

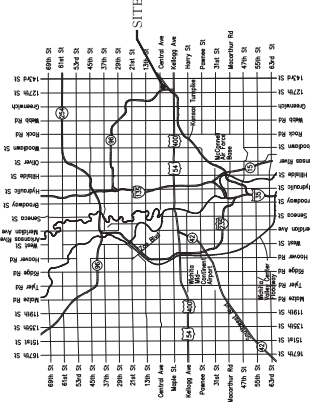
GENERAL NOTES:

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:
AIRET 1-800-246-8464
City of Wichita Water & Sewer 1-316-219-8921
City of Wichita Stormwater 1-316-268-4090
City of Wichita Electric 1-316-268-4090
City Communications 1-888-249-3530
Kansas Gas Service 1-888-462-4950
Energy 1-800-344-4657
Utility service lines, poles, etc. are to be adjusted as necessary by others prior to construction unless the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. The Contractor will be required to work around conflict with proposed construction, any which do not conflict with proposed construction.
3. Rubble from the removal of sidewalks, curbs and other structures shall be disposed of at the Contractor's expense. The Contractor shall provide the location, in the opinion of the Engineer, that will leave an ungravelly surface. Material either stockpiled or disposed of in the United States or wetlands is subject to U.S. Corps, Agricultural permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps, Agricultural permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps, Agricultural permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps, Agricultural permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps, Agricultural permit.
4. Trees and shrubs in public right-of-way which are in danger of being removed shall be protected by the Contractor. Trees and shrubs which are not in direct contact with construction shall be saved and protected from damage.
5. The Contractor shall give all property owners and/or tenants of damaged property written notice of construction prior to start of construction.
6. The Contractor shall be responsible for preserving, re-establish any property lines which are damaged or destroyed by the construction operations. Such lines shall be re-established in accordance with state laws.
7. All elevations shown are MAMDD.
8. All stakes and capped pipes shall be located with green plastic tape in the same manner as notes.
9. Connecting to Existing Manholes: Existing stakes in existing manholes, the Contractor shall expose and verify the elevation, grade and alignment of existing stakes and manholes. Where the stakes are unusable due to elevation grade or alignment, the Contractor shall remove the stakes and install new stakes. Where connection to an existing manhole is required, the Contractor shall construct a new manhole to make connection using approved water stop gasket, and provide a minimum of 12" of clearance between the manhole and the existing manhole. The cost of connection to existing manholes is incidental to the project.
10. Contractor shall limit the extent of trench open overnight and weekends to less than 50 feet.
11. Contractor shall provide positive drainage away from all manhole covers.
12. The Contractor shall prevent any construction, which may enter the existing sanitary sewer during construction.
13. The Contractor shall protect from damage and support all existing utility lines in the vicinity of the project. The Contractor shall be responsible for the cost of the Contractor's expenses.

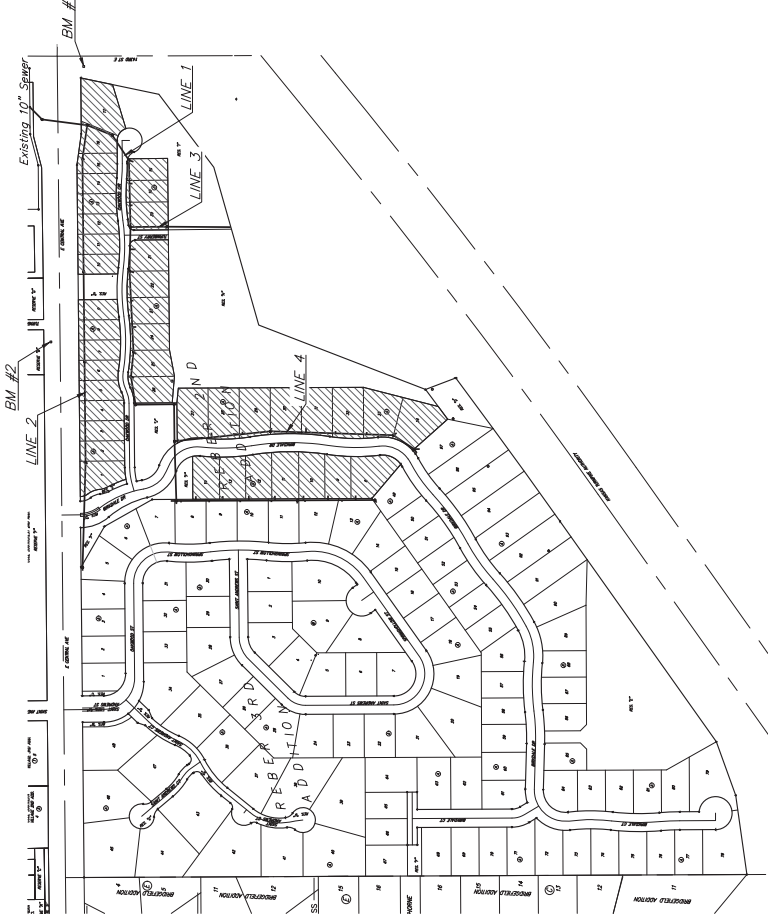
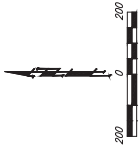
SANITARY SEWER IMPROVEMENTS TO SCIVE REBER 2ND ADD. Ph I

CITY OF WICHITA, KANSAS
Paul Gunzelman, P.E. City Engineer
Project Number 468-2024-033114
Org Code 47273725
Munis Number E5075

6348B
6347A
4MC-CV



Vicinity Map



Sheet Index

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Benchmarks

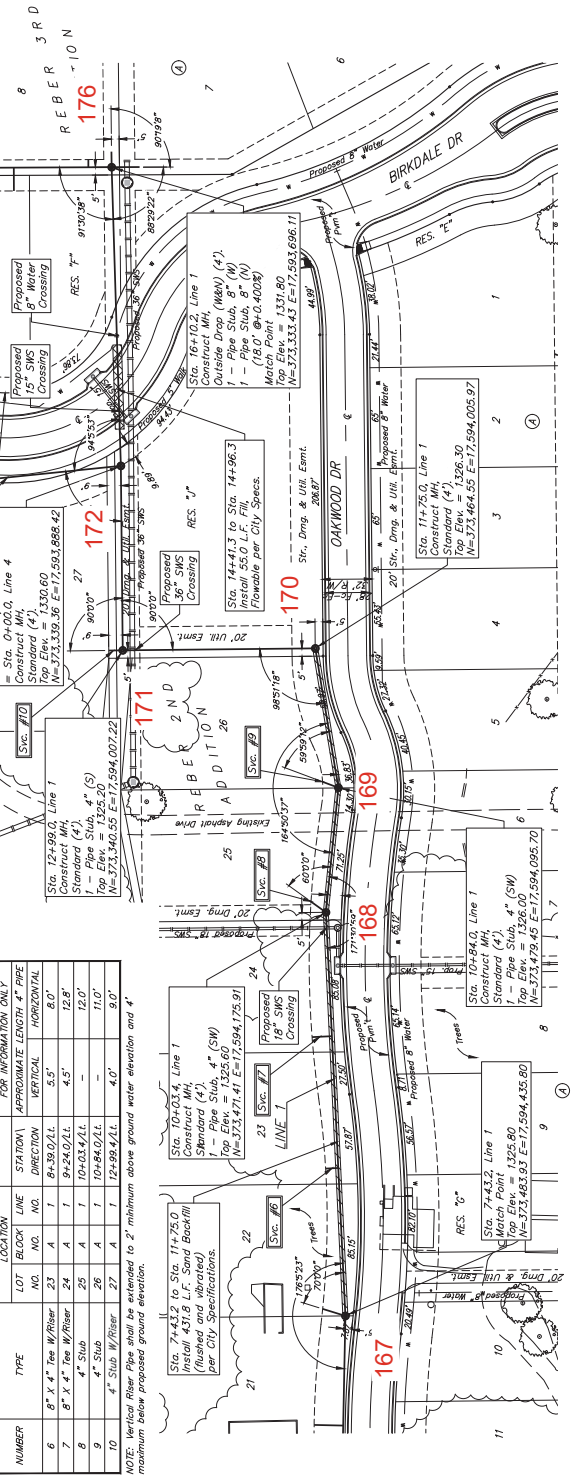
BM #1: Cross NE Corner of curb
inlet west side of 143rd St. E.
Elev. = 1326.60 H1416068
BM #2: North side of curb
inlet north side of Central, 59 ±
west of Veterinary Clinic
Elev. = 1326.12 H1416068

Benefit District



May 29, 2025
BAUGHMAN COMPANY
315 EIBS ST. WICHITA, KS 67211 316-262-1271
BaughmanCo.com





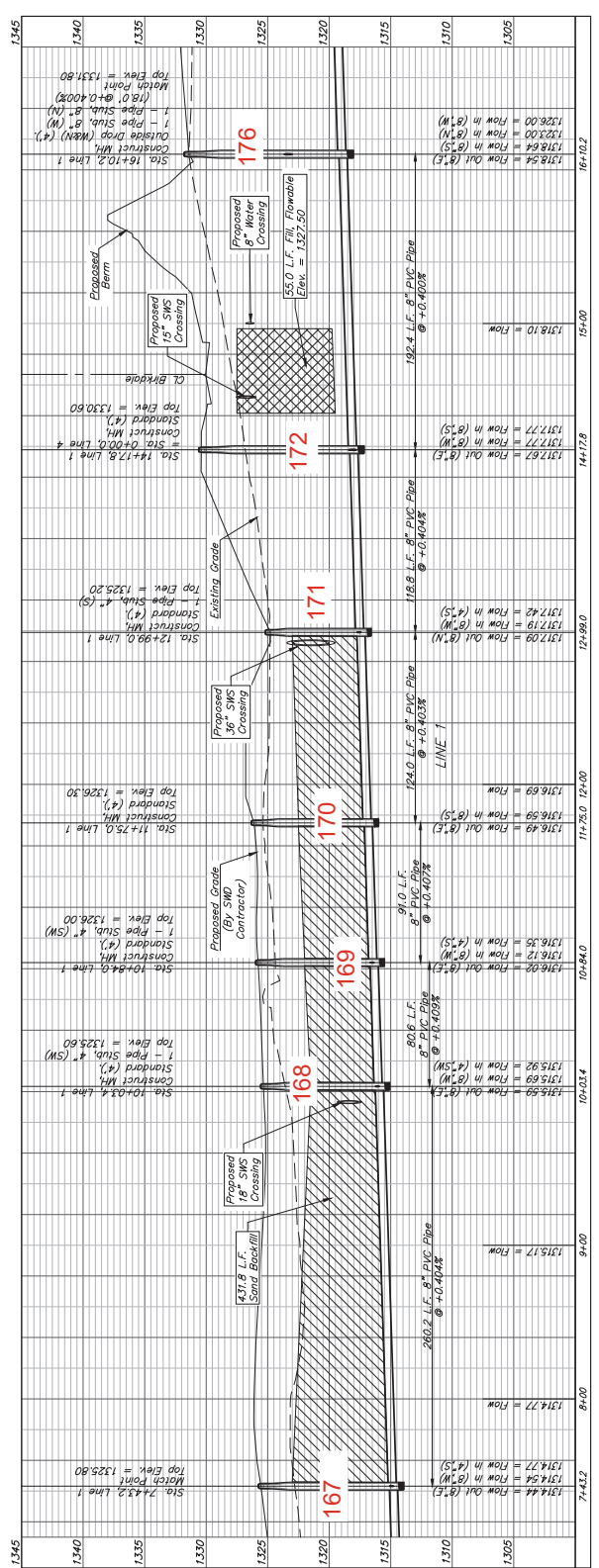
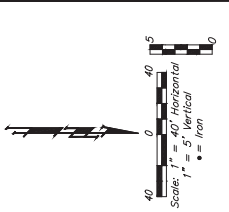
SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION	ESR INFORMATION ONLY	
			APPROXIMATE LENGTH	APPROXIMATE LENGTH
			VERTICAL	HORIZONTAL
6	8" X 4" Tee W/riser	23	5.5'	8.0'
7	8" X 4" Tee W/riser	24	4.5'	12.8'
8	4" Sub	25	11.0'	11.0'
9	4" Sub	26	4.0'	9.0'
10	4" Sub W/riser	27	4.0'	9.0'


NOTE: Vertical flow pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.

Existing trees shall be preserved/removed ONLY with approval of the City Engineer. All trees to be removed shall be marked with a red 'X' and a diameter measurement. Trees not in direct conflict with new construction shall remain and the Contractor shall be responsible for their protection. The Contractor shall schedule an on-site meeting with the City Engineer and the Developer to discuss tree areas. All included in bid item "Site Clearing".

BENCHMARKS:
 BM #1: Cross NE Corner of curb
 Elev. = 1439.4 St. E.
 BM #2: South side of Central 59 ±
 Elev. = 1320.83 (NA1008)
 BM #3: North side of curb
 Elev. = 1320.83 (NA1008)
 BM #4: North side of Central 59 ±
 Elev. = 1323.12 (NA1008)



6347



**BAUGHMAN
COMPANY**

315 Ellis St.
Wichita, KS 67211
316-262-7271
Baughmanco.com

REBER 2ND ADDITION
Phase 1

LINE 1

SANITARY SEWER
IMPROVEMENTS

PROJECT NUMBER
24-10-EG20

DRAWN AEG: BRW/TLS

DATE: MAY 28, 2025

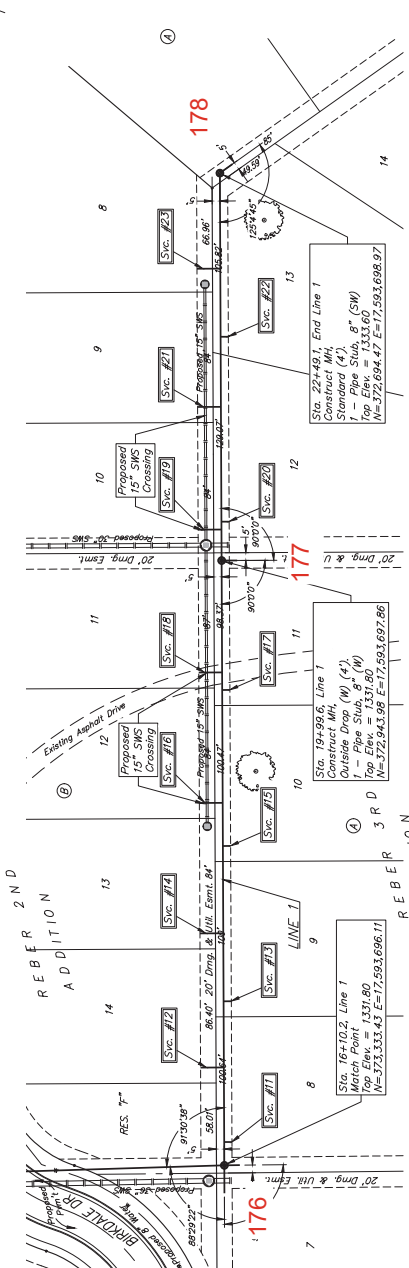
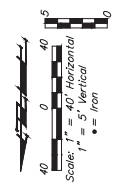
BENCHMARKS:
 BM #1: Cross NE Corner of curb
 Inlet west side of 143rd St. E.
 Elev. = 1320.83 NAVD88
 BM #2: " North side of curb
 Inlet north side of Central 59±
 Elev. = 1323.12 NAVD88

Existing trees shall be trimmed/removed ONLY with approval of the Developer. Trimming of overhanging branches, trees not in direct contact with new construction shall remain and be protected from damage. Prior to the start of construction, the Developer shall schedule an on-site meeting with the Developer and/or removal shall be included in Bid Item "Site Cleaning".

