

AS BUILT PLANS

Contractor: Dondlinger Const.
 Inspector: Don Eddingfield, Baughman Co.
 pdf's by: KEK, 1/4/13
 American Valves & Hydrants

WATER LINE SYSTEM TO SERVE

West High School Addition

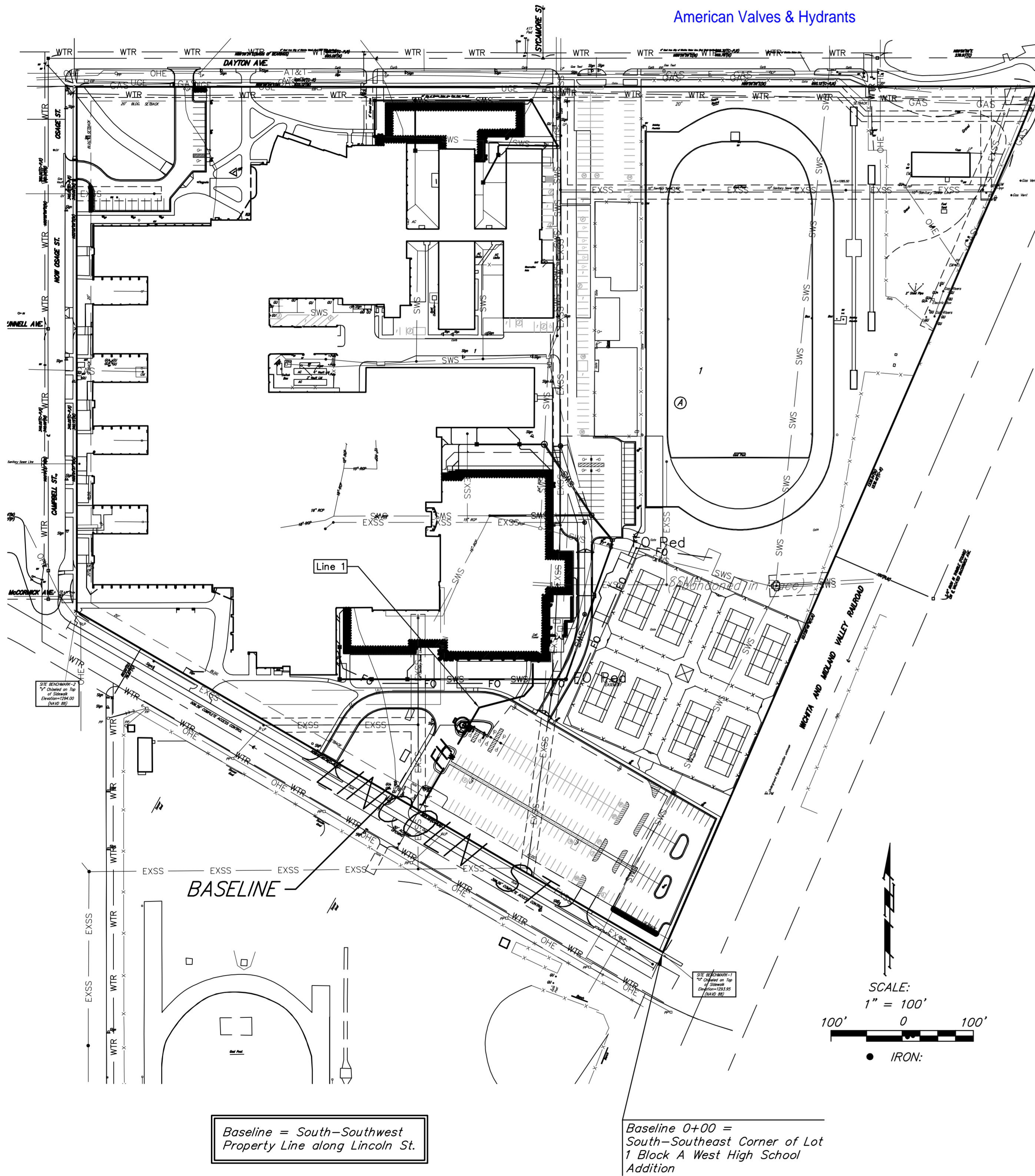
Lot 1, Block A

Private Project: 1633 PPW (607853)

CITY OF WICHITA, KANSAS

James Armour, P.E. City Engineer

July 2012



Baseline = South-Southwest Property Line along Lincoln St.

Baseline 0+00 = South-Southeast Corner of Lot 1 Block A West High School Addition

Benchmarks

Benchmark #1 - "□" Chiseled on Top of Sidewalk
 Elevation=1293.95 (NAVD 88)

Benchmark #2 - "v" Chiseled on Top of Sidewalk
 Elevation=1294.00 (NAVD 88)

Legal Description

Part of Lot 1, Block A of West High School Addition, in Wichita, Sedgwick County, KS.

APPROVED AS NOTED
 BY CITY ENGINEER OF WICHITA,
 BY WICHITA WATER & SEWER DEPARTMENT,
 & BY WICHITA FIRE DEPARTMENT

Public Works: *Julianne Kallman 8-6-12*
 Water & Sewer: *Aug 10th 08-06-12*
 Fire: *Budman 8-07-2012*

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 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 the City Engineer. All Construction and Materials shall comply with the City or Wichita Specifications and Standards (on file and available in the City Engineer's Office).

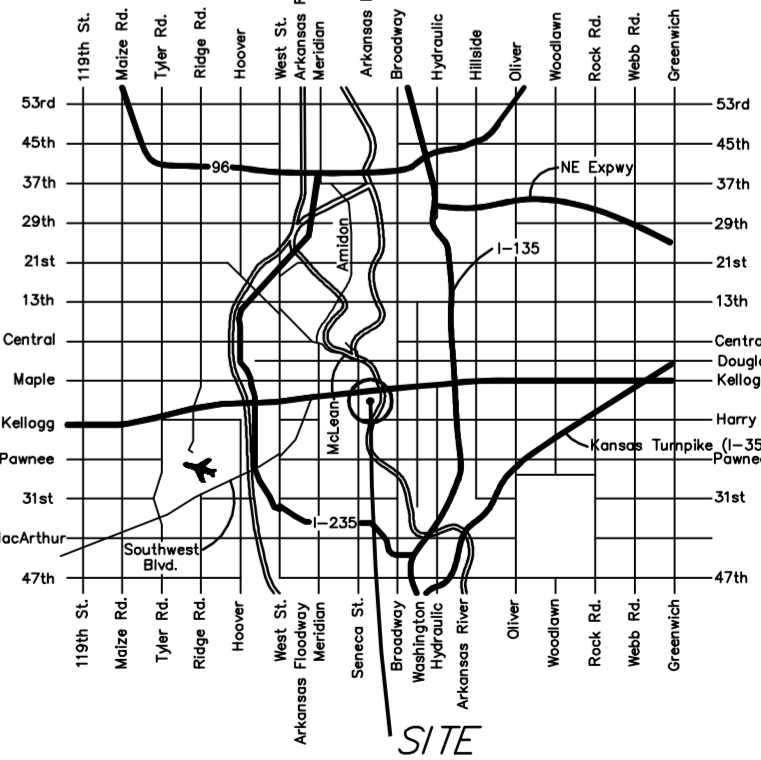
Private Property:
 Installation and testing for the fire protection line is to be performed by a City of Wichita licensed fire protection contractor in accordance with the fire codes as adopted by the City of Wichita. All material and construction practices for the fire protection line shall comply with 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.

