

AS-BUILT PLANS

GENERAL NOTES

PRIVATE WATER DISTRIBUTION SYSTEM IMPROVEMENTS

TO SERVE

AIRXCEL WAREHOUSE ADDITION

PROJECT NO. 2022-019568PPW

THE CITY OF WICHITA, KANSAS
GARY JANZEN, P.E. - CITY ENGINEER

ORG CODE 54030980

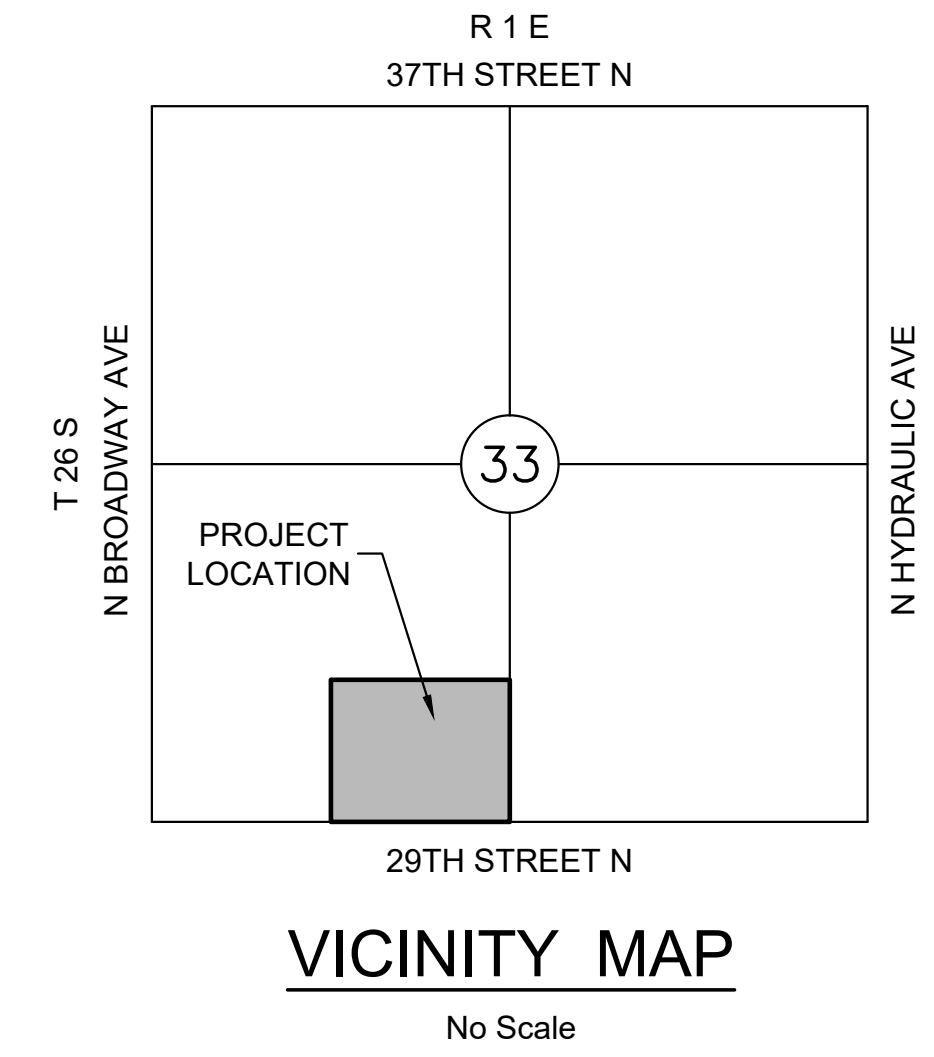
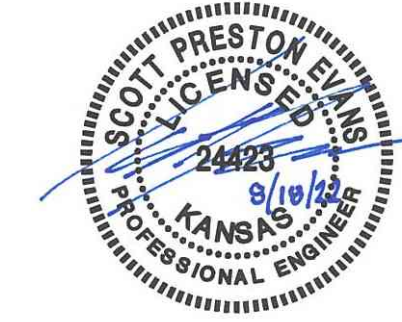
Baughman No.: 23-06-E529

Construction Began: June 27, 2023
Construction Ended: July 18, 2023

FH Assy = Clow
Valve = Clow
8" PVC = Sanderson Pipe
8" DICL = McWane Ductile

CONTRACTOR: Pearson Construction
INSPECTOR: James Ralston
Baughman Co.

As-Built By: JAR
As-Built Date: July 21, 2023



VICINITY MAP
No Scale

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
01	TITLE SHEET
02-03	DETAILS
04	WTR LINE 1 & FH RELOCATE
05-09	BMP DETAILS

LEGEND

- W — EXISTING WATER
- P — PROPOSED WATER

CONTROL POINTS

CP 100
N: 1704523.177 E: 1650585.741 EL: 1315.14
Description of control point: 5/8 x 24" rebar with MKEC aluminum control cap

CP 101
N: 1704540.507 E: 1651574.479 EL: 1315.58
Description of control point: 5/8 x 24" rebar with MKEC aluminum control cap

CP 102
N: 1705585.541 E: 1650560.046 EL: 1315.605
Description of control point: + cut top of curb

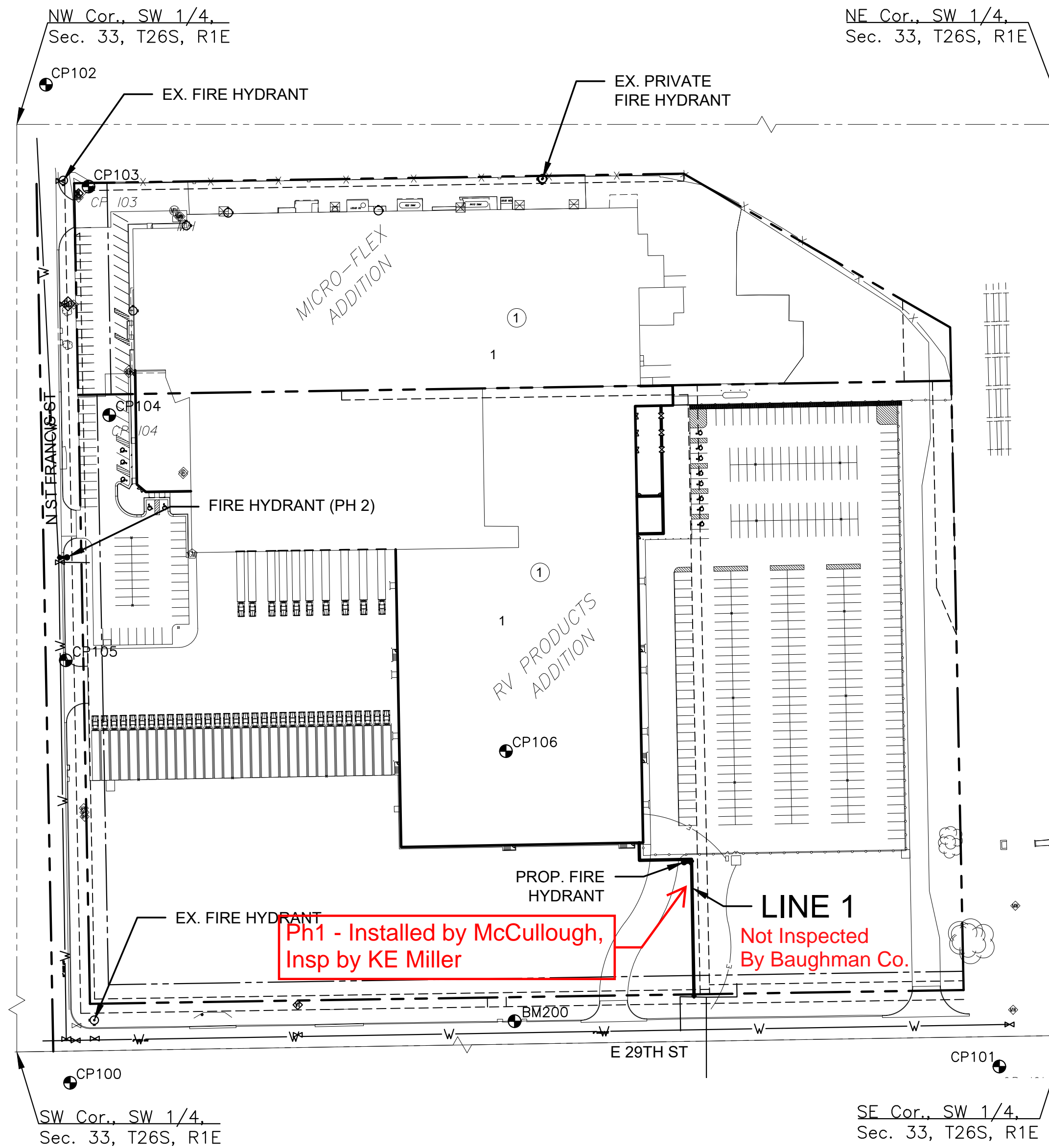
CP 103
N: 1705477.106 E: 1650605.346 EL: 1316.91
Description of control point: PKN and washer

