

# MAIN 24, SOUTHWEST INTERCEPTOR SEWER, SANITARY SEWER PUMP STATION & FORCE MAIN

to serve

## EDGE WATER ADDITION

### CITY OF WICHITA, KANSAS

James L. Armour, P.E. City of Wichita

Project Number

468-84364

O.C.A. Number

744262

### Benchmarks

BM #1: Hoover and 45th St. N - COW Benchmark at NE corner of Intersection, 10.20' SSE of PP, 58.80' ESE of PP on NW corner, 85.50' NE of gas line marker, 59.00' N of gas line marker, 28.50' E of Centerline, 14.50' N of Centerline.  
Elev. = 1,335.29 (NGVD 29)

BM #2: small RR spike in 3rd PP W of Hoover St. on the N side of 45th St. N.  
Elev. = 1,337.68

BM #3: 60d Nail in PP at the SE corner of exception on W side of Hoover St., South of 45th St. N.  
Elev. = 1,335.26

BM #4: COW BM North R/W of K-96 and West R/W of North Hoover Road, 6.9' ESE of PP, and 42.5' west of center line.  
Elev. = 1,333.14 MSL (145.74 City Datum)

BM #5: Hoover and 37th St. N - COW Benchmark at SW corner of Intersection, 16.40' W of PP, 7.40' N of PP, 3.00' N of 4' high chain link fence, 15.20' WNW of chain link fence corner, 48.50' SW of Section corner Iron, 17.20' S of Centerline, 48.00' W of Centerline.  
Elev. = 1,333.68

BM #6: Ridge Port and 37th St. - N Rim of SS MH, 100' E of Centerline, 54' S of Centerline.  
Elev. = 1,332.71

BM #7 - Railroad Spike in the North Face of the Second Power Pole East of Ridge Road on the South Side of 37th Street North, Sta. 101+19.45, 59' Rt.  
Elev. = 1,330.54 MSL

### Sheet Index

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Stationing has been changed so that the upstream end has a higher stationing than the downstream end.

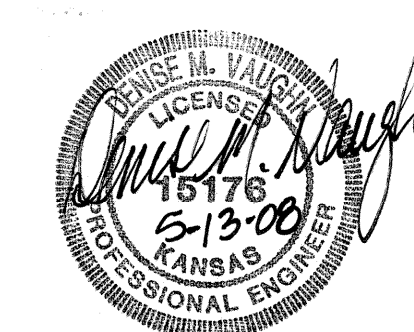
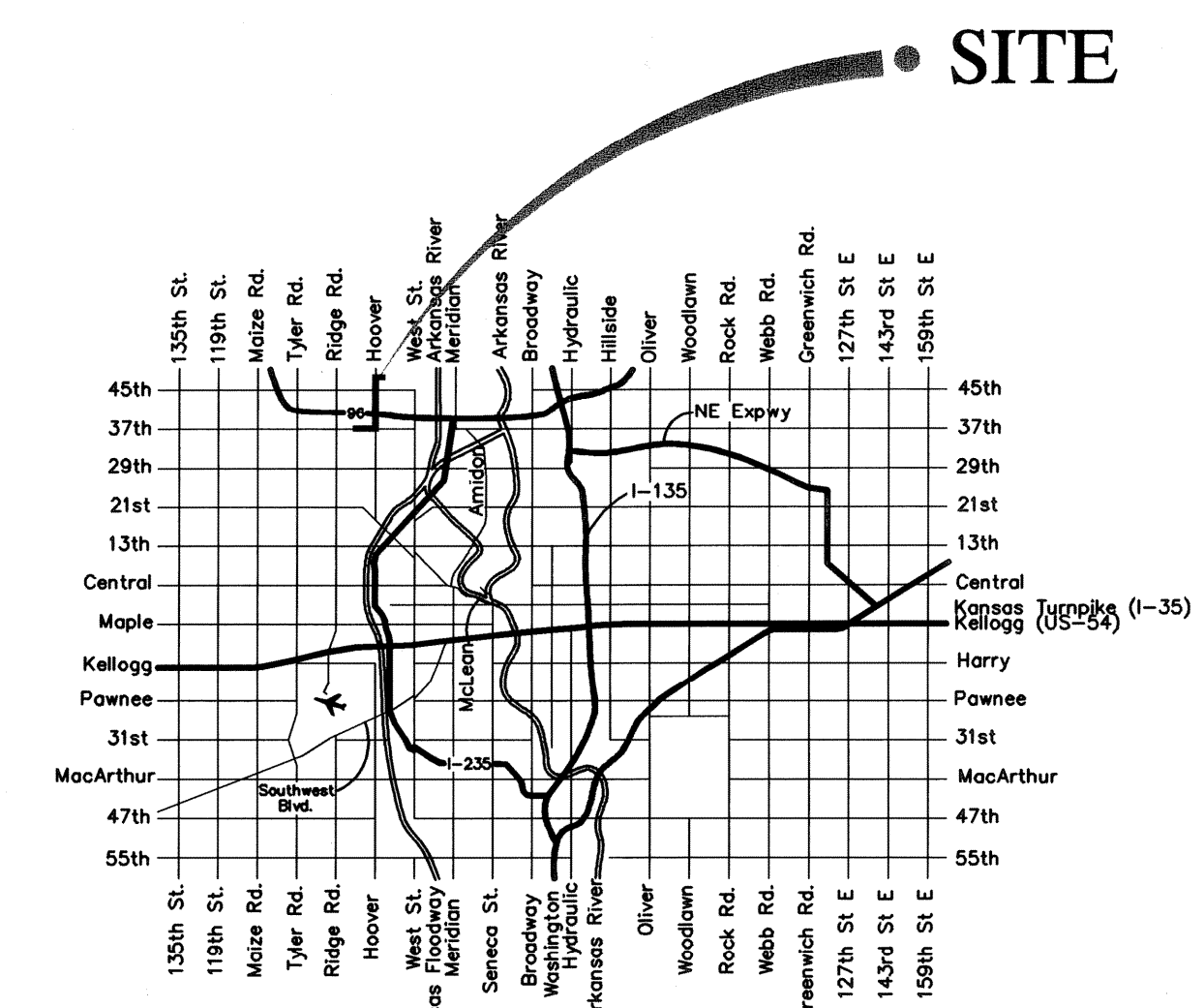
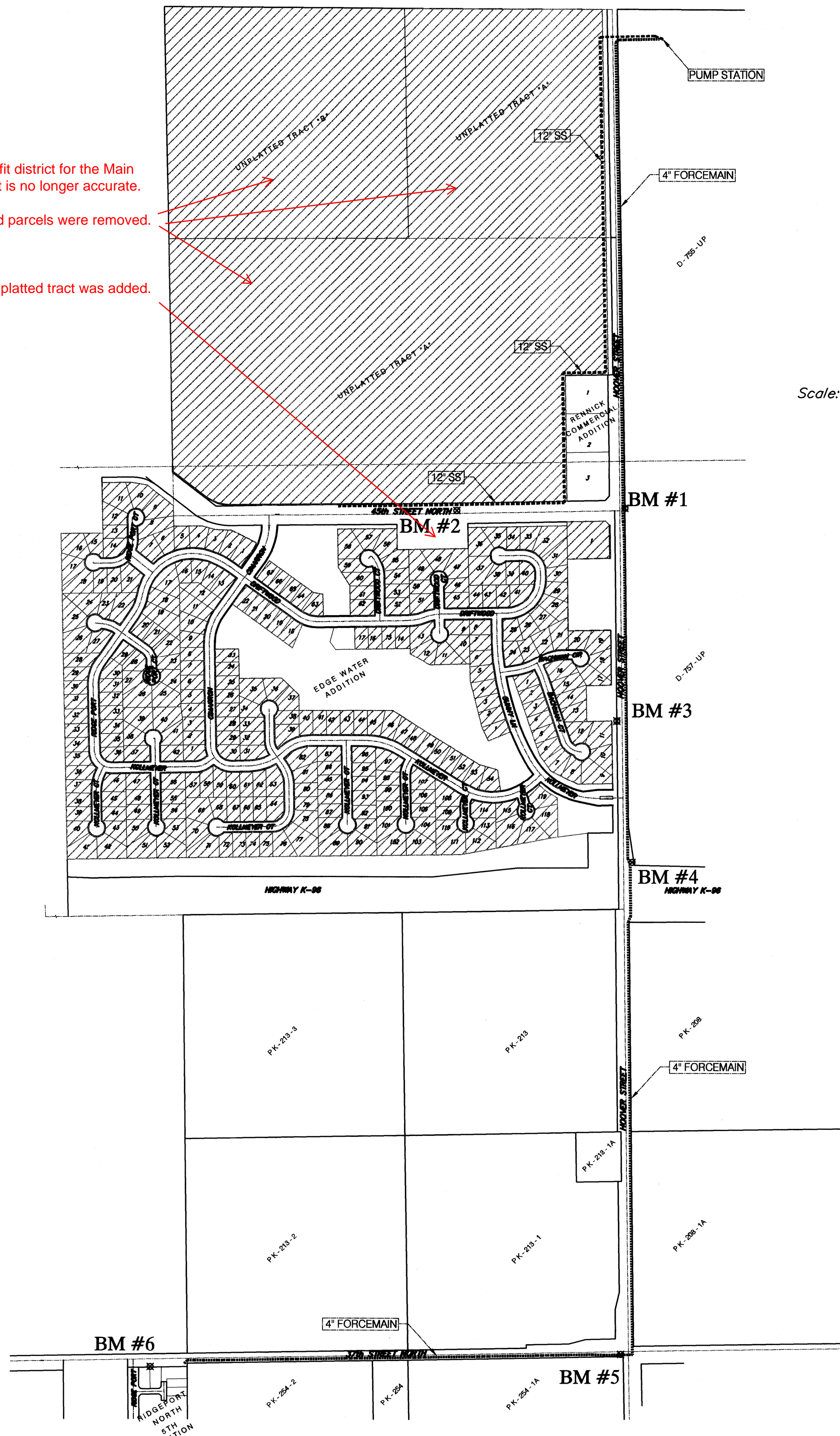
- The Contractor shall give all property owners and/or tenants of developed property abutting the project limits a minimum of ten (10) days advance notice prior to start of construction.
- Contractor will be required to provide notice to utility companies a minimum of forty-eight (48) hours prior to any excavation, as follows:  

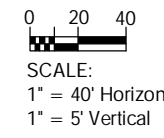
Kansas One-Call	687-2470
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The Contractor must notify the following in case of an emergency:

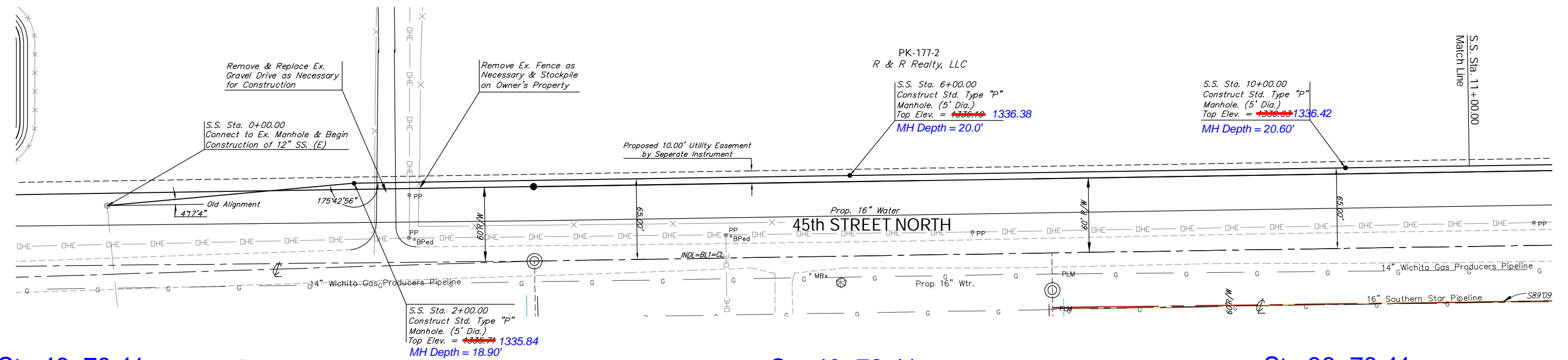
Cox Communications	262-4270
Westar Energy	363-8650
Aquila Energy	303-0357
AT&T	268-2245
City of Wichita Water Dept.	268-4563
City of Wichita Sewer Maint.	268-4024
City of Wichita Storm Sewer Maint.	268-4090
City of Wichita Traffic Maint.	268-4034
Wichita Gas Producers	773-1575
Southern Star Pipeline Co.	529-6601
- Existing utilities and their locations, as shown on the plan, represent the best information obtainable for design. Location information has been obtained from utility company records and/or field locations. The Contractor shall be aware that construction will occur in close proximity to existing utilities, shown and not shown, and any conflicts with such utilities shall be reported to the Engineer.
- All project waste including any trees, milled asphalt, rubble from miscellaneous structures, abandoned pipes, excess excavation, etc. shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations that, in the opinion of the Engineer, will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps. of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archeological investigations unless buried in a previously approved borrow location.
- Prior to bidding the project, each bidder shall visit the site and satisfy himself of surface & subsurface conditions. Each bidder shall also fully inform himself as to the extent of the scope of work to be performed. Each bidder shall also be aware that no additional compensation will be awarded for extra work that should have been evaluated prior to bidding.
- The Contractor shall not start work on the Project until the Project Inspector is assigned and is present on site. Any work done without inspection will be required to be uncovered for inspection.
- Irons and Monuments found are shown on the plan. The Contractor shall be responsible for notifying the Engineer prior to excavation or clearing operations that will endanger said irons so that accurate ties can be determined for resetting.
- Properties within the project limits may have underground sprinkler systems in public right-of-way which conflict with the new construction. The Contractor will be required to remove and replace to existing working condition all sprinkler systems that conflict with the proposed construction. Portions of underground sprinkler systems not in conflict with the proposed construction shall be protected from damage and shall remain in place. The Contractor shall contact the property owner for location and condition prior to removal. All work in connection with underground sprinkler system shall be INCIDENTAL to "Site Clearing & Preparation."
- The Contractor shall be responsible for implementing erosion control methods during construction to prevent unnecessary silt/sediment discharge through downstream properties and/or storm sewer systems. The Contractor shall install and maintain erosion controls as directed by the Engineer. These controls may include but not limited to: hay bales; silt fences; temporary mulching or other controls necessary to inhibit sediment runoff during construction.
- Trees and shrubs in the public right-of-way which are in direct conflict with the proposed construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with the proposed construction shall be saved and protected from damage. Tree Removal shall be INCIDENTAL to "Site Clearing and Preparation".
- Gravel roads and driveways that are to be removed during construction shall be replaced to pre-construction condition, including landscaping around drives and entrance pipes, as soon as possible to provide access to local residents. Cost to be INCIDENTAL to "Site Restoration".
- The lump sum price bid for furnishing and installing the pump station and miscellaneous appurtenances shall include all costs for furnishing and installing the pump station module as indicated on the site plan, complete in place and in operation. Such lump sum bid price shall include the cost of constructing and/or installing compacted subgrade, concrete pad, power pole, electrical conduit, electrical wiring, disconnect switch, electrical power supply, backup generator, propane fuel supply, piping, earthwork, reinforced concrete valve vault, fiberglass building, compacted fill, finished grading, and any other incidentals necessary to complete the work.
- The Force Main is to be constructed of PVC Pipe C-900, Class 150, or Ductile Iron Pipe, Class 350, that conforms to City of Wichita Specifications and Standards. The directionally drilled portion of the project shall use Certa-Lok C300 or HDPE pipe that also conforms to City of Wichita Specifications and Standards.
- Tracer Wire shall be installed with the Force Mains throughout the Project. See Detail, Sheet 19. Cost to be INCIDENTAL to Pipe Installation.
- The Contractor shall provide appropriate signage for the 4" Force Main as shown on the plans. Cost of installation shall be INCIDENTAL to the bid item "Force Main Warning Signs".
- The Contractor shall comply with all applicable safety regulations and City of Wichita Specifications and Standards.
- The developer for this project is Jay Russell, (316) 722-2417.
- All law/lurf areas disturbed by the construction shall be restored with the same sod as existing. Restoration of disturbed areas shall include, but not limited to, top soil preparation and sodding. All sodding work shall be in accordance with City Standard specifications and the City Administrative Regulations No. AR78, which governs cleanup and restoration or replacement following construction. When the weather/season prevents the installation of the sod, the Contractor shall be responsible for installing Erosion Control Blanket (Curlx, or approved equivalent) along the trench (8' wide minimum). All costs for erosion control mat installation shall be SUBSIDIARY to "Site Restoration".
- The Contractor shall reseed all non-law/lurf areas disturbed by construction with a mixture of Ryegrass (applied at a rate of 200lbs. per acre) and Fescue, Bermuda, or Buffalo grass, depending on the soil conditions (applied per Standard Specifications). Pure Nitrogen fertilizer shall also be applied at a rate of 1.5 lbs. per thousand square feet. The seed shall be watered with deep soaking every two (2) weeks during dry periods until a mature stand of grass is obtained. The permanent seeding may be omitted only if sodding is required in accordance with previous General Note. The Contractor shall be responsible for installing Erosion Control Blanket (Curlx, or approved equal), at the back of curb, to and including the limits of the seeded areas. All costs for this work shall be SUBSIDIARY to the bid item "Permanent Seeding".

WILDCAT CONSTRUCTION - CONTRACTOR  
M. THOM - CITY OF WICHITA, INSPECTOR  
AS-BUILT  
STUBS  
FINAL ACCEPTANCE DATE: 03/16/2009  
PDF: APR 05/12/2009





Reseed 1100 L.F. According to General Note 19 as Measured Along the Sewer Line from Sta. 0+00 to Sta. 11+00.



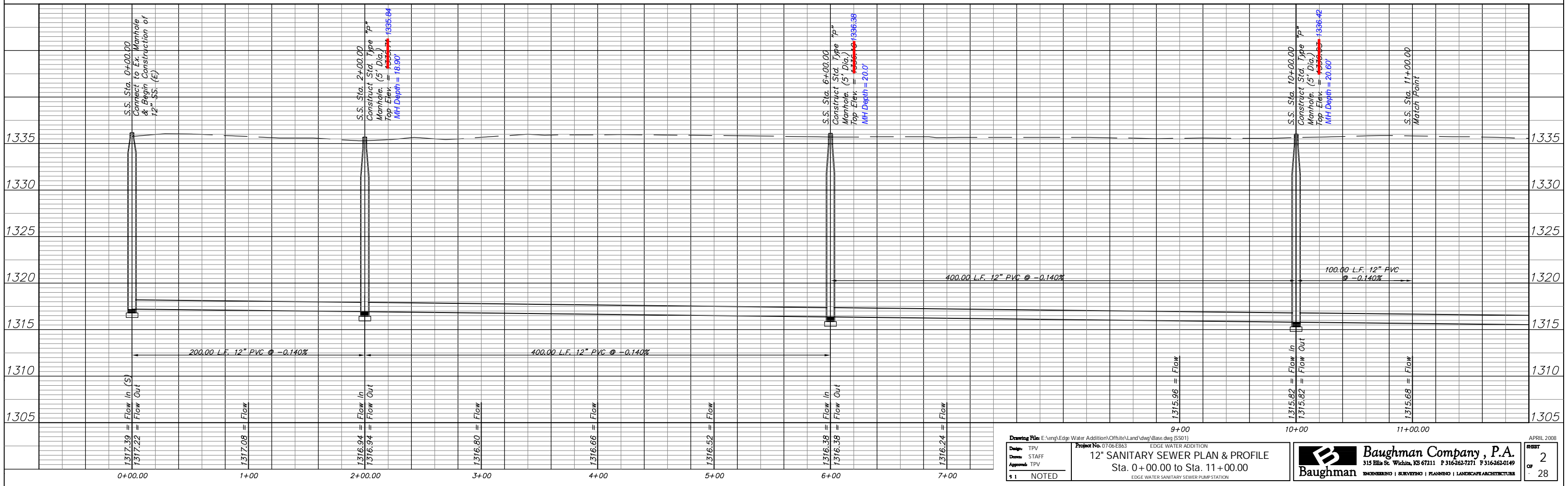
Sta 46+78.41  
5052-002

Sta 44+78.41  
5052-072

Sta 40+78.41  
5052-071

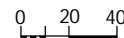
Sta 36+78.41  
5052-070

Revised 9-16-08 TPV  
Moved SS Line 5' North of PL

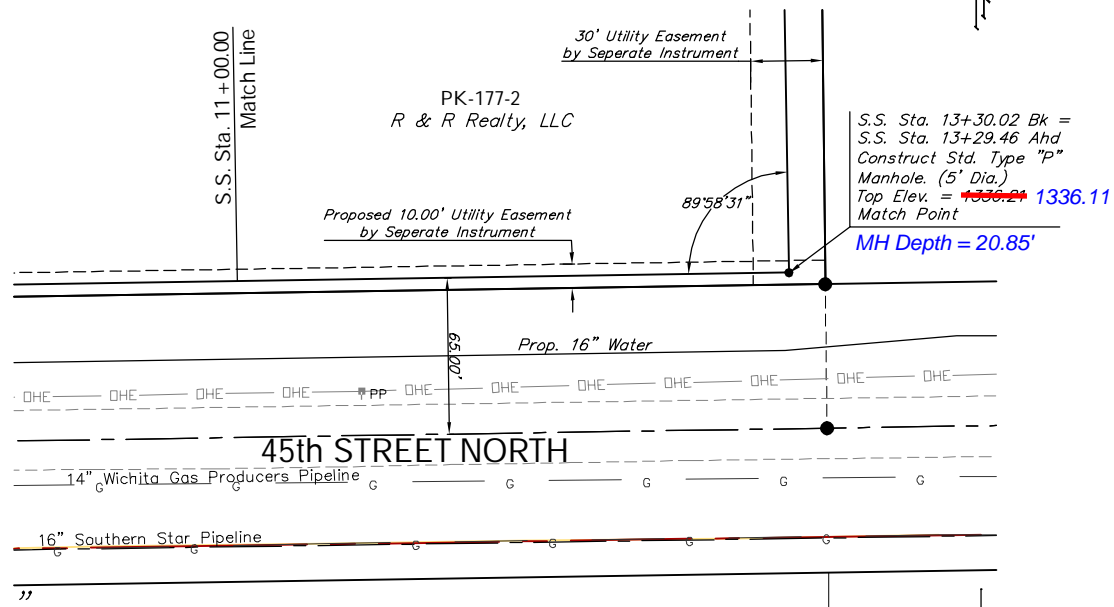


Drawing File: E:\eng\Edge Water Addition\Offsite\Land\dwg\Bse.dwg (SS01) Design: TPV Design: STAFF Approvers: TPV 1 NOTED	Project No. 0706-EB63 <b>12" SANITARY SEWER PLAN &amp; PROFILE</b> Sta. 0+00.00 to Sta. 11+00.00 EDGE WATER SANITARY SEWER PUMP STATION	<b>Baughman Company, P.A.</b> 315 Ella St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING   SURVEYING   PLANNING   LANDSCAPE ARCHITECTURE	APRIL 2008 SHEET <b>2</b> OF <b>28</b>
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Reseed 230 L.F. According to General Note 19 as Measured Along the Sewer Line from Sta. 11+00 to Sta. 13+30.



