

GRANDWOOD RANCH

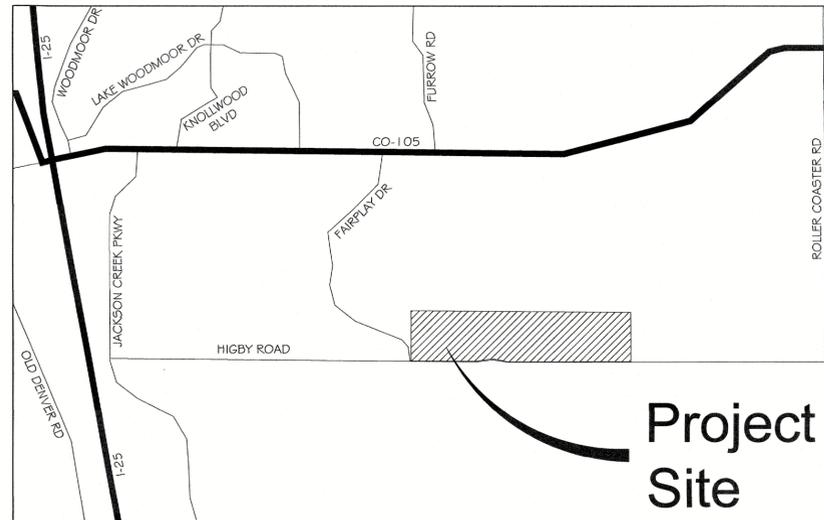
EL PASO COUNTY, CO

PRE-DEVELOPMENT GRADING & EROSION CONTROL PLANS

AUGUST, 2020

INDEX OF SHEETS		SHEET No.
TS01	TITLE SHEET	1
GEN01	LEGEND & ABBREVIATION NOTES	2
GN01	GENERAL NOTES	3
GEC01-GEC03	GRADING & EROSION CONTROL PLAN	4-6
ECN01-ECN03	EROSION CONTROL DETAILS	7-9

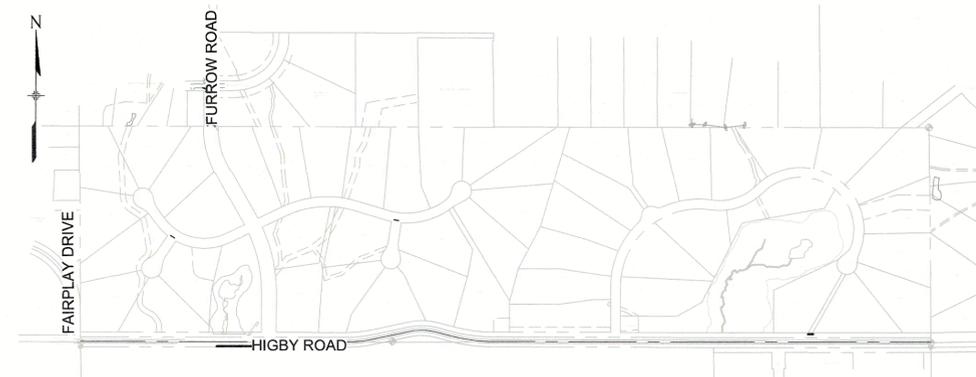
THIS IS AN OVERLOT GRADING AND EROSION CONTROL PLAN ONLY. THIS PLAN DOES NOT REFLECT DETAILED/FINE GRADING ELEMENTS THAT WILL BE PART OF FINAL CONSTRUCTION DOCUMENTS FOR SITE DEVELOPMENT, PAVING OPERATIONS, PLACEMENT OF CURB & GUTTER, AND LANDSCAPING. BUILDING AND PARKING LOT LOCATIONS ARE PROVIDED FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE.



VICINITY MAP

N.T.S.

OWNER/DEVELOPER	SYLVAN VISTA, INC. 14160 GLENEAGLE DRIVE COLORADO SPRINGS, CO 80921
CIVIL ENGINEER	MATRIX DESIGN GROUP 2435 RESEARCH PARKWAY, SUITE 300 COLORADO SPRINGS, CO 80920
ELECTRIC	MOUNTAINVIEW ELECTRIC ASSOCIATION (719) 495-2283
GAS	BLACK HILLS ENERGY 105 SOUTH VICTORIA AVENUE PUEBLO, CO (888) 890-5554
STREET	EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT INSPECTIONS 2880 INTERNATIONAL CIRCLE, SUITE 110 COLORADO SPRINGS, CO 80910 (719) 520-6819
DRAINAGE	EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS STORMWATER TEAM 3275 AKERS DRIVE COLORADO SPRINGS, CO 80922 (719) 520-6877
FIRE DEPARTMENT	TRI-LAKES MONUMENT FIRE RESCUE 16055 OLD FOREST POINT, SUITE 103 MONUMENT, CO 80132 (719) 484-0911



SITE MAP

N.T.S.

OWNER'S STATEMENT:

THE OWNER WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

William F. Herebic II
 WILLIAM F. HEREBIC II
 SYLVAN VISTA, INC.
 14160 GLENEAGLE DRIVE
 COLORADO SPRINGS, CO 80921
 DATE: 9-30-2020

ENGINEER'S STATEMENT:

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

Nicole Schanel
 NICOLE SCHANEL, PE #52434
 DATE: 8/21/2020

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.

APPROVED Engineering Department

10/05/2020 7:41:50 PM
dsdnijkamp

EPC Planning & Community
 Development Department

JENNIFER IRVINE, P.E.
 COUNTY ENGINEER / ECM ADMINISTRATOR

TRAFFIC CONTROL NOTE:

THE CONTRACTOR SHOULD PROVIDE ALL TRAFFIC CONTROL DEVICES AND MONITORING NECESSARY TO SAFELY COMPLETE THE WORK SHOWN IN THESE CONSTRUCTION DOCUMENTS IN CONFORMANCE WITH M.U.T.C.D. GUIDELINES. THE CONTRACTOR SHALL COMPLETE ALL NECESSARY WORK FOR PLAN REVIEW, PERMITS, AND PROCESSING. TRAFFIC CONTROL WILL NOT BE PAID SEPARATELY BUT IS INCLUDED IN THE COST OF THE PROJECT.

REFERENCE DRAWINGS	###	DESCRIPTION	BY
X-788-W			
X-1105-EX			
NO. 2	8/21/2020	EPC REV4 COMMENTS	CAP
NO. 1	6/24/2020	EPC REV3 COMMENTS	CAP
No.	DATE	DESCRIPTION	BY
REVISIONS			
COMPUTER FILE MANAGEMENT			
FILE NAME: S:\20.1105.004 Grandwood Ranch\104 Dwg\104 Plan Sets\Construction Plans\GEC Plan\TS01.dwg			
CTB FILE: —			
PLOT DATE: September 29, 2020 1:23:49 PM			
THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.			

SHEET KEY

BENCHMARK
NGS T 294 ELEVATION - 7247.10' NAVD 88
BASIS OF BEARING:
A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56'32"W - 5135.84'. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5/8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"

OWNER: SYLVAN VISTA, INC. WILLIAM F. HEREBIC II, MANAGER 14160 GLENEAGLE DRIVE COLORADO SPRINGS, CO 80921
PREPARED BY:

SEAL
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 20.1105.004

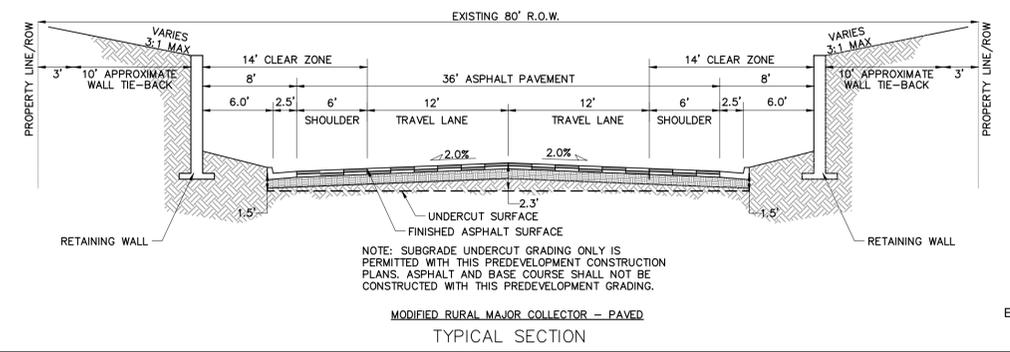
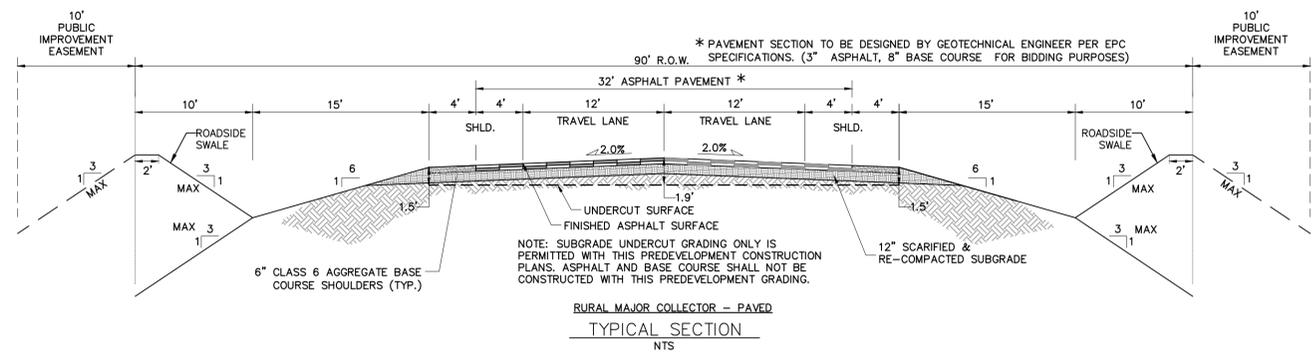
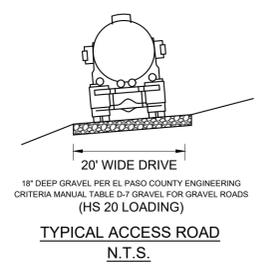
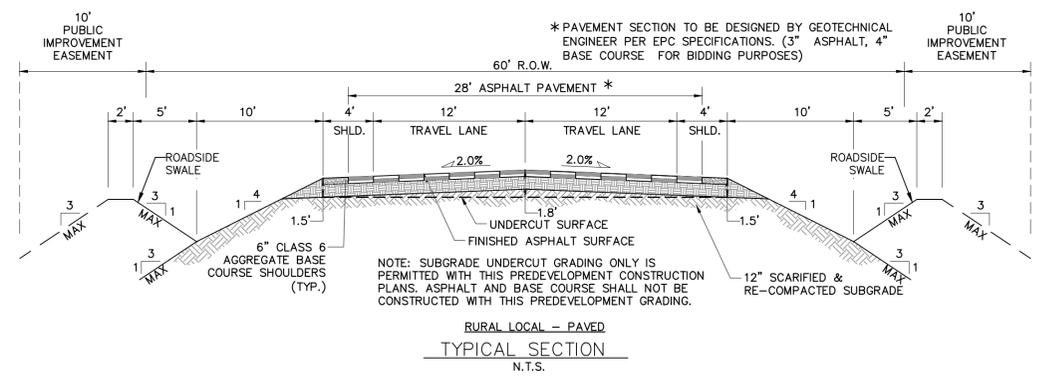
GRANDWOOD RANCH			
EL PASO COUNTY PRE-DEVELOPMENT GRADING & EROSION CONTROL PLAN			
TITLE SHEET			
DESIGNED BY: CAP	CAP	SCALE: N/A	DATE ISSUED: AUGUST 2020
DRAWN BY: CAP	CAP	HORIZ: N/A	DRAWING No. 1 OF 9
CHECKED BY: JA	JA	VERT: N/A	SHEET 1 OF 9
			DRAWING No. TS 01

