SADDLEHORN RANCH - FILING 3

LOCATED IN SECTION 3

TOWNSHIP 13 SOUTH, RANGE 64 WEST OF THE 6TH P.M., EL PASO COUNTY, STATE OF COLORADO

GRADING AND EROSION CONTROL PLANS





J·R ENGINEERING

ENGINEER'S STATEMENT

FOR AND ON BEHALF OF JR ENGINEERING, LLC

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

PREPARING THIS PLANS.

BRYAN T. LAW, P.E.

| ABE | BREVIATIONS | | |
|----------|---------------------------------------|-------|---------------------------------|
| .C | ACRE | INT | INTERSECTION |
| .D | ALGEBRAIC DIFFERENCE | INV | INVERT |
| ·Η | AHEAD | IRR | IRRIGATION |
| RCH | ARCHITECT | KB | KICK (THRUST) BLOCK |
| SCE | AMERICAN SOCIETY OF CIVIL | LB | POUND |
| | ENGINEERS | LE | LANDSCAPE EASEMENT |
| SS'Y | ASSEMBLY | ĹF | LINEAR FOOT |
| VE | AVENUE | LN | LANE |
| В | BOX BASE | LOMR | LETTER OF MAP REVISION |
| K | BACK | | LOW POINT |
| NDY | BOUNDARY | LS | LUMP SUM |
| OP | BOTTOM OF PIPE | LT | LEFT |
| OV | BLOW OFF VALVE | | MAXIMUM |
| FV | BUTTERFLY VALVE | M/D | |
| LVD | BOULEVARD | MDDP | MASTER DEVELOPMENT |
| W | BOTTOM OF WALL | MIDDE | DRAINAGE PLAN |
| &G | CURB & GUTTER | МН | MANHOLE |
| ATV | CABLE TELEVISION | MIN | MINIMUM |
| | CATCH BASIN | MS | MOUNTABLE SIDEWALK |
| B | | | |
| BC | CONCRETE BOX CULVERT | N | NORTH |
| DOT | COLORADO DEPARTMENT OF TRANSPORTATION | NRCP | NON-REINFORCED CONCRETE PIPE |
| DS | CUL-DE-SAC | ODP | OFFICIAL DEVELOPMENT PLAN |
| F | CUBIC FOOT | OHE | OVERHEAD ELECTRIC |
| FS | CUBIC FEET PER SECOND | OHU | OVERHEAD UTILITY |
| IP. | COMPLETE IN PLACE | PC | |
| L | CENTER LINE | PCC | POINT OF COMPOUND |
| | CONDITIONAL LETTER OF MAP | | CURVATURE |
| | REVISION | PCR | POINT OF CURB RETURN |
| LR | CLEAR | PDP | |
| MP | CORRUGATED METAL PIPE | | PLAN |
| :0 | CLEAN OUT | ΡE | PROFESSIONAL ENGINEER |
| ocs | CITY OF COLORADO SPRINGS | PI | POINT OF INTERSECTION |
| ONC | CONCRETE | PKWY | |
| R | CIRCLE | PL | PROPERTY LINE |
| SP | CORRUGATED STEEL PIPE | PR | PROPOSED |
| SU | COLORADO SPRINGS UTILITIES | PRC | POINT OF REVERSE CURVATURE |
| :T | COURT | PT | POINT OF TANGENCY |
| TRB | CONCRETE THRUST REDUCER | PV | |
| מאווי | BLOCK | PVC | POLYVINYL CHLORIDE |
| ~ | CUBIC YARD | R R | RADIUS |
| Y DDC | | RCBC | |
| BPS | DRAINAGE BASIN PLANNING | KCBC | |
| | STUDY | | CULVERT |

DRAINAGE EASEMENT

EDGE OF ASPHALT

FINAL DEVELOPMENT PLAN

GEOGRAPHIC INFORMATION

GLOBAL POSITIONING SYSTEM

HOT BITUMINOUS PAVEMENT

HIGH DEFLECTION COUPLING

HOME OWNERS ASSOCIATION

HDPE HIGH DENSITY POLYETHYLENE

HOT MIX ASPHALT

HYDRAULIC GRADE LINE

IRRIGATION EASEMENT

FINAL DRAINAGE REPORT

FLARED END SECTION FINISHED FLOOR ELEVATION

FIBER OPTIC CABLE

FINISHED GRADE

FIRE HYDRANT FLOWLINE

GRADE BREAK

GAS EASEMENT

FILING

SYSTEM

GAS LINE

HANDICAP

HIGH POINT

HOUR INLET

GATE VALVE

EPC EL PASO COUNTY ERCP ELLIPTICAL RCP

ESTIMATE

EXISTING

ESMT EASEMENT

DIAMETER

DIA

DIP

EST

EΧ

FES

FΟ GB

GIS

GV

HOA

HR

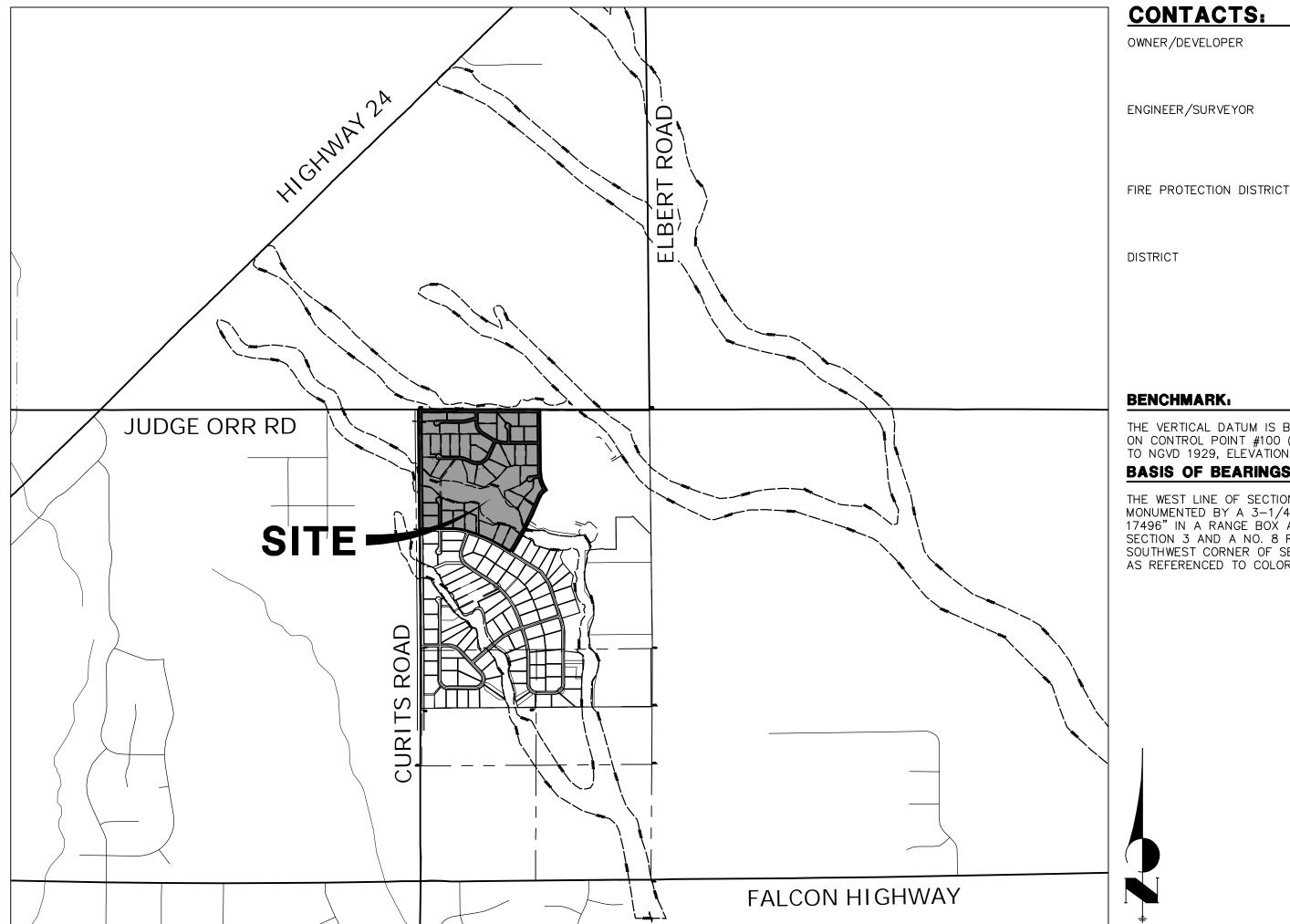
REINFORCED CONCRETE PIPE ROAD RIGHT OF WAY RIGHT STEEL SANITARY SEWER SQUARE YARD SY-IN SQUARE YARD INCH TR THRUST BLOCK TOP BACK OF CURB TOP BACK OF WALK TBW TELEPHONE TOP OF ASPHALT TOA TOP OF BOX TOC TOP OF CURB OR CONCRETE

TOP OF FOUNDATION TOP OF PIPE TOP OF WALL TYPICAL UDFCD URBAN DRAINAGE AND FLOOD CONTROL DISTRICT UTILITY EASEMENT U&DE UTILITY & DRAINAGE EASEMENT UNDERGROUND ELECTRIC VCP VITRIFIED CLAY PIPE VERTICAL POINT OF CURVATURE

VERTICAL POINT OF INTERSECTION VERTICAL POINT OF TANGENCY VEHICLE TRACKING CONTROL WEST

WATER LINE WATER MAIN WRD WATER RESOURCES DEPARTMENT WATER SURFACE WATER SURFACE ELEVATION WTR WATER

YEAR



VICINITY MAP

SHEET INDEX

SCALE: 1" = 2000'

COVER SHEET LEGEND & NOTES TYPICAL SECTIONS

 OVERALL SITE MAP GRADING & EROSION CONTROL PLANS GRADING & EROSION CONTROL DETAILS

BENCHMARK:

THE VERTICAL DATUM IS BASED OFF AN OPUS SOLUTION RAN ON CONTROL POINT #100 (NO. 4 REBAR) AND IS ADJUSTED TO NGVD 1929, ELEVATION 6754.61.

ROI PROPERTY GROUP, LLC 2495 RIGDON STREET NAPA, CALIFORNIA 94558 P~707-633-9700

5475 TECH CENTER DRIVE, SUITE 235

FALCON FIRE PROTECTION
12072 ROYAL COUNTY DOWN ROAD

SADDLEHORN RANCH METRO DISTRICT

COLORADO SPRINGS, CO 80919

JR ENGINEERING, LLC ATTN: BRYAN LAW

P~(303) 267-6254

FALCON, CO 80831 P~(719) 495-4050

MONUMENTED BY A 3-1/4" ALUMINUM CAP STAMPED "PLS 17496" IN A RANGE BOX AT THE NORTHWEST CORNER OF SECTION 3 AND A NO. 8 REBAR IN A RANGE BOX AT THE SOUTHWEST CORNER OF SECTION 3, BEARING NO0'32'28"W AS REFERENCED TO COLORADO STATE PLANE CENTRAL ZONE

ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS

EL PASO COUNTY STATEMENT

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL,

VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED. IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION

DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS. THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS DISCRETION.

JENNIFER IRVINE, P.E.

COLORADO P.E. 25043

COUNTY ENGINEER/ECM ADMINISTRATOR

OWNER/DEVELOPER STATEMENT

EDARP File Number: SF234

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

DATE BILL GUMAN

WILLIAM GUMAN AND ASSOCIATES 731 NORTH WEBER STREET COLORADO SPRINGS, CO 80903

THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES.

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR

THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR

 \circ

SHEET 1 OF 11 JOB NO. 25142.05

LAYER LINETYPE LEGEND **GRADING AND EROSION CONTROL STANDARD NOTES** EXISTING **PROPOSED** 1. CONSTRUCTION MAY NOT COMMENCE UNTIL A CONSTRUCTION PERMIT IS OBTAINED FROM PLANNING AND COMMUNITY DEVELOPMENT AND A PRECONSTRUCTION CONFERENCE IS HELD WITH PLANING AND COMMUNITY DEVELOPMENT INSPECTIONS. PHASE LINE 2. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, MATCH LINE 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. SECTION LINE BOUNDARY LINE 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 PROPERTY LINE 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 EASEMENT LINE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED. AND RIGHT OF WAY R.O.W. A LINE 4. A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION, MANAGEMENT OF THE CENTERLINE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED CITY LIMITS 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 WIRE FENCE 5. ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL CHAIN LINK FENCE THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A WOOD FENCE 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 MASONRY FENCE GUARDRAIL 6. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS CONC. BARRIER TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE. CABLE TV 7. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE ELECTRIC OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION FIBER OPTIC 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 GAS MAIN CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN. IRRIGATION MAIN OIL/PETRO. MAIN 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. OVERHEAD UTILITY ______OHU____ 9. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED SANITARY SEWER WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM STORM DRAIN 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 TELEPHONE CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE. WATER MAIN 10. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY RAW WATER LINE PROPOSED CHANGES THAT AFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION. SWALE/WATERWAY FLOWLINE 11. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL DIVERSION DITCH 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. DIVERSION CHANNEL 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. MAJOR DRAINAGE BASIN MINOR DRAINAGE BASIN 12. 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 TOP OF SLOPE 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 TOE OF SLOPE VEGETATION CONTROL MEASURES MUST BE LOOSENED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S). EDGE OF WATER 13. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION INDEX CONTOUR AND THE DISCHARGE OF SEDIMENT OFF SITE. INTERMEDIATE CONTOUR 14. 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. 15. DURING DEWATERING OPERATIONS OF UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE. TOP OF CUTS 16. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1. TOE OF FILLS CUT AND FILL LINE 17. 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 _____ SF ____ SF ___ SF ____ SF ____ SF ____ SILT FENCE MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE. 100 YEAR FLOODPLAIN 18. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, 500 YEAR FLOODPLAIN 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. FLOODWAY 19. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE BASE FLOOD ELEVATION ^^^^ CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY. EDGE OF WETLANDS 20. 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 STONE WALL SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT. STORMWATER FLOW ARROWS 21. 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. 22. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ONSITE UNLESS

PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING

23. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS

24. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH

25. OWNER/DEVELOPER AND THEIR AGENTS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS). AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE

CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE,

28. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED

29. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY ENTECH ENGINEERING, INC. ON APRIL 29, 2019 AND SHALL BE

30. 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

LOCAL, OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.

27. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.

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

SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER

APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.

APPROVED SEDIMENT CONTROL MEASURES.

CONSIDERED A PART OF THESE PLANS.

