

GENERAL NOTES:

- The Contractor shall comply with all applicable safety regulations. All construction shall be completed following current City Standard Specifications and Special Provisions.
- Contractor will be required to provide notice to utility companies a minimum of seventy-two (72) hours prior to any excavation, as follows:

Kansas One-Call 687-2470

The Contractor must notify the following in case of an emergency:

AT&T	1-800-246-8464
Black Hills Energy	1-800-694-8989
City of Wichita Water & Sewer	1-316-219-8921
City of Wichita Stormwater	1-316-268-4090
City of Wichita Traffic	1-316-268-4034
Cox Communications	1-888-249-3530
Kansas Gas Service	1-888-482-4950
Westar Energy	1-800-544-4857

- Utility service lines, poles, etc. are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
- Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations, in the opinion of the Engineer, that will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain will require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits will require additional archaeological investigations unless buried in a previously approved borrow location.
- Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the City Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.
- The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days notice prior to start of construction.
- The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws
- All elevations shown are NGVD29.
- All areas disturbed during construction that will not be under proposed pavement shall be restored to match existing conditions.
- Opening and closing of water valves shall be done slowly to prevent damage to the water distribution system from water hammer. All valves closed by the contractor must be reopened as new construction permits. The project inspector must ascertain that any valve closed by the Contractor is reopened. The contractor will be permitted to operate water valves only when the project inspector assigned to the project is present.
- The Contractor shall lay a Tracer Wire and Set Test Stations along all water pipe installed in accordance with City Specifications and Tracer Wire Detail on detail sheet WL-101, cost is subsidiary to pipe installation.
- The contractor shall provide materials for temporary blowoff of waterlines. Connections to the existing waterline(s) shall be made with clean, swabbed pipe and flushed upon completion of tie-ins.
- Requests for short term water interruptions shall be made to the City Water Distribution Division and will be subject to their approval. The Contractor shall give written notice to any property owner, business, and/or tenants that will have water service interrupted at least 5 days in advance. Such notifications should indicate the time and date that the water will be turned off and when the service will be restored. No business, property owner, and/or tenants shall be without water service for more than 8 hours. Proposed tie in locations which will affect water service to property owners shall be performed during non-peak hours.

- The Contractor must schedule the connections to the existing main with the City such that there is a minimum disruption of service. Connections shall be made during periods of low water usage. The Contractor shall submit his proposed schedule for completing work for City approval at least 10 days prior to beginning construction.
- Deflections at pipe joint or couplings shall not exceed the pipe manufacturers recommended maximum. Where deflections are greater than the maximum allowed, the contractor shall utilize fittings.
- Any existing joint exposed during excavation shall be replaced if within four feet of proposed joint.
- Valves 12 inches and larger are to be operated by the City Water Distribution Division, 48 hours of advance notice is required.
- All wet taps shall be installed by the City of Wichita. The Contractor will reimburse the City for tapping fees prior to tap being made. Unless noted on plans.
- The Contractor shall protect from damage and support existing utilities through construction as approved by the utility owner and the Engineer at the contractor's expense.
- Contractor shall limit the extent of trench openings overnight and weekends to less than 50 feet.
- Wichita Fire Department inspections may be scheduled by calling 316-268-4441.
- The Contractor shall protect from damage and support existing utilities through construction as approved by the utility owner and the Engineer at the contractor's expense.
- All areas disturbed during construction shall be seeded at 300 lbs./acre with Rye Grass immediately following construction in that area. Contractor shall prepare ground per City Specifications.
- All existing and proposed erosion control measures including silt fencing, erosion control mat, straw bales, inlet barriers, and const. entrance shall be maintained throughout construction by the contractor and until project is accepted by the City of Wichita. The on-site engineer shall complete weekly reports on the status of erosion control measures. The contractor shall be required to comply with maintenance and/or replacement of erosion control measures as determined by the on-site engineer until project is accepted by City of Wichita. Maintenance and/or replacement of erosion control measures to be paid by L.S. bid item "Maintain Existing BMPs".
- All excess excavation shall remain on-site and shall be stockpiled or spread at a location determined by the engineer.
- The developer for this project is R & R Realty, LLC, Jay W. Russell, Manager (316-722-2417) and Ritchie Associates, Inc., Kevin M. Mullen, President.

Benchmarks

BM #1: Crows foot cut at SE corner of curb inlet south side of Kollmeyer near NE corner of Lot 82, Block A, Edge Water Addition.
Elev. = 1335.36 NGVD29

BM #2: Brass disc on top of curb by fire hydrant at SE corner of intersection of Kollmeyer and Kollmeyer Ct. (Lots 63-82, Block A) at the NW corner of Lot 82, Block A, Edge Water Addition.
Elev. = 1336.61 NGVD29

BM #3: "□" on Top of Curb, east side of Kollmeyer Ct. (Lots 63-82, Block A) near NW Corner of Lot 80, Block A, Edge Water Addition.
Elev. = 1333.99 NGVD29

BM #4: "□" on Top of Curb, east side of Kollmeyer Ct. (Lots 63-82, Block A) near NW Corner of Lot 78, Block A, Edge Water Addition.
Elev. = 1334.26 NGVD29

WATER DISTRIBUTION SYSTEM to serve EDGE WATER ADD. - PH. II

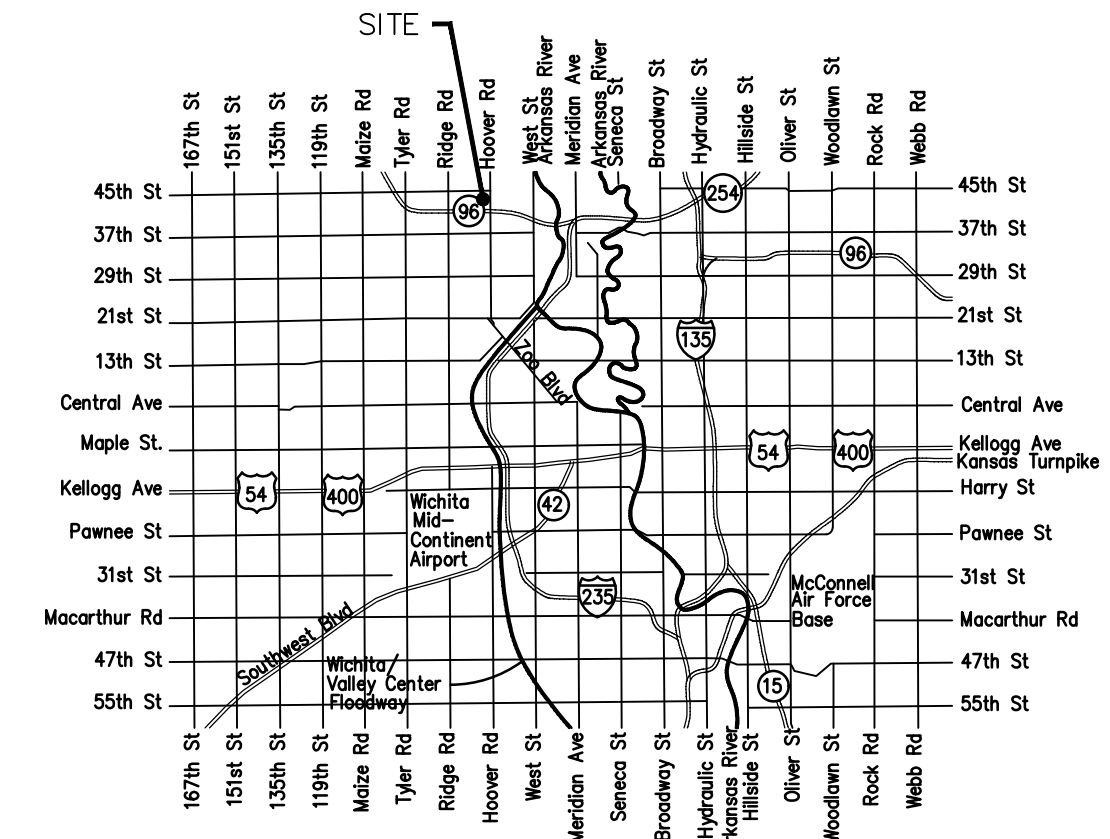
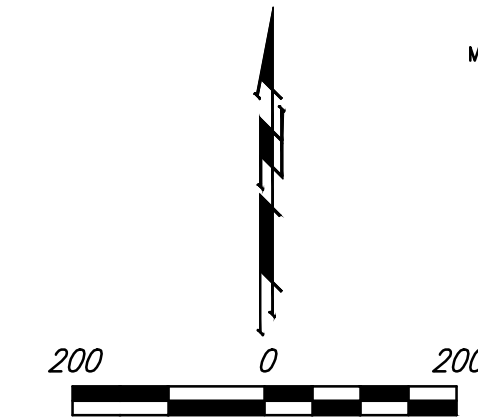
CITY OF WICHITA, KANSAS

