

Main 30, War Industrials Street, Forest Main
 SANITARY SEWER IMPROVEMENTS

BROOKFIELD ADDITION
 CITY OF WICHITA, KANSAS

Garland Janz, P.E. Civil Engineer
 Project Number 468-85189
 OCA Number
 621101

**NOTE: Preliminary release 9/21/2017.
 For connection purposes only.**

McCullough Excavation - Contractor
 J Wagner - City of Wichita, Field Project Engineer
 S. May/S. Stripling - City of Wichita, Inspectors
 Stubs & Risers

Release Date: 9/21/2017
 Completion Date:
 pdf: 9/21/2017 apr

GENERAL NOTES

1. 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
Aquila Energy	1-800-303-0357
AT&T	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
Conoco Phillips Pipeline Co.	1-877-267-2290
Southern Star Pipeline Co.	529-6600
Kinder-Morgan Pipeline Co.	1-888-844-5658

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 BMP's."

2. 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.

8. All excess excavation shall remain on-site and shall be stockpiled or spread at a location determined by the engineer.
 9. The Contractor shall be responsible for maintaining continuous flow of sewage through construction. Contractor's proposed method for maintaining sewage flow shall be approved by the Engineer. Cost of maintaining flow of sewage through construction will not be paid for directly and this cost shall be considered as subsidiary to the other pay items of work.

3. 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.

10. All areas disturbed during construction shall be seeded as follows (Temporary Seeding):
Seed: Rye grass (PLS)--5 lbs./1000 Sq. Ft.
 All costs associated with seeding shall be included in bid item "Seeding". All seeding operations shall conform to City of Wichita Standard Specifications.

4. Trees and shrubs in the work area which are in direct conflict with proposed new construction shall be removed by the Contractor ONLY with Developer or Baughman Company approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage. If trimming is necessary, a chainsaw shall be used. Breaking limbs with equipment will not be allowed. An on-site pre-construction meeting will occur prior to any construction to discuss tree removal, tree protection and tree trimming.

11. The proposed internal gravity sanitary sewer will be constructed by others. That project bid date is planned for May 5, 2017. The contractor for this project and the internal sewer will be required to coordinate scheduling and construction activities. See construction phasing note. All contractors on-site will be required to coordinate construction activities.

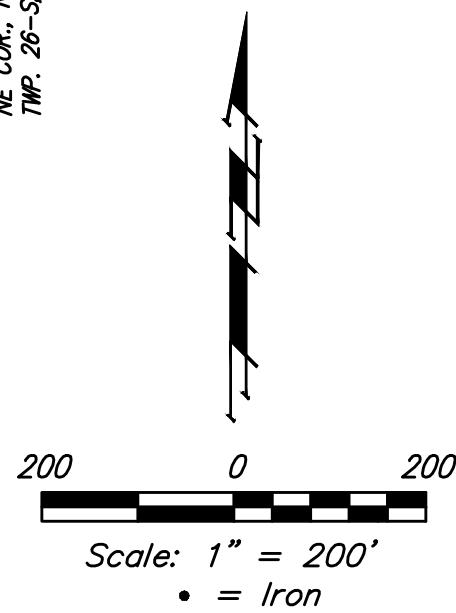
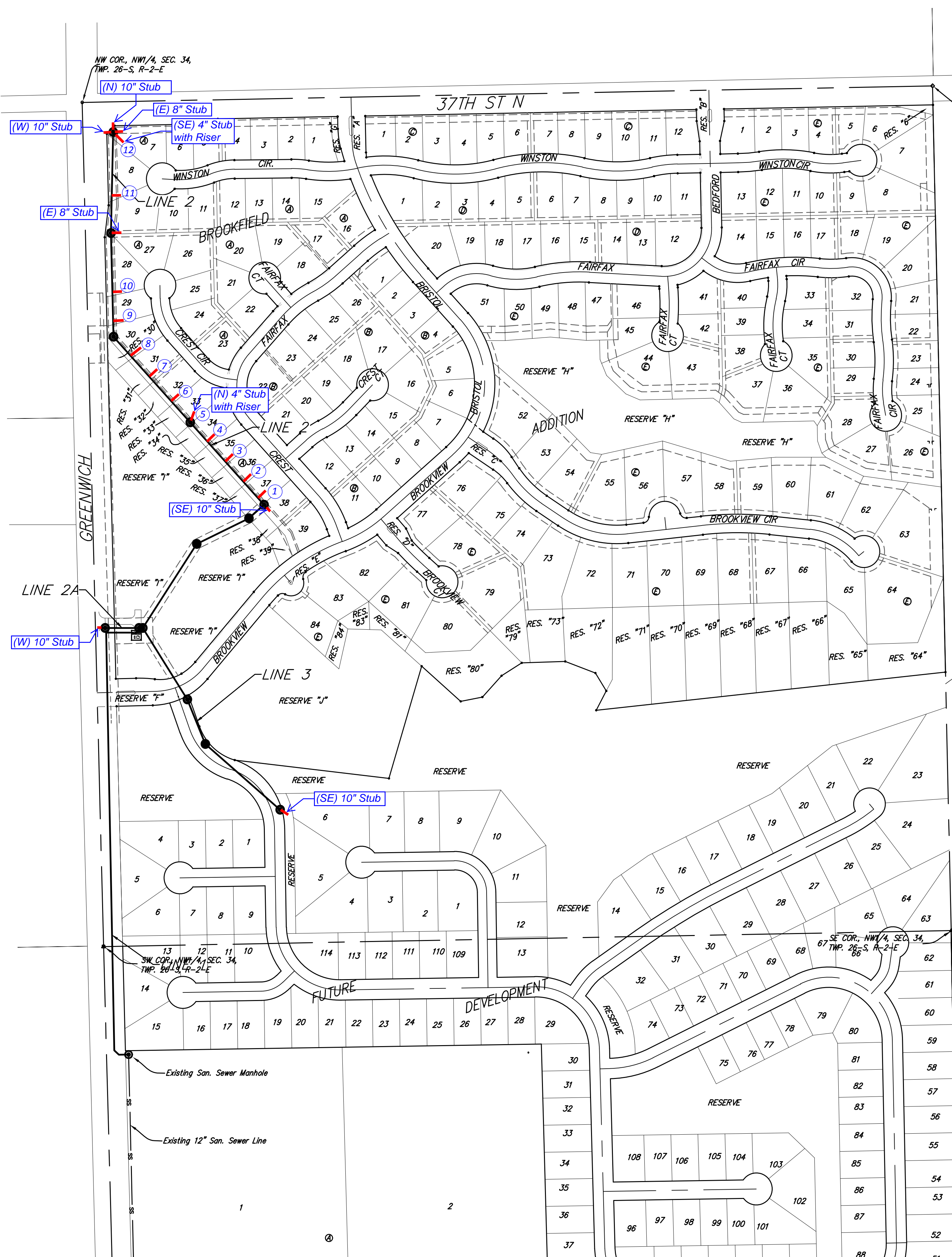
5. The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days notice prior to start of construction.

12. Construction Phasing:
 Line 2 of the gravity sanitary sewer main shall be constructed first to allow for construction of internal sanitary sewer by others.

6. 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.

13. If traffic is impacted by construction, a traffic control plan must be submitted and approved by the City Traffic Engineer, Brian Coon, at traffic@wichita.gov before construction can begin. The Contractor shall be responsible for all traffic control measures to facilitate construction. All construction zone markings and signage shall conform to the latest version of Manual on Uniform Traffic Control Devices (MUTCD) as published by the US Dept. of Transportation, Federal Highway Administration. All costs associated with construction markings and signage shall be the Contractor's responsibility.

14. The Developer for this project is Ritchie Development, Kevin Mullen, 684-7300.

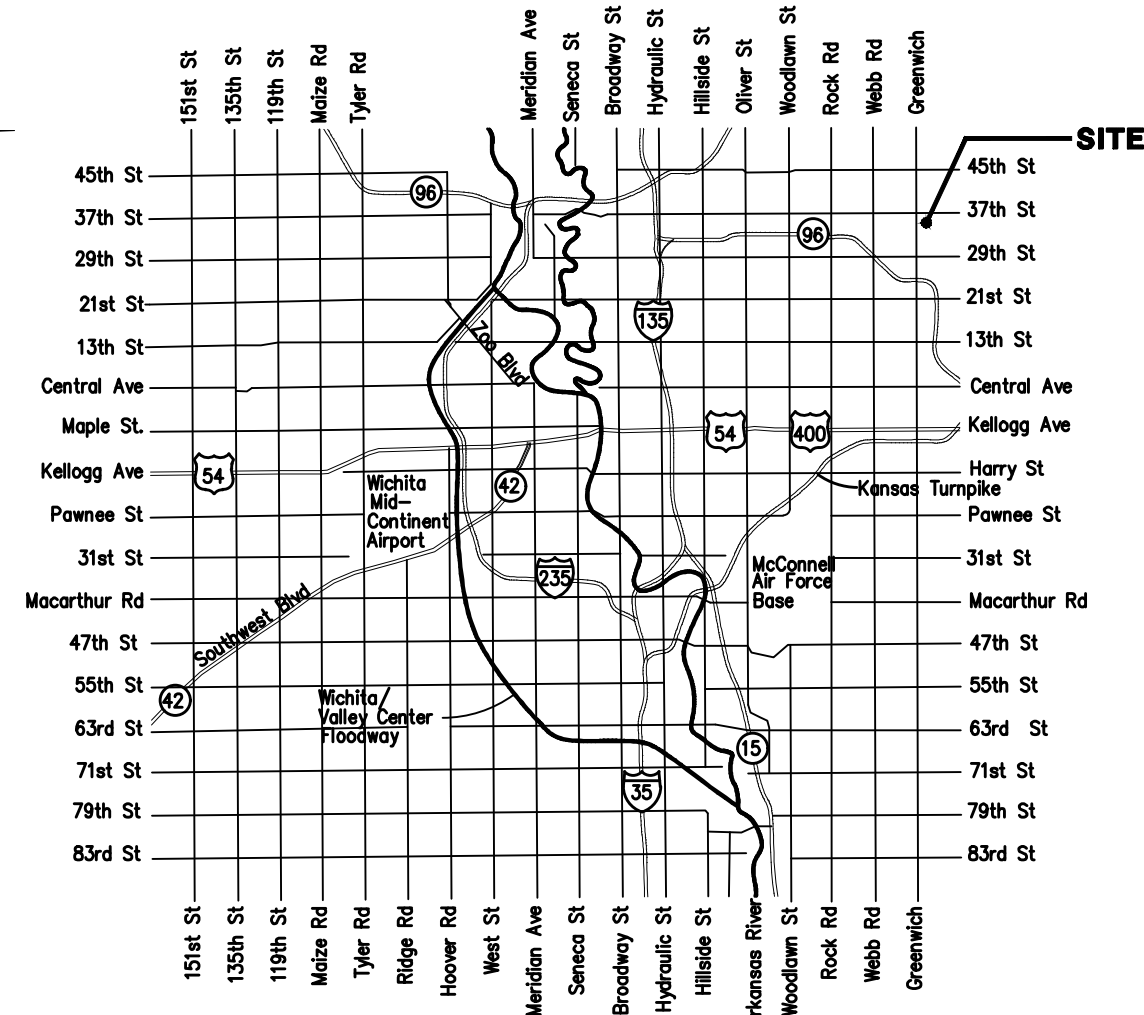


BENCHMARKS

- RR spike in asphalt, SW COR., N1/2, SW1/4, Sec. 34, TWP. 26-S, R-2-E. Elev. = 1400.59 NAVD88
- RR spike in E. face of power pole, 174± N. of S. line, N1/2, SW1/4, & 49± E. of W. line, SW1/4, Sec. 34, TWP. 26-S, R-2-E. Elev. = 1398.64 NAVD88
- RR spike in S. face of power pole, 294± S. of N. line, SW1/4, & 48± E. of W. line, SW1/4, Sec. 34, TWP. 26-S, R-2-E. Elev. = 1386.14 NAVD88

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Vicinity Map

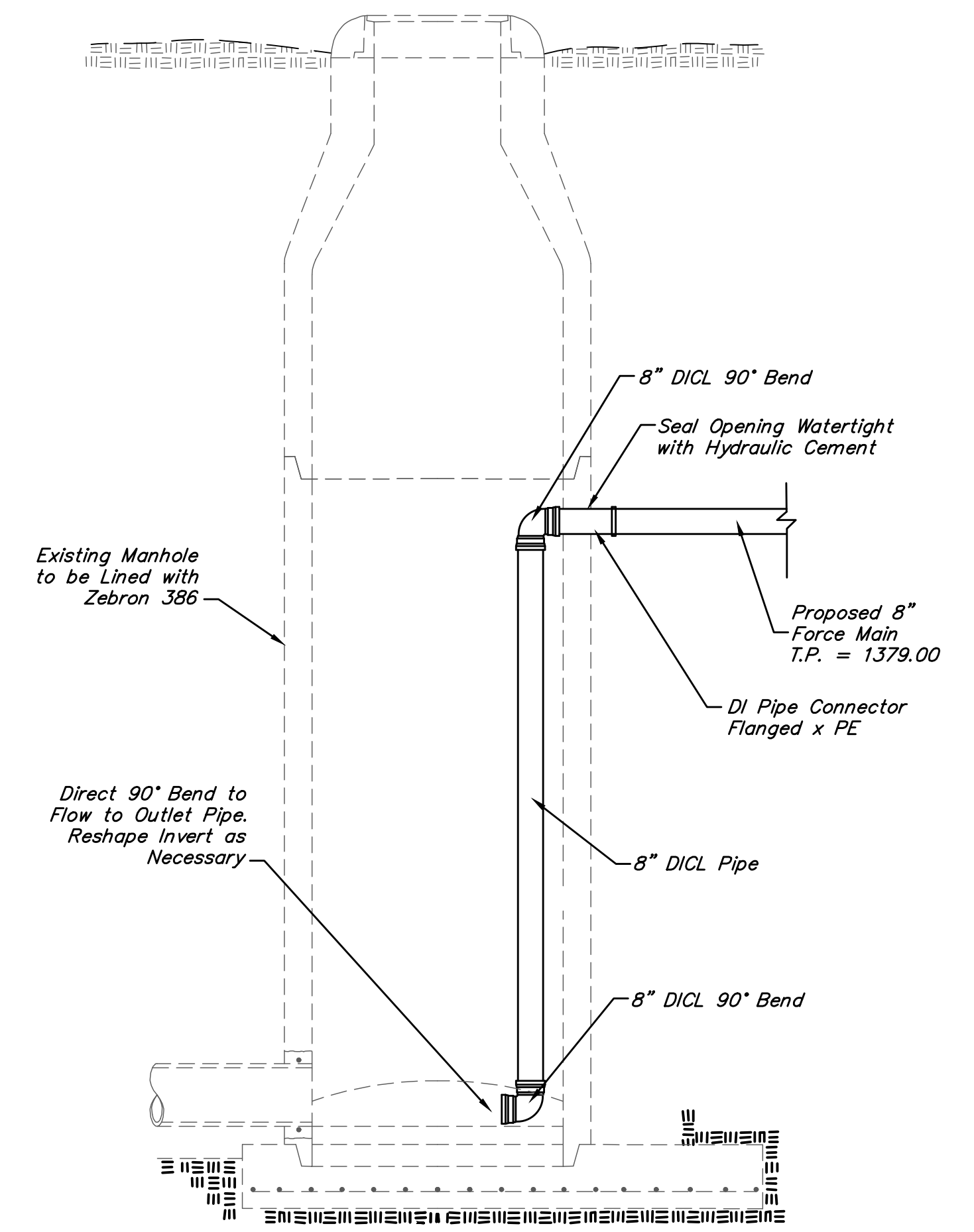
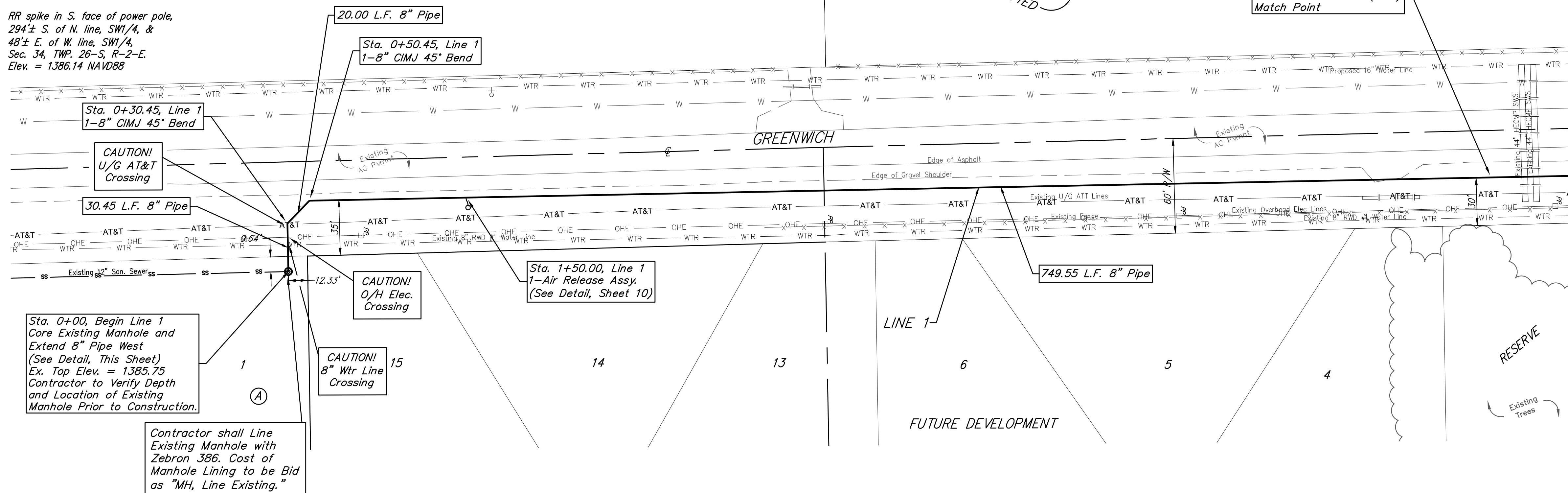
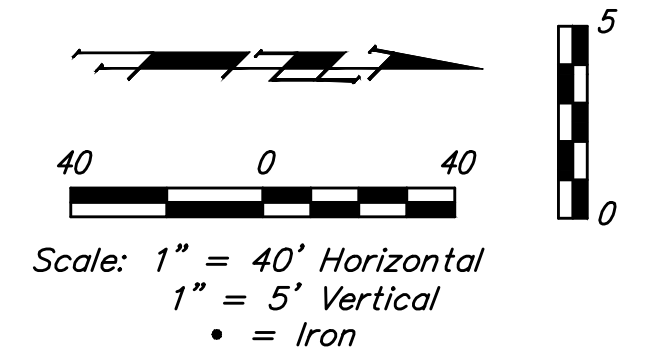


Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149
 ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

BENCHMARKS:
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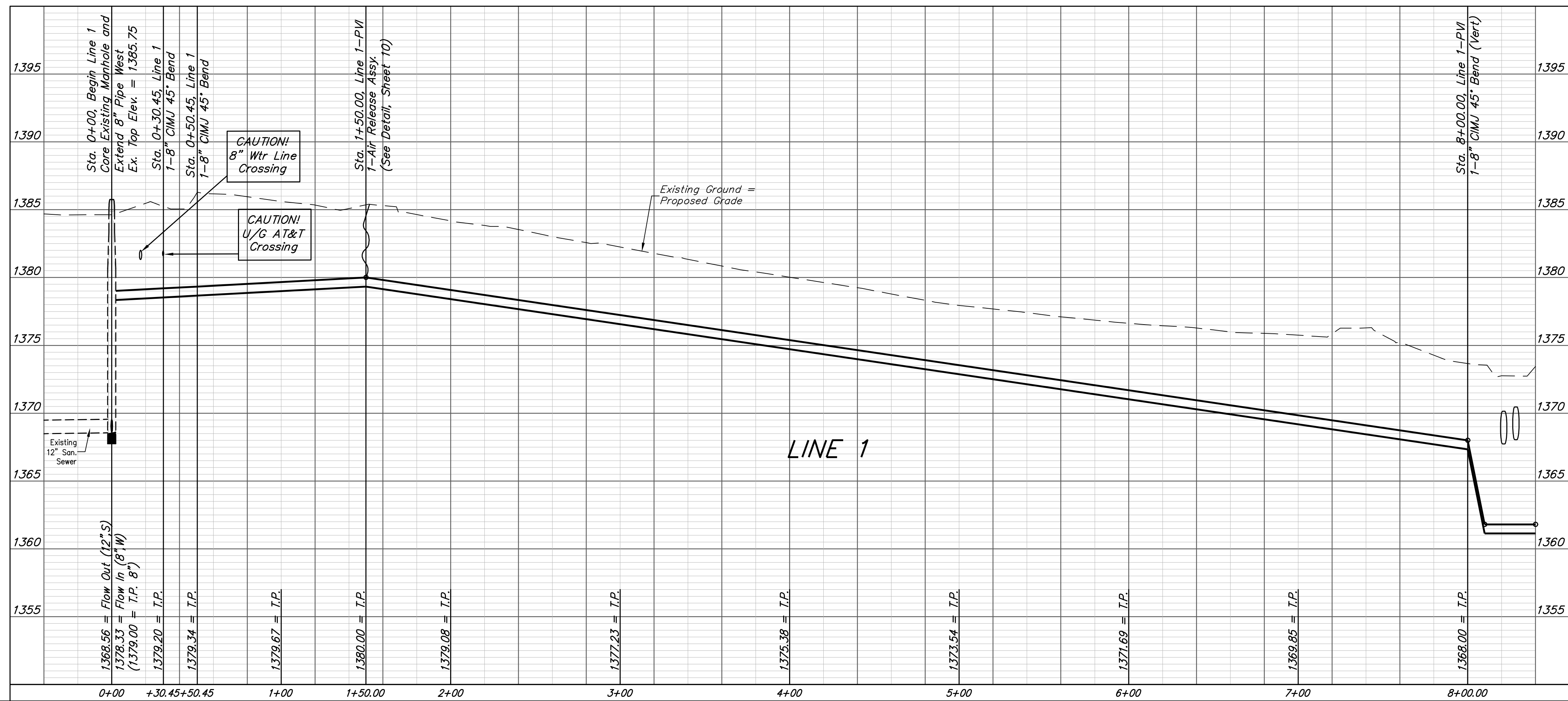
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 Elev. = 1386.14 NAVD88



**Sta 0+00, Line 1
 FORCE MAIN CONNECTION DETAIL**
 No Scale

Note: Pipe shall be Anchored Securely to Wall of Manhole. 90° Elbow at Base of Manhole shall be Directed to Discharge Flow in Direction of 12" Outlet Pipe and Invert shall be Re-shaped as Necessary. All Costs Associated with Manhole Connections, Piping Inside Manhole and Invert Re-shaping shall be Included in Bid Item "MH, Connect to Existing."