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Line 1 & 2	3
BMP Erosion Details	Available On Request

General Notes

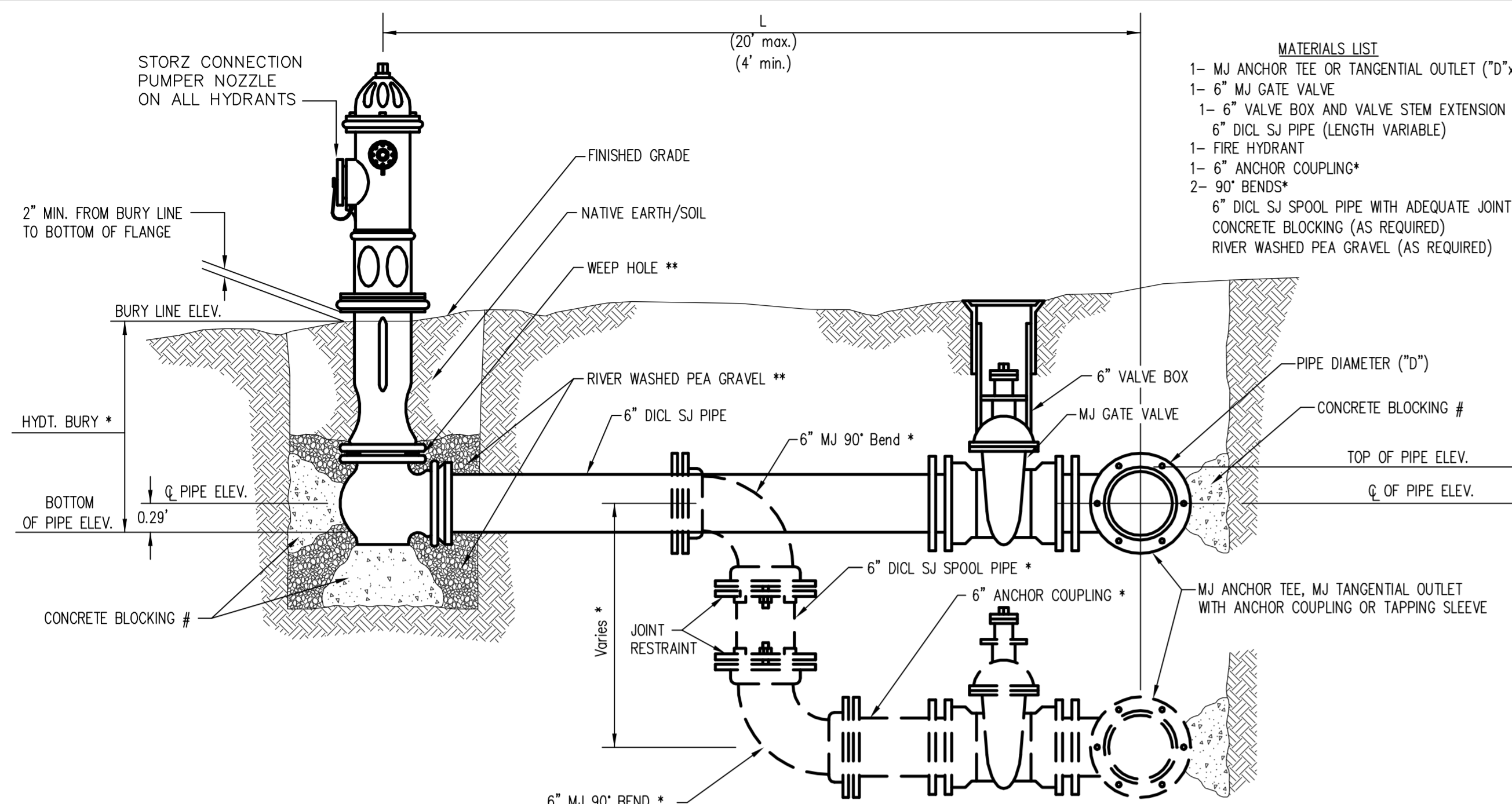
- Contractor will be required to provide notice to utility companies a minimum of forty-eight (48) hours prior to any excavation, as follows:
 Kansas One-Call 687-2470
 The Contractor must notify the following in case of an emergency:
 Cox Communications 262-4270
 Kansas Gas Service Company 1-888-482-4950
 Westar Energy (Electric) 383-8650
 Black Hills Energy (Gas) 1-800-303-0357
 Southwestern Bell Telephone Co. 1-800-286-8313
 City of Wichita Water Dept. (Water) 262-6000
 City of Wichita Sewer Maint. (SS) 262-6000
 City of Wichita Storm Sewer Maint. 268-4090
 City of Wichita Traffic Maint. 268-4034
- All disturbed R/W areas not intended for pavement or sidewalk construction shall be seeded with Kansas Premium Fescue Blend at a rate of 8 lb./1000 Sq. Ft., fertilized with a 16-20-6 ratio at a rate of 4 lb./1000 Sq. Ft., and mulched with Prairie Hay at a rate of 92 lb./1000 Sq. Ft. Mulch shall be "patted" with forks or punched into soil to reduce loss due to wind.
- Utility service lines, poles, valve boxes, meters, et cetera 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 and shall be field verified. The contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
- Contractor shall furnish the inspector with a copy of the manufacturer's certification for any pipe used on this project after completion of pipe installation. The engineer will not certify the project to the city until pipe certification has been received.
- All water lines and appurtenances shall be installed in accordance with the most recent edition of City of Wichita, Kansas Standard Specifications for the Construction of City Projects.
- Contractor shall not start work on the project until the project inspector is assigned to the project and is present on the site. Contractor shall not start on the project until all necessary bonds and permits have been obtained. Bonds may include but are not limited to Statutory, Performance & Maintenance Any work done without inspection will be required to be uncovered for inspection.
- 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 that, in the opinion of the Engineer, 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 would 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 would require additional archaeological investigations unless buried in a previously approved borrow location.



VICINITY MAP



Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-01
 ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE



- 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 SJ SPOOL 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 SPOOL PIPE AS NECESSARY FOR VERTICAL ADJUSTMENT. THE CONTRACTOR SHALL PROVIDE ADEQUATE THRUST BLOCKING AT HYDRANT AND MEGALUGS, ROD AND LUG 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.

