

VICINITY MAP

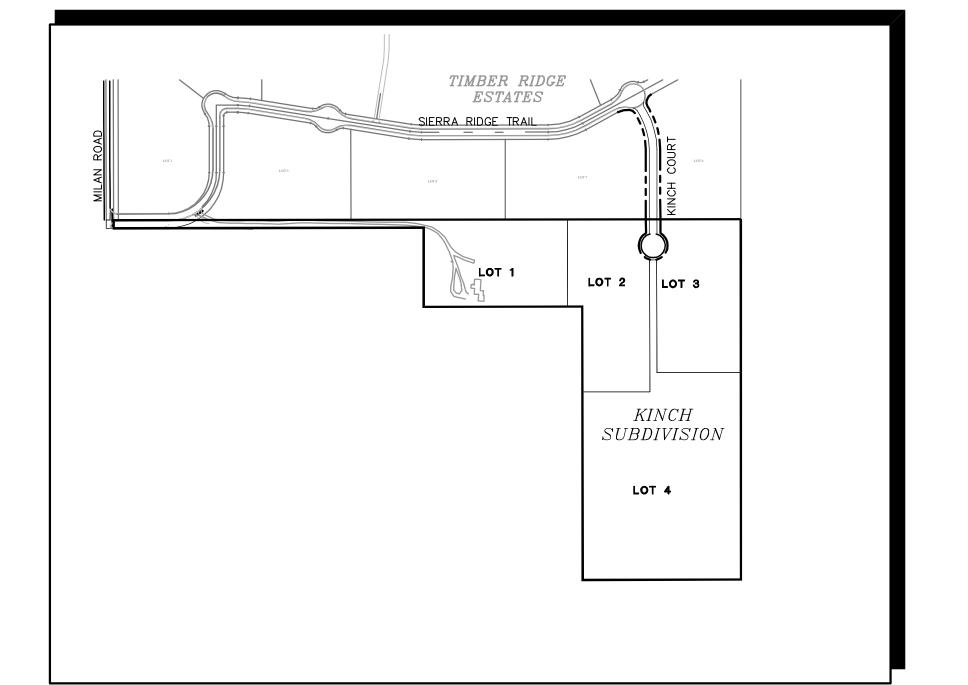
KINCH SUBDIVISION Grading & Erosion Control Plans El Paso County, Colorado

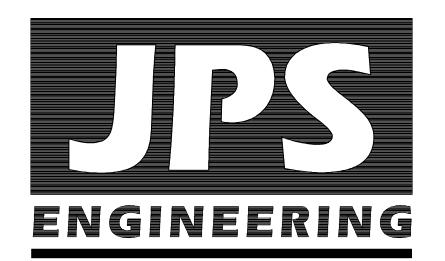
PREPARED FOR:

PAUL AND AMY KINCH

10805 MILAM ROAD Colorado Springs, CO 80908

PREPARED BY:





19 East Willamette Avenue Colorado Springs, Colorado 80903

> JULY 2022 PCD FILING NO. MS-224

> > FIRE DEPARTMENT:

revise to match GEC Checklist item "hh"



NOTE: 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 TO BE ACCEPTABLE.

BASIS OF BEARING:

ALL BEARINGS USED HEREIN ARE BASED ON AN ASSUMED BEARING OF S00°09'37"E, A DISTANCE OF 2644.09 FEET BETWEEN A REBAR AND 2-1/2" ALUMINUM CAP STAMPED "HANNIGAN AND ASSOC. PLS 25629" AT THE WEST ONE-QUARTER CORNER OF SECTION 24, TOWNSHIP 12 SOUTH RANGE 66 WEST AND A REBAR AND 3-1/4" ALUMINUM CAP STAMPED "JR ENG. LTD. 10377" AT THE SOUTHWEST CORNER OF SAID SECTION 24.