CP 104
N: 1705233.806 E: 1650627.411 EL: 1317.205
Description of control point: PKN

CP 105
N: 1704972.900 E: 1650581.171 EL: 1315.015
Description of control point: + cut top of curb

CP 106
N: 1704876.145 E: 1651049.489 EL: 1316.685
Description of control point: + cut center of concrete slab

Benchmarks:
BM 200
N: 1704588.754 E: 1651058.685 EL: 1313.86 (88)
Description of Benchmark: square cut top of curb at the SE corner of curb inlet



DATUM

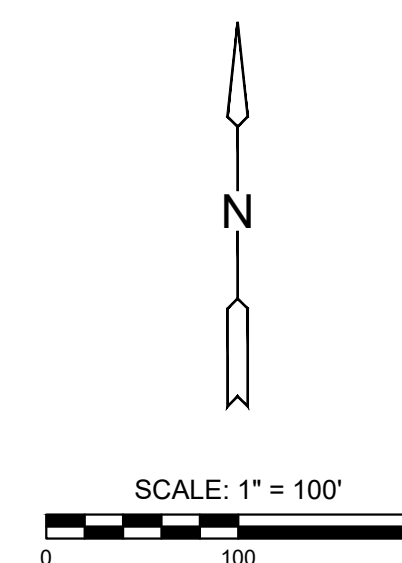
The Horizontal Datum is based on the Kansas Coordinate System of 1983, NAD83(2011), EPOCH 2010.0000, South Zone. Coordinates shown have been modified to the ground using a combined adjustment factor of 1.0001200144. State Plane coordinates can be calculated by multiplying the shown values by 0.99988.

All elevations shown are based on the NAVD 88 vertical datum, Geoid12b.

NOTE

All Control Points shown have elevations established using standard surveying procedures and can be used as temporary benchmarks. When using a Control point as a temporary benchmark, it is recommended that cross-checks be made to other control points or benchmarks to confirm elevations prior to use.

NOTE: WATER LINE VALVES TO BE OPERATED BY CONTRACTOR ONLY IF WATER INSPECTOR IS ON SITE.



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

Engineering approved by Shawn Mellies on this day the 18th of August, 2022

Utilities approved by Greg Lolley on this day the 18th of August, 2022

Fire Department approved by Jose Ocaidiz on this day the 18th of August, 2022

NOTE TO CONTRACTORS

Public Property:

Inspection and testing for the water line 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 Professional Engineer Licensed in the state of Kansas. No work shall be performed in dedicated easements or public rights-of-way by the Contractor without such inspection nor shall any work be commenced without written authorization by the City Engineer. 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 is required on-site.



PRIVATE WATER DISTRIBUTION PLANS FOR
AIRXCEL WAREHOUSE ADDITION
3050 N. ST. FRANCIS STREET, WICHITA, KANSAS 67219

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TITLE SHEET

PROJECT NO.	2022-019568PPW	
DATE	JULY 2022	
SCALE	1"=100'	
DESIGNED	DRAWN	CHECKED
SPE	LM	SPE

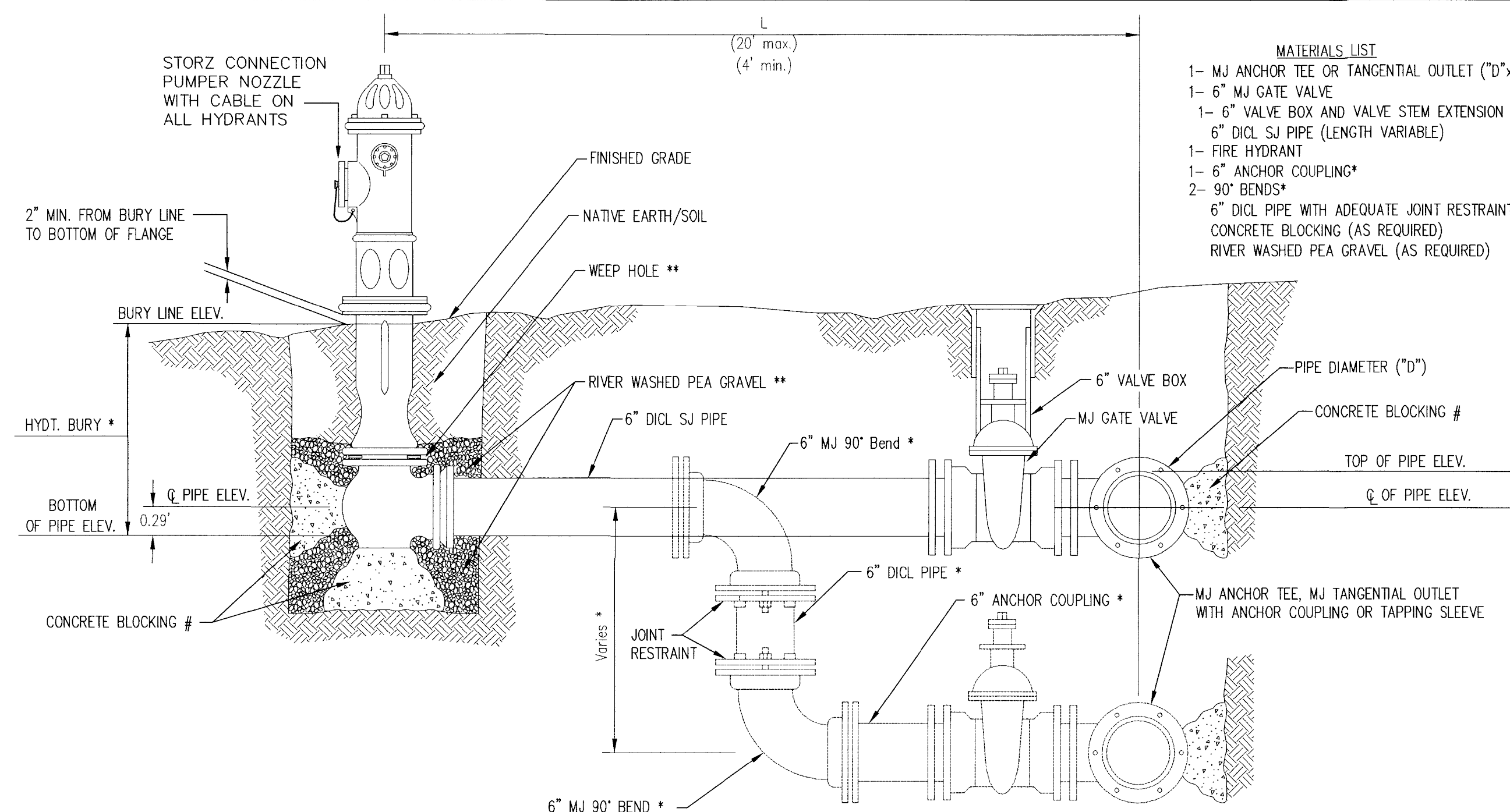
NO.	REVISION	DATE

SHEET NO.
01 OF 09

NOTE: ALL LINES TO BE INSTALLED BY OTHERS ARE SUBJECT TO MABCD REVIEW.