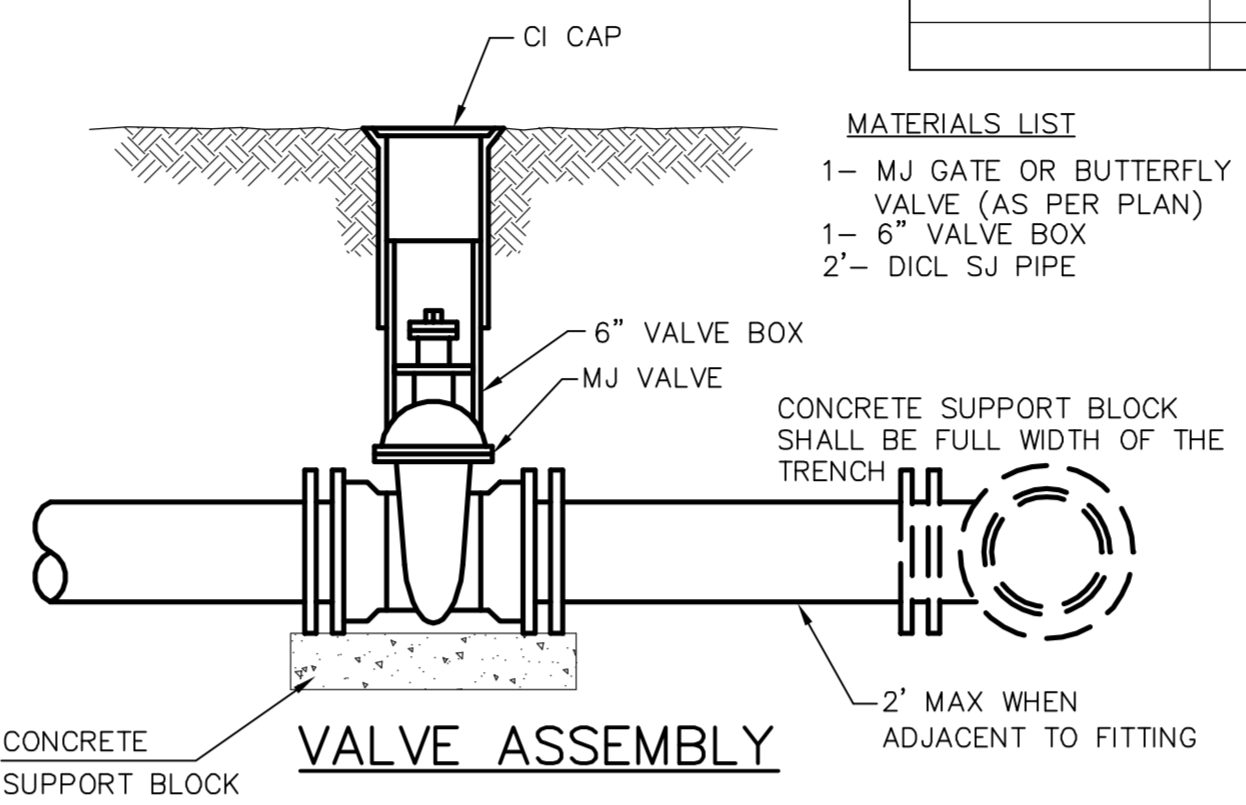
** CAUTION!!! WEEP HOLES TO BE KEPT CLEAR DURING CONSTRUCTION AND BACKFILL. CONCRETE FOR THRUST BLOCKING SHALL NOT OBSTRUCT WEEP HOLES. PLACE 1 CUBIC FOOT OF RIVER WASHED PEA GRAVEL AROUND EACH WEEP HOLE.

CONCRETE THRUST BLOCKING SHALL BE KEPT CLEAR OF BOLTS, NUTS, AND MJ ACCESSORIES.

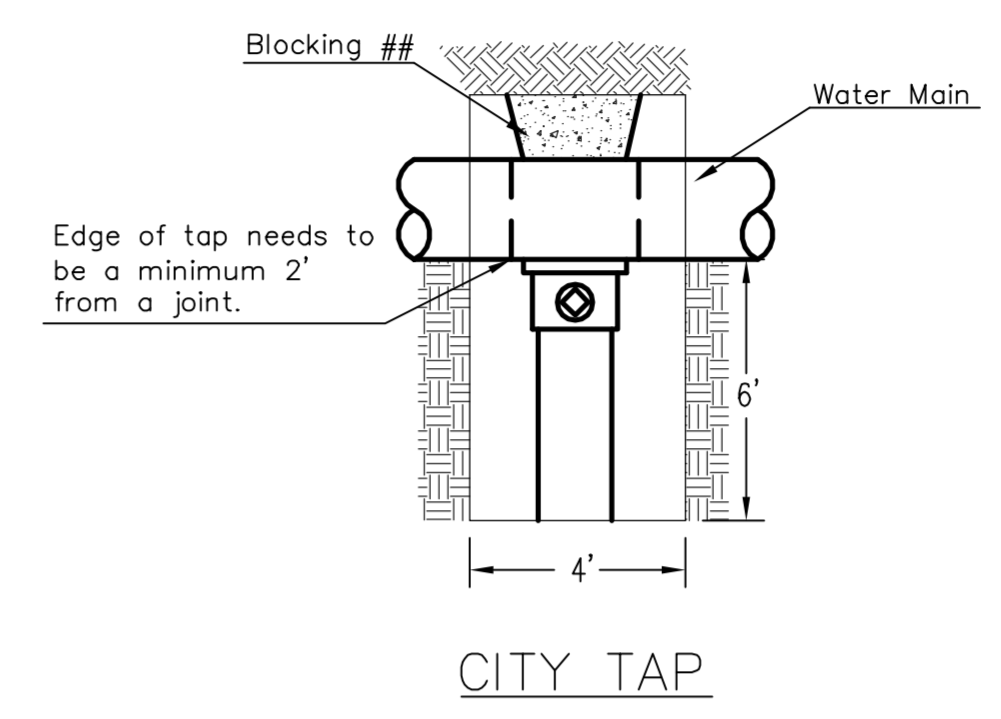
FIRE HYDRANT ASSEMBLY
PER CITY OF WICHITA SPECIFICATIONS

