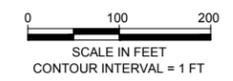


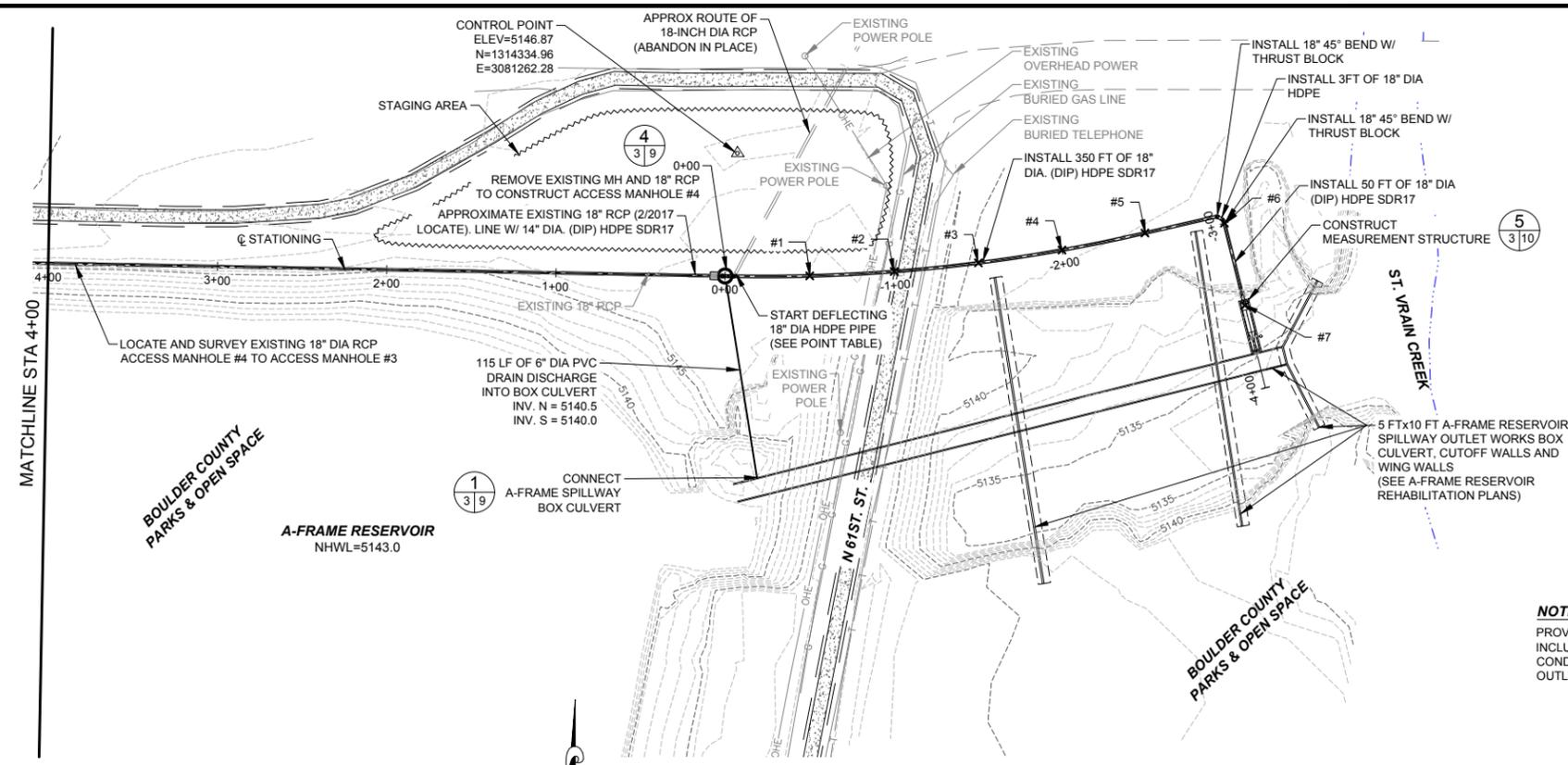
**PLAN VIEW**



Friday, August 17, 2018 8:56:19 AM DRAWING: Q:\0155 arhwa\005 lake 4 repair\outlet pipeline design\_0155.005.02\CAD\working drawings\GENERAL\_SITE\_PLAN.DWG

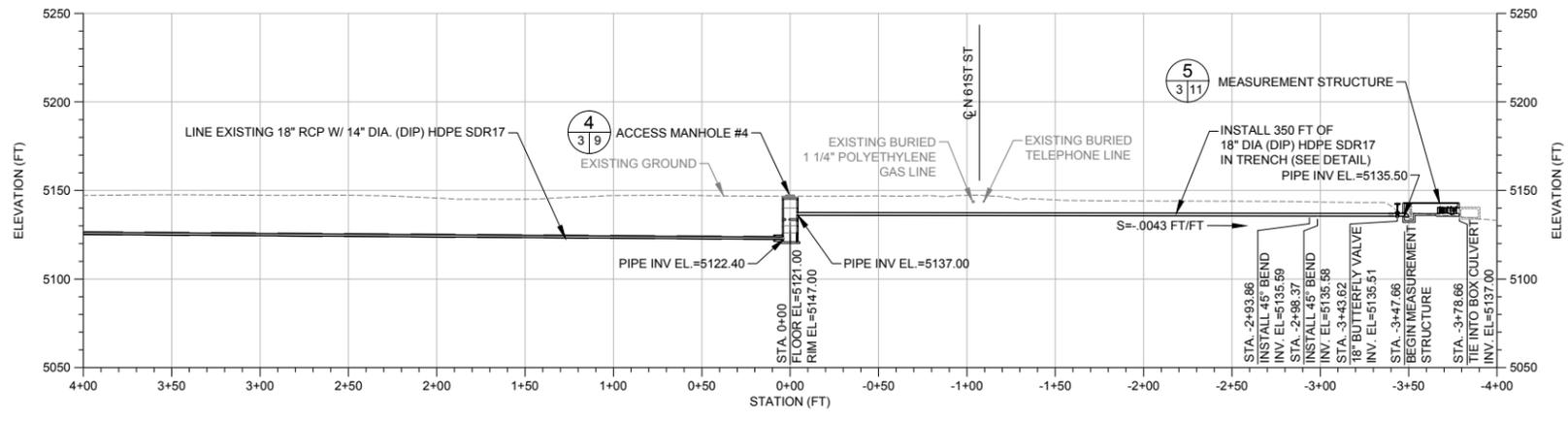
REVISIONS				LAKE 4 OUTLET PIPELINE REPLACEMENT	
NO.	DESCRIPTION	DATE	BY	GENERAL SITE PLAN	
1	ISSUED FOR BID	6/14/18	MMC	DEERE & AULT CONSULTANTS, INC.	
				DESIGNED BY: MMC	APPROVED BY: MMC
				DRAWN BY: HOG	DATE: JUNE 2018
				CHECKED BY: MMC	SCALE: AS NOTED
				JOB NO. 0155.005.02	SHEET: 2 of 11

600 S. AIRPORT RD., BLDG. A, SUITE 205  
LONGMONT, CO 80503  
TEL. 303.651.1468 FAX 303.651.1469



POINT TABLE		
DESCRIPTION	NORTHING	EASTING
#1	1314262.69	3081305.05
#2	1314265.27	3081354.98
#3	1314270.35	3081404.72
#4	1314277.91	3081454.14
#5	1314287.92	3081503.12
#6	1314293.75	3081550.08
#7	1314245.24	3081562.20

**NOTE:**  
 PROVIDE 208V, 100A 1Ø ELECTRICAL SERVICE TO ACCESS MANHOLE #4 INCLUDING CONNECTION TO CITY OF LONGMONT ELECTRIC, BURIED CONDUIT AND UNISTRUT MOUNTED SERVICE DISCONNECT METER AND OUTLETS WITH ENCLOSURES LOCATED ADJACENT TO ACCESS MANHOLE #4.

