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:

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

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 City 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. All elevations shown are NAVD88.

9. All existing pavement and curb and gutter within the construction limits shall be saw cut, full depth, to the lines shown on the plans, or to the nearest joint, and removed, unless otherwise noted. If removal limits are within three feet of a joint, remove to the joint.

10. All traffic control devices in the work zone (including markings and signs) and their installation and maintenance shall comply with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All traffic control devices in the traveled way or clear zone shall be crashworthy (NCHRP Report 350 or MASH compliant). http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/wzd

11. All construction equipment, including vehicles, materials, and debris, shall be stored outside of the clear zone. Where this cannot be achieved the contractor shall place appropriate signs, abject identifiers, and/or barricades in compliance with the MUTCD.

12. Except when required for safety, traffic control shall not block any lanes or sidewalks when work is not being performed.

13. Traffic lane blockages more than four hours may need permitting. Call 316–268–4501 to determine requirements and request permit.

14. Limits of earthwork shall match existing ground elevations at the right–of–way line unless otherwise noted on the plans with a new finished grade elevation. When a new finished grade elevation is shown, the earthwork shall extend one foot beyond the right–of–way line and then slope up or down using permissible slopes to match the existing ground surface.

15. All existing and proposed erosion control measures including silt fencing, erosion control mat, straw bales, inlet barriers, and const. entrance shall be maintained throughout construction by the contractor and until project is accepted by the City of Wichita. The on–site engineer shall complete weekly reports on the status of erosion control measures. The contractor shall be required to comply with maintenance and/or replacement of erosion control measures as determined by the on–site engineer until project is accepted by City of Wichita. Maintenance and/or replacement of erosion control measures to be paid by L.S. bid item "Maintain Existing BMPs".

16. All excess excavation shall remain on–site and shall be spread or stockpiled at a location to be determined by developer.

17. All of Central Ave. R/W disturbed during construction and street R/W adjacent to Reserves shall be seeded and mulched as follows:

    Seed –– Kansas Premium Fescue Blend; 8 lbs. PLS/1000 Sq. Ft.
    Annual Rye grass; 3 lbs./1000 Sq. Ft.
    Fertilizer –– 12–24–12 Ratio; 45 Lbs./Ac.
    Mulch –– 2 Tons Prairie Hay/Ac.

    All other areas disturbed during construction are to be seeded as follows:

    Seed –– Rye grass; 5 lbs./1000 Sq. Ft.

    All costs associated with seeding including mobilization, preparation of ground, seeding, fertilizing, mulching, etc. shall be included in the L.S. bid item "Seeding".

    An additional bid item for "Seeding, Temporary" has been included and may be used at the discretion of the design engineer. Temporary seed shall be Annual Rye at 5 lbs./1000 Sq. Ft. unless otherwise noted and shall be planted when permanent seed or sod cannot be used due to seasonal limitations. If the "Seeding, Temporary" bid item is not used, 100% of the pay item will be deducted from the contract. All costs associated with temporary seeding including mobilization, preparation of ground, seeding, etc., shall be included in the L.S. bid item "Seeding, Temporary".

18. Contractor shall contact Developer and coordinate seeding schedule to avoid conflict with Evergy staking and trenching.

19. The developer for this project is Bridger Development, LLC, Carter Wells, Manager (314)973–0148.

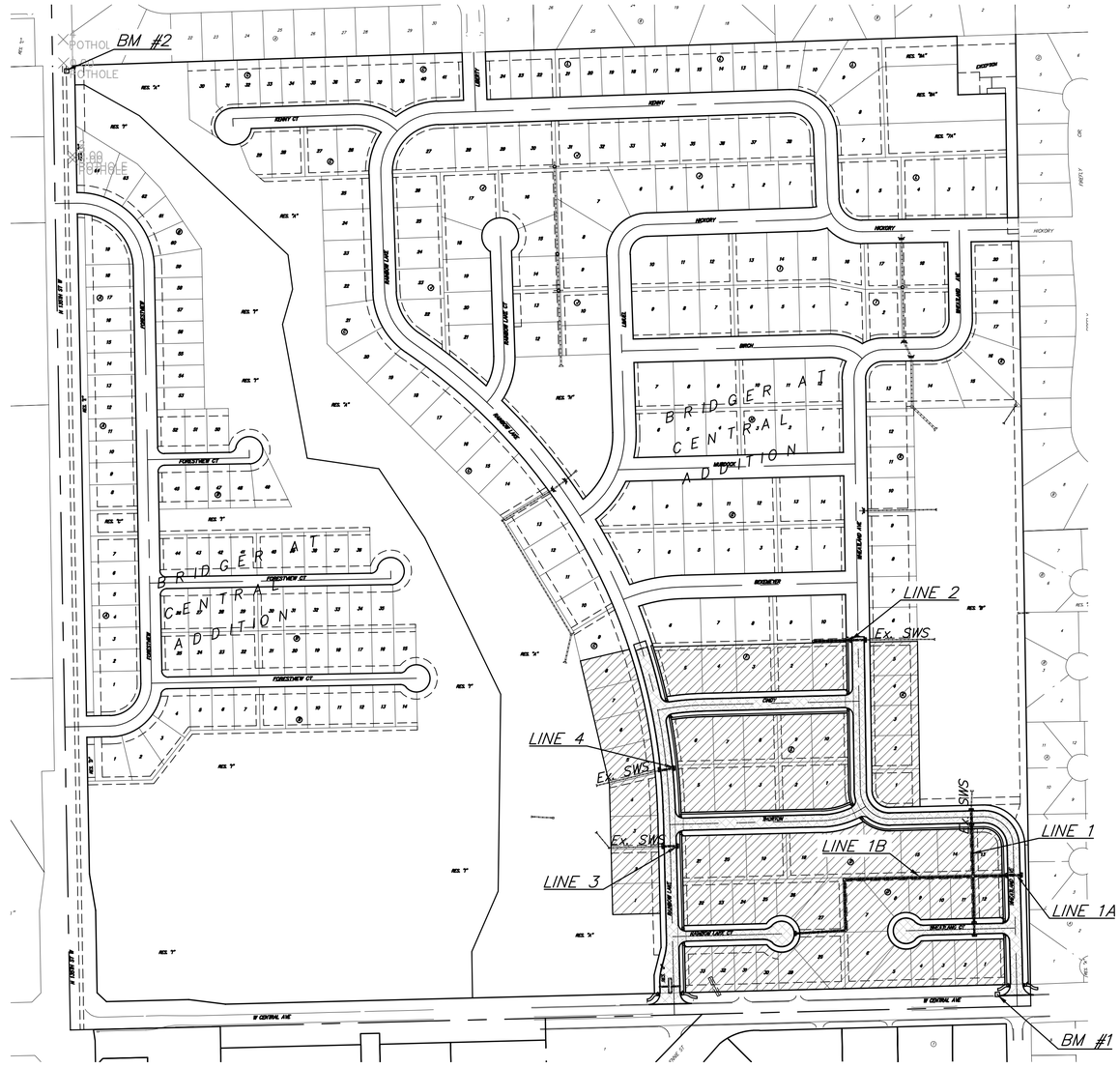
STREET PAVING FOR RAINBOW LAKE WITH INCIDENTAL SWS IMPROVEMENTS

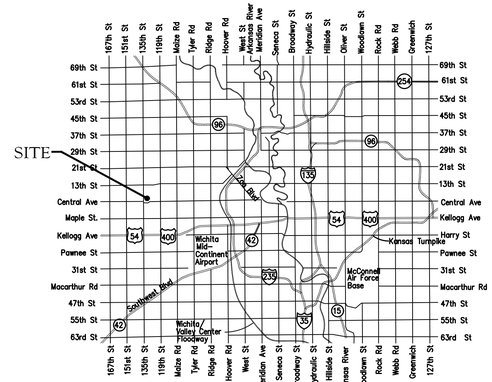
to serve

BRIDGER AT CENTRAL ADDITION - Ph. I

CITY OF WICHITA, KANSAS

Paul Gunzelman, P.E. City Engineer
Project Number 472-2024-086030
Org Code 47476624
Munis Number E4087





Vicinity Map

Benchmarks

BM #1: "□" on top of curb inlet, NE Cor. N side of W Central Ave, 27.5'± S. & 90.2'± W. of SW Cor., Lot 1, Block 1, Castlegate 3rd.
Elev. = 1342.00 NAVD88

BM–#2: City of Wichita Benchmark disc, E side of N 135th St W, 13.2'± S. & 37.7'± E. of W1/4 Cor., Sec. 13, Twp. 27–S, R–2–W.
Elev. = 1347.48 NAVD88

Project Earthwork Totals
Excavation = 2,228 C.Y.
Loose Fill = 1,377 C.Y.
Compacted Fill = 136 C.Y.

Total Project Length
4,064 L.F. = 0.77 Miles

Benefit District

Proposed Streets

Sheet Index

M. BRENT WOOTEN LICENSED 8470 12/02/2024 KANSAS PROFESSIONAL ENGINEER

December 2, 2024

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

E:\Projects\Bridger at Central Addition(Albert) \Engineering\Phase 1\STR 23-09-E\02\Streets.dwg

BENCHMARKS:
BM #1: "□" on top of curb inlet, NE Cor. N side of W Central Ave, 27.5'± S. & 90.2'± W. of SW Cor., Lot 1, Block 1, Castlegate 3rd.
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Elev. = 1347.48 NAVD88

Most trees have been removed prior to construction by storm water drain project.

All other trees shall remain and be protected from damage during construction. Overhanging limbs shall be trimmed by the Contractor using a chain saw only as necessary for construction and with approval of the Engineer. Cost of tree trimming to be included in bid item "Site Clearing"

NE corner Intersection of Central Ave. & 135th St. W. Install R9–11 "Sidewalk Closed Ahead Cross Here".

House/buildings/foundations, septic lateral field and all other existing structures, fences, footings, foundations, steps, plumbing, utility service poles and lines, windmill and all other miscellaneous items have been removed prior to construction by storm drain contractor. Two water wells have been capped.

Baseline = CL Rainbow Lake

Scale: 1" = 20'
• = Iron

Sta. 0+00.00 = CL Central Ave.
Sta. 0+60.50
Sta. 0+87.34
Sta. 1+25.00
Sta. 1+80.00
Sta. 2+03.54
Sta. 2+48.00
Sta. 3+50.00

P.V.I. Elev. = 1349.20 48' V.C.
P.V.I. Elev. = 1348.60 No V.C.
P.V.I. Elev. = 1348.10 No V.C.

+0.620%
–1.091%
–0.735%
–0.564%

Sta 0+63.50, 44' Lt. Install R1–1 (stop) sign.

Construct 6' Wide Concrete Sidewalk 4"

Sta 0+36.00, 73' Lt. Install R9–9 "Sidewalk Closed".

Construct Std. Type A Wheelchair Ramp w/ Detectable Warnings (both sides) (See detail, sheet 24)

Transition from Concrete Curb, Mono Edge (6–5/8") to Concrete C & G, Comb. Type 2 (3–5/8") in 5', outside of valley gutter radius (north side).

Const. Concrete C & G, Comb. Type 3 (8"), Median (See detail, sheet 20) Median shall be filled with friable fill material

Iron @ Sta. 0+60.00
Iron @ Sta. 1+10.00
Iron @ Sta. 1+85.00
Iron @ Sta. 2+43.00

RES. "A" BRIDGER AT CENTRAL ADDITION

Construct AC Pavement 5" (3" Bit Base) W/ Crushed Rock Base 5", Reinforced.

Manhole Top Elev. = 1348.70

Valve Box Elev. = 1348.20

Construct Concrete C & G, Comb. Type 2 (3–5/8"), both sides.

Match Point

Power pole to be removed by others prior to construction.

Sawcut and remove 92.0 S.Y. existing concrete sidewalk as indicated.

Sawcut and remove 55.0 S.Y. existing concrete driveway as indicated. Replace with 54.0 L.F. Concrete C & G, Comb. Type 1 (6").

Construct Concrete Pavement (VG) 7" (Reinf) on Crushed Rock Base 5", Reinforced with Concrete Curb, Mono Edge (6–5/8").

Sta 0+60.50, Begin construction of AC Pavement 5" (3" Bit Base) W/ Crushed Rock Base 5", Reinforced and 5' Wide Concrete Sidewalk 4".

Sawcut and remove 115.0 L.F. existing curb & gutter as indicated.

Sta 0+39.00, 52' Rt. Install R9–9 "Sidewalk Closed".

Sawcut and remove 48.0 S.Y. existing concrete driveway as indicated. Replace with 52.0 L.F. Concrete C & G, Comb. Type 1 (6").

W CENTRAL AVE

RAINBOW LAKE CT.

RAINBOW LAKE

Install 29' Long Pipe, PVC 4" (Left) & 28' long Pipe, PVC 4" (Right) under pavement. Cap each end. Mark End of Pipes with Wooden Stake Painted Pink.

Sta. 0+64.00 & 96.00, 10' Lt. Install R4–7 (keep right) & OM–1 sign.

Manhole Top Elev. = 1349.20

Construct 6' Wide Concrete Sidewalk 4"

Sta 0+63.50, 24' Rt. Install Metro 9" SNS Assembly "Central (____ W)" & "Rainbow Lake (____ N)" as per City specs.

Sta 1+82.00, 34' Rt. Install Std. 9" SNS Assembly "Rainbow Lake" & Metro 9" SNS Assembly "Rainbow Lake Ct (_____–_____)" as per City specs.

Construct 5' Wide Concrete Sidewalk 4"

Construct Std. Type A Wheelchair Ramp w/ Detectable Warnings (both sides) (See detail, sheet 24)

Valve Box Elev. = 1348.60

Transition from Concrete Curb, Mono Edge (6–5/8") to Concrete C & G, Comb. Type 2 (3–5/8") in 5', outside of valley gutter radius (N&S sides) and through wheelchair ramps (east side).

Construct Concrete Pavement (VG) 7" (Reinf) on Crushed Rock Base 5", Reinforced with Concrete Curb, Mono Edge (6–5/8").

Sta. 2+14.00 = CL Rainbow Lake Ct.

P.V.I. Elev. = 1349.20 48' V.C.

NW corner Intersection of Central Ave. & 119th St. W. Install R9–11 "Sidewalk Closed Ahead Cross Here".

WATER VALVE LOCATION TABLE

VALVE NUMBER	STREET	BASELINE STATION	OFFSET DISTANCE	OFFSET DIRECTION
V1	Rainbow Lake	2+37.00	26'	Lt.

Paving contractor will be responsible to operate all water valves on the project, in the presence of the inspector, to ensure accessibility to the valves, and that all valves (except blowoffs) are left in the "ON" position when the project is completed.

NOTE: ROLL TYPE CURB & GUTTER (TYPE 2) TO BE CONSTRUCTED ON THE PAVEMENT SHOWN ON THIS SHEET. TOP OF CURB ELEVATIONS ARE GIVEN FOR FULL HEIGHT CURB (TYPE 4).

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

BRIDGER AT CENTRAL ADDITION - Ph. I

RAINBOW LAKE

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 2 OF 49

File: E:\Projects\Bridger At Central Addition(Albert)..\Engineering\Phase 1\STR 23-09-E602\Streets.dwg

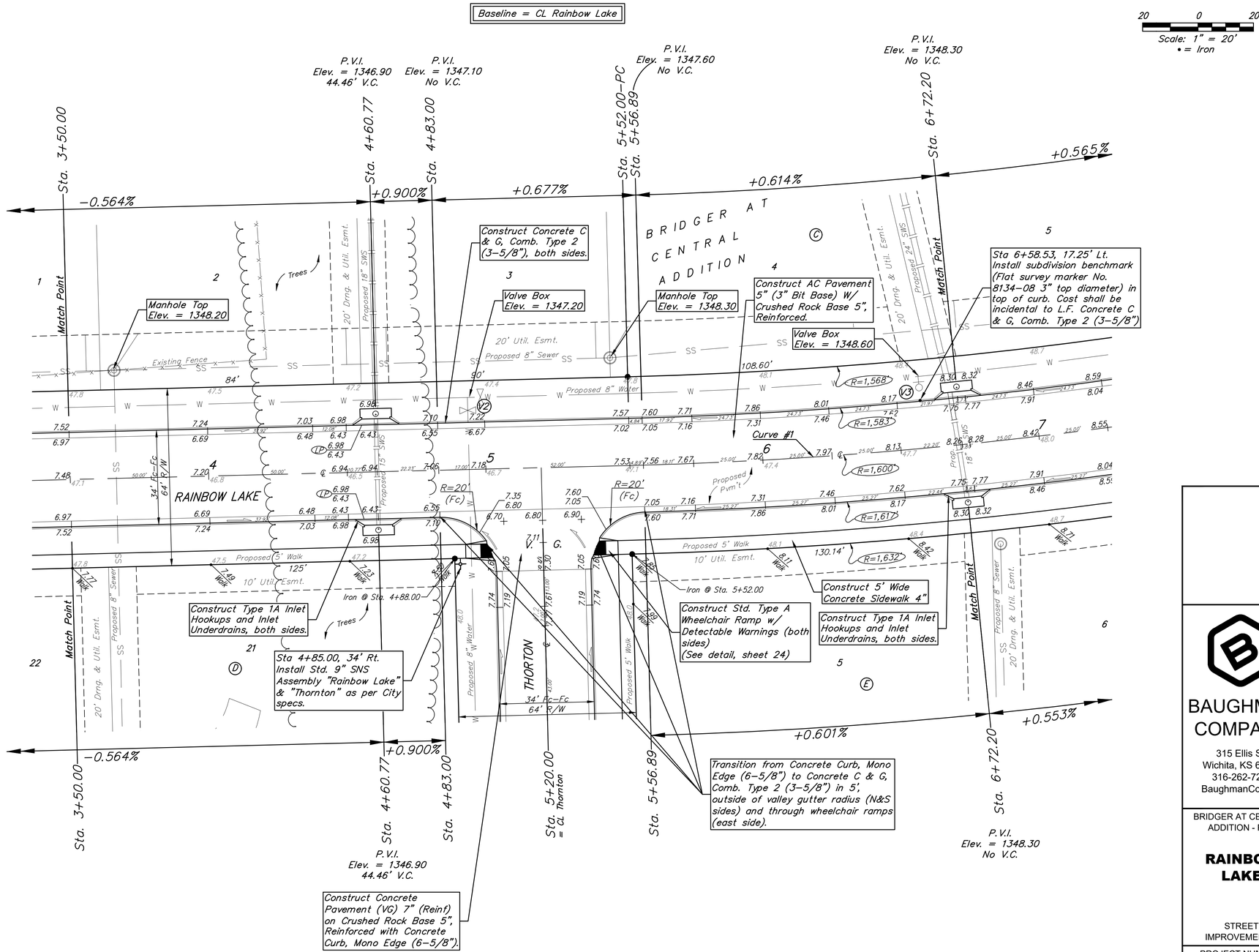
BENCHMARKS:
BM #1: "□" on top of curb inlet, NE Cor. N side of W Central Ave, 27.5'± S. & 90.2'± W. of SW Cor., Lot 1, Block 1, Castlegate 3rd.
Elev. = 1342.00 NAVD88

BM–#2: City of Wichita Benchmark disc, E side of N 135th St W, 13.2'± S. & 37.7'± E. of W1/4 Cor., Sec. 13, Twp. 27–S, R–2–W.
Elev. = 1347.48 NAVD88

Most trees have been removed prior to construction by storm water drain project.

All other trees shall remain and be protected from damage during construction. Overhanging limbs shall be trimmed by the Contractor using a chain saw only as necessary for construction and with approval of the Engineer. Cost of tree trimming to be included in bid item "Site Clearing"

Curve #1					
Curve Data Based on Centerline					
Rad. = 1600' Delta = 16°20'04" Tangent = 229.63'					
Arc = 456.14' L.C. = 454.60' Def./Ft. = 1.07430 Min.					
		Face Chord Lengths			
Station	Arc	8' Left	8' Right	Defl.	Total Defl.
5+52.00	-	-	-	0°00'00"	0°00'00"
5+56.89	4.89'	4.81'	4.97'	0°05'15"	0°05'15"
5+75.00	18.11'	17.83'	18.39'	0°19'28"	0°24'43"
6+00.00	25.00'	24.61'	25.39'	0°26'51"	0°51'34"
6+25.00	25.00'	24.61'	25.39'	0°26'51"	1°18'25"
6+50.00	25.00'	24.61'	25.39'	0°26'52"	1°45'17"
6+75.00	25.00'	24.61'	25.39'	0°26'51"	2°12'08"
7+00.00	25.00'	24.61'	25.39'	0°26'52"	2°39'00"
7+25.00	25.00'	24.61'	25.39'	0°26'51"	3°05'51"
7+50.00	25.00'	24.61'	25.39'	0°26'52"	3°32'43"
7+75.00	25.00'	24.61'	25.39'	0°26'51"	3°59'34"
7+97.53	22.53'	22.18'	22.88'	0°24'12"	4°23'46"
8+00.00	2.47'	2.43'	2.51'	0°02'40"	4°26'26"
8+25.00	25.00'	24.61'	25.39'	0°26'51"	4°53'17"
8+34.70	9.70'	9.55'	9.85'	0°10'25"	5°03'42"
8+50.00	15.30'	15.06'	15.54'	0°16'27"	5°20'09"
8+69.97	19.97'	19.66'	20.28'	0°21'27"	5°41'36"
8+75.00	5.03'	4.95'	5.11'	0°05'24"	5°47'00"
9+00.00	25.00'	24.61'	25.39'	0°26'51"	6°13'51"
9+25.00	25.00'	24.61'	25.39'	0°26'52"	6°40'43"
9+50.00	25.00'	24.61'	25.39'	0°26'51"	7°07'34"
9+75.00	25.00'	24.61'	25.39'	0°26'52"	7°34'26"
10+00.00	25.00'	24.61'	25.39'	0°26'51"	8°01'17"
10+08.14	8.14'	8.01'	8.27'	0°08'45"	8°10'02"



WATER VALVE LOCATION TABLE

VALVE NUMBER	STREET	BASELINE STATION	OFFSET DISTANCE	OFFSET DIRECTION
V2	Rainbow Lake	4+91.00	26'	Lt.
V3	Rainbow Lake	6+58.53	26'	Lt.

Paving contractor will be responsible to operate all water valves on the project, in the presence of the inspector, to ensure accessibility to the valves, and that all valves (except blowoffs) are left in the "ON" position when the project is completed.

Subdivision Bench Marks

Street & Station	Location Description	Elevation
Rainbow Lake 6+58.53, 17.25' Lt.	Adjacent to Fire Hydrant near common front lot corner of Lots 4 and 5, Block C, Bridger at Central Addition.	

NOTE: ROLL TYPE CURB & GUTTER (TYPE 2) TO BE CONSTRUCTED ON THE PAVEMENT SHOWN ON THIS SHEET. TOP OF CURB ELEVATIONS ARE GIVEN FOR FULL HEIGHT CURB (TYPE 4).

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

BRIDGER AT CENTRAL ADDITION - Ph. I

RAINBOW LAKE

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 3 OF 49

File: E:\Projects\Bridger At Central Addition(Albert)_\Engineering\Phase 1\STR_23-09-E602Streets.dwg

BENCHMARKS:
BM #1: "□" on top of curb inlet, NE Cor. N side of W Central Ave, 27.5'± S. & 90.2'± W. of SW Cor., Lot 1, Block 1, Castlegate 3rd.
Elev. = 1342.00 NAVD88

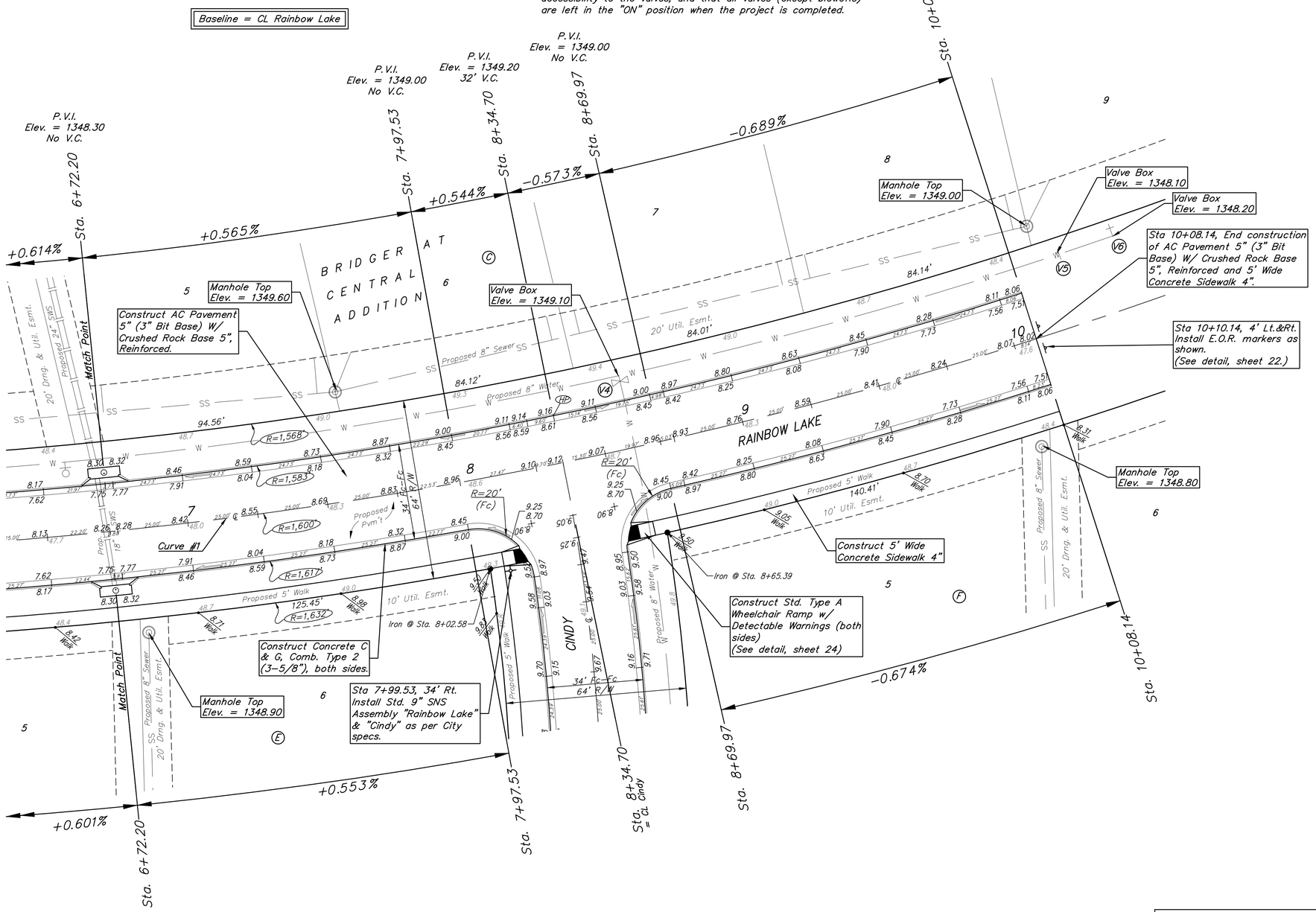
BM–#2: City of Wichita Benchmark disc, E side of N 135th St W, 13.2'± S. & 37.7'± E. of W1/4 Cor., Sec. 13, Twp. 27–S, R–2–W.
Elev. = 1347.48 NAVD88

WATER VALVE LOCATION TABLE

VALVE NUMBER	STREET	BASELINE STATION	OFFSET DISTANCE	OFFSET DIRECTION
V4	Rainbow Lake	8+60.64	26'	Lt.
V5	Rainbow Lake	10+25.72	26'	Lt.
V6	Rainbow Lake	10+45.65	26'	Lt.

Paving contractor will be responsible to operate all water valves on the project, in the presence of the inspector, to ensure accessibility to the valves, and that all valves (except blowoffs) are left in the "ON" position when the project is completed.

20 0 20
Scale: 1" = 20'
• = Iron



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BRIDGER AT CENTRAL ADDITION - Ph. I

RAINBOW LAKE

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 4 OF 49

File: E:\Projects\Bridger At Central Addition(Albert)_IEngineering\Phase 1\STR_23-09-E602\Streets.dwg

BENCHMARKS:
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Elev. = 1347.48 NAVD88

Existing house, buildings, fences, and most trees have been removed prior to construction by storm water drain project.

All other trees shall remain and be protected from damage during construction. Overhanging limbs shall be trimmed by the Contractor using a chain saw only as necessary for construction and with approval of the Engineer. Cost of tree trimming to be included in bid item "Site Clearing"

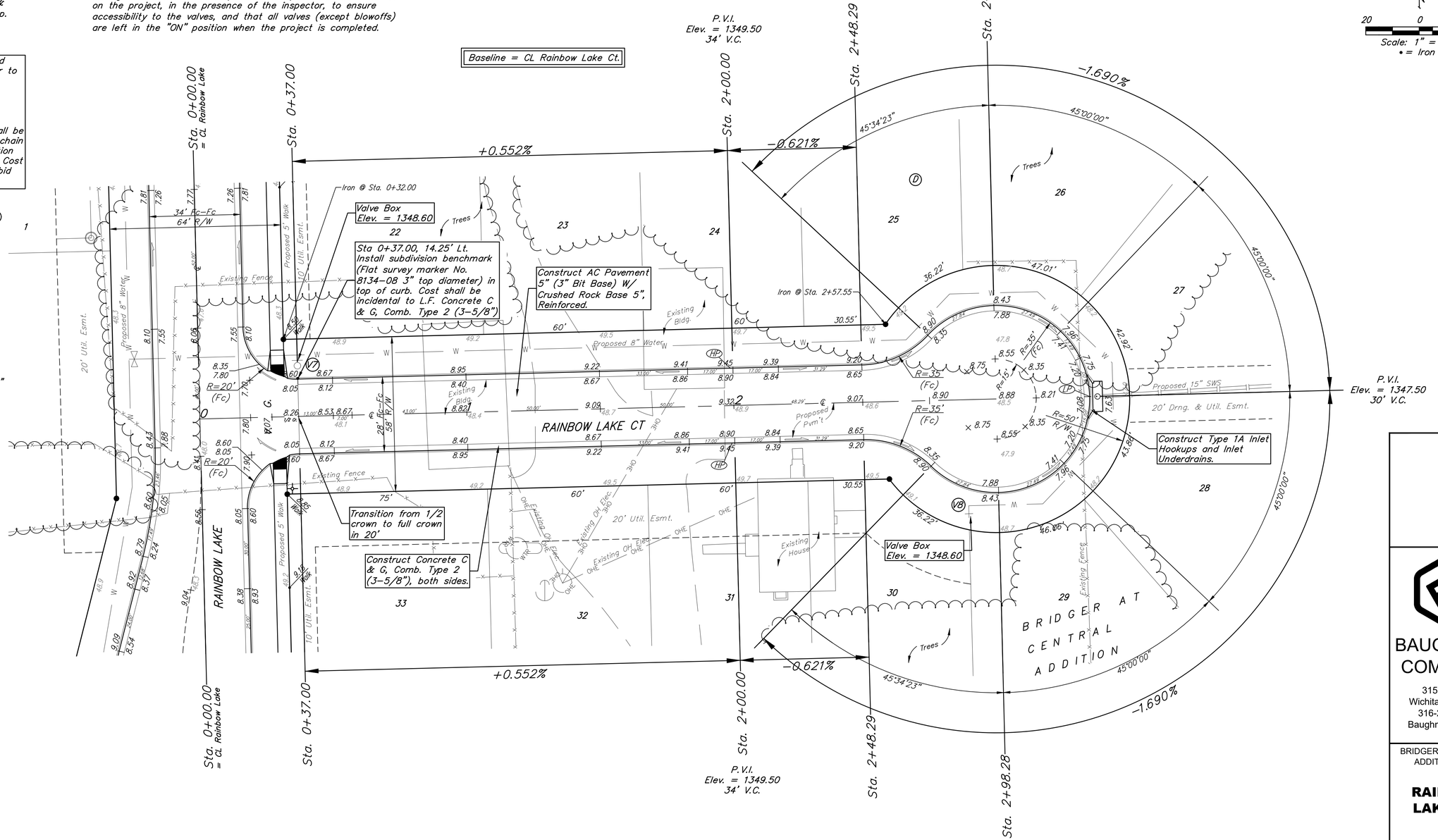
WATER VALVE LOCATION TABLE

VALVE NUMBER	STREET	BASELINE STATION	OFFSET DISTANCE	OFFSET DIRECTION
V7	Rainbow Lake Ct.	0+37.00	23'	Lt.
V8	Rainbow Lake Ct.	2+87.00	39.73'	Rt.

Paving contractor will be responsible to operate all water valves on the project, in the presence of the inspector, to ensure accessibility to the valves, and that all valves (except blowoffs) are left in the "ON" position when the project is completed.

Subdivision Bench Marks

Street & Station	Location Description	Elevation
Rainbow Lake Ct. 0+37.00, 14.25' Lt.	Adjacent to Fire Hydrant near common front lot corner of Lots 29 and 30, Block D, Bridger at Central Addition.	



20 0 20
Scale: 1" = 20'
• = Iron

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BRIDGER AT CENTRAL ADDITION - Ph. I

RAINBOW LAKE CT.

