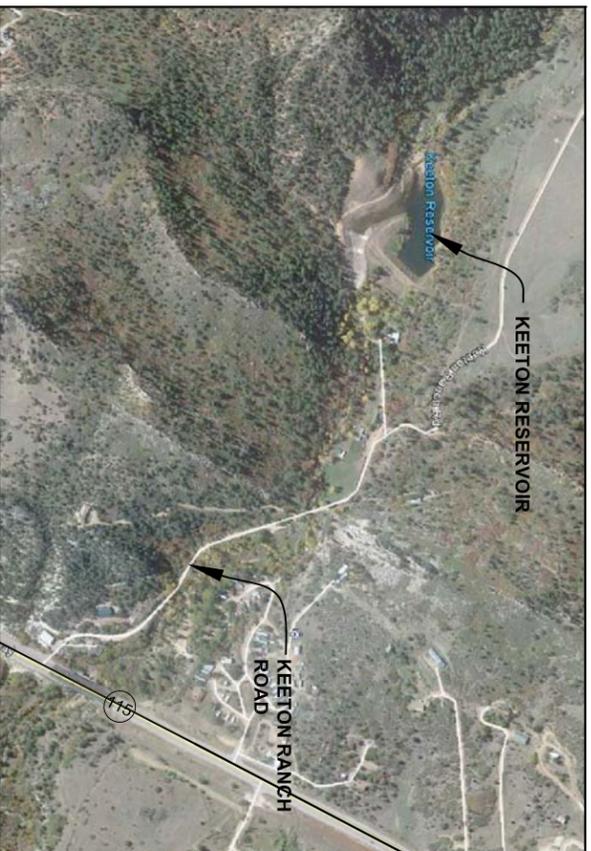
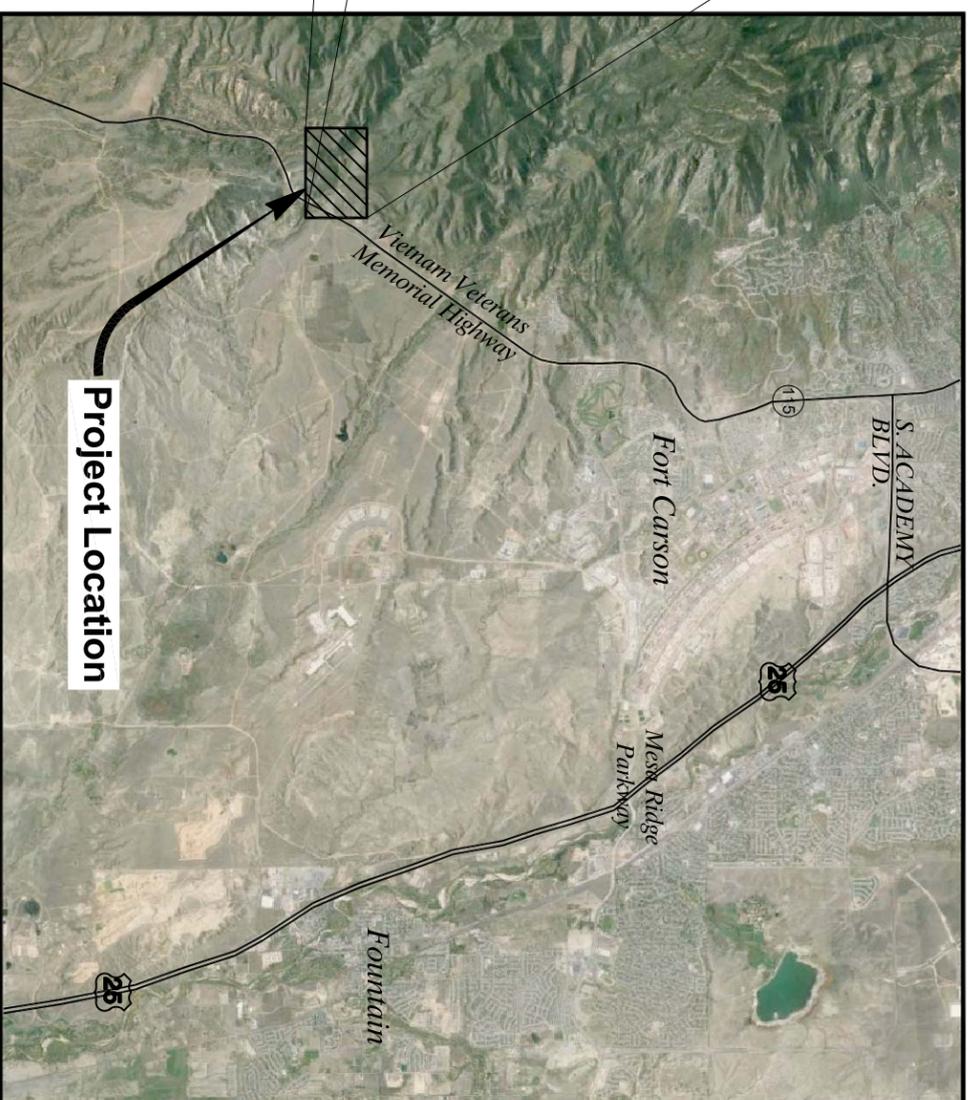


**CONTRACT DRAWINGS FOR CONSTRUCTION OF
KEETON RESERVOIR REMEDIATION**
CITY OF FOUNTAIN
OCTOBER, 2014



PROJECT MAP
1" = 500'



VICINITY MAP
1" = 5000'

SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES
3	KEETON RESERVOIR CAPACITY
4	PRE-FLOOD CONDITIONS
5	POST-FLOOD CONDITIONS
6	GRADING PLAN 1 - RESERVOIR AREA
7	GRADING PLAN 2 - SPILLWAY AREA
8	FLUME PLAN AND PROFILE
9	FLUME DETAILS
10	FLUME ELECTRICAL EQUIPMENT
11	WELL COVER DETAILS
12	RESERVOIR PROFILE
13	SECTIONS - 1
14	SECTIONS - 2
15	SECTIONS - 3
16	SECTIONS - 4



GENERAL NOTES

1. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND CDOT M&S STANDARDS.
2. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. CONTRACTOR WILL HAVE THE PLAN SET AND CONTRACT DOCUMENTS ON-SITE WHILE WORK IS IN PROGRESS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACCEPTANCE AND CONTROL OF ALL SURFACE AND SUBSURFACE DRAINAGE AND GROUND WATER ENTERING THE WORK AREA. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING DEWATERING IF NEEDED AT NO ADDITIONAL COST TO THE PROJECT. DEWATERING METHODS SHALL BE APPROVED BY THE ENGINEER. CONTACT THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT AT (303) 692-3618 TO DETERMINE IF A DEWATERING PERMIT IS REQUIRED. IF REQUIRED, THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING THE PERMIT AND THE COSTS ASSOCIATED WITH SAID PERMIT.
4. THE CONTRACTOR SHALL CONTACT THE OWNERS PROJECT REPRESENTATIVE 24 HOURS PRIOR TO STARTING WORK AND 24 HOURS PRIOR TO EACH DESIRED AND REQUIRED INSPECTION.
5. ANY CONSTRUCTION DEBRIS OR MUD TRACKING SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. UPON WRITTEN NOTICE BY THE CITY, FAILURE TO REMOVE THE MUD OR DEBRIS BY THE CONTRACTOR WITHIN 24 HOURS SHALL CAUSE THE CITY TO STOP THE CONSTRUCTION UNTIL THE SITUATION IS RESOLVED.
6. WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. LOCATIONS SHALL BE APPROVED BY THE OWNERS PROJECT REPRESENTATIVE. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE WORK.
7. ANY ASPHALT OR CONCRETE PAVEMENT WHICH IS TO REMAIN AND WHICH IS DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATION, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR SAFETY CONDITIONS ON AND ADJACENT TO THE SITE 24 HOURS A DAY, SEVEN DAYS A WEEK.
9. DEPTH OF RECONDITIONING AND MOISTURE-DENSITY CONTROL FOR THIS PROJECT SHALL BE 8 INCHES FOR BASES OF CUTS AND FILLS AND FULL DEPTH FOR ALL EMBANKMENTS, EXCAVATION AND COMPACTION FOR BASES OF CUTS AND FILLS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF UNCLASSIFIED EXCAVATION.
10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS PROJECT REPRESENTATIVE OF ANY CONSTRUCTION PROBLEMS DUE TO CHANGED CONDITIONS OR DESIGN ERRORS ENCOUNTERED BY THE CONTRACTOR. THE CONTRACTOR AND OWNERS REPRESENTATIVE WILL WORK TOGETHER TO REVISE THE PLANS PRIOR TO ANY FURTHER CONSTRUCTION RELATED TO THAT PORTION OF THE WORK. ANY IMPROVEMENTS NOT CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS, OR THE APPROVED REVISED PLANS, SHALL BE REMOVED AND THE IMPROVEMENTS SHALL BE RECONSTRUCTED AT NO COST TO THE PROJECT.
11. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AND/OR TOES OF SLOPE AS SHOWN ON THE PLANS AND/OR GROSS SECTIONS. ANY DISTURBANCE BEYOND THOSE LIMITS SHALL BE RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE. CONSTRUCTION ACTIVITIES, IN ADDITION TO NORMAL CONSTRUCTION PROCEDURES, SHALL INCLUDE THE PARKING OF VEHICLES AND EQUIPMENT, DISPOSAL OF LITTER AND ALL OTHER ACTIONS THAT WOULD ALTER EXISTING CONDITIONS.
12. STAGING AREAS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. STAGING AREA LOCATIONS MUST BE PRE-APPROVED BY THE OWNER.
13. EARTHWORK SHALL BE COMPLETED IN PLACE. EXCESS MATERIAL SHALL BE HAULED OFF-SITE. COMPACTION REQUIREMENTS SHALL BE 95% OF THE MAXIMUM DRY DENSITY. MOISTURE REQUIREMENTS WILL BE WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT. TESTS MAY BE PERFORMED BY THE OWNER. IF A FAILED TEST IS RECEIVED, THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF THE TEST AND ANY CORRECTIVE ACTIONS NECESSARY.
14. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN OR SPECIFIED. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPED SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.
15. IF HEAVY EQUIPMENT TO BE USED ON THE PROJECT HAS PREVIOUSLY BEEN USED IN ANOTHER STREAM, RIVER, LAKE, POND, OR WETLAND, ONE OF THE FOLLOWING DISINFECTION PRACTICES IS NECESSARY PRIOR TO CONSTRUCTION TO PREVENT THE SPREAD OF NEW ZEALAND MUD SNAIL, ZEBRA MUSSELS, QUAGGA MUSSELS, WHIRLING DISEASE, AND MANY OTHER AQUATIC INVASIVE SPECIES INTO THIS DRAINAGE. THESE PRACTICES ARE ALSO NECESSARY AFTER PROJECT COMPLETION, PRIOR TO THE EQUIPMENT BEING USED IN ANOTHER STREAM, RIVER, LAKE, POND, OR WETLAND.
 - REMOVE ALL MUD AND DEBRIS FROM EQUIPMENT (TRACKS, TURRETS, BUCKETS, DRAGS, TEETH, ETC.) AND SPRAY/SOAK EQUIPMENT IN A 0:15 SOLUTION OF SPARQUAT INSTITUTIONAL CLEANER AND WATER. KEEP EQUIPMENT MOIST FOR AT LEAST 10 MINUTES OR
 - REMOVE ALL MUD AND DEBRIS FROM EQUIPMENT (TRACKS, TURRETS, BUCKETS, DRAGS, TEETH, ETC.) AND SPRAY/SOAK EQUIPMENT WITH WATER GREATER THAN 140 DEGREES FAHRENHEIT FOR AT LEAST 10 MINUTES.
 - CLEAN HAND TOOLS, BOOTS, AND ANY OTHER EQUIPMENT THAT WILL BE USED IN THE WATER WITH ONE OF THE ABOVE OPTIONS AS WELL. THE COST OF DISINFECTING EQUIPMENT AND TOOLS SHALL BE INCIDENTAL TO THE PROJECT AND BE INCLUDED IN THE COST OF THE WORK.
16. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (1-800-922-1811 OR 811) AND OTHER AFFECTED UTILITIES TO LOCATE UNDERGROUND FACILITIES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL POT-HOLE AND SURVEY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES THAT MAY BE AFFECTED BY CONSTRUCTION PRIOR TO START OF CONSTRUCTION. THE POT-HOLING AND SURVEY WORK SHALL BE INCLUDED AND PAID FOR AS PART OF MOBILIZATION.
17. NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED WHEREVER POSSIBLE. EXPOSURE OF SOIL TO EROSION BY REMOVAL OR DISTURBANCE OF VEGETATION SHALL BE LIMITED TO THE AREA REQUIRED FOR IMMEDIATE CONSTRUCTION OPERATIONS.
18. ANY SETTLEMENT OR SOIL ACCUMULATIONS BEYOND THE LIMITS OF CONSTRUCTION DUE TO GRADING OR EROSION SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR OBTAINING ACCESS RIGHTS TO ADJACENT PROPERTY, IF NEEDED, AND REMEDIATING ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, PROPERTIES, ETC. RESULTING FROM WORK DONE AS PART OF THIS PROJECT.

