

ENGINEER'S STATEMENT:
THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

ENGINEER OF RECORD SIGNATURE
DATE

OWNER'S STATEMENT:
I, THE OWNER/DEVELOPER, WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

OWNER SIGNATURE
DATE

EL PASO COUNTY:
COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA AND ENGINEERING CRITERIA MANUAL VOLUMES 1 AND 2 AS AMENDED.

IN ACCORDANCE WITH EGM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

COUNTY ENGINEER/ECM ADMINISTRATOR
DATE

- GENERAL NOTES:
1. PROPOSED SLOPES ARE 2:1 FOR SHOOTING RANGE BACKDROPP BERMS. EARTHWORK AND CONSTRUCTION AT THE REQUEST OF THE OWNER/DEVELOPER. RMG-ROCKY MOUNTAIN GROUP HAS NOT CONDUCTED A GEOTECHNICAL INVESTIGATION OR SLOPE STABILITY ANALYSIS AND IS NOT RESPONSIBLE FOR THE STABILITY OF THE FINISHED GRADES/SLOPES.
 2. FINISHED SLOPES GREATER THAN 3:1 ARE TO CONTAIN GEOTEXTILE FABRIC FOR SLOPE STABILITY.
 3. OWNER/DEVELOPER IS RESPONSIBLE FOR THE MAINTENANCE OF FINAL SLOPES/GRADES AND EROSION CONTROL.
 4. AN UNNAMED TRIBUTARY IS IDENTIFIED ON THE FEMA FIRM MAP. THE OWNER IS RESPONSIBLE FOR MAINTAINING THE TRIBUTARY FLOW PATTERN.
 5. CONTOURS SHOWN ARE FROM CSU FIMS MAPPING GIS DATA. CONTRACTOR AND OWNER/DEVELOPER SHALL VERIFY ELEVATIONS AND DIMENSIONS PRIOR TO CONSTRUCTION.
 6. THE PARCEL CONTAINS APPROXIMATELY 37.20 ACRES OF NATIVE GRASSES/WEEDS, CONSISTING OF APPROXIMATELY 91.4 PERCENT OF THE PROPERTY.
 7. NO OFF-SITE GRADING OR DISTURBANCE IS TO OCCUR.

FEMA FLOODPLAIN STATEMENT:
A PORTION OF THE SITE TO BE DEVELOPED FALLS WITHIN FEMA FLOOD ZONE A. THE MAJORITY OF THE SITE FALLS WITHIN OTHER AREAS, ZONE X. THESE ZONES AND AN UNNAMED TRIBUTARY IS IDENTIFIED ACCORDING TO FIRM PANEL 05636, MAP NUMBER 05041005636 REVISED DECEMBER 7, 2018. BELOW ARE DESCRIPTIONS OF THE RELEVANT ZONES:
ZONE A: AREAS WITH A 1 PERCENT ANNUAL CHANCE OF FLOODING AND A 26 PERCENT CHANCE OF FLOODING OVER THE LIFE OF 30 YEARS. BECAUSE DETAILED ANALYSES ARE NOT PERFORMED FOR SUCH AREAS, NO DEPTHS OR BASE FLOOD ELEVATIONS ARE SHOWN WITHIN THESE ZONES.
ZONE X: AREAS OF MINIMAL FLOOD HAZARD, USUALLY DEPICTED ON FIRMS AS ABOVE THE 500-YEAR FLOOD LEVEL.

LEGEND

---	PROPERTY LINE
---	EASEMENT LINE
---	SUBDIVISION LINE
X.X%	SLOPE ARROW
X	SPOT ELEVATION
---	EXISTING TRIBUTARY
---	EXISTING MINOR CONTOUR
---	EXISTING MAJOR CONTOUR
---	PROPOSED MINOR CONTOUR
---	PROPOSED MAJOR CONTOUR
SF	SILT FENCE
SCL	SEDIMENT CONTROL LOG
ECB	EROSION CONTROL BLANKET
TSD	TEMPORARY SEDIMENT BASIN
PS	PERMANENT SEEDING
---	EX. STRUCTURE/BUILDING
---	EX. ASPHALT PAVEMENT
---	EX. DIRT ROADWAY



AREA: 5.0 AC.

move this text as shown.

3985 PHEASANT LN.
ENGELKE, ROBERT
SCH. NO. 4330002002
ZONING: RR-5
PLAT 3323
LOT 2 BLK 4 FALCON
HILLS SUB NO 1
AREA: 5.0 AC.

3905 PHEASANT LN.
CEBALLES, LAURA L
SCH. NO. 4330002003
ZONING: RR-5
PLAT 3323
LOT 3 BLK 4 FALCON
HILLS SUB NO 1
AREA: 5.0 AC.

3815 PHEASANT LN.
QUIST, LINDA A
SCH. NO. 4330002009
ZONING: RR-5
PLAT 3323
LOT 4 BLK 4 FALCON HILLS
SUB NO 1 EX NLY 60 FT
AREA: 7.14 AC.

3715 PHEASANT LN.
WHITTENBECK, SHERI K
SCH. NO. 4330002005
ZONING: RR-5
PLAT 3474
LOT 1 BLK 2 FALCON
HILLS SUB NO 3
AREA: 7.15 AC.
VICINITY MAP
N.T.S.

EPC STORMWATER REVIEW COMMENTS
IN ORANGE BOXES WITH BLACK TEXT

30-13-64
JARDON, GLEN A & JANET S
SCH. NO. 4330000001
ZONING: A-35
NE4 SEC 30-13-64
AREA: 160 AC.

3885 PHEASANT LANE
FRONTIER SPORTSMAN'S CLUB INC.
SCH. NO. 4330000017
ZONING: A-35 RR-5
NW4SE4, TOG WITH R/W EASEMENT OVER NLY 30.0 FT
OF E2SE4 SEC 30-13-64, TOG WITH NLY 60.0 FT OF LOT
4 BLK 4 FALCON HILLS SUB NO 1
AREA: 40.71 AC.

Ex. Property Line (Typ.)

GRADING AND DRAINAGE 1 OF 2 - SHEET C-02

GRADING AND DRAINAGE 2 OF 2 - SHEET C-03

"CENTRAL" BERMS

"SOUTHWEST" BERM

Ex. Covered Range Structures

Ex. Asphalt Millings

PROPERTY LINES (TYP.)