Gary Janzen, P.E. City Engineer

Project Number
448-90316

O.C.A. Number
735617

Mies Construction - Contractor
B. Woods - City of Wichita, Field Project Engineer
S. Stripling - City of Wichita, Inspector
As-built
Release Date: 11/26/2018
Completion Date: 5/14/2019
pdf: 12/18/2018 apr

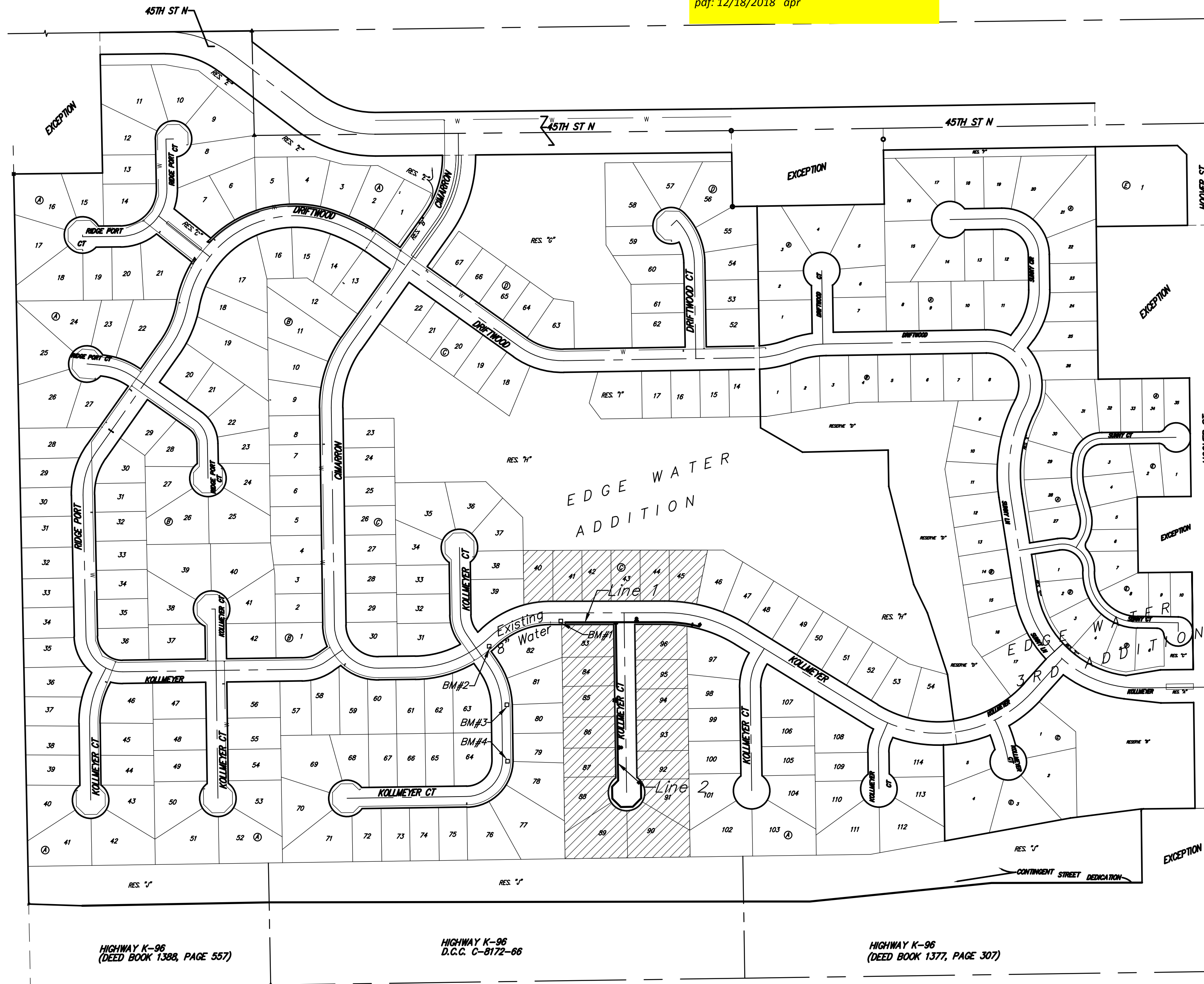


Vicinity Map

Sheet Index

Title Sheet	1
Line 1	2
Line 2	3
Erosion Control/Grading Plan	4
Std. Water Assembly Detail	5
Miscellaneous Water Details	6
Erosion Control BMP Details	7-11
Coordinate Sheet	12
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8" Gate Valve Assembly	American
8" Anchored Valve Assembly, Special	Mueller
6" Fire Hydrant Assembly	American
2" Blow off Assembly	American
8" x 8" CIMJ Tee	American
8" x 6" Reducer	
6"-45° CIMJ Bends	



HIGHWAY K-96
(DEED BOOK 1368, PAGE 557)

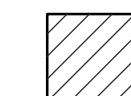
HIGHWAY K-96
D.C.C. C-8172-86

HIGHWAY K-96
(DEED BOOK 1377, PAGE 307)



September 2018

Benefit District



Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0148
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

G:\Projects\Edgewater Addition\Phase 2\Wtr_1804E962\Wtr.dwg

BENCHMARKS:
 BM #1: Crows foot cut at SE corner of curb inlet south side of Kollmeyer near NE corner of Lot 82, Block A, Edge Water Addition.
 Elev. = 1335.36 NGVD29