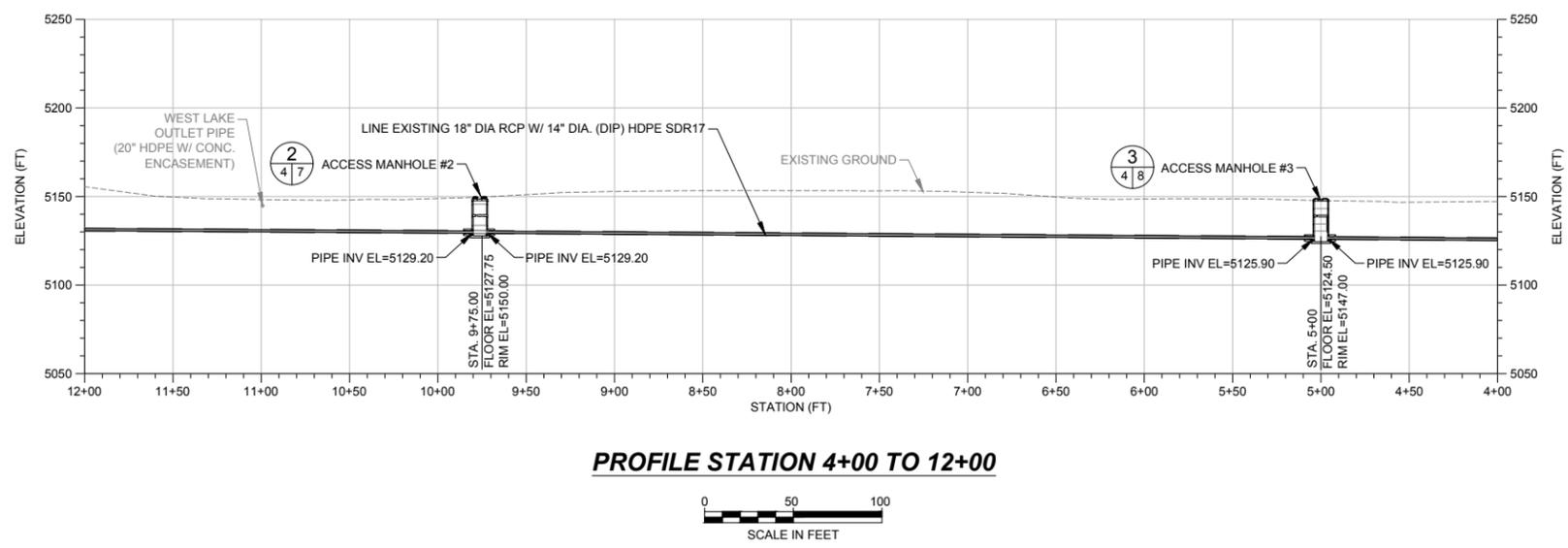
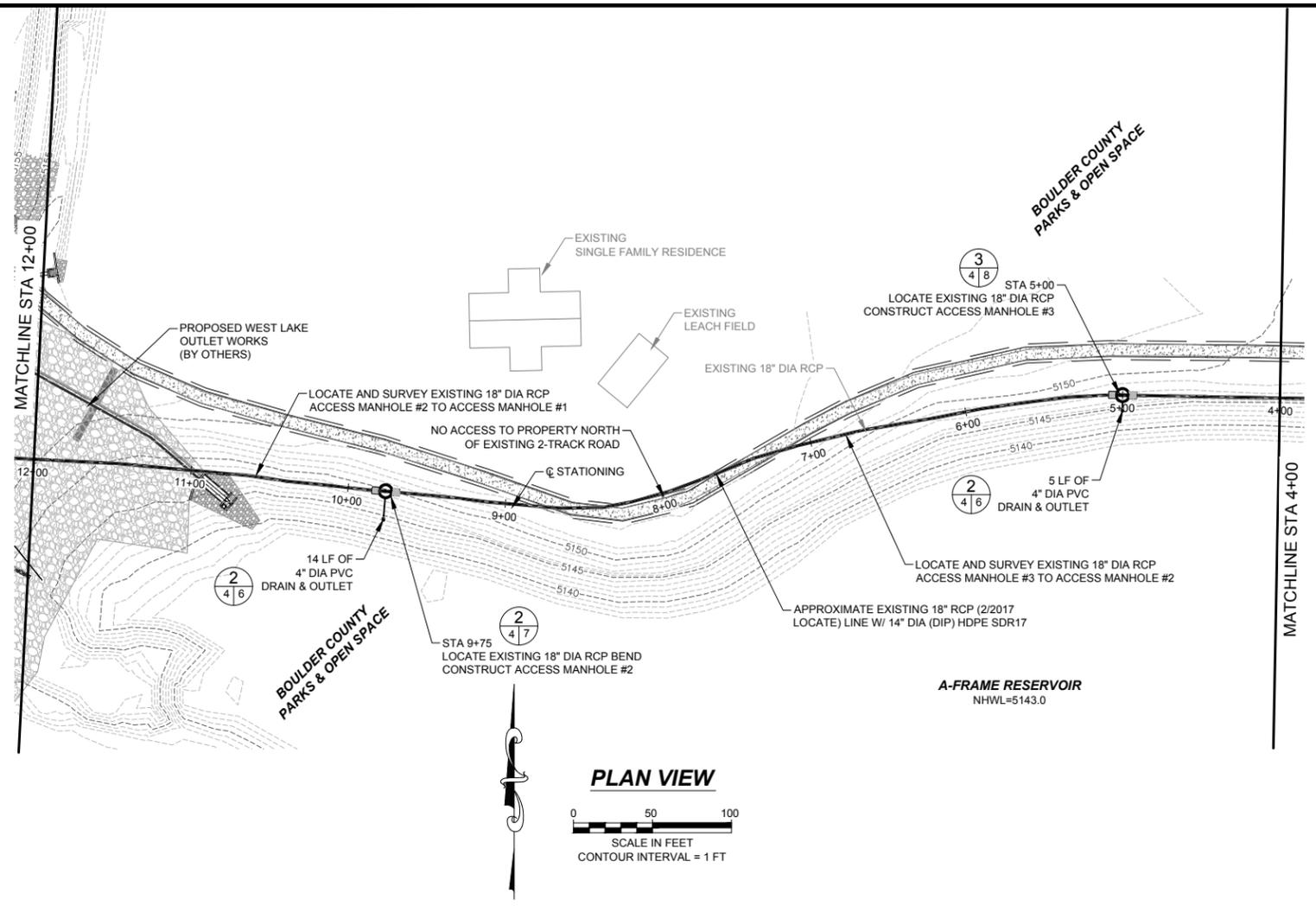


Friday, August 17, 2018 8:56:20 AM DRAWING: Q:\0155 arhwa\005 lake 4 repair\outlet pipeline design\_0155.005.02\CAD\working drawings\GENERAL SITE PLAN.DWG

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR BID	6/14/18	MMC

<b>LAKE 4 OUTLET PIPELINE REPLACEMENT</b>			
<b>PLAN &amp; PROFILE - ST. VRAIN CREEK TO STA 4+00</b>			
<b>DEERE &amp; AULT CONSULTANTS, INC.</b>		600 S. AIRPORT RD., BLDG. A, SUITE 205 LONGMONT, CO 80503 TEL. 303.651.1468 FAX 303.651.1469	
DESIGNED BY: MMC	APPROVED BY: MMC	JOB NO.	SHEET:
DRAWN BY: HOG	DATE: JUNE 2018	0155.005.02	3 of 11
CHECKED BY: MMC	SCALE: AS NOTED		

Friday, August 17, 2018 8:56:21 AM DRAWING: Q:\0155 arhwa\005 lake 4 repair\outlet pipeline design 0155.005.02\CAD\working drawings\GENERAL SITE PLAN.DWG

