

TWO (2) PARCELS OF LAND BEING A PORTION OF NORTHEAST QUARTER OF SECTION 36, TOWNSHIP 11 SOUTH, RANGE 66 WEST, A PORTION OF SOUTH HALF OF SECTION 30, AND A PORTION OF NORTH HALF OF SECTION 31, TOWNSHIP 11 SOUTH, RANGE 65 WEST THE SIXTH PRINCIPAL MERIDIAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BASIS OF BEARINGS: THE NORTH LINE OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 36, TOWNSHIP 11 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, BEING MONUMENTED AT THE WEST END BY A 1" YELLOW PLASTIC CAP STAMPED "18235" AND THE EAST END BY A 2" ALUMINUM CAP STAMPED "32439" WITH APPROPRIATE MARKINGS, IS ASSUMED TO BEAR N89°03'58"E A DISTANCE OF 1,332.09 FEET.

COMMENCING AT THE NORTHWEST CORNER OF SECTION 31, TOWNSHIP 11 NORTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, SAID POINT BEING THE POINT OF BEGINNING; THENCE N89°08'20"E ON THE NORTH OF LINE 6 OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 31 A DISTANCE OF 1,474.13 FEET TO THE NORTHWEST CORNER OF SAID SECTION 31; THENCE S89°08'20"E ALONG THE WEST LINE OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 30, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, A DISTANCE OF 1325.48 FEET TO THE SOUTHWEST SIXTEENTH CORNER OF SAID SECTION 30; THENCE N89°03'20"E ON THE NORTH LINE OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 30, A DISTANCE OF 920.27 FEET; THENCE N00°08'15"E A DISTANCE OF 128.29 FEET; THENCE S55°57'42"E A DISTANCE OF 623.40 FEET; THENCE S61°53'08"E A DISTANCE OF 628.43 FEET TO A POINT ON THE WEST LINE OF SAID SECTION 30, A DISTANCE OF 11.00 FEET FROM THE WEST LINE OF SAID SECTION 30; NO. 1, RECORDED UNDER RECEPTION NUMBER 218714238; THENCE ON SAID NORTHERLY RIGHT-OF-WAY LINE THE FOLLOWING SIX (6) COURSES:

1. S52°41'25"W A DISTANCE OF 1,517.83 FEET TO A POINT OF CURVE;
2. ON THE ARC OF A CURVE TO THE RIGHT HAVING A DELTA OF 52°50'29", A RADIUS OF 760.00 FEET A DISTANCE OF 700.92 FEET TO A POINT OF TANGENT;
3. ON THE ARC OF A CURVE TO THE LEFT HAVING A DELTA OF 169.05 FEET TO A POINT OF CURVE;
4. ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 32°53'45", A RADIUS OF 1,640.00 FEET, A DISTANCE OF 941.59 FEET TO A POINT OF TANGENT;
5. S72°38'09"W A DISTANCE OF 400.46 FEET TO A POINT OF CURVE;
6. ON THE ARC OF A CURVE TO THE LEFT HAVING A DELTA OF 00°45'53", A RADIUS OF 3,460.00 FEET A DISTANCE OF 46.18 FEET TO A POINT ON CURVE, SAID POINT BEING THE SOUTHEAST CORNER OF LOT 28 OF SAID FLYING HORSE NORTH FILING NO. 1;

THENCE N00°13'46"W ON THE EAST LINE OF SAID LOT 28, A DISTANCE OF 497.29 FEET TO A POINT ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 36, TOWNSHIP 11 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN; THENCE N89°03'58"E ON SAID NORTH LINE A DISTANCE OF 491.20 FEET TO THE POINT OF BEGINNING.

PARCEL 2:

COMMENCING AT THE SOUTHEAST CORNER OF LOT 80, FLYING HORSE NORTH FILING NO.1, RECORDED UNDER RECEPTION NUMBER 218714238, SAID POINT BEING ON THE WESTERLY LINE OF LOT 79, FLYING HORSE NORTH FILING NO. 1, SAID POINT BEING THE POINT OF BEGINNING; THENCE S00°00'00"E ON THE WEST LINE OF SAID LOT 79 A DISTANCE OF 477.97 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 30, TOWNSHIP 11 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN.

THENCE S89°04'37"W, ON THE SOUTH LINE OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 30, A DISTANCE OF 144.30 FEET TO THE EAST SIXTEENTH CORNER OF SECTION 31; THENCE S00°00'11"E, ON THE EAST LINE OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 31, A DISTANCE OF 1,326.67 FEET TO THE NORTHEAST SIXTEENTH CORNER OF SAID SECTION 31; THENCE N89°08'21"E, ON THE NORTH LINE OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 31, A DISTANCE OF 1,289.57 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF BLACK FOREST ROAD, SAID POINT BEING 30.00 FEET WEST OF AND PARALLEL TO THE EAST LINE OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 31; THENCE S00°05'54"W, ON THE WESTERLY RIGHT-OF-WAY LINE OF SAID BLACK FOREST ROAD BEING ALSO 30.00 FEET WEST OF AND PARALLEL TO THE EAST LINE OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 31, A DISTANCE OF 3,328.09 FEET TO A POINT ON THE SOUTH LINE OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 11; THENCE S89°11'15"W, ON THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 11, A DISTANCE OF 2,341.40 FEET; THENCE N07°08'46"E A DISTANCE OF 860.74 FEET; THENCE N04°05'31"W A DISTANCE OF 1,388.17 FEET; THENCE N09°22'22"W A DISTANCE OF 488.58 FEET; THENCE N37°18'35"W A DISTANCE OF 402.75 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF OLD STAGECOACH ROAD AS PLATTED IN FLYING HORSE NORTH FILING NO. 1, RECORDED UNDER RECEPTION NUMBER 218714238; THENCE ON THE BOUNDARY OF SAID FLYING HORSE NORTH FILING NO. 1 THE FOLLOWING EIGHT (8) COURSES:

1. N52°41'25"E A DISTANCE OF 330.02 FEET TO A POINT ON CURVE;
2. ON THE ARC OF A CURVE TO THE RIGHT HAVING A DELTA OF 38°46'50", A RADIUS OF 960.00 FEET A DISTANCE OF 649.77 FEET TO A POINT OF TANGENT;
3. S88°31'45"E A DISTANCE OF 8.27 FEET TO A POINT ON CURVE;
4. ON THE ARC OF A CURVE TO THE LEFT WHOSE CENTER BEARS N67°53'33"E, A HAVING A DELTA OF 48°57'51", A RADIUS OF 100.00 FEET A DISTANCE OF 85.46 FEET TO A POINT ON CURVE;
5. S89°25'32"E A DISTANCE OF 152.16 FEET TO A POINT OF CURVE;
6. ON THE ARC OF A CURVE TO THE LEFT HAVING A DELTA OF 00°53'47", A RADIUS OF 5,030.00 FEET A DISTANCE OF 78.69 FEET TO A POINT ON CURVE;
7. S89°25'32"E A DISTANCE OF 60.00 FEET;
8. N89°59'56"E A DISTANCE OF 505.80 FEET TO THE POINT OF BEGINNING.

PARCEL 1 AND PARCEL 2 CONTAIN A TOTAL CALCULATED AREA OF 7,656,925 SQUARE FEET OR 175.779 ACRES.

UNDEVELOPED

FLYING HORSE NORTH  
FILING NO. 4

OLD STAGECOACH ROAD

BLACK FOREST ROAD

UNPLATTED

COUNTRY VIEW  
ESTATES

OPEN SPACE  
AREA

FLYING HORSE NORTH  
FILING NO. 1

FLYING HORSE NORTH  
FILING NO. 3

ROUNDING COURT

ALLEN RANCH ROAD

NE4NE4  
SEC  
31-11-65

0 1000  
500

NORTH

NOT TO SCALE

1 - COVER  
2 - LEGEND & NOTES  
3 - 6 - INITIAL & INTERIM GEO  
7 - 10 - FINAL GEO  
11 - 12 - DETAILS  
13 - CHANNEL SECTIONS



HR GREEN - COLORADO SPRINGS  
1975 RESEARCH PARKWAY SUITE 160  
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FLYING HORSE NORTH FILING 4  
PRI #2, LLC.  
EL PASO COUNTY, CO

GRADING & EROSION CONTROL PLAN  
COVER

SHEET  
CV

1

PCD FILE NO.: SF2422

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.

JOSHUA PALMER P.E.  
COUNTY ENGINEER

DATE \_\_\_\_\_

### 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 PLAN.

RICHARD D. LYON, COLORADO P.E. NO. 53921

DATE \_\_\_\_\_

**OWNER'S STATEMENT:**

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

DREW BALSICK, PRI #2 LLC  
VICE PRESIDENT

DATE \_\_\_\_\_



## GRADING AND EROSION CONTROL NOTES:

- 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 CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
- A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OF 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 THE 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 OPERATION 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 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 FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OF 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 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 OF 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 LOOSENEED 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 BLANKET OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED OR DISCHARGED AT THIS 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 PROPERLY AND PROPERLY DISPOSED OF IMMEDIATELY.
- THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION, DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF THE 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 AN EAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABEL.
- 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 REQUIRED ADEQUATE SECONDARY 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 ECM APPENDIX A. 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 PERMITEE 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 THE SITE HAS BEEN PREPARED BY ENTECH ENGINEERING, INC. DATED SEPTEMBER 11, 2024 AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- AT LEAST (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 CHERR CREEK DRIVE SOUTH  
DENVER, CO 80246-1530  
ATTN: PERMITS UNIT

FROUDE NUMBER CALCULATIONS: 100-YR						
SECTION	VELOCITY	GRAVITATIONAL CONSTANT	HYDRAULIC DEPTH	XSECTIONAL AREA	TOP WIDTH	FROUDE #
	FT/S	FT/S^2	FT	FT^2	FT	N/A
A-A	5.79	32.17	0.88	47.30	53.49	1.09
B-B	3.92	32.17	0.55	18.30	33.21	0.93
C-C	5.61	32.17	0.69	7.59	10.99	1.19
D-D	3.91	32.17	0.55	48.50	88.91	0.93
E-E	4.84	32.17	0.23	1.00	4.31	1.77
F-F	7.56	32.17	1.34	39.40	29.43	1.15
G-G	6.86	32.17	0.44	3.10	7.00	1.82
H-H	7.75	32.17	1.51	36.60	24.18	1.11
I-I	8.90	32.17	0.76	10.50	13.74	1.79
J-J	4.31	32.17	0.31	8.30	27.05	1.37
K-K	3.08	32.17	0.19	8.40	43.34	1.23
L-L	1.57	32.17	0.10	3.60	35.03	0.86
M-M	4.10	32.17	0.40	4.30	10.74	1.14
SECTION A1	6.10	32.17	0.70	6.90	9.81	1.28
SECTION A2	5.23	32.17	0.65	6.00	9.20	1.14
SECTION B	5.24	32.17	0.72	7.20	10.06	1.09
SECTION C	4.14	32.17	0.61	5.30	8.65	0.93
SECTION D	5.25	32.17	0.62	5.30	8.58	1.18
SECTION E	5.78	32.17	0.70	8.80	12.55	1.22

SHEAR STRESS CALCULATIONS: 100-YR				
SECTION	UNIT WEIGHT OF WATER	DEPTH OF FLOW	SLOPE	SHEAR STRESS
	LB/FT^3	FT	FT/FT	LB/FT^2
A-A	62.43	1.10	0.022	1.51
B-B	62.43	0.70	0.019	0.83
C-C	62.43	1.40	0.030	2.62
D-D	62.43	0.80	0.019	0.95
E-E	62.43	0.50	0.090	2.81
F-F	62.43	2.70	0.022	3.71
G-G	62.43	0.90	0.082	4.61
H-H	62.43	3.00	0.020	3.75
I-I	62.43	1.50	0.065	6.09
J-J	62.43	0.40	0.050	1.25
K-K	62.43	0.40	0.05	1.17
L-L	62.43	0.10	0.028	0.17
M-M	62.43	0.60	0.032	1.20
SECTION A1	62.43	1.40	0.035	3.06
SECTION A2	62.43	1.30	0.028	2.27
SECTION B	62.43	1.40	0.025	2.19
SECTION C	62.43	1.20	0.019	1.42
SECTION D	62.43	1.20	0.031	2.32
SECTION E	62.43	1.40	0.031	2.71

CHANNEL LINING DETERMINATION					
CALCULATED VALUES			P300 MAX VALUES		
SECTION	SHEAR STRESS	VELOCITY	SHEAR STRESS	VELOCITY	LINING REQUIRED
A-A	1.51	5.79	3.00	9.00	NONE
B-B	0.83	3.92	3.00	9.00	P300
C-C	2.62	5.61	3.00	9.00	P300
D-D	0.95	3.91	3.00	9.00	NONE
E-E	2.81	4.84	3.00	9.00	P300
F-F	3.71	7.56	3.00	9.00	TMAX
G-G	4.61	6.86	3.00	9.00	TMAX
H-H	3.75	7.75	3.00	9.00	TMAX
I-I	6.09	8.90	3.00	9.00	TMAX
J-J	1.25	4.31	3.00	9.00	NONE
K-K	1.17	3.08	3.00	9.00	NONE
L-L	0.17	1.57	3.00	9.00	NONE
M-M	1.20	4.10	3.00	9.00	NONE
SECTION A1	3.06	6.10	3.00	9.00	P300
SECTION A2	2.27	5.23	3.00	9.00	P300
SECTION B	2.19	4.24	3.00	9.00	P300
SECTION C	1.42	4.14	3.00	9.00	P300
SECTION D	2.32	5.25	3.00	9.00	P300
SECTION E	2.71	5.78	3.00	9.00	P300

## ABBREVIATIONS

	DEFLECTION ANGLE	FT	FOOT OR FEET
Ø, DIA	DIAMETER	GB	GRADE BREAK
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	GAL	GALLON
ABC	ASPHALT BASE COURSE	HDPE	HIGH DENSITY POLYETHYLENE
ABD	ABANDONED	HC RAMP	HANDICAP RAMP
ACRE	ACRE	HW	HEADWALL
ADA	THE AMERICANS WITH DISABILITIES ACT	INVT	INVERT
ASPH	ASPHALT	KM	KILOMETER
ASSY	ASSEMBLY	L	LENGTH
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	LF	LINEAR FEET
BFE	BASE FLOOD ELEVATION	M	METER
BLDG	BUILDING	MIN	MINIMUM
BLVD	BOULEVARD	MISC	MISCELLANEOUS
BM	BENCH MARK	MAINT	MAINTENANCE
BNDY	BOUNDARY	MAX	MAXIMUM
BOP	BOTTOM OF POND	MH	MANHOLE
BW	BOTTOM OF WALL	MP	MIDPOINT
C&G	CURB AND GUTTER	N	NORTH/NORTHING
CA	COARSE AGGREGATE	NO	NUMBER
CATV	CABLE TELEVISION	OC	ON CENTER
CB	CHORD BEARING/CATCH BASIN	OH	OVERHEAD
CFS	CUBIC FEET PER SECOND	PB	PUBLIC
CIP	CAST IRON PIPE	PC	POINT OF CURVATURE
CL	CENTER LINE	PCC	POINT OF COMPOUND CURVATURE
CMP	CORRUGATED METAL PIPE	PCR	POINT OF CURB RETURN
COMP	COMPOSITE	PI	POINT OF INTERSECTION
CONC	CONCRETE	PIE	PUBLIC IMPROVEMENT ESMT
CONST	CONSTRUCT OR CONSTRUCTION	PT	POINT OF TANGENCY
CSP	CORRUGATED STEEL PIPE	PRC	PROPOSED
CSU	COLORADO SPRINGS UTILITIES	PRC	POINT OF REVERSE CURVATURE
CT	COURT	PRV	PRESSURE REDUCING VALVE
CCTR	CENTER	PRV	PRIVATE
CU	COPPER	PUE	PUBLIC UTILITY AND ACCESS ESMT
CY	CUBIC YARD	PUE	PUBLIC UTILITY, ACCESS AND DRAINAGE ESMT
DBL	DOUBLE	PVC	POLYVINYL CHLORIDE
DEG	DEGREE	R	RADIUS
DET	DETAIL	REC	RECEPTION
DEPT	DEPARTMENT	RCBC	REINFORCED CONCRETE BOX CULVERT
DIM	DIMENSION	S	SOUTH
DIP	DUCTILE IRON PIPE	SHT	SHEET
DOT	DEPARTMENT OF TRANSPORTATION	SQ	SQUARE
DWG	DRAWING	SW	SPILLWAY
E	EAST/EASTING	TBC	TOP BACK OF CURB
EL	ELEVATION	TC	TRICKLE CHANNEL
ELEC	ELECTRIC	TOP	TOP OF POND
EOG	EDGE OF GUTTER	TW	TOP OF WALL
EOP	EDGE OF PAVEMENT	TY	TYPICAL
ESMT	EASEMENT	UG	UNDERGROUND
EW	ENDWALL	VERT	VERTICAL
EX	EXISTING	W	WEST
FD	FRENCH DRAIN	WW	WASTEWATER
FDC	FIRE DEPARTMENT CONNECTION	WWF	WELDED WIRE FABRIC
FE	FLANGE ELEVATION	W/	WITH
FES	FLARED END SECTION	W/O	WITHOUT
FF	FINISHED FLOOR	YD	YARD
FG	FINISHED GRADE		
FH	FIRE HYDRANT		
FHWA	FEDERAL HIGHWAY ADMINISTRATION		
FL	FLOW LINE		

## LEGEND

MATCH LINE				
FILING LINE				
SECTION LINE				
PROPERTY LINE				
EASEMENT LINE				
RIGHT OF WAY				
CENTERLINE				
CHAIN LINK FENCE				
WOODEN FENCE				
ROD/IRON FENCE				
GUARDRAIL				
CABLE TV				
U.G. ELECTRIC				
OVERHEAD ELECTRIC				
FIBER OPTIC				
GAS MAIN				
SANITARY SEWER				
STORM DRAIN				
TELEPHONE				
WATER MAIN				
SWALE				
TRAIL				
CURB & GUTTER				
DRAINAGE BASIN				
INDEX CONTOUR				
INTER. CONTOUR				
100-YR FLOODPLAIN				
FLOODWAY				
EDGE OF WETLANDS				
	EXISTING	PROPOSED		
DRAINAGE				
DRAINAGE BASIN				
BASIN TAG				
DESIGN POINT				
	EXISTING	PROPOSED		
MANHOLE				
STORM INLET				
FLARED END SECTION				
RIPRAP				
	EXISTING	PROPOSED		
CLEAN OUT				
MANHOLE				
PLUG				
	EXISTING	PROPOSED		
FIRE HYDRANT				
FIRE DEPT. CONNECTION				
GATE VALVE				
MANHOLE				
METER				
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REDUCER				
	EXISTING	PROPOSED		
DRAINAGE				
DRAINAGE BASIN				
BASIN TAG				
DESIGN POINT				
	EXISTING	PROPOSED		
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STORM INLET				
FLARED END SECTION				
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	EXISTING	PROPOSED		
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	EXISTING	PROPOSED		
DRAINAGE				
DRAINAGE BASIN				
BASIN TAG				
DESIGN POINT				
	EXISTING	PROPOSED		

NO.	DATE	BY	REVISION DESCRIPTION



HR GREEN - COLORADO SPRINGS  
1975 RESEARCH PARKWAY SUITE 160  
COLORADO SPRINGS, CO 80920  
PHONE: 719.300.4140  
FAX: 713.965.0044

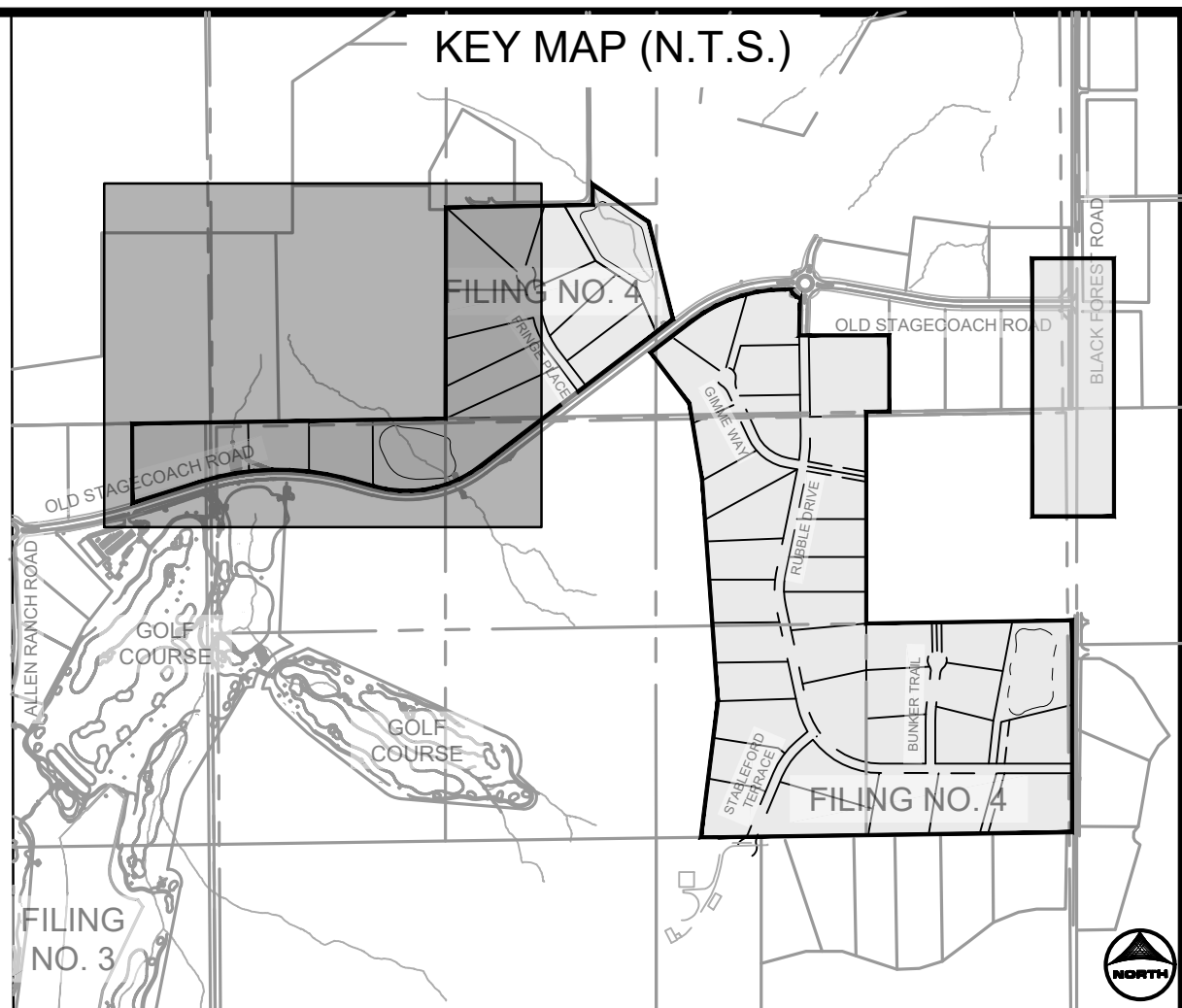
FLYING HORSE NORTH FILING 4  
PRI #2, LLC.  
EL PASO COUNTY, CO



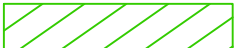














## LEGEND & NOTES

SHEET  
LG

2





- | GEC LEGEND:   |  | PHASE:                |
|---|--|-----------------------|
|    | (SF) SILT FENCE                                      | INITIAL/INTERIM       |
|    | (SSA) STABILIZED STAGING AREA                        | INITIAL/INTERIM       |
|    | (SP) STOCKPILE MANAGEMENT                            | INITIAL/INTERIM       |
|    | (IP) INLET PROTECTION: IP-1 TO BE USED ON ALL INLETS | INTERIM               |
|    | (CIP) CULVERT INLET PROTECTION                       | INTERIM               |
|    | (VTC) VEHICLE TRACKING CONTROL                       | INITIAL               |
|    | (DS) DRAINAGE SWALE                                  | INTERIM               |
|    | (LOC) LIMITS OF CONSTRUCTION                         | INITIAL/INTERIM/FINAL |
|    | LIMITS OF DISTURBANCE                                | INITIAL/INTERIM/FINAL |
|    | CUT CONDITION  |                       |
|    | FILL CONDITION                                       |                       |
|    | FLOW DIRECTION                                       |                       |
|    | (ECB) EROSION CONTROL BLANKET                        | INTERIM/FINAL         |
|    | (CD) CHECK DAM (STRAW BALE)                          | INTERIM               |
|    | (CWA) CONCRETE WASH OUT                              | INITIAL               |
|   | (TSB) TEMPORARY SEDIMENT BASIN                       | INITIAL               |
|  | TSB TRIBUTARY AREA DELINEATION                       | INITIAL               |

GRADING & EROSION CONTROL PLAN NOTES:

1. SEE SHEETS 11-12 FOR EL PASO COUNTY GRADING AND EROSION CONTROL DETAILS.
2. ALL STORMWATER MANAGEMENT MEASURES SHOWN ON THIS PLAN MUST BE INSTALLED AND MAINTAINED PER THE EL PASO COUNTY STORMWATER CONSTRUCTION MANUAL, LATEST REVISIONS.
3. AREAS WITHIN LIMITS OF DISTURBANCE TO BE CLEARED, GRUBBED AND STOCKPILED PRIOR TO IMPORT OF ANY FILL.
4. ALL GREATER THAN 4:1 SLOPES MUST BE RECEIVE SLOPE TRACKING TREATMENT AND EROSION CONTROL BLANKET.
5. STOCKPILES REQUIRED DURING ONSITE CONSTRUCTION ACTIVITIES WILL BE PLACED AT THE DISCRETION OF THE CONTRACTOR. STOCKPILING OF MATERIAL MUST NOT OCCUR OUTSIDE THE LIMITS OF DISTURBANCE SHOWN ON THIS PLAN.
6. NON-STRUCTURAL CONTROLS (I.E. STREET SWEEPING) WILL BE AT THE DISCRETION OF THE PROJECT'S CERTIFIED GEC ADMINISTRATOR THROUGHOUT THE DURATION OF LAND DISTURBING ACTIVITIES.
7. THE CONTRACTOR SHALL ANTICIPATE ASPHALT AND/OR CONCRETE BATCH PLANTS, OR MASONRY MIX STATIONS ASSOCIATED WITH THIS PROJECT. IF THE CONTRACTOR REQUIRES A ASPHALT/CONCRETE BATCH PLANTS OR MASONRY MIX STATIONS, THESE PLANTS WILL BE AMENDED AS REQUIRED.
8. THERE ARE NO EXISTING PRESERVATION EASEMENTS LOCATED ON SITE.
9. ONCE EXISTING VEGETATION IS NATIVE GRASSES AND WEEDS, THERE IS NO NOTABLE VEGETATION OTHERWISE.
10. THE NATURAL TERTIARY SWALE THROUGH LOTS 16 AND 17 IS PLATTED AS A PUBLIC DRAINAGE EASEMENT WITH A VARIED WIDTH. THE EASEMENT IS TO HAVE TMAX TRM INSTALLED WITH PERMANENT SEEDING. ALL OTHER NATURAL TERTIARY SWALES DO NOT HAVE TRM AND ARE NOT TO BE DISTURBED. AREAS REQUIRING ROLLMAX TRM (TMAX OR P300) ARE CALLED OUT ON THE PLANS AND ARE AREAS NEAR POND CONSTRUCTION RUNDOWNS OR ROADSIDE SWALES. SEE THE PERMANENT CHANNEL LINING PROVIDED ON SHEET 2.
11. ALL ROADSIDE DITCHES ARE TO HAVE PERMANENT TRM (ROLLMAX P300 OR EQUIV.) INSTALLED.
12. ALL CULVERTS ARE TO HAVE RIP-RAP INSTALLED AT OUTLET POINTS AS SEEN IN STORM CONSTRUCTION DRAWINGS.

PROJECT INFO:

BASE SURFACE: EXISTING-FULL VOLUME: COMPARISON SURFACE: FILING-4-FG

CUT FACTOR: 1.00  
FILL FACTOR: 1.15  
CUT VOLUME(ADJUSTED): 82678.57 CUBIC YARDS  
FILL VOLUME(ADJUSTED): 87623.31 CUBIC YARDS  
NET VOLUME(ADJUSTED): 4944.74(FILL) CUBIC YARDS

CUT FACTOR: 1.00  
FILL FACTOR: 1.00  
CUT VOLUME(UNADJUSTED): 82678.57 CUBIC YARDS  
FILL VOLUME(UNADJUSTED): 76194.18 CUBIC YARDS  
NET VOLUME(UNADJUSTED): 6484.39(CUT) CUBIC YARDS

LOC - LIMITS OF CONSTRUCTION (ENTIRE  
FILING PERIMETER CONTROL) = 185.80 AC

LOD - LIMITS OF DISTURBANCE (ROADWAYS,  
UTILITIES, GRADING) = 33.71 AC

PCD FILE NO.: SF2422

DRAWN BY: AMC JOB DATE: 12/5/2024 BAR IS ONE INCH ON  
APPROVED: RDL JOB NUMBER: 211030.240 OFFICIAL DRAWINGS.  
0  1"  
CAD DATE: 12/6/2024 IF NOT ONE INCH,  
CAD FILE: J:\2021\211030\CAD\DWG\C\Filing\_No\_4\GEC\GEC-Initial-Interim ADJUST SCALE ACCORDINGLY.

NO.	DATE	BY	REVISION DESCRIPTION



HR GREEN - COLORADO SPRINGS  
1975 RESEARCH PARKWAY SUITE 160  
COLORADO SPRINGS, CO 80920  
PHONE: 719.300.4140  
FAX: 713.965.0044

FLYING HORSE NORTH FILING 4  
PRI #2, LLC.  
EL PASO COUNTY, CO

GRADING & EROSION CONTROL PLAN  
INITIAL & INTERIM GEC

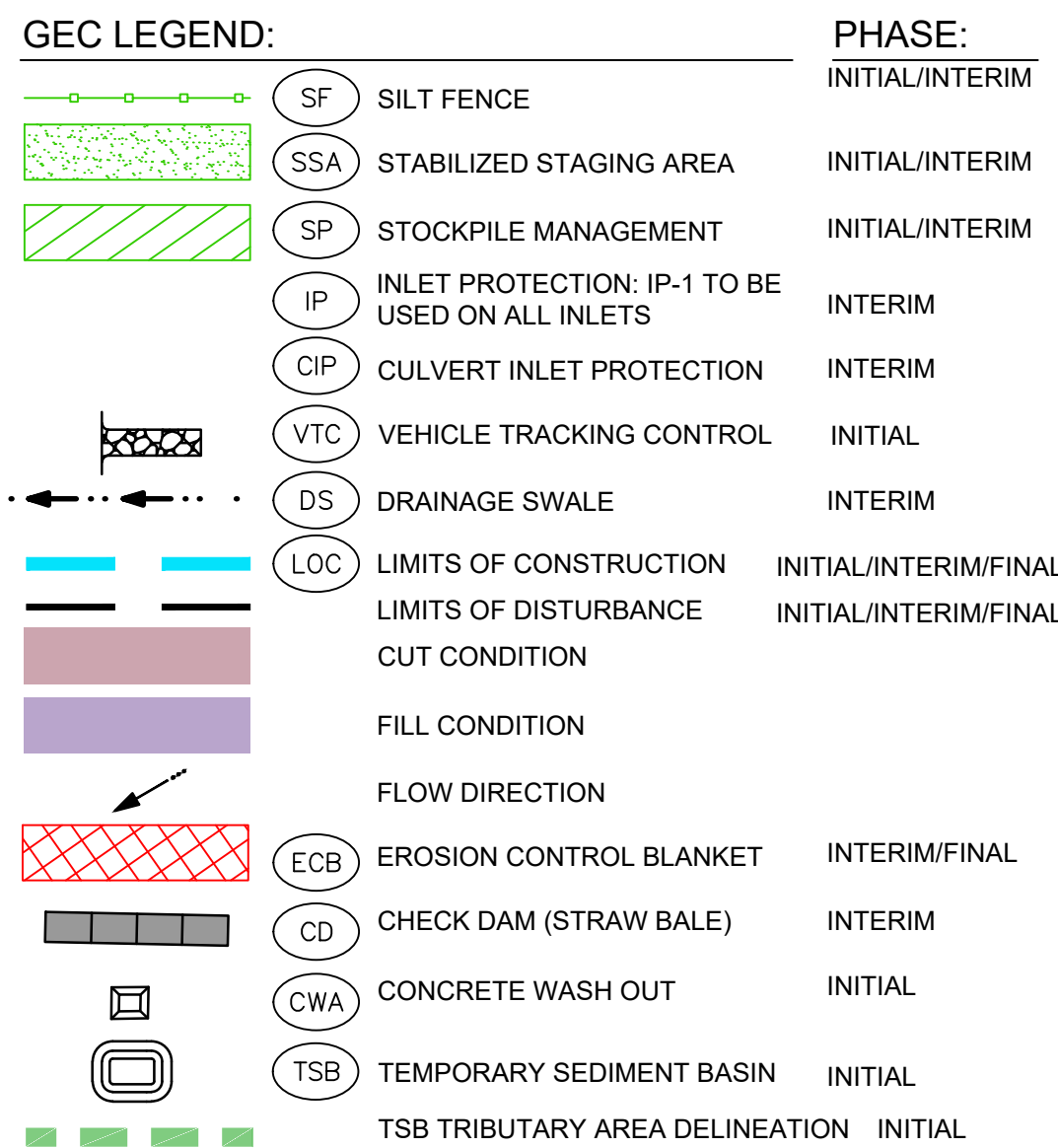
SHEET GEC	3
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SLOPE @ CHANNEL FLOWLINE (%)	MAX SPACING (FEET)
0.5 - 0.75	200
0.75 - 1	150
1 - 1.25	120
1.25 - 1.5	100
1.5 - 1.75	85
1.75 - 2	75





SLOPE @ CHANNEL FLOWLINE (%)	MAX SPACING (FEET)
0.5 - 0.75	200
0.75 - 1	150
1 - 1.25	120
1.25 - 1.5	100
1.5 - 1.75	85
1.75 - 2	75



2. SEE SHEETS 11-12 FOR EL PASO COUNTY GRADING AND EROSION CONTROL DETAILS.
3. ALL STORMWATER MANAGEMENT MEASURES SHOWN ON THIS PLAN MUST BE INSTALLED AND MAINTAINED PER THE EL PASO COUNTY STORMWATER CONSTRUCTION MANUAL. LATEST REVISIONS.
4. AREA WITHIN LIMITS OF DISTURBANCE TO BE CLEARED, GRUBBED AND STOCKPILED BEFORE IMPORT OF ANY FILL.
4. ALL GREATER THAN 4:1 SLOPES MUST BE RECEIVE SLOPE TRACKING TREATMENT AND EROSION CONTROL BLANKET.
5. STOCKPILES REQUIRED DURING ONSITE CONSTRUCTION ACTIVITIES WILL BE PLACED AT THE DISCRETION OF THE CONTRACTOR. STOCKPILING OF MATERIAL MUST NOT OCCUR OUTSIDE THE LIMITS OF DISTURBANCE SHOWN ON THIS PLAN.
6. NON-STRUCTURAL CONTROLS (I.E. STREET SEWEING) WILL BE AT THE DISCRETION OF THE PROJECT'S CERTIFIED GEC ADMINISTRATOR THROUGHOUT THE DURATION OF LAND DISTURBING ACTIVITIES.
7. THERE ARE NO ANTICIPATED ASPHALT AND/OR CONCRETE BATCH PLANTS, OR MASONRY MIX STATIONS ASSOCIATED WITH THIS PROJECT. IF THE CONTRACTOR REQUIRES A ASPHALT/CONCRETE BATCH PLANTS OR MASONRY MIX STATIONS, THESE PLANS WILL BE AMENDED AS REQUIRED.
8. THERE ARE NO EXISTING PRESERVATION EASEMENTS LOCATED ON SITE.
9. ONSITE EXISTING VEGETATION IS NATIVE GRASSES AND WEEDS. THERE IS NO NOTABLE VEGETATION OTHER THAN GRASS.
10. THE NATURAL TERTIARY SWALE THROUGH LOTS 16 AND 17 IS PLATTED AS A PUBLIC DRAINAGE EASEMENT WITH A VARIED WIDTH. THE EASEMENT IS TO HAVE TMAX TRM INSTALLED WITH PERMANENT SEEDING. ALL OTHER NATURAL TERTIARY SWALES DO NOT REQUIRE TRM AND ARE NOT TO BE DISTURBED. AREAS REQUIRING ROLLMAX TRM ARE LOCATED 15000 AROUND THE OUTLET ON THE PLANS AND ARE AREAS NEAR POND CONCRETE ROUNDUNDS OR ROADSIDE SWALES. SEE THE PERMANENT CHANNEL LINING PROVIDED ON SHEET 2.
11. ALL ROADSIDE DITCHES ARE TO HAVE PERMANENT TRM (ROLLMAX P300 OR EQUIV.)
12. ALL CULVERTS ARE TO HAVE RIP-RAP INSTALLED AT OUTLET POINTS AS SEEN IN STORM CONSTRUCTION DRAWINGS.

BASE SURFACE: EXISTING-FULL VOLUME: COMPARISON SURFACE: FILING-4-FG

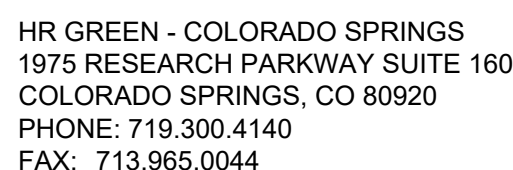
CUT FACTOR: 1.00  
FILL FACTOR: 1.00  
CUT VOLUME(UNADJUSTED): 82678.57 CUBIC YARDS  
FILL VOLUME(UNADJUSTED): 76194.18 CUBIC YARDS  
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LOC - LIMITS OF CONSTRUCTION (ENTIRE  
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LOD - LIMITS OF DISTURBANCE (ROADWAY  
UTILITIES, GRADING) = 33.71 AC

PCD FILE NO.: SF2422

NO.	DATE	BY	REVISION DESCRIPTION



GRADING & EROSION CONTROL PLAN  
INITIAL & INTERIM GEC

SHEET  
GEC

4



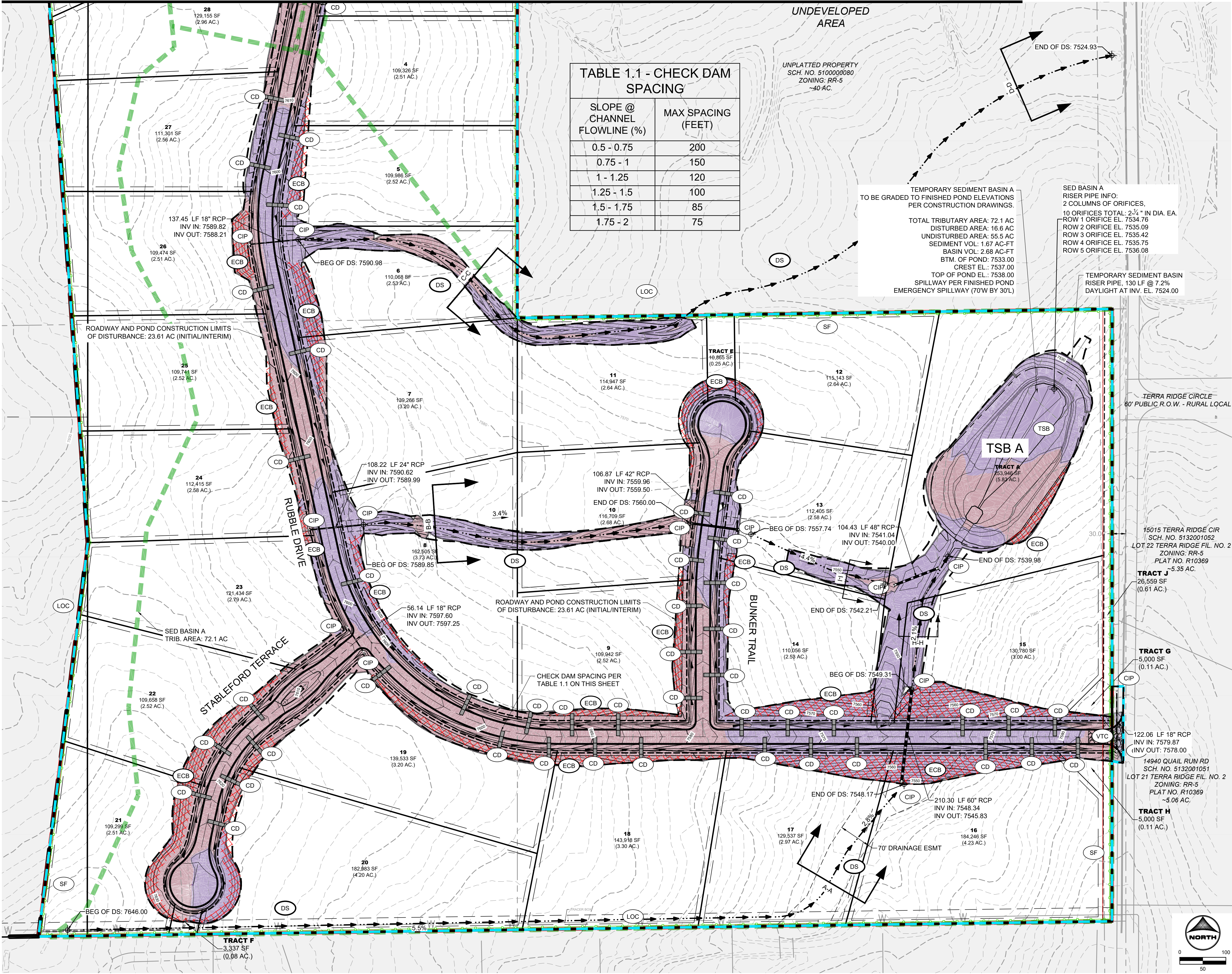


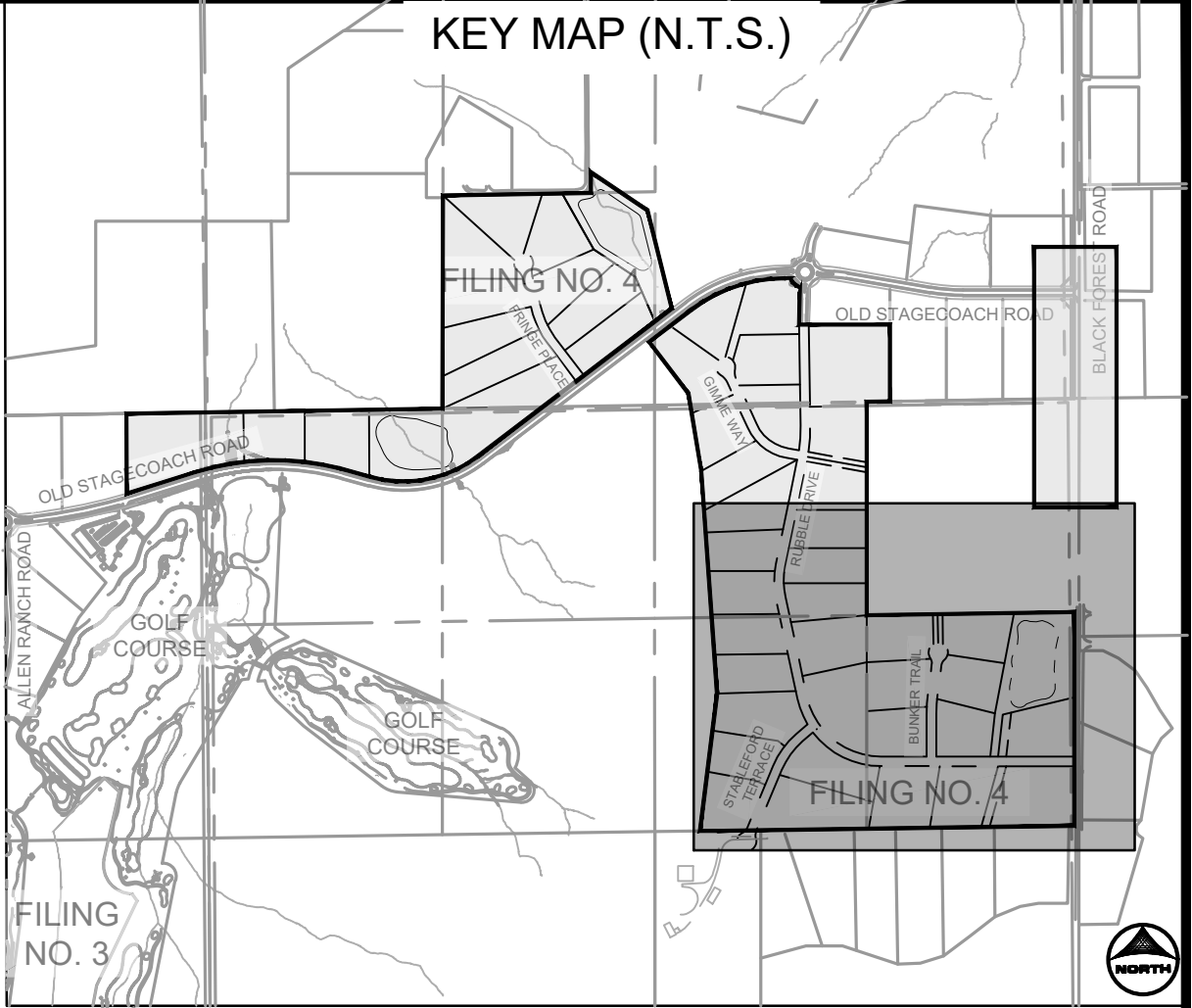
TABLE 1.1 - CHECK DAM SPACING	
SLOPE @ CHANNEL FLOWLINE (%)	MAX SPACING (FEET)
0.5 - 0.75	200
0.75 - 1	150
1 - 1.25	120
1.25 - 1.5	100
1.5 - 1.75	85
1.75 - 2	75

TEMPORARY SEDIMENT BASIN A  
TO BE GRADED TO FINISHED POND ELEVATIONS  
PER CONSTRUCTION DRAWINGS.

TOTAL TRIBUTARY AREA: 72.1 AC  
DISTURBED AREA: 16.6 AC  
UNDISTURBED AREA: 55.5 AC  
SEDIMENT VOL: 1.67 AC-FT  
BASIN VOL: 2.68 AC-FT  
BTM. OF POND: 7533.00  
CREST EL.: 7537.00  
TOP OF POND EL.: 7538.00  
SPILLWAY PER FINISHED POND  
EMERGENCY SPILLWAY (70'W BY 30'L)

SED BASIN A  
RISER PIPE INFO:  
2 COLUMNS OF ORIFICES.  
10 ORIFICES TOTAL: 2 1/2" IN DIA. EA.  
ROW 1 ORIFICE EL. 7534.76  
ROW 2 ORIFICE EL. 7535.09  
ROW 3 ORIFICE EL. 7535.42  
ROW 4 ORIFICE EL. 7535.75  
ROW 5 ORIFICE EL. 7536.08

TEMPORARY SEDIMENT BASIN  
RISER PIPE, 130 LF @ 7.2%  
DAYLIGHT AT INV. EL. 7524.00



GEC LEGEND:		PHASE:	
	SF SILT FENCE	INITIAL/INTERIM	
	SSA STABILIZED STAGING AREA	INITIAL/INTERIM	
	SP STOCKPILE MANAGEMENT	INITIAL/INTERIM	
	IP INLET PROTECTION: IP-1 TO BE USED ON ALL INLETS	INTERIM	
	CIP CULVERT INLET PROTECTION	INTERIM	
	VTC VEHICLE TRACKING CONTROL	INITIAL	
	DS DRAINAGE SWALE	INTERIM	
	LOC LIMITS OF CONSTRUCTION	INITIAL/INTERIM/FINAL	
	LIMITS OF DISTURBANCE	INITIAL/INTERIM/FINAL	
	CUT CONDITION		
	FILL CONDITION		
	FLOW DIRECTION		
	ECB EROSION CONTROL BLANKET	INTERIM/FINAL	
	CD CHECK DAM (STRAW BALE)	INTERIM	
	CWA CONCRETE WASH OUT	INITIAL	
	TSB TEMPORARY SEDIMENT BASIN	INITIAL	
	TSB TRIBUTARY AREA DELINEATION	INITIAL	

- GRADING & EROSION CONTROL PLAN NOTES:**
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  - THERE ARE NO EXISTING PRESERVATION EASEMENTS LOCATED ON SITE.
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PROJECT INFO:	
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FILL FACTOR: 1.15	
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NET VOLUME(UNADJUSTED): 6484.39(CUT) CUBIC YARDS	
LOC - LIMITS OF CONSTRUCTION (ENTIRE FILING PERIMETER CONTROL) = 185.80 AC	
LOD - LIMITS OF DISTURBANCE (ROADWAYS, UTILITIES, GRADING) = 33.71 AC	

DRAWN BY: AMC JOB DATE: 12/5/2024  
APPROVED: RDL JOB NUMBER: 211030.240  
CAD DATE: 12/6/2024  
CAD FILE: J:\2021\211030\CAD\Drawings\C\Filing\_No\_4\GEC\GEC-Initial-Interim

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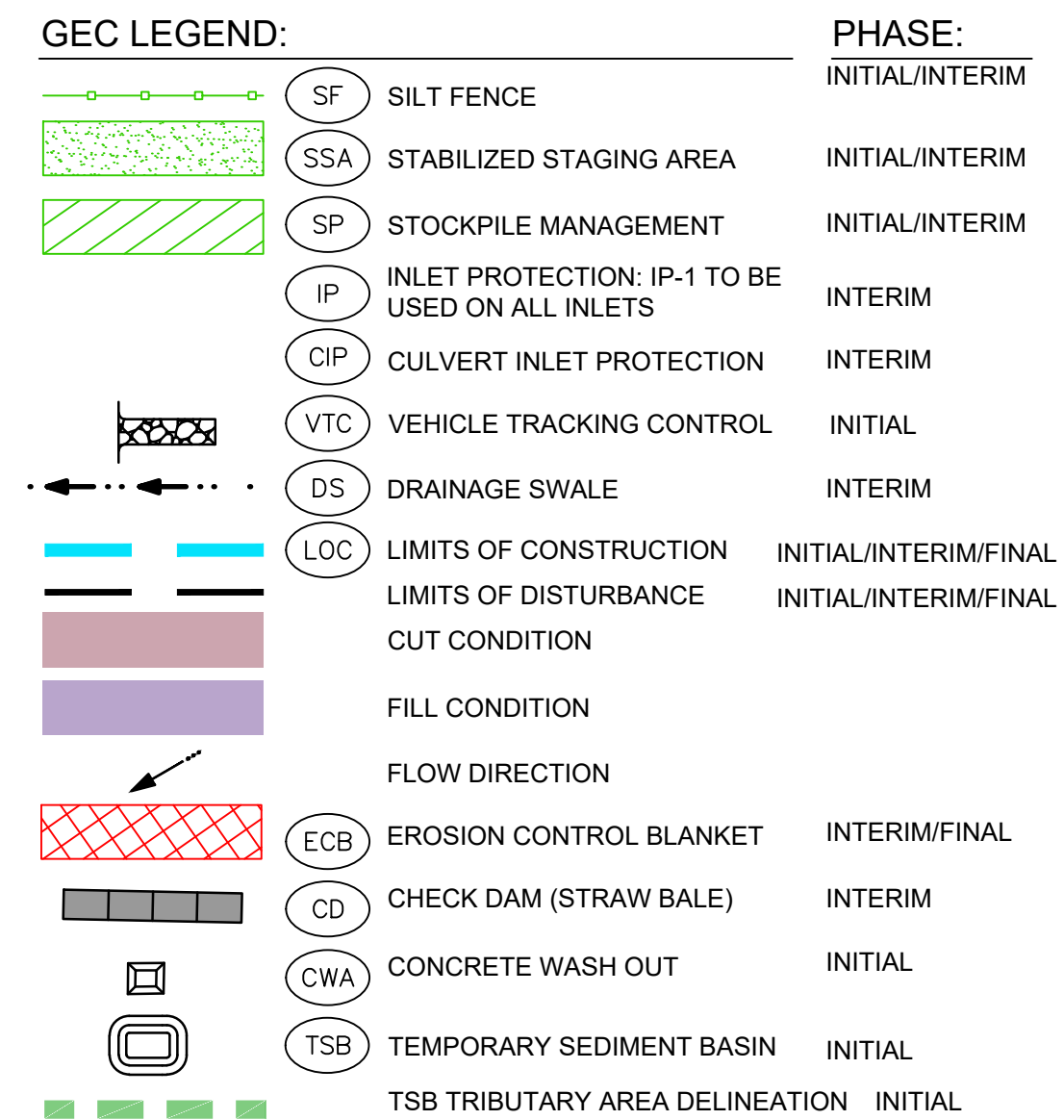
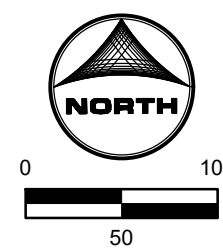
**HRGreen**  
HR GREEN - COLORADO SPRINGS  
1975 RESEARCH PARKWAY SUITE 160  
COLORADO SPRINGS, CO 80920  
PHONE: 719.300.4140  
FAX: 713.965.0044

FLYING HORSE NORTH FILING 4  
PRI #2, LLC.  
EL PASO COUNTY, CO

GRADING & EROSION CONTROL PLAN  
INITIAL & INTERIM GEC

SHEET  
GEC  
5





1. SEE SHEETS 11-12 FOR EL PASO COUNTY GRADING AND EROSION CONTROL DETAILS.
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3. AREA WITHIN LIMITS OF DISTURBANCE TO BE CLEARED, GRUBBED AND STOCKPILED PRIOR TO IMPORT OF ANY FILL.
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BASE SURFACE: EXISTING-FULL VOLUME: COMPARISON SURFACE: FILING-4-FG

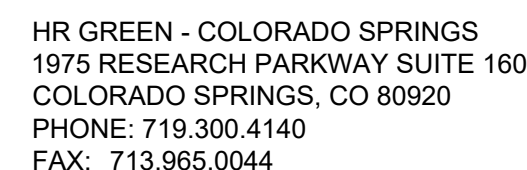
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LOD - LIMITS OF DISTURBANCE (ROADWAYS,  
UTILITIES, GRADING) = 33.71 AC

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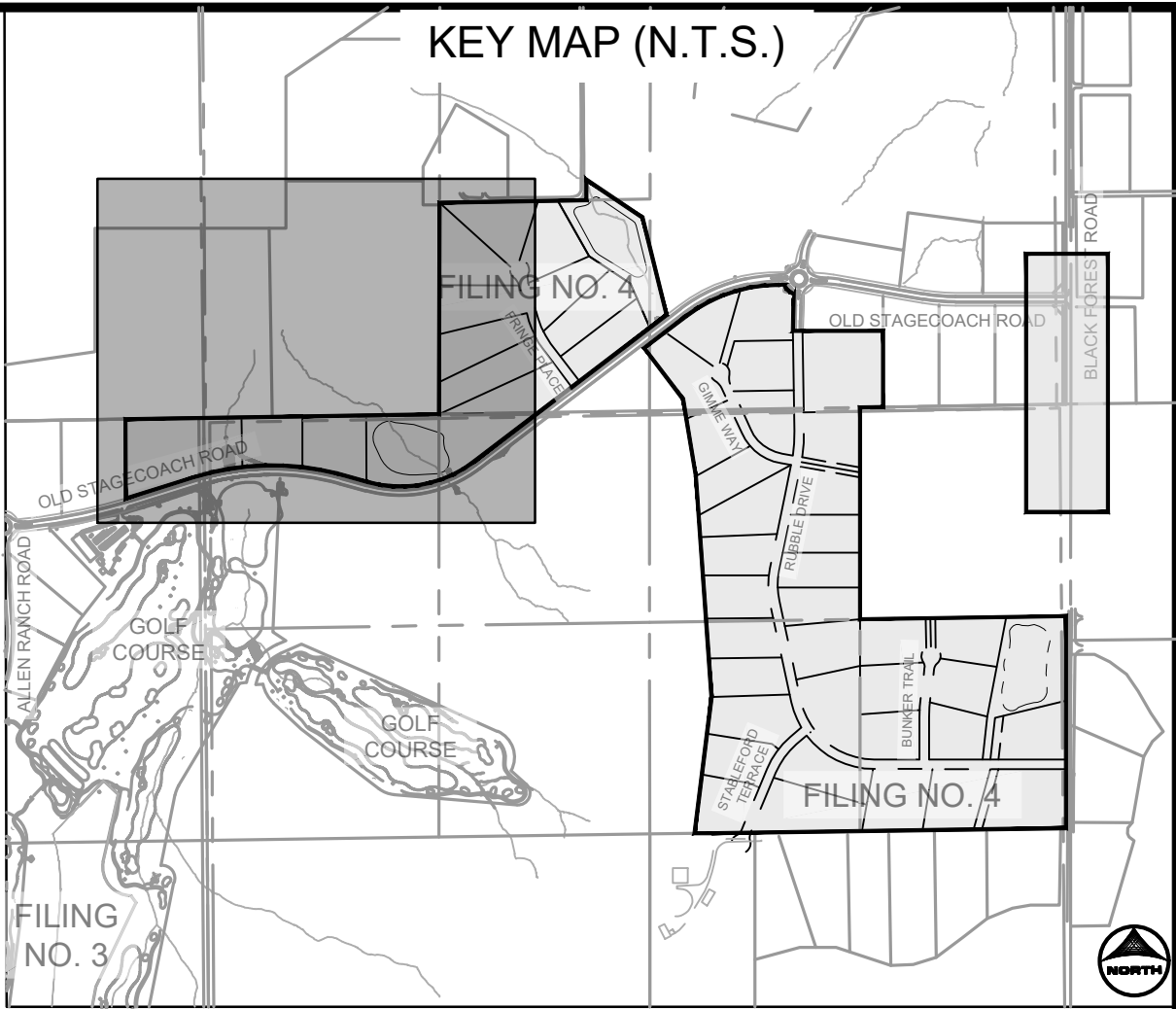


FLYING HORSE NORTH FILING 4  
PRI #2, LLC.  
EL PASO COUNTY, CO

GRADING & EROSION CONTROL PLAN  
INITIAL & INTERIM GEC

SHEET GEC	6
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GEC LEGEND:		PHASE:
	(TRM) TURF REINFORCED MAT	FINAL
	(SM) SEEDING & MULCHING	FINAL
	(DS) DRAINAGE SWALE	
	(LOD) LIMITS OF CONSTRUCTION/DISTURBANCE	
	FLOW DIRECTION	
	(ECB) EROSION CONTROL BLANKET	INTERIM/FINAL

GRADING & EROSION CONTROL PLAN NOTES:

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PROJECT INFO:

VOLUME:  
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MATCHLINE SEE SHEET 8

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HR GREEN - COLORADO SPRINGS  
1975 RESEARCH PARKWAY SUITE 160  
COLORADO SPRINGS, CO 80920  
PHONE: 719.300.4140  
FAX: 713.965.0044

FLYING HORSE NORTH FILING 4  
PRI #2, LLC.  
EL PASO COUNTY, CO

GRADING & EROSION CONTROL PLAN  
FINAL GEC

SHEET  
GEC  
7





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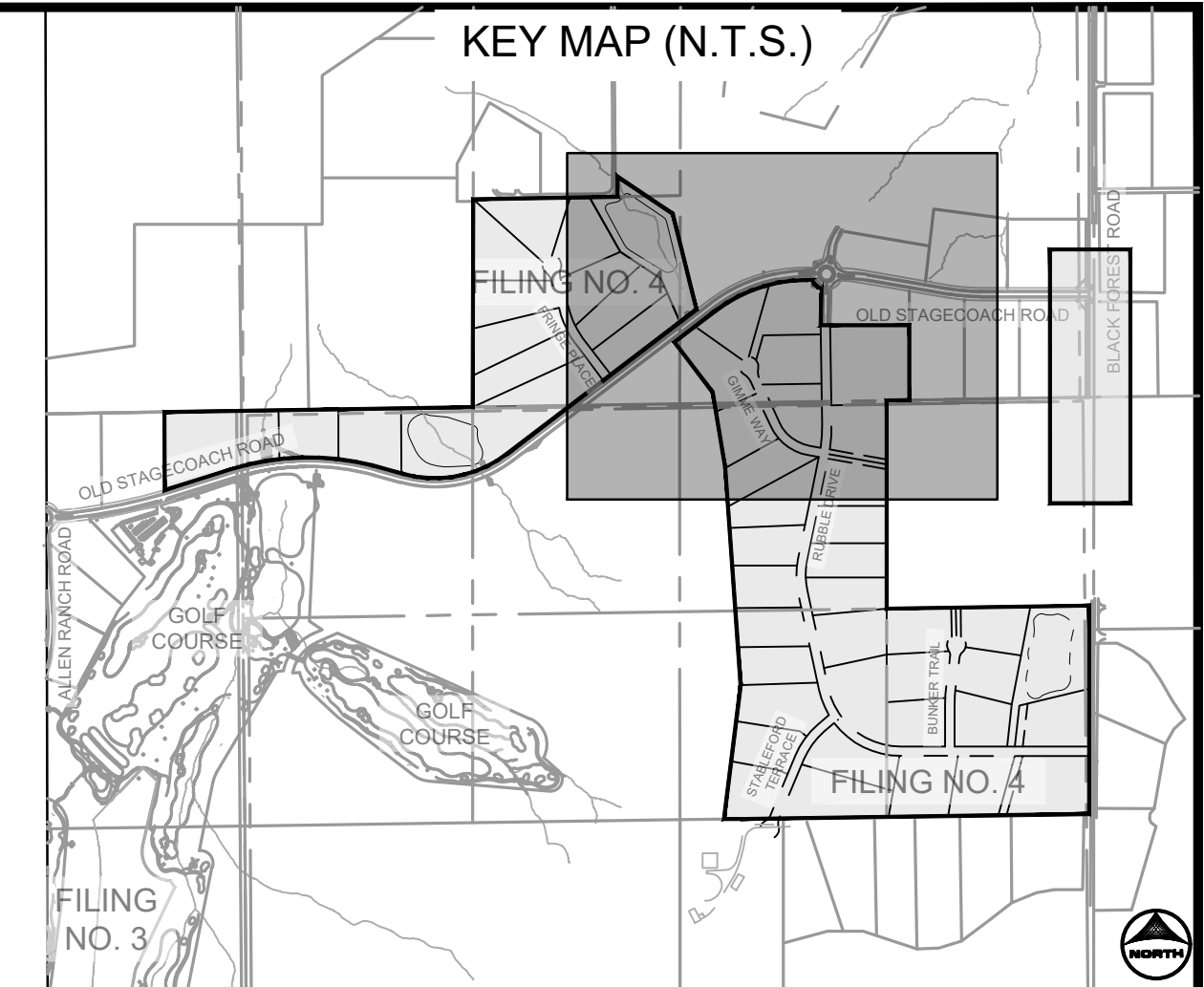


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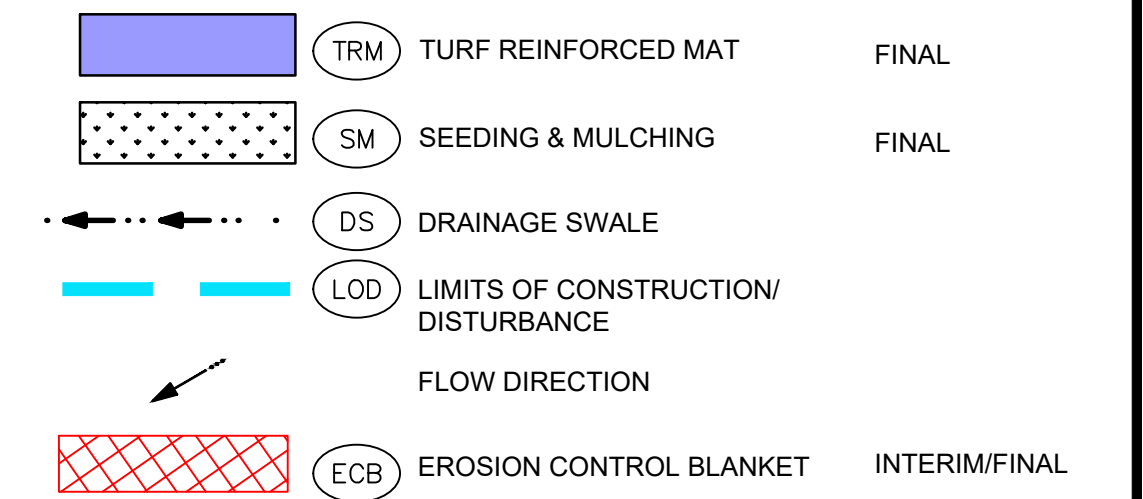
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EL PASO COUNTY, CO

GRADING & EROSION CONTROL PLAN  
FINAL GEC

SHEET GEC	8
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PHASE:



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VOLUME:

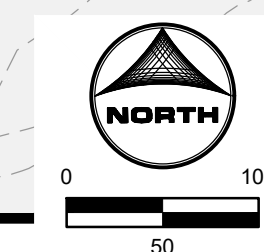
BASE SURFACE: EXISTING-FULL VOLUME: COMPARISON SURFACE: FILING-4-FG

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CUT VOLUME(ADJUSTED): 82678.57 CUBIC YARDS  
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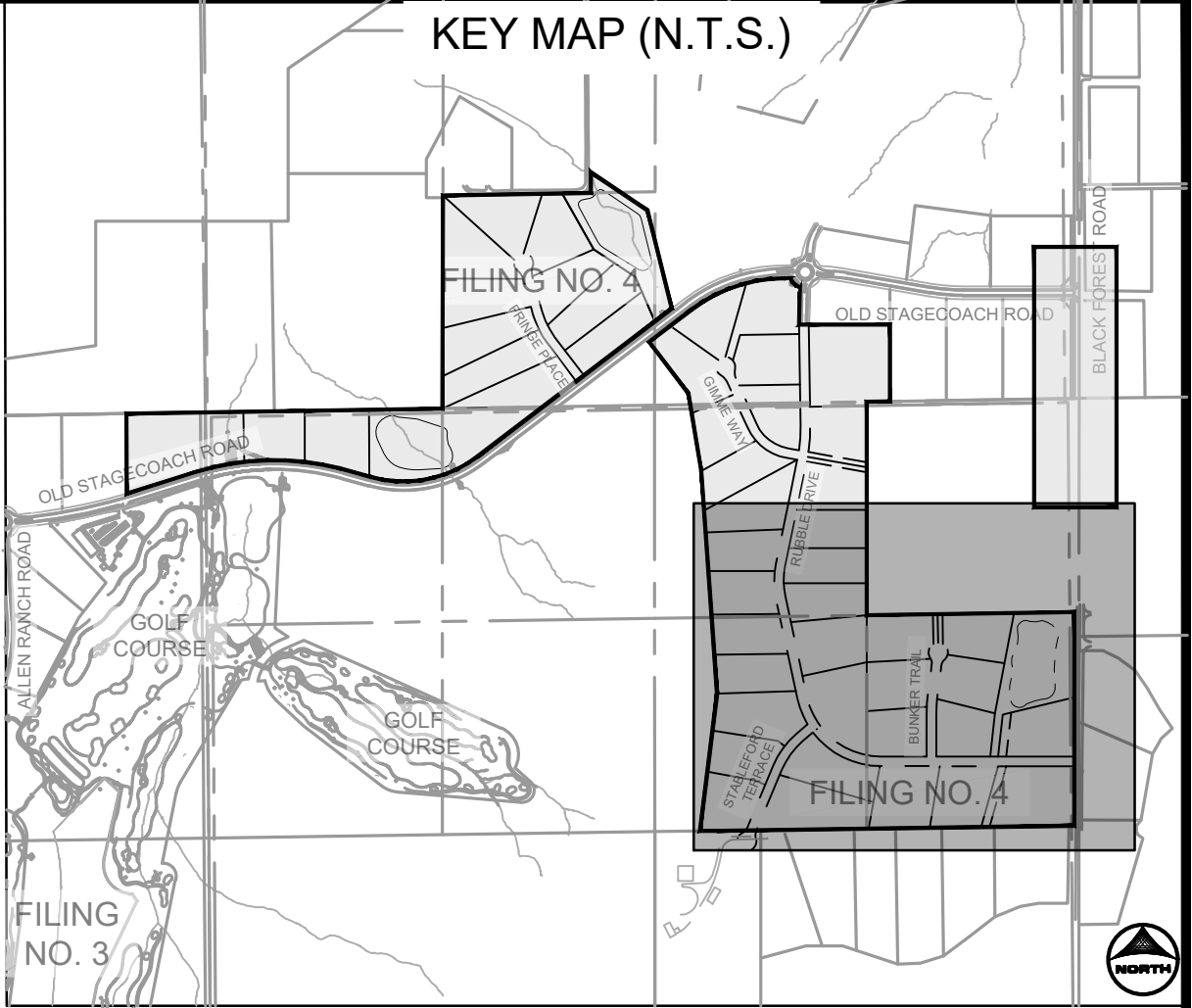
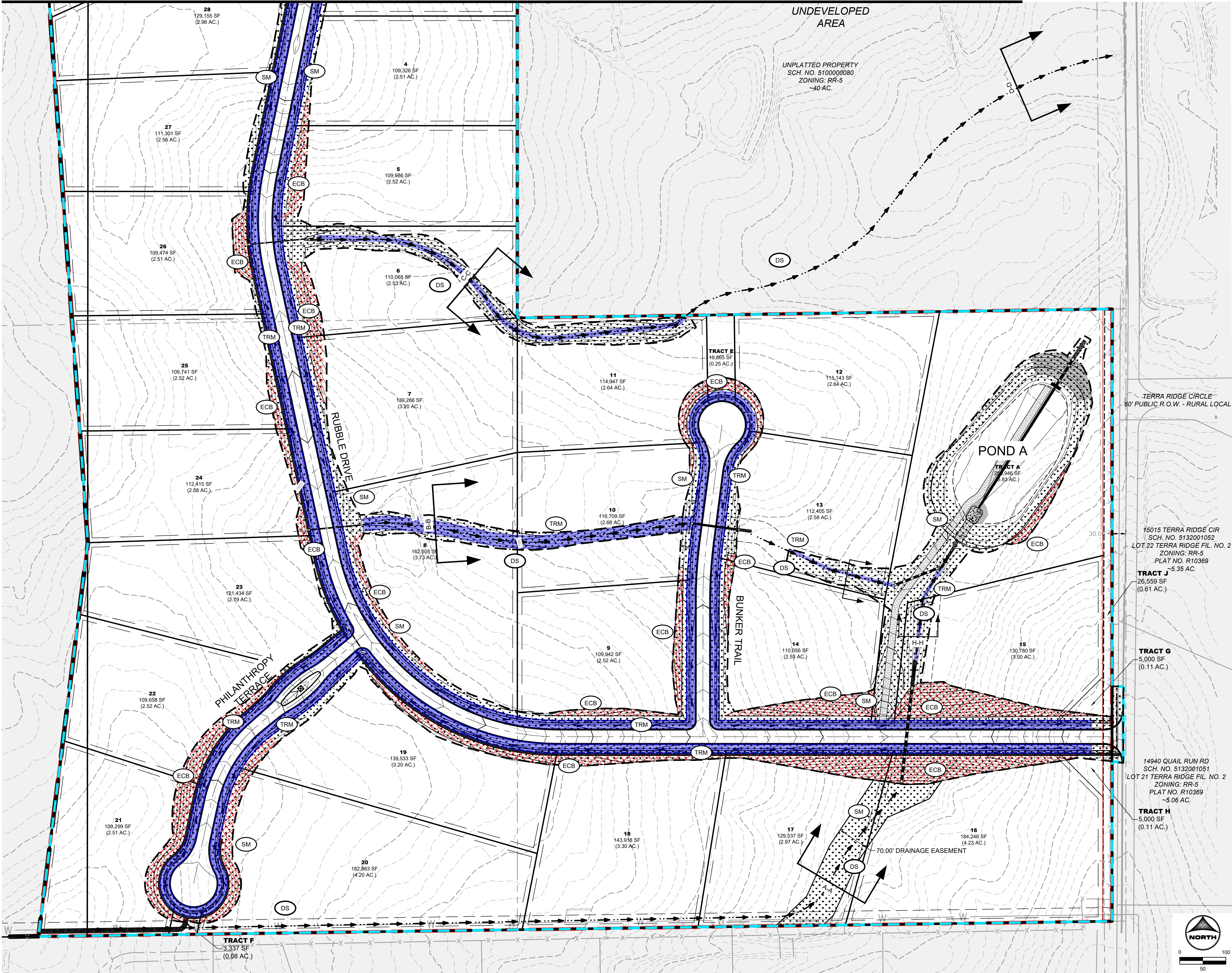
LOD - LIMITS OF DISTURBANCE (ROADWAYS,  
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MATCHLINE SEE SHEET 10



MATCHLINE SEE SHEET 8



GEC LEGEND:		PHASE:
	TRM	TURF REINFORCED MAT
	SM	SEEDING & MULCHING
	DS	DRAINAGE SWALE
	LOD	LIMITS OF CONSTRUCTION/DISTURBANCE
	ECB	EROSION CONTROL BLANKET
		FLOW DIRECTION
		INTERIM/FINAL

GRADING & EROSION CONTROL PLAN NOTES:

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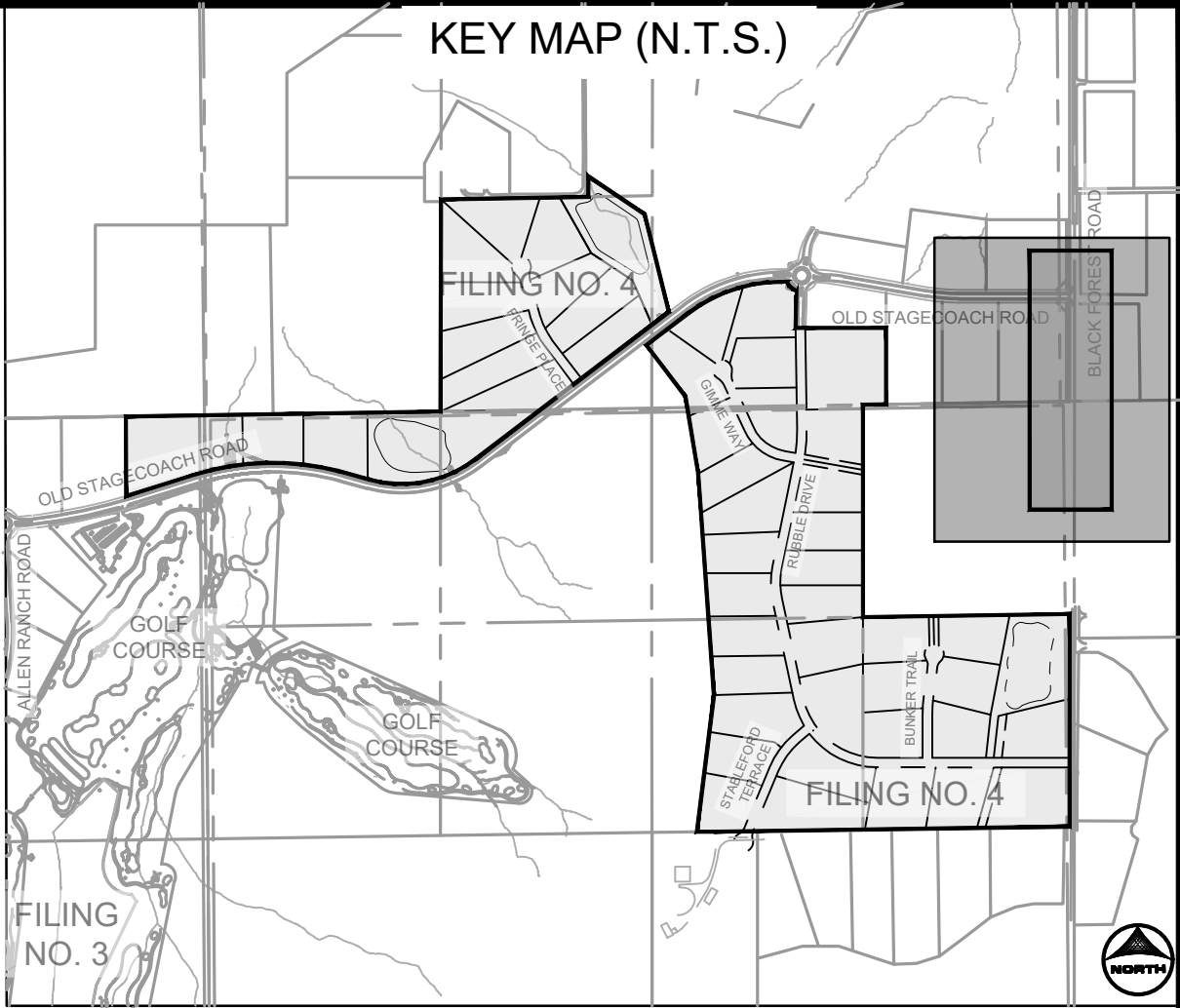
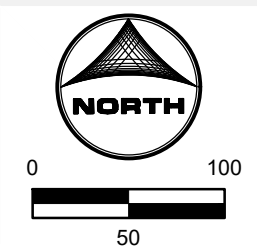
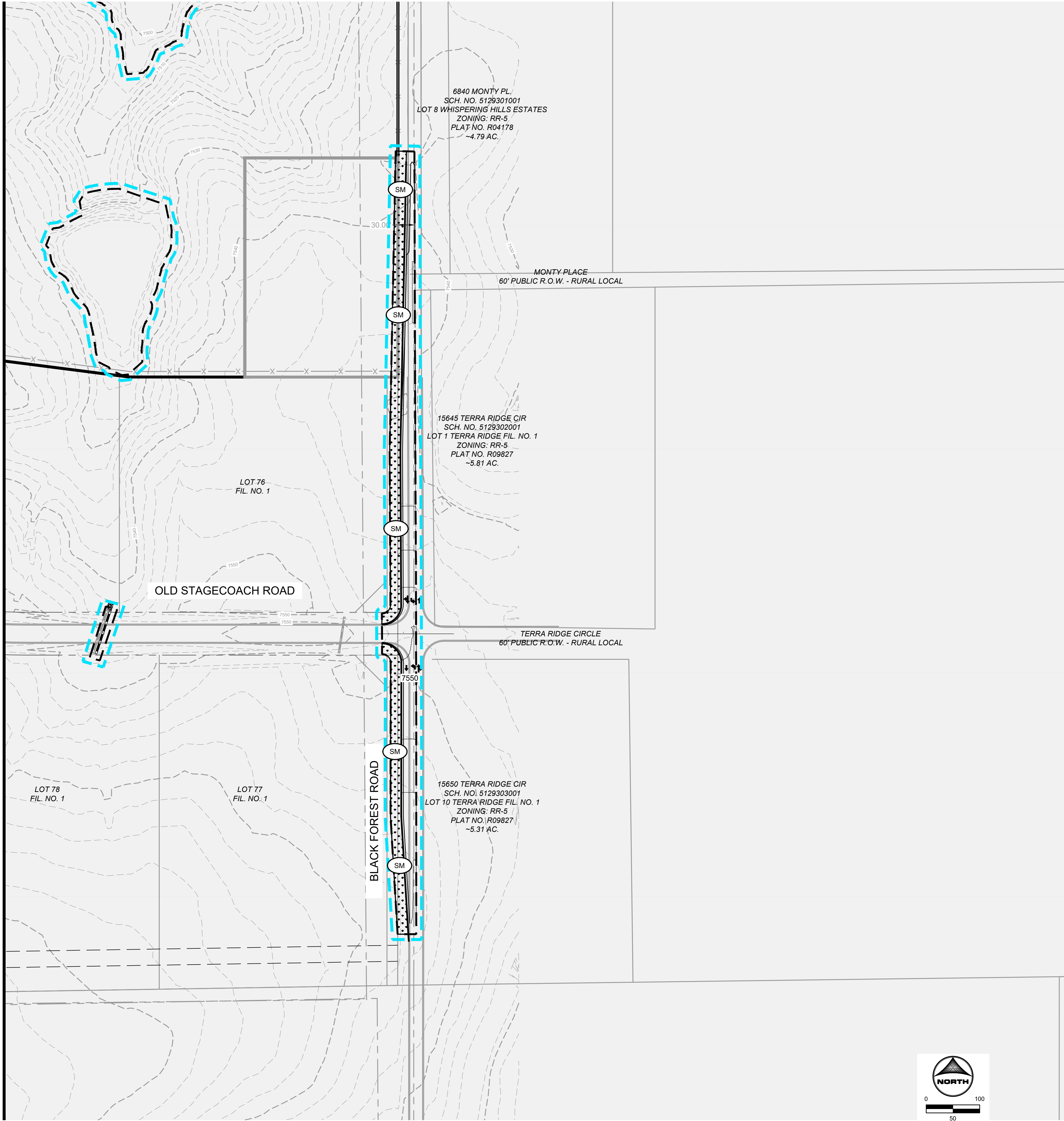
FLYING HORSE NORTH FILING 4  
PRI #2, LLC.  
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GRADING & EROSION CONTROL PLAN  
FINAL GEC

SHEET  
GEC  
9



MATCHLINE SEE SHEET 8



GEC LEGEND:		PHASE:
	(TRM) TURF REINFORCED MAT	FINAL
	(SM) SEEDING & MULCHING	FINAL
	(DS) DRAINAGE SWALE	
	(LOD) LIMITS OF CONSTRUCTION/DISTURBANCE	
	FLOW DIRECTION	
	(ECB) EROSION CONTROL BLANKET	INTERIM/FINAL

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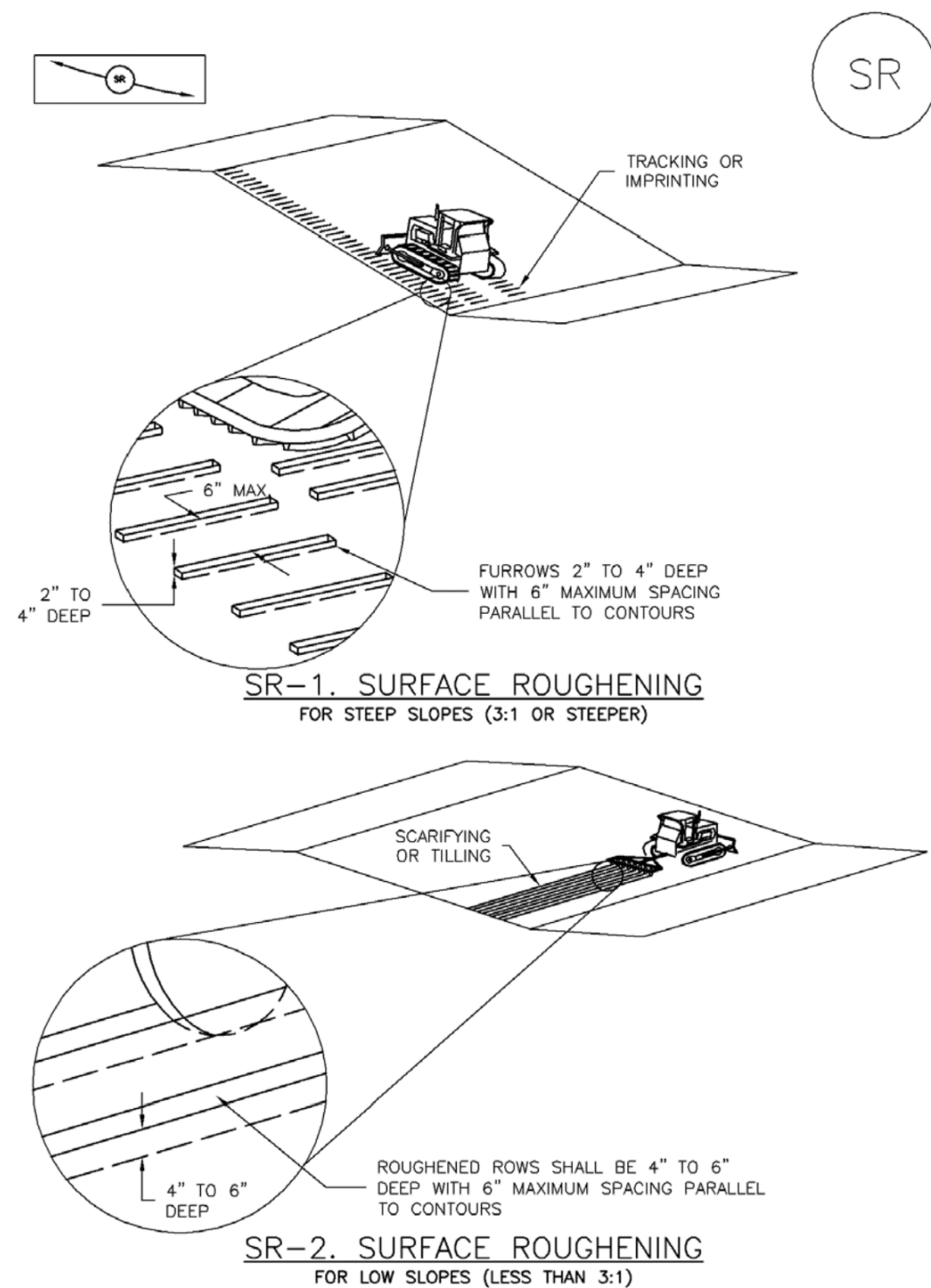
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GRADING & EROSION CONTROL PLAN  
FINAL GEC



Surface Roughening (SR) EC-1



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

Mulching (MU) EC-4

Description

Mulching consists of evenly applying straw, hay, shredded wood mulch, rock, bark or compost to disturbed soils and securing the mulch by crimping, tackifiers, netting or other measures. Mulching helps reduce erosion by protecting bare soil from rainfall impact, increasing infiltration, and reducing runoff. Although often applied in conjunction with temporary or permanent seeding, it can also be used for temporary stabilization of areas that cannot be reseeded due to seasonal constraints.

Mulch can be applied either using standard mechanical dry application methods or using hydromulching equipment that hydraulically applies a slurry of water, wood fiber mulch, and often a tackifier.

Appropriate Uses

Use mulch in conjunction with seeding to help protect the seedbed and stabilize the soil. Mulch can also be used as a temporary cover on low to mild slopes to help temporarily stabilize disturbed areas where growing season constraints prevent effective reseeding. Disturbed areas should be properly mulched and tacked, or seeded, mulched and tacked promptly after final grade is reached (typically within no longer than 14 days) on portions of the site not otherwise permanently stabilized.

Standard dry mulching is encouraged in most jurisdictions; however, hydromulching may not be allowed in certain jurisdictions or may not be allowed near waterways.

Do not apply mulch during windy conditions.

Design and Installation

Prior to mulching, surface-roughen areas by rolling with a crimping or punching type roller or by track walking. Track walking should only be used where other methods are impractical because track walking with heavy equipment typically compacts the soil.

A variety of mulches can be used effectively at construction sites. Consider the following:

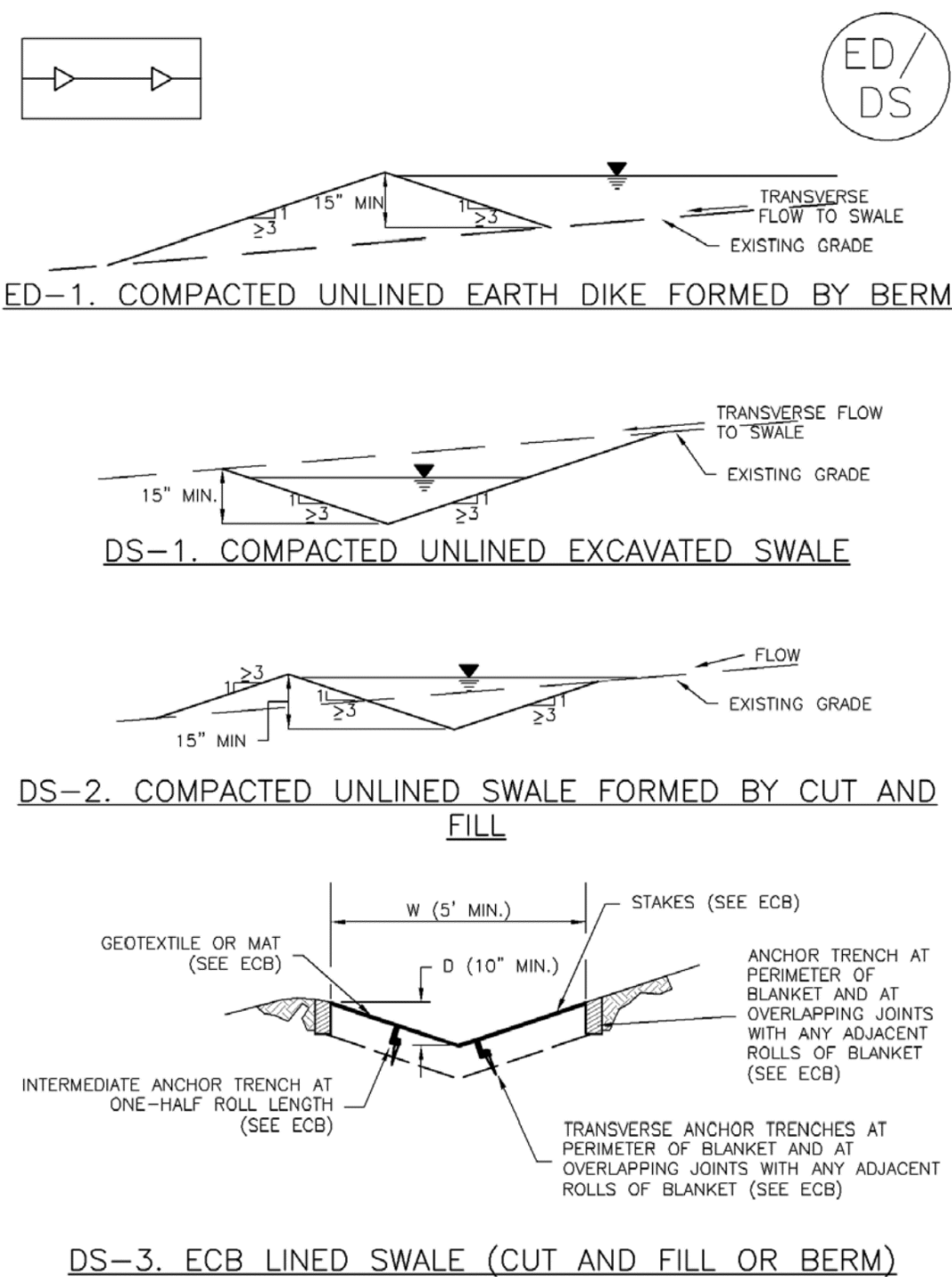
Mulch	
Functions	
Erosion Control	Yes
Sediment Control	Moderate
Site/Material Management	No

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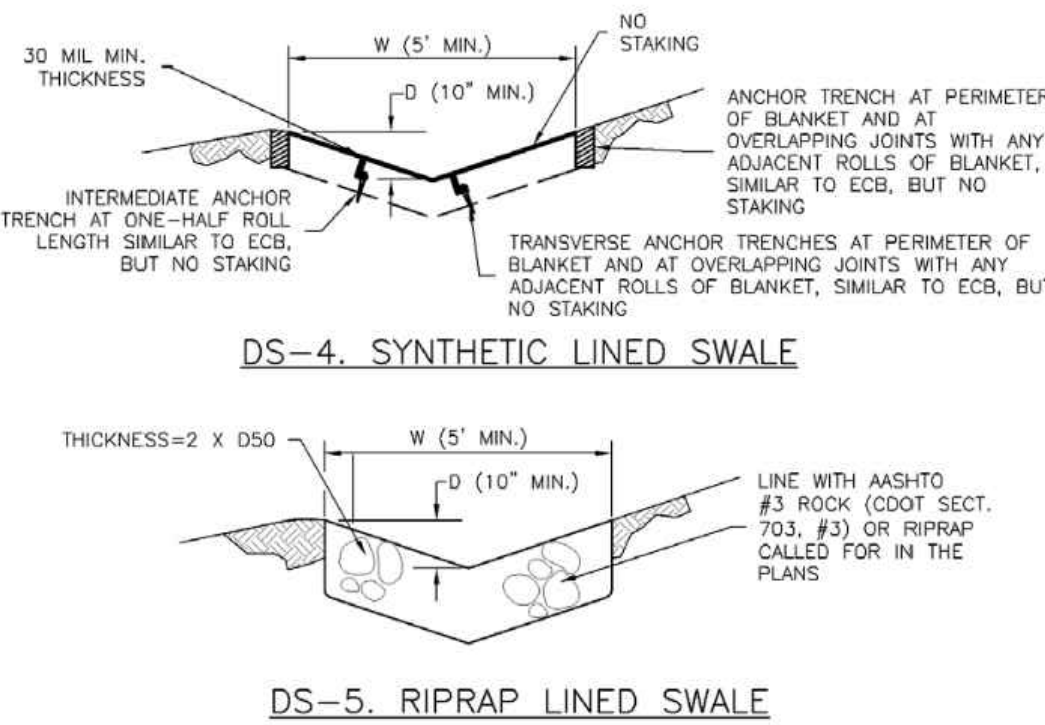
Photograph MU-1. An area that was recently seeded, mulched, and crimped.

Earth Dikes and Drainage Swales (ED/DS) EC-10



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EC-10 Earth Dikes and Drainage Swales (ED/DS)

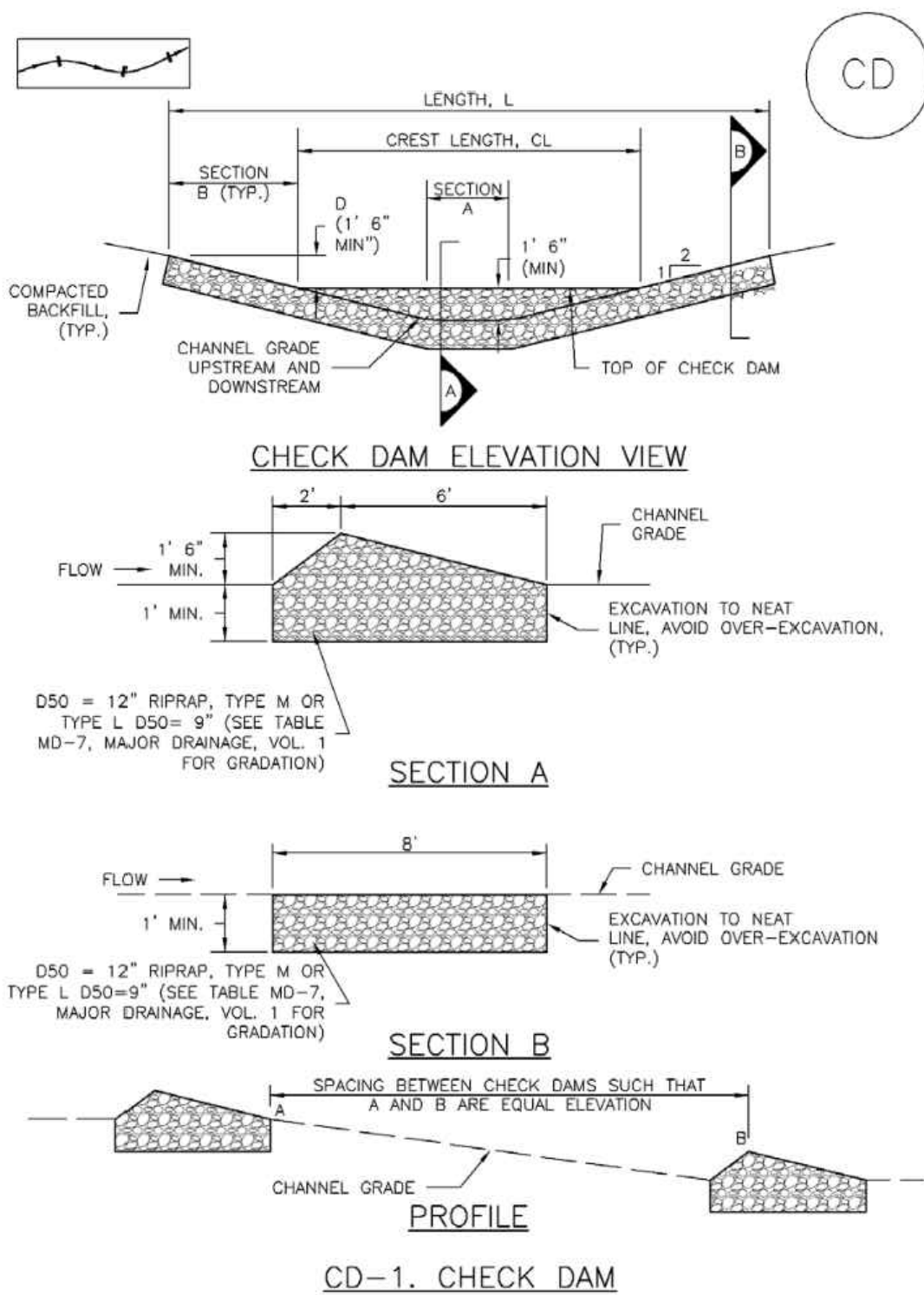


EARTH DIKE AND DRAINAGE SWALE INSTALLATION NOTES

- SEE SITE PLAN FOR:
  - LOCATION OF DIVERSION SWALE
  - TYPE OF SWALE (UNLINED, COMPACTED AND/OR LINED).
  - LENGTH OF EACH SWALE.
  - DEPTH, D, AND WIDTH, W DIMENSIONS.
  - FOR ECB/TRM LINED DITCH, SEE ECB DETAIL.
  - FOR RIPRAP LINED DITCH, SIZE OF RIPRAP, D50.
- SEE DRAINAGE PLANS FOR DETAILS OF PERMANENT CONVEYANCE FACILITIES AND/OR DIVERSION SWALES EXCEEDING 2-YEAR FLOW RATE OR 10 CFS.
- EARTH DIKES AND SWALES INDICATED ON SWMP PLAN SHALL BE INSTALLED PRIOR TO LAND-DISTURBING ACTIVITIES IN PROXIMITY.
- EMBANKMENT IS TO BE COMPACTED TO 90% OF MAXIMUM DENSITY AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT ACCORDING TO ASTM D698.
- SWALES ARE TO DRAIN TO A SEDIMENT CONTROL BMP.
- FOR LINED DITCHES, INSTALLATION OF ECB/TRM SHALL CONFORM TO THE REQUIREMENTS OF THE ECB DETAIL.
- WHEN CONSTRUCTION TRAFFIC MUST CROSS A DIVERSION SWALE, INSTALL A TEMPORARY CULVERT WITH A MINIMUM DIAMETER OF 12 INCHES.

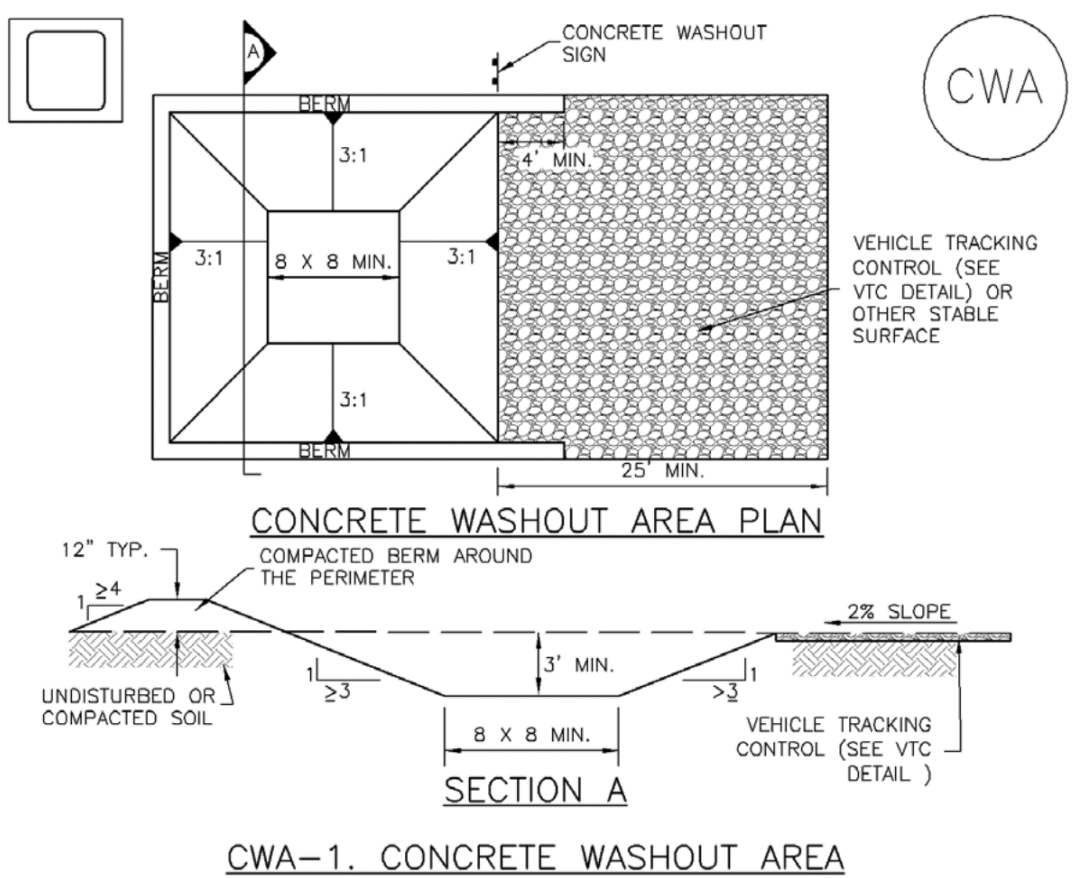
ED/DS-4 Urban Drainage and Flood Control District  
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Check Dams (CD) EC-12



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Concrete Washout Area (CWA) MM-1



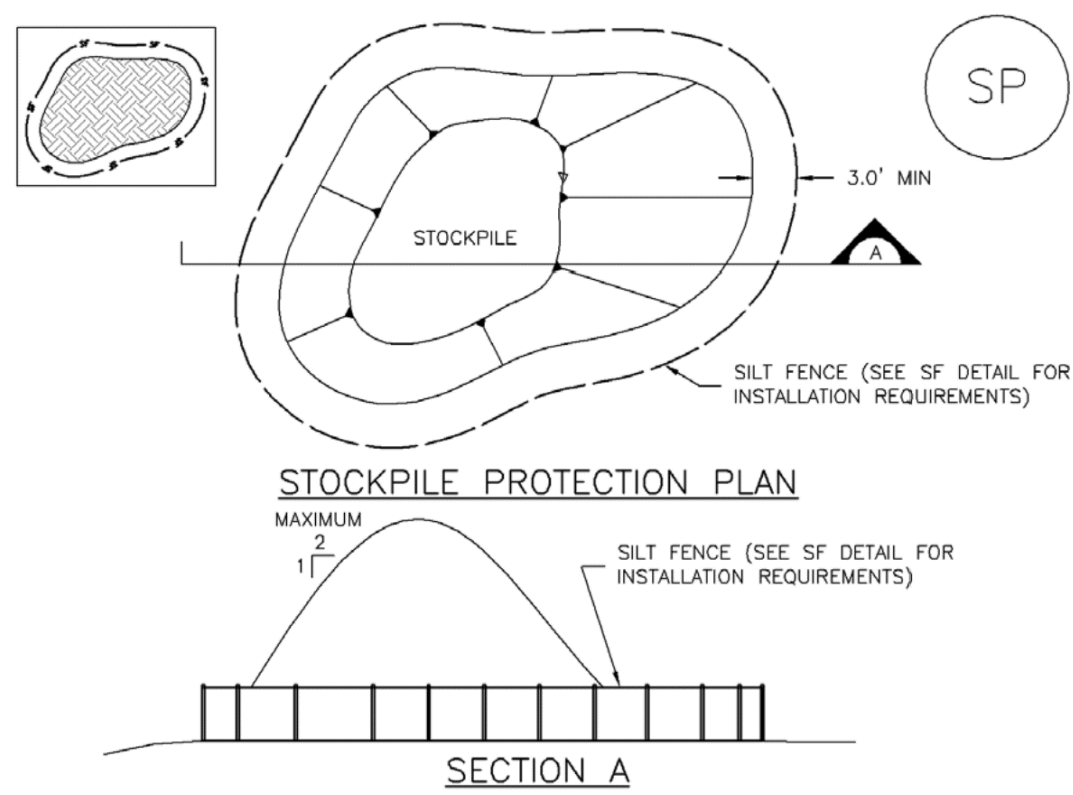
CWA-1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

- SEE PLAN VIEW FOR:
  - CWA INSTALLATION LOCATION.
- 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 (1.6 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
- THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
- 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.
- BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE 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.

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Stockpile Management (SP) MM-2



SP-1. STOCKPILE PROTECTION

STOCKPILE PROTECTION INSTALLATION NOTES

- SEE PLAN VIEW FOR:
  - LOCATION OF STOCKPILES.
  - TYPE OF STOCKPILE PROTECTION.
- INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE 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 IMPVIOUS 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.

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

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APPROVED: RDL JOB NUMBER: 211030.240  
CAD DATE: 12/6/2024  
CAD FILE: J:\2021\211030\CAD\DWG\C\Filing\_No\_4\GEC\GEC-Details

BAR IS ONE INCH ON  
OFFICIAL DRAWINGS.  
0 1" IF NOT ONE INCH,  
ADJUST SCALE ACCORDINGLY.

NO.	DATE	BY	REVISION DESCRIPTION



HR GREEN - COLORADO SPRINGS  
1975 RESEARCH PARKWAY SUITE 160  
COLORADO SPRINGS, CO 80920  
PHONE: 719.300.4140  
FAX: 713.965.0044

FLYING HORSE NORTH FILING 4  
PRI #2, LLC.  
EL PASO COUNTY, CO

GRADING & EROSION CONTROL PLAN  
DETAILS

SHEET  
DT

11



Good Housekeeping Practices (GH)

MM-3

Description

Implement construction site good housekeeping practices to prevent pollution associated with solid, liquid and hazardous construction-related materials and wastes. Stormwater Management Plans (SWMPs) should clearly specify BMPs including these good housekeeping practices:

- Provide for waste management.
- Establish proper building material staging areas.
- Designate paint and concrete washout areas.
- Establish proper equipment/vehicle fueling and maintenance practices.
- Control equipment/vehicle washing and allowable non-stormwater discharges.
- Develop a spill prevention and response plan.

**Acknowledgement:** This Fact Sheet is based directly on EPA guidance provided in *Developing Your Stormwater Pollution Prevent Plan* (EPA 2007).

Appropriate Uses

Good housekeeping practices are necessary at all construction sites.

Design and Installation

The following principles and actions should be addressed in SWMPs:

- Provide for Waste Management.** Implement management procedures and practices to prevent or reduce the exposure and transport of pollutants in stormwater from solid, liquid and sanitary wastes that will be generated at the site. Practices such as trash disposal, recycling, proper material handling, and cleanup measures can reduce the potential for stormwater runoff to pick up construction site wastes and discharge them to surface waters. Implement a comprehensive set of waste-management practices for hazardous or toxic materials, such as paints, solvents, petroleum products, pesticides, wood preservatives, acids, roofing tar, and other materials. Practices should include storage, handling, inventory, and cleanup procedures, in case of spills. Specific practices that should be considered include:

Solid or Construction Waste

- Designate trash and bulk waste-collection areas on-site.



Photographs GH-1 and GH-2. Proper materials storage and secondary containment for fuel tanks are important good housekeeping practices. Photos courtesy of CDOT and City of Aurora.

Good Housekeeping	
Functions	
Erosion Control	No
Sediment Control	No
Site/Material Management	Yes

November 2010 Urban Drainage and Flood Control District  
Urban Storm Drainage Criteria Manual Volume 3 GH-1

MM-3

Good Housekeeping Practices (GH)

- Recycle materials whenever possible (e.g., paper, wood, concrete, oil).
- Segregate and provide proper disposal options for hazardous material wastes.
- Clean up litter and debris from the construction site daily.
- Locate waste-collection areas away from streets, gutters, watercourses, and storm drains. Waste-collection areas (dumpsters, and such) are often best located near construction site entrances to minimize traffic on disturbed soils. Consider secondary containment around waste collection areas to minimize the likelihood of contaminated discharges.
- Empty waste containers before they are full and overflowing.

Sanitary and Septic Waste

- Provide convenient, well-maintained, and properly located toilet facilities on-site.
- Locate toilet facilities away from storm drain inlets and waterways to prevent accidental spills and contamination of stormwater.
- Maintain clean restroom facilities and empty portable toilets regularly.
- Where possible, provide secondary containment pans under portable toilets.
- Provide tie-downs or stake-downs for portable toilets.
- Educate employees, subcontractors, and suppliers on locations of facilities.
- Treat or dispose of sanitary and septic waste in accordance with state or local regulations. Do not discharge or bury wastewater at the construction site.
- Inspect facilities for leaks. If found, repair or replace immediately.
- Special care is necessary during maintenance (pump out) to ensure that waste and/or biocide are not spilled on the ground.

Hazardous Materials and Wastes

- Develop and implement employee and subcontractor education, as needed, on hazardous and toxic waste handling, storage, disposal, and cleanup.
- Designate hazardous waste-collection areas on-site.
- Place all hazardous and toxic material wastes in secondary containment.

