PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN
WINSOME FILING NO 1

A TRACT OF LAND BEING A PORTION OF SECTION 24, TOWNSHIP 11 SOUTH, RANGE 65 WEST,
OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO

Know what's below. Call before you dig.

PROJECT CONTACTS

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COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT:
WATER QUALITY CONTROL DIVISION
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246
303.692.3500

VICINITY MAP

LEGAL DESCRIPTION

COMMENCING AT THE WEST QUARTER CORNER OF SAID SECTION 24; THENCE S00°14'17"W, A DISTANCE OF 1,684.27 FEET TO THE POINT OF BEGINNING; THENCE S89°41'23"E, A DISTANCE OF 820.25 FEET; THENCE N29°41'56"E, A DISTANCE OF 768.98 FEET; THENCE S89°45'39"E, A DISTANCE OF 128.26 FEET; THENCE S69°47'19"E, A DISTANCE OF 306.30 FEET TO A POINT ON CURVE; THENCE ON THE ARC OF A CURVE TO THE LEFT WHOSE CENTER BEARS N69°47'19"W, HAVING A DELTA OF 2°06'42", A RADIUS OF 1,790.00 FEET, A DISTANCE OF 65.97 FEET TO A POINT A POINT OF TANGENT; THENCE N18°06'10"E, A DISTANCE OF 383.72 FEET; THENCE N19°13'35"E, A DISTANCE OF 60.00 FEET TO A POINT ON CURVE; THENCE ON THE ARC OF A CURVE TO THE LEFT WHOSE CENTER BEARS N19°13'35"E, HAVING A DELTA OF 50°01'50", A RADIUS OF 1,470.00 FEET, A DISTANCE OF 1,283.60 FEET TO A POINT ON CURVE; THENCE N30°48'16"W, A DISTANCE OF 58.07 FEET; THENCE N54°25'41"E, A DISTANCE OF 240.00 FEET; THENCE S40°33'13"E, A DISTANCE OF 117.62 FEET TO A POINT ON CURVE; THENCE ON THE ARC OF A CURVE TO THE LEFT WHOSE CENTER BEARS N40°33'13"W, HAVING A DELTA OF 7°37'13", A RADIUS OF 1,530.00 FEET A DISTANCE OF 203.49 FEET TO A POINT OF TANGENT; THENCE N41°49'33"E, A DISTANCE OF 100.05 FEET; THENCE S34°15'42"E, A DISTANCE OF 1,176.07 FEET TO A POINT ON CURVE; THENCE ON THE ARC OF A CURVE TO THE RIGHT WHOSE CENTER BEARS N38°44'46"W, HAVING A DELTA OF 3°31'19", A RADIUS OF 3,970.00 FEET, A DISTANCE OF 244.03 FEET TO A POINT OF TANGENT; THENCE S54°46'33"W, A DISTANCE OF 146.74 FEET; THENCE S35°13'27"E, A DISTANCE OF 60.00 FEET; THENCE N54°46'33"E, A DISTANCE OF 146.74 FEET TO A POINT OF CURVE; THENCE ON THE ARC OF A CURVE TO THE LEFT HAVING A DELTA OF 3°27'19", A RADIUS OF 4,030.00 FEET, A DISTANCE OF 243.03 FEET TO A POINT ON CURVE; THENCE S32°53'11"E, A DISTANCE OF 363.08 FEET; THENCE S21°16'12"E, A DISTANCE OF 333.95 FEET; THENCE S10°20'00"E, A DISTANCE OF 247.91 FEET; THENCE S00°29'45"E, A DISTANCE OF 484.81 FEET TO A POINT 30.00 FEET NORTH OF THE SOUTH LINE OF SECTION 24, TOWNSHIP 11 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN; THENCE S89°30'15"W ON A LINE 30.00 FEET NORTH OF AND PARALLEL WITH THE SOUTH LINE OF SAID SECTION 24, A DISTANCE OF 4,535.40 FEET TO A POINT ON THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 24; THENCE N00°14'17"E ON THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 24, A DISTANCE OF 922.65 FEET TO THE POINT OF BEGINNING.

CONTAINING A CALCULATED AREA OF 7,161,246 SQUARE FEET OR 164.400 ACRES.

BASIS OF BEARINGS

THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 24, TOWNSHIP 11 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN BEING MONUMENTED ON THE SOUTHERLY END BY A 2-1/2" ALUMINUM CAP STAMPED "LS 28658" AND AT THE NORTHERLY END BY A 3-1/2" ALUMINUM CAP STAMPED "LS 12103" BEING ASSUMED TO BEAR N00°14'25"E A DISTANCE OF 2636.99 FEET AS SHOWN IN LAND SURVEY PLAT RECORDED UNDER RECEPTION 218900072 RECORDS OF EL PASO COUNTY, COLORADO.

BENCHMARK

1. A 2.5" ALUMINUM CAP BEING A 30 FOOT WITNESS CORNER NORTH OF THE SOUTHWEST CORNER OF SECTION 24, TOWNSHIP 11 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN.

   7384.87 NAVD88

OWNER/DEVELOPER 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.

BY: Joseph W. DesJardin DATE: 6/2/2020
JOSEPH W DESJARDIN
WINSOME, LLC
1864 WOODMORE DR, SUITE 100
MONUMENT, COLORADO 80132

DESIGN ENGINEER STATEMENT:

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

BY: DATE: 6/2/2020
LANCE P VANDEMARK, PE
STATE OF COLORADO NO. 43911
THE VERTEX COMPANIES, INC

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 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.