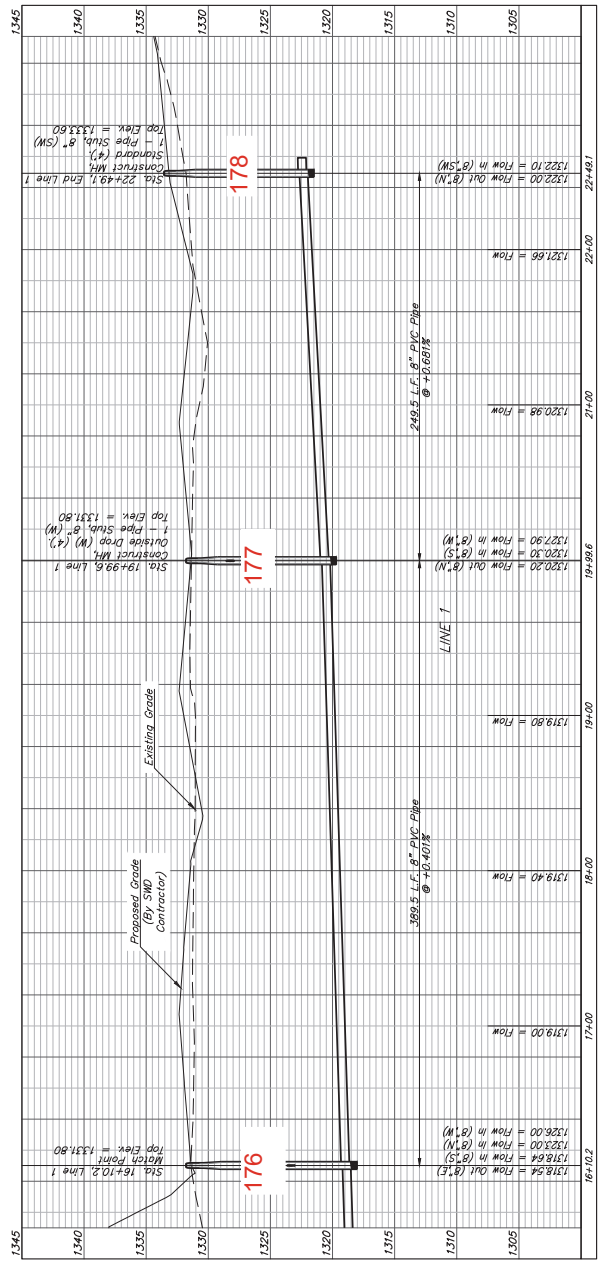
SEWER SERVICE TABLE


NUMBER	TYPE	LOT NO.	LOCATION	STATION	FOR INFORMATION ONLY	
					APPROXIMATE LENGTH	PIPE
					VERTICAL	HORIZONTAL
11	8" X 4" Tee W/Riser	B	A	167-25.0/RL	8.5'	15.0'
12	8" X 4" Tee W/Riser	B	B	171-15.0/RL	8.5'	15.0'
13	8" X 4" Tee W/Riser	B	A	171-15.0/RL	8.5'	15.0'
14	8" X 4" Tee W/Riser	B	A	181-16.2/RL	7.0'	15.0'
15	8" X 4" Tee W/Riser	B	A	181-16.2/RL	6.5'	15.0'
16	8" X 4" Tee W/Riser	B	A	191-16.7/RL	8.0'	15.0'
17	8" X 4" Tee W/Riser	B	A	191-16.7/RL	8.0'	15.0'
18	8" X 4" Tee W/Riser	B	A	201-25.0/RL	8.0'	15.0'
19	8" X 4" Tee W/Riser	B	A	201-25.0/RL	8.0'	15.0'
20	8" X 4" Tee W/Riser	B	A	211-44.0/RL	6.5'	15.0'
21	8" X 4" Tee W/Riser	B	A	211-44.0/RL	6.5'	15.0'
22	8" X 4" Tee W/Riser	B	A	211-44.0/RL	6.0'	15.0'
23	8" X 4" Tee W/Riser	B	A	211-44.0/RL	6.0'	15.0'

NOTE: Vertical Rise Pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.



6347





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RESER 2ND ADDITION
 Phase 1

LINE 1

SANITARY SEWER IMPROVEMENTS
 PROJECT NUMBER
 24-10-ES20
 DESIGN AEG DRAWN TMS
 DATE: MAY 28, 2025

SHEET **4** OF **22**
 SHEET NUMBER

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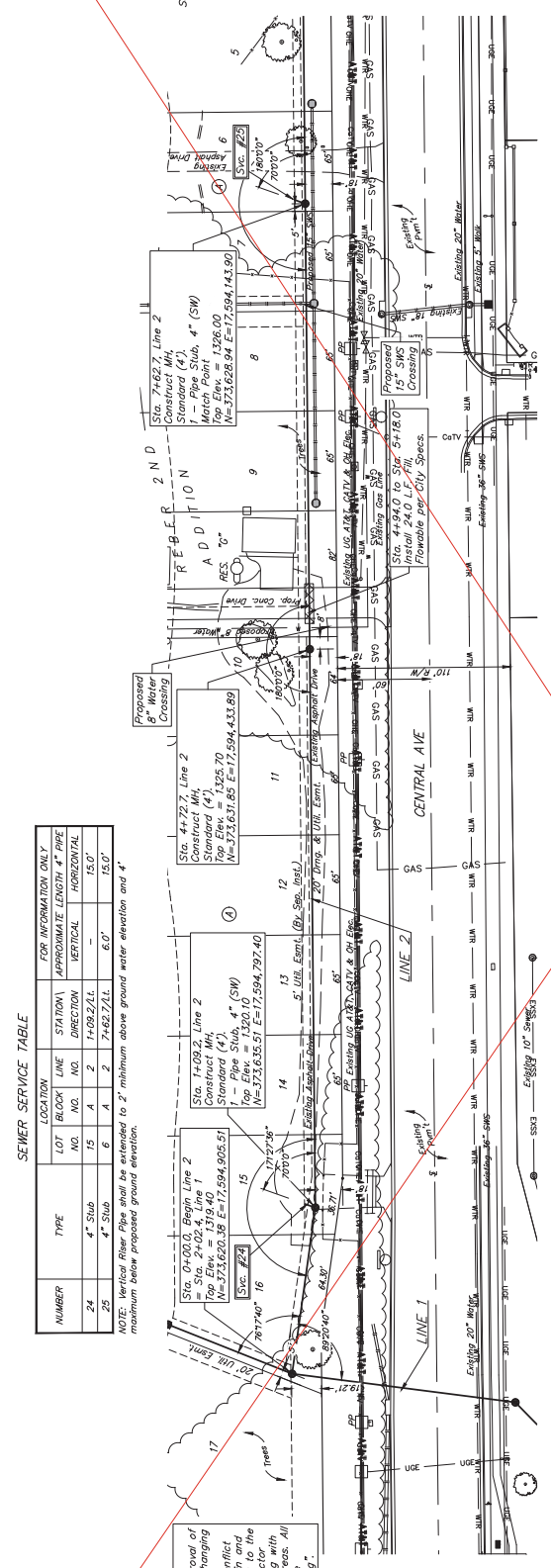
BENCHMARKS:
 BM #1: Cross NE Corner of curb
 Elev. = 143.94 St. E.
 Elev. = 1320.83 (NAVD88)
 BM #2: North side of curb
 Elev. = 1323.12 (NAVD88)

Existing trees shall be trimmed/removed ONLY with approval of city. Limits to be permitted only with new construction shall remain and start of construction, the Contractor shall schedule an on-site meeting with the Developer to discuss tree removal. All information included in bid item "Site Clearing".

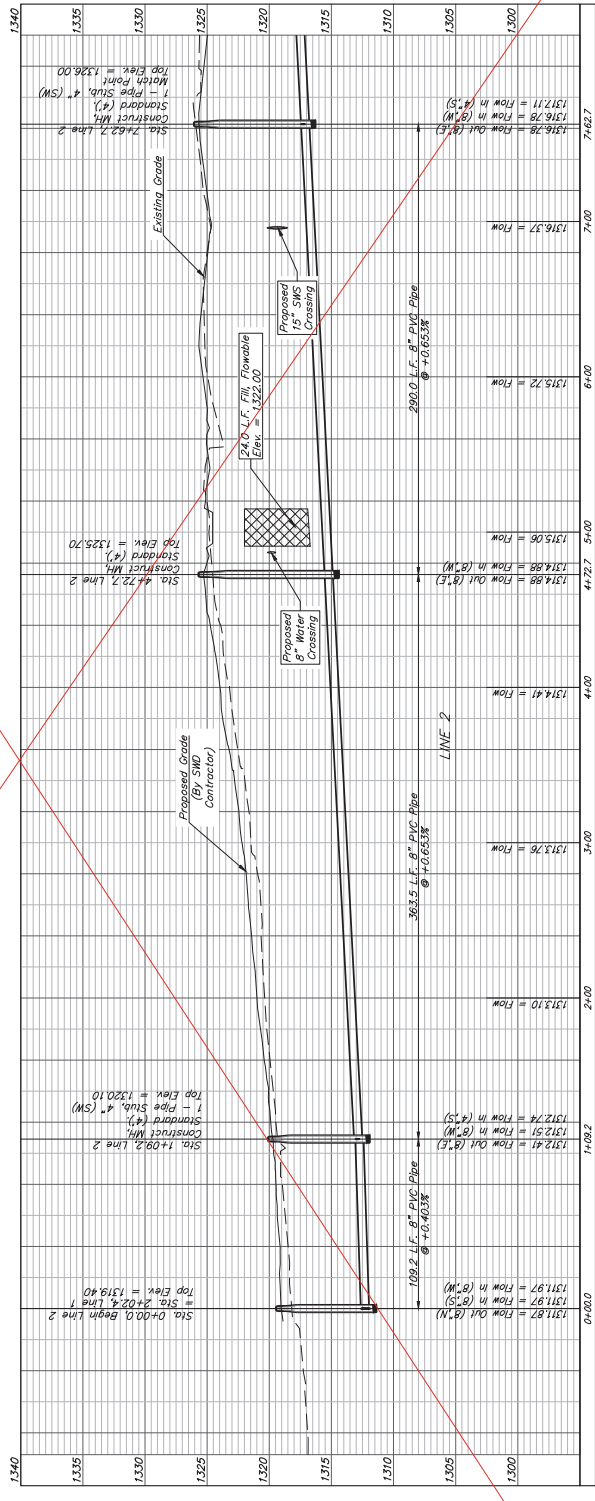
SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION		STATION		FOR INFORMATION ONLY		
		LOT NO.	BLOCK NO.	LINE NO.	DIRECTION	APPROXIMATE LENGTH 4" PIPE	VERTICAL	HORIZONTAL
24	4" Stub	15	A	2	1+08.24(L)	—	15.0'	
25	4" Stub	6	A	2	2+68.72(L)	6.0'	15.0'	

NOTE: Vertical Blow Pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.



6347



See Revised Sheet

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 Wichita, KS 67211
 316-262-7271
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REBER 2ND ADDITION
 Phase 1

LINE 2

SANITARY SEWER IMPROVEMENTS
 PROJECT NUMBER: 24-10-EE20
 DESIGN AEG: sba/w/tms
 DATE: May 28, 2025

SHEET **5** OF **22**

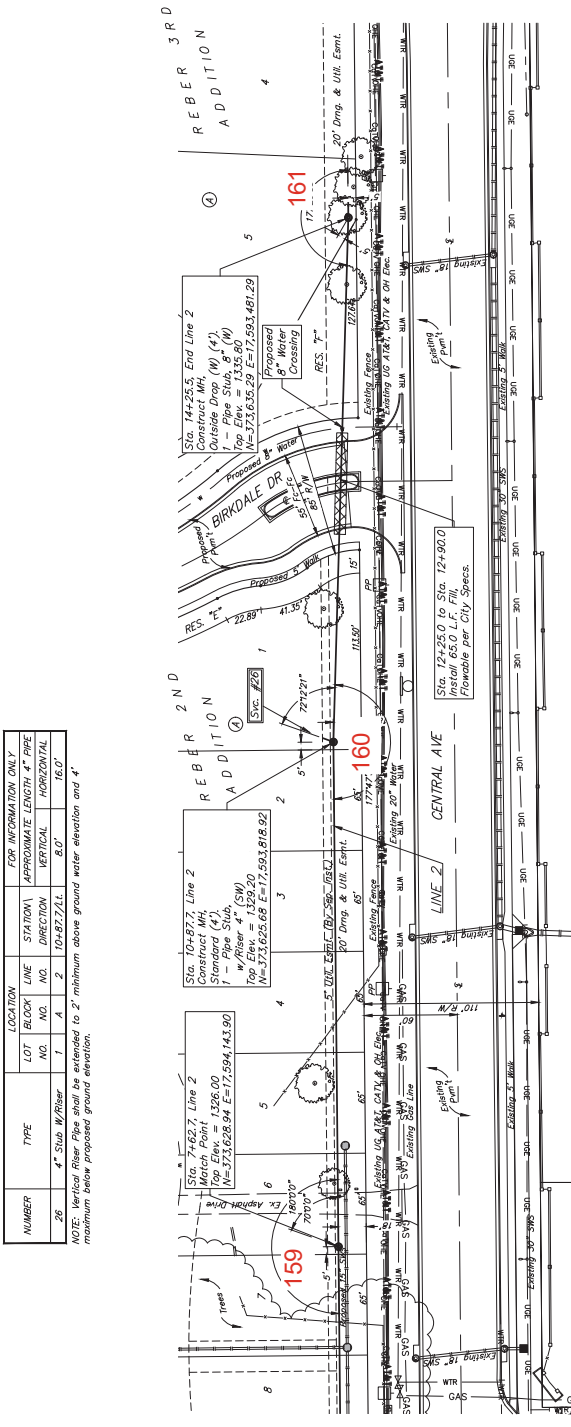
SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION		FOR INFORMATION ONLY		
		LOT BLOCK	LINE	STARROW	APPROXIMATE LENGTH	
NO.	NO.	NO.	NO.	DIRECTION	VERTICAL	HORIZONTAL
28	4" Sub. W/Riser	1	A	10+87.7-11.1	8.0'	16.0'

