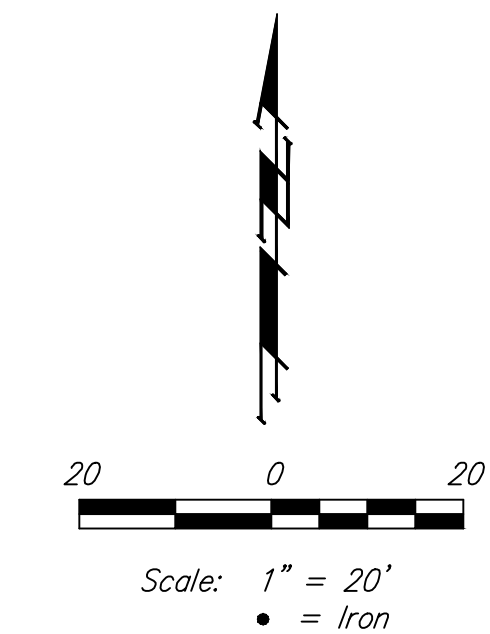


FIRE SERVICE LINE TO SERVE GRACE MED ADDITION CLOUD ELEMENTARY - USD 259 Lot 1, Henry Roe Cloud Addition Private Project: 1728 PPW (607853) CITY OF WICHITA, KANSAS

Gary Janzen, P.E. - City Engineer
March 2013

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 1-888-482-4950
Westar Energy 383-8650
Black Hills Energy (Gas) 1-800-303-0357
ATT 268-2245
City of Wichita Water Dept. 268-4563
City of Wichita Sewer Maint. 268-4024
City of Wichita Storm Sewer Maint. 268-4090
City of Wichita Traffic Maint. 268-4034
- Utility service lines, poles, valve boxes, meters, and etcetera 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.
- 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.
- 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 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.
- Contractor to remove concrete sidewalk to the nearest construction joint if within 3' of joint. Saw cut if over 3' from joint. Removal and replacement of pavement shall not be paid for directly, but shall be considered incidental to other items in the project.
- 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.
- 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 Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.
- 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.
- The Baseline for this project is the East Line of Lot 1, with south R/W Line of 26th Street North = Station 10+00.



BENCHMARK

Chiseled "Square" on Top of Curb
Elevation=1313.62 (NAVD 88)

SHEET INDEX:

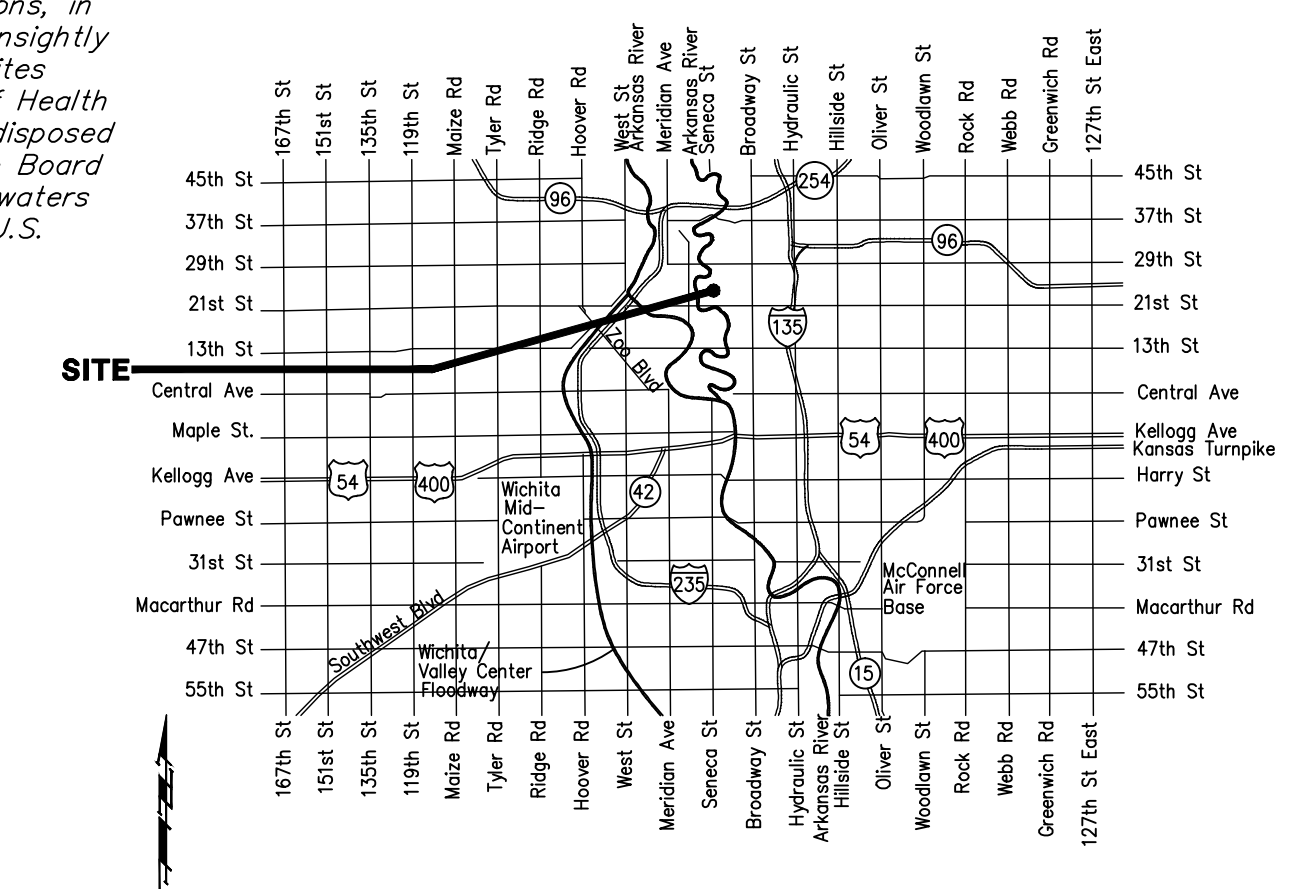
Title Sheet	1
Standard Water Details	2-3
Line 1	4
Copy of Plat	5

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

Public Works *3-11-13*
Water & Sewer *3-12-13*
Fire *3-12-2013*

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).

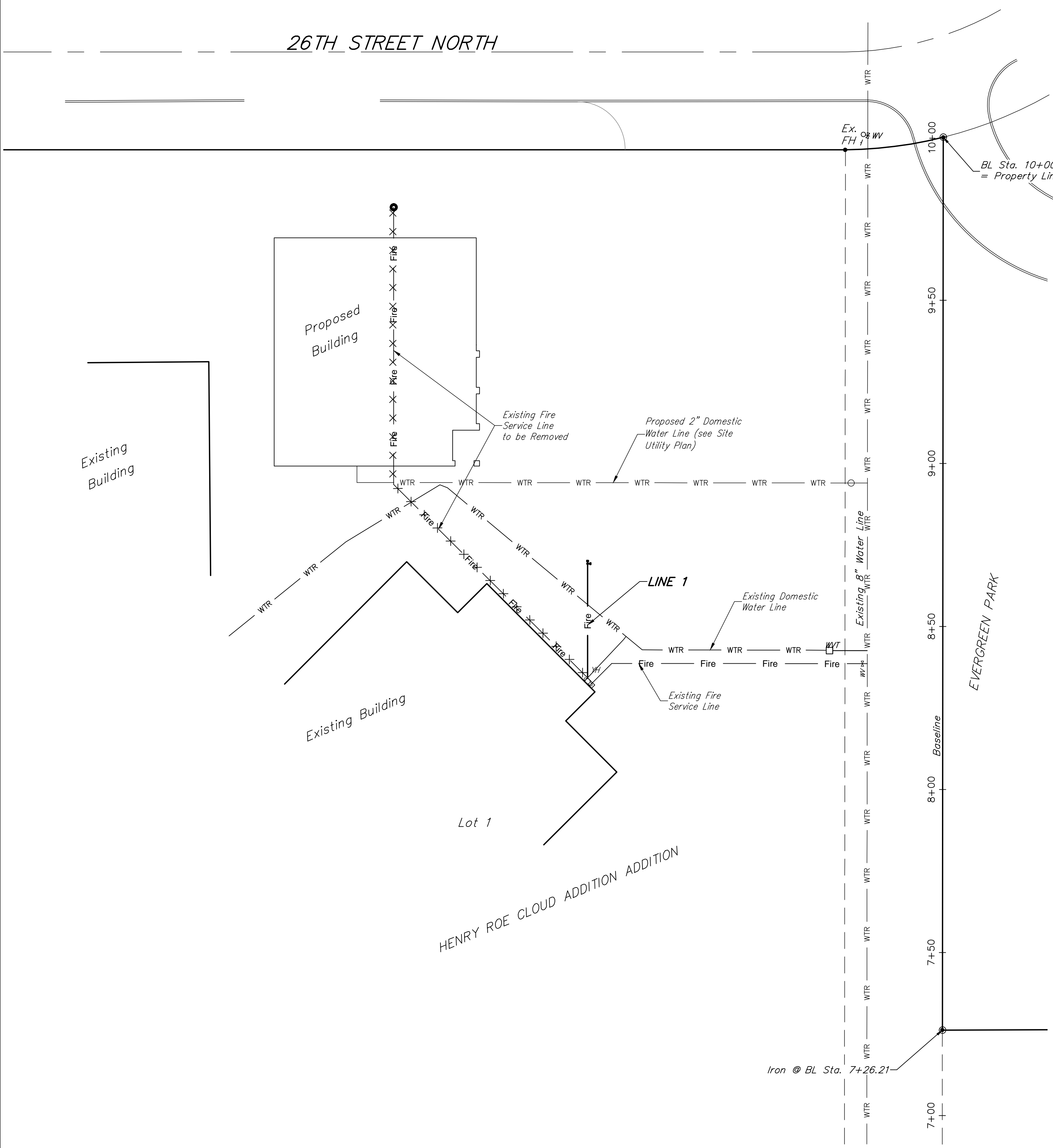
Private Property:
Installation and testing for the fire protection line is to be performed by a City of Wichita licensed fire protection contractor in accordance with the fire codes as adopted by the City of Wichita. All material and construction practices for the fire protection line shall comply with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



NO SCALE: VICINITY MAP

Baughman
Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-2271 F 316-262-0149
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