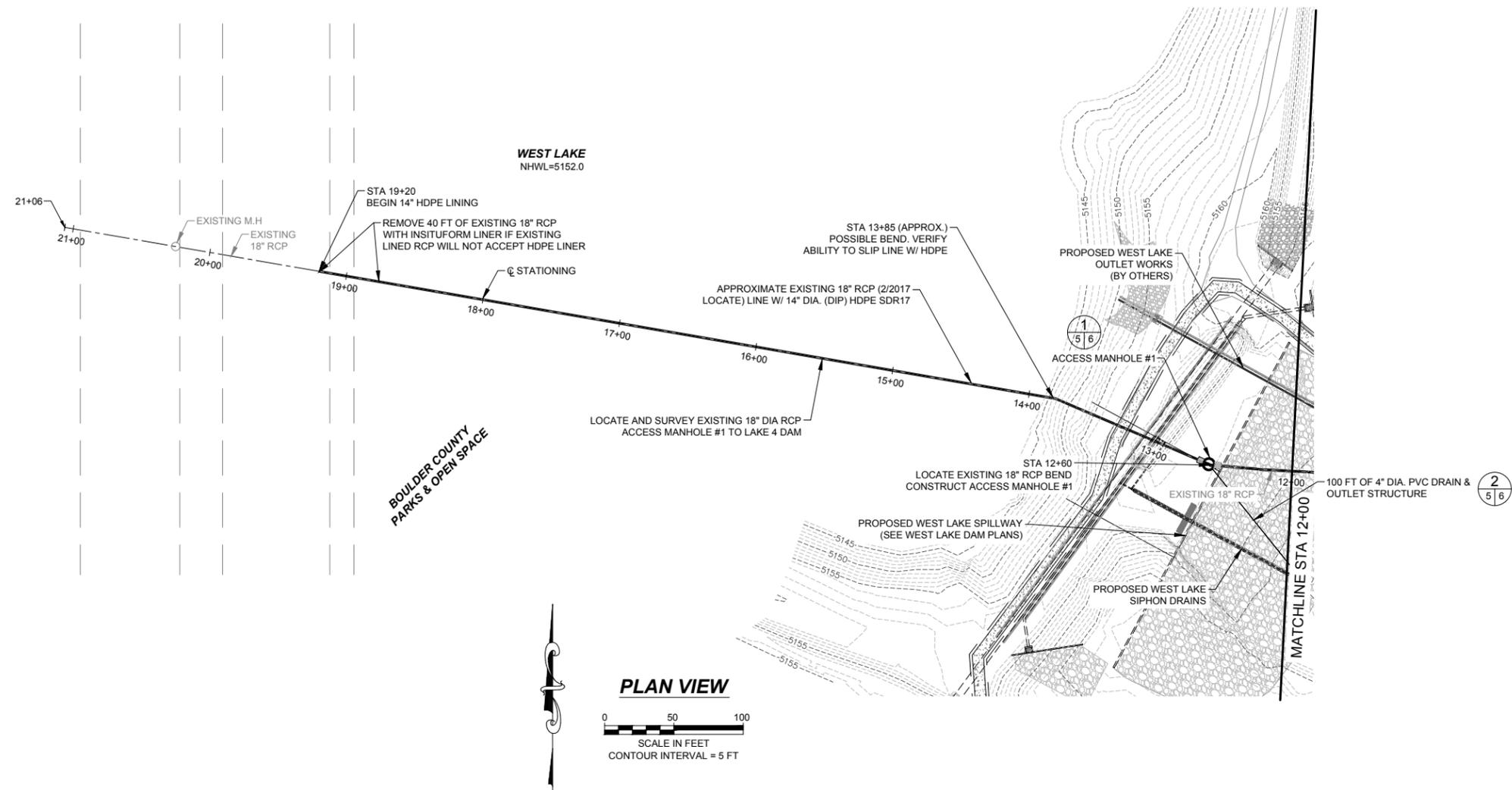


**LAKE 4 OUTLET PIPELINE REPLACEMENT**  
**PLAN & PROFILE - STA 4+00 TO STA 12+00**

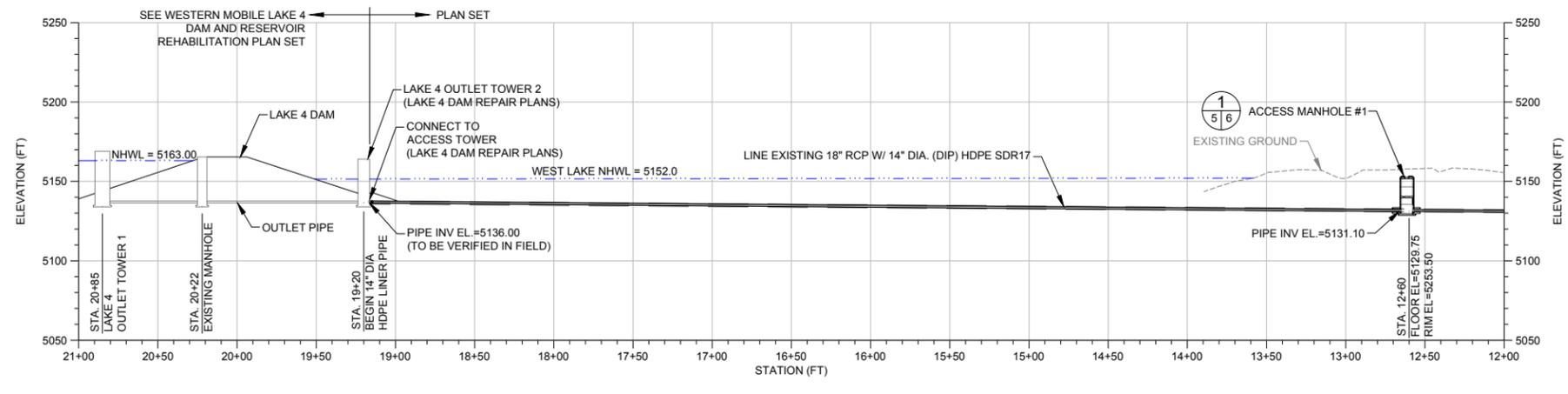
REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR BID	6/14/18	MMC

<b>DEERE &amp; AULT CONSULTANTS, INC.</b>		600 S. AIRPORT RD., BLDG. A, SUITE 205 LONGMONT, CO 80503 TEL. 303.651.1468 FAX 303.651.1469	
DESIGNED BY: MMC	APPROVED BY: MMC	JOB NO.	SHEET:
DRAWN BY: HOG	DATE: JUNE 2018	0155.005.02	4 of 11
CHECKED BY: MMC	SCALE: AS NOTED		

Friday, August 17, 2018 8:56:22 AM DRAWING: Q:\0155 arhwa\005 lake 4 repair\outlet pipeline design\_0155.005.02\CAD\working drawings\GENERAL SITE PLAN.DWG