BENCHMARK:

CONTROL POINTS AS SHOWN HEREON. ELEVATIONS ARE BASED UPON CITY OF COLORADO SPRINGS VERTICAL DATUM. (MONUMENT=F_65)

AGENCIES/CONTACTS

LOCAL ROADS

& DRAINAGE:

EL PASO COUNTY DSD

(719) 520-6300

2880 INTERNATIONAL CIRCLE

COLORADO SPRINGS, CO 80910

DEVELOPER: PAUL AND AMY KINCH GAS DEPARTMENT: BLACK HILLS ENERGY 10805 MILAM ROAD MR. GEORGE PETERSON COLORADO SPRINGS, CO 80908 (719) 393-6625 ELECTRIC DEPARTMENT: MOUNTAIN VIEW ELECTRIC ASSOCIATION 11140 E. WOODMEN ROAD CIVIL ENGINEER: JPS ENGINEERING, INC. COLORADO SPRINGS, CO 80908 19 E. WILLAMETTE AVENUE MR. DAVE WALDNER COLORADO SPRINGS, CO 80903 (719) 495-2283 MR. JOHN P. SCHWAB, P.E. (719) 477-9429 TELEPHONE COMPANY: QWEST COMMUNICATIONS (LOCATORS) (800) 922-1987

A.T. & T. (LOCATORS) (719) 635-3674

BLACK FOREST FIRE DISTRICT

FIRE MARSHAL (719) 495-4300 SHEET INDEX

GEC TITLE SHEET

GRADING & EROSION CONTROL PLAN EROSION CONTROL NOTES & DETAILS

DESIGN ENGINEER'S STATEMENT:

OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

JOHN P. SCHWAB, P.E. #29891	DATE

OWNER/DEVELOPER'S STATEMENT:

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN AND ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

PAUL KINCH 10805 MILAM ROAD COLORADO SPRINGS, COLORADO 80908

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 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. 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 DEVELOPEMENT DIRECTORS DISCRETION.

COUNTY ENGINEER / ECM ADMINISTRATOR

DATE

PCD FILE NO. MS-224

Colorado Springs, CO

FAX: 719-471-0766 www.jpsengr.com

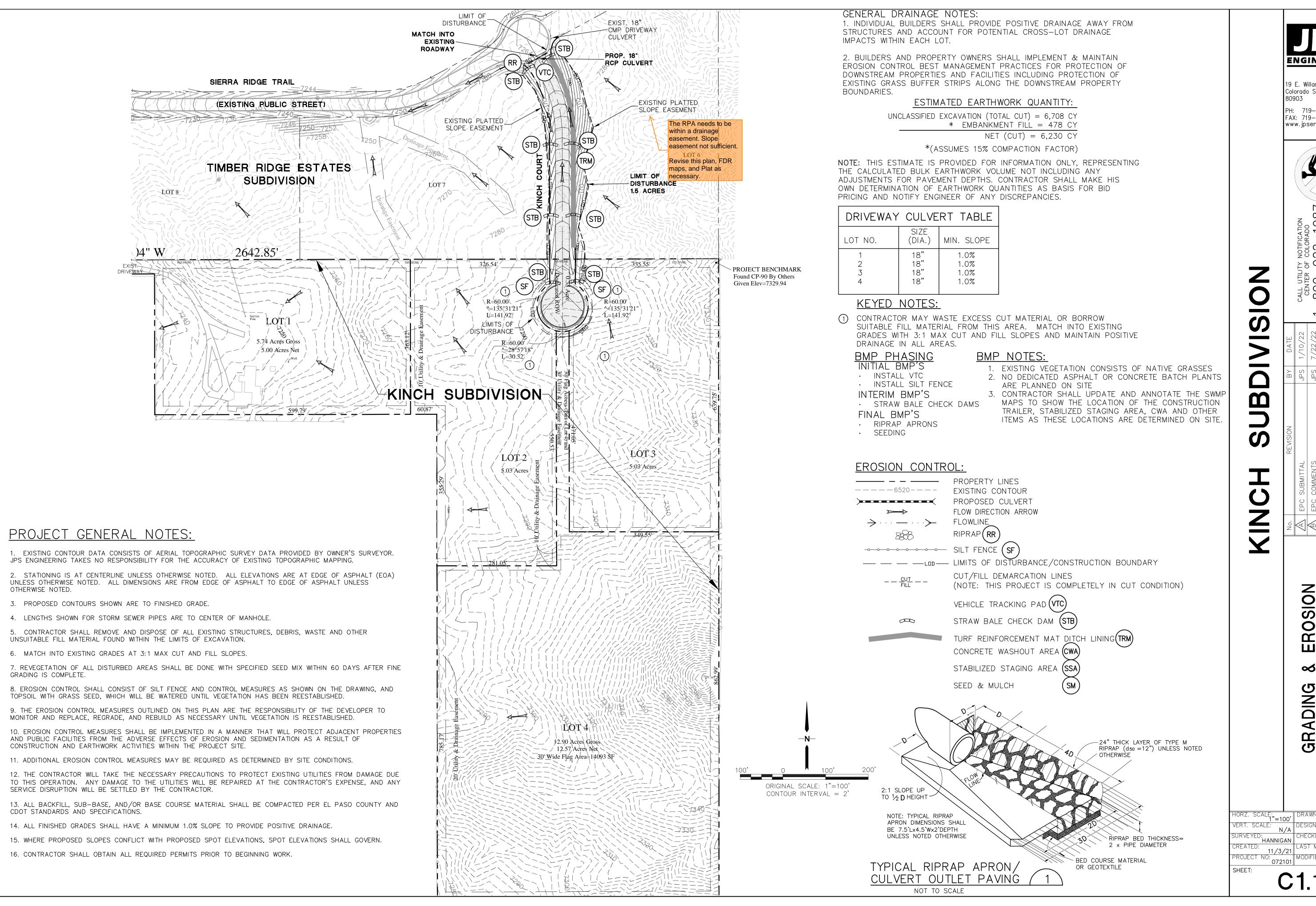
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HORZ. SCALE: NA DRAWN: VERT. SCALE: DESIGNED: [^]HANNIGAN 11/3/21 NO: 072101