E:\Projects\Grace Med At Cloud Elem (12-10-E823)\Engineering\CGM_PPW.dwg



26TH STREET NORTH

10+00

9+50

9+00

8+50

8+00

7+50

7+00

Baseline

EVERGREEN PARK

Iron @ BL Sta. 7+26.21

BL Sta. 10+00 = Property Line

Proposed Building

Existing Building

Existing Fire Service Line to be Removed

Proposed 2" Domestic Water Line (see Site Utility Plan)

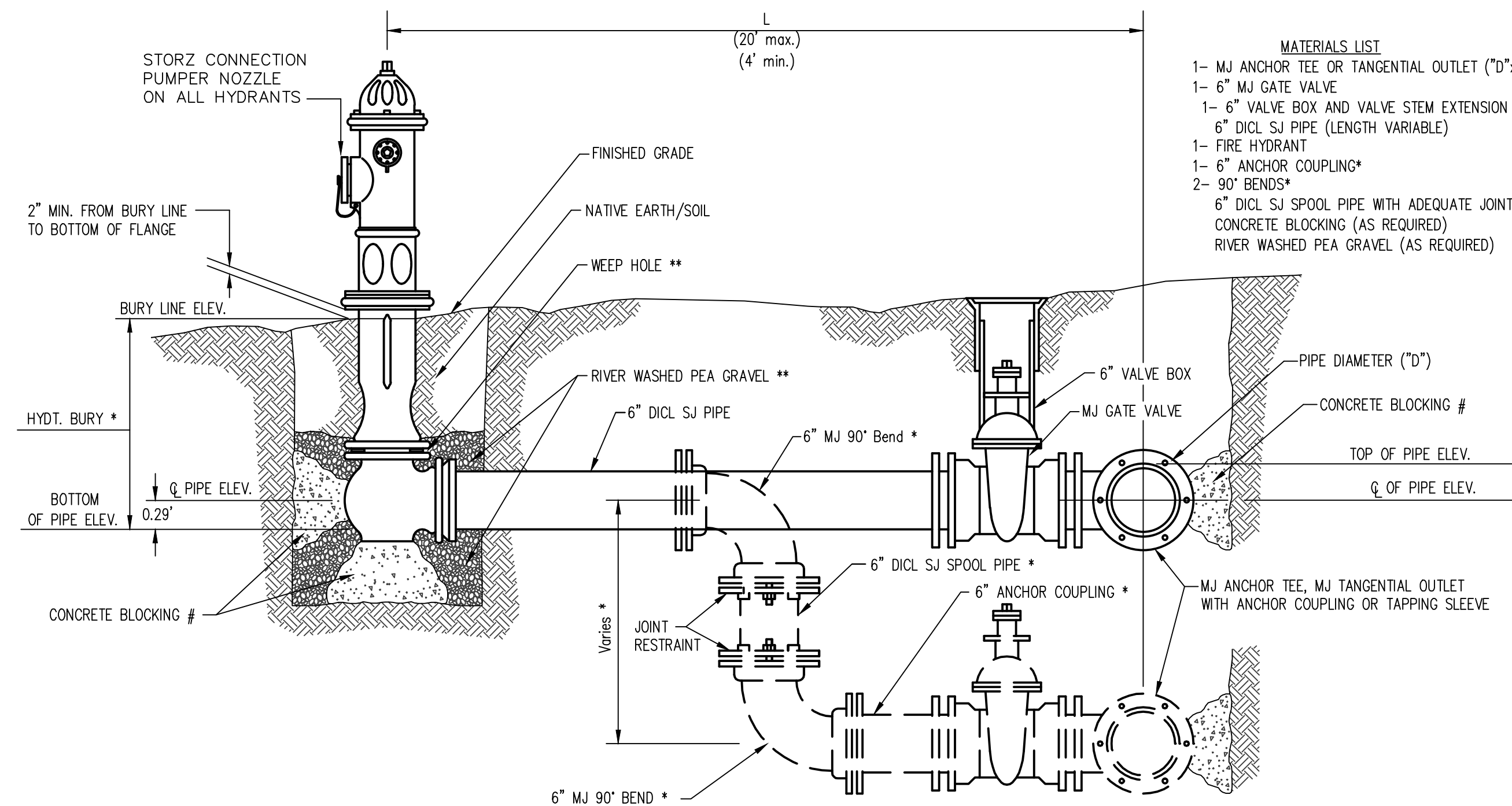
LINE 1

Existing Domestic Water Line

Existing Fire Service Line

Lot 1

HENRY ROE CLOUD ADDITION

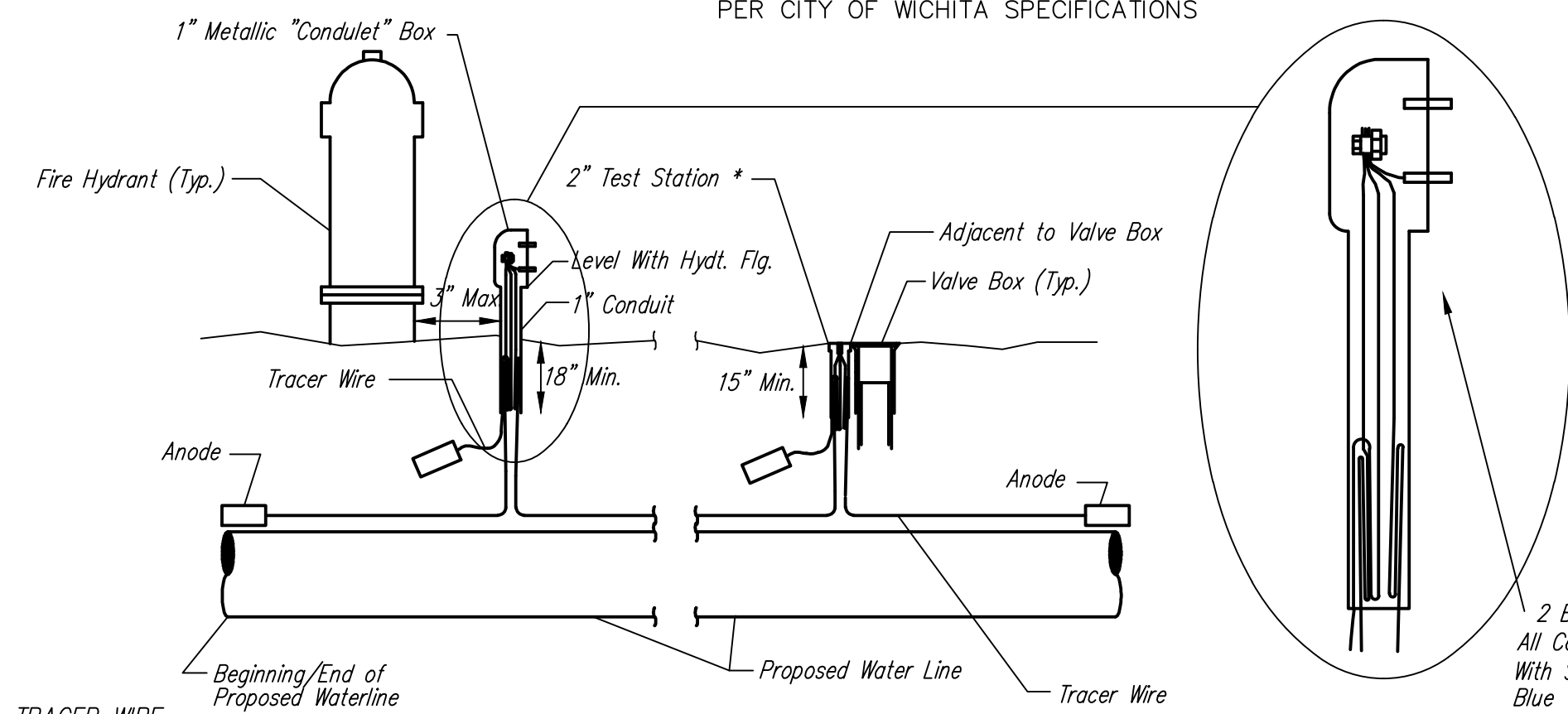


*** IF THE REQUIRED HYDRANT BURY IS IN EXCESS OF 5', BUT LESS THAN 7', CONTRACTOR SHALL USE STANDARD 5' HYDRANT BURY AND HYDRANT BARREL EXTENSIONS AS NECESSARY. IF THE REQUIRED HYDRANT BURY IS GREATER THAN 7', CONTRACTOR SHALL USE 5' HYDRANT BURY, 2-MJ 90° BENDS, 6" ANCHOR COUPLING AND 6" DICL SPOOL 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



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.

WIRE
The tracer wire shall be Blue No. 12 THHN annealed soft copper wire with thermal plastic insulation or Blue No. 12 AWG CCS with 30 mil HDPE insulation. The insulation shall be heat, oil, and gasoline resistant as manufactured by Temple Electric or approved equal. 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. The insulation sheathing shall be removed such that 1" bare copper wire at all points of connection. 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 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.