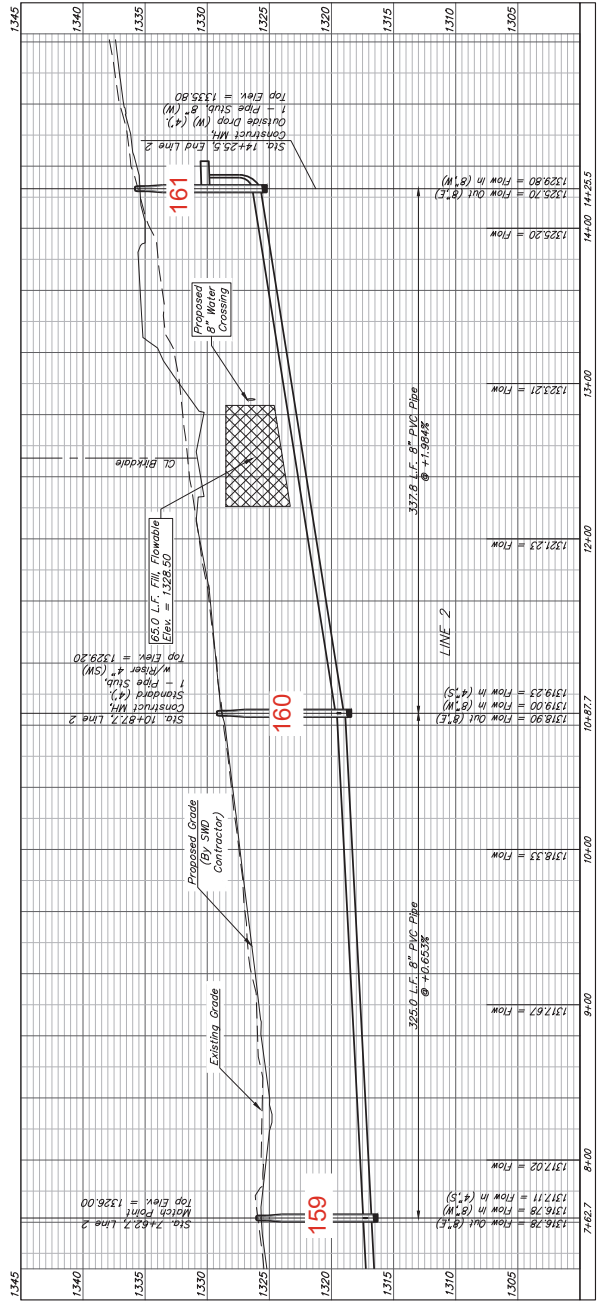
NOTE: Vertical Riser Pipe shall be extended to 2" minimum above ground water elevation and 4" maximum below proposed ground elevation.

BENCHMARKS:
 BM #1: Cross NE Corner of curb
 sheet west side of 143rd St. E.
 Elev. = 1320.83 NAVD88
 BM #2: " North side of curb
 sheet north side of Central. 59±
 Elev. = 1323.12 NAVD88

Existing trees shall be protected and/or removed. Only with approval of the City Engineer. All trees to be removed shall be marked with red lines. Trees not in direct conflict with proposed construction shall be protected from damage. Prior to the start of construction, the Contractor shall schedule an on-site meeting with the City Engineer to discuss tree trimming and/or removal shall be included in bid item "Site Clearing".

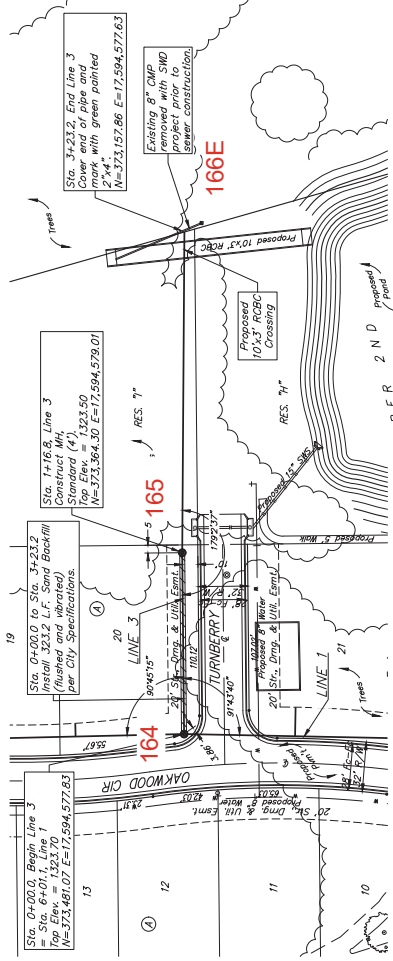
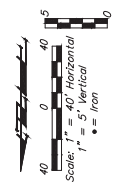


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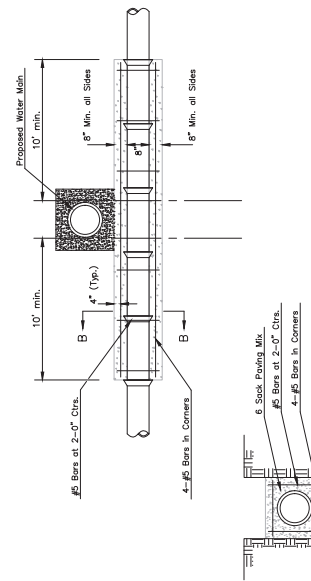
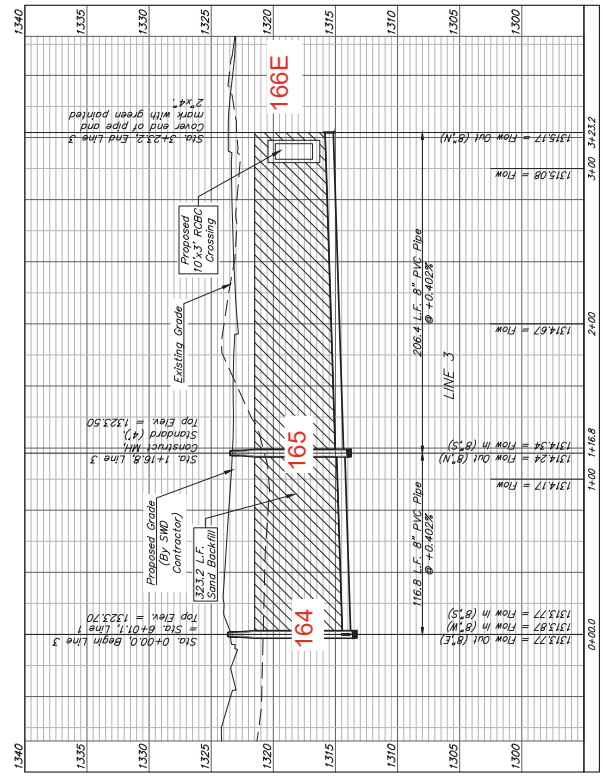


BENCHMARKS:
 BM #1: Cross NE Corner of curb
 at west side of 143rd St. E.
 Elev. = 1320.83 NAVD88
 BM #2: " " North side of curb
 at north side of Central. 59±
 Elev. = 1323.12 NAVD88

Existing trees shall be trimmed/removed ONLY with approval of the Developer. Trimming of overhanging limbs will be permitted only with approval of the City Engineer. All trees to be protected from damage. Prior to the start of construction, the Contractor shall submit a tree protection plan to the Developer to discuss tree areas. All trimming and/or removal shall be included in bid item "Site Clearing".



6347



REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER

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 DATE: May 28, 2025
 SHEET: 7 OF 22



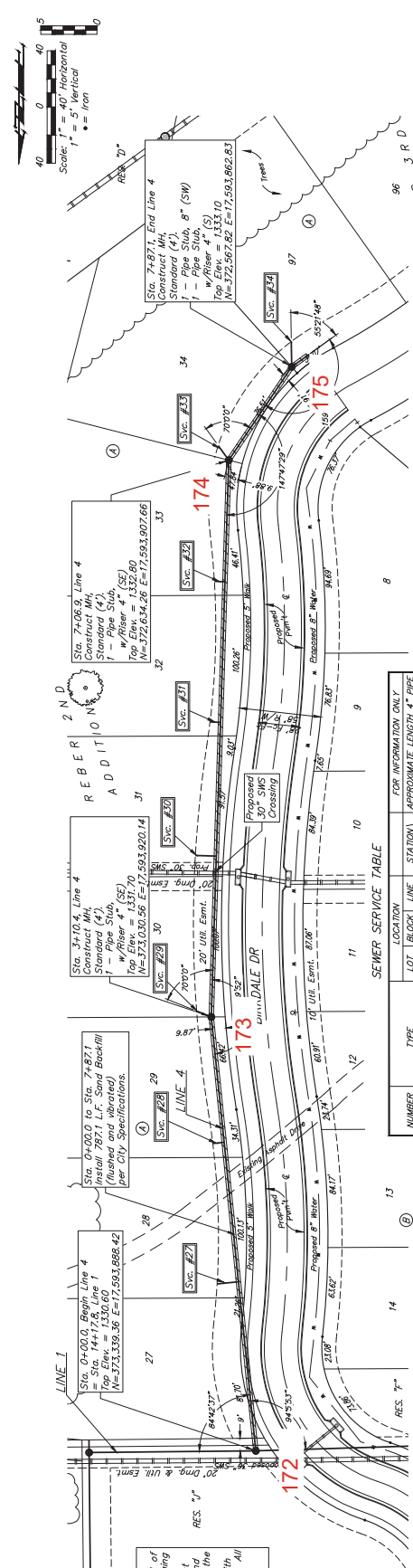
BAUGHMAN COMPANY
 315 Ellis St.
 Wichita, KS 67211
 316-262-7271
 Baughmanco.com

LINE 3

SANITARY SEWER IMPROVEMENTS
 PROJECT NUMBER: 24-10-E220
 DESIGN AEG: BREWHA, TMS
 REBER 2ND ADDITION
 Phase 1

BENCHMARKS:
 BM #1: Cross NE Corner of curb
 Elev. = 143.94 St. E.
 BM #2: SW Corner of 143rd St. E.
 Elev. = 143.083
 BM #3: SW Corner of 143rd St. E.
 Elev. = 143.083
 BM #4: SW Corner of 143rd St. E.
 Elev. = 143.083
 BM #5: SW Corner of 143rd St. E.
 Elev. = 143.083

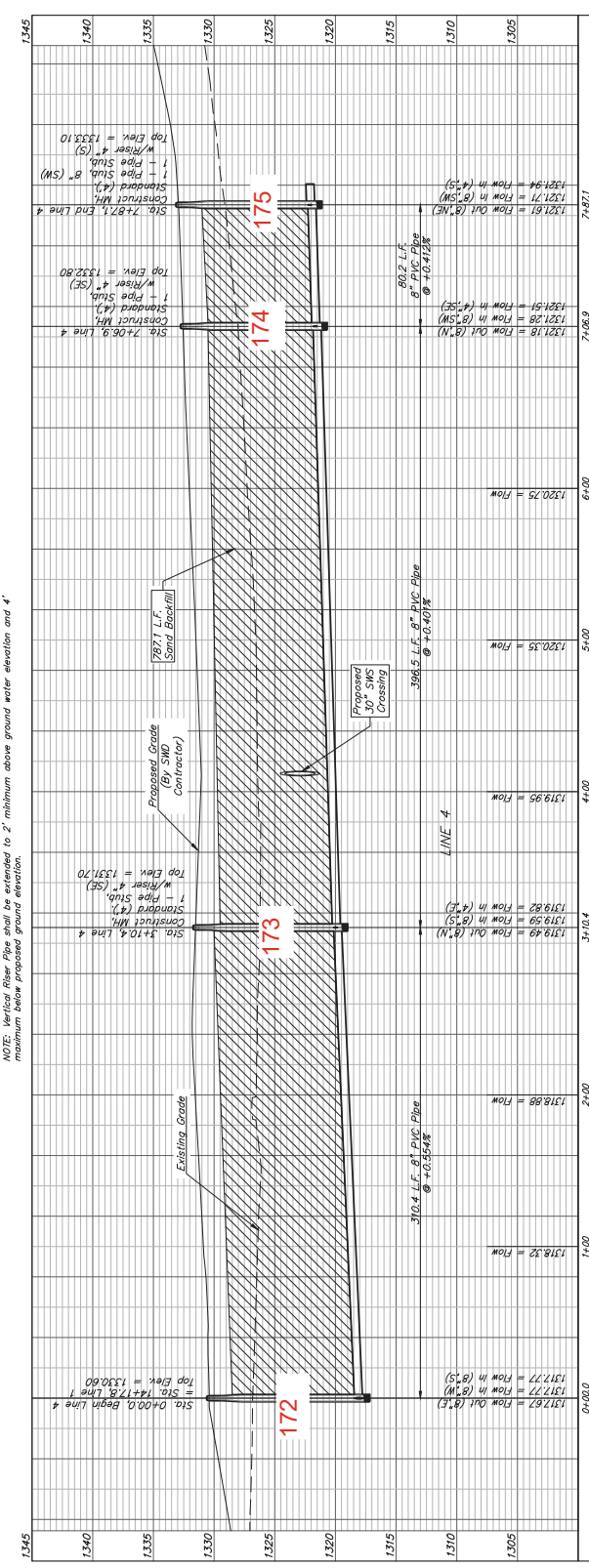
Existing trees shall be protected and only with approval of the Developer. Trimming of overhanging limbs will be permitted only with the Developer's approval. Risk with new construction shall remain and be protected from damage. Prior to the start of construction, the Contractor shall discuss tree areas. All trimming and/or removal shall be included in bid item "Site Clearing".