BY: DATE:
JENNIFER IRVINE, PE
COUNTY ENGINEER / ECM ADMINISTRATOR

EGP-20-001

LEGEND

	EXISTING	PROPOSED
PROPERTY BOUNDARY		
EASEMENT		
CONTOURS	5540	5540
SPOT ELEVATION		31.45
SLOPE		2.0%
ELECTRIC LINE / LIGHT POLE	ELEC	
SWALE		
MATCHLINE		

BMP LEGEND

SF	SILT FENCE (INITIAL PHASE - TEMPORARY BMP)
VTC	VEHICLE TRACKING CONTROL (INITIAL PHASE - TEMPORARY BMP)
SSA	STABILIZED STAGING AREA (INITIAL PHASE - TEMPORARY BMP)
SP	STOCK PILE (INITIAL PHASE - TEMPORARY BMP)
CSB	(AKA LIMITS OF CONSTRUCTION) CONSTRUCTION SITE BOUNDARY
CWA	CONCRETE WASHOUT AREA (INITIAL PHASE - TEMPORARY BMP)
ECB	EROSION CONTROL BLANKET (INTERIM PHASE - PERMANENT BMP)
SM	SEEDING AND MULCHING (INTERIM PHASE - PERMANENT BMP)
SB	SEDIMENT BASIN (INTERIM PHASE - TEMPORARY BMP)
RD	ROCK DAM (INTERIM PHASE - PERMANENT BMP)
RS	ROCK SOCK (INTERIM PHASE - PERMANENT BMP)
ST	SEDIMENT TRAP (INTERIM PHASE - PERMANENT BMP)
	FLOW ARROW

CIVIL ABBREVIATIONS

ASSY	-ASSEMBLY
ECB	-EROSION CONTROL BLANKET
EG	-EXISTING GRADE
EL	-ELEVATION
EOA	-EDGE OF ASPHALT
ESMT	-EASEMENT
EX	-EXISTING
CSB	-CONSTRUCTION SITE BOUNDARY
CWA	-CONCRETE WASHOUT AREA
FG	-FINISHED GRADE
FL	-FLOWLINE
INV:	-INVERT
L	-LEFT
LF	-LINEAR FEET
ME	-MATCH EXISTING
PT	-POINT
PVC	-POLYVINYL CHLORIDE PIPE
R	-RIGHT
RAD	-RADIUS
RD	-ROCK DAM
RS	-ROCK SOCK
SF	-SILT FENCE
SM	-SEEDING AND MULCHING
SP	-STOCK PILE
SSA	-STABILIZED STAGING AREA
ST	-SEDIMENT TRAP
STA:	-STATION
TYP	-TYPICAL
VTC	-VEHICLE TRACKING CONTROL
W/	-WITH

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VERTEX®
2420 W. 26th Avenue, Suite 100-D I Denver, CO 80211
Main: 303.623.9116 I VERTEXENG.COM

COLORADO LICENSED
LANCE PATRICK VANDEMARK
6/1/2020
43911
PROFESSIONAL ENGINEER

COVER SHEET
SITE: 17480 MERIDIAN ROAD
ELBERT, COLORADO 80106
FOR: WINSOME, LLC
1864 WOODMORE DR, SUITE 100
MONUMENT, COLORADO 80132

NO.	REVISIONS
1	SUBMITTAL 1
2	03.11.2020 REVISED PER COMMENTS
3	06.01.2020 FOR CONSTRUCTION
4	
5	
6	
7	
8	
9	
10	

DATE: 01.22.20
DRAWN BY: JCP
CHECKED BY: LPV
JOB #: 49388.01
1

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PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN
WINSOME FILING NO 1

A TRACT OF LAND BEING A PORTION OF SECTION 24, TOWNSHIP 11 SOUTH, RANGE 65 WEST,
OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO

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

GENERAL CONSTRUCTION NOTES

1. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).

3. CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
   a. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
   b. CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
   c. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
   d. CDOT M & S STANDARDS

4. 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. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.

5. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.

6. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) - INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.

7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.

8. CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.

9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.

10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PAVEMENT.

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

12. SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.

13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DOT AND MUTCD CRITERIA.

14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DOT, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.

15. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONDITIONS AT AND ADJACENT TO THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL ADJACENT IMPROVEMENTS FROM DAMAGE DURING CONSTRUCTION. ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION UNLESS NOTED ON THE PLANS.

18. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES. CONTRACTOR SHALL CONTACT UTILITY NOTIFICATION CENTER OF COLORADO (1-800-922-1987) FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.

19. CONSTRUCTION DEBRIS OR MUD TRACKING IN THE PUBLIC RIGHT OF WAY RESULTING FROM THIS DEVELOPMENT SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR.

20. THE EXISTING CONDITIONS AND PROPOSED IMPROVEMENTS AS SHOWN ON THESE CONSTRUCTION DOCUMENTS ARE BASED ON:
   a) EXISTING TOPOGRAPHIC INFORMATION OBTAINED FROM EL PASO COUNTY LICENSED GIS DATA SERVICE. LIDAR DATA DATED 2011
   b) ADDITIONAL SURVEY INFORMATION COMPILED BY EDWARD JAMES SURVEYING 8/2018
   c) PRELIMINARY PLAN PREPARED BY NES DATED 5/10/2018
   d) SUBDIVISION PLAT PREPARED BY EDWARD JAMES SURVEYING DATED XX/XX/XXXX
   e) NATURAL FEATURES AND WETLAND REPORT PREPAIRED BY ECOSYSTEM SERVICES DATED 10/1/2018
   f) SOILS INVESTIGATION PREPARED BY ENTECH DATED 1/11/2019
   g) TRAFFIC IMPACT STUDY PREPARED BY KELLAR ENGINEERING DATED 1/9/2020

21. ONLY USE CONSTRUCTION PLANS THAT ARE APPROVED FOR CONSTRUCTION. THE APPROVED PLANS WILL BE SIGNED AND SEALED BY THE ENGINEER OF RECORD, THE WORDS "FOR CONSTRUCTION" WILL APPEAR IN THE REVISION BLOCK AND WILL BE SIGNED BY THE APPROPRIATE GOVERNING AGENCY.

22. BASED ON VISUAL INSPECTION, 90% OF THE GROUND IS COVERED AND STABILIZED BY EXISTING VEGETATION.

GRADING AND EROSION CONTROL PLANS

1. 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.