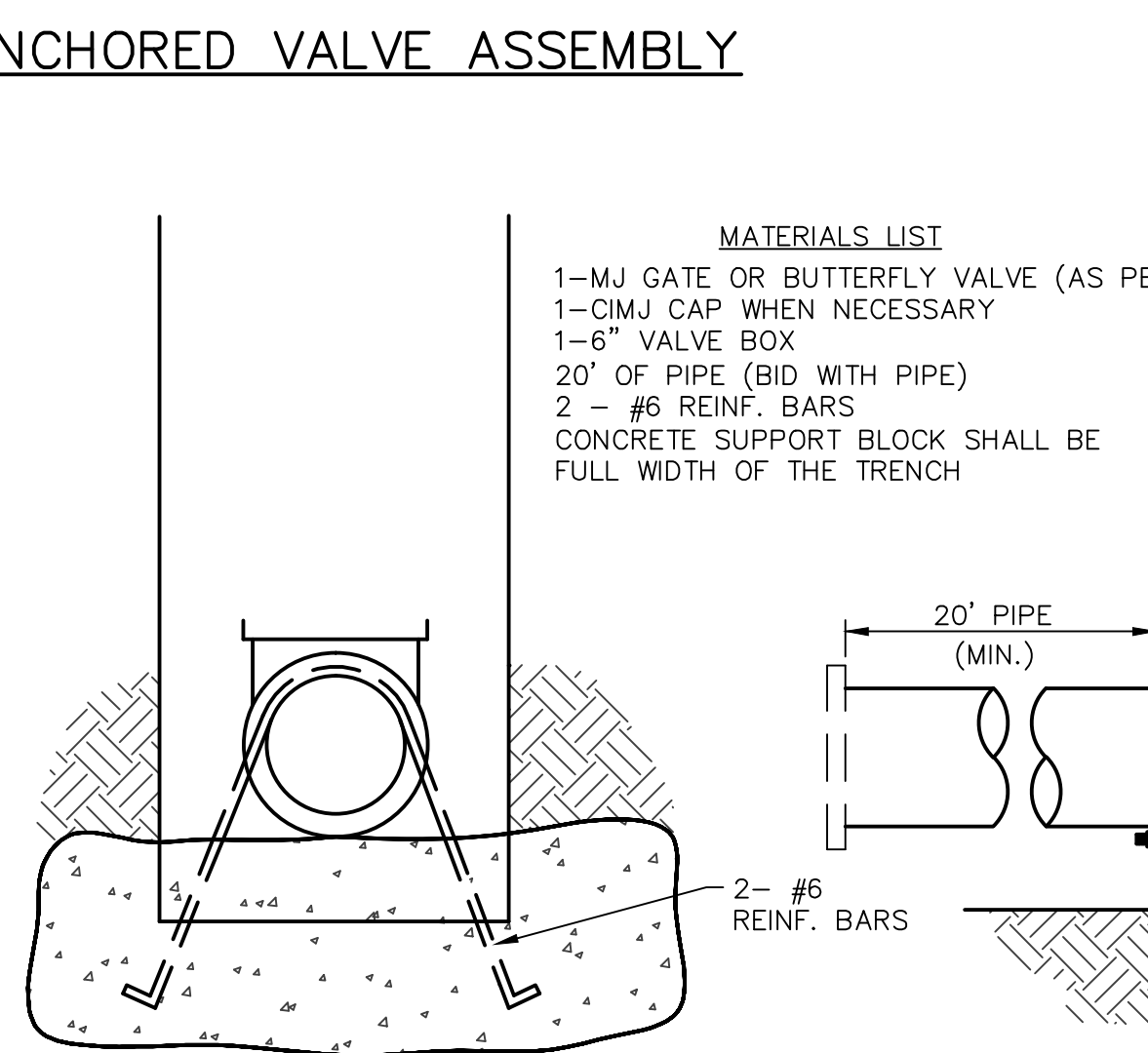
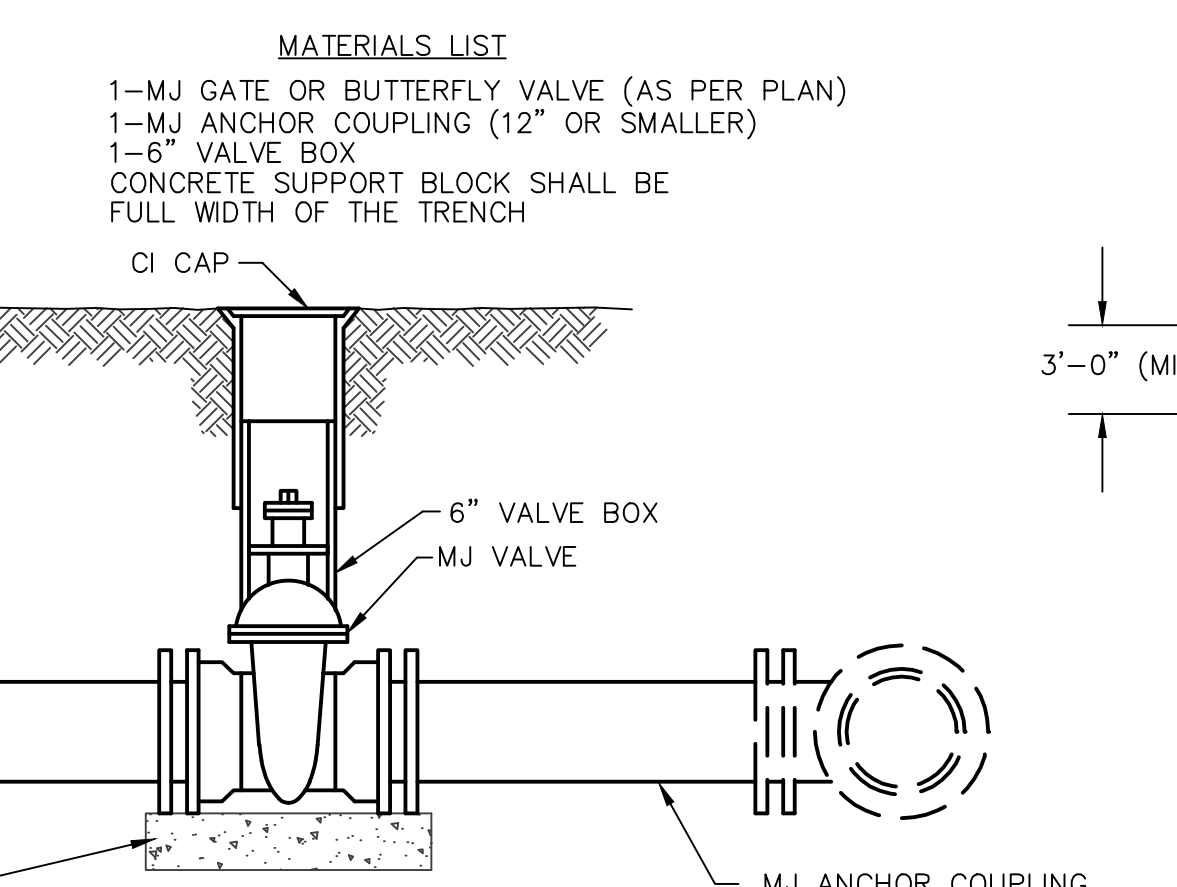
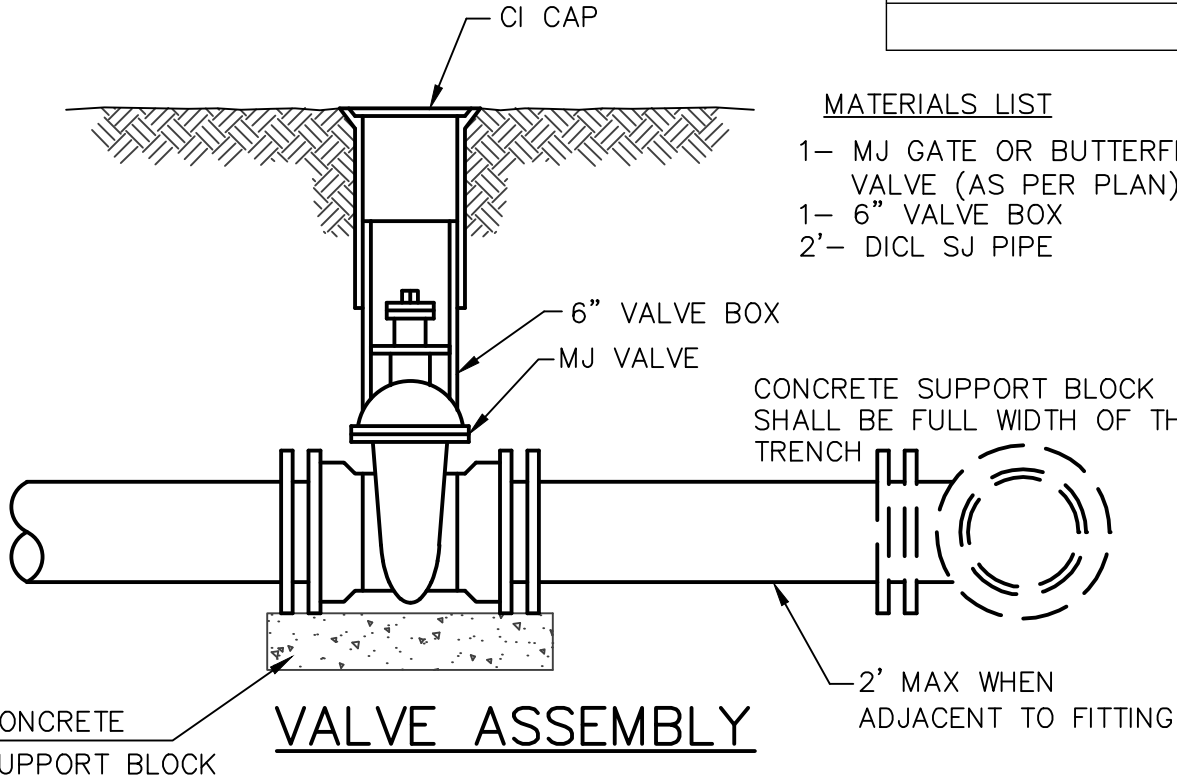
ANODES
The anodes shall be 3 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to Black No. 12 THHN annealed soft copper wire which shall be extended to the test station.

TRACER WIRE DETAIL
COST IS SUBSIDIARY TO PIPE INSTALLATION

- 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" DICL SJ PIPE (LENGTH VARIABLE)
 - 1- FIRE HYDRANT
 - 1- 6" ANCHOR COUPLING*
 - 2- 90° BENDS*
 - 6" DICL SJ SPOOL 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)*
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-