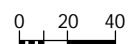
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1" = 5' Vertical



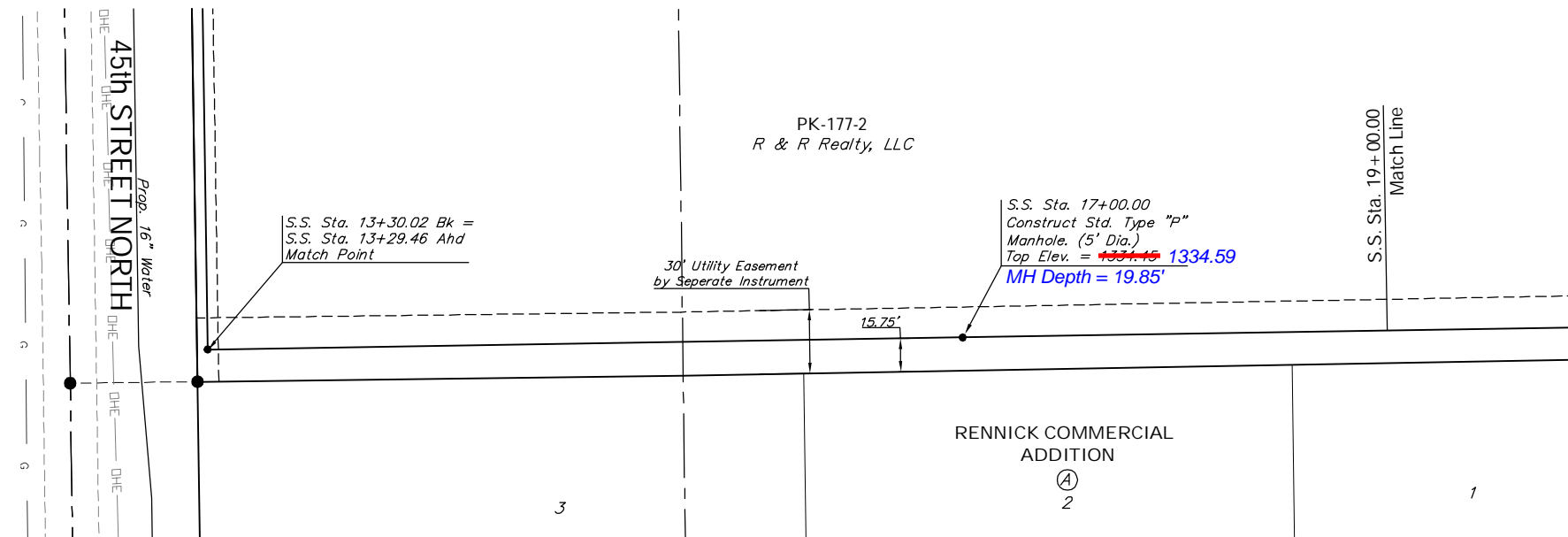
Sta 33+48.39  
5052-069

Revised 9-16-08 TPV  
Moved SS Line 5' North of PL

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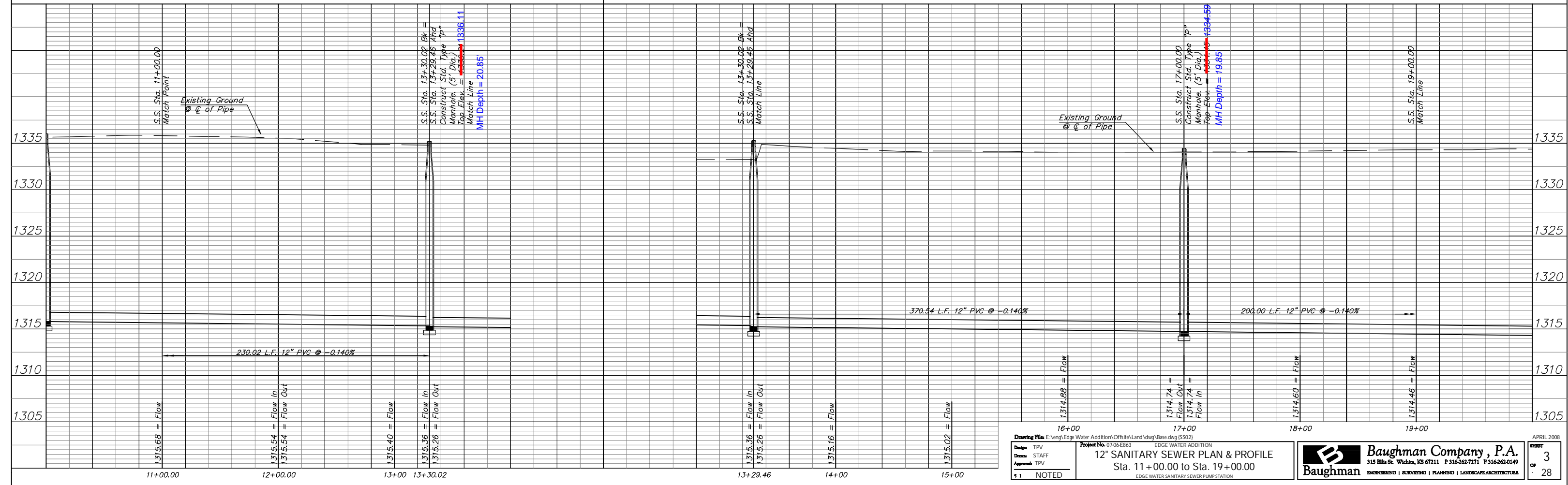


SCALE:  
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1" = 5' Vertical



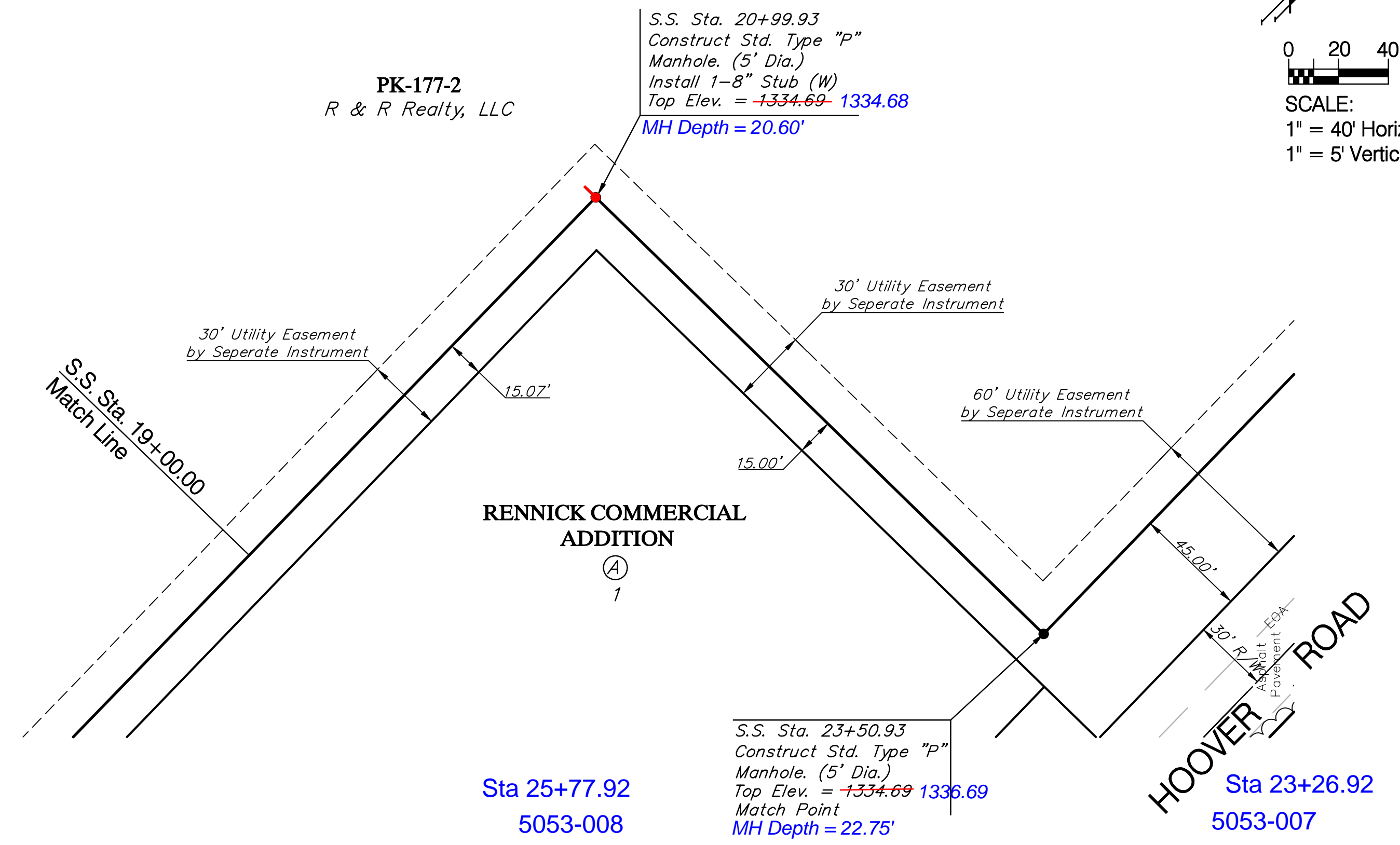
Sta 33+48.39  
5052-069

Sta 29+77.85  
5053-009



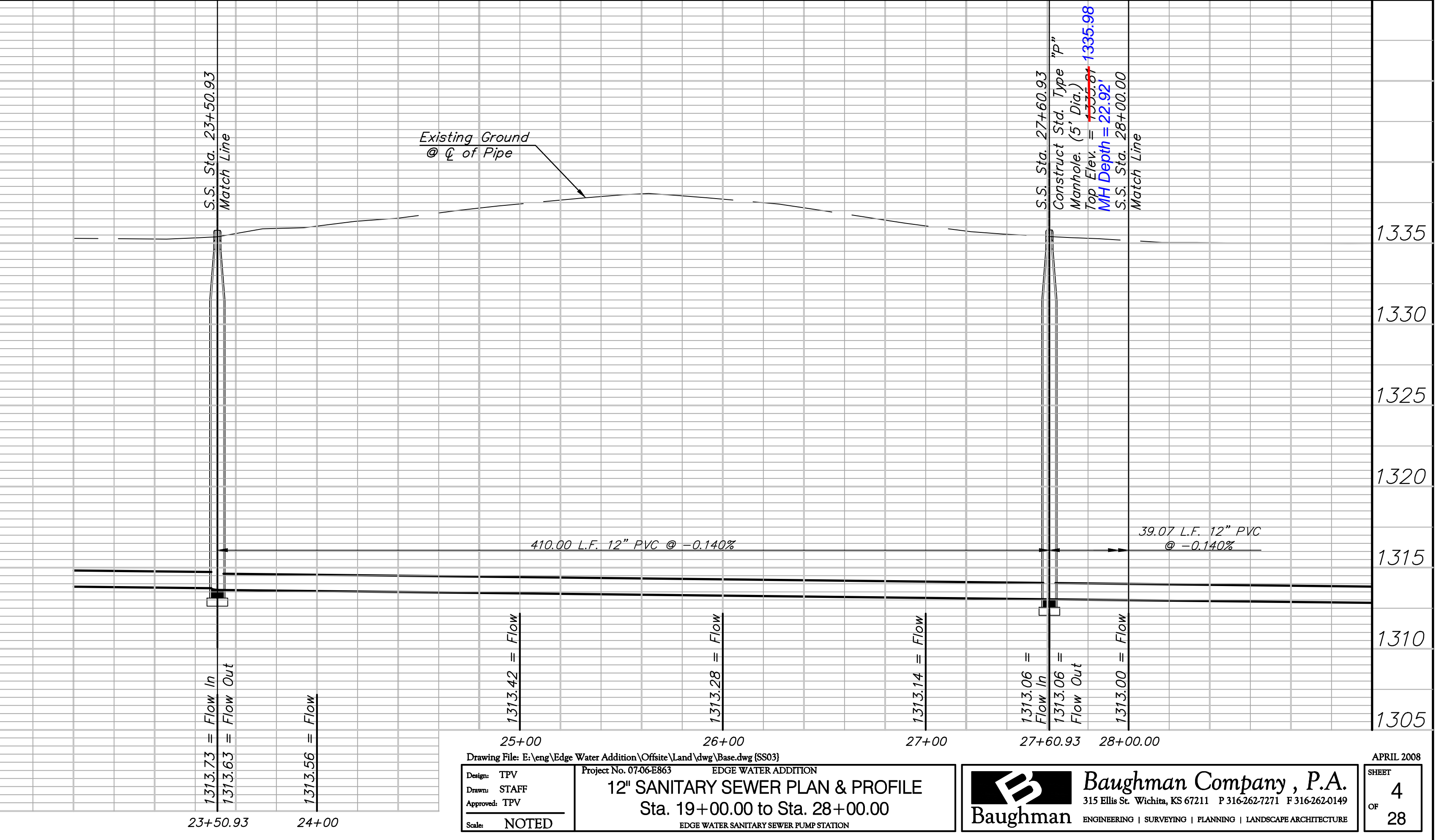
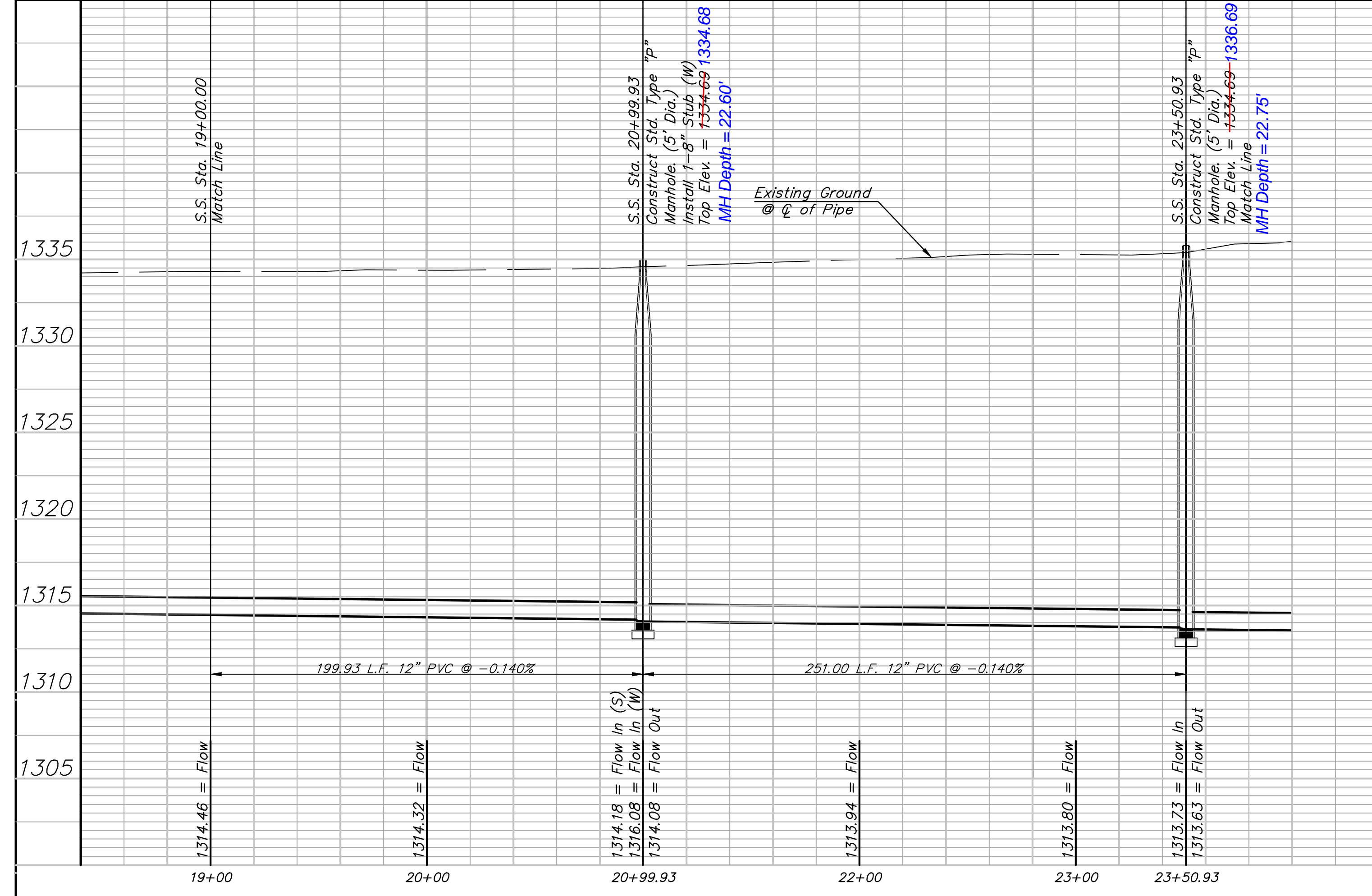
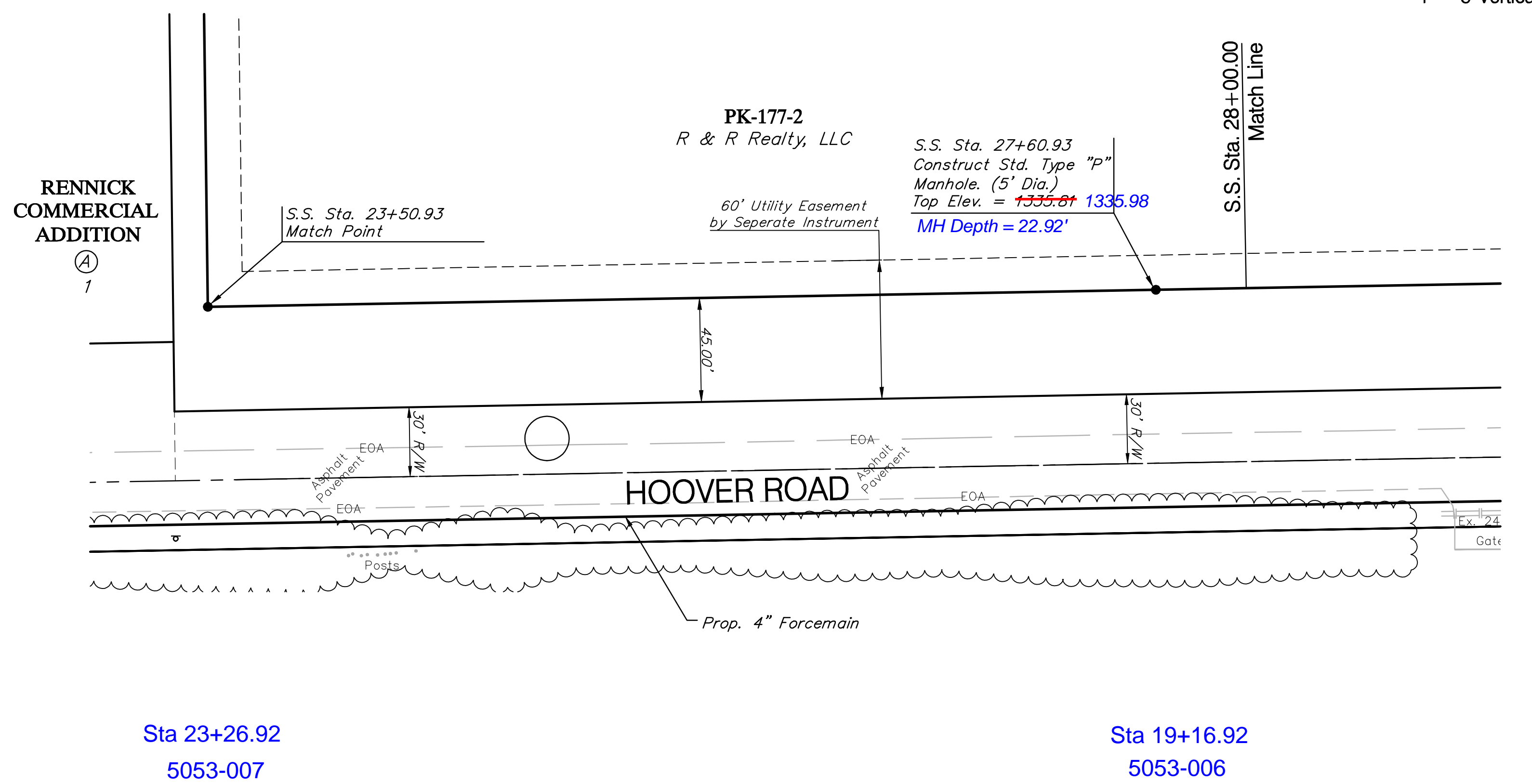
Reseed 451 L.F. According to General Note 19 as Measured Along the Sewer Line from Sta. 19+00 to Sta. 23+51.

0 20 40  
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1" = 5' Vertical

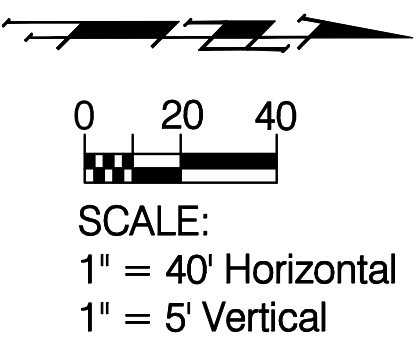


Reseed 449 L.F. According to General Note 19 as Measured Along the Sewer Line from Sta. 23+51 to Sta. 28+00.

