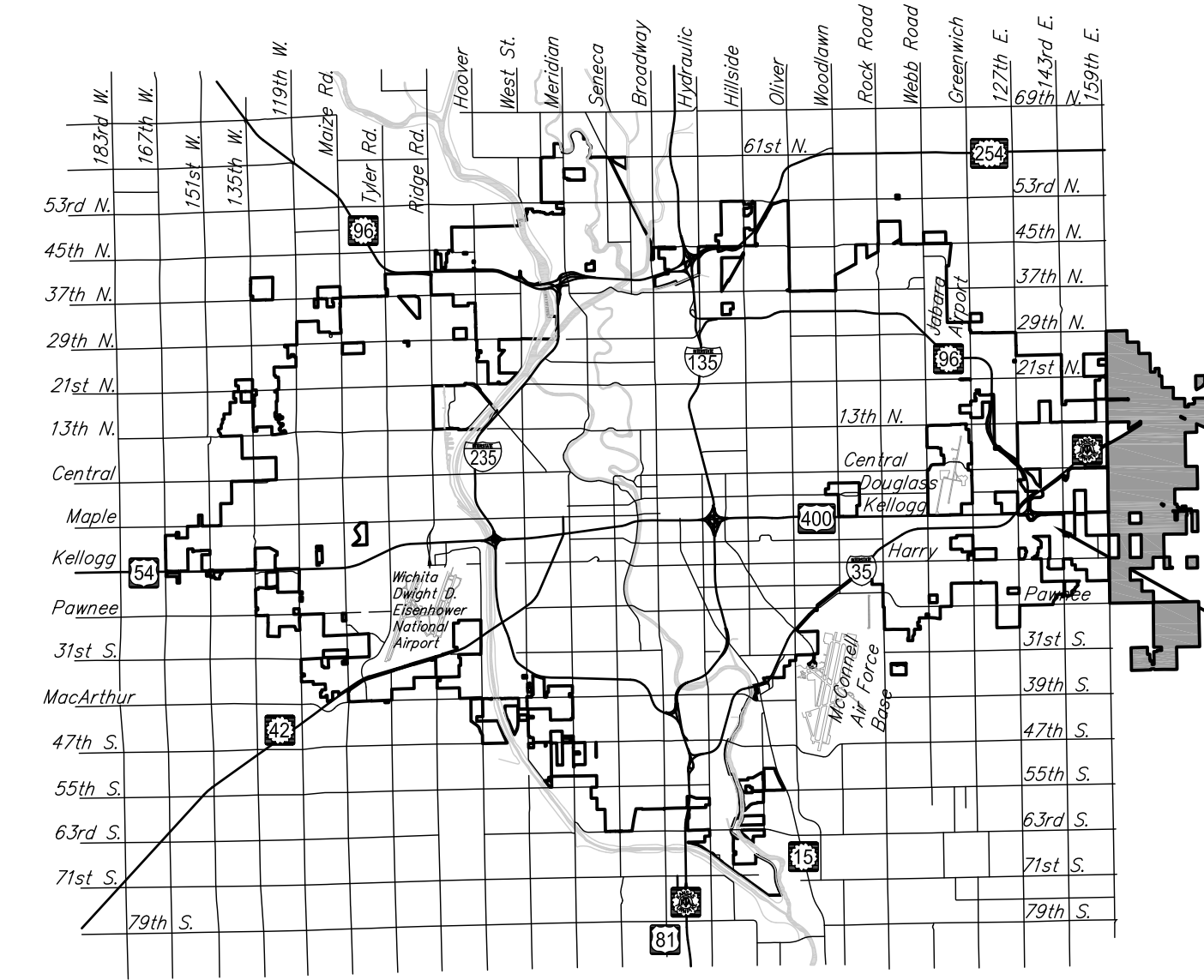


Lateral 349 Four Mile Creek
SANITARY SEWER EXTENSION
 to serve
Clear Creek Phase 4
CITY OF WICHITA, KANSAS

Gary Janzen, P.E. City Engineer
 Project Number 468-83611
 O.C.A. NO. 744417

Esfed Construction - Contractor
J. Wagner - City of Wichita, Field Project Engineer
J. Smith - City of Wichita, Inspector
As-built
Risers
Completion Date: 8/25/2017
pdf: aprosas 11/21/2016



PROJECT LOCATION

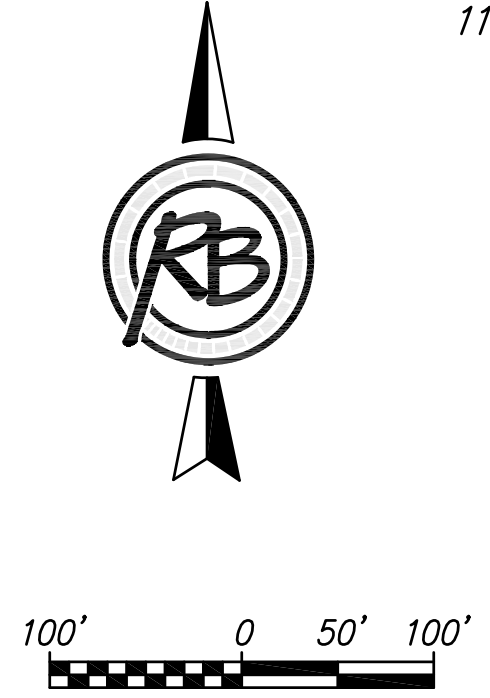
Vicinity Map

Sheet Index

1. TITLE SHEET
- 2.-6. PLAN & PROFILES
7. EASEMENT GRADING
8. EROSION CONTROL PLAN
- 9.-10. BUBBLE MAP
- 11.-12. PLATS

The following Standard Details are available on the City's website.

- (SS-101) PRECAST SS MH DETAILS
- (SS-102) MH FRAME & COVER DETAILS
- (SS-103) VERTICAL RISER DETAILS
- (SS-104) CLEANOUT RISER ASSEMBLY
- (SW-501 thru SW-505) EROSION CONTROL DETAILS



GENERAL NOTES:

1. The Contractor shall comply with all applicable safety regulations. All construction shall be completed following current City Standard Specifications and Special Provisions.
2. Contractor will be required to provide notice to utility companies a minimum of seventy-two (72) hours prior to any excavation, as follows:
 Kansas One-Call 687-2470
 The Contractor must notify the following in case of an emergency:
 Cox Communications 316-260-7195
 Kansas Gas Service 1-888-482-4950
 Black Hills Energy 316-941-1628
 Westar 316-261-6554
 AT&T 316-268-2102
 City of Wichita Water 316-268-4555
 City of Wichita Sewer 316-268-4073
 City of Wichita Stormwater 316-268-4090
 City of Wichita Traffic 316-268-4034
3. Utility service lines, poles, etc. are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
4. Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance, and site location. Locations, in the opinion of the Engineer, that will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain will require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps. of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits will require additional archaeological investigations unless buried in a previously approved borrow location.
5. Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.
6. 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.
7. 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.
8. If traffic will be 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 the 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 Contractors responsibly.
10. All elevations shown are NAVD 88.
11. All areas disturbed during construction that will not be under proposed pavement shall be restored to match existing conditions.
12. The Contractor shall protect from damage and support existing utilities through constructions as approved by the utility owner and the Engineer at the contractors expense.
13. Contractor shall limit the extent of trench openings overnight and weekends to less than 50 feet.
14. Any sidewalk, drive approach, curb, or street pavement removed to construct project must have a pavement cut permit and be replaced by the City contractor. Permits can be obtained by calling 316-268-4501 or 316-268-4480.
15. All stubs and plugged pipes shall be located with green plastic tape in the same manner as risers.
16. Connecting to Existing Manholes:
 Prior to laying sewer lines using existing stubs in existing manholes, the Contractor shall expose and verify the elevation, grade and alignment of existing stubs and notify the Engineer of any deviation from the plans. Where connection to an existing manhole that does not have an existing stub or the stub is unusable due to elevation grade or alignment, the Contractor shall bore cut into existing manhole wall to make connection using approved water stop gasket, and reshape the existing manhole invert to provide smooth flow. The cost to connecting to existing manholes is incidental to the project.
17. Contractor shall provide positive drainage away from all manhole covers.
18. The Contractor shall prevent any construction debris from entering the existing sanitary sewer during construction.
19. The Contractor shall be responsible for maintaining continuous flow of sewage through construction. Contractors proposed method for maintaining sewage flow shall be submitted and approved by the Sewer Maintenance Division (316-268-4073) prior to starting and by-passing of sewage flows.
20. Any over excavation from manhole and pipe removal shall be backfilled with AB-3 compacted to 90-95% ASTM D698.
21. Excess excavation is to be wasted on site. Excavation may NOT be wasted in Utility Easements or Street Right-of-Way. Lots 3-4, Block 1, Clear Creek 2nd Addition is the preferred location for stockpiling excess excavation.