3950 E. BLANEY RD.
CIMINO, PATRICIA A
SCH. NO. 4330000018
ZONING: A-35
N2NE4SE4 SEC 30-13-64
AREA: 20 AC.

3730 E. BLANEY RD.
CIMINO, PATRICIA A
SCH. NO. 4330005001
ZONING: RR-5
PLAT 9118
LOT 1 SCIACCA SUB
AREA: 13.59 AC.

3670 E. BLANEY RD.
CORBITT, DAVID
SCH. NO. 4330005002
ZONING: RR-5
PLAT 9118
LOT 2 SCIACCA SUB
AREA: 13.59 AC.

12430 S. BLANEY RD.
PADILLA STEVE & SUSIE
SCH. NO. 4330006001
ZONING: RR-5
PLAT 10462
LOT 1 MARTINEZ SUB
AREA: 10.3 AC.

12370 S. BLANEY RD.
PADILLA, FIDEL A
SCH. NO. 4330006002
ZONING: RR-5
PLAT 10462
LOT 2 MARTINEZ SUB
AREA: 7.57 AC.

SCIACCA SUBDIVISION

3610 E. BLANEY RD.
MITHCELL, ERIC B
SCH. NO. 4330005006
ZONING: RR-5

DEVELOPMENT PLAN SHEET LIST

Sheet Number	Sheet Title
C-01	OVERALL GRADING KEY
C-02	GRADING AND DRAINAGE PLAN 1 OF 2
C-03	GRADING AND DRAINAGE PLAN 2 OF 2
C-04	FINAL GRADE DRAINAGE CONCEPT
C-05	EROSION CONTROL PLAN
C-06	EROSION CONTROL DETAILS 1
C-07	EROSION CONTROL DETAILS 2

PCD Filing No.:
PPR-19-054

Graphic Scale
0 50 100 200
In Feet: 1" = 100'

- EL PASO COUNTY GRADING AND EROSION CONTROL STANDARD NOTES:
1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS, ALL WORTH AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.
 2. NOTWITHSTANDING ANYTHING DERIVED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
 3. A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR AND SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
 4. ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED DEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
 5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT MAY CONTRIBUTE POLLUTANTS TO STORMWATER. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
 6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AND MAKE ANY NECESSARY CHANGES TO THE EROSION CONTROL MEASURES IS NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN PRIOR TO IMPLEMENTATION.
 7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE STABILIZED.
 8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLAN DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS, ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
 9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE HYDROLOGY OR HYDRAULICS OF A PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE EGM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
 10. ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE, UNLESS INFEASIBLE.
 11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED.
 12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR OVER THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
 13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUT SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY.
 14. DEWATERING OPERATIONS: UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT MAY NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF.
 15. EROSION CONTROL BLANKETING IS TO BE USED ON SLOPES STEEPER THAN 3:1.
 16. BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. BMP'S MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
 17. VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
 18. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
 19. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
 20. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
 21. NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE EGM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
 22. BULK STORAGE OF PETROLEUM PRODUCTS OR OTHER LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL HAVE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
 23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCH FLOW LINE.
 24. INDIVIDUALS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE DCM VOLUME II AND THE EGM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
 25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
 26. PRIOR TO ACTUAL CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
 27. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
 28. A SOILS REPORT FOR THIS SITE HAS BEEN DEVELOPED. THE SITE IS KNOWN TO CONSIST OF BRESSER SANDY LOAM NRCS (HYDROLOGIC SOIL GROUP B) FOR PART OF THE SOUTHWEST BERM, AND THE REST OF THE SITE CONSISTS OF BLAKELAND LOAMY SAND (NRCS HYDROLOGIC SOIL GROUP A).
 29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT: COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER QUALITY CONTROL DIVISION WOOD - PERMITS 4300 CHERRY CREEK DRIVE SOUTH DENVER, CO 80246-1530 ATTN: PERMITS UNIT

ZONE A

UNNAMED TRIBUTARY

ZONE A

ROCKY MOUNTAIN GROUP

ASPECTS
Geotechnical
Materials Testing
Civil Planning
RMG
ENGINEERS

ARCHITECTURAL
Structural
Forensics

53821
NO. 1
FOR CONSTRUCTION
FOR CIVIL ONLY

FRONTIER SPORTSMAN'S CLUB
3885 PHEASANT LANE
PEYTON, CO

MT2, LLC. METALS TREATMENT TECHNOLOGIES

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SHEET NAME
OVERALL GRADING KEY

