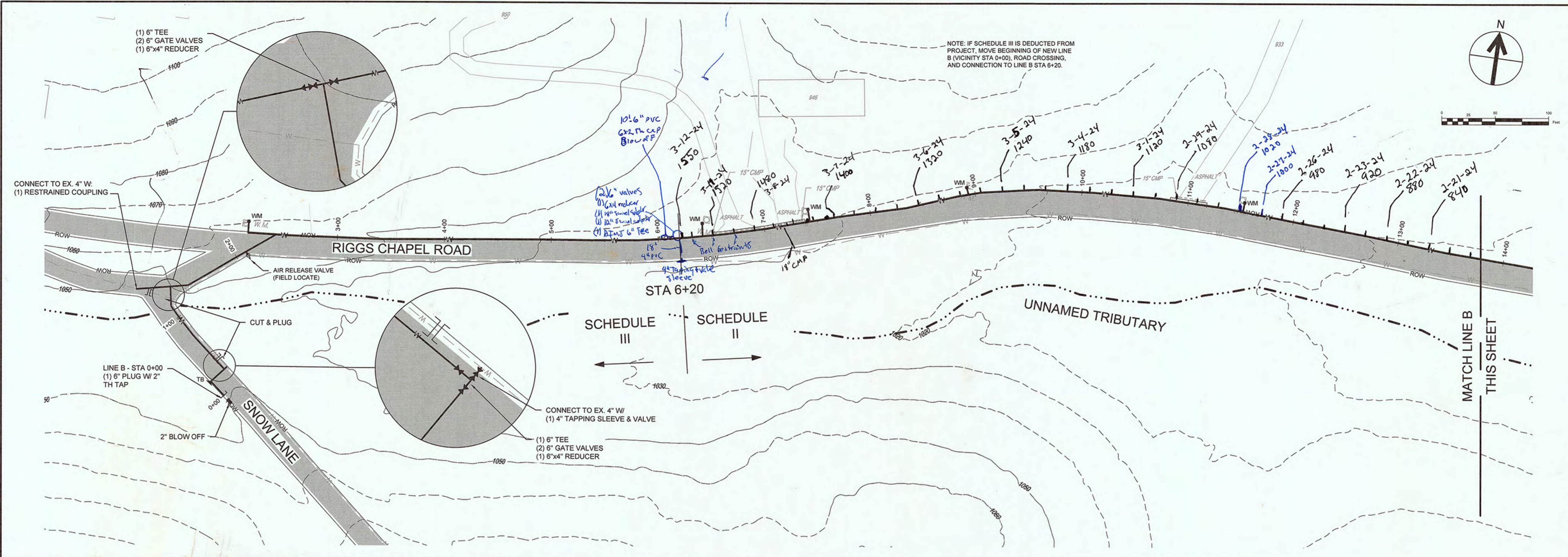
NO.	REVISIONS DESCRIPTIONS	DATE	BY	APP'D

2021 HARRIMAN CDBG WATER SYSTEM IMPROVEMENTS CONTRACT NO. 14980 WATERLINE PLAN - LINE A SHEET 2 OF 2



JOB NO.	K22014
ISSUE DATE	04/10/2023
DRAWING NO.	4.0





LEGEND

	PROPOSED WATER LINE
	PROPOSED GATE VALVE
	PROPOSED WATER METER
	AIR RELEASE VALVE
	THRUST BLOCK
	EXISTING WATER LINE
	EXISTING GATE VALVE
	EXISTING WATER METER
	PAVEMENT REPLACEMENT

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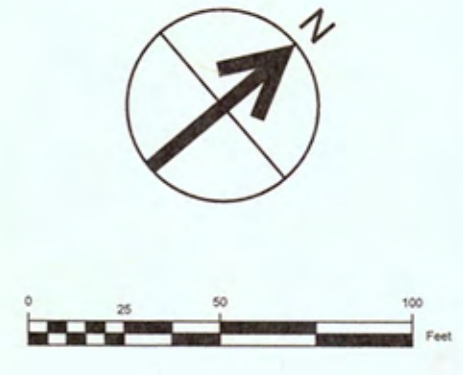
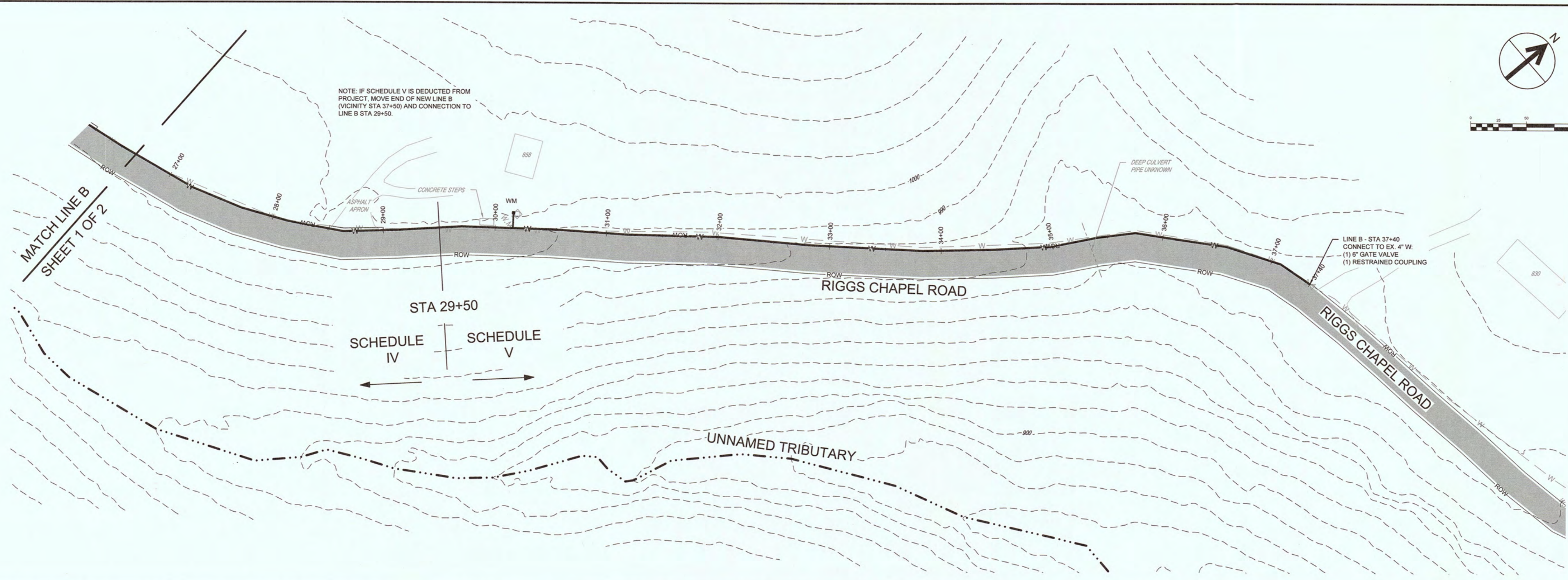
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2021 HARRIMAN CDBG WATER SYSTEM IMPROVEMENTS
 CONTRACT NO. 14980
 WATERLINE PLAN - LINE B
 SHEET 1 OF 2



JOB NO.	K22014
ISSUE DATE	04/10/2023
DRAWING NO.	5.0





LEGEND	
	PROPOSED WATER LINE
	PROPOSED GATE VALVE
	PROPOSED WATER METER
	AIR RELEASE VALVE
	THRUST BLOCK
	EXISTING WATER LINE
	EXISTING GATE VALVE
	EXISTING WATER METER
	PAVEMENT REPLACEMENT



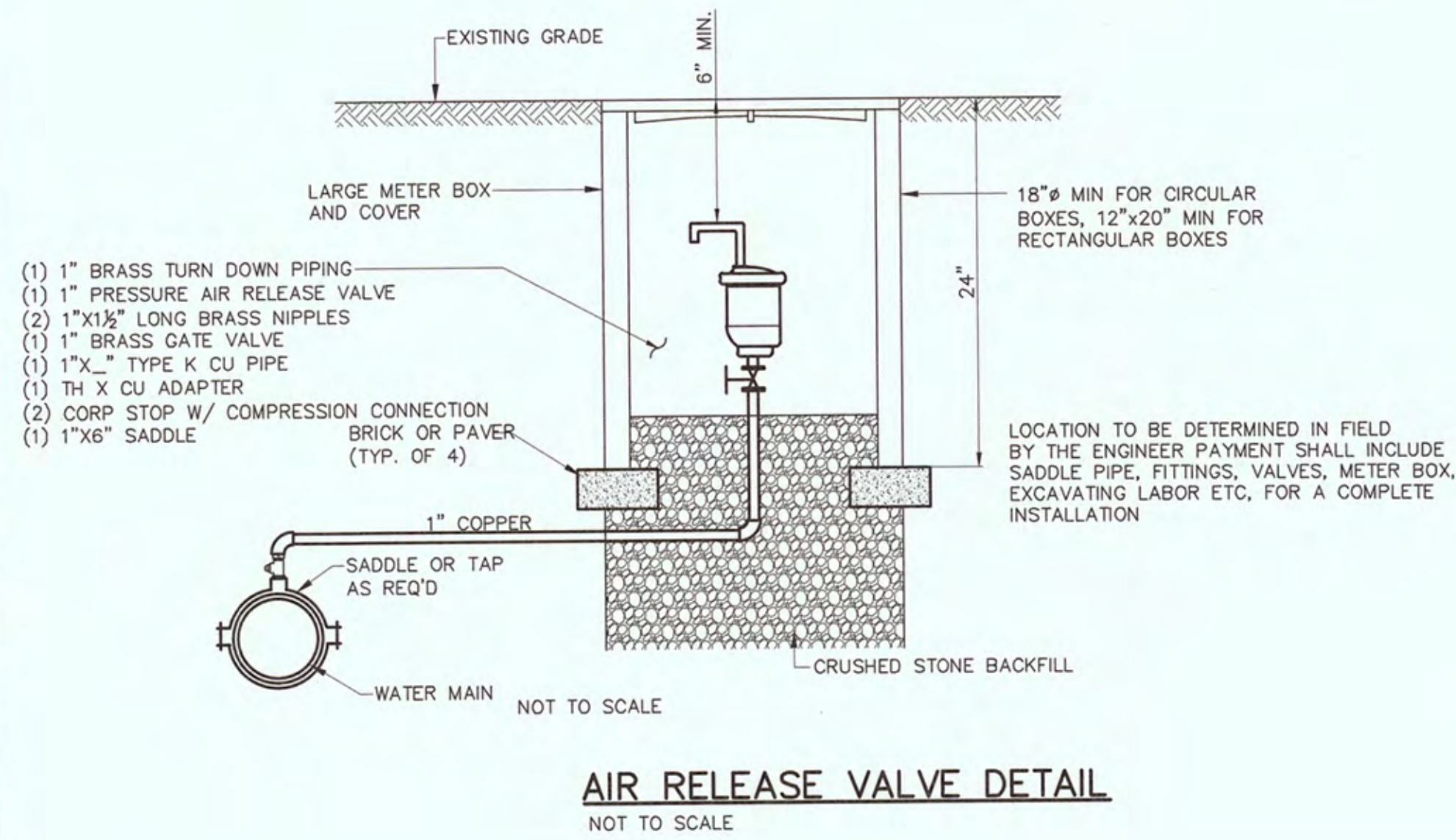
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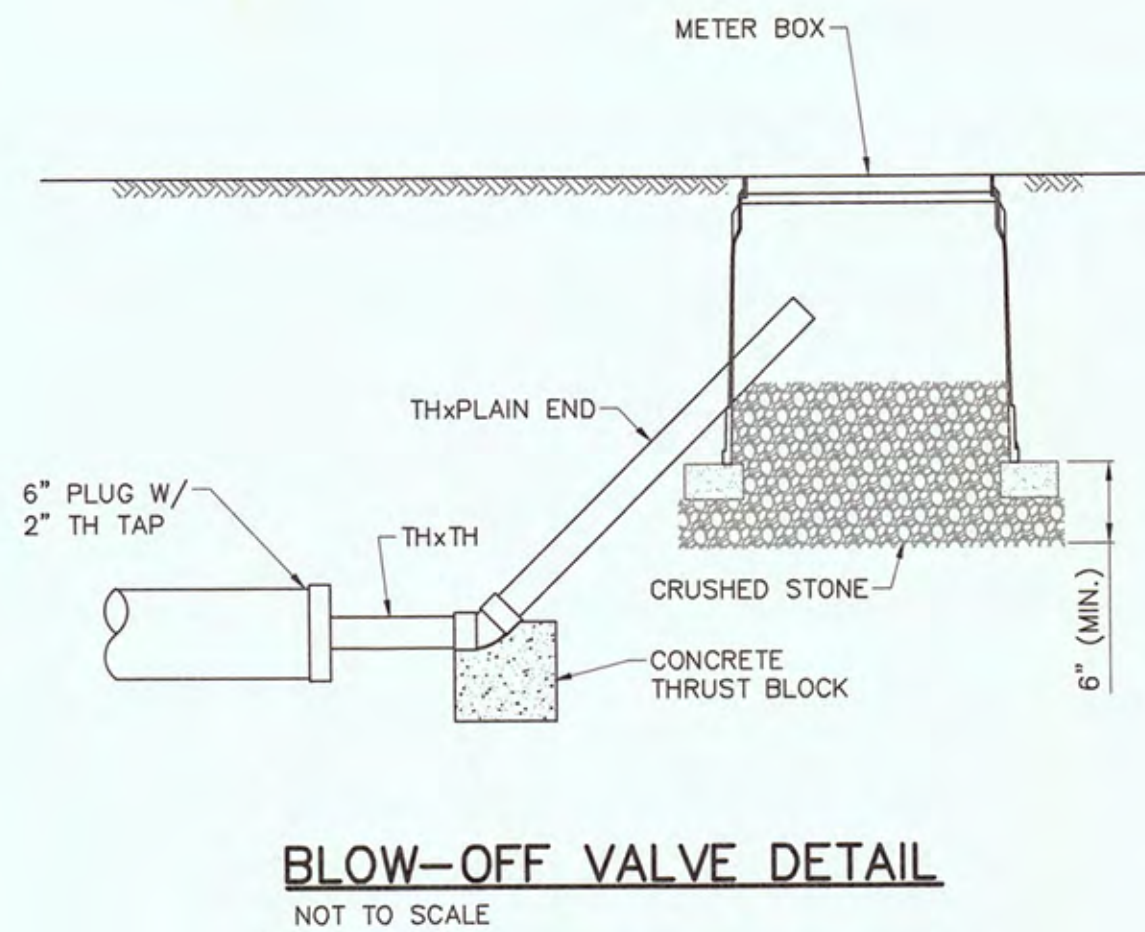
2021 HARRIMAN CDBG WATER SYSTEM IMPROVEMENTS
CONTRACT NO. 14980
WATERLINE PLAN - LINE B
SHEET 2 OF 2



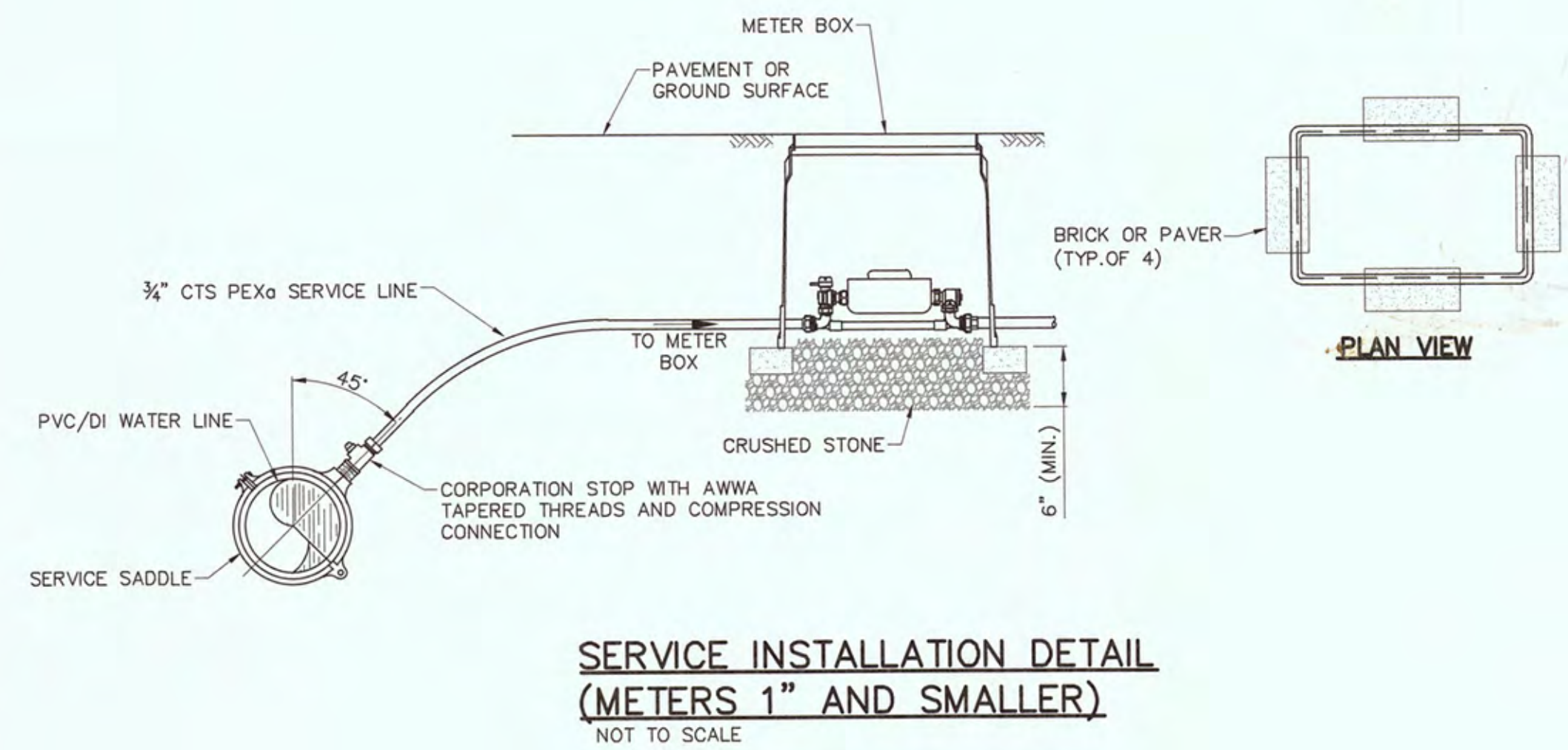
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ISSUE DATE	04/10/2023
DRAWING NO.	6.0



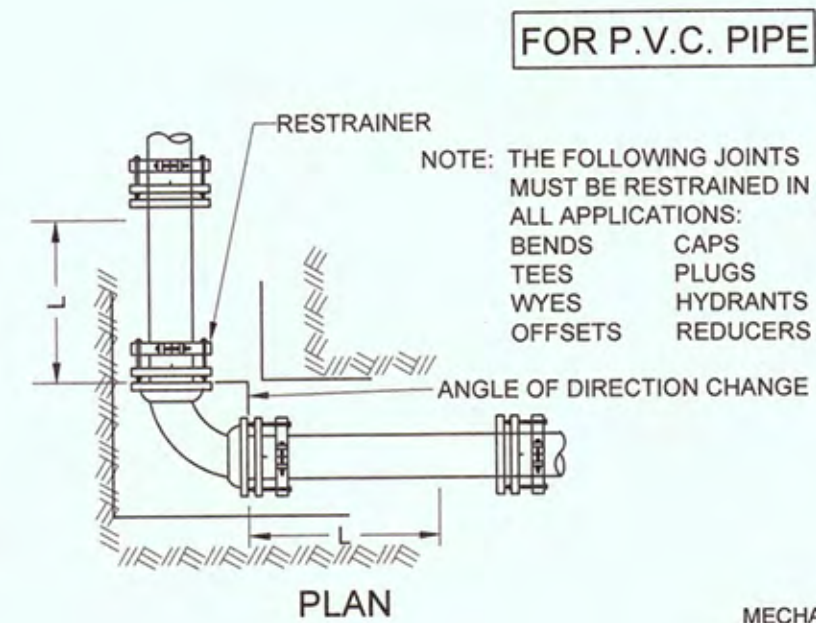
AIR RELEASE VALVE DETAIL
NOT TO SCALE



BLOW-OFF VALVE DETAIL
NOT TO SCALE

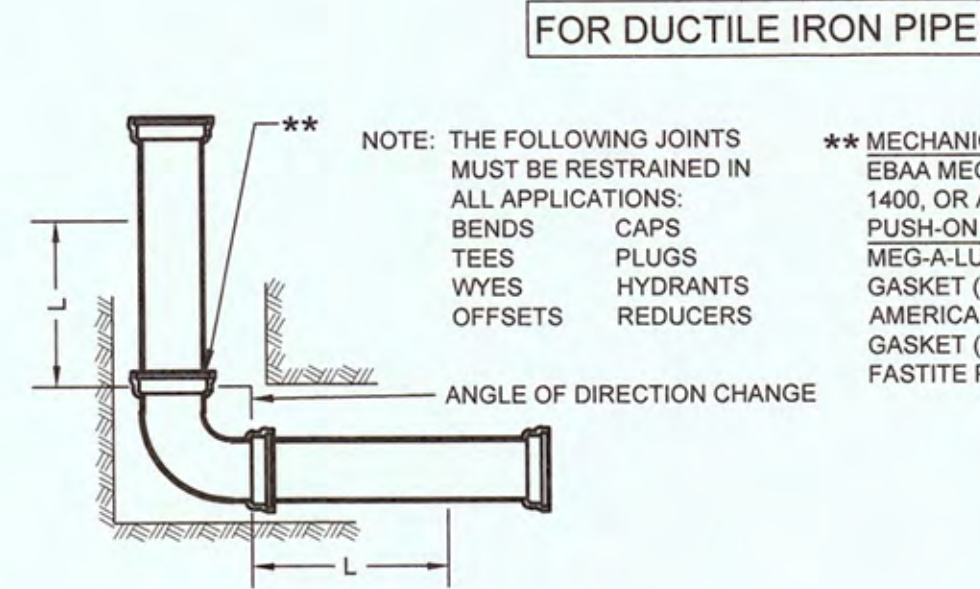


SERVICE INSTALLATION DETAIL (METERS 1" AND SMALLER)
NOT TO SCALE



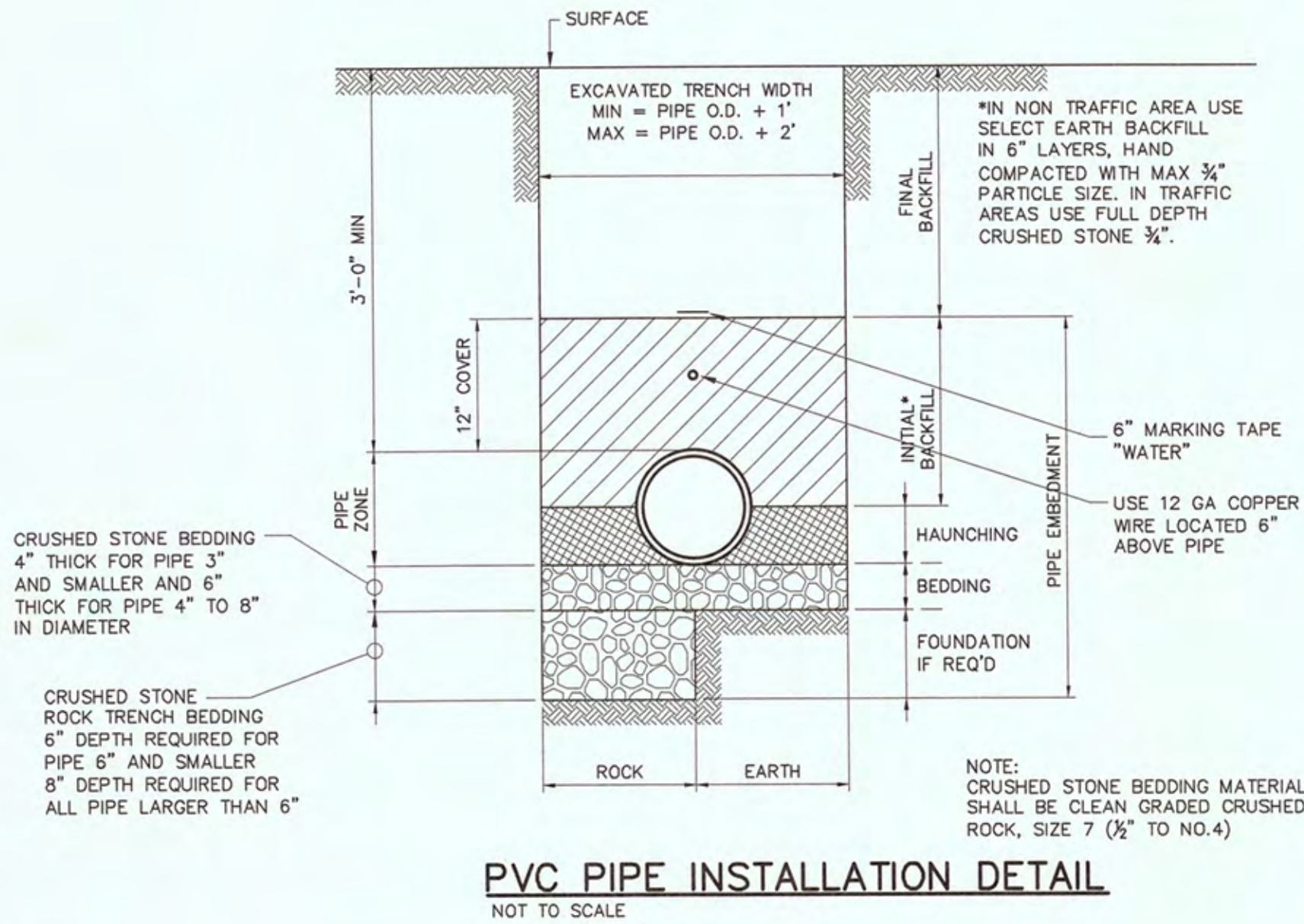
FOR P.V.C. PIPE

**** MECHANICAL JOINTS SHALL BE RESTRAINED WITH ONE OF THE FOLLOWING, OR AN APPROVED EQUIVALENT:**
C900 (3"-12") AND C905 (14"-24") PIPE - EBAA SERIES 2000PV OR UNI-FLANGE SERIES 1500-CA
ASTM D2241 IPS OD PIPE - EBAA SERIES 2000PV OR UNI-FLANGE SERIES 1500-SA
PUSH ON JOINTS SHALL BE RESTRAINED WITH ONE OF THE FOLLOWING, OR AN APPROVED EQUIVALENT:
C900 (3"-12") PIPE - EBAA SERIES 1600 OR UNI-FLANGE 1390-C
ASTM D2241 IPS OD PIPE - EBAA SERIES 6500 OR UNI-FLANGE 1390-S

