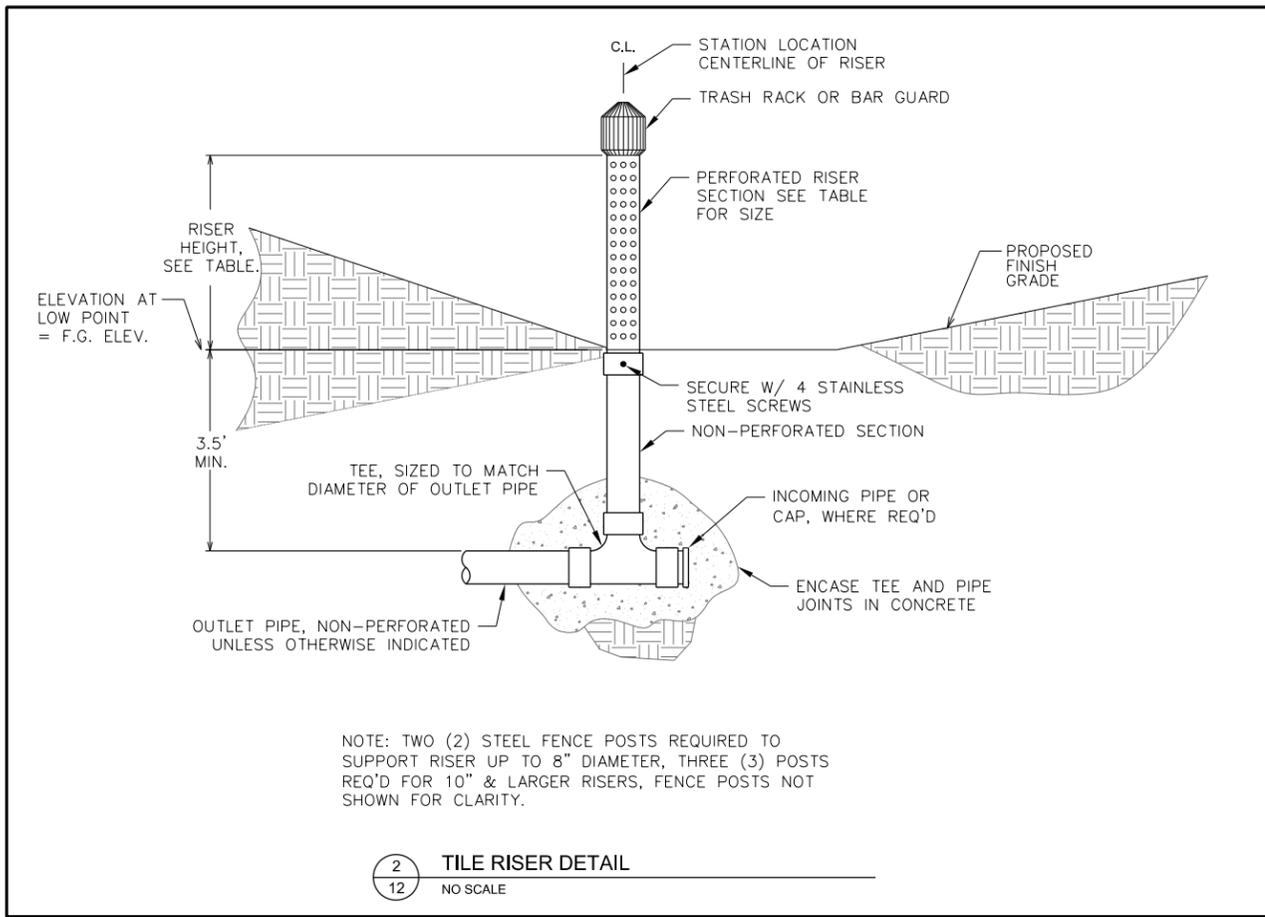
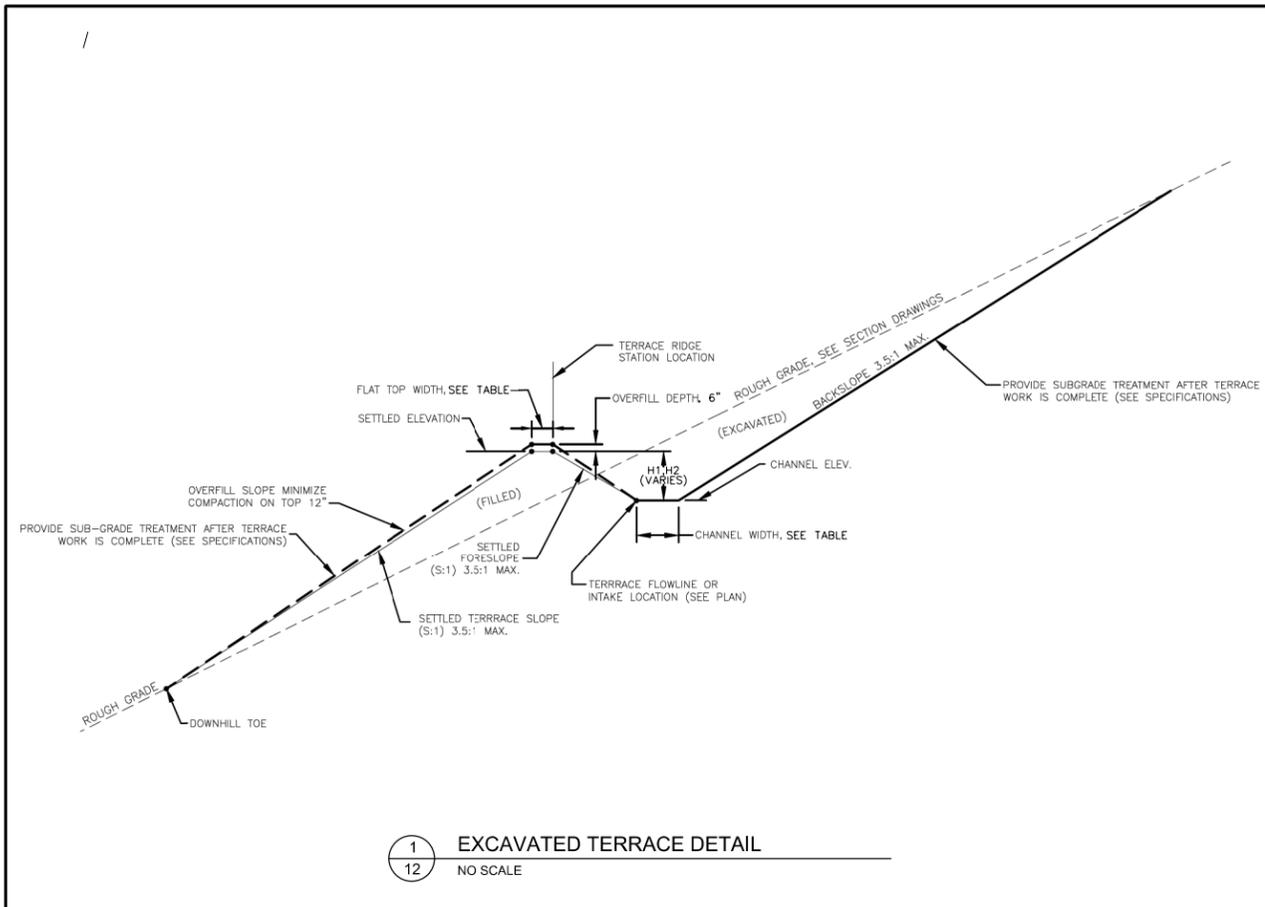


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NOTE: TWO (2) STEEL FENCE POSTS REQUIRED TO SUPPORT RISER UP TO 8" DIAMETER, THREE (3) POSTS REQ'D FOR 10" & LARGER RISERS, FENCE POSTS NOT SHOWN FOR CLARITY.

TILE RISER SCHEDULE								
RISER I.D.	SHEET No.	DIAMETER (in)	INTAKE MATERIAL	HOLES / QTY/FT	HOLE SIZE (in)	LOWPT. ELEV. (ft)	RISER HEIGHT (ft)	BAR GUARD (Y/N)
R1	10	8	Plastic	56	1	793.00	2.0	Y
R2	10	8	Plastic	56	1	803.00	2.0	Y
R3	10	8	Plastic	56	1	816.00	2.0	Y
R4	10	8	Plastic	56	1	786.00	2.0	Y
R5	10	8	Plastic	56	1	793.50	2.0	Y
R6	10	8	Plastic	56	1	803.50	2.0	Y
R7	11	8	Plastic	56	1	793.00	2.0	Y
R8	11	8	Plastic	56	1	797.00	2.0	Y

- NOTES:
- Elevations are approximate based on rough grade elevations. Field adjustments may be necessary to accommodate final grades.
  - Final tile riser layout will be reviewed and modified by Engineer and Contractor as necessary after final grading is completed.

TILE SCHEDULE							
PIPE I.D.	SHEET No.	DIAMETER (in)	PIPE MATERIAL	LENGTH (ft)	TYP. SLOPE (%)	OUTLET (Y/N)	DISCHARGE INTO
P1	10	10	Non-perforated Plastic	35	2.0	Y	Plunge Pool
P2	10	8	Non-perforated Plastic	100	10.0	N	Downstream Tile
P3	10	8	Non-perforated Plastic	135	10.0	N	Downstream Tile
P4	10	10	Non-perforated Plastic	45	6.0	Y	Plunge Pool
P5	10	8	Non-perforated Plastic	105	10.0	N	Downstream Tile
P6	10	8	Non-perforated Plastic	110	10.0	N	Downstream Tile
P7	11	8	Non-perforated Plastic	165	0.5	Y	Plunge Pool
P8	11	8	Non-perforated Plastic	60	3.5	Y	Plunge Pool

- NOTES:
- Lengths shown do not include outlet/end treatment where applicable. Outlet/end treatment is a separate bid item.
  - Final tile layout will be reviewed and modified by Engineer and Contractor as necessary after final grading is completed.

EXCAVATED TERRACE SCHEDULE										
TERRACE I.D.	SHEET No.	TERRACE TYPE	LENGTH (LF)	RIDGE WIDTH (ft)	CHANNEL WIDTH (ft)	MAX CHANNEL SLOPE (%)	LOW POINT		HIGH POINT	
							ELEVATION (ft)	HEIGHT, H1 (ft)	ELEVATION (ft)	HEIGHT, H2 (ft)
T1	10	Detention	240.0	3.0	3.0	0.9	793.0	4.0	795.0	2.0
T2	10	Detention	200.0	3.0	3.0	1.0	793.0	4.0	795.0	2.0
T3	10	Detention	200.0	3.0	3.0	1.0	803.0	4.0	805.0	2.0
T4	10	Detention	220.0	3.0	3.0	0.9	803.0	4.0	805.0	2.0
T5	10	Detention	120.0	3.0	3.0	1.7	816.0	4.0	818.0	2.0
T6	10	Detention	130.0	3.0	3.0	1.5	816.0	4.0	818.0	2.0
T7	10	Detention	190.0	3.0	3.0	1.1	786.0	4.0	788.0	2.0
T8	10	Detention	150.0	3.0	3.0	1.3	786.0	4.0	788.0	2.0
T9	10	Detention	150.0	3.0	3.0	1.0	793.5	3.0	795.0	2.0
T10	10	Detention	150.0	3.0	3.0	1.0	793.5	3.0	795.0	2.0
T11	10	Detention	150.0	3.0	3.0	1.0	803.5	3.0	805.0	2.0
T12	10	Detention	150.0	3.0	3.0	1.0	803.5	3.0	805.0	2.0
T13	11	Detention	250.0	3.0	3.0	1.0	793.0	4.0	795.0	2.0
T14	11	Detention	200.0	3.0	3.0	1.0	793.0	4.0	795.0	2.0
T15	11	Gradient	200.0	3.0	3.0	0.8	793.0	3.0	795.0	2.0
T16	10	Gradient	250.0	3.0	3.0	0.8	800.5	3.0	802.5	2.0
T17	10	Gradient	350.0	3.0	6.0	0.5	822.0	3.0	823.8	2.0
T18	10/11	Gradient	75.0	3.0	3.0	1.0	822.0	2.0	823.0	1.0
T19	11	Gradient	200.0	3.0	3.0	0.8	792.0	3.0	79.60	3.0
T20	11	Detention	230.0	3.0	6.0	0.9	797.00	4.0	799.0	2.0
T21	11	Detention	250.0	3.0	6.0	0.8	797.00	4.0	799.0	2.0
T22	11	Gradient	200.0	3.0	3.0	1.0	807.0	3.0	809.0	2.0

- NOTES:
- Terrace length is measured along the centerline of the ridge.
  - Terrace ridge for Detention Terrace is uniform (level) throughout the entire length.
  - Terrace ridge for Gradient Terraces varies with terrace channel such that height uniformly transitions from low point height to high point height.
  - H1 = Height from low point in the terrace channel at the intake to the top of the settled ridge.
  - H2 = Height from high point in the terrace channel at the ends to the top of the settled ridge.
  - Final terrace layout will be reviewed and modified by Engineer and Contractor as necessary after final grading is completed.