2. 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.

3. 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.

4. ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED 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.

5. 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.

6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES 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.

7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.

8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL 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.

9. 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.

10. 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.

11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL 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).

12. 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.

13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO 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.

14. 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.

17. 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.

18. 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 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.

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 HAS BEEN PREPARED BY ENTECH DATED 1/11/2019, AND 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

GRADING AND EROSION CONTROL PLANS

30. GRADING PLAN IS FOR ROUGH GRADING ONLY. CHANGES MAY BE NECESSARY TO BRING PLAN INTO CONFORMANCE WITH APPROVED FINAL DRAINAGE PLAN AND SITE PLAN.

31. ANY SETTLEMENT OR SOIL ACCUMULATIONS BEYOND THE PROPERTY LIMITS DUE TO GRADING OR EROSION SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR.

32. AREAS BEING DISTURBED BY THE GRADING SHALL BE RE-SEEDED WITH NATIVE VEGETATION OR AS APPROVED ON THE EROSION CONTROL PLAN.

33. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS AT AND ADJACENT TO THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE DUTY OF THE COUNTY TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDED REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

34. DITCH SECTIONS WITH VELOCITIES OVER 4 CFS WILL BE LINED WITH EROSION CONTROL FABRIC. SEE TABLE BELOW FOR DETAILS.

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6/1/2020
43911
PROFESSIONAL ENGINEER

NOTES

SITE: 17480 MERIDIAN ROAD
ELBERT, COLORADO 80106

FOR: WINSOME, LLC
1864 WOODMORE DR, SUITE 100
MONUMENT, COLORADO 80132

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PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN

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0' 300' 600' 900'

SCALE: 1" = 300'

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SITE PLAN

SITE: 17480 MERIDIAN ROAD
ELBERT, COLORADO 80106

FOR: WINSOME, LLC
1864 WOODMORE DR, SUITE 100
MONUMENT, COLORADO 80132

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PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN

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OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO

EARTH WORK QUANTITIES

CLEAR AND GRUB	6,800 SY
RAW CUT	51,000 CY
RAW FILL	49,000 CY
10% COMPACTION	5,000 CY
IMPORT	3,000 CY

KEY

CUT

FILL

0' 300' 600' 900'

SCALE: 1" = 300'

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CUT FILL PLAN

SITE: 17480 MERIDIAN ROAD
ELBERT, COLORADO 80106

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1864 WOODMORE DR, SUITE 100
MONUMENT, COLORADO 80132

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OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO

STANDARD EPC RURAL LOCAL ROADWAY CROSS SECTION

N.T.S.

NOTES:

1. EXISTING FLOODPLAIN AS SHOWN BASED ON FIRM MAP #08041C0350G PANEL 350 REVISED 12/7/2018.
2. REPLANT ALL DISTURBED AREAS WITH COUNTY APPROVED SEED MIX.

0' 300' 600' 900'

SCALE: 1" = 300'

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OVERALL GRADING PLAN

SITE: 17480 MERIDIAN ROAD
ELBERT, COLORADO 80106

FOR: WINSOME, LLC
1864 WOODMORE DR, SUITE 100
MONUMENT, COLORADO 80132

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OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO

TYPICAL ROADWAY CROSS SECTION
N.T.S

MATCHLINE - 8 - DETAIL GRADING PLAN - B1

MATCHLINE - 7 - DETAIL GRADING PLAN - A2

SCALE: 1" = 100'

KEY MAP
1"= 2000'

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DETAIL GRADING PLAN - A1

SITE: 17480 MERIDIAN ROAD
ELBERT, COLORADO 80106

FOR: WINSOME, LLC
1864 WOODMORE DR, SUITE 100
MONUMENT, COLORADO 80132

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OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO

TYPICAL ROADWAY CROSS SECTION
N.T.S

MATCHLINE - 9 - DETAIL GRADING PLAN - B2

MATCHLINE - 6 - DETAIL GRADING PLAN - A1

0' 100' 200' 300'
SCALE: 1" = 100'

KEY MAP
1"= 2000'

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DETAIL GRADING PLAN - A2

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FOR: WINSOME, LLC
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TYPICAL ROADWAY CROSS SECTION
N.T.S

KEY MAP
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DETAIL GRADING PLAN - B1

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TYPICAL ROADWAY CROSS SECTION
N.T.S

MATCHLINE - 8 - DETAIL GRADING PLAN - B1

MATCHLINE - 7 - DETAIL GRADING PLAN - A2

0' 100' 200' 300'
SCALE: 1" = 100'

KEY MAP
1"= 2000'

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DETAIL GRADING PLAN - B2

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TYPICAL ROADWAY CROSS SECTION
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MATCHLINE - 9 - DETAIL GRADING PLAN - B2

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SCALE: 1" = 100'

KEY MAP
1"= 2000'

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DETAIL GRADING PLAN - C2

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MATCHLINE - 13 - INITIAL EROSION CONTROL PLAN B1

MATCHLINE - 12 - INITIAL EROSION CONTROL PLAN A2

NOTE:

1. ALL BMPS ARE REPRESENTED GRAPHICALLY AND ARE INTENDED TO GENERALLY DEPICT APPLICABLE LOCATIONS. IT IS EXPECTED THAT SITE CONDITIONS AND DEVELOPMENT PHASING WILL DETERMINE BEST LOCATIONS OF ACTUAL BMPS WHILE CONFORMING TO INTENDED LOCATIONS PER THIS PLAN.
2. SEED MIX MUST BE EL PASO COUNTY APPROVED.

0' 100' 200' 300'
SCALE: 1" = 100'

KEY MAP
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EROSION CONTROL A1

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FOR: WINSOME, LLC
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OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO

MATCHLINE - 14 - INITIAL EROSION CONTROL PLAN B2

MATCHLINE - 11 - INITIAL EROSION CONTROL PLAN A1

NOTE:

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EROSION CONTROL A2

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ELBERT, COLORADO 80106

FOR: WINSOME, LLC
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NOTE:

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2. SEED MIX MUST BE EL PASO COUNTY APPROVED.

