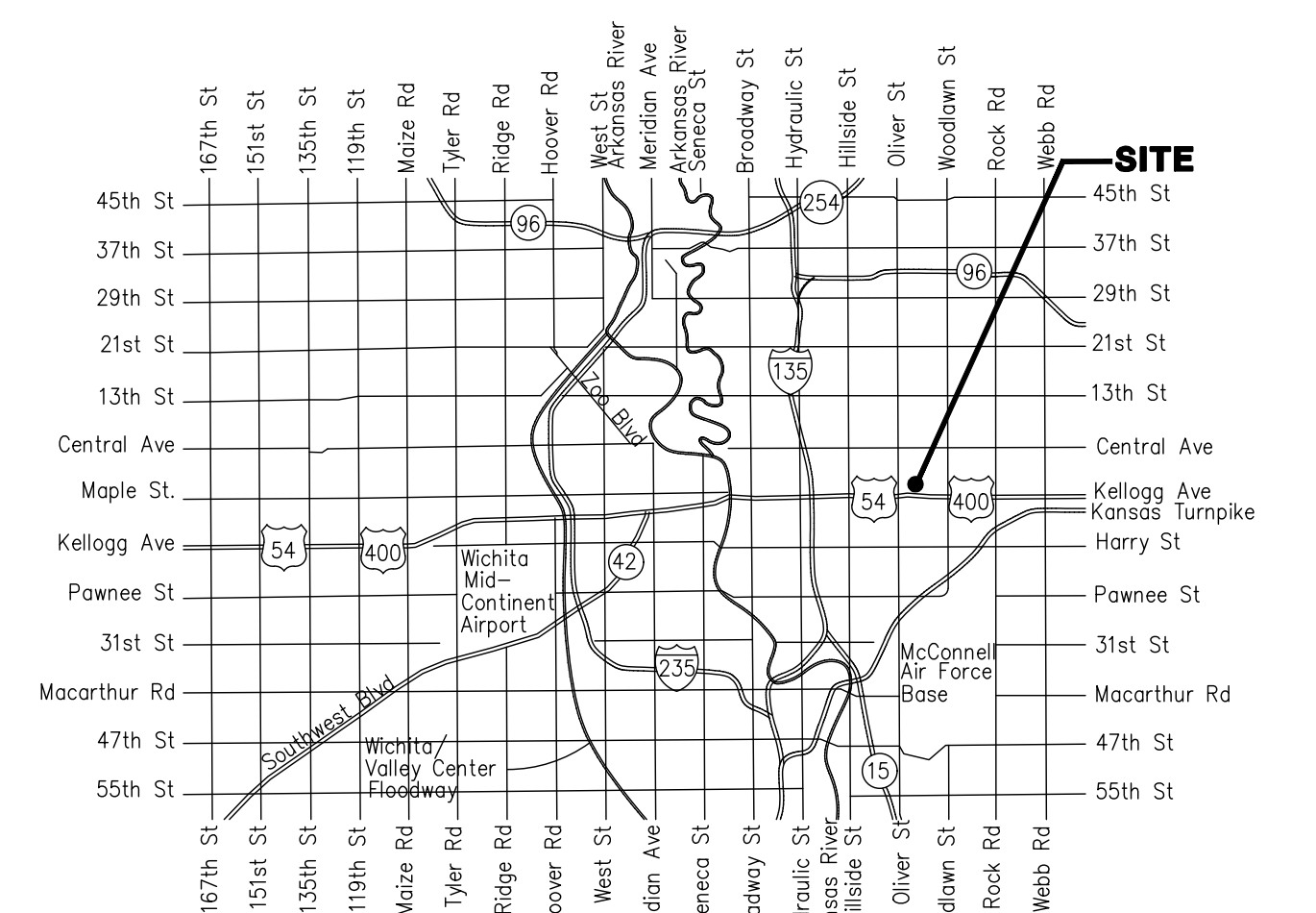


# WATER DISTRIBUTION SYSTEM to serve ROBERT J. DOLE VA MEDICAL CENTER BUILDING 13 NEW BOILERS, CITY OF WICHITA, KANSAS

Gary Janzen, P.E. City Engineer  
Project Number  
2020-652 PPD (XXXXXX)



**Vicinity Map**

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SHEET NO. 3	CU222.01 - WATERLINE PLAN & PROFILE, LINE 1, PHASE 1
SHEET NO. 4	CU223.01 - WATERLINE PLAN & PROFILE, LINE 2, PHASE 1
SHEET NO. 5	CU224 - STANDARD WATER ASSEMBLY DETAILS
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**APPROVED AS NOTED  
BY WICHITA PUBLIC WORKS  
ENGINEERING DIVISION  
& BY WICHITA FIRE DEPARTMENT**

Engineering \_\_\_\_\_  
Utilities \_\_\_\_\_  
Fire Dept. \_\_\_\_\_

**NOTE TO CONTRACTORS**

**Public Property:**  
Inspection and testing for the waterline is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection is to be in accordance with the City of Wichita standard construction engineering practices and certified by a Professional Engineer Licensed in the state of Kansas. No work shall be performed in dedicated easements or public right-of-way by the Contractor without such inspection nor shall any work be commenced without written authorization by City Engineering. All Construction and Materials shall comply with the City of Wichita Specifications and Standards and Special Provision (on file and available in the City Engineer's Office) or on the City's Website.

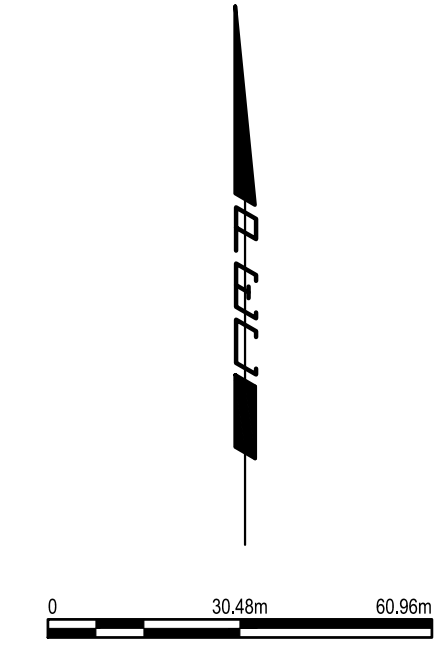
**Private Property:**  
Installation and testing for the fire protection line is to be performed by a City of Wichita licensed fire protection contractor in accordance with the fire codes as adopted by the City of Wichita. All material and construction practices for the fire protection line shall comply with the fire codes as adopted by the City of Wichita (available from the City of Wichita Fire Department). The Contractor shall not commence work without notification and approval of the Wichita Fire Department. Inspection of the fire protection line is to be provided by a licensed Engineering Firm under contract with the Owner/Developer and the Fire Department. The contractor shall not start work until the project inspector is assigned to the project and present on the site. Any work done without inspection will be required to be uncovered for inspection.

An approved copy of these plans signed by City staff are required on-site.

SEPTEMBER 2021

## GENERAL NOTES

- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY REGULATIONS. ALL CONSTRUCTION SHALL BE COMPLETED FOLLOWING CURRENT CITY STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- CONTRACTOR WILL BE REQUIRED TO PROVIDE NOTICE TO UTILITY COMPANIES A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO ANY EXCAVATION, AS FOLLOWS:  
KANSAS ONE-CALL 687-2470  
THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:  
AT&T 1-800-248-8464  
BLACK HILLS ENERGY 1-800-694-8989  
CITY OF WICHITA WATER & SEWER 1-316-219-8921  
CITY OF WICHITA STORMWATER 1-316-268-4090  
CITY OF WICHITA TRAFFIC 1-316-268-4034  
COX COMMUNICATIONS 1-888-249-3530  
KANSAS GAS SERVICE 1-888-482-4950  
EVERGY 1-800-544-4857
- UTILITY SERVICE LINES, POLES, ETC. ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
- RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DEPOSED ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS, IN THE OPINION OF THE ENGINEER, THAT WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WILL REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS. OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WILL REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.
- TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE CITY ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.
- THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ADJACENT TO THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS NOTICE PRIOR TO START OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
- THE ENGINEERING DIVISION SHALL FIELD LOCATE WATER VALVES ONE TIME DURING CONSTRUCTION WHEN REQUESTED BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE SUCH FIELD LOCATIONS DURING THE CONSTRUCTION PROCESS. WATER VALVES, VALVE BOXES OR FIRE HYDRANTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY CONTRACTOR AT HIS OWN EXPENSE. VALVE BOXES AND WATER METERS WITHIN THE PROJECT LIMITS SHALL BE ADJUSTED TO MATCH FINAL GRADES BY THE CONTRACTOR.
- THE CONTRACTOR SHALL NOTIFY THE INSPECTING ENGINEER AND DAWNITA REINHOLD AT 316-650-4444 WITH THE CITY OF WICHITA WITH THE ANTICIPATED CONSTRUCTION START DATE AND NOTIFY THEM OF PROJECT COMPLETION. STAKING AND INSPECTION FOR THIS PROJECT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- IF TRAFFIC WILL BE IMPACTED BY CONSTRUCTION, A TRAFFIC CONTROL PLAN MUST BE SUBMITTED AND APPROVED BY THE CITY TRAFFIC ENGINEER, MKE ARMOUR AT TRAFFIC@WICHITA.GOV BEFORE CONSTRUCTION CAN BEGIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL MEASURES TO FACILITATE CONSTRUCTION. ALL CONSTRUCTION ZONE MARKINGS AND SIGNAGE SHALL CONFORM TO THE LATEST VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS PUBLISHED BY THE US DEPT. OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION. ALL COSTS ASSOCIATED WITH CONSTRUCTION MARKINGS AND SIGNAGE SHALL BE THE CONTRACTORS RESPONSIBILITY.
- ALL ELEVATIONS SHOWN ARE NAVD 88.
- ALL AREAS DISTURBED DURING CONSTRUCTION THAT WILL NOT BE UNDER PROPOSED PAVEMENT SHALL BE RESTORED TO MATCH EXISTING CONDITIONS.
- ANY SIDEWALK, DRIVE APPROACH, CURB, OR STREET PAVEMENT REMOVED TO CONSTRUCT PROJECT MUST HAVE A PAVEMENT CUT PERMIT AND BE REPLACED BY THE CITY CONTRACTOR. PERMITS CAN BE OBTAINED BY CALLING 316-268-4501 OR 316-268-4480.
- ALL APPLICABLE FEES (TAP, EQUITY, IN LIEU OF & MAIN BENEFIT) MUST BE PAID BEFORE ANY CONNECTIONS CAN BE MADE ON THIS PROJECT. QUOTES CAN BE OBTAINED ON FEES BY CALLING 316-268-4555.
- CITY MAINTENANCE OF WATER MAINS ENDS AT RIGHT-OF-WAY OR EASEMENT LINE OR WITHIN TWO FEET OF VAULT.
- OPENING AND CLOSING OF WATER VALVES SHALL BE DONE SLOWLY TO PREVENT DAMAGE TO THE WATER DISTRIBUTION SYSTEM FROM WATER HAMMER. ALL VALVES CLOSED BY THE CONTRACTOR MUST BE REOPENED AS NEW CONSTRUCTION PERMITS. THE PROJECT INSPECTOR MUST ASCERTAIN THAT ANY VALVE CLOSED BY THE CONTRACTOR IS REOPENED. THE CONTRACTOR WILL BE PERMITTED TO OPERATE WATER VALVES ONLY WHEN THE PROJECT INSPECTOR ASSIGNED TO THE PROJECT IS PRESENT.
- THE CONTRACTOR SHALL LAY A TRACER WIRE AND SET TEST STATIONS ALONG ALL WATER PIPE INSTALLED IN ACCORDANCE WITH CITY SPECIFICATIONS AND TRACER WIRE DETAIL ON DETAIL SHEET WL-101, COST IS SUBSIDIARY TO PIPE INSTALLATION.
- THE CONTRACTOR SHALL PROVIDE MATERIALS FOR TEMPORARY BLOWOFF OF WATERLINES. CONNECTIONS TO THE EXISTING WATERLINE(S) SHALL BE MADE WITH CLEAN, SWABBED PIPE AND FLUSHED UPON COMPLETION OF THE LINES.
- REQUESTS FOR SHORT TERM WATER INTERRUPTIONS SHALL BE MADE TO THE CITY WATER DISTRIBUTION DIVISION AND WILL BE SUBJECT TO THEIR APPROVAL. THE CONTRACTOR SHALL GIVE WRITTEN NOTICE TO ANY PROPERTY OWNER, BUSINESS, AND/OR TENANTS THAT WILL HAVE WATER SERVICE INTERRUPTED AT LEAST 5 DAYS IN ADVANCE. SUCH NOTIFICATIONS SHOULD INDICATE THE TIME AND DATE THAT THE WATER WILL BE TURNED OFF AND WHEN THE SERVICE WILL BE RESTORED. NO BUSINESS, PROPERTY OWNER, AND/OR TENANTS SHALL BE WITHOUT WATER SERVICE FOR MORE THAN 8 HOURS. PROPOSED TIE IN LOCATIONS WHICH WILL AFFECT WATER SERVICE TO PROPERTY OWNERS SHALL BE PERFORMED DURING NON-PEAK HOURS.
- THE CONTRACTOR MUST SCHEDULE THE CONNECTIONS TO THE EXISTING MAIN WITH THE CITY SUCH THAT THERE IS A MINIMUM DISRUPTION OF SERVICE. CONNECTIONS SHALL BE MADE DURING PERIODS OF LOW WATER USAGE. THE CONTRACTOR SHALL SUBMIT HIS PROPOSED SCHEDULE FOR COMPLETING WORK FOR CITY APPROVAL AT LEAST 10 DAYS PRIOR TO BEGINNING CONSTRUCTION.
- DEFLECTIONS AT PIPE JOINT OR COUPLINGS SHALL NOT EXCEED THE PIPE MANUFACTURERS RECOMMENDED MAXIMUM. WHERE DEFLECTIONS ARE GREATER THAN THE MAXIMUM ALLOWED, THE CONTRACTOR SHALL UTILIZE FITTINGS.
- ANY EXISTING JOINT EXPOSED DURING EXCAVATION SHALL BE REPLACED IF WITHIN FOUR FEET OF PROPOSED JOINT.
- VALVES 300mm AND LARGER ARE TO BE OPERATED BY THE CITY WATER DISTRIBUTION DIVISION, 48 HOURS ADVANCE NOTICE IS REQUIRED WITH THE WATER DISPATCH AT 316-291-8921.
- ALL WET TAPS SHALL BE INSTALLED BY THE CITY OF WICHITA. THE CONTRACTOR WILL REIMBURSE THE CITY FOR TAPPING FEES PRIOR TO TAP BEING MADE. UNLESS NOTED ON PLANS.
- THE CONTRACTOR SHALL PROTECT FROM DAMAGE AND SUPPORT EXISTING UTILITIES THROUGH CONSTRUCTION AS APPROVED BY THE UTILITY OWNER AND THE ENGINEER AT THE CONTRACTORS EXPENSE.
- CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH OPENINGS OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.
- WICHITA FIRE DEPARTMENT INSPECTIONS MAY BE SCHEDULED BY CALLING 316-650-0740.
- ALL APPROVED EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE STOCKPILED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER. STOCKPILE LOCATIONS SHALL BE AS DIRECTED BY THE OWNER AND IN ACCORDANCE WITH GENERAL NOTE NO. 4 ABOVE.
- ALL LAWN/TURF AREAS DISTURBED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE RESTORED WITH THE SAME GRASS/SOD AS EXISTING. RESTORATION OF DISTURBED AREAS SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP SOIL PREPARATION, SEEDING, MULCH, AND/OR RESEEDING. ALL SEEDING/SODDING WORK SHALL BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD SPECIFICATIONS AND THE CITY OF WICHITA ADMINISTRATIVE REGULATION NO. 46.5 WHICH GOVERNS CLEANUP AND RESTORATION OR REPLACEMENT FOLLOWING CONSTRUCTION.
- THE CONTRACTOR SHALL SEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WITH TEMPORARY RYE GRASS. RYE GRASS SEED SHALL BE PLANTED AT A MINIMUM RATE OF SIX (6) POUNDS PER ONE THOUSAND (1,000) SQUARE FEET. THIS TEMPORARY SEEDING MAY BE OMITTED ONLY IF OTHER SEEDING IS REQUIRED IN ACCORDANCE WITH GENERAL NOTE NO. 31 ABOVE. TEMPORARY SEEDING OR PERMANENT SEEDING/SODDING SHALL BE APPLIED WITHIN 14 DAYS AFTER THE AREA HAS BEEN DISTURBED.
- EACH BIDDER SHALL VISIT THE SITE OF THE PROJECT BEFORE SUBMITTING THE PROPOSAL FOR THIS WORK SO THAT HE WILL BE FULLY INFORMED OF THE EXISTING FIELD CONDITIONS AND THE OBSTACLES WHICH MIGHT BE ENCOUNTERED. UPON AWARD OF THE CONTRACT THE CONTRACTOR WILL NOT BE GRANTED ANY ADDITIONAL COMPENSATION WITH REGARDS TO TIME AND MONEY FOR CONDITIONS THAT MAY HAVE BEEN EVALUATED DURING ANY INSPECTION OF THE SITE.
- THE CONTRACTOR SHALL INSTALL AND/OR MAINTAIN EROSION CONTROL METHODS AS SPECIFIED. THE GENERAL LOCATION OF THE REQUIRED EROSION CONTROL IS ILLUSTRATED ON THE EROSION CONTROL PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE EROSION CONTROL SHOWN THROUGH THE COMPLETION OF THIS PROJECT. INSTALLATION OF THESE BMP'S DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF ABATING SOIL EROSION.
- MAINTAIN A MINIMUM OF 10-FOOT HORIZONTAL SEPARATION BETWEEN ALL WATER LINES (MANS, SERVICES, AND FIRE HYDRANTS) AND ALL SANITARY SEWER LINES (MANS, SERVICES, AND MANHOLES). ALL SEPARATION DISTANCES ARE TO BE MEASURED FROM EDGE-TO-EDGE AT THE CLOSEST POINT.
- MAINTAIN A MINIMUM OF 2-FOOT VERTICAL SEPARATION BETWEEN ALL WATER LINES (MANS AND SERVICES) AND ALL GRAVITY SANITARY SEWER LINES (MANS, SERVICES, AND MANHOLES) AT CROSSINGS. ALL SEPARATION DISTANCES ARE TO BE MEASURED FROM EDGE-TO-EDGE AT THE CLOSEST POINT.
- MAINTAIN A MINIMUM OF 2-FOOT VERTICAL SEPARATION BETWEEN ALL WATER LINES (MANS AND SERVICES) AND ALL PRESSURIZED SANITARY SEWER LINES (FORCE MAINS AND SERVICES) AT CROSSINGS. WATERLINES MUST ALWAYS BE PLACED ABOVE PRESSURIZED SANITARY SEWER LINES WHERE THEY CROSS. ALL SEPARATION DISTANCES ARE TO BE MEASURED FROM EDGE-TO-EDGE AT THE CLOSEST POINT.



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NO.	DESCRIPTION	DATE

CONSULTANTS	
<b>HAZARDOUS MATERIALS</b> MABBETT & ASSOCIATES, INC. 105 CENTRAL STREET, STONEHAM, MA 02180 PHONE: (781)275-0590	<b>FIRE SUPPRESSION</b> KOFFEL ASSOCIATES 8815 CENTRE PARK DRIVE, SUITE 200, COLUMBIA, MD 21045 PHONE: (410)729-2246
<b>CIVIL/STRUCTURAL</b> PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA, WICHITA, KS 67202 PHONE: (316)262-2891	<b>ELECTRONIC SECURITY</b> MAGNA ENGINEERS 861 CORPORATE PARKWAY, SUITE 210, LEXINGTON, KY 40503 PHONE: (859)309-2990
<b>ARCHITECTURAL</b> OCULUS INC. 1 SOUTH MEMORIAL DRIVE, SUITE 1500, SAINT LOUIS, MO 63102 PHONE: (314)367-6100	<b>PHYSICAL SECURITY</b> FORCE PROTECT 3210 GULF BLVD UNIT 304, BELLSEAR BEACH, FL 33786 PHONE: (602)836-4232

**ENGINEER OF RECORD**

**Miller-Remick LLC**  
M.E.P. & Structural Engineering  
A Service Disabled Veteran Owned Small Business

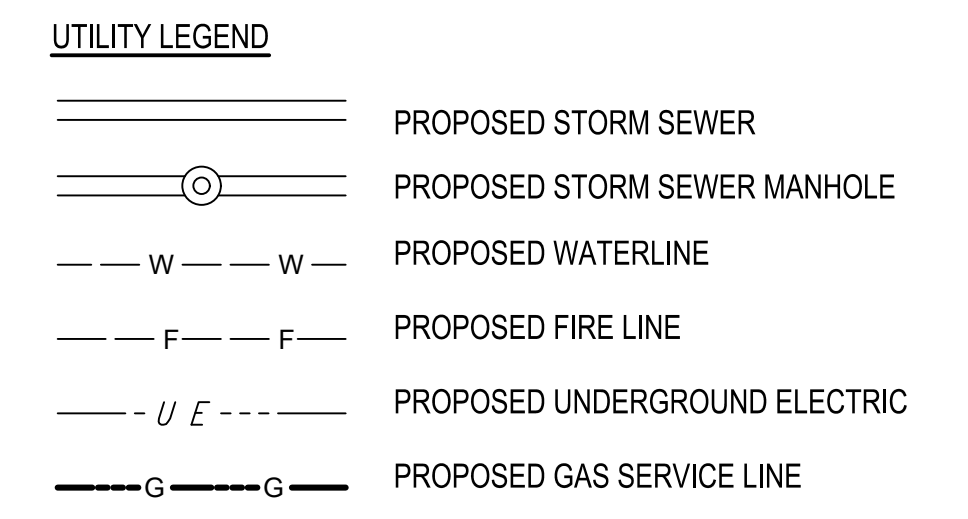
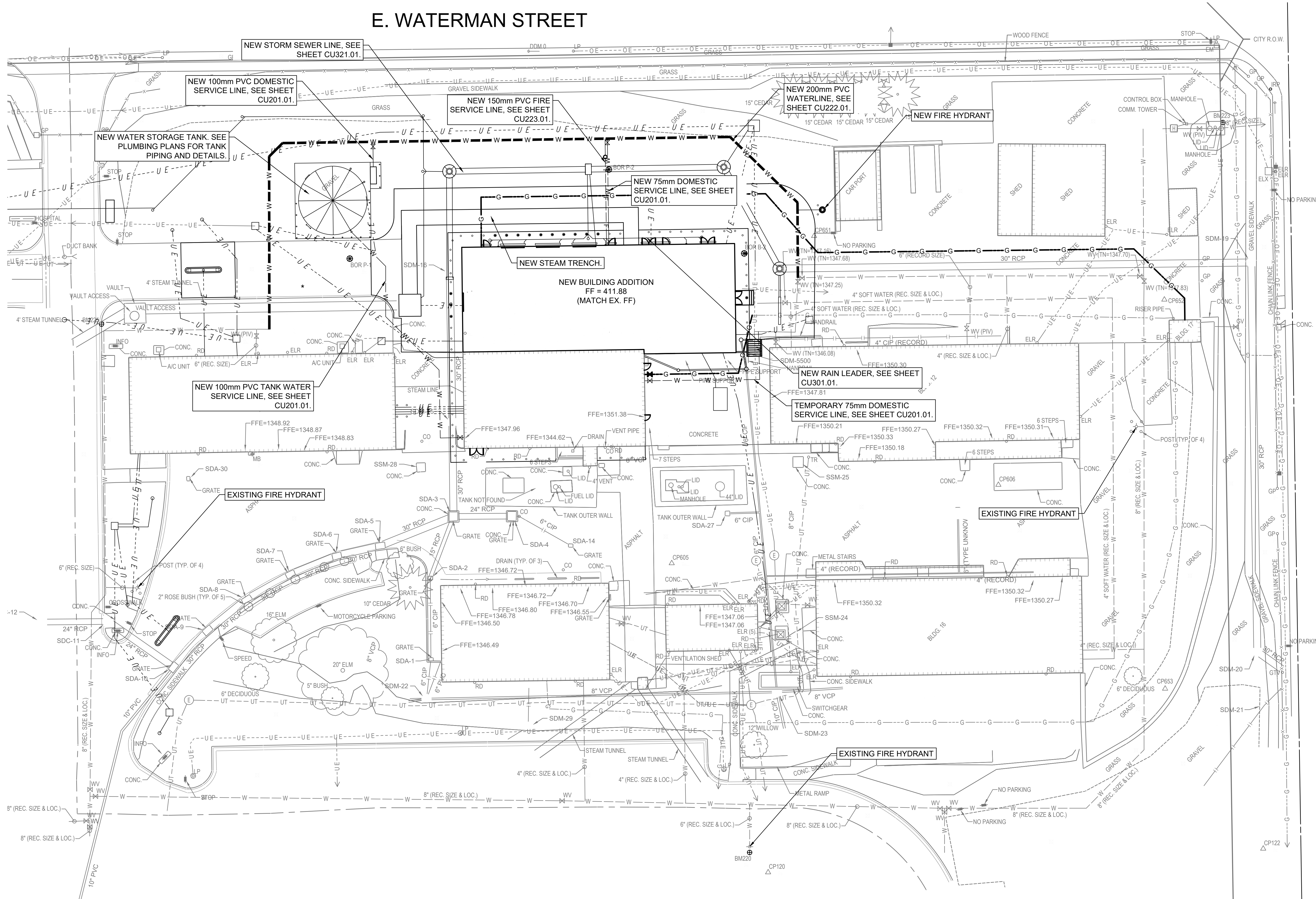
1010 KINGS HIGHWAY SOUTH  
CHERRY HILL, NEW JERSEY 08034  
PHONE: (856)429-4000  
FAX: (856)429-9020  
MR PROJECT NO: 0499-0121

