

GENERAL NOTES:

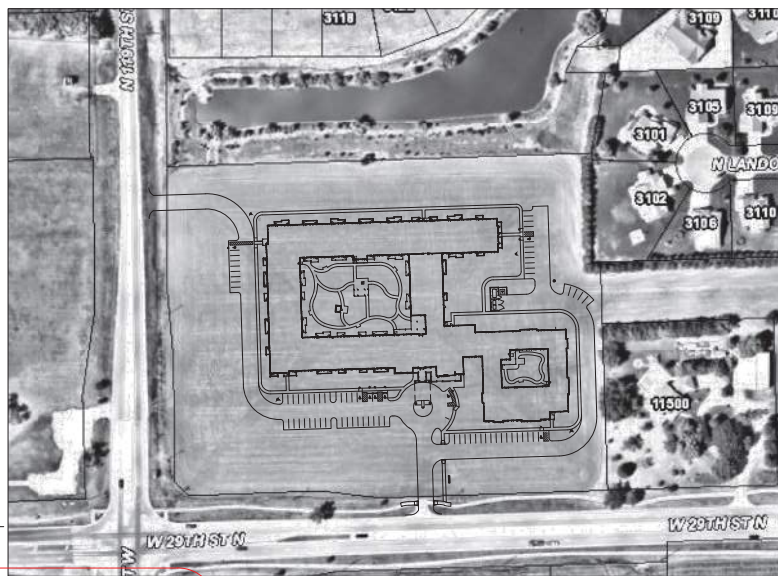
- The Contractor shall comply with all applicable safety regulations. All construction shall be completed following current City Standard Specifications and Special Provisions.
- Contractor will be required to provide notice to utility companies of minimum of seventy-two (72) hours prior to any excavation, as follows:
Kansas One-Call 687-2470
The Contractor must notify the following in case of an emergency:
ATTN: 1-800-248-8684
Block Hills Energy 1-800-694-8989
City of Wichita Water & Sewer 1-316-219-8921
City of Wichita Storm Water 1-316-268-4990
City of Wichita Traffic 1-316-268-4034
Cox Communications 1-888-249-3530
Kansas Gas Service 1-888-482-4990
Evergy 1-800-544-4857
- 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.
- 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.
- 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.
- 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.
- 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.
- The Engineering Division shall field locate water valves one time during construction when requested by the Contractor. It shall be the Contractor's responsibility to preserve such field locations during the construction process. Water valves, valve boxes or fire hydrants damaged during construction shall be repaired by Contractor at his own expense. Valve boxes and water meters within the project limits shall be adjusted to match final grades by the contractor.
- The Contractor shall notify the inspecting engineer and Dawnita Reinhardt at 316-268-4574 with the City of Wichita with the anticipated construction start date and notify them of project completion. Staking and inspection for this project will be the responsibility of the Contractor.
- If traffic will be impacted by construction, a traffic control plan must be submitted and approved by the City Traffic Engineer. Mike Armour at traffic@cityofwichita.gov before construction can begin. The Contractor shall be responsible for all traffic control measures to facilitate construction. All construction zone markings and signage shall conform to the latest version of the Manual on Uniform Traffic Control Devices (MUTCD) as published by the US Dept. of Transportation, Federal Highway Administration. All costs associated with construction markings and signage shall be the Contractor's responsibility.
- All elevations shown are NAVD 88.
- All areas disturbed during construction that will not be under proposed pavement shall be restored to match existing conditions.
- Any sidewalk, drive approach, curb, or street pavement removed to construct project must have a pavement cut permit and be replaced by the City contractor. Permits can be obtained by calling 316-268-6501 or 316-268-4863.
- City maintenance of storm sewer ends at the last structure in the easement or right-of-way.
- A portion of excess excavated material shall be mounded around manholes which extend more than one (1) foot above the existing ground. Such mound shall be constructed with new development a six (6) foot diameter flat top with 4 to 1 side slopes down to the original ground. The elevation of the flat top of the mound shall be 0.4 foot below the top of the manhole.
- Geotechnical report available upon request.
- Contractor shall limit the extent of trench openings overnight and weekends to less than 50 feet.
- The inspecting firm shall submit to the City Stormwater Maintenance Division a digital copy of the CCTV inspection of the conduits and structures following construction. The digital file formation shall be compatible with the City input template. A copy of the template is available upon request at 316-268-4090.
- The Contractor shall protect from damage and support existing utilities through construction as approved by the utility owner and the Engineer at the contractor's expense.

STORM SEWER IMPROVEMENTS

TO SERVE 11820 W. 29th St N

CEDARHURST SENIOR LIVING OF WICHITA

CITY OF WICHITA, KANSAS
GARY JANZEN, P.E. CITY ENGINEER
CITY OF WICHITA PROJECT NO. PLR 2022-000786 PPD (56030970)

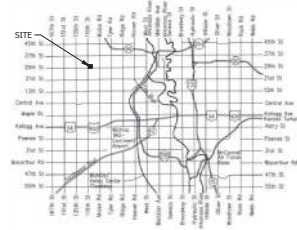


AS BUILT THE SW 1/4 OF SW 1/4 OF SW 1/4 SECTION 41, T 26 S, R 01 W

Contractor:
**McCullough
Excavation**
3-12-24

Project Inspector:
Eric Miner
KEMILLER
ENGINEERING PA
117 E. Lewis, Wichita, KS 67202
PHONE: 316-268-4574
FAX: 316-268-4574
ELEVATION = 1370.91 (NAVD88)
1370.44 (NGVD29)