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19 E. Willamette Ave. Colorado Springs, CO

PH: 719-477-9429 FAX: 719-471-0766 www.jpsengr.com



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HORZ. SCALE: DRAWN:

STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS:

REVISED 7/02/19

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

A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) 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.

O. 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

I2. 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.

3. 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.

4. 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.

15. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1 16. 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

7. 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

8. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.

19. 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.

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 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.

22. BULK STORAGE OF ALLOWED PETROLEUM PRODÚCTS 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.

23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.

24. 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.

25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.

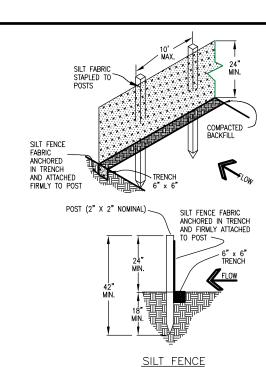
26. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES. 27. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO

MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND. 28. THE SOILS REPORT FOR THIS SITE ("SOILS AND GEOLOGY STUDY, 10805 MILAM ROAD" BY RMG ENGINEERS, DATED 2/4/21) SHALL BE CONSIDERED A PART OF THESE PLANS.

29. 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

NOTWITHSTANDING ANY DETAILS, NOTES OR PLANS SHOWN ON THESE DRAWINGS, ALL EROSION CONTROL DESIGNS AND INSTALLATIONS SHALL CONFORM TO EL PASO COUNTY STANDARDS AND POLICIES UNLESS OTHERWISE APPROVED IN WRITING.



SILT FENCE NOTES INSTALLATION REQUIREMENTS SILT FENCES SHALL BE INSTALLED PRIOR TO ANY LAND TURBING ACTIVITIES. WHEN JOINTS ARE NECESSARY, SILT FENCE GEOTEXTILE

SHALL BE SPLICED TOGE AND SECURELY SEALED. METAL POSTS SHALL BE "STUDDED TEE" OR "U" TYPE TH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT. DOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS COTION DIMENSION OF 2 INCHES. 4. THE FILTER MATERIAL SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE TIES, OR TO WOOD POSTS WITH 3/4" LONG #9 HEAVY—DUTY STAPLES. THE SILT FENCE GEOTEXTILE SHALL NOT BE STAPLED TO EXISTING TREES.

