

**Materials**

PRO-TRACER WIRE  
 FIRE HYD.-CLOW(STORZ)  
 VALVES- 6" & 8" CLOW  
 PIPE- 4" & 6" & 8" CIS PIPELIFE JET  
 STREAM DR18-C900  
 8" NORTHERN DR18-C900  
 6" DI CL-U.S. PIPE  
 SIGMA-GLAND PACK & FITTINGS

SWIMMER'S CHOICE C HLORINE  
 2" CLOW BLOWOFF VALVE

**AS BUILTS**

Contractor: Ewertz Excavation  8/15/2013	Project Inspector: Larry Gann  <b>kemiller</b> engineering 516 S. Market, Wichita, KS 67202 (316)264-0242
--	--

Site Benchmark 2  
 "V" Notch in West  
 Edge of Sidewalk.  
 Elevation = 1375.60  
 (NAVD 88)

# WATER LINES & FIRE HYDRANTS TO SERVE Berkeley Square First Addition

Lots 2-4, Block 1 (Phase 2)  
 Private Project: 1603 PPW (607853)  
 CITY OF WICHITA, KANSAS

Gary Janzen, P.E. City Engineer  
 MAY 2013

**BENCHMARK**

Benchmark #1 - "□" cut in west edge of catch basin.  
 Elevation = 1381.56 (NAVD 88)

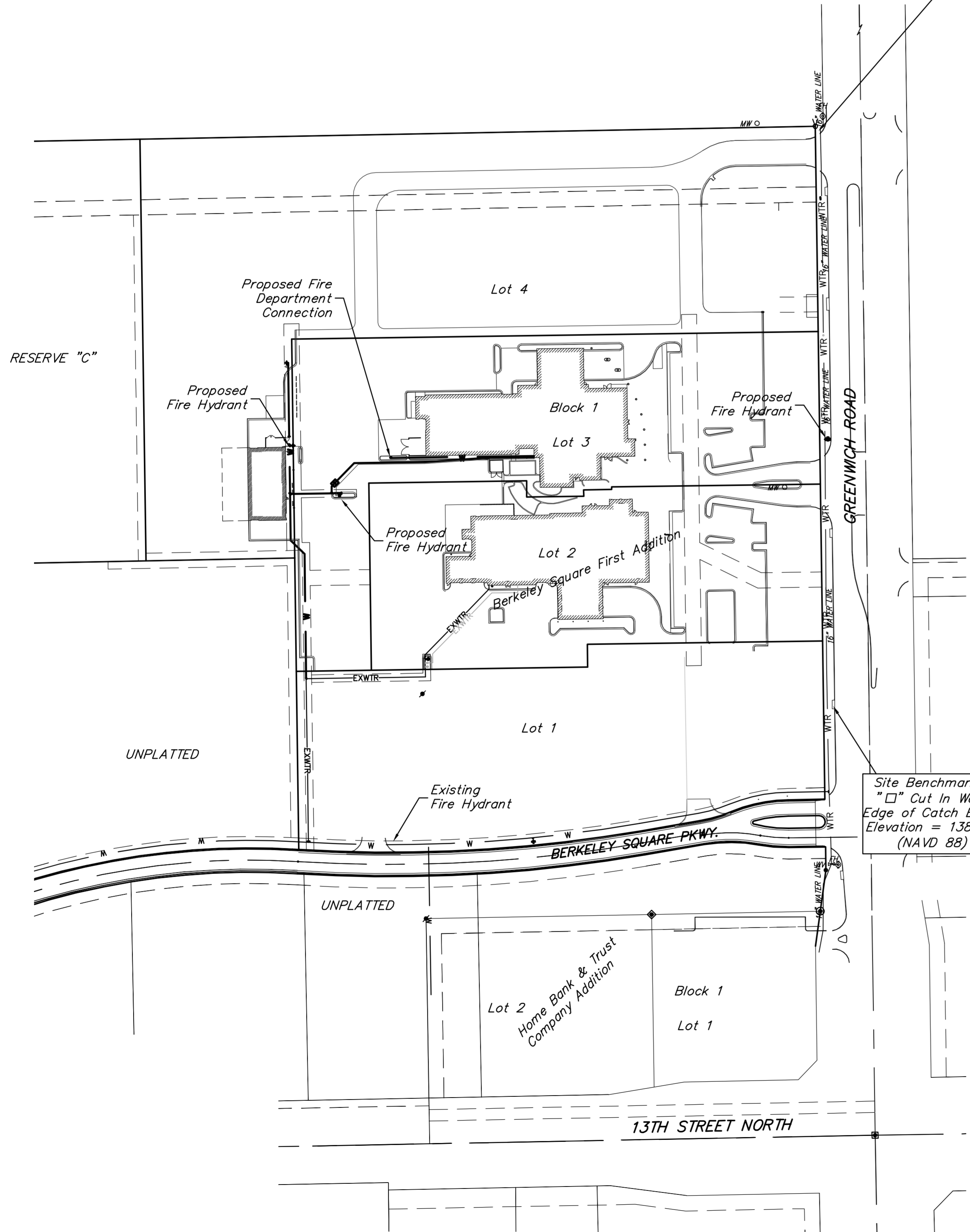
Benchmark #2 - "V" notch in west edge of sidewalk.  
 Elevation = 1375.60 (NAVD 88)

**SHEET INDEX:**

Title Sheet	1
Standard Water Details	2-4
Line 1 & Line 2	5
Line 3, 4, & 5	6
Copy of Plat	7

**GENERAL NOTES:**

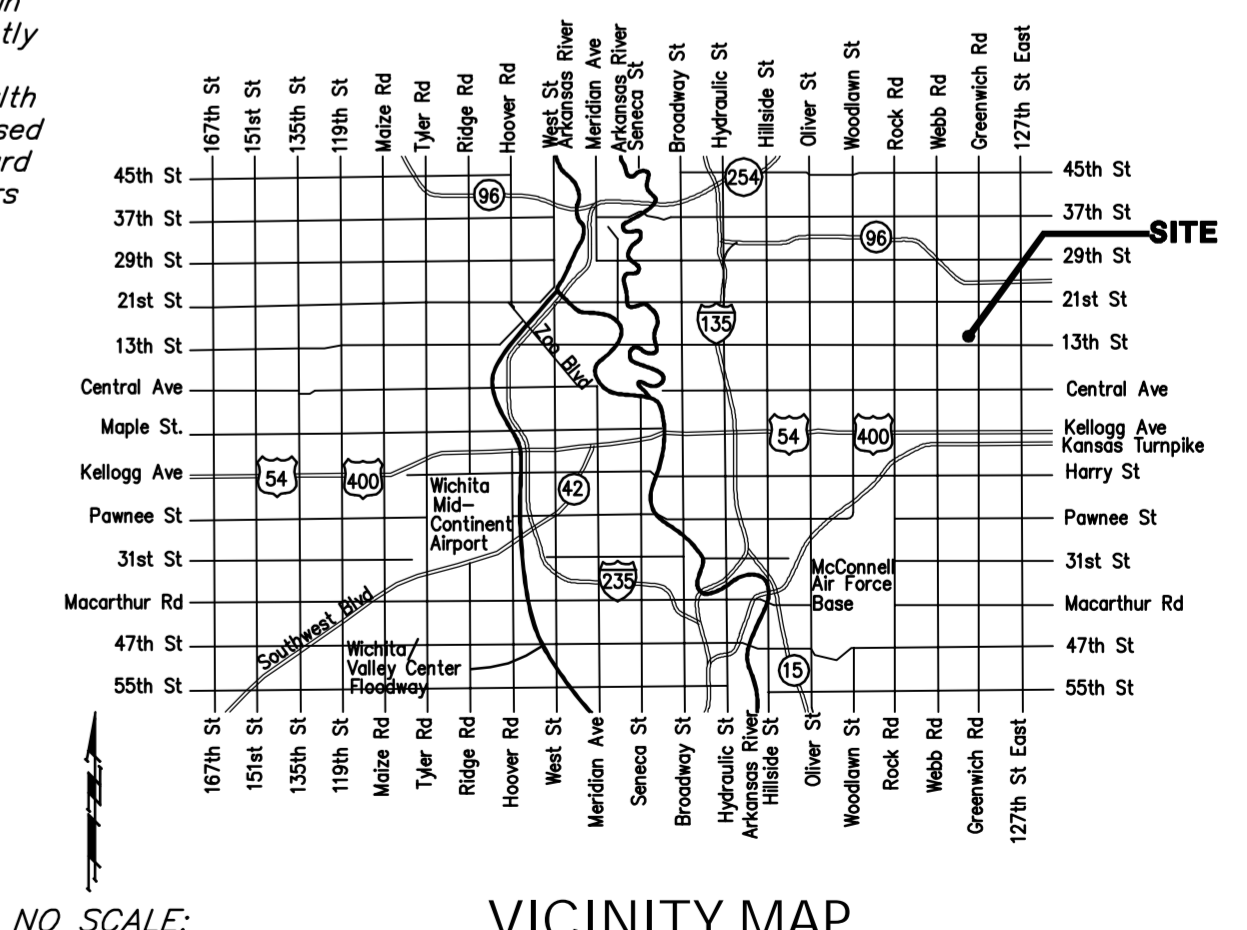
- Contractor will be required to provide notice to utility companies a minimum of forty-eight (48) hours prior to any excavation, as follows:  
 Kansas One-Call 687-2470  
 Cox Communications 262-4270  
 Kansas Gas Service 1-888-482-4950  
 Westar Energy 383-8650  
 Black Hills Energy (Gas) 1-800-303-0357  
 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
- 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 West Line of Lot 3, Block 1, Berkeley Square First Addition with North R/W Line of Berkeley Square Pkwy = Station 0+00.



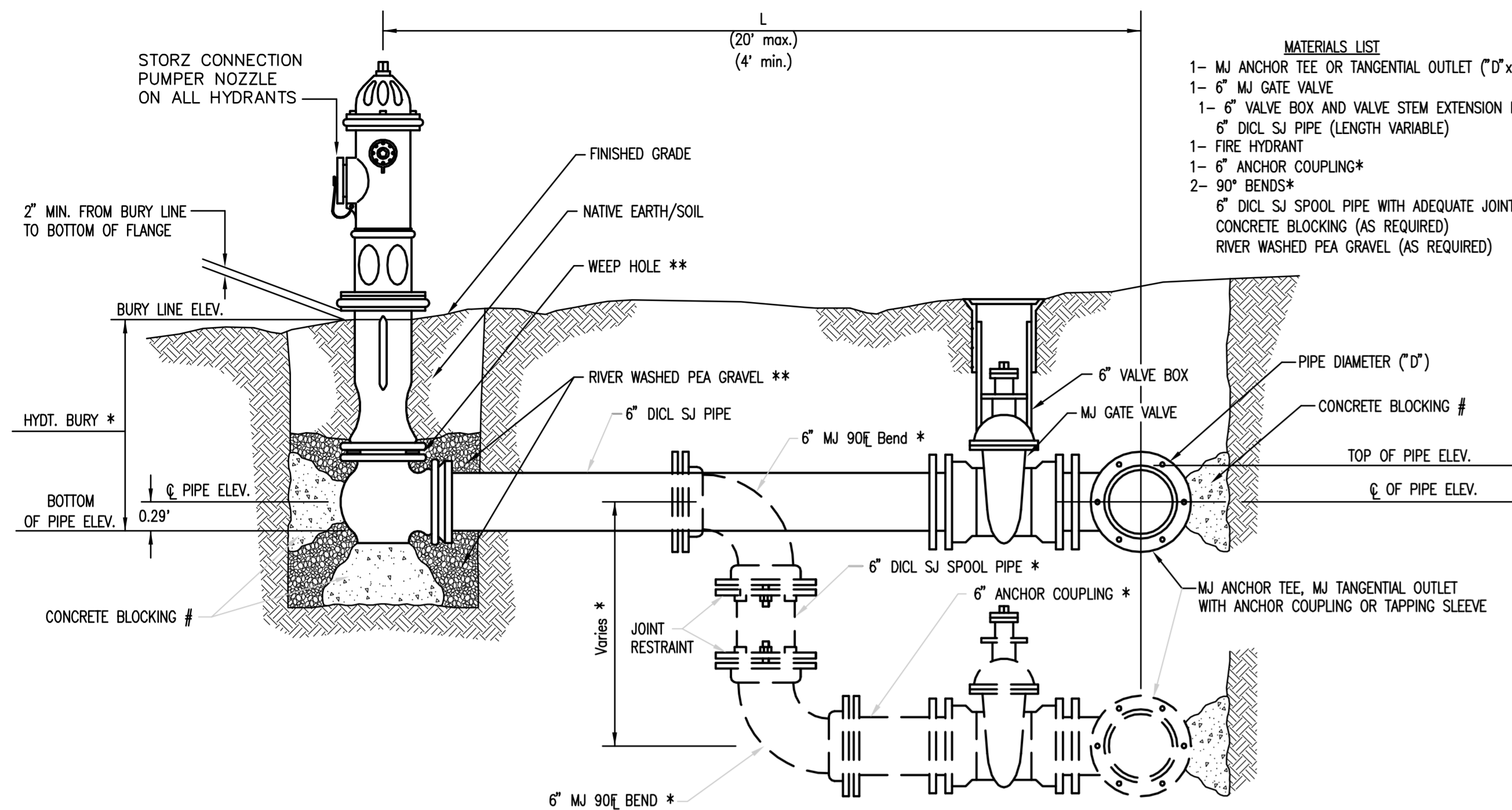
APPROVED AS NOTED  
 BY CITY ENGINEER OF WICHITA,  
 BY WICHITA WATER & SEWER DEPARTMENT,  
 & BY WICHITA FIRE DEPARTMENT

Public Works *[Signature]* 6/19/13  
 Water & Sewer *[Signature]* 6-19-13  
 Fire *[Signature]* 6-19-2013

**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.



**Baughman**  
 Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149  
 ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE



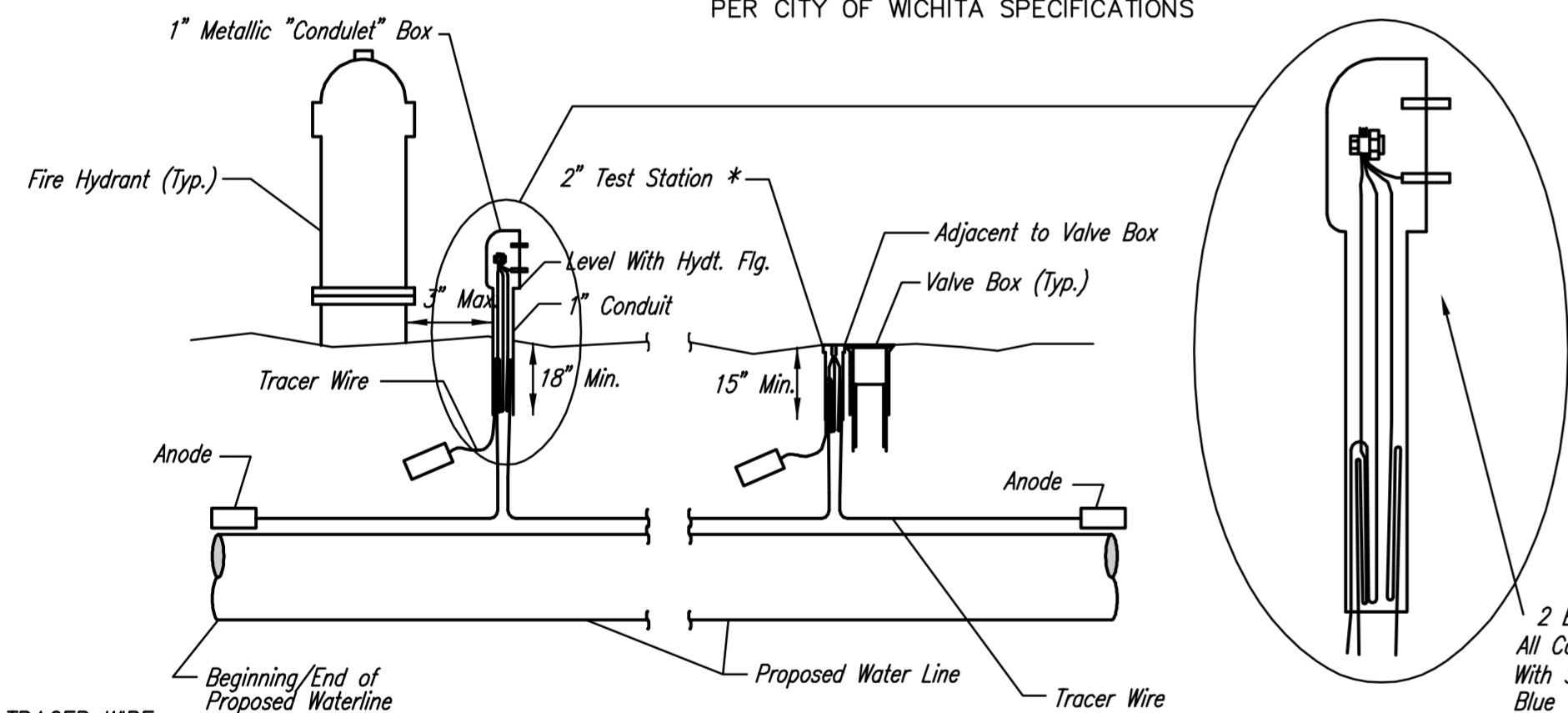
- MATERIALS LIST**
- 1- MJ ANCHOR TEE OR TANGENTIAL OUTLET (6" x 6")
  - 1- 6" MJ GATE VALVE
  - 1- 6" VALVE BOX AND VALVE STEM EXTENSION IF REQUIRED \*
  - 6" DI CL SJ PIPE (LENGTH VARIABLE)
  - 1- FIRE HYDRANT
  - 1- 6" ANCHOR COUPLING\*
  - 2- 90° BENDS\*
  - 6" DI CL SJ SPOOL PIPE WITH ADEQUATE JOINT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