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 5 OF 49

File: E:\Projects\Bridger At Central Addition(Albert)_IEngineering\Phase 1\STR_23-09-E602\Streets.dwg

BENCHMARKS:

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Elev. = 1342.00 NAVD88

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Elev. = 1347.48 NAVD88

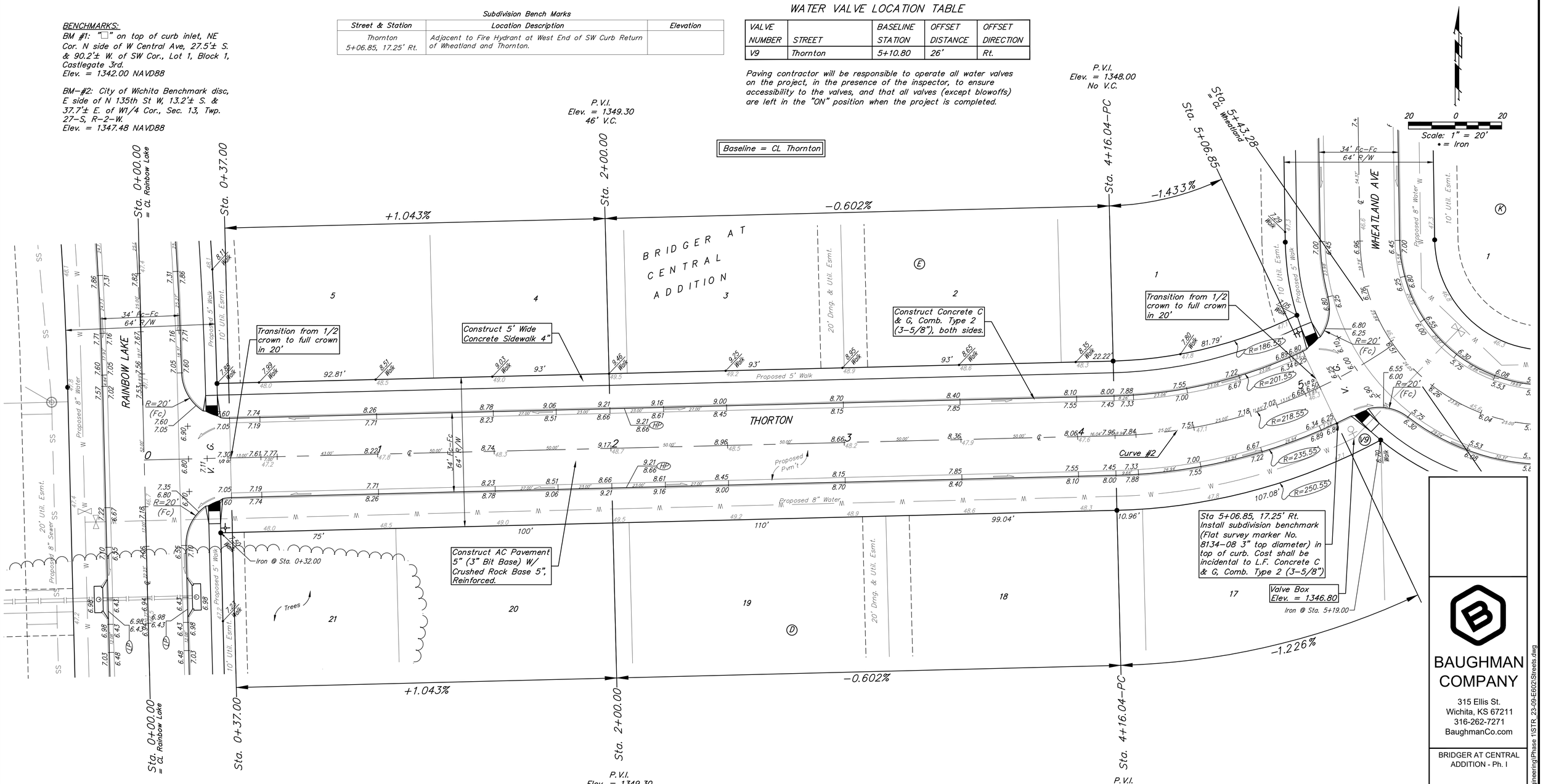
Subdivision Bench Marks

Street & Station	Location Description	Elevation
Thornton 5+06.85, 17.25' Rt.	Adjacent to Fire Hydrant at West End of SW Curb Return of Wheatland and Thornton.	

WATER VALVE LOCATION TABLE

VALVE NUMBER	STREET	BASELINE STATION	OFFSET DISTANCE	OFFSET DIRECTION
V9	Thornton	5+10.80	26'	Rt.

Paving contractor will be responsible to operate all water valves on the project, in the presence of the inspector, to ensure accessibility to the valves, and that all valves (except blowoffs) are left in the "ON" position when the project is completed.



Curve #2					
Curve Data Based on Centerline					
Rad. = 218.55' Delta = 33°21'35" Tangent = 65.48'					
Arc = 127.24' L.C. = 125.46' Def./Ft. = 7.86539 Min.					
		Face Chord Lengths			
Station	Arc	8' Left	8' Right	Defl.	Total Defl.
4+16.04	-	-	-	0°00'00"	0°00'00"
4+25.00	8.96'	7.93'	9.98'	1°10'28"	1°10'28"
4+50.00	25.00'	22.13'	27.85'	3°16'39"	4°27'07"
4+75.00	25.00'	22.13'	27.85'	3°16'38"	7°43'45"
5+00.00	25.00'	22.13'	27.85'	3°16'38"	11°00'23"
5+06.85	6.85'	6.07'	7.63'	0°53'52"	11°54'15"
5+43.28	36.43'	32.23'	40.55'	4°46'33"	16°40'48"

NOTE: ROLL TYPE CURB & GUTTER (TYPE 2) TO BE CONSTRUCTED ON THE PAVEMENT SHOWN ON THIS SHEET. TOP OF CURB ELEVATIONS ARE GIVEN FOR FULL HEIGHT CURB (TYPE 4).

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316-262-7271
BaughmanCo.com

BRIDGER AT CENTRAL ADDITION - Ph. I

THORNTON

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 6 OF 49

File: E:\Projects\Bridger At Central Addition(Albert) \Engineering\Phase 1\STR_23-09-E602\Streets.dwg

BENCHMARKS:

BM #1: "□" on top of curb inlet, NE Cor. N side of W Central Ave, 27.5'± S. & 90.2'± W. of SW Cor., Lot 1, Block 1, Castlegate 3rd.
Elev. = 1342.00 NAVD88

BM–#2: City of Wichita Benchmark disc, E side of N 135th St W, 13.2'± S. & 37.7'± E. of W1/4 Cor., Sec. 13, Twp. 27–S, R–2–W.
Elev. = 1347.48 NAVD88

Subdivision Bench Marks

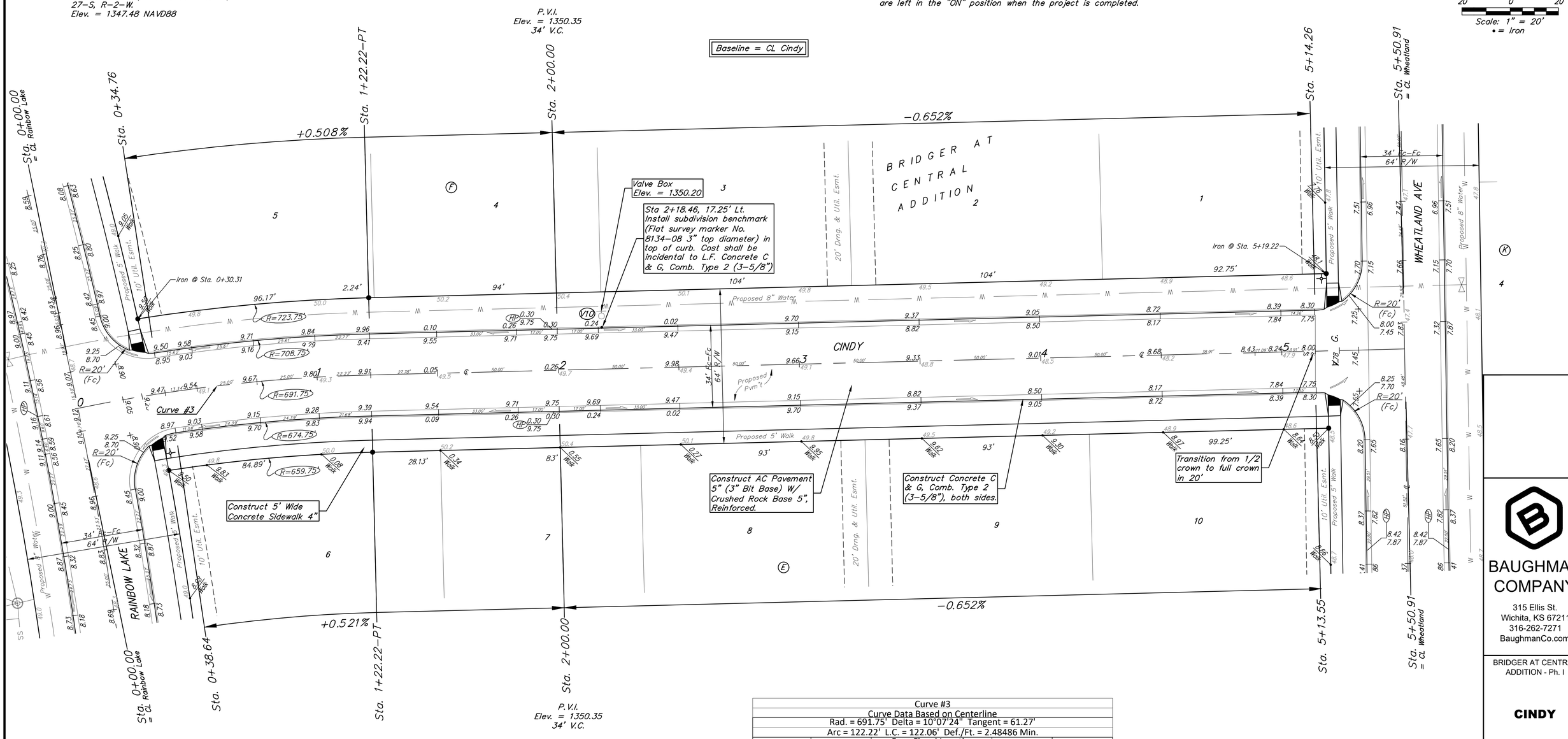
Street & Station	Location Description	Elevation
Cindy 2+18.46, 17.25' Lt.	Adjacent to Fire Hydrant near common front lot corner of Lots 3 and 4, Block F, Bridger at Central Addition.	

WATER VALVE LOCATION TABLE

VALVE NUMBER	STREET	BASELINE STATION	OFFSET DISTANCE	OFFSET DIRECTION
V10	Cindy	2+18.46	26'	Lt.

Paving contractor will be responsible to operate all water valves on the project, in the presence of the inspector, to ensure accessibility to the valves, and that all valves (except blowoffs) are left in the "ON" position when the project is completed.

20 0 20
Scale: 1" = 20'
• = Iron



Curve #3					
Curve Data Based on Centerline					
Rad. = 691.75' Delta = 10°07'24" Tangent = 61.27'					
Arc = 122.22' L.C. = 122.06' Def./Ft. = 2.48486 Min.					
		Face Chord Lengths			
Station	Arc	8' Left	8' Right	Defl.	Total Defl.
0+00.00	-	-	-	0°00'00"	0°00'00"
0+34.76	34.76'	36.01'	33.50'	1°26'22"	1°26'22"
0+50.00	15.24'	15.79'	14.69'	0°37'53"	2°04'15"
0+75.00	25.00'	25.90'	24.10'	1°02'07"	3°06'22"
1+00.00	25.00'	25.90'	24.10'	1°02'07"	4°08'29"
1+22.22	22.22'	23.02'	21.42'	0°55'13"	5°03'42"

NOTE: ROLL TYPE CURB & GUTTER (TYPE 2) TO BE CONSTRUCTED ON THE PAVEMENT SHOWN ON THIS SHEET. TOP OF CURB ELEVATIONS ARE GIVEN FOR FULL HEIGHT CURB (TYPE 4).

BAUGHMAN COMPANY
315 Ellis St.
Wichita, KS 67211
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BRIDGER AT CENTRAL ADDITION - Ph. I

CINDY

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 7 OF 49

File: E:\Projects\Bridger At Central Addition(Albert) \Engineering\Phase 1\STR 23-09-E602\Streets.dwg

BENCHMARKS:
BM #1: "□" on top of curb inlet, NE Cor. N side of W Central Ave, 27.5'± S. & 90.2'± W. of SW Cor., Lot 1, Block 1, Castlegate 3rd.
Elev. = 1342.00 NAVD88

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Elev. = 1347.48 NAVD88

Most trees have been removed prior to construction by storm water drain project.

All other trees shall remain and be protected from damage during construction. Overhanging limbs shall be trimmed by the Contractor using a chain saw only as necessary for construction and with approval of the Engineer. Cost of tree trimming to be included in bid item "Site Clearing"

WATER VALVE LOCATION TABLE

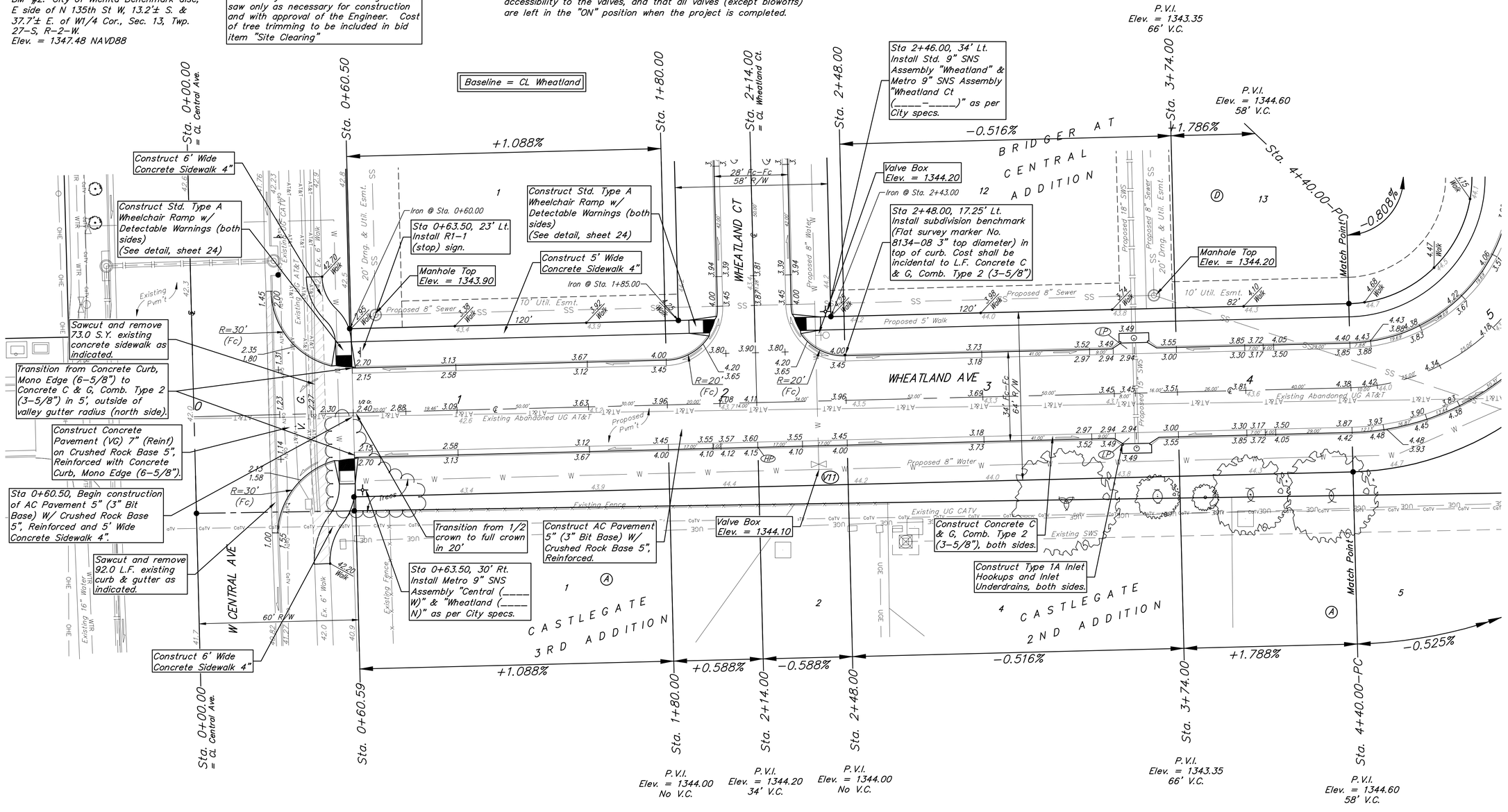
VALVE NUMBER	STREET	BASELINE STATION	OFFSET DISTANCE	OFFSET DIRECTION
V11	Wheatland	2+37.00	26'	Rt.

Paving contractor will be responsible to operate all water valves on the project, in the presence of the inspector, to ensure accessibility to the valves, and that all valves (except blowoffs) are left in the "ON" position when the project is completed.

Subdivision Bench Marks

Street & Station	Location Description	Elevation
Wheatland 2+48.00, 17.25' Lt.	Adjacent to Fire Hydrant at North End of NW Curb Return of Wheatland and Wheatland Ct.	

Scale: 1" = 20'
• = Iron



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BRIDGER AT CENTRAL ADDITION - Ph. I

WHEATLAND

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 8 OF 49

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BENCHMARKS:
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Elev. = 1347.48 NAVD88

20 0 20
Scale: 1" = 20'
• = Iron

Baseline = CL Wheatland

P.V.I. Elev. = 1344.60 58' V.C. Sta. 4+40.00-PC Match Point

+1.788%

P.V.I. Elev. = 1344.60 58' V.C.

P.V.I. Elev. = 1343.60 58' V.C. Sta. 5+97.66

P.V.I. Elev. = 1343.80 No V.C.

Sta. 5+65.66-PT Match Point

-0.808%

-0.625%

+0.993%

P.V.I. Elev. = 1345.80 No V.C. Sta. 8+19.20-PC Match Point

+0.753%

+1.160%

+1.224%

+1.284%

CASTLEGATE 2ND ADDITION

BRIDGER AT CENTRAL ADDITION

WHEATLAND AVE

Curve #4

Construct AC Pavement 5" (3" Bit Base) W/ Crushed Rock Base 5", Reinforced.

Construct Concrete C & G, Comb. Type 2 (3-5/8"), both sides.

Construct 5' Wide Concrete Sidewalk 4"

Construct Type 1A Inlet Hookups and Inlet Underdrains, both sides.

Manhole Top Elev. = 1345.70

Iron @ Sta. 8+76.25

Proposed 5' Walk

Proposed 8" Water

Proposed 8" Sewer

Proposed 24" SWS

Proposed 20" SWS

Existing SWS

Existing UG CATV

Existing Abandoned UG AT&T

20' Drng. & Util. Esmt.

20' Util. Esmt.

10' Util. Esmt.

RES. "B"

Proposed Pond

Proposed Pvm't

34' F-F 64' R/W

-0.525%

Curve #4					
Curve Data Based on Centerline					
Rad. = 80' Delta = 90°00'00" Tangent = 80.00'					
Arc = 125.66' L.C. = 113.14' Def./Ft. = 21.48655 Min.					
		Face Chord Lengths			
Station	Arc	8' Left	8' Right	Defl.	Total Defl.
4+40.00	-	-	-	0°00'00"	0°00'00"
4+50.00	10.00'	6.87'	13.12'	3°34'52"	3°34'52"
4+75.00	25.00'	17.12'	32.68'	8°57'10"	12°32'02"
5+00.00	25.00'	17.12'	32.68'	8°57'10"	21°29'12"
5+25.00	25.00'	17.12'	32.68'	8°57'09"	30°26'21"
5+50.00	25.00'	17.12'	32.68'	8°57'10"	39°23'31"
5+65.66	15.66'	10.75'	20.52'	5°36'29"	45°00'00"

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BRIDGER AT CENTRAL ADDITION - Ph. I

WHEATLAND

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 9 OF 49

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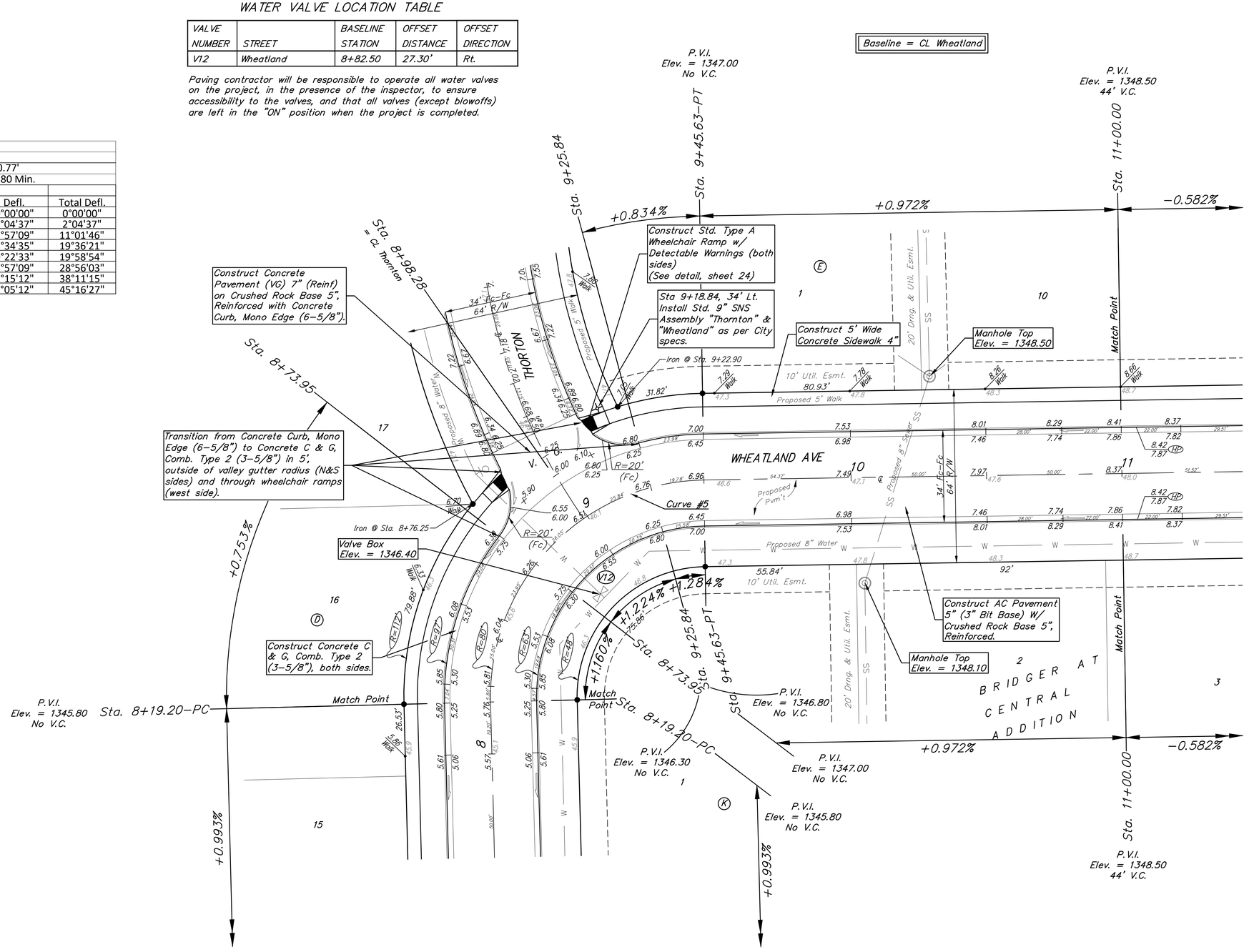
Elev. = 1347.48 NAVD88

Curve #5					
Curve Data Based on Centerline					
Rad. = 80' Delta = 90°32'54" Tangent = 80.77'					
Arc = 126.43' L.C. = 113.68' Def./Ft. = 21.48580 Min.					
		Face Chord Lengths			
Station	Arc	8' Left	8' Right	Defl.	Total Defl.
8+19.20	-	-	-	0°00'00"	0°00'00"
8+25.00	5.80'	7.61'	3.99'	2°04'37"	2°04'37"
8+50.00	25.00'	32.68'	17.12'	8°57'09"	11°01'46"
8+73.95	23.95'	31.32'	16.40'	8°34'35"	19°36'21"
8+75.00	1.05'	1.38'	0.72'	0°22'33"	19°58'54"
9+00.00	25.00'	32.68'	17.12'	8°57'09"	28°56'03"
9+25.84	25.84'	33.77'	17.69'	9°15'12"	38°11'15"
9+45.63	19.79'	25.91'	13.57'	7°05'12"	45°16'27"

WATER VALVE LOCATION TABLE

VALVE NUMBER	STREET	BASELINE STATION	OFFSET DISTANCE	OFFSET DIRECTION
V12	Wheatland	8+82.50	27.30'	Rt.

Paving contractor will be responsible to operate all water valves on the project, in the presence of the inspector, to ensure accessibility to the valves, and that all valves (except blowoffs) are left in the "ON" position when the project is completed.



NOTE: ROLL TYPE CURB & GUTTER (TYPE 2) TO BE CONSTRUCTED ON THE PAVEMENT SHOWN ON THIS SHEET. TOP OF CURB ELEVATIONS ARE GIVEN FOR FULL HEIGHT CURB (TYPE 4).

BAUGHMAN COMPANY
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BRIDGER AT CENTRAL ADDITION - Ph. I

WHEATLAND

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 10 OF 49

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BENCHMARKS:
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Elev. = 1347.48 NAVD88

WATER VALVE LOCATION TABLE

VALVE NUMBER	STREET	BASELINE STATION	OFFSET DISTANCE	OFFSET DIRECTION
V13	Wheatland	12+15.12	26'	Rt.
V14	Wheatland	13+64.18	26'	Rt.
V15	Wheatland	13+84.18	26'	Rt.

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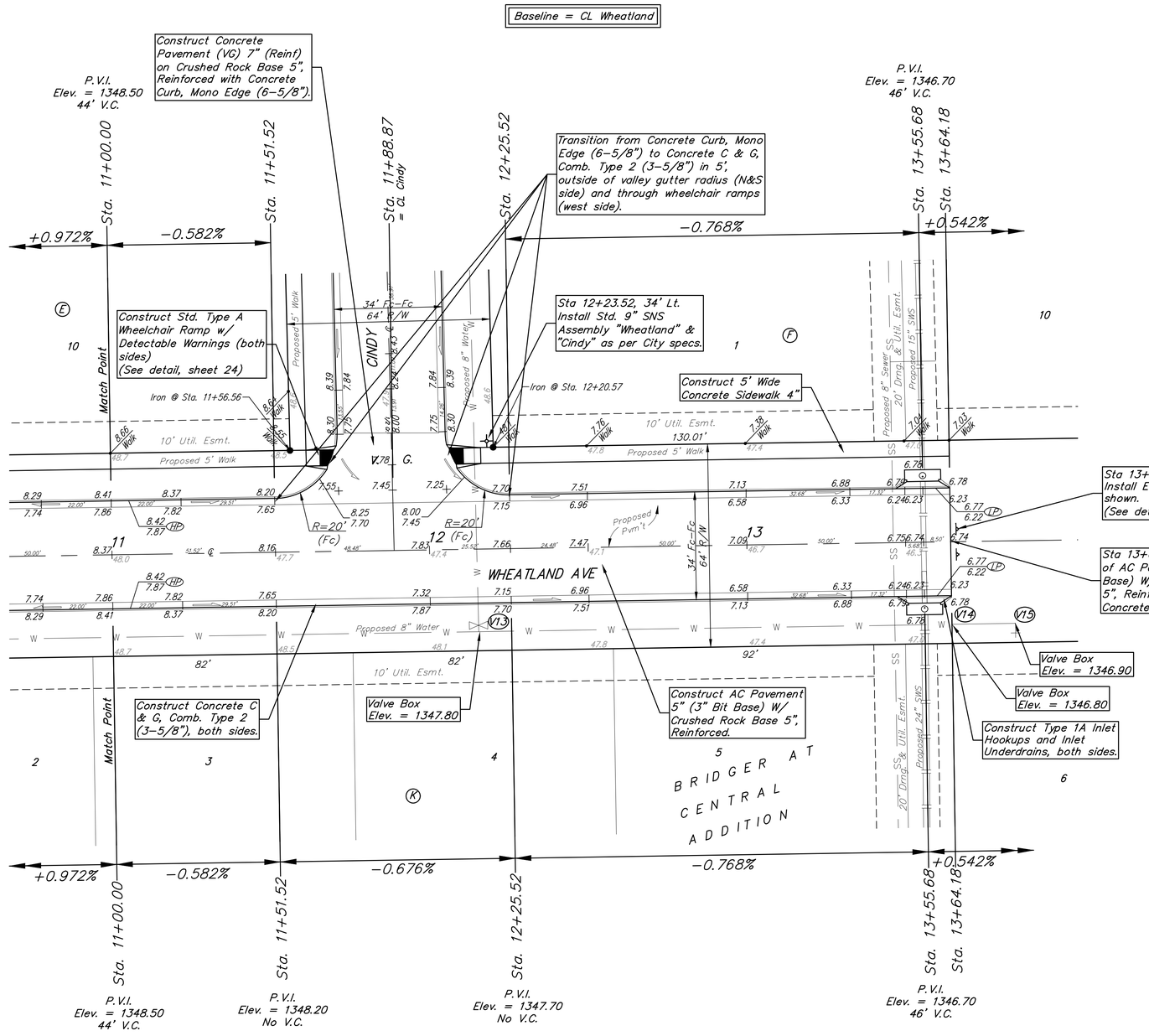

20 0 20
Scale: 1" = 20'
• = Iron

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BRIDGER AT CENTRAL ADDITION - Ph. I

WHEATLAND

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 11 OF 49

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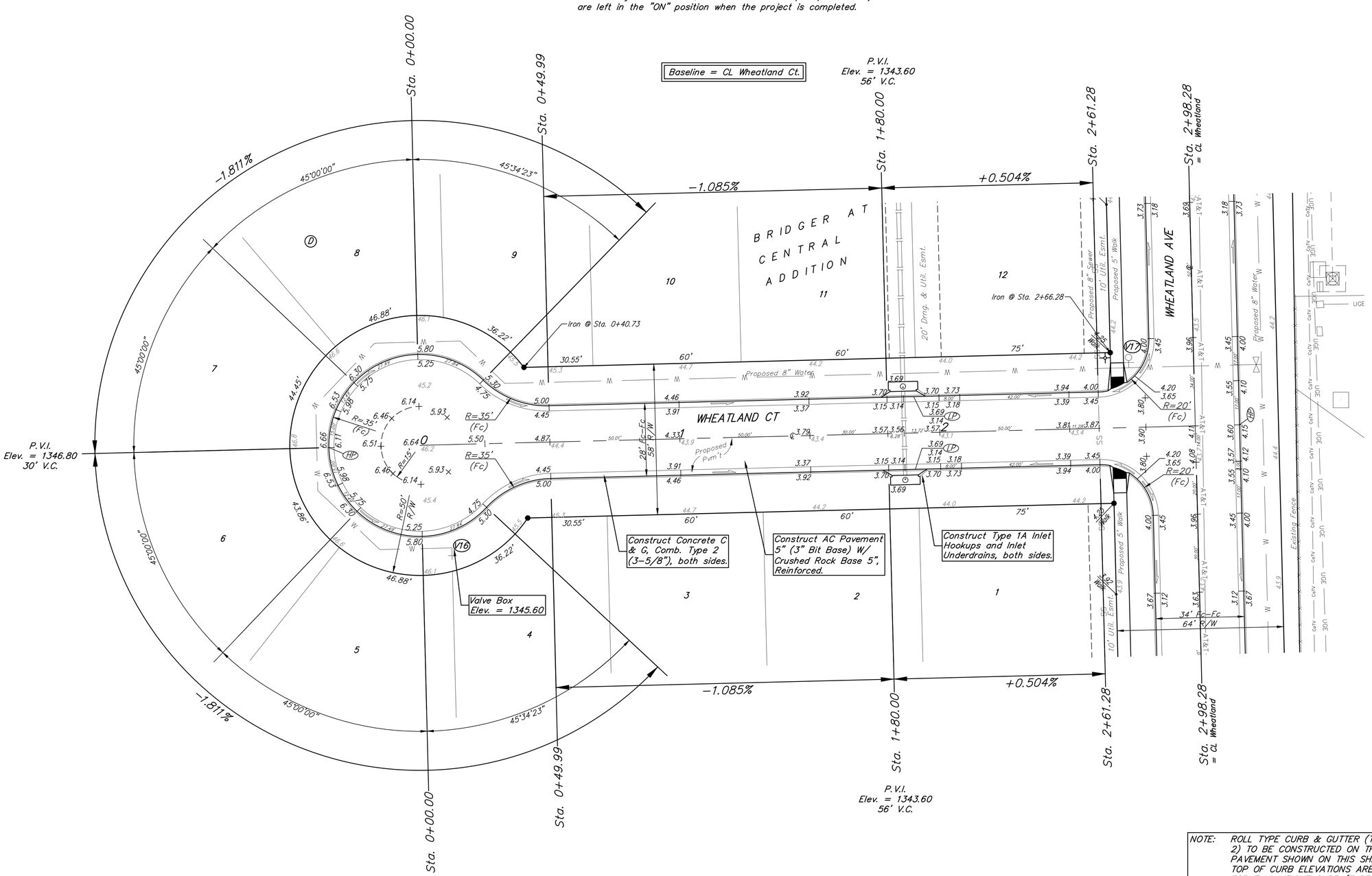
WATER VALVE LOCATION TABLE

VALVE NUMBER	STREET	BASELINE STATION	OFFSET DISTANCE	OFFSET DIRECTION
V16	Wheatland Ct.	0+11.28	39.73'	Rt.
V17	Wheatland Ct.	2+73.28	23'	Lt.

