

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	1-316-687-2470
AT&T	1-800-246-8464
BLACK HILLS ENERGY	1-800-694-8989
CITY OF ANDOVER WATER & SEWER	1-316-219-8921
CITY OF ANDOVER STORMWATER	1-316-977-9416
CITY OF ANDOVER TRAFFIC	1-316-733-4634
COX COMMUNICATIONS	1-888-249-3530
KANSAS GAS SERVICE	1-888-482-4950
EVERGY	1-800-544-4857

 THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:
- 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-ON-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 BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO REESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED DURING CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE REESTABLISHED 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 REINHARDT AT 316-650-0740 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 OF ANDOVER 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 CONTRACTOR'S 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.
- CONTRACTOR TO ENSURE ALL REQUIRED PERMITS HAVE BEEN OBTAINED PRIOR TO CONSTRUCTION COMMENCEMENT.
- 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 TIE-INS.
- 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 MANUFACTURER'S 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.

Utility Contractor = Fremar Corporation
Inspector = Fred Smith -
Baughman Company, P.A.

As-Built Plans = FES & Larry Powell
10-2-2024

As-Built Plans Revised = 12-03-2024.

Construction Began = August 2024

Construction Ended = September 2024

New Fire Hydrant = American
6" FH Valve = American
Fittings = Sigma
6" DICL Pipe = US Pipe
8" PVC Pipe = Westlake

Acceptance Date 12-18-2024

AS-BUILT PLANS

WATER DISTRIBUTION SYSTEM


to serve

ANDOVER FIRE STATION NO. 2

650 S ANDOVER ROAD, ANDOVER, KS 67002

Paul Gunzelman, P.E. City Engineer
 2024-016690PPW (ORG CODE 54030980)

Baughman Company Job #: 24-08-E877



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 1525 E DOUGLAS AVE
 WICHITA, KS 67211
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 FAX: (316) 265-5948
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 LEMAY ERICKSON WILCOX ARCHITECTS
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 RESTON, VIRGINIA 20190
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SECURITY & IT ENGINEERS
 KSI 87211

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
CU131	PPW COVER SHEET
CU231	WATER PLAN & PROFILES
CU530	WATER DETAILS
CU531	WATER DETAILS
CU532	WATER DETAILS
CU533	WATER DETAILS
CE501	EROSION CONTROL DETAILS
CE502	EROSION CONTROL DETAILS
CE503	EROSION CONTROL DETAILS
CE504	EROSION CONTROL DETAILS
CE505	EROSION CONTROL DETAILS
CE506	EROSION CONTROL DETAILS