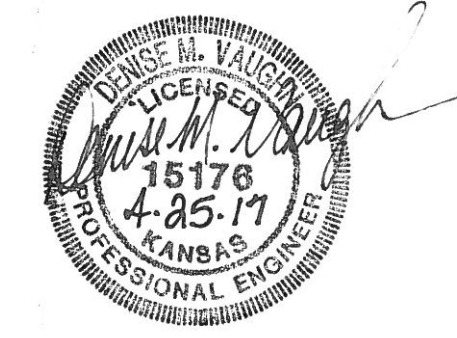
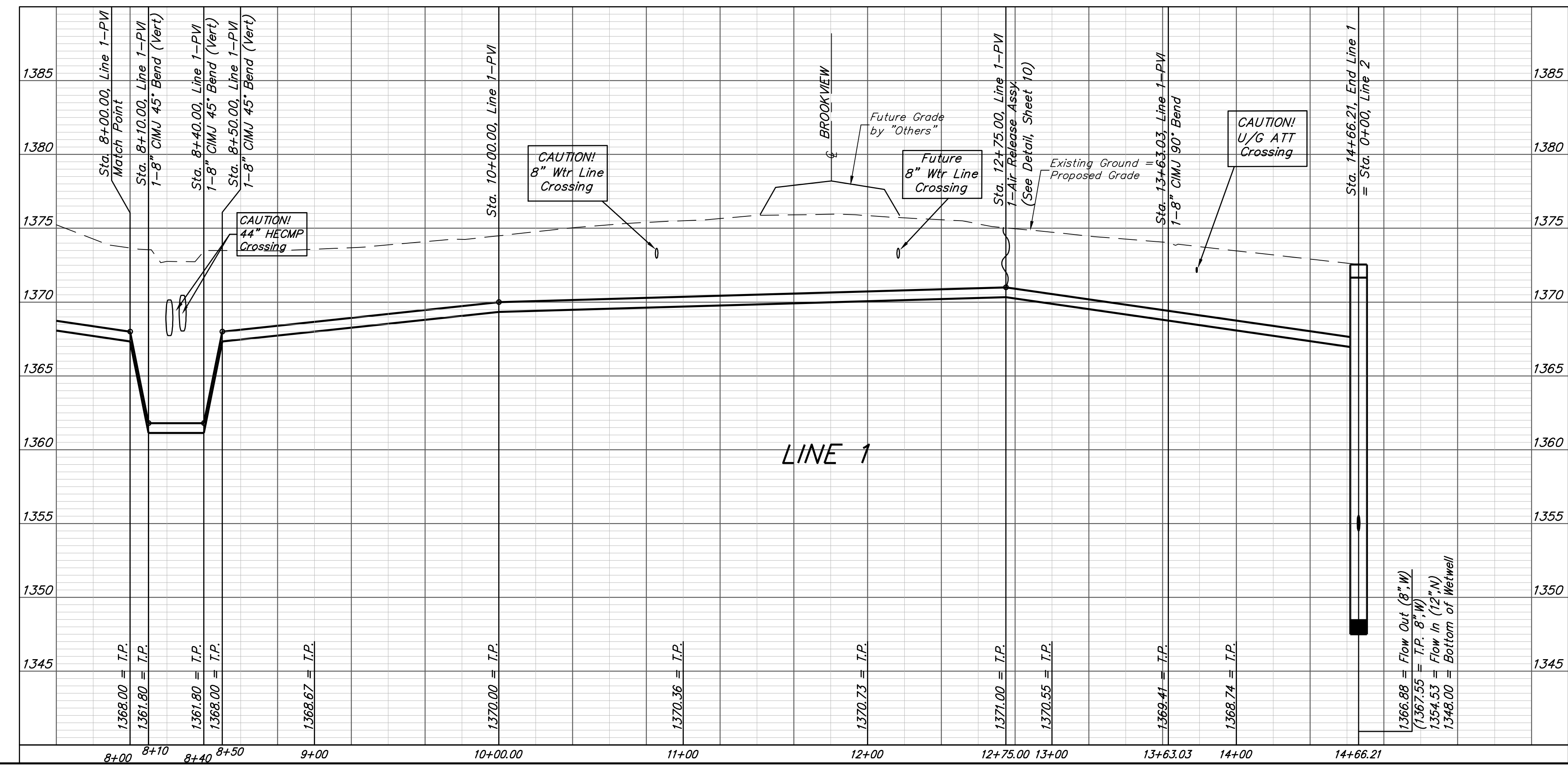
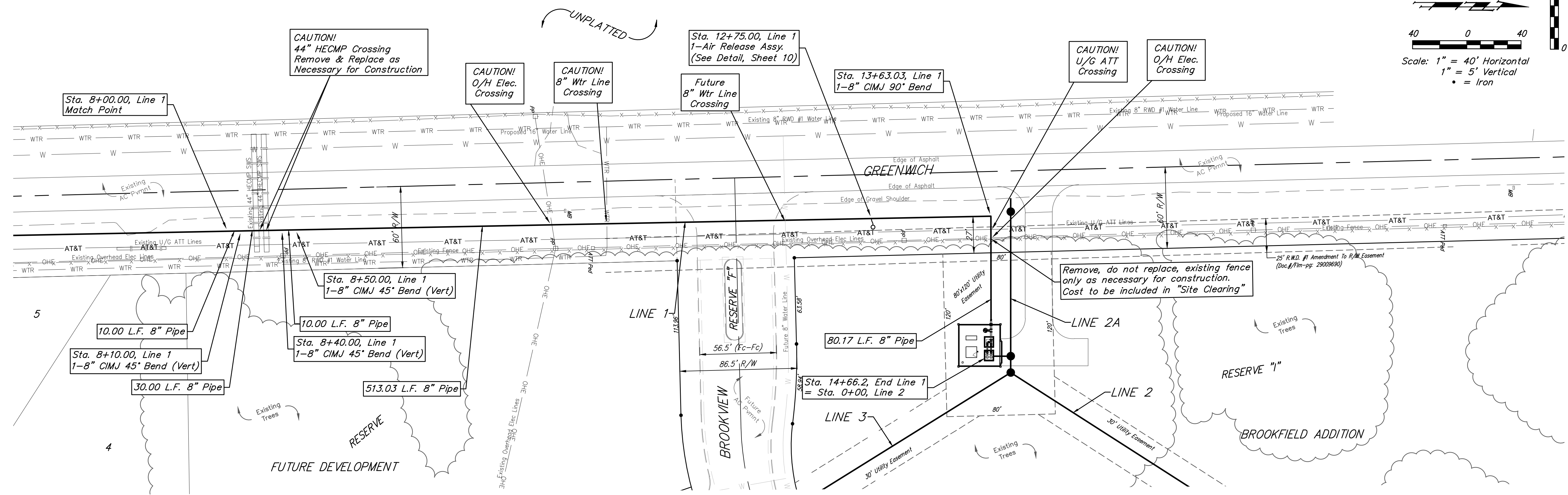
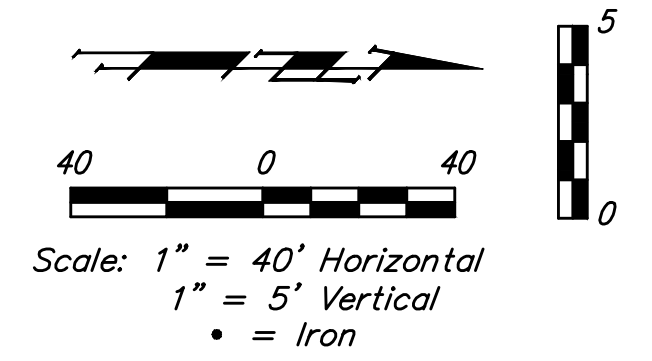
	Baughman Sanitary Structures Engineering & Architecture
	PROJECT NUMBER 462519
REVISIONS:	DESIGN AEG
DRAWN JAK	DATE 4/25/17
SCALE Noted SHEET	2 OF 24



BENCHMARKS:
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	Br... Addition LINE 1 Sanitary S... r... m... m... m... m...	
	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 46025119	DESIGN AEG	DRAWN JAK
REVISIONS:	APPROVED DATE 4/25/17	SCALE N... SHEET
		3 OF 24

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Remove, do not replace, existing fence only as necessary for construction. Cost to be included in "Site Clearing"

CAUTION! U/G ATT Crossing

CAUTION! O/H Elec. Crossing

Sta. 0+00, Begin Line 2 = Sta. 14+66.2, Line 1

Sta. 1+06.6, End Line 2A Const. Std. Manhole (5' Dia.) 1-10" Stub (W) Top Elev. = 1374.40

Sta. 0+15.9, Line 2 = Sta. 0+00, Begin Line 2A Const. Std. Manhole (5' Dia.) Top Elev. = 1372.50

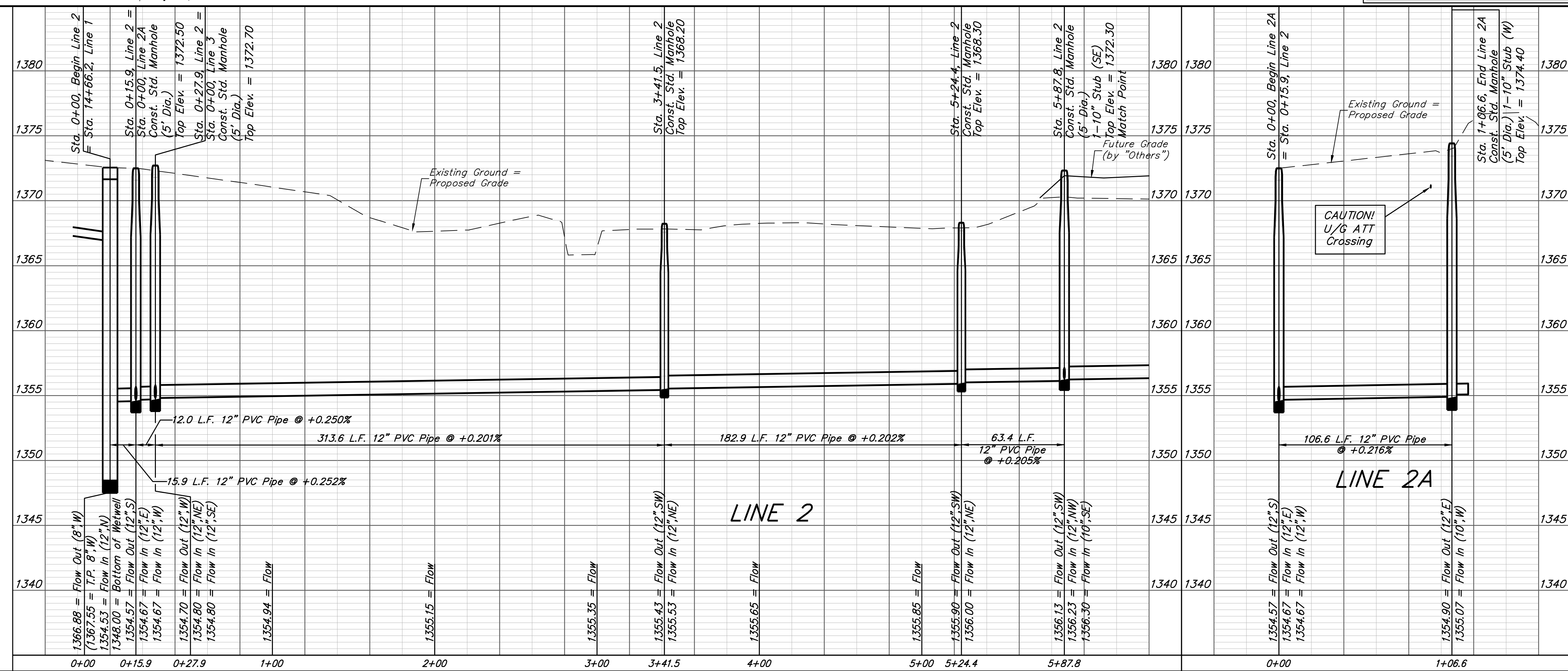
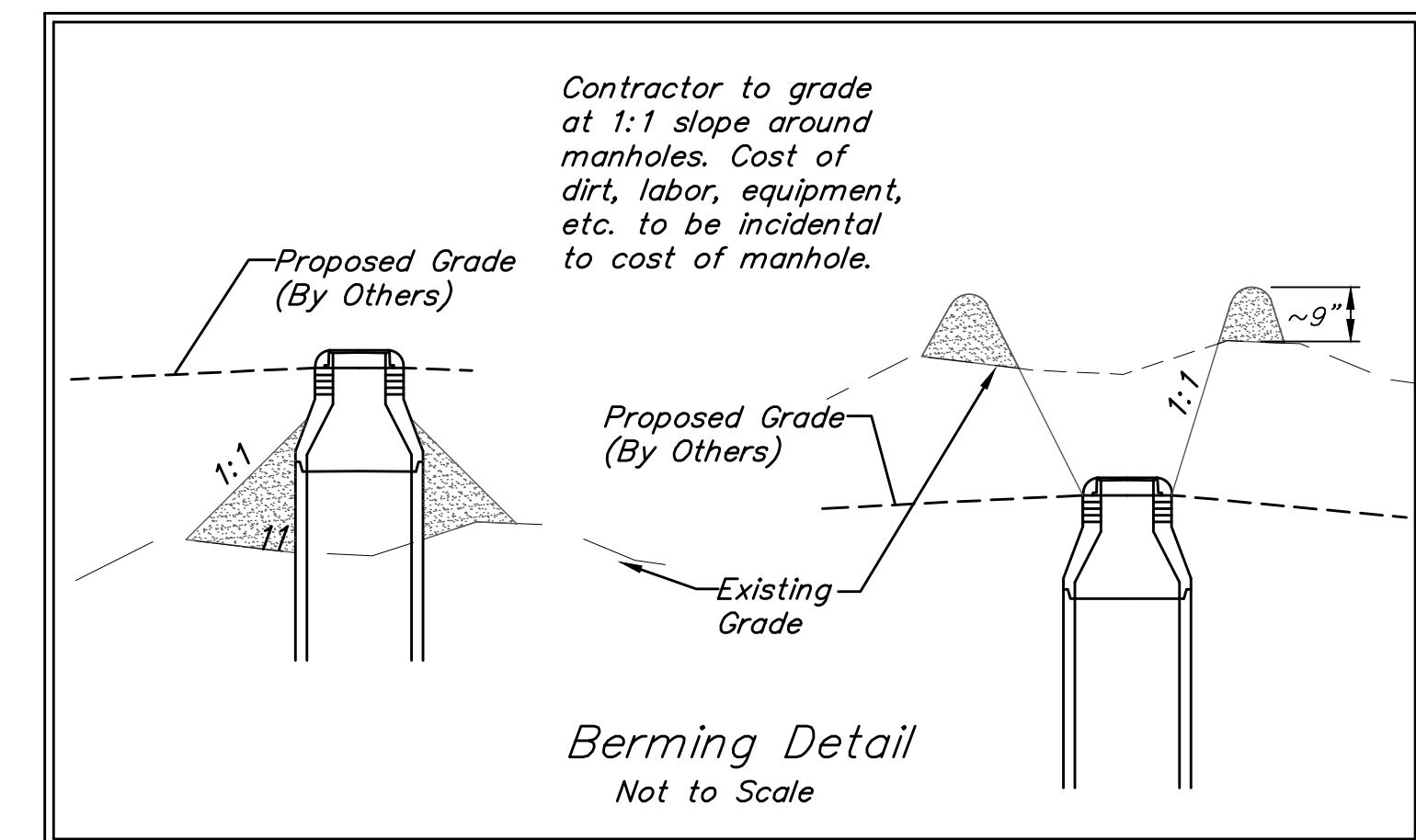
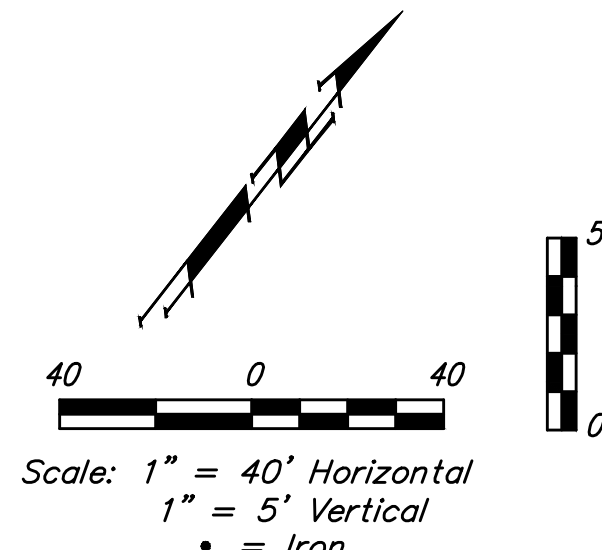
Sta. 0+27.9, Line 2 = Sta. 0+00, Line 3 Const. Std. Manhole (5' Dia.) Top Elev. = 1372.70

Sta. 3+41.5, Line 2 Const. Std. Manhole Top Elev. = 1368.20

Remove, do not replace, existing fence only as necessary for construction. Cost to be included in "Site Clearing"

Sta. 5+24.4, Line 2 Const. Std. Manhole Top Elev. = 1368.30

Sta. 5+87.8, Line 2 Const. Std. Manhole (5' Dia.) 1-10" Stub (SE) Top Elev. = 1372.30 Match Point



Baughman Engineering, Planning & Landscape Architecture

LINE 2 & LINE 2A
 Sanitary Sewer Installation Plans

PROJECT NUMBER: 460519
 DESIGN: AEG
 DRAWN: JAK
 APPROVED: [Signature]
 DATE: 4/25/17
 SCALE: Noted
 SHEET: 4 OF 24

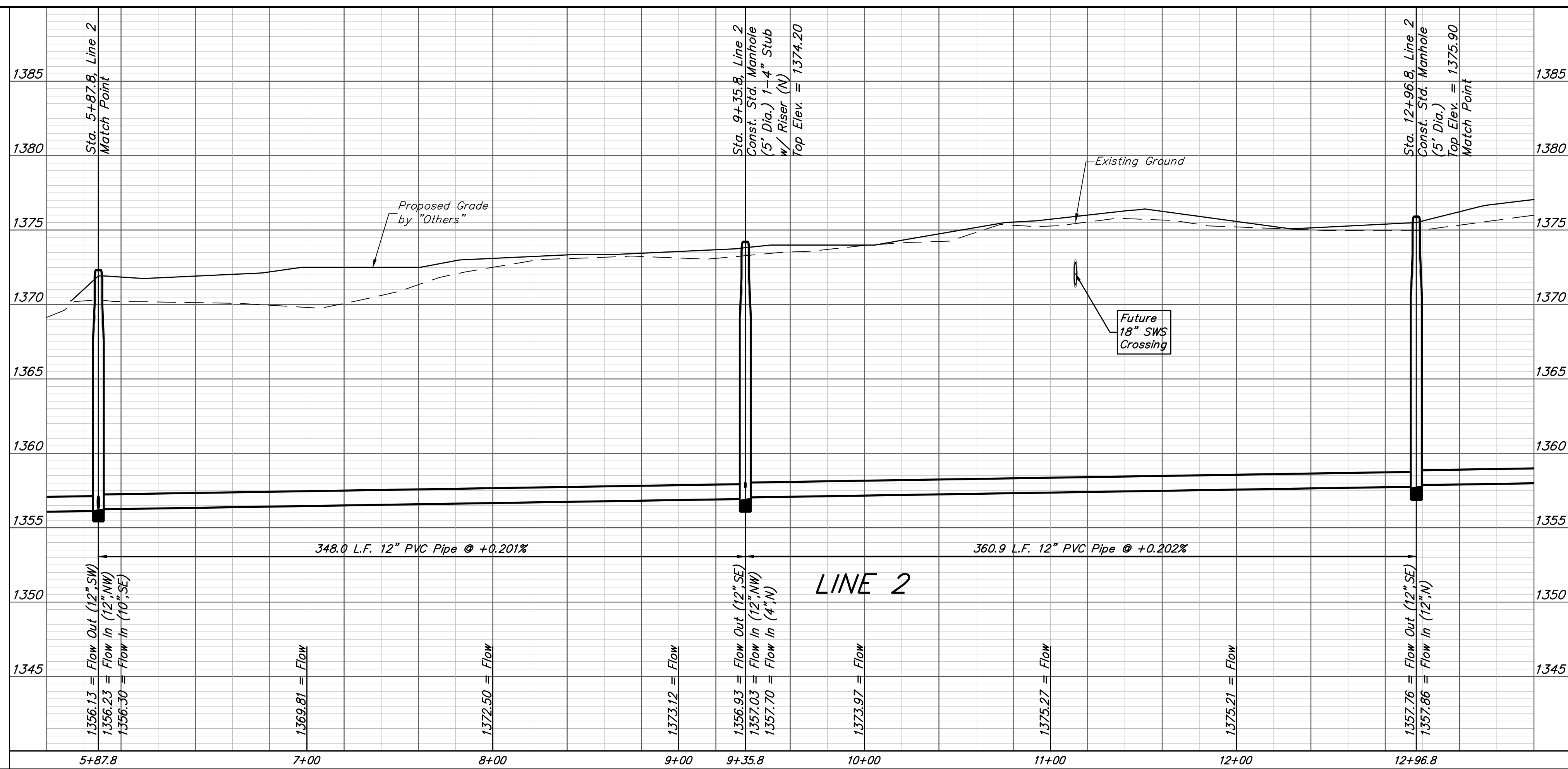
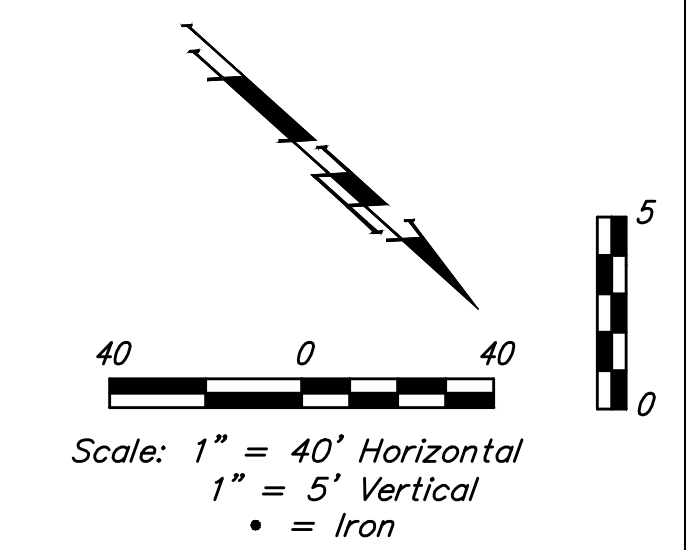
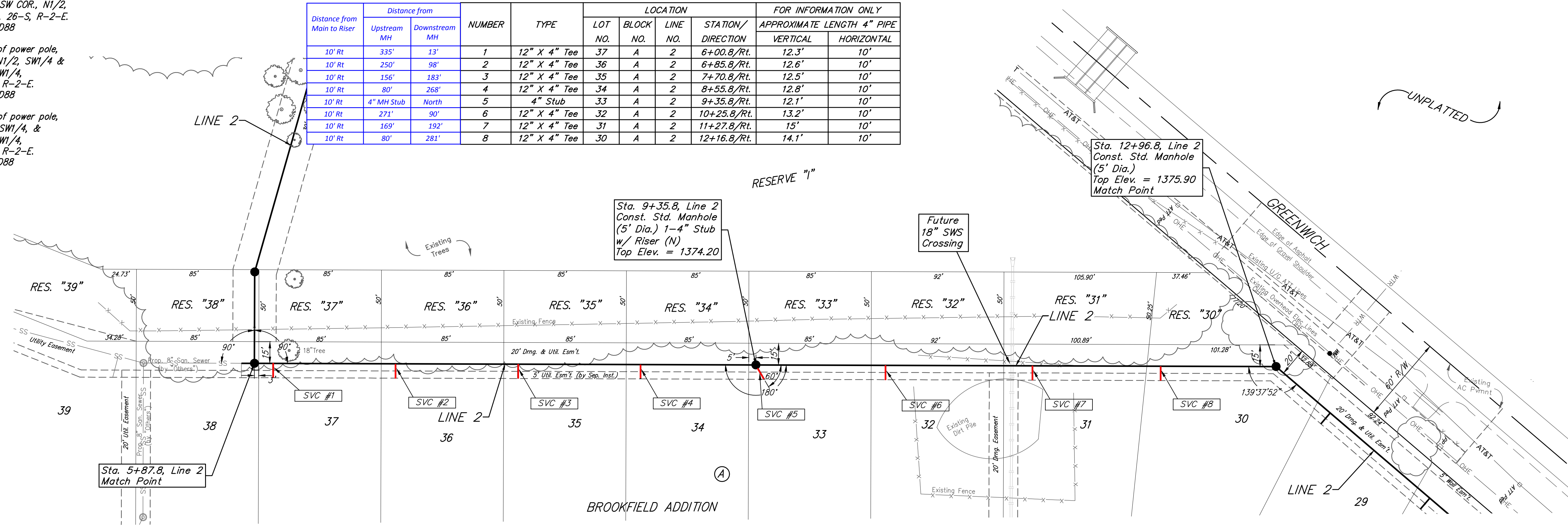
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SEWER SERVICE TABLE

Distance from Main to Riser	Distance from		NUMBER	TYPE	LOCATION				FOR INFORMATION ONLY	
	Upstream MH	Downstream MH			LOT NO.	BLOCK NO.	LINE NO.	STATION/ DIRECTION	APPROXIMATE LENGTH 4" PIPE	VERTICAL
10' Rt	335'	13'	1	12" X 4" Tee	37	A	2	6+00.8/Rt.	12.3'	10'
10' Rt	250'	98'	2	12" X 4" Tee	36	A	2	6+85.8/Rt.	12.6'	10'
10' Rt	156'	183'	3	12" X 4" Tee	35	A	2	7+70.8/Rt.	12.5'	10'
10' Rt	80'	268'	4	12" X 4" Tee	34	A	2	8+55.8/Rt.	12.8'	10'
10' Rt	4" MH Stub	North	5	4" Stub	33	A	2	9+35.8/Rt.	12.1'	10'
10' Rt	271'	90'	6	12" X 4" Tee	32	A	2	10+25.8/Rt.	13.2'	10'
10' Rt	169'	192'	7	12" X 4" Tee	31	A	2	11+27.8/Rt.	15'	10'
10' Rt	80'	281'	8	12" X 4" Tee	30	A	2	12+16.8/Rt.	14.1'	10'



Baughman | Brookfield Addition
LINE 2
 Sanitary Sewer Installation Plans

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: 461519
 DESIGN: AEG
 DRAWN: JAK
 APPROVED: [Signature]
 DATE: 4/25/17