0' 100' 200' 300'
SCALE: 1" = 100'

KEY MAP
1"= 2000'

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EROSION CONTROL B1

SITE: 17480 MERIDIAN ROAD
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FOR: WINSOME, LLC
1864 WOODMORE DR, SUITE 100
MONUMENT, COLORADO 80132

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PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN
WINSOME FILING NO 1

A TRACT OF LAND BEING A PORTION OF SECTION 24, TOWNSHIP 11 SOUTH, RANGE 65 WEST,
OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO

MATCHLINE - 15 - INITIAL EROSION CONTROL PLAN C2

MATCHLINE - 13 - INITIAL EROSION CONTROL PLAN B1

MATCHLINE - 12 - INITIAL EROSION CONTROL PLAN A2

NOTE:

1. ALL BMPS ARE REPRESENTED GRAPHICALLY AND ARE INTENDED TO GENERALLY DEPICT APPLICABLE LOCATIONS. IT IS EXPECTED THAT SITE CONDITIONS AND DEVELOPMENT PHASING WILL DETERMINE BEST LOCATIONS OF ACTUAL BMPS WHILE CONFORMING TO INTENDED LOCATIONS PER THIS PLAN.
2. SEED MIX MUST BE EL PASO COUNTY APPROVED.

0' 100' 200' 300'

SCALE: 1" = 100'

KEY MAP
1"= 2000'

EGP-20-001

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COLORADO LICENSED
LUKE PATRICK VANDEN
6/1/2020
43911
PROFESSIONAL ENGINEER

EROSION CONTROL B2

SITE: 17480 MERIDIAN ROAD
ELBERT, COLORADO 80106

FOR: WINSOME, LLC
1864 WOODMORE DR, SUITE 100
MONUMENT, COLORADO 80132

NO.	REVISIONS
1	SUBMITTAL 1
2	03.11.2020 REVISED PER COMMENTS
3	06.01.2020 FOR CONSTRUCTION
4	
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DATE: 01.22.20
DRAWN BY: JCP
CHECKED BY: LPV
JOB #: 49388.01

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PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN

WINSOME FILING NO 1

A TRACT OF LAND BEING A PORTION OF SECTION 24, TOWNSHIP 11 SOUTH, RANGE 65 WEST,
OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO

Know what's below. Call before you dig.

MATCHLINE - 14 - INITIAL EROSION CONTROL PLAN B2

NOTE:

1. ALL BMPS ARE REPRESENTED GRAPHICALLY AND ARE INTENDED TO GENERALLY DEPICT APPLICABLE LOCATIONS. IT IS EXPECTED THAT SITE CONDITIONS AND DEVELOPMENT PHASING WILL DETERMINE BEST LOCATIONS OF ACTUAL BMPS WHILE CONFORMING TO INTENDED LOCATIONS PER THIS PLAN.
2. SEED MIX MUST BE EL PASO COUNTY APPROVED.

0' 100' 200' 300'

SCALE: 1" = 100'

KEY MAP
1"= 2000'

EGP-20-001

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COLORADO LICENSED
LYNN PATRICK VANDERWALKER
6/1/2020
43911
PROFESSIONAL ENGINEER

EROSION CONTROL C2

SITE: 17480 MERIDIAN ROAD
ELBERT, COLORADO 80106

FOR: WINSOME, LLC
1864 WOODMORE DR, SUITE 100
MONUMENT, COLORADO 80132

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PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN
WINSOME FILING NO 1

A TRACT OF LAND BEING A PORTION OF SECTION 24, TOWNSHIP 11 SOUTH, RANGE 65 WEST,
OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO

CHECK DAM
NTS

CHECK DAM NOTES

INSTALLATION REQUIREMENTS

1. STRAW BALES USED 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.

MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL 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.
3. CHECK DAMS ARE TO REMAIN IN PLACE AND OPERATIONAL UNTIL THE DRAINAGE AREA AND CHANNEL ARE PERMANENTLY STABILIZED.
4. WHEN CHECK DAMS ARE REMOVED THE CHANNEL LINING OR VEGETATION IS TO BE RESTORED.

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

3-20

Sediment Basin (SB) — SC-7

SEDIMENT BASIN RISER PIPE DETAIL
(NTS)

SEDIMENT BASIN B
DISTURBED AREA = 3.97 AC X 1800 = 7150 FT^3 MIN VOLUME
PROPOSED VOLUME = 10,200 FT^3 0.23 AC-FT
STAND PIPE: 3' HIGH, 0.30 IN^2 REQUIRED HOLE AREA
2 COLUMNS OF (5) - 7/16" DIA HOLES

SEDIMENT BASIN C
DISTURBED AREA = 7.64 AC X 1800 = 13,750 FT^3 MIN VOLUME
PROPOSED VOLUME = 23,600 FT^3 0.54 AC-FT
STAND PIPE: 4' HIGH, 0.61 IN^2 REQUIRED HOLE AREA
2 COLUMNS OF (5) - 5/8" DIA HOLES

SEDIMENT BASIN D
DISTURBED AREA = 5.52 AC X 1800 = 9,950 FT^3 MIN VOLUME
PROPOSED VOLUME = 62,800 FT^3 1.44 AC-FT
STAND PIPE: 4' HIGH, 1.01 IN^2 REQUIRED HOLE AREA
3 COLUMNS OF (5) - 11/16" DIA HOLES

SEDIMENT BASIN 3
DISTURBED AREA = 3.72 AC X 1800 = 6,700 FT^3 MIN VOLUME (0.15 AC-FT)
PROPOSED VOLUME = 320,000 FT^3 7.35 AC-FT
STAND PIPE: 4.5' HIGH, 0.17 IN^2 REQUIRED HOLE AREA
1 COLUMN OF (5) - 1/2" DIA HOLES
* SB3 VOLUME IS SIZED FOR OVER DETENTION, STAND PIPE SIZED FOR ASSOCIATED DISTURBED AREA.