GENERAL STRUCTURE NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2011 EDITION, AS APPLICABLE TO THE PROJECT.
2. STRUCTURE EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH CDOT STANDARD PLANS, M&S STANDARDS M-206-1, UNLESS OTHERWISE NOTED ON PLANS.
3. EXPANSION JOINT MATERIAL SHALL MEET AASHTO SPECIFICATION M-213.
4. THE COST FOR EXPANSION JOINT MATERIAL SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE WORK.
5. ALL CONCRETE SHALL BE CDOT CLASS D. REINFORCING STEEL SHALL BE INCLUDED IN THE COST OF THE STRUCTURAL CONCRETE ITEM AND SHALL NOT BE PAID FOR SEPARATELY.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL NOT BACKFILL STRUCTURES UNTIL THE WALLS HAVE REACHED 80% OF DESIGN STRENGTH.
8. CONCRETE SHALL BE PLACED AND FINISHED IN ACCORDANCE WITH SECTION 601.
9. GRADE 60 REINFORCING STEEL IS REQUIRED.
10. ALL EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.
11. ALL REINFORCING STEEL SHALL BE BLACK STEEL REINFORCING BARS UNLESS OTHERWISE NOTED.
12. THE FOLLOWING TABLE GIVES THE MINIMUM CLASS B LAP SPlice LENGTH FOR BLACK (NON-EPOXY COATED) REINFORCING BARS PLACED IN ACCORDANCE WITH SUBSECTION 602.06. THESE SPlice LENGTHS SHALL INCREASE BY 25% FOR BARS SPACED LESS THAN 6" ON CENTER.

BAR SIZE:	#4	#5	#6	#7	#8	#9	#10	#11
SPlice LENGTH FOR CLASS B CONCRETE:	1'-0"	1'-4"	1'-7"	1'-11"	2'-6"	3'-1"	3'-11"	4'-10"

13. ALL REINFORCEMENT SHALL HAVE A CLEAR COVERAGE OF 2", EXCEPT AS SHOWN ON THE PLANS. CLEAR COVERAGE SHALL BE MEASURED FROM THE SURFACE OF THE CONCRETE TO THE OUTSIDE OF THE REINFORCEMENT.
14. THE STOCK LENGTH USED FOR ALL REINFORCING IS 60 FEET.

REVISIONS			
NO.	DATE	BY (CHKD)	DESCRIPTION

KEETON RESERVOIR REMEDIATION

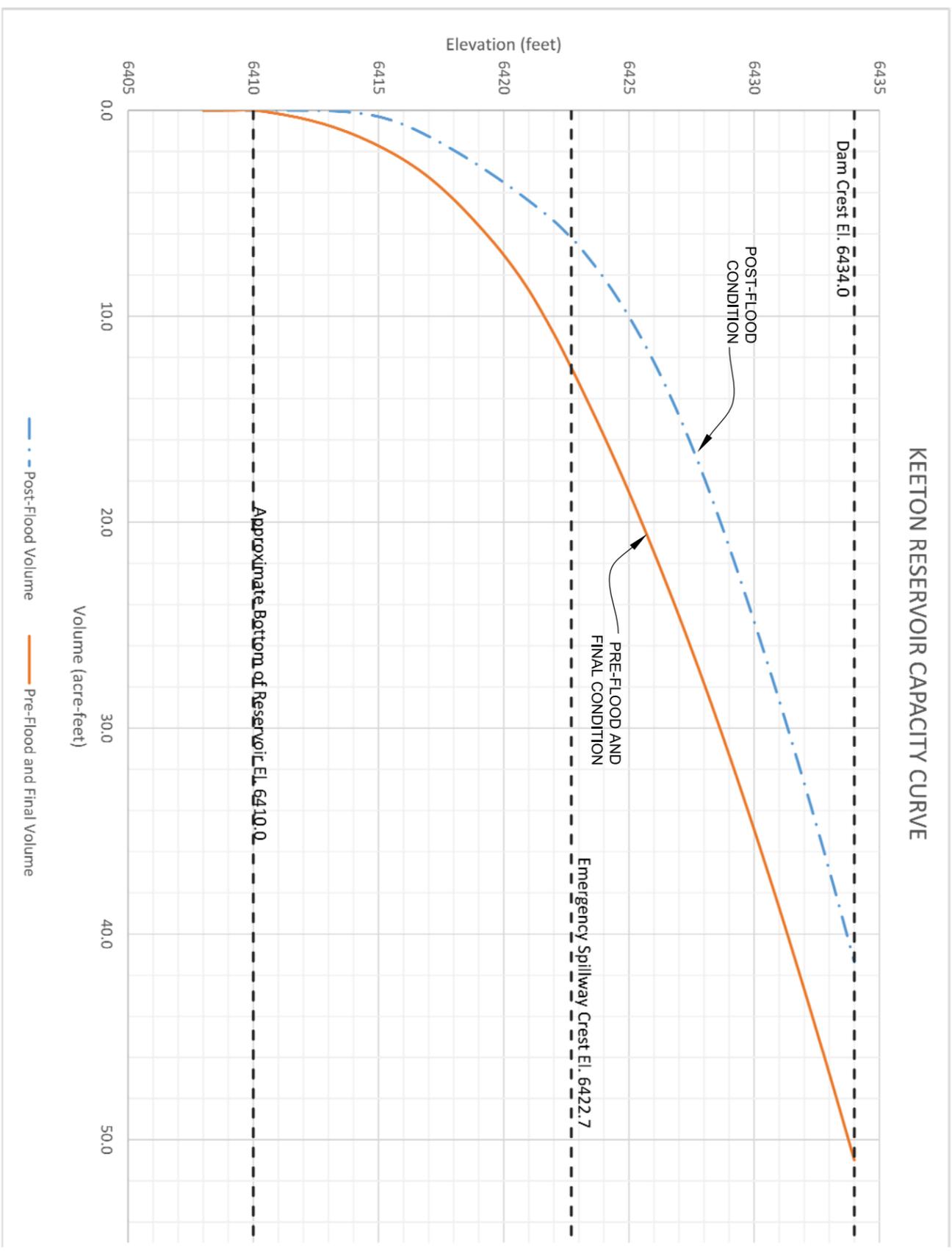
GENERAL NOTES

 <p>MULLER ENGINEERING CO., INC. CONSULTING ENGINEERS 777 S. WASHINGTON BLVD. 4-100 LAKEWOOD, COLORADO 80226 (303) 988-0799</p>		 <p>City of Fountain 116 S. Main St. Fountain, CO 80817 Phone: (719) 322-2000 Fax: (719) 322-2001</p>	
DESIGNED	KLH	DATE	10/24/2014
DRAWN	KLH	FILED/PROJECT GEN. NOTES	
CHECKED	DAH	PROJ. NO.	142003.01
SCALE	AS SHOWN	SHEET	2 OF 17

KEETON RESERVOIR CAPACITY					
Elevation (feet)	POST-FLOOD CONDITION (2)		PRE-FLOOD AND FINAL CONDITION (1)		Volume Loss (%)
	Surface Area (acres)	Cumulative Volume (acre-feet)	Surface Area (acres)	Cumulative Volume (acre-feet)	
6408	0.0	0.0	0.0	0.0	-
6409	0.0	0.0	0.0	0.0	-
6410	0.0	0.0	0.1	0.0	100.0
6411	0.0	0.0	0.2	0.2	100.0
6412	0.0	0.0	0.3	0.4	99.7
6413	0.0	0.0	0.4	0.7	96.7
6414	0.1	0.1	0.5	1.2	90.6
6415	0.3	0.3	0.6	1.7	82.3
6416	0.5	0.7	0.7	2.4	71.2
6417	0.6	1.3	1.0	3.2	61.1
6418	0.7	1.9	1.2	4.3	55.3
6419	0.8	2.7	1.3	5.6	52.1
6420	0.9	3.5	1.5	7.0	50.2
6421	0.9	4.4	1.9	8.7	49.7
6422	1.0	5.4	2.3	10.8	50.5
6422.7	1.3	6.2	2.4	12.5	50.4
6423	1.4	6.6	2.5	13.2	50.3
6424	1.7	8.1	2.6	15.8	48.5
6425	2.0	10.0	2.8	18.5	46.0
6426	2.4	12.2	3.0	21.5	43.0
6427	2.8	14.8	3.2	24.6	39.6
6428	3.2	17.8	3.4	27.8	36.0
6429	3.5	21.2	3.5	31.3	32.3
6430	3.7	24.8	3.7	34.9	28.9
6431	3.9	28.7	3.9	38.7	26.0
6432	4.1	32.7	4.0	42.7	23.4
6433	4.3	36.9	4.2	46.8	21.1
6434	4.6	41.4	4.3	51.0	18.9