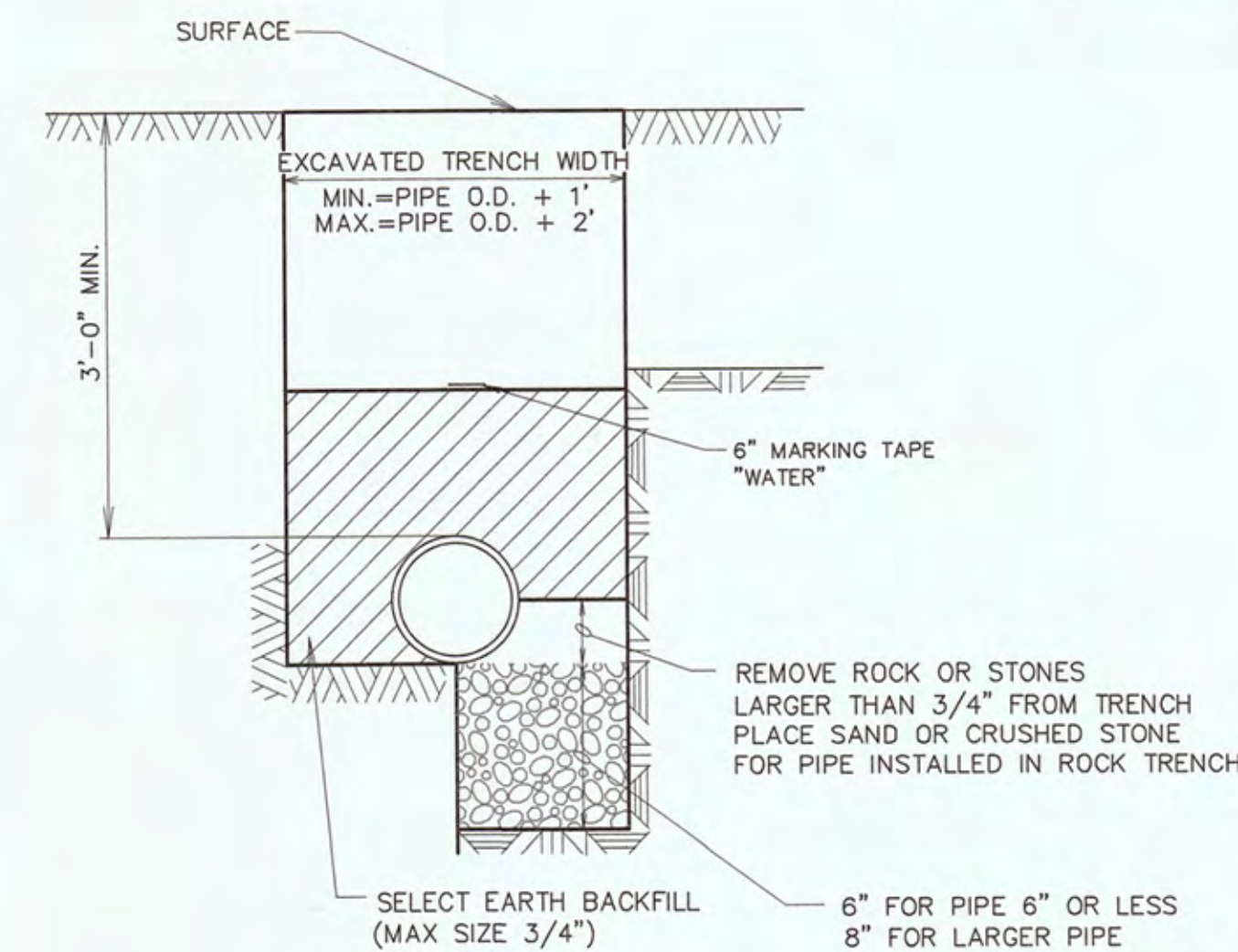


FOR DUCTILE IRON PIPE

**** MECHANICAL JOINTS SHALL BE RESTRAINED WITH EBAA MEG-A-LUG SERIES 1100, UNI-FLANGE SERIES 1400, OR APPROVED EQUAL. PUSH-ON JOINTS SHALL BE RESTRAINED WITH EBAA MEG-A-LUG SERIES 1700, U.S. PIPE FIELD LOK 350 GASKET (WITH U.S. PIPE TYTON PIPE OR FITTINGS), AMERICAN DUCTILE IRON PIPE'S FAST GRIP GASKET (WITH STANDARD AMERICAN DUCTILE IRON FASTITE PIPE), OR APPROVED EQUAL.**



PVC PIPE INSTALLATION DETAIL
NOT TO SCALE



DUCTILE IRON PIPE INSTALLATION DETAIL
NOT TO SCALE

L = MINIMUM LENGTH TO BE RESTRAINED ON EACH SIDE OF FITTING (FEET) *

NOM. PIPE SIZE (IN.)	TEST PRESSURE - 150 psi			
	ELBOWS (DEGREES)	TEES	VALVES, DEAD-ENDS	REDUCERS
11"	22"	45"	90"	
6	3	7	14	35
				38
				74

COMMENTS AND ASSUMPTIONS:
The tabulated values shown were generated using the EBAA Iron, Inc. computer program.
Soil Type: Worst Case
MH Granular - For Elbows
ML - For Reducers, Tees, Valves, and Dead-ends.
Trench Type: 3 (Pipe bedded in 4-inch minimum loose soil. Backfill lightly consolidated to top of pipe).
Depth of cover to top of pipe: 3 feet
Safety Factor: 1.5
The values shown for the Reducers were based on a reduction from the nominal pipe size to a pipe one-size smaller.
* Restrain one joint beyond the minimum length for all lengths over 10 feet.

MECHANICALLY RESTRAINED JOINTS GENERAL NOTES:
1. THE RESTRAINED LENGTHS SHOWN IN THE TABLE ASSUME A WORST CASE SOIL CONDITION FOR THE BEDDING CONDITION AND DESIGN PRESSURE.
2. INSTALL THRUST RESTRAINTS IN STRICT CONFORMANCE WITH MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.
3. PIPE JOINTS WITHIN CASING PIPES WILL BE RESTRAINED BUT PIPE LENGTHS WITHIN CASING PIPES WILL NOT BE CONSIDERED IN THE TOTAL LENGTH OF RESTRAINED PIPE.
4. "L" IN THE TABLE INDICATES THE MINIMUM LENGTH (IN FEET) TO BE RESTRAINED ON EACH SIDE OF THE RESPECTIVE FITTING LISTED.
5. THE FOLLOWING ARE THE PROCEDURES FOR DETERMINING THE MINIMUM RESTRAINED LENGTHS WHEN INSTALLING BENDS AND FITTINGS.
A. WHERE HORIZONTAL NON-ENCROACHING BENDS ARE ENCOUNTERED, USE "L" AS SHOWN IN THE TABLES.
B. WHERE HORIZONTAL RESTRAINED LENGTHS ENCR OACH, RESTRAIN ALL JOINTS BETWEEN BENDS (OR FITTINGS) AND MULTIPLY "L" BY 1.5 FOR NEW RESTRAINED LENGTH OPPOSITE THE FULLY RESTRAINED SECTION OF PIPING.
C. WHERE VERTICAL UP BENDS ARE ENCOUNTERED, USE "L" AS SHOWN IN TABLES.
D. WHERE VERTICAL DOWN BENDS ARE ENCOUNTERED, MULTIPLY "L" BY 1.5 FOR NEW RESTRAINED LENGTH.
E. WHERE VERTICAL BENDS ENCR OACH, RESTRAIN ALL JOINTS BETWEEN BENDS. FOR VERTICAL UP BENDS, MULTIPLY "L" BY 1.5 AND FOR VERTICAL DOWN BENDS, MULTIPLY "L" BY 2.25 FOR NEW RESTRAINED LENGTHS OPPOSITE THE FULLY RESTRAINED SECTION OF PIPE.
6. THE RESTRAINED LENGTHS SHOWN FOR REDUCERS ARE BASED ON A REDUCTION OF ONE SIZE DOWN (I.E. 8 TO 6, 4 TO 3, ETC.). IF A REDUCTION GREATER THAN ONE SIZE DOWN IS NECESSARY, SEE THE ENGINEER FOR THE REQUIRED RESTRAINED LENGTH.

DEFINITIONS:
ENCROACHING: WHERE FITTINGS ARE INSTALLED AT LOCATIONS CLOSE ENOUGH TO ONE ANOTHER WHERE THE CALCULATED MINIMUM RESTRAINED LENGTHS OVERLAP.
NON ENCROACHING: WHERE FITTINGS ARE INSTALLED AT LOCATIONS WHERE THE CALCULATED MINIMUM RESTRAINED LENGTHS DO NOT OVERLAP.

MECHANICALLY RESTRAINED JOINT DETAIL
NOT TO SCALE

L = MINIMUM LENGTH TO BE RESTRAINED ON EACH SIDE OF FITTING (FEET) *

NOM PIPE SIZE (IN.)	TEST PRESSURE - 150 psi			
	ELBOWS (DEGREES)	TEES	VALVES, DEAD-ENDS	REDUCERS
11"	22"	45"	90"	
6	3	5	11	28
				21
				40

COMMENTS AND ASSUMPTIONS:
The tabulated values shown were generated using the EBAA Iron, Inc. computer program.
Soil Type: Worst Case
MH Granular - For Elbows
ML - For Reducers, Tees, Valves, and Dead-ends.
Trench Type: 3 (Pipe bedded in 4-inch minimum loose soil. Backfill lightly consolidated to top of pipe).
Depth of cover to top of pipe: 3 feet
Safety Factor: 1.5
The values shown for the Reducers were based on a reduction from the nominal pipe size to a pipe one-size smaller.
* Restrain one joint beyond the minimum length for all lengths over 10 feet.

NOTE: 2 INCH BELL RESTRAINTS WERE INSTALLED USING THE 3 INCH PIPE SIZE FROM THE EBAA IRON WEBSITE.

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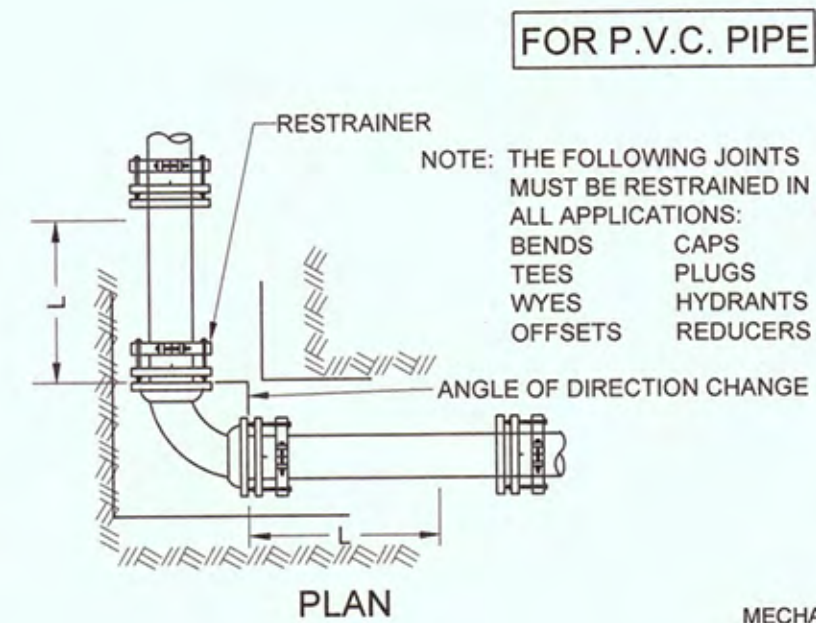
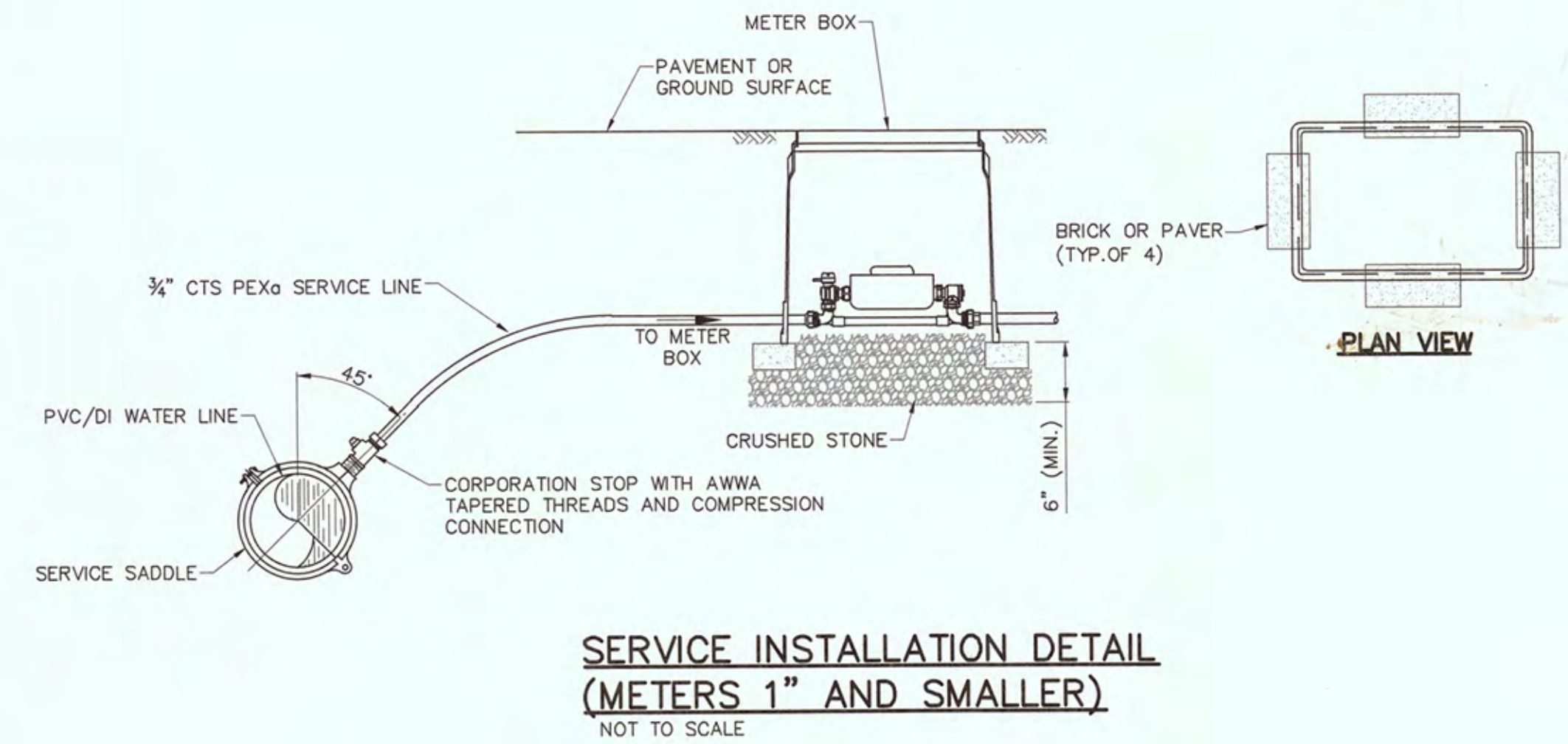
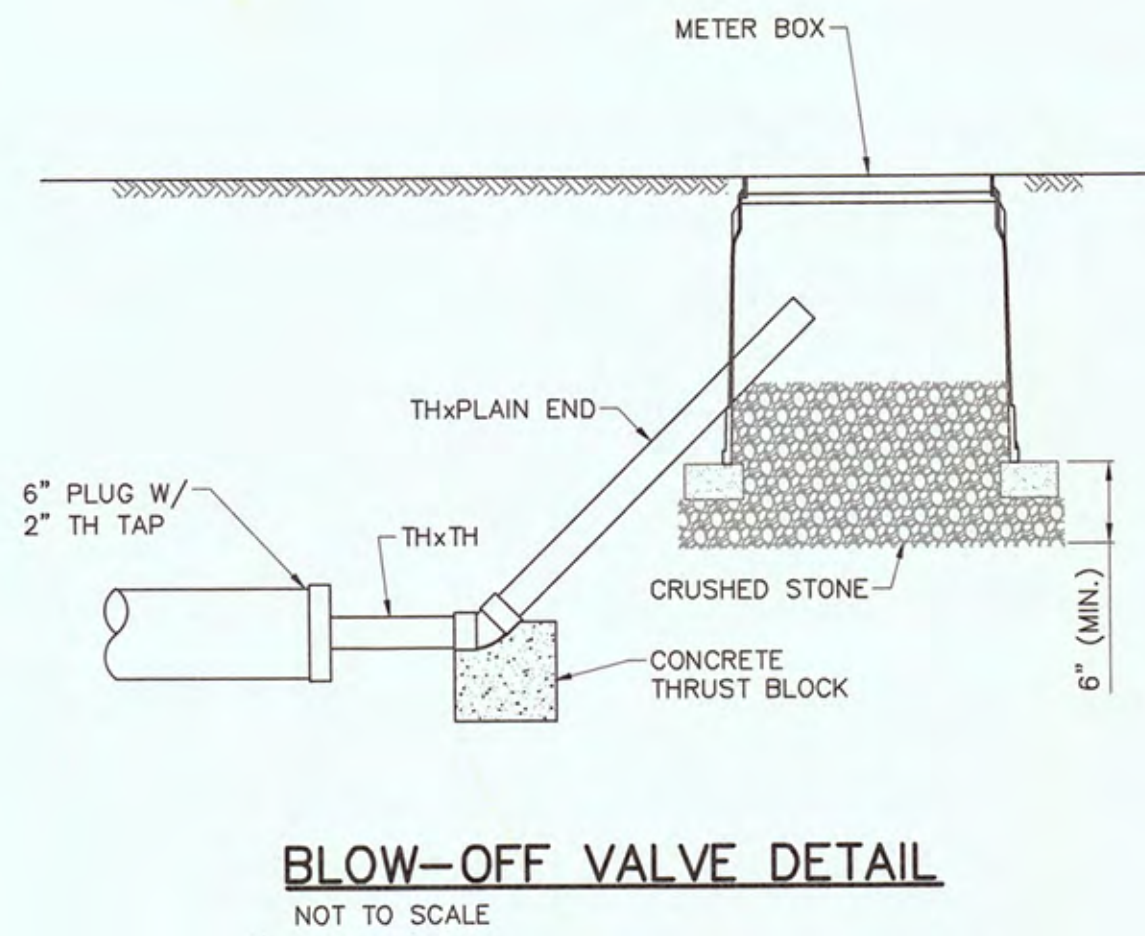
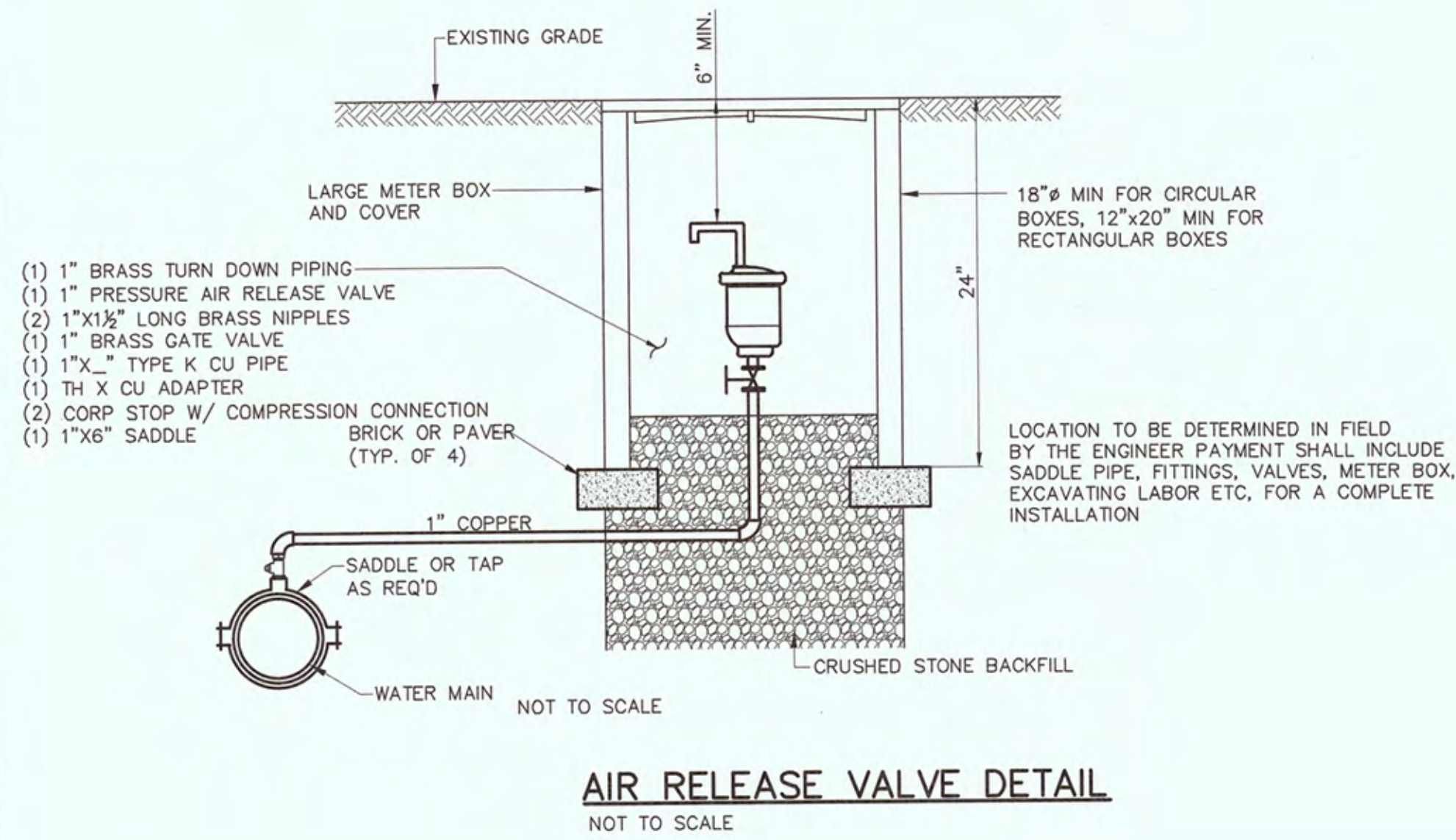
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CONTRACT NO. 14980
DETAIL SHEET 1 OF 2

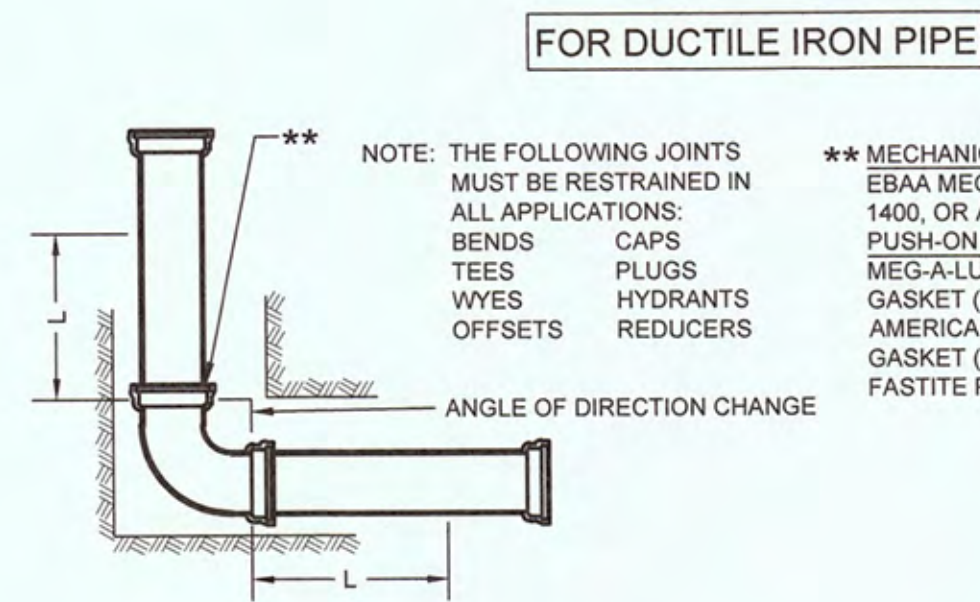


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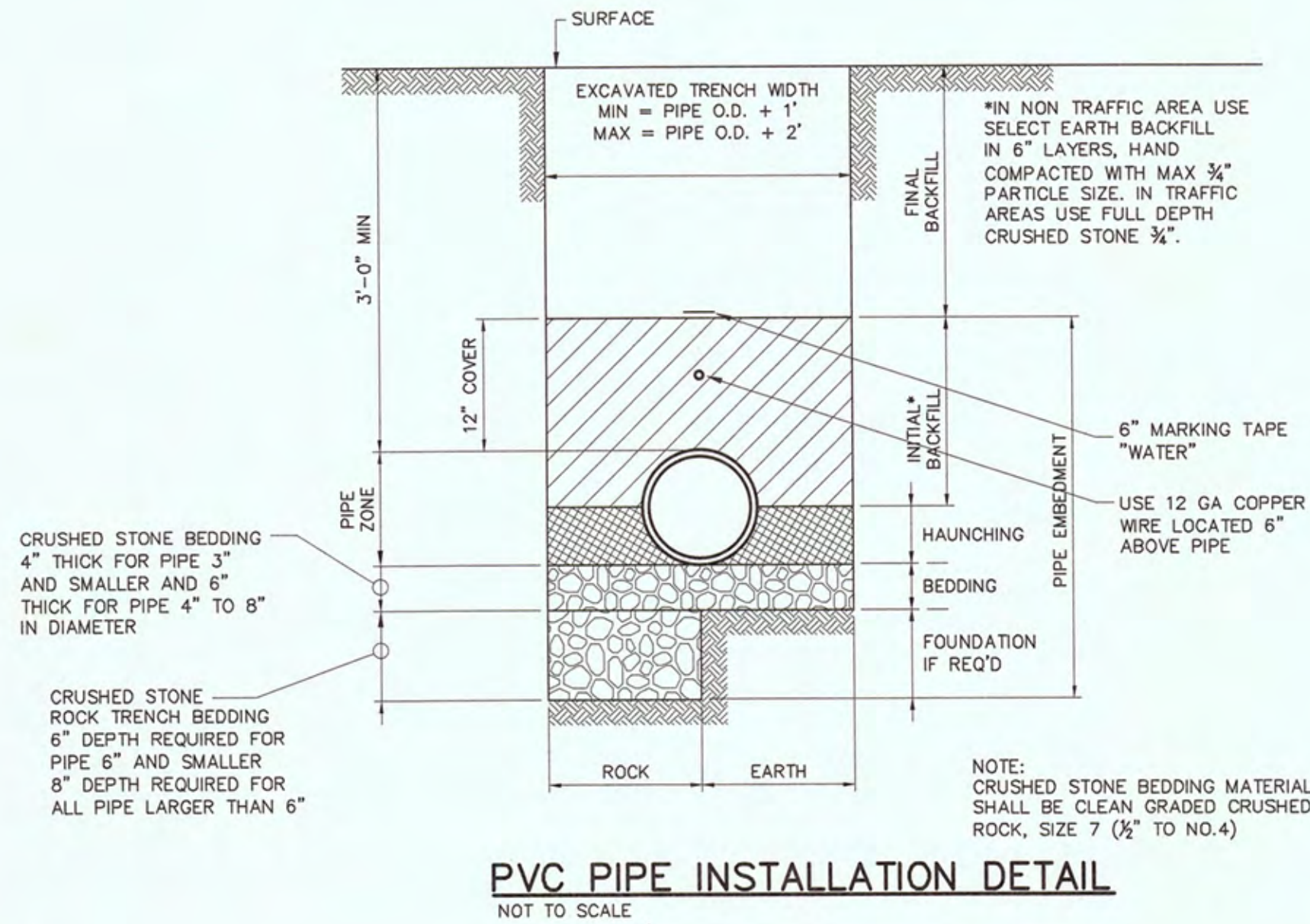


**** MECHANICAL JOINTS SHALL BE RESTRAINED WITH ONE OF THE FOLLOWING, OR AN APPROVED EQUIVALENT.**
C900 (3"-12") AND C905 (14"-24") PIPE - EBAA SERIES 2000PV OR UNI-FLANGE SERIES 1500-CA
ASTM D2241 IPS OD PIPE - EBAA SERIES 2000PV OR UNI-FLANGE SERIES 1500-SA

PUSH ON JOINTS SHALL BE RESTRAINED WITH ONE OF THE FOLLOWING, OR AN APPROVED EQUIVALENT:
C900 (3"-12") PIPE - EBAA SERIES 1600 OR UNI-FLANGE 1390-C
ASTM D2241 IPS OD PIPE - EBAA SERIES 6500 OR UNI-FLANGE 1390-S



**** MECHANICAL JOINTS SHALL BE RESTRAINED WITH EBAA MEG-A-LUG SERIES 1100, UNI-FLANGE SERIES 1400, OR APPROVED EQUAL.**
PUSH-ON JOINTS SHALL BE RESTRAINED WITH EBAA MEG-A-LUG SERIES 1700, U.S. PIPE FIELD LOK 350 GASKET (WITH U.S. PIPE TYTON PIPE OR FITTINGS), AMERICAN DUCTILE IRON PIPE'S FAST GRIP GASKET (WITH STANDARD AMERICAN DUCTILE IRON FASTITE PIPE), OR APPROVED EQUAL.