SCALE: Noted
 SHEET: 5 OF 24

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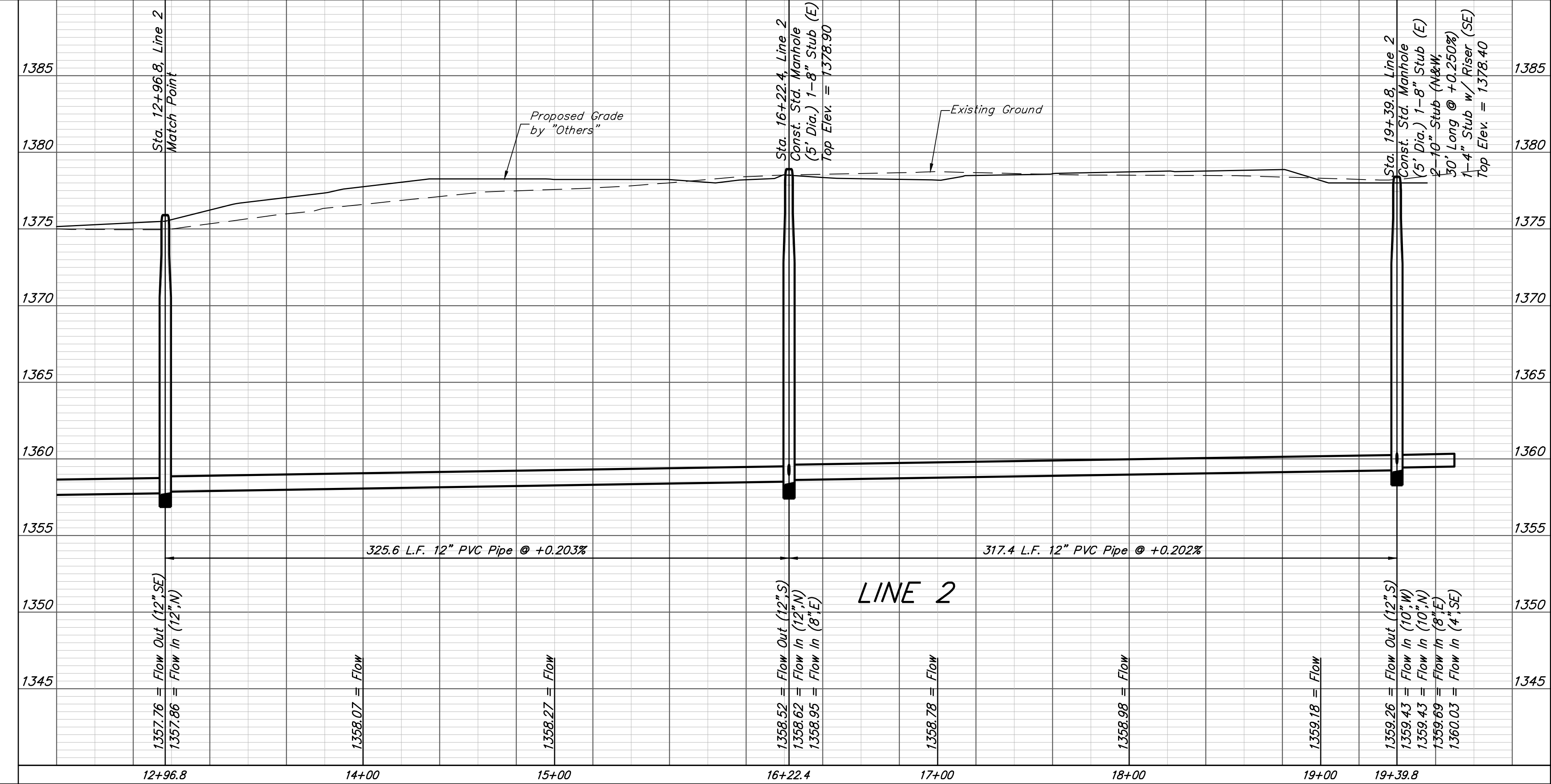
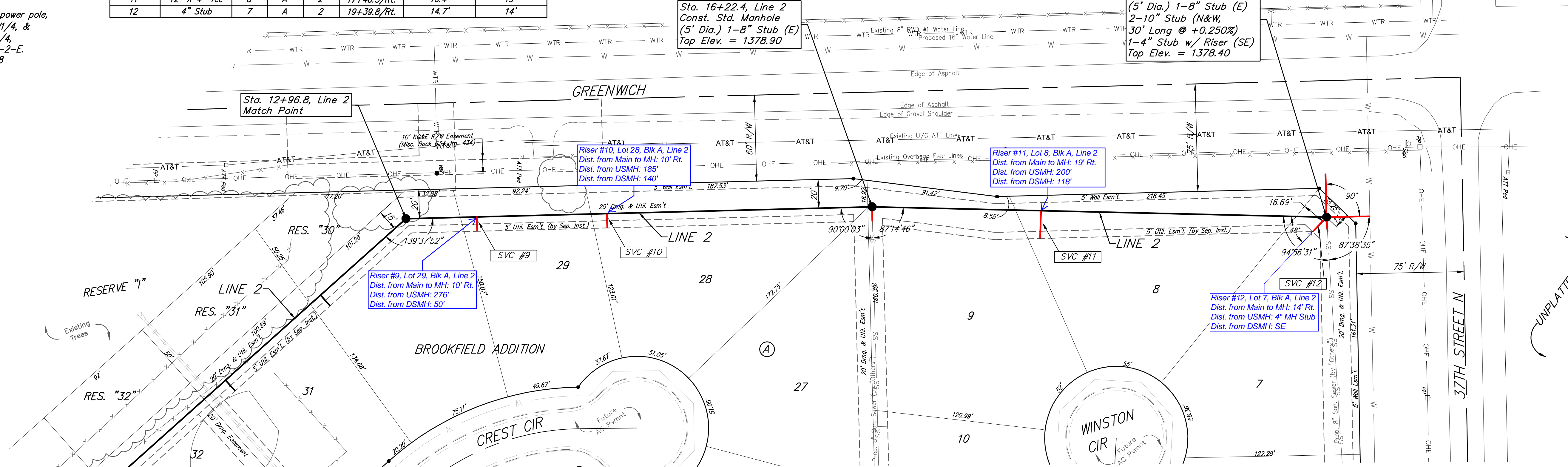
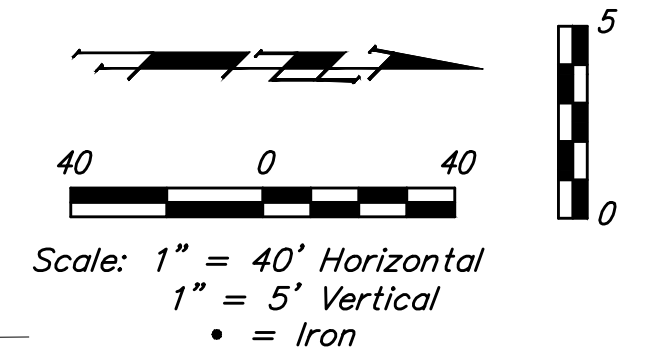
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SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION				FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE	VERTICAL
9	12" X 4" Tee	29	A	2	13+46.3/Rt.	15.1'	10'
10	12" X 4" Tee	28	A	2	14+37.2/Rt.	16.3'	10'
11	12" X 4" Tee	8	A	2	17+40.3/Rt.	16.4'	19'
12	4" Stub	7	A	2	19+39.8/Rt.	14.7'	14'



Baughman Engineering, P.A. | 315 Ellis St. Wichita, KS 67211 | P 316-262-7271 | F 316-262-0149

PROJECT NUMBER: 46045119

DESIGN: AEG | DRAWN: JAK

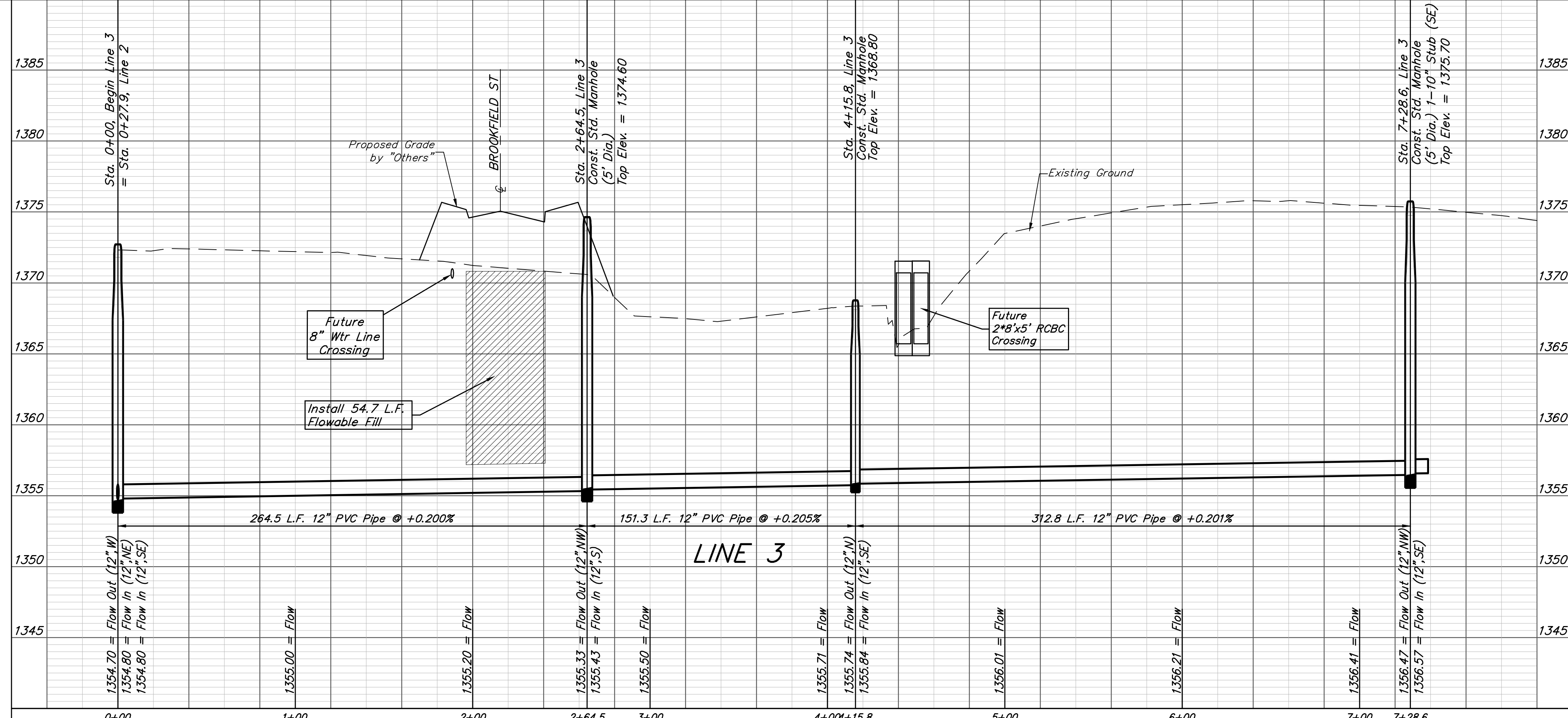
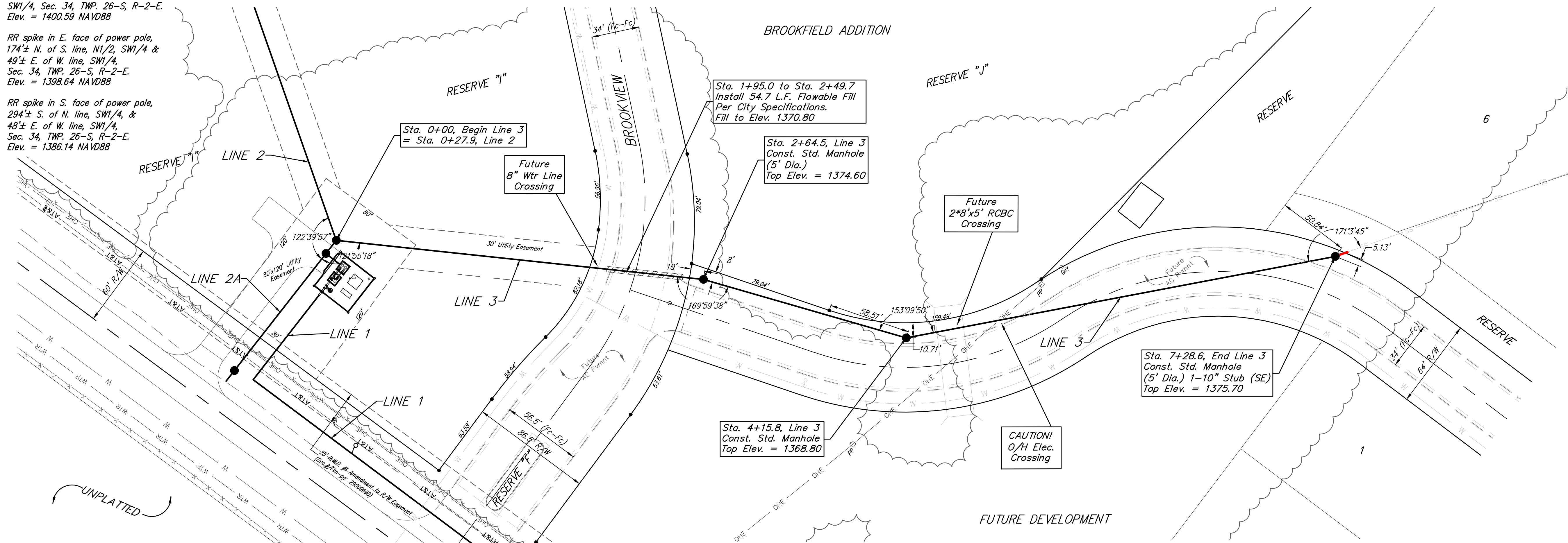
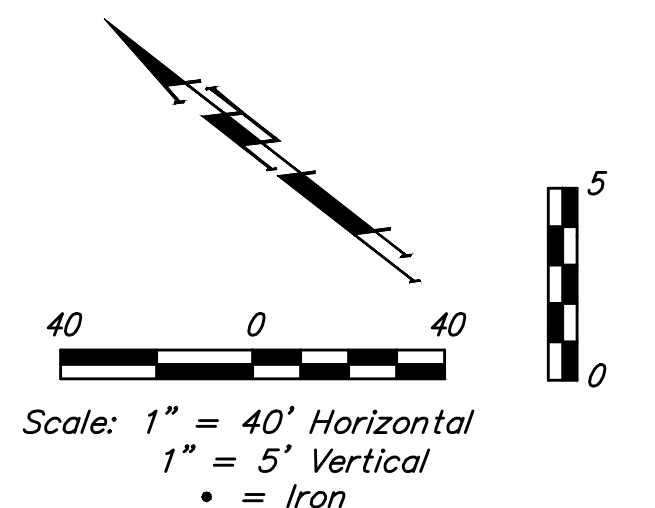
APPROVED: [Signature] | DATE: 4/25/17

SCALE: Noted | SHEET: 6 OF 24

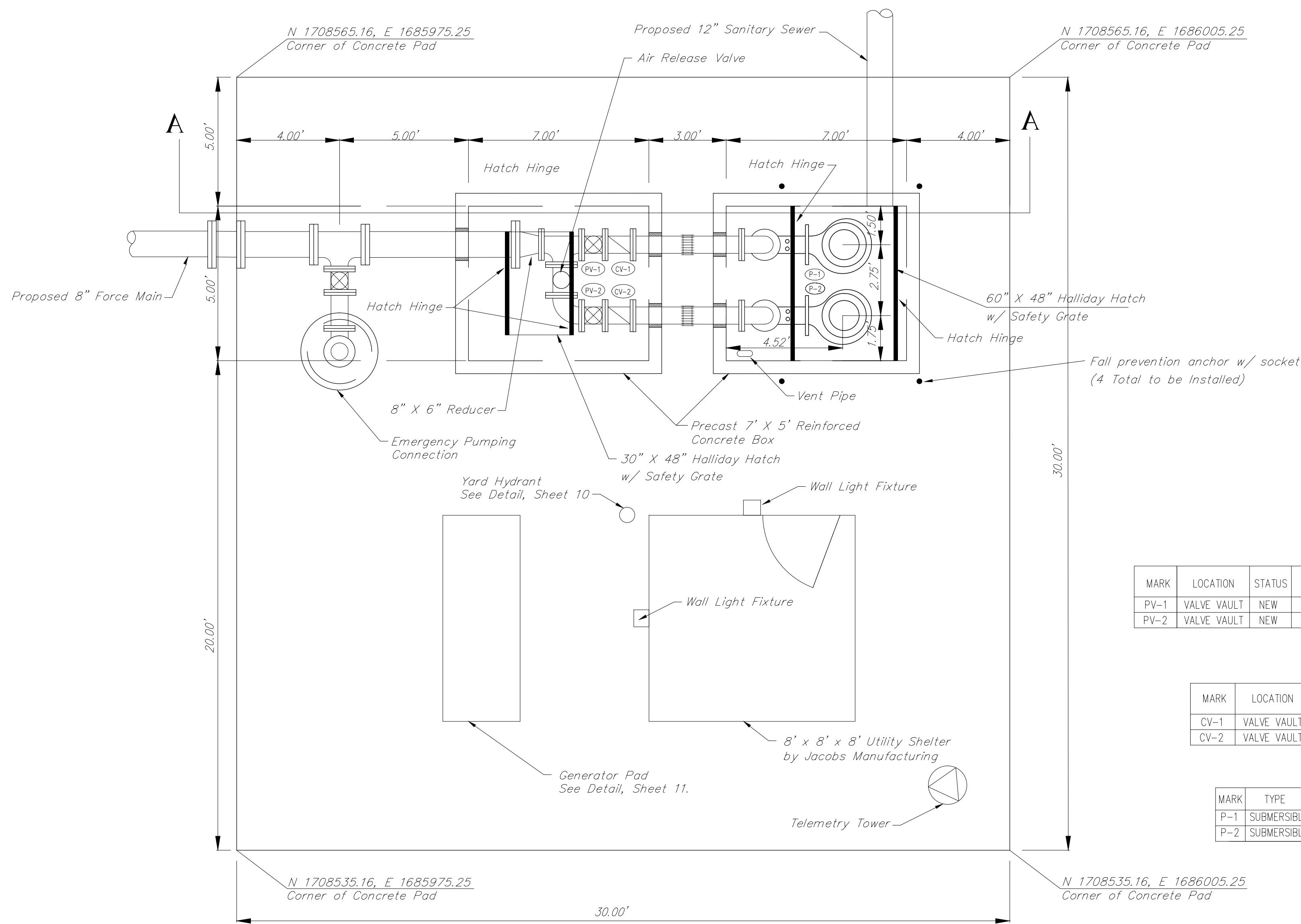
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	Brookfield Addition LINE 3 Sanitary Sewer Installation Plans	
	Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE	
PROJECT NUMBER 461519	DESIGN AEG	DRAWN JAK
REVISIONS:	APPROVED 	DATE 4/25/17
SCALE Noted SHEET		7 OF 24



PLAN VIEW
(No Scale)

- The Price Bid for Furnishing and Installing the Lift Station, including the Wet Well, Valve Vault, and Other Miscellaneous Appurtenances, shall include All Costs for Furnishing and Installing the Lift Station as Indicated in the Plans Complete in Place and in Operation. This Price shall include the Cost of Constructing and/or Installing Compacted Subgrade, Concrete Pavement, Electrical Conduit, Electrical Wiring, Disconnect Switch, Pump Controls, Electrical Power Supply, Finished Grading, Concrete Slump Block Wall, and any Other Incidentals Necessary to Complete the Work and Place the Lift Station into Satisfactory Operation. The Price Bid shall include All Sanitary Sewer Pipe and Force Main Extended Outside the Slab as Shown in the Site Plan and Details.
- All Force Main Piping shall be Ductile Iron (Flanged) to 5' Outside the Structures, Unless Otherwise Noted. All Interior Piping shall be Cement Lined and Epoxy Coated Ductile Iron Pipe.
- Pipe Penetrations Thru the Wet Well, Valve Vault, and Concrete Pad shall be Grouted Watertight With Non-Shrink Grout and Water Stop Gaskets as Required.
- The Contractor shall perform an Exfiltration Test on the complete Wet Well. The Wet Well shall be tested individually by securely plugging all inlet and outlet pipes. The Wet Well shall be filled to its full depth and then observed for at least six (6) hours. Exfiltration loss from the 6-foot diameter Wet Well shall not exceed the rate of 1.70 Gallons per foot of Wet Well depth per day. If exfiltration exceeds the maximum limits, the Contractor shall repair the leaks and defects, and then retest.
- The Contractor shall support all piping inside the Wet Well and Valve Vault as required.
- All hardware inside the Wet Well and Valve Vault, including but not limited to the Guide Bar, Hoist Chain, Chain Catch, etc. shall be stainless steel. 316 Stainless Steel shall be used when available, otherwise 304 Stainless Steel is acceptable. Nylon Rope will not be allowed in the Wet Well.
- Wet Well and Valve Vault design shall be subject to the same design requirements as Precast Manholes.
- The interior of the Wet Well shall be lined Zebron 386.
- Backfill around the Wet Well and under the Valve Vault and Pad shall be a low volume change material compacted to 95% ASTM D-1557.
- The Contractor shall coordinate with Westar Energy and Kansas Gas Service to extend electric and gas services to the Pump Station Site. The Contractor shall verify the electrical and gas service costs & requirements PRIOR to Bidding. ALL COST INCURRED TO EXTEND THESE SERVICES TO THE SITE SHALL BE INCLUDED IN LUMP SUM BID ITEM "PUMP STATION MODULE."
- The Contractor shall verify all requirements and dimensions of the Generator Pad with the Generator Supplier prior to construction.
- No Electrical Connections will be Allowed within the Wetwell.
- Contact David Harper with the City of Wichita Sewer Treatment Plant at 303-8778 PRIOR to Lift Station Start-up.
- The Contractor Shall Be Responsible for All Permit and Review Fees.
- Contractor shall install 4 Fall Prevention Anchors at locations as shown outside of Hatch on above drawing. Anchors shall be 3M/Sala Model 2100169 Pour-in-Place Detent Anchor w/ Socket or approved equal.

PLUG VALVE SCHEDULE

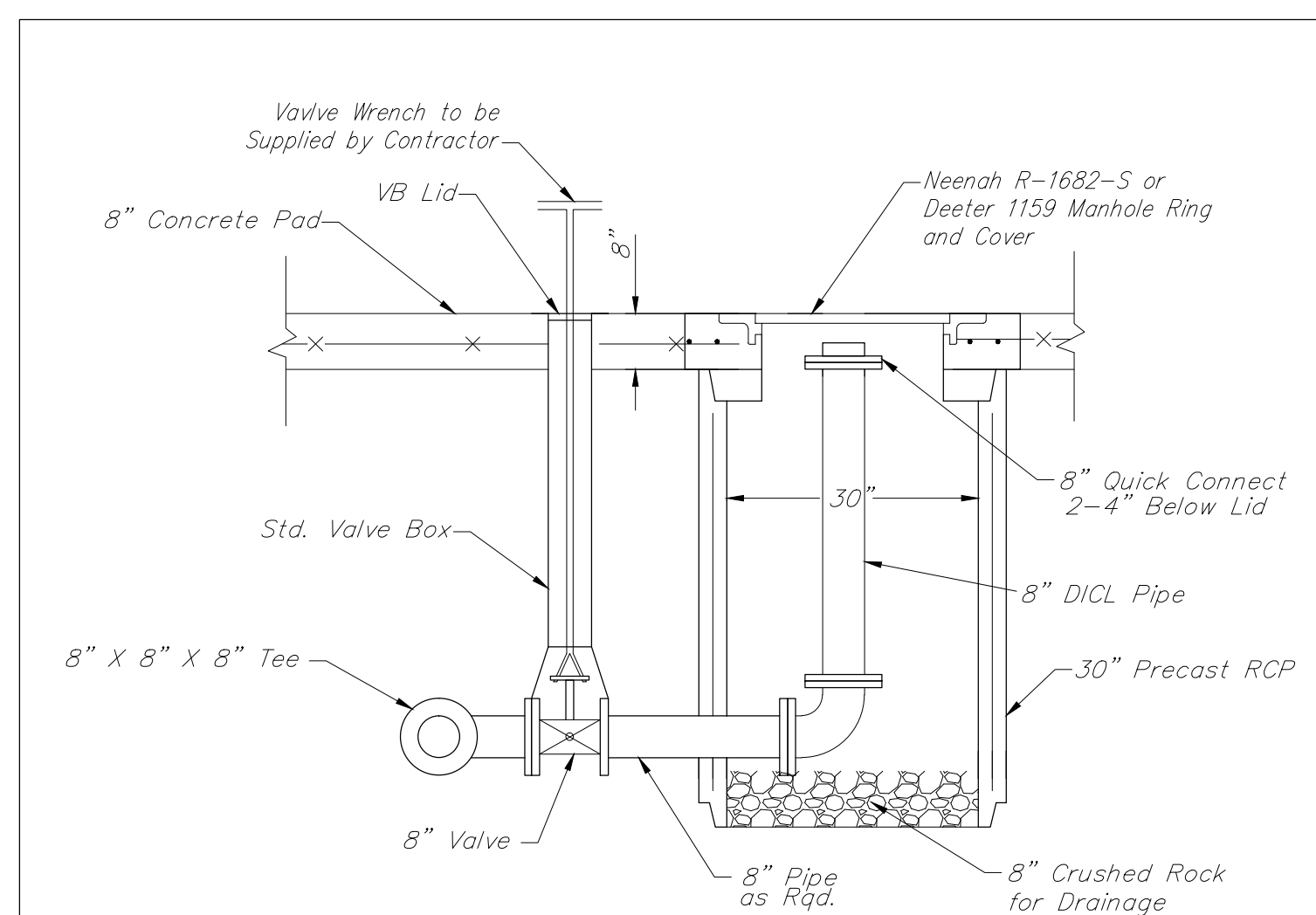
MARK	LOCATION	STATUS	SIZE	FITTINGS	OPERATOR
PV-1	VALVE VAULT	NEW	6"	FLANGE	GEARED OPERATOR W/ EXTENSION & 2" NUT
PV-2	VALVE VAULT	NEW	6"	FLANGE	GEARED OPERATOR W/ EXTENSION & 2" NUT

CHECK VALVE SCHEDULE

MARK	LOCATION	STATUS	SIZE	FITTINGS	OPERATOR
CV-1	VALVE VAULT	NEW	6"	FLANGE	LEVER & SPRING
CV-2	VALVE VAULT	NEW	6"	FLANGE	LEVER & SPRING

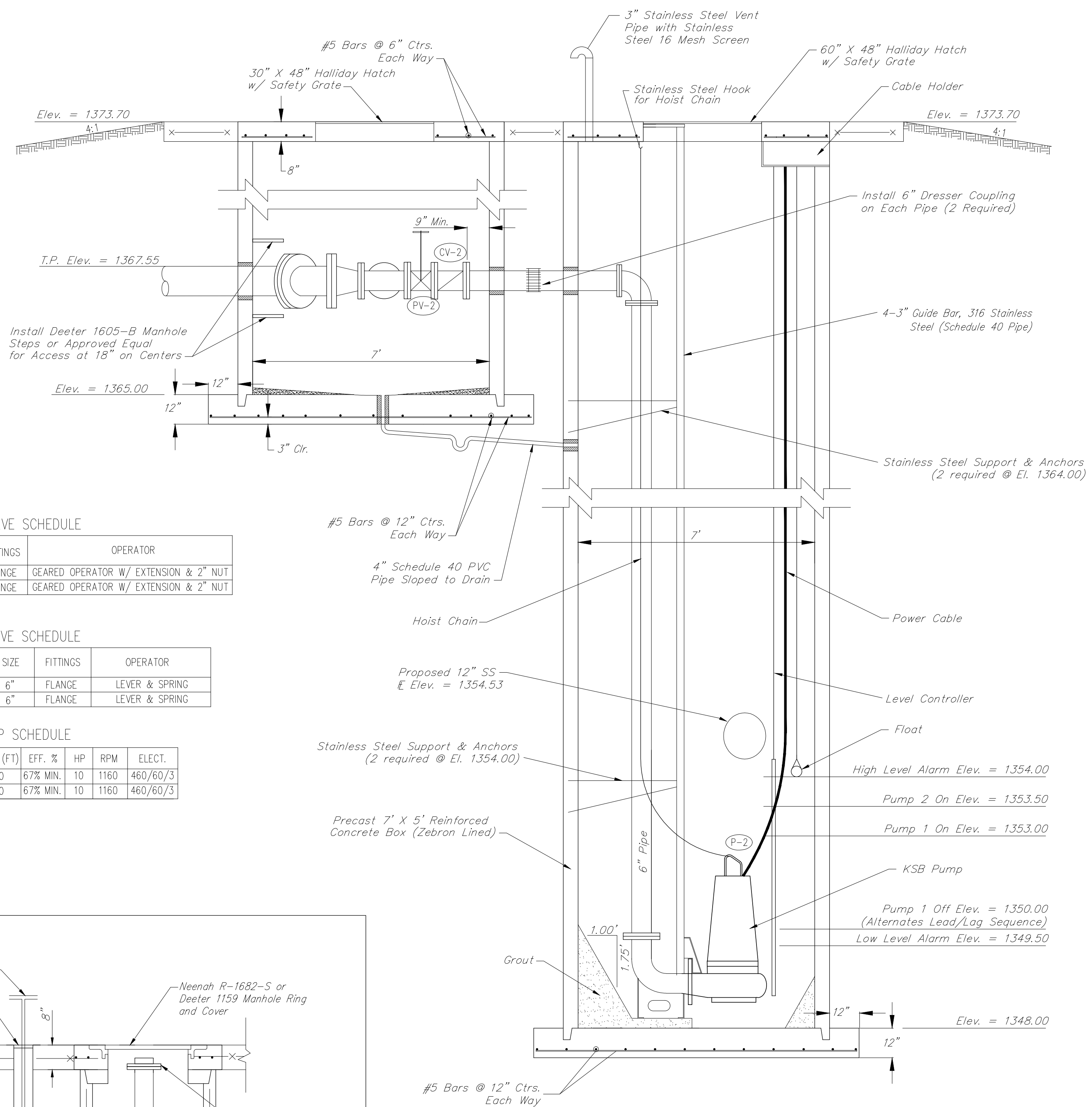
PUMP SCHEDULE

MARK	TYPE	GPM	HEAD (FT)	EFF. %	HP	RPM	ELECT.
P-1	SUBMERSIBLE	550	33.0	67% MIN.	10	1160	460/60/3
P-2	SUBMERSIBLE	550	33.0	67% MIN.	10	1160	460/60/3



EMERGENCY PUMPING CONNECTION

Contractor to contact David Harper with the Wichita Sewer Treatment Plant at 303-8778 to coordinate type of Quick Connect to be used.



