

PRELIMINARY SITE GRADING CONSTRUCTION PLANS
FOR
CREEKSIDE AT LORSON RANCH FILING NO. 1
EARLY GRADING / EROSION CONTROL PLANS



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

CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR
EXCAVATE FOR THE MARKING OF
UNDERGROUND MEMBER UTILITIES



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DEVELOPER'S STATEMENT

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

BUSINESS NAME LORSON, LLC

BY JEFF MARK DATE _____
TITLE MANAGER
ADDRESS 212 N. WAHSATCH AVE. SUITE 301
COLORADO SPRINGS, CO 80903

CONSTRUCTION APPROVAL

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

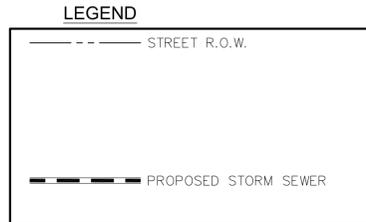
FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUALS VOLUME 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED. CONSTRUCTION DOCUMENTS WILL BE VALID FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER.

JENNIFER IRVINE, P.E., COUNTY ENGINEER/ECM ADMINISTRATOR DATE _____
CONDITIONS:

ENGINEER'S APPROVAL

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

RICHARD L. SCHINDLER, P.E. # 33997
FOR AND ON BEHALF OF CORE ENGINEERING GROUP



WATER / SANITARY
WIDEFIELD WATER AND SANITATION DISTRICT
8495 FONTAINE BLVD.
COLORADO SPRINGS, CO 80925
719-390-7111

CABLE
COMCAST
P.O. BOX 173838
DENVER, CO 80217
970-641-4774

ELECTRIC
MOUNTAIN VIEW ELECTRIC
11140 E. WOODMEN RD.
COLORADO SPRINGS, CO 80831
719-495-2283

SECURITY FIRE PROTECTION DISTRICT
400 SECURITY BOULEVARD
SECURITY, CO 80911
719-392-7121

PREPARED FOR:
LORSON, LLC
N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, CO 80903
719-635-3200
CONTACT: JEFF MARK

PREPARED BY:
CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
719-570-1100
CONTACT: RICHARD L. SCHINDLER P.E.

TELEPHONE
CENTURYLINK
7925 INDUSTRY ROAD
COLORADO SPRINGS, CO 80939
719-278-4651

GAS
BLACK HILLS ENGERGY
7060 ALLEGRE ST.
FOUNTAIN, CO 80817
719-393-6639

EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT
2880 INTERNATIONAL CIRCLE
COLORADO SPRINGS, CO 80910
719-520-6300

BASIS OF BEARING

BEARINGS ARE BASED ON THE SOUTH LINE OF THE NORTH HALF OF SECTION 23, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN AS BEING SOUTH 8941'52" WEST. THE EAST QUARTER CORNER OF SAID SECTION 23 IS A FOUND 3-1/2" ALUMINUM CAP MONUMENT AND THE WEST QUARTER CORNER OF SAID SECTION 23 IS A FOUND 2-1/2" ALUMINUM CAP MONUMENT

BENCHMARK

FIMS MONUMENT F204 LOCATED AT THE NORTHWEST CORNER OF FONTAINE BLVD AND COTTONWOOD GROVE DR. ELEVATION 5724.072 (N.G.V.D. 29)

TRAFFIC CONTROL NOTE

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

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cog1.com

| NO. | DESCRIPTION | DATE |
|-----|-------------|------|
| | | |
| | | |
| | | |

PREPARED FOR:
LORSON, LLC
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
CREEKSIDE AT LORSON RANCH FILING NO. 1
LORSON BLVD AND COTTONWOOD GROVE DR.
COLORADO SPRINGS, COLORADO

DRAWN: **RLS**
DESIGNED: **RLS**
CHECKED: **RLS**

**COVER SHEET
EARLY GRADING AND
EROSION CONTROL PLAN**

DATE:
DECEMBER 5, 2018

PROJECT NO.
100.045

SHEET NUMBER
C0.1

TOTAL SHEETS: 17

PUDSP-18-005

CONSTRUCTION NOTES

- ALL WORK SHALL COMPLY WITH THE CODES AND POLICIES FOR EL PASO COUNTY.
- EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THIS GRADING PLAN WAS OBTAINED FROM AERIAL CONTOURS AND PREVIOUS CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO EXAMINE THE SITE AND BE FAMILIAR WITH THE EXISTING CONDITIONS.
- DEPTH OF MOISTURE-DENSITY CONTROL FOR THIS PROJECT SHALL BE AS FOLLOWS:
BASE OF ALL CUTS AND FILLS - 12 INCHES,
FULL DEPTH OF ALL EMBANKMENTS
- THE CONTRACTOR IS RESPONSIBLE FOR THE RE-ESTABLISHMENT OF ALL SURVEY MONUMENTS DISTURBED WITHIN THE PROJECT LIMITS.
- THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM FLOODING AT ALL TIMES. AREAS AND FACILITIES SUBJECTED TO FLOODING, REGARDLESS OF THE SOURCE OF WATER, SHALL BE PROMPTLY DEWATERED AND RESTORED.
- PRIOR TO PAVING OPERATIONS, THE ENTIRE SUBGRADE SHALL BE PROOF-ROLLED WITH A LOADED 988 FRONT-END LOADER OR SIMILAR HEAVY RUBBER Tired VEHICLE (GVW OF 50,000 POUNDS WITH 18 KIP PER AXLE AT TIRE PRESSURES OF 90 PSI) TO DETECT ANY SOFT OR LOOSE AREAS. IN AREAS WHERE SOFT OR LOOSE SOILS, PUMPING OR EXCESSIVE MOVEMENT IS OBSERVED, THE EXPOSED MATERIALS SHALL BE OVER-EXCAVATED TO A MINIMUM DEPTH OF TWO FEET BELOW PROPOSED FINAL GRADE OR TO A DEPTH AT WHICH SOILS ARE STABLE. AFTER THIS HAS BEEN COMPLETED, THE EXPOSED MATERIALS SHALL BE SCARIFIED TO A DEPTH OF 12 INCHES AND MOISTURE CONDITIONED. THE SUBGRADE SHALL THEN BE UNIFORMLY COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D-698) AT 0 TO +4.0% OF OPTIMUM MOISTURE CONTENT FOR A-6 AND A-7-6 SOILS ENCOUNTERED. OTHER SUBGRADE TYPES SHALL BE UNIFORMLY COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR DENSITY (ASTM D-1557) AT PLUS OR MINUS 2.0% OF OPTIMUM MOISTURE CONTENT. AREAS WHERE STABLE NATURAL SOILS ARE ENCOUNTERED AT PROPOSED SUBGRADE ELEVATION SHALL ALSO BE SCARIFIED (18 INCHES FOR A-7-6 SOILS BELOW FULL-DEPTH ASPHALT CONCRETE) AND COMPACTED AS OUTLINED ABOVE PRIOR TO PAVING OPERATIONS. SUBGRADE FILL SHALL BE PLACED IN SIX-INCH LIFTS AND UNIFORMLY COMPACTED, MEETING THE REQUIREMENTS AS PREVIOUSLY DESCRIBED.
- SUBGRADE MATERIALS DEEMED UNSUITABLE BY THE ENGINEER SHALL BE EXCAVATED, DISPOSED OF AND REPLACED WITH APPROVED MATERIALS.
- FILL SHALL BE PLACED IN 8-INCH MAXIMUM LOOSE LIFTS AND SHALL BE COMPACTED PRIOR TO SUCCESSIVE LIFTS.
- THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING AND CONTROLLING EROSION DURING CONSTRUCTION ACTIVITIES AT ALL TIMES DURING GRADING AND CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING EROSION AND SEDIMENT CONTROL MEASURES:
 - HAY BALE BARRIERS WHERE NEEDED AND/OR AS DIRECTED BY THE ENGINEER.
 - SILT FENCE WHERE NEEDED AND/OR AS DIRECTED BY THE ENGINEER.
 - TEMPORARY SEDIMENTATION BASINS WHERE NEEDED AND/OR AS DIRECTED BY THE ENGINEER.
 - MULCHING AND SEEDING OF EXCESSIVE SLOPED AREAS AS NEEDED OR AS DIRECTED BY THE ENGINEER.
 - TEMPORARY VEHICLE TRACKING CONTROL AS NEEDED AND/OR DIRECTED BY THE ENGINEER.
 - CONCRETE WASH AREAS.
 - INLET PROTECTION.
 THESE AND ALL EROSION CONTROL BEST MANAGEMENT PRACTICES AS SHOWN IN THE GRADING AND EROSION CONTROL PLANS SHALL BE STRICTLY ADHERED TO.
- FINISHED CONTOURS/SPOT ELEVATIONS SHOWN HEREON REPRESENT FINISHED GRADES. ALL PAVEMENT SUBGRADES ARE BASED ON THE COMPOSITE ASPHALT PAVEMENT RECOMMENDATIONS MADE IN THE "GEOTECHNICAL STUDY" FOR THIS PROJECT.
- ALL GRADING SHALL CONFORM TO THE GEOTECHNICAL RECOMMENDATIONS FOR CREEKSIDE PREPARED BY RMG, "PRELIMINARY SOILS AND GEOLOGY FOR CREEKSIDE AT LORSON RANCH FIL NO. 1", DATED JULY, 2018. CONSTRUCTION OF DETENTION PONDS SHALL CONFORM TO THE GEOTECHNICAL RECOMMENDATIONS IN A REPORT BY RMG TITLED "PRELIMINARY SOILS AND GEOLOGY FOR CREEKSIDE AT LORSON RANCH FIL NO. 1", DATED JULY, 2018. THIS INCLUDES POND OUTFALL DESIGN, KEY-IN, AND SLOPE/EMBANKMENT COMPACTION REQUIREMENTS.
- THERE MAY BE SOME TOPSOIL WITHIN LORSON RANCH EAST THAT IS NOT SUITABLE FOR RE-USE. CONTRACTOR SHALL AMEND THE TOPSOIL AS NECESSARY AND RE-SPREAD IN ACCORDANCE WITH THE GEOTECHNICAL RECOMMENDATIONS. IF TOPSOIL CANNOT BE AMENDED IT SHALL BE USED AS FILL WHERE NO FUTURE STRUCTURES OR ROADS WILL BE BUILT.

ADDITIONAL SWMP PLAN CONTRACTOR NOTES.

- CONTRACTOR MUST ADD THEIR CONTACT INFORMATION TO THE SWMP PLANS PRIOR TO CONSTRUCTION
- IF THE GRADING IS TO BE PHASED THE CONTRACTOR MUST PROVIDE PHASING MAPS FOR INSERTION INTO THE SWMP PLANS.
- THE CONTRACTOR MUST PROVIDE THE CLIENT THE LOCATION OF ANY POTENTIAL SOURCES OF POLLUTIONS SUCH AS FUELING AREAS, ETC TO BE INSERTED INTO THE SWMP PLANS.
- THE ON-SITE SWMP PLAN SHALL BE LOCATED AT THE NE CORNER OF OLD GLORY DRIVE AND LORSON BOULEVARD UNLESS OTHERWISE DOCUMENTED.

