



**CONSTRUCTION NOTES:**

- ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN COMPLIANCE WITH EL PASO COUNTY ENGINEERING CRITERIA MANUAL AND EL PASO COUNTY DRAINAGE CRITERIA MANUAL.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK. THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NONEXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES. ANY DAMAGE TO THE UTILITIES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR.
- CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
  - EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
  - CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL VOLUMES 1&2
- THE CONTRACTOR WILL HOLD A PRE-CONSTRUCTION MEETING WITH THE EL PASO COUNTY ENGINEERING DEPARTMENT REPRESENTATIVE AND THE ENGINEER PRIOR TO CONSTRUCTION OF PUBLIC IMPROVEMENTS.
- ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT, REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
- CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND EPC. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
- CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DOT, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
- THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY.
- ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER OR APPLICABLE ENTITY.
- EL PASO COUNTY SHALL BE NOTIFIED 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.
- ALL WORK SHALL BE DONE TO THE LINES, GRADES, SECTIONS, AND ELEVATIONS SHOWN ON THE PLANS UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER.
- ALL RANGE POINTS, TIES, BENCH MARKS, AND OTHER SURVEY CONTROL POINTS WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION MUST BE PRESERVED.
- THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AND/OR TOES OF SLOPE AS SHOWN ON THE PLANS AND CROSS SECTIONS. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITIONS AT THE CONTRACTOR'S EXPENSE. CONSTRUCTION ACTIVITIES, IN ADDITION TO NORMAL CONSTRUCTION PROCEDURES, SHALL INCLUDE THE PARKING OF VEHICLES OR EQUIPMENT, DISPOSAL OF LITTER AND ANY OTHER ACTION WHICH WOULD ALTER EXISTING CONDITIONS AS APPROVED.
- CONSTRUCTION ACTIVITY SHALL BE SCHEDULED WITH MINIMUM IMPACT TO PEDESTRIAN AND VEHICULAR TRAFFIC. ALLOWABLE WORK HOURS SHALL BE AS SPECIFIED IN THE PROJECT SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL UTILITIES AND STRUCTURES AFFECTED BY THE WORK AND ANY DAMAGE SHALL BE REPAIRED AND RESTORED TO THE SATISFACTION OF THE ENGINEER OR APPLICABLE ENTITY.
- THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN TEMPORARY TRAFFIC CONTROL DEVICES NECESSARY THROUGHOUT THE DURATION OF CONSTRUCTION IN CONFORMANCE WITH TRAFFIC CONTROL PLANS. NO LANE CLOSURES WILL BE PERMITTED UNLESS OTHERWISE SPECIFIED IN THE PROJECT SPECIAL PROVISION "TRAFFIC CONTROL".
- THE CONTRACTOR SHALL MAINTAIN PAVEMENT MARKINGS ON THE ROADWAYS DURING ALL PHASES OF CONSTRUCTION IN ACCORDANCE WITH MUTCD AND CDOT STANDARDS.
- WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. LOCATIONS SHALL BE AS ORDERED. WATER WILL NOT BE PAID FOR SEPARATELY.
- THE CONTRACTOR SHALL OBTAIN A STATE CONSTRUCTION DEWATERING DISCHARGE PERMIT FOR DISCHARGES TO ANY ROADWAY DITCHES, STORM SEWER, CHANNEL, IRRIGATION DITCH, ANY STREAM THAT IS TRIBUTARY TO THE AFOREMENTIONED FACILITIES, OR ANY WATERS OF THE UNITED STATES.
- DEWATERING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 107 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- CONTRACTOR SHALL NOTIFY ALL BUSINESSES AND RESIDENTS, IN WRITING, PRIOR TO ANY INTERRUPTION IN UTILITY SERVICE. NOTICE MUST BEAR ALL APPROPRIATE CONTACT INFORMATION, AND AN EMERGENCY NUMBER FOR AFTER HOURS CALLS.
- AT THE COMPLETION OF CONSTRUCTION AND PRIOR TO PROJECT CLOSEOUT, THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF PLANS MARKED "AS-BUILT". THE PLANS SHALL SHOW ANY AND ALL VARIATIONS FROM THE APPROVED PLAN SET.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A SITE SPECIFIC STAGING PLAN FOR ACCESS TO THE WORK AREAS AND FIELD FACILITIES TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO BEGINNING CONSTRUCTION. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF TEMPORARY INGRESS/EGRESS SHALL BE PAID FOR UNDER THE LUMP SUM TRAFFIC CONTROL, EARTHWORK, DRAINAGE, AND OTHER ITEMS RELATED TO THE ACCESS SHALL BE SUBSIDIARY TO THE WORK INCLUDING EROSION CONTROL MEASURES FOR RESTORATION OF THE SITE TO ORIGINAL CONDITION.
- THE CONTRACTOR SHALL PROTECT EXISTING WETLANDS WITH TEMPORARY FENCING BEFORE ANY GROUND DISTURBANCE BEGINS. WETLANDS AREAS TO BE PROTECTED ARE SHOWN ON THE PLANS.

**GRADING NOTES:**

- SAND CREEK IS AN ACTIVE MAJOR DRAINAGEWAY WITH PERENNIAL BASE FLOWS. CONTRACTOR SHALL ANTICIPATE STORMWATER INFLOWS TO THE SITE DURING CONSTRUCTION AND PROVIDE A MEANS OF CONVEYANCE/REMOVAL OF ANY CONTINUOUS INFLOWS.
- THERE IS A LIKELIHOOD FOR LARGE FLOW EVENTS IN SAND CREEK WHICH COULD JEOPARDIZE CONSTRUCTION. THE LIKELIHOOD OF THESE EVENTS CHANGES WITH THE SEASONS. THE CONTRACTOR SHOULD ACCOUNT FOR THE EVENTUALITY OF THESE LARGE FLOW EVENTS BASED ON THE TIMING OF CONSTRUCTION.
- DEWATERING.
  - DEWATERING/BYPASS PUMPING OF SAND CREEK SHALL OCCUR IN ADVANCE OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION DEWATERING (CDW) PERMIT FROM CDPHE ANYTIME GROUNDWATER, INCLUDING GROUNDWATER THAT IS COMMINGLED WITH STORMWATER OR SURFACE WATER, IS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES AND THE GROUNDWATER OR COMMINGLED WATER NEEDS TO BE DISCHARGED TO SURFACE WATER.
  - WATER FROM DEWATERING OPERATIONS SHALL ONLY BE DISCHARGED TO STATE WATERS IF ALLOWED BY A PERMIT.
- MUCK EXCAVATION IS NOT ANTICIPATED FOR THIS PROJECT. IF ENCOUNTERED, CONTRACTOR SHALL REMOVE UNSUITABLE ORGANIC MATERIAL TO THE DEPTH AS DETERMINED BY THE ENGINEER AND REPLACE THE EXCAVATED VOLUME WITH SUITABLE APPROVED FILL MATERIAL PRIOR TO CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- THE MAXIMUM SLOPE FOR EXCAVATION AND PLACEMENT OF FILL IS 4:1 HORIZONTAL:VERTICAL, UNLESS OTHERWISE SHOWN IN THE PLANS.
- THE EXISTING DROP STRUCTURE, ANY ASSOCIATED FEATURES, AND DEBRIS SHOULD BE REMOVED FROM THE PROPOSED CONSTRUCTION AREA. EXPOSED SURFACES SHOULD BE FREE OF MOUNDS AND DEPRESSIONS WHICH COULD PREVENT UNIFORM COMPACTION.
- EXPOSED AREAS WHICH WILL RECEIVE FILL, ONCE PROPERLY CLEARED WHERE NECESSARY, SHOULD BE SCOURED TO A MINIMUM DEPTH OF 8 INCHES, CONDITIONED TO NEAR OPTIMUM WATER CONTENT, AND COMPACTED.
- A GEOTECHNICAL ENGINEER SHALL BE PRESENT FOR OVER-EXCAVATION AND FILL OPERATIONS.
- THE EARTHWORK EFFORTS SHOULD BE MONITORED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER. MONITORING SHOULD INCLUDE DOCUMENTATION OF ADEQUATE REMOVAL OF VEGETATION AND TOP SOIL, PROOF-ROLLING AND MITIGATION OF AREAS DELINEATED BY THE PROOF-ROLL TO REQUIRE MITIGATION.
- EACH LIFT OF COMPACTED FILL SHOULD BE TESTED, EVALUATED, AND REWORKED AS NECESSARY UNTIL APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF ADDITIONAL LIFTS. EACH LIFT OF FILL SHOULD BE TESTED FOR DENSITY AND WATER CONTENT AT A FREQUENCY OF AT LEAST ONE TEST FOR EVERY 2,500 SQUARE FEET OF COMPACTED FILL PLACED BENEATH THE DROP STRUCTURE, OR WITHIN CONSTRUCTED SLOPES.
- IN AREAS OF FOUNDATION EXCAVATIONS, THE BEARING SUBGRADE SHOULD BE EVALUATED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER. IN THE EVENT UNANTICIPATED CONDITIONS ARE ENCOUNTERED, THE GEOTECHNICAL ENGINEER SHOULD PRESCRIBE MITIGATION OPTIONS.
- THE ON-SITE SOILS ARE GENERALLY CONSIDERED SUITABLE FOR REUSE AS STRUCTURAL AND/OR GENERAL FILL. IMPORTED SOILS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER. ALL UNSUITABLE MATERIAL SHALL BE DISPOSED OF AS DIRECTED. PARTIAL REMOVAL OF THE FILL SOILS SHOULD INCLUDE OVER-EXCAVATING A MINIMUM OF 4 FEET OF THE FILL SOILS, PROCESSING AS REQUIRED, MOISTURE CONDITIONING, AND RECOMPACTING AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
- THE FILL SHALL BE PLACED IN THIN, LOOSE LIFTS OF 8 INCHES OR LESS (WHEN HEAVY SELF-PROPELLED COMPACTION EQUIPMENT IS USED) OR 4-6 INCHES (WHEN HAND-GUIDED EQUIPMENT IS USED). WATER CONTENT SHALL BE WITHIN 3 PERCENT OF OPTIMUM. FILL IS TO BE COMPACTED TO A MINIMUM OF:
  - WITHIN 10 FEET OF STRUCTURES, OR IN CONSTRUCTED SLOPES:
    - 95 PERCENT OF MAXIMUM DRY DENSITY
  - GENERAL FILL OUTSIDE OF STRUCTURAL AREAS:
    - 90 PERCENT OF MAXIMUM DRY DENSITY
- A COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) WATER QUALITY DIVISION STORMWATER DISCHARGE PERMIT SHALL BE OBTAINED AND A COPY SHALL BE SUBMITTED TO EL PASO COUNTY.
- PROPOSED SPOT ELEVATIONS REFLECT MEAN FINISHED GROUND GRADES IRRESPECTIVE OF VARIATIONS DUE TO PROPOSED GROUT, BOULDER, AND RIPRAP.
- EXISTING GRADES REFLECT CHANNEL CONDITIONS AS OF AUGUST 1, 2017. CHANNEL SCOUR MAY AFFECT SHOWN ELEVATIONS.
- TOPSOIL SHALL BE STOCKPILED TO THE EXTENT PRACTICAL ON THE SITE FOR USE ON AREAS TO BE REVEGETATED. ANY AND ALL STOCKPILES SHALL BE LOCATED AND PROTECTED FROM EROSION ELEMENTS. THE MINIMUM THICKNESS OF TOPSOIL SHALL BE OBTAINED BY STOCKPILING EXISTING TOPSOIL. THE TOPSOIL SHALL BE APPLIED TO ALL SURFACES REQUIRING SEEDING OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL DISPOSE OF EXCESS TOPSOIL IN A DESIGNATED AREA ON SITE.

**ABBREVIATIONS**

AC	ACRE	DU	DWELLING UNITS	LQMR	LETTER OF MAP REVISION
AD	ALGEBRAIC DIFFERENCE	DY	DAY	LP	LOW POINT
AH	AHEAD	E	EAST	LS	LUMP SUM
ARCH	ARCHITECT	EA	EACH	LT	LEFT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	EGL	ENERGY GRADE LINE	MAX	MAXIMUM
ASSY	ASSEMBLY	ELEV	ELEVATION	M/D	MOISTURE DENSITY
AVE	AVENUE	EL	ELECTRIC	MDP	MASTER DEVELOPMENT
BB	BOX BASE	EOA	EDGE OF ASPHALT	MP	MANHOLE
BK	BACK	EPC	EL PASO COUNTY	MIN	MINIMUM
BNDY	BOUNDARY	ERCP	ELLIPTICAL RCP	MS	MOUNTABLE SIDEWALK
BOP	BOTTOM OF PIPE	EST	ESTIMATE	N	NORTH
BOV	BLOW OFF VALVE	EX	EXISTING	NRCP	NON-REINFORCED CONCRETE
BFV	BUTTERFLY VALVE	FDP	FINAL DEVELOPMENT PLAN	PIPE	PIPE
BLVD	BOULEVARD	FDR	FINAL DRAINAGE REPORT	OP	OFFICIAL DEVELOPMENT PLAN
BW	BOTTOM OF WALL	FES	FLARED END SECTION	OHE	OVERHEAD ELECTRIC
C&G	CURB & GUTTER	FF	FINISHED FLOOR ELEVATION	OHU	OVERHEAD UTILITY
CATV	CABLE TELEVISION	FG	FINISHED GRADE	PC	POINT OF CURVATURE
CB	CATCH BASIN	FH	FIRE HYDRANT	VPC	POINT OF COMPOUND CURVATURE
CBC	CONCRETE BOX CULVERT	FL	FLOWLINE	VPI	VERTICAL POINT OF INTERSECTION
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION	PCR	POINT OF CURB RETURN	VPT	VERTICAL POINT OF TANGENCY
CD	CUL-DE-SAC	PDP	PRELIMINARY DEVELOPMENT PLAN	VTC	VEHICLE TRACKING CONTROL
CF	CUBIC FOOT	PE	PROFESSIONAL ENGINEER	W	WEST
CFS	CUBIC FEET PER SECOND	PI	POINT OF INTERSECTION	WL	WATER LINE
CL	CENTER LINE	PKWY	PARKWAY	WM	WATER MAIN
CLOMR	CONDITIONAL LETTER OF MAP REVISION	PL	PROPERTY LINE	WRD	WATER RESOURCES DEPARTMENT
CLR	CLEAR	PR	PROPOSED	WS	WATER SURFACE
OMP	CORRUGATED METAL PIPE	PRC	POINT OF REVERSE CURVATURE	WSE	WATER SURFACE ELEVATION
CO	CLEAN OUT	PT	POINT OF TANGENCY	WTR	WATER
COCS	CITY OF COLORADO SPRINGS	HDC	HIGH DEFLECTION COUPLING	YR	YEAR
CONC	CONCRETE	HDPE	HIGH DENSITY POLYETHYLENE		
CR	CIRCLE	HGL	HYDRAULIC GRADE LINE		
CSP	CORRUGATED STEEL PIPE	HMA	HOT MIX ASPHALT		
CSU	COLORADO SPRINGS UTILITIES	HQA	HOME OWNERS ASSOCIATION		
CT	COURT	HP	HIGH POINT		
CTRB	CONCRETE THRUST REDUCER	HR	HOUR		
	BLOCK	I	INLET		
CY	CUBIC YARD	IE	IRRIGATION EASEMENT		
DBPS	DRAINAGE BASIN PLANNING STUDY	INT	INTERSECTION		
DE	DRAINAGE EASEMENT	INV	INVERT		
DIA	DIAMETER	IRR	IRRIGATION		
DP	DUCTILE IRON PIPE	KB	KICK (THRUST) BLOCK		
DR	DRIVE	LE	LANDSCAPE EASEMENT		
DRC	DESIGN REVIEW COMMITTEE	LF	LINEAR FOOT		
		LN	LANE		
				SY-IN	SQUARE YARD INCH

**GRADING, EROSION AND STORMWATER QUALITY 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 LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
- 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 STATE 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 EGM 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 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 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, UNCONTAMINATED GROUNDWATER 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 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 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.
- 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 ON-SITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE EGM 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 ON-SITE 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 EGM 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.
- 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 ENTECH ENGINEERING INC, JULY 2020 AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:
  - COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
  - WATER QUALITY CONTROL DIVISION
  - WOOD - PERMITS
  - 4300 CHERRY CREEK DRIVE SOUTH
  - DENVER, CO 80246-1530
  - ATTN: PERMITS UNIT

**RIPRAP NOTES:**

- WHERE "SOIL RIPRAP" IS DESIGNATED ON THE CONTRACT DRAWINGS, RIPRAP VOIDS ARE TO BE FILLED WITH APPROVED FILL. THE RIPRAP SHALL BE PRE-MIXED WITH THE APPROVED FILL AT THE FOLLOWING PROPORTIONS BY VOLUME: 65 PERCENT RIPRAP AND 35 PERCENT SOIL. THE SOIL USED FOR MIXING SHALL BE NATIVE TOPSOIL AND SHALL HAVE A MINIMUM FINES CONTENT OF 15 PERCENT. THE SOIL RIPRAP SHALL BE INSTALLED IN A MANNER THAT RESULTS IN A DENSE, INTERLOCKED LAYER OF RIPRAP WITH RIPRAP VOIDS FILLED COMPLETELY WITH SOIL. SEGREGATION OF MATERIALS SHALL BE AVOIDED AND IN NO CASE SHALL THE COMBINED MATERIAL CONSIST PRIMARILY OF SOIL; THE DENSITY AND INTERLOCKING NATURE OF RIPRAP IN THE MIXED MATERIAL SHALL ESSENTIALLY BE THE SAME AS IF THE RIPRAP WAS PLACED WITHOUT SOIL.
- PLACE ALL RIPRAP AND SOIL-RIPRAP TO RESULT IN SECURELY INTERLOCKED ROCK AT THE DESIGN THICKNESS AND GRADE. COMPACT AND ALL LEVEL TO ELIMINATE VOIDS AND ROCKS PROJECTING DESIGN ABOVE RIPRAP TOP GRADE.
- ALL SOIL RIPRAP THAT IS BURIED WITH TOPSOIL SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ANY TOPSOIL PLACEMENT.
- CRIMP OR TACKIFY MULCH OR USE APPROVED HYDROMULCH AS CALLED FOR IN THE PLANS AND SPECIFICATIONS.
- ELEVATION TOLERANCES FOR RIPRAP SHALL BE 0.10 FEET. THICKNESS OF SOIL RIPRAP SHALL BE NO LESS THAN THICKNESS SHOWN AND NO MORE THAN 2-INCHES GREATER THAN THE THICKNESS SHOWN.

RIPRAP DESIGNATION	INTERMEDIATE ROCK DIMENSION (IN.)	PERCENT PASSING (%)	D <sub>50</sub> (IN.)
TYPE VL	12	70-100	6
	9	50-70	
	6	35-50	
	2	2-10	
TYPE M	21	70-100	12
	18	50-70	
	12	35-50	
	4	2-10	
TYPE H	30	70-100	18
	24	50-70	
	18	35-50	
	6	2-10	



Know what's below. Call before you dig.

**ENGINEER'S STATEMENT**

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

MIKE A. BRAMLETT, P.E. DATE  
 COLORADO P.E. 32314  
 FOR AND ON BEHALF OF JR ENGINEERING, LLC.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
 20 BOULDER CRESCENT  
 2ND FLOOR  
 COLORADO SPRINGS, CO 80903  
 JAMES F. MORLEY  
 (719) 419-3024

**J.R. ENGINEERING**  
 A Westplan Company  
 Centennial 303-740-9383 • Colorado Springs 719-583-2583  
 Fort Collins 970-491-9888 • www.jrengineering.com

DATE: \_\_\_\_\_ BY: \_\_\_\_\_

NO. REVISION: \_\_\_\_\_

H-SCALE: \_\_\_\_\_ V-SCALE: \_\_\_\_\_ DATE: 9/1/22 DESIGNED BY: SCH DRAWN BY: SCH CHECKED BY: \_\_\_\_\_

**SAND CREEK RESTORATION**

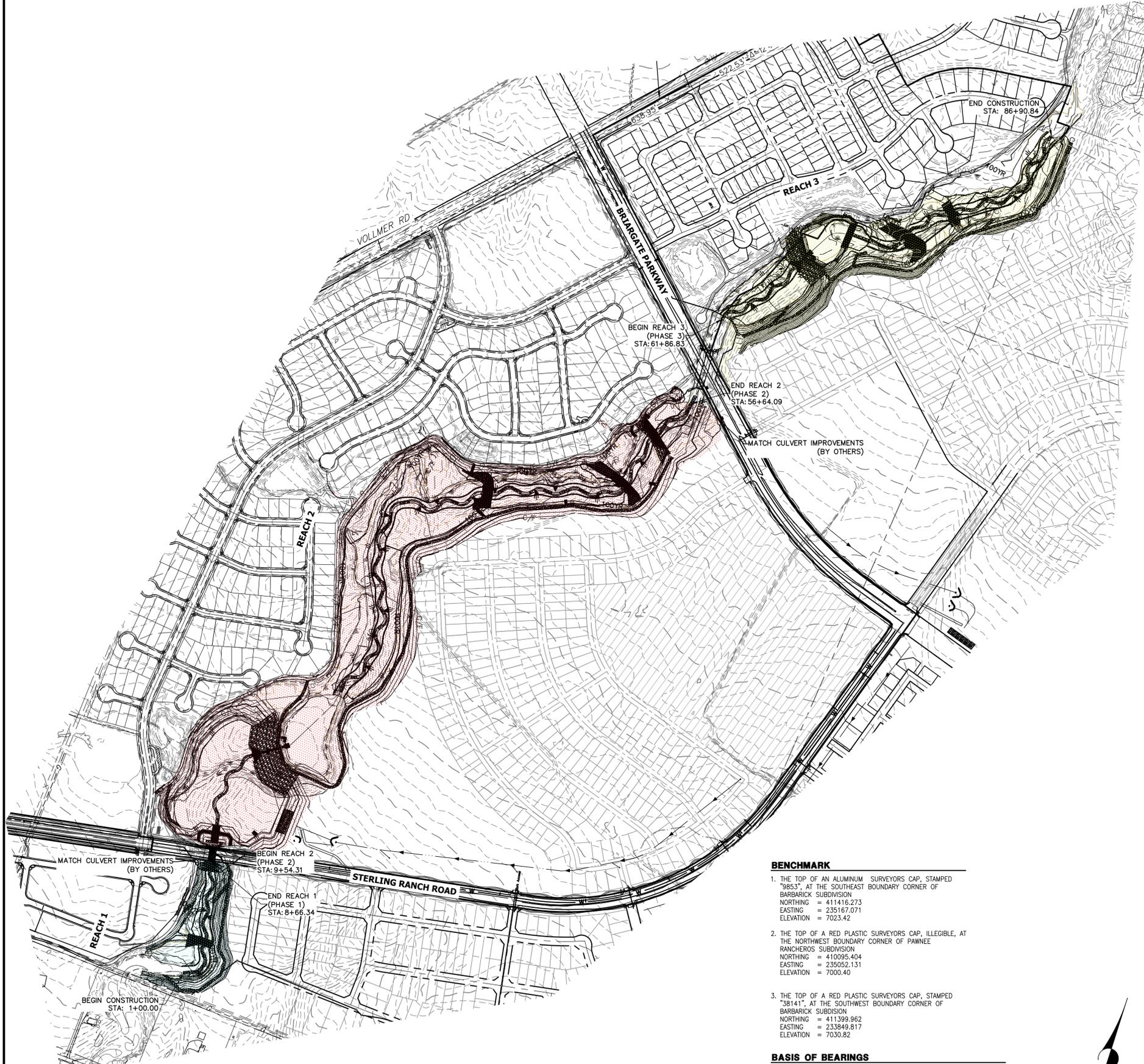
**GENERAL NOTES**

SHEET 2 OF 99

JOB NO. 25188.04

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**LEGEND**

- REACH 1 (PHASE 1)
- REACH 2 (PHASE 2)
- REACH 3 (PHASE 3)

**GRADING NOTES:**

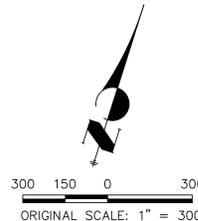
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2. THERE IS A LIKELIHOOD FOR LARGE FLOW EVENTS IN SAND CREEK WHICH COULD JEOPARDIZE CONSTRUCTION. THE LIKELIHOOD OF THESE EVENTS CHANGES WITH THE SEASONS. THE CONTRACTOR SHOULD ACCOUNT FOR THE EVENTUALITY OF THESE LARGE FLOW EVENTS BASED ON THE TIMING OF CONSTRUCTION.
3. DEWATERING:
  - 3.a. DEWATERING/BYPASS PUMPING OF SAND CREEK SHALL OCCUR IN ADVANCE OF CONSTRUCTION ACTIVITIES.
  - 3.b. THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION DEWATERING (CDW) PERMIT FROM CDPHE PRIOR TO GROUNDWATER, INCLUDING GROUNDWATER THAT IS COMMINGLED WITH STORMWATER OR SURFACE WATER, BEING ENCOUNTERED DURING CONSTRUCTION ACTIVITIES AND THE GROUNDWATER OR COMMINGLED WATER NEEDS TO BE DISCHARGED TO SURFACE WATER.
  - 3.c. WATER FROM DEWATERING OPERATIONS SHALL ONLY BE DISCHARGED INTO STATE WATERS IF ALLOWED BY A PERMIT.
4. MUCK EXCAVATION IS NOT ANTICIPATED FOR THIS PROJECT. IF ENCOUNTERED, CONTRACTOR SHALL REMOVE UNSUITABLE ORGANIC MATERIAL TO THE DEPTH AS DETERMINED BY THE ENGINEER AND REPLACE THE EXCAVATED VOLUME WITH SUITABLE APPROVED FILL MATERIAL PRIOR TO CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
5. THE MAXIMUM SLOPE FOR EXCAVATION AND PLACEMENT OF FILL IS 4:1 HORIZONTAL:VERTICAL, UNLESS OTHERWISE SHOWN IN THE PLANS.
6. THE EXISTING DROP STRUCTURE AT BRIARGATE PARKWAY, ANY ASSOCIATED FEATURES, AND DEBRIS SHOULD BE REMOVED FROM THE PROPOSED CONSTRUCTION AREA. EXPOSED SURFACES SHOULD BE FREE OF MOUNDS AND DEPRESSIONS WHICH COULD PREVENT UNIFORM COMPACTION.
7. EXPOSED AREAS WHICH WILL RECEIVE FILL, ONCE PROPERLY CLEARED WHERE NECESSARY, SHOULD BE SCARIFIED TO A MINIMUM DEPTH OF 8 INCHES, CONDITIONED TO NEAR OPTIMUM WATER CONTENT, AND COMPACTED.
8. A GEOTECHNICAL ENGINEER SHALL BE PRESENT FOR OVER-EXCAVATION AND FILL OPERATIONS.
9. THE EARTHWORK EFFORTS SHOULD BE MONITORED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER. MONITORING SHOULD INCLUDE DOCUMENTATION OF ADEQUATE REMOVAL OF VEGETATION AND TOP SOIL, PROOF-ROLLING AND MITIGATION OF AREAS DELINEATED BY THE PROOF-ROLL TO REQUIRE MITIGATION.
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**BENCHMARK**

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
 NORTHING = 411416.273  
 EASTING = 235167.071  
 ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANWEE RANCHEROS SUBDIVISION  
 NORTHING = 410095.404  
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 ELEVATION = 7000.40
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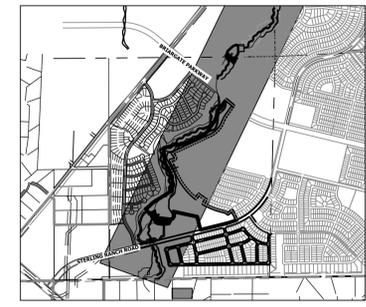
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THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND SEAL  
**PRELIMINARY NOT FOR CONSTRUCTION**  
 MIKE A. BRAMBLE  
 COLORADO P.E. 30112  
 FOR AND ON BEHALF OF J.R. ENGINEERING, INC.



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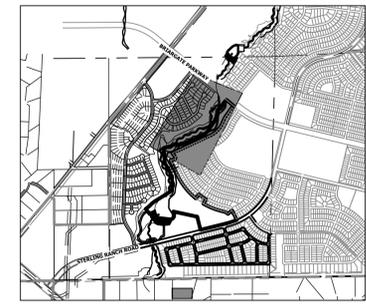
BY	DATE	NO.	REVISION

**SAND CREEK RESTORATION**  
**EARTHWORK & PHASING PLAN**  
 SHEET 4 OF 99  
 JOB NO. 25188.04

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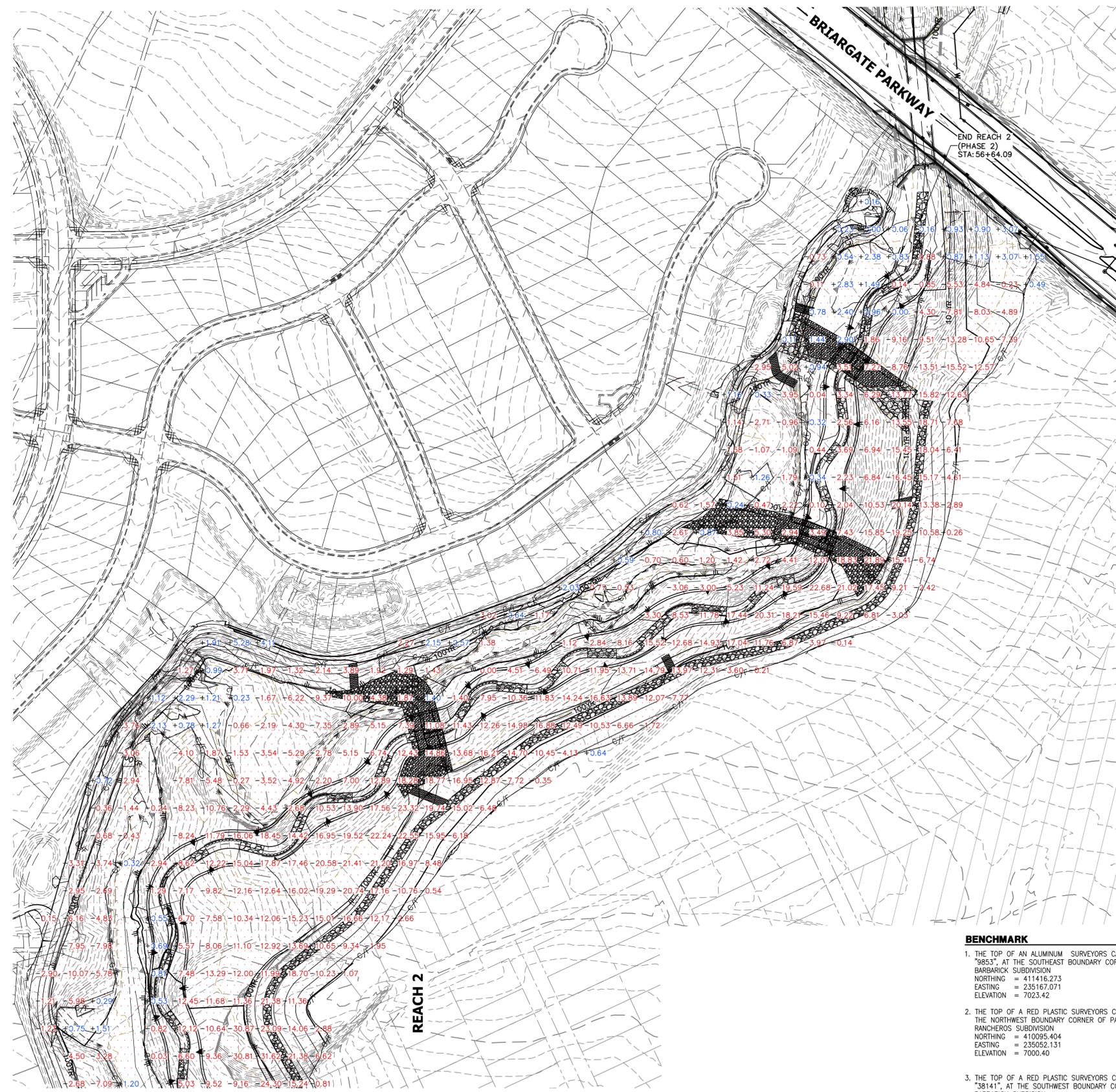


KEY MAP  
SCALE: 1"=2000'

- LEGEND**
- REACH 1 (PHASE 1)
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  - REACH 3 (PHASE 3)

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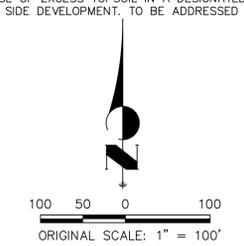
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**APPROXIMATE QUANTITY SUMMARY**

NAME	CUT/FILL SUMMARY					
	CUT FACTOR	FILL FACTOR	2D AREA (ACRES)	CUT (CY)	FILL (CY)	NET (CY)
REACH 1	1	1	5.3202	25795	5652	20144 <CUT>
REACH 2	1	1	44.4228	625035	38932	586102 <CUT>
REACH 3	1	1	16.0801	114827	10005	104822 <CUT>
<b>TOTAL</b>			<b>65.8231</b>	<b>765657</b>	<b>54589</b>	<b>711068</b>

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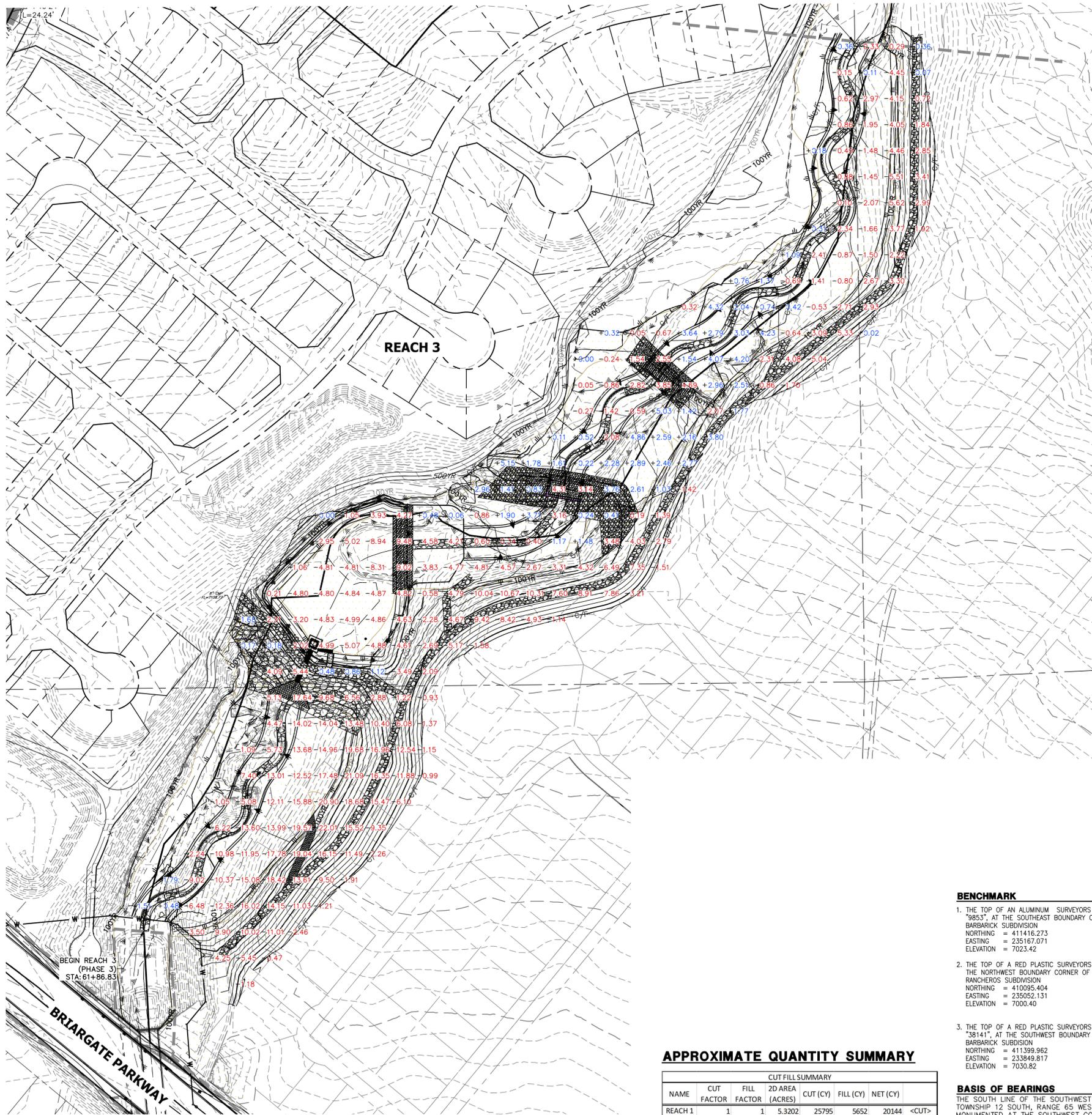
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BY	DATE	No.	REVISION	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				1"=300'	N/A	9/1/22	DJV	SCH	

**SAND CREEK RESTORATION**  
**EARTHWORK & PHASING PLAN**  
 SHEET 7 OF 99  
 JOB NO. 25188.04



**LEGEND**

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- REACH 3 (PHASE 3)

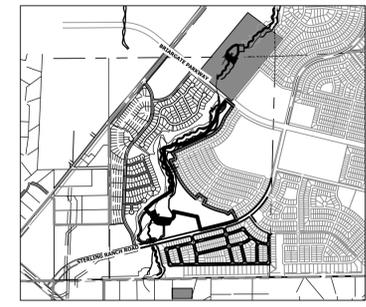
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  9. THE EARTHWORK EFFORTS SHOULD BE MONITORED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER. MONITORING SHOULD INCLUDE DOCUMENTATION OF ADEQUATE REMOVAL OF VEGETATION AND TOP SOIL, PROOF-ROLLING AND MITIGATION OF AREAS DELINEATED BY THE PROOF-ROLL TO REQUIRE MITIGATION.
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  11. IN AREAS OF FOUNDATION EXCAVATIONS, THE BEARING SUBGRADE SHOULD BE EVALUATED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER. IN THE EVENT UNANTICIPATED CONDITIONS ARE ENCOUNTERED, THE GEOTECHNICAL ENGINEER SHOULD PRESCRIBE MITIGATION OPTIONS.
  12. THE ON-SITE SOILS ARE GENERALLY CONSIDERED SUITABLE FOR REUSE AS STRUCTURAL AND/OR GENERAL FILL. IMPORTED SOILS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER. ALL UNSUITABLE MATERIAL SHALL BE DISPOSED OF AS DIRECTED. PARTIAL REMOVAL OF THE FILL SOILS SHOULD INCLUDE OVER-EXCAVATING A MINIMUM OF 4 FEET OF THE FILL SOILS, PROCESSING AS REQUIRED, MOISTURE CONDITIONING, AND RECOMPACTING AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
  13. THE FILL SHALL BE PLACED IN THIN, LOOSE LIFTS OF 8 INCHES OR LESS (WHEN HEAVY SELF-PROPELLED COMPACTION EQUIPMENT IS USED) OR 4-6 INCHES (WHEN HAND-GUIDED EQUIPMENT IS USED). WATER CONTENT SHALL BE WITHIN 3 PERCENT OF OPTIMUM. FILL IS TO BE COMPACTED TO A MINIMUM OF:
    - 13.a. WITHIN 10 FEET OF STRUCTURES, OR IN CONSTRUCTED SLOPES: 95 PERCENT OF MAXIMUM DRY DENSITY.
    - 13.b. GENERAL FILL OUTSIDE OF STRUCTURAL AREAS: 90 PERCENT OF MAXIMUM DRY DENSITY.
  14. A COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) WATER QUALITY DIVISION STORMWATER DISCHARGE PERMIT SHALL BE OBTAINED AND A COPY SHALL BE SUBMITTED TO EL PASO COUNTY.
  15. PROPOSED SPOT ELEVATIONS REFLECT MEAN FINISHED GROUND GRADES IRRESPECTIVE OF VARIATIONS DUE TO PROPOSED GROUT, BOULDER, AND RIPRAP.
  16. EXISTING GRADES REFLECT CHANNEL CONDITIONS AS OF AUGUST 1, 2017. CHANNEL SCOUR MAY AFFECT SHOWN ELEVATIONS.
  17. TOPSOIL SHALL BE STOCKPILED TO THE EXTENT PRACTICAL ON THE SITE FOR USE ON AREAS TO BE REVEGETATED. ANY AND ALL STOCKPILES SHALL BE LOCATED AND PROTECTED FROM EROSION ELEMENTS. THE MINIMUM THICKNESS OF TOPSOIL SHALL BE 4" AND SHALL BE OBTAINED BY STOCKPILING EXISTING TOPSOIL. THE TOPSOIL SHALL BE APPLIED TO ALL SURFACES REQUIRING SEEDING OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL DISPOSE OF EXCESS TOPSOIL IN A DESIGNATED AREA ON SITE.
  18. GRADING CONFLICTS WITH EAST SIDE DEVELOPMENT. TO BE ADDRESSED WITH LOT GRADING AND POTENTIALLY WALLS.

- BENCHMARK**
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
 NORTHING = 411416.273  
 EASTING = 235167.071  
 ELEVATION = 7023.42
  2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANNEE RANCHEROS SUBDIVISION  
 NORTHING = 410095.404  
 EASTING = 235052.131  
 ELEVATION = 7000.40
  3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
 NORTHING = 411399.962  
 EASTING = 233849.817  
 ELEVATION = 7030.82

**APPROXIMATE QUANTITY SUMMARY**

NAME	CUT/FILL SUMMARY					
	CUT FACTOR	FILL FACTOR	2D AREA (ACRES)	CUT (CY)	FILL (CY)	NET (CY)
REACH 1	1	1	5.3202	25795	5652	20144 <CUT>
REACH 2	1	1	44.4228	625035	38932	586102 <CUT>
REACH 3	1	1	16.0801	114827	10005	104822 <CUT>
<b>TOTAL</b>			<b>65.8231</b>	<b>765567</b>	<b>54589</b>	<b>711068</b>

**BASIS OF BEARINGS**  
 THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



**KEY MAP**  
SCALE: 1" = 2000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE PORTAGES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
 20 BOULDER CRESCENT  
 2ND FLOOR  
 COLORADO SPRINGS, CO 80903  
 JAMES F. MORLEY  
 (719) 419-3024

**J.R. ENGINEERING**  
 A Westman Company  
 Centennial 300-740-9383 • Colorado Springs 719-583-2593  
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				1"=300'	N/A	9/1/22	DJV	SCH	

**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

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

**PRELIMINARY NOT FOR CONSTRUCTION**

MIKE A. BRAMLEY  
 COLORADO P.E. No. 30000  
 FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

**SAND CREEK RESTORATION**

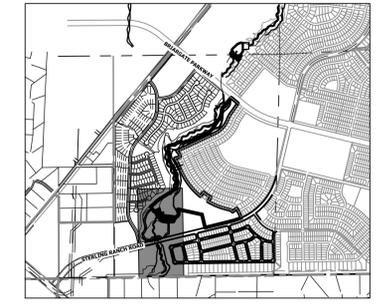
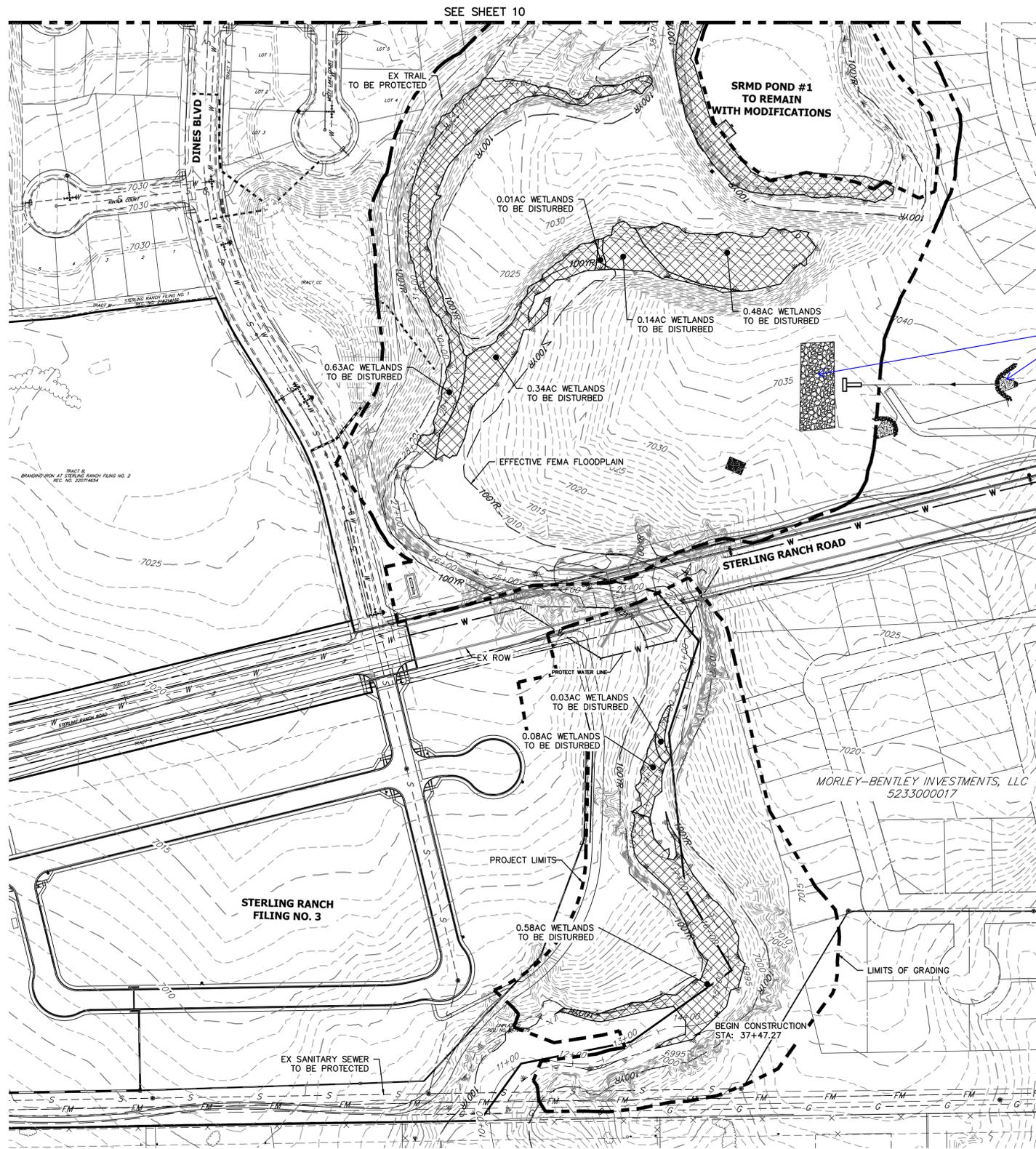
**EARTHWORK & PHASING PLAN**

SHEET 8 OF 99

JOB NO. 25188.04

X:\25188\04\Drawings\Sheet\Drawn\Drawn.dwg, 8/20/22, 8:28:29 PM, Vaughey





KEY MAP  
SCALE: 1"=2000'

**LEGEND**  
WETLAND: DISTURBED AREAS

DEMOLITION PLANS  
EX STA 11+00.00 TO 38+00.00  
SCALE: 1"=100'

Sand Creek Demolitions		
Totals	Sq Ft	Acres
Reach 1 Permanent Loss	32,636.00	0.74
Reach 2 Permanent Loss	159,695.00	4.28
Reach 3 Permanent Loss	184,711.00	5.44
<b>Total Permanent Loss</b>	<b>377,042.00</b>	<b>10.46</b>

**BENCHMARK**

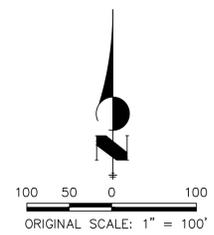
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EASTING = 235167.071  
ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION  
NORTHING = 410095.404  
EASTING = 235052.131  
ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411399.962  
EASTING = 233849.817  
ELEVATION = 7030.82



Know what's below.  
Call before you dig.