MECHANICALLY RESTRAINED JOINTS GENERAL NOTES:

- THE RESTRAINED LENGTHS SHOWN IN THE TABLE ASSUME A WORST CASE SOIL CONDITION FOR THE BEDDING CONDITION AND DESIGN PRESSURE.
- INSTALL THRUST RESTRAINTS IN STRICT CONFORMANCE WITH MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.
- PIPE JOINTS WITHIN CASING PIPES WILL BE RESTRAINED BUT PIPE LENGTHS WITHIN CASING PIPES WILL NOT BE CONSIDERED IN THE TOTAL LENGTH OF RESTRAINED PIPE.
- "L" IN THE TABLE INDICATES THE MINIMUM LENGTH (IN FEET) TO BE RESTRAINED ON EACH SIDE OF THE RESPECTIVE FITTING LISTED.
- THE FOLLOWING ARE THE PROCEDURES FOR DETERMINING THE MINIMUM RESTRAINED LENGTHS WHEN INSTALLING BENDS AND FITTINGS.
 - WHERE HORIZONTAL NON-ENCROACHING BENDS ARE ENCOUNTERED, USE "L" AS SHOWN IN THE TABLES.
 - WHERE HORIZONTAL RESTRAINED LENGTHS ENCR OACH, RESTRAIN ALL JOINTS BETWEEN BENDS (OR FITTINGS) AND MULTIPLY "L" BY 1.5 FOR NEW RESTRAINED LENGTH OPPOSITE THE FULLY RESTRAINED SECTION OF PIPING.
 - WHERE VERTICAL UP BENDS ARE ENCOUNTERED, USE "L" AS SHOWN IN TABLES.
 - WHERE VERTICAL DOWN BENDS ARE ENCOUNTERED, MULTIPLY "L" BY 1.5 FOR NEW RESTRAINED LENGTH.
 - WHERE VERTICAL BENDS ENCR OACH, RESTRAIN ALL JOINTS BETWEEN BENDS. FOR VERTICAL UP BENDS, MULTIPLY "L" BY 1.5 AND FOR VERTICAL DOWN BENDS, MULTIPLY "L" BY 2.25 FOR NEW RESTRAINED LENGTHS OPPOSITE THE FULLY RESTRAINED SECTION OF PIPE.
- THE RESTRAINED LENGTHS SHOWN FOR REDUCERS ARE BASED ON A REDUCTION OF ONE SIZE DOWN (I.E. 8 TO 6, 4 TO 3, ETC.). IF A REDUCTION GREATER THAN ONE SIZE DOWN IS NECESSARY, SEE THE ENGINEER FOR THE REQUIRED RESTRAINED LENGTH.

DEFINITIONS:
ENCROACHING: WHERE FITTINGS ARE INSTALLED AT LOCATIONS CLOSE ENOUGH TO ONE ANOTHER WHERE THE CALCULATED MINIMUM RESTRAINED LENGTHS OVERLAP.
NON ENCROACHING: WHERE FITTINGS ARE INSTALLED AT LOCATIONS WHERE THE CALCULATED MINIMUM RESTRAINED LENGTHS DO NOT OVERLAP.

ENCROACHING: WHERE FITTINGS ARE INSTALLED AT LOCATIONS CLOSE ENOUGH TO ONE ANOTHER WHERE THE CALCULATED MINIMUM RESTRAINED LENGTHS OVERLAP.

NON ENCROACHING: WHERE FITTINGS ARE INSTALLED AT LOCATIONS WHERE THE CALCULATED MINIMUM RESTRAINED LENGTHS DO NOT OVERLAP.

L = MINIMUM LENGTH TO BE RESTRAINED ON EACH SIDE OF FITTING (FEET) *

NOM. PIPE SIZE (IN.)	TEST PRESSURE - 150 psi			
	ELBOWS (DEGREES)	TEES	VALVES, DEAD-ENDS	REDUCERS
11"	22"	45"	90"	
6	3	7	14	35
				38
				74

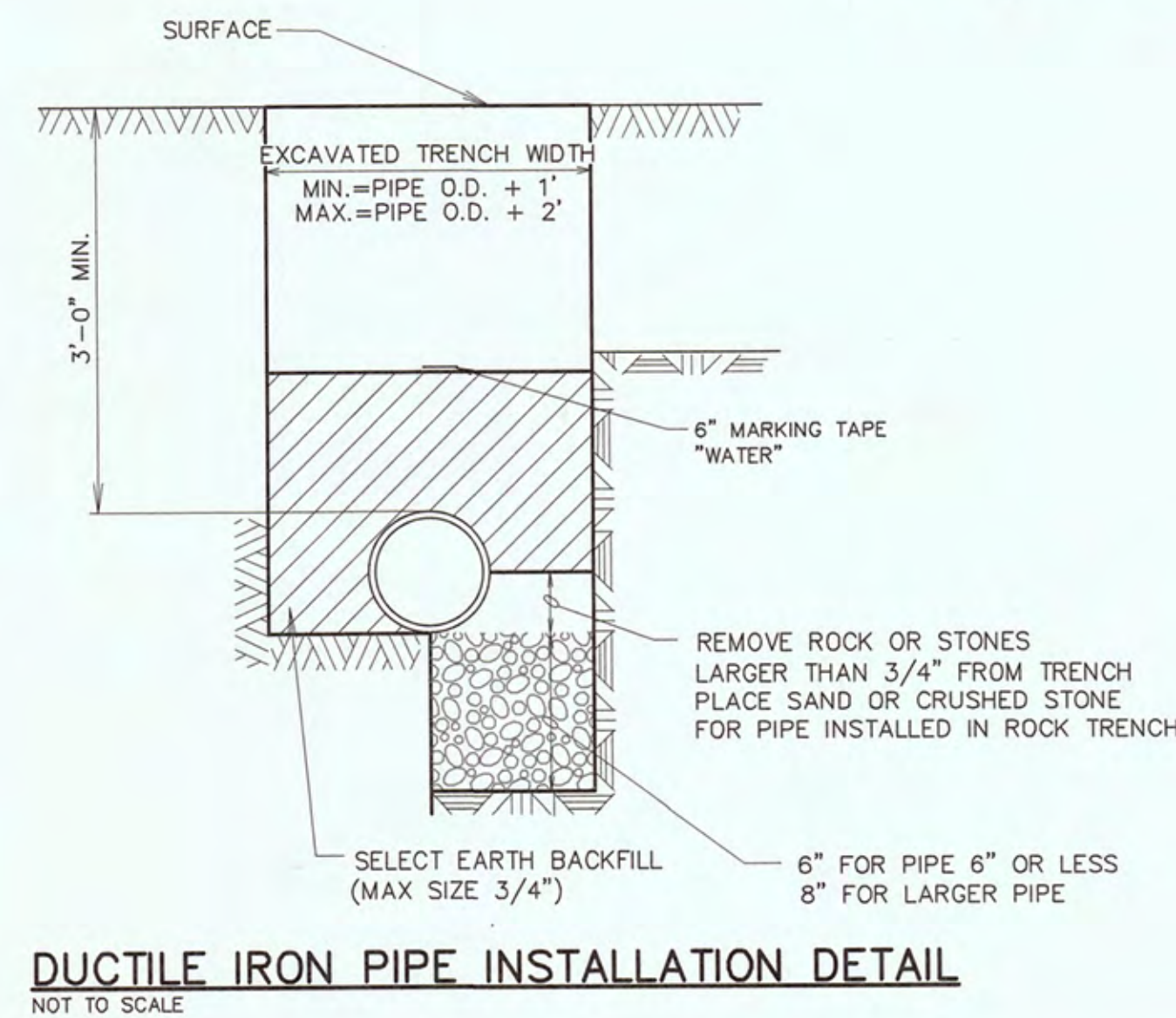
COMMENTS AND ASSUMPTIONS:
The tabulated values shown were generated using the EBAA Iron, Inc. computer program.
Soil Type: Worst Case
MH Granular - For Elbows
ML - For Reducers, Tees, Valves, and Dead-ends.
Trench Type: 3 (Pipe bedded in 4-inch minimum loose soil. Backfill lightly consolidated to top of pipe).
Depth of cover to top of pipe: 3 feet
Safety Factor: 1.5
The values shown for the Reducers were based on a reduction from the nominal pipe size to a pipe one-size smaller.
* Restrain one joint beyond the minimum length for all lengths over 10 feet.

L = MINIMUM LENGTH TO BE RESTRAINED ON EACH SIDE OF FITTING (FEET) *

NOM. PIPE SIZE (IN.)	TEST PRESSURE - 150 psi			
	ELBOWS (DEGREES)	TEES	VALVES, DEAD-ENDS	REDUCERS
11"	22"	45"	90"	
6	3	5	11	28
				21
				40

COMMENTS AND ASSUMPTIONS:
The tabulated values shown were generated using the EBAA Iron, Inc. computer program.
Soil Type: Worst Case
MH Granular - For Elbows
ML - For Reducers, Tees, Valves, and Dead-ends.
Trench Type: 3 (Pipe bedded in 4-inch minimum loose soil. Backfill lightly consolidated to top of pipe).
Depth of cover to top of pipe: 3 feet
Safety Factor: 1.5
The values shown for the Reducers were based on a reduction from the nominal pipe size to a pipe one-size smaller.
* Restrain one joint beyond the minimum length for all lengths over 10 feet.

MECHANICALLY RESTRAINED JOINT DETAIL
NOT TO SCALE



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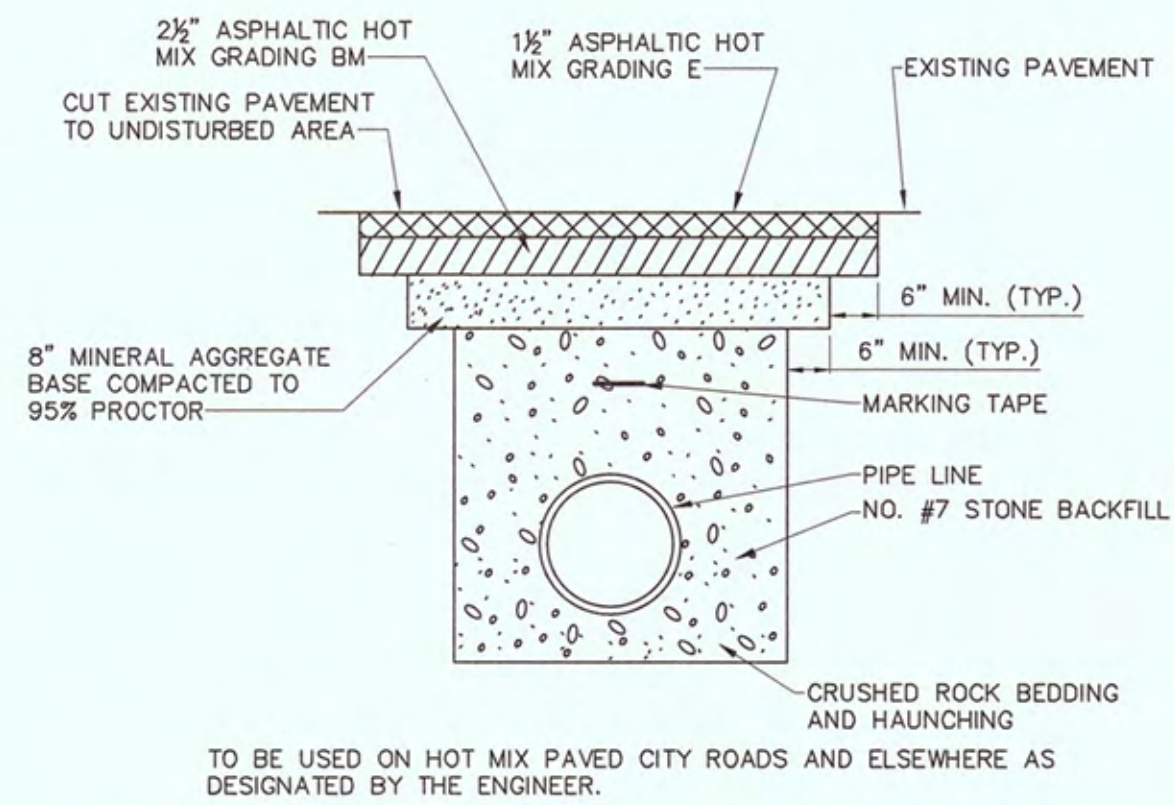
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**PAVEMENT REPLACEMENT DETAIL
(CITY & COUNTY ROADS)**

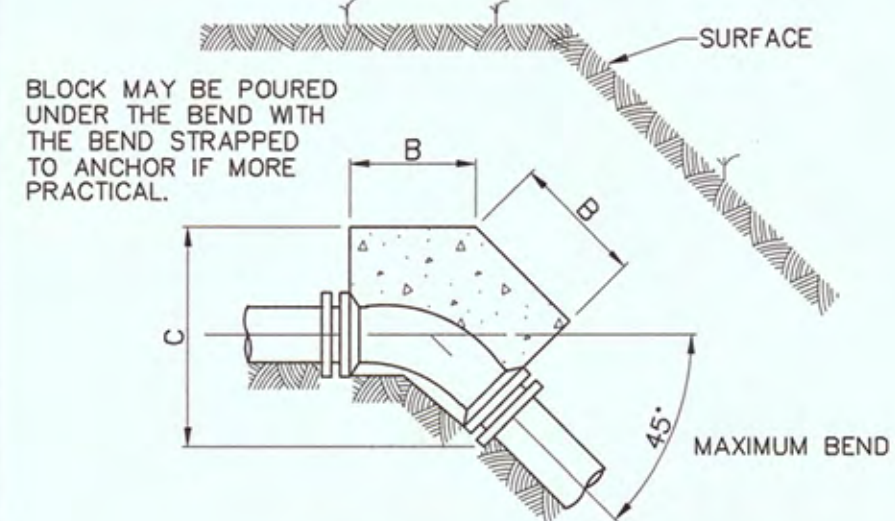
NOT TO SCALE

PIPE SIZE X	A	B	DEPTH C	PIPE SIZE X	A	B	DEPTH C
11 1/2" BEND							
10"	0'-9"	1'-0"	1'-0"	10"	1'-4"	2'-2"	3'-0"
8"	0'-9"	1'-0"	0'-8"	8"	1'-0"	2'-0"	2'-3"
6"	0'-9"	1'-0"	0'-6"	6"	1'-0"	1'-3"	2'-0"
2'-4"	0'-6"	1'-0"	0'-4"	2'-4"	0'-9"	1'-0"	1'-0"
DEAD END							
10"	0'-9"	2'-0"	2'-4"	10"	0'-9"	2'-0"	1'-9"
8"	0'-7"	1'-8"	1'-9"	8"	0'-9"	1'-6"	1'-8"
6"	0'-5"	1'-3"	1'-5"	6"	0'-9"	1'-0"	1'-6"
2'-4"	0'-4"	0'-10"	0'-11"	2'-4"	0'-9"	1'-0"	1'-0"
TEE							
10"	1'-9"	4'-0"	2'-3"	10"	0'-9"	1'-3"	1'-6"
8"	1'-6"	3'-0"	2'-0"	8"	0'-9"	1'-0"	1'-4"
6"	1'-0"	2'-8"	1'-6"	6"	0'-9"	0'-10"	1'-0"
2'-4"	1'-0"	2'-0"	1'-0"	2'-4"	0'-9"	0'-7"	1'-0"

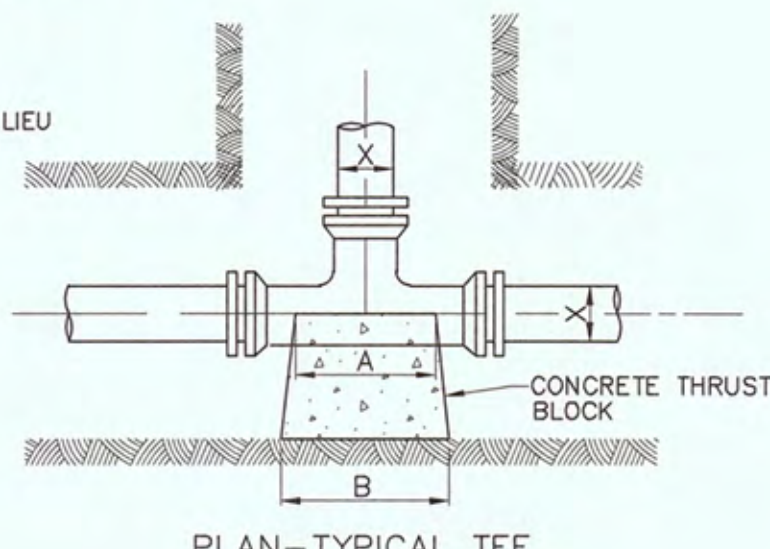
NOTE: ALL CONCRETE FOR THRUST BLOCKS SHALL BE READY-MIXED 3000 PSI (MINIMUM) CLASS "B". MIX DESIGN SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO USE. THRUST BLOCKS BASED ON 225 PSI & 2000LB/FT² SOIL RESISTANCE TYPICAL FOR UNDISTURBED SAND AND GRAVEL CEMENTED WITH CLAY. FOR OTHER SOILS THE BEARING CAPACITY OF THE THRUST BLOCKS SHOULD BE INCREASED BY THE FOLLOWING FACTORS:

SAND 2
SAND & GRAVEL 1.33
SHALE 0.4

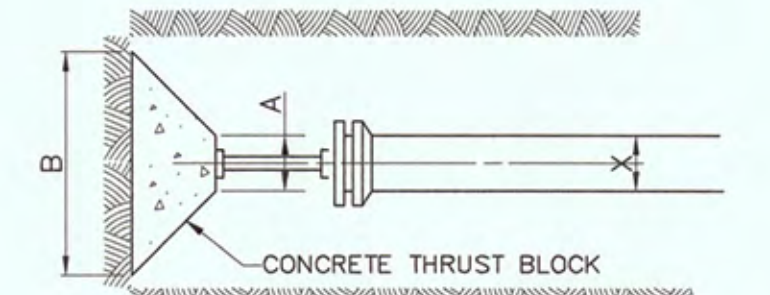
SOFT CLAY, MUCK AND PEAT SHALL USE RESTRAINED JOINTS IN LIEU OF THRUST BLOCKS.



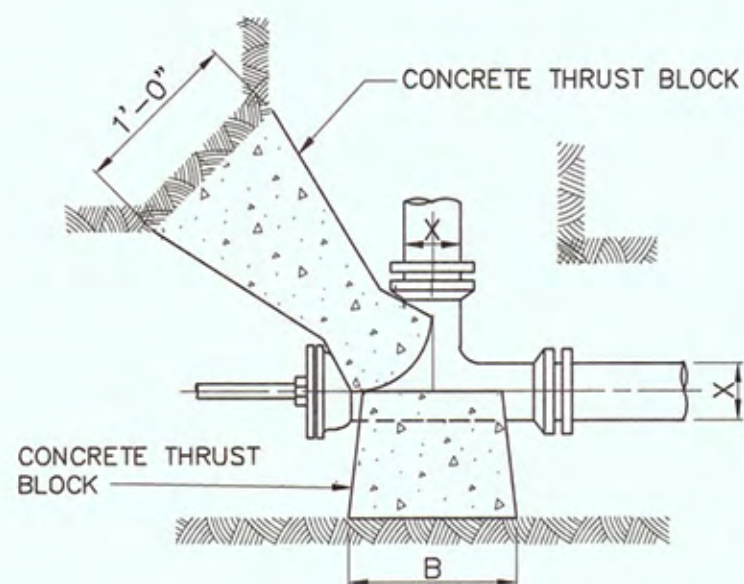
PLAN-TYPICAL VERTICAL BEND



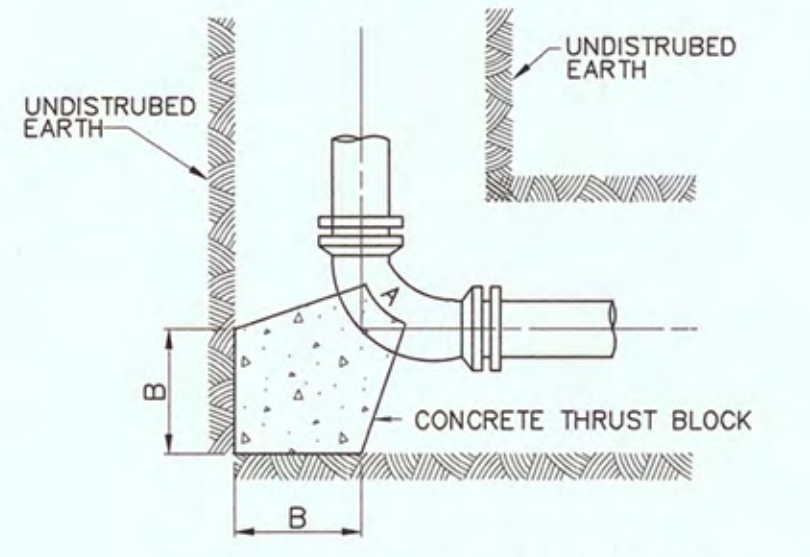
PLAN-TYPICAL TEE



PLAN-TYPICAL PLUG



PLAN-UNBALANCED TEE



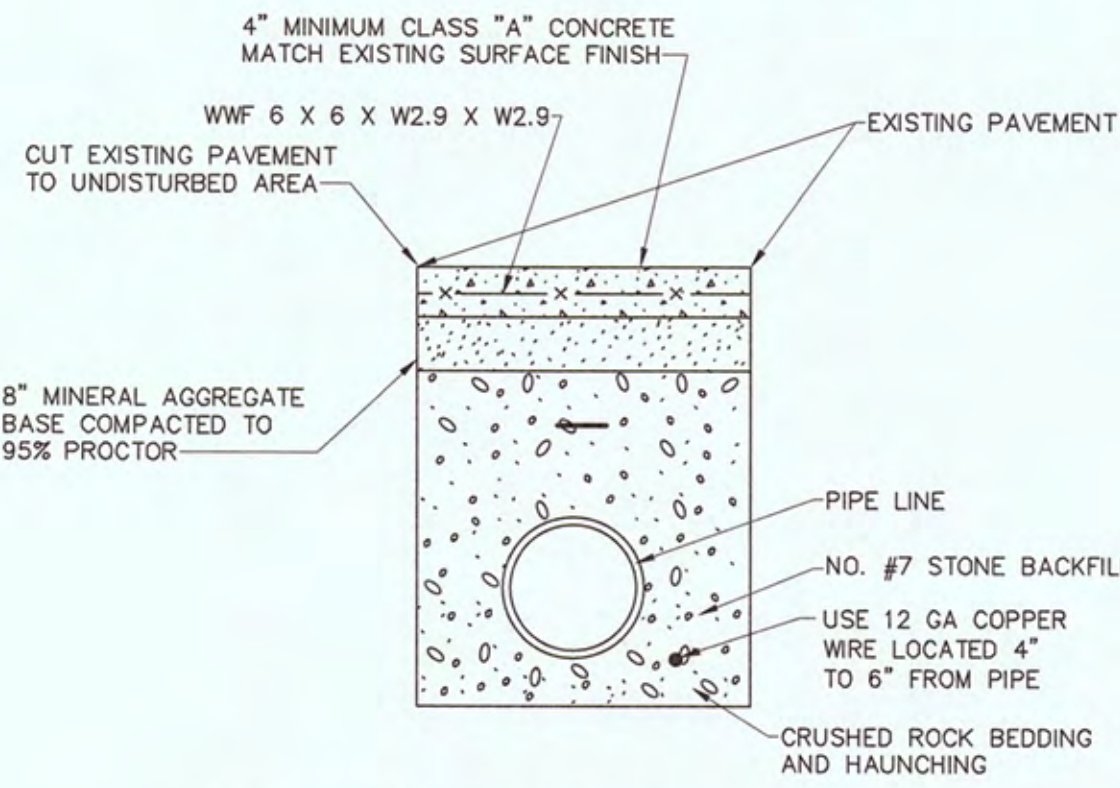
PLAN-TYPICAL HORIZONTAL BEND

THRUST BLOCK DETAILS

NOT TO SCALE

PAVING NOTES

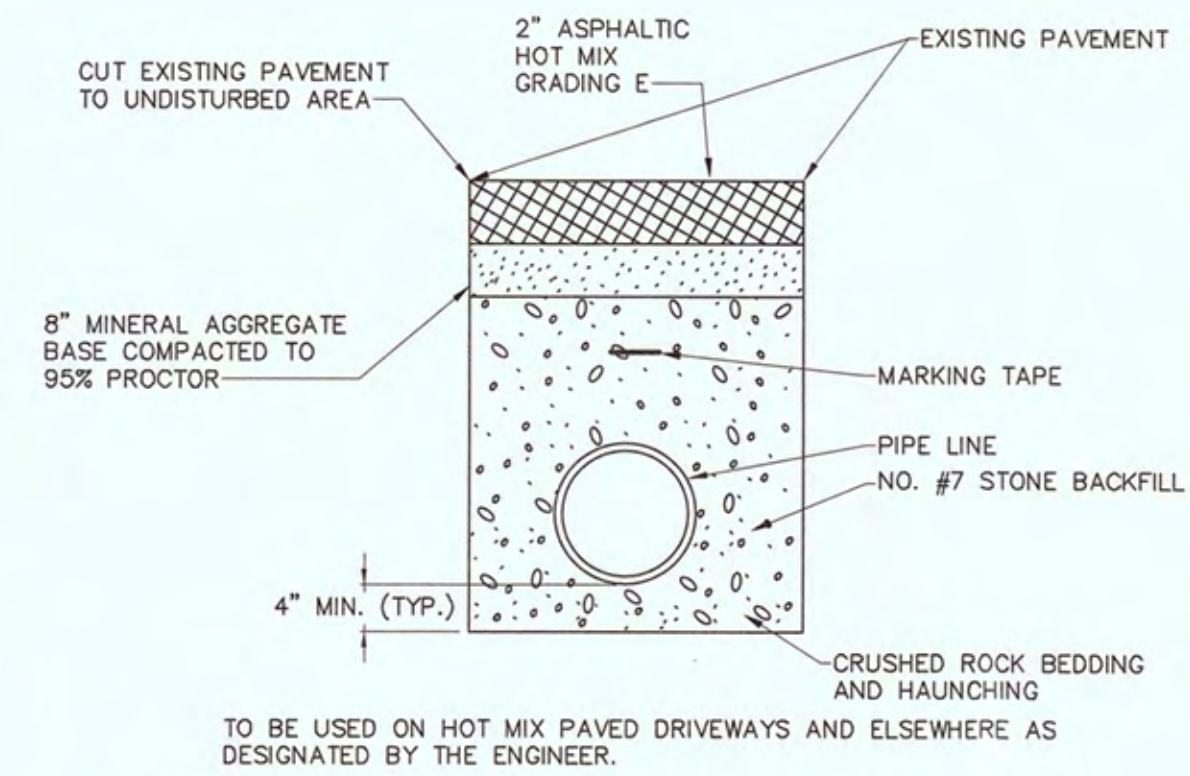
- COST OF SAW CUTTING, COMPACTING, MINERAL AGGREGATE, HOT MIX, ETC. TO BE INCLUDED IN THE UNIT PRICE FOR ASPHALT OR OTHER PAVEMENT REPLACEMENT IN THE BID SCHEDULE.
- IT IS THE INTENTION OF THE OWNER TO INSTALL ALL LINES OUT OF PAVEMENT IF POSSIBLE, IN ROAD SHOULDERS OR DITCHES, BUT WITHIN TWO FEET OF THE EDGE OF PAVEMENT EXCEPT WHERE CROSSING THE ROADWAY OR SHOWN IN THE ROADWAY; IF LINE IS INSTALLED UNDER PAVEMENT FOR CONVENIENCE OF CONTRACTOR, NO SEPARATE PAYMENT WILL BE MADE FOR EXTRA PAVEMENT AND CRUSHED ROCK BACKFILL REQUIRED.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ROAD CUT PERMITS PRIOR TO CUTTING ROADWAY PAVEMENTS.



