

# 17224 COPPER VALLEY COURT

## EL PASO COUNTY, CO

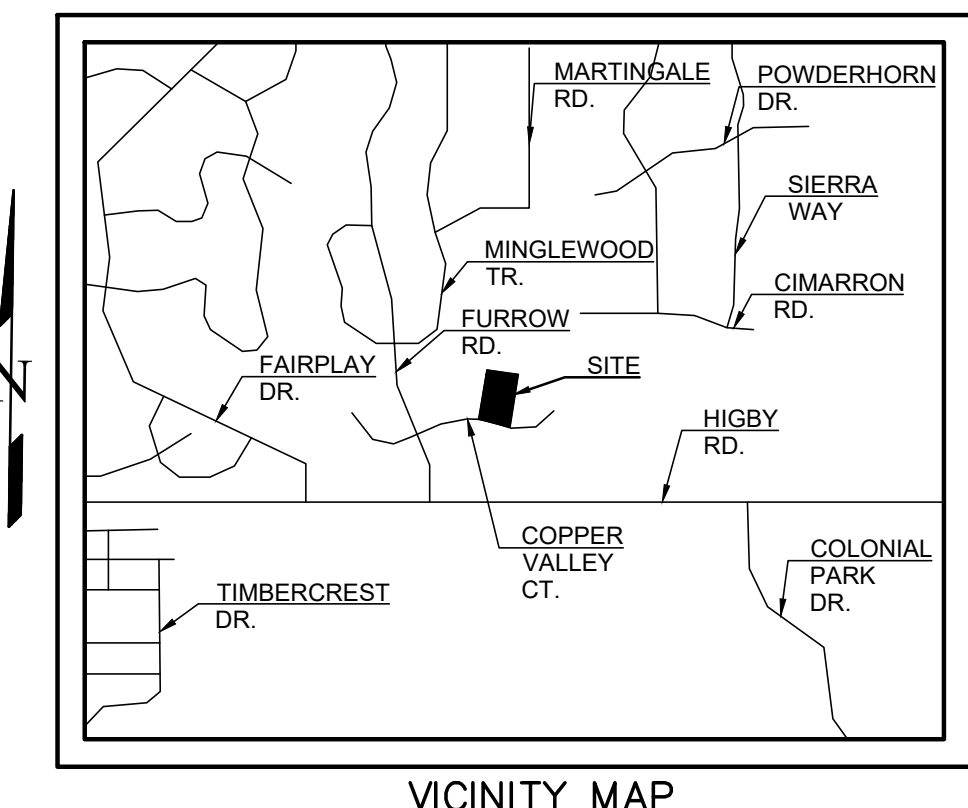
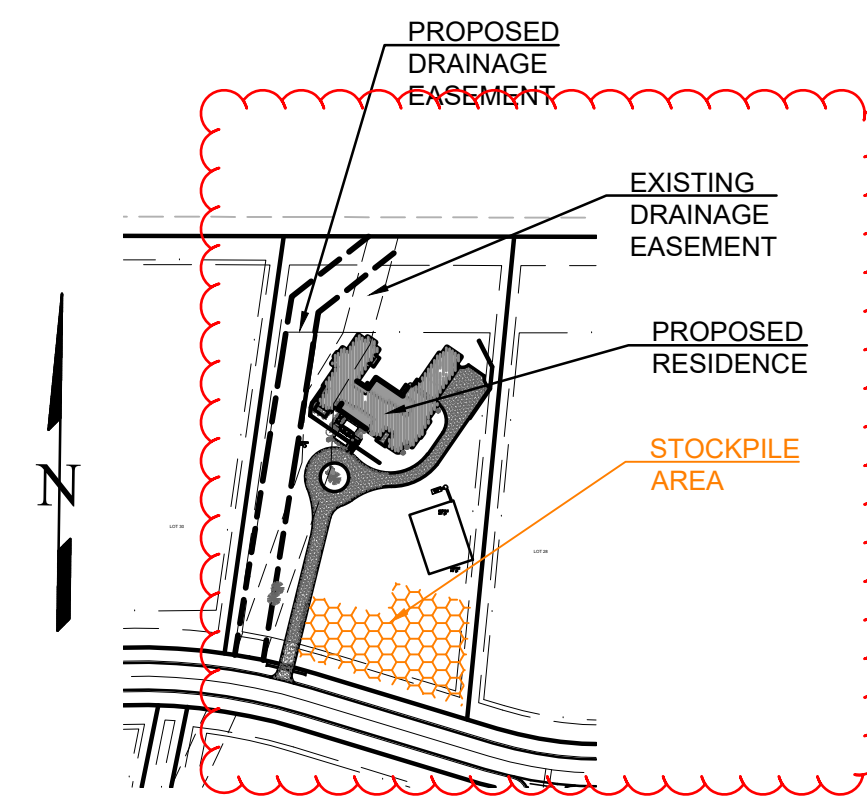
# GRADING, EROSION, & SEDIMENT CONTROL PLAN

## AUGUST 2025

Standard Notes for El Paso County Grading and Erosion Control Plans

- Stormwater discharges from construction sites shall not cause or threaten to cause pollution, contamination, or degradation of State Waters. All work and earth disturbance shall be done in a manner that minimizes pollution of any on-site or off-site waters, including wetlands.
- Notwithstanding anything depicted 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 from regulations and standards must be requested, and approved, in writing.
- 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. Management of the SWMP during construction is the responsibility of the designated Qualified Stormwater Manager or Certified Erosion Control Inspector. The SWMP 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.
- 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 GEC. 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.
- Control measures must be installed prior to commencement of activities that could contribute pollutants to stormwater. Control measures for all slopes, channels, ditches, and disturbed land areas shall be installed immediately upon completion of the disturbance.
- 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 at the site and identify if changes to those control measures are 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.
- 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.
- 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 plant 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.
- All permanent stormwater management facilities shall be installed as designed in the approved plans. Any proposed changes that affect the design or function of permanent stormwater management structures must be approved by the ECM Administrator prior to implementation.
- Earth disturbances 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 shown to be infeasible and specifically requested and approved.
- 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 measures shall also be protected from sedimentation during construction until final stabilization is achieved. If compaction prevention is not feasible due to site constraints, all areas designated for infiltration and vegetation control measures must be loosened prior to installation of the control measure(s).
- Any temporary or permanent facility designed and constructed for the conveyance of stormwater around, through, or from the earth disturbance area shall be a stabilized conveyance designed to minimize erosion and the discharge of sediment off site.
- Concrete wash water shall be contained and disposed of in accordance with the SWMP. No wash water shall be discharged to or allowed to enter State Waters, including any surface or subsurface storm drainage system or facilities. Concrete washouts shall not be located in an area where shallow groundwater may be present, or within 50 feet of a surface water body, creek or stream.
- During dewatering operations of uncontaminated ground water may be discharged on site, but shall not leave the site in the form of surface runoff unless an approved State dewatering permit is in place.
- Erosion control blanketing or other protective covering shall be used on slopes steeper than 3:1.
- 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.
- 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. Control measures may be required by El Paso County Engineering if deemed necessary, based on specific conditions and circumstances.
- Tracking of soils and construction debris off-site shall be minimized. Materials tracked off-site shall be cleaned up and properly disposed of immediately.
- The owner/developer shall be responsible for the removal of all construction debris, dirt, trash, rock, sediment, soil, and sand that may accumulate in roads, storm drains and other drainage conveyance systems and stormwater appurtenances as a result of site development.
- 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.
- No chemical(s) having the potential to be released in stormwater are to be stored or used onsite unless permission for the use of such chemical(s) is granted in writing by the ECM Administrator. In granting approval for the use of such chemical(s), special conditions and monitoring may be required.
- Bulk storage of allowed petroleum products or other allowed liquid chemicals in excess of 55 gallons shall require adequate secondary containment protection to contain all spills onsite and to prevent any spilled materials from entering State Waters, any surface or subsurface storm drainage system or other facilities.
- No person shall cause the impediment of stormwater flow in the curb and gutter or ditch except with approved sediment control measures.
- Owner/developer and their agents 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 of the Land Development Code, DCM Volume II and the ECM Appendix I. All appropriate permits must be obtained by the contractor prior to construction (1041, NPDES, Floodplain, 404, fugitive dust, etc.). In the event of conflicts between these requirements and other laws, rules, or regulations of other Federal, State, local, or County agencies, the most restrictive laws, rules, or regulations shall apply.
- All construction traffic must enter/exit the site only at approved construction access points.
- Prior to construction the permittee shall verify the location of existing utilities.
- A water source shall be available on site during earthwork operations and shall be utilized as required to minimize dust from earthwork equipment and wind.
- The soils report for this site has been prepared by Vivid Engineering Group, Inc, dated September 2019. If applicable, the approved soils report for this site shall be considered a part of these plans.
- At least ten (10) days prior to the anticipated start of construction, for projects that will disturb one (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  
WQCD -Permits  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530  
Attn: Permits Unit