WATER QUALITY CONTROL DIVISION

4300 CHERRY CREEK DRIVE SOUTH

WQCD - PERMITS

DENVER, CO 80246-1530 ATTN: PERMITS UNIT

TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

| | EXISTING | PROPOSED |
|--------------------------------------|----------------------|----------------|
| STORM SEWER | | |
| MANHOLE | (D) | |
| STORM INLET | | |
| AREA INLET — SQUARE | | |
| AREA INLET — ROUND | 0 | |
| FLARED END SECTION | D | |
| | | |
| RIPRAP | | |
| SANITARY SEWER | | |
| LINE MARKER | Mkr San° | |
| SERVICE MARKER | <u>/s</u> | |
| CLEAN-OUT | 0- | • |
| MANHOLE W/ DIRECTIONAL FLOW ARROW | \$ ⊲ | •- |
| WATER LINE | | |
| LINE MARKER | Mkr W° | |
| SERVICE MARKER | | |
| FIRE HYDRANT | ď | €. |
| FIRE CONNECTION | • | × |
| MANHOLE BEND | W | • |
| BLOW-OFF VALVE | ۶t | ☆ ‡₁ |
| WELL VALUE | OWELL | ●WELL |
| METER | <i>₩</i> | • |
| VALVE | × | • |
| REDUCER | \sim | → |
| THRUST BLOCK | | × |
| CROSS | | ≺ + |
| PLUG W/ THRUST BLOCK | ٩Ĺ | • •[|
| TEE | | + |
| REVERSE ANCHOR | | ı |
| ANODE | | ⊗ |
| AIR & VACUUM VALVE ASSEMBLY | | • |
| TRANSMISSION BLOW-OFF ASSEMBLY | | • + |
| GAS LINE | | |
| MARKER | Mkr G° <u>∕</u> © | |
| SERVICE MARKER METER | <u> </u> | • |
| VALVE | ⊌ ⊠ | ▼ |
| PLUG | [| С |
| TEE | | ! - |
| DRY UTILITIES | | |
| CABLE TV MARKER | Mkr TV° | |
| CABLE TELEVISION PEDESTA | AL IV | |
| ELECTRIC MARKER | Mkr E° △ | |
| ELECTRIC SERVICE MARKER | | |
| ELECTRICAL PEDESTAL ELECTRICAL METER | E É | |
| ELECTRICAL METER ELECTRICAL MANHOLE | E | |
| FIBER-OPTIC MARKER | Mkr F0° | |
| IRRIGATION PEDESTAL | | |
| TELEPHONE MARKER | Mkr T° | |
| TELEPHONE PEDESTAL | T | |
| TELEPHONE MANHOLE | \bigcirc | |
| UTILITY POLE | -0- | + |
| GUY ANCHOR | @ — | |
| GUY POLE | 0- | |

<u>1.00%</u>

UTILITIES LEGEND

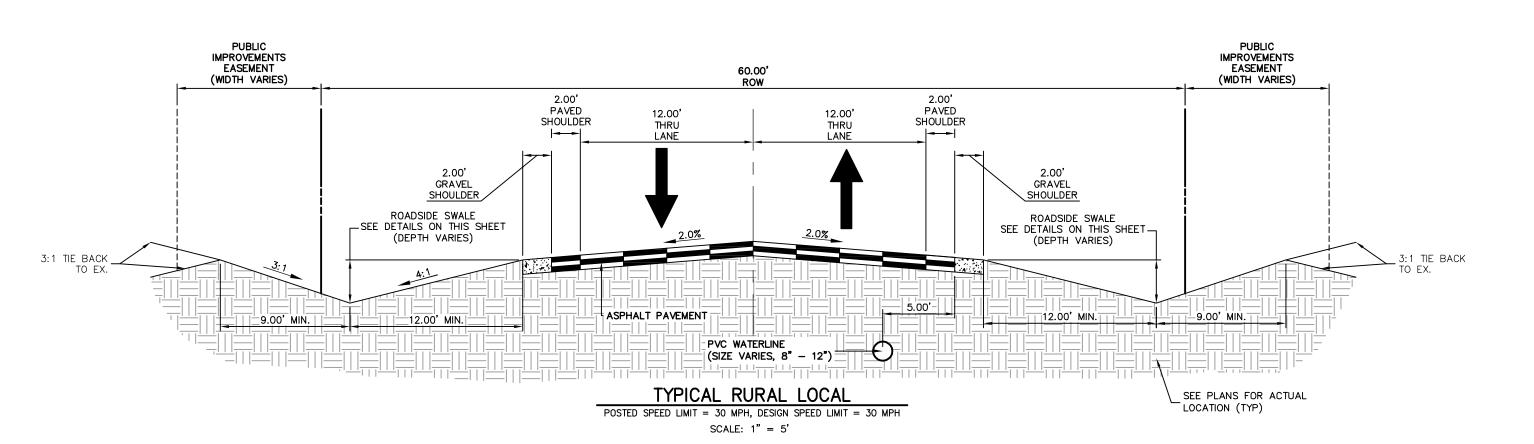
ENGINEER'S STATEMENT

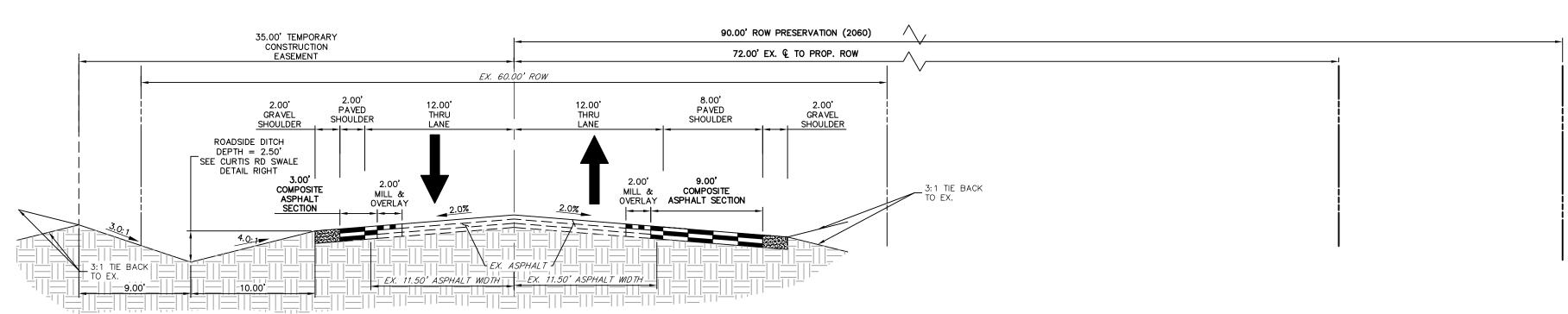
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

BRYAN T. LAW, P.E. COLORADO P.E. 25043

FOR AND ON BEHALF OF JR ENGINEERING, LLC

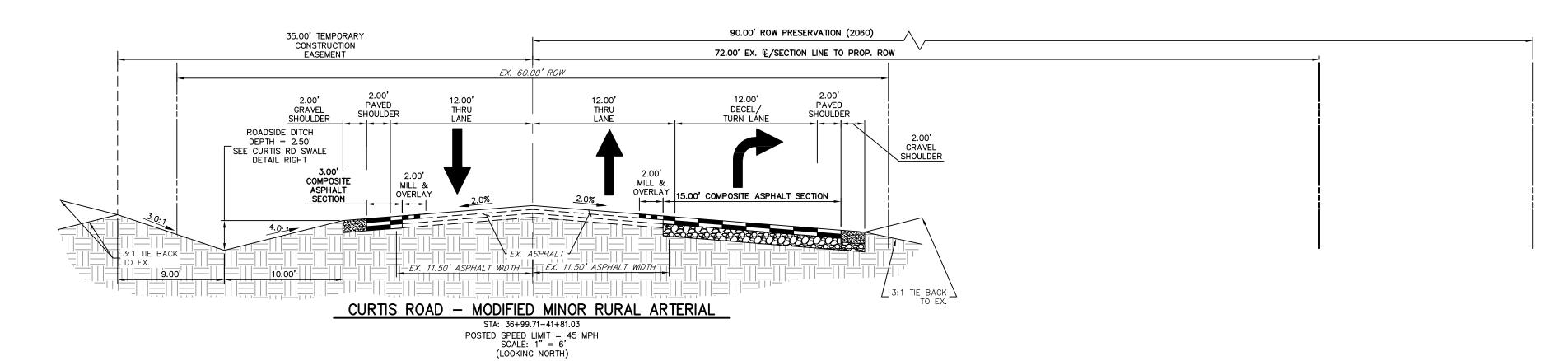
SHEET 2 OF 11 JOB NO. **25142.05**

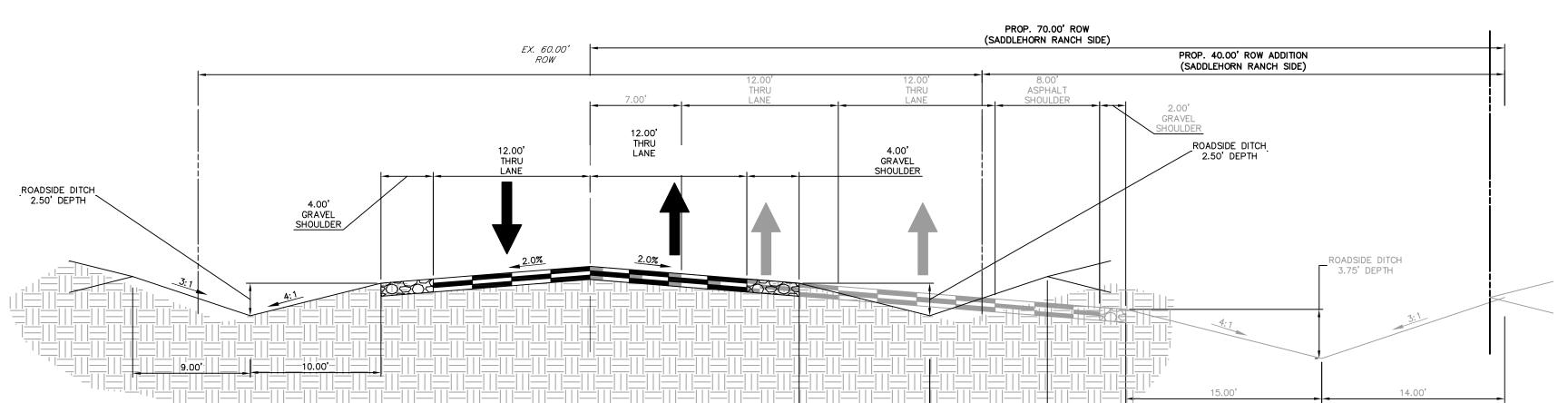




<u>CURTIS ROAD - MODIFIED MINOR RURAL ARTERIAL - INTERIM FUTURE</u> STA: 30+81.09-36+99.71 & 48+96.29-49+32.21 POSTED SPEED LIMIT = 45 MPH

(LOOKING NORTH)

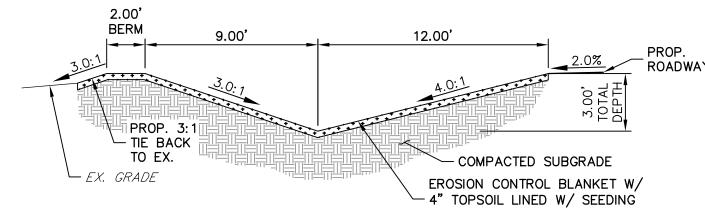




EX. JUDGE ORR ROAD -TYPICAL SECTION POSTED SPEED LIMIT = 45 MPH, DESIGN SPEED LIMIT = 50 MPH *NOTE: ULTIMATE SECTION HAS BEEN OVERLAYED.

ROADSIDE SWALE NOTES

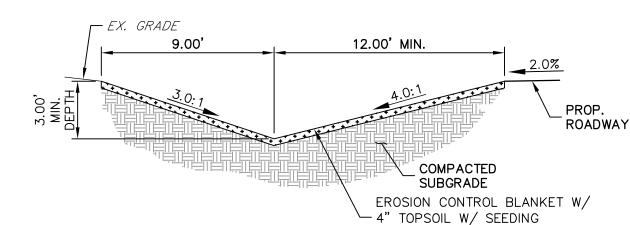
- 1. SWALE SECTION A-A PROVIDES MINIMUM SWALE DIMENSIONS. IN AREAS WHERE 3:1 TIE BACK TO EXISTING DOES NOT PROIVDE MINIMUM SWALE DEPTH, SWALE TO BE CUT DEEPER SUCH THAT 3' DEPTH IS PROVIDED RELATIVE TO EXISTING GRADE.
- 2. SWALE SECTION B-B TO BE USED IN FILL AREAS OF ROADWAY WHERE CUTTING SWALE DEEPER TO ACHIEVE 3.0' DEPTH RELATIVE TO EXISTING GRADE CAN NOT BE ACHIEVED DUE TO DOWN STREAM GRADE REQUIREMENTS, 2.0' BERM MUST BE PROVIDED TO MITIGATE FUTURE EROSION.