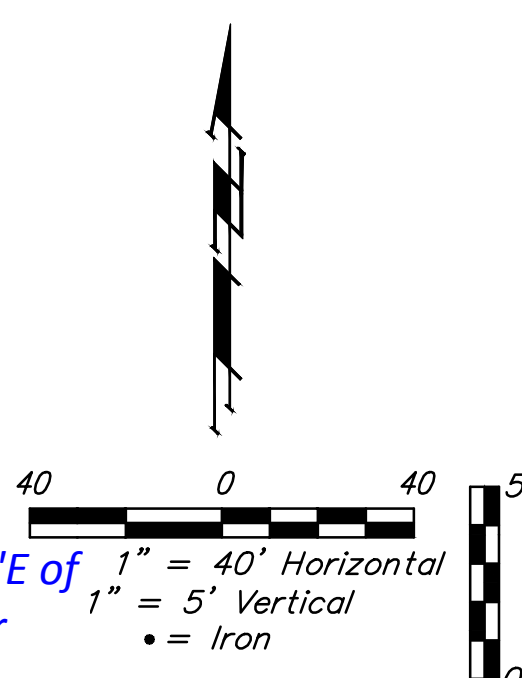
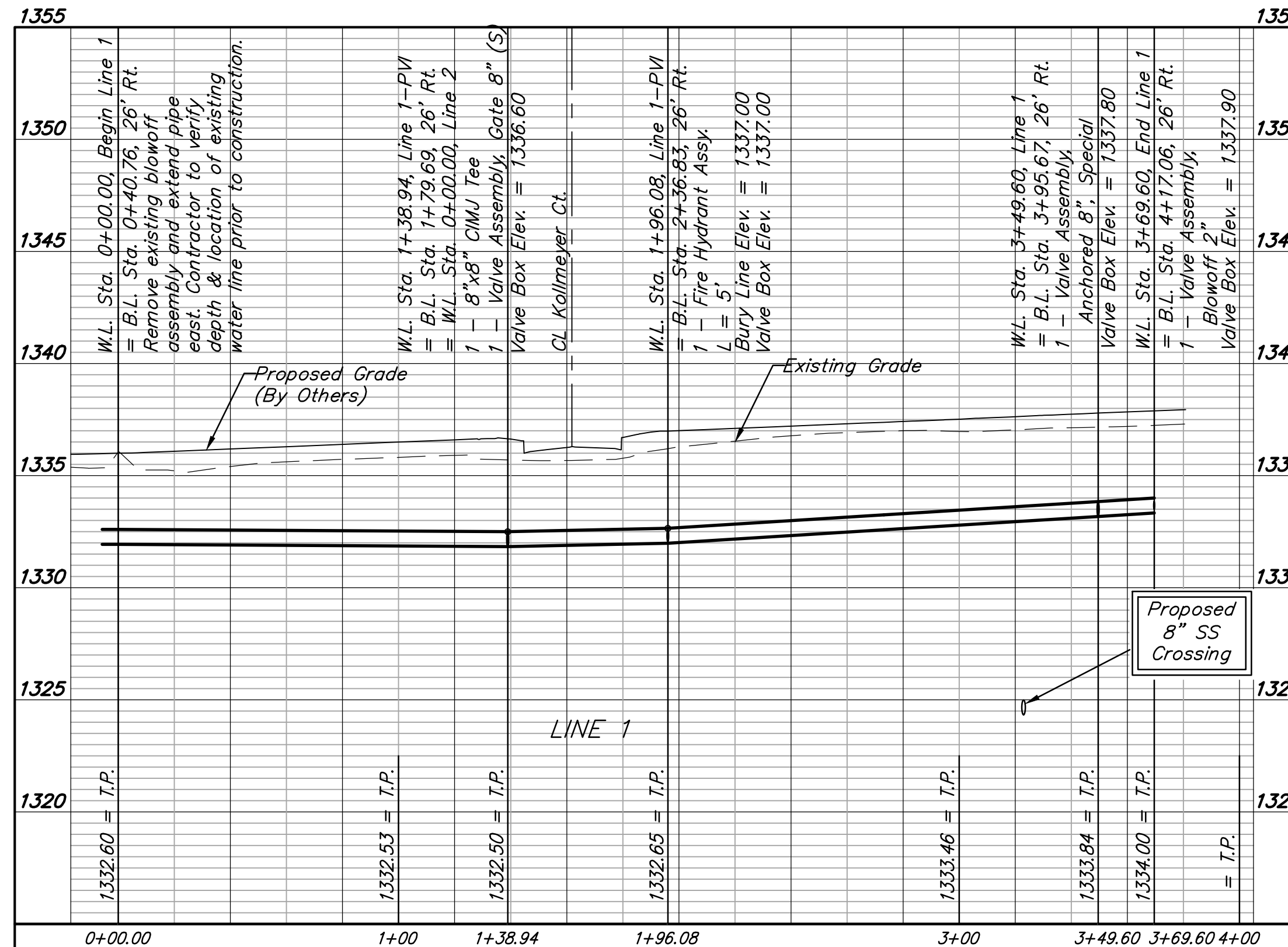
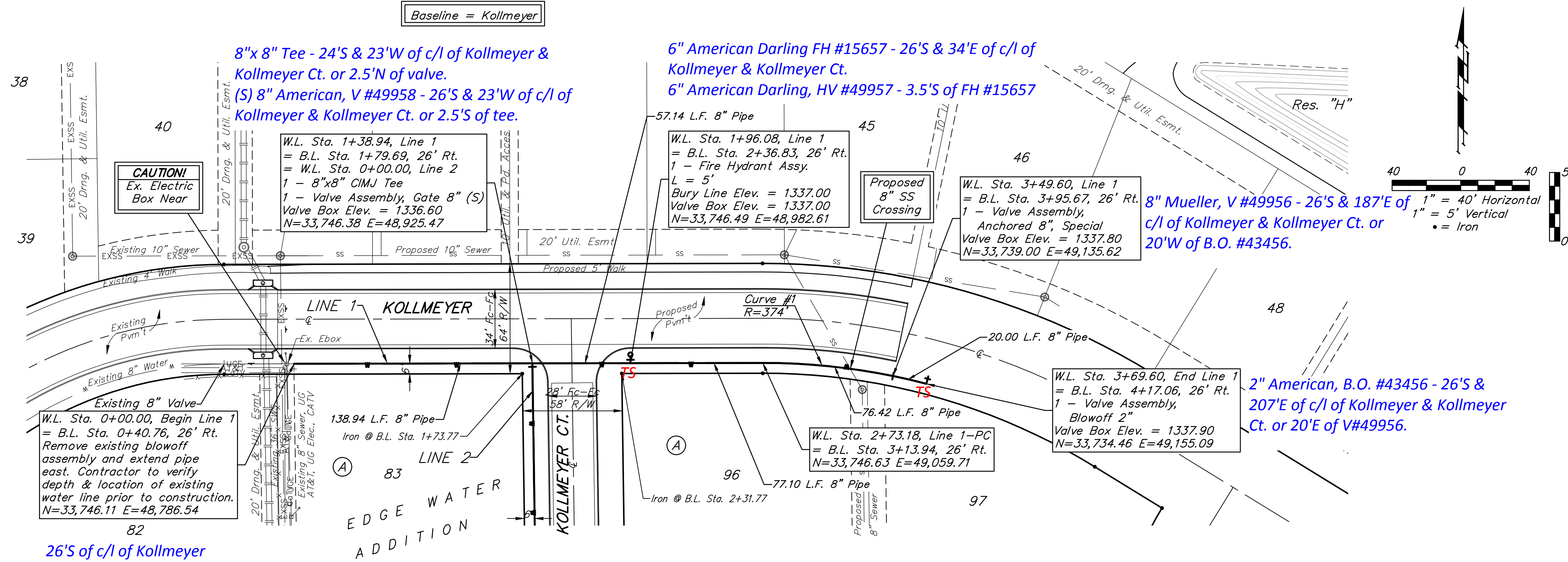
BM #2: Brass disc on top of curb by fire hydrant at SE corner of intersection of Kollmeyer and Kollmeyer Ct. (Lots 63-82, Block A) at the NW corner of Lot 82, Block A, Edge Water Addition.
 Elev. = 1336.61 NGVD29

BM #3: "□" on Top of Curb, east side of Kollmeyer Ct. (Lots 63-82, Block A) near NW Corner of Lot 80, Block A, Edge Water Addition.
 Elev. = 1333.99 NGVD29

BM #4: "□" on Top of Curb, east side of Kollmeyer Ct. (Lots 63-82, Block A) near NW Corner of Lot 78, Block A, Edge Water Addition.
 Elev. = 1334.26 NGVD29

Curve #1				
Curve Data Based on Waterline				
Rad. = 374' Delta = 11°42'26" Tangent = 38.34'				
Arc = 76.42' L.C. = 76.29' Def./Ft. = 4.59587 Min.				
Station	Arc	Chord Lengths	Defl.	Total Defl.
		6' Right		
2+73.18			0°00'00"	0°00'00"
2+75.00	1.82'	1.79'	0°08'22"	0°08'22"
3+00.00	25.00'	24.59'	1°54'54"	2°03'16"
3+19.60	19.60'	19.28'	1°30'04"	3°33'20"
3+25.00	5.40'	5.31'	0°24'49"	3°58'09"
3+49.60	24.60'	24.20'	1°53'04"	5°51'13"

Construction area is full of trees. Contractor to remove and dispose of trees only as necessary for construction. Cost for tree removal and disposal to be included in Site Clearing" bid item.