SECTION A-A
No Scale



Baughman Brookfield Addition
**PUMP STATION
DETAILS**
Sanitary Sewer Improvements

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

PROJECT NUMBER
468-85189

DESIGN
AEG

DRAWN
JAK

APPROVED

DATE
2/17

SCALE
Noted

SHEET
8 OF 24

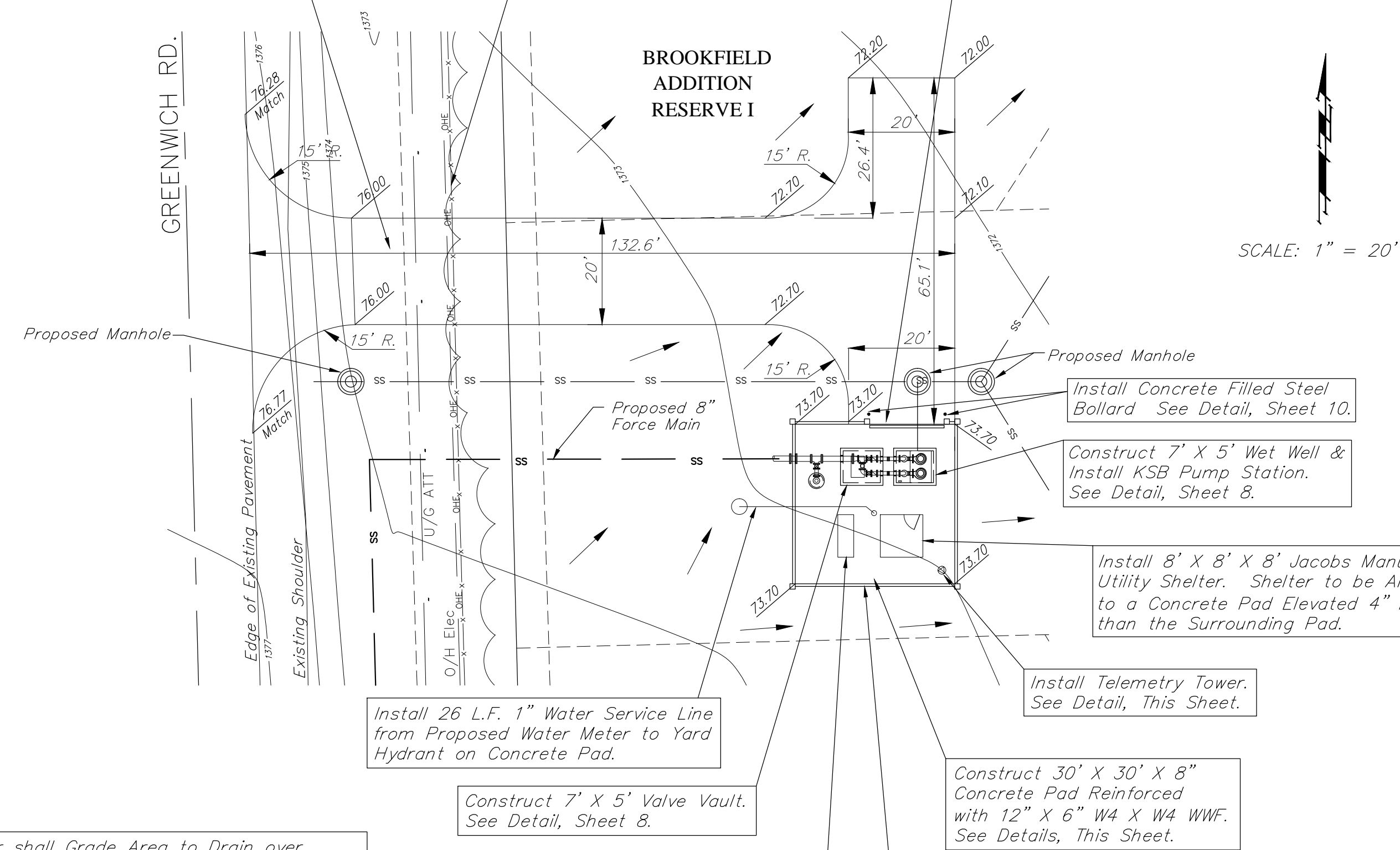
REVISIONS:

E:\Projects\Brookfield Addition_1604P190\Engineering\SS MAIN_1608E5540\Lift Station.dwg

Strip Top Soil and Construct 20' Access Drive (8" Reinforced Concrete over 6" Rock Base). See Detail, This Sheet. Cost to be INCIDENTAL to Cost of the Pump Station.

Remove Existing Barbed Wire Fence as Necessary for Construction.

Install 14' Rolling Security Gate According to Manufacturer's Recommendations. Contractor shall Submit Gate Design to Engineer for Approval.



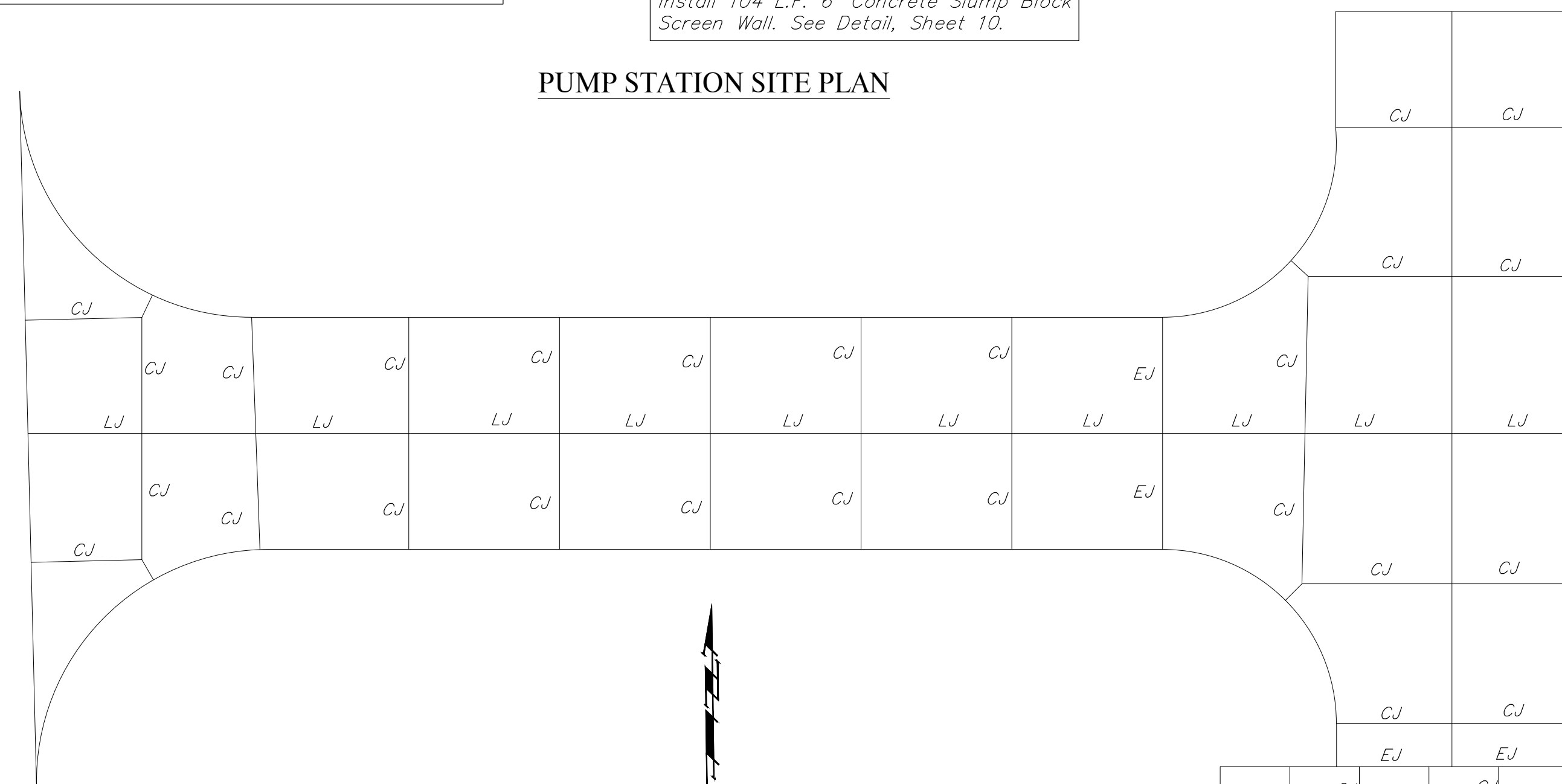
PUMP STATION SITE PLAN

Contractor shall Grade Area to Drain over Access Drive and Around Pump Station Pad. Grade From Edge of Access Road and Concrete Pad to Match Existing at 4:1 Slope. Cost of Grading Incidental to Pump Station Cost.

Construct 7' X 5' Valve Vault. See Detail, Sheet 8.

Construct Generator Pad. See Detail, Sheet 11.

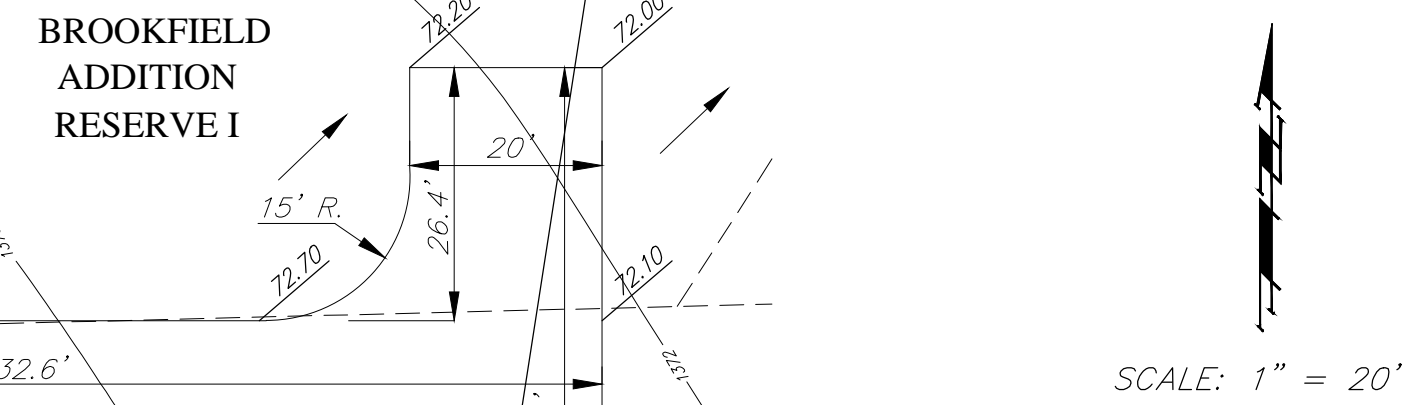
Install 104 L.F. 6' Concrete Slump Block Screen Wall. See Detail, Sheet 10.



CONCRETE PAD JOINT PLAN

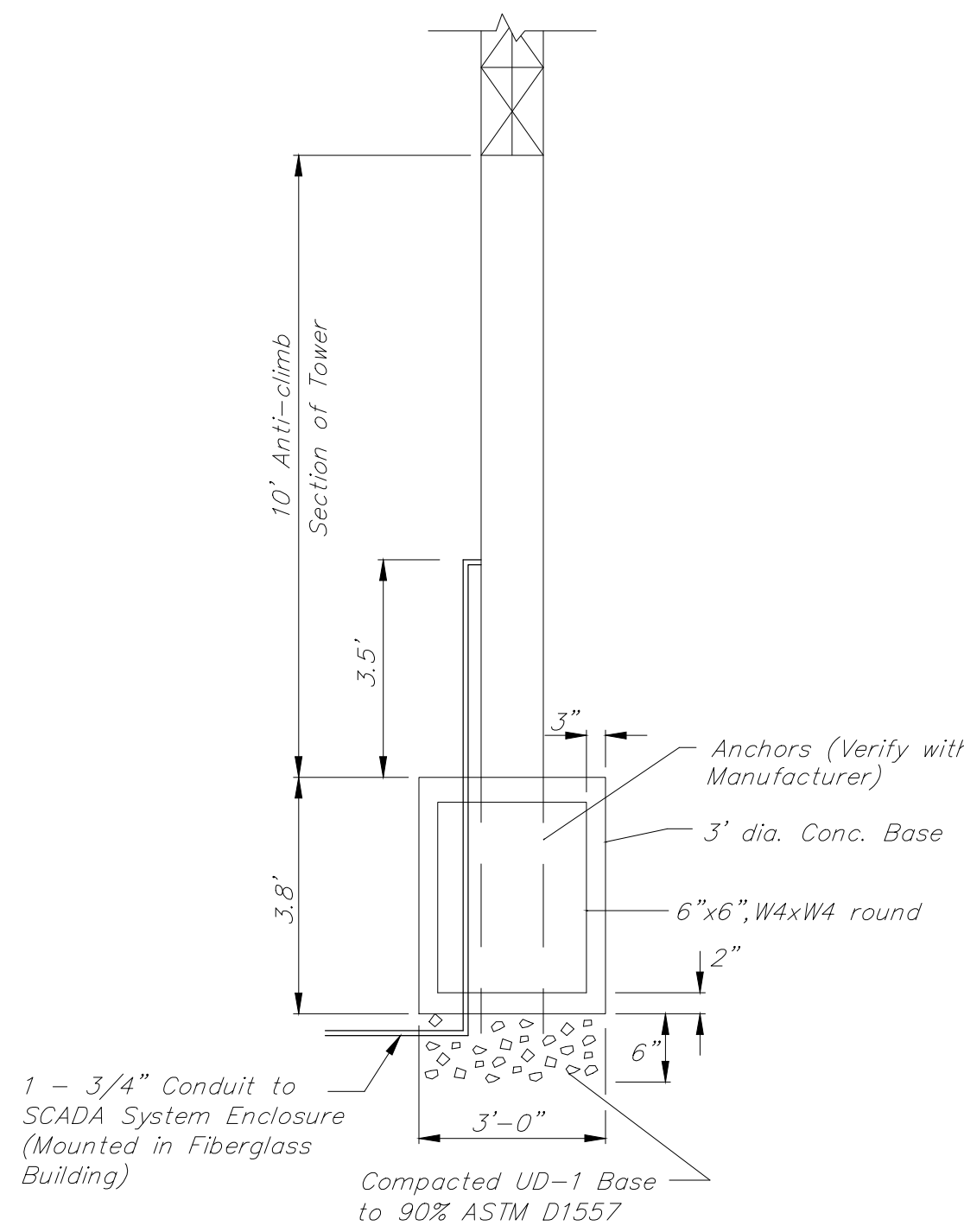
Denotes Concrete Pavement to have 4" Thick Building Pad (12" Total)

SCALE: 1" = 10'



BROOKFIELD ADDITION RESERVE I

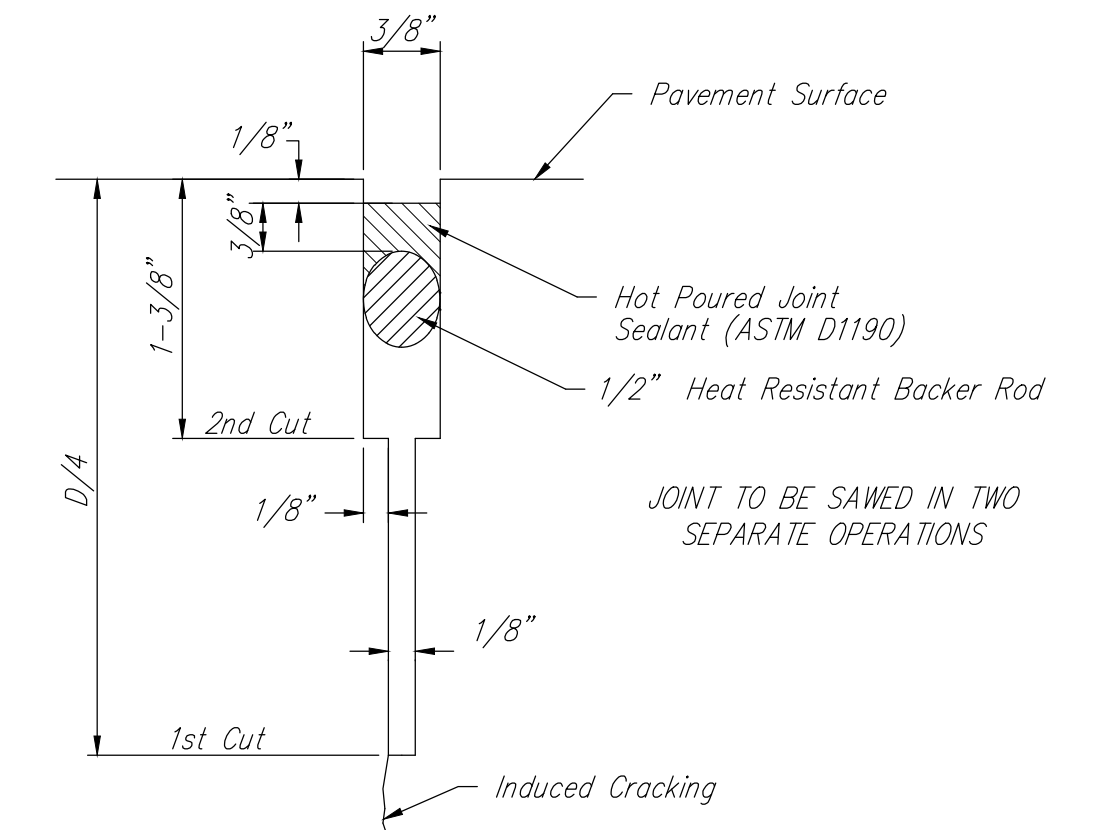
SCALE: 1" = 20'



SCADA SYSTEM DETAIL

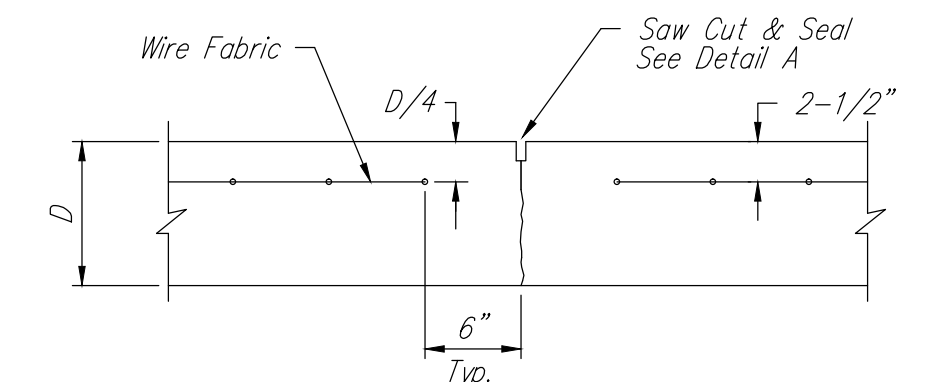
NOTES:

1. MAXIMUM TOWER HEIGHT IS 30 FEET.
2. 6" COPPER GROUND ROD SHALL BE PROVIDED FOR THE TOWER.
3. ANCHOR BOLT SIZES AND LENGTHS SHALL BE PER THE TOWER MANUFACTURER'S RECOMMENDATIONS.

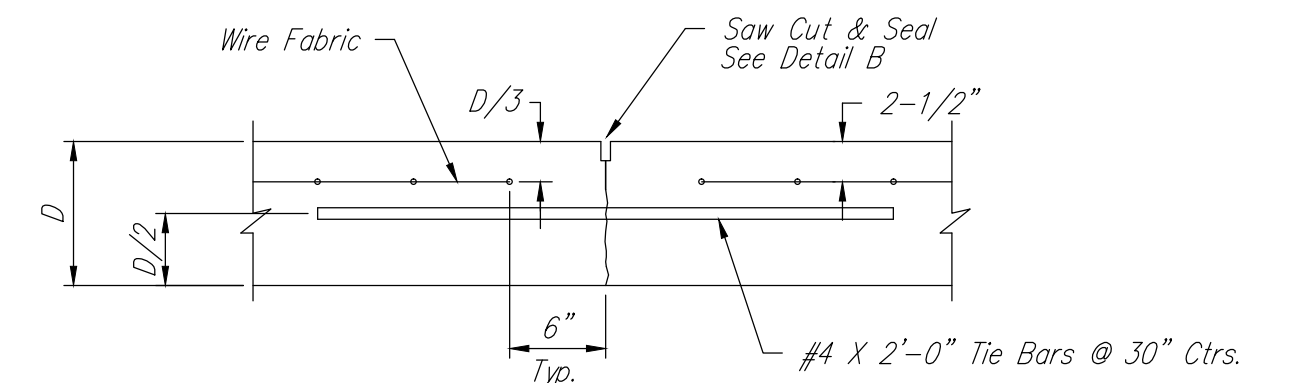


DETAIL A

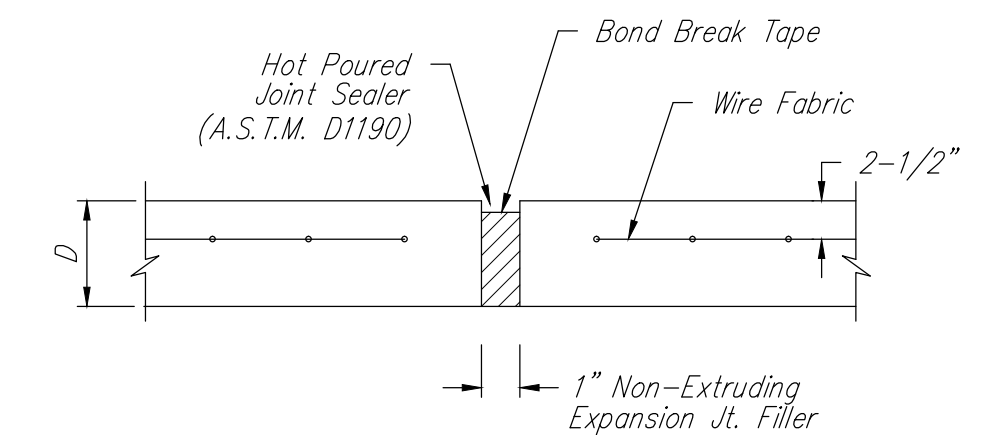
JOINT TO BE SAWED IN TWO SEPARATE OPERATIONS



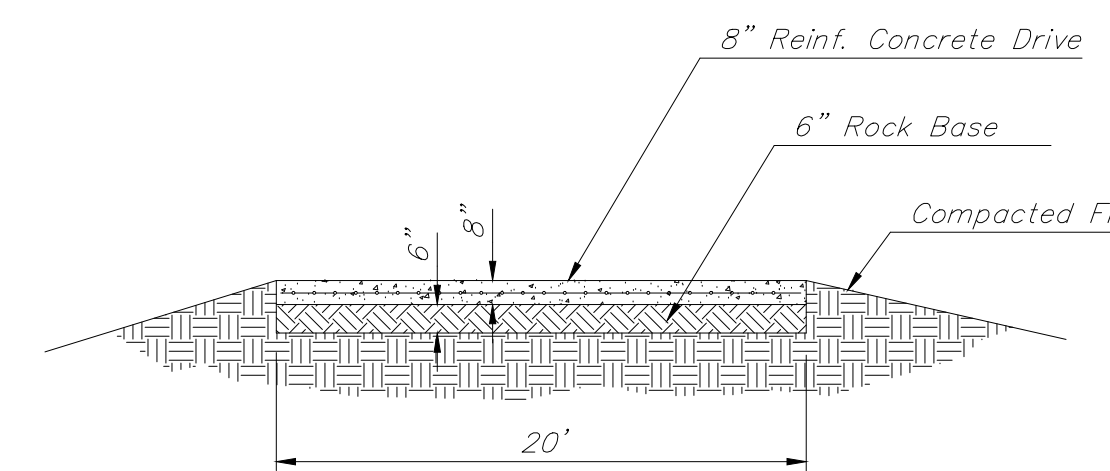
CONTRACTION JOINT DETAIL
REINFORCED PAVEMENT
(C.J.)