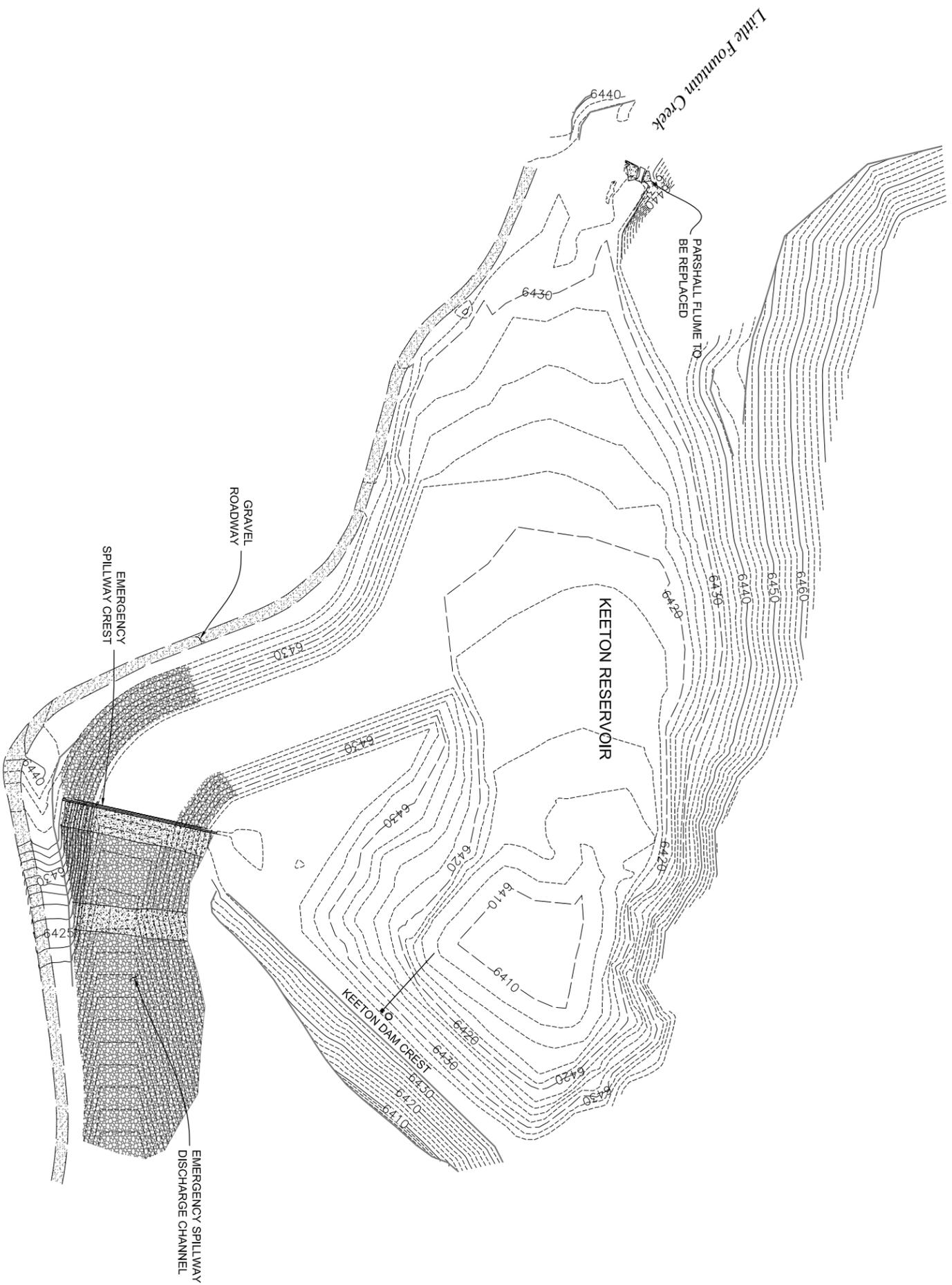
Notes:

- (1) Pre-Flood Condition based on Keeton Dam Emergency Spillway Modifications design performed by W. W. Wheeler and Associates, Inc. and approved by SEO on 9/11/06.
- (a) Storage Volume was calculated from the contours derived from the Keeton Dam - Emergency Spillway Modifications Project (2006).
- (b) The spillway volume upstream of the spillway crest was included in the storage calculations.
- (2) Post-Flood Condition was based on March 2014 topographic survey performed by GMS Engineering, Inc.
- (3) Proposed design grading will remove the excess sediment deposited by the flooding to create a reservoir capacity equal to the Pre-Flood Condition in volume.



REVISIONS		KEETON RESERVOIR REMEDIATION	
NO.	DATE	BY	DESCRIPTION

MULLER ENGINEERING CO., INC. CONSULTING ENGINEERS 777 S. WASHINGTON BLVD. 4-100 LAKEWOOD, COLORADO 80226 (303) 988-0999		City of Fountain 116 S. Main St. Fountain, CO 80817 Phone: (719) 322-2000 Fax: (719) 322-2001	
DESIGNED	KLH	DATE	10/24/2014
DRAWN	KLH	FILE	14-003.01_CAPACITY
CHECKED	DAH	PROJ. NO.	14-003.01
SCALE	AS SHOWN	SHEET	3 OF 17



NOTES:

1. PRE-FLOOD CONTOURS ARE BASED ON THE KEETON DAM - EMERGENCY SPILLWAY MODIFICATIONS PROJECT IN 2006 PREPARED BY W.W. WHEELER AND ASSOCIATES, INC.

REVISIONS				
NO.	DATE	BY	CHKD	DESCRIPTION

MULLER ENGINEERING CO., INC.
 CONSULTING ENGINEERS
 777 S. WADSWORTH BLVD. 4-100
 LAKEWOOD, COLORADO 80226
 (303) 988-4999



City of Fountain
 116 S. Main St.
 Fountain, CO 80817
 Phone: (719) 322-2000 Fax: (719) 322-2001

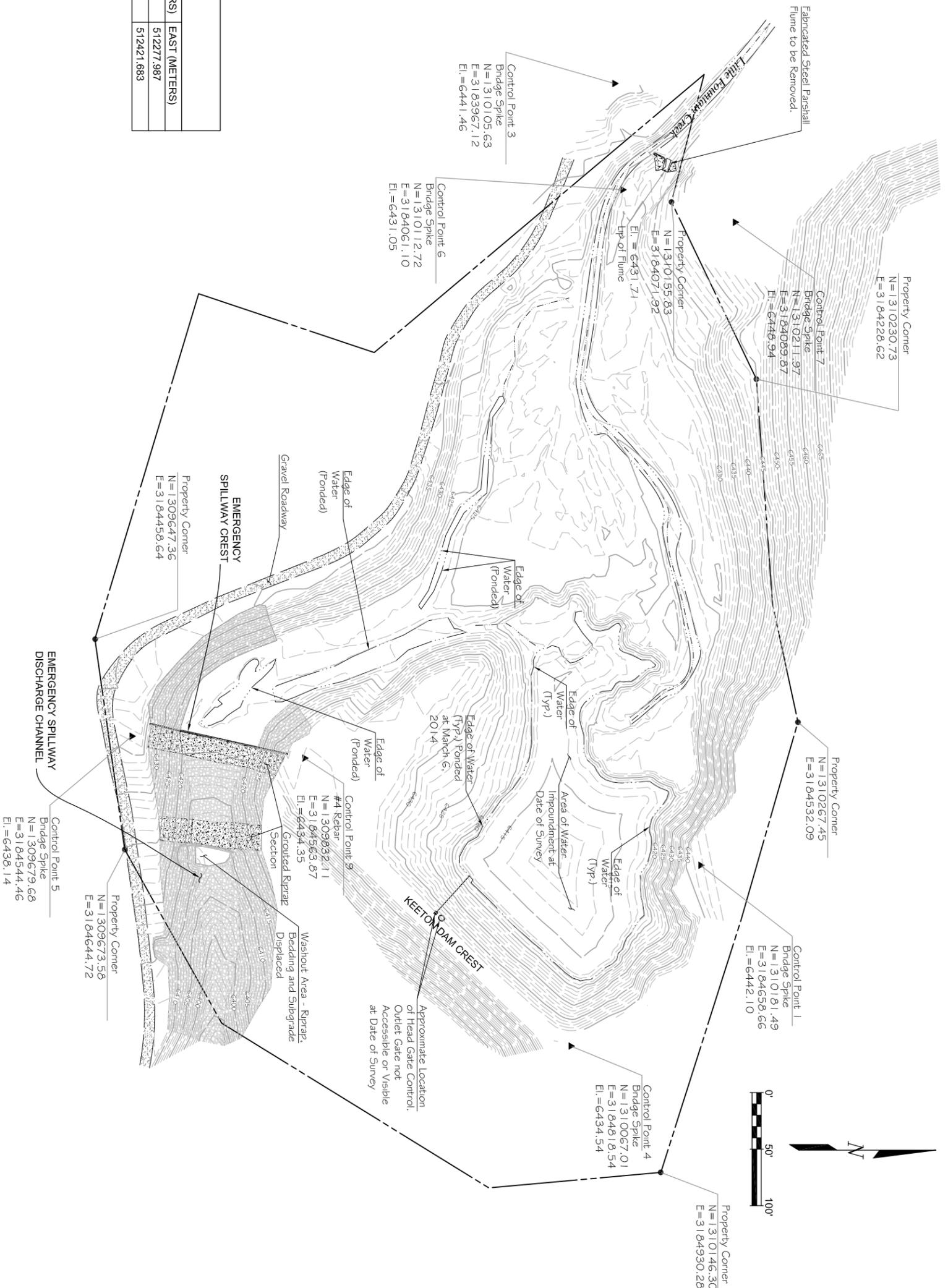
**KEETON RESERVOIR REMEDIATION
 PRE-FLOOD CONDITIONS**

DESIGNED	KLH	DATE	10/24/2014
DRAWN	KLH	PROJ. NO.	14-003.01
CHECKED	DAH	SHEET	4 OF 17
SCALE	1"=50'		

SURVEY NOTES:

1. THE KEETON DAM STRUCTURE REPRESENTED ON THIS SURVEY IS IDENTIFIED WITH DAM ID 100205 BY THE COLORADO DIVISION OF WATER RESOURCES. THE DAM IS LOCATED IN WATER DIVISION 2, WATER DISTRICT 10, EL PASO COUNTY, COLORADO.
2. CONTOURS AND STANDING WATER CONDITIONS ARE BASED ON A FIELD SURVEY COMPLETED FROM MARCH 4 THROUGH MARCH 6, 2014.
3. REFERENCE PHOTOGRAPHS TAKEN ON MARCH 6, 2014 FOR CONDITIONS, SEDIMENT AND DEBRIS AROUND THE FLUME AREA.
4. COORDINATES SHOWN AT PROPERTY CORNER MONUMENTS ON PROJECT SPECIFIC SURVEY CONTROL POINTS ARE GROUND COORDINATES.
5. FOR CONVERSION TO UNIVERSAL TRAVERSE MERCATOR (UTM) ZONE 13, NAD83, REQUIRED BY THE COLORADO DIVISION OF WATER RESOURCES, THE FOLLOWING REFERENCES ARE PROVIDED.
6. ALL ELEVATIONS AT CONTROL POINTS AND REPRESENTED BY ELEVATION CONTOUR LINES ARE RELATIVE TO THE NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD29) OBTAINED BY GLOBAL POSITIONING SYSTEM (GPS) TRIANGULATION. THE ELEVATION DATA PROVIDED FOR THE RESPECTIVE CONTROL POINTS IS RELATIVE TO THE PRIOR VERTICAL DATUM UTILIZED WHEN PERFORMING SITE SURVEYS.
7. SURFACE STREAMFLOW COMPLETELY INFILTRATED INTO THE ALLUVIUM AT LOCATION SHOWN AT DATE OF SURVEY.
8. CONTROL AND TOPOGRAPHICAL SURVEYING WAS PERFORMED BY GMS, INC. (3/2014)
9. WHEN THE TOPOGRAPHIC SURVEY WAS PERFORMED ON MARCH 2014, THE RESERVOIR WATER LEVEL WAS AT ELEVATION 6417. THUS, CONTOURS BELOW THE WATER LEVEL WERE ESTIMATED BASED ON THE OBSERVED SEDIMENT DEPOSITION AT THE TIME OF THE SURVEY.

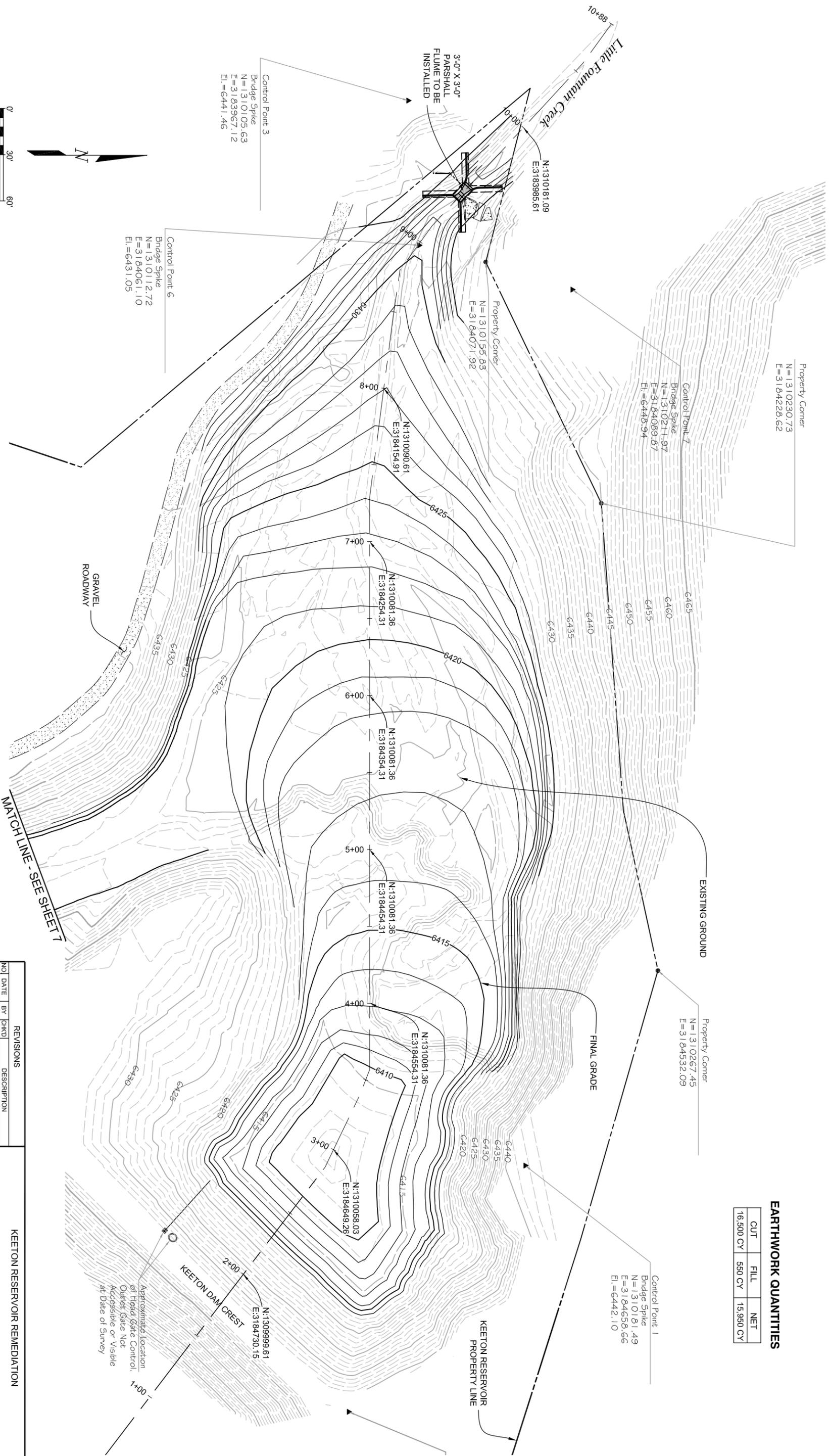
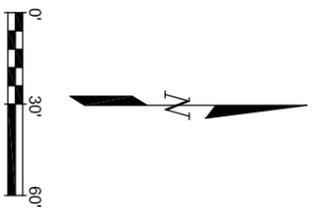
CONTROL POINT ID	COLORADO STATE PLANE GRID COORDINATE	GROUND COORDINATES	UTM ZONE 13 COORDINATE	
	NORTH (FT)	EAST (FT)	NORTH (METERS)	EAST (METERS)
7	1309783.60	3183026.72	1310211.97	3184089.87
9	1309403.58	3183500.44	1309832.11	3184563.87



**KEETON RESERVOIR REMEDIATION
POST-FLOOD CONDITIONS**

REVISIONS		
NO.	DATE	DESCRIPTION

MULLER ENGINEERING CO., INC. CONSULTING ENGINEERS 777 S. WASHINGTON BLVD. 4-100 LAKEWOOD, COLORADO 80226 (303) 988-0939		City of Fountain 116 S. Main St. Fountain, CO 80817 Phone: (719) 322-2000 Fax: (719) 322-2001	
DESIGNED	KLH	DATE	10/24/2014
DRAWN	KLH	PROJECT	POST FLOOD VOLUME
CHECKED	DAH	PROJ. NO.	142003.01
SCALE	1" = 50'	SHEET	5 OF 17



EARTHWORK QUANTITIES

CUT	FILL	NET
16,500 CY	550 CY	15,950 CY

REVISIONS

NO.	DATE	BY	CHKD	DESCRIPTION

MULLER ENGINEERING CO., INC.
 CONSULTING ENGINEERS
 777 S. WASHINGTON BLVD. 4-100
 LAKEWOOD, COLORADO 80226
 (303) 988-4099

City of Fountain
 116 S. Main St.
 Fountain, CO 80817
 Phone: (719) 322-2000 Fax: (719) 322-2001

DESIGNED: KLH DATE: 10/24/2014
 DRAWN: KLH PROJ. NO.: 142003.01
 CHECKED: DAH SCALE: 1"=30'
 SHEET 6 OF 17

GRADING PLAN 1 - RESERVOIR AREA

KEETON RESERVOIR REMEDIATION

Approximate Location of Head Gate Control, Outlet Gate Control, Accessible or Visible at Date of Survey