SEWER SERVICE TABLE

NUMBER	TYPE	LOT NO.	BLOCK NO.	LINE NO.	STATION NO.	FOR INFORMATION ONLY	
						APPROXIMATE LENGTH	4" PIPE
		VERTICAL		HORIZONTAL			
27	8" x 4" Free W/Riser	28	A	4	1+21.0/1.1	8.0'	15.3'
28	8" x 4" Free W/Riser	29	A	4	2+20.2/1.1	8.0'	8.1'
29	4" Stub W/Riser	30	A	4	3+10.4/1.1	6.5'	11.1'
30	8" x 4" Free W/Riser	31	A	4	4+24.9/1.1	6.0'	15.0'
31	8" x 4" Free W/Riser	32	A	4	5+20.2/1.1	6.0'	7.5'
32	8" x 4" Free W/Riser	33	A	4	6+20.3/1.1	6.0'	12.7'
33	4" Stub W/Riser	34	A	4	7+106.9/1.1	6.0'	12.7'
34	4" Stub W/Riser	97	A	4	7+871/1.1	6.0'	16.0'

NOTE: Vertical Riser Pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.



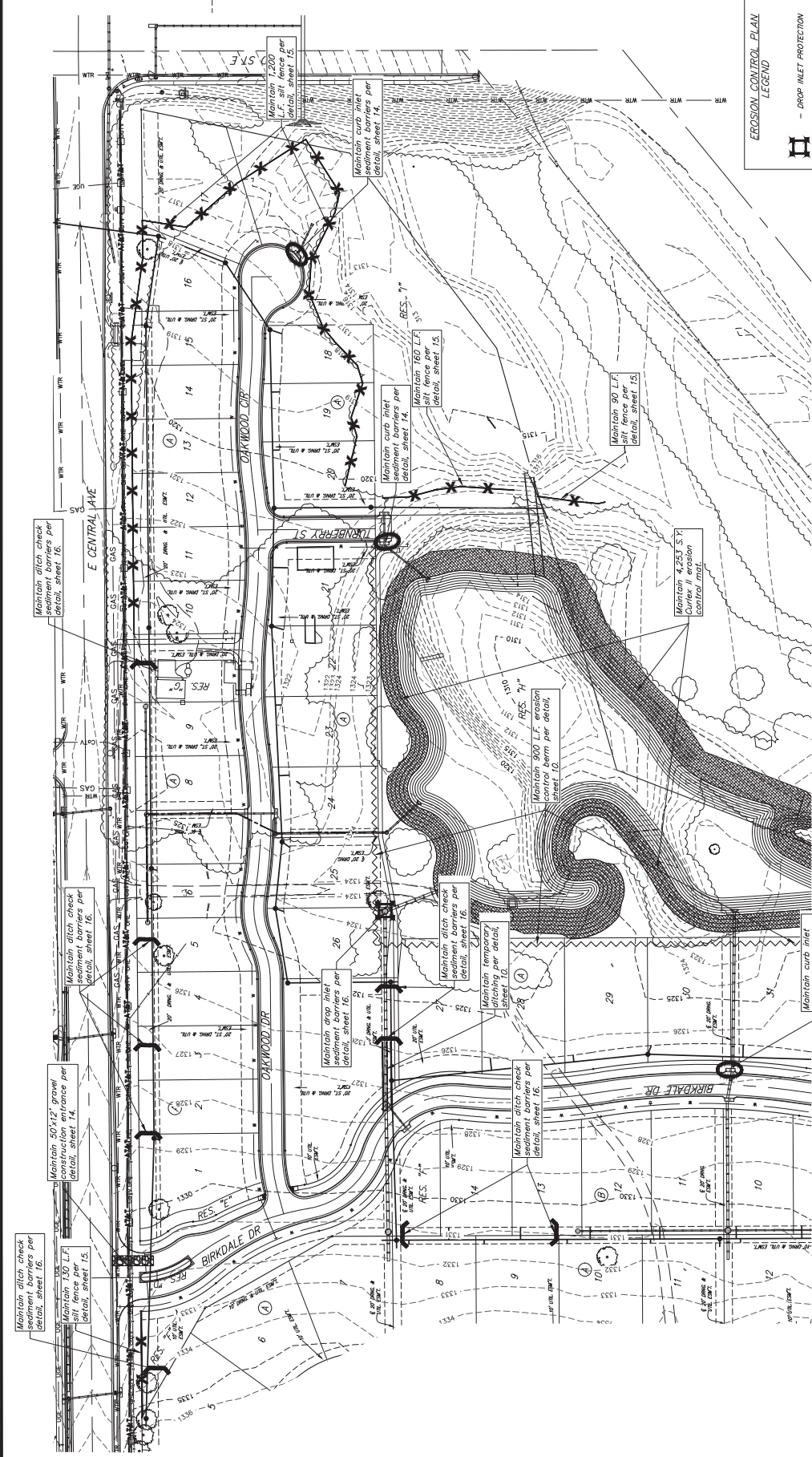
BAUGHMAN COMPANY
 315 Ellis St.
 Wichita, KS 67211
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REBER 2ND ADDITION
 Phase 1

LINE 4

SANITARY SEWER IMPROVEMENTS
 PROJECT NUMBER: 24-10-ES20
 DESIGN AEG: BRAWA TUIS
 DATE: MAY 28, 2025

SHEET **8** OF **22**



EROSION CONTROL PLAN
LEGEND

	- DROP INLET PROTECTION
	- CURB INLET PROTECTION
	- DITCH CHECKS
	- SILT FENCING
	- STRAW MATTLE DITCH CHECKS
	- EROSION CONTROL BERM
	- BACK OF CURB PROTECTION
	- EROSION CONTROL MAT
	- TEMPORARY DITCH

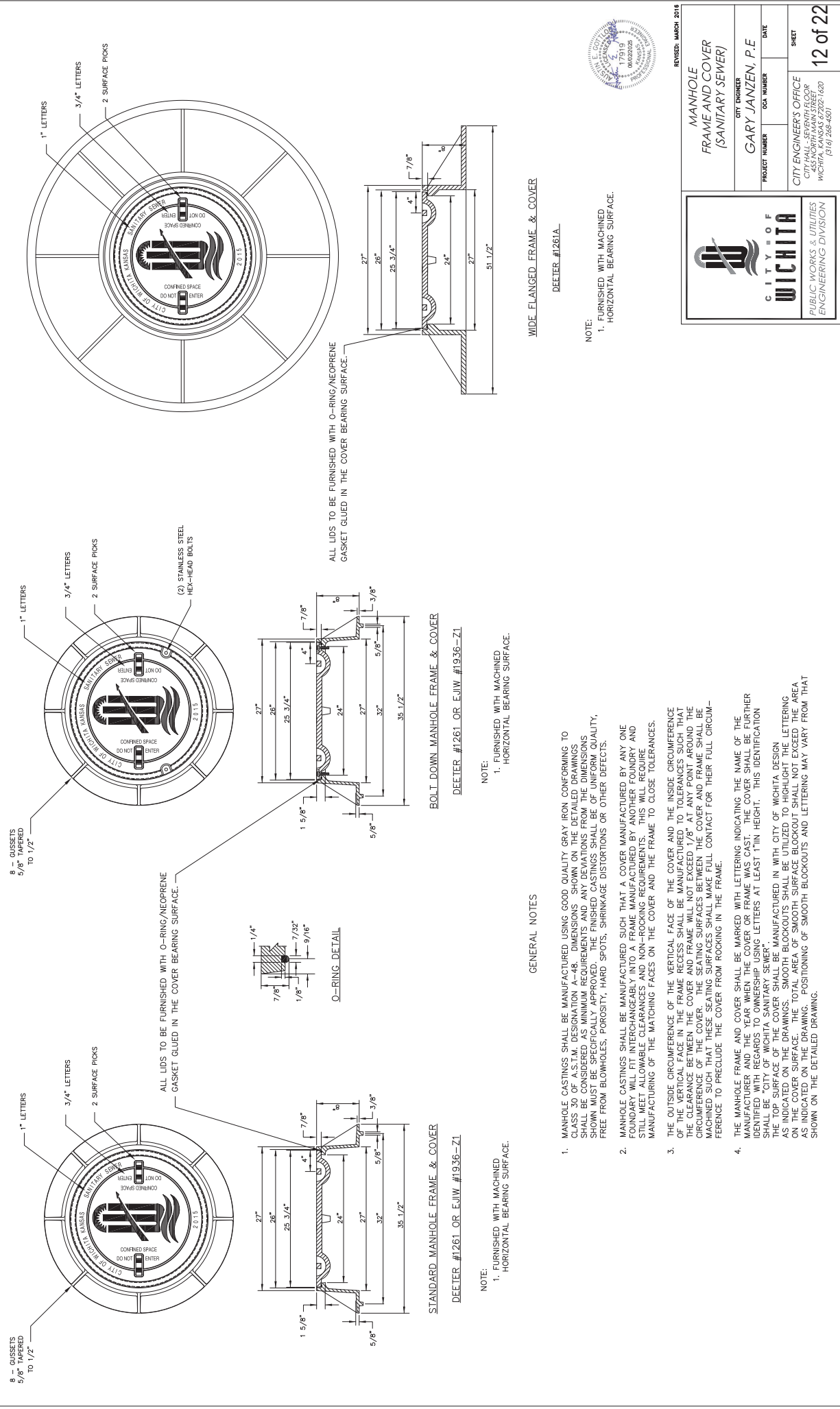
BAUGHMAN COMPANY
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Wichita, KS 67211
316-262-7271
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RESERVATION ADDITION
Phase I

EROSION CONTROL PLAN

SANITARY SEWER IMPROVEMENTS
PROJECT NUMBER: 24-10-ES20
DESIGN AEG: BRAWN, TINS
DATE: MAY 30, 2025

SHEET **9** OF **22**



REVISION: MARCH 2015 MANHOLE FRAME AND COVER (SANITARY SEWER)	
CITY ENGINEER	DATE
PROJECT NUMBER	OC# NUMBER
CITY ENGINEER'S OFFICE CITY AND SEWER DEPARTMENT WICHITA, KANSAS 67202-1620 (316) 268-4501	
12 of 22	



WIDE-FLANGED FRAME & COVER

DEETIER #1261A

NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.

BOLT-DOWN MANHOLE FRAME & COVER

DEETIER #1261 OR E/JW #1936-Z1

NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.

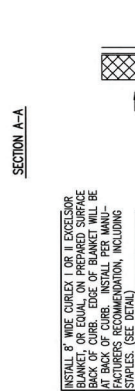
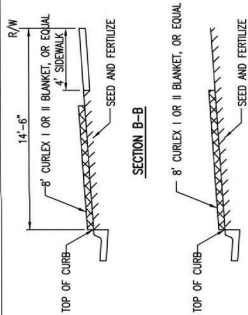
GENERAL NOTES

- MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 20 OR BETTER DESIGNATION. DIMENSIONS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED REQUIREMENTS. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.
- MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.
- THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SEATING SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.
- THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1" IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SANITARY SEWER". THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN WITH CITY OF WICHITA DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.

STANDARD MANHOLE FRAME & COVER

DEETIER #1261 OR E/JW #1936-Z1

NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.

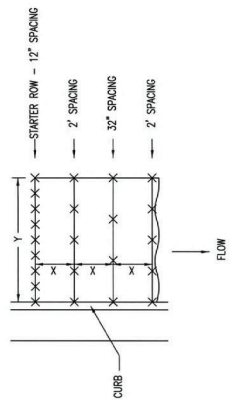


INSTALL 8" WIDE CURBLEX I OR II EXCESSOR BLANKET OR EQUAL ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURER'S RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)

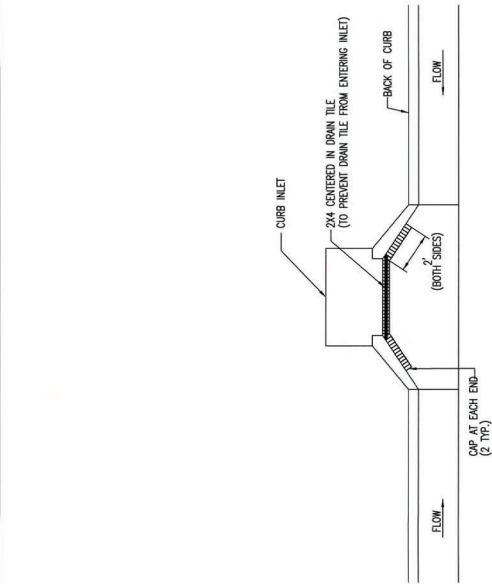
INSTALL 8" WIDE CURBLEX I OR II EXCESSOR BLANKET OR EQUAL ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURER'S RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)

- GENERAL NOTES**
- EXCESSOR MAT TO BE INSTALLED WHEN SDO IS NOT SPECIFIED ON PROJECT.
 - EXCESSOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
 - AFTER INSTALLATION OF EXCESSOR BLANKET, AT LOCATIONS WHERE CONCENTRATED FLOW OCCURS, SEEDS SHOULD BE PLACED OVER CURB AND CURBLEX. THESE SEEDS WILL BE INSTALLED BY THE CONTRACTOR AS NEEDED, TO FIX THE PROBLEM. (SEE DETAIL)

BACK OF CURB PROTECTION DETAIL

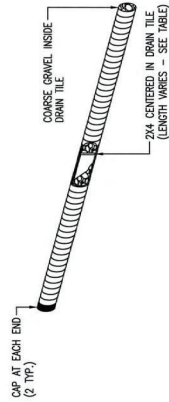


STAPLE PATTERN:
USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURER)

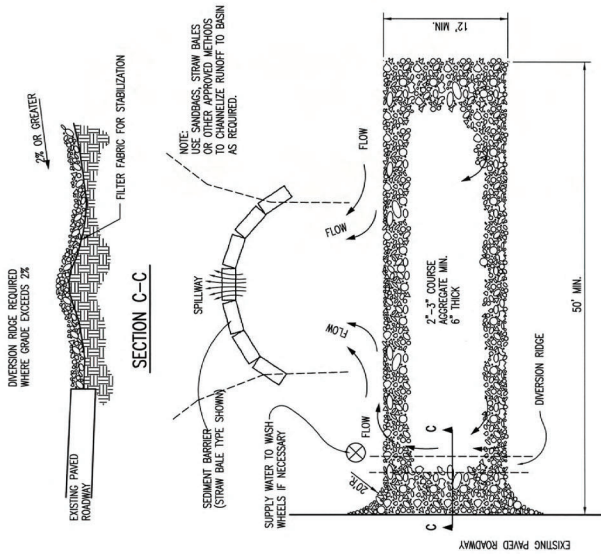


2x4 LENGTH	INLET TYPE	INLET OPENING
5'-5"	1-A	5'-0"
10'-5"	1-A	10'-0"
15'-5"	1-A	15'-0"

NOTE: PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2" - 1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.



