City of Wichita

CHENEY TRANSMISSION LINE IMPROVEMENTS

Wichita, Kansas

GARY JANZEN, P.E. , CITY ENGINEER

Project No. 448-90768

OCA 636272

CITY OF WICHITA

CONFORMING TO CONSTRUCTION RECORDS

FEBRUARY 2019

BMCD PROJECT No. 97687

Know what's **below.**
Call 811 before you dig.

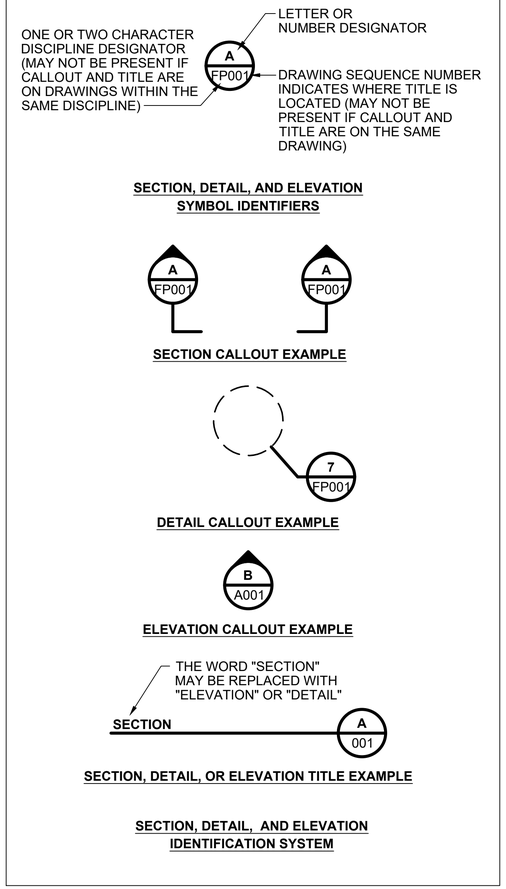
no.	date	by	ckd	description
0	11/8/17	CAM	LJK	ISSUED FOR BID
	2/5/19	CAM	LJK	**CONFORMING TO CONSTRUCTION RECORDS**

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. 000165

Z:\CLIENTS\WTR\WICHITAKS\97687_CHENEYPIPELINE\DESIGN\CADD_COMMON\97687_COVER.DWG 11/9/2017 10:17 AM BDFIFIELD

CITY OF WICHITA

Conforming to Construction Records Drawings



GENERAL DRAWINGS

DWG. NO.	TITLE
G001	COVER SHEET
G002	INDEX SHEET
G003	TRANSMISSION MAIN PLAN

CIVIL DRAWINGS

DWG. NO.	TITLE
C001	GENERAL CIVIL

ARCHITECTURAL DRAWINGS

DWG. NO.	TITLE
A001	FLOOR PLAN
A002	SECTION AND DETAILS

STRUCTURAL DRAWINGS

1

DWG. NO.	TITLE
S001	VAULT TOP SLAB MODIFICATIONS

PROCESS DRAWINGS

DWG. NO.	TITLE
D001	EXISTING CONDITIONS
D002	INTERIOR MODIFICATIONS
D003	DRAIN VAULT MODIFICATIONS 2

BID ALTERNATES

PROCESS DRAWINGS

DWG. NO.	TITLE
BA-D001	VAULT REPLACEMENT INTERIOR MODIFICATIONS

STRUCTURAL DRAWINGS

DWG. NO.	TITLE
BA-S001	LEGEND AND ABBREVIATIONS
BA-S002	VAULT REPLACEMENT PLANS, SECTIONS, AND DETAILS

2 REFERENCE DRAWINGS

DUDLEY WILLIAMS AND ASSOCIATES, PA

DWG. NO.	TITLE
RS1	VAULTS 14, 19, AND 21 REPLACEMENT
RS2	VAULTS 14, 19, AND 21 REPLACEMENT

GENERAL NOTES

1. ALL WORK SHALL BE COORDINATED WITH OWNER A MINIMUM OF FIVE (5) DAYS PRIOR TO WORK.
2. CONTRACTOR SHALL SUBMIT A DETAILED WORK PLAN FOR REVIEW BY OWNER AND ENGINEER A MINIMUM OF FIVE (5) DAYS PRIOR TO WORK.
3. WORK SHALL BE LIMITED TO 12-HOUR INCREMENTS, LIMITED TO THE HOURS OF 9:00 AM THROUGH 9:00 PM.
4. IF PERFORMED BETWEEN THE DATES OF DECEMBER 15TH THROUGH FEBRUARY 15TH, VAULTS SHALL BE INSULATED PRIOR TO INSTALLING NEW VALVES AND PIPING.
5. THE CONTRACTOR SHALL HAVE ONE (1) SEALED COPY OF THE PLANS INCLUDING ANY ADDENDA RFI, AND CHANGE ORDER REVISIONS AT THE JOB SITE AT ALL TIMES.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL FEES AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.
7. CONTRACTOR SHALL KEEP ALL CONSTRUCTION MATERIALS, EQUIPMENT AND TRAILERS WITHIN THE EASEMENT OF EACH PROPERTY. CONTRACTOR SHALL HAVE VAULT LOCATIONS SURVEYED TO DETERMINE THE LOCATION OF EXISTING EASEMENTS.
8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SAFETY OF THE CONSTRUCTION WORKERS, THE PUBLIC, AND OWNER PERSONNEL WORKING IN VICINITY OF CONSTRUCTION.
9. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE CODES PER THE GOVERNING MUNICIPALITY.
10. CONTRACTOR SHALL PROVIDE 3-DAYS NOTICE TO LANDOWNERS PRIOR TO WORK, PER CITY OF WICHITA SPECIFICATIONS.

no.	date	by	ckd	description
0	11/8/17	CAM	LJK	ISSUED FOR BID
1	5/25/18	BDF	CAM	REVISER PER ECN 001
2	1/30/19	BDF	CAM	DRAWING ADDED

no.	date	by	ckd	description
2	2/5/19	CAM	LJK	**CONFORMING TO CONSTRUCTION RECORDS**

BURNS McDONNELL
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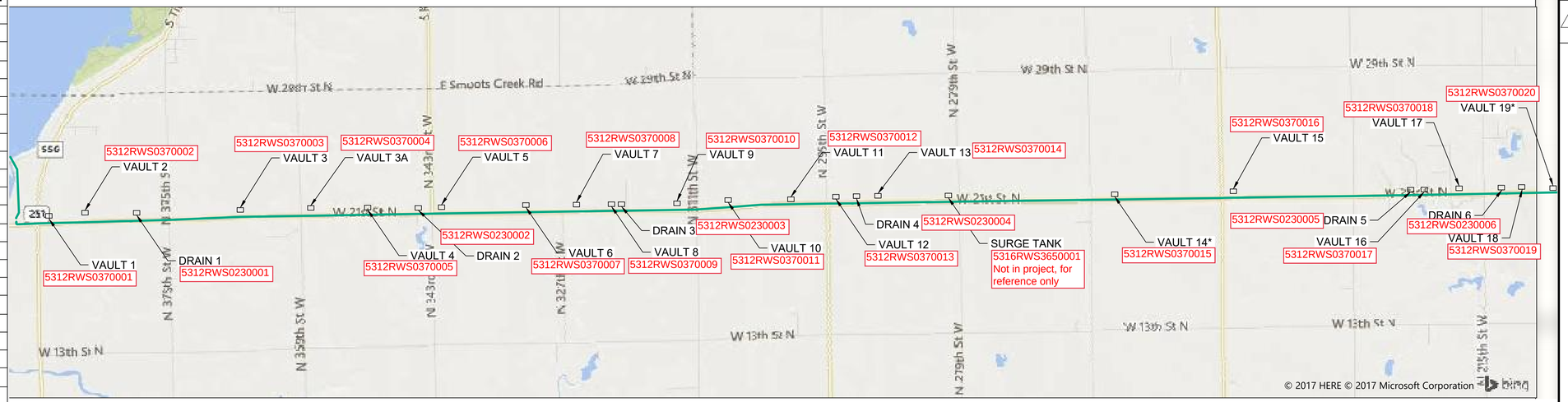
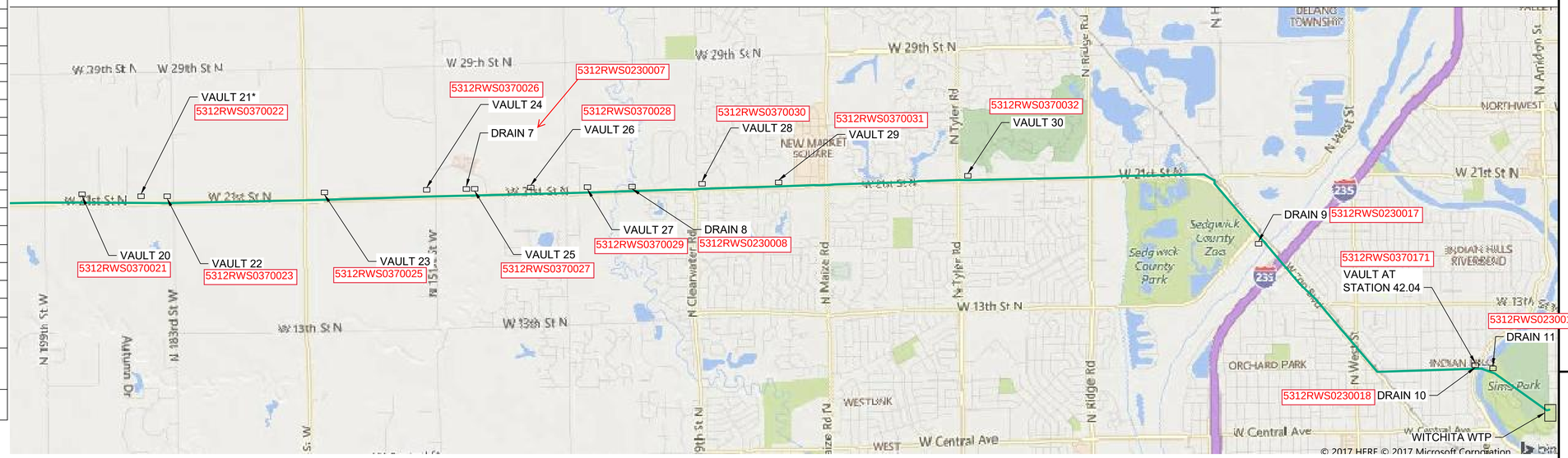
CHENEY TRANSMISSION LINE EVALUATION & IMPROVEMENTS
Project No. 448-90768
BMCD PROJECT No. 97687

Index

VAULT COORDINATES		
VAULT	LATITUDE	LONGITUDE
1	37.7198	-97.7886
2	37.7199	-97.7834
DRAIN 1	37.7200	-97.7768
3	37.7204	-97.7617
3A	37.7204	-97.7514
4	37.7205	-97.7435
DRAIN 2	37.7205	-97.7363
5	37.7206	-97.7336
6	37.7206	-97.7209
7	37.7207	-97.7147
8	37.7207	-97.7102
DRAIN 3	37.7207	-97.7095
9	37.7207	-97.7011
10	37.7210	-97.6945
11	37.7213	-97.6856
12	37.7213	-97.6794
DRAIN 4	37.7213	-97.6769
13	37.7213	-97.6737
14*	37.7215	-97.6392
15	37.7215	-97.6253
DRAIN 5	37.7216	-97.5997
16	37.7217	-97.5980
17	37.7217	-97.5931
DRAIN 6	37.7217	-97.5862
18	37.7218	-97.5834
19*	37.7218	-97.5777
20	37.7218	-97.5665
21*	37.7217	-97.5582
22	37.7216	-97.5537
23	37.7218	-97.5331
24	37.7221	-97.5181
DRAIN 7	37.7221	-97.5118
25	37.7221	-97.5113
26	37.7222	-97.5046
27	37.7223	-97.4963
DRAIN 8	37.7224	-97.4920
28	37.7226	-97.4808
29	37.7228	-97.4697
30	37.7232	-97.4432
DRAIN 9	37.7162	-97.4024
DRAIN 10	37.7018	-97.3723
VAULT AT STA. 42.04	37.7018	-97.3723
DRAIN 11	37.7015	-97.3713

1





1

NOTES:

1. VAULT AND DRAIN LOCATIONS INDICATE LOCATIONS OF WORK.
2. REFERENCE OTHER SHEETS FOR DETAILED WORK AT EACH LOCATION.
3. ASTERISK DENOTES NEW VAULTS RECONSTRUCTED IN LOCATIONS SIMILAR TO ORIGINAL.