**PLAN VIEW**  
 SCALE IN FEET  
 CONTOUR INTERVAL = 5 FT

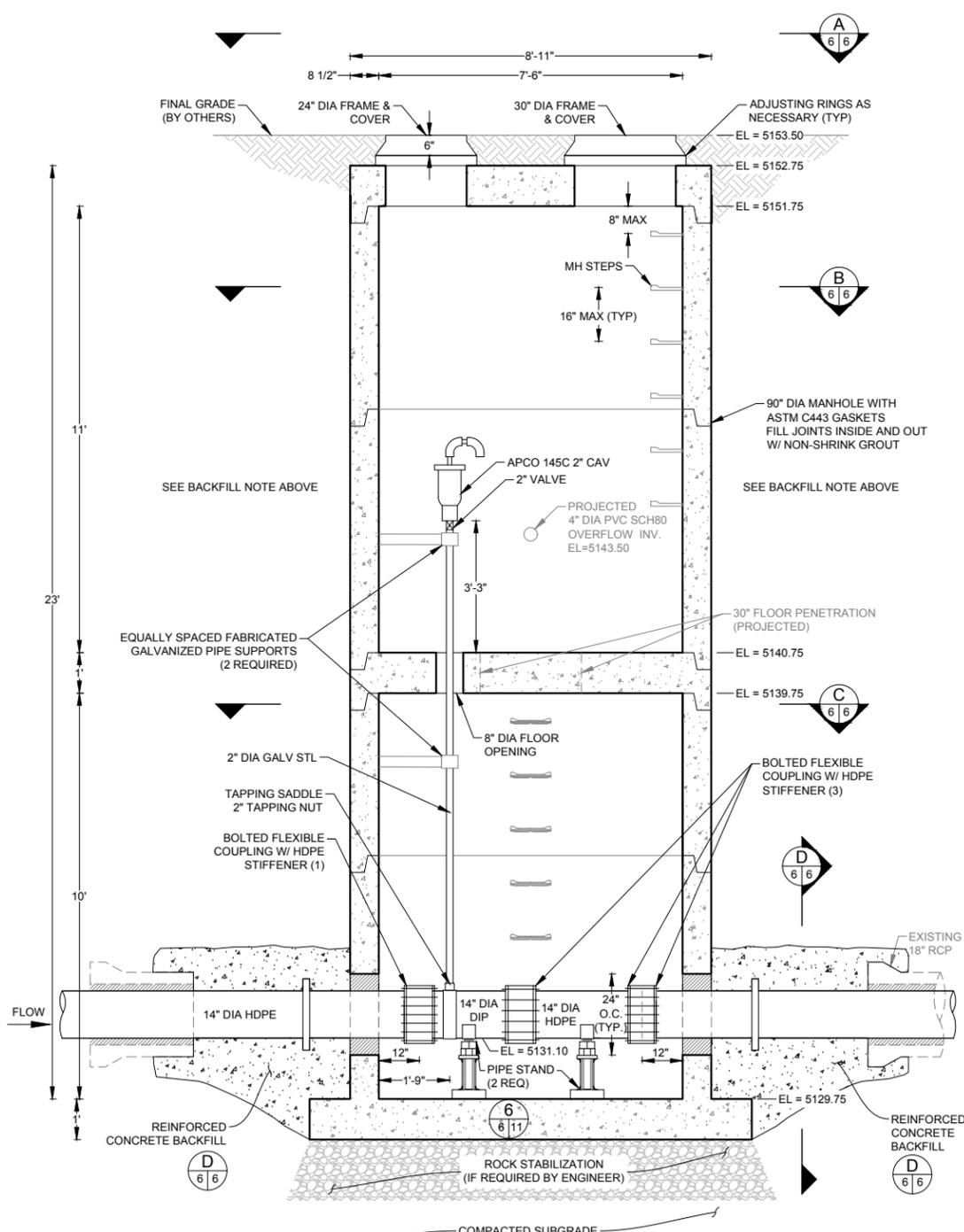


**PROFILE STATION 12+00 TO END**  
 SCALE IN FEET

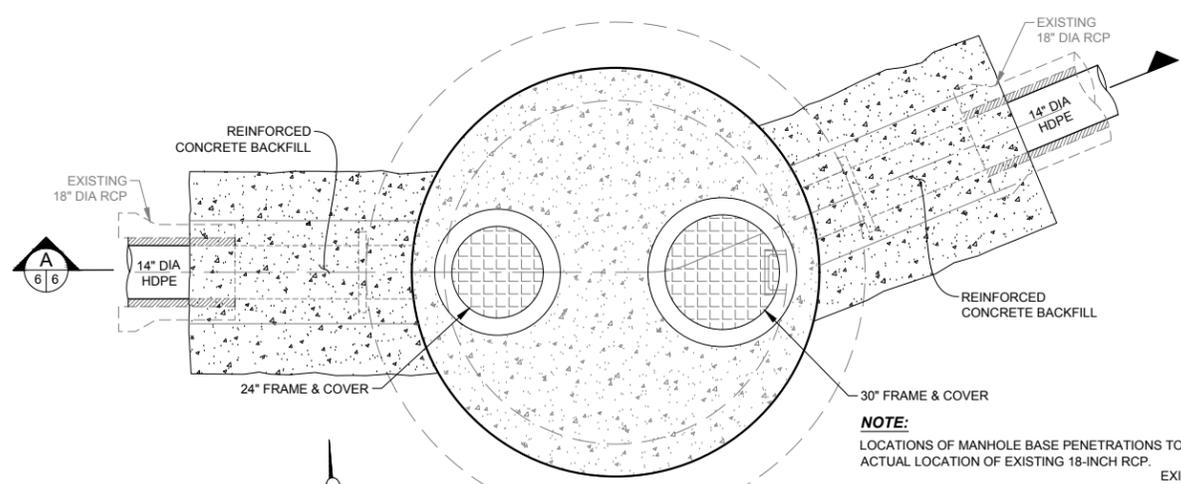
REVISIONS				LAKE 4 OUTLET PIPELINE REPLACEMENT	
NO.	DESCRIPTION	DATE	BY	PLAN & PROFILE - STA 12+00 TO END	
1	ISSUED FOR BID	6/14/18	MMC	DEERE & AULT CONSULTANTS, INC.	
				DESIGNED BY: MMC	APPROVED BY: MMC
				DRAWN BY: HOG	DATE: JUNE 2018
				CHECKED BY: MMC	SCALE: AS NOTED
				JOB NO. 0155.005.02	SHEET: 5 of 11

600 S. AIRPORT RD., BLDG. A, SUITE 205  
 LONGMONT, CO 80503  
 TEL. 303.651.1488 FAX 303.651.1489

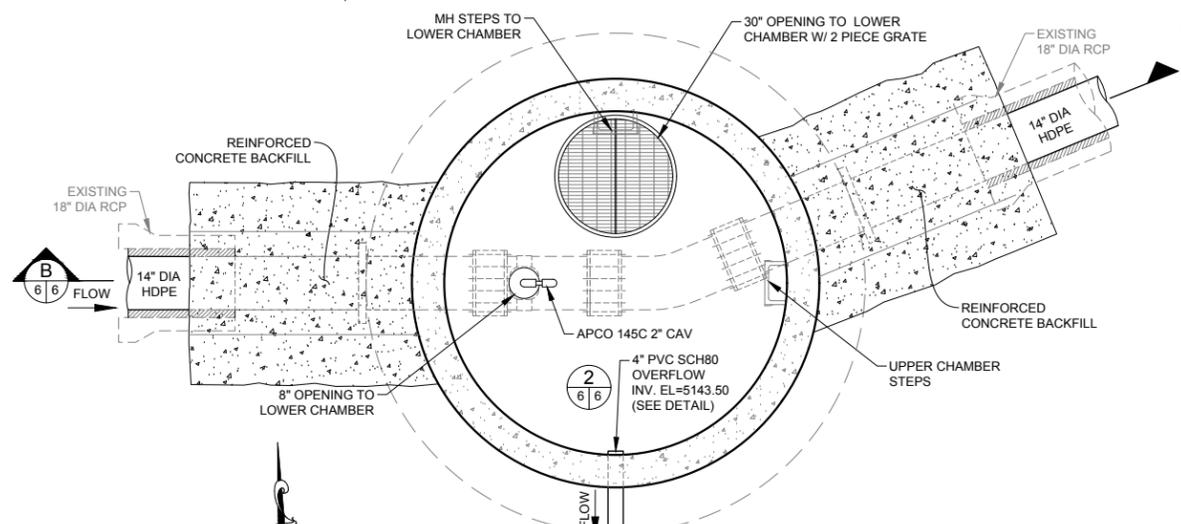
**NOTE:**  
ACCESS MANHOLE #1 (ONLY) BACKFILL SHALL BE CLAY CORE MATERIAL CONFORMING TO THE WEST LAKE DAM REPAIR PLAN MATERIAL AND INSTALLATION SPECIFICATIONS, INCLUDING TESTING REQUIREMENTS.