PROJECT LOCATION MAP
SCALE: 1" = 100'



VICINITY MAP

SHEET INDEX

- CVR COVER SHEET
- C1.0 - C1.1 SITE LAYOUT PLAN
- C2.0 - C2.6 PLAN AND PROFILE
- C3.0 - C3.4 GRADING PLAN
- C4.0 - C4.2 EROSION AND SEDIMENT CONTROL PLANS
- C5.0 SITE DETAILS
- C6.0 - C6.4 CITY STANDARD DETAILS
- SITE SURVEY (FOR REFERENCE)

Stormwater Certification:

New Development or Redevelopment (Circle One)

Stormwater Permit # _____

NOI Permit # S-AR04-1792

These construction plans were prepared in accordance with the current Stormwater management Regulations as set forth in the City of Wichita's Stormwater Management Ordinance 16.32 and the policies/guidelines presented in the Wichita/Sedgewick County Stormwater Manual.

Site Area (Acres) = 9.53

Disturbance Area (Acres) = 9.50

Water Quality Treatment: Off-site BMP Program

Downstream Channel Protection: N/A

Detention: Provided on-site

The BMP used for this development is Off-site BMP Program

**APPROVED AS NOTED
BY WICHITA PUBLIC WORKS ENGINEERING
AND STORMWATER DIVISION**

Engineering *Sharon Mallory* 11/22/2022
Signature Name Date

Stormwater *Joe Hinkle* 11/22/2022
Signature Name Date

NOTE TO CONTRACTORS

Public Property:
Inspection and testing for the waterline is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection is to be in accordance with the City of Wichita standard construction engineering practices and certified by a Professional Engineer Licensed in the state of Kansas. No work shall be performed in dedicated easements or public right-of-way by the Contractor without such inspection nor shall any work be commenced without written authorization by City Engineering. All Construction and Materials shall comply with the City or Wichita Specifications and Standards and Special Provision (on file and available at Wichita.gov).

An approved copy of these plans signed by City staff are required on-site.

NO.	DATE	DESCRIPTION
1	11/22/2022	CONTRACT START
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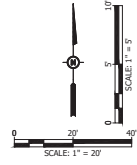
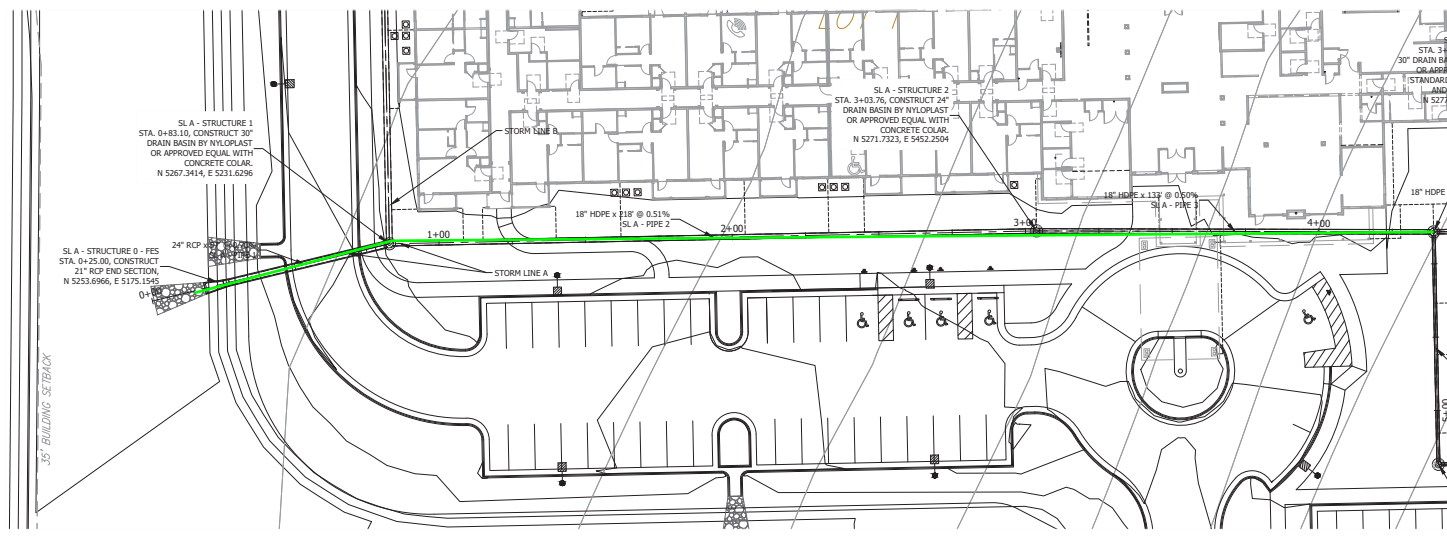
Bartlett & West
544 COLUMBIA DRIVE, LANSING, KS 66106
www.bartlettandwest.com