SC-8 — Sediment Trap (ST)

ST-1. SEDIMENT TRAP

Sediment Trap (ST) — SC-8

SEDIMENT TRAP INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   —LOCATION, LENGTH AND WIDTH OF SEDIMENT TRAP.
2. ONLY USE FOR DRAINAGE AREAS LESS THAN 1 ACRE.
3. SEDIMENT TRAPS SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND–DISTURBING ACTIVITIES.
4. SEDIMENT TRAP BERM SHALL BE CONSTRUCTED FROM MATERIAL FROM EXCAVATION. THE BERM SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
5. SEDIMENT TRAP OUTLET TO BE CONSTRUCTED OF RIPRAP, TYPE M (D50=12") TYP.SMALLER ROCK SIZE MAY BE ALLOWABLE FOR SMALLER TRAPS IF APPROVED BY LOCAL JURISDICTION.
6. THE TOP OF THE EARTHEN BERM SHALL BE A MINIMUM OF 6" HIGHER THAN THE TOP OF THE RIPRAP OUTLET STRUCTURE.
7. THE ENDS OF THE RIPRAP OUTLET STRUCTURE SHALL BE A MINIMUM OF 6" HIGHER THAN THE CENTER OF THE OUTLET STRUCTURE.

SEDIMENT TRAP MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS 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 DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. REMOVE SEDIMENT ACCUMULATED IN TRAP AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN THE SEDIMENT DEPTH REACHES ½ THE HEIGHT OF THE RIPRAP OUTLET.
5. SEDIMENT TRAPS SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
6. WHEN SEDIMENT TRAPS ARE REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED 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.

Required Area per Row (in^2)

		Depth at Outlet (ft)							
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5
Design Volume (acre-ft)	2	15.04	7.71	5.10	3.76	2.95	2.41	2.02	1.73
	1	7.52	3.86	2.55	1.88	1.48	1.21	1.01	0.87
	0.6	4.51	2.31	1.53	1.13	0.89	0.72	0.61	0.52
	0.4	3.01	1.54	1.02	0.75	0.59	0.48	0.40	0.35
	0.2	1.50	0.77	0.51	0.38	0.30	0.24	0.20	0.17
	0.1	0.75	0.39	0.26	0.19	0.15	0.12	0.10	0.09
	0.06	0.45	0.23	0.15	0.11	0.09	0.07	0.06	0.05
	0.04	0.30	0.15	0.10	0.08	0.06	0.05	0.04	0.03
	0.02	0.15	0.08	0.05	0.04	0.03	0.02	0.02	0.02
	0.01	0.08	0.04	0.03	0.02	0.01	0.01	0.01	0.01

TABLE SB-1

Circular Perforation Sizing

Hole Diameter (in)	Hole Diameter (in)	Area per Row (in^2) n = 1	n = 2	n = 3
1/4	0.250	0.05	0.10	0.15
5/16	0.313	0.08	0.15	0.23
3/8	0.375	0.11	0.22	0.33
7/16	0.438	0.15	0.30	0.45
1/2	0.500	0.20	0.39	0.59
9/16	0.563	0.25	0.50	0.75
5/8	0.625	0.31	0.61	0.92
11/16	0.688	0.37	0.74	1.11
3/4	0.750	0.44	0.88	1.33
7/8	0.875	0.60	1.20	1.80
1	1.000	0.79	1.57	2.36
1 1/8	1.125	0.99	1.99	2.98
1 1/4	1.250	1.23	2.45	3.68
1 3/8	1.375	1.48	2.97	4.45
1 1/2	1.500	1.77	3.53	5.30
1 5/8	1.625	2.07	4.15	6.22
1 3/4	1.750	2.41	4.81	7.22
1 7/8	1.875	2.76	5.52	8.28
2	2.000	3.14	6.28	9.42
n = Number of columns of perforations				
Minimum steel plate thickness		1/4"	5/16"	3/8"

TABLE SB-2

City of Colorado Springs Stormwater Quality	Figure SB-2 Outlet Sizing Application Techniques and Maintenance Requirements