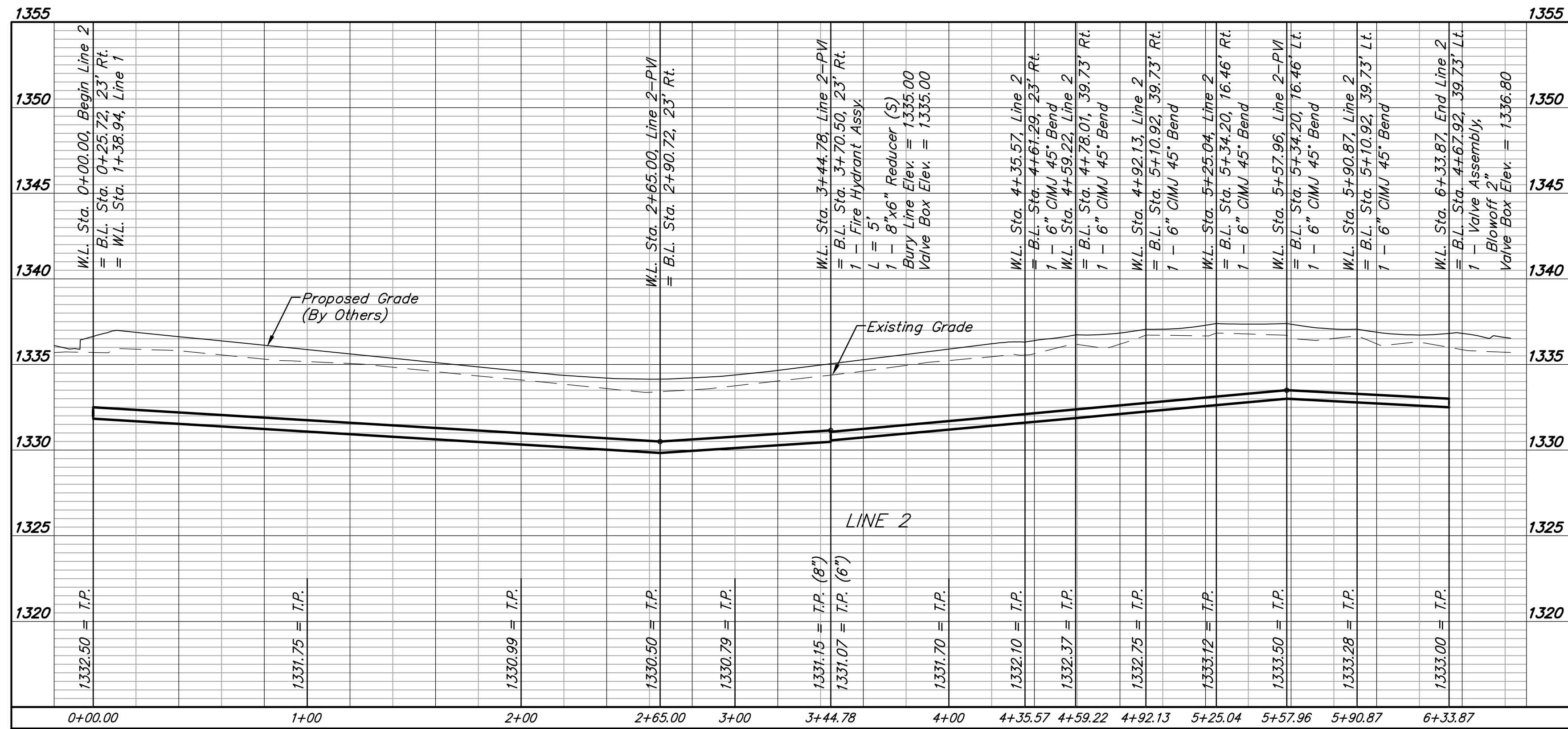
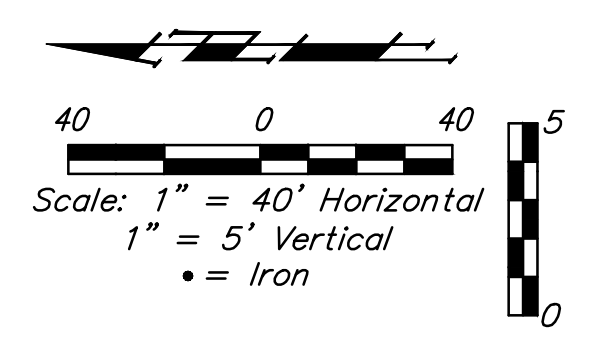
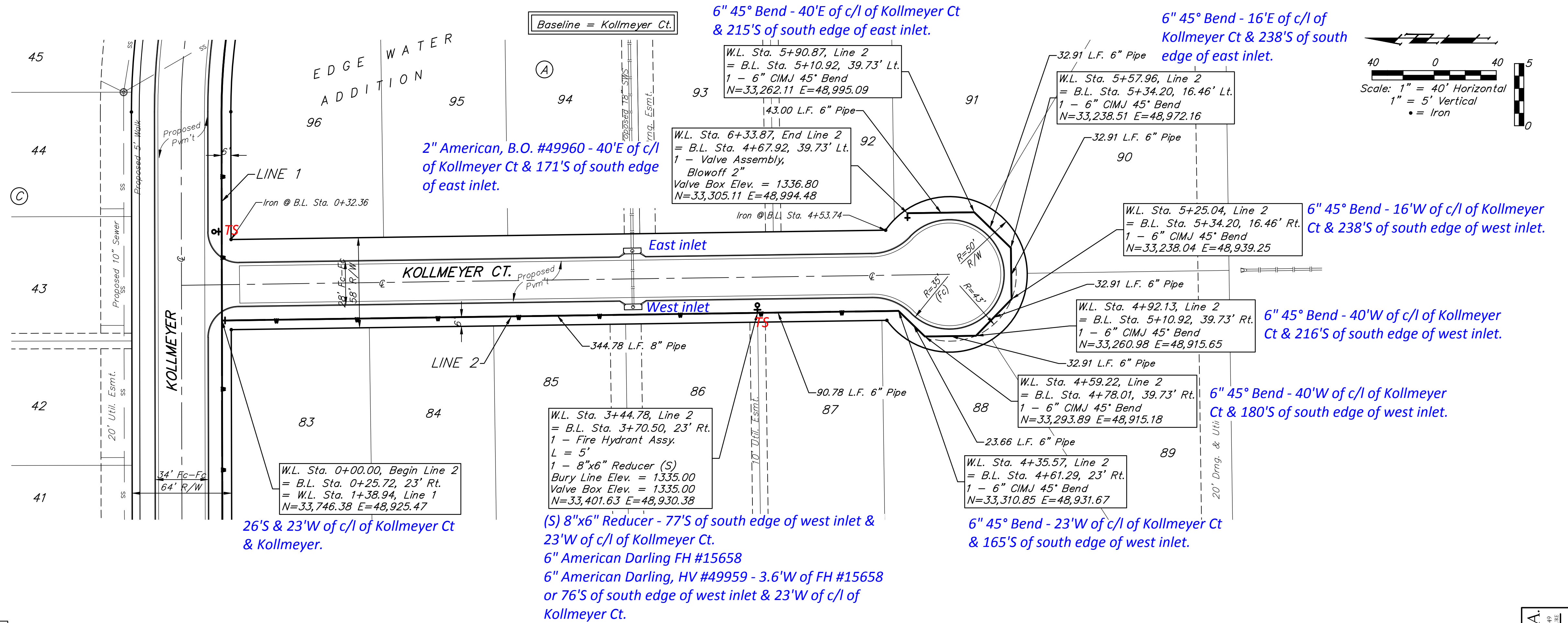
BENCHMARKS:
 BM #1: Crows foot cut at SE corner of curb inlet south side of Kollmeyer near NE corner of Lot 82, Block A, Edge Water Addition.
 Elev. = 1335.36 NGVD29

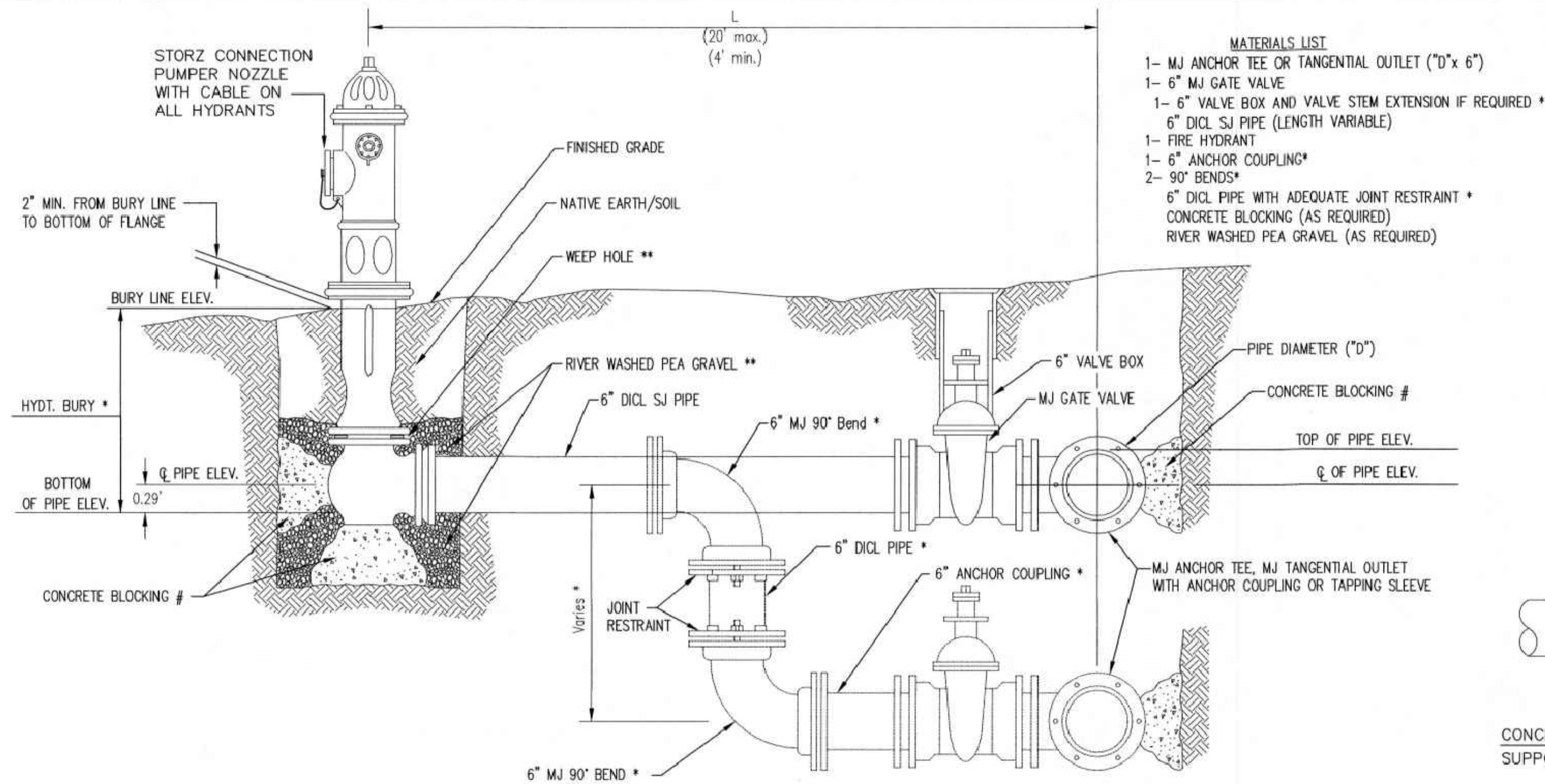
BM #2: Brass disc on top of curb by fire hydrant at SE corner of intersection of Kollmeyer and Kollmeyer Ct. (Lots 63-82, Block A) at the NW corner of Lot 82, Block A, Edge Water Addition.
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BM #3: "□" on Top of Curb, east side of Kollmeyer Ct. (Lots 63-82, Block A) near NW Corner of Lot 80, Block A, Edge Water Addition.
 Elev. = 1333.99 NGVD29

BM #4: "□" on Top of Curb, east side of Kollmeyer Ct. (Lots 63-82, Block A) near NW Corner of Lot 78, Block A, Edge Water Addition.
 Elev. = 1334.26 NGVD29

Construction area is full of trees. Contractor to remove and dispose of trees only as necessary for construction. Cost for tree removal and disposal to be included in Site Clearing" bid item.