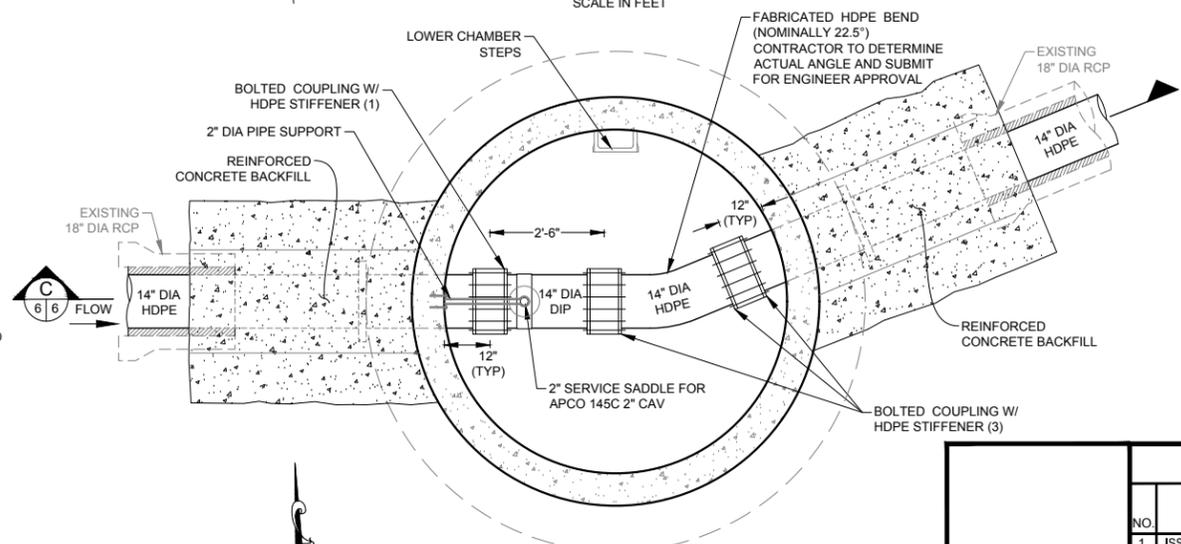
**ACCESS MANHOLE 1 SECTION VIEW**



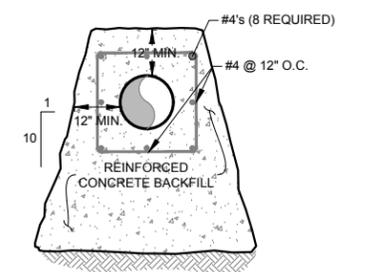
**SECTION A PLAN VIEW**



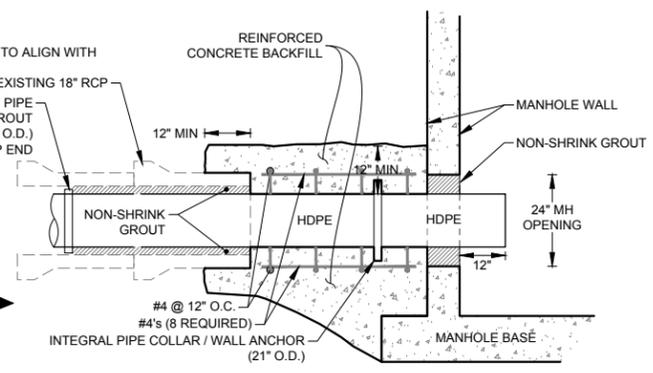
**UPPER CHAMBER SECTION B PLAN VIEW**



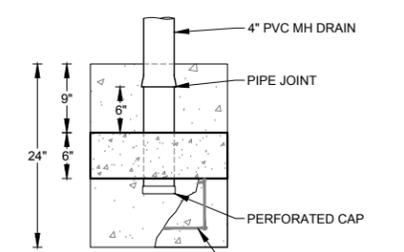
**LOWER CHAMBER SECTION C PLAN VIEW**



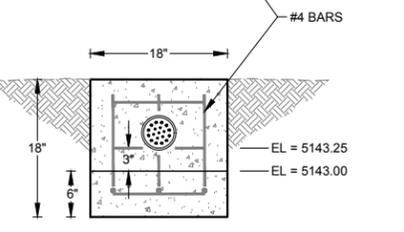
**SECTION D**



**MANHOLE WALL PENETRATION DETAIL (TYP.)**



**PLAN VIEW**



**PROFILE VIEW  
MANHOLE DRAIN OUTLET (TYP.)**

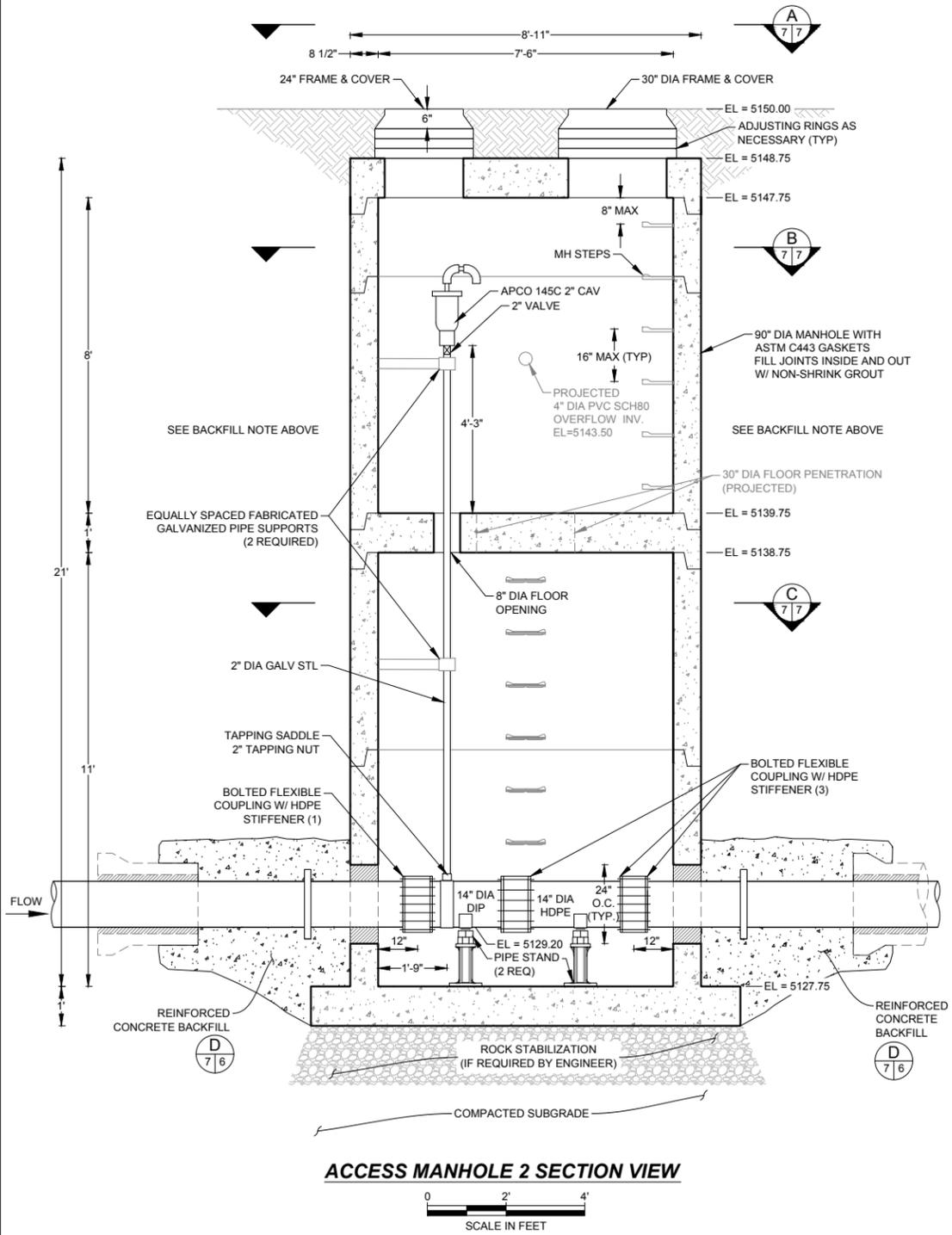


REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR BID	6/14/18	MMC

LAKE 4 OUTLET PIPELINE REPLACEMENT			
ACCESS MH #1 PLAN & SECTIONS			
<b>DEERE &amp; AULT</b>		600 S. AIRPORT RD., BLDG. A, SUITE 205 LONGMONT, CO 80503 TEL. 303.651.1488 FAX 303.651.1469	
DESIGNED BY: MMC	APPROVED BY: MMC	JOB NO.:	SHEET:
DRAWN BY: HOG	DATE: JUNE 2018	0155.005.02	6 of 11
CHECKED BY: MMC	SCALE: AS NOTED		

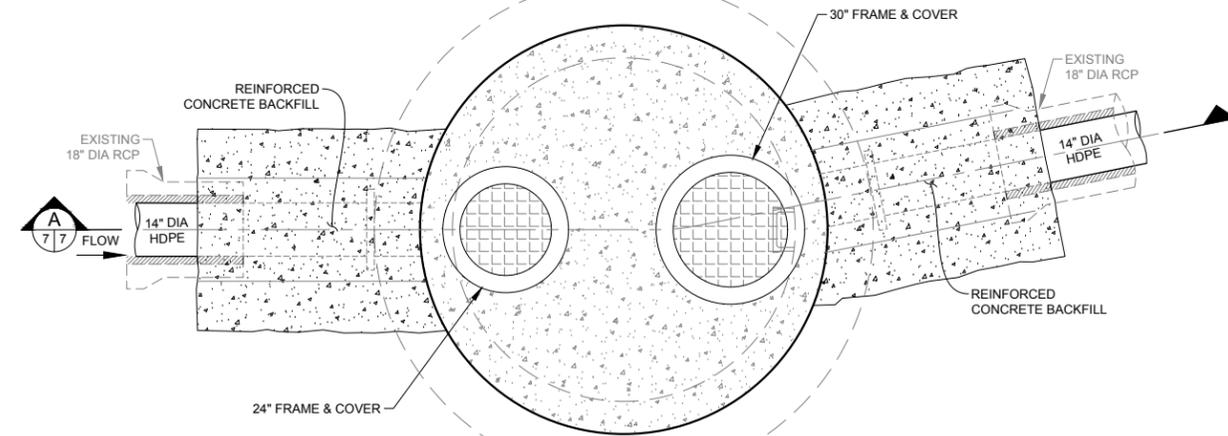
Friday, August 17, 2018 8:56:33 AM DRAWING: C:\0155\_arkw\005\_in\4\_repair\outlet\_pipeline\_design\_0155.005.02\CAD\working\_drawings\Outlet\_Pipe\_Details.DWG

**NOTE:**  
BACKFILL WITH COMPACTED NATIVE MATERIAL FROM EXCAVATION.  
COMPACT TO 95% STD PROCTOR DENSITY AT ±2% OF OPTIMUM MOISTURE.