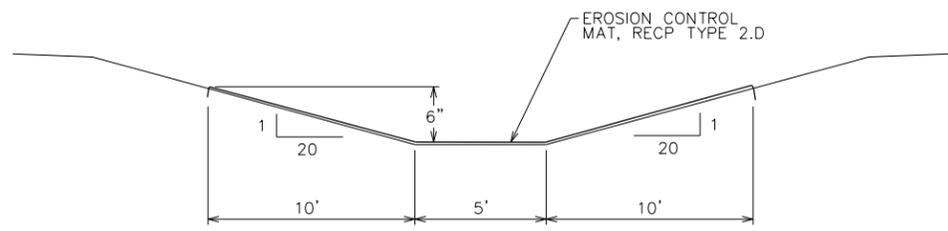
DESIGN BY: WCF  
 DRAWN BY: TLR  
 CHKD. BY: WCF  
 ISSUED: 00-00-00  
 REVISED:



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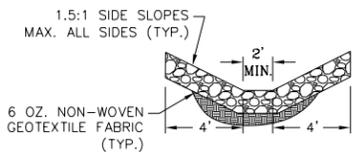
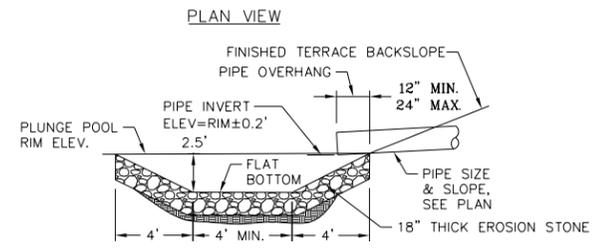
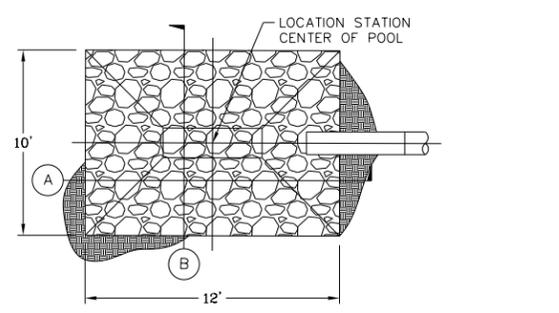
**MORGAN AML RECLAMATION PROJECT**  
**DETAILS**

S & A PROJECT No. 114-0228  
  
**SNYDER & ASSOCIATES**  
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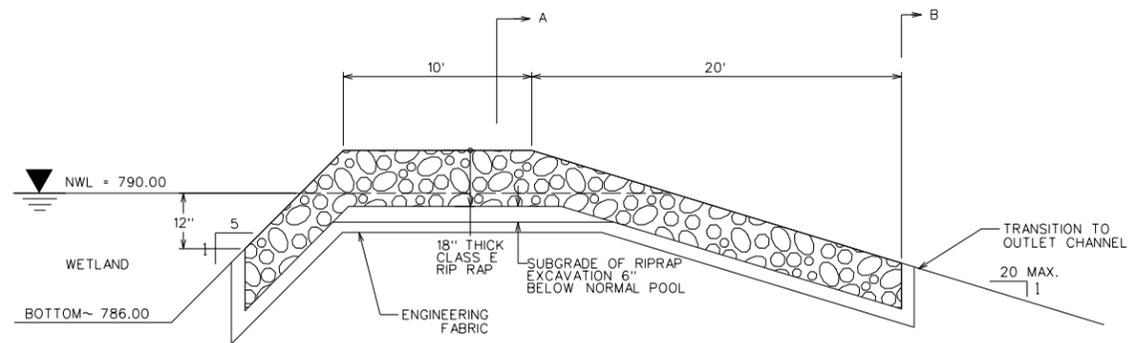


- NOTES:
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  2. PLACE EROSION CONTROL MAT AFTER SEEDING BUT PRIOR TO GRASS EMERGING.

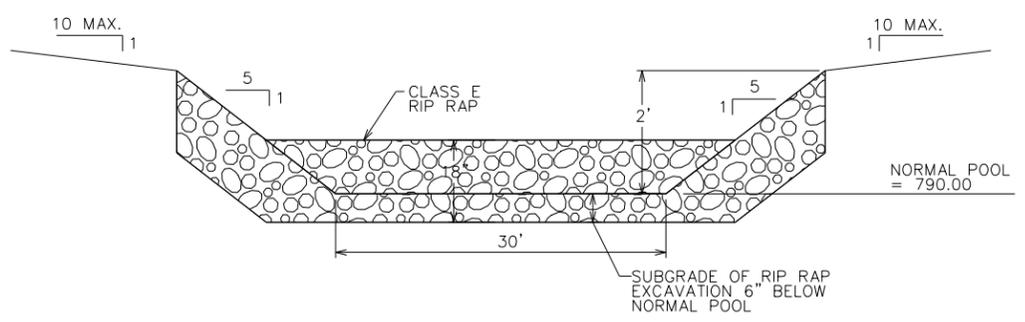
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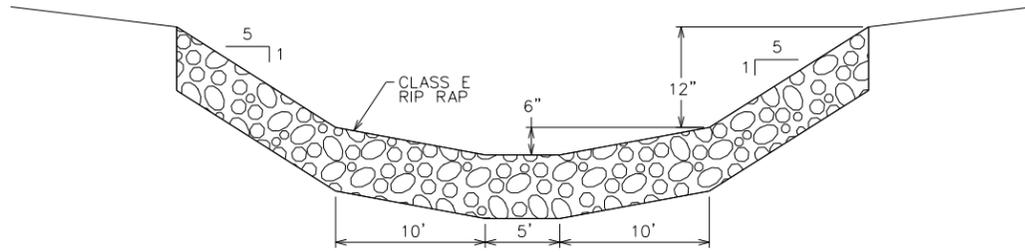
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13 PLUNGE POOL DETAIL  
NO SCALE



3  
13 WETLAND OUTLET PROFILE  
NO SCALE



4  
15 WETLAND OUTLET SECTION A  
NO SCALE



4  
13 WETLAND OUTLET SECTION B  
NO SCALE



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CHKD. BY: WCF

ISSUED: 00-00-00

REVISID:

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(515)281-4246



DESIGN BY: WCF

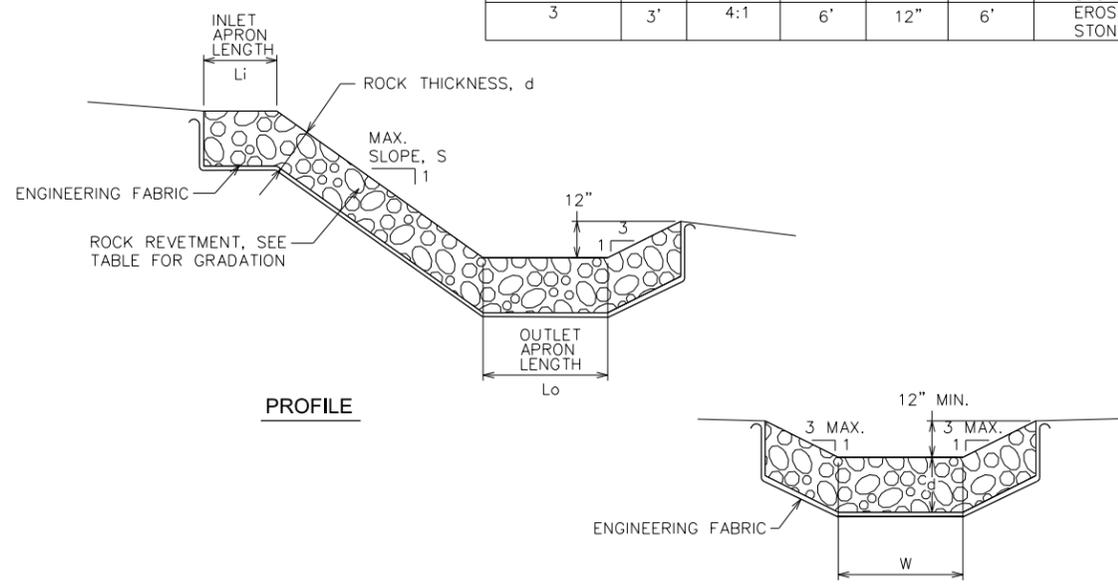
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**MORGAN**  
AML RECLAMATION PROJECT

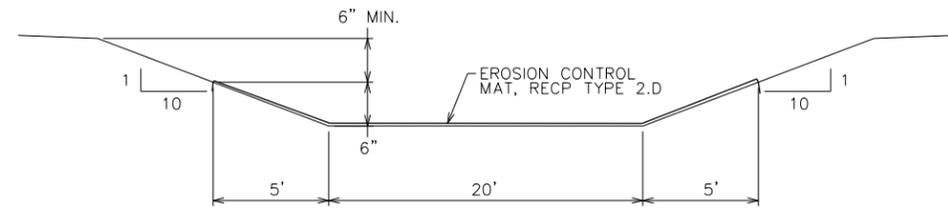
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LETDOWN	Li	S	Lo	d	W	ROCK GRADATION
1	6'	3:1	10'	18"	10'	CLASS E RIPRAP
2	3'	2.5:1	6'	12"	6'	EROSION STONE
3	3'	4:1	6'	12"	6'	EROSION STONE

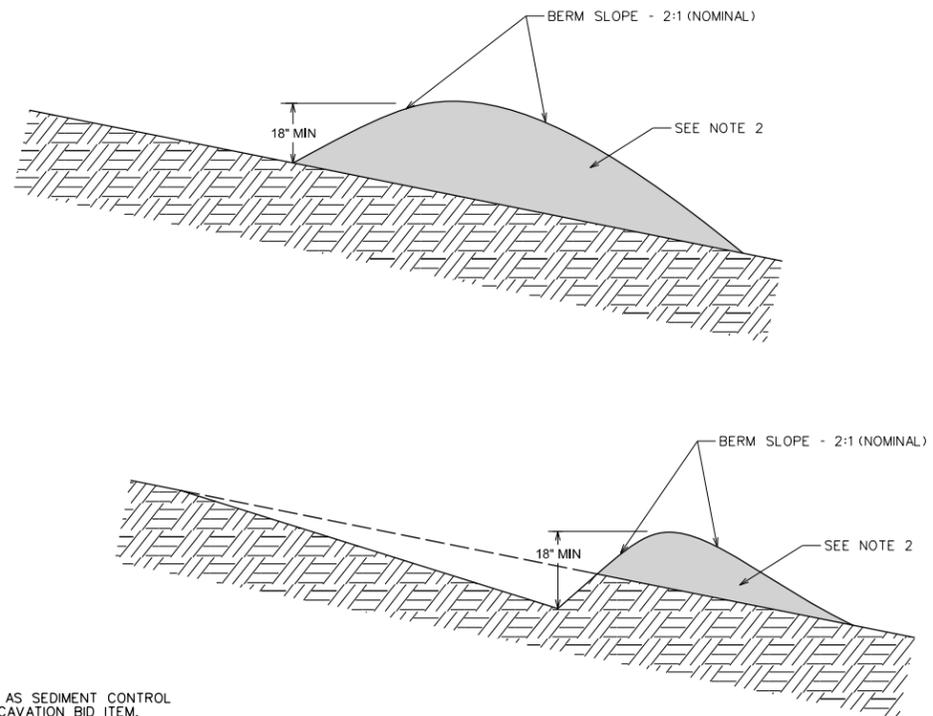


1 ROCK LETDOWN  
14 NO SCALE



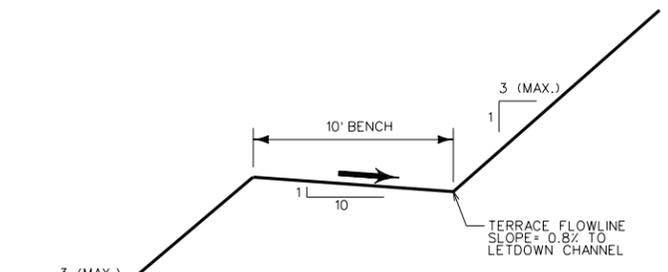
NOTES:  
1. PLACE EROSION CONTROL MAT AFTER SEEDING BUT PRIOR TO GRASS EMERGING.