CURB INLET PROTECTION
4" PERFORATED PIPE W/ GRAVEL



STABILIZED CONSTRUCTION ENTRANCE

GENERAL NOTES

- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
- DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT MAINTAINED. WHEEL WASHING SHALL BE BACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DRIBBLING.

REVISION DATE: MAY 2013

BACK OF CURB PROTECTION, CURB INLET PROTECTION AND CONSTRUCTION ENTRANCE

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER: OCA NUMBER
DATE: 5/2013
SHEET: 14 of 22

CITY ENGINEER'S OFFICE
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CITY OF WICHITA

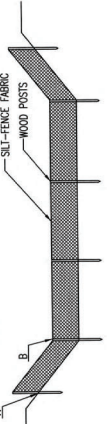
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION



01A-13

DETAILS FOR APPROVED EROSION CONTROL MAT

NOTE: POINT A MUST BE HIGHER THAN POINT B SO THAT THE FLOW LINE OVER THE SILT FENCE FABRIC AND NOT AROUND IT.



ELEVATION
SILT FENCE DITCH CHECKS
(STREAM PROTECTION)

MATERIAL SPECIFICATION:
SILT FENCE FABRIC SHOULD CONFORM TO THE ASTM D2088 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG.
SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:
PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. WATER SHOULD FLOW FROM THE DOWNSTREAM SIDE OF THE SILT FENCE. SILT FENCE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE SILT FENCE SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE TOP OF THE LOW POINT OF THE FENCE. THIS PREVENTS WATER FROM FLOWING UNDER TWO SIDES OF THE EXPOSED SOIL AND COMPACK. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED.
SILT FENCE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD.
SILT FENCE SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED.

THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A OPEN DITCH GRADE:

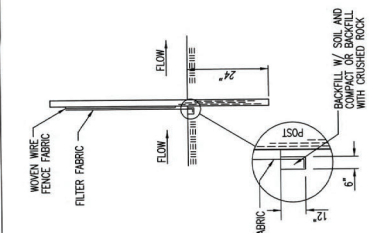
DITCH CHECK DITCH GRADE	SPACING (FEET)
(%)	
0.5	200
1.0	200
2.0	100
4.0	50
6.0	40

PROPER INSTALLATION METHOD:
EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS AT LEAST 12" DEEP BY 6" WIDE. EXTEND THE TRENCH A MINIMUM OF 10' FROM THE DOWNSTREAM SIDE OF THE FENCE. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSTREAM SIDE OF THE TRENCH. PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSTREAM EDGE OF THE TRENCH. LINE TWO SIDES OF THE EXPOSED SOIL AND COMPACK. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED.
DO NOT PLACE SILT FENCE ON THE UPSTREAM SIDE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSTREAM OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 18". ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:
WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK-NOT OVER IT. PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. SILT FENCE INSTALLATIONS QUICKLY DETERIORATE WHEN WATER OVERTOPS THEM.
DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE LOW POINT ON THE TOP OF THE FENCE.
DO NOT PLACE SILT FENCE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.

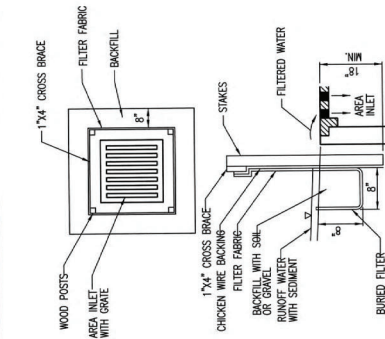
INSPECTION AND MAINTENANCE:
SILT FENCE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW AROUND THE DITCH CHECK?
- DOES WATER FLOW UNDER THE DITCH CHECK?
- DOES THE SILT FENCE TURN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



ANCHOR TRENCH DETAIL

WOODEN WIRE FENCE FABRIC
FILTER FABRIC
FLOW
FLOW
BACKFILL 1/4" SOIL AND 3/4" GRAVEL WITH COMPACTED ROCK
POST
6"



SILT FENCE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:
SILT FENCE FABRIC SHOULD CONFORM TO THE ASTM D2088 96 SILT FENCE SPECIFICATION. THE WIRE OR POLYMERIC MESH BACKING USED TO HELP SUPPORT THE SILT FENCE FABRIC SHOULD CONFORM TO THE ASTM D2088 96 SILT FENCE SPECIFICATION.
THE POSTS USED TO SUPPORT THE SILT FENCE SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG.
SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS AND FRAME WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:
PLACE A SILT FENCE DROP INLET BARRIER IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. WHEN FLOWING THROUGH AN AREA INLET, SILT FENCE BARRIERS SHOULD BE OVERTOPPED. WHEN USED AS A BARRIER FOR AREA INLETS, SILT FENCE FABRIC AND POSTS MUST BE SUPPORTED AT THE TOP BY A WOODEN FRAME.
WHEN A SILT FENCE BARRIER FOR AREA INLETS IS LOCATED NEAR AN INLET THAT HAS STEEP APPROACH WHEN A SILT FENCE BARRIER BEHIND THE BARRIER IS PRACTICALLY REDUCED. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR A BARRIER TO OPERATE PROPERLY IN THIS LOCATION.

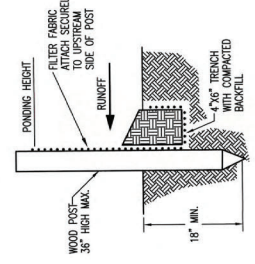
PROPER INSTALLATION METHOD:
EXCAVATE A TRENCH AROUND THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 8" DEEP BY 8" WIDE. DRIVE POSTS TO A DEPTH OF AT LEAST 18" AROUND THE PERIMETER OF THE AREA INLET. THE DISTANCE BETWEEN POSTS SHOULD BE 4' OR LESS. BEHIND THE PERIMETER BETWEEN TWO ADJACENT POSTS, ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSTREAM SIDE OF THE TRENCH. CONNECT THE TOPS OF ALL THE POSTS WITH A WOODEN FRAME MADE OF 1" BY 4" BOARDS. USE NAILS OR SCREWS FOR FASTENING.
ATTACH THE WIRE OR POLYMERIC-MESH BACKING TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC LONG ENOUGH TO WRAP AROUND THE PERIMETER OF THE AREA INLET. ADD MORE LENGTH FOR OVERLAPPING THE FABRIC JOINT. PLACE THE EDGE OF THE FABRIC IN THE TRENCH, STARTING AT THE OUTSIDE EDGE OF THE TRENCH. LINE ALL TWO SIDES OF THE EXPOSED SOIL AND COMPACK. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED.
DO NOT PLACE SILT FENCE TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. THE JOINT SHOULD BE OVERTOPPED TO THE NEXT POST.

INSPECTION AND MAINTENANCE:
WHEN A SILT FENCE BARRIER FOR AREA INLET IS PLACED IN A SHALLOW MEDIAN DITCH, MAKE SURE THAT THE TOP OF THE BARRIER IS NOT HIGHER THAN THE PAVED ROAD. IN THIS CONFIGURATION, WATER MAY SPREAD ONTO THE ROADWAY CAUSING A HAZARDOUS CONDITION.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:
WATER SHOULD FLOW THROUGH A SILT FENCE BARRIER FOR AREA INLET-NOT OVER IT. PLACE A SILT FENCE BARRIER FOR AREA INLETS IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. SILT FENCE BARRIER FOR AREA INLETS SHOULD NOT BE PLACED IN A SHALLOW MEDIAN DITCH. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES.
DO NOT INSTALL SILT FENCE BARRIER FOR AREA INLETS WITHOUT FRAMING THE TOP OF THE POSTS. THE CORNER POSTS AROUND AREA INLETS ARE STRESSED IN TWO DIRECTIONS WHEREAS A NORMAL SILT FENCE IS ONLY STRESSED IN ONE DIRECTION. THIS ADDED STRESS REQUIRES MORE SUPPORT.

INSPECTION AND MAINTENANCE:
SILT FENCE BARRIER FOR AREA INLETS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW UNDER THE SILT FENCE?
- DOES THE SILT FENCE TURN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



SILT FENCE BARRIERS

MATERIAL SPECIFICATION:
SILT FENCE FABRIC SHOULD CONFORM TO THE ASTM D2088 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG.
SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:
A SLOPE BARRIER SHOULD BE USED AT THE TOP OF A SLOPE WHEN A DITCH DOES NOT EXIST. THE SLOPE BARRIER SHOULD BE PLACED ON NEARLY LEVEL GROUND 5' TO 10' AWAY FROM THE TOE OF A SLOPE. THE BARRIER IS PLACED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE ADEQUATE STORAGE FOR SETTLING OUT SEDIMENT.
WHEN A SILT FENCE SLOPE BARRIER IS PLACED ON A SLOPE, IT SHOULD BE PLACED AT THE TOE OF THE SLOPE. SILT FENCE SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW.
SILT FENCE SLOPE BARRIERS CAN ALSO BE PLACED ALONG RIGHT-OF-WAY FENCE LINES TO KEEP SEDIMENT FROM CROSSING OVER ADJACENT PROPERTY. WHEN PLACED IN THIS MANNER, THE SLOPE BARRIER WILL NOT LIKELY FOLLOW CONTOURS.

PROPER INSTALLATION METHOD:
EXCAVATE A TRENCH THE LENGTH OF THE PLANNED SLOPE BARRIER THAT IS 6" DEEP BY 4" WIDE. MAKE SURE THAT THE TRENCH IS EXCAVATED ALONG A SINGLE CONTOUR. WHEN PRACTICABLE, SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. PLACE THE SOIL ON THE UPSLOPE SIDE OF THE TRENCH FOR LATER USE.
ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSLOPE SIDE OF THE TRENCH. PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSLOPE EDGE. LINE ALL THREE SIDES OF THE TRENCH WITH THE FABRIC. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACK. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED.
DO NOT PLACE SILT FENCE UPSTREAM OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSTREAM OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 18". ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:
WHEN PRACTICABLE, DO NOT PLACE SILT FENCE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. WHEN THE FLOW CONCENTRATES IT OVERTOPS THE BARRIER AND THE SILT FENCE SLOPE BARRIER QUICKLY DETERIORATES.
DO NOT PLACE SILT FENCE POSTS ON THE UPSLOPE SIDE OF THE SILT FENCE FABRIC. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES.
DO NOT PLACE SILT FENCE SLOPE BARRIERS IN AREAS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE BARRIER IS NOT SUFFICIENTLY ANCHORED, IT WILL WASH OUT.
SILT FENCE SLOPE BARRIERS MUST BE LOCATED INTO THE GROUND-SILT FENCE AT GROUND LEVEL DOES NOT WORK BECAUSE WATER WILL FLOW UNDERNEATH.

INSPECTION AND MAINTENANCE:
SILT FENCE SLOPE BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?
- DOES WATER FLOW UNDER THE SLOPE BARRIER?
- DOES THE SILT FENCE TURN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?

SILT FENCE DITCH CHECK AND BARRIER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER: 512013
SHEET: 15 OF 22

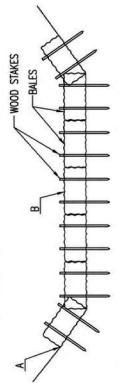
CITY ENGINEER'S OFFICE
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WICHITA, KANSAS 67202-1620
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CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

REVISION DATE: MAY 2013

NOTE: POINT A MUST BE HIGHER THAN POINT B SO THAT WATER FLOWS OVER THE BALES AND NOT AROUND THEM.



STRAW BALE DITCH CHECKS

MATERIAL SPECIFICATION:

BALE DITCH CHECKS MAY BE CONSTRUCTED OF WHEAT STRAW, OR STRAW, PRAIRIE HAY, OR BROMGRASS HAY THAT IS FREE OF WEEDS DECLARED NOxious BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

PLACEMENT:

BALE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE STAKES SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK.

STRAW BALE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. BALES SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED.

THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A GIVEN DITCH GRADE:

DITCH CHECK SPACING CHECK SPACING (FEET)	(%)
0.5	200
1.0	200
2.0	100
4.0	50
6.0	40
8.0	30

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS 4" DEEP AND A BALE'S WIDTH. EXTEND THE TRENCH TO THE DOWNSTREAM SIDE OF THE TRENCH. TWO STAKES SHOULD BE PLACED ALONG THE UPSTREAM SIDE OF THE TRENCH, ROLL OUT A LENGTH OF EROSION-CONTROL BLANKET (SCOUR APRON) EQUAL TO THE LENGTH OF THE TRENCH. PLACE THE UPSTREAM EDGE OF THE EROSION-CONTROL BLANKET ALONG THE BOTTOM UPSTREAM EDGE OF THE LANDSCAPE STAPLES PLACED ON 18" CENTERS. THE REMAINDER OF THE EROSION-CONTROL BLANKET (THE PORTION THAT IS NOT LYING IN THE TRENCH) WILL SERVE AS THE DOWNSTREAM SCOUR APRON. THIS SECTION OF THE BLANKET SHOULD BE ANCHORED TO THE GROUND WITH 8" LANDSCAPE STAPLES PLACED AROUND THE PERIMETER OF THE BLANKET ON 18" CENTERS. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TOGETHER. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" APART. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TOGETHER. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" APART. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TOGETHER. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" APART. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TOGETHER. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" APART. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TOGETHER. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" APART.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

DO NOT PLACE A BALE DITCH CHECK DIRECTLY IN FRONT OF A DRAINAGE OUTLET. IT WILL NOT STAND UP.

DO NOT PLACE BALE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW.

FOLLOW PRESCRIBED DITCH-CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR AND FLOW AROUND THE DITCH CHECK.

DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE.

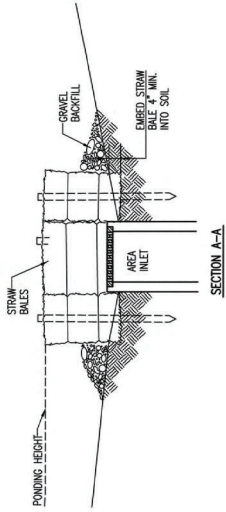
DO NOT PLACE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECKS DO NOT WASH AWAY SUCCESSFULLY, THEY WILL WASH OUT.