Benchmark

POINT #103
 RAILROAD SPIKE BURIED IN GROUND, 3.4' NORTHEAST OF POWER POLE, WEST OF LINCOLN ST. & 143RD ST.
 ELEVATION = 1314.88 (NAVD88)

POINT #104
 CHISELED DISC WITH DIVOT ON THE TOP OF CURB, AT EAST CURB RETURN AT THE SOUTHEAST CORNER OF ST. ANDREWS CIR. & WATSON ST.
 ELEVATION = 1329.43 (NAVD88)



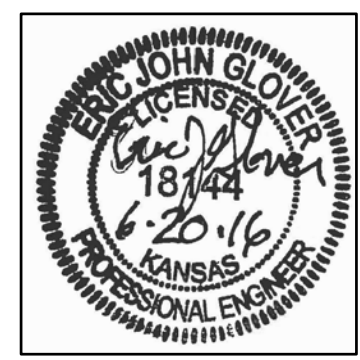
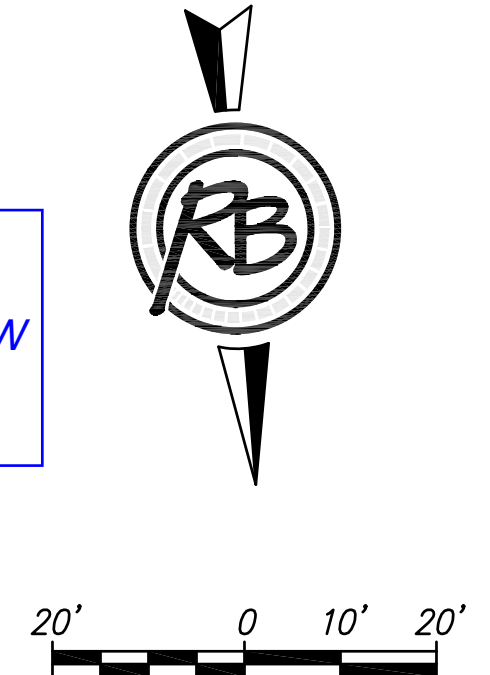
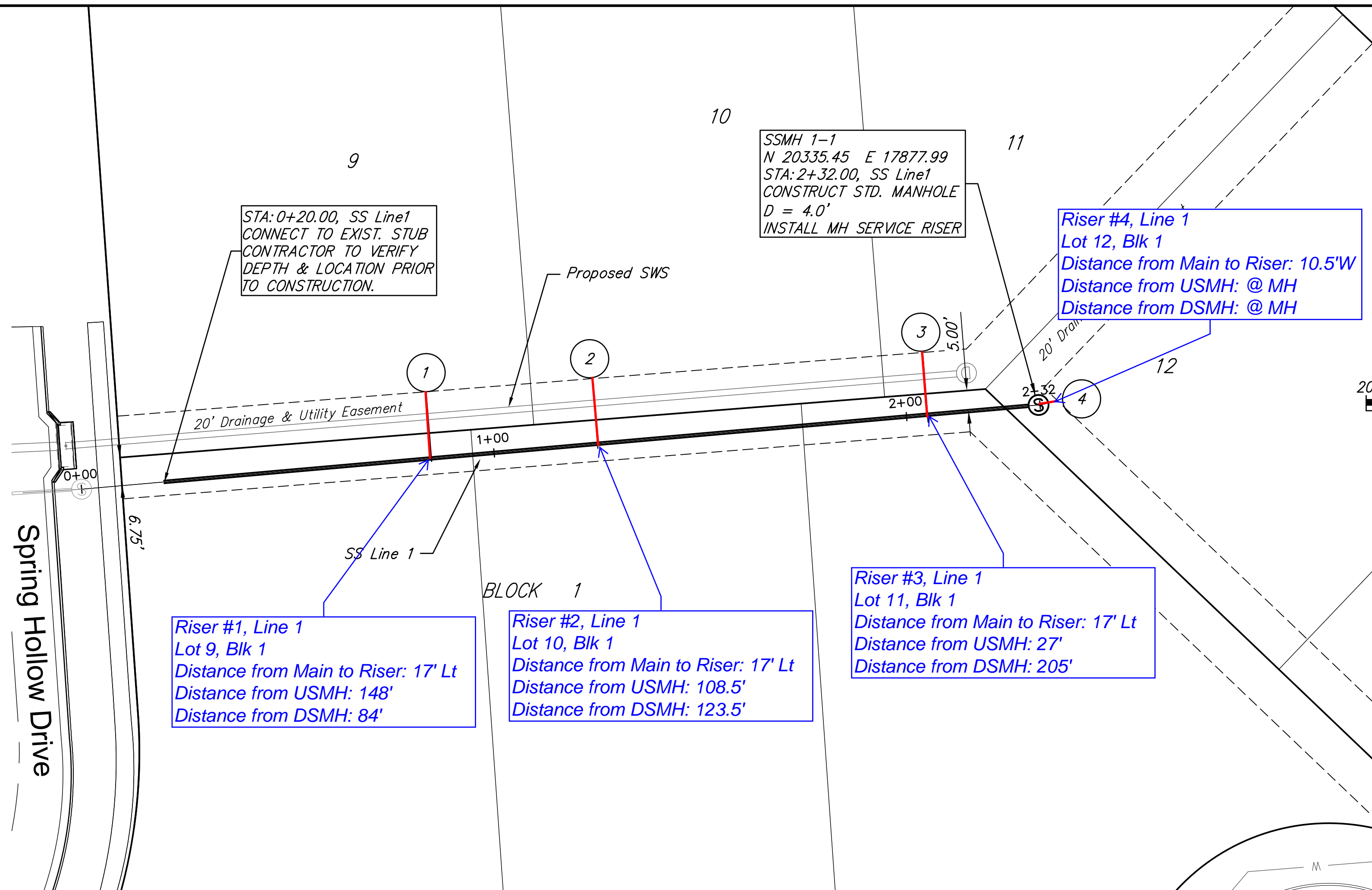
April 2016

PLANS PREPARED BY

RUGGLES & BOHM

F:\Projects\Projects 4600-4699\4696E (Clear Creek Ph. 4)\DWGs\Sanitary\02 - SS Line 1 Plan and Profile.dwg

SEWER SEVICE TABLE							
NUMBER	TYPE	SERVING			STATION/DIRECTION	FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.		APPROX. LENGTH 4" PIPE	
					VERTICAL	HORIZONTAL	
1	8"x4" Tee	9	1	1	0+85 Left	5.0	17.0
2	8"x4" Tee	10	1	1	1+25 Left	6.0	17.0
3	8"x4" Tee	11	1	1	2+05 Left	4.0	17.0
4	Manhole	12	1	1	2+33 Right	4.0	10.0



REVIEW
June 2016
DATE

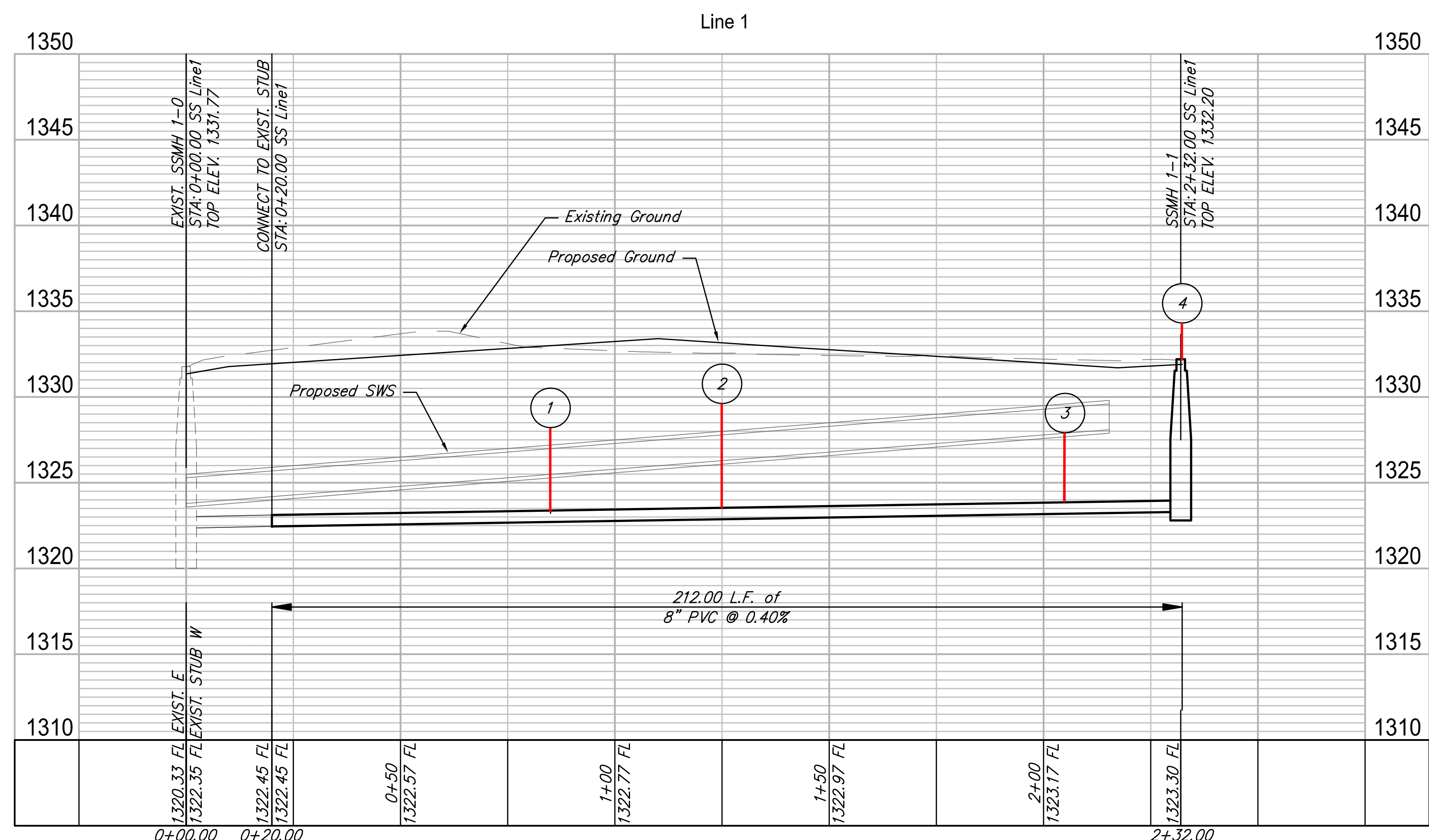
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EJG
DRAWN

PROJECT NUMBER
468-43611
DRAWING FILE
02 - SS Line 1 Plan and Profile

CDU

Clear Creek Phase 4
SS Line 1
Wichita, Kansas

RB JOB
4696E
SHEET
2
OF
12



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34

1

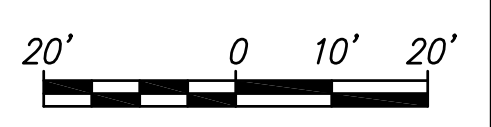
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3