NOTE: CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.

J:\PROJECTS\2022\2201010369_CROSSLAND_AIRXCEL_EXPANSION\00-220369_CAD\SHETS\05-CIVIL\WTR\PPW\2269-TITLE SHEET.DWG



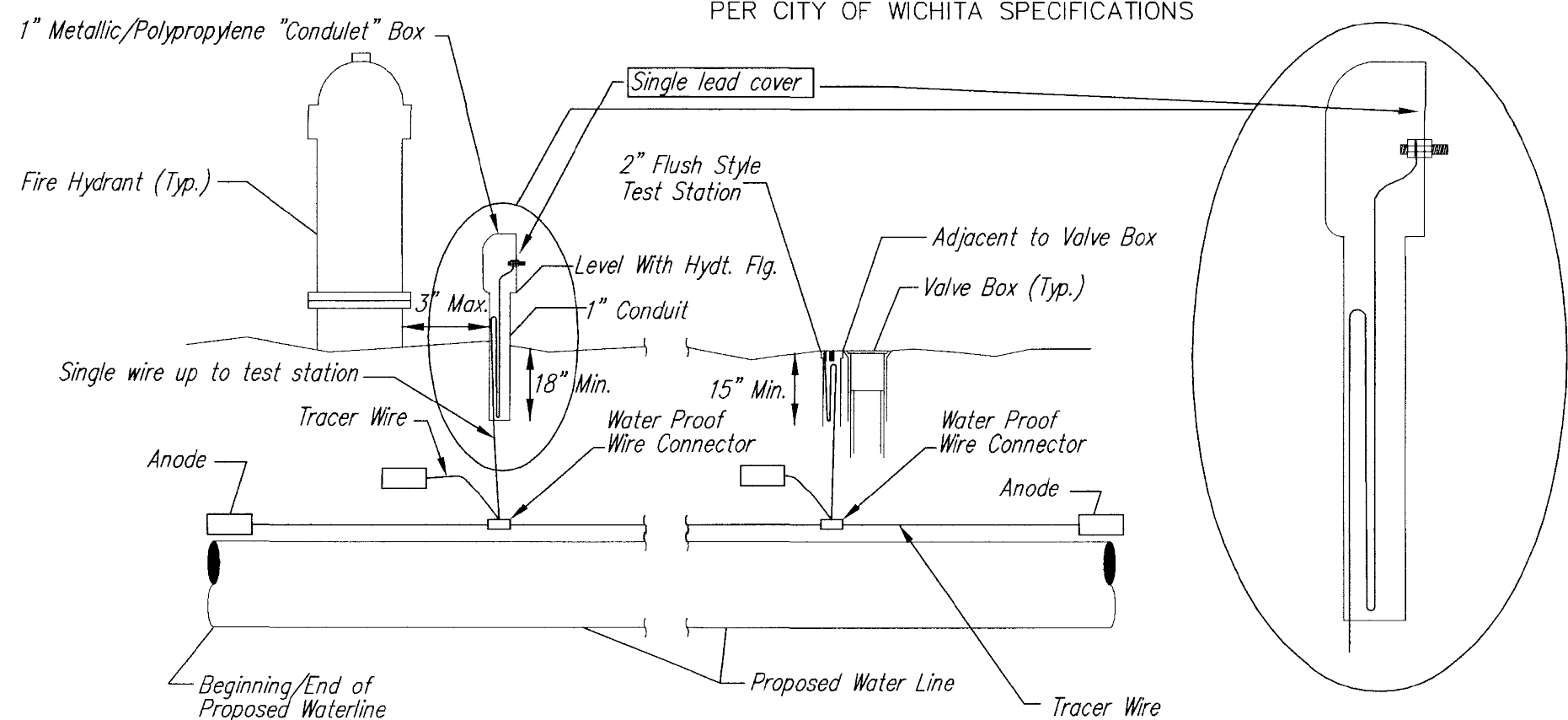
- MATERIALS LIST**
- 1- MJ ANCHOR TEE OR TANGENTIAL OUTLET ("D"x 6")
 - 1- 6" MJ GATE VALVE
 - 1- 6" VALVE BOX AND VALVE STEM EXTENSION IF REQUIRED *
 - 6" DI-CL SJ PIPE (LENGTH VARIABLE)
 - 1- FIRE HYDRANT
 - 1- 6" ANCHOR COUPLING*
 - 2- 90° BENDS*
 - 6" DI-CL PIPE WITH ADEQUATE JOINT RESTRAINT *
 -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

* 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 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 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.

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 "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 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

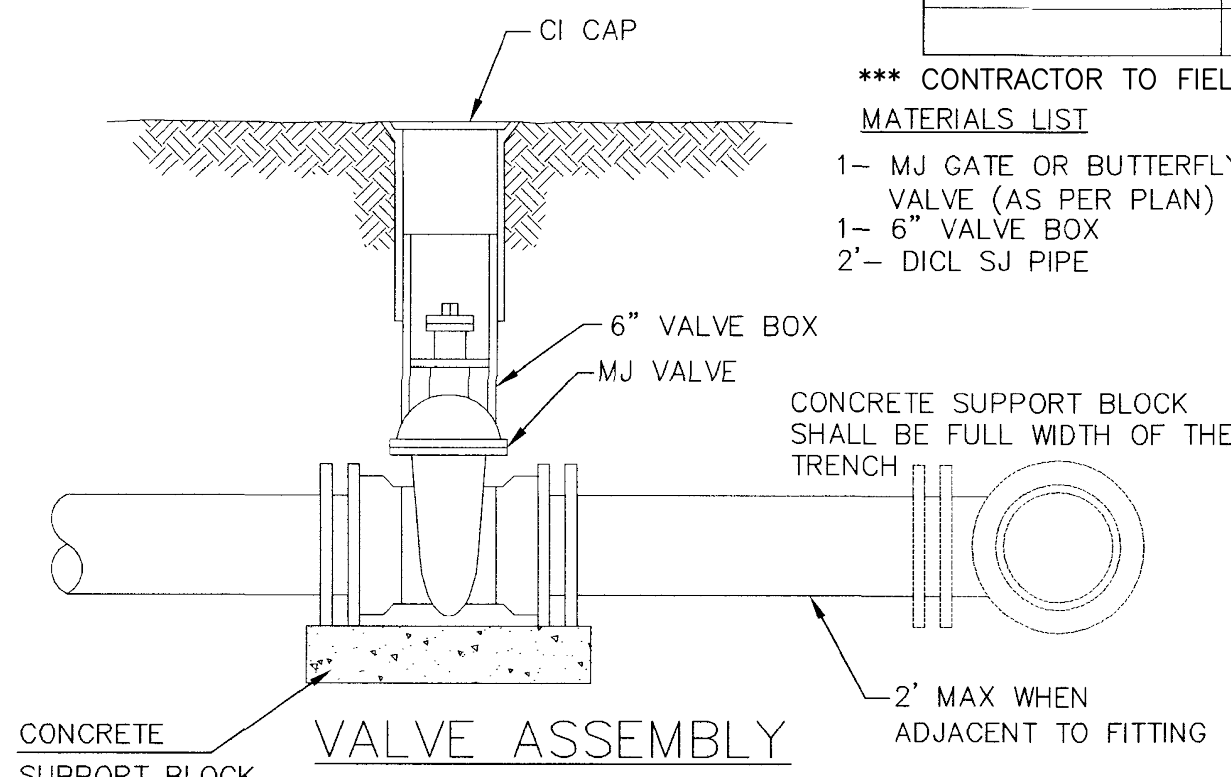
The anodes shall be 3 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to 12 AWG CCS which shall be extended to the test station.