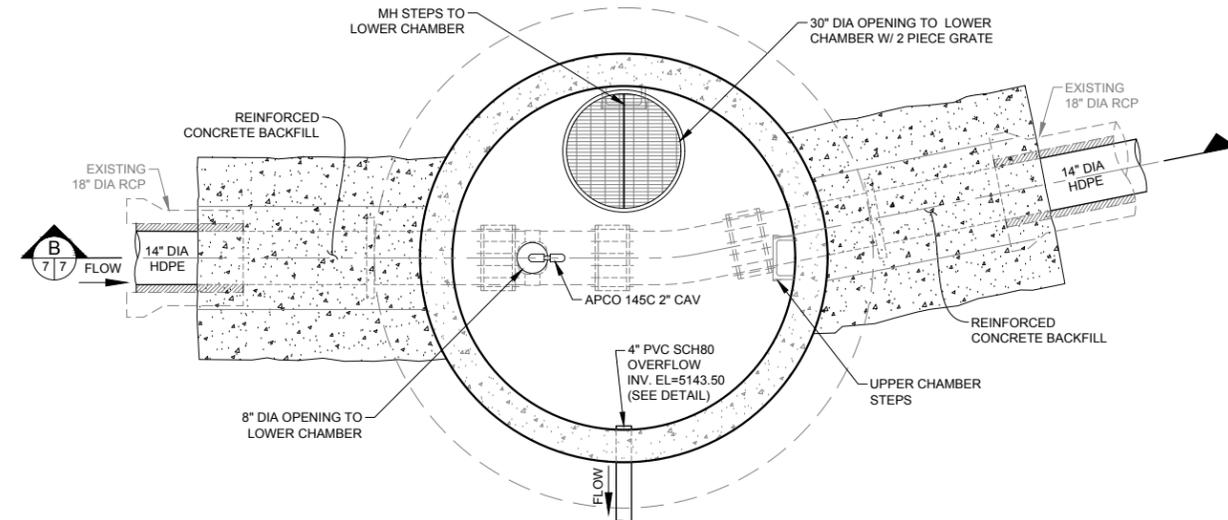
**ACCESS MANHOLE 2 SECTION VIEW**

SCALE IN FEET



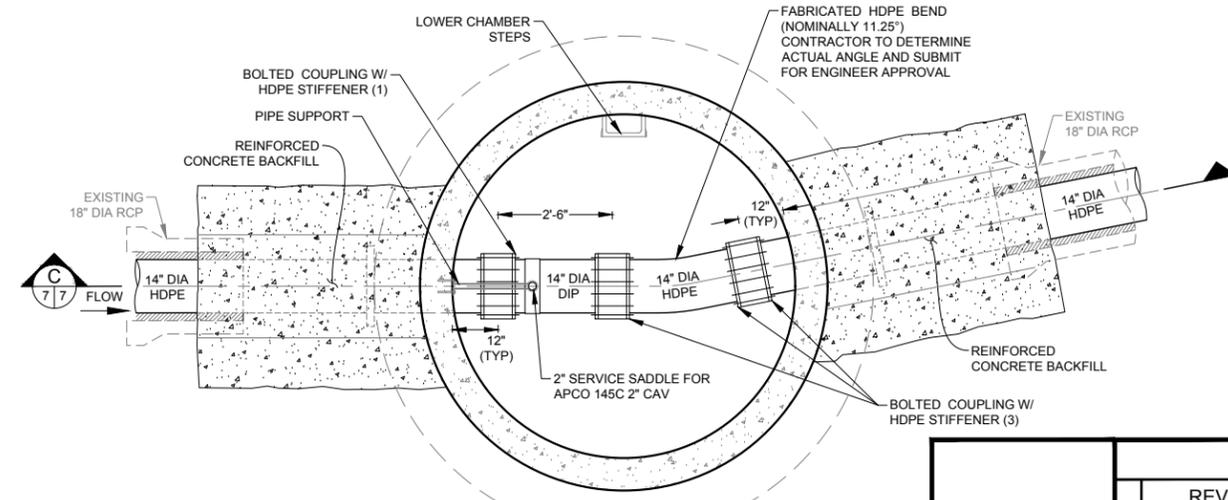
**SECTION A PLAN VIEW**

SCALE IN FEET



**UPPER CHAMBER SECTION B PLAN VIEW**

SCALE IN FEET



**LOWER CHAMBER SECTION C PLAN VIEW**

SCALE IN FEET

**NOTE:**  
LOCATIONS OF MANHOLE BASE PENETRATIONS TO ALIGN WITH  
ACTUAL LOCATION OF EXISTING 18-INCH RCP.

Friday, August 17, 2018 8:56:34 AM DRAWING: Q:\0155 arhwa\005.02\03\CAD\working drawings\Outlet\_Pipe\_Details.DWG