TO BE USED ON CONCRETE DRIVEWAYS AND ELSEWHERE AS DESIGNATED BY THE ENGINEER.

CONCRETE PAVEMENT REPLACEMENT DETAIL

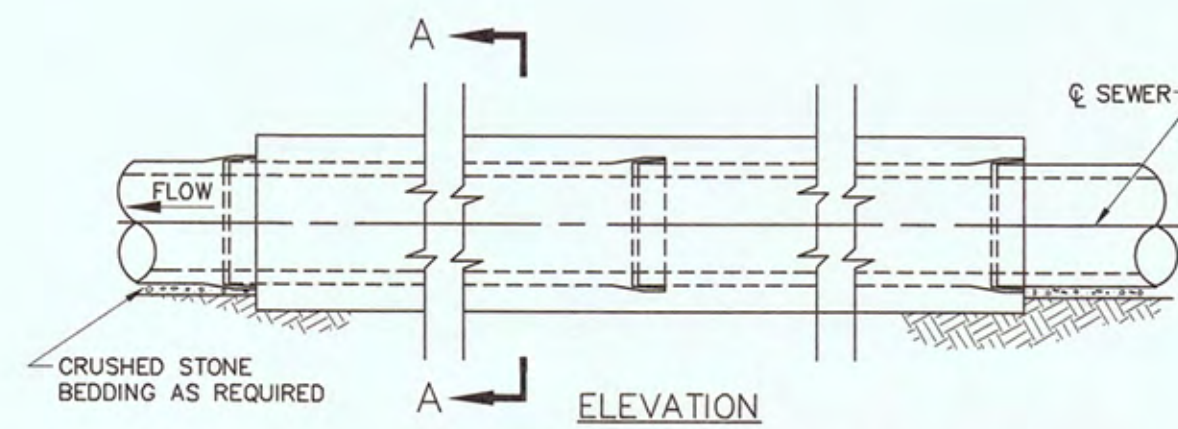
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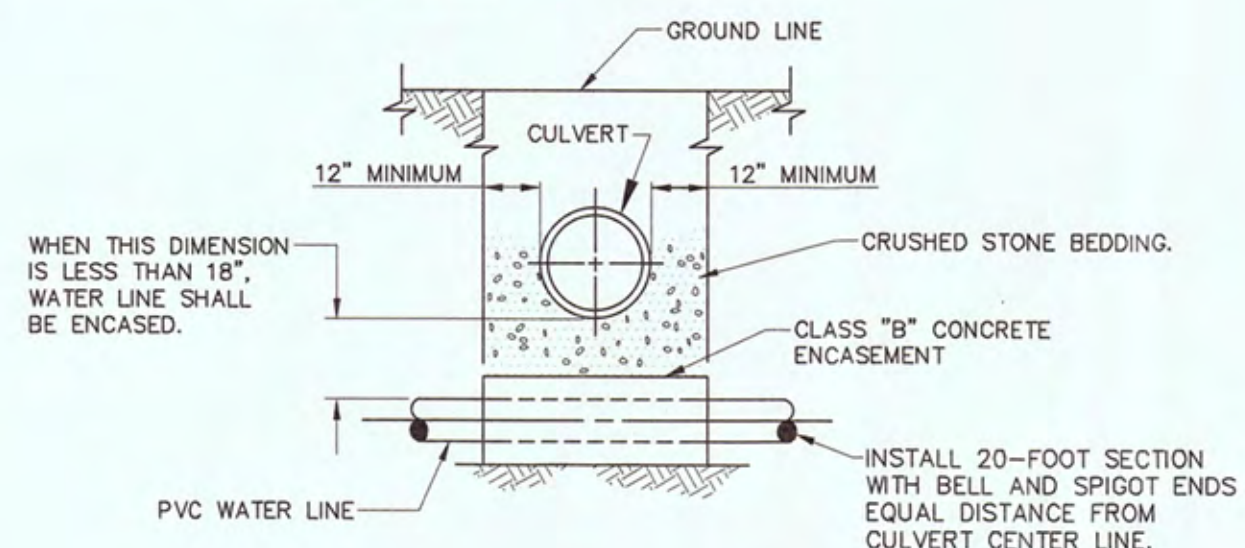
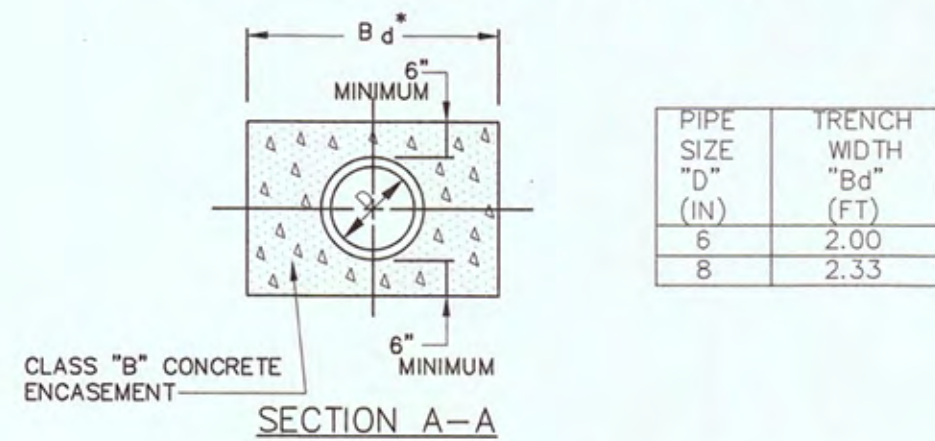
TO BE USED ON HOT MIX PAVED DRIVEWAYS AND ELSEWHERE AS DESIGNATED BY THE ENGINEER.

**PAVEMENT REPLACEMENT DETAIL
(ASPHALT DRIVEWAYS)**

NOT TO SCALE

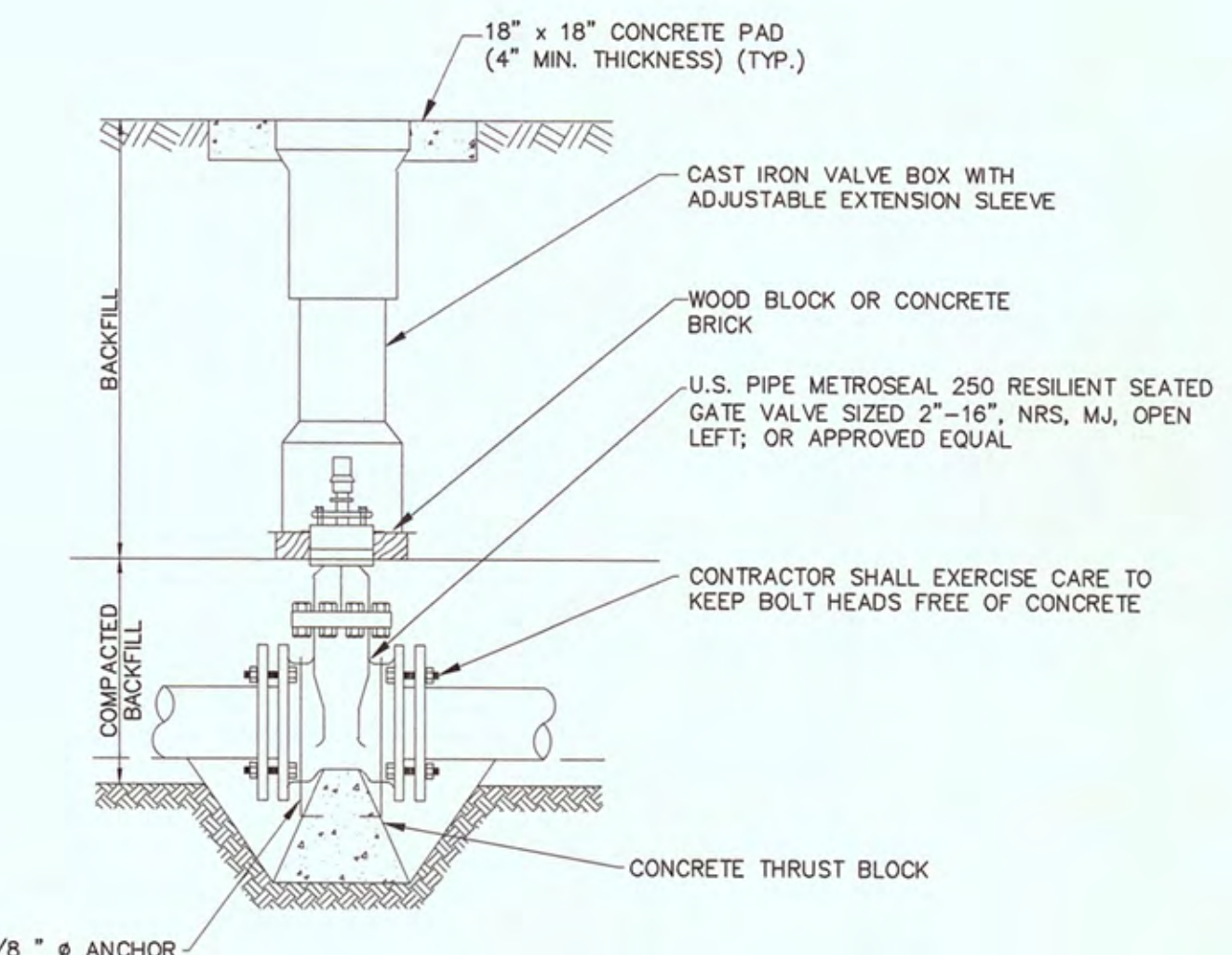


NOTE: CLAY CUT-OFFS SHALL BE CONSTRUCTED AT MINIMUM 500-FOOT INTERVALS ALONG PIPELINE WHERE CRUSHED ROCK EMBEDMENT AND/OR BACKFILL IS USED. SEE DITCH CROSSING DETAIL ABOVE.



CONCRETE ENCASEMENT

NOT TO SCALE



GATE VALVE INSTALLATION DETAIL

NOT TO SCALE

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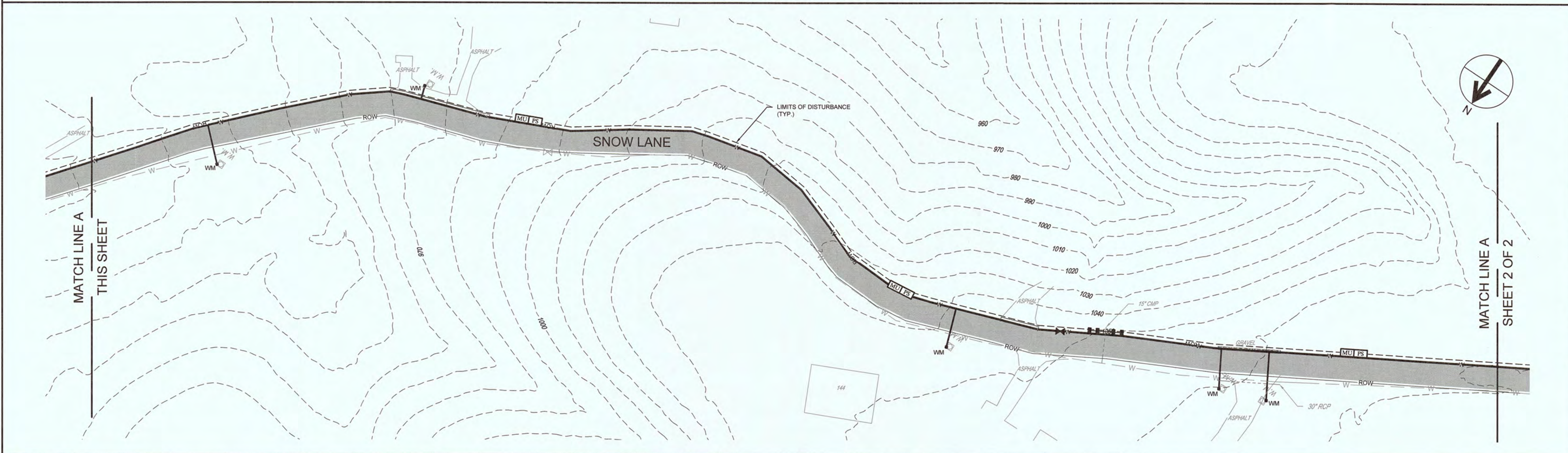
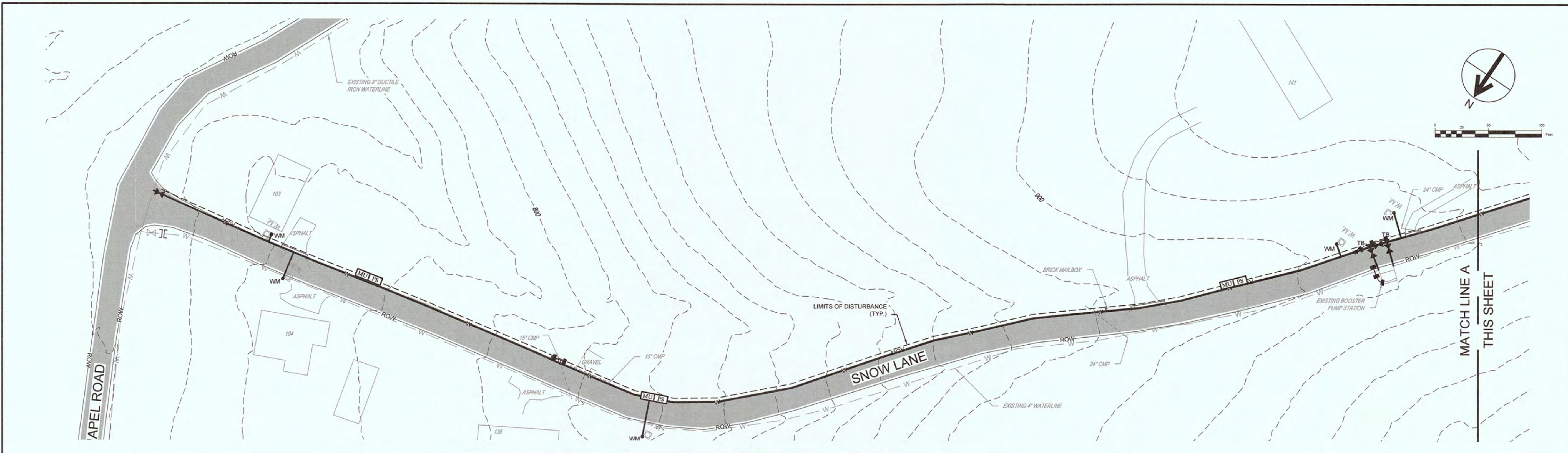
DETAIL SHEET 2 OF 2



112 RIVERFRONT PARKWAY
CHATTANOOGA, TN 37402
423-267-7613



JOB NO. K22014
ISSUE DATE 04/10/2023
DRAWING NO. 8.0



EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN

LEGEND	
	LIMITS OF DISTURBANCE
	SILT FENCE
	TUBES AND WATTLES
	STABILIZATION WITH STRAW MULCH
	STABILIZATION WITH PERMANENT VEGETATION
	DEWATERING PIT
	ROLLED EROSION CONTROL

COMPREHENSIVE

- THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.
- PROVISIONS TO PREVENT EROSION OF THE SOIL FROM THE SITE SHALL BE AT A MINIMUM IN CONFORMANCE WITH THE REQUIREMENTS OF THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN TENNESSEE, FOURTH EDITION, AND ALL APPLICABLE CODES OF THE LOCAL ISSUING AUTHORITY GOVERNING EROSION SEDIMENTATION CONTROL. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE STANDARDS SPECIFIED IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN TENNESSEE AND ALL APPLICABLE CODES OF THE LOCAL ISSUING AUTHORITY.
- EROSION DEVICES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM ACTUAL DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL EXISTING DRAINAGE PATTERNS AND THOSE CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

- THE CONSTRUCTION OF THE SITE MAY COMMENCE AFTER THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL PAVING IS COMPLETE.
- CONSTRUCTION EXITS SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY OR EXIT FROM ANY STORAGE OR EQUIPMENT SITES AND SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE AS CONDITIONS DEMAND, REPAIR, AND/OR CLEAN-OUT ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OFF-SITE ONTO PUBLIC RIGHTS-OF-WAY AND PRIVATE PROPERTY MUST BE REMOVED IMMEDIATELY.
- IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION EXITS, AND NEEDED PERIMETER EROSION CONTROL DEVICES AND STORM WATER MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.
- ALL SILT BARRIERS MUST BE PLACED AS ACCESS IS OBTAINED DURING CLEARING. NO EXCAVATION OR GRADING SHALL BE DONE UNTIL SILT BARRIER INSTALLATION IS COMPLETE.
- AMENDMENTS AND/OR REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE ENGINEER.

NARRATIVE

- THE PROJECT INCLUDES THE CONSTRUCTION OF APPROXIMATELY 860 LF OF 6-IN WATER MAIN. IT IS ESTIMATED THAT APPROXIMATELY 1.04 ACRES WILL BE DISTURBED IN COMPLETING THIS INFRASTRUCTURE PROJECT.

NOTE:
INSTALL CONTROLS ALONG AND/OR WITHIN PUBLIC RIGHTS-OF-WAY OR EASEMENTS.



Know what's below.
Call before you dig.

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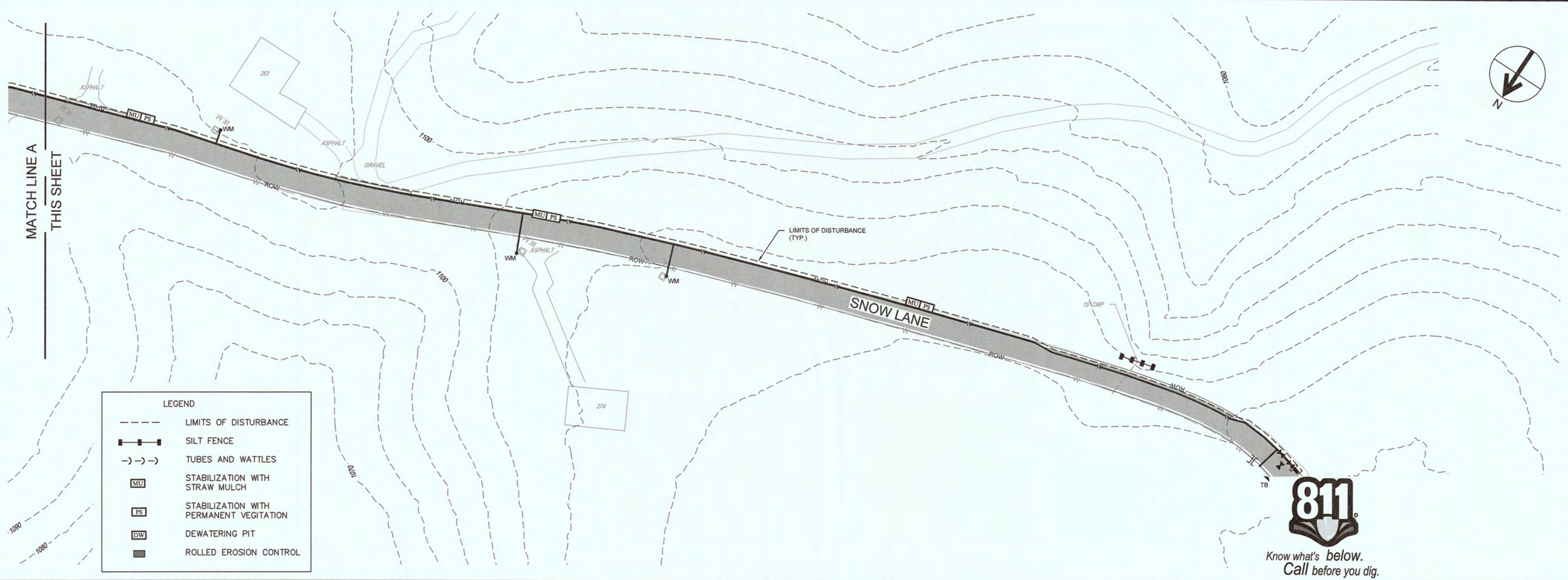
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EROSION CONTROL PLAN - LINE A
SHEET 1 OF 2

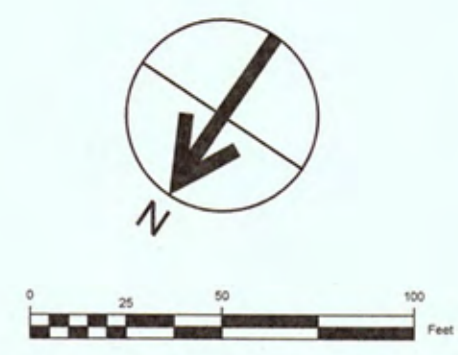


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LEGEND

	LIMITS OF DISTURBANCE
	SILT FENCE
	TUBES AND WATTLES
	STABILIZATION WITH STRAW MULCH
	STABILIZATION WITH PERMANENT VEGETATION
	DEWATERING PIT
	ROLLED EROSION CONTROL



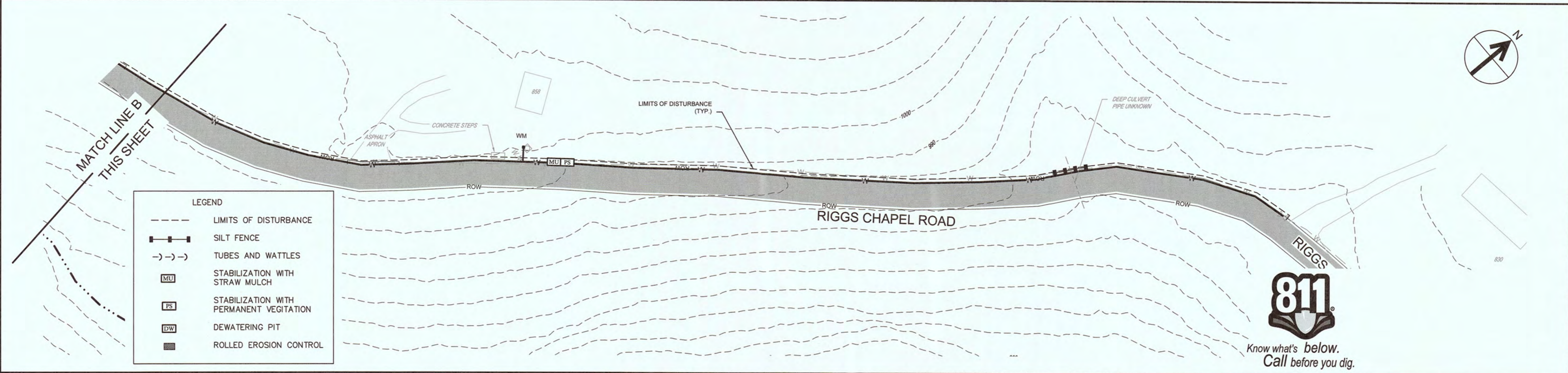
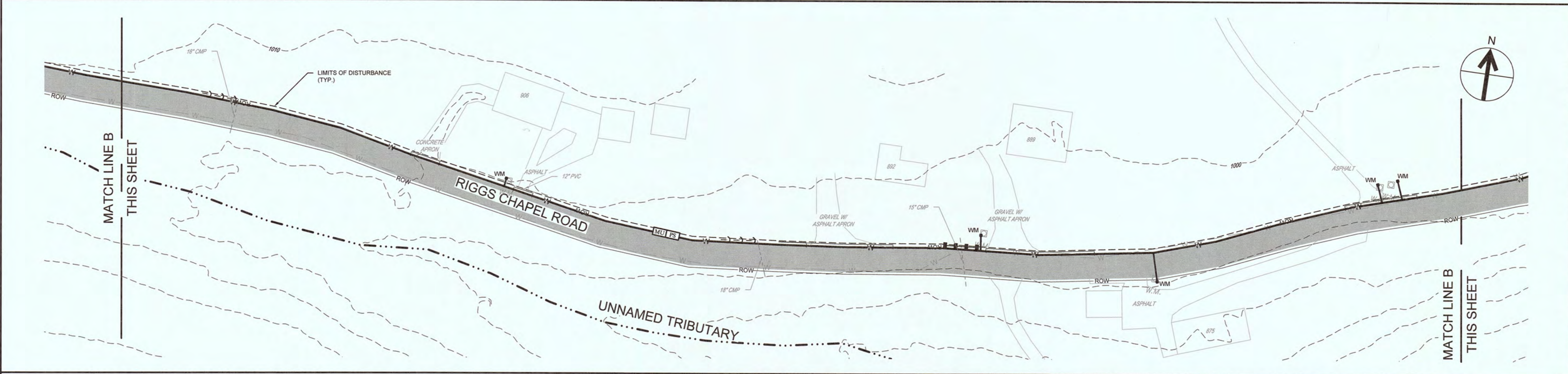
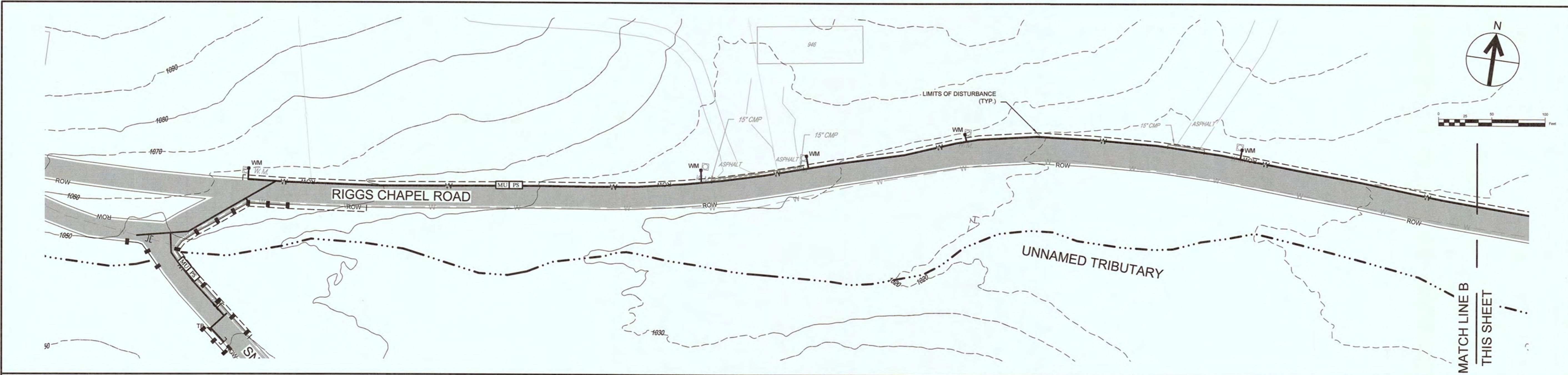
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 EROSION CONTROL PLAN - LINE A
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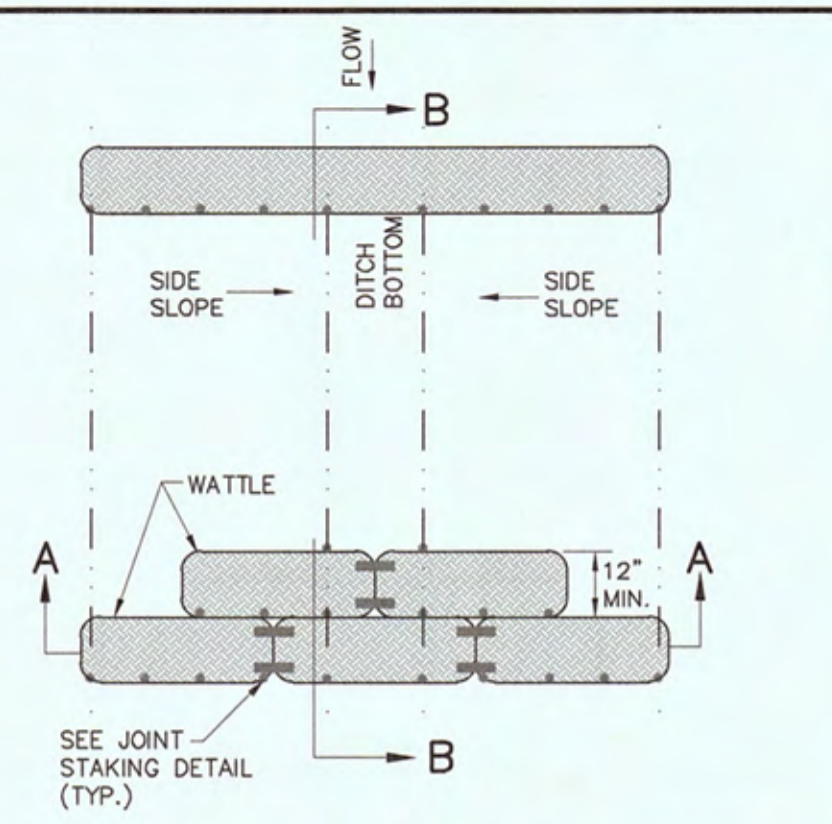
2021 HARRIMAN CDBG WATER SYSTEM IMPROVEMENTS
CONTRACT NO. 14980