APPROVED AS NOTED
 BY WICHITA PUBLIC WORKS
 ENGINEERING DIVISION
 & BY ANDOVER FIRE DEPARTMENT

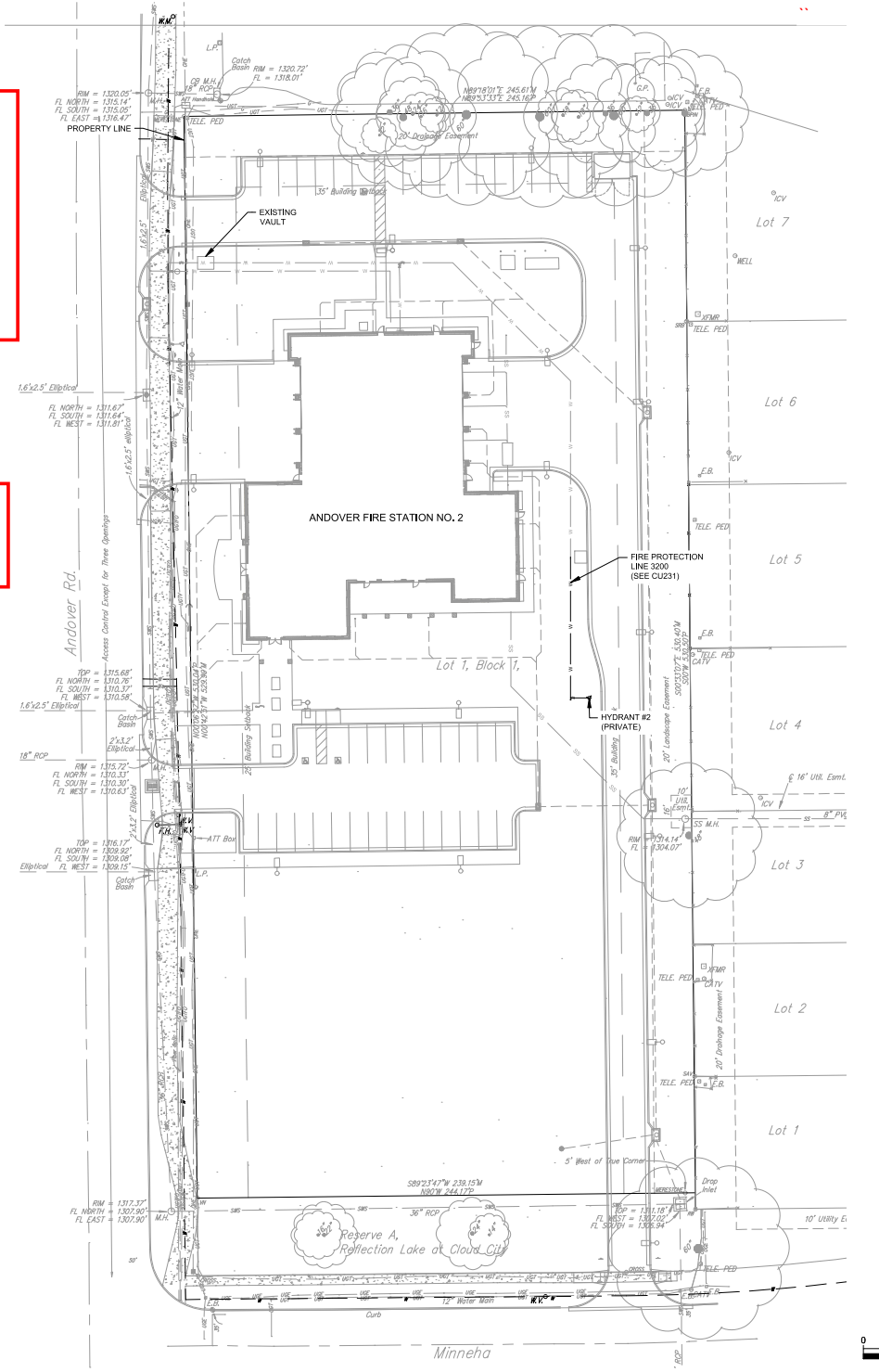
Engineering: SHAWN MELLIES, 2024-08-05
 Utilities: GREG LOLLEY, 2024-08-05
 Fire Dept.: CHAD RUSSELL, 2024-07-19

NOTE TO CONTRACTORS

Public Property:
 Inspection and testing for the waterline is to be provided by 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 no 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.



Vicinity Map



ANDOVER FIRE STATION NO. 2
 CITY OF ANDOVER
 650 SOUTH ANDOVER ROAD, ANDOVER, KS 67002

CONSTRUCTION DOCUMENTS

REVISIONS:

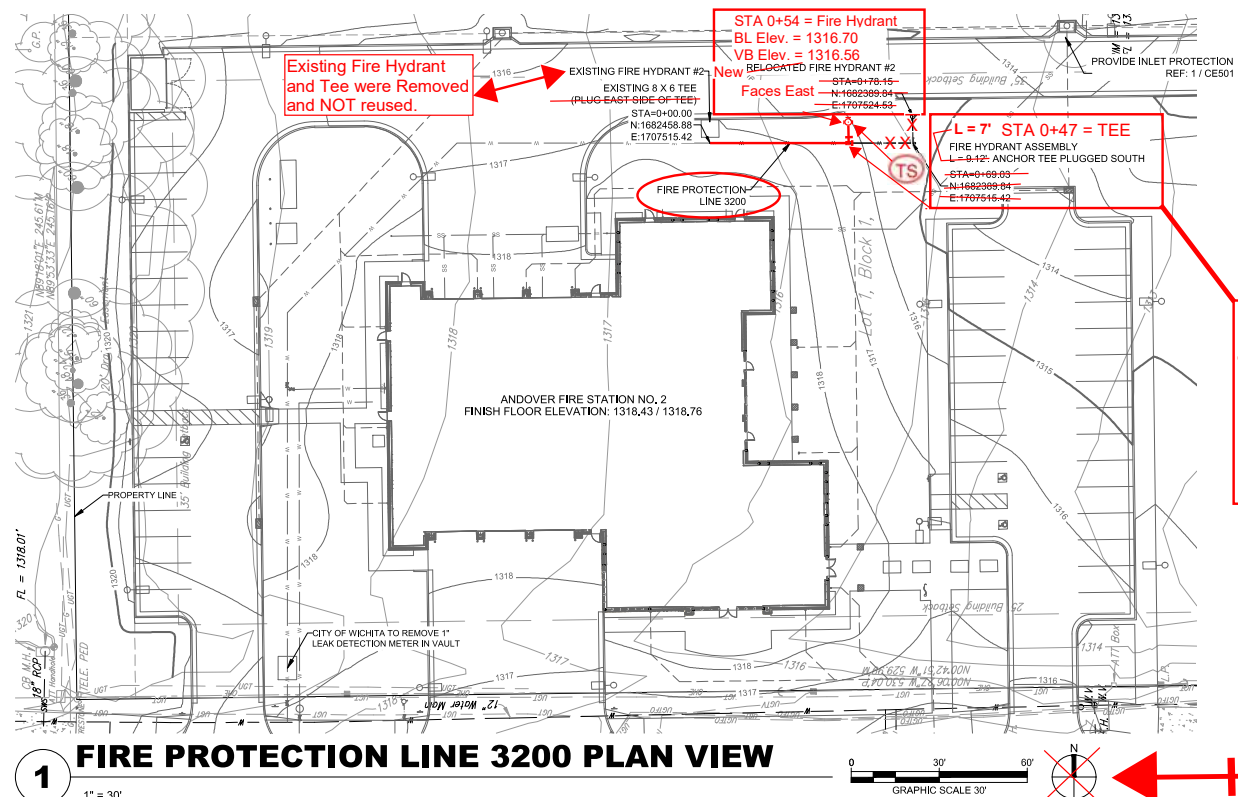
Description	Date

DERECK HOLMES - CIVIL ENGINEER
 KSA PE26313
 26313
 08/06/2024

PROJECT NO: 00799R21003
 DATE: 08/06/2024
 DRAWN BY: SJB
 CHK'D BY: DMH

PPW COVER SHEET

CU131



WATER LINE FITTING COORDINATES					
LINE	STA.	ITEM	NORTHING	EASTING	ELEV.
1	0+00	Tee	1,682,458.88	1,707,515.42	
1	0+47	FH Tee	1,682,411.94	1,707,516.60	1312.85
1	0+49	FH Valve	1,682,413.55	1,707,518.03	1316.56
1	0+54	FH	1,682,413.67	1,707,523.31	1316.70

VALVE ELEV. = TOP OF BOX FIRE HYD ELEV. = BURY LINE

From Centerlines of Minneha & Andover Road:
 TEE = 338' N. & 240' E.
 FH 6" VALVE = 338' N. & 242' E.
 NEW FIRE HYDRANT = 338' N. & 247' E.
 FH 6" Valve = 5' W. of Fire Hydrant.

GENERAL UTILITY NOTES

- UTILITY CONSTRUCTION SHALL COMPLY WITH THE STANDARD SPECIFICATIONS, CODES, AND DETAILS OF THE CITY OF WICHITA AND UTILITY PROVIDERS.
- INSTALLATION, BEDDING, & TESTING OF UTILITY INSTALLATIONS SHALL BE AS PER CITY OF WICHITA STANDARD SPECIFICATIONS AND STANDARD SPECIAL PROVISIONS.
 - THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES FOR FIELD LOCATION OF ALL UNDERGROUND UTILITY LINES PRIOR TO ANY EXCAVATION AND FOR MAKING HIS OWN VERIFICATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.
 - PROTECT ALL COMPONENTS DURING DEMOLITION / CONSTRUCTION PROCESS, MAINTAIN BMP'S THROUGHOUT THE DURATION OF CONSTRUCTION.
 - CONTRACTOR TO PROVIDE DETAILED AS-BUILT DRAWINGS TO OWNER/ENGINEER, CITY OF ANDOVER, AND CITY OF WICHITA UPON COMPLETION OF ALL UTILITIES.
 - UTILITY TRENCH BACKFILL SHALL BE PER SPECIFICATIONS WHEN ON PRIVATE PROPERTY. BACKFILL SHALL BE PER CITY OF WICHITA SPECIFICATIONS WITHIN PUBLIC RIGHT-OF-WAY.
 - UTILITY PIPE LENGTHS ARE PROVIDED FOR INFORMATION ONLY. CONTRACTOR TO VERIFY ACTUAL LENGTHS OF PIPE REQUIRED PRIOR TO BIDDING & INSTALLING UTILITIES.
 - CONTRACTOR TO MAKE FIELD ADJUSTMENT ACCORDING TO PIPE MANUFACTURERS RECOMMENDATIONS.