KEETON DAM CREST

KEETON RESERVOIR PROPERTY LINE

EXISTING GROUND

FINAL GRADE

GRAVEL ROADWAY

MATCH LINE - SEE SHEET 7

3'-0" X 3'-0" PARSHALL FLUME TO BE INSTALLED

Control Point 3
 Bridge Spike
 N = 1310105.63
 E = 3183967.12
 El. = 6441.46

Control Point 6
 Bridge Spike
 N = 1310112.72
 E = 3184061.10
 El. = 6431.05

Control Point 7
 Bridge Spike
 N = 1310211.97
 E = 3184089.87
 El. = 6448.34

Property Corner
 N = 1310230.73
 E = 3184228.62

Property Corner
 N = 1310155.83
 E = 3184071.92

Property Corner
 N = 1310267.45
 E = 3184532.09

Control Point 1
 Bridge Spike
 N = 1310181.49
 E = 3184658.66
 El. = 6442.10

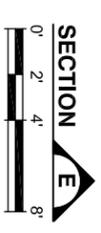
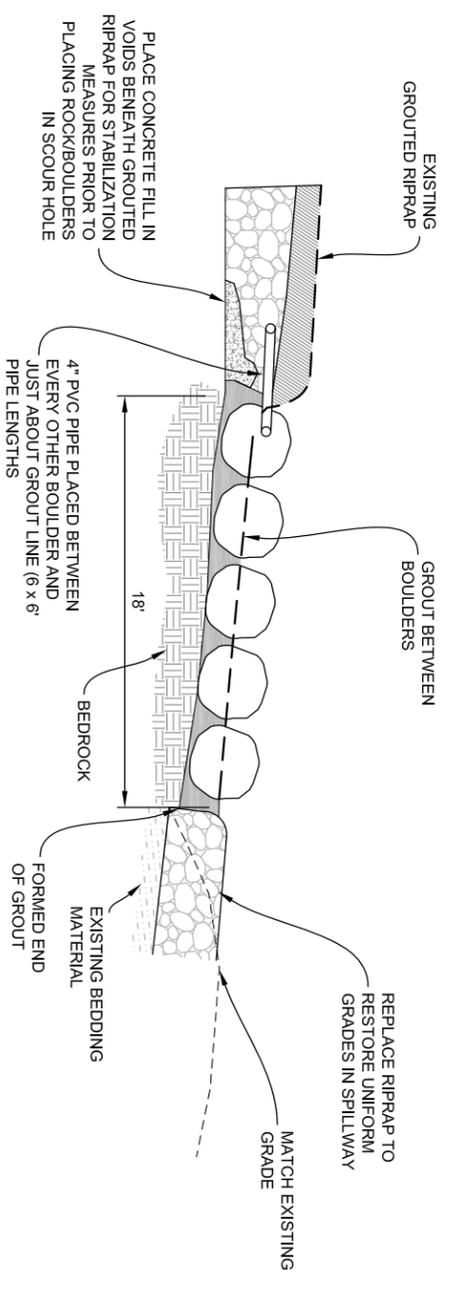
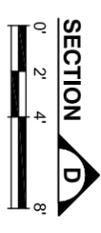
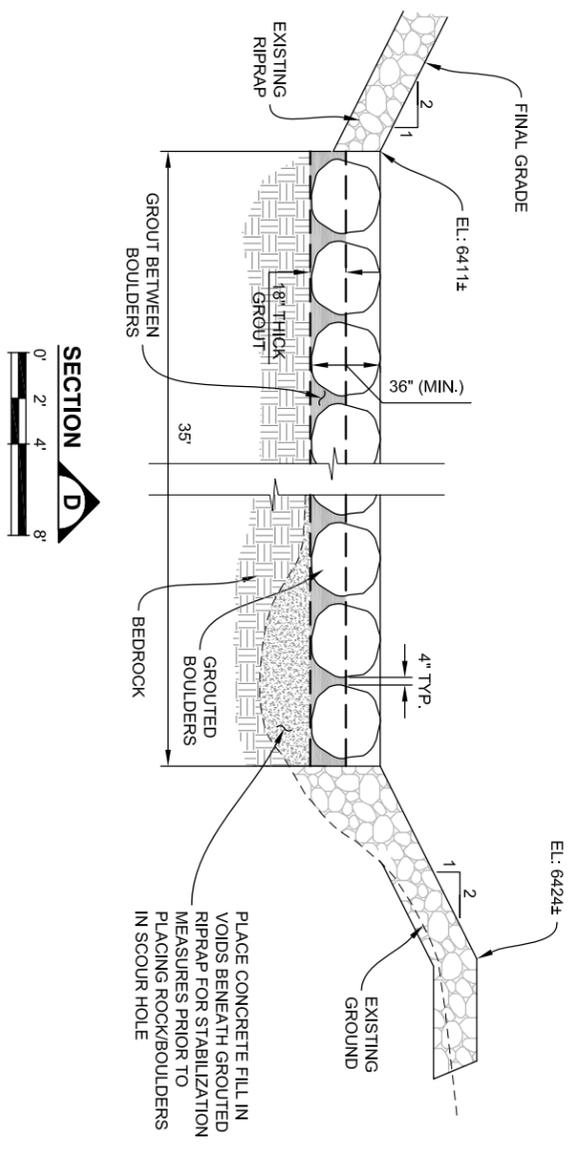
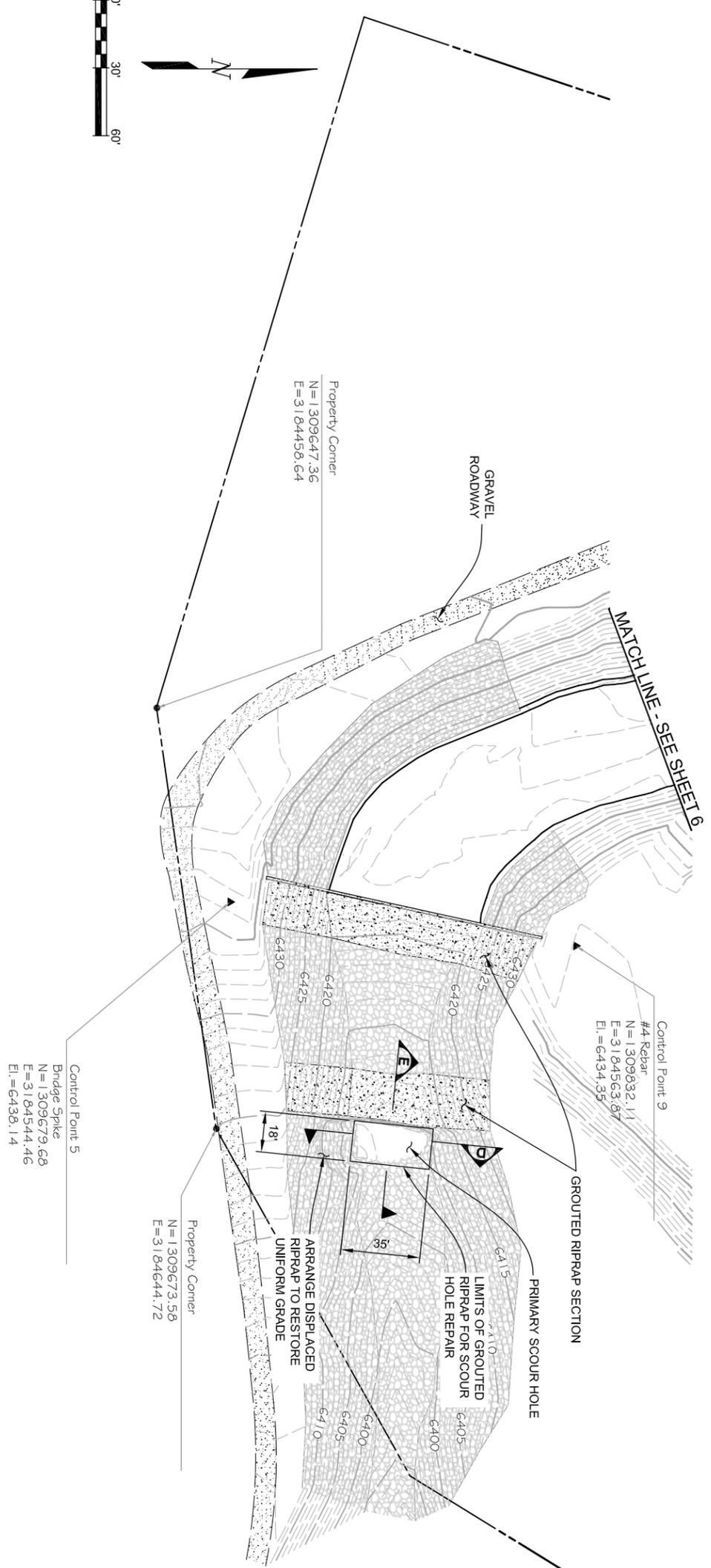
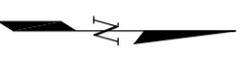
Property Corner
 N = 1310081.36
 E = 3184454.31

Property Corner
 N = 1310081.36
 E = 3184354.31

Property Corner
 N = 1310081.36
 E = 3184254.31

Property Corner
 N = 1310090.61
 E = 3184154.91

Property Corner
 N = 1310181.09
 E = 3183985.61

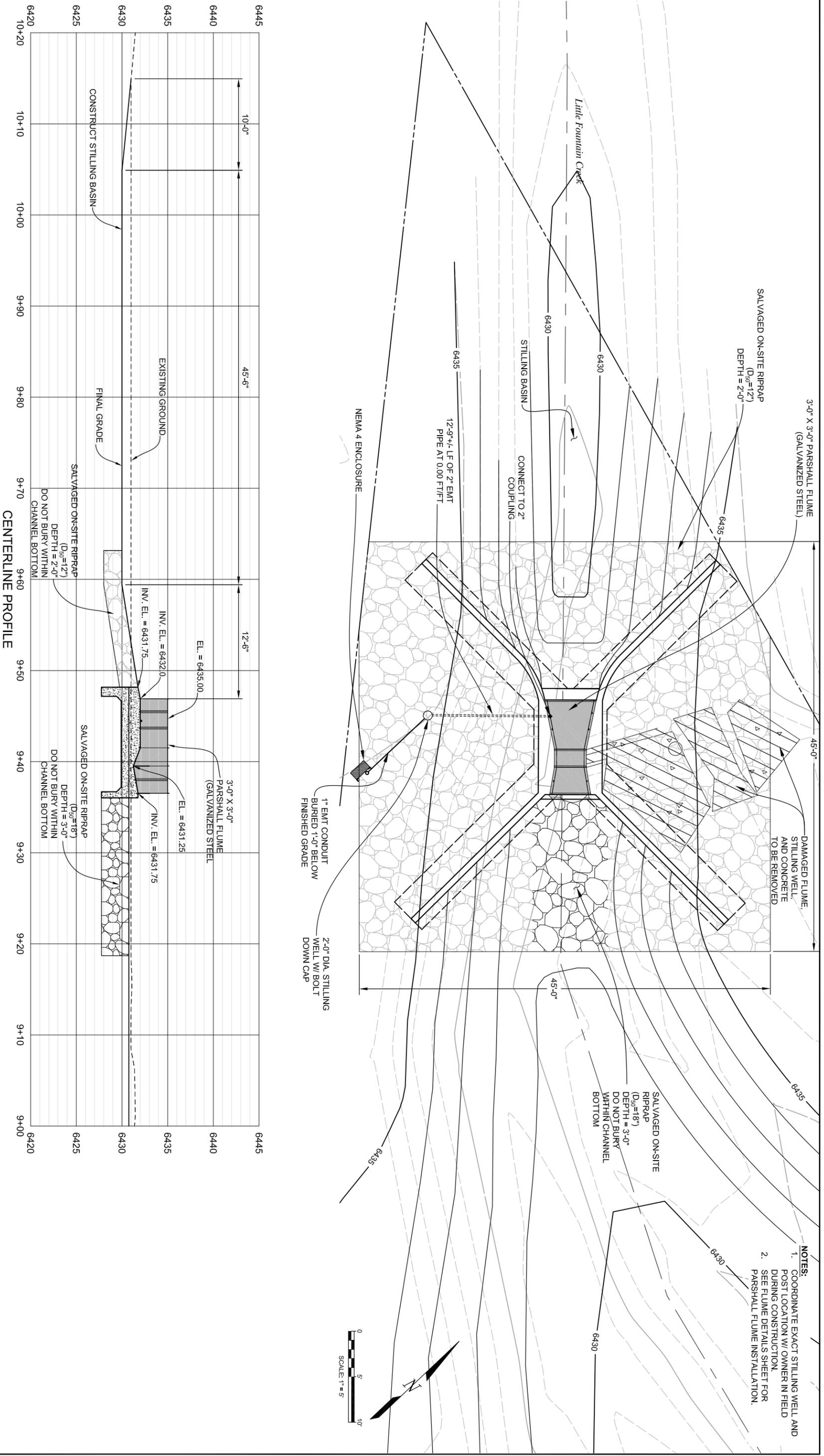


REVISIONS

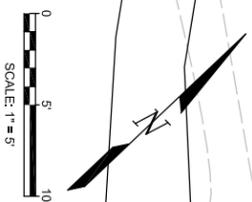
NO.	DATE	BY	CHKD	DESCRIPTION

KEETON RESERVOIR REMEDIATION
GRADING PLAN 2 - SPILLWAY AREA

<p>MULLER ENGINEERING CO., INC. CONSULTING ENGINEERS 777 S. WASHINGTON BLVD. 4-100 LAKEWOOD, COLORADO 80226 (303) 988-0939</p>	<p>City of Fountain 116 S. Main St. Fountain, CO 80817 Phone: (719) 322-2000 Fax: (719) 322-2001</p>	DESIGNED	KLH	DATE	10/24/2014
		DRAWN	KLH	PROJECT	14-003 GRADING PLAN
		CHECKED	DAH	PROJ. NO.	14-003.01
				SCALE	1"=30'
				SHEET	Z OF 17



- NOTES:**
- COORDINATE EXACT STILLING WELL AND POST LOCATION W/ OWNER IN FIELD DURING CONSTRUCTION.
 - SEE FLUME DETAILS SHEET FOR PARSHALL FLUME INSTALLATION.