EROSION CONTROL PLAN - LINE B
SHEET 1 OF 1

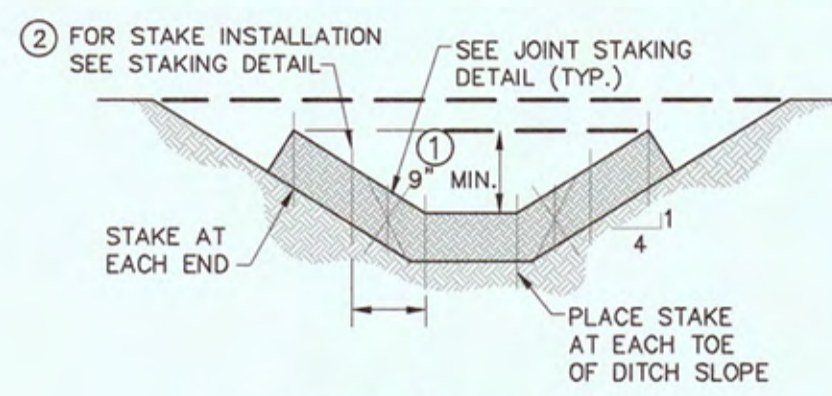


JOB NO.	K22014
ISSUE DATE	04/10/2023
DRAWING NO.	11.0

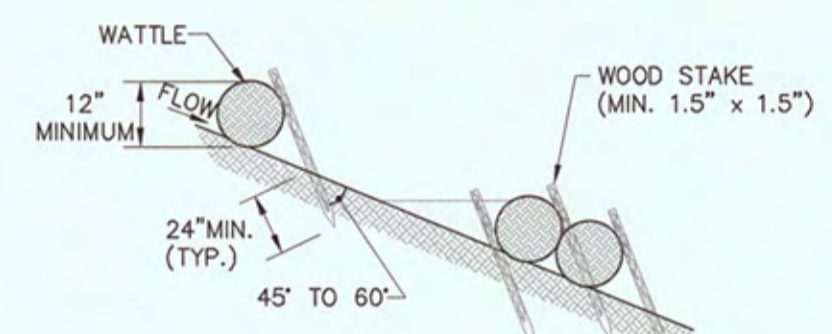




PLAN VIEW FOR DITCH APPLICATION

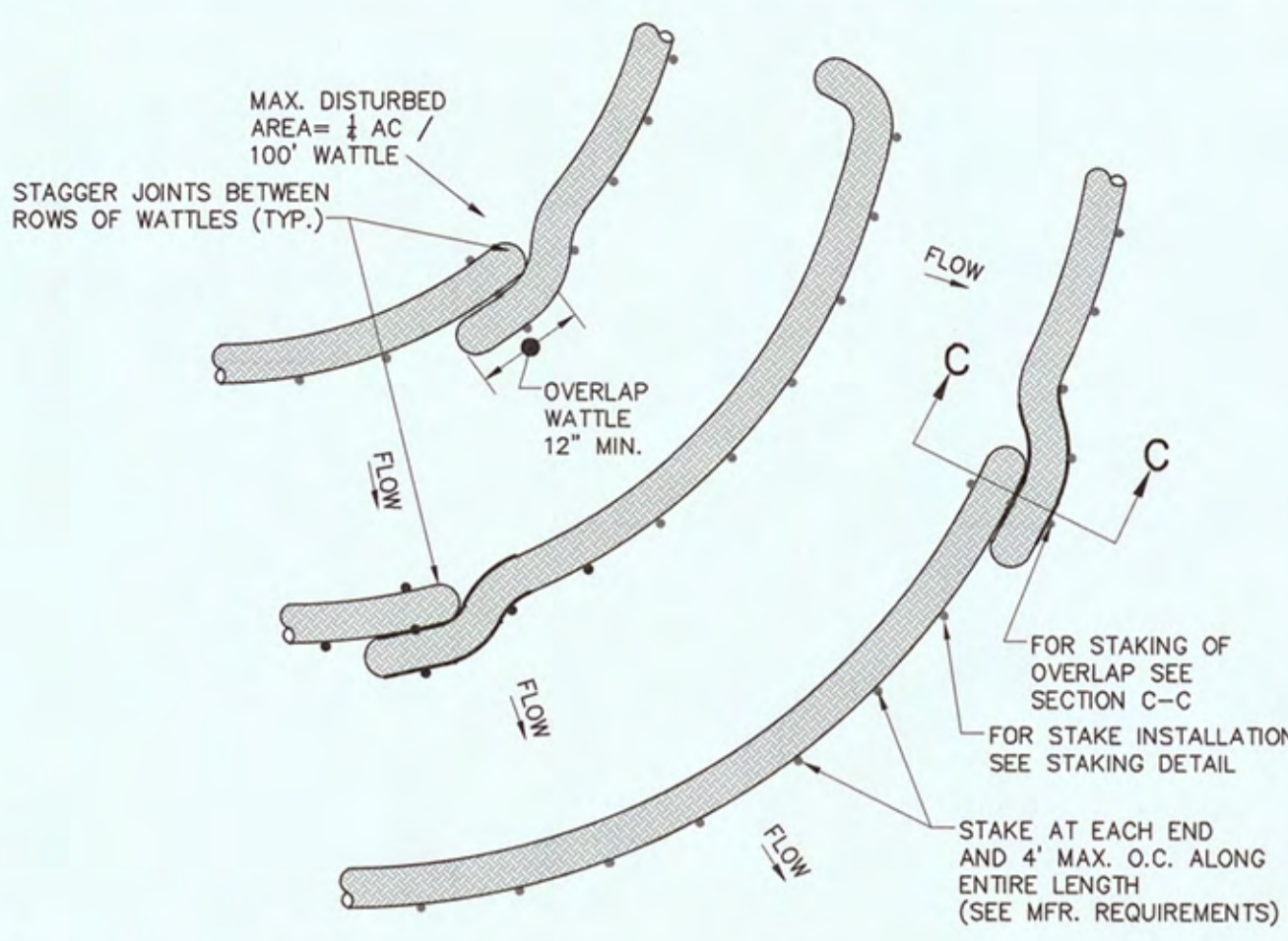


SECTION A-A

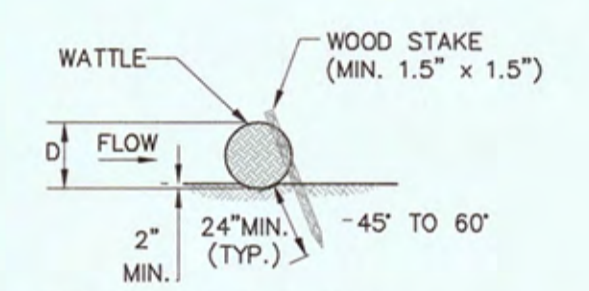


SECTION B-B

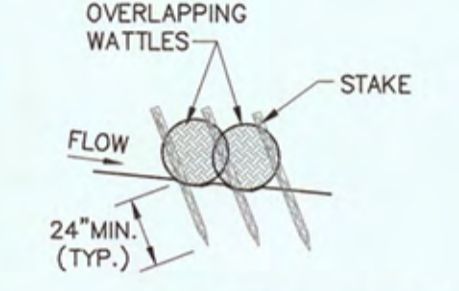
- NOTES:
- 1 THE DEPTH AND WIDTH OF THE WEIR SECTION OF THE WATTLE SHALL BE DESIGNED TO PASS THE 2yr/24hr OR 5yr/24hr STORM EVENT WITHOUT OVERTOPPING THE CHANNEL.
 - 2 STAKE PER MANUFACTURERS RECOMMENDATIONS



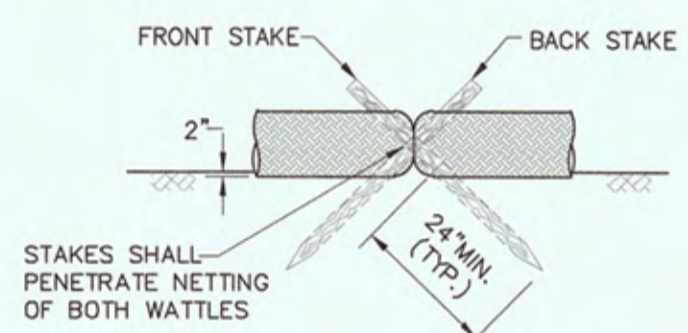
PLAN VIEW FOR SLOPE APPLICATION



STAKING DETAIL

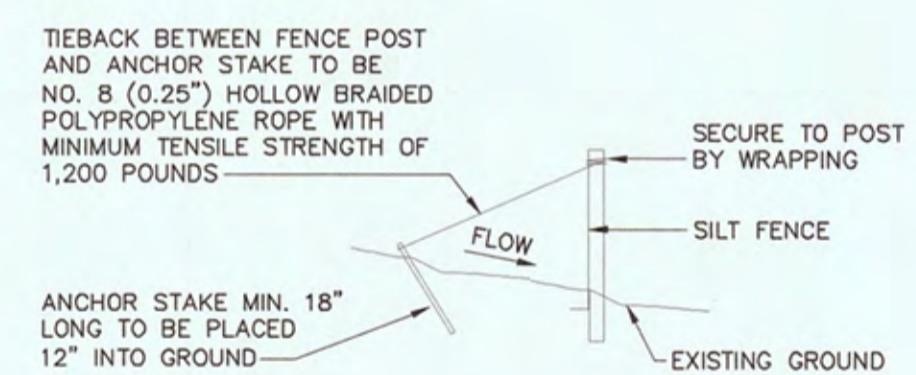


SECTION C-C



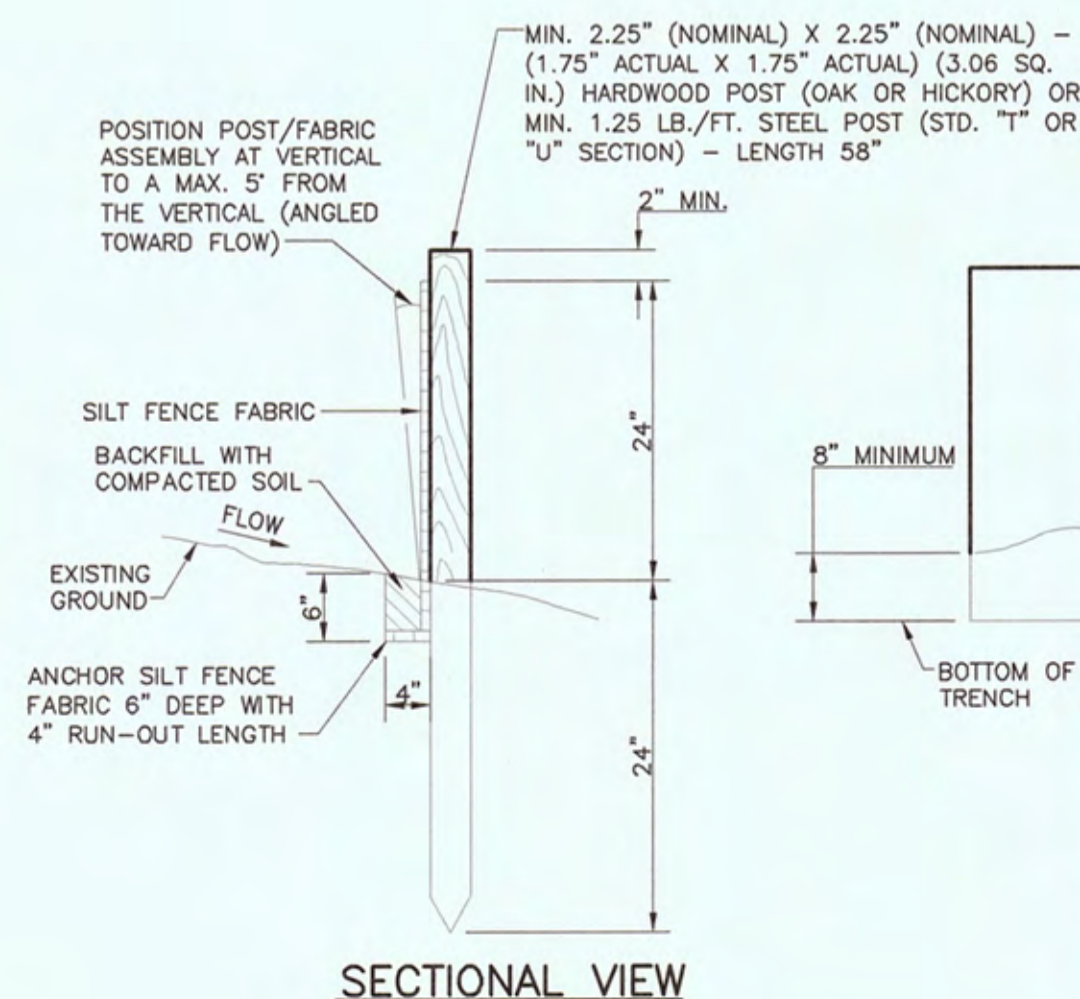
JOINT STAKING DETAIL

LEGEND
 → → → TUBES AND WATTLES
 TUBES AND WATTLES
 NOT TO SCALE

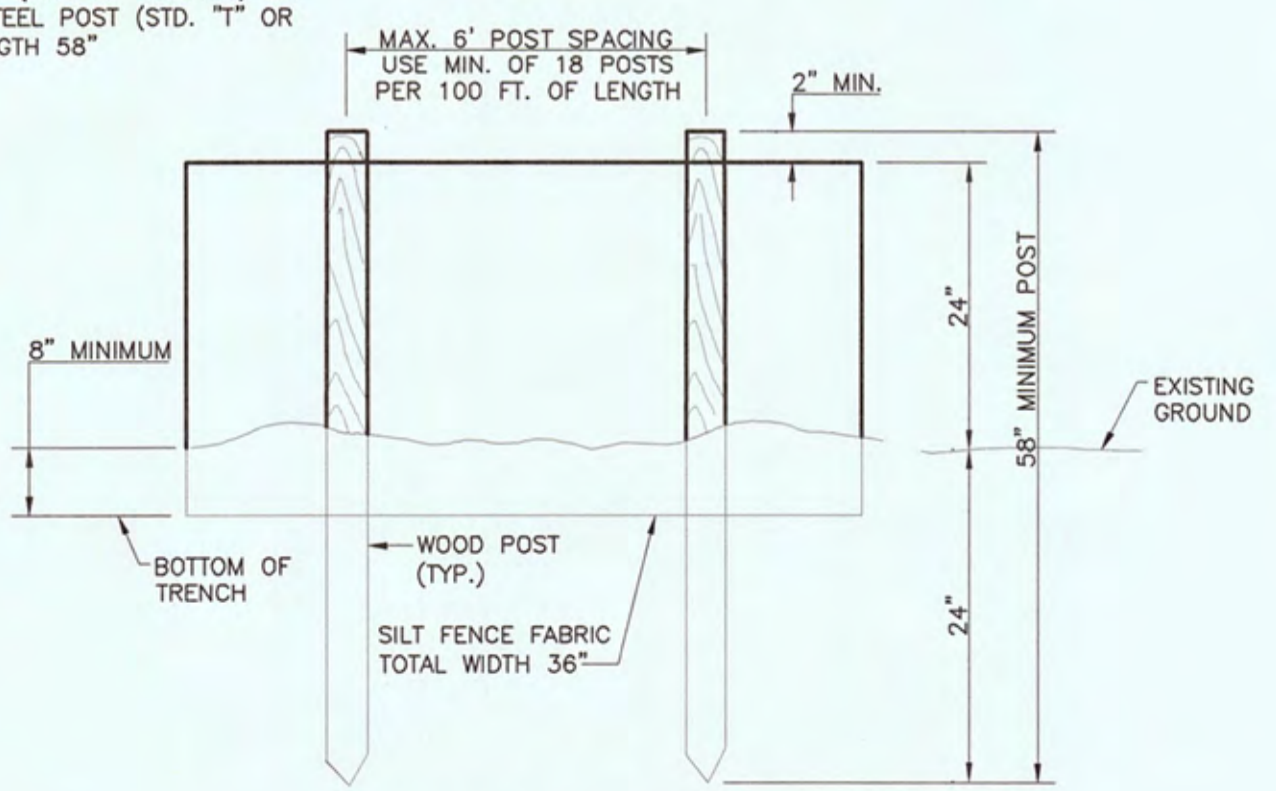


SILT FENCE TIEBACK FOR STEEL POSTS OR WOOD POSTS

(WHEN REQUIRED BY THE ENGINEER OR NOTED IN THE PLANS, COST TO BE INCLUDED IN THE ITEMS FOR SILT FENCE)



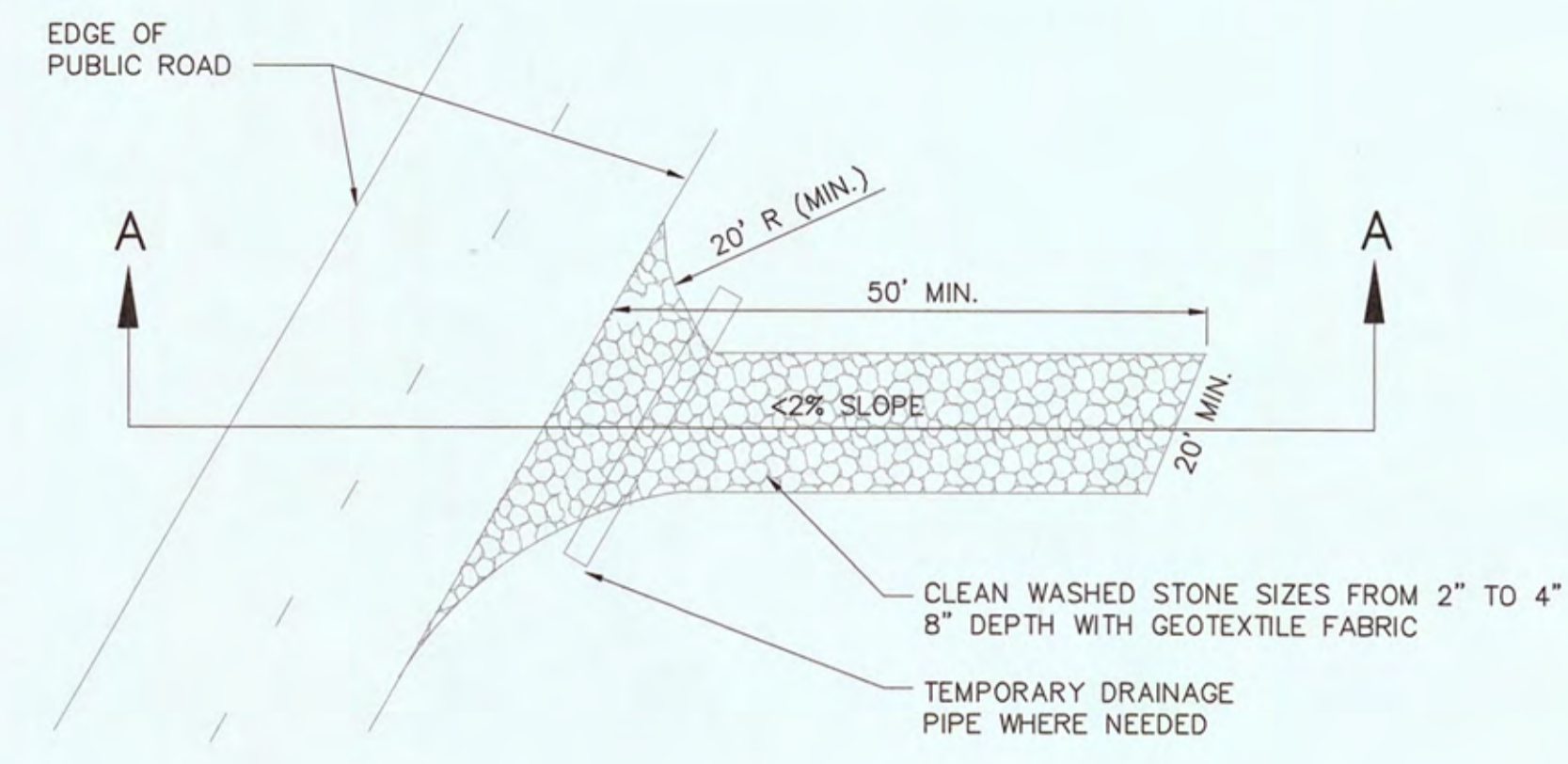
SECTIONAL VIEW



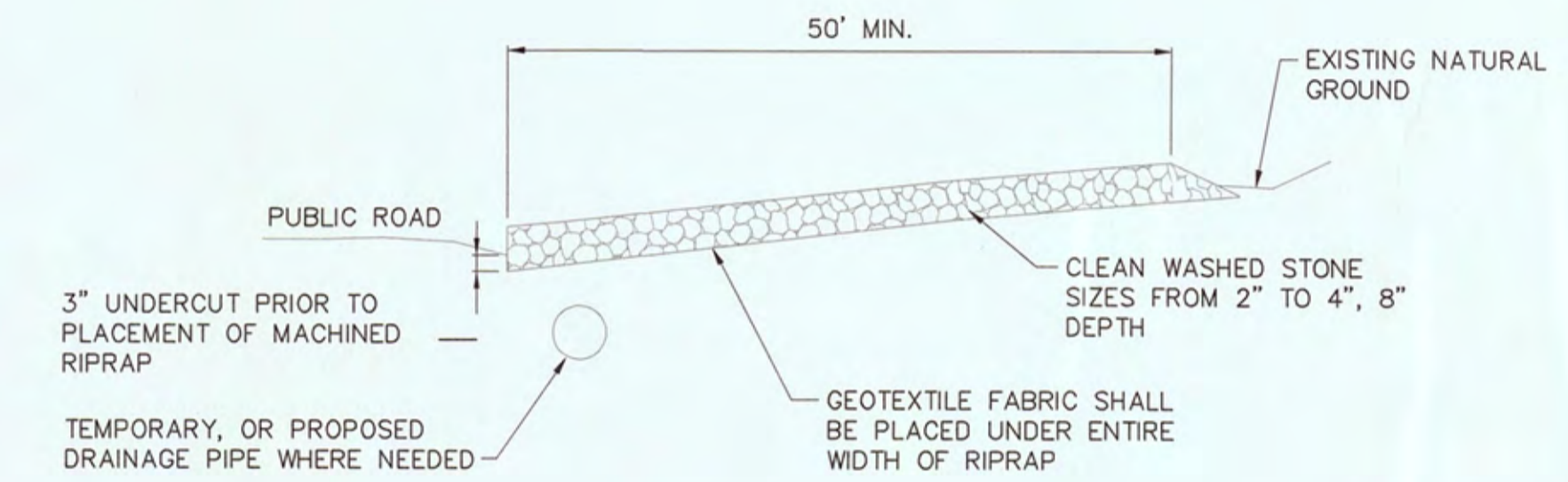
ELEVATION VIEW

LEGEND
 ■ ■ ■ ■ ■ SILT FENCE

SILT FENCE
 NOT TO SCALE



PLAN VIEW OF TEMPORARY CONSTRUCTION ROAD



SECTION A-A

LEGEND
 CONSTRUCTION EXIT

TEMPORARY SEEDING REQUIREMENTS TABLE					
AREA	SOWING SEASON	SPECIES	RATE (LB/ACRE)		
			SEED	FERTILIZER (10-10-10)	LIMESTONE
ALL	MAY 1 - AUG. 15	OATS	50	750'	2,000'
		BROWN TOP MILLET	30		
	AUG. 15 - DEC. 30	OATS	30		
		WINTER WHEAT	30		

* OR FOLLOW RECOMMENDATIONS OF SOIL TEST(S)

- NOTES: 1. APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL.
 2. REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

PERMANENT SEEDING REQUIREMENTS TABLE					
AREA	SOWING SEASON	SPECIES	RATE (LB/ACRE)		
			SEED	FERTILIZER (6-12-12)	LIMESTONE
FLAT TO ROLLING TERRAIN WITH SLOPES LESS THAN 3:1	MAR. 1 - JUNE 1	KENTUCKY 31 FESCUE	200-400	1,350"	4,300"
		LADINO WHITE CLOVER**	10-20		
	AUG. 1 - NOV. 1	KENTUCKY 31 FESCUE	200-400		
		LADINO WHITE CLOVER** ANNUAL RYEGRASS	10-20 100-180		
EMBANKMENTS WITH SLOPES GREATER THAN 3:1	MAR. 1 - JUNE 1	KENTUCKY 31 FESCUE	140	1,350"	4,300"
		WEEPING LOVEGRASS	15		
	AUG. 1 - NOV. 1	KENTUCKY 31 FESCUE	140		
		ANNUAL RYEGRASS	90		