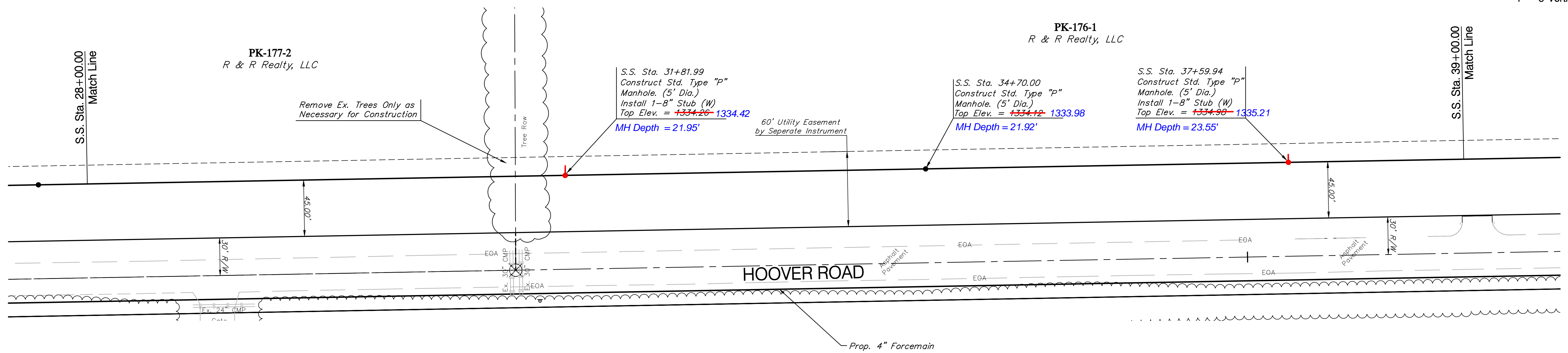
0 20 40  
SCALE:  
1" = 40' Horizontal  
1" = 5' Vertical



Drawing File: E:\eng\Edge Water Addition\Offsite\Land\dwg\Basc.dwg (SS03)		APRIL 2008	
Design: TPV	Project No. 07-06-E863	EDGE WATER ADDITION	
Drawn: STAFF	12" SANITARY SEWER PLAN & PROFILE		
Approved: TPV	Sta. 19+00.00 to Sta. 28+00.00		
Scale: NOTED	EDGE WATER SANITARY SEWER PUMP STATION		
		Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING   SURVEYING   PLANNING   LANDSCAPE ARCHITECTURE	
		SHEET 4 OF 28	



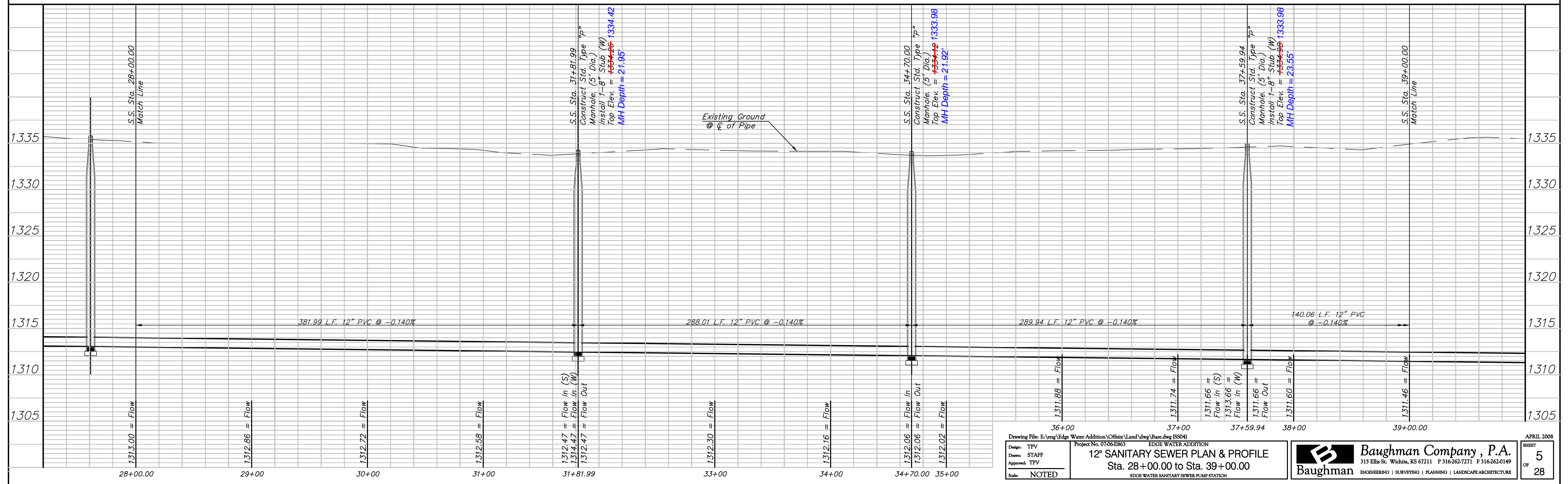
Reseed 1100 L.F. According to General Note 19 as Measured Along the Sewer Line from Sta. 28+00 to Sta. 39+00.



Sta 14+95.86  
5053-005

Sta 12+07.85  
5053-004

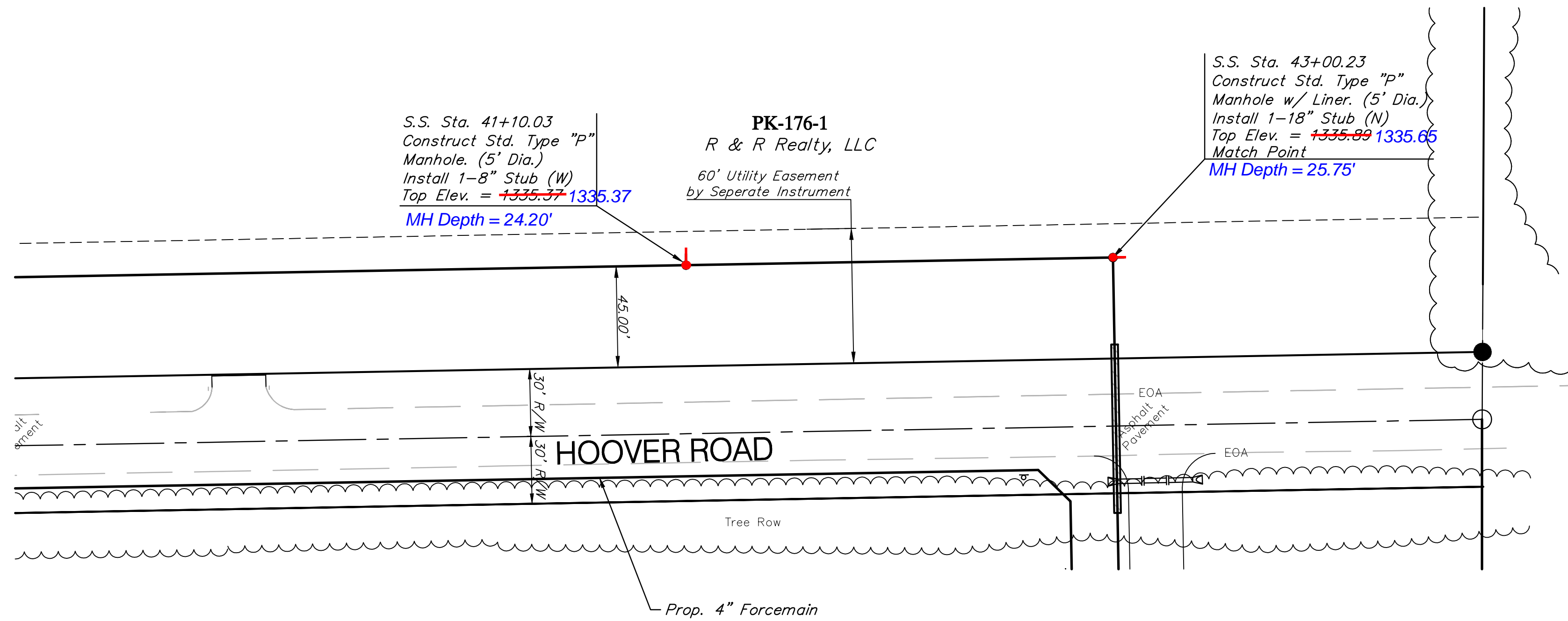
Sta 9+17.91  
5053-003



Drawing File: E:\eng\Edge Water Addition\Offsite\Land\dwg\Base.dwg (SS04) Project No. 07-06-E863 Design: TPV Drawn: STAFF Approved: TPV Scale: NOTED		EDGE WATER ADDITION <b>12" SANITARY SEWER PLAN &amp; PROFILE</b> Sta. 28+00.00 to Sta. 39+00.00 EDGE WATER SANITARY SEWER PUMP STATION		<b>Baughman Company, P.A.</b> 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING   SURVEYING   PLANNING   LANDSCAPE ARCHITECTURE		APRIL 2008 SHEET <b>5</b> OF <b>28</b>
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Reseed 440 L.F. According to General Note 19 as Measured Along the Sewer Line from Sta. 39+00 to Sta. 43+40.

SCALE:  
1" = 40' Horizontal  
1" = 5' Vertical



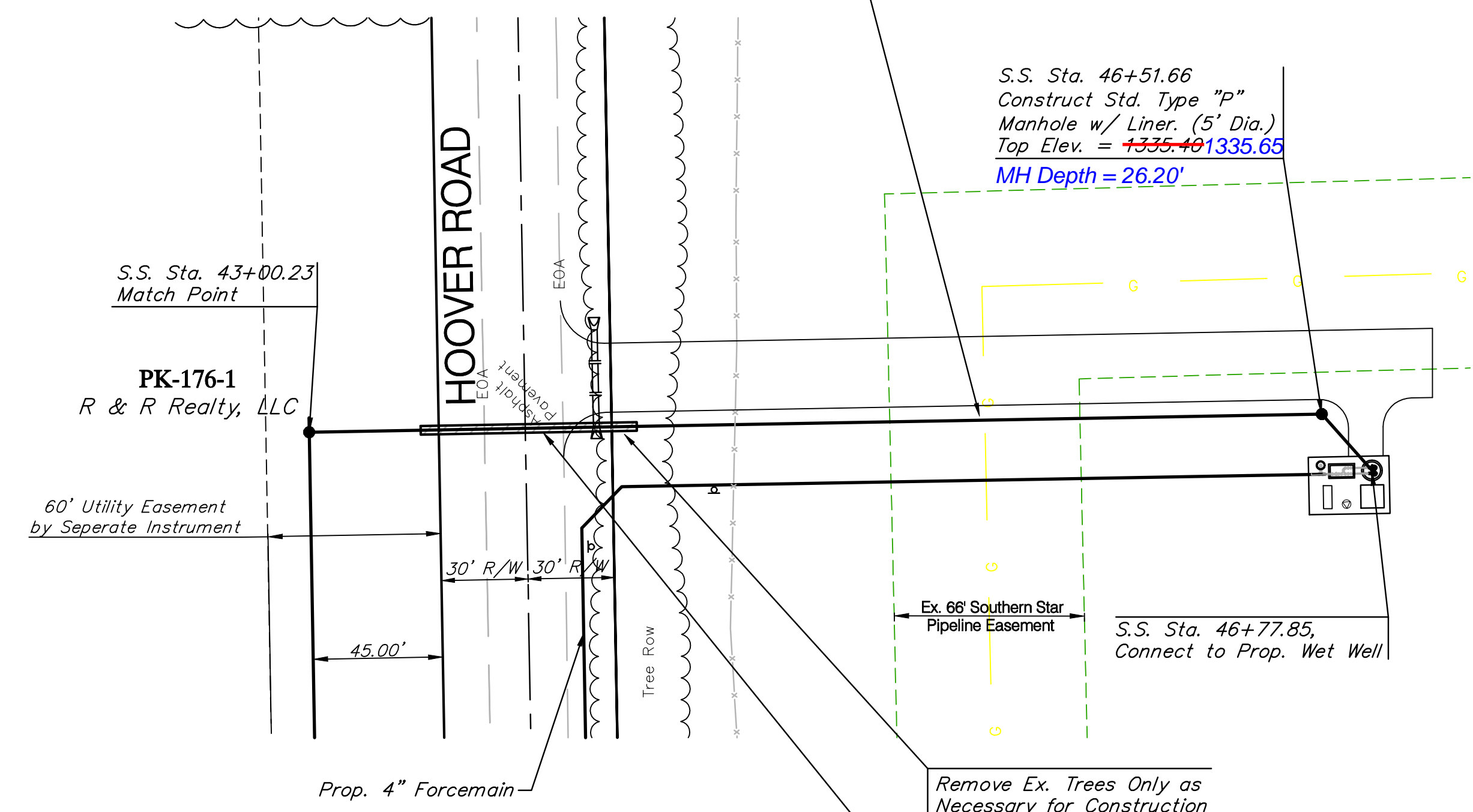
Sta 5+67.82  
5053-002

Sta 3+77.62  
5053-001

Reseed 240 L.F. According to General Note 19 as Measured Along the Sewer Line from Sta. 44+15 to Sta. 46+55.

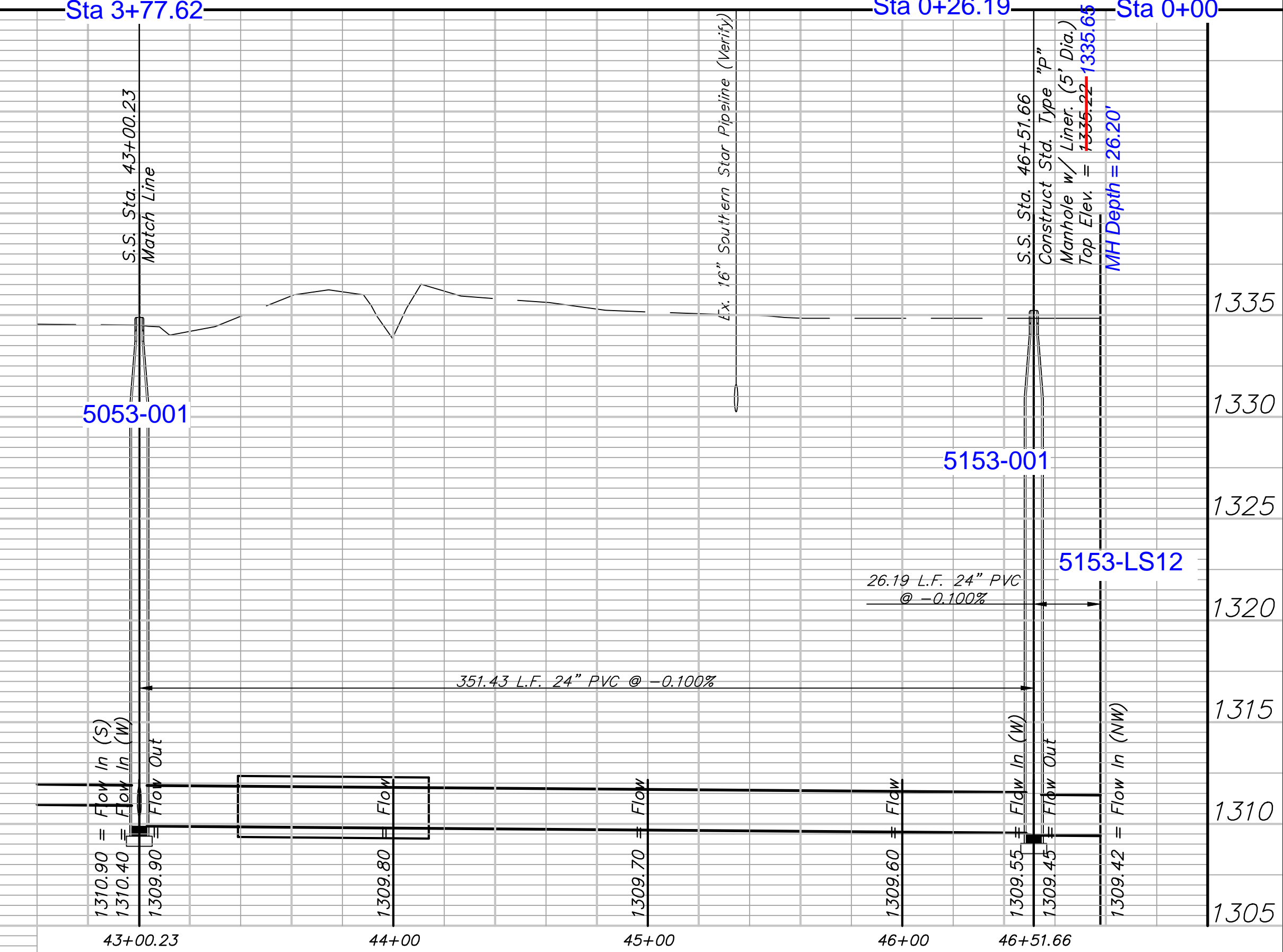
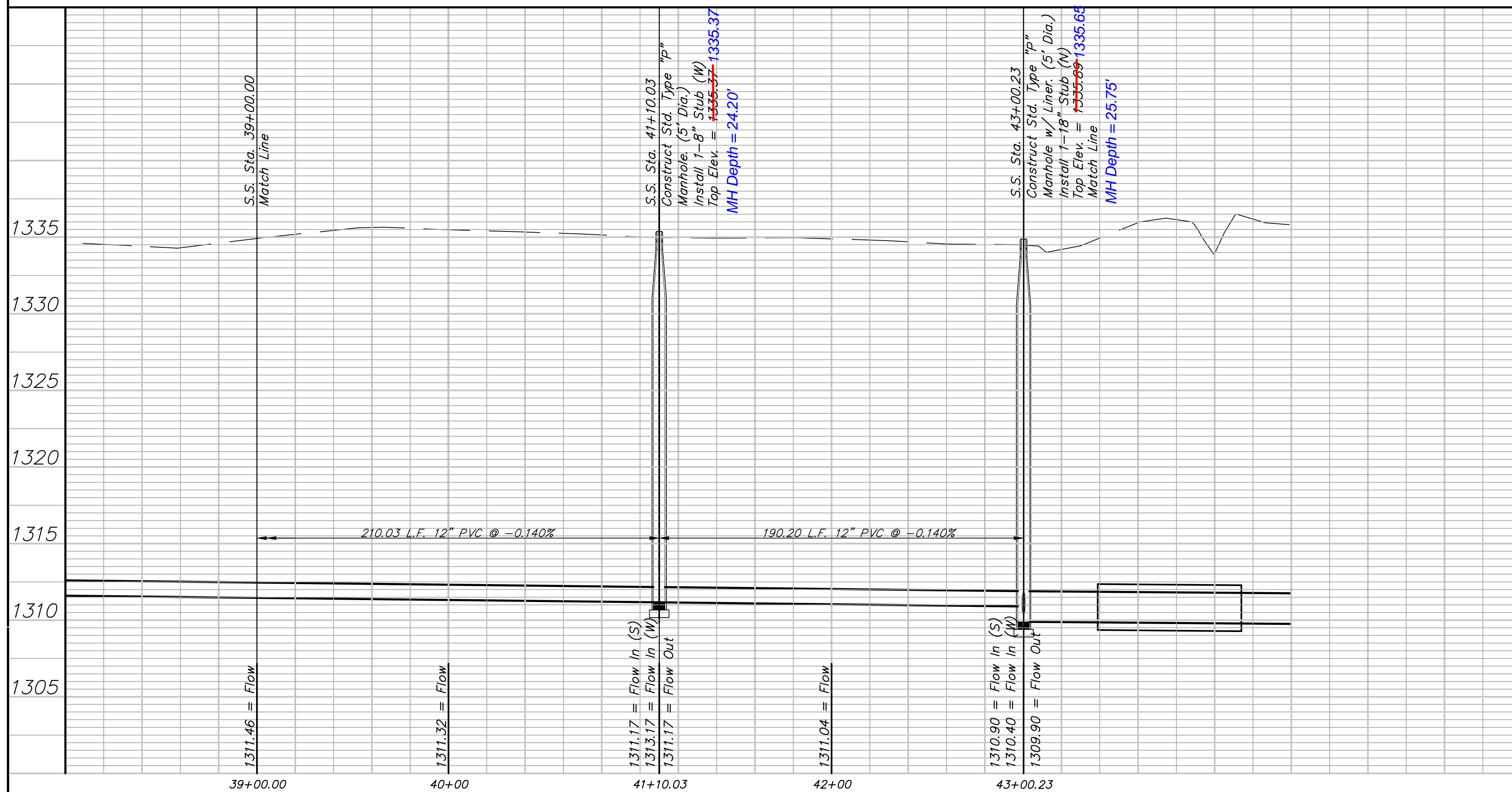
CAUTION! Southern Star 16" Pipeline Crossing. Contractor to Contact Terry Blanding at 529-6622 at least 2 weeks prior to Construction.