2518

5

9

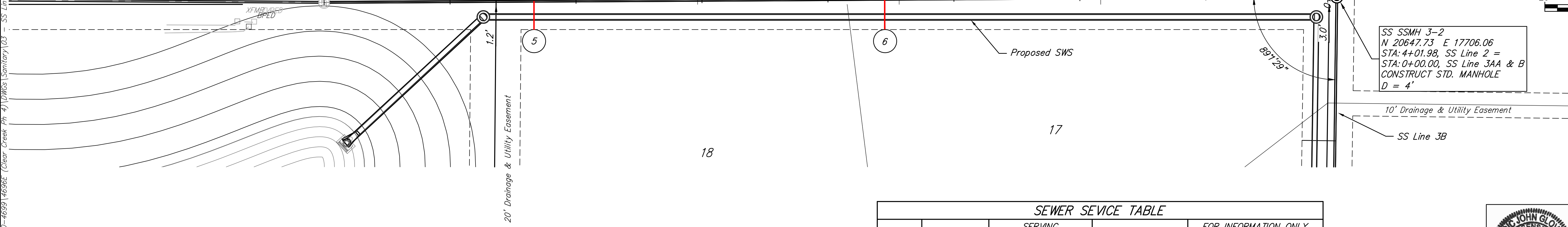


SS EXIST. SSMH 2-0
N 20651.70 E 18108.02
STA: 0+00.00, SS Line 2
CONNECT TO EXISTING 8" STUB

Riser #5, Line 2
Lot 18, Blk 1
Distance from Main to Riser: 11' Rt
Distance from USMH: 320'
Distance from DSMH: 82'

Riser #6, Line 2
Lot 17, Blk 1
Distance from Main to Riser: 11' Rt
Distance from USMH: 180'
Distance from DSMH: 222'

SS SSMH 3-2
N 20647.73 E 17706.06
STA: 4+01.98, SS Line 2 =
STA: 0+00.00, SS Line 3AA & B
CONSTRUCT STD. MANHOLE
D = 4'



SEWER SEVICE TABLE							
NUMBER	TYPE	SERVING			STATION/DIRECTION	FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.		APPROX. LENGTH 4" PIPE	
					VERTICAL	HORIZONTAL	
5	8"x4" Tee	18	1	2	0+83 Right	1.0	11.0
6	8"x4" Tee	17	1	2	2+23 Right	1.0	11.0



REVIEW
June 2016
DATE

DESIGN
EJG
DRAWN

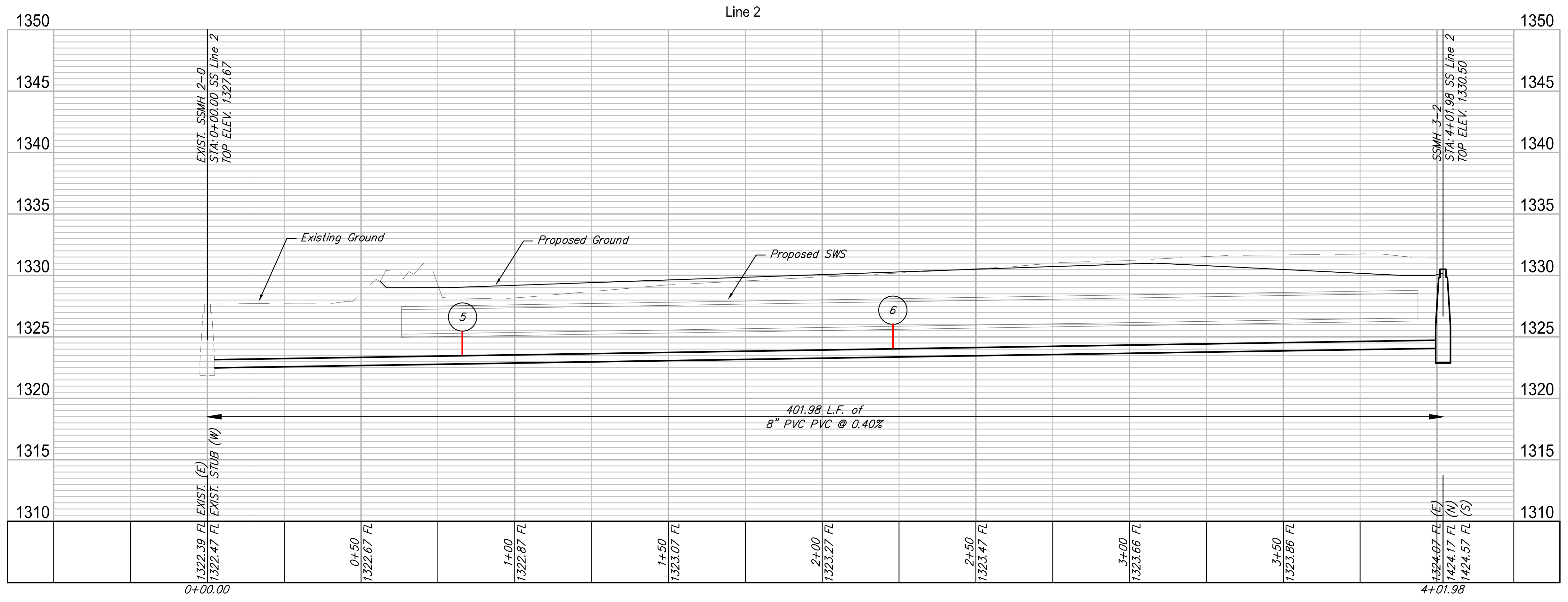
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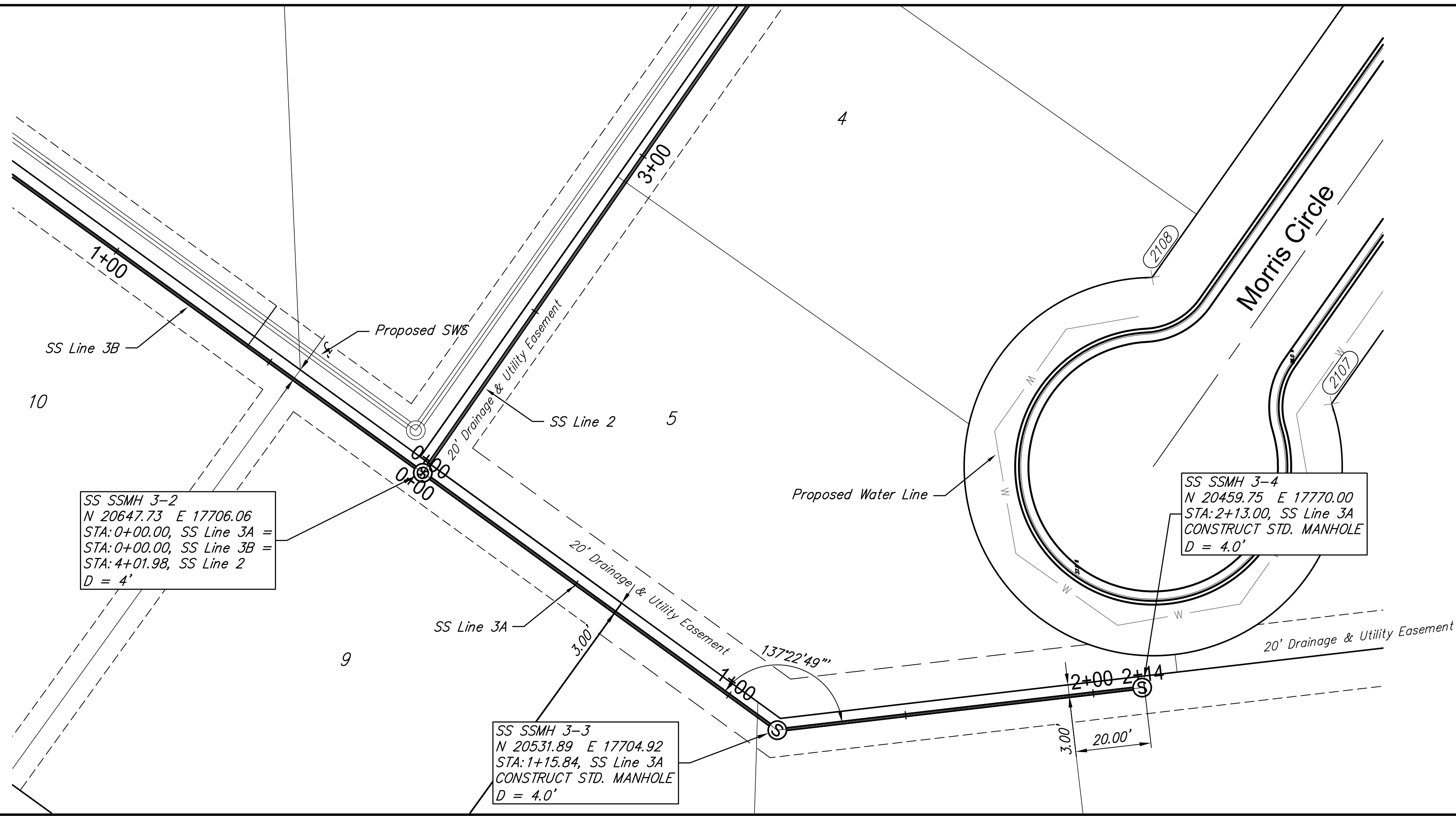
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Clear Creek Phase 4
SS Line 2
Wichita, Kansas