FIRE HYDRANTS REQUIRED

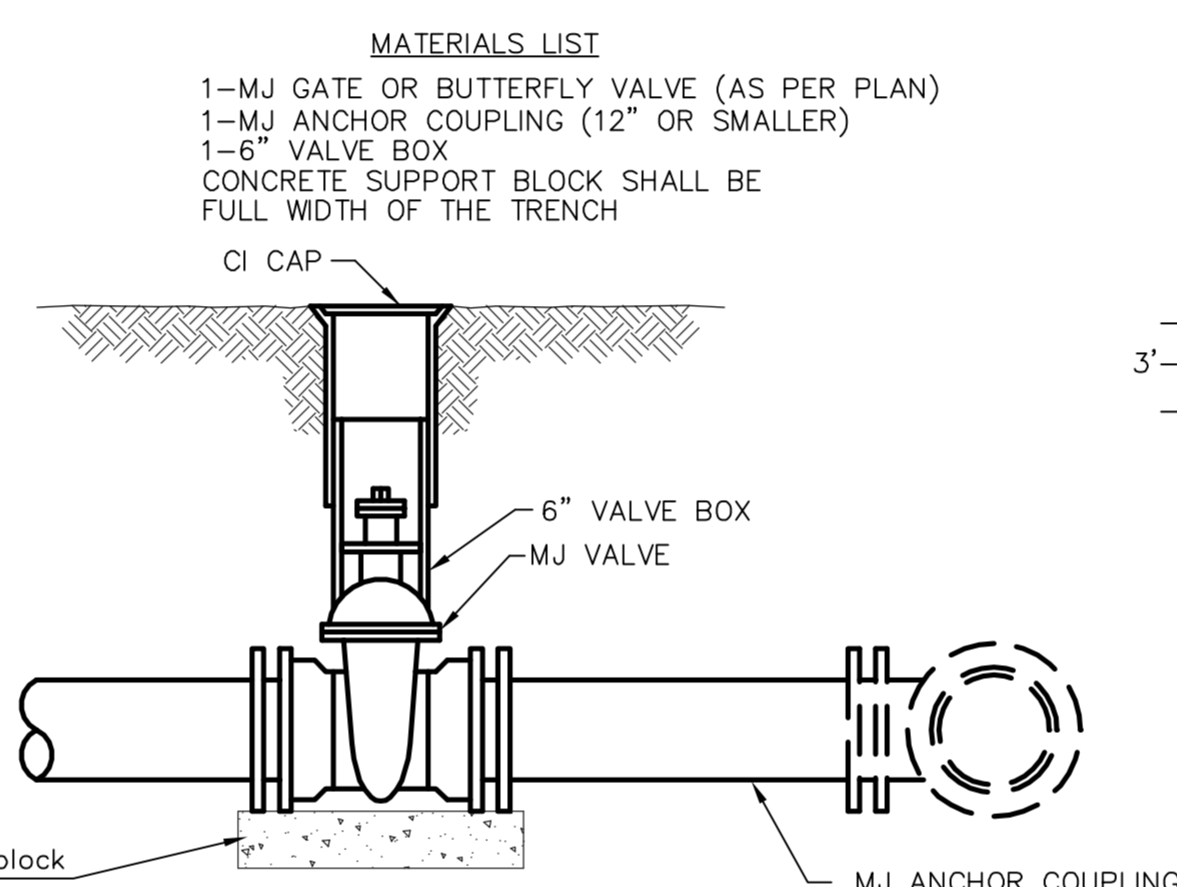
STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*	VALVE STEM EXT. REQUIRED (ft)*
1	1+63.39	1304.55	1308.40	4.5'



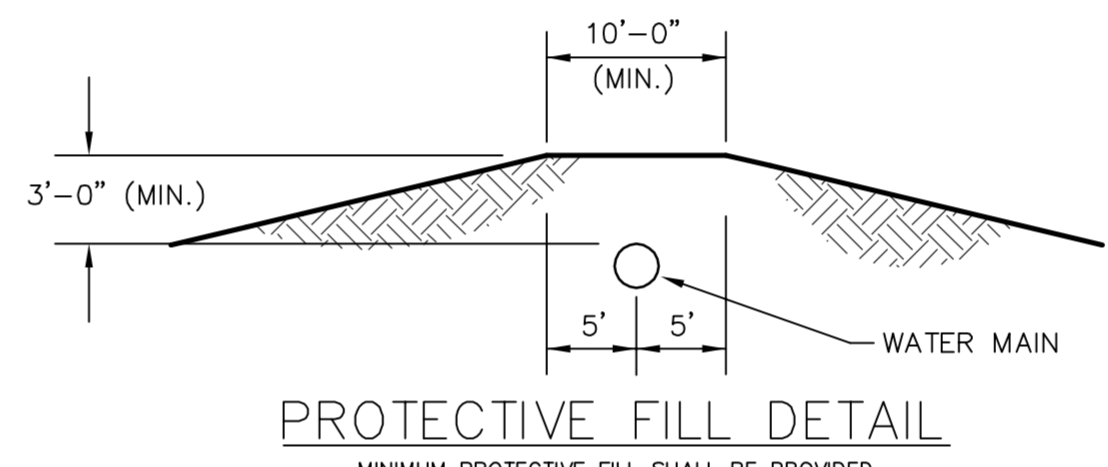
- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1- 6" VALVE BOX
 - 2- DI CL SJ PIPE
- CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH
- 2" MAX WHEN ADJACENT TO FITTING



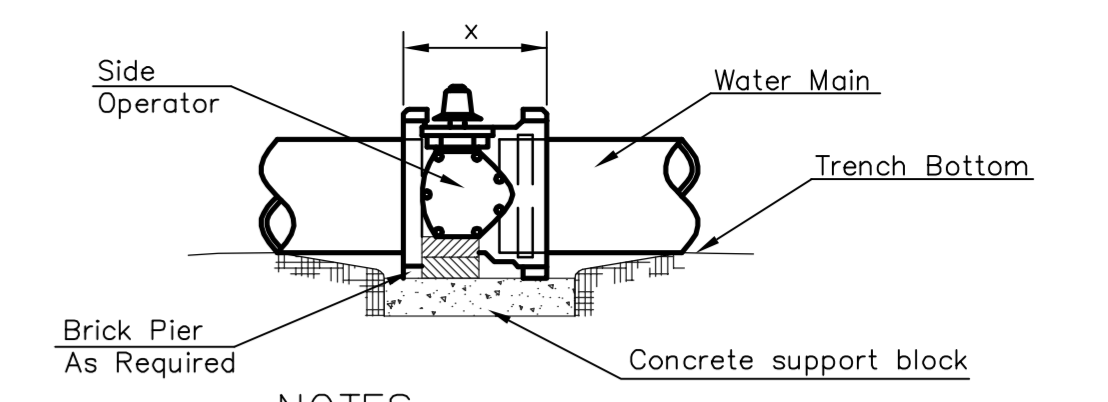
When the City of Wichita makes tap, blocking is to be done by Contractor