**STORM SEWER IMPROVEMENTS
COVER SHEET**
CEDARHURST WICHITA
W 29th ST N & N 118th ST W, WICHITA, KS

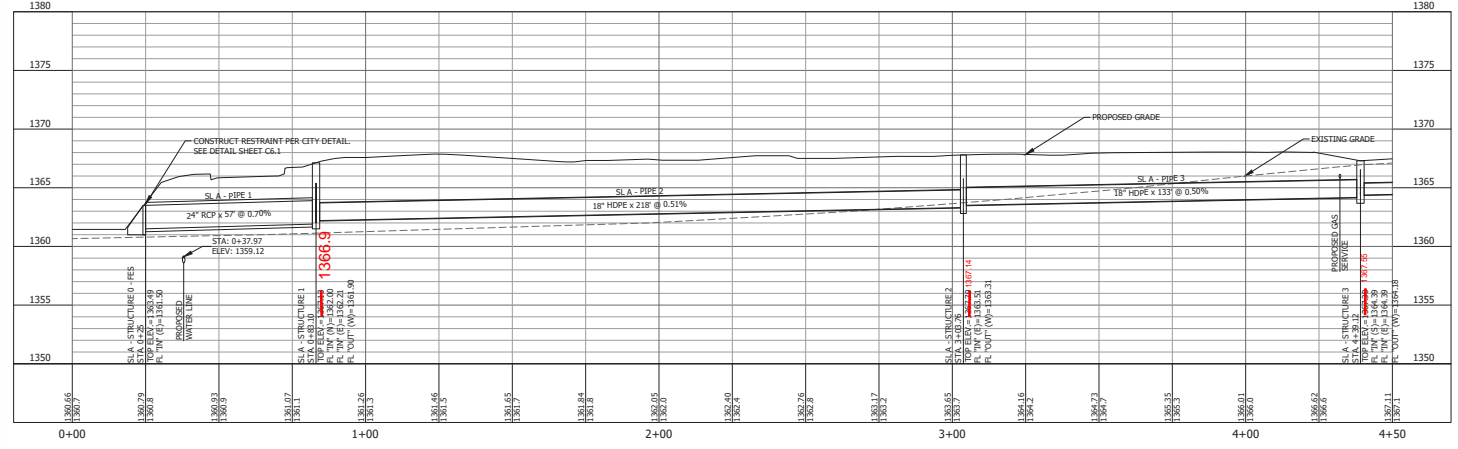
CITY REVIEW SET



DESIGNED BY: EDM
DRAWN BY: EDM
APPROVED BY: ACS, CRC
REVISION PRICE: 21167.001
PROJECT PRICE:
SCALE:
DATE: AS NOTED
DATE: 11/09/22
DRAWING NO:
CVR



STORM LINE A: STA 0+00 - 4+50



BACKFILL NOTE:
CONTRACTOR SHALL BACKFILL ALL PIPE FOLLOWING THE SPECIFICATIONS OF THE MANUFACTURER.

AS BUILTS

KEMILLER ENGINEERING PA

117 E. Lewis,
Wichita, KS 67202 (316)264-0242

NO.	DATE	DESCRIPTION
1	11/09/23	CONSTRUCTION SET

Bartlett & West

844 COLUMBIA DRIVE, LAWRENCE, KS 66044
www.bartlettandwest.com

**STORM SEWER IMPROVEMENTS
PLAN & PROFILE
STORM LINE A: STA 0+00 - 4+50
CEDARHURST WICHITA**

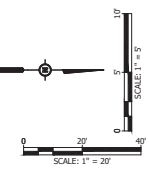
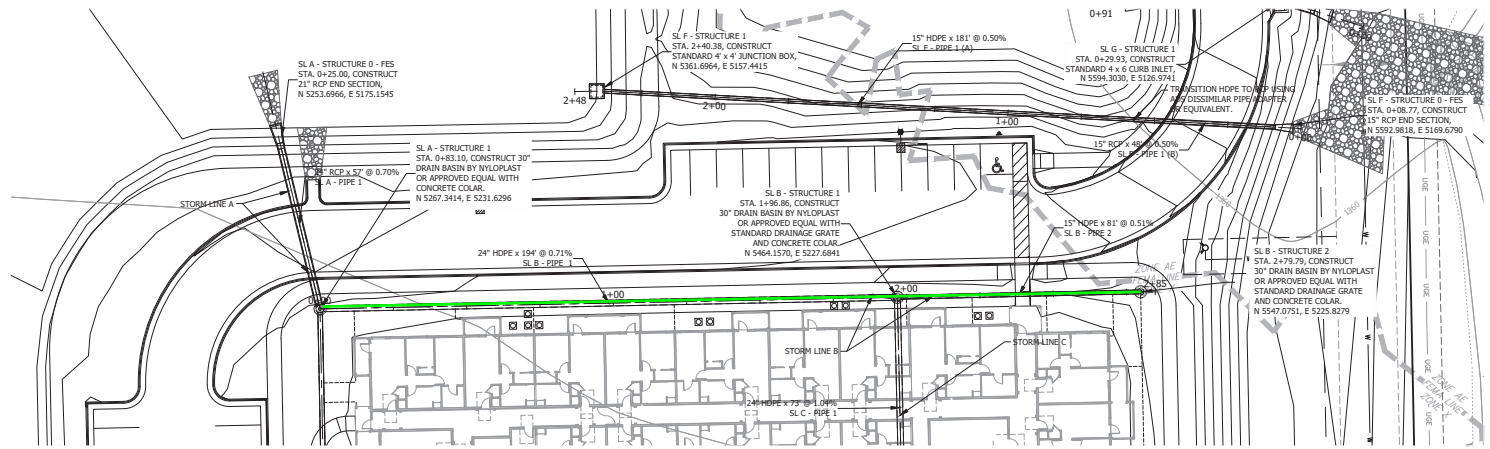
W 29th ST N & N 119th ST W, WICHITA, KS