LEGEND

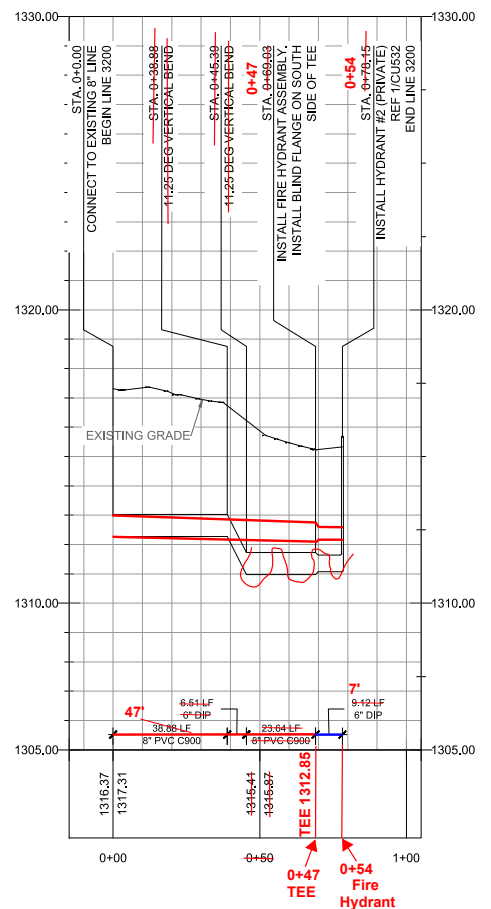
TS = Test Station

BL = Bury Line

CL = Centerline

1 FIRE PROTECTION LINE 3200 PLAN VIEW
 1" = 30' GRAPHIC SCALE 30' NORTH

CL ANDOVER ROAD



NOTES: THE 11.25° BENDS (VERTICAL) AT STA. 0+38.88 AND 0+45.39 WERE ELIMINATED.

THE TEE WAS MOVED TO STA. 0+47 TO AVOID CONFLICT WITH SANITARY SEWER SERVICE LINE.

A NEW FIRE HYDRANT WAS INSTALLED.

OLD FIRE HYDRANT WAS LEFT AT FIRE STATION #2 IN ANDOVER, AT THE REQUEST OF THE FIRE CHIEF.

**Northings and Eastings: State Plane Coordinates - Kansas Grid South - NAD83.
 Elevations: NAVD88
 GPS Survey Shots by Fred Smith - Baughman Company, P.A.**

2 FIRE PROTECTION LINE 3200 PROFILE
 HORIZONTAL 1" = 30'; VERTICAL 1" = 3'

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SECURITY & IT ENGINEERS

ANDOVER FIRE STATION NO. 2
 CITY OF ANDOVER
 650 SOUTH ANDOVER ROAD, ANDOVER, KS 67002

CONSTRUCTION DOCUMENTS

REVISIONS:

△	Description	Date

DERICK HOLMES
 LICENSED PROFESSIONAL ENGINEER
 26313
 KANSAS
 08/06/2024

DERICK HOLMES - CIVIL ENGINEER
 KSA PE26313

PROJECT NO:	00799R21003
DATE:	08/06/2024
DRAWN BY:	SJB
CHKD BY:	DMH

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WATER PLAN & PROFILES

CU231

Δ	Description	Date

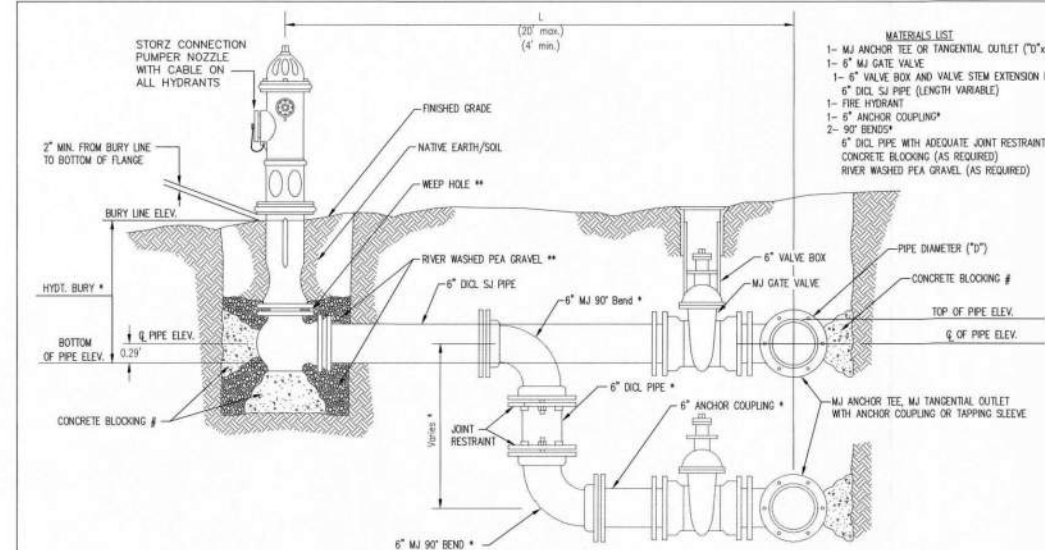
DERICK HOLMES - CIVIL ENGINEER
KSA# PE26313

PROJECT NO:	0079R21003
DATE:	08/06/2024
DRAWN BY:	KDW
CHKD BY:	DMH

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WATER DETAILS

CU532



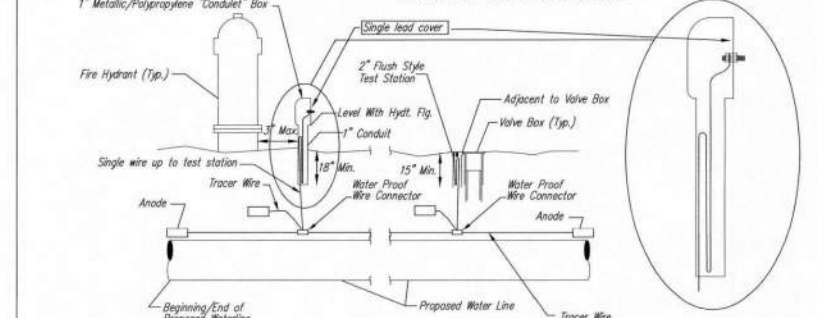
- MATERIALS LIST**
- 1- MJ ANCHOR TEE OR TANGENTIAL OUTLET (12" x 6")
 - 1- 6" MJ GATE VALVE
 - 1- 6" VALVE BOX AND VALVE STEM EXTENSION IF REQUIRED *
 - 6" DI. SJ PIPE (LENGTH VARIABLE)
 - 1- FIRE HYDRANT
 - 1- 6" ANCHOR COUPLING*
 - 2- 90° BENDS*
 - 6" DI. PIPE WITH ADEQUATE JOINT RESTRAINT *
 - CONCRETE BLOCKING (AS REQUIRED)
 - RIVER WASHED PEA GRAVEL (AS REQUIRED)

* 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. PIPE AS NECESSARY FOR VERTICAL ADJUSTMENT. THE CONTRACTOR SHALL PROVIDE ADEQUATE THRUST BLOCKING AT HYDRANT AND MEGALUGS, 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



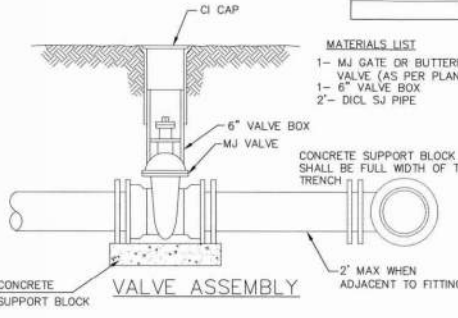
TRACER WIRE
Conductive type pipe locator/tracer wire shall be installed to locate all waterline pipe regardless of pipe material. The wire shall extend the entire length of the proposed pipe. The wire shall be taped to the waterline and pulled with the pipe. A waterproof connector shall be used at splice 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.

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.

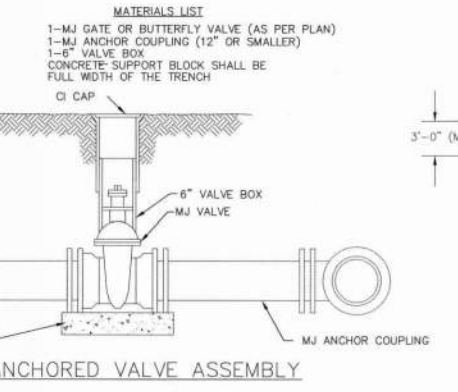
TEST STATIONS
The test station for fire hydrant application shall be a 1" "conduit" style station as manufactured by AGRA Industries with a removable solid cover having a single lead extending from the face or approved equal. The "conduit" style test station shall be attached to a 1" rigid galvanized 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 installed 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.

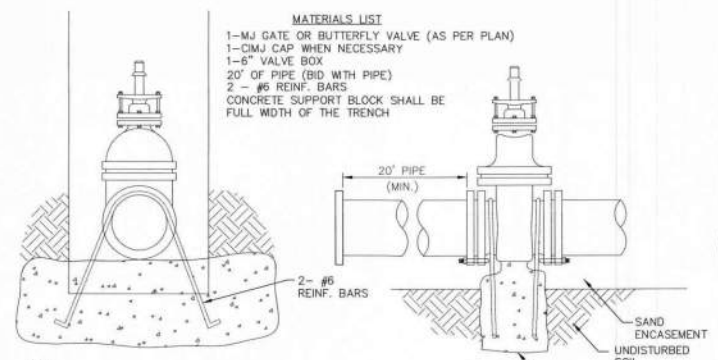
TRACER WIRE DETAIL
COST IS SUBSIDIARY TO PIPE INSTALLATION



- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1- MJ ANCHOR COUPLING (12" OR SMALLER)
 - 1- 6" VALVE BOX
 - CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH



- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1- CMJ CAP WHEN NECESSARY
 - 1- 6" VALVE BOX
 - 20' OF PIPE (BD WITH PIPE)
 - 2- #6 REIN. 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.

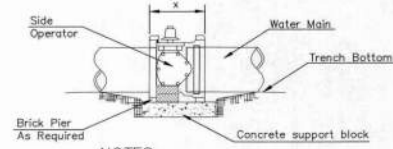
THRUST AT VALVES

VALVE	THRUST AT 150 PSI
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.

ANCHORED VALVE ASSEMBLY, SPECIAL

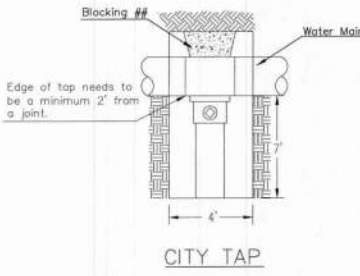
FIRE HYDRANTS REQUIRED

STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*	FIRE HYDRANT VALVE STEM EXT. REQUIRED (ft)*
077745 (LINE 3200)	1316.33	1311.64	4.26	NO
0+54	1316.70			

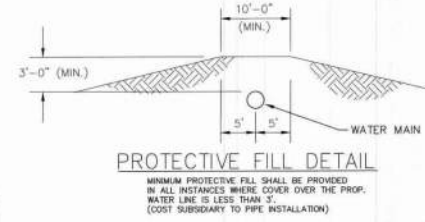


- NOTES**
- This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. 24" and larger lines to be detailed on plans.
 - 6" Valve Box and Cover required per City of Wichita Std. Specifications.
 - Conc. Support Block to be full width of trench.

CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION

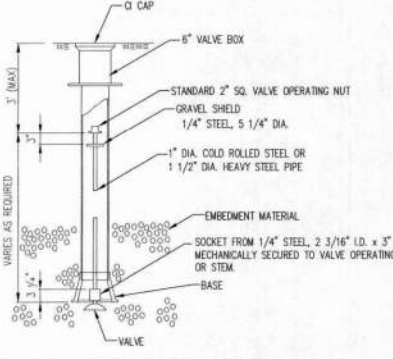


CITY TAP



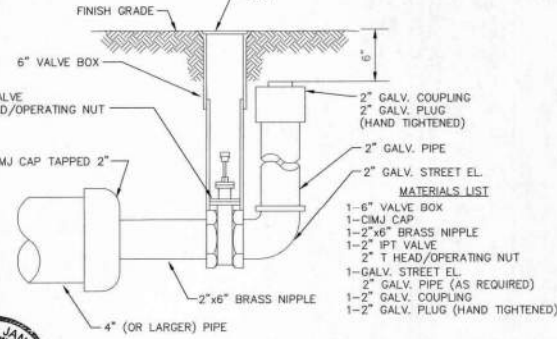
PROTECTIVE FILL DETAIL

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 BURIED GREATER THAN 5'.



2" BLOWOFF ASSEMBLY



CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

STANDARD WATER ASSEMBLY DETAIL

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

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

WL-101

1 STANDARD WATER ASSEMBLY DETAIL
NTS