**SHEET INDEX**

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|-----------------------------------|--------|
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| EROSION AND SEDIMENT CONTROL PLAN | 2 OF 4 |
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| EROSION CONTROL DETAILS           | 4 OF 4 |

**SITE DATA**

OWNER/PETITIONER:  
ALL ABOUT HOME DESIGN, LLC  
13530 NORTHGATE ESTATES DRIVE  
COLORADO SPRINGS, CO 80921  
SCOTT MAYNES, (719) 559-1220

PREPARED BY:  
TERRA NOVA ENGINEERING, INC.  
721 S 23RD STREET  
COLORADO SPRINGS, CO 80904  
(719) 635-6422 OFFICE

**DESCRIPTION OF ACTIVITIES:**

THE DEVELOPER PROPOSES TO STOCKPILE SOIL AND RE-GRADE THE SITE SO THAT THE DRAINAGE EASEMENT CAN BE MOVED TO A MORE SUITABLE LOCATION. THE SITE CONSISTS OF APPROXIMATELY 2.68 ACRES OF UNDEVELOPED PRAIRIE LOCATED IN EL PASO COUNTY.

EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IN A MANNER THAT WILL PROTECT PROPERTIES AND PUBLIC FACILITIES FROM THE ADVERSE EFFECTS OF EROSION AND SEDIMENTATION AS A RESULT OF CONSTRUCTION AND EARTHWORK ACTIVITIES. IT IS ANTICIPATED THAT CONSTRUCTION ACTIVITIES WILL OCCUR BETWEEN FALL OF 2025 AND FALL OF 2026, AT WHICH POINT IT WILL BE CONSIDERED COMPLETED.

CONSTRUCTION PHASING IS ANTICIPATED TO OCCUR AS FOLLOWS:  
PHASE 1:  
PRIOR TO START OF CONSTRUCTION, INITIAL EROSION CONTROL MEASURES TO BE INSTALLED INCLUDE SEDIMENT CONTROL LOG (SCL) ALONG THE DOWNHILL SIDE OF DISTURBED AREA. ALSO INCLUDED IN THIS PHASE WILL BE INSTALLATION OF SEDIMENT CONTROL LOG (SCL) AROUND THE BASE OF ANY DIRT STOCKPILE AREAS. UNTIL THE STOCKPILE HAS BEEN REMOVED, THE SEDIMENT CONTROL LOG SHALL REMAIN IN PLACE AND BE MAINTAINED IN SUCH A WAY AS TO REDUCE TRANSFERENCE OF SEDIMENTATION OVER THE SITE.

PHASE 2:  
ALL PREVIOUSLY INSTALLED BMP'S SHALL REMAIN IN PLACE UNTIL A LATER PHASE.

PHASE 3:  
ANY AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL BE SEEDED IN ORDER TO ESTABLISH A VEGETATIVE COVER UNTIL THE FINAL LANDSCAPING IS INSTALLED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMP'S SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND VEGETATION HAS BEEN ESTABLISHED TO 70% ON AREAS NOT COVERED BY GRAVEL. ONCE VEGETATIVE COVER HAS BEEN ESTABLISHED AT 70% OF THE DISTURBED AREAS, SEDIMENT CONTROL LOG WILL BE REMOVED FROM ANY DIRT STOCKPILE AREAS. THE DIRT STOCKPILES (SP) WILL BE REMOVED AND RE-VEGETATED AS PART OF THIS PHASE.

PHASE 4:  
FINAL CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AT THIS POINT. THE PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

THE SOILS ON THIS SITE ARE PRING COARSE SANDY LOAM (71), 3% TO 8% SLOPES. THE SOIL IS IN HYDROLOGIC SOIL GROUP B, THEREFORE, THERE ARE MODERATE RUNOFF POTENTIALS. THERE ARE NO WETLANDS ON THIS SITE.

THE SITE CONSISTS OF UNDEVELOPED LAND THAT HAS NATURAL VEGETATIVE COVER OF ABOUT 70% CONSISTING OF NATIVE GRASSES BASED ON AERIAL PHOTOS AND A SITE VISIT.

THERE ARE NO POTENTIAL POLLUTANTS EXISTING OR PROPOSED FOR STORAGE ON THIS SITE.

THIS SITE IS WITHIN THE JACKSON CREEK DRAINAGE BASIN. DRAINAGE TYPICALLY FLOWS FROM THE NORTH TOWARDS THE SOUTH ON THIS SITE.

THE PROPERTY OWNER OR OWNERS REPRESENTATIVE IS RESPONSIBLE FOR INSPECTING AND MAINTAINING THE SITE ON A REGULAR BASIS. INITIAL CRITERIA FOR THE OCCURRENCE OF INSPECTIONS IS AS FOLLOWS:

ONCE EVERY 14 DAYS OR  
AFTER ANY PRECIPITATION OR SNOWMELT EVENT THAT SIGNIFICANT ENOUGH TO CAUSE SURFACE EROSION.  
A WRITTEN RECORD OF INSPECTIONS SHALL BE KEPT BY THE OWNER OR OWNERS REPRESENTATIVE AND MADE AVAILABLE TO THE COUNTY UPON REQUEST. THIS WILL CONTINUE UNTIL THE SITE IS STABILIZED AND THE STOCKPILE IS NO LONGER NEEDED.

**GENERAL NOTES**

- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE SITE. THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NON-EXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- THE CONTRACTOR WILL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES, BUILDINGS, FENCES, AND ROADWAYS FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE ABOVE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR.
- AS DETERMINED BY THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL #'S 08041C0545G & 08041C0561G, EFFECTIVE DATES DECEMBER 7, 2018, NO PORTION OF THIS SITE IS LOCATED WITHIN A DESIGNATED 100-YEAR F.E.M.A. FLOODPLAIN.
- NO BATCH PLANTS ARE PROPOSED FOR THIS PROJECT.

**EROSION CONTROL COST OPINION**

|   |           |              |
|---|-----------|--------------|
| 1. 0.92 AC-SEEDING & MULCH @ \$785/AC           | \$        | 722          |
| 2. 1 EA-FUEL SPILL KIT @ \$200.00/EA            | \$        | 200          |
| 3. 1 EA-VEHICLE TRACKING CONTROL @ \$1325.00/EA | \$        | 1,325        |
| 3. 240 LF-SEDIMENT CONTROL LOG @ \$3.00/LF      | \$        | 720          |
| 5. 40% MAINTENANCE AND REPLACEMENT              | \$        | 1,187        |
| <b>TOTAL</b>                                    | <b>\$</b> | <b>5,154</b> |



**AREA**

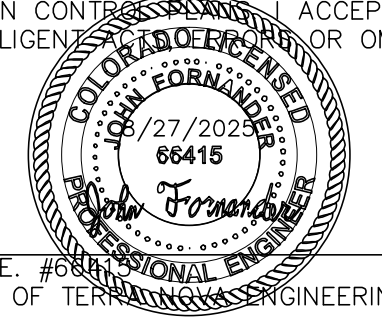
TOTAL AREA TO BE CLEARED, EXCAVATED, GRADED OR DISTURBED IS 0.92± ACRES.

**VOLUME**

EARTHWORK VOLUMES: 1,000± CUBIC YARDS FILL

**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. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENCE OR OMISSIONS ON MY PART IN PREPARING THIS REPORT.



JOHN FORANNDER, P.E., #100000000  
FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

**OWNER'S STATEMENT**

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

OWNER NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

**EL PASO COUNTY APPROVAL**

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 MANUAL VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH ECM 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 DIRECTORS DISCRETION.