CENTERLINE PROFILE

REVISIONS

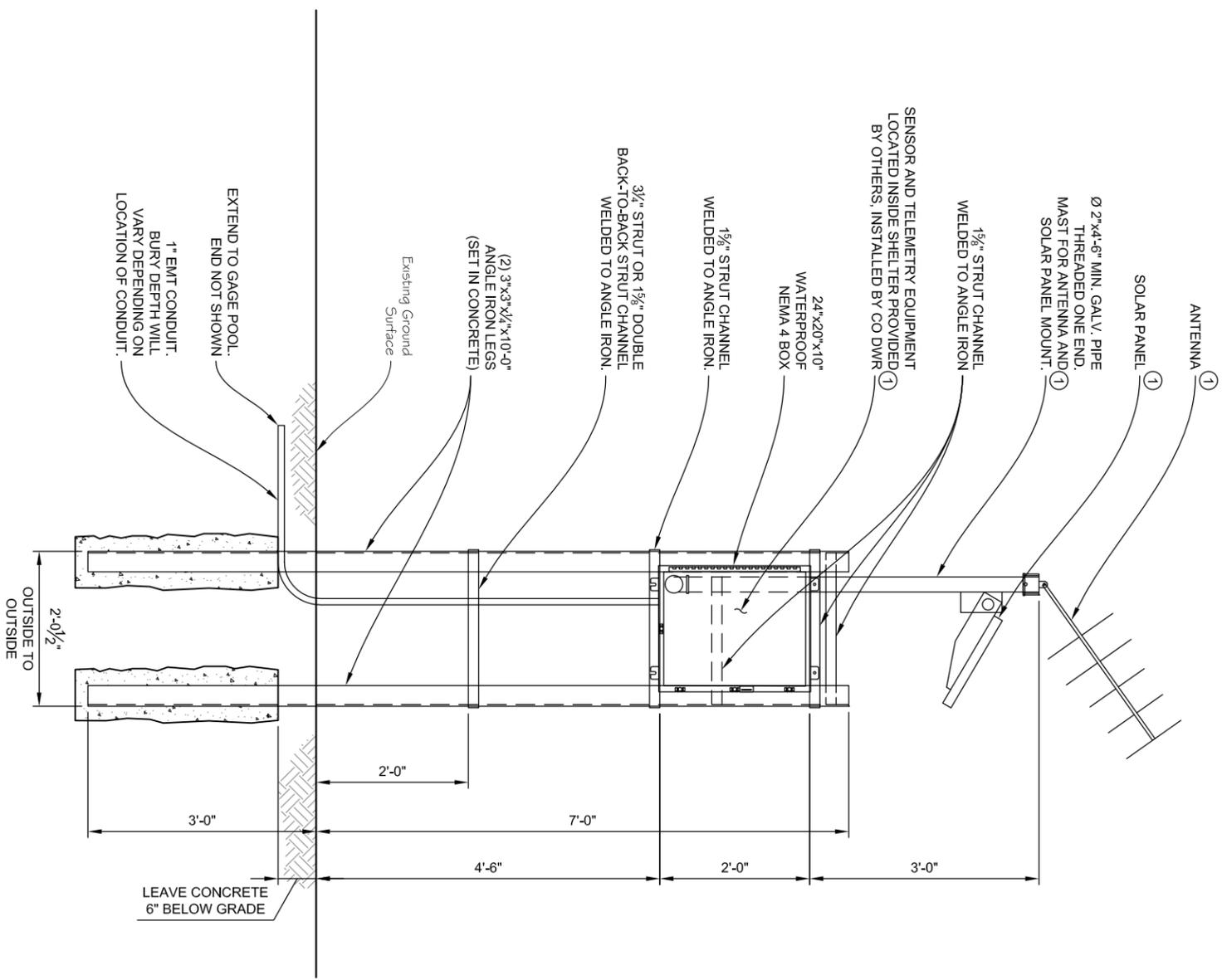
NO.	DATE	BY	CHKD	DESCRIPTION

MULLER ENGINEERING CO., INC.
 CONSULTING ENGINEERS
 777 S. WASHINGTON BLVD. 4-100
 LAKEWOOD, COLORADO 80236
 (303) 788-0939

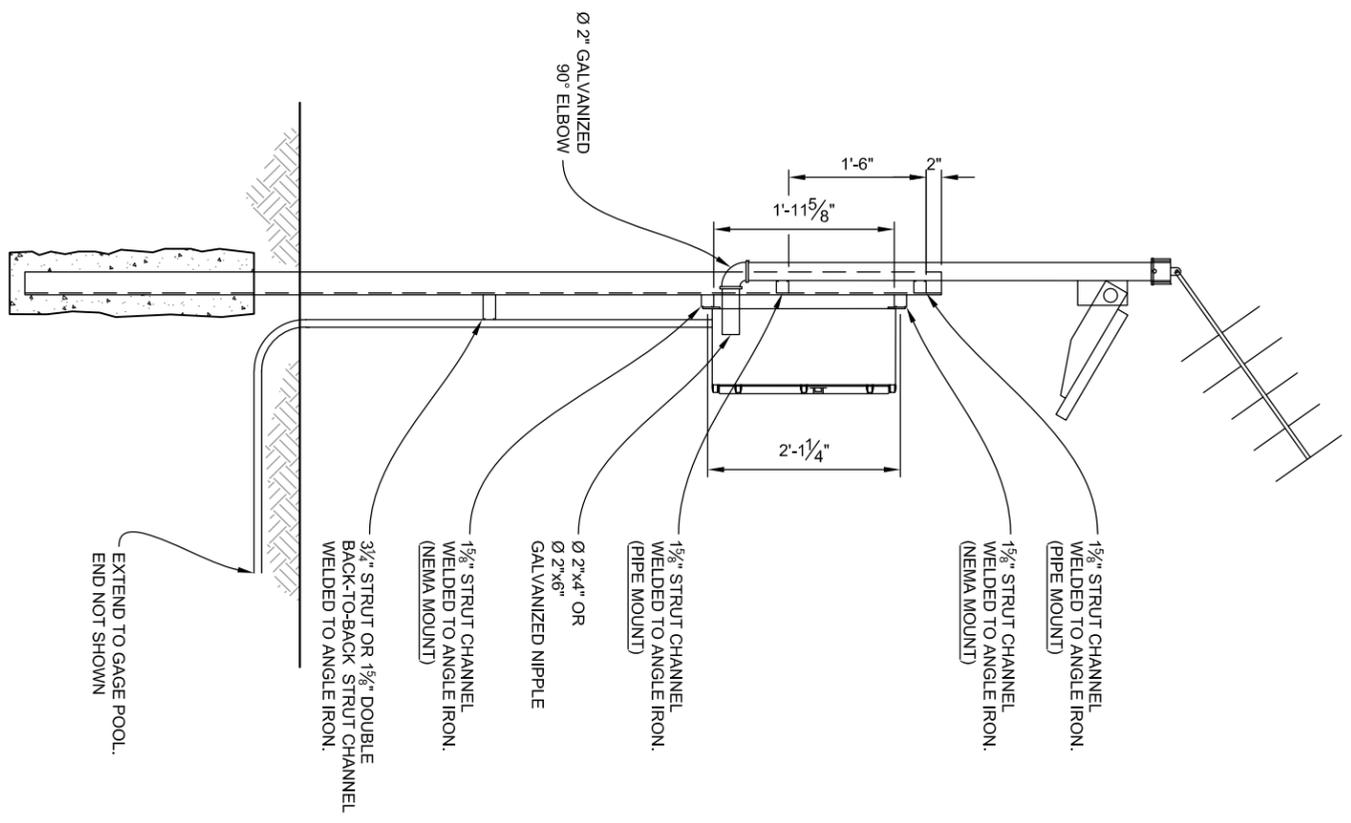
City of Fountain
 116 S. Main St.
 Fountain, CO 80817
 Phone: (719) 322-2000 Fax: (719) 322-2001

DESIGNED: KLH DATE: 10/24/2014
 DRAWN: KLH PROJ. NO.: 14-003.01
 CHECKED: DAH SCALE: 1"=30'
 SHEET 8 OF 17

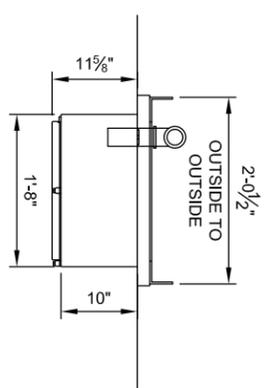
**KEETON RESERVOIR REMEDIATION
 FLUME PLAN AND PROFILE**



FRONT VIEW
NEMA 4 ENCLOSURE
SCALE: 1"=1'-0"



SIDE VIEW
NEMA 4 ENCLOSURE
SCALE: 1"=1'-0"



PLAN VIEW
NEMA 4 ENCLOSURE
SCALE: 1"=1'-0"

① = PROVIDED BY OTHERS, INSTALLED BY CO DWR.

CONTRACTOR MUST COORDINATE THE PLACEMENT OF THE EMT CONDUIT AND GAGE SHELTER WITH CO DWR PRIOR TO INSTALLING.