SWALE SECTION B-B

-BIG BLUEGRASS

SWALE SEED MIX: EROSION CONTROL BLANKET WITH PAWNEE BUTTES SEED INC. — "LOW GROW NATIVE MIX" —IDAHO FESCUE -SANDBERG BLUEGRASS -ROCKY MOUNTAIN FESCUE



AS SPEC'D BELOW SWALE SECTION A-A

EROSION CONTROL BLANKET WITH PAWNEE BUTTES SEED INC. - "LOW GROW NATIVE MIX" -IDAHO FESCUE

-SANDBERG BLUEGRASS -ROCKY MOUNTAIN FESCUE -BIG BLUEGRASS

PROP. ROADWAY

SPEC'D BELOW

ADDLEHORN | FILING

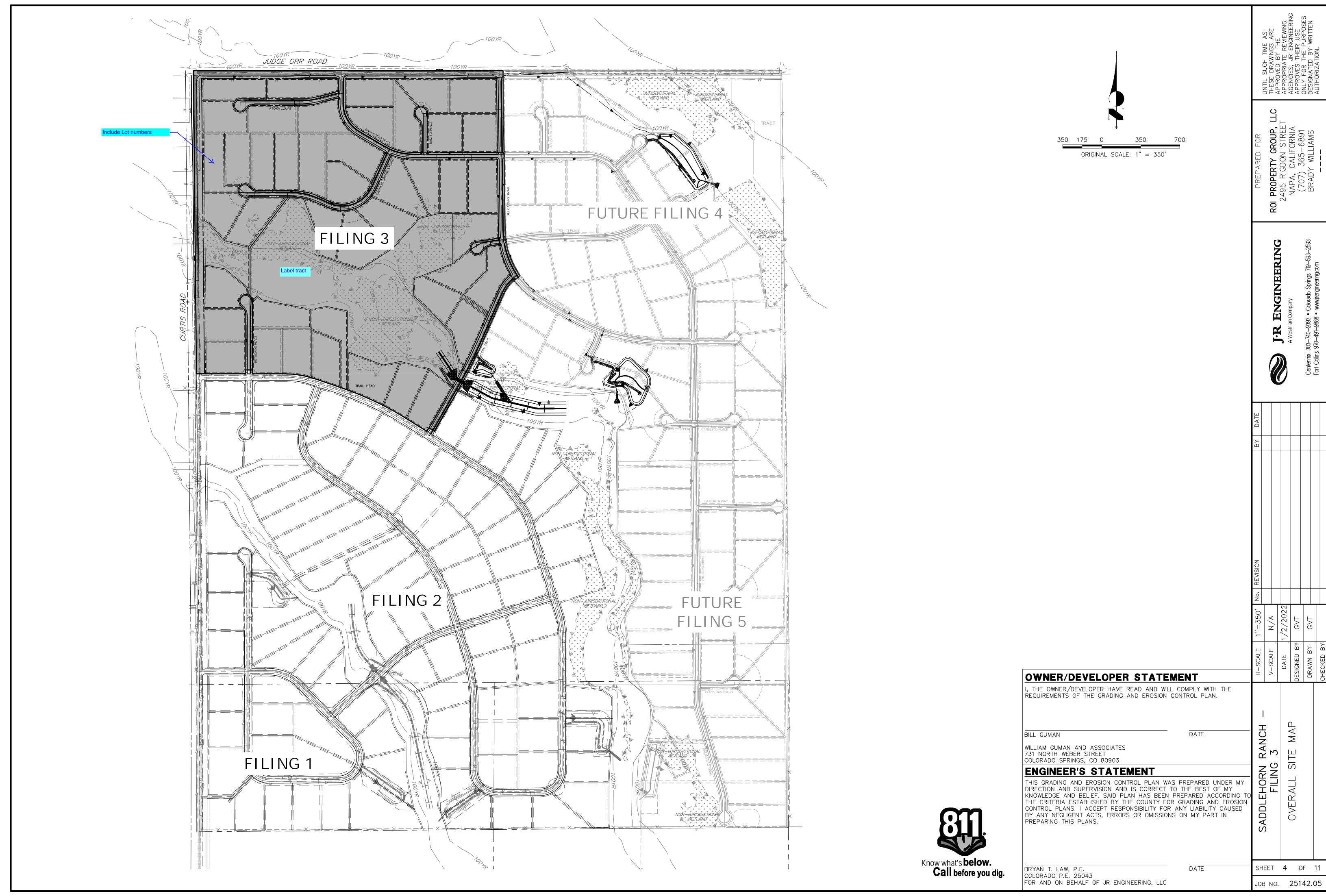
ENGINEER'S STATEMENT

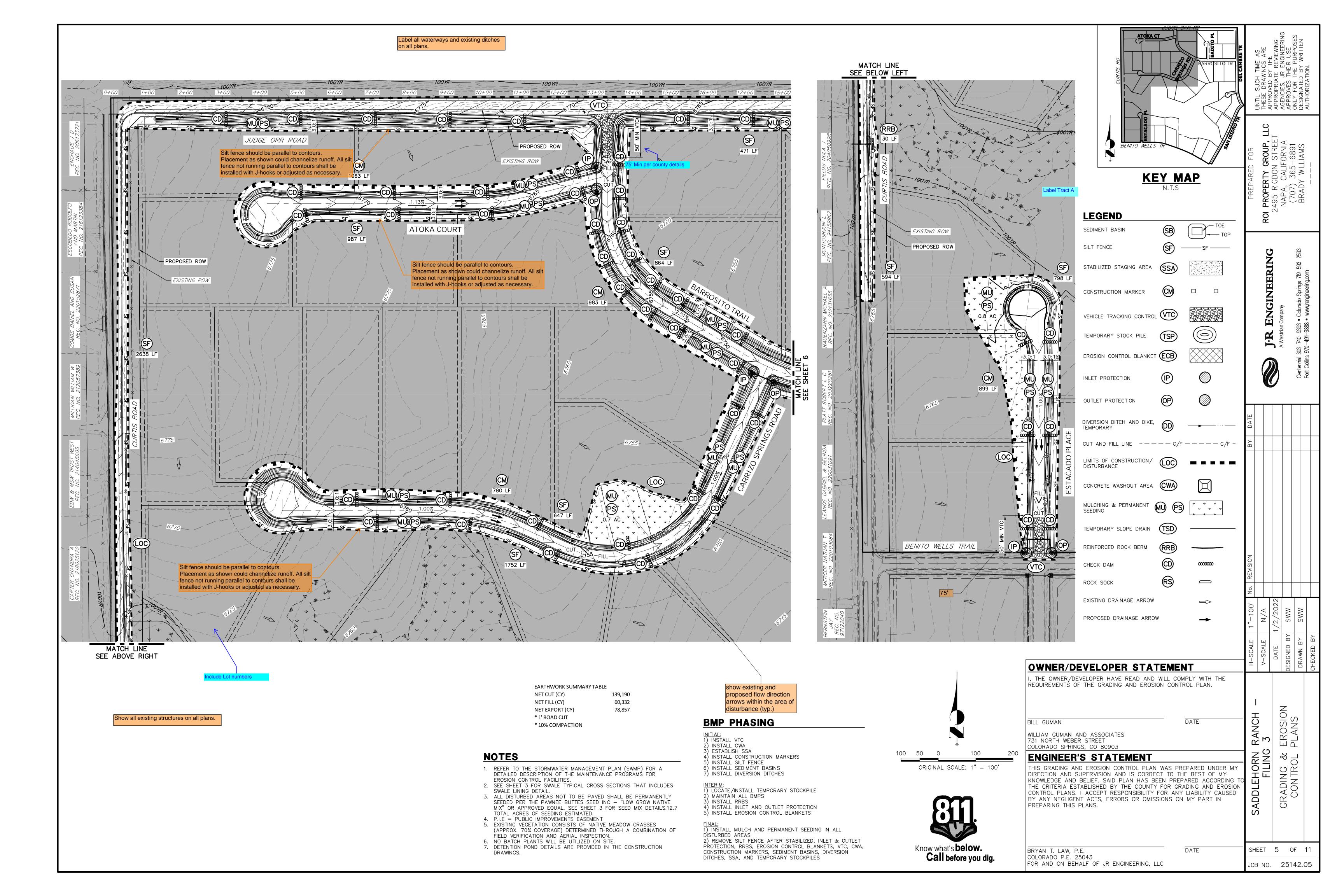
ORIGINAL SCALE: 1" = 5'

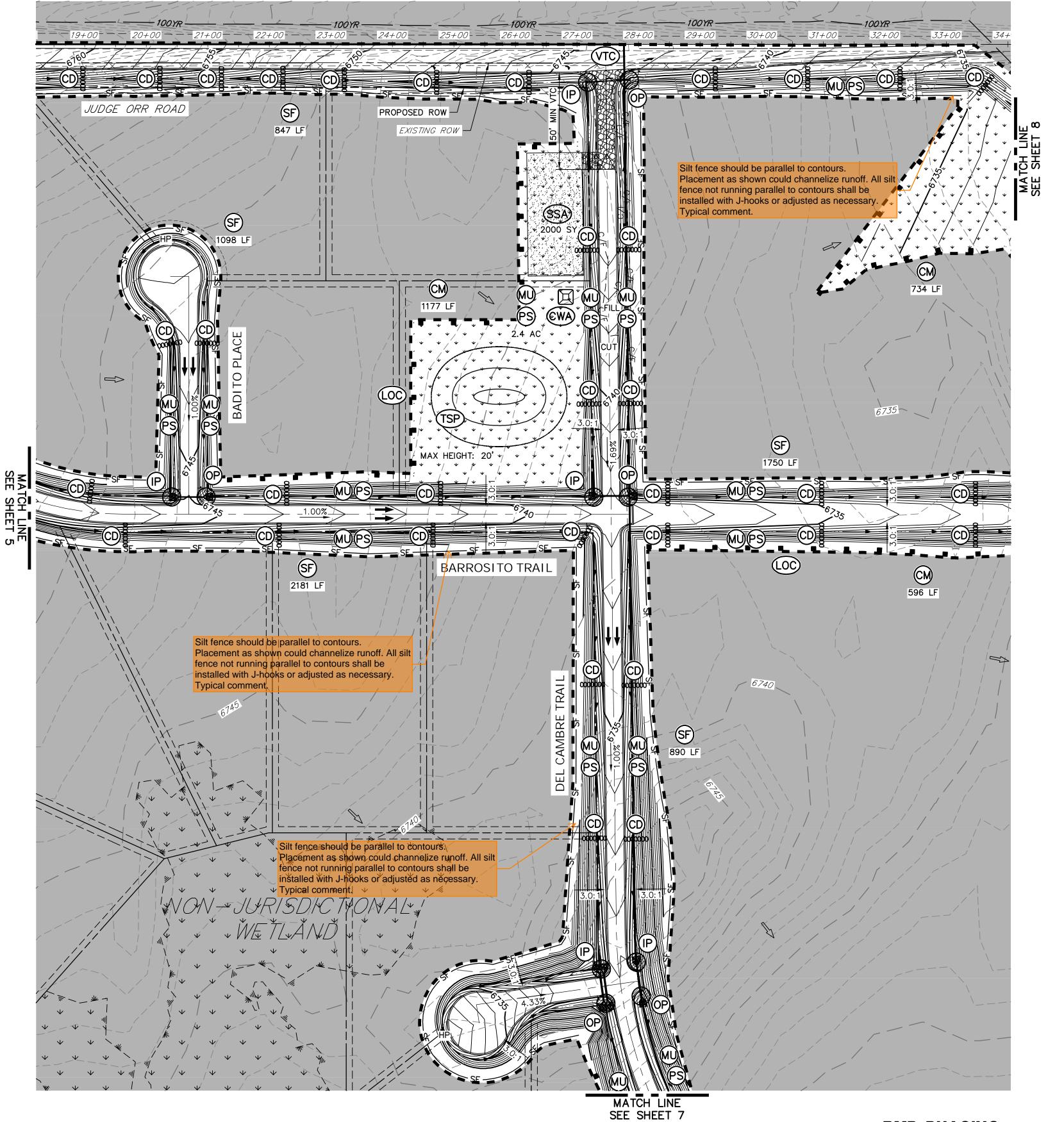
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

BRYAN T. LAW, P.E. COLORADO P.E. 25043 FOR AND ON BEHALF OF JR ENGINEERING, LLC

SHEET 3 OF 11 JOB NO. 25142.05







NOTES

EROSION CONTROL FACILITIES.

TOTAL ACRES OF SEEDING ESTIMATED. 4. P.I.E = PUBLIC IMPROVEMENTS EASEMENT

FIELD VERIFICATION AND AERIAL INSPECTION.

6. NO BATCH PLANTS WILL BE UTILIZED ON SITE.

SWALE LINING DETAIL.

1. REFER TO THE STORMWATER MANAGEMENT PLAN (SWMP) FOR A DETAILED DESCRIPTION OF THE MAINTENANCE PROGRAMS FOR

2. SEE SHEET 3 FOR SWALE TYPICAL CROSS SECTIONS THAT INCLUDES

3. ALL DISTURBED AREAS NOT TO BE PAVED SHALL BE PERMANENTLY SEEDED PER THE PAWNEE BUTTES SEED INC — "LOW GROW NATIVE

5. EXISTING VEGETATION CONSISTS OF NATIVE MEADOW GRASSES

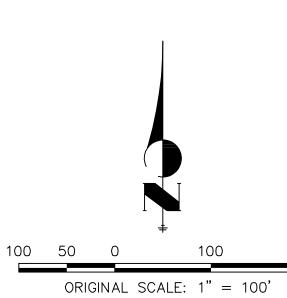
7. DETENTION POND DETAILS ARE PROVIDED IN THE CONSTRUCTION

MIX" OR APPROVED EQUAL. SEE SHEET 3 FOR SEED MIX DETAILS.12.7

(APPROX. 70% COVERAGE) DETERMINED THROUGH A COMBINATION OF

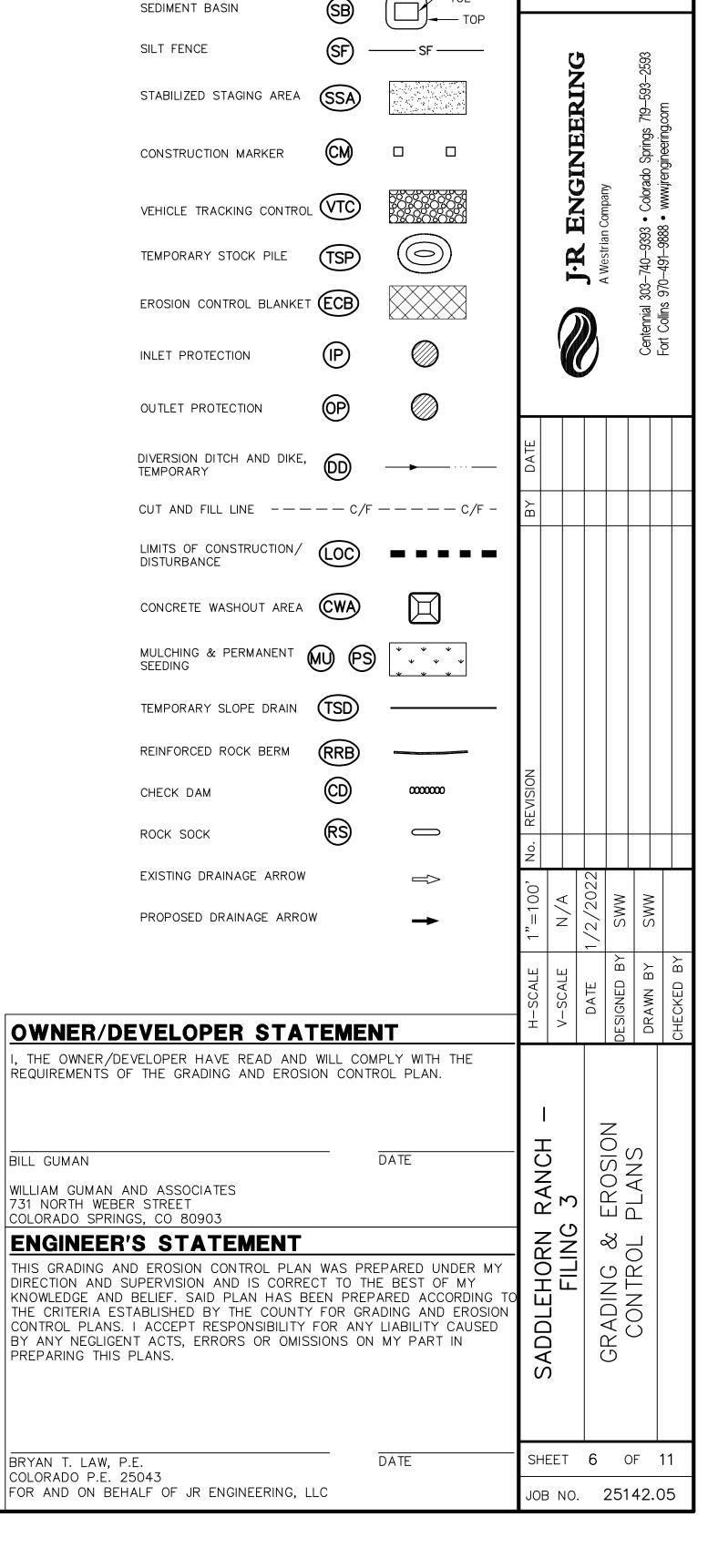
BMP PHASING

- 4) INSTALL CONSTRUCTION MARKERS
- 6) INSTALL SEDIMENT BASINS
- 7) INSTALL DIVERSION DITCHES
- 2) MAINTAÍN ALL BMPS
- 3) INSTALL RRBS 4) INSTALL INLET AND OUTLET PROTECTION
- 5) INSTALL EROSION CONTROL BLANKETS
- DISTURBED AREAS CONSTRUCTION MARKERS, SEDIMENT BASINS, DIVERSION DITCHES, SSA, AND TEMPORARY STOCKPILES