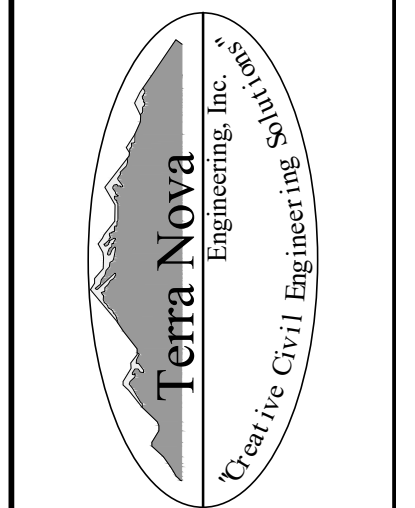
COUNTY ENGINEER / ECM ADMINISTRATOR \_\_\_\_\_ DATE \_\_\_\_\_

**REVISIONS**

| NO. | DESCRIPTION                      | DATE   |
|-----|----------------------------------|--------|
| 1.  | RESIDENCE ADDED, GRADING REVISED | 6/6/26 |
|     |                                  |        |
|     |                                  |        |
|     |                                  |        |

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPLICABLE AGENCIES, THESE DRAWINGS ARE NOT TO BE USED FOR ANY PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR:  
MVEA  
ATTN: DAVE WALDNER  
11140 E. WOODMEN RD  
PEYTON, CO 80831  
(719) 495-2283



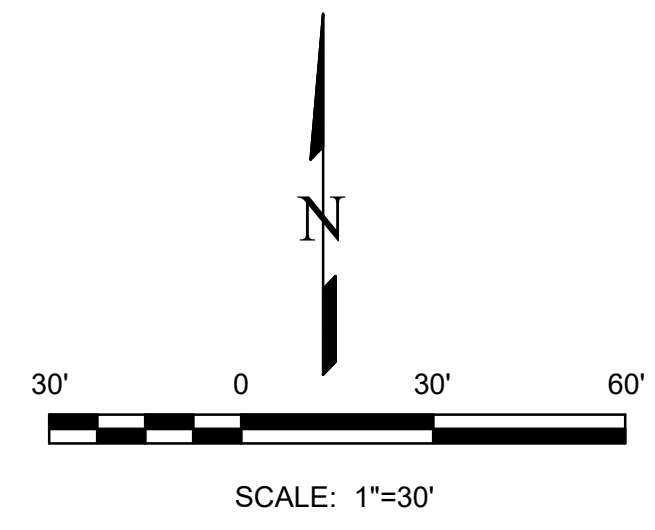
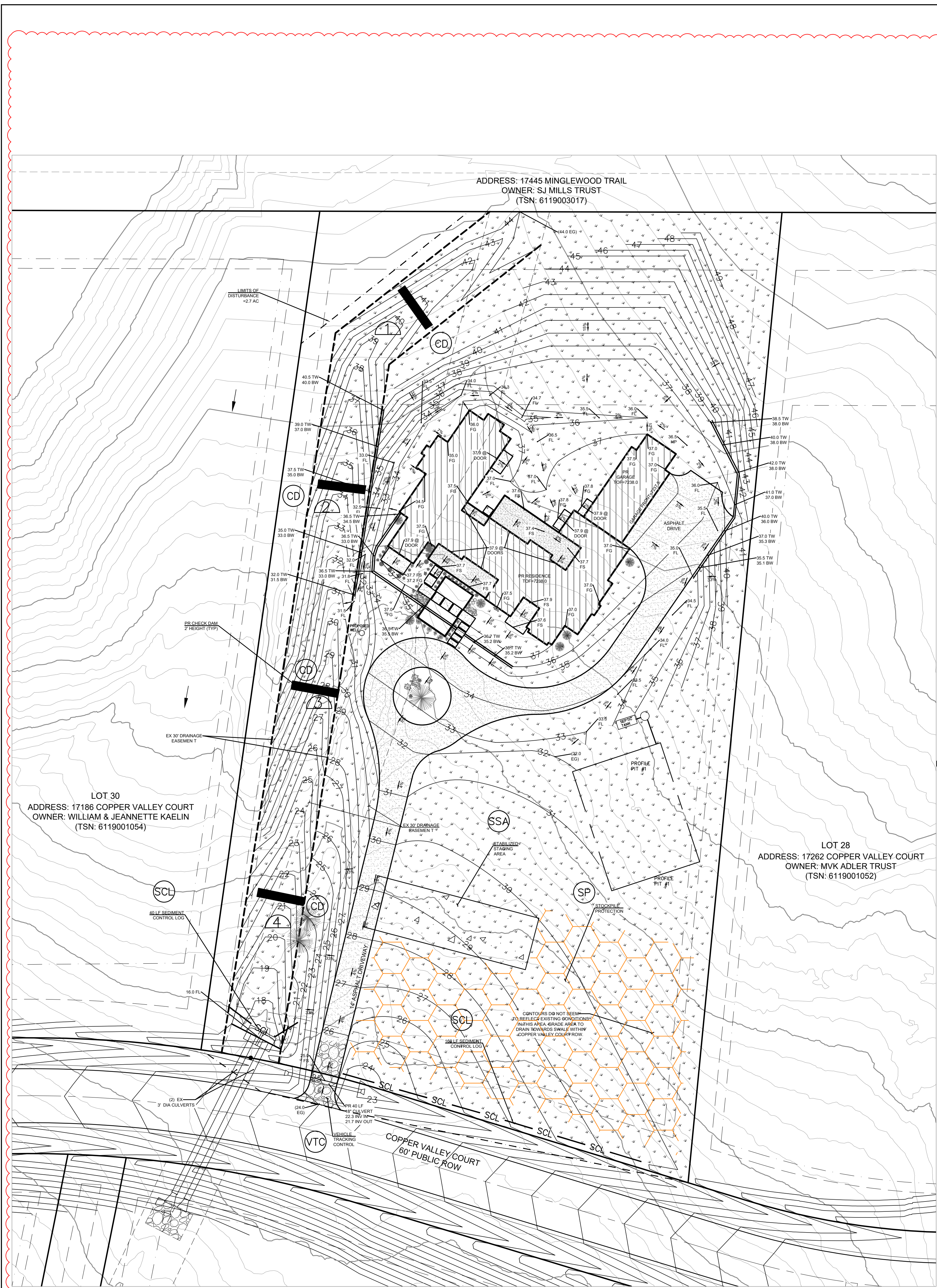
721 S. 23RD STREET  
COLORADO SPRINGS, CO 80904  
OFFICE: 719-635-6422  
FAX: 719-635-6426  
www.tneng.com

17224 COPPER VALLEY COURT

GRADING, EROSION, & SEDIMENT CONTROL PLAN  
COVER SHEET

|             |          |
|-------------|----------|
| DESIGNED BY | JF       |
| DRAWN BY    | JF       |
| CHECKED BY  |          |
| H-SCALE     | AS SHOWN |
| V-SCALE     | NA       |
| JOB NO.     | 2558.00  |
| DATE ISSUED | 8/27/25  |
| SHEET NO.   | 1 OF 4   |

PCD FILE NO. VR2512



**EROSION CONTROL LEGEND**

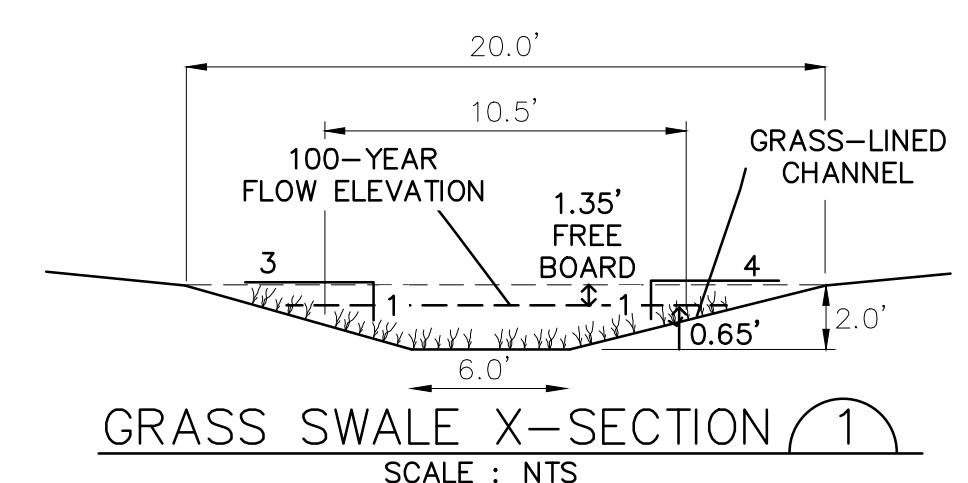
| KEY               | TITLE                                    | SYMBOL |
|-------------------|--|--------|
| FINAL             | PERMANENT SEEDING AND MULCHING (FINAL)   |        |
| INTERIM           | STABILIZED STAGING AREA (INTERIM)        |        |
| INTERIM           | VEHICLE TRACKING CONTROL (INTERIM)       |        |
| INTERIM           | STOCKPILE PROTECTION (INTERIM)           |        |
| INITIAL & INTERIM | SEDIMENT CONTROL LOG (INITIAL & INTERIM) |        |
| FINAL             | ROCK CHECK DAM (FINAL)                   |        |