TRACER WIRE DETAIL
COST IS SUBSIDIARY TO PIPE INSTALLATION

FIRE HYDRANTS REQUIRED				
STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*	VALVE STEM EXT. REQUIRED (ft)*
11+43.50, WL1	1315.79	1311.96	4.5	N/A
FH 2	1315.72	***	N/A	N/A
	1315.55			NONE

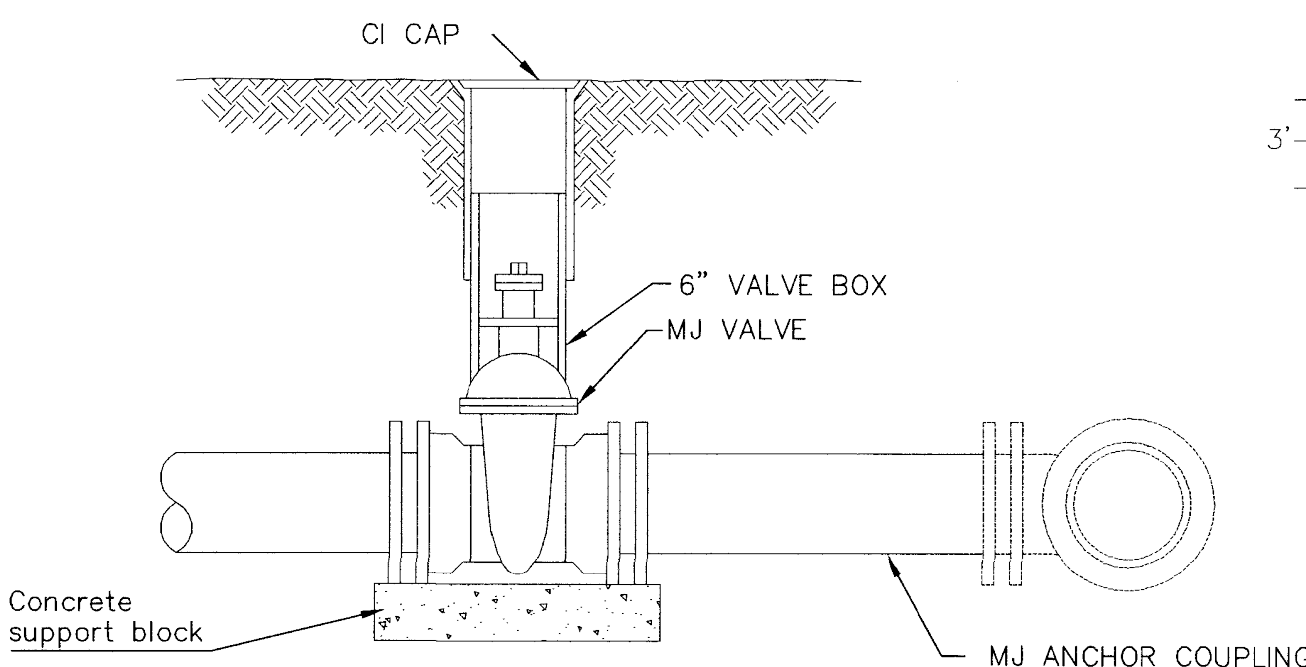
*** CONTRACTOR TO FIELD VERIFY DEPTH OF EXISTING WATER LINE.