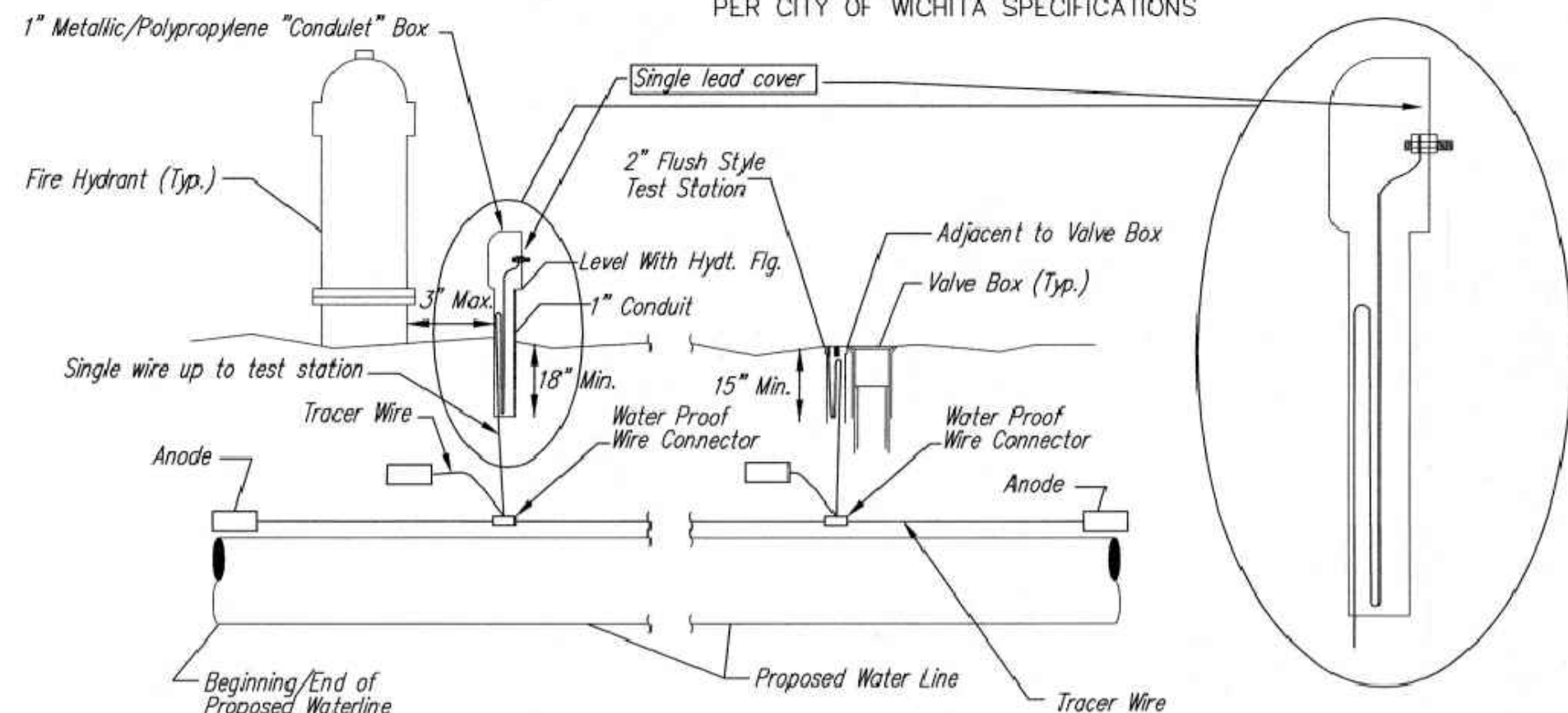
- MATERIALS LIST**
- 1- MJ ANCHOR TEE OR TANGENTIAL OUTLET ("D" x 6")
 - 1- 6" MJ GATE VALVE
 - 1- 6" VALVE BOX AND VALVE STEM EXTENSION IF REQUIRED *
 - 6" DI CL SJ PIPE (LENGTH VARIABLE)
 - 1- FIRE HYDRANT
 - 1- 6" ANCHOR COUPLING*
 - 2- 90° BENDS*
 - 6" DI CL PIPE WITH ADEQUATE JOINT RESTRAINT *
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

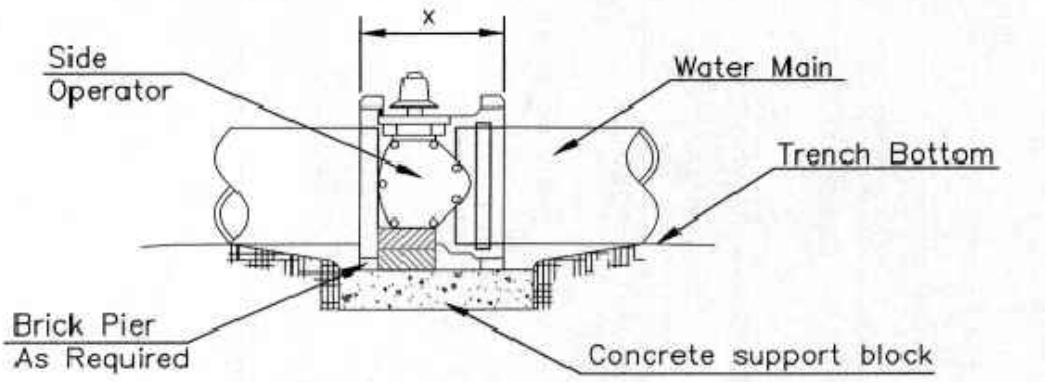
WIRES
The tracer wire shall be Blue No. 12 AWG CCS with 45 mil HDPE insulation. To allow for grade adjustment, a minimum of 12" of excess wire shall be coiled at the bottom of the test station for all wires. Wire connectors shall be installed per manufacturer recommendations. Contractor shall attach wire being installed with proposed water main to any tracer wire installed with adjacent waterline projects.

TEST STATIONS
The test station for fire hydrant application shall be a 1" "conduit" style station as manufactured by AGRA Industries with a removable solid cover having a single lead extending from the face or approved equal. The "conduit" style test station shall be attached to a 1" rigid galvanized conduit with a minimum length of 36" and plastic end bushing. The flush style shall have the word "WATER" stamped or molded into the lid. The test station for valve applications shall be a 2" flush style test station with wire connector on lid. Model # T2PH7B1LP Handley Industries or CD14*TP SnakePit as manufactured by Copperhead Industries or approved equal. The flush style shall have the word "WATER" stamped or molded into the lid. All test stations shall be manufactured using molded blue tops or sufficiently coated with blue enamel paint. The tracer wire and the anode wire shall be 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.