* REQUIRES INOCULATION
 ** OR FOLLOW RECOMMENDATIONS OF SOIL TEST(S)

- NOTES: 1. APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL.
 2. REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

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NO.	REVISIONS DESCRIPTIONS	DATE	BY	APPD
JLK	TAB	JLK	JLK	JLK

2021 HARRIMAN CDBG WATER SYSTEM IMPROVEMENTS
 CONTRACT NO. 14980
 EROSION CONTROL DETAILS

CTI ENGINEERS
 1122 RIVERFRONT PARKWAY
 CHATTANOOGA, TN 37402
 423-267-7613



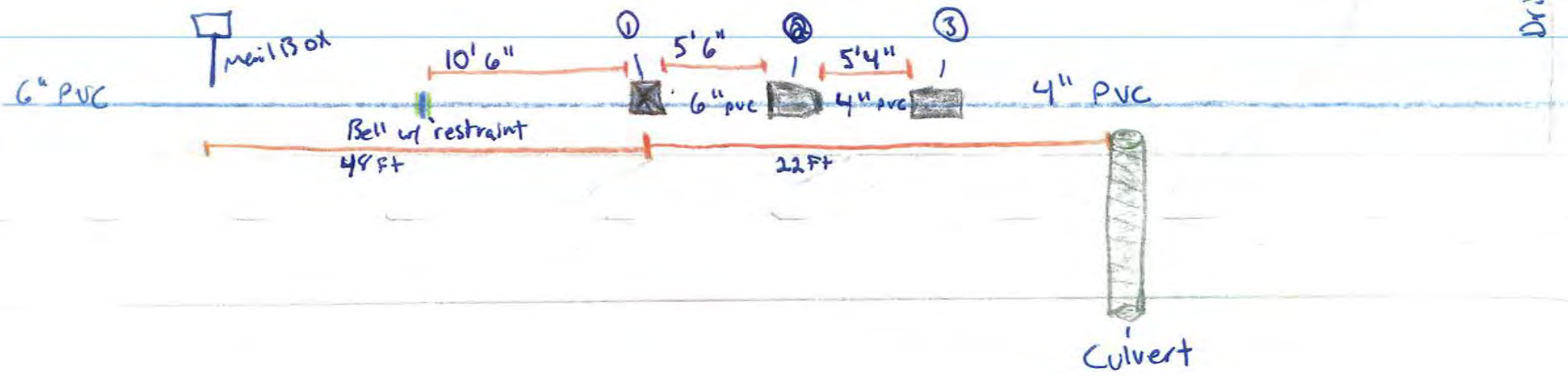
JOB NO.
 K22014
 ISSUE DATE
 04/10/2023
 DRAWING NO.
 12.0

- 1. 6" Grate valve
- 2. 6" x 4" DIMT Reducer
- 3. 4" solid sleeve DIMT

CBDG Riggs chapel
 4/3/24
 Justin Davis

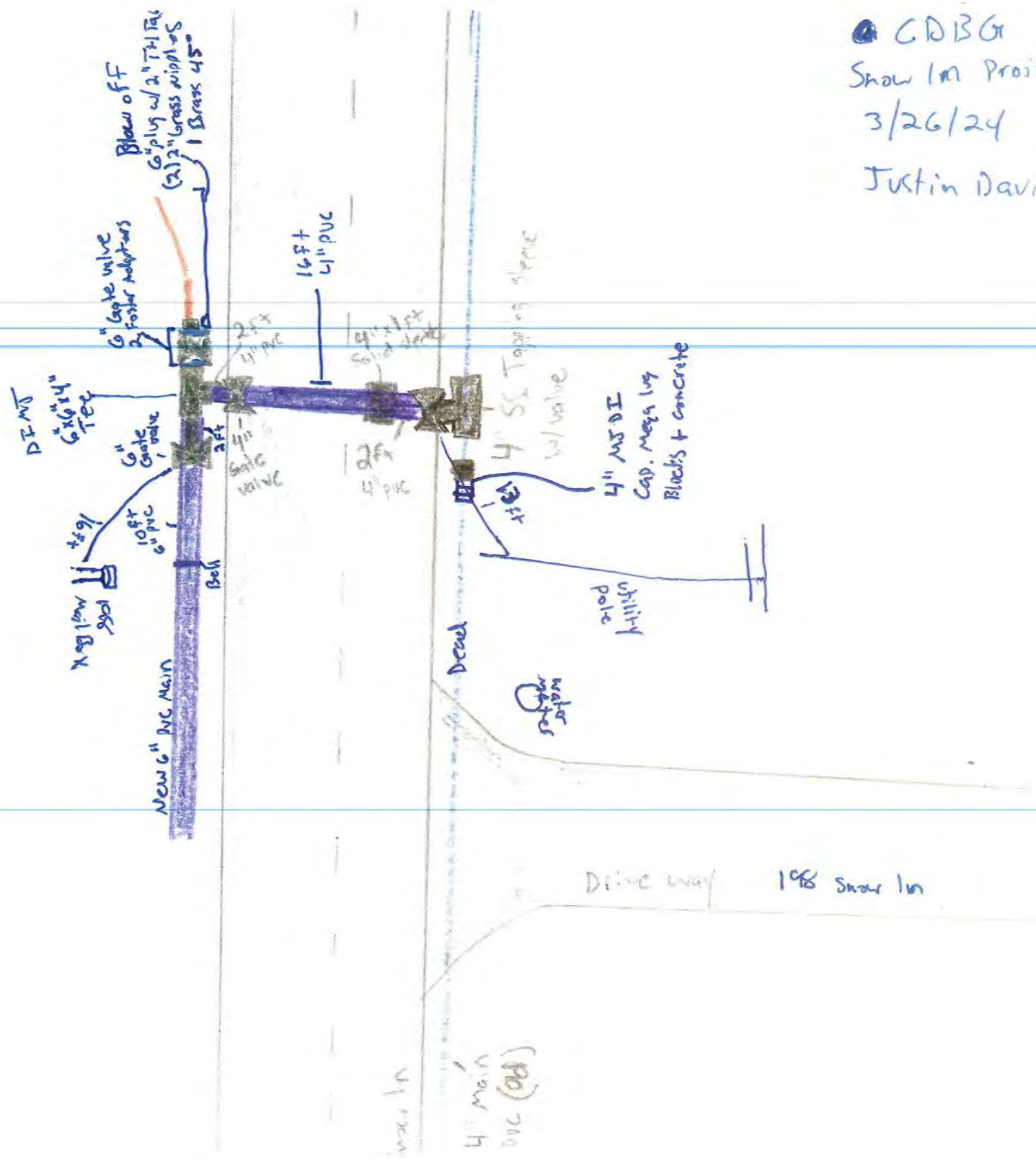
892
 Riggs chapel

Bundling



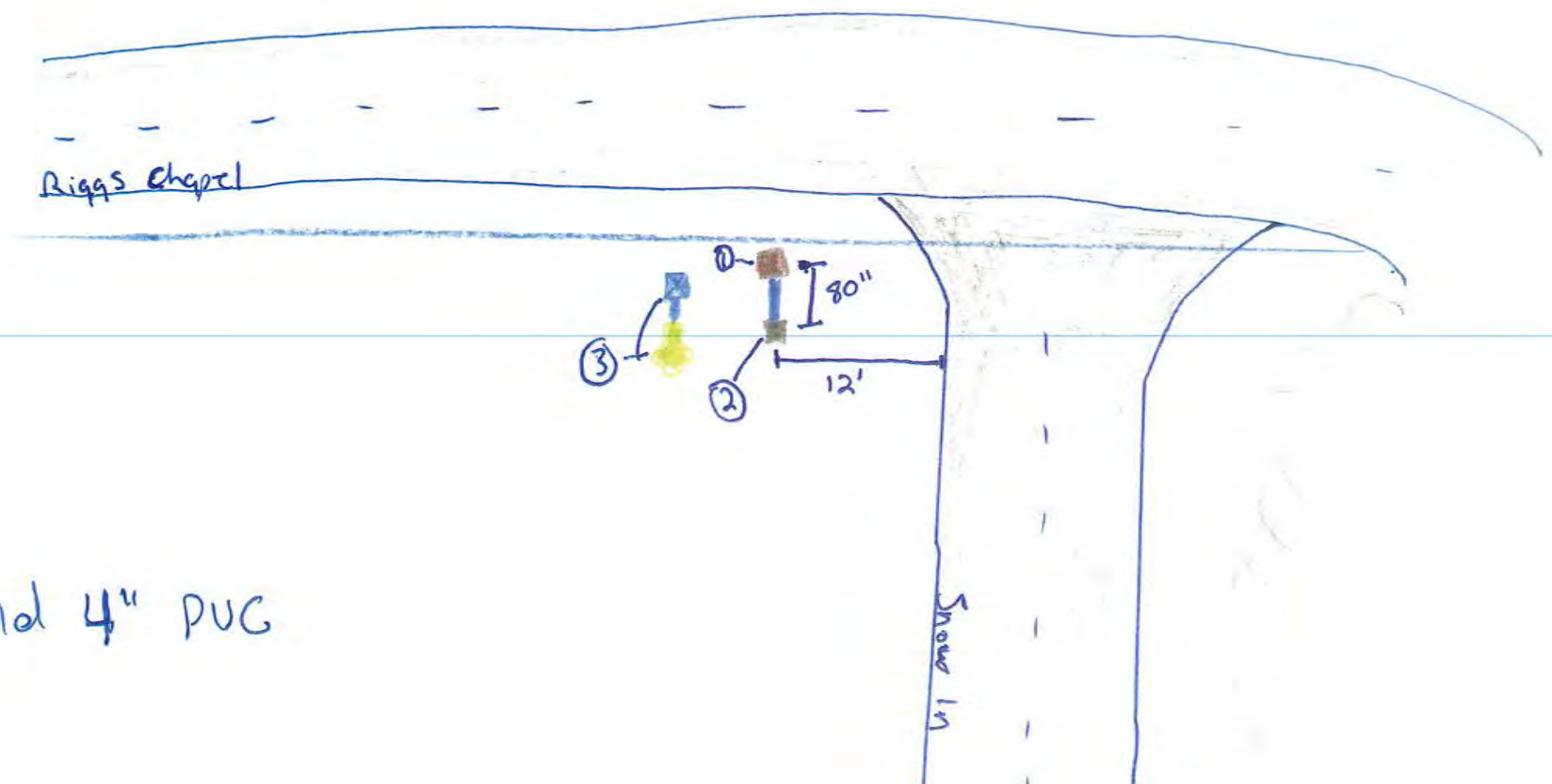
New 6" End of Line,
Blowoff + Tapping Sleeve
Tie-in

CDBG
Snow Im Project
3/26/24
Justin Davis



1. Old 4" valve - Turned off
2. Cap DFMT - Mega lug
3. Hydrant + valve

CBDG Snow Ln
3/26/24
Justin Davis



Cut n Cap old 4" PVC

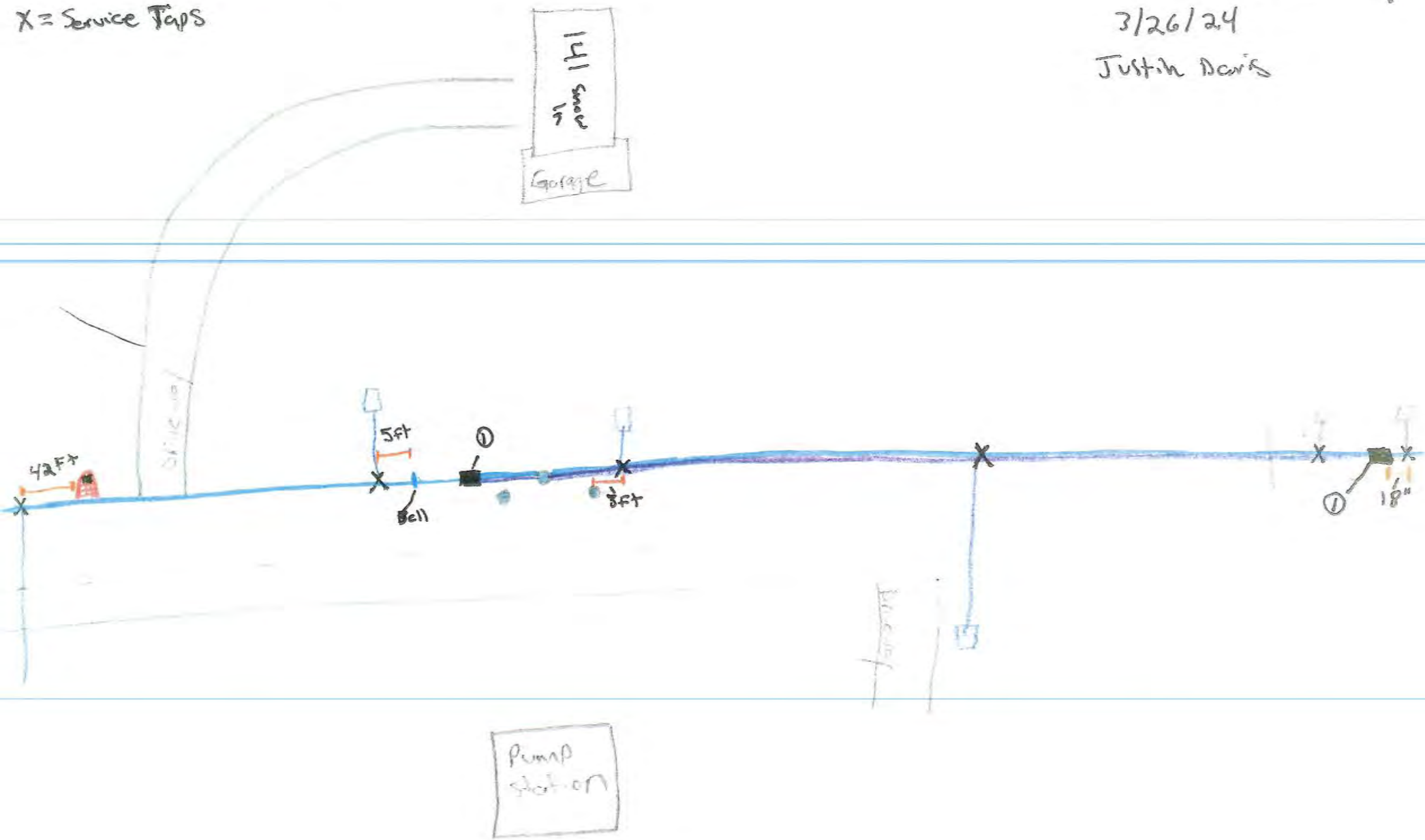
1.6" DIMS solid sleeve

X = Service Taps

Smart In GBDG - Taps

3/26/24

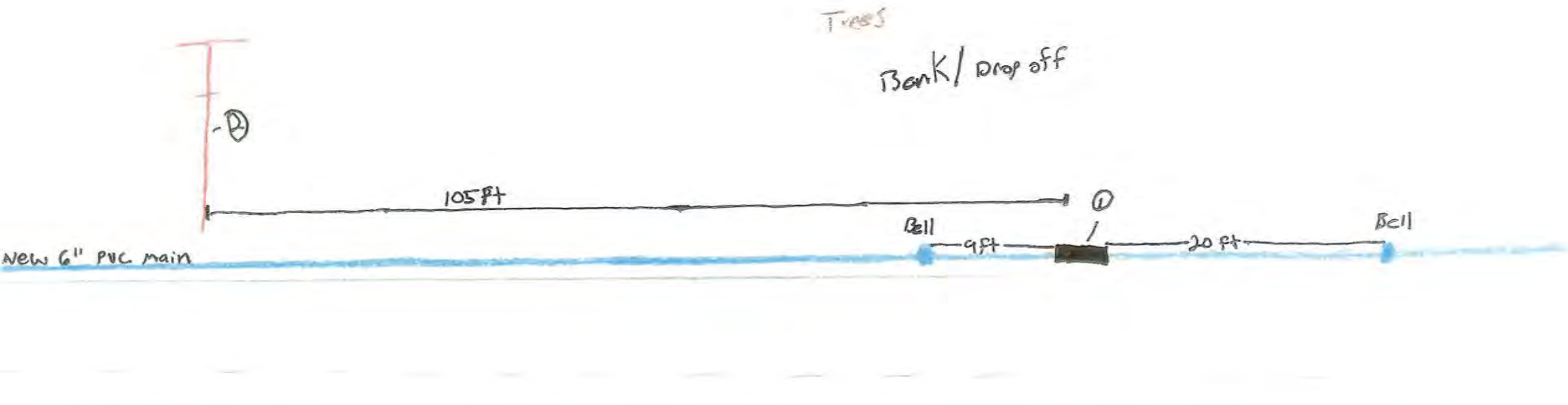
Justin Davis



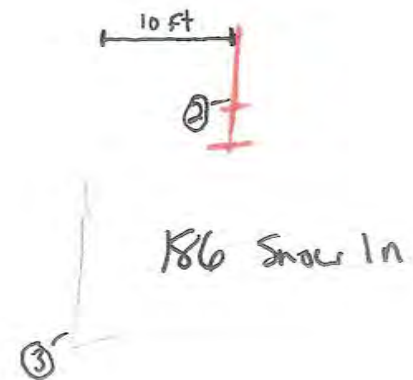
Service Taps near pump station

1. MSDI 6" solid sleeve
2. Telephone/electric Poles
3. House - 186 snow in

Snow In CDBG project
2/2/24
Justin Davis



Snow In

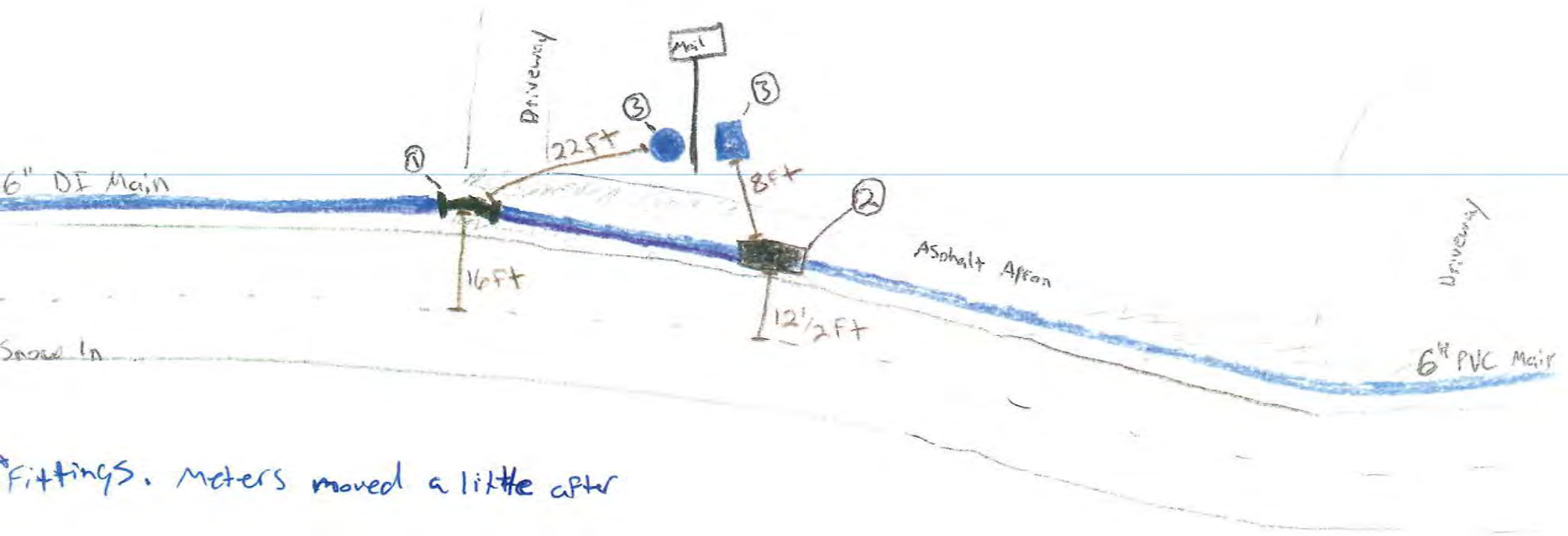


*Sleeve was installed to fix leaking Bell

CBDG Snow In
3/26/24
Justin Davis

1. DIMJ 22 1/2 x 6" Fitting
2. DIMJ 6" Solid steel
3. Water Meter

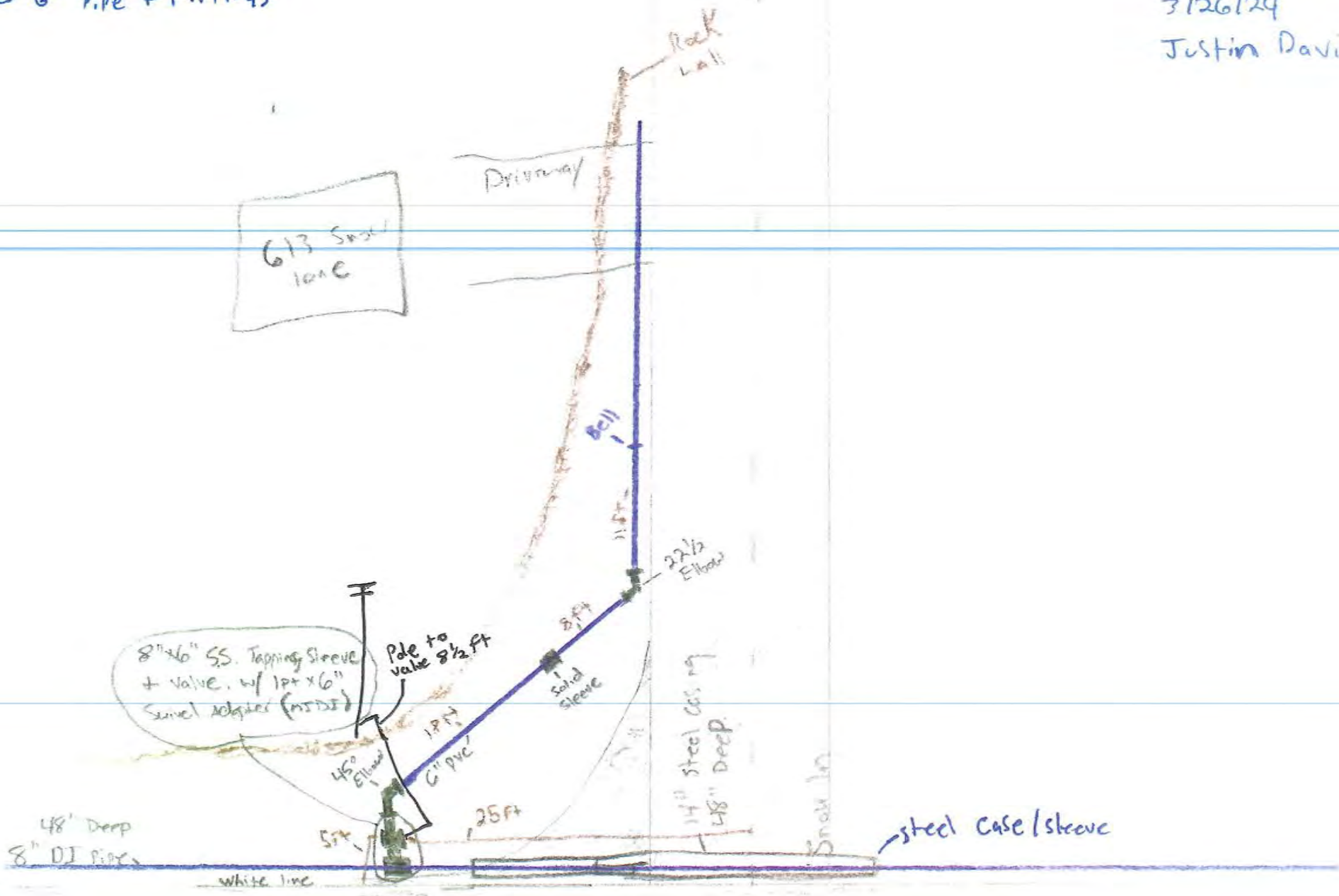
16" Snow In



*Fittings. Meters moved a little after

Snow In/Riggs chapel Tie-In
+ New 6" Pipe + Fittings

GRDD Snow In
3/26/24
Justin Davis

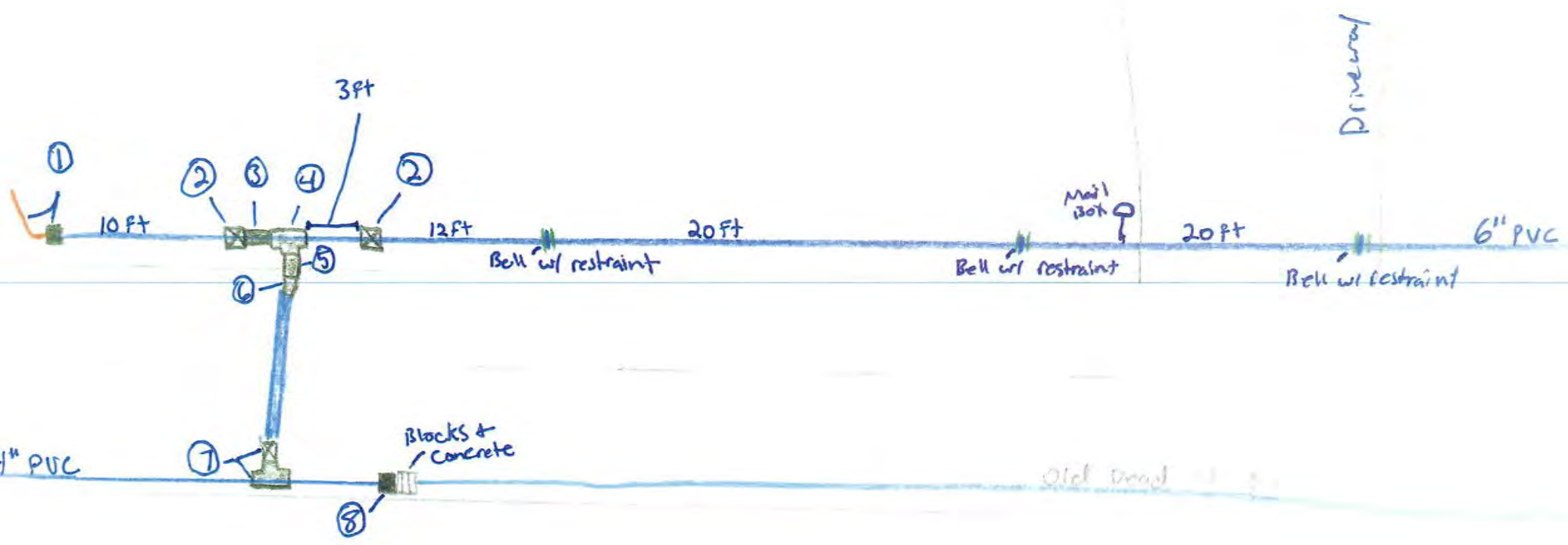


Riggs chapel tie

1. 6"x2" Th cap/blow off
2. 6" Grate Valve
3. 12"x6" Swivel Adapter-DIMJ
4. 6" DIMJ Tee
5. 18"x6" Swivel Adapter DIMJ
6. 6"x4" Reducer DIMJ
7. 4" Tapping sleeve + valve
8. 6" DIMJ cap - (cut-n-cap)