EL PASO COUNTY STANDARD CONSTRUCTION NOTES:

- ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).
- 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 AND 2
 - COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
 - CDOT M & S STANDARDS
- NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) - INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
- CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND DSD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
- ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
- CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.
- SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY PUBLIC WORK DEPARTMENT AND MUTCD CRITERIA.
- CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY PWD, 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 OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS

- CONSTRUCTION MAY NOT COMMENCE UNTIL A CONSTRUCTION PERMIT IS OBTAINED FROM PCD AND A PRECONSTRUCTION CONFERENCE IS HELD WITH PCD INSPECTIONS.
- 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. 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 I.
- 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 EARTH 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 COMPLETED 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 SHALL 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. BMP'S MAY BE REQUIRED BY EL PASO COUNTY PCD IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE 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, TRASH, 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 THE 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 PERMITTEE 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 RMG AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

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

CORE ENGINEERING GROUP
1500 WEST AVENUE, SUITE 5506
BOULDER, CO 80501
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cegi.com

DATE: _____
DESCRIPTION: _____
NO: _____
DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

PREPARED FOR:
LORSON, LLC
212 N. WAHSATCH AVE. SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
CREEKSIDE AT LORSON RANCH FILING NO. 1
LORSON, EL-D-OLD GLORY DR. COLORADO SPRINGS, COLORADO

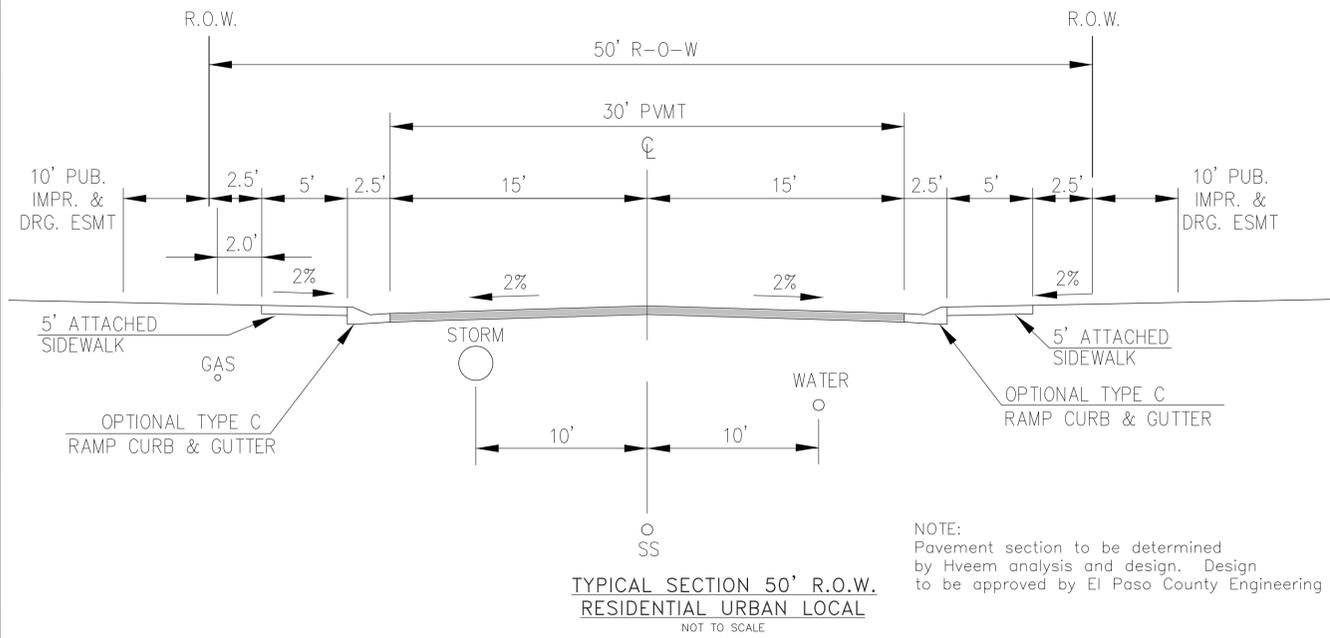
OVERLOT EARLY SITE GRADING PLAN NOTES

DATE:
DECEMBER 5, 2018

PROJECT NO.
100.045

SHEET NUMBER
C0.2

TOTAL SHEETS: 17



TYPICAL SECTION 50' R.O.W.
RESIDENTIAL URBAN LOCAL
NOT TO SCALE

- CASTOR DRIVE
- TENSAS DRIVE
- MAIDFORD DRIVE
- WINNICUT DRIVE
- YAZOO DRIVE
- KEARSARGE DRIVE
- STINGRAY DRIVE
- TOMOKA DRIVE
- KALAMA DRIVE
- ALSEA DRIVE

NOTE:
Pavement section to be determined
by Hveem analysis and design. Design
to be approved by El Paso County Engineering

CORE
ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cegi.com

| NO. | DESCRIPTION | DATE |
|-----|-------------|------|
| | | |
| | | |
| | | |
| | | |

PREPARED FOR:
LORSON, LLC
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
CREEKSIDE AT LORSON
RANCH FILING NO. 1
LORSON BLVD—OLD GLOBE DR.
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

OVERLOT EARLY
SITE GRADING
TYPICAL ROADWAY SECTIONS

DATE:
DECEMBER 5, 2018

PROJECT NO.
100.045

SHEET NUMBER
C0.3

TOTAL SHEETS: 17

LEGEND

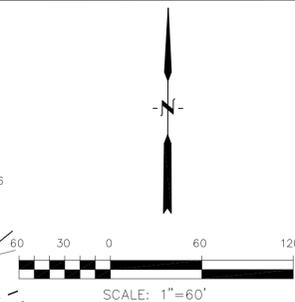
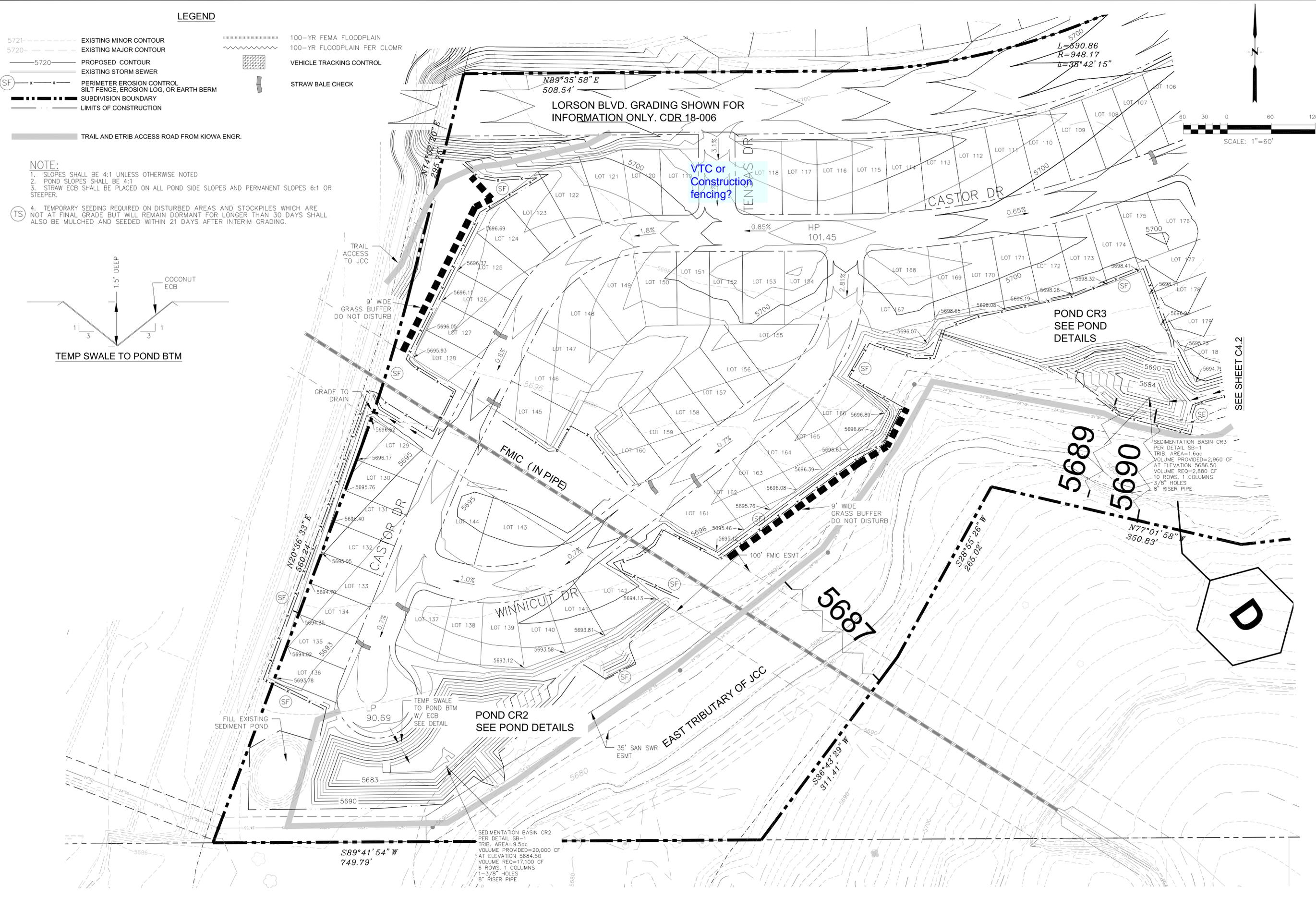
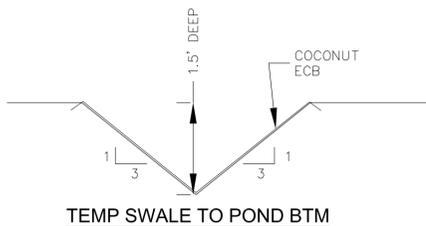
- 5721----- EXISTING MINOR CONTOUR
- 5720----- EXISTING MAJOR CONTOUR
- 5720----- PROPOSED CONTOUR
- EXISTING STORM SEWER
- (SF) x-x-x PERIMETER EROSION CONTROL
SILT FENCE, EROSION LOG, OR EARTH BERM
- SUBDIVISION BOUNDARY
- LIMITS OF CONSTRUCTION
- 100-YR FEMA FLOODPLAIN
- 100-YR FLOODPLAIN PER CLOMR
- VEHICLE TRACKING CONTROL
- STRAW BALE CHECK

TRAIL AND ETRIB ACCESS ROAD FROM KIOWA ENGR.

NOTE:

1. SLOPES SHALL BE 4:1 UNLESS OTHERWISE NOTED
2. POND SLOPES SHALL BE 4:1
3. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES AND PERMANENT SLOPES 6:1 OR STEEPER.
4. TEMPORARY SEEDING REQUIRED ON DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED AND SEEDDED WITHIN 21 DAYS AFTER INTERIM GRADING.

(TS)



CORE ENGINEERING GROUP
 1500R 151ST AVENUE, SUITE 301
 BOULDER, CO 80506
 PH: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@c-eg1.com

DATE: _____
 DESCRIPTION: _____
 NO: _____
 PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 PROJECT: **CREEKSIDE AT LORSON RANCH FILING NO. 1**
 LORSON BLVD-OLD GLORY DR. COLORADO SPRINGS, COLORADO
 CONTACT: JEFF MARK

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

CREEKSIDE AT LORSON RANCH FIL. NO. 1
OVERLOT EARLY GRADING AND
EROSION CONTROL PLAN

DATE: **DECEMBER 5, 2018**
 PROJECT NO: **100.045**
 SHEET NUMBER: **C4.1**
 TOTAL SHEETS: 17

SEDIMENTATION BASIN CR2
 PER DETAIL SB-1
 TRIB. AREA=9.5ac
 VOLUME PROVIDED=20,000 CF
 AT ELEVATION 5684.50
 VOLUME REQ=17,100 CF
 6 ROWS, 1 COLUMNS
 1-3/8" HOLES
 8" RISER PIPE

SEDIMENTATION BASIN CR3
 PER DETAIL SB-1
 TRIB. AREA=1.6ac
 VOLUME PROVIDED=2,960 CF
 AT ELEVATION 5686.50
 VOLUME REQ=2,880 CF
 10 ROWS, 1 COLUMNS
 3/8" HOLES
 8" RISER PIPE