PROJECT STATUS
DESIGN DEVELOPMENT

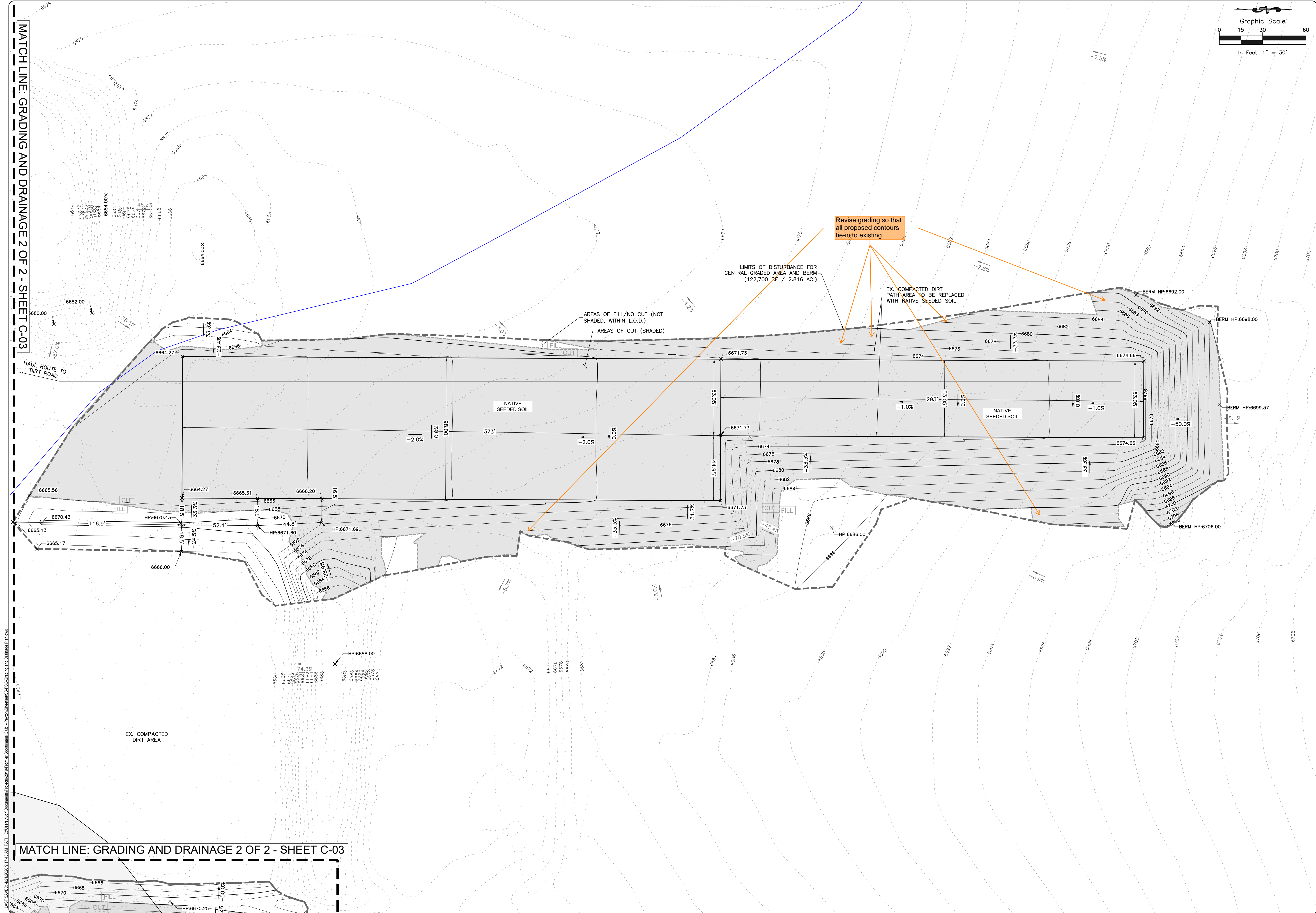
ENG: RDL
DRAWN: RDL
CHECKED: RDL

DATE
04/20/20

#	REVISION	DATE
1	DESIGN DEV. 1	05/20/19
2	CNTY REV. 1	06/04/19
3	CNTY REV. 2	04/20/20
4	---	---
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8	---	---
9	---	---
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JOB NO.
170915

SHEET NO.
C-01
of 07



ROCKY MOUNTAIN GROUP

ARCHITECTS

ENGINEERS

Geotechnical

Materials Testing

Civil Planning

Architectural

Structural

Forensics

SOUTHERN COLORADO
19375 BEACON LITE RD., MONUMENT, CO 80132
(719) 488-2145 - WWW.RMENGINEERS.COM
SOUTHERN COLORADO, BEACON LITE, MONUMENT, COLORADO

FOR CONSTRUCTION

FOR CIVIL ONLY

FRONTIER SPORTSMAN'S CLUB

3885 PHEASANT LANE

PEYTON, CO

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SHEET NAME

GRADING AND DRAINAGE PLAN 1

OF 2

PROJECT STATUS

DESIGN DEVELOPMENT

ENG:

RDL

DRAWN:

RDL

CHECKED:

RDL

DATE

04/20/20

#

REVISION

DATE

DESIGN DEV. 1

05/20/19

CNTY REV. 1

06/04/19

CNTY REV. 2

04/20/20

JOB NO.

170915

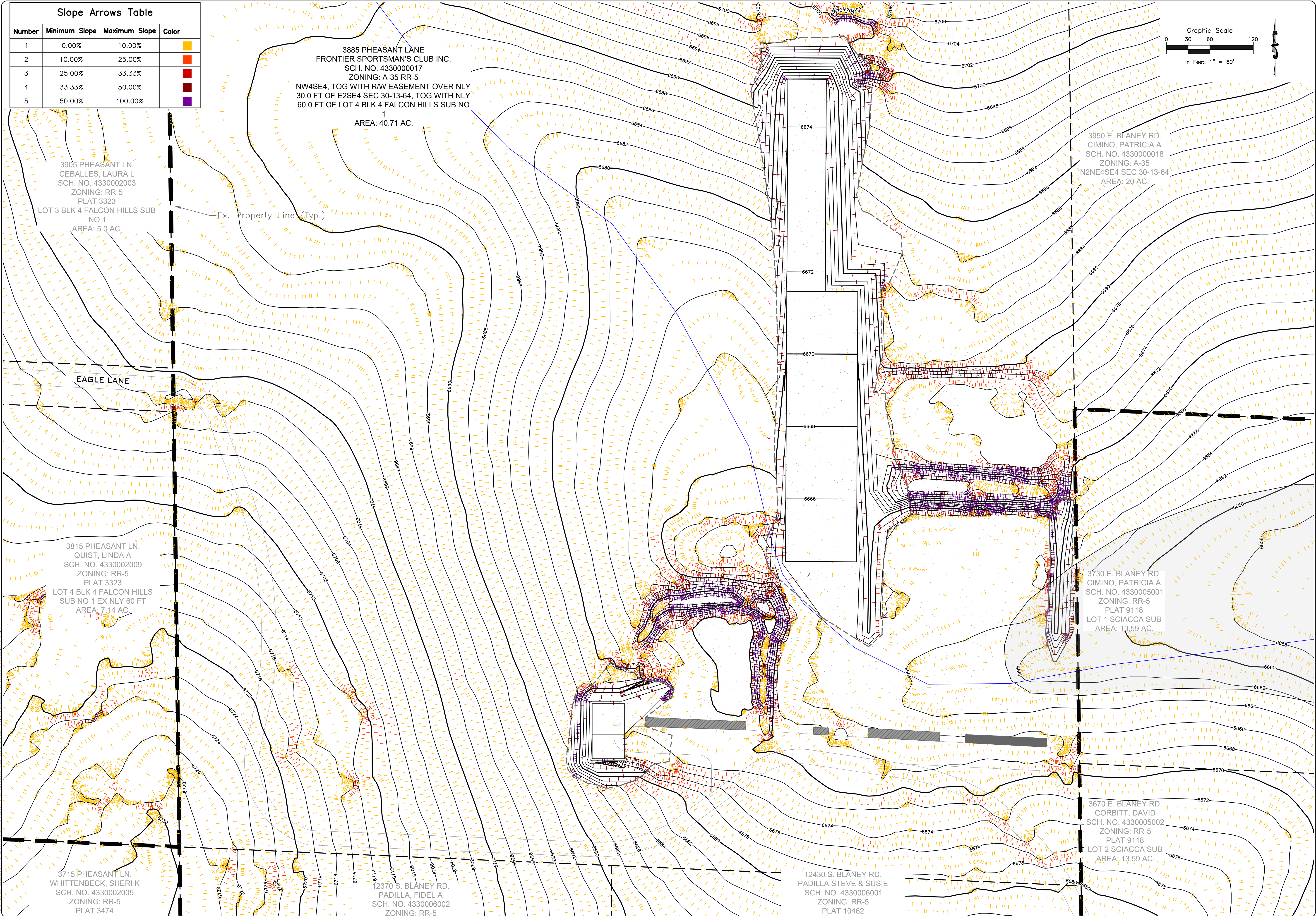
SHEET NO.