BILL GUMAN





KEY MAP

LEGEND



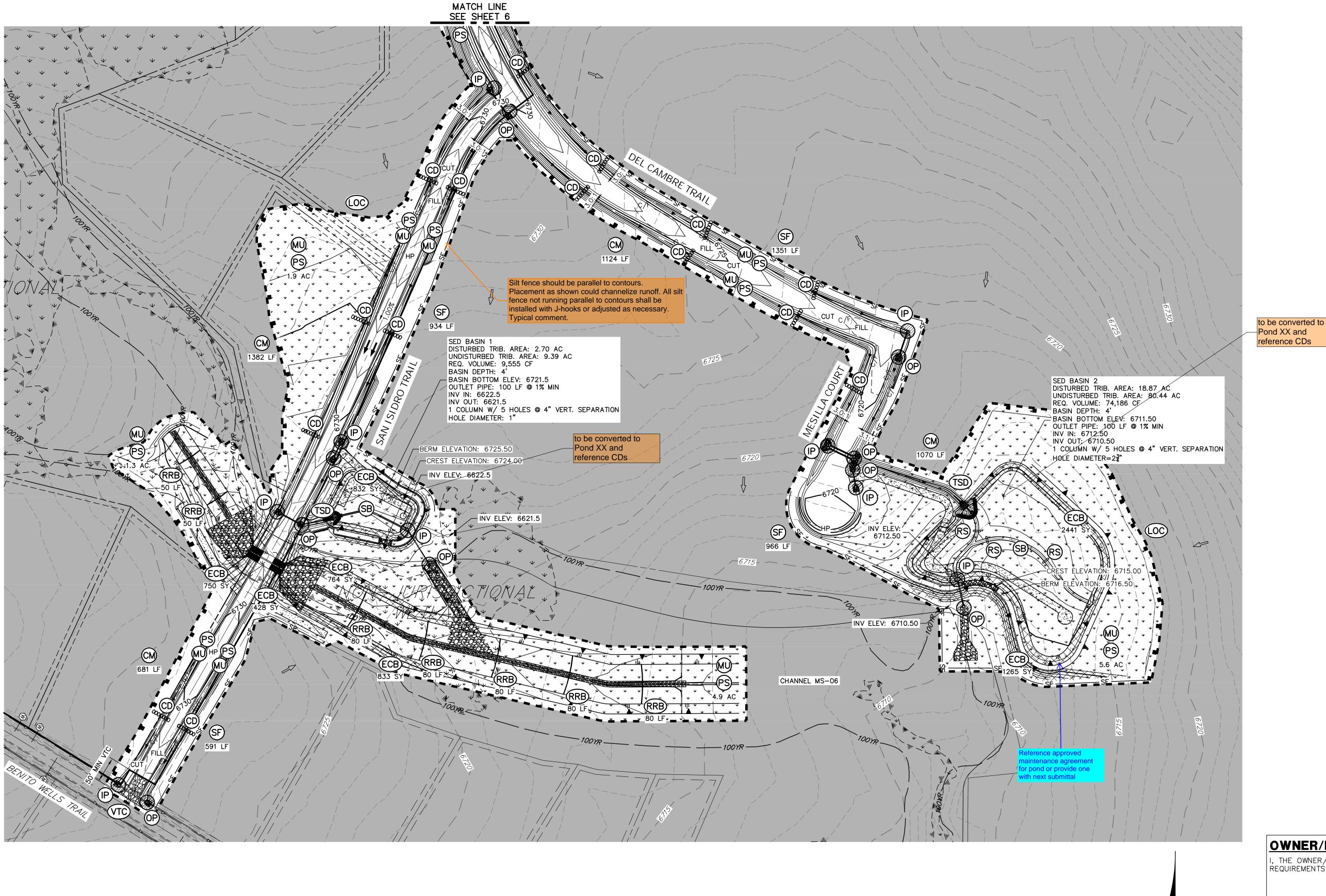
INITIAL:
1) INSTALL VTC
2) INSTALL CWA
3) ESTABLISH SSA

5) INSTALL SILT FENCE

<u>INTERIM:</u>
1) LOCATE/INSTALL TEMPORARY STOCKPILE

1) INSTALL MULCH AND PERMANENT SEEDING IN ALL

2) REMOVE SILT FENCE AFTER STABILIZED, INLET & OUTLET PROTECTION, RRBS, EROSION CONTROL BLANKETS, VTC, CWA,



NOTES

EROSION CONTROL FACILITIES.

TOTAL ACRES OF SEEDING ESTIMATED. 4. P.I.E = PUBLIC IMPROVEMENTS EASEMENT

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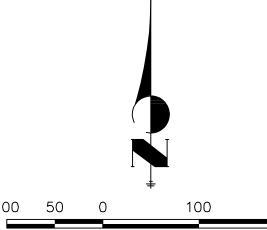
(APPROX. 70% COVERAGE) DETERMINED THROUGH A COMBINATION OF

BMP PHASING

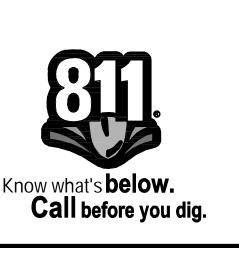
INITIAL:
1) INSTALL VTC

- 2) INSTALL CWA S) ESTABLISH SSA
- 4) INSTALL CONSTRUCTION MARKERS
- 5) INSTALL SILT FENCE 6) INSTALL SEDIMENT BASINS
- 7) INSTALL DIVERSION DITCHES
- INTERIM:

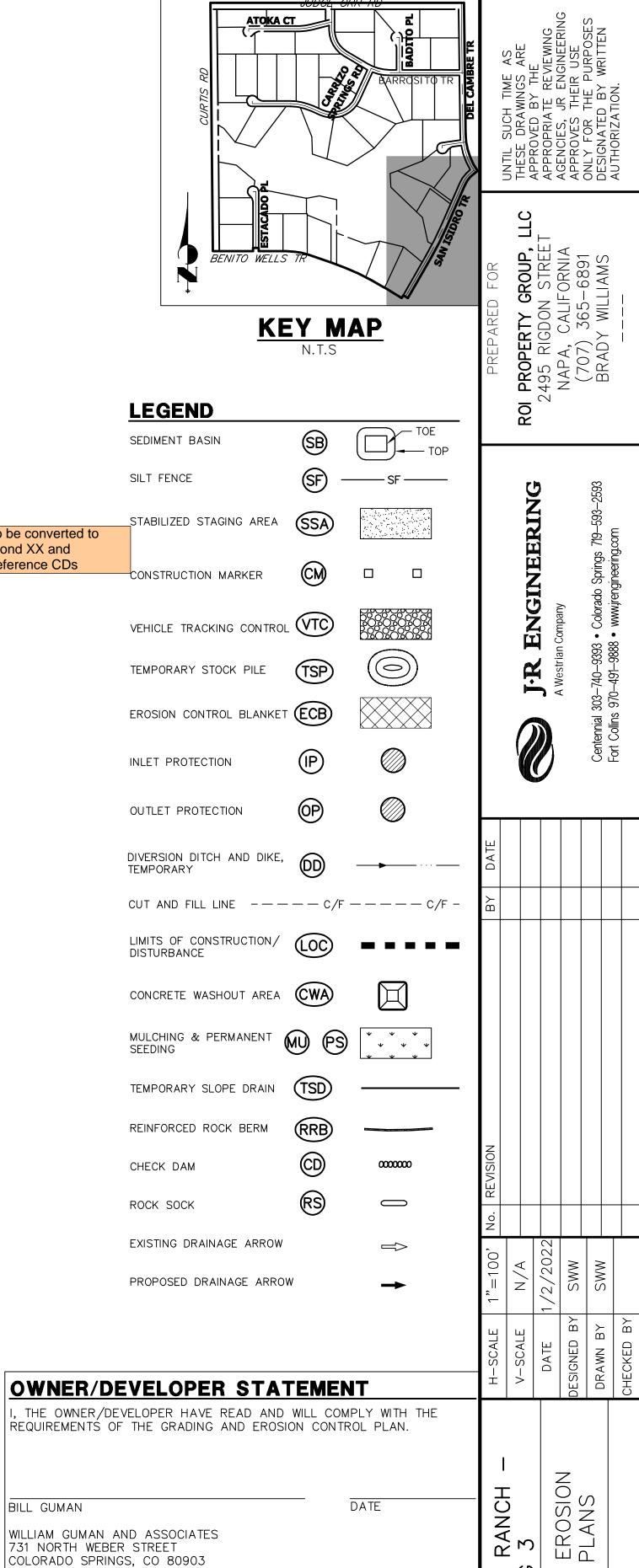
 1) LOCATE/INSTALL TEMPORARY STOCKPILE 2) MAINTAÍN ALL BMPS
- 3) INSTALL RRBS 4) INSTALL INLET AND OUTLET PROTECTION 5) INSTALL EROSION CONTROL BLANKETS
- 1) INSTALL MULCH AND PERMANENT SEEDING IN ALL DISTURBED AREAS 2) REMOVE SILT FENCE AFTER STABILIZED, INLET & OUTLET PROTECTION, RRBS, EROSION CONTROL BLANKETS, VTC, CWA, CONSTRUCTION MARKERS, SEDIMENT BASINS, DIVERSION DITCHES, SSA, AND TEMPORARY STOCKPILES



Know what's **below.**



ORIGINAL SCALE: 1" = 100'



DATE BILL GUMAN

WILLIAM GUMAN AND ASSOCIATES 731 NORTH WEBER STREET COLORADO SPRINGS, CO 80903

ENGINEER'S STATEMENT

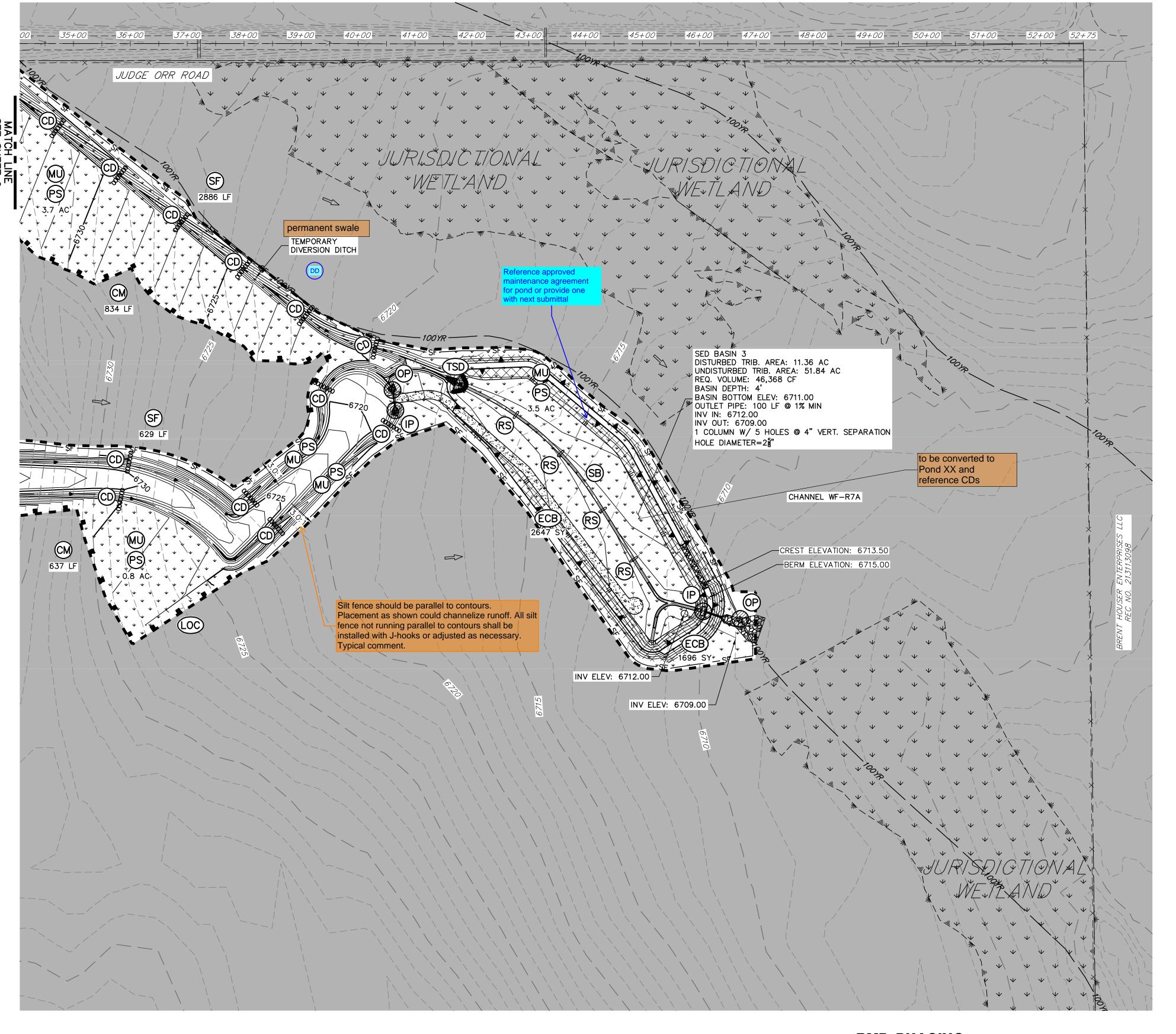
THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED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

BRYAN T. LAW, P.E. COLORADO P.E. 25043

DATE FOR AND ON BEHALF OF JR ENGINEERING, LLC

RADING DDI

SHEET **7** OF **11** JOB NO. 25142.05



NOTES

SWALE LINING DETAIL.

TOTAL ACRES OF SEEDING ESTIMATED. 4. P.I.E = PUBLIC IMPROVEMENTS EASEMENT

FIELD VERIFICATION AND ÁERIAL INSPECTION.

6. NO BATCH PLANTS WILL BE UTILIZED ON SITE.

REFER TO THE STORMWATER MANAGEMENT PLAN (SWMP) FOR A DETAILED DESCRIPTION OF THE MAINTENANCE PROGRAMS FOR

EROSION CONTROL FACILITIES.

2. SEE SHEET 3 FOR SWALE TYPICAL CROSS SECTIONS THAT INCLUDES

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5. EXISTING VEGETATION CONSISTS OF NATIVE MEADOW GRASSES (APPROX. 70% COVERAGE) DETERMINED THROUGH A COMBINATION OF

7. DETENTION POND DETAILS ARE PROVIDED IN THE CONSTRUCTION

BMP PHASING

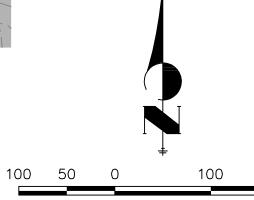
I<u>NITIAL</u>: 1) INSTALL VTC 2) INSTALL CWA 3) ESTABLISH SSA

- 4) INSTALL CONSTRUCTION MARKERS 5) INSTALL SILT FENCE
- 6) INSTALL SEDIMENT BASINS 7) INSTALL DIVERSION DITCHES
- INTERIM:

 1) LOCATE/INSTALL TEMPORARY STOCKPILE

 2) MAINTAIN ALL BMPS 3) INSTALL RRBS
 4) INSTALL INLET AND OUTLET PROTECTION
- 5) INSTALL EROSION CONTROL BLANKETS

FINAL:
1) INSTALL MULCH AND PERMANENT SEEDING IN ALL
DISTURBED AREAS 2) REMOVE SILT FENCE AFTER STABILIZED, INLET & OUTLET PROTECTION, RRBS, EROSION CONTROL BLANKETS, VTC, CWA, CONSTRUCTION MARKERS, SEDIMENT BASINS, DIVERSION DITCHES, SSA, AND TEMPORARY STOCKPILES





ORIGINAL SCALE: 1" = 100' Know what's **below. Call before you dig.**

| CURTIS RD | | | A DEL CAMBRE TR | H NIN | ΨÄ! | 고 교 교 교 교 | ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN | AUTHORIZATION. |
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| BENITO WELLS KE LEGEND | | IAP TOE | S C C C C C C C C C C C C C C C C C C C | <i>-</i> | i H | NAPA, CALIFORNIA (707) 365-6801 |) JJIM 人(| |
| SEDIMENT BASIN SILT FENCE STABILIZED STAGING AREA CONSTRUCTION MARKER VEHICLE TRACKING CONTROL TEMPORARY STOCK PILE EROSION CONTROL BLANKET INLET PROTECTION OUTLET PROTECTION | TSP | TOP SF — SF — O O O O O O O O O O O O O | | | J'K ENGINEEKING | A westriari Company | Centennial 303-740-9393 • Colorado Springs 719-593-2593 | Fort Collins 9/0-497-9888 • www.jrengineering.com |
| DIVERSION DITCH AND DIKE, TEMPORARY CUT AND FILL LINE ——— | ○ ○ c/F | | BY DATE | | | | | |
| LIMITS OF CONSTRUCTION/DISTURBANCE CONCRETE WASHOUT AREA MULCHING & PERMANENT SEEDING TEMPORARY SLOPE DRAIN REINFORCED ROCK BERM CHECK DAM ROCK SOCK | (CO) (CWA) (MU) (FS) (RRB) (CD) (RS) | | No. REVISION | | | | | |
| EXISTING DRAINAGE ARROW PROPOSED DRAINAGE ARRO | W | → | ,-100, | N A N | 2/2022 | SWW | SWW | |
| OWNER/DEVELOPER STA | TEME | NT | - H | -SCALE | DATE 1/ | DESIGNED BY | DRAWN BY | CHECKED BY |
| I, THE OWNER/DEVELOPER HAVE READ AND REQUIREMENTS OF THE GRADING AND EROS BILL GUMAN WILLIAM GUMAN AND ASSOCIATES 731 NORTH WEBER STREET COLORADO SPRINGS, CO 80903 ENGINEER'S STATEMENT THIS GRADING AND EROSION CONTROL PLAN DIRECTION AND SUPERVISION AND IS CORRE KNOWLEDGE AND BELIEF. SAID PLAN HAS B THE CRITERIA ESTABLISHED BY THE COUNTY CONTROL PLANS. I ACCEPT RESPONSIBILITY BY ANY NEGLIGENT ACTS, ERRORS OR OMIS | WILL COI ION CONT WAS PR CCT TO THEEN PREF Y FOR GR FOR ANY | MPLY WITH THE ROL PLAN. DATE DATE REPARED UNDER MY HE BEST OF MY PARED ACCORDING ADING AND EROSIC | Y TO ON | ADDLEHORN RANCH - FILING 3 | | ≳ _₹ | CONTROL PLANS | |

, THE OWNER/[

REQUIREMENTS

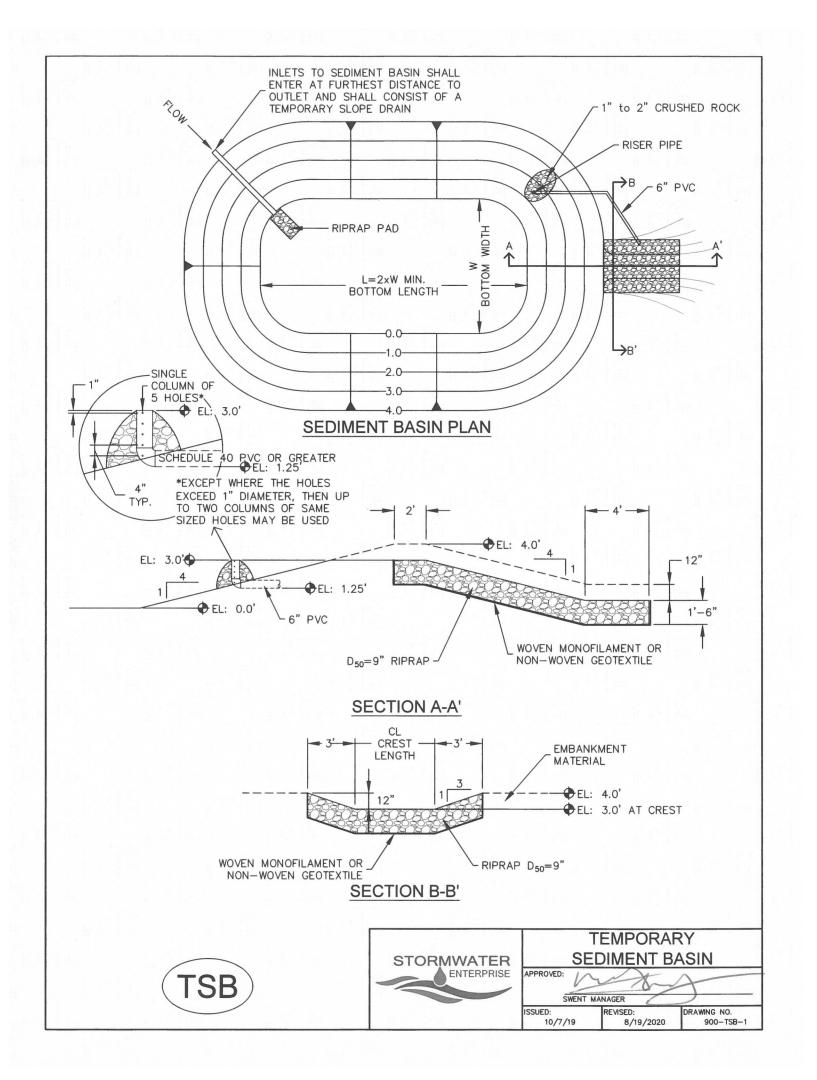
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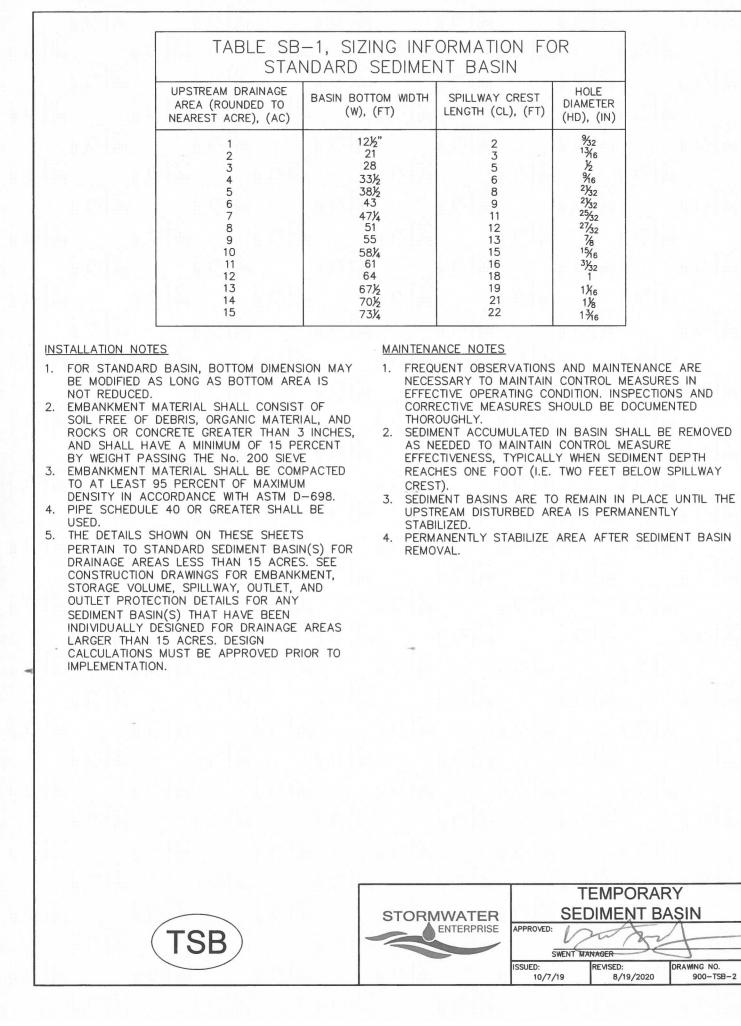
PREPARING THIS PLANS. DATE

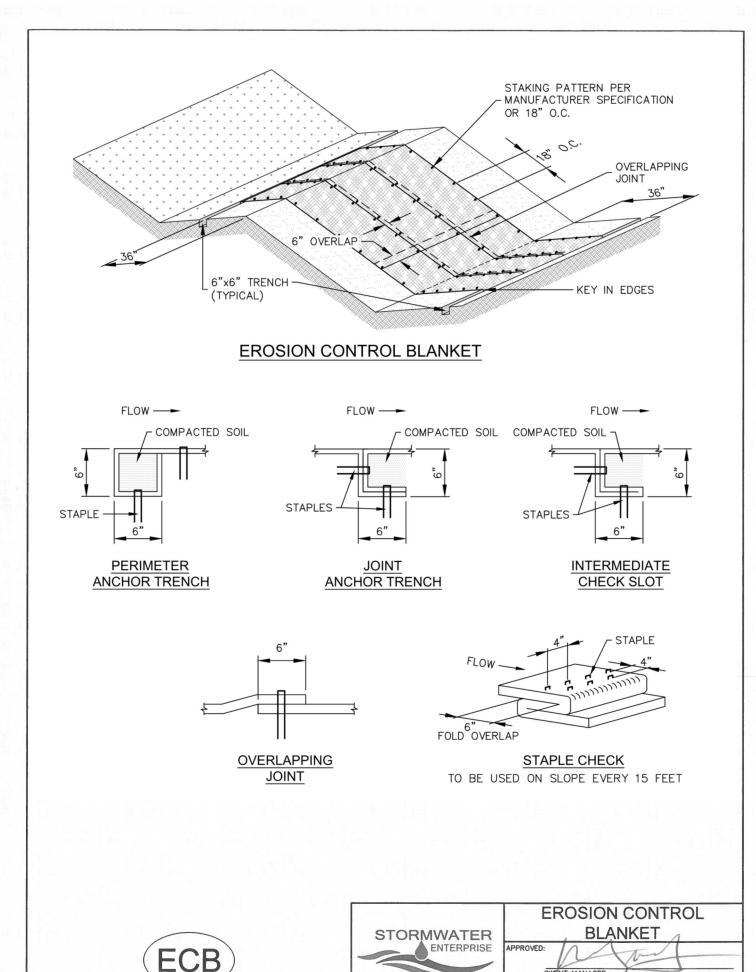
BRYAN T. LAW, P.E. COLORADO P.E. 25043 FOR AND ON BEHALF OF JR ENGINEERING, LLC

SHEET 8 OF 11 JOB NO. 25142.05

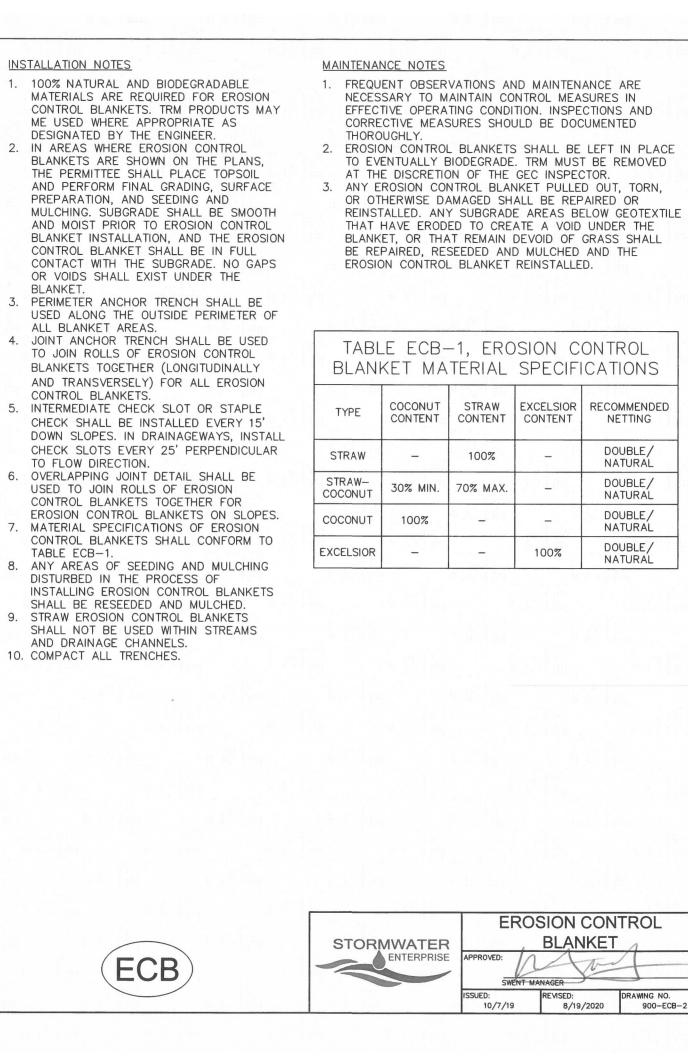
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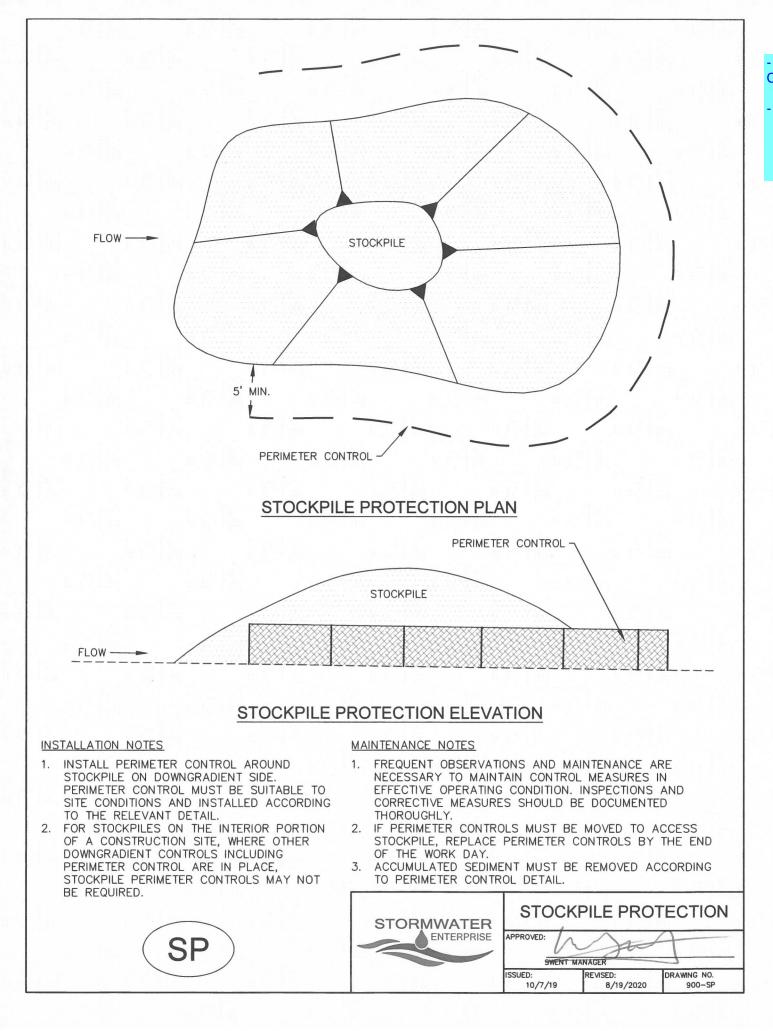






EVISED: DRAWING NO. 8/19/2020 900-ECB-1





SILT FENCE

FLOW

INSTALLATION NOTES

DEPOSITION.

J-HOOK INSTALLATION

1. SILT FENCE MUST BE PLACED ON A FLAT

SLOPE TO ALLOW FOR PONDING AND

2. COMPACT THE TRENCH USING A JUMPING

OUT OF THE GROUND BY HAND.

AFTER IT HAS BEEN ANCHORED.

4. FABRIC SHALL BE ATTACHED TO POSTS

WITH 1" HEAVY DUTY STAPLES OR 1"

VERTICALLY DOWN THE POST, 3" APART.

6. INSTALL SILT FENCE ALONG THE CONTOUR OF THE SLOPES OR IN A MANNER TO

AVOID CREATING CONCENTRATED FLOW

(SUCH AS A "J-HOOK" INSTALLATION).

NAILS. THESE SHOULD BE PLACED

5. THE PREFERRED INSTALLATION METHOD

USES A TRENCHER OR SILT FENCE

INSTALLATION DEVICE.

JACK OR WHEEL ROLLING TO THE POINT

THAT THE FENCE RESISTS BEING PULLED

3. SILT FENCE SHALL BE TAUT WITH NO SAGS

SURFACE 2'-5' AWAY FROM TOE OF THE

1½"×1½" (RECOMMENDED) WOODEN FENCE POST -

WITH 10' MAX. SPACING

GEOTEXTILE -

COMPACTED

SECTION A-A'

DISTURBANCE AREA IS STABILIZED.

1. FREQUENT OBSERVATIONS AND MAINTENANCE ARE

NECESSARY TO MAINTAIN CONTROL MEASURES IN

EFFECTIVE OPERATING CONDITION. INSPECTIONS AND

CORRECTIVE MEASURES SHOULD BE DOCUMENTED

ACCUMULATED SEDIMENT MUST BE REMOVED WHEN

THE HEIGHT REACHES $\frac{1}{2}$ OF THE DESIGN HEIGHT OF THE SILT FENCE.

SILT FENCE MUST REMAIN UNTIL THE UPSTREAM

4. PERMANENTLY STABILIZE AREA AFTER SILT FENCE IS

SILT FENCE

8/19/2020

SWENT MANAGER

MAINTENANCE NOTES

THOROUGHLY.

REMOVED.