NORTH

0 2500' 5000'
SCALE IN FEET

no.	date	by	ckd	description
0	11/8/17	CAM	LJK	ISSUED FOR BID
1	2/5/19	CAM	LJK	**CONFORMING TO CONSTRUCTION RECORDS**

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. E-65

date	detailed
SEPTEMBER 11, 2017	B. FIFIELD
designed	checked
C. MAGES	L. KLEIN

City of Wichita, Kansas

SEDGWICK, KANSAS

CHENEY TRANSMISSION LINE

TRANSMISSION MAIN PLAN

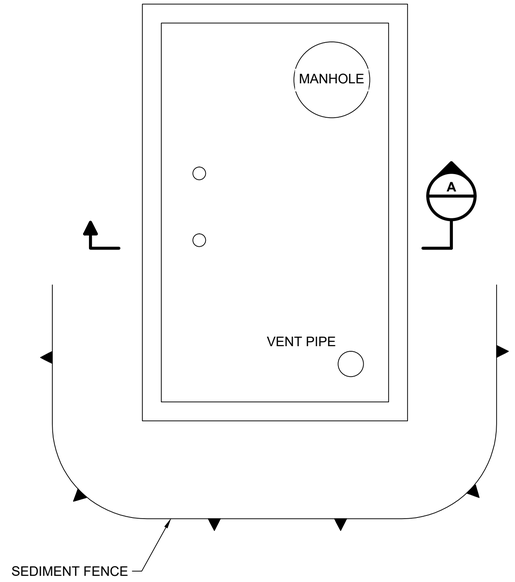
project	contract
97687	

drawing **G003** – rev. **0**

sheet of sheets

file 97687_G003.DWG

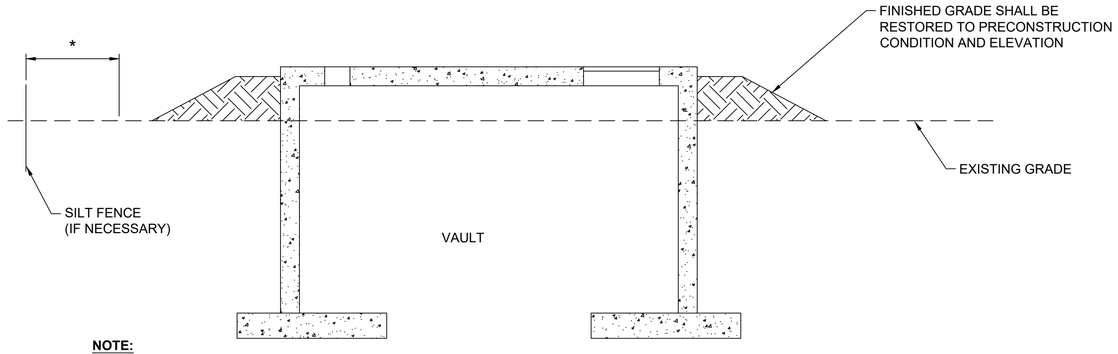
Scale For Microfilming
Millimeters
Inches



NOTE:

1. PROVIDE SEDIMENT FENCE IN DISTURBED AREAS WHERE NOT PROTECTED BY NATURAL VEGETATION.
2. EXISTING FENCING SHALL BE TAKEN DOWN AS NEEDED AND REESTABLISHED TO ORIGINAL CONDITION. PROVIDE TEMPORARY FENCING DURING CONSTRUCTION.
3. VAULTS WITHIN CITY LIMITS SHALL BE RESTORED TO ORIGINAL CONDITIONS AND SODDED. VAULTS OUTSIDE OF CITY LIMITS SHALL BE RESTORED TO ORIGINAL CONDITIONS AND SEEDED PER CITY OF WITCHITA STANDARD SPECIFICATIONS.

VAULT COVER
NOT TO SCALE



NOTE:

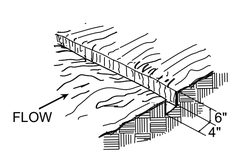
1. EXCAVATION AREA DEPTH WILL VARY BASED ON EXISTING GRADE, AND WHETHER THE VAULT IS EXISTING OR NEW (BID ALTERNATES 1, 2, AND 3). BACKFILL AND COMPACT TO 90% MODIFIED PROCTOR.

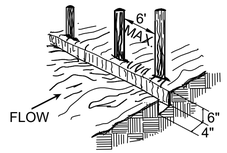
*PLACE SEDIMENT FENCE DOWN-SLOPE OF CONSTRUCTION AND WITHIN THE EXISTING EASEMENT, BUT NO MORE THAN 10 FEET FROM THE LIMITS OF DISTURBANCE.

SECTION A
VAULT
NOT TO SCALE

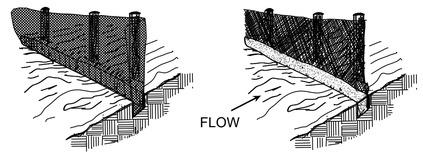
SEDIMENT FENCE

1. EXCAVATE A 6"x4" TRENCH.
2. SET THE STAKES ALONG THE DOWN SLOPE SIDE OF THE TRENCH.

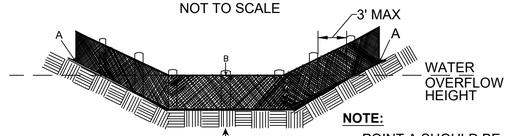




3. STAPLE GEOTEXTILE MATERIAL TO STAKES AND EXTEND IT INTO AND AROUND THE BOTTOM OF THE TRENCH.
4. BACKFILL AND COMPACT THE EXCAVATED SOIL OVER THE GEOTEXTILE IN THE TRENCH.



SHEET FLOW INSTALLATION
(PERSPECTIVE VIEW)
NOT TO SCALE



NOTE:
POINT A SHOULD BE HIGHER THAN POINT B.

DRAINAGEWAY INSTALLATION
(FRONT ELEVATION)
NOT TO SCALE

SEDIMENT FENCE NOTES:

A) INSTALLATION:

1. THE HEIGHT OF SEDIMENT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE AND SHALL NOT EXCEED 34 INCHES ABOVE THE GROUND SURFACE.
2. THE FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE UNAVOIDABLE, FILTER CLOTH SHALL BE SECURELY SPLICED TOGETHER ONLY AT SUPPORT POSTS, WITH A MAX 6-INCH OVERLAP.
3. DIG A TRENCH AT LEAST 6 INCHES DEEP AND 4 INCHES WIDE ALONG THE FENCE ALIGNMENT.
4. DRIVE POSTS AT LEAST 24 INCHES INTO THE GROUND ON THE DOWNSLOPE SIDE OF THE TRENCH. SPACE POSTS A MAXIMUM OF 6 FEET APART.
5. EXTRA-STRENGTH SEDIMENT FENCE FABRIC SHALL BE USED. POSTS FOR THIS TYPE OF FABRIC SHALL BE PLACED A MAXIMUM OF 6 FEET APART. THE SEDIMENT FABRIC SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING A MINIMUM OF ONE INCH LONG, HEAVY-DUTY WIRE STAPLES OR TIE-WIRES, AND EIGHT INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
6. PLACE THE BOTTOM 1 FOOT OF FABRIC IN THE MINIMUM-OF-6-INCH DEEP TRENCH, LAPPING TOWARD THE UPSLOPE SIDE. BACKFILL WITH COMPACTED EARTH OR GRAVEL.
7. IF A SEDIMENT FENCE IS TO BE CONSTRUCTED ACROSS A DITCH LINE OR SWALE, IT MUST BE OF SUFFICIENT LENGTH TO ELIMINATE ENDFLOW, AND THE PLAN CONFIGURATION SHALL RESEMBLE AN ARC OR HORSESHOE WITH THE ENDS ORIENTED UPSLOPE. EXTRA-STRENGTH SEDIMENT FABRIC SHALL BE USED WITH A MAXIMUM 3-FOOT SPACING OF POSTS.
8. TO REDUCE MAINTENANCE, EXCAVATE A SHALLOW SEDIMENT STORAGE AREA IN THE UPSLOPE SIDE OF THE FENCE. PROVIDE GOOD ACCESS IN AREAS OF HEAVY SEDIMENTATION FOR CLEAN OUT AND MAINTENANCE.
9. SEDEMENT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.

B) TROUBLESHOOTING:

1. DETERMINE THE EXACT LOCATION OF UNDERGROUND UTILITIES, BEFORE FENCE INSTALLATION SO UTILITIES ARE NOT DISTURBED.
2. GRADE ALIGNMENT OF FENCE AS NEEDED TO PROVIDE A BROAD, NEARLY LEVEL AREA UPSTREAM OF FENCE TO ALLOW SEDIMENT COLLECTION AREA.

C) INSPECTION MAINTENANCE:

1. INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
2. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
3. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. AVOID DAMAGING OR UNDERMINING THE FENCE DURING CLEANOUT. SEDIMENT ACCUMULATION SHOULD NOT EXCEED 1/2 THE HEIGHT OF THE FENCE.
4. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY AND COMPLETELY STABILIZED.

no.	date	by	ckd	description
0	11/8/17	CAM	LJS	ISSUED FOR BID
	2/5/19	CAM	LJK	**CONFORMING TO CONSTRUCTION RECORDS**