SEE SHEET C4.2

D

LEGEND

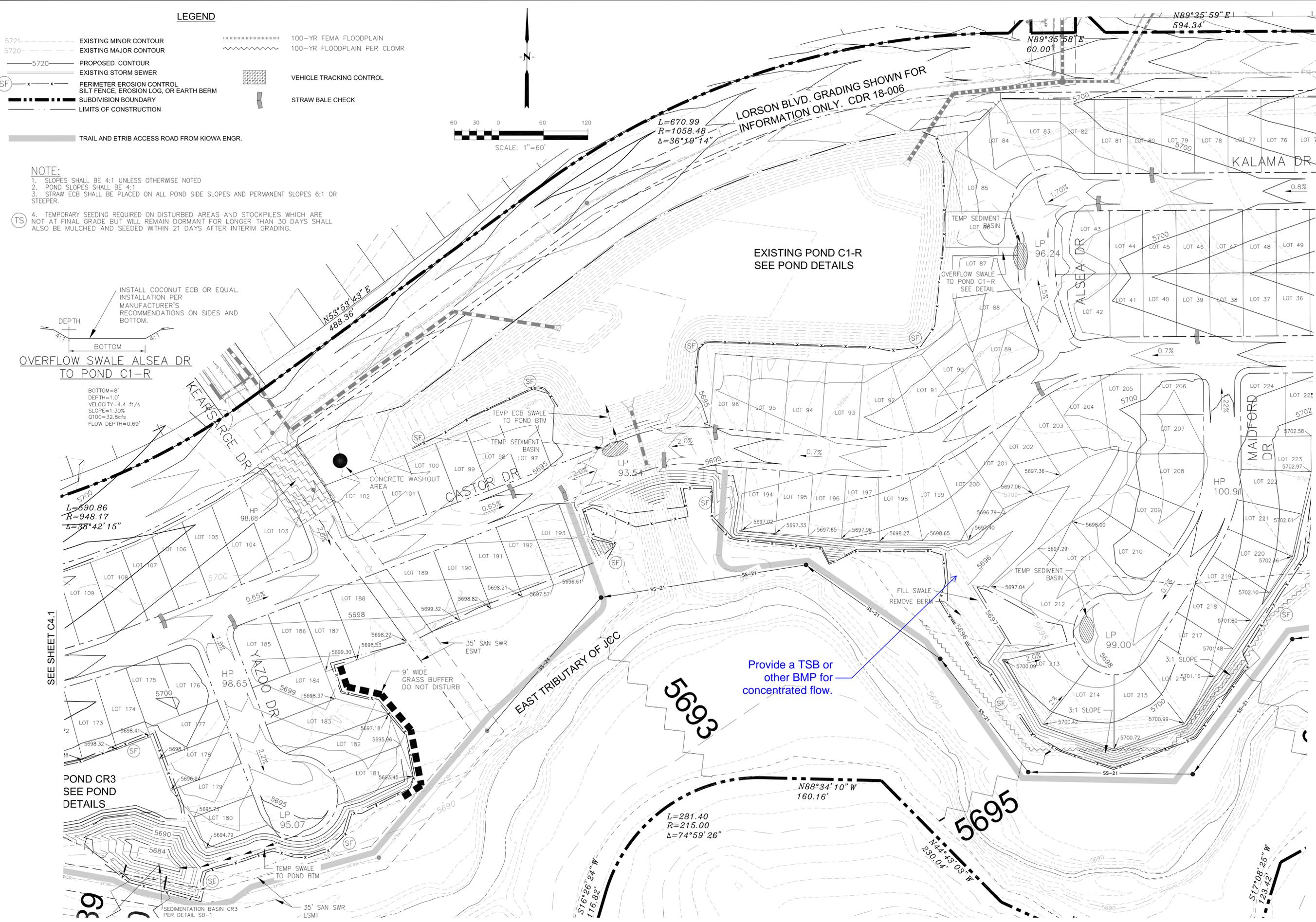
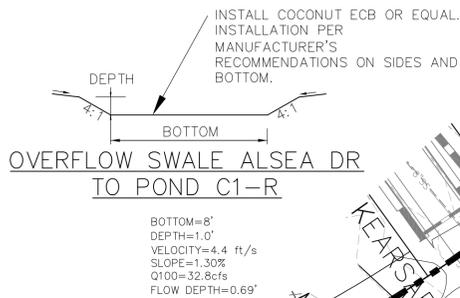
- 5721----- EXISTING MINOR CONTOUR
- 5720----- EXISTING MAJOR CONTOUR
- 5720----- PROPOSED CONTOUR
- x----- EXISTING STORM SEWER
- (SF) x----- PERIMETER EROSION CONTROL
SILT FENCE, EROSION LOG, OR EARTH BERM
- SUBDIVISION BOUNDARY
- LIMITS OF CONSTRUCTION
- 100-YR FEMA FLOODPLAIN
- 100-YR FLOODPLAIN PER CLOMR
- VEHICLE TRACKING CONTROL
- STRAW BALE CHECK

TRAIL AND ETRIB ACCESS ROAD FROM KIOWA ENGR.



NOTE:

1. SLOPES SHALL BE 4:1 UNLESS OTHERWISE NOTED
2. POND SLOPES SHALL BE 4:1
3. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES AND PERMANENT SLOPES 6:1 OR STEEPER.
- (TS) 4. TEMPORARY SEEDING REQUIRED ON DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED AND SEEDED WITHIN 21 DAYS AFTER INTERIM GRADING.



CORE ENGINEERING GROUP
 1500 S. 1ST AVENUE, SUITE 500
 DENVER, CO 80202
 PH: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg1.com

DATE: _____
 DESCRIPTION: _____
 NO: _____
 PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 PROJECT: **CREEKSIDE AT LORSON RANCH FILING NO. 1**
 LORSON BLVD-OLD GLORY DR. COLORADO SPRINGS, COLORADO
 CONTACT: JEFF MARK

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

**CREEKSIDE AT LORSON RANCH FIL. NO. 1
 OVERLOT EARLY GRADING AND
 EROSION CONTROL PLAN**

DATE: DECEMBER 5, 2018
 PROJECT NO. 100.045
 SHEET NUMBER **C4.2**
 TOTAL SHEETS: 17

SEE SHEET C4.3

SEE SHEET C4.1

POND CR3
SEE POND
DETAILS

Provide a TSB or
other BMP for
concentrated flow.

LORSON BLVD. GRADING SHOWN FOR
INFORMATION ONLY. CDR 18-006

L=670.99
R=1058.48
Δ=36°19'14"

N89°35'59"E
594.34'

N89°35'58"E
60.00'

N53°53'43"E
488.96'

L=690.86
R=948.17
Δ=38°42'15"

5693

5695

L=281.40
R=215.00
Δ=74°59'26"

N88°34'10"W
160.16'

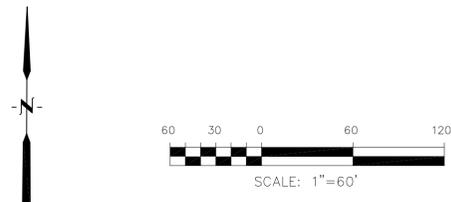
N44°43'30"E
230.04'

S17°08'25"W
128.42'

S16°26'24"W
116.82'

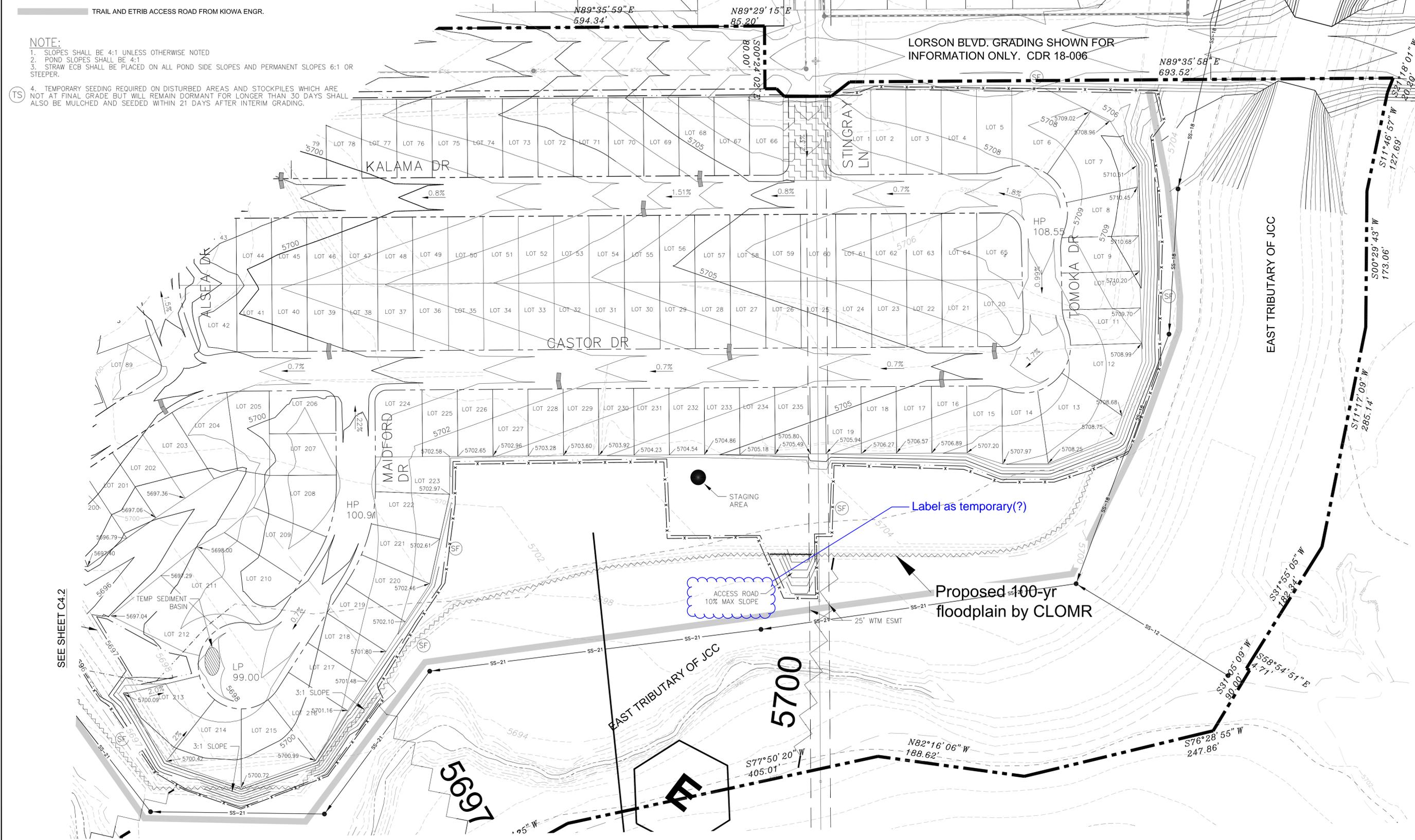
LEGEND

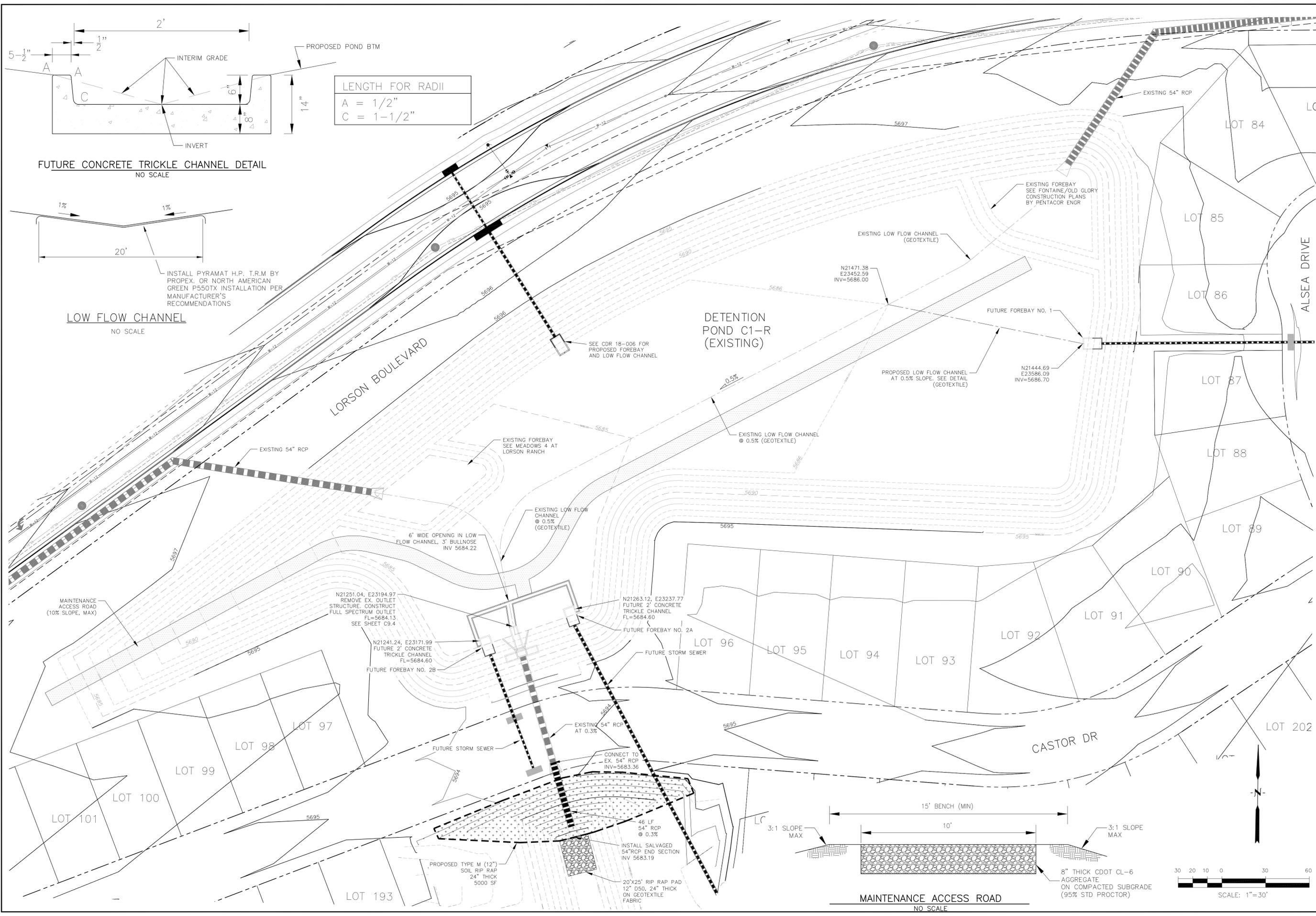
- 5721----- EXISTING MINOR CONTOUR
- 5720----- EXISTING MAJOR CONTOUR
- 5720----- PROPOSED CONTOUR
- EXISTING STORM SEWER
- (SF) x-x-x PERIMETER EROSION CONTROL
SILT FENCE, EROSION LOG, OR EARTH BERM
- SUBDIVISION BOUNDARY
- LIMITS OF CONSTRUCTION
- 100-YR FEMA FLOODPLAIN
- 100-YR FLOODPLAIN PER CLOMR
- VEHICLE TRACKING CONTROL
- STRAW BALE CHECK



NOTE:

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4. TEMPORARY SEEDING REQUIRED ON DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED AND SEEDED WITHIN 21 DAYS AFTER INTERIM GRADING.