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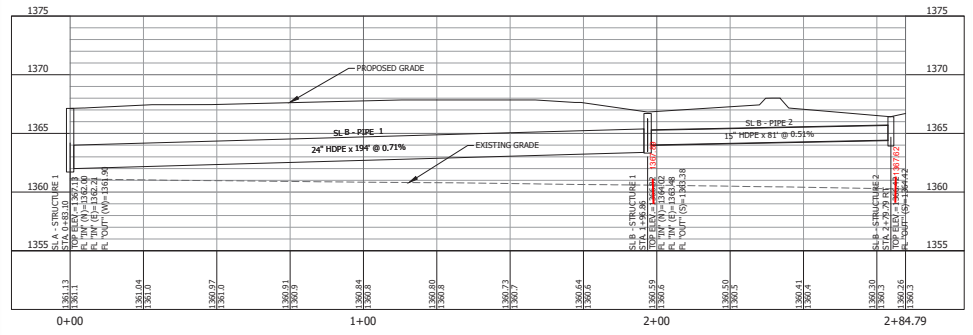


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DRAWN BY:	EDM
APPROVED BY:	ACS, CRC
REVISION NO.:	21167.001
SHEET NO.:	
SCALE:	AS NOTED
DATE:	11/09/23
DRAWING NO.:	C2.0
SHEET NO.:	04 of 26

Drawn: 11/09/23, 11:07:11 AM, ACS, CRC
Checked: 11/09/23, 11:07:11 AM, ACS, CRC
Scale: 1" = 20'
Date: 11/09/23
Sheet: 04 of 26




STORM LINE B



BACKFILL NOTE:
CONTRACTOR SHALL BACKFILL ALL PIPE FOLLOWING
THE SPECIFICATIONS OF THE MANUFACTURER.

AS BUILTS



117 E. Lewis,
Wichita, KS 67202 (316)264-0242

NO.	DATE	REVISION
1	11/19/23	CONSTRUCTION SET

Bartlett & West

544 COLUMBIA DRIVE, LANSING, MI 48106
www.bartlettandwest.com

**STORM SEWER IMPROVEMENTS
PLAN & PROFILE
STORM LINE B
CEDARHURST WICHITA**

W 29th ST N & N 119th ST W, WICHITA, KS

CONSTRUCTION SET



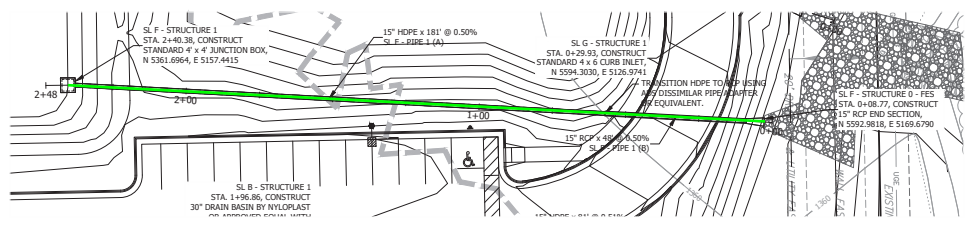
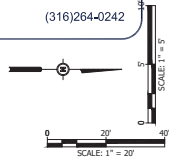
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APPROVED BY:	ACS, CRC
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DATE:	11/19/23
DRAWING NO.:	C2.2
SHEET NO.:	06 of 26

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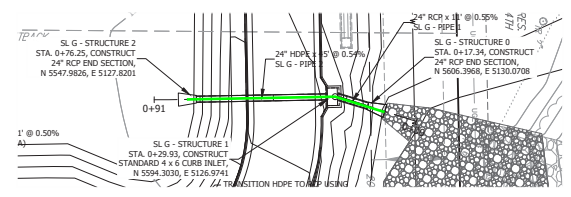
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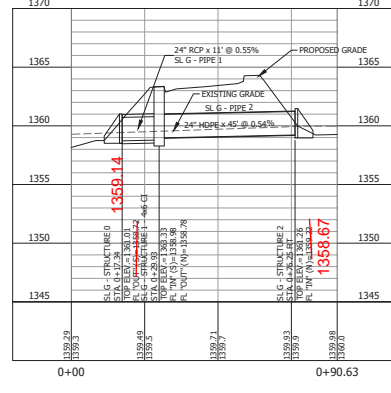
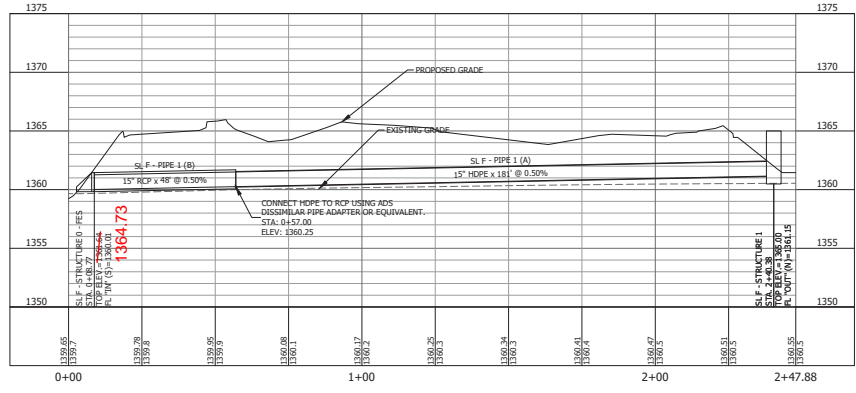
KEMILLER ENGINEERING PA
117 E. Lewis,
Wichita, KS 67202 (316)264-0242