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. E-65

date	detailed
SEPTEMBER 11, 2017	B. FIFIELD
designed	checked
C. MAGES	L. STAAB

City of Wichita, Kansas
SEDGWICK, KANSAS

CHENEY TRANSMISSION LINE

GENERAL CIVIL

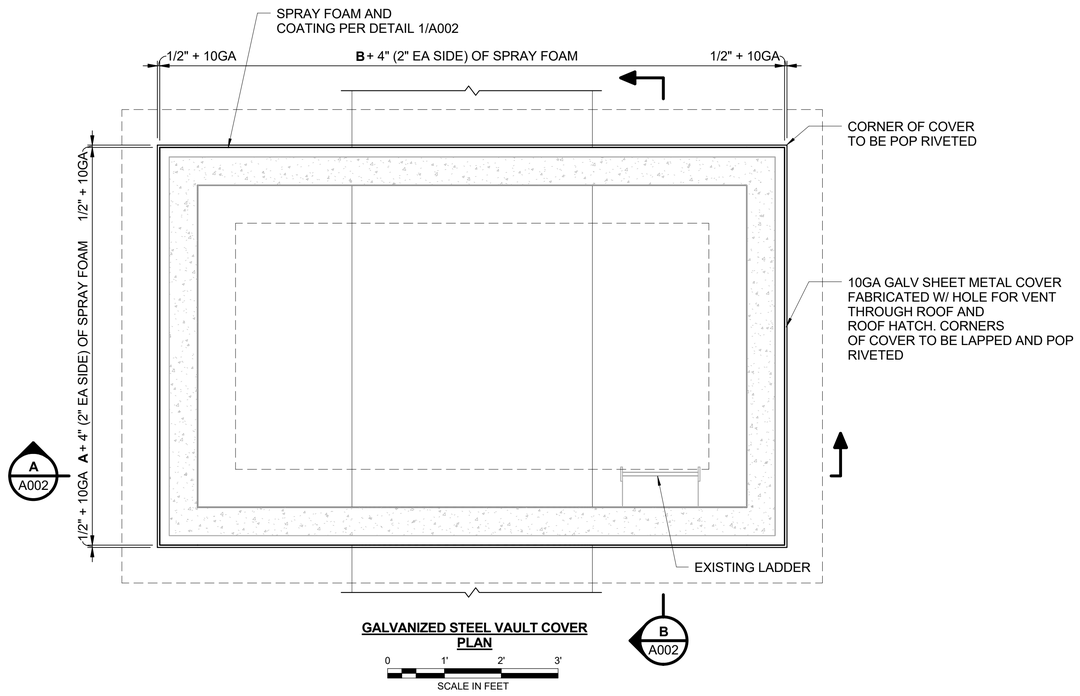
project	contract
97687	CONTRACT

drawing **C001** – rev. **0**

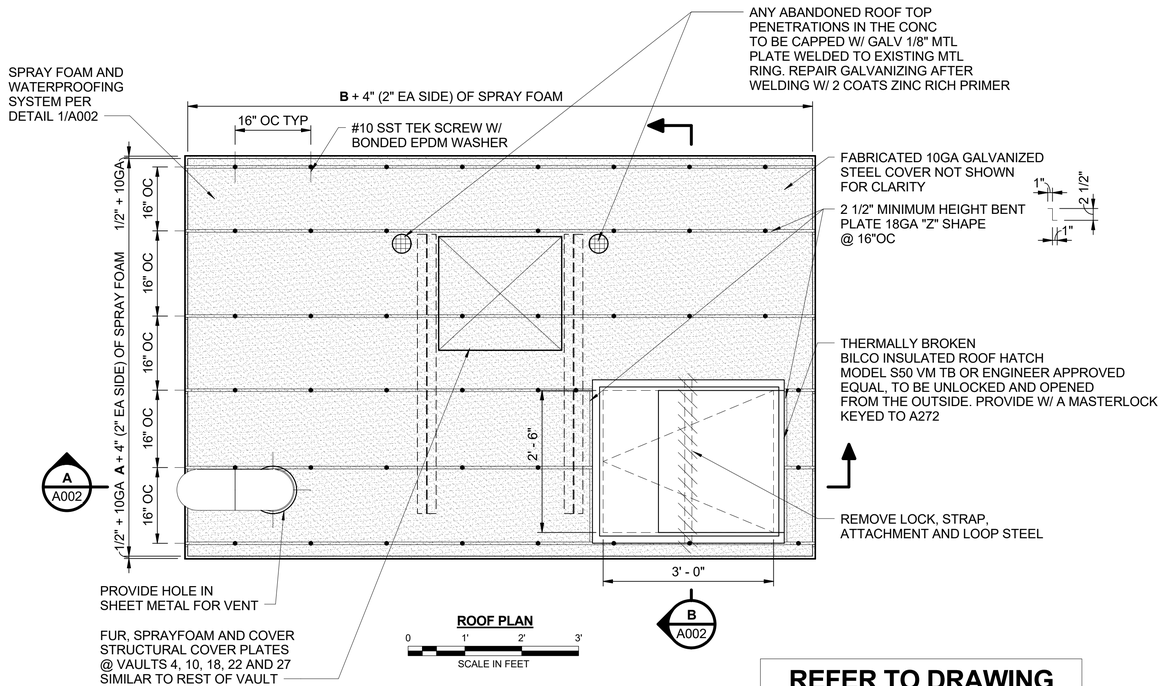
sheet of sheets

file 97687_C001.DWG

Millimeters
Inches
Scale For Microfilming



GALVANIZED STEEL VAULT COVER PLAN



ROOF PLAN

REFER TO DRAWING D001 FOR LETTER A & B DIMENSIONS

BURNS McDONNELL	PROTECTIVE COATING SYSTEM System: **E-1**

SERVICE: Steel & Iron – Nonpotable Liquid Immersion, Normal to Severe Exposure. Interior of Tank or Basin. Exterior of Steel, Piping, or Equipment in Tank or Basin.

Surface Preparation: Shop or Field First Coat: SSPC-SP10 and profile depth of 1.5 to 2.5 mils (38 to 63 microns).
Field Touch-Up (of Shop-applied first coat): Same as for First Coat.

First Coat: High solids amine, polyamidoamine, or polyamide epoxy coating with minimum 67% solids by volume. Apply at 5.0 to 7.0 mils (125 to 175 microns) dry film thickness.

Second Coat: Same as first coat.

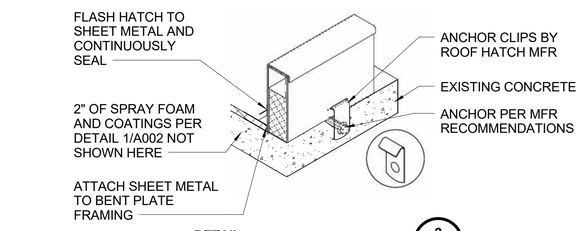
System Total: Minimum 10.0 mils (250 microns) dry film thickness. Check for voids with holiday or pinhole detector.

Volatile Organic Content: Maximum 2.8 lb/gal (340 g/L).

COATING MANUFACTURER	PRODUCT DESIGNATION		
	FIRST COAT	TOUCH UP	SECOND COAT
PPG	Amerlock 2 or 400	Same as first coat	Same as first coat
Sherwin-Williams	Macropoxy 646 FC B58W610/B58V600	Same as first coat	Same as first coat
Tnemec	Epoxoline II Series 66 HS	Same as first coat	Same as first coat

GENERAL NOTES:

1. ALL PRODUCTS SPECIFIED ARE "OR ENGINEER APPROVED EQUAL."
2. MINIMUM R-VALUE REQUIRED R-10Ci PER INTERNATIONAL BUILDING CODE 2012 IECC BELOW GRADE MASS.
3. SUBMIT ALL ITEMS CALLED FOR ON THIS SHEET FOR ENGINEER/ARCHITECT APPROVAL PRIOR TO INSTALLATION. SUBMITTAL SHALL INCLUDE BUT NOT BE LIMITED TO DATA SHEETS, SHOP DRAWINGS, HARD AND DIGITAL COPY COLOR CHART.
4. INSTALL PER MANUFACTURERS DATA SHEETS AND INSTRUCTIONS.
5. SPRAY FOAM SYSTEM AND COATINGS SHALL BE WARRANTED AS A SINGLE SYSTEM.
6. SPRAY FOAM APPLICATORS SHALL HAVE AND DOCUMENT IN THE SUBMITTAL A MINIMUM OF 5 YEARS APPLICABLE EXPERIENCE.
7. OWNER TO APPROVE SHEET METAL COVER ON FIRST VAULT PRIOR TO FABRICATION OF SUBSEQUENT COVERS.
8. INSULATION SHALL BE ON EVERY VAULT EXISTING AND NEW.



DETAIL 2 / A002

FLASHING DETAIL

NOT TO SCALE

EXISTING ATTACHMENT LOOP

no.	date	by	ckd	description
0	11/8/17	RPL	JT	ISSUED FOR BID
1	2/5/19	RPL	JT	**CONFORMING TO CONSTRUCTION RECORDS**

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. E-65

date	detailed
SEPTEMBER 12, 2017	R. GUIN
designed	**checked**
R. LANG	J. TSOUFLIAS

City of Wichita, Kansas

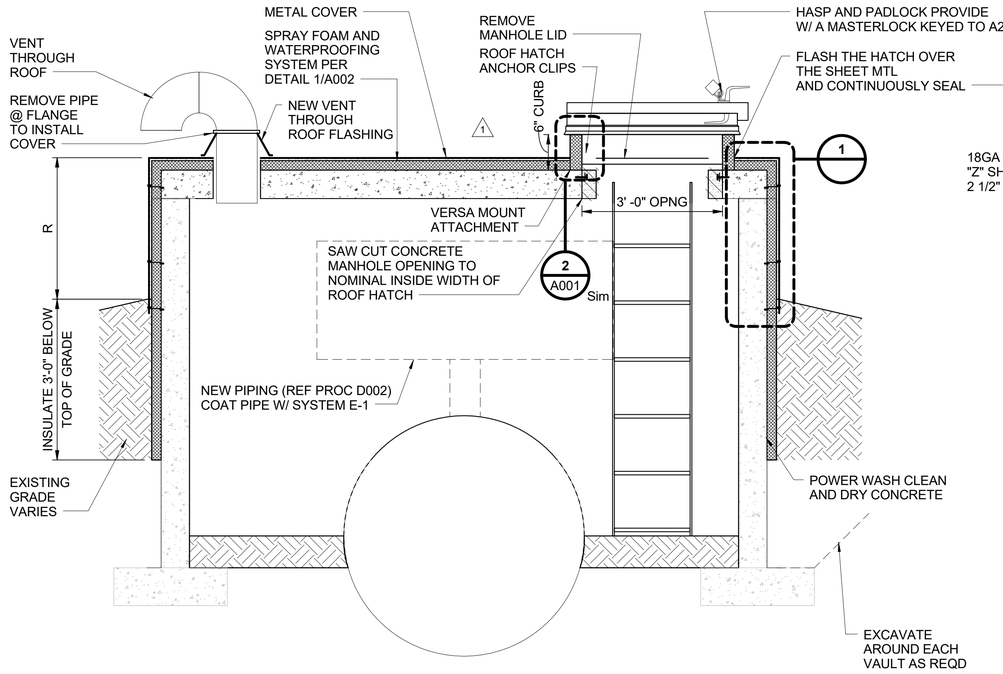
SEDGWICK, KANSAS

CHENEY TRANSMISSION LINE

FLOOR PLAN

project	contract
97687	
drawing	**rev.**
A001	**1**
sheet	**of** **sheets**
file 97687_ARCH_2017.RVT	

Scale For Microfilming
Inches
Millimeters

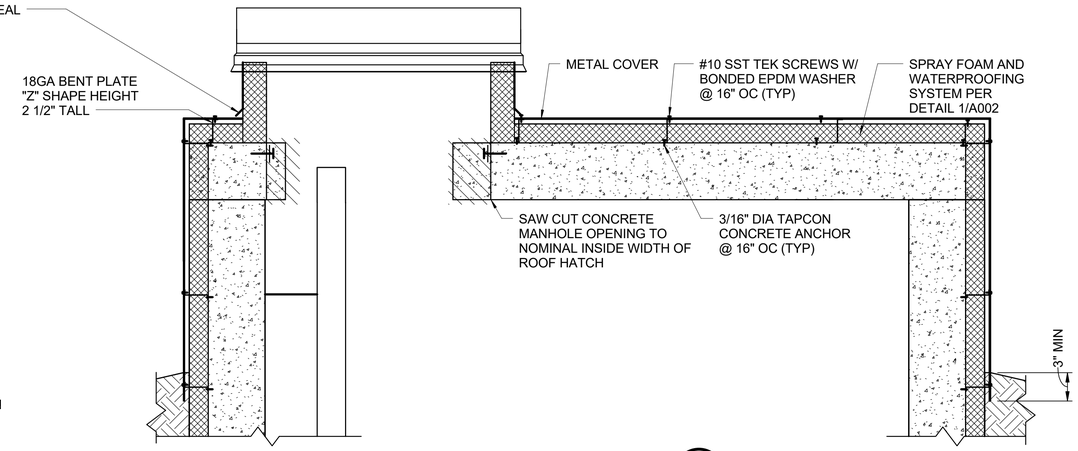


SECTION A A001

VAULT

0 1' 2' 3'

SCALE IN FEET

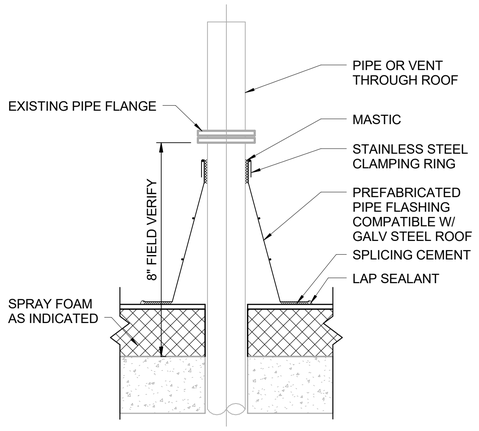


SECTION B A001

VAULT

0 1/2' 1' 1 1/2'

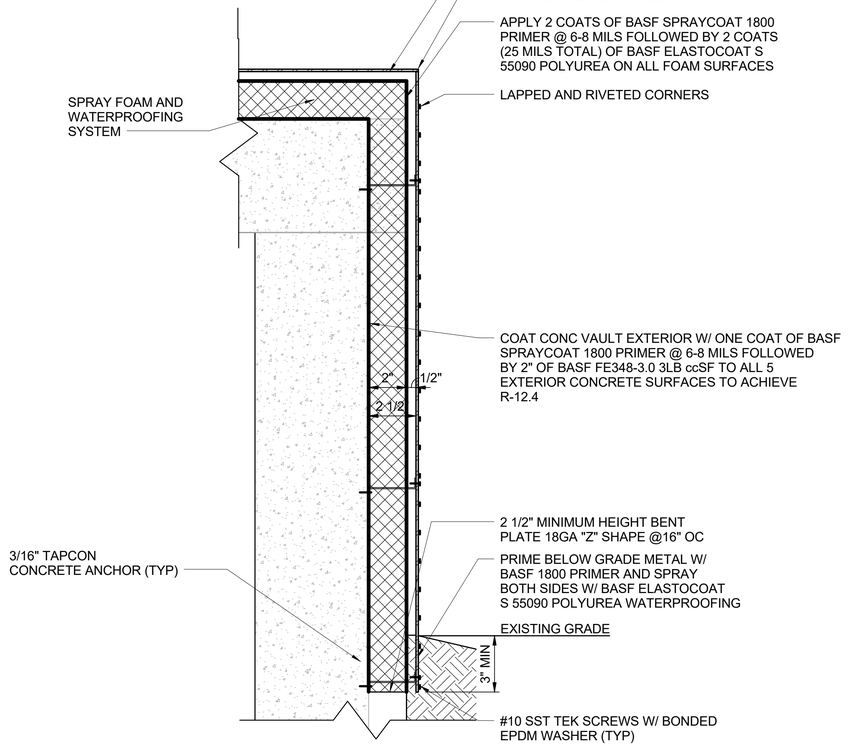
SCALE IN FEET



TYP VENT FLASHING

0 1/2" 1' 1 1/2'