CORE ENGINEERING GROUP
 15004 1ST AVENUE, SUITE 301
 BLDG 719, FLD 1100
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg1.com

DATE: _____
 DESCRIPTION: _____
 NO: _____

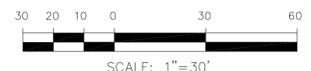
PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

PROJECT: **CREEKSIDE AT LORSON RANCH FILING NO. 1**
 LORSON BLVD-OLD GLORY DR
 COLORADO SPRINGS, COLORADO

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

CREEKSIDE AT LORSON RANCH FIL. 1
EXISTING DETENTION POND C1-R
MODIFICATIONS

DATE: DECEMBER 5, 2018
 PROJECT NO: 100.045
 SHEET NUMBER: C9.1
 TOTAL SHEETS: 17



| POINT TABLE | | | | |
|-------------|----------|----------|-----------|-------------------------------------|
| NUMBER | NORTHING | EASTING | ELEVATION | NOTES |
| 1 | 20131.46 | 21604.97 | 5682.00 | TOP OUTLET STRUCTURE |
| 2 | 20116.51 | 21617.75 | 5679.80 | 18" RCP STORM SEWER OUTLET PIPE |
| 3 | 20109.41 | 21522.51 | 5682.04 | TRICKLE CHANNEL INVERT |
| 4 | 20108.57 | 21527.70 | 5681.99 | TRICKLE CHANNEL INVERT |
| 5 | 20110.26 | 21582.25 | 5681.56 | TRICKLE CHANNEL INVERT |
| 6 | 20128.44 | 21604.01 | 5681.33 | TRICKLE CHANNEL INVERT |
| 7 | 20122.07 | 21522.11 | 5682.50 | RCP STORM SEWER INVERT INTO FOREBAY |
| 8 | 20205.30 | 21652.72 | 5683.00 | POND BOTTOM |
| 9 | 20210.63 | 21680.38 | 5683.00 | POND BOTTOM |
| 10 | 20229.82 | 21737.23 | 5689.00 | DIVERSION SWALE |
| 11 | 20290.52 | 21843.85 | 5690.56 | DIVERSION SWALE |
| 12 | 20344.76 | 21910.71 | 5691.99 | DIVERSION SWALE |

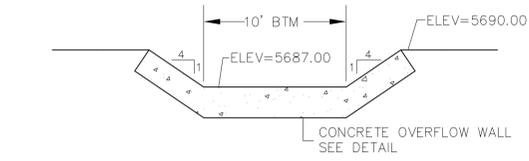
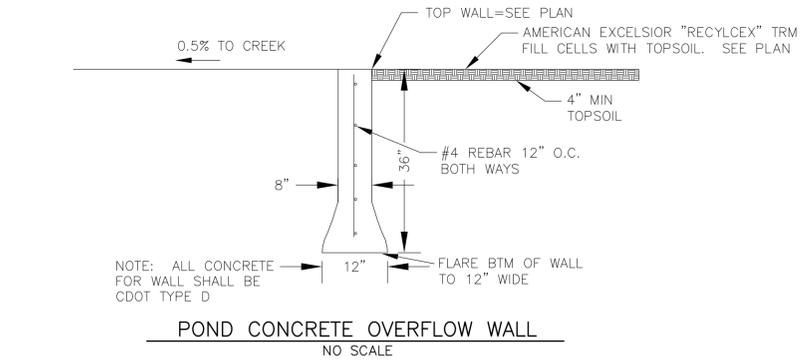
CORE ENGINEERING GROUP
 15004 1ST AVENUE S.
 BLDG 100
 PHO: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg1.com

DATE: _____
 DESCRIPTION: _____
 NO: _____
 PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 PROJECT: **CREEKSIDE AT LORSON RANCH FILING NO. 1**
 LORSON BLVD-OLD GLODY DR.
 COLORADO SPRINGS, COLORADO
 CONTACT: JEFF MARK

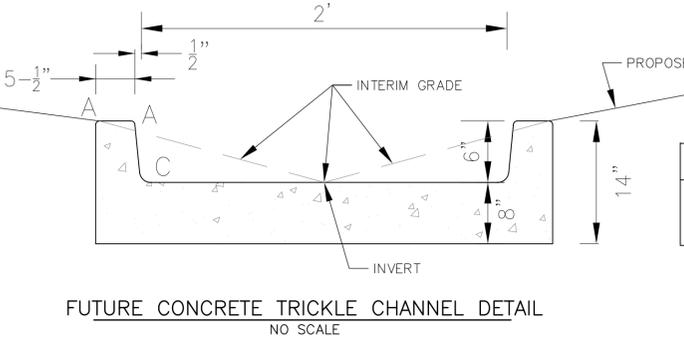
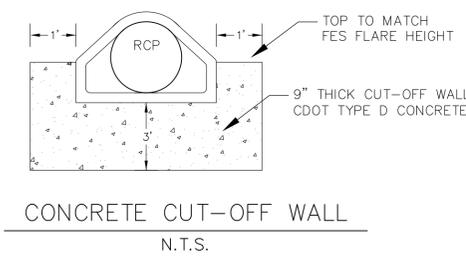
DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

CREEKSIDE AT LORSON RANCH FIL. 1
FULL SPECTRUM DETENTION POND CR2
GRADING AND DETAILS

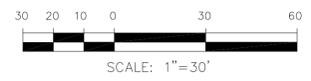
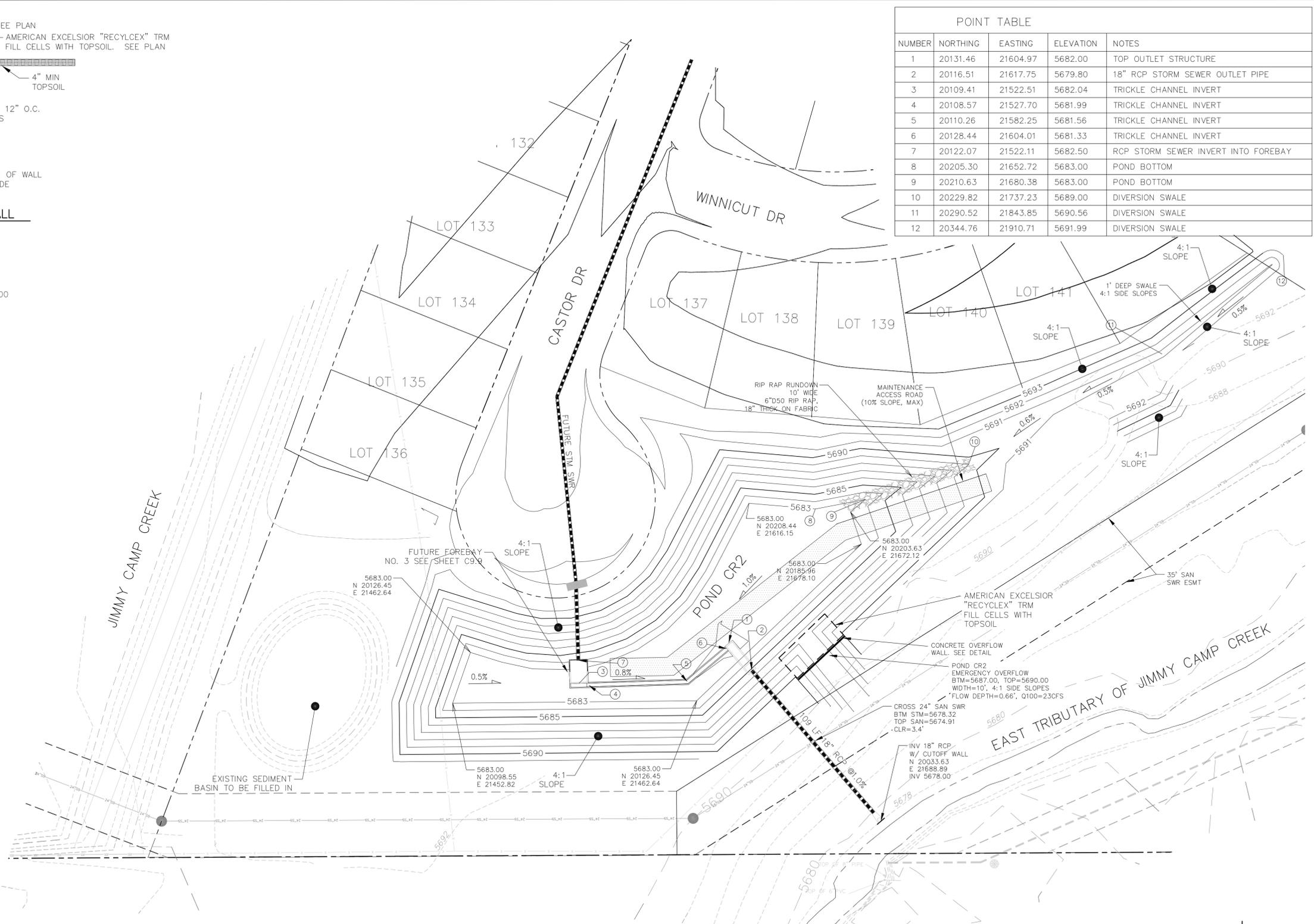
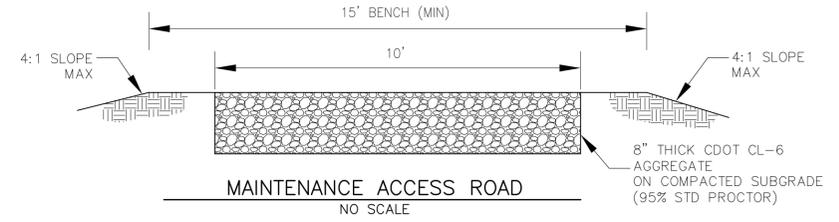
DATE: **DECEMBER 5, 2018**
 PROJECT NO: **100.045**
 SHEET NUMBER: **C9.2**
 TOTAL SHEETS: 17

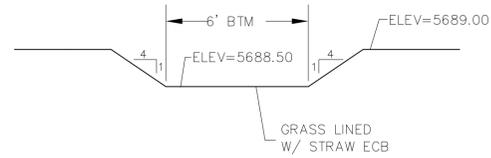


NOTE:
 1. POND SLOPES SHALL BE 4:1 UNLESS OTHERWISE NOTED
 2. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES UNLESS NOTED OTHERWISE



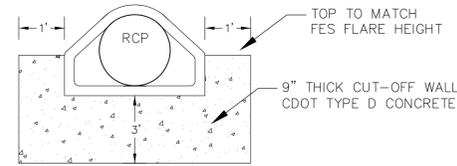
| LENGTH FOR RADII | |
|------------------|----------|
| A | = 1/2" |
| C | = 1-1/2" |