C-02

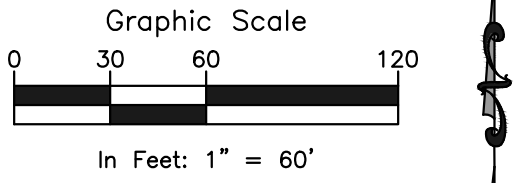
of 07



<p>FRONTIER SPORTSMAN'S CLUB</p> <p>3885 PHEASANT LANE</p> <p>PEYTON, CO</p>	<p>MT², LLC, METALS TREATMENT TECHNOLOGIES</p>	<p>GRADING AND DRAINAGE PLAN 2</p> <p>OF 2</p>	<p>DESIGN DEVELOPMENT</p>																								
<p>SHEET NAME</p> <p>ENG: _____ RDL _____</p> <p>DRAWN: _____ RDL _____</p> <p>CHECKED: _____ RDL _____</p> <p>DATE</p> <p style="text-align: center;">04/20/20</p>	<p>PROJECT STATUS</p>	<p>These plans are copyrighted 2018 by Geoscient Engineers, Inc. dba RMG - Rocky Mountain Group. All rights reserved. Any sale, reproduction, creation of derivative works based on these plans, or use of these plans for any purpose without proper compensation and the express written consent of RMG, is strictly prohibited.</p>																									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">#</th> <th style="width: 45%;">REVISION</th> <th style="width: 50%;">DATE</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">--</td> <td>DESIGN DEV. 1</td> <td>05/29/19</td> </tr> <tr> <td style="text-align: center;">--</td> <td>CNTY REV. 1</td> <td>06/04/19</td> </tr> <tr> <td style="text-align: center;">--</td> <td>CNTY REV. 2</td> <td>04/20/20</td> </tr> <tr> <td style="text-align: center;">--</td> <td>---</td> <td>---</td> </tr> <tr> <td style="text-align: center;">--</td> <td>---</td> <td>---</td> </tr> <tr> <td style="text-align: center;">--</td> <td>---</td> <td>---</td> </tr> <tr> <td style="text-align: center;">--</td> <td>---</td> <td>---</td> </tr> </tbody> </table>	#	REVISION	DATE	--	DESIGN DEV. 1	05/29/19	--	CNTY REV. 1	06/04/19	--	CNTY REV. 2	04/20/20	--	---	---	--	---	---	--	---	---	--	---	---	<p>JOB NO. 170915</p> <p>SHEET NO. C-03</p> <p style="text-align: right;">of 07</p>		
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Slope Arrows Table			
Number	Minimum Slope	Maximum Slope	Color
1	0.00%	10.00%	Yellow
2	10.00%	25.00%	Orange
3	25.00%	33.33%	Red
4	33.33%	50.00%	Dark Red
5	50.00%	100.00%	Purple



ROCKY MOUNTAIN GROUP



ARCHITECTS
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FRONTIER SPORTSMAN'S CLUB
3885 PHEASANT LANE
PEYTON, CO

MT2, LLC, METALS TREATMENT TECHNOLOGIES

SHEET NAME
FINAL GRADE DRAINAGE
CONCEPT

PROJECT STATUS
DESIGN DEVELOPMENT

ENG: RDL
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JOB NO.
170915

SHEET NO.
C-04
of 07

LAST SAVED: 4/20/2020 8:17:43 AM PATH: C:\Users\jordan\Documents\Projects\2019\Frontier Sportsman's Club - Peyton\SheetSet\SS-CSC-Grading and Drainage Plan.dwg

ENGINEER OF RECORD:
THE STORMWATER MANAGEMENT PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY AND STATE FOR STORMWATER MANAGEMENT PLANS.

06/26/2020
ENGINEERING OF RECORD SIGNATURE DATE

REVIEW ENGINEER:
THE STORMWATER MANAGEMENT PLAN WAS REVIEWED AND FOUND TO MEET THE CHECKLIST REQUIREMENTS EXCEPT WHERE OTHERWISE NOTED OR ALLOWED BY AN APPROVED DEVIATION REQUEST.

REVIEW ENGINEER DATE

3885 PHEASANT LANE
FRONTIER SPORTSMAN'S CLUB INC.
SCH. NO. 4330000017
ZONING: A-35 RR-5
NW4SE4, TOG WITH R/W EASEMENT OVER NLY
30.0 FT OF E2SE4 SEC 30-13-64, TOG WITH NLY
60.0 FT OF LOT 4 BLK 4 FALCON HILLS SUB NO
1
AREA: 40.71 AC.

3905 PHEASANT LN.
CEBALLES, LAURA L
SCH. NO. 4330002003
ZONING: RR-5
PLAT 3323
LOT 3 BLK 4 FALCON HILLS SUB
NO 1
AREA: 5.0 AC.

Ex. Property Line (Typ.)

3815 PHEASANT LN.
QUIST, LINDA A
SCH. NO. 4330002009
ZONING: RR-5
PLAT 3323
LOT 4 BLK 4 FALCON HILLS
SUB NO 1 EX NLY 60 FT
AREA: 7.14 AC.