RB JOB
4696E
SHEET
3
OF
12



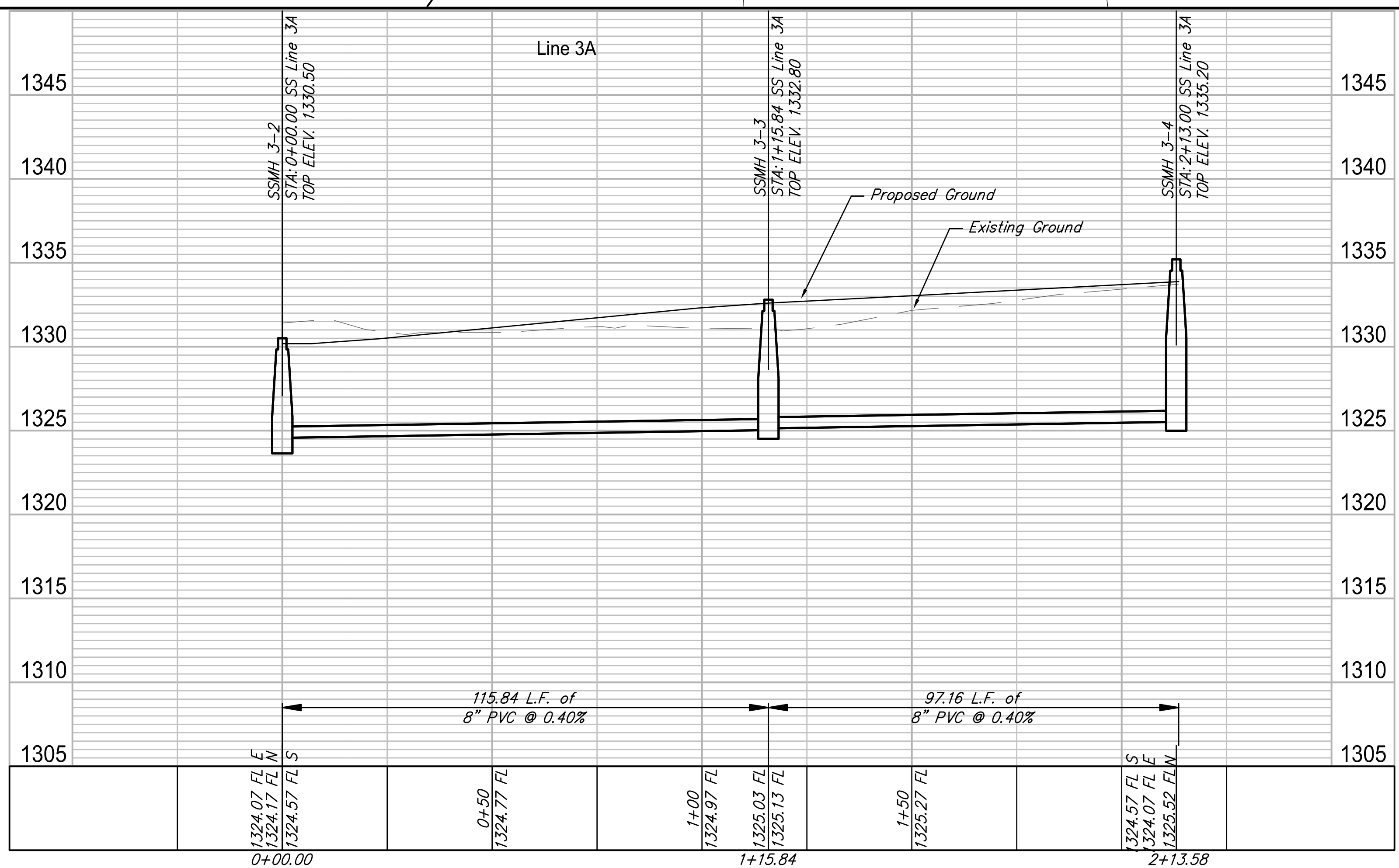
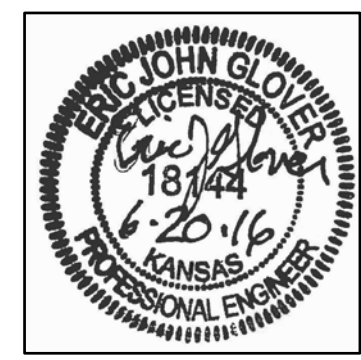
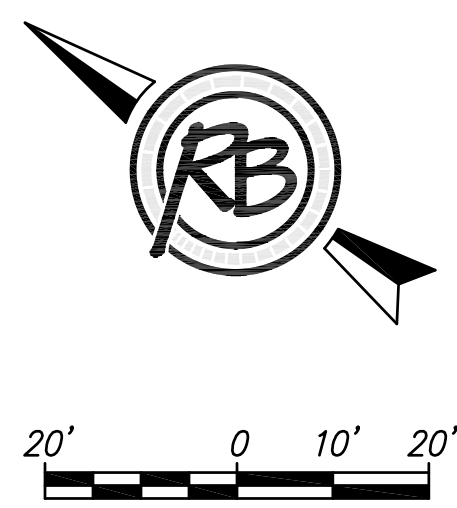
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SS SSMH 3-2
 N 20647.73 E 17706.06
 STA: 0+00.00, SS Line 3A
 STA: 0+00.00, SS Line 3B
 STA: 4+01.98, SS Line 2
 D = 4'

SS SSMH 3-4
 N 20459.75 E 17770.00
 STA: 2+13.00, SS Line 3A
 CONSTRUCT STD. MANHOLE
 D = 4.0'

SS SSMH 3-3
 N 20531.89 E 17704.92
 STA: 1+15.84, SS Line 3A
 CONSTRUCT STD. MANHOLE
 D = 4.0'



Clear Creek Phase 4
SS Line 3A
 Wichita, Kansas

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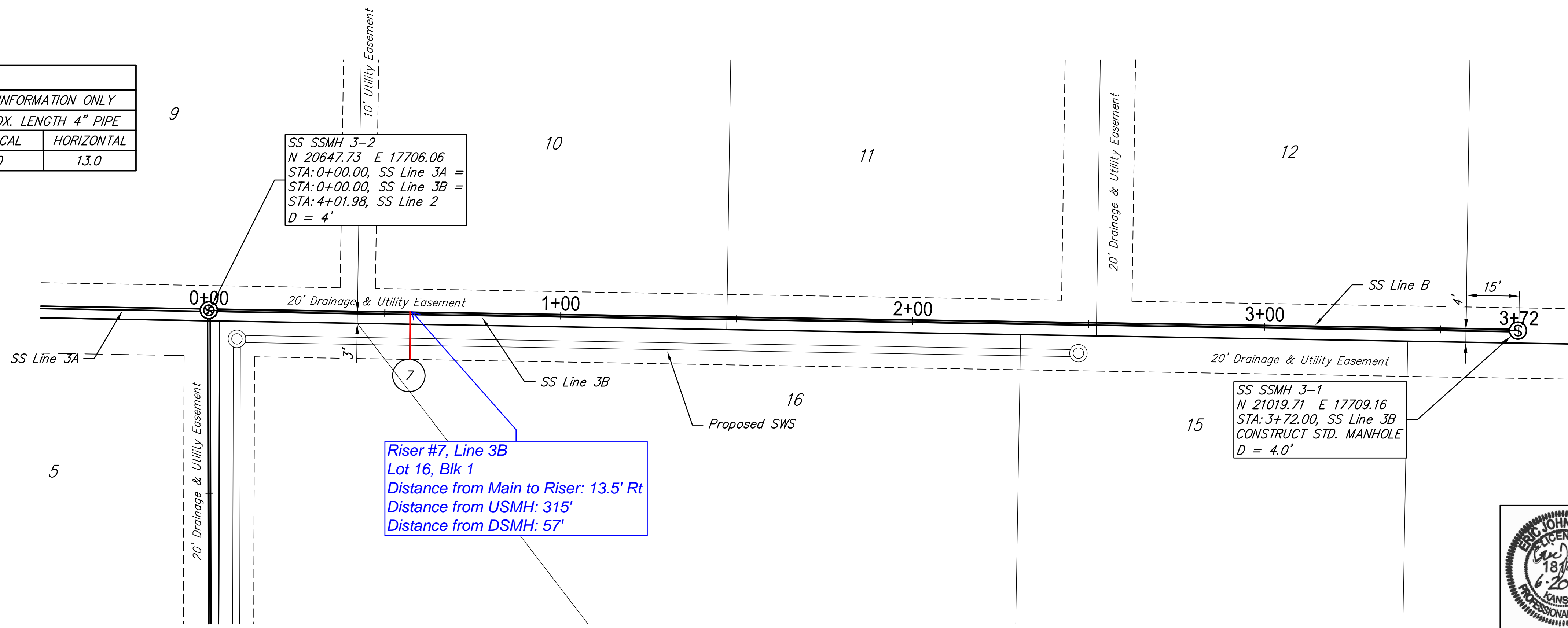
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REVIEW: June 2016
 DATE: April 2016

RB JOB: 4696E
 SHEET: 4 OF 12

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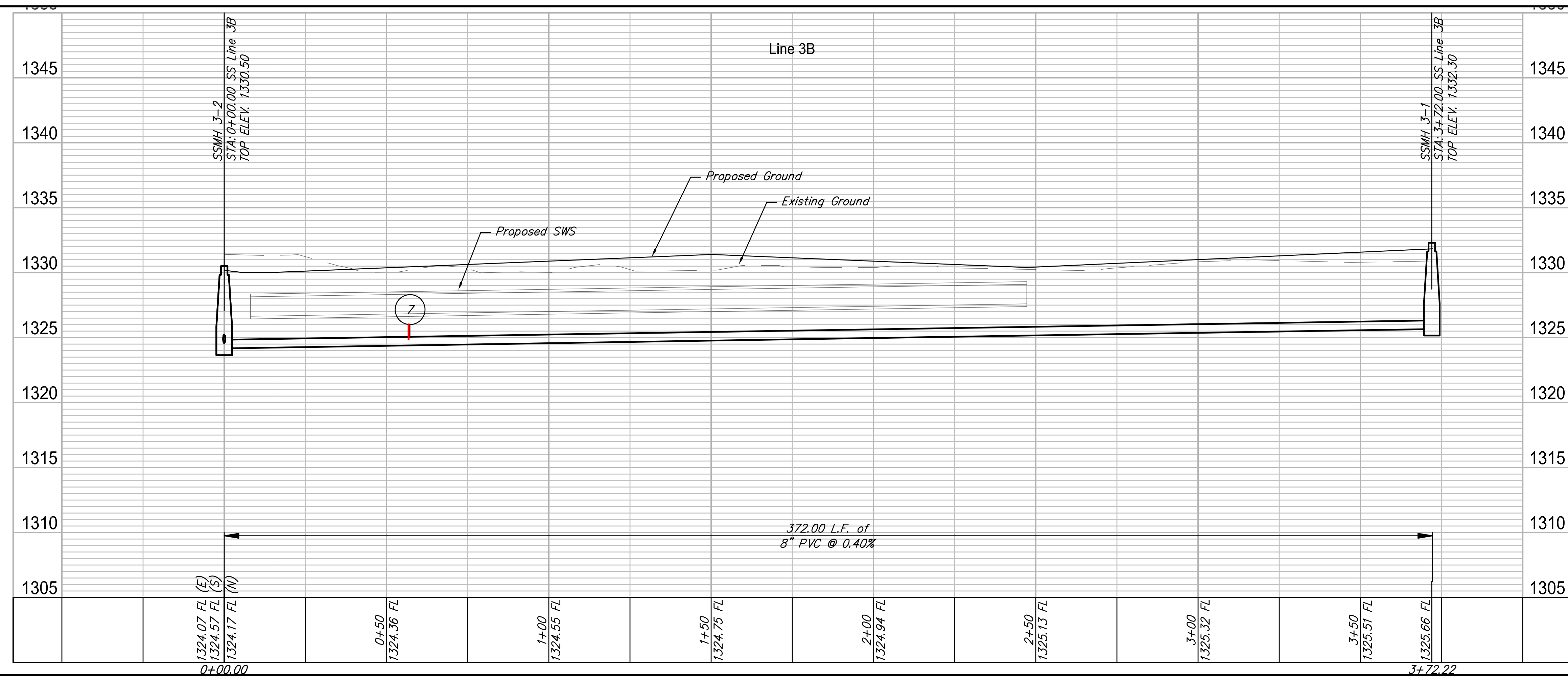
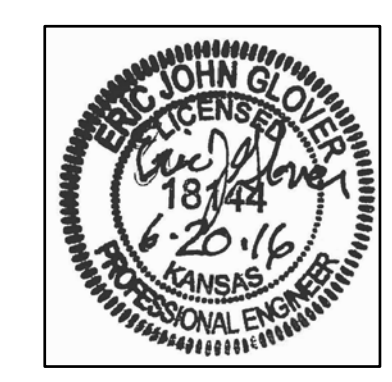
SEWER SEVICE TABLE							
NUMBER	TYPE	SERVING			STATION/DIRECTION	FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.		APPROX. LENGTH 4" PIPE	VERTICAL
7	8"x4" Tee	16	1	3B	0+57 Right	1.0	13.0