2 WEST LETDOWN TYPICAL CHANNEL  
14 NO SCALE



NOTES:  
1. BERM CONSTRUCTION AS SEDIMENT CONTROL IS INCIDENTAL TO EXCAVATION BID ITEM.  
2. BERM MATERIAL TO BE COMPACTED EARTH, COMPOST, OR WOOD CHIP MULCH.

3 DIVERSION BERM  
14 NO SCALE



NOTES:  
1. BENCH TERRACE TO BE CONSTRUCTED AS PART OF GENERAL GRADING. INCIDENTAL TO EXCAVATION.  
2. UNIFORMLY TRANSITION UPSTREAM ENDS TO MATCH ADJACENT SLOPE.

4 BENCH TERRACE  
14 NO SCALE

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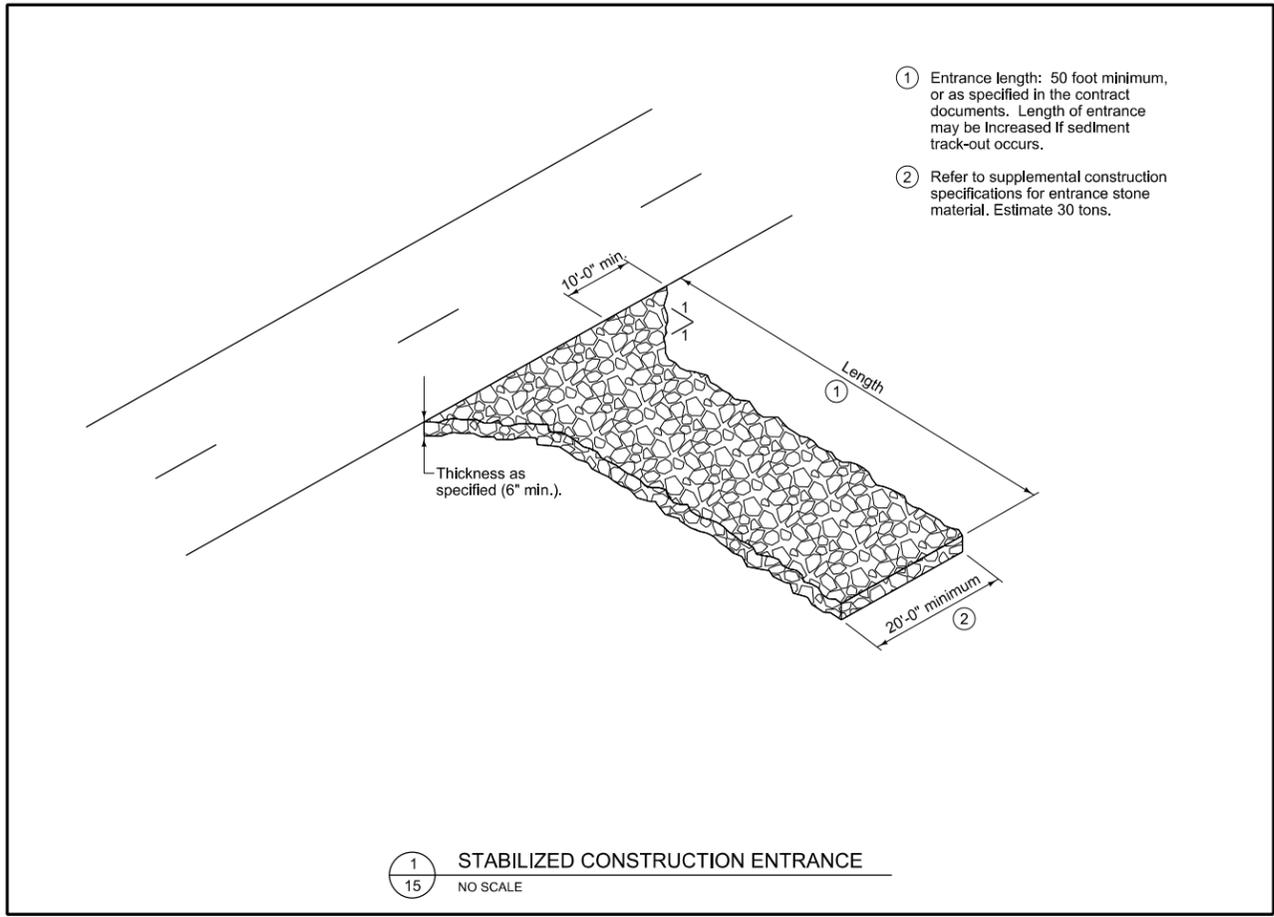
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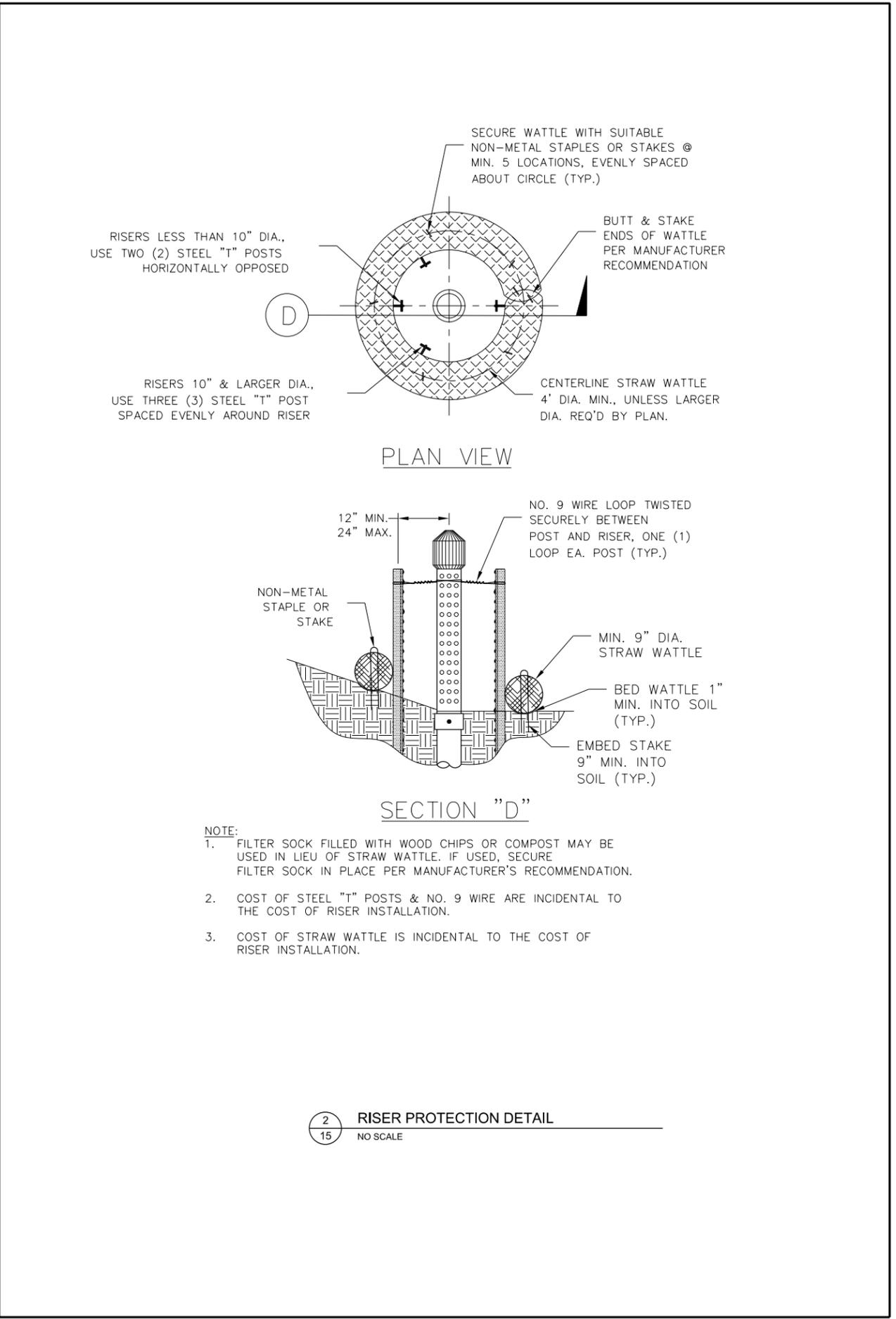


MORGAN  
 AML RECLAMATION PROJECT

DETAILS



1  
15  
**STABILIZED CONSTRUCTION ENTRANCE**  
NO SCALE



**PLAN VIEW**

**SECTION "D"**

- NOTE:**
1. FILTER SOCK FILLED WITH WOOD CHIPS OR COMPOST MAY BE USED IN LIEU OF STRAW WATTLE. IF USED, SECURE FILTER SOCK IN PLACE PER MANUFACTURER'S RECOMMENDATION.
  2. COST OF STEEL "T" POSTS & NO. 9 WIRE ARE INCIDENTAL TO THE COST OF RISER INSTALLATION.
  3. COST OF STRAW WATTLE IS INCIDENTAL TO THE COST OF RISER INSTALLATION.

2  
15  
**RISER PROTECTION DETAIL**  
NO SCALE



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CHKD. BY: WCF  
ISSUED: 00-00-00  
REVISED:

DESIGN BY: WCF  
DRAWN BY: TLR

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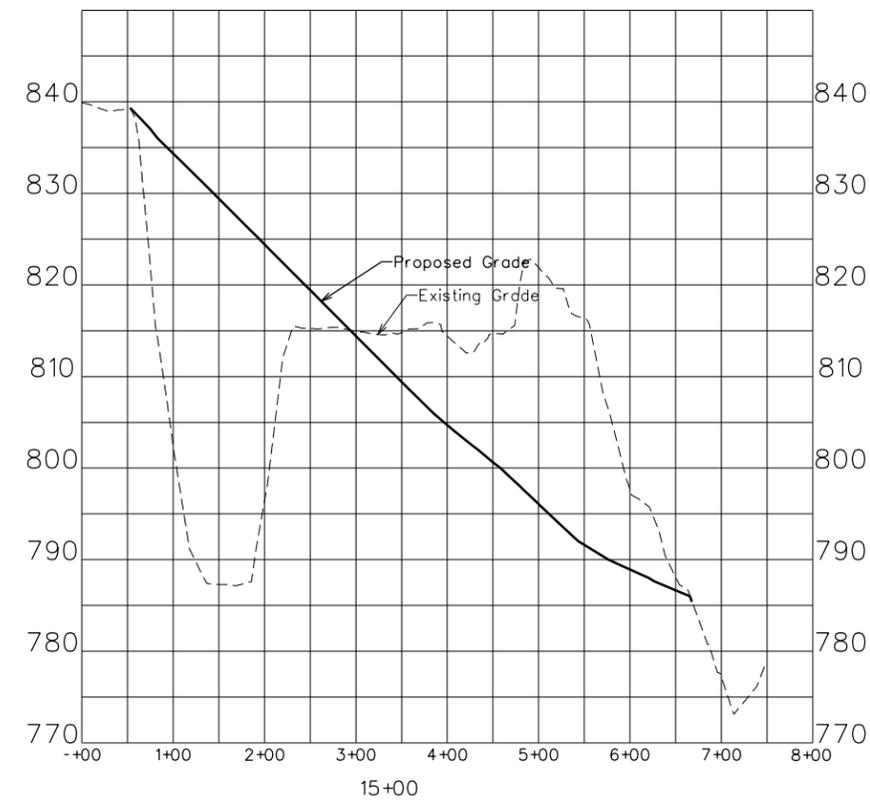
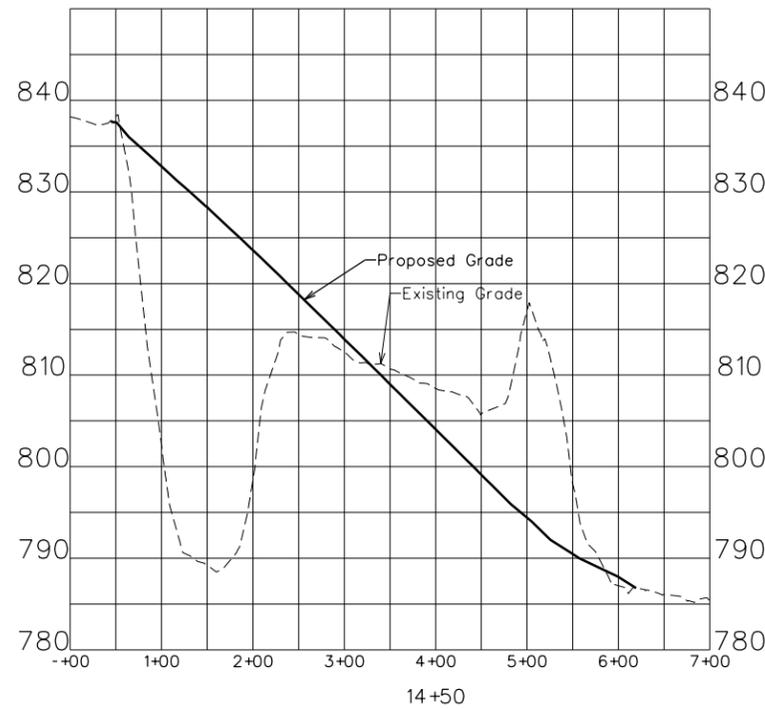
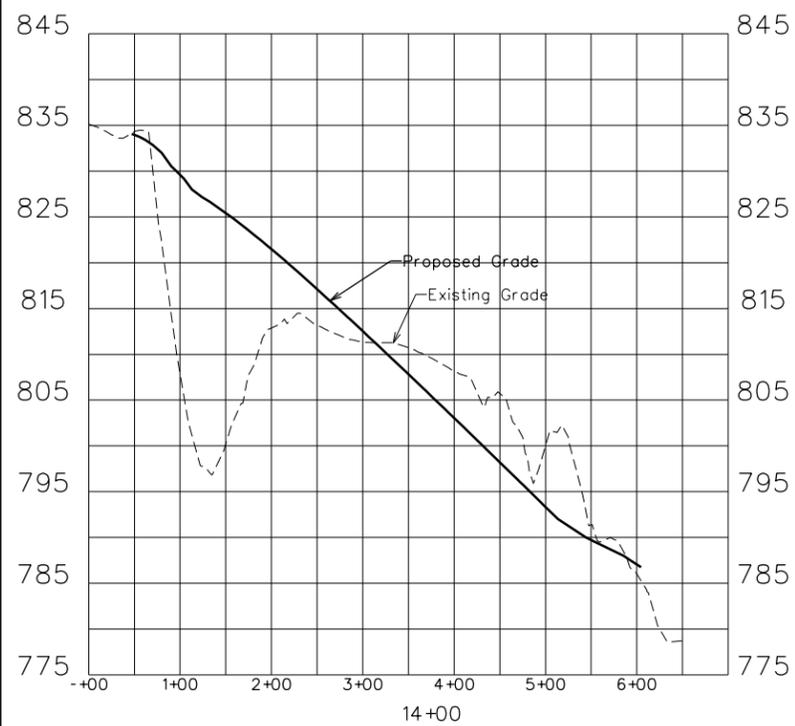
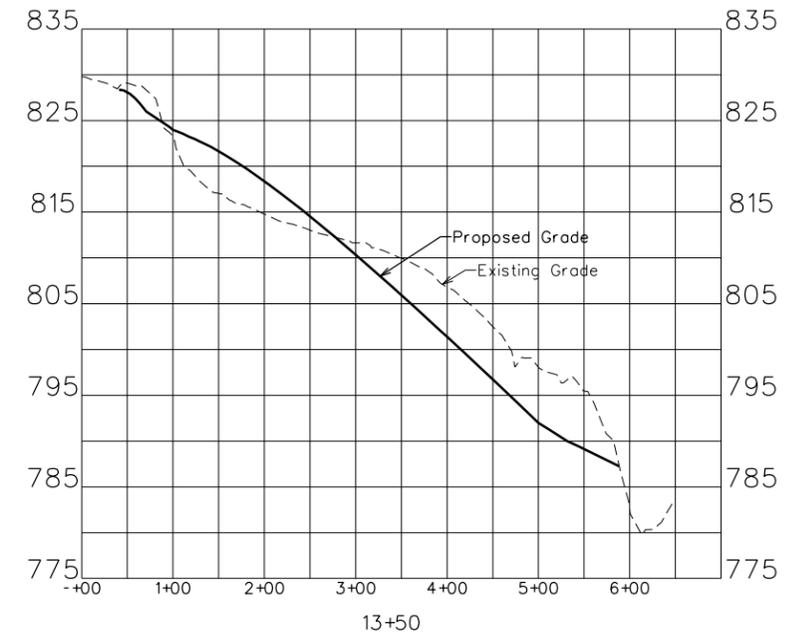
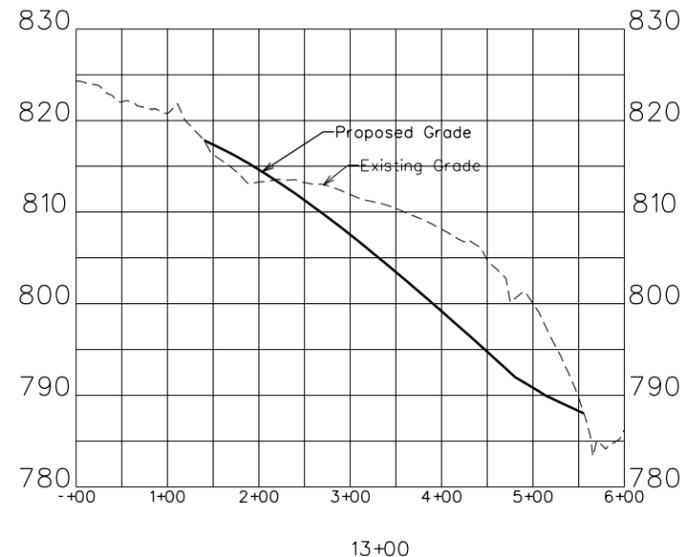
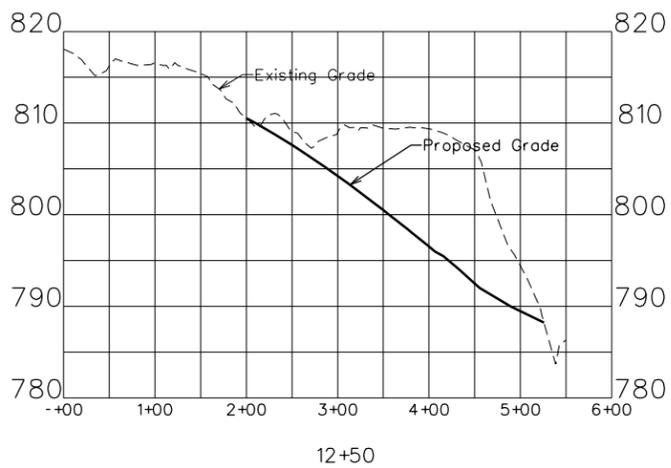
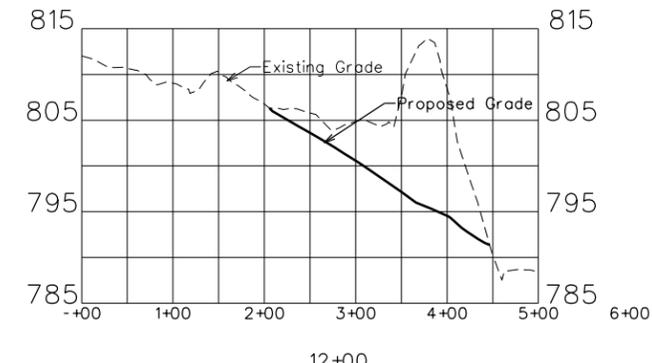
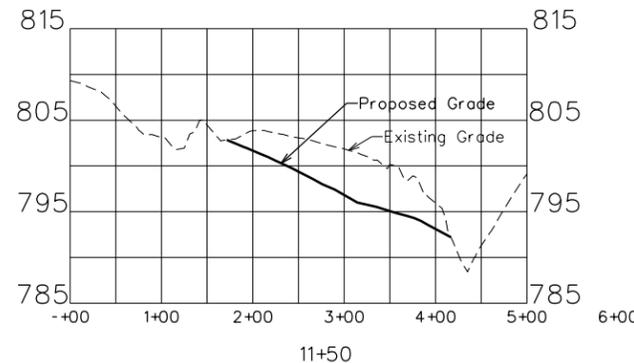
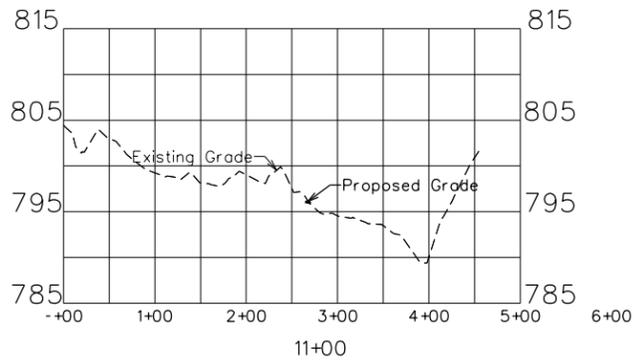