POND CR3 SECONDARY EMERGENCY OVERFLOW

SCALE: NTS

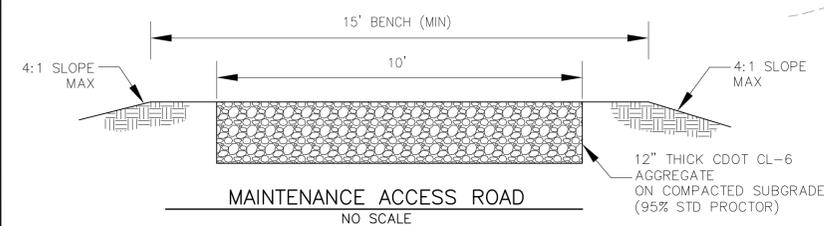
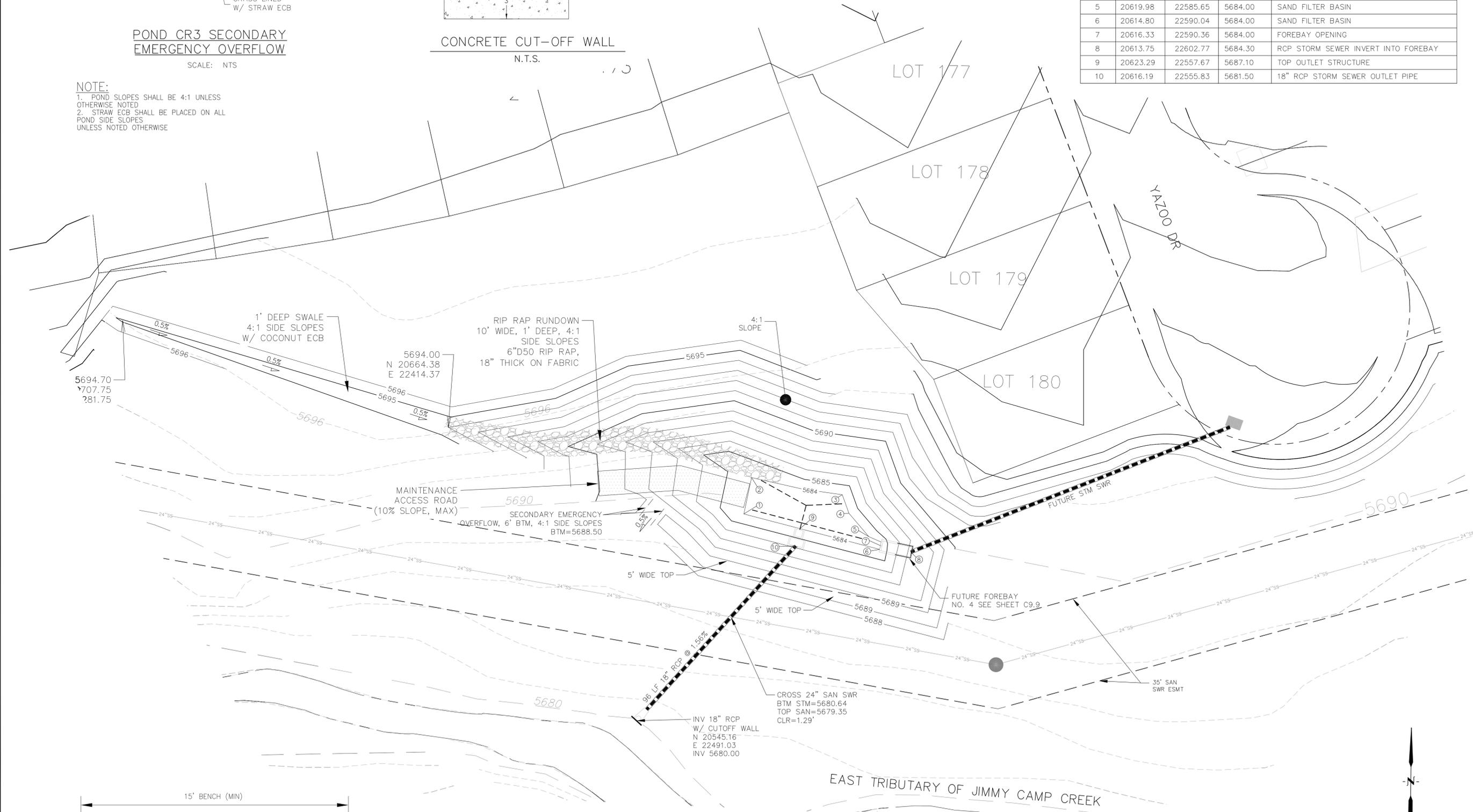


CONCRETE CUT-OFF WALL

N.T.S.

| POINT TABLE | | | | |
|-------------|----------|----------|-----------|-------------------------------------|
| NUMBER | NORTHING | EASTING | ELEVATION | NOTES |
| 1 | 20629.20 | 22534.74 | 5684.00 | SAND FILTER BASIN |
| 2 | 20643.98 | 22537.90 | 5684.00 | SAND FILTER BASIN |
| 3 | 20637.02 | 22574.84 | 5684.00 | SAND FILTER BASIN |
| 4 | 20629.46 | 22577.57 | 5684.00 | SAND FILTER BASIN |
| 5 | 20619.98 | 22585.65 | 5684.00 | SAND FILTER BASIN |
| 6 | 20614.80 | 22590.04 | 5684.00 | SAND FILTER BASIN |
| 7 | 20616.33 | 22590.36 | 5684.00 | FOREBAY OPENING |
| 8 | 20613.75 | 22602.77 | 5684.30 | RCP STORM SEWER INVERT INTO FOREBAY |
| 9 | 20623.29 | 22557.67 | 5687.10 | TOP OUTLET STRUCTURE |
| 10 | 20616.19 | 22555.83 | 5681.50 | 18" RCP STORM SEWER OUTLET PIPE |

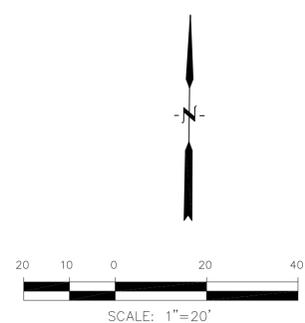
NOTE:
 1. POND SLOPES SHALL BE 4:1 UNLESS OTHERWISE NOTED
 2. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES UNLESS NOTED OTHERWISE



MAINTENANCE ACCESS ROAD

NO SCALE

12" THICK CDOT CL-6 AGGREGATE ON COMPACTED SUBGRADE (95% STD PROCTOR)



CORE ENGINEERING GROUP
 15004 1ST AVENUE, S.
 BOULDER, CO 80506
 PH: 303.440.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg1.com

DATE: _____
 DESCRIPTION: _____
 NO: _____
 PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

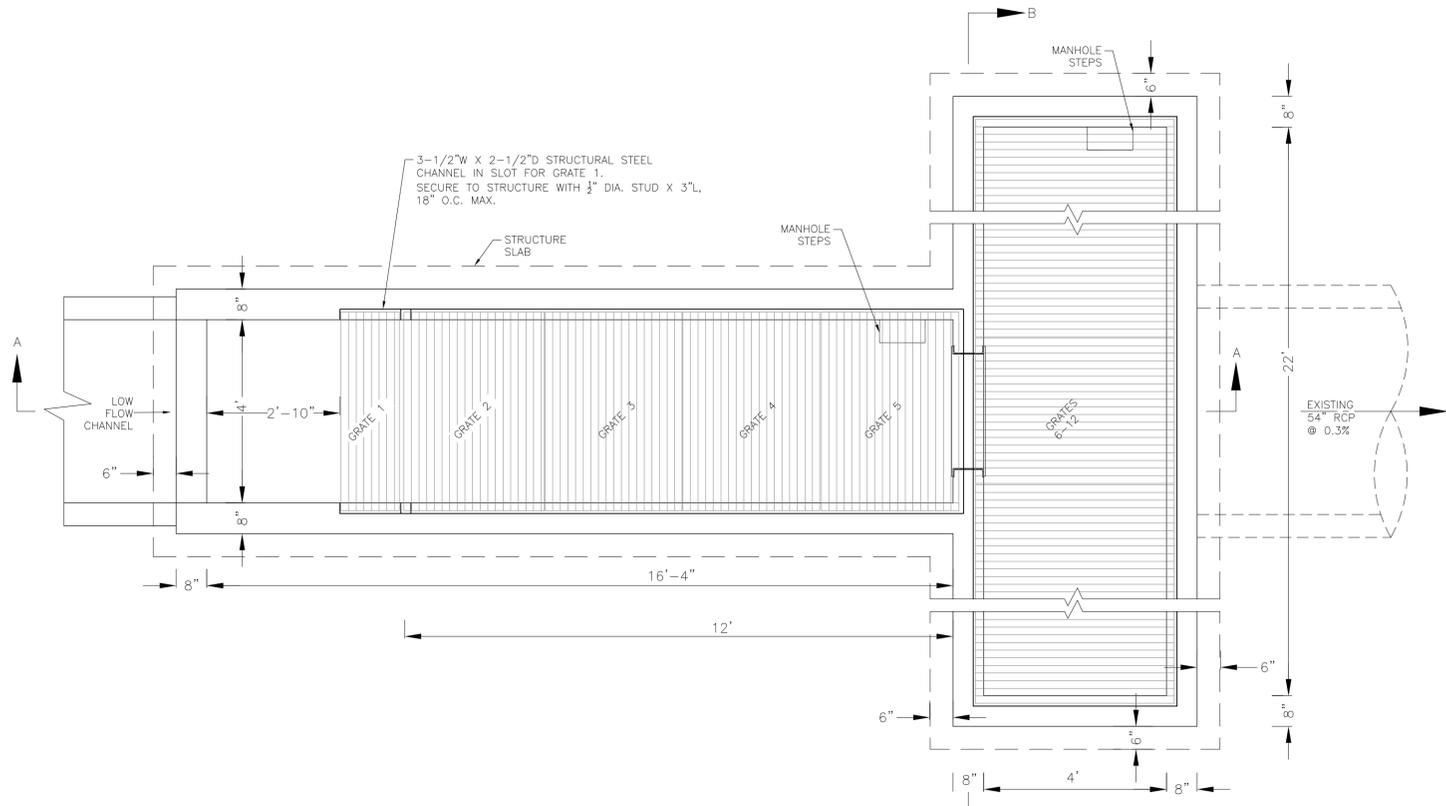
PROJECT: **CREEKSIDE AT LORSON RANCH FILING NO. 1**
 LORSON BLVD-OLD GLODY DR.
 COLORADO SPRINGS, COLORADO