**LEGEND**

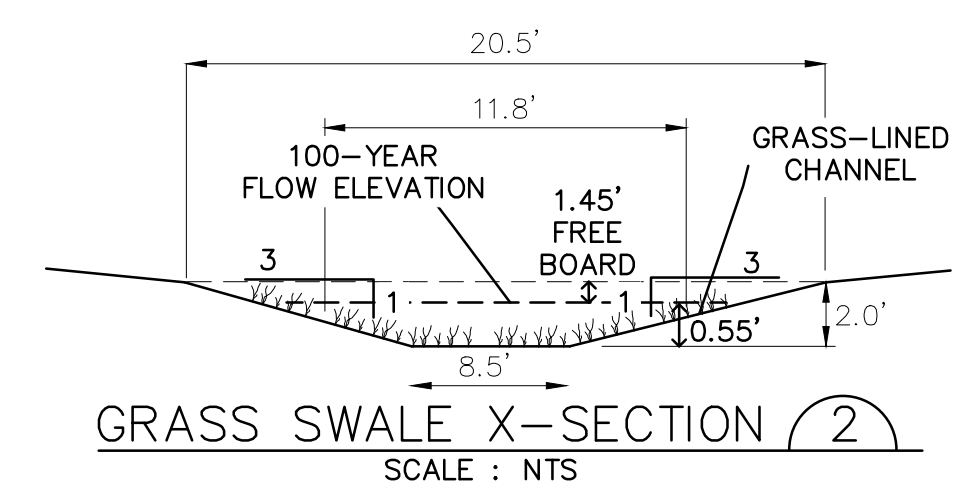
|  |                                    |
|--|------------------------------------|
|  | EXISTING CONTOUR-MAJOR             |
|  | EXISTING CONTOUR-MINOR             |
|  | EXISTING FLOW DIRECTION            |
|  | EXISTING PROPERTY LINE/ROW         |
|  | EXISTING EASEMENT                  |
|  | LIMITS OF DISTURBANCE/CONSTRUCTION |
|  | PROPOSED EASEMENT                  |
|  | PROPOSED CONTOUR-MAJOR             |
|  | PROPOSED CONTOUR-MINOR             |

**GENERAL NOTES**

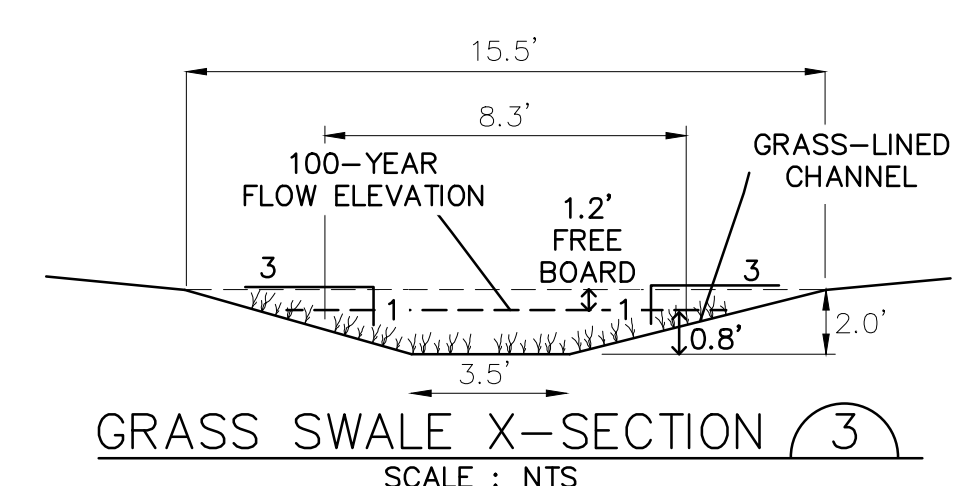
- CONTRACTOR TO MARK UP PLAN SHOWING ACTUAL FIELD INSTALLATION OF EROSION CONTROL BMPs.
- BROADCAST SEEDING SHALL BE PLACED OVER DISTURBED AREAS ONCE THE CONSTRUCTION IS DONE.
- TOTAL LIMITS OF DISTURBANCE ESTIMATED TO BE APPROXIMATELY 0.92 AC.
- WHEN WORK HAS BEEN COMPLETED, CONTRACTOR SHALL RETURN ANY DISTURBED AREAS TO THEIR ORIGINAL GRADES ON AREAS THAT ARE NOT RE-GRADED PER THESE PLANS. USE SURFACE ROUGHENING OR TRACK WHEELING ON SLOPES AND SWALE WITHIN DRAINAGE EASEMENT.
- MAX ALLOWABLE EXCAVATED/STOCKPILED SLOPE IS 2:1.
- VEGETATIVE COVER IS APPROXIMATELY 70% CONSISTING OF NATIVE GRASSES.



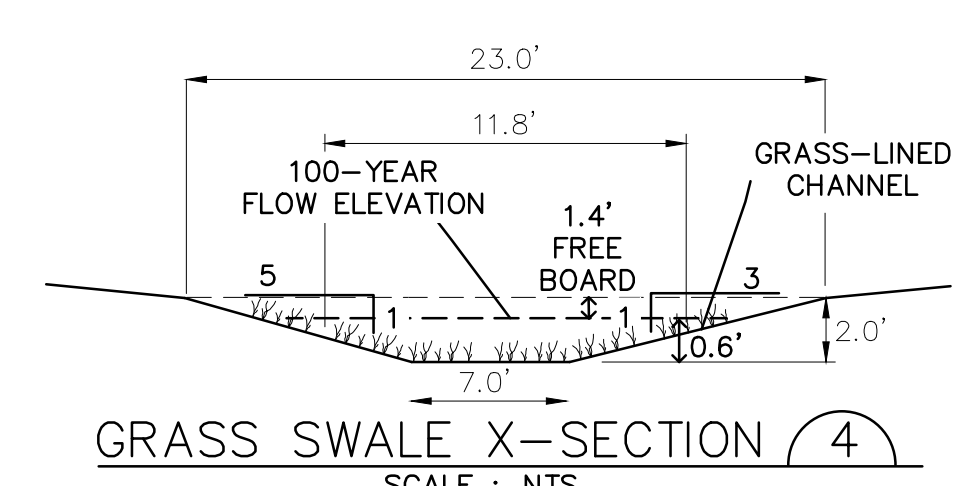
Q (100-YEAR) = 36.0 CFS  
 SLOPE = 4.0%  
 n VALUE = 0.030  
 DEPTH = 0.65'  
 VELOCITY = 6.2 FT/S



Q (100-YEAR) = 36.0 CFS  
 SLOPE = 4.0%  
 n VALUE = 0.030  
 DEPTH = 0.55'  
 VELOCITY = 6.0 FT/S

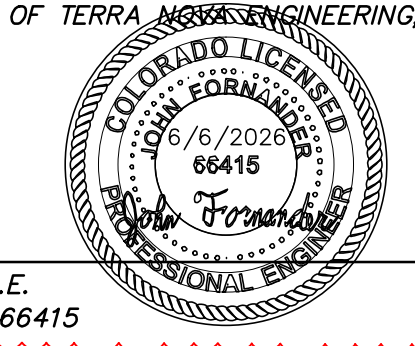


Q (100-YEAR) = 36.0 CFS  
 SLOPE = 4.0%  
 n VALUE = 0.030  
 DEPTH = 0.8'  
 VELOCITY = 6.7 FT/S



Q (100-YEAR) = 36.0 CFS  
 SLOPE = 4.0%  
 n VALUE = 0.030  
 DEPTH = 0.6'  
 VELOCITY = 6.0 FT/S

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.