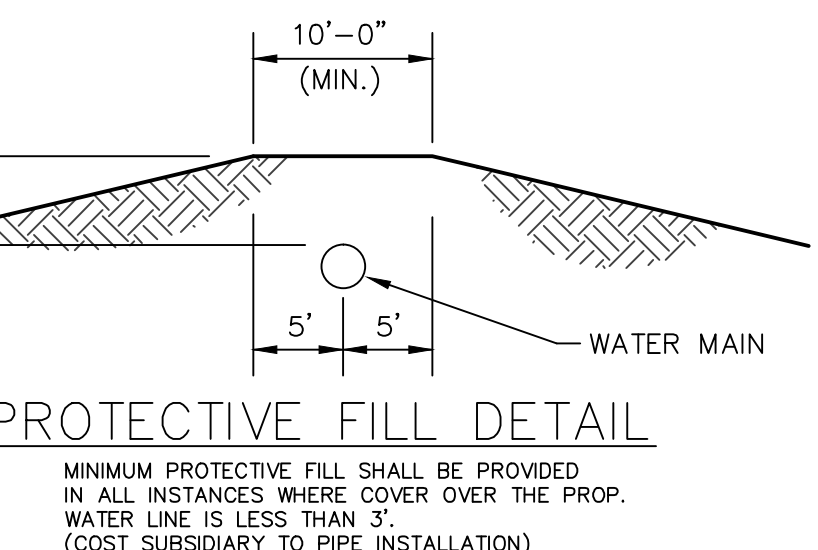
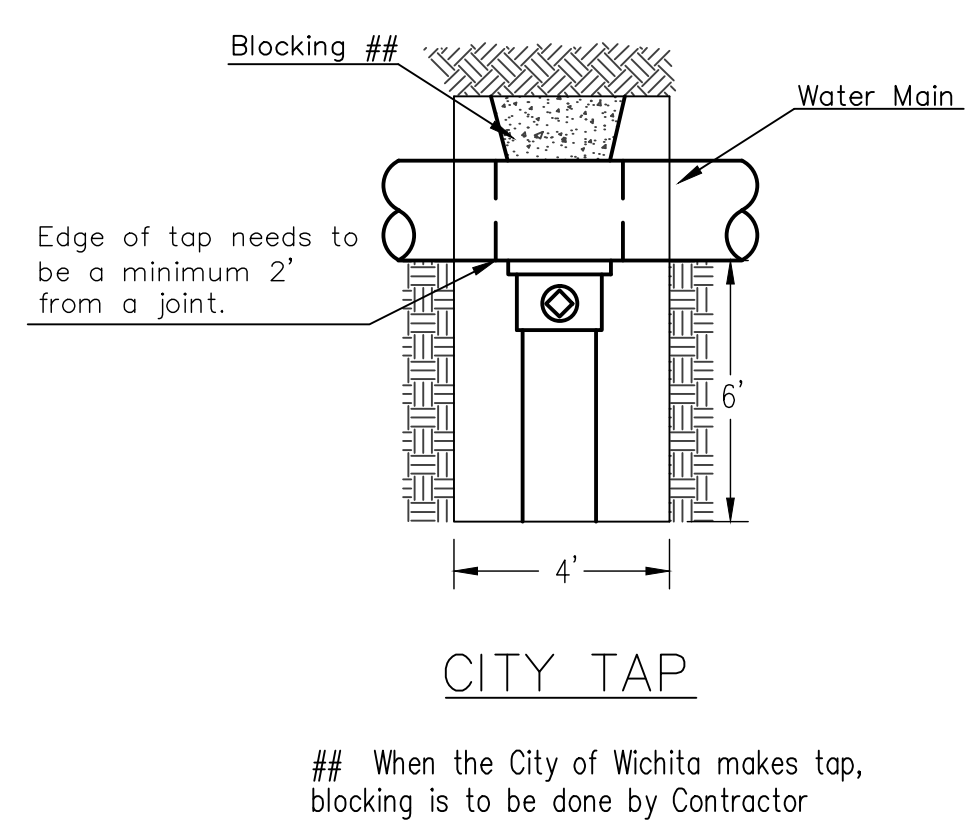
Notes:

- 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

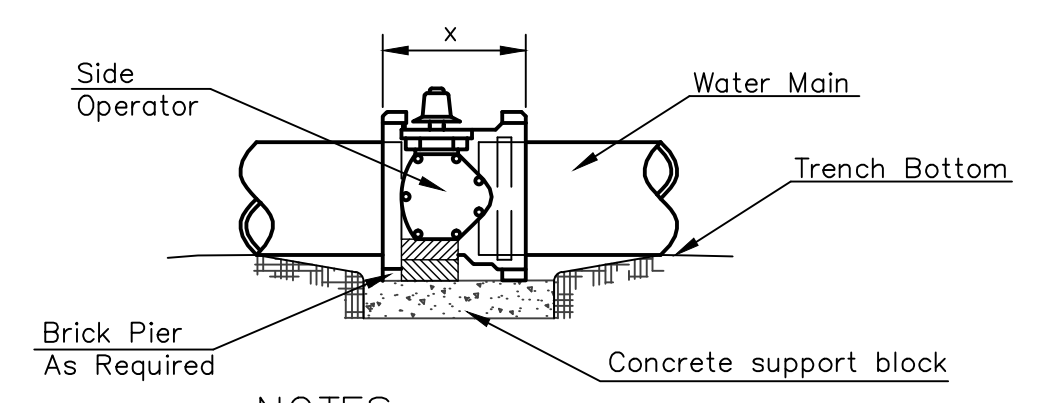
VALVE	THRUST AT 150 #/sq.ft
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.

- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1- 6" VALVE BOX
 - 2- DICL 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

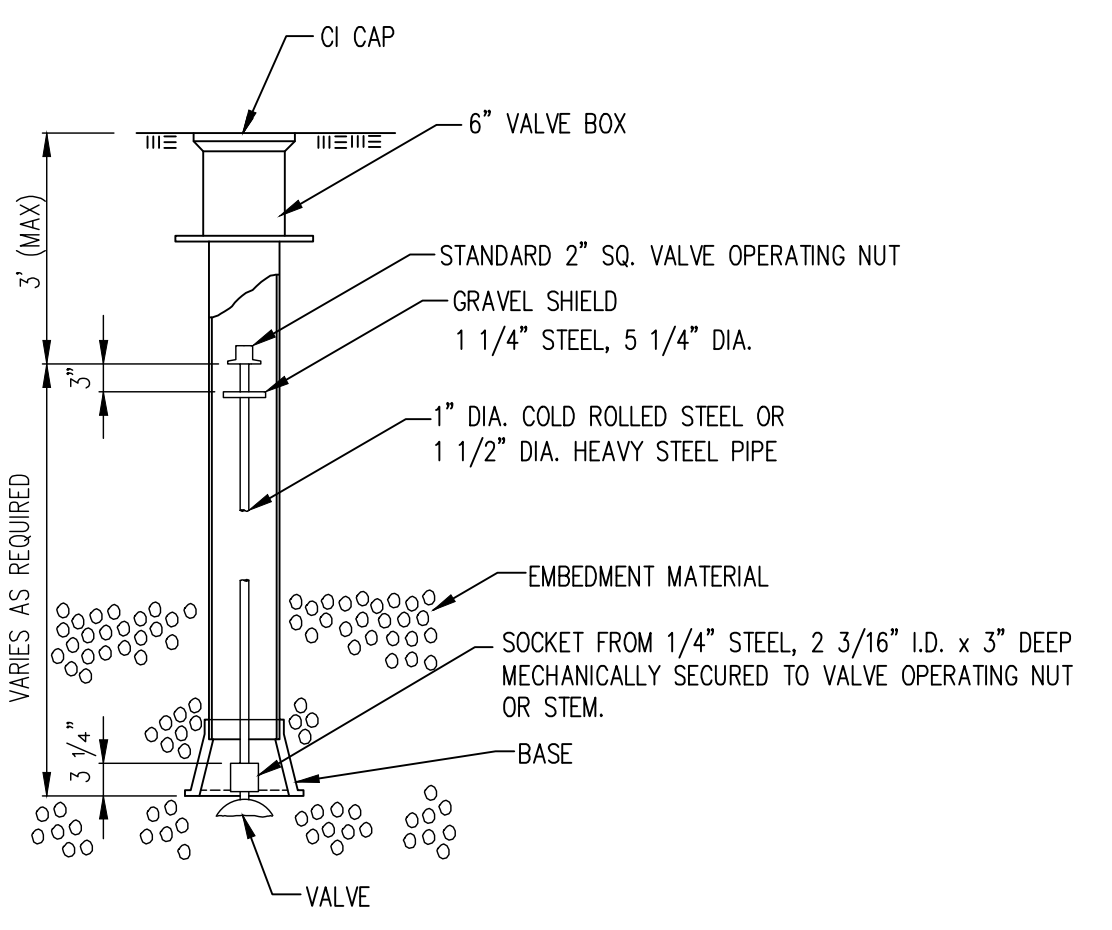
- MATERIALS LIST**
- 1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1-CIMJ CAP WHEN NECESSARY
 - 1-6" VALVE BOX
 - 20' OF PIPE (BID WITH PIPE)
 - 2 - #6 REINF. BARS
 - CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH



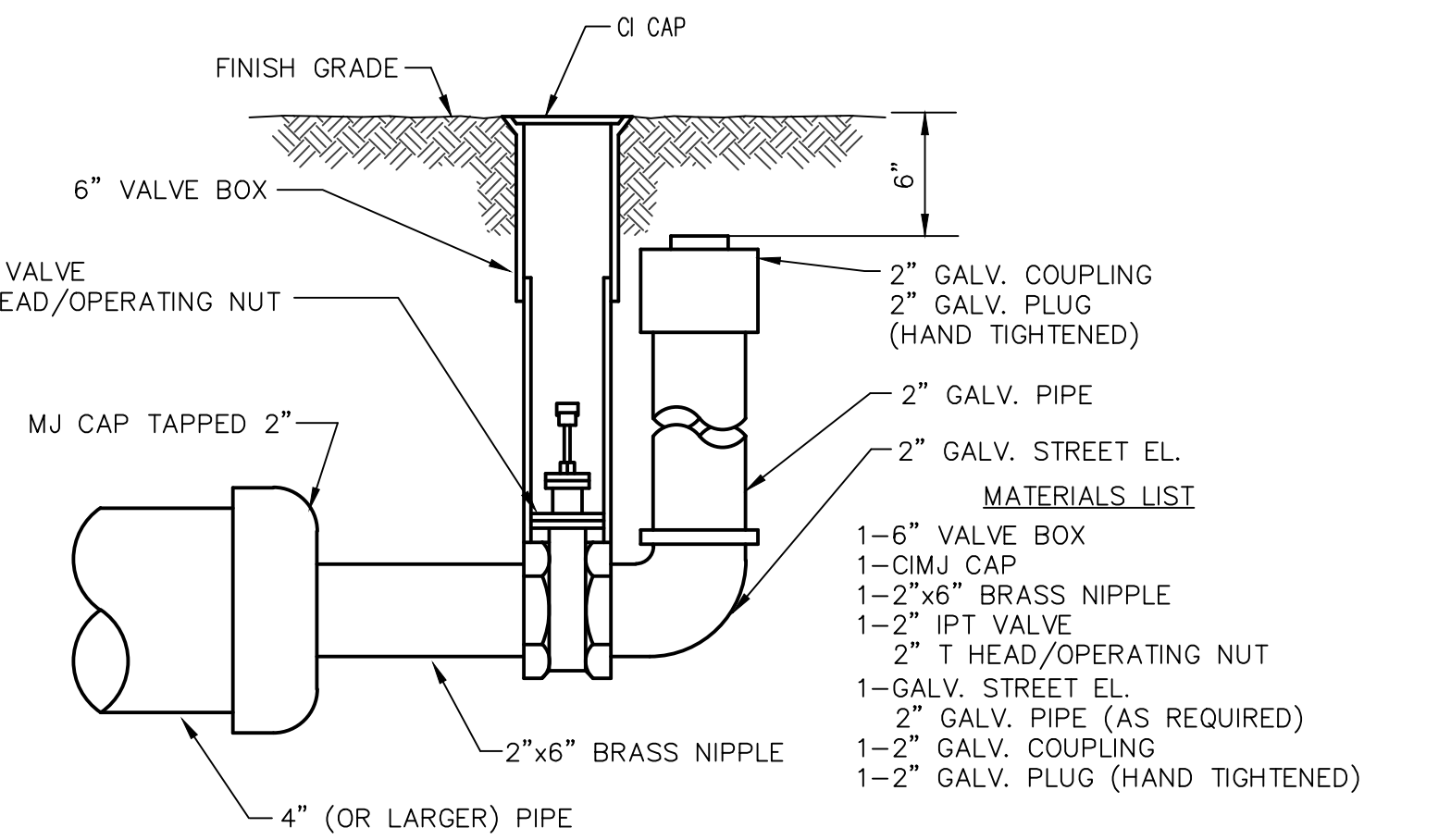
NOTES

- 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



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



2" BLOWOFF ASSEMBLY

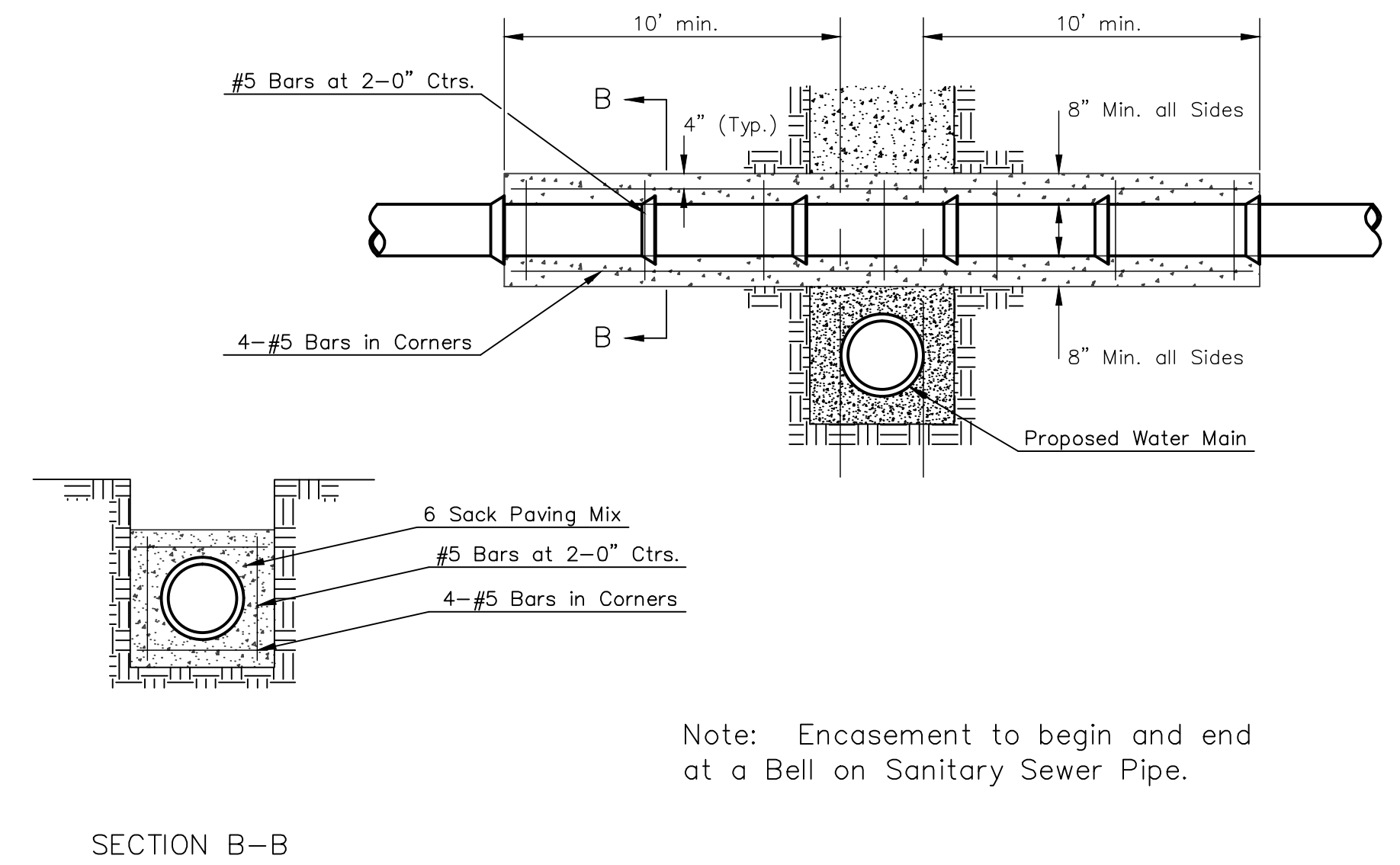
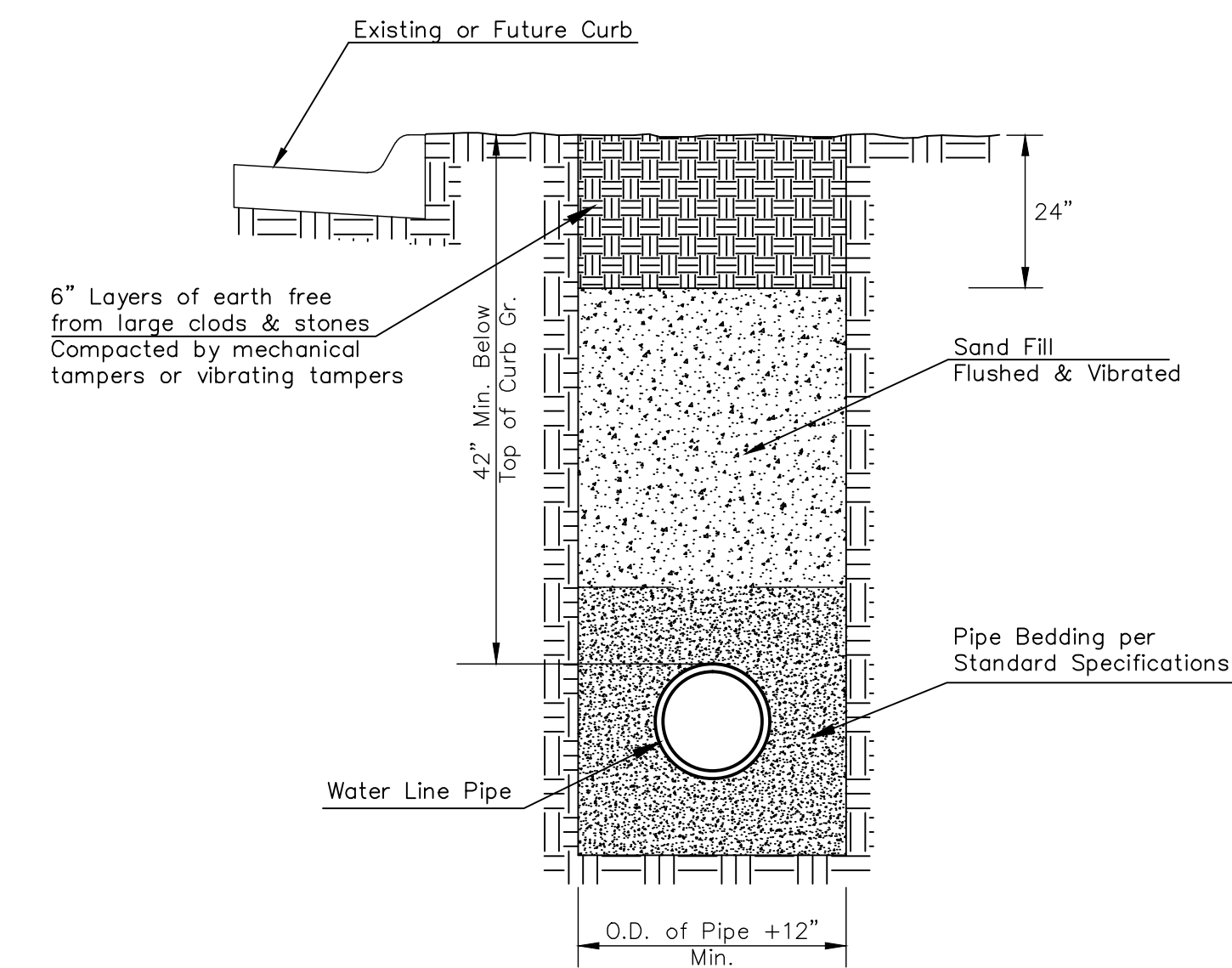
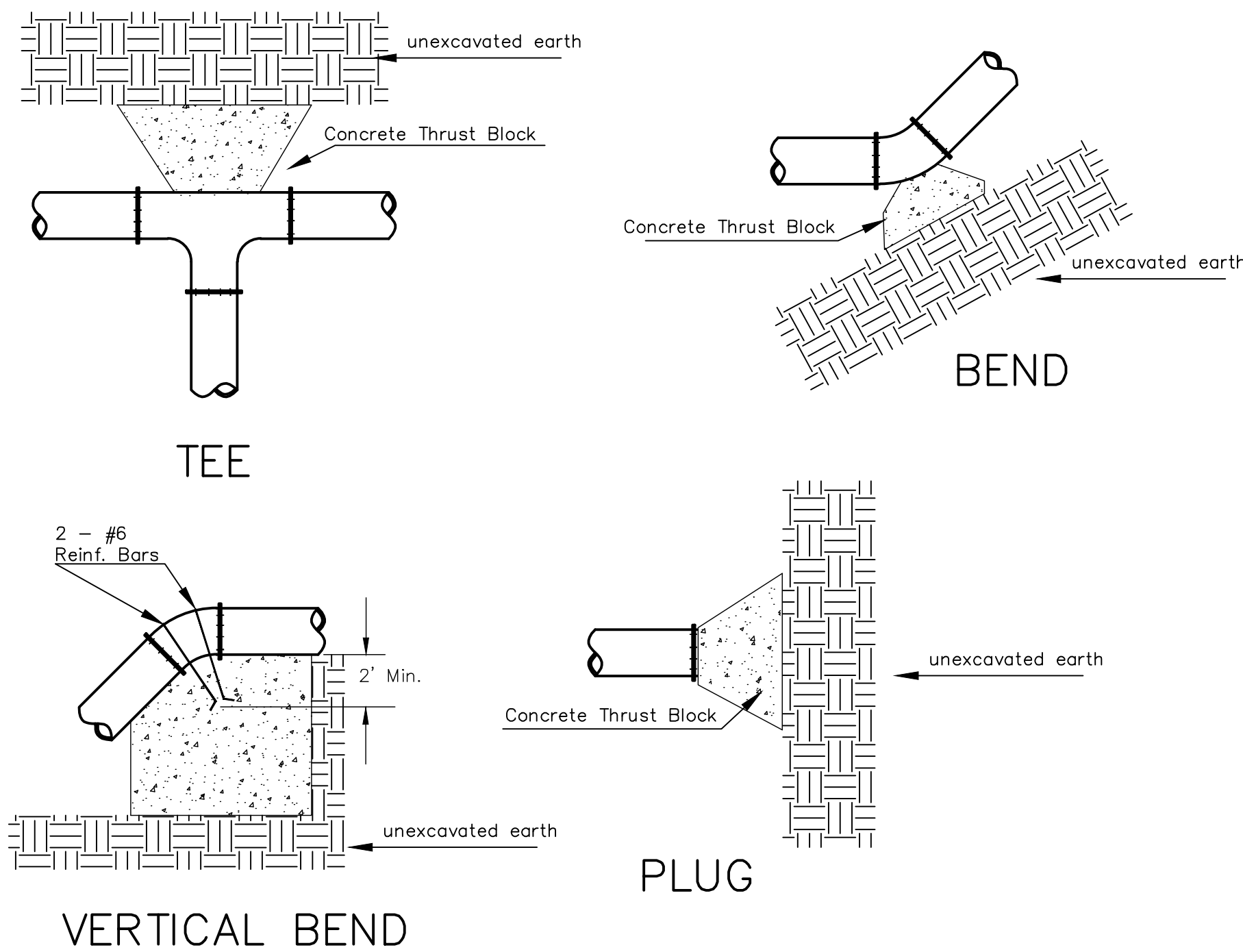


CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

STANDARD WATER ASSEMBLY DETAIL

CITY ENGINEER
Gary Janzen, P.E. City Engineer

PRIVATE PROJECT NUMBER 1728 PPW (607853)	DATE 3/13
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501	DESIGN Staff
	DRAWN Staff
	SHEET 2 of 5

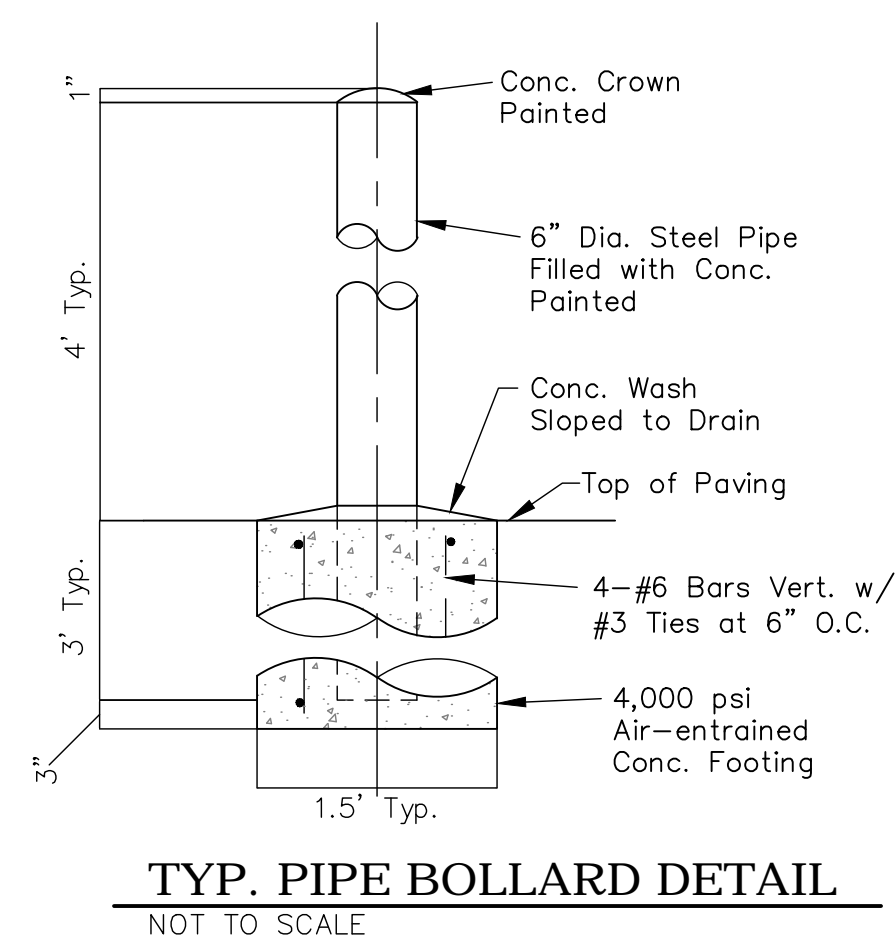
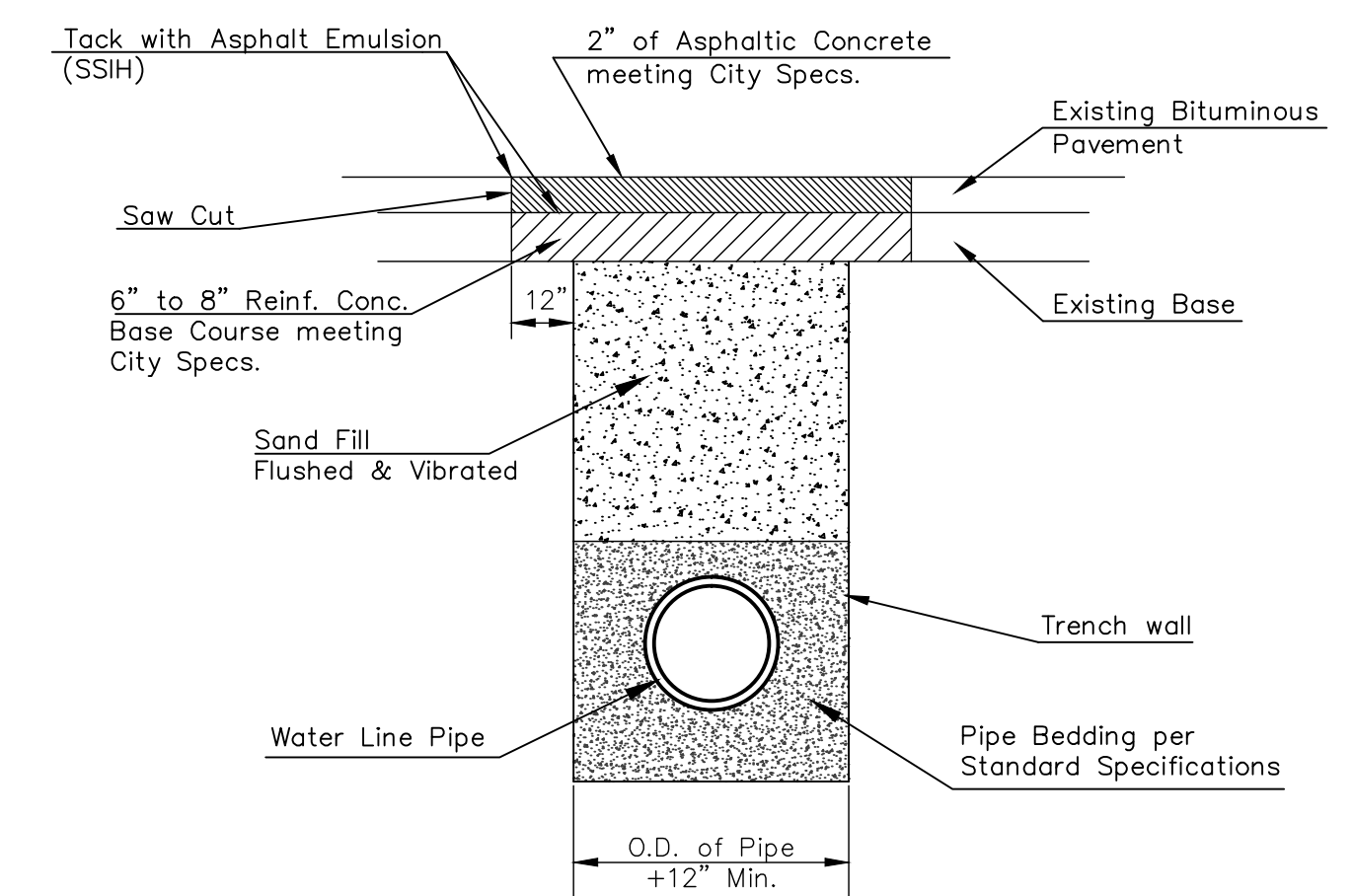
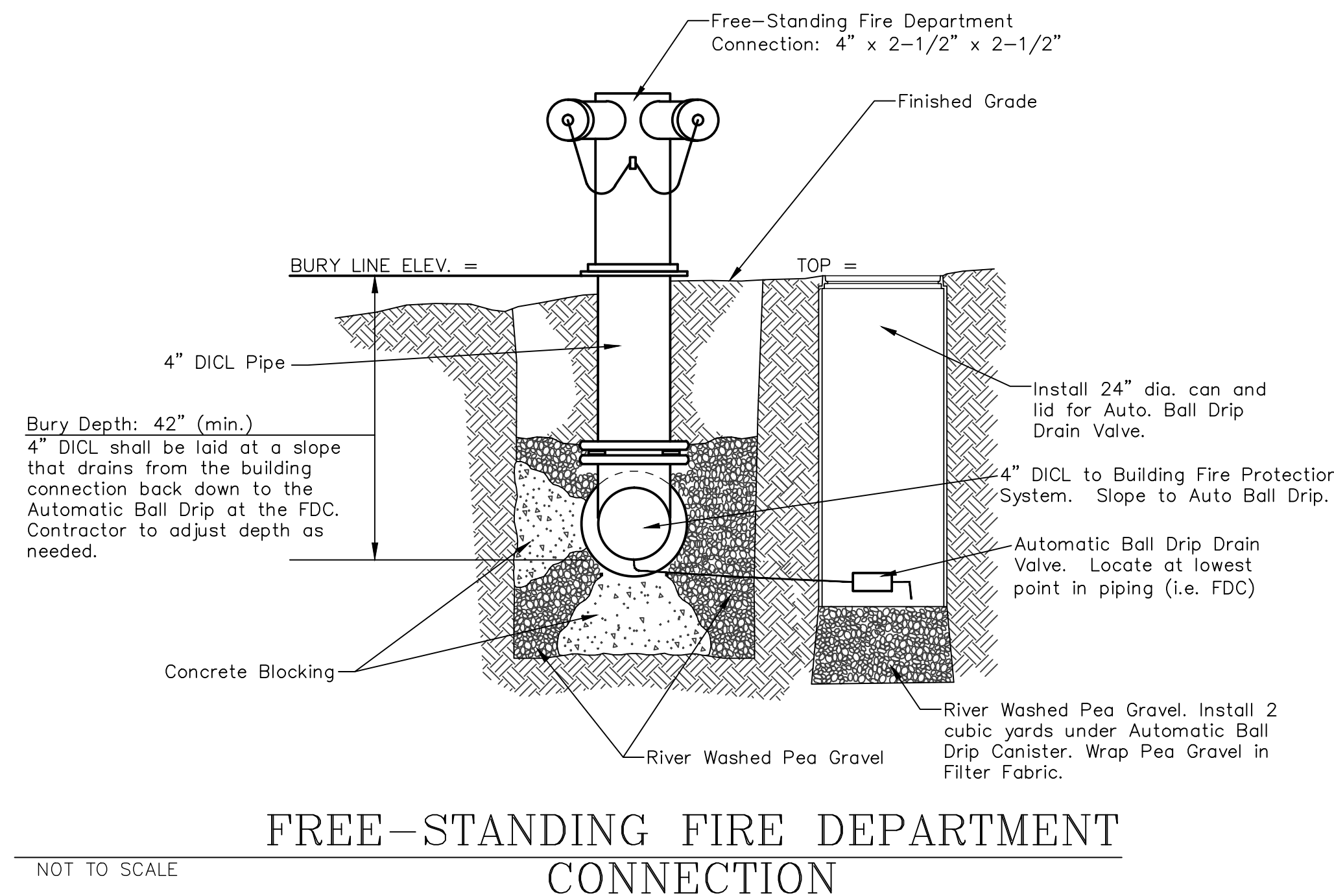
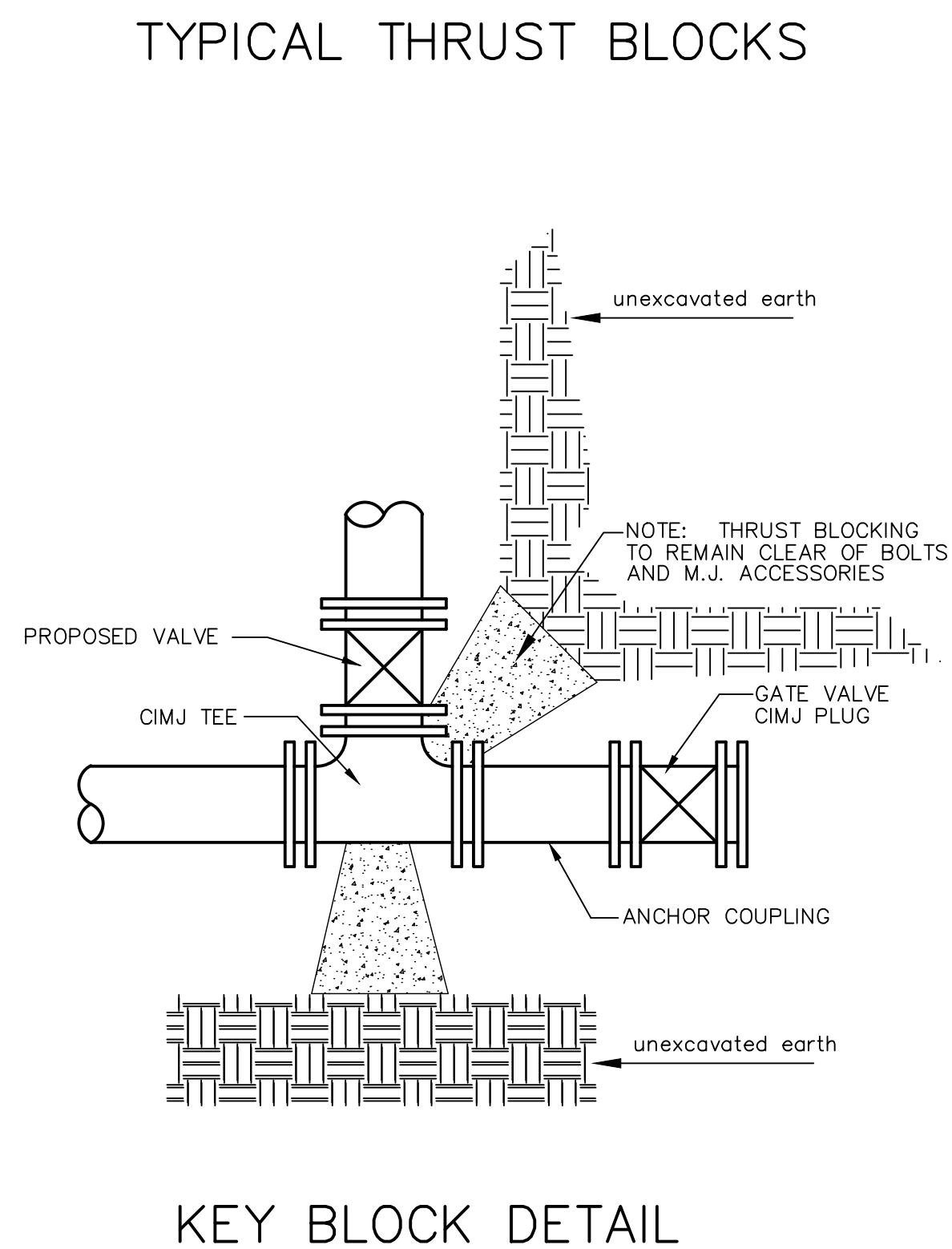