950
Riggs chapel

CBDG Riggs chapel
4/11/24
Justin Davis



1. DIMJ Solid sleeve
Joining PVC + DI

2. DIMJ 6" Tee + Swivel
Adapter + Gate valve + Thrust Block

3. 6" Gate valve - In Line

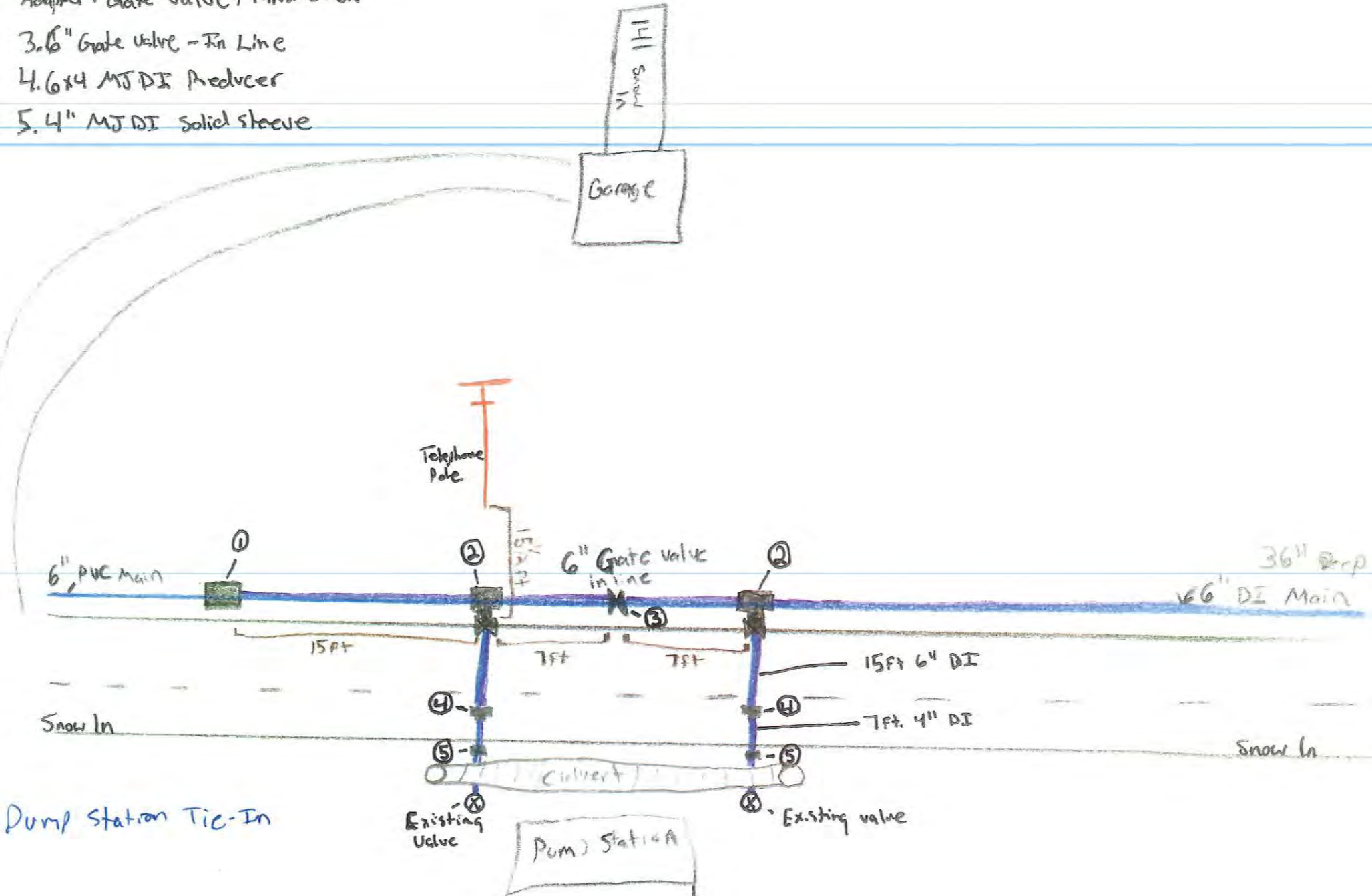
4. 6x4 MJDI Reducer

5. 4" MJDI solid sleeve

CBDG Show In

3/26/24

Justin Davis



Pressure Check & Service Line

Assigned To: Justin D.

Account #:

Date:	<u>3/20/24</u>		GPM	PSI	Chlorine
Name:		House			
Addr:		Meter	<u>20</u>	<u>160</u>	<u>1.83</u>
		Hydrant			
		Tap			

Yes No
Photos:

Meter Removed	Yes	NO	Time of Work	
---------------	-----	----	--------------	--

Meter Location: 23' right of utility pole / 22ft from road

Meter #: 88755279

DRAWING BELOW

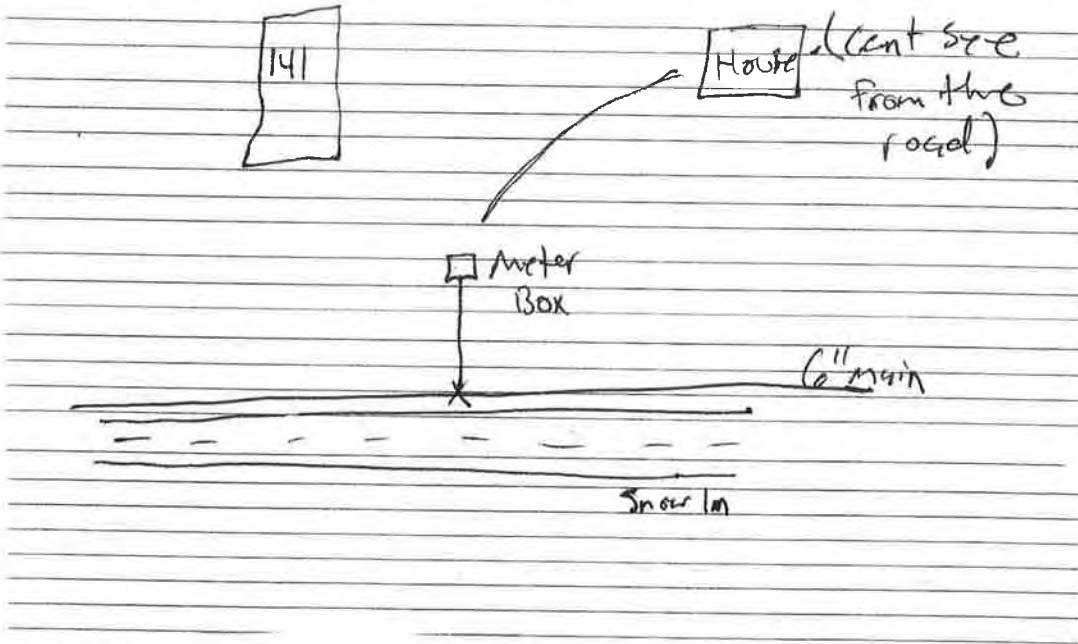
New Service Tap: Yes No

Renewed Service: Yes No

Old Tap: Yes No

Regulator House Meter ?

Service Lines	Yes	NO
Backed Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Top Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Split Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Coupling in Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Customer @ Home	<input type="checkbox"/>	<input checked="" type="checkbox"/>



Main Size:	Size	Type	Depth	Long Side	Short Side
	<u>6"</u>	<u>PVC</u>	<u>36"</u>		<input checked="" type="checkbox"/>

Service Size:	Size	Type	Depth	Length
	<u>3/4"</u>	<u>Pex</u>	<u>20"</u>	

REMARKS: First meter past Isolation valve (uphill) of pump station
when meter number entered into I pad, customer - Calvin M shadrick
Address - 192 Martin Hollow rd
No Account #

customer side Black plastic

Harriman Utility Board

Pressure Check & Service Line

Assigned To: Justin D.

Account #: 11-07300

Date:	<u>3/19/24</u>	GPM	PSI	Chlorine	
Name:	<u>Roy Fsham</u>	House			
Addr:	<u>619 Riggs chapel rd</u>	Meter	<u>14</u>	<u>100</u>	<u>2.00</u>
		Hydrant			
		Tap			

Photos:

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

Meter Removed	<input type="checkbox"/>	Yes	<input type="checkbox"/>	NO	Time of Work	<input type="checkbox"/>
---------------	--------------------------	-----	--------------------------	----	--------------	--------------------------

Meter Location: Left of driveway / 10ft from road - on snow in

DRAWING BELOW

Meter #: 88755232

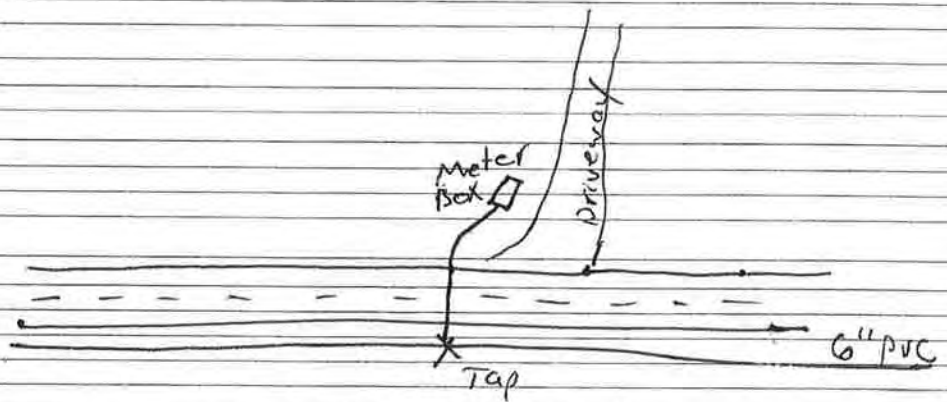
New Service Tap: Yes No

Renewed Service: Yes No

Old Tap: Yes No

Regulator: House Meter ?

Service Lines	Yes	NO
Backed Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Top Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Split Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Coupling in Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Customer @ Home	<input type="checkbox"/>	<input checked="" type="checkbox"/>



Main Size:	Size	Type	Depth	Long Side	Short Side
	<u>6"</u>	<u>PVC</u>	<u>36"</u>	<input checked="" type="checkbox"/>	

Service Size:	Size	Type	Depth	Length
	<u>3/4</u>	<u>Pex</u>	<u>18"</u>	<u>29'</u>

REMARKS: customer side copper

Pressure Check & Service Line

Assigned To: Justin D.

Account #: 11-14550

Date:	<u>3/27/24</u>		GPM	PSI	Chlorine
Name:	<u>Mary Brewer</u>	House			
Addr:	<u>950 Riggs Chapel</u>	Meter	<u>18</u>	<u>126</u>	<u>2.11</u>
		Hydrant			
		Tap			

Photos: Yes No

Meter Removed	<input type="checkbox"/> Yes <input type="checkbox"/> NO	Time of Work	
---------------	--	--------------	--

Meter Location: 10' from the road / 11' left of driveway
DRAWING BELOW

Meter #: 88755188

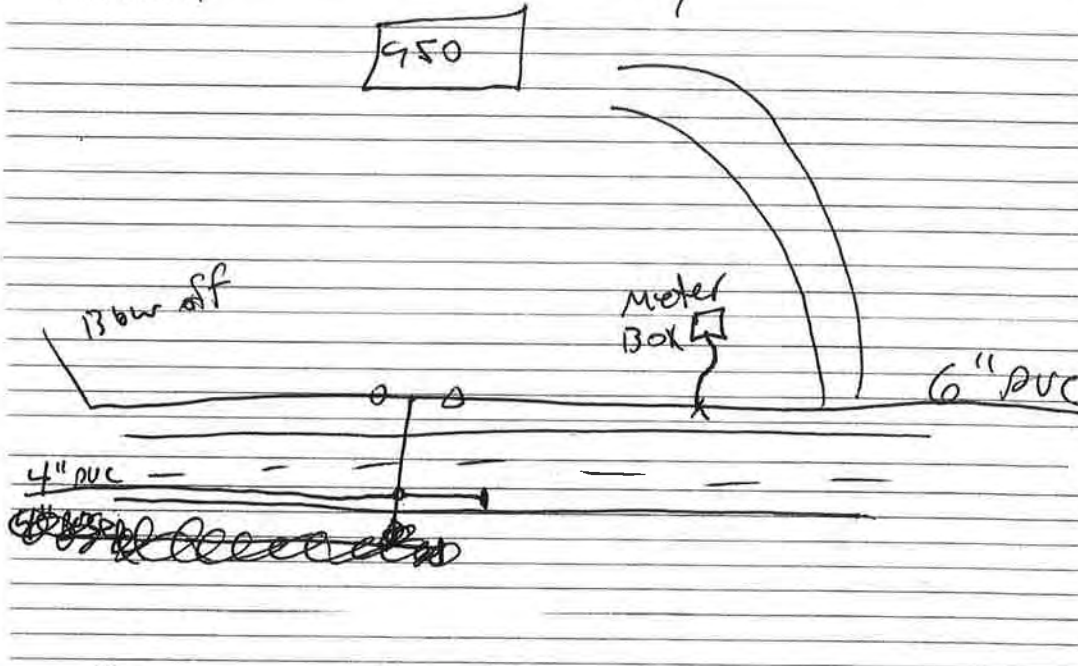
New Service Tap: Yes No

Renewed Service: Yes No

Old Tap: Yes No

Regulator: House Meter ?

Service Lines	Yes	NO
Backed Tap:		<input checked="" type="checkbox"/>
Top Tap:		<input checked="" type="checkbox"/>
Split Service		<input checked="" type="checkbox"/>
Coupling in Service		<input checked="" type="checkbox"/>
Customer @ Home		<input checked="" type="checkbox"/>



Main Size:	Size	Type	Depth	Long Side	Short Side
	<u>6"</u>	<u>PVC</u>	<u>36"</u>		<input checked="" type="checkbox"/>

Service Size:	Size	Type	Depth	Length
	<u>3/4</u>	<u>Pex</u>	<u>22"</u>	<u>8'</u>

REMARKS: Customer side PVC

Pressure Check & Service Line

Assigned To: Justin D

Account #: 11-14500

Date:	<u>3/27/24</u>		GPM	PSI	Chlorine	
Name:	<u>Marcel Guy</u>	House				
Addr:	<u>946 Riggs chapel</u>	Meter	<u>16</u>	<u>120</u>	<u>2.6</u>	
		Hydrant				
		Tap				

Yes No
Photos:

Meter Removed Yes NO Time of Work

Meter Location: 10' right of driveway / 6' from the road

Meter #: 88755185

DRAWING BELOW

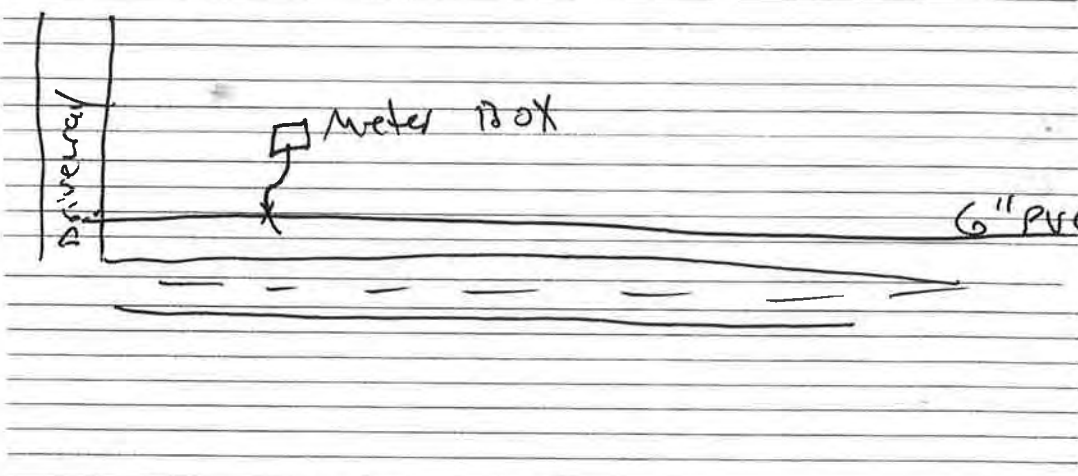
New Service Tap: Yes No



Renewed Service: Yes No

Old Tap: Yes No

Regulator House Meter ?



Service Lines Yes NO

Backed Tap:

Top Tap:

Split Service

Coupling in Service

Customer @ Home

	Size	Type	Depth	Long Side	Short Side
Main Size:	<u>6"</u>	<u>PVC</u>	<u>36"</u>		<u>X</u>

	Size	Type	Depth	Length
Service Size:	<u>3/4</u>	<u>Pex</u>	<u>18"</u>	<u>4'</u>

REMARKS: customer side Copper

Pressure Check & Service Line

Assigned To: Justin D.

Account #: 11-14510

Date:	<u>3/27/24</u>	GPM	PSI	Chlorine
Name:	<u>David Pilyaw</u>	House		
Addr:	<u>942 R. 995 Chapel</u>	Meter	<u>16</u>	<u>110</u>
		Hydrant		
		Tap		

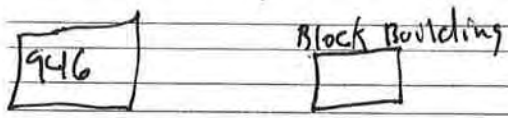
Photos: Yes No

Meter Removed	<input type="checkbox"/> Yes <input type="checkbox"/> NO	Time of Work	
---------------	--	--------------	--

Meter Location: Left From the road / 25' right of Gray block building / In Bank

DRAWING BELOW

Meter #: 88755196

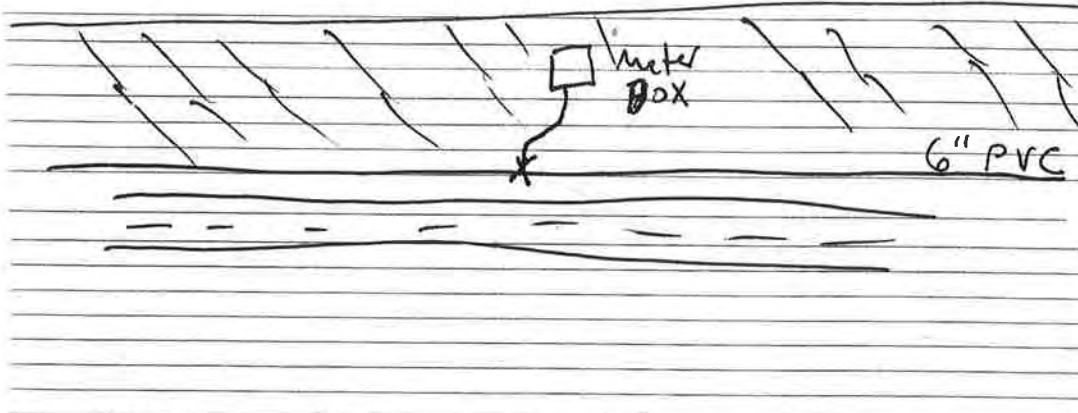


New Service Tap: Yes No

Renewed Service: Yes No

Old Tap: Yes No

Regulator: House Meter ?



Service Lines	Yes	NO
Backed Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Top Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Split Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Coupling in Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Customer @ Home	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Main Size:	Size	Type	Depth	Long Side	Short Side
	<u>6"</u>	<u>PVC</u>	<u>36"</u>		<input checked="" type="checkbox"/>

Service Size:	Size	Type	Depth	Length
	<u>3/4</u>	<u>Pex</u>	<u>18"</u>	<u>4'</u>

REMARKS: customer side PVC
locked off

Pressure Check & Service Line

Assigned To: Justin D.

Account #: 11-07500

DATE:	<u>3/27/24</u>		GPM	PSI	Chlorine	
NAME:	<u>Fox Crabtree</u>	House				
ADDR:	<u>932 Riggs Chapel</u>	Meter	<u>16</u>	<u>115</u>	<u>1.31</u>	
		Hydrant				
		Tap				

Yes No
Photos:

	Yes	NO	
Meter Removed			Time of Work

Meter Location: Under white fence / 8' from the road

DRAWING BELOW

Meter #: 88755193

New Service Tap: Yes No

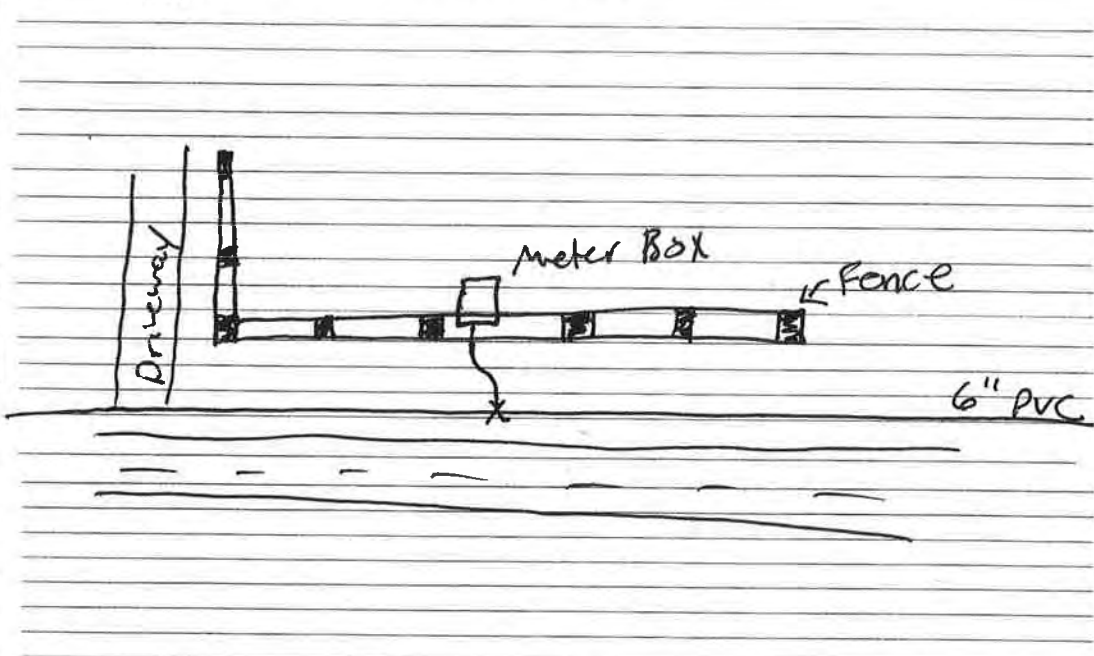
Renewed Service: Yes No

Old Tap: Yes No

Regulator: House Meter ?

Service Lines

	Yes	NO
Backed Tap:		<input checked="" type="checkbox"/>
Top Tap:		<input checked="" type="checkbox"/>
Split Service		<input checked="" type="checkbox"/>
Coupling in Service		<input checked="" type="checkbox"/>
Customer @ Home		<input checked="" type="checkbox"/>



	Size	Type	Depth	Long Side	Short Side		
Main Size:	<u>6"</u>	<u>PVC</u>	<u>36"</u>		<input checked="" type="checkbox"/>		

	Size	Type	Depth	Length			
Service Size:	<u>3/4</u>	<u>Pex</u>	<u>18"</u>	<u>6'</u>			

REMARKS: customer side copper

Harriman Utility Board

Pressure Check & Service Line

Assigned To: Justin Davis

Account # 11-13500

Date:	<u>3/27/24</u>		GPM	PSI	Chlorine	
Name:	<u>Lisa Dipaola</u>	House				
Addr:	<u>906 Riggs chapel</u>	Meter	<u>16</u>	<u>120</u>	<u>1.42</u>	
		Hydrant				
		Tap				

Photos: Yes No

Meter Removed	<input type="checkbox"/> Yes <input type="checkbox"/> NO	Time of Work	
---------------	--	--------------	--

Meter Location: 8' left of driveway / 8' from the road

DRAWING BELOW

Meter #: 88755192

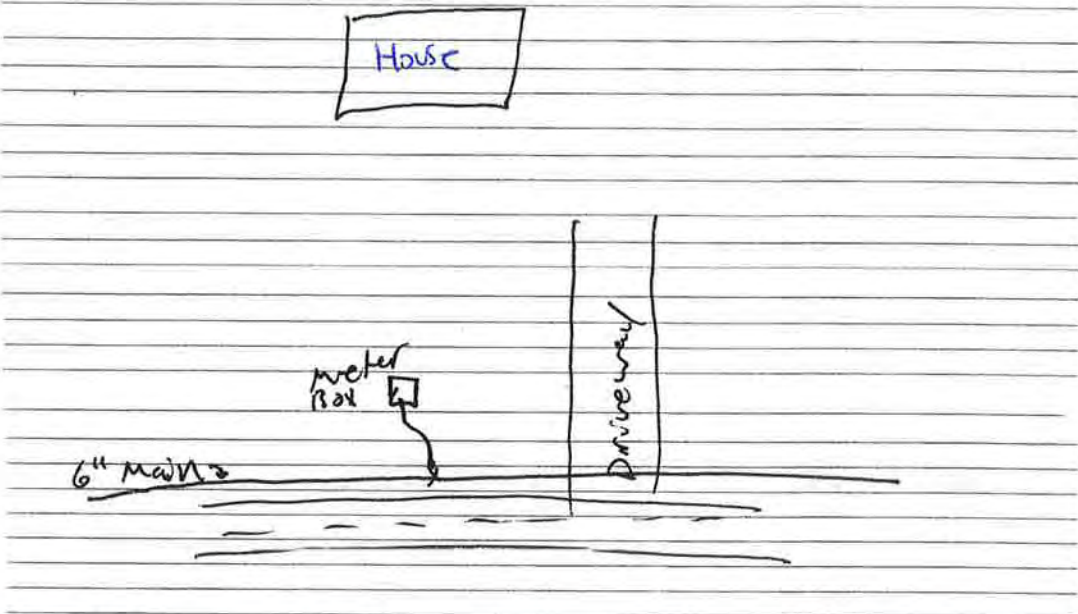
New Service Tap: Yes No

Renewed Service: Yes No

Old Tap: Yes No

Regulator: House Meter ?

Service Lines	Yes	NO
Backed Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Top Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Split Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Coupling in Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Customer @ Home	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Main Size:	Size	Type	Depth	Long Side	Short Side
	<u>6"</u>	<u>PUC</u>	<u>36"</u>		<input checked="" type="checkbox"/>

Service Size:	Size	Type	Depth	Length
	<u>3/4</u>	<u>Pex</u>	<u>18"</u>	<u>6'</u>

REMARKS: customer side pex

Pressure Check & Service Line

Assigned To: Justin D.

Account #: 11-31200

Date:	3/21/24		GPM	PSI	Chlorine
Name:	Jason Taylor		House		
Addr:	156 Snow Ln		Meter	18	155
			Hydrant		1.67
			Tap		

Photos: Yes No

Meter Removed: Yes NO Time of Work:

Meter Location: 17ft from road / 2 ft left of driveway

Meter #: 88755211

DRAWING BELOW

New Service Tap: Yes No

Renewed Service: Yes No

Old Tap: Yes No

Regulator: House Meter ?