- 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

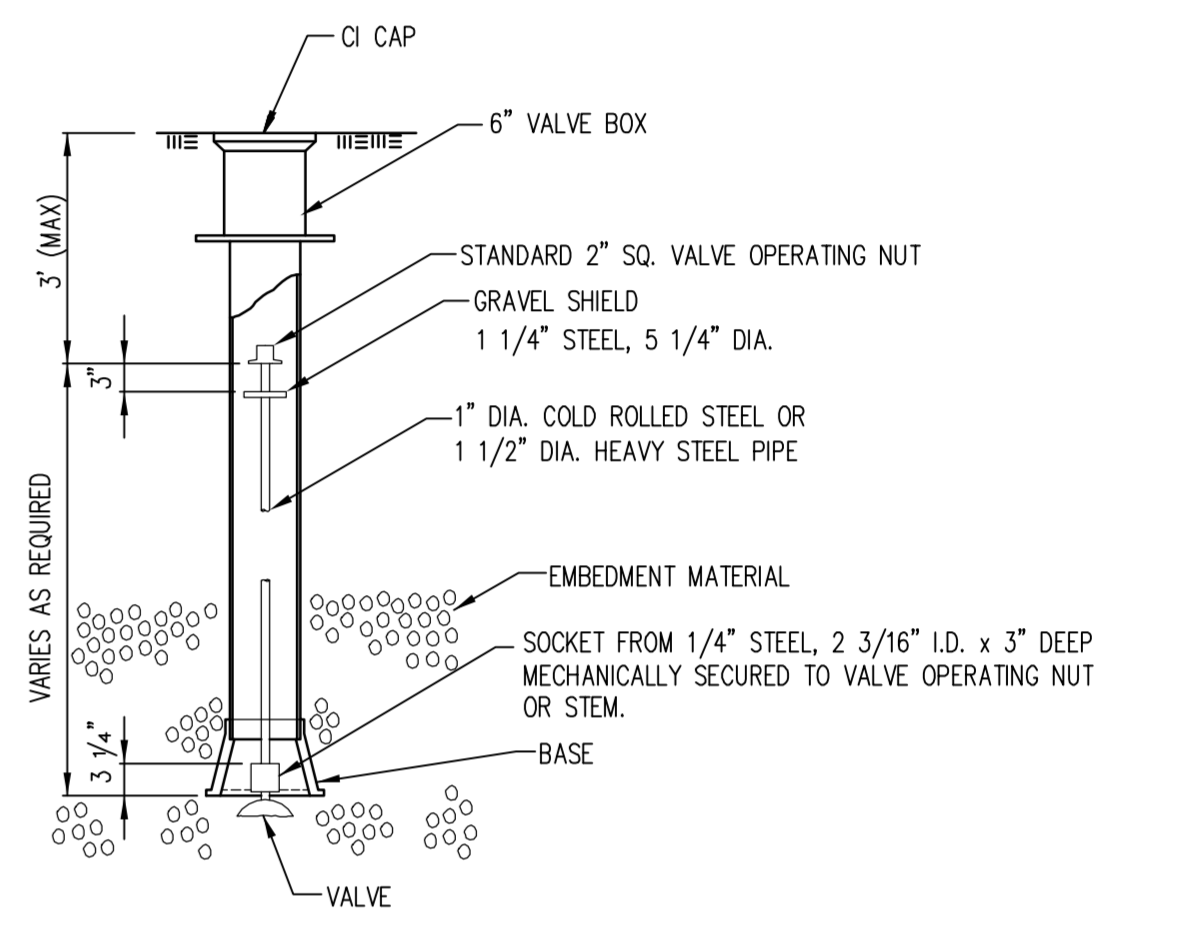


PROTECTIVE FILL DETAIL
MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN 3'. (COST SUBSIDIARY TO PIPE INSTALLATION)

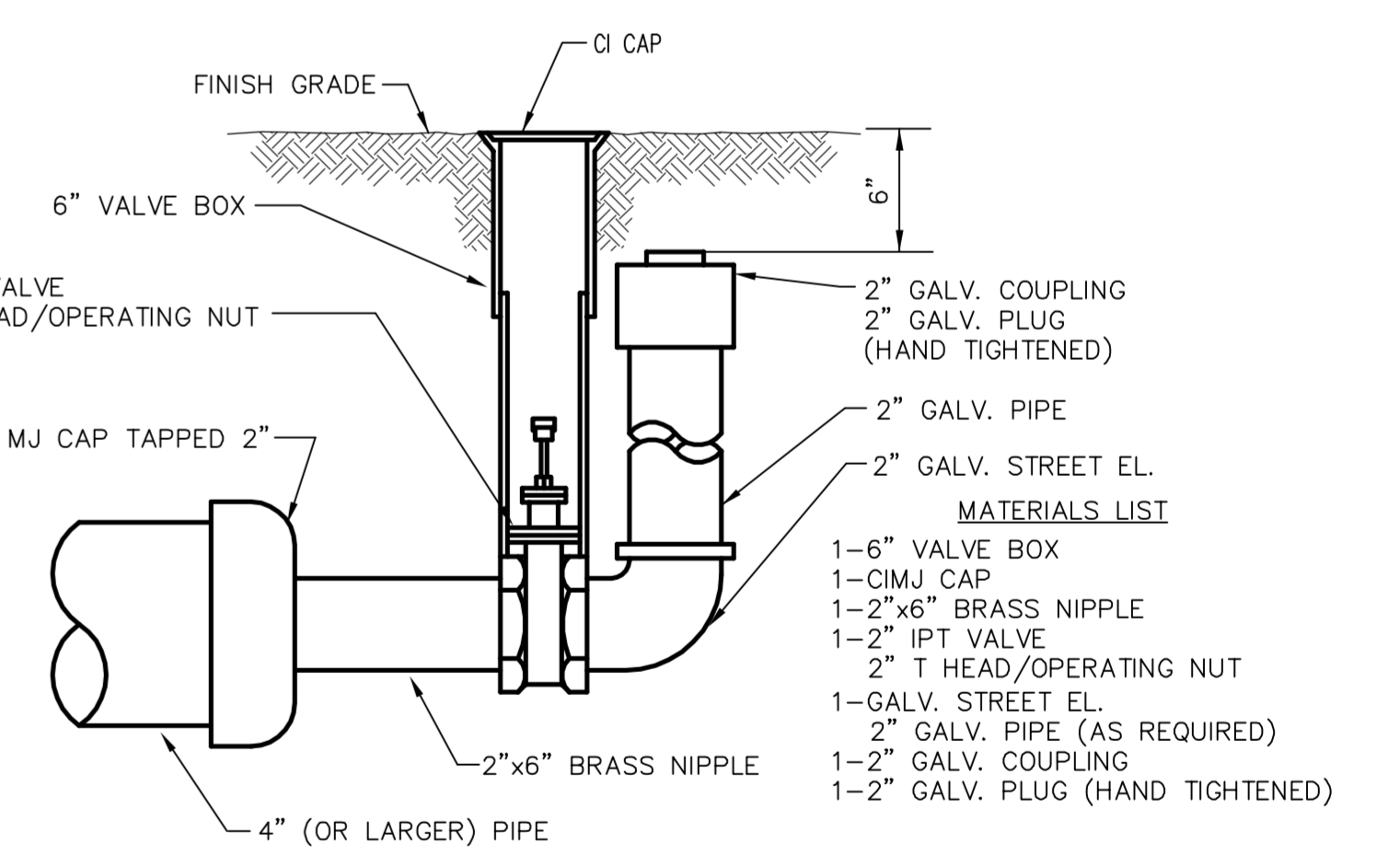


- NOTES**
- This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. 24" and larger lines to be detailed on plans.
 - 6" Valve Box and Cover required per City of Wichita Std. Specifications.
 - Conc. Support Block to be full width of trench.

CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION

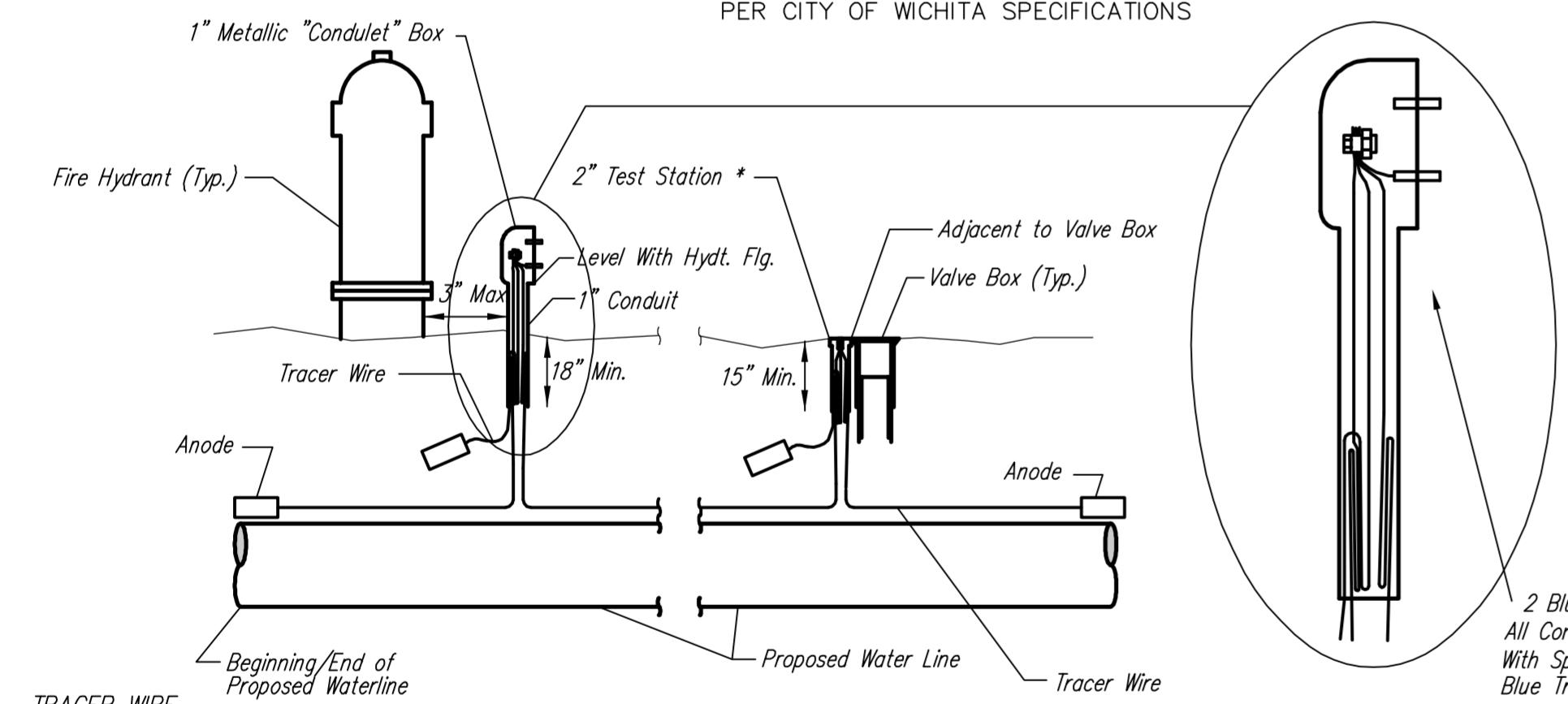


VALVE STEM EXTENSION DETAIL
NOTE: ONE VALVE STEM EXTENSION FOR EACH VALVE BURIED GREATER THAN 5'.



2" BLOWOFF ASSEMBLY

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* FLUSH STYLE TEST STATIONS SHALL ONLY BE USED IN PAVEMENT.

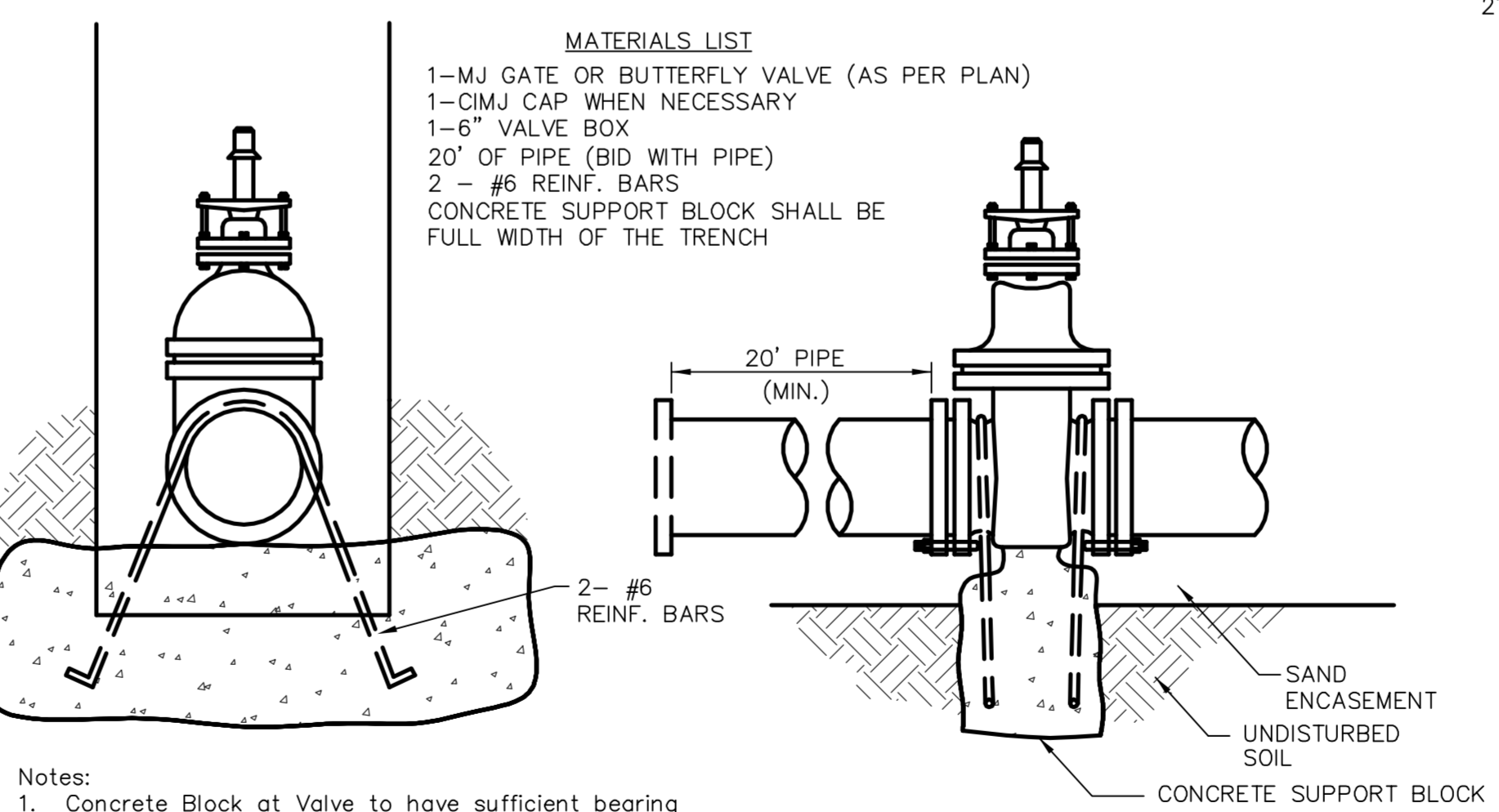
2 Blue Wires and 1 Black Wire All Connected to Single Test Lead With Split Bolt Connection and Blue Tracer Wire