REVISIONS

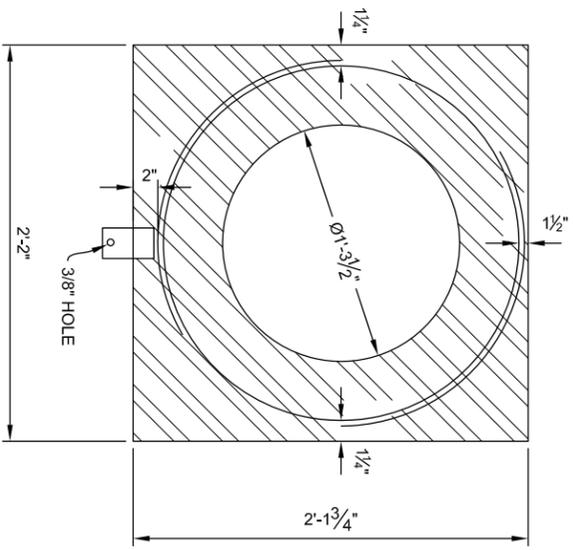
NO.	DATE	BY	CHKD	DESCRIPTION

MULLER ENGINEERING CO., INC.
CONSULTING ENGINEERS
777 S. WADSWORTH BLVD. 4-100
LAKEWOOD, COLORADO 80226
(303) 988-0999

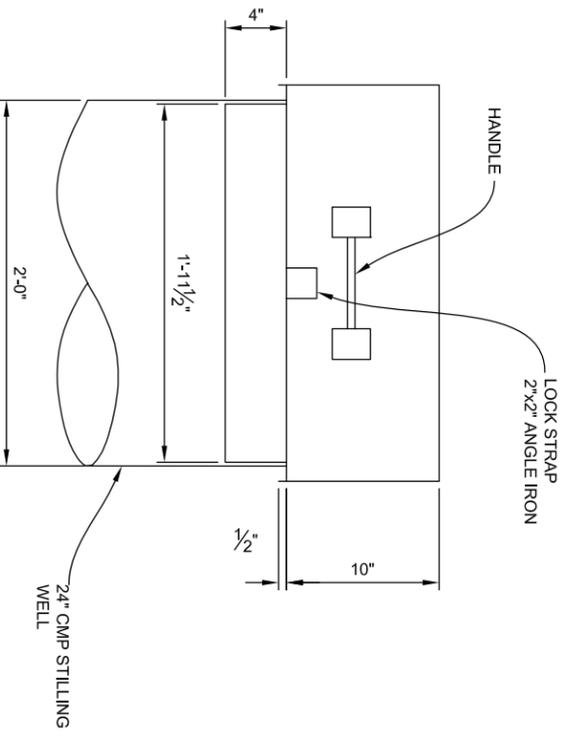
City of Fountain
116 S. Main St.
Fountain, CO 80817
Phone: (719) 322-2000 | Fax: (719) 322-2001

KEETON RESERVOIR REMEDIATION
FLUME ELECTRICAL EQUIPMENT

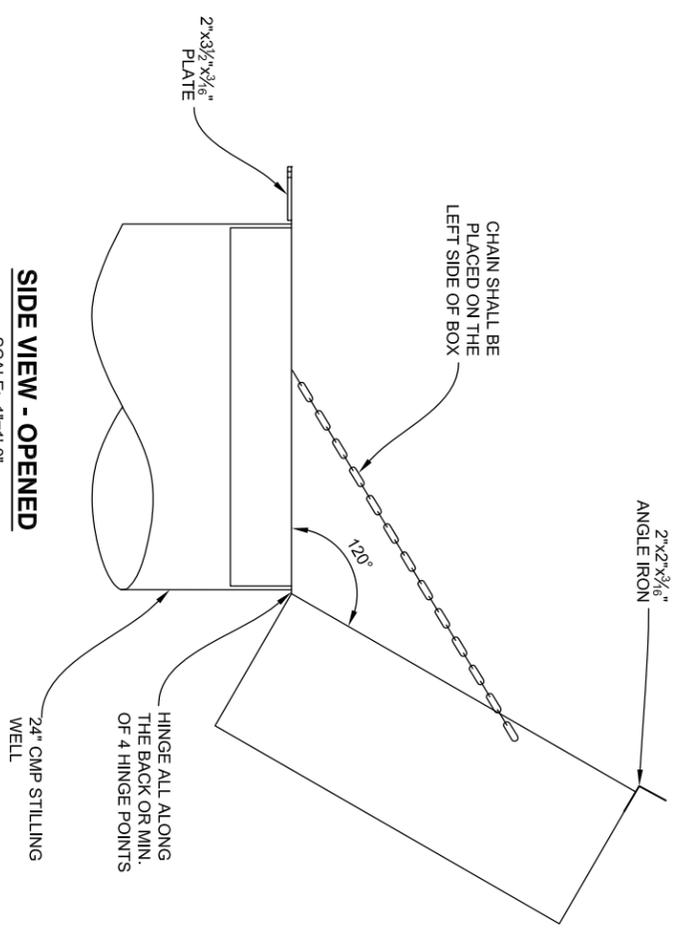
DESIGNED	DATE
KLH	10/24/2014
DRAWN	DATE
KLH	10/24/2014
CHECKED	DATE
DAH	14/03/01
SCALE	SHEET
1"=1'-0"	10 OF 17



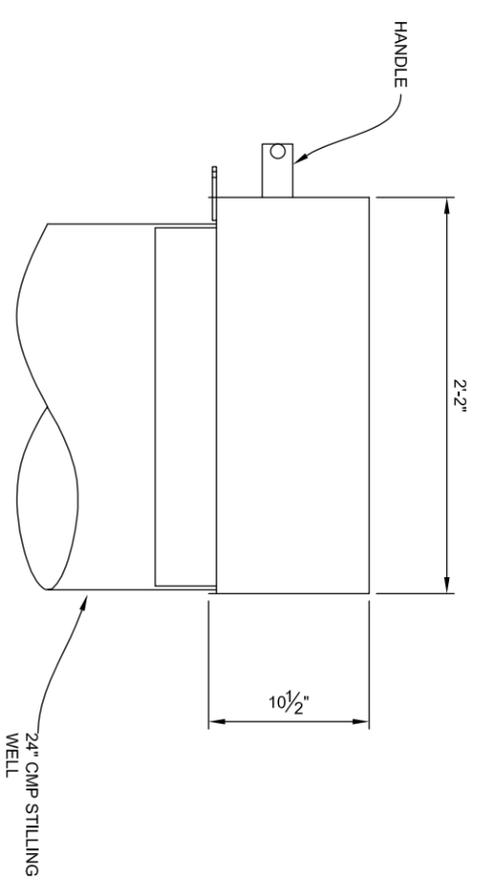
TOP VIEW
SCALE: 1"=1'-0"



FRONT VIEW
SCALE: 1"=1'-0"



SIDE VIEW - OPENED
SCALE: 1"=1'-0"



SIDE VIEW - CLOSED
SCALE: 1"=1'-0"

NOTE:
STILLING WELL COVER SHALL BE CONSTRUCTED 3' ABOVE GROUND.

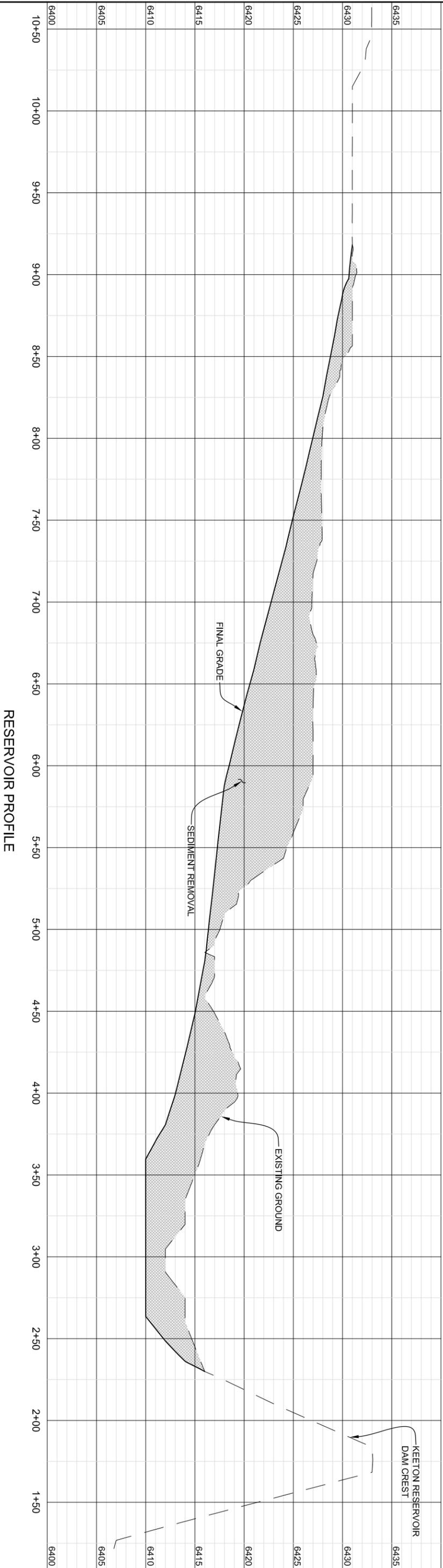
KEETON RESERVOIR REMEDIATION
WELL COVER DETAILS

REVISIONS		
NO.	DATE	DESCRIPTION

MULLER ENGINEERING CO., INC.
CONSULTING ENGINEERS
777 S. WADSWORTH BLVD. 4-100
LAKEWOOD, COLORADO 80226
(303) 988-0999

City of Fountain
116 S. Main St.
Fountain, CO 80817
Phone: (719) 322-2000 Fax: (719) 322-2001