Service Lines: Yes NO

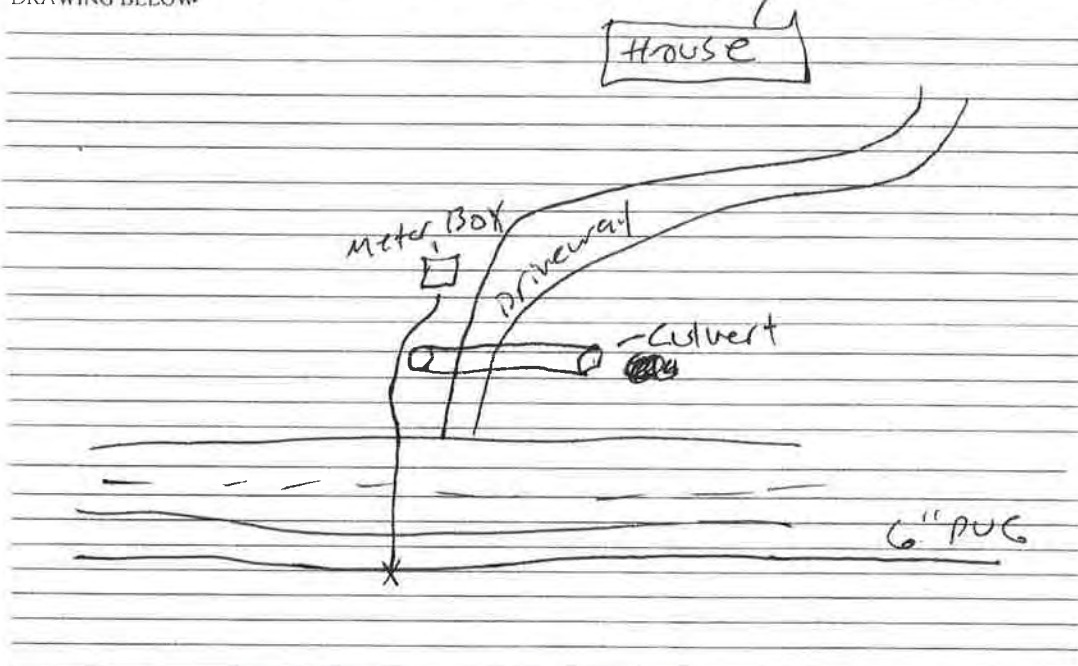
Backed Tap: Yes NO

Top Tap: Yes NO

Split Service: Yes NO

Coupling in Service: Yes NO

Customer @ Home: Yes NO



Main Size:	Size	Type	Depth	Long Side	Short Side
6"	6"	PVC	36"	X	

Service Size:	Size	Type	Depth	Length
3/4"	3/4"	Pex	20"	

REMARKS: customer side copper service in ditch under culvert / sleeved in 2" poly / covered with gravel / caution tape then dirt.

Harriman Utility Board

Pressure Check & Service Line

Assigned To: Justin D.

Account #: 11-30000

Date:	<u>3/21/24</u>		GPM	PSI	Chlorine
Name:	<u>Gerald Taylor</u>	House			
Addr:	<u>186 Snow Ln</u>	Meter	<u>15</u>	<u>108</u>	<u>1.99</u>
		Hydrant			
		Tap			

Yes No
Photos:

Meter Removed	Yes	NO	Time of Work
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Meter Location: 16ft from the road / 3ft right of flower bed

Meter #: 88755299

DRAWING BELOW

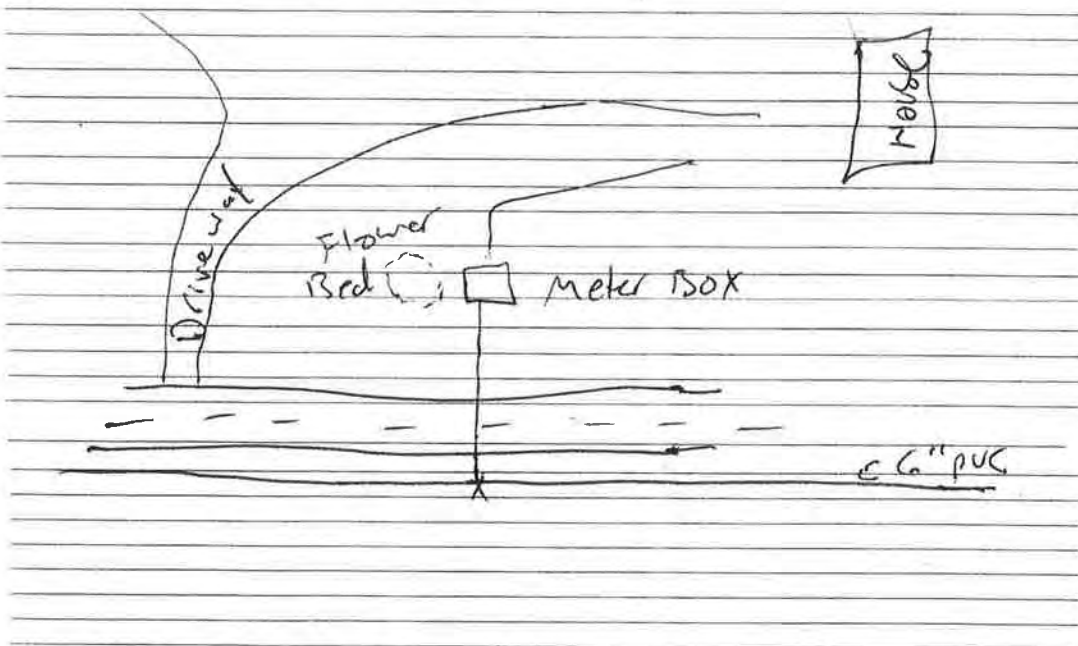
New Service Tap: Yes No

Renewed Service: Yes No

Old Tap: Yes No

Regulator House Meter ?

Service Lines	Yes	NO
Backed Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Top Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Split Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Coupling in Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Customer @ Home	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Main Size:	Size	Type	Depth	Long Side	Short Side
	<u>6"</u>	<u>PVC</u>	<u>36"</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Service Size:	Size	Type	Depth	Length
	<u>3/4</u>	<u>Pex</u>	<u>20"</u>	<u>36'</u>

REMARKS: customer side black plastic

Pressure Check & Service Line

Assigned To: Justin D.

Account #: 11-30160

Date:	<u>3/20/24</u>		GPM	PSI	Chlorine	
Name:	<u>Lela Jones</u>	House				
Addr:	<u>165 Snow Ln</u>	Meter	<u>18</u>	<u>140</u>	<u>1.97</u>	
		Hydrant				
		Tap				

Yes No
Photos:

Meter Removed	Yes	NO	Time of Work	
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Meter Location: 12' from road / 1.5ft left of mail box

DRAWING BELOW

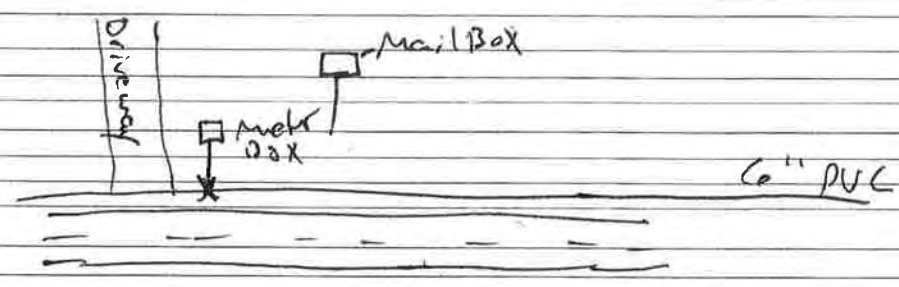
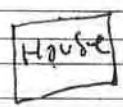
Meter #: 88753580

Yes No
New Service Tap:

Yes No
Renewed Service:

Yes No
Old Tap:

House Meter ?
Regulator



Service Lines	Yes	NO
Backed Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Top Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Split Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Coupling in Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Customer @ Home	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Size	Type	Depth	Long Side	Short Side
Main Size:	<u>6"</u>	<u>PVC</u>	<u>36"</u>		<input checked="" type="checkbox"/>

	Size	Type	Depth	Length
Service Size:	<u>3/4"</u>	<u>Pex</u>	<u>18"</u>	<u>10'</u>

REMARKS: Meter was locked off,
customer side black plastic

Pressure Check & Service Line

Assigned To: Justin D.

Account #: 11-31000

Date:	<u>3/20/24</u>		GPM	PSI	Chlorine	
Name:	<u>Dustin Taylor</u>	House				
Addr:	<u>163 Snow Ln</u>	Meter	<u>20</u>	<u>150</u>	<u>2.2</u>	
		Hydrant				
		Tap				

Yes No
Photos:

Meter Removed	Yes	NO	Time of Work
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Meter Location: 5' Left of mail Box / 13' From road

DRAWING BELOW

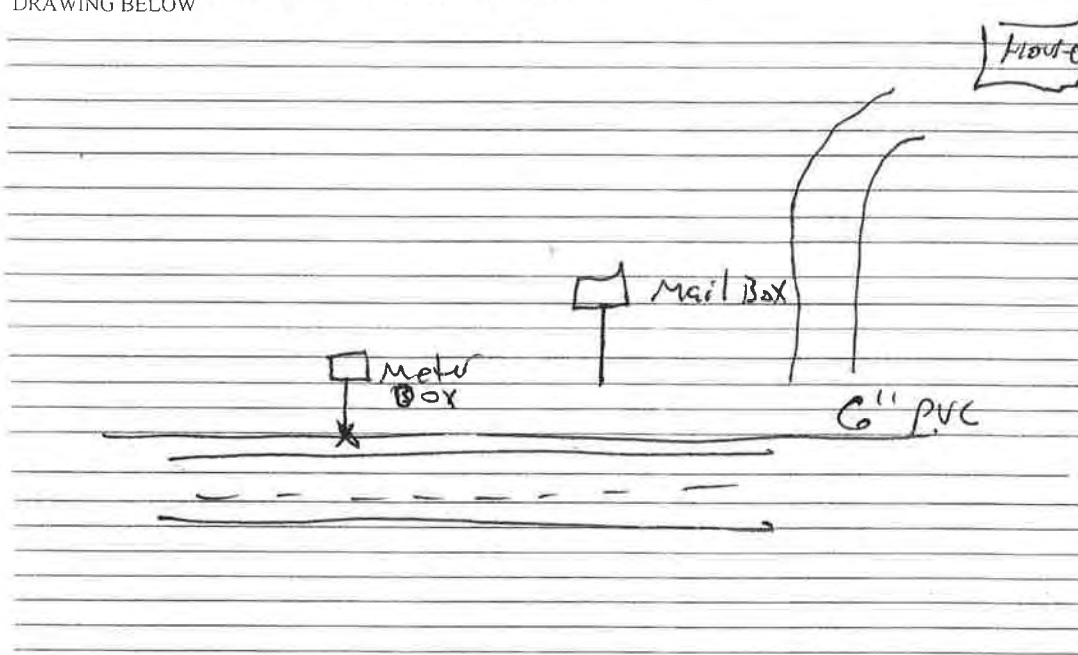
Meter #: 88755300

New Service Tap: Yes No

Renewed Service: Yes No

Old Tap: Yes No

Regulator House Meter ?



Service Lines	Yes	NO
Backed Tap:		<input checked="" type="checkbox"/>
Top Tap:		<input checked="" type="checkbox"/>
Split Service		<input checked="" type="checkbox"/>
Coupling in Service		<input checked="" type="checkbox"/>
Customer @ Home		<input checked="" type="checkbox"/>

Main Size:	Size	Type	Depth	Long Side	Short Side
	<u>6"</u>	<u>PVC</u>	<u>36"</u>		<input checked="" type="checkbox"/>

Service Size:	Size	Type	Depth	Length
	<u>3/4</u>	<u>Pex</u>	<u>18"</u>	<u>10'</u>

REMARKS: customer side Pex

Pressure Check & Service Line

Assigned To: Justin D.

Account #: 11-29930

Date:	<u>3/20/24</u>		GPM	PSI	Chlorine
Name:	<u>Todd Taylor</u>	House			
Addr:	<u>194 Snow Ln</u>	Meter	<u>160</u>	<u>110</u>	<u>1.94</u>
		Hydrant			
		Tap			

Yes No
Photos:

Yes NO
Meter Removed Time of Work

Meter Location: 17' right of Asphalt driveway / 14 ft from the road

Meter #: 88755293

DRAWING BELOW

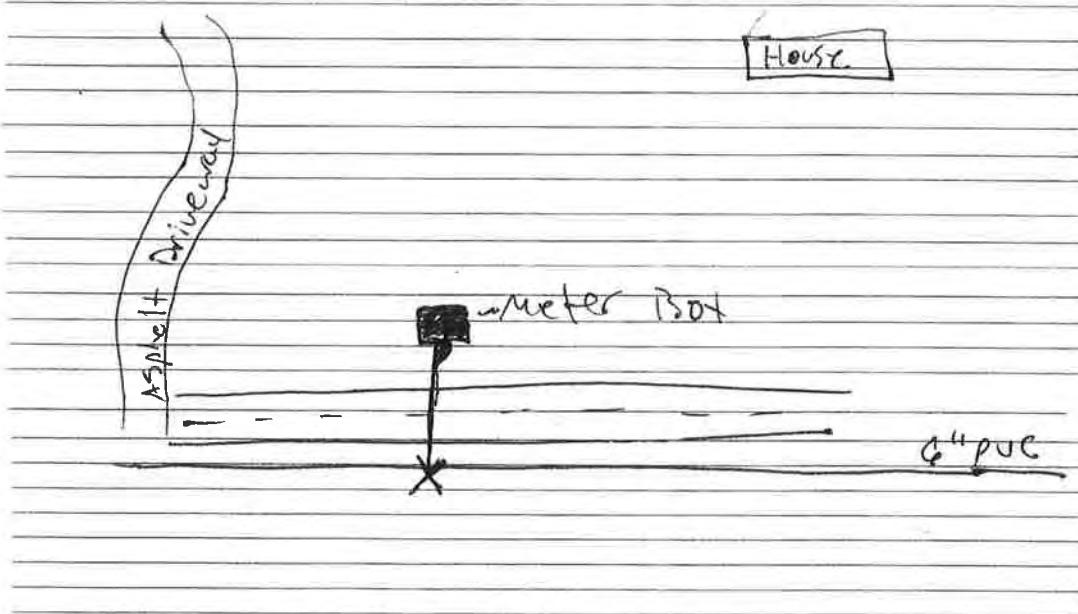
Yes No
New Service Tap:

Yes No
Renewed Service:

Yes No
Old Tap:

House Meter ?
Regulator

Service Lines	Yes	NO
Backed Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Top Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Split Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Coupling in Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Customer @ Home	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Size	Type	Depth	Long Side	Short Side
Main Size:	<u>6"</u>	<u>PVC</u>	<u>36"</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Size	Type	Depth	Length
Service Size:	<u>3/4</u>	<u>PVC</u>	<u>22"</u>	

REMARKS: customer side PVC

Pressure Check & Service Line

Assigned To:

Account #: 11-33000

Date:	3/20/24		GPM	PSI	Chlorine	
Name:	Jason S Taylor	House				
Addr:	103 Snow Ln	Meter	18	120	1.98	
		Hydrant				
		Tap				

Yes No
Photos:

Meter Removed	Yes	NO	Time of Work	
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Meter Location: 19' ft left of driveway / 8ft from road

Meter #: 88755210

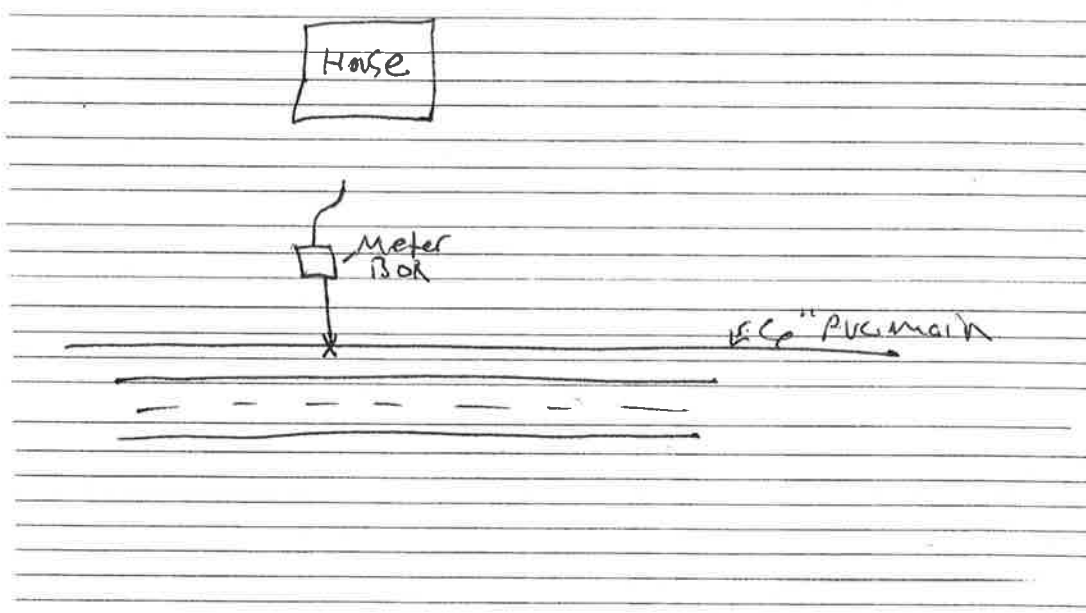
DRAWING BELOW

New Service Tap: Yes No

Renewed Service: Yes No

Old Tap: Yes No

Regulator House Meter ?



Service Lines	Yes	NO
Backed Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Top Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Split Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Coupling in Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Customer @ Home	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Size	Type	Depth	Long Side	Short Side
Main Size:	6"	PVC	36"		X

	Size	Type	Depth	Length
Service Size:	3/4	PEX	18"	8ft

REMARKS: Customer side copper

Pressure Check & Service Line

Assigned To: Justin D.

Account #: 11-32500

Date:	<u>3/20/24</u>		GPM	PSI	Chlorine	
Name:	<u>Paul Burgess</u>	House				
Addr:	<u>104 Snow Ln</u>	Meter	<u>16</u>	<u>120</u>	<u>2.15</u>	
		Hydrant				
		Tap				

Yes No
Photos:

Meter Removed	Yes	NO	Time of Work	
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Meter Location: 4 ft of the road / 8 ft right of driveway

DRAWING BELOW

Meter #: 88755295

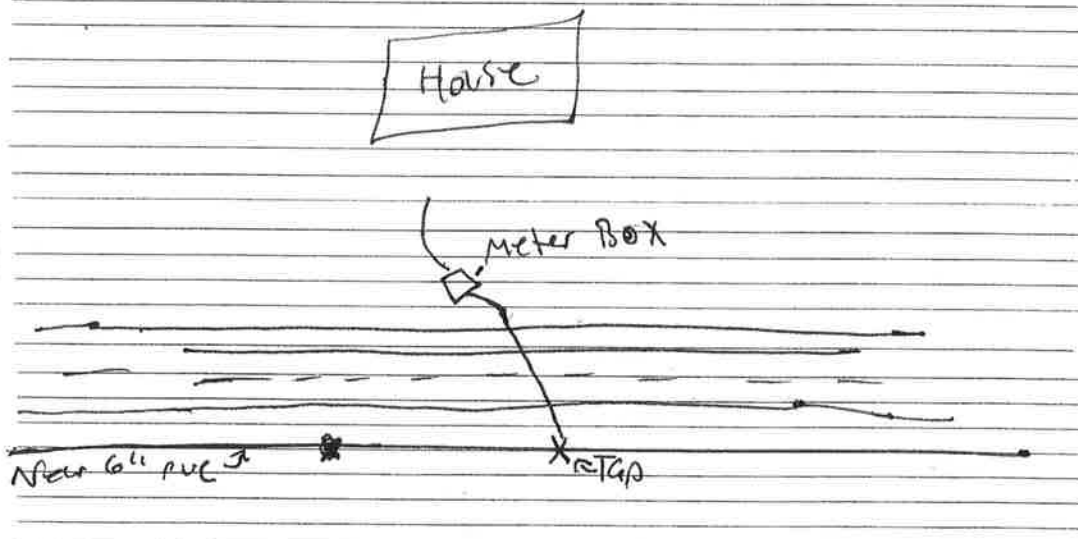
New Service Tap: Yes No

Renewed Service: Yes No

Old Tap: Yes No

Regulator: House Meter ?

Service Lines	Yes	NO
Backed Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Top Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Split Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Coupling in Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Customer @ Home	<input type="checkbox"/>	<input checked="" type="checkbox"/>



Main Size:	Size	Type	Depth	Long Side	Short Side
	<u>6"</u>	<u>PVC</u>	<u>36"</u>	<input checked="" type="checkbox"/>	

Service Size:	Size	Type	Depth	Length
	<u>3/4</u>	<u>Pex</u>	<u>18"</u>	<u>28'</u>

REMARKS: customer side PVC

Pressure Check & Service Line

Assigned To: Justin D.

Account #: 11-32000

Date:	<u>3/19/24</u>		GPM	PSI	Chlorine
Name:	<u>Charles Keller</u>	House			
Addr:	<u>136 Snow Ln</u>	Meter	<u>10</u>	<u>78</u>	<u>2.01</u>
		Hydrant			
		Tap			

Yes No
Photos:

Meter Removed	Yes	NO	Time of Work	
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Meter Location: 18' right of driveway / 17ft from road
DRAWING BELOW

Meter #: 88755264

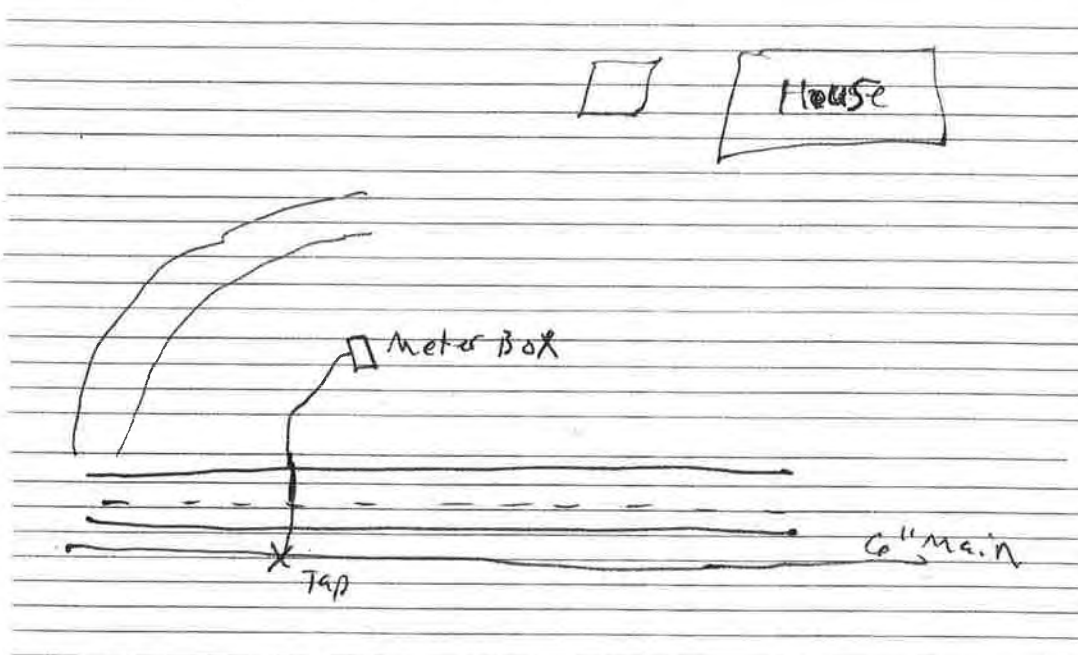
New Service Tap: Yes No

Renewed Service: Yes No

Old Tap: Yes No

Regulator House Meter ?

Service Lines	Yes	NO
Backed Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Top Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Split Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Coupling in Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Customer @ Home	<input type="checkbox"/>	<input checked="" type="checkbox"/>



Main Size:	Size	Type	Depth	Long Side	Short Side
	<u>6"</u>	<u>Pvc</u>	<u>36"</u>	<input checked="" type="checkbox"/>	

Service Size:	Size	Type	Depth	Length
	<u>3/4</u>	<u>Pex</u>	<u>22"</u>	<u>37' Approx</u>

REMARKS:
Customer side PVC

Pressure Check & Service Line

Assigned To: Justin D.

Account #: 11-31600

Date:	<u>3/19/24</u>		GPM	PSI	Chlorine
Name:	<u>Jeffery Raymond</u>	House			
Addr:	<u>141 Snow Ln</u>	Meter	<u>12</u>	<u>68</u>	<u>1.88</u>
		Hydrant			
		Tap			

Yes No
Photos:

Meter Removed	Yes	NO	Time of Work	
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Meter Location: Approx 32 ft left of utility pole / ~~at road~~ 12 ft from road

Meter #: 88755296

DRAWING BELOW

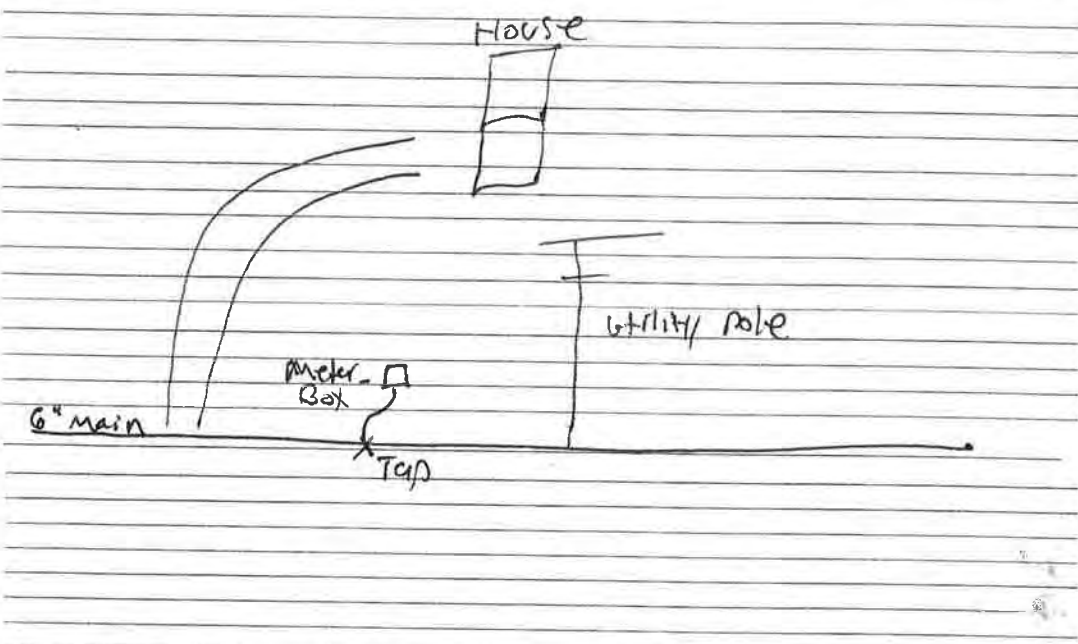
New Service Tap: Yes No

Renewed Service: Yes No

Old Tap: Yes No

Regulator	House	Meter	?
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Service Lines	Yes	NO
Backed Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Top Tap:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Split Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Coupling in Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Customer @ Home	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Main Size:	Size	Type	Depth	Long Side	Short Side
	<u>6"</u>	<u>PVC</u>	<u>36"</u>		<input checked="" type="checkbox"/>

Service Size:	Size	Type	Depth	Length
	<u>3/4</u>	<u>Pex</u>	<u>18"</u>	<u>32'</u>

REMARKS: After hooking up new service. Customer stated she had issues with faucet. "bley up" or something. Matt from H/C went in to investigate. He stated that he didnt see an issue other than possibly low pressure in that faucet only. No other issues.

customer side black plastic