BALE DITCH CHECKS MUST BE DRIVEN INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE CHECK.

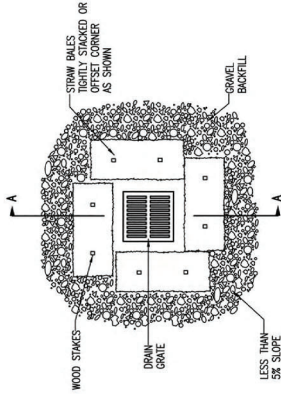
INSPECTION AND MAINTENANCE:

BALE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW AROUND THE DITCH CHECK?
- DOES WATER FLOW UNDER THE DITCH CHECK?
- DOES ANY BALE DISCLOSED?
- ARE ANY BALES DISCLOSED?
- ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



SECTION A-A



STRAW BALE BARRIERS FOR AREA INLETS (INLET PROTECTION)

MATERIAL SPECIFICATION:

BALE AREA INLET BARRIERS SHOULD BE CONSTRUCTED OF WHEAT STRAW, OR STRAW, PRAIRIE HAY, OR BROMGRASS HAY THAT IS FREE OF WEEDS DECLARED NOxious BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

PLACEMENT:

BALE AREA INLET BARRIERS SHOULD BE PLACED DIRECTLY AROUND THE PERIMETER OF A DRAIN INLET. WHEN A BALE AREA INLET BARRIER IS LOCATED NEAR AN INLET THAT HAS STEEP APPROACH SLOPES, THE STORAGE CAPACITY BEHIND THE BARRIER IS DRASTICALLY REDUCED. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR A BARRIER TO OPERATE PROPERLY IN THIS LOCATION.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH AROUND THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 4" DEEP BY A BALE'S WIDTH.

PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TOGETHER. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE AREA INLET, APPROXIMATELY 6" TO 8" APART. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TOGETHER. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE AREA INLET, APPROXIMATELY 6" TO 8" APART. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TOGETHER. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE AREA INLET, APPROXIMATELY 6" TO 8" APART.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

DO NOT PLACE A BALE AREA INLET BARRIER IN FRONT OF A DRAINAGE OUTLET. IT WILL NOT STAND UP.

DO NOT PLACE BALE AREA INLET BARRIERS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW.

FOLLOW PRESCRIBED DITCH-CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR AND FLOW AROUND THE DITCH CHECK.

DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE.

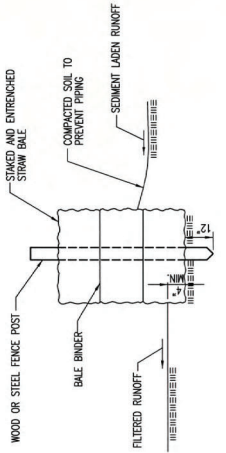
DO NOT PLACE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECKS DO NOT WASH AWAY SUCCESSFULLY, THEY WILL WASH OUT.

BALE DITCH CHECKS MUST BE DRIVEN INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE CHECK.

INSPECTION AND MAINTENANCE:

BALE AREA INLET BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW UNDER THE AREA INLET BARRIER?
- DOES WATER FLOW THROUGH SPACES BETWEEN BALES?
- ARE ANY BALES DISCLOSED?
- ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



STRAW BALE BARRIERS

MATERIAL SPECIFICATION:

BALE SLOPE BARRIERS MAY BE CONSTRUCTED OF WHEAT STRAW, OR STRAW, PRAIRIE HAY, OR BROMGRASS HAY THAT IS FREE OF WEEDS DECLARED NOxious BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

PLACEMENT:

A SLOPE BARRIER SHOULD BE USED AT THE TOP OF A SLOPE WHEN A DITCH DOES NOT EXIST. THE SLOPE BARRIER SHOULD BE PLACED ON NEARLY LEVEL GROUND 3" TO 10" AWAY FROM THE TOE OF A SLOPE. THE BARRIER IS PLACED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE ADEQUATE STORAGE FOR SETTLING OUT SEDIMENT.

PROVIDE A SLOPE BARRIER SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW.

BALE SLOPE BARRIERS CAN ALSO BE PLACED ALONG RIGHT-OF-WAY FENCE LINES TO KEEP SEDIMENT FROM CROSSING ONTO ADJACENT PROPERTY. WHEN PLACED IN THIS MANNER, THE SLOPE BARRIER WILL NOT LIKELY FOLLOW CONTOURS.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH THE LENGTH OF THE PLANNED SLOPE BARRIER THAT IS 4" DEEP AND A BALE'S WIDTH. EXTEND THE TRENCH TO THE DOWNSTREAM SIDE OF THE TRENCH. TWO STAKES SHOULD BE PLACED ALONG THE UPSTREAM SIDE OF THE TRENCH, ROLL OUT A LENGTH OF EROSION-CONTROL BLANKET (SCOUR APRON) EQUAL TO THE LENGTH OF THE TRENCH. PLACE THE UPSTREAM EDGE OF THE EROSION-CONTROL BLANKET ALONG THE BOTTOM UPSTREAM EDGE OF THE LANDSCAPE STAPLES PLACED ON 18" CENTERS. THE REMAINDER OF THE EROSION-CONTROL BLANKET (THE PORTION THAT IS NOT LYING IN THE TRENCH) WILL SERVE AS THE DOWNSTREAM SCOUR APRON. THIS SECTION OF THE BLANKET SHOULD BE ANCHORED TO THE GROUND WITH 8" LANDSCAPE STAPLES PLACED AROUND THE PERIMETER OF THE BLANKET ON 18" CENTERS. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TOGETHER. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" APART. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TOGETHER. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" APART. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TOGETHER. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" APART.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

DO NOT PLACE A SLOPE BARRIER IN FRONT OF A DRAINAGE OUTLET. IT WILL NOT STAND UP.

DO NOT PLACE SLOPE BARRIERS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW.

FOLLOW PRESCRIBED DITCH-CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR AND FLOW AROUND THE DITCH CHECK.

DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE.

DO NOT PLACE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECKS DO NOT WASH AWAY SUCCESSFULLY, THEY WILL WASH OUT.

BALE DITCH CHECKS MUST BE DRIVEN INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE BARRIER.

INSPECTION AND MAINTENANCE:

BALE SLOPE BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?
- DOES WATER FLOW UNDER THE SLOPE BARRIER?
- DOES WATER FLOW THROUGH SPACES BETWEEN ADJUTING BALES?
- ARE ANY BALES DISCLOSED?
- ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?

REVISION DATE: MAY, 2013

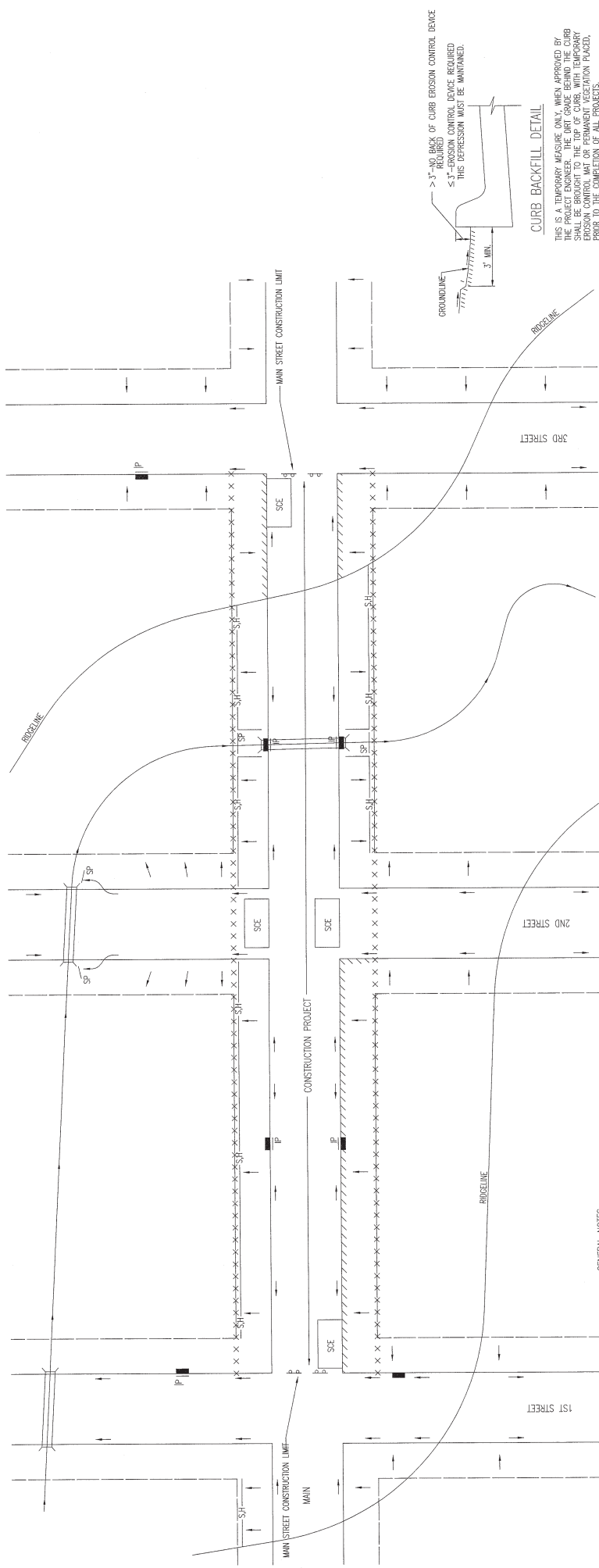
STRAW BALE DITCH CHECK AND BARRIER DETAILS

CITY ENGINEER		DATE	
GARY JANZEN, P.E.		5/2013	
PROJECT NUMBER	OC# NUMBER	SHEET	
		16 of 22	
CITY ENGINEER'S OFFICE			
CITY HALL - SEVENTH FLOOR			
155 NORTH MAIN STREET			
WICHITA, KANSAS 67202			
(316) 268-4921			



GENERAL NOTES

1. THIS SHEET IS INTENDED TO PROVIDE DETAILS AS TO WHAT TYPES OF EROSION CONTROL DEVICES ARE TO BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BUY PRODUCTS ACCORDINGLY.
2. EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.
3. IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE PERMITS STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.
4. FOR PROJECTS DISTURBING LESS THAN 1 ACRE, CONTRACTORS ARE ENCOURAGED TO PREPARE STORMWATER POLLUTION PREVENTION PLANS PRIOR TO CONSTRUCTION. EROSION CONTROL DEVICES MUST BE USED ON ALL PROJECTS.
5. FAILURE TO USE AND MAINTAIN EROSION CONTROL DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE CONTRACTOR TO THE PENALTIES PROVIDED FOR THEREIN.
6. THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE A DIFFERENT DEVICE OTHER THAN THOSE SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED AS LONG AS THEY ARE EFFECTIVE AND MAINTAINED.



GENERAL NOTES

1. THE INTERIOR OF ALL EROSION CONTROL DEVICES IS TO KEEP ALL SEDIMENT CONTAINED TO THE CONSTRUCTION SITE AND OUT OF ALL UNDERGROUND PIPES, DITCHES, LAKES, AND OTHER DRAINAGE FACILITIES, AND OFF OF STREETS.
2. THE POINT OF COMPLIANCE IS GENERALLY THE RIGHT-OF-WAY LINES WITHIN THE LIMITS OF CONSTRUCTION.
3. EROSION CONTROL DEVICES WILL BE REQUIRED AT ALL POINTS ALONG THE PROJECT WHERE DISTURBED EARTH CAN DRAIN ONTO PRIVATE PROPERTY.
4. INLET PROTECTION DEVICES WILL BE REQUIRED WHEREVER WATER CAN DRAIN OFF THE PROJECT SITE INTO AN INLET, INCLUDING ANY SIDE STREET INLETS.
5. EROSION CONTROL DEVICES SHALL BE INSTALLED AT GREEK CROSSINGS SO AS TO PREVENT SEDIMENT FROM ENTERING THEREIN.
6. STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED, AS NEEDED, TO PREVENT MUD FROM TRACKING ONTO STREETS NOT UNDER CONSTRUCTION AND ON STREETS WITHIN THE PROJECT LIMITS IF TRAFFIC IS BEING MAINTAINED THROUGH THE PROJECT.
7. ANY MUD TRACKED ONTO STREETS MUST BE REMOVED AT THE END OF EACH WORK DAY.
8. THE CONTRACTOR WILL BE REQUIRED TO PLACE EROSION CONTROL DEVICES BACK OF CURB, WHENEVER WATER CAN DRAIN OVER CURB, TO KEEP ERODED SOIL OUT OF THE GUTTERLINES.
 - A. THE DEVICES REQUIRED WILL BE APPROVED EROSION CONTROL MAT LISTED ON THE CITY'S APPROVED MATERIAL LIST.
 - B. THIS DEVICE SHALL BE INSTALLED IMMEDIATELY WHENEVER THE CURB IS BACKFILLED TO WITHIN 3" OF THE TOP OF CURB. (SEE CURB BACKFILL DETAIL)
 - C. ADDITIONALLY OTHER EROSION CONTROL DEVICES (HAY BALES, SILT FENCE, ETC.) WILL BE INSTALLED AT LOCATIONS OF CONCENTRATED FLOW RESULTING IN SEDIMENT OVERRUNNING THE MAT.
 - D. THE EXCESSER MAT WILL NOT BE REQUIRED SO LONG AS THE SOD IS PLACED WITHIN 48 HOURS AFTER CURB BACKFILL REACHES A HEIGHT OF 3" OR LESS FROM TOP OF CURB. (SEE CURB BACKFILL DETAIL)

LEGEND

- DRAINAGE FLOW PATH
- R/W LIMIT WITHIN CONSTRUCTION LIMIT
- x x x x x STORM WATER INLETS
- IP INLET PROTECTION
- SF SILT FENCE OR HAY BALE BARRIER
- SP STREAM PROTECTION
- SCE STABILIZED CONSTRUCTION ENTRANCE
- /////// BACK OF CURB PROTECTION