STORM LINE F



STORM LINE G



BACKFILL NOTE:
CONTRACTOR SHALL BACKFILL ALL PIPE FOLLOWING THE SPECIFICATIONS OF THE MANUFACTURER.

NO.	DATE	DESCRIPTION
1	11/09/23	CONSTRUCTION SET

Bartlett & West

544 COLUMBIA DRIVE, LAWRENCE, KS 66044
www.bartlettandwest.com

**STORM SEWER IMPROVEMENTS
PLAN & PROFILE
STORM LINE F & G
CEDARHURST WICHITA**

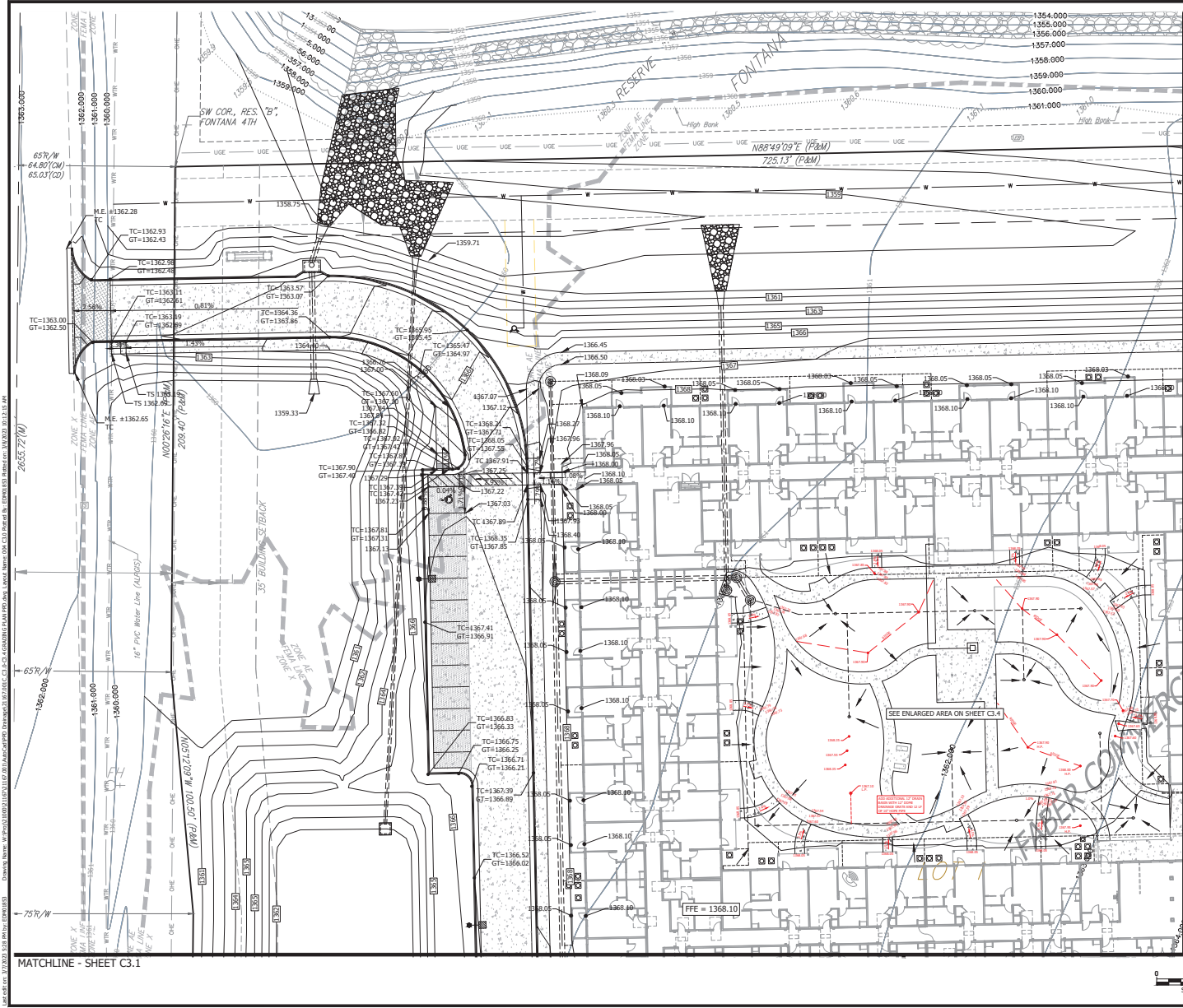
W 29th ST N & N 119th ST W, WICHITA, KS

CONSTRUCTION SET



DESIGNED BY: EDM
DRAWN BY: EDM
APPROVED BY: ACS, CRC
REVISION NO.: 21167.001
SHEET NO.:
SCALE: AS NOTED
DATE: 11/09/23
DRAWING NO.:
C2.5
SHEET NO.: 09 of 26