DESIGNED: KLH DATE: 10/24/2014
DRAWN: KLH PROJ. NO.: 14003.01
CHECKED: DAH SCALE: 8"=1'-0"
SHEET 11 OF 17



RESERVOIR PROFILE

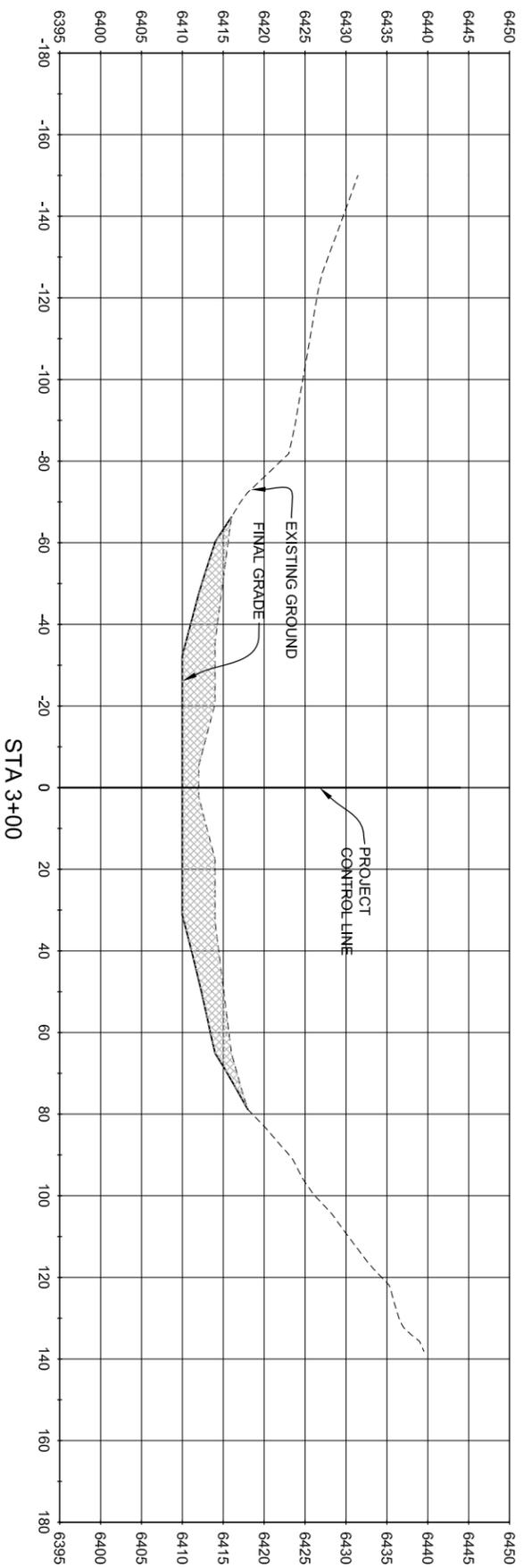
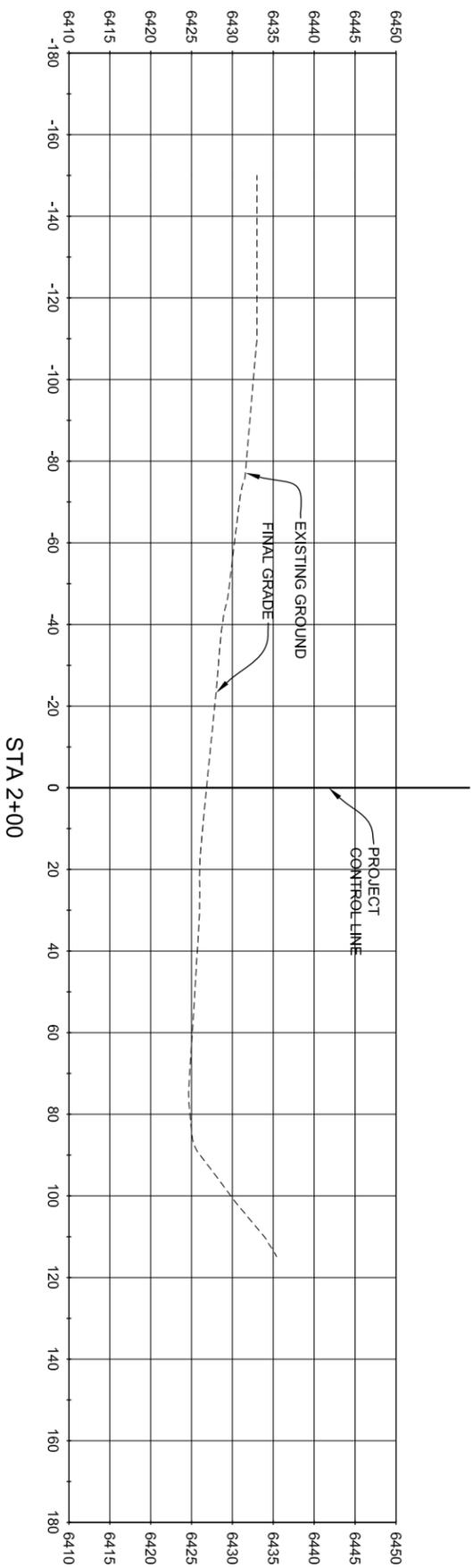
REVISIONS		
NO.	DATE	DESCRIPTION

MULLER ENGINEERING CO., INC.
 CONSULTING ENGINEERS
 777 S. WADSWORTH BLVD. 4-100
 LAKEWOOD, COLORADO 80226
 (303) 988-4099

City of Fountain
 116 S. Main St.
 Fountain, CO 80817
 Phone: (719) 322-2000 Fax: (719) 322-2001

DESIGNED	KLH	DATE	10/24/2014
DRAWN	LLD	FILE	14-003_01_PROFILE
CHECKED	DAH	PROJ. NO.	14-003.01
SCALE	AS SHOWN	SHEET	12 OF 17

KEETON RESERVOIR REMEDIATION
RESERVOIR PROFILE



REVISIONS		
NO.	DATE	DESCRIPTION

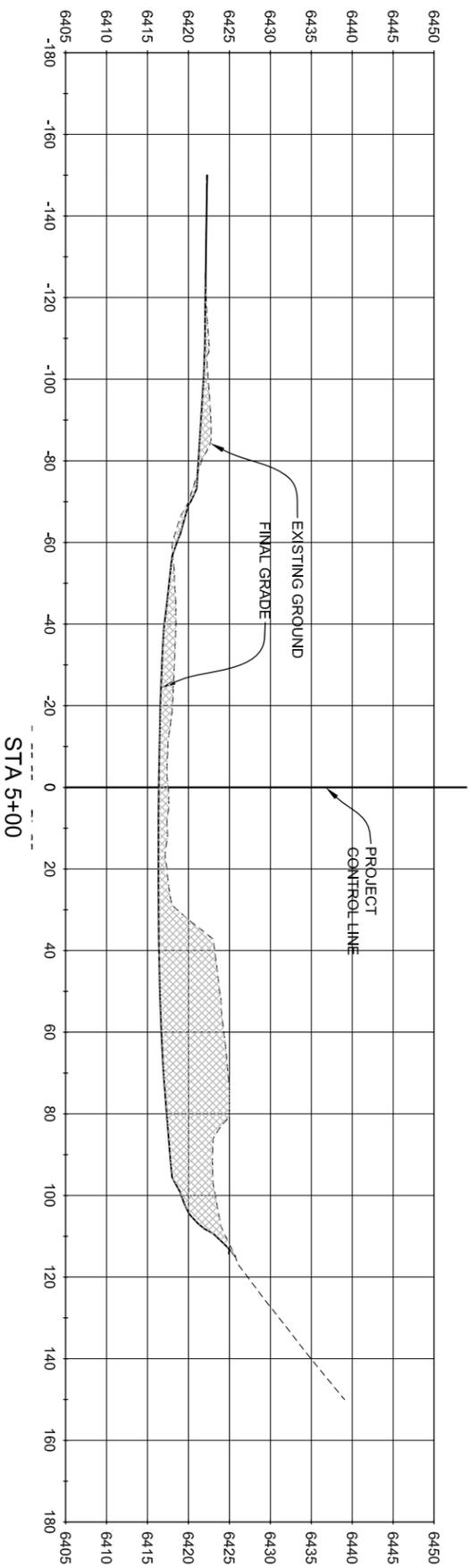
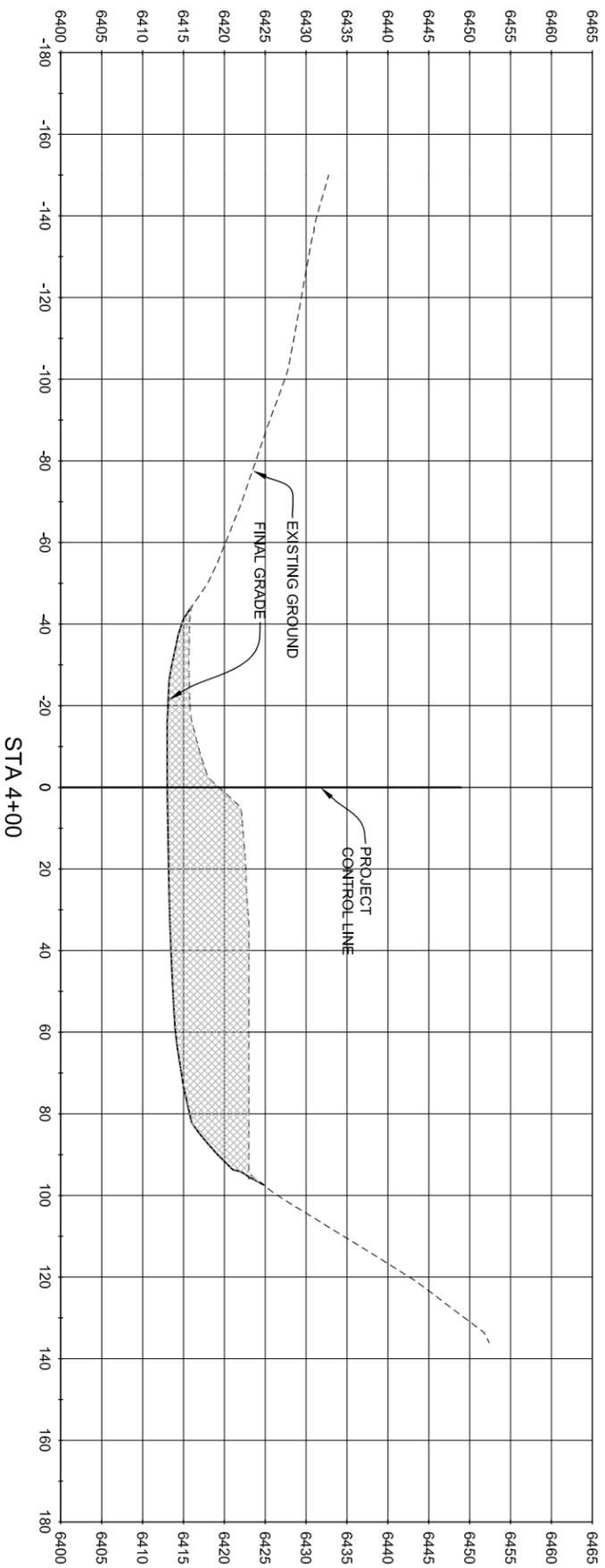
MULLER ENGINEERING CO., INC.
 CONSULTING ENGINEERS
 777 S. WADSWORTH BLVD. 4-100
 LAKEWOOD, COLORADO 80226
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KEETON RESERVOIR REMEDIATION

SECTIONS - 1

City of Fountain
 116 S. Main St.
 Fountain, CO 80817
 Phone: (719) 322-2000 Fax: (719) 322-2001

DESIGNED	KLH	DATE	10/24/2014
DRAWN	LLD	FILE	144003.01_PROFILE
CHECKED	DAH	PROJ. NO.	144003.01
SCALE	AS SHOWN	SHEET	13 OF 17



KEETON RESERVOIR REMEDIATION

SECTIONS - 2

REVISIONS		
NO.	DATE	DESCRIPTION

MULLER ENGINEERING CO., INC.
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DESIGNED	KLH	DATE	10/24/2014
DRAWN	LLD	FILE	14-003_01_PROFILE
CHECKED	DAH	PROJ. NO.	14-003_01
SCALE	AS SHOWN	SHEET	14 OF 17