**PROFESSIONAL ENGINEERING  
CONSULTANTS, P.A.  
PROFESSIONAL ENGINEER**

**Office of  
Construction  
and Facilities  
Management**

Drawing Title <b>CIVIL SITE PPW TITLE SHEET</b>
Phase <b>100% BID SET</b>
Project Title <b>INSTALL NEW BOILERS IN BUILDING 13</b>
Location <b>ROBERT J. DOLE VA MEDICAL CENTER WICHITA, KANSAS</b>
Issue Date <b>2021-09-03</b>
Checked <b>DRC</b>
Drawn <b>SMT /DSB</b>
Project Number <b>589A7-18-302</b>
Building Number <b>13</b>
Drawing Number <b>CU220</b>

# E. WATERMAN STREET



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 VA FORM 08-6231

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CONSULTANTS	
<b>HAZARDOUS MATERIALS</b> MABBETT & ASSOCIATES, INC. 105 CENTRAL STREET, STONEHAM, MA 02180 PHONE: (781)275-6590	<b>FIRE SUPPRESSION</b> KOFFEL ASSOCIATES 8815 CENTRE PARK DRIVE, SUITE 200, COLUMBIA, MD 21045 PHONE: (410)729-2246
<b>CIVIL/STRUCTURAL</b> PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA, WICHITA, KS 67202 PHONE: (316)262-2891	<b>ELECTRONIC SECURITY</b> MAGNA ENGINEERS 861 CORPORATE DRIVE, SUITE 210, LEXINGTON, KY 40503 PHONE: (859)309-2990
<b>ARCHITECTURAL</b> OCULUS INC. 1 SOUTH MEMORIAL DRIVE, SUITE 1500, SAINT LOUIS, MO 63102 PHONE: (314)367-6100	<b>PHYSICAL SECURITY</b> FORCE PROTECT 3210 GULF BLVD, UNIT 304, BELLEAIR BEACH, FL 33786 PHONE: (802)836-4232

**ENGINEER OF RECORD**

**Miller-Remick LLC**  
 M.E.P. & Structural Engineering  
 A Service Disabled Veteran Owned Small Business  
 1010 KINGS HIGHWAY SOUTH  
 CHERRY HILL, NEW JERSEY 08034  
 PHONE: (856)429-4000  
 FAX: (856)429-9022  
 MR PROJECT NO: 0499-0121

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.  
 PROFESSIONAL ENGINEER

**Office of Construction and Facilities Management**

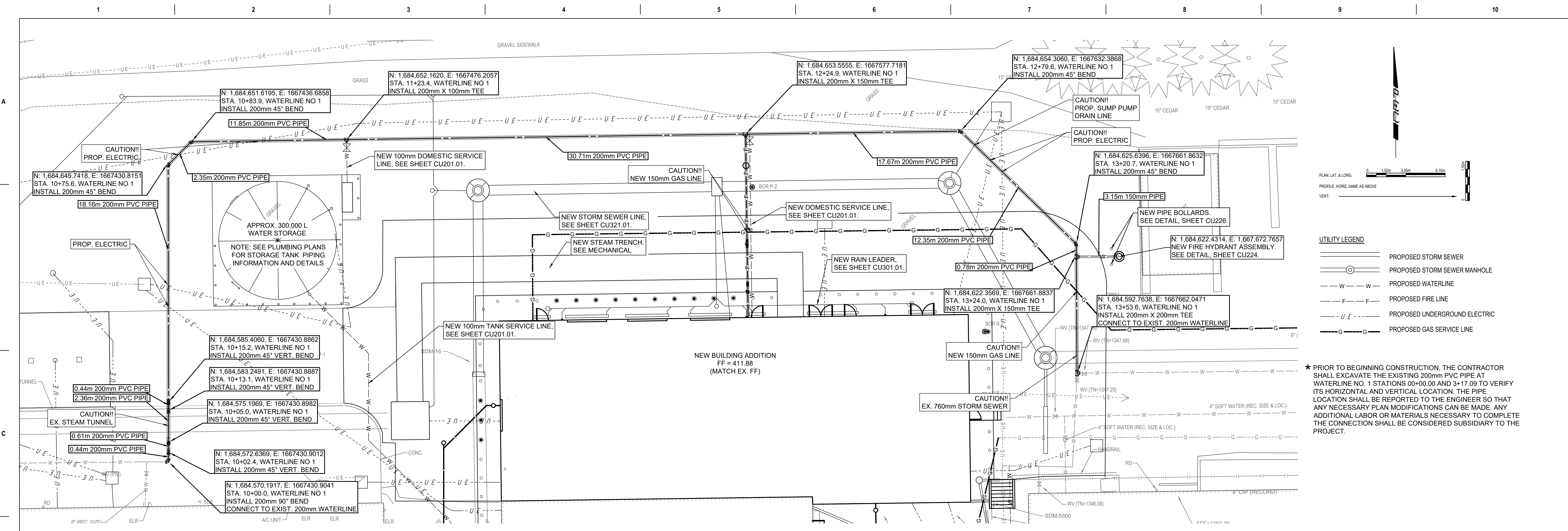
U.S. Department of Veterans Affairs

Drawing Title <b>CIVIL SITE WATERLINE KEY MAP, PHASE 1</b>
Approved: Project Director

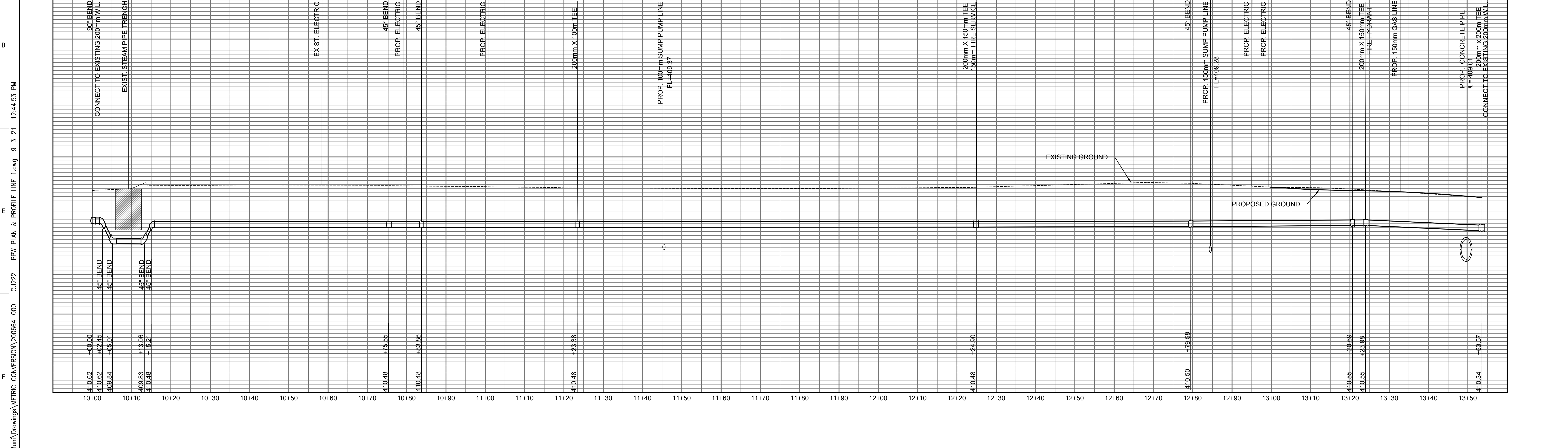
Phase <b>100% BID SET</b>
<b>FULLY SPRINKLERED</b>

Project Title <b>INSTALL NEW BOILERS IN BUILDING 13</b>		
Location ROBERT J. DOLE VA MEDICAL CENTER WICHITA, KANSAS		
Issue Date 2021-09-03	Checked DRC	Drawn SMT / DSB

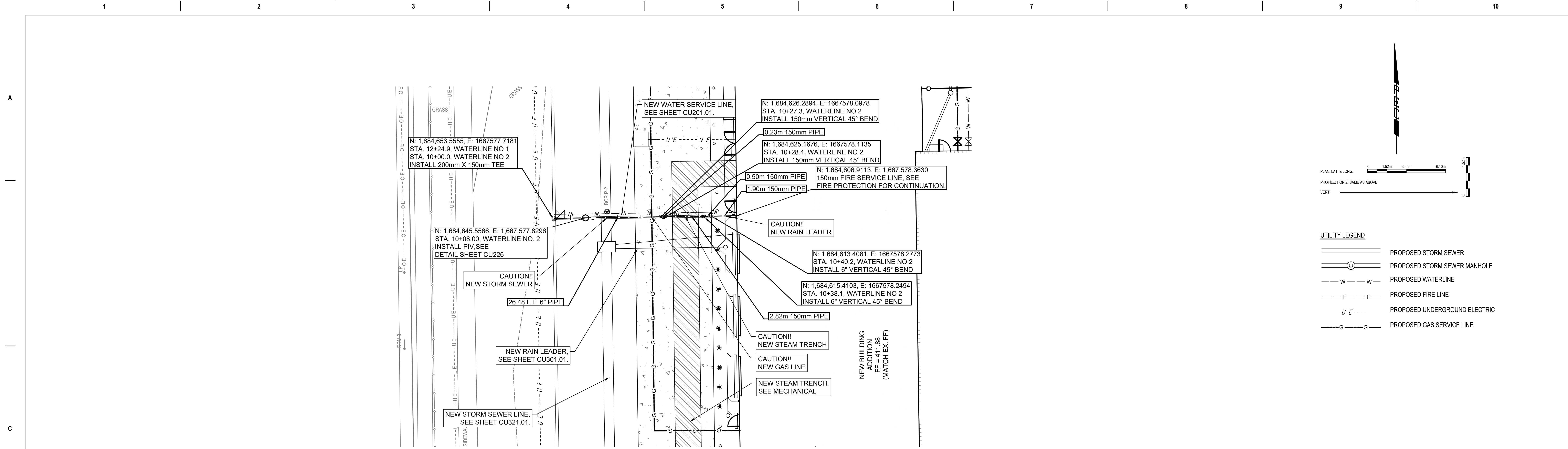
Project Number 589A7-18-302
Building Number 13
Drawing Number CU221.01



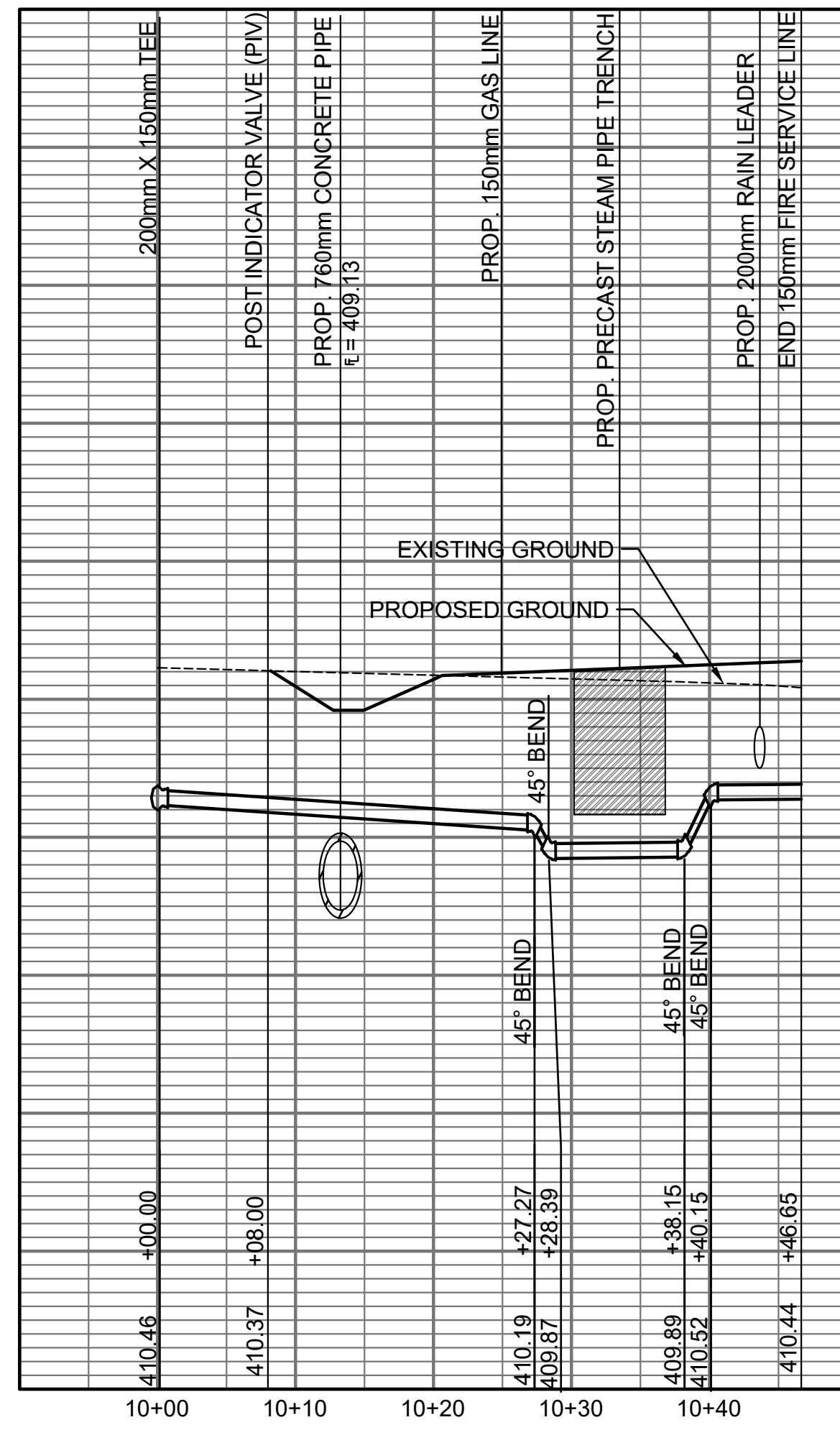
**WATERLINE NO 1**



<p>PRINTS OF THIS DRAWING SHALL NOT BE USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER.</p>		<p><b>CONSULTANTS</b></p> <p><b>HAZARDOUS MATERIALS</b> MABBETT &amp; ASSOCIATES, INC. 105 CENTRAL STREET, STONEHAM, MA 02180 PHONE: (781)275-6599</p> <p><b>CIVIL/STRUCTURAL</b> PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA, WICHITA, KS 67202 PHONE: (316)262-2881</p> <p><b>ARCHITECTURAL</b> OCULUS INC. 1 SOUTH MEMORIAL DRIVE, SUITE 1500, SAINT LOUIS, MO 63102 PHONE: (314)367-6100</p>		<p><b>FIRE SUPPRESSION</b> KOFFEL ASSOCIATES 8815 CENTRE PARK DRIVE, SUITE 200, COLUMBIA, MD 21045 PHONE: (410)729-2246</p> <p><b>ELECTRONIC SECURITY</b> MAGNA ENGINEERS 861 CORPORATE DRIVE, SUITE 210, LEXINGTON, KY 40503 PHONE: (859)309-2990</p> <p><b>PHYSICAL SECURITY</b> FORCE PROTECT 3210 GULF BLVD, UNIT 304, BELLEAIR BEACH, FL 33786 PHONE: (802)836-4232</p>		<p><b>ENGINEER OF RECORD</b></p> <p><b>Miller-Remick LLC</b> M.E.P. &amp; Structural Engineering A Service Disabled Veteran Owned Small Business 1010 KINGS HIGHWAY SOUTH CHERRY HILL, NEW JERSEY 08034 PHONE: (856)429-4000 FAX: (856)429-5002 MR PROJECT NO: 0499-0121</p>		<p><b>PROFESSIONAL ENGINEERING CONSULTANTS, P.A.</b> PROFESSIONAL ENGINEER</p> <p><b>SCOTT M. TURNER</b> 26113 08/03/2021 KANSAS PROFESSIONAL ENGINEER</p>		<p><b>Office of Construction and Facilities Management</b></p> <p><b>VA</b> U.S. Department of Veterans Affairs</p>		<p>Drawing Title <b>CIVIL SITE WATERLINE PLAN &amp; PROFILE, LINE 1, PHASE 1</b></p> <p>Approved: Project Director</p>		<p>Phase <b>100% BID SET</b></p> <p><b>FULLY SPRINKLERED</b></p>		<p>Project Title <b>INSTALL NEW BOILERS IN BUILDING 13</b></p> <p>Location <b>ROBERT J. DOLE VA MEDICAL CENTER WICHITA, KANSAS</b></p> <p>Issue Date <b>2021-09-03</b></p> <p>Checked <b>DRC</b></p> <p>Drawn <b>SMT / DSB</b></p>		<p>Project Number <b>589A7-18-302</b></p> <p>Building Number <b>13</b></p> <p>Drawing Number <b>CU22.01</b></p>	
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**WATERLINE NO 2**




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CONSULTANTS	
<b>HAZARDOUS MATERIALS</b> MABBETT & ASSOCIATES, INC. 105 CENTRAL STREET, STONEHAM, MA 02180 PHONE: (781)275-6591	<b>FIRE SUPPRESSION</b> KOFFEL ASSOCIATES 8815 CENTRE PARK DRIVE, SUITE 200, COLUMBIA, MD 21045 PHONE: (410)729-2246
<b>CIVIL / STRUCTURAL</b> PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA, WICHITA, KS 67202 PHONE: (316)262-2891	<b>ELECTRONIC SECURITY</b> MAGNA ENGINEERS 861 CORPORATE DRIVE, SUITE 210, LEXINGTON, KY 40503 PHONE: (859)309-2990
<b>ARCHITECTURAL</b> OCULUS INC. 1 SOUTH MEMORIAL DRIVE, SUITE 1500, SAINT LOUIS, MO 63102 PHONE: (314)367-6100	<b>PHYSICAL SECURITY</b> FORCE PROTECT 3210 GULF BLVD UNIT 304, BELLAIR BEACH, FL 33786 PHONE: (802)836-4232

ENGINEER OF RECORD
 <b>Miller-Remick LLC</b> M.E.P. & Structural Engineering A Service Disabled Veteran Owned Small Business 1010 KINGS HIGHWAY SOUTH CHERRY HILL, NEW JERSEY 08034 PHONE: (856)429-4000 FAX: (856)429-5002 MR PROJECT NO: 0499-0121

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 <b>SCOTT M. TURNBILL</b> 26113 08/03/2021 PROFESSIONAL ENGINEER

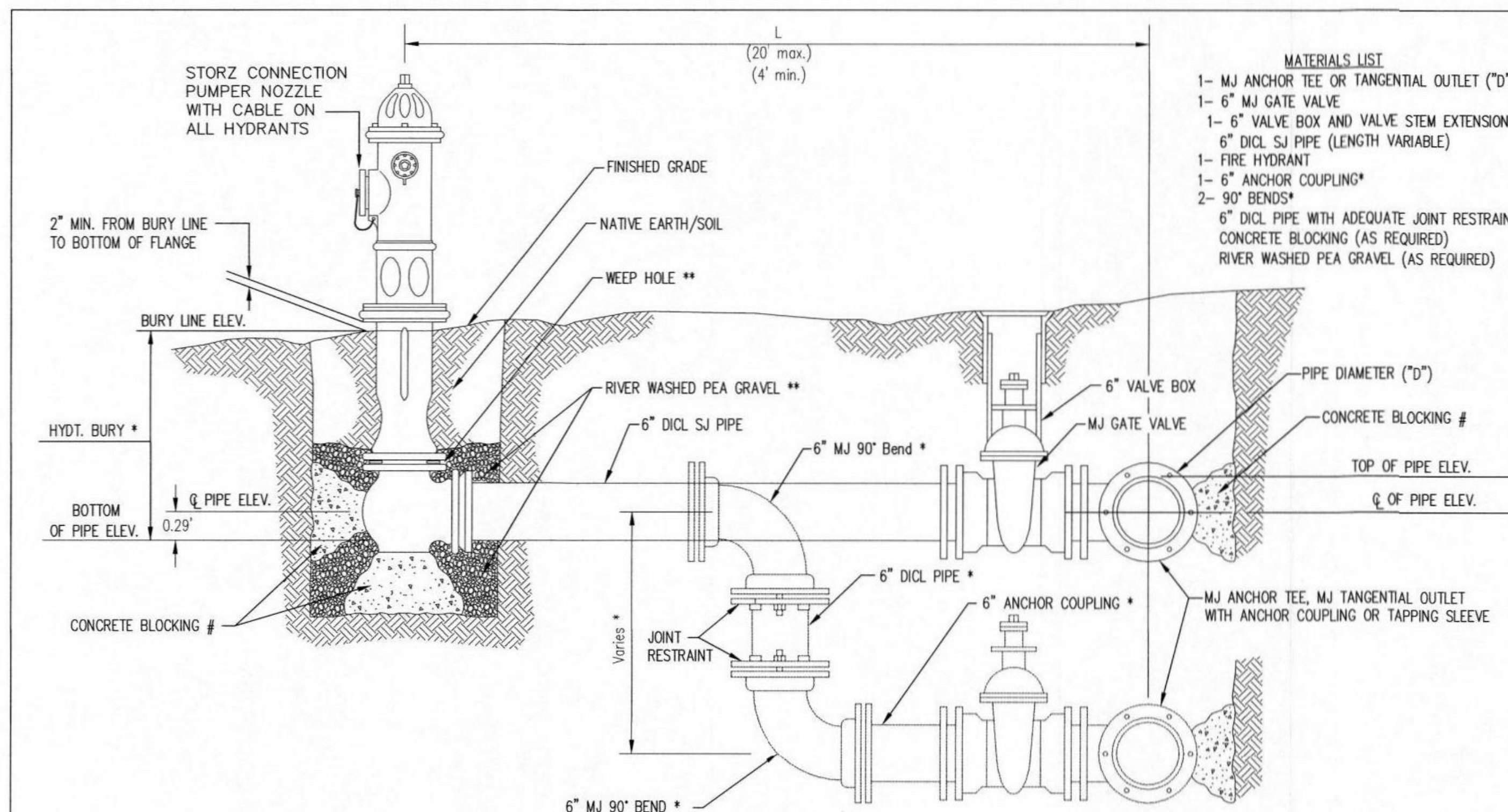
<b>Office of Construction and Facilities Management</b>  U.S. Department of Veterans Affairs
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Drawing Title <b>CIVIL SITE WATERLINE PLAN &amp; PROFILE, LINE 2, PHASE 1</b>
Approved: Project Director

Phase <b>100% BID SET</b>
<b>FULLY SPRINKLERED</b>

Project Title <b>INSTALL NEW BOILERS IN BUILDING 13</b>
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Issue Date <b>2021-09-03</b>
Checked <b>DRC</b>
Drawn <b>SMT / DSB</b>

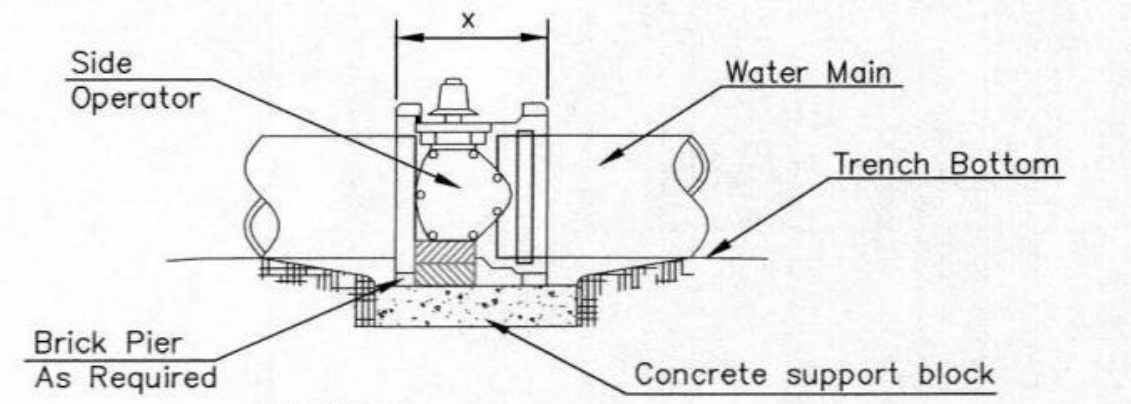
Project Number <b>589A7-18-302</b>
Building Number <b>13</b>
Drawing Number <b>CU223.01</b>



- MATERIALS LIST**
- 1- MJ ANCHOR TEE OR TANGENTIAL OUTLET (10" x 6")
  - 1- 6" MJ GATE VALVE
  - 1- 6" VALVE BOX AND VALVE STEM EXTENSION IF REQUIRED \*
  - 6" DI CL SJ PIPE (LENGTH VARIABLE)
  - 1- FIRE HYDRANT
  - 1- 6" ANCHOR COUPLING\*
  - 2- 90° BENDS\*
  - 6" DI CL PIPE WITH ADEQUATE JOINT RESTRAINT \*
  - CONCRETE BLOCKING (AS REQUIRED)
  - RIVER WASHED PEA GRAVEL (AS REQUIRED)