Paving contractor will be responsible to operate all water valves on the project, in the presence of the inspector, to ensure accessibility to the valves, and that all valves (except blowoffs) are left in the "ON" position when the project is completed.

20 0 20
Scale: 1" = 20'
• = Iron



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BRIDGER AT CENTRAL ADDITION - Ph. I

WHEATLAND CT.

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 12 OF 49

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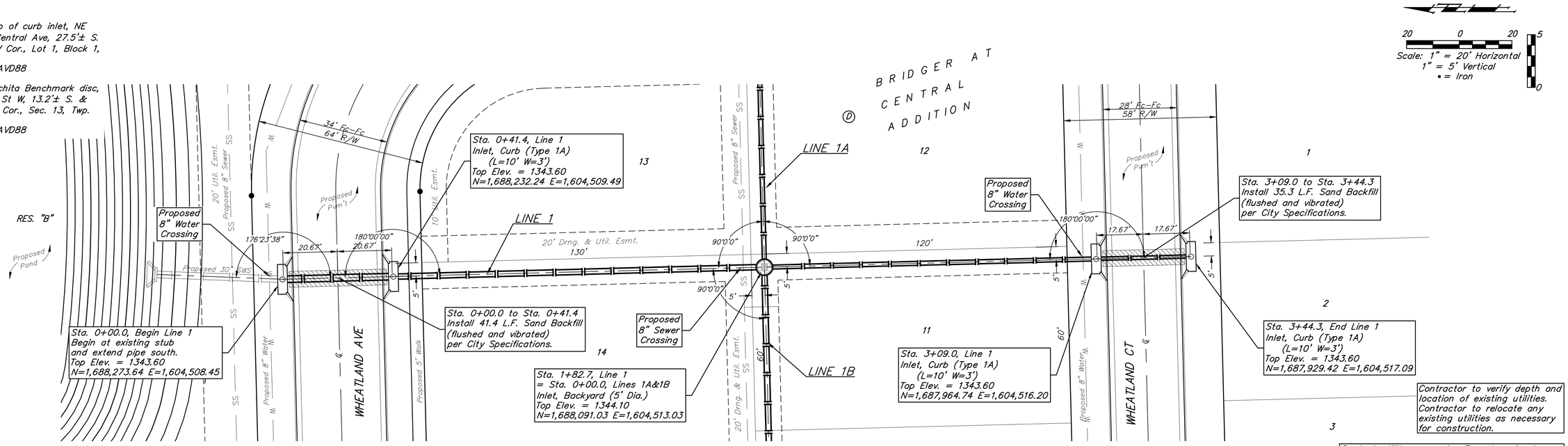
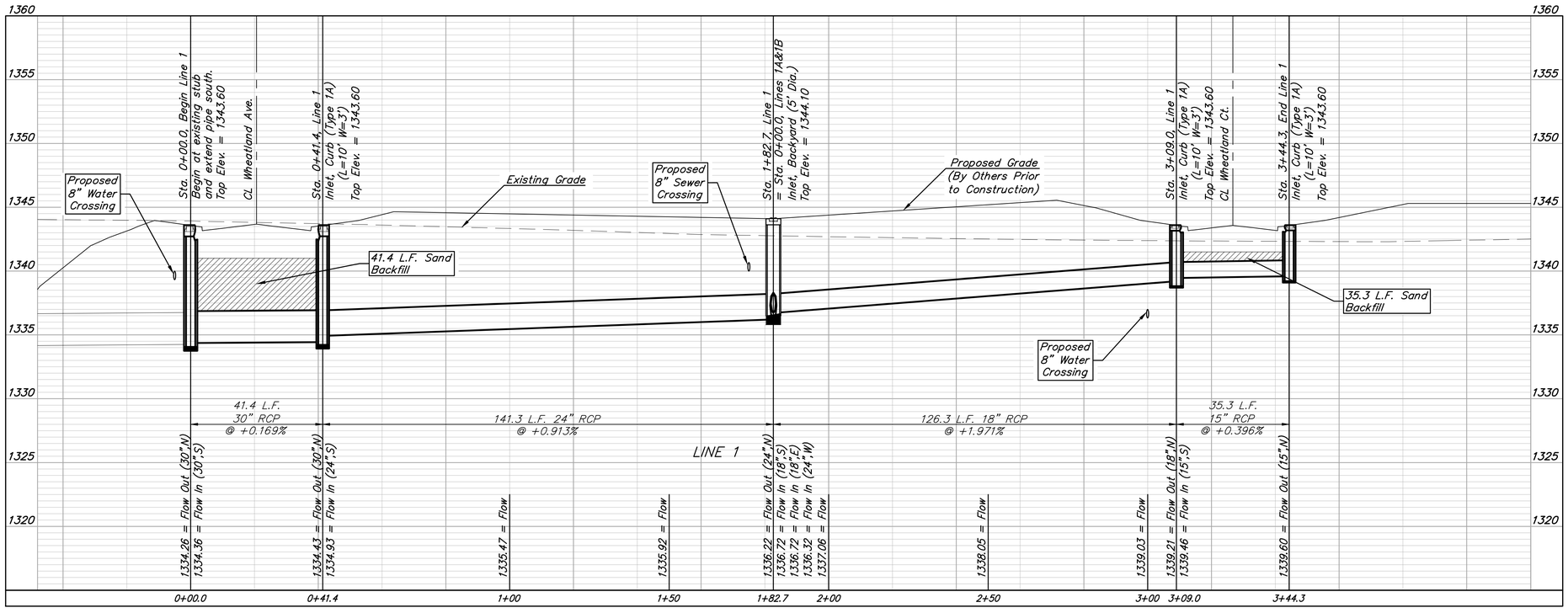


Contractor to verify depth and location of existing utilities. Contractor to relocate any existing utilities as necessary for construction.

Contact utility companies 3 weeks prior to construction to coordinate temporary removal/replacement.
Heide Bryan, Evergy, (316) 261–6354
Shannon Brinkmeyer, AT&T (316) 268–2931
Travis Taylor, Cox Comm., Travis.taylor@cox.com



BAUGHMAN COMPANY
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BRIDGER AT CENTRAL ADDITION - Ph. I

LINE 1

STORM WATER SEWER IMPROVEMENTS

PROJECT NUMBER:
23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 13 OF 49

File: E:\Projects\Bridger At Central Addition(Albert)_IEngineering\Phase 1\STR_23-09-E602\Streets.dwg

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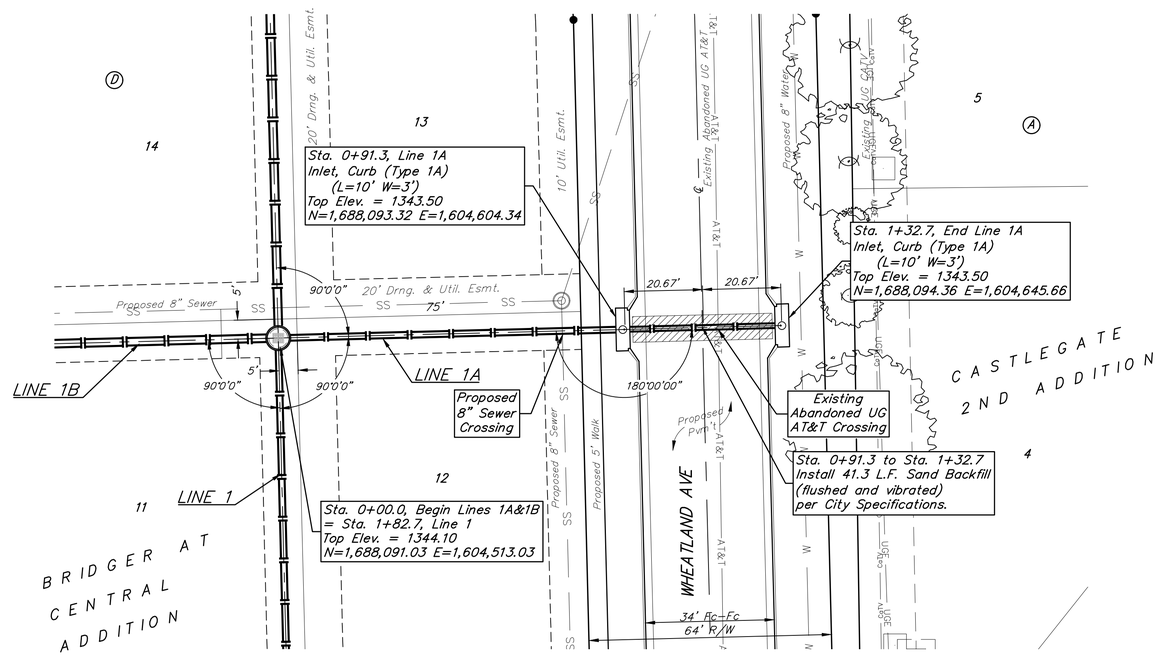

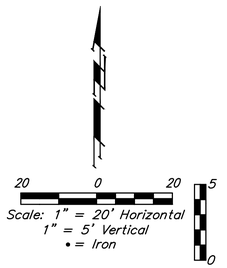

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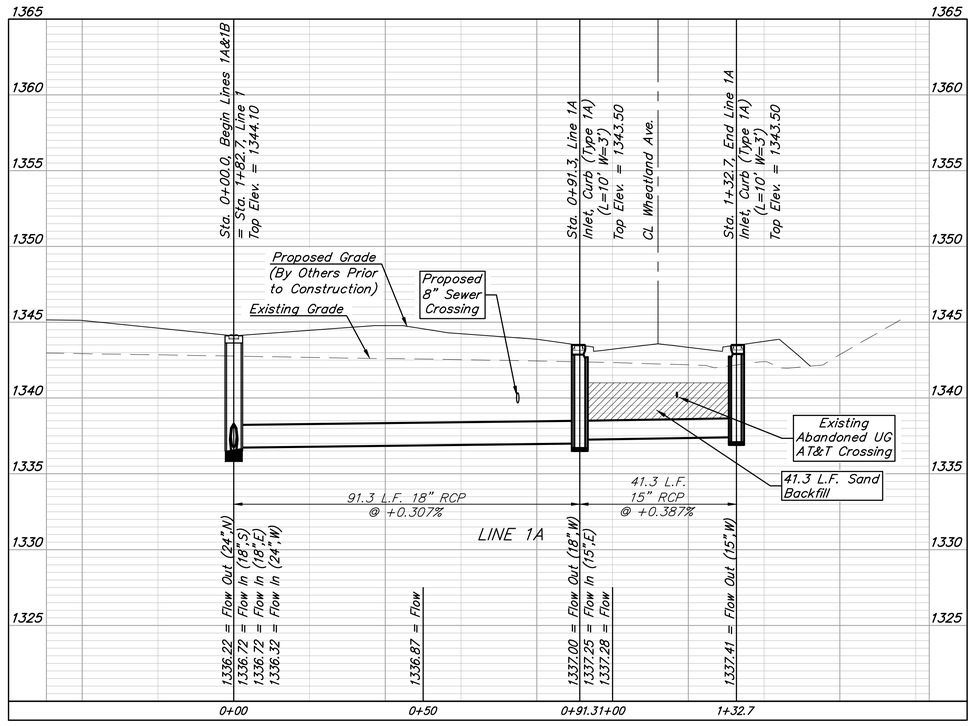

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BRIDGER AT CENTRAL ADDITION - Ph. I

LINE 1A

STORM WATER SEWER IMPROVEMENTS

PROJECT NUMBER:
23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 14 OF 49

File: E:\Projects\Bridger At Central Addition(Albert)_IEngineering\Phase 1\STR_23-09-E602\Streets.dwg

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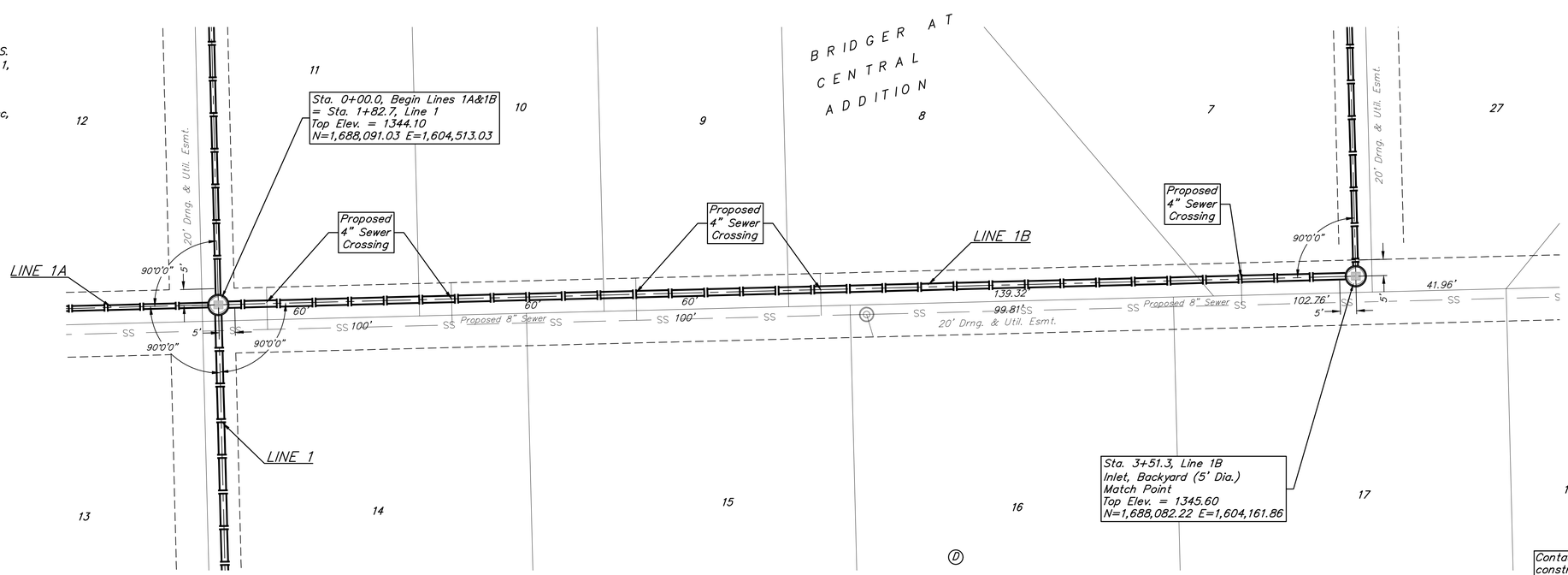

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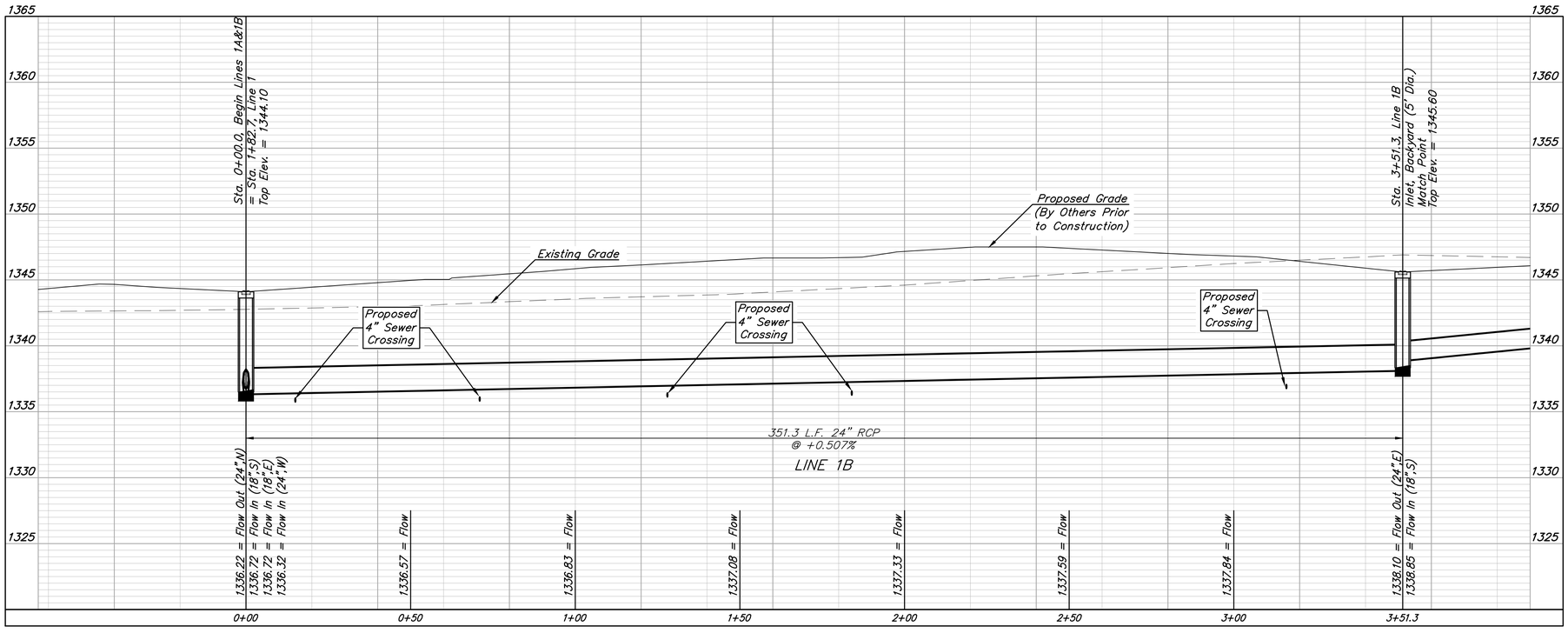

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BRIDGER AT CENTRAL ADDITION - Ph. I

LINE 1B

STORM WATER SEWER IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 15 OF 49

File: E:\Projects\Bridger At Central Addition(Albert)_IEngineering\Phase 1\STR_23-09-E602\Streets.dwg

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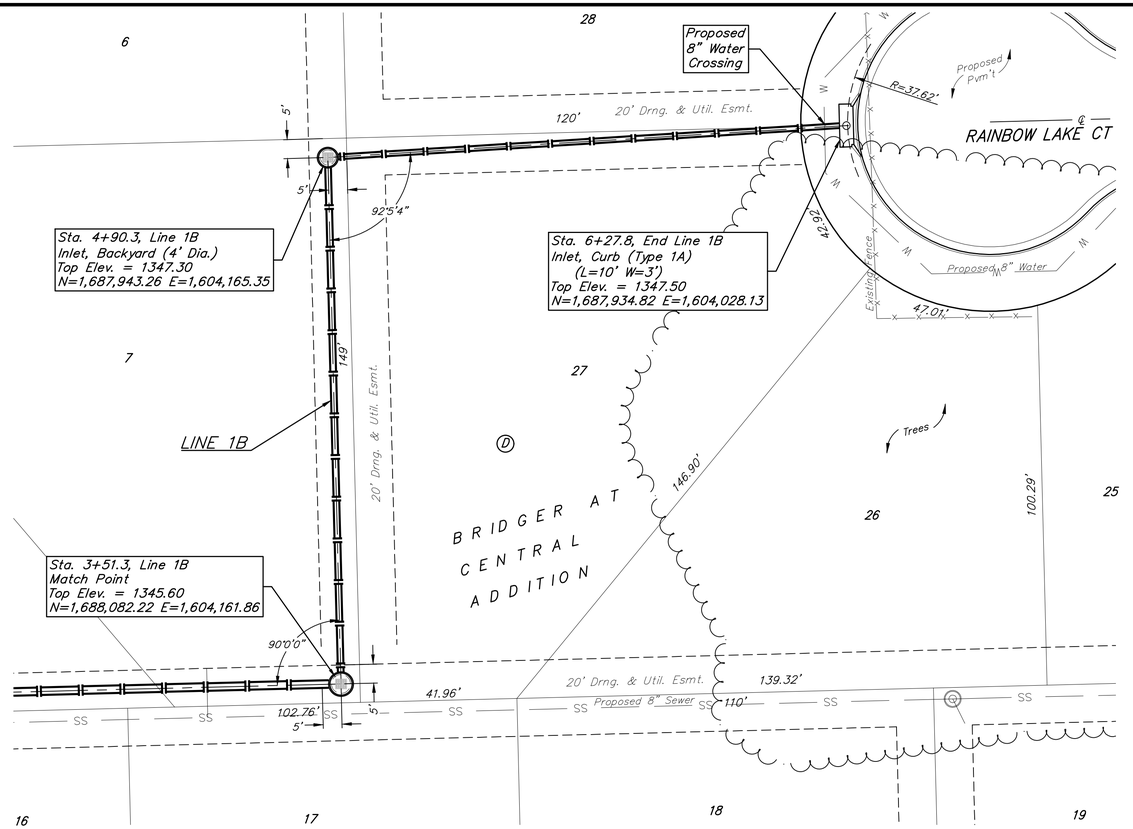

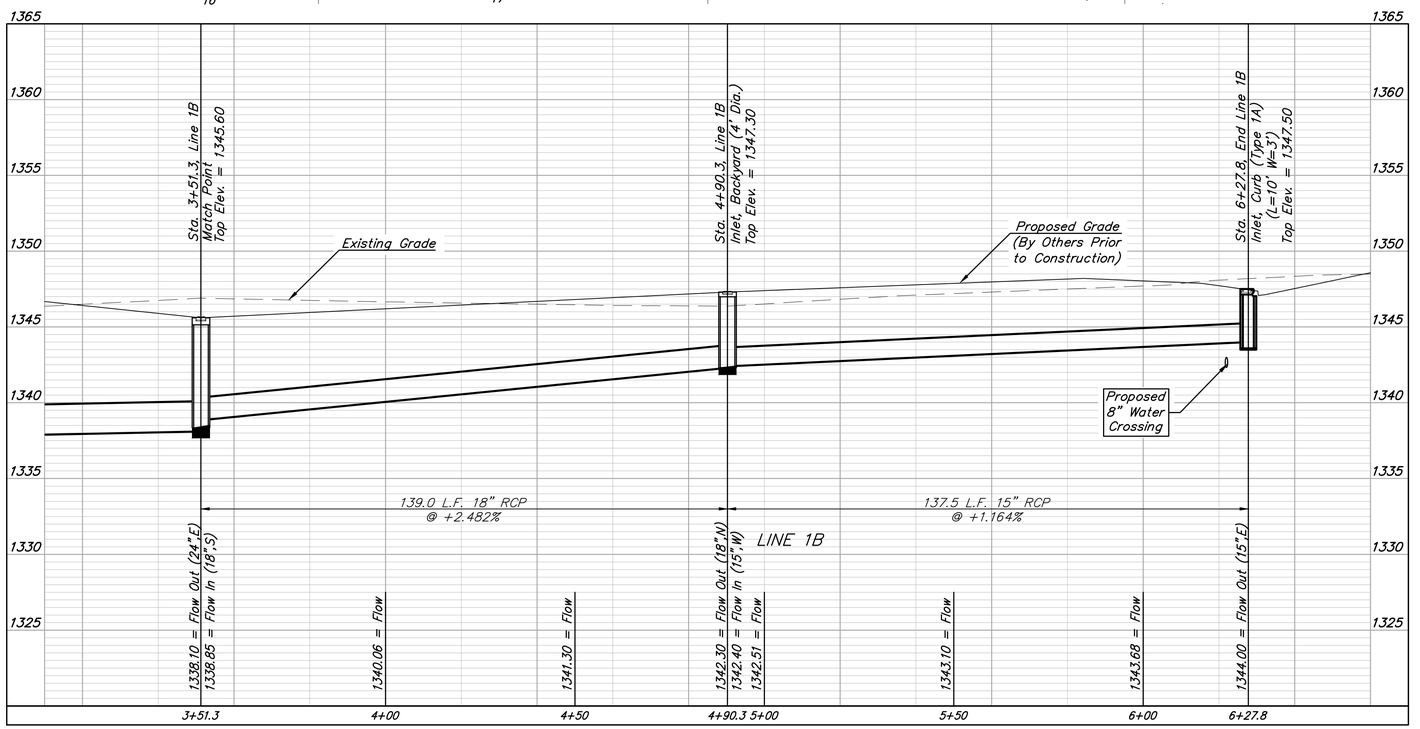

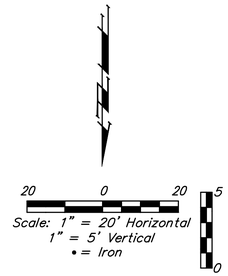

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316-262-7271
BaughmanCo.com

BRIDGER AT CENTRAL ADDITION - Ph. I

LINE 1B

STORM WATER SEWER IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: NBW DRAWN: TMS

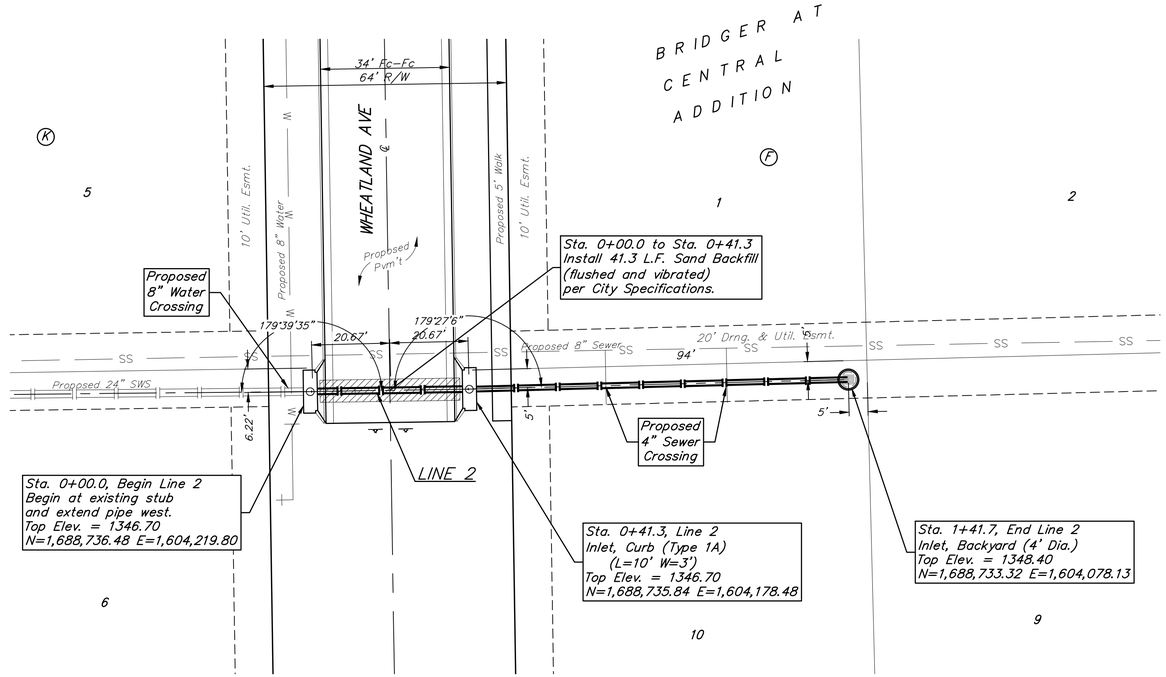
DATE: December 2, 2024

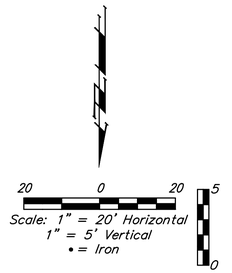
SHEET 16 OF 49

File: E:\Projects\Bridger At Central Addition(Albert)_\Engineering\Phase 1\STR_23-09-E602\Streets.dwg

BENCHMARKS:
BM #1: "□" on top of curb inlet, NE Cor. N side of W Central Ave, 27.5'± S. & 90.2'± W. of SW Cor., Lot 1, Block 1, Castlegate 3rd.
Elev. = 1342.00 NAVD88

BM–#2: City of Wichita Benchmark disc, E side of N 135th St W, 13.2'± S. & 37.7'± E. of W1/4 Cor., Sec. 13, Twp. 27–S, R–2–W.
Elev. = 1347.48 NAVD88

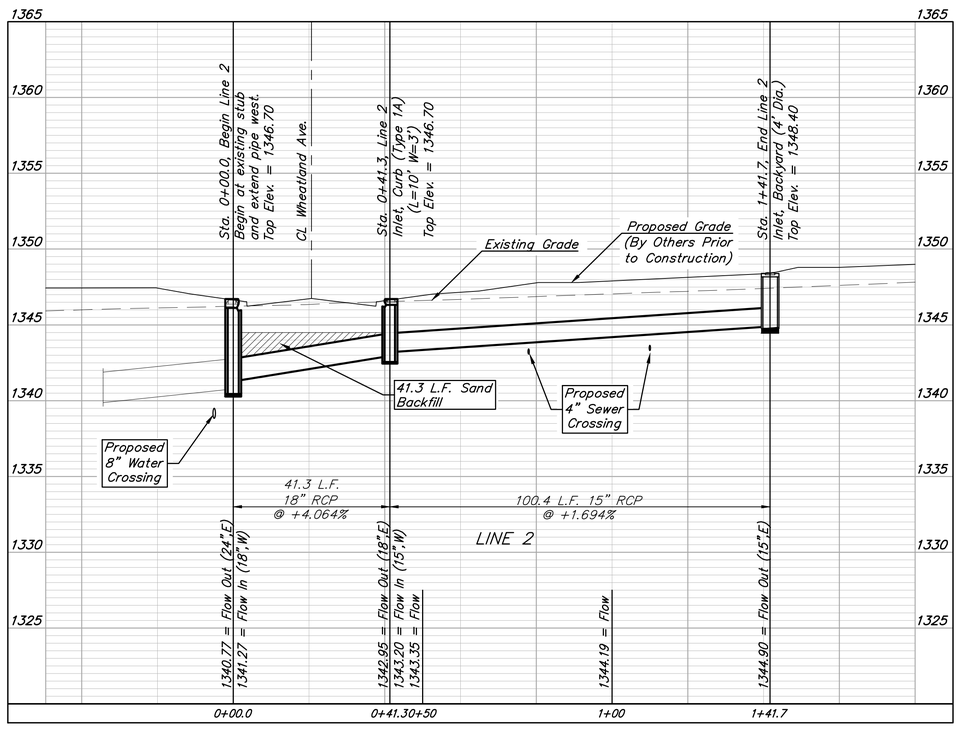




Scale: 1" = 20' Horizontal
1" = 5' Vertical
• = Iron

Contractor to verify depth and location of existing utilities. Contractor to relocate any existing utilities as necessary for construction.