SCALE IN FEET



DETAIL 1

SPRAY FOAM/WATER PROOFING

0 3" 6" 9"

SCALE IN FEET

no.	date	by	ckd	description
0	11/8/17	RPL	JT	ISSUED FOR BID
1	2/5/19	RPL	JT	**CONFORMING TO CONSTRUCTION RECORDS**

BURNS McDONNELL

9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. E-65

date	detailed
OCTOBER 10, 2017	R. GUIN
designed	**checked**
R. LANG	J. TSOUFLIAS

City of Wichita, Kansas

SEDGWICK, KANSAS

CHENEY TRANSMISSION LINE

SECTION AND DETAILS

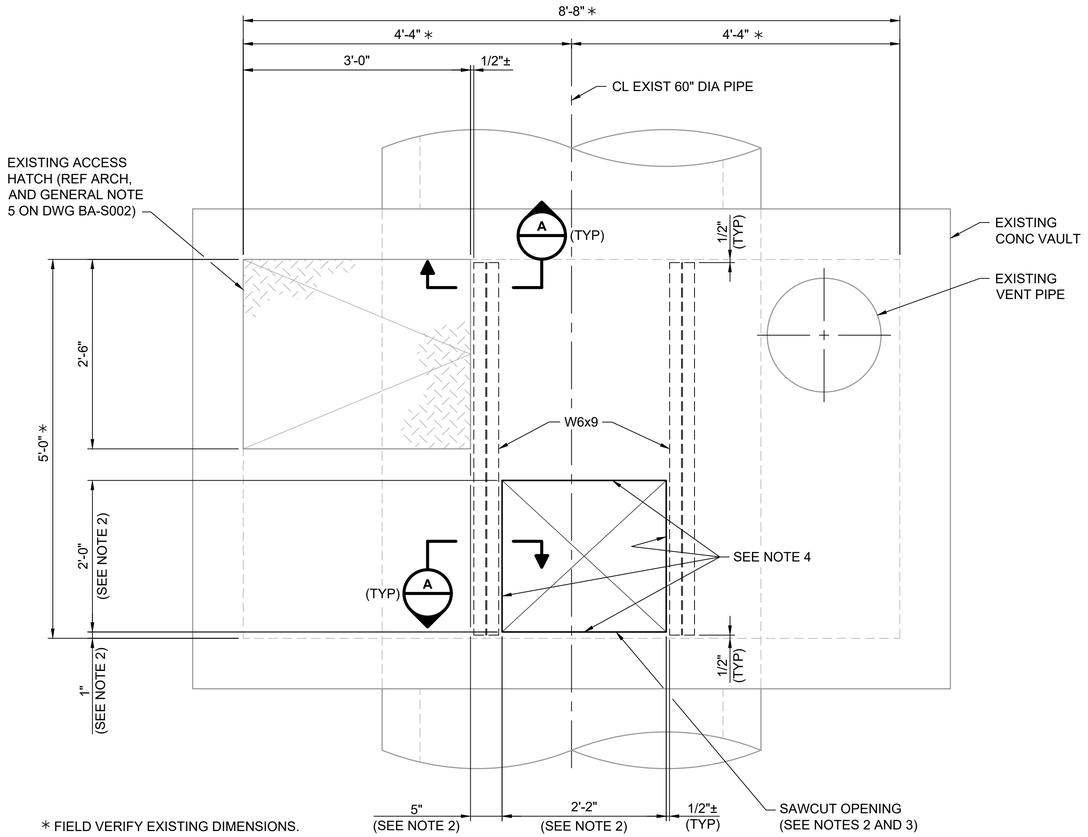
project	contract
97687	

drawing A002 — **rev.** 1

sheet of **sheets**

file 97687_ARCH_2017.RVT

Scale For Microfilming: Millimeters / Inches



∗ FIELD VERIFY EXISTING DIMENSIONS.

TOP PLAN @ VAULTS 4, 10, 18, 22, AND 27

0 1/2' 1' 2'
SCALE IN FEET

NORTH

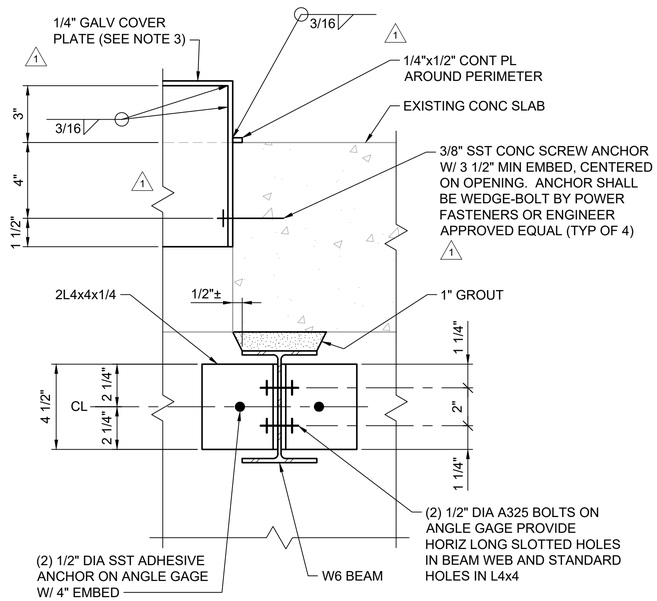
GENERAL NOTES:

1. MATERIALS:
   - A. STRUCTURAL STEEL:
     1. WIDE FLANGE (WF) SHAPES ASTM A992, GRADE 50.
     2. ANGLES AND PLATE: ASTM A36.
     3. ALL STRUCTURAL STEEL SHALL BE GALVANIZED AND CONFORM TO ASTM A123. NUTS, BOLTS, AND WASHERS SHALL BE HOT-DIPPED GALVANIZED TO CONFORM TO ASTM F2329 OR MECHANICALLY GALVANIZED TO CONFORM TO ASTM B695.
   - B. GROUT:
     1. VOLUME: 1 PART PORTLAND CEMENT TO 2 PARTS SAND.
     2. KEEP WATER TO A MINIMUM AS REQUIRED FOR PLACING BY THE DRY PACK METHOD.
     3. CURE PER MANUFACTURER'S INSTRUCTIONS.
   - C. ADHESIVE FOR POST INSTALLED ANCHORS SHALL BE HILTI HIT-HY 200 OR ENGINEER APPROVED EQUAL.

2. SAWCUT OPENING AS REQUIRED FOR NEW VALVE ASSEMBLY. SUPPORT BEAMS SHALL BE INSTALLED AND GROUT CURED FOR MINIMUM 3 DAYS PRIOR TO SAW CUTTING OPENING.

△1 3. COVER PLATE SHALL BE CONTINUOUSLY WELDED AROUND THE PERIMETER AND AT THE CORNERS. SUBMIT SHOP DRAWING TO ENGINEER FOR REVIEW. INSTALL INSULATION OVER PLATE PER ARCHITECTURAL DRAWINGS.

4. APPLY CORROSION INHIBITOR TO SAWCUT CONCRETE SURFACE. SIKA ARMATEC 110 EPOCEM OR ENGINEER APPROVED EQUAL.



SECTION A

0 3" 6" 9"
SCALE IN INCHES

no.	date	by	ckd	description
0	5/24/18	AMG	JT	ISSUED PER ECN001
△1	6/15/18	AMG	JT	ISSUED PER ECN002
	2/5/19	AMG	JT	**CONFORMING TO CONSTRUCTION RECORDS**

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. E-65

date	detailed
MAY 23, 2018	J. ANAYA
designed	checked
A. GRIFFIN	J. TSOUFLIAS

City of Wichita, Kansas
SEDGWICK, KANSAS

WITCHITA CHENEY PIPELINE

VAULT TOP SLAB MODIFICATIONS

project	contract
97687	

drawing **S001** rev. **1**

sheet of sheets

file 97687_S001.DWG

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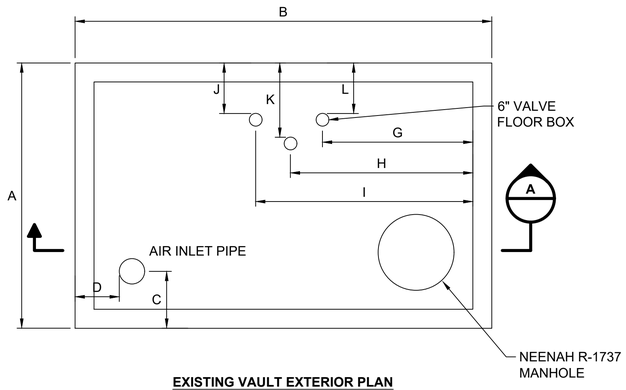
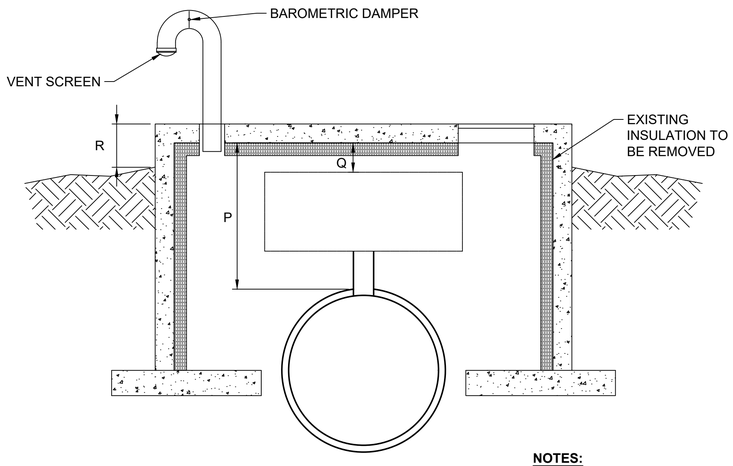
EXISTING VAULT DIMENSIONS (INCHES)

VAULT	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	64	112	N/A	N/A	N/A	N/A	N/A	52	67	21	21	N/A	N/A	N/A	N/A	57	27	**	N/A
2	64	112	N/A	N/A	16	22	65	N/A	N/A	N/A	N/A	20	11	33	46	58	28	**	N/A
3	64	112	13	14	14	18	N/A	50	66	19	19	N/A	11	5	46	58	24	**	6
3A	76	120	17	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13	35	40	77	42	**	14
4	76	120	7	7	21	N/A	43	58	75	25	30	26	10	19	10	58	30	**	14
5	76	120	N/A	N/A	23	N/A	47	60	73	25	36	25	13	13	17	57	43	24.00	10
6	64	112	N/A	N/A	15	19	66	N/A	N/A	N/A	N/A	18	9	23	47	58	28	21.00	N/A
7	64	112	N/A	N/A	16	18	65	N/A	N/A	N/A	N/A	20	9	23	43	60	31	27.00	N/A
8	64	112	N/A	N/A	N/A	66	N/A	N/A	N/A	N/A	20	10	24	47		58	31	16.00	N/A
9	64	112	10	10	15	17	57	66	N/A	N/A	19	20	6	3	42	58	29	13.00	6
10	76	120	7	7	21	25	42	61	75	24	28	24	9	11	9	58	10	26 TO 31	18
11	64	112	10	10	12	17	47	67	N/A	N/A	20	20	7	10	43	58	35	25.00	6
12	64	112	N/A	N/A	12	18	66	N/A	N/A	N/A	N/A	17	7	23	44	58	37	29 TO 33	N/A
13	64	112	N/A	N/A	11	17	66	N/A	N/A	N/A	N/A	17	7	26	44	58	42	24 TO 31	N/A
14*	64	112	10	10	14	18	55	66	N/A	N/A	17	18	7	4	41	58	28	26.00	6
15	64	112	7	8	12	18	52	68	N/A	N/A	20	20	6	1	43	58	29	6.00	6
16	64	112	N/A	N/A	13	19	55	65	N/A	N/A	**	**	8	N/A	43	58	29	26.00	N/A
17	76	120	**	**	23	22	46	61	73	**	**	**	9	20	13	59	22	9.00	14
18	76	120	7	8	21	25	43	63	76	25	30	26	8	19	8	58	10	21.00	18
19*	64	112	N/A	N/A	12	18	67	N/A	N/A	N/A	N/A	20	7	25	44	59	34	**	N/A
20	64	112	N/A	N/A	11	17	67	N/A	N/A	N/A	N/A	19	7	25	45	59	31	21 TO 24	N/A
21*	64	112	10	10	15	18	50	67	N/A	N/A	20	20	2	4	42	59	24	19.00	6
22	76	120	**	**	20	25	41	59	79	**	**	**	11	20	8	59	9	10.00	18
23	64	112	10	10	**	**	52	67	N/A	N/A	20	20	2	19	30	58	22	30 TO 36	6
24	76	120	8	8	22	25	45	60	76	22	27	22	9	14	13	58	20	22 TO 32	14
25	64	112	N/A	N/A	12	19	66	N/A	N/A	N/A	N/A	20	6	24	44	58	30	14.00	N/A
26	64	112	10	10	12	21	52	67	N/A	N/A	21	21	2	10	42	59	24	16 TO 23	6
27	76	120	**	**	17	25	40	61	76	**	**	**	7	20	30	58	12	24 TO 42	18
28	76	120	8	8	20	25	41	60	73	**	**	**	8	12	13	58	22	24 TO 48	14
29	64	112	10	10	12	18	49	68	N/A	N/A	20	20	2	4	43	58	23	26 TO 38	6
30	76	120	8	8	21	24	42	60	73	**	**	**	8	12	13	58	22	14 TO 26	14
STA. 42.04	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**