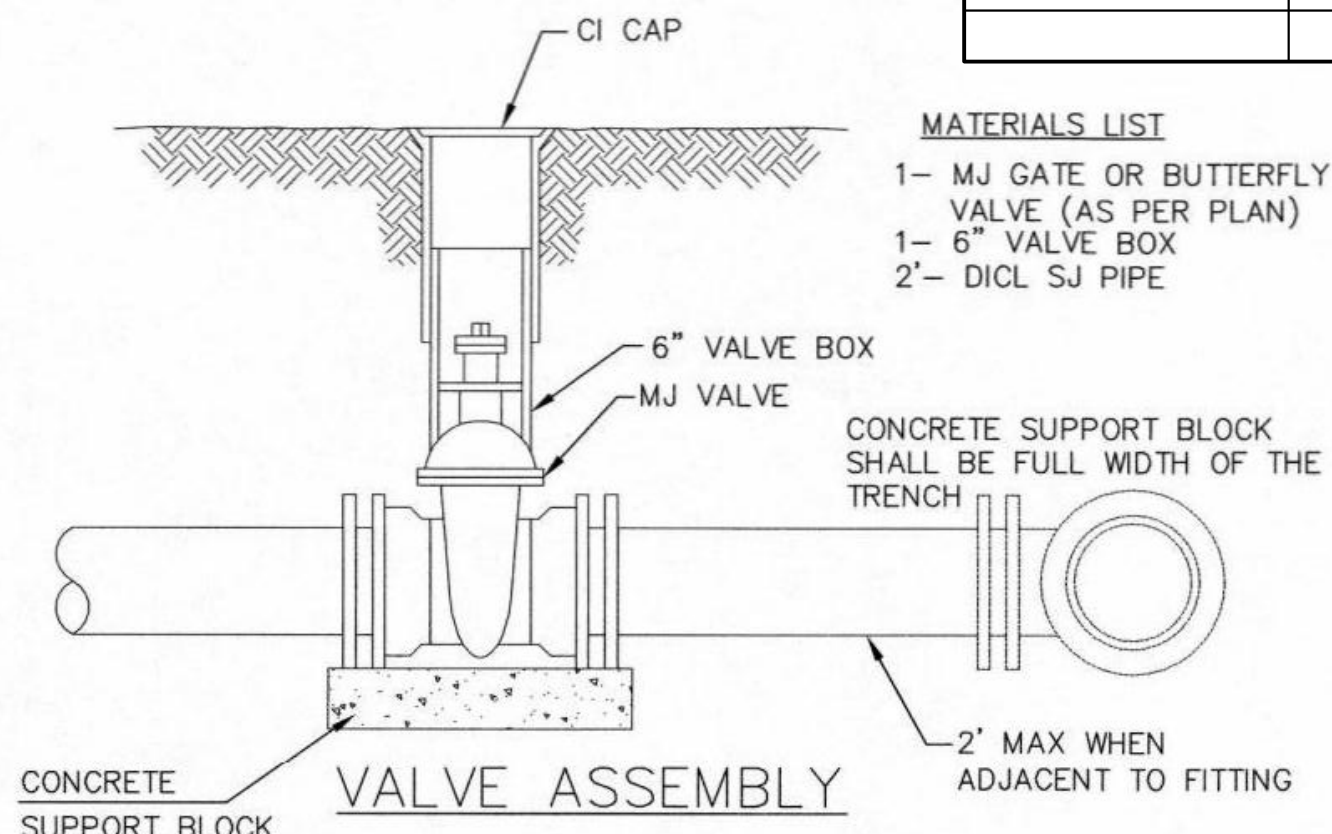
**FIRE HYDRANTS REQUIRED**

STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*	VALVE STEM EXT. REQUIRED (ft)*
STA. 13+24.0	1350.85	1346.43	5.0'	

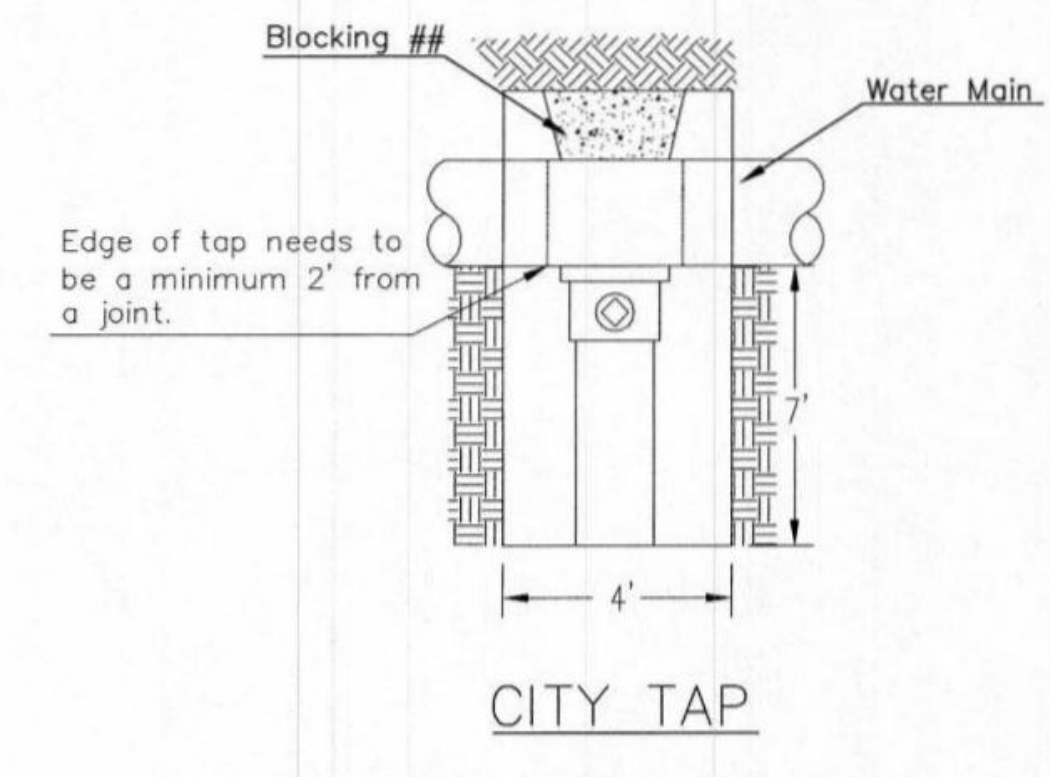


- NOTES**
- This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. 24" and larger lines to be detailed on plans.
  - 6" Valve Box and Cover required per City of Wichita Std. Specifications.
  - Conc. Support Block to be full width of trench.

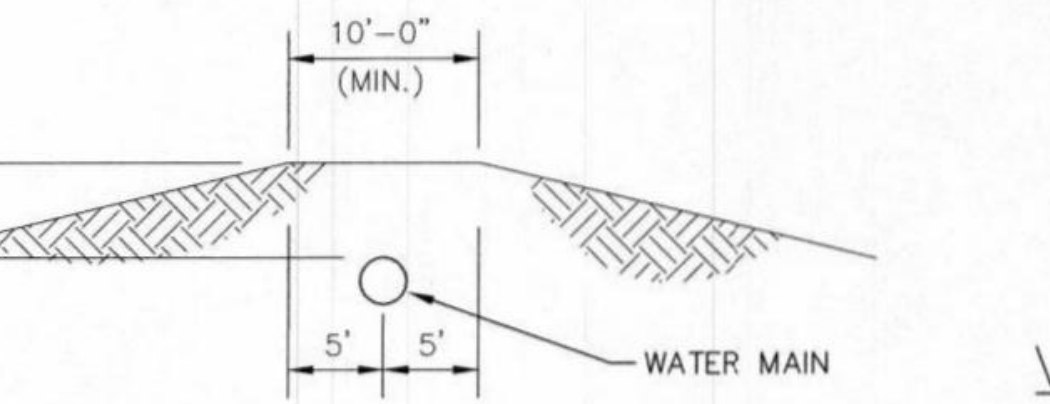
**CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION**



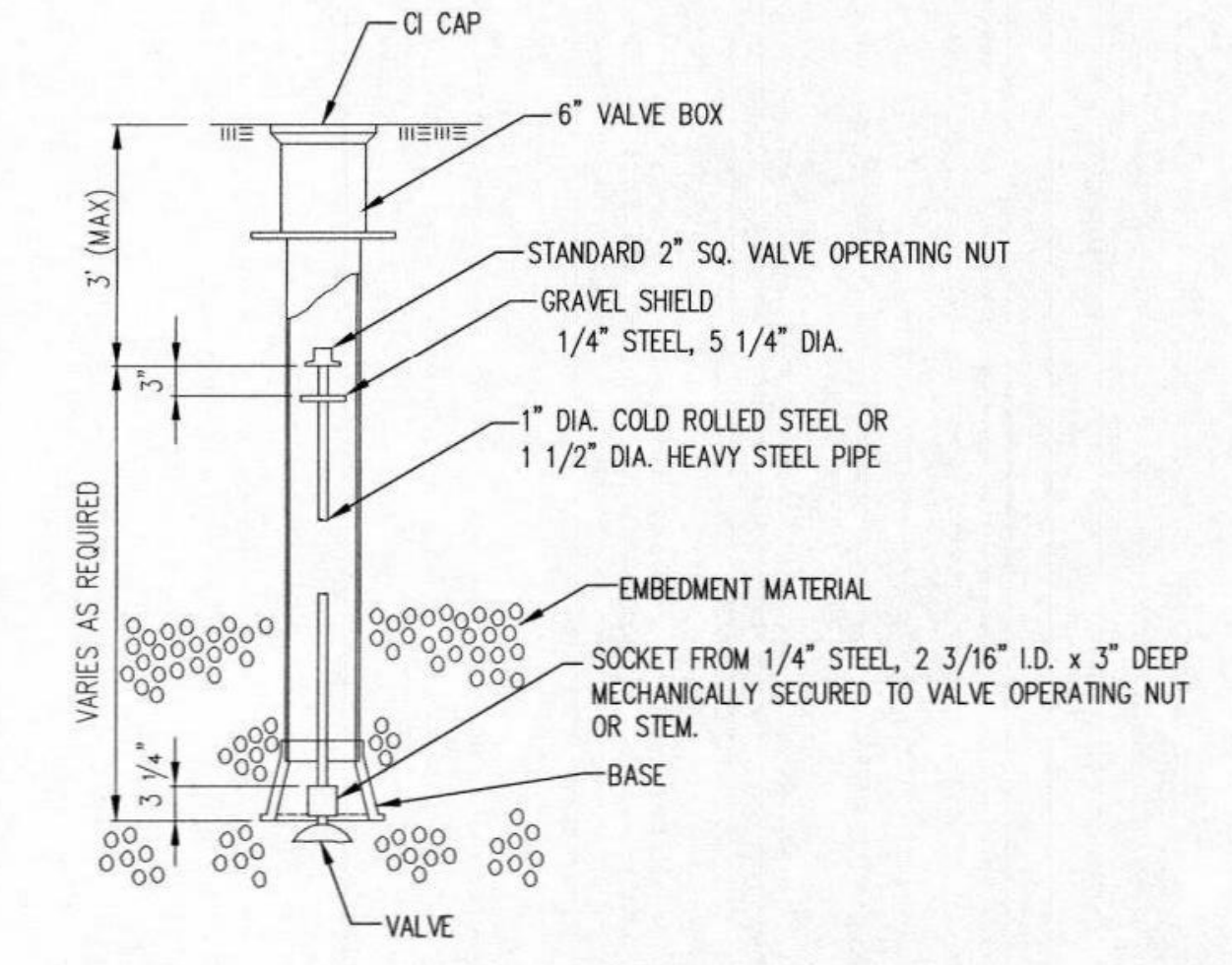
- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
  - 1- 6" VALVE BOX
  - 2- DI CL SJ PIPE



Edge of tap needs to be a minimum 2' from a joint.



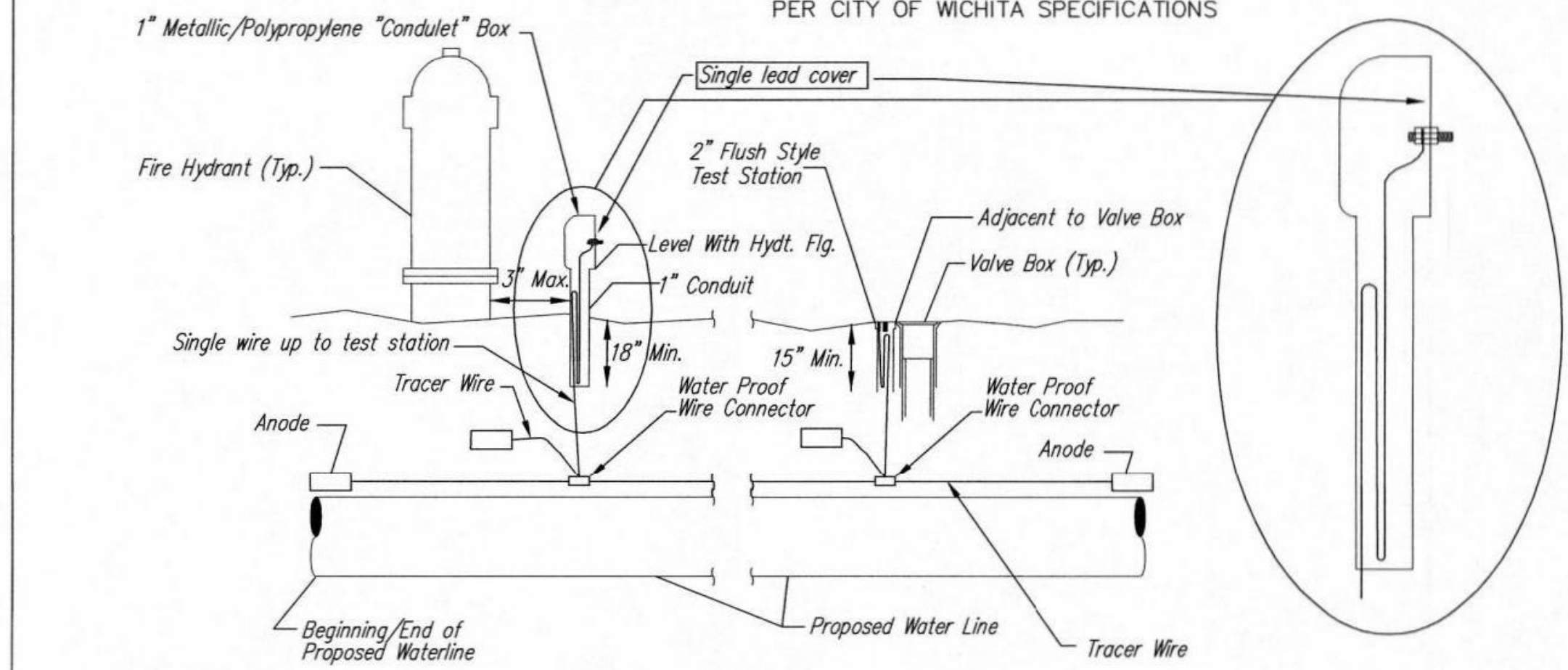
**PROTECTIVE FILL DETAIL**  
MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN 3". (COST SUBSIDIARY TO PIPE INSTALLATION)



**VALVE STEM EXTENSION DETAIL**  
NOTE: ONE VALVE STEM EXTENSION FOR EACH VALVE BURED GREATER THAN 5".

- \* IF THE REQUIRED HYDRANT BURY IS IN EXCESS OF 5', BUT LESS THAN 7', CONTRACTOR SHALL USE STANDARD 5' HYDRANT BURY AND HYDRANT BARREL EXTENSIONS AS NECESSARY. IF THE REQUIRED HYDRANT BURY IS GREATER THAN 7', CONTRACTOR SHALL USE 5' HYDRANT BURY, 2-MJ 90° BENDS, 6" ANCHOR COUPLING AND 6" DI CL PIPE AS NECESSARY FOR VERTICAL ADJUSTMENT. THE CONTRACTOR SHALL PROVIDE ADEQUATE THRUST BLOCKING AT HYDRANT AND MEGALIGS, OR SIMILAR RESTRAINT BETWEEN 90° BENDS TO SECURE ALL FITTINGS DURING TESTING AND OPERATION. THE CONTRACTOR SHALL PROVIDE A VALVE STEM EXTENSION PER DETAIL THIS SHEET.
- \*\* CAUTION: WEEP HOLES TO BE KEPT CLEAR DURING CONSTRUCTION AND BACKFILL. CONCRETE FOR THRUST BLOCKING SHALL NOT OBSTRUCT WEEP HOLES. PLACE 1 CUBIC FOOT OF RIVER WASHED PEA GRAVEL AROUND EACH WEEP HOLE.
- # CONCRETE THRUST BLOCKING SHALL BE KEPT CLEAR OF BOLTS, NUTS, AND MJ ACCESSORIES.

**FIRE HYDRANT ASSEMBLY PER CITY OF WICHITA SPECIFICATIONS**



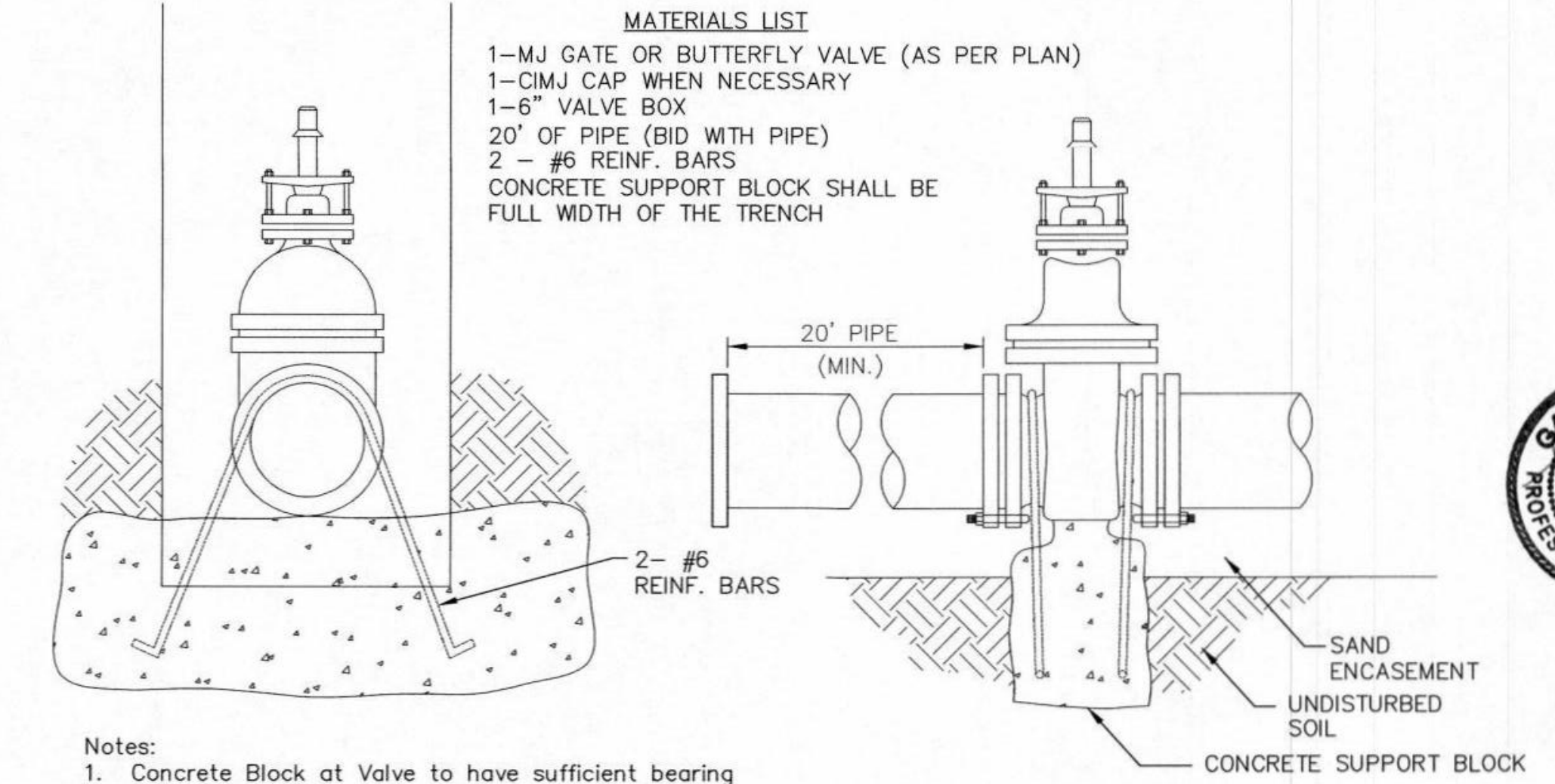
**TRACER WIRE**  
Conductive type pipe locator/tracer wire shall be install to locate all waterline pipe regardless of pipe material. The wire shall extend the entire length of the proposed pipe. The wire shall be taped to the waterline and pulled with the pipe. A waterproof connector shall be used at splice locations. A complete list of approved tracer wire and waterproof connectors can be found on the City of Wichita's website at [www.wichita.gov](http://www.wichita.gov).

**WIRE**  
The tracer wire shall be Blue No. 12 AWG CCS with 45 mil HDPE insulation. To allow for grade adjustment, a minimum of 12" of excess wire shall be coiled at the bottom of the test station for all wires. Wire connectors shall be installed per manufacturer recommendations. Contractor shall attach wire being installed with proposed water main to any tracer wire installed with adjacent waterline projects.

**TEST STATIONS**  
The test station for fire hydrant application shall be a 1" "condulet" style station as manufactured by AGRA Industries with a removable solid cover having a single lead extending from the face or approved equal. The "condulet" style test station shall be attached to a 1" rigid galvanized conduit with a minimum length of 36" and plastic end bushing. The flush style shall have the word "WATER" stamped or molded into the lid. The test station for valve applications shall be a 2" flush style test station with wire connector on lid. Model # T2PH7B1LP Handley Industries or CD14\*TP SnakePit as manufactured by Copperhead Industries or approved equal. The flush style shall have the word "WATER" stamped or molded into the lid. All test stations shall be manufactured using molded blue tops or sufficiently coated with blue enamel paint. The tracer wire and the anode wire shall be install to allow 12" of wire within the test station. The location of all test stations shall be recorded, and shown in the as-built drawings. Flush style test stations shall not be installed in pavement or sidewalk unless approved by the Engineer. Contractor shall extend tracer wire & move flush mount test station to nearest location out of pavement or sidewalk.

**ANODES**  
The anodes shall be 3 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to 12 AWG CCS which shall be extended to the test station.

**TRACER WIRE DETAIL**  
COST IS SUBSIDIARY TO PIPE INSTALLATION

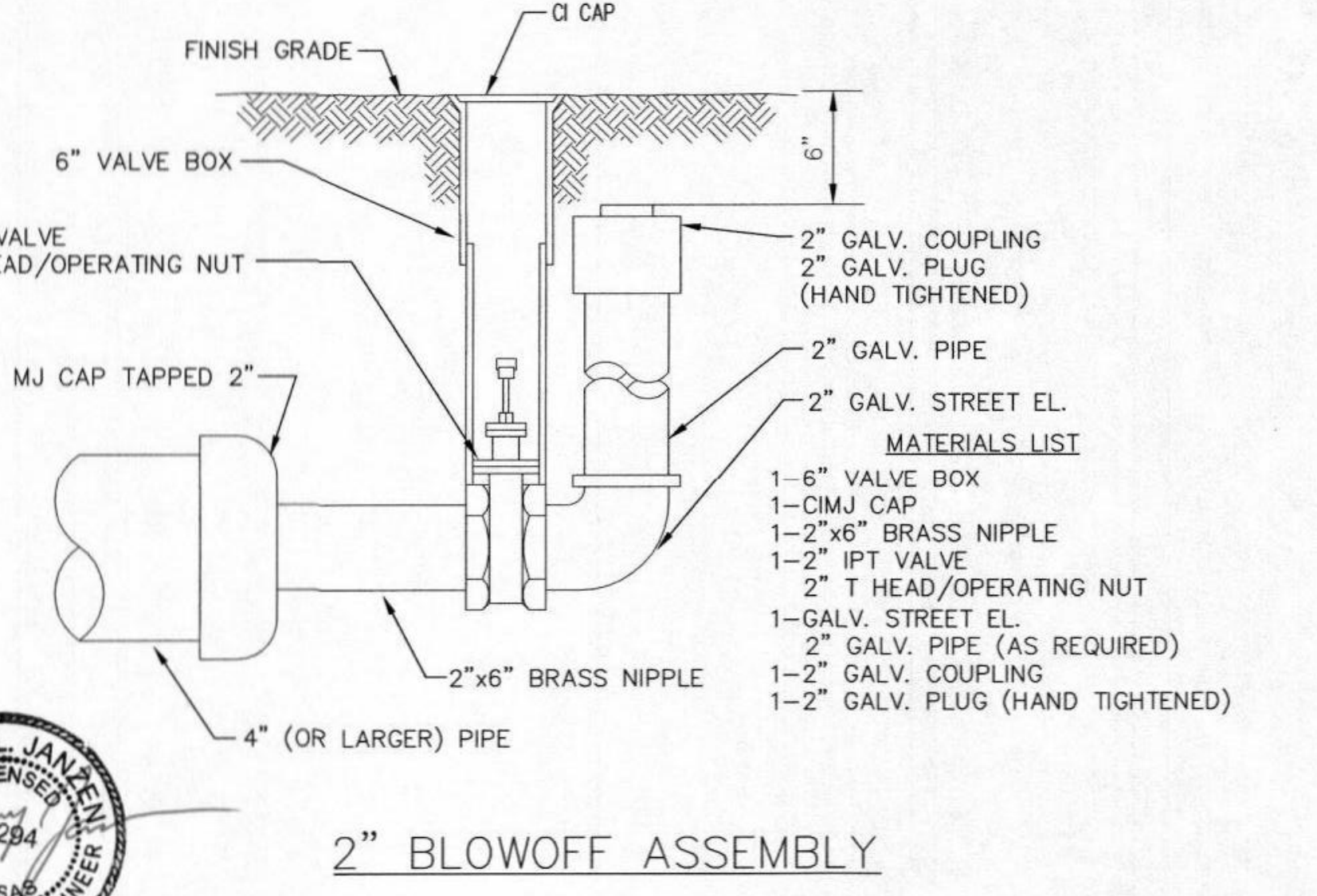


- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
  - 1- MJ ANCHOR COUPLING (12" OR SMALLER)
  - 1- 6" VALVE BOX
  - 20" OF PIPE (BID WITH PIPE)
  - 2 - #6 REINF. BARS
  - CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

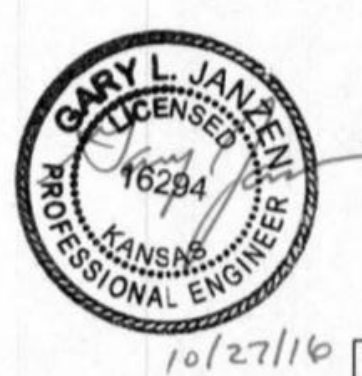
- Notes:**
- Concrete Block at Valve to have sufficient bearing in undisturbed soil to prevent thrust movement as shown in table at right. Field Engineer to determine thrust loading of undisturbed soil and final size of thrust block.
  - The thrust block shall be constructed such that bolts, nuts, and other MJ accessories are kept clear of concrete.
  - All valves at dead ends and at other locations as called out on the plans shall be blocked as shown here.