Contact utility companies 3 weeks prior to construction to coordinate temporary removal/replacement.
Heide Bryan, Evergy, (316) 261–6354
Shannon Brinkmeyer, AT&T (316) 268–2931
Travis Taylor, Cox Comm., Travis.taylor@cox.com



BAUGHMAN COMPANY
315 Ellis St.
Wichita, KS 67211
316-262-7271
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BRIDGER AT CENTRAL ADDITION - Ph. I

LINE 2

STORM WATER SEWER IMPROVEMENTS

PROJECT NUMBER:
23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 17 OF 49

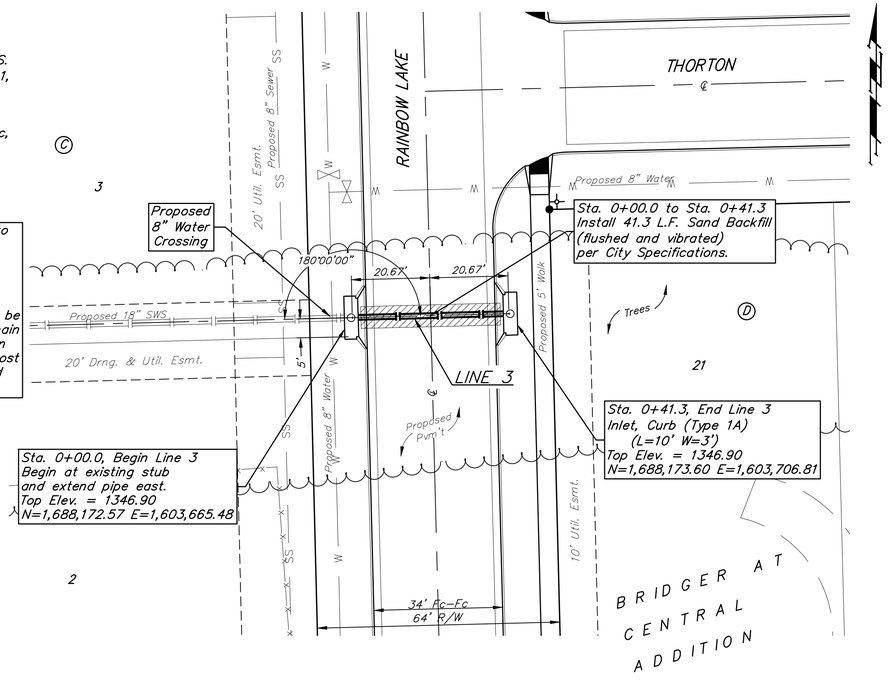
File: E:\Projects\Bridger At Central Addition(Albert)_IEngineering\Phase 1\STR_23-09-E602\Streets.dwg

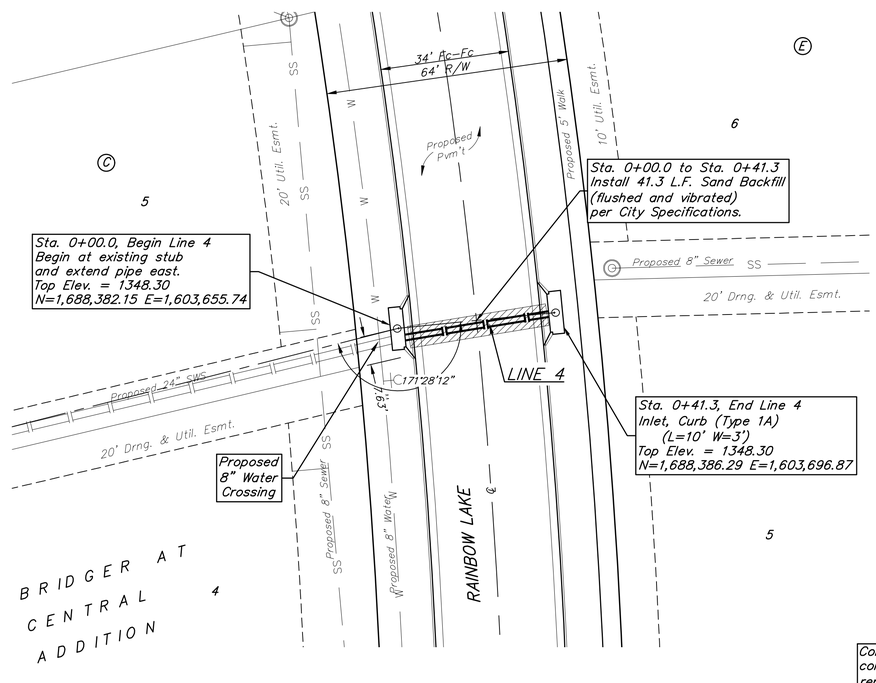
BENCHMARKS:
BM #1: "□" on top of curb inlet, NE Cor. N side of W Central Ave, 27.5'± S. & 90.2'± W. of SW Cor., Lot 1, Block 1, Castlegate 3rd.
Elev. = 1342.00 NAVD88

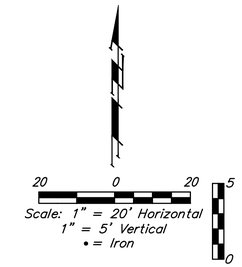
BM–#2: City of Wichita Benchmark disc, E side of N 135th St W, 13.2'± S. & 37.7'± E. of W1/4 Cor., Sec. 13, Twp. 27–S, R–2–W.
Elev. = 1347.48 NAVD88

Most trees have been removed prior to construction by storm water drain project.

All other trees shall remain and be protected from damage during construction. Overhanging limbs shall be trimmed by the Contractor using a chain saw only as necessary for construction and with approval of the Engineer. Cost of tree trimming to be included in bid item "Site Clearing"







Contractor to verify depth and location of existing utilities. Contractor to relocate any existing utilities as necessary for construction.

Contact utility companies 3 weeks prior to construction to coordinate temporary removal/replacement.
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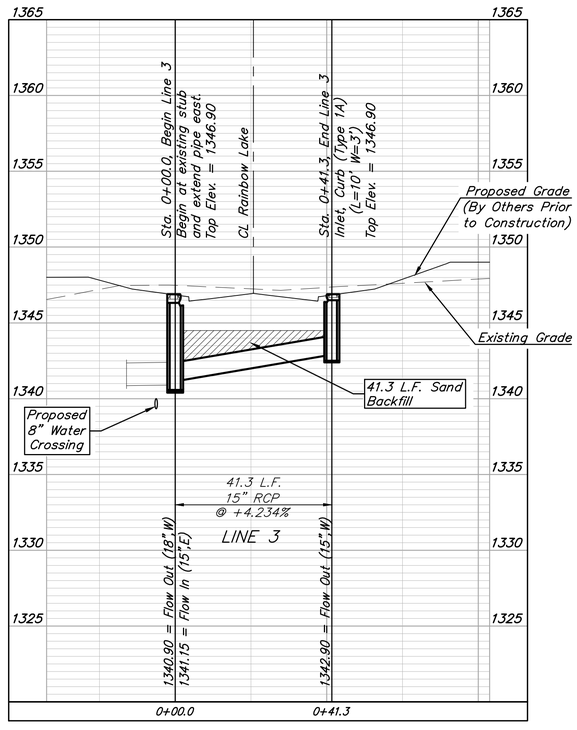

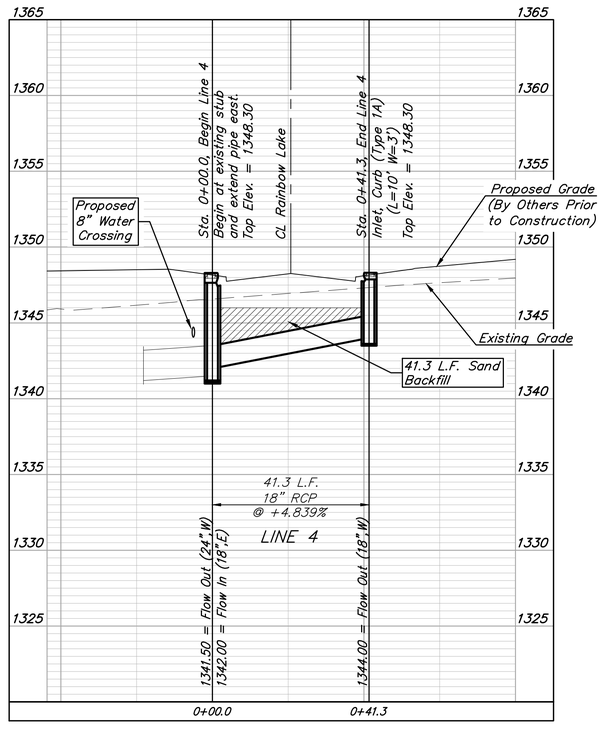

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316-262-7271
BaughmanCo.com

BRIDGER AT CENTRAL ADDITION - Ph. I

LINES 3 & 4

STORM WATER SEWER IMPROVEMENTS

PROJECT NUMBER:
23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

SHEET 18 OF 49

File: E:\Projects\Bridger At Central Addition(Albert)_IEngineering\Phase 1\STR_23-09-E602\Streets.dwg

Maintain ditch check sediment barriers per detail, sheet 30.

Maintain temporary ditching per detail, this sheet.

Install ditch check sediment barriers per detail, sheet 30.

Install drop inlet sediment barriers per detail, sheet 30.

Maintain ditch check sediment barriers per detail, sheet 30.

Install curb inlet sediment barriers per detail, sheet 28.

Fill & Grade existing ditch to match plan elevations.

Install ditch check sediment barriers per detail, sheet 30.

Maintain curb inlet sediment barriers per detail, sheet 28.

Maintain 7,932 S.Y. Curlex II, or approved equal to be paid for as bid item "Erosion Control Mat". Erosion control mat shall be installed and anchored per manufacturer's specifications. Note: This quantity does not include excess material necessary for overlap and anchoring.

Maintain 4,010 S.Y. Curlex II, or approved equal to be paid for as bid item "Erosion Control Mat". Erosion control mat shall be installed and anchored per manufacturer's specifications. Note: This quantity does not include excess material necessary for overlap and anchoring.

Remove ditch check sediment barrier.

Install back of curb protection per detail, sheet 28.

Maintain 820 L.F. erosion control berm per detail, this sheet.

Maintain 544 L.F. erosion control berm per detail, this sheet.

Fill & Grade existing ditch to match plan elevations.

Install curb inlet sediment barriers per detail, sheet 28.

Remove ditch check sediment barrier.

Maintain ditch check sediment barriers per detail, sheet 30.

Maintain curb inlet sediment barriers per detail, sheet 28.

Maintain curb inlet sediment barriers per detail, sheet 28.

Remove ditch check sediment barrier.

Install curb inlet sediment barriers per detail, sheet 28.

Install curb inlet sediment barriers per detail, sheet 28.

Fill & Grade existing ditch to match plan elevations.

Install back of curb protection per detail, sheet 28.

Remove ditch check sediment barrier.

Install back of curb protection per detail, sheet 28.

Maintain ditch check sediment barriers per detail, sheet 30.

Maintain ditch check sediment barriers per detail, sheet 30.

Install drop inlet sediment barriers per detail, sheet 30.

Install drop inlet sediment barriers per detail, sheet 30.

Install curb inlet sediment barriers per detail, sheet 28.

Maintain curb inlet sediment barriers per detail, sheet 28.

Maintain 188 L.F. silt fence per detail, sheet 29.

Maintain 464 L.F. silt fence per detail, sheet 29.

Maintain 872 L.F. silt fence per detail, sheet 29.

Maintain 50'x12' gravel construction entrance per detail, sheet 28.

Static Water Surface Elev. = 1341.50
100-yr WSE = 1344.30

Static Water Surface Elev. = 1338.80
100-yr WSE = 1341.80

CINDY

THORTON

RAINBOW LAKE

RAINBOW LAKE CT

WHEATLAND

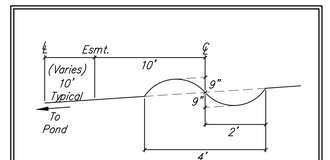
WHEATLAND CT

CASTLEGATE

W CENTRAL AVE

RES. "A"

RES. "B"



Erosion Control Berm Detail
(No Scale)

60 0 60

Scale: 1"=60'

—1345— Existing Grade

EROSION CONTROL MEASURE	INSTALL	MAINTAIN	REMOVE
BACK OF CURB PROTECTION (LF)	7,828	0	0
CONSTRUCTION ENTRANCE (EA)	0	1	0
CURB INLET BARRIER (EA)	9	4	0
DITCH CHECK (EA)	2	9	4
DROP INLET PROTECTION (EA)	4	0	0
EROSION CONTROL (LS)	0	0	0
EROSION CONTROL BERM (LF)	0	1,364	0
SILT FENCE (LF)	0	1,524	0
EROSION CONTROL MAT (SY)	0	11,942	0

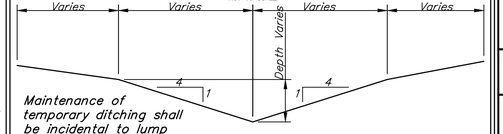
QUANTITIES ARE FOR INFORMATION ONLY! CONTRACTOR SHALL VERIFY QUANTITIES PER FINAL BID QUANTITY SHEET.

* ALL EXISTING BMPs INCLUDING CONSTRUCTION ENTRANCE, SEDIMENT BARRIERS, SILT FENCE, EROSION CONTROL BERM, AND EROSION CONTROL MAT SHALL BE MAINTAINED AND REPAIRED IF NECESSARY. REPLACEMENT OR REMOVAL OF EROSION CONTROL MEASURES TO BE PAID FOR BY L.S. BID ITEM "MAINTAIN EXISTING BMPs"

EROSION CONTROL PLAN
LEGEND

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

TEMPORARY TYPICAL DITCH SECTION
NOT TO SCALE



Maintenance of temporary ditching shall be incidental to lump sum bid item "Maintain Existing BMPs".

BAUGHMAN COMPANY
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Wichita, KS 67211
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BRIDGER AT CENTRAL ADDITION - Ph. I

EROSION CONTROL PLAN

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: NBW DRAWN: TMS

DATE: December 2, 2024

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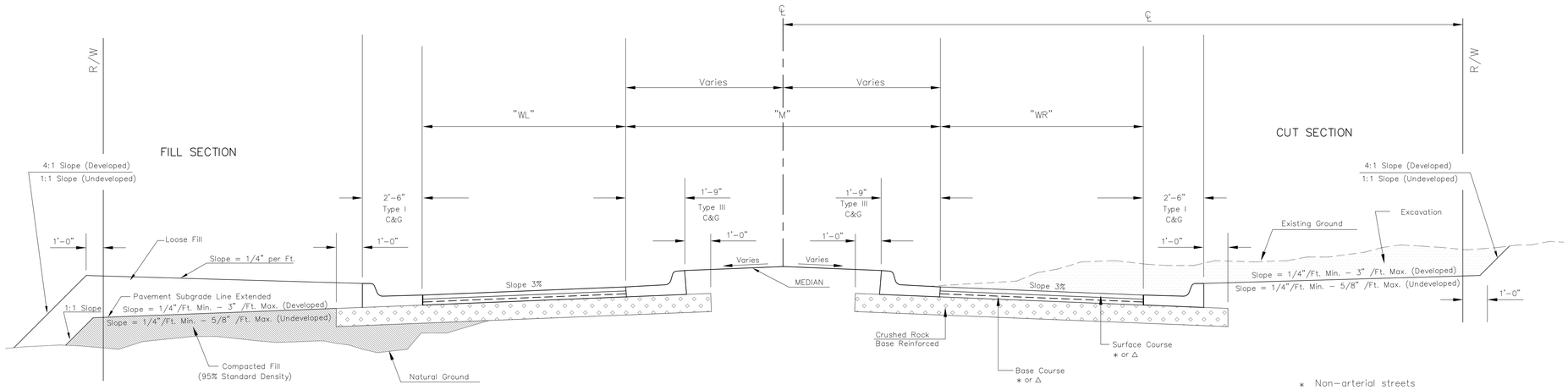
File: E:\Projects\Bridger At Central Addition(Albert) \Engineering\Phase 1\STR_23-09-E602\Streets.dwg

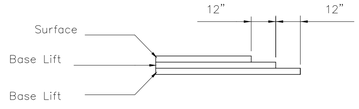
TYPICAL SECTION



* Non–arterial streets
BC–1, SC–1 AND PG 64–22

Δ Arterial streets
BM–2 PG 64–22(Base) PG 70–28(Surface)

Base Course thicker than 4" shall be installed in two lifts



TRANSVERSE CONSTRUCTION JOINTS

Transverse construction joints shall be constructed in flexible base pavement at locations where pavement joins existing flexible base pavement as show by the detail. All costs associated with the construction of the transverse joint shall be included in the bid price for Square Yards of pavement.

GENERAL NOTES

Fabric base reinforcement shall be an approved grid. Fabric base reinforcement shall be installed in accordance with manufacturer's recommendations. Crushed rock shall be uniformly graded from 1 – ½" maximum size to not more than 10% passing a No. 200 sieve. Rock quality shall be the same as specified for coarse aggregate for concrete mixes.

Rock base is to be compacted and smoothed with a steel faced roller prior to placement of asphalt. Tack coat will not be applied to rock base.

A tack coat of emulsified asphalt (SC–1H or CSS–1H) shall be applied to an approximate rate of 0.05 gallons per square yard between each lifts of asphaltic material.

Bituminous base and asphaltic concrete wearing surface shall be placed with a laydown machine having automatic controls for line and grade.

Construction joints in each lift shall be staggered a minimum distance of one (1) foot from joints in preceding lifts and placed so that a join will be constructed on the centerline of the top lift.

The asphaltic concrete pavement between the combined curb and gutter shall be paid as square yards of of pavement.

STREET NAME	"WL"	"M"	"WR"	STATION	CENTER LINE	ROW DIMENSION	MEDIAN DESCRIPTON	SLOPE	ROCK THICKNESS	PAVEMENT THICKNESS	COMMENTS
Rainbow Lake	20.75'	10.5'	19.75'	0+64.00		85'		3%	5"	5"	
Rainbow Lake	15'	-	15'	2+03.54		64'		3%	5"	5"	
Rainbow Lake Ct.	12'	-	12'	0+37.00		58'		3%	5"	5"	
Thornton	15'	-	15'	0+37.00		64'		3%	5"	5"	
Cindy	15'	-	15'	0+38.64		64'		3%	5"	5"	
Wheatland	15'	-	15'	0+60.50		64'		3%	5"	5"	
Wheatland Ct.	12'	-	12'	0+49.99		58'		3%	5"	5"	

REVISED: OCTOBER 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

ASPHALT PAVING DETAIL

CITY ENGINEER
GARY JANZEN, P.E.

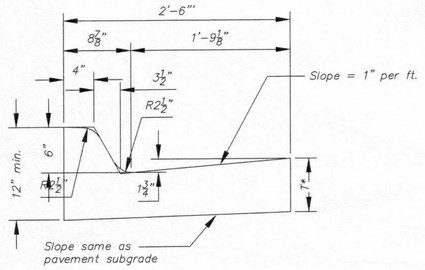
PROJECT NUMBER	OCA NUMBER	DATE

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

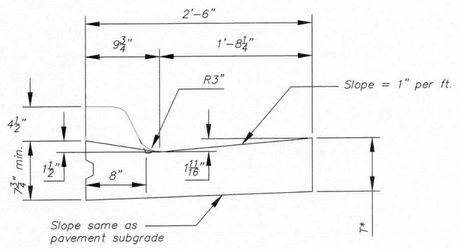
SHEET
20 of 49

PV–147

TYPE 1
(Arterial curb)

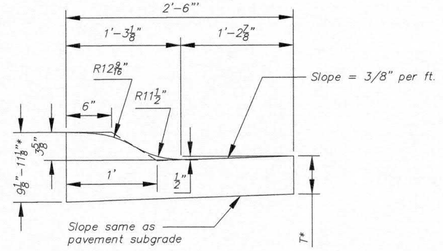


Combined Curb & Gutter (6")

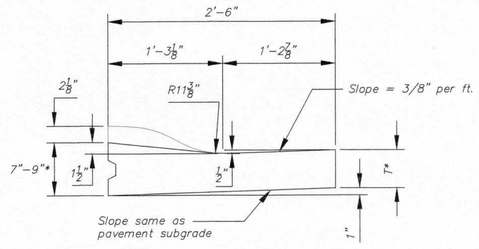


Combined Curb & Gutter (1 1/2")

TYPE 2
(Roll curb)

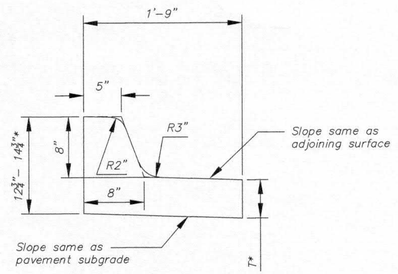


Combined Curb & Gutter (3 5/8")

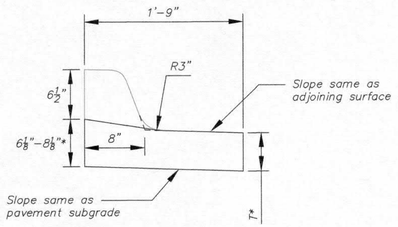


Combined Curb & Gutter (1 1/2")

TYPE 3
(Median curb)

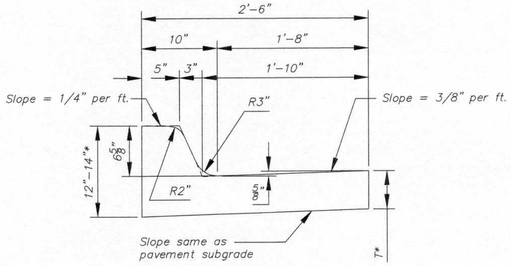


Combined Curb & Gutter (8")

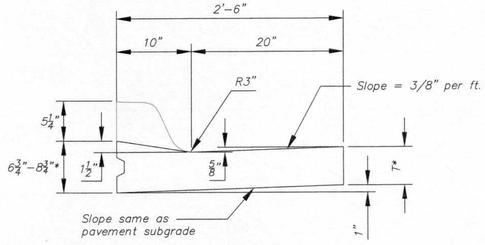


Combined Curb & Gutter (1 1/2")

TYPE 4
(Residential curb)

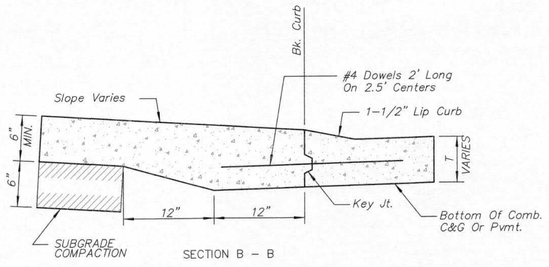


Combined Curb & Gutter (6 5/8")

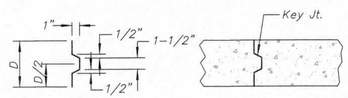


Combined Curb & Gutter (1 1/2")

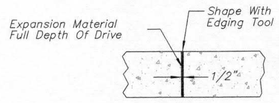
T* = Thickness of curb to adjust with pavement thickness



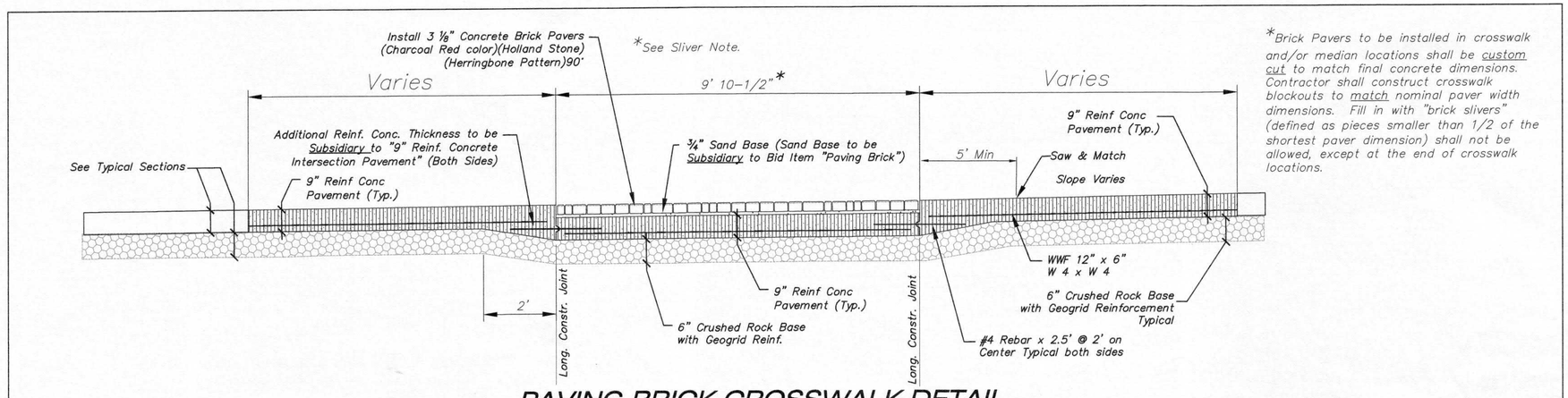
BACK OF CURB DETAIL



ALT. LONGITUDINAL CONSTRUCTION JOINT



EXPANSION JOINT (E.J.)



PAVING BRICK CROSSWALK DETAIL

*Brick Pavers to be installed in crosswalk and/or median locations shall be custom cut to match final concrete dimensions. Contractor shall construct crosswalk blockouts to match nominal paver width dimensions. Fill in with "brick slivers" (defined as pieces smaller than 1/2 of the shortest paver dimension) shall not be allowed, except at the end of crosswalk locations.

GENERAL NOTES

1. Expansion (isolation) joints shall be constructed a maximum of 300' apart and at all PIs, PCs, cul-de-sac quadrants, and ends of returns.

2. Contraction joints shall be constructed a minimum of 12' apart.

3. Joint sealer shall be required at all joints on arterial and industrial streets and at intersections on residential streets.

GARY L. JANZEN LICENSED 16094 12-21-17 KANSAS PROFESSIONAL ENGINEER

REVISED: OCTOBER 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

CURB & GUTTER & PAVING BRICK CROSSWALK DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

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

SHEET
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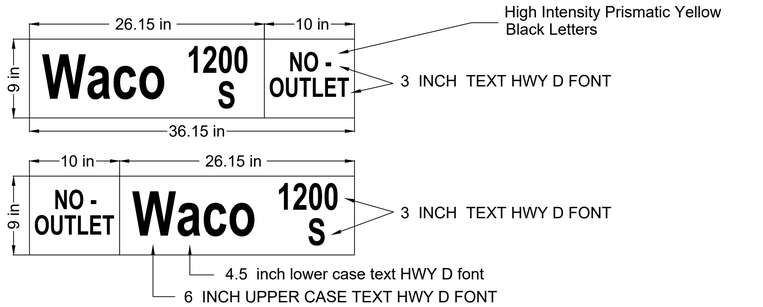
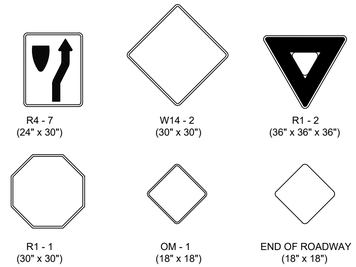
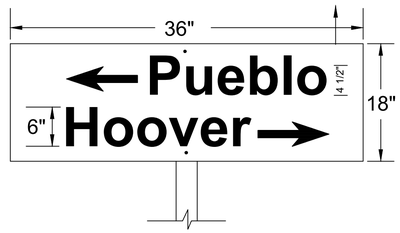
PV-101

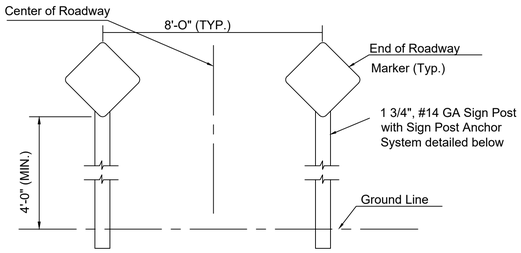




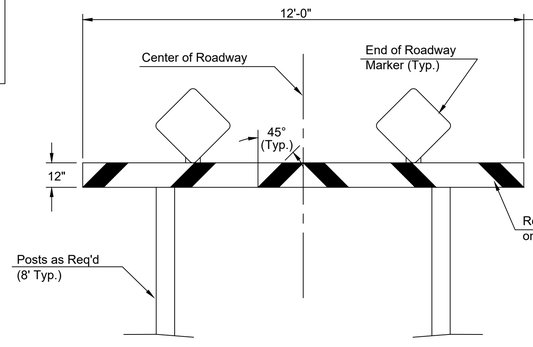
* IN NO CASE SHALL THE SPECIFICATIONS BE LESS THAN REQUIRED BY THE CURRENT MUTCD.



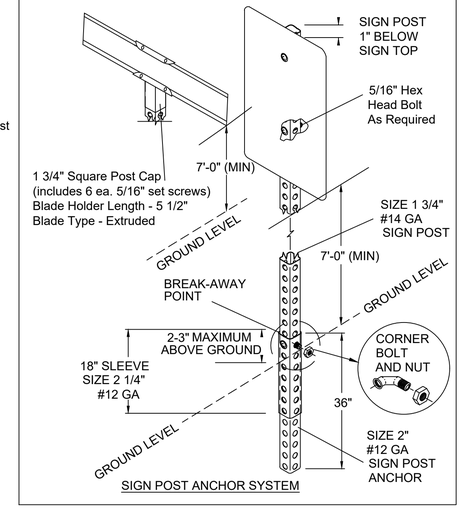
FLAT PLATE STREET NAME SIGN



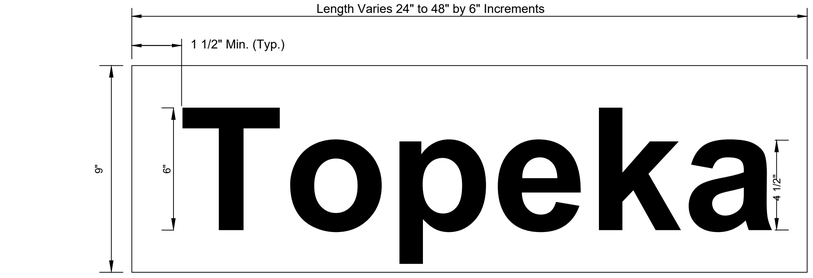
TYPICAL END OF ROADWAY SIGN MOUNTING INSTALLATION



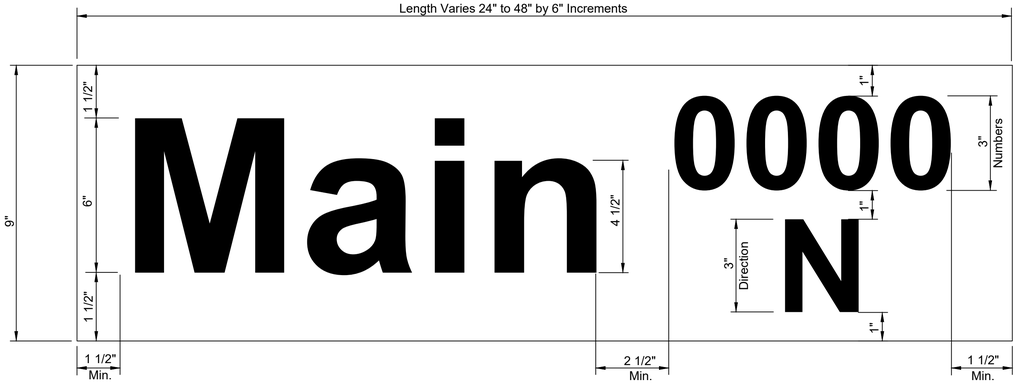
TYPE I BARRICADE DETAIL W/ E.O.R. MARKERS



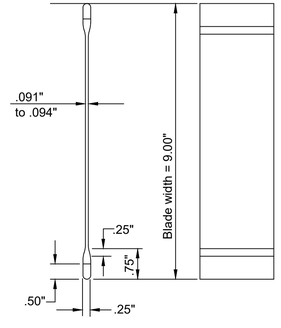
SIGN POST ANCHOR SYSTEM



DETAIL A
9" STANDARD



DETAIL B
9" METRO



STREET NAME SIGN
BLADE DETAILS

SIGN ASSEMBLY TABLE

STATION	OFFSET	SIGN	QUANTITY*
Intersection of Central & 135th		R9-11	1
Rainbow Lake	0+36.00	73' Lt.	R9-9	1
Rainbow Lake	0+39.00	52' Rt.	R9-9	1
Intersection of Central & 119th		R9-11	1
Rainbow Lake	0+63.50	24' Rt.	SNS	1
Rainbow Lake	0+63.50	44' Lt.	R1-1	1
Rainbow Lake	0+64.00	10' Lt.	R4-7, OM-1	1
Rainbow Lake	0+96.00	10' Lt.	R4-7, OM-1	1
Rainbow Lake	1+82.00	34' Rt.	SNS	1
Rainbow Lake	4+85.00	34' Rt.	SNS	1
Rainbow Lake	4+99.53	34' Rt.	SNS	1
Rainbow Lake	10+10.14	4' Lt. & Rt.	EOR	2
Wheatland	0+63.50	30' Rt.	SNS	1
Wheatland	0+63.50	23' Lt.	R1-1	1
Wheatland	2+46.00	34' Lt.	SNS	1
Wheatland	9+18.84	34' Lt.	SNS	1
Wheatland	12+23.52	34' Lt.	SNS	1
Wheatland	13+66.18	4' Lt. & Rt.	EOR	2
TOTAL			20

STREET NAME	NO. BLADES REQ'D	
	9" STD.	9" METRO
Central (____ W)*		1
Rainbow Lake (____ N)*		1
Rainbow Lake	3	
Rainbow Lake Ct (____-____)*		1
Thornton	2	
Cindy	2	
Central (____ W)*		1
Wheatland (____ N)*		1
Wheatland	3	
Wheatland Ct (____-____)*		1

*Contractor to contact Engineer for street numbers prior to ordering.

NOTE: REFERENCES BELOW TO "STANDARD SPECIFICATIONS" DENOTE "STANDARD SPECIFICATION FOR STATE ROAD AND BRIDGE CONSTRUCTION EDITION 2015" BY THE KANSAS DEPARTMENT OF TRANSPORTATION.

1. ***FABRICATION AND INSTALLATION OF ALL SIGNS SHALL CONFORM TO THE LATEST EDITION OF THE MUTCD.***

1a. POST ANCHORS: POSTS SHALL BE ANCHORED WITH A YIELDING BASE POST SUPPORT AS DETAILED.

2. POSTS FOR TRAFFIC CONTROL SIGNS: POSTS SHALL BE GALVANIZED AND CONFORM TO THE REQUIREMENTS OF SUBSECTION 1620 OF THE STANDARD SPECIFICATIONS, EXCEPT THAT ALL POSTS SHALL WEIGH 3 LBS./FT. MINIMUM.