**LAKE 4 OUTLET PIPELINE REPLACEMENT**

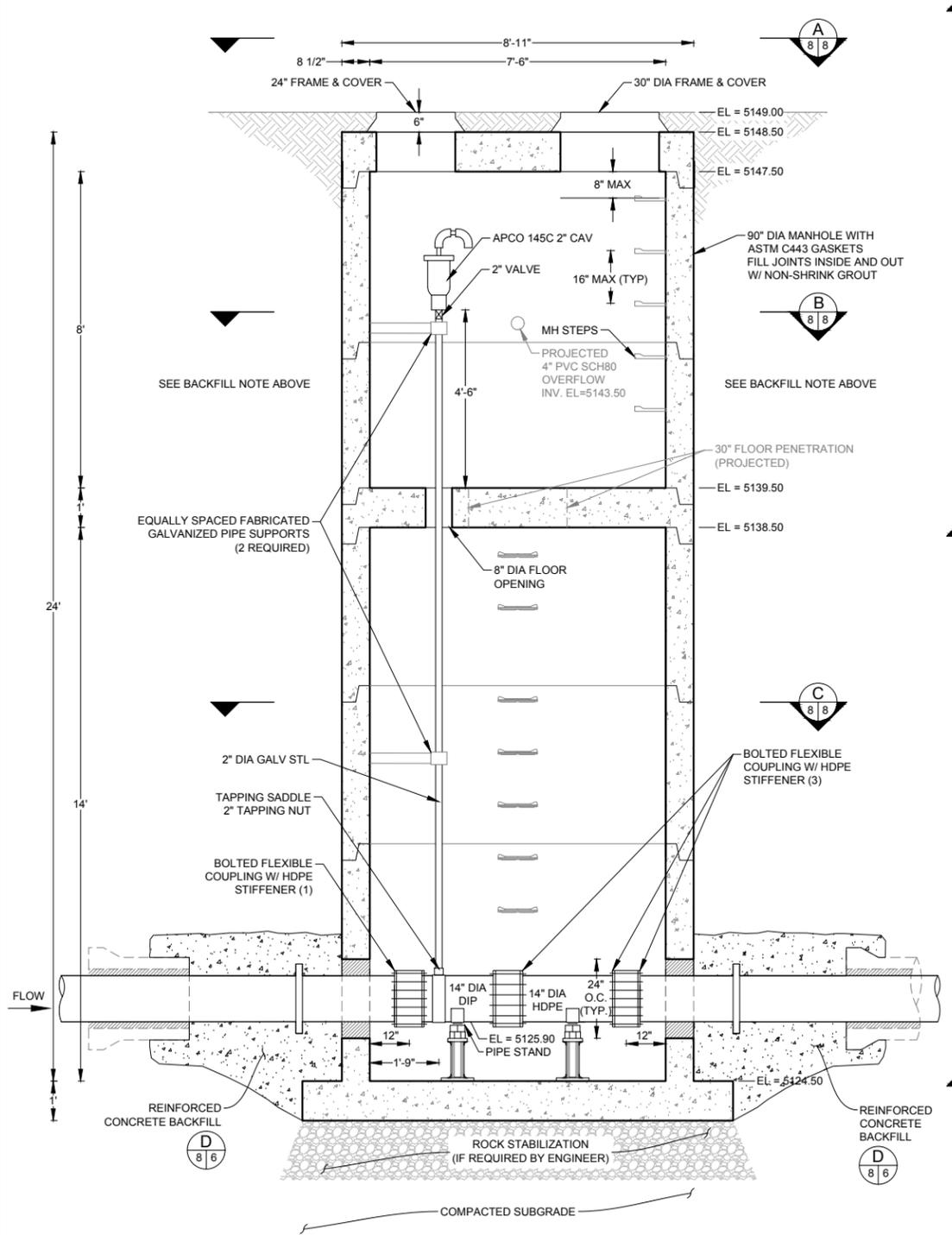
**ACCESS MH #2 PLAN & SECTIONS**

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR BID	6/14/18	MMC

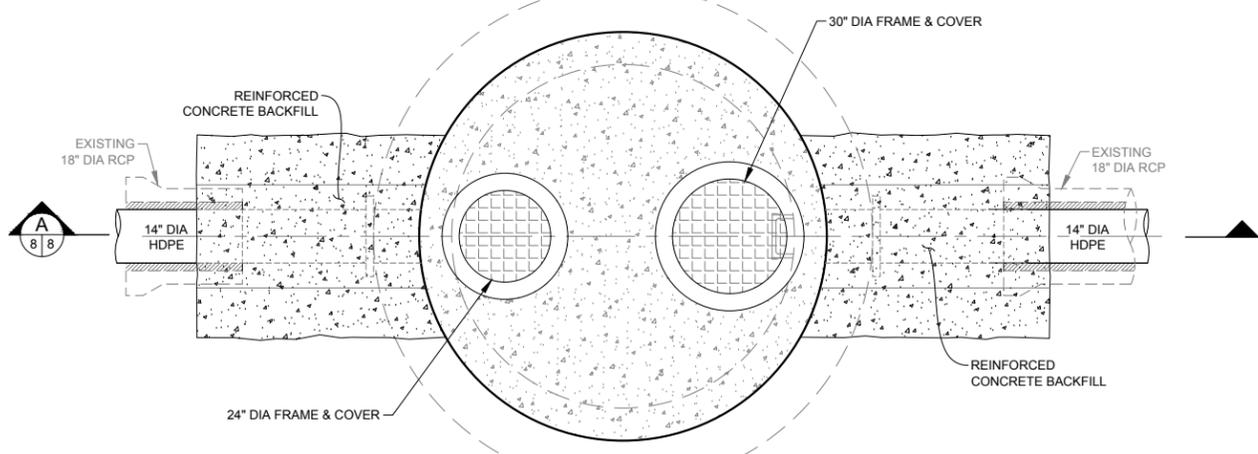
**DEERE & AULT CONSULTANTS, INC.**  
600 S. AIRPORT RD., BLDG. A, SUITE 205  
LONGMONT, CO 80503  
TEL. 303.651.1488 FAX 303.651.1489

DESIGNED BY: MMC APPROVED BY: MMC JOB NO. SHEET:  
DRAWN BY: HOG DATE: JUNE 2018 0155.005.02 7 of 11  
CHECKED BY: MMC SCALE: AS NOTED

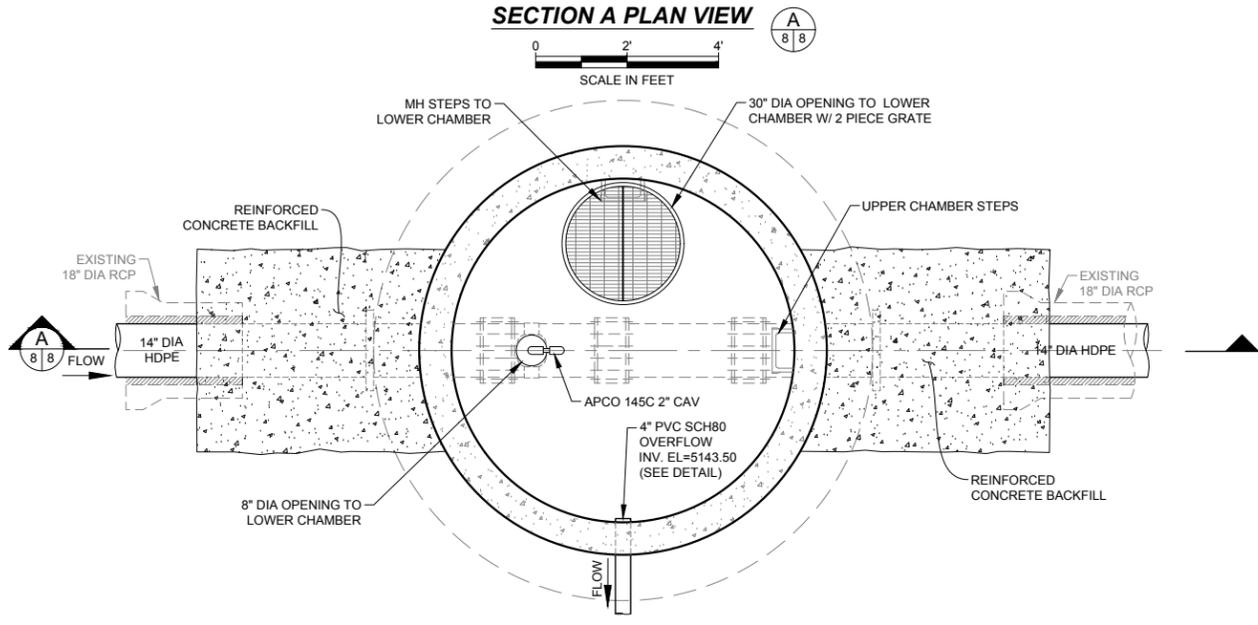
**NOTE:**  
 BACKFILL WITH COMPACTED NATIVE MATERIAL FROM EXCAVATION.  
 COMPACT TO 95% STD PROCTOR DENSITY AT ±2% OF OPTIMUM MOISTURE.



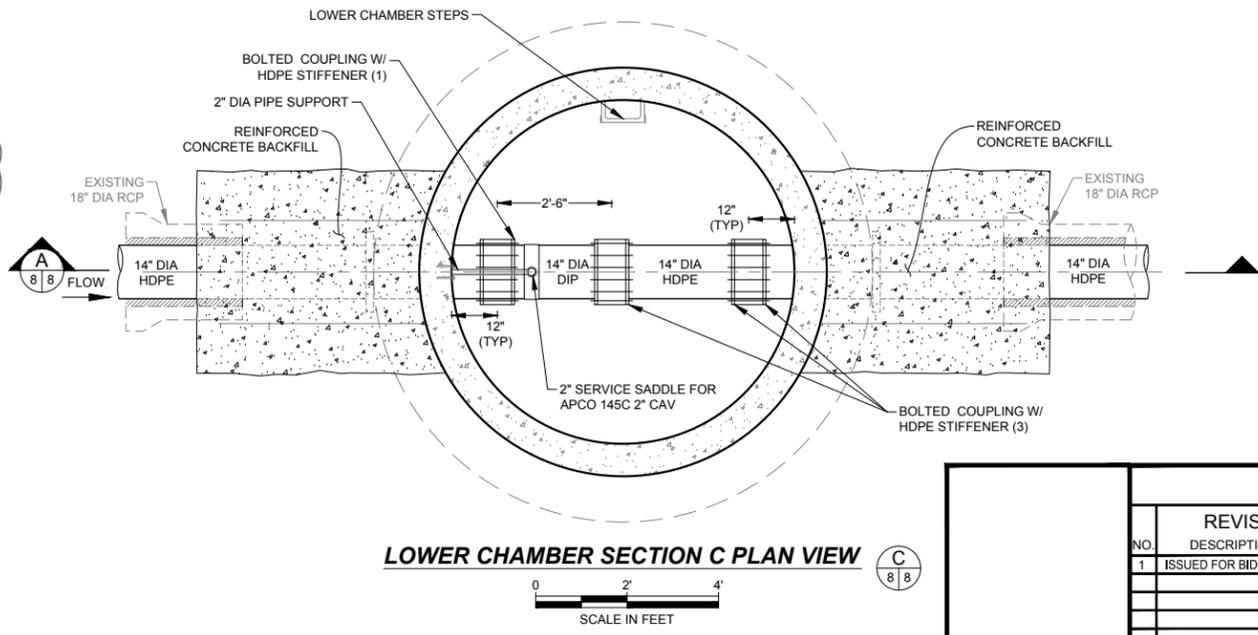
**ACCESS MANHOLE 3 SECTION VIEW**



**SECTION A PLAN VIEW**



**UPPER CHAMBER SECTION B PLAN VIEW**



**LOWER CHAMBER SECTION C PLAN VIEW**



REVISIONS				LAKE 4 OUTLET PIPELINE REPLACEMENT	
NO.	DESCRIPTION	DATE	BY	ACCESS MH #3 PLAN & SECTIONS	
1	ISSUED FOR BID	6/14/18	MMC	DEERE & AULT CONSULTANTS, INC.	
				DESIGNED BY: MMC	APPROVED BY: MMC
				DRAWN BY: HOG	DATE: JUNE 2018
				CHECKED BY: MMC	SCALE: AS NOTED