SS SSMH 3-2
 N 20647.73 E 17706.06
 STA: 0+00.00, SS Line 3A =
 STA: 0+00.00, SS Line 3B =
 STA: 4+01.98, SS Line 2
 D = 4'

SS SSMH 3-1
 N 21019.71 E 17709.16
 STA: 3+72.00, SS Line 3B
 CONSTRUCT STD. MANHOLE
 D = 4.0'

Riser #7, Line 3B
 Lot 16, Blk 1
 Distance from Main to Riser: 13.5' Rt
 Distance from USMH: 315'
 Distance from DSMH: 57'



RUGGLES BOHM
 ARCHITECTS & ENGINEERS
 18144
 6-20-16
 PROFESSIONAL ENGINEER
 KANSAS

PROJECT NUMBER: 468-83611
 DRAWING FILE: 04 - SS Line 3 Plan and Profile

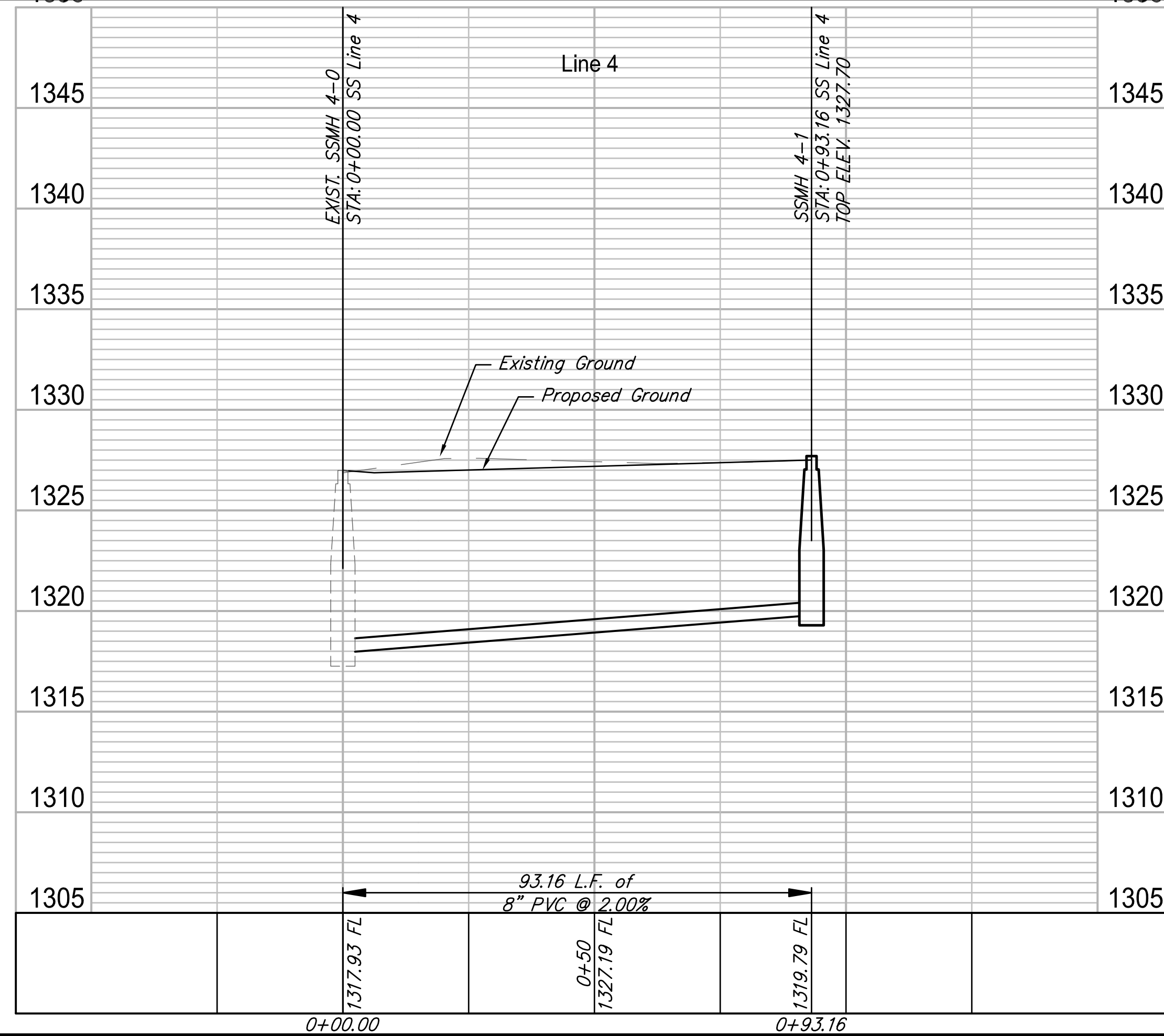
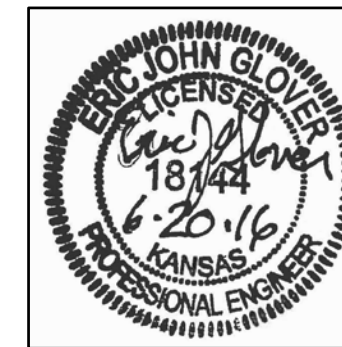
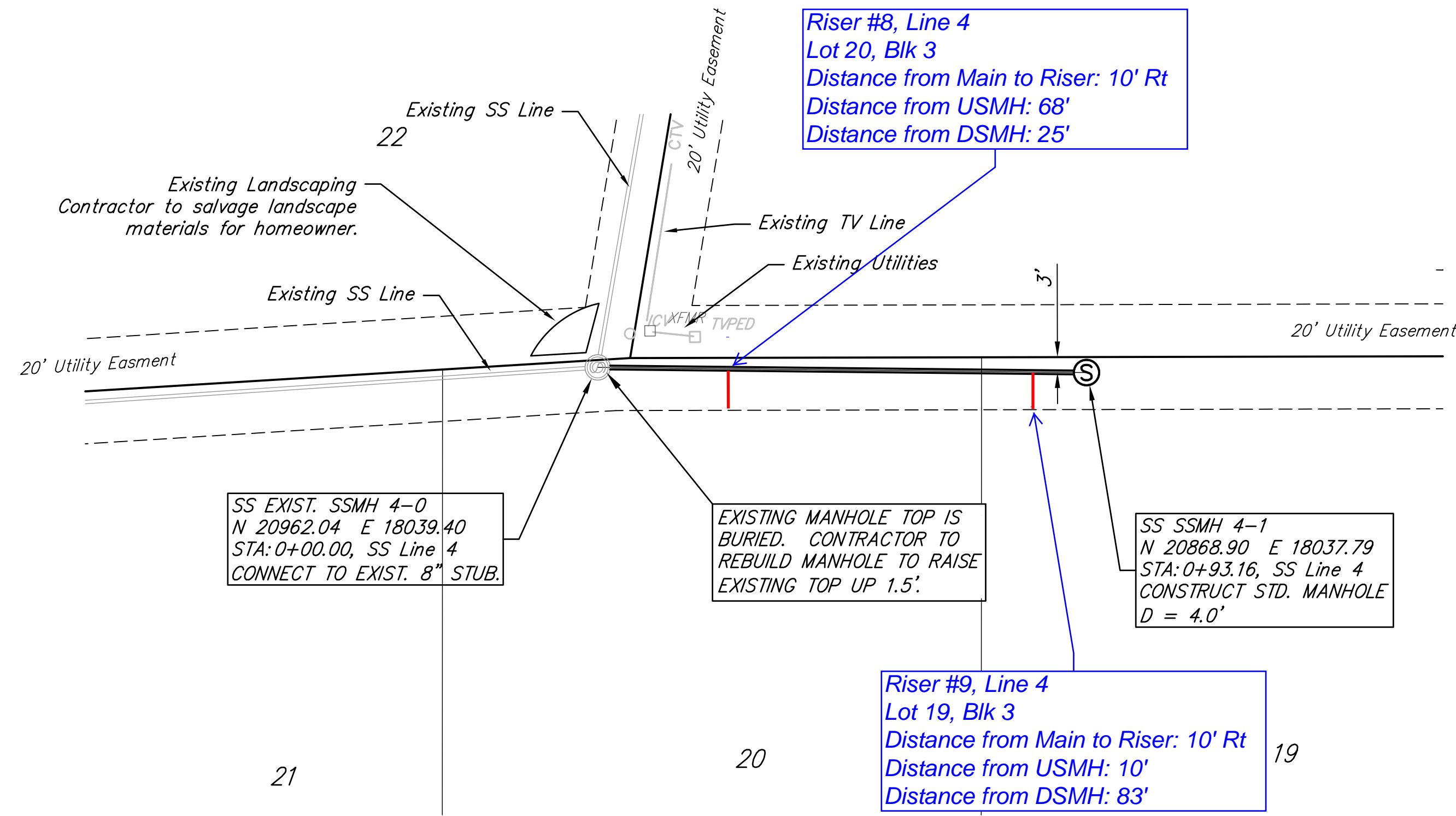
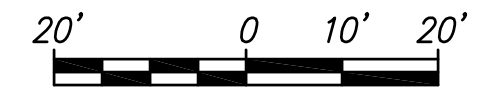
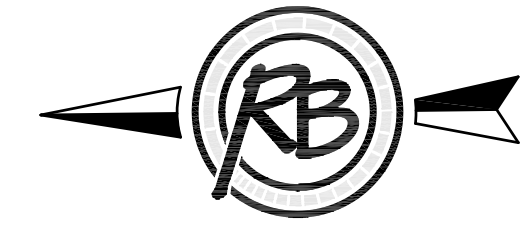
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REVIEW: June 2016
 DATE: April 2016