**BASIS OF BEARINGS**

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



**ENGINEER'S STATEMENT**

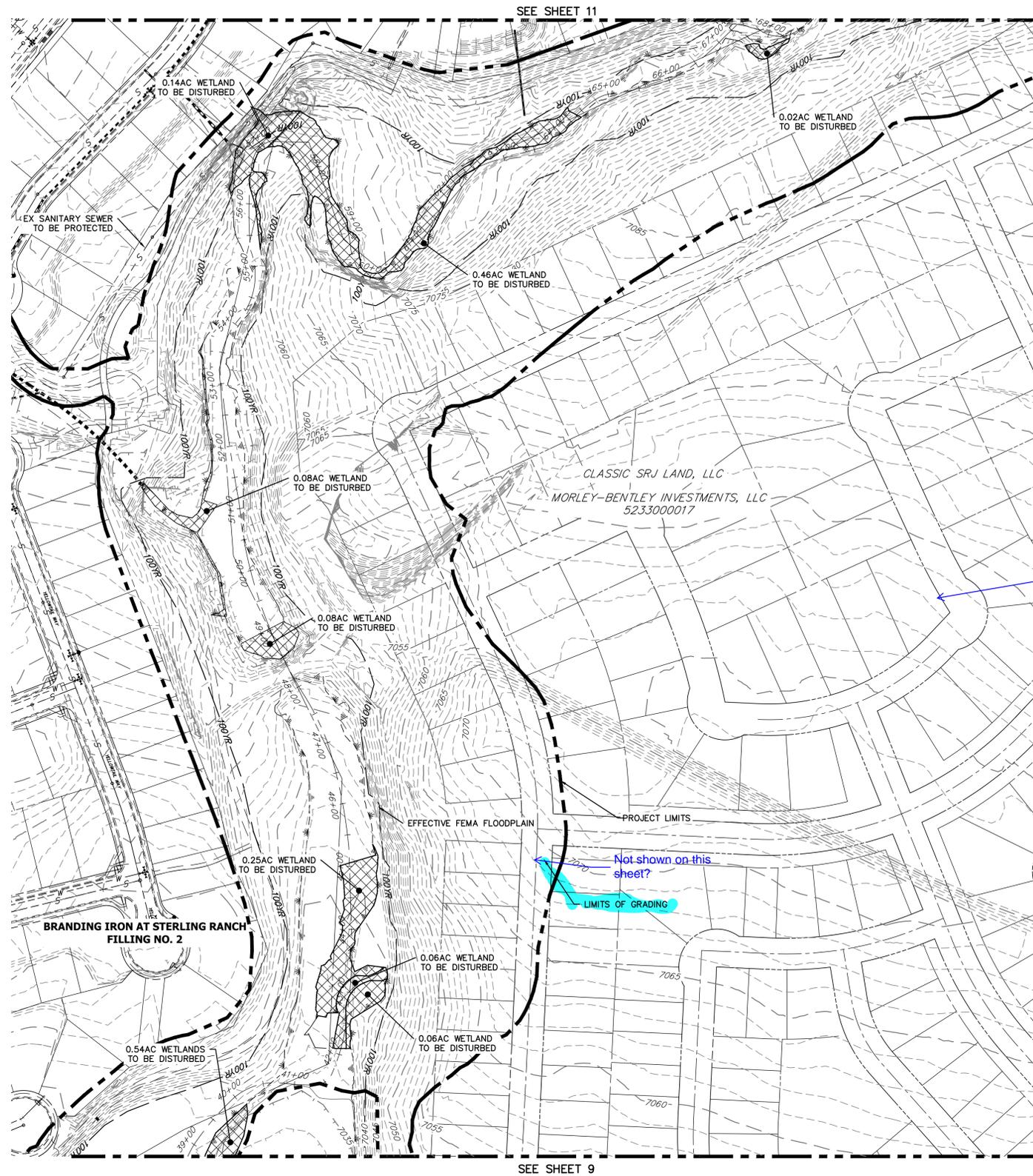
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMLEY  
COLORADO P.E. 33212  
FOR AND ON BEHALF OF J.R. ENGINEERING, LLC

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, DESIGNATED BY WRITTEN AUTHORIZATION.  
PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE	1"=100'	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				N/A	9/1/22	DJV	SCH	

SAND CREEK RESTORATION  
DEMOLITION PLAN  
SHEET 9 OF 99  
JOB NO. 25188.04



SEE SHEET 11

SEE SHEET 9

**DEMOLITION PLANS**  
EX STA: 38+00.00 TO 68+00.00  
SCALE: 1"=100'

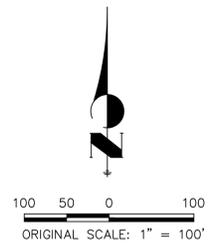
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EASTING = 233849.817  
ELEVATION = 7030.82

**BASIS OF BEARINGS**

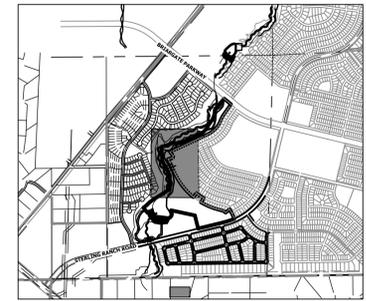
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Turn off future lots or label and add a note that these are not approved.

**LEGEND**

WETLAND: DISTURBED AREAS



**KEY MAP**  
SCALE: 1"=2000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
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BY	DATE	No.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=100'	N/A	9/1/22	DJV	SCH	

**SAND CREEK RESTORATION**  
**DEMOLITION PLAN**

SHEET 10 OF 99  
JOB NO. 25188.04

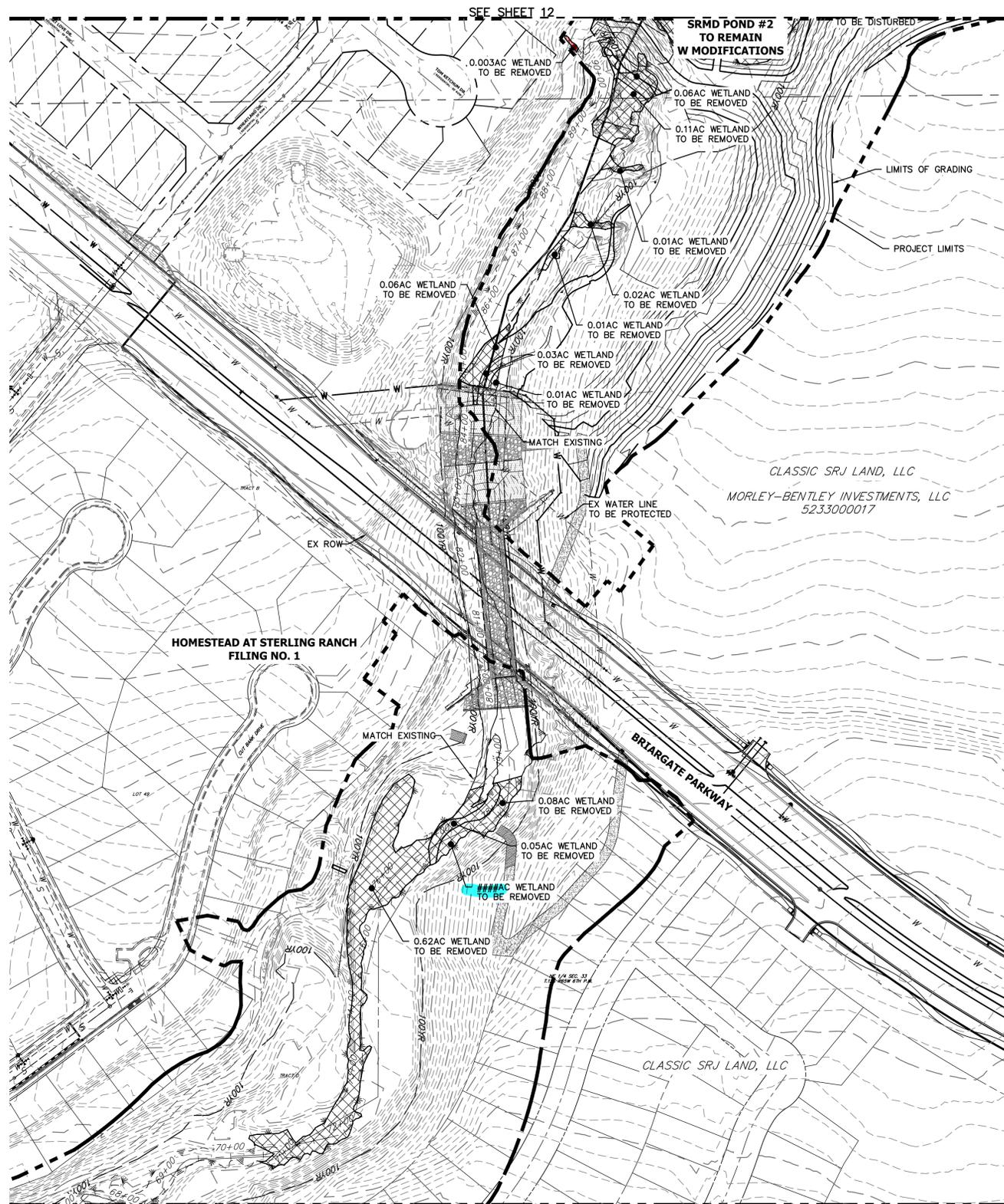
**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF COLORADO.  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMLEY  
COLORADO P.E. 30112  
FOR AND ON BEHALF OF JR ENGINEERING



Know what's below.  
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X:\25188\000\all\25188\Drawings\Sheet\Demolition Plans\25188-04-Demo1.dwg, D:\M02, 9/16/2022 8:53:02 AM, d\w\m



SEE SHEET 12

SEE SHEET 10

DEMOLITION PLANS  
EX STA: 68+00.00 TO 91+00.00  
SCALE: 1"=100'

Sand Creek Demolitions		
Totals	Sq Ft	Acres
Reach 1 Permanent Loss	32,636.00	0.74
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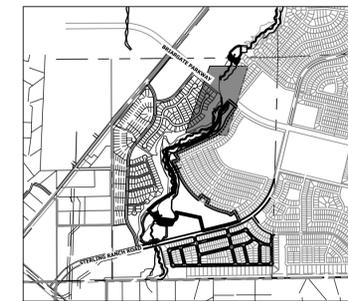
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**LEGEND**

WETLAND: DISTURBED AREAS



SAND CREEK RESTORATION

DEMOLITION PLAN

SHEET 11 OF 99

JOB NO. 25188.04

**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

MIKE A. BRAMLEY  
COLORADO P.E. 30117  
FOR AND ON BEHALF OF J.R. ENGINEERING, INC.



Know what's below.  
Call before you dig.

BY DATE

No. REVISION

1"=100'

H-SCALE

V-SCALE

DATE

DESIGNED BY

DRAWN BY

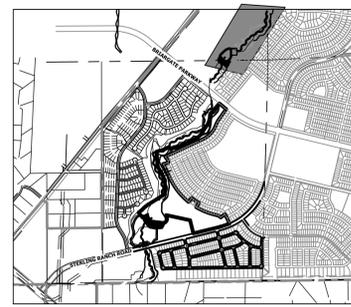
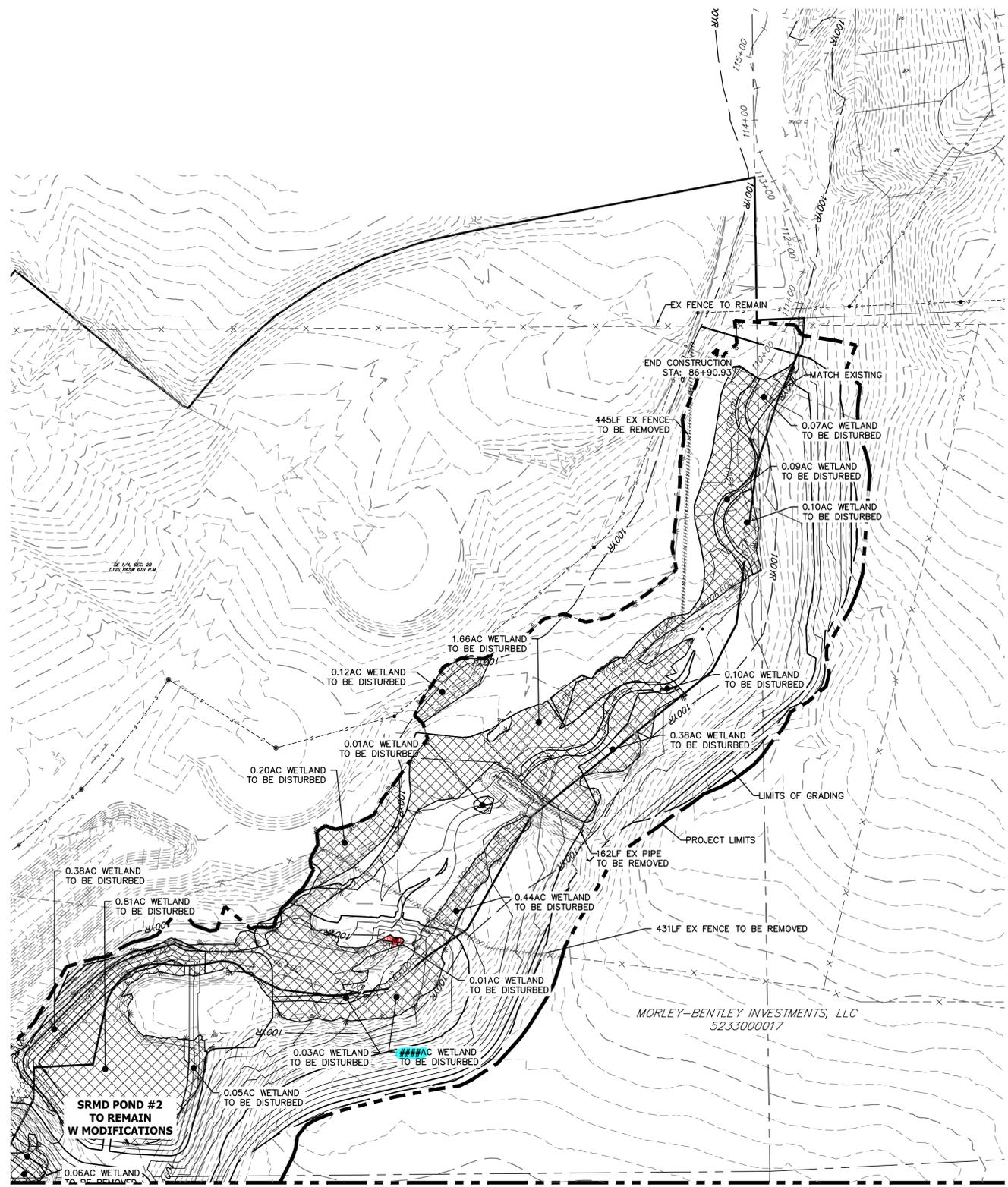
CHECKED BY

N/A

9/1/22

DJV

SCH



KEY MAP  
SCALE: 1"=2000'

**LEGEND**

WETLAND: DISTURBED AREAS

SEE SHEET 11

**DEMOLITION PLANS**  
EX STA 91+00.00 TO 110+00.00  
SCALE: 1"=100'

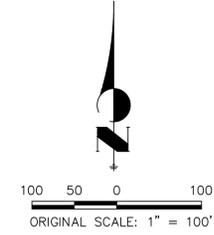
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**BENCHMARK**

- THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "98537", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411416.273  
EASTING = 235167.071  
ELEVATION = 7023.42
- THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANWEE RANCHEROS SUBDIVISION  
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**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL BY  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMLEY  
COLORADO P.E. 31111  
FOR AND ON BEHALF OF J.R. ENGINEERING, LLC



SAND CREEK RESTORATION

DEMOLITION PLAN

SHEET 12 OF 99

JOB NO. 25188.04

BY DATE

No. REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=100'	N/A	9/1/22	DJV	SCH	

PREPARED FOR

**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

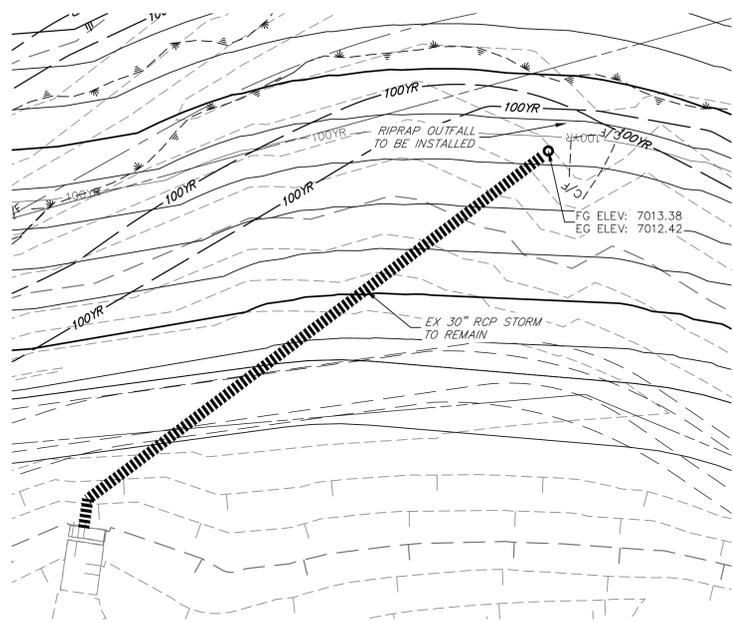
**J.R. ENGINEERING**  
A Westman Company



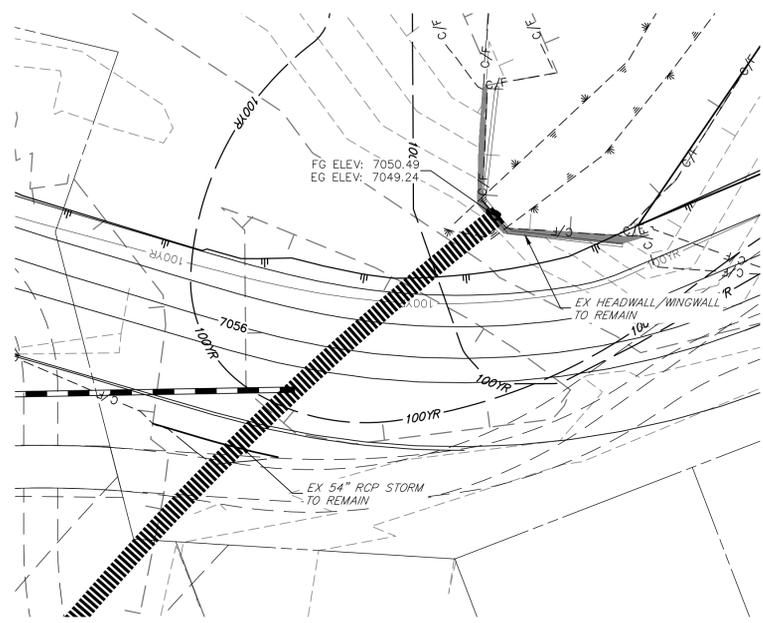
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Fort Collins 970-491-9888 • www.jrengineering.com

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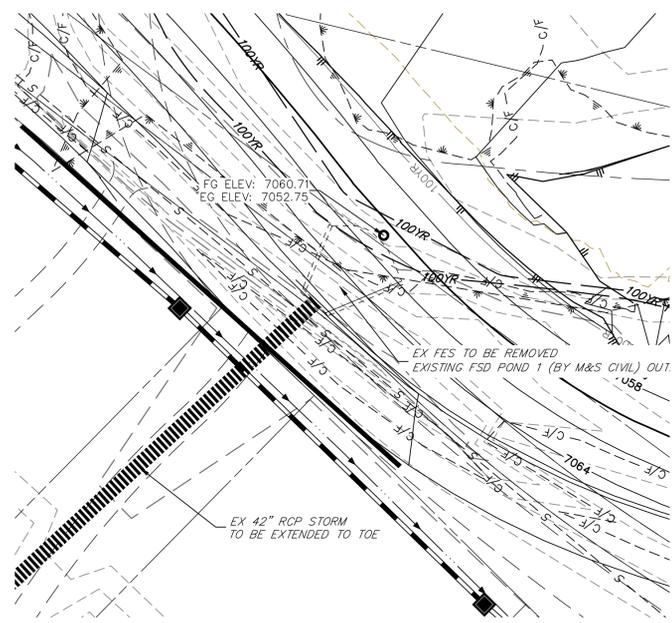
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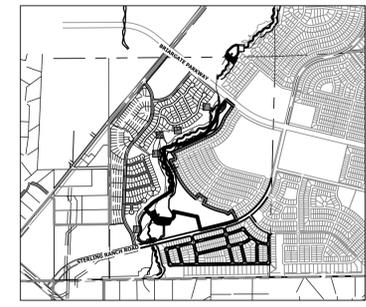
SEE STERLING RANCH FILING NO. 1 PLANS FOR AS BUILTS  
(BY M&S CIVIL)



SEE STERLING RANCH FILING NO. 1 PLANS FOR AS BUILTS  
(BY M&S CIVIL)



SEE HOMESTEAD AT STERLING RANCH FILING NO. 2 PLANS FOR AS BUILTS  
(BY M&S CIVIL)



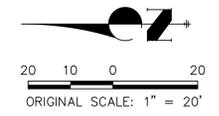
KEY MAP  
SCALE: 1"=2000'

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20 BOULDER CRESCENT  
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BY	DATE

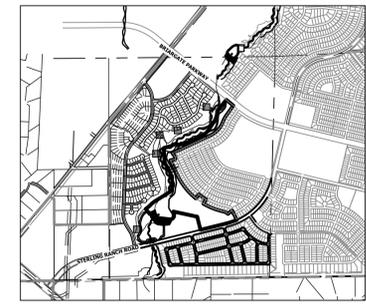
No.	REVISION	1"=20'	1"=20'	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				9/1/22	DJV	WLL	

SAND CREEK RESTORATION  
DEMOLITION PLAN  
SHEET 13 OF 99  
JOB NO. 25188.04

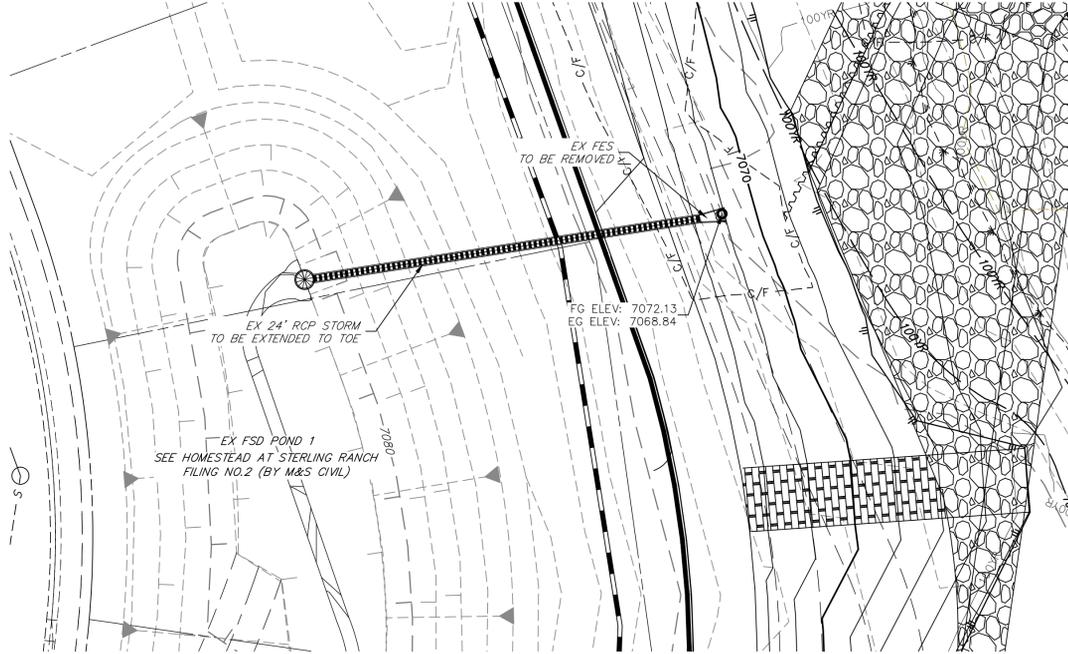


**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMLEY  
COLORADO P.E. 38141  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

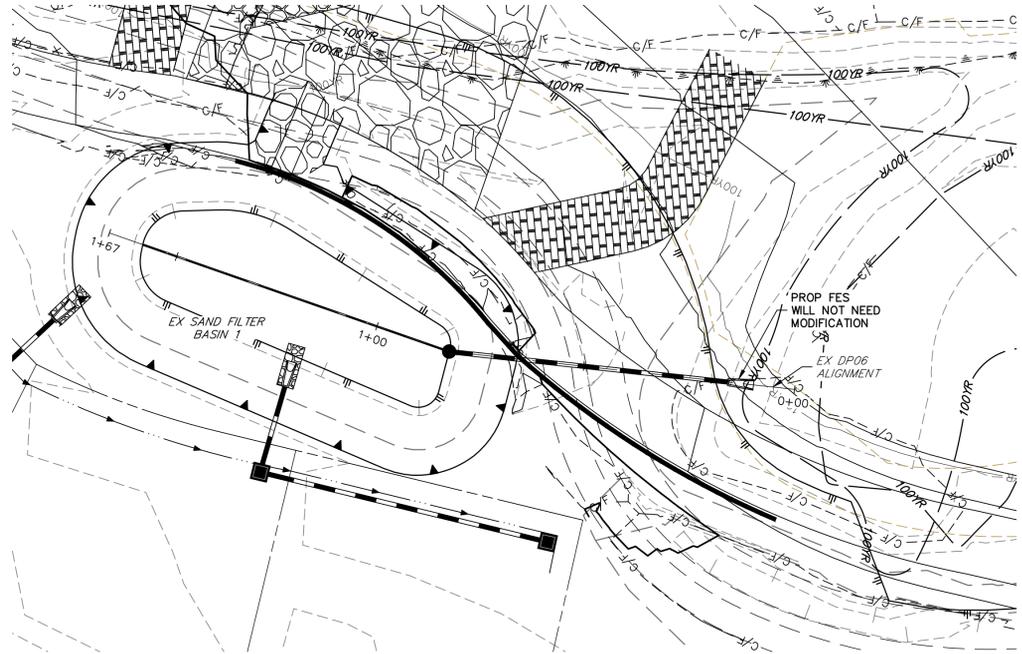
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KEY MAP  
SCALE: 1"=2000'

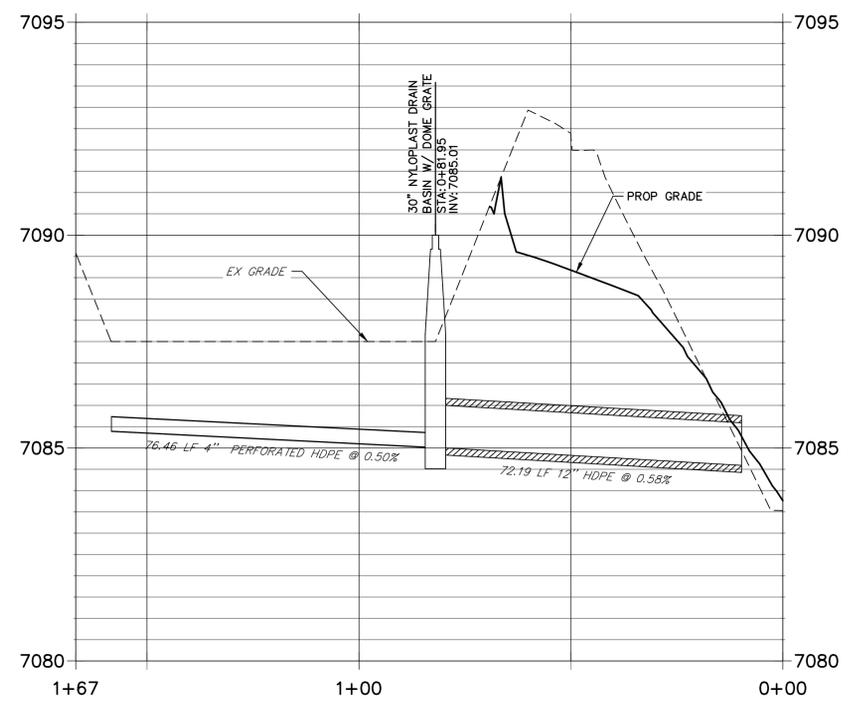


SEE HOMESTEAD AT STERLING RANCH FILING NO. 2 PLANS FOR AS BUILTS (BY M&S CIVIL)



SEE HOMESTEAD 2 COMMONS SAND FILTER STORM PLANS FOR AS BUILTS (BY JR ENGINEERING)

**DP06**  
**STA 0+00.00 TO 1+66.80**

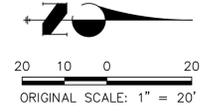


**BENCHMARK**

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411416.273  
EASTING = 235167.071  
ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION  
NORTHING = 410095.404  
EASTING = 235052.131  
ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411399.962  
EASTING = 233849.817  
ELEVATION = 7030.82

**BASIS OF BEARINGS**

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHWEST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY NOT FOR CONSTRUCTION**

MIKE A. BRAMLEY  
COLORADO P.E. 30112  
FOR AND ON BEHALF OF JR ENGINEERING, INC.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

**J.R. ENGINEERING**  
A Westman Company

Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=20'	1"=20'	9/1/22	DJV	WLL	

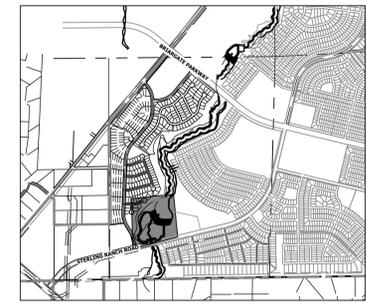
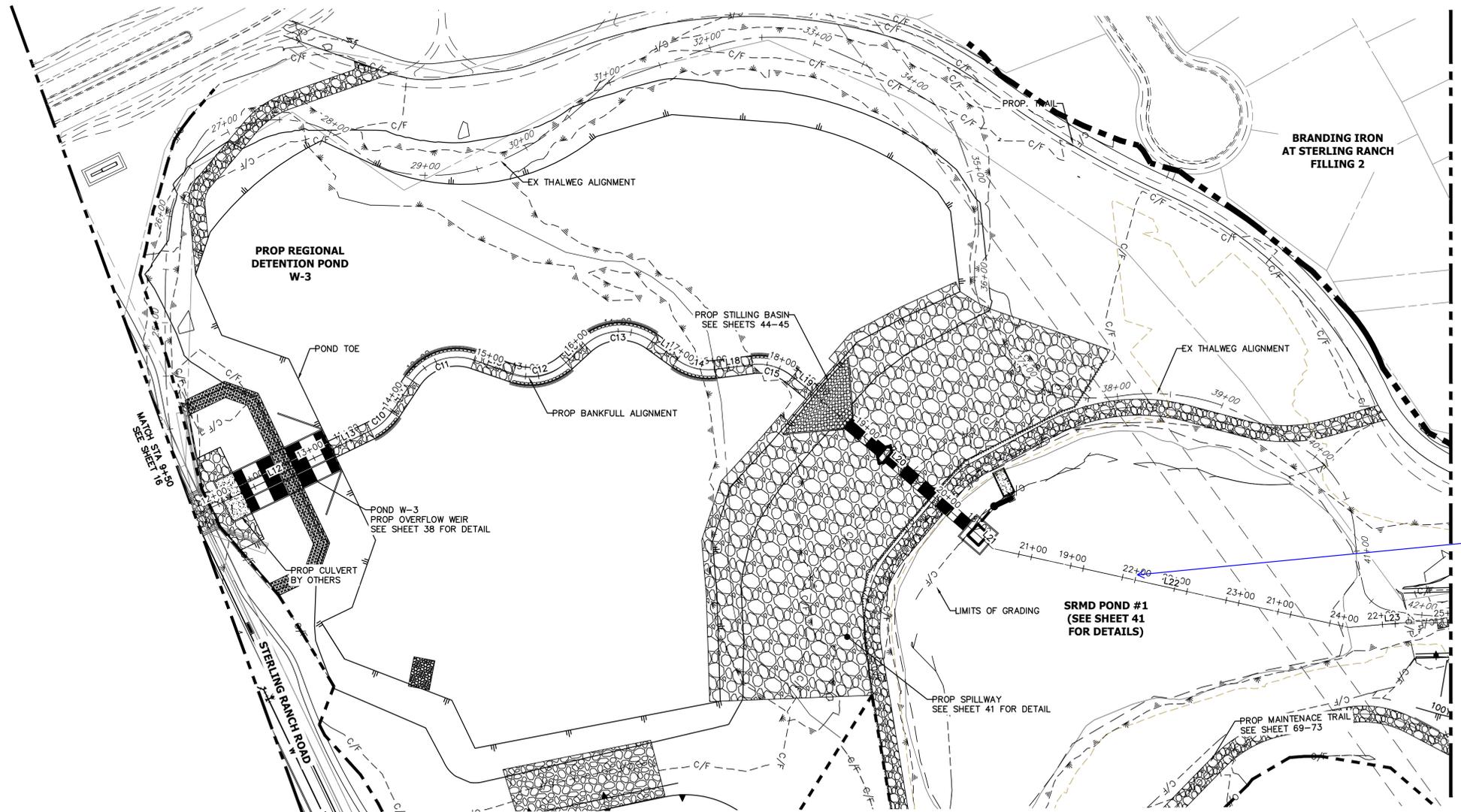
SAND CREEK RESTORATION	DEMOLITION PLAN	SHEET 14 OF 99
		JOB NO. 25188.04

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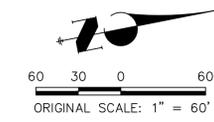
KEY MAP  
SCALE: 1"=2000'

HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL  
SCALE: 1"=60'

LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL

LINE	BEARING	DISTANCE
L12	N13°40'36"W	112.14'
L13	N13°44'44"W	41.29'
L14	N44°17'13"W	35.34'
L15	N30°54'11"E	38.94'
L16	N30°18'24"W	24.14'
L17	N47°41'02"E	29.75'
L18	N04°47'34"E	35.38'
L19	N51°32'30"E	23.98'
L20	N52°27'37"E	205.18'
L21	N55°27'43"E	18.57'
L22	N24°26'44"E	343.60'
L23	N07°07'50"E	83.24'

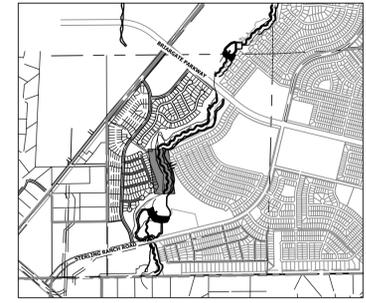
CURVE	DELTA	RADIUS	LENGTH
C10	30°32'29"	50.00'	26.65'
C11	75°11'23"	50.00'	65.62'
C12	61°12'35"	50.00'	53.42'
C13	77°59'26"	50.00'	68.06'
C14	42°53'28"	50.00'	37.43'
C15	46°44'56"	50.00'	40.80'



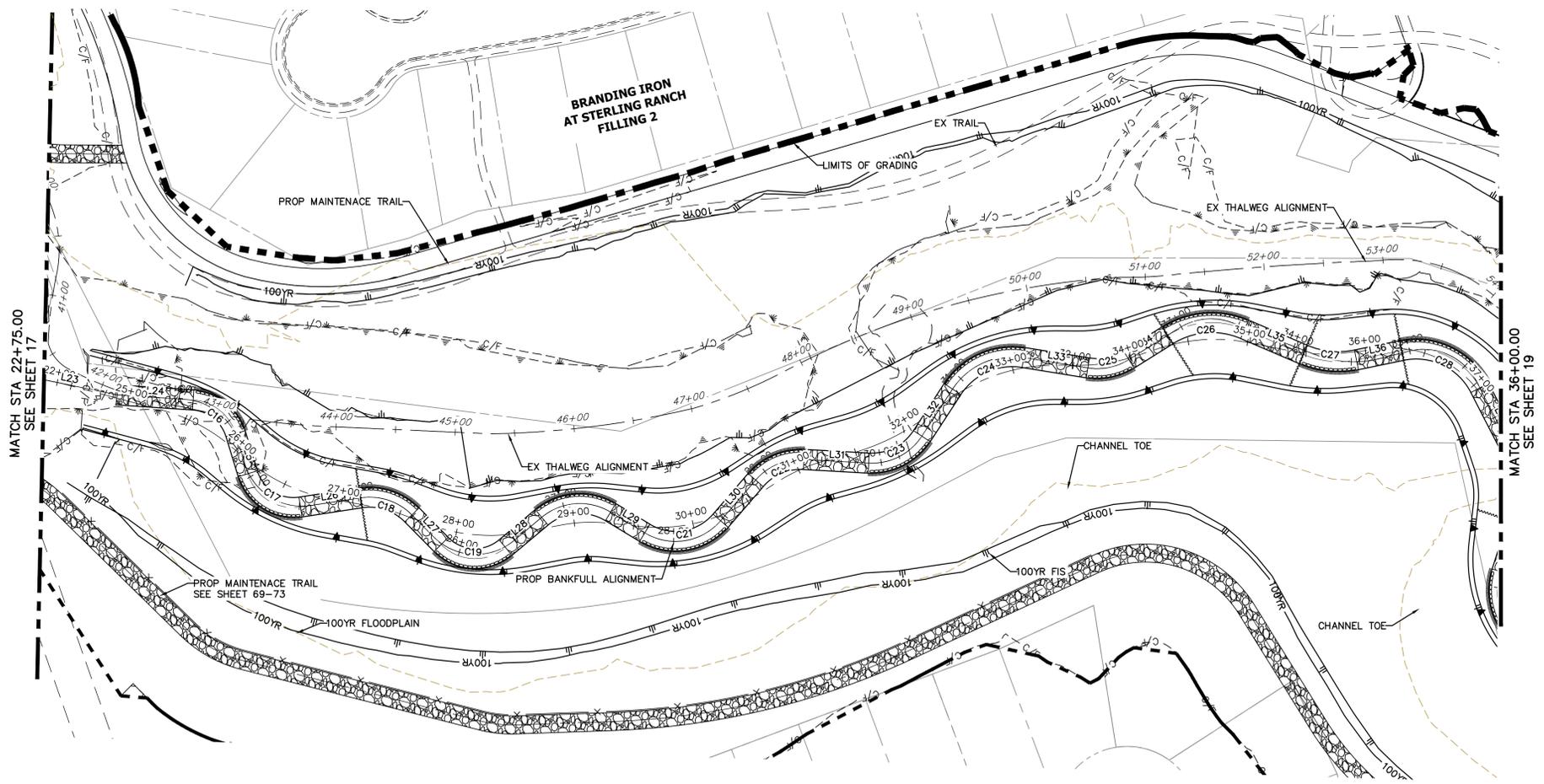
**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
 PRELIMINARY NOT FOR CONSTRUCTION  
 MIKE A. BRAMLEY  
 COLORADO P.E. 30000  
 FOR AND ON BEHALF OF J.R. ENGINEERING, LLC

2 sets of stations is confusing

SAND CREEK RESTORATION HORIZONTAL CONTROL PLAN	SHEET 17 OF 99
	JOB NO. 25188.04
H-SCALE 1"=60' V-SCALE N/A DATE 9/1/22 DESIGNED BY DJV DRAWN BY SCH CHECKED BY	No. REVISION
BY DATE	PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
J.R. ENGINEERING A Westman Company Centennial 300-740-9888 • Colorado Springs 719-588-2583 Fort Collins 970-491-9888 • www.jrengineering.com	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.



KEY MAP  
SCALE: 1"=2000'

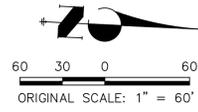


HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL  
SCALE: 1"=60'

LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL

LINE	BEARING	DISTANCE
L23	N07°07'50"E	83.24'
L24	N00°39'41"W	63.90'
L25	N68°26'27"E	35.05'
L26	N13°07'27"W	51.07'
L27	N40°46'05"E	34.86'
L28	N44°15'32"W	39.48'
L29	N26°36'38"E	33.54'
L30	N53°36'32"W	44.94'
L31	N01°16'36"W	54.35'
L32	N61°14'53"W	46.99'
L33	N04°37'48"E	54.56'
L34	N36°27'31"W	38.39'
L35	N18°38'25"E	53.64'
L36	N16°05'42"W	38.89'

CURVE	DELTA	RADIUS	LENGTH
C16	69°06'08"	40.00'	48.24'
C17	79°32'05"	40.00'	55.53'
C18	53°53'33"	50.00'	47.03'
C19	85°01'35"	40.00'	59.36'
C20	70°52'11"	50.00'	61.85'
C21	80°13'10"	50.00'	70.00'
C22	52°19'56"	50.00'	45.67'
C23	59°58'18"	50.00'	52.34'
C24	65°52'41"	60.00'	68.99'
C25	41°05'20"	50.00'	35.86'
C26	55°05'57"	70.00'	67.32'
C27	34°44'08"	75.00'	45.47'
C28	74°20'35"	60.00'	77.85'

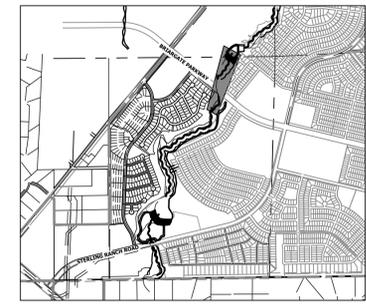


**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
 PRELIMINARY  
 NOT FOR  
 CONSTRUCTION

MIKE A. BRAMLEY  
 COLORADO P.E. # 30000  
 FOR AND ON BEHALF OF J.R. ENGINEERING, LLC

SAND CREEK RESTORATION HORIZONTAL CONTROL PLAN	H-SCALE: 1"=60' V-SCALE: N/A	No. REVISION BY DATE	PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
	DATE: 9/1/22 DESIGNED BY: DJV DRAWN BY: SCH CHECKED BY:	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. REVISED DATES DESIGNATED BY WRITTEN AUTHORIZATION.	J.R. ENGINEERING A Westman Company Centennial 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com





KEY MAP  
SCALE: 1"=2000'

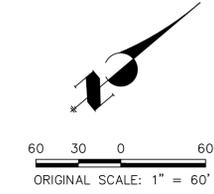


HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL  
SCALE: 1"=60'

LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL

LINE TABLE		
LINE	BEARING	DISTANCE
L53	N06°00'39"W	66.75'
L54	N36°14'46"E	39.38'
L55	N10°21'29"E	49.36'
L56	N60°54'10"E	43.33'
L57	N05°12'24"E	171.36'
L58	N05°23'49"W	227.79'
L59	N05°23'49"W	100.46'
L60	N00°44'30"E	91.02'
L61	N07°39'00"E	24.57'
L62	N73°38'46"E	29.14'
L63	N14°36'29"E	40.64'
L64	N68°08'38"E	25.60'
L65	N03°58'14"E	28.73'
L66	N51°56'37"E	36.80'
L67	N02°24'18"W	36.29'
L68	N24°19'33"E	149.34'
L69	N25°56'53"E	128.38'

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C46	42°15'20"	55.00'	40.56'
C47	25°52'40"	50.02'	22.59'
C48	50°32'41"	50.00'	44.11'
C49	54°19'17"	50.00'	47.40'
C50	65°59'46"	50.00'	57.59'
C51	58°56'29"	50.19'	51.63'
C52	53°32'09"	50.00'	46.72'
C53	64°10'24"	50.00'	56.00'
C54	47°58'23"	50.00'	41.86'
C55	54°20'55"	50.00'	47.43'
C56	26°43'51"	50.00'	23.33'



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY NOT FOR CONSTRUCTION**

MIKE A. BRAMLEY  
COLORADO P.E. # 30000  
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

**J.R. ENGINEERING**  
A Westman Company

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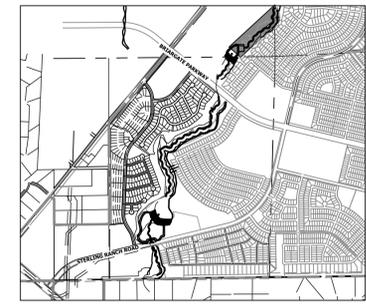
No.	REVISION	BY	DATE

H-SCALE	1"=60'	V-SCALE	N/A	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				9/1/22	DJV	SCH	

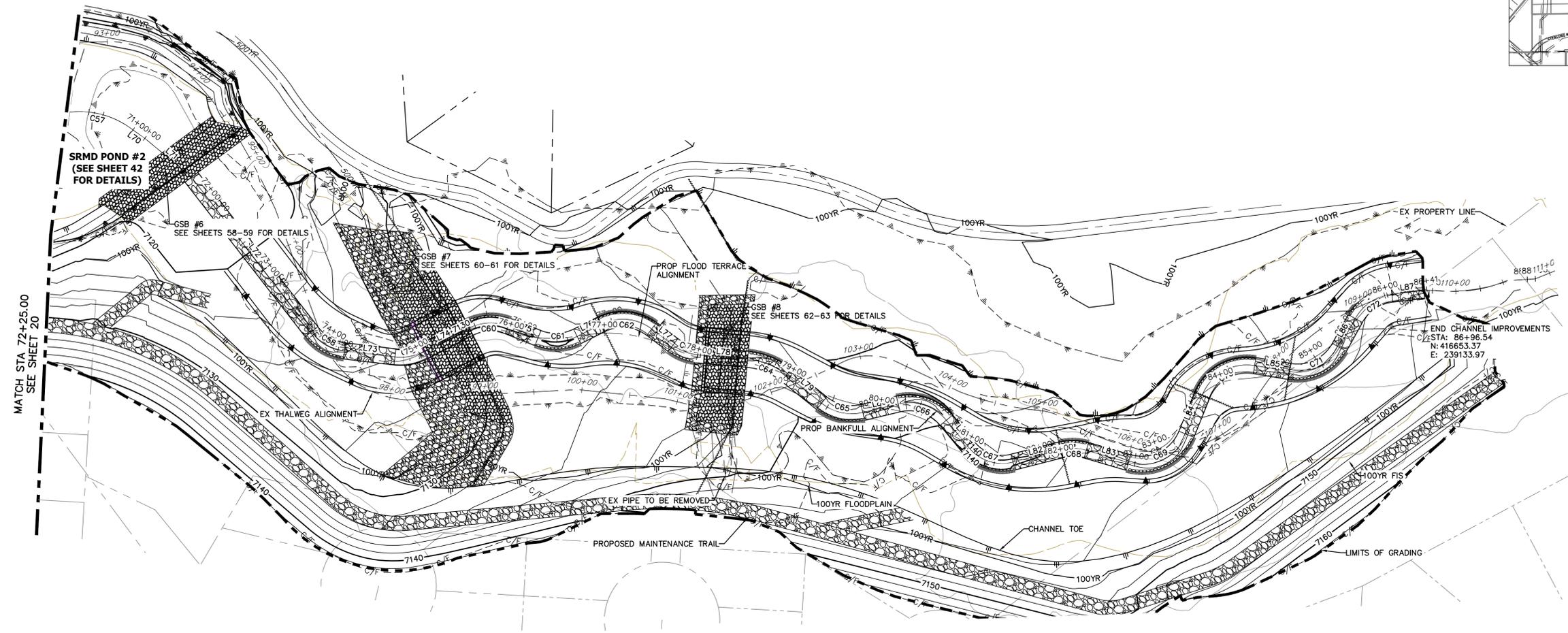
**SAND CREEK RESTORATION**  
HORIZONTAL CONTROL PLAN

SHEET 20 OF 99  
JOB NO. 25188.04

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KEY MAP  
SCALE: 1"=2000'

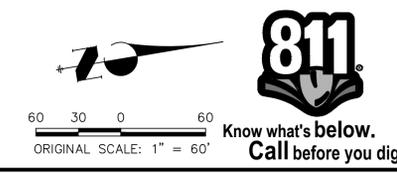


**HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL**  
SCALE: 1"=50'

**LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL**

LINE TABLE		
LINE	BEARING	DISTANCE
L70	N71°47'03"E	19.62'
L71	N75°44'54"E	61.12'
L72	N88°15'33"E	204.10'
L73	N43°02'34"E	52.87'
L74	N09°08'25"E	54.02'
L75	N57°53'21"E	33.46'
L76	N09°48'06"E	28.21'
L77	N73°17'31"E	27.67'
L78	N41°18'28"E	51.56'
L79	N74°55'24"E	46.84'
L80	N22°53'04"E	37.83'
L81	N86°42'25"E	36.83'
L82	N22°00'31"E	51.65'
L83	N52°26'30"E	45.59'
L84	N31°41'54"W	43.63'
L85	N45°44'54"E	36.65'
L86	N24°37'06"W	34.08'
L87	N29°45'43"E	33.26'