REVISION: JUNE, 2015

STREET IMPROVEMENT PROJECTS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER: 05A NUMBER: 11/2015
DATE: 11/2015

SHEET
17 of 22

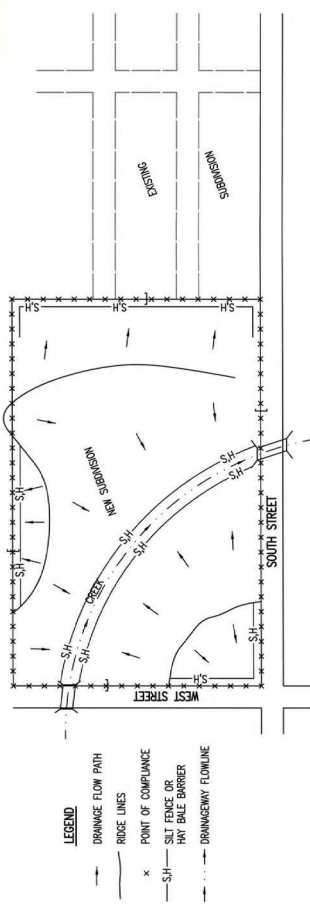
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
WICHITA, KANSAS 67202-4680
(316) 268-4807

CITY OF WICHITA

PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

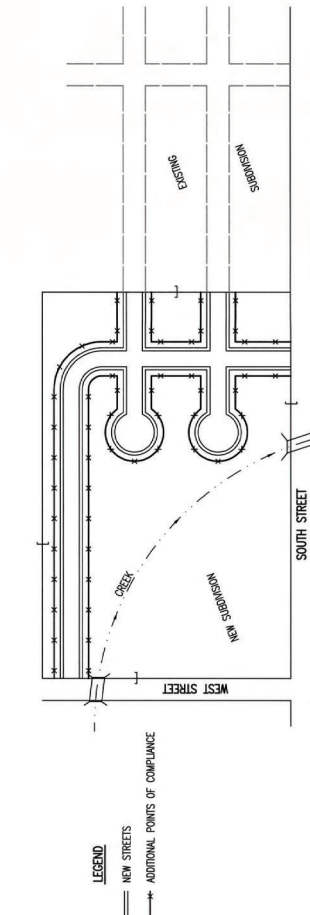


PHASE 1 — INITIAL EARTHWORK AND UTILITIES (EXCEPT STORM SEWER)



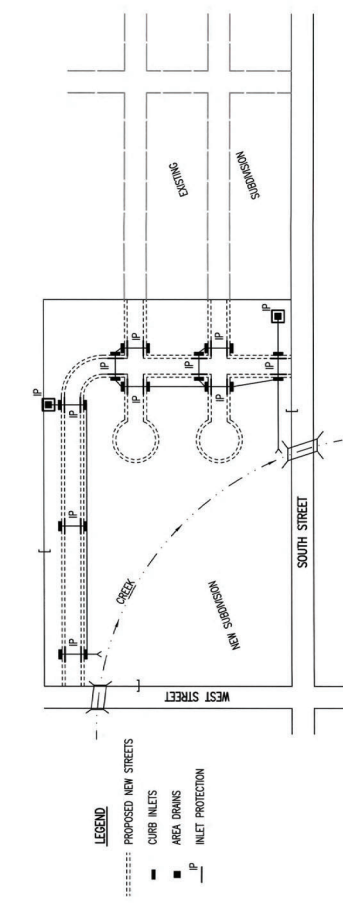
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE SPECIFIED ON THIS PLAN MAY HAVE TO BE SUPPLEMENTED WITH HAY BALE OR SILT FENCE EROSION CONTROL DEVICES AT LOCATIONS WHERE CONCENTRATED FLOW RESULTS IN SEDIMENT BEING CARRIED OVER THE EXCESSOR MATS.
2. HAY BALES OR SILT FENCE MUST BE CONSTRUCTED ALONG THE PROPERTY LINE WHERE ON SITE WATER CAN DRAIN OFF THE PROPERTY. THESE EROSION CONTROL DEVICES WILL ALSO BE INSTALLED ALONG ANY DRAINAGE DITCH OR LAKE THAT CAN DISCHARGE.
3. SHOULD SILT OR SEDIMENT ENTER THE DITCHES OR STREETS ON THE ADVANCED BOUNDARY STREETS, APPROPRIATE EROSION CONTROL DEVICES WILL BE PLACED WITHIN THE SUBDIVISION TO PREVENT THIS.
4. ANY MUD TRACKED ONTO ADVANCED STREETS WILL BE REMOVED WITHIN 48 HOURS OR BY FRIDAY AT 6:00 PM, WHICHEVER IS EARLIER.
5. CONTRACTORS WORKING WITHIN THE SITE WILL NOT BE REQUIRED TO USE INDIVIDUAL EROSION CONTROL DEVICES AS LONG AS THOSE SPECIFIED ABOVE ARE IN PLACE AND EFFECTIVE. CONTRACTORS WORKING ON THE BOUNDARY LINE STREETS OR ON ADVANCED PROPERTIES TO EXTEND UTILITIES ARE EXPECTED TO USE EROSION CONTROL DEVICES AT THEIR WORK LOCATIONS, AS NEEDED.
6. UTILIZE STABILIZED CONSTRUCTION ENTRANCE AT ENTRANCE AND EXIT ONTO ANY EXISTING PUBLIC STREETS.
7. IF THE INITIAL EARTH WORK AND UTILITIES ARE DONE AS PART OF A PUBLIC IMPROVEMENT PROJECT, THESE EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS SPECIFIED IN THE INDIVIDUAL PROJECT CONTRACTS. THE CONTRACTOR WILL MAINTAIN THE DEVICES THROUGHOUT THE PROJECT AND ASSUME MAINTENANCE RESPONSIBILITIES. IF THESE CONTRACTS ARE NOT PUBLIC IMPROVEMENT PROJECTS, THE DEVELOPER WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THESE DEVICES.
8. WITHIN 14 DAYS OF COMPLETION OF EARTHWORK ACTIVITIES IN ANY GIVEN AREA, THAT AREA SHALL BE TEMPORARILY OR PERMANENTLY SEEDED AND MULCHED.

PHASE 3 — STREET CONSTRUCTION



1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL EROSION CONTROL DEVICES INSTALLED DURING PHASE 1 AND 2 MUST STILL BE IN PLACE AT THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
2. CURB OPENING INLET PROTECTION SHALL BE PROVIDED WHEN STREET SUBGRADE WORK IS COMPLETED.
 - A. NON-SUMP LOCATIONS - PROVIDE INLET PROTECTION AS SOON AS BASE COURSE ASPHALT IS INSTALLED, BEFORE THE SURFACE COURSE LIFT.
3. EROSION CONTROL DEVICES WILL BE REQUIRED BACK OF CURB WHEREVER WATER CAN FLOW OVER THE CURB AND THE CURB HAS BEEN BACKFILLED TO WITHIN 3" OR LESS OF THE TOP OF CURB (SEE CURB BACKFILL DETAIL). CONTRACTORS SHALL BE ADVISED AT POINTS WHERE WATER BREAKS OVER CURB WHICH COULD RESULT IN THE PLACEMENT OF SEDIMENT IN THE GUTTER.
4. SEE DETAIL SHEET FOR BACK OF CURB PROTECTION.
5. THE BACK OF CURB PROTECTION SPECIFIED ON THIS PLAN MAY HAVE TO BE SUPPLEMENTED WITH HAY BALE OR SILT FENCE EROSION CONTROL DEVICES AT LOCATIONS WHERE CONCENTRATED FLOW RESULTS IN SEDIMENT BEING CARRIED OVER THE EXCESSOR MATS.
6. THE STREET CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING BACK OF CURB EROSION CONTROL DEVICES.
7. THE INDIVIDUAL LOT OWNERS WILL BE RESPONSIBLE FOR MAINTAINING THE BACK OF CURB EROSION CONTROL DEVICES IN FRONT OF THEIR LOTS UNTIL SUCH TIME AS ADVANCED DISTURBED EARTH IS STABILIZED WITH GRASS OR SOD.

PHASE 2 — INSTALLATION OF STORM SEWER

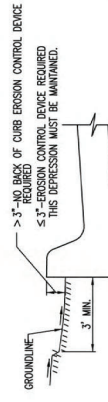


1. DURING THIS PHASE OF SUBDIVISION DEVELOPMENT, ALL EROSION CONTROL DEVICES REQUIRED IN PHASE 1 SHALL REMAIN IN PLACE AND BE MAINTAINED.
2. AS NEW STORM SEWERS, WITH INLETS, ARE INSTALLED, THE STORM SEWERS MUST NOW BE PROTECTED SO ALL NEW INLETS BECOME POINTS OF COMPLIANCE.
3. AREA DRAINS - AS SOON AS WATER CAN FLOW INTO THESE DRAINS, HAY BALE OR SILT FENCE PROTECTION WILL BE INSTALLED AROUND THEM.
4. CURB OPENING INLETS - AS SOON AS WATER CAN FLOW INTO THESE DRAINS, INLET PROTECTION DEVICES MUST BE INSTALLED. IF WATER CANNOT FLOW INTO CURB INLETS UNTIL STREET CONSTRUCTION IS COMPLETE, THEN STREET CONTRACTOR WILL INSTALL INLET PROTECTION. SEE PHASE 3 - STREET CONSTRUCTION.
5. THE STORM SEWER CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING THESE DEVICES.
6. THE SUBDIVISION DEVELOPER WILL MAINTAIN THESE EROSION CONTROL DEVICES ONCE INSTALLED.
7. ALL DISTURBED GROUND WILL BE FINAL GRADED AND TEMPORARILY OR PERMANENTLY SEEDED WITHIN 14 DAYS OF COMPLETION OF WORK IN ANY GIVEN PART OF THE SUBDIVISION.
8. ONCE ALL DISTURBED GROUND DRAINING TO AN INLET HAS BEEN RESTABILIZED WITH GRASS OR SOD, THE SUBDIVISION DEVELOPER WILL BE RESPONSIBLE FOR PERMANENTLY REMOVING THE INLET PROTECTION.

GENERAL NOTES

1. ALL EROSION CONTROL DEVICES TO PREVENT ERODED SOIL FROM ENTERING DITCHES, STORM SEWERS, LAKES, STREETS OR ANY OTHER OTHER DRAINAGE FEATURE.
2. THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPE OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
3. EROSION CONTROL DEVICES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS TO REMAIN EFFECTIVE. MAINTENANCE SHALL BE AS INDICATED ON SOIL EROSION BMP'S DETAIL SHEETS.
4. PERSONS DESTROYING EROSION CONTROL DEVICES SHALL BE RESPONSIBLE FOR IMMEDIATELY REPAIRING THEM OR INSTALLING SUITABLE REPLACEMENT DEVICES.
5. THE DEVELOPMENT OF ANY SUBDIVISION THAT DISTURBS 1 ACRE OR MORE WILL BE REQUIRED TO SUBMIT TO THE CITY ENGINEER A POLLUTION PREVENTION PLAN. EROSION CONTROL DEVICES ARE REQUIRED. THE DETAILS SHOWN ON THIS SHEET ARE THE MINIMUM STANDARDS TO BE SHOWN ON POLLUTION PREVENTION PLANS.
6. FOR SUBDIVISIONS SMALLER THAN 1 ACRE, SOIL EROSION DEVICES ARE REQUIRED. ALSO, DEVELOPERS AND CONTRACTORS ARE ENCOURAGED TO DEVELOP POLLUTION PREVENTION PLANS FOR EACH PROJECT PRIOR TO CONSTRUCTION.
7. FAILURE TO USE AND MAINTAIN SOIL EROSION DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE SUBDIVISION DEVELOPER AND CONTRACTORS TO THE PENALTIES PROVIDED THEREIN.
8. THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMAL TO THE PROJECT. OTHER THAN THE SITUATIONS CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED SO LONG AS THEY ARE EFFECTIVE AND MAINTAINED.
9. A STABILIZED EARTH SURFACE IS DEFINED AS ONE THAT IS HARD SURFACED WITH CONCRETE, ASPHALT, OR THE LIKE, OR ONE ON WHICH 70% OF THE GRASS HAS GERMINATED ON THE ENTIRE SURFACE.

SEE DETAIL SHEET FOR BACK OF CURB PROTECTION DETAIL



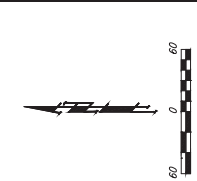
CURB BACKFILL DETAIL (STREET CONSTRUCTION ONLY)

THIS IS A TEMPORARY MEASURE ONLY, WHEN APPROVED BY THE PROJECT ENGINEER. THE DIRT GRADE BEHIND THE CURB SHALL BE BROUGHT TO THE FINISH GRADE WITH TEMPORARY EROSION CONTROL DEVICES TO PREVENT EROSION PRIOR TO THE COMPLETION OF ALL PROJECTS.