TYPICAL THRUST BLOCKS

PIPE SIZE	THRUST AT FITTINGS IN TONS--AT 150#/IN ² 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

TRENCH COMPACTION IN ROAD RIGHT-OF-WAY

REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER



MISCELLANEOUS WATER DETAILS

CITY ENGINEER

Gary Janzen, P.E. City Engineer

PRIVATE PROJECT NUMBER: 1728 PPW (607853) DATE: 2/13

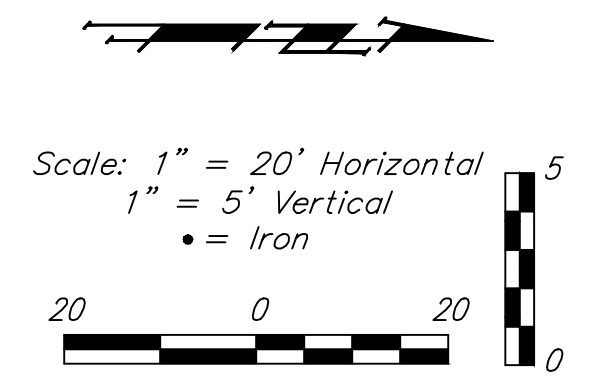
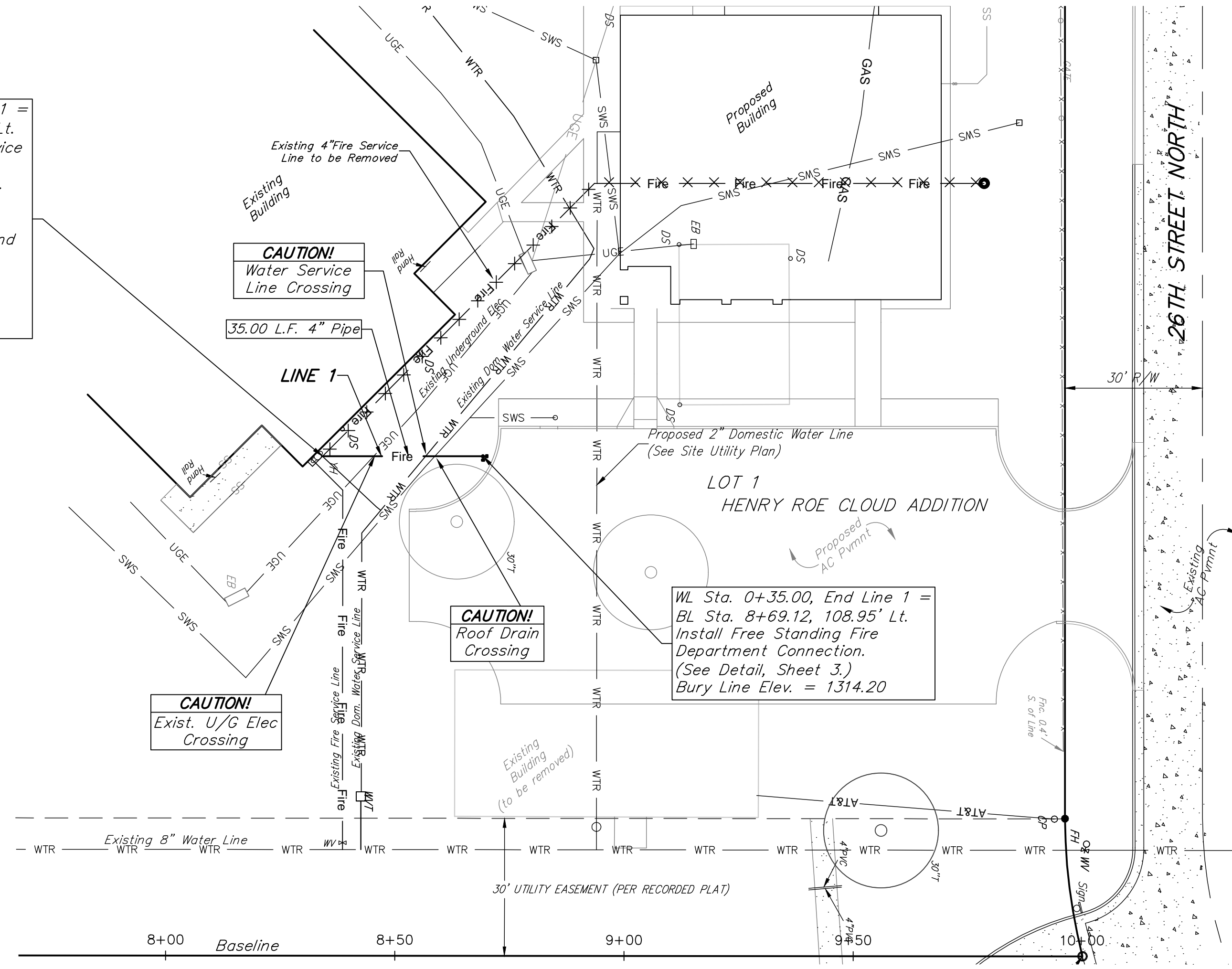
CITY ENGINEER'S OFFICE: CITY HALL - SEVENTH FLOOR, 455 NORTH MAIN STREET, WICHITA, KANSAS 67202-1620 (316) 268-4501

DESIGN: Staff DRAWN: Staff

SHEET: 3 of 5

Benchmark:
 "Chiseled Square" on Top of Curb
 Elevation=1313.62 (NAVD 88)

WL Sta. 0+00, Begin Line 1 =
 BL Sta. 8+34.12, 108.91' Lt.
 Sever Existing 4" Fire Service
 Line and Remove 169 L.F.
 Existing 4" Pipe Northwest.
 1 - 4" CIMJ 45° Bend
 Connect to Existing 4"
 Fire Service Line and Extend
 4" Pipe North.
 Contractor to Verify Depth
 & Location of Existing 4"
 Fire Service Line Prior to
 Construction.