3. POSTS FOR STREET NAME SIGNS (SNS): POSTS SHALL BE 9 FEET LONG, CONSTRUCTED FROM #14 GALVANIZED STEEL PIPE AND SHALL BE 1 3/4" SQUARE WEIGHING A MINIMUM OF 3 LBS/FT. POSTS SHALL BE POSITIONED SO THAT THE BOTTOM BLADE IS 7 FEET ABOVE GRADE.

4. POSTS FOR END OF ROADWAY SIGN TO BE 8' LONG AND INSTALLED A MINIMUM OF 4' FROM ROADWAY TO BOTTOM OF SIGN.

5. SIGN BLANKS FOR TRAFFIC CONTROL SIGNS: SIGN BLANKS SHALL BE FABRICATED FROM 0.080" ALUMINUM ALLOY 6063-T6 CONFORMING TO THE REQUIREMENTS OF SUBSECTION 1627 OF THE STANDARD SPECIFICATIONS.

6. SIGN BLADES FOR STREET NAME SIGNS: EXTRUDED ALUMINUM BLADES SHALL BE ALUMINUM ALLOY CONFORMING TO 6063-T6 OR 5052-H38 (ASTM SPECIFICATION B221, LATEST ISSUE). BLADES SHALL HAVE AN ALODINE OR PHOSPHATE ETCHED FINISH. BLADES SHALL HAVE SQUARE CORNERS AND NO HOLES.
MINIMUM BLADE LENGTH SHALL BE 24". MAXIMUM BLADE LENGTH SHALL BE 48". LENGTH VARIES BY INCREMENTS OF 6".
BLADES BEARING THE STREET NAMES SHALL BE FIRMLY ATTACHED TO THE MOUNTING BRACKETS USING ALLEN-TYPE CONICAL SET SCREWS. THE BLADES SHALL BE ORIENTED PARALLEL TO THE STREET.

7. MOUNTING BRACKETS FOR SIGNS: DIE-CAST ALUMINUM BRACKETS SHALL BE ALUMINUM ALLOY 360 HAVING A TENSILE STRENGTH OF 44,000 PSI. THE BRACKETS SHALL BE SMOOTHLY FINISHED FREE OF PITS, BURRS, AND FLAWS. EACH BRACKET SHALL BE TAPPED AND DRILLED FOR 5/16" ZINC-PLATED ALLEN-TYPE SET SCREWS HAVING SELF-LOCKING SAW-TOOTH ENDS.

8. FASTENERS: ALL STEEL FASTENERS FOR TRAFFIC CONTROL SIGNS SHALL BE GALVANIZED AND SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 1614 OF THE STANDARD SPECIFICATIONS.

9. REFLECTIVE SHEETING: REFLECTIVE SHEETING SHALL BE A MINIMUM OF HIGH INTENSITY PRISMATIC.

10. PROCESS INK: ALL PROCESS INK SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 2202 OF THE STANDARD SPECIFICATIONS.

11. DETAILS - SNS: THE REFLECTIVE SHEETING FOR THE 9" STANDARD SIZE SNS IS TO BE THE HIGHWAY GREEN BACKGOUND WITH SILVER-WHITE #2 COPY WITH 6" UPPER CASE AND 4 1/2" LOWER CASE PRIMARY COPY AND SUFFIX COPY. BOTH SERIES "C". FACES TO TRIM TO A 8 1/2". (SEE DETAIL A.)
THE REFLECTIVE SHEETING FOR THE 9" METRO SIZE SNS IS TO BE THE HIGHWAY GREEN BACKGROUND WITH SILVERWHITE #2 COPY WITH 6" UPPER CASE AND 4 1/2" LOWER CASE PRIMARY COPY AND SUFFIX COPY, BOTH SERIES "C". THE CARDINAL DIRECTION CENTERED DIRECTLY BELOW THE BLOCK NUMBER SHALL BE AN UPPER CASE, 3" SERIES "C" LETTER. FACES TO TRIM TO A 8 1/2" WIDTH. (SEE DETAIL B.)
FOR CUL-DE-SAC STREETS, A 9" METRO SIZE BLADE SHALL BE USED WITH THE BLOCK NUMBERS DISPLAYED BENEATH THE STREET NAME. IF BLOCK NUMBERS ARE NOT SHOWN ON THE PLANS THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEER AT 268-4501 PRIOR TO MANUFACTURING THE SIGN.
SHOP DRAWINGS OF LAYOUT FOR SNS SHALL BE SUBMITTED TO THE TRAFFIC ENGINEERING DIVISION OF THE CITY OF WICHITA FOR APPROVAL PRIOR TO FABRICATION. THE FINISHED SIGNS AS SUPPLIED SHALL BE OF GOOD APPEARANCE, FREE FROM RAGGED EDGES, CRACKS SCALES OR BLISTERS AND SHALL BE CLEAN-CUT. SIGNS SHALL BE PACKED IN SUCH MANNER AS TO PREVENT DAMAGE OR DEFACEMENT DURING SHIPMENT OR STORAGE.

12. PERMANENT TRAFFIC CONTROL AND SNS: PERMANENT TRAFFIC CONTROL AND SNS SHALL BE MEASURED AND PAID FOR AT THE LUMP SUM PRICE FOR SIGNING. THE PAYMENT AS SET FORTH ABOVE SHALL BE CONSIDERED FULL COMPENSATION FOR ALL EXCAVATION, BACKFILLING. POSTS, ANCHORS, FASTENERS, MATERIALS, LABOR, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK.

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

SIGN DETAILS

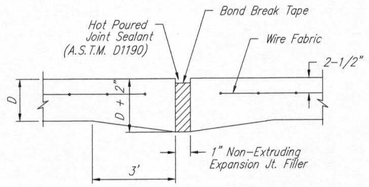
TRAFFIC ENGINEER — APP'D 01/27/22
MIKE ARMOUR, P.E.

PROJECT NUMBER	ORG NUMBER	DATE

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

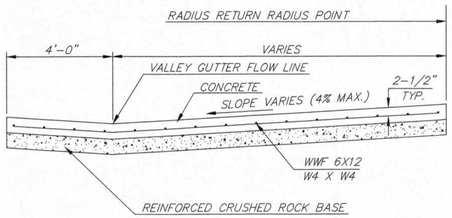
SHEET
22 of 49

TR-112

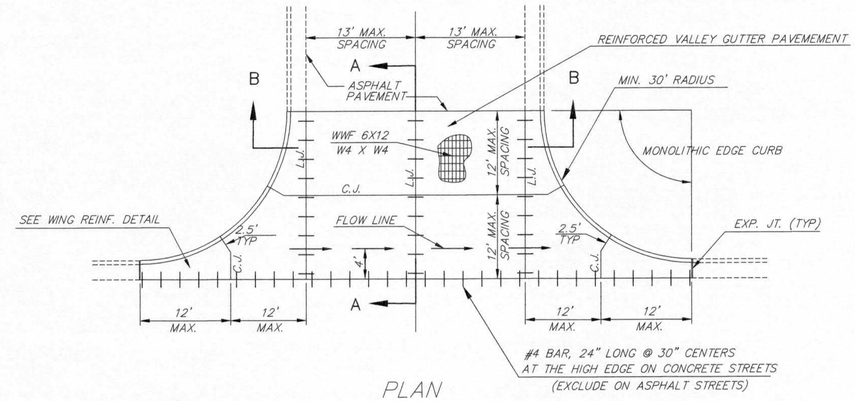


EXPANSION JOINT

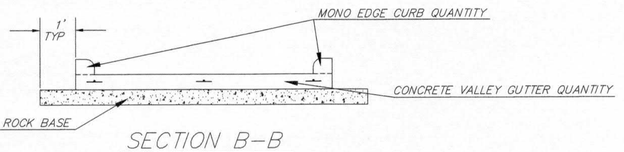
NOTE: Extra Thickness to be Subsidiary to Price of Square Yards Pavement



SECTION A-A

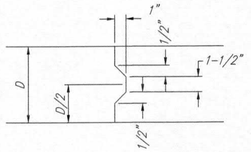


PLAN

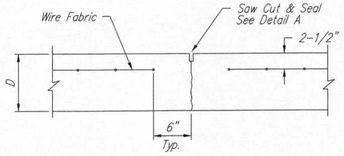


SECTION B-B

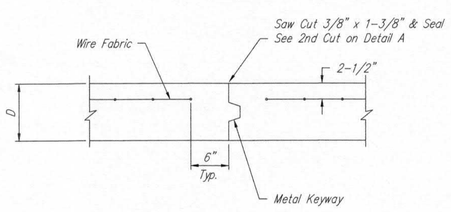
REINFORCED VALLEY GUTTER DETAIL



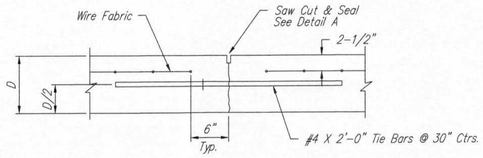
KEYWAY DETAIL



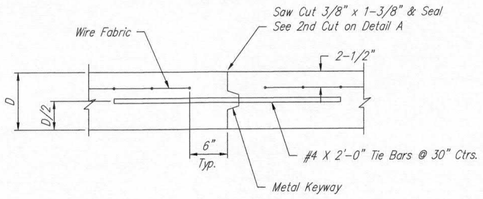
CONTRACTION JOINT DETAIL (C.J.)



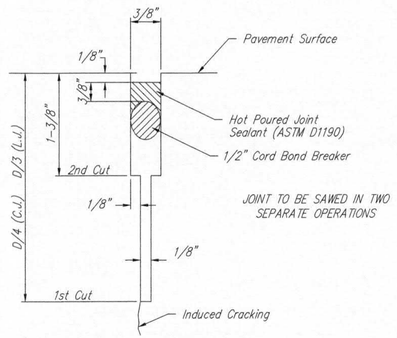
OPTIONAL CONTRACTION JOINT



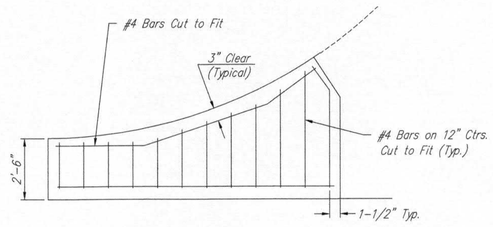
LONGITUDINAL JOINT DETAIL (L.J.)



OPTIONAL LONGITUDINAL JOINT DETAIL (L.J.)



SAW JOINT DETAIL
(DETAIL A)



WING REINFORCING DETAIL

GARY L. JANZEN
LICENSED
16294
12-31-18
KANSAS
PROFESSIONAL ENGINEER

REVISION MAY 2017	SECTION B-B, ROCK EXTENDED ONE FOOT BEYOND PAVEMENT

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

VALLEY GUTTER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

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

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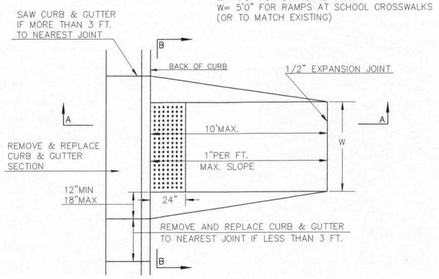
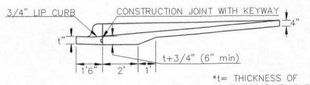
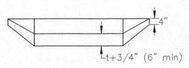
PV-109

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER (TYPE A)



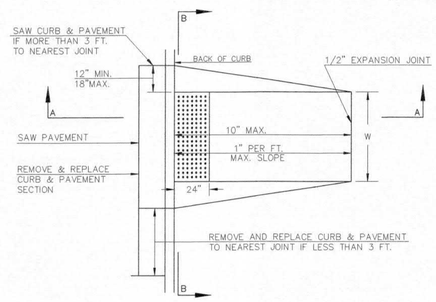


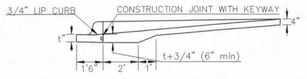
SECTION A–A



SECTION B–B

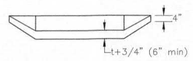
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR CONCRETE STREETS WITH MONOLITHIC CURB (TYPE A)





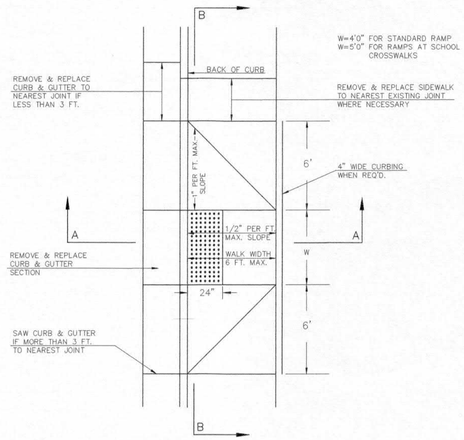
*t= THICKNESS OF PAVEMENT (VARIABLE)

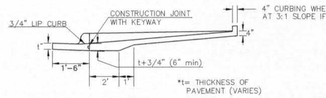
SECTION A–A



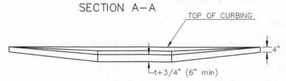
SECTION B–B

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER AND FULL WALK (TYPE B)



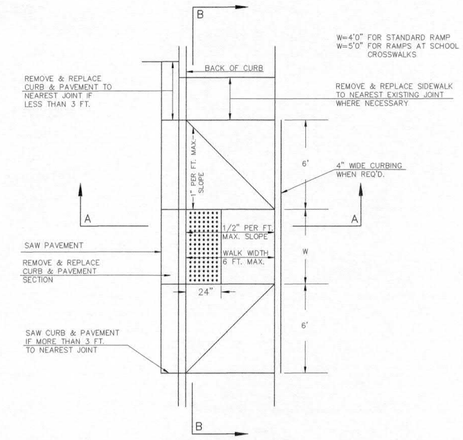


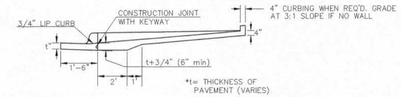
SECTION A–A



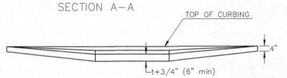
SECTION B–B

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH MONOLITHIC CURB AND FULL WALK (TYPE B)



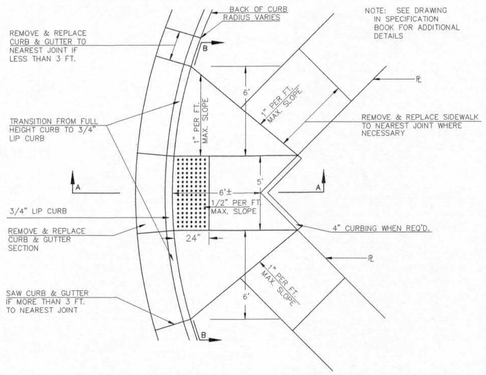


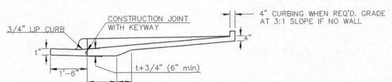
SECTION A–A



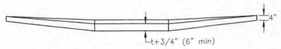
SECTION B–B

STANDARD WHEELCHAIR RAMP CONSTRUCTION DEAIL FOR STREET WITH COMBINED CURB AND GUTTER ON RADIUS WITH 6'± FROM BACK OF CURB TO PROPERTY CORNER (TYPE C)



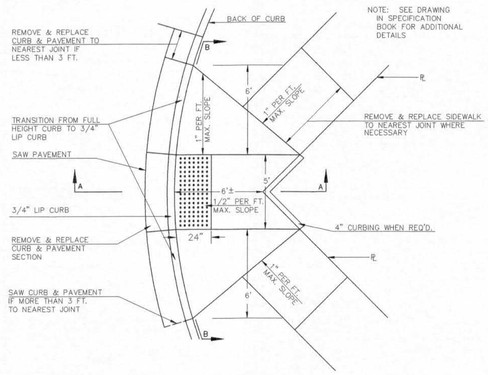


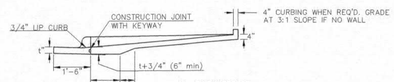
SECTION A–A



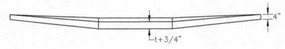
SECTION B–B

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREET WITH MONOLITHIC CURB ON RADIUS WITH 6'± FROM BACK OF CURB TO PROPERTY CORNER (TYPE C)



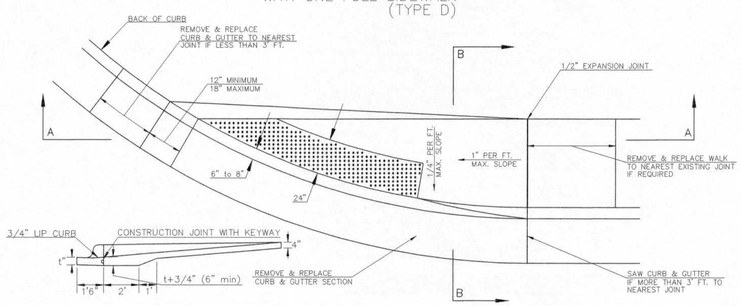


SECTION A–A

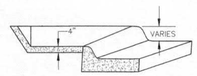


SECTION B–B

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER WITH ONE FULL SIDEWALK (TYPE D)

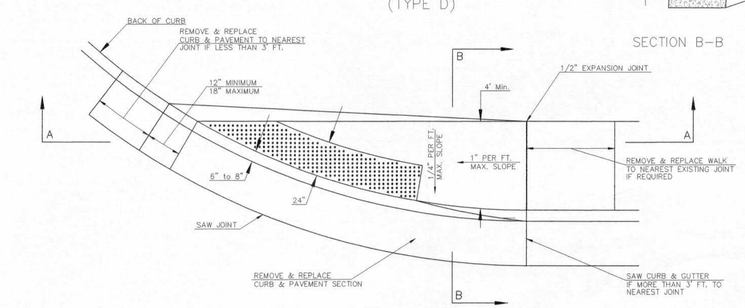


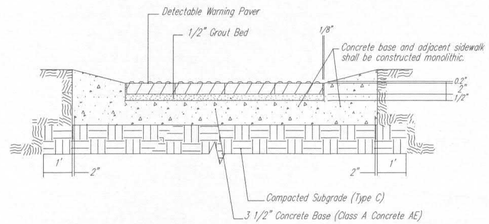
SECTION A–A



SECTION B–B

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH MONOLITHIC CURB WITH ONE FULL SIDEWALK (TYPE D)

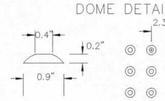




TYPICAL SECTION DETECTABLE WARNING PAVER
SECTION A–A

NOTE: HANOVER DETECTABLE WARNING PAVERS (OR AN APPROVED ALTERNATE) SHALL BE USED IN ALL WHEELCHAIR RAMPS. THE 11 3/4" RED 15' PAVER SHALL BE USED IN ALL APPLICATIONS.
HANOVER ARCHITECTURAL PRODUCTS
240 BENDER ROAD
HANOVER, PA 17331
1-717-637-0500
www.hanoverpavers.com

DOME DETAIL



GARY L. JANZEN LICENSED 16294 12/31/13 KANSAS PROFESSIONAL ENGINEER

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

WHEELCHAIR RAMP DETAILS WITH DETECTABLE WARNING

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
		08/2013

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

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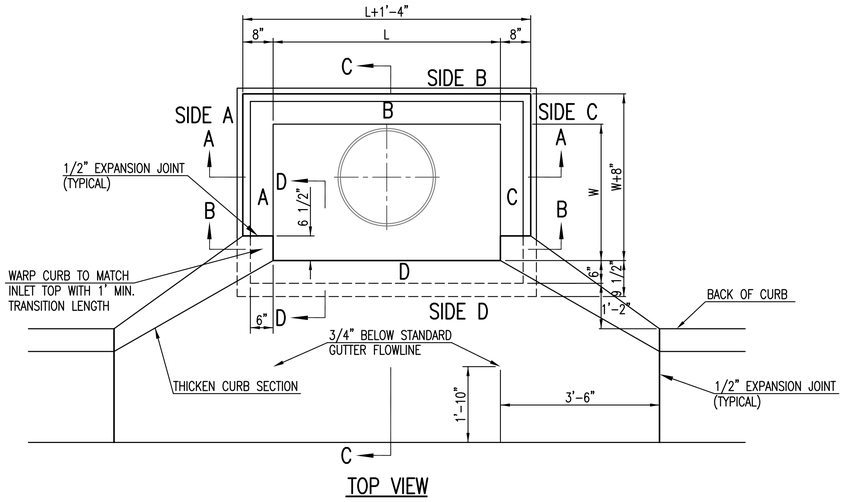


TOP VIEW

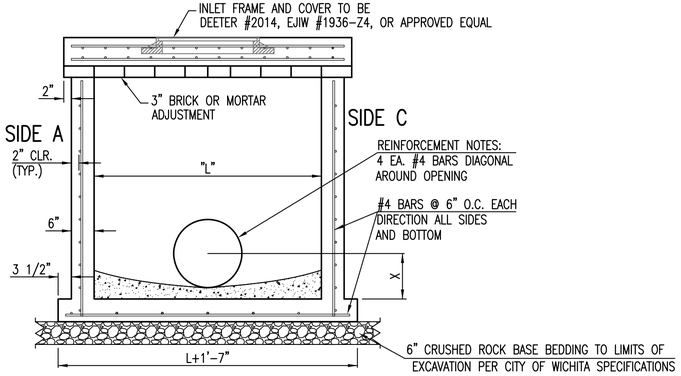
BAR SCHEDULE		
INLET OPENING	B1 BARS	SPACING
5'-0"	#4	4"
10'-0"	#6	3.5"

PRECAST CURB INLET WIDTHS				
W	PRE-CAST TOP SIZE			PIPE DIA.**
	WIDTH	LENGTH	TOP	
3'-0"	W+8"	L+1'-4"	7 1/2"	21" & SMALLER
4'-0"	W+8"	L+1'-4"	7 1/2"	24" & 30"
5'-0"	W+8"	L+1'-4"	7 1/2"	36" & 42"
6'-0"	W+8"	L+1'-4"	7 1/2"	48" & 54"
7'-0"	W+8"	L+1'-4"	7 1/2"	60" & 66"

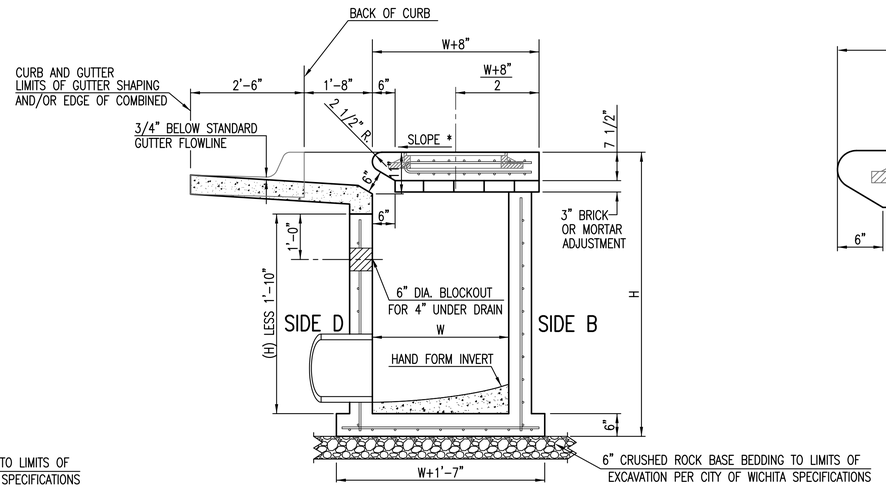
** FOR PIPES PERPENDICULAR TO INLET WALL

GENERAL NOTES

1. CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
2. CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP OF THIS INLET WHEN W=5'-0" AND H=7'-0" OR LESS.
3. INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
4. THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
5. INLET FRAME AND COVER TO BE DEETER #2014, EJIW #1936-Z4, OR APPROVED EQUAL, SEE SW-303.
6. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN INLET WALL SHALL BE GROUTED FLUSH TO THE INLET WALL WITH HYDRAULIC CEMENT AFTER THE INLET IS IN PLACE. LIFTING HOLES THRU THE INLET WALL WILL NOT BE ACCEPTED.

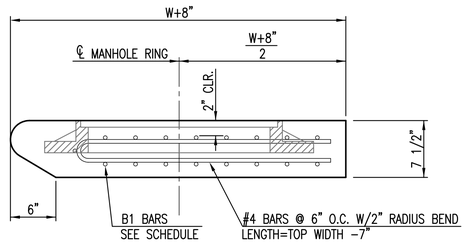


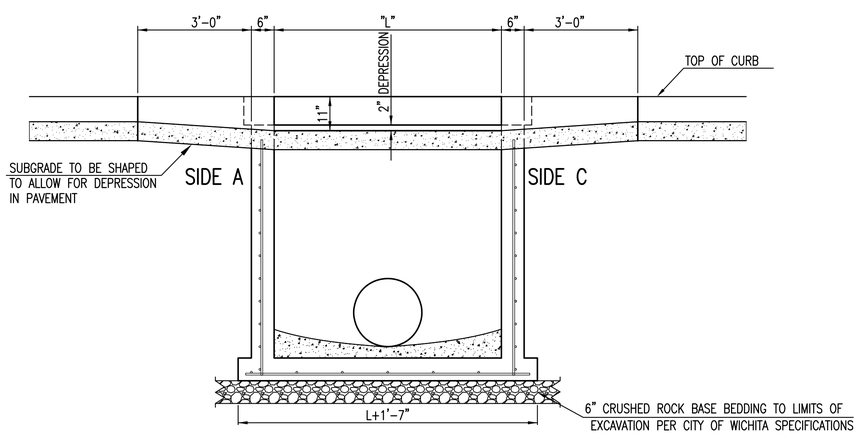
SECTION "A-A"



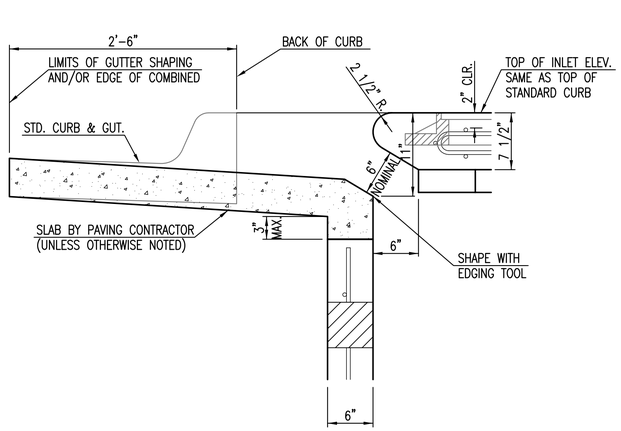
SECTION "C-C"

NOTES:
* SLOPE OF INLET TOP TO MATCH SIDEWALK OR PARKING SLOPES WITHIN LIMITS INDICATED.





SECTION "B-B"



SECTION "D-D"

REVISION MAY 2017	UPDATED SET BACK DIMENSION ON TOP VIEW

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

STANDARD TYPE 1A CURB INLET 5'-0" OR 10'-0" OPENING

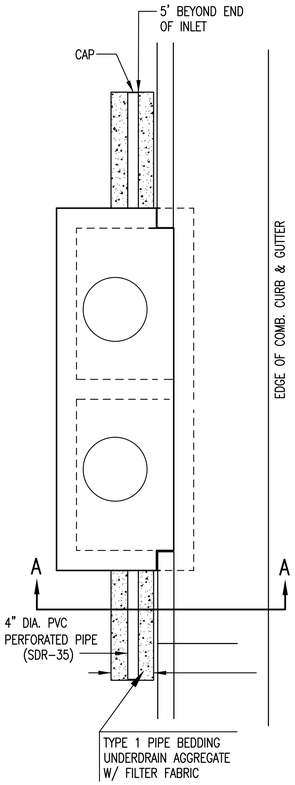
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

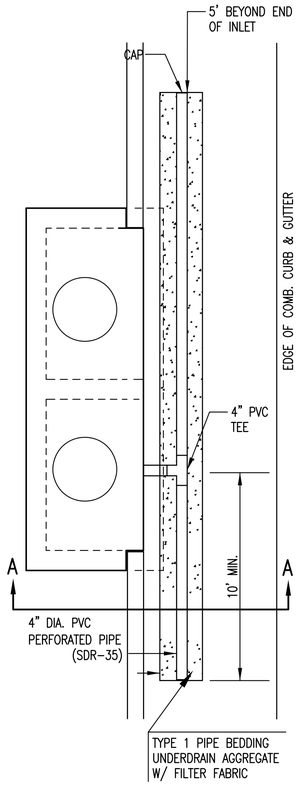
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET
25 of 49

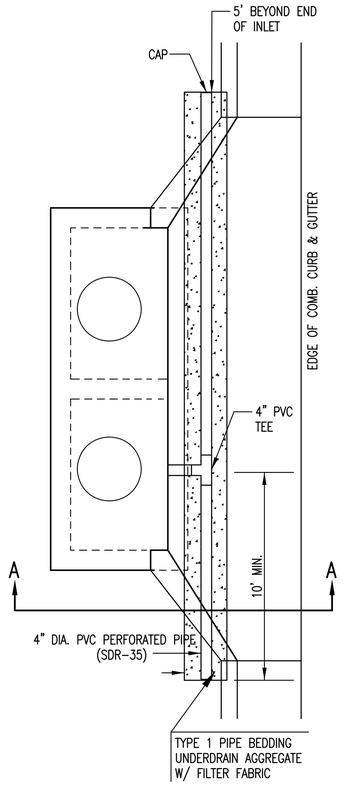
PAVEMENT UNDERDRAIN SHALL BE INSTALLED ON ALL CURB INLETS.



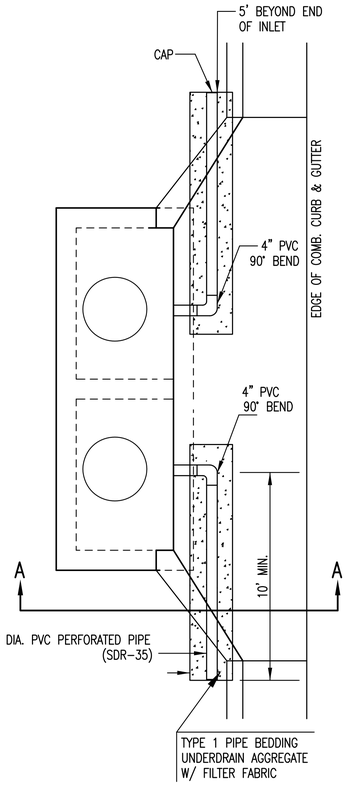
TYPE 1
OPTION 1



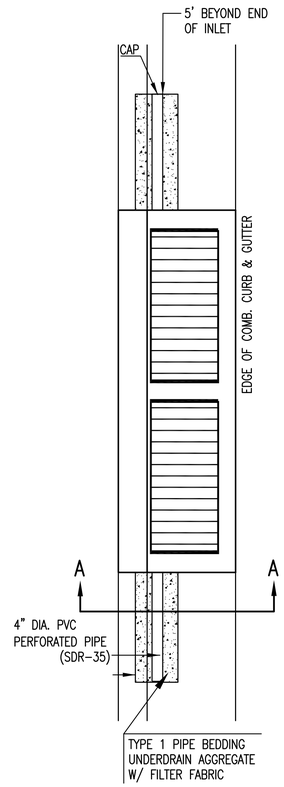
TYPE 1
OPTION 2



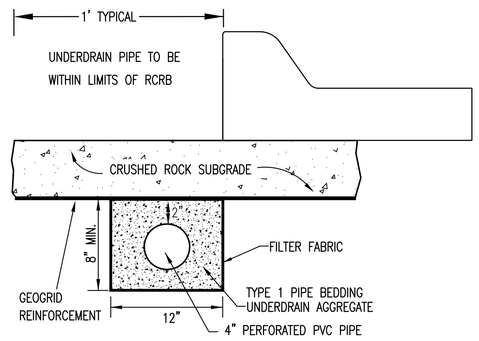
TYPE 1-A INLET
OPTION 1



TYPE 1-A INLET
OPTION 2



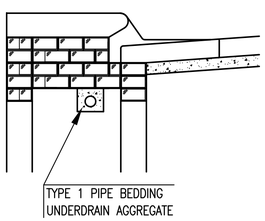
TYPE 2

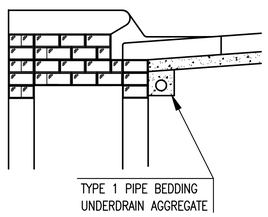


SECTION A-A (TYPICAL)

GENERAL NOTES

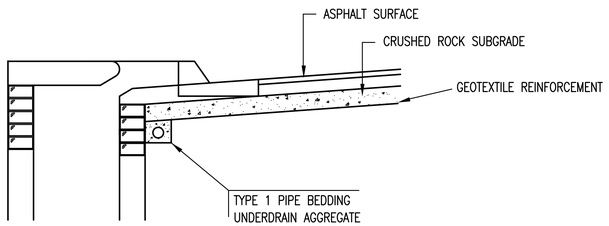
1. PAVEMENT CONTRACTOR WILL BE REQUIRED TO INSTALL SDR 35, 4" PERFORATED DRAIN PIPE AND TEE AS INDICATED IN THE DETAILS.
2. WHEN SWS CONSTRUCTED BY SEPARATE PROJECT, SWS CONTRACTOR SHALL INSTALL SDR 35, 4" DRAIN PIPE STUB ONLY THROUGH WALLS OF CURB INLETS AND CAP TO ALLOW FUTURE CONNECTION OF TEE AND ADDITIONAL DRAIN PIPE BY OTHERS.
2. UNDERDRAIN PIPE SHALL BE PAID AS A MEASURED QUANTITY BY THE LINEAL FOOT.