SCALE:  
1" = 40' Horizontal  
1" = 5' Vertical



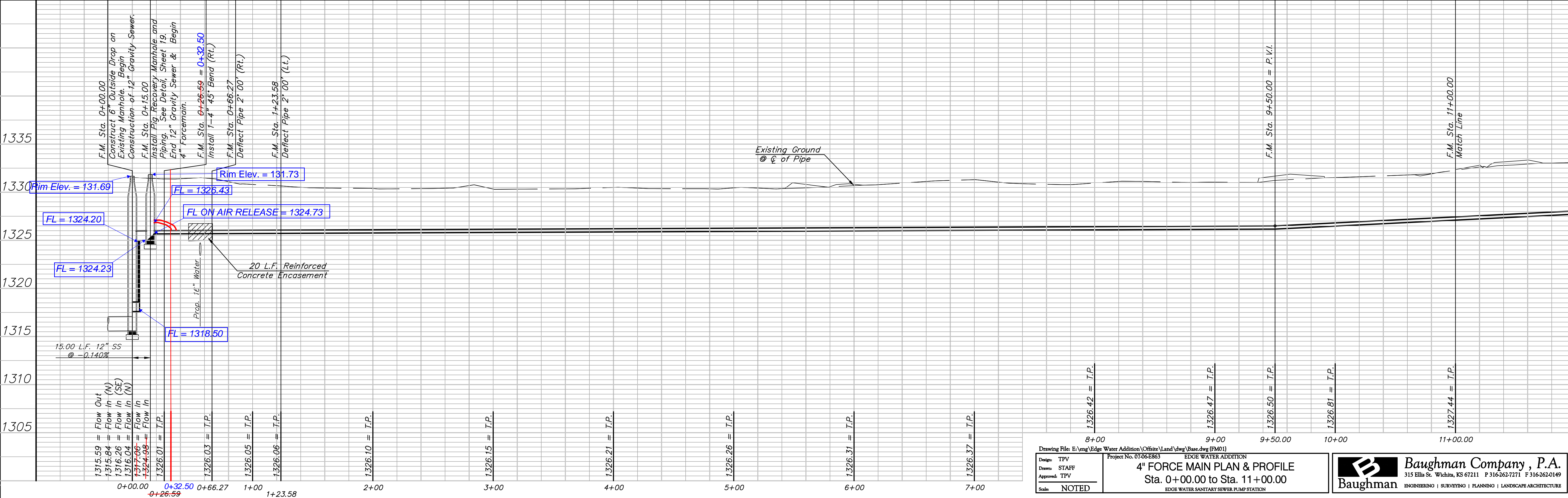
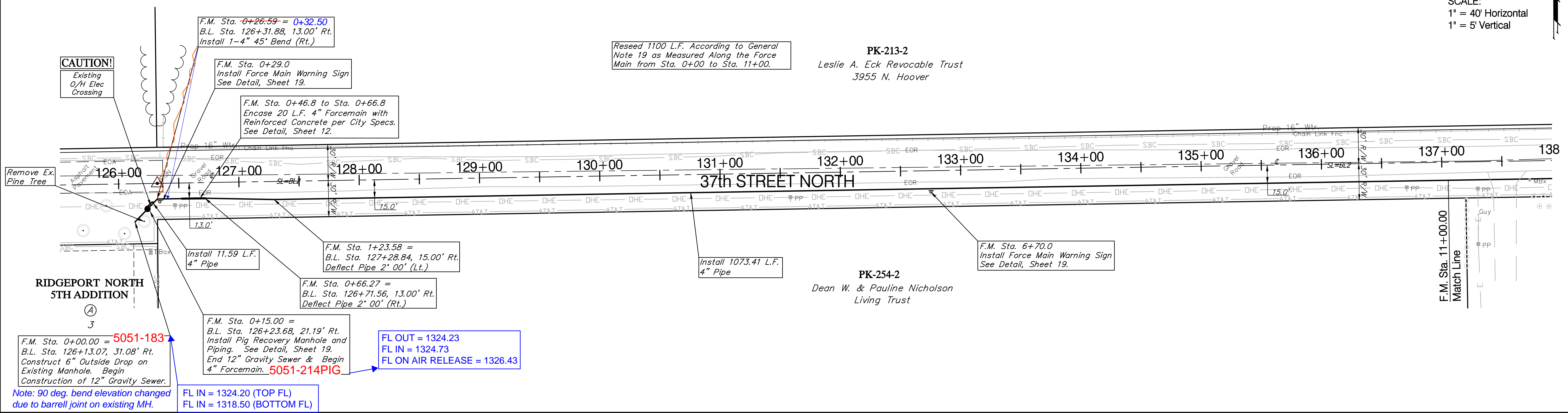
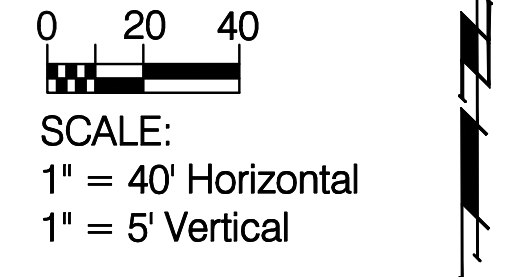
Sta 3+77.62

Sta 0+26.19  
Sta 0+00

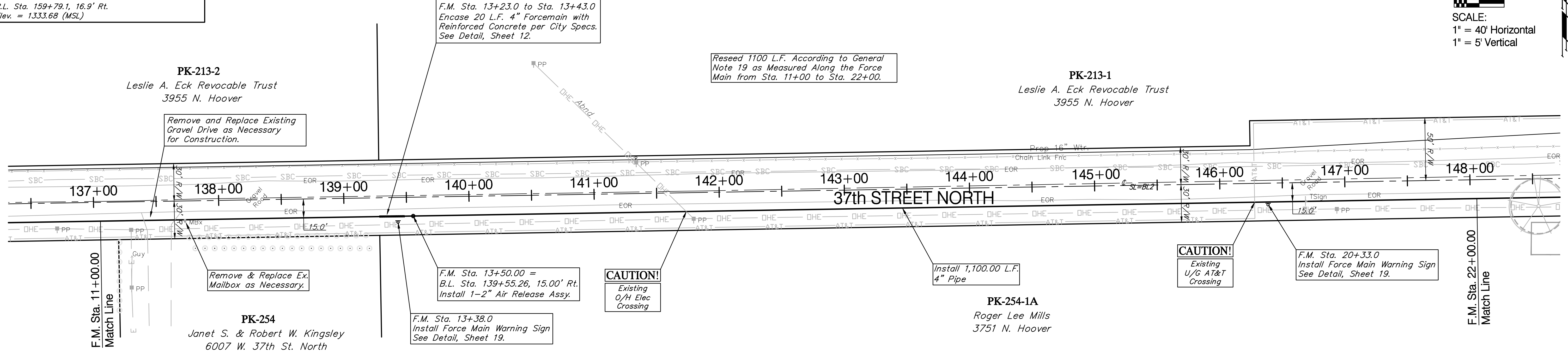
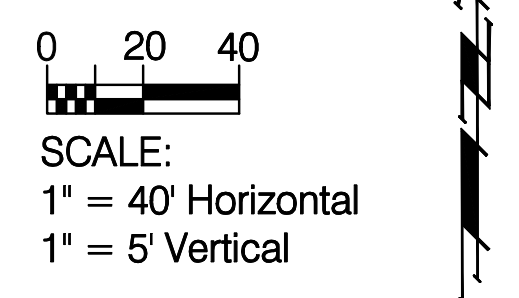


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Design: TPV	Drawn: STAFF	12" SANITARY SEWER PLAN & PROFILE			
Approved: TPV	Scale: NOTED	Sta. 39+00 to Sta. 46+51.66			
		EDGE WATER SANITARY SEWER PUMP STATION		Baughman Company, P.A.	
				315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149	
				APRIL 2008	
				SHEET 6 OF 28	

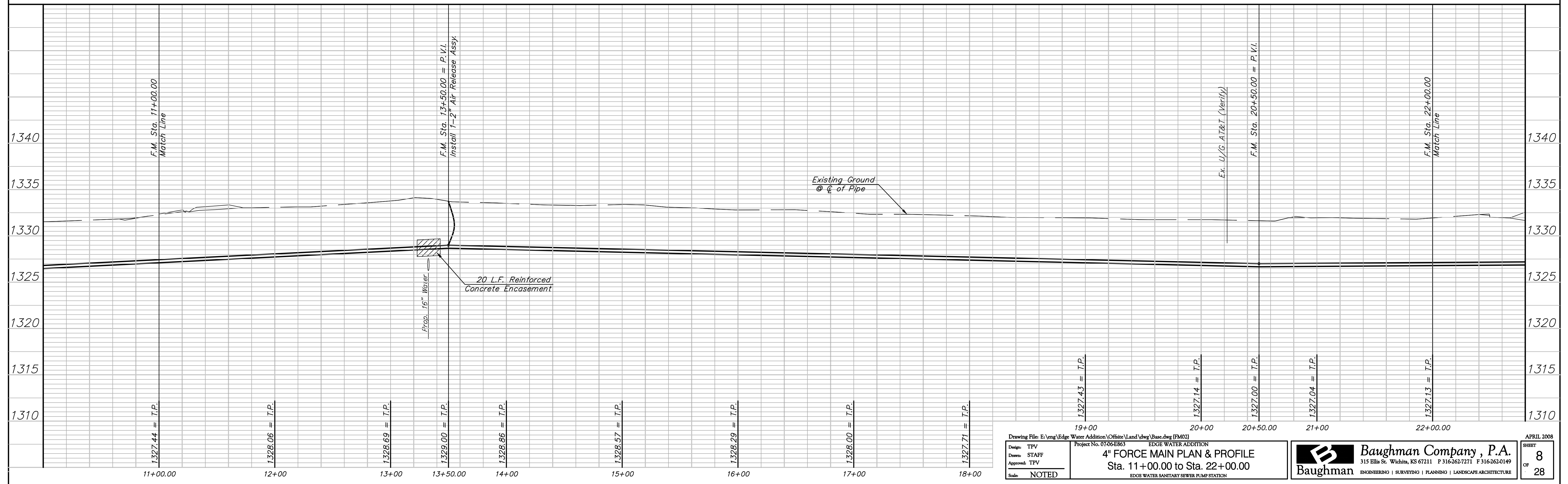
**BENCHMARK:**  
 BM #6 - North Rim of Sanitary Sewer Manhole 100' East and 54' South of the Centerlines of Ridge Port and 37th St North.  
 B.L. Sta. 124+12.5, 45.9' Rt.  
 Elev. = 1332.71 (MSL)



**BENCHMARK:**  
 BM #6 - North Rim of Sanitary Sewer Manhole 100' East and 54' South of the Centerlines of Ridge Port and 37th St North.  
 B.L. Sta. 124+12.5, 45.9' Rt.  
 Elev. = 1332.71 (MSL)  
 BM #5 - COW Benchmark 17.2' South and 48.0' West of the Centerlines of 37th St. North and Hoover Road.  
 B.L. Sta. 159+79.1, 16.9' Rt.  
 Elev. = 1333.68 (MSL)



5051-215AR



Design: TPV Drawn: STAFF Approved: TPV Scale: NOTED	Drawing File: E:\eng\Edge Water Addition\Offsite\Land\dwg\Base.dwg (FM02) Project No. 07-06-E863 <b>4" FORCE MAIN PLAN &amp; PROFILE</b> Sta. 11+00.00 to Sta. 22+00.00 EDGE WATER SANITARY SEWER PUMP STATION	<b>Baughman Company, P.A.</b> 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING   SURVEYING   PLANNING   LANDSCAPE ARCHITECTURE	APRIL 2008 SHEET <b>8</b> OF <b>28</b>
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**BENCHMARK:**  
 BM #5 - COW Benchmark 17.2' South and 48.0' West of the Centerlines of 37th St. North and Hoover Road.  
 B.L. Sta. 159+79.1, 16.9' Rt.  
 Elev. = 1333.68 (MSL)

Reseed 400 L.F. According to General Note 19 as Measured Along the Force Main from Sta. 22+00 to Sta. 26+00.

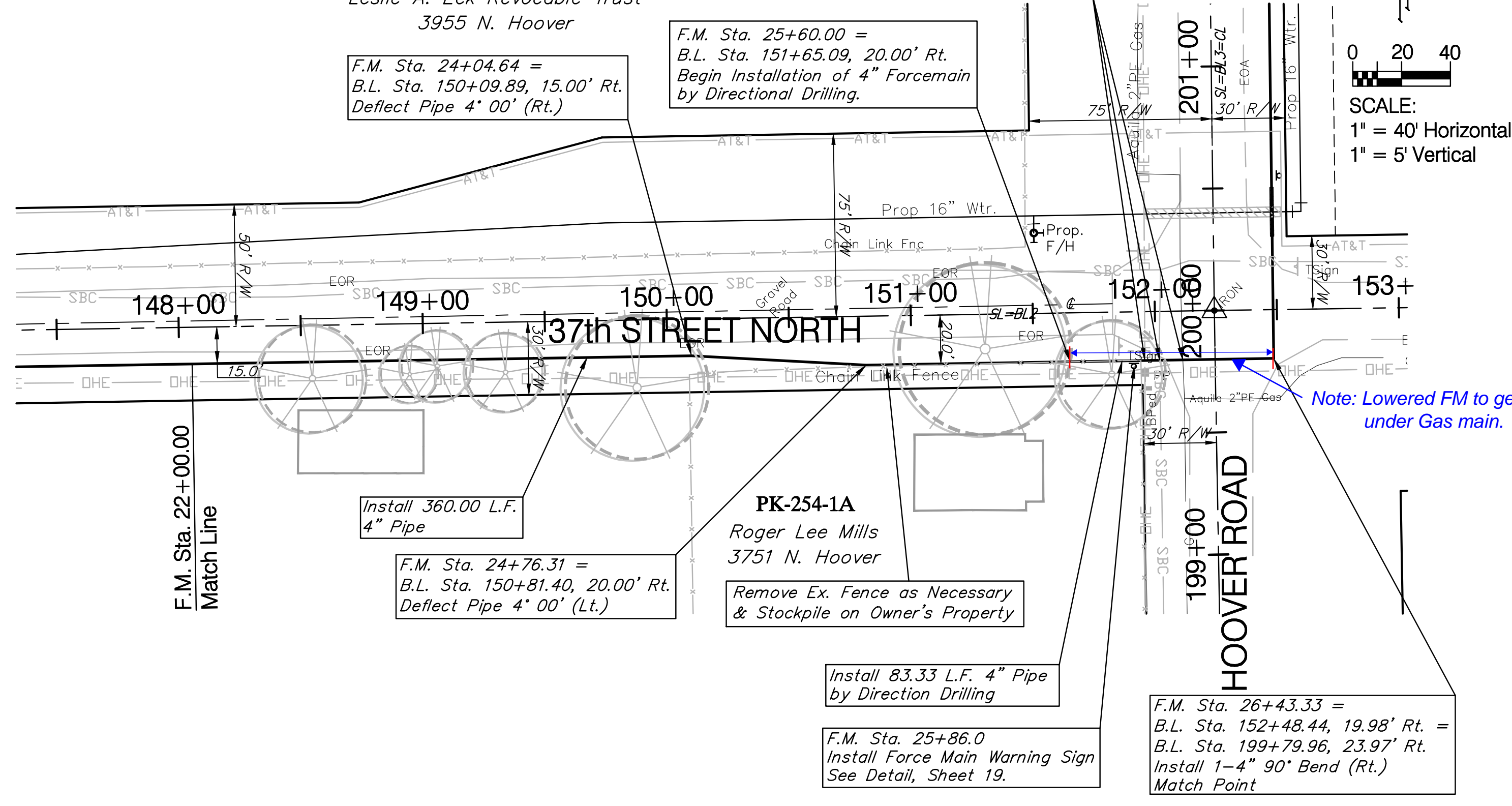
**CAUTION!**  
 Existing O/H Elec U/G AT&T 2" Gas Crossings

**PK-213-1**  
 Leslie A. Eck Revocable Trust  
 3955 N. Hoover

F.M. Sta. 24+04.64 = B.L. Sta. 150+09.89, 15.00' Rt. Deflect Pipe 4' 00' (Rt.)

F.M. Sta. 25+60.00 = B.L. Sta. 151+65.09, 20.00' Rt. Begin Installation of 4" Forcemain by Directional Drilling.

SCALE:  
 1" = 40' Horizontal  
 1" = 5' Vertical

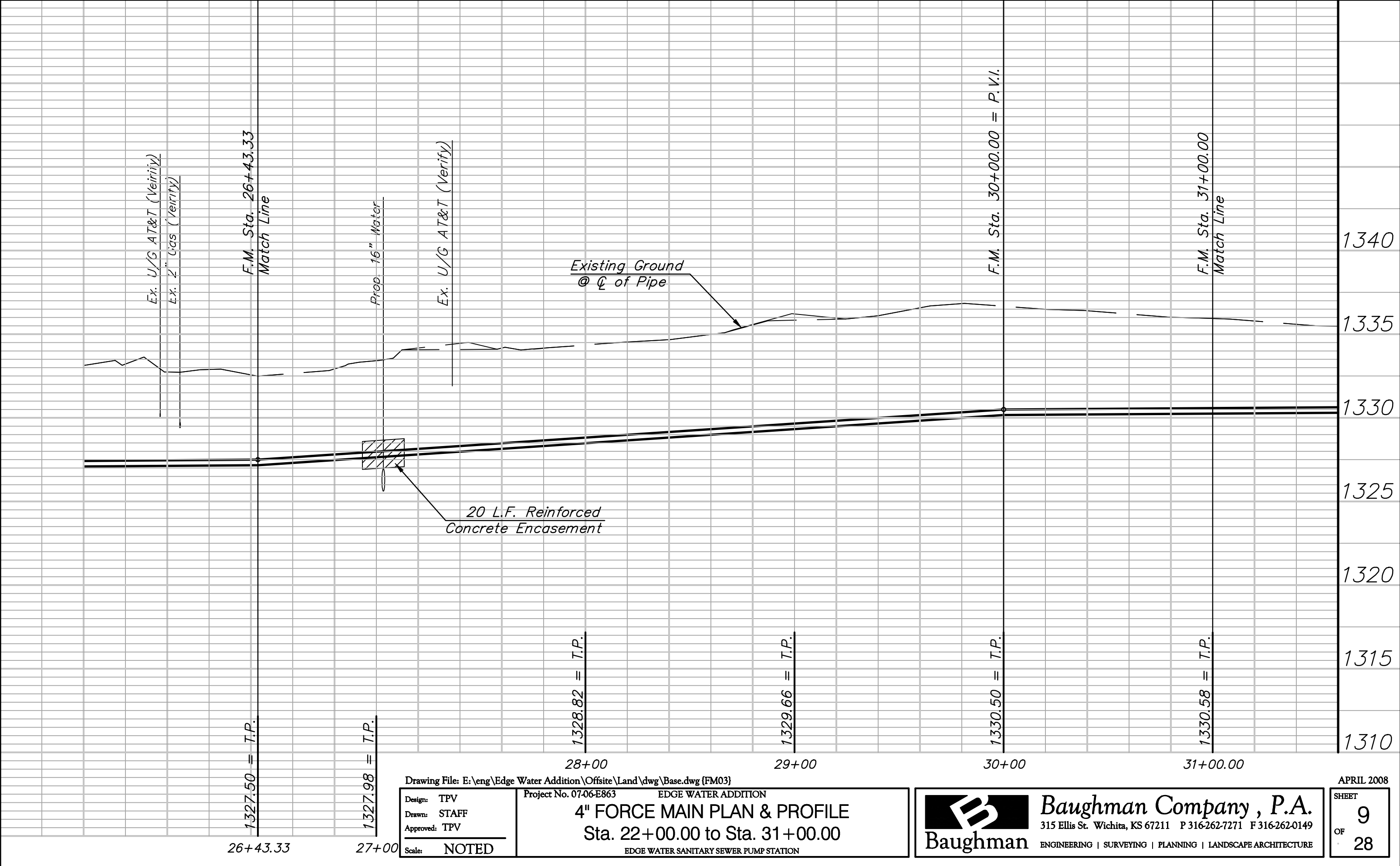
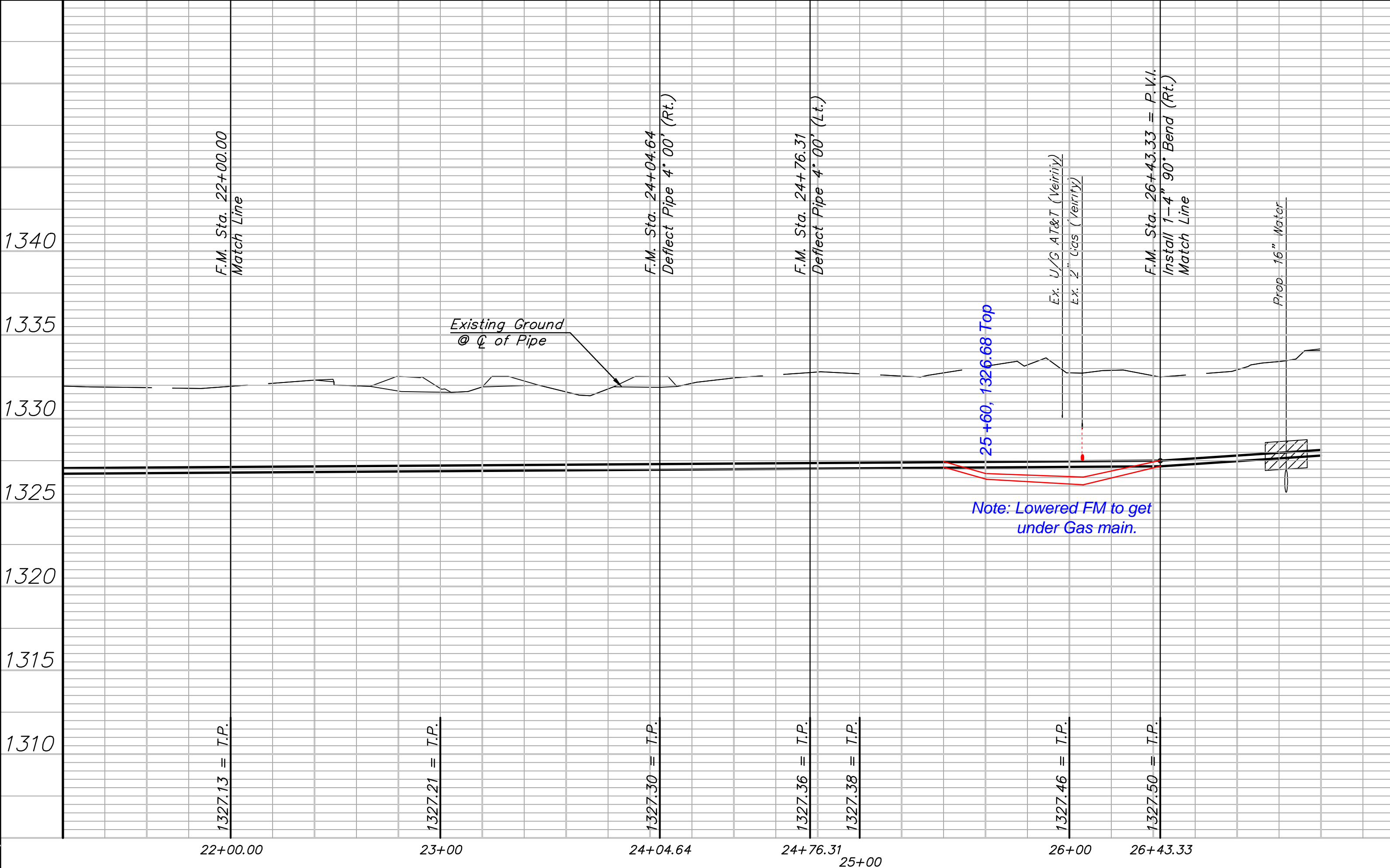
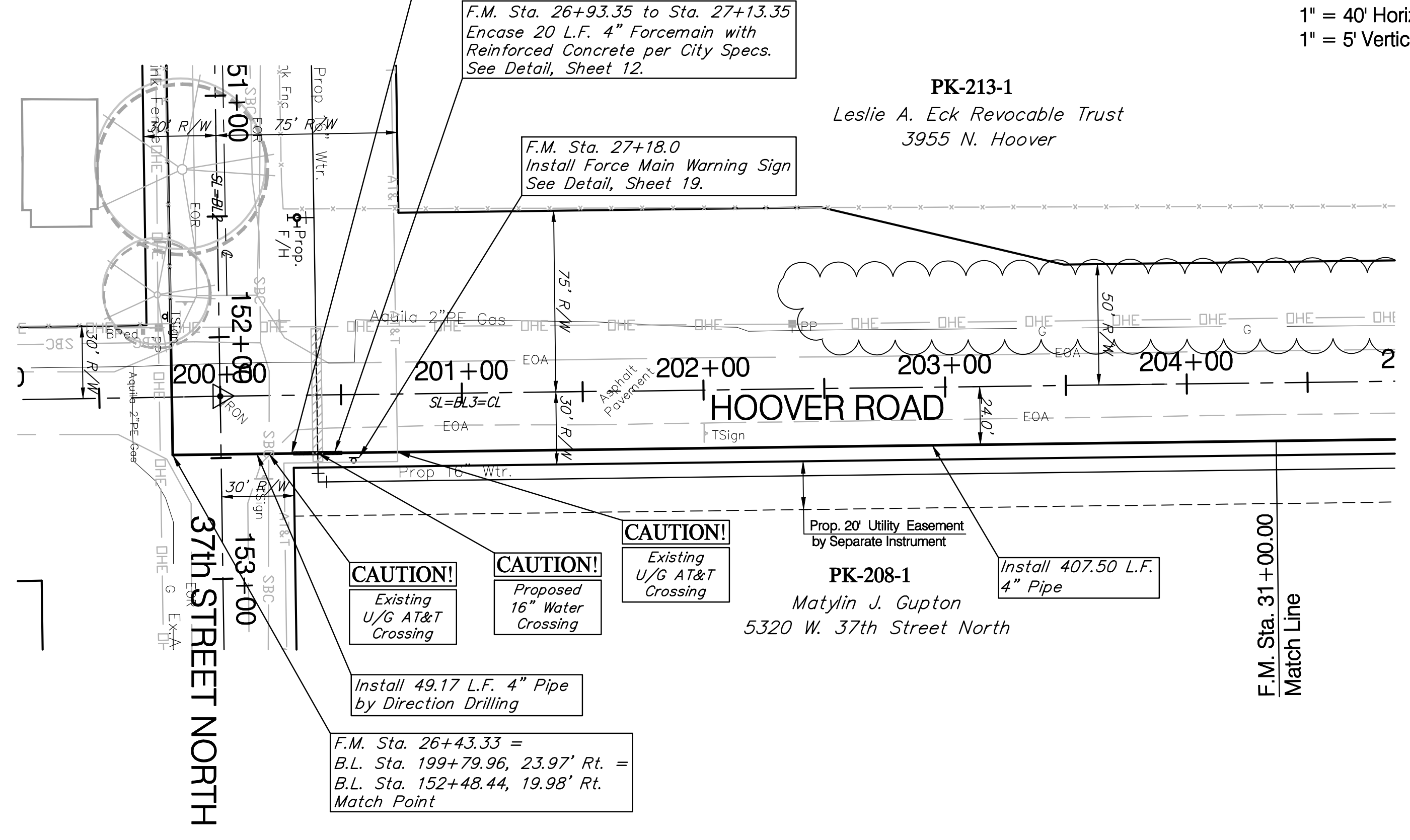


**BENCHMARK:**  
 BM #5 - COW Benchmark 17.2' South and 48.0' West of the Centerlines of 37th St. North and Hoover Road.  
 B.L. Sta. 159+79.1, 16.9' Rt.  
 Elev. = 1333.68 (MSL)

F.M. Sta. 26+92.50 = B.L. Sta. 151+65.09, 20.00' Rt. End Installation of 4" Forcemain by Directional Drilling.