Clear Creek Phase 4
 SS Line 3B
 Wichita, Kansas

RB JOB: 4696E
 SHEET: 5 OF 12

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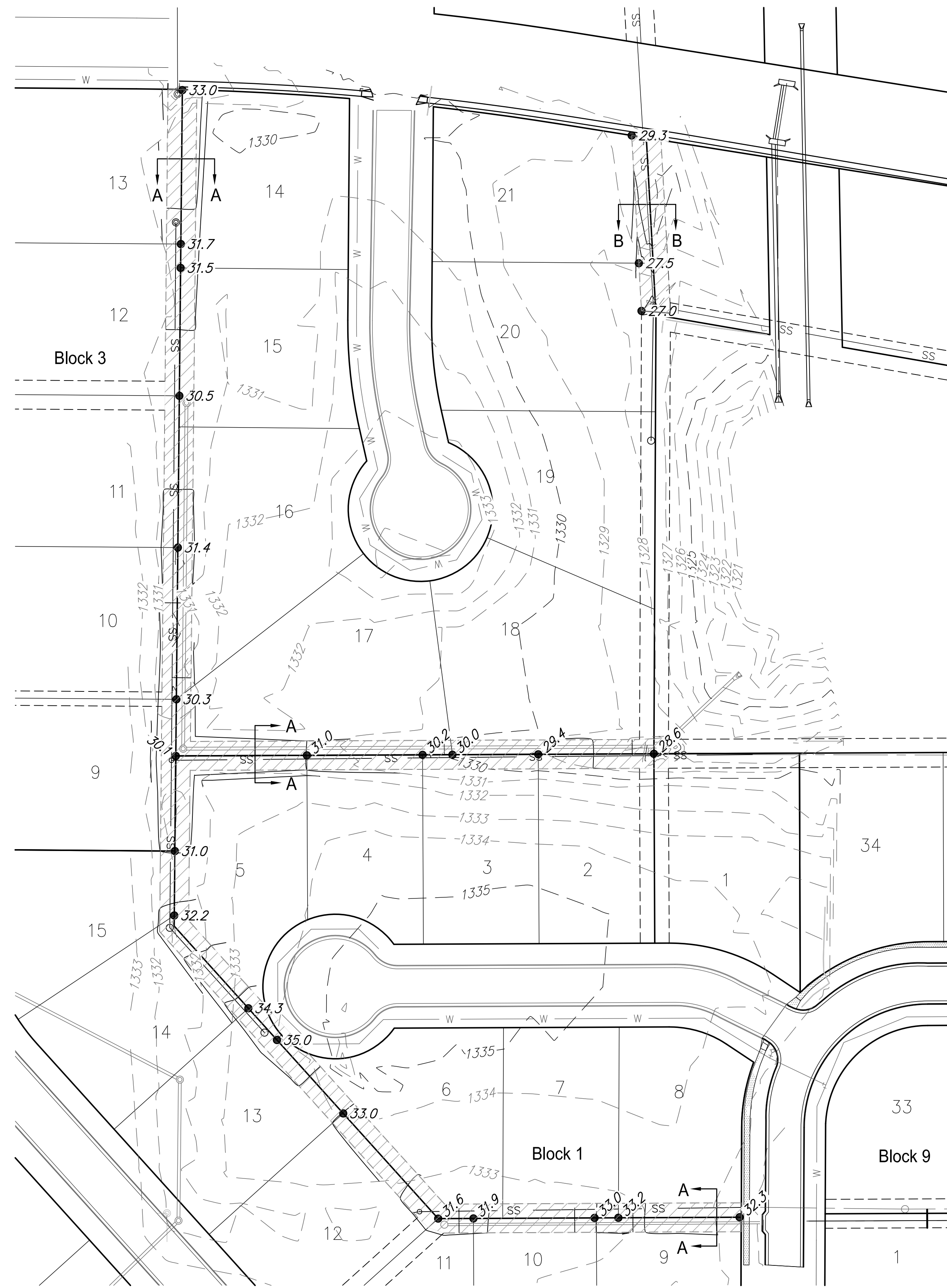
Clear Creek Phase 4
SS Line 4
 Wichita, Kansas

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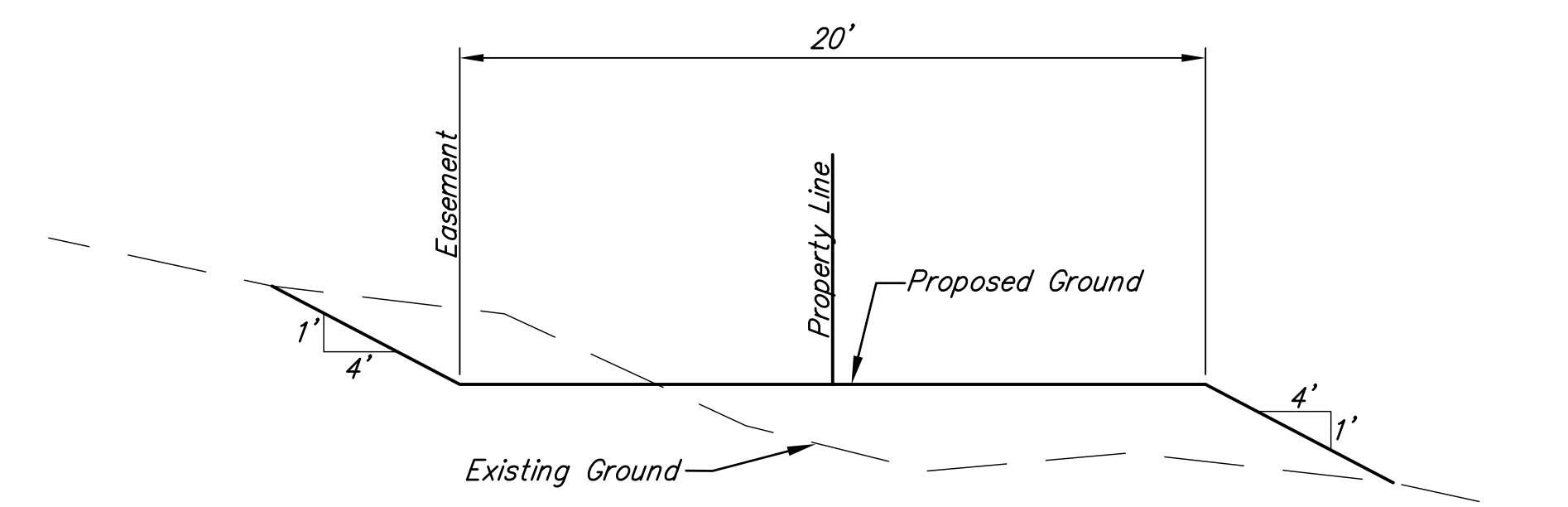
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RB JOB: 4696E
 SHEET: 6 OF 12

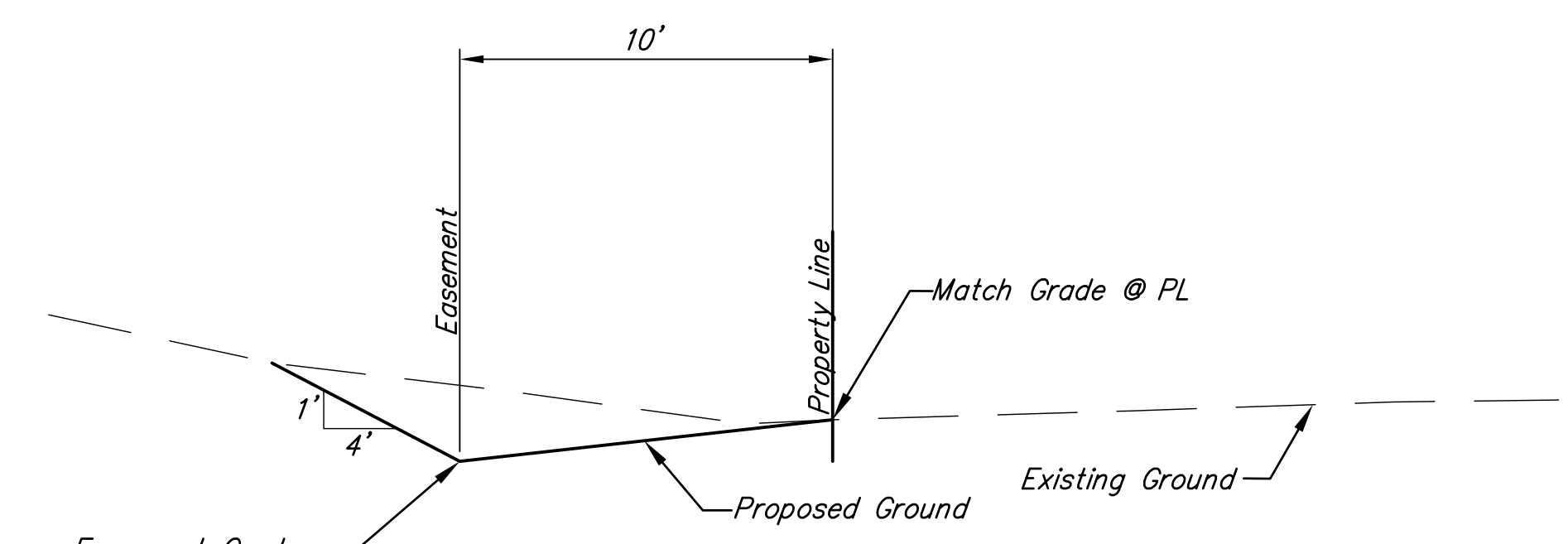


Easement Grading Quantity Summary (Project Total*):