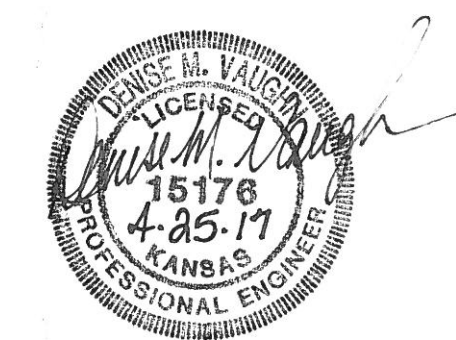
LONGITUDINAL JOINT DETAIL
(L.J.)



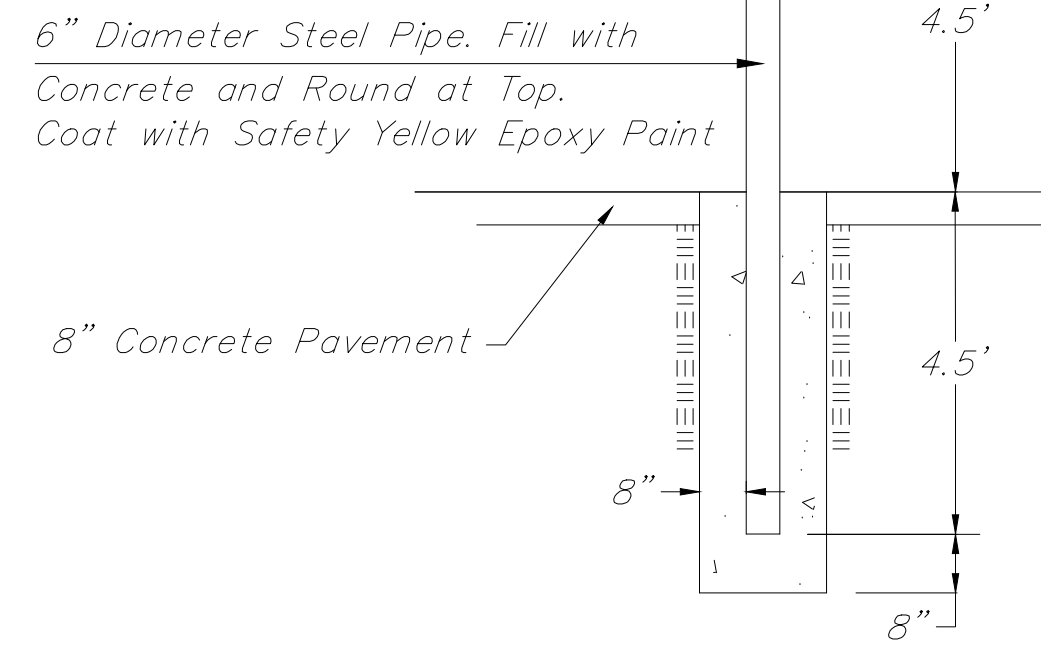
EXPANSION JOINT DETAIL
(E.J.)



ACCESS DRIVE DETAIL

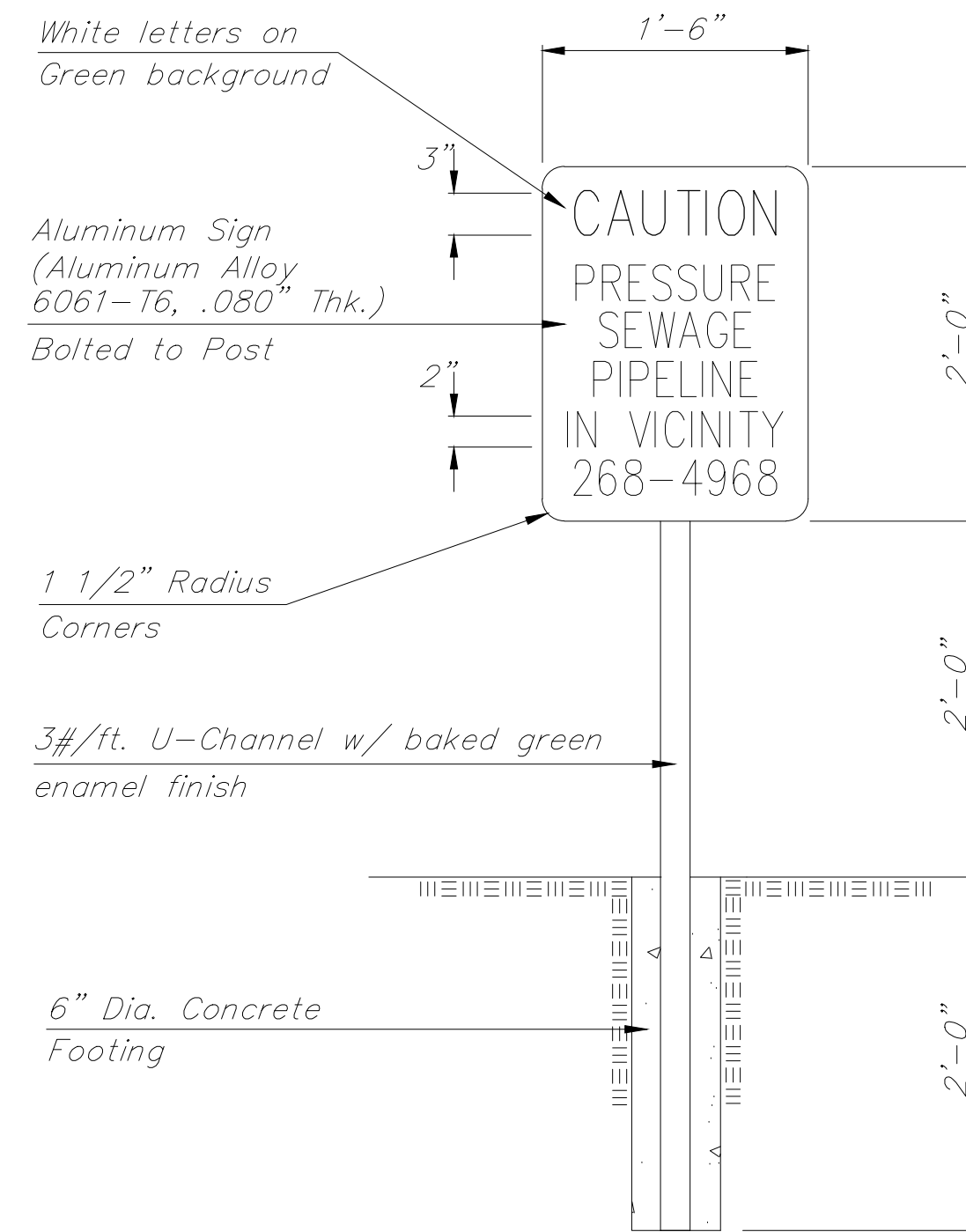


		Brookfield Addition MISC DETAILS Sanitary Sewer Improvements	
		Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE	
PROJECT NUMBER 468-85189	DESIGN DMV	DRAWN JAK	DATE 2/17
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BOLLARD DETAIL

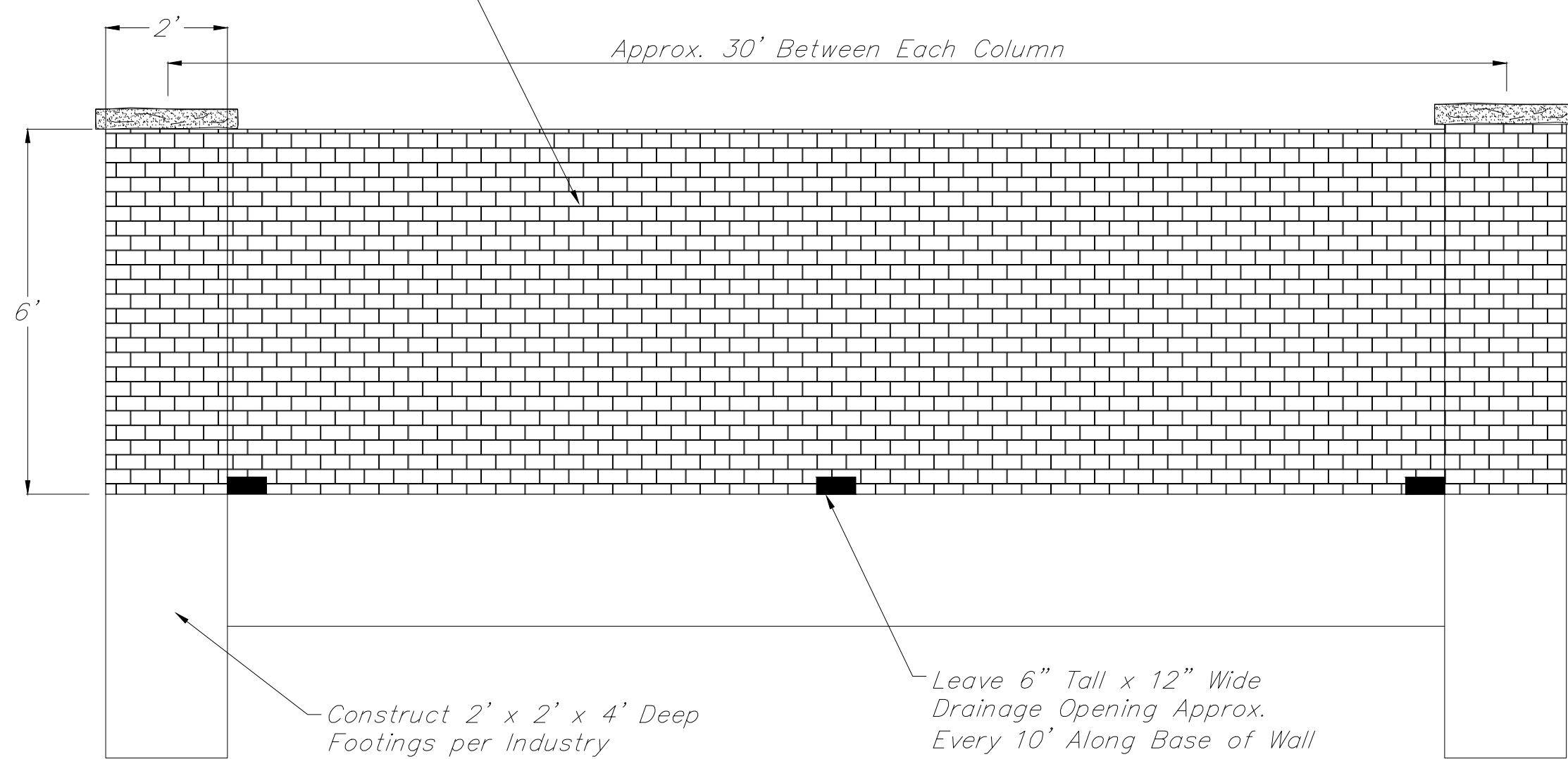
Note: Cost of Bollards shall be included in L.S. Bid Item "Lift Station Module."



FORCE MAIN WARNING SIGN DETAIL

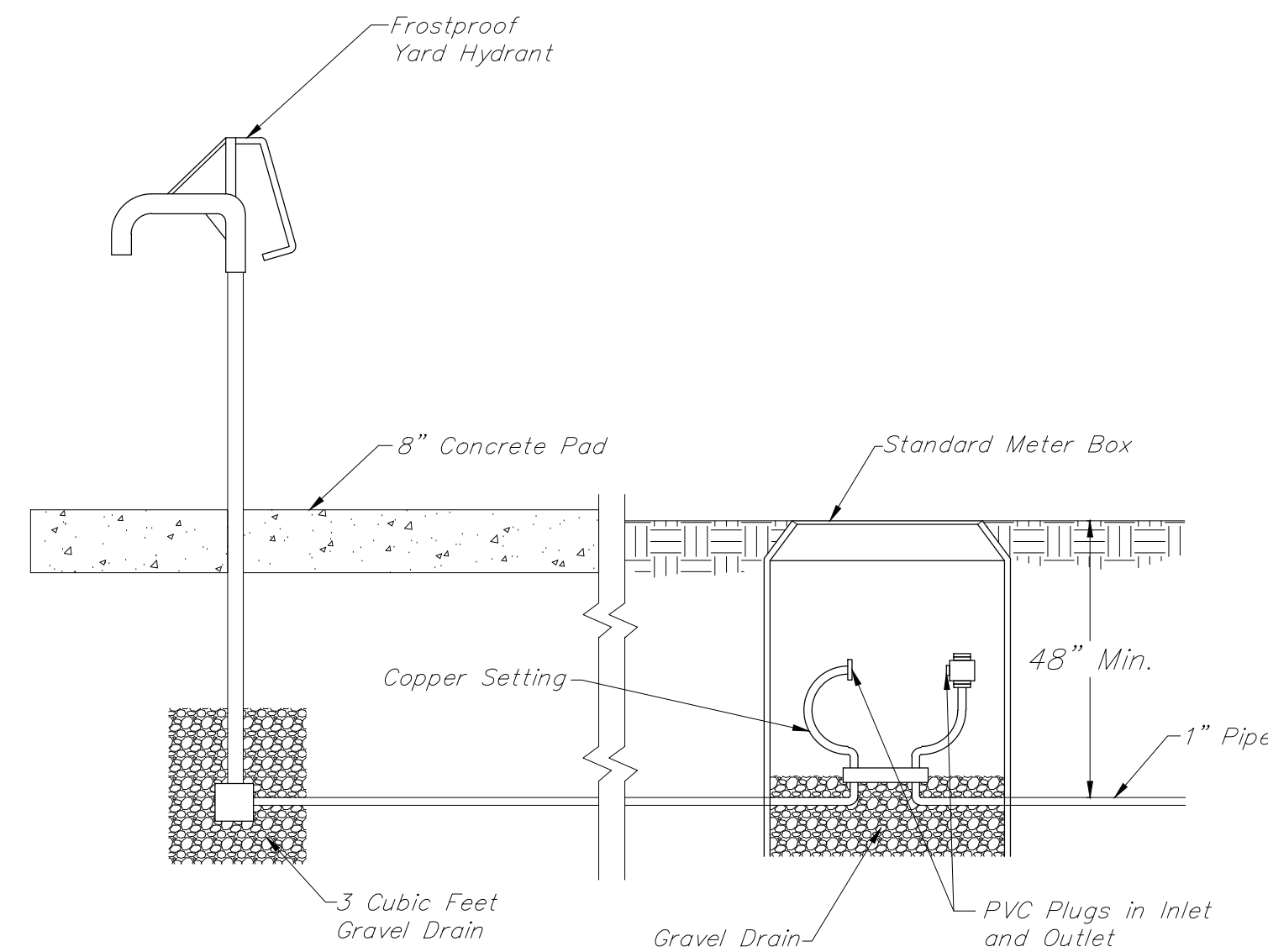
Note: Install Metal Warning Signs near Sta. 0+50, Sta. 5+00, Sta. 9+50 and Sta. 13+63. Exact Locations of Warning Signs shall be Approved by the Engineer. Cost of Signs shall be included in L.S. Bid Item "Lift Station Module."

Construct 6' Tall Concrete Slump Block Wall per Industry Standards and City Standards. Wall shall be Left Unpainted. Contractor shall Obtain Approval from Developer for Texture and Finish Style of Wall.



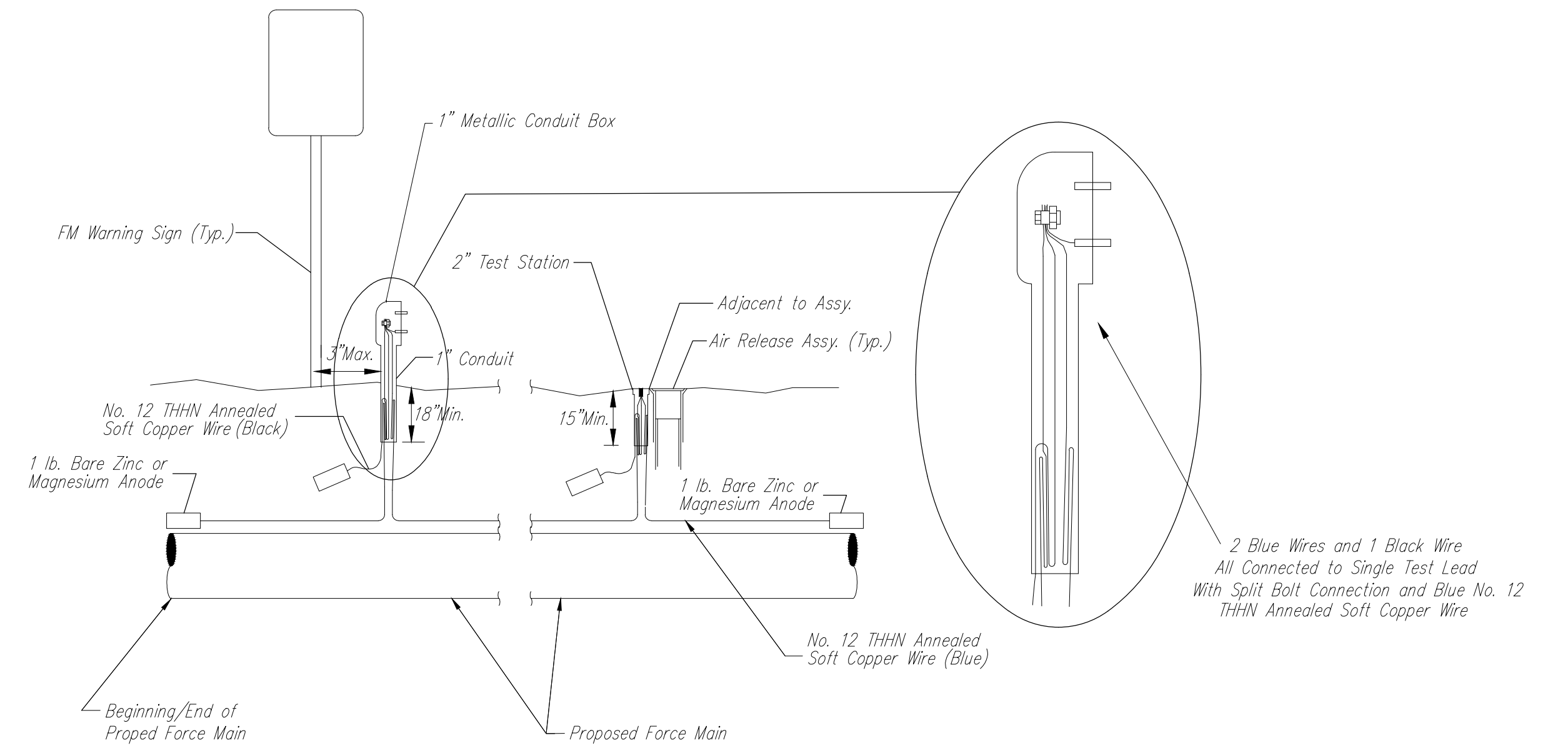
SCREEN WALL DETAIL

Note: Cost of 6' Concrete Slump Block Screening Wall shall be included in L.S. Bid Item "Lift Station Module."



YARD HYDRANT DETAIL

Note: All Costs Associated with the Yard Hydrant shall be included in L.S. Bid Item "Lift Station Module."



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 1 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. 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 is exposed 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

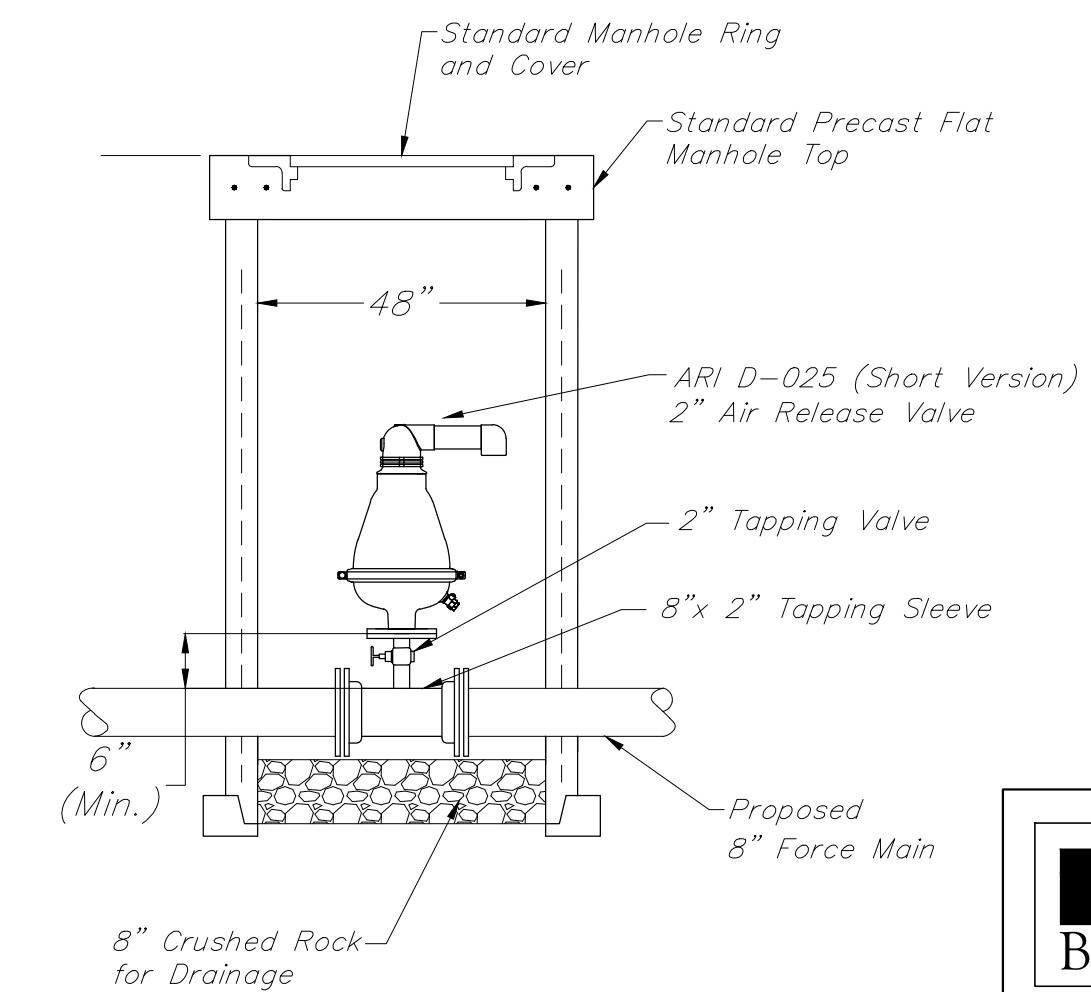
The test station for fire hydrant applications shall be a 1 inch galvanized conduit style test station as manufactured by AGRA Industries with a removable solid cover having two leads extending from the face or approved equal. The test station for valve applications shall be 2 inch flush style test station T2PS3B as manufactured by HANDLEY Industries or approved equal. The conduit style 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 "Force Main" 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 1 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.