**MORGAN**  
**AML RECLAMATION PROJECT**

**DETAILS**



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**CROSS SECTION**

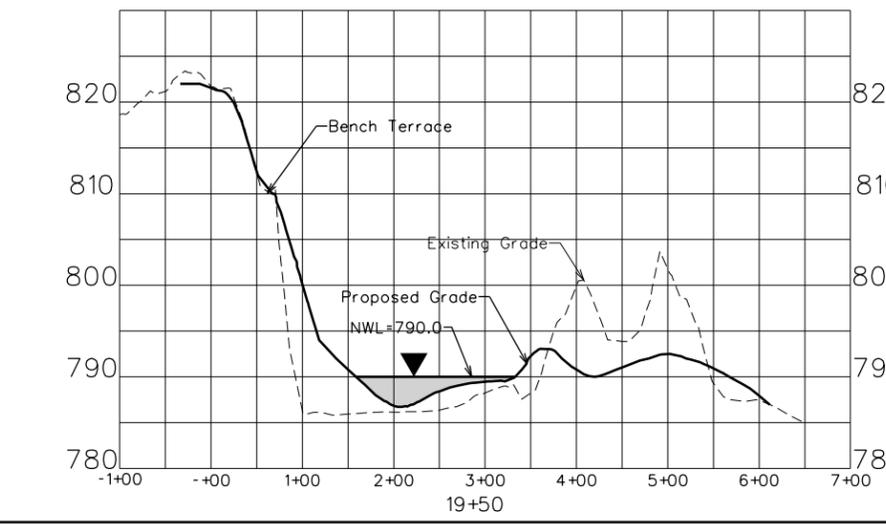
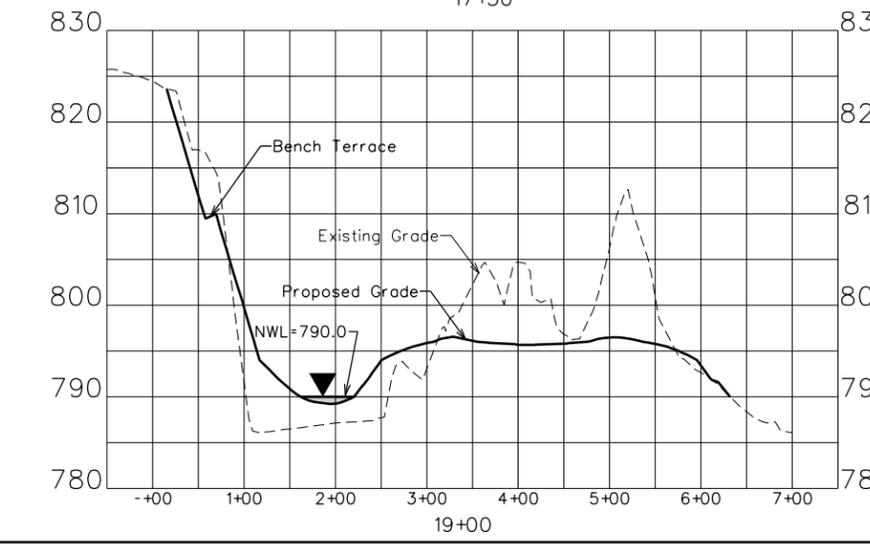
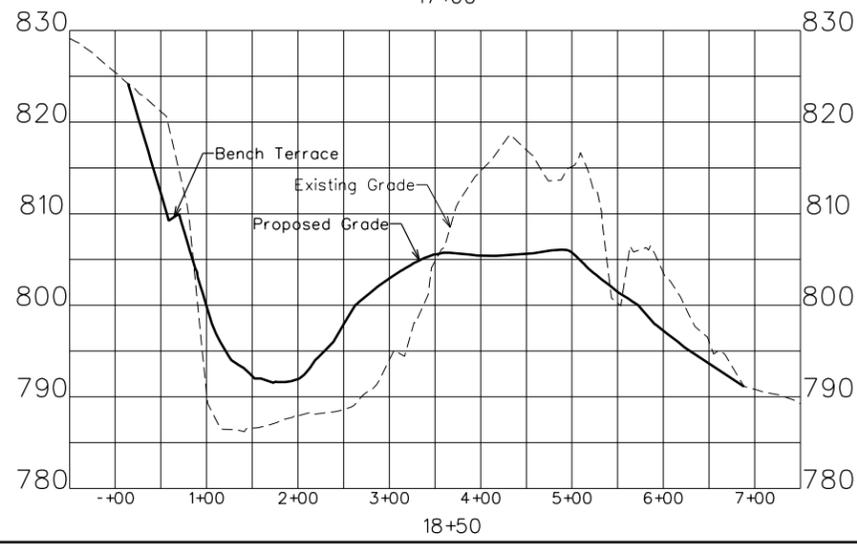
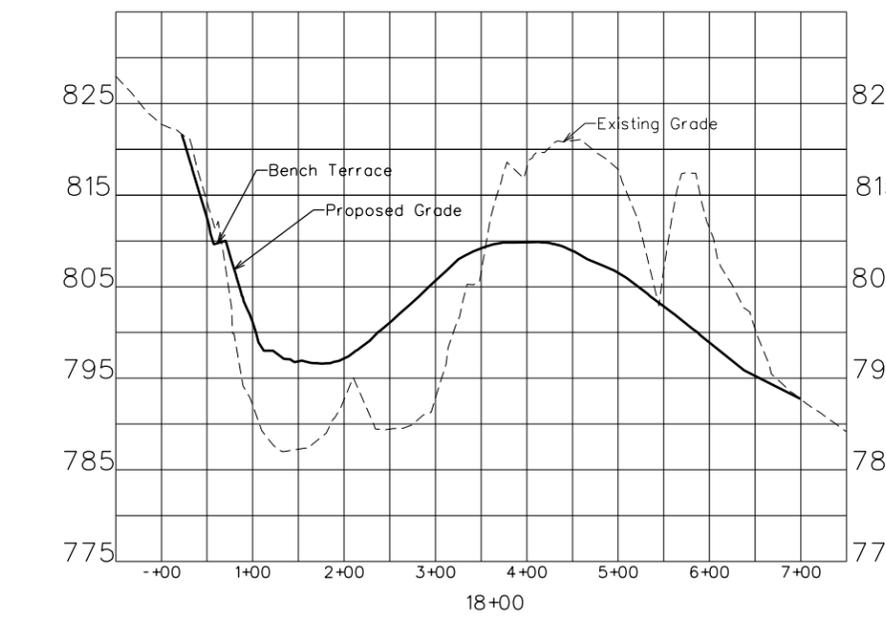
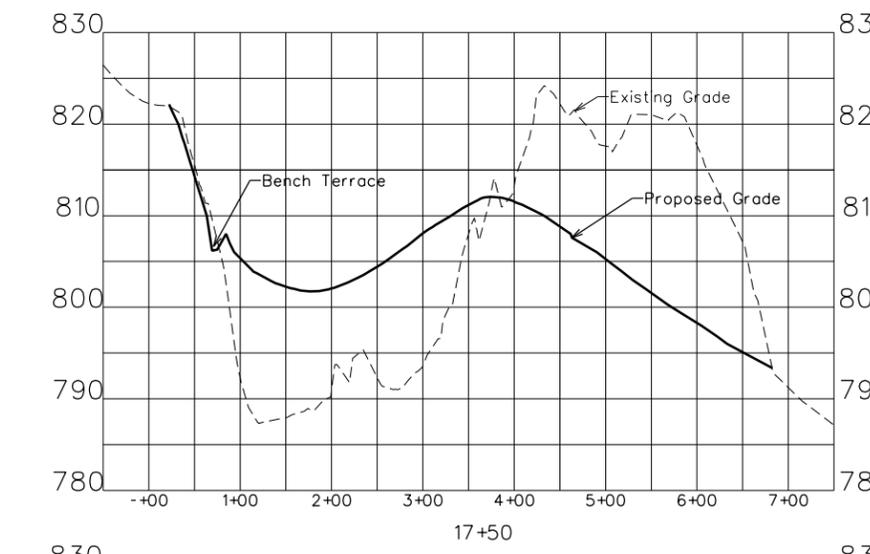
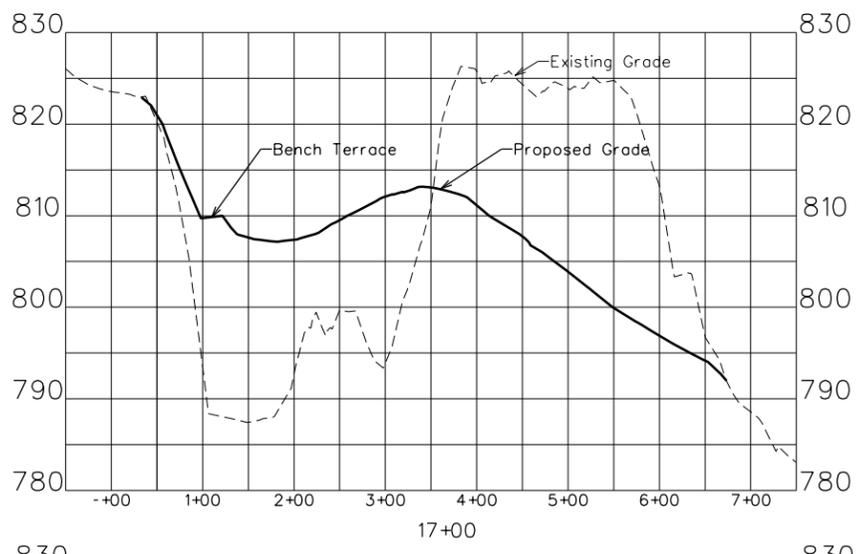
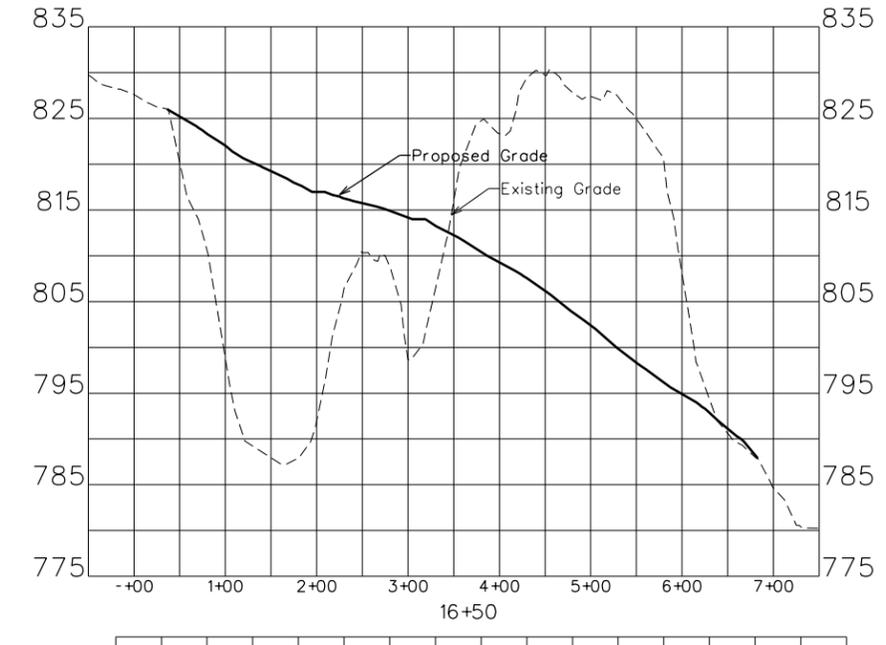
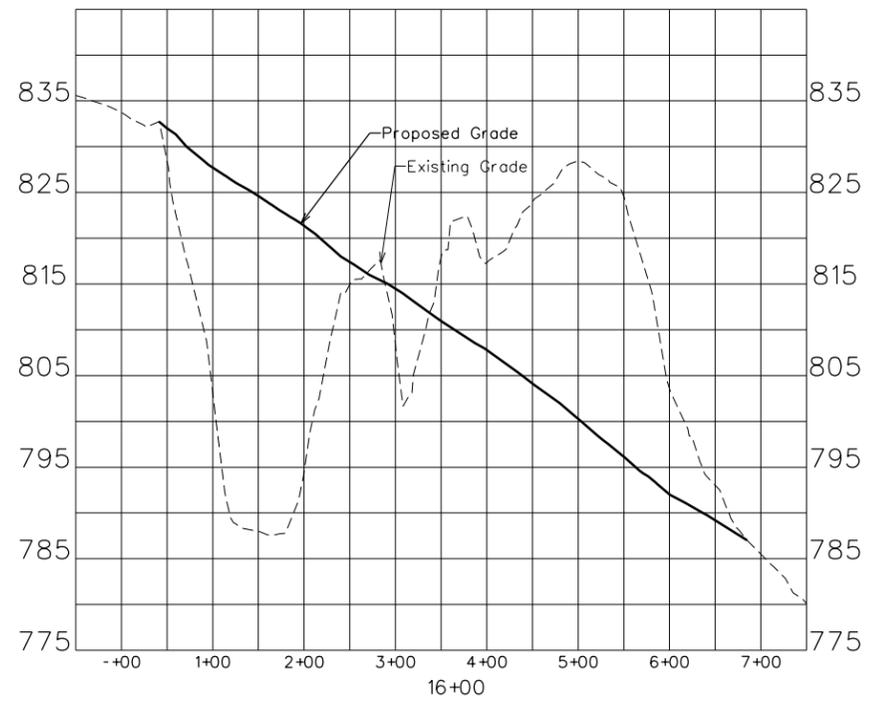
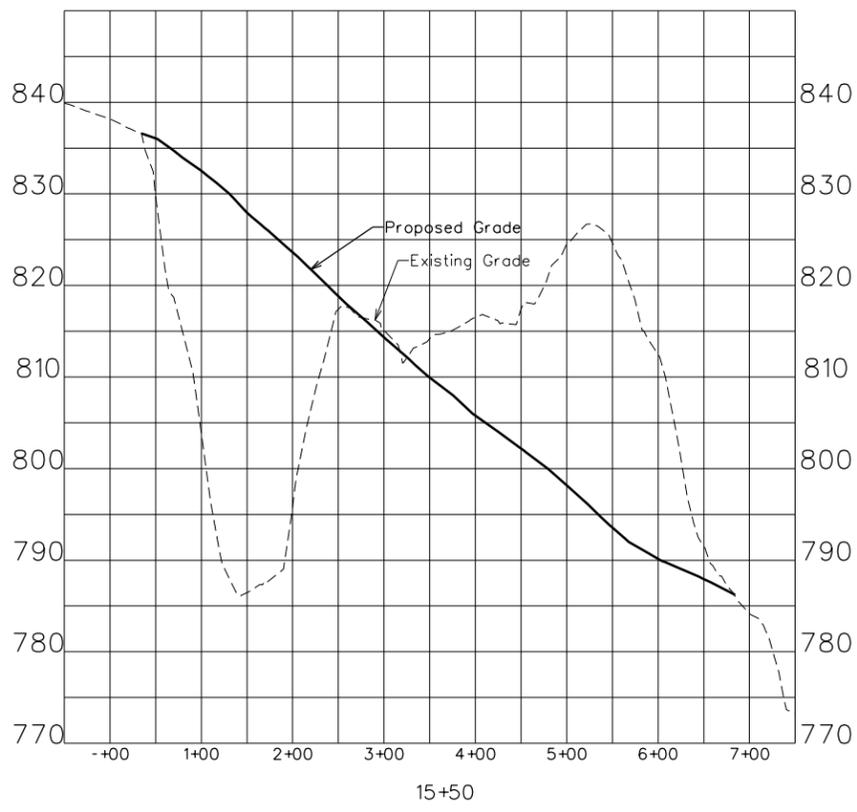
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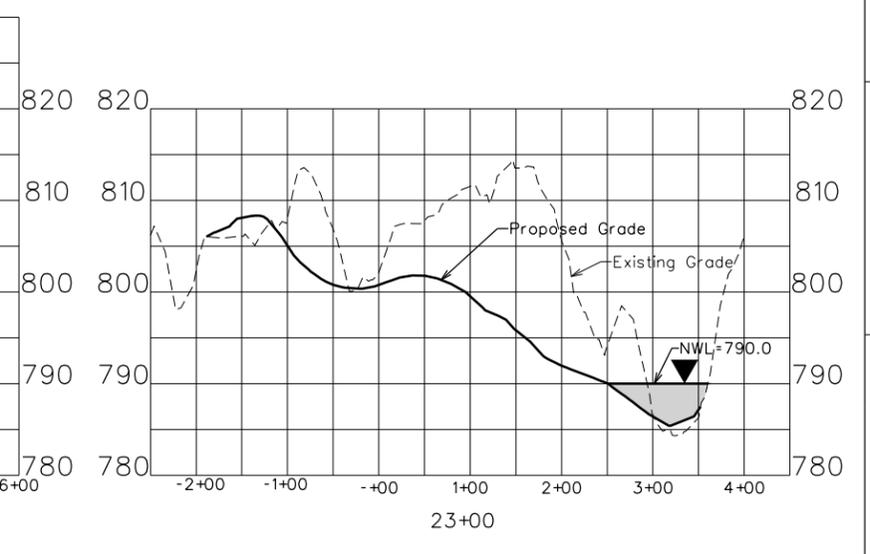
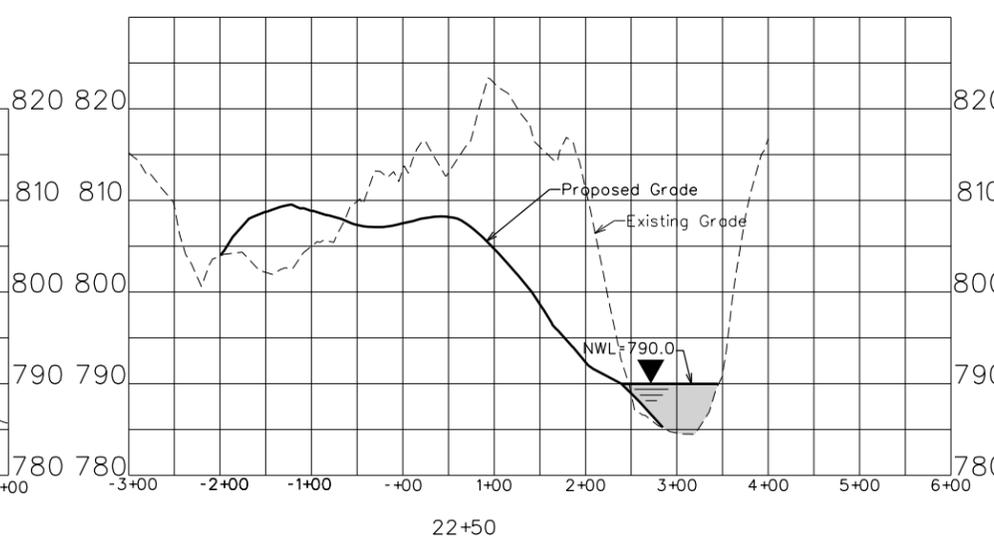
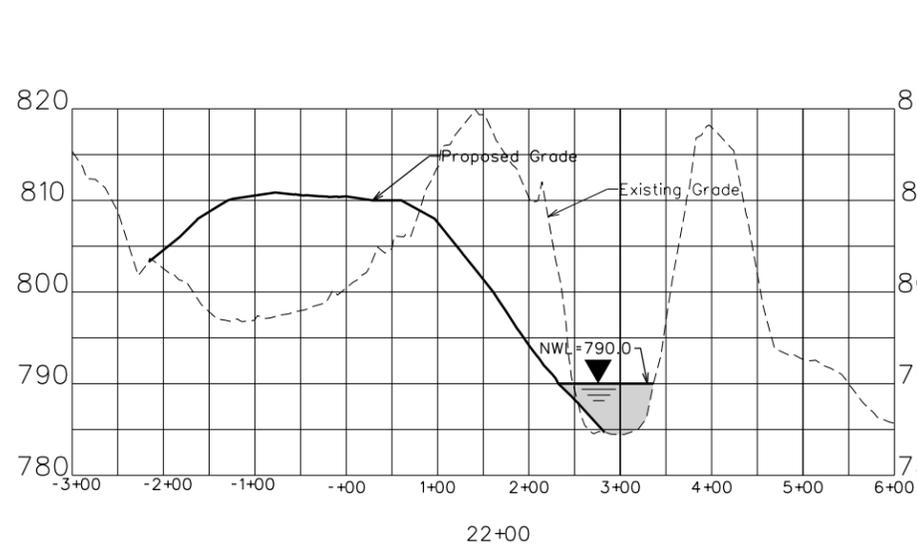
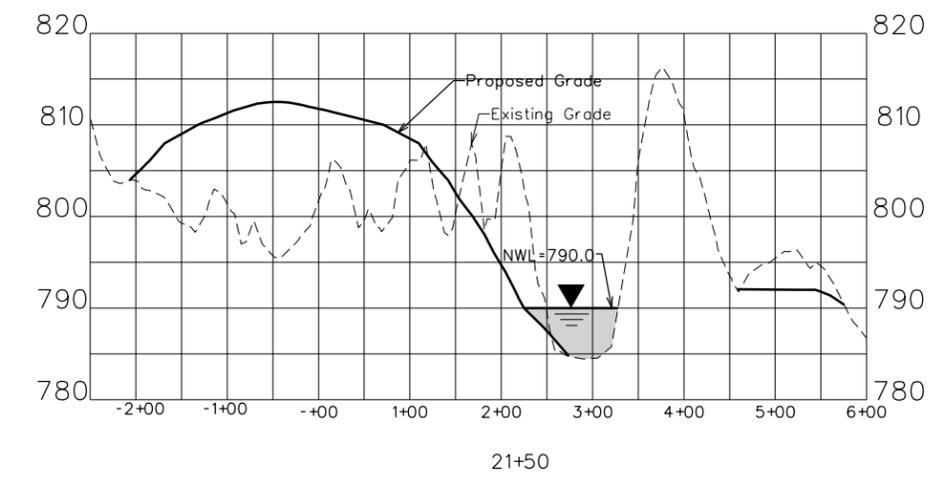
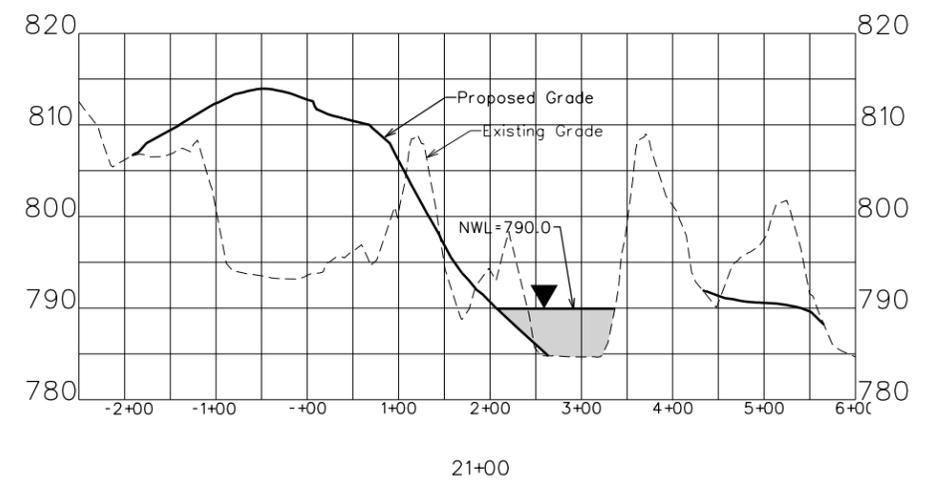
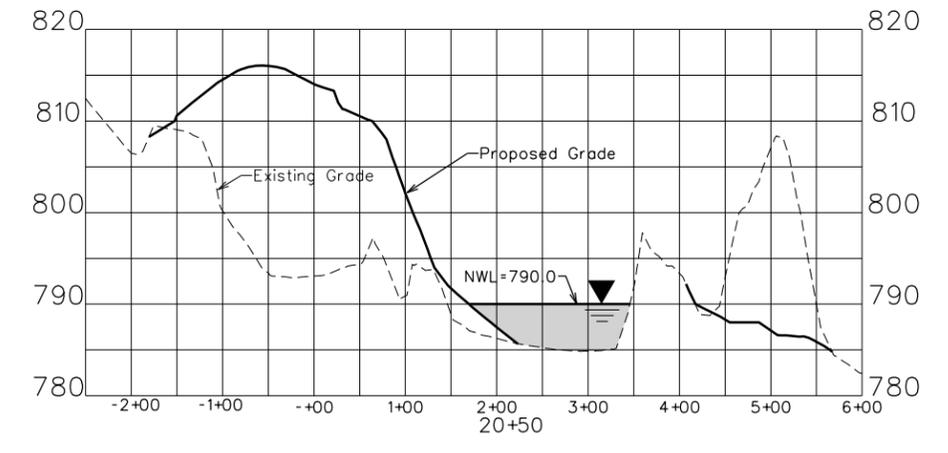
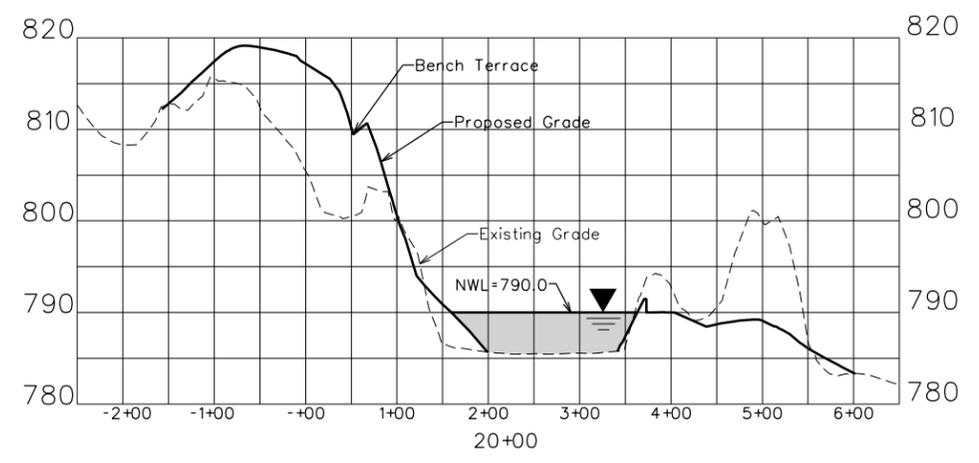