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

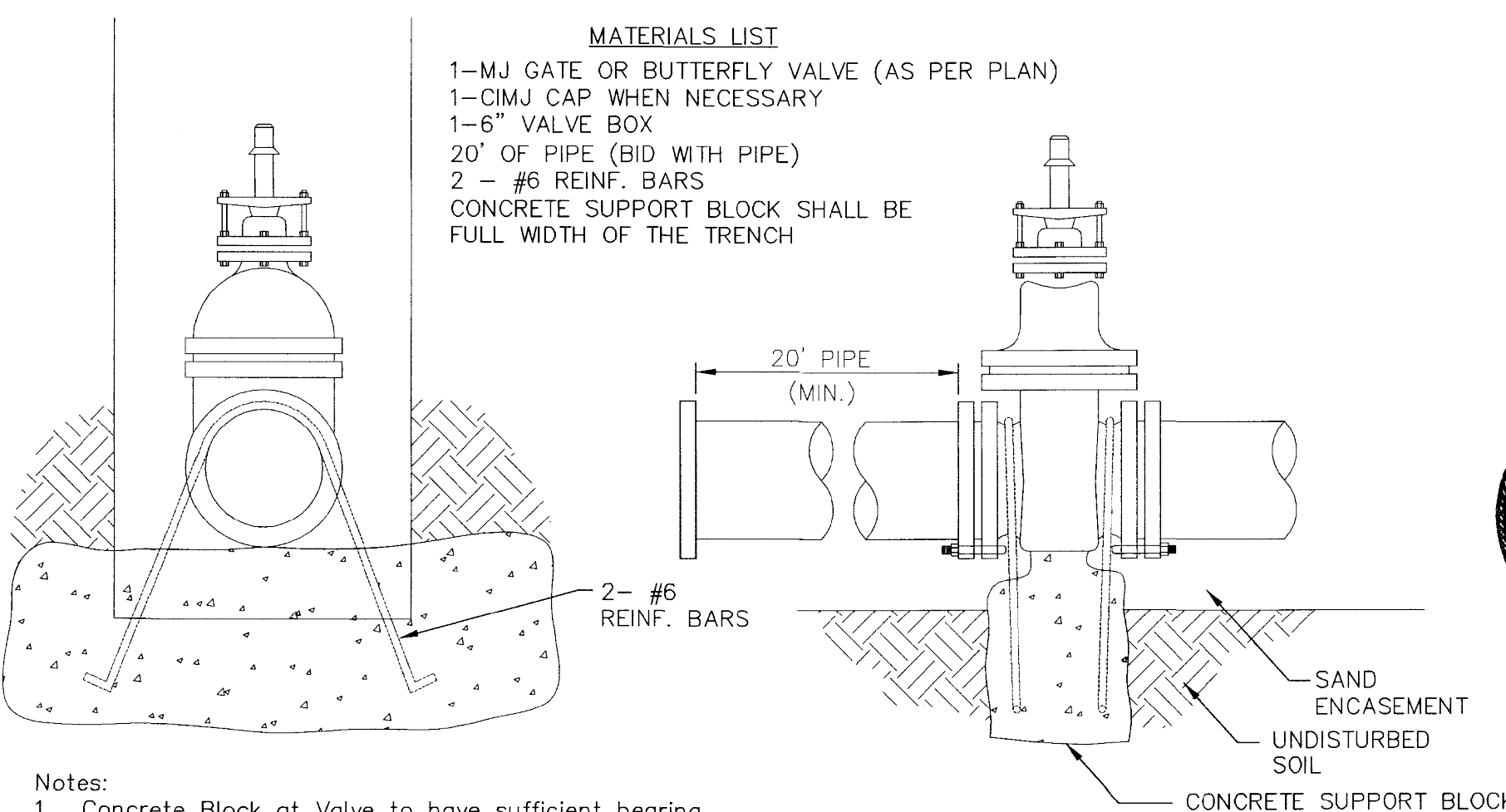


MATERIALS LIST

- 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



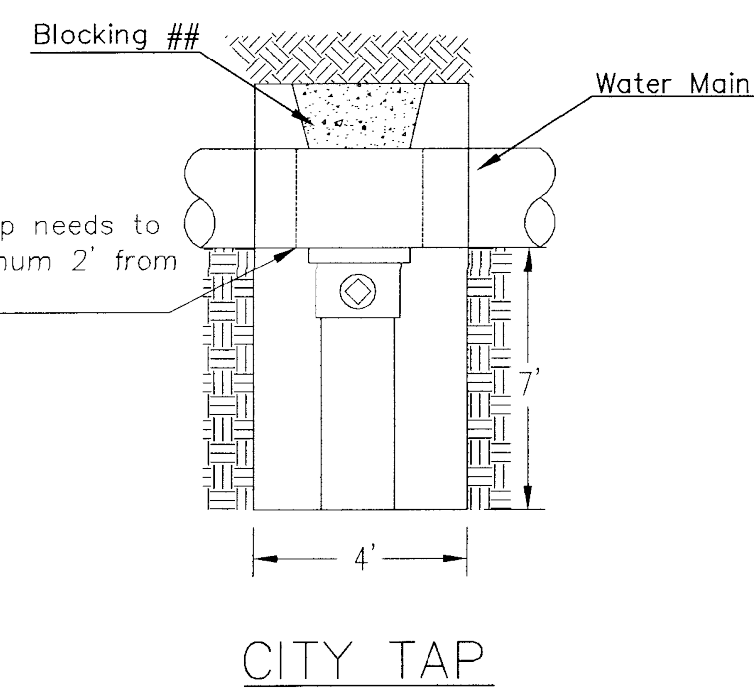
ANCHORED VALVE ASSEMBLY, SPECIAL



Notes:

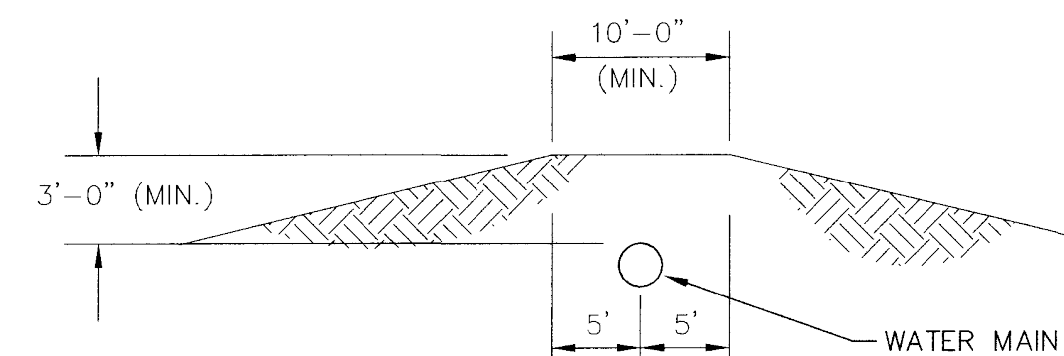
- Concrete Block at Valve to have sufficient bearing in undisturbed soil to prevent thrust movement as shown in table at right. Field Engineer to determine thrust loading of undisturbed soil and final size of thrust block.
- The thrust block shall be constructed such that bolts, nuts, and other MJ accessories 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
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.



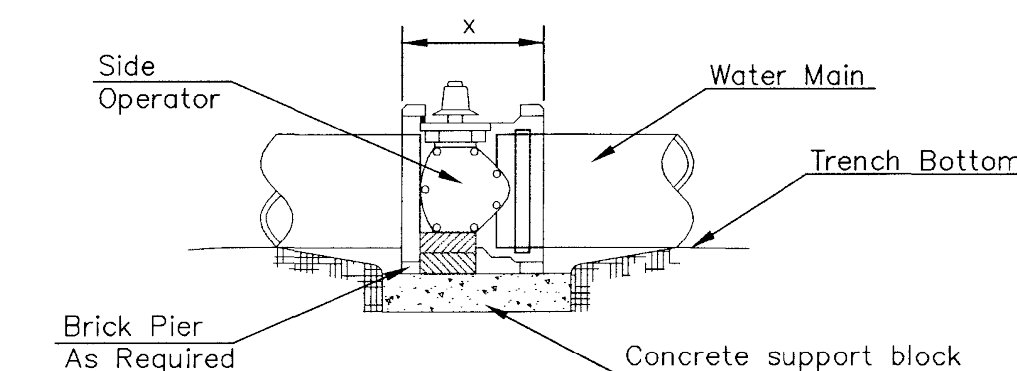
CITY TAP

When the City of Wichita makes tap, blocking is to be done by Contractor



PROTECTIVE FILL DETAIL

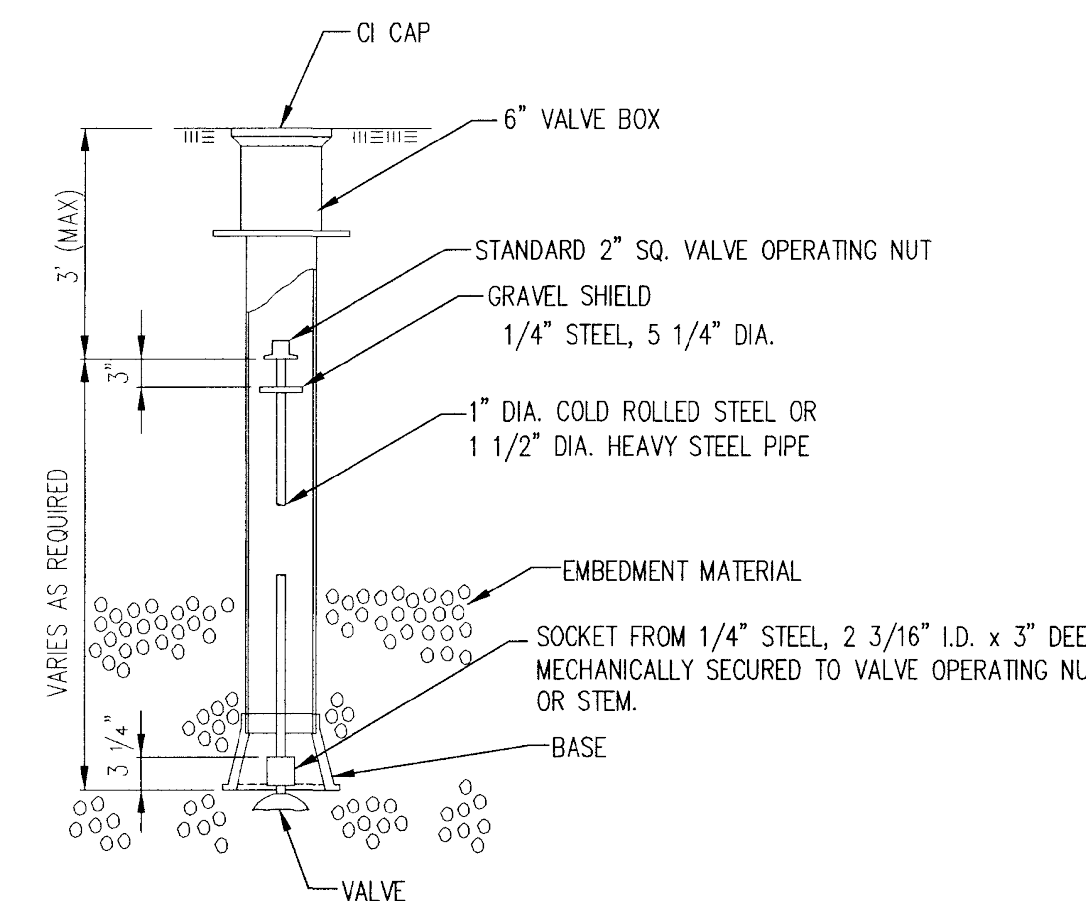
MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN 3". (COST SUBSIDIARY TO PIPE INSTALLATION)