WHILE NOT REQUIRED, WIRE MESH FENCE MAY BE USED

STS USING HEAVY-DUTY WIRE STAPLES AT LEAST 3/4" NG, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND

City of Colorado Springs

Stormwater Quality

INSTALLATION REQUIREMENTS

STRAW BALE BARRIERS SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

3. BALES ARE TO BE PLACED IN A SINGLE ROW WITH THE END OF THE BALES TIGHTLY ABUTTING ONE ANOTHER.

5. STAKES ARE TO BE A MINIMUM OF 42 INCHES

"U" TYPE WITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT. WOOD STAKES SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2 INCHES.

6. BALES ARE TO BE BOUND WITH EITHER WIRE OR STRING AND ORIENTED SUCH THAT THE BINDINGS

ARE AROUND THE SIDES AND NOT ALONG THE TOPS AND BOTTOMS OF THE BALE.

8. END BALES ARE TO EXTEND UPSLOPE SO THE TRAPPED RUNOFF CANNOT FLOW AROUND THE ENDS OF THE BARRIER.

City of Colorado Springs

Stormwater Quality

Concrete Washout Area (CWA)

8 X 8 MIN.

SECTION A

WATERBODY, DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. SITE CONSTRAINTS MAKE THIS INFERSIBLE, OR IF HIGHLY PERMEABLE SOLS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERIMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES LISING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE ORGOUND STORAGE ARE SHOULD BE USED.

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1

SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

Urban Drainage and Flood Control Distric

Urban Storm Drainage Criteria Manual Volume 3

CWA INSTALLATION NOTES

STRAW BALE BARRIER

STRAW BALE BARRIER NOTES

SUPPORT THE GEOTEXTILE. WIRE FENCE SHALL BE ASTENED SECURELY TO THE UPSLOPE SIDE OF THE

I. CONTRACTOR SHALL INSPECT SILT FENCES
IMMEDIATELY AFTER EACH RAINFALL, AT LEAST
DAILY DURING PROLONGED RAINFALL, AND
WEEKLY DURING PERIODS OF NO RAINFALL.
DAMAGED, COLLAPSED, UNENTRENCHED OR
INEFFECTIVE SILT FENCES SHALL BE PROMPTLY
REPAIRED OR REPLACED. 2. SEDIMENT SHALL BE REMOVED FROM BEHIND SILT FENCE WHEN IT ACCUMULATES TO HALF THE EXPOSED GEOTEXTILE HEIGHT.

MAINTENANCE REQUIREMENTS

NTO THE TRENCH A MINIMUM OF 6" AND SHALL NOT EXTEND MORE THAN 3' ABOVE THE ORIGINAL GROUND SURFACE. Figure SF-2 Silt Fence Construction Detail and Maintenance Requirements

STRAW BALE- TIGHTLY ABUTTED TO ADJACENT BALES

MAINTENANCE REQUIREMENTS

CWA

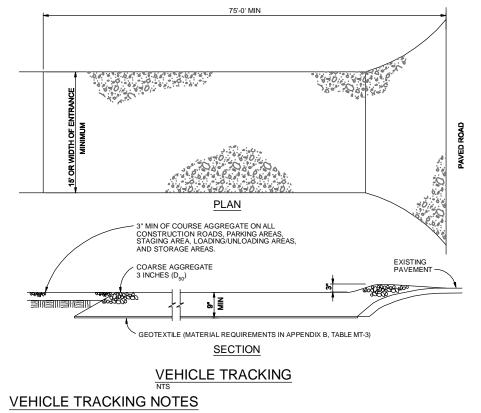
1. CONTRACTOR SHALL INSPECT STRAW BALE BARRIERS IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.

2. DAMAGED OR INEFFECTIVE BARRIERS SHALL PROMPTLY BE REPAIRED, REPLACING BALES IF NECESSARY, AND UNENTRENCHED BALES NEED TO BE REPAIRED WITH COMPACTED BACKFILL MATERIAL.