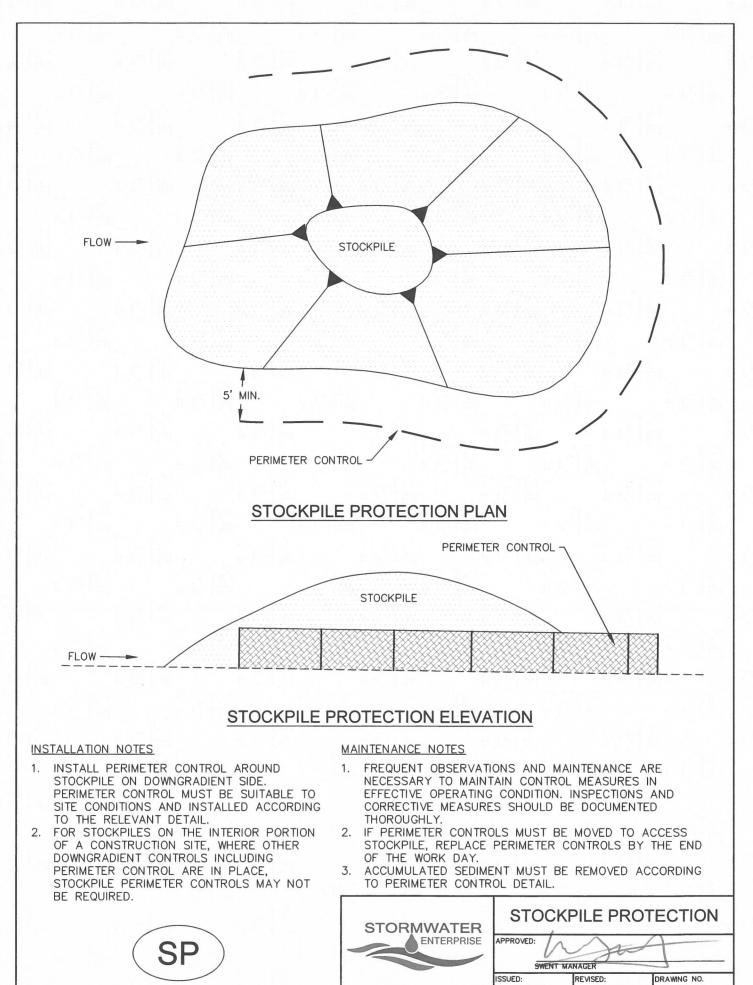
STORMWATER

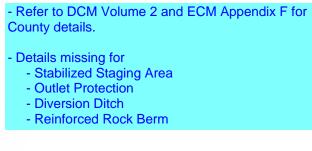
BACKFILL

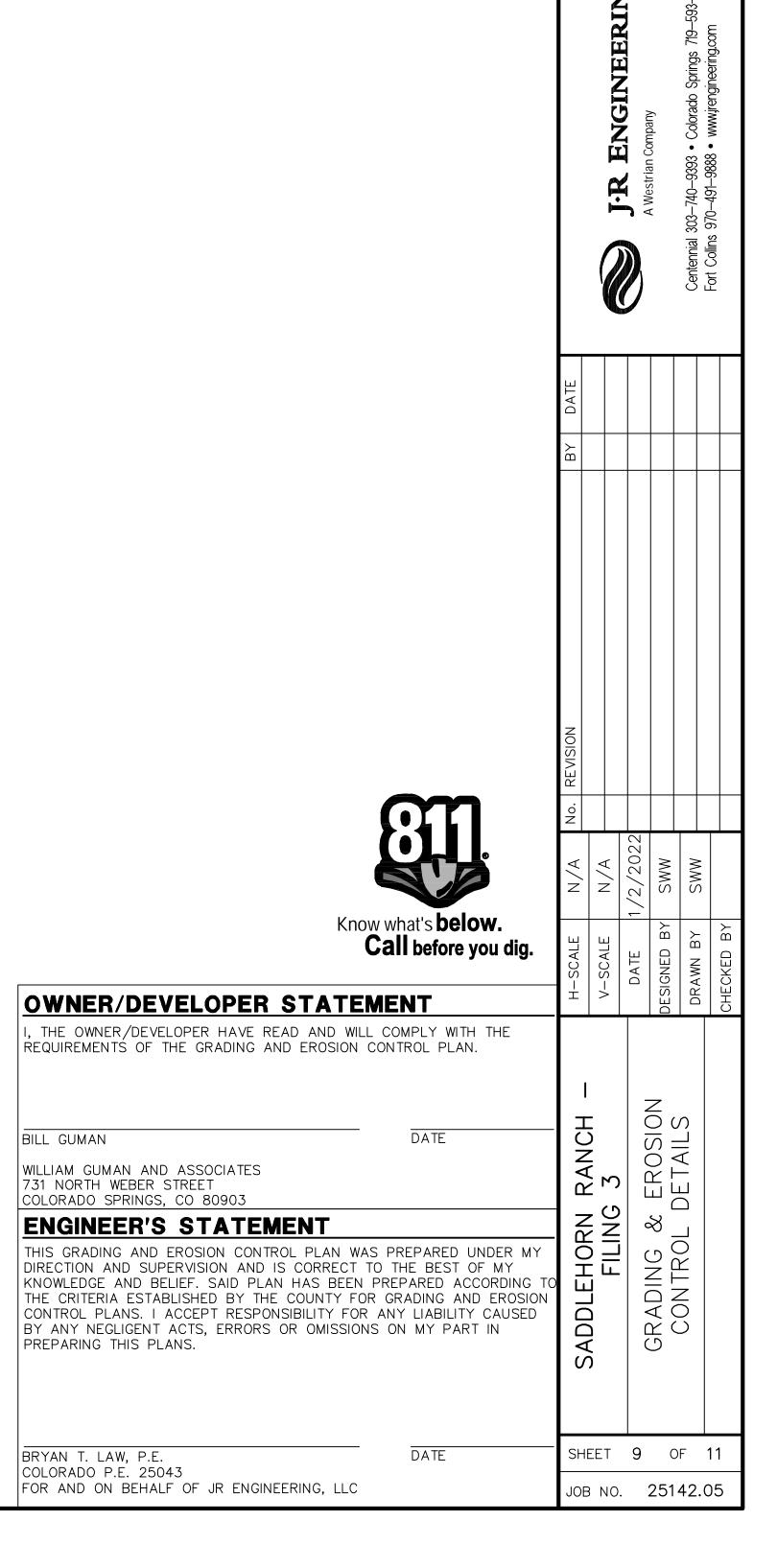
4" MIN. ————

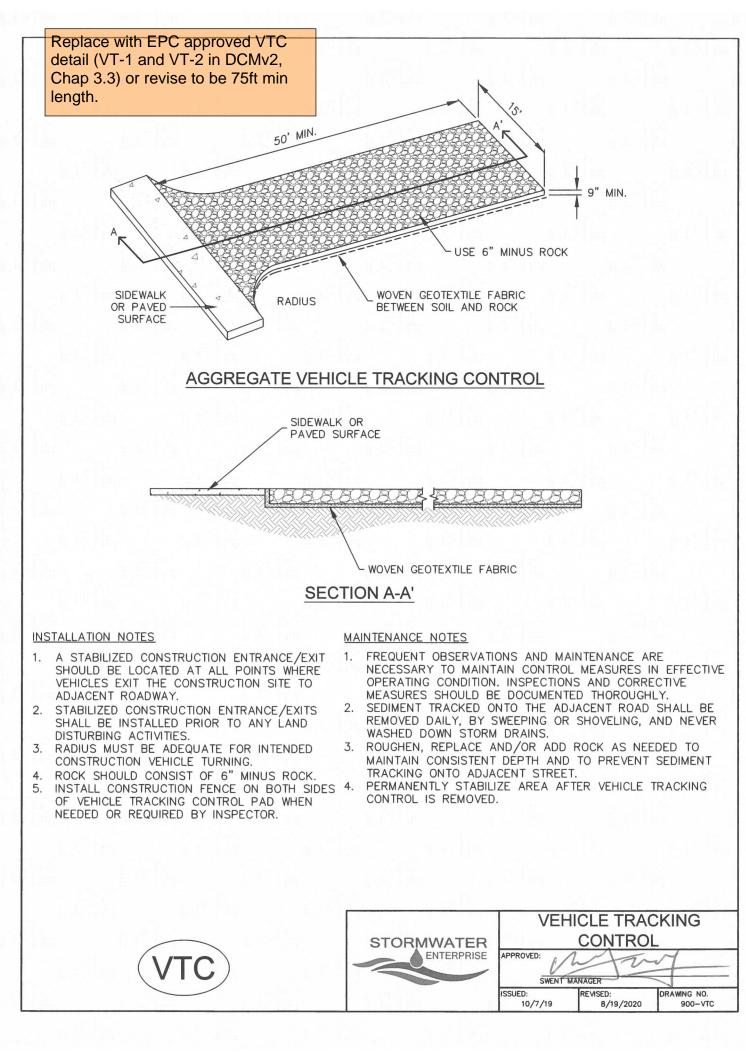
POSTS SHOULD OVERLAP

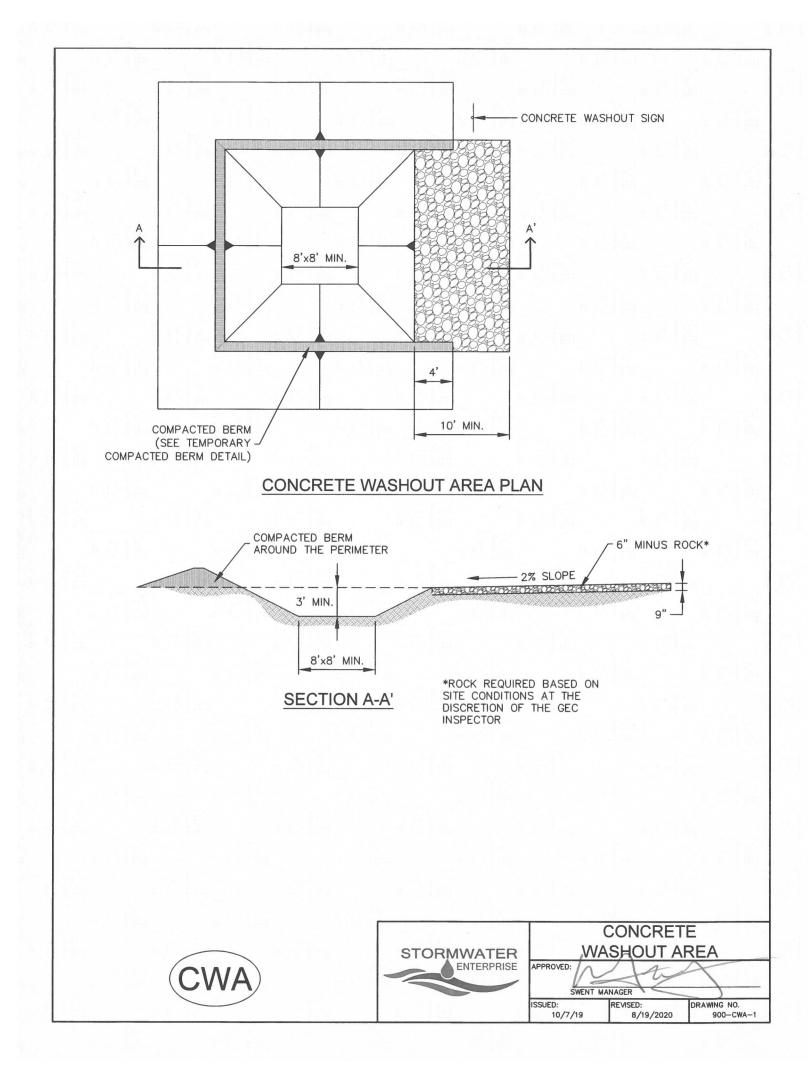
SO THAT NO GAPS EXIST

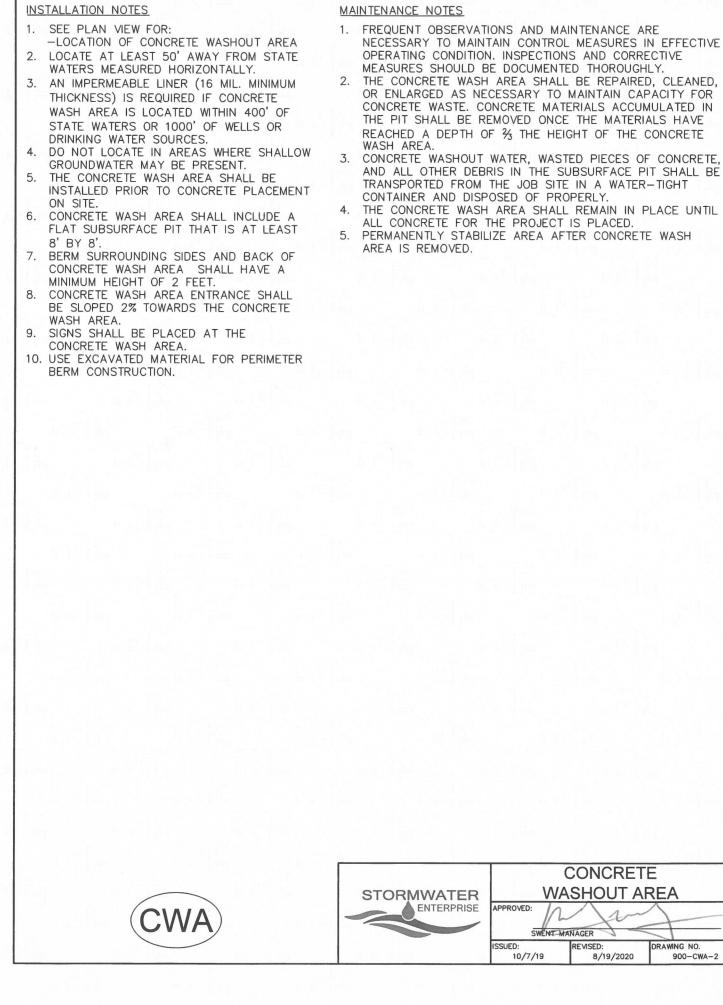


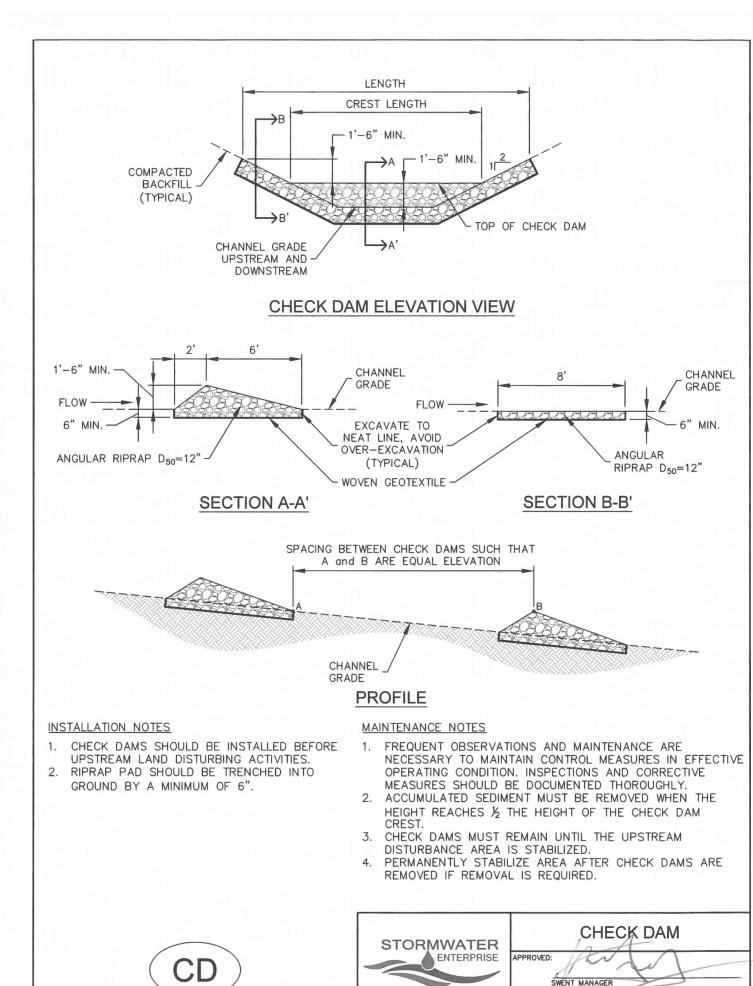




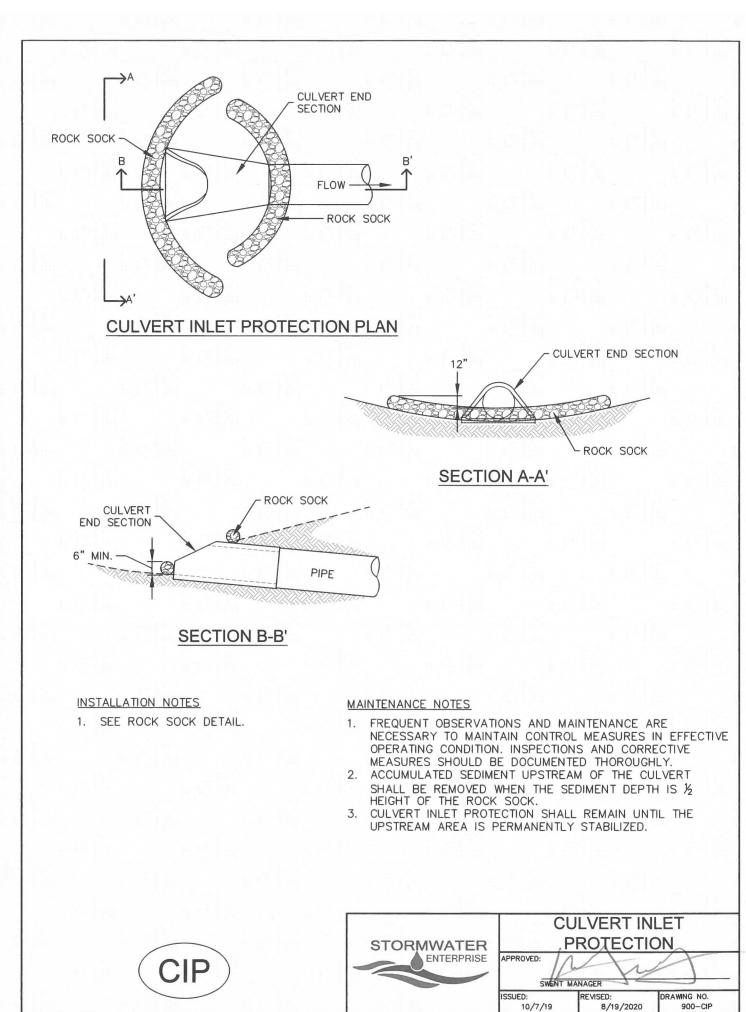


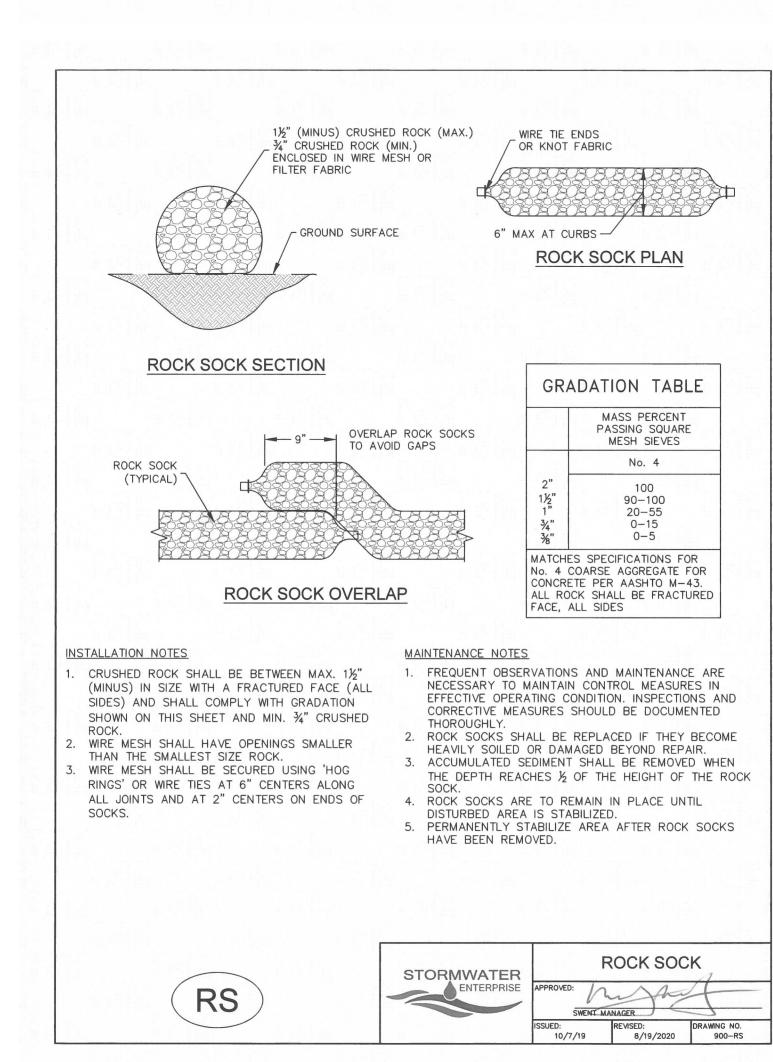


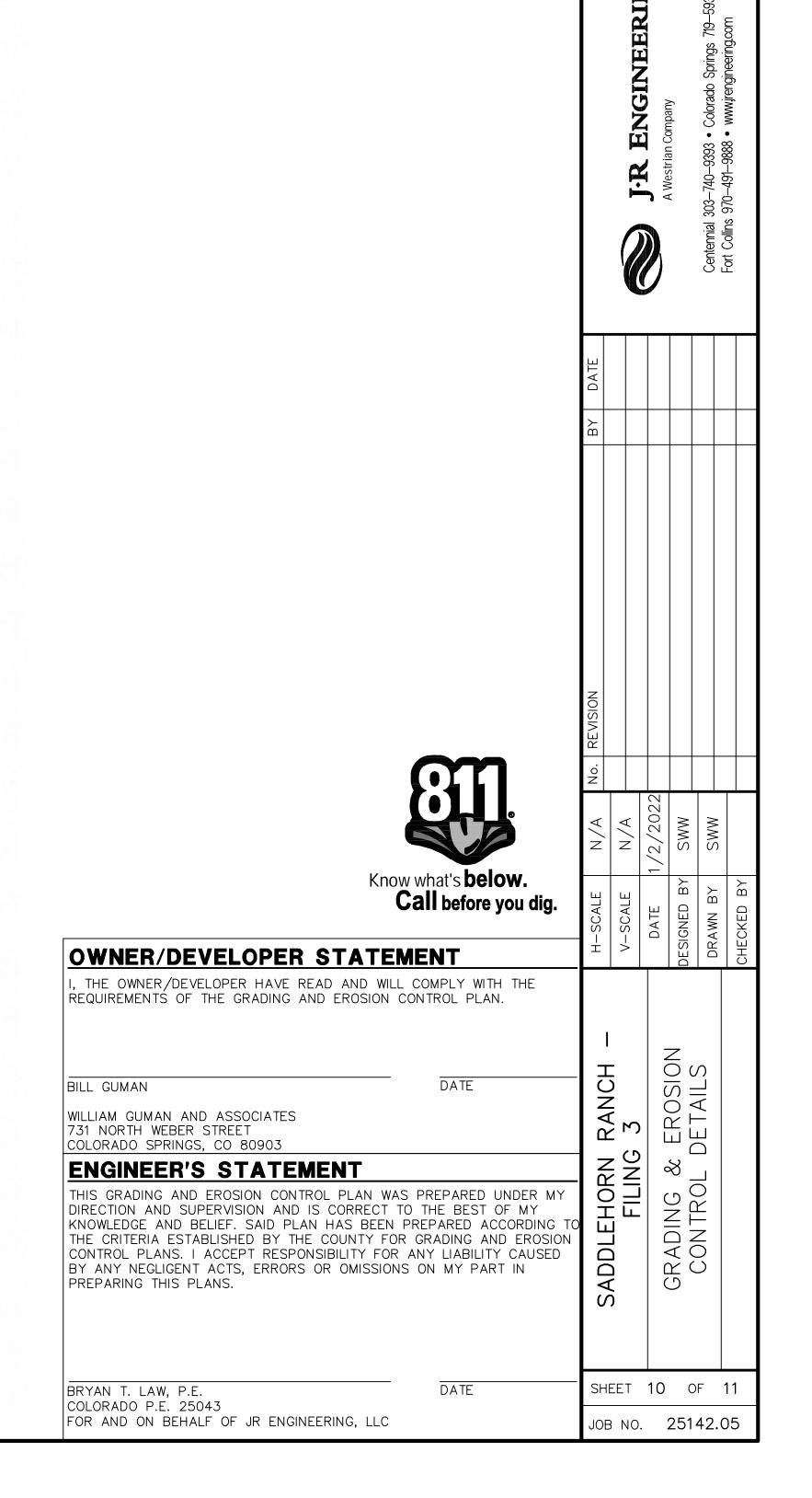




8/19/2020







SEEDING & MULCHING

ALL SOIL TESTING, SOILS AMENDMENT AND FERTILIZER DOCUMENTATION, AND SEED LOAD AND BAG TICKETS MUST BE ADDED TO THE CSWMP.

SOIL PREPARATION

- 1. IN AREAS TO BE SEEDED, THE UPPER 6 INCHES OF THE SOIL MUST NOT BE HEAVILY COMPACTED, AND SHOULD BE IN FRIABLE CONDITION. LESS THAN 85% STANDARD PROCTOR DENSITY IS ACCEPTABLE. AREAS OF COMPACTION OR GENERAL CONSTRUCTION ACTIVITY MUST BE SCARIFIED TO A DEPTH OF 6 TO 12 INCHES PRIOR TO SPREADING TOPSOIL TO BREAK UP COMPACTED LAYERS AND PROVIDE A BLENDING ZONE BETWEEN DIFFERENT SOIL LAYERS.
- 2. AREAS TO BE PLANTED SHALL HAVE AT LEAST 4 INCHES OF TOPSOIL SUITABLE TO SUPPORT PLANT GROWTH.
- 3. THE CITY RECOMMENDS THAT EXISTING AND/OR IMPORTED TOPSOIL BE TESTED TO IDENTIFY SOIL DEFICIENCIES AND ANY SOIL AMENDMENTS NECESSARY TO ADDRESS THESE DEFICIENCIES. SOIL AMENDMENTS AND/OR FERTILIZERS SHOULD BE ADDED TO CORRECT TOPSOIL DEFICIENCIES BASED ON SOIL TESTING
- 4. TOPSOIL SHALL BE PROTECTED DURING THE CONSTRUCTION PERIOD TO RETAIN ITS STRUCTURE AVOID COMPACTION, AND TO PREVENT EROSION AND CONTAMINATION. STRIPPED TOPSOIL MUST BE STORED IN AN AREA AWAY FROM MACHINERY AND CONSTRUCTION OPERATIONS, AND CARE MUST BE TAKEN TO PROTECT THE TOPSOIL AS A VALUABLE COMMODITY. TOPSOIL MUST NOT BE STRIPPED DURING UNDESIRABLE WORKING CONDITIONS (E.G. DURING WET WEATHER OR WHEN SOILS ARE SATURATED). TOPSOIL SHALL NOT BE STORED IN SWALES OR IN AREAS WITH POOR DRAINAGE.

SEEDING

- 1. ALLOWABLE SEED MIXES ARE INCLUDED IN THE CITY OF COLORADO SPRINGS STORMWATER CONSTRUCTION MANUAL. ALTERNATIVE SEED MIXES ARE ACCEPTABLE IF INCLUDED IN AN APPROVED LANDSCAPING PLAN.
- 2. SEED SHOULD BE DRILL—SEEDED WHENEVER POSSIBLE

 SEED DEPTH MUST BE ⅓ TO ⅙ INCHES WHEN DRILL—SEEDING IS USED
- 3. BROADCAST SEEDING OR HYDRO—SEEDING WITH TACKIFIER MAY BE SUBSTITUTED ON SLOPES STEEPER THAN 3:1 OR ON OTHER AREAS NOT PRACTICAL TO DRILL SEED.

 SEEDING RATES MUST BE DOUBLED FOR BROADCAST SEEDING OR INCREASED BY 50% IF USING A BRILLION DRILL OR HYDRO—SEEDING

 BROADCAST SEEDING MUST BE LIGHTLY HAND—RAKED INTO THE SOIL

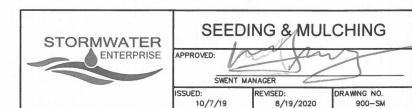
MULCHIN

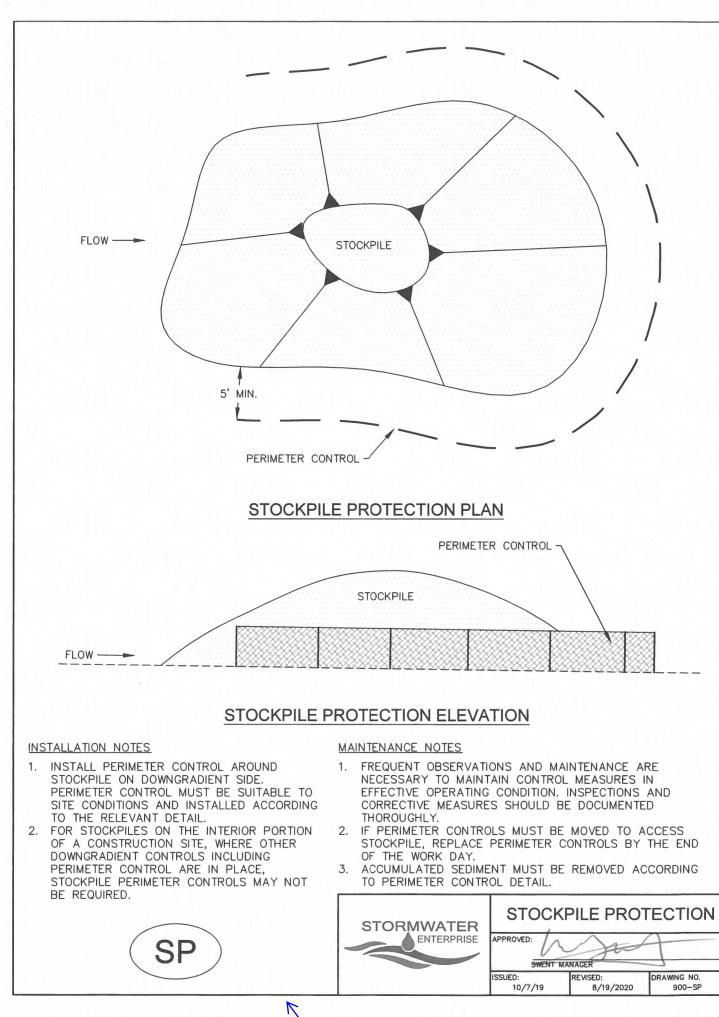