**THRUST AT VALVES**

VALVE	THRUST AT 150 #/sq ft
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.



- MATERIALS LIST**
- 1- 6" VALVE BOX
  - 1- CIMJ CAP
  - 1- 2"x6" BRASS NIPPLE
  - 1- 2" IPT VALVE
  - 2" T HEAD/OPERATING NUT
  - 1- GALV. STREET EL.
  - 2" GALV. PIPE (AS REQUIRED)
  - 2" GALV. COUPLING
  - 1- 2" GALV. PLUG (HAND TIGHTENED)



REVISED: OCTOBER 2016

**STANDARD WATER ASSEMBLY DETAIL**

CITY ENGINEER  
**GARY JANZEN, P.E.**

PROJECT NUMBER	OCA NUMBER	DATE

CITY ENGINEER'S OFFICE  
CITY HALL SEVENTH FLOOR  
435 NORTH MAIN STREET  
WICHITA, KANSAS 67202-1620  
(316) 268-4501

SHEET

WL-101

PRINTS OF THIS DRAWING SHALL NOT BE USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER.

NO.	DESCRIPTION	DATE

**CONSULTANTS**

<b>HAZARDOUS MATERIALS</b> MABBETT & ASSOCIATES, INC. 105 CENTRAL STREET, STONEHAM, MA 02180 PHONE: (781)275-6091	<b>FIRE SUPPRESSION</b> KOFFEL ASSOCIATES 8815 CENTRE PARK DRIVE, SUITE 200, COLUMBIA, MD 21045 PHONE: (410)729-2246
<b>CIVIL/STRUCTURAL</b> PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA, WICHITA, KS 67202 PHONE: (316)262-2891	<b>ELECTRONIC SECURITY</b> MAGNA ENGINEERS 861 CORPORATE DRIVE, SUITE 210, LEXINGTON, KY 40503 PHONE: (859)309-2990
<b>ARCHITECTURAL</b> OCULUS INC. 1 SOUTH MEMORIAL DRIVE, SUITE 1500, SAINT LOUIS, MO 63102 PHONE: (314)367-6100	<b>PHYSICAL SECURITY</b> FORCE PROTECT 3210 GULF BLVD. UNIT 304, BELL SAIR BEACH, FL 33786 PHONE: (602)836-4232

**ENGINEER OF RECORD**

**Miller-Remick LLC**  
M.E.P. & Structural Engineering  
A Service Disabled Veteran Owned Small Business

1010 KINGS HIGHWAY SOUTH  
CHERRY HILL, NEW JERSEY 08034  
PHONE: (856)429-4000  
FAX: (856)429-9022  
MR PROJECT NO: 0499-0121

**PROFESSIONAL ENGINEERING CONSULTANTS, P.A.**  
PROFESSIONAL ENGINEER

**GARY L. JANZEN**  
26113  
08/03/2021  
KANSAS  
PROFESSIONAL ENGINEER

**Office of Construction and Facilities Management**

**VA** U.S. Department of Veterans Affairs

**Drawing Title**  
CIVIL SITE  
STANDARD WATER ASSEMBLY DETAILS

Approved: Project Director

**Phase**  
100% BID SET

**FULLY SPRINKLERED**

**Project Title**  
INSTALL NEW BOILERS IN BUILDING 13

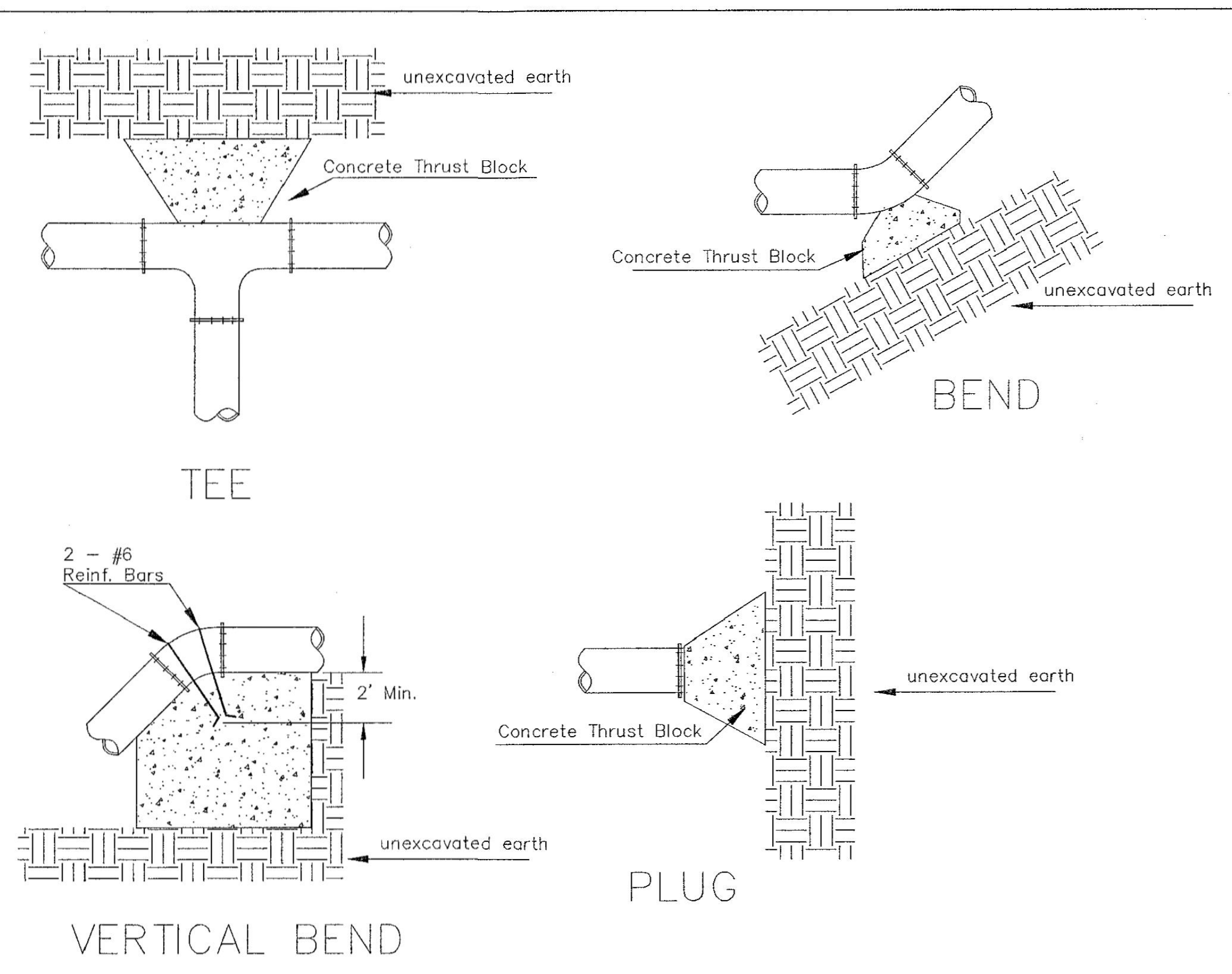
**Location**  
ROBERT J. DOLE VA MEDICAL CENTER  
WICHITA, KANSAS

Issue Date	Checked	Drawn
2021-09-03	DRC	SMT / DSB

**Project Number**  
589A7-18-302

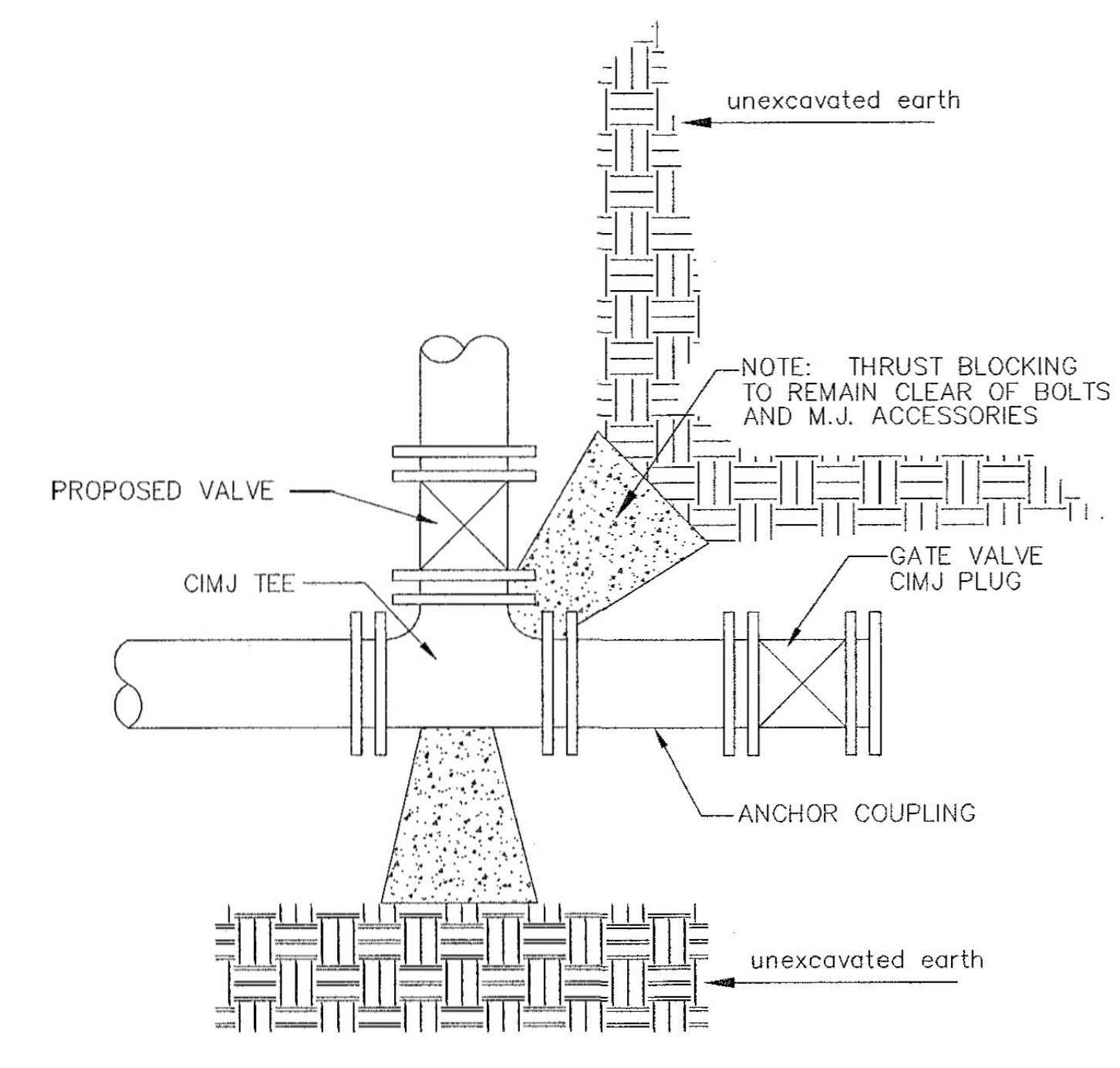
**Building Number**  
13

**Drawing Number**  
CU224

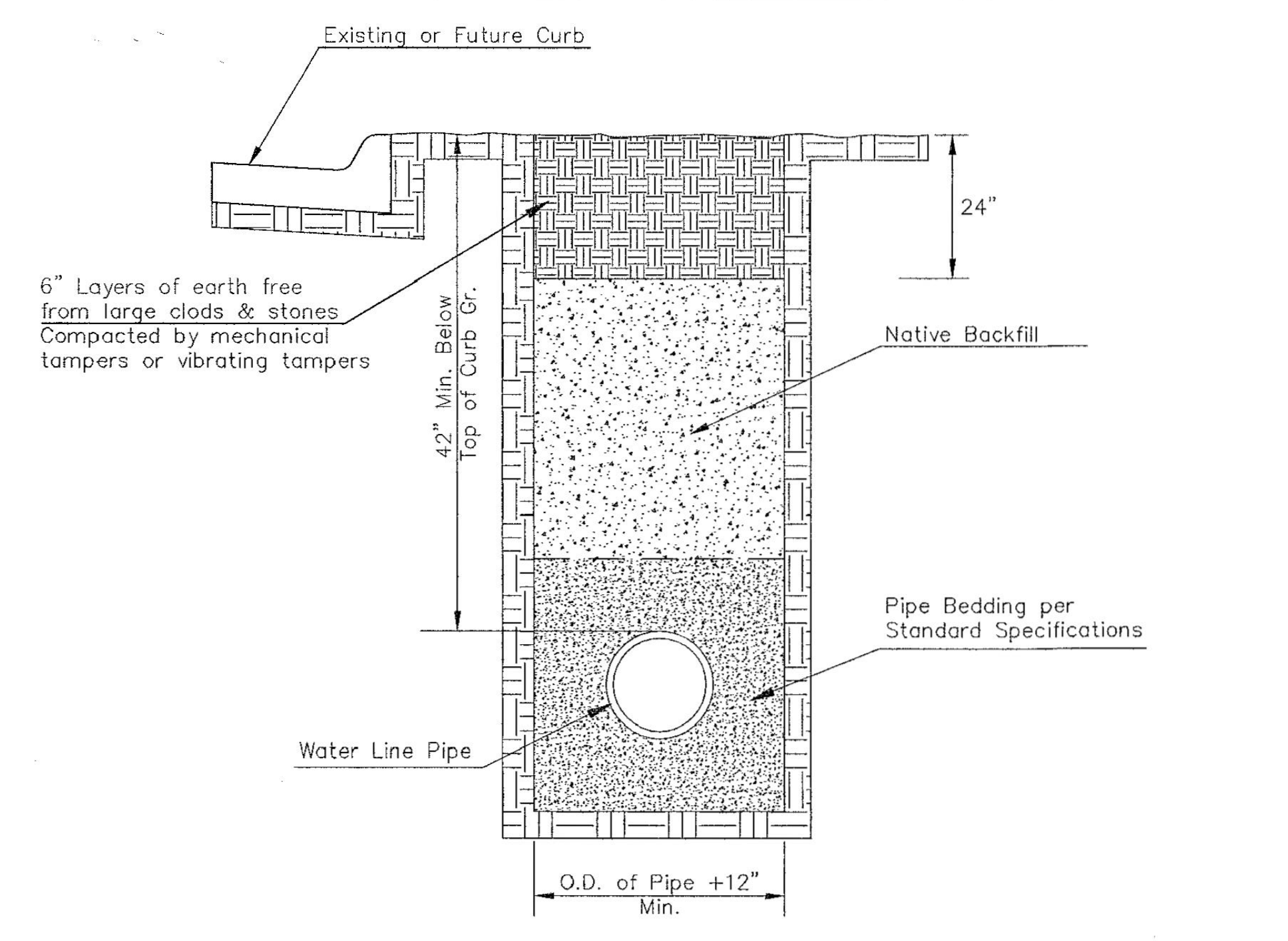


PIPE SIZE	THRUST AT FITTINGS IN TONS-AT 150#/IN <sup>2</sup> P					
	PLUG	90°	45°	22 1/2°	11 1/4°	TEE
6"	2.8	3.95	2.15	1.09	.55	2.8
8"	4.9	6.95	3.75	1.90	.96	4.9
12"	11.4	16.1	8.75	4.45	2.25	11.4
16"	20.15	28.5	15.4	7.85	3.95	20.15
20"	31.15	44.0	23.85	12.15	6.10	31.15
24"	44.55	63.0	34.1	17.4	8.75	44.55

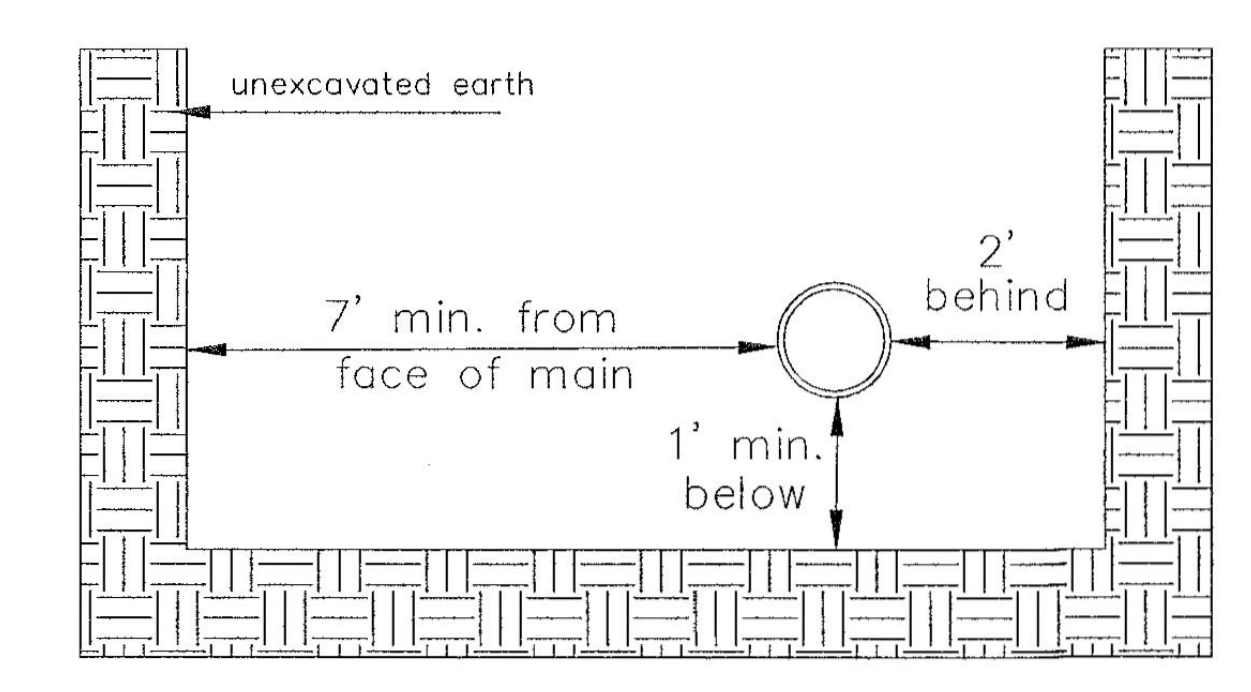
TYPICAL THRUST BLOCKS



KEY BLOCK DETAIL

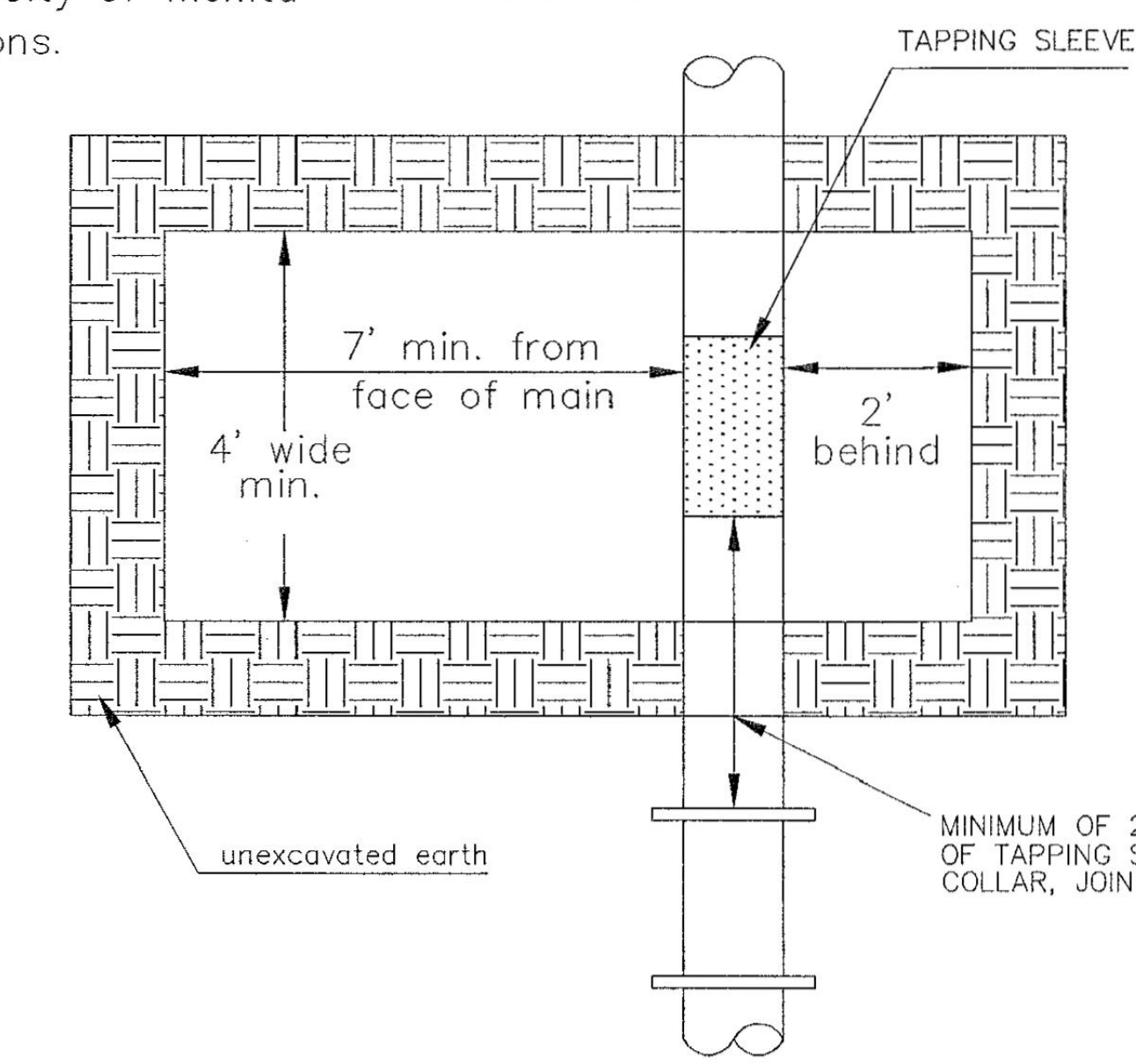


TRENCH COMPACTION IN ROAD RIGHT-OF-WAY

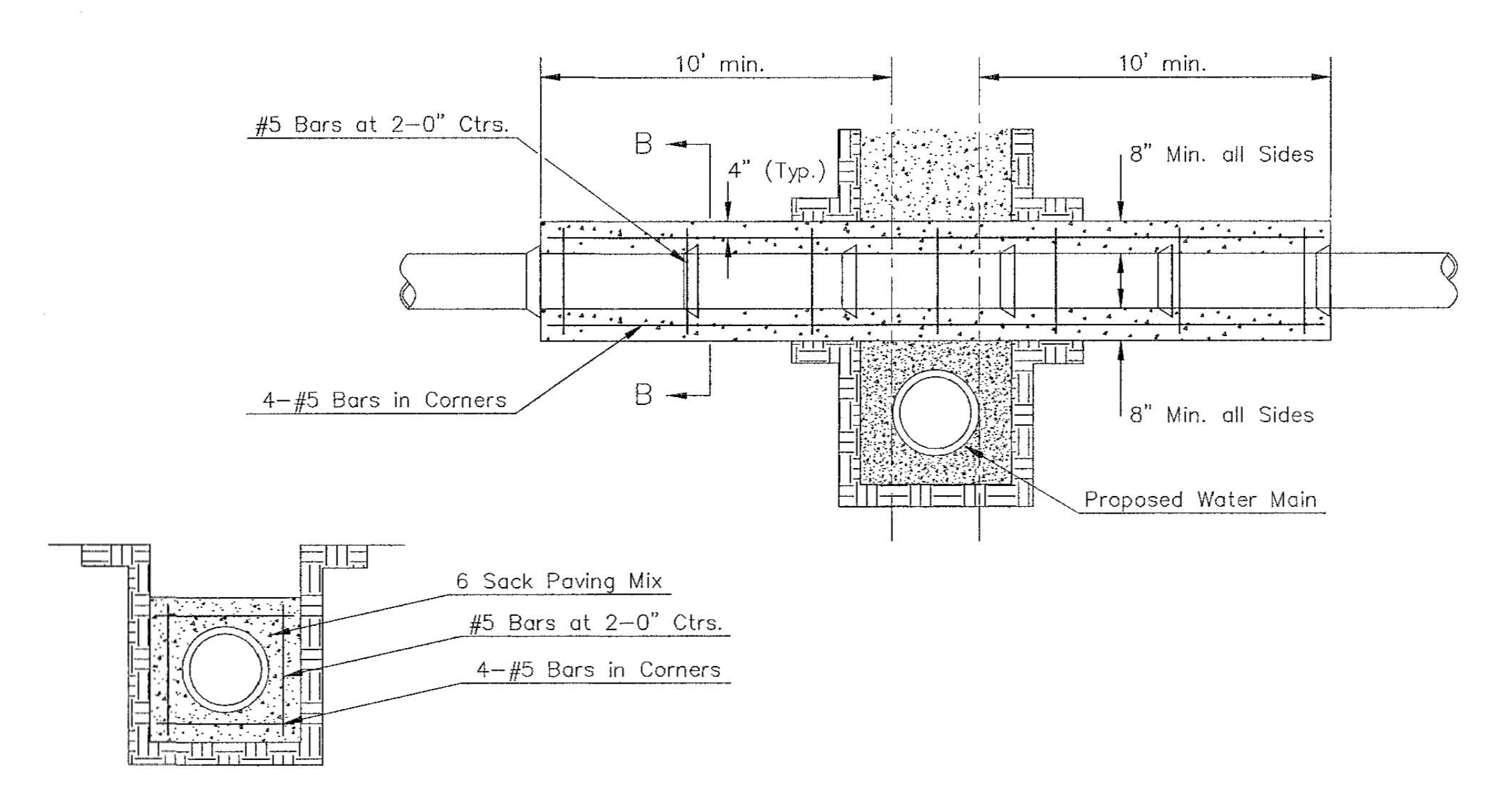


TOP VIEW

Note: When shoring is required it is to be per The City of Wichita Standard Specifications.