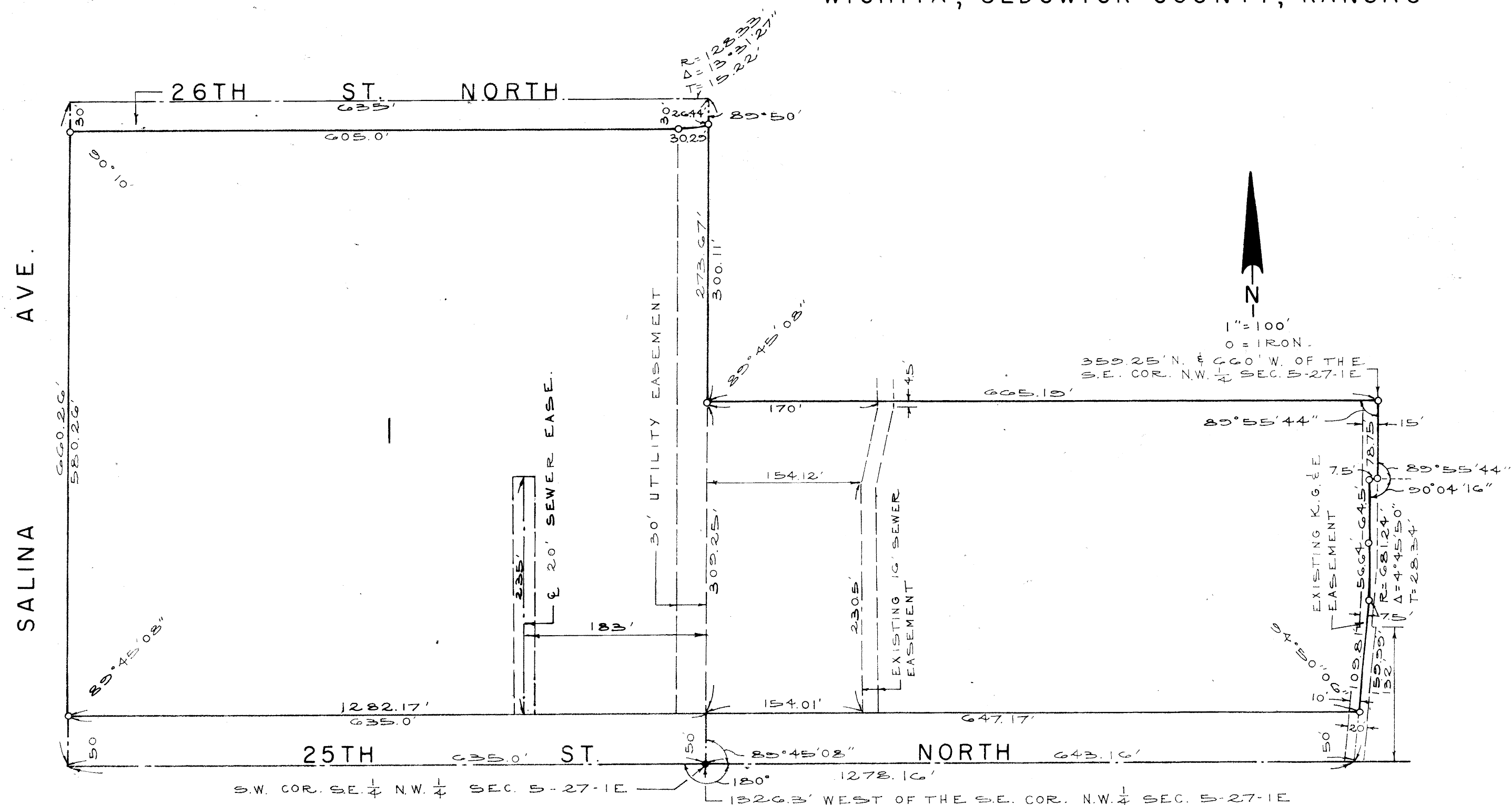


1330				1330
1325				1325
1320				1320
1315				1315
1310				1310
1305				1305
1300				1300
1295				1295
	0+00		0+35.00	

LINE 1

HENRY ROE CLOUD ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS



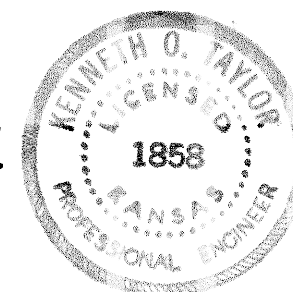
State of Kansas, County of Sedgwick, SS.

I, Kenneth O. Taylor, Civil Engineer in said State and County, do hereby certify that I have surveyed and platted "HENRY ROE CLOUD ADDITION", Wichita, Sedgwick County, Kansas, and that the accompanying plat is a true and correct exhibit of said survey described as follows: The east 635 feet of the SE 1/4 of the SW 1/4 of the NW 1/4 of Section 5, T27S, R1E of the 6th P.M., Sedgwick County, Kansas and a tract in the SE 1/4 of the NW 1/4 of Section 5, T27S, R1E of the 6th P.M., Sedgwick County, Kansas, described as follows: Beginning at the SW corner of said SE 1/4 of said NW 1/4; thence north on the west line of said SE 1/4 of said NW 1/4, 359.25 feet; thence east parallel to the south line of said SE 1/4, 665.19 feet to a point 660 feet west of the east line of said SE 1/4; thence south parallel to the east line of said SE 1/4 78.75 feet; thence west parallel to the south line of said SE 1/4, 7.5 feet to the center line of Mascot Avenue as platted in Woodland Heights Addition to Wichita, Kansas; thence south along the center line of said Mascot Avenue and parallel to the east line of said SE 1/4, 64.5 feet to the P.C. of a curve; thence southerly along said center line of said Mascot Avenue and on a curve to the right having a radius of 681.24 feet and a deflection angle of 4°45'50", a distance of 56.64 feet to the P.T. of said curve; thence southerly on a tangent to said curve and on the center line of said Mascot Avenue and on said center line extended to the south, a distance of 159.99 feet to the south line of said SE 1/4 of said NW 1/4; thence west on said south line of said SE 1/4, 643.16 feet to the point of beginning.

The above described property includes a REPLAT of Blocks A and B in Woodland Heights Addition to Wichita, Kansas and all of Ingram Addition to Wichita, Sedgwick County, Kansas.

All lots and blocks in Block A and Block B in Woodland Heights Addition to Wichita, Kansas, Jeanette Avenue, Woodland Avenue and the West one-half of Mascot Avenue as platted in said Woodland Heights, and all of Ingram Addition to Wichita, Sedgwick County, Kansas being vacated and replatted by virtue of K.S.A. 1970 Supp. 12-512 (b).

Kenneth O. Taylor, Civil Engineer
Kenneth O. Taylor



Know all men by these presents that Unified School District No. 259 by Evelyn Whitcomb, President, has caused the land described in the Civil Engineer's certificate to be platted into a lot and streets to be known as "HENRY ROE CLOUD ADDITION", Wichita, Sedgwick County, Kansas. Utility easements as indicated on the plat are hereby granted for the construction and maintenance of all public utilities.

The streets, not previously dedicated, are hereby dedicated to and for the use of the public.

Unified School District No. 259, A Quasi-Municipality

ATTEST: Evelyn Whitcomb, President
Evelyn Whitcomb

Melvin F. McDonald, Clerk of the Board
Melvin F. McDonald

State of Kansas, County of Sedgwick, SS.

The foregoing instrument was acknowledged before me this 10th day of April, 1975 by Evelyn Whitcomb, President of Unified School District No. 259, a Quasi-Municipality, on behalf of the Quasi-Municipality.

Charlotte Buckmaster, Notary Public
CHARLOTTE BUCKMASTER

This plat of "HENRY ROE CLOUD ADDITION", Wichita, Sedgwick County, Kansas, has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 13th day of February, 1975.

Wichita-Sedgwick County Metropolitan Area Planning Commission

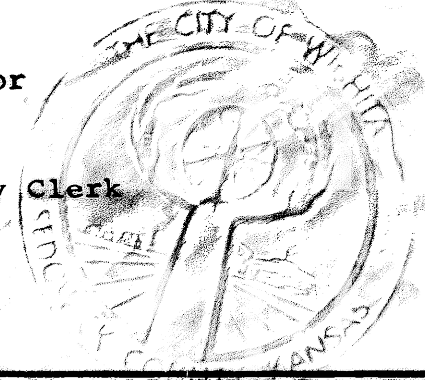
By Harlan R. Kamen, Chairman
Harlan R. Kamen

Robert A. Lakin, Secretary
Robert A. Lakin

This plat approved and all dedications shown hereon accepted by the Board of City Commissioners of the City of Wichita, Kansas, this 11th day of JAN, 1977.

James M. Donnell, Mayor
James M. Donnell

Donald C. Gisick, City Clerk
Donald C. Gisick



This plat approved and all dedications shown hereon accepted by the Board of County Commissioners of Sedgwick County, Kansas, this 3rd day of FEB, 1977.

Tom Scott, Chairman
Tom Scott

Tom Everett Patrick, Commissioner
Tom Everett Patrick

John Hale, Commissioner
John Hale

Dorothy K. White, County Clerk
DOROTHY K. WHITE

Entered on transferred record this 3rd day of Feb., 1977.

Dorothy K. White, County Clerk
DOROTHY K. WHITE

State of Kansas, County of Sedgwick, SS.

This is to certify that this instrument was filed for record in the Register of Deeds Office, at 10 o'clock A.., on the 3rd day of FEBRUARY, 1977.

Bette F. McCart, Register of Deeds
Bette F. McCart

Amelia Feil, Deputy
AMELIA FEIL

313850