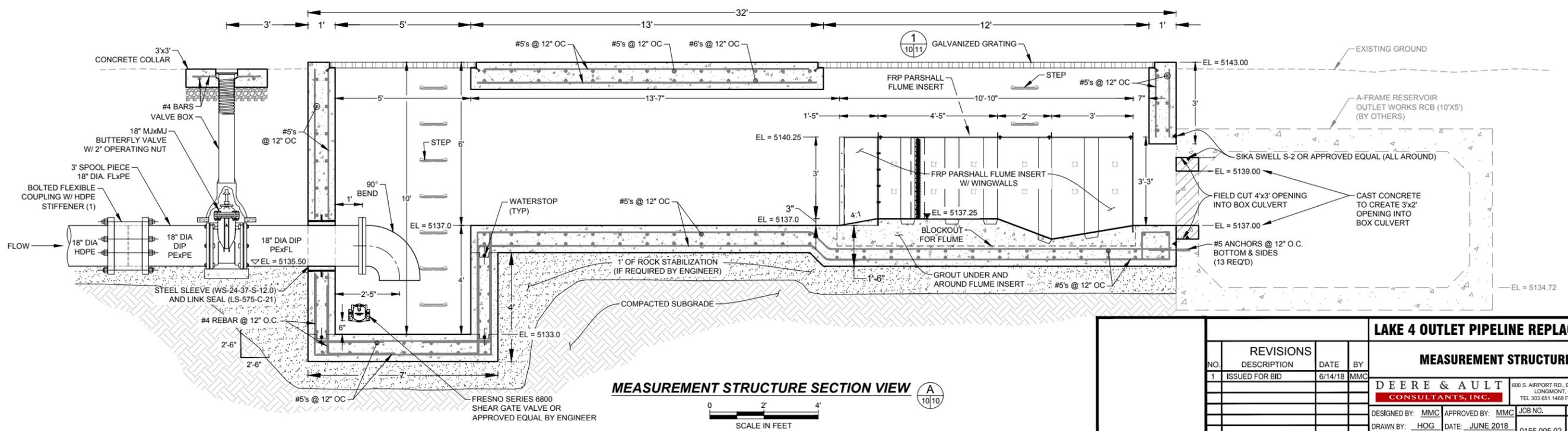
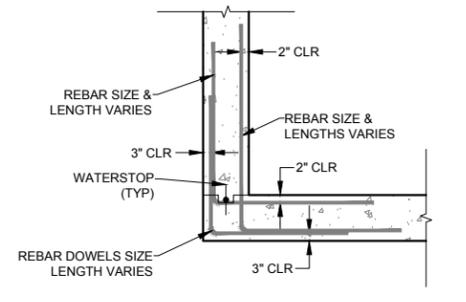
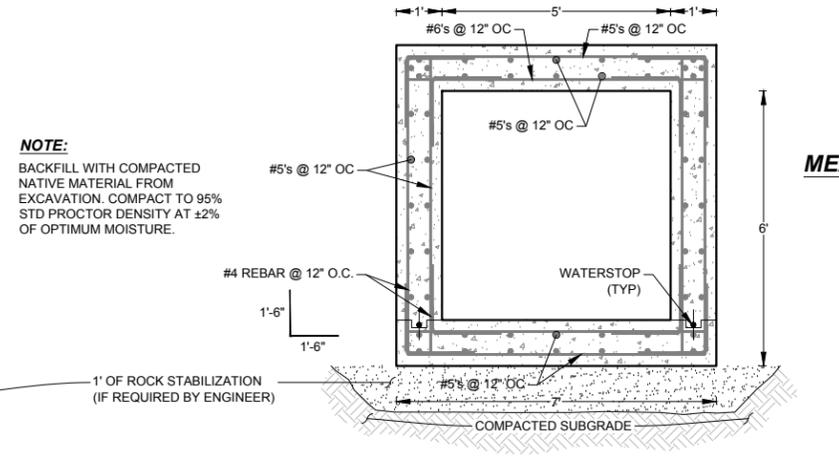
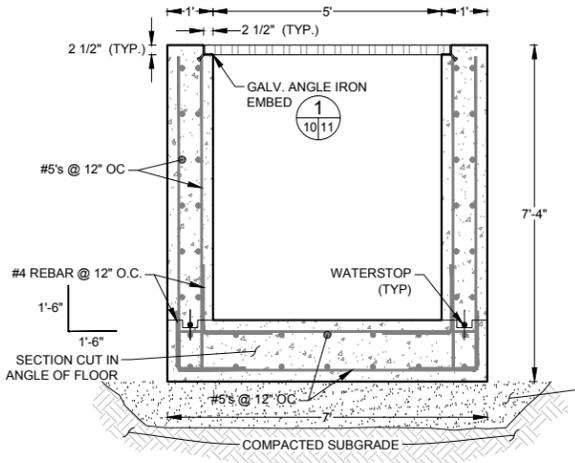
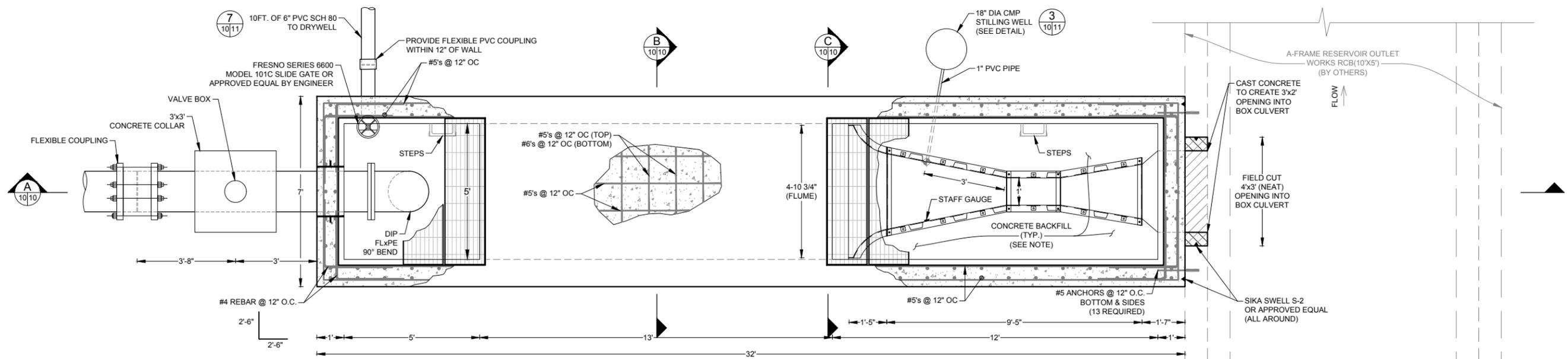
P:\0155\_005\_02\CAD\working drawings\Outlet\_Pipe\_Details.DWG  
 17, 2018 8:56:35 AM  
 DRAWING: C:\0155\_005\_02\CAD\working drawings\Outlet\_Pipe\_Details.DWG  
 design: 0155\_005\_02\CAD\working drawings\Outlet\_Pipe\_Details.DWG  
 4: report\outlet\_pipeline\_design\_0155\_005\_02\CAD\working drawings\Outlet\_Pipe\_Details.DWG

690 S. AIRPORT RD., BLDG. A, SUITE 205  
 LONGMONT, CO 80503  
 TEL. 303.651.1468 FAX 303.651.1469

JOB NO. SHEET:  
 0155.005.02 8 of 11



Friday, August 17, 2018 8:56:37 AM DRAWING: C:\1155\_005\_02\CAD\working\_pipeline\_design\_0155\_005\_02\CAD\working\_pipeline\_design\_0155\_005\_02\CAD\working\_pipeline\_details\Outlet\_Pipe\_Details.dwg



REVISIONS				LAKE 4 OUTLET PIPELINE REPLACEMENT	
NO.	DESCRIPTION	DATE	BY	MEASUREMENT STRUCTURE	
1	ISSUED FOR BID	6/14/18	MMC		
				<b>DEERE &amp; AULT CONSULTANTS, INC.</b>	
				DESIGNED BY: MMC	APPROVED BY: MMC
				DRAWN BY: HOG	DATE: JUNE 2018
				CHECKED BY: MMC	SCALE: AS NOTED
				JOB NO.:	SHEET:
				0155.005.02	10 of 11

600 S. AIRPORT RD., BLDG. A, SUITE 205  
LONGMONT, CO 80503  
TEL. 303.651.1468 FAX 303.651.1469