3-33

ROADSIDE DITCH Q 100Y VALUES

DITCH SECTION DESIGNATOR	START STATION	END STATION	LENGTH	GRADE	WATER SHED FROM ROAD	FRACTION OF BASIN FLOW	BASIN DESIGNATOR	BASIN 100Y Q	DITCH RECEIVING FRACTION OF Q	DITCH 100Y Q FROM BASIN	ROAD WATERSHED 100Y Q	CONNECTING DITCH 100Y Q	TOTAL 100Y Q IN DITCH SECTION	AVERAGE VELCITY
	(FT)	(FT)	(FT)	%				(CFS)	%	(CFS)	(CFS)	(CFS)	(CFS)	(FPS)
WINSOME WAY														
B2-3	+32	5+14	482'	4.83%	X		B2			-	0.00		0.00	3.00
B4-3.1	5+14	6+60	146'	3.85%	X		B4			-	0.00		0.00	3.52
B4-3.2	6+60	9+50	290'	7.89%	X		B5			-	0.00	0.00	0.00	3.51
B4-3.3	9+50	18+00	850'	3.22%	X		B6			-	0.00	0.00	0.00	3.29
B4-4	18+00	20+96	296'	1.00%	X		B4			-	0.00		0.00	1.47
C2-1.1	+32	6+10	578'	3.85%	X		C2			-	0.00		0.00	2.65
C2-1.2	6+10	10+17	407'	7.89%	X		C2			-	0.00	0.00	0.00	4.30
C3-3	10+17	18+00	783'	3.22%	X		C3			-	0.00	1.19	1.19	3.93
C3-4	18+00	20+96	296'	1.00%	X		C4			-	0.00		0.00	1.47
ALAMAR WAY														
D2-1	70+52	78+93	841'	1.43%	X	X	C3	22.1	10%	2.21	0.00		2.21	2.42
D2-2	78+93	84+31	538'	3.72%	X	X	D2	81.3	2%	1.63	0.00		1.63	3.39
D5-1	70+52	78+93	841'	1.43%	X		-			-	0.00		0.00	2.21
D5-2	78+93	84+31	538'	3.72%	X		-			-	0.00		0.00	2.79
BISON MEADOWS COURT														
D2-3.1	+8	6+00	592'	1.37%	X	X		81.3	1%	0.81	0.00	0.81	1.63	2.92
D2-3.2	5+50	24+02	1852'	3.47%	X	X		81.3	1%	0.81	0.00		0.81	3.82
D3.4.6-1.1	5+50	24+02	1852'	3.47%	X					-	0.00		0.00	3.71
D3.4.6-2.2	+8	6+00	592'	1.37%	X					-	0.00	0.00	0.00	2.79
CLOVE HITCH COURT														
B2-1	+14	5+80	566'	5.34%			B2	19.9	10%	1.99	0.00		1.99	3.85
B2-2	5+80	7+82	202'	1.13%			B2	19.9	20%	3.98	0.00		3.98	2.37
B4-1	5+80	7+82	202'	1.13%			B4	53.1		-	0.00		0.00	1.48
B4-2	+14	5+80	566'	5.34%			B4	53.1		-	0.00		0.00	3.24
MOSEY TRAIL														
C2-2.1	+14	2+74	260'	1.43%	X	X	C2	23.7	5%	1.19	0.00		1.19	2.00
C2-2.2	2+74	5+25	251'	1.03%	X	X	C2	23.7	10%	2.37	0.00		2.37	2.16
C2-3	5+25	14+54	929'	7.03%	X	X	C2	23.7	40%	9.48	0.00		9.48	5.72
C3-1	5+25	14+54	929'	7.03%	X		C3	22.1		-	0.00		0.00	2.38
C3-2.1	2+74	5+25	251'	1.03%	X		C3	22.1		-	0.00		0.00	1.56
C3-2.2	+14	2+74	260'	1.43%	X		C3	22.1		-	0.00		0.00	2.26
Q PER FOOT FOR 1' X 20' (HALF OF ROAD SECTION TO DITCH X 1' WIDE) = 0.003														CFS

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COLORADO LICENSED PATRICK VANDEN BERG 6/1/2020 43911 PROFESSIONAL ENGINEER

EROSION CONTROL DETAILS
SITE: 17480 MERIDIAN ROAD ELBERT, COLORADO 80106
FOR: WINSOME, LLC 1864 WOODMORE DR, SUITE 100 MONUMENT, COLORADO 80132

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PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN
WINSOME FILING NO 1
A TRACT OF LAND BEING A PORTION OF SECTION 24, TOWNSHIP 11 SOUTH, RANGE 65 WEST, OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO

Know what's below. Call before you dig.

Rock Sock (RS) SC-5

Description

Photograph RS-1. Rock socks placed at regular intervals in a curb line can help reduce sediment loading to storm sewer inlets. Rock socks can also be used as perimeter controls.

A rock sock is constructed of gravel that has been wrapped by wire mesh or a geotextile to form an elongated cylindrical filter. Rock socks are typically used either as a perimeter control or as part of inlet protection. When placed at angles in the curb line, rock socks are typically referred to as curb socks. Rock socks are intended to trap sediment from stormwater runoff that flows onto roadways as a result of construction activities.

Appropriate Uses

Rock socks can be used at the perimeter of a disturbed area to control localized sediment loading. A benefit of rock socks as opposed to other perimeter controls is that they do not have to be trenched or staked into the ground; therefore, they are often used on roadway construction projects where paved surfaces are present.

Use rock socks in inlet protection applications when the construction of a roadway is substantially complete and the roadway has been directly connected to a receiving storm system.

Design and Installation

When rock socks are used as perimeter controls, the maximum recommended tributary drainage area per 100 lineal feet of rock socks is approximately 0.25 acres with disturbed slope length of up to 150 feet and a tributary slope gradient no steeper than 3:1. A rock sock design detail and notes are provided in Detail RS-1. Also see the Inlet Protection Fact Sheet for design and installation guidance when rock socks are used for inlet protection and in the curb line.

When placed in the gutter adjacent to a curb, rock socks should protrude no more than two feet from the curb in order for traffic to pass safely. If located in a high traffic area, place construction markers to alert drivers and street maintenance workers of their presence.

Maintenance and Removal

Rock socks are susceptible to displacement and breaking due to vehicle traffic. Inspect rock socks for damage and repair or replace as necessary. Remove sediment by sweeping or vacuuming as needed to maintain the functionality of the BMP, typically when sediment has accumulated behind the rock sock to one-half of the sock's height.

Once upstream stabilization is complete, rock socks and accumulated sediment should be removed and properly disposed.

Rock Sock	
Functions	
Erosion Control	No
Sediment Control	Yes
Site/Material Management	No

SC-5 Rock Sock (RS)

GRADATION TABLE

SIEVE SIZE	MASS PERCENT PASSING SQUARE MESH SIEVES
	NO. 4
2"	100
1½"	90 – 100
1"	20 – 55
¾"	0 – 15
⅜"	0 – 5
MATCHES SPECIFICATIONS FOR NO. 4 COARSE AGGREGATE FOR CONCRETE PER AASHTO M43. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES.	

ROCK SOCK INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION(S) OF ROCK SOCKS.
2. CRUSHED ROCK SHALL BE 1½" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET (1½" MINUS).
3. WIRE MESH SHALL BE FABRICATED OF 10 GAGE POULTRY MESH, OR EQUIVALENT, WITH A MAXIMUM OPENING OF ½", RECOMMENDED MINIMUM ROLL WIDTH OF 48"
4. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS AND AT 2" CENTERS ON ENDS OF SOCKS.
5. SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROCK ENCLOSURE.