NOTES

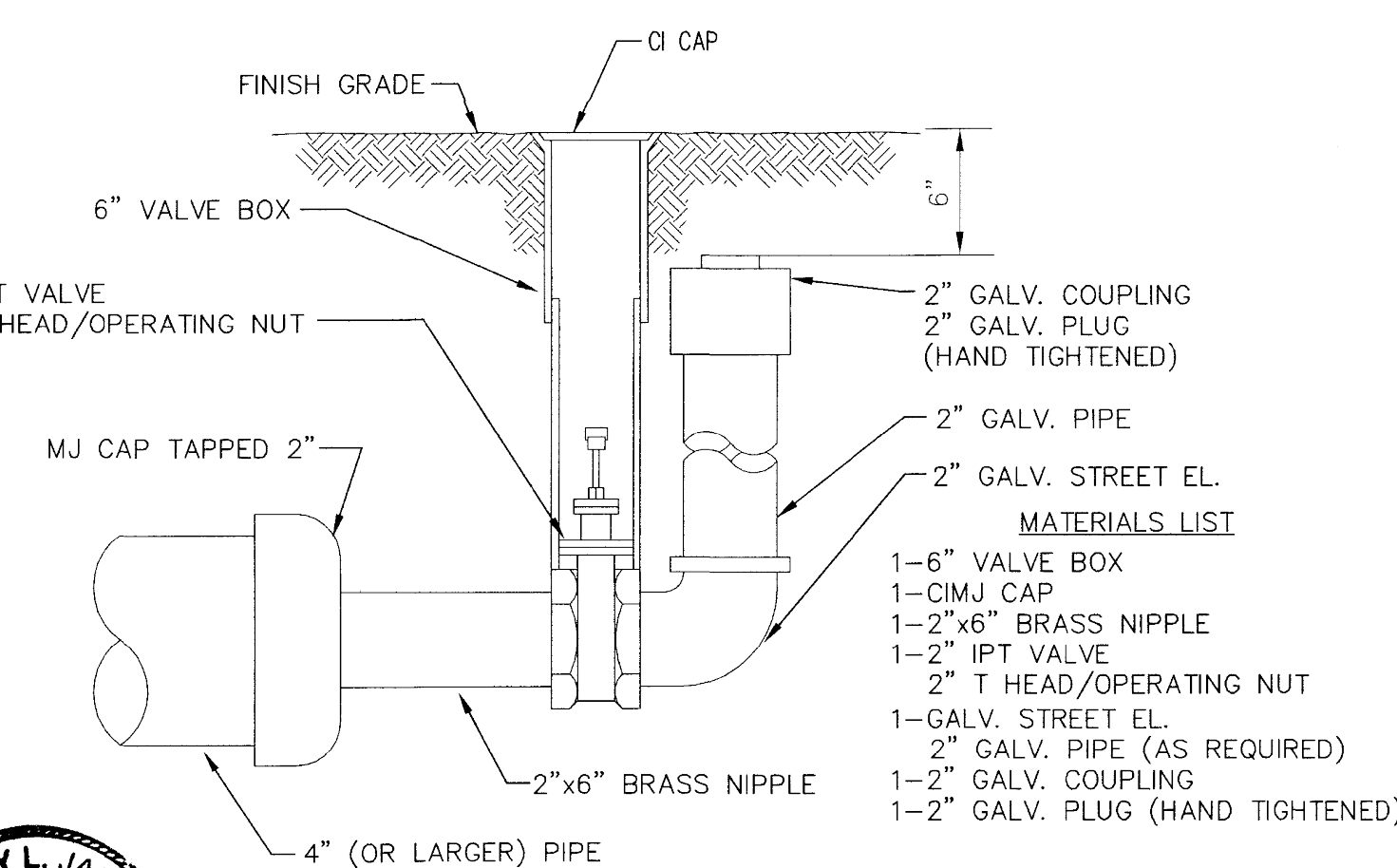
- This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. 24" and larger lines to be detailed on plans.
- 6" Valve Box and Cover required per City of Wichita Std. Specifications.
- Conc. Support Block to be full width of trench.

CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION

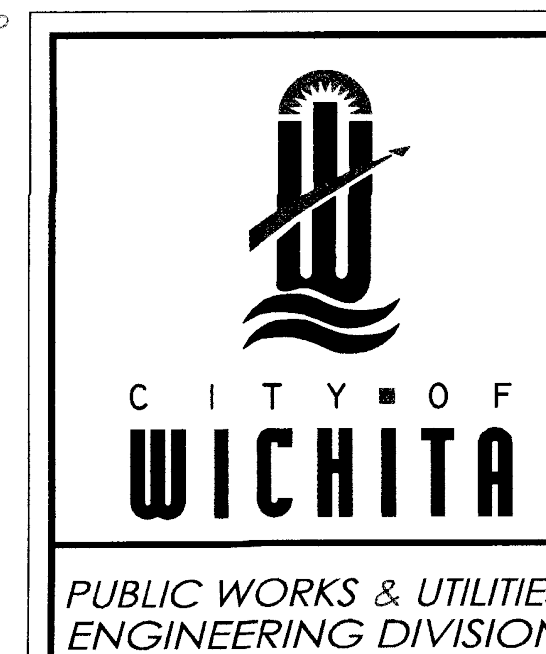
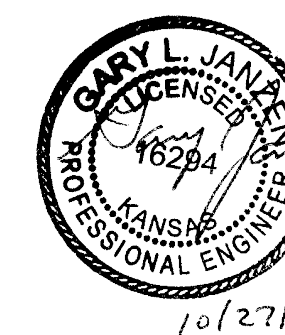


VALVE STEM EXTENSION DETAIL

NOTE: ONE VALVE STEM EXTENSION FOR EACH VALVE BURIED GREATER THAN 5'.



2" BLOWOFF ASSEMBLY



STANDARD WATER ASSEMBLY DETAIL		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE
2022-019568PPW		JULY 2022
CITY ENGINEER'S OFFICE		SHEET
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		02 OF 09

REVISED: OCTOBER 2016

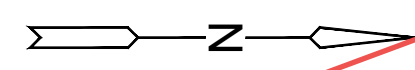
PLOTTED: Thursday, August 18, 2022 @ 10:12PM
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Installed By McCullough on Ph1, Insp. by KE Miller