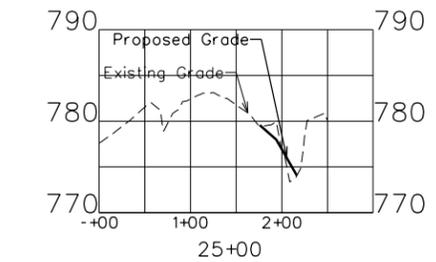
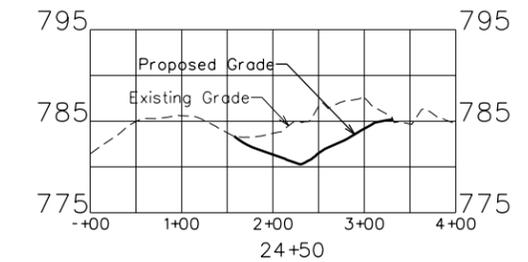
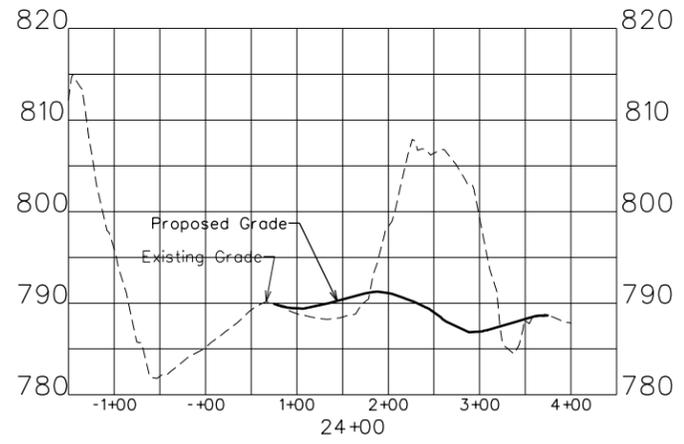
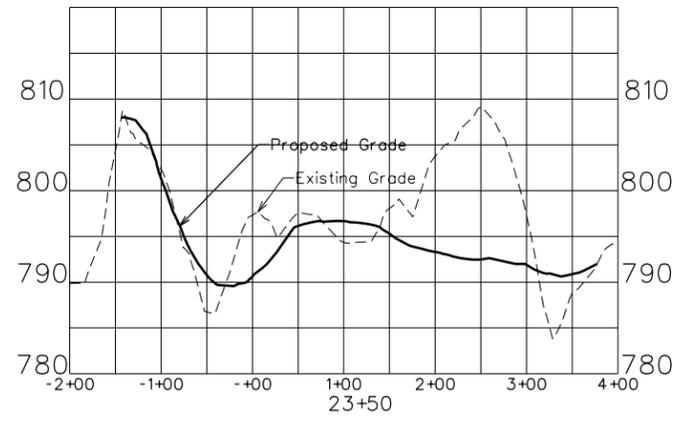
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DESIGN BY: WCF	DRAWN BY: TLR	CHKD. BY: WCF	ISSUED: 00-00-00	REVISED:	S & A PROJECT No. 114.0228
<b>MORGAN AML RECLAMATION PROJECT</b>					
<b>CROSS SECTION</b>			DIVISION OF SOIL CONSERVATION AND WATER QUALITY IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP HENRY A. WALLACE BUILDING 502 E. 9th STREET, DES MOINES, IOWA 50319 (515)281-4246		
SHEET <b>20</b> OF <b>22</b>			 <b>SNYDER &amp; ASSOCIATES</b> Engineers and Planners SNYDER & ASSOCIATES, INC. 2727 S.W. SNYDER BLVD. ANKENY, IOWA 50023 515-964-2020 www.snyder-associates.com		