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GRADING NOTES:

1. ALL QUANTITIES SHALL BE CALCULATED BY THE CONTRACTOR AND INCLUDE ALL SUBSIDIARY ITEMS NECESSARY TO COMPLETE THE WORK.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED FOR THE SITE GRADING.
3. THE CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT (IF APPLICABLE) AND FAMILIARIZE HIMSELF WITH ALL SOIL CONDITIONS AND RECOMMENDATIONS.
4. ALL AREAS DISTURBED DURING THE PROGRESS OF THIS PROJECT SHALL BE FINISHED WITH 6" (MIN) OF TOPSOIL AND GRADE RESTORED TO EXISTING CONDITIONS PRIOR TO DISTURBANCE.
5. ALL AREAS SHALL SLOPE AWAY FROM PROPOSED BUILDING.
6. ALL GROUND SURFACES SHALL VARY UNIFORMLY FROM INDICATED ELEVATIONS.
7. GRADING PLAN REFLECTS TOP OF TURF OR PAVEMENT ELEVATION UNLESS OTHERWISE NOTED.
8. CONTRACTOR SHALL PROVIDE AND MAINTAIN POSITIVE DRAINAGE DURING ALL PHASES OF CONSTRUCTION.
9. EXISTING UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION WORK. ANY DAMAGE TO EXISTING STRUCTURES, UTILITIES, FENCES, AND/OR INCLEMENTALS NOT DESIGNATED FOR REMOVAL SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
10. ALL PROPOSED SIDEWALKS SHALL HAVE A MINIMUM OF 1% CROSS SLOPE UNLESS NOTED OTHERWISE.
11. THE CONTRACTOR SHALL NOT PERFORM FINAL GRADING OR SEEDING UNTIL ALL UTILITY INSTALLATIONS ARE COMPLETE.
12. NO SLOPES ON THIS SITE SHALL EXCEED 3 TO 1.
13. AT ALL BUILDING EXITS ENSURE MINIMUM OF 5' LANDING DEPTH (IN DIRECTION OF TRAVEL) AT 2% MAXIMUM SLOPE. NO SIDEWALK IS TO EXCEED 5% SLOPE UNLESS IT IS AN ADA COMPLIANT RAMP.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND PROTECTING ALL SURVEY STAKES, CONSTRUCTION STAKES, CONTROL POINTS, REFERENCE POINTS, BENCH MARKS, PROPERTY AND OFFSET CORNERS, AND ALL OTHER ESSENTIAL HORIZONTAL AND VERTICAL SURVEY CONTROL POINTS UNTIL CONSTRUCTION ACTIVITY IS COMPLETED. THE CONTRACTOR SHALL PAY FOR RE-STAKING ANY SURVEY STAKES THAT ARE DESTROYED.

GRADING LEGEND:

- ME = MATCH EXISTING
- LP = LOW POINT
- HP = HIGH POINT
- TC = TOP OF CURB
- GT = GUTTER
- TP = TOP OF PAVEMENT
- TS = TOP OF SIDEWALK



NO.	DATE	DESCRIPTION	BY
1	11/09/23	CONSTRUCTION SET	EDM

Bartlett & West
 844 COLUMBIA DRIVE, LINCOLN SQUARE
 WICHITA, KS 67203
 WWW.BARTLETTWEST.COM

**STORM SEWER IMPROVEMENTS
 GRADING PLAN**
 CEDARHURST WICHITA
 W 29th ST N & N 119th ST, WICHITA, KS

CONSTRUCTION SET



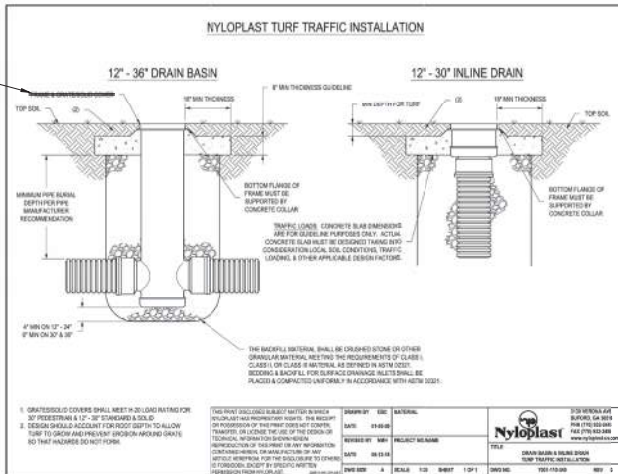
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SCALE:	AS NOTED
DATE:	11/09/23
DRAWING NO.:	C3.0
SHEET NO.:	11 of 26

MATCHLINE - SHEET C3.1

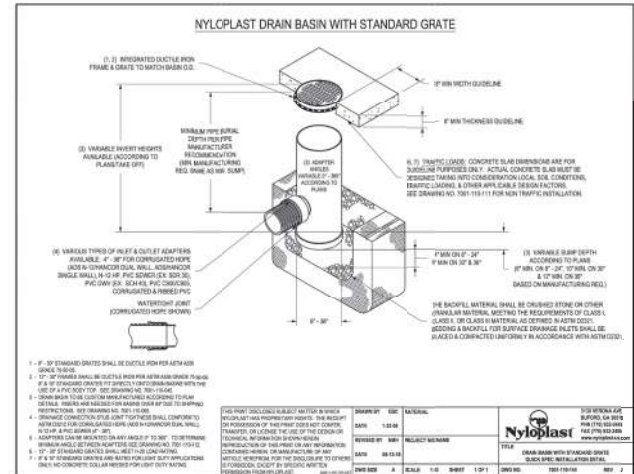
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CONTRACTOR SHALL INSTALL 12" DOME GRATE PER ADS, NYLOPLAST OR APPROVED EQUAL.