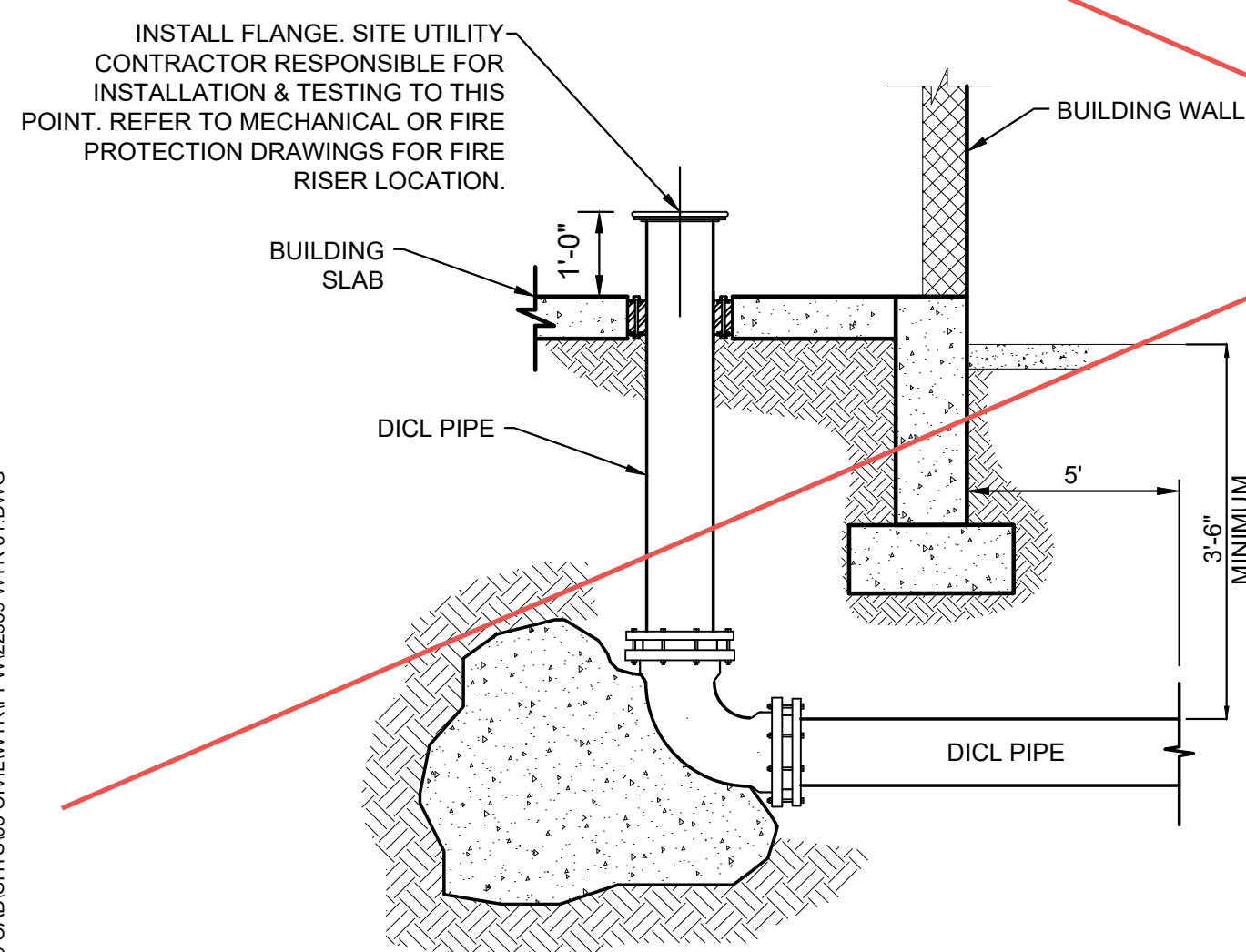
NOT INSPECTED BY BAUGHMAN

PHASE 1 SCOPE OF WORK

BEND CHART				
NO.	8" BEND	STA.	NORTHING	EASTING
①	22.5'	11+82.05	1704760.43	1651211.36
②	22.5'	11+88.05	1704760.32	1651205.37
③	22.5'	11+93.05	1704760.23	1651200.37
④	22.5'	11+97.92	1704760.14	1651195.50

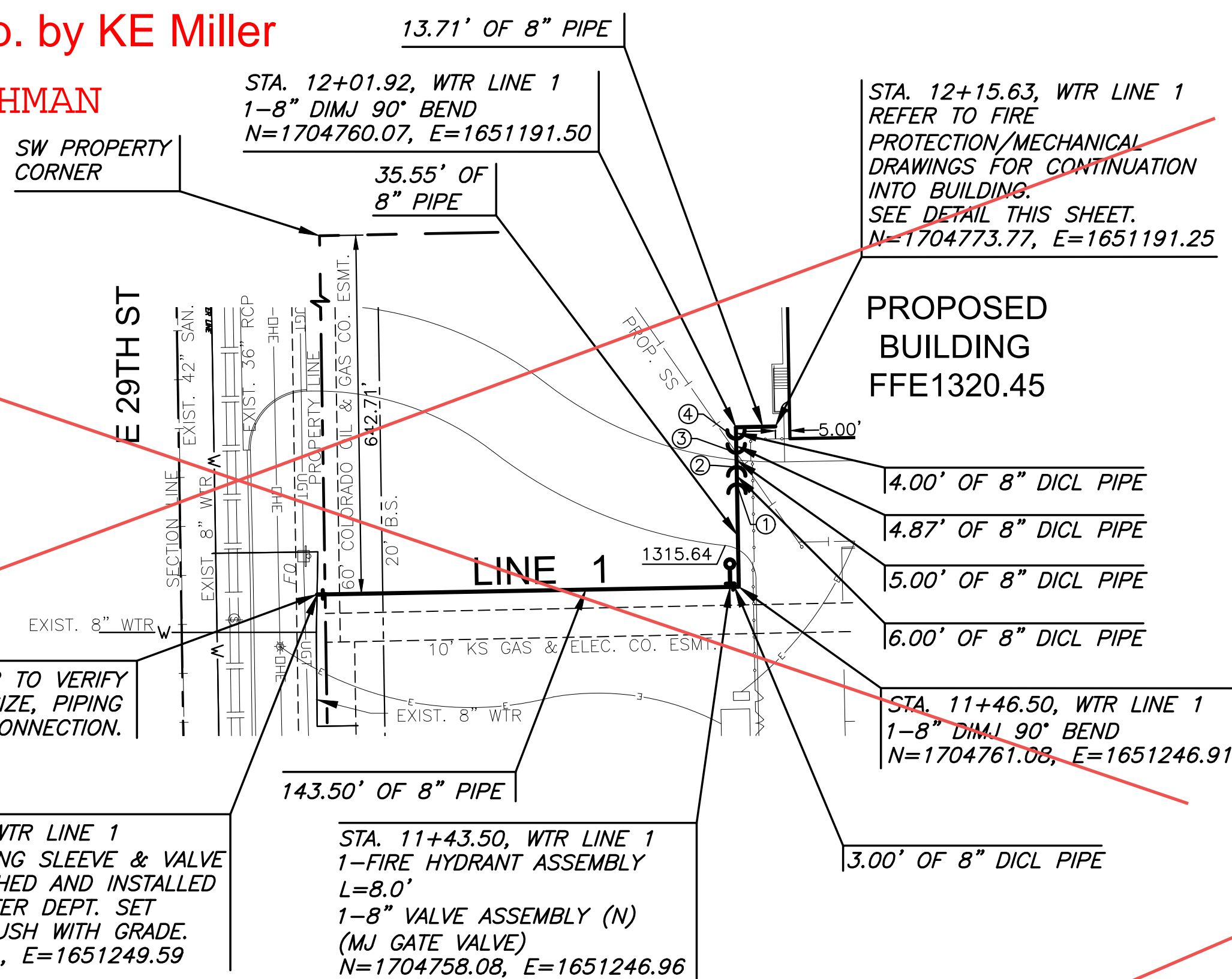


NOTE:
CONTRACTOR TO VERIFY LOCATION
AND ELEVATION OF EXISTING WATER
LINE PRIOR TO CONSTRUCTION.