**CONTRACTOR TO FIELD VERIFY DIMENSIONS



EXISTING VAULT EXTERIOR PLAN
NOT TO SCALE

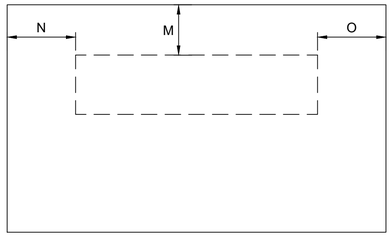


SECTION A

EXISTING VAULT INTERIOR SECTION
NOT TO SCALE

NOTES:

1. BOX REPRESENTS AREA OCCUPIED BY PIPING AND VALVES.
2. DIMENSIONS OF BOXED AREA REPRESENT THE CLOSEST POINT FROM THE PIPING TO THE VAULT WALL



NOTES:

1. BOX REPRESENTS AREA OCCUPIED BY PIPING AND VALVES.
2. DIMENSIONS OF BOXED AREA REPRESENT THE CLOSEST POINT FROM THE PIPING TO THE VAULT WALL

EXISTING VAULT INTERIOR PLAN
NOT TO SCALE

no.	date	by	ckd	description
0	11/8/17	CAM	LJK	ISSUED FOR BID
	2/5/19	CAM	LJK	**CONFORMING TO CONSTRUCTION RECORDS**

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. E-65

date	detailed
SEPTEMBER 11, 2017	B. FIFIELD
designed	checked
C. MAGES	L. KLEIN

City of Wichita, Kansas
SEDGWICK, KANSAS

CHENEY TRANSMISSION LINE

EXISTING CONDITIONS

project	contract
97687	CONTRACT

drawing **D001** rev. **0**

sheet of sheets

file 97687_D001.DWG

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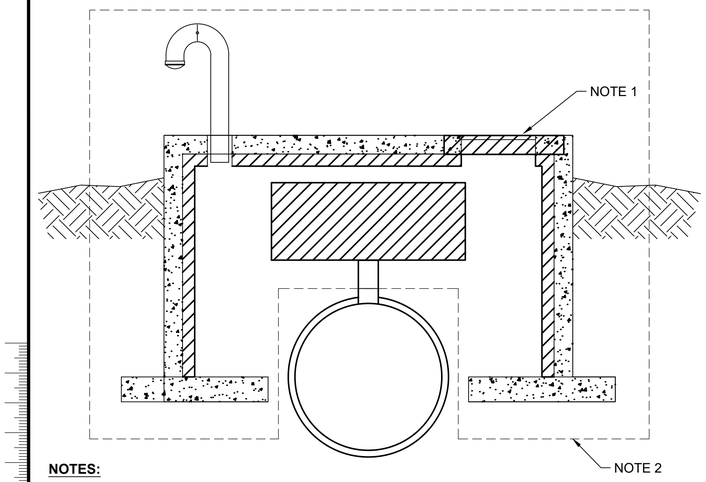
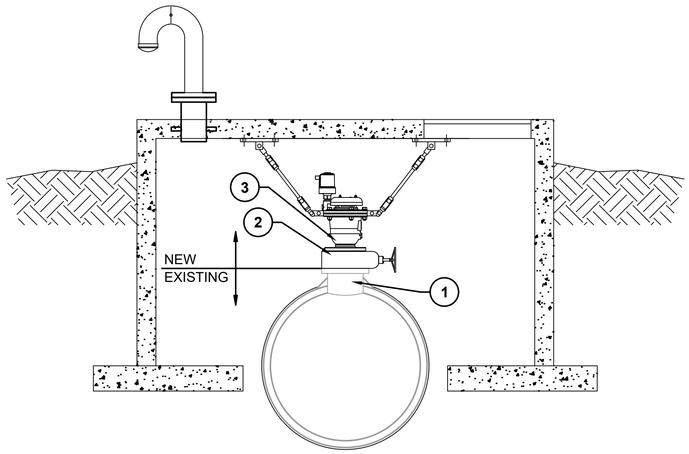


NOTES:

1. SAWCUT A 2'-6"x3'-0" OPENING FOR REMOVAL OF EQUIPMENT AND INSTALLATION OF HATCH.
2. ALTERNATES 1, 2, AND 3 FOR VAULTS 14, 19, AND 21. BID ALTERNATES 1, 2 AND 3 SHALL BE FOR COMPLETE DEMOLITION AND REPLACEMENT OF THESE VAULTS.
3. VAULTS SHALL BE CLEANED, WALLS SCRAPED TO BE FREE OF ADHESIVE, AND CLEARED OF ALL DEBRIS.
4. DEMO ALL INSULATION AS INDICATED.

SECTION A
DEMO OF VAULT INTERIOR
NOT TO SCALE



DEMOLITION ← NEW CONSTRUCTION

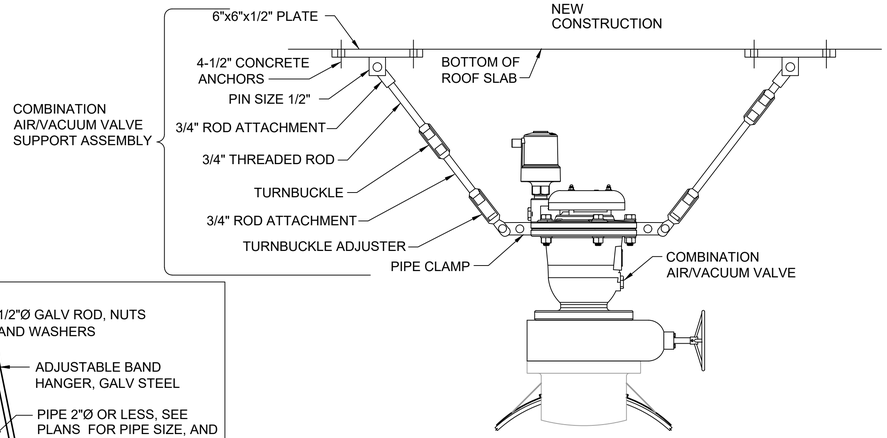
NOTE:

1. THIS SHALL APPLY TO VAULTS 1, 3, 3A, 4, 5, 9, 10, 11, 14, 15, 17, 18, 21, 22, 23, 24, 26, 27, 28, 29, 30, AND STA. 42.04

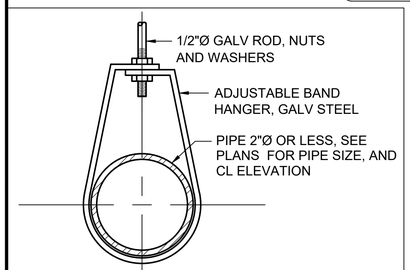
SECTION B
4-INCH AND LARGER OUTLET PIPING
NOT TO SCALE

VAULT	①	②	③
1	4-INCH	4-INCH FLANGED GV	4-INCH COMBINATION AIR/VACUUM VALVE
2	2-INCH	2-INCH THREADED BALL VALVE	2-INCH AIR/VACUUM VALVE
3	4-INCH	4-INCH FLANGED GV	4-INCH COMBINATION AIR/VACUUM VALVE
3A	10-INCH	10-INCH FLANGED GV	10-INCH COMBINATION AIR/VACUUM VALVE
4	10-INCH	10-INCH FLANGED GV	10-INCH COMBINATION AIR/VACUUM VALVE
5	6-INCH	6-INCH FLANGED GV	6-INCH COMBINATION AIR/VACUUM VALVE
6	2-INCH	2-INCH THREADED BALL VALVE	2-INCH AIR/VACUUM VALVE
7	2-INCH	2-INCH THREADED BALL VALVE	2-INCH AIR/VACUUM VALVE
8	2-INCH	2-INCH THREADED BALL VALVE	2-INCH AIR/VACUUM VALVE
9	4-INCH	4-INCH FLANGED GV	4-INCH COMBINATION AIR/VACUUM VALVE
10	10-INCH	10-INCH FLANGED GV	10-INCH COMBINATION AIR/VACUUM VALVE
11	4-INCH	4-INCH FLANGED GV	4-INCH COMBINATION AIR/VACUUM VALVE
12	2-INCH	2-INCH THREADED BALL VALVE	2-INCH AIR/VACUUM VALVE
13	2-INCH	2-INCH THREADED BALL VALVE	2-INCH AIR/VACUUM VALVE
14	4-INCH	4-INCH FLANGED GV	(2) 2-INCH AIR/VACUUM VALVES
15	4-INCH	4-INCH FLANGED GV	4-INCH COMBINATION AIR/VACUUM VALVE
16	2-INCH	2-INCH THREADED BALL VALVE	2-INCH AIR/VACUUM VALVE
17	8-INCH	8-INCH FLANGED GV	8-INCH COMBINATION AIR/VACUUM VALVE
18	10-INCH	10-INCH FLANGED GV	10-INCH COMBINATION AIR/VACUUM VALVE
19	2-INCH	2-INCH THREADED BALL VALVE	2-INCH AIR/VACUUM VALVE
20	2-INCH	2-INCH THREADED BALL VALVE	2-INCH AIR/VACUUM VALVE
21	4-INCH	4-INCH FLANGED GV	(2) 2-INCH AIR/VACUUM VALVES
22	10-INCH	10-INCH FLANGED GV	10-INCH COMBINATION AIR/VACUUM VALVE
23	4-INCH	4-INCH FLANGED GV	4-INCH COMBINATION AIR/VACUUM VALVE
24	8-INCH	8-INCH FLANGED GV	8-INCH COMBINATION AIR/VACUUM VALVE
25	2-INCH	2-INCH THREADED BALL VALVE	2-INCH AIR/VACUUM VALVE
26	4-INCH	4-INCH FLANGED GV	4-INCH COMBINATION AIR/VACUUM VALVE
27	10-INCH	10-INCH FLANGED GV	10-INCH COMBINATION AIR/VACUUM VALVE
28	8-INCH	8-INCH FLANGED GV	8-INCH COMBINATION AIR/VACUUM VALVE
29	4-INCH	4-INCH FLANGED GV	4-INCH COMBINATION AIR/VACUUM VALVE
30	8-INCH	8-INCH FLANGED GV	8-INCH COMBINATION AIR/VACUUM VALVE
STA. 42.04	8-INCH	8-INCH FLANGED GV	8-INCH COMBINATION AIR/VACUUM VALVE

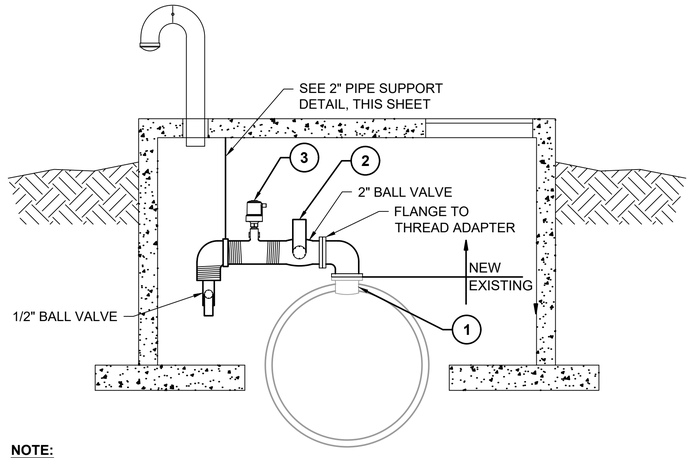
DEMOLITION ↕ NEW CONSTRUCTION



COMBINATION AIR/VACUUM VALVE SUPPORT 4" AND LARGER DETAIL
NOT TO SCALE



2" PIPE SUPPORT DETAIL
NOT TO SCALE



NOTE:

1. THIS SHALL APPLY TO VAULTS 2, 6, 7, 8, 12, 13, 16, 19, 20, 25
2. ARV AND ASSOCIATED PIPING ENLARGED FOR CLARITY.
2. PIPE ELBOWS, TEES, AND NIPPLES SHALL BE SCHEDULE 40 CARBON STEEL.
3. ALL NEW PIPING SHALL BE COATED PER E-1 ON A001

SECTION C
2-INCH OUTLET PIPING
NOT TO SCALE

no.	date	by	ckd	description
0	11/8/17	CAM	LJK	ISSUED FOR BID
	2/5/19	CAM	LJK	**CONFORMING TO CONSTRUCTION RECORDS**

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. E-65

date	detailed
SEPTEMBER 11, 2017	B. FIFIELD
designed	checked
C. MAGES	L. KLEIN

City of Wichita, Kansas
SEDGWICK, KANSAS

CHENEY TRANSMISSION LINE

INTERIOR MODIFICATIONS

project	contract
97687	

drawing **D002** rev. **0**

sheet of sheets

file 97687_D002.DWG

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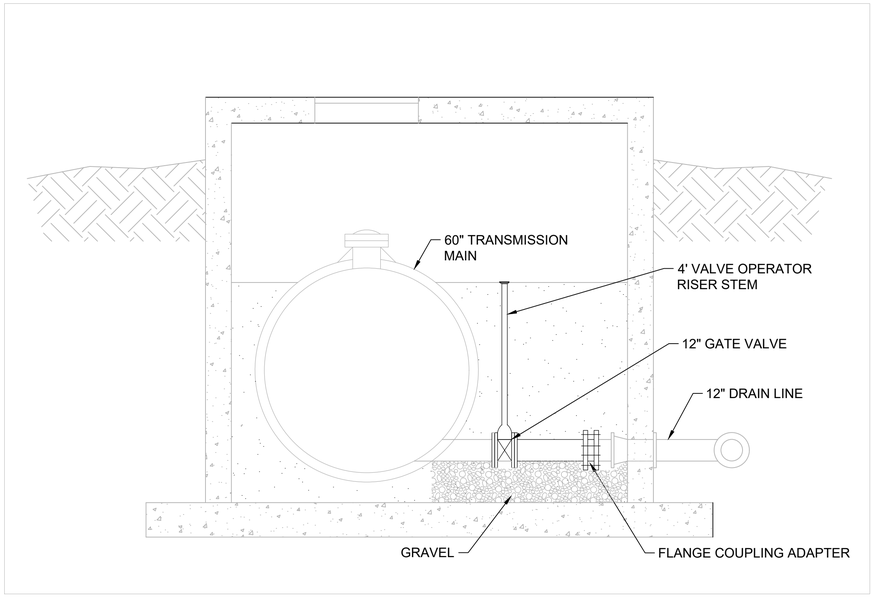

DETAIL 1
DRAIN VAULT MODIFICATIONS
NOT TO SCALE

no.	date	by	ckd	description
1	1/30/19	CAM	LJK	DRAWING ADDED
	2/5/19	CAM	LJK	**CONFORMING TO CONSTRUCTION RECORDS**

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. E-65

date	detailed
JANUARY 30, 2019	B. FIFIELD
designed	checked
C. MAGES	L. KLEIN

City of Wichita, Kansas
SEDGWICK, KANSAS

CHENEY TRANSMISSION LINE

DRAIN VAULT MODIFICATIONS

project	contract
97687	

drawing **D003 – 1** rev.
sheet of sheets
file 97687_D003.DWG

Scale For Microfilming
Millimeters
Inches

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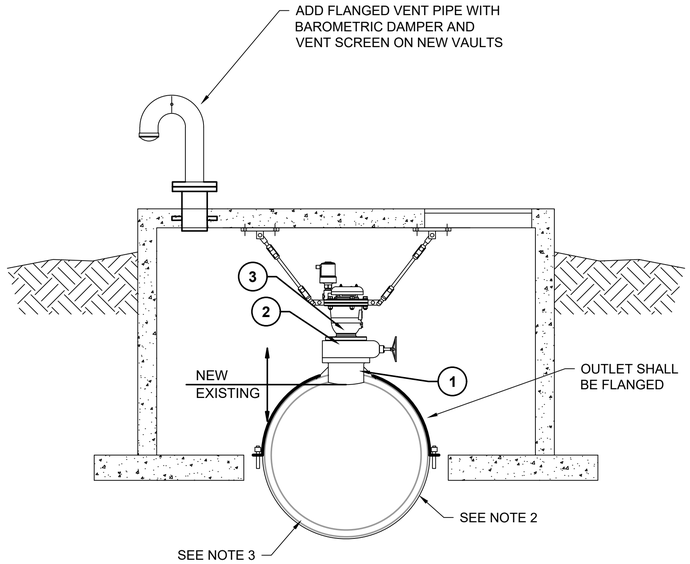
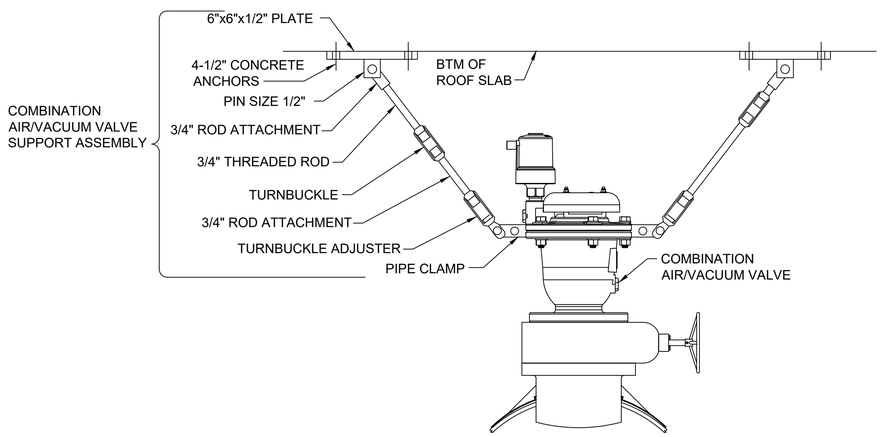


NOTES:

1. REFER TO D002 FOR DEMOLITION REQUIREMENTS.
2. INSULATE AND COVER VAULT PER ARCHITECTURAL DRAWINGS.

SECTION B
VAULT REPLACEMENT
OUTLET PIPING
NOT TO SCALE



COMBINATION AIR/VACUUM VALVE
SUPPORT 4" AND LARGER DETAIL
NOT TO SCALE

NOTES:

1. TAPPING SADDLE FOR VAULTS 14, 19, AND 21 SHALL BE SPECIFICALLY DESIGNED FOR PCCP AT THE RATED PRESSURE OF THE PIPE.
2. TAPPING SADDLE AS MANUFACTURED BY ROMAC, SMITH-BLAIR, JCM, U.S. PIPE, MUELLER, CASCADE MANUFACTURING, OR ENGINEER APPROVED EQUAL.
3. RECONSTRUCTED VAULTS 14, 19, AND 21 CONTAIN NEW TAPS AND ORIGINAL TAPS. ORIGINAL TAP DETAILS LISTED ON D002.

VAULT	①	②	③
14*	12-INCH	12-INCH FLANGED GV	12-INCH COMBINATION AIR/VACUUM VALVE
19*	12-INCH	12-INCH THREADED BALL VALVE	12-INCH COMBINATION AIR/VACUUM VALVE
21*	12-INCH	12-INCH FLANGED GV	12-INCH COMBINATION AIR/VACUUM VALVE

no.	date	by	ckd	description
0	11/8/17	CAM	LJK	ISSUED FOR BID
1	2/5/19	CAM	LJK	**CONFORMING TO CONSTRUCTION RECORDS**

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. E-65

date	detailed
SEPTEMBER 11, 2017	B. FIFIELD
designed	checked
C. MAGES	L. KLEIN

City of Wichita, Kansas
SEDGWICK, KANSAS

CHENEY TRANSMISSION LINE

VAULT REPLACEMENT
INTERIOR MODIFICATIONS

project	contract
97687	

drawing **BA-D001** rev. **0**

sheet of sheets

file 97687_BA-D001.DWG

Scale For Microfilming: Millimeters / Inches

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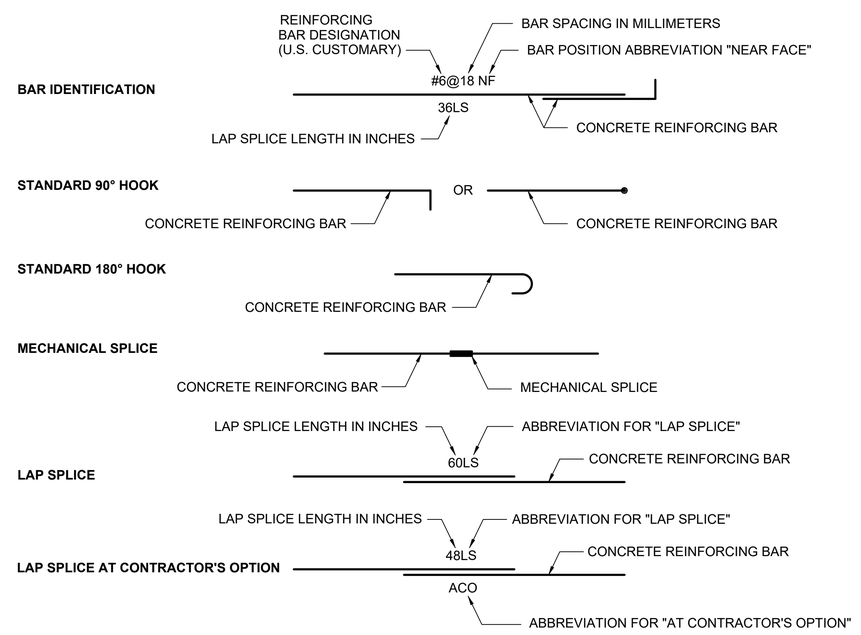
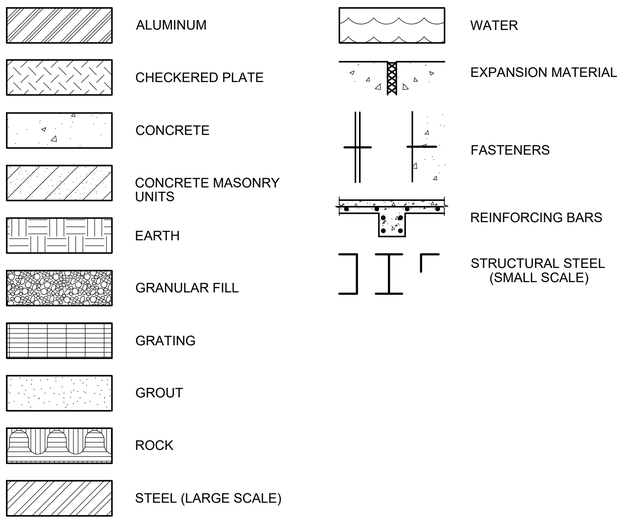
ABBREVIATIONS