(MIN. 16 PERFORATIONS PER LIN. FT. @ 1/4" DIA.)
PERFORATIONS TO BE ON BOTTOM HALF

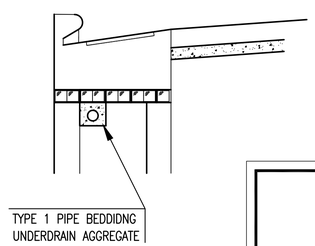
SECTION A-A



SECTION A-A

PAVEMENT UNDERDRAIN DETAIL

BID ITEM TO BE PROVIDED PER 4" PERFORATED UNDERDRAIN PIPE.



SECTION A-A

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

CURB INLET
PAVEMENT UNDERDRAIN
DETAIL

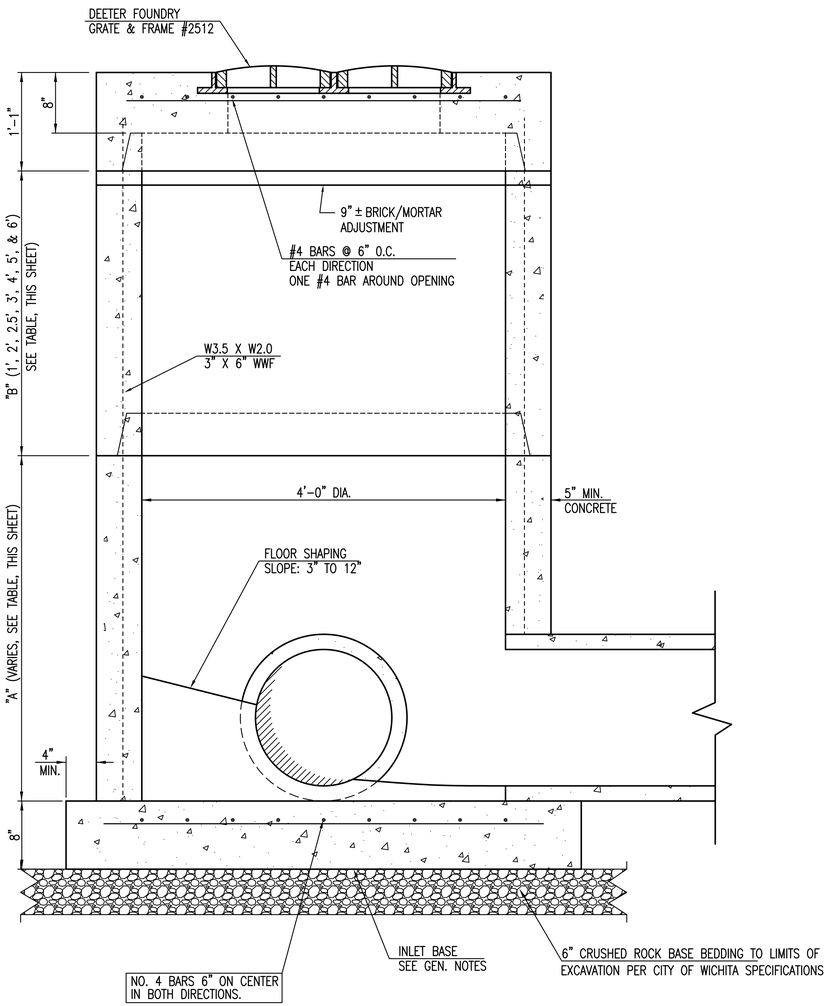
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
		10/2012

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

SHEET

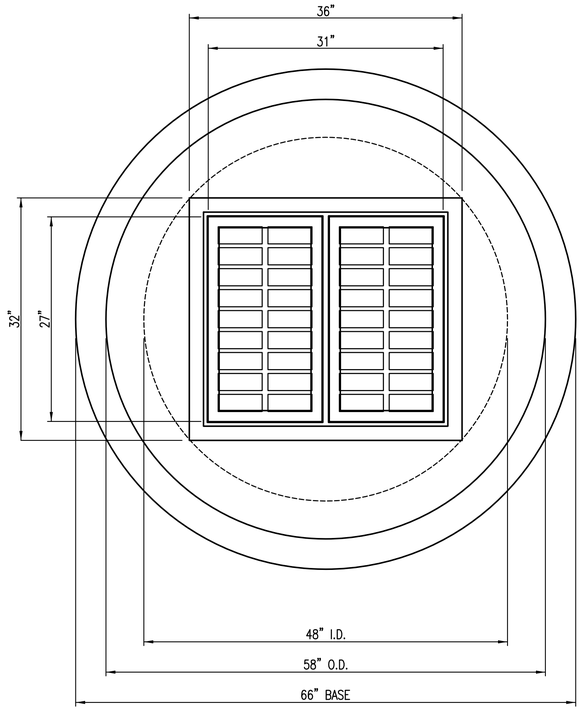
SW-111

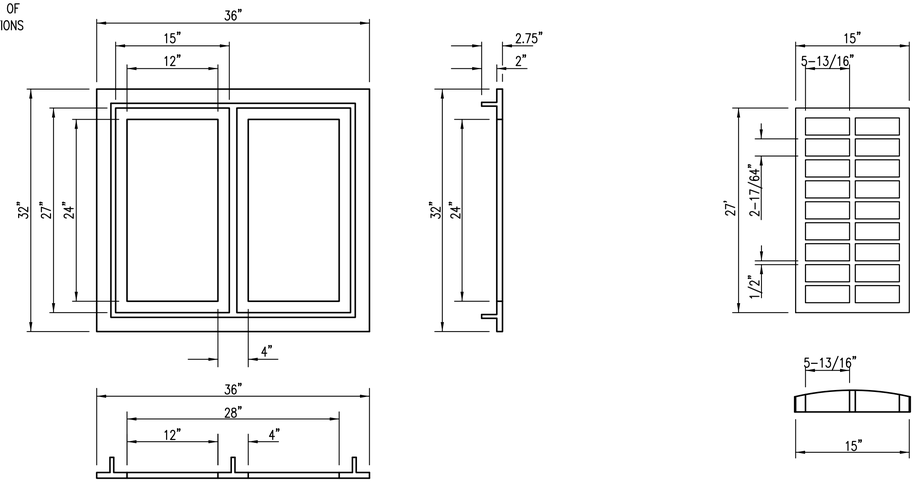


BACKYARD INLET

LINE #	STA.	TOP OF INLET	INLET FLOW	"A"	"B"
1	1+82.7	1344.10	1336.22	4.08'	3.00'
1B	3+51.3	1345.60	1338.10	3.70'	3.00'
1B	4+90.3	1347.30	1342.30	3.20'	1.00'
2	1+41.7	1348.40	1344.90	2.70'	-

BACKYARD INLETS SHALL NOT BE USED UNDER PAVEMENT





DEETER #2512 CATCH BASIN INLET GRATE & FRAME

GENERAL NOTES

1. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN BACKYARD INLET BASES SHALL CONFORM TO THE REQUIREMENTS FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE CEMENT MIX WITHOUT AIR ENTRAINING.

2. REINFORCING STEEL SHALL BE INSTALLED IN THE BACKYARD INLET BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE BACKYARD INLET BASE REINFORCEMENT SHALL BE PLACED 6" ABOVE THE BOTTOM OF THE BACKYARD INLET BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BACKYARD INLET.

3. THE FLOORS OF ALL BACKYARD INLET SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE INLETS WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS. INLET FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH INLETS SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE INLET. INLET FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.

4. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE INLET SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE INLET EXCAVATION. WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE INLET. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF CRADLE WITHIN INLET EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO INLET SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE INLET.

5. INLET GRATE CASTINGS AND INLET FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.

6. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.

7. JOINTS BETWEEN INLET SECTIONS TO BE SEALED WITH TWO WRAPS OF EXTRUDED BUTYL RUBBER JOINT MASTIC MEETING CITY OF WICHITA TYPE "A" MANHOLE SPECIFICATIONS.

8. BACKYARD INLETS SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH. ALL STANDARD BACKYARD INLET DIAMETERS WILL BE 4'.

9. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN INLET WALL SHALL BE GROUTED FLUSH TO THE INLET WALL WITH HYDRAULIC CEMENT AFTER THE INLET IS IN PLACE. LIFTING HOLES THRU THE INLET WALL WILL NOT BE ACCEPTED.

REVISED: MARCH 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

BACKYARD INLET

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

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

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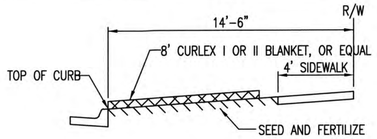
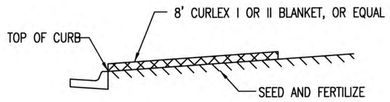
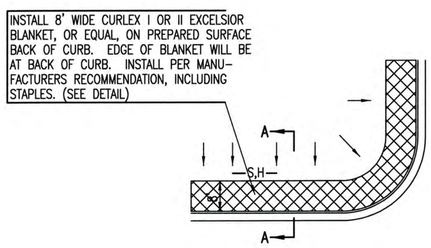


SECTION B-B



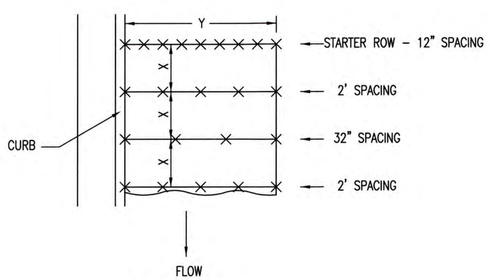
SECTION A-A



GENERAL NOTES

1. EXCELSIOR MAT TO BE INSTALLED WHEN SOD IS NOT SPECIFIED ON PROJECT.
2. EXCELSIOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
3. AFTER INSTALLATION OF EXCELSIOR BLANKET, AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB AND INTO THE GUTTER, SUPPLEMENTAL EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS NEEDED, TO FIX THE PROBLEM.

BACK OF CURB PROTECTION DETAIL

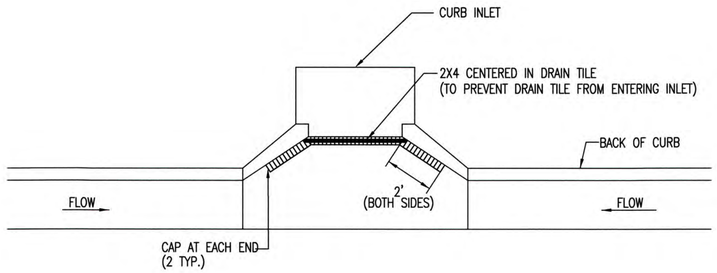


STAPLE PATTERN

STAPLE

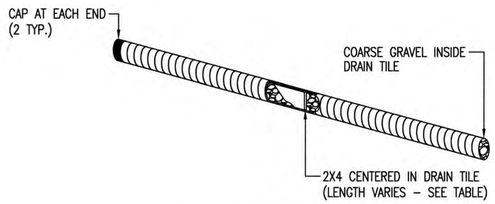
NOTES: USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT

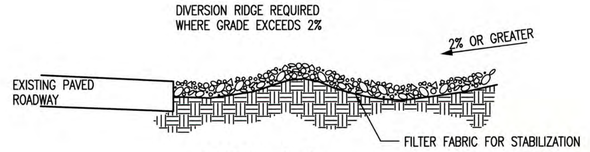


NOTE:
PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"-1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

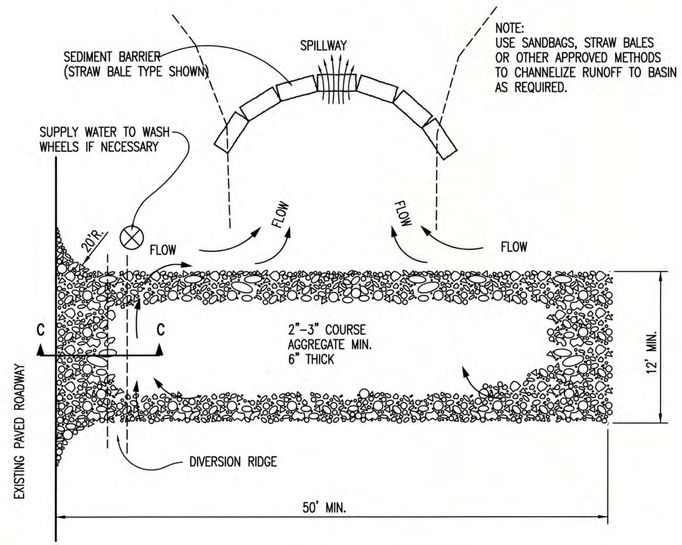
2X4 LENGTH	INLET TYPE	INLET OPENING
5'-6"	1-A	5'-0"
10'-6"	1-A	10'-0"
15'-6"	1-A	15'-0"



CURB INLET PROTECTION
4" PERFORATED PIPE W/ GRAVEL



SECTION C-C



STABILIZED CONSTRUCTION ENTRANCE

GENERAL NOTES

1. 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.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. 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.
4. 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 SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.

REVISION DATE: MAY 2013

GARY L. JANZEN LICENSED PROFESSIONAL KANSAS ENGINEER 16204
05/31/13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

BACK OF CURB PROTECTION, CURB INLET PROTECTION AND CONSTRUCTION ENTRANCE

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
		5/2013

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
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SHEET
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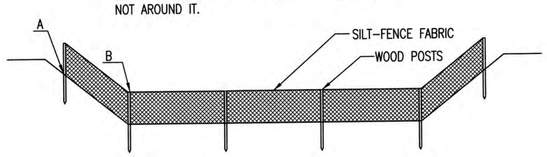
NOTE: POINT A MUST BE HIGHER THAN POINT B SO THAT WATER FLOWS OVER THE SILT FENCE FABRIC AND NOT AROUND IT.



ELEVATION

SILT FENCE DITCH CHECKS
(STREAM PROTECTION)

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION.
THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC 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 THROUGH A SILT FENCE DITCH CHECK, NOT OVER IT. SILT FENCE DITCH CHECKS OFTEN FAIL WHEN OVERTOPPED.
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 AROUND THE CHECK.
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 GIVEN DITCH GRADE:

DITCH GRADE (%)	CHECK SPACING (FEET)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS AT LEAST 12" DEEP BY 6" WIDE.
EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK.
PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH FOR LATER USE.
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 TRENCH WITH THE FABRIC AS SHOWN ON DETAIL. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED.
LAY THE EXPOSED 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 24". PLACE POSTS NO MORE THAN 4' APART.
ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

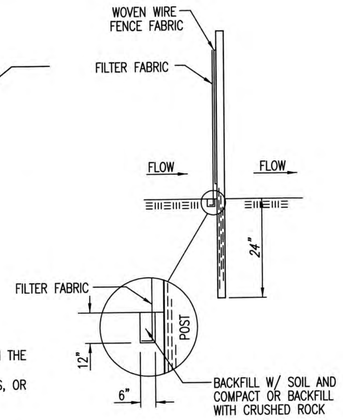
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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 PLACE SILT FENCE POSTS ON THE UPSTREAM 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 (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL.
DO NOT PLACE A SILT FENCE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW.
DO NOT PLACE SILT FENCE 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 BETWEEN THE DITCH CHECKS.
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.

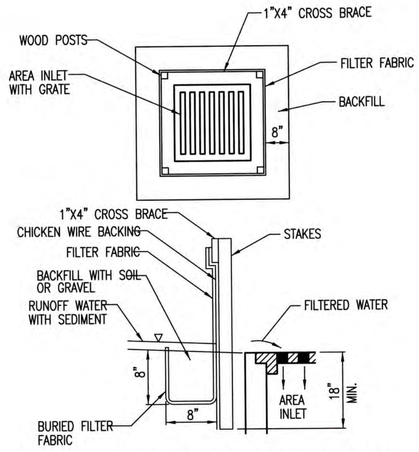
INSPECTION AND MAINTENANCE:

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 SAG EXCESSIVELY?
HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



ANCHOR TRENCH DETAIL



SILT FENCE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION.
THE WIRE OR POLYMERIC MESH BACKING USED TO HELP SUPPORT THE SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION.
THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG.
THE MATERIAL USED TO FRAME THE TOPS OF THE POSTS SHOULD BE 1" BY 4" BOARDS.
SILT FENCE FABRIC AND SUPPORT BACKING 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.
WATER SHOULD FLOW THROUGH SILT FENCE, NOT OVER IT. SILT FENCE BARRIERS FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY 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 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 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. IF THE DISTANCE BETWEEN TWO ADJACENT CORNER POSTS IS MORE THAN 4', ADD ANOTHER POST(S) BETWEEN THEM.
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 STAPLES, WIRE, ZIP TIES, OR NAILS.
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 THREE SIDES OF THE TRENCH WITH THE FABRIC. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED.
ATTACH THE SILT FENCE TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. THE JOINT SHOULD BE OVERLAPPED TO THE NEXT POST.

NOTE: 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.

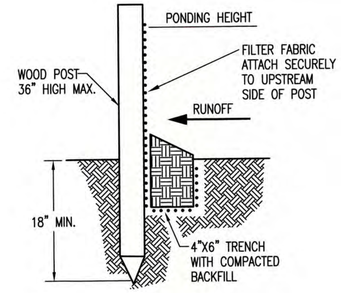
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WATER SHOULD FLOW THROUGH A SILT FENCE BARRIER FOR AREA INLET-NOT OVER IT. PLACE A SILT FENCE BARRIER FOR AREA INLET IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. SILT FENCE BARRIER FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED.
DO NOT PLACE POSTS ON THE OUTSIDE OF THE SILT FENCE BARRIER FOR AREA INLET. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESISTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL.
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 SAG EXCESSIVELY?
HAS THE SILT FENCE TORN 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 AASHTO M288 96 SILT FENCE SPECIFICATION.
THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC 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 TOE 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 PRACTICABLE, 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 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 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 COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT-FENCE FABRIC SHOULD REMAIN EXPOSED.
LAY THE EXPOSED SILT FENCE UPSLOPE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSLOPE OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 18".
PLACE POSTS NO MORE THAN 4' APART.
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 (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL.
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 DUG 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?
DO THE SILT FENCES SAG EXCESSIVELY?
HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?

GARY L. JANZEN LICENSED 16294 PROFESSIONAL ENGINEER KANSAS
05/2/13

REVISION DATE: MAY 2013

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

SILT FENCE DITCH CHECK AND BARRIER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
		5/2013

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

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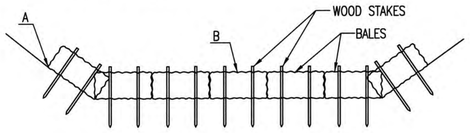
NOTE: POINT A MUST BE HIGHER THAN POINT B
SO THAT WATER FLOWS OVER THE BALES AND
NOT AROUND THEM.



STRAW BALE DITCH CHECKS

MATERIAL SPECIFICATION:

BALE DITCH CHECKS MAY BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS 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.
OPTIONAL: THE DOWNSTREAM SCOUR APRON SHOULD BE CONSTRUCTED OF A DOUBLE-NETTED STRAW EROSION-CONTROL BLANKET AT LEAST 6' WIDE.
OPTIONAL: THE METAL LANDSCAPE STAPLES USED TO ANCHOR THE EROSION-CONTROL BLANKET SHOULD BE AT LEAST 8" LONG.

PLACEMENT:

BALE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH.
THE DITCH CHECK 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. ROCK CHECKS SHOULD BE USED INSTEAD.
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 GRADE (%)	CHECK SPACING (FEET)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS 4" DEEP AND A BALE'S WIDTH WIDE. EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK. PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH-IT WILL BE USED LATER.
OPTIONAL: ON THE DOWNSTREAM 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 TRENCH. THE EROSION CONTROL BLANKET SHOULD BE ANCHORED IN THE TRENCH WITH ONE ROW OF 8" 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. THE REMAINDER OF THE BLANKET SHOULD BE ANCHORED USING TWO EVENLY SPACED ROWS OF 8" LANDSCAPE STAPLES ON 18" CENTERS PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH.
PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND.
ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE UPSTREAM SIDE OF THE CHECK AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP AND EXTEND UPSTREAM NO MORE THAN 24".

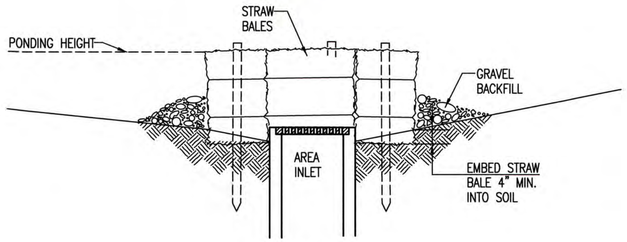
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

DO NOT PLACE A BALE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW.
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 BETWEEN THE DITCH CHECKS.
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 BALE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.
BALE DITCH CHECKS MUST BE DUG 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 WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
ARE ANY BALES AND/OR SCOUR APRONS (OPTIONAL) DISLODGED?
ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



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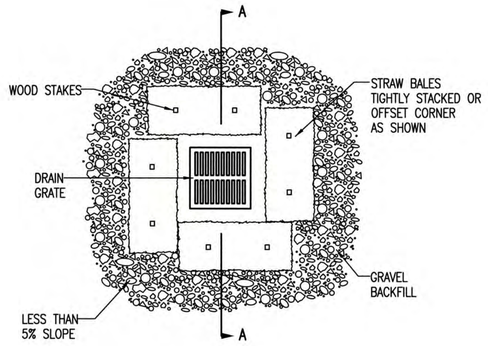


STRAW BALE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:

BALE AREA INLET BARRIERS SHOULD BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS 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.
TWINE SHOULD BE USED TO BIND BALES. 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 DROP 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 WIDE.
PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. SOME BALES MAY NEED TO BE SHORTENED TO FIT INTO THE TRENCH AROUND THE AREA INLET. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS.
STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND.
ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE RECEIVING SIDE OF THE BARRIER AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP.
NOTE: WHEN A BALE AREA INLET BARRIER 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.

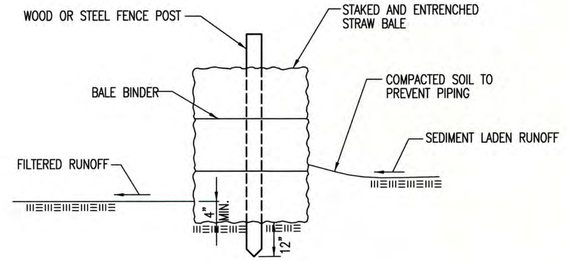
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

BALES SHOULD BE PLACED DIRECTLY AGAINST THE PERIMETER OF THE AREA INLET. THIS ALLOWS OVERTOPPING WATER TO FLOW DIRECTLY INTO THE INLET INSTEAD OF ONTO NEARBY SOIL CAUSING SCOUR.
BALE AREA INLET BARRIERS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE BARRIER.

INSPECTION AND MAINTENANCE:

BALE AREA INLET BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL 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 ABUTTING BALES?
ARE ANY BALES DISLODGED?
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, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS 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.
TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

PLACEMENT:

A SLOPE BARRIER SHOULD BE USED AT THE TOE 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 PRACTICABLE, BALE SLOPE BARRIERS 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 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.
PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND.
ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE UPSLOPE SIDE OF THE CHECK AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WHEN PRACTICAL, DO NOT PLACE BALE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. CONCENTRATED FLOW OVER A SLOPE BARRIER CREATES A SCOUR HOLE ON THE DOWNSLOPE SIDE OF THE BARRIER. THE SCOUR HOLE EVENTUALLY UNDERMINES THE BALES AND THE BARRIER FAILS.
DO NOT PLACE BALE SLOPE BARRIERS IN AREAS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE BARRIER IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.
BALE SLOPE BARRIERS MUST BE DUG 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 ABUTTING BALES?
ARE ANY BALES DISLODGED?
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

GARY L. JANZEN LICENSED 16294 KANSAS PROFESSIONAL ENGINEER
05/30/13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

STRAW BALE DITCH CHECK AND BARRIER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
		5/2013

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

SHEET
30 of 49

SW-503

GENERAL NOTES

1. THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPES OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.

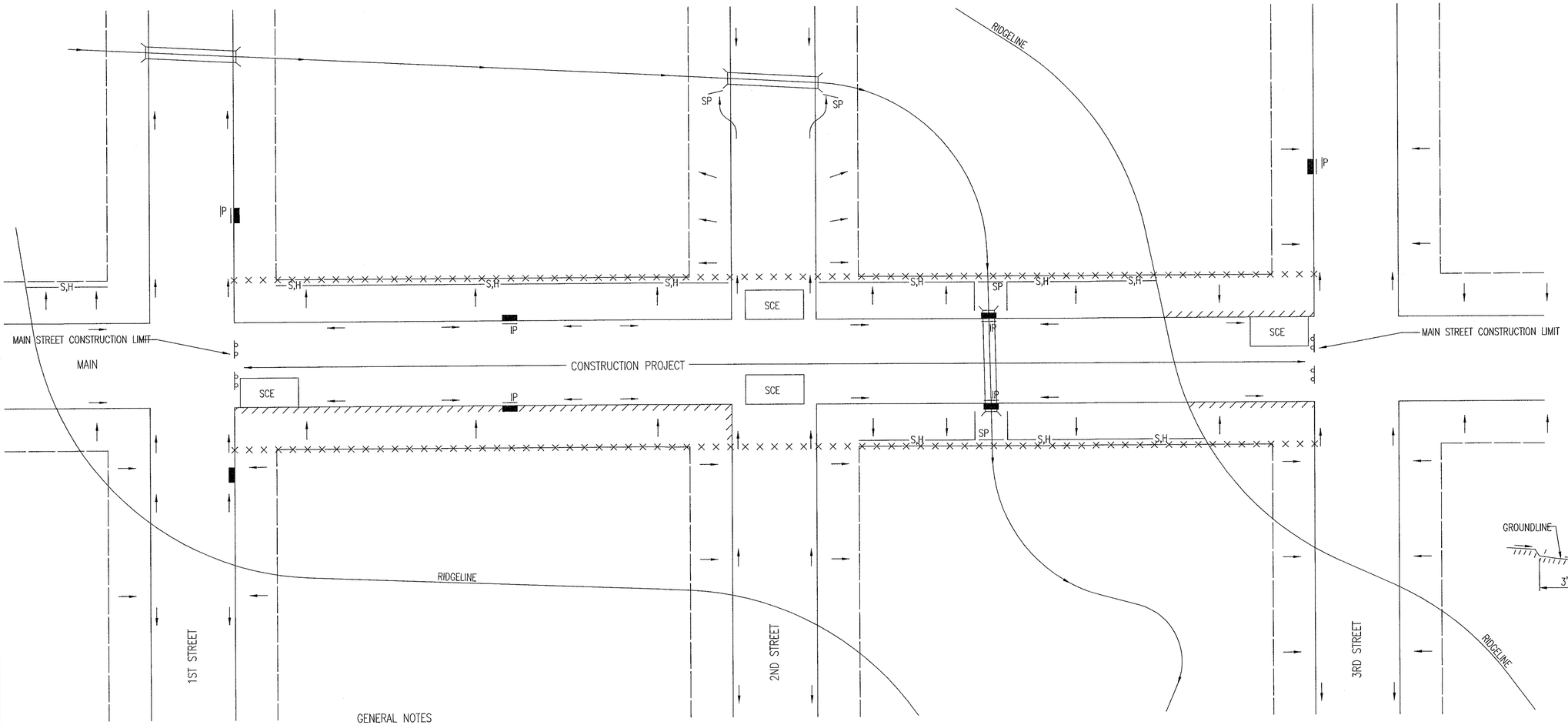
2. EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.

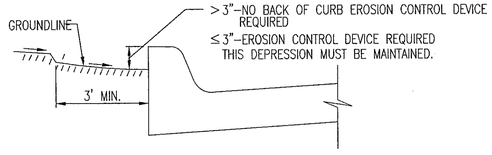
3. IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.

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.





CURB BACKFILL DETAIL

THIS IS A TEMPORARY MEASURE ONLY, WHEN APPROVED BY THE PROJECT ENGINEER. THE DIRT GRADE BEHIND THE CURB SHALL BE BROUGHT TO THE TOP OF CURB, WITH TEMPORARY EROSION CONTROL MAT OR PERMANENT VEGETATION PLACED, PRIOR TO THE COMPLETION OF ALL PROJECTS.

LEGEND

- R-O-W LIMITS
- DRAINAGE FLOW PATH
- R/W LIMIT WITHIN CONSTRUCTION LIMIT
- STORM WATER INLETS
- IP — INLET PROTECTION
- S,H — SILT FENCE OR HAY BALE BARRIER
- SP — STREAM PROTECTION
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- BACK OF CURB PROTECTION

GENERAL NOTES

1. THE INTENT OF ALL EROSION CONTROL DEVICES IS TO KEEP ALL SEDIMENT CONFINED 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 CREEK 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 CONTACTOR 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, IN ACCORDANCE WITH THE FOLLOWING:
   A. THE DEVICE REQUIRED WILL BE APPROVED EROSION CONTROL MAT LISTED ON THE CITY'S APPROVED MATERIAL LIST. SAID BLANKET SHALL BE PLACED OVER THE APPROPRIATE SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS. (SEE SOIL EROSION BMPs – BACK OF CURB SEDIMENT BARRIER DETAILS)
   B. THIS DEVICE SHALL BE INSTALLED IMMEDIATELY WHENEVER THE CURB IS BACKFILLED TO WITHIN 3" OF THE TOP OF CURB. (SEE CURB BACKFILL DETAIL) OTHER BMP'S MAY BE REQUIRED AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB.
   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. SHOULD THE PROJECT PLANS SPECIFY THAT THE RIGHT-OF-WAY IS TO BE SODDED, THE EXCELSIOR 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)

GARY L. JANZEN — LICENSED — 16294 — KANSAS — PROFESSIONAL ENGINEER
06/05/15

REVISION: JUNE 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

STREET IMPROVEMENT PROJECTS

CITY ENGINEER
GARY JANZEN, P.E.

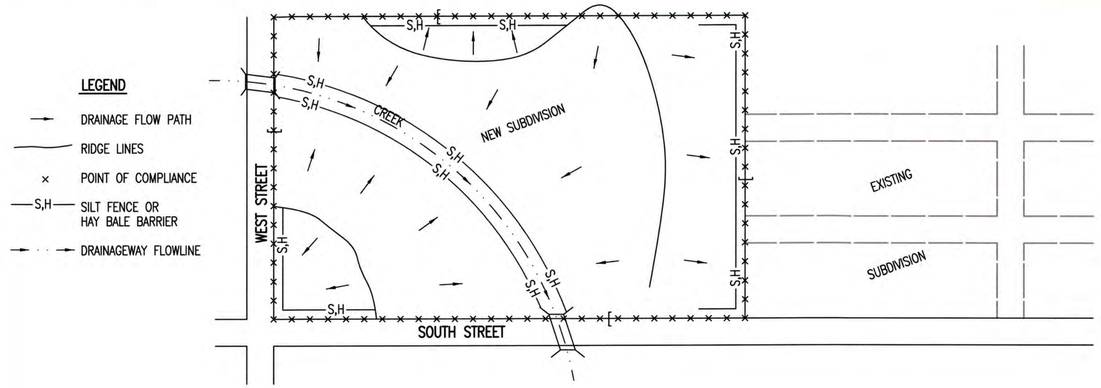
PROJECT NUMBER	OCA NUMBER	DATE
		11/2015

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

SHEET
31 of 49

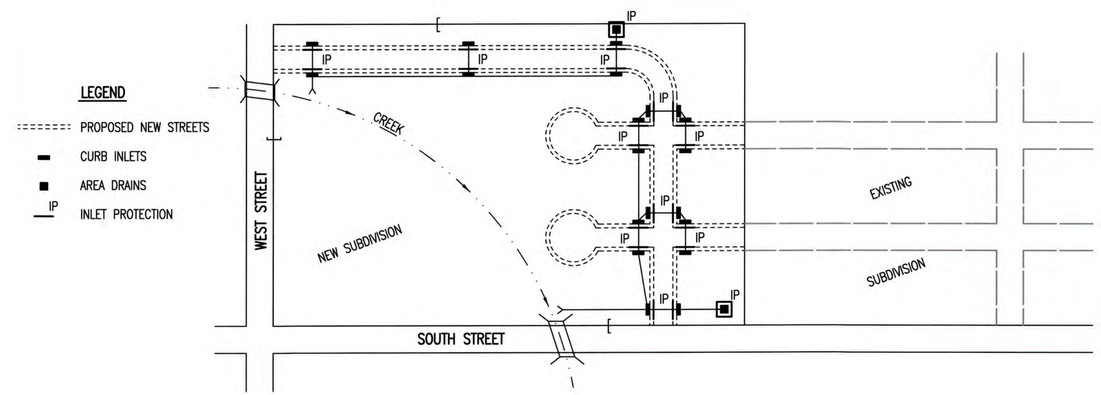
SW-504

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



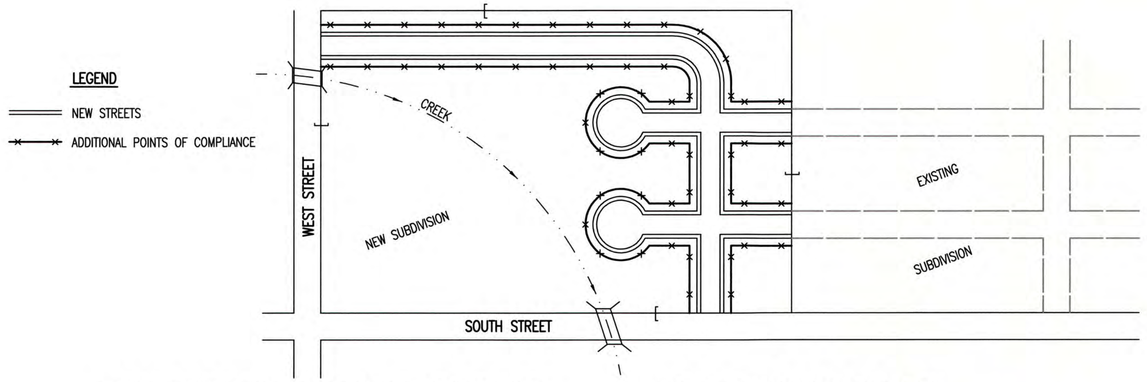
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
2. 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 ADJACENT BOUNDARY STREETS, APPROPRIATE EROSION CONTROL DEVICES WILL BE PLACED WITHIN THE SUBDIVISION TO PREVENT THIS.
4. ANY MUD TRACKED ONTO ADJACENT 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 ADJACENT 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 UNTIL COMPLETION OF THE CONTRACT, AT WHICH TIME THE DEVELOPER WILL 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 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 IF 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.