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

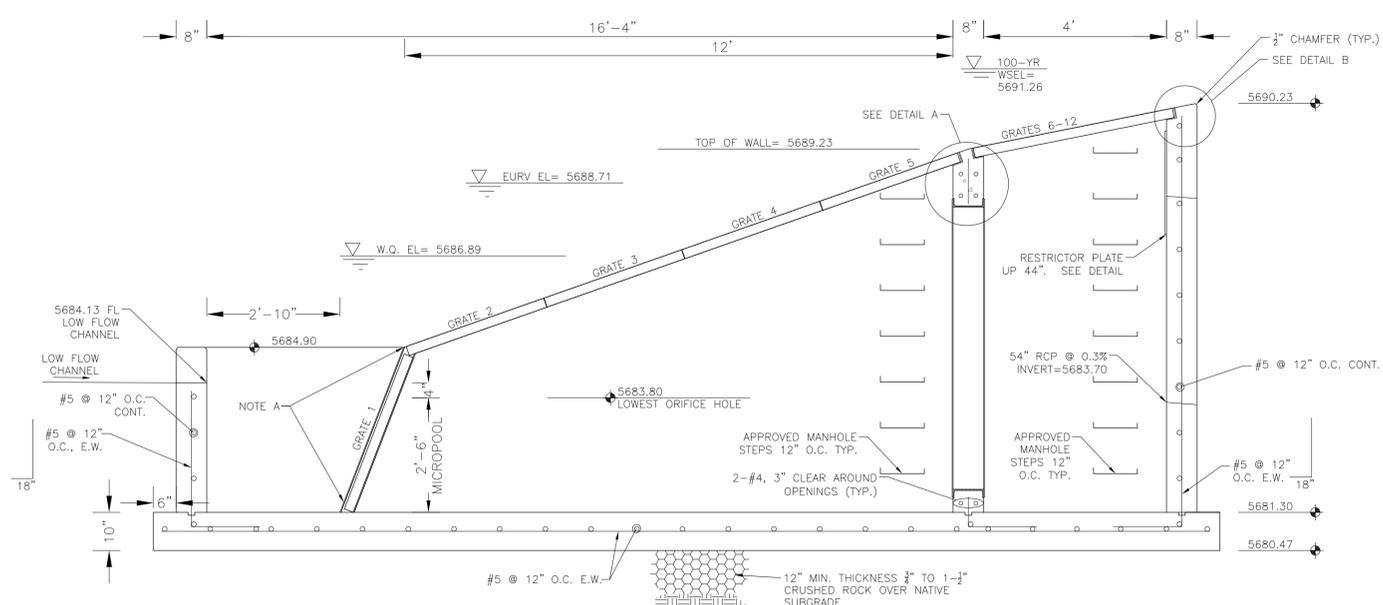
CREEKSIDE AT LORSON RANCH FIL. 1
DETENTION POND CR3 (SFB)
GRADING AND DETAILS

DATE: **DECEMBER 5, 2018**

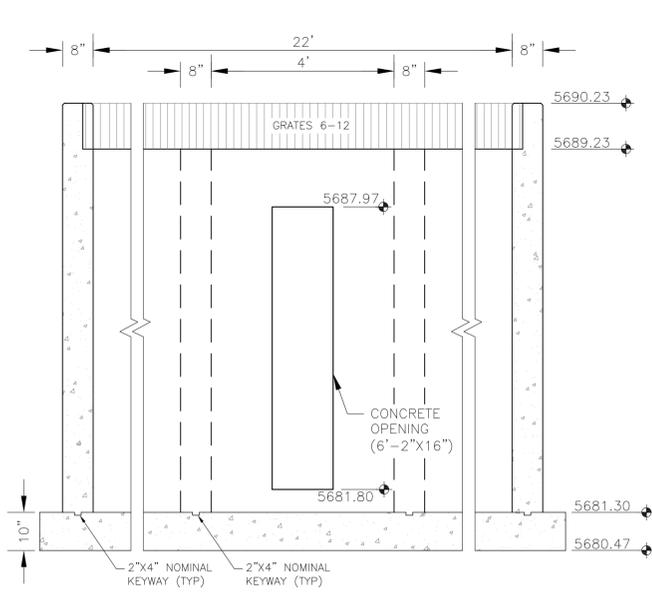
PROJECT NO. **100.045**
 SHEET NUMBER **C9.3**
 TOTAL SHEETS: 17



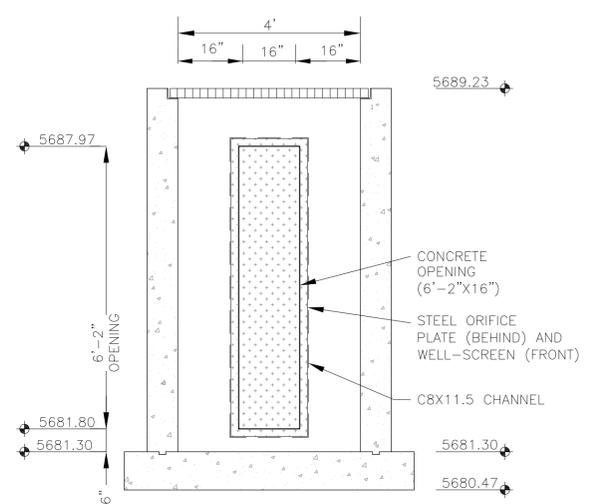
OUTLET STRUCTURE DETAIL - PLAN VIEW
NO SCALE



OUTLET STRUCTURE DETAIL - SECTION A-A
NO SCALE



OUTLET STRUCTURE DETAIL - SECTION B-B
NO SCALE



OUTLET STRUCTURE WITH PLATE/SCREEN - SECTION B-B
NO SCALE

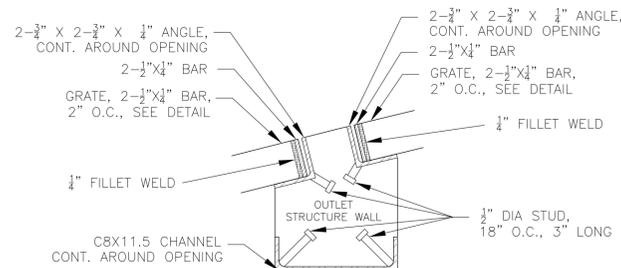
OUTLET STRUCTURE, FOREBAY, AND DRAIN CHANNEL NOTES:

1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL COMPONENTS OF THE OUTLET STRUCTURE.
2. GRADE 60 REINFORCING STEEL REQUIRED. SEE TABLE FOR THE MINIMUM LAP SPLICE LENGTH FOR REINFORCING BARS. ALL REINFORCING STEEL SHALL HAVE A TWO-INCH MINIMUM CLEARANCE FROM EDGE OF CONCRETE, UNLESS OTHERWISE NOTED.
3. CONCRETE FOR THE OUTLET STRUCTURE AND FOREBAY SHALL BE CDOT CLASS D CONCRETE.
4. CONCRETE FOR DRAIN CHANNELS SHALL BE CDOT CLASS B CONCRETE.
5. EXPANSION JOINT MATERIAL SHALL MEET AASHTO SPECIFICATION M-213. EXPANSION JOINT MATERIAL SHALL BE 1/2" THICK, SHALL EXTEND THE FULL DEPTH OF CONTACT SURFACE AND THE JOINT SHALL BE SEALED, REFER TO DETAILS.
6. ALL EXPOSED CONCRETE CORNERS SHALL HAVE A 3/8" CHAMFER UNLESS OTHERWISE NOTED.
7. SUBGRADE TO BE 12" THICK CLEAN FILL COMPACTED TO 95% STANDARD PROCTOR DENSITY PER ASTM M698 UNDER STRUCTURE.
8. REFER TO GRADING PLANS FOR PRESEDIMENTATION/FOREBAY DESIGN.
9. ENGINEER SHALL BE NOTIFIED PRIOR TO BEGINNING CONSTRUCTION OF OUTLET STRUCTURE TO SCHEDULE OBSERVATION VISITS FOR STRUCTURES.

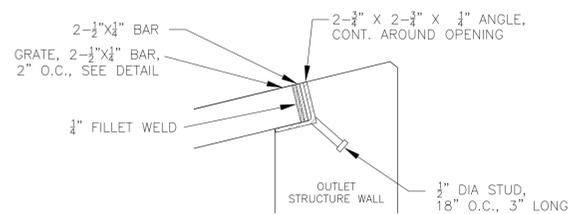
| BAR SIZE | #4 | #5 | #6 |
|--------------------|-------|-------|-------|
| MIN. SPLICE LENGTH | 1'-3" | 1'-7" | 2'-0" |

NOTE:

1. SEE SHEET CX FOR POND CR1 DETAILS.

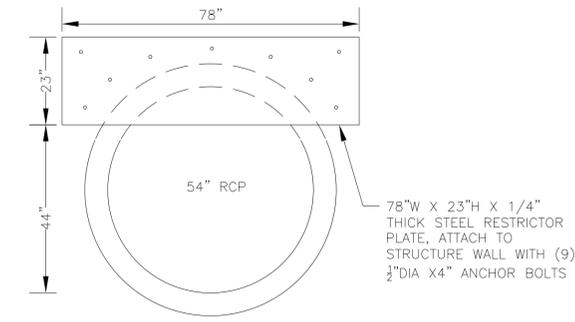
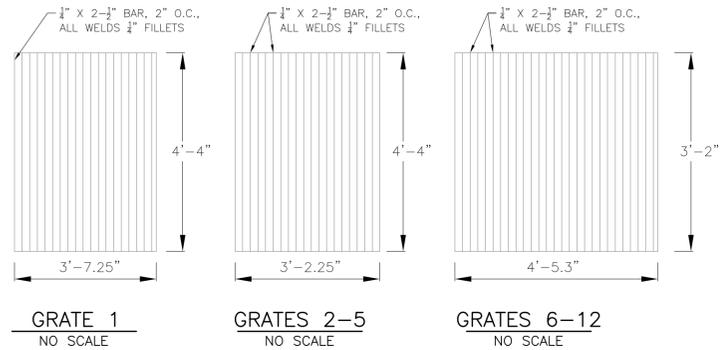


DETAIL A
NO SCALE

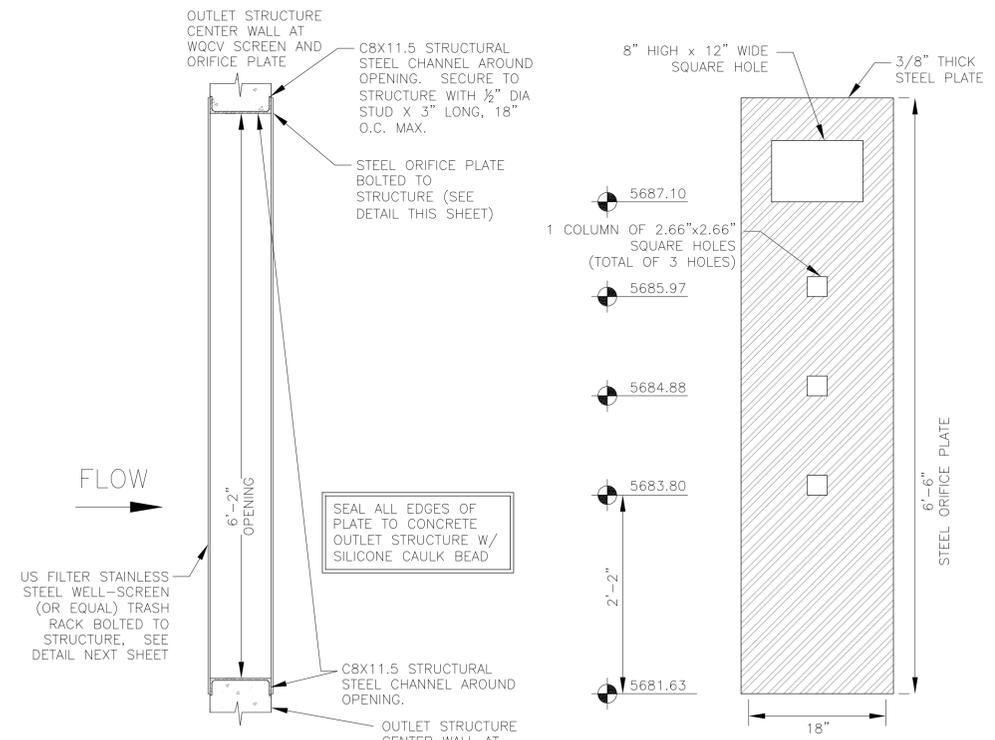


DETAIL B
NO SCALE

NOTE:
AFTER CONCRETE STRUCTURE HAS BEEN POURED
ALL GRATE DIMENSIONS SHALL BE FIELD VERIFIED
PRIOR TO GRATE CONSTRUCTION



OUTLET RESTRICTOR PLATE
NO SCALE



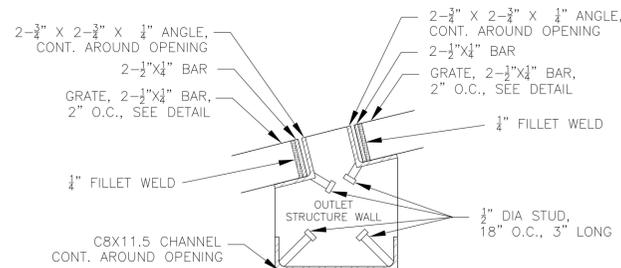
TRASH RACK DETAIL
NO SCALE

ORIFICE PLATE DETAIL
NO SCALE

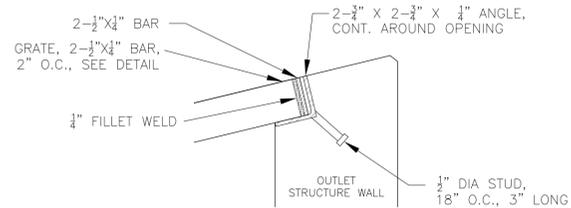
WQCV WELL-SCREEN NOTES:

- Well-Screen shall be stainless steel and attached by stainless steel bolts along edge of the mounting frame.
- WQCV Well Screen
 - Type of Screen: Stainless steel #93 Vee Wire (Johnson Vee Wire (tm) Stainless Steel Screen or equivalent with 60% open area)
 - Screen slot opening dimension: 0.139" (Screen #93 Vee Wire Slot Opening)
 - Type and Size of Support Rod: TE 0.074"x0.50"
 - Spacing of Support Rod (O.C.): 1.0 Inch
 - Total Screen Thickness: 0.655"
 - Carbon Steel Holding Frame Type: 3/4" x 1.0" angle