**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.

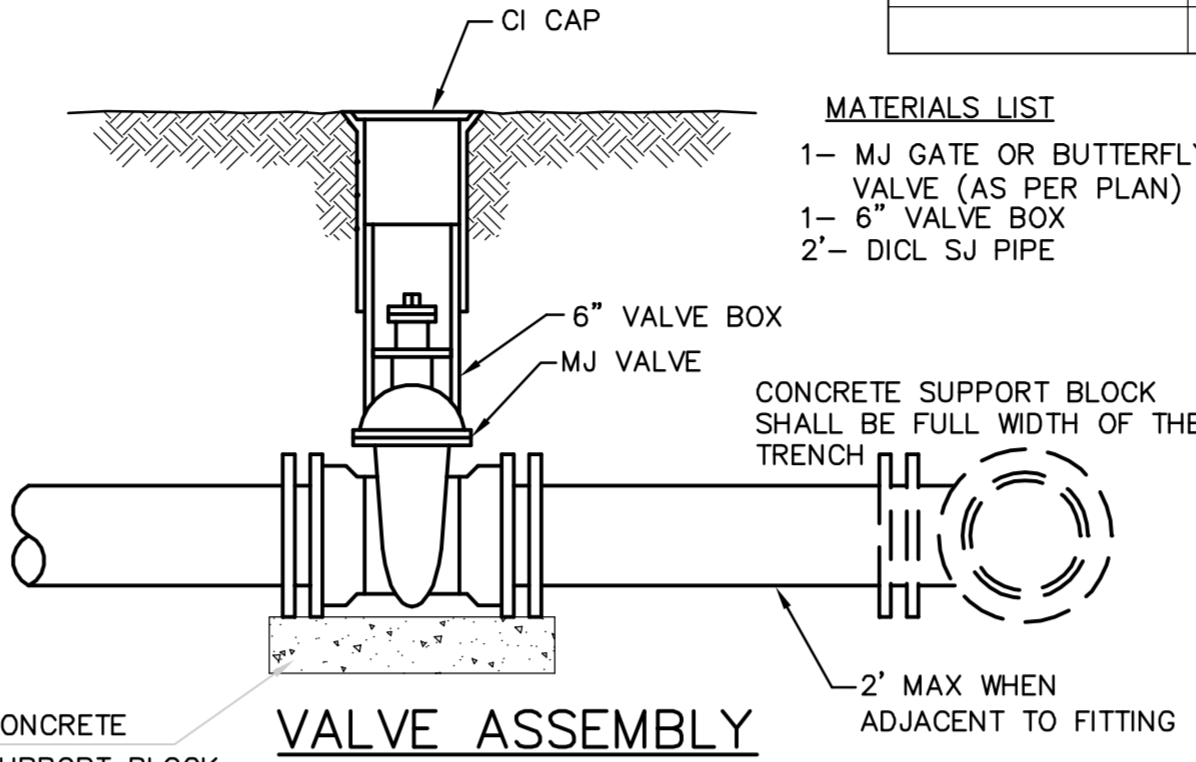
**WIRE**  
The tracer wire shall be Blue No. 12 THHN annealed soft copper wire with thermal plastic insulation or Blue No. 12 AWG CCS with 30 mil HDPE insulation. The insulation shall be heat, oil, and gasoline resistant as manufactured by Temple Electric or approved equal. To allow for grade adjustment, 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

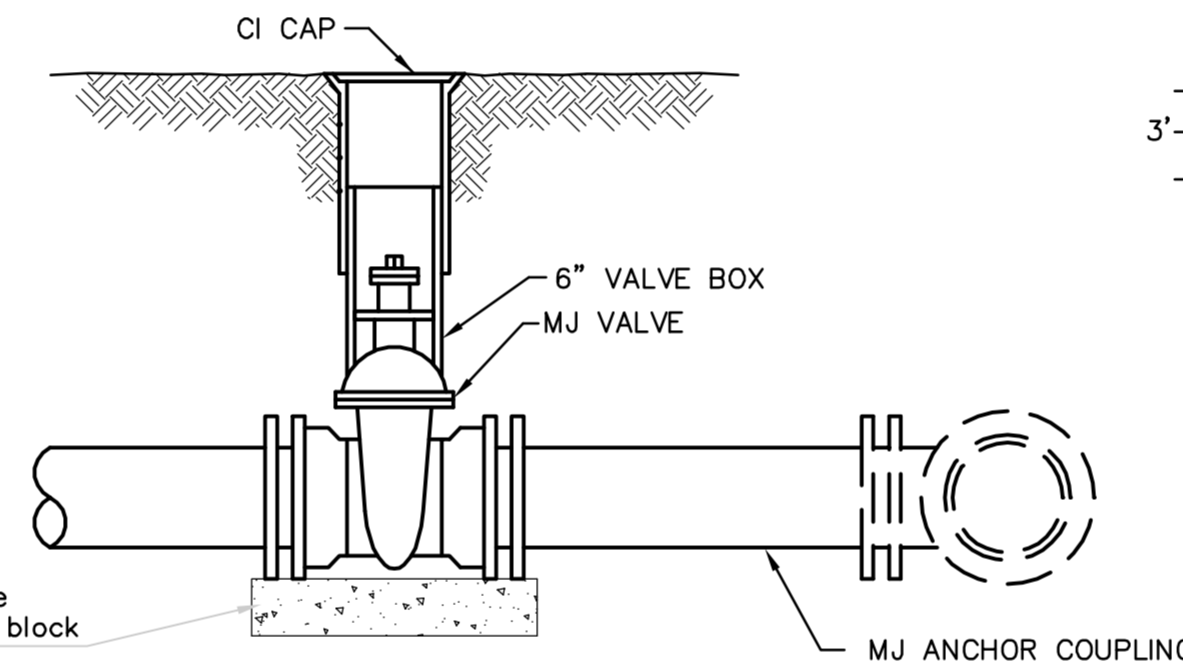
FIRE HYDRANTS REQUIRED				
STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*	VALVE STEM EXT. REQUIRED (ft)*
3+14.65	1391.10	1387.25	4.5'	-
0+65.00	1389.50	1385.65	4.5'	-
0+00	1379.10	1374.10	6.0'	-



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

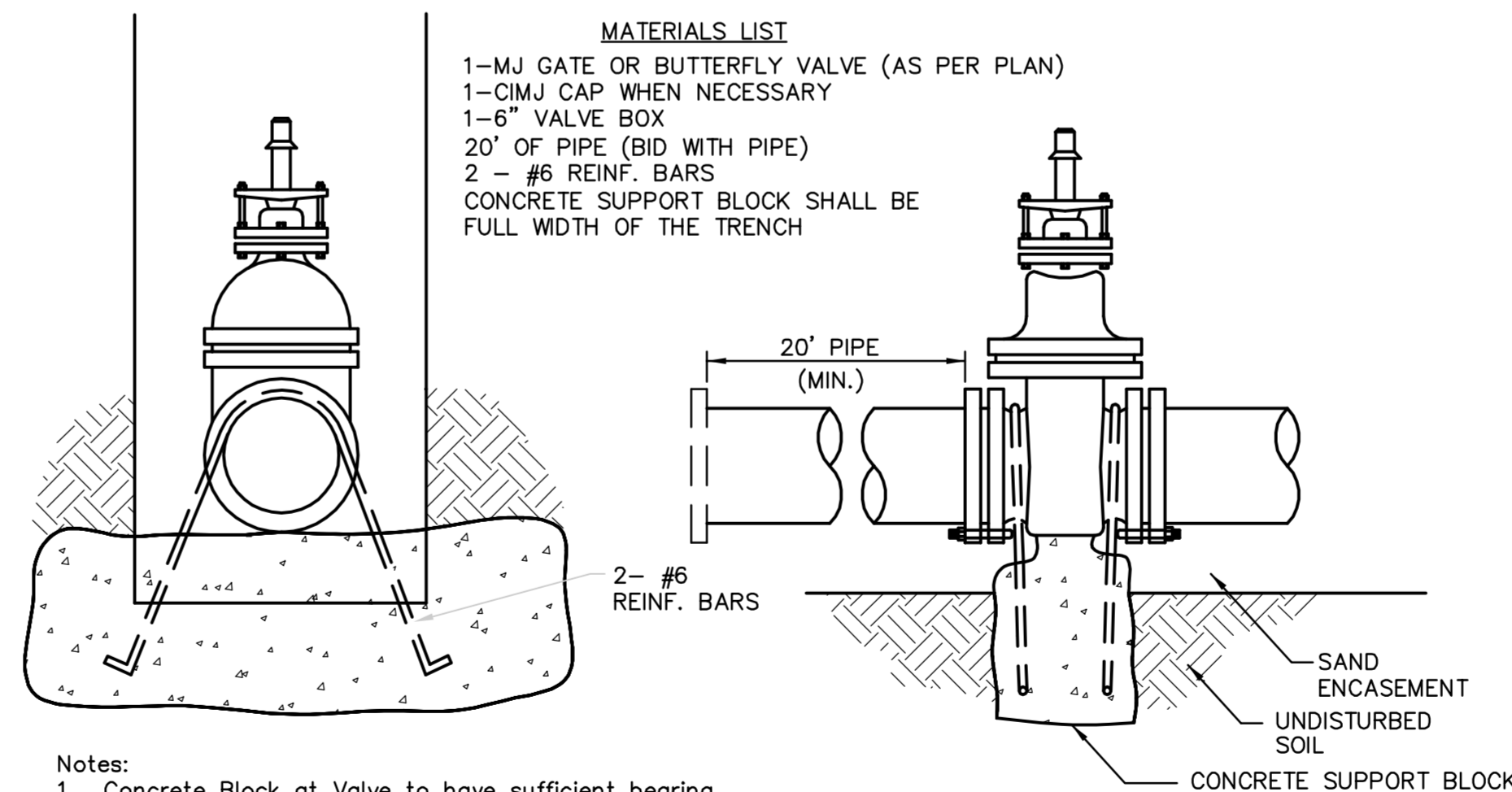
CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

- 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**

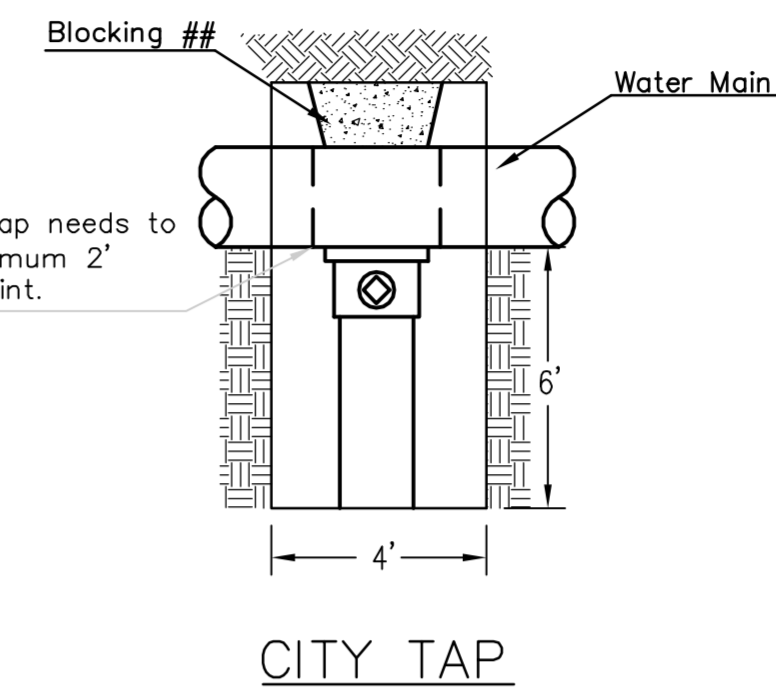
- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
  - 1- CI MJ CAP WHEN NECESSARY
  - 1- 6" VALVE BOX
  - 20' OF PIPE (BID WITH PIPE)
  - 2 - #6 REINF. BARS
  - CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH



- Notes:**
- 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.

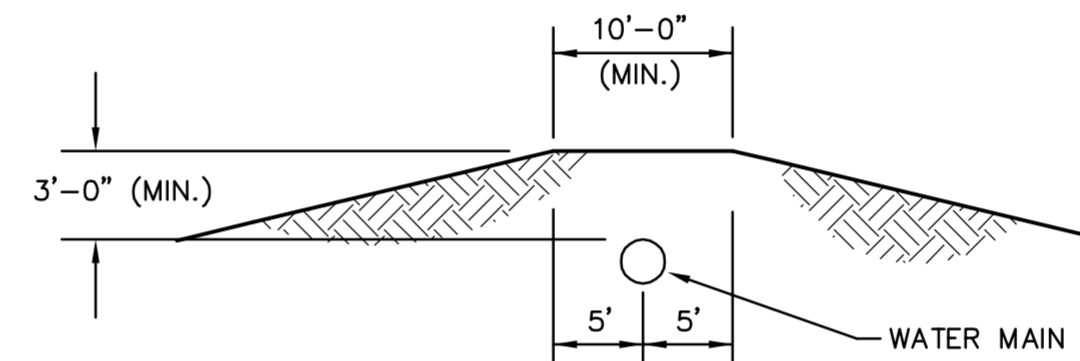
**ANCHORED VALVE ASSEMBLY, SPECIAL**



**CITY TAP**

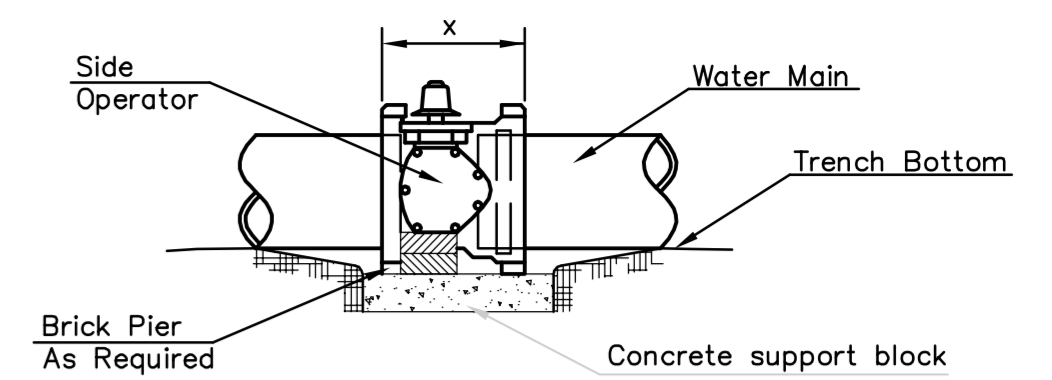
Edge of tap needs to be a minimum 2' from a joint.