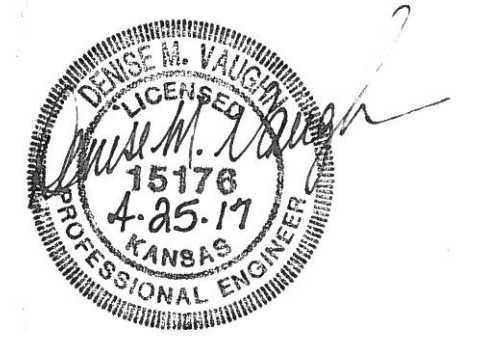
TRACER WIRE DETAIL

COST IS SUBSIDIARY TO PIPE INSTALLATION



AIR RELEASE VALVE and VAULT DETAIL

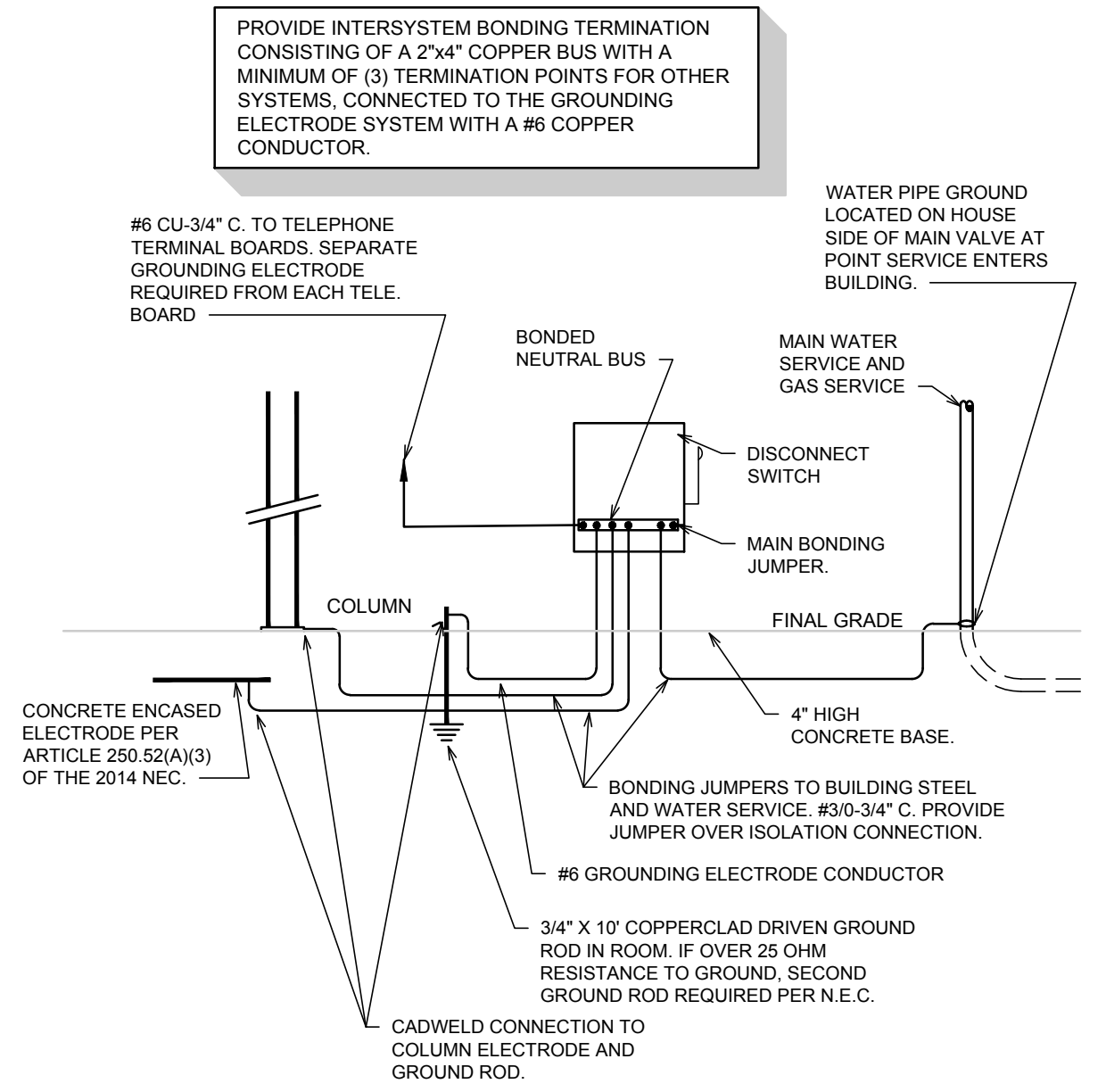
Note: Install Air Release Valve and Vault at Locations as Shown on the Plans. All Costs Associated with Air Release Valves shall be included in 8" Force Main Bid Item.



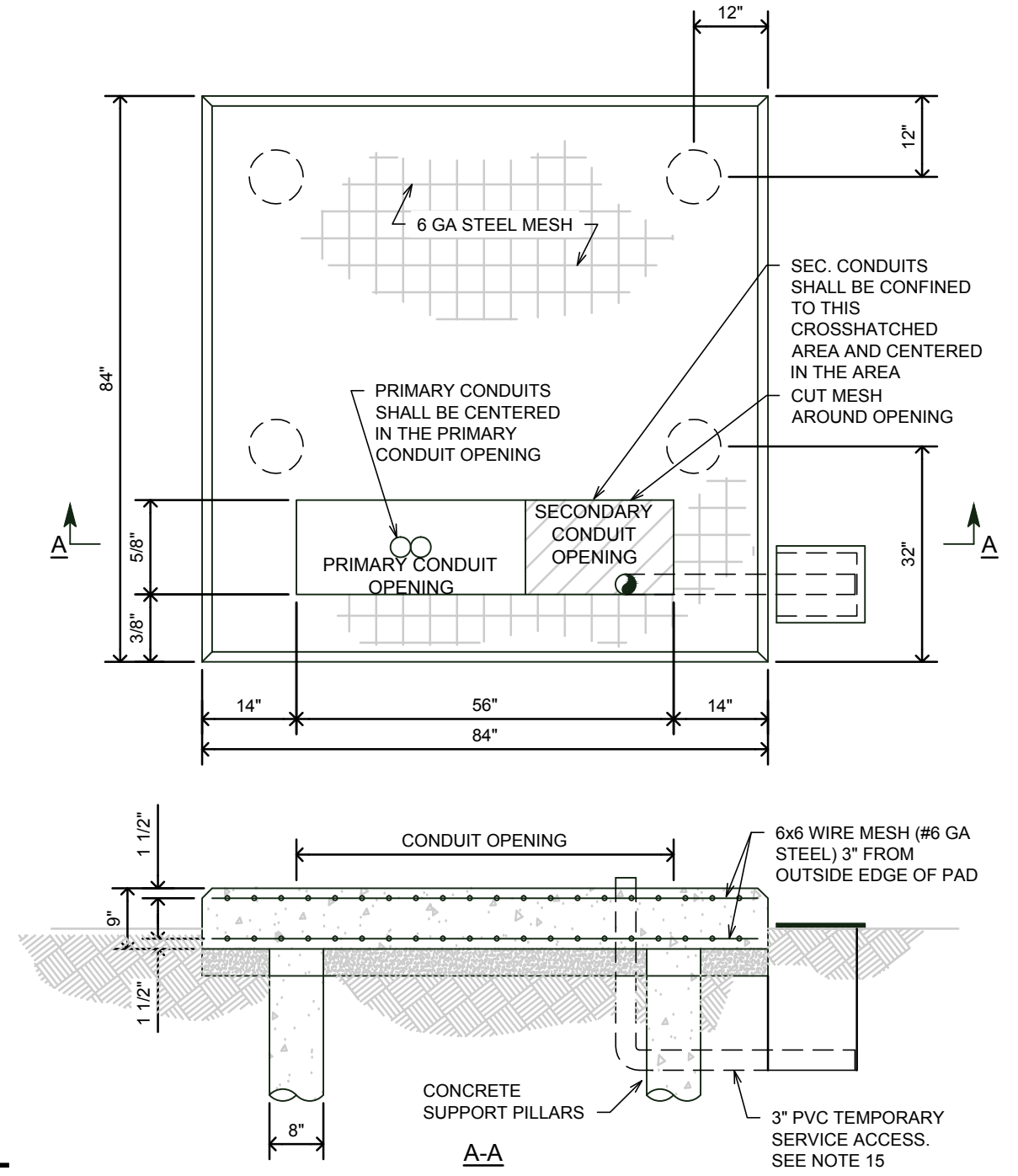
Baughman		Brookfield Addition MISC DETAILS Sanitary Sewer Improvements	
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	SHEET 10 OF 24		

3 SYSTEM GROUNDING DETAIL-DISCONNECT

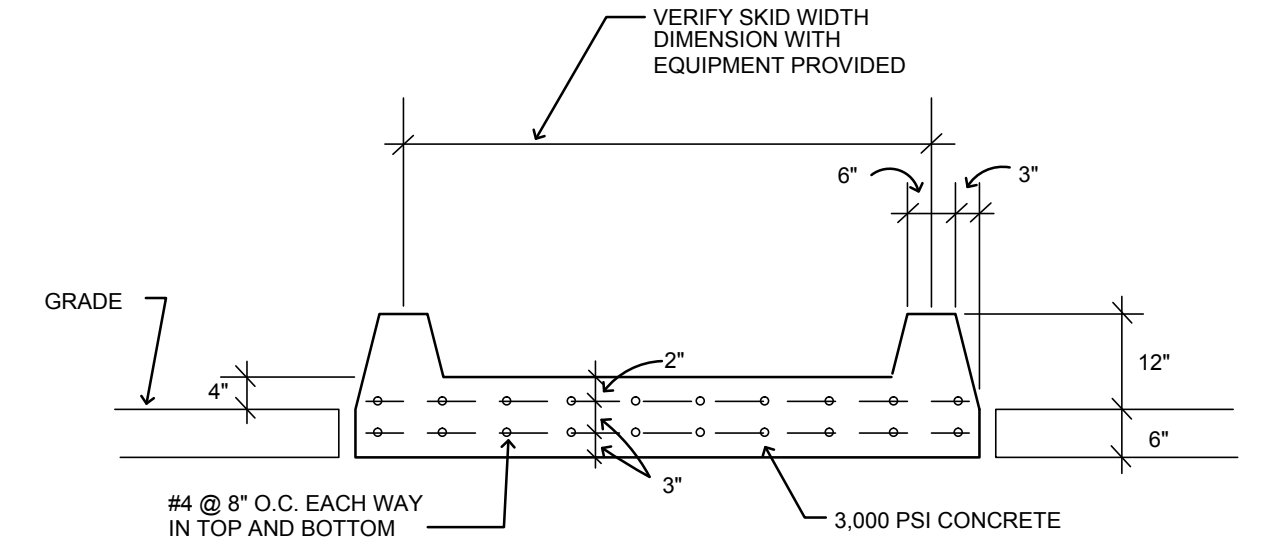
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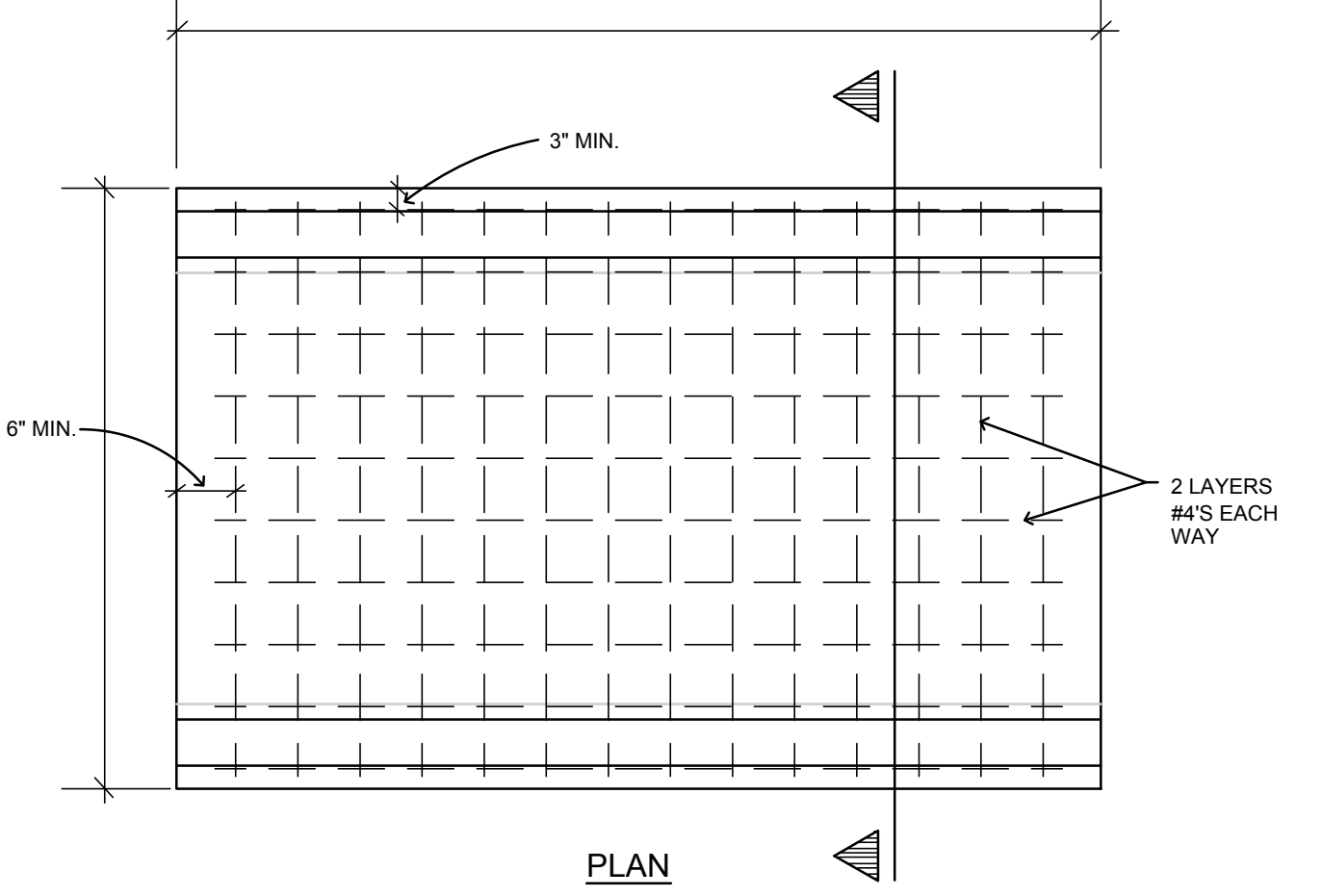
NOTE: PROVIDE OTHER GROUND CONNECTIONS AS SPECIFIED IN N.E.C. ARTICLE 250.50 (2014)



- NOTES:
- PAD LOCATION SHALL BE APPROVED BY LOCAL UTILITY COMPANY.
 - TRANSFORMER SHALL BE INSTALLED NEAR THE CUSTOMER'S SERVICE ENTRANCE.
 - IF TRANSFORMER PAD IS INSTALLED IN AN AREA SUBJECT TO VEHICULAR TRAFFIC, THE INSTALLATION SHALL BE PROTECTED WITH A PIPE-RAIL GUARD. (SEE SS-77.9)
 - FOR PROPER CLEARANCE AROUND THE TRANSFORMER, REFER TO SS-75.0
 - CONTRACTOR SHALL EXTEND FORMS DOWN TO AT LEAST 3" BELOW AVERAGE GROUND LINE.
 - CONCRETE SHALL BE A MINIMUM OF 3,000 LB. MIX.
 - TOP OF TRANSFORMER PAD SHALL RECEIVE A SMOOTH TROWEL FINISH. CORNERS AND EDGES SHALL BE ROUNDED OR BEVELED.
 - CONDUIT OPENING SHALL BE FREE AND CLEAR OF CONCRETE.
 - TOPS OF THE CONDUIT SHALL BE FLUSH WITH THE TOP OF THE CONCRETE PAD.
 - NUMBER OF CONDUITS NECESSARY IS DEPENDENT ON THE MAXIMUM NUMBER OF SERVICE CONDUCTORS ALLOWED IN THE LOW-VOLTAGE COMPARTMENT OF THE TRANSFORMER. REFER TO SS-73.1 FOR MAXIMUM NUMBER. INSTALL 1" METERING CONDUIT FROM PAD TO METER ENCLOSURE WHEN TRANSFORMER RATED METERING IS SET ON ADJACENT BUILDING OR STAND & METERING TRANSFORMERS ARE IN THE PADMOUNT TRANSFORMER. (SEE SS-74.0)
 - PILLARS ARE FORMED BY AUGERING AND 8" DIAMETER HOLE TO A DEPTH OF UNDISTURBED EARTH. A SEPARATOR, SUCH AS TAR PAPER, SHOULD BE PLACED BETWEEN THE PILLAR AND THE PAD SO THAT THE PAD CAN BE LEVELED AT A LATER TIME IF NECESSARY.
 - LOCAL UTILITY RESERVES THE RIGHT NOT TO ACCEPT THE CONDITION OF THE CONCRETE PAD IF IT FAILS TO MEET THE REQUIREMENTS STATED IN THIS STANDARD.
 - THE 6" ABOVE GRAD CAN BE REDUCED TO 4" ABOVE FINISHED PAVEMENT.
 - CONDUIT OPENING DIMENSIONS PERTAIN TO ABB & GE (1991 & NEWER)
 - TRANSFORMERS: CHECK WITH LOCAL UTILITY SERVICE CENTER TO BE SURE THAT THE OPENING IS THE CORRECT SIZE FOR THE TRANSFORMER DESIGNATED FOR THE JOB. CALL LOCAL SERVICE CENTER TO CONFIRM PAD DIMENSIONS BEFORE PAD IS POURED.
 - CONDUIT TO EXTEND 1' TO 2' BEYOND EDGE OF PAD. DO NOT BACKFILL. USE MIN. 3/4" PLYWOOD OR COMPARABLE COVER TO SECURE THE HOLE.



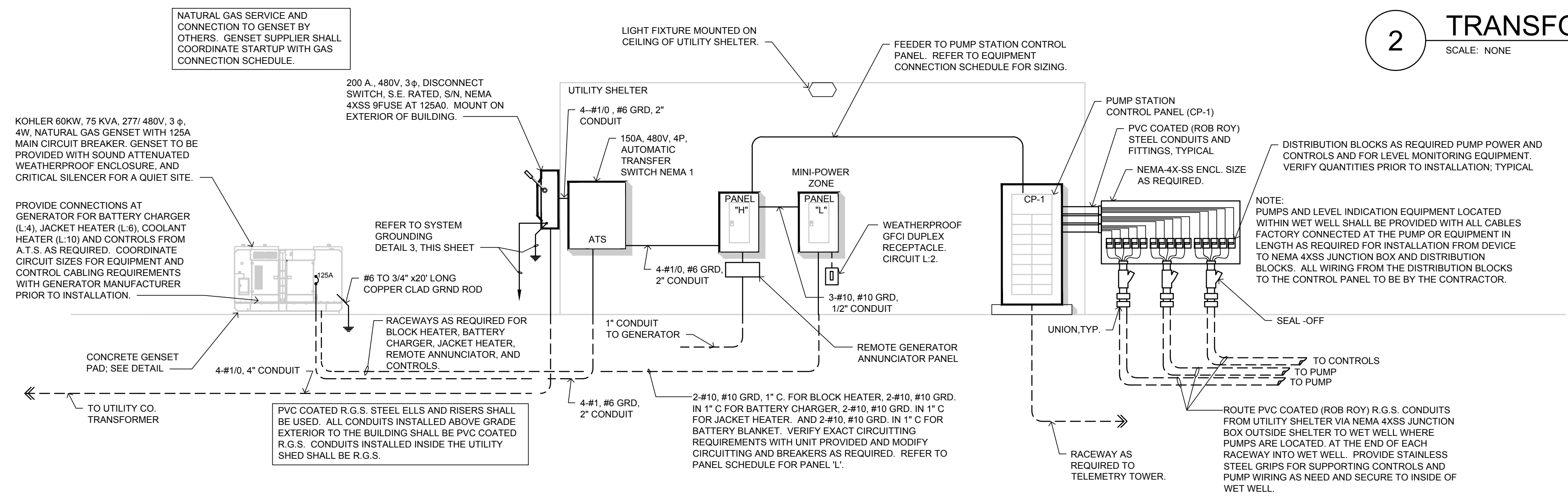
- SECTION
- NOTES:
- PAD BY G.C./E.C. TO VERIFY ALL REQUIREMENTS WITH EQUIPMENT PROVIDED PRIOR TO G.C. POURING PAD.
 - THICKNESS AND STEEL MUST BE SIZED PER GENERATOR SIZE.



- NOTES:
- INSTALL 1/4 X 1/4 REMOVABLE WIRE FENCING AROUND GENERATOR AND PAD AND ANY OPENINGS TO STOP RODENT ENTRY.

2 TRANSFORMER PAD DETAIL

SCALE: NONE



A ELECTRICAL RISER DIAGRAM

SCALE: NONE

SERVICE VOLTAGE: 277/480 V, 3φ, 4W.

ELECTRICAL CONTRACTOR SHALL VERIFY CONDUIT QUANTITIES NEEDED. ALL CONDUITS REQUIRED MAY NOT BE SHOWN IN THIS RISER DIAGRAM.

1 ENGINE GENERATOR PAD DETAIL

SCALE: NONE



Baughman **LIFT STATION DETAILS**

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ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

PROJECT NUMBER ?????	DESIGN GWS	DRAWN
APPROVED PJV	DATE 04-25-17	
REVISIONS:	SCALE AS NOTED	SHEET 11 OF 23

Integrated Consulting Engineers, Inc.
349 South Ipademille - Wichita, KS 67211
316.264.3586 • 316.264.3948 • www.icengr.com

MINI-POWER ZONE L										
INTEGRAL PANEL/ TRANSFORMER										
CIRC NO.	LOAD V.A.	LOAD DESCRIPTION	P O L E	AMP SIZE	H A S E	AMP SIZE	P O L E	LOAD DESCRIPTION	LOAD V.A.	CIRC NO.
1	140	PUMP LIGHTG	1	20	A	20	1	INT. RECEPT.	200	2
3	300	EXT. LIGHTING	1	20	B	20	1	BATTERY CHRGR	1000	4
5	200	EXT. RECEPT.	1	20	C	15	2	JACKET HTR	1500	6
7	60	EF-1	1	20	A	--	--			8
9		SPARE	1	25	B	15	2	COOLANT HTR	1500	10
11		SPARE	1	20	C	--	--			12
13		SPACE			A	20	1	SPACE		14
15		SPACE			B	--	--			16
17		SPACE			C	--	--			18

- ① 15 KVA MINI-POWER ZONE COMBINATION PANEL/ TRANSFORMER, 480V. PRIMARY WITH 120/208V., 3-PHASE, 4-WIRE SECONDARY. 18 POLE PANEL.
- ② VERIFY CIRCUITING REQUIREMENTS WITH GENERATOR PROVIDED PRIOR TO ORDERING PANEL AND BREAKERS.

PANEL H										
W/ GRD. BUS										
CIRC NO.	LOAD V.A.	LOAD DESCRIPTION	P O L E	AMP SIZE	H A S E	AMP SIZE	P O L E	LOAD DESCRIPTION	LOAD V.A.	CIRC NO.
1	15,000	MINI ZONE L	3	25	A	60	3	CP-1	29900	2
3					B	--	--			4
5					C	--	--			6
7		SPARE	1	20	A	20	3	UH-1	3300	8
9		SPARE	1	20	B	--	--			10
11		SPARE	1	20	C	--	--			12
13		SPACE			A	20	1	SPACE		14
15		SPACE			B	--	--	SPACE		16
17		SPACE			C	--	--	SPACE		18

LIGHT FIXTURE SCHEDULE										
FIXT LTR.	MANUFACTURER	CATALOG NUMBER	LAMPS		FIXT. VOLT.	FINISH	MOUNTING	REMARKS	ICE	
			NO.	TYPE						
A	WILLIAMS	96-4-L82-HIAFR-DRV-UNV	--	LED	UNV	WHITE	SURFACE	ENCLOSED AND GASKETED.		
B	WILLIAMS	WPI-L44/850-PG-WG-120	--	LED	120	STANDARD	WALL	(1)(2)		

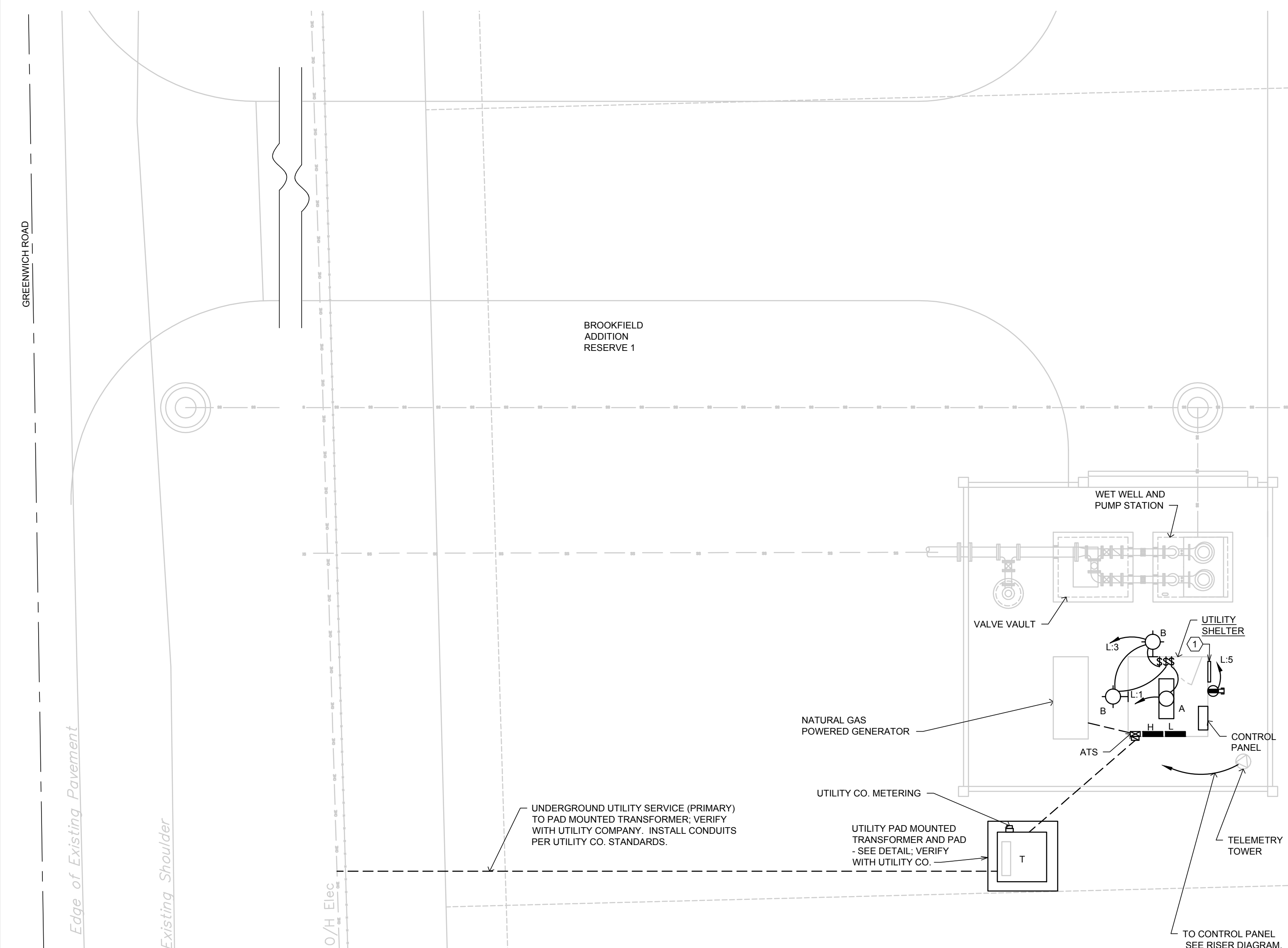
LIGHT FIXTURE SCHEDULE NOTES									
ICE									
① PROVIDE FIXTURE WITH INTEGRAL PHOTOCELL.									
② MANUFACTURERS LISTED IN THIS SCHEDULE OR APPROVED BY WRITTEN ADDENDUM WILL BE THE ONLY APPROVED MANUFACTURERS TO BID THE LIGHTING FIXTURES FOR THIS PROJECT. CONTRACTORS AND SUPPLIERS USING PRICING FROM MANUFACTURERS NOT LISTED ON SCHEDULE OR BY ADDENDUM DO SO AT THEIR OWN RISK.									