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. Split-bolt connectors shall be used at splice locations. Electrical tape shall cover all splices so no bare wire is exposed. Test stations shall be installed adjacent to all fire hydrants along the waterline and at blowoffs or valves near the ends of the waterlines. Any exceptions to the location of test stations shall be approved by the engineer. At each test station, the tracer wire shall be connected to a 3 lb. Zinc or magnesium anode. Anodes shall also be attached to the tracer wire at both the beginning and the end of the proposed waterline. A typical layout of the tracer wire and test station is provided in the above figure.

TEST STATIONS
The test station for fire hydrant applications shall be a 1 inch galvanized "condulet" style test station as manufactured by AGRA Industries with a removable solid cover having two leads extending from the face or approved equal. The test station for valve applications shall be 2 inch flush style test station T2PS3B as manufactured by HANDLEY Industries or approved equal. The "condulet" style test station shall be attached to a 1 inch 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. 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 10 inches of wire within the test station. In concrete environments such as sidewalks or in the downtown area the contractor shall use the flush style test station. The location of all test stations shall be approved by the engineer, recorded, and shown in the as-built drawings.

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 Black No. 12 THHN annealed soft copper wire which shall be extended to the test station.

TRACER WIRE DETAIL
COST IS SUBSIDIARY TO PIPE INSTALLATION



- 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.2
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.

ANCHORED VALVE ASSEMBLY, SPECIAL



STANDARD WATER ASSEMBLY DETAIL

CITY ENGINEER
Gary Janzen, P.E. Interim City Engineer.

PROJECT NUMBER 1633PPW	OCA NUMBER NA	DATE 07/2012
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CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET
2 of 3

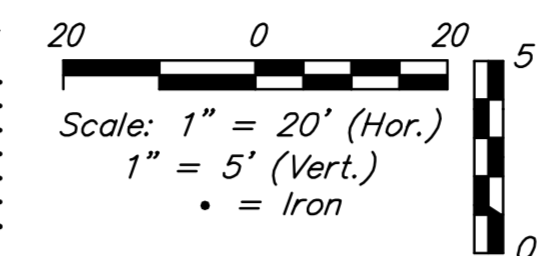
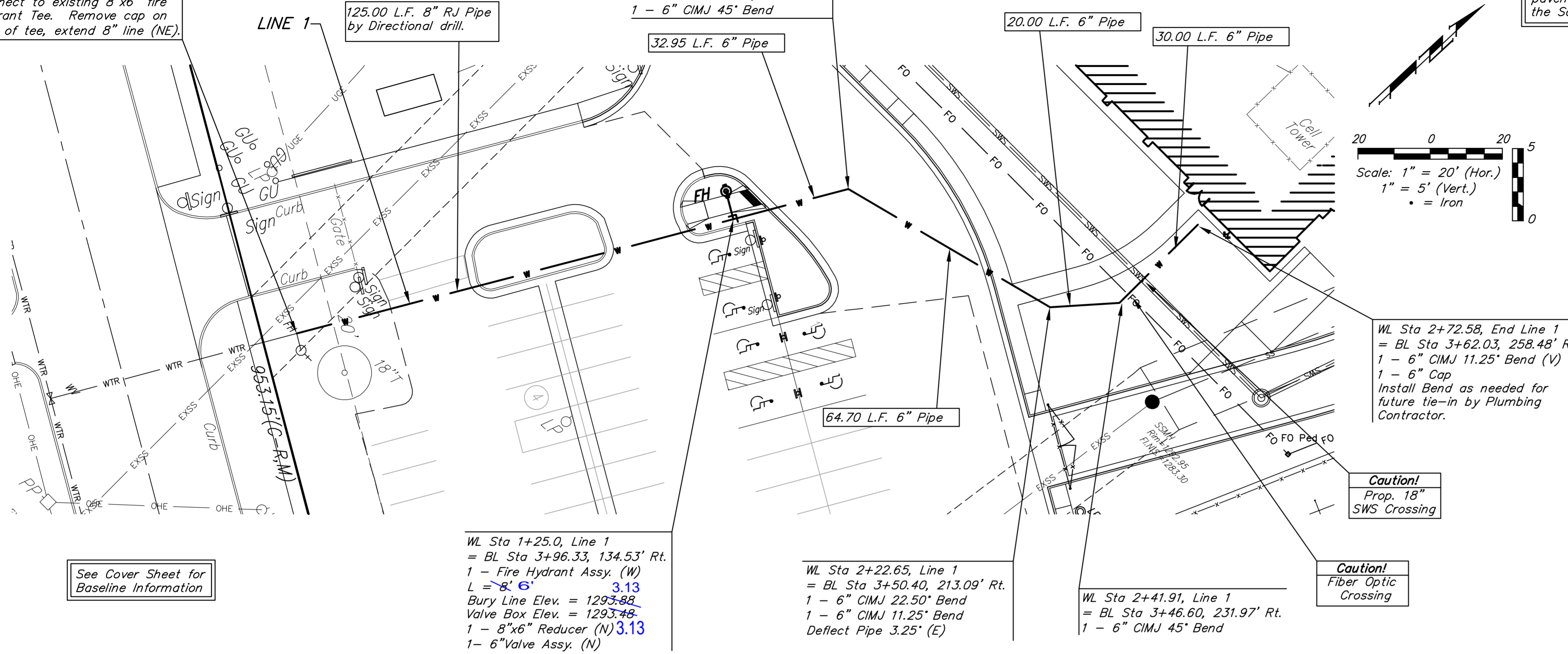
W.L. Sta 0+00, Begin Line 1
= B.L. Sta. 3+96.62, 9.50' Rt.
Connect to existing 8"x6" fire
hydrant Tee. Remove cap on
end of tee, extend 8" line (NE).