**STORM WATER POLLUTION PREVENTION PLAN (SWPPP)**

**SITE INFORMATION:**

1. SITE IS LOCATED IN THE SE 1/4, SECTION 9 OF TOWNSHIP 75 NORTH RANGE 18 WEST, MARION COUNTY, IOWA.
2. THIS SWPPP COVERS THE RECLAMATION OF APPROXIMATELY 18 ACRES OF STRIP MINED LAND.
3. THE PREDOMINANT SOIL TYPES ARE: STRIP MINE SPOILS, 25 TO 80% SLOPES (5020 G).
4. RUNOFF FROM THE CONSTRUCTION AREA WILL FLOW INTO UNNAMED TRIBUTARY TO ENGLISH CREEK, A TRIBUTARY TO THE DES MOINES RIVER.
5. THE AVERAGE NRCS RUNOFF CURVE NUMBER FOR THIS LAND AFTER PERMANENT VEGETATION IS ESTABLISHED IS ESTIMATED TO BE 74.

**GENERAL:**

1. THIS PROJECT WILL BE COVERED BY NPDES GENERAL PERMIT NO. 2 WHICH REGULATES RUNOFF FROM CONSTRUCTION SITES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM THE REQUIRED MONITORING, INSPECTION, AND MAINTENANCE OF ALL BEST MANAGEMENT PRACTICES (BMPs) AS REQUIRED BY THE PERMIT.
2. THE PRIME CONTRACTOR AND ALL ITS SUBCONTRACTORS SHALL CONDUCT THEIR OPERATIONS IN A MANNER WHICH MINIMIZES EROSION AND PREVENTS SEDIMENTS FROM LEAVING THE CONSTRUCTION SITE. THE PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION AND COMPLIANCE OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE ENTIRE CONTRACT. THIS RESPONSIBILITY SHALL BE FURTHER SHARED WITH ALL ITS SUBCONTRACTORS.
3. THE WORK SHALL BE DONE IN ACCORDANCE WITH THIS PLAN, THE CONTRACT DRAWINGS, AND SECTION 02120 OF THE CONSTRUCTION SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN THESE REQUIREMENTS AND WATER POLLUTION CONTROL LAWS, RULES OR REGULATIONS OF OTHER FEDERAL, STATE OR LOCAL AGENCIES, THE MORE RESTRICTIVE LAWS, RULES OR REGULATIONS SHALL APPLY.
4. A COPY OF THE SWPPP SHALL BE KEPT IN A CONTRACTOR-SUPPLIED, WEATHER-PROTECTED ENCLOSURE SUCH AS A MAILBOX, SO THAT THE PLAN IS ACCESSIBLE AT THE SITE AT ALL TIMES. A SIGN OR NOTICE POSTED BY THE CONTRACTOR SHALL INDICATE THE PLAN'S LOCATION AND CONTRACTOR'S CONTACT INFORMATION.
5. THE CONTRACTOR SHALL NOTIFY THE IOWA DNR, THE DIVISION, AND THE LOCAL POLICE DEPARTMENT OF ANY HAZARDOUS CONDITIONS AS SOON AS POSSIBLE BUT NOT MORE THAN (6) HOURS AFTER ONSET OF HAZARDOUS CONDITIONS. HAZARDOUS CONDITIONS ARE DEFINED AS ANY SITUATION INVOLVING THE ACTUAL, IMMINENT, OR PROBABLE SPILLAGE, LEAKAGE, OR RELEASE OF A HAZARDOUS SUBSTANCE ONTO THE LAND, INTO WATERS OF THE STATE, OR INTO THE ATMOSPHERE, WHICH CREATES AN IMMEDIATE OR POTENTIAL DANGER TO THE PUBLIC HEALTH OR SAFETY OR THE ENVIRONMENT.
6. CONTRACTOR SHALL FOLLOW THE IOWA CONSTRUCTION SITE EROSION CONTROL MANUAL.

**EROSION CONTROLS:**

1. GRANULAR SURFACING SHALL BE INSTALLED AND MAINTAINED AT THE ENTRANCE INTO THE SITE AND OFFICE PARKING AREA TO CONTROL MUD FROM BEING TRACKED OFF SITE. ON AND OFF SITE TRACKING OF MUD SHALL BE REMOVED AS NECESSARY. IN ADDITION, WATER SHALL BE APPLIED TO HAUL ROADS AND OTHER DISTURBED EARTHEN SURFACES AS NECESSARY TO CONTROL DUST THROUGHOUT CONTRACT PERIOD.
2. WATER PUMPED DURING CONSTRUCTION OPERATIONS SHALL BE HANDLED IN A PROPER MANNER. EROSION AND SCOUR SHALL BE PREVENTED AT POINTS WHERE THE PUMP(S) DISCHARGE. LEVEL SPREADERS, RIP-RAP, AND/OR OTHER ENERGY ABSORBING DEVICES OR APPROPRIATE BMPs SHALL BE USED.
3. EXISTING VEGETATION IN AREAS NOT NEEDED FOR CONSTRUCTION SHALL BE PRESERVED.
4. WHERE PRACTICABLE, SILT FENCE OR DIVERSION BERMS SHALL BE INSTALLED AT THE DOWNSTREAM PERIMETER OF THE CONSTRUCTION AREA PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITY.
5. RISERS, INLETS, INTAKES, AND OTHER SUCH WATER-CONVEYING STRUCTURES SHALL BE PROTECTED WITH SILT FENCES AT THE TIME OF THEIR INITIAL INSTALLATION.
6. IN AREAS WHERE PRESENCE OF SILT FENCE WILL INTERFERE WITH CONSTRUCTION ACTIVITIES, DIVERSION DITCHES AND TEMPORARY SEDIMENT TRAPS SHALL BE UTILIZED UNTIL THE SILT FENCE OR OTHER PRACTICES CAN BE INSTALLED.
7. LOCATIONS AND QUANTITIES OF SILT FENCE OR OTHER BMPs SHOWN ON THE PLAN ARE APPROXIMATE. ACTUAL LOCATIONS OR QUANTITIES ARE TO BE DETERMINED IN THE FIELD WITH THE APPROVAL OF THE DIVISION OR THE ENGINEER.
8. INSTALL LONG RUNS OF SILT FENCE (GREATER THAN 200' WITH SEPARATE RUNS OFFSET BY 30' (MIN.) TO ALLOW THROUGH ACCESS.

**EROSION CONTROLS (CONTINUED):**

9. AS THE WORK PROGRESSES, ADDITIONAL EROSION CONTROL MEASURES DEEMED NECESSARY, AS DETERMINED BY THE DIVISION OR ENGINEER AFTER INVESTIGATION, SHALL BE FURNISHED, INSTALLED AND MAINTAINED BY THE CONTRACTOR.
10. IF CONSTRUCTION ACTIVITY IS NOT PLANNED TO OCCUR IN A DISTURBED AREA FOR AT LEAST TWENTY-ONE (21) DAYS, THE AREA SHALL BE STABILIZED AS SOON AS PRACTICABLE AND WITHIN FOURTEEN (14) DAYS FOLLOWING THE LAST DISTURBANCE (UNLESS THE GROUND IS FROZEN OR SNOW-COVERED) BY SURFACE ROUGHENING, MULCHING, TEMPORARY SEEDING, OR OTHER APPROVED METHOD.
11. NO MORE THAN FIVE (5) TOTAL ACRES OF EXPOSED ERODIBLE AREA IS ALLOWED AT ANY ONE TIME WITHOUT PERMISSION OF THE DIVISION OR ENGINEER.
12. WHEN AREAS REACH FINAL GRADE, THEY SHALL BE TEMPORARILY STABILIZED. INTERIM SEEDING SHALL BE INITIATED AS SOON THEREAFTER WITHIN THE SEEDING SEASONS OUTLINED IN THE SPECIFICATIONS. EROSION CONTROL MEASURES BY THE CONTRACTOR SHALL CONTINUE UNTIL PERMANENT GROUND COVER IS ESTABLISHED AND ACCEPTED BY THE DIVISION.
13. ALL AREAS DISTURBED BEYOND CONSTRUCTION LIMITS SHOWN ON THIS PLAN MUST BE SEEDED AND STABILIZED. THE SEED MIXTURE USED SHOULD INCLUDE SPECIES SIMILAR TO AND COMPATIBLE WITH THE SURROUNDING VEGETATION.