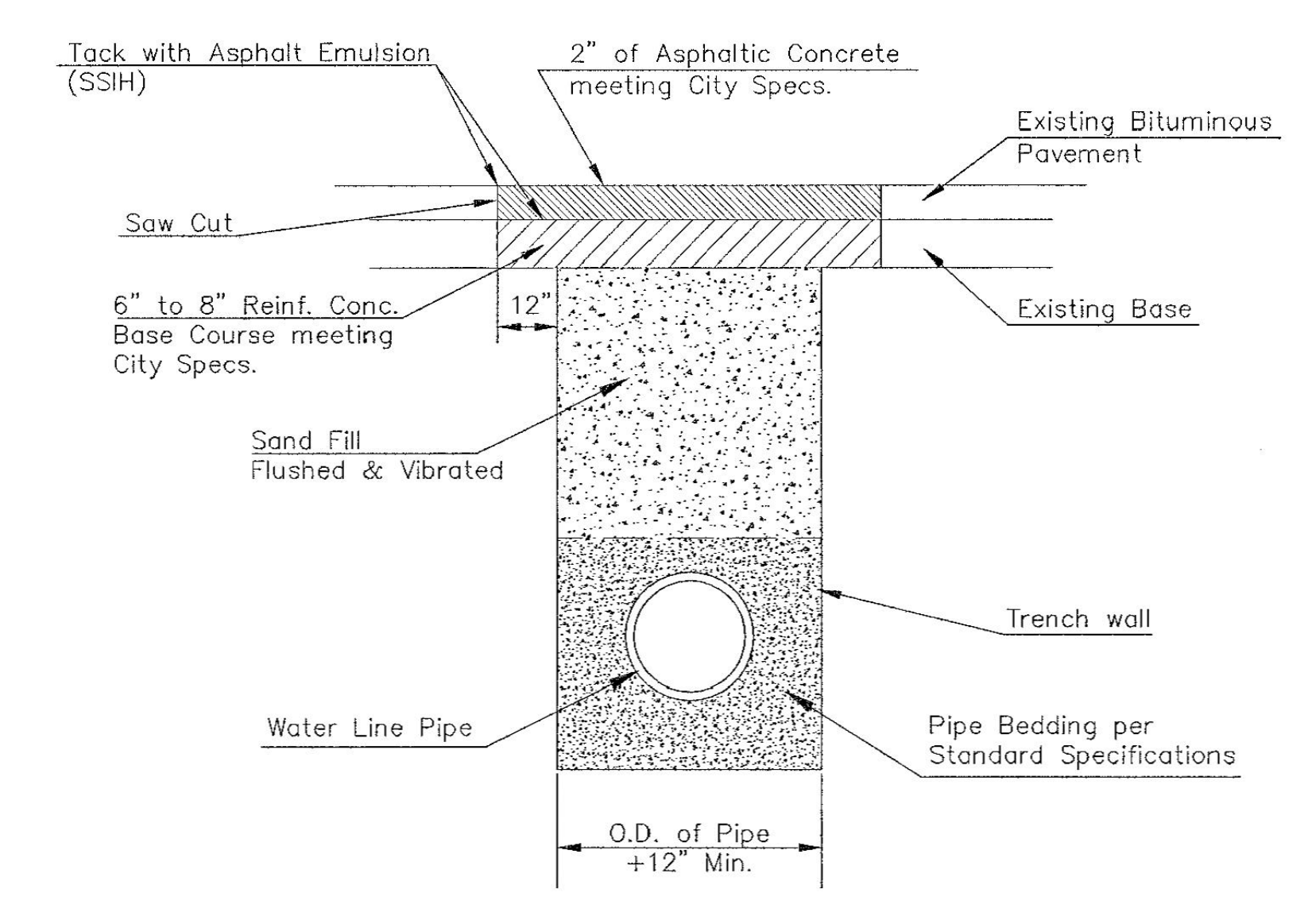
EXCAVATION FOR WET TAP



SECTION B-B

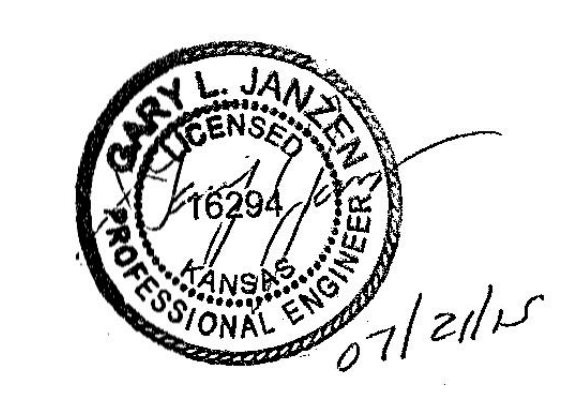
REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER

Note: Encasement to begin and end at a Bell on Sanitary Sewer Pipe.



PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS

REVISED: JULY 2015



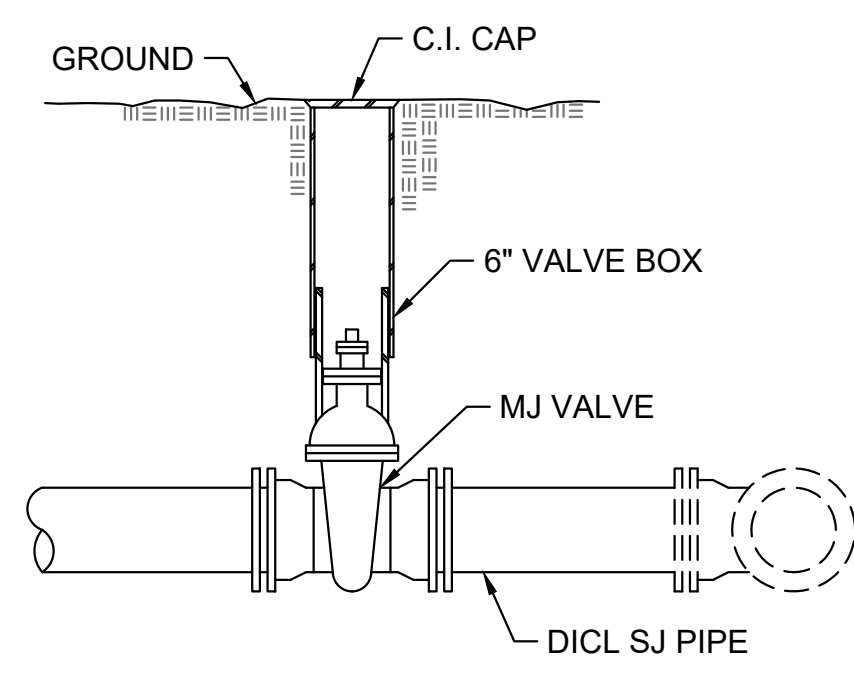
MISCELLANEOUS WATER DETAILS		
CITY ENGINEER <b>GARY JANZEN, P.E.</b>		
PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET
		13

WL-104

\* PLANS GOVERN UNLESS OTHERWISE NOTED ON PLANS

U:\Wichita-Civil\2020\200664\000\Drawings\Metric\CONVERSION\200664-000 - CU225 - Misc. Water Details.dwg 9-3-21 12:45:22 PM

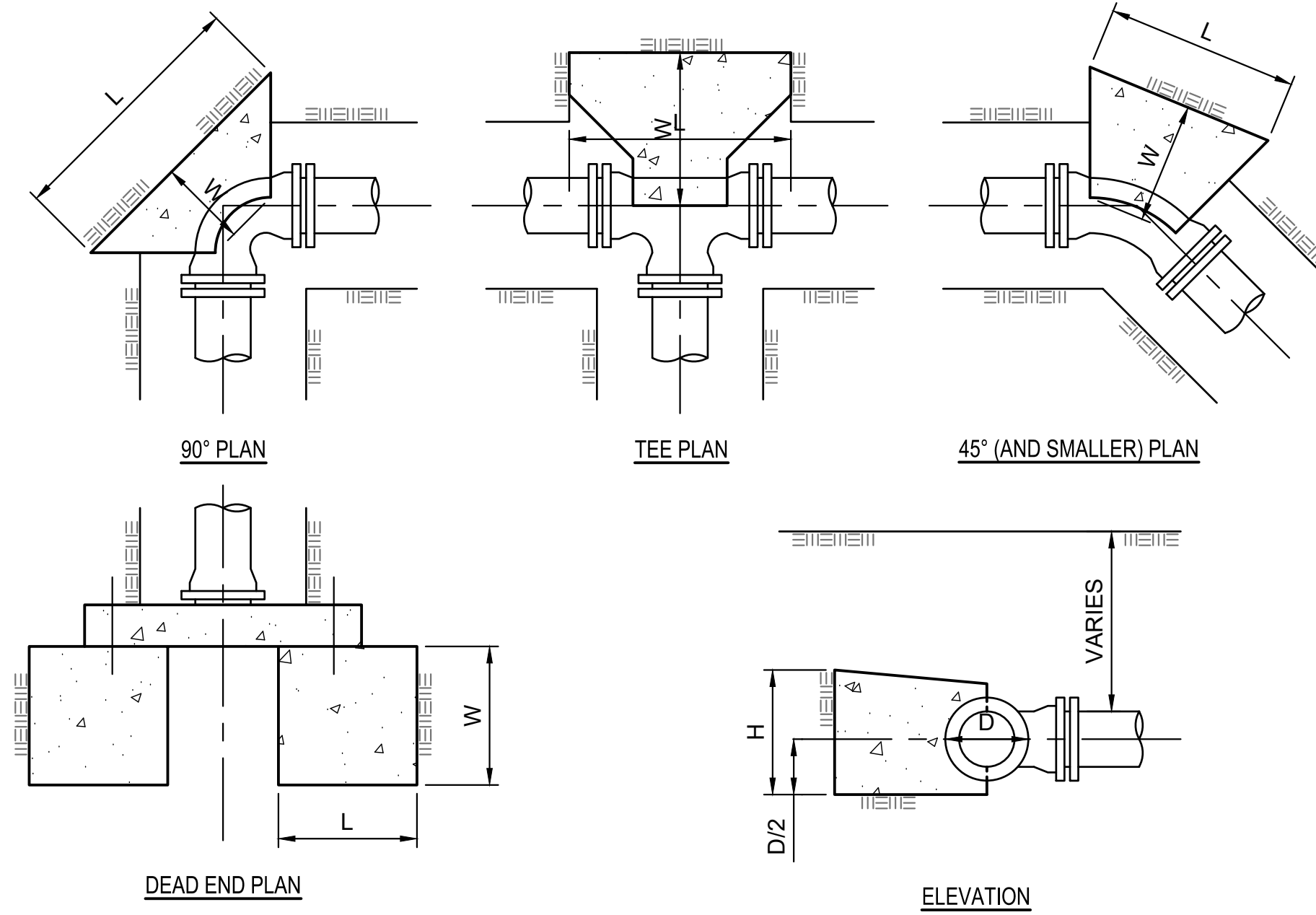
PRINTS OF THIS DRAWING SHALL NOT BE USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER.		<b>CONSULTANTS</b> <b>HAZARDOUS MATERIALS</b> MABBETT & ASSOCIATES, INC. 105 CENTRAL STREET, STONEHAM, MA 02180 PHONE: (781)275-6591 <b>CIVIL/STRUCTURAL</b> PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA, WICHITA, KS 67202 PHONE: (316)262-2891 <b>ARCHITECTURAL</b> OCULUS INC. 1 SOUTH MEMORIAL DRIVE, SUITE 1500, SAINT LOUIS, MO 63102 PHONE: (314)367-6100	<b>FIRE SUPPRESSION</b> KOFFEL ASSOCIATES 8815 CENTRE PARK DRIVE, SUITE 200, COLUMBIA, MD 21045 PHONE: (410)759-2246 <b>ELECTRONIC SECURITY</b> MAGNA ENGINEERS 861 CORPORATE DRIVE, SUITE 210, LEXINGTON, KY 40503 PHONE: (859)309-2990 <b>PHYSICAL SECURITY</b> FORCE PROTECT 3210 GULF BLVD, UNIT 304, BELLEAIR BEACH, FL 33786 PHONE: (802)836-4232	<b>ENGINEER OF RECORD</b> <b>Miller-Remick LLC</b> M.E.P. & Structural Engineering A Service Disabled Veteran Owned Small Business 1010 KINGS HIGHWAY SOUTH CHERRY HILL, NEW JERSEY 08034 PHONE: (856)429-4000 FAX: (856)429-9022 MR PROJECT NO: 0499-0121	<b>PROFESSIONAL ENGINEERING CONSULTANTS, P.A.</b> PROFESSIONAL ENGINEER SCOTT M. TUNNICLIFFE 26113 08/03/2021 KANSAS PROFESSIONAL ENGINEER	<b>Office of Construction and Facilities Management</b> VA U.S. Department of Veterans Affairs	Drawing Title <b>CIVIL SITE MISC. WATER DETAILS</b> Approved: Project Director	Phase <b>100% BID SET</b> <b>FULLY SPRINKLERED</b>	Project Title <b>INSTALL NEW BOILERS IN BUILDING 13</b> Location ROBERT J. DOLE VA MEDICAL CENTER WICHITA, KANSAS Issue Date 2021-09-03 Checked DRC Drawn SMT / DSB	Project Number <b>589A7-18-302</b> Building Number <b>13</b> Drawing Number <b>CU225</b>
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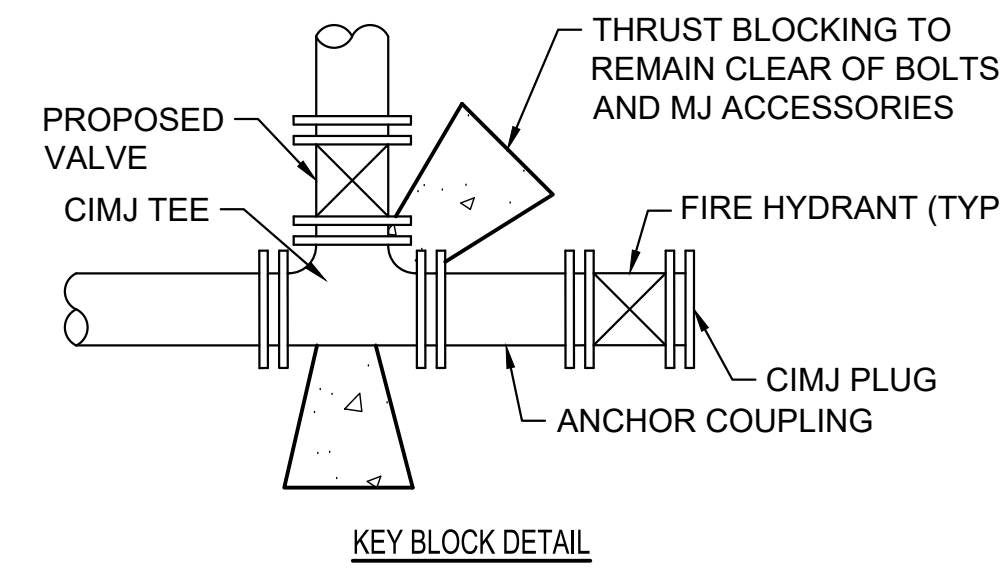
**VALVE ASSEMBLY NOTES**

- MATERIAL LIST
- 1 - MJ GATE VALVE
- 2 LF - DICL SJ PIPE
- 1 - 150mm VALVE BOX

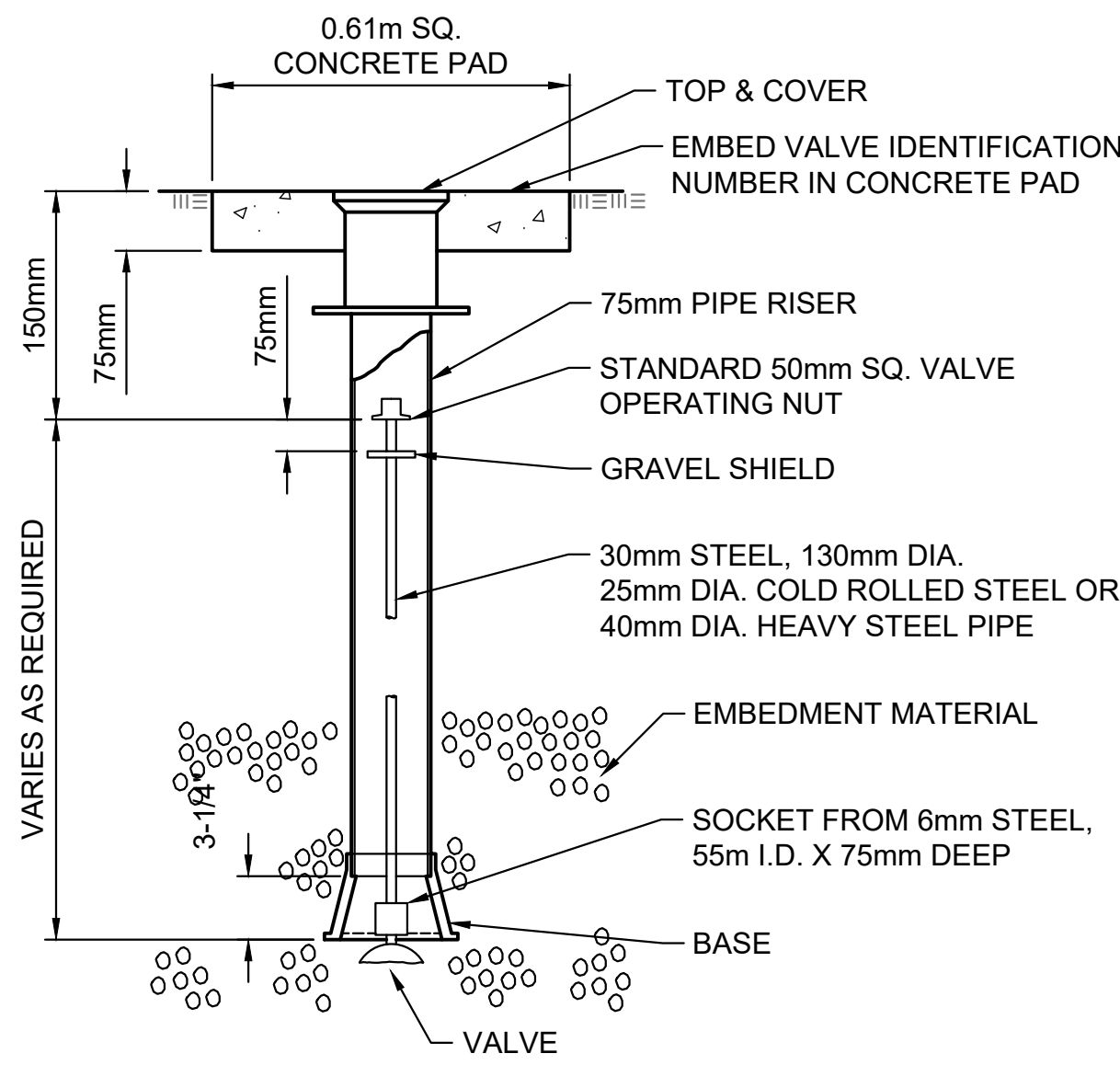
**1 VALVE ASSEMBLY DETAIL**  
NOT TO SCALE



THRUST BLOCK SCHEDULE				
LINE SIZE	FITTINGS & ANGLE	DIM. "L"	DIM. "H"	DIM. "W"
100mm	45°	0.5m	0.5m	0.3m
100mm	90°	0.6m	0.6m	0.6m
150mm	45°	0.8m	0.6m	0.6m
150mm	90°	0.9m	0.9m	0.9m
100mm	TEE	0.6m	0.5m	0.5m
150mm	TEE	0.9m	0.8m	0.8m
200mm	45°	0.9m	0.6m	0.5m
200mm	90°	1.4m	1.1m	1.1m
200mm	TEE	1.2m	0.9m	0.9m



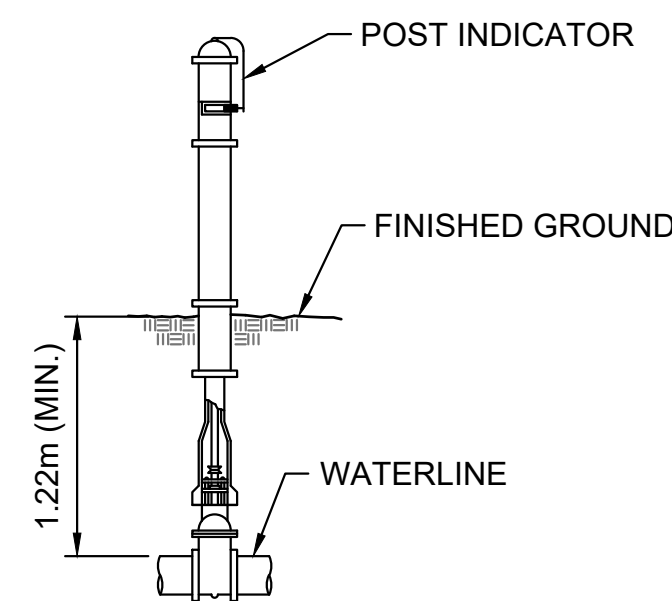
**3 THRUST BLOCK DETAILS (HORIZONTAL FITTINGS)**  
NOT TO SCALE



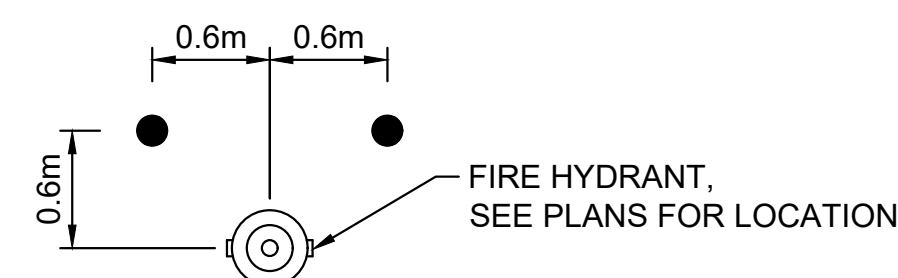
**VALVE BOX NOTES**

- ONE VALVE STEM REQUIRED FOR EACH BURIED VALVE.