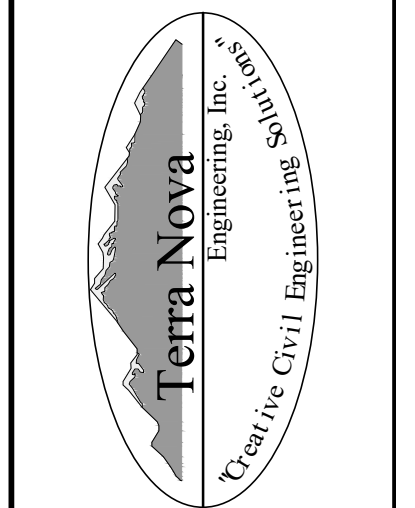
JOHN FORWANDER, P.E.  
 COLORADO P.E. NO. 66415

**REVISIONS**

| NO. | DESCRIPTION                      | DATE   |
|-----|----------------------------------|--------|
| 1.  | RESIDENCE ADDED, GRADING REVISED | 6/6/26 |

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, INCORPORATE ANY CHANGES ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR:  
**ALL ABOUT HOME DESIGN, LLC**  
 ATTN: SCOTT MAYNES  
 13530 NORTHGATE ESTATES DR.  
 COLORADO SPRINGS, CO 80921  
 (719) 559-1220



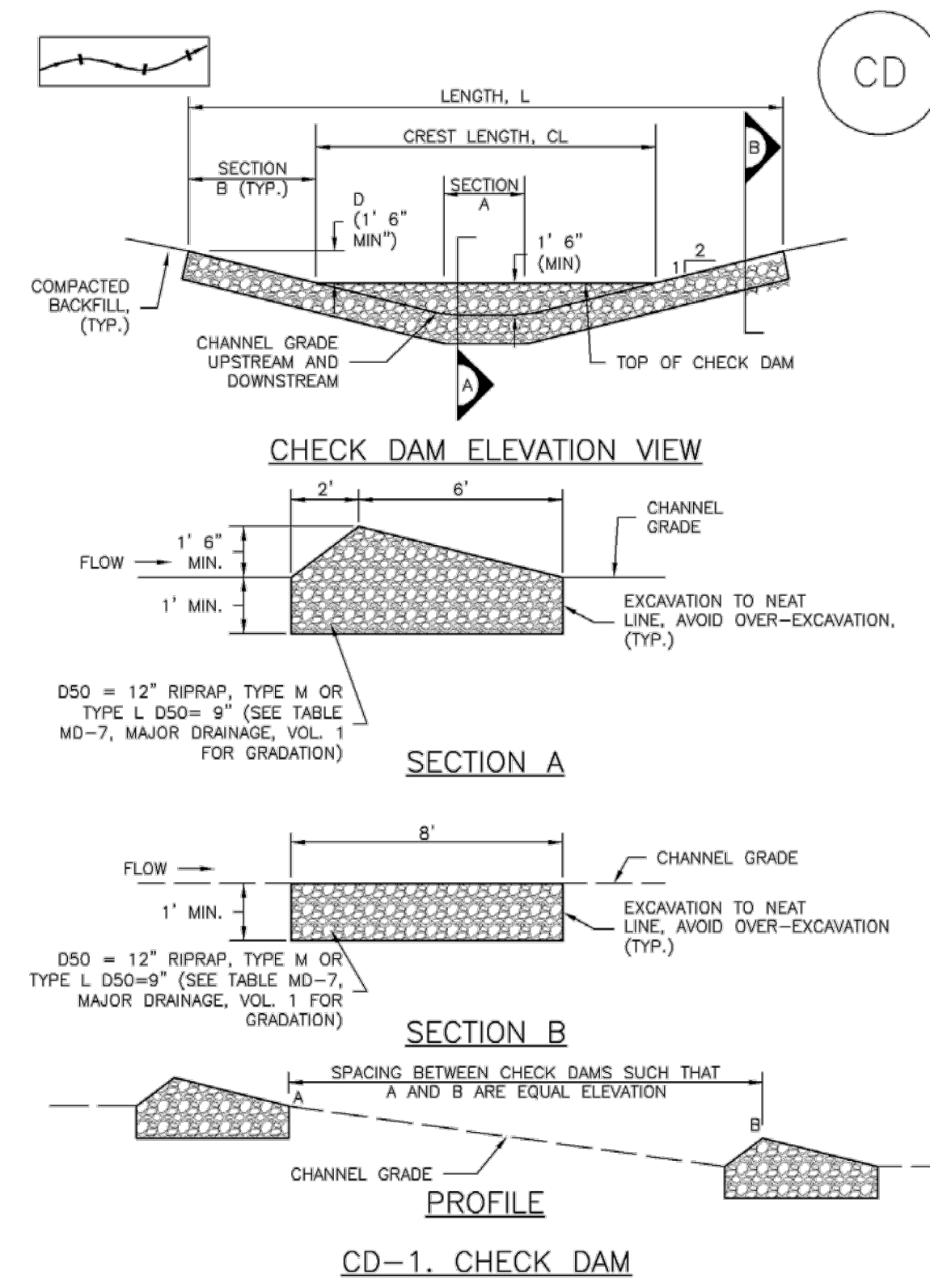
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**17224 COPPER VALLEY COURT**  
 GRADING, EROSION, & SEDIMENT CONTROL PLAN

|             |          |
|-------------|----------|
| DESIGNED BY | JF       |
| DRAWN BY    | JF       |
| CHECKED BY  |          |
| H-SCALE     | AS SHOWN |
| V-SCALE     | NA       |
| JOB NO.     | 2558.00  |
| DATE ISSUED | 11/18/25 |
| SHEET NO.   | 2 OF 4   |

**Check Dams (CD)**

**EC-12**



November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 CD-3

**EC-12**

**Check Dams (CD)**

**CHECK DAM INSTALLATION NOTES**

- SEE PLAN VIEW FOR:
  - LOCATION OF CHECK DAMS
  - CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM).
  - LENGTH (L), CREST LENGTH (CL), AND DEPTH (D).
- CHECK DAMS INDICATED ON INITIAL SWMP SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND DISTURBING ACTIVITIES.
- RIPRAP UTILIZED FOR CHECK DAMS SHOULD BE OF APPROPRIATE SIZE FOR THE APPLICATION. TYPICAL TYPES OF RIPRAP USED FOR CHECK DAMS ARE TYPE M (D50 12") OR TYPE L (D50 9").
- RIPRAP PAD SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1'.
- THE ENDS OF THE CHECK DAM SHALL BE A MINIMUM OF 1' 6" HIGHER THAN THE CENTER OF THE CHECK DAM.

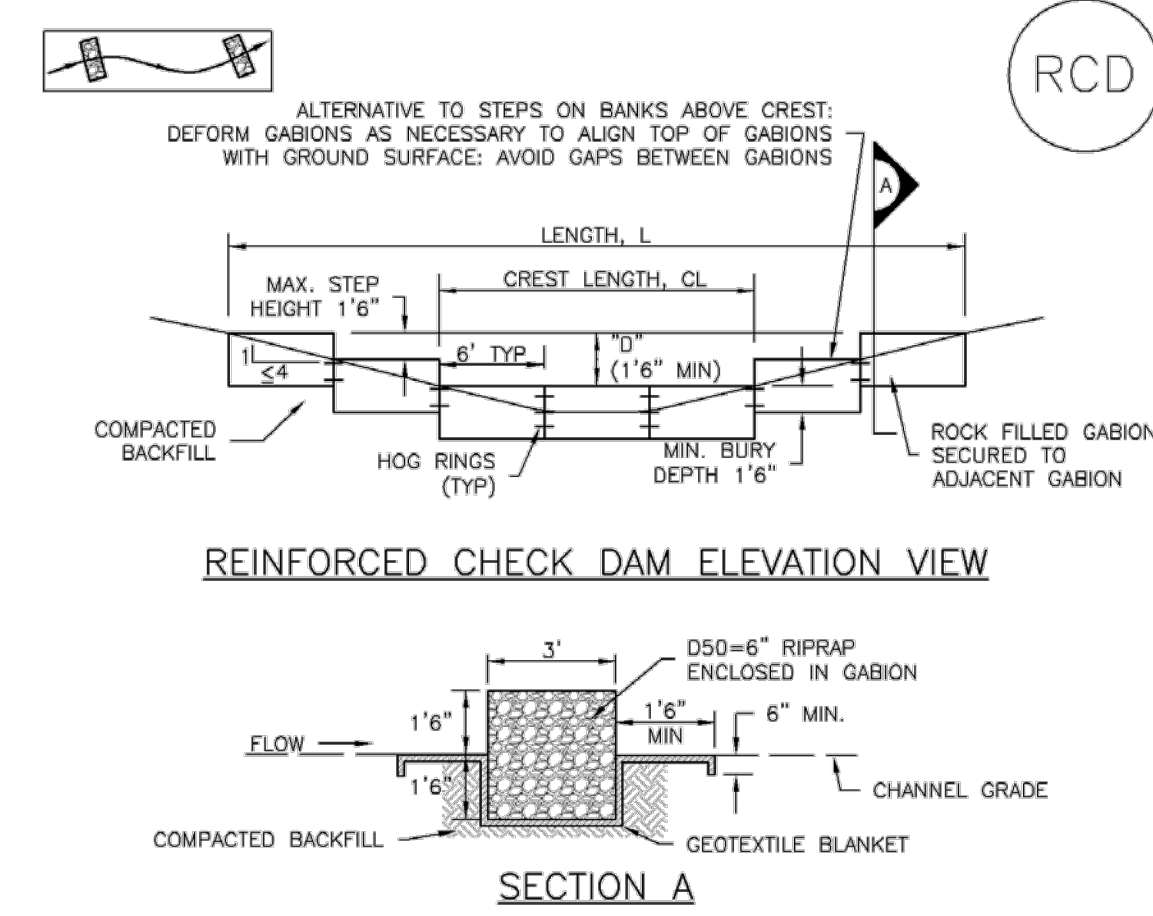
**CHECK DAM MAINTENANCE NOTES**

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
  - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
  - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
  - SEDIMENT ACCUMULATED UPSTREAM OF THE CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 1/2 OF THE HEIGHT OF THE CREST.
  - CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
  - WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACKFILL. DISTURBED AREA SHALL BE SEEDED AND MULCHED AND COVERED WITH GEOTEXTILE OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.
- (DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)
- 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.