**OTHER POLLUTION CONTROLS:**

1. THE CONTRACTOR SHALL MAINTAIN THE CONSTRUCTION SITE FREE OF ALL WASTES INCLUDING LITTER, USED PARTS, USED OIL AND CONTAINERS, TIRES, AND ANY OTHER WASTE GENERATED BY CONSTRUCTION ACTIVITIES. SANITARY WASTE GENERATED ON SITE SHALL BE TREATED AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REQUIREMENTS. CONTRACTOR DISPOSAL OF UNUSED CONSTRUCTION MATERIALS AND WASTES SHALL ALSO COMPLY WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
2. CONCRETE WASHOUT RESIDUE SHOULD BE CONTAINED AND HAULED OFF SITE ONCE IT HARDENS. AREAS WHERE CONCRETE WASHOUT OCCURS SHALL BE FILLED AND STABILIZED.
3. THE SITE IS AN ABANDONED COAL MINE RECLAMATION PROJECT; NO TOPSOIL EXISTS PRIOR TO RECLAMATION-RELATED CONSTRUCTION ACTIVITIES. THEREFORE, THE TOPSOIL PRESERVATION REQUIREMENT WILL NOT BE MET. THE SITE CONSISTS OF MINE SPOIL MATERIAL CLASSIFIED AS MINE PITS AND DUMPS - SOIL TYPE 502 ON USDA SOIL SURVEY MAPS. AFTER FINAL GRADE IS ACHIEVED, AGRICULTURAL LIME WILL BE APPLIED AT A RATE TO BE DETERMINED BY SOIL TESTS. THE AGRICULTURAL LIME, ALONG WITH 5 TONS OF MULCH WILL BE INCORPORATED INTO THE UPPER ONE (1) FOOT OF THE MINE SPOIL TO PRODUCE A GROWING MEDIUM AS OUTLINED IN PROJECT SPECIFICATION 02400. AFTER A PERIOD OF TIME TO ALLOW FOR NEUTRALIZATION AND MULCH DECOMPOSITION, THE SITE WILL BE PREPARED FOR SEEDING. AGRICULTURAL LIME, FERTILIZER, SEED AND CRIMPED MULCH WILL BE APPLIED AS OUTLINED IN PROJECT SPECIFICATION 02700.

**INSPECTIONS:**

1. SITE INSPECTION SHALL BE PERFORMED BY QUALIFIED PERSONNEL OF THE CONTRACTOR. INSPECTIONS SHALL BE PERFORMED ONCE EVERY SEVEN (7) DAYS.
2. INSPECTIONS SHALL INCLUDE: ALL SILT FENCES, HAY BALE DIKES, DITCHES, SEDIMENT TRAPS, AND ALL OTHER EROSION CONTROL DEVICES; AREAS DISTURBED BY CONSTRUCTION ACTIVITY OR USED FOR STORAGE OF MATERIALS WHICH ARE EXPOSED TO PRECIPITATION; POLLUTION CONTROL MEASURES TO ENSURE PROPER OPERATION; DRAINAGE LOCATIONS TO DETERMINE EFFECTIVENESS IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS; AND LOCATION WHERE VEHICLES AND EQUIPMENT ENTER AND EXIT THE SITE FOR EVIDENCE OF OFF-SITE TRACKING.
3. SITE INSPECTION REPORTS SHALL BE PROPERLY SIGNED BY THE PERSON CONDUCTING THE INSPECTION. THE REPORT SHALL INCLUDE: DATE, NAME AND TITLE / POSITION OF THE INSPECTOR; WEATHER INFORMATION; LOCATION OF SEDIMENT / POLLUTANT DISCHARGE; CONTROL MEASURES A) REQUIRING MAINTENANCE, B) THAT HAVE FAILED, AND C) THAT ARE NEEDED; AND CORRECTIVE ACTIONS REQUIRED INCLUDING CHANGES / UPDATES TO THE SWPPP.
4. THE FINDINGS OF EACH INSPECTION SHALL BE RECORDED AND KEPT AT THE SITE IN A PROJECT FILE. THE CONTRACTOR SHALL IMMEDIATELY BEGIN CORRECTIVE ACTION ON ALL DEFICIENCIES FOUND. ALL CORRECTIVE ACTIONS SHALL BE COMPLETED WITHIN THREE (3) WORKING DAYS OF THE INSPECTION.
5. THE SWPPP MAY BE REVISED BASED ON FINDINGS OF THE INSPECTIONS. SUCH REVISIONS SHALL BE MADE WITHIN SEVEN (7) DAYS OF THE INSPECTION. THE CONTRACTOR SHALL IMPLEMENT ALL REVISIONS.
6. COPIES OF INSPECTION REPORTS WILL BE RETAINED WITH THE SWPPP FOR THREE (3) YEARS FROM THE DATE THE PERMIT COVERAGE TERMINATES.

**MAINTENANCE:**

1. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES IN PROPER WORKING ORDER FOR THE DURATION OF THE CONTRACT. IF A MEASURE IS NO LONGER NEEDED AS DETERMINED BY THE DIVISION OR ENGINEER, IT SHALL BE REMOVED. MAINTENANCE INCLUDES CLEANING, REPAIRING, OR REPLACING AS REQUIRED. IN GENERAL, MAINTENANCE SHALL BE PERFORMED PRIOR TO THE NEXT ANTICIPATED STORM EVENT.
2. REMOVE SEDIMENT FROM SEDIMENT TRAPS, DITCHES AND SILT FENCES WHEN THEIR INSTALLED CAPACITY IS REDUCED BY FIFTY (50) PERCENT OR MORE.
3. SEDIMENT WHICH ESCAPES THE SITE SHALL BE CLEANED UP BY THE CONTRACTOR AND RETURNED TO THE SITE FOR PROPER DISPOSAL.

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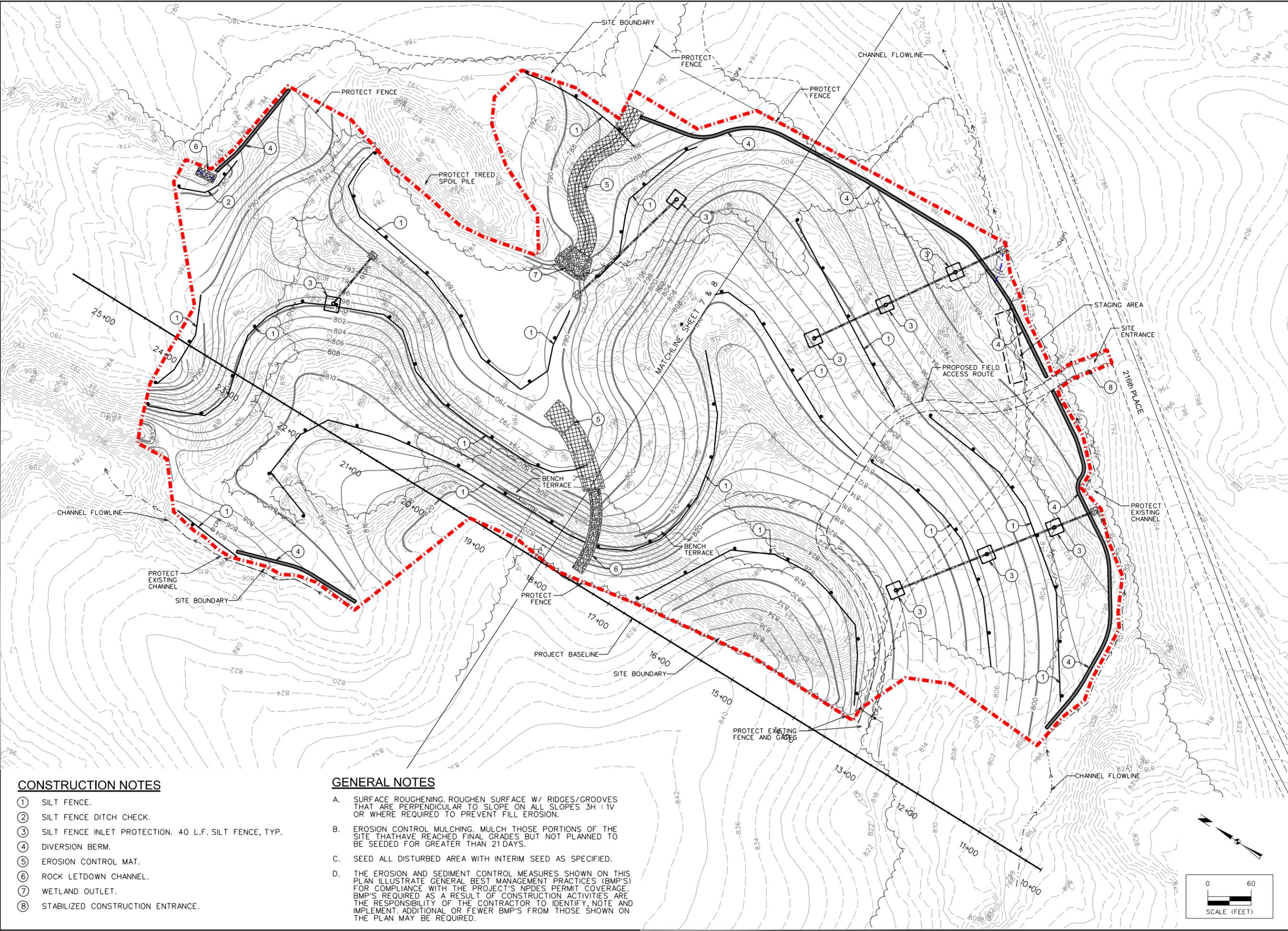
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DESIGN BY: WCF      DRAWN BY: TLR

**MORGAN**  
**AML RECLAMATION PROJECT**

**STORM WATER POLLUTION PREVENTION PLAN**

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**CONSTRUCTION NOTES**

- ① SILT FENCE.
- ② SILT FENCE DITCH CHECK.
- ③ SILT FENCE INLET PROTECTION. 40 L.F. SILT FENCE, TYP.
- ④ DIVERSION BERM.
- ⑤ EROSION CONTROL MAT.
- ⑥ ROCK LETDOWN CHANNEL.
- ⑦ WETLAND OUTLET.
- ⑧ STABILIZED CONSTRUCTION ENTRANCE.

**GENERAL NOTES**

- A. SURFACE ROUGHENING. ROUGHEN SURFACE W/ RIDGES/GROOVES THAT ARE PERPENDICULAR TO SLOPE ON ALL SLOPES 3H : 1V OR WHERE REQUIRED TO PREVENT FILL EROSION.
- B. EROSION CONTROL MULCHING. MULCH THOSE PORTIONS OF THE SITE THAT HAVE REACHED FINAL GRADES BUT NOT PLANNED TO BE SEED FOR GREATER THAN 21 DAYS.
- C. SEED ALL DISTURBED AREA WITH INTERIM SEED AS SPECIFIED.
- D. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THIS PLAN ILLUSTRATE GENERAL BEST MANAGEMENT PRACTICES (BMP'S) FOR COMPLIANCE WITH THE PROJECT'S NPDES PERMIT COVERAGE. BMP'S REQUIRED AS A RESULT OF CONSTRUCTION ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY, NOTE AND IMPLEMENT. ADDITIONAL OR FEWER BMP'S FROM THOSE SHOWN ON THE PLAN MAY BE REQUIRED.

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