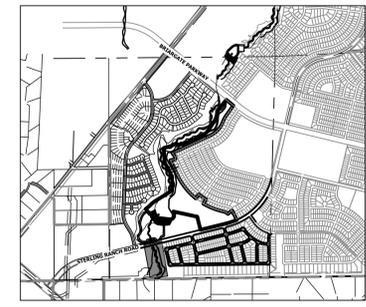
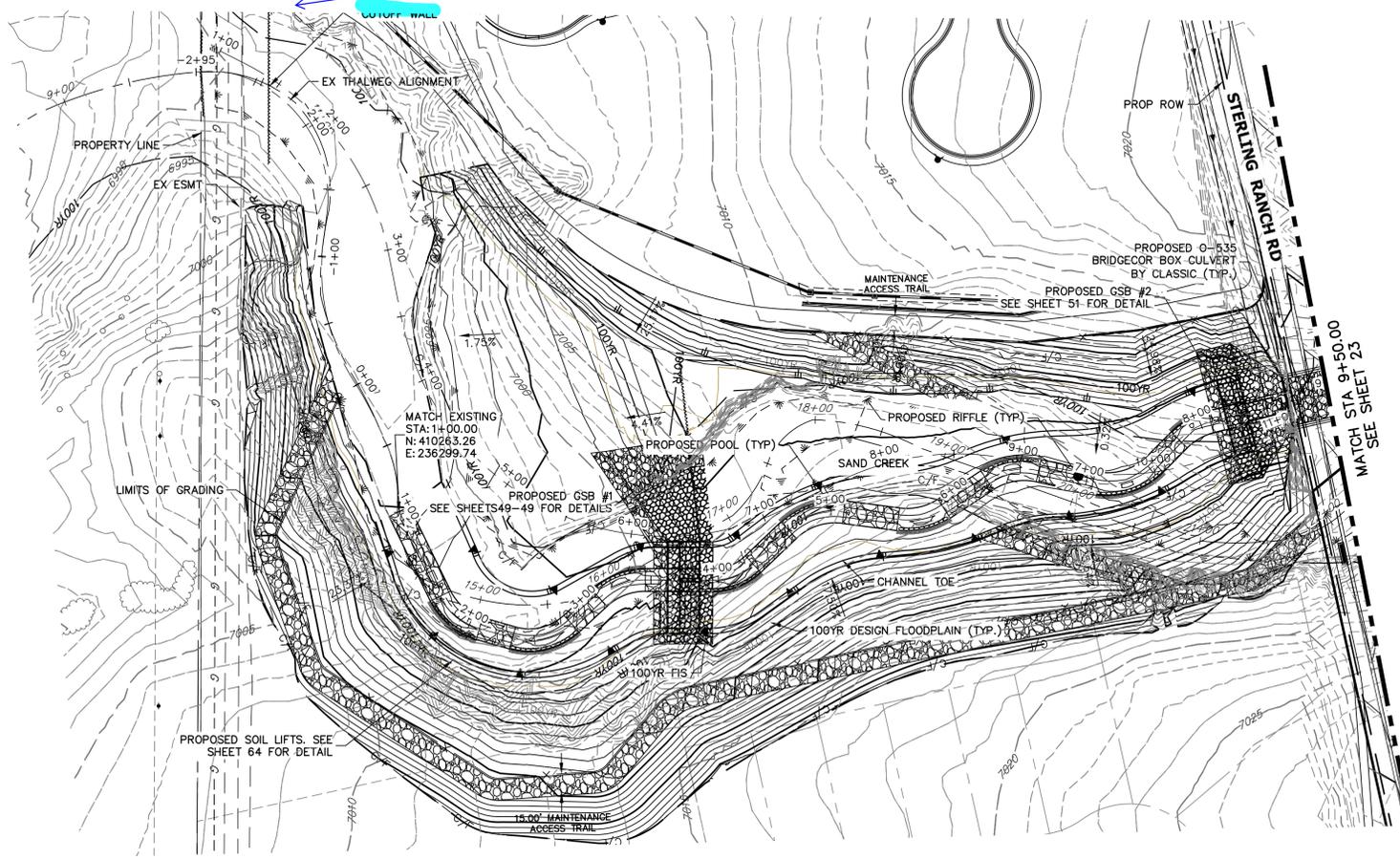
CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C57	45°50'10"	90.00'	72.00'
C58	46°32'33"	50.08'	40.68'
C59	34°22'46"	50.02'	30.02'
C60	47°43'06"	50.03'	41.67'
C61	48°17'05"	49.81'	41.98'
C62	63°30'09"	49.99'	55.41'
C63	32°34'55"	50.22'	28.56'
C64	33°32'59"	75.28'	44.08'
C65	52°02'18"	50.00'	45.41'
C66	63°49'22"	50.00'	55.70'
C67	64°37'45"	45.04'	50.81'
C68	30°26'04"	50.00'	26.56'
C69	83°48'51"	50.22'	73.47'
C70	77°26'48"	50.00'	67.59'
C71	70°22'00"	50.00'	61.41'
C72	54°22'49"	50.00'	47.46'



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMLEY  
COLORADO P.E. 31111  
FOR AND ON BEHALF OF JR. ENGINEERING, LLC

PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR. ENGINEERING APPROVES THEIR USE FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.
SAND CREEK RESTORATION HORIZONTAL CONTROL PLAN	SHEET 21 OF 99 JOB NO. 25188.04

Adjust viewport



**LEGEND**

- FINISHED GRADE @ CHANNEL
- THALWEG PROFILE
- EXISTING GRADE @ CHANNEL
- EXISTING THALWEG PROFILE
- 100-YR HGL PROFILE
- 100YR FIS FLOODPLAIN
- 100-YR DESIGN FLOODPLAIN
- STABLE CHANNEL GRADE

- BENCHMARK**
- THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411416.273  
EASTING = 235167.071  
ELEVATION = 7023.42
  - THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANNEE RANCHEROS SUBDIVISION  
NORTHING = 410095.404  
EASTING = 235052.131  
ELEVATION = 7000.40
  - THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "381417", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411399.962  
EASTING = 233849.817  
ELEVATION = 7030.82

**BASIS OF BEARINGS**  
THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHWEST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

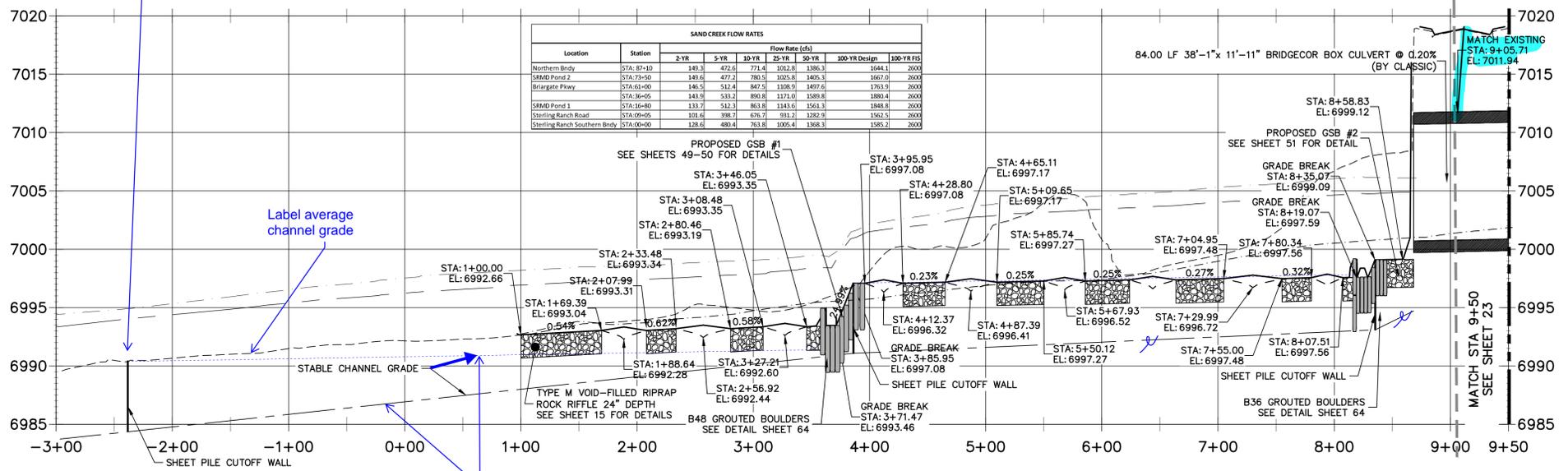
**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9383 • Colorado Springs 719-583-2593  
Fort Collins 970-491-9888 • www.jrengineering.com

Show property line and utilities

Label station, elevations

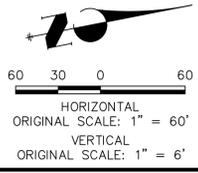
delete gray line?

**SAND CREEK - BANKFULL PROFILE 1  
STA -3+00.00 TO 9+50.00**



This line should be upstream from the top of each downstream grade control structure. Label stable grade. A dotted linetype might be better.

- NOTE**
- NO GRADING OR CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY.
  - DRIVE SHEET PILE THROUGH BEDROCK OR MINIMUM OF 6 FEET.



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY NOT FOR CONSTRUCTION**

MIKE A. BRAMBLE  
COLORADO P.E. 30112  
FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

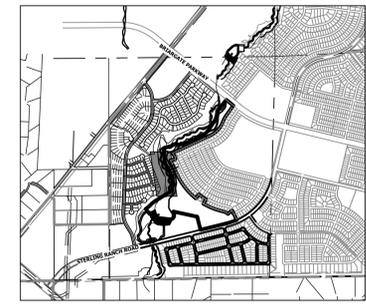
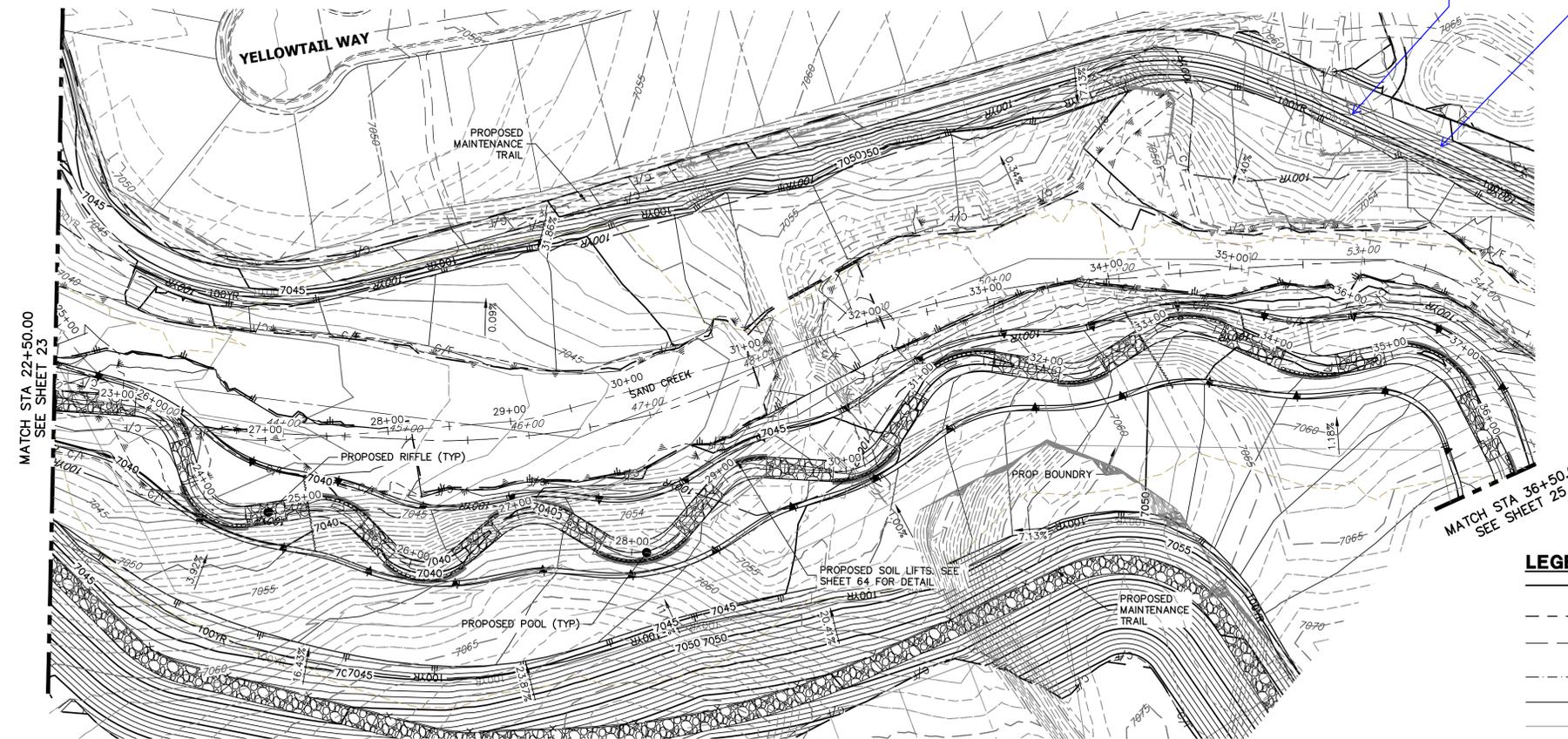
BY	DATE	No.	REVISION	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				1"=60'	1"=6'	9/1/22	DJV	SCH	

**SAND CREEK RESTORATION**  
**CHANNEL PLAN & PROFILE**

SHEET 22 OF 99  
JOB NO. 25188.04

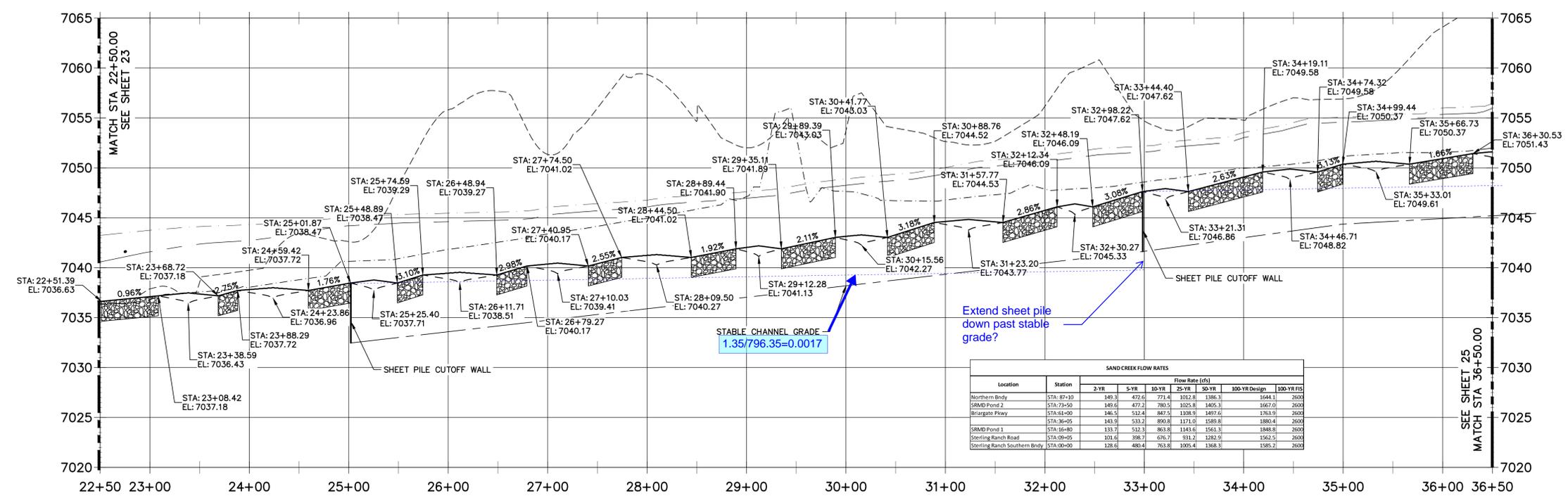


relocate trail?  
label spillway/rundown protection



- LEGEND**
- FINISHED GRADE @
  - CHANNEL @
  - THALWEG PROFILE
  - EXISTING GRADE @
  - CHANNEL @
  - EXISTING THALWEG PROFILE
  - 100-YR HGL PROFILE
  - 100-YR FIS FLOODPLAIN
  - 100-YR DESIGN FLOODPLAIN
  - STABLE CHANNEL GRADE

**SAND CREEK - BANKFULL PROFILE 3  
STA 22+50.00 TO 36+50.00**



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

**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMBLE  
COLORADO P.E. No. 30107  
FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. OFFICES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

**J.R. ENGINEERING**  
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Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

H-SCALE 1"=60'  
V-SCALE 1"=6'  
DATE 9/1/22  
DESIGNED BY DJV  
DRAWN BY SCH  
CHECKED BY

**SAND CREEK RESTORATION  
CHANNEL PLAN & PROFILE**

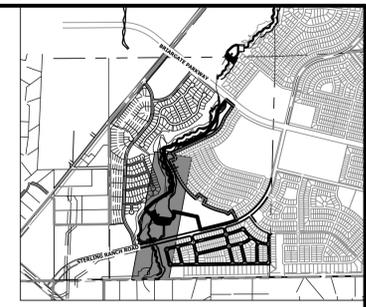
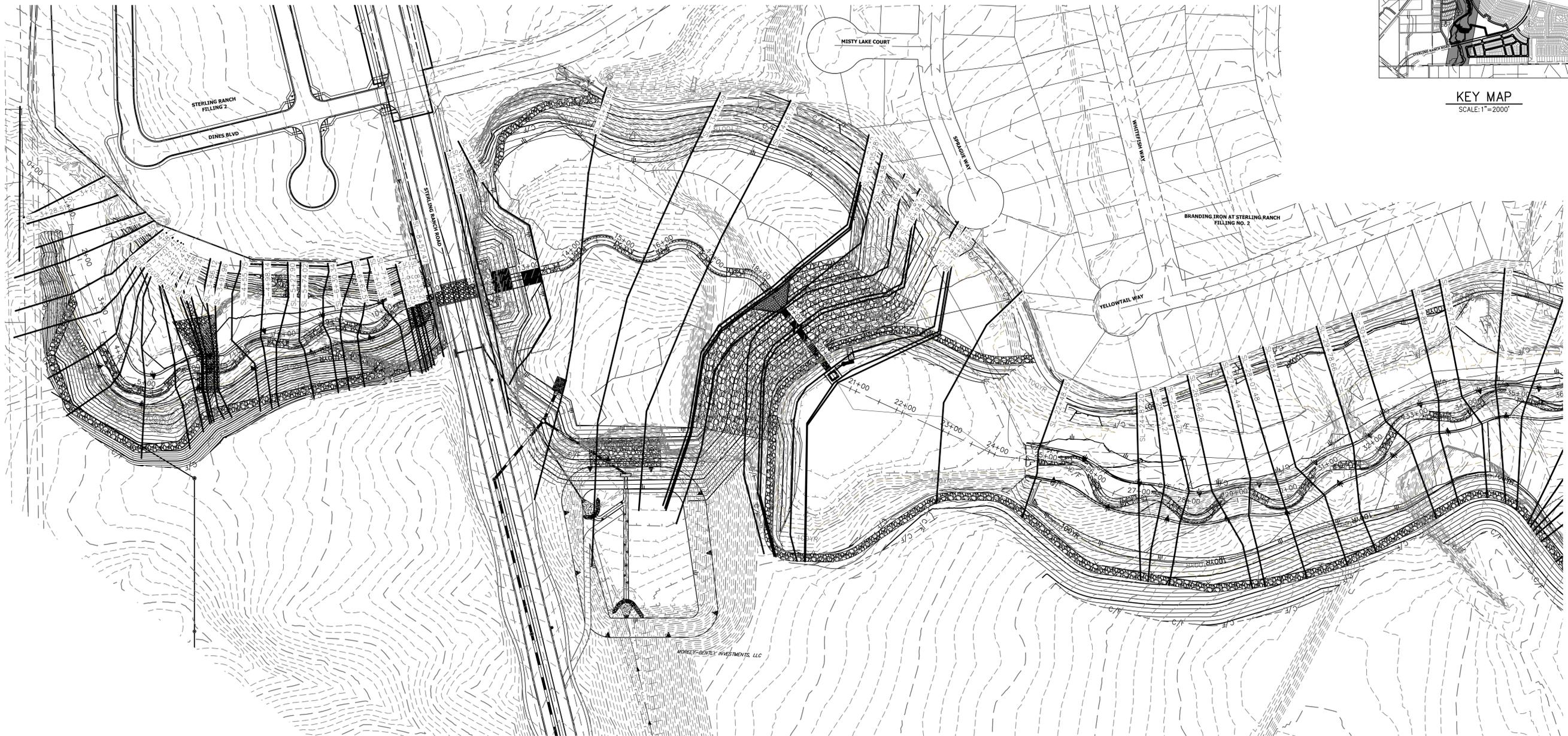
SHEET 24 OF 99  
JOB NO. 25188.04









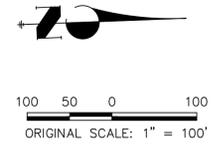


**BANKFULL CROSS SECTION – SAND CREEK**  
 STA: 1+00 TO 35+00  
 SCALE: 1"=100'

- BENCHMARK**
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853" AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
 NORTHING = 411416.273  
 EASTING = 235167.071  
 ELEVATION = 7023.42
  2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION  
 NORTHING = 410095.404  
 EASTING = 235052.131  
 ELEVATION = 7000.40
  3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141" AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
 NORTHING = 411399.962  
 EASTING = 233849.817  
 ELEVATION = 7030.82

**NOTE**  
 SEE SHEETS 31-## FOR CROSS SECTIONS

**BASIS OF BEARINGS**  
 THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
 20 BOULDER CRESCENT  
 2ND FLOOR  
 COLORADO SPRINGS, CO 80903  
 JAMES F. MORLEY  
 (719) 419-3024

**J.R. ENGINEERING**  
 A Westman Company  
 Centennial 303-740-9383 • Colorado Springs 719-583-2583  
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

SAND CREEK RESTORATION	H-SCALE	1"=100'
	V-SCALE	N/A
CROSS SECTIONS	DATE	9/1/22
	DESIGNED BY	DJV
	DRAWN BY	NEO
	CHECKED BY	
	SHEET	28 OF 99
	JOB NO.	25188.04



**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION AS THE  
 COLORADO P.E. OF THE PROJECT  
 FOR AND ON BEHALF OF JR ENGINEERING, LLC  
**PRELIMINARY NOT FOR CONSTRUCTION**  
 MIKE A. BRAMLE  
 COLORADO P.E. # 30000  
 FOR AND ON BEHALF OF JR ENGINEERING, LLC

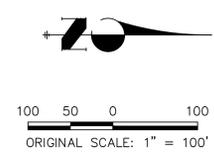


BANKFULL CROSS SECTION – SAND CREEK  
 STA: 35+00 TO 60+00  
 SCALE: 1"=100'

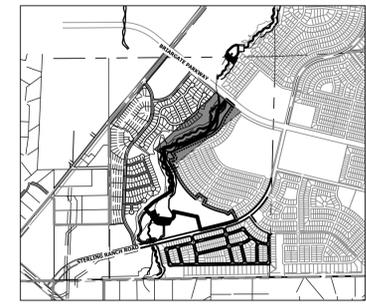
- BENCHMARK**
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 EASTING = 233849.817  
 ELEVATION = 7030.82

**NOTE**  
 SEE SHEETS 31-## FOR CROSS SECTIONS

**BASIS OF BEARINGS**  
 THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
 PRELIMINARY  
 NOT FOR  
 CONSTRUCTION  
 MIKE A. BRAMLEY  
 COLORADO P.E. No. 3587  
 FOR AND ON BEHALF OF J.R. ENGINEERING, INC.



KEY MAP  
 SCALE: 1"=2000'

SAND CREEK RESTORATION CROSS SECTIONS	H-SCALE 1"=100'	V-SCALE N/A	DATE 9/1/22	DESIGNED BY DJV	DRAWN BY NEO	CHECKED BY	BY DATE	No. REVISION	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, DESIGNATED BY WRITTEN AUTHORIZATION. PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
	J.R. ENGINEERING A Western Company Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	SHEET 29 OF 99	JOB NO. 25188.04						

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BANKFULL CROSS SECTION – SAND CREEK  
 STA: 60+00 TO 88+60  
 SCALE: 1"=100'

**BENCHMARK**

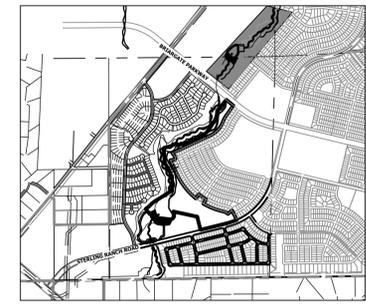
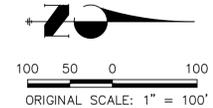
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 NORTHING = 411399.962  
 EASTING = 233849.817  
 ELEVATION = 7030.82

**NOTE**

SEE SHEETS 31-## FOR CROSS SECTIONS

**BASIS OF BEARINGS**

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



KEY MAP  
 SCALE: 1"=2000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
 20 BOULDER CRESCENT  
 2ND FLOOR  
 COLORADO SPRINGS, CO 80903  
 JAMES F. MORLEY  
 (719) 419-3024

**J.R. ENGINEERING**  
 A Westman Company  
  
 Centennial 303-740-9888 • Colorado Springs 719-583-2583  
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=100'	N/A	9/1/22	DJV	NEO	

SAND CREEK RESTORATION	SHEET 30 OF 99
CROSS SECTIONS	JOB NO. 25188.04



Know what's below.  
 Call before you dig.

**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND REVIEW

**PRELIMINARY  
 NOT FOR  
 CONSTRUCTION**

MIKE A. BRAMLEY  
 COLORADO P.E.  
 FOR AND ON BEHALF OF JR ENGINEERING, LLC

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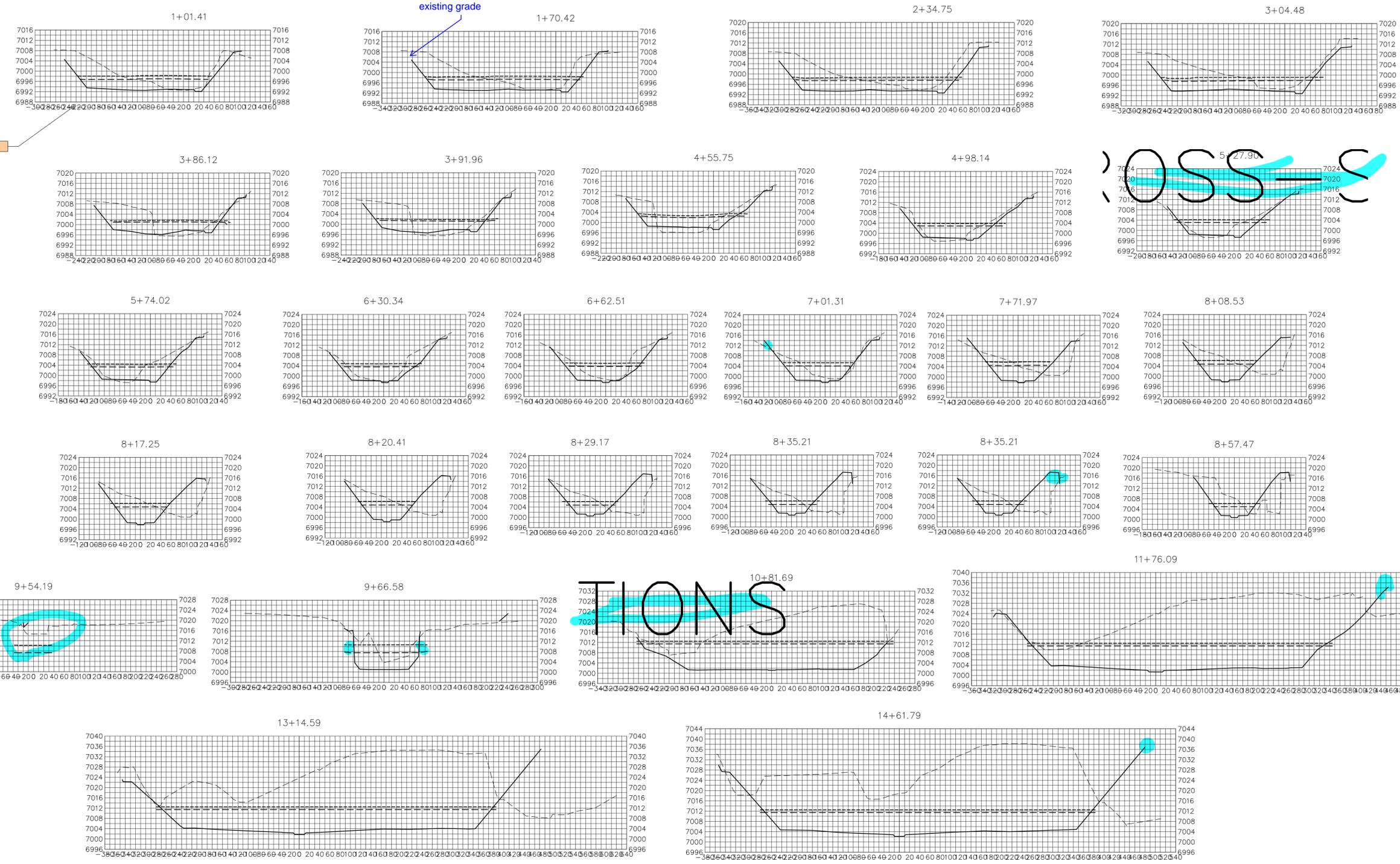
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PREPARED FOR  
**SR LAND, LLC**  
 20 BOULDER CRESCENT  
 2ND FLOOR  
 COLORADO SPRINGS, CO 80903  
 JAMES F. MORLEY  
 (719) 419-3024

NO.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=100'	1"=10'	9/14/22	DJV	SCH	

**SAND CREEK RESTORATION**  
**CROSS SECTIONS**  
 SHEET 31 OF 99  
 JOB NO. 25188.04



adjust text

**BENCHMARK**

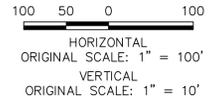
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 EASTING = 233849.817  
 ELEVATION = 7030.82

**BASIS OF BEARINGS**

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 85 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 7,272.69 FEET.

**LEGEND**

- PROP GROUND SURFACE
- - - EX GROUND SURFACE
- - - - 100YR FIS WSEL
- - - - 100YR DESIGN WSEL



Know what's below.  
 Call before you dig.

**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

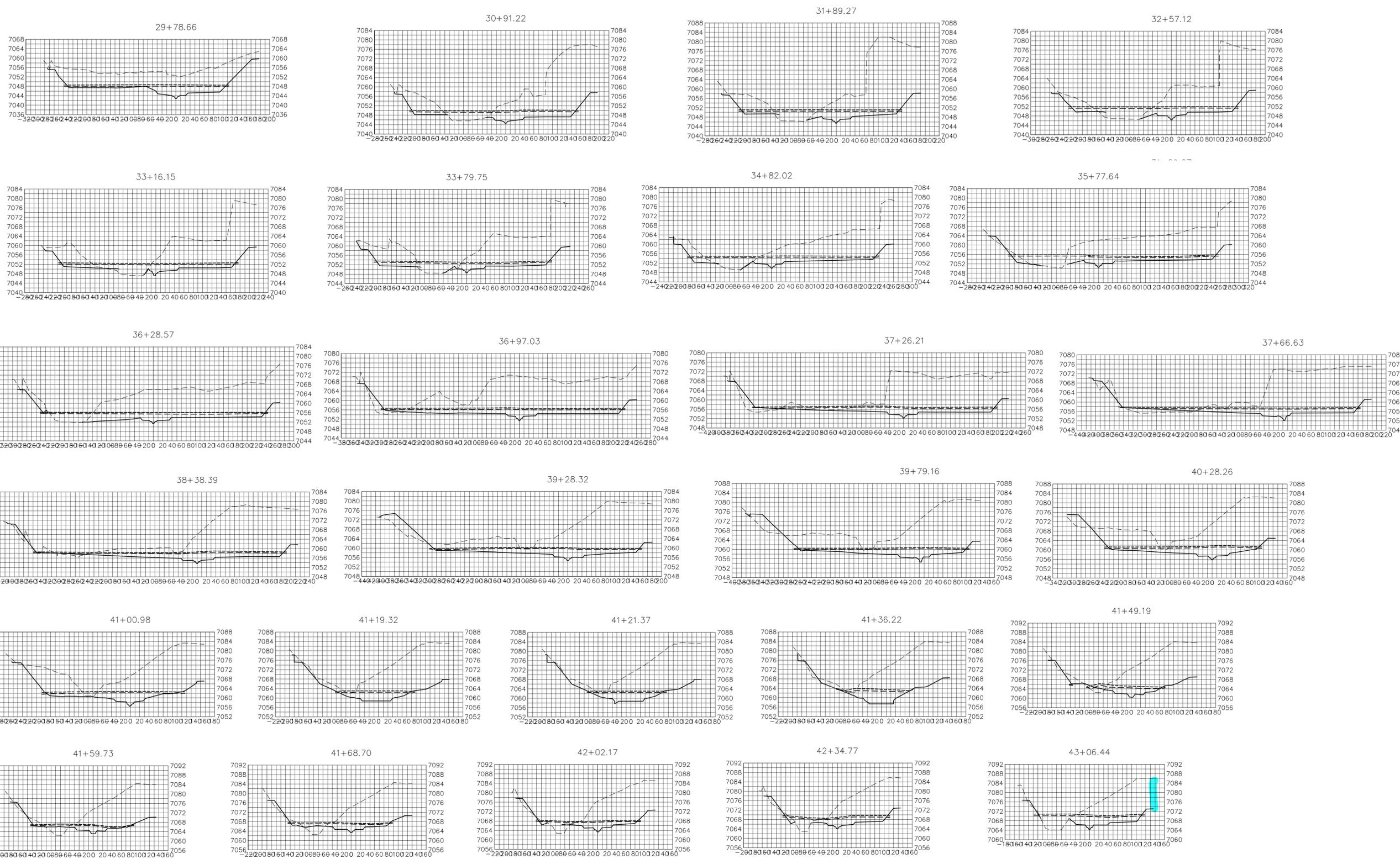
**PRELIMINARY NOT FOR CONSTRUCTION**

MIKE A. BRAMBLE  
 COLORADO P.E. 30147  
 FOR AND ON BEHALF OF JR ENGINEERING, INC.

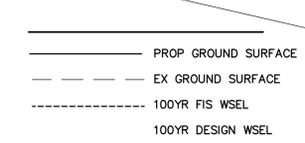
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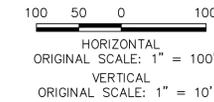


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**BASIS OF BEARINGS**

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**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY NOT FOR CONSTRUCTION**  
 MIKE A. BRAMBLE  
 COLORADO P.E. 30110  
 FOR AND ON BEHALF OF JR ENGINEERING

SAND CREEK RESTORATION	CROSS SECTIONS	DESIGNED BY	DJV
		DRAWN BY	SCH
SHEET 33	OF 99	DATE	9/1/22
JOB NO.	25188.04	BY	DATE
		No.	REVISION

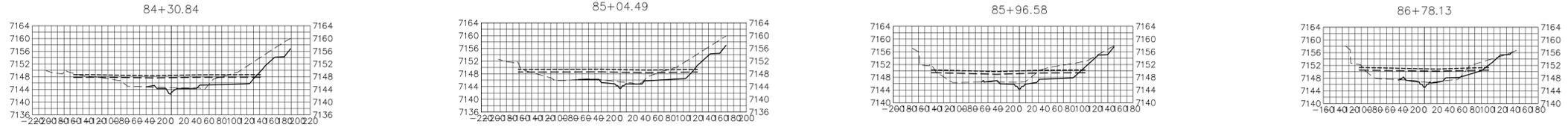
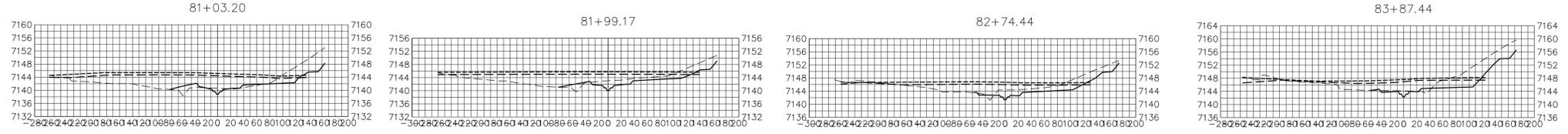
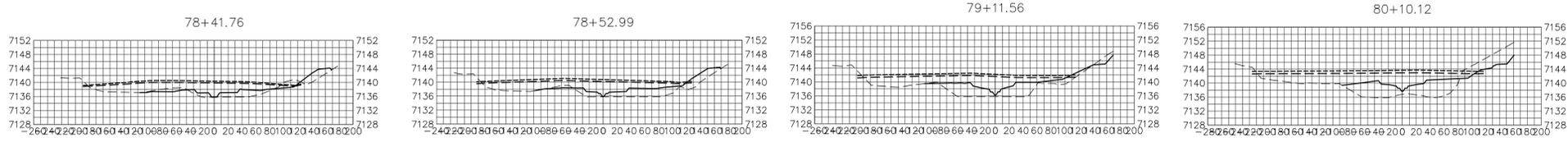
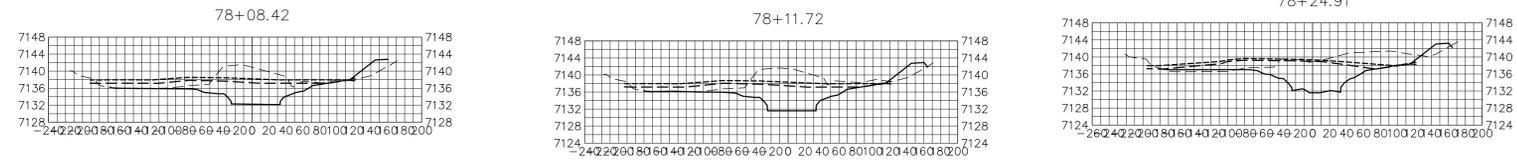
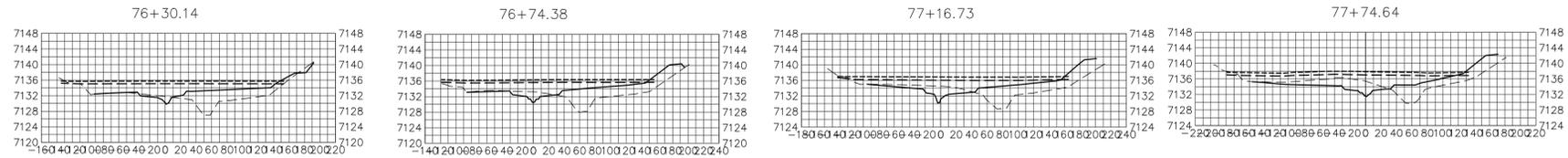
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE AS DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
 20 BOULDER CRESCENT  
 2ND FLOOR  
 COLORADO SPRINGS, CO 80903  
 JAMES F. MORLEY  
 (719) 419-3024

**J.R. ENGINEERING**  
 A Westman Company  
 Centennial 300-740-9888 • Colorado Springs 719-588-2593  
 Fort Collins 970-491-9888 • www.jrengineering.com







**BENCHMARK**

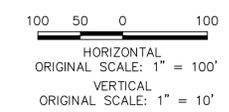
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**LEGEND**

- PROP GROUND SURFACE
- - - EX GROUND SURFACE
- - - - 100YR FIS WSEL
- - - - 100YR DESIGN WSEL

**BASIS OF BEARINGS**

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



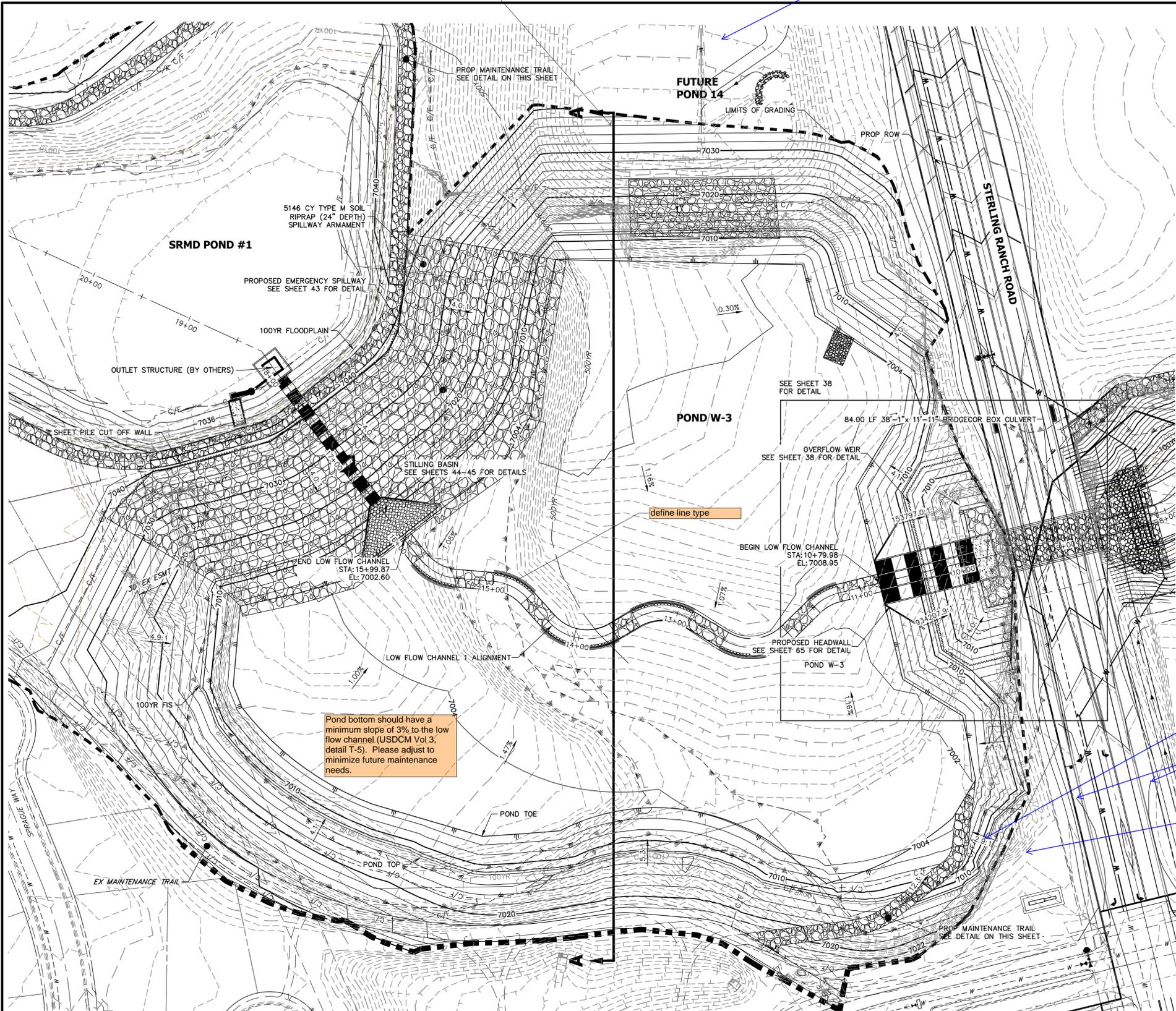
**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY NOT FOR CONSTRUCTION**

MIKE A. BRAMLEY  
 COLORADO P.E. 30112  
 FOR AND ON BEHALF OF J.R. ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.  PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	<b>J.R. ENGINEERING</b> A Westman Company Centennial 300-740-9888 • Colorado Springs 719-588-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE
<b>SAND CREEK RESTORATION</b>  <b>CROSS SECTIONS</b>	H-SCALE 1"=100' V-SCALE 1"=10' DATE 9/1/22 DESIGNED BY DJV DRAWN BY NEO CHECKED BY	No.	REVISION
SHEET 36 OF 99 JOB NO. 25188.04			

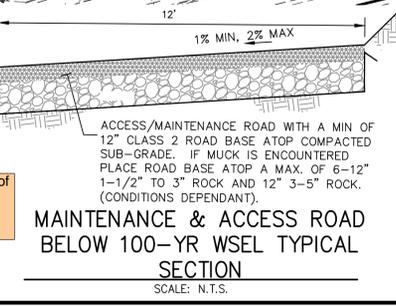
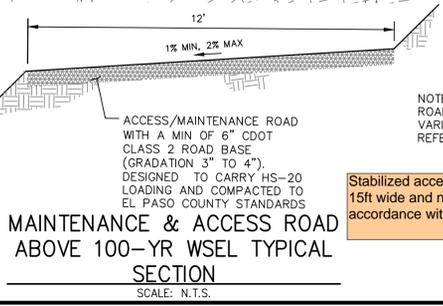
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Pond bottom should have a minimum slope of 3% to the low flow channel (USDCM Vol 3, detail T-5). Please adjust to minimize future maintenance needs.

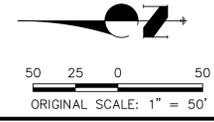
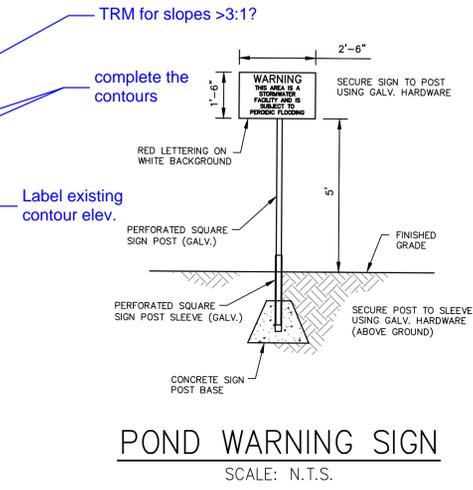
define line type

Also label as existing TSB?

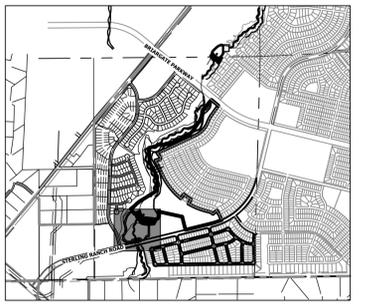


Stabilized access ramp shall be a minimum of 15ft wide and no greater than 12% slope, in accordance with DCMv1, Chap 11.2.2.

POND W-3	
DRAINAGE AREA (AC)	2729.9
AVERAGE % IMP.	17%
Q <sub>IN</sub> (CFS)	578.95
Q <sub>OUT</sub> (CFS)	470.55
WSEL (FT)	7004.72
DEPTH (FT)	3.55
VOLUME (AC-FT)	6.75
SURFACE AREA (AC)	5.46



**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
 PRELIMINARY NOT FOR CONSTRUCTION  
 MIKE A. BRAMBLE  
 COLORADO P.E. 30000  
 FOR AND ON BEHALF OF J.R. ENGINEERING, INC.