ABBREVIATIONS

ASSY	ASSEMBLY	MAX	MAXIMUM
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS	MH	MANHOLE
APPROX	APPROXIMATE or APPROXIMATELY	MIN	MINIMUM
AVE	AVENUE	MJ	MECHANICAL JOINT
AVG	AVERAGE	NTS	NOT TO SCALE
BLVD	BOULEVARD	O/S	OFFSET
BTM	BOTTOM	PR	PROPOSED
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION	PC	POINT OF CURVATURE
CEN	CENTER	PCC	POINT OF COMPOUND CURVE
C or CL	CENTERLINE	PCR	POINT OF CURB RETURN
CFS	CUBIC FEET PER SECOND	R _c or P/L	PROPERTY LINE
CONC	CONCRETE	PRC	POINT OF REVERSE CURVE
CONST	CONSTRUCTION	PT	POINT OF TANGENCY
CONT	CONTINUOUS	PVC	POINT OF VERTICAL CURVE or POLYVINYL CHLORIDE
DIA	DIAMETER	PVI	POINT OF VERTICAL INTERSECTION
DWG	DRAWING	PVMT	PAVEMENT
EA	EACH	PVT	POINT OF VERTICAL TANGENT
EGL	ENERGY GRADE LINE	RCP	REINFORCED CONCRETE PIPE
ELEV or EL	ELEVATION	RED	REDUCER
ESMT	EASEMENT	REF	REFERENCE
EX or EXIST	EXISTING	REQ	REQUIRED
FES	FLARED END SECTION	REV	REVISION
F or FL	FLOWLINE	ROW	RIGHT-OF-WAY
FLG	FLANGE	RT	RIGHT
FT	FOOT/FEET	SD	STORM SEWER
HGL	HYDRAULIC GRADE LINE	ST	STREET
HP	HIGH POINT	STA	STATION
HORIZ	HORIZONTAL	STD	STANDARD
HCL	HORIZONTAL CONTROL LINE	SS	SANITARY SEWER
INV	INVERT	SW or S/W	SIDEWALK
	VERTICAL CURVE FACTOR	TAN	TANGENT
LF	LINEAR FEET	TBC	TOP BACK OF CURB
LN	LANE	TYP	TYPICAL
LP	LOW POINT	UG	UNDERGROUND
LT	LEFT	UTIL	UTILITY
		VERT	VERTICAL
		W	WIDTH
		w/	WITH

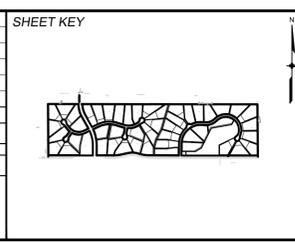
SYMBOLS

---	PROPOSED CENTERLINE
=====	EXISTING PAVED ROAD
-----E-SD-----	EXISTING UNDERGROUND UTILITY
-----P-W 8-----	PROPOSED UNDERGROUND UTILITY
-----	RIGHT OF WAY
-----	EASEMENT
=====	EXISTING CURB & GUTTER
=====	PROPOSED CURB & GUTTER
-----6.400-----	EXISTING CONTOUR
-----6.400-----	PROPOSED CONTOUR
=====	LIMITS OF CONSTRUCTION



EPC 10/5/2020

REFERENCE DRAWINGS			
X-Title-W	X-1105-EX SITE DESIGN		
NO. 2	8/21/2020	EPC REV4 COMMENTS	CAP
NO. 1	6/24/2020	EPC REV3 COMMENTS	CAP
NO.	DATE	DESCRIPTION	BY
REVISIONS			
COMPUTER FILE MANAGEMENT			
FILE NAME: S:\20.1105.004 Grandwood Ranch\100 Dwg\104 Plan Sets\Construction Plans\GEC Plan\GEN01.dwg			
CTB FILE:			
PLOT DATE: September 29, 2020 10:45:02 AM			
THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.			



BENCHMARK
NGS T 294 ELEVATION - 7247.10' NAVD 88

BASIS OF BEARING:
A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56'32\"/>

OWNER:
SYLVAN VISTA, INC.
WILLIAM F. HEREBIC II, MANAGER
14160 GLENLEAGLE DRIVE
COLORADO SPRINGS, CO 80921

PREPARED BY:

SEAL

FOR AND ON BEHALF OF:
MATRIX DESIGN GROUP, INC.
PROJECT No. 20.1105.004

GRANDWOOD RANCH

EL PASO COUNTY
PRE-DEVELOPMENT GRADING & EROSION CONTROL PLAN

LEGEND AND ABBREVIATION NOTES

DESIGNED BY:	CAP	SCALE:	DATE ISSUED:	AUGUST 2020	DRAWING No.
DRAWN BY:	JA	HORIZ:	N/A		GEN 01
CHECKED BY:	JA	VERT:	N/A	SHEET	2 OF 9

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

- STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF SITE WATERS, INCLUDING WETLANDS.
- NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
- A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
- CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
- ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN.
- TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
- FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
- ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
- EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
- COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
- ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
- CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK OR STREAM.
- DURING DEWATERING OPERATIONS OF UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.
- EROSION CONTROL BLANKETING IS TO BE USED ON SLOPES STEEPER THAN 3:1.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.

STANDARD NOTES FOR EL PASO COUNTY GRADING & EROSION CONTROL PLANS (CONT.):

- THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
- THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
- NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ONSITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FACILITIES.
- NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
- OWNER/DEVELOPER AND THEIR AGENTS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL, OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
- PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY VIVID ENGINEERING GROUP, INC., DATED SEPTEMBER, 2019, AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
 WATER QUALITY CONTROL DIVISION
 WQCD - PERMITS
 4300 CHERRY CREEK DRIVE SOUTH
 DENVER, CO 80246-1530
 ATTN: PERMITS UNIT

NRCS SOIL SURVEY FOR EL PASO COUNTY

SOIL ID NO.	SOIL TYPE	HYDROLOGIC CLASSIFICATION
1	ALAMOSA LOAM (1%-3% SLOPES)	D
41	KETTLE GRAVELLY LOAMY SAND (8%-40% SLOPES)	B
42	KETTLE-ROCK OUTCROP COMPLEX	B
71	PRING COARSE SANDY LOAM (3%-8% SLOPES)	B
93	TOMAH-CROWFOOT COMPLEX (8%-15% SLOPES)	B

TIMING

ANTICIPATED STARTING AND COMPLETION TIME PERIOD OF SITE GRADING:
AUGUST 2020 THRU SEPTEMBER 2020

EXPECTED DATE ON WHICH THE FINAL STABILIZATION WILL BE COMPLETED:
NOVEMBER 2020

AREAS

TOTAL AREA: 147.42 ACRES
 DISTURBED AREA : 24.8 ACRES

RECEIVING WATERS

NAME OF RECEIVING WATERS
 JACKSON CREEK (ULTIMATE)

NPDES NOTES:

- THE CONTRACTOR SHALL REMOVE ALL SEDIMENT, MUD, AND CONSTRUCTION DEBRIS THAT MAY ACCUMULATE IN THE FLOWLINES AND PUBLIC RIGHTS OF WAYS AS A RESULT OF THIS CONSTRUCTION PROJECT. SAID REMOVAL SHALL BE CONDUCTED IN A TIMELY MANNER, OR AS DIRECTED BY THE ENGINEER.
- THIS CONSTRUCTION ACTIVITIES STORMWATER MANAGEMENT PLAN (SWMP) HAS BEEN SUBMITTED AS PART OF AN APPLICATION FOR AN EROSION AND SEDIMENT CONTROL PERMIT FILED WITH THE CITY OF COLORADO SPRINGS AND AS INCLUSION BY REFERENCE TO THE CDPHE CONSTRUCTION ACTIVITY PERMIT. THE SWMP IS A LIVING DOCUMENT AND ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED OF THE CONTRACTOR DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT FUNCTION AS INTENDED. THE REQUIREMENTS OF THIS PLAN SHALL BE THE OBLIGATION OF THE LAND OWNER AND/OR HIS SUCCESSORS OR HEIRS; UNTIL SUCH TIME AS THE PLAN IS PROPERLY COMPLETED, MODIFIED, OR VOIDED.
- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, ETC., RESULTING FROM WORK DONE AS PART OF THIS PROJECT.
- THE CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION, EXCAVATION, TRENCHING, BORING, GRADING OR OTHER CONSTRUCTION OPERATIONS THAT ARE PART OF THIS PROJECT.
- A LAYER OF SUITABLE MULCH SHALL BE APPLIED TO ALL DISTURBED PORTIONS OF THE SITE WITHIN 21 DAYS OF THE COMPLETION OF GRADING. SAID MULCH SHALL BE APPLIED AT A RATE OF 2 TONS PER ACRE AND SHALL BE TACKED OR FASTENED BY AN APPROVED METHOD SUITABLE FOR THE TYPE OF MULCH USED. ROUGH-CUT STREETS SHALL BE MULCHED UNLESS A LAYER OF AGGREGATE ROAD BASE OR ASPHALT PAVING IS TO BE APPLIED TO SAID ROUGH-CUT STREETS WITHIN THE 21 DAY PERIOD AFTER COMPLETION OF OVERLOT GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THEN SIXTY (60) DAYS SHALL ALSO BE SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMP'S SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.
- THE CONTRACTOR SHALL LOCATE, INSTALL, AND MAINTAIN ALL EROSION CONTROL AND WATER QUALITY "BEST MANAGEMENT PRACTICES" AS INDICATED IN THE APPROVED CONSTRUCTION ACTIVITIES STORMWATER MANAGEMENT PLAN. BMP'S SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THIS PROJECT.
- AT A MINIMUM, THE CONTRACTOR SHALL INSPECT, AND KEEP A LOG OF, ALL BMP'S WEEKLY AND AFTER SIGNIFICANT PRECIPITATION EVENTS. ALL NECESSARY MAINTENANCE AND REPAIR SHALL BE COMPLETED IN A TIMELY MANNER. ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED FROM A BMP WHEN THE SEDIMENT LEVEL REACHES ONE-HALF THE HEIGHT OF THE BMP, OR, AT ANY TIME THAT SEDIMENT OR DEBRIS ADVERSELY IMPACTS THE FUNCTIONING OF THE BMP.
- THE CONTRACTOR SHALL PROPERLY COVER ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THIS SITE TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT WITHIN PUBLIC RIGHTS OF WAY.
- THE USE OF REBAR, STEEL STAKES, OR STEEL FENCE POSTS TO STAKE DOWN STRAW OR HAY BALES; OR TO SUPPORT SILT FENCING USED AS AN EROSION CONTROL MEASURE; IS PROHIBITED. THE USE OF OSHA APPROVED COLORED WARNING CAPS ON REBAR OR FENCE POSTS USED WITH EROSION CONTROL MEASURES IS NOT ACCEPTABLE.
- SOILS THAT WILL BE STOCKPILED FOR MORE THAN 30 DAYS SHALL BE MULCHED AND SEEDED WITH A TEMPORARY OR PERMANENT GRASS COVER WITHIN 21 DAYS OF STOCKPILE CONSTRUCTION. IF STOCKPILES ARE LOCATED WITHIN 100 FEET OF A DRAINAGEWAY, ADDITIONAL SEDIMENT CONTROLS SUCH AS TEMPORARY DIKES OR SILT FENCE SHALL BE REQUIRED.
- MODIFICATION OF AN ACTIVE EROSION AND SEDIMENT CONTROL PERMIT BY THE CONTRACTOR SHALL REQUIRE TIMELY NOTIFICATION OF AND APPROVAL BY THE CITY OF COLORADO SPRINGS. TERMINATION OF AN ACTIVE EROSION AND SEDIMENT CONTROL PERMIT UPON COMPLETION OF THE PROJECT REQUIRES NOTIFICATION OF AND APPROVAL BY THE CITY OF COLORADO SPRINGS.
- UNLESS CONFINED IN A PREDEFINED, BERMED CONTAINMENT AREA, THE CLEANING OF CONCRETE TRUCK DELIVERY CHUTES IS PROHIBITED AT THE JOB SITE. THE DISCHARGE OF WATER CONTAINING WASTE CEMENT TO THE STORM SEWER SYSTEM IS PROHIBITED.
- THE CONTRACTOR SHALL PROTECT ALL STORM SEWER FACILITIES ADJACENT TO ANY LOCATION WHERE PAVEMENT CUTTING OPERATIONS INVOLVING WHEEL CUTTING, SAW CUTTING OR ABRASIVE WATER JET CUTTING ARE TO TAKE PLACE. THE DISCHARGE OF ANY WATER CONTAMINATED BY WASTE PRODUCTS FROM CUTTING OPERATIONS TO THE STORM SEWER SYSTEM IS PROHIBITED. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL WASTE PRODUCTS GENERATED BY SAID CUTTING OPERATIONS ON A DAILY BASIS.
- LOCATION OF STAGING, STORAGE, EQUIPMENT MAINTENANCE, TEMPORARY DISPOSAL, VEHICLE TRACKING CONTROL AND CONCRETE TRUCK WASHOUT AREAS WILL BE DETERMINED IN THE FIELD AT THE START OF CONSTRUCTION ACTIVITY AND DELINEATED ON THIS PLAN.
- CONTRACTOR SHALL ENSURE NO ASPHALT OR CONCRETE BATCH PLANTS WILL BE USED ONSTIE.
- THE EXISTING VEGETATION CONSISTS OF NATIVE GRASSES AND SCRUB OAK. BASED ON SITE VISITS AND A REVIEW OF AERIAL PHOTOGRAPHY, THE VEGETATIVE COVER AT GRANDWOOD RANCH IS APPROXIMATELY 100%

EPC 10/5/2020

REFERENCE DRAWINGS	NO.	DATE	DESCRIPTION	CAP	BY
X-Title-W					
X-1105-EX SITE DESIGN					
	NO. 2	8/21/2020	EPC REV4 COMMENTS		
	NO. 1	6/24/2020	EPC REV3 COMMENTS		
REVISIONS					
COMPUTER FILE MANAGEMENT					
FILE NAME: S:\20.1105.004 Grandwood Ranch\100 Dwg\104 Plan Sets\Construction Plans\GEC Plan\GN01.dwg					
CTB FILE: ---					
PLOT DATE: September 29, 2020 10:45:18 AM					
THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.					

SHEET KEY



BENCHMARK
 NGS T 294 ELEVATION - 7247.10' NAVD 88

BASIS OF BEARING:
 A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56'32"W - 5135.84'. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5/8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"

OWNER:
 SYLVAN VISTA, INC.
 WILLIAM F. HEREBIC II, MANAGER
 14160 GLENLEAGLE DRIVE
 COLORADO SPRINGS, CO 80921

PREPARED BY:



SEAL

FOR AND ON BEHALF OF:
 MATRIX DESIGN GROUP, INC.
 PROJECT No. 20.1105.004



DESIGNED BY: CAP
DRAWN BY: CAP
CHECKED BY: JA

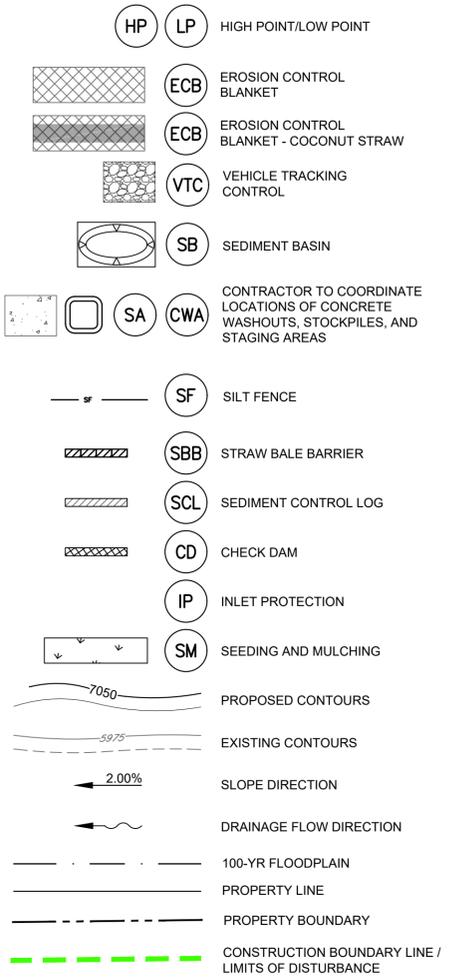
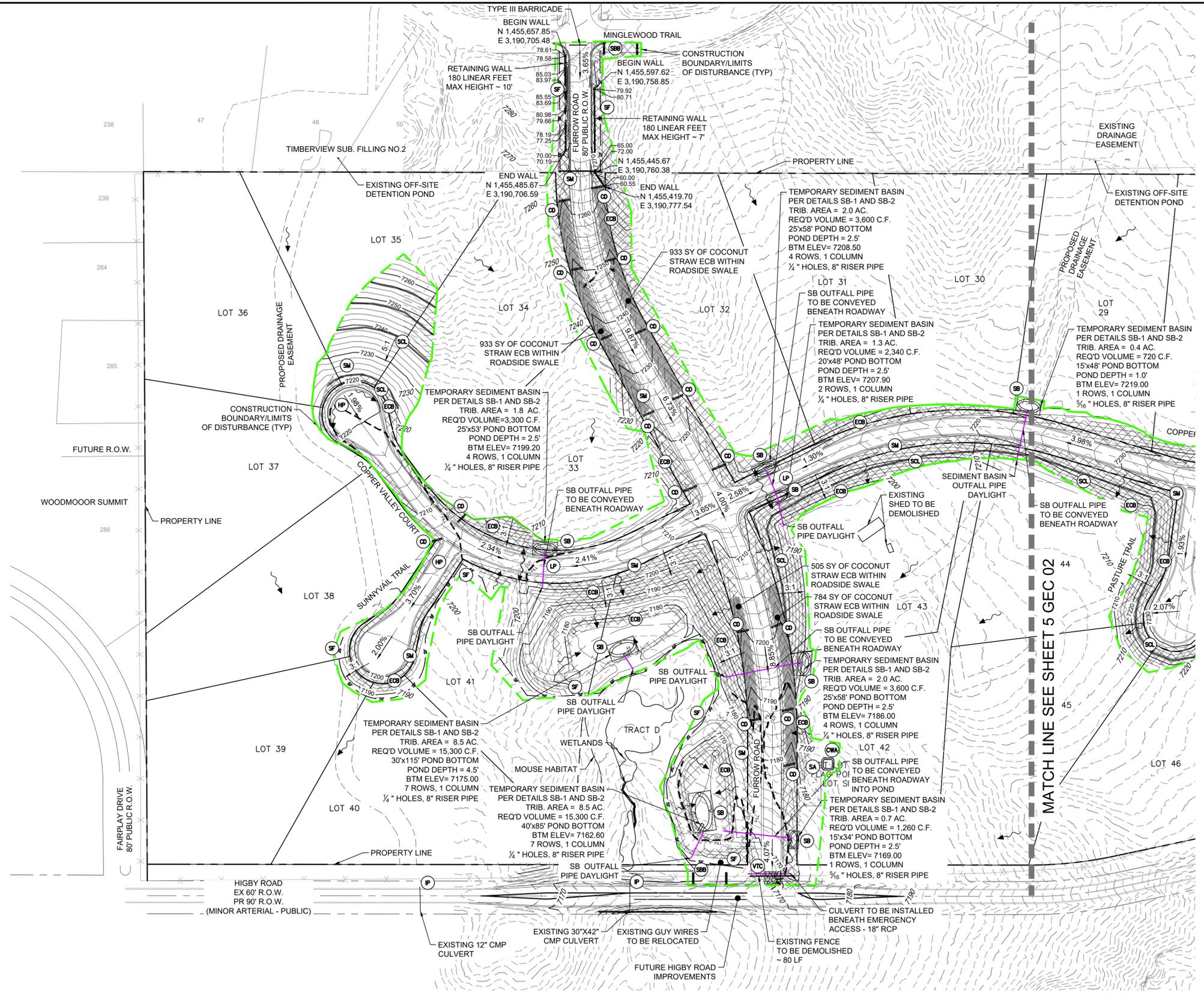
SCALE: HORIZ N/A
 VERT N/A

DATE ISSUED: AUGUST 2020
SHEET: 3 OF 9

DRAWING No.: GN 01

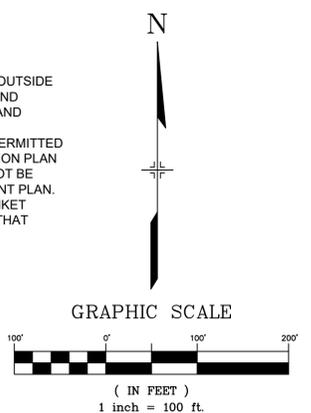
GRANDWOOD RANCH
 EL PASO COUNTY
 PRE-DEVELOPMENT GRADING & EROSION CONTROL PLAN

GENERAL NOTES



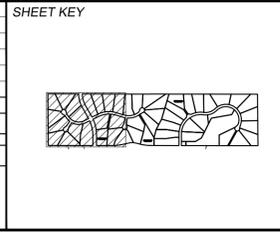
BMP SEQUENCING	
INITIAL	SILT FENCE, CONCRETE WASHOUT, VEHICLE TRACKING, TEMP SEDIMENT BASINS
INTERIM	CHECK DAMS, COCONUT WASHOUT, STRAW BARRIERS, STOCKPILES, STAGING
FINAL	EROSION CONTROL BLANKETS, SEEDING & MULCHING

- CONSTRUCTION NOTES:
- ALL GRADING OPERATIONS SHALL REMAIN OUTSIDE OF DESIGNATED PREBLE MOUSE HABITAT AND WETLANDS. DESIGNATED MOUSE HABITAT AND WETLANDS ARE TO REMAIN UNDISTURBED.
 - ONLY SUBGRADE UNDERCUT GRADING IS PERMITTED WITH THIS PREDEVELOPMENT CONSTRUCTION PLAN SET. ASPHALT AND BASE COURSE SHALL NOT BE CONSTRUCTED WITH THIS PREDEVELOPMENT PLAN. COCONUT STRAW EROSION CONTROL BLANKET SHALL BE USED IN ALL ROADSIDE SWALES THAT EXCEED A 5% LONGITUDINAL SLOPE.



NO.	DATE	DESCRIPTION	BY
NO. 2	8/21/2020	EPC REV4 COMMENTS	CAP
NO. 1	6/24/2020	EPC REV3 COMMENTS	CAP

COMPUTER FILE MANAGEMENT
 FILE NAME: S:\20.1105.004 Grandwood Ranch\100 Dwg\104 Plan Sets\Construction Plans\GEC Plan\GEC01.dwg
 PLOT DATE: September 29, 2020 11:13:38 AM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.



BENCHMARK
 NGS T 294 ELEVATION - 7247.10' NAVD 88

BASIS OF BEARING:
 A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56'32"W - 5135.84'. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5/8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"

OWNER:
 SYLVAN VISTA, INC.
 WILLIAM F. HEREBIC II, MANAGER
 14160 GLENLEAGUE DRIVE
 COLORADO SPRINGS, CO 80921

PREPARED BY:
 Matrix

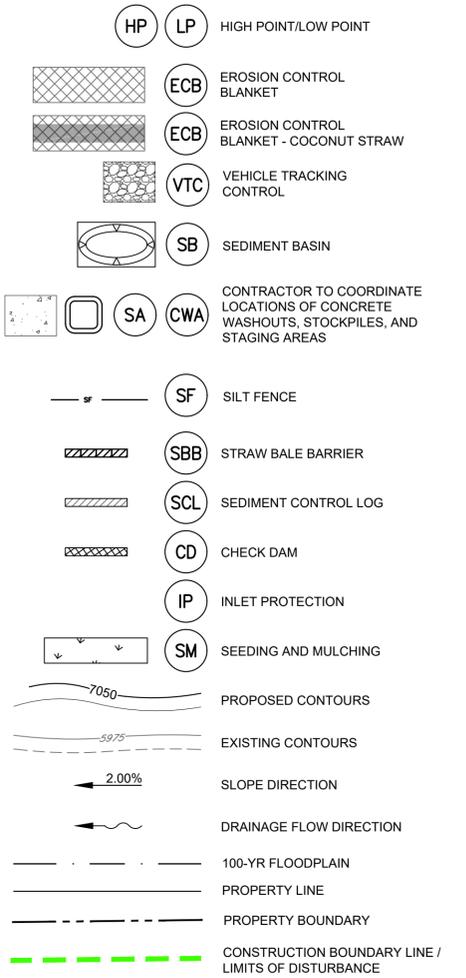
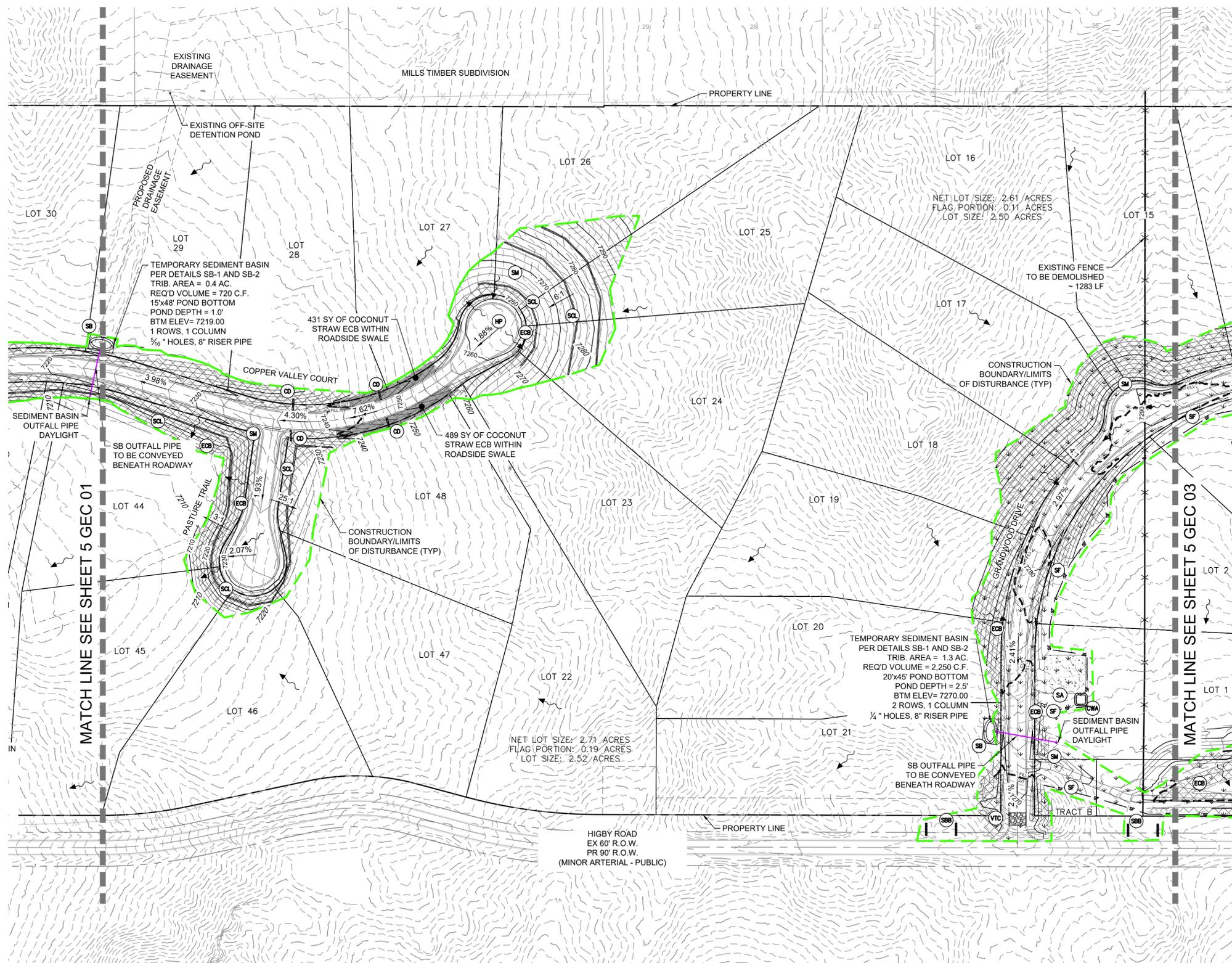