W.L. Sta 1+57.95, Line 1
= B.L. Sta 3+96.26, 167.45' Rt.
1 - 6" CIMJ 45° Bend

Coordinate with General Contractor and
refer to different Site Plan sheets for
pavement removal and replacement for
the Sanitary Sewer project.

NOTE:
Contractor Shall Sand Backfill,
Flush, & Vibrate Water Line
Trenches When Pipe is Under
Pavement.

Contractor Shall Follow All Applicable
Best Management Practices (BMP)
For Erosion Control.



See Cover Sheet for
Baseline Information

W.L. Sta 1+25.0, Line 1
= B.L. Sta 3+96.33, 134.53' Rt.
1 - Fire Hydrant Assy. (W)
L = 8' 6" 3.13
Bury Line Elev. = 1293.88
Valve Box Elev. = 1293.48
1 - 8"x6" Reducer (N) 3.13
1 - 6" Valve Assy. (N)

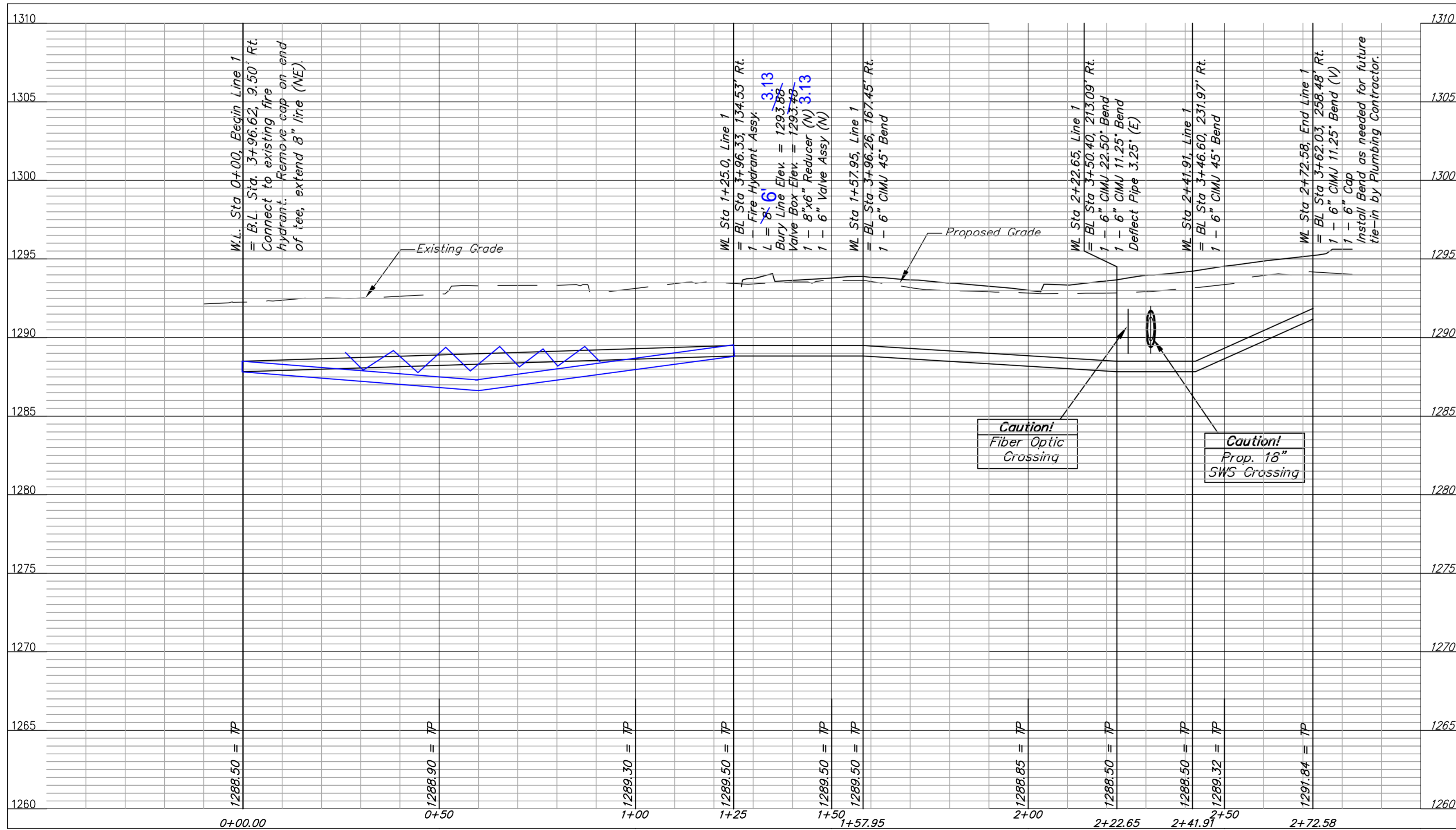
W.L. Sta 2+22.65, Line 1
= B.L. Sta 3+50.40, 213.09' Rt.
1 - 6" CIMJ 22.50° Bend
1 - 6" CIMJ 11.25° Bend
Deflect Pipe 3.25' (E)

W.L. Sta 2+41.91, Line 1
= B.L. Sta 3+46.60, 231.97' Rt.
1 - 6" CIMJ 45° Bend

W.L. Sta 2+72.58, End Line 1
= B.L. Sta 3+62.03, 258.48' Rt.
1 - 6" CIMJ 11.25° Bend (V)
1 - 6" Cap
Install Bend as needed for
future tie-in by Plumbing
Contractor.

Caution!
Prop. 18" SWS Crossing

Caution!
Fiber Optic Crossing



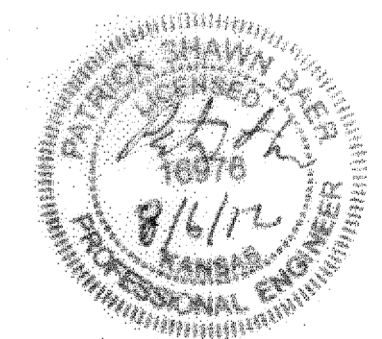
Caution!
Fiber Optic Crossing

Caution!
Prop. 18" SWS Crossing

Contractor To Use Extreme Caution
When Excavating Near Utility Lines.
Contractor To Hand Dig To Expose All
Utility Lines Prior To Construction.
Verify Depth To Determine Conflict If Any.

Benchmark #1 - "□" Chiseled
on Top of Sidewalk
Elevation=1293.95 (NAVD 88)

Benchmark #2 - "V" Chiseled
on Top of Sidewalk
Elevation=1294.00 (NAVD 88)



Baughman		USD 259 West High School Line 1 Wichita, Kansas	
Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE			
PROJECT NUMBER 11-04-E-617	DESIGN PSB	DRAWN TNT	APPROVED PSB
REVISIONS:	SCALE Varies	DATE 10/20/2011	SHEET 3 OF 3
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