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Easement Grading	360	440

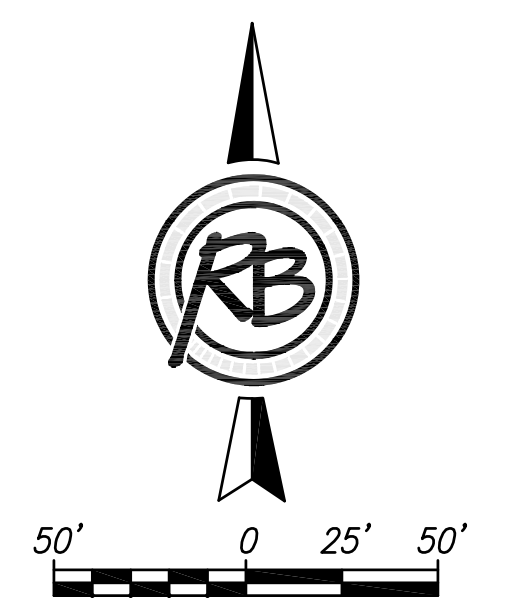


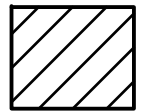
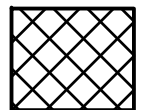
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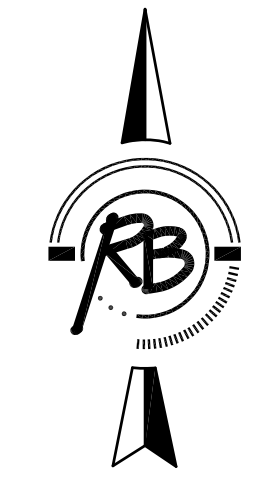
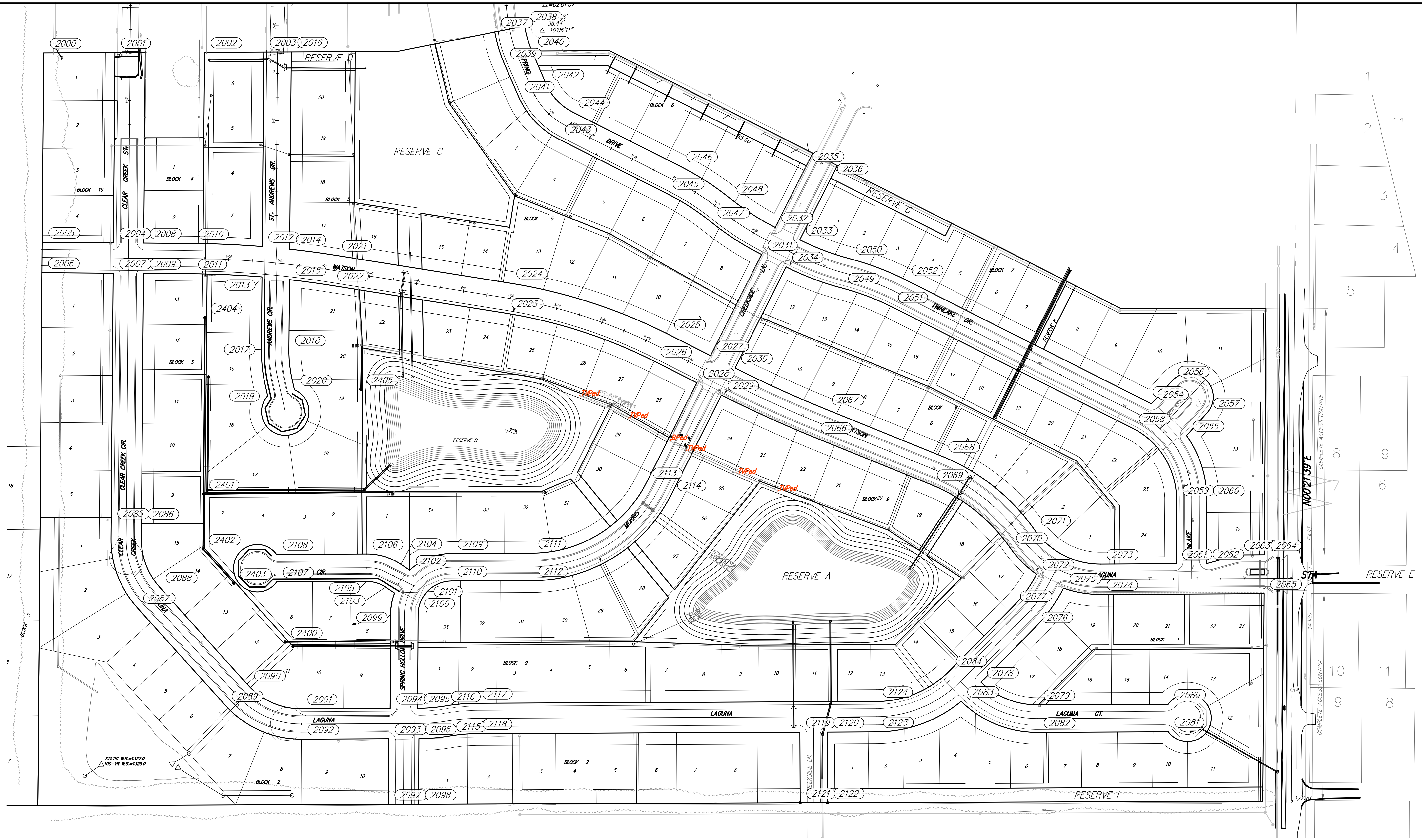
Easement Grading Section B-B

Clear Creek Phase 4			
Easement Grading Plan			
			DATE April 2016
	ENGINEERING SURVEYING LANDSCAPE ARCHITECTURE GOVERNMENT 924 NORTH MAIN WICHITA, KANSAS 67203 P (316) 264-8008 F (316) 264-4621 WWW.RBKANSAS.COM		DESIGN EJG
PROJECT NUMBER 468-83611	RB JOB NO. 4696E	DWG. SCALE 50	DRAWN CDJ
DRAWING FILE 06 - Easement Grading [Easement Grading Plan]			REVIEW June 2016
			SHEET 7
			OF 12



- x — x — *INSTALL Silt Fence (228 L.F.)*
-  ① *INSTALL Inlet Protection (2 Ea.)*
-  ② *INSTALL Construction Entrance (1 Ea.)*

Clear Creek Phase 4 Erosion Control Plan			
	 RUGGLES & BOHM <small>ENGINEERING SURVEYING LANDSCAPE ARCHITECTURE GOVERNMENT</small> <small>924 NORTH MAIN WICHITA, KANSAS 67203 P (316) 264-8008 F (316) 264-4621 WWW.RBKANSAS.COM</small>	<small>DATE</small> April 2016 <small>DESIGN</small> EJG <small>DRAWN</small> CDJ <small>REVIEW</small> June 2016 <small>SHEET</small> 8 <small>OF</small> 12	<small>PROJECT NUMBER</small> 468-83611 <small>DRAWING FILE</small> 06 - Erosion Control [Erosion Control Plan]
<small>RB JOB NO.</small> 4696E		<small>DWG. SCALE</small> 50	



Clear Creek Phase 4		Bubble Map Addition SS	
	RUGGLES & BOHM		
	<small>ENGINEERING SURVEYING LANDSCAPE ARCHITECTURE GOVERNMENT</small> <small>924 NORTH MAIN WICHITA, KANSAS 67203 P (316) 264-8008 F (316) 264-4621 WWW.RBKANSAS.COM</small>		
PROJECT NUMBER 468-83611	RB JOB NO. 4696E	DWG. SCALE 50	DATE April 2016
DRAWING FILE Engineering Base Clear Creek Ph4 [Bubble Map Addition SS]			DESIGN EJG
			DRAWN CDJ
			REVIEW June 2016
			SHEET 9
			OF 12