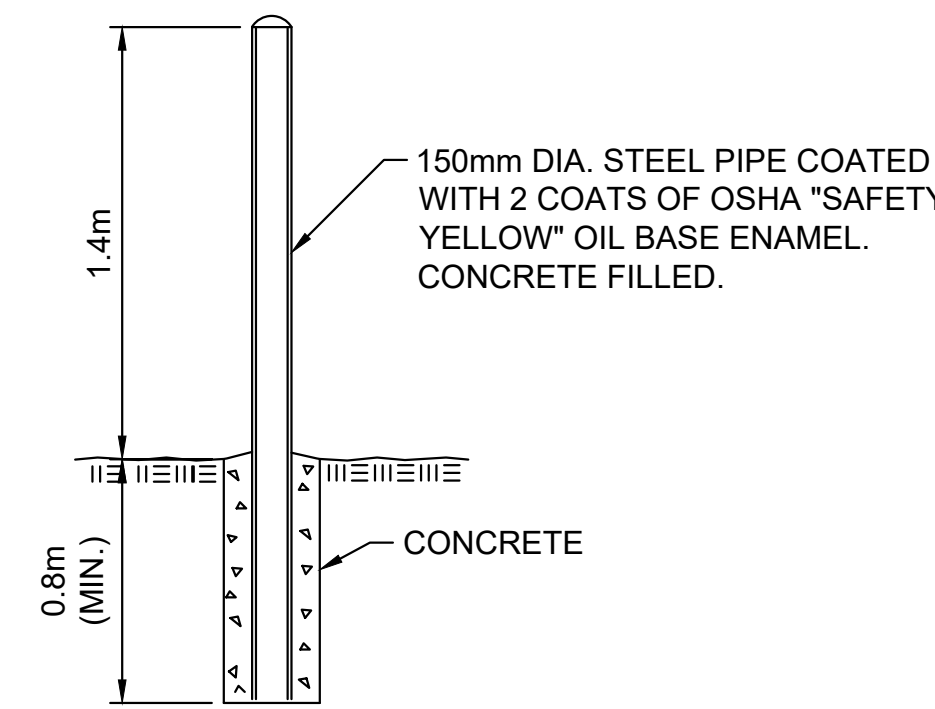
**2 VALVE BOX DETAIL**  
NOT TO SCALE



**4 POST INDICATOR VALVE DETAIL**  
NOT TO SCALE



**5 PIPE BOLLARD SPACING DETAIL**  
NOT TO SCALE



**6 PIPE BOLLARD DETAIL**  
NOT TO SCALE

**NOTE:**  
BOLLARDS SHALL BE CONSIDERED SUBSIDIARY TO "FIRE HYDRANT ASSEMBLY".

PRINTS OF THIS DRAWING SHALL NOT BE USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER.		
NO.	DESCRIPTION	DATE

CONSULTANTS	
<b>HAZARDOUS MATERIALS</b> MABBETT & ASSOCIATES, INC. 105 CENTRAL STREET, STONEHAM, MA 02180 PHONE: (781)275-6550	<b>FIRE SUPPRESSION</b> KOFFEL ASSOCIATES 8815 CENTRE PARK DRIVE, SUITE 200, COLUMBIA, MD 21045 PHONE: (410)729-2246
<b>CIVIL/STRUCTURAL</b> PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA, WICHITA, KS 67202 PHONE: (316)262-2881	<b>ELECTRONIC SECURITY</b> MAGNA ENGINEERS 861 CORPORATE DRIVE, SUITE 210, LEXINGTON, KY 40503 PHONE: (859)309-2990
<b>ARCHITECTURAL</b> OCULUS INC. 1 SOUTH MEMORIAL DRIVE, SUITE 1500, SAINT LOUIS, MO 63102 PHONE: (314)367-6100	<b>PHYSICAL SECURITY</b> FORCE PROTECT 3210 GULF BLVD UNIT 304, BELLEAIR BEACH, FL 33786 PHONE: (802)836-4232

ENGINEER OF RECORD
<b>Miller-Remick LLC</b> M.E.P. & Structural Engineering A Service Disabled Veteran Owned Small Business 1010 KINGS HIGHWAY SOUTH CHERRY HILL, NEW JERSEY 08034 PHONE: (856)429-4000 FAX: (856)429-9002 MR PROJECT NO: 0499-0121

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
PROFESSIONAL ENGINEER SCOTT M. TURNELL 26113 08/03/2021 KANSAS PROFESSIONAL ENGINEER

Office of Construction and Facilities Management
U.S. Department of Veterans Affairs

Drawing Title
CIVIL SITE MISC. WATERLINE DETAILS 2
Approved: Project Director

Phase
100% BID SET
FULLY SPRINKLERED

Project Title		
INSTALL NEW BOILERS IN BUILDING 13		
Location ROBERT J. DOLE VA MEDICAL CENTER WICHITA, KANSAS		
Issue Date 2021-09-03	Checked DRC	Drawn SMT / DSB

Project Number
589A7-18-302
Building Number 13
Drawing Number CU226

# GENERAL NOTES

- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY REGULATIONS. ALL CONSTRUCTION SHALL BE COMPLETED FOLLOWING CURRENT CITY STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- CONTRACTOR WILL BE REQUIRED TO PROVIDE NOTICE TO UTILITY COMPANIES A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO ANY EXCAVATION, AS FOLLOWS:  
KANSAS ONE-CALL 687-2470  
THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:  
AT&T 1-800-246-8464  
BLACK HILLS ENERGY 1-800-694-8989  
CITY OF WICHITA WATER & SEWER 1-316-219-8921  
CITY OF WICHITA STORMWATER 1-316-268-4090  
CITY OF WICHITA TRAFFIC 1-316-268-4034  
COX COMMUNICATIONS 1-888-249-3530  
KANSAS GAS SERVICE 1-888-482-4950  
EVERGY 1-800-544-4857
- UTILITY SERVICE LINES, POLES, ETC. ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
- RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS, IN THE OPINION OF THE ENGINEER, THAT WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WILL REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS. OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WILL REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.
- TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE CITY ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.
- THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ADJUTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS NOTICE PRIOR TO START OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
- THE ENGINEERING DIVISION SHALL FIELD LOCATE WATER VALVES ONE TIME DURING CONSTRUCTION WHEN REQUESTED BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE SUCH FIELD LOCATIONS DURING THE CONSTRUCTION PROCESS. WATER VALVES, VALVE BOXES OR FIRE HYDRANTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY CONTRACTOR AT HIS OWN EXPENSE. VALVE BOXES AND WATER METERS WITHIN THE PROJECT LIMITS SHALL BE ADJUSTED TO MATCH FINAL GRADES BY THE CONTRACTOR.
- THE CONTRACTOR SHALL NOTIFY THE INSPECTING ENGINEER AND TOM MASON AT 316-268-4574 WITH THE CITY OF WICHITA WITH THE ANTICIPATED CONSTRUCTION START DATE AND NOTIFY THEM OF PROJECT COMPLETION. STAKING AND INSPECTION FOR THIS PROJECT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- IF TRAFFIC WILL BE IMPACTED BY CONSTRUCTION, A TRAFFIC CONTROL PLAN MUST BE SUBMITTED AND APPROVED BY THE CITY TRAFFIC ENGINEER, MIKE ARMOUR AT TRAFFIC@WICHITA.GOV BEFORE CONSTRUCTION CAN BEGIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL MEASURES TO FACILITATE CONSTRUCTION. ALL CONSTRUCTION ZONE MARKINGS AND SIGNAGE SHALL CONFORM TO THE LATEST VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS PUBLISHED BY THE US DEPT. OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION. ALL COSTS ASSOCIATED WITH CONSTRUCTION MARKINGS AND SIGNAGE SHALL BE THE CONTRACTORS RESPONSIBILITY.
- ALL ELEVATIONS SHOWN ARE NAVD 88.
- ALL AREAS DISTURBED DURING CONSTRUCTION THAT WILL NOT BE UNDER PROPOSED PAVEMENT SHALL BE RESTORED TO MATCH EXISTING CONDITIONS.

- ANY SIDEWALK, DRIVE APPROACH, OR STREET PAVEMENT REMOVED TO CONSTRUCT PROJECT MUST HAVE A PAVEMENT CUT PERMIT AND BE REPLACED BY THE CITY CONTRACTOR. PERMITS CAN BE OBTAINED BY CALLING 316-268-4501 OR 316-268-4480.
- CITY MAINTENANCE OF STORM SEWER ENDS AT THE LAST STRUCTURE IN THE EASEMENT OR RIGHT-OF-WAY.
- CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH OPENINGS OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.
- THE INSPECTING FIRM SHALL SUBMIT TO THE CITY STORMWATER MAINTENANCE DIVISION A DIGITAL COPY OF THE CCTV INSPECTION OF THE CONDUITS AND STRUCTURES FOLLOWING CONSTRUCTION. THE DIGITAL FILE FORMATION SHALL BE COMPATIBLE WITH THE CITY INPUT TEMPLATE. A COPY OF THE TEMPLATE IS AVAILABLE UPON REQUEST AT 316-268-4090.
- THE CONTRACTOR SHALL PROTECT FROM DAMAGE AND SUPPORT EXISTING UTILITIES THROUGH CONSTRUCTION AS APPROVED BY THE UTILITY OWNER AND THE ENGINEER AT THE CONTRACTORS EXPENSE.
- A PORTION OF EXCESS EXCAVATED MATERIAL SHALL BE MOUNDED AROUND MANHOLES WHICH EXTEND MORE THAN ONE (1) FOOT ABOVE THE EXISTING GROUND. SUCH MOUND SHALL BE CONSTRUCTED WITH NEW DEVELOPMENT AS A SIX (6) FOOT DIAMETER FLAT TOP WITH 4 TO 1 SIDE SLOPES DOWN TO THE ORIGINAL GROUND. THE ELEVATION OF THE FLAT TOP OF THE MOUND SHALL BE 0.4 FOOT BELOW THE TOP OF THE MANHOLE.
- GEOTECHNICAL REPORT AVAILABLE UPON REQUEST.

## BENCHMARKS

BM201: CHISELED SQUARE ON BACK OF CURB WEST OF STORM INLET EAST OF CENTER DRIVE TO PARKING LOT. ELEV.= 1409.45 (NAVD 88)

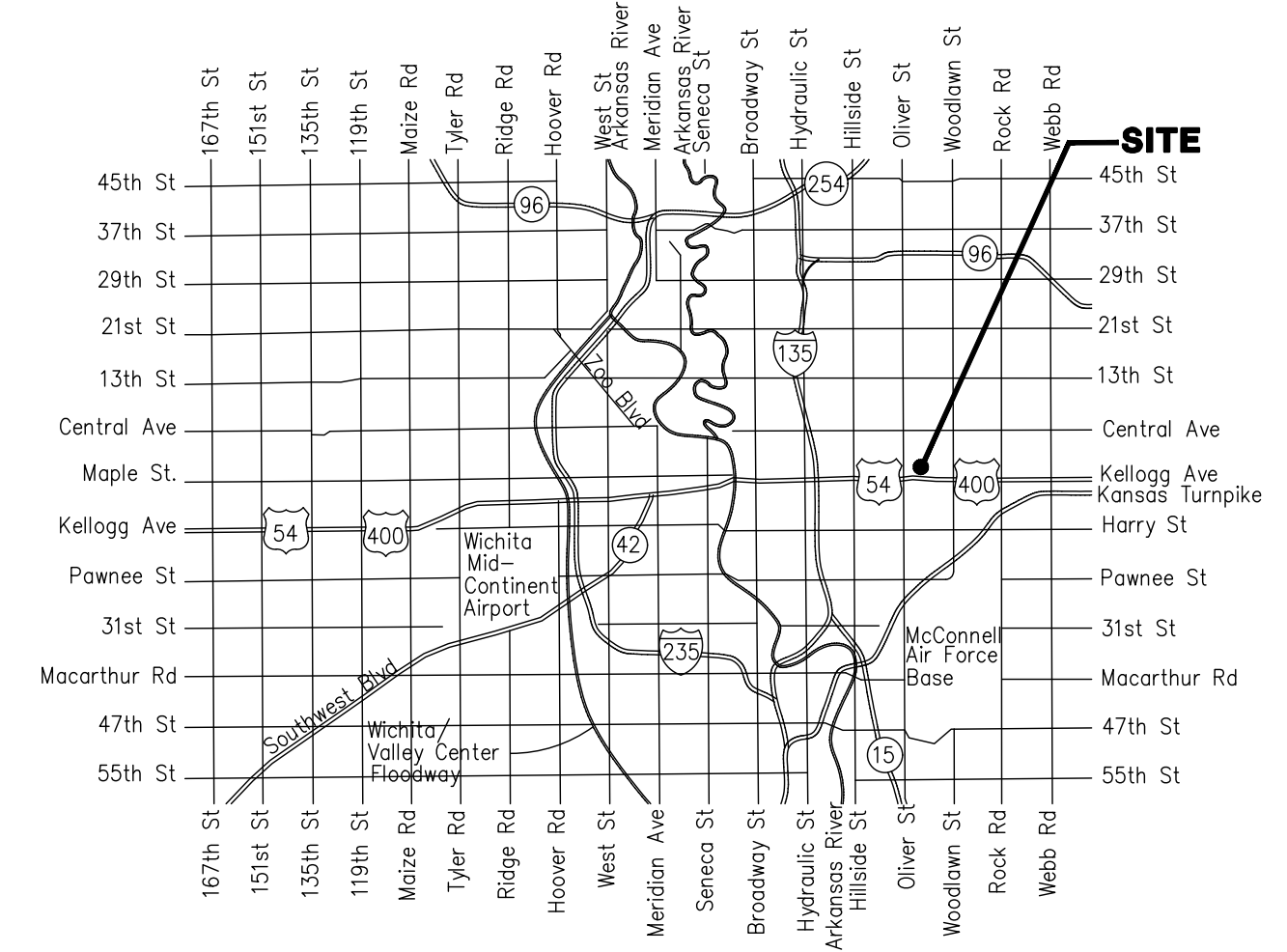
BM102: CHISELED SQUARE ON BACK OF CURB SOUTHEAST OF EAST PARKING LOT OF FIRE DEPARTMENT ON NORTH SIDE OF ACCESS DRIVE SOUTH OF FIRE HYDRANT. ELEV.= 1411.95 (NAVD 88)

BM103: CHISELED SQUARE ON CENTER BACK OF STORM INLET ON WEST SIDE OF CENTER MEDIAN OF PARKING LOT. ELEV.= 1410.74 (NAVD 88)

# STORM SEWER IMPROVEMENTS to serve

# ROBERT J. DOLE VA MEDICAL CENTER BUILDING 13 NEW BOILERS, CITY OF WICHITA, KANSAS

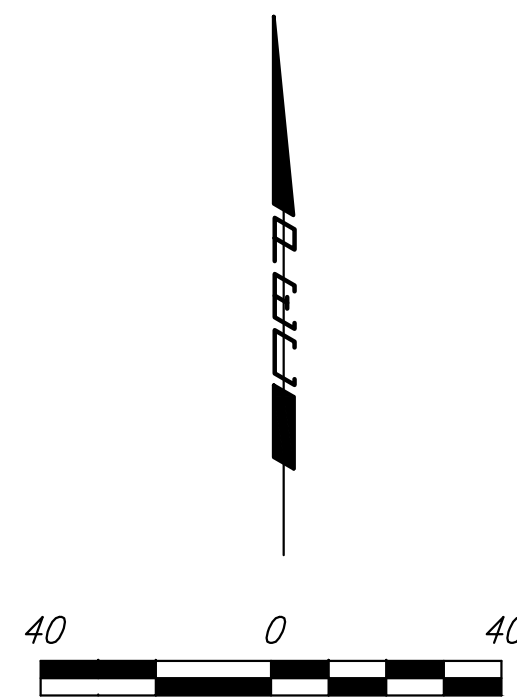
Gary Janzen, P.E. City Engineer  
Project Number  
2020-652 PPD (XXXXXX)



Vicinity Map

## SHEET INDEX

SHEET NO. 1	CU320 - PPD TITLE SHEET
SHEET NO. 2	CU321.01 - STORM SEWER PLAN & PROFILE, PHASE 1
SHEET NO. 3	CU322 - PRECAST MANHOLE DETAILS
SHEET NO. 4	CU323 - DROP INLET DETAILS
SHEET NO. 8-12	EROSION CONTROL BMP DETAILS ARE AVAILABLE ON THE CITY OF WICHITA WEBSITE



**Stormwater Certification:**

New Development or Redevelopment (Circle One)  
 Stormwater Permit # N/A  
 NOI State Permit # N/A  
 NOI Federal Permit # N/A

These construction plans were prepared in accordance with the current Stormwater management Regulations as set forth in the City of Wichita's Stormwater Management Ordinance 16.32 and the policies/guidelines presented in the Wichita/Sedgwick County Stormwater Manual.

Site Area (Acres) = 3.03  
 Disturbed Area (Acres) = .36  
 Water Quality Treatment: N/A  
 Downstream Channel Protection: N/A  
 Detention: N/A  
 The BMP used for this development is N/A

APPROVED AS NOTED  
BY WICHITA PUBLIC WORKS ENGINEERING  
AND STORMWATER DIVISION

Engineering \_\_\_\_\_  
 Stormwater \_\_\_\_\_

NOTE TO CONTRACTORS  
 Inspection and testing for this project is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said Inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer in the state of Kansas. No work shall be performed the Contractor without such inspection nor shall any work be commenced without written authorization by City Engineering. All Construction and Materials shall comply with the current City of Wichita Specifications and Standards and Special Provisions. (an file and available at Wichita.gov).

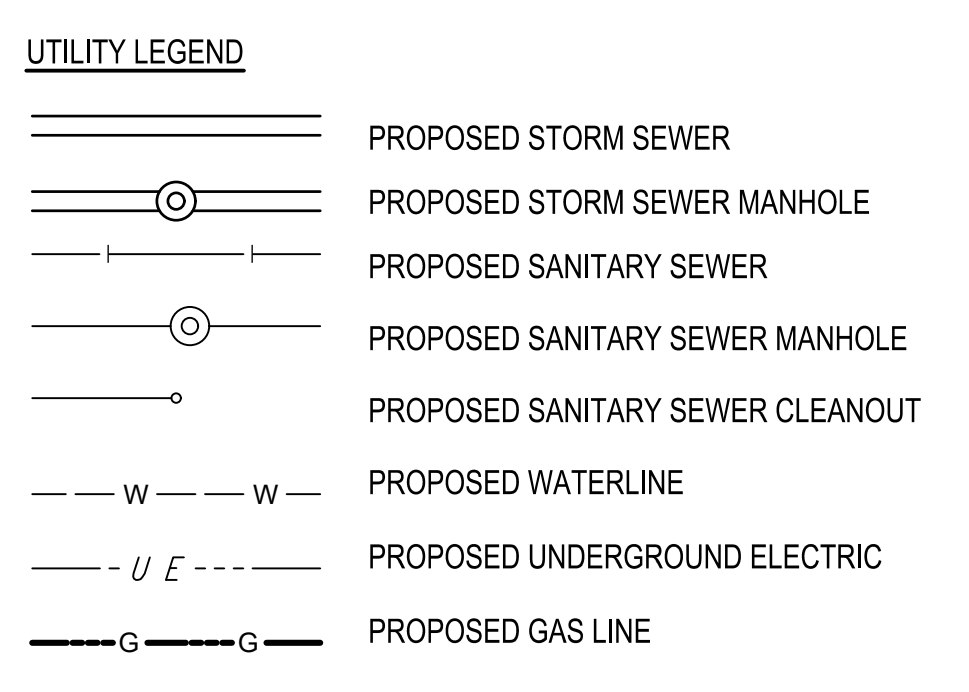
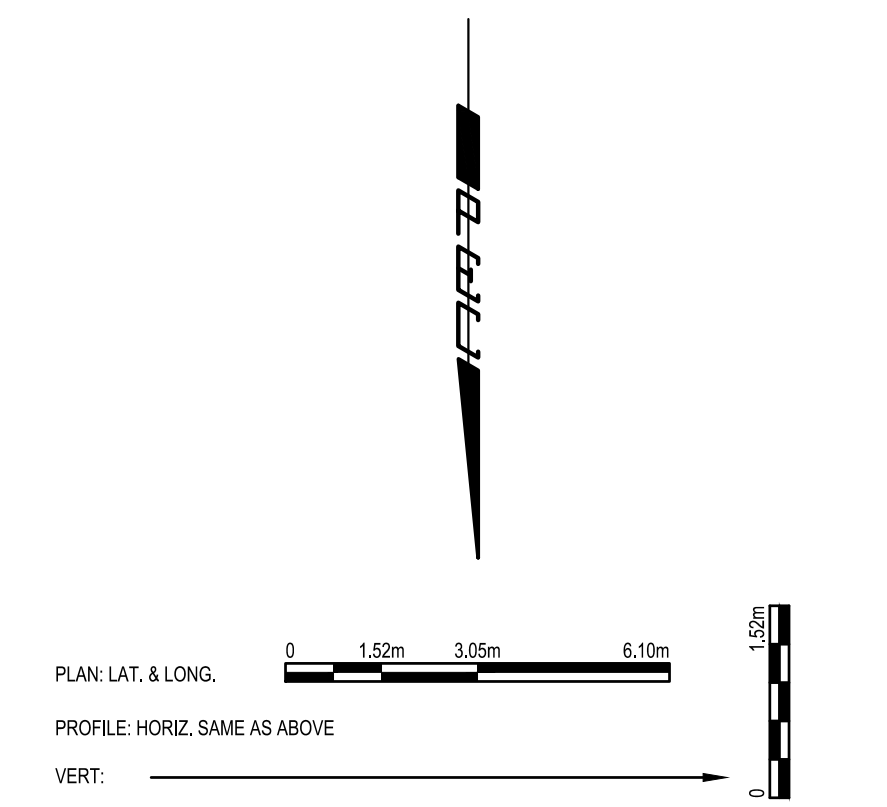
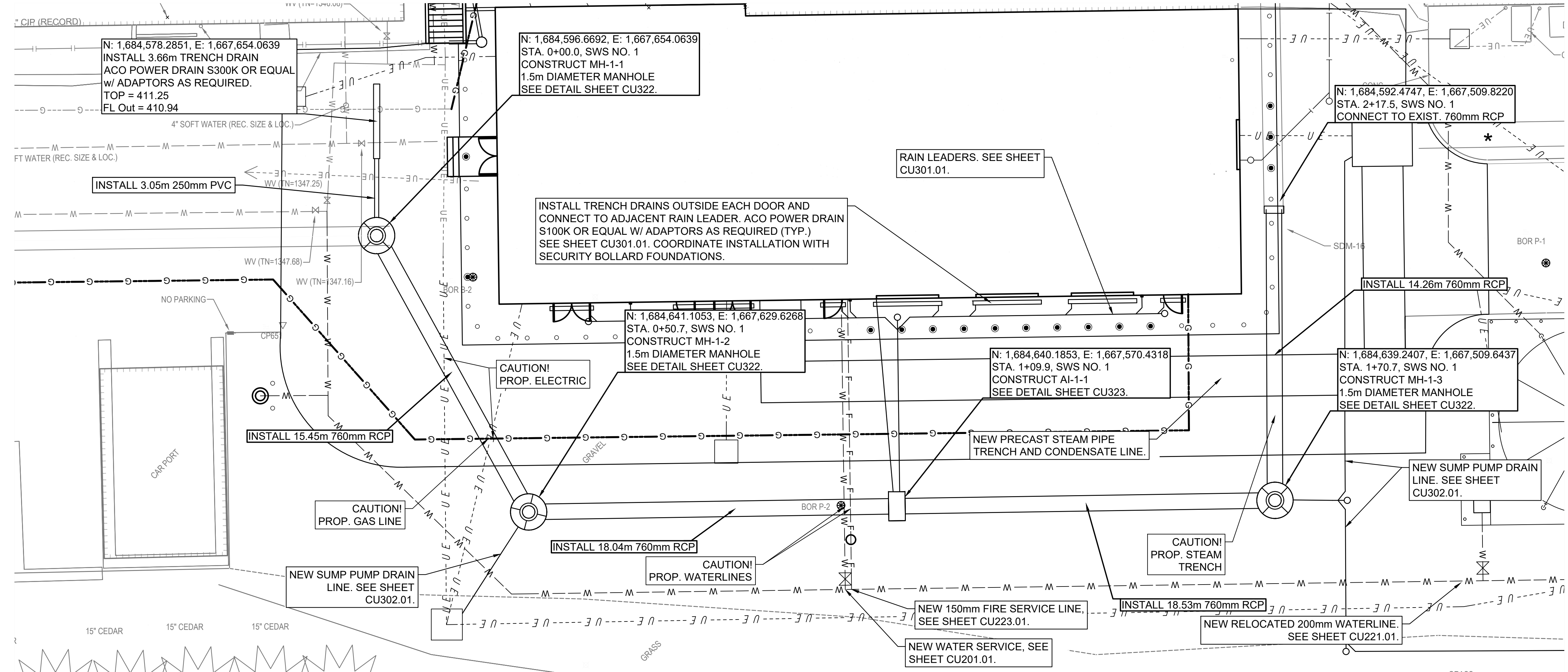
An approved copy of these plans signed by City staff are required on-site.