CD-4 Urban Drainage and Flood Control District November 2010 Urban Storm Drainage Criteria Manual Volume 3

**Check Dams (CD)**

**EC-12**



**REINFORCED CHECK DAM INSTALLATION NOTES**

- SEE PLAN VIEW FOR:
  - LOCATIONS OF CHECK DAMS
  - CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM).
  - LENGTH (L), CREST LENGTH (CL), AND DEPTH (D).
- CHECK DAMS INDICATED ON THE SWMP SHALL BE INSTALLED PRIOR TO AN UPSTREAM LAND-DISTURBING ACTIVITIES.
- REINFORCED CHECK DAMS, GABIONS SHALL HAVE GALVANIZED TWISTED WIRE NETTING WITH A MAXIMUM OPENING DIMENSION OF 4 1/2" AND A MINIMUM WIRE THICKNESS OF 0.10". WIRE "HOG RINGS" AT 4" SPACING OR OTHER APPROVED MEANS SHALL BE USED AT ALL GABION SEAMS AND TO SECURE THE GABION TO THE ADJACENT SECTION.
- THE CHECK DAM SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1' 6".
- GEOTEXTILE BLANKET SHALL BE PLACED IN THE REINFORCED CHECK DAM TRENCH EXTENDING A MINIMUM OF 1' 6" ON BOTH THE UPSTREAM AND DOWNSTREAM SIDES OF THE REINFORCED CHECK DAM.

**CD-2. REINFORCED CHECK DAM**

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**EC-12**

**Check Dams (CD)**

**REINFORCED CHECK DAM MAINTENANCE NOTES**

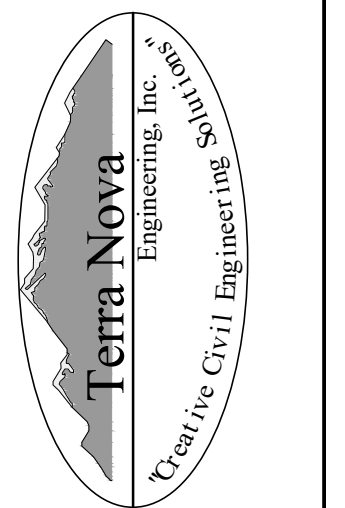
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
  - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
  - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
  - SEDIMENT ACCUMULATED UPSTREAM OF REINFORCED CHECK DAMS SHALL BE REMOVED AS NEEDED TO MAINTAIN THE EFFECTIVENESS OF BMP. TYPICALLY WHEN THE UPSTREAM SEDIMENT DEPTH IS WITHIN 1/2 OF THE HEIGHT OF THE CREST.
  - REPAIR OR REPLACE REINFORCED CHECK DAMS WHEN THERE ARE SIGNS OF DAMAGE SUCH AS HOLES IN THE GABION OR UNDERCUTTING.
  - REINFORCED CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
  - WHEN REINFORCED CHECK DAMS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, AND COVERED WITH A GEOTEXTILE BLANKET, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.
- (DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)
- 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.

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| REVISIONS | NO.                              | DESCRIPTION | DATE |
|-----------|----------------------------------|-------------|------|
| 1.        | RESIDENCE ADDED, GRADING REVISED | 6/6/26      |      |

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPLICABLE REMEDIATION AGENCIES, THIS DRAWING IS NOT TO BE USED FOR ANY PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

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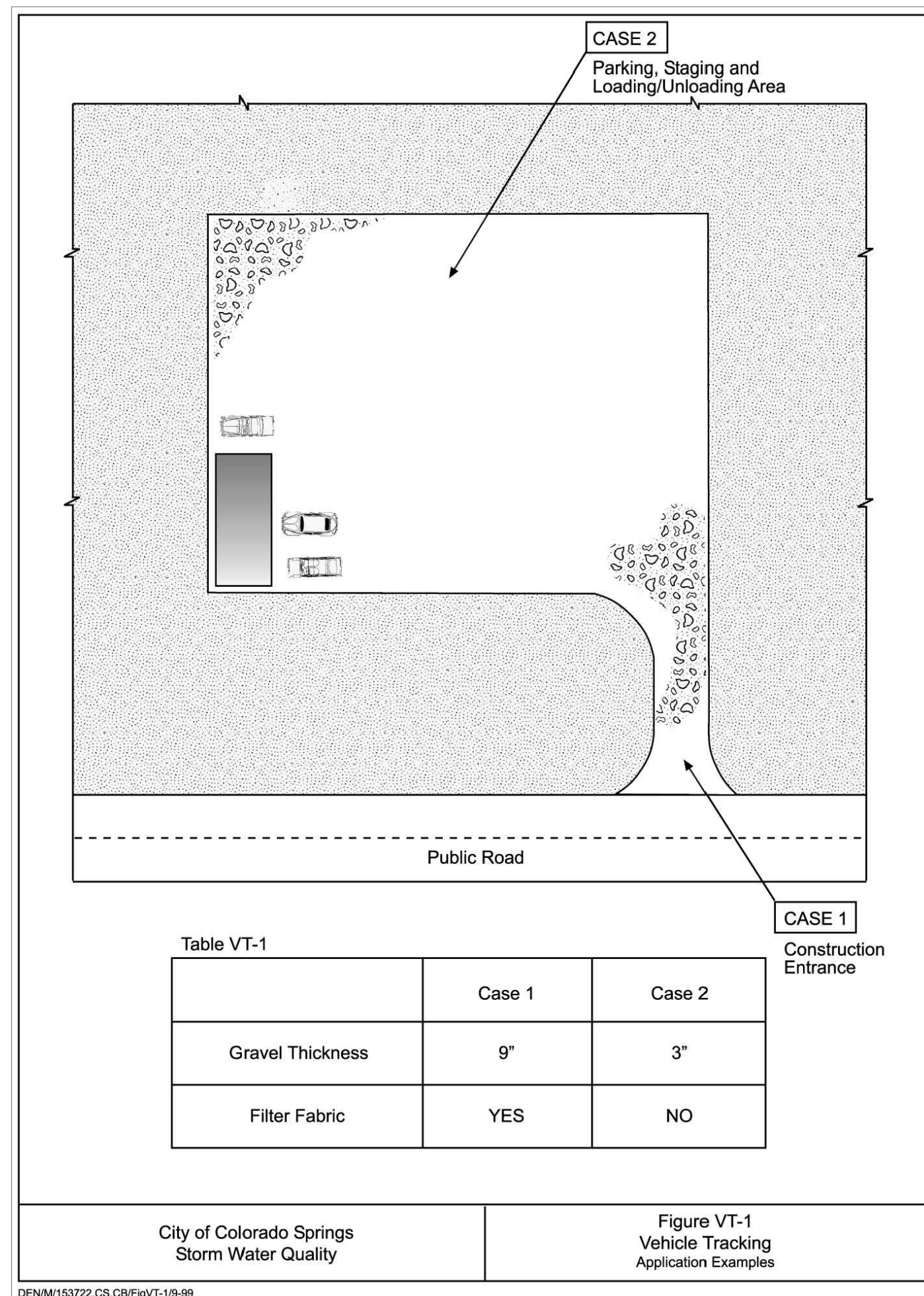