DESIGNED BY: CAP		SCALE: HORIZ 1"=100'	DATE ISSUED: AUGUST 2020	DRAWING No: GEC 01
DRAWN BY: CAP		VERT: N/A	SHEET: 4 OF 9	
CHECKED BY: JA				

FOR AND ON BEHALF OF
 MATRIX DESIGN GROUP, INC.
 PROJECT No. 20.1105.004

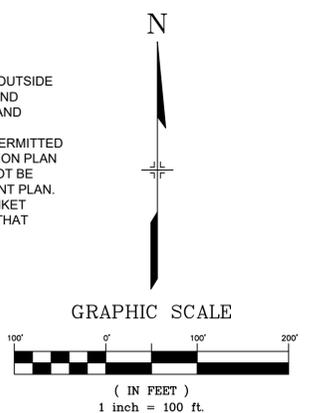
GRANDWOOD RANCH
 EL PASO COUNTY
 PRE-DEVELOPMENT GRADING & EROSION CONTROL PLAN

GRADING & EROSION CONTROL PLAN



BMP SEQUENCING	
INITIAL	SILT FENCE, CONCRETE WASHOUT, VEHICLE TRACKING, TEMP SEDIMENT BASINS
INTERIM	CHECK DAMS, CONCRETE WASHOUT, STRAW BARRIERS, STOCKPILES, STAGING
FINAL	EROSION CONTROL BLANKETS, SEEDING & MULCHING

- CONSTRUCTION NOTES:**
- ALL GRADING OPERATIONS SHALL REMAIN OUTSIDE OF DESIGNATED PREBLE MOUSE HABITAT AND WETLANDS. DESIGNATED MOUSE HABITAT AND WETLANDS ARE TO REMAIN UNDISTURBED.
 - ONLY SUBGRADE UNDERCUT GRADING IS PERMITTED WITH THIS PREDEVELOPMENT CONSTRUCTION PLAN SET. ASPHALT AND BASE COURSE SHALL NOT BE CONSTRUCTED WITH THIS PREDEVELOPMENT PLAN. COCONUT STRAW EROSION CONTROL BLANKET SHALL BE USED IN ALL ROADSIDE SWALES THAT EXCEED A 5% LONGITUDINAL SLOPE.



NO.	DATE	DESCRIPTION	BY
NO. 2	8/21/2020	EPC REV4 COMMENTS	CAP
NO. 1	6/24/2020	EPC REV3 COMMENTS	CAP

COMPUTER FILE MANAGEMENT

FILE NAME: S:\20.1105.004 Grandwood Ranch\100 Dwg\104 Plan Sets\Construction Plans\GEC Plan\GEC01.dwg
 CTB FILE:
 PLOT DATE: September 29, 2020 11:13:41 AM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

SHEET KEY

BENCHMARK

NGS T 294 ELEVATION - 7247.10' NAVD 88

BASIS OF BEARING:

A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56'32"W - 5135.84'. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5/8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"

OWNER:
 SYLVAN VISTA, INC.
 WILLIAM F. HEREBIC II, MANAGER
 14160 GLENLEAGLE DRIVE
 COLORADO SPRINGS, CO 80921

PREPARED BY:

SEAL

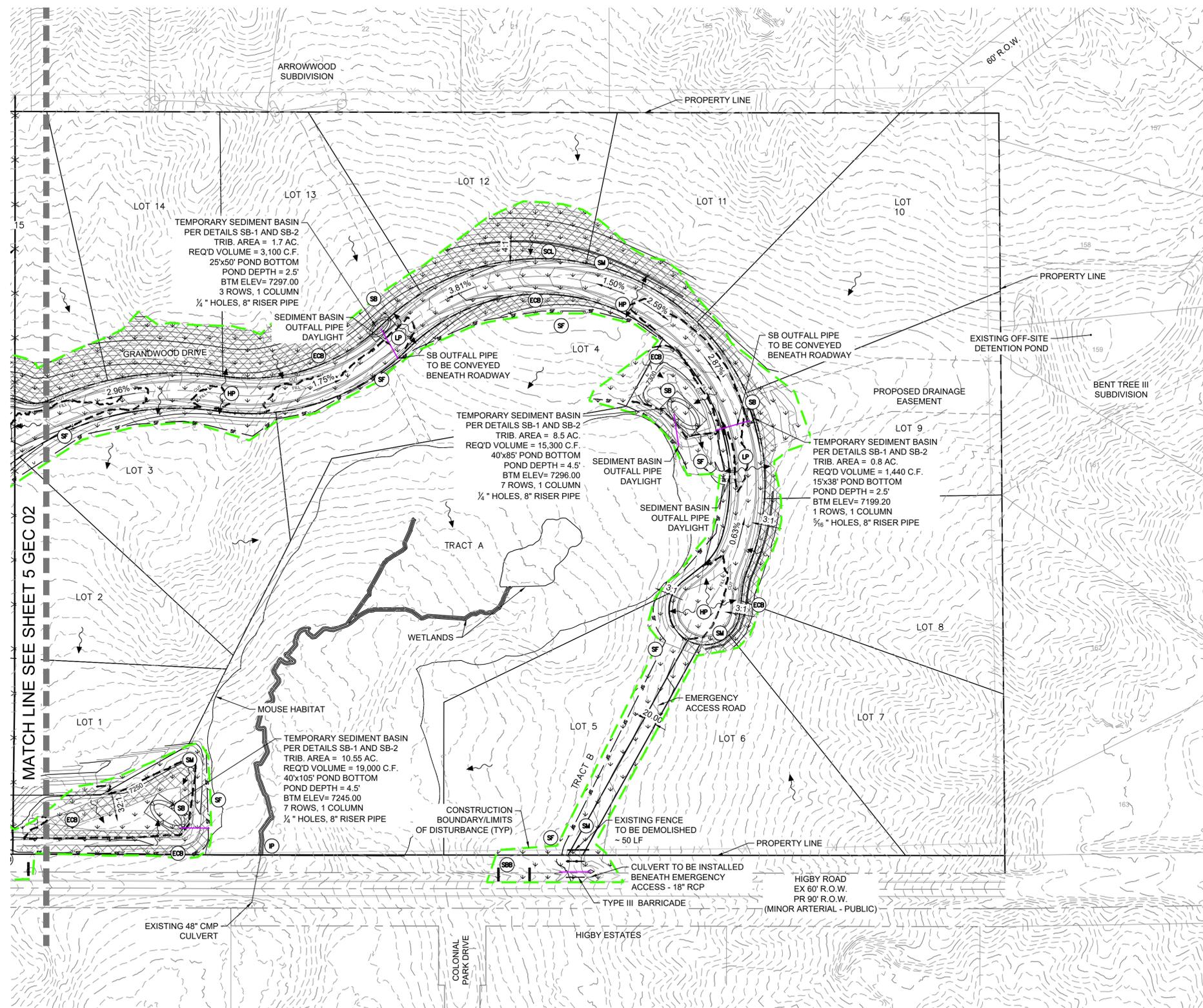
FOR AND ON BEHALF OF
 MATRIX DESIGN GROUP, INC.
 PROJECT No. 20.1105.004

GRANDWOOD RANCH

EL PASO COUNTY
 PRE-DEVELOPMENT GRADING & EROSION CONTROL PLAN

GRADING & EROSION CONTROL PLAN

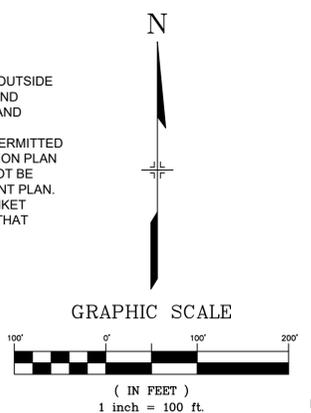
DESIGNED BY:	CAP	SCALE:	DATE ISSUED:	AUGUST 2020	DRAWING No.:
DRAWN BY:	JA	HORIZ 1" = 100'	SHEET:	6 OF 9	GEC 03
CHECKED BY:	JA	VERT. N/A			



- HIGH POINT/LOW POINT
- EROSION CONTROL BLANKET
- VEHICLE TRACKING CONTROL
- SEDIMENT BASIN
- CONTRACTOR TO COORDINATE LOCATIONS OF CONCRETE WASHOUTS, STOCKPILES, AND STAGING AREAS
- SILT FENCE
- STRAW BALE BARRIER
- SEDIMENT CONTROL LOG
- CHECK DAM
- INLET PROTECTION
- SEEDING AND MULCHING
- PROPOSED CONTOURS
- EXISTING CONTOURS
- SLOPE DIRECTION
- DRAINAGE FLOW DIRECTION
- 100-YR FLOODPLAIN
- PROPERTY LINE
- PROPERTY BOUNDARY
- CONSTRUCTION BOUNDARY LINE / LIMITS OF DISTURBANCE

BMP SEQUENCING	
INITIAL	SILT FENCE, CONCRETE WASHOUT, VEHICLE TRACKING, TEMP SEDIMENT BASINS
INTERIM	CHECK DAMS, COCONUT WASHOUT, STRAW BARRIERS, STOCKPILES, STAGING
FINAL	EROSION CONTROL BLANKETS, SEEDING & MULCHING

- CONSTRUCTION NOTES:
- ALL GRADING OPERATIONS SHALL REMAIN OUTSIDE OF DESIGNATED PREBLE MOUSE HABITAT AND WETLANDS. DESIGNATED MOUSE HABITAT AND WETLANDS ARE TO REMAIN UNDISTURBED.
 - ONLY SUBGRADE UNDERCUT GRADING IS PERMITTED WITH THIS PREDEVELOPMENT CONSTRUCTION PLAN SET. ASPHALT AND BASE COURSE SHALL NOT BE CONSTRUCTED WITH THIS PREDEVELOPMENT PLAN. COCONUT STRAW EROSION CONTROL BLANKET SHALL BE USED IN ALL ROADSIDE SWALES THAT EXCEED A 5% LONGITUDINAL SLOPE.