POND C1-R
FULL SPECTRUM
OUTLET STRUCTURE DETAILS

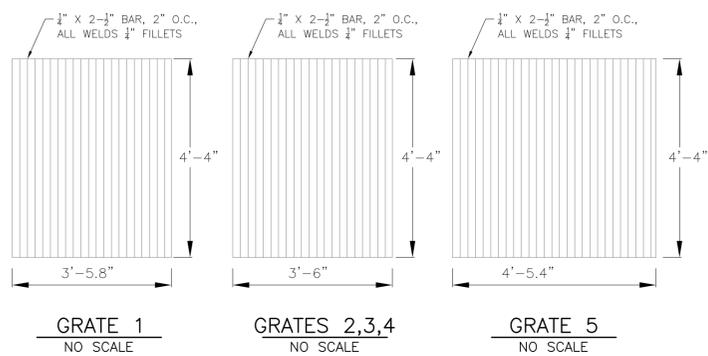


DETAIL A
NO SCALE

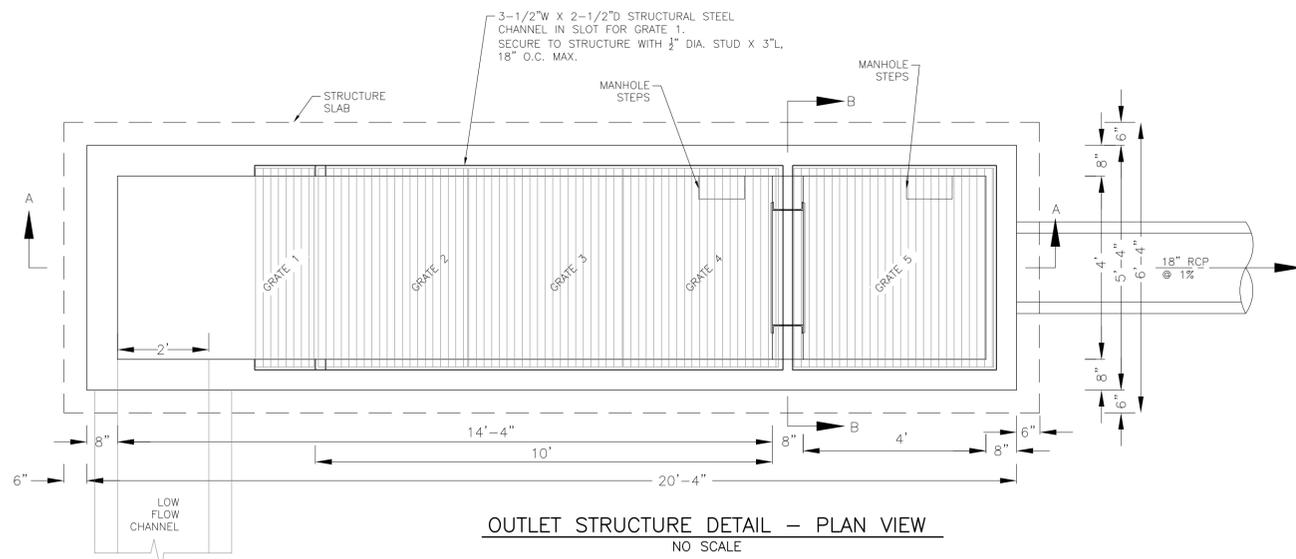


DETAIL B
NO SCALE

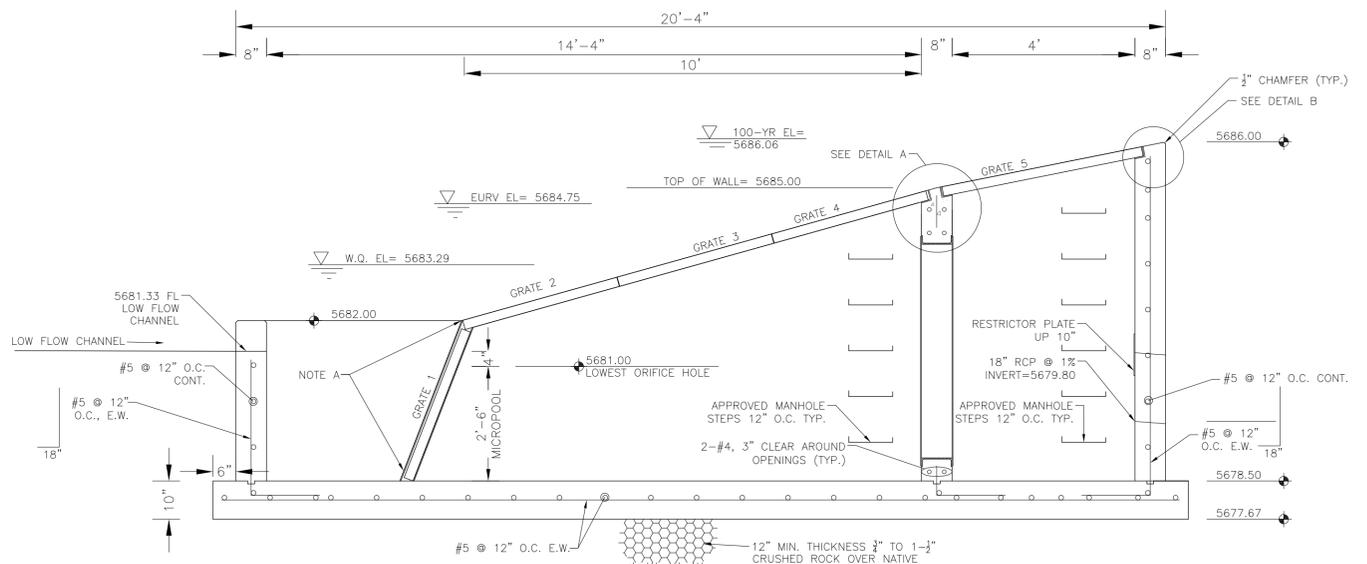
NOTE:
AFTER CONCRETE STRUCTURE HAS BEEN POURED
ALL GRATE DIMENSIONS SHALL BE FIELD VERIFIED
PRIOR TO GRATE CONSTRUCTION



GRATE 1 NO SCALE
GRATES 2,3,4 NO SCALE
GRATE 5 NO SCALE



OUTLET STRUCTURE DETAIL - PLAN VIEW
NO SCALE



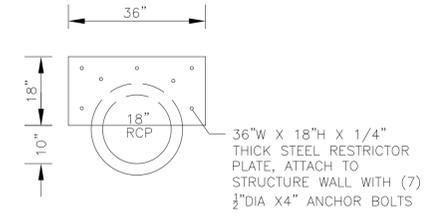
OUTLET STRUCTURE DETAIL - SECTION A-A
NO SCALE

OUTLET STRUCTURE, FOREBAY, AND DRAIN CHANNEL NOTES:

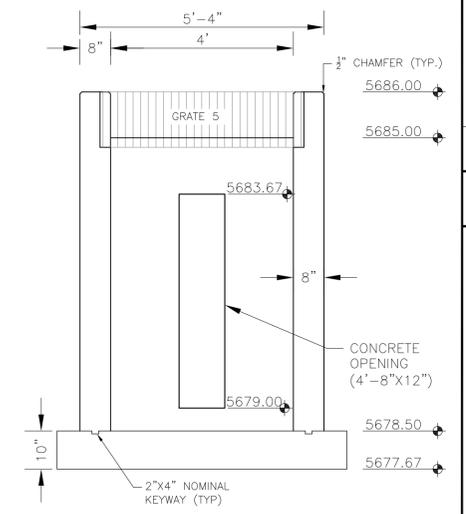
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL COMPONENTS OF THE OUTLET STRUCTURE.
 - GRADE 60 REINFORCING STEEL REQUIRED. SEE TABLE FOR THE MINIMUM LAP SPLICE LENGTH FOR REINFORCING BARS. ALL REINFORCING STEEL SHALL HAVE A TWO-INCH MINIMUM CLEARANCE FROM EDGE OF CONCRETE, UNLESS OTHERWISE NOTED.
- | BAR SIZE | #4 | #5 | #6 |
|--------------------|-------|-------|-------|
| MIN. SPLICE LENGTH | 1'-3" | 1'-7" | 2'-0" |
- CONCRETE FOR THE OUTLET STRUCTURE AND FOREBAY SHALL BE CDOT CLASS D CONCRETE.
 - CONCRETE FOR DRAIN CHANNELS SHALL BE CDOT CLASS B CONCRETE.
 - EXPANSION JOINT MATERIAL SHALL MEET AASHTO SPECIFICATION M-213. EXPANSION JOINT MATERIAL SHALL BE 1/2" THICK, SHALL EXTEND THE FULL DEPTH OF CONTACT SURFACE AND THE JOINT SHALL BE SEALED, REFER TO DETAILS.
 - ALL EXPOSED CONCRETE CORNERS SHALL HAVE A 3/8" CHAMFER UNLESS OTHERWISE NOTED.
 - SUBGRADE TO BE 12" THICK CLEAN FILL COMPACTED TO 95% STANDARD PROCTOR DENSITY PER ASTM M698 UNDER STRUCTURE.
 - REFER TO SHEET XX FOR PRESEDIMENTATION/FOREBAY DESIGN.
 - ENGINEER SHALL BE NOTIFIED PRIOR TO BEGINNING CONSTRUCTION OF OUTLET STRUCTURE TO SCHEDULE OBSERVATION VISITS FOR STRUCTURES.

WQCV WELL-SCREEN NOTES:

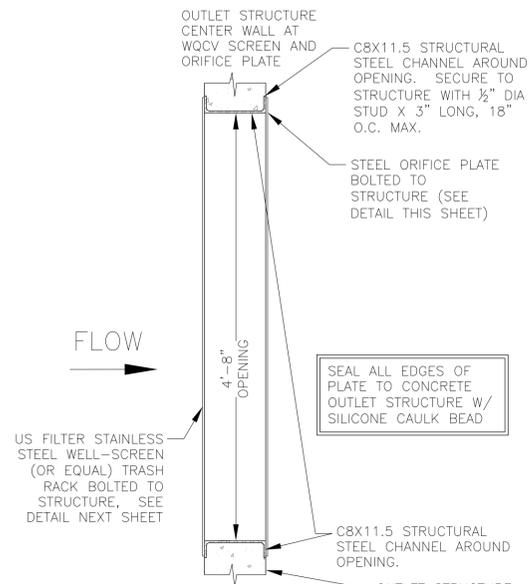
- Well-Screen shall be stainless steel and attached by stainless steel bolts along edge of the mounting frame.
- WQCV Well Screen
 - Type of Screen: Stainless steel #93 Vee Wire (Johnson Vee Wire (tm) Stainless Steel Screen or equivalent with 60% open area)
 - Screen slot opening dimension: 0.139" (Screen #93 Vee Wire Slot Opening)
 - Type and Size of Support Rod: TE 0.074"x0.50"
 - Spacing of Support Rod (O.C.): 1.0 Inch
 - Total Screen Thickness: 0.655"
 - Carbon Steel Holding Frame Type: 3/4" x 1.0" angle



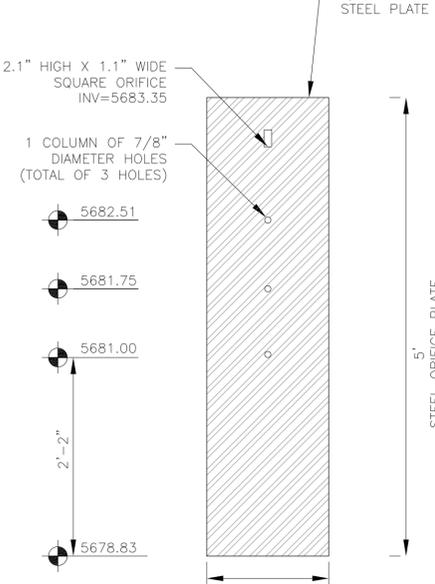
OUTLET RESTRICTOR PLATE
NO SCALE



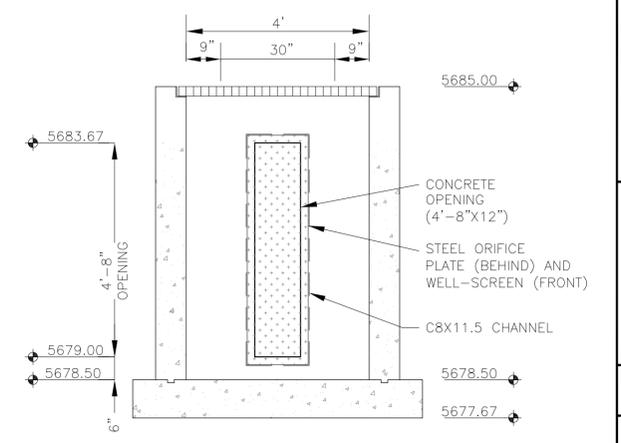
OUTLET STRUCTURE DETAIL - SECTION B-B
NO SCALE