6. ALONG THE TOE OF FILLS, INSTALL THE SILT FENCE ALONG A LEVEL CONTOUR AND PROVIDE AN AREA BEHIND THE FENCE FOR RUNOFF TO POND

AND SEDIMENT TO SETTLE. A MINIMUM DISTANCE OF 5 FEET FROM THE TOE OF THE FILL IS RECOMMENDE

THE HEIGHT OF THE SILT FENCE FROM THE GROUN



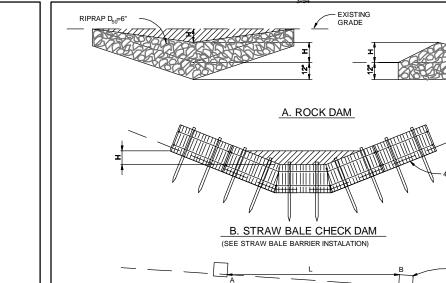
INSTALLATION REQUIREMENTS ALL ENTRANCES TO THE CONSTRUCTION SITE ARE BE STABILIZED PRIOR TO CONSTRUCTION 2. CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APRON TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP. S. AREAS TO BE STABILIZED ARE TO BE PROPERL' GRADED AND COMPACTED PRIOR TO LAYING DOWN SEOTEXTILE AND STONE.

3. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS. 4. STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY. CONSTRUCTION ROADS, PARKING AREAS OADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED. 5. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING 5. CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD GRADES THAT ARE FYFESSIVELY STEFP

MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM

Figure VT-2 City of Colorado Springs Vehicle Tracking Stormwater Quality Application Examples



MAINTENANCE REQUIREMENTS CHECK DAMS, ESPECIALLY AFTER STORM EVENTS 2. REPLACE STONE AS NECESSARY TO MAINTAIN THE CORRECT HEIGHT OF THE DAM. 3. ACCUMULATED SEDIMENT AND DEBRIS IS TO BE REMOVED FROM BEHIND THE DAMS AFTER EACH STORM OR WHEN 1/2 OF THE ORIGINAL HEIGHT OF THE DAM IS REACHED.

WHEN CHECK DAMS ARE REMOVED THE CHANNEL LINING OR VEGETATION IS TO BE RESTORED.

CHECK DAM NOTES 4. STRAW BALE BARRIERS SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED AS APPROVED BY THE CITY. INSTALLATION REQUIREMENTS STRAW BALES LISED AS CHECK DAMS ARE TO MEET THE REQUIREMENTS STATED IN FIGURE SBB-2. 2. THE "H" DIMENSION SHALL BE SELECTED TO PROVIDE WEIR FLOW CONVEYANCE FOR 2-YEAR FLOW OR GREATER Figure SBB-2 City of Colorado Springs Straw Bale Barrier Stormwater Quality Construction Detail and Maintenance Requirements MM-[nlet Protection (IP) SC-6 CIP

EXISTING GRADE L= THE DISTANCE SUCH THAT POINTS A AND B ARE AT THE SAME ELEVATION C. SPACING CHECK DAMS CHECK DAM

3. CHECK DAMS ARE TO REMAIN IN PLACE AND OPERATIONAL UNTIL THE DRAINAGE AREA AND CHANNEL ARE PERMANENTLY STABILIZED.

Figure CD-1 Check Dam

Construction Detail and Maintenance Requirements

D (12" MIN.) CULVERT END SECTION BACKFILL UPSTREAM OF WATTLE ROCK SOCK CULVERT INLET PROTECTION SECTION A

CONCRETE WASHOUT AREA PLAN PLAN F 10" MIN. SECTION B CIP-1. CULVERT INLET PROTECTION CULVERT INLET PROTECTION INSTALLATION NOTES CWA-1. CONCRETE WASHOUT AREA

> SEDIMENT DEPTH IS 1/2 THE HEIGHT OF THE ROCK SOCK. 5. CULVERT INLET PROTECTION SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED AND APPROVED BY THE LOCAL JURISDICTION. (DETAILS ADAPTED FROM 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.