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



**PROTECTIVE FILL DETAIL**

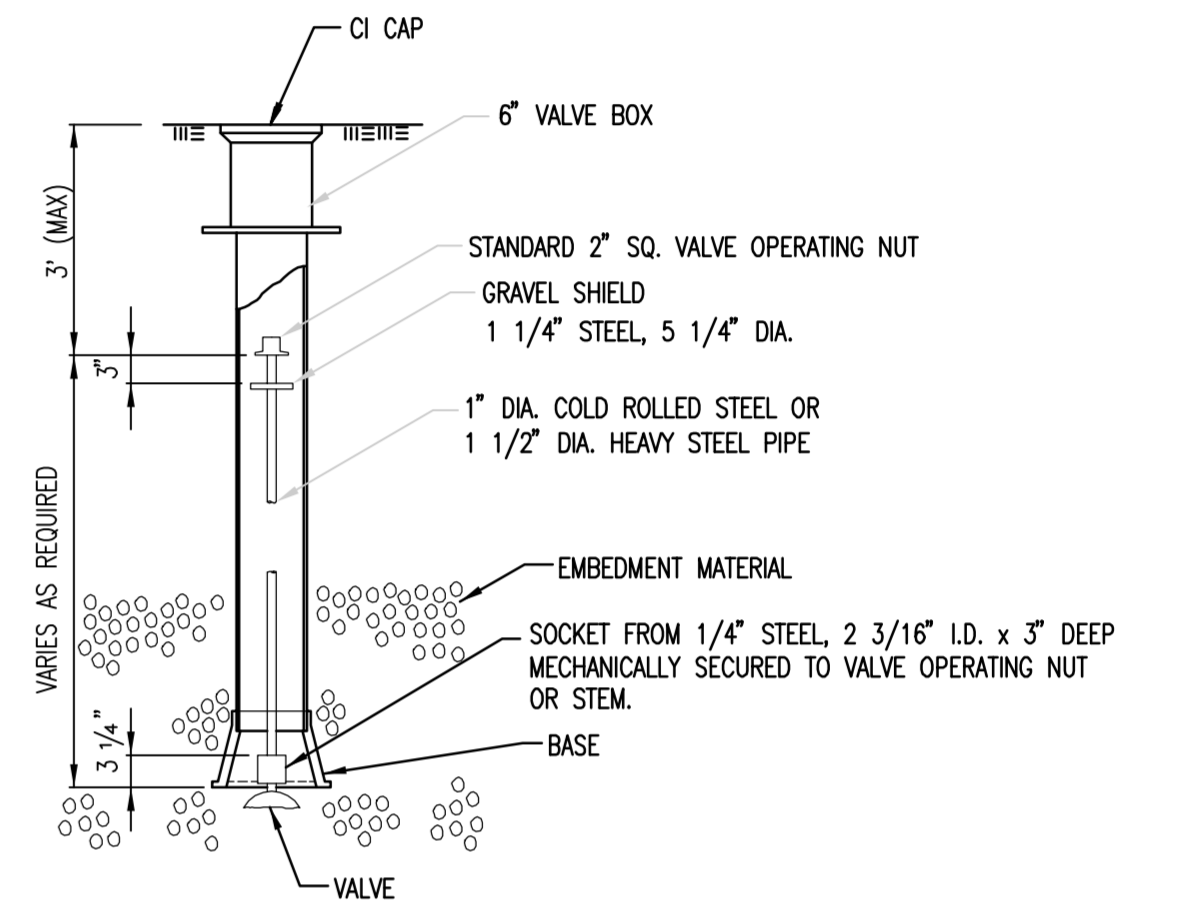
MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN 3'. (COST SUBSIDIARY TO PIPE INSTALLATION)



**NOTES**

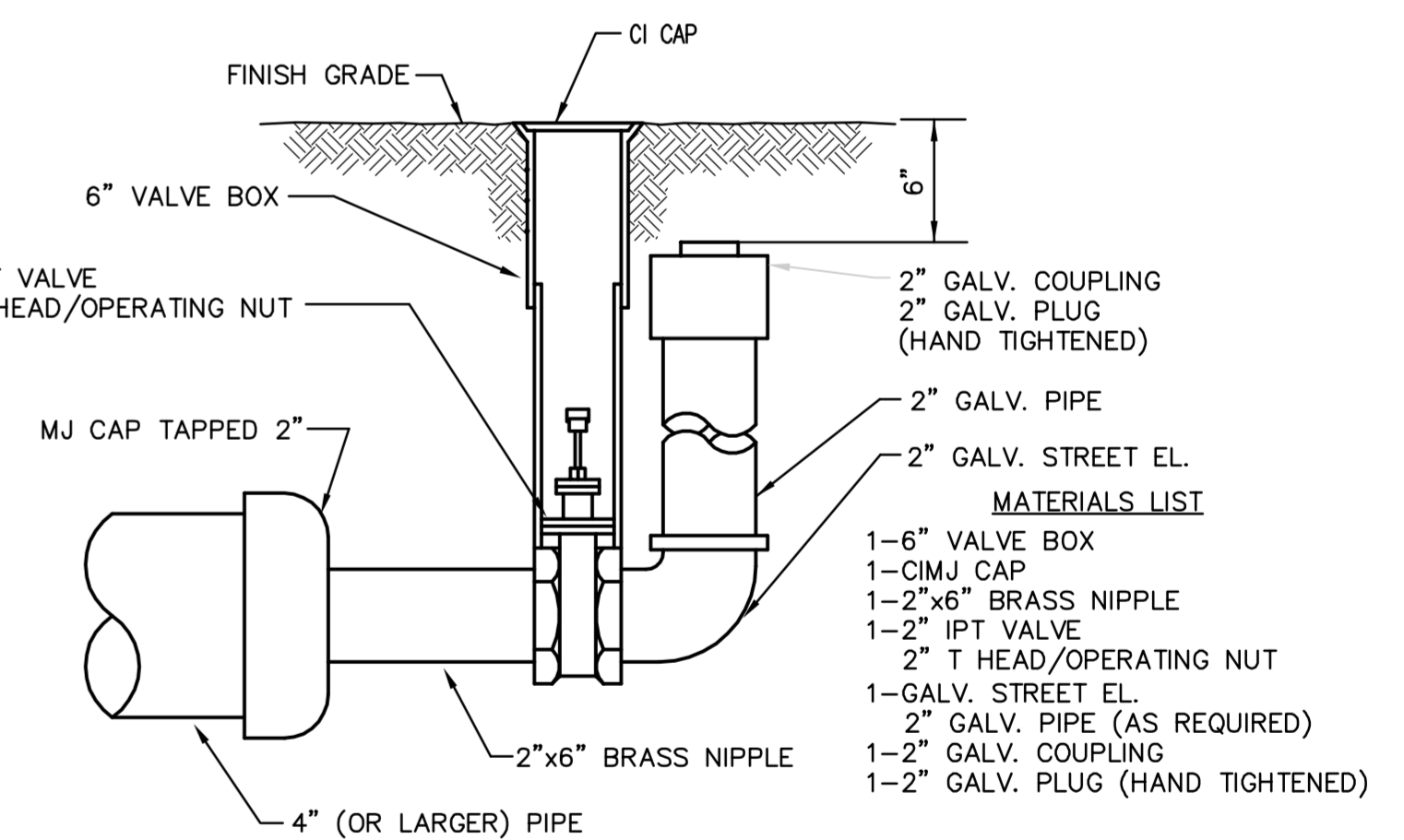
- This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. 24" and larger lines to be detailed on plans.
- 6" Valve Box and Cover required per City of Wichita Std. Specifications.
- Conc. Support Block to be full width of trench.

**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**



**CITY OF WICHITA**  
PUBLIC WORKS & UTILITIES  
ENGINEERING DIVISION

**STANDARD WATER ASSEMBLY DETAIL**

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

PRIVATE PROJECT NUMBER  
**1603 PPW (607853)**

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

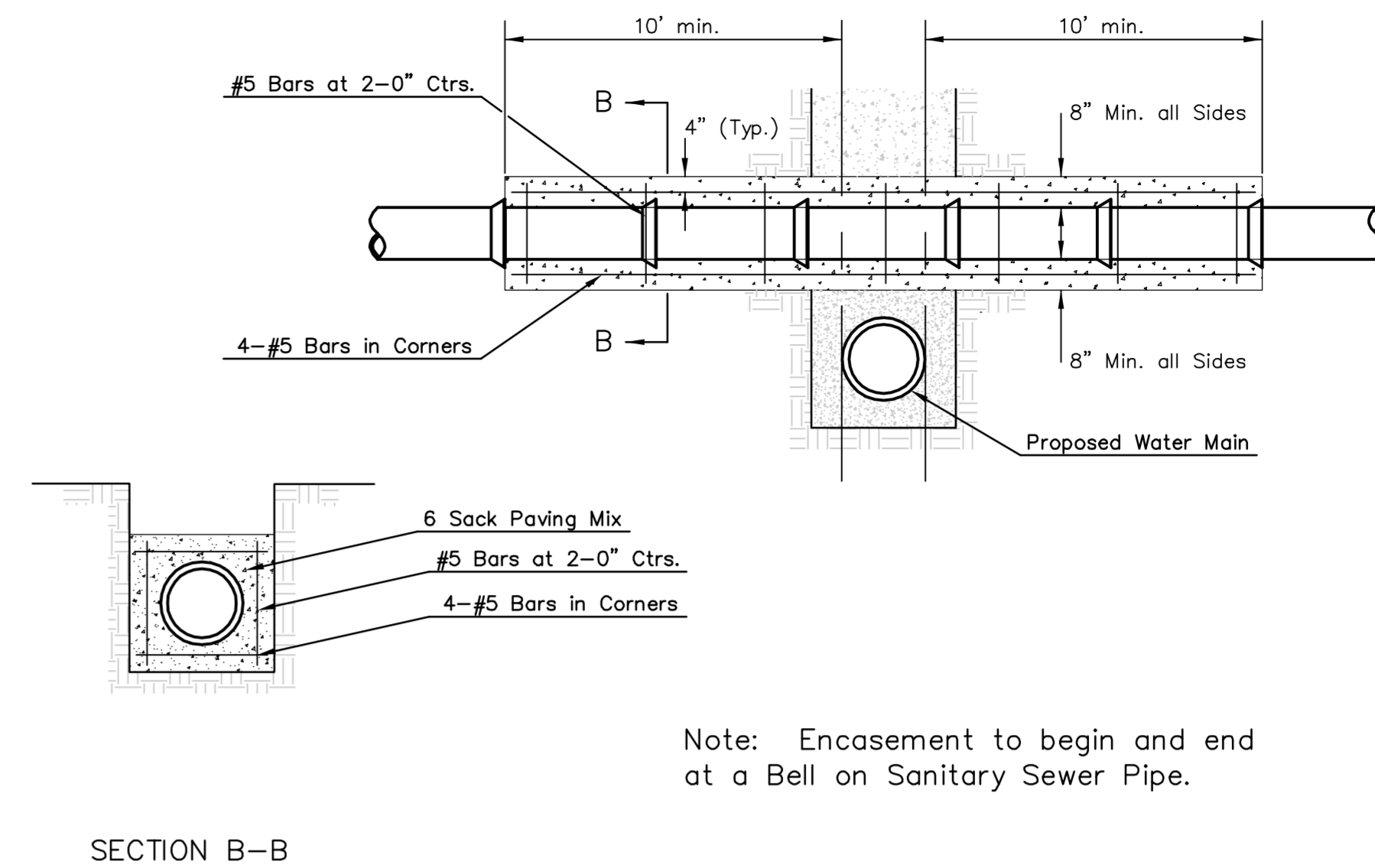
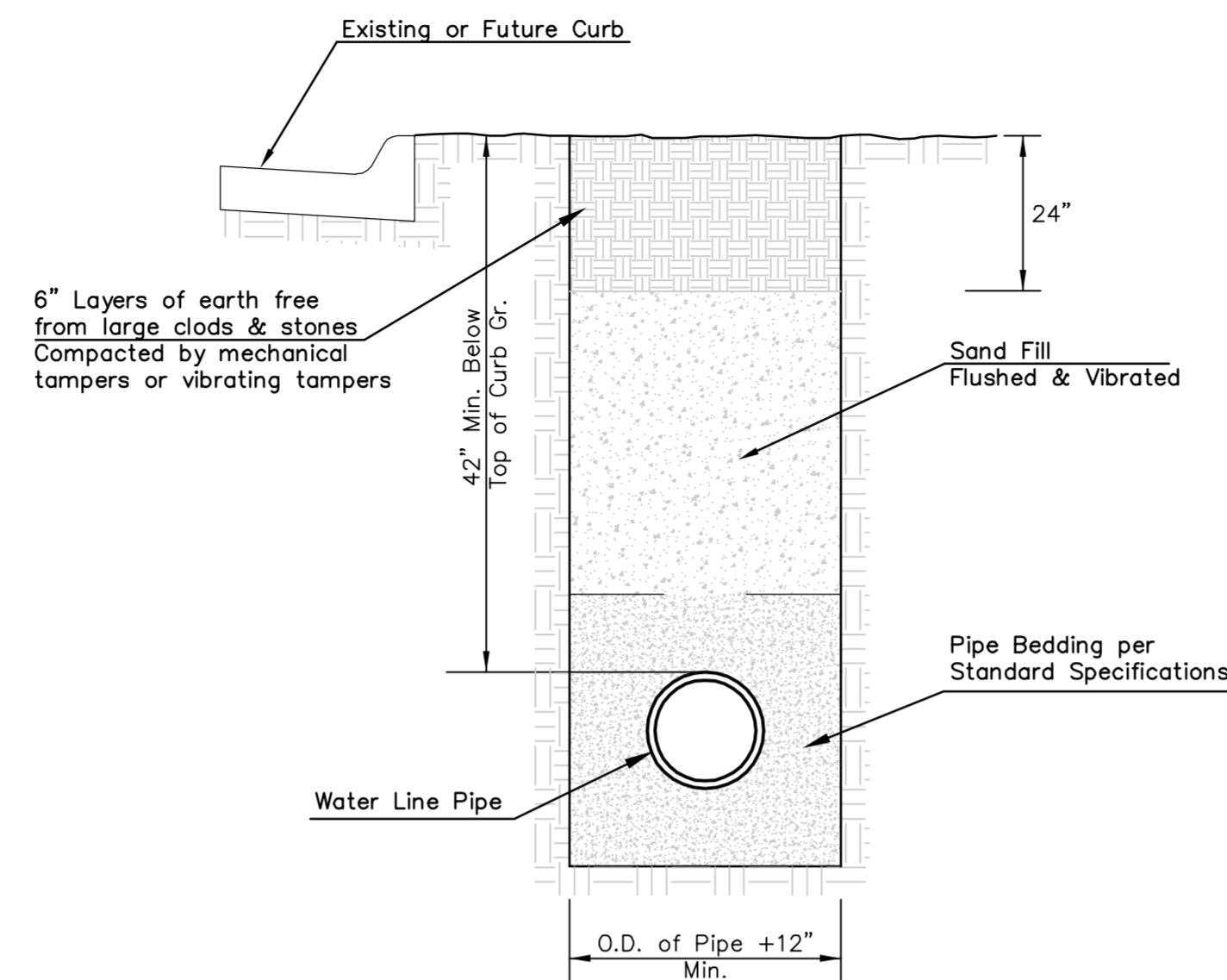
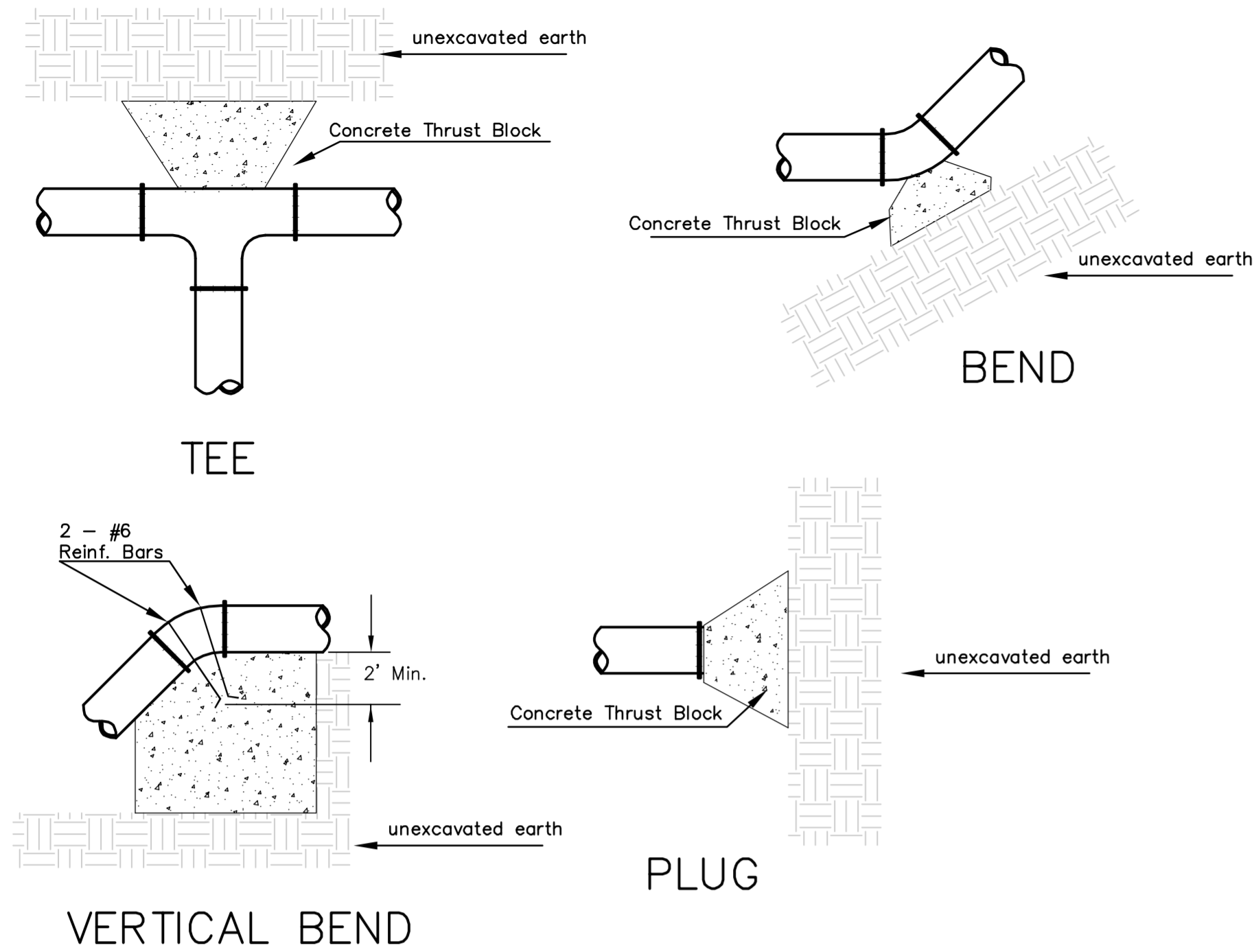
DATE  
**3/13**