AA	ALUMINUM ASSOCIATION
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AB	ANCHOR BOLT
ABT	ABOUT
ACI	AMERICAN CONCRETE INSTITUTE
ACO	AT CONTRACTOR'S OPTION
ADH	ADHESIVE
AGGR	AGGREGATE
AHR	ANCHOR
AHU	AIR HANDLING UNIT
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
AL, ALUM	ALUMINUM
ALTN	ALTERNATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
B, BOT	BOTTOM
BC	BOLT CIRCLE
BETW	BETWEEN
BLDG	BUILDING
BM	BEAM
BO	BOTTOM OF
BOS	BOTTOM OF STEEL
BRG	BEARING
BRKT	BRACKET
CAP	CAPACITY
CB	CORNER BAR
CC	CLEAR COVER
C/C	CENTER TO CENTER
CE	CONCRETE EDGE
CF	CUBIC FEET
CHKR	CHECKERED
CIR	CIRCLE
CIRC	CIRCULAR
CIRCUM	CIRCUMFERENTIAL
CIS	CENTERED IN SLAB
CIW	CENTERED IN WALL
CJ	CONSTRUCTION JOINT
CL	CENTER LINE
CLJ	CONTROL JOINT
CLR	CLEAR
CM	CENTIMETER
CMU	CONCRETE MASONRY UNIT
CO	CONCRETE OPENING
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
COR	CORNER
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
CTR	CENTER
CWB	CAPILLARY WATER BARRIER
CY	CUBIC YARD
db	BAR DIAMETER
DBL	DOUBLE
DET	DETAIL
DGA	DENSE GRADED AGGREGATE
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DK	DECKING
DL	DEAD LOAD
DN	DOWN
DT	DOUBLE TEE
DWG	DRAWING
DWL	DOWEL
E	EAST
EA	EACH
ED	EQUIPMENT DRAIN
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
EMBED	EMBEDMENT
EP	EQUIPMENT PAD
ERCP	ELLIPTICAL REINF CONC PIPE
EQ	EQUAL
EQ SP	EQUALLY SPACED
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
EW	EACH WAY
EXP	EXPANSION
EXIST	EXISTING
EXT	EXTERIOR
FAB	FABRICATE
f'c	SPECIFIED 28 DAY COMPRESSIVE STRENGTH OF CONCRETE
FD	FLOOR DRAIN
FDN	FOUNDATION
FF	FAR FACE
FL	FLOOR
FLG	FLANGE
f'm	SPECIFIED COMPRESSIVE STRENGTH OF MASONRY
FNSH	FINISH
FRP	FIBERGLASS REINFORCED PLASTIC
fs	PERMISSIBLE STEEL STRESS
FS	FAR SIDE
FT	FEET, FOOT
FUT	FUTURE
Fy, fy	YIELD STRESS
GA	GAGE, GAUGE
GAL	GALLON
GALV	GALVANIZED
GF	GRANULAR FILL
GND	GROUND
GR	GRADE
GRTG	GRATING
GS	GRATING SUPPORT
H	HIGH
HC	HOLLOW CORE
HEX	HEXAGON
HK	HOOK
HR	HANDRAIL
HORIZ	HORIZONTAL
HP	HORSEPOWER
HPT	HIGH POINT
HS	HIGH STRENGTH
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
IBC	INTERNATIONAL BUILDING CODE
ID	INSIDE DIAMETER
IF	INNER FACE
IJ	ISOLATION JOINT
INTR	INTERIOR
INVT	INVERT
JT	JOINT
K	KIP (1000 POUNDS)
KB	KNEE BRACE
KPL	KICK PLATE
kg	KILOGRAM
kN	KILONEWTON
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
L	ANGLE, LONG
LAD	LADDER
LB	POUND
LG	LENGTH, LONG
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LLO	LONG LEG OUTSTANDING
LNTL	LINTEL
LONG	LONGITUDINAL
LPT	LOW POINT
LS	LAP SPLICE
M	METER
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURE(R)
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MK	MARK
MM	MILLIMETER
MPa	MEGAPASCAL
MS	MECHANICAL SPLICE
N	NORTH
NA	NOT APPLICABLE
NE	NORTHEAST
NF	NEAR FACE
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NS	NEAR SIDE
NTS	NOT TO SCALE
NW	NORTHWEST
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTER FACE
OPNG	OPENING
OPP	OPPOSITE
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OZ	OUNCE
Pa	PASCAL
PCA	PORTLAND CEMENT ASSOCIATION
PCF	POUNDS PER CUBIC FOOT
PCI	PRESTRESSED CONCRETE INSTITUTE, POUNDS PER CUBIC INCH
PED	PEDESTAL
PEN	PENETRATE
PERP	PERPENDICULAR
PJTN	PROJECTION
PL	PLATE, PROPERTY LINE
PLCS	PLACES
PLF	POUNDS PER LINEAR FOOT
PREFAB	PREFABRICATED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PRV	PRESSURE RELIEF VALVE
PT	POINT
PVC	POLYVINYL CHLORIDE
PWS	PLASTIC WATERSTOP
R	RISERS
RAD	RADIUS
RD	ROOF DRAIN
REF	REFERENCE
REINF	REINFORCEMENT
REQD	REQUIRED
REV	REVISION
RJ	ROUGHENED JOINT
RM	ROOM
S	SOUTH
SCHED	SCHEDULE
SD	SUBDRAIN
SE	SOUTHEAST, STEEL EDGE
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SJ	SAWED JOINT
SLO	SHORT LEG OUTSTANDING
SLP	SLOPE
SLV	SLEEVE
SP	SPACE
SPECS	SPECIFICATION
SQ	SQUARE
SS, SST	STAINLESS STEEL
ST	SINGLE TEE
STD	STANDARD
STIF	STIFFENER
STIR	STIRRUP
STL	STEEL
STR	STRAIGHT, STAIR
STRL	STRUCTURAL
STRUC	STRUCTURE
SW	SOUTHWEST
SYMM	SYMMETRICAL
T	TON, TREAD, THICKNESS, TOP
TEMP	TEMPERATURE, TEMPORARY
THK	THICK
THD	THREAD
THRU	THROUGH
T&B	TOP AND BOTTOM
TOB	TOP OF BOLT
TOC	TOP OF CONCRETE
TOF	TOP OF FLOOR
TOG	TOP OF GRATING
TOS	TOP OF STEEL
TOW	TOP OF WALL
TSF	TONS PER SQUARE FOOT
TRD	TREAD
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
UNO	UNLESS NOTED OTHERWISE
VAR	VARIES
VERT	VERTICAL
W	WEST, WIDE
WD	WIDTH
WP	WORK POINT
WS	WATERSTOP
WT	WEIGHT, WATERTIGHT
WW	WASTEWATER
WWF	WELDED WIRE FABRIC
W/	WITH
W/O	WITHOUT
YD	YARD
&	AND
±	APPROXIMATELY
@	AT
x	BY
°	DEGREE (PLANE ANGLE)
Ø	DIAMETER
=	EQUAL
>	GREATER THAN
<	LESS THAN
#	NUMBER, POUND
%	PERCENT

CONCRETE REINFORCING BAR NOMENCLATURE



MATERIALS LEGEND



no.	date	by	ckd	description
0	11/8/17	AMG	JT	ISSUED FOR BID
1	2/5/19	AMG	JT	**CONFORMING TO CONSTRUCTION RECORDS**

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. E-65

date	detailed
SEPTEMBER 27, 2017	B. FIFIELD
designed	checked
A. GRIFFIN	J. TSOUFLIAS

City of Wichita, Kansas

SEDGWICK, KANSAS

WITCHITA CHENEY PIPELINE

LEGEND AND ABBREVIATIONS

project	contract
97687	

drawing **BA-S001** – rev. **1**

sheet of sheets

file 97687_BA-S001.DWG

Scale For Microfilming: Millimeters / Inches

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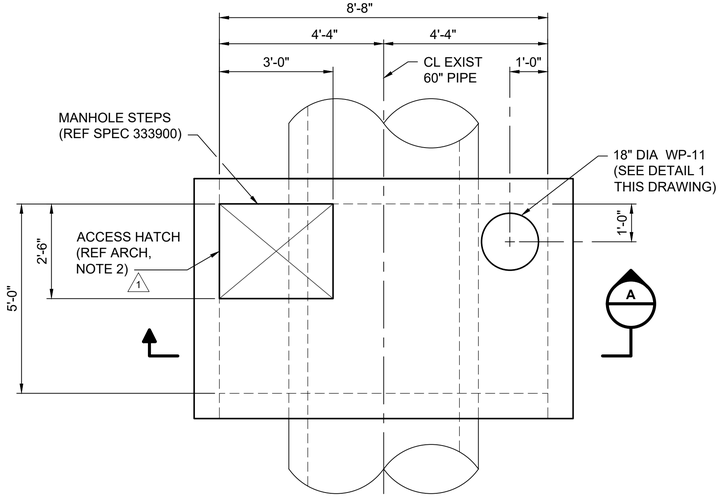
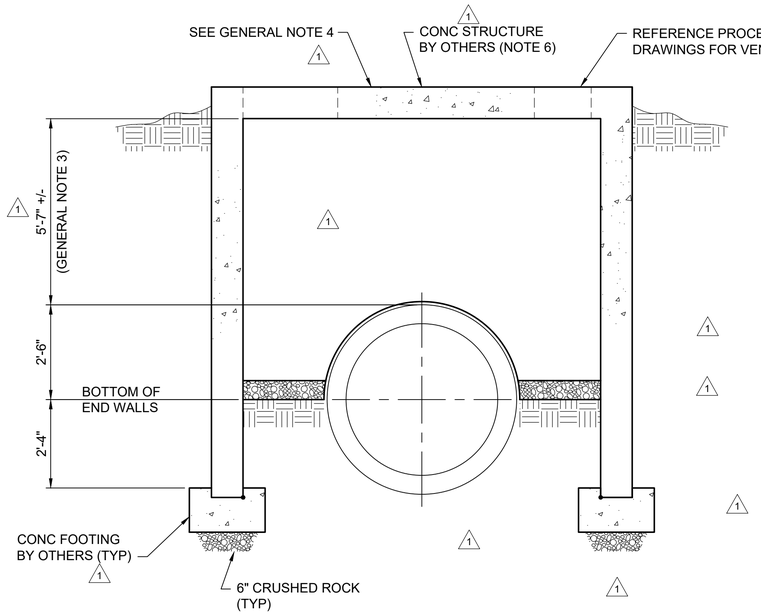


TOP PLAN

0 1' 2' 4'

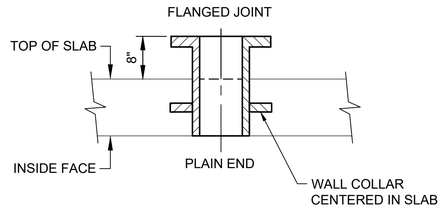
SCALE IN FEET

NORTH



SECTION A

NOT TO SCALE



WP-11

PRECAST

DETAIL 1

NOT TO SCALE

GENERAL NOTES:

1. **THIS SHEET SHALL APPLY ONLY TO VAULTS 14, 19, AND 21.**
2. HATCH ANCHORS SHALL BE 304 SST HILTI HAS ADHESIVE ANCHORS WITH HILTI HIT-HY200 ADHESIVE OR ENGINEER APPROVED EQUAL. ANCHOR DIAMETER AND EMBEDMENT PER HATCH MANUFACTURER.
3. TOP OF CONCRETE VAULT ELEVATION SHALL MATCH EXISTING VAULT ELEVATION.
4. INSULATE AND COVER VAULT PER PROCESS AND ARCHITECTURAL DRAWINGS.
5. ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE SHALL HAVE A BITUMASTIC COATING.
6. SEE REFERENCE DRAWINGS 1 AND 2 FOR VAULT DETAILS AND REINFORCING.

no.	date	by	ckd	description
0	11/8/17	AMG	JT	ISSUED FOR BID
1	2/5/19	AMG	JT	**CONFORMING TO CONSTRUCTION RECORDS**

BURNS McDONNELL

9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. E-65

date	detailed
SEPTEMBER 27, 2017	B. FIFIELD
designed	checked
A. GRIFFIN	J. TSOUFLIAS