PHASE 3 – STREET CONSTRUCTION

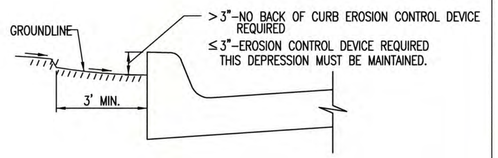


1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL EROSION CONTROL DEVICES INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
2. CURB OPENING INLET PROTECTION:
   A. SUMP AREAS – INLET PROTECTION SHALL BE PROVIDED WHEN STREET SUBGRADE WORK IS COMPLETED.
   B. 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). FOR CURBS NOT YET ENTIRELY BACKFILLED (3" OR MORE BELOW TOP OF CURB), ADDITIONAL DEVICES WILL BE REQUIRED 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 EXCELSIOR 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 ADJACENT DISTURBED EARTH IS STABILIZED WITH GRASS OR SOD.

GENERAL NOTES

1. THE INTENT OF ALL EROSION CONTROL DEVICES IS 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 REQUIRE A FEDERAL/STATE NPDES STORMWATER PERMIT. THE PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN IS REQUIRED. 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 NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE DEVICES OTHER THAN THAT SHOWN. EROSION 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 TOP OF CURB, WITH TEMPORARY EROSION CONTROL MAT OR PERMANENT VEGETATION PLACED, PRIOR TO THE COMPLETION OF ALL PROJECTS.

REVISION DATE: MAY 2013

GARY L. JANZEN LICENSED 16294 KANSAS PROFESSIONAL ENGINEER
05/13/13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

SUBDIVISION DEVELOPMENT PROCESS

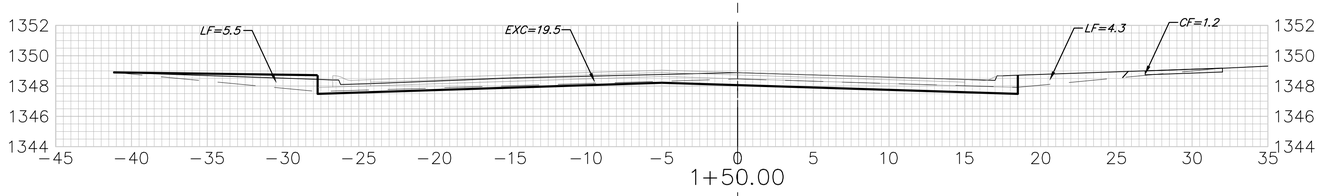
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
		5/2013

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

SHEET
32 of 49

SW–505



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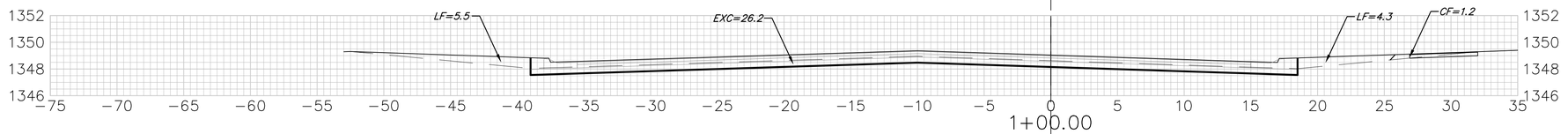
CF = 1.3



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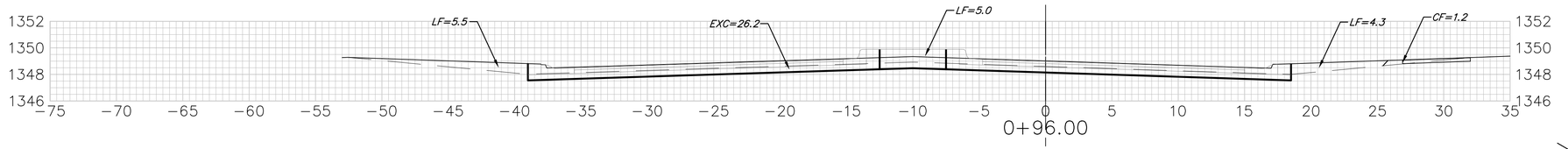

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32.00'

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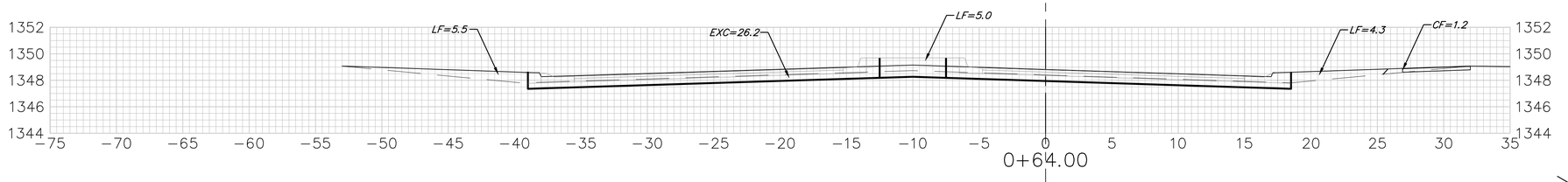

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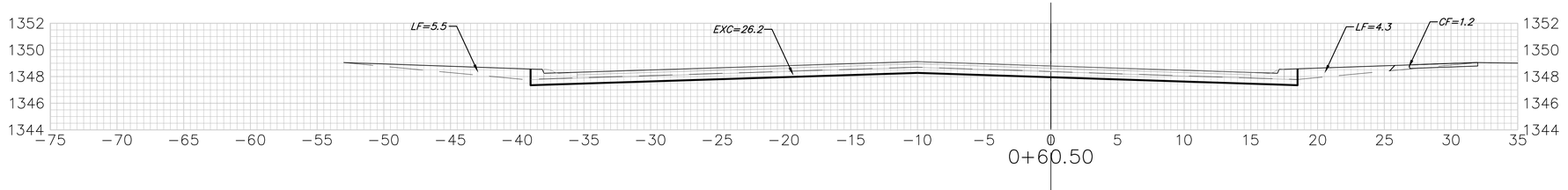


0+60.50

RAINBOW LAKE
℄

Sheet Totals
Excavation = 100.0 C.Y.
Loose Fill = 44.4 C.Y.
Compacted Fill = 11.1 C.Y.

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

BRIDGER AT CENTRAL ADDITION - Ph. I

CROSS SECTIONS

STREET IMPROVEMENTS

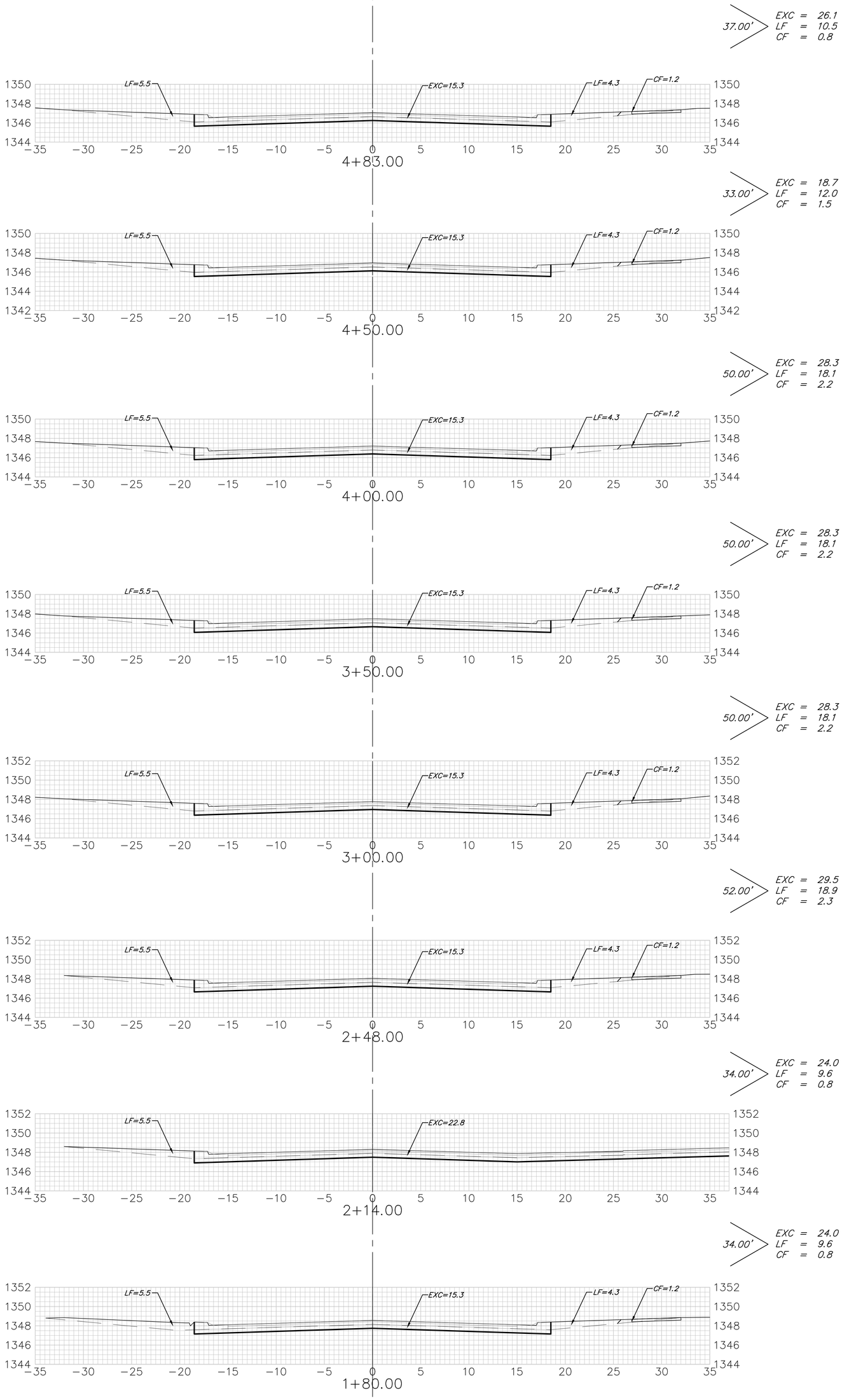
PROJECT NUMBER:
23-09-602

DESIGN: DRAWN:

DATE: July 31, 2024

SHEET 33 OF 49

File: E:\Projects\Bridger At Central Addition(Albert)_\Engineering\Phase 1\STR_23-09-E602\Streets.dwg



Sheet Totals
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Loose Fill = 114.9 C.Y.
Compacted Fill = 12.8 C.Y.

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

BRIDGER AT CENTRAL ADDITION - Ph. I

CROSS SECTIONS

STREET IMPROVEMENTS
PROJECT NUMBER: 23-09-602
DESIGN:
DRAWN:
DATE: July 31, 2024
SHEET 34 OF 49

RAINBOW LAKE
℄

File: E:\Projects\Bridger At Central Addition(Albert)_\Engineering\Phase 1\STR_23-09-E602\Streets.dwg

Sheet Totals

Excavation =	*213.0*	*C.Y.*
Loose Fill =	*118.1*	*C.Y.*
Compacted Fill =	*13.0*	*C.Y.*

BAUGHMAN COMPANY

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

BRIDGER AT CENTRAL ADDITION - Ph. I

CROSS SECTIONS

STREET IMPROVEMENTS

PROJECT NUMBER:
23-09-602

DESIGN: DRAWN:

DATE: July 31, 2024

SHEET **35** OF **49**

File: E:\Projects\Bridger At Central Addition(Albert)_\Engineering\Phase 1\STR_23-09-E602\Streets.dwg

RAINBOW LAKE
℄

Sheet Totals

Excavation =	78.2	C.Y.
Loose Fill =	50.1	C.Y.
Compacted Fill =	6.1	C.Y.

BAUGHMAN COMPANY

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

BRIDGER AT CENTRAL ADDITION - Ph. I

CROSS SECTIONS

STREET IMPROVEMENTS

PROJECT NUMBER:
23-09-602

DESIGN: DRAWN:

DATE: July 31, 2024

SHEET **36** OF **49**

File: E:\Projects\Bridger At Central Addition(Albert) \Engineering\Phase 1\STR_23-09-E602\Streets.dwg

Sheet Totals

Excavation =	*100.2*	*C.Y.*
Loose Fill =	*84.5*	*C.Y.*
Compacted Fill =	*0.0*	*C.Y.*

BAUGHMAN COMPANY

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

BRIDGER AT CENTRAL ADDITION - Ph. I

CROSS SECTIONS

STREET IMPROVEMENTS

PROJECT NUMBER:
23-09-602

DESIGN: DRAWN:

DATE: May 9, 2024

SHEET **37** OF **49**

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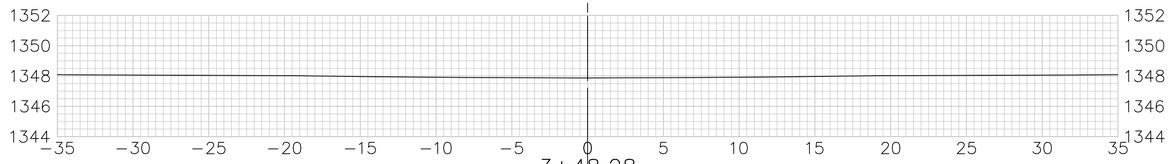

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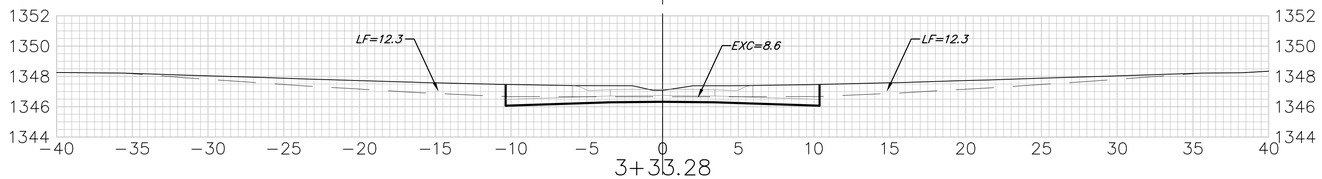

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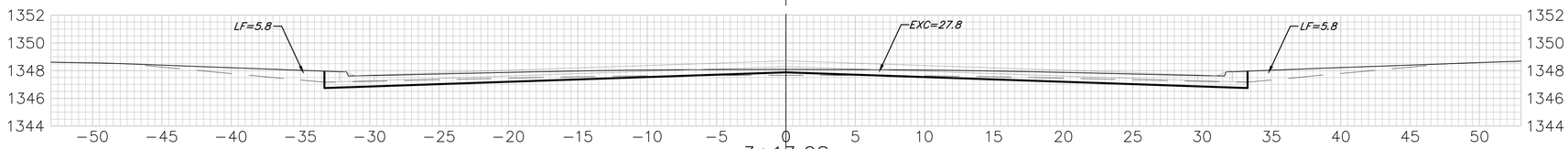

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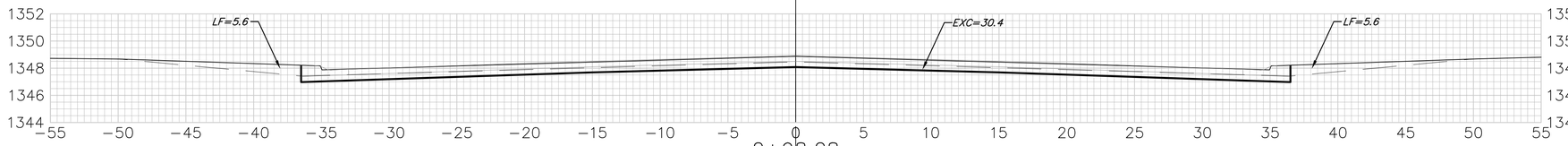

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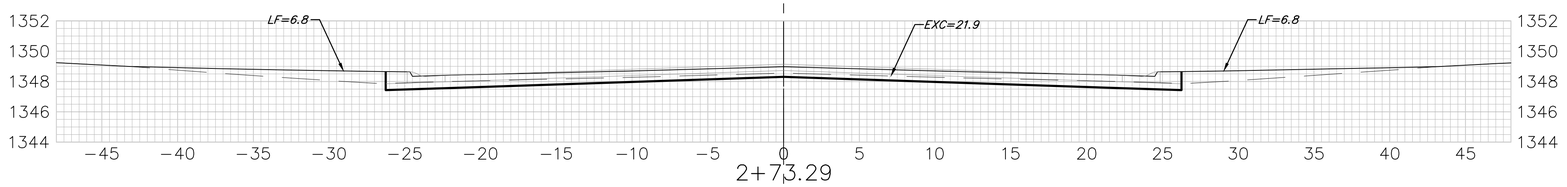

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25.00'
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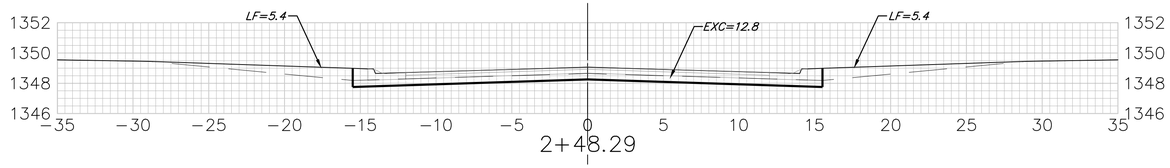

2+48.29

RAINBOW LAKE CT.
℄

Sheet Totals
Excavation = 72.4 C.Y.
Loose Fill = 49.3 C.Y.
Compacted Fill = 0.0 C.Y.

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

BRIDGER AT CENTRAL ADDITION - Ph. I

CROSS SECTIONS

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: DRAWN:

DATE: May 9, 2024

SHEET 38 OF 49

File: E:\Projects\Bridger At Central Addition(Albert)..\EngineeringPhase 1\STR_23-09-E602\Streets.dwg

THORNTON

Sheet Totals

Excavation =	*205.5*	*C.Y.*
Loose Fill =	*131.4*	*C.Y.*
Compacted Fill =	*16.0*	*C.Y.*

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BRIDGER AT CENTRAL ADDITION - Ph. I

CROSS SECTIONS

STREET IMPROVEMENTS

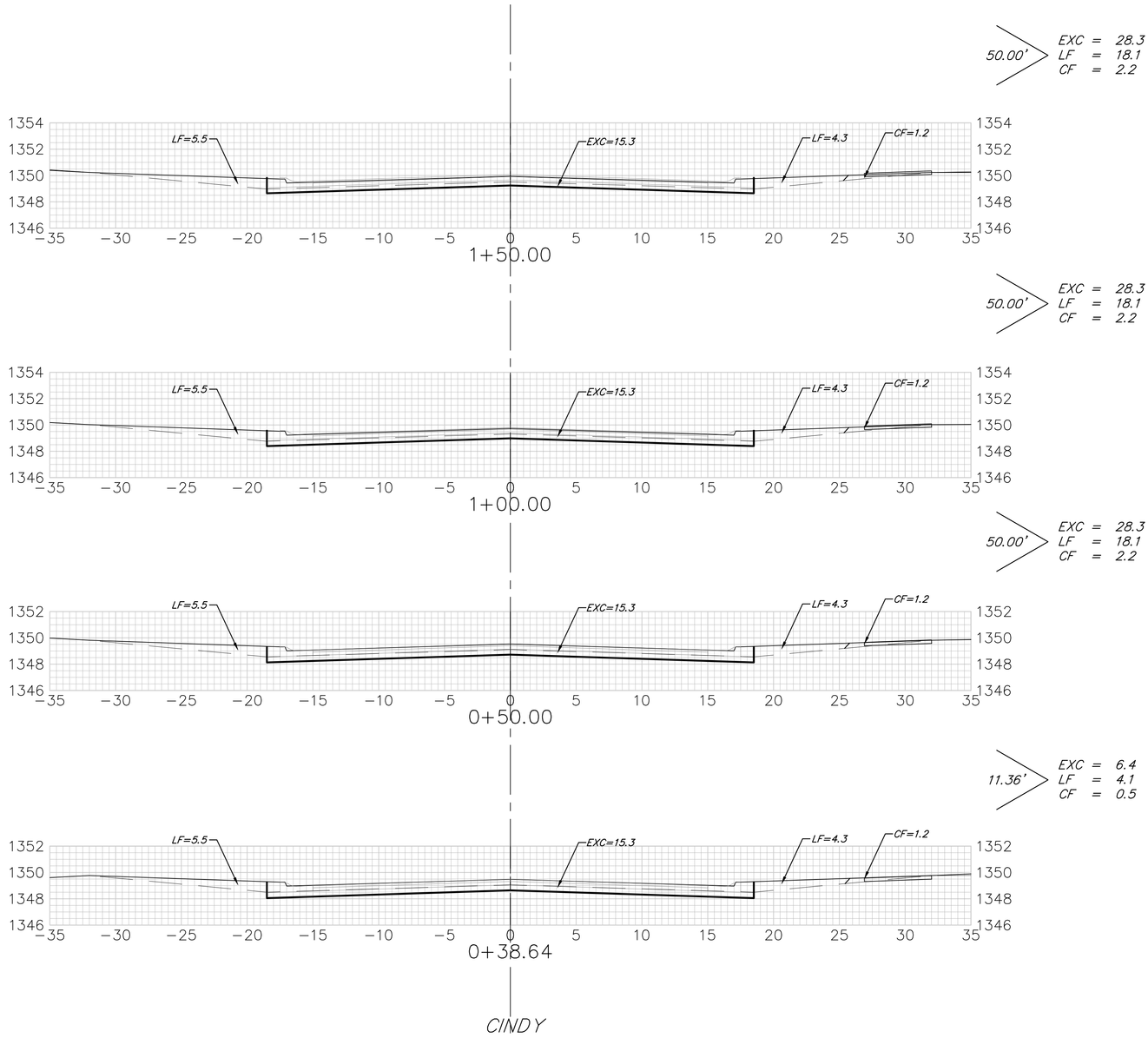
PROJECT NUMBER:
23-09-602

DESIGN: DRAWN:

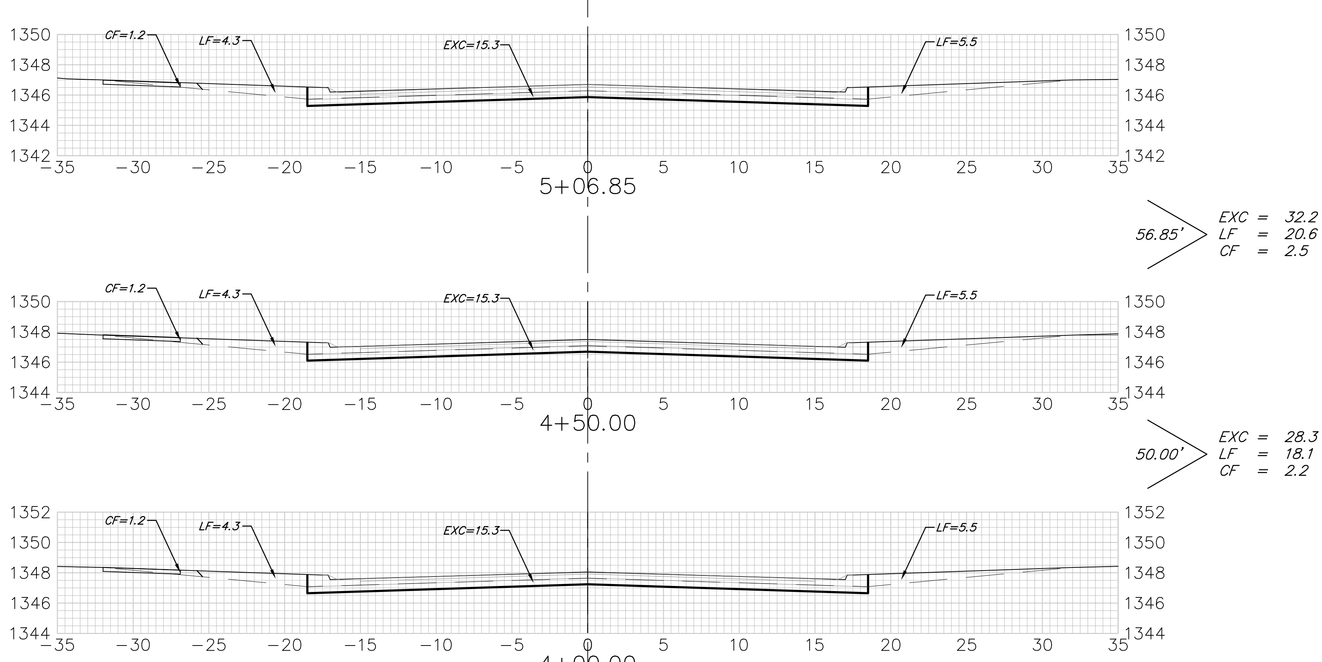
DATE: July 31, 2024

SHEET 39 OF 49

File: E:\Projects\Bridger At Central Addition(Albert)_\Engineering\Phase 1\STR_23-09-E602Streets.dwg



CINDY



THORNTON

℄

Sheet Totals

Excavation = 151.8 C.Y.
Loose Fill = 97.1 C.Y.
Compacted Fill = 11.8 C.Y.

BAUGHMAN COMPANY 315 Ellis St. Wichita, KS 67211 316-262-7271 BaughmanCo.com	**CROSS SECTIONS**	STREET IMPROVEMENTS PROJECT NUMBER: 23-09-602 DESIGN: DRAWN: DATE: July 31, 2024 SHEET 40 OF 49
BRIDGER AT CENTRAL ADDITION - Ph. I		

File: E:\Projects\Bridger At Central Addition(Albert)_\Engineering\Phase 1\STR_23-09-E602\Streets.dwg

CINDY
℄

Sheet Totals

Excavation =	*177.7*	*C.Y.*
Loose Fill =	*113.6*	*C.Y.*
Compacted Fill =	*13.8*	*C.Y.*

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BRIDGER AT CENTRAL ADDITION - Ph. I

CROSS SECTIONS

STREET IMPROVEMENTS

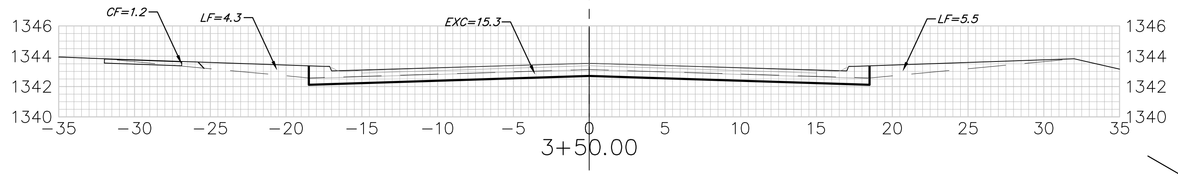
PROJECT NUMBER:
23-09-602

DESIGN: DRAWN:

DATE: July 31, 2024

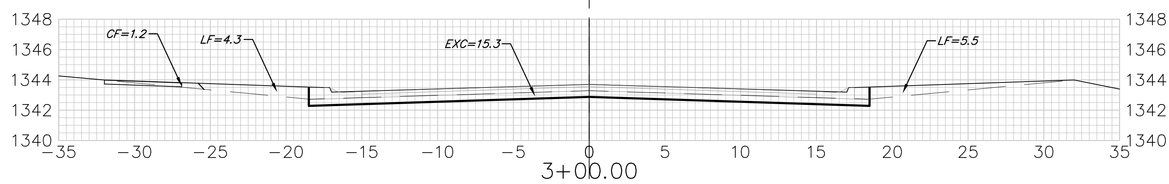
SHEET **41** OF **49**

File: E:\Projects\Bridger At Central Addition(Albert)_\Engineering\Phase 1\STR_23-09-E602\Streets.dwg



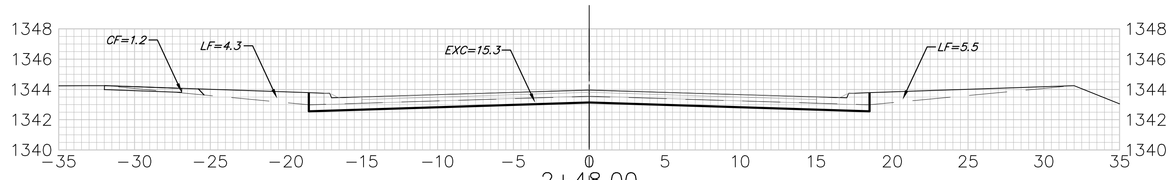
3+50.00

50.00'
EXC = 28.3
LF = 18.1
CF = 2.2



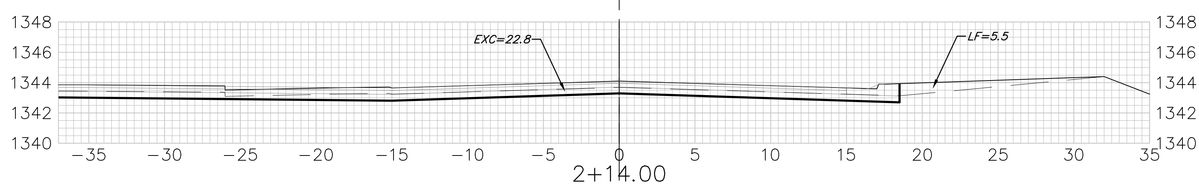
3+00.00

52.00'
EXC = 29.5
LF = 18.9
CF = 2.3



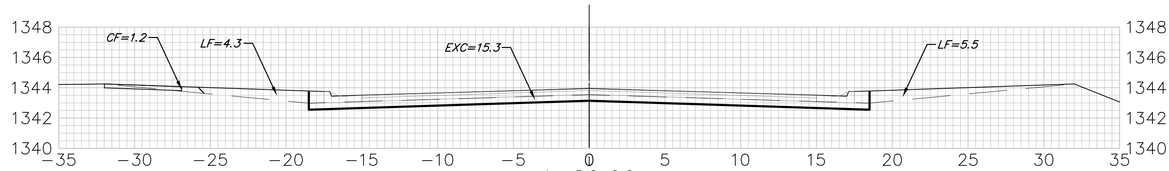
2+48.00

34.00'
EXC = 28.7
LF = 9.6
CF = 0.8



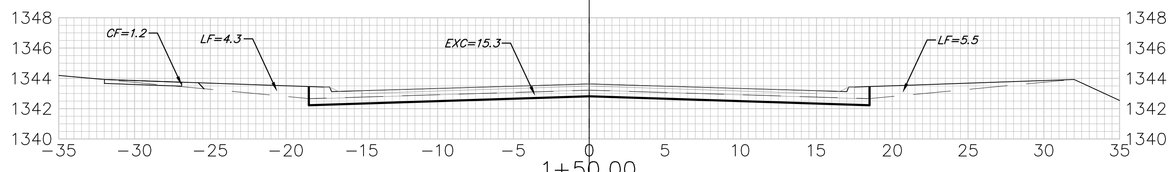
2+14.00

34.00'
EXC = 28.7
LF = 9.6
CF = 0.8



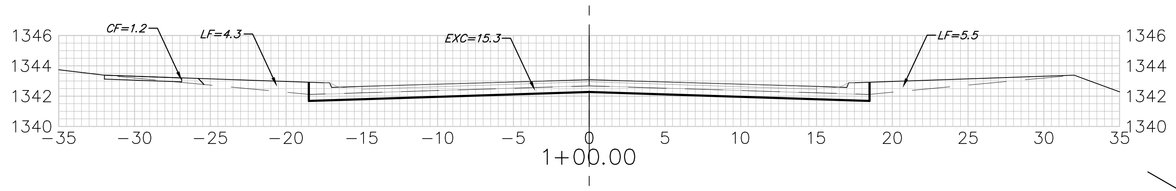
1+80.00

30.00'
EXC = 17.0
LF = 10.9
CF = 1.3



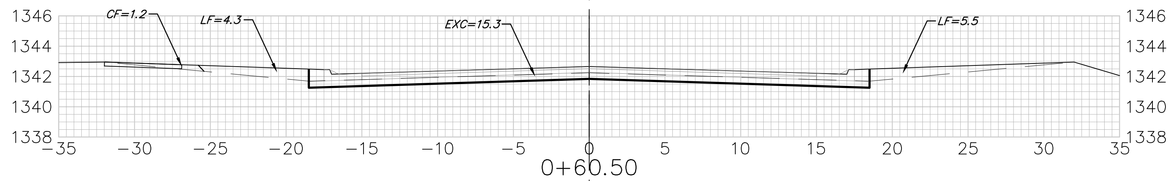
1+50.00

50.00'
EXC = 28.3
LF = 18.1
CF = 2.2



1+00.00

39.50'
EXC = 22.4
LF = 14.3
CF = 1.8



0+60.50

Sheet Totals
Excavation = 182.9 C.Y.
Loose Fill = 99.5 C.Y.
Compacted Fill = 11.4 C.Y.