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PREPARED FOR  
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 20 BOULDER CRESCENT  
 2ND FLOOR  
 COLORADO SPRINGS, CO 80903  
 JAMES F. MORLEY  
 (719) 419-3024

**J.R. ENGINEERING**  
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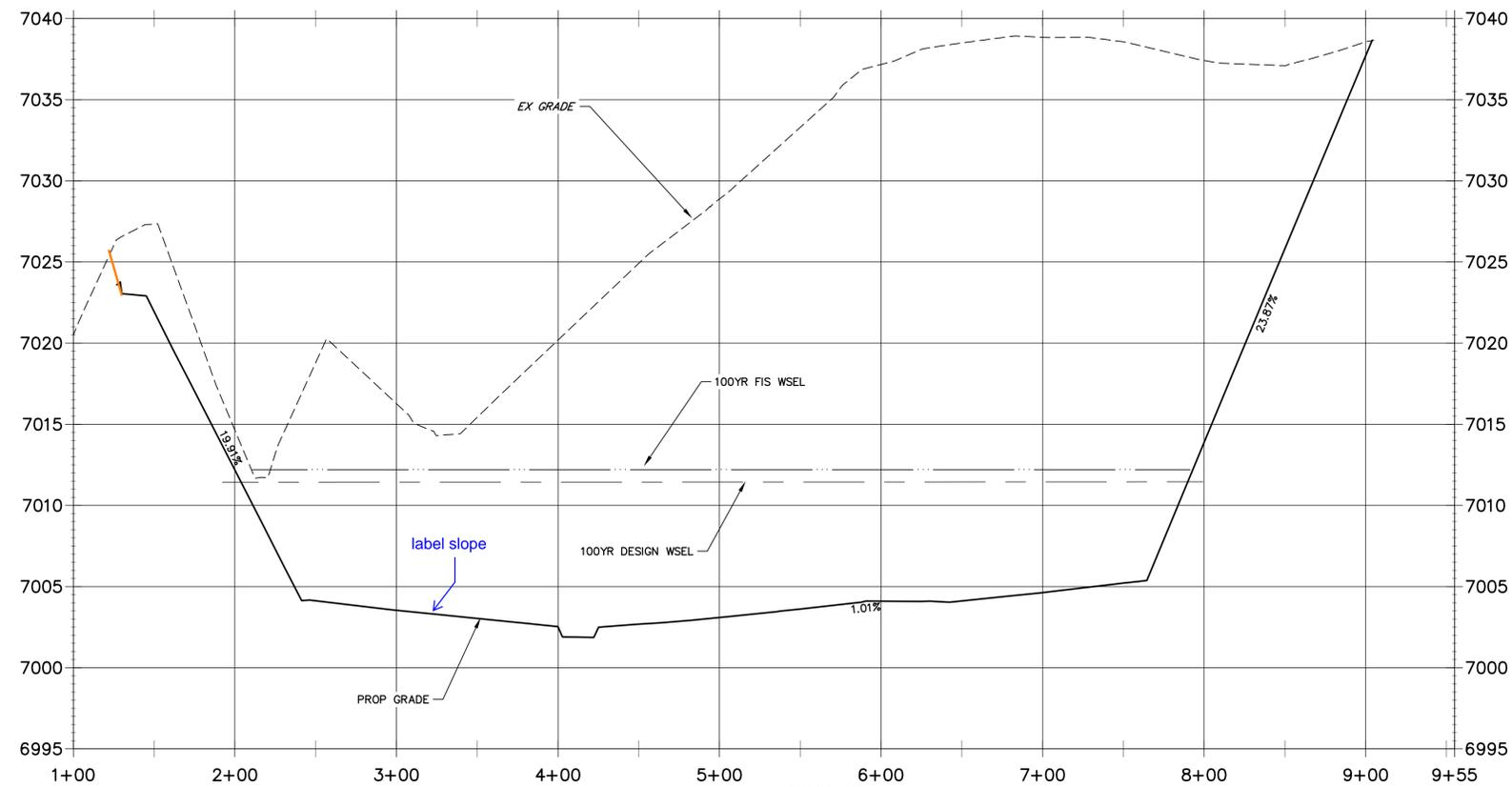
No.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=50'	N/A	9/1/22	DV	NEO	

**SAND CREEK RESTORATION**  
**POND PLANS**  
 SHEET 37 OF 99  
 JOB NO. 25188.04

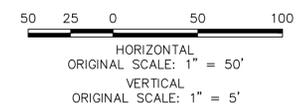
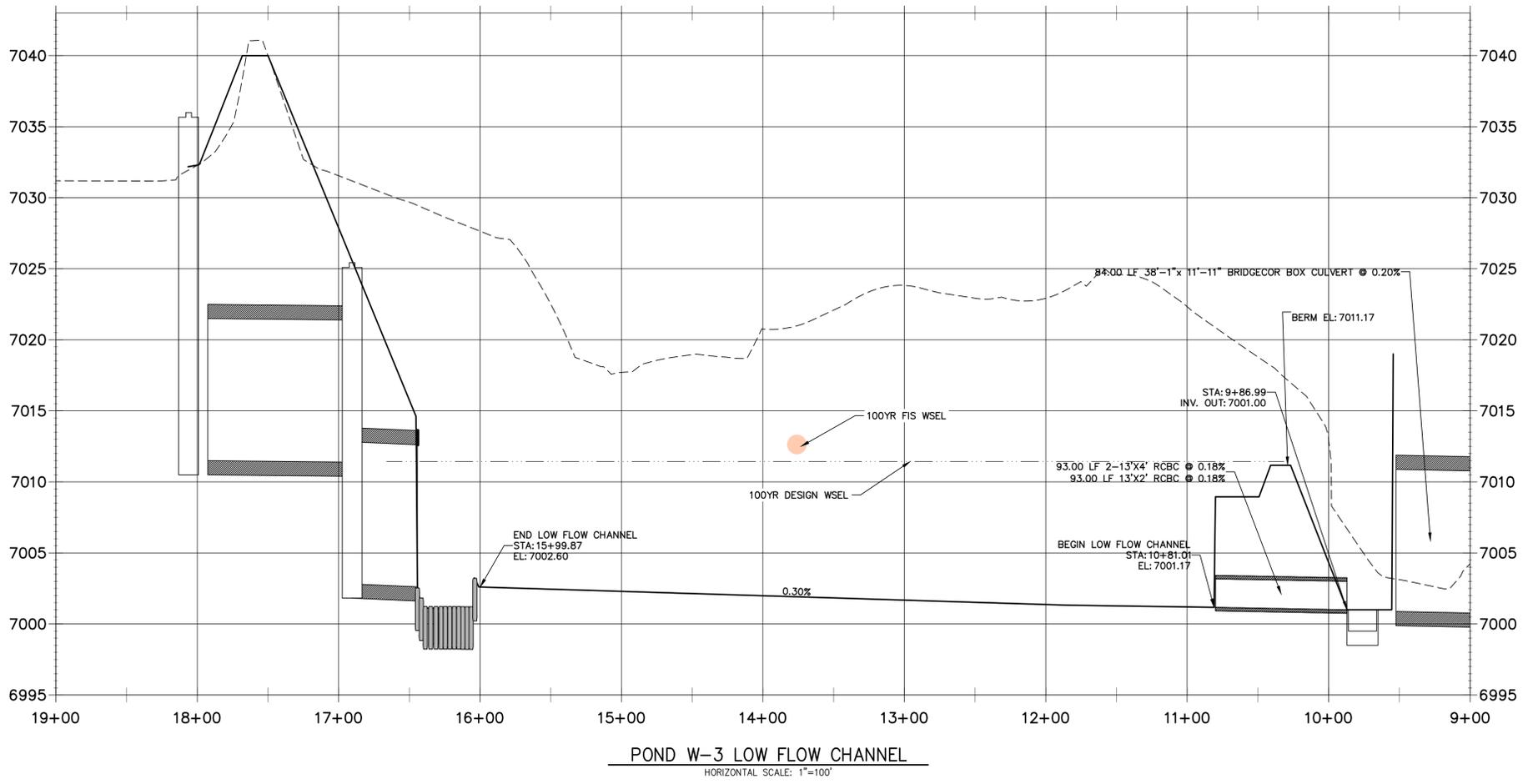


**CROSS SECTION A-A  
STA 1+00.00 TO 9+55.00**



**LOW FLOW CHANNEL 1  
STA 9+00.00 TO 19+00.00**

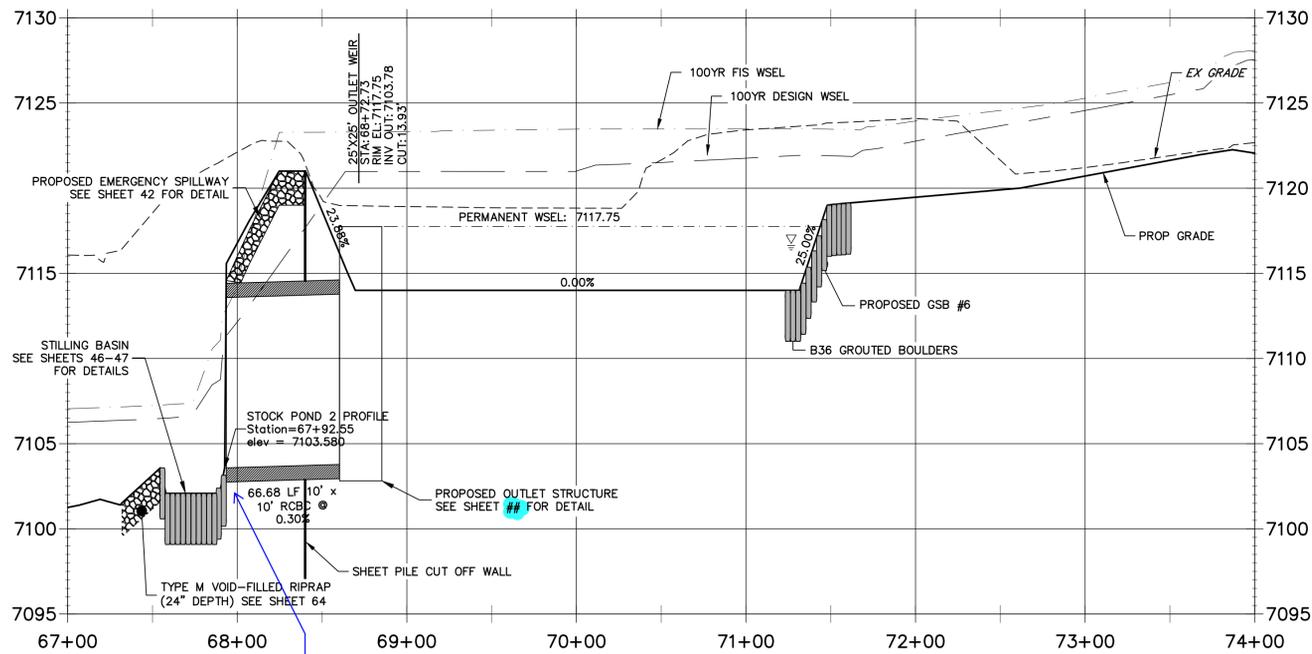
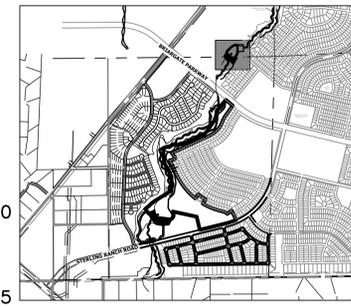
**POND W-3  
CROSS SECTION A-A**  
HORIZONTAL SCALE: 1"=50'



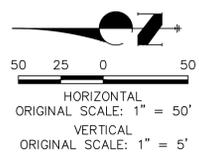
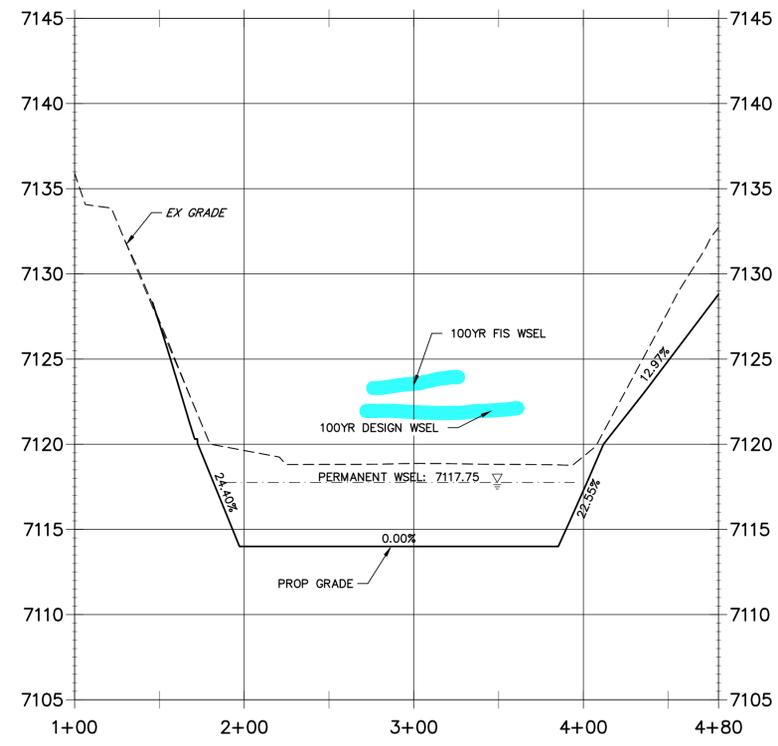
**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY  
NOT FOR  
CONSTRUCTION**  
MIKE A. BRAMLEY  
COLORADO P.E. 30101  
FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, J.R. ENGINEERING APPROVES THEIR USE FOR PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.	
PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
BY	DATE
No.	REVISION
H-SCALE 1"=50'	V-SCALE 1"=5'
DESIGNED BY DV	CHECKED BY SCH
DATE 9/1/22	
SAND CREEK RESTORATION	
POND PLANS	
SHEET 39	OF 99
JOB NO.	25188.04

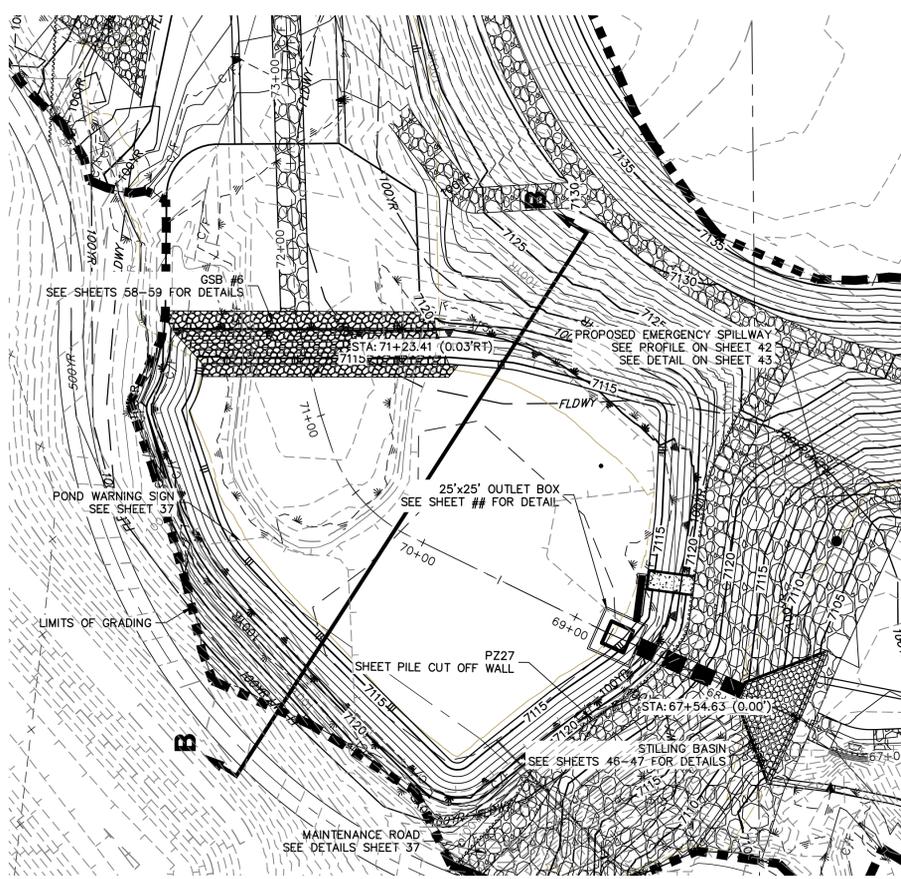
**STOCK POND 2 PROFILE  
STA 67+00.00 TO 74+00.00**



**CROSS SECTION B-B  
STA 1+00.00 TO 4+79.69**



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY  
NOT FOR  
CONSTRUCTION**  
MIKE A. BRAMLEY  
COLORADO P.E.  
FOR AND ON BEHALF OF JR ENGINEERING

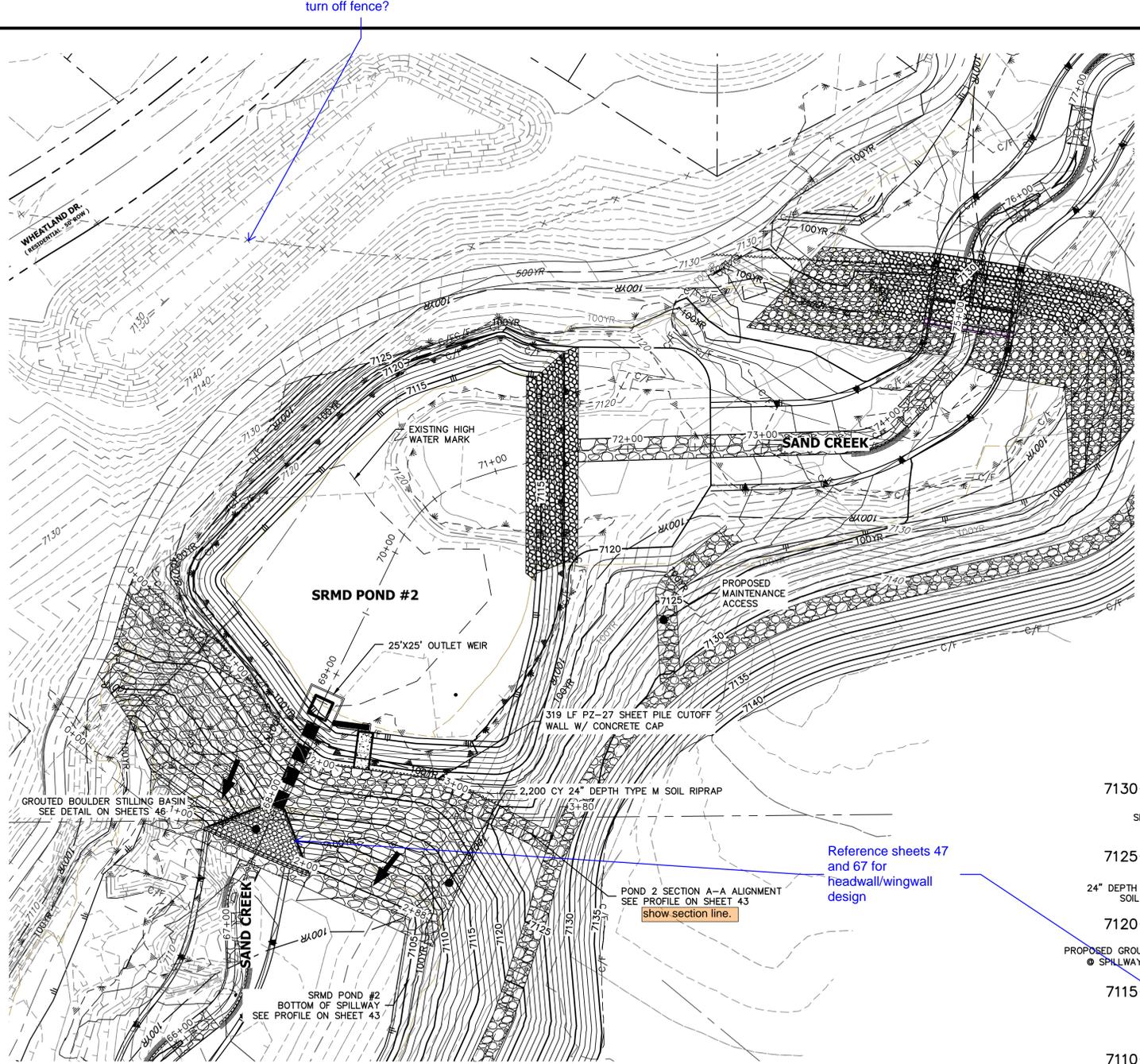


UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.	
PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
J.R. ENGINEERING A Westman Company	Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com
BY	DATE
No.	REVISION
H-SCALE 1"=50'	V-SCALE 1"=5'
DESIGNED BY DV	DATE 9/1/22
DRAWN BY SCH	CHECKED BY
SAND CREEK RESTORATION	
POND PLANS	
SHEET 40 OF 99	
JOB NO. 25188.04	

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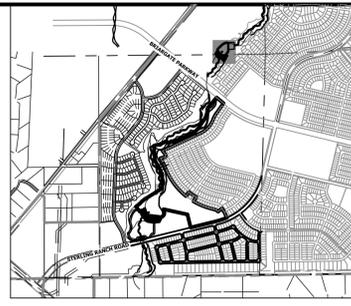






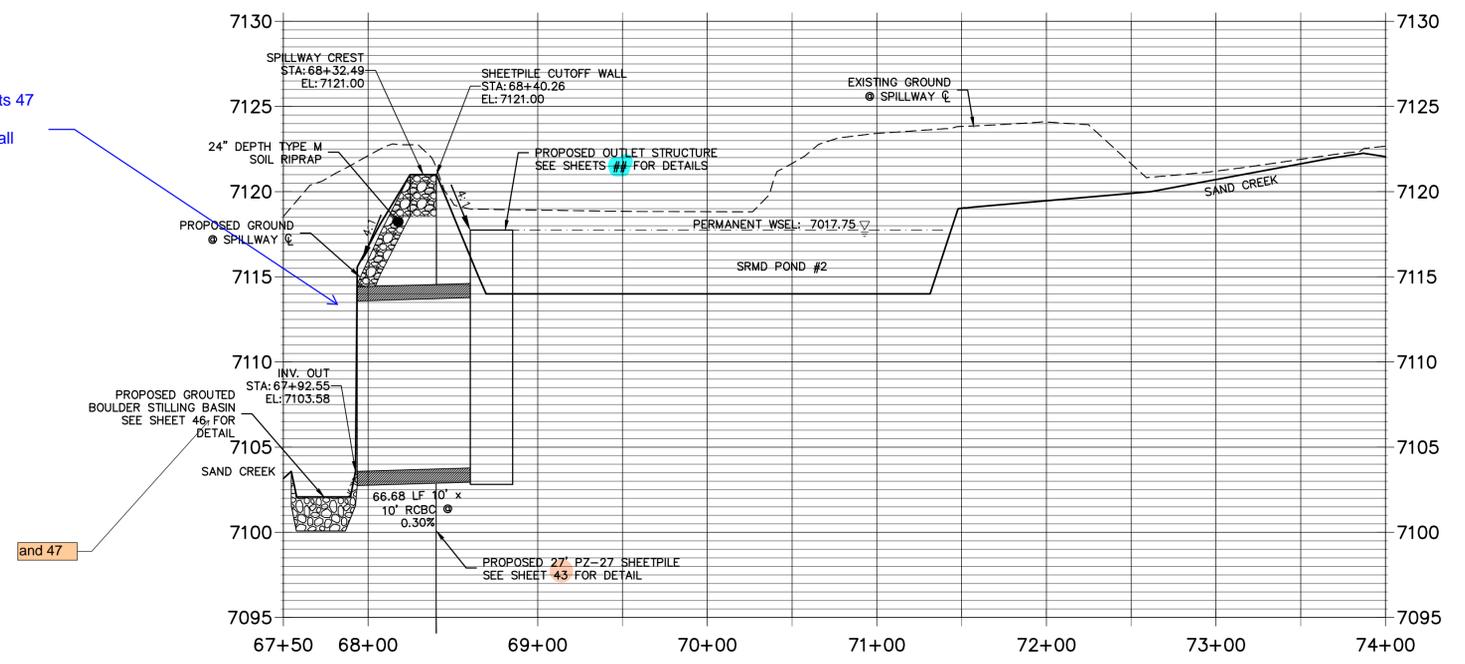
STOCK POND 2		
DRAINAGE AREA (AC)	2003.2	
AVERAGE % IMP.	8%	
	5-YR	100-YR
Q <sub>un</sub> (CFS)	477.23	1666.90
Q <sub>un</sub> (CFS)	476.24	1661.20
STATIC WSEL (FT)	7117.75	7117.75
MAX WSEL (FT)	7019.27	7021.00
DEPTH (FT)	5.08	6.81
VOLUME (AC-FT)	6.26	8.70
SURFACE AREA (AC)	1.35	2.10

- GRADING NOTES:**
- ALL PROPOSED CONTOURS ARE TO FINISHED GRADE.
  - EARTHEN CUT AND FILL SLOPES SHALL BE 3:1 MAXIMUM. SLOPES IN EXCESS OF 4:1 AND AREAS OTHERWISE INDICATED BY WITHIN THESE PLANS, SHALL BE COVERED WITH SOIL RETENTION BLANKET OVER 4" MIN. THICKNESS OF TOPSOIL AND SEEDED.
  - IF THE PROJECT IS CONSTRUCTED DURING THE SUMMER WHEN SEEDING IS NOT ALLOWED, APPLY 1-1/2 TONS OF CERTIFIED WEED FREE MULCH PER ACRE MECHANICALLY CRIMPED INTO THE SOIL IN COMBINATION WITH AN ORGANIC MULCH TACKIFIER.
  - PRIOR TO ANY CONSTRUCTION ACTIVITIES THE PROPOSED SILT FENCE SHOWN ON THE EROSION CONTROL SHEET SHALL BE CONSTRUCTED. THE FENCE SHALL BE REMOVED UPON THE LATER OF STABILIZATION OF THE SITE OR COMPLETION OF CONSTRUCTION.
  - TO REDUCE THE POTENTIAL FOR CLOGGING OF DEBRIS GRATES, NO STRAW MULCH SHALL BE USED WITHIN THE EURV OR WCV OF A DETENTION BASIN. INSTEAD, EROSION CONTROL BLANKETS SHALL BE INSTALLED FOR A WIDTH OF AT LEAST 6 FEET ON EITHER SIDE OF CONCRETE LOW-FLOW CHANNELS. THE BLANKETS SHALL COMPLY WITH THE MATERIALS AND INSTALLATION REQUIREMENTS FOR EROSION CONTROL BLANKETS (STRAW COCONUT OR 100 PERCENT COCONUT). SITE-SPECIFIC CONDITIONS MAY REQUIRE ADDITIONAL BLANKET OR OTHER EROSION CONTROL MEASURES.



Please be consistent with pond labels. Right now they are labeled SRMD Pond #, Stock Pond #, Existing Stock Pond #, and Pond #

**STOCK POND 2 EMERGENCY SPILLWAY PROFILE  
STA 67+50.00 TO 74+00.00**



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PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

**J.R. ENGINEERING**  
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Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

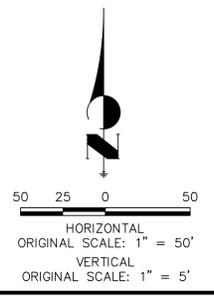
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1"=50'	1"=5'	9/1/22	DJV	DJV	

**SAND CREEK RESTORATION**

**POND PLANS**

SHEET 42 OF 26

JOB NO. 25188.04



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

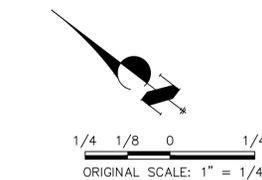
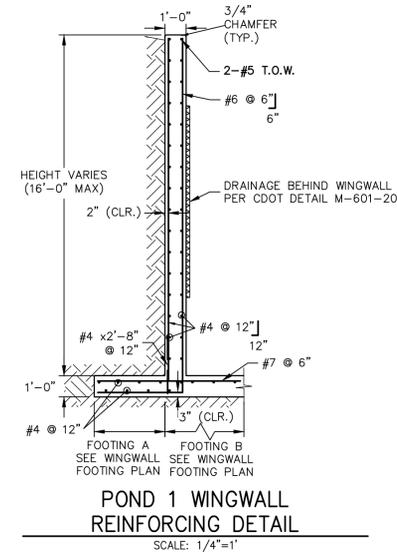
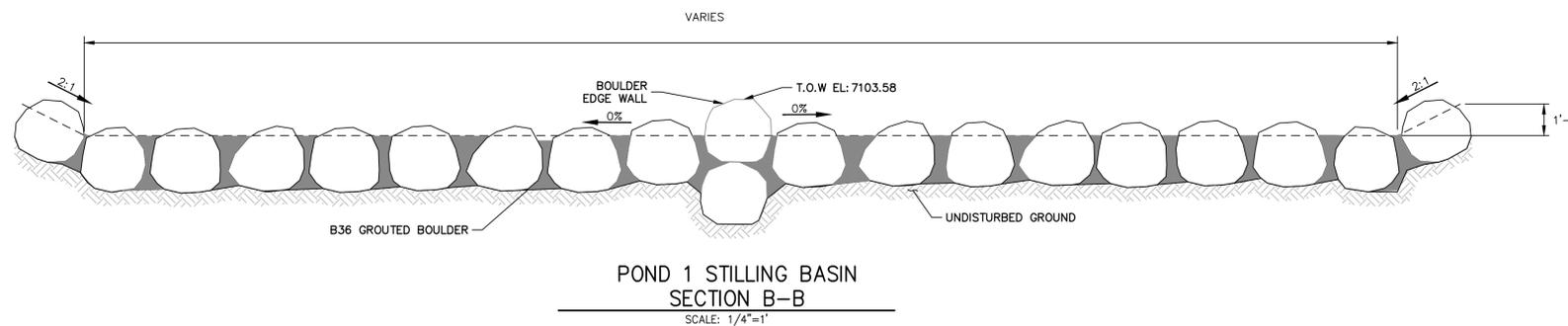
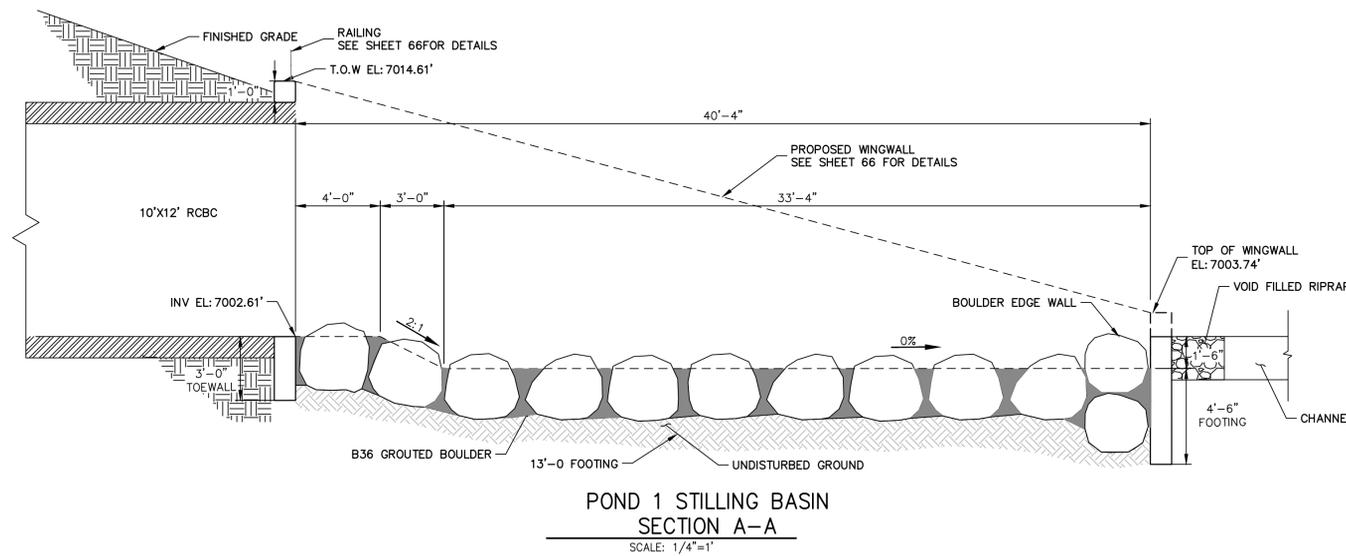
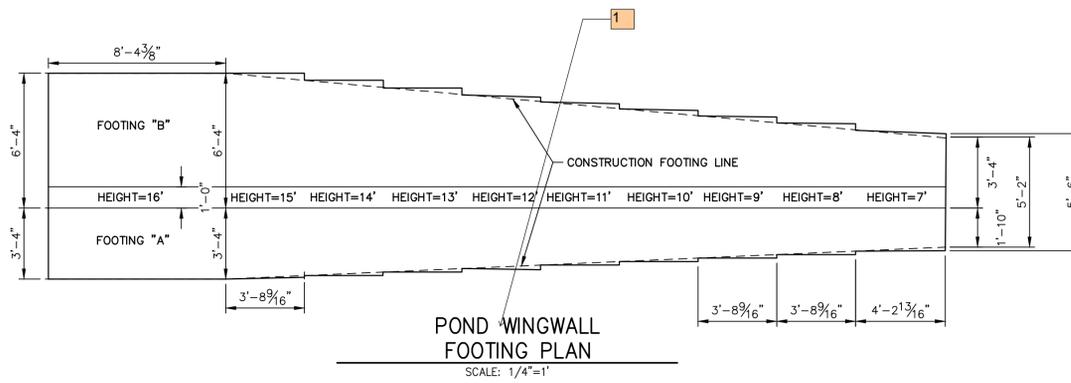
**PRELIMINARY NOT FOR CONSTRUCTION**

MIKE A. BRAMLEY  
COLORADO P.E. 30000  
FOR AND ON BEHALF OF JR ENGINEERING

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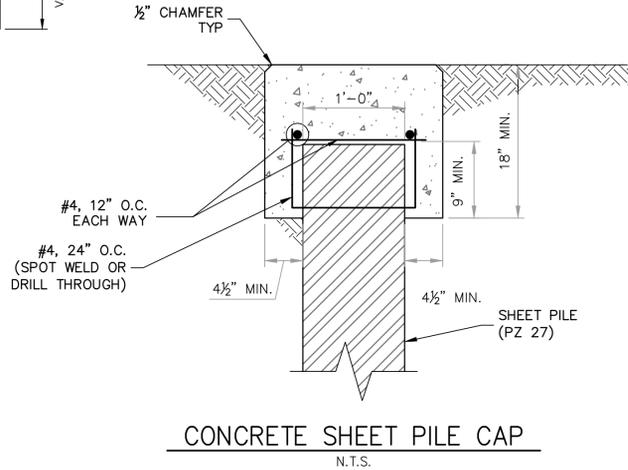
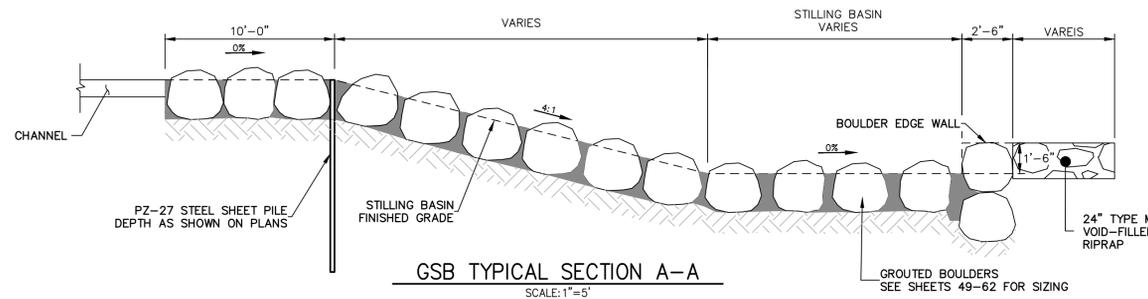
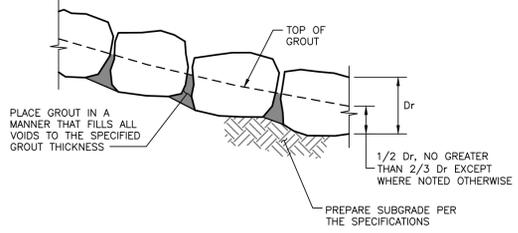
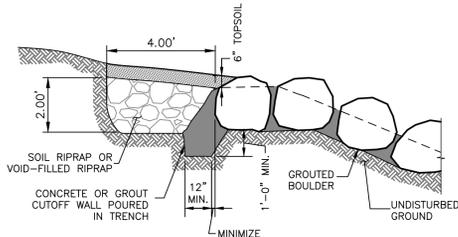
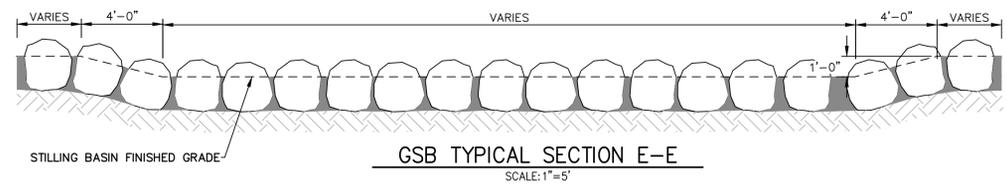
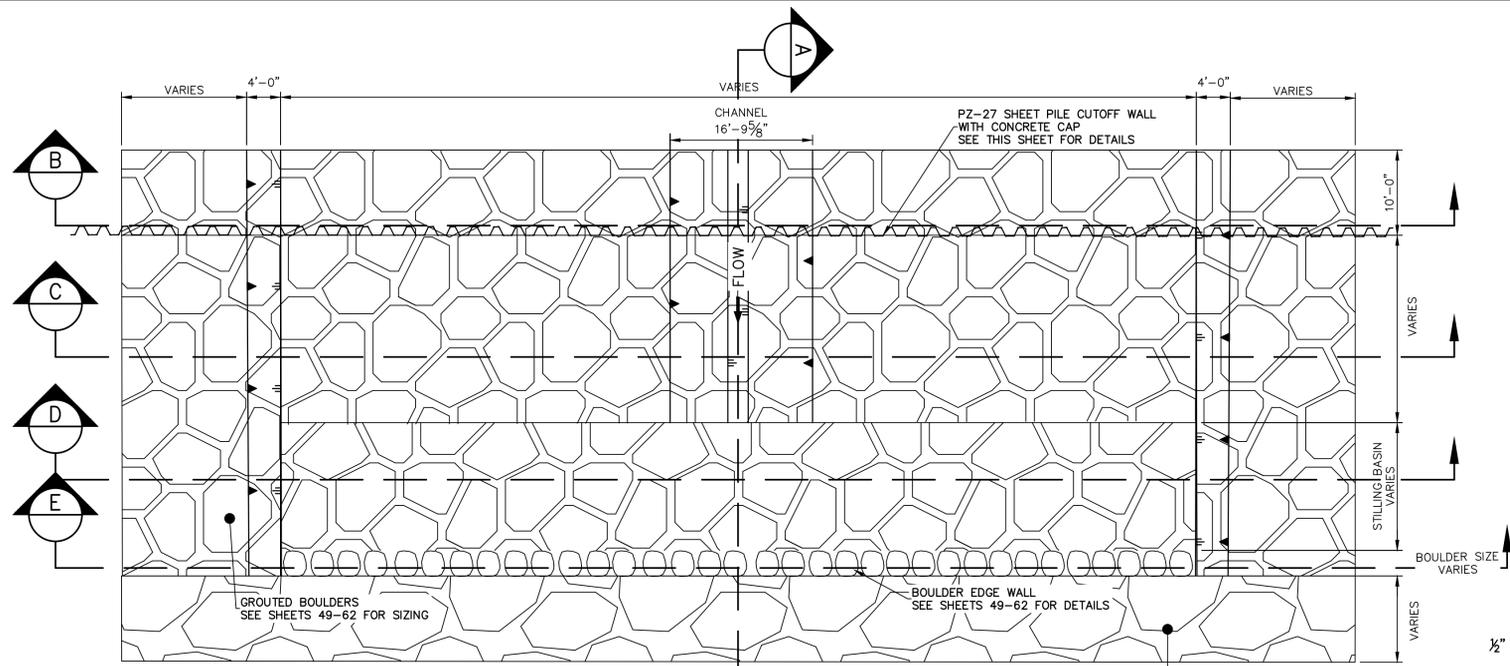
**811**  
Know what's below.  
Call before you dig.

**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMLEY  
COLORADO P.E. 30112  
FOR AND ON BEHALF OF J.R. ENGINEERING, L.L.C.

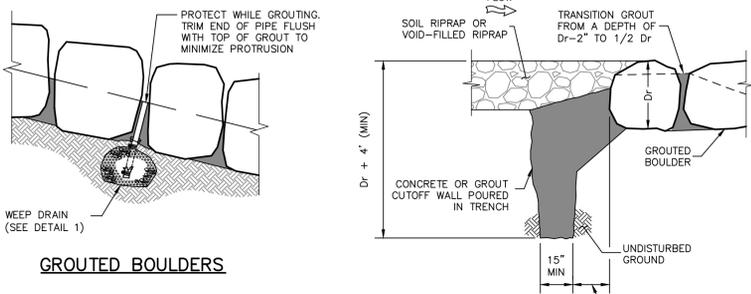
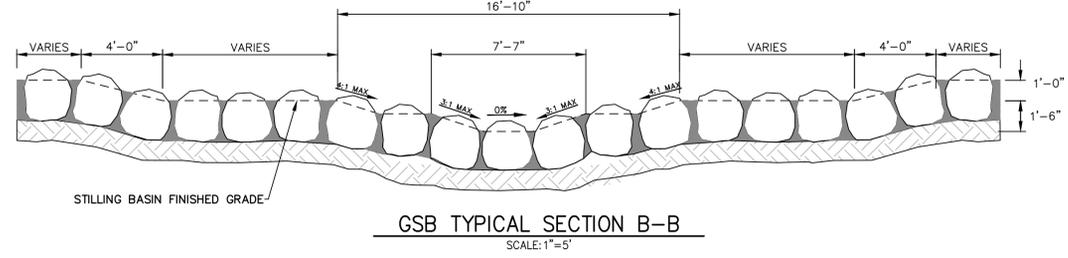
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.	PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	<b>J.R. ENGINEERING</b> A Westman Company Central 303-740-9888 • Colorado Springs 719-588-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE				
			No.	REVISION				
H-SCALE	1/4" = 1"	DESIGNED BY	DJV	CHECKED BY				
V-SCALE	N/A	DRAWN BY	NEO					
DATE	9/1/22							
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SAND CREEK RESTORATION	POND PLANS							
SHEET 45 OF 99	JOB NO. 25188.04							



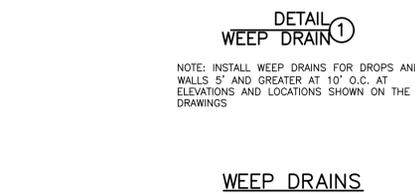
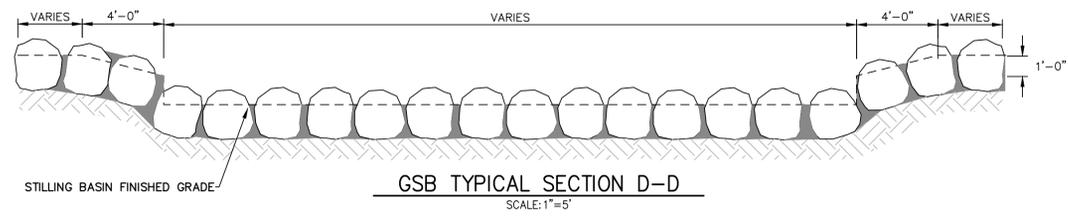
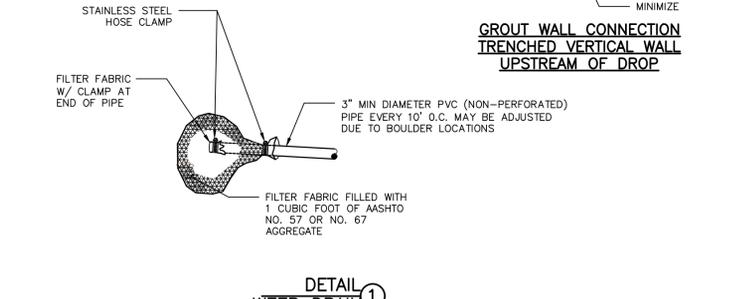
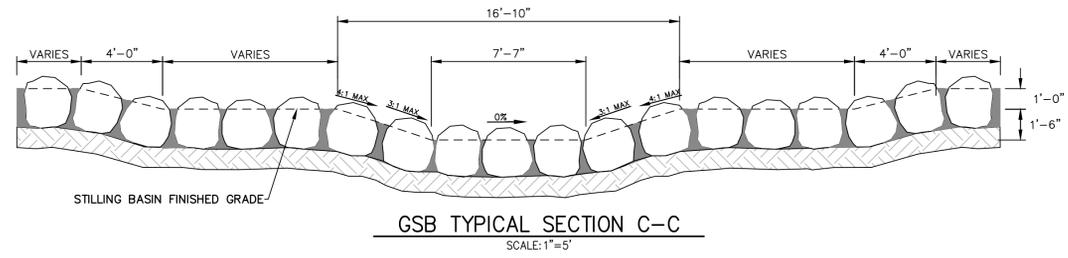




- BOULDER PLACEMENT NOTES:**
1. PLACE BOULDERS WITH THE REQUIRED BOULDER HEIGHT VERTICAL. PLACE BOULDERS AS TIGHTLY TOGETHER AS POSSIBLE (WITHOUT TOUCHING) WHILE PROVIDING ENOUGH ROOM BETWEEN THEM TO THOROUGHLY VIBRATE THE GROUT AND TO ENSURE NO GAPS IN THE GROUT. THE SMALL DIMENSION OF A 244 CAN BE USED AS A GUIDE TO CHECK MINIMUM SPACING.
  2. BEFORE GROUTING, CLEAN ALL DIRT AND MATERIAL FROM ROCK THAT COULD PREVENT THE GROUT FROM BINDING TO THE ROCK. KEEP BOULDERS FROM TOUCHING. AVOID SLIDING BOULDERS AGAINST SUBGRADE TO PROPERLY POSITION.
- MATERIAL SPECIFICATIONS:**
1. ALL GROUT SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH EQUAL TO 3200 PSI.
  2. ONE CUBIC YARD OF GROUT SHALL HAVE A MINIMUM OF SIX (6) SACKS OF TYPE II PORTLAND CEMENT.
  3. A MAXIMUM OF 25% TYPE F FLY ASH MAY BE SUBSTITUTED FOR THE PORTLAND CEMENT.
  4. THE AGGREGATE SHALL BE COMPRISED OF 70% NATURAL SAND (FINES) AND 30% 3/4-INCH ROCK (COARSE).
  5. THE GROUT SLUMP SHALL BE BETWEEN 4-INCHES TO 6-INCHES.
  6. AIR ENTRAINMENT SHALL BE BETWEEN 5.5% AND 7.5%.
  7. TO CONTROL SHRINKAGE AND CRACKING, 1.5 POUNDS OF FIBERMESH, OR EQUIVALENT, SHALL BE USED PER CUBIC YARD OF GROUT.
  8. COLOR ADDITIVE IN REQUIRED AMOUNTS SHALL BE USED WHEN SO SPECIFIED BY CONTRACT.
- GROUT PLACEMENT SPECIFICATIONS:**
1. SPECIAL PROCEDURES SHALL BE REQUIRED FOR GROUT PLACEMENT WHEN THE AIR TEMPERATURES ARE LESS THAN 40°F OR GREATER THAN 90°F. CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FROM THE DESIGN ENGINEER OF THE PROCEDURES TO BE USED FOR PROTECTING THE GROUT.
  2. GROUT SHALL BE DELIVERED BY MEANS OF A LOW PRESSURE (LESS THAN 10 PSI) GROUT PUMP USING A 2-INCH DIAMETER (MAXIMUM) NOZZLE.
  3. FULL DEPTH PENETRATION OF THE GROUT INTO THE BOULDER VOIDS SHALL BE ACHIEVED BY INJECTING GROUT STARTING WITH THE NOZZLE NEAR THE BOTTOM AND RAISING IT AS THE GROUT FILLS, WHILE VIBRATING GROUT INTO PLACE USING A PENCIL VIBRATOR.
  4. ALL GROUT BETWEEN BOULDERS SHALL BE TREATED WITH A BROOM FINISH.
  5. AFTER GROUT PLACEMENT, EXPOSED BOULDER FACES SHALL BE CLEANED AND FREE OF GROUT.
  6. ALL FINISHED GROUT SURFACES SHALL BE SPRAYED WITH A CLEAR LIQUID MEMBRANE CURING COMPOUND AS SPECIFIED IN ASTM C309.



- GROUTED BOULDER NOTES:**
1. BOULDERS USED FOR GROUTING SHOULD MEET ALL THE PROPERTIES OF ROCK FOR ORDINARY RIPRAP, AND ROCK OF UNIFORM SIZE SHOULD BE USED.
  2. ROCK SHALL BE HARD, DURABLE, AND FREE FROM CRACKS, OVERBURDEN, SHALE, AND ORGANIC MATTER.
  3. GROUTED BOULDERS SHALL BE PLACED DIRECTLY ON STABILIZED, COMPACTED SUBGRADE WITHOUT GRANULAR BEDDING.
  4. THE TOP ONE-THIRD OF THE BOULDERS SHALL BE LEFT UNGROUTED AND EXPOSED.
  5. ROCK HAVING A MINIMUM SPECIFIC GRAVITY OF 2.65 IS PREFERRED; HOWEVER, IN NO CASE SHALL ROCK HAVE A SPECIFIC GRAVITY LESS THAN 2.50.
  6. WEEP HOLES SHALL BE PROVIDED AT THE CHANNEL SLOPES AND CHANNEL DROPS AS SHOWN TO REDUCE UPLIFT FORCES ON THE GROUTED CHANNEL LINING.
  7. PLACEMENT AND GROUTING OF BOULDERS SHALL GENERALLY CONFORM TO THE SPECIFICATIONS AND DETAILS FOR GROUTED BOULDER DROPS. SEE DETAILS AND NOTES FOR GROUTED BOULDER DROPS ON THIS SHEET.
  8. BOULDERS SHALL BE SET IN A STEPPED MANNER. BOULDERS SHALL NOT BE ORIENTED INTO A SMOOTH SLOPING FACE.
  9. BOULDERS SHALL BE GROUTED TO 3/8 THE ROCK HEIGHT.
  10. BOULDERS OF DIFFERENT SOURCES AND/OR COLORS SHALL BE MIXED WITH THE OTHER ROCK AND EVENLY DISPERSED THROUGHOUT THE PROJECT TO AVOID HAVING AREAS OF NON-UNIFORMITY.
  11. THE BOULDER SIZES SHOWN ON THE PLANS ARE MINIMUM DIMENSIONS. LARGER ROCK MAY BE SUBSTITUTED AS LONG AS THE TOP OF BOULDER ELEVATIONS SHOWN ON THE PLANS ARE MET AND THE MINIMUM OVER-EXCAVATION REQUIREMENTS ARE MET AT EACH BOULDER LOCATION.



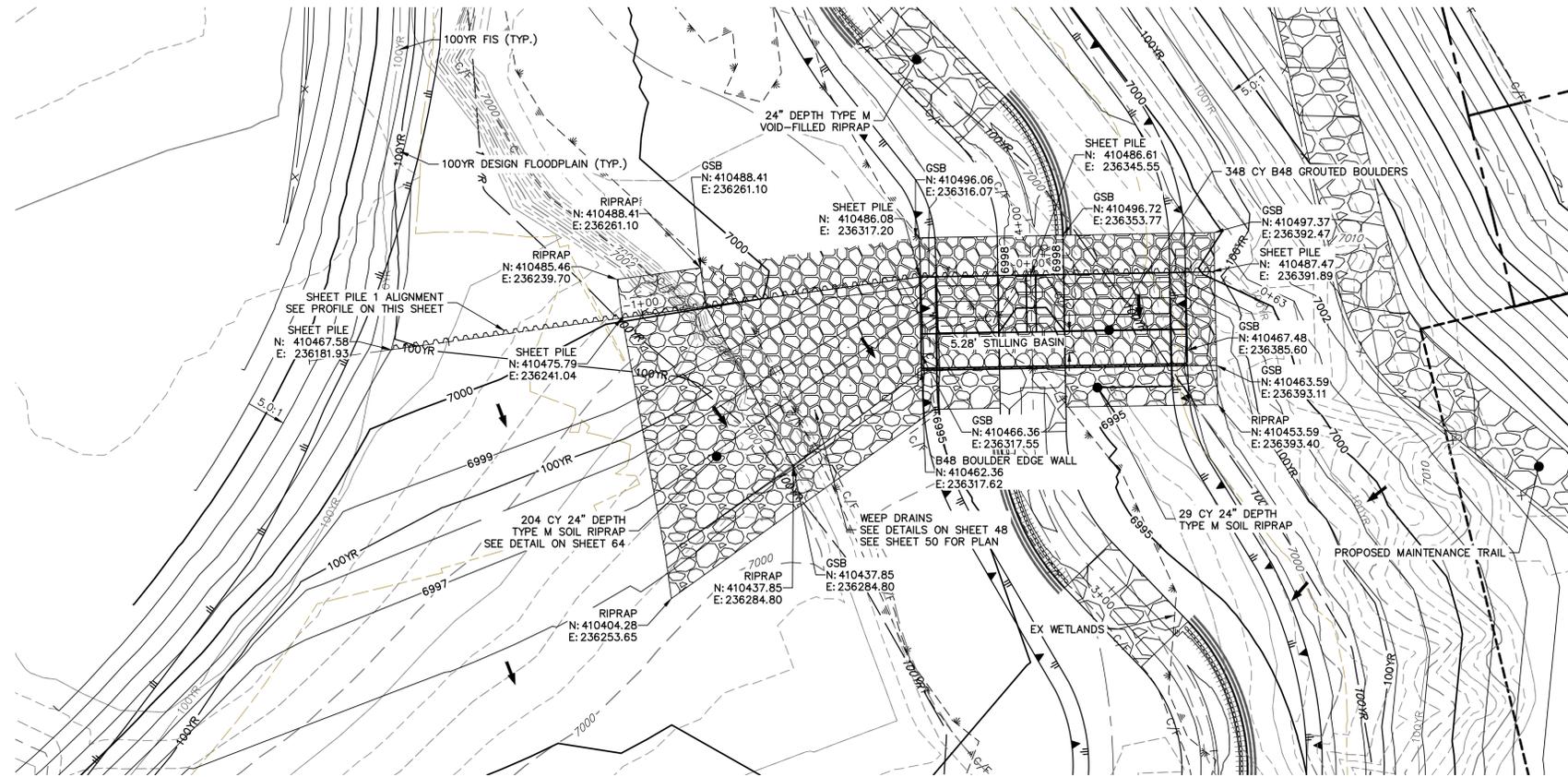
**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION

**PRELIMINARY NOT FOR CONSTRUCTION**

MIKE A. BRAMLEY  
COLORADO P.E. 30100  
FOR AND ON BEHALF OF JR ENGINEERING

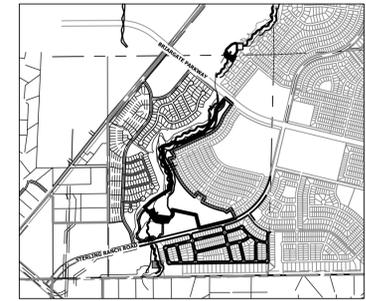
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	20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	
J.R. ENGINEERING A Westman Company	BY	DATE
	AS SHOWN	REVISION
SAND CREEK RESTORATION	H-SCALE	V-SCALE
	DATE	DESIGNED BY
GSB DETAILS	DRAWN BY	CHECKED BY
	DESIGNED BY	DATE
SHEET 48	OF 99	
JOB NO.	25188.04	





GRouted STEPPED BOULDER DROP #1 DETAIL  
PLAN VIEW

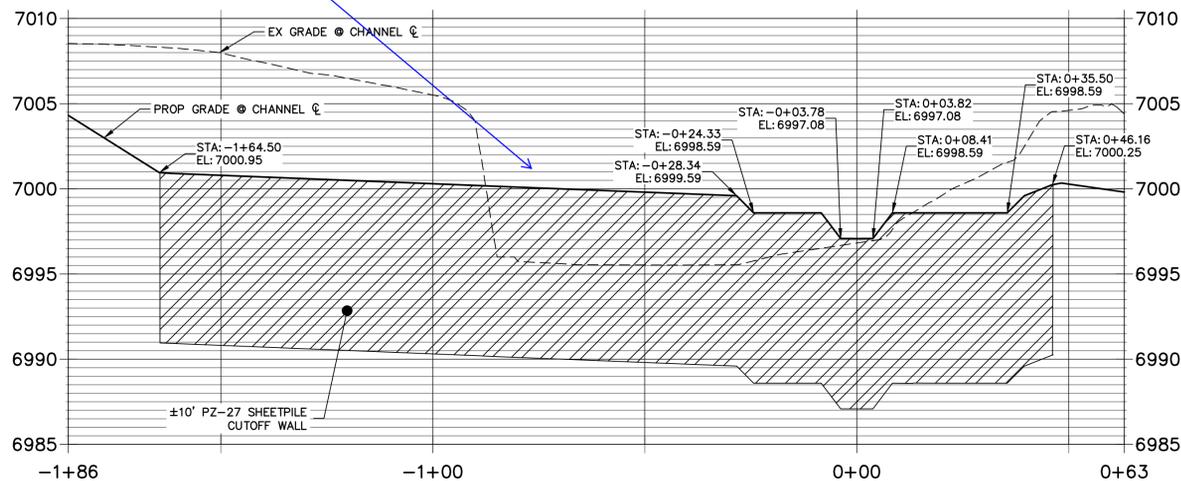
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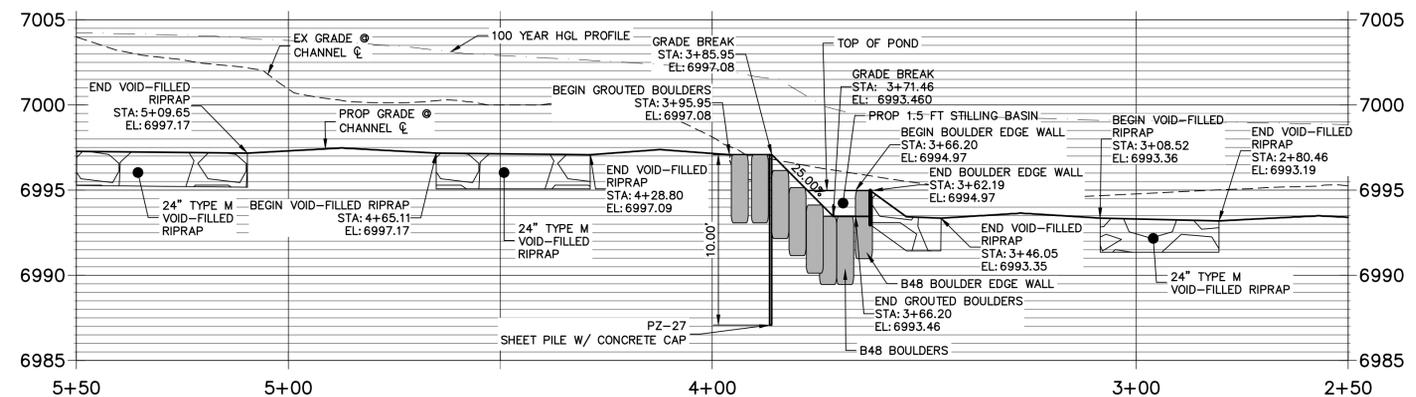
KEY MAP  
SCALE: 1"=2000'

Please show  
100-year WS on all  
8 cross-sections

SHEET PILE 1 PROFILE  
STA -1+85.99 TO 0+63.12

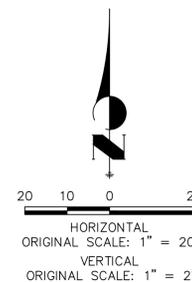


GSB DETAIL 1  
STA 2+50.00 TO 5+50.00



**NOTE**

1. SEE TYPICAL GSB DETAILS ON SHEET 48
2. DRIVE SHEET PILE THROUGH BEDROCK OR MINIMUM OF 6 FEET.
3. SHEET PILE ELEVATIONS ARE AT TOP OF CONCRETE CAP.



**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY  
NOT FOR  
CONSTRUCTION

MIKE A. BRAMBLE  
COLORADO P.E. 30000  
FOR AND ON BEHALF OF JR ENGINEERING

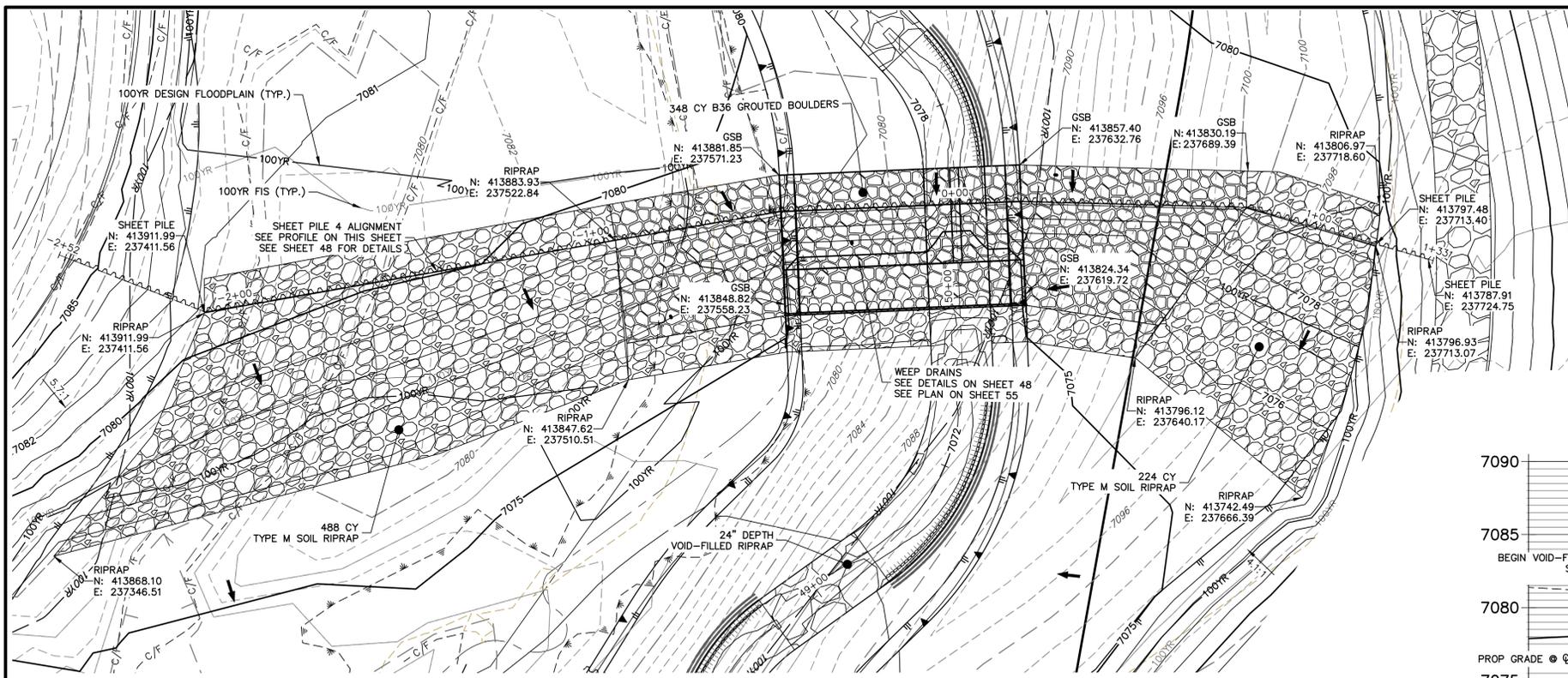
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		No.	REVISION									
SAND CREEK RESTORATION  GSB DETAILS	H-SCALE	1"=20'	V-SCALE	1"=4'	DATE	9/1/22	DESIGNED BY	DV	DRAWN BY	NEO	CHECKED BY	
	SHEET 49 OF 99											
	JOB NO. 25188.04											
	SAND CREEK RESTORATION											





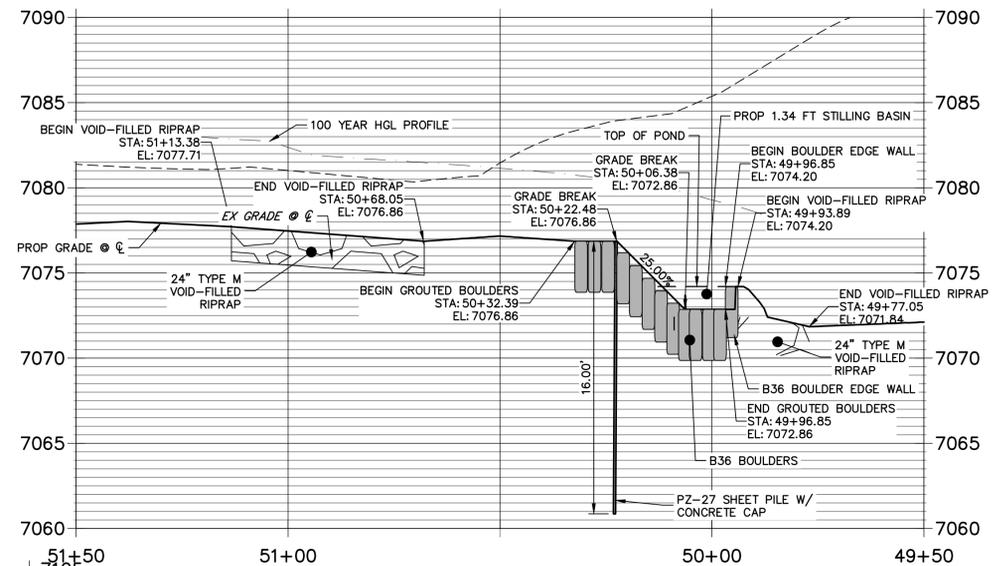




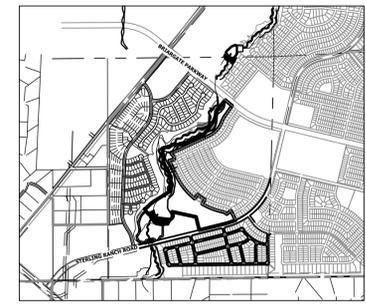
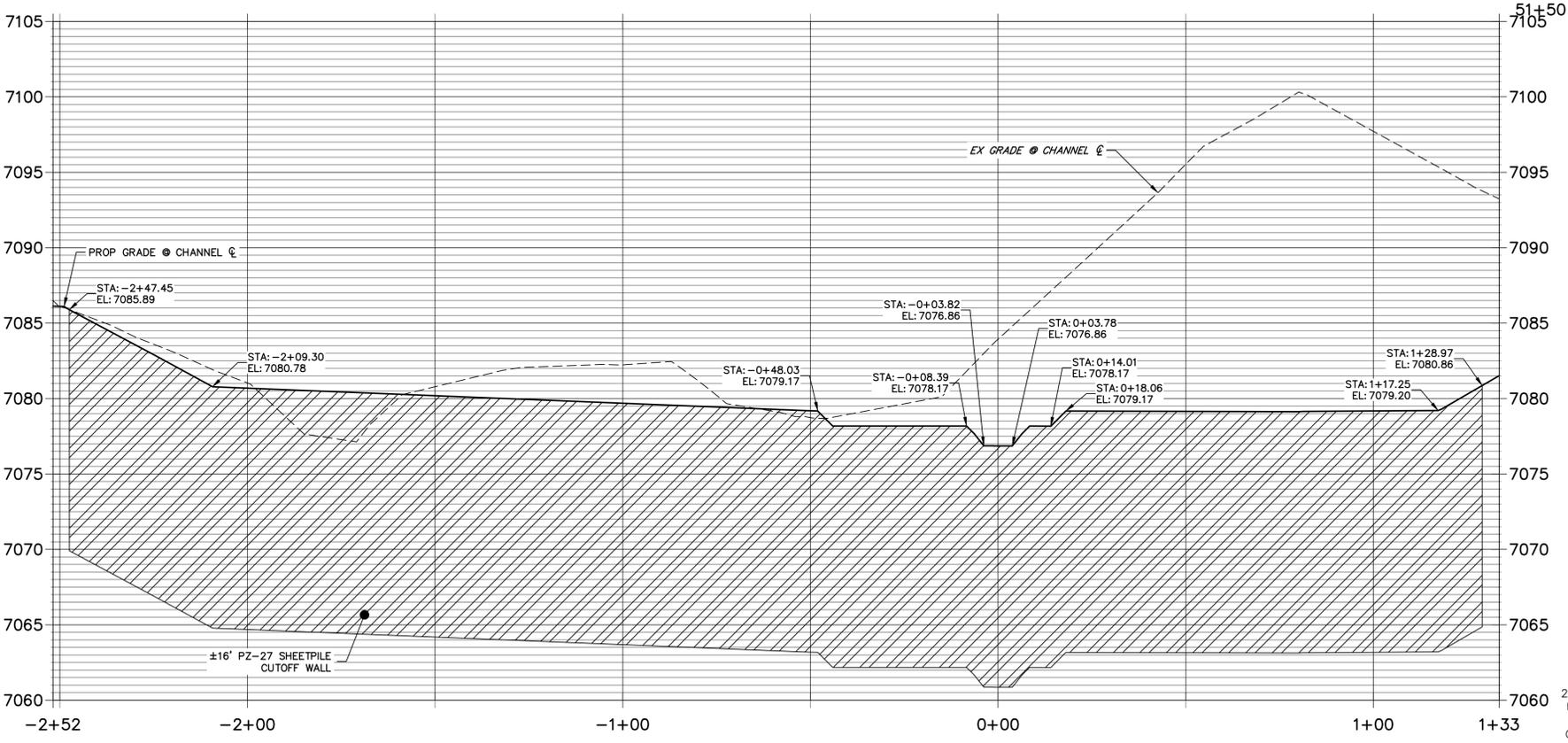


**GRouted STEPPED BOULDER DROP #4 DETAIL  
PLAN VIEW**  
SCALE: 1"=20'

**GSB PROFILE 4  
STA 49+50.00 TO 51+50.00**



**SHEET PILE 4 PROFILE  
STA -2+51.83 TO 1+33.48**



**KEY MAP**  
SCALE: 1"=2000'

UNLESS SHOWN OTHERWISE, ALL DIMENSIONS ARE IN FEET AND INCHES. THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING AGENCIES, OR ENGINEERS DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

**J.R. ENGINEERING**  
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BY	DATE	No.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=20'	1"=2'	9/14/22	DV	NEO	



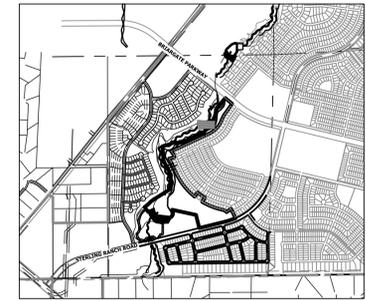
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**ENGINEER'S STATEMENT**

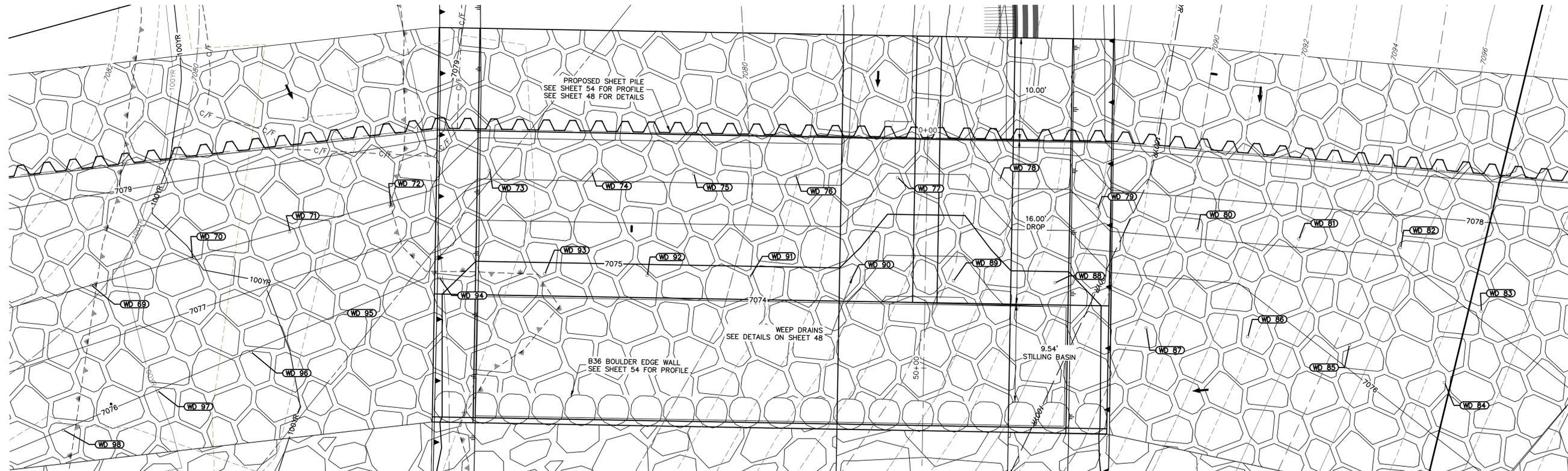
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COLORADO P.E. # 100000000  
FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

SAND CREEK RESTORATION  
GSB DETAILS



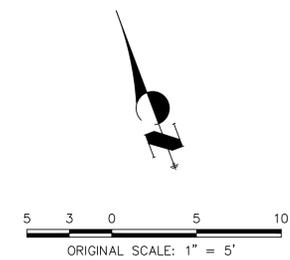
KEY MAP  
SCALE: 1"=2000'



GSB04 WEEP DRAINS PLAN VIEW  
SCALE: 1"=5'

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 69	WEEP DRAIN	N: 413870.35 E: 237530.45	7078.00
WD 70	WEEP DRAIN	N: 413869.31 E: 237540.62	7077.99
WD 71	WEEP DRAIN	N: 413868.36 E: 237550.49	7077.98
WD 72	WEEP DRAIN	N: 413867.36 E: 237560.66	7077.97
WD 73	WEEP DRAIN	N: 413867.07 E: 237570.93	7077.21
WD 74	WEEP DRAIN	N: 413863.38 E: 237580.22	7077.21
WD 75	WEEP DRAIN	N: 413859.69 E: 237589.52	7077.21
WD 76	WEEP DRAIN	N: 413856.00 E: 237598.81	7077.21
WD 77	WEEP DRAIN	N: 413852.31 E: 237608.11	7075.90
WD 78	WEEP DRAIN	N: 413848.62 E: 237617.40	7076.90
WD 79	WEEP DRAIN	N: 413842.57 E: 237625.37	7077.22
WD 80	WEEP DRAIN	N: 413837.16 E: 237633.78	7077.21
WD 81	WEEP DRAIN	N: 413832.85 E: 237642.80	7077.21
WD 82	WEEP DRAIN	N: 413828.54 E: 237651.82	7077.21
WD 83	WEEP DRAIN	N: 413819.94 E: 237657.03	7077.06

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 84	WEEP DRAIN	N: 413814.67 E: 237651.21	7076.40
WD 85	WEEP DRAIN	N: 413821.35 E: 237643.80	7076.16
WD 86	WEEP DRAIN	N: 413825.68 E: 237634.75	7075.70
WD 87	WEEP DRAIN	N: 413829.99 E: 237625.73	7075.27
WD 88	WEEP DRAIN	N: 413837.25 E: 237618.94	7074.73
WD 89	WEEP DRAIN	N: 413840.95 E: 237609.69	7073.41
WD 90	WEEP DRAIN	N: 413844.72 E: 237600.45	7074.46
WD 91	WEEP DRAIN	N: 413848.33 E: 237591.12	7074.74
WD 92	WEEP DRAIN	N: 413852.02 E: 237581.76	7074.73
WD 93	WEEP DRAIN	N: 413855.72 E: 237572.44	7074.73
WD 94	WEEP DRAIN	N: 413858.95 E: 237562.64	7075.46
WD 95	WEEP DRAIN	N: 413859.02 E: 237552.78	7075.99
WD 96	WEEP DRAIN	N: 413858.71 E: 237542.82	7075.99
WD 97	WEEP DRAIN	N: 413858.39 E: 237532.91	7075.99
WD 98	WEEP DRAIN	N: 413858.08 E: 237522.91	7076.00



Know what's below.  
Call before you dig.

**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

MIKE A. BRAMLEY  
COLORADO P.E. 30100  
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

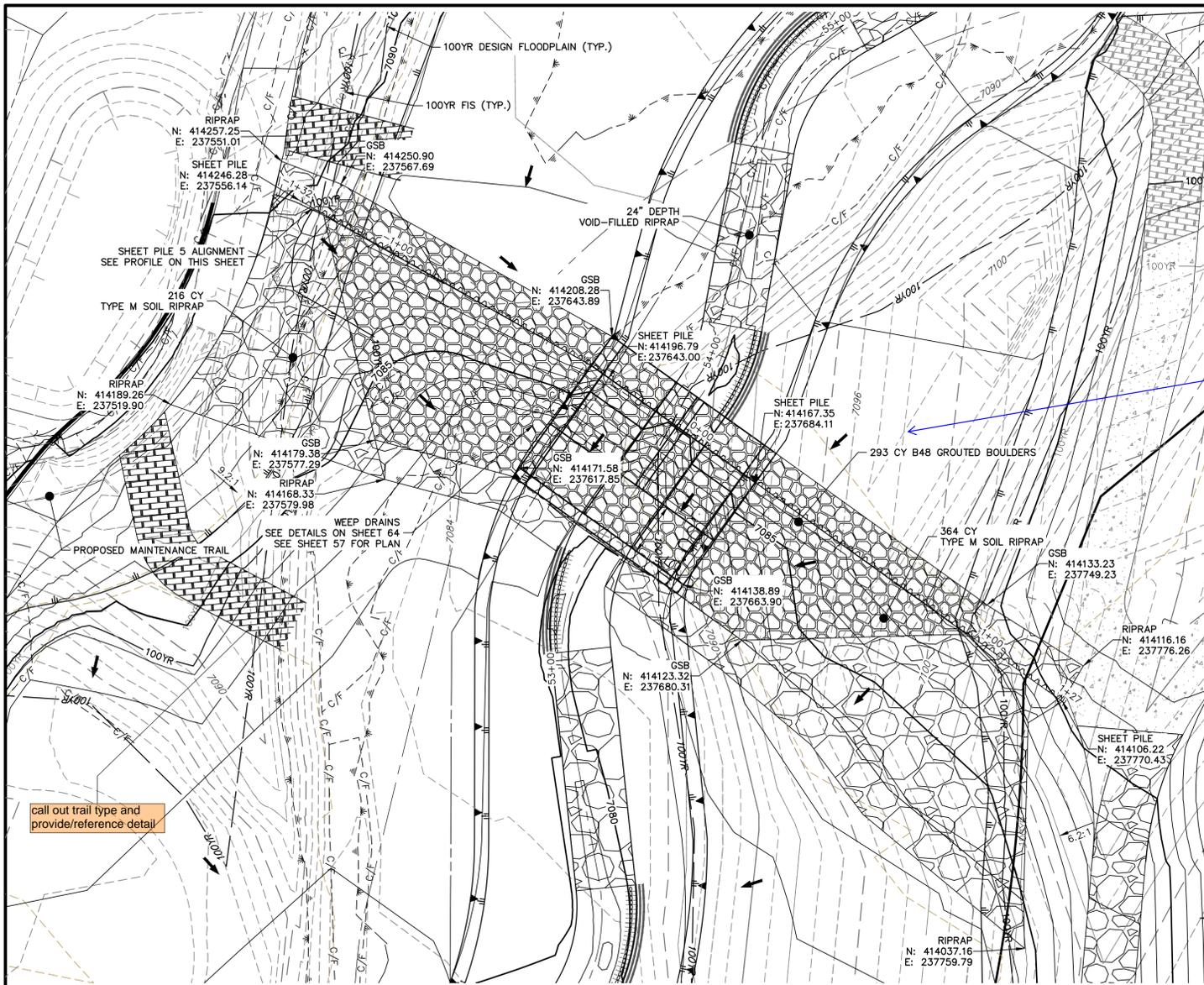
PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9383 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

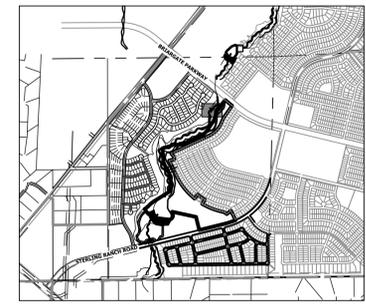
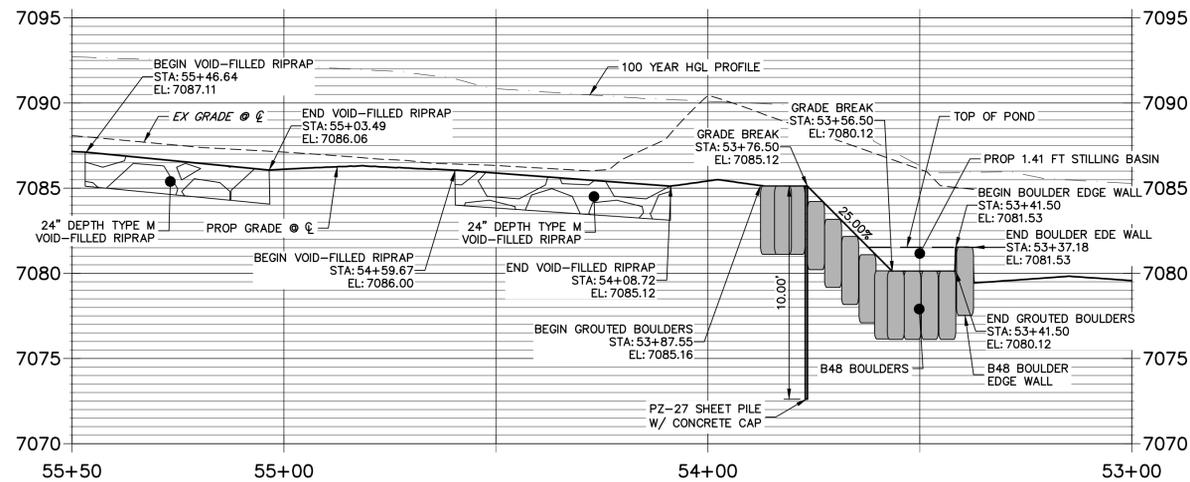
No.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=5'	N/A	9/1/22	DV	NEO	

**SAND CREEK RESTORATION**  
**GSB DETAILS**  
SHEET 55 OF 99  
JOB NO. 25188.04

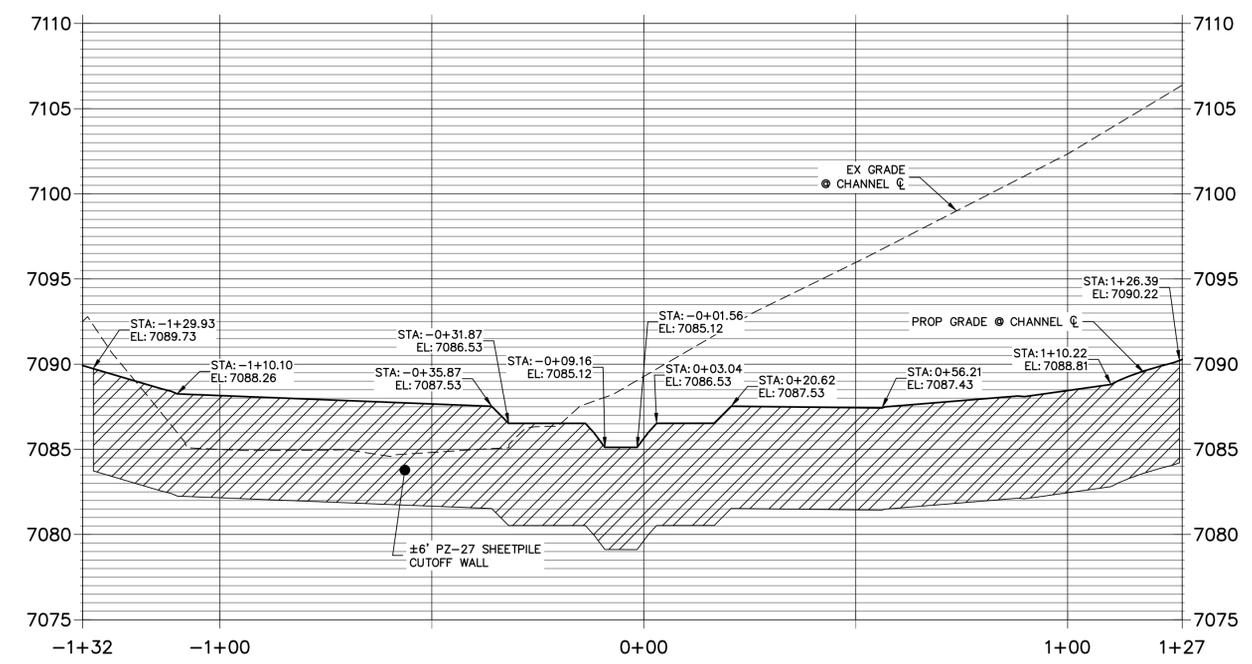


GRouted STEPPED BOULDER DROP #5 DETAIL  
PLAN VIEW  
STA 53+00.00 TO 55+50.00



KEY MAP  
SCALE: 1"=2000'

SHEET PILE 5 PROFILE  
STA -1+32.40 TO 1+27.04



Something is wrong with contours

call out trail type and provide/reference detail

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.

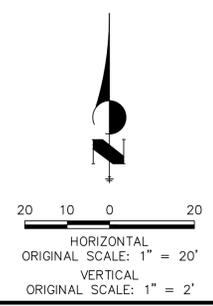
PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

**J.R. ENGINEERING**  
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Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

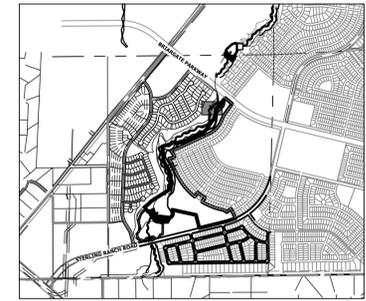
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
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SAND CREEK RESTORATION  
GSB DETAILS  
SHEET 56 OF 99  
JOB NO. 25188.04

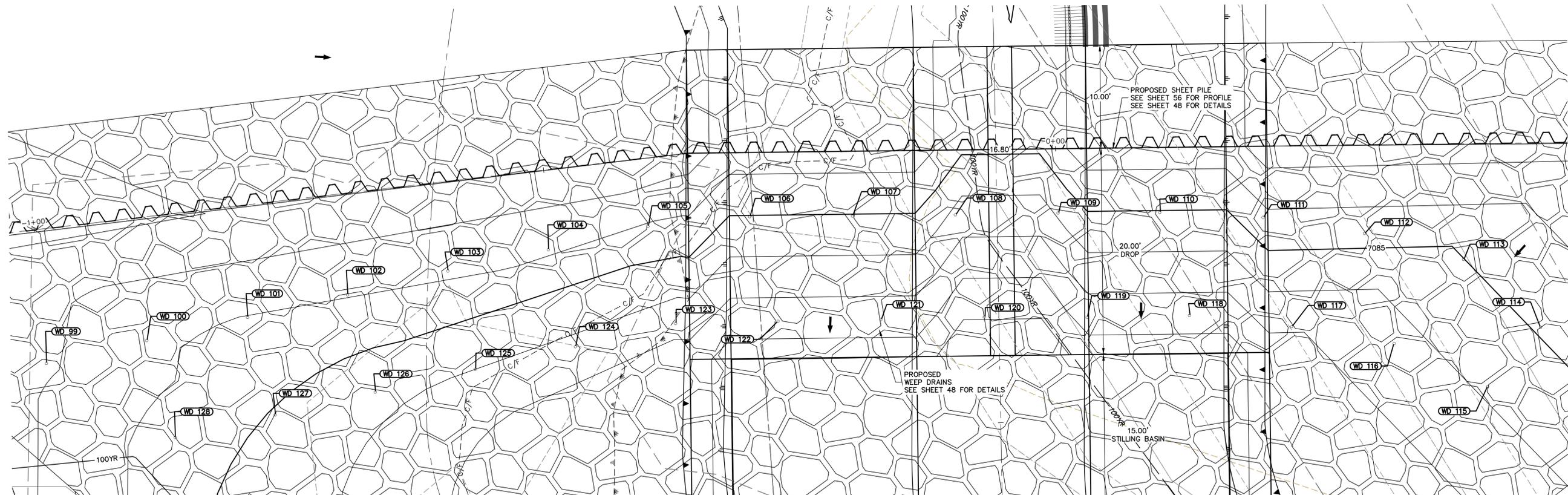


**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMLEY  
COLORADO P.E. 33880  
FOR AND ON BEHALF OF JR ENGINEERING





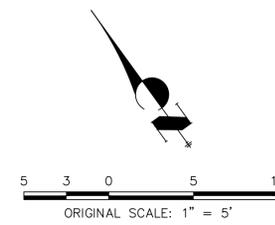
KEY MAP  
SCALE: 1"=2000'



GSB05 WEEP DRAINS PLAN VIEW  
SCALE: 1"=5'

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 99	WEEP DRAIN	N: 414220.44 E: 237575.56	7087.12
WD 100	WEEP DRAIN	N: 414216.47 E: 237584.78	7086.30
WD 101	WEEP DRAIN	N: 414212.50 E: 237594.05	7085.97
WD 102	WEEP DRAIN	N: 414208.53 E: 237603.22	7086.05
WD 103	WEEP DRAIN	N: 414204.64 E: 237612.48	7086.16
WD 104	WEEP DRAIN	N: 414200.55 E: 237621.61	7086.17
WD 105	WEEP DRAIN	N: 414196.66 E: 237630.80	7085.91
WD 106	WEEP DRAIN	N: 414191.58 E: 237639.36	7084.97
WD 107	WEEP DRAIN	N: 414185.74 E: 237647.51	7084.96
WD 108	WEEP DRAIN	N: 414179.92 E: 237655.69	7083.76
WD 109	WEEP DRAIN	N: 414174.17 E: 237663.88	7084.13
WD 110	WEEP DRAIN	N: 414168.38 E: 237671.94	7084.95
WD 111	WEEP DRAIN	N: 414162.06 E: 237679.80	7085.69
WD 112	WEEP DRAIN	N: 414154.99 E: 237686.87	7085.36
WD 113	WEEP DRAIN	N: 414147.26 E: 237693.19	7084.99

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 114	WEEP DRAIN	N: 414137.51 E: 237695.40	7085.09
WD 115	WEEP DRAIN	N: 414135.91 E: 237687.84	7084.14
WD 116	WEEP DRAIN	N: 414144.65 E: 237682.92	7083.69
WD 117	WEEP DRAIN	N: 414151.85 E: 237675.80	7083.14
WD 118	WEEP DRAIN	N: 414158.60 E: 237668.39	7082.45
WD 119	WEEP DRAIN	N: 414164.33 E: 237660.22	7082.39
WD 120	WEEP DRAIN	N: 414170.24 E: 237652.14	7081.06
WD 121	WEEP DRAIN	N: 414175.98 E: 237643.84	7082.43
WD 122	WEEP DRAIN	N: 414181.75 E: 237635.63	7082.42
WD 123	WEEP DRAIN	N: 414187.46 E: 237627.42	7083.38
WD 124	WEEP DRAIN	N: 414191.39 E: 237618.21	7083.77
WD 125	WEEP DRAIN	N: 414195.37 E: 237609.03	7084.00
WD 126	WEEP DRAIN	N: 414198.32 E: 237599.84	7084.38
WD 127	WEEP DRAIN	N: 414203.27 E: 237590.66	7084.93
WD 128	WEEP DRAIN	N: 414207.23 E: 237581.48	7085.62



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMLEY  
COLORADO P.E. 30000  
FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

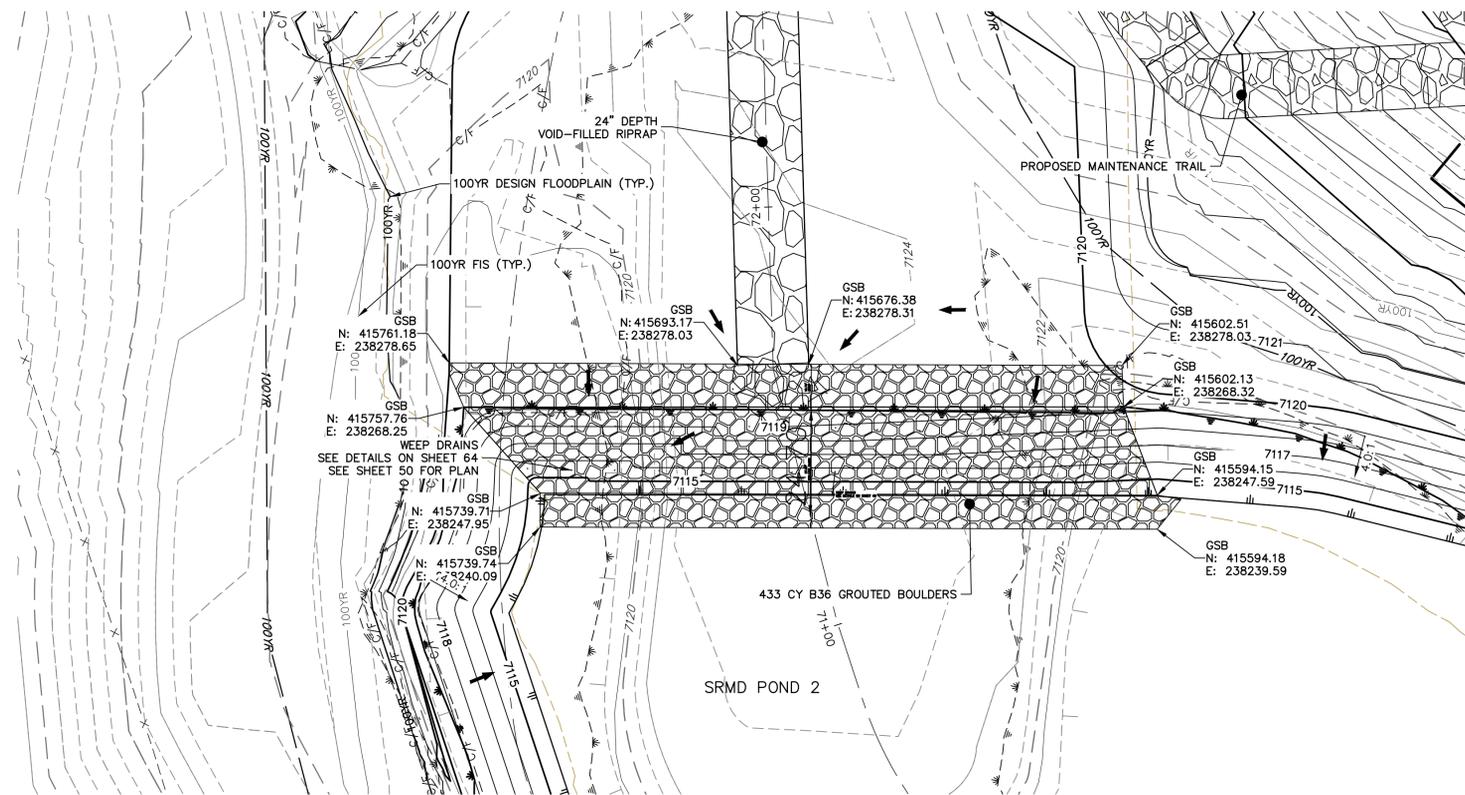
**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9383 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE	1"=5'		DESIGNED BY	DRAWN BY	CHECKED BY
				H-SCALE	V-SCALE			

SAND CREEK RESTORATION  
GSB DETAILS

SHEET 57 OF 99  
JOB NO. 25188.04

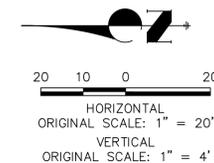
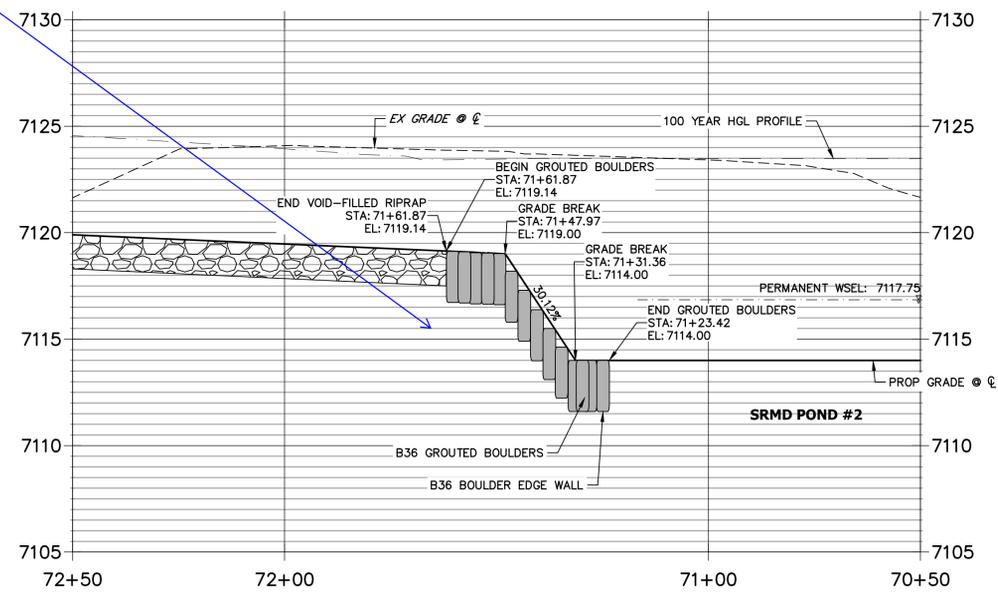
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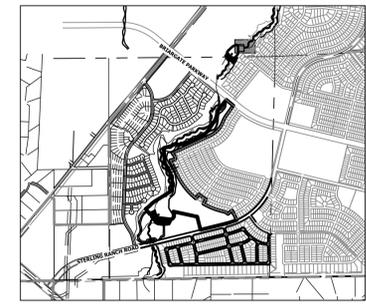
**GRouted STEPPED BOULDER DROP #6 DETAIL  
PLAN VIEW**  
SCALE: 1"=20'

Show sheet pile

**GSB PROFILE 6  
STA 70+50.00 TO 72+50.00**



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY  
NOT FOR  
CONSTRUCTION**  
MIKE A. BRAMLEY  
COLORADO P.E. 30000  
FOR AND ON BEHALF OF JR ENGINEERING



**KEY MAP**  
SCALE: 1"=2000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE AS SHOWN. REVISES DESIGNATED BY WRITTEN AUTHORIZATION.