NO.	DATE	DESCRIPTION	BY
NO. 2	8/21/2020	EPC REV4 COMMENTS	CAP
NO. 1	6/24/2020	EPC REV3 COMMENTS	CAP
NO.	DATE	DESCRIPTION	BY

COMPUTER FILE MANAGEMENT
 FILE NAME: S:\20.1105.004 Grandwood Ranch\100 Dwg\104 Plan Sets\Construction Plans\GEC Plan\GEC01.dwg
 CTB FILE:
 PLOT DATE: September 29, 2020 11:13:46 AM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

SHEET KEY

BENCHMARK
 NGS T 294 ELEVATION - 7247.10' NAVD 88

BASIS OF BEARING:
 A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56'32"W - 5135.84'. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5/8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"

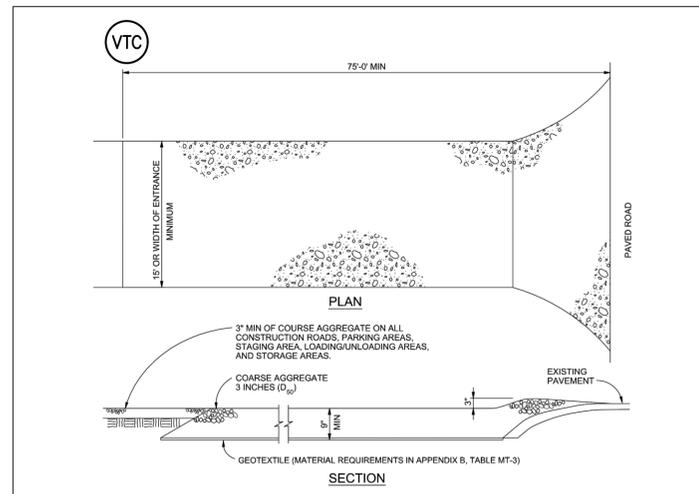
OWNER:
 SYLVAN VISTA, INC.
 WILLIAM F. HERBIC II, MANAGER
 14160 GLENEAGLE DRIVE
 COLORADO SPRINGS, CO 80921

PREPARED BY:

SEAL

FOR AND ON BEHALF OF
 MATRIX DESIGN GROUP, INC.
 PROJECT No. 20.1105.004

GRANDWOOD RANCH			
EL PASO COUNTY			
PRE-DEVELOPMENT GRADING & EROSION CONTROL PLAN			
GRADING & EROSION CONTROL PLAN			
DESIGNED BY:	CAP	SCALE:	DATE ISSUED:
DRAWN BY:	JA	HORIZ 1" = 100'	AUGUST 2020
CHECKED BY:	JA	VERT N/A	SHEET 6 OF 9
			DRAWING No. GEC 03



STABILIZED CONSTRUCTION ENTRANCE/EXIT

- INSTALLATION NOTES:**
- ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.
 - 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.
 - AREA TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.
 - CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.
 - 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 NOTES:**
- REGULAR INSPECTION ARE TO BE MADE OF ALL STABILIZING AREAS, ESPECIALLY AFTER STORM EVENTS.
 - STONES ARE TO BE REAPPLIED PERIODICALLY AND WHEN REPAIR IS NECESSARY.
 - SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS.
 - STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.
 - OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

Figure VT-2 Vehicle Tracking
El Paso County's Stormwater Quality Design Criteria
Drainage Criteria Manual Volume 2

Table 14-10. Recommended Seed Mix for Transition Areas¹

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

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

SEED MIX NOTES:

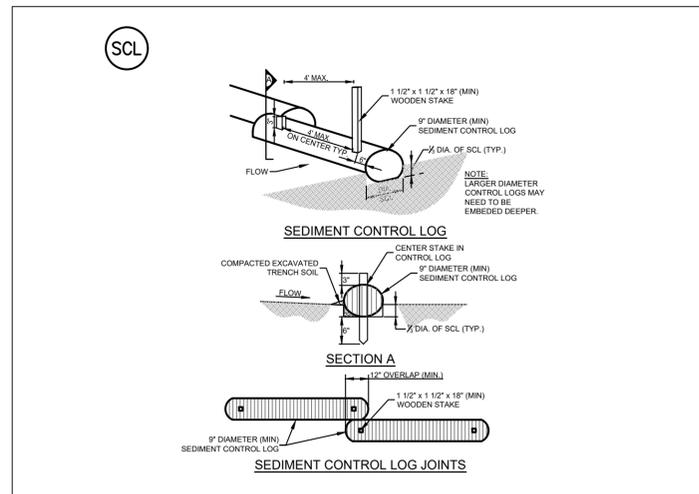
A MIXTURE DEVELOPED FOR ELEVATIONS 3,000 TO 8,000 FEET TO PROVIDE NATURAL COVER UNDER DRYLAND CONDITIONS. CONTAINS BOTH COOL AND WARM SEASON GRASSES ADAPTED TO THE WESTERN GREAT PLAINS AND SOUTHWESTERN REGION. HAS EXCELLENT COLD AND DROUGHT TOLERANCE. GOOD FOR SOIL STABILIZATION ON POOR SOILS.

CHARACTERISTICS:
GROWS 30-60 INCHES WITH AVERAGE RAINFALL.

SEEDING RATE:
BROADCAST: 20-25 LBS/ACRE
DRILLED: 15-20 LBS/ACRE
OVERSEEDING BROADCAST: 10-15 LBS/ACRE
DRILLED: 5-10 LBS/ACRE

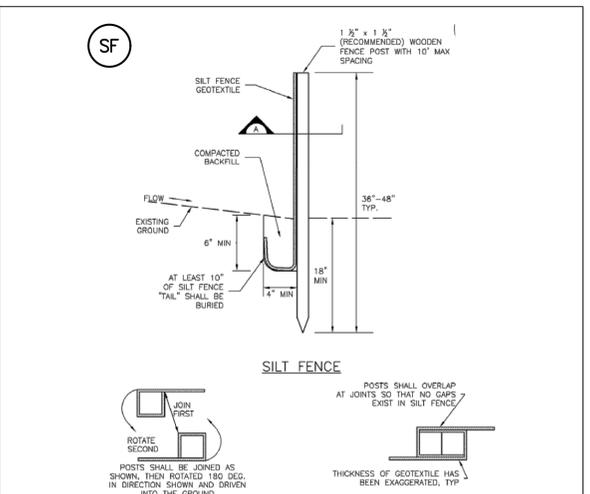
MIX CONTAINS:

KIND AND VARIETY:	PURE	GERM	ORIGIN
ANNUAL RYEGRASS	15.72	97	OR
SLENDER WHEATGRASS	14.75	98	WA
CRESTED WHEATGRASS	10.91	96	SD
MOUNTAIN BROME	9.91	97	WY
CANADA BLUEGRASS	9.80	87	WA
HARD FESCUE	9.78	86	MT
SIDEOATS GRAMA	5.78	80	TX
SWITCHGRASS	4.99	93	MN
BIG BLUESTEM	4.55	95	KS
BLUE GRAMA	2.37	95	MN
SAND DROPSEED	0.99	95	CO



- INSTALLATION NOTES:**
- SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.
 - SEDIMENT CONTROL LOGS THAT ACT AS PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADE LAND-DISTURBING ACTIVITIES.
 - SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.
 - SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS OR HIGH VELOCITY DRAINAGE WAYS.
 - IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY 1/3 THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING.
 - THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER.
 - FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3' OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED.
- MAINTENANCE NOTES:**
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/2 OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.
 - SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

Figure SC-2 Sediment Control Log
Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3



- SILT FENCE INSTALLATION NOTES:**
- SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT TOP OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.
 - A UNIFORM 6" x 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.
 - COMPACT ANCHOR TRENCH BY HAND OR WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.
 - SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG 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 TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK". THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF 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 BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".
 - REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGN 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 TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

Figure SC-1 Silt Fence
Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3

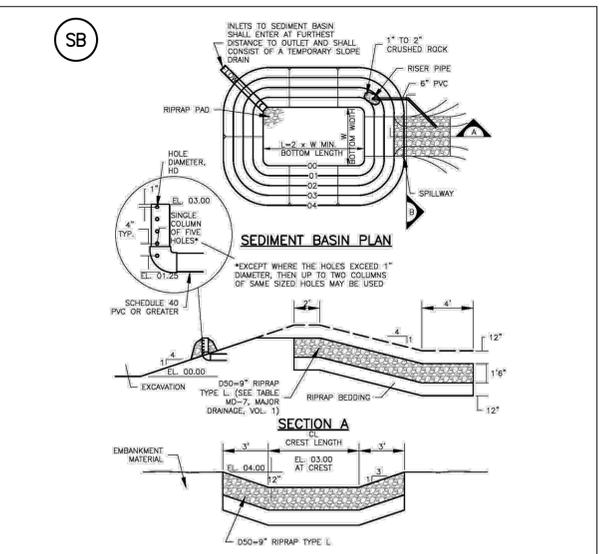


TABLE SB-1 SIZING INFORMATION FOR STANDARD SEDIMENT BASIN

Upstream Drainage Area (rounded to nearest acre), (ac)	Basin Bottom Width (w), (ft)	Spillway Crest Length (CL), (ft)	Hole Diameter (HD), (in)
1	12 1/2	2	3/2
2	21	3	1 1/8
3	28	5	1/2
4	33 1/2	6	3/8
5	38 1/2	8	3/4
6	43	9	5/8
7	47 1/2	11	3/4
8	51	12	7/8
9	55	13	1
10	58 1/2	15	1 1/8
11	61	16	3/4
12	64	18	1
13	67 1/2	19	1 1/8
14	70 1/2	21	1 1/2
15	73 1/2	22	1 1/8