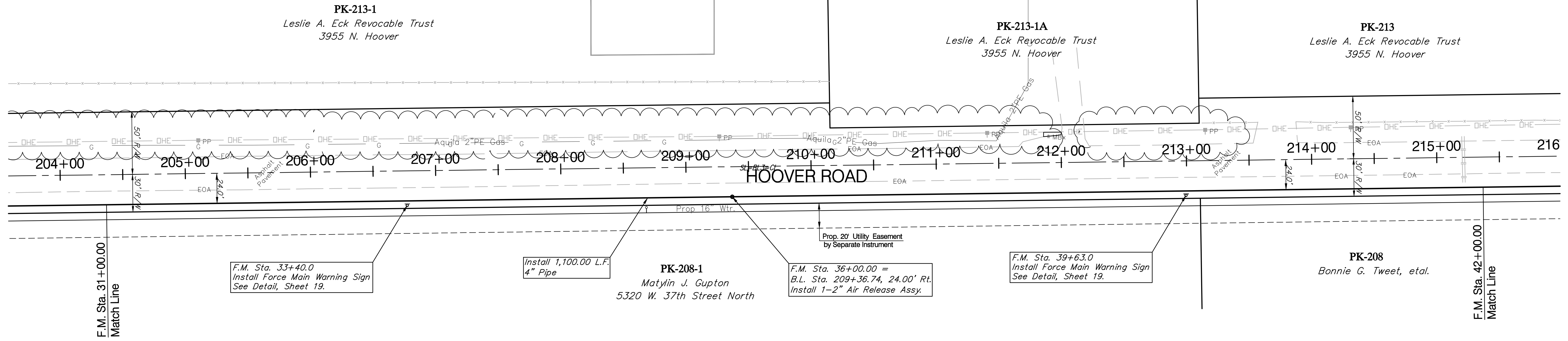
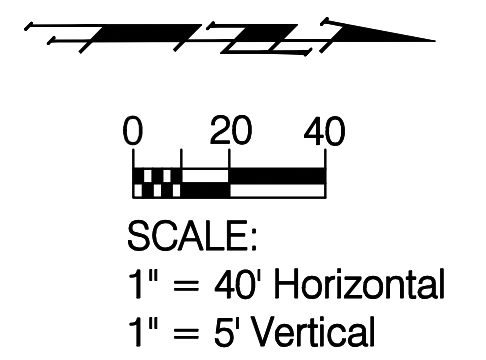
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SCALE:  
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 1" = 5' Vertical

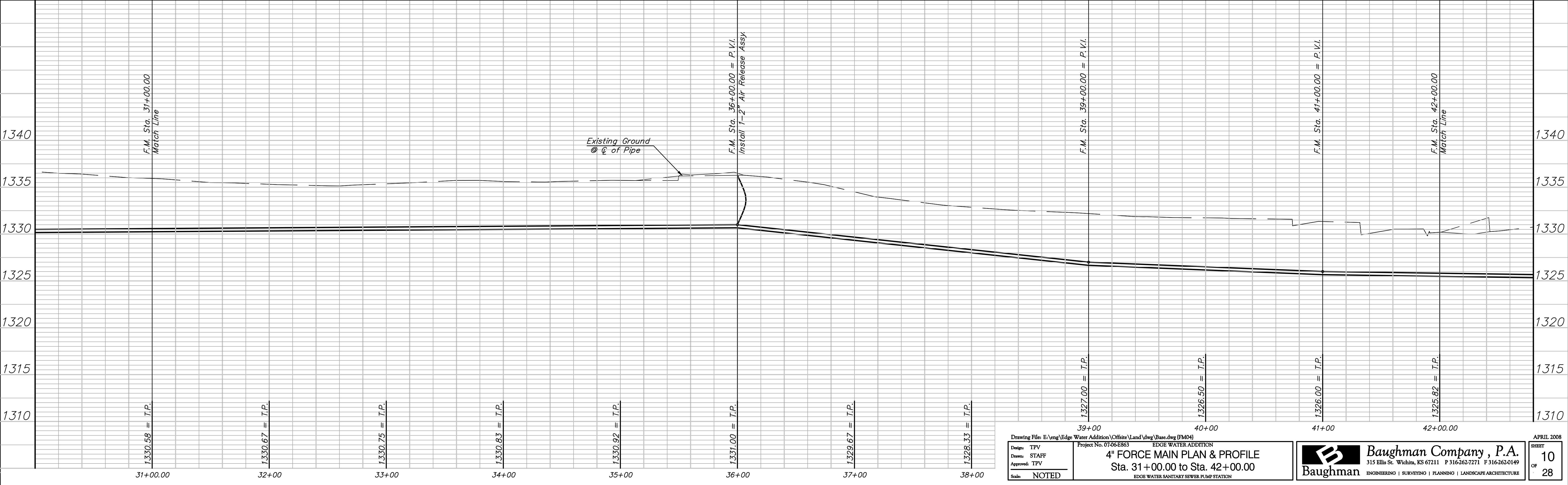


**BENCHMARK:**  
 BM #5 - COW Benchmark 17.2' South and 48.0' West of the Centerlines of 37th St. North and Hoover Road.  
 B.L. Sta. 159+79.1, 16.9' Rt.  
 Elev. = 1333.68 (MSL)

Reseed 1100 L.F. According to General Note 19 as Measured Along the Force Main from Sta. 31+00 to Sta. 42+00.



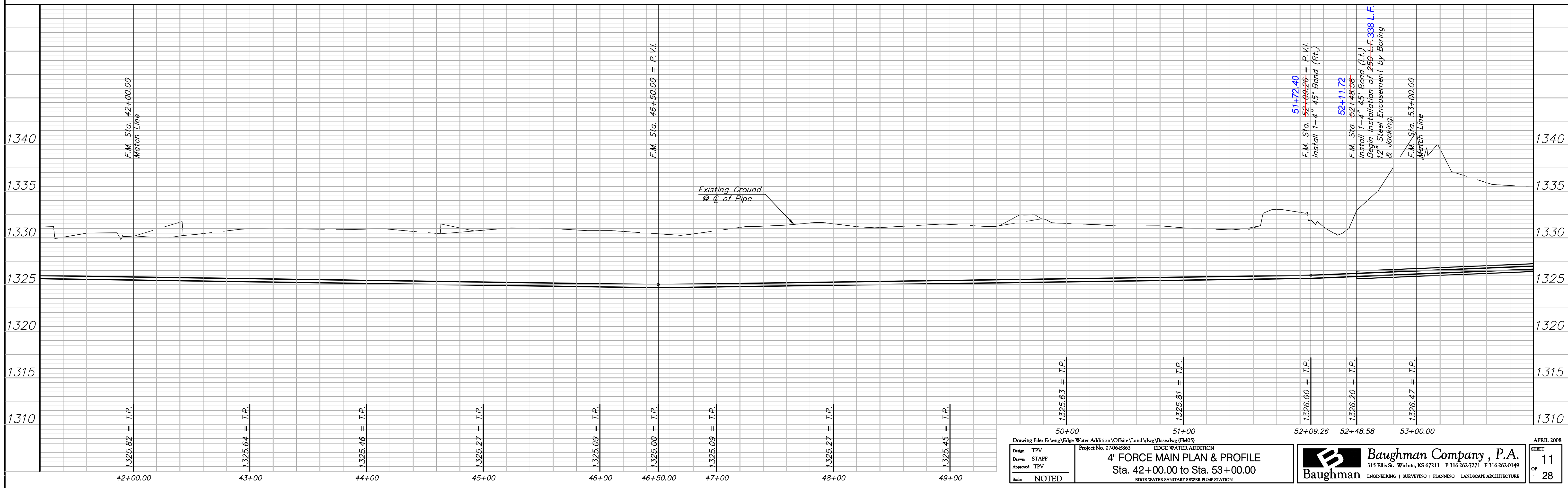
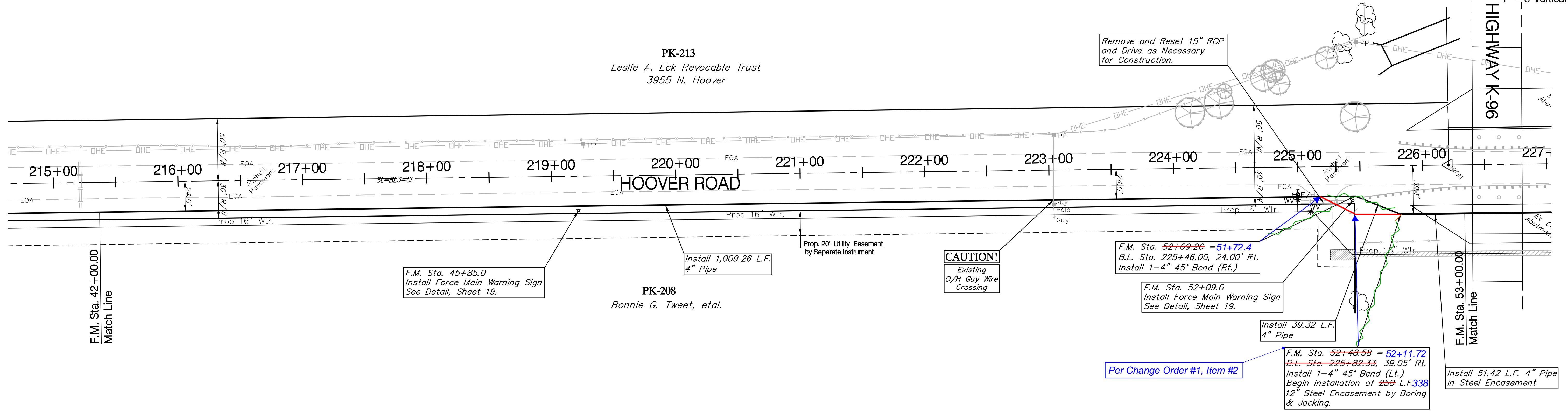
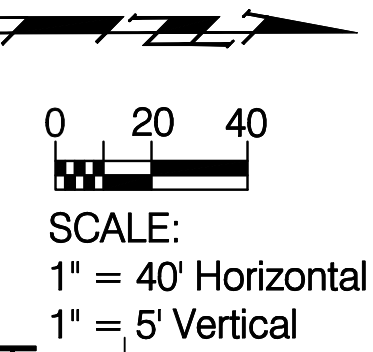
5152-001AR



Drawing File: E:\eng\Edge Water Addition\Offsite\Land\dwg\Base.dwg (FM04) Project No. 07-06-EB63 EDGE WATER ADDITION		<b>Baughman Company, P.A.</b> 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING   SURVEYING   PLANNING   LANDSCAPE ARCHITECTURE	APRIL 2008 SHEET <b>10</b> OF <b>28</b>
Design: TPV Drawn: STAFF Approved: TPV Scale: NOTED	<b>4" FORCE MAIN PLAN &amp; PROFILE</b> Sta. 31+00.00 to Sta. 42+00.00 EDGE WATER SANITARY SEWER PUMP STATION		

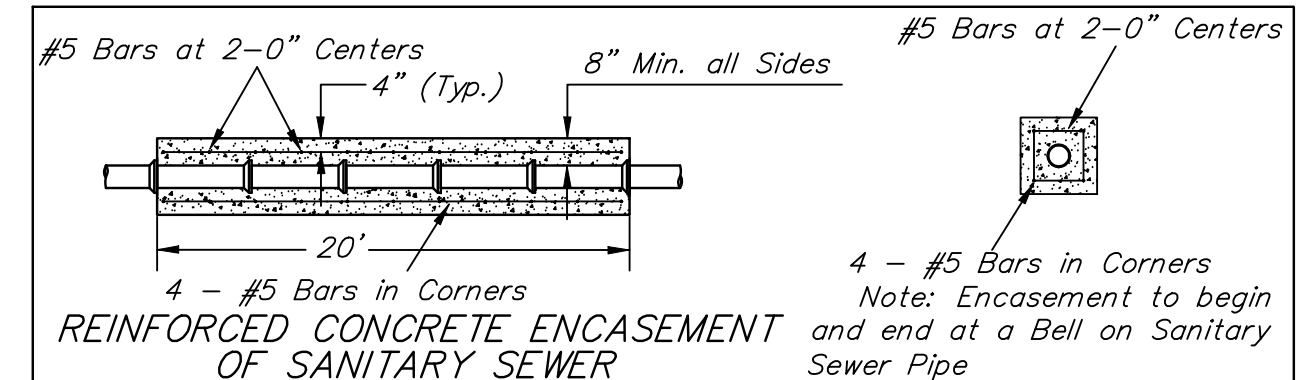
**BENCHMARK:**  
 BM #4 - COW Benchmark the North R/W of K-96 Highway  
 and 42.5' West of the Centerline of Hoover Road.  
 B.L. Sta. 228+60.3, 39.9' Lt.  
 Elev. = 1333.14 (MSL)

Reseed 1049 L.F. According to General  
 Note 19 as Measured Along the Force  
 Main from Sta. 42+00 to Sta. 52+49.

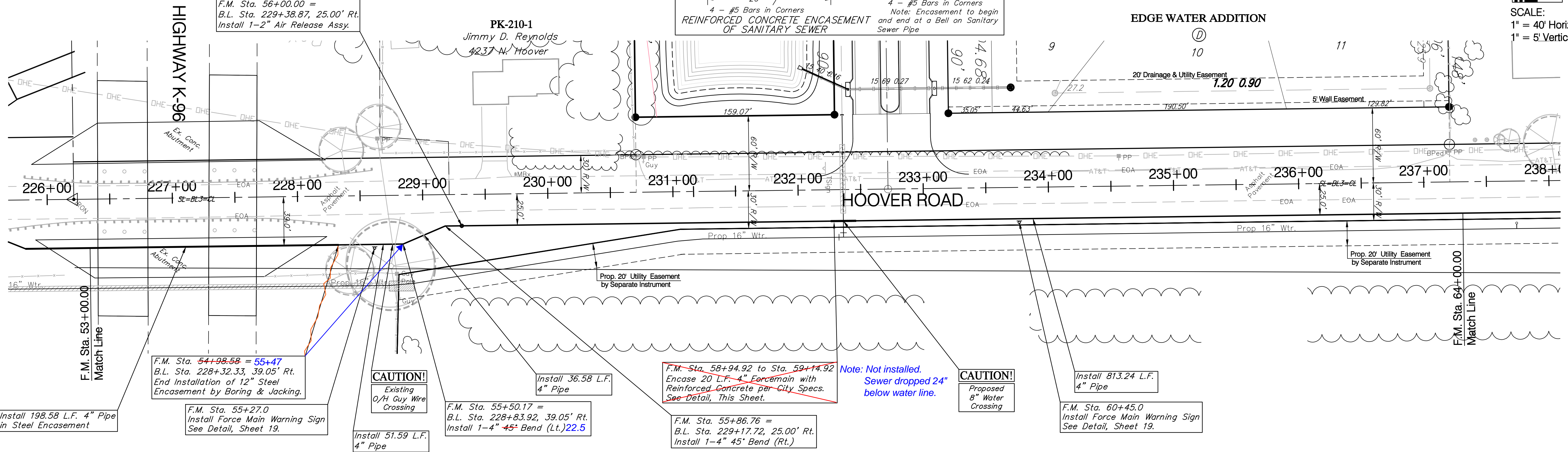
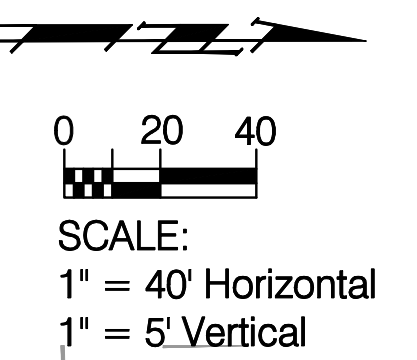


Drawing File: E:\eng\Edge Water Addition\Offsite\Land\dwg\Basc.dwg (FM05) Project No. 07-06-EB63 Design: TPV Drawn: STAFF Approved: TPV Scale: NOTED		EDGE WATER ADDITION <b>4" FORCE MAIN PLAN &amp; PROFILE</b> Sta. 42+00.00 to Sta. 53+00.00 EDGE WATER SANITARY SEWER PUMP STATION		<b>Baughman Company, P.A.</b> 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING   SURVEYING   PLANNING   LANDSCAPE ARCHITECTURE		APRIL 2008 SHEET <b>11</b> OF <b>28</b>
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**BENCHMARK:**  
 BM #4 - COW Benchmark the North R/W of K-96 Highway and 42.5' West of the Centerline of Hoover Road.  
 B.L. Sta. 228+60.3, 39.9' Lt.  
 Elev. = 1333.14 (MSL)



Reseed 90' L.F. According to General Note 19 as Measured Along the Force Main from Sta. 54+99 to Sta. 64+00.



Install 198.58 L.F. 4" Pipe in Steel Encasement

F.M. Sta. 54+98.58 = 55+47  
 B.L. Sta. 228+32.33, 39.05' Rt.  
 End Installation of 12" Steel Encasement by Boring & Jacking.

F.M. Sta. 55+27.0  
 Install Force Main Warning Sign See Detail, Sheet 19.

**CAUTION!**  
 Existing O/H Guy Wire Crossing

Install 51.59 L.F. 4" Pipe

F.M. Sta. 55+50.17 =  
 B.L. Sta. 228+83.92, 39.05' Rt.  
 Install 1-4" 45° Bend (Lt.) 22.5

Install 36.58 L.F. 4" Pipe

F.M. Sta. 58+94.92 to Sta. 59+14.92  
 Encase 20 L.F. 4" Forcemain with Reinforced Concrete per City Specs. See Detail, This Sheet.

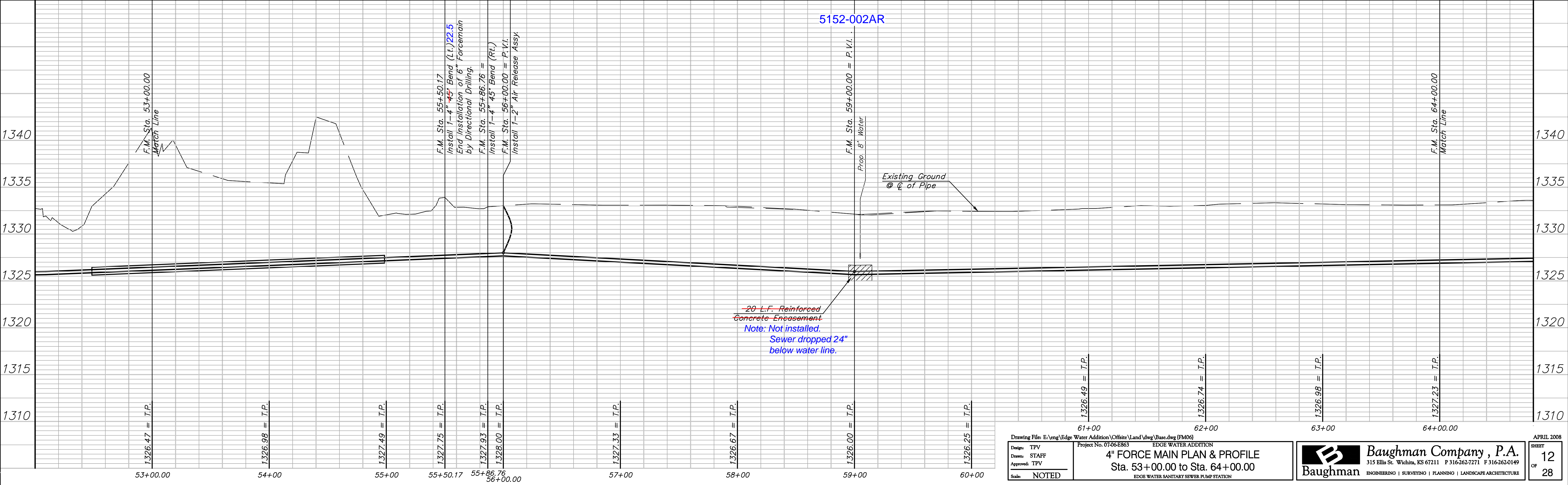
F.M. Sta. 55+86.76 =  
 B.L. Sta. 229+17.72, 25.00' Rt.  
 Install 1-4" 45° Bend (Rt.)

Note: Not installed. Sewer dropped 24" below water line.

**CAUTION!**  
 Proposed 8" Water Crossing

Install 813.24 L.F. 4" Pipe

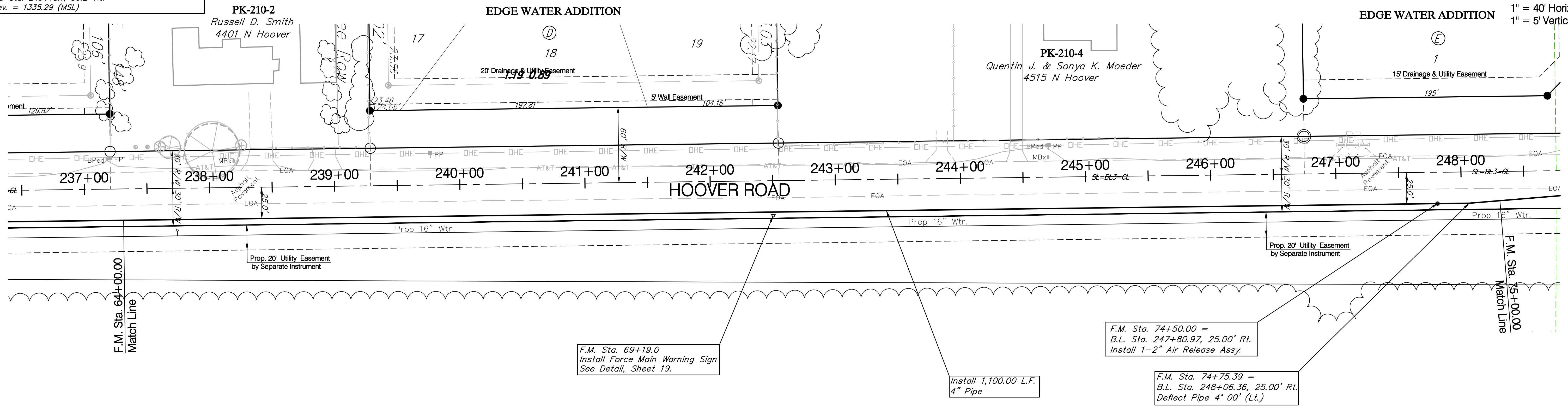
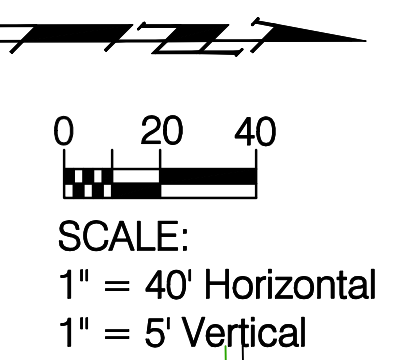
F.M. Sta. 60+45.0  
 Install Force Main Warning Sign See Detail, Sheet 19.



Drawing File: E:\eng\Edge Water Addition\Office\Land\dwg\Base.dwg (FM06)		Project No. 07-06-EB63		EDGE WATER ADDITION	
Design: TPV	Drawn: STAFF	4" FORCE MAIN PLAN & PROFILE		Baughman Company, P.A.	
Approved: TPV	Scale: NOTED	Sta. 53+00.00 to Sta. 64+00.00		315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149	
				Baughman ENGINEERING   SURVEYING   PLANNING   LANDSCAPE ARCHITECTURE	
				APRIL 2008	
				SHEET 12 OF 28	

**BENCHMARK:**  
 BM #4 - COW Benchmark the North R/W of K-96 Highway and 42.5' West of the Centerline of Hoover Road. B.L. Sta. 228+60.3, 39.9' Lt. Elev. = 1333.14 (MSL)  
 BM #1 - COW Benchmark 28.5' East and 14.5' North of the Centerlines of Hoover Road and 45th Street North. B.L. Sta. 249+18.1, 30.2' Rt. Elev. = 1335.29 (MSL)

Reseed 1100 L.F. According to General Note 19 as Measured Along the Force Main from Sta. 64+00 to Sta. 75+00.



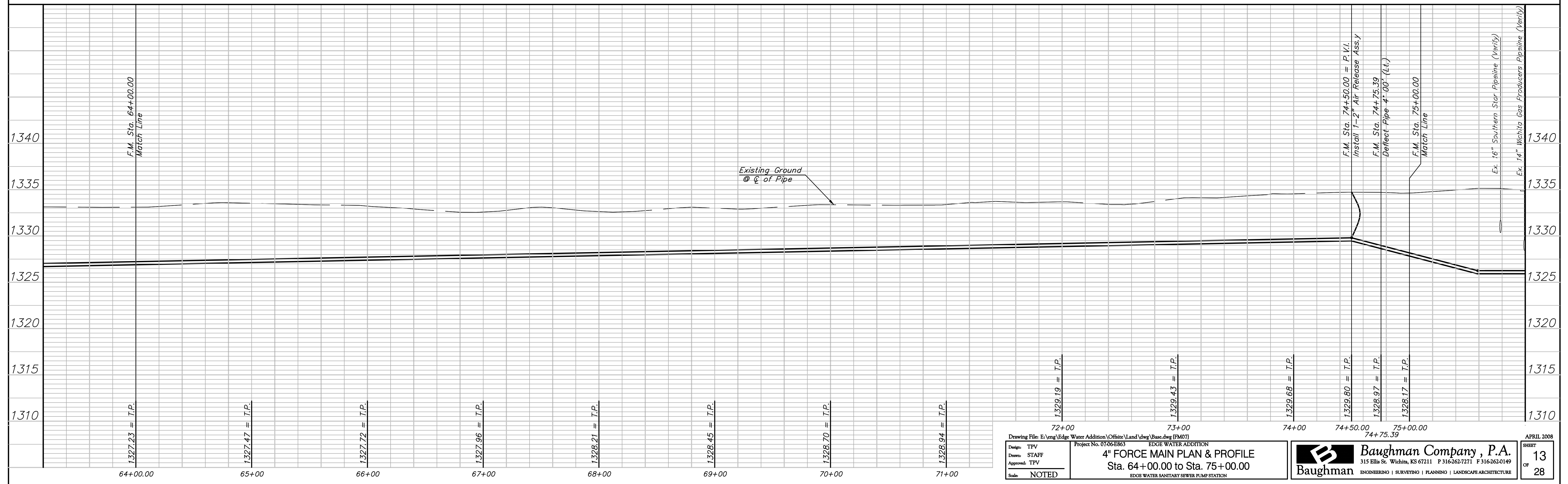
F.M. Sta. 69+19.0  
 Install Force Main Warning Sign  
 See Detail, Sheet 19.

Install 1,100.00 L.F.  
 4" Pipe

F.M. Sta. 74+50.00 =  
 B.L. Sta. 247+80.97, 25.00' Rt.  
 Install 1-2" Air Release Assy.

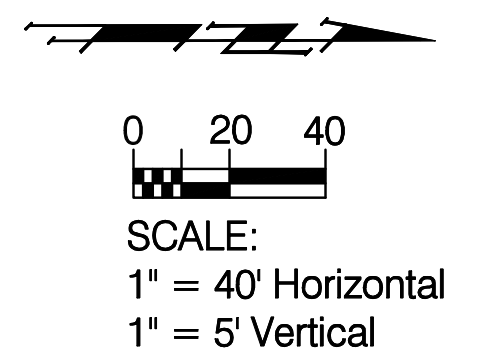
F.M. Sta. 74+75.39 =  
 B.L. Sta. 248+06.36, 25.00' Rt.  
 Deflect Pipe 4' 00" (Lt.)

5152-003AR

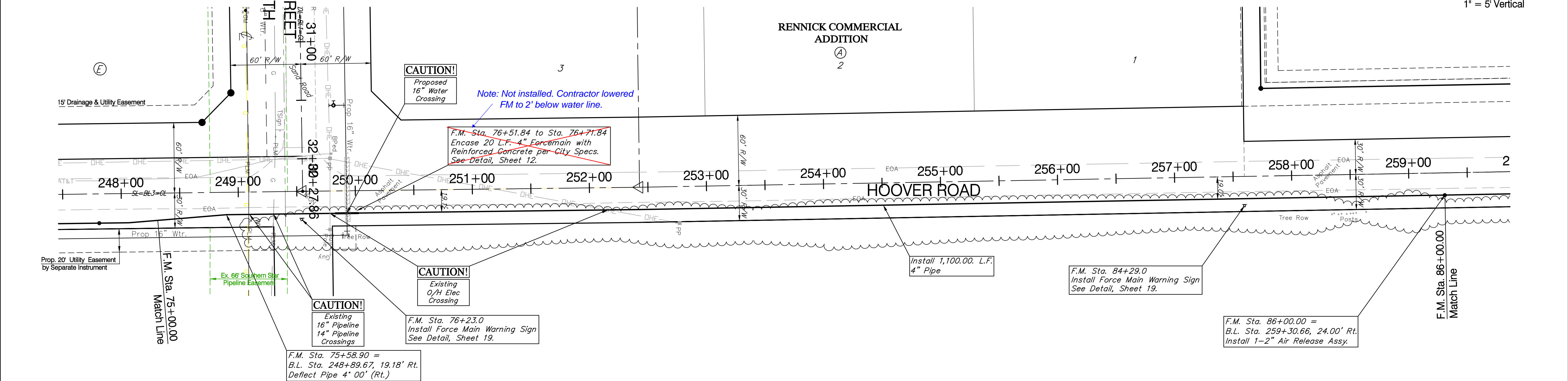


Drawing File: E:\eng\Edge Water Addition\Offsite\Land\dwg\Basc.dwg (FM07) Project No. 07-06-EB63 Design: TPV Drawn: STAFF Approved: TPV Scale: NOTED		EDGE WATER ADDITION <b>4" FORCE MAIN PLAN &amp; PROFILE</b> Sta. 64+00.00 to Sta. 75+00.00 EDGE WATER SANITARY SEWER PUMP STATION		<b>Baughman Company, P.A.</b> 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING   SURVEYING   PLANNING   LANDSCAPE ARCHITECTURE		APRIL 2008 SHEET <b>13</b> OF <b>28</b>
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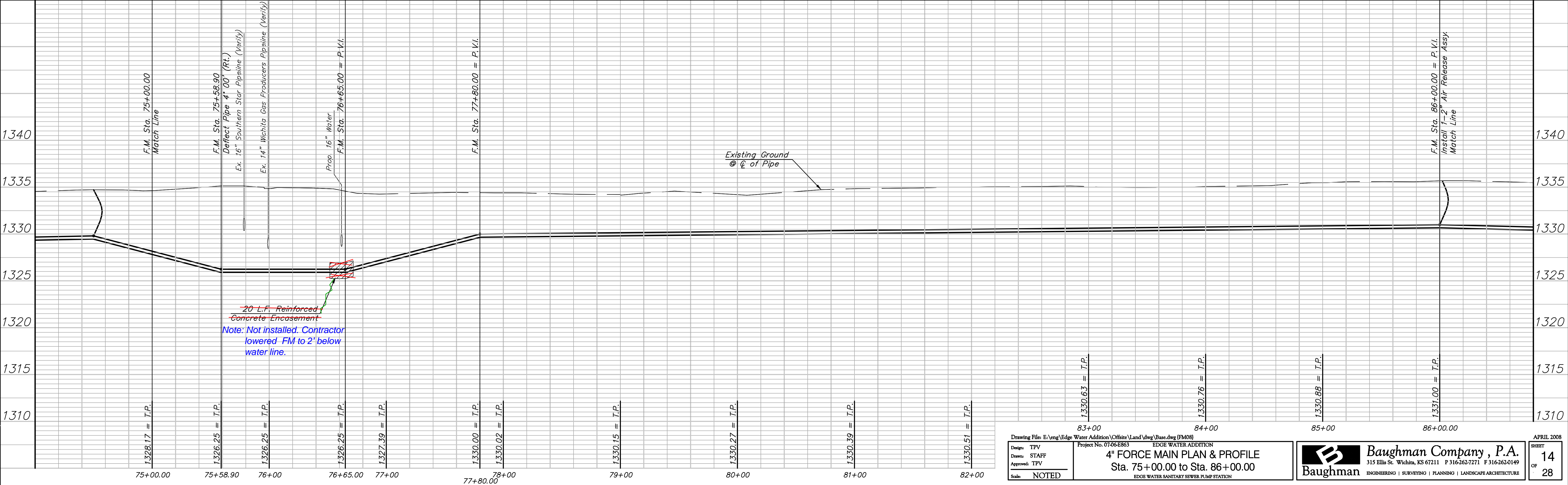
**BENCHMARK:**  
 BM #1 - COW Benchmark 28.5' East and 14.5' North of the Centerlines of Hoover Road and 45th Street North.  
 B.L. Sta. 249+18.1, 30.2' Rt.  
 Elev. = 1335.29 (MSL)



Reseed 1100 L.F. According to General Note 19 as Measured Along the Force Main from Sta. 75+00 to Sta. 86+00.



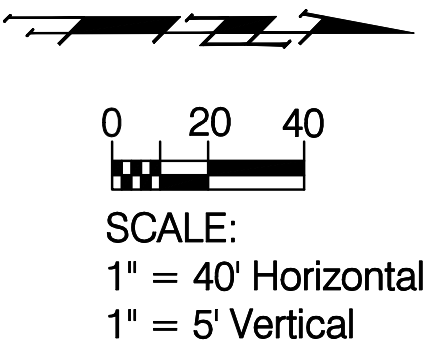
5153-002AR



Drawing File: E:\eng\Edge Water Addition\Office\Land\dwg\Base.dwg (FM08) Project No. 07-06-E863 Design: TPV Drawn: STAFF Approved: TPV Scale: NOTED		EDGE WATER ADDITION <b>4" FORCE MAIN PLAN &amp; PROFILE</b> Sta. 75+00.00 to Sta. 86+00.00 EDGE WATER SANITARY SEWER PUMP STATION		<b>Baughman Company, P.A.</b> 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING   SURVEYING   PLANNING   LANDSCAPE ARCHITECTURE		APRIL 2008 SHEET <b>14</b> OF <b>28</b>
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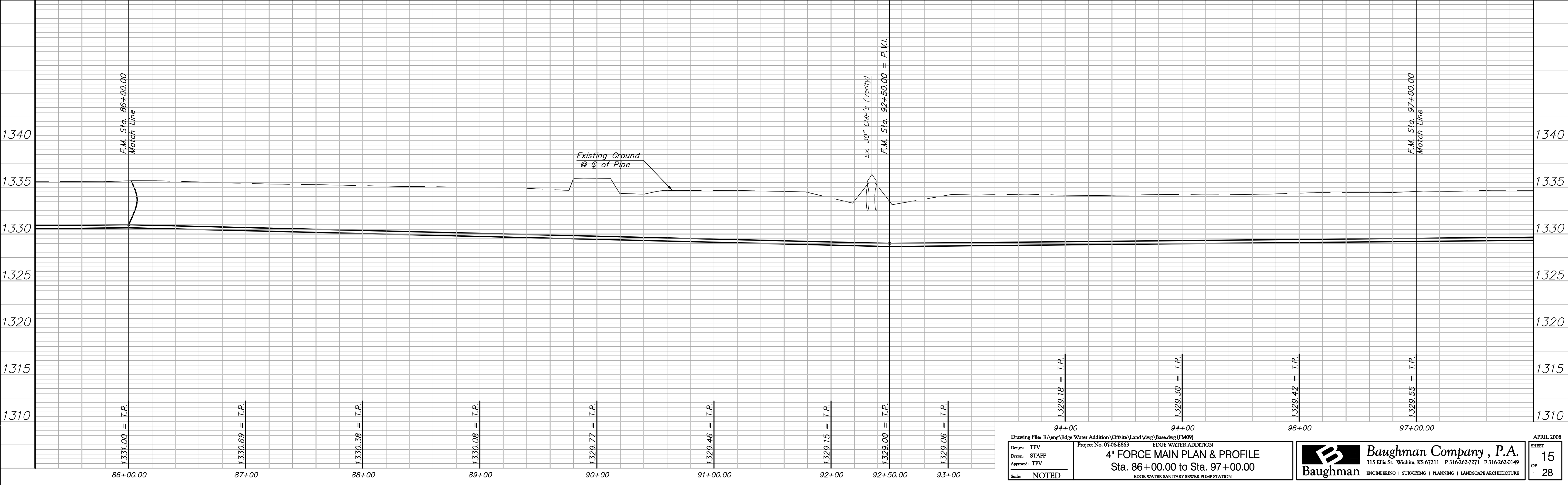
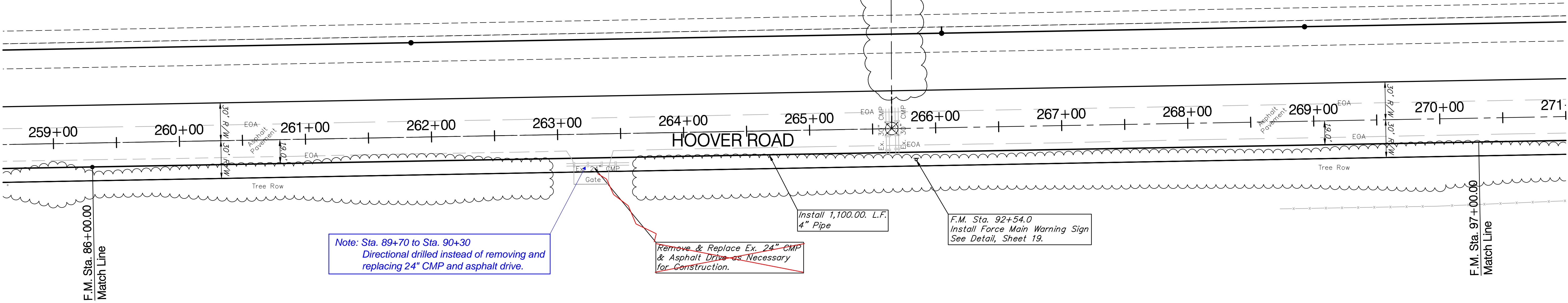
**BENCHMARK:**  
 BM #1 - COW Benchmark 28.5' East and 14.5' North of the Centerlines of Hoover Road and 45th Street North.  
 B.L. Sta. 249+18.1, 30.2' Rt.  
 Elev. = 1335.29 (MSL)

Reseed 1100 L.F. According to General Note 19 as Measured Along the Force Main from Sta. 86+00 to Sta. 97+00.



**PK-177-2**  
 R & R Realty, LLC

**PK-176-1**  
 R & R Realty, LLC

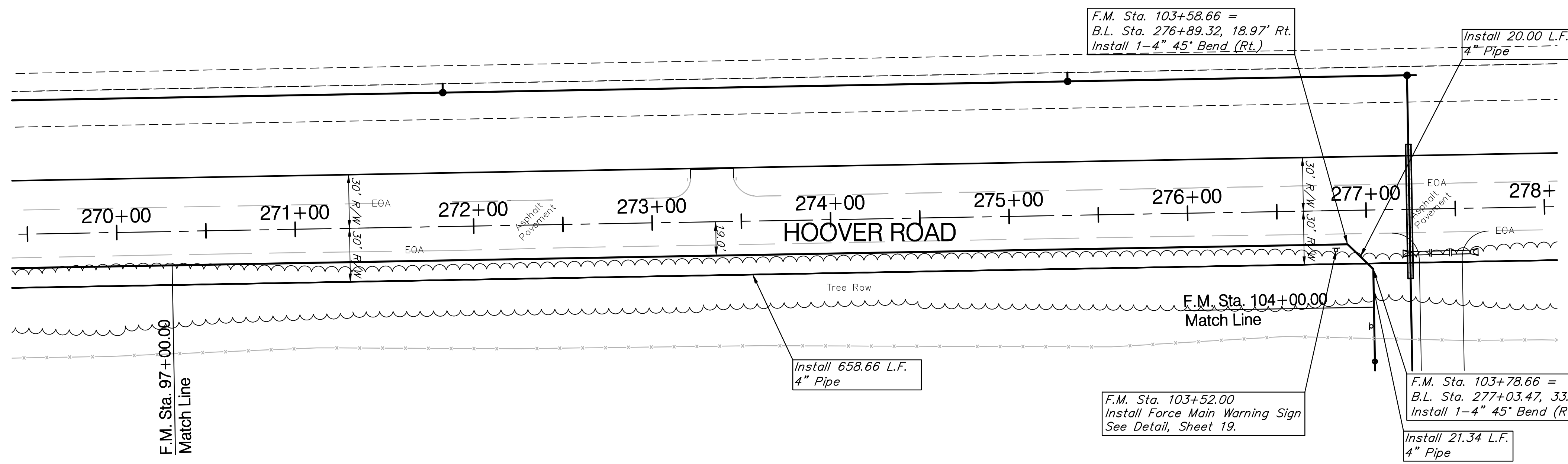
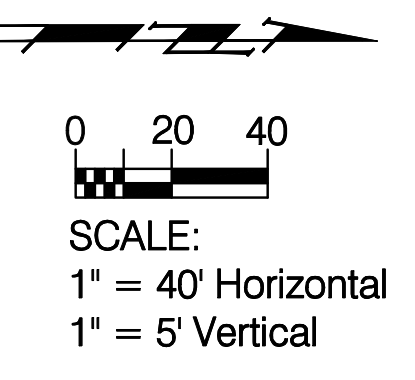


Drawing File: E:\eng\Edge Water Addition\Offsite\Land\dwg\Basc.dwg (FM09) Project No. 07-06-E863 Design: TPV Drawn: STAFF Approved: TPV Scale: NOTED		EDGE WATER ADDITION <b>4" FORCE MAIN PLAN &amp; PROFILE</b> Sta. 86+00.00 to Sta. 97+00.00 EDGE WATER SANITARY SEWER PUMP STATION		<b>Baughman Company, P.A.</b> 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING   SURVEYING   PLANNING   LANDSCAPE ARCHITECTURE		APRIL 2008 SHEET <b>15</b> OF <b>28</b>
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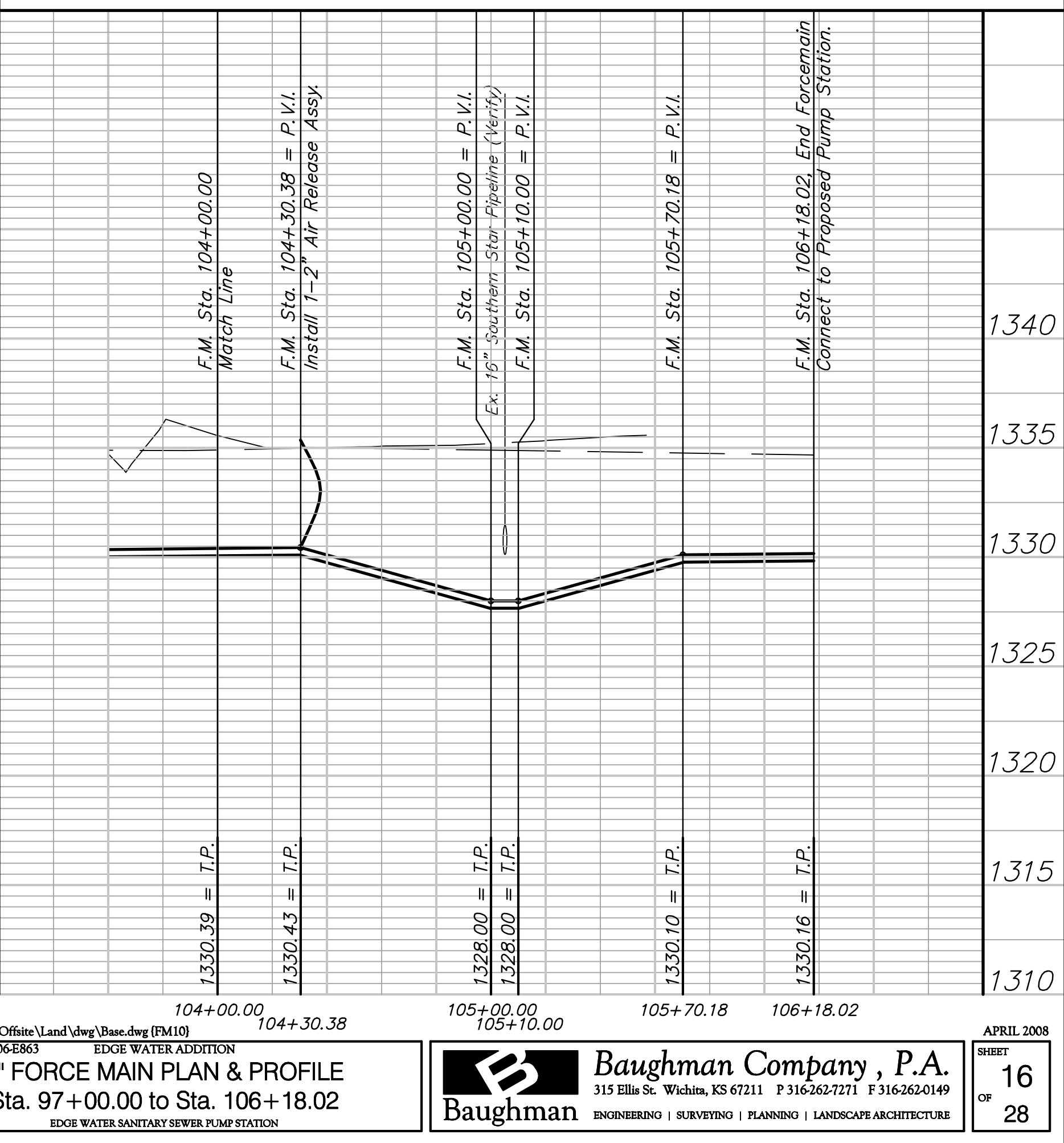
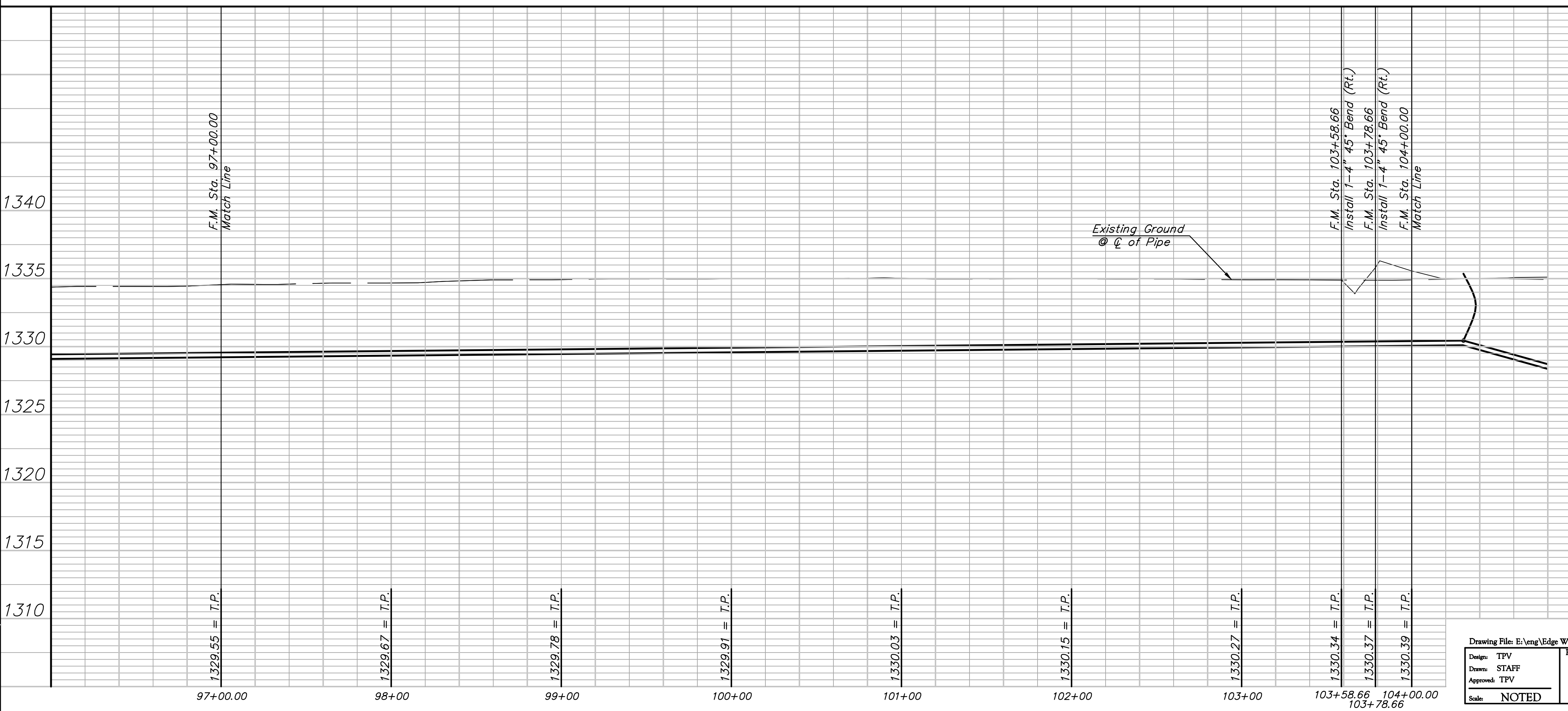
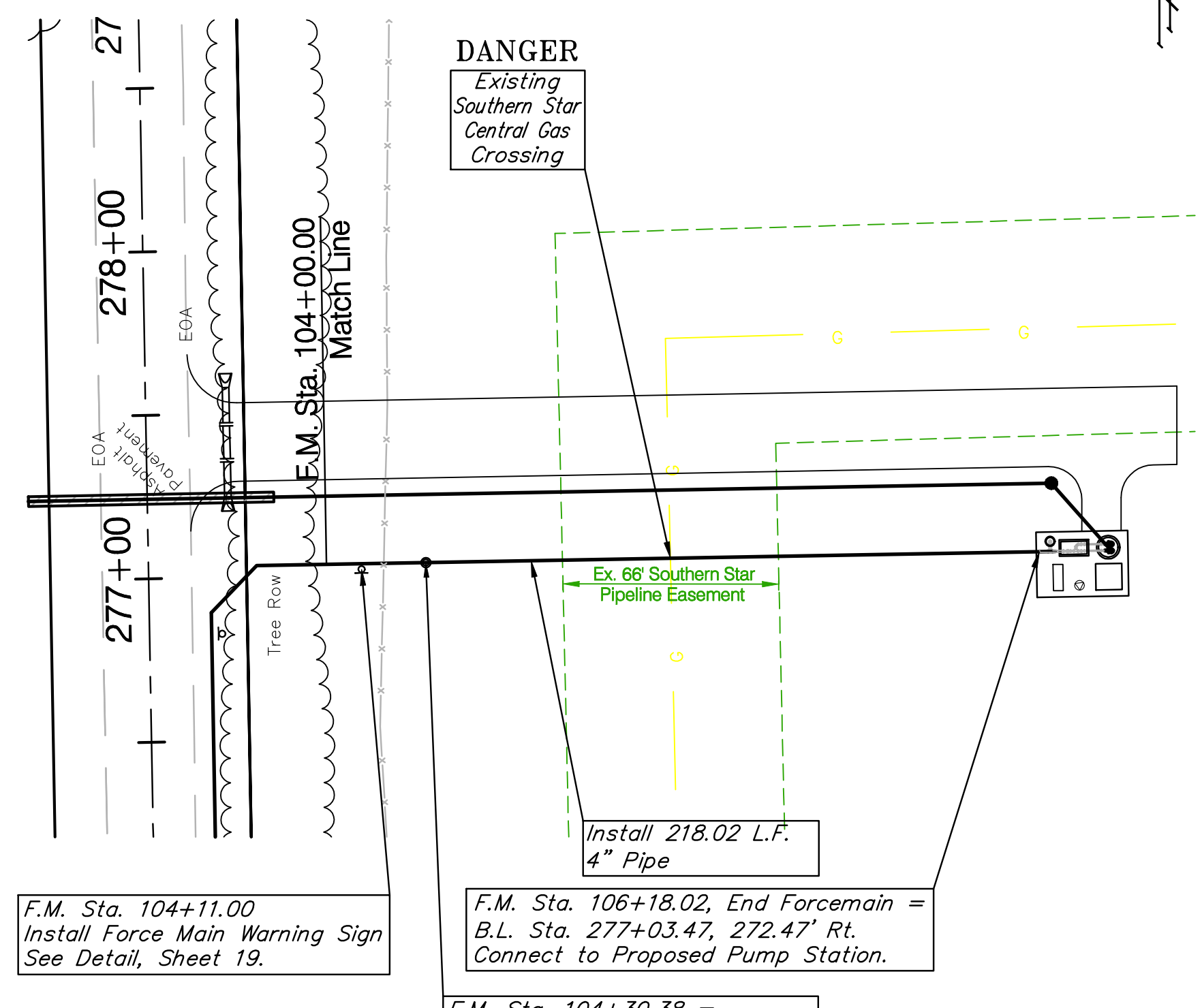
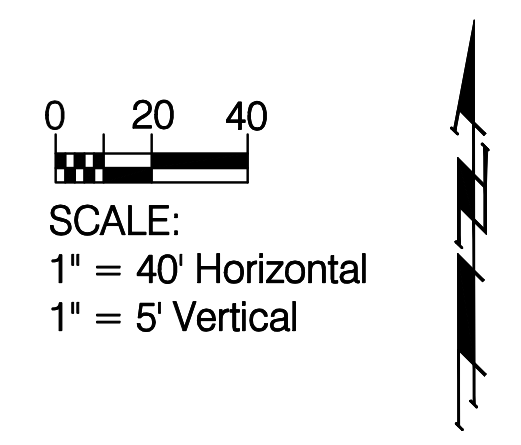
**BENCHMARK:**  
 BM #1 - COW Benchmark 28.5' East and 14.5' North of the Centerlines of Hoover Road and 45th Street North.  
 B.L. Sta. 249+18.1, 30.2' Rt.  
 Elev. = 1335.29 (MSL)

Reseed 700 L.F. According to General Note 19 as Measured Along the Force Main from Sta. 97+00 to Sta. 104+00.

**PK-176-1**  
 R & R Realty, LLC



Reseed 218 L.F. According to General Note 19 as Measured Along the Force Main from Sta. 104+00 to Sta. 106+18.

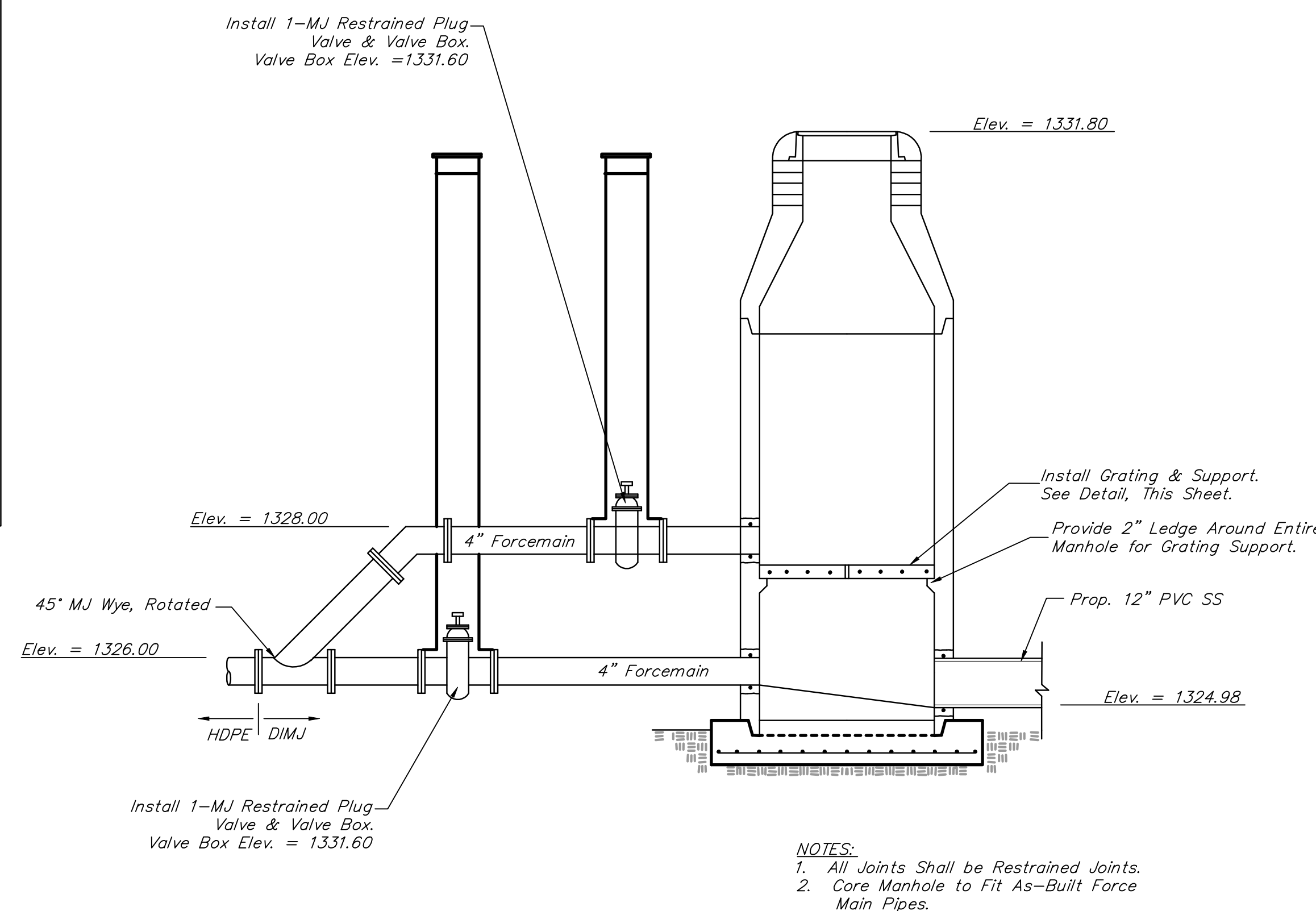
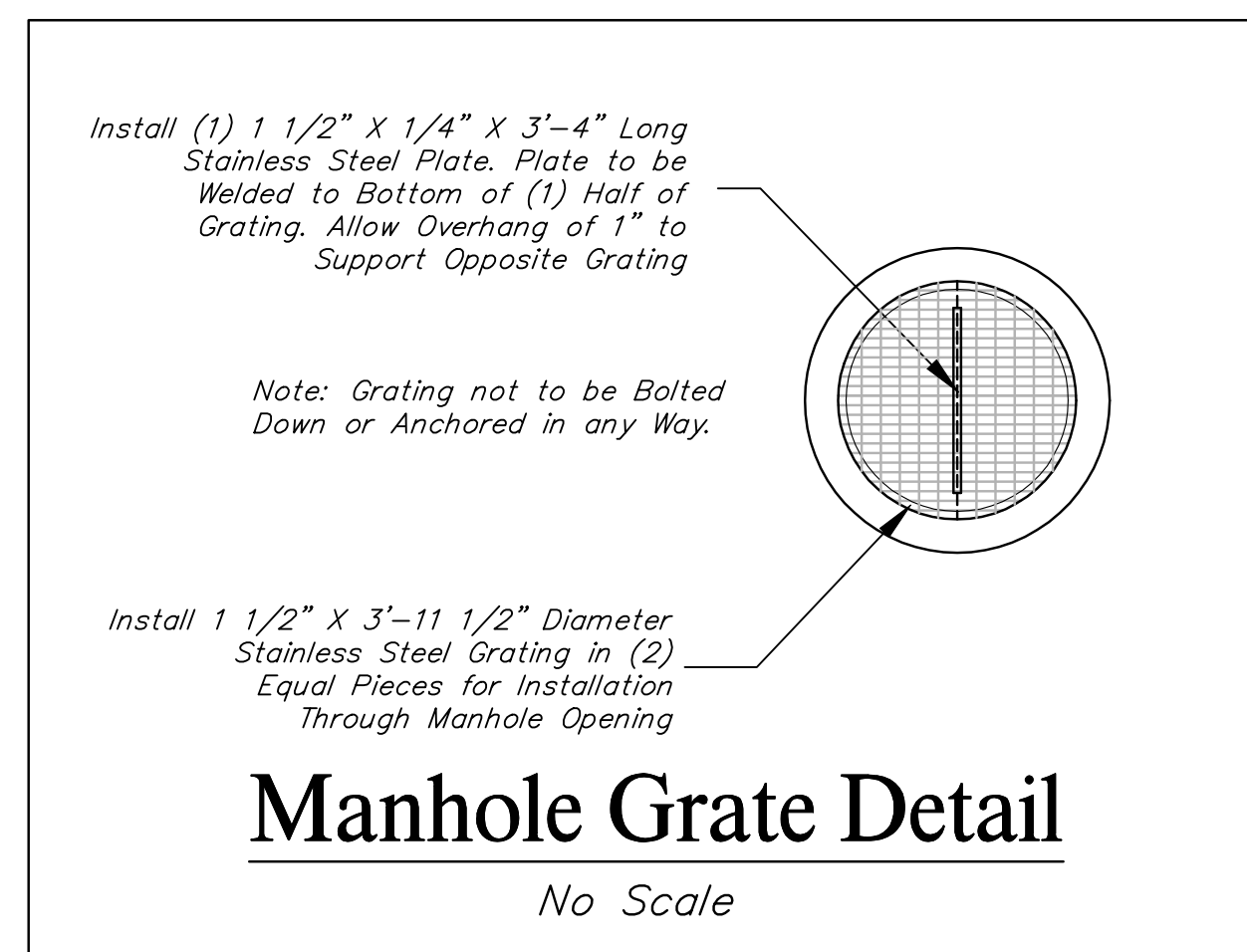
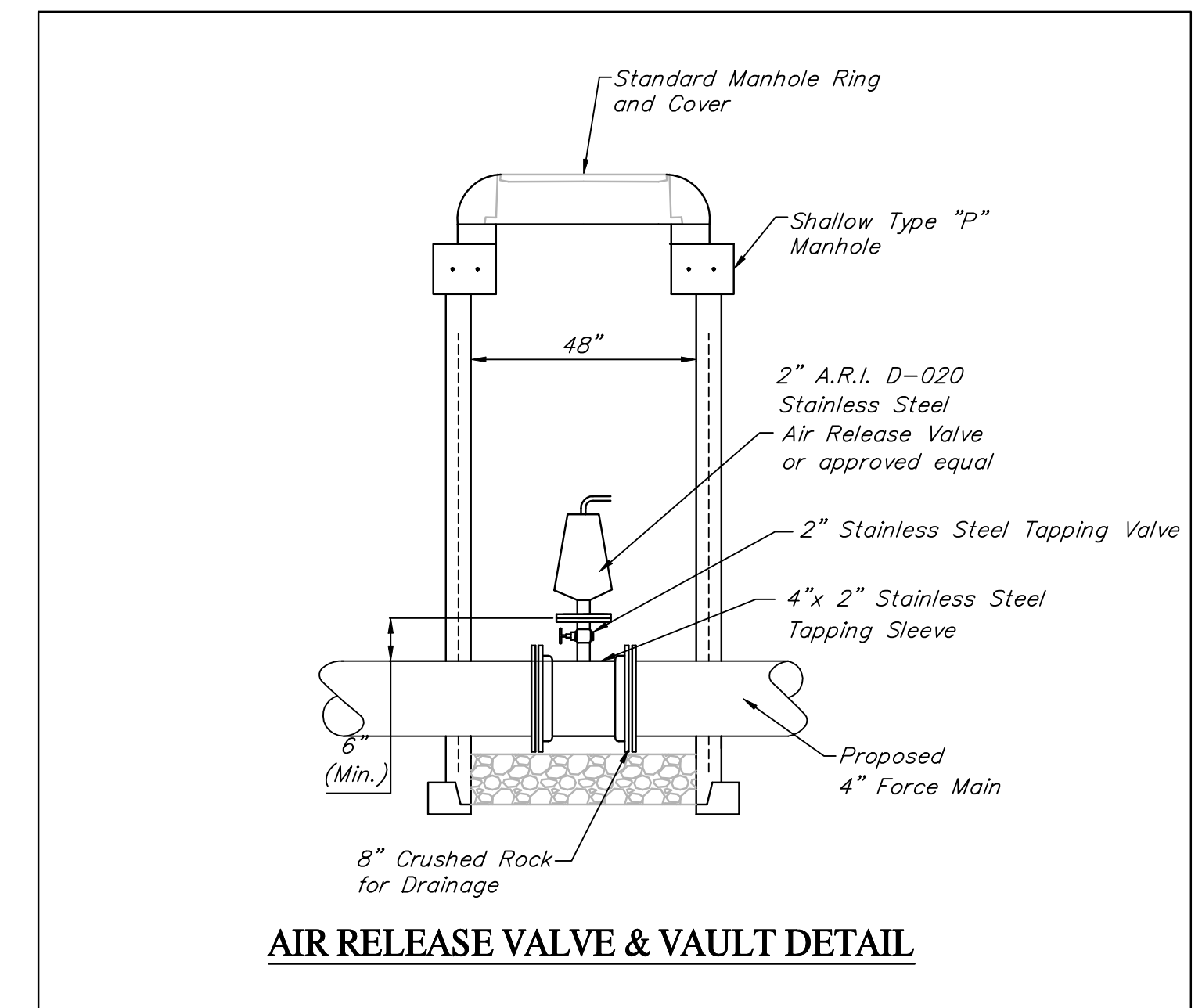
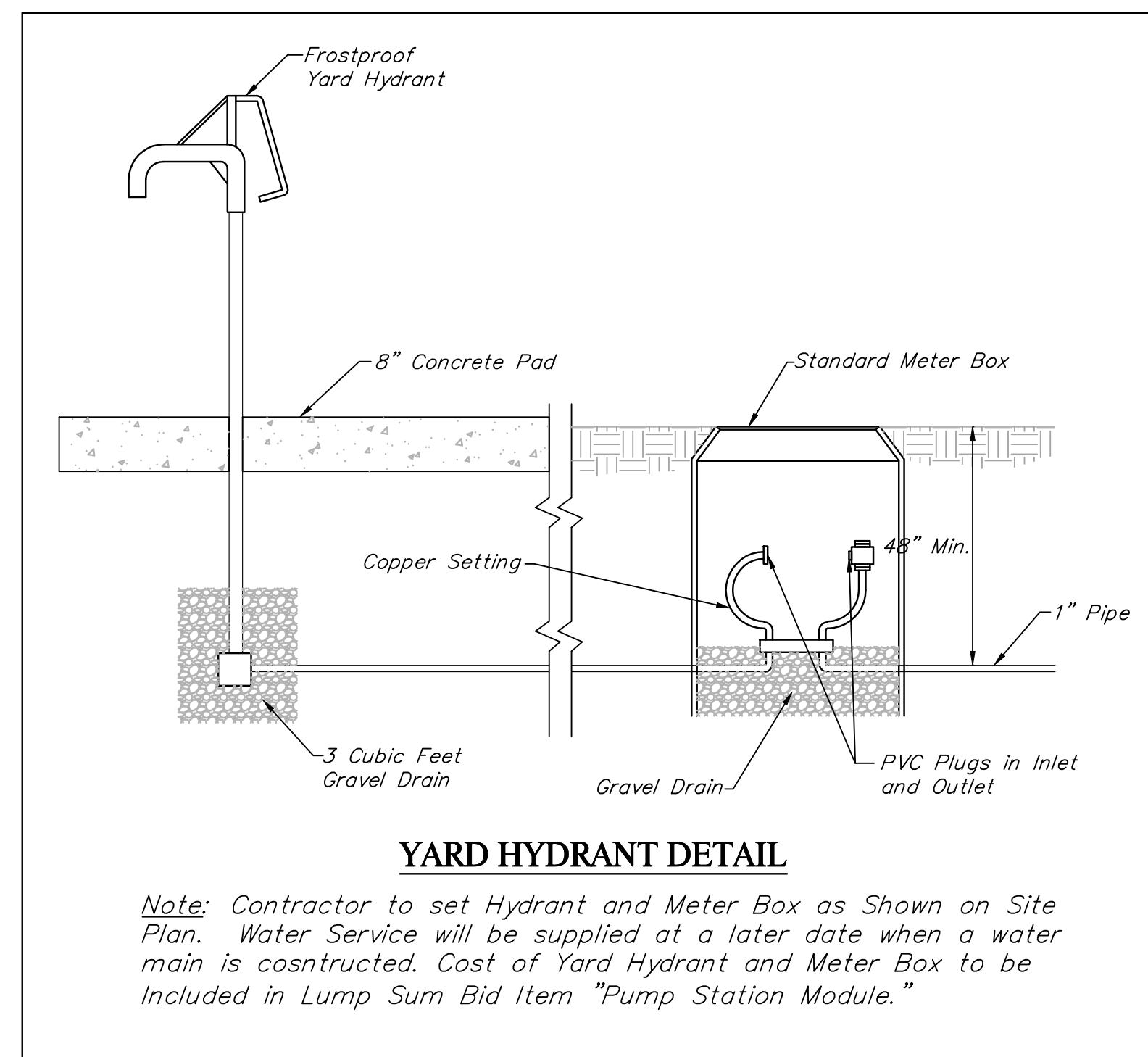
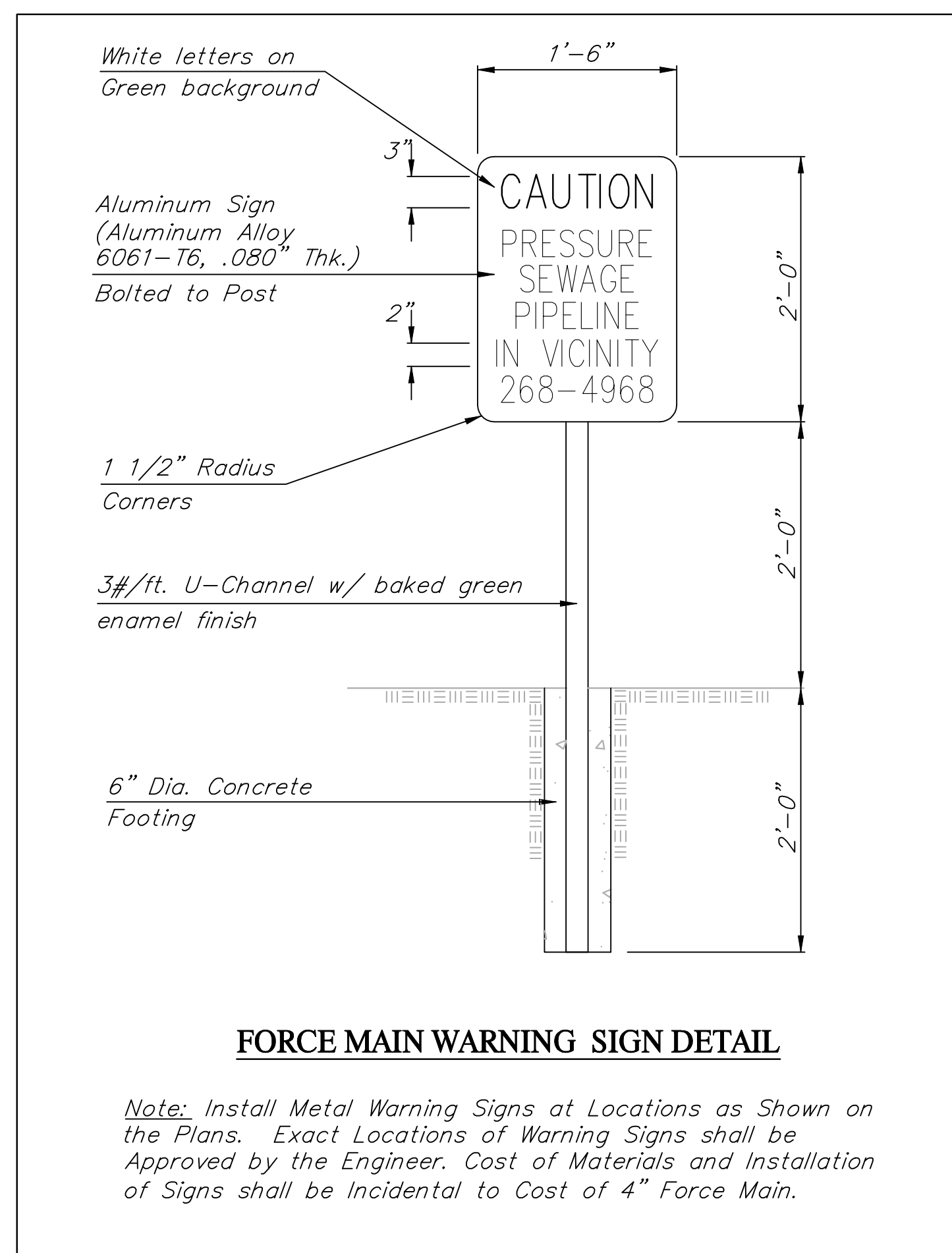
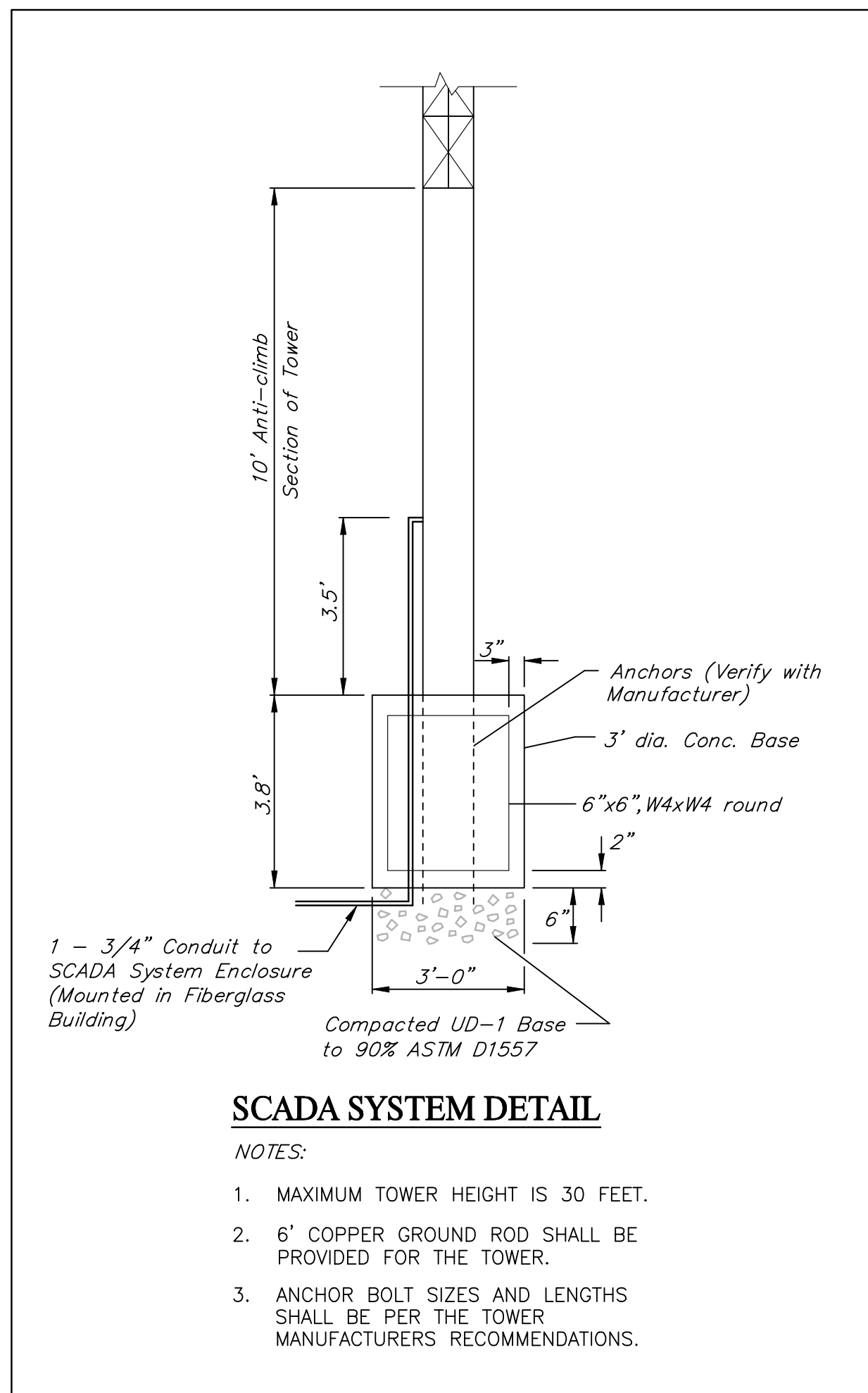


Drawing File: E:\eng\Edge Water Addition\Offsite\Land\dwg\Base.dwg (FM10)  
 Project No. 07-06-EB63  
**4" FORCE MAIN PLAN & PROFILE**  
 Sta. 97+00.00 to Sta. 106+18.02  
 EDGE WATER SANITARY SEWER PUMP STATION

Design: TPV  
 Drawn: STAFF  
 Approved: TPV  
 Scale: NOTED

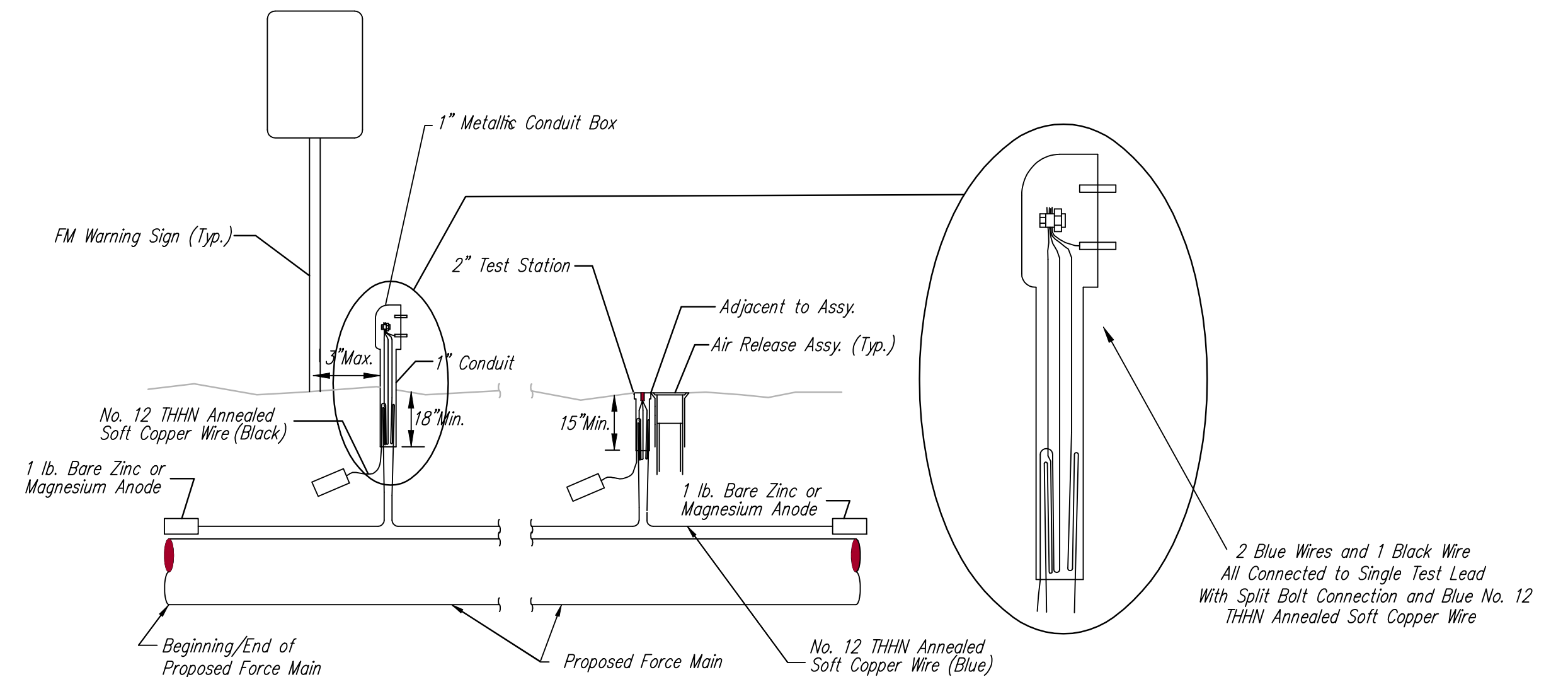
**Baughman Company, P.A.**  
 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149  
 ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

APRIL 2008  
 SHEET 16 OF 28



**PIG RECOVERY MANHOLE & PIPING DETAIL**

**Note:** All Piping, Valves, Plugs, Valve Boxes, Fittings, Grates, Supports, Manhole, etc. Required to Construct Pig Recovery Manhole and Piping shall be Included in Lump Sum Bid Item "Pig Recovery Manhole & Piping."



**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 T2PSJB 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

Drawing File: E:\eng\Edge Water Addition\Office\Details\FM Detail.dwg

Project No. 07-06-E863 EDGE WATER ADDITION

Design: TPV  
Drawn: TPV  
Approved: TPV  
Scale: None

**FORCE MAIN DETAIL SHEET**

EDGEWATER SANITARY SEWER PUMP STATION

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

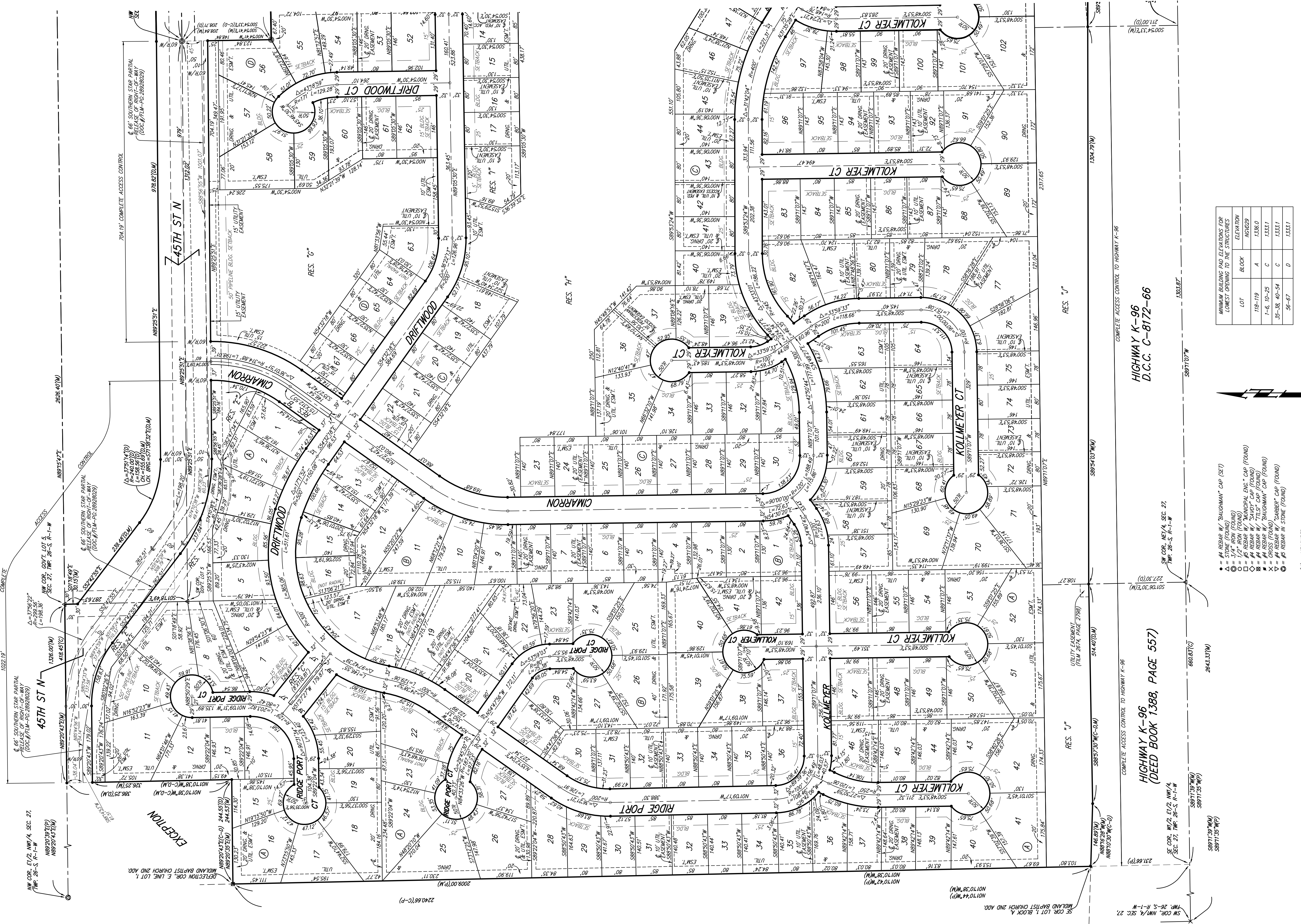
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

APRIL 2008

SHEET 19 OF 28



# EDGE WATER ADDITION WICHITA, SEDGWICK COUNTY, KANSAS



MINIMUM BUILDING PAD ELEVATIONS FOR LOWEST OPENINGS TO THE STRUCTURES

LOT	BLOCK	ELEVATION
118-119	A	1336.0
1-6, 10-25	C	1333.1
35-38, 40-54	C	1333.1
56-67	D	1333.1

- ▲ = #4 REBAR W/ "BAUGHMAN" CAP (SET)
- △ = STONE (FOUND)
- ⊙ = 3/4" IRON (FOUND)
- ⊚ = 1/2" IRON (FOUND)
- ⊛ = #6 REBAR W/ "MUNICIPAL ENG." CAP (FOUND)
- ⊜ = #6 REBAR W/ "TILT" CAP (FOUND)
- ⊝ = #4 REBAR W/ "BAUGHMAN" CAP (FOUND)
- ⊞ = CROSS (FOUND)
- ⊟ = #4 REBAR W/ "BARBER" CAP (FOUND)
- ⊠ = #6 REBAR W/ STONE (FOUND)
- (M) = MEASURED
- (D) = DESCRIBED
- (C) = CALCULATED
- (SM) = CALCULATED PER
- (C-1) = CALCULATED PER
- (C-2) = DESCRIBED PER
- (C-P) = CALCULATED PER
- (P) = PLATTED INFO.

NOTE: KANSAS GAS SUPPLY CORPORATION RIGHTS-OF-WAY MAP (MOG BOOK 508, PAGES 665, 493, AND 493), FIRST ASSIGNED TO CITIES SERVICE GAS COMPANY AND NOW ASSIGNED TO SOUTHERN STAR CENTRAL GAS PIPELINE COMPANY, INC. (SSC) RIGHTS-OF-WAY MAP (MOG BOOK 295, PAGES 1-19) AND GOVERNMENT LOTS 4, 4, AND 6 IN THE NW 1/4 OF SEC. 27, T. 26-S, R. 1-W ARE IN THE PROCESS OF BEING RELEASED PER 241 OF MAY, 2002.

A master grading plan for drainage has been developed for this subdivision and is on file with the City of Wichita, Kansas. All drainage easements, utility easements, and other easements shown on this plan were modified with the approval of the City Engineer of the City of Wichita, Kansas. No obstructions which impede the flow of this drainage system be allowed.