Include stormwater flow
direction arrows (Checklist
Item "S")

Include SSA and SP in
Legend. Also include IP
if any inlets on/offsite
need to be protected
and notate the possibility
of offsite IP (per SWMP
page 5)

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- SETBACK LINE
- SLOPE ARROW
- SPOT ELEVATION
- EXISTING TRIBUTARY
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- SILT FENCE
- SEDIMENT CONTROL LOG
- EROSION CONTROL BLANKET
- TEMPORARY SEDIMENT BASIN
- PERMANENT SEEDING
- VEHICLE TRACKING CONTROL
- EX. STRUCTURE/BUILDING
- EX. ASPHALT PAVEMENT
- EX. DIRT ROADWAY

Label or add lintypes to Legend:
- Construction Site Boundaries
- Limits of Disturbance
- If the same, label as "Construction Site Boundaries / Limits of Disturbance" so it's known that they are the same limits.
- Cut/fill line

PERMANENT SEED AND MULCH OF 3:1
SIDE EMBANKMENTS (TYP.)

TEMPORARY SEDIMENT BASIN FOR
0.5-ACRE SURROUNDING AREA.
4:1 SLOPES, 4' DEPTH,
BOTTOM=16'x8', TOTAL 1,920 SF AREA
SOUTH SPILLWAY OF 1' WIDTH

EROSION CONTROL BLANKET TO BE
INSTALLED ON ALL PROPOSED
SLOPES/BERMS GREATER
THAN 3:1 SLOPE (SOUTHWEST
GRADED AREA: 4,500 SF) (FINAL)

PERMANENT SEED AND MULCH OF 3:1
SIDE EMBANKMENTS (TYP.)

VTC Suggested Options:
1) Include a second VTC here to catch
traffic from adjacent Southwest Berm.
And install barricades and signs to
direct traffic over 1 of the VTC's.
2) Or install barricades and signs here
to direct all traffic over the single VTC
already shown on this plan.

Orient long direction of
VTC with flow of traffic.
Appears as if it needs to be
rotated 90deg to align
with Haul Route.

EROSION CONTROL BLANKET
TO BE INSTALLED ON ALL
PROPOSED SLOPES/BERMS
GREATER THAN 3:1 SLOPE
(CENTRAL GRADED AREA AND
BERM: 12,000 SF) (FINAL)

PERMANENT SEED AND MULCH OF 3:1
SIDE EMBANKMENTS (TYP.)

PERMANENT SEED AND MULCH OF 3:1
SIDE EMBANKMENTS (TYP.)

53 LF OF SEDIMENT CONTROL LOG
(INITIAL, INTERIM, FINAL)

53 LF OF SEDIMENT CONTROL LOG
(INITIAL, INTERIM, FINAL)

98 LF OF SEDIMENT CONTROL LOG
(INITIAL, INTERIM, FINAL)

TEMPORARY SEDIMENT BASIN FOR
2.5-ACRE DISTURBANCE AREA NORTH,
EAST, WEST, 3:1 SLOPES, 4' DEPTH,
BOTTOM=24'x48', TOTAL 3,456 SF AREA
SOUTH SPILLWAY OF 4' WIDTH

EROSION CONTROL BLANKET
TO BE INSTALLED ON ALL
PROPOSED SLOPES/BERMS
GREATER THAN 3:1 SLOPE
(SOUTHEAST BERM: 6,313 SF) (FINAL)

TEMPORARY SEDIMENT BASIN FOR
0.5-ACRE SURROUNDING AREA.
4:1 SLOPES, 4' DEPTH,
BOTTOM=16'x8', TOTAL 1,920 SF AREA
SOUTH SPILLWAY OF 1' WIDTH

3730 E. BLANEY RD.
CIMINO, PATRICIA A
SCH. NO. 4330005001
ZONING: RR-5
PLAT 9118
LOT 1 SCIACCA SUB
AREA: 13.59 AC.

535 LF OF SILT FENCE
(INITIAL, INTERIM, FINAL)

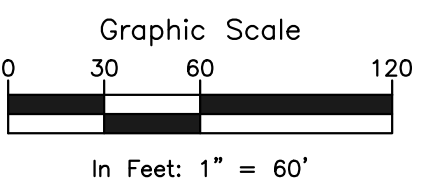
140 LF OF SEDIMENT CONTROL LOG
(INITIAL, INTERIM, FINAL)

670 LF OF SILT FENCE
(INITIAL, INTERIM, FINAL)

3670 E. BLANEY RD.
CORBITT, DAVID
SCH. NO. 4330005002
ZONING: RR-5
PLAT 9118
LOT 2 SCIACCA SUB
AREA: 13.59 AC.

12370 S. BLANEY RD.
PADILLA, FIDEL A
SCH. NO. 4330006002
ZONING: RR-5

12430 S. BLANEY RD.
PADILLA STEVE & SUSIE
SCH. NO. 4330006001
ZONING: RR-5
PLAT 10462



ROCKY MOUNTAIN GROUP

ARCHITECTS
ENGINEERS

Geotechnical
Materials Testing
Civil Planning
Architectural
Structural
Forensics

19375 BEACON LITE RD., MONUMENT, CO 80132
(719) 488-2145 - WWW.RMENGINEERS.COM
SOUTHWESTERN ENGINEERING GROUP (Formerly Northern Engineers)