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

Figure SB-1 Sediment Basin
Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3

<p>REFERENCE DRAWINGS</p> <p>X-Title-W X-1105-EX SITE DESIGN</p>	<p>NO. 2 8/21/2020 EPC REV4 COMMENTS</p> <p>NO. 1 6/24/2020 EPC REV3 COMMENTS</p>	<p>DESCRIPTION REVISIONS</p>	<p>SHEET KEY</p>	<p>BENCHMARK</p> <p>NGS T 294 ELEVATION - 7247.10' NAVD 88</p> <p>BASIS OF BEARING:</p> <p>A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56'32"W - 5135.84'. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5/8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"</p>	<p>OWNER:</p> <p>SYLVAN VISTA, INC. WILLIAM F. HEREBIC II, MANAGER 14160 GLENEAGLE DRIVE COLORADO SPRINGS, CO 80921</p> <p>PREPARED BY:</p>	<p>SEAL</p>	<p>FOR AND ON BEHALF OF</p> <p>MATRIX DESIGN GROUP, INC. PROJECT No. 20.1105.004</p>	<p>DESIGNED BY: CAP</p> <p>DRAWN BY: CAP</p> <p>CHECKED BY: JA</p>	<p>SCALE</p> <p>HORIZ N/A</p> <p>VERT. N/A</p>	<p>DATE ISSUED: AUGUST 2020</p> <p>SHEET 7 OF 9</p>	<p>DRAWING No. ECN 01</p>
----------------------------------------------------------------------	-----------------------------------------------------------------------------------	------------------------------	------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------	-------------	------------------------------------------------------------------------------------------	--------------------------------------------------------------------	------------------------------------------------	-----------------------------------------------------	---------------------------

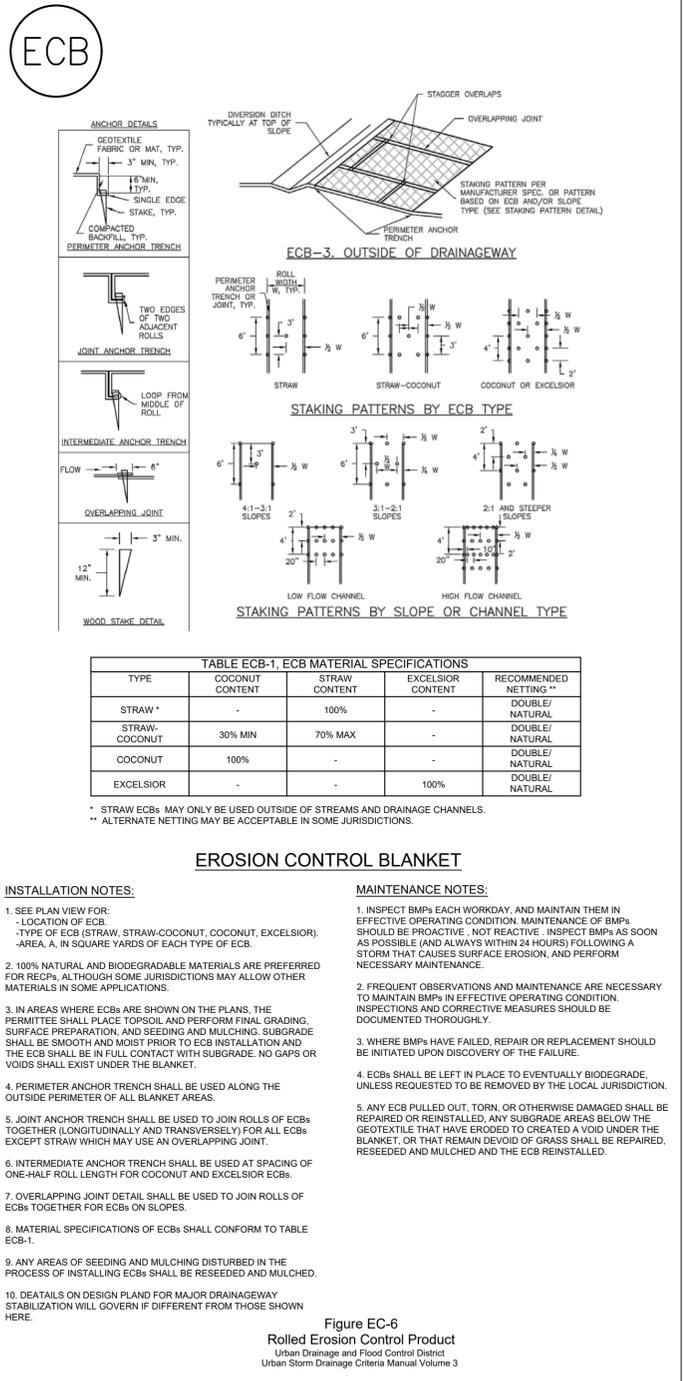
COMPUTER FILE MANAGEMENT

FILE NAME: S:\20.1105.004 Grandwood Ranch\100 Dwg\104 Plan Sets\Construction Plans\GEC Plan\ECN01.dwg

CTB FILE: ---

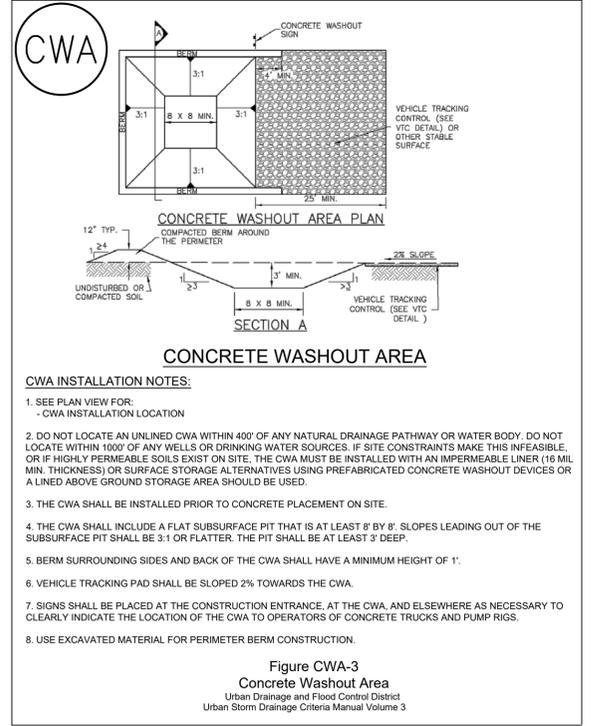
PLOT DATE: September 29, 2020 10:48:19 AM

THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

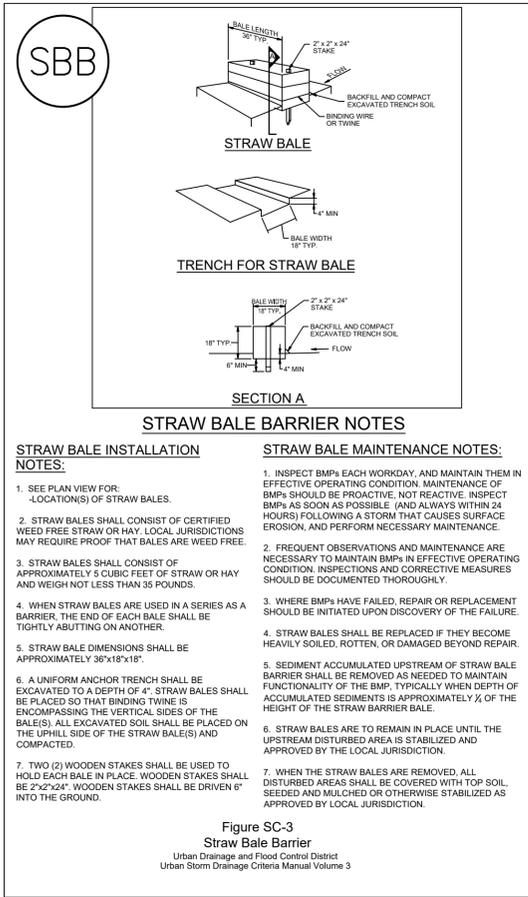


EROSION CONTROL BLANKET

- INSTALLATION NOTES:**
- SEE PLAN VIEW FOR:
 - LOCATION OF ECB.
 - TYPE OF ECB (STRAW, STRAW-COCONUT, COCONUT, EXCELSIOR).
 - AREA, A, IN SQUARE YARDS OF EACH TYPE OF ECB.
 - 100% NATURAL AND BIODEGRADABLE MATERIALS ARE PREFERRED FOR RECPs. ALTHOUGH SOME JURISDICTIONS MAY ALLOW OTHER MATERIALS IN SOME APPLICATIONS.
 - IN AREAS WHERE ECBs ARE SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOIST PRIOR TO ECB INSTALLATION AND THE ECB SHALL BE IN FULL CONTACT WITH SUBGRADE. NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.
 - PERIMETER ANCHOR TRENCH SHALL BE USED ALONG THE OUTSIDE PERIMETER OF ALL BLANKET AREAS.
 - JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL ECBs EXCEPT STRAW WHICH MAY USE AN OVERLAPPING JOINT.
 - INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE-HALF ROLL LENGTH FOR COCONUT AND EXCELSIOR ECBs.
 - OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER FOR ECBs ON SLOPES.
 - MATERIAL SPECIFICATIONS OF ECBs SHALL CONFORM TO TABLE ECB-1.
 - ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING ECBs SHALL BE RESEEDED AND MULCHED.
 - DETAILS ON DESIGN PLAND FOR MAJOR DRAINAGEWAY STABILIZATION WILL GOVERN IF DIFFERENT FROM THOSE SHOWN HERE.
- MAINTENANCE NOTES:**
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - ECBs SHALL BE LEFT IN PLACE TO EVENTUALLY BIODEGRADE, UNLESS REQUESTED TO BE REMOVED BY THE LOCAL JURISDICTION.
 - ANY ECB PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OR REINSTALLED. ANY SUBGRADE AREAS BELOW THE GEOTEXTILE THAT HAVE ERODED TO CREATED A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE ECB REINSTALLED.
- Figure EC-6**
Rolled Erosion Control Product
Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3



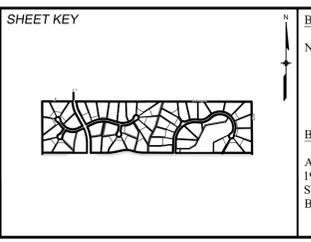
- CWA INSTALLATION NOTES:**
- SEE PLAN VIEW FOR:
 - CWA INSTALLATION LOCATION
 - DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATER BODY. DO NOT LOCATE WITHIN 1000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE 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 AREA SHOULD BE USED.
 - THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
 - THE CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 6" BY 8" SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
 - BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE A MINIMUM HEIGHT OF 1'.
 - VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
 - 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.
 - USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.