RS–1. ROCK SOCK PERIMETER CONTROL

Rock Sock (RS) SC-5

ROCK SOCK MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS 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 DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, OR DAMAGED BEYOND REPAIR.

5. SEDIMENT ACCUMULATED UPSTREAM OF ROCK SOCKS SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE ROCK SOCK.

6. ROCK SOCKS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

7. WHEN ROCK SOCKS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, 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.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF ROCK SOCK INSTALLATION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY OTHER SIMILAR PROPRIETARY PRODUCTS ON THE MARKET. UDFCD NEITHER INDORSES NOR DISCOURAGES USE OF PROPRIETARY PROTECTION PRODUCTS; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

VEHICLE TRACKING
NTS

VEHICLE TRACKING NOTES

INSTALLATION REQUIREMENTS

1. ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.

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.

3. AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.

4. CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.

5. CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.

MAINTENANCE REQUIREMENTS

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

2. STONES ARE TO BE REAPPLIED PERIODICALLY AND WHEN REPAIR IS NECESSARY.

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.

5. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

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

3-54

Concrete Washout Area (CWA) MM-1

Description

Photograph CWA-1. Example of concrete washout area. Note gravel tracking pad for access and sign.

Concrete waste management involves designating and properly managing a specific area of the construction site as a concrete washout area. A concrete washout area can be created using one of several approaches designed to receive wash water from washing of tools and concrete mixer chutes, liquid concrete waste from dump trucks, mobile batch mixers, or pump trucks. Three basic approaches are available: excavation of a pit in the ground, use of an above ground storage area, or use of prefabricated haul-away concrete washout containers. Surface discharges of concrete washout water from construction sites are prohibited.

Appropriate Uses

Concrete washout areas must be designated on all sites that will generate concrete wash water or liquid concrete waste from onsite concrete mixing or concrete delivery.

Because pH is a pollutant of concern for washout activities, when unlined pits are used for concrete washout, the soil must have adequate buffering capacity to result in protection of state groundwater standards; otherwise, a liner/containment must be used. The following management practices are recommended to prevent an impact from unlined pits to groundwater:

- The use of the washout site should be temporary (less than 1 year), and
- The washout site should be not be located in an area where shallow groundwater may be present, such as near natural drainages, springs, or wetlands.

Design and Installation

Concrete washout activities must be conducted in a manner that does not contribute pollutants to surface waters or stormwater runoff. Concrete washout areas may be lined or unlined excavated pits in the ground, commercially manufactured prefabricated washout containers, or aboveground holding areas constructed of berms, sandbags or straw bales with a plastic liner.

Although unlined washout areas may be used, lined pits may be required to protect groundwater under certain conditions.

Do not locate an unlined washout area within 400 feet of any natural drainage pathway or waterbody or within 1,000 feet of any wells or drinking water sources. Even for lined concrete washouts, it is advisable to locate the facility away from waterbodies and drainage paths. If site constraints make these setbacks infeasible or if highly permeable soils exist in the area, then the pit must be installed with an impermeable liner (16 mil minimum thickness) or surface storage alternatives using prefabricated concrete washout devices or a lined aboveground storage area should be used.

Concrete Washout Area	
Functions	
Erosion Control	No
Sediment Control	No
Site/Material Management	Yes

MM-1 Concrete Washout Area (CWA)

Design details with notes are provided in Detail CWA-1 for pits and CWA-2 for aboveground storage areas. Pre-fabricated concrete washout container information can be obtained from vendors.

Maintenance and Removal

A key consideration for concrete washout areas is to ensure that adequate signage is in place identifying the location of the washout area. Part of inspecting and maintaining washout areas is ensuring that adequate signage is provided and in good repair and that the washout area is being used, as opposed to washout in non-designated areas of the site.

Remove concrete waste in the washout area, as needed to maintain BMP function (typically when filled to about two-thirds of its capacity). Collect concrete waste and deliver offsite to a designated disposal location.

Upon termination of use of the washout site, accumulated solid waste, including concrete waste and any contaminated soils, must be removed from the site to prevent on-site disposal of solid waste. If the wash water is allowed to evaporate and the concrete hardens, it may be recycled.

Photograph CWA-2. Prefabricated concrete washout. Photo courtesy of CDOT.

Photograph CWA-3. Earthen concrete washout. Photo courtesy of CDOT.

Concrete Washout Area (CWA) MM-1

CWA–1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –CWA INSTALLATION LOCATION.
2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' 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 (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
7. 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.
8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

MM-1 Concrete Washout Area (CWA)

CWA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS 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 DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. 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'.

5. 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.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.

7. 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.

(DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF 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.

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COLORADO LICENSED PATRICK V. PARKER 6/1/2020 43911 PROFESSIONAL ENGINEER

EROSION CONTROL DETAILS
SITE: 17480 MERIDIAN ROAD ELBERT, COLORADO 80106
FOR: WINSOME, LLC 1864 WOODMORE DR, SUITE 100 MONUMENT, COLORADO 80132

NO.	REVISIONS
1	SUBMITTAL 1
2	03.11.2020 REVISED PER COMMENTS
3	06.01.2020 FOR CONSTRUCTION
4	
5	
6	
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DATE: 01.22.20
DRAWN BY: JCP
CHECKED BY: LPV
JOB #: 49388.01

EGP-20-001

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PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN

WINSOME FILING NO 1

A TRACT OF LAND BEING A PORTION OF SECTION 24, TOWNSHIP 11 SOUTH, RANGE 65 WEST, OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO

City of Colorado Springs
Storm Water Quality

Figure ECB-1
Erosion Control Blanket
Application Examples

DEN/M153722.CS.CB/FigECB-1/9-99

3-22

City of Colorado Springs
Storm Water Quality

Figure ECB-2
Erosion Control Blanket
Installation Requirements

DEN/M153722.CS.CB/FigECB-2/9-99

3-23

American Excelsior Company®
Earth Science Division

Proud Participant in NTPEP and Proud Member of:

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PRODUCT DATA SHEET
CURLEX® ENFORCER®

DESCRIPTION

Curlex Enforcer a biocomposite Turf Reinforcement Mat (TRM) that consists of a specific cut of naturally seed free Great Lakes Aspen curled wood excelsior with 80% six-inch fibers or greater fiber length. It is of consistent thickness with fibers evenly distributed throughout the entire area of the blanket. The top and bottom of each blanket is covered with extra heavy duty black net. Curlex Enforcer is also available as QuickGRASS® (Dyed Green). Curlex Enforcer shall be manufactured in the U.S.A.