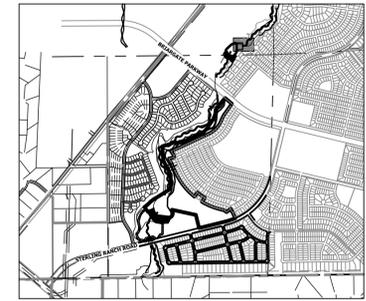
PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

**J.R. ENGINEERING**  
A Westman Company  
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Fort Collins 970-491-9888 • www.jrengineering.com

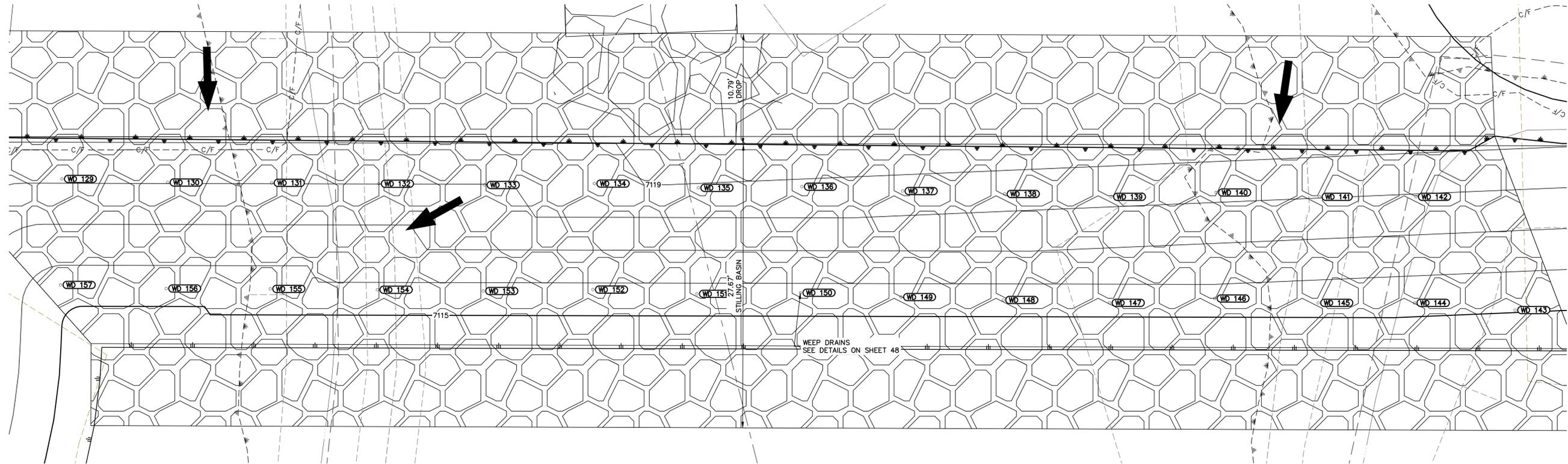
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	No.	REVISION	BY	DATE

**SAND CREEK RESTORATION**  
GSB DETAILS  
SHEET 58 OF 99  
JOB NO. 25188.04

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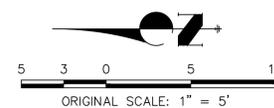
KEY MAP  
SCALE: 1"=2000'



GSB06 WEEP DRAINS PLAN VIEW  
SCALE: 1"=5'

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 129	WEEP DRAIN	N: 415742.56 E: 238264.15	7118.11
WD 130	WEEP DRAIN	N: 415732.20 E: 238263.80	7118.02
WD 131	WEEP DRAIN	N: 415722.01 E: 238263.76	7118.02
WD 132	WEEP DRAIN	N: 415711.50 E: 238263.67	7118.01
WD 133	WEEP DRAIN	N: 415701.13 E: 238263.56	7117.98
WD 134	WEEP DRAIN	N: 415690.38 E: 238263.69	7118.63
WD 135	WEEP DRAIN	N: 415680.18 E: 238263.27	7118.89
WD 136	WEEP DRAIN	N: 415670.03 E: 238263.39	7118.81
WD 137	WEEP DRAIN	N: 415660.17 E: 238262.96	7118.60
WD 138	WEEP DRAIN	N: 415650.16 E: 238262.68	7118.43
WD 139	WEEP DRAIN	N: 415639.73 E: 238262.40	7118.25
WD 140	WEEP DRAIN	N: 415629.44 E: 238262.82	7118.24
WD 141	WEEP DRAIN	N: 415619.29 E: 238262.40	7118.03
WD 142	WEEP DRAIN	N: 415609.85 E: 238262.40	7117.93
WD 143	WEEP DRAIN	N: 415600.12 E: 238251.35	7115.06

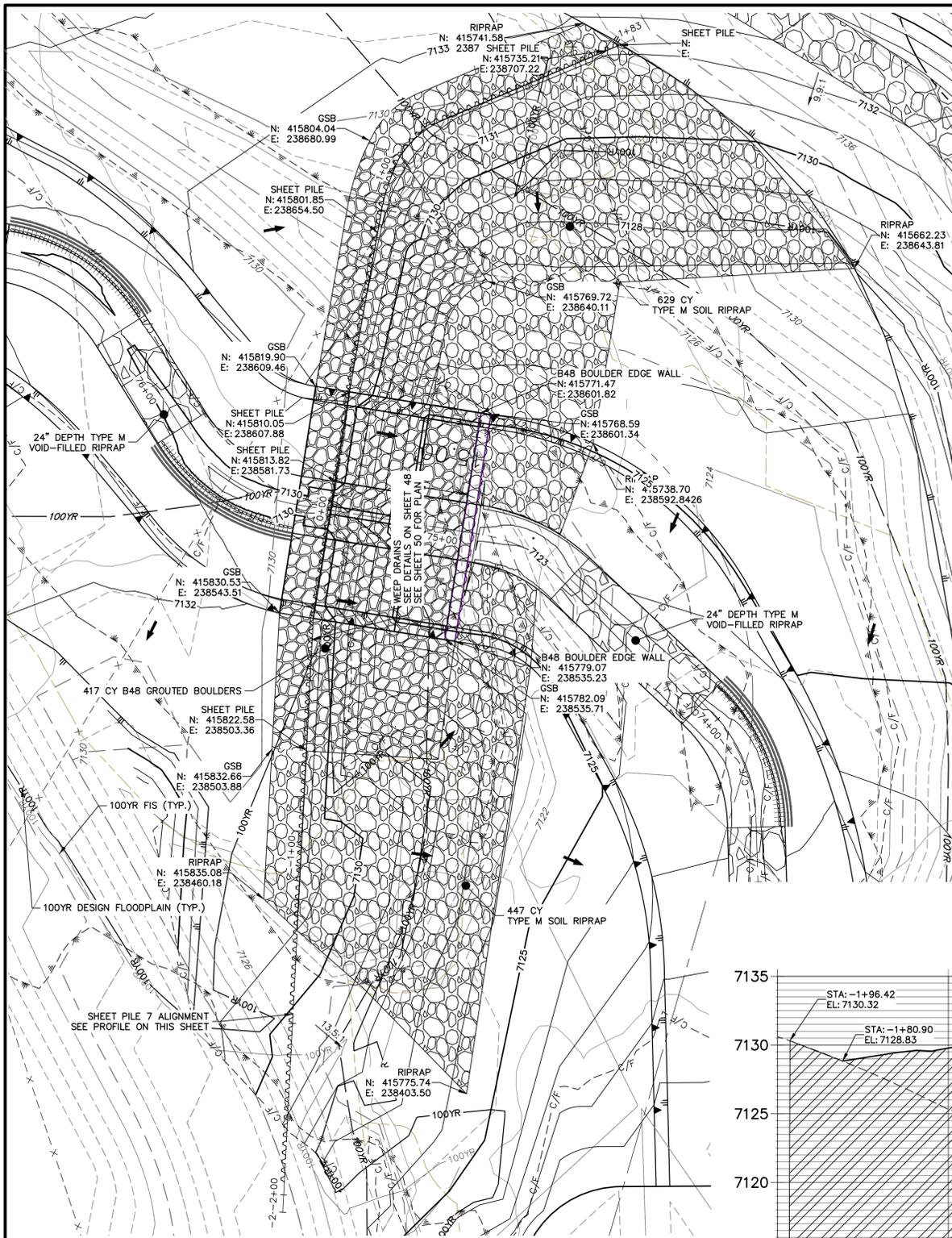
POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 144	WEEP DRAIN	N: 415609.99 E: 238252.06	7115.34
WD 145	WEEP DRAIN	N: 415619.43 E: 238252.06	7115.44
WD 146	WEEP DRAIN	N: 415629.58 E: 238252.48	7115.57
WD 147	WEEP DRAIN	N: 415639.87 E: 238252.06	7115.43
WD 148	WEEP DRAIN	N: 415650.30 E: 238252.34	7115.51
WD 149	WEEP DRAIN	N: 415660.31 E: 238252.62	7115.59
WD 150	WEEP DRAIN	N: 415670.17 E: 238253.05	7115.72
WD 151	WEEP DRAIN	N: 415680.32 E: 238252.93	7115.67
WD 152	WEEP DRAIN	N: 415690.52 E: 238253.35	7115.80
WD 153	WEEP DRAIN	N: 415701.27 E: 238253.21	7115.75
WD 154	WEEP DRAIN	N: 415711.64 E: 238253.33	7115.78
WD 155	WEEP DRAIN	N: 415722.15 E: 238253.42	7115.59
WD 156	WEEP DRAIN	N: 415732.34 E: 238253.45	7115.44
WD 157	WEEP DRAIN	N: 415742.70 E: 238253.81	7115.57



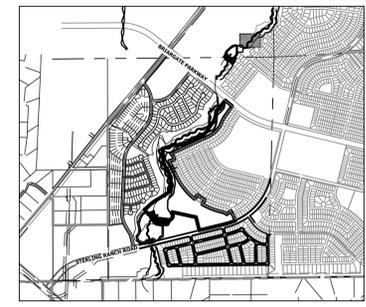
**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMLEY  
COLORADO P.E. 30000  
FOR AND ON BEHALF OF JR. ENGINEERING, INC.

PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.
SAND CREEK RESTORATION GSB DETAILS	SHEET 59 OF 99 JOB NO. 25188.04

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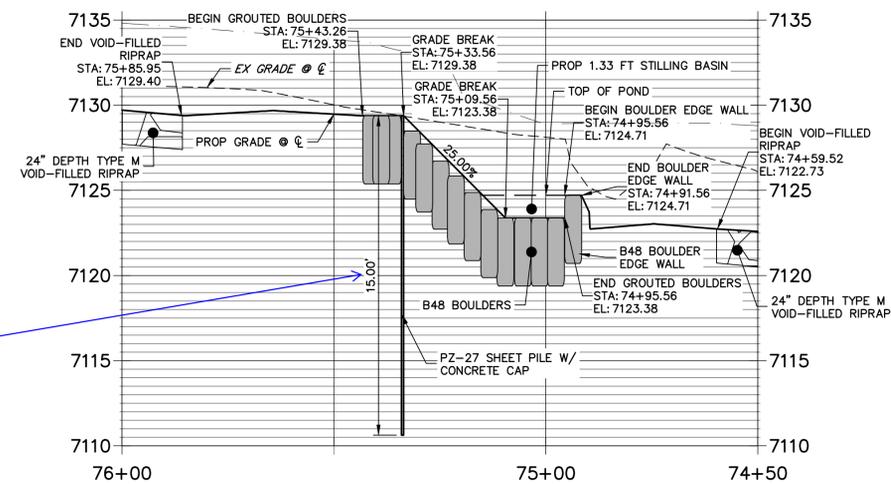


**GRouted STEPPED BOULDER DROP #7 DETAIL  
PLAN VIEW**  
HORIZONTAL SCALE: 1"=20'



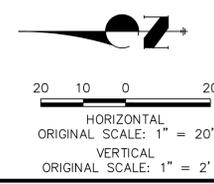
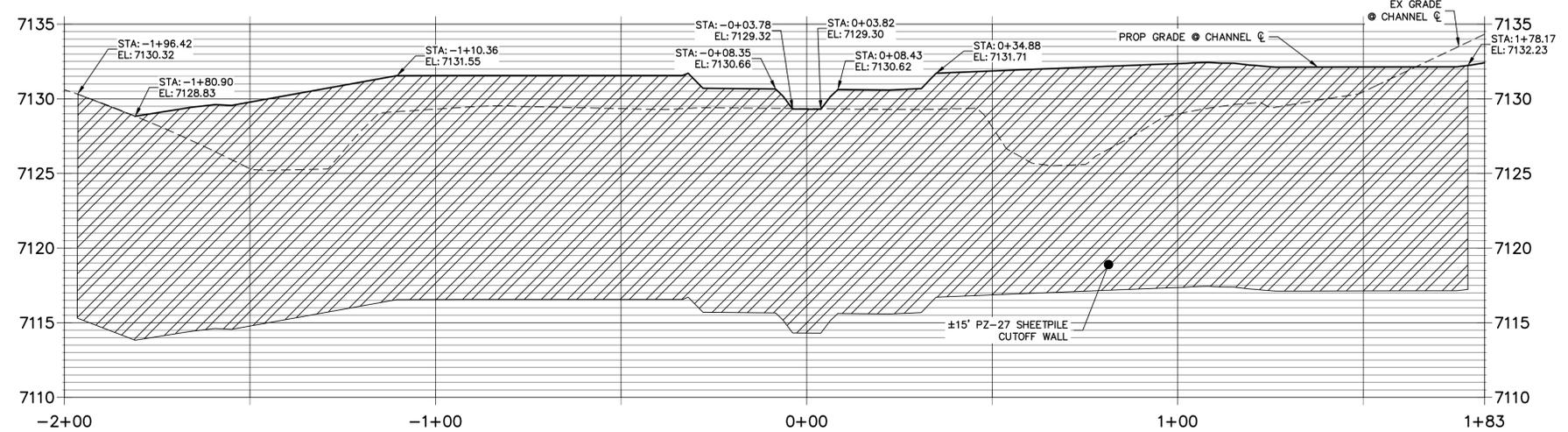
**KEY MAP**  
SCALE: 1"=2000'

**GSB PROFILE 7  
STA 74+50.00 TO 76+00.00**



Verify depth

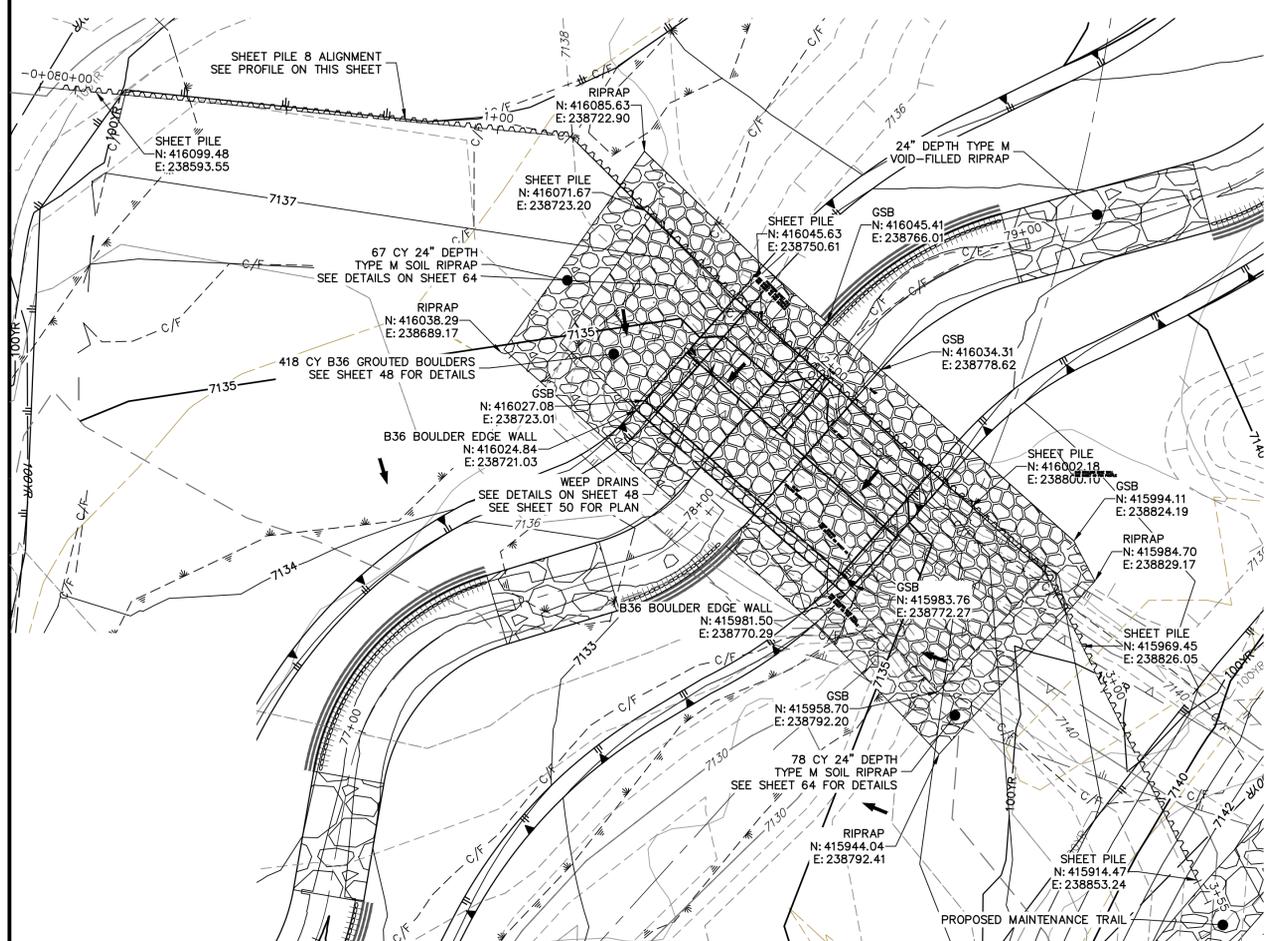
**SHEET PILE 7 PROFILE  
STA -2+00.00 TO 1+82.67**



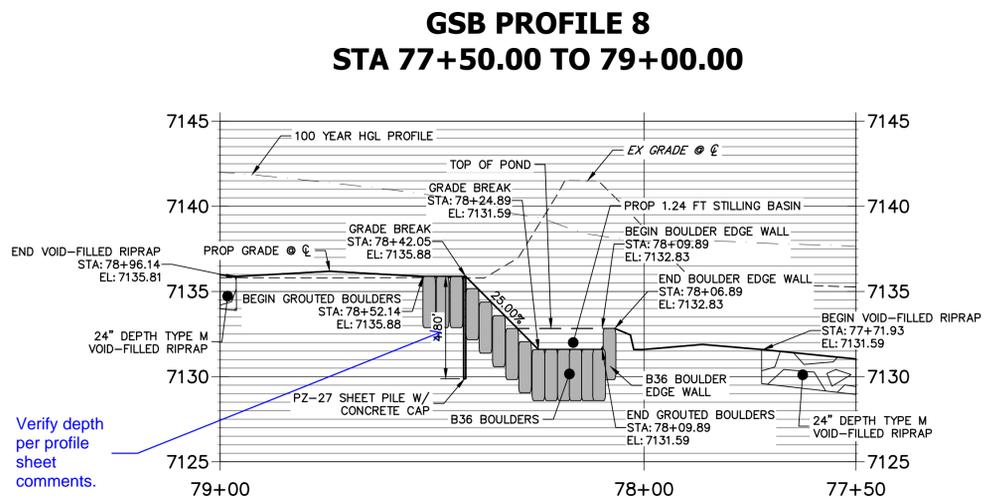
**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY  
NOT FOR  
CONSTRUCTION**  
MIKE A. BRAMLEY  
COLORADO P.E. 30000  
FOR AND ON BEHALF OF JR. ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR. ENGINEERING APPROVES THEIR USE AS DESIGNATED BY WRITTEN AUTHORIZATION.  PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	<b>J.R. ENGINEERING</b> A Westman Company  Centennial 300-740-9383 • Colorado Springs 719-583-2593 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE
		No.	REVISION
H-SCALE	1"=20'	DESIGNED BY	DJV
V-SCALE	1"=4'	DRAWN BY	NEO
DATE	9/1/22	CHECKED BY	
<b>SAND CREEK RESTORATION</b>		<b>GSB DETAILS</b>	
SHEET 60 OF 99		JOB NO. 25188.04	



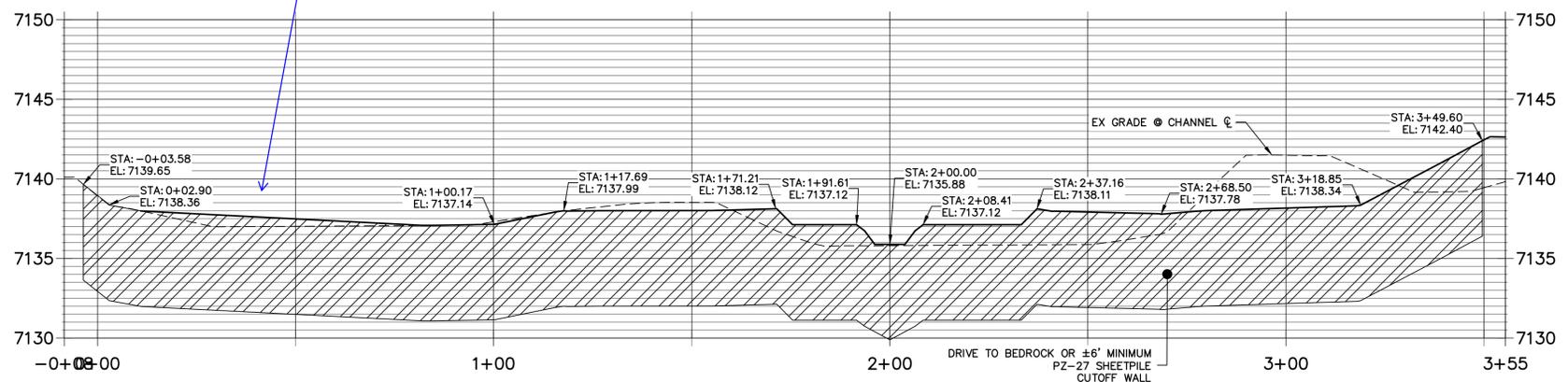


**GRouted STEPPED BOULDER DROP #8 DETAIL  
PLAN VIEW**  
HORIZONTAL SCALE: 1"=20'

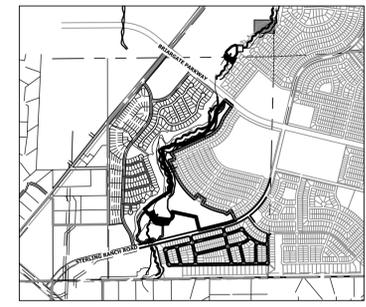


Verify depth per profile comments.

**SHEET PILE 8 PROFILE  
STA -0+08.44 TO 3+55.43**

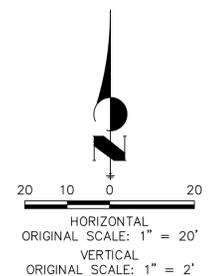


Please show 100-year WS on all 8 cross-sections



**KEY MAP**  
SCALE: 1"=2000'

- NOTE**
1. NO GRADING OR CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY
  2. DRIVE SHEET PILE THROUGH BEDROCK OR MINIMUM OF 6 FEET.



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMBLE  
COLORADO P.E. 30000  
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.  PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	<b>J.R. ENGINEERING</b> A Westman Company  Centennial 300-740-9383 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE
<b>SAND CREEK RESTORATION</b>  <b>GSB DETAILS</b>	SHEET 62 OF 99  JOB NO. 25188.04	No.	REVISION
		H-SCALE	1"=20'
		V-SCALE	1"=4'
		DATE	9/1/22
DESIGNED BY	DJV	DRAWN BY	NEO
CHECKED BY			

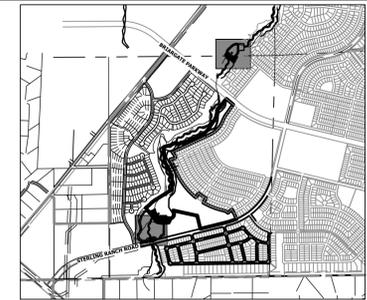
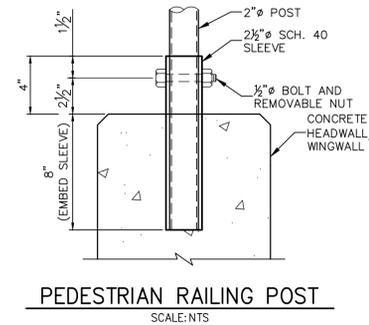
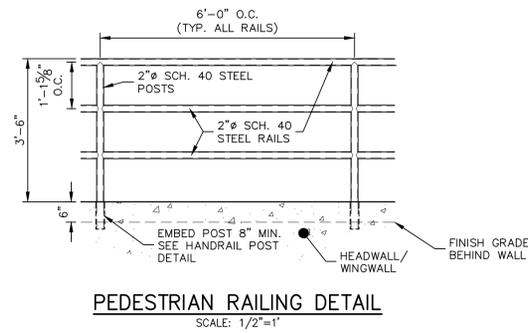
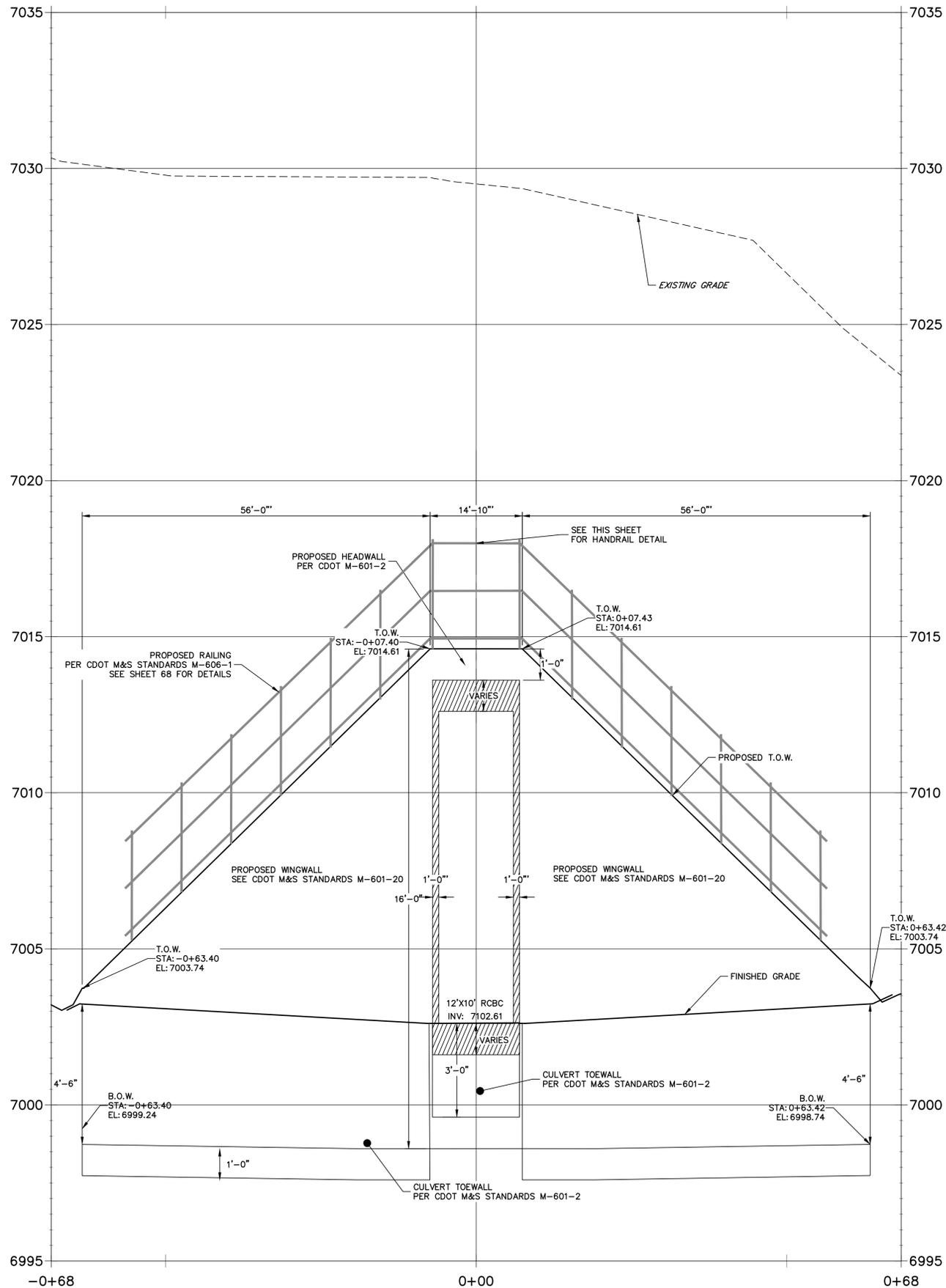




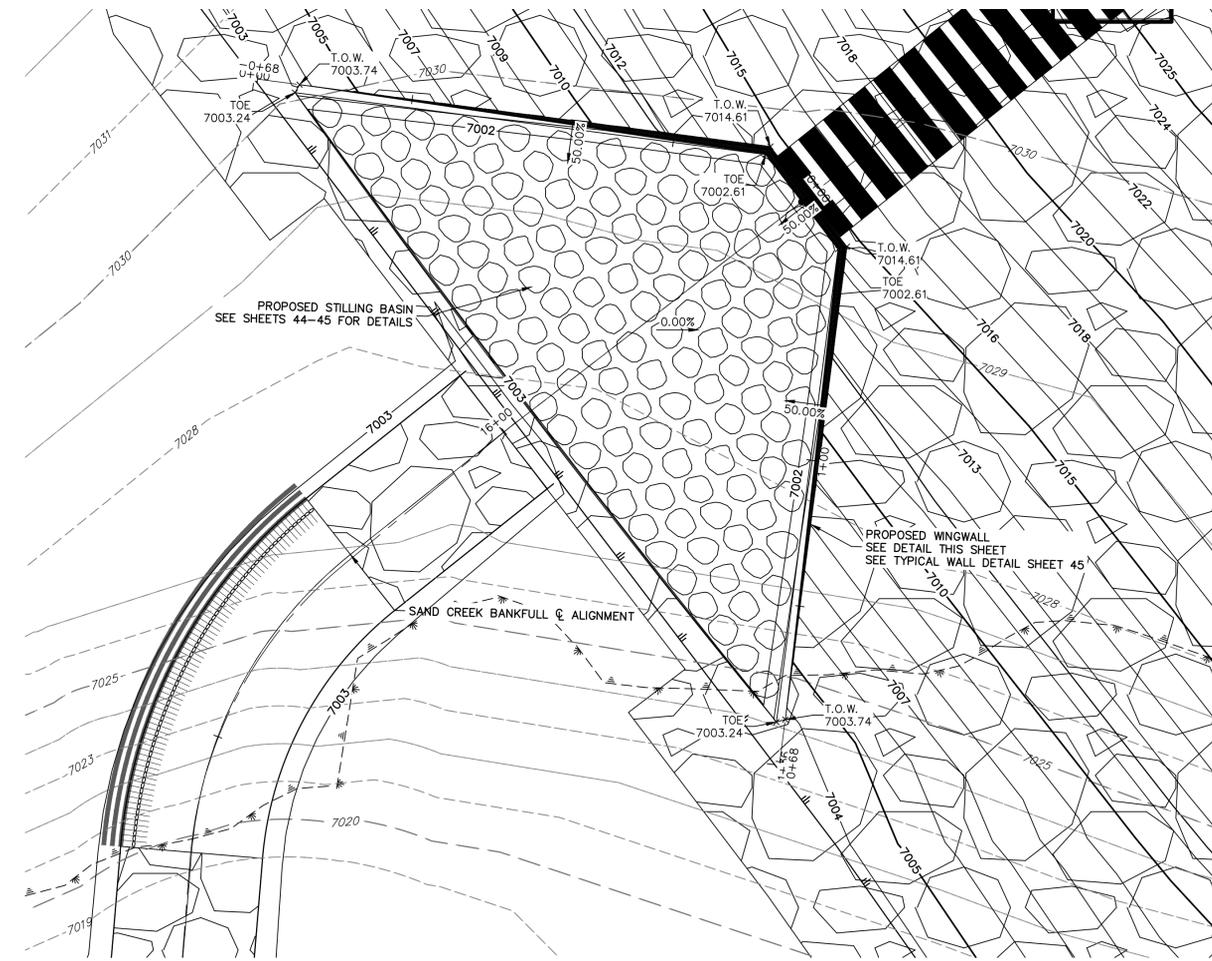




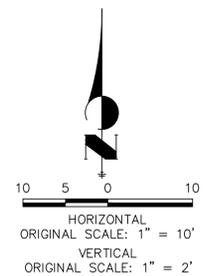
**POND 1 STILLING BASIN WINGWALL PROFILE  
STA -0+68.40 TO 0+68.42**



KEY MAP  
SCALE: 1"=2000'



POND 1 STILLING BASIN HEADWALL  
WINGWALL PLAN VIEW



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, OR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

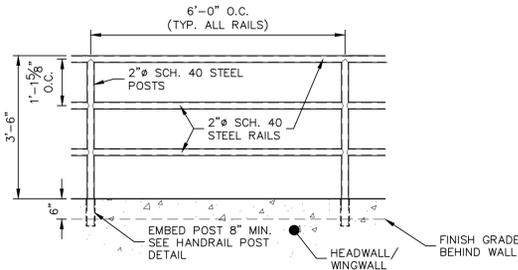
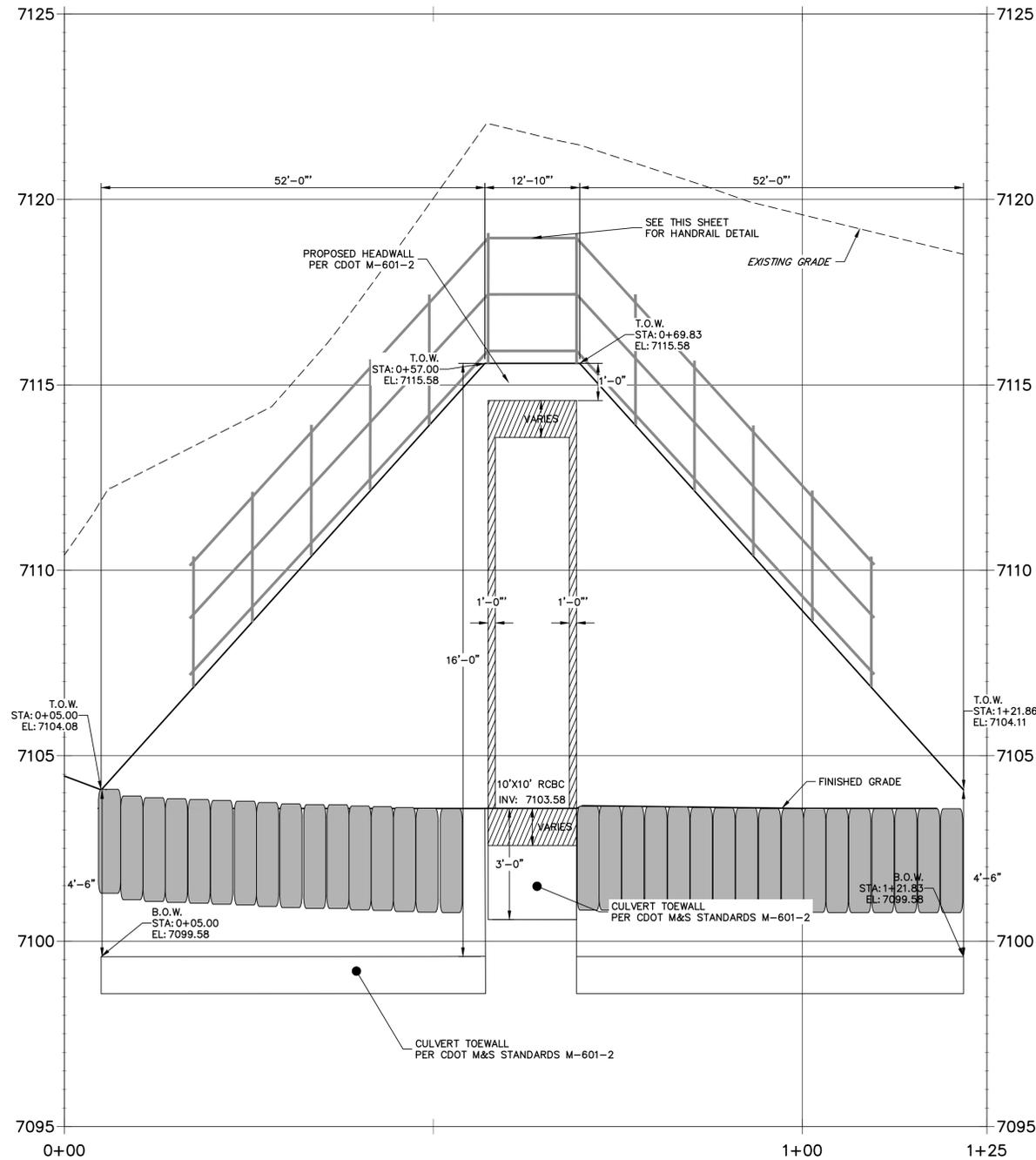
**SAND CREEK RESTORATION**

STRUCTURAL DETAILS

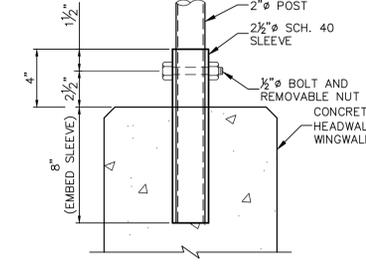
SHEET 66 OF 99

JOB NO. 25188.04

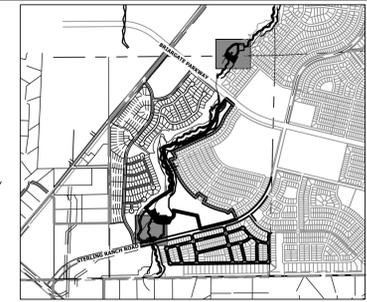
**POND 2 STILLING BASIN WINGWALL PROFILE  
STA 0+00.00 TO 1+25.00**



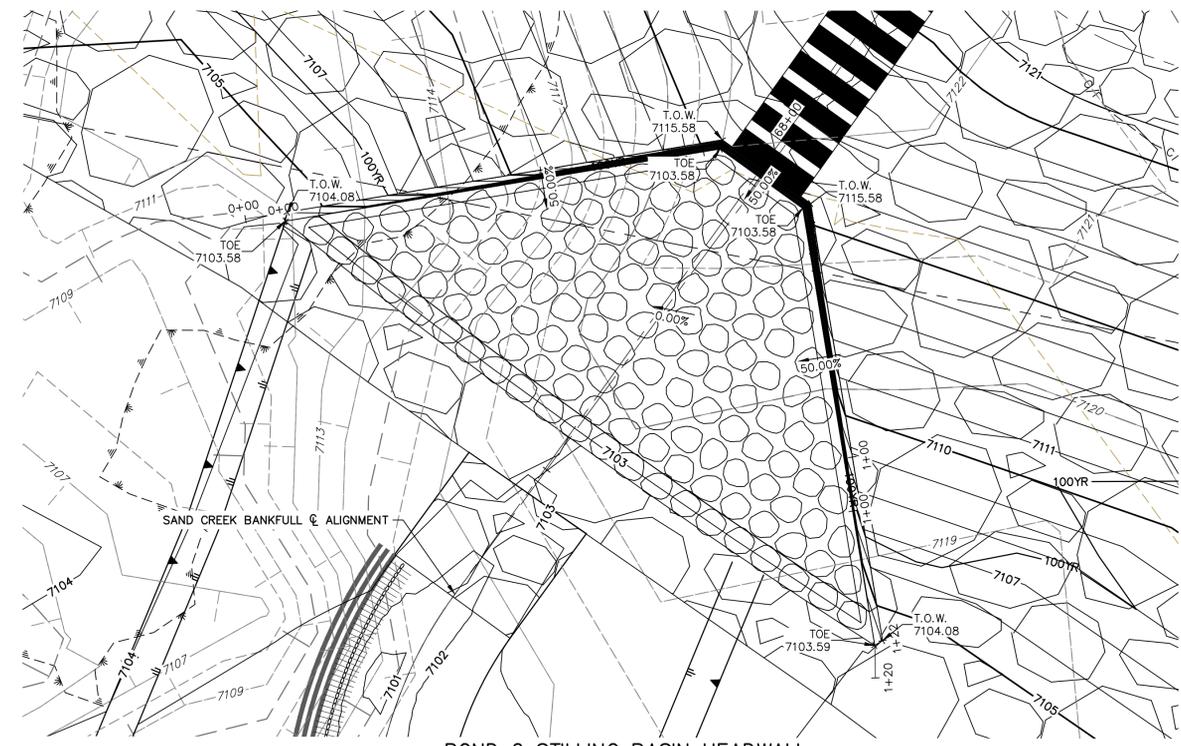
**PEDESTRIAN RAILING DETAIL**  
SCALE: 1/2"=1'



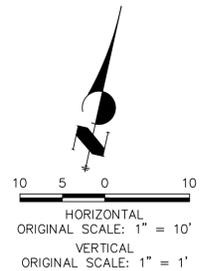
**PEDESTRIAN RAILING POST**  
SCALE: NTS



**KEY MAP**  
SCALE: 1"=2000'



**POND 2 STILLING BASIN HEADWALL  
WINGWALL PLAN VIEW**



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20 BOULDER CRESCENT  
2ND FLOOR  
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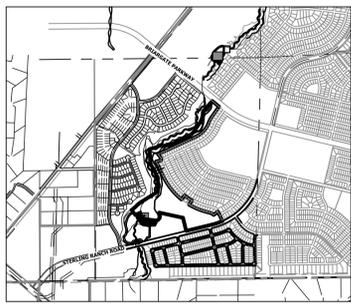
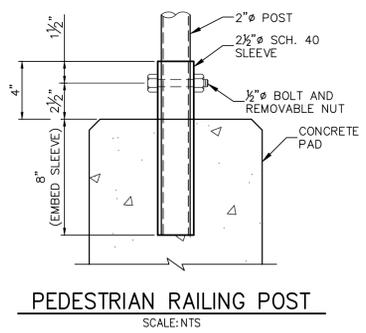
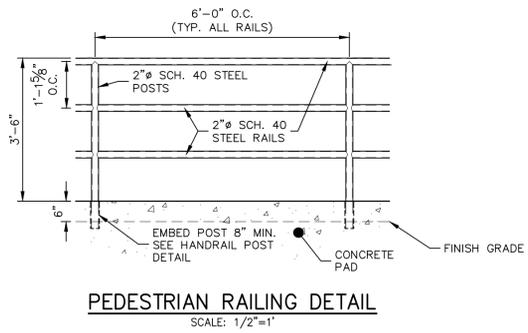
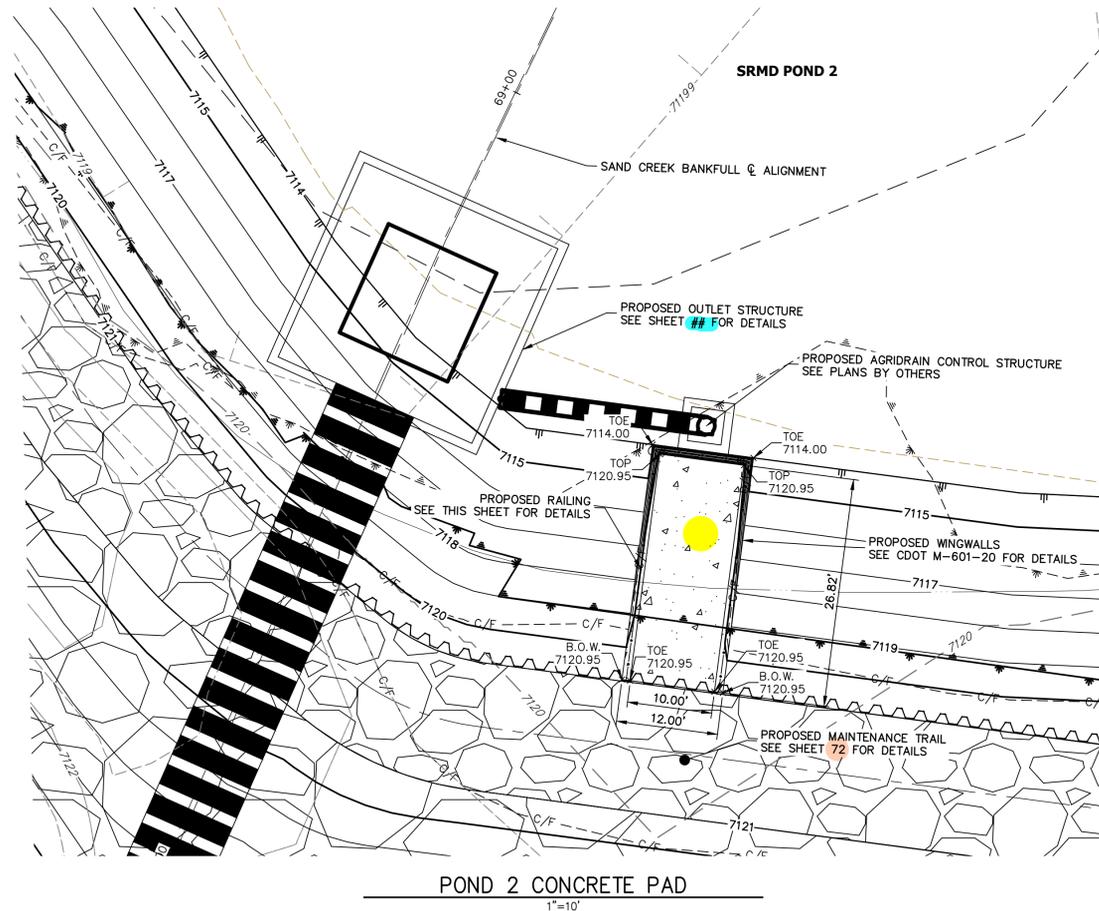
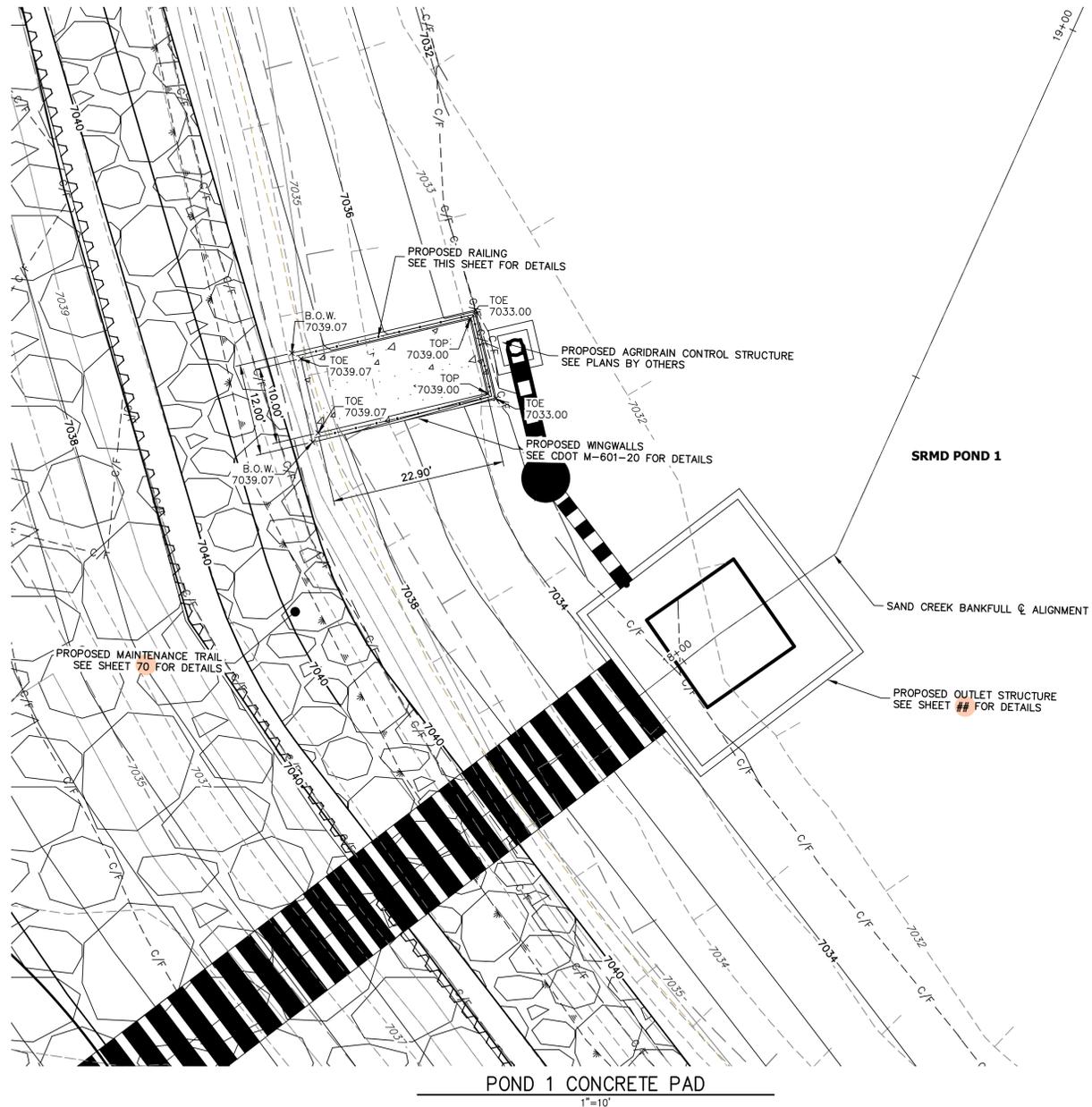
No.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=10'	1"=1'	9/1/22	DV	SCH	

**SAND CREEK RESTORATION**  
**STRUCTURAL DETAILS**

SHEET 67 OF 99  
JOB NO. 25188.04





UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.