NO.	DATE	DESCRIPTION	BY
NO. 2	8/21/2020	EPC REV4 COMMENTS	CAP
NO. 1	6/24/2020	EPC REV3 COMMENTS	CAP
NO.	DATE	DESCRIPTION	BY

COMPUTER FILE MANAGEMENT

FILE NAME: S:\20.1105.004 Grandwood Ranch\100 Dwg\104 Plan Sets\Construction Plans\GEC Plan\ECN01.dwg
 CTB FILE: ---
 PLOT DATE: September 29, 2020 1:32:38 PM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.



BENCHMARK

NGS T 294 ELEVATION - 7247.10' NAVD 88

BASIS OF BEARING:

A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56'32"W - 5135.84'. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5/8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"

OWNER:

SYLVAN VISTA, INC.
 WILLIAM F. HEREBIC II, MANAGER
 14160 GLENEAGLE DRIVE
 COLORADO SPRINGS, CO 80921

PREPARED BY:

Matrix



GRANDWOOD RANCH

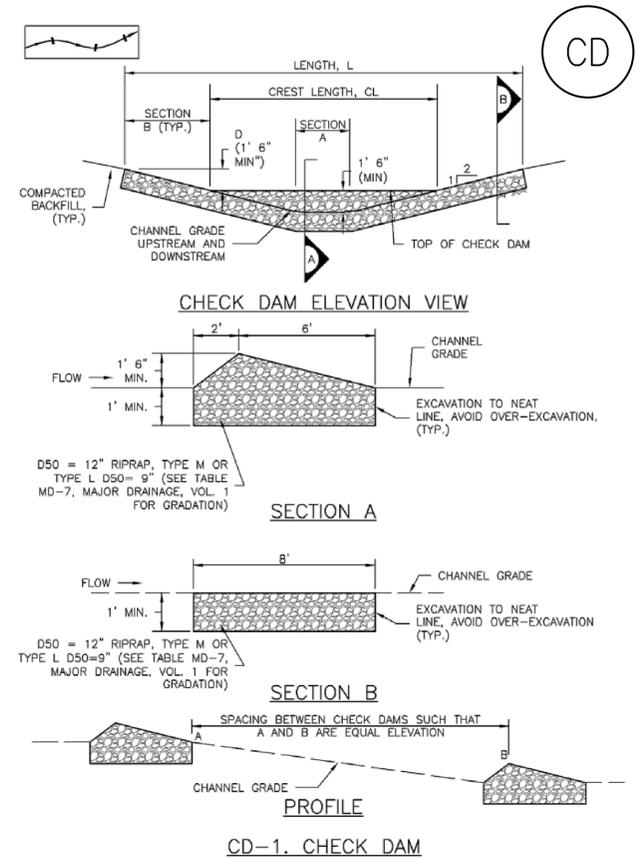
EL PASO COUNTY
 PRE-DEVELOPMENT GRADING & EROSION CONTROL PLAN

EROSION CONTROL DETAILS

DESIGNED BY: CAP	SCALE: N/A	DATE ISSUED: AUGUST 2020	DRAWING No. ECN 02
CHECKED BY: JA	HORIZ. VERT. N/A	SHEET 8 OF 9	

FOR AND ON BEHALF OF
 MATRIX DESIGN GROUP, INC.
 PROJECT No. 20.1105.004

Check Dams (CD) EC-12



CD

CHECK DAM ELEVATION VIEW

SECTION A

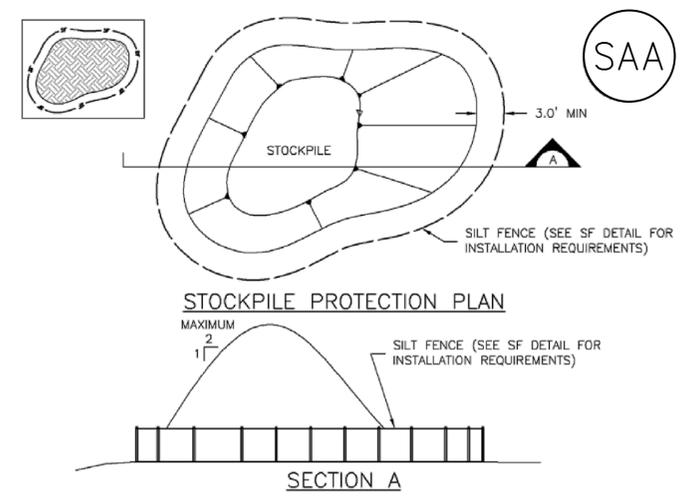
SECTION B

PROFILE

CD-1. CHECK DAM

- CHECK DAM INSTALLATION NOTES**
- SEE PLAN VIEW FOR:
 - LOCATION OF CHECK DAMS.
 - CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM).
 - LENGTH (L), CREST LENGTH (CL), AND DEPTH (D).
 - CHECK DAMS INDICATED ON INITIAL SWMP SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND DISTURBING ACTIVITIES.
 - RIPRAP UTILIZED FOR CHECK DAMS SHOULD BE OF APPROPRIATE SIZE FOR THE APPLICATION. TYPICAL TYPES OF RIPRAP USED FOR CHECK DAMS ARE TYPE M (D50 12") OR TYPE L (D50 9").
 - RIPRAP PAD SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1'.
 - THE ENDS OF THE CHECK DAM SHALL BE A MINIMUM OF 1' 6" HIGHER THAN THE CENTER OF THE CHECK DAM.
- CHECK DAM MAINTENANCE NOTES**
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - SEDIMENT ACCUMULATED UPSTREAM OF THE CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 1/2 OF THE HEIGHT OF THE CREST.
 - CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
 - WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACKFILL. DISTURBED AREA SHALL BE SEEDED AND MULCHED AND COVERED WITH GEOTEXTILE OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.
- (DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)
- NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

Stockpile Management (SP) MM-2



SAA

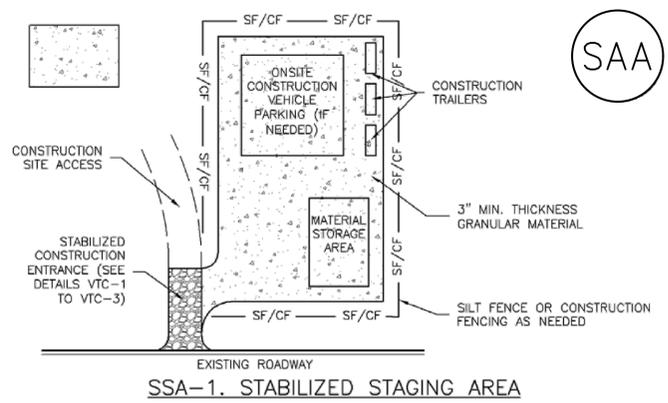
STOCKPILE PROTECTION PLAN

SECTION A

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 SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE 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 SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.
 - STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 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 DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

Stabilized Staging Area (SSA) SM-6



SAA

SSA-1. STABILIZED STAGING AREA

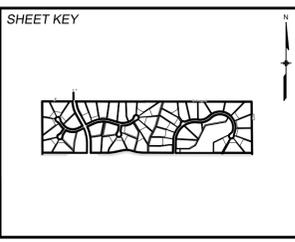
- STABILIZED STAGING AREA INSTALLATION NOTES**
- SEE PLAN VIEW FOR:
 - LOCATION OF STAGING AREA(S).
 - CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
 - STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.
 - STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
 - THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
 - UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.
 - 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 EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

EPC 10/5/2020

NO.	DATE	DESCRIPTION	BY
NO. 2	8/21/2020	EPC REV4 COMMENTS	CAP
NO. 1	6/24/2020	EPC REV3 COMMENTS	CAP
NO.	DATE	DESCRIPTION	BY

COMPUTER FILE MANAGEMENT

FILE NAME: S:\20.1105.004 Grandwood Ranch\100 Dwg\104 Plan Sets\Construction Plans\GEC Plan\ECN01.dwg
 CTB FILE: ---
 PLOT DATE: September 29, 2020 1:32:41 PM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.



BENCHMARK
 NGS T 294 ELEVATION - 7247.10' NAVD 88

BASIS OF BEARING:
 A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56'32"W - 5135.84'. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5/8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"

OWNER:
 SYLVAN VISTA, INC.
 WILLIAM F. HEREBIC II, MANAGER
 14160 GLENEAGLE DRIVE
 COLORADO SPRINGS, CO 80921

PREPARED BY:

SEAL

FOR AND ON BEHALF OF
 MATRIX DESIGN GROUP, INC.
 PROJECT No. 20.1105.004

GRANDWOOD RANCH			
EL PASO COUNTY PRE-DEVELOPMENT GRADING & EROSION CONTROL PLAN			
EROSION CONTROL DETAILS			
DESIGNED BY:	CAP	SCALE	DATE ISSUED:
DRAWN BY:	CAP	HORIZ N/A	AUGUST 2020
CHECKED BY:	JA	VERT. N/A	9 OF 9
			DRAWING No. ECN 03