12" DRAIN BASIN



24" AND 36" RISER PIPE

NO.	DATE	DESCRIPTION
1	11/09/23	CONSTRUCTION SET

Bartlett & West

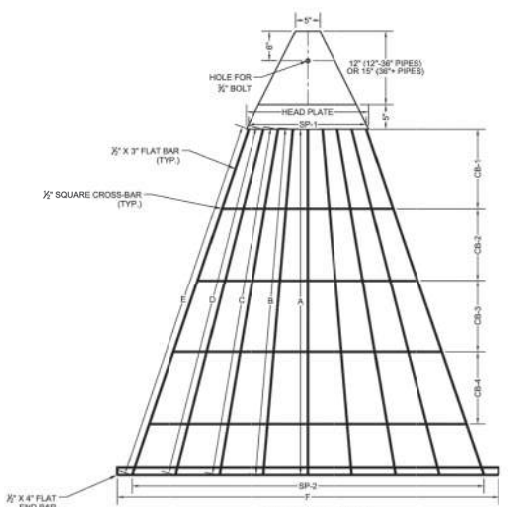
844 COLUMBIA DRIVE, LAWRENCE, KS 66044
www.bartlettandwest.com

STORM SEWER IMPROVEMENTS
SITE DETAILS
 CEDARHURST WICHITA
 W 29th ST N & N 118th ST W, WICHITA, KS

CONSTRUCTION SET

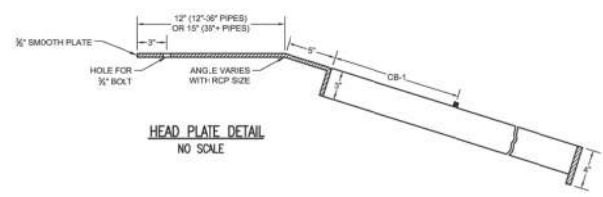


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PROJECT NO.:	21167.001
DATE:	AS NOTED
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SHEET NO.:	C5.0
	19 of 26

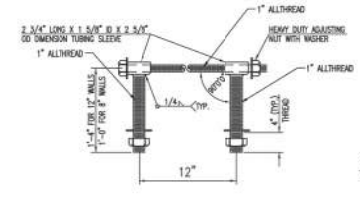


END GRATE DETAIL
NO SCALE
NOTE: GRATE TO BE USED AS DIRECTED BY THE CITY OF WICHITA.

GRATE DIMENSIONS													
PIPE SIZE	HEAD PLATE	A	B	C	D	E	F	CB-1	CB-2	CB-3	CB-4	SP-1	SP-2
12"	13"	19 1/4"	19 3/4"	-	-	-	27"	10 3/4"	-	-	-	3@4"	3@6"
15"	13"	23 1/2"	25 1/4"	-	-	-	34"	10 3/4"	-	-	-	3@4"	3@6"
18"	13"	25"	26 3/4"	-	-	-	40"	12 3/4"	-	-	-	3@4"	3@9"
24"	17"	41 1/2"	42 3/4"	4 3/4"	-	-	53"	2"	15"	-	-	4@4"	4@9"
30"	19"	51 1/2"	52 3/4"	5 3/4"	-	-	65"	15 1/4"	11 3/4"	12"	-	2@3" + 3@4"	5@9"
36"	21"	60 1/2"	61 3/4"	6 2 1/2"	-	-	78"	18 3/4"	14 3/4"	16"	-	2@2" + 4@4"	6@9"
42"	22"	65 3/4"	66 3/4"	6 7 3/4"	6 8 3/4"	-	86"	13 3/4"	12 3/4"	13"	11 3/4"	7@3"	7@9"
48"	25"	70 3/4"	71"	7 1 3/4"	7 3"	7 4 1/2"	90"	15 3/4"	14 3/4"	14 3/4"	14 3/4"	8@3"	8@9"
54"	26"	71 3/4"	73"	7 4 3/4"	7 4 3/4"	7 6 3/4"	96"	6 3/4"	20 3/4"	17 3/4"	15 3/4"	4@2 3/4" + 5@3"	9@9"
60"	28"	81 3/4"	81 3/4"	8 2 3/4"	8 4 1/2"	8 6 3/4"	102"	2"	12"	11 1/2"	13"	2@2" + 8@3"	10@9"

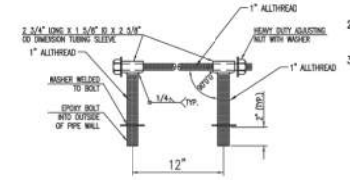


HEAD PLATE DETAIL
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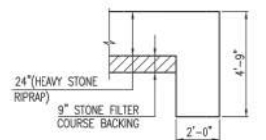
HEAVY DUTY (H.D.) COUPLER (>36")
NO SCALE

- NOTES
- BOLTS TO BE A-36 1/2" DIAMETER.
 - BOLTS, NUTS, WASHERS AND SLEEVES TO BE ZINC PLATED.
 - WASHERS TO BE 3 1/2" O.D. X 7 GAUGE.
 - SHIP WITH NUTS AND WASHERS PLACED ON BOLTS.