SYMBOL LIST		
SYMBOL	DESCRIPTION	MOUNTING
	FLUORESCENT FIXTURE & FIXTURE LETTER	CEILING
	INCAND. OR H.I.D. FIXTURE & FIXT. LETTER	WALLBRACKET
	GFCI DUPLEX GROUNDED RECEPTACLE	1'-3" AFF
	DUPLEX GROUNDED RECEPTACLE	1'-3" AFF
	EXTERIOR GFCI RECEPT. WEATHERPROOF	1'-3" AFF
	SWITCHES (1-POLE, 3-WAY, 4-WAY, PILOT KEY)	4'-0" TO TOP
	JUNCTION BOX	
	FUSTAT	
	SPECIAL DEVICE AS NOTED ON PLAN	
	BRANCH CIRCUIT PANEL & PANEL DESIG.	6'-6" TO TOP
	H.D. SAFETY SWITCH (AMPS, POLE, VOLTAGE)	6'-6" TO TOP
	STARTER (SIZE, POLE, VOLTAGE)	6'-6" TO TOP
	THERMOSTAT (BY M.C.)	4'-0" TO TOP
	MOTOR	
	CONDUIT RUN 2#12 & 1#12 GRD. -1/2" C.	CEIL./WALL
	CONDUIT RUN 2#12 & 1#12 GRD. -1/2" C.	EARTH/FLOOR
	PARTIAL HOMERUN (MULTIPLE LOAD LOCATIONS)	
	SEE NOTE #7	
	FEEDER IDENTIFICATION, SEE SCHEDULE	
	WEATHERPROOF	
	INDICATES SWITCHING SCHEME	

GENERAL NOTES									
ICE									
1. ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) & THE AMERICANS WITH DISABILITIES ACT (ADA).									
2. REFER TO RELATED ARCHITECTURAL, MECHANICAL, AND STRUCTURAL DRAWINGS FOR RELATED INFORMATION.									
3. REFER TO THE SPECIFICATIONS FOR DATA NOT ON THE DRAWINGS.									
4. E.C. SHALL REFER TO DRAWINGS AND SPECIFICATIONS FOR THE REQUIREMENTS ASSOCIATED WITH WIRING AND CONNECTION OF INTERLOCKING AND CONTROLS OF MECHANICAL UNITS AND THERMOSTAT LOCATIONS.									
5. COORDINATE OUTLET BOX LOCATIONS WITH MASONRY TO MINIMIZE CUTTING OF BRICK OR BLOCK.									
6. ALL MOUNTING HEIGHTS TO CENTERLINE OF ITEM UNLESS OTHERWISE NOTED. VERIFY ALL OUTLET LOCATIONS ON THE JOB PRIOR TO ROUGH-IN.									
7. CONDUIT RUN W/ CONDUCTORS AS INDICATED & GROUND WIRE SIZED PER N.E.C. 250-122 (2014); CONDUIT SIZE AS REQUIRED.									
8. WHEN INCREASED CONDUCTOR SIZES ARE SHOWN ON THE PLANS, THE LARGER CONDUCTOR SIZE SHALL BE USED THROUGHOUT THE LENGTH OF THE CIRCUIT, INCLUDING NEUTRAL AND GROUND.									
9. CONTRACTOR SHALL BUILD TO ALL CURRENT NATIONAL, STATE, AND LOCAL CODES.									

EQUIPMENT CONNECTION SCHEDULE														
ICE														
UNIT DESIG.	LOAD	PANEL DEVICE RATING (AMPS/POLE)								DISC. DEVICE AT UNIT (AMPS/POLE)	STARTER (SIZE/POLE)	CIRC. NO.	FEEDER IDENT.	
		H.P.	FLA	MCA	20/1	20/3	30/3	60/3	100/3					200/3
CP-	DUPLEX CONTROL PANEL													
1		(2)	10	28	36					SW			H-2	3#4& 1#8GRD-1 1/4" C
P-	PUMP													
1			10	14	18					SW	VFD		CP-1	3#10& 1#10GRD-1" C
2			10	14	18					SW	VFD		CP-1	3#10& 1#10GRD-1" C
EF-	EXHAUST FAN													
1			60W										L-7	2#12& 1#12GRD-1/2" C
UH-	UNIT HEATER													
1			3.3KW	4						SW			H-8	3#12& 1#12GRD-3/4" C

EQUIPMENT CONNECTION SCHEDULE NOTES									
ICE									
① ALL CONNECTIONS AND ELECTRICAL EQUIPMENT LISTED IN SCHEDULE SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. FIELD VERIFY CONNECTION REQUIREMENTS AND EQUIPMENT PROVIDED BY OTHERS PRIOR TO ROUGH-IN.									
② REFER TO DRAWINGS AND SPECIFICATIONS FOR THE REQUIREMENTS ASSOCIATED WITH WIRING AND CONNECTIONS OF INTERLOCKING, THERMOSTAT LOCATIONS, EXHAUST FAN CONTROL SWITCHES, AND OTHER CONTROLS OF MECHANICAL EQUIPMENT.									
③ NOT USED.									
④ PROVIDE A 30A, 1 POLE, 125V. HORSEPOWER RATED TOGGLE SWITCH WITH A 125V, 3/4 HP RATED FUSTAT (EQUAL TO BUSSMAN #SOY), SIZE FUSE PER MANUFACTURER'S RECOMMENDATION.									
⑤ STARTER AND POWER FACTOR CORRECTION CAPACITORS SHALL BE PROVIDED AS PART OF CP-1. CONTRACTOR TO PROVIDE WIRING FROM CP-1 TO DISTRIBUTION BLOCKS IN JUNCTION BOX LOCATED OUTSIDE BUILDING AND CONNECT PUMP SUPPLIED CABLING AS REQUIRED.									
⑥ PROVIDE CONNECTION TO EXHAUST AN PROVIDED WITH UTILITY SHED AS REQUIRED. INSTALL A COOK MODEL GC-142 CABINET FAN OR EQUIVALENT. 75 CFM AT 0.25" E.S.P., 59 WATTS, 120V/1/60. INSTALL TIGHT TO CEILING OF UTILITY SHELTER. PROVIDE ALUMINUM GRILLE, WALL CAP PAINTED TO MATCH UTILITY SHELTER, CONTROL TRANSFORMER, AND 24V. THERMOSTAT TO TURN FAN ON ABOVE 80° (ADJUSTABLE). INSTALL A 12"x 12" WALL LOUVER WITH MOTORIZED DAMPER INTERLOCKED TO OPEN WITH FAN OPERATION.									
⑦ PROVIDE CONNECTION TO UNIT HEATER IN UTILITY SHED AS REQUIRED. VERIFY LOCATION PRIOR TO ROUGH-IN. INSTALL A MARKEL MODEL P3P5103CAIN ELECTRIC UNIT HEATER OR EQUIVALENT. HEATER SHALL BE 3.3 KW, 112 MBH, 4.0A, 480/3/60. PROVIDE WITH WALL MOUNTING BRACKET, CONTROL TRANSFORMER, AND 24 V LOW VOLTAGE THERMOSTAT TO START THE HEATER BELOW 50° (ADJUSTABLE).									

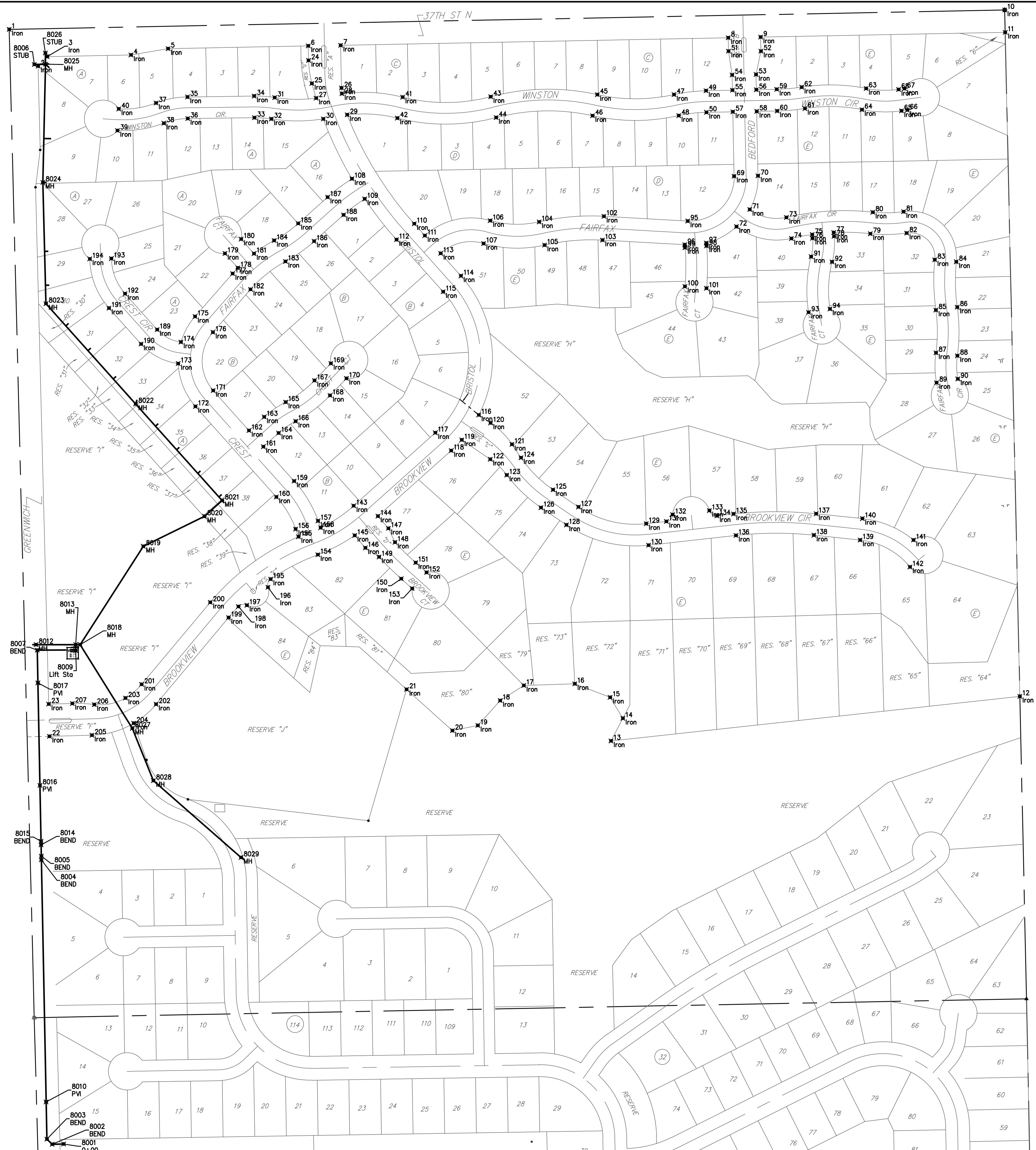


A ELECTRICAL LAYOUT DIAGRAM
SCALE: 1/8"= 1'-0"

KEYNOTES:
① NEMA 4XSS JUNCTION BOX WITH DISTRIBUTION BLOCKS TO BE MOUNTED ON RISER. MOUNT JUNCTION BOX ON STAINLESS STEEL UNI-STRUT ADJACENT TO BUILDING.



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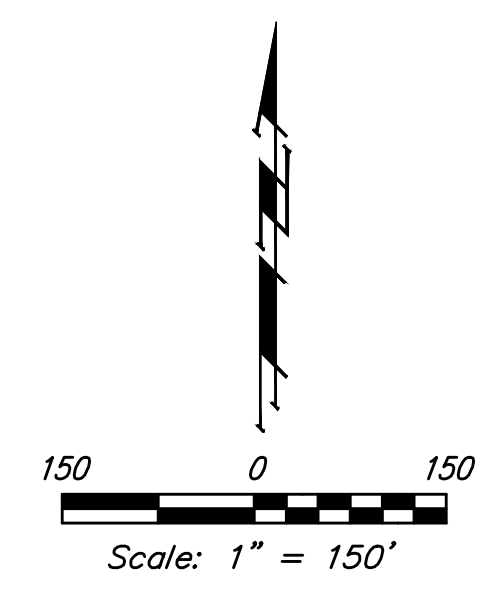
IRONS			
Point	Northing	Eastng	Desc
1	1710224.38	1685819.67	Iron
2	1710125.87	1685897.20	Iron
3	1710151.35	1685921.56	Iron
4	1710155.73	1686146.52	Iron
5	1710172.68	1686246.20	Iron
6	1710180.00	1686222.34	Iron
7	1710181.69	1686709.32	Iron
8	1710201.65	1687493.63	Iron
9	1710203.64	1687836.61	Iron
10	1710226.41	1688491.69	Iron
11	1710216.42	1688493.01	Iron
12	1708434.40	1688532.32	Iron
13	1708314.79	1687434.98	Iron
14	1708375.36	1687466.71	Iron
15	1708431.69	1687432.50	Iron
16	1708468.12	1687337.71	Iron
17	1708463.53	1687200.91	Iron
18	1708423.09	1687137.52	Iron
19	1708356.21	1687077.37	Iron
20	1708342.53	1687009.18	Iron
21	1708452.99	1686886.36	Iron
22	1708327.13	1685927.82	Iron
23	1708413.61	1685925.62	Iron
24	1710141.15	1686623.10	Iron
25	1710079.18	1686631.93	Iron
26	1710067.22	1686711.55	Iron
27	1710039.71	1686643.43	Iron
28	1710051.74	1686712.48	Iron
29	1709995.10	1686726.94	Iron
30	1709983.85	1686662.70	Iron
31	1710041.37	1686532.22	Iron
32	1709984.06	1686523.25	Iron
33	1709987.30	1686477.84	Iron
34	1710045.30	1686477.10	Iron
35	1710043.00	1686298.19	Iron
36	1709985.01	1686298.94	Iron
37	1710026.60	1686213.67	Iron
38	1709972.54	1686234.68	Iron
39	1709952.90	1686110.33	Iron
40	1710010.80	1686113.64	Iron
41	1710042.43	1686875.70	Iron
42	1709986.21	1686861.45	Iron
43	1710043.68	1687111.90	Iron
44	1709987.61	1687126.74	Iron
45	1710049.25	1687398.10	Iron
46	1709992.64	1687385.46	Iron
47	1710049.39	1687604.10	Iron
48	1709992.80	1687616.82	Iron
49	1710059.76	1687689.85	Iron
50	1710001.77	1687690.98	Iron
51	1710165.70	1687750.33	Iron
52	1710165.79	1687837.35	Iron
53	1710103.38	1687824.06	Iron
54	1710102.13	1687760.07	Iron
55	1710061.14	1687760.87	Iron
56	1710062.38	1687824.86	Iron
57	1710033.15	1687762.00	Iron
58	1710004.40	1687825.99	Iron
59	1710063.46	1687879.85	Iron
60	1710005.47	1687880.98	Iron
61	1710011.94	1687955.56	Iron
62	1710069.26	1687946.68	Iron
63	1710065.77	1688119.66	Iron
64	1710008.86	1688108.48	Iron
65	1710005.68	1688214.63	Iron
66	1710007.80	1688230.32	Iron
67	1710065.27	1688222.56	Iron
68	1710063.16	1688206.87	Iron
69	1709830.18	1687765.37	Iron
70	1709831.43	1687829.35	Iron
71	1709740.93	1687807.27	Iron
72	1709695.04	1687771.79	Iron
73	1709719.62	1687905.73	Iron
74	1709663.17	1687919.07	Iron
75	1709673.70	1687974.93	Iron
76	1709663.74	1687975.87	Iron
77	1709679.12	1688032.68	Iron
78	1709669.17	1688033.61	Iron
79	1709675.94	1688131.06	Iron
80	1709733.58	1688137.52	Iron
81	1709735.01	1688220.16	Iron
82	1709677.63	1688228.63	Iron
83	1709606.06	1688303.96	Iron
84	1709600.55	1688361.70	Iron
85	1709471.00	1688306.89	Iron
86	1709479.01	1688364.33	Iron
87	1709356.24	1688307.11	Iron
88	1709348.44	1688364.58	Iron
89	1709276.17	1688308.79	Iron
90	1709286.37	1688365.88	Iron

IRONS			
Point	Northing	Eastng	Desc
91	1709614.43	1687972.08	Iron
92	1709600.26	1688028.33	Iron
93	1709605.01	1687965.29	Iron
94	1709474.02	1688022.59	Iron
95	1709710.07	1687640.79	Iron
96	1709646.42	1687632.83	Iron
97	1709651.10	1687690.64	Iron
98	1709643.31	1687691.26	Iron
99	1709638.68	1687633.45	Iron
100	1709534.39	1687633.28	Iron
101	1709529.57	1687691.08	Iron
102	1709722.68	1687415.67	Iron
103	1709609.21	1687412.09	Iron
104	1709707.66	1687242.19	Iron
105	1709645.33	1687256.69	Iron
106	1709711.10	1687110.71	Iron
107	1709649.60	1687092.97	Iron
108	1709823.40	1686739.62	Iron
109	1709769.33	1686773.86	Iron
110	1709702.65	1686906.88	Iron
111	1709671.01	1686935.20	Iron
112	1709659.98	1686859.19	Iron
113	1709623.32	1686977.87	Iron
114	1709562.72	1687032.06	Iron
115	1709520.08	1686906.88	Iron
116	1709189.64	1687079.94	Iron
117	1709141.65	1686963.34	Iron
118	1709093.96	1687006.02	Iron
119	1709122.65	1687034.40	Iron
120	1709168.02	1687111.74	Iron
121	1709110.68	1687168.96	Iron
122	1709070.69	1687110.84	Iron
123	1709028.22	1687155.19	Iron
124	1709074.77	1687193.25	Iron
125	1708988.82	1687279.34	Iron
126	1708940.67	1687246.85	Iron
127	1708942.55	1687347.63	Iron
128	1708894.50	1687315.14	Iron
129	1708897.73	1687529.40	Iron
130	1708840.08	1687535.82	Iron
131	1708903.76	1687583.57	Iron
132	1708922.02	1687600.46	Iron
133	1708932.97	1687698.82	Iron
134	1708918.87	1687719.31	Iron
135	1708923.84	1687763.90	Iron
136	1708866.20	1687770.32	Iron
137	1708924.52	1687985.37	Iron
138	1708866.84	1687979.31	Iron
139	1708853.79	1688103.46	Iron
140	1708911.47	1688109.52	Iron
141	1708853.87	1688246.77	Iron
142	1708781.60	1688237.28	Iron
143	1708945.64	1687442.27	Iron
144	1708918.08	1688009.45	Iron
145	1708866.33	1687477.13	Iron
146	1708832.81	168775.72	Iron
147	1708885.36	1686837.35	Iron
148	1708847.94	1686855.01	Iron
149	1708808.60	1686812.40	Iron
150	1708749.89	1686871.88	Iron
151	1708793.01	1686910.66	Iron
152	1708766.75	1686939.86	Iron
153	1708723.63	1686901.07	Iron
154	1708814.43	1686848.00	Iron
155	1708862.69	1686596.15	Iron
156	1708883.33	1686588.96	Iron
157	1708905.42	1686484.63	Iron
158	1708886.85	1686555.46	Iron
159	1709012.21	1686584.45	Iron
160	1708969.53	1686536.76	Iron
161	1709104.48	1686501.89	Iron
162	1709147.71	1686463.21	Iron
163	1709184.39	1686504.20	Iron
164	1709141.16	1686542.87	Iron
165	1709224.06	1686561.64	Iron
166	1709172.58	1686588.37	Iron
167	1709282.02	1686639.00	Iron
168	1709241.91	1686680.89	Iron
169	1709327.86	1686682.89	Iron
170	1709287.74	1686724.78	Iron
171	1709255.02	1686367.19	Iron
172	1709212.35	1686319.50	Iron
173	1709327.60	1686273.23	Iron
174	1709385.13	1686280.55	Iron
175	1709453.79	1686318.37	Iron
176	1709411.56	1686366.46	Iron
177	1709568.84	1686419.39	Iron
178	1709584.09	1686433.50	Iron
179	1709623.06	1686398.77	Iron
180	1709661.65	1686442.08	Iron

IRONS			
Point	Northing	Eastng	Desc
181	1709622.68	1686476.80	Iron
182	1709526.61	1686467.49	Iron
183	1709601.55	1686561.24	Iron
184	1709657.77	1686530.65	Iron
185	1709703.41	1686595.38	Iron
186	1709655.72	1686638.06	Iron
187	1709774.09	1686674.37	Iron
188	1709726.39	1686717.05	Iron
189	1709418.63	1686216.77	Iron
190	1709379.96	1686173.55	Iron
191	1709476.23	1686087.41	Iron
192	1709514.91	1686130.63	Iron
193	1709609.21	1686093.87	Iron
194	1709608.44	1686035.88	Iron
195	1708748.79	1686521.37	Iron
196	1708727.05	1686514.17	Iron
197	1708678.90	1686457.50	Iron
198	1708675.31	1686434.89	Iron
199	1708664.70	1686408.32	Iron
200	1708666.76	1686359.22	Iron
201	1708466.44	1686174.99	Iron
202	1708413.12	1686213.83	Iron
203	1708429.72	1686131.81	Iron
204	1708362.21	1686153.87	Iron
205	1708330.02	1686041.74	Iron
206	1708412.28	1686048.00	Iron
207	1708415.22	1685989.19	Iron

SS POINTS			
Point	Northing	Eastng	Desc
8001	1707232.90	1685965.68	O+00
8002	1707232.35	1685935.24	BEND
8003	1707246.19	1685920.81	BEND
8004	1707995.60	1685906.03	BEND
8005	1708005.60	1685905.84	BEND
8007	1708558.53	1685894.94	BEND
8009	1708557.29	1685998.07	Lift Sta
8010	1707345.73	1685918.74	PVI
8012	1708573.16	1685998.25	MH
8013	1708573.16	1685998.25	MH
8014	1708035.59	1685905.25	BEND
8015	1708045.59	1685905.05	BEND
8016	1708195.56	1685902.09	PVI
8017	1708470.51	1685896.67	PVI
8018	1708573.16	1686010.25	MH
8019	1708837.18	1686179.52	MH
8020	1708917.57	1686343.83	MH
8021	1708959.86	1686391.10	MH
8022	1709219.20	1686159.05	MH
8023	1709488.19	1685918.37	MH
8024	1709813.69	1685910.12	MH
8025	1710131.01	1685917.33	MH
8026	1710161.00	1685916.66	STUB
8027	1708348.63	1686150.13	MH
8028	1708208.33	1686206.58	MH
8029	1708002.08	1686441.78	MH

BENCHMARKS:
 RR spike in asphalt, SW COR., N1/2, SW1/4, Sec. 34, TWP. 26-S, R-2-E. Elev. = 1400.59 NAVD88
 RR spike in E. face of power pole, 174± N. of S. line, N1/2, SW1/4 & 49± E. of W. line, SW1/4, Sec. 34, TWP. 26-S, R-2-E. Elev. = 1398.64 NAVD88
 RR spike in S. face of power pole, 294± S. of N. line, SW1/4, & 48± E. of W. line, SW1/4, Sec. 34, TWP. 26-S, R-2-E. Elev. = 1386.14 NAVD88



Baughman

Brilliant Addition
COORDINATES

BROOKFIELD ADDITION WICHITA, SEDGWICK COUNTY, KANSAS

State of Kansas) SS We, Baughman Company, P.A., Surveyors in
Sedgwick County) aforesaid county and state do hereby certify that we have surveyed and
platted "BROOKFIELD ADDITION", Wichita, Sedgwick County, Kansas and that
the accompanying plat is a true and correct exhibit of the property
surveyed, described as that part of the Northwest Quarter of Section 34,
Township 26 South, Range 2 East of the Sixth Principal Meridian, Sedgwick
County, Kansas described as follows: Beginning at the northwest corner
of said Northwest Quarter; thence N88°53'05"E along the north line of
said Northwest Quarter, 2672.52 feet to the northeast corner of said
Northwest Quarter; thence S01°15'49"E along the east line of said
Northwest Quarter, 1842.45 feet; thence S83°46'45"W, 1103.84 feet; thence
N27°38'26"E, 68.38 feet; thence N31°16'05"W, 65.90 feet; thence
N68°58'44"W, 101.55 feet; thence S88°04'39"W, 136.87 feet; thence
S57°28'11"W, 75.19 feet; thence S41°58'08"W, 89.95 feet; thence
S78°39'05"W, 69.55 feet; thence N48°01'52"W, 165.19 feet; thence
S16°13'44"W, 366.95 feet; thence N83°15'09"W, 487.82 feet to the point of
curvature of a non-tangent curve to the right; thence westerly and
northwesterly along said curve, having a central angle of 54°23'40" and a
radius of 168.00 feet, an arc distance of 159.49 feet, (having a chord
length of 153.57 feet bearing N46°24'30"W), to the point of tangency of
said curve; thence N19°12'40"W, 104.14 feet to a point on a non-tangent
curve to the right; thence southwesterly and westerly along said curve,
through a central angle of 29°07'25" and having a radius of 232.00 feet,
an arc distance of 117.93 feet, (having a chord length of 116.66 feet
bearing S73°59'06"W), to the point of tangency of said curve; thence
S88°32'49"W, 173.96 feet to a point on the west line of said Northwest
Quarter; thence N01°27'11"W along the west line of said Northwest Quarter,
1899.38 feet to the point of beginning, all being subject to road
rights-of-way of record.