REVISION DATE: MAY, 2013

		SUBDIVISION DEVELOPMENT PROCESS	
		CITY ENGINEER GARY JANZEN, P.E.	DATE 5/2013
PROJECT NUMBER 1019 288-401	CITY ENGINEER'S OFFICE 1555 NORTH MAIN STREET WICHITA, KANSAS 67202-1420	SHEET 18 of 22	REVISION DATE: MAY, 2013





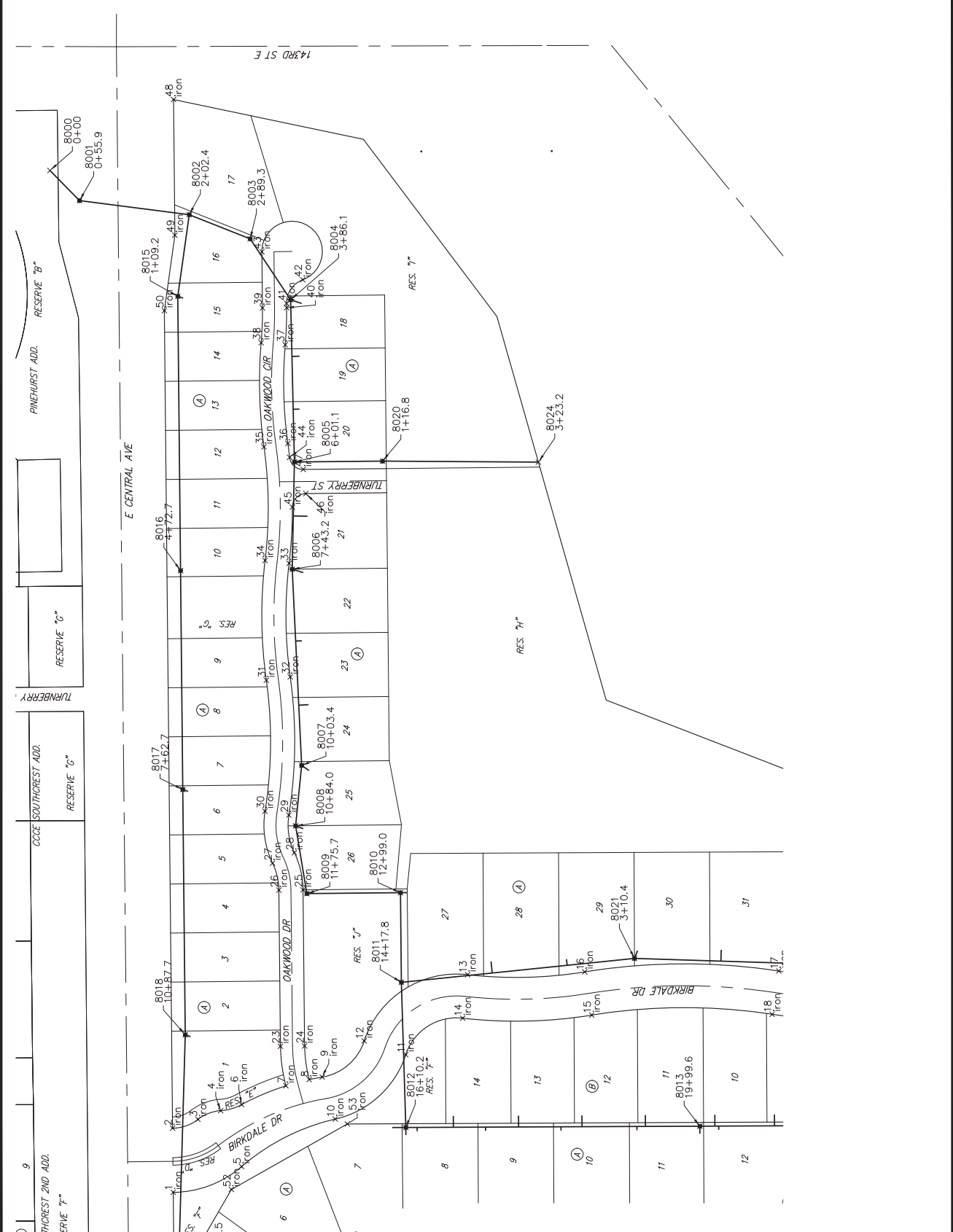
BAUGHMAN COMPANY
 315 Ellis St.
 Wichita, KS 67211
 316-262-7271
 Baughmanco.com

RESER 2ND ADDITION
 Phase 1

COORDINATE SHEET

SANITARY SEWER IMPROVEMENTS
 PROJECT NUMBER: 24-10-ES20

DESIGN AEG: BREWSTER TINS
 DATE: May 28, 2025
 SHEET: 19 OF 22



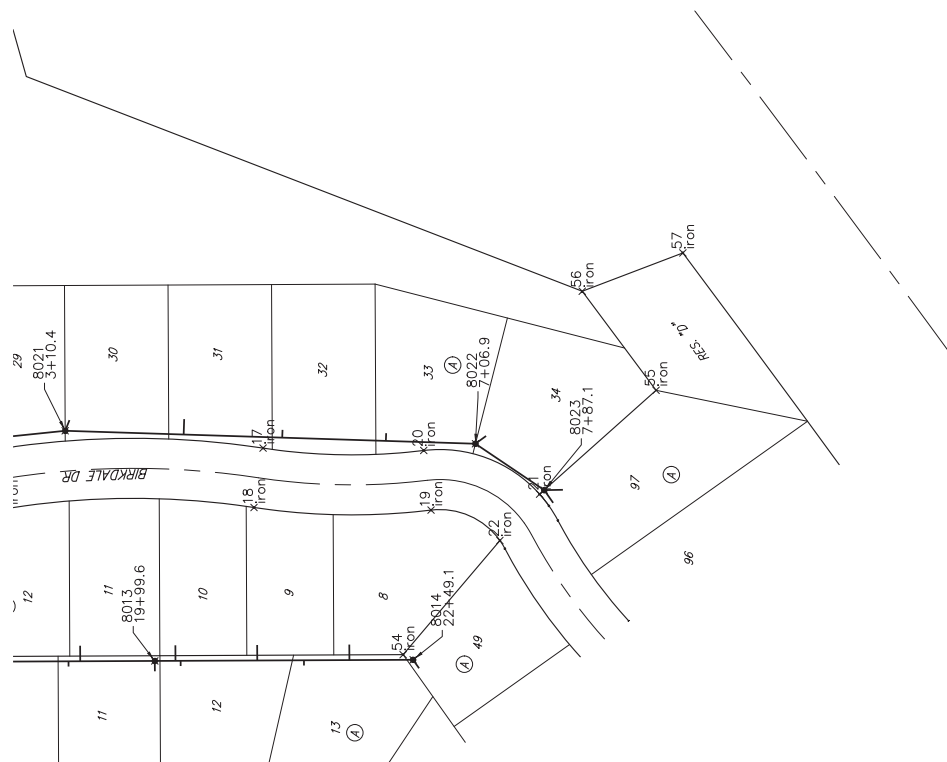


SANITARY SEWER

Point #	Northing	Easting	Point Table	Row Description
8000	373604.89	17594964.04		0+00
8001	373765.69	17594924.14		0+53.9
8002	373820.38	17594905.91		2+02.4
8003	373539.64	17594973.42		2+49.3
8004	373486.06	17594792.79		3+46.1
8005	373461.07	17594577.83		6+01.1
8006	373463.93	17594435.60		7+43.2
8007	373471.41	17594176.91		10+03.4
8008	373479.45	17594095.70		10+48.0
8009	373464.55	17594025.97		11+75.7
8010	373340.35	17594007.22		12+99.0
8011	373339.36	17593988.42		14+17.8
8012	373333.43	17593986.11		16+10.2
8013	372943.98	17593697.66		19+99.6
8014	372944.47	17593698.97		22+49.1
8015	372635.51	17594797.40		4+92.2
8016	372631.85	17594433.89		7+42.7
8017	372628.94	17594143.90		10+48.7
8018	372625.09	17593916.52		14+25.5
8019	372635.29	17594491.29		14+25.5
8020	372635.30	17594479.21		14+25.5
8021	372630.56	17593902.14		3+10.4
8022	372634.26	17593907.66		7+49.9
8023	372667.82	17593962.83		7+49.1
8024	373167.98	17594577.63		3+43.2

IRONS

Point #	Northing	Easting	Row Description
1	373644.58	17595010.23	Iron
2	373645.43	17594995.24	Iron
3	373606.78	17594796.91	Iron
4	373578.75	17594716.43	Iron
5	373551.02	17593844.37	Iron
6	373550.98	17593265.51	Iron
7	373462.32	17592915.30	Iron
8	373462.42	17592596.61	Iron
9	373444.30	17592762.93	Iron
10	373446.94	17593707.28	Iron
11	373333.55	17593792.61	Iron
12	373308.64	17593810.75	Iron
13	373201.62	17593808.60	Iron
14	373208.14	17593845.03	Iron
15	373087.19	17593804.97	Iron
16	373086.44	17593902.29	Iron
17	372838.41	17593933.44	Iron
18	372846.15	17593846.10	Iron
19	372877.17	17593843.57	Iron
20	372864.20	17593901.14	Iron
21	372972.20	17593858.96	Iron
22	372910.64	17593874.15	Iron
23	372496.52	17593803.74	Iron
24	372467.52	17593804.06	Iron
25	372469.69	17594010.92	Iron
26	372501.60	17594010.60	Iron
27	372509.93	17594046.25	Iron
28	372461.11	17594060.15	Iron
29	372468.39	17594109.97	Iron
30	372519.89	17594115.04	Iron
31	372516.26	17594285.66	Iron
32	372466.57	17594331.01	Iron
33	372468.08	17594443.57	Iron
34	372519.85	17594443.37	Iron
35	372517.36	17594597.84	Iron
36	372468.67	17594602.28	Iron
37	372463.20	17594723.17	Iron
38	372525.08	17594732.84	Iron
39	372523.34	17594791.95	Iron
40	372494.35	17594782.27	Iron
41	372494.40	17594788.07	Iron
42	372470.02	17594619.29	Iron
43	372524.09	17594855.33	Iron
44	372462.99	17594853.69	Iron
45	372462.71	17594071.95	Iron
46	372463.89	17594535.98	Iron
47	372462.07	17594507.25	Iron
48	372471.12	17594505.08	Iron
49	372630.32	17594678.40	Iron
50	372633.01	17594778.17	Iron
51	372640.30	17594862.61	Iron
52	372645.61	17594913.97	Iron
53	372471.00	17593702.78	Iron
54	372204.41	17593703.93	Iron
55	372465.83	17593852.28	Iron
56	372531.12	17594654.98	Iron
57	372433.91	17594691.35	Iron



BAUGHMAN COMPANY
315 Ellis St.
Wichita, KS 67211
316-262-7271
BaughmanCo.com

RESERVED ADDITION
Phase 1

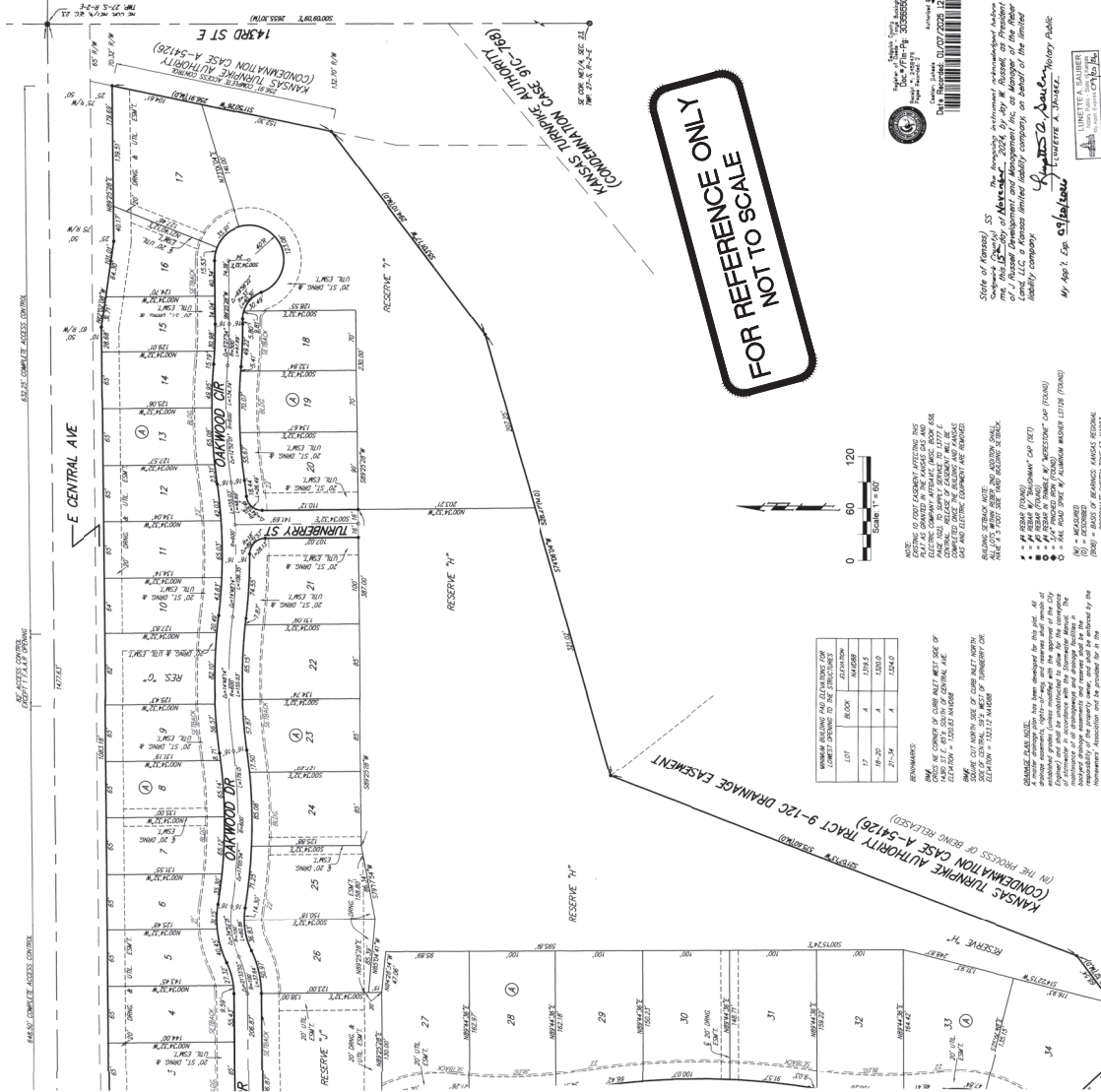
COORDINATE SHEET

SANITARY SEWER IMPROVEMENTS
PROJECT NUMBER: 24-10-ES20
DESIGN AEG: BRAWA TMS
DATE: May 28, 2025

FILE: E:\Projects\Reserve 2nd Addition 24-04-1930\Engineering\Phase 1\sewer 24-10-ES20\sewer.dwg

SHEET **20** OF **22**

REBER 2ND ADDITION WICHITA, SEDGWICK COUNTY, KANSAS



State of Kansas, SS We, **Reber 2nd Addition, P.A.**, Chapter 15-1001, a limited liability company organized under the laws of the State of Kansas, do hereby certify that the foregoing plat was prepared by **Reber 2nd Addition, P.A.**, Chapter 15-1001, a limited liability company organized under the laws of the State of Kansas, and that the same was duly recorded in the office of the Register of Deeds, Sedgwick County, Kansas, on this 23rd day of January, 2025, at 10:00 AM. The undersigned is the duly authorized officer of the undersigned company, and the undersigned hereby certifies that the foregoing plat was prepared by the undersigned company, and that the same was duly recorded in the office of the Register of Deeds, Sedgwick County, Kansas, on this 23rd day of January, 2025, at 10:00 AM.

Know all men by these presents that we, **Reber 2nd Addition, P.A.**, Chapter 15-1001, a limited liability company organized under the laws of the State of Kansas, do hereby certify that the foregoing plat was prepared by the undersigned company, and that the same was duly recorded in the office of the Register of Deeds, Sedgwick County, Kansas, on this 23rd day of January, 2025, at 10:00 AM. The undersigned is the duly authorized officer of the undersigned company, and the undersigned hereby certifies that the foregoing plat was prepared by the undersigned company, and that the same was duly recorded in the office of the Register of Deeds, Sedgwick County, Kansas, on this 23rd day of January, 2025, at 10:00 AM.

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