SEPTEMBER 2021

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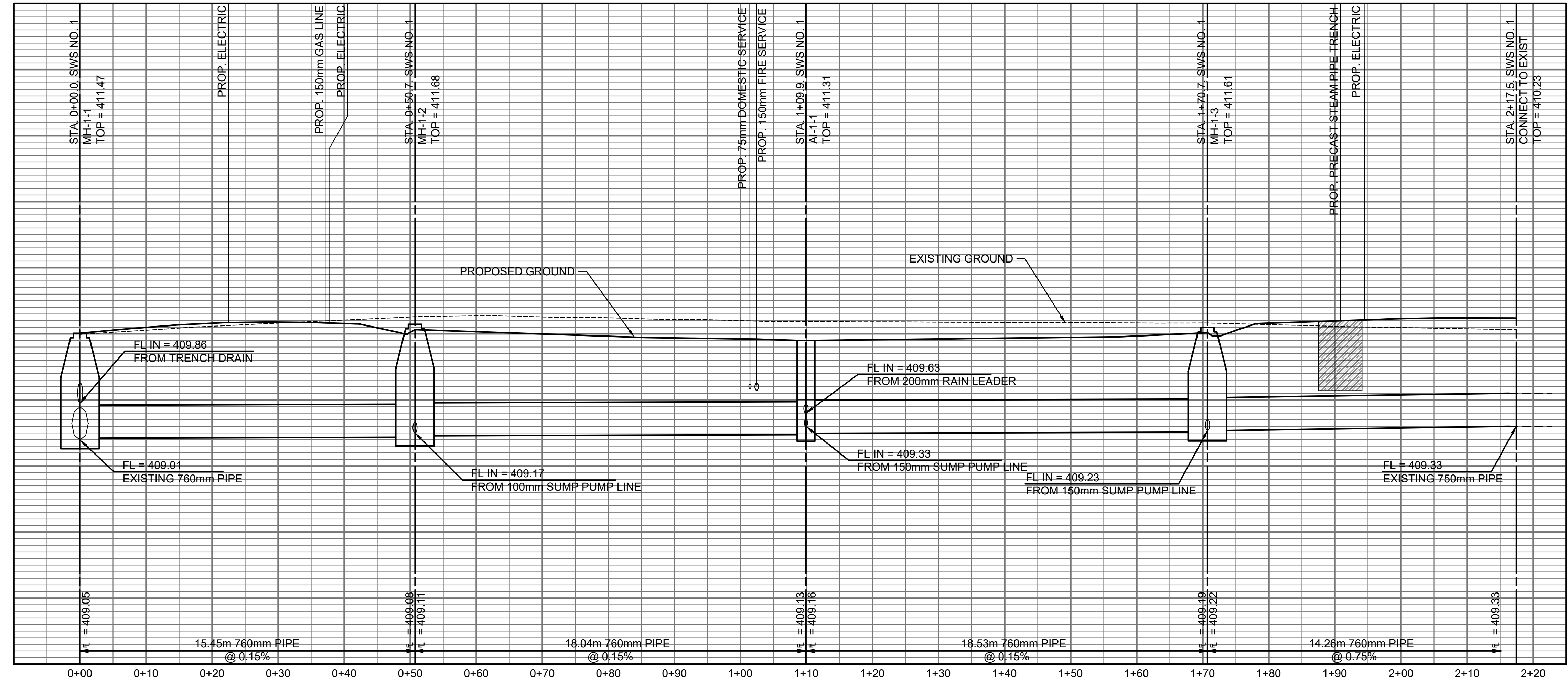
PRINTS OF THIS DRAWING SHALL NOT BE USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER.			<b>CONSULTANTS</b> <b>HAZARDOUS MATERIALS</b> MABBETT & ASSOCIATES, INC. 105 CENTRAL STREET, STONEHAM, MA 02180 PHONE: (781)275-0591 <b>CIVIL / STRUCTURAL</b> PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA, WICHITA, KS 67202 PHONE: (316)262-2891 <b>ARCHITECTURAL</b> OCULUS INC. 1 SOUTH MEMORIAL DRIVE, SUITE 1500, SAINT LOUIS, MO 63102 PHONE: (314)367-6100		<b>FIRE SUPPRESSION</b> KOFFEL ASSOCIATES 8815 CENTRE PARK DRIVE, SUITE 200, COLUMBIA, MD 21045 PHONE: (410)729-2246 <b>ELECTRONIC SECURITY</b> MAGNA ENGINEERS 861 CORPORATE DRIVE, SUITE 210, LEXINGTON, KY 40503 PHONE: (859)309-2990 <b>PHYSICAL SECURITY</b> FORCE PROTECT 3210 GULF BLVD. UNIT 304, BELLEAIR BEACH, FL 33786 PHONE: (802)836-4232		<b>ENGINEER OF RECORD</b>  <b>Miller-Remick LLC</b> M.E.P. & Structural Engineering A Service Disabled Veteran Owned Small Business 1010 KINGS HIGHWAY SOUTH CHERRY HILL, NEW JERSEY 08034 PHONE: (856)429-4000 FAX: (856)429-9022 MR PROJECT NO: 0499-0121		<b>PROFESSIONAL ENGINEERING CONSULTANTS, P.A.</b> PROFESSIONAL ENGINEER  <b>Office of Construction and Facilities Management</b> VA U.S. Department of Veterans Affairs		Drawing Title CIVIL SITE PPD TITLE SHEET Approved: Project Director		Phase 100% BID SET FULLY SPRINKLERED		Project Title INSTALL NEW BOILERS IN BUILDING 13 Location ROBERT J. DOLE VA MEDICAL CENTER WICHITA, KANSAS Issue Date 2021-09-03 Checked DRC Drawn SMT /DSB		Project Number 589A7-18-302 Building Number 13 Drawing Number CU320	
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\* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING STORM SEWER PIPE TO VERIFY ITS SIZE, AND HORIZONTAL AND VERTICAL LOCATION. THE PIPE LOCATION SHALL BE REPORTED TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS CAN BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

SWS NO. 1



U:\Wichita-Civil\2020\20664\000\Drawings\Metric\Drawings\Metric CONVERSION\200664-000 - CU321 - PPD PLAN & PROFILE.dwg 9-3-21 12:45:55 PM

PRINTS OF THIS DRAWING SHALL NOT BE USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER.

NO.	DESCRIPTION	DATE

**CONSULTANTS**

**HAZARDOUS MATERIALS**  
 MABBETT & ASSOCIATES, INC.  
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**CIVIL/STRUCTURAL**  
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**FIRE SUPPRESSION**  
 KOFFEL ASSOCIATES  
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 PHONE: (410)729-2246

**ELECTRONIC SECURITY**  
 MAGNA ENGINEERS  
 861 CORPORATE DRIVE, SUITE 210, LEXINGTON, KY 40503  
 PHONE: (859)309-2990

**PHYSICAL SECURITY**  
 FORCE PROTECT  
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 PHONE: (802)836-4232

**ENGINEER OF RECORD**

**Miller-Remick LLC**  
 M.E.P. & Structural Engineering  
 A Service Disabled Veteran Owned Small Business

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 CHERRY HILL, NEW JERSEY 08034  
 PHONE: (856)429-4000  
 FAX: (856)429-9025  
 MR PROJECT NO: 0499-0121

PROFESSIONAL ENGINEERING  
 CONSULTANTS, P.A.  
 PROFESSIONAL ENGINEER

26113  
 08/03/2021  
 KANSAS  
 PROFESSIONAL ENGINEER

Office of  
 Construction  
 and Facilities  
 Management

VA U.S. Department of Veterans Affairs

Drawing Title  
 CIVIL SITE  
 STORM SEWER PLAN & PROFILE, PHASE 1

Approved: Project Director

Phase  
 100% BID SET

FULLY SPRINKLERED

Project Title  
 INSTALL NEW BOILERS IN  
 BUILDING 13

Location  
 ROBERT J. DOLE VA MEDICAL CENTER  
 WICHITA, KANSAS

Issue Date  
 2021-09-03

Checked  
 DRC

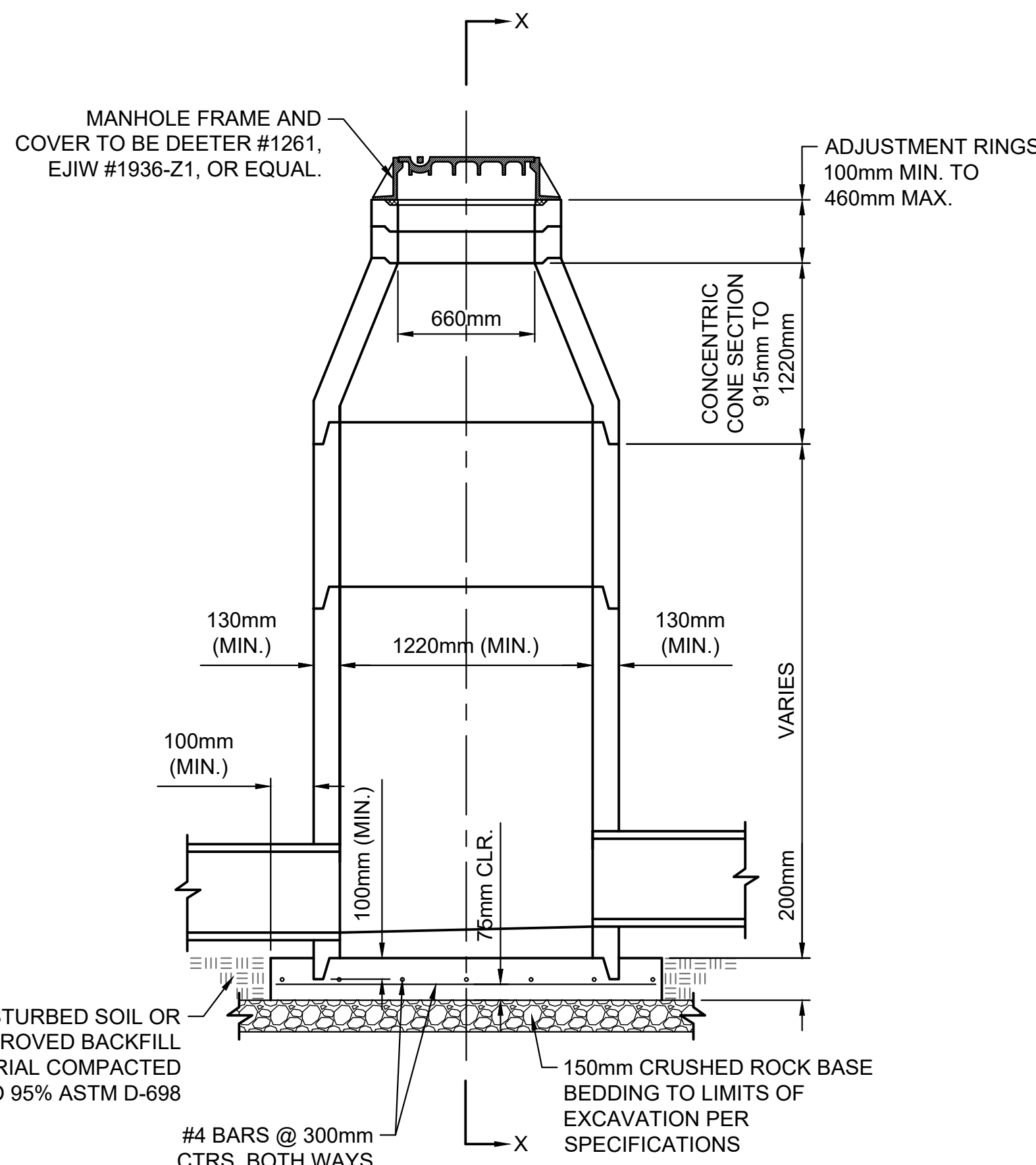
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 SMT / DSB

Project Number  
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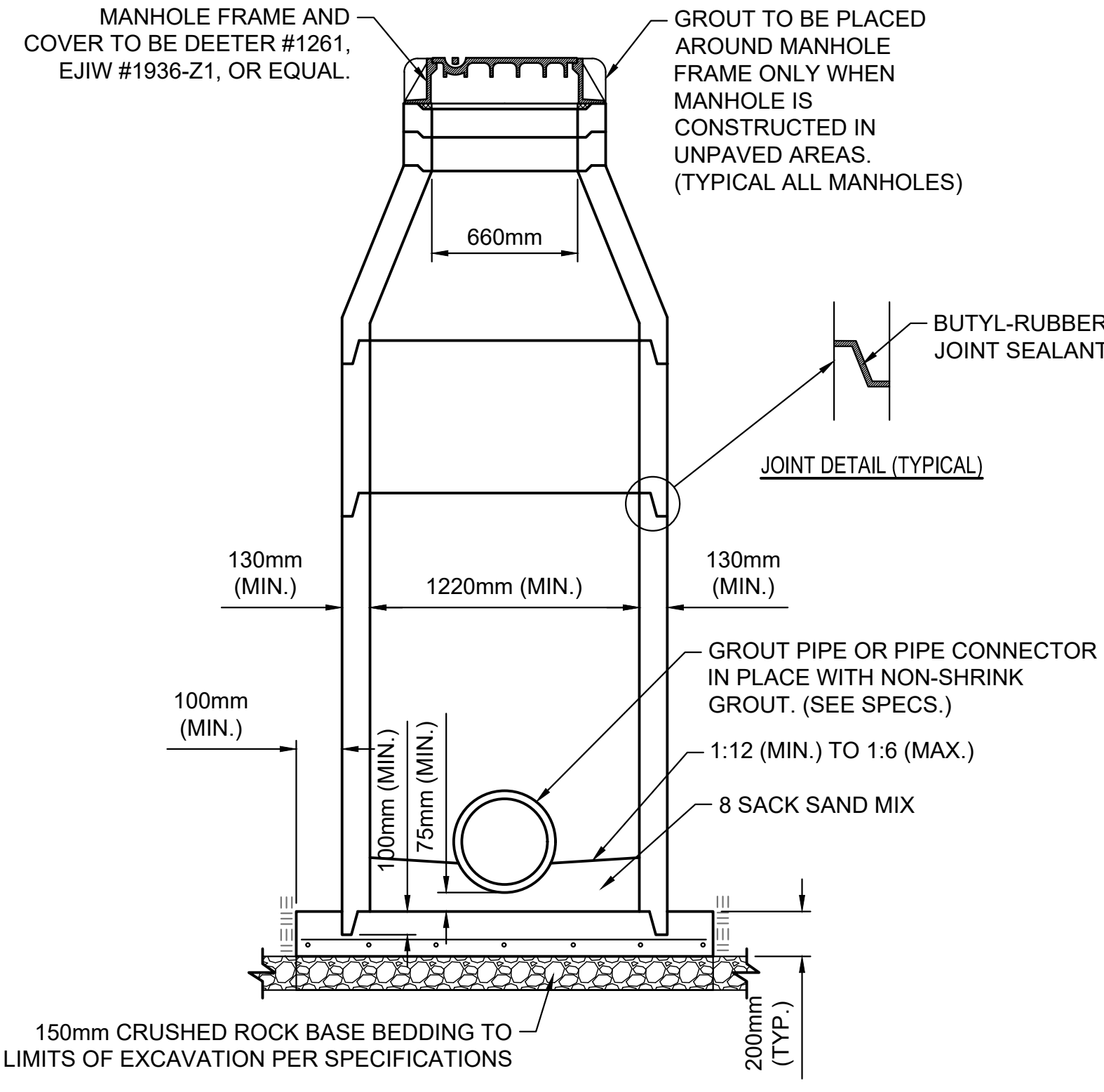
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Drawing Number  
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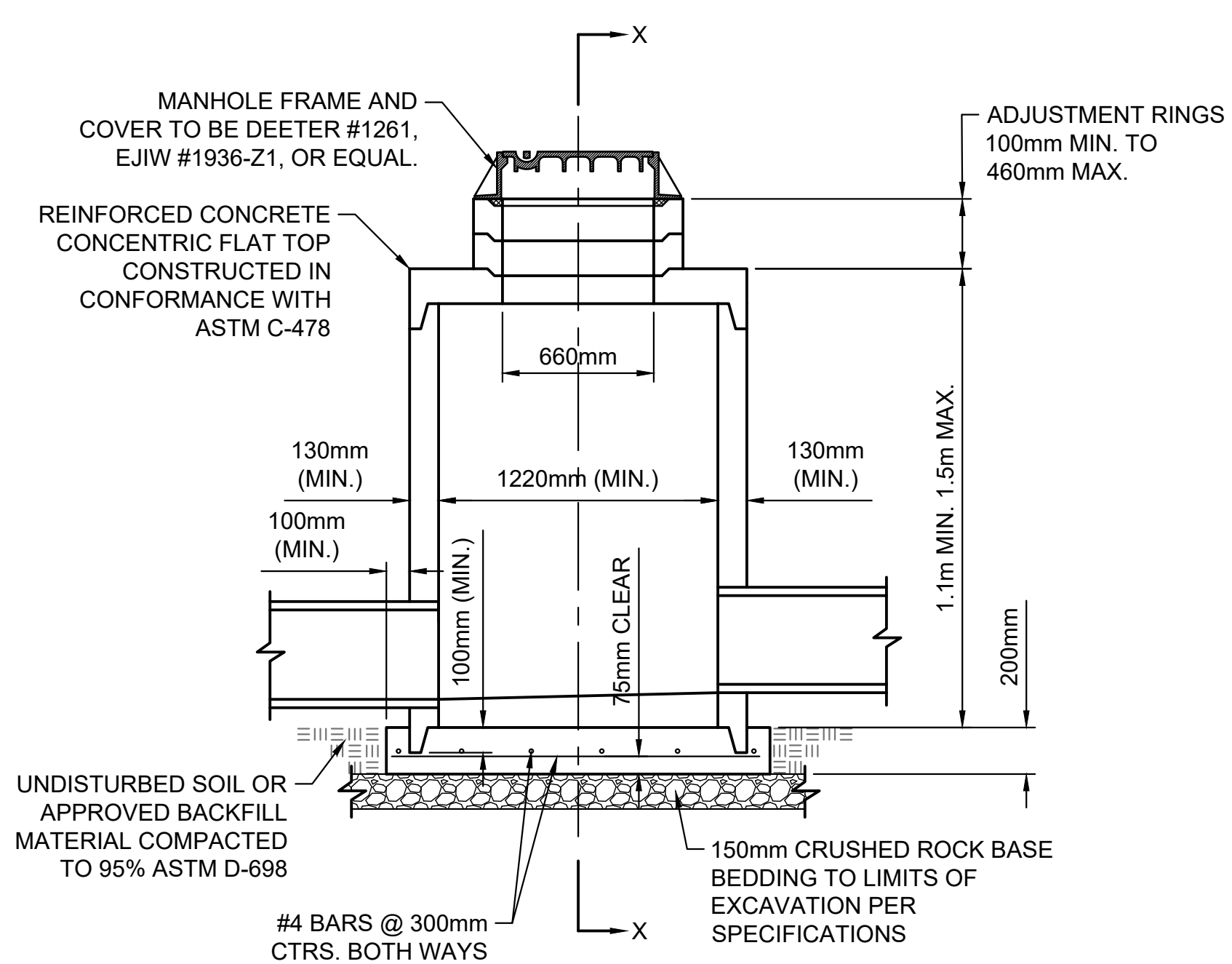
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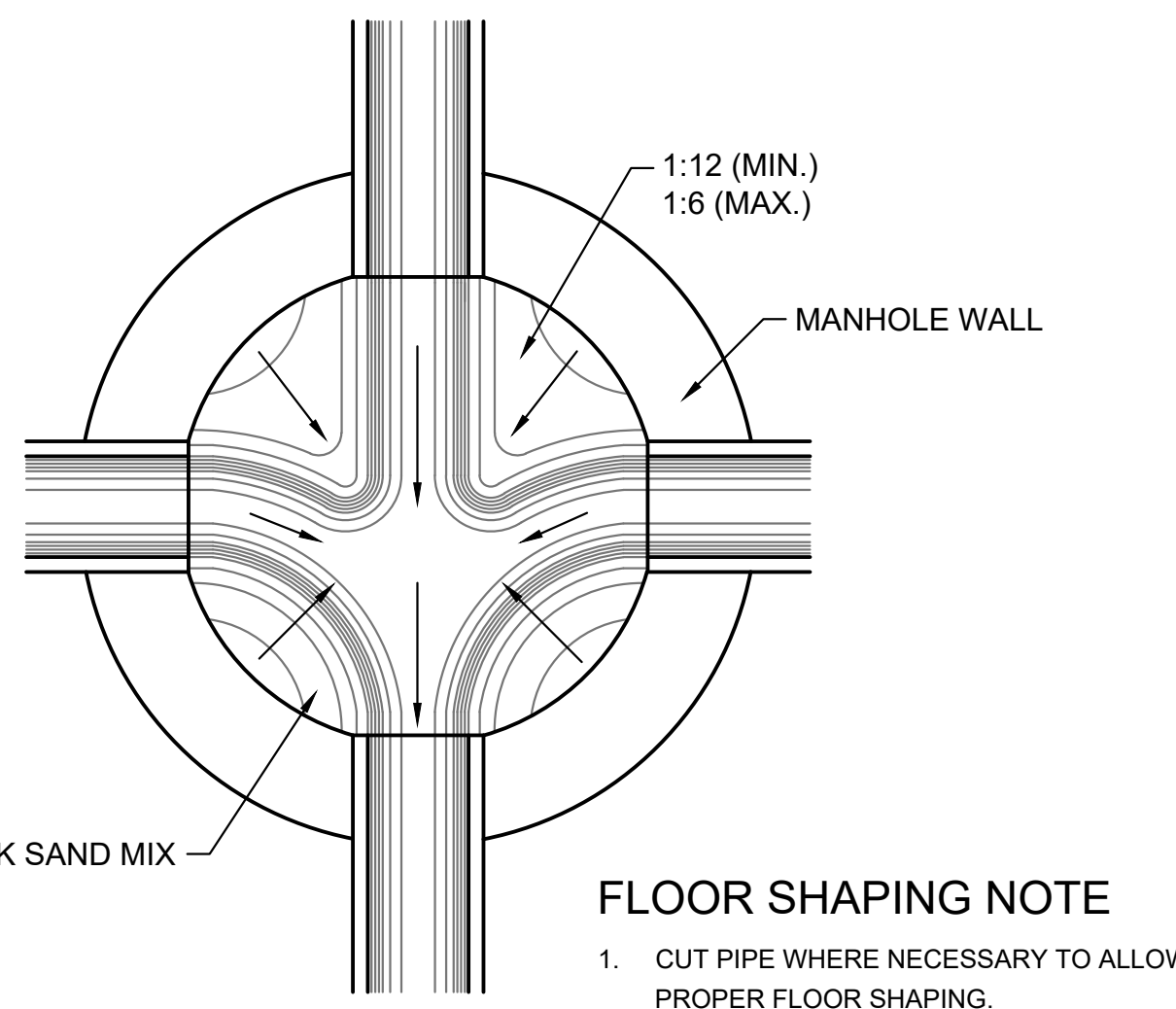
**1 PRECAST STANDARD MANHOLE TYPE "A"**  
NOT TO SCALE



**2 SECTION X-X (TYPICAL)**  
NOT TO SCALE



**3 PRECAST SHALLOW MANHOLE TYPE "B"**  
NOT TO SCALE



**4 TYPICAL MANHOLE FLOOR SHAPING**  
NOT TO SCALE

**PRECAST MANHOLE NOTES**

- IF, IN THE OPINION OF THE ENGINEER, THE MANHOLE SUBGRADE APPEARS UNSTABLE, THE CONTRACTOR WILL HAVE THE OPTION TO COMPACT SUBGRADE AS SHOWN OR INCREASE THE THICKNESS OF THE MANHOLE BASE AS DIRECTED BY THE ENGINEER.
- STEEL REINFORCING WILL BE REQUIRED IN ALL MANHOLE BASES.
- ALL MANHOLE CONSTRUCTION SHALL BE WATER TIGHT.
- TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
- ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISION OF ASTM C-478 AS MODIFIED BY THE SPECIFICATIONS.
- CONCRETE USED FOR MANHOLE CONSTRUCTION SHALL CONFORM TO CITY SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
- PRECAST MANHOLES SHALL BE SET AT LEAST 100mm INTO MANHOLE BASE.
- MANHOLES WITH PIPE SIZES 610mm AND LARGER SHALL HAVE 1.5 METER INSIDE DIAMETER (MIN.)
- MANHOLES WITH PRECAST BASES MAY BE USED AT THE CONTRACTORS OPTION. THESE MANHOLES SHALL HAVE AN 200mm MINIMUM BASE THICKNESS AND SHALL BE PLACED ON AN 200mm MIN. CRUSHED ROCK BASE. PIPES SHALL BE ENCASED WITH CRUSHED ROCK TO AT LEAST 1 METER FROM THE MANHOLE WALL.
- CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN MANHOLE WALL SHALL BE GROUTED FLUSH TO THE MANHOLE WALL WITH HYDRAULIC CEMENT AFTER THE MANHOLE IS IN PLACE. LIFTING HOLES THRU THE MANHOLE WALL WILL NOT BE ACCEPTED.
- THE ENDS OF ALL PIPES IN MANHOLES SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE MANHOLE WALL.
- MANHOLE INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE MANHOLE WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
- MANHOLE FRAME AND COVER TO BE DEETER #1261, EJIW #1936-Z1, OR APPROVED EQUAL (NO LOGO).
- FOR FLAT GRATED INLET APPLICATION, GRATE TO BE DEETER #1933, EJIW #1205 MDI, OR APPROVED EQUAL.
- FOR BEEHIVE GRATE APPLICATION, GRATE TO BE DEETER #4495, EJIW #120545, OR APPROVED EQUAL.