Curlex Enforcer has a design soil loss ratio (event-based RUSLE C factor) of .022 and is typically suitable for slopes up to .5H:1V. Curlex Enforcer is rated for channel flows up to 11 ft/s (3.4 m/s); 3.25 lb/ft^2 (156 Pa) shear stress unvegetated or 17 ft/s (5.2 m/s); 10.0 lb/ft^2 (480 Pa) shear stress vegetated.

PHYSICAL PROPERTIES

Curlex Enforcer measurements at time of manufacturing:

Width	8.0 ft (2.4 m)
Length	67.5 ft (20.6 m)
Area	60.0 yd^2 (50.2 m^2)
Weight[1]	75.0 lb (34.1 kg)
Fiber Count	≈12,000 per yd^2 (≈14,400 per m^2)
Fiber Length (80% min.)	≥6.0 in (≥15.2 cm)
Mass per Unit Area (± 10%)	1.25 lb/yd^2 (0.68 kg/m^2)
Net Openings	0.75 in x 1.0 in (19.1 mm x 25.4 mm)

TYPICAL INDEX VALUES

Index Property	Test Method	Value
Thickness	ASTM D 6525	0.415 in (10.64 mm)
Light Penetration	ASTM D 6567	12.7%
Resiliency	ASTM D 1777/ECTC	55%
Mass per Unit Area	ASTM D 6475	0.98 lb/yd^2 (532 g/m^2)
MD-Tensile Strength Max.	ASTM D 6818	612.0 lb/ft (8.96 kN/m)
TD-Tensile Strength Max.	ASTM D 6818	460.8 lb/ft (6.75 kN/m)
MD-Elongation	ASTM D 6818	19.5%
TD-Elongation	ASTM D 6818	27.3%
Swell	ECTC Procedure	33%
Water Absorption	ASTM D 1117/ECTC	170%
UV Stability	ASTM D 4355 (1,000 hr)	90% minimum
Bench-Scale Rain Splash	ASTM D 7101	SLR = 10.24 @ 2 in/hr [2,3]
Bench-Scale Rain Splash	ASTM D 7101	SLR = 10.51 @ 4 in/hr [2,3]
Bench-Scale Rain Splash	ASTM D 7101	SLR = 10.86 @ 6 in/hr [2,3]
Bench-Scale Shear	ASTM D 7207	3.55 lb/ft^2 @ 0.5 in soil loss [3]
Germination Improvement	ASTM D 7322	486%

[1] Weight is based on a dry fiber weight basis at time of manufacture. Baseline moisture content of Great Lakes Aspen excelsior is 22%.

[2] SLR is the Soil Loss Ratio, as reported by NTPEP/AASHTO. [3] Bench-scale index values should not be used for design purposes.

MADE IN THE U.S.A.

850 Avenue H East | Arlington, Texas 76011
Phone 1-800-777-SOIL | Fax 817-385-3585 | www.Curlex.com

W0911R0315

SILT FENCE

SILT FENCE NOTES

INSTALLATION REQUIREMENTS

1. SILT FENCES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

2. WHEN JOINTS ARE NECESSARY, SILT FENCE GEOTEXTILE SHALL BE SPLICED TOGETHER ONLY AT SUPPORT POST AND SECURELY SEALED.

3. METAL POSTS SHALL BE "STUDDED TEE" OR "U" TYPE WITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT. WOOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION 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.

5. WHILE NOT REQUIRED, WIRE MESH FENCE MAY BE USED TO SUPPORT THE GEOTEXTILE. WIRE FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 3/4" LONG, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 6" AND SHALL NOT EXTEND MORE THAN 3' ABOVE THE ORIGINAL GROUND SURFACE.

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 RECOMMENDED.

7. THE HEIGHT OF THE SILT FENCE FROM THE GROUND SURFACE SHALL BE MINIMUM OF 24 INCHES AND SHALL NOT EXCEED 36 INCHES; HIGHER FENCES MAY INPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.

MAINTENANCE REQUIREMENTS

1. 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.

3. SILT FENCES SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED AS APPROVED BY THE CITY.

City of Colorado Springs
Stormwater Quality

Figure SF-2
Silt Fence
Construction Detail and Maintenance Requirements

3-36

City of Colorado Springs
Stormwater Quality

Figure SF-3
Silt Fence Joint Tying
Construction Detail and Maintenance Requirements

3-37

EROSION CONTROL BLANKET DETAIL
(NTS)

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LUKE PATRICK VANDEN DANIEL
6/1/2020
43911
PROFESSIONAL ENGINEER

EROSION CONTROL DETAILS

SITE: 17480 MERIDIAN ROAD
ELBERT, COLORADO 80106

FOR: WINSOME, LLC
1864 WOODMORE DR, SUITE 100
MONUMENT, COLORADO 80132

NO.	REVISIONS
1	SUBMITTAL 1
2	03.11.2020 REVISED PER COMMENTS
3	06.01.2020 FOR CONSTRUCTION
4	
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DATE: 01.22.20
DRAWN BY: JCP
CHECKED BY: LPV
JOB #: 49388.01

18

EGP-20-001

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