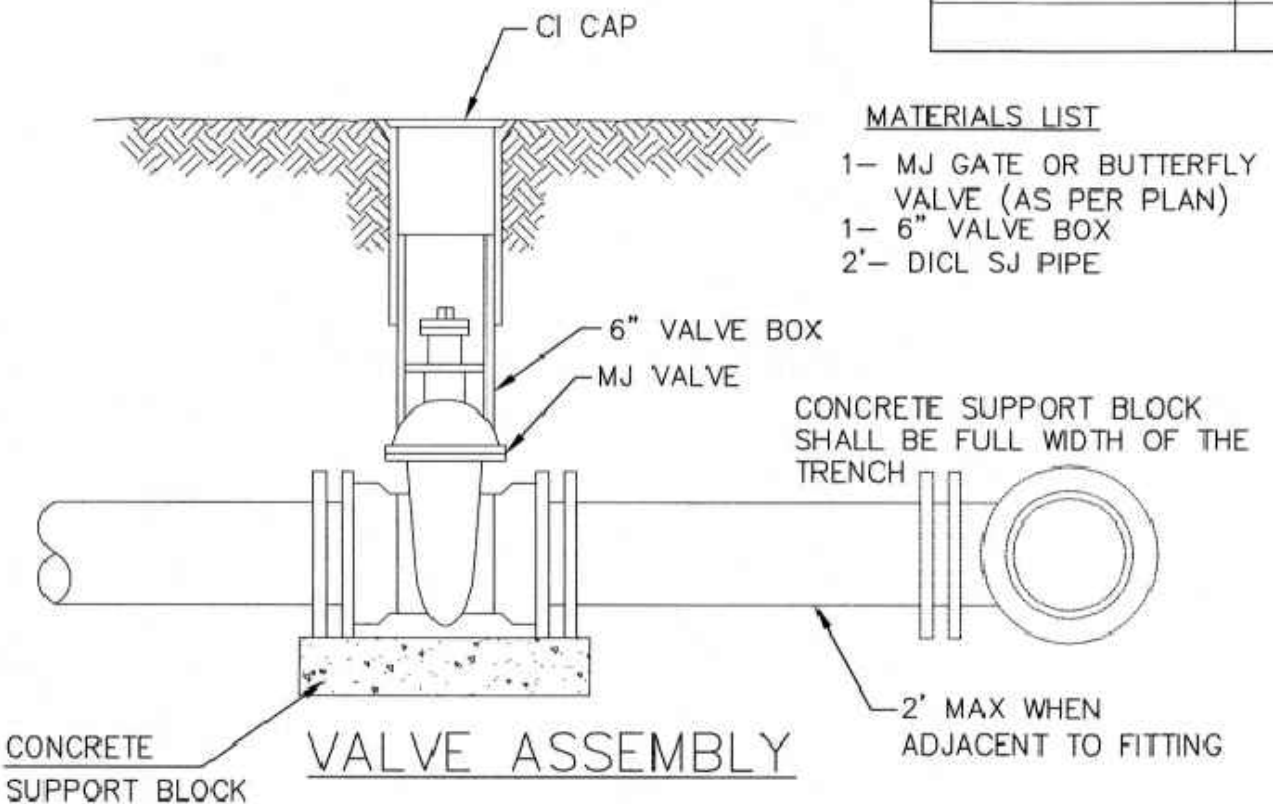
TRACER WIRE DETAIL
COST IS SUBSIDIARY TO PIPE INSTALLATION

FIRE HYDRANTS REQUIRED				
STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*	VALVE STEM EXT. REQUIRED (ft)*
Sta. 1+96.08, Line 1	1337.00	1332.65	5.0'	-
Sta. 3+44.78, Line 2	1335.00	1331.15	4.5'	-

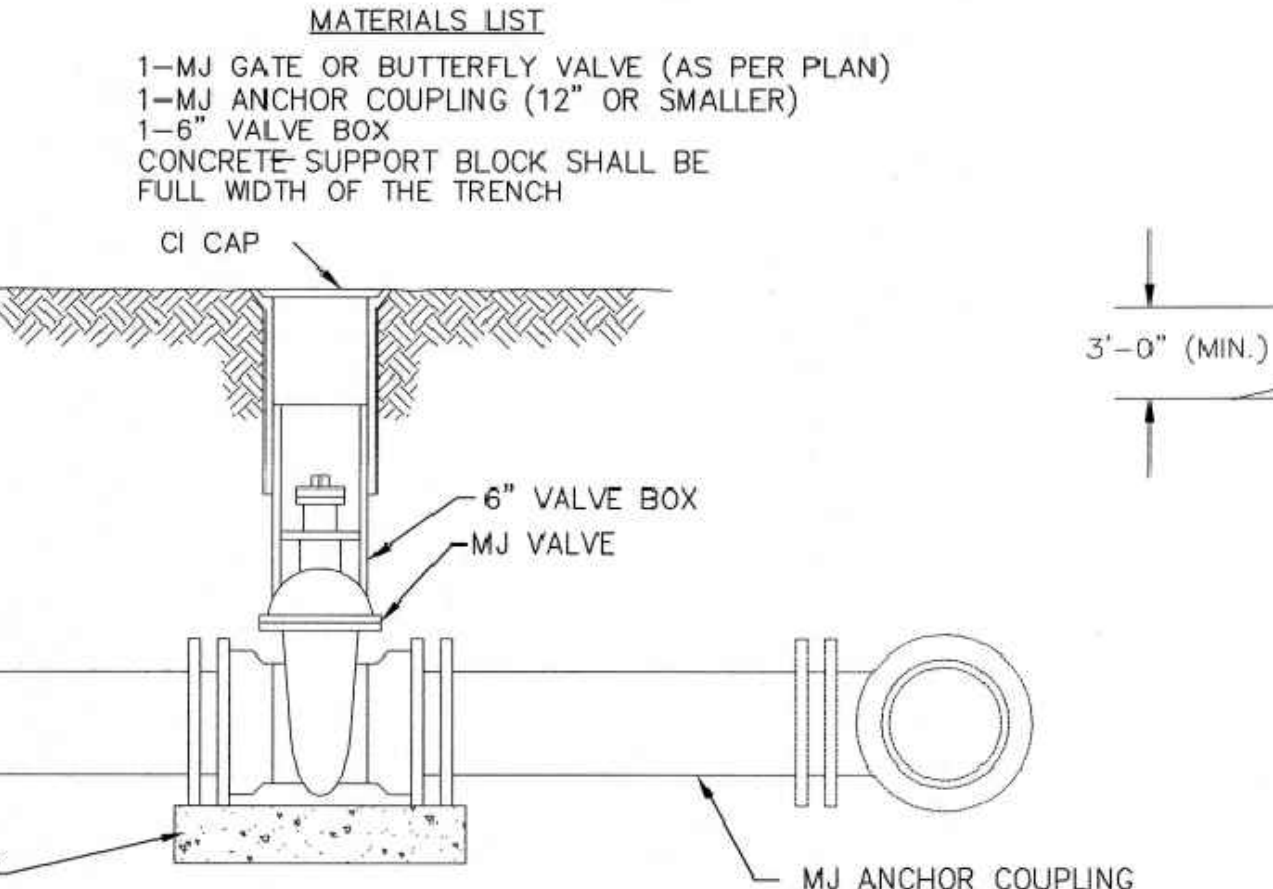


- NOTES**
- This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. 24" and larger lines to be detailed on plans.
 - 6" Valve Box and Cover required per City of Wichita Std. Specifications.
 - Conc. Support Block to be full width of trench.

CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION

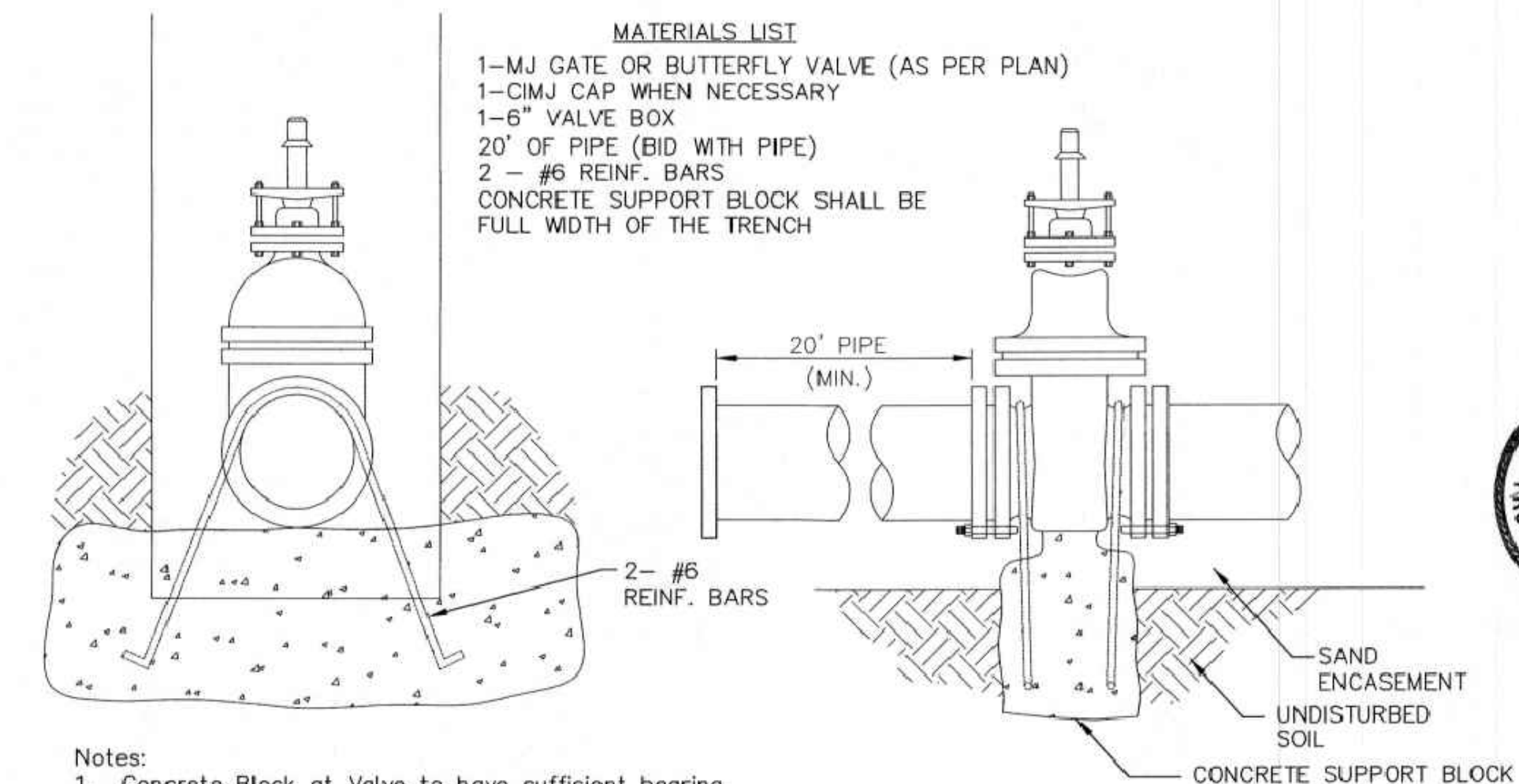


- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1- 6" VALVE BOX
 - 2'- DI CL SJ PIPE



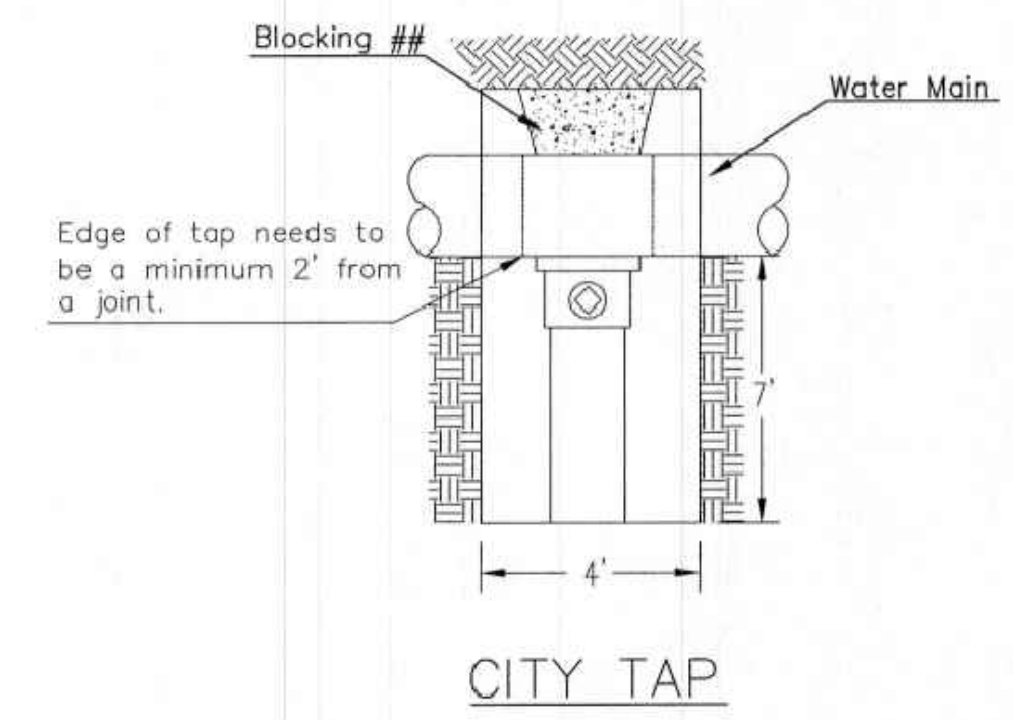
ANCHORED VALVE ASSEMBLY, SPECIAL

- 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:**
- 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.

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

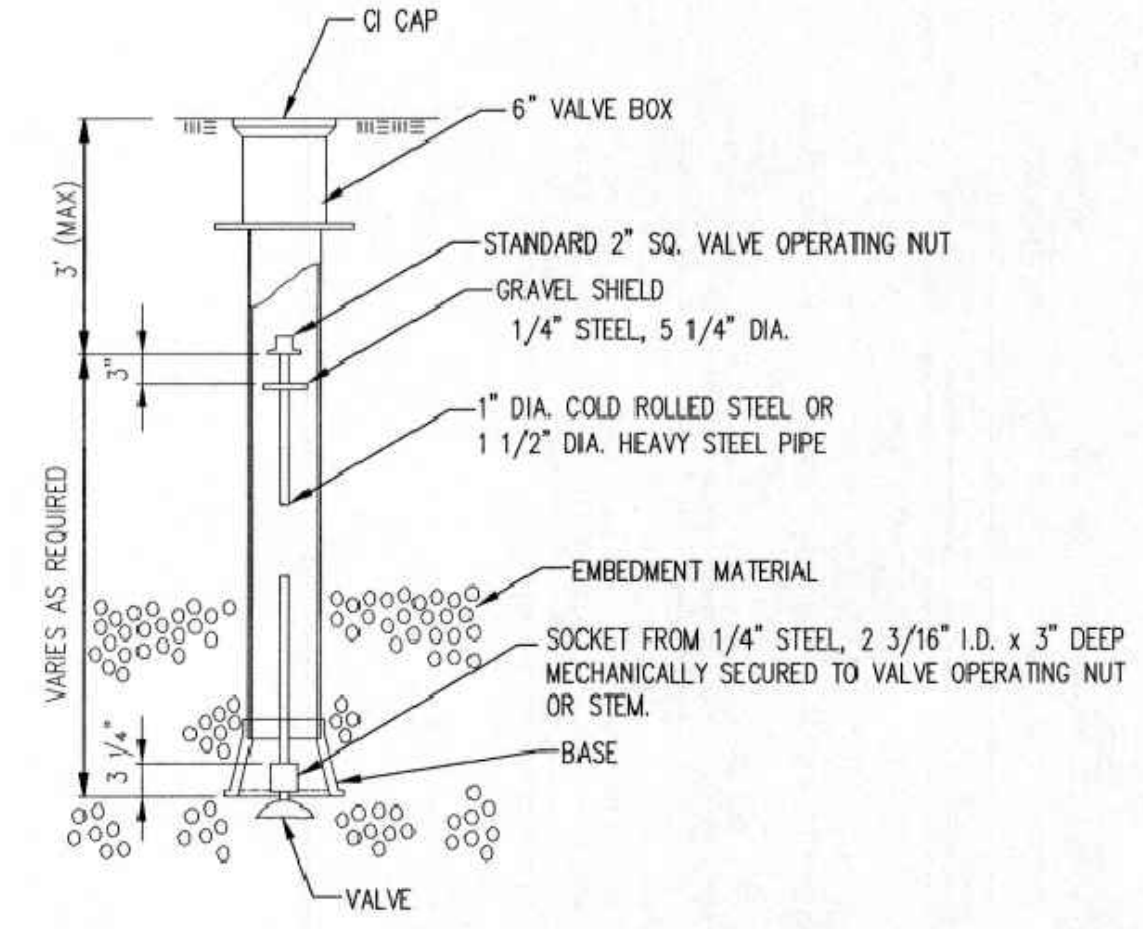


Edge of top needs to be a minimum 2' from a joint.

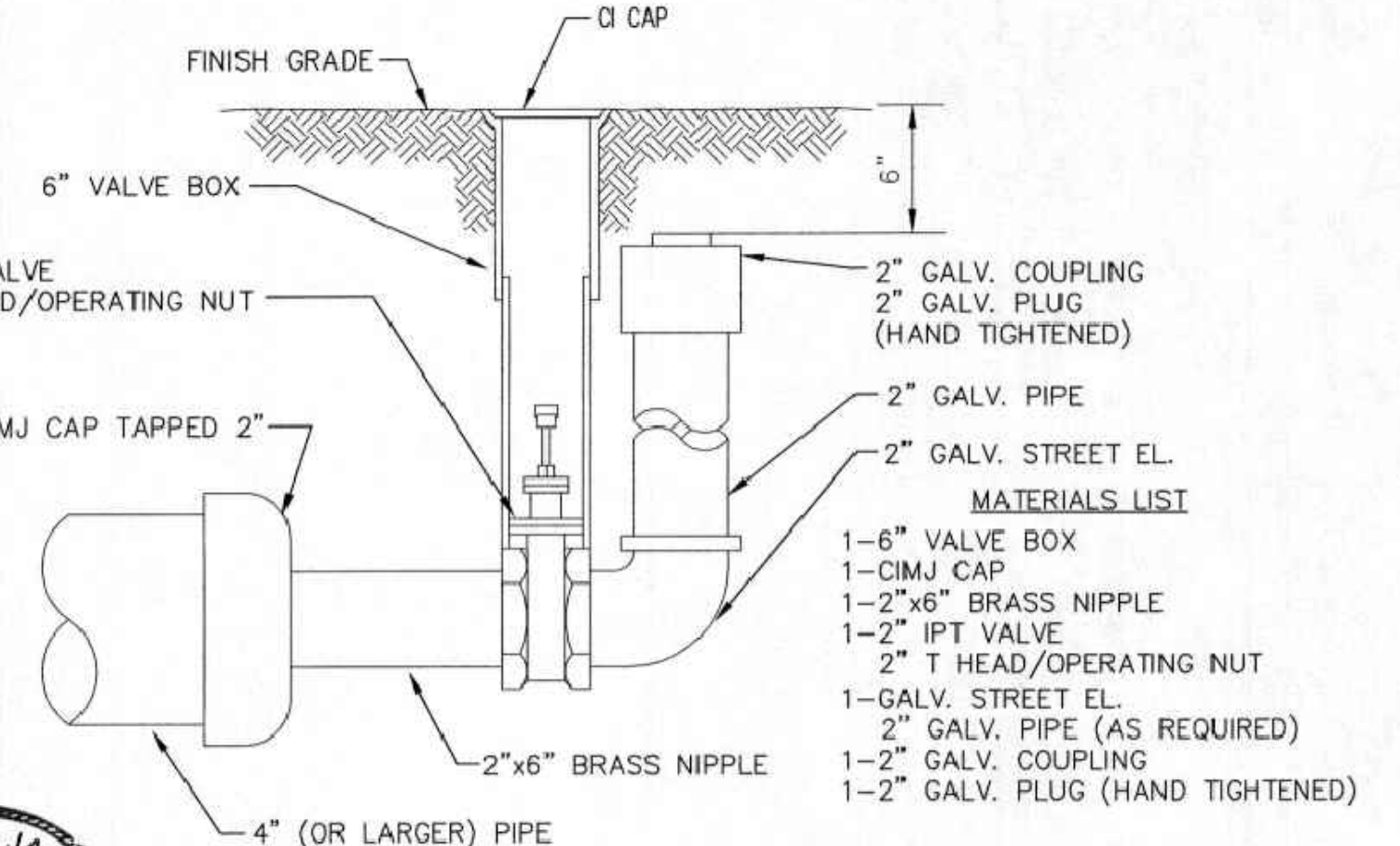
When the City of Wichita makes tap, blocking is to be done by Contractor