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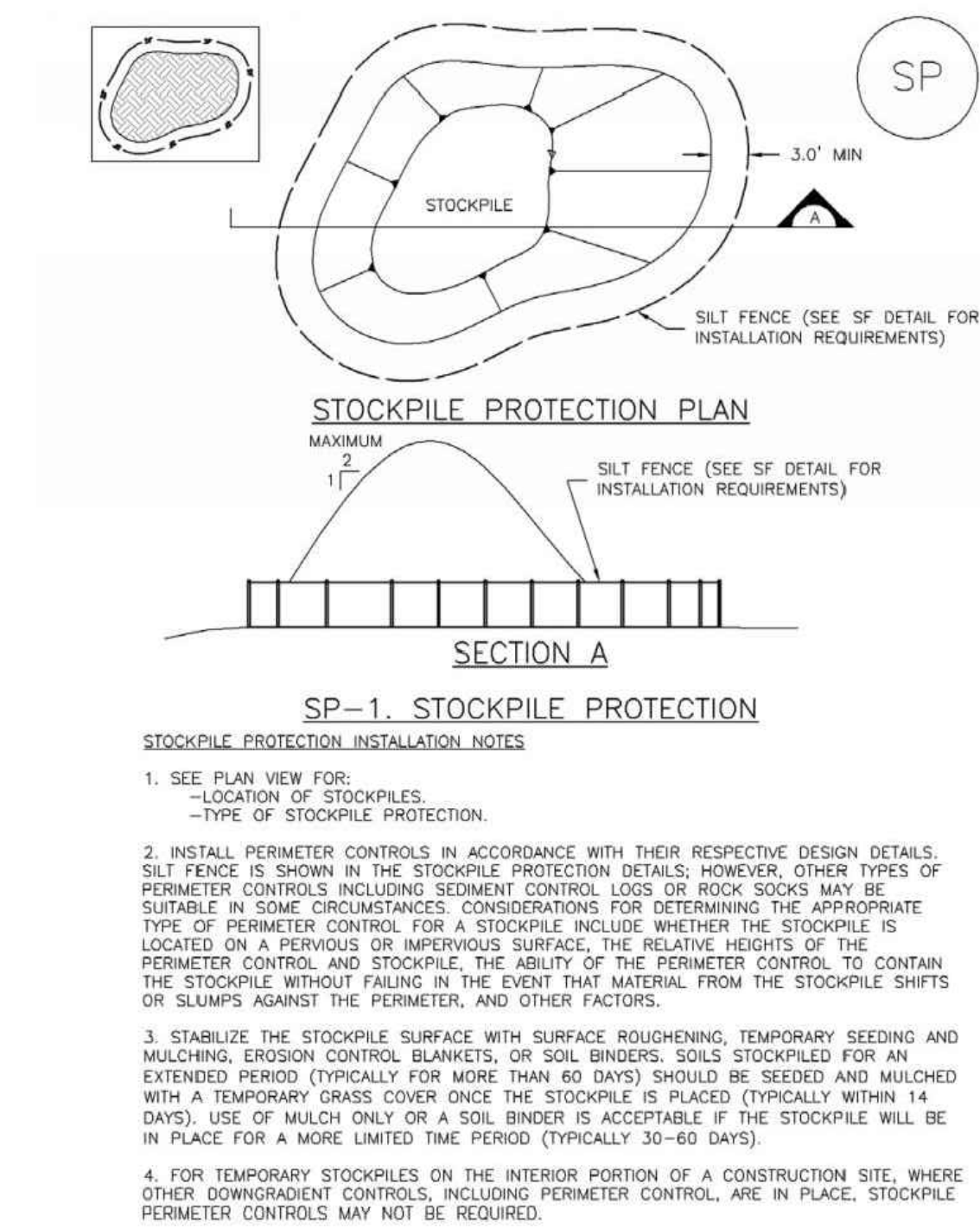
**17224 COPPER VALLEY COURT**

DETAIL SHEET

|             |          |
|-------------|----------|
| DESIGNED BY | JF       |
| DRAWN BY    | JF       |
| CHECKED BY  |          |
| H-SCALE     | AS SHOWN |
| V-SCALE     | NA       |
| JOB NO.     | 2558.00  |
| DATE ISSUED | 10/15/25 |
| SHEET NO.   | 3 OF 4   |



### Stockpile Management (SP) MM-2



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### Stockpile Management (SM) MM-2

**STOCKPILE PROTECTION MAINTENANCE NOTES**

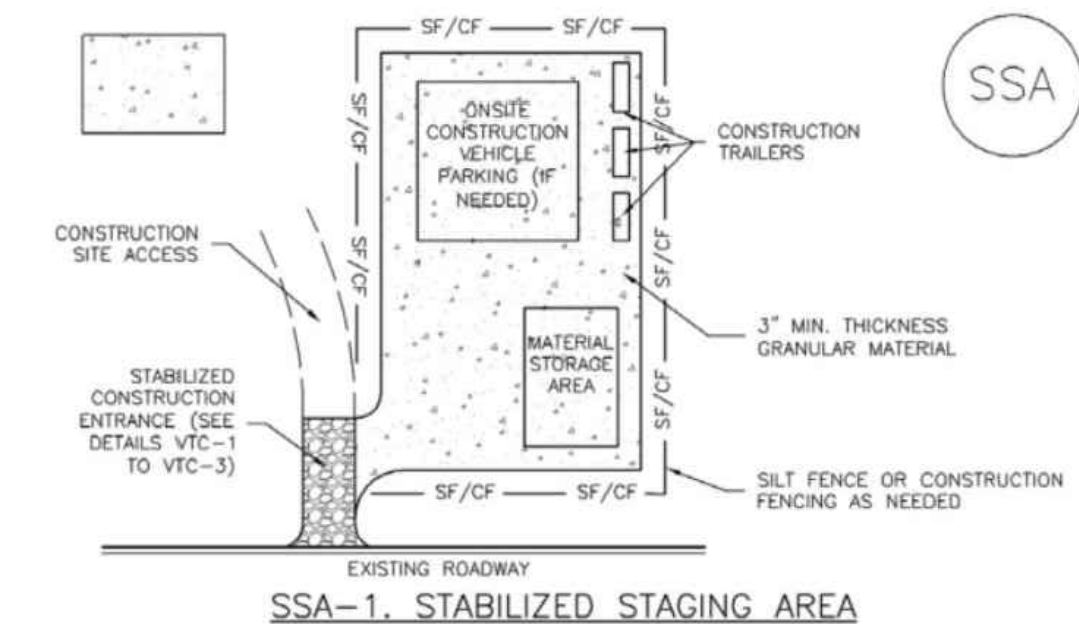
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.
- STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.

(DETAILS ADAPTED FROM PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

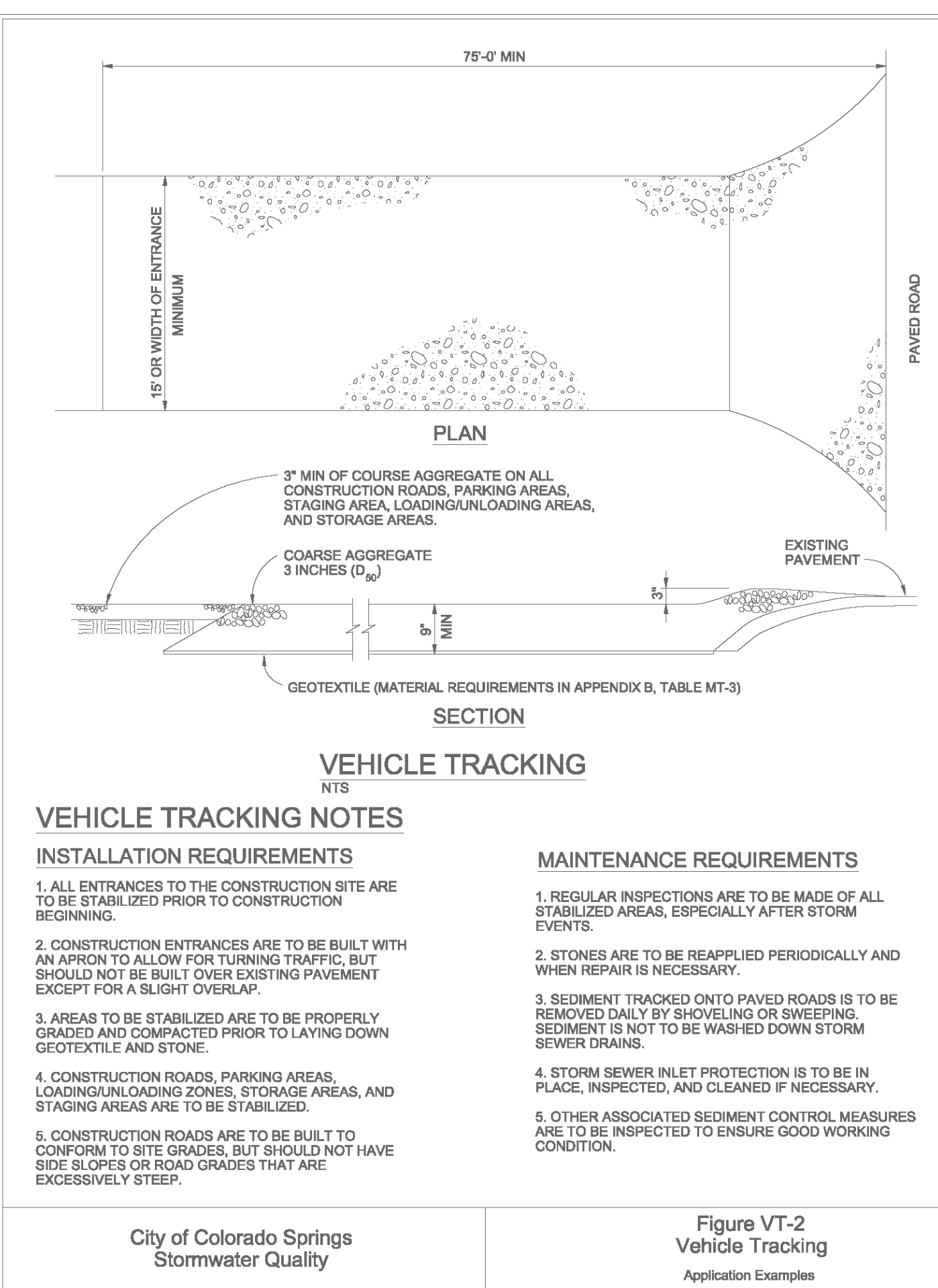
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SP-4 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 November 2010