HEAVY DUTY (H.D.) COUPLER (<30")
NO SCALE

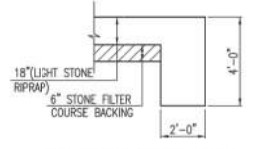
- NOTES
- BOLTS TO BE A-36 1/2" DIAMETER.
 - BOLTS, NUTS, WASHERS AND SLEEVES TO BE ZINC PLATED.
 - WASHERS TO BE 3 1/2" O.D. X 7 GAUGE.
 - SHIP WITH NUTS AND WASHERS PLACED ON BOLTS.



TYPICAL SECTION THRU TOEWALL
NO SCALE

- NOTES
- ALL RIPRAP FOR THIS PROJECT SHALL BE NATURAL STONE, NEITHER BROKEN CONCRETE, FABRIC ENVELOPE, NOR PREMIXED DRY PACKAGED CONCRETE BAG ALTERNATES WILL BE ALLOWED, UNLESS INDICATED OTHERWISE.
 - TOEWALLS SHALL BE INSTALLED ALONG ALL UNPROTECTED EDGES OF STONE RIPRAP.
 - GROUTING OF THE SURFACE OF THE RIPRAP SHALL NOT BE PERFORMED, UNLESS INDICATED OTHERWISE. GROUTING OF THE TOEWALLS SHALL BE PERFORMED PER CITY SPECIFICATIONS.

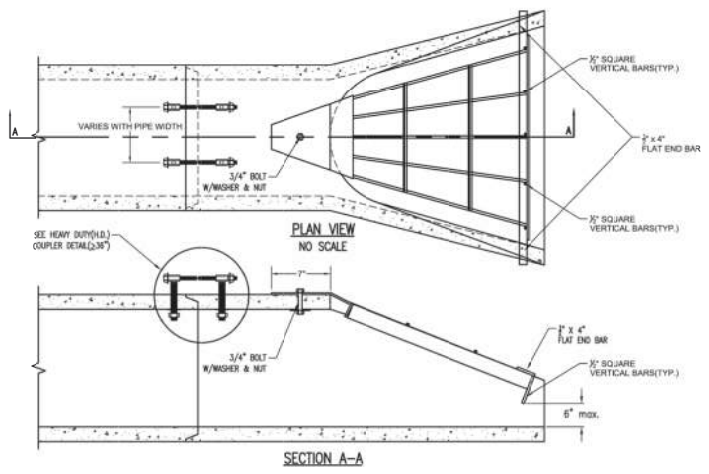
HEAVY STONE RIPRAP DETAILS



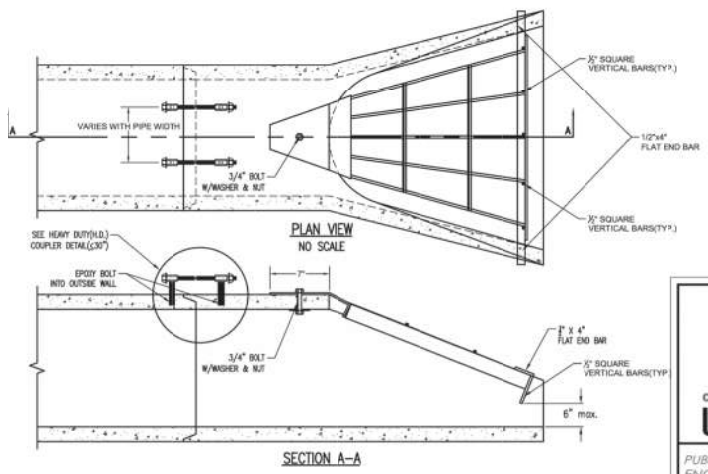
TYPICAL SECTION THRU TOEWALL
NO SCALE

- NOTES
- ALL RIPRAP FOR THIS PROJECT SHALL BE NATURAL STONE, NEITHER BROKEN CONCRETE, FABRIC ENVELOPE, NOR PREMIXED DRY PACKAGED CONCRETE BAG ALTERNATES WILL BE ALLOWED, UNLESS INDICATED OTHERWISE.
 - TOEWALLS SHALL BE INSTALLED ALONG ALL UNPROTECTED EDGES OF STONE RIPRAP.
 - GROUTING OF THE SURFACE OF THE RIPRAP SHALL NOT BE PERFORMED, UNLESS INDICATED OTHERWISE. GROUTING OF THE TOEWALLS SHALL BE PERFORMED PER CITY SPECIFICATIONS.

LIGHT STONE RIPRAP DETAILS



SECTION A-A



SECTION A-A

END SECTION, PIPE RESTRAINT COUPLER & END GRATE

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	DCA NUMBER	DATE
		01/2015
CITY ENGINEER'S OFFICE		DESIGN
CITY HALL - SEVENTH FLOOR		DRAWN
455 NORTH MAIN STREET		
WICHITA, KANSAS 67202-1620		
(316) 268-4501		

SHEET
C6.1
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