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BRIDGER AT CENTRAL ADDITION - Ph. I

CROSS SECTIONS

STREET IMPROVEMENTS
PROJECT NUMBER: 23-09-602

DESIGN:
DRAWN:
DATE: July 31, 2024

SHEET 42 OF 49

WHEATLAND ℄

File: E:\Projects\Bridger At Central Addition(Albert) \Engineering\Phase 1\STR_23-09-E602\Streets.dwg

WHEATLAND
℄

Sheet Totals

Excavation =	*226.4*	*C.Y.*
Loose Fill =	*144.8*	*C.Y.*
Compacted Fill =	*17.6*	*C.Y.*

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BRIDGER AT CENTRAL ADDITION - Ph. I

CROSS SECTIONS

STREET IMPROVEMENTS

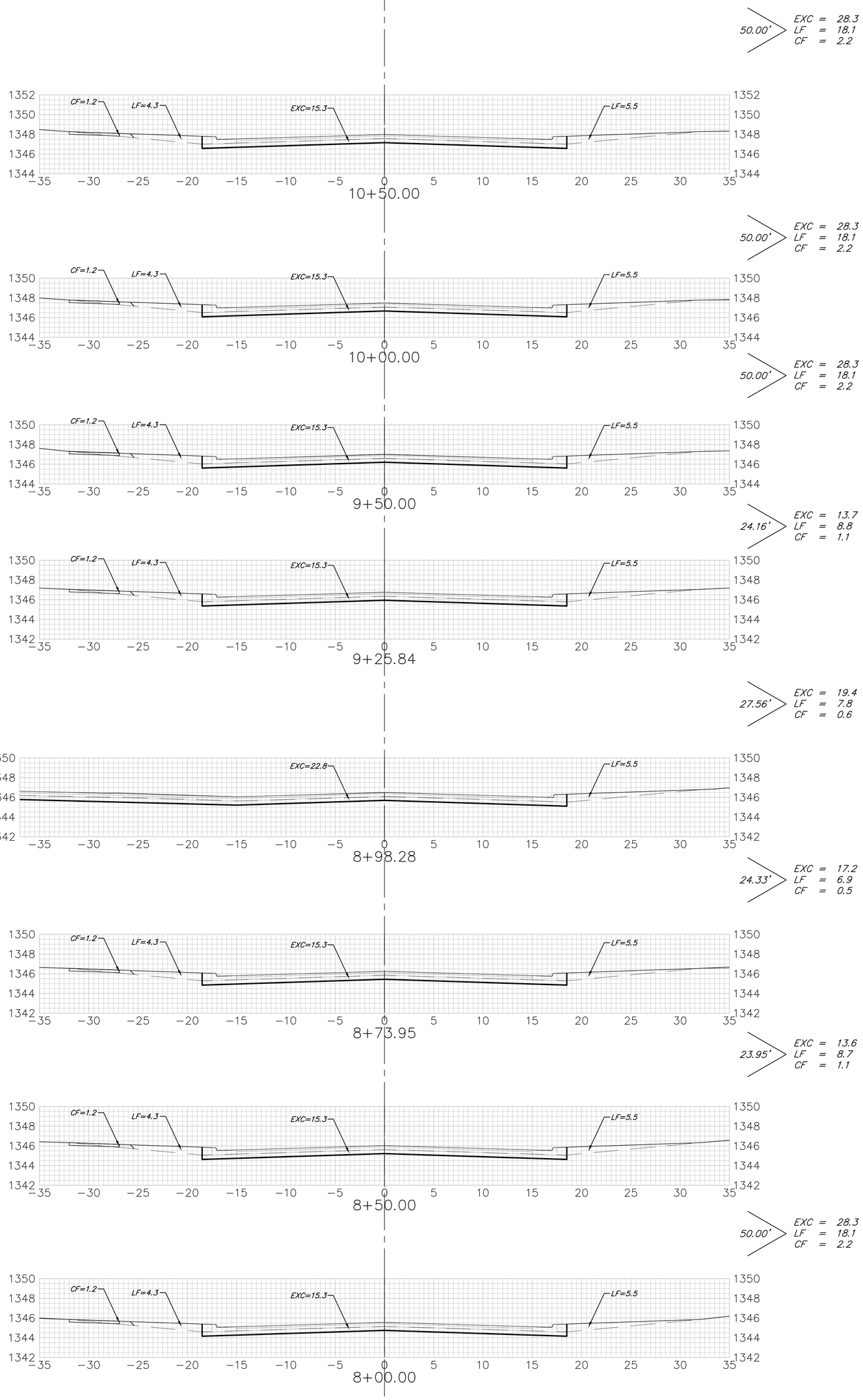
PROJECT NUMBER:
23-09-602

DESIGN: DRAWN:

DATE: July 31, 2024

SHEET **43** OF **49**

File: E:\Projects\Bridger At Central Addition\Albert\ \Engineering\Phase 1\STR_23-09-E602Streets.dwg



Sheet Totals

Excavation = 177.1 C.Y.
Loose Fill = 104.6 C.Y.
Compacted Fill = 12.1 C.Y.

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BRIDGER AT CENTRAL ADDITION - Ph. I

CROSS SECTIONS

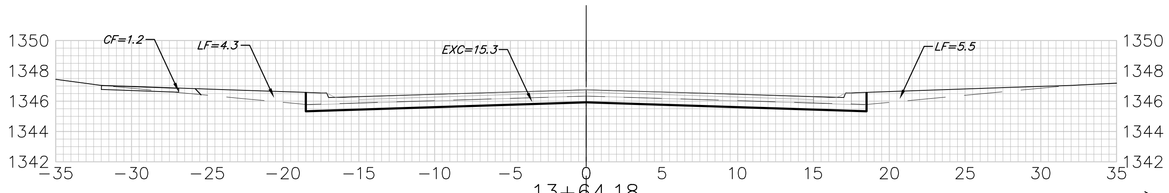
STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: DRAWN:
DATE: July 31, 2024

SHEET **44** OF **49**

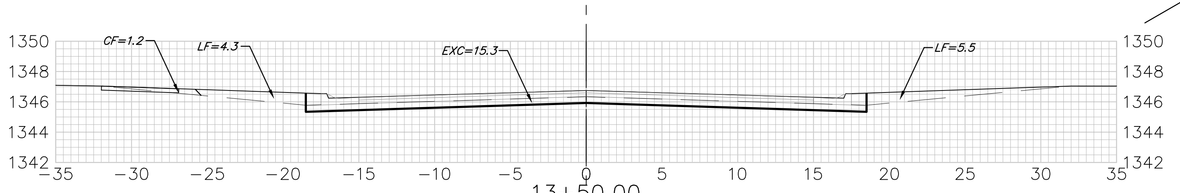
File: E:\Projects\Bridger At Central Addition(Albert)_\Engineering\Phase 1\STR_23-09-E602\Streets.dwg



13+64.18

14.18'

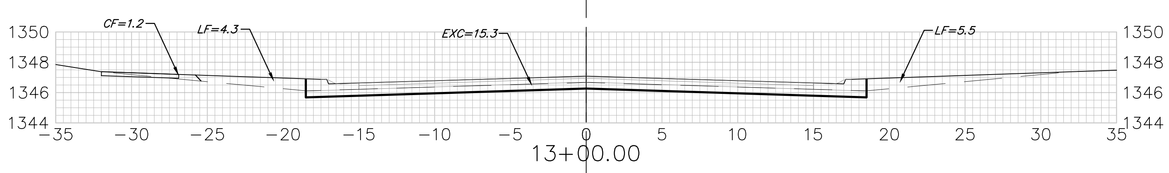
EXC = 8.0
LF = 5.2
CF = 0.6



13+50.00

50.00'

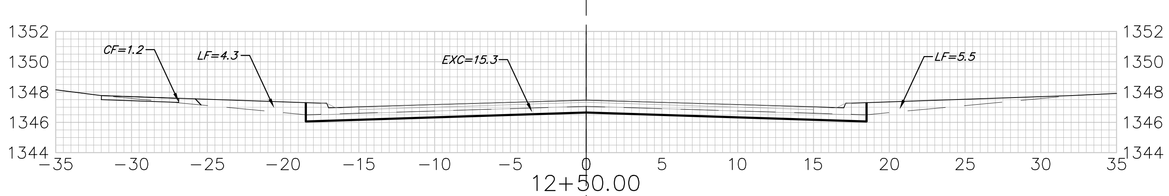
EXC = 28.3
LF = 18.1
CF = 2.2



13+00.00

50.00'

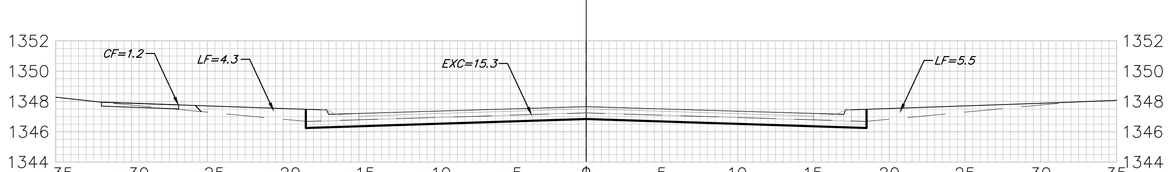
EXC = 28.3
LF = 18.1
CF = 2.2



12+50.00

24.48'

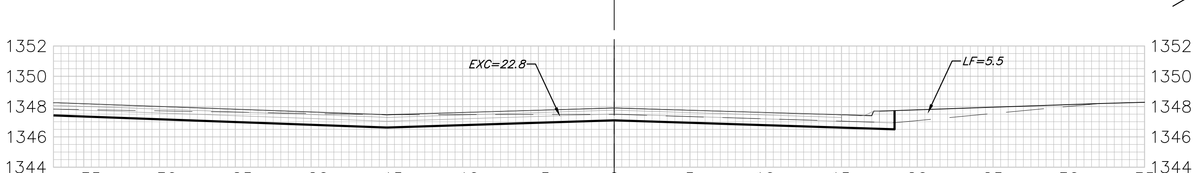
EXC = 13.9
LF = 8.9
CF = 1.1



12+25.52

36.65'

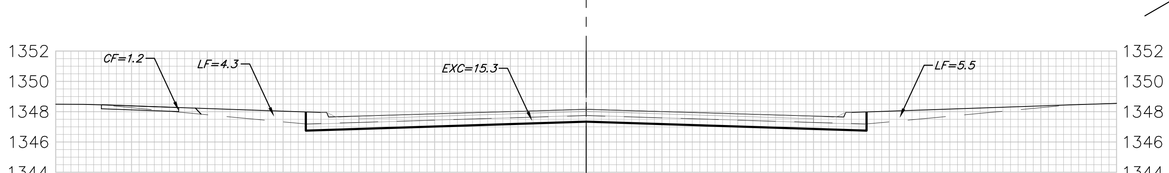
EXC = 25.9
LF = 10.4
CF = 0.8



11+88.87

37.35'

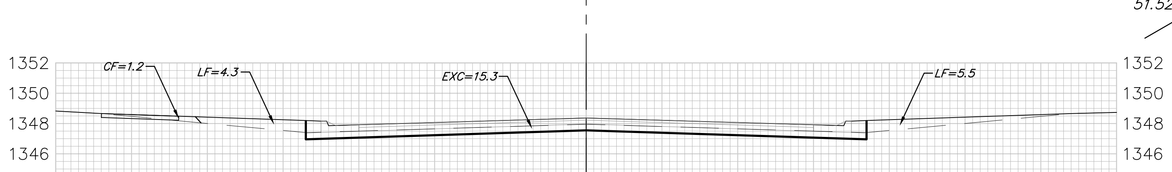
EXC = 26.4
LF = 10.6
CF = 0.8



11+51.52

51.52'

EXC = 29.2
LF = 18.7
CF = 2.3



11+00.00

WHEATLAND
℄

Sheet Totals
Excavation = 160.0 C.Y.
Loose Fill = 90.0 C.Y.
Compacted Fill = 10.0 C.Y.

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BRIDGER AT CENTRAL ADDITION - Ph. I

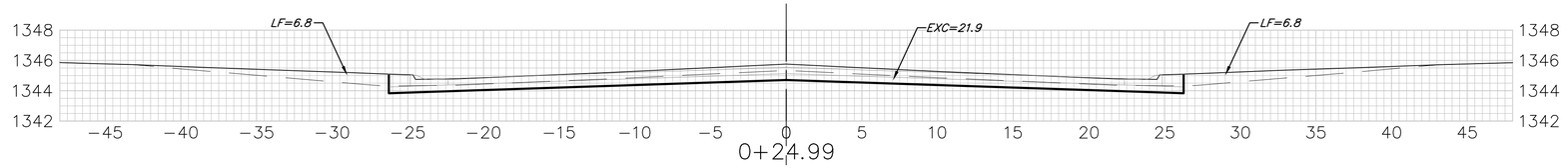
CROSS SECTIONS

STREET IMPROVEMENTS
PROJECT NUMBER: 23-09-602

DESIGN:
DRAWN:
DATE: July 31, 2024

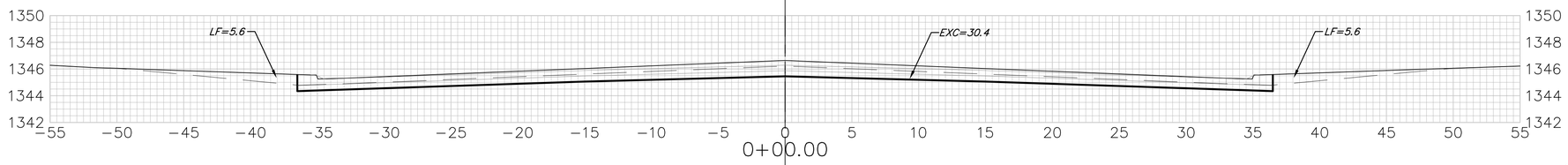
SHEET 45 OF 49

File: E:\Projects\Bridger At Central Addition(Albert)_\Engineering\Phase 1\STR_23-09-E602\Streets.dwg



0+24.99

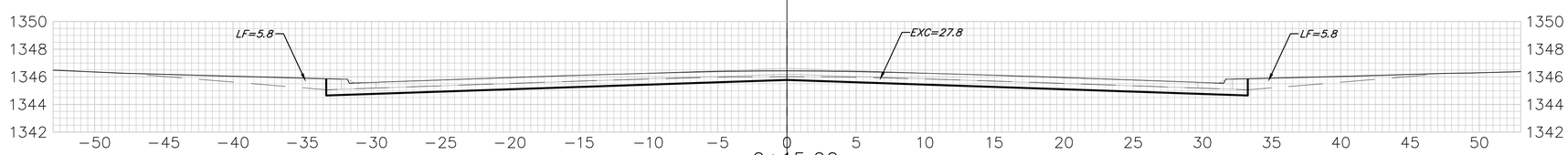
25.00'
EXC = 16.1
LF = 11.3
CF = 0.0



0+00.00

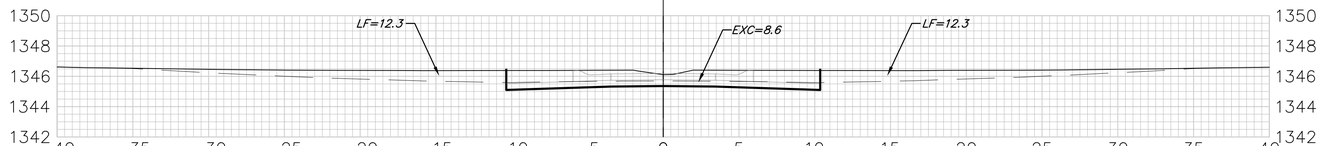
24.99'
EXC = 24.2
LF = 11.5
CF = 0.0

15.00'
EXC = 16.2
LF = 6.3
CF = 0.0



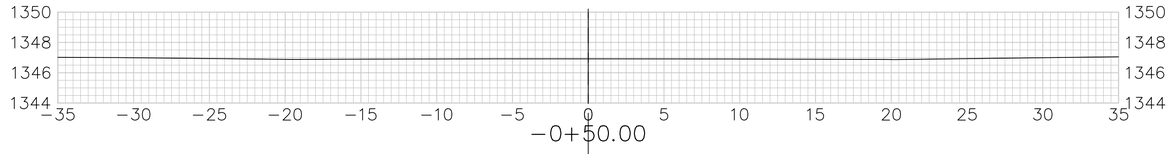
−0+15.00

20.00'
EXC = 13.5
LF = 13.4
CF = 0.0



−0+35.00

15.00'
EXC = 2.4
LF = 6.8
CF = 0.0



−0+50.00

WHEATLAND CT.
℄

Sheet Totals

Excavation =	72.4	C.Y.
Loose Fill =	49.3	C.Y.
Compacted Fill =	0.0	C.Y.

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BRIDGER AT CENTRAL ADDITION - Ph. I

CROSS SECTIONS

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: DRAWN:

DATE: May 9, 2024

SHEET 46 OF 49

File: E:\Projects\Bridger At Central Addition(Albert)_\Engineering\Phase 1\STR_23-09-E602\Streets.dwg

Sheet Totals
Excavation = 100.2 C.Y.
Loose Fill = 84.5 C.Y.
Compacted Fill = 0.0 C.Y.

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BRIDGER AT CENTRAL ADDITION - Ph. I

CROSS SECTIONS

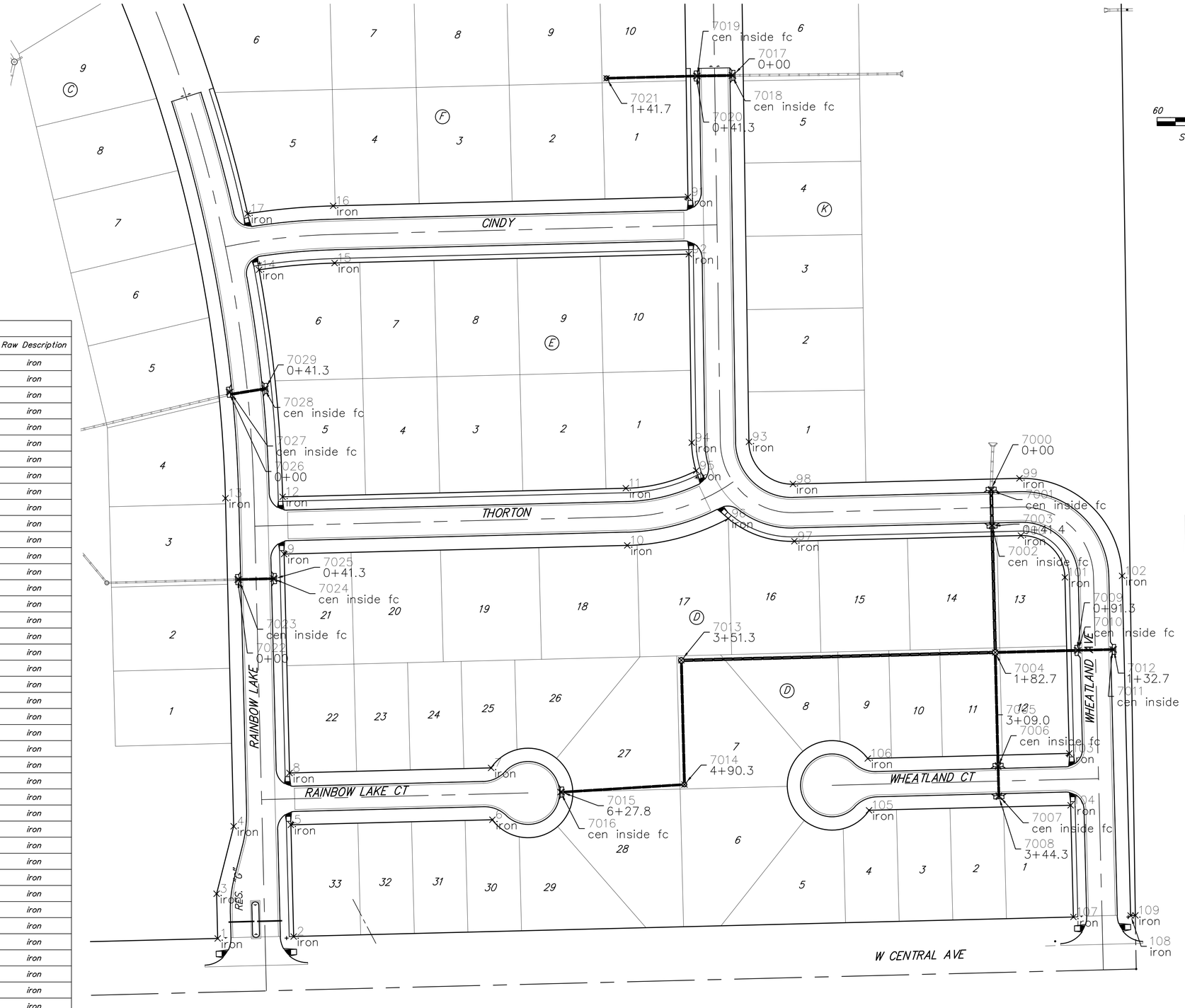
STREET IMPROVEMENTS

PROJECT NUMBER:
23-09-602

DESIGN: DRAWN:
DATE: May 9, 2024

SHEET **47** OF **49**

File: E:\Projects\Bridger At Central Addition(Albert) \Engineering\Phase 1\STR 23-09-E602\Streets.dwg



STORM WATER SEWER IMPROVEMENTS

Point Table			
Point #	Northing	Easting	Raw Description
7000	1688273.64	1604508.45	0+00
7001	1688272.14	1604508.49	cen inside fc
7002	1688233.74	1604509.45	cen inside fc
7003	1688232.24	1604509.49	0+41.4
7004	1688091.03	1604513.03	1+82.7
7005	1687964.74	1604516.20	3+09.0
7006	1687963.24	1604516.24	cen inside fc
7007	1687930.92	1604517.05	cen inside fc
7008	1687929.42	1604517.09	3+44.3
7009	1688093.32	1604604.34	0+91.3
7010	1688093.36	1604605.83	cen inside fc
7011	1688094.32	1604644.16	cen inside fc
7012	1688094.36	1604645.66	1+32.7
7013	1688082.22	1604161.86	3+51.3
7014	1687943.26	1604165.35	4+90.3
7015	1687934.82	1604028.13	6+27.8
7016	1687934.78	1604026.63	cen inside fc
7017	1688736.48	1604219.80	0+00
7018	1688736.46	1604218.30	cen inside fc
7019	1688735.86	1604179.98	cen inside fc
7020	1688735.84	1604178.48	0+41.3
7021	1688733.32	1604078.13	1+41.7
7022	1688172.57	1603665.48	0+00
7023	1688172.60	1603666.98	cen inside fc
7024	1688173.56	1603705.31	cen inside fc
7025	1688173.60	1603706.81	0+41.3
7026	1688382.15	1603655.74	0+00
7027	1688382.30	1603657.24	cen inside fc
7028	1688386.14	1603695.38	cen inside fc
7029	1688386.29	1603696.87	0+41.3

IRONS

Point Table			
Point #	Northing	Easting	Raw Description
1	1687771.11	1603643.22	iron
2	1687773.24	1603728.19	iron
3	1687821.09	1603641.96	iron
4	1687896.59	1603661.07	iron
5	1687898.20	1603725.05	iron
6	1687903.86	1603950.54	iron
7	1687961.84	1603949.08	iron
8	1687956.18	1603723.60	iron
9	1688201.10	1603717.45	iron
10	1688210.74	1604101.37	iron
11	1688274.72	1604099.75	iron
12	1688265.08	1603715.85	iron
13	1688263.48	1603651.87	iron
14	1688519.05	1603689.49	iron
15	1688526.63	1603773.98	iron
16	1688590.61	1603772.37	iron
17	1688581.82	1603676.68	iron
18	1688828.64	1603600.27	iron
19	1688849.33	1603718.42	iron
20	1688913.31	1603716.81	iron
21	1688887.76	1603575.34	iron
89	1688924.54	1604164.21	iron
90	1688860.55	1604165.21	iron
91	1688600.57	1604169.24	iron
92	1688536.57	1604170.24	iron
93	1688326.65	1604237.50	iron
94	1688325.66	1604173.51	iron
95	1688294.34	1604178.48	iron
96	1688240.88	1604214.37	iron
97	1688215.43	1604288.31	iron
98	1688279.41	1604286.70	iron
99	1688285.77	1604540.15	iron
100	1688221.79	1604541.76	iron
101	1688175.01	1604590.95	iron
102	1688176.62	1604654.93	iron
103	1687978.08	1604595.89	iron
104	1687920.09	1604597.35	iron
105	1687914.43	1604371.86	iron
106	1687972.42	1604370.41	iron
107	1687795.13	1604600.48	iron
108	1687796.74	1604664.46	iron
109	1687796.87	1604669.76	iron

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BRIDGER AT CENTRAL ADDITION - Ph. I

COORDINATE SHEET

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: DRAWN:

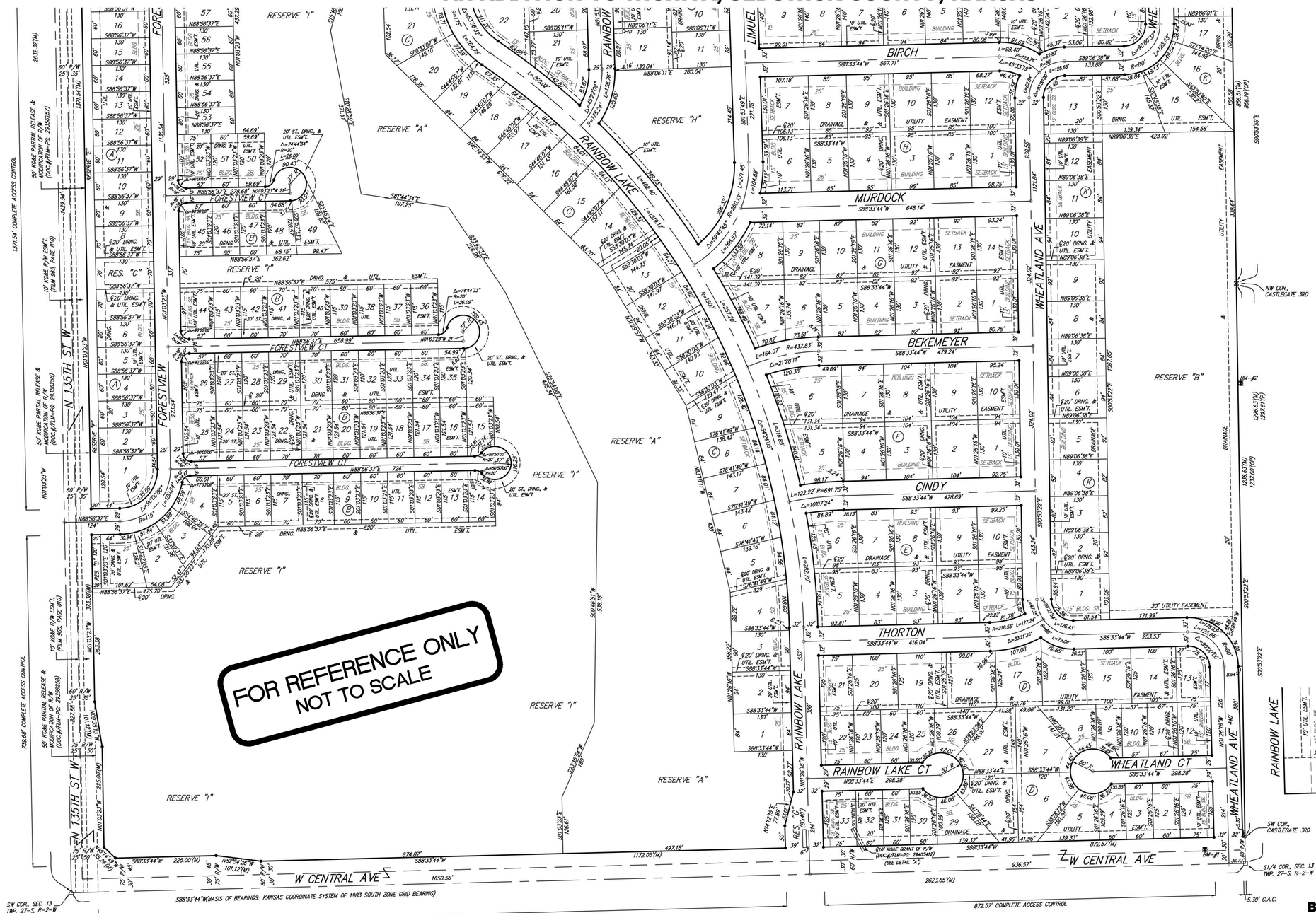
DATE: May 9, 2024

SHEET 48 OF 49

File: E:\Projects\Bridger At Central Addition(Albert)_Engineering\Phase 1\STR_23-09-E602\Streets.dwg

BRIDGER AT CENTRAL

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



0 100 200

Scale: 1" = 100'

(M) = MEASURED
(P) = PLATTED
(CM) = CALCULATED PER MEASURED INFO.
(CD) = CALCULATED PER DESCRIBED INFO.

● = #4 REBAR W/ "BAUGHMAN" CAP (SET)
○ = #4 REBAR W/ "BAUGHMAN" CAP (FOUND)
⊗ = #4 REBAR W/ "ARMSTRONG" CAP (FOUND)
Ø = #4 REBAR (FOUND)(ORIGIN UNKNOWN)
△ = 1/2" IRON PIPE (FOUND)(ORIGIN UNKNOWN)
□ = 3/4" IRON PIPE (FOUND)(ORIGIN UNKNOWN)
■ = BENCHMARK

BENCHMARK:

BM-#1:
SQUARE CUT NORTHEAST CORNER OF CURB INLET, NORTH SIDE OF W CENTRAL AVE, 27.5'± S. & 90.2'± W. OF SW COR., LOT 1, BLOCK A, CASTLEGATE 3RD.
ELEV. = 1342.00 NAVD88

BM-#2:
SQUARE CUT ON TOP OF RCP PIPE, 223.5'± S. & 6.4'± E. OF NW COR., LOT 7, BLOCK B, CASTLEGATE 3RD.
ELEV. = 1341.75 NAVD88

BM-#3:
CITY OF WICHITA BENCHMARK DISC, EAST SIDE OF N 135TH ST W, 13.2'± S. & 37.7'± E. OF W1/4 COR., SEC. 13, TWP. 27-S, R-2-W.
ELEV. = 1347.48 NAVD88

NOTE:
ALL LOTS WITHIN BRIDGER AT CENTRAL SHALL HAVE A 5 FOOT MINIMUM INTERIOR SIDEYARD SETBACK.

MINIMUM BUILDING PAD ELEVATIONS FOR LOWEST OPENING TO THE STRUCTURES

LOT	BLOCK	ELEVATION NAVD88
1–15	B	1350.0
35–64	B	1350.0
1–25	C	1350.0
27–30	C	1350.0
11, 12	J	1353.5
1–15	K	1349.0

Note:
Existing Blanket Phillips Pipe Line Company Easement for Telephone and Telegraph Lines over the Southwest Quarter of Sec. 13, Twp. 27–S, R–2–W, (Misc. Book 98, Page 132), now assigned to Phillips 66 Gold Line System, LLC. (DOC.#/FILM–PG: 29464531).

DRAINAGE PLAN NOTE:
A master drainage plan has been developed for this plat. All drainage easements, rights–of–way, and reserves shall remain at established grades (unless modified with the approval of the City Engineer) and shall be unobstructed to allow for the conveyance of stormwater in accordance with the Stormwater Manual. The maintenance of all drainageways and drainage facilities in backyard drainage easements and reserves shall be the responsibility of the property owner, and shall be enforced by the Homeowners' Association and be provided for in the Homeowners' Association covenants.

BRIDGER AT CENTRAL

PAGE 2 OF 2

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

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BRIDGER AT CENTRAL ADDITION - Ph. I

COPY OF PLAT

STREET IMPROVEMENTS

PROJECT NUMBER: 23-09-602

DESIGN: DRAWN:

DATE: May 9, 2024

SHEET 49 OF 49

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