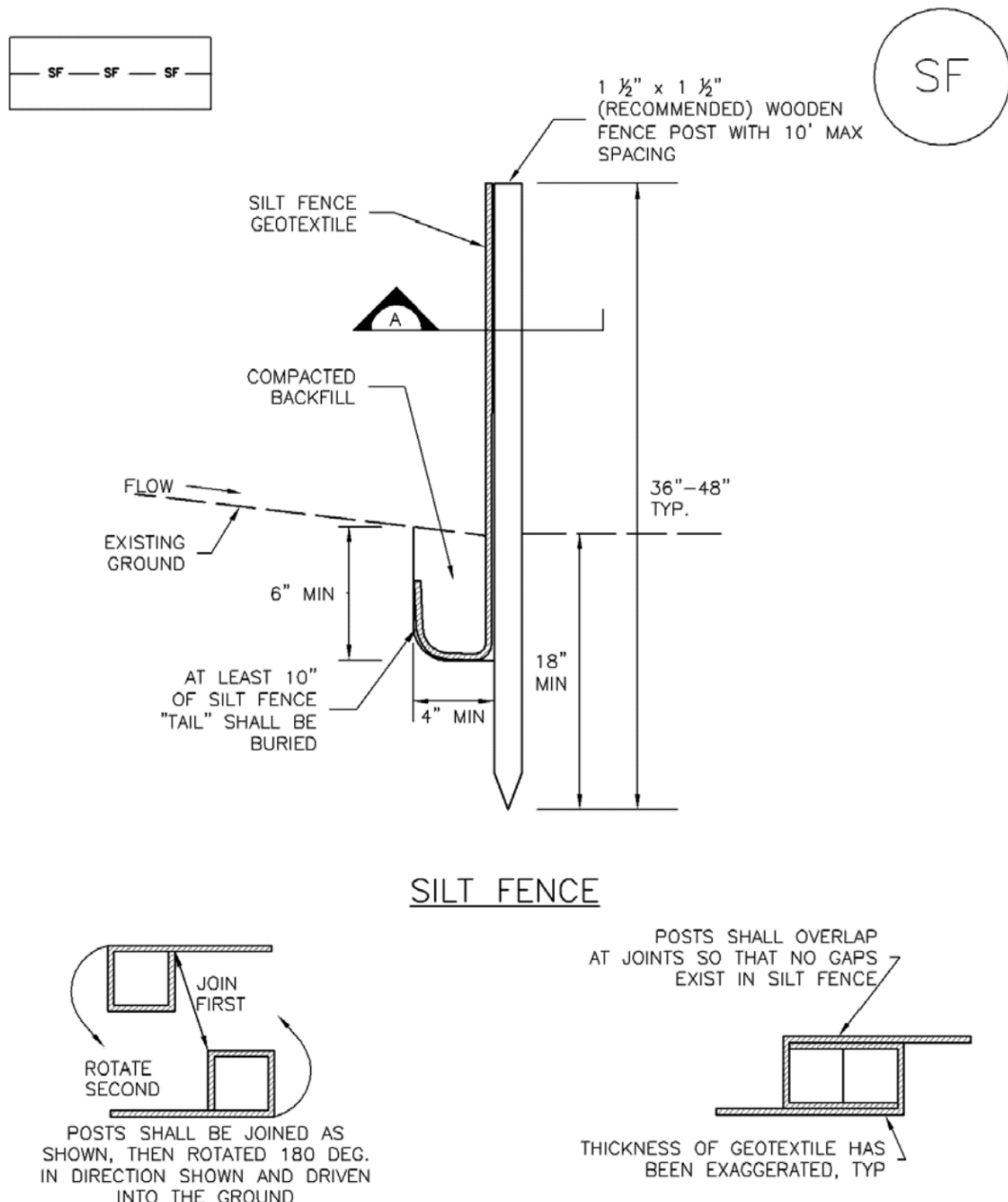


Photograph GH-3. Locate portable toilet facilities on level surfaces away from waterways and storm drains. Photo courtesy of WVE.

GH-2 Urban Drainage and Flood Control District  
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Silt Fence (SF)

SC-1



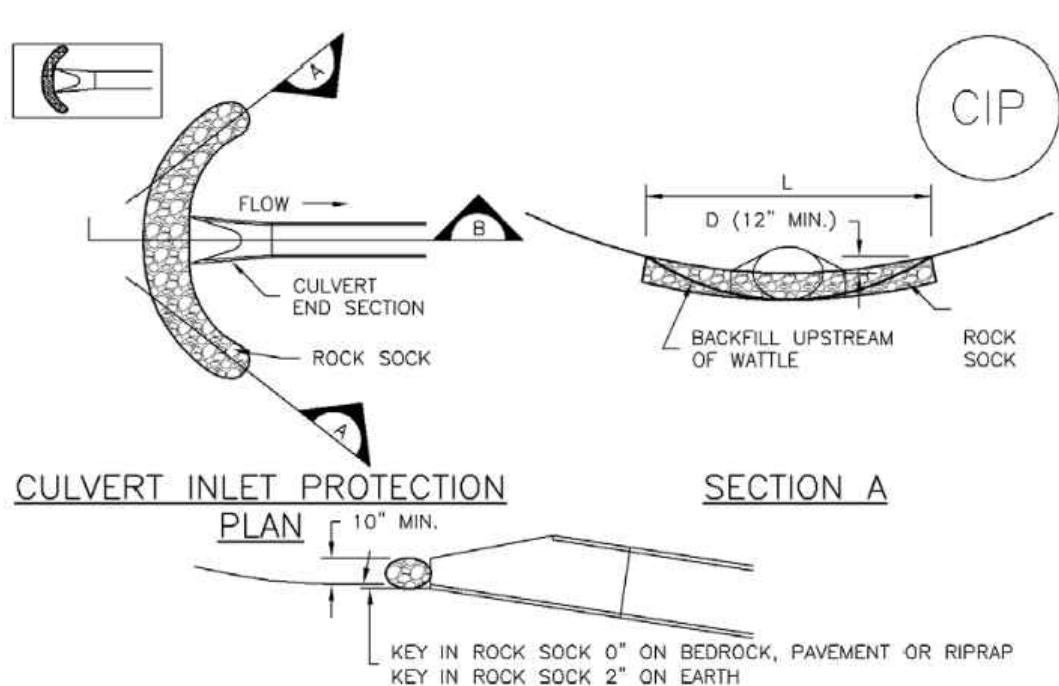
SECTION A

SF-1. SILT FENCE

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Inlet Protection (IP)

SC-6



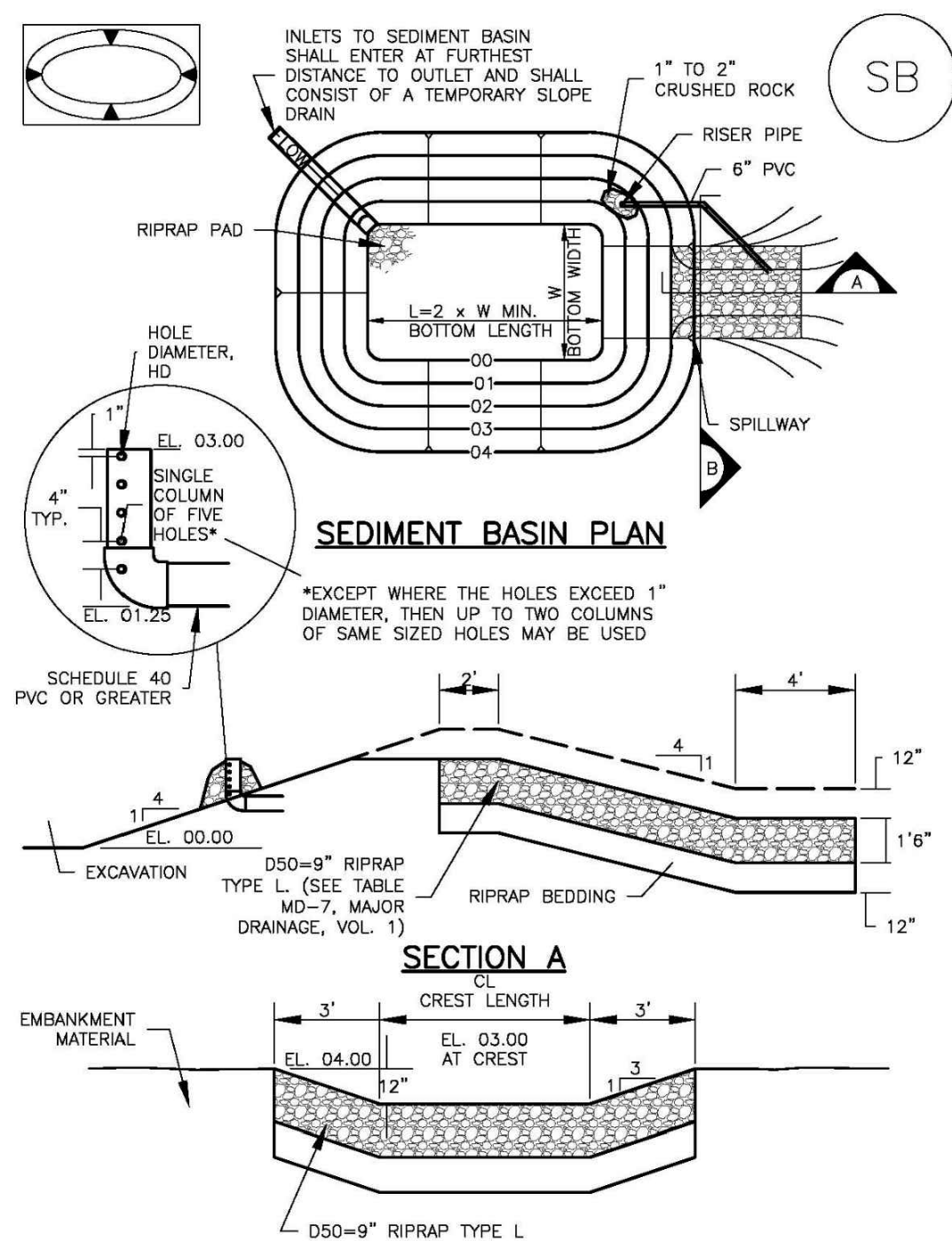
CIP-1. CULVERT INLET PROTECTION

- CULVERT INLET PROTECTION INSTALLATION NOTES
- SEE PLAN VIEW FOR  
-LOCATION OF CULVERT INLET PROTECTION.
  - SEE ROCK SOCK DESIGN DETAIL FOR ROCK GRADATION REQUIREMENTS AND JOINTING DETAIL.
- CULVERT INLET PROTECTION MAINTENANCE NOTES
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
  - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
  - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
  - SEDIMENT ACCUMULATED UPSTREAM OF THE CULVERT SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS 1/2 THE HEIGHT OF THE ROCK SOCK.
  - CULVERT INLET PROTECTION SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
- (DETAILS ADAPTED FROM AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)
- NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

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Sediment Basin (SB)

SC-7

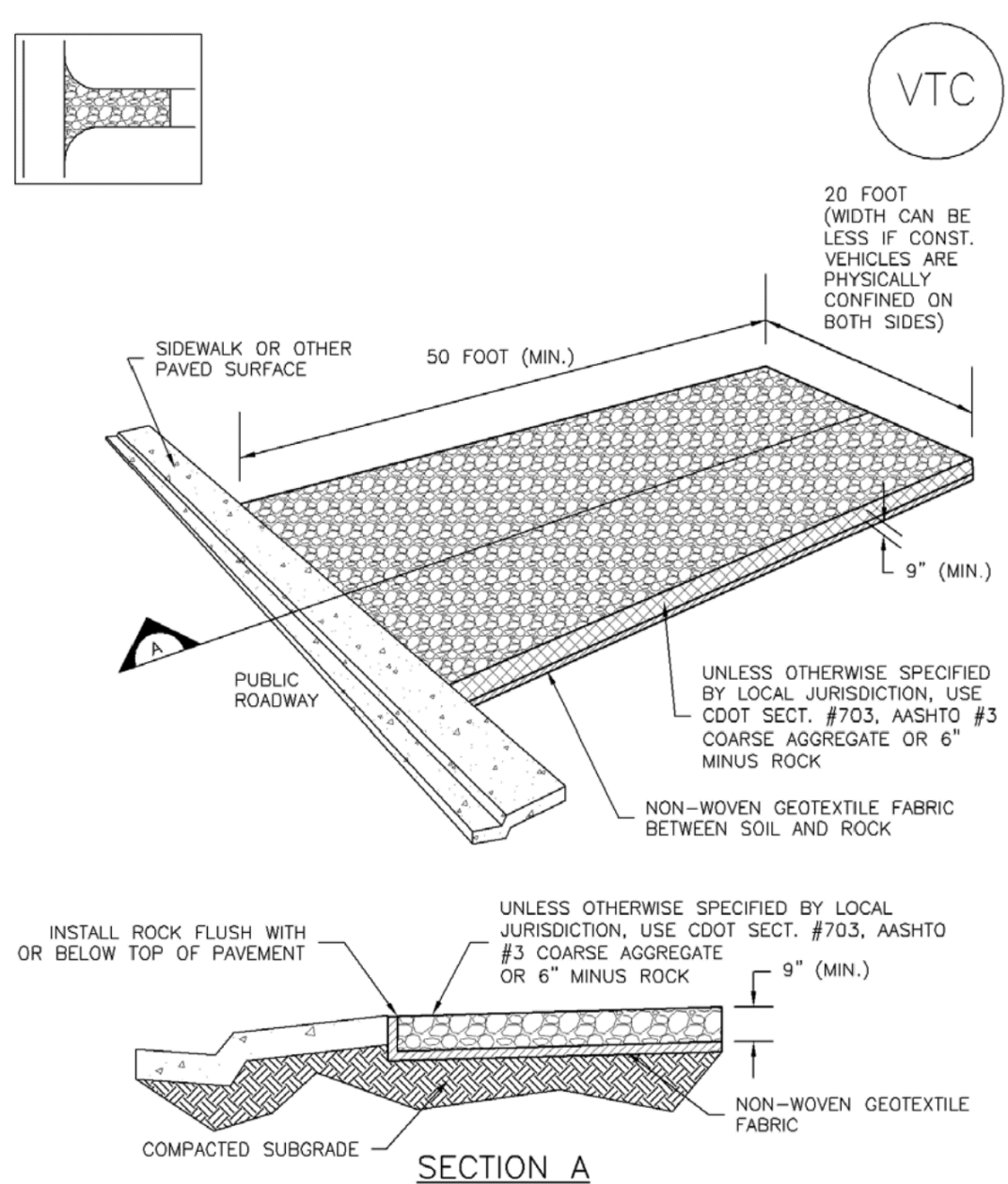


SECTION A

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Vehicle Tracking Control (VTC)

SM-4

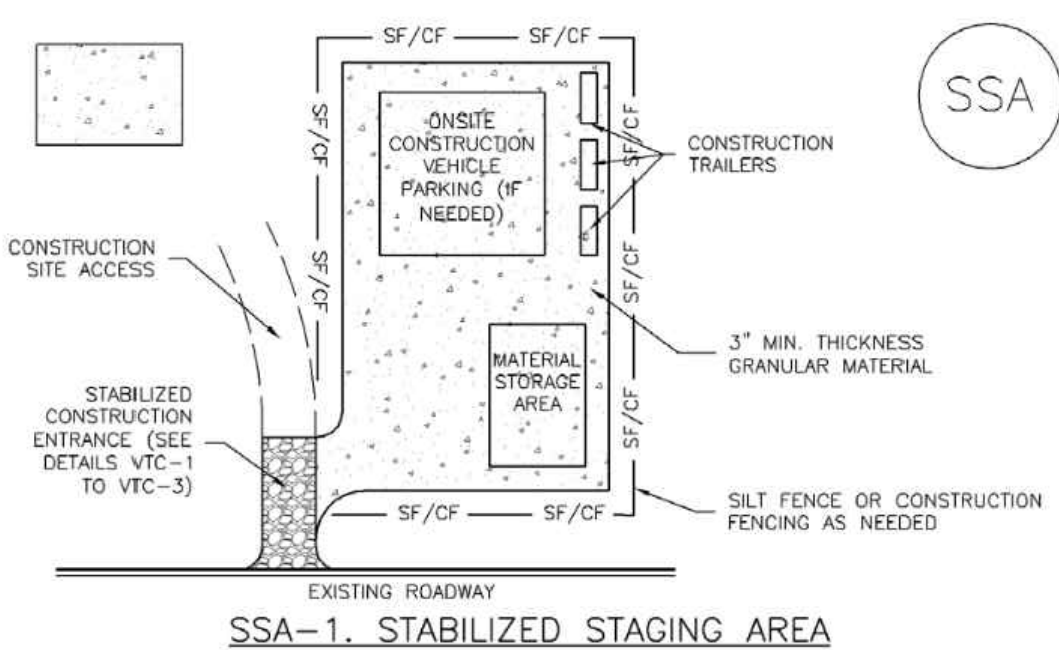


VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

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Stabilized Staging Area (SSA)

SM-6



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.

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