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)



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



2" BLOWOFF ASSEMBLY



CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

STANDARD WATER ASSEMBLY DETAIL
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER: OCA NUMBER: DATE:

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

SHEET
5 of 14

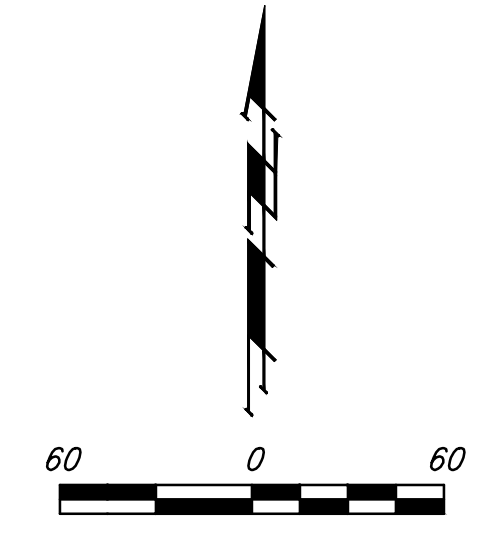
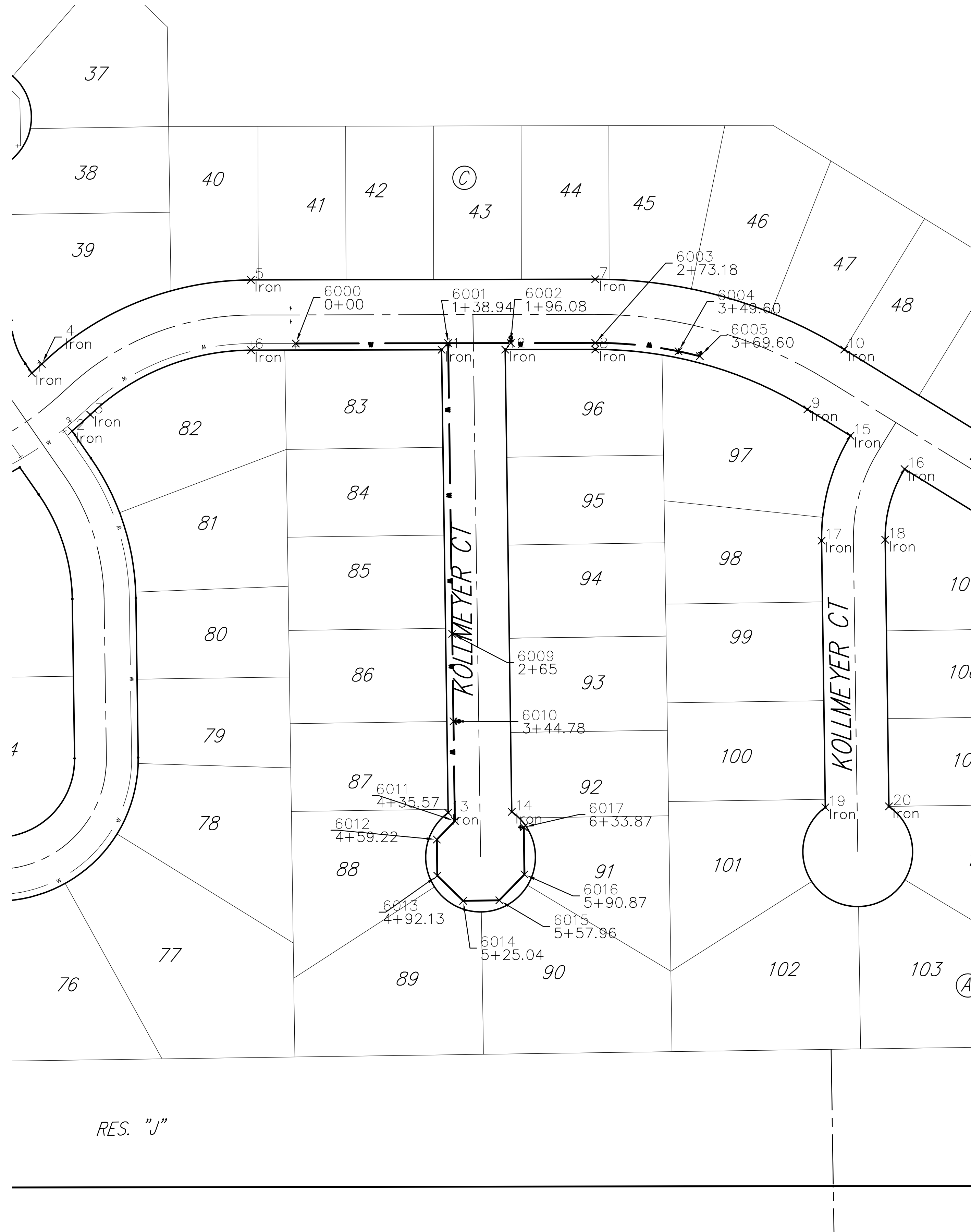
REVISED: OCTOBER 2016

IRONS

Point Table			
Point #	Northing	Easting	Raw Description
1	33719.11	48545.83	Iron
2	33666.31	48582.54	Iron
3	33681.13	48599.15	Iron
4	33727.43	48554.96	Iron
5	33804.03	48745.67	Iron
6	33740.03	48745.79	Iron
7	33804.63	49059.60	Iron
8	33740.63	49059.72	Iron
9	33686.10	49253.21	Iron
10	33740.62	49286.74	Iron
11	33740.36	48919.56	Iron
12	33740.48	48977.56	Iron
13	33318.31	48925.56	Iron
14	33319.14	48983.55	Iron
15	33662.00	49292.39	Iron
16	33631.62	49341.80	Iron
17	33566.35	49266.07	Iron
18	33567.18	49324.06	Iron
19	33323.28	49269.52	Iron
20	33324.11	49327.52	Iron

WATER DISTRIBUTION SYSTEM

Point Table			
Point #	Northing	Easting	Raw Description
6000	33746.11	48786.54	0+00
6001	33746.38	48925.47	1+38.94
6002	33746.49	48982.61	1+96.08
6003	33746.63	49059.71	2+73.18
6004	33739.00	49135.62	3+49.60
6005	33734.46	49155.09	3+69.60
6009	33481.40	48929.24	2+65
6010	33401.63	48930.38	3+44.78
6011	33310.85	48931.67	4+35.57
6012	33293.89	48915.18	4+59.22
6013	33260.98	48915.65	4+92.13
6014	33238.04	48939.25	5+25.04
6015	33238.51	48972.16	5+57.96
6016	33262.11	48995.09	5+90.87
6017	33305.11	48994.48	6+33.87



Baughman Company, P.A.
 115 E. WILSON ST. STE. 200, P.O. BOX 200, P.O. BOX 200
 OVERLAND PARK, KANSAS 66204
 ENGINEERING, ARCHITECTURE, PLANNING, LANDSCAPE ARCHITECTURE
 Baughman
 Date: 9/14/2018
 Drawn: TMS
 Approval: [Signature]
 Date: 09/18

EDGE WATER ADD. - PH. II
COORDINATE SHEET
 WATER DISTRIBUTION SYSTEM