City of Wichita, Kansas

SEDGWICK, KANSAS

WITCHITA CHENEY PIPELINE

VAULT REPLACEMENT
PLANS, SECTIONS, AND DETAILS

project	contract
97687	

drawing **BA-S002** – rev. **1**

sheet of sheets

file 97687_BA-S002.DWG

Scale For Microfilming: Millimeters / Inches

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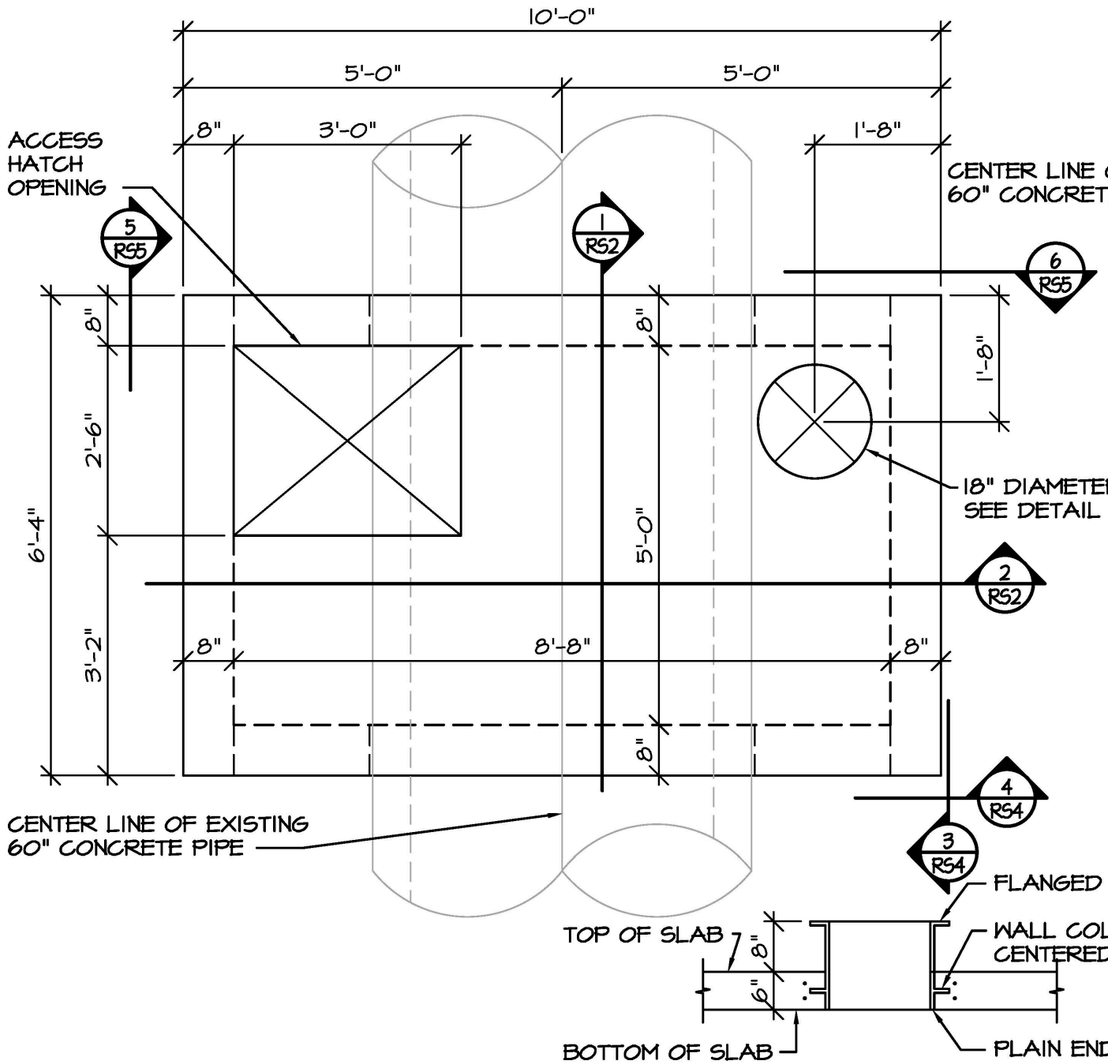
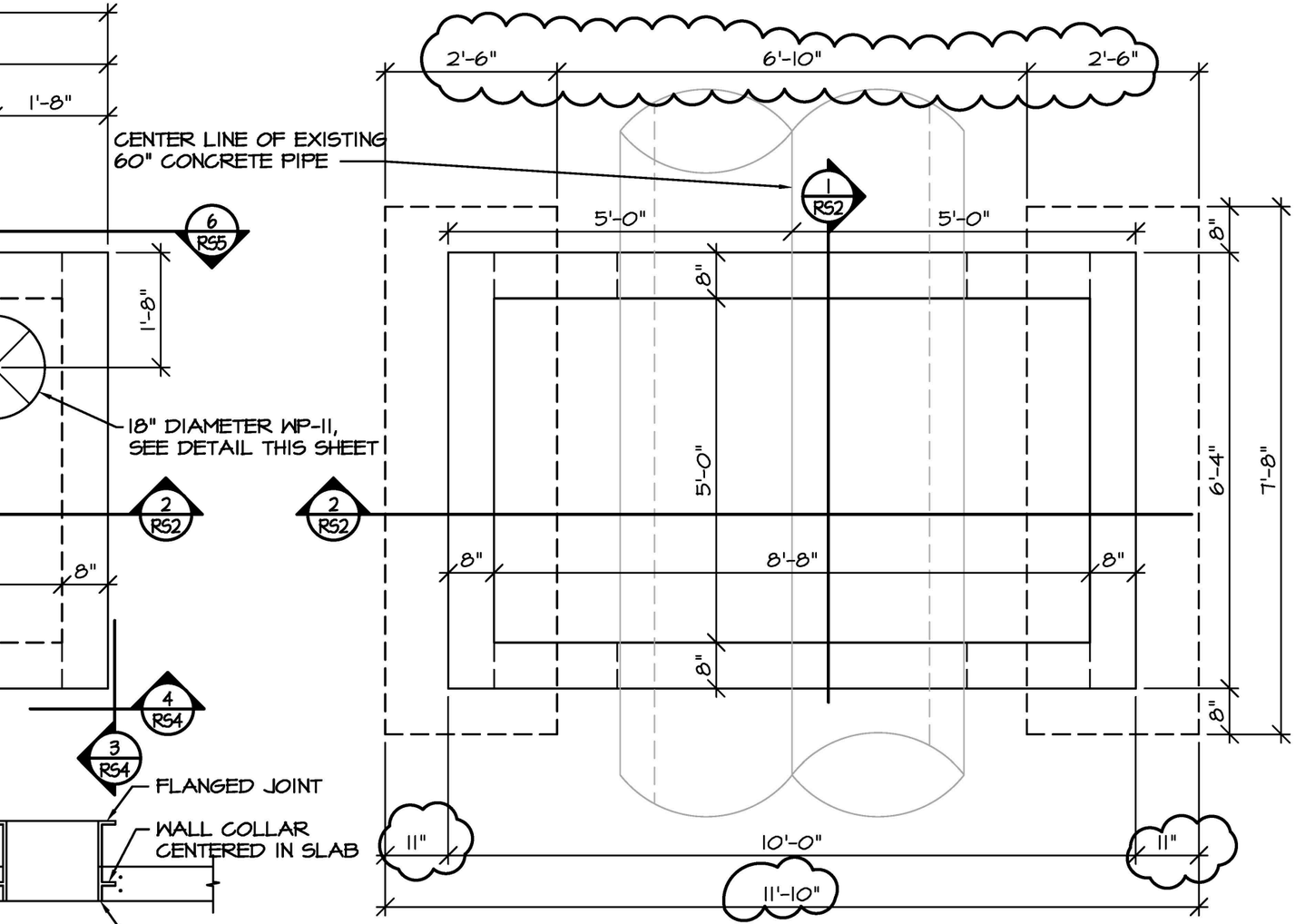


WP-11 DETAIL

A CAP SLAB PLAN

½" = 1'-0"



B FOUNDATION PLAN

½" = 1'-0"

NOTE

DO NOT BACKFILL WALLS UNTIL CAP SLAB CONCRETE OBTAINS DESIGN STRENGTH.

DESIGN LOADS

CAP SLAB
- 300 PSF UNIFORM LIVE LOAD
- 1500 P CONCENTRATED LOAD AT ANY POINT SIMULTANEOUS WITH UNIFORM LOAD

WALLS
- 62.4 PCF INTERIOR HYDROSTATIC PRESSURE
- 100 PCF EXTERIOR EQUIVALENT SOIL FLUID PRESSURE
- WATER TABLE BELOW VAULT LEVEL

MATERIAL REQUIREMENTS

CONCRETE: 4500 PSI AT 28 DAYS
4.5 TO 7.5% ENTRAINED AIR
REINFORCING: ASTM A615, GRADE 60
MINIMUM SOIL BEARING PRESSURE: 1500 PSF
MAXIMUM EQUIVALENT SOIL FLUID PRESSURE: 100 PCF

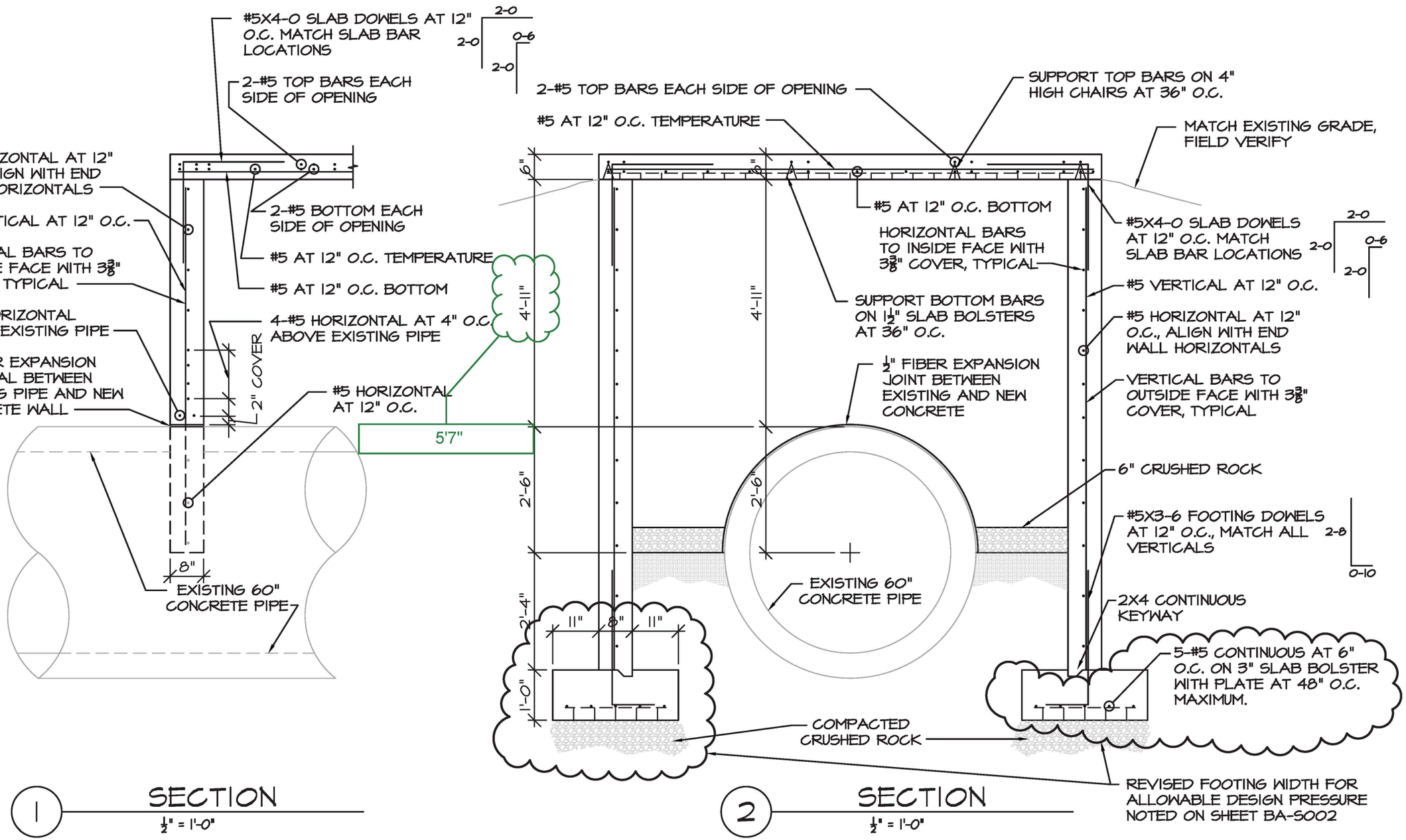
REFERENCE DRAWING

Dudley Williams and Associates, P.A.
230 Laura ▪ Suite 200 ▪ Wichita, KS 67211-1514
316-263-7591 ▪ www.dwase.com

CITY OF WICHITA
CHENEY TRANSMISSION LINE IMPROVEMENTS
VAULTS 14, 19, AND 21 REPLACEMENT
DONDLINGER CONSTRUCTION

PROJECT NO. 17-248
DATE DEC. 22, 2017
REVISED JAN. 12, 2018
RS1

Vaults were moved 4' to the west of their original location



1 SECTION
½" = 1'-0"

2 SECTION
½" = 1'-0"

REFERENCE DRAWING

Dudley Williams and Associates, P.A.
230 Laura ▪ Suite 200 ▪ Wichita, KS 67211-1514
316-263-7591 ▪ www.dwase.com

DWA

CITY OF WICHITA
CHENEY TRANSMISSION LINE IMPROVEMENTS
VAULTS 14, 19, AND 21 REPLACEMENT
DONDLINGER CONSTRUCTION

PROJECT NO.
17-248

DATE
DEC. 22, 2017
REVISED JAN. 12, 2018

RS2