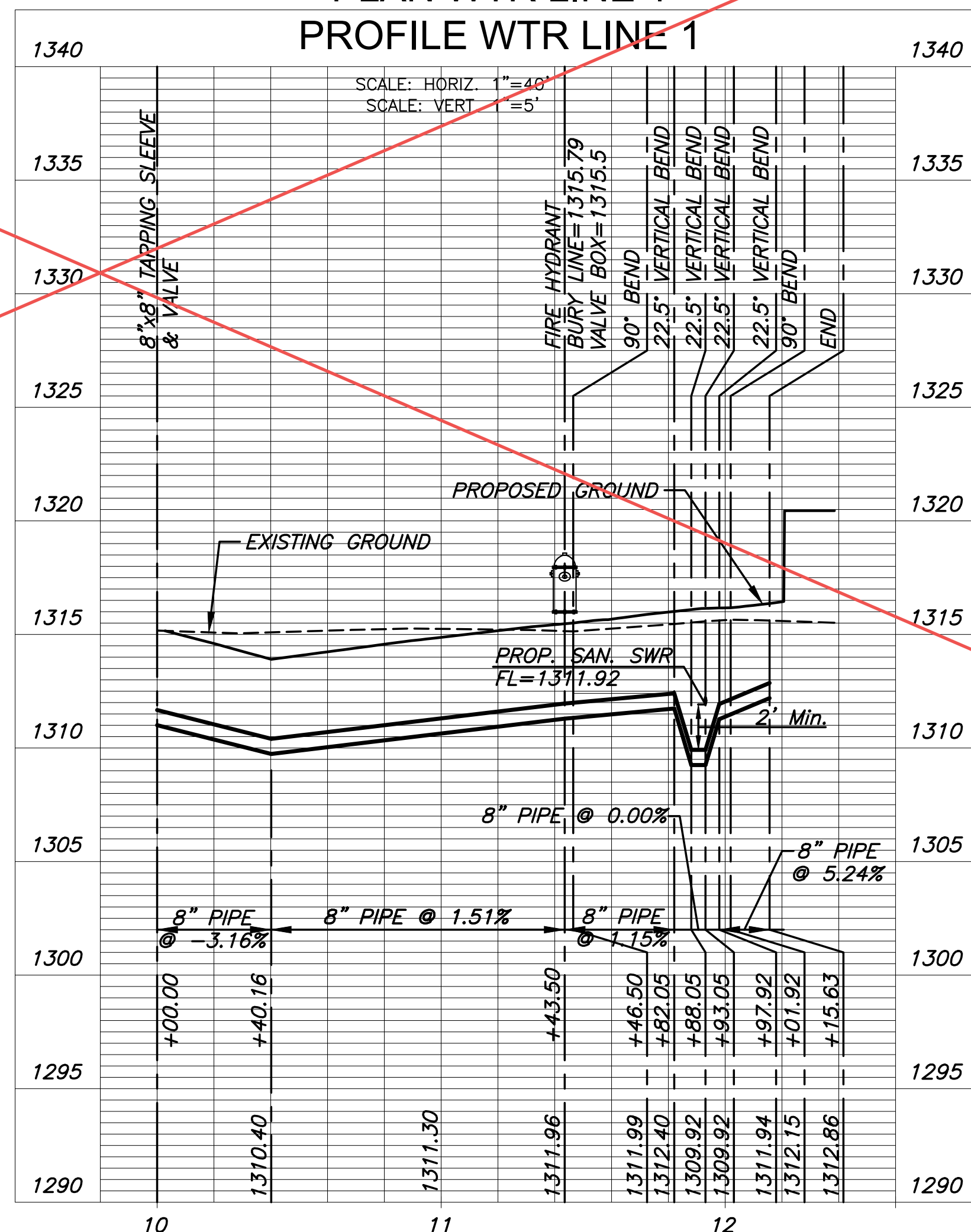


1 FIRE PROTECTION AT BUILDING (TYP.)

SCALE: NTS



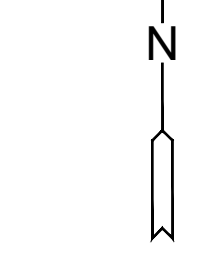
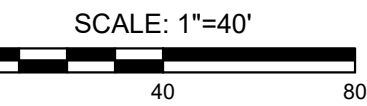
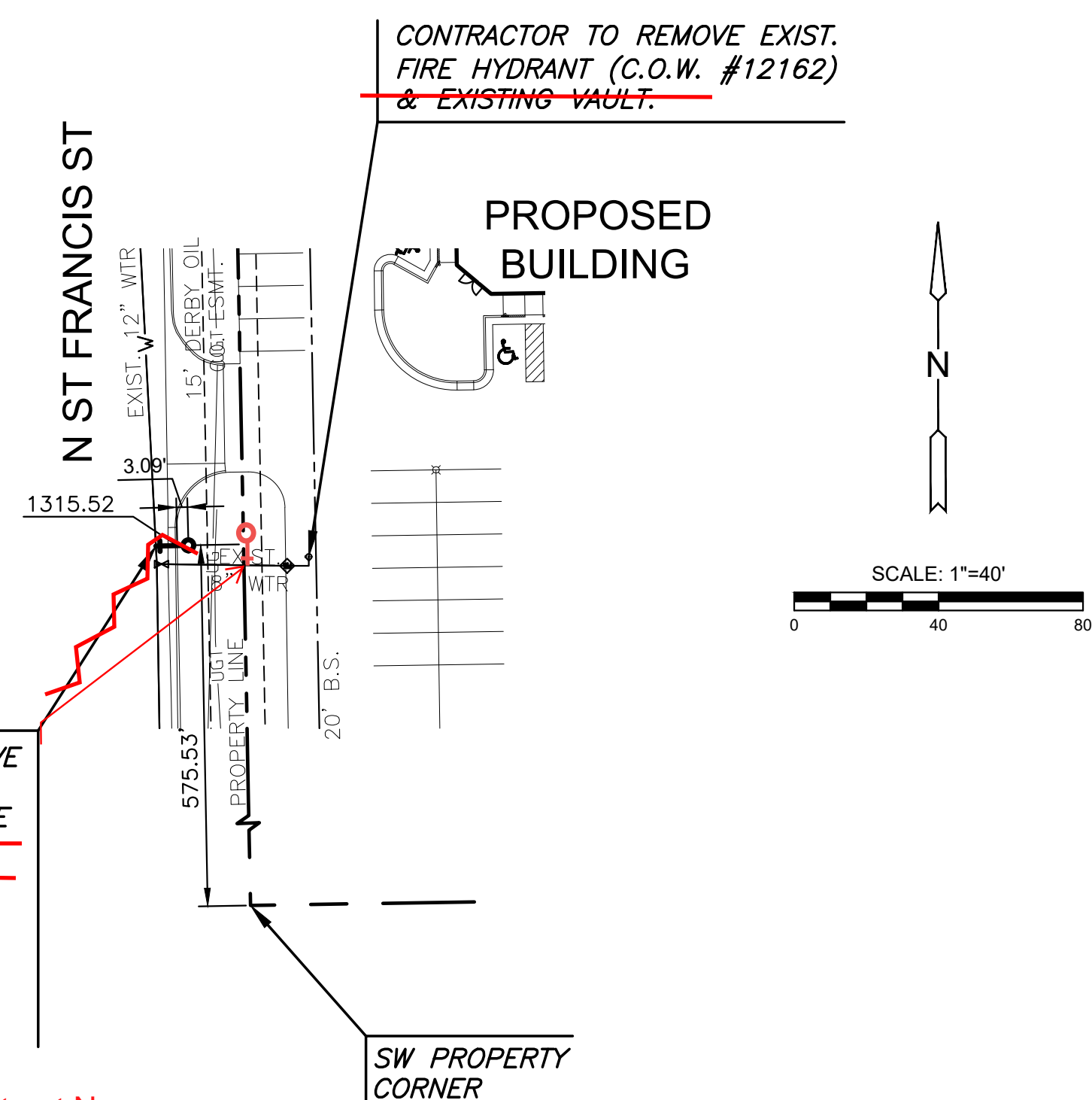
PLAN WTR LINE 1
PROFILE WTR LINE 1



PHASE 2 SCOPE OF WORK

Tapped 8" line running to existing vault
that serves a fireline into the building,
not the 12" line along St. Francis.

8"
1-12"x6" TAPPING SLEEVE & VALVE
TO BE FURNISHED AND INSTALLED
BY C.O.W. WATER DEPT. SET VALVE
BOX FLUSH WITH GRADE. REMOVE
& REPLACE CURB & GUTTER AND
PAVEMENT, IN LIKE KIND, AS
NECESSARY FOR WATER TAP.
1-FIRE HYDRANT ASSEMBLY
L=9.0' 6.0' (N)
N=1705002.26, E=1650573.43
N=1704877.44, E=1650400.31
Tee is 521' N. of CL of 29th Street N
41' E. of CL St Francis Street
Valve is 523' N. of CL of CL 29th Street N
41' E. of CL St Francis Street
Fire Hydrant is 527' N. of CL of CL 29th Street N
41' E. of CL St Francis Street



PRIVATE WATER DISTRIBUTION PLANS FOR
AIRXCEL WAREHOUSE ADDITION
 3050 N. ST. FRANCIS STREET, WICHITA, KANSAS 67219

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WTR LINE 1 & FH
RELOCATE

PROJECT NO.	2022-019568PPW	
DATE	JULY 2022	
SCALE	1"=40'	
DESIGNED	DRAWN	CHECKED
SPE	LM	SPE

NO.	REVISION	DATE

SHEET NO.
04 OF 09