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NO.	DESCRIPTION	DATE

**CONSULTANTS**

<p><b>HAZARDOUS MATERIALS</b> MABBETT &amp; ASSOCIATES, INC. 105 CENTRAL STREET, STONEHAM, MA 02180 PHONE: (781)275-6590</p>	<p><b>FIRE SUPPRESSION</b> KOFFEL ASSOCIATES 8815 CENTRE PARK DRIVE, SUITE 200, COLUMBIA, MD 21045 PHONE: (410)729-2246</p>
<p><b>CIVIL/STRUCTURAL</b> PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA, WICHITA, KS 67202 PHONE: (316)262-2891</p>	<p><b>ELECTRONIC SECURITY</b> MAGNA ENGINEERS 861 CORPORATE DRIVE, SUITE 210, LEXINGTON, KY 40503 PHONE: (859)309-2990</p>
<p><b>ARCHITECTURAL</b> OCULUS INC. 1 SOUTH MEMORIAL DRIVE, SUITE 1500, SAINT LOUIS, MO 63102 PHONE: (314)367-6100</p>	<p><b>PHYSICAL SECURITY</b> FORCE PROTECT 3210 GULF BLVD UNIT 304, BELLEAIR BEACH, FL 33786 PHONE: (802)836-4232</p>

**ENGINEER OF RECORD**

**Miller-Remick LLC**  
M.E.P. & Structural Engineering  
A Service Disabled Veteran Owned Small Business  
1010 KINGS HIGHWAY SOUTH  
CHERRY HILL, NEW JERSEY 08034  
PHONE: (856)429-4000  
FAX: (856)429-9022  
MR PROJECT NO: 0499-0121

**PROFESSIONAL ENGINEERING CONSULTANTS, P.A.**  
PROFESSIONAL ENGINEER

**SCOTT M. TUNNICK**  
26113  
08/03/2021  
KANSAS PROFESSIONAL ENGINEER

**Office of Construction and Facilities Management**

**VA** U.S. Department of Veterans Affairs

**Drawing Title**  
CIVIL SITE  
PRECAST MANHOLE DETAILS

**Phase**  
100% BID SET

**Project Title**  
INSTALL NEW BOILERS IN BUILDING 13

**Location**  
ROBERT J. DOLE VA MEDICAL CENTER  
WICHITA, KANSAS

**Issue Date**  
2021-09-03

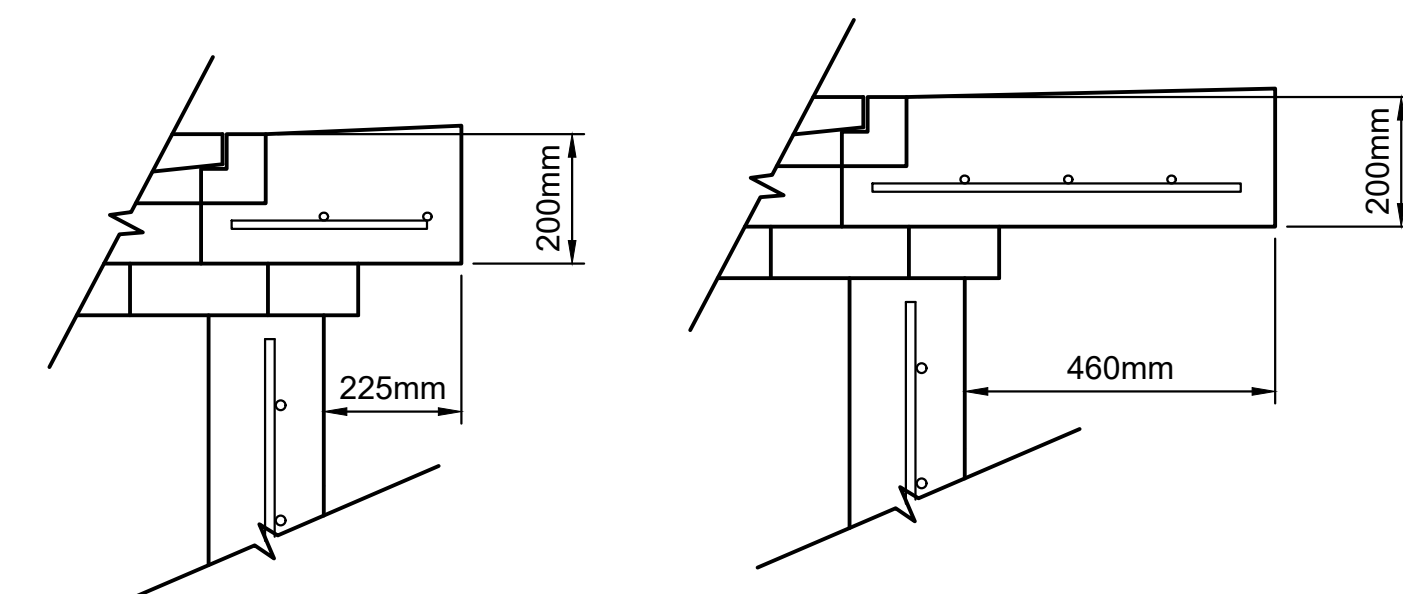
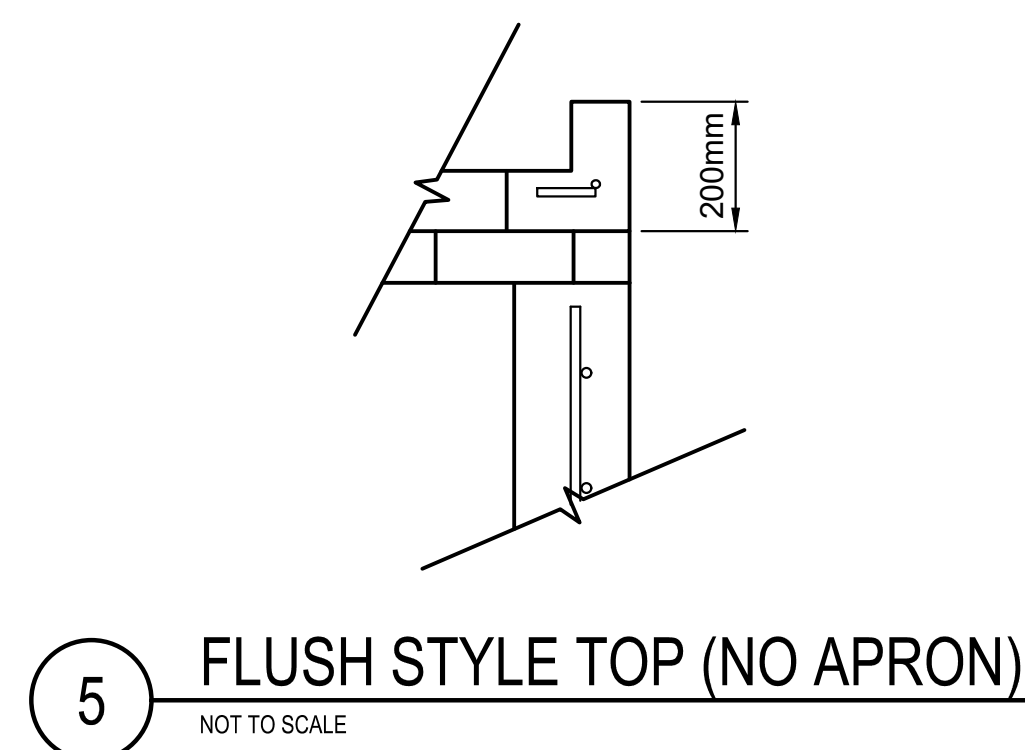
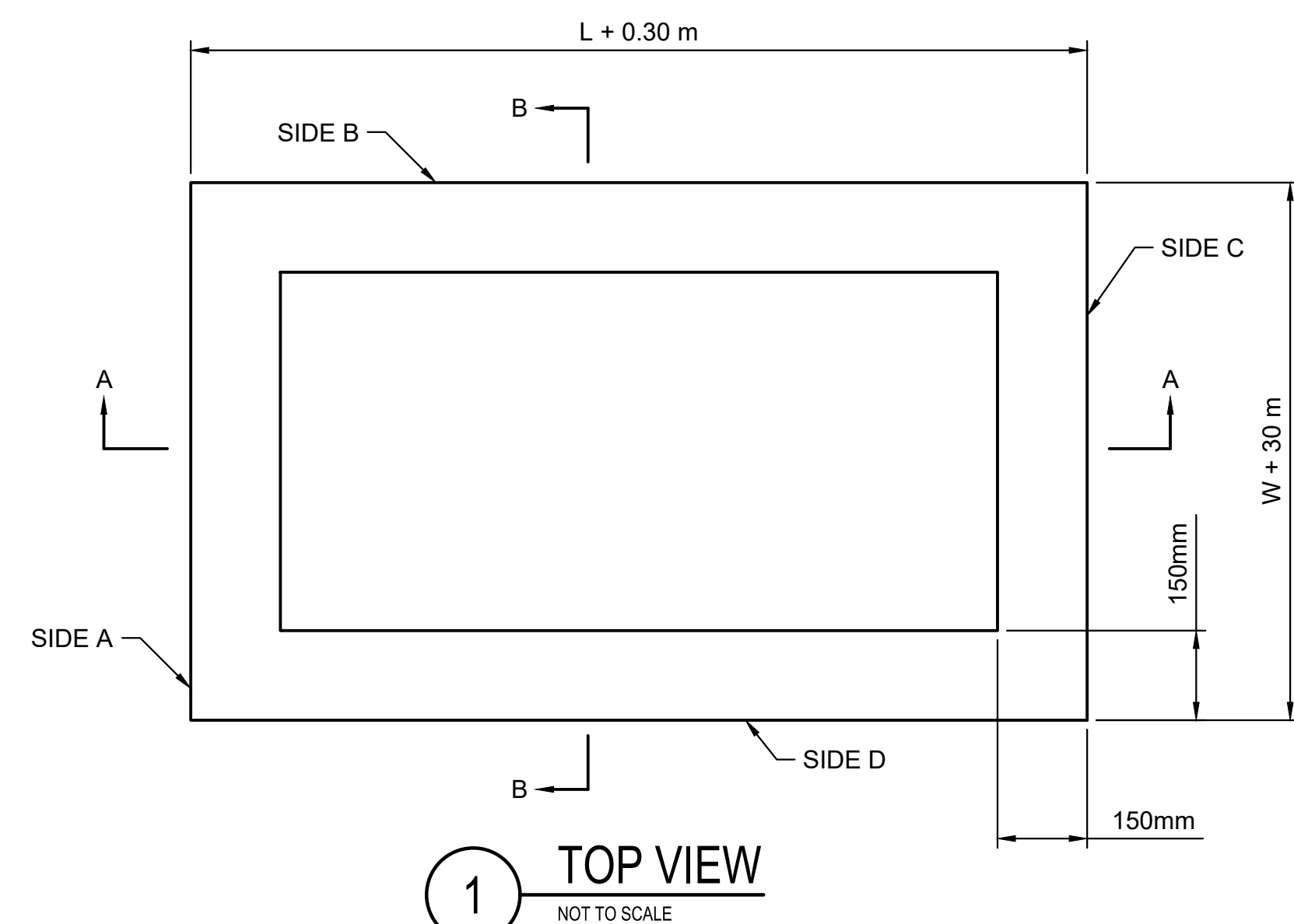
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**Drawn**  
SMT /DSB

**Project Number**  
589A7-18-302

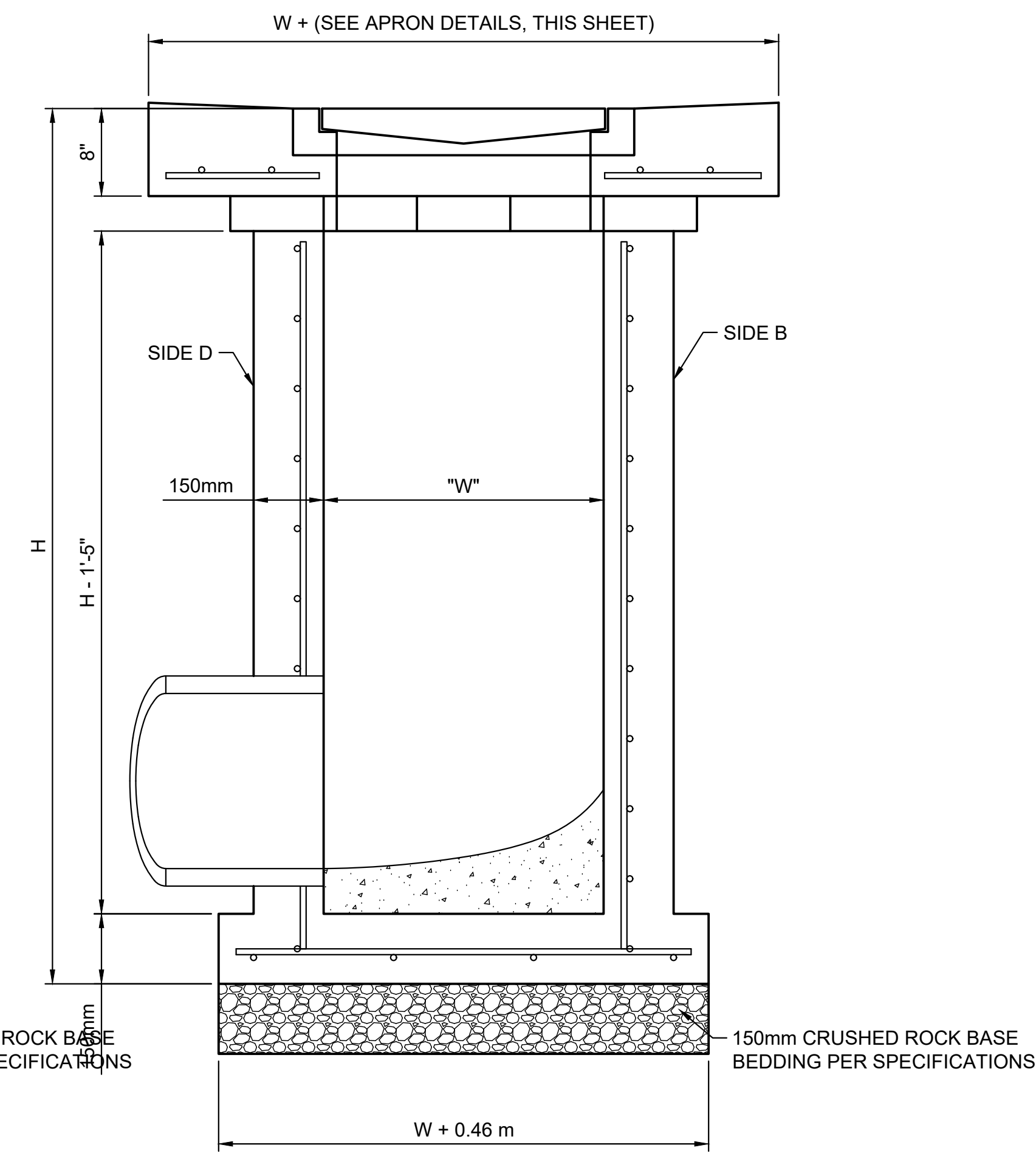
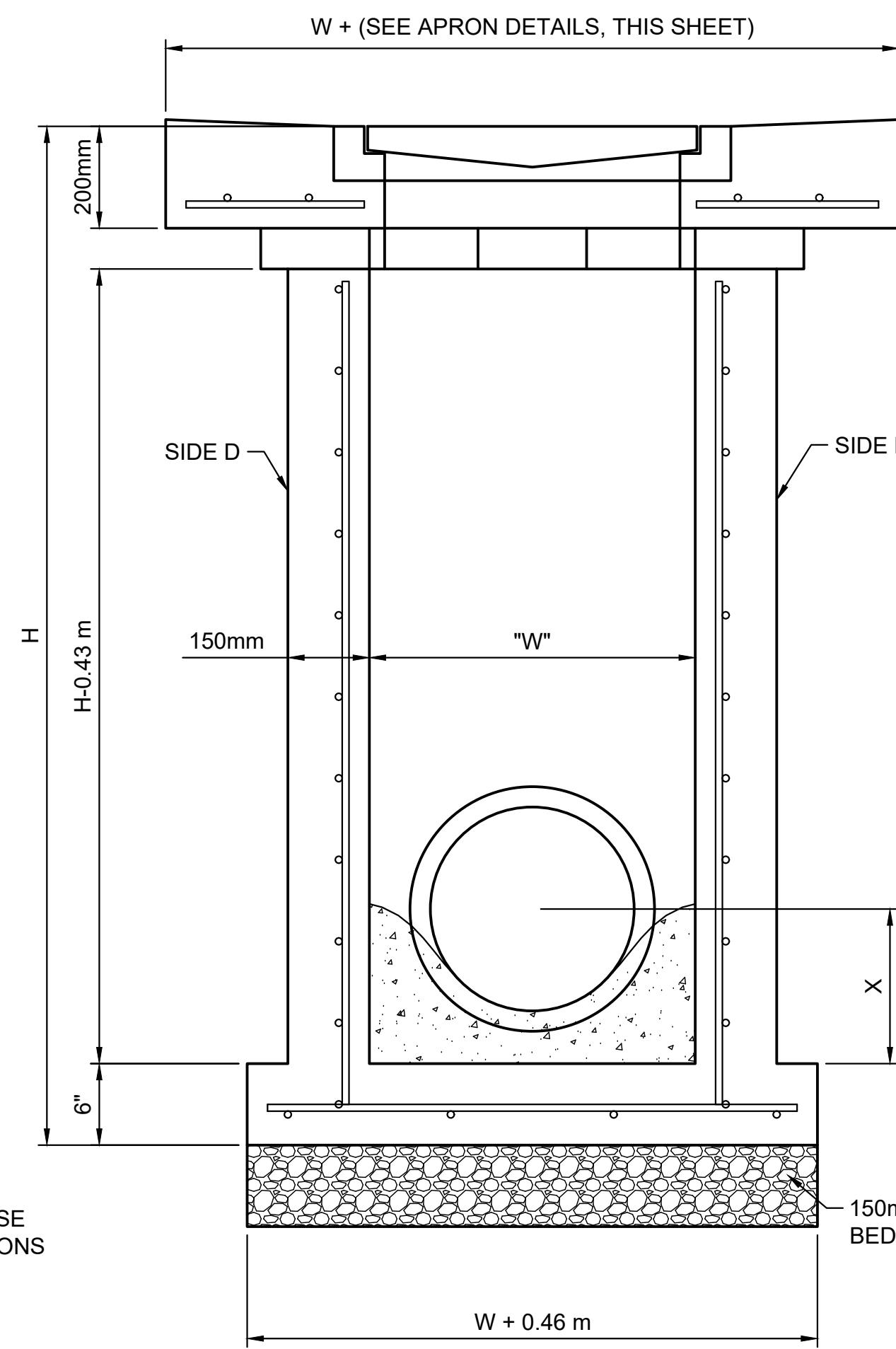
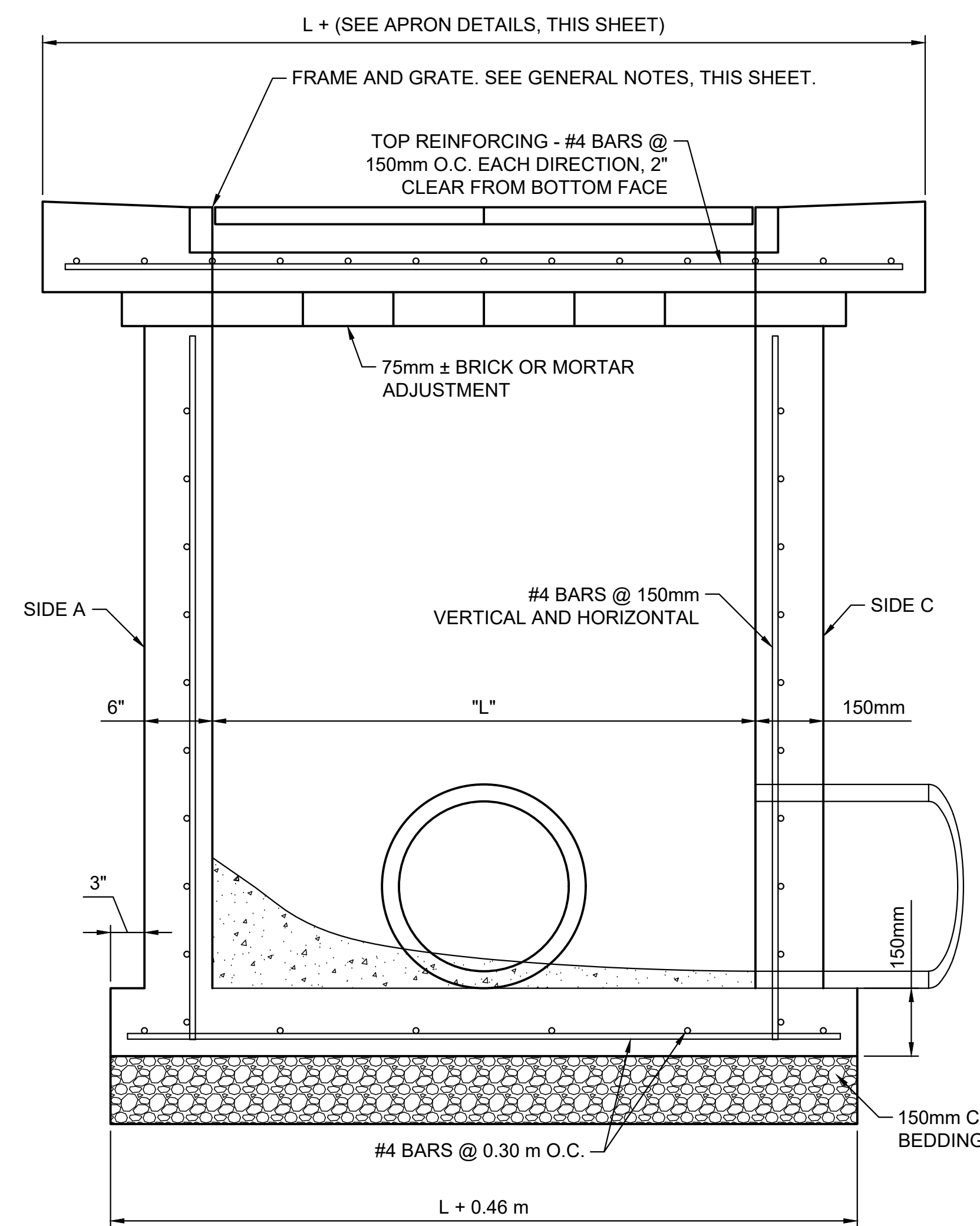
**Building Number**  
13

**Drawing Number**  
CU322



**DROP INLET NOTES**

1. W=0.61m AND L=0.61m FOR SINGLE AREA INLET
2. W=0.61m AND L=1.22m FOR DOUBLE AREA INLET
3. THE STRUCTURE(S) ON THIS DETAIL SHEET ARE DESIGNED FOR HS-20 LOADING AT THESE SPECIFIC DIMENSIONS ONLY. IF LARGER DIMENSIONS ARE REQUIRED, THE ENGINEER SHALL PROVIDE A PROJECT SPECIFIC STRUCTURE DESIGN FOR APPROVAL BY THE CITY ENGINEER'S OFFICE.
4. GRATE FRAME TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
5. INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF-CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
6. THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
7. INLET FRAME AND GRATE TO BE DEETER #2433, E.I.W #5391-Z1 OR APPROVED EQUAL FOR SINGLE DROP INLET AND DEETER #2434, E.I.W #5391 Z3 OR APPROVED EQUAL FOR DOUBLE DROP INLET.
8. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN INLET WALL SHALL BE GROUTED FLUSH TO THE INLET WALL WITH HYDRAULIC CEMENT AFTER THE INLET IS IN PLACE. LIFTING HOLES THRU THE INLET WALL WILL NOT BE ACCEPTED.
9. APRON TO EXTEND ON ALL 4 SIDES OF INLET. DESIGNER TO DESIGNATE APRON SIZE.



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PRINTS OF THIS DRAWING SHALL NOT BE USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER.

NO.	DESCRIPTION	DATE

CONSULTANTS		
<b>HAZARDOUS MATERIALS</b> MABBETT & ASSOCIATES, INC. 105 CENTRAL STREET, STONEHAM, MA 02180 PHONE: (781)275-6550	<b>FIRE SUPPRESSION</b> KOFFEL ASSOCIATES 8815 CENTRE PARK DRIVE, SUITE 200, COLUMBIA, MD 21045 PHONE: (410)759-2246	<b>ELECTRONIC SECURITY</b> MAGNA ENGINEERS 861 CORPORATE DRIVE, SUITE 210, LEXINGTON, KY 40503 PHONE: (859)309-2990
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**ENGINEER OF RECORD**

**Miller-Remick LLC**  
 M.E.P. & Structural Engineering  
 A Service Disabled Veteran Owned Small Business

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 PHONE: (856)429-4000  
 FAX: (856)429-9002  
 MR PROJECT NO: 0499-0121

PROFESSIONAL ENGINEERING  
 CONSULTANTS, P.A.  
 PROFESSIONAL ENGINEER

**SCOTT M. TUNNELL**  
 26113  
 08/03/2021  
 KANSAS  
 PROFESSIONAL ENGINEER

**Office of Construction and Facilities Management**

**VA** U.S. Department of Veterans Affairs

Drawing Title <b>CIVIL SITE DROP INLET DETAILS</b>	Phase <b>100% BID SET</b>
Approved: Project Director	<b>FULLY SPRINKLERED</b>

Project Title <b>INSTALL NEW BOILERS IN BUILDING 13</b>	Location ROBERT J. DOLE VA MEDICAL CENTER WICHITA, KANSAS
Issue Date 2021-09-03	Checked DRC
Drawn SMT / DSB	

Project Number 589A7-18-302	Building Number 13
Location ROBERT J. DOLE VA MEDICAL CENTER WICHITA, KANSAS	Drawing Number CU323