### Stabilized Staging Area (SSA) SM-6



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### Chapter 14 Revegetation

or irrigation to wet and settle the seed bed. Firming of the seedbed following seeding will improve results during dry or warm seeding times.

**Table 14-9. Recommended Seed Mix for High Water Table Conditions<sup>1</sup>**

| Common Name (Variety)       | Scientific Name             | Growth Season | Growth Form | Seeds/Lb     | Lbs PLS/Acre Drilled | Lbs PLS/Acre Broadcast or Hydroseeded |
|-----------------------------|-----------------------------|---------------|-------------|--------------|----------------------|---------------------------------------|
| Redtop <sup>2</sup>         | <i>Agrostis alba</i>        | Warm          | Sod         | 5,000,000    | 0.1                  | 0.2                                   |
| Switchgrass (Pathfinder)    | <i>Panicum virgatum</i>     | Warm          | Sod/ Bunch  | 389,000      | 2.2                  | 4.4                                   |
| Western wheatgrass (Arriba) | <i>Pascopyrum smithii</i>   | Cool          | Sod         | 110,000      | 7.9                  | 15.8                                  |
| Indian saltgrass            | <i>Distichlis spicata</i>   | Warm          | Sod         | 520,000      | 1.0                  | 2.0                                   |
| Woolly sedge                | <i>Carex lanuginosa</i>     | Cool          | Sod         | 400,000      | 0.1                  | 0.2                                   |
| Baltic rush                 | <i>Juncus balticus</i>      | Cool          | Sod         | 109,300,000  | 0.1                  | 0.2                                   |
| Prairie cordgrass           | <i>Spartina pectinata</i>   | Cool          | Sod         | 110,000      | 1.0                  | 2.0                                   |
| Annual rye                  | <i>Lolium multiflorum</i>   | Cool          | Cover crop  | 227,000      | 10.0                 | 20.0                                  |
|                             |                             |               |             | <b>TOTAL</b> | <b>22.4</b>          | <b>44.8</b>                           |
| <b>Wildflowers</b>          |                             |               |             |              |                      |                                       |
| Nuttall's sunflower         | <i>Helianthus nuttallii</i> | ---           | ---         | 250,000      | 0.10                 | 0.20                                  |
| Wild bergamot               | <i>Monarda fistulosa</i>    | ---           | ---         | 1,450,000    | 0.12                 | 0.24                                  |
| Yarrow                      | <i>Achillea millefolium</i> | ---           | ---         | 2,770,000    | 0.06                 | 0.12                                  |
| Blue vervain                | <i>Verbena hastata</i>      | ---           | ---         | ---          | 0.12                 | 0.24                                  |
|                             |                             |               |             | <b>TOTAL</b> | <b>0.40</b>          | <b>0.80</b>                           |

<sup>1</sup>For portions of facilities located near or on the bottom or where wet soil conditions occur. Planting of potted nursery stock wetland plants 2-foot on-center is recommended for sites with wetland hydrology.

<sup>2</sup>Non-native.

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### Chapter 14 Revegetation

**Table 14-10. Recommended Seed Mix for Transition Areas<sup>1</sup>**

| Common Name (Variety)        | Scientific Name              | Growth Season | Growth Form | Seeds/Lb     | Lbs PLS/Acre Drilled | Lbs PLS/Acre Broadcast or Hydroseeded |
|------------------------------|------------------------------|---------------|-------------|--------------|----------------------|---------------------------------------|
| Sheep fescue (Durar)         | <i>Festuca ovina</i>         | Cool          | Bunch       | 680,000      | 1.3                  | 2.6                                   |
| Western wheatgrass (Arriba)  | <i>Pascopyrum smithii</i>    | Cool          | Sod         | 110,000      | 7.9                  | 15.8                                  |
| Alkali sacaton               | <i>Spolobolus airoides</i>   | Warm          | Bunch       | 1,758,000    | 0.5                  | 1.0                                   |
| Slender wheatgrass           | <i>Elymus trichycaulis</i>   | Cool          | Bunch       | 159,000      | 5.5                  | 11.0                                  |
| Canadian bluegrass (Ruebens) | <i>Poa compressa</i>         | Cool          | Sod         | 2,500,000    | 0.3                  | 0.6                                   |
| Switchgrass (Pathfinder)     | <i>Panicum virgatum</i>      | Warm          | Sod/ Bunch  | 389,000      | 1.3                  | 2.6                                   |
| Annual rye                   | <i>Lolium multiflorum</i>    | Cool          | Cover crop  | 227,000      | 10.0                 | 20.0                                  |
|                              |                              |               |             | <b>TOTAL</b> | <b>26.8</b>          | <b>53.6</b>                           |
| <b>Wildflowers</b>           |                              |               |             |              |                      |                                       |
| Blanket flower               | <i>Faillardia aristata</i>   | ---           | ---         | 132,000      | 0.25                 | 0.50                                  |
| Prairie coneflower           | <i>Ratibida columnaris</i>   | ---           | ---         | 1,230,000    | 0.20                 | 0.40                                  |
| Purple prairie clover        | <i>Petalostemum purpurea</i> | ---           | ---         | 210,000      | 0.20                 | 0.40                                  |
| Gayfeather                   | <i>Liatris punctata</i>      | ---           | ---         | 138,000      | 0.06                 | 0.12                                  |
| Flax                         | <i>Linum lewisii</i>         | ---           | ---         | 293,000      | 0.20                 | 0.40                                  |
| Penstemon                    | <i>Penstemon strictus</i>    | ---           | ---         | 592,000      | 0.20                 | 0.40                                  |
| Yarrow                       | <i>Achillea millefolium</i>  | ---           | ---         | 2,770,000    | 0.03                 | 0.06                                  |
|                              |                              |               |             | <b>TOTAL</b> | <b>1.14</b>          | <b>2.28</b>                           |

<sup>1</sup>For side slopes or between wet and dry areas.  
<sup>2</sup>Substitute 1.7 lbs PLS/acre of inland saltgrass (*Distichlis spicata*) in salty soils.

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### SM-6 Stabilized Staging Area (SSA)

**STABILIZED STAGING AREA MAINTENANCE NOTES**

- STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.
- THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDING AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

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.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

SSA-4 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 November 2010

REVISIONS

| NO. | DESCRIPTION                     | DATE   |
|-----|---------------------------------|--------|
| 1.  | REVISION ADDED, GRADING REVISED | 6/6/26 |

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, INCORPORATING THEIR USE FOR THE PROJECT IS NOT APPROVED BY THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

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DRAWN BY JF  
CHECKED BY  
H-SCALE AS SHOWN  
V-SCALE NA  
JOB NO. 2558.00  
DATE ISSUED 10/15/25  
SHEET NO. 4 OF 4