FRONTIER SPORTSMAN'S CLUB
3885 PHEASANT LANE
PEYTON, CO

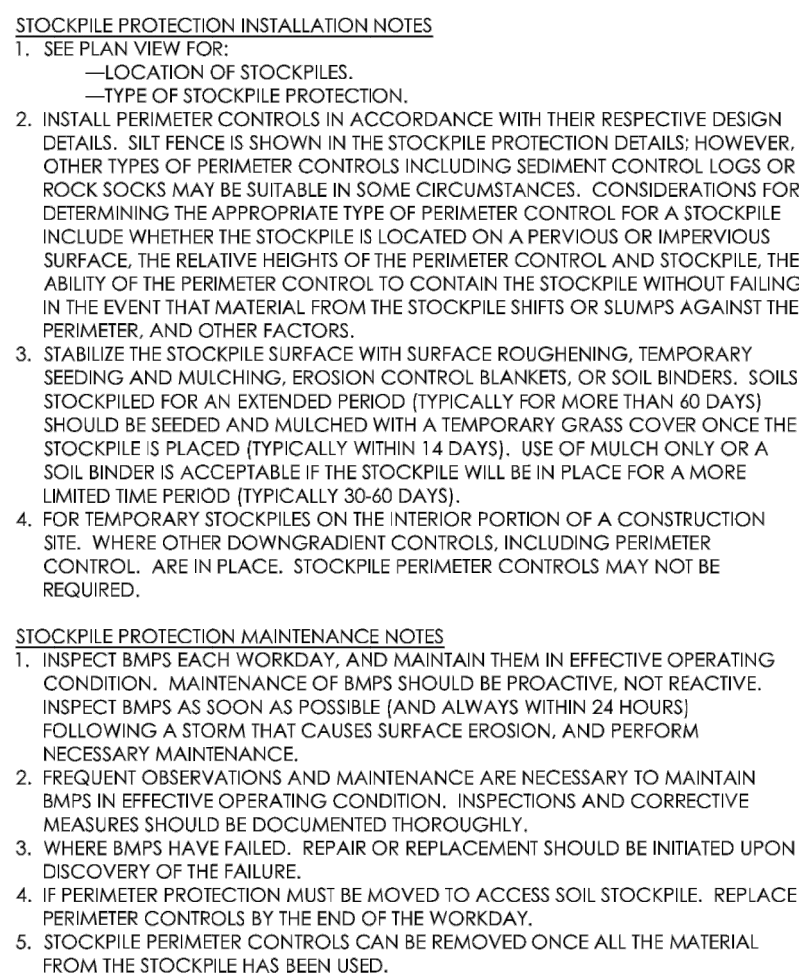
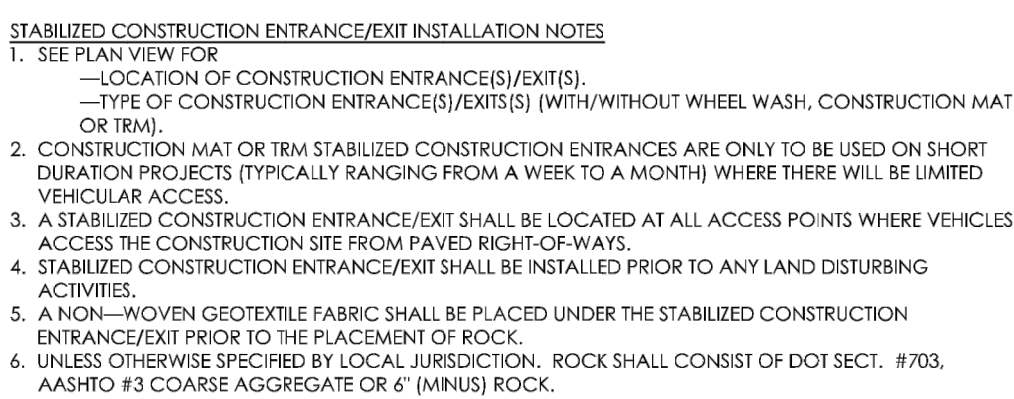
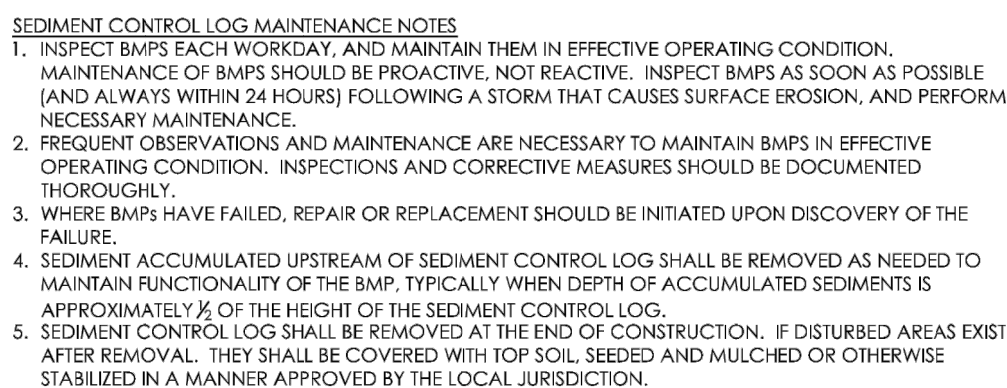
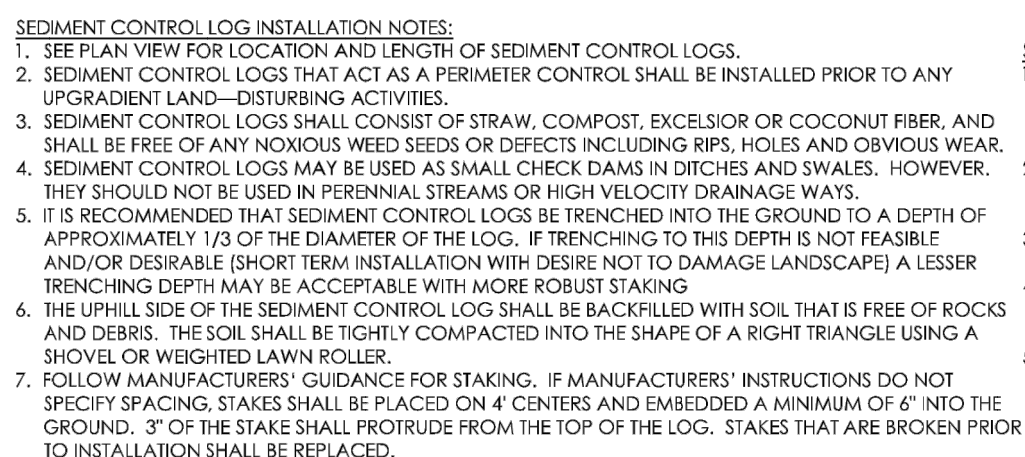
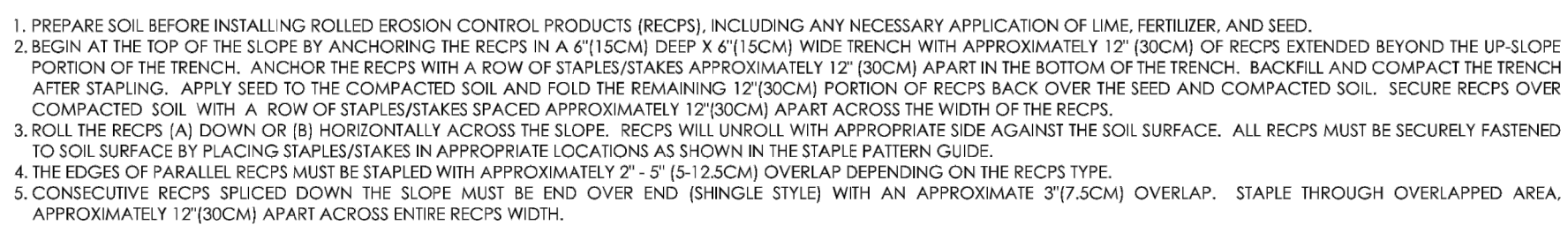
MT2, LLC, METALS TREATMENT TECHNOLOGIES

EROSION CONTROL PLAN

DESIGN DEVELOPMENT

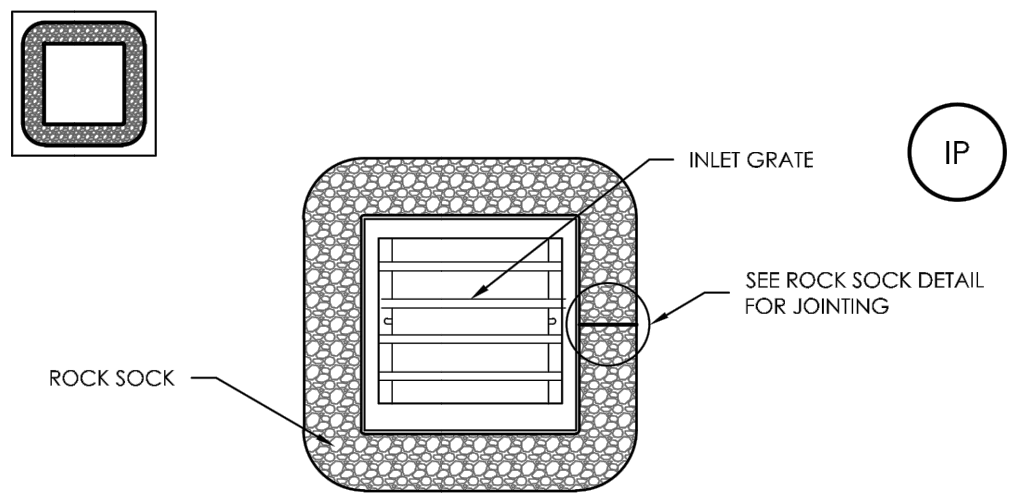
170915

C-05
of 07



Include details for the following BMP's. Examples of acceptable details are listed as well:

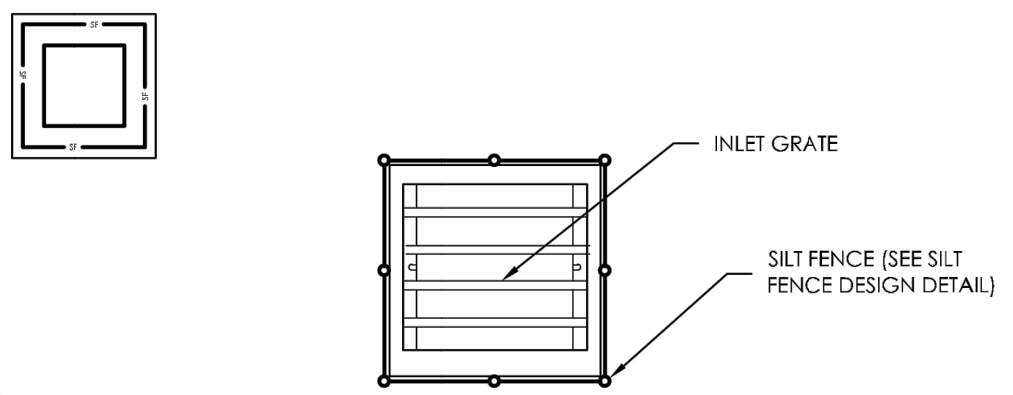
BMP	DCM	MHFD
Mulching	MU-1	EC-4
Seeding	TS-1	EC-2



IP-3. ROCK SOCK SUMP/AREA INLET PROTECTION

ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES

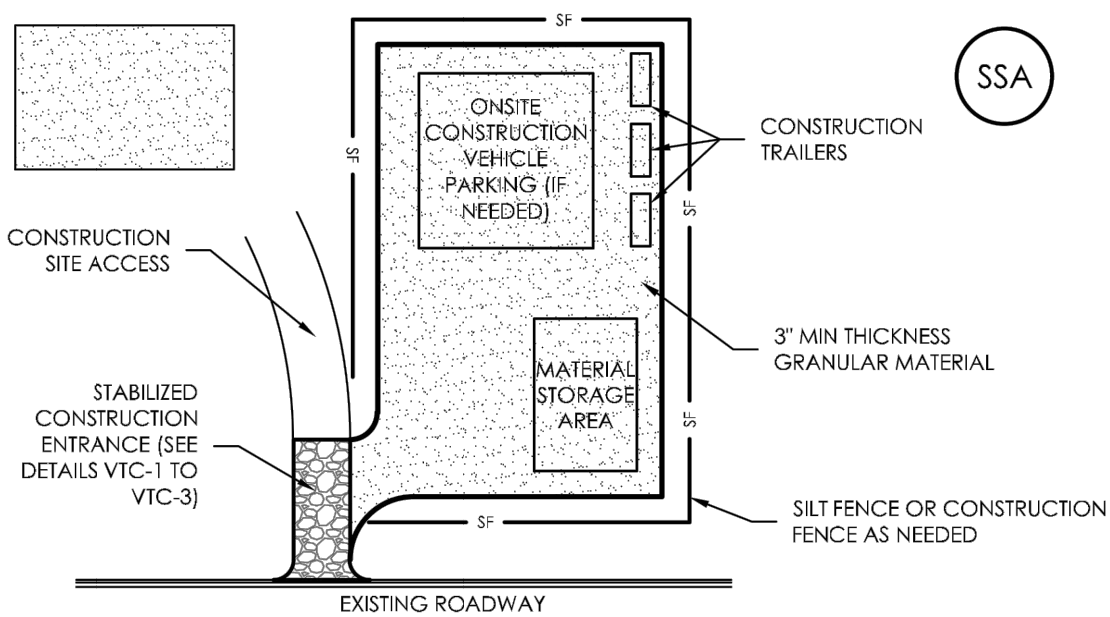
1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



IP-4. SILT FENCE FOR SUMP INLET PROTECTION

SILT FENCE INLET PROTECTION INSTALLATION NOTES

1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.
3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



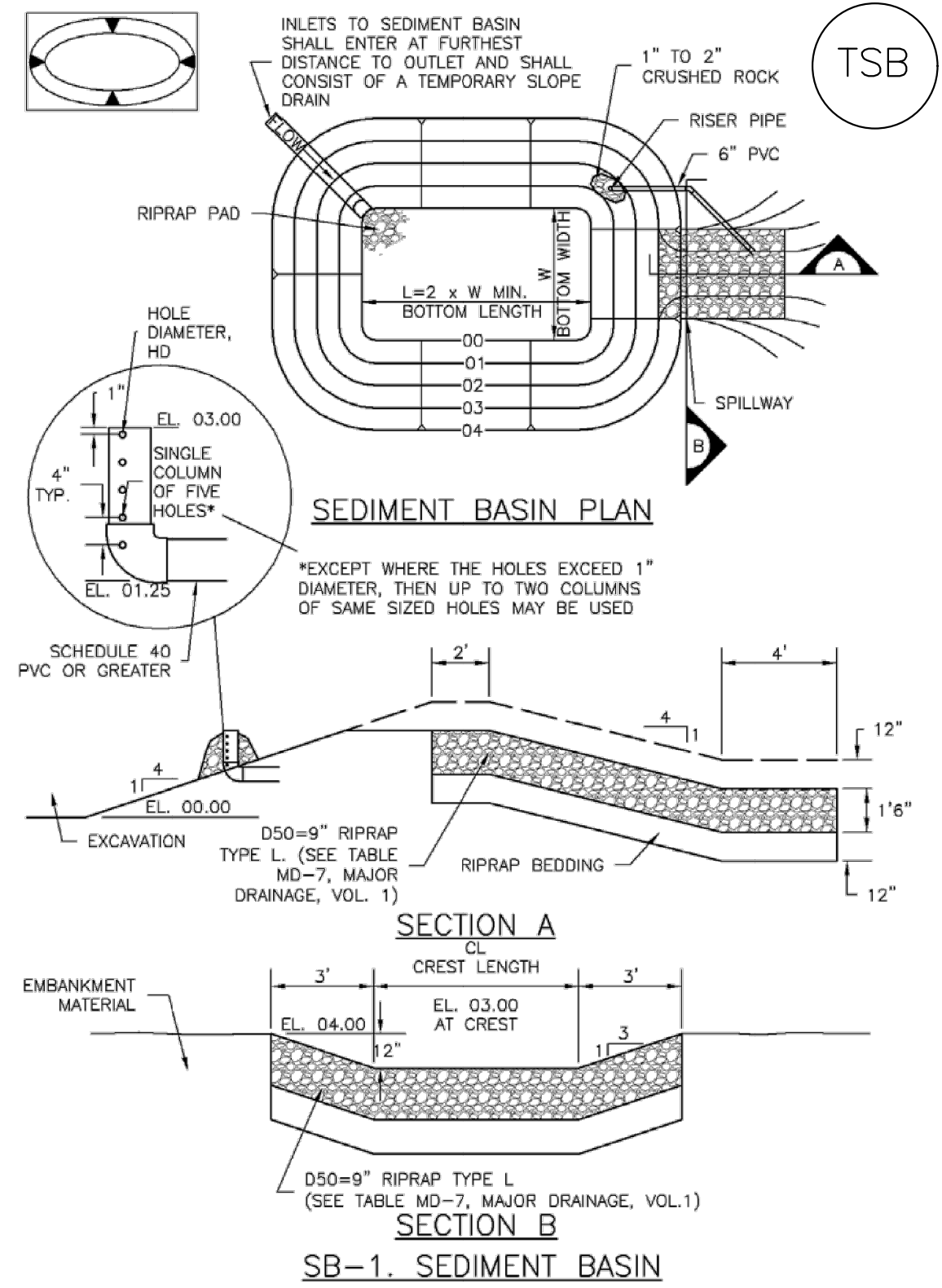
SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR
 - LOCATION(S) OF STAGING AREA(S),
 - LOCATION CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
3. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF CDOT TYPE 33, AASHTO #2 COARSE AGGREGATE ONLY (INCLUDING BUT NOT LIMITED TO ADDITIONAL PERIMETER BMP'S MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED CONSTRUCTION ENTRANCE EXIT MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS OFTEN AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.
5. STABILIZED STAGING AREA SHALL BE MAINTAINED, IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.
6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION, THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL AGENCY, MAY BE USED ON SITE FOR EROSION CONTROL. COVERED, MULCHED, AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.



Upstream Drainage Area (rounded to nearest acre), (ac)	Basin Bottom Width (ft), (ft)	Spillway Crest Length (CrL), (ft)	Hole Diameter (D _H), (in)
1	12 1/2	2	3/32
2	21	3	1/16
3	28	5	1/8
4	33 1/2	6	5/16
5	38 1/2	8	3/32
6	43	9	7/32
7	47 1/4	11	29/32
8	51	12	27/32
9	56	13	3/8
10	58 1/4	15	13/16
11	61	16	3/32
12	64	18	1
13	67 1/2	19	1 1/16
14	70 1/2	21	1 1/8
15	73 1/4	22	1 3/8

SEDIMENT BASIN INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
 - LOCATION OF SEDIMENT BASIN.
 - TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN).
 - FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE DIAMETER, HD.
 - FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE DIAMETER D.
2. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.
3. SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-DISTURBING ACTIVITY THAT RELIES ON BASINS AS A STORMWATER CONTROL.
4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.
5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
6. PIPE SCH 40 OR GREATER SHALL BE USED.
7. THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

SEDIMENT BASIN MAINTENANCE NOTES

1. INSPECT BMPS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE BMPS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPS AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE DISTURBANCE, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS. TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E., TWO FEET BELOW THE SPILLWAY CREST).
5. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION.
6. WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDS AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.