Urban Drainage and Flood Control Distric Urban Storm Drainage Criteria Manual Volume 3

KEY IN ROCK SOCK O" ON BEDROCK, PAVEMENT OR RIPRAP KEY IN ROCK SOCK 2" ON EARTH SEE PLAN VIEW FOR

 LOCATION OF CULVERT INLET PROTECTION.

 2. SEE ROCK SOCK DESIGN DETAIL FOR ROCK GRADATION REQUIREMENTS AND JOINTING 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. 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE 3. WHERE \mbox{BMPs} HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

SEEDING MIX:

AMOUNT IN PLS <u>GRASS</u> VARIETY LBS. PER ACRE CRESTED WHEAT GRASS EPHRAIM OR HYCREST 4.0 LBS. PERENIAL RYE LINN 2.0 LBS. WESTERN WHEATGRASS SARTON 3.0 LBS. LINCOLN OR MANCHAR 5.0 LBS. SMOOTH BROME GRASS 2.5 LBS. SIDEOATS GRAMA EPHRAIM

TOTAL: 16.5 LBS.

SEEDING & FERTILIZER APPLICATION: DRILL SEED OR HYDRO-SEED PER CDOT SPEC. SECTION 212.

MULCHING APPLICATION: CONFORM TO CDOT SPEC-SECTION 213.

SEDIMENT CONTROL MAINTENANCE PROGRAM:

FREQUENCY

PERIODIC SITE INSPECTIONS BI-WEEKLY WITHIN 21 DAYS OF GRADING RE-VEGETATION OF EXPOSED SOILS SEDIMENT REMOVAL FROM BMP'S MONTHLY REMOVAL OF BMP'S AFTER STABILIZATION ACHIEVED

1 AND AFTER ANY PRECIPITATION OR SNOW MELT EVENT THAT CAUSES SURFACE EROSION

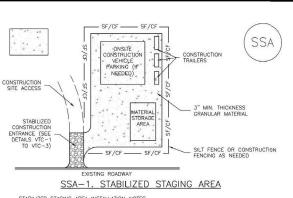
2ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED WHEN THE SEDIMENT LEVEL REACHES ONE HALF THE HEIGHT OF THE BMP OR AT ANY TIME THAT SEDIMENT OR DEBRIS ADVERSELY IMPACTS THE FUNCTION OF THE BMP.

ESTIMATED TIME SCHEDULE:

INSTALL BMP'S ROADWAY GRADING SEEDING & MULCHING STABILIZATION

JANUARY 2023 JANUARY 2023 JUNE 2024 SEPTEMBER 2025

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



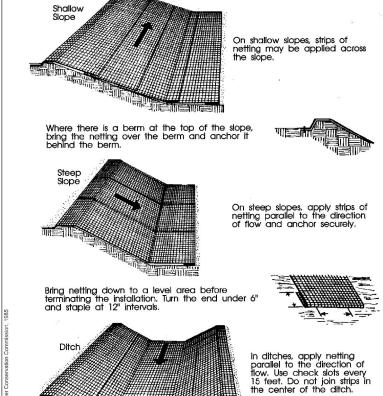
STABILIZED STAGING AREA INSTALLATION NOTES SEE PLAN VIEW FOR
 LOCATION OF STAGING AREA(S),
 CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION. 2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION. 3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE $\boldsymbol{6}.$ ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING. STABILIZED STAGING AREA MAINTENANCE NOTES

INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN 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. 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.

Urban Drainage and Flood Control Distric Urban Storm Drainage Criteria Manual Volume 3

STABILIZED STAGING AREA MAINTENANCE NOTES 5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS. 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 APEAS WHERE RECYCLED CONCRETE WAS PLACED. NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAIL: CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED. (DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAL

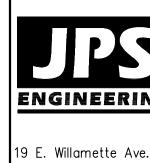
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Storm Water Quality

CREATED:

Erosion Control Blanket



Colorado Springs, CO 80903

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ORZ. SCALE: N/A ERT. SCALE: DESIGNED: CHECKED: HANNIGAN LAST MODI 11/29/21 PROJECT NO: MODIFIED BY 072101 SHEET: