

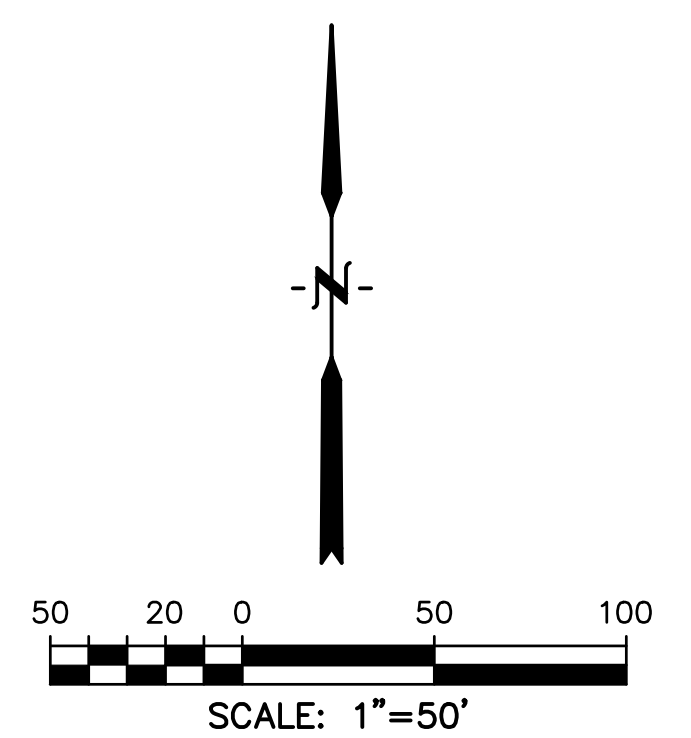
show existing and proposed flow direction arrows

show on figure

LEGEND

- PROPOSED INTERMEDIATE CONTOUR 5522
- PROPOSED INDEX CONTOUR 5520
- EX. INTERMEDIATE CONTOUR 5364
- EX. INDEX CONTOUR 5365
- DIRECTION OF FLOW ←
- HIGH POINT HP
- LOW POINT LP
- PROPOSED INLET blue
- PROPOSED MANHOLE
- LIMITS OF DISTURBANCE/ CONSTRUCTION SITE BOUNDARY
- CUT/FILL LINE
- INITIAL STOCKPILE
- INITIAL INLET PROTECTION
- INITIAL SILT FENCE pink
- INITIAL CONSTRUCTION FENCE
- INITIAL VEHICLE TRACKING CONTROL
- INITIAL STABILIZED STAGING AREA TO BE LOCATED BY CONTRACTOR

- NOTES:
1. WASTE DISPOSAL BIN LOCATIONS ARE TBD AND WILL BE ADDED TO THE SWMP ONCE DETERMINED BY THE CONTRACTOR.
 2. ONSITE LOCATION OF THE SSA IS TBD AND WILL BE ADDED TO THE SWMP ONCE DETERMINED BY THE CONTRACTOR.
 3. THE NEED FOR DEWATERING IS NOT ANTICIPATED. IN THE EVENT THAT DEWATERING BECOMES NECESSARY THE CONTRACTOR, WITH INPUT FROM THE COUNTY STORMWATER INSPECTOR, WILL DESIGN THE LOCATIONS OF DIVERSION, PUMP & DISCHARGES.
 4. NO BATCH PLANTS WILL BE UTILIZED ONSITE.



PREPARED BY:

DREXEL, BARRELL & CO.
 Engineers & Surveyors
 101 SAHAWATCH ST. STE 100
 COLORADO SPGS, COLORADO 80903
 CONTACT: TIM D. MCCONNELL, P.E.
 (719)260-0887
 COLORADO SPRINGS • LAFAYETTE

CLIENT:

COLO WINDERMERE #2, LLC
 4164 AUSTIN BLUFFS FWY, #361
 COLORADO SPRINGS, CO 80918
 (719) 200-9594
 CONTACT: JAMES TODD STEPHENS

**WINDERMERE FILING 2
 GRADING & EROSION CONTROL**
 N. MARKSHEFFEL ROAD
 EL PASO COUNTY, COLORADO

ISSUE	DATE
INITIAL ISSUE	4/1/22
RESUBMITTAL	3/18/24

DESIGNED BY:	KGV
DRAWN BY:	KGV
CHECKED BY:	TDM
FILE NAME:	21187-03EC1

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF
DREXEL, BARRELL & CO.

DRAWING SCALE:
 HORIZONTAL: 1" = 50'
 VERTICAL: N/A

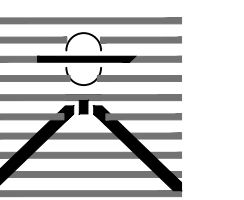
**INITIAL
 EROSION CONTROL
 PLAN**

PROJECT NO. 21187-03CSCV
 DRAWING NO.

EC1

811 Know what's below.
 Call before you dig.
 CALL 3-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

PREPARED BY:



DREXEL, BARRELL & CO.
 Engineers • Surveyors
 101 SAHAWATCH ST. STE 100
 COLORADO SPGS, COLORADO 80903
 CONTACT: TIM D. MCCONNELL, P.E.
 (719) 260-0887
 COLORADO SPRINGS • LAFAYETTE

CLIENT:

COLO WINDERMERE #2, LLC
 4164 AUSTIN BLUFFS FWY, #361
 COLORADO SPRINGS, CO 80918
 (719) 200-9594
 CONTACT: JAMES TODD STEPHENS

**WINDERMERE FILING 2
 GRADING & EROSION CONTROL**
 N. MARKSHEFFEL ROAD
 EL PASO COUNTY, COLORADO

ISSUE	DATE
INITIAL ISSUE	4/1/22
RESUBMITTAL	3/18/24

DESIGNED BY:	KGV
DRAWN BY:	KGV
CHECKED BY:	TDM
FILE NAME:	21187-03EC1

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF
DREXEL, BARRELL & CO.

DRAWING SCALE:
 HORIZONTAL: 1" = 50'
 VERTICAL: N/A

**FINAL
 EROSION CONTROL
 PLAN**

PROJECT NO. 21187-03CSCV
 DRAWING NO.

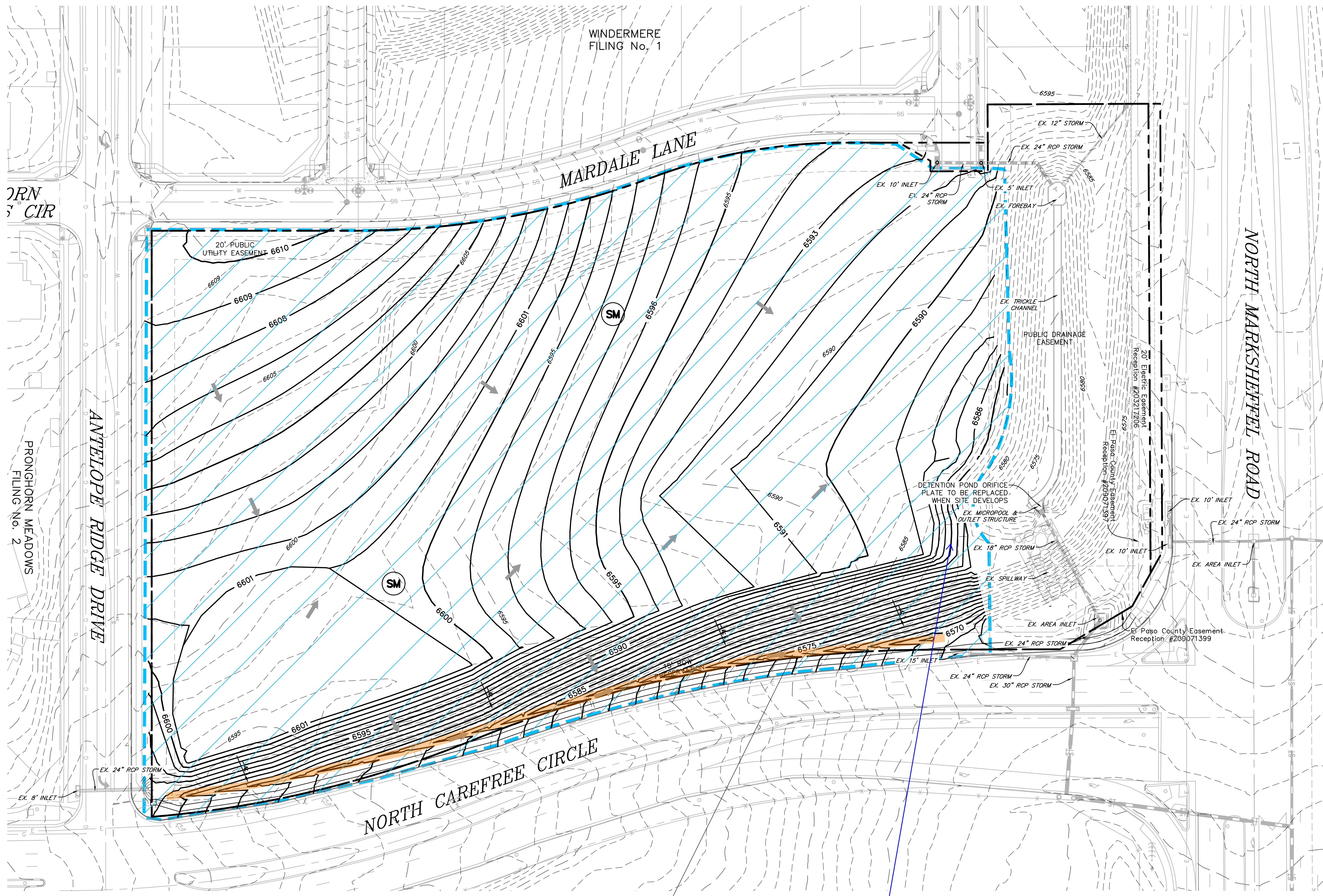
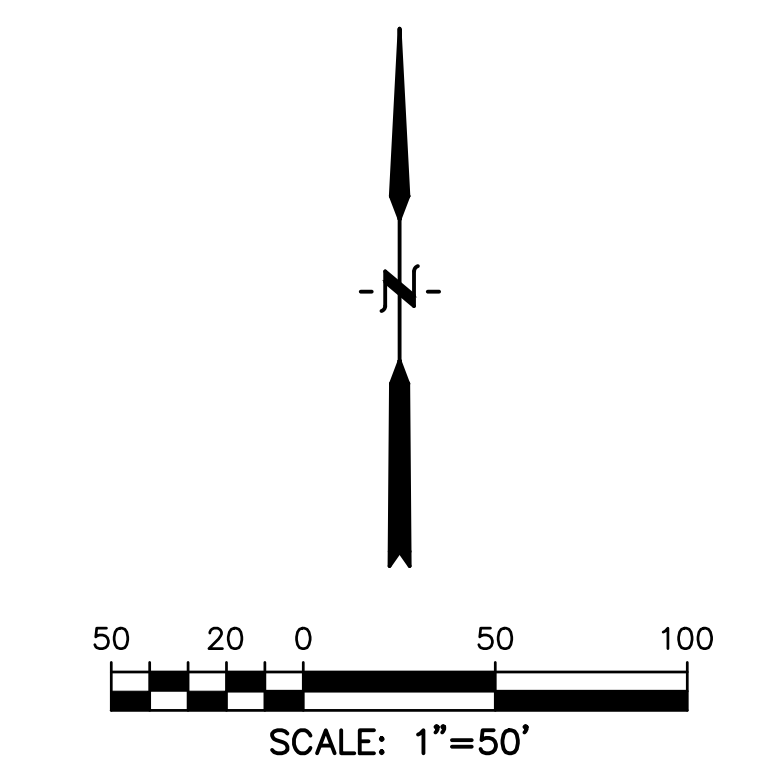
EC3

LEGEND

- PROPOSED INTERMEDIATE CONTOUR 5522
- PROPOSED INDEX CONTOUR 5520
- EX. INTERMEDIATE CONTOUR 5364
- EX. INDEX CONTOUR 5365
- DIRECTION OF FLOW ←
- HIGH POINT HP
- LOW POINT LP
- PROPOSED INLET ■
- PROPOSED MANHOLE ●
- LIMITS OF DISTURBANCE/
CONSTRUCTION SITE BOUNDARY [Blue dashed line]
- FINAL SEEDING/MULCHING [SM symbol]

Add maint. access roads hatching [Blue hatched box]

- NOTES:
- WASTE DISPOSAL BIN LOCATIONS ARE TBD AND WILL BE ADDED TO THE SWMP ONCE DETERMINED BY THE CONTRACTOR.
 - ONSITE LOCATION OF THE SSA IS TBD AND WILL BE ADDED TO THE SWMP ONCE DETERMINED BY THE CONTRACTOR.
 - THE NEED FOR DEWATERING IS NOT ANTICIPATED. IN THE EVENT THAT DEWATERING BECOMES NECESSARY THE CONTRACTOR, WITH INPUT FROM THE COUNTY STORMWATER INSPECTOR, WILL DESIGN THE LOCATIONS OF DIVERSION, PUMP & DISCHARGES.
 - NO BATCH PLANTS WILL BE UTILIZED ONSITE.
 - THE DETENTION FACILITY IS TO BE CHECKED FOR SEDIMENT AND CLEANED ON A MONTHLY BASIS AND AFTER EVERY RAIN EVENT.



This swale concentrates the flows and is no longer "land disturbance to undeveloped land that will remain undeveloped" as originally determined under SF2126. These flow should be conveyed to the pond. Address in Drainage Report.

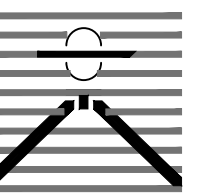
show and label access roads and correct the grade here

811 Know what's below.
 Call before you dig.
 CALL 3-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

COUNTY FILE NO.: SP-22-003

SHEET: 5 OF 7

PREPARED BY:



DREXEL, BARRELL & CO.
Engineers • Surveyors
101 SAHWATCH ST. STE 100
COLORADO SPGS, COLORADO 80903
CONTACT: TIM D. MCCONNELL, P.E.
(719)260-0887
COLORADO SPRINGS • LAFAYETTE

CLIENT:

COLO WINDERMERE #2, LLC
4164 AUSTIN BLUFFS FWY, #361
COLORADO SPRINGS, CO 80918
(719) 200-9594
CONTACT: JAMES TODD STEPHENS

WINDERMERE FILING 2
GRADING & EROSION CONTROL
N. MARKSHEFFEL ROAD
EL PASO COUNTY, COLORADO

Table with 2 columns: ISSUE, DATE. Rows: INITIAL ISSUE (4/1/22), RESUBMITTAL (3/18/24)

DESIGNED BY: KGV
DRAWN BY: KGV
CHECKED BY: TDM
FILE NAME: 21187-03ECDT

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF DREXEL, BARRELL & CO.

DRAWING SCALE:
HORIZONTAL: N/A
VERTICAL: N/A

EROSION CONTROL DETAILS

PROJECT NO. 21187-03CSCV
DRAWING NO.

DT1

SHEET: 6 OF 7



Know what's below. Call before you dig.
CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

COUNTY FILE NO.: SP-22-003

SC-6 Inlet Protection (IP)
IP-1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION
IP-2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

Inlet Protection (IP) SC-6
IP-3. ROCK SOCK SUMP/AREA INLET PROTECTION
IP-4. SILT FENCE FOR SUMP INLET PROTECTION

SC-6 Inlet Protection (IP)
IP-5. OVEREXCAVATION INLET PROTECTION
IP-6. STRAW BALE FOR SUMP INLET PROTECTION

Inlet Protection (IP) SC-6
CIP-1. CULVERT INLET PROTECTION

SC-6 Inlet Protection (IP)
GENERAL INLET PROTECTION INSTALLATION NOTES
INLET PROTECTION MAINTENANCE NOTES

Vehicle Tracking Control (VTC) SM-4
VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

SM-4 Vehicle Tracking Control (VTC)
STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES
STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

EC-12 Check Dams (CD)
A. ROCK DAM
B. STRAW BALE CHECK DAM
C. SPACING CHECK DAMS
CHECK DAM NOTES
INSTALLATION REQUIREMENTS
MAINTENANCE REQUIREMENTS

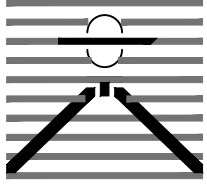
EC-12 Check Dams (CD)
CHECK DAM INSTALLATION NOTES
CHECK DAM MAINTENANCE NOTES

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

VTC-6 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 November 2010

City of Colorado Springs Stormwater Quality Figure CD-1 Check Dam Construction Detail and Maintenance Requirements

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

PREPARED BY:

DREXEL, BARRELL & CO.
 Engineers • Surveyors
 101 SAHAWATCH ST. STE 100
 COLORADO SPGS, COLORADO 80903
 CONTACT: TIM D. MCCONNELL, P.E.
 (719)260-0887
 COLORADO SPRINGS • LAFAYETTE

CLIENT:
 COLO WINDERMERE #2, LLC
 4164 AUSTIN BLUFFS Pkwy, #361
 COLORADO SPRINGS, CO 80918
 (719) 200-9594
 CONTACT: JAMES TODD STEPHENS

WINDERMERE FILING 2
GRADING & EROSION CONTROL
 N. MARKSHEFFEL ROAD
 EL PASO COUNTY, COLORADO

ISSUE	DATE
INITIAL ISSUE	4/1/22
RESUBMITTAL	3/18/24
DESIGNED BY:	KGV
DRAWN BY:	KGV
CHECKED BY:	TDM
FILE NAME:	21187-03ECOT

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF
DREXEL, BARRELL & CO.

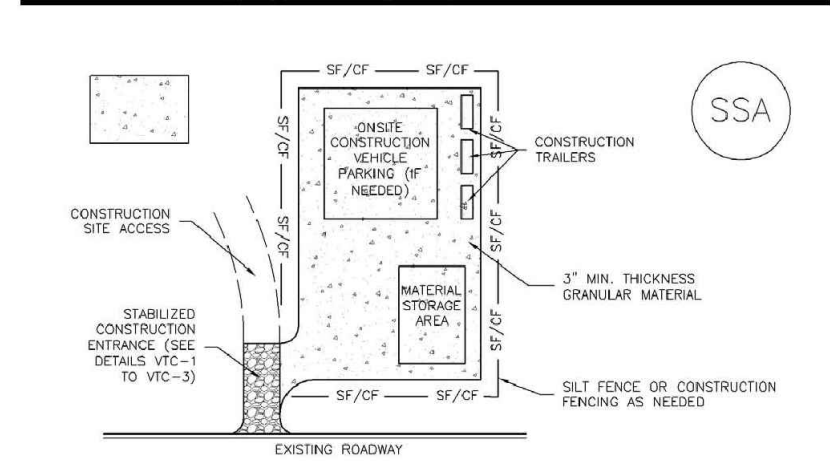
DRAWING SCALE:
 HORIZONTAL: N/A
 VERTICAL: N/A

EROSION CONTROL DETAILS

PROJECT NO. 21187-03CSCV
 DRAWING NO.
DT2

SHEET: 7 OF 7

Stabilized Staging Area (SSA) SM-6



SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

- SEE PLAN VIEW FOR:
 - LOCATION OF STAGING AREA.
 - CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
- STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSEEING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.
- STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
- THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
- UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SPEC #703 MIXED BY COMB AGGREGATE OR #4 (WASHED) ROCK.
- ADDITIONAL PERIMETER BARS MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SLOOT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

- INSPECT BARS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BARS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BARS 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 BARS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BARS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- ROCK SHALL BE REPAIRED OR REGRANDED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

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

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, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

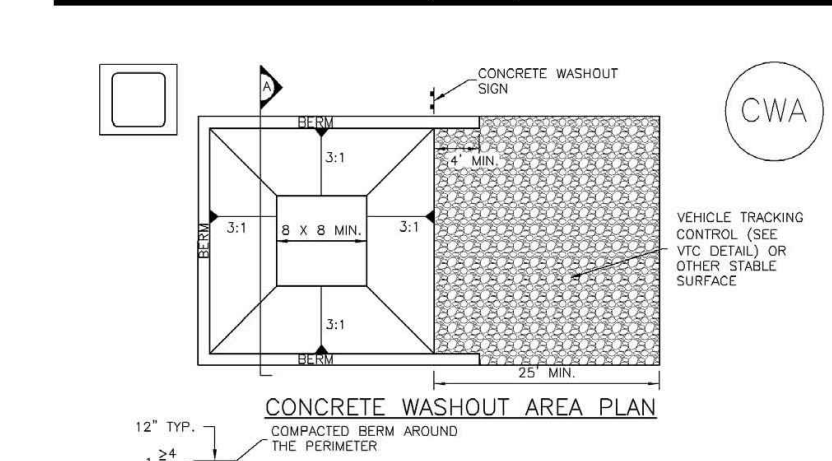
NOTE: MANY JURISDICTIONS PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM USDC 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 ARIKHO)

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

Concrete Washout Area (CWA) MM-1



CWA-1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

- SEE PLAN VIEW FOR:
 - CWA REGULATION LOCATION.
- DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODIES. DO NOT LOCATE WITHIN 100' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (1.5 MIL THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINER ABOVE CONCRETE STORAGE AREAS SHOULD BE USED.
- THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
- CWA SHALL INCLUDE A FLAT SUBSURFACE THAT IS AT LEAST 8" BY 8" SLOPES. LEAKING OUT OF THE SUBSURFACE MUST BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
- REMOVE SUBSURFACE SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
- VEHICLE TRACKING PITS SHALL BE SLOPED 2% TOWARDS THE CWA.
- SOILS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP TRUCKS.
- USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

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

MM-1 Concrete Washout Area (CWA)

CWA MAINTENANCE NOTES

- INSPECT BARS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BARS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BARS 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 BARS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BARS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.
- CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.
- THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
- WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION. (DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN ARIKHO)

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

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

TEMPORARY SEEDING NOTES

- SOIL IS TO BE CONDITIONED FOR PLANT GROWTH BY APPLYING TOPSOIL, FERTILIZER OR LIME.
- SOIL IS TO BE TILLED IMMEDIATELY PRIOR TO APPLYING SEEDS. COMPACT SOILS ESPECIALLY NEED TO BE LOOSENEED.
- SEEDBED DEPTH IS TO BE 4 INCHES FOR SLOPES FLATTER THAN 2:1 AND 1 INCH FOR SLOPES STEEPER THAN 2:1.
- ANNUAL GRASSES LISTED IN THE TABLE BELOW ARE TO BE USED FOR TEMPORARY SEEDING. SEED MIXES ARE NOT TO CONTAIN ANY NOXIOUS WEED SEEDS INCLUDING RUSSIAN OR CANADIAN THISTLE, KNAPWEED, PURPLE LOOSESTRIPE, EUROPEAN BINDWEED, JOHNSON GRASS, AND LEAFY SPURGE.
- THE TABLE BELOW ALSO PROVIDES REQUIREMENTS FOR SEEDING RATES, SEEDING DATES, AND PLANTING DEPTHS FOR THE APPROVED TYPES OF ANNUAL GRASSES.
- SEEDING IS TO BE APPLIED USING MECHANICAL TYPE DRILLS EXCEPT WHERE SLOPES ARE STEEP OR ACCESS IS LIMITED THEN HYDRAULIC SEEDING MAY BE USED.
- ALL SEEDED AREAS ARE TO BE MULCHED.
- IF HYDRAULIC SEEDING IS USED THEN HYDRAULIC MULCHING SHALL BE DONE SEPARATELY TO AVOID SEEDS BECOMING ENCAPSULATED IN THE MULCH.

MULCHING NOTES

INSTALLATION REQUIREMENTS

- MATERIAL USED FOR MULCH CAN BE CERTIFIED CLEAN, WEED-AND SEED-FREE LONG STEMMED FIELD OR MARSH HAY, OR STRAW OF OATS, BARLEY, WHEAT, RYE, OR TRITICALE CERTIFIED BY THE COLORADO DEPARTMENT OF AGRICULTURE WEED FREE FORAGE CERTIFICATION PROGRAM.
- HYDRAULIC MULCHING MATERIAL SHALL CONSIST OF VIRGIN WOOD FIBER MANUFACTURED FROM CLEAN WHOLE WOOD CHIPS. WOOD CHIPS CANNOT CONTAIN ANY GROWTH OR GERMINATION INHIBITORS OR BE PRODUCED FROM RECYCLED MATERIAL.
- MULCH IS TO BE APPLIED EVENLY AT A RATE OF 2 TONS PER ACRE.
- MULCH IS TO BE ANCHORED EITHER BY CRIMPING (TUCKING MULCH FIBERS 4 INCHES INTO THE SOIL), USING NETTING (USED ON SMALL AREAS WITH STEEP SLOPES) OR WITH A TACKIFIER.
- HYDRAULIC MULCHING AND TACKIFIERS ARE NOT TO BE USED IN THE PRESENCE OF FREE SURFACE WATER.

MAINTENANCE REQUIREMENTS

- REGULAR INSPECTIONS ARE TO BE MADE OF ALL MULCHED AREAS.
- MULCH IS TO BE REPLACED IMMEDIATELY IN THOSE AREAS IT HAS BEEN REMOVED, AND IF NECESSARY THE AREA SHOULD BE RESEEDED.

SEEDING PLAN

NATIVE SEEDING MIX

SOIL PREPARATION, FERTILIZER, SEEDING, MULCHING AND MULCH TACKIFIER WILL BE REQUIRED FOR DISTURBED AREAS EXCLUDING THE RIGHT-OF-WAYS.

THE FOLLOWING TYPES AND RATES SHALL BE USED:

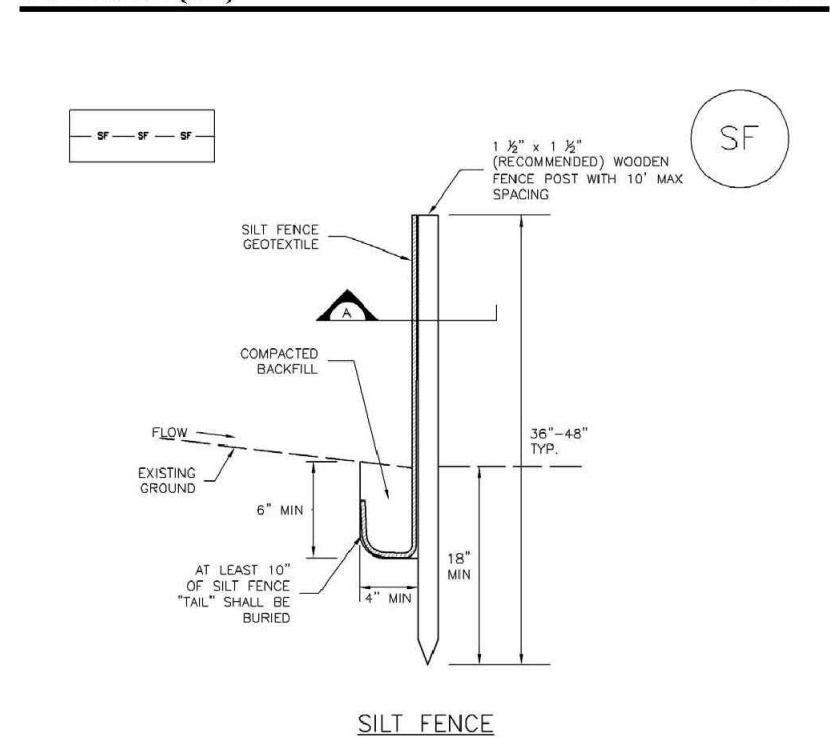
COMMON NAME	SCIENTIFIC NAME	LBS PLS/ACRE
SAND BLUESTEM V. ELIDA	ANDROPOGON HALLII	2.0
WESTERN WHEATGRASS V. ARRIBA	PASOPYRUM SMITHII	7.0
SIDEOATS GRAMA V. VAUGHN	BOUPELLOUA CURTIPENDULA	4.0
GALLETTA V. VIVA (CARYOPSIS)	HILARIA JAMESII	1.0
LITTLE BLUESTEM V. PASTURA	SCHIZACHYRIUM SCOPARIUM	3.0
PRARIE SANDREED V. GASHEN	CALAMOVILFA LONGIFOLIA	2.0
SWITCHGRASS V. NEBR 28	PANICUM VIRGATUM	1.0
BLANKETFLOWER	GAILLARDIA ARISTATA	1.0
PRARIE CONEFLOWER	RATIBIDA COLUMNIFERA	0.5
BLUE FLAX	LINUM LEWISII	1.0
OATS	AVENA SATIVA	3.0
WINTER WHEAT	TRITICUM AESTIVUM	3.0
TOTAL/POUNDS/ACRE		28.5

FERTILIZER	RATE PER ACRE
NITROGEN	27
PHOSPHORUS (P205)	69

SEEDING APPLICATION: DRILL SEED 0.25"-0.5" INTO TOPSOIL. AREA NOT ACCESSIBLE TO A DRILL SEEDER AND SLOPES STEEPER THAN 2:1 SHALL BE HAND BROADCAST AND DOUBLE THE ABOVE SEED RATE AND RAKED AT 1/4 TO 1/2 INTO THE TOPSOIL.

MULCHING APPLICATION: 1 1/2 TONS CERTIFIED WEED FREE NATIVE HAY PER ACRE MECHANICALLY CRIMED IN TOPSOIL IN COMBINATION WITH AN ORGANIC MULCH TACKIFIER.

Silt Fence (SF) SC-1



SF-1. SILT FENCE

SILT FENCE INSTALLATION NOTES

- SILT FENCE MUST BE INSTALLED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER FLOWING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST 50 FEET (15.24 M) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR FLOWING AND DEPOSITION.
- A MINIMUM 4" x 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROCKS, BRICKS, OR SIMILAR EQUIPMENT SHALL BE USED.
- CONTACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY WIND.
- SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO HORIZONTAL GAP BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.
- SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.
- AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TAPPED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK". THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RAINOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20').
- SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

- INSPECT BARS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BARS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BARS 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 BARS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BARS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".
- REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, Tearing, OR COLLAPSE.
- SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.
- WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION. (DETAILS ADAPTED FROM PARKER, COLORADO, NOT AVAILABLE IN ARIKHO)

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

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

SC-1 Silt Fence (SF)

SILT FENCE INSTALLATION NOTES

- SILT FENCE MUST BE INSTALLED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER FLOWING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST 50 FEET (15.24 M) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR FLOWING AND DEPOSITION.
- A MINIMUM 4" x 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROCKS, BRICKS, OR SIMILAR EQUIPMENT SHALL BE USED.
- CONTACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY WIND.
- SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO HORIZONTAL GAP BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.
- SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.
- AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TAPPED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK". THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RAINOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20').
- SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

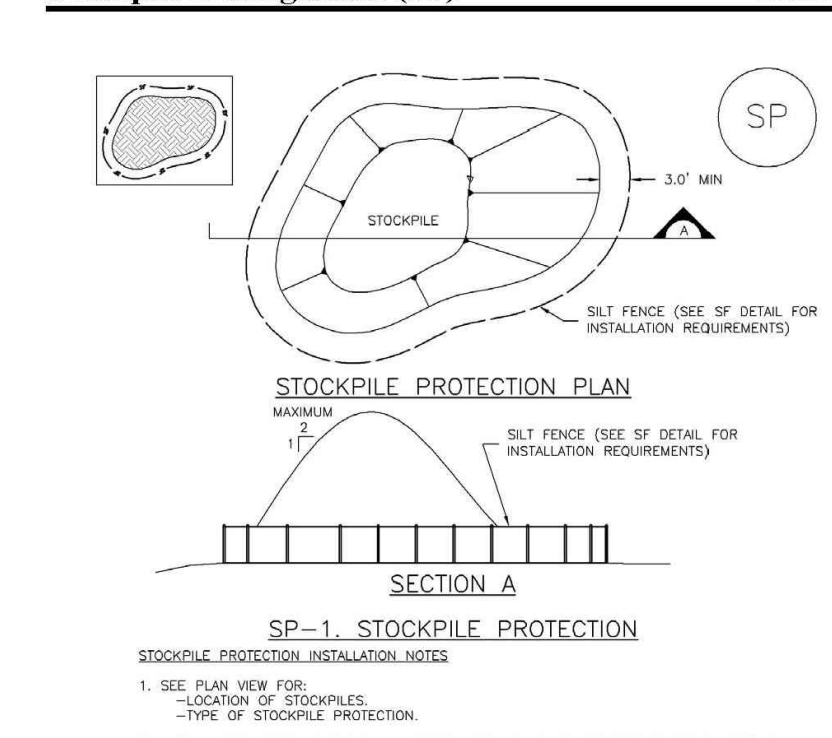
SILT FENCE MAINTENANCE NOTES

- INSPECT BARS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BARS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BARS 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 BARS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BARS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".
- REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, Tearing, OR COLLAPSE.
- SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.
- WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION. (DETAILS ADAPTED FROM PARKER, COLORADO, NOT AVAILABLE IN ARIKHO)

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

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

Stockpile Management (SP) MM-2



SP-1. STOCKPILE PROTECTION

STOCKPILE PROTECTION INSTALLATION NOTES

- SEE PLAN VIEW FOR:
 - LOCATION OF STOCKPILES.
 - TYPE OF STOCKPILE PROTECTION.
- INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS HOWEVER OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE USED. PERFORM NECESSARY MAINTENANCE AS NECESSARY TO MAINTAIN THE APPROPRIATE TYPE OF PERIMETER CONTROL. A STOCKPILE INCLUDES WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLIPS AGAINST THE PERIMETER, AND OTHER FACTORS.
- STABILIZE THE STOCKPILE SURFACE WITH SURFACE BROOMING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOIL STOCKPILES FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 90 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).
- FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOMINANT CONTROLS INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

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

MM-2 Stockpile Management (SM)

STOCKPILE PROTECTION MAINTENANCE NOTES

- INSPECT BARS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BARS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BARS 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 BARS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BARS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- IF PERIMETER PROTECTION MUST BE USED 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.

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

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

811 Know what's below. Call before you dig.

CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.