DESIGN  
Staff

DRAWN  
Staff

SHEET  
**2 of 7**



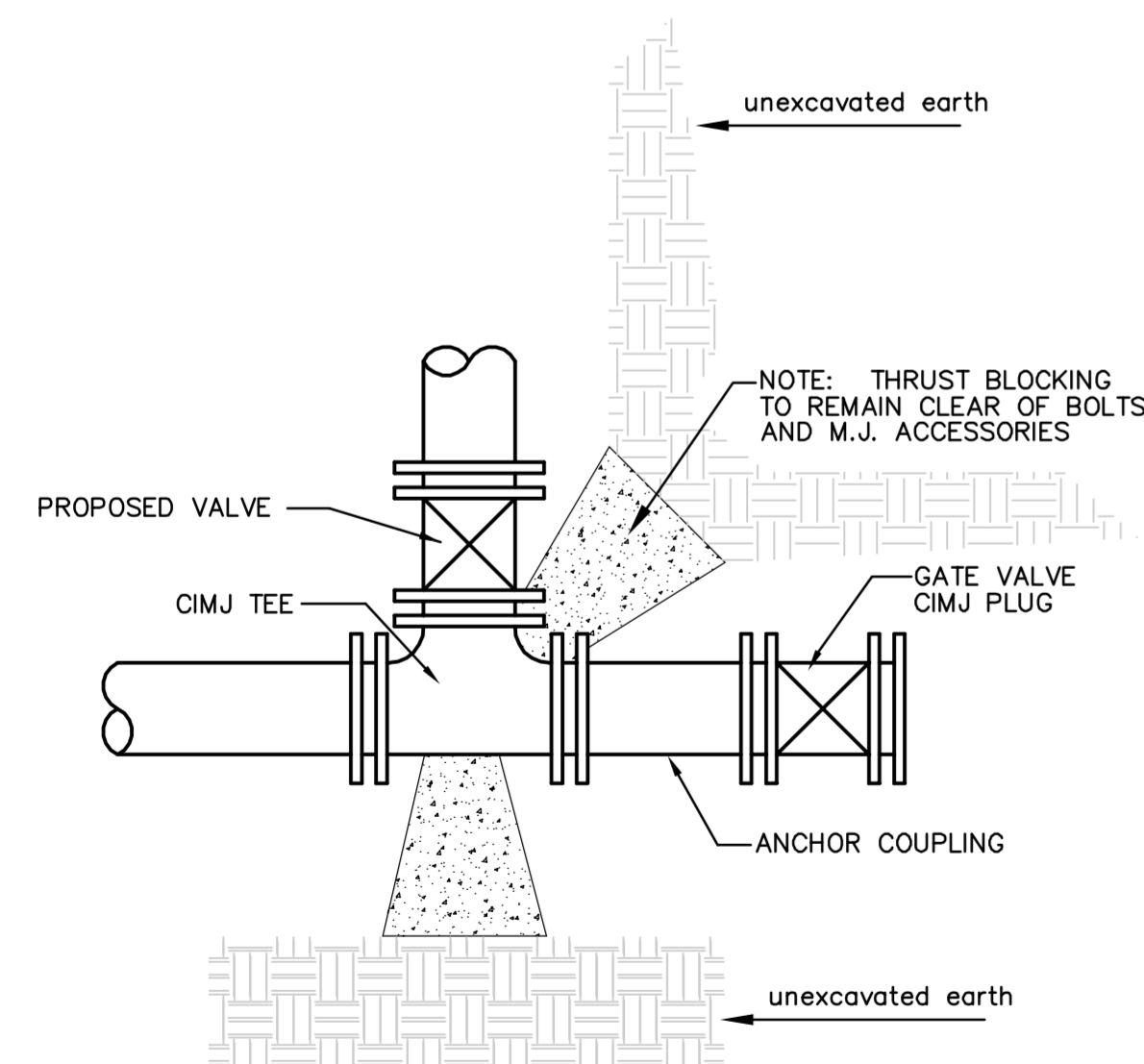


Note: Encasement to begin and end at a Bell on Sanitary Sewer Pipe.

REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER

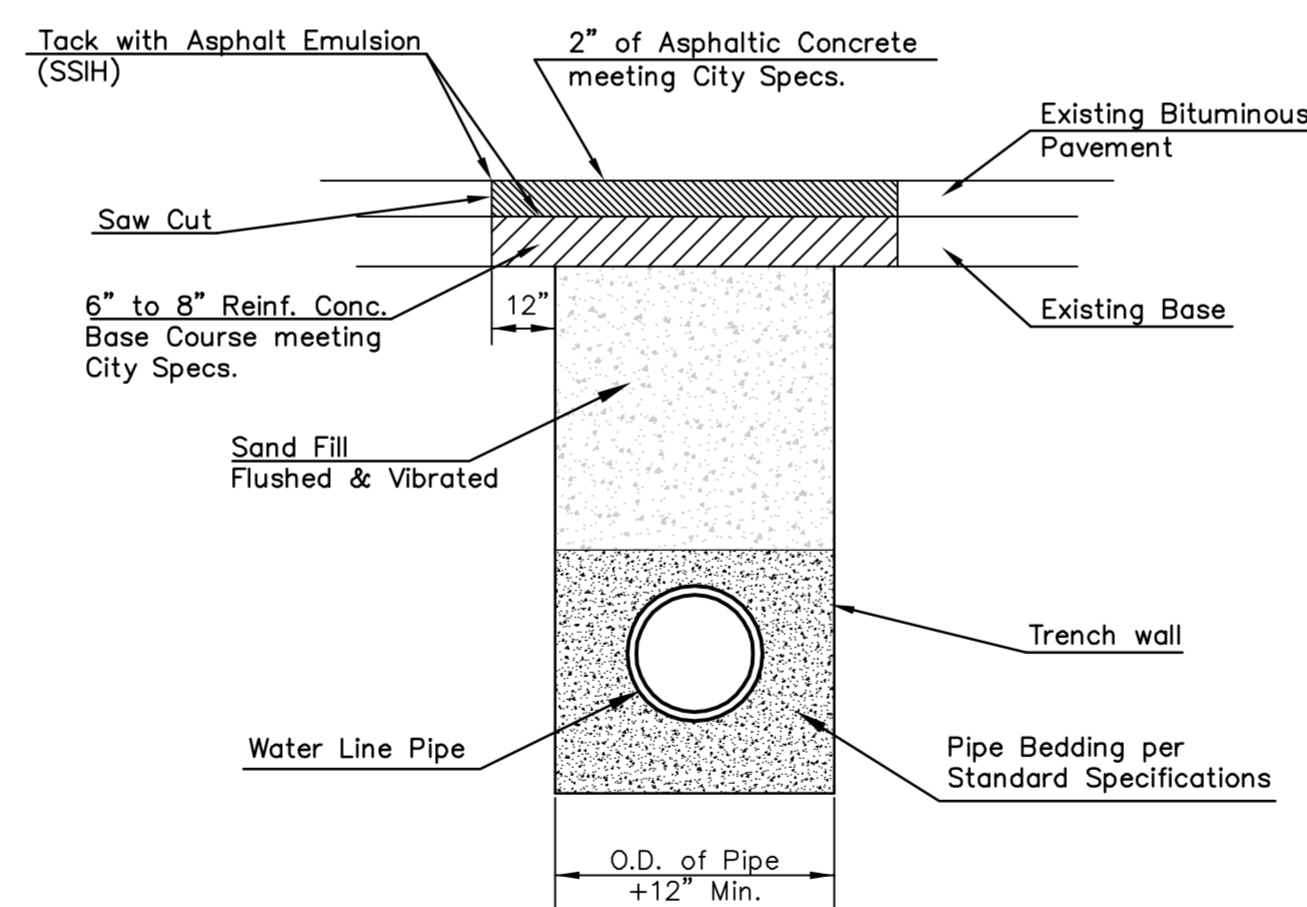
PIPE SIZE	THRUST AT FITTINGS IN TONS-AT 150#/IN <sup>2</sup> P					
	PLUG	90°	45°	22 1/2°	11 1/4°	TEE
6"	2.8	3.95	2.15	1.09	.55	2.8
8"	4.9	6.95	3.75	1.90	.96	4.9
12"	11.4	16.1	8.75	4.45	2.25	11.4
16"	20.15	28.5	15.4	7.85	3.95	20.15
20"	31.15	44.0	23.85	12.15	6.10	31.15
24"	44.55	63.0	34.1	17.4	8.75	44.55

TYPICAL THRUST BLOCKS



KEY BLOCK DETAIL

TRENCH COMPACTION IN ROAD RIGHT-OF-WAY



PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS

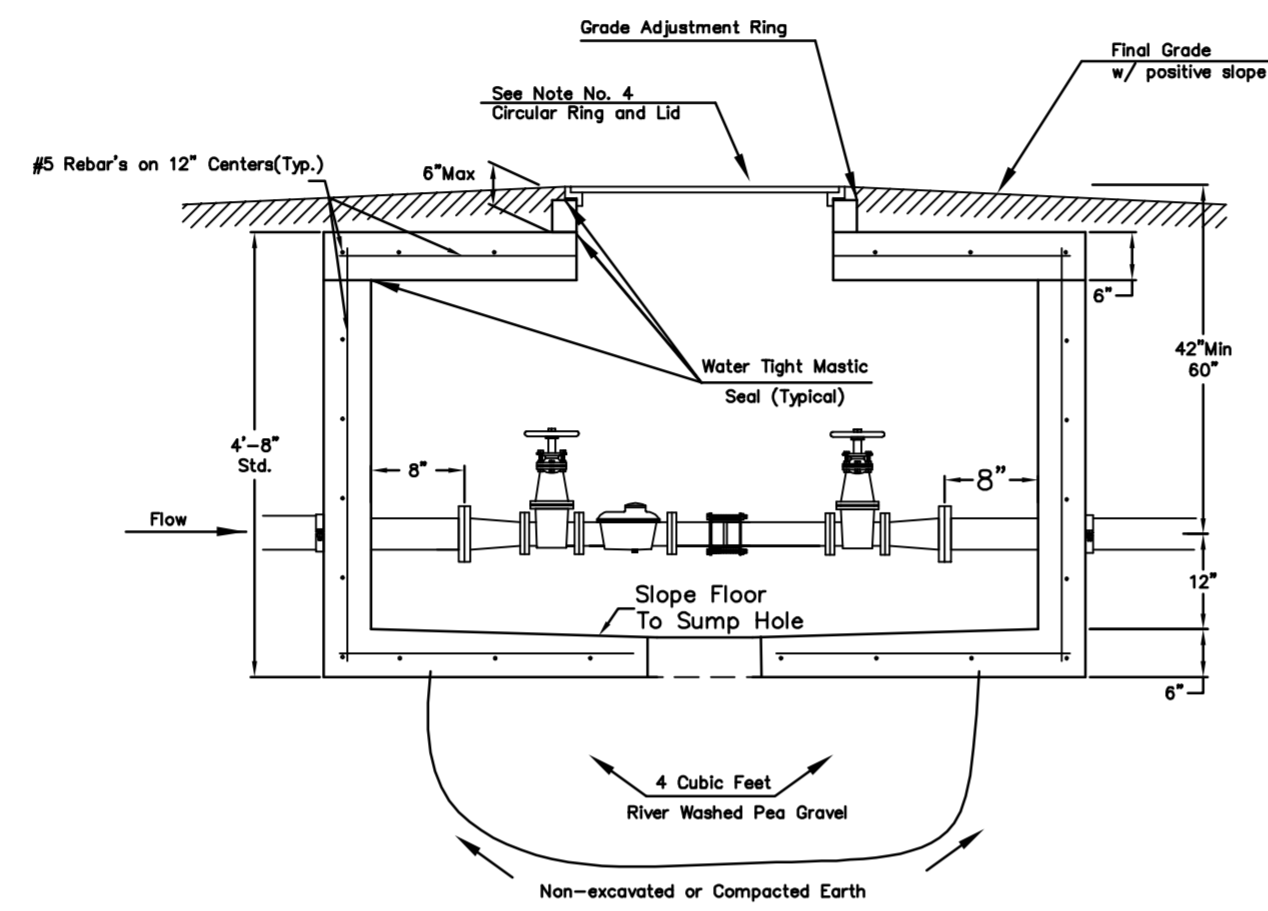
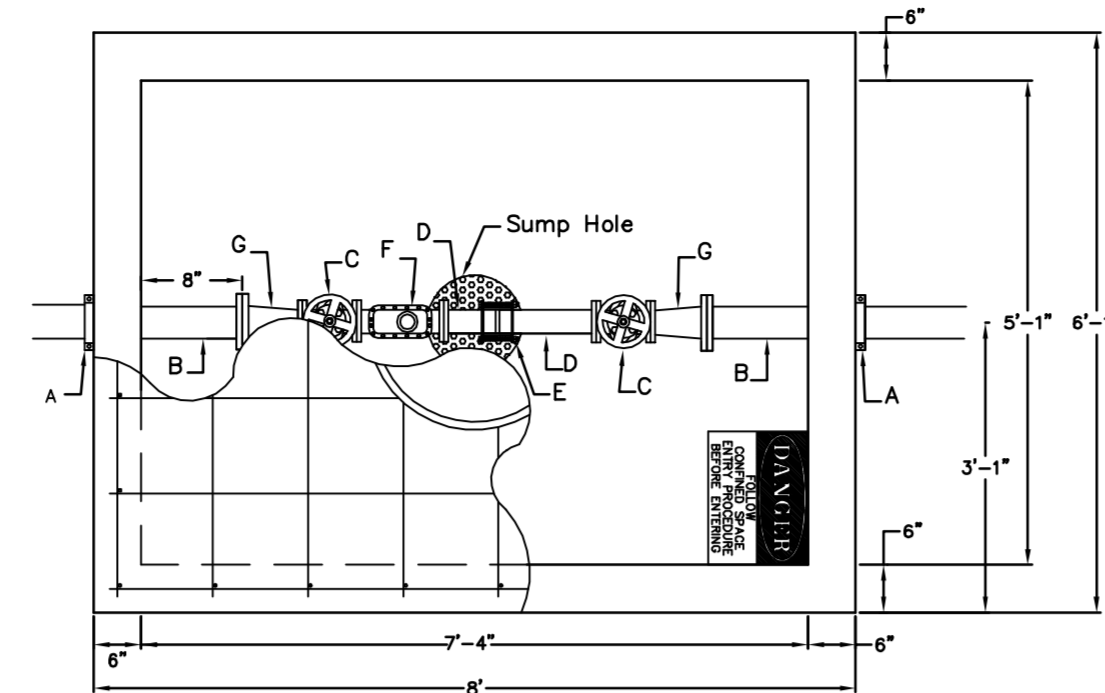
\* UNLESS OTHERWISE NOTED ON PLANS



<b>MISCELLANEOUS WATER DETAILS</b>			
CITY ENGINEER			
<b>Gary Janzen, P.E. City Engineer</b>			
PRIVATE PROJECT NUMBER	1603 PPW (607853)		DATE
			3/13
CITY ENGINEER'S OFFICE	DESIGN	DRAWN	
CITY HALL - SEVENTH FLOOR	Staff	Staff	
455 NORTH MAIN STREET			SHEET
WICHITA, KANSAS 67202-1620			3 of 7
(316) 268-4501			

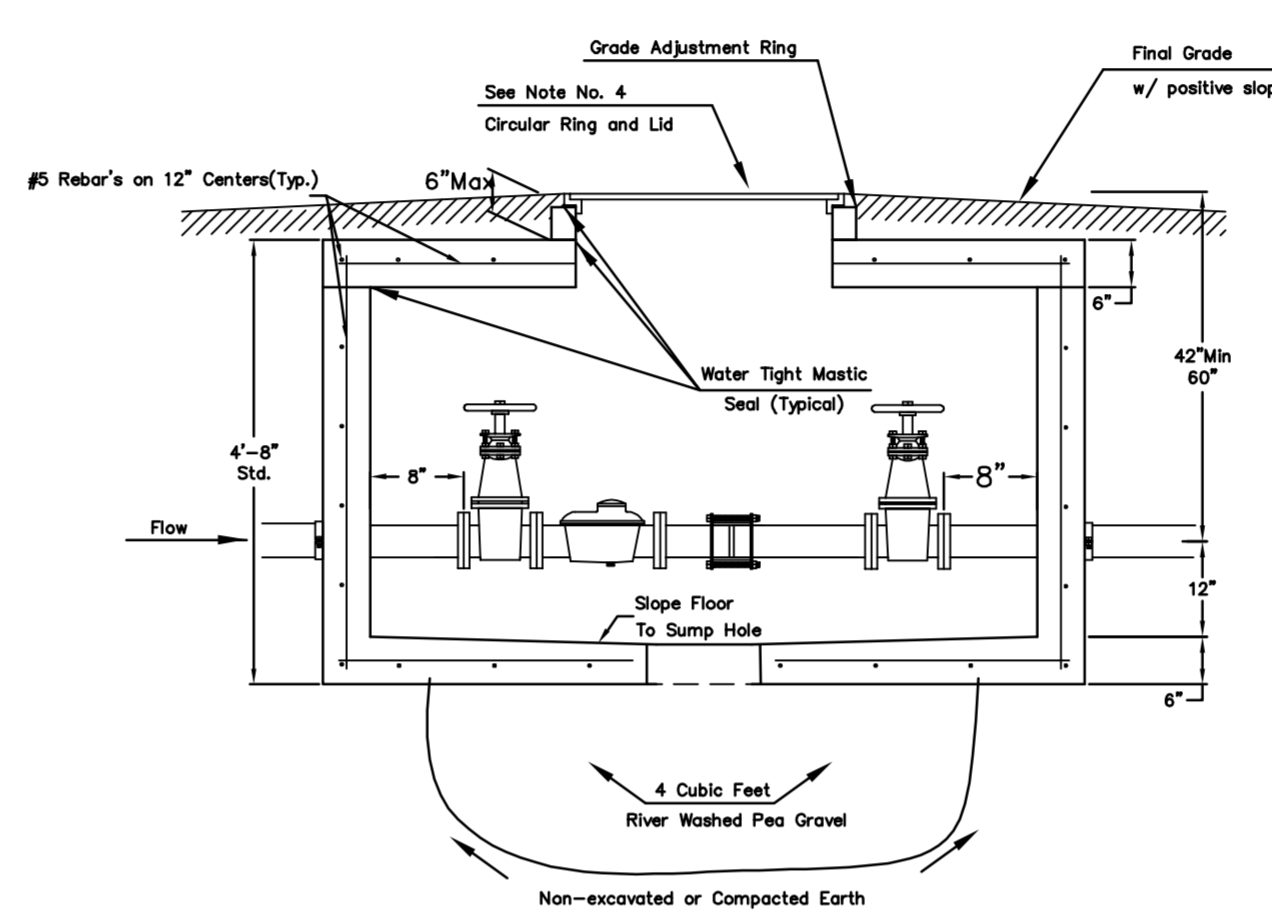
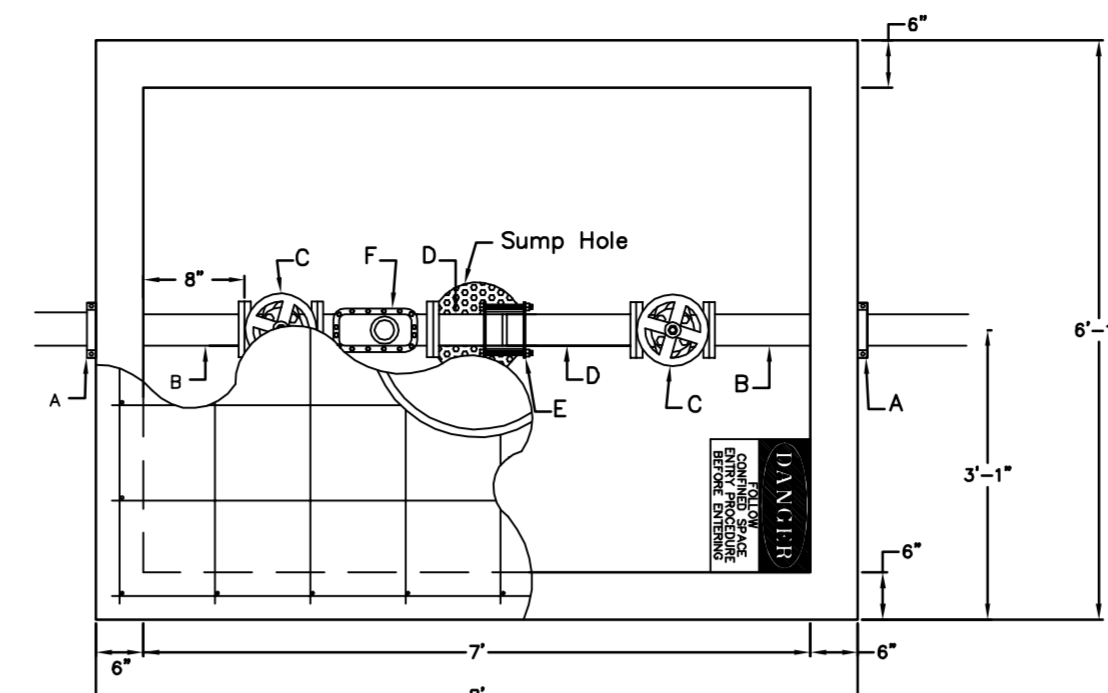
Notes For All Services - 3" thru 12".

- When the standard vault dimensions are not applicable, such as when additional space is required for special pipe, fittings, additional meters, etc. the design engineer shall design a vault with the required dimensions for Public Works and Utilities approval.
- The vault shall be poured concrete, cement blocks (voids to be completely filled with 2500 P.S.I. concrete), or approved precast structure (such as Clutter Inc. vaults approved 8/1/2000). The intent of these details shall not be limited by drawings or standards of precast structures.
- Vault location to be determined by Public Works and Utilities prior to construction and approved by Department's field supervisor prior to installation. A final inspection will be required for acceptance. Vault location standards include but not limited to: not to be located where subjected to vehicular loads, not to be located in any right-of-way or utility easement, and must be located on the property being served.
- The manhole ring and lid shall be Neenah R-6034 Frame with Type "C" Solid Lid and Drop Down Handle or US Foundry APS-30x30 (Aluminum). Where applicable the standard 10" Public Works and Utilities pattern meter reading lid and ring shall be located directly above water meter register. All meter registers shall have an approved lid directly vertical above. All joints of concrete to concrete or metal to concrete in the construction of the vault shall have an approved water tight mastic joint seal.
- Any fittings or appurtenances required to achieve proper elevation of pipe through the vault shall be provided by the contractor and appropriately noted on as-builts submitted by the inspecting engineer. Such fittings shall be a minimum of 2' from the exterior wall of vault.
- For all domestic services larger than 3" the contractor shall provide an outlet flange connection as shown 8" from the inside wall. Inlet and outlet wall sleeves shall be provided and installed by the contractor and shall be in alignment with one another. The inlet and outlet pipe shall be ductile iron pipe, cement lined, Class 150 per Standard Specifications and shall be continuous through vault wall and joint no less than 2' from the exterior wall of vault. Flanges of inlet and outlet pipes shall be in proper alignment and bolt pattern shall be rotated in such a way that valves and other fittings shall be in their proper vertical alignment when installed.
- For all services 4" and larger the contractor shall install a mega lug, restrained joint, or approved equal on the exterior walls of the vault, which shall be manufactured of ductile iron conforming to ASTM A 536-80, heat treated to a minimum hardness of 370 BHN and have a working pressure of at least 250 P.S.I. For all services smaller than 4" the contractor shall install an approved vault clamp on the exterior walls of the vault.
- All valves, meters, assemblies, and fittings shall be provided with sufficient concrete or other approved supports to the vault floor.
- The "Confined Space Warning" sign shall be fastened to the top of all vaults. If necessary for landscaping or site considerations, the sign may be fastened to the vault lid if it does not impede access to the handle. Acceptable materials: Aluminum 73415HH, Plastic 73439HH, or S.A. Vinyl 73463HH.
- All meters shall have an electronic read register compatible with the current City of Wichita meter reading system. All detector meters shall be an 5/8 cubic foot Badger meter with ERT register or approved equal. Gallon meters shall not be accepted.
- Additional Notes For Fire Services:
  - A post indicator valve (PIV) is an option for the outlet valve and may be requested by the architect or owner. The PIV is not required by City of Wichita ordinance.
  - When Siamese connections are required by the Wichita Fire Department, refer to the current City Code Section 15.
  - If due to any reason the completed vault retains ground or drainage water in excess of 4" in depth from the floor of the vault, the property owner shall be responsible for providing and installing an appropriate automatic sump pump or approved equal, as well as any other appurtenances required to make such system function as intended.
  - The property owner is responsible for completing an "Application for Private Fire Protection" prior to final acceptance of the project.



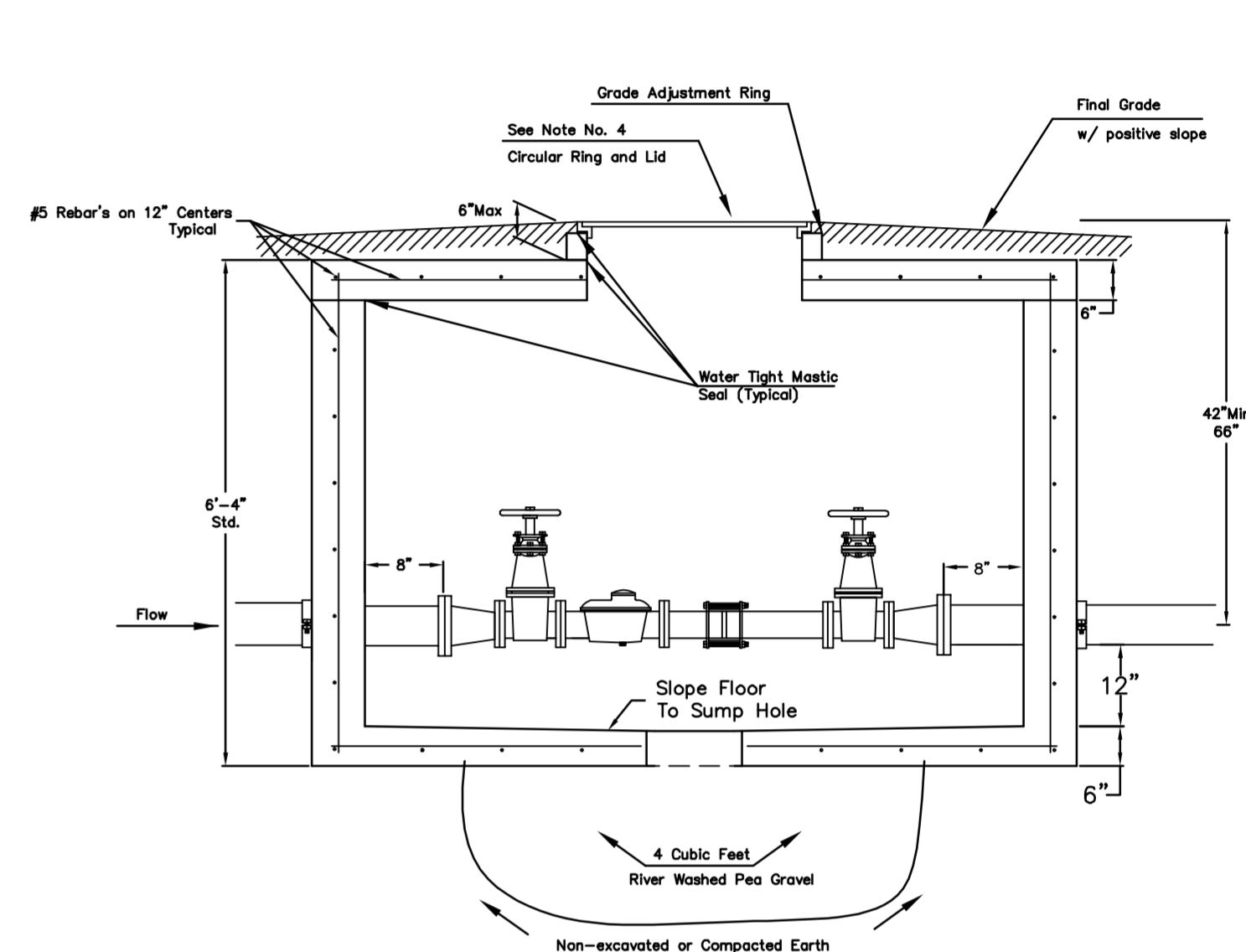
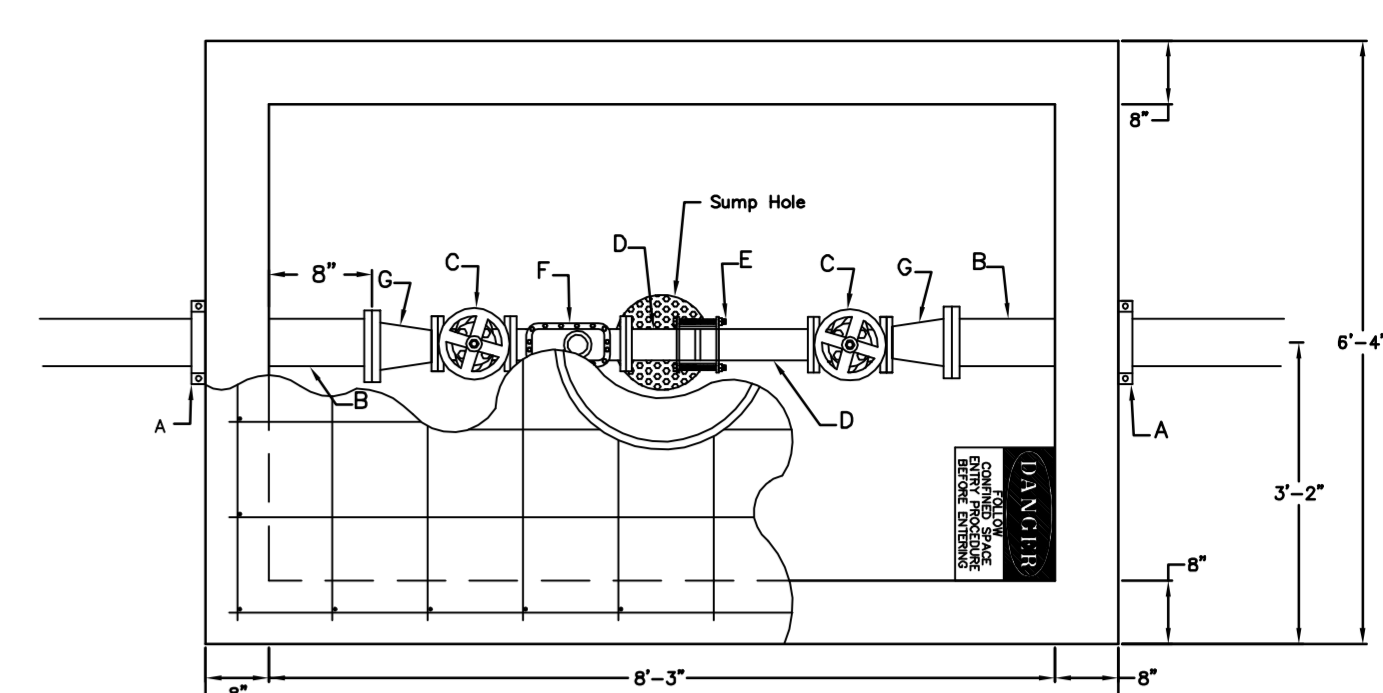
- A - 4" Vault Clamp
- B - Min. 3' Piece of 4" FL x PE DCL Pipe
- C - 3" Flange Non-rising Stem Gate Wheel Valve
- D - 3" FL x PE Pipe
- E - 3" Flex Coupling
- F - 3" Badger Recordall II Turbo Cubic Foot Meter with ERT Register or Sensus W-350DR Cubic Foot Meter with AMR Register.
- G - 3" x 4" FL Reducer

### 3" Domestic Service



- A - 4" Vault Clamp
- B - Min. 3' Piece of 4" FL x PE DCL Pipe
- C - 4" Flange Non-rising Stem Gate Wheel Valve
- D - 4" FL x PE Pipe
- E - 4" Flex Coupling
- F - 4" Badger Recordall II Turbo Cubic Foot Meter with ERT Register or Sensus W-1000DR Cubic Foot Meter with AMR Register.

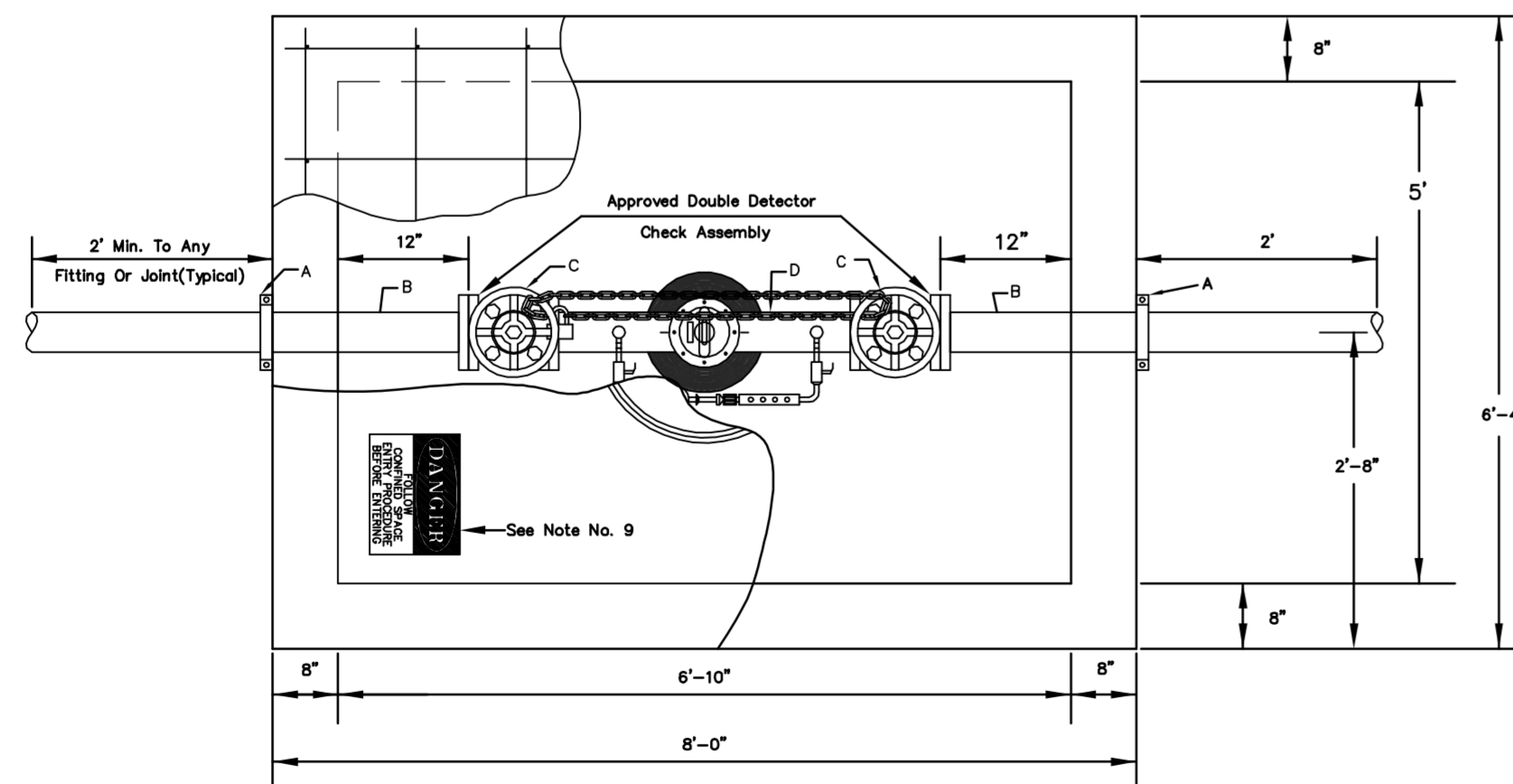
### 4" Domestic Service



- A - 6" Mega Lug (See Note 7)
- B - Min. 3' Piece of 6" FL x PE DCL Pipe
- C - 4" Flange Non-rising Stem Gate Wheel Valve
- D - 4" FL x PE Pipe
- E - 4" Flex Coupling
- F - 4" Badger Recordall II Turbo Cubic Foot Meter with ERT Register or Sensus W-1000DR Cubic Foot Meter with AMR Register.
- G - 6" x 4" Flange Reducer

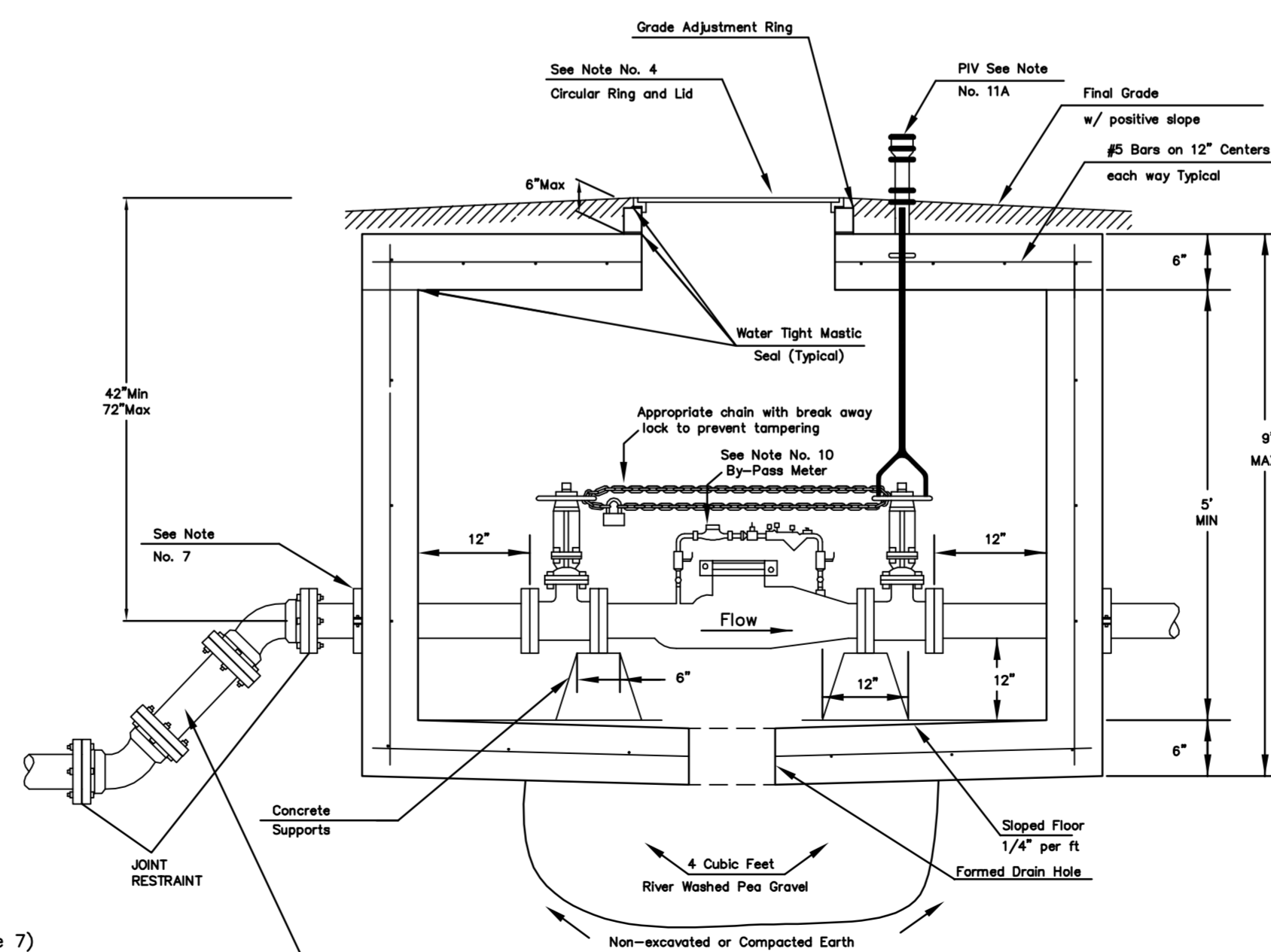
### 6" Domestic Service with 4" meter

NOTE:  
INSPECTOR FROM PUBLIC WORKS AND UTILITIES TO BE CONTACTED  
24 HOURS PRIOR TO INSTALLATION TO SET VAULT.  
CONTACT: 316-219-8928 OR 316-219-8929



- A - Mega Lug (See Note 7)
- B - Min. 3'-8" Piece of FL x PE DCL Pipe
- C - Flange Gate Valve, Wheel Operated
- D - Ames Model 3001SS or approved equal with metered (cubic foot) by-pass assembly

### 4" thru 8" Fire Service



Use 45 degree fittings as necessary to keep depth of vault within 76 inch maximum. All fittings should be mega lug, restrained joint or approved equal.

NOTE:  
Domestic Services larger than 6" shall be custom designed by Engineer.



<b>STANDARD VAULT DETAILS AND METER ASSEMBLIES</b>	
CITY ENGINEER	
<b>Gary Janzen, P.E. City Engineer</b>	
PRIVATE PROJECT NUMBER	DATE
	01/2012
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501	
DESIGN	DRAWN
	SHEET <b>4 of 7</b>

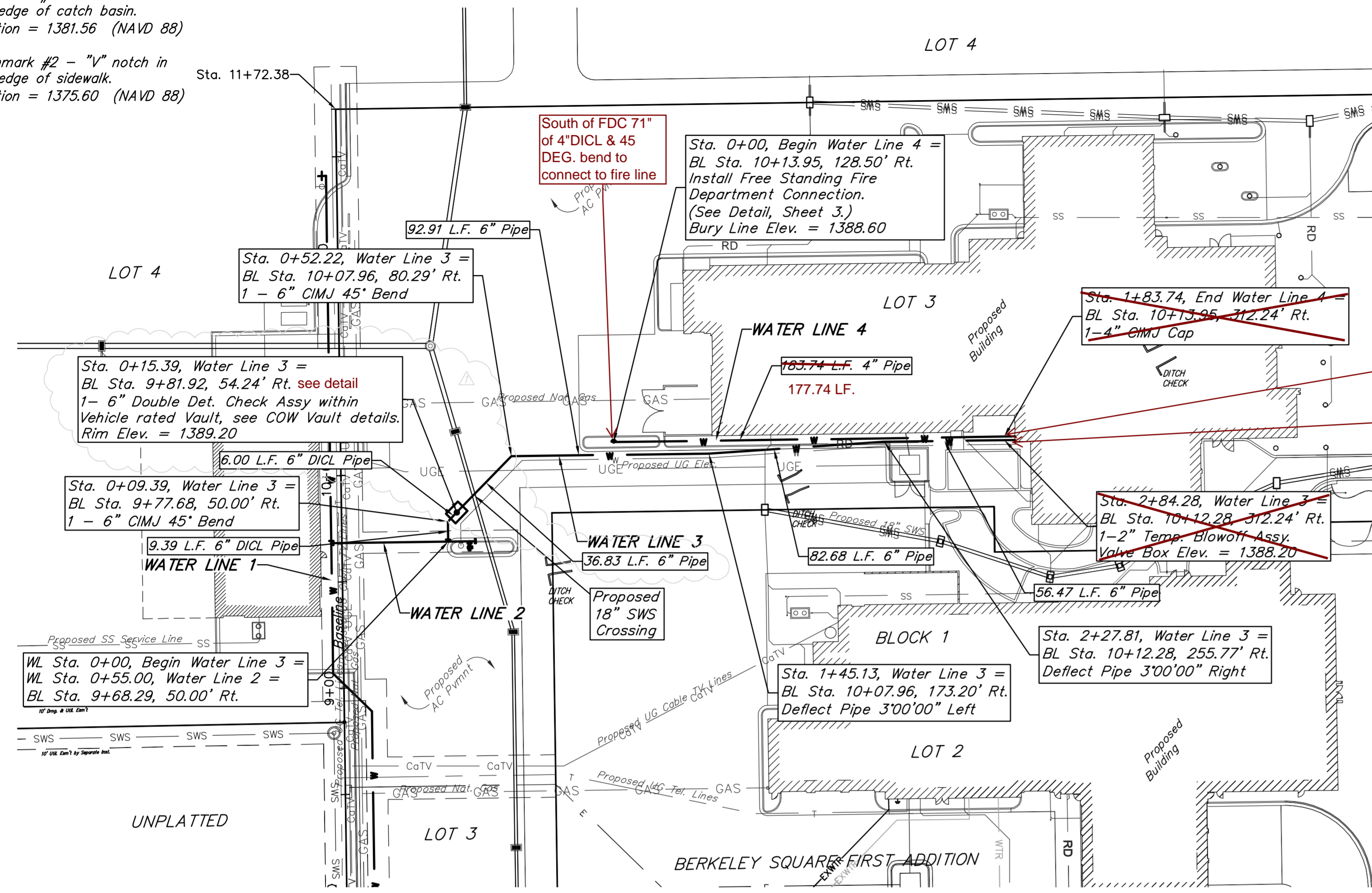
**PPW – 1603 BERKELEY SQUARE FIRST ADDITION LOCATES**

- ① STA. 1+73.22 L-1, 45° BEND IS 92' S & 40' W OF CENTER OF VAULT.
- ② STA. 2+04.65 L-1, 45° BEND IS 75' S & 60' W OF CENTER OF VAULT.
- ③ STA. 2+51 L-1, VALVE LOOKING EAST IS 13.5' S & 52.25' W OF CENTER OF VAULT.  
STA. 2+51 L-1, VALVE LOOKING NORTH IS 10' S & 58' W OF CENTER OF VAULT.
- ④ STA. 0+55 L-2, 6" VALVE IS 10' S & 4' W OF CENTER OF VAULT.
- ⑤ STA. 0+65 L-2, FIRE HYDRANT IS 7.5' E & 15.25' S OF CENTER OF VAULT.
- ⑥ STA. 0+65 L-2, FH VALVE IS 3' N OF FH.
- ⑦ STA. 4+23.774 L-1, BLOWOFF VALVE IS 162' N & 58' W OF CENTER OF VAULT.



Benchmark #1 - "□" cut in west edge of catch basin.  
Elevation = 1381.56 (NAVD 88)

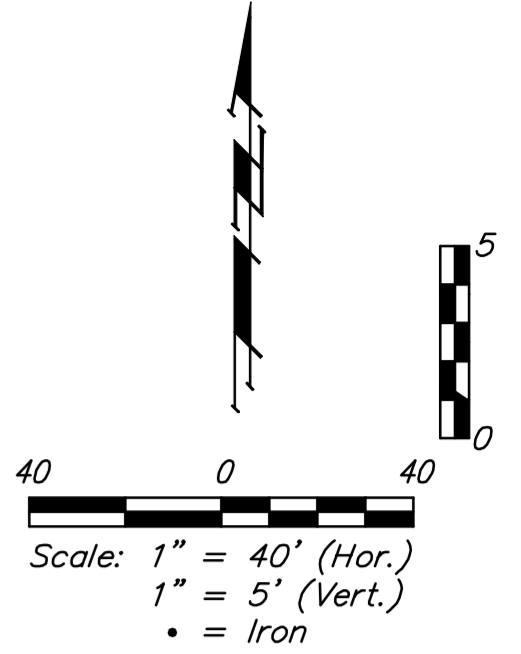
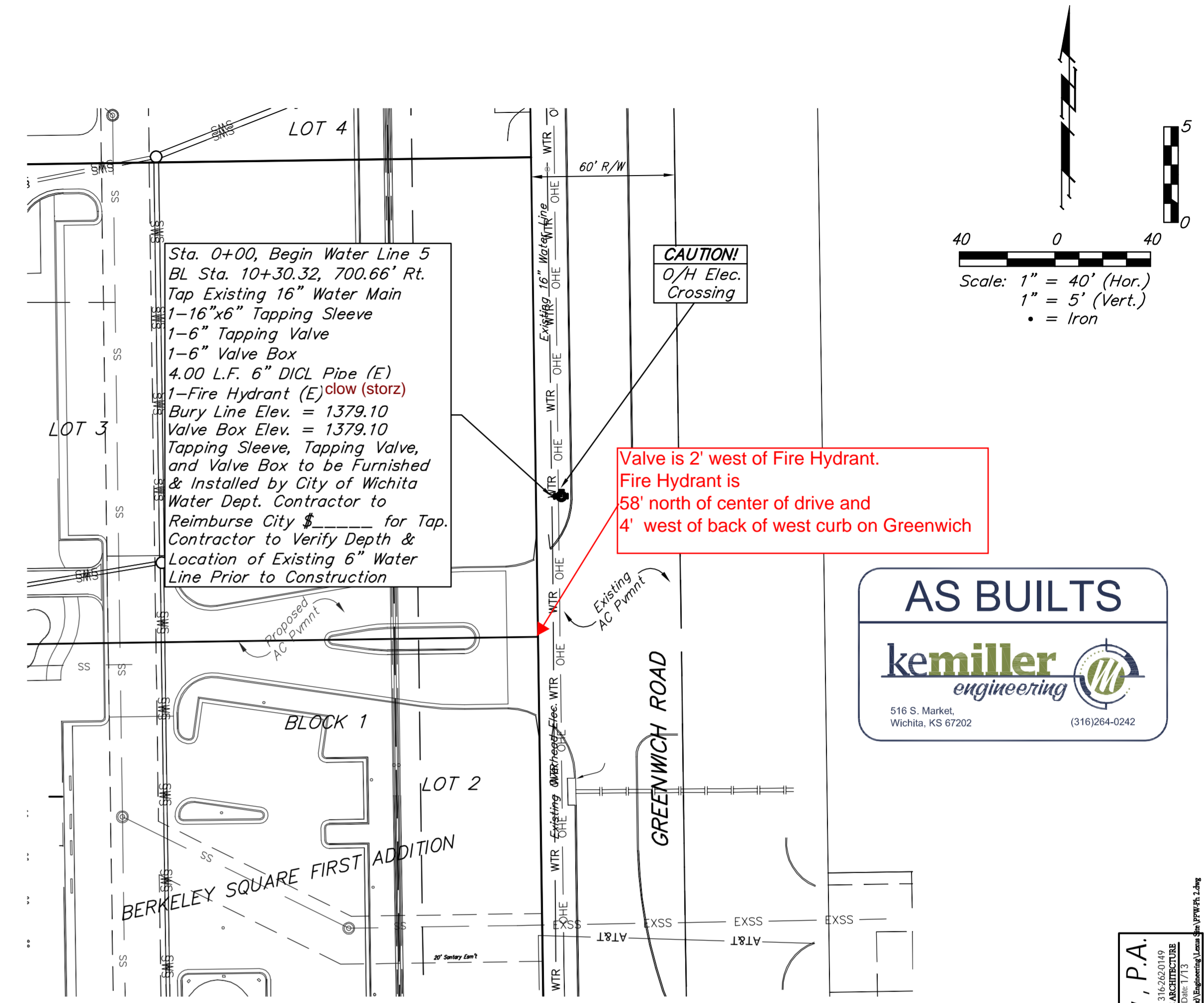
Benchmark #2 - "V" notch in west edge of sidewalk.  
Elevation = 1375.60 (NAVD 88)



BOTH LINES IN SAME TRENCH 6' FROM BUILDING 4" LINE ADDED 6' OF DI CL AND 45 BEND TO GET BACK TO RIGHT LOCATION

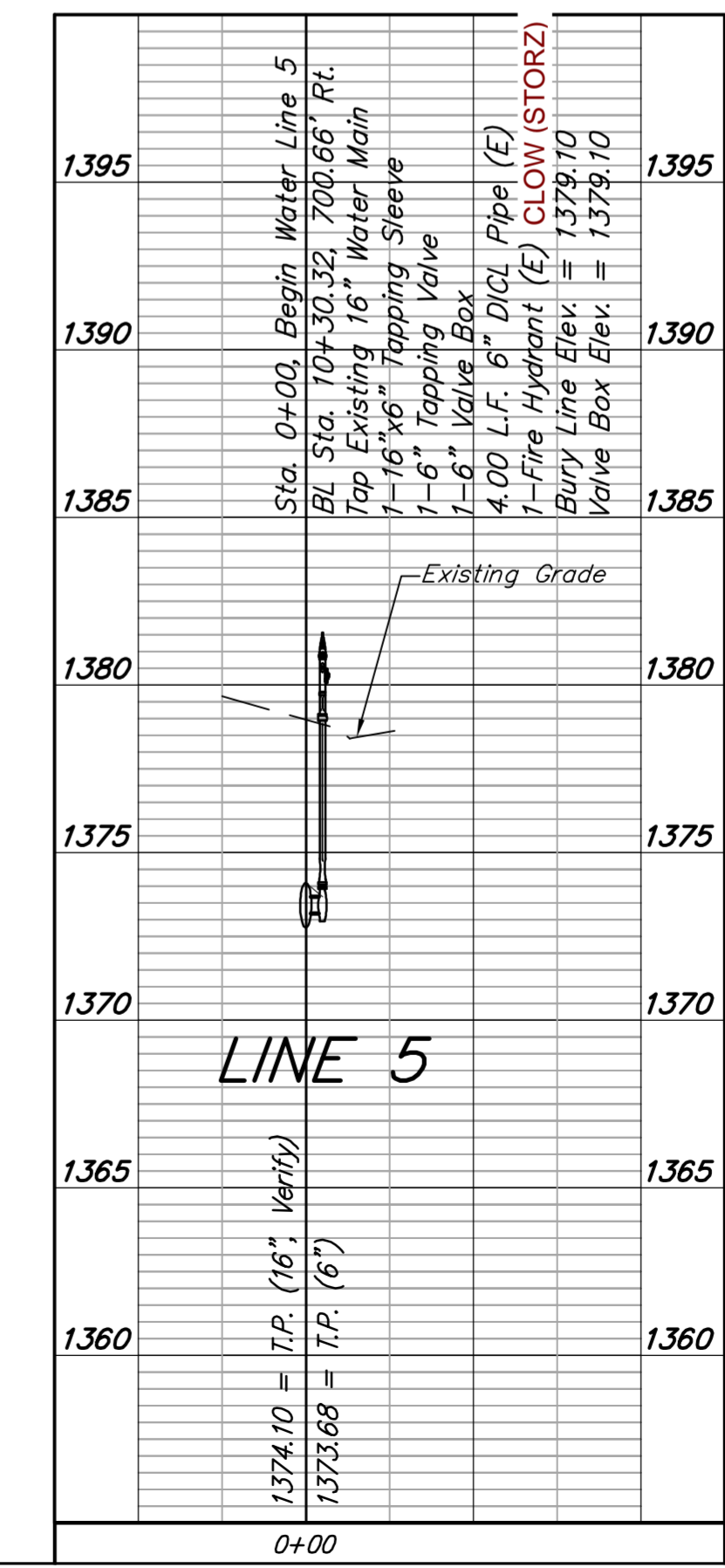
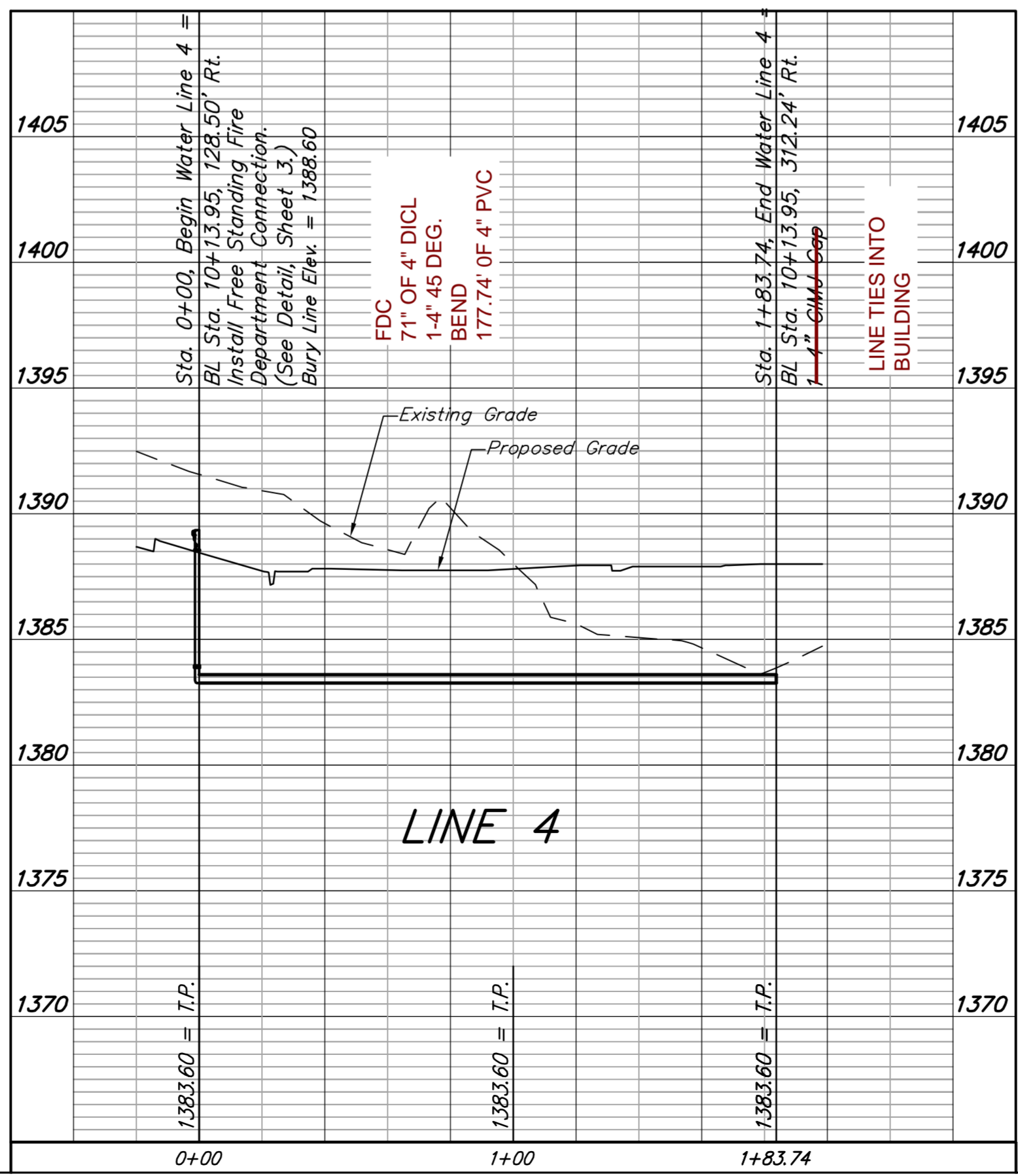
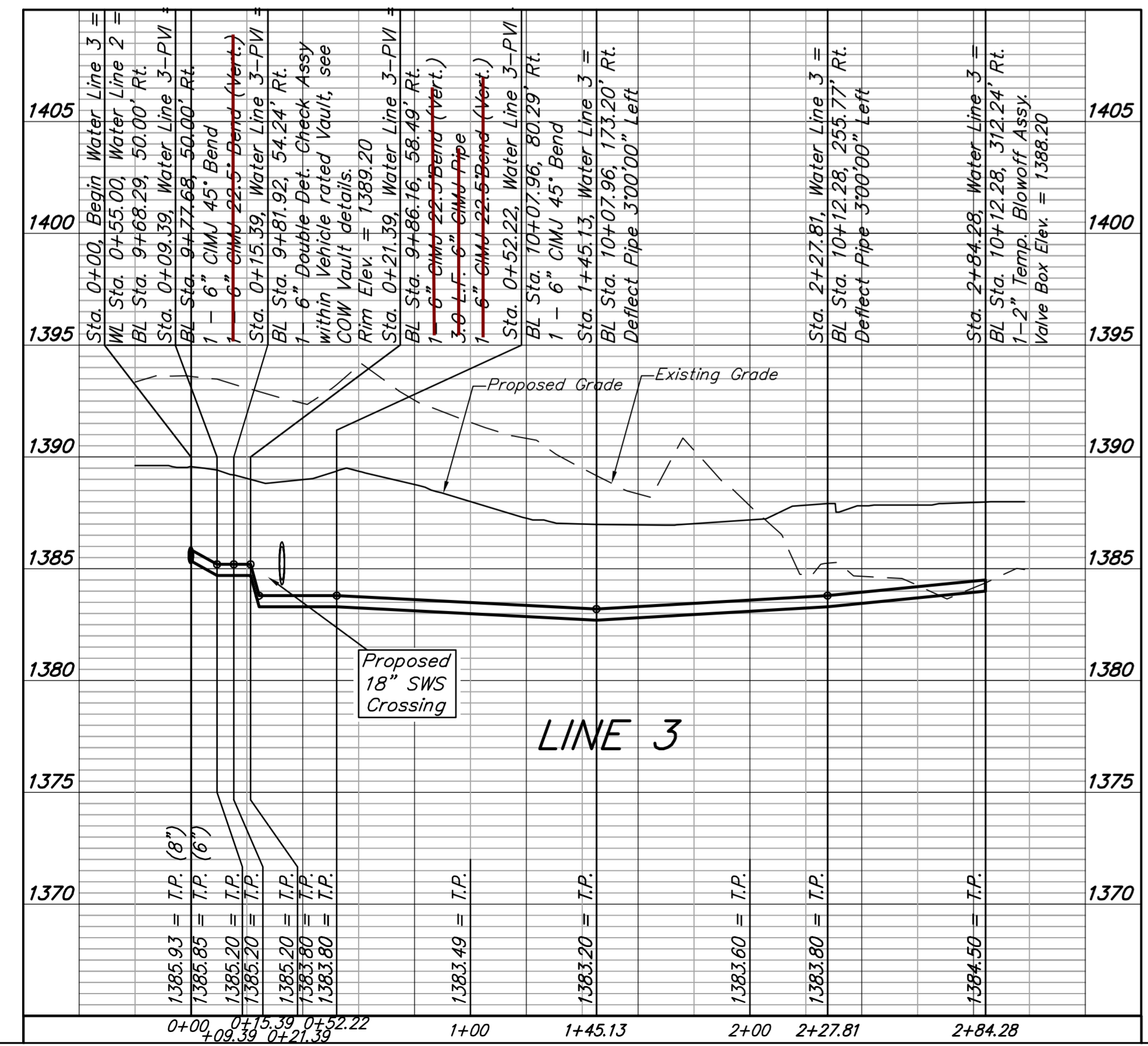
TIES INTO BUILDING

VAULT DETAIL  
From valve 0+00 line 3  
12" long sleeve  
45 deg. bend  
13" di cl  
45 deg. bend  
3" di cl with flange  
pressure valve in vault  
5" di cl with flange  
12" long sleeve  
pvc pipe  
all with megalugs



SEE VAULT DETAILS ON THIS PAGE

Baseline = West Line of Lot 3, Block 1, Berkeley Square First Addition



CERTIFICATE OF SURVEY

I, Gregory J. Allison, a registered land surveyor in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of "BERKELEY SQUARE FIRST ADDITION", an addition to Wichita, Sedgwick County, Kansas, into Lots, a Block, Reserves, and a Street, the same being accurately set forth in the accompanying plat and described herein:

A tract of land lying within the Southeast Quarter of the Southeast Quarter, of Section 9, Township 27 South, Range 2 East, Wichita, Sedgwick County, Kansas, said tract being more particularly described as follows:

COMMENCING at the southeast corner of said Southeast Quarter, thence along the east line of a Kansas coordinate system on N00°48'07"W, 296.08 feet; thence S89°11'53"W, 68.09 feet to the northeast corner of Lot 1, Block 1, Home Bank & Trust Addition, an addition to Wichita, Sedgwick County, Kansas, being the POINT OF BEGINNING, thence along the north line of said Lot 1, S88°53'46"W, 222.39 feet to the northwest corner of said Lot 1; thence N06°27'22"W, 78.97 feet to a point on a non-tangent curve to the right; thence along the said non-tangent curve 459.61 feet to a curve to the left, said curve to the right having a central angle of 13°23'16", a radius of 1967.00 feet, and a long chord distance of 458.57 feet, bearing S86°54'17"W; thence along the said curve to the left 367.21 feet to a curve to the right, said curve having a central angle of 21°22'54", a radius of 984.00 feet, and a long chord distance of 365.08 feet, bearing S82°54'28"W; thence along the said curve to the left 75.98 feet to the east right-of-way line of Chesterfield, being a point on a non-tangent curve to the left, said curve having a central angle of 48°22'16", a radius of 90.00 feet, and a long chord distance of 73.74 feet, bearing S48°01'53"W; thence along the said right-of-way line and said non-tangent curve to the left, 97.58 feet to a non-tangent curve to the left, said curve to the left having a central angle of 86°40'51", a radius of 64.50 feet, and a long chord distance of 88.54 feet, bearing N19°29'41"W; thence along the said non-tangent curve to the left, 71.12 feet to a point on a curve to the right, said non-tangent curve to the left having a central angle of 45°16'35", a radius of 90.00 feet, and a long chord distance of 69.28 feet, bearing S85°28'23"E; thence along the said curve to the right 384.97 feet, said curve having a central angle of 21°42'27", a radius of 1016.00 feet, and a long chord distance of 382.67 feet, bearing N82°44'37"E; thence parallel with and 754.00 feet west of the east line of said Southeast Quarter, N00°48'07"W, 383.98 feet; thence parallel with and 775.00 feet north of the south line of said Southeast Quarter, S88°53'46"W, 479.32 feet; thence S00°54'24"E, 70.00 feet to the northeast corner of Greenwich Office Park Second Addition, an addition to Wichita, Sedgwick County, Kansas; thence along the north line of said Greenwich Office Park Second Addition, 588°53'46"W, 75.00 feet to the southeast corner of The Waterfront Residential Addition, an addition to Wichita, Sedgwick County, Kansas; thence along the east line of said The Waterfront Residential Addition, N00°54'24"W, 625.59 feet to the north line of said Southeast Quarter of said Southeast Quarter; thence along said north line, N88°54'31"E, 1249.35 feet to the west line right-of-way line of Greenwich Road as recorded DOC.#/FLM-PG: 28739050 and 28739049; thence along said west right-of-way line, S00°48'07"E, 980.01 feet; thence continuing along said west right-of-way line, S07°43'43"W, 54.53 feet to the POINT OF BEGINNING. CONTAINING: 1,016,658 square feet or 23.34 acres of land, more or less.

All reserves, streets, easements, rights-of-ways, building setbacks, and access controls, a Utility Easement recorded on DOC.#/FLM-PG:28756001, together with all other public dedications within the above described property, are hereby vacated and replatted by virtue of K.S.A. 12-512(b).

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this 24th day of February, 2011.

Gregory J. Allison, PE, LS #1257  
MKEC Engineering Consultants, Inc.  
411 North Webb Road  
Wichita, Kansas 67206



OWNER'S CERTIFICATE

Know all men by these presents that the undersigned property owner of the land above set forth in the Registered Land Surveyor's Certificate, has caused the same to be surveyed and platted into Lots, a Block, Reserves, and a Street the same to be known as "BERKELEY SQUARE FIRST ADDITION," an addition to Wichita, Sedgwick County, Kansas.

Easements for the construction and maintenance of public utilities and drainage, as indicated on the accompanying plat are hereby granted to the public.

The streets are hereby dedicated to and for the use of the public.

All abutters rights of access to or from Greenwich Road over and across the east line of "BERKELEY SQUARE FIRST ADDITION," are hereby granted to the appropriate governing body, as indicated hereon.

Reserves "A", "B", and "C" are platted for landscaping, irrigation, berming, monuments, signs, and utilities confined by easement(s) or rights-of-way. Reserve "C" is also platted for drainage. The Reserves shall be owned and maintained by the owner(s) of Lots 1, 2, 3 and 4, Block 1, and/or their successors, assigns, and/or a Lot Owner's Association.

A drainage plan has been developed for this plat. All drainage easements, right-of-way, or reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer, and unobstructed to allow for the conveyance of storm water.

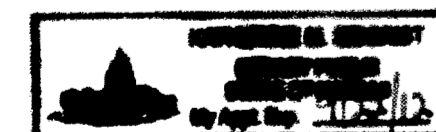
Greenwich 13, L.L.C., a Kansas limited liability company

George E. Laham, II, manager  
Laham Development Company, L.L.C., a Kansas limited liability company,  
manager of Greenwich 13, L.L.C.

STATE OF KANSAS, SEDGWICK COUNTY) ss:

This instrument was acknowledged before me on the 24th day of February, 2011, by George E. Laham, II, manager of, Laham Development Company, L.L.C., a Kansas limited liability company, which is the manager of Greenwich 13, L.L.C., a Kansas limited liability company.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.



Notary Public

My Term Expires: 1/20/12

MORTGAGE CERTIFICATE

INTRUST Bank, N.A. holder of a mortgage on a portion of the above described property, does hereby consent to the plat of "BERKELEY SQUARE FIRST ADDITION."

INTRUST Bank, N.A.

Gary D. Schmitt, Executive Vice President

This instrument was acknowledged before me on this 4th day of February, 2011, by Gary D. Schmitt, Executive Vice President, INTRUST Bank, N.A.

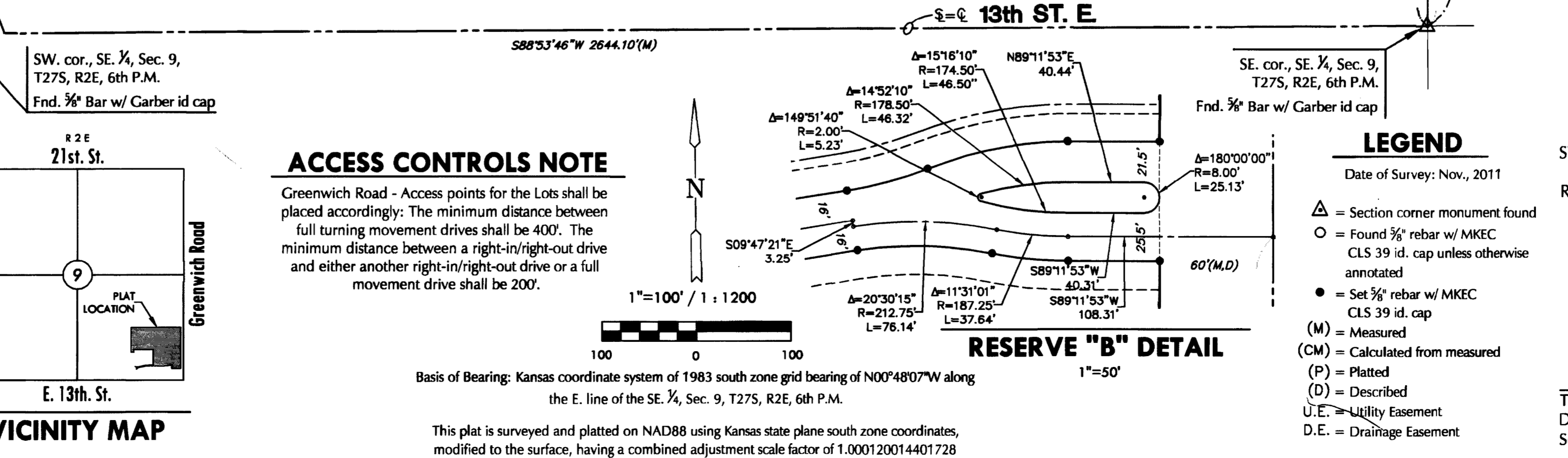
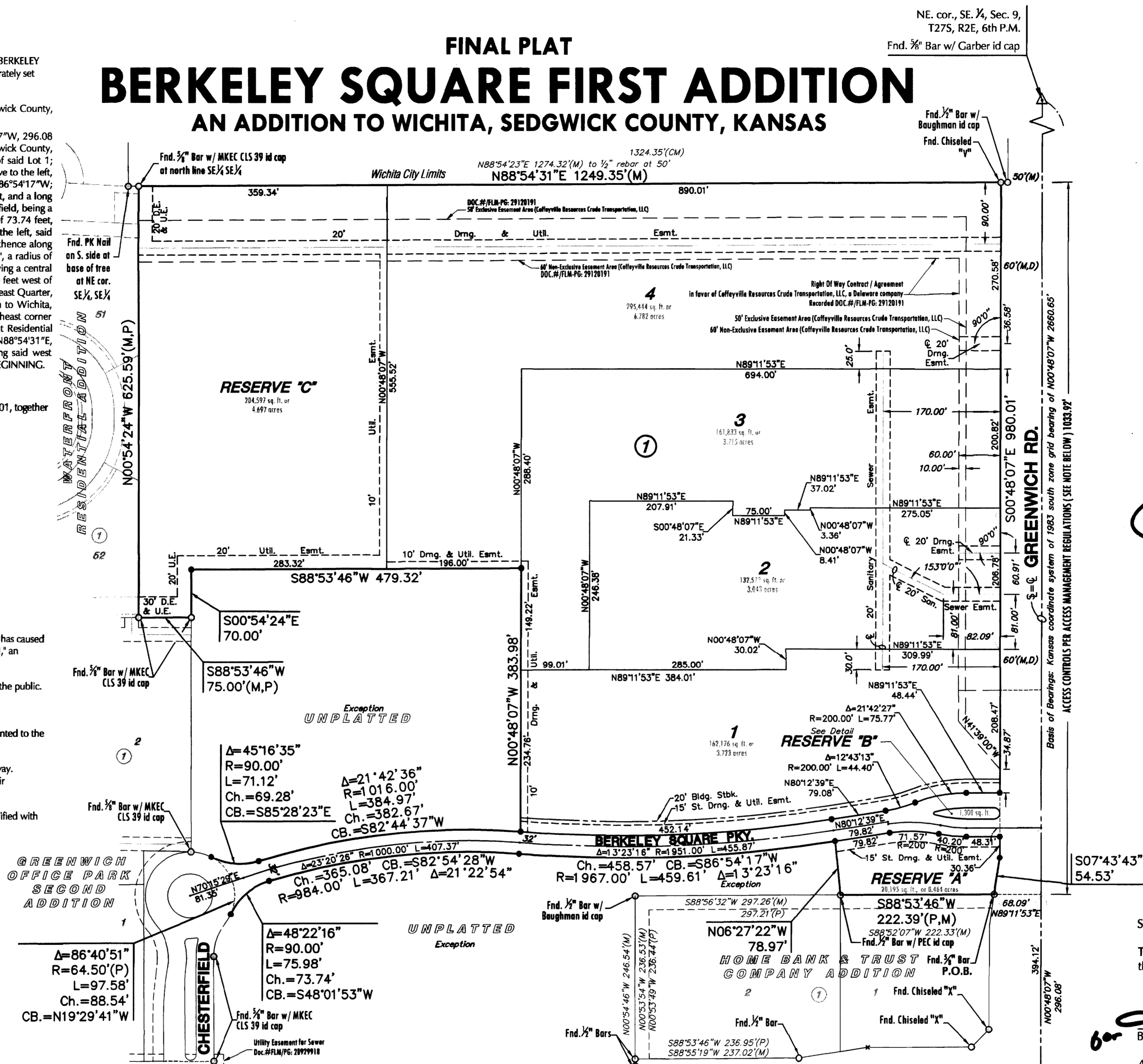
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.



Notary Public

My Term Expires: 11/3/12

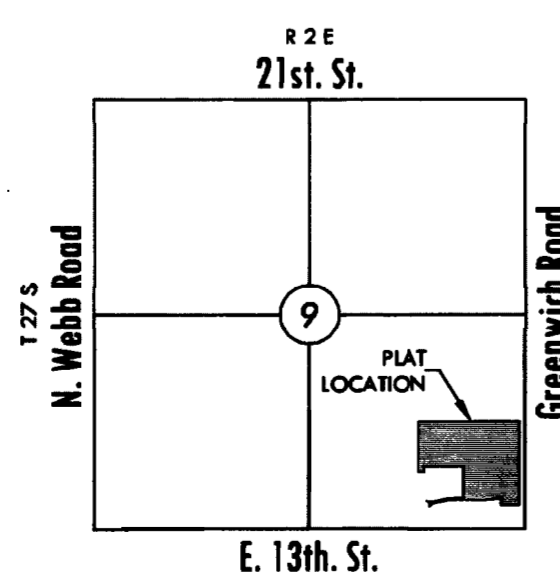
FINAL PLAT  
BERKELEY SQUARE FIRST ADDITION  
AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



ACCESS CONTROLS NOTE

Greenwich Road - Access points for the Lots shall be placed accordingly: The minimum distance between full turning movement drives shall be 400'. The minimum distance between a right-in/right-out drive and either another right-in/right-out drive or a full movement drive shall be 200'.

VICINITY MAP



LEGEND

- Date of Survey: Nov., 2011
- Δ = Section corner monument found
- = Found 3/8" rebar w/ MKEC CLS 39 id. cap unless otherwise annotated
- = Set 3/8" rebar w/ MKEC CLS 39 id. cap
- (M) = Measured
- (CM) = Calculated from measured
- (P) = Platted
- (D) = Described
- U.E. = Utility Easement
- D.E. = Drainage Easement

PLANNING COMMISSION CERTIFICATE

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

Dated this 6th day of January, 2011

WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION

Debra Miller Stevens, Chair



John L. Schlegel, Secretary

GOVERNING BODY CERTIFICATE

The dedications shown on this plat are hereby accepted and this plat is hereby approved by the governing body of the City of Wichita, Kansas.

Dated this 8th day of March, 2011

At the direction of the City Council.

Carl Brewer, Mayor

Karen Sublett, City Clerk

TRANSFER RECORD

STATE OF KANSAS, SEDGWICK COUNTY) ss:

Entered on transfer record this 20 day of June, 2011

Kelly B. Arnold, County Clerk



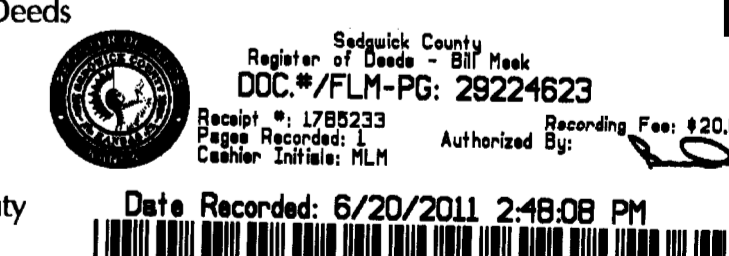
REGISTER OF DEEDS CERTIFICATE

STATE OF KANSAS, SEDGWICK COUNTY) ss:

This is to certify that this instrument was filed for record in the Register of Deeds office this 20th day of June, 2011, at 2:48:01 o'clock P.M. and is duly recorded.

Bill Meek, Register of Deeds

Tonya E. Buckingham, Deputy



COUNTY SURVEYOR

STATE OF KANSAS, SEDGWICK COUNTY) ss:

Reviewed in accordance with K.S.A. 58-2005 on this day of , 2011.



Tricia L. Robello, Deputy County Surveyor



411 N. WEBB ROAD  
WICHITA, KS. 67206  
316-684-9600