

Animas River Diversion

City of Aztec, New Mexico

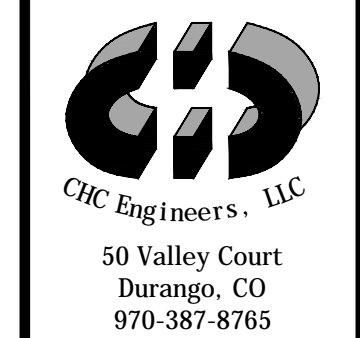
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Plot Date: 12/19/2016 - 7:27pm

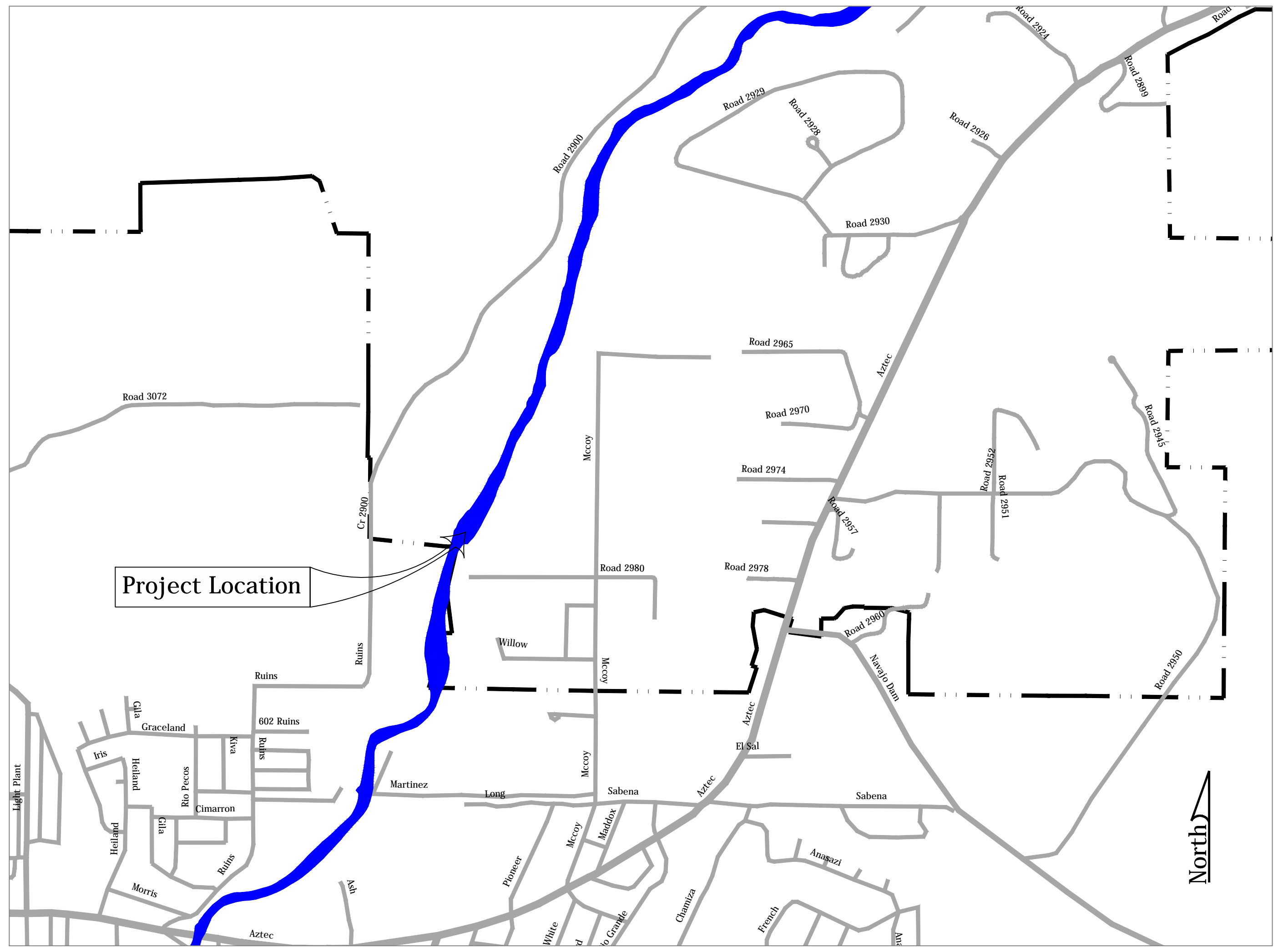
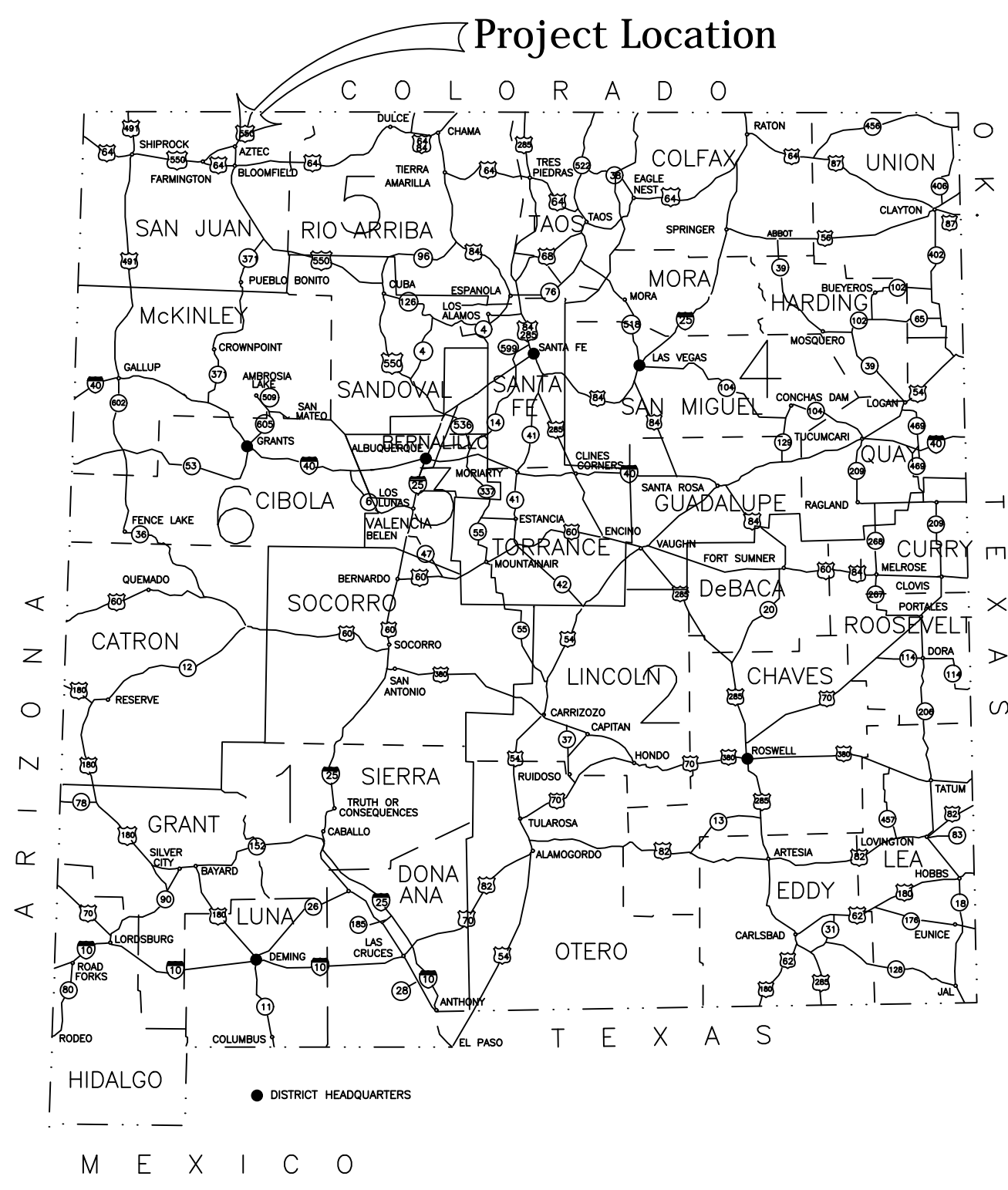


Project:
ANIMAS RIVER DIVERSION

Sheet Description:
COVER SHEET



Project Date:
12/19/16
Proj: 16014



Vicinity Map
Scale: 1" = 1000'

Sheet List Table	
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12/19/2016 7:27 PM
 14238
 1/19/17
 R. CLAYTON HARRISON
 NEW MEXICO
 REGISTERED PROFESSIONAL ENGINEER

GENERAL NOTES:

1. THE SPECIFICATIONS USED FOR THIS PROJECT ARE THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2006.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR DISPOSING OF ALL DEBRIS, INCLUDING BUT NOT LIMITED TO ALL CONSTRUCTION WASTE AT DISPOSAL SITES APPROVED BY GOVERNMENTAL AGENCIES REGULATING THE DISPOSAL OF SUCH MATERIALS.
3. CONTRACTOR IS REQUIRED TO COMPLY TO ALL 404/401 PERMIT CONDITION OF CONSTRUCTION APPROVAL.
4. ALL EXCAVATION WILL BE GOVERNED BY FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
5. THE CONTRACTOR IS TO EXERCISE CARE TO AVOID DISTURBING ANY EXISTING UNDERGROUND UTILITIES. IT WILL BE HIS RESPONSIBILITY TO COORDINATE WITH THE UTILITY COMPANIES IN ORDER TO PREVENT ANY SERVICE DISRUPTION.
6. THE CONTRACTOR WILL NOTIFY NEW MEXICO ONE CALL SYSTEM (505-260-1990) TWO (2) WORKING DAYS PRIOR TO COMMENCING WORK IN NEW AREAS.
7. THE CONTRACTOR WILL BE REQUIRED TO CONFINE THEIR WORK WITHIN THE CONSTRUCTION LIMITS TO PRESERVE EXISTING VEGETATION AND PRIVATE PROPERTY. LARGE TREES (GREATER THAN OR EQUAL TO 6" DIAMETER) IN THE PROJECT AREA WILL BE PROTECTED FROM DAMAGE.
8. PRIOR TO CONSTRUCTION, THE CONTRACTOR WILL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL CONFLICTING UTILITIES. SHOULD A CONFLICT EXIST BETWEEN THE FIELD INFORMATION AND THE PLANS, THE CONTRACTOR WILL NOTIFY THE ENGINEER SO THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY.
9. ALL UTILITY LINES WHICH ARE NOT SPECIFICALLY DESIGNATED TO BE REMOVED AND REPLACED ON THE PLANS WILL BE MAINTAINED IN SERVICE. SHORING, SHEETING, AND OTHER MEANS OF SUPPORT SHALL BE EMPLOYED BY THE CONTRACTOR TO PREVENT DAMAGE OR LOSS OF THESE EXISTING UTILITIES. BEAM AND CABLE OR OTHER ADEQUATE SUPPORTS WILL BE USED FOR TEMPORARY SUPPORT OF ALL UTILITY LINES WHICH CROSS THE TRENCH. ANY DAMAGE TO EXISTING UTILITIES WILL IMMEDIATELY AND WITHOUT DELAY BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR WILL NOTIFY THE ENGINEER IMMEDIATELY OF ANY SIGNIFICANT DEVIATION OF EXPOSED UTILITIES FROM THE LOCATIONS SHOWN ON THE PLANS SO THAT CONFLICTS CAN BE RESOLVED IN A TIMELY MANNER.
10. THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING CITY OF AZTEC INFRASTRUCTURE DURING CONSTRUCTION, APART FROM THOSE SECTIONS INDICATED FOR REMOVAL ON THE PLANS, AND WILL REPAIR OR REPLACE SAME AT HIS OWN EXPENSE.
11. ALL INTERFERING PORTIONS OF ABANDONED UTILITY LINES WHICH ARE EXPOSED AS A RESULT OF CONSTRUCTION WILL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR, THIS WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
12. SHORING COSTS WILL BE CONSIDERED INCIDENTAL TO THE TRENCH AND BACKFILL COSTS.
13. THE CONTRACTOR WILL BE RESPONSIBLE FOR SECURING NPDES PERMITS REQUIRED BY APPLICABLE CITY, STATE, AND FEDERAL REGULATIONS. THE CONTRACTOR SHALL PREPARE, IMPLEMENT, AND MAINTAIN A SWPPP FOR THE DURATION OF CONSTRUCTION.
14. EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650, SUBPART B.
15. CONTRACTOR IS ADVISED TO VISIT THE PROJECT SITE PRIOR TO BIDDING AND FAMILIARIZE THEMSELVES WITH FIELD CONDITIONS INCLUDING THE LOCATION OF UTILITIES SHOWN ON THE PLANS AND OTHER UTILITIES/OBSTACLES CLEARLY VISIBLE IN THE FIELD.
16. ALL DISTURBED GROUND AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH NMAPWA STANDARD SPECIFICATION SECTION 1012, NATIVE GRASS SEEDING.
17. EROSION CONTROL MEASURES FOR ALL PORTIONS OF THE PROJECT AREA THAT DRAIN TO OR WOULD HAVE RUNOFF TOWARD THE RIVER WILL BE PROPERLY SELECTED, INSTALLED, INSPECTED, REPAIRED, AND MAINTAINED. EROSION AND SEDIMENT CONTROL STRUCTURES (E.G., SILT FENCES, SEDIMENT BASINS, ETC.) WILL BE INSPECTED AFTER SIGNIFICANT STORM EVENTS AND REPAIRED AS NECESSARY. SEDIMENT WILL BE REMOVED FROM EROSION CONTROL STRUCTURES WHEN THE SEDIMENT REACHES 1/2 THE HEIGHT OF THE STRUCTURE OR WET STORAGE VOLUME IS REDUCED BY 1/2.
18. FUEL, OIL, HYDRAULIC FLUID, LUBRICANTS, AND OTHER PETROCHEMICALS WILL NOT BE STORED WITHIN 200 FEET OF THE RIVER, AND WILL HAVE A SECONDARY CONTAINMENT SYSTEM TO PREVENT SPILLS. APPROPRIATE SPILL CLEAN-UP MATERIALS SUCH AS BOOMS AND ABSORBENT PADS WILL BE AVAILABLE ON-SITE AT ALL TIMES DURING CONSTRUCTION.
19. ALL HEAVY EQUIPMENT USED IN THE PROJECT AREA WILL BE PRESSURE WASHED AND/OR STEAM CLEANED BEFORE THE START OF THE PROJECT AND INSPECTED DAILY FOR LEAKS. A WRITTEN LOG OF INSPECTIONS AND MAINTENANCE WILL BE COMPLETED. LEAKING EQUIPMENT WILL NOT BE USED IN OR NEAR SURFACE WATER. EQUIPMENT REFUELING WILL BE CONDUCTED AT LEAST 200 FEET FROM THE EDGE OF THE RIVER.
20. ALL CONCRETE AND OTHER CONSTRUCTION MATERIALS WILL BE PROPERLY HANDLED AND CONTAINED TO PREVENT RELEASES TO SURFACE WATER. POURED CONCRETE WILL BE FULLY CONTAINED IN MORTAR-TIGHT FORMS AND/OR PLACED BEHIND COFFERDAMS TO PREVENT RELEASES TO SURFACE WATER OR GROUND WATER. APPROPRIATE MEASURES WILL BE USED TO PREVENT WASTEWATER FROM CONCRETE BATCHING, VEHICLE WASH-DOWN, OR AGGREGATE PROCESSING ENTERING THE WATERCOURSE. DUMPING OF WASTE MATERIALS NEAR WATERCOURSES IS STRICTLY PROHIBITED.
21. DURING DEMOLITION, TREATMENTS, OR CLEANING ACTIVITIES OF EXISTING STRUCTURES (E.G., HEAD GATE, ABUTMENTS, WALLS, AND CULVERTS), ANY DEBRIS THAT FALLS INTO THE RIVER WILL BE PROPERLY REMOVED AND DISPOSED IN ACCORDANCE WITH THE NEW MEXICO SOLID WASTE REGULATION (NEW MEXICO ADMINISTRATIVE CODE 20.9.1).
22. APPLICABLE MATERIAL SAFETY DATA SHEETS FOR WATER REPELLANTS AND SURFACE FINISH TREATMENTS WILL BE MAINTAINED AT THE PROJECT AREA TO ASSIST THE SURFACE WATER QUALITY BUREAU IN MONITORING OR INSPECTIONS, IF NEEDED.
23. EXCAVATED CONSTRUCTION EXCAVATION WILL BE BACKFILLED AND COMPACTED TO MATCH THE BULK DENSITY AND ELEVATION OF THE ADJACENT UNDISTURBED SOIL. ALL AREAS ADJACENT TO THE WATERCOURSE THAT ARE DISTURBED DURING CONSTRUCTION, INCLUDING TEMPORARY ACCESS ROADS, WILL BE RESTORED TO PRE-PROJECT ELEVATIONS AND REPLANTED WITH NATIVE VEGETATION AND/OR PHYSICALLY PROTECTED FROM EROSION. STABILIZATION MEASURES INCLUDING VEGETATION ARE REQUIRED AT THE EARLIEST PRACTICABLE DATE, BUT BY THE END OF FIRST FULL GROWING SEASON FOLLOWING CONSTRUCTION.
24. PROVIDE AND INSTALL "AQUADAM" COFFERDAM OR ACCEPTED EQUAL PRODUCT. ASSUME A WATER DEPTH OF 5 FEET FOR SELECTING "AQUADAM" SIZE.

UNITED STATES ARMY CORPS OF ENGINEERS CONDITIONS OF APPROVAL:

GENERAL CONDITIONS:

1. THE TIME LIMIT FOR COMPLETING THE WORK AUTHORIZED ENDS ON FEBRUARY 15, 2021. IF YOU FIND THAT YOU NEED MORE TIME TO COMPLETE THE AUTHORIZED ACTIVITY, SUBMIT YOUR REQUEST FOR A TIME EXTENSION TO THIS OFFICE FOR CONSIDERATION AT LEAST ONE MONTH BEFORE THE ABOVE DATE IS REACHED.
2. YOU MUST MAINTAIN THE ACTIVITY AUTHORIZED BY THIS PERMIT IN GOOD CONDITION AND IN CONFORMANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT. YOU ARE NOT RELIEVED OF THIS REQUIREMENT IF YOU ABANDON THE PERMITTED ACTIVITY, ALTHOUGH YOU MAY MAKE A GOOD FAITH TRANSFER TO A THIRD PARTY IN COMPLIANCE WITH GENERAL CONDITION 4 BELOW. SHOULD YOU WISH TO CEASE TO MAINTAIN THE AUTHORIZED ACTIVITY OR SHOULD YOU DESIRE TO ABANDON IT WITHOUT A GOOD FAITH TRANSFER, YOU MUST OBTAIN A MODIFICATION OF THIS PERMIT FROM THIS OFFICE, WHICH MAY REQUIRE RESTORATION OF THE AREA.
3. IF YOU DISCOVER ANY PREVIOUSLY UNKNOWN HISTORIC OR ARCHEOLOGICAL REMAINS WHILE ACCOMPLISHING THE ACTIVITY AUTHORIZED BY THIS PERMIT, YOU MUST IMMEDIATELY NOTIFY THIS OFFICE OF WHAT YOU HAVE WE WILL INITIATE THE FEDERAL AND STATE COORDINATION REQUIRED TO DETERMINE IF THE REMAINS WARRANT A RECOVERY EFFORT OR IF THE SITE IS ELIGIBLE FOR LISTING IN THE NATIONAL REGISTER OF HISTORIC PLACES.
4. IF YOU SELL THE PROPERTY ASSOCIATED WITH THIS PERMIT, YOU MUST OBTAIN THE SIGNATURE OF THE NEW OWNER IN THE SPACE PROVIDED AND FORWARD A COPY OF THE PERMIT TO THIS OFFICE TO VALIDATE THE TRANSFER OF THIS AUTHORIZATION.
5. IF A CONDITIONED WATER QUALITY CERTIFICATION HAS BEEN ISSUED FOR YOUR PROJECT, YOU MUST COMPLY WITH THE CONDITIONS SPECIFIED IN THE CERTIFICATION AS SPECIAL CONDITIONS TO THIS PERMIT. FOR YOUR CONVENIENCE, A COPY OF THE CERTIFICATION IS ATTACHED IF IT CONTAINS SUCH CONDITIONS.
6. YOU MUST ALLOW REPRESENTATIVES FROM THIS OFFICE TO INSPECT THE AUTHORIZED ACTIVITY AT ANY TIME DEEMED NECESSARY TO ENSURE THAT IT IS BEING OR HAS BEEN ACCOMPLISHED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF YOUR PERMIT.

SPECIAL CONDITIONS:

1. IN ORDER TO PREVENT UNAUTHORIZED IMPACTS TO WATERS OF THE U.S., PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE PERMITTEE SHALL INSTALL A BARRIER (I.E., FLAGGING, TEMPORARY FENCING, JERSEY BARRIERS, AROUND AREAS TO BE AVOIDED AND PROTECTED, SUCH AS WETLANDS AND RIPARIAN AREAS, IN ACCORDANCE WITH THE PROPOSED PROJECT PLANS SUBMITTED WITH THE PERMIT APPLICATION DATED MAY 10, 2016. THE PERMITTEE SHALL SUBMIT PHOTO DOCUMENTATION OF ALL BARRIER INSTALLATION TO THE CORPS ALBUQUERQUE DISTRICT OFFICE WITHIN 30 DAYS OF SUCH INSTALLATION.
2. THE PERMITTEE SHALL IMPLEMENT EROSION CONTROL MEASURES FOR ALL TEMPORARILY DISTURBED AREAS, INCLUDING ACCESS AND STAGING AREAS, TO PREVENT UPLAND EROSION INTO WATERS OF THE U.S. PRIOR TO COMMENCEMENT OF GROUND-DISTURBING ACTIVITIES AND THESE MEASURES MUST BE PROPERLY MAINTAINED BY THE PERMITTEE UNTIL TEMPORARILY DISTURBED AREAS ARE STABILIZED.
3. ALL TEMPORARILY IMPACTED AREAS LOCATED ADJACENT TO WATERS OF THE U.S. SHALL BE RESTORED BY THE PERMITTEE TO PRE-CONSTRUCTION CONDITIONS, INCLUDING ORIGINAL CONTOURS, VEGETATION COMPOSITION AND DENSITY (EXCLUDING INVASIVE SPECIES), AND DRAINAGE PATTERNS. THE PERMITTEE SHALL SUBMIT PHOTOS TO THE CORPS ALBUQUERQUE DISTRICT OFFICE THAT DOCUMENT THE SUCCESS OF RESTORATION EFFORTS WITHIN 90 DAYS AFTER RESTORATION IS COMPLETE. FOR RESTORATION OF TEMPORARY IMPACTS THAT REQUIRE LONGER TERM MONITORING, SUCH AS REVEGETATION, ANNUAL MONITORING REPORTS MUST BE SUBMITTED TO THE CORPS ALBUQUERQUE DISTRICT OFFICE BY DECEMBER 31ST OF EACH YEAR, BEGINNING IN 2017, FOR A PERIOD OF 3 YEARS. THESE REPORTS MUST INCLUDE PHOTOS THAT ACCURATELY REFLECT THE CURRENT CONDITION OF RESTORED AREAS, ANY POTENTIAL PROBLEM AREAS, AND REMEDIES AND A TIMETABLE FOR CORRECTION IF IT IS ANTICIPATED THAT PROJECTED GOALS MAY NOT BE MET.

Revision Log

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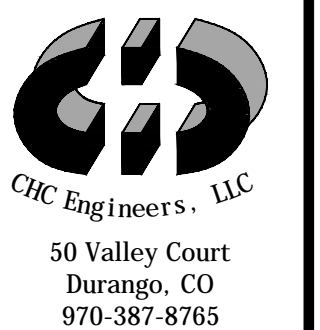
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Project:

ANIMAS RIVER DIVERSION

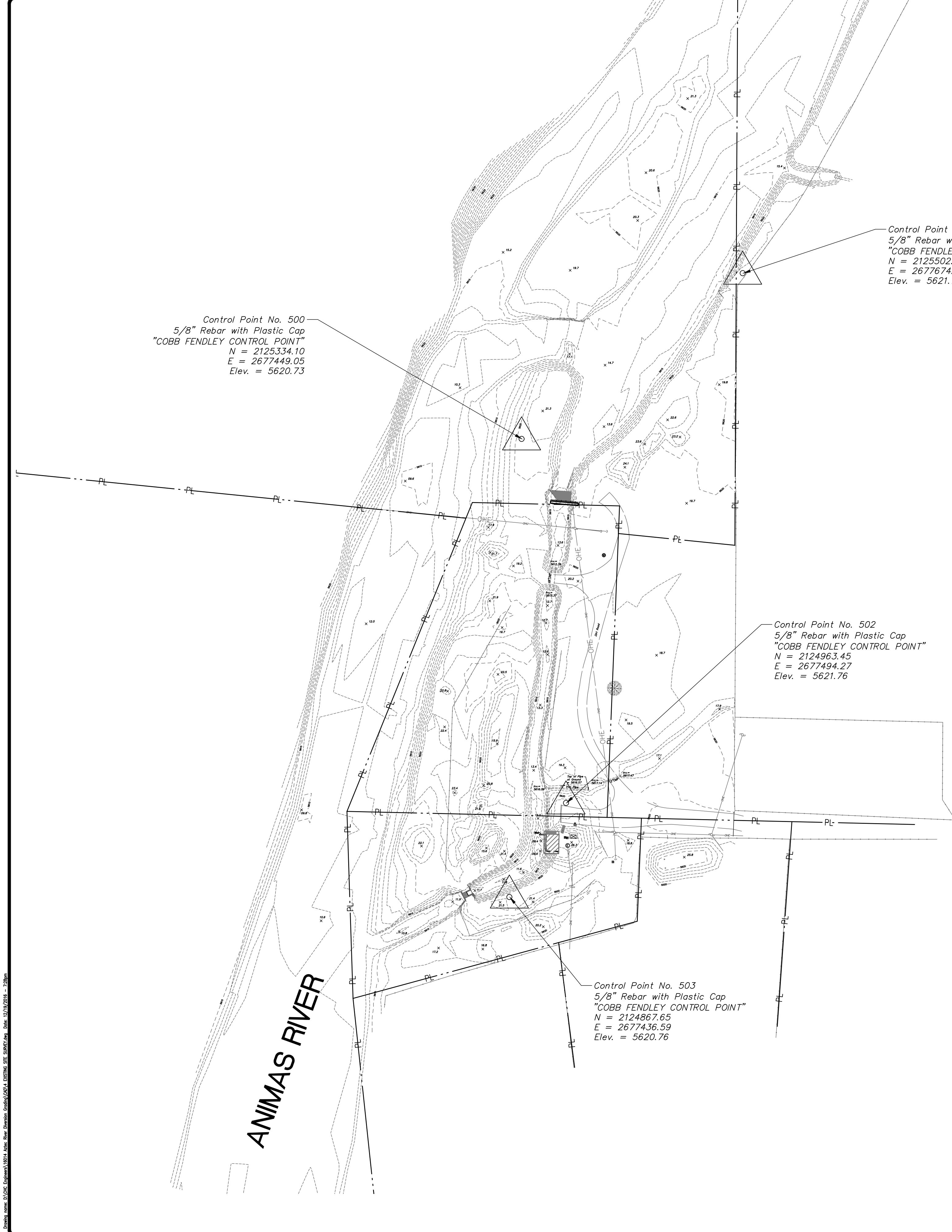
Sheet Description:

GENERAL NOTES



Project Date: 12/19/16

Proj: 16014



LEGEND (EXISTING ITEMS)

- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING MONITOR WELL
- EXISTING ELECTRIC SWITCH
- EXISTING ELECTRIC PANEL
- EXISTING ELECTRIC MANHOLE
- EXISTING POWER POLE
- EXISTING GUY ANCHOR
- EXISTING SPOT ELEVATION
- EXISTING COTTONWOOD TREE
- EXISTING OVERHEAD UTILITIES
- EXISTING OVERHEAD POWER LINE
- EXISTING FENCE LINE
- EXISTING CONTOUR (INDEX)
- EXISTING PROPERTY LINE
- PROPERTY LINE

LEGEND (NEW WORK)

- PRC POINT OF REVERSE CURVATURE
- PT POINT OF TANGENCY
- PC POINT OF CURVATURE
- PL PROPERTY LINE
- STA. STATION
- FF FINISHED FLOOR ELEVATION
- CL CENTERLINE
- TG TOP OF GRAVEL
- TOC TOP OF CONCRETE
- FG FINISHED GROUND
- EG EXISTING GROUND
- N= NORTHING
- E= EASTING
- INV INVERT
- CTR CENTER
- DESC. DESCRIPTION
- R RADIUS
- MH MANHOLE
- NEW GRAVEL
- NEW CONCRETE
- NEW RIPRAP
- NEW CONTOUR
- LIMIT OF CONSTRUCTION

NOTE

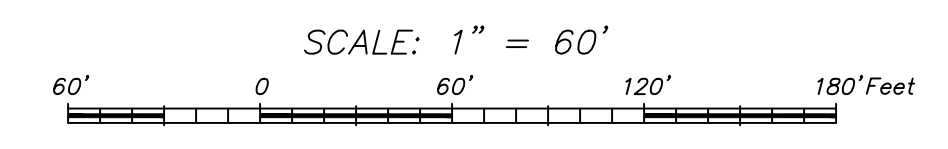
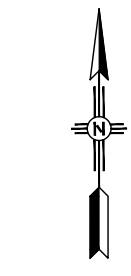
Coordinates shown hereon are modified (surface) N.M. State Plane Coordinates – West Zone (NAD 83, NSRS 2007), and were derived by scaling State Plane grid coordinates by the project average combined Factor of CF = 1.000345309 around an origin of 0,0. Elevations are NAVD 88, and have been adjusted to the NGS 1st order benchmark "Z 430" (published elevation = 5779.01'). The coordinates and elevations are expressed in US Survey Feet.

DISCLAIMER

Underground utility locations are based on physical features such as manholes, valves, pedestals and spotting in the field and are approximate only. No digging was performed to locate the actual locations of buried utilities. The surveyor does not guarantee the completeness or accuracy of the buried utility data shown hereon. Actual locations should be verified prior to any excavating.

NOTE: PROPERTY LINES SHOWN ON THIS DRAWING ARE APPROXIMATE AND ARE FOR INFORMATION ONLY.

NOTE: THIS SURVEY WAS COMPLETED IN APRIL 2014. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING AND REPORT DISCREPANCIES TO THE CITY ENGINEER.

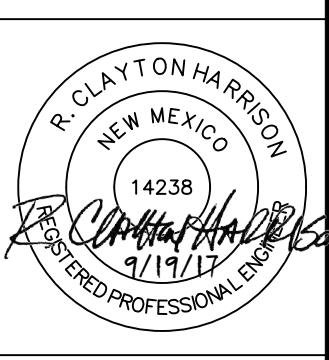


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Project: ANIMAS RIVER DIVERSION

Sheet Description: EXISTING SITE SURVEY

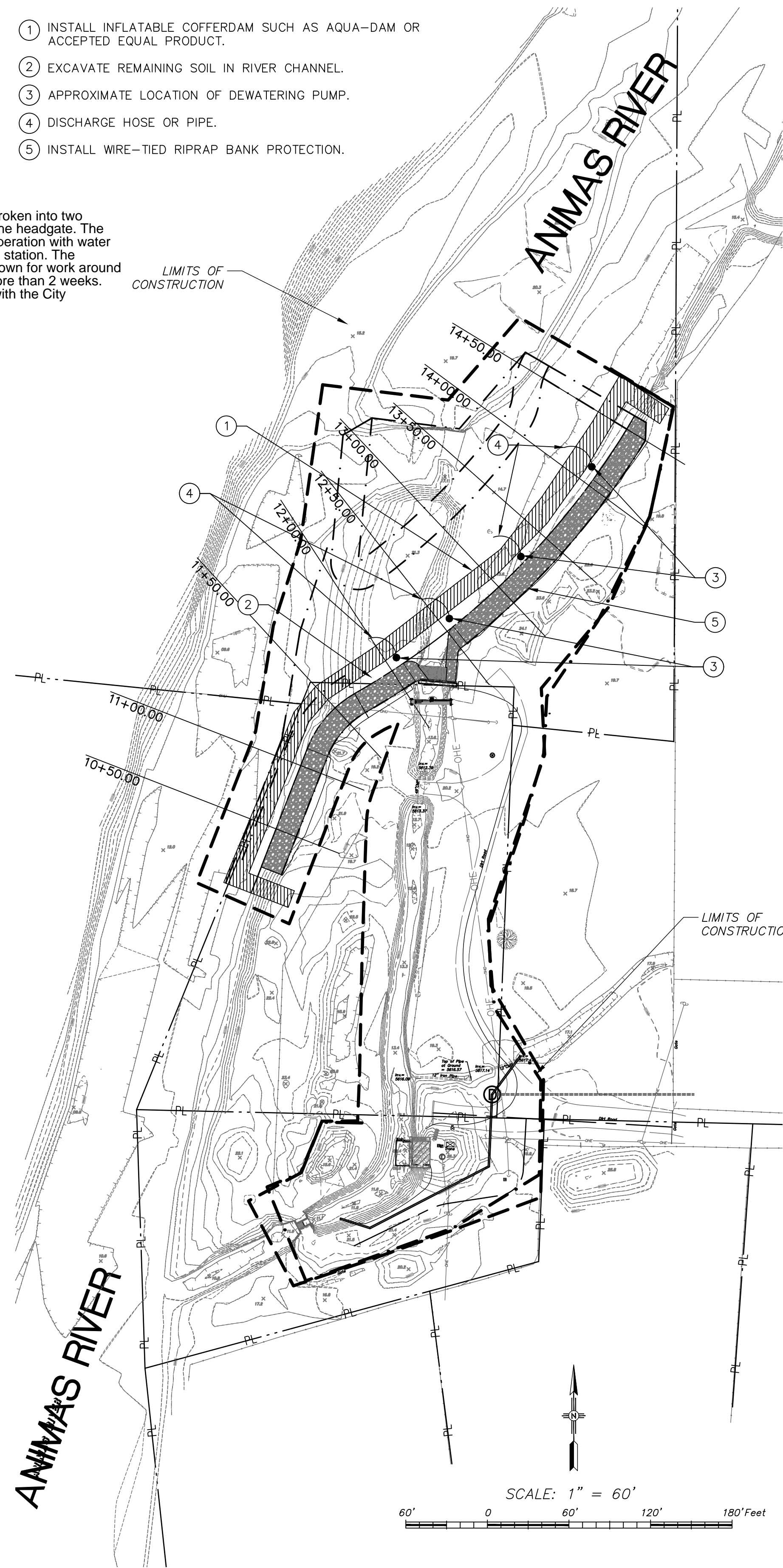
R. CLAYTON HARRISON
NEW MEXICO
14238
4/17/17
REGISTERED PROFESSIONAL ENGINEER



Project Date: 12/19/16
Proj: 16014

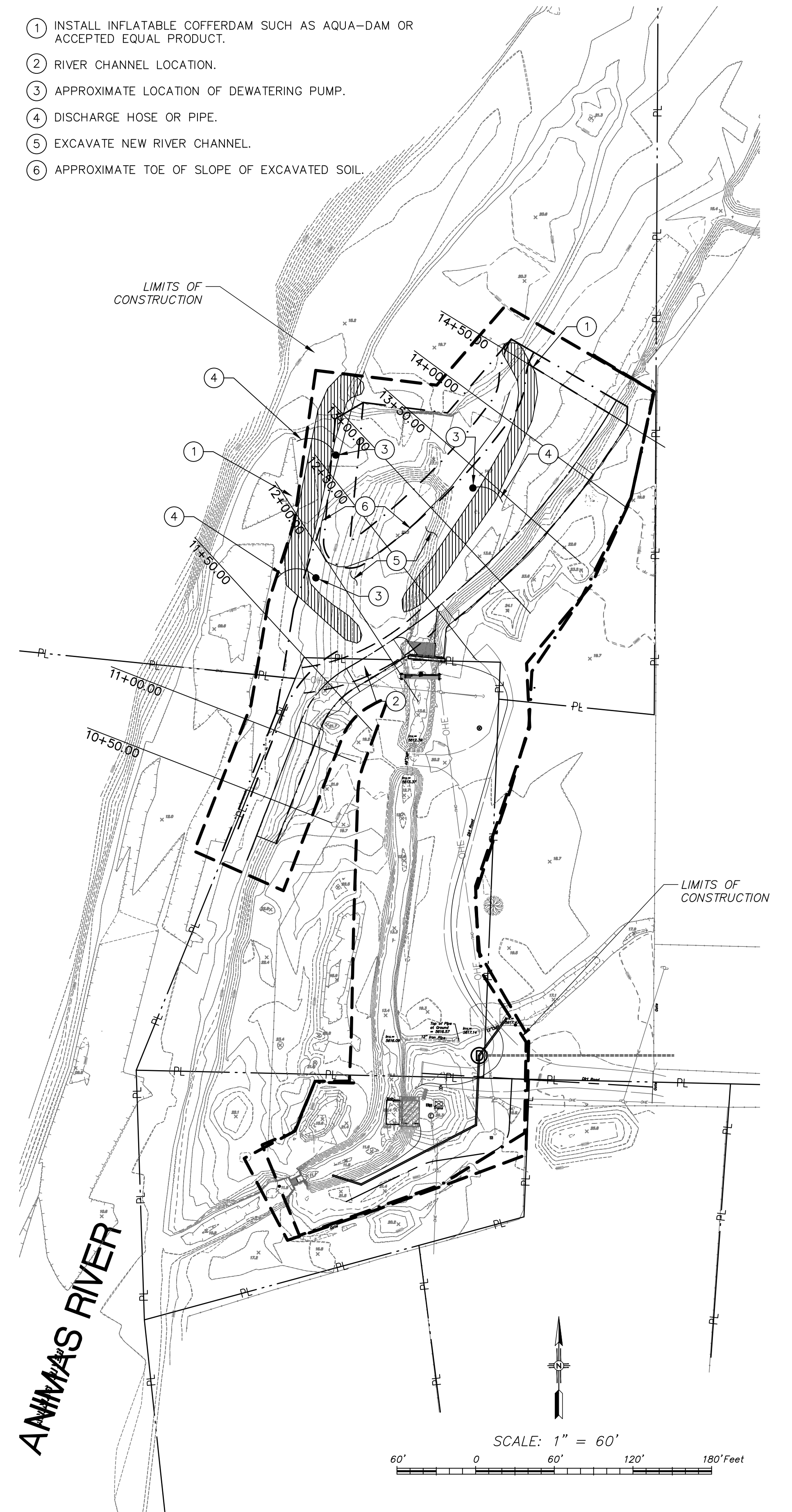
- ① INSTALL INFLATABLE COFFERDAM SUCH AS AQUA-DAM OR ACCEPTED EQUAL PRODUCT.
- ② EXCAVATE REMAINING SOIL IN RIVER CHANNEL.
- ③ APPROXIMATE LOCATION OF DEWATERING PUMP.
- ④ DISCHARGE HOSE OR PIPE.
- ⑤ INSTALL WIRE-TIED RIPRAP BANK PROTECTION.

Note: This phase may be broken into two phases, above and below the headgate. The headgate must remain in operation with water allowed to flow to the pump station. The headgate can be brought down for work around the headgate, but for no more than 2 weeks. Coordinate all shutdowns with the City Engineer.



PHASE 1 - COFFERDAM & DEWATER PLAN
1"=60'

- ① INSTALL INFLATABLE COFFERDAM SUCH AS AQUA-DAM OR ACCEPTED EQUAL PRODUCT.
- ② RIVER CHANNEL LOCATION.
- ③ APPROXIMATE LOCATION OF DEWATERING PUMP.
- ④ DISCHARGE HOSE OR PIPE.
- ⑤ EXCAVATE NEW RIVER CHANNEL.
- ⑥ APPROXIMATE TOE OF SLOPE OF EXCAVATED SOIL.



PHASE 2 - COFFERDAM & DEWATER PLAN
1"=60'

Drawing created by CHC Engineers, LLC. Project: 16014, Animas River. Revision: 12/19/2016. Scale: 1/16"=1'-0".

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Plot Date: 12/19/2016 - 7:29pm

Project: ANIMAS RIVER DIVERSION

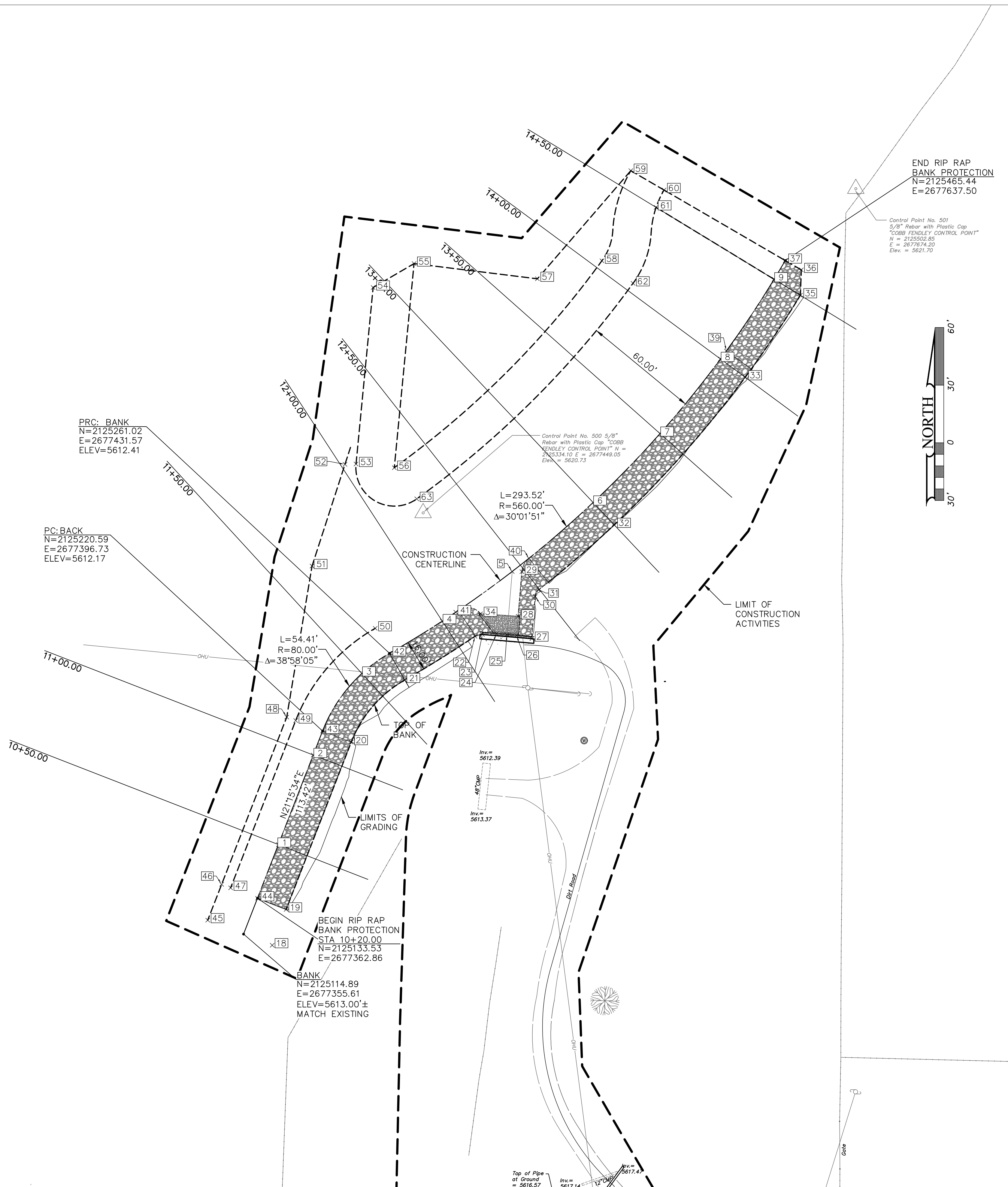
Sheet Description: COFFERDAM AND DEWATERING PLAN

R. CLAYTON HARRISON
NEW MEXICO
14238
1/19/17
REGISTERED PROFESSIONAL ENGINEER

CHC Engineers, LLC
50 Valley Court
Durango, CO
970-387-8765

Project Date: 12/19/16
Proj: 16014

2-1



POINT DATA TABLE

Point #	Northing	Easting	Elevation
1	2125161.49	2677373.74	5612.59
2	2125208.08	2677391.87	5612.26
3	2125250.53	2677417.20	5612.33
4	2125277.79	2677459.02	5612.61
5	2125303.61	2677495.42	5612.76
6	2125339.52	2677537.52	5613.10
7	2125375.39	2677572.33	5613.43
8	2125414.24	2677603.78	5613.68
9	2125455.70	2677631.70	5613.96
18	2125109.09	2677370.52	5621.02
19	2125127.73	2677377.77	5620.79
20	2125214.79	2677411.65	5620.17
21	2125247.13	2677439.51	5620.41
22	2125269.88	2677476.03	5620.60
23	2125270.84	2677479.89	5620.81
24	2125271.19	2677487.27	5613.53
25	2125270.72	2677492.64	5613.53
26	2125270.31	2677497.63	5613.53
27	2125268.67	2677505.63	5620.79
28	2125280.27	2677498.53	5613.53
29	2125303.51	2677500.43	5612.96
30	2125290.60	2677507.37	5620.80
31	2125294.11	2677509.26	5620.80
32	2125327.88	2677548.49	5621.11
33	2125404.70	2677616.68	5621.66
34	2125281.59	2677478.95	5613.53
35	2125447.37	2677645.36	5621.96
36	2125460.58	2677645.86	5621.34
37	2125465.44	2677637.50	5616.00
39	2125418.37	2677606.85	5613.70
40	2125310.47	2677504.13	5612.82
41	2125282.43	2677466.03	5612.61
42	2125261.02	2677431.57	5612.41
43	2125220.59	2677396.73	5612.17
44	2125133.53	2677362.86	5612.79
45	2125122.14	2677336.97	5611.44
46	2125140.78	2677344.22	5610.95
47	2125138.97	2677348.88	5612.82
48	2125227.84	2677378.10	5611.93
49	2125226.03	2677382.76	5612.20
50	2125274.04	2677424.12	5612.44
51	2125306.45	2677391.25	5612.55
52	2125359.37	2677408.39	5613.90
53	2125359.56	2677414.15	5613.58
54	2125451.41	2677423.03	5613.00
55	2125463.87	2677444.34	5617.00
56	2125357.64	2677434.06	5617.58
57	2125455.95	2677508.51	5618.61
58	2125465.33	2677542.09	5618.90
59	2125512.22	2677557.12	5619.21
60	2125502.16	2677574.41	5615.24
61	2125493.12	2677570.29	5615.17
62	2125453.59	2677558.28	5614.90
63	2125341.41	2677445.75	5613.86

SEE SHEET 1-3 FOR ADDITIONAL CONTROL POINTS

GENERAL NOTES:

- REFER TO SHEET 1-3 - Existing Site Survey FOR LEGEND INFORMATION.
- ALL ELEVATIONS IN POINT DATA TABLE ARE TO FINISHED GRADE.
- REFER TO SHEETS 4-1 AND 4-2 FOR RIVER CROSS SECTIONS.

KEYED NOTES:

- GRADE RIVER BED TO CONTOUR ELEVATIONS SHOWN.
- BUILD WIRE-TIED RIP RAP BANK PROTECTION PER DETAIL ON SHEET 5-1.
- GRADE EXISTING RIVER PER SECTION ON SHEETS 4-1 AND 4-2.
- SEE RIP RAP TERMINATION DETAIL ON SHEET 5-1
- TRANSITION FROM 1:1 (H:V) SIDE SLOPES IN DIVERSION CHANNEL TO 2:1 (H:V) SIDE SLOPES ON RIVER BANK.

Revision Log

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Owner:

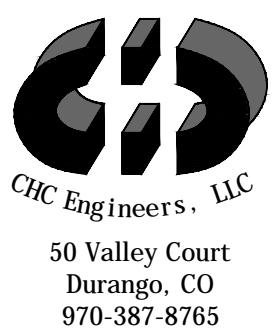
City of Aztec

Project:

ANIMAS RIVER DIVERSION

Sheet Description:

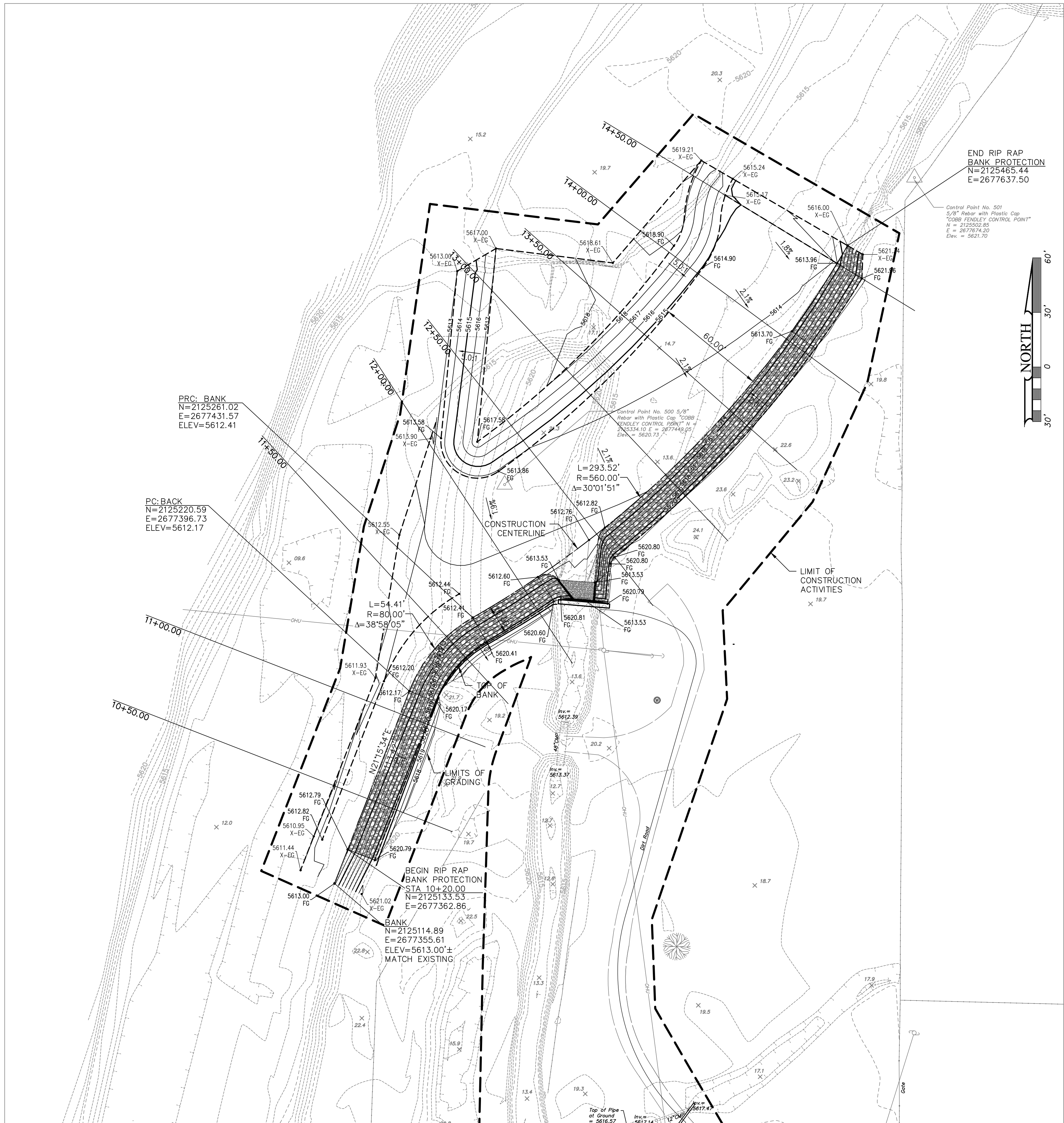
LAYOUT PLAN



Project Date: 12/19/16

Proj: 16014

Drawn by: E:\Projects\2016\16014\16014.dwg
 Date: 12/19/16
 Scale: 1"=50'



Earthwork Volumes:
 Cut: 2000cy
 Fill: 1500cy
 Note: These volumes may not be accurate as they are based on 2014 survey and changes to the river may have occurred. Extra material can be placed on the island above elevation 5617 or hauled off at the contractor's expense. No additional payment will be made for grading or hauling additional material.



GENERAL NOTES:

1. REFER TO SHEET 1-3 FOR LEGEND INFORMATION.

KEYED NOTES:

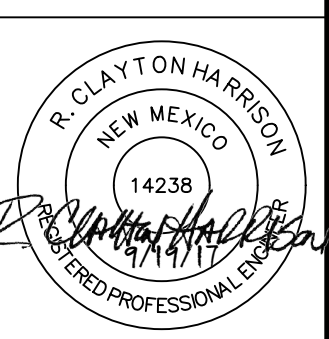
- ① WIRE-TIED RIP RAP BANK PROTECTION. SEE SHEET 2-2 FOR LAYOUT INFORMATION. SEE SHEET 5-1 FOR DETAILS.
- ② EXISTING CHANNEL INLET STRUCTURE.

Revision Log	1	2	3	4	5	6

Owner:
 City of Aztec

Project:
 ANIMAS RIVER DIVERSION

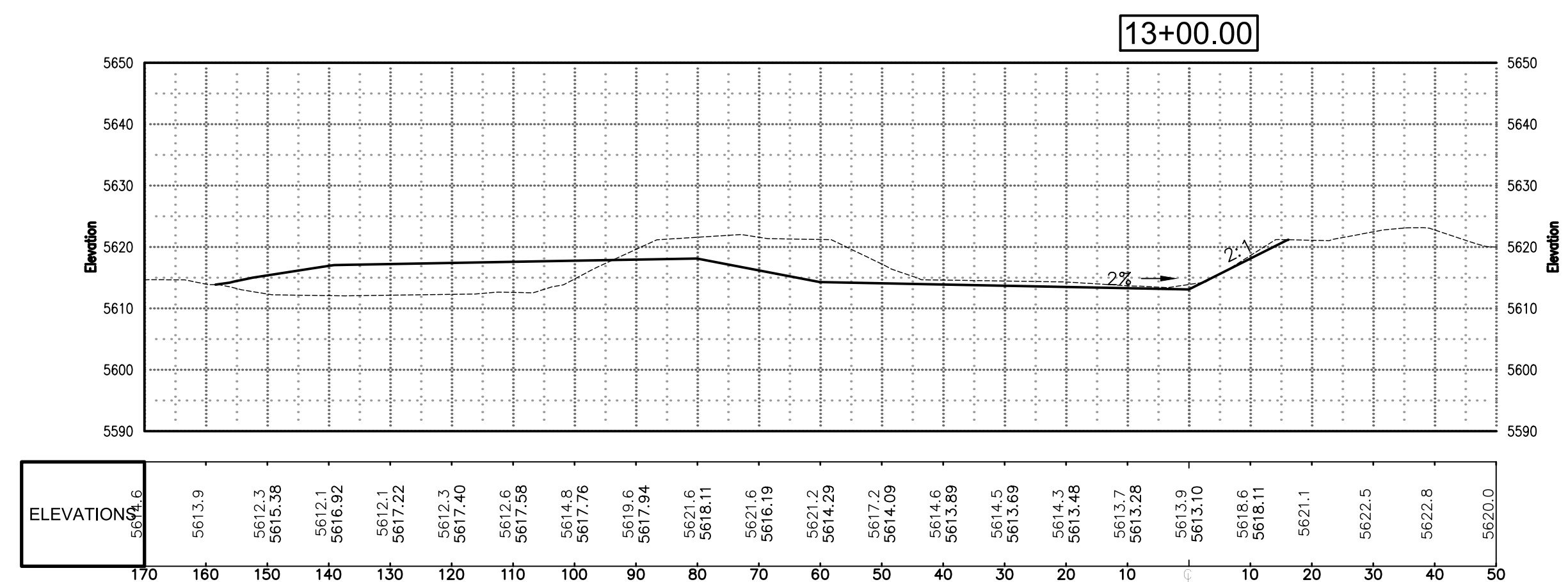
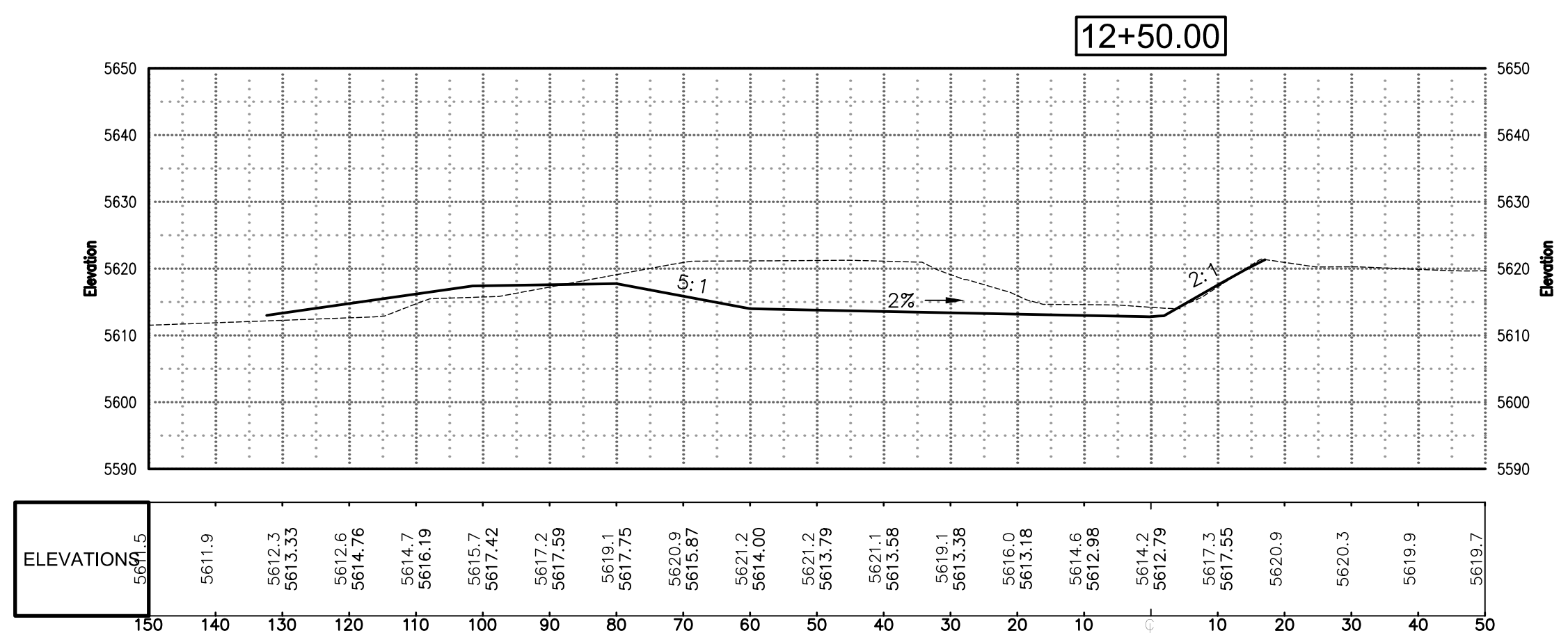
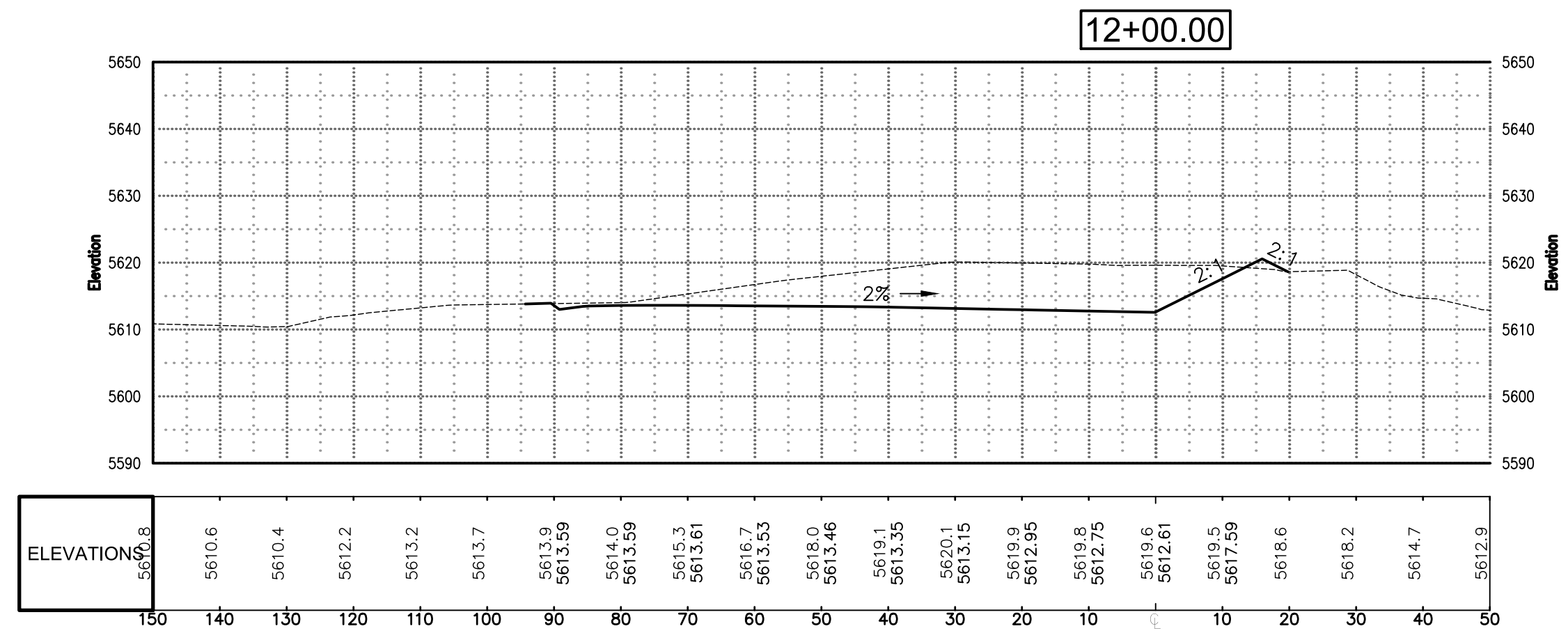
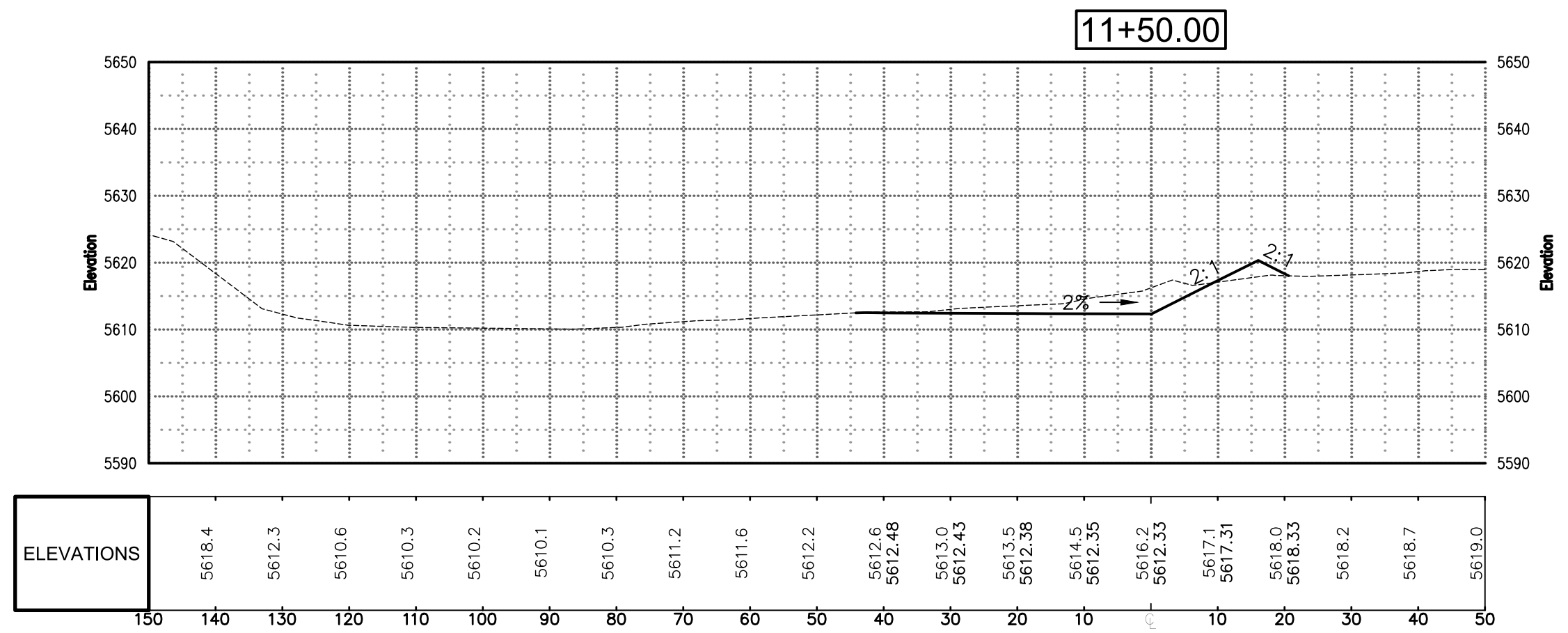
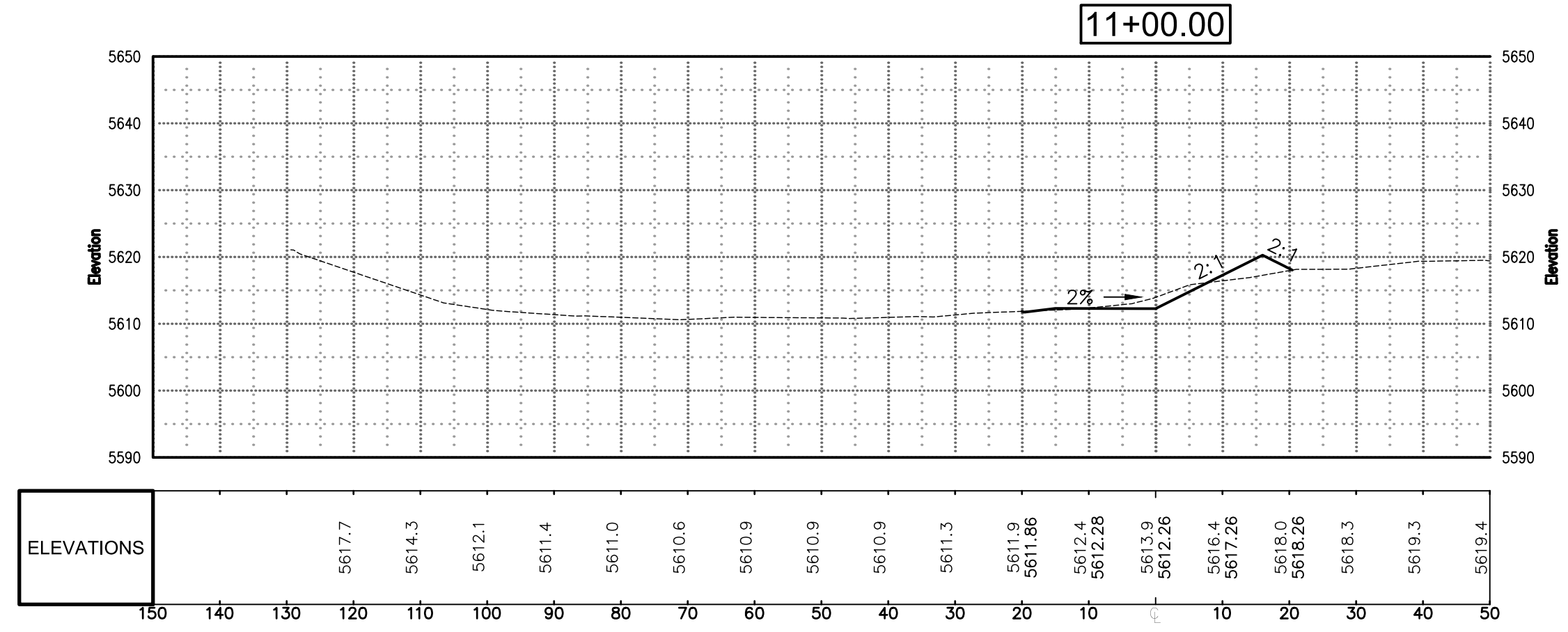
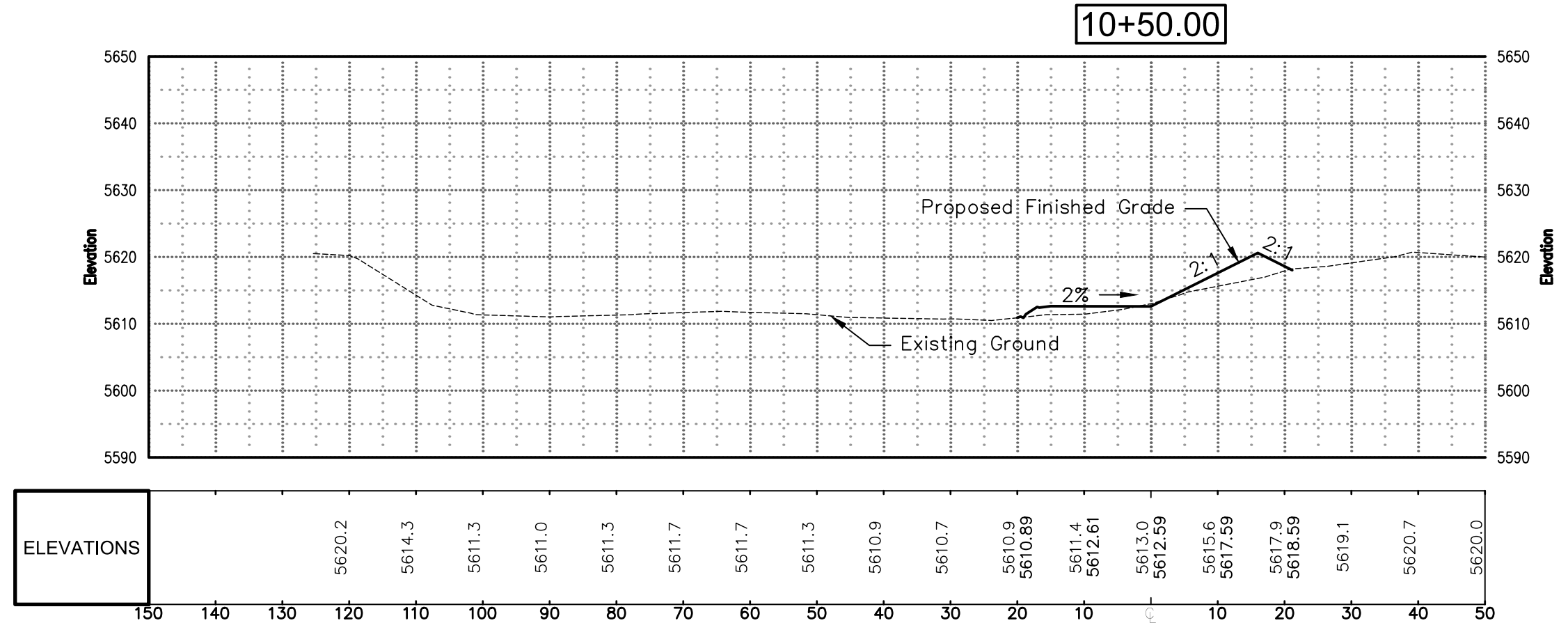
Sheet Description:
 GRADING PLAN



50 Valley Court
 Durango, CO
 970-387-8765

Project Date:
 12/19/16
 Proj: 16014
 2-3

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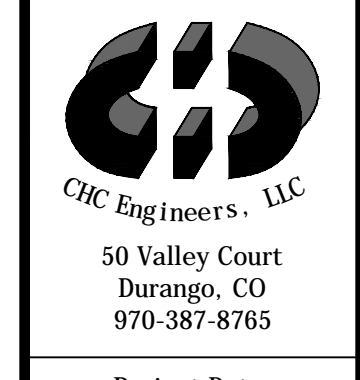
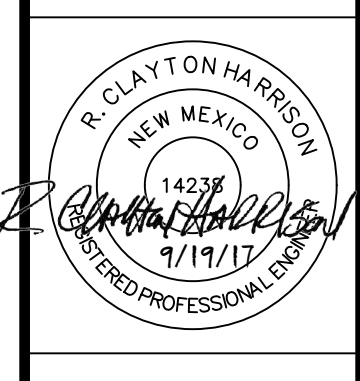


Revision Log	
1	
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6	

Owner: City of Aztec

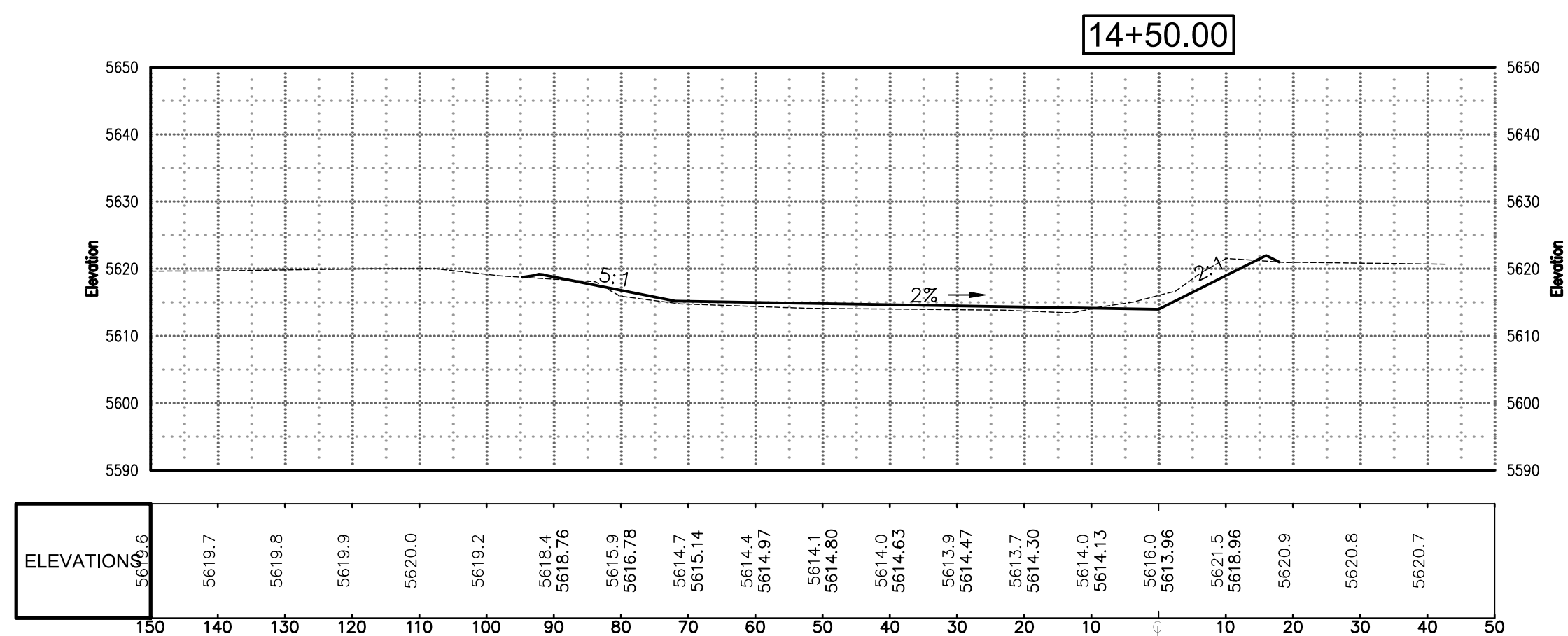
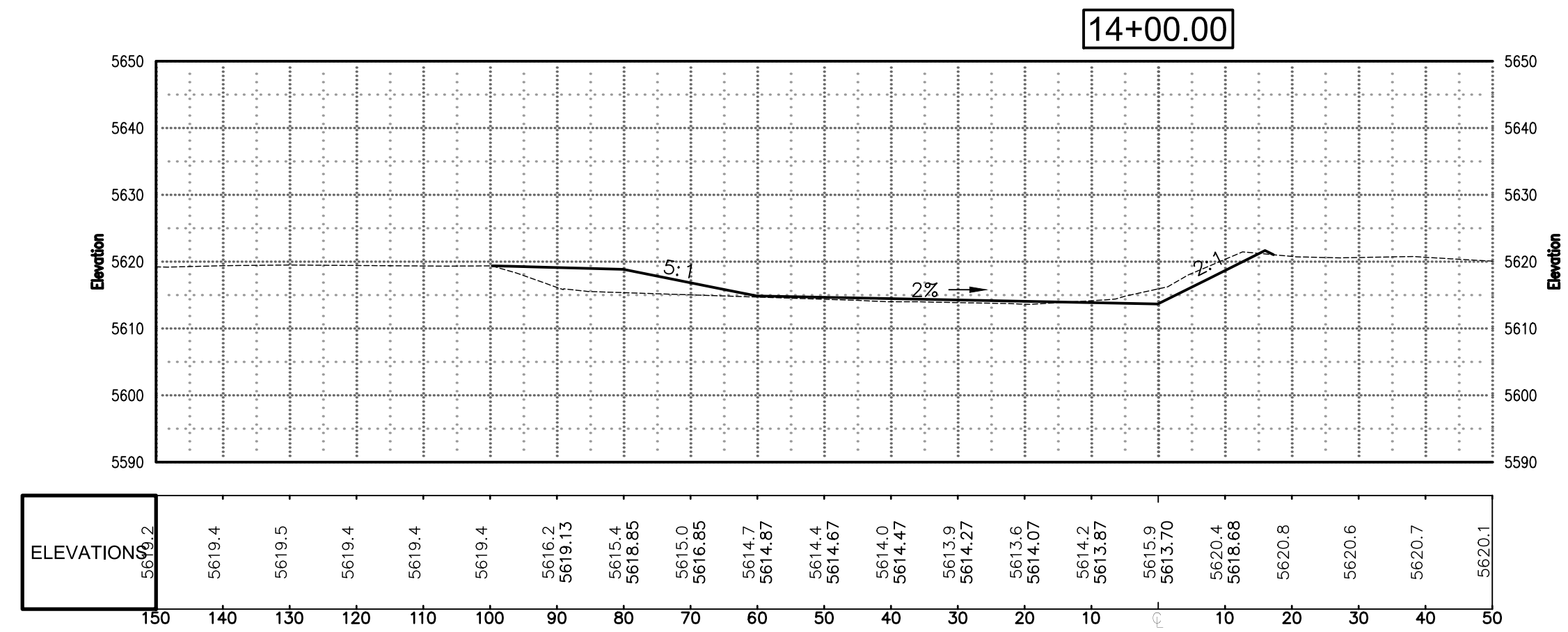
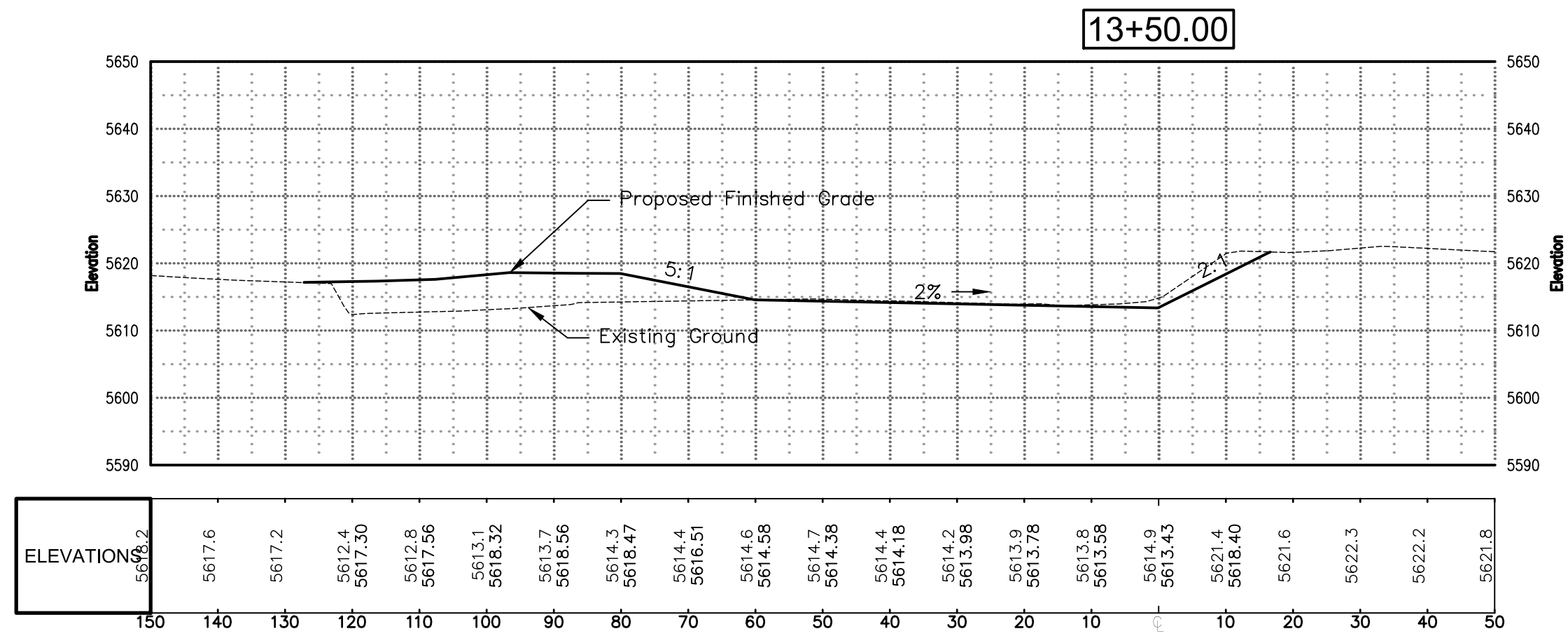
Project: ANIMAS RIVER DIVERSION

Sheet Description: RIVER CROSS SECTIONS



Project Date: 12/19/16
Proj: 16014

Drawing created by: CHC Engineers, LLC. Date: 12/19/2016. Project: Animas River Diversion. Sheet: 12/19/2016 - 23pm

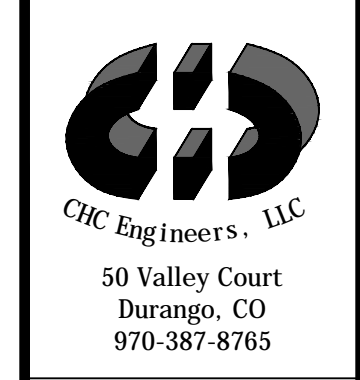
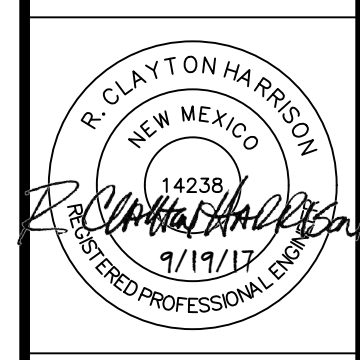


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1	
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Owner: City of Aztec

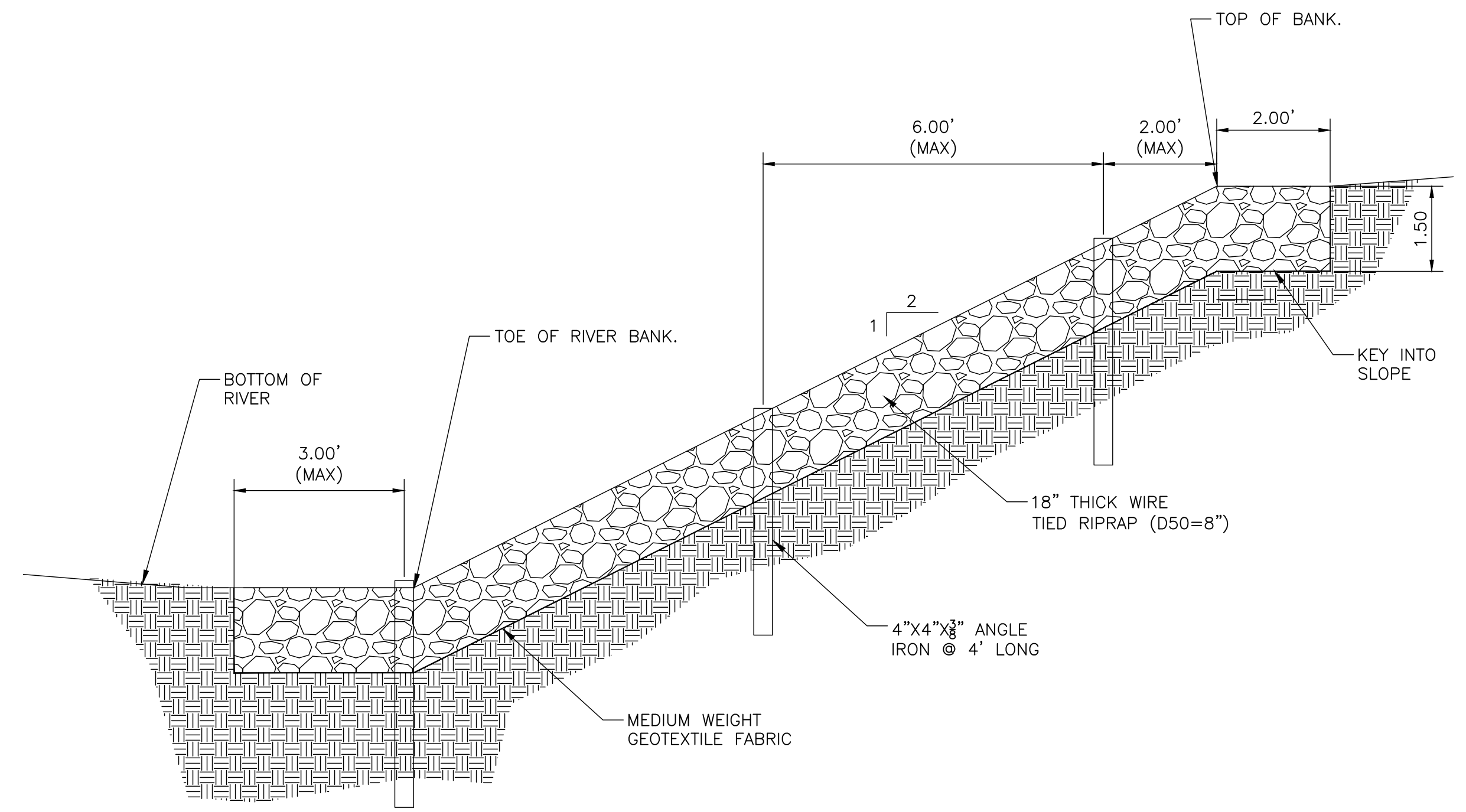
Project: ANIMAS RIVER DIVERSION

Sheet Description: RIVER CROSS SECTIONS

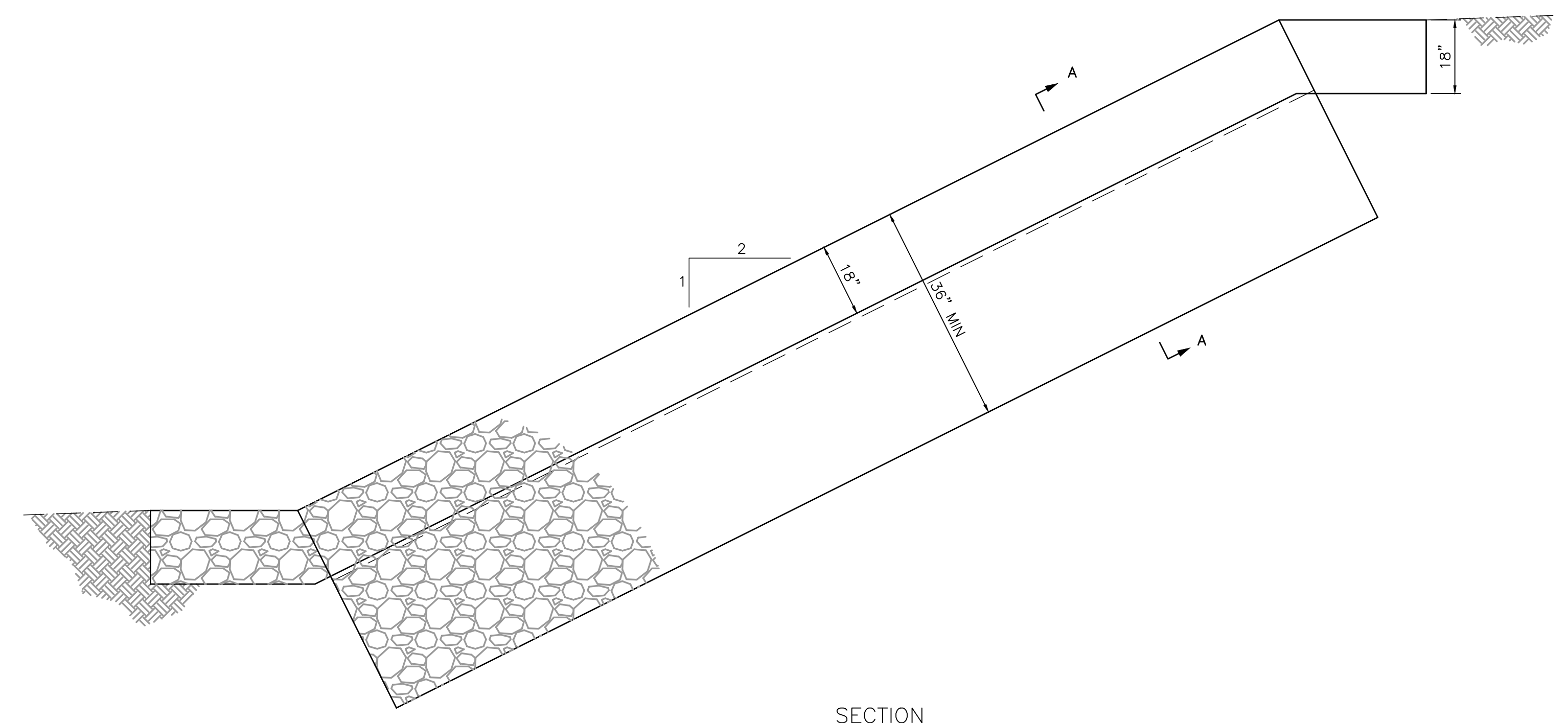


Project Date: 12/19/16
Proj: 16014

Drawing created by CHC Engineers, LLC. Date: 12/19/2016 - 7:30pm



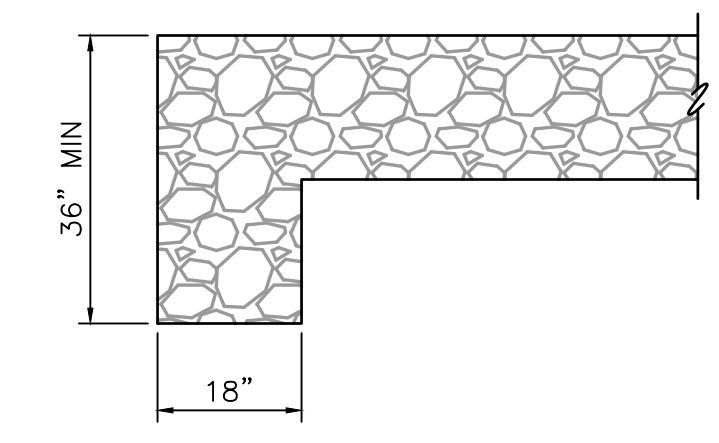
WIRE-TIED RIP RAP DETAIL
N.T.S



SECTION

RIP RAP TERMINATION DETAIL

TYPICAL AT BOTH UPSTREAM AND DOWNSTREAM TERMINATIONS AND AT HEADGATE



SECTION A-A

Revision Log	
1.	
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Plot Date: 12/19/2016 - 7:30pm

Project:
ANIMAS RIVER DIVERSION

Sheet Description:
RIP RAP DETAILS



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 Durango, CO
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Project Date:
12/19/16
 Proj: 16014