- 1. MULCHING SHOULD BE COMPLETED AS SOON AS PRACTICABLE AFTER SEEDING, HOWEVER PLANTED AREAS MUST BE MULCHED NO LATER THAN 14 DAYS AFTER PLANTING.
- 2. MULCHING REQUIREMENTS INCLUDE:

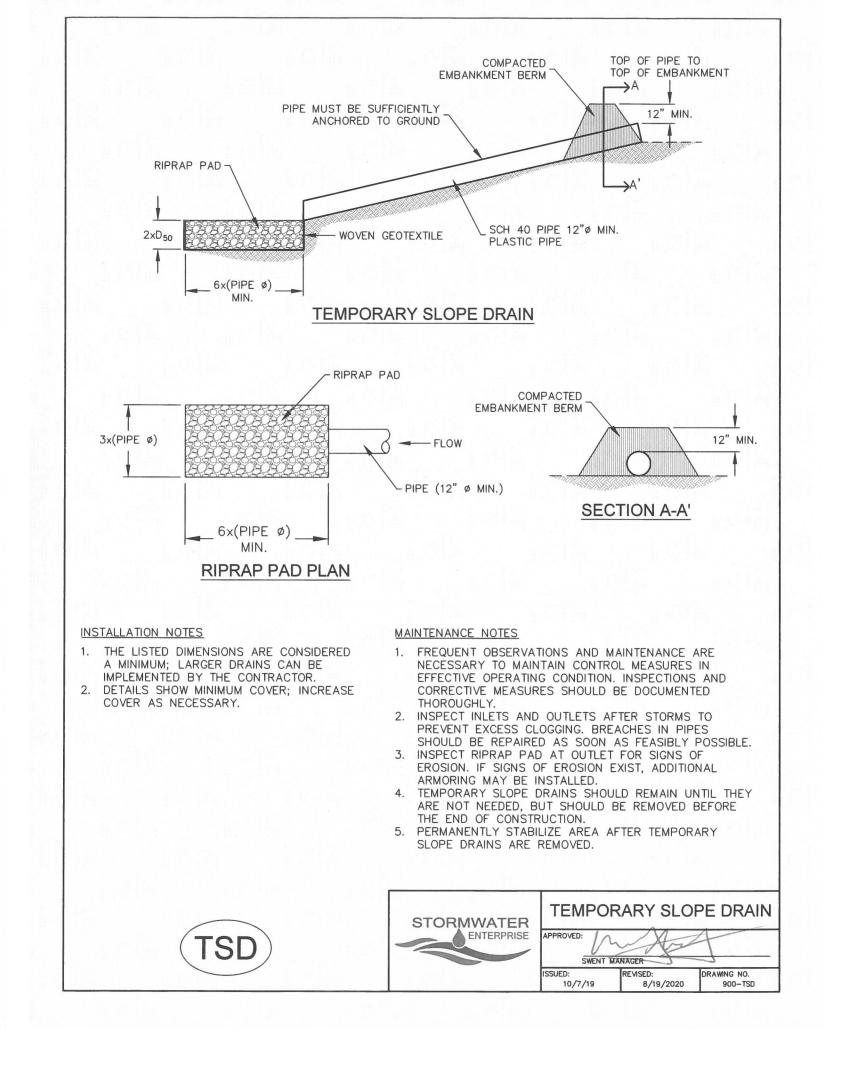
 •HAY OR STRAW MULCH
- ONLY CERTIFIED WEED—FREE AND CERTIFIED SEED—FREE MULCH MAY BE USED. MULCH MUST BE APPLIED AT 2 TONS/ACRE AND ADEQUATELY SECURED BY CRIMPING AND/OR TACKIFIER.
 CRIMPING MUST NOT BE USED ON SLOPES GREATER THAN 3:1 AND MULCH FIBERS MUST BE TUCKED
- INTO THE SOIL TO A DEPTH OF 3 TO 4 INCHES.

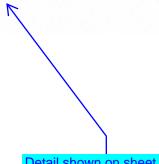
 TACKIFIER MUST BE USED IN PLACE OF CRIMPING ON SLOPES STEEPER THAN 3:1
- TACKIFIER MUST BE USED IN PLACE OF CRIMPING ON SLOPES STEEPER THAN 3:1.
 HYDRAULIC MULCHING
- HYDRAULIC MULCHING IS AN OPTION ON STEEP SLOPES OR WHERE ACCESS IS LIMITED.
 IF HYDRO—SEEDING IS USED, MULCHING MUST BE APPLIED AS A SEPARATE, SECOND OPERATION.
 WOOD CELLULOSE FIREBS MIXED WITH WATER MUST BE APPLIED AT A BATE OF 3 000 TO 3 500
- WOOD CELLULOSE FIBERS MIXED WITH WATER MUST BE APPLIED AT A RATE OF 2,000 TO 2,500 POUNDS/ACRE, AND TACKIFIER MUST BE APPLIED AT A RATE OF 100 POUNDS/ACRE.
- EROSION CONTROL BLANKET
 EROSION CONTROL BLANKET MAY BE USED IN PLACE OF TRADITIONAL MULCHING METHODS.











Know what's **below. Call before you di**

| | all before you dig. | H-SCALE | V-SCALE | DATE | ESIGNED F | DRAWN BY | CHECKED B |
|---|--|-------------------|---------|-------|-------------------|----------|------------|
| OWNER/DEVELOPER STATEM I, THE OWNER/DEVELOPER HAVE READ AND WILL REQUIREMENTS OF THE GRADING AND EROSION CO | COMPLY WITH THE | | | | | | <u> Ö</u> |
| BILL GUMAN WILLIAM GUMAN AND ASSOCIATES 731 NORTH WEBER STREET COLORADO SPRINGS, CO 80903 ENGINEER'S STATEMENT THIS GRADING AND EROSION CONTROL PLAN WAS DIRECTION AND SUPERVISION AND IS CORRECT TO KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN P THE CRITERIA ESTABLISHED BY THE COUNTY FOR CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR A BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS PREPARING THIS PLANS. | THE BEST OF MY REPARED ACCORDING TO GRADING AND EROSION NY LIABILITY CAUSED | SADDI FHORN BANCH | / D | . . | GRADING & EROSION | . | |
| BRYAN T. LAW, P.E. COLORADO P.E. 25043 | DATE | SH | EET | 11 | 0 | F | 11 |
| FOR AND ON BEHALF OF JR ENGINEERING, LLC | | JOE | NO | • | 251 | 42.0 | 05 |

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N/A No. REVISION
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SWW

ROI PROPERTY GROUP, 2495 RIGDON STREE NAPA, CALIFORNIA (707) 365-6891 BRADY WILLIAMS

> estrian Company 0–9393 • Colorado Springs 719–593–259 91–9888 • www.irenqineering.com

A Westinan Contennal 303-740-9393 • Fort Collins 970-491-9888 •