Existing public easements, building setbacks,
access controls, and dedications, if any, being
vacated by virtue of K.S.A. 12-512b, as amended.
Baughman Company, P.A.

_____, Surveyor
Michael G. Conrey

Know all men by these presents that we, the
undersigned, have caused the land in the surveys certificate to be platted into
Lots, Blocks, Streets, and Reserves to be known as "BROOKFIELD ADDITION",
Wichita, Sedgwick County, Kansas. The utility easements are hereby granted
as indicated for the construction and maintenance of all public utilities. The
drainage and utility easements are hereby granted as indicated for drainage
purposes and for the construction and maintenance of all public utilities. No
signs, light poles, private drainage systems, masonry trash enclosures or other
structures shall be located within public utility easements. The drainage
easements are hereby granted as indicated for drainage purposes. The wall
easements are hereby granted as indicated for the construction and maintenance
of private screening walls and utility main lines and service lines shall be allowed
to cross these easements. The streets are hereby dedicated to and for the use
of the public. Reserves "A", "B", "C", "D", "E", and "F" are hereby reserved for
open space, landscaping, drainage purposes, entry monuments, utilities, and
streets. Reserve "G" is hereby reserved for open space, landscaping, drainage
purposes, entry monuments, screening walls, and utilities as confined to
easement. Reserve "H" is hereby reserved for open space, landscaping, drainage
purposes, lakes, and utilities as confined to easements. Reserve "I" is hereby
reserved for open space, landscaping, drainage purposes, entry monuments,
sidewalks, floodplain, a sanitary sewer lift station as confined to easement,
utilities as confined to easements, and water lines as confined to easement.
Reserve "J" is hereby reserved for open space, landscaping, drainage purposes,
sidewalks, floodplain, and lakes. No fill, change of grade, creation of channel, or
any other work shall be carried on within said Reserves "I" and "J" without the
permission of the Engineer for the appropriate governing body. Reserves "A", "B",
"C", "D", "E", "F", "G", "H", "I", and "J" shall be owned and maintained by the
homeowners association for the addition provided, however, that the undersigned,
or the homeowners association, as the undersigned's successor in interest, may,
in their discretion, deed a parcel of a Reserve to an owner or owners of an
adjacent Lot, subject to the obligation to maintain such deeded parcel of a
Reserve in compliance with the provisions hereof and in compliance with the
maintenance covenants or any applicable restrictive covenants and/or regulations.
Reserves "6", "31", "32", "33", "34", "35", "36", "64", "65", "66", "67", "68",
"69", "70", "71", "72", "73", "79", "80", "81", "83", and "84" are hereby
reserved for open space, landscaping, drainage reserve purposes, and floodplain.
Reserve "30" is hereby reserved for open space, landscaping, drainage reserve
purposes, floodplain, and water lines as confined to easement. Reserves "37",
"38", and "39" are hereby reserved for open space, landscaping, drainage reserve
purposes, floodplain, and utilities as confined to easement. No fill, change of
grade, creation of channel, or any other work shall be carried on within said
floodplain without the permission of the Engineer for the appropriate governing
body. Reserves "6", "30", "31", "32", "33", "34", "35", "36", "37", "38", "39",
"64", "65", "66", "67", "68", "69", "70", "71", "72", "73", "79", "80", "81", "83",
and "84" shall be owned and maintained by the owners of the corresponding
adjacent lots and shall be the responsibility of said corresponding adjacent lot
owners until such time as the appropriate governing body elects to assume the
responsibility for maintenance and improvements to the drainage. FEMA
floodplain and regulatory floodway boundaries are subject to periodic change and
such change may affect the intended land use within the subdivision. Access
controls shall be as depicted on the face of the plat and are hereby granted to
the City of Wichita, Kansas. The Minimum Building Pad Elevations for the lowest
opening to the structures shall be as indicated on the face of the plat.

_____, Manager
Kevin M. Mullen, President of
Ritchie Development Corporation,
a Kansas corporation

We, the undersigned holders of a mortgage on the
above described property, do hereby consent to this plat of "BROOKFIELD
ADDITION", Wichita, Sedgwick County, Kansas.
INTRUST Bank, N.A.

State of Kansas) SS The foregoing instrument acknowledged be-
Sedgwick County) fore me, this _____ day of _____, 2017, by _____,
_____, of INTRUST Bank, N.A., on behalf of the bank.

_____, Notary Public
My App't. Exp. _____

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

Dated this _____ day of _____, 2016.
Wichita-Sedgwick County Metropolitan Area Planning Commission

_____, Chair
David W. Foster

_____, Secretary
Dale Miller

This plat approved and all dedications
shown hereon accepted by the City Council of the City of Wichita,
Kansas, this _____ day of _____, 2017.

_____, Mayor
Jeff Longwell

_____, City Clerk
Karen Sublett

Reviewed in accordance with K.S.A. 58-2005
on this _____ day of _____, 2017.

_____,
Tricia L. Robello, L.S. #1246
Deputy County Surveyor
Sedgwick County, Kansas

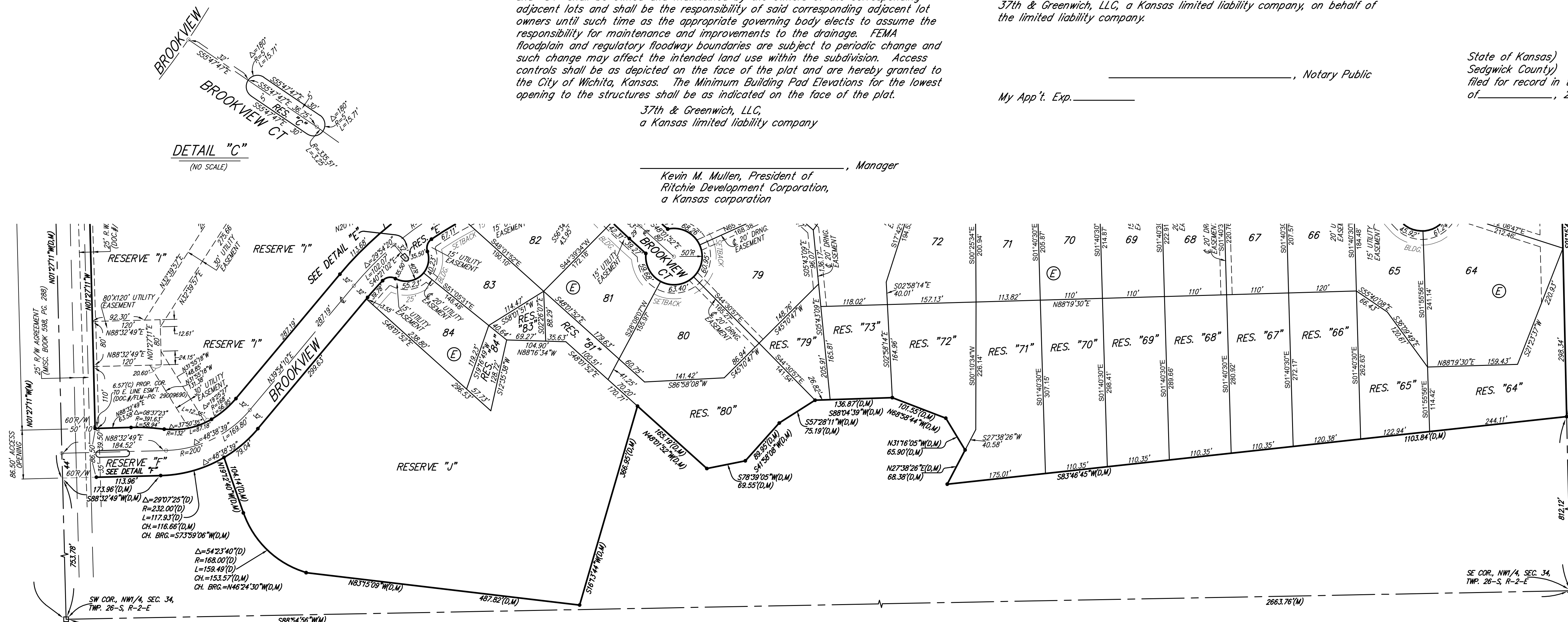
Entered on transfer record this _____ day
of _____, 2017.

_____, County Clerk
Kelly B. Arnold

State of Kansas) SS This is to certify that this plat has been
Sedgwick County) filed for record in the office of the Register of Deeds, this _____ day
of _____, 2017 at _____ o'clock _____ M; and is duly recorded.

_____, Register of Deeds
Tonya Buckingham

_____, Deputy
Judy J. Paget



MINIMUM BUILDING PAD ELEVATIONS FOR
LOWEST OPENING TO THE STRUCTURES

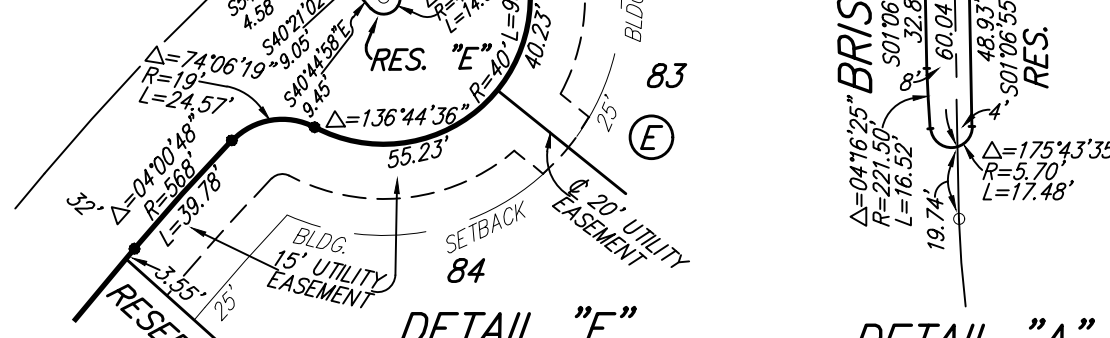
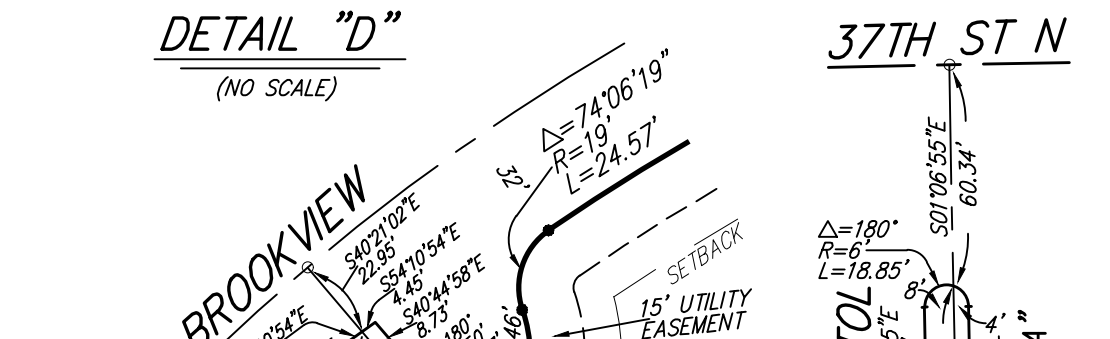
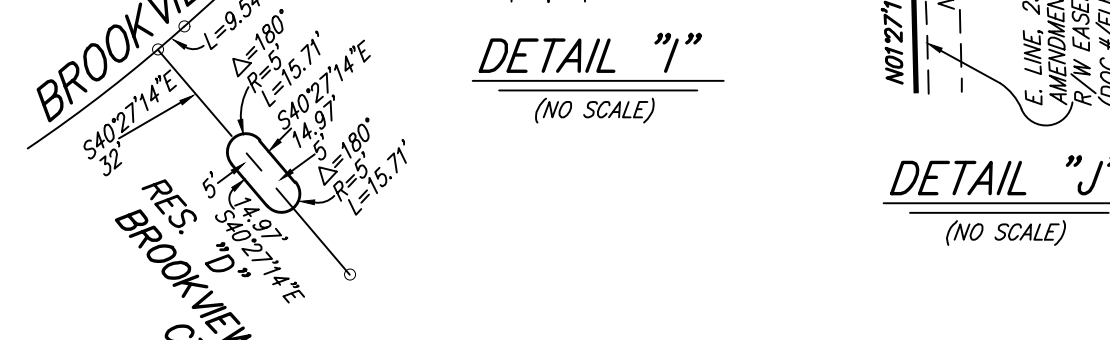
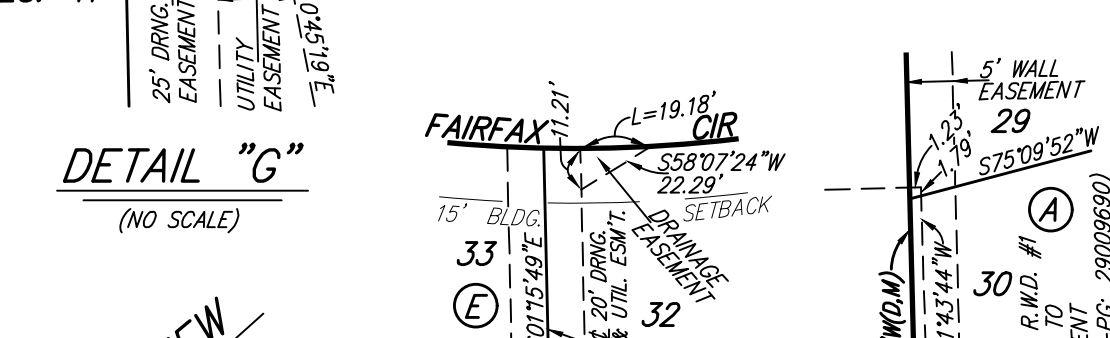
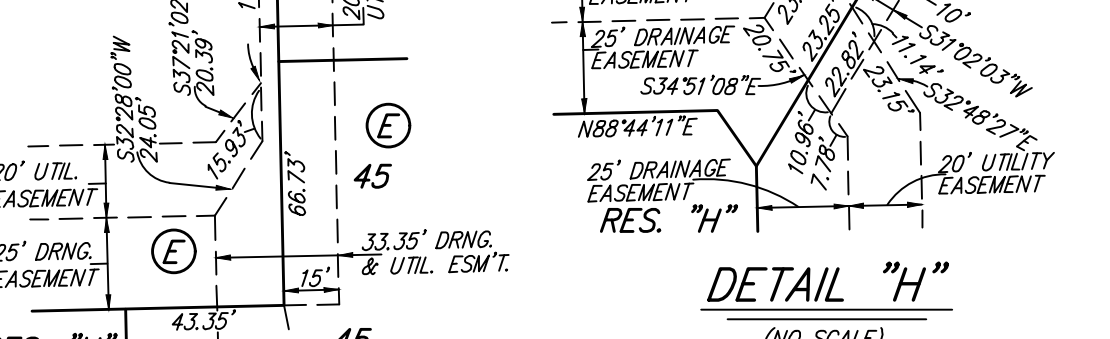
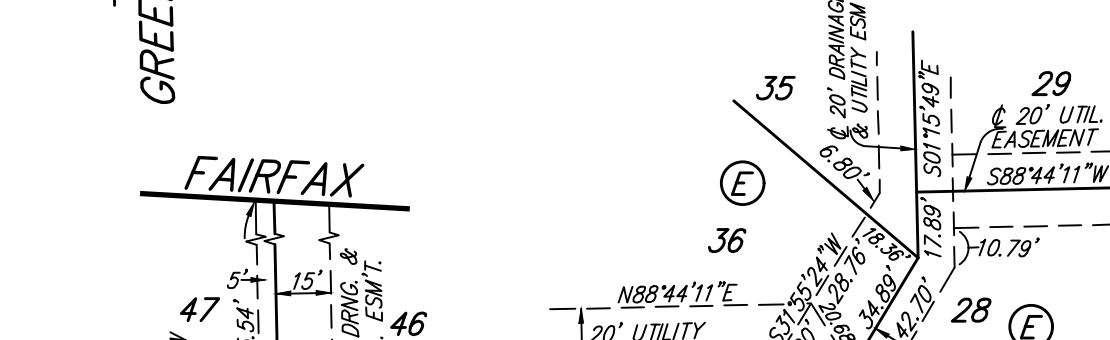
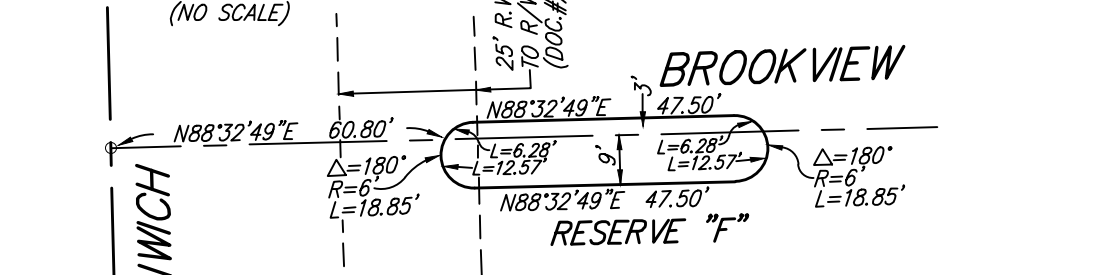
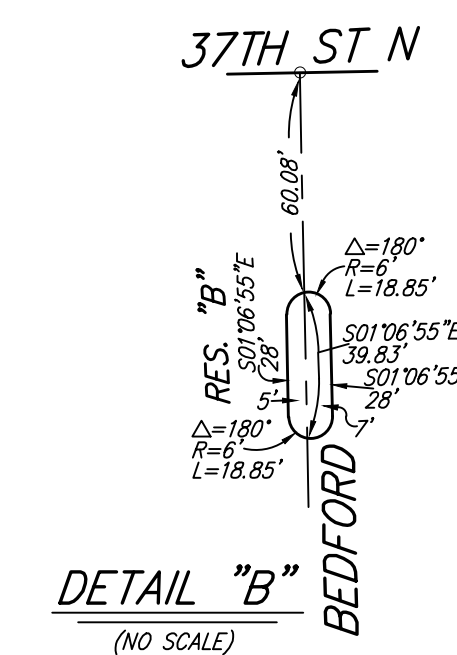
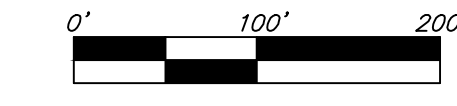
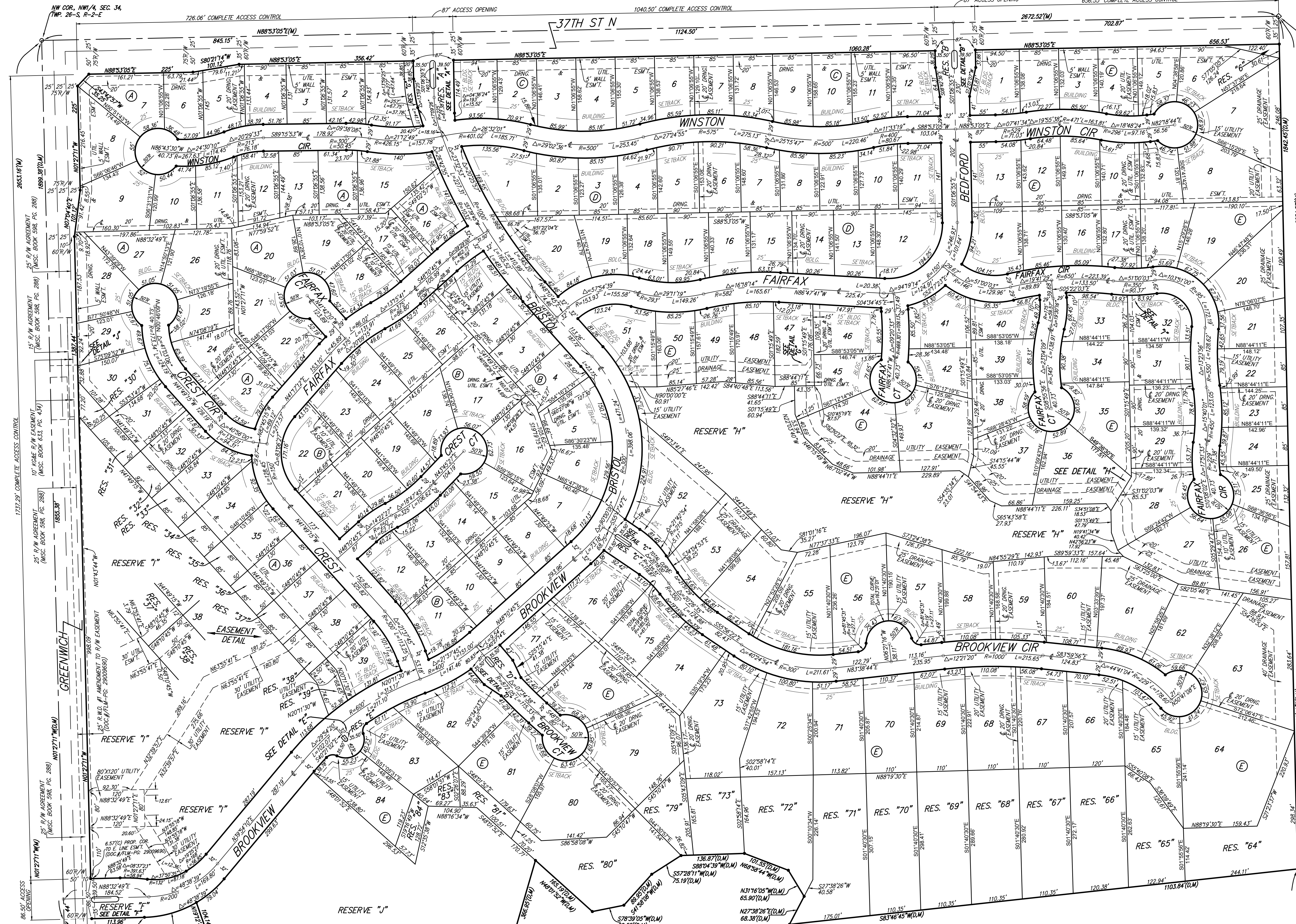
LOT	BLOCK	ELEVATION NAVD88
15-19	A	1376.0
20-22	A	1375.5
23-25	A	1375.0
5-7	F	1377.0
26-28		
36-37		
43-45	F	1372.8
47-51		
52-61		
62	F	1372.5
63-66	F	1370.8
67-71	F	1372.0
72-73	F	1372.7
79-80	F	1373.0
81-84	F	1373.5

NOTE:
A drainage plan has been developed for the plat and
all drainage easements, rights-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 stormwater.

BROOKFIELD ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS

- #4 REBAR W/ "BAUGHMAN" CAP (SET)
 - = 1" IRON PIPE (FOUND)
 - ◇ = 2" ALUMINUM "SEDGWICK COUNTY" CAP (FOUND)
 - △ = STONE (FOUND)
 - = #6 REBAR (FOUND)
- (M) = MEASURED
(D) = DESCRIBED
(P) = PLATTED
- BENCHMARK:
CHISELED SQUARE ON E. SIDE OF SCHOOL SIGNAL POLE BASE, W. SIDE OF GREENWICH ROAD, 302' S. & 21.5' W. OF THE SW COR., NW1/4, SEC. 34, TWP. 26-S, R-2-E. ELEV. = 1373.80 NAVD88.
- CHISELED SQUARE ON E. SIDE OF SCHOOL SIGNAL POLE BASE, W. SIDE OF GREENWICH ROAD, 302' S. & 21.5' W. OF THE SW COR., NW1/4, SEC. 34, TWP. 26-S, R-2-E. ELEV. = 1387.64 NAVD88.
- TOP OF 1" IRON PIPE AT NW COR., NW1/4, SEC. 34, TWP. 26-S, R-2-E. ELEV. = 1380.04 NAVD88.



LOT	BLOCK	ELEVATION NAVD88
15-19	A	1376.0
20-22	A	1375.5
23-25	A	1375.0
5-7	F	1377.0
26-28	F	1372.8
30-32	F	1372.5
43-45	F	1372.8
47-51	F	1372.7
52-61	F	1373.0
62	F	1372.5
63-66	F	1370.8
67-71	F	1372.0
72-73	F	1372.7
79-80	F	1373.0
81-84	F	1373.5

NOTE:
A drainage plan has been developed for the plat and all drainage easements, rights-of-way, or reserves shall remain as established grades or as modified with the approval of the applicable City or County Engineer and unobstructed to allow for the conveyance of stormwater.