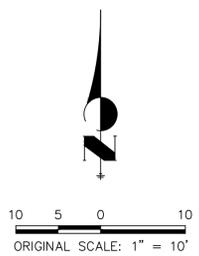
PREPARED FOR  
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COLORADO SPRINGS, CO 80903  
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NO.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
VARIES	N/A	9/1/22	DV	NEO	

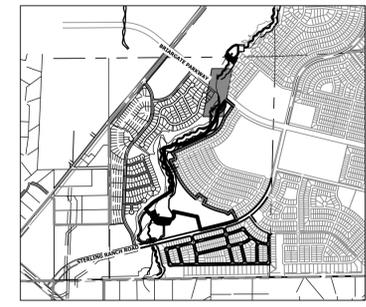
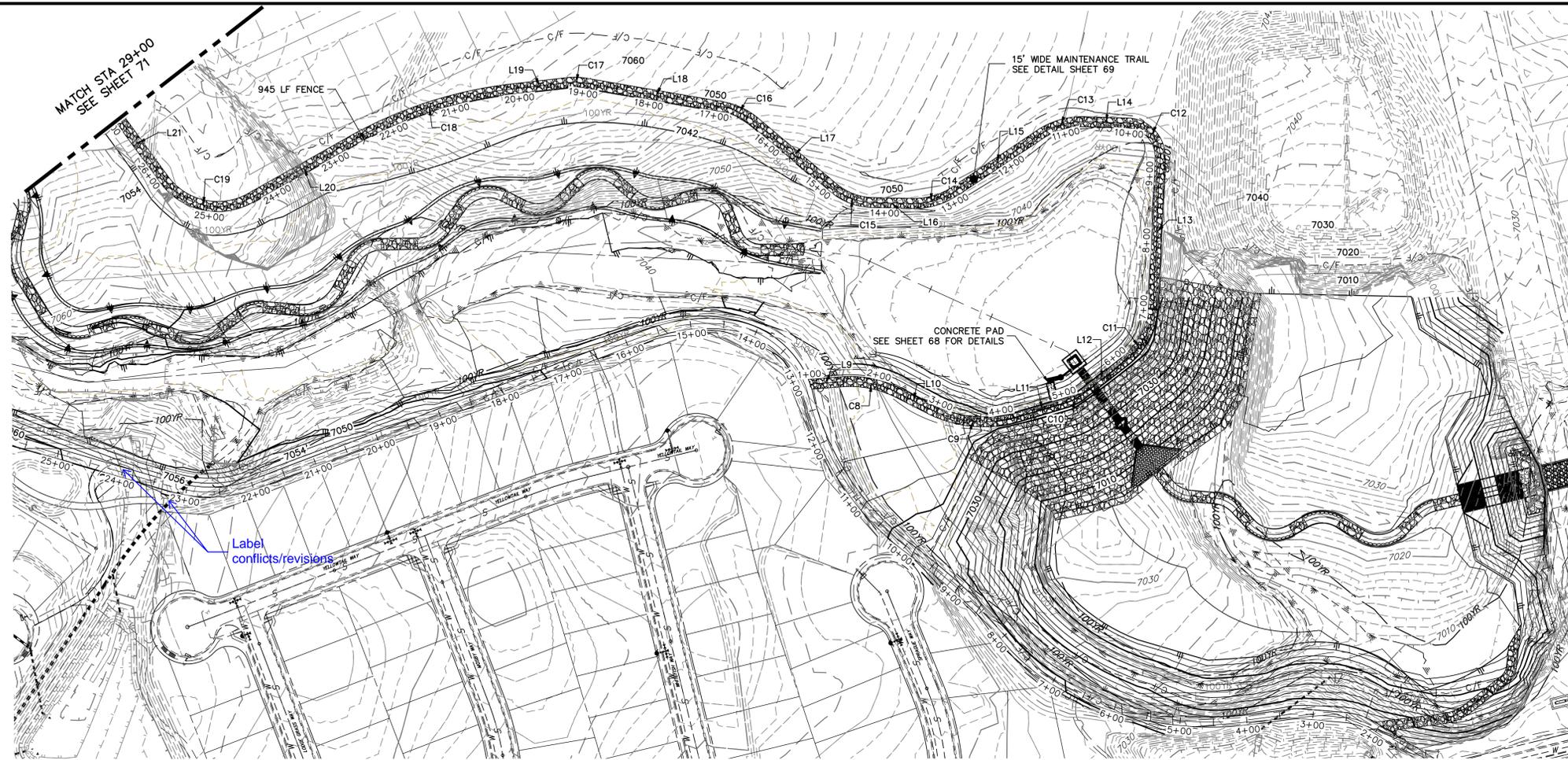
<b>SAND CREEK RESTORATION</b>	<b>STRUCTURAL DETAILS</b>
SHEET 68	OF 99
JOB NO.	25188.04



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMLEY  
COLORADO P.E. 30000  
FOR AND ON BEHALF OF J.R. ENGINEERING

X:\25188\04\Drawings\Sheet\Drawings\25188\04-Concrete Pad Details.dwg, 73 Pond 1 Concrete Pad, 9/16/2022, 4:58:58 PM, vbaug10

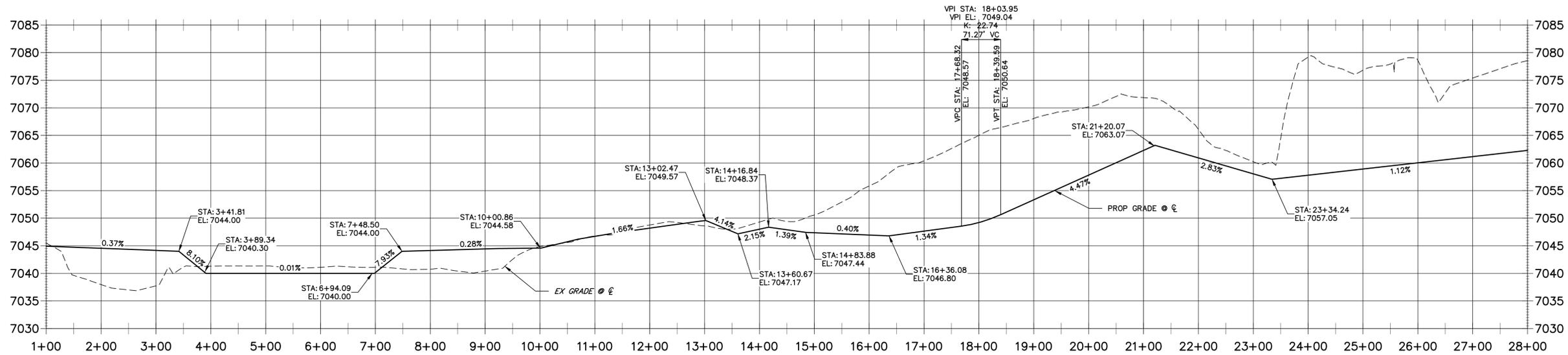




KEY MAP  
SCALE: 1"=2000'

LINE TABLE			CURVE TABLE			
LINE	BEARING	DISTANCE	CURVE	DELTA	RADIUS	LENGTH
L9	S04°12'48"E	48.53'	C8	30°40'46"	162.24'	86.87'
L10	S26°54'20"W	51.80'	C9	43°19'59"	180.03'	136.16'
L11	S16°26'06"E	77.36'	C10	21°20'41"	65.00'	24.21'
L12	S37°46'47"E	82.58'	C11	49°35'43"	110.00'	95.22'
L13	S87°22'29"E	221.11'	C12	90°50'11"	50.00'	79.27'
L14	N01°47'20"E	64.75'	C13	35°26'06"	115.00'	71.12'
L15	N33°38'47"W	150.85'	C14	34°54'33"	115.00'	70.07'
L16	N01°15'46"E	58.58'	C15	38°33'29"	95.00'	63.93'
L17	N39°49'15"E	153.65'	C16	29°14'48"	107.92'	55.09'
L18	N09°44'33"E	206.08'	C17	16°14'16"	105.00'	29.76'
L19	N06°29'43"W	81.42'	C18	22°46'14"	645.00'	256.34'
L20	N29°15'57"W	173.11'	C19	82°52'35"	100.00'	144.65'
L21	N53°36'38"E	113.38'	C20	18°33'53"	235.00'	76.14'
L22	N35°02'46"E	136.97'	C21	17°32'07"	140.00'	42.85'
L23	N52°34'53"E	233.05'	C22	12°54'44"	90.00'	20.28'

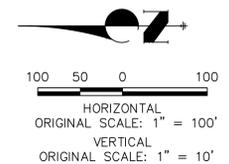
**EAST MAINTENANCE ACCESS TRAIL PROFILE REACH 2  
STA 1+00.00 TO 28+00.00**



- BENCHMARK**
- THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411416.273  
EASTING = 235167.071  
ELEVATION = 7023.42
  - THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION  
NORTHING = 410095.404  
EASTING = 235052.131  
ELEVATION = 7000.40
  - THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411399.962  
EASTING = 233849.817  
ELEVATION = 7030.82

**BASIS OF BEARINGS**  
THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624". SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.

**NOTES:**  
1. STEEPEST ALLOWABLE GRADE IS 12%.  
2. MAINTENANCE ACCESS TRAILS WITH SLOPES GREATER THAN 10% ARTICULATED CONCRETE WILL BE USED.



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMBLE  
COLORADO P.E. # 30000  
FOR AND ON BEHALF OF J.R. ENGINEERING, LLC

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE AS DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2593  
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	NO.	REVISION

H-SCALE 1"=100'  
V-SCALE 1"=10'  
DATE 9/1/22  
DESIGNED BY SCH  
DRAWN BY SCH  
CHECKED BY

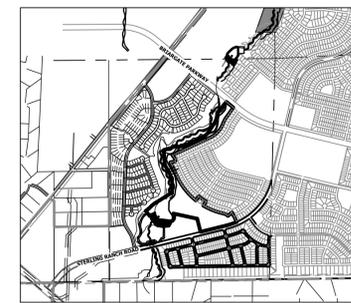
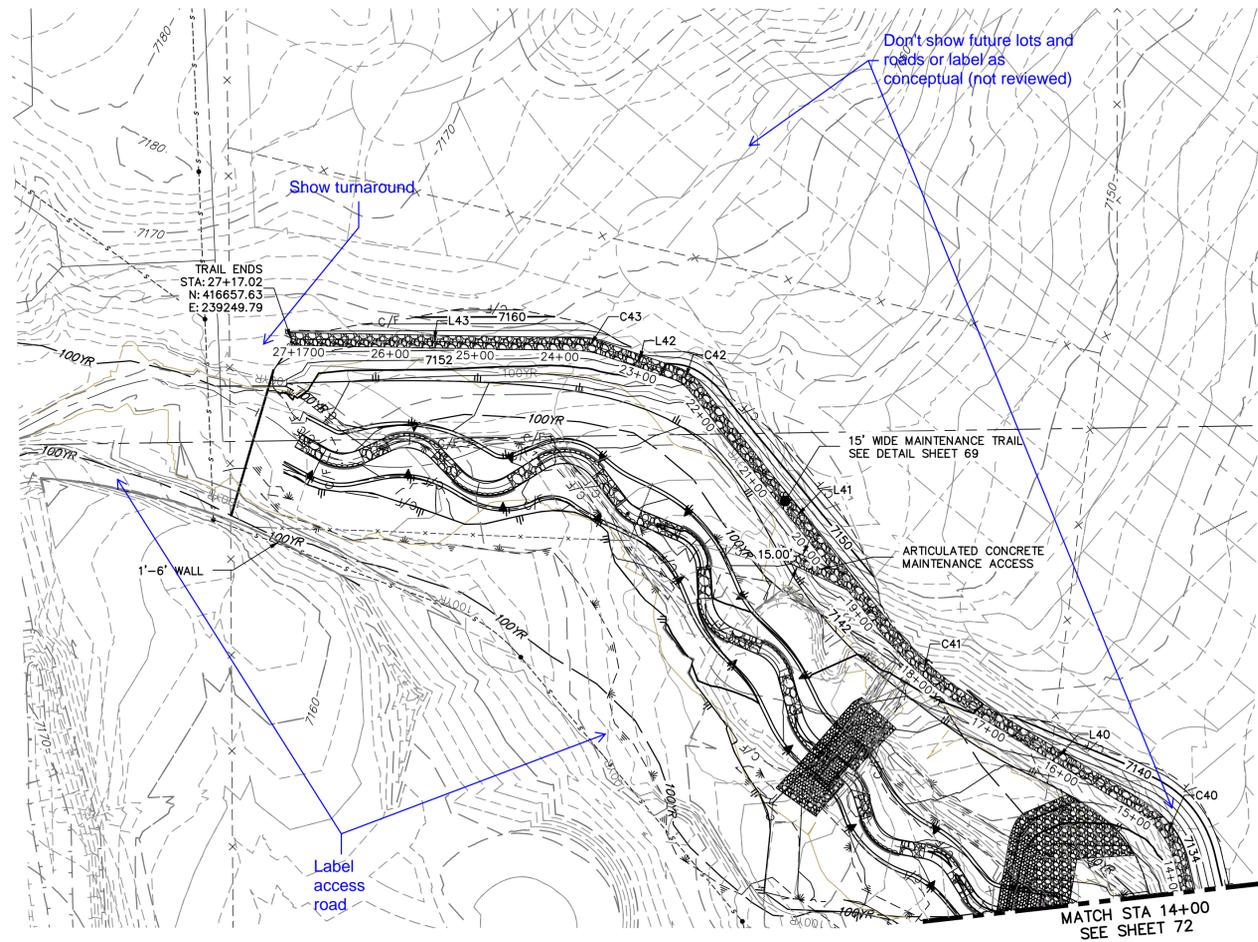
**SAND CREEK RESTORATION  
MAINTENANCE ACCESS PLAN  
& PROFILE**

SHEET 70 OF 99  
JOB NO. 25188.04







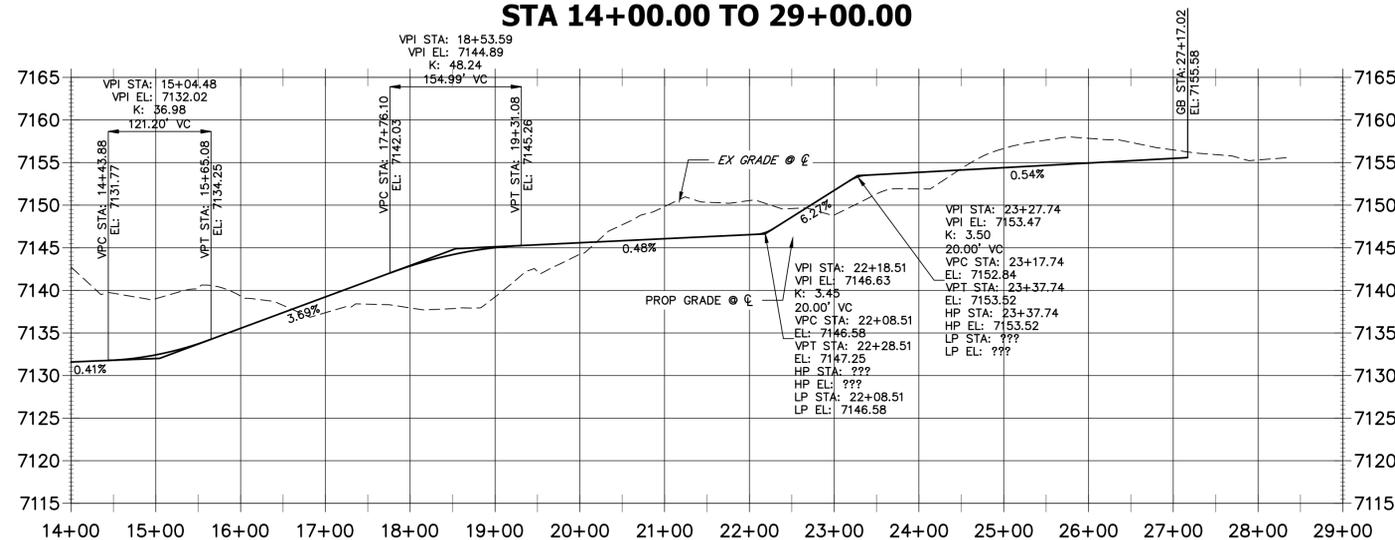


KEY MAP  
SCALE: 1"=2000'

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C40	46°45'59"	100.00'	81.62'
C41	21°27'49"	400.00'	149.84'
C42	30°11'53"	50.59'	26.66'
C43	17°34'04"	100.00'	30.66'

LINE TABLE		
LINE	BEARING	DISTANCE
L40	N31°01'24"E	229.41'
L41	N51°28'24"E	353.36'
L42	N18°35'32"E	91.99'
L43	N01°01'28"E	337.27'

**EAST MAINTENANCE ACCESS TRAIL PROFILE REACH 3 (2)  
STA 14+00.00 TO 29+00.00**

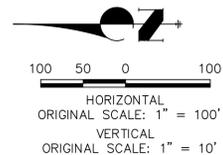


**BENCHMARK**

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411416.273  
EASTING = 235167.071  
ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANNEE RANCHEROS SUBDIVISION  
NORTHING = 410095.404  
EASTING = 235052.131  
ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411399.962  
EASTING = 233849.817  
ELEVATION = 7030.82

**BASIS OF BEARINGS**

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMBLE  
COLORADO P.E. 30000  
FOR AND ON BEHALF OF JR ENGINEERING

BY	DATE	No.	REVISION	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				1"=100'	1"=10'	9/1/22	SCH	SCH	SCH

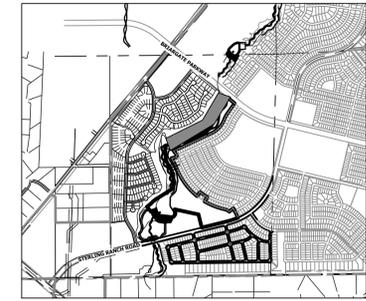
SAND CREEK RESTORATION  
MAINTENANCE ACCESS PLAN  
& PROFILE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.  
PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
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Fort Collins 970-491-9888 • www.jrengineering.com





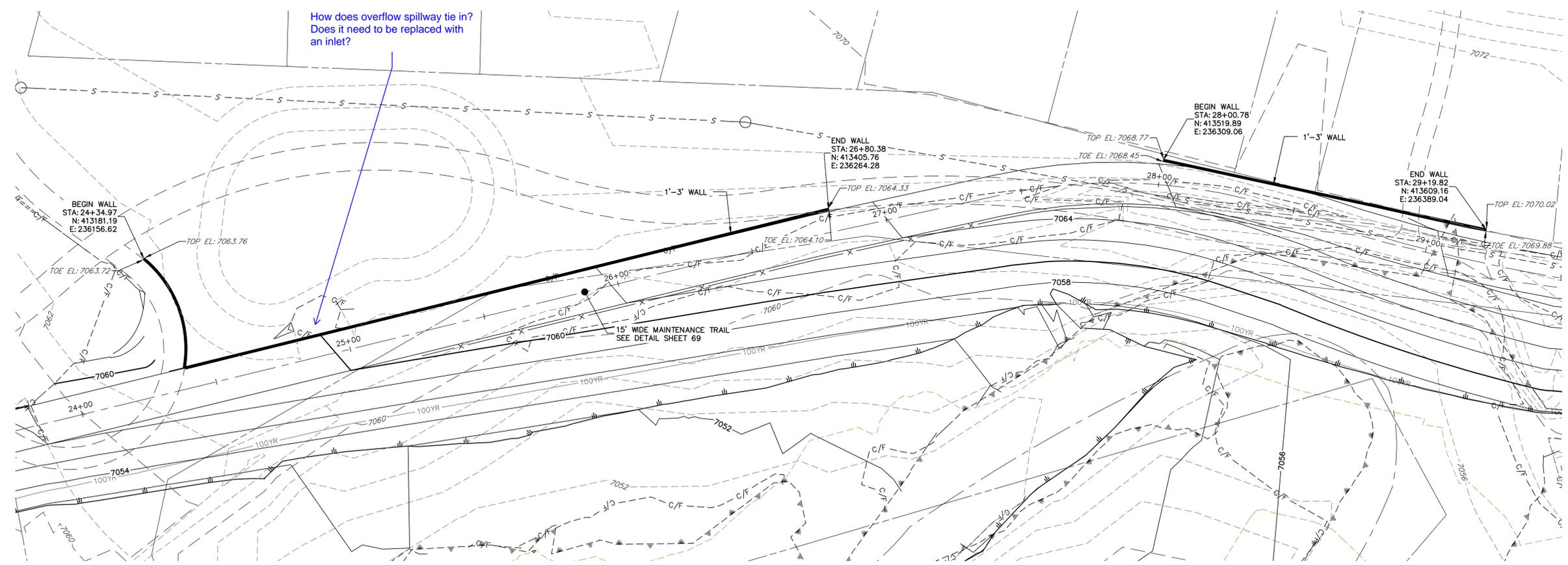


KEY MAP  
SCALE: 1"=2000'

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MAINTENANCE TRAIL WALLS #1 & #2

**BENCHMARK**

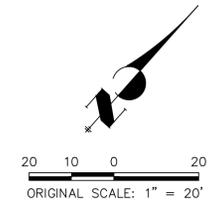
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "5853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
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**NOTES:**

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MIKE A. BRAMLEY  
COLORADO P.E. 30000  
FOR AND ON BEHALF OF JR ENGINEERING

REVISION	DATE	BY



you can remove this since its up front on the Cds

### STANDARD EPC 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 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) ASSIGNED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED STORMWATER MANAGER, SHALL BE LOCATED ON SITE AT ALL TIMES AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- ONCE THE ESQCP HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL BMPs AS INDICATED ON THE 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 DSD INSPECTIONS STAFF.
- SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 21 CALENDAR DAYS AFTER FINAL GRADING, OR FINAL EARTH DISTURBANCE, HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE SEEDDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPs SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED.
- TEMPORARY SOIL EROSION CONTROL FACILITIES SHALL BE REMOVED AND EARTH DISTURBANCE AREAS GRADED AND STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES PURSUANT TO STANDARDS AND SPECIFICATION PRESCRIBED IN THE DCM VOLUME II AND THE ENGINEERING CRITERIA MANUAL (ECM) APPENDIX X.
- ALL PERSONS ENGAGED IN EARTH DISTURBANCE SHALL IMPLEMENT AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BMPs IN CONFORMANCE WITH THE EROSION CONTROL TECHNICAL STANDARDS OF THE DRAINAGE CRITERIA MANUAL (DCM) VOLUME II AND IN ACCORDANCE WITH THE STORMWATER MANAGEMENT PLAN (SWMP).
- ALL TEMPORARY EROSION CONTROL FACILITIES INCLUDING BMPs AND ALL PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF ANY DISTURBANCE OPERATIONS, SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS, THE SWMP AND THE DCM VOLUME II AND MAINTAINED THROUGHOUT THE DURATION OF THE EARTH DISTURBANCE OPERATION.
- ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY REDUCE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED AND MAINTAINED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME.
- ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE DESIGNED TO LIMIT THE DISCHARGE TO A NON-EROSIVE VELOCITY.
- CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- EROSION CONTROL BLANKETING IS TO BE USED ON SLOPES STEEPER THAN 3:1.
- BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER 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. BMPs MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- 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.
- THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, GRASS, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM 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 CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN ANY DITCHLINE.
- INDIVIDUALS 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 INCLUDED IN THE DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- PRIOR TO ACTUAL CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- ALL PROPOSED CONTOURS ARE TO FINISHED GRADE.
- EARTHEN CUT AND FILL SLOPES SHALL BE 3:1 MAXIMUM. SLOPES IN EXCESS OF 4:1 AND AREAS OTHERWISE INDICATED BY WITHIN THESE PLANS, SHALL BE COVERED WITH SOIL RETENTION BLANKET OVER 4" MIN. THICKNESS OF TOPSOIL AND SEEDDED.
- IF THE PROJECT IS CONSTRUCTED DURING THE SUMMER WHEN SEEDING IS NOT ALLOWED, APPLY 1-1/2 TONS OF CERTIFIED WEED FREE MULCH PER ACRE MECHANICALLY CRIMPED INTO THE SOIL IN COMBINATION WITH AN ORGANIC MULCH TACKIFIER.
- PRIOR TO ANY CONSTRUCTION ACTIVITIES THE PROPOSED SILT FENCE SHOWN ON THE EROSION CONTROL SHEET SHALL BE CONSTRUCTED. THE FENCE SHALL BE REMOVED UPON THE LATER OF STABILIZATION OF THE SITE OR COMPLETION OF CONSTRUCTION.
- TO REDUCE THE POTENTIAL FOR CLOGGING OF DEBRIS GRATES, NO STRAW MULCH SHALL BE USED WITHIN THE EURV OR WOCV OF A DETENTION BASIN. INSTEAD, EROSION CONTROL BLANKETS SHALL BE INSTALLED FOR A WIDTH OF AT LEAST 6 FEET ON EITHER SIDE OF CONCRETE LOW-FLOW CHANNELS. THE BLANKETS SHALL COMPLY WITH THE MATERIALS AND INSTALLATION REQUIREMENTS FOR EROSION CONTROL BLANKETS (STRAW COCONUT OR 100 PERCENT COCONUT). SITE-SPECIFIC CONDITIONS MAY REQUIRE ADDITIONAL BLANKET OR OTHER EROSION CONTROL MEASURES.
- 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 ACTIVITIES 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



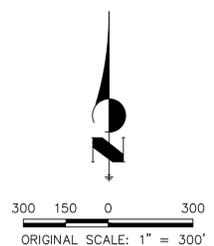
KEY MAP SCALE: 1" = 2000'

### BENCHMARK

- THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411416.273  
EASTING = 235187.071  
ELEVATION = 7023.42
- THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANWEE RANCHEROS SUBDIVISION  
NORTHING = 410095.404  
EASTING = 235052.131  
ELEVATION = 7000.40
- THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411399.962  
EASTING = 233849.817  
ELEVATION = 7030.82

### BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



### LEGEND

- REACH 1 (PHASE 1)
- REACH 2 (PHASE 2)
- REACH 3 (PHASE 3)

## GEC INDEX SHEET

SCALE: 1" = 300'

add a note about existing vegetation and percent cover



Know what's below. Call before you dig.

### OWNER/DEVELOPER STATEMENT

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

JAMES F. MORLEY \_\_\_\_\_ DATE \_\_\_\_\_

SR LAND, LLC  
20 BOULDER CRESCENT, SUITE 201  
COLORADO SPRINGS, CO 80903

### ENGINEER'S STATEMENT

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



MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEW AGENCIES, JR ENGINEERING APPROVES THEIR USE. THESE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

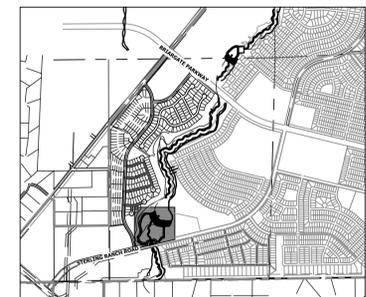
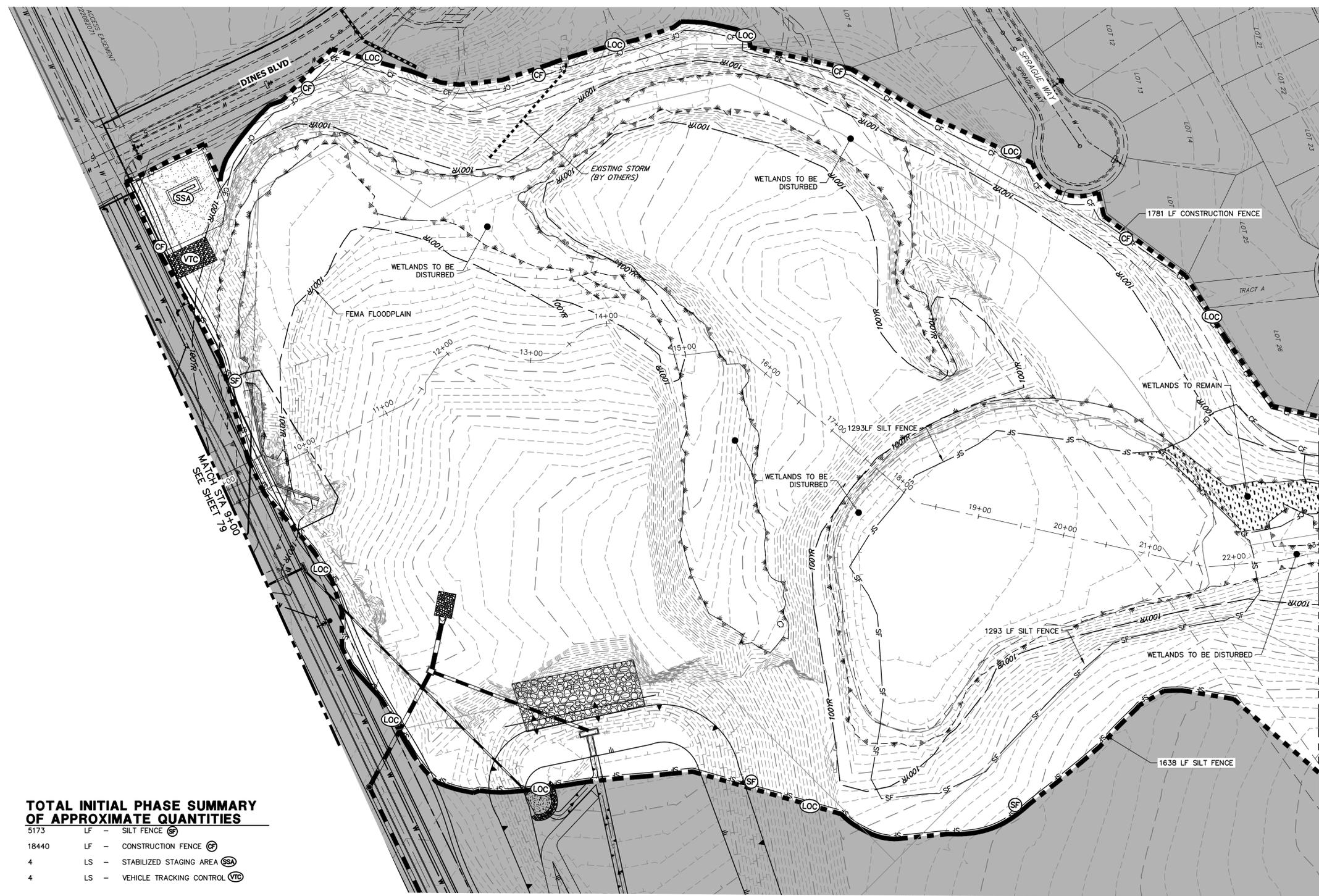
**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=300'	N/A	9/1/22	DJV	WLL	

SAND CREEK RESTORATION  
GEC PLANS  
SHEET 78 OF 99  
JOB NO. 25188.04





KEY MAP  
SCALE: 1" = 2000'

**TOTAL INITIAL PHASE SUMMARY OF APPROXIMATE QUANTITIES**

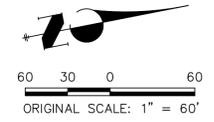
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18440	LF - CONSTRUCTION FENCE	(CF)
4	LS - STABILIZED STAGING AREA	(SSA)
4	LS - VEHICLE TRACKING CONTROL	(VTC)

**LEGEND**

EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	(IP)	DEWATERING	(DW)
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	(RRB)	TEMPORARY SEDIMENTATION BASIN	(SB)
EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE	CONSTRUCTION MARKERS	(CM)	CHECK DAM	(CD)
EXISTING EASEMENT	CONSTRUCTION FENCE	SEDIMENT CONTROL LOG	(SCL)	SURFACE ROUGHENING	(SR)
SECTION LINE	SILT FENCE	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX	(SM)		
EXISTING STORM SEWER	VEHICLE TRACKING CONTROL	PERMANENT LANDSCAPING	(LS)		
EXISTING CURB & GUTTER	STABILIZED STAGING AREA	GEOTEXTILE	(ECB)		
PROPOSED RIGHT OF WAY LINE	CONCRETE WASHOUT AREA	COIR MATTING	(ECB)		
PROPOSED EASEMENT	STOCK PILE				
PROPOSED STORM SEWER	TEMP DRAINAGE CHANNEL				
PROPOSED CURB & GUTTER					
PROPOSED TOP OF SLOPE					
PROPOSED TOE OF SLOPE					
EXISTING DRAINAGE ARROW					
PROPOSED DRAINAGE ARROW					

**BASIS OF BEARINGS**  
THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.

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**ENGINEER'S STATEMENT**

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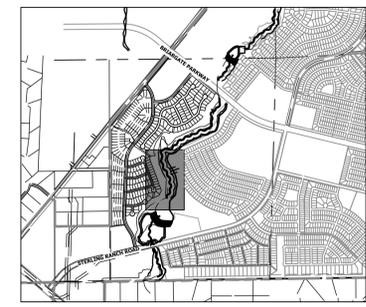
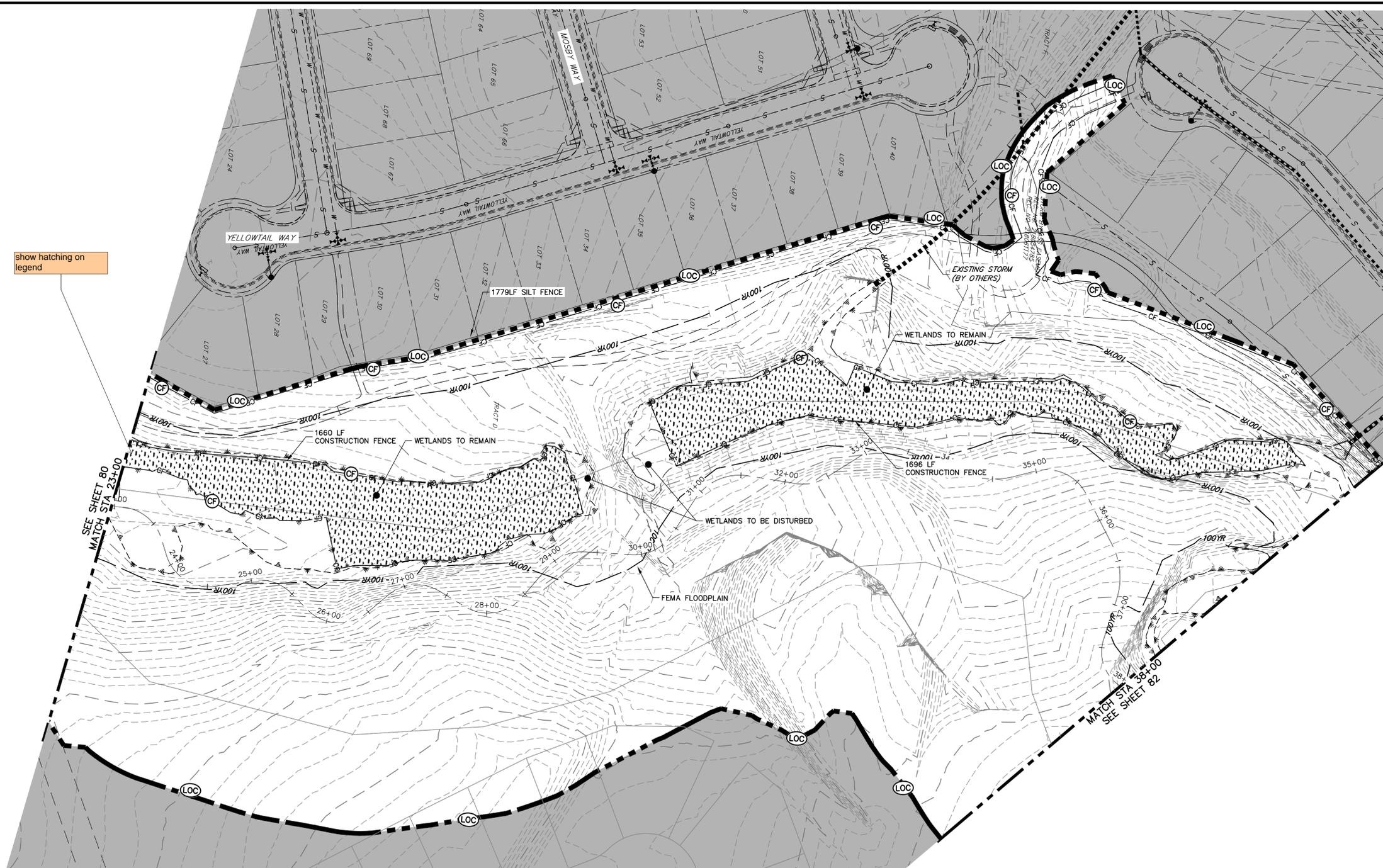
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING



PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
	J.R. ENGINEERING A Westman Company Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com
BY	DATE
No.	REVISION
H-SCALE	1" = 60'
V-SCALE	N/A
DATE	9/1/22
DESIGNED BY	DJV
DRAWN BY	WLL
CHECKED BY	
SAND CREEK RESTORATION	GEC INITIAL
SHEET 80	OF 99
JOB NO.	25188.04

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KEY MAP  
SCALE: 1"=2000'

show hatching on legend

**LEGEND**

EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE	CONSTRUCTION MARKERS	CM	CHECK DAM	CD
EXISTING EASEMENT	CONSTRUCTION FENCE	SEDIMENT CONTROL LOG	SCL	SURFACE ROUGHENING	SR
SECTION LINE	SILT FENCE	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX	SM		
EXISTING STORM SEWER	VEHICLE TRACKING CONTROL	PERMANENT LANDSCAPING	LS		
EXISTING CURB & GUTTER	STABILIZED STAGING AREA	GEOTEXTILE	ECB		
PROPOSED RIGHT OF WAY LINE	CONCRETE WASHOUT AREA	COIR MATTING	ECB		
PROPOSED EASEMENT	STOCK PILE				
PROPOSED STORM SEWER	TEMP DRAINAGE CHANNEL				
PROPOSED CURB & GUTTER					
PROPOSED TOP OF SLOPE					
PROPOSED TOE OF SLOPE					
EXISTING DRAINAGE ARROW					
PROPOSED DRAINAGE ARROW					

**TOTAL INITIAL PHASE SUMMARY OF APPROXIMATE QUANTITIES**

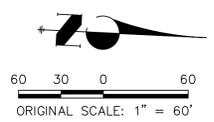
5173	LF - SILT FENCE	⊙
18440	LF - CONSTRUCTION FENCE	⊕
4	LS - STABILIZED STAGING AREA	SSA
4	LS - VEHICLE TRACKING CONTROL	VTC

**BENCHMARK**

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411416.273  
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**BASIS OF BEARINGS**

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**ENGINEER'S STATEMENT**

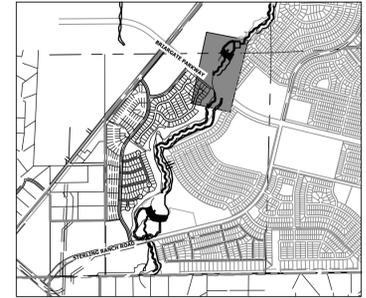
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MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING

PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.
<b>J.R. ENGINEERING</b> A Westman Company Centennial 303-740-9383 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	No. REVISION
<b>SAND CREEK RESTORATION</b>	<b>ENGINEER'S STATEMENT</b>
SHEET 81 OF 99	JOB NO. 25188.04

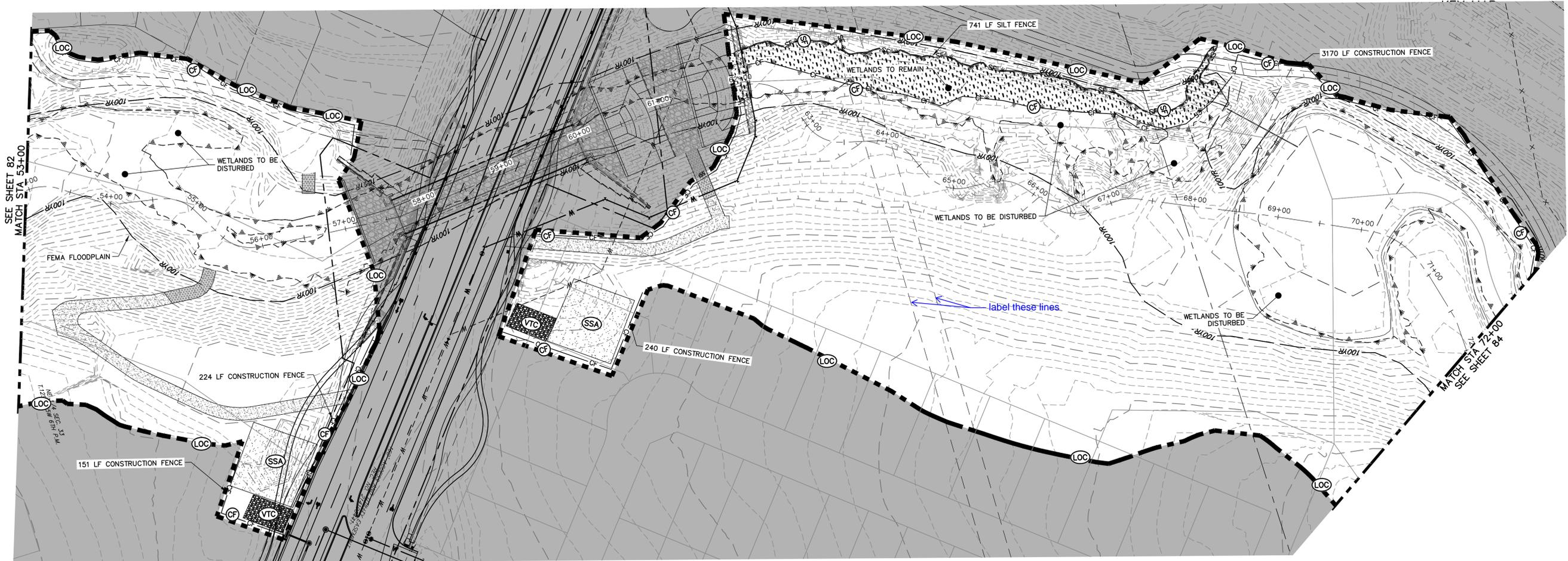




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**LEGEND**

EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION (LOC)	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
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EXISTING EASEMENT	CONSTRUCTION FENCE (CF)	SEDIMENT CONTROL LOG	SCL	SURFACE ROUGHENING	SR
SECTION LINE	SILT FENCE (SF)	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX	SM		
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PROPOSED RIGHT OF WAY LINE	CONCRETE WASHOUT AREA (CWA)	COIR MATTING	ECB		
PROPOSED EASEMENT	STOCK PILE (SP)				
PROPOSED STORM SEWER	TEMP DRAINAGE CHANNEL				
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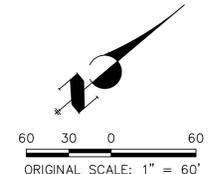
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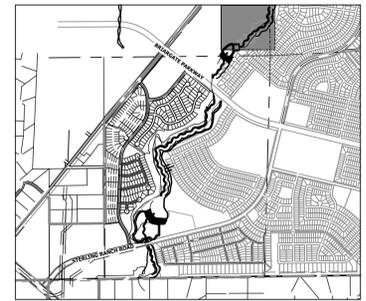
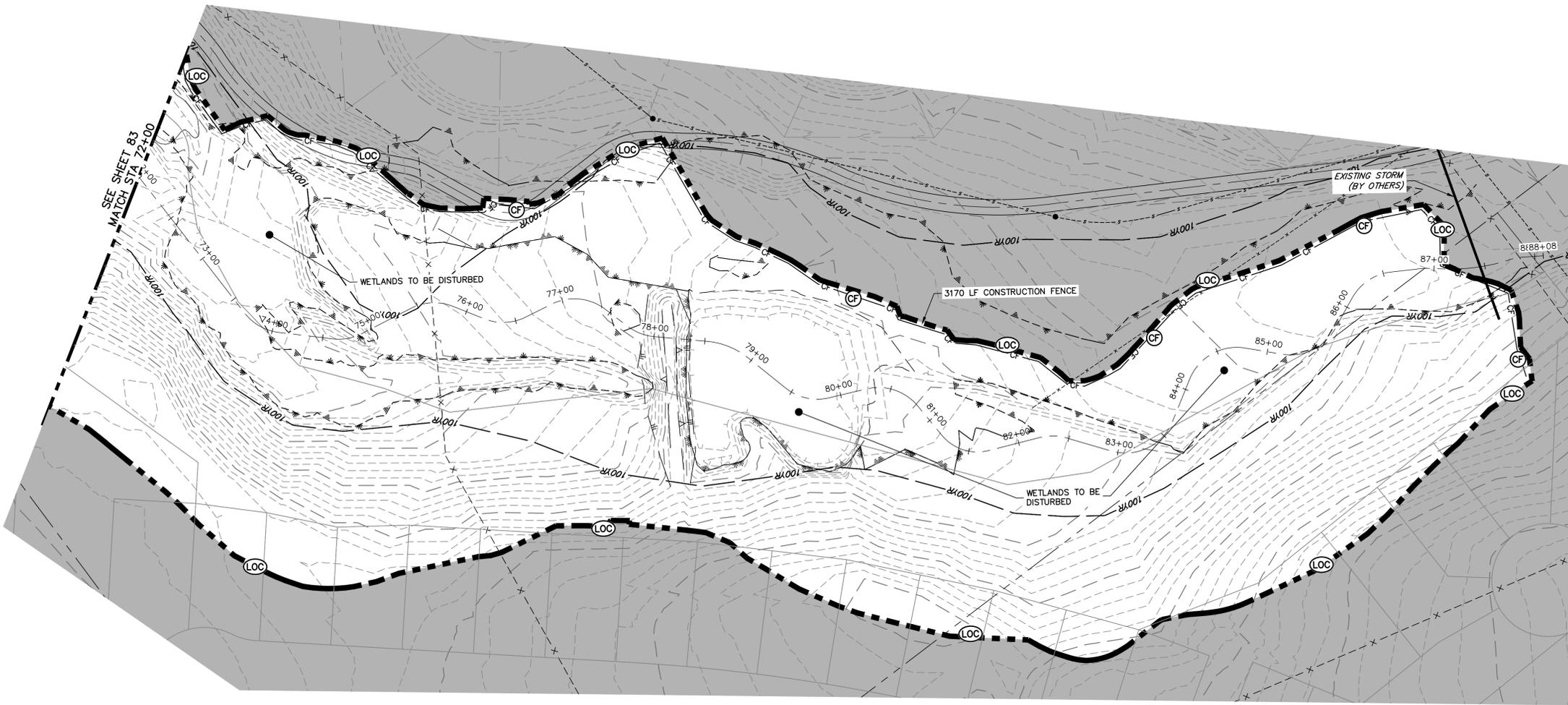
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MIKE A. BRAMLETT, P.E.  
 COLORADO P.E. 32314  
 FOR AND ON BEHALF OF JR ENGINEERING

BY	DATE	REVISION

SAND CREEK RESTORATION	H-SCALE	1" = 60'
	V-SCALE	N/A
GEC INITIAL	DATE	9/1/22
	DESIGNED BY	DJV
SHEET 83 OF 99	DRAWN BY	WLL
	CHECKED BY	
JOB NO.	25188.04	



KEY MAP  
SCALE: 1" = 2000'

**LEGEND**

EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE	CONSTRUCTION MARKERS	CM	CHECK DAM	CD
EXISTING EASEMENT	CONSTRUCTION FENCE	SEDIMENT CONTROL LOG	SCL	SURFACE ROUGHENING	SR
SECTION LINE	SILT FENCE	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX	SM		
EXISTING STORM SEWER	VEHICLE TRACKING CONTROL	PERMANENT LANDSCAPING	LS		
EXISTING CURB & GUTTER	STABILIZED STAGING AREA	GEOTEXTILE	ECB		
PROPOSED RIGHT OF WAY LINE	CONCRETE WASHOUT AREA	COIR MATTING	ECB		
PROPOSED EASEMENT	STOCK PILE				
PROPOSED STORM SEWER	TEMP DRAINAGE CHANNEL				
PROPOSED CURB & GUTTER					
PROPOSED TOP OF SLOPE					
PROPOSED TOE OF SLOPE					
EXISTING DRAINAGE ARROW					
PROPOSED DRAINAGE ARROW					

**TOTAL INITIAL PHASE SUMMARY OF APPROXIMATE QUANTITIES**

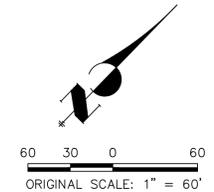
5173	LF	-	SILT FENCE	(S)
18440	LF	-	CONSTRUCTION FENCE	(CF)
4	LS	-	STABILIZED STAGING AREA	(SSA)
4	LS	-	VEHICLE TRACKING CONTROL	(VTC)

**BENCHMARK**

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411416.273  
EASTING = 235167.071  
ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANNEE RANCHEROS SUBDIVISION  
NORTHING = 410095.404  
EASTING = 235052.131  
ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411399.962  
EASTING = 233849.817  
ELEVATION = 7030.82

**BASIS OF BEARINGS**

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



Know what's below.  
Call before you dig.

**ENGINEER'S STATEMENT**

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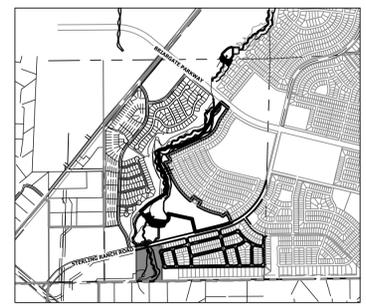
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING

SAND CREEK RESTORATION	GEC INITIAL	BY	DATE		
		No.	REVISION		
		H-SCALE	1" = 60'		
		V-SCALE	N/A		
		DATE	9/1/22		
		DESIGNED BY	DJV		
		DRAWN BY	WLL		
		CHECKED BY			
		SHEET	84	OF	99
		JOB NO.	25188.04		

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com



KEY MAP  
SCALE: 1" = 2000'

**TOTAL INTERIM PHASE SUMMARY OF APPROXIMATE QUANTITIES**

9	EA	-	REINFORCED ROCK BERM FOR CULVERT PROTECTION (RRB)
3	EA	-	CONCRETE WASHOUT AREA (CWA)
2	EA	-	CHECK DAMS (CD)

add TSBs and SCLs

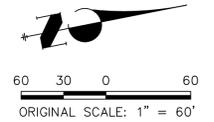
**LEGEND**

EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	(IP)	DEWATERING	(DW)
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION (LOC)	REINFORCED ROCK BERM FOR CULVERT PROTECTION	(RRB)	TEMPORARY SEDIMENTATION BASIN	(SB)
EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE	CONSTRUCTION MARKERS	(CM)	CHECK DAM	(CD)
EXISTING EASEMENT	CONSTRUCTION FENCE (CF)	SEDIMENT CONTROL LOG	(SCL)	SURFACE ROUGHENING	(SR)
SECTION LINE	SILT FENCE (SF)	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX	(SM)		
EXISTING STORM SEWER	VEHICLE TRACKING CONTROL (VTC)	PERMANENT LANDSCAPING	(LS)		
EXISTING CURB & GUTTER	STABILIZED STAGING AREA (SSA)	GEOTEXTILE	(ECB)		
PROPOSED RIGHT OF WAY LINE	CONCRETE WASHOUT AREA (CWA)	COIR MATTING	(ECB)		
PROPOSED EASEMENT	STOCK PILE (SP)				
PROPOSED STORM SEWER	TEMP DRAINAGE CHANNEL				
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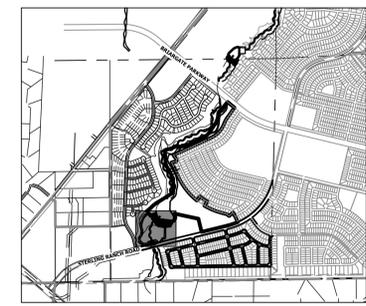
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MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING



PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.
<b>J.R. ENGINEERING</b> A Westman Company Centennial 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	No. REVISION
	H-SCALE 1" = 60' V-SCALE N/A DATE 9/1/22 DESIGNED BY DJV DRAWN BY WLL CHECKED BY
<b>SAND CREEK RESTORATION</b>	<b>GEC INTERIM</b>
SHEET 85 OF 99	JOB NO. 25188.04



KEY MAP  
SCALE: 1"=2000'

what is this line?

label contours

If this area is a wetland should the TSB be in a defined area?

is CF necessary here if you have SF along the LOC perimeter

Provide details of temporary sediment basin including riser pipe diameter and perforation sizing, number of rows of holes, required volume, location of outlet pipe and spillway, and tributary area to the sediment basin. And provide contours for sediment basin.

**LEGEND**

EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
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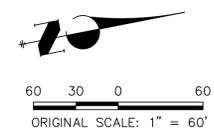
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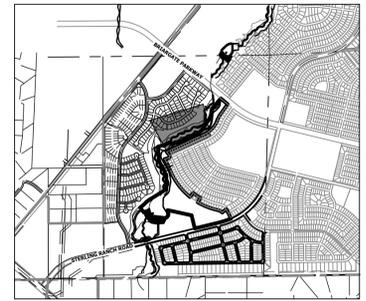
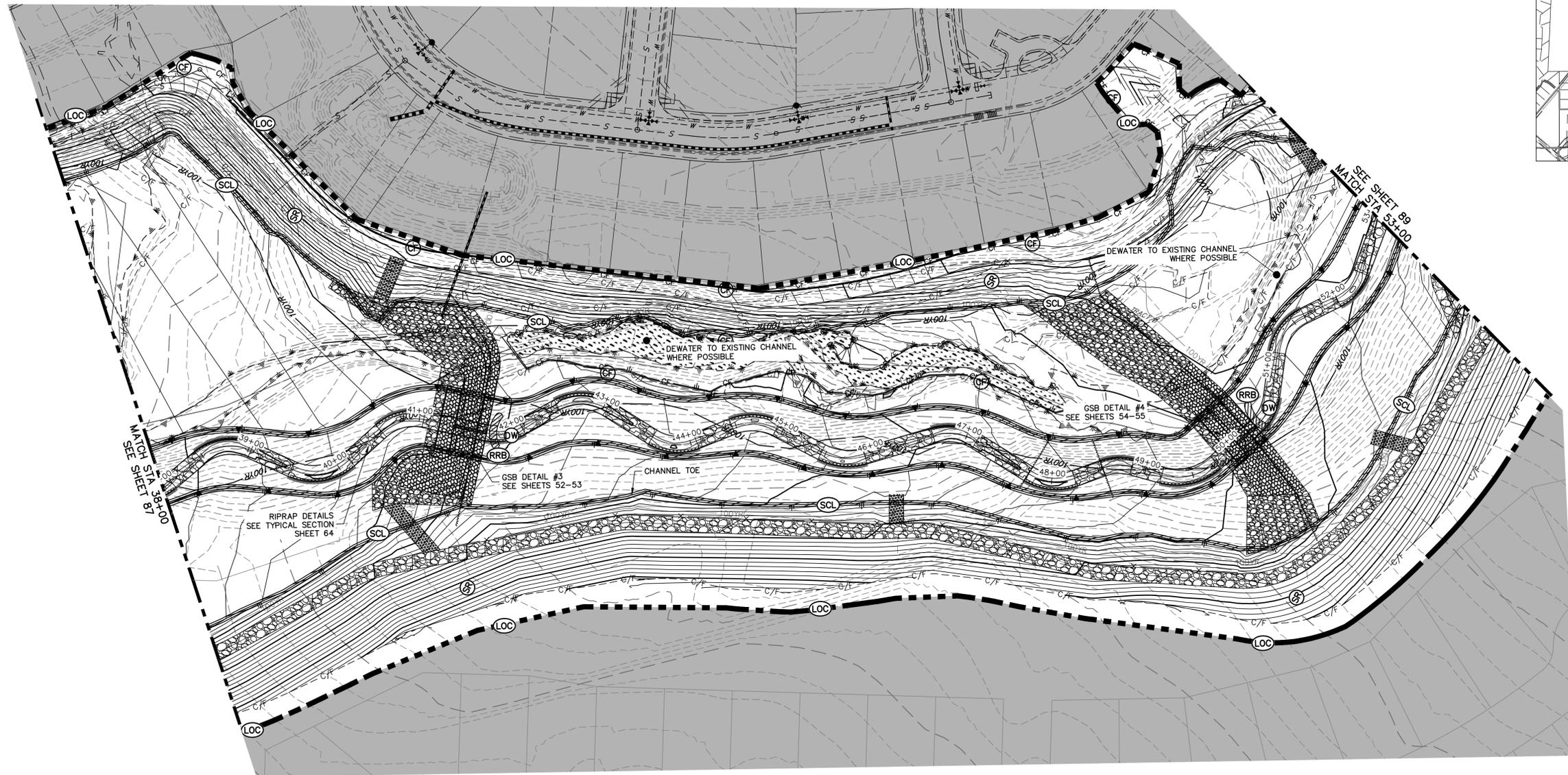


MIKE A. BRAMLETT, P.E.  
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PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	
	J.R. ENGINEERING A Westman Company Central 303-740-9383 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	
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DRAWN BY	DIV	DJV
CHECKED BY	WLL	
SAND CREEK RESTORATION		GEC INTERIM
SHEET 86 OF 99		
JOB NO. 25188.04		

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KEY MAP  
SCALE: 1"=2000'

**LEGEND**

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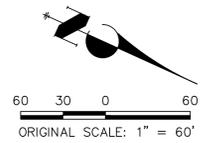
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BY	DATE	No.	REVISION

SAND CREEK RESTORATION	GEC INTERIM	H-SCALE	1"=60'
		V-SCALE	N/A
DESIGNED BY	DJV	DATE	9/1/22
DRAWN BY	WLL	CHECKED BY	
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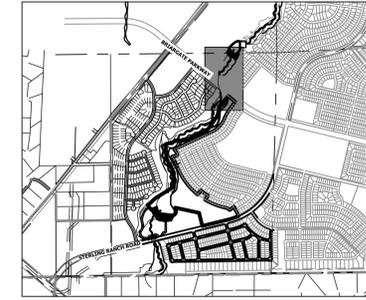


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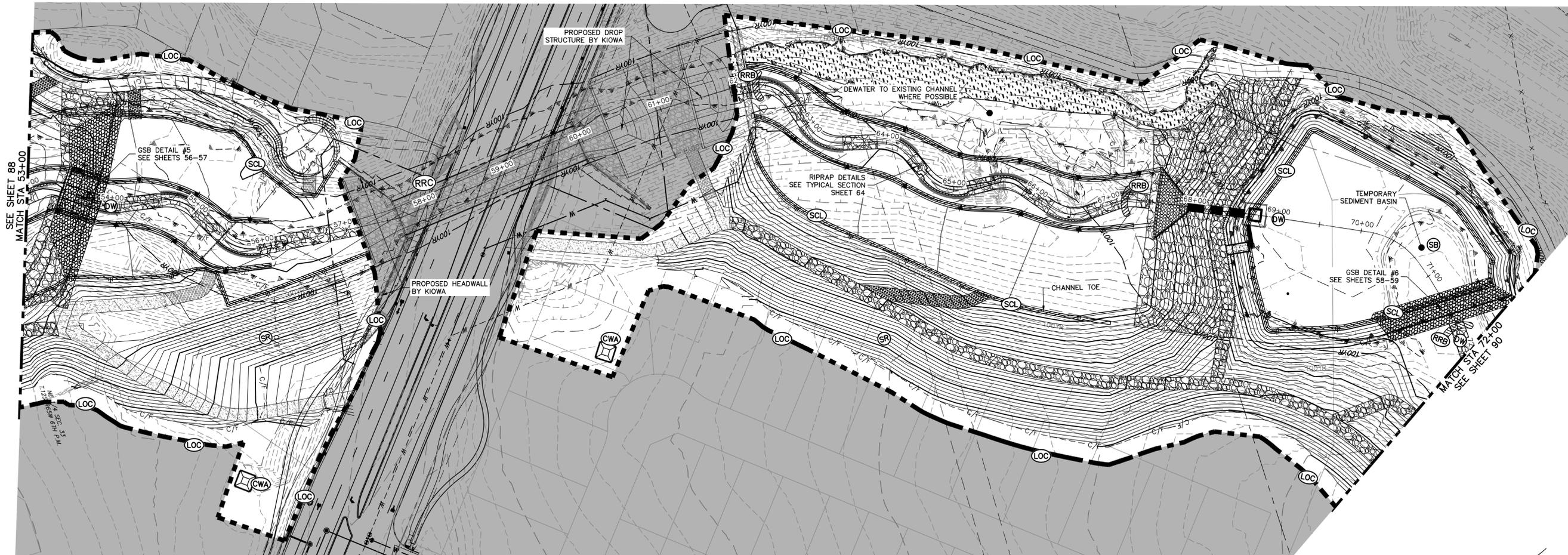


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KEY MAP  
SCALE: 1"=2000'



**LEGEND**

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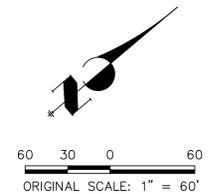
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NORTHING = 411399.962  
EASTING = 233849.817  
ELEVATION = 7030.82

**BASIS OF BEARINGS**

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



**ENGINEER'S STATEMENT**

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MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING

PREPARED FOR

SR LAND, LLC  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

J.R. ENGINEERING  
A Westman Company



Central 303-740-9383 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

BY DATE

No. REVISION

1"=60'

V-SCALE N/A

DATE 9/1/22

DESIGNED BY DJV

DRAWN BY WLL

CHECKED BY

SAND CREEK RESTORATION

GEC INTERIM

SHEET 89 OF 99

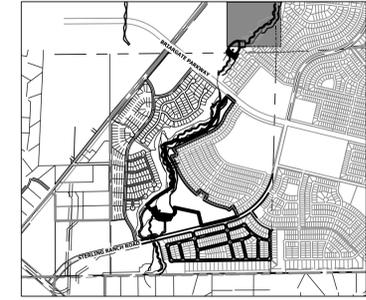
JOB NO. 25188.04

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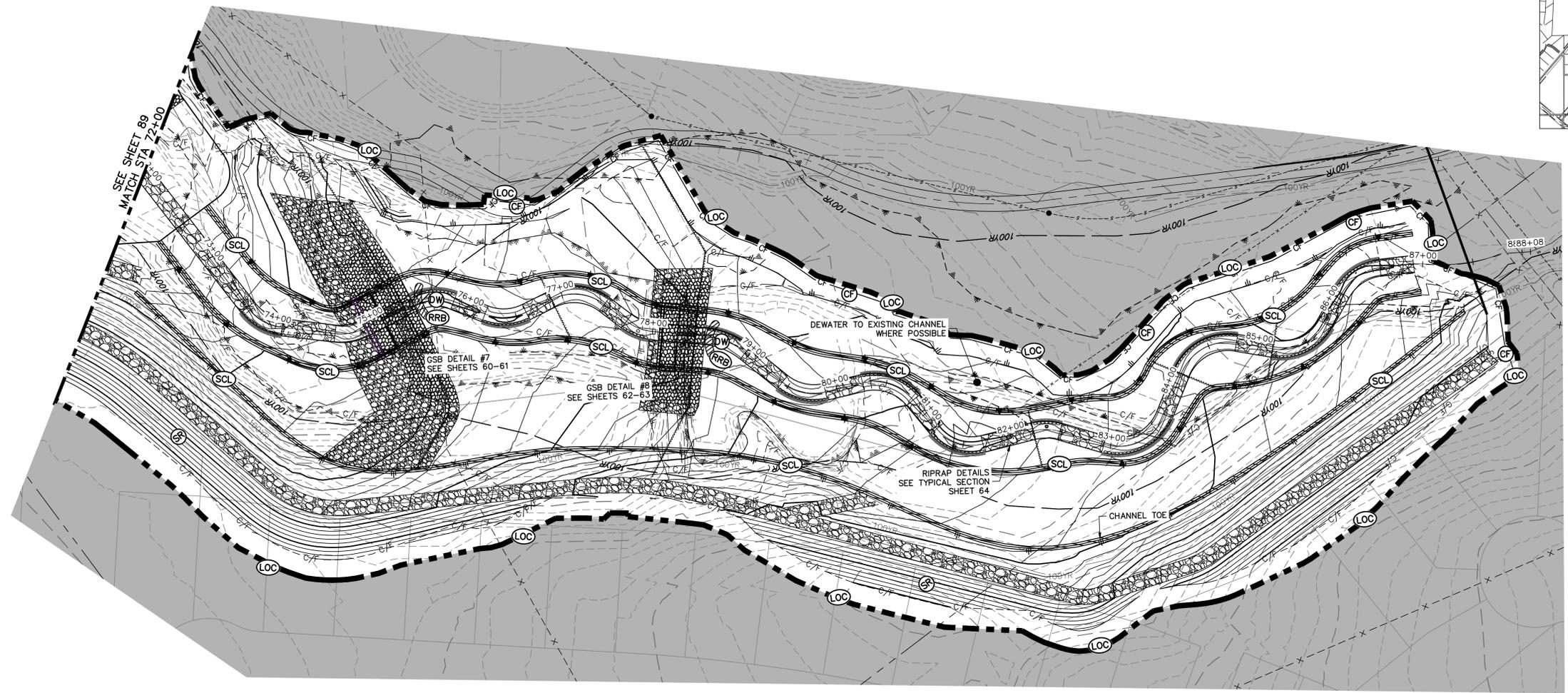
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PREPARED FOR  
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 20 BOULDER CRESCENT  
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 COLORADO SPRINGS, CO 80903  
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 Centennial 303-740-9383 • Colorado Springs 719-583-2593  
 Fort Collins 970-491-9888 • www.jrengineering.com



KEY MAP  
 SCALE: 1"=200'



**LEGEND**

EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE	CONSTRUCTION MARKERS	CM	CHECK DAM	CD
EXISTING EASEMENT	CONSTRUCTION FENCE	SEDIMENT CONTROL LOG	SCL	SURFACE ROUGHENING	SR
SECTION LINE	SILT FENCE	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX	SM		
EXISTING STORM SEWER	VEHICLE TRACKING CONTROL	PERMANENT LANDSCAPING	LS		
EXISTING CURB & GUTTER	STABILIZED STAGING AREA	GEOTEXTILE	ECB		
PROPOSED RIGHT OF WAY LINE	CONCRETE WASHOUT AREA	COIR MATTING	ECB		
PROPOSED EASEMENT	STOCK PILE				
PROPOSED STORM SEWER	TEMP DRAINAGE CHANNEL				
PROPOSED CURB & GUTTER					
PROPOSED TOP OF SLOPE					
PROPOSED TOE OF SLOPE					
EXISTING DRAINAGE ARROW					
PROPOSED DRAINAGE ARROW					

**TOTAL INTERIM PHASE SUMMARY OF APPROXIMATE QUANTITIES**

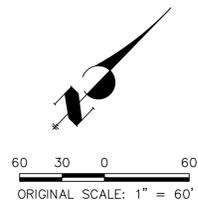
9	EA	-	REINFORCED ROCK BERM FOR CULVERT PROTECTION	(RRB)
3	EA	-	CONCRETE WASHOUT AREA	(CWA)
2	EA	-	CHECK DAMS	(CD)

**BENCHMARK**

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
 NORTHING = 411416.273  
 EASTING = 235167.071  
 ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION  
 NORTHING = 410095.404  
 EASTING = 235052.131  
 ELEVATION = 7000.40
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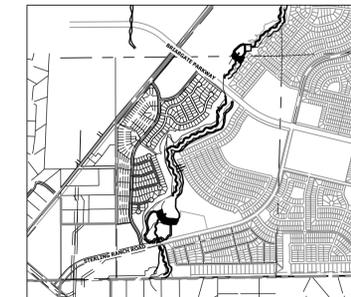
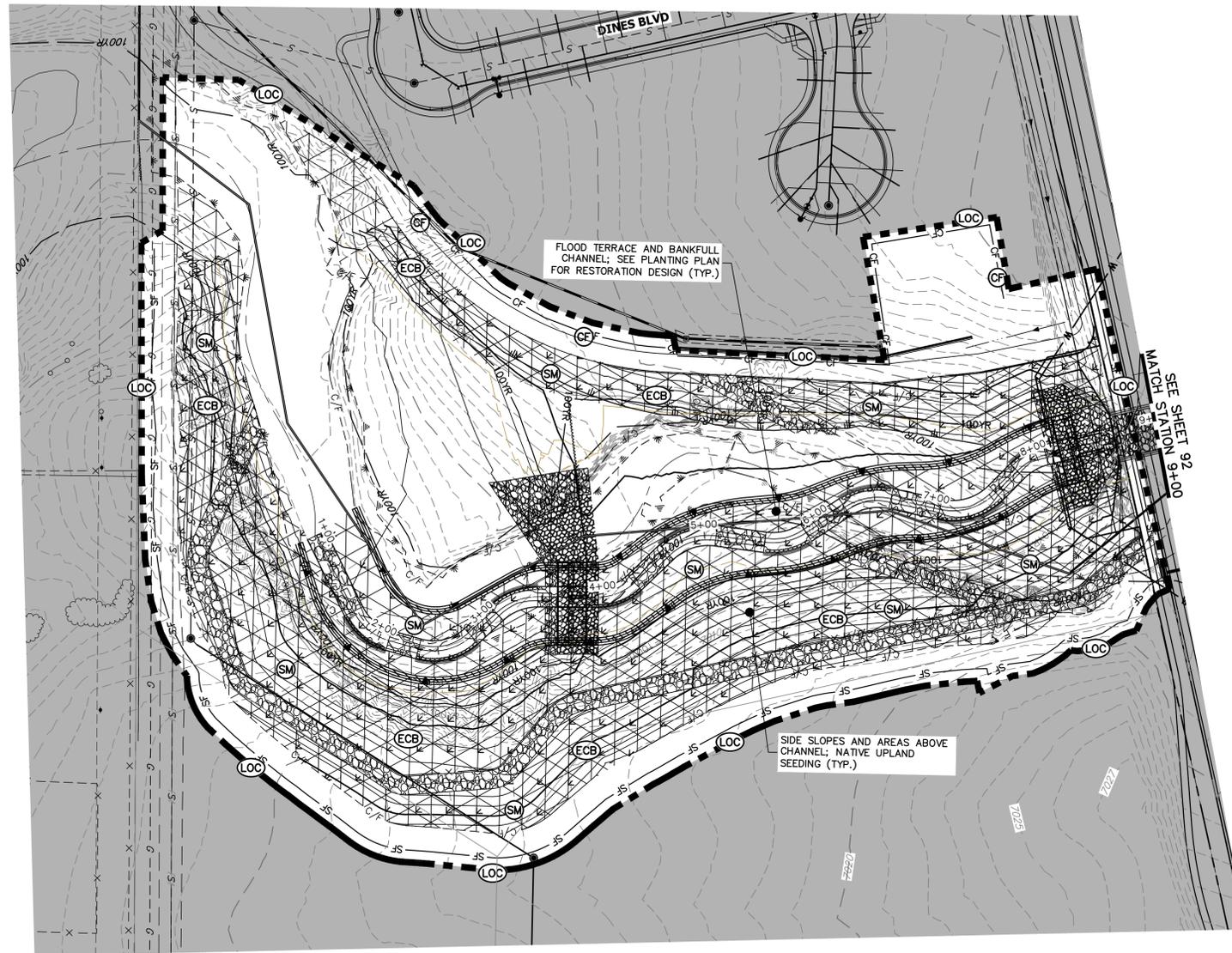
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MIKE A. BRAMLETT, P.E.  
 COLORADO P.E. 32314  
 FOR AND ON BEHALF OF JR ENGINEERING

SAND CREEK RESTORATION	GEC INTERIM	BY	DATE						
		No.	REVISION	1"=60'	H-SCALE	N/A	V-SCALE	9/1/22	DATE
		DESIGNED BY							
		DRAWN BY							
		CHECKED BY							
		SHEET	90	OF	99				
		JOB NO.	25188.04						



KEY MAP  
SCALE: 1"=2000'

final should have all temporary BMPs removed (or grayed out) from the figures

include quantities for ECB, seeding/mulching

**LEGEND**

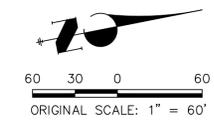
EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE	CONSTRUCTION MARKERS	CM	CHECK DAM	CD
EXISTING EASEMENT	CONSTRUCTION FENCE	SEDIMENT CONTROL LOG	SCL	SURFACE ROUGHENING	SR
SECTION LINE	SILT FENCE	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX	SM		
EXISTING STORM SEWER	VEHICLE TRACKING CONTROL	PERMANENT LANDSCAPING	LS		
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EXISTING DRAINAGE ARROW					
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**BENCHMARK**

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PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.
SAND CREEK RESTORATION GEC FINAL	SHEET 91 OF 99 JOB NO. 25188.04



KEY MAP  
SCALE: 1" = 2000'

**LEGEND**

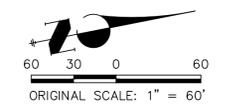
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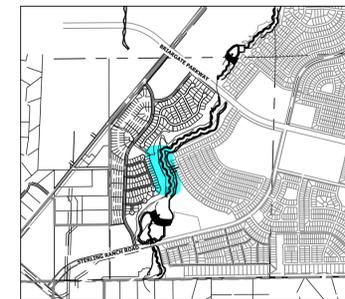
PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024			
	J.R. ENGINEERING A Westman Company Central 303-740-9888 • Colorado Springs 719-583-2683 Fort Collins 970-491-9888 • www.jrengineering.com			
BY	DATE	No.	REVISION	
H-SCALE	1" = 60'			
V-SCALE	N/A			
DESIGNED BY	9/1/22			
DRAWN BY	DJV			
CHECKED BY	WLL			
SAND CREEK RESTORATION		GEC FINAL		
SHEET 92 OF 99		JOB NO. 25188.04		

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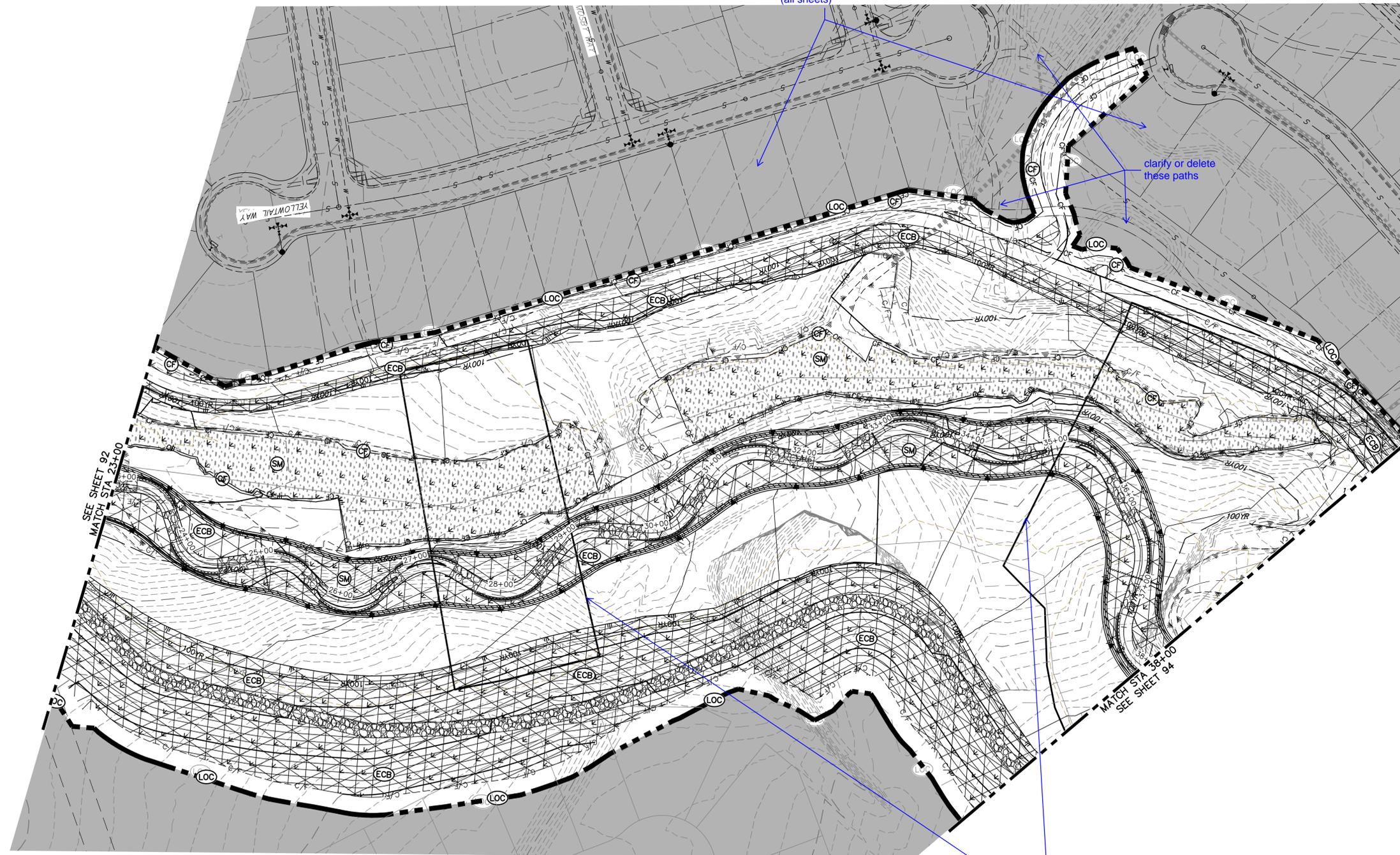
Label lot numbers  
(all sheets)

clarify or delete  
these paths

Delete any  
unnecessary lines,  
label if needed



KEY MAP  
SCALE: 1" = 2000'



**LEGEND**

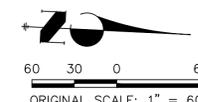
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EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE	CONSTRUCTION MARKERS	CM	CHECK DAM	CD
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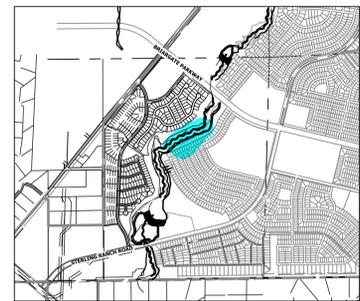
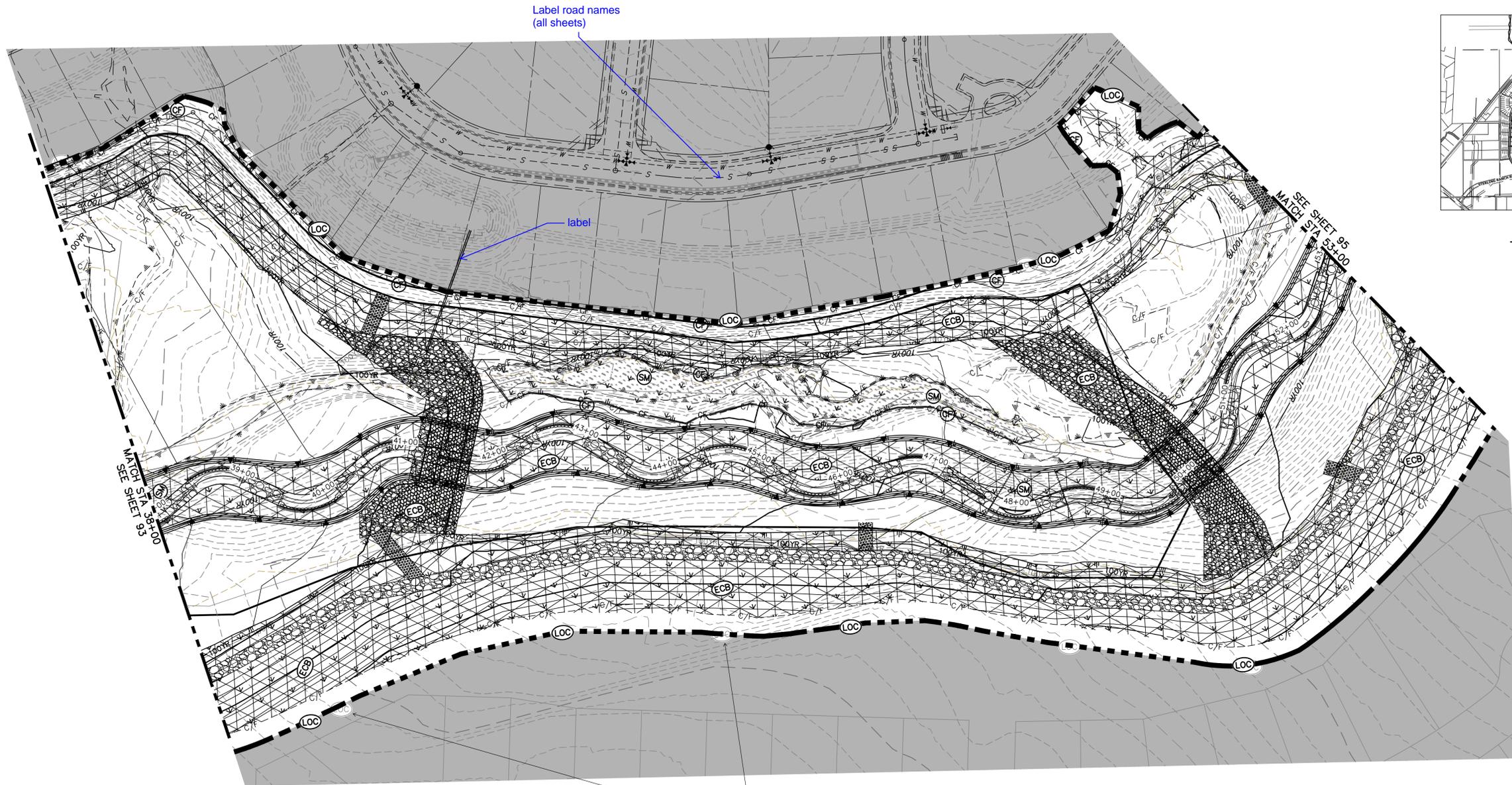
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COLORADO SPRINGS, CO 80903  
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BY	DATE	No.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1" = 60'	N/A	9/1/22	DJV	WLL	

SAND CREEK RESTORATION	GEC FINAL	SHEET 93 OF 99
		JOB NO. 25188.04



KEY MAP  
SCALE: 1"=2000'

PREPARED FOR  
**SR LAND, LLC**  
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2ND FLOOR  
COLORADO SPRINGS, CO 80903  
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DATE	9/1/22
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**LEGEND**

EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
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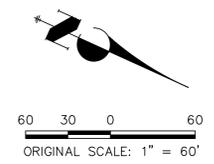
remove

**BENCHMARK**

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EASTING = 235167.071  
ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION  
NORTHING = 410095.404  
EASTING = 235052.131  
ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411399.962  
EASTING = 233849.817  
ELEVATION = 7030.82

**BASIS OF BEARINGS**

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



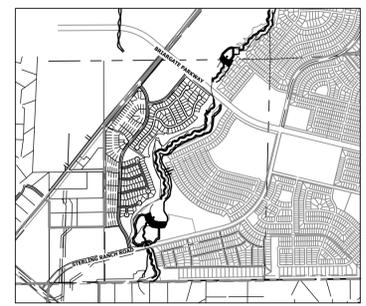
**ENGINEER'S STATEMENT**

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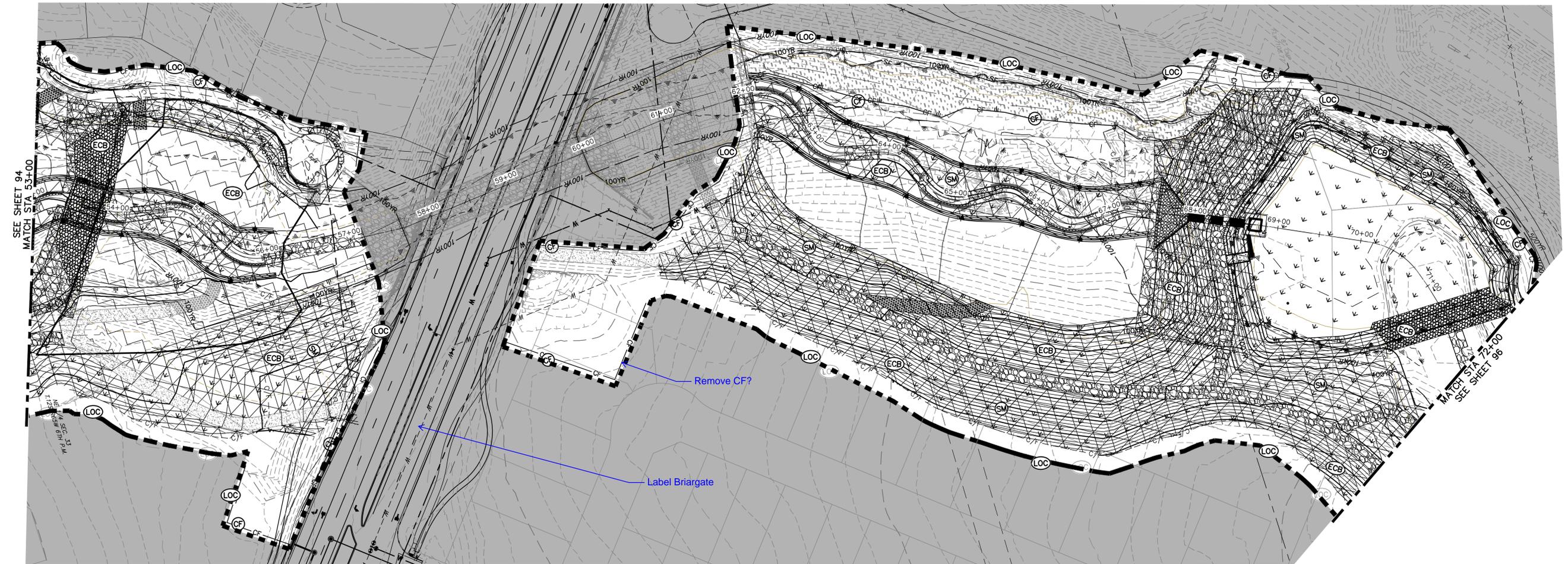


MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING

show location on key



KEY MAP  
SCALE: 1" = 200'



SEE SHEET 94  
MATCH STA 53+00

MATCH STA 72+00  
SEE SHEET 96

Remove CF?

Label Briagate

**LEGEND**

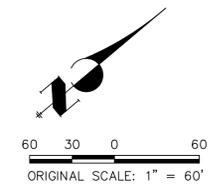
EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE	CONSTRUCTION MARKERS	CM	CHECK DAM	CD
EXISTING EASEMENT	CONSTRUCTION FENCE	SEDIMENT CONTROL LOG	SCL	SURFACE ROUGHENING	SR
SECTION LINE	SILT FENCE	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX	SM		
EXISTING STORM SEWER	VEHICLE TRACKING CONTROL	PERMANENT LANDSCAPING	LS		
EXISTING CURB & GUTTER	STABILIZED STAGING AREA	GEOTEXTILE	ECB		
PROPOSED RIGHT OF WAY LINE	CONCRETE WASHOUT AREA	COIR MATTING	ECB		
PROPOSED EASEMENT	STOCK PILE				
PROPOSED STORM SEWER	TEMP DRAINAGE CHANNEL				
PROPOSED CURB & GUTTER					
PROPOSED TOP OF SLOPE					
PROPOSED TOE OF SLOPE					
EXISTING DRAINAGE ARROW					
PROPOSED DRAINAGE ARROW					

**BENCHMARK**

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411416.273  
EASTING = 235167.071  
ELEVATION = 7023.42
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**BASIS OF BEARINGS**

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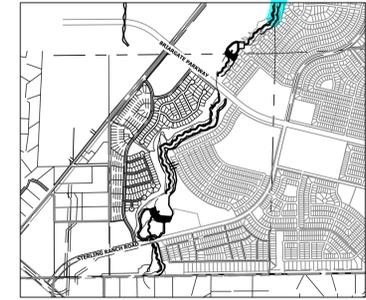
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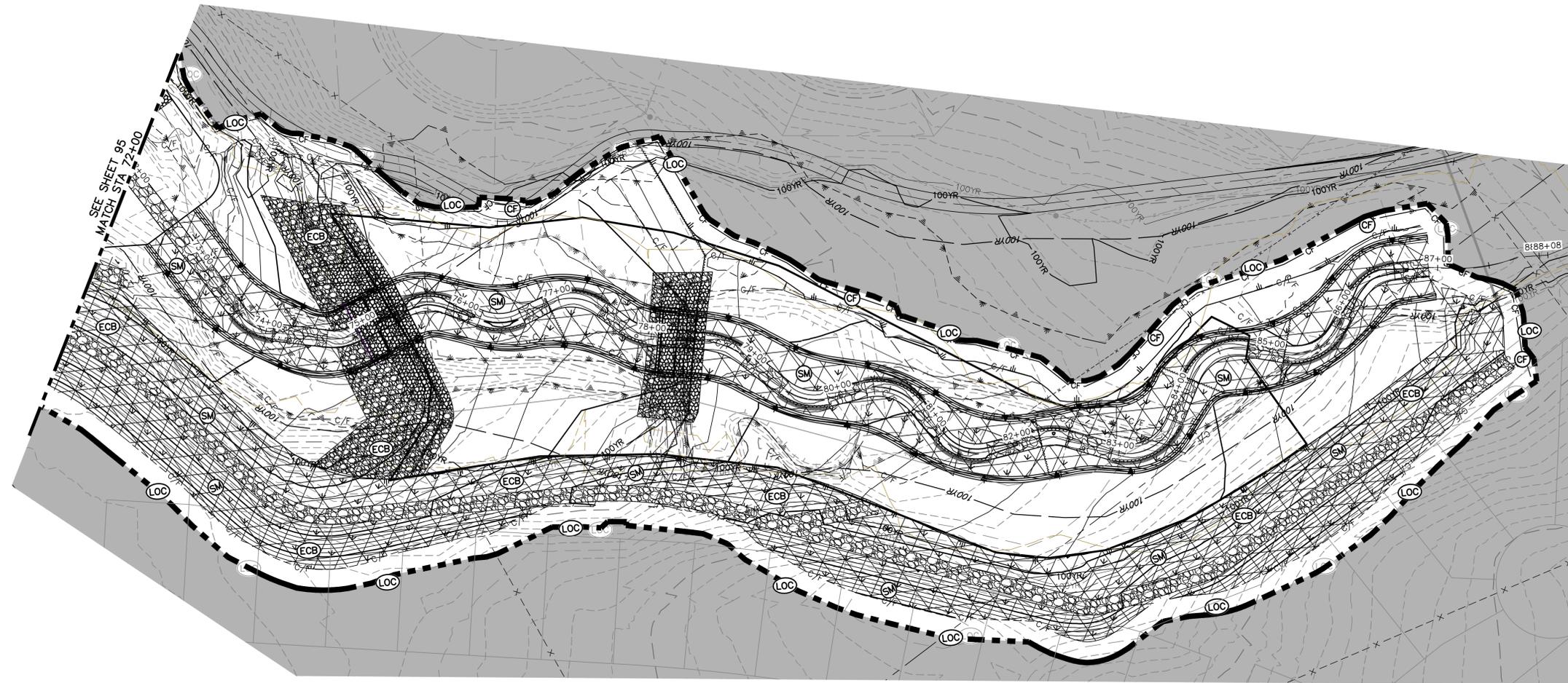


MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING

PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, OR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.
SAND CREEK RESTORATION GEC FINAL	SHEET 95 OF 99 JOB NO. 25188.04



KEY MAP  
SCALE: 1" = 2000'



**LEGEND**

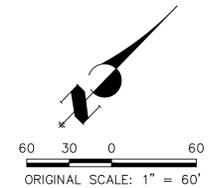
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EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
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COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING



SAND CREEK RESTORATION	GEC FINAL	BY	DATE	No.	REVISION
		H-SCALE	1" = 60'		
		V-SCALE	N/A		
		DATE	9/1/22		
		DESIGNED BY	DJV		
		DRAWN BY	WLL		
		CHECKED BY			
		SHEET	96	OF	99
		JOB NO.	25188.04		

**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
2ND FLOOR  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 419-3024

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