Point Table				
Point #	Elevation	Northing	Easting	Description
2000	0.00	21578.16	17369.04	Addition Corner
2001	0.00	21578.75	17519.03	Prop. Corner
2002	0.00	21579.49	17708.03	Prop. Corner
2003	0.00	21579.98	17833.03	Prop. Corner
2004	0.00	21177.51	17515.83	Prop. Corner
2005	0.00	21178.63	17365.84	Prop. Corner
2006	0.00	21114.63	17365.33	Prop. Corner
2007	0.00	21113.51	17515.32	Prop. Corner
2008	0.00	21177.03	17579.83	Prop. Corner
2009	0.00	21113.04	17579.32	Prop. Corner
2010	0.00	21176.27	17682.16	PC
2011	0.00	21112.27	17681.68	PC
2012	0.00	21169.76	17829.76	Prop. Corner
2013	0.00	21105.59	17829.25	Prop. Corner
2014	0.00	21164.23	17887.72	Prop. Corner
2015	0.00	21099.89	17887.21	Prop. Corner
2016	0.00	21580.21	17891.04	Prop. Corner
2017	0.00	20952.15	17828.03	PC
2018	0.00	20951.69	17886.02	PC
2019	0.00	20854.83	17841.11	PT
2020	0.00	20867.58	17897.69	PT
2021	0.00	21151.12	17985.09	PT
2022	0.00	21087.92	17975.01	PT
2023	0.00	21029.30	18342.56	PC
2024	0.00	21092.50	18352.64	PC
2025	0.00	20984.84	18685.60	PT
2026	0.00	20927.70	18656.77	PT
2027	0.00	20939.63	18775.20	Prop. Corner
2028	0.00	20882.49	18746.37	Prop. Corner
2029	0.00	20856.36	18798.15	Prop. Corner
2030	0.00	20913.50	18826.98	Prop. Corner
2031	0.00	21152.92	18882.82	Prop. Corner
2032	0.00	21210.06	18911.65	Prop. Corner
2033	0.00	21183.96	18963.45	Prop. Corner
2034	0.00	21126.82	18934.62	Prop. Corner
2035	0.00	21339.97	18977.20	Prop. Corner
2036	0.00	21313.84	19028.98	Prop. Corner
2037	0.00	21622.22	18320.13	Prop. Corner
2038	0.00	21634.75	18382.89	Addition Corner
2039	0.00	21556.78	18339.76	PT
2040	0.00	21582.20	18398.49	PT
2041	0.00	21486.61	18370.13	PC
2042	0.00	21512.04	18428.86	PC
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2045	0.00	21281.85	18682.53	PC
2046	0.00	21339.00	18711.33	PC
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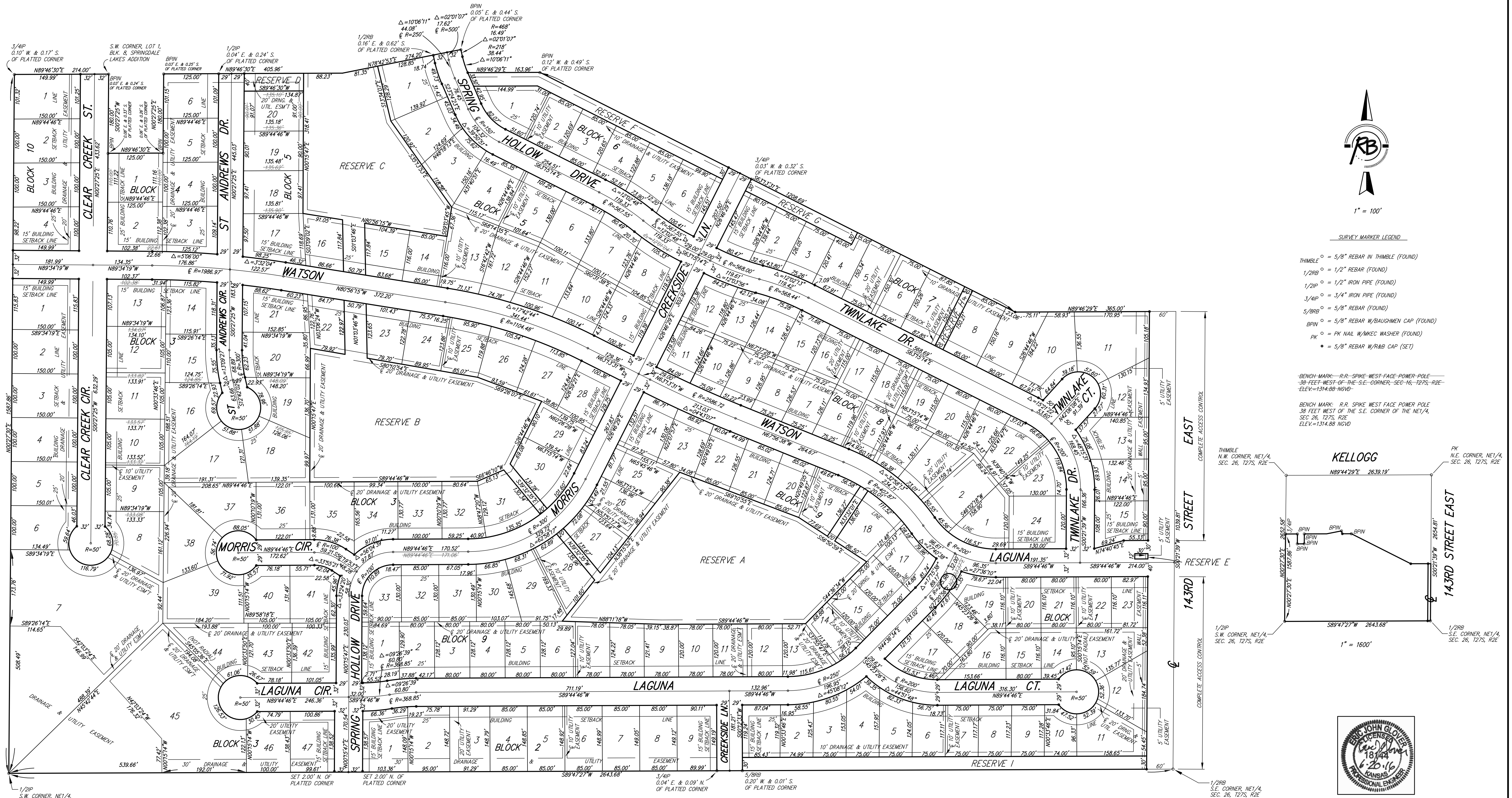
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2053	0.00	20843.57	19694.42	PT
2054	0.00	20838.00	19704.80	Prop. Corner
2055	0.00	20770.95	19779.00	Prop. Corner
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2057	0.00	20819.06	19822.47	PT
2058	0.00	20786.42	19665.62	PC
2059	0.00	20635.33	19758.01	PT
2060	0.00	20634.93	19822.01	PT
2061	0.00	20500.63	19757.16	Prop. Corner
2062	0.00	20500.92	19821.16	Prop. Corner
2063	0.00	20519.21	19887.95	Prop. Corner
2064	0.00	20519.46	19943.27	Prop. Corner
2065	0.00	20437.45	19942.75	Prop. Corner
2066	0.00	20767.24	18994.47	PT
2067	0.00	20826.56	19018.51	PT
2068	0.00	20727.17	19263.80	PC
2069	0.00	20667.85	19239.77	PC
2070	0.00	20534.94	19406.62	PT
2071	0.00	20571.62	19459.06	PT
2072	0.00	20478.53	19462.73	Prop. Corner
2073	0.00	20499.92	19597.47	PT
2074	0.00	20435.92	19597.75	PT
2075	0.00	20449.13	19519.58	Prop. Corner
2076	0.00	20367.50	19460.74	PC
2077	0.00	20412.44	19415.18	PC
2078	0.00	20250.74	19345.56	Prop. Corner
2079	0.00	20203.13	19464.71	PT
2080	0.00	20204.35	19740.27	Prop. Corner
2081	0.00	20146.35	19740.53	Prop. Corner
2082	0.00	20145.13	19464.96	PT
2083	0.00	20210.49	19303.75	Prop. Corner
2084	0.00	20275.03	19279.62	PT
2085	0.00	20586.40	17511.12	PC
2086	0.00	20585.92	17575.12	PC
2087	0.00	20408.25	17565.96	PT
2088	0.00	20451.12	17613.47	PT
2089	0.00	20201.40	17752.58	PC
2090	0.00	20244.27	17800.10	PC
2091	0.00	20194.75	17912.13	PT
2092	0.00	20130.75	17912.42	PT
2093	0.00	20131.57	18096.23	Prop. Corner
2094	0.00	20195.58	18099.53	Prop. Corner
2095	0.00	20195.84	18157.53	Prop. Corner
2096	0.00	20131.85	18160.24	Prop. Corner
2097	0.00	19993.05	18095.60	Prop. Corner
2098	0.00	19993.28	18159.60	Prop. Corner
2099	0.00	20393.87	18100.44	PC

Point Table				
Point #	Elevation	Northing	Easting	Description
2100	0.00	20396.37	18158.50	PC
2101	0.00	20438.82	18108.75	Prop. Corner
2102	0.00	20487.09	18140.90	Prop. Corner
2103	0.00	20451.34	18089.95	PC
2104	0.00	20499.61	18122.11	PC
2105	0.00	20463.25	18050.28	PT
2106	0.00	20521.25	18050.02	PT
2107	0.00	20462.41	17860.17	Prop. Corner
2108	0.00	20520.41	17859.91	Prop. Corner
2109	0.00	20522.27	18228.87	PT
2110	0.00	20464.27	18229.12	PT
2111	0.00	20523.03	18399.39	PC
2112	0.00	20465.03	18399.64	PC
2113	0.00	20671.94	18640.13	PT
2114	0.00	20645.82	18691.91	PT
2115	0.00	20137.57	18226.28	PT
2116	0.00	20200.66	18215.49	PT
2117	0.00	20206.38	18281.24	PT
2118	0.00	20142.39	18281.53	PT
2119	0.00	20145.41	18963.69	Prop. Corner
2120	0.00	20145.67	19021.69	Prop. Corner
2121	0.00	19996.22	18964.24	Prop. Corner
2122	0.00	19996.43	19022.24	Prop. Corner
2123	0.00	20146.13	19125.67	PC
2124	0.00	20210.13	19125.39	PC
2400		20335.45	17877.99	MH 2+32 L1
2401		20647.73	17706.06	MH 4+02 L2
2402		20531.89	17704.92	MH 1+16 L3
2403		20459.75	17770.00	MH 2+14 L3
2404		21019.71	17709.16	MH 3+72 L3B
2405		20868.90	18037.79	MH 0+93 L4

Clear Creek Phase 4			
Bubble Map Add Coords SS			
			DATE April 2016
	ENGINEERING SURVEYING LANDSCAPE ARCHITECTURE GOVERNMENT <small>924 NORTH MAIN WICHITA, KANSAS 67203 P (316) 264-8008 F (316) 264-4621 WWW.RBKANSAS.COM</small>		DESIGN EJG
PROJECT NUMBER 468-83611		RB JOB NO. 4696E	DRAWN CDJ
DRAWING FILE Engineering Base Clear Creek Ph4 [Bubble Map Add Coords SS]		DWG. SCALE 50	REVIEW June 2016
			SHEET 10
			OF 12

CLEAR CREEK ADDITION

Wichita, Sedgwick County, Kansas



- SURVEY MARKER LEGEND**
- THIMBLE \circ = 5/8" REBAR IN THIMBLE (FOUND)
 - 1/2" \circ = 1/2" REBAR (FOUND)
 - 1/2" \circ = 1/2" IRON PIPE (FOUND)
 - 3/4" \circ = 3/4" IRON PIPE (FOUND)
 - 5/8" \circ = 5/8" REBAR (FOUND)
 - BPIN \circ = 5/8" REBAR W/ BAUGHMAN CAP (FOUND)
 - PK \circ = PK NAIL W/ MKEC WASHER (FOUND)
 - \bullet = 5/8" REBAR W/ RAB CAP (SET)

BENCH MARK: R.R. SPIKE WEST FACE POWER POLE
 38 FEET WEST OF THE S.E. CORNER, SEC. 16, T27S, R2E
 ELEV. = 1314.88 NGVD

BENCH MARK: R.R. SPIKE WEST FACE POWER POLE
 38 FEET WEST OF THE S.E. CORNER OF THE NE 1/4,
 SEC. 26, T27S, R2E
 ELEV. = 1314.88 NGVD