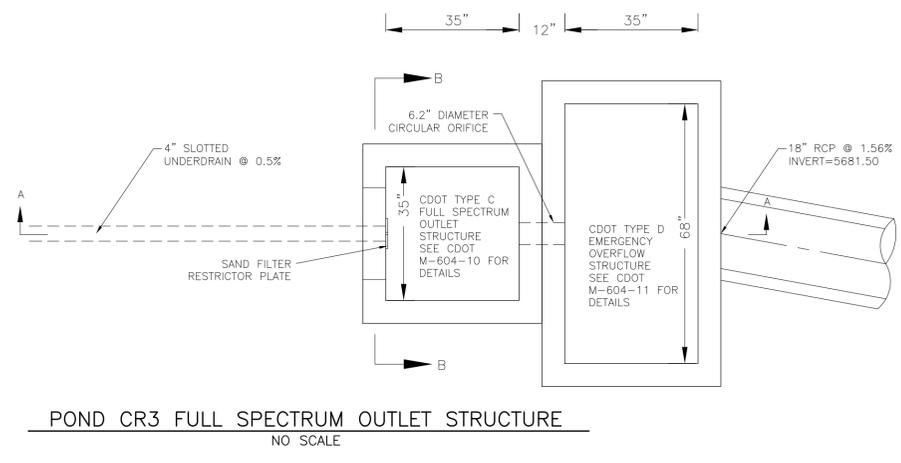
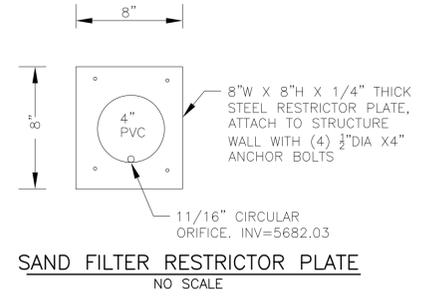
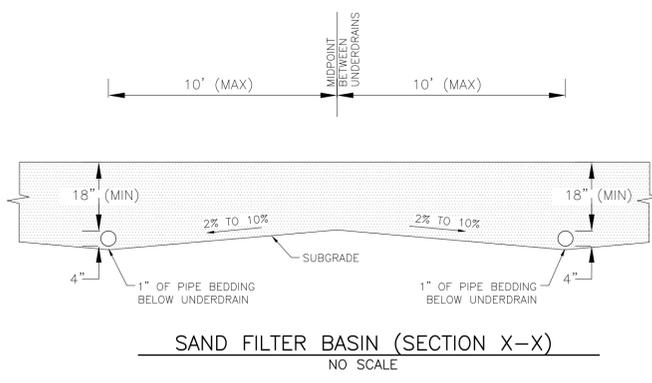
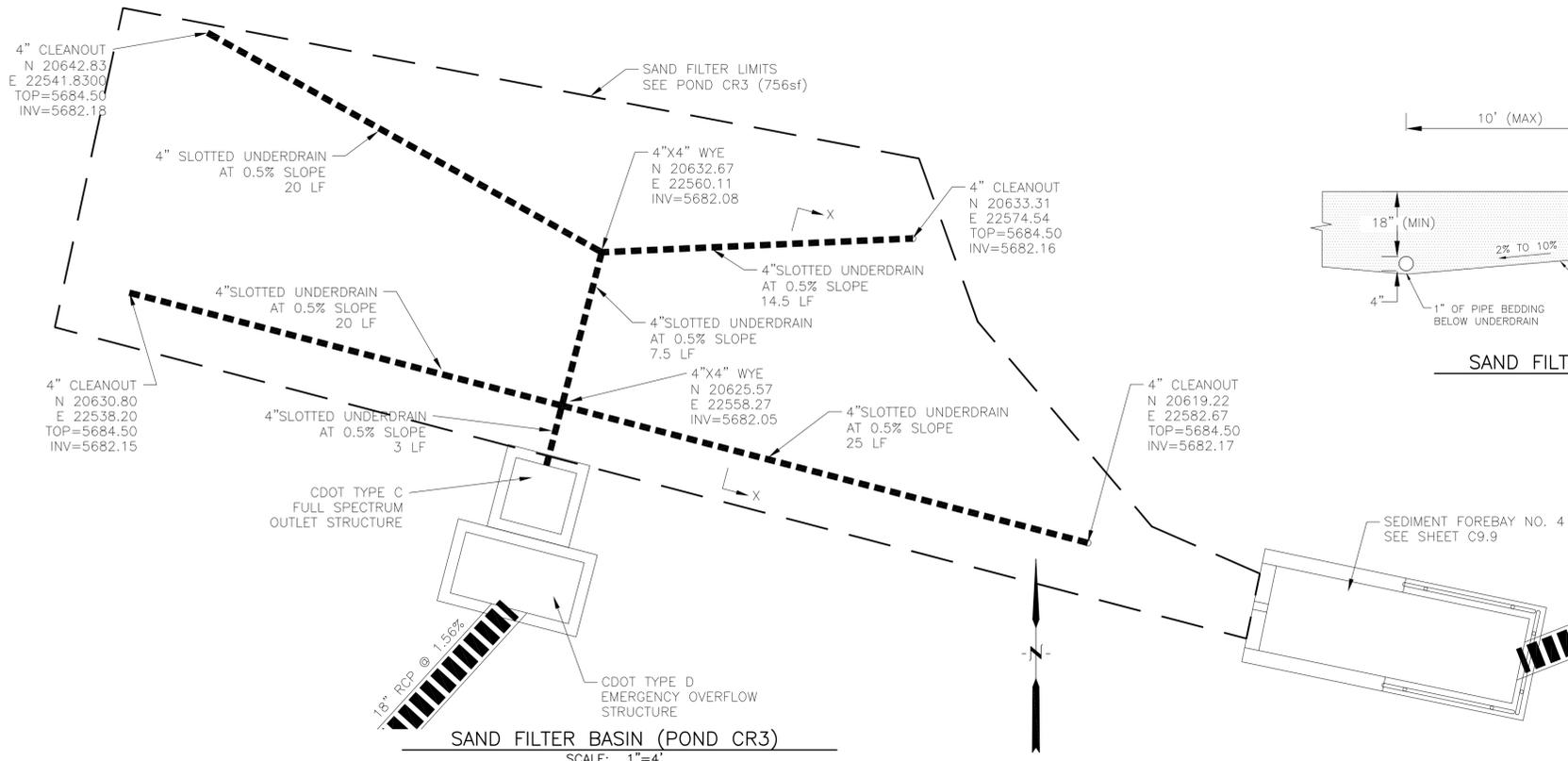
TRASH RACK DETAIL
NO SCALE



ORIFICE PLATE DETAIL
NO SCALE



OUTLET STRUCTURE DETAIL - SECTION B-B
NO SCALE



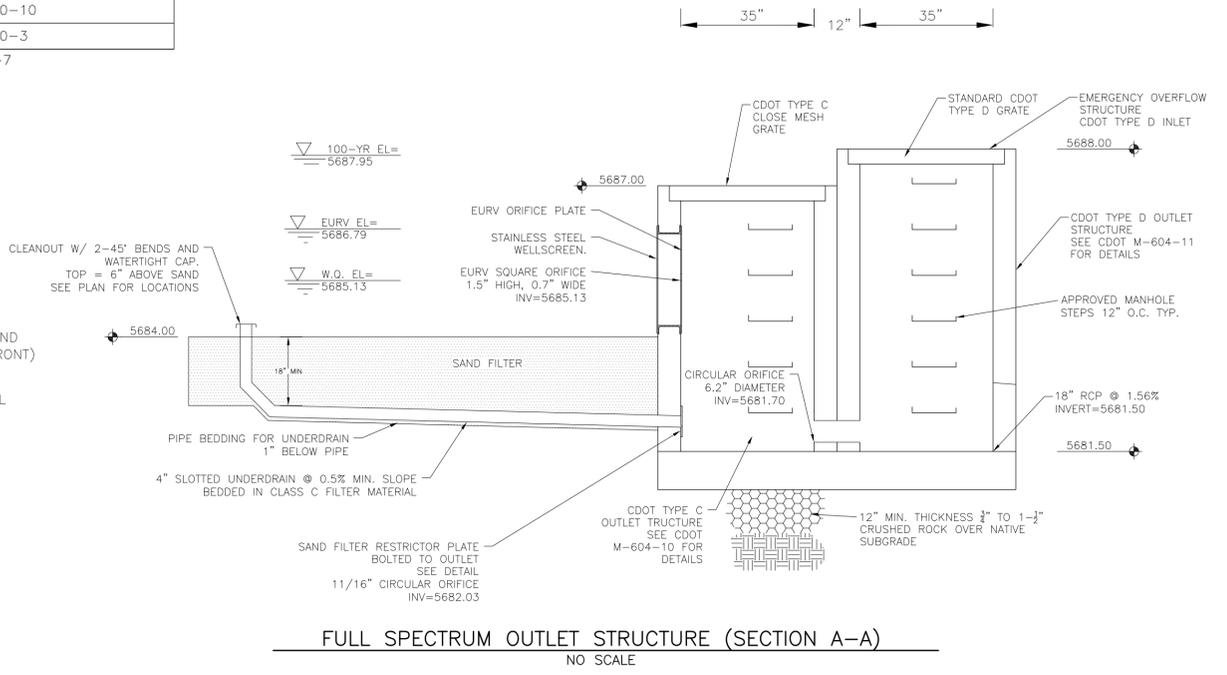
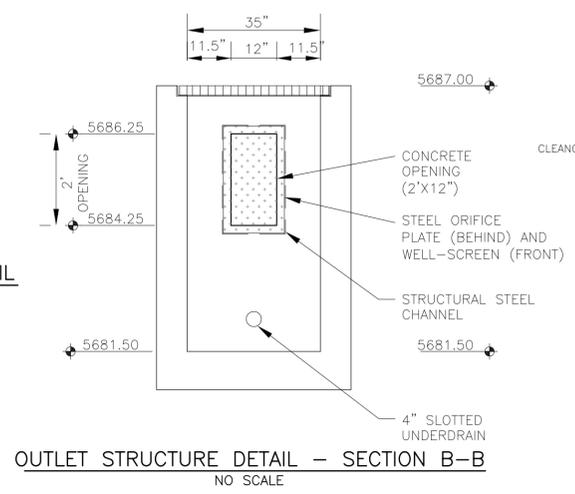
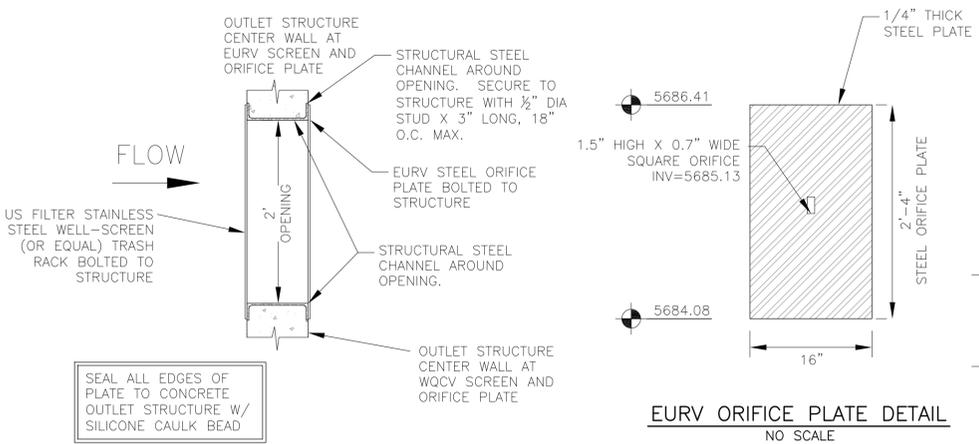
OUTLET STRUCTURE, FOREBAY, AND DRAIN CHANNEL NOTES:

- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL COMPONENTS OF THE OUTLET STRUCTURE.
- CONSTRUCTION OF CDOT TYPE C AND CDOT TYPE D STRUCTURES SHALL BE IN ACCORDANCE WITH CDOT M-604-10 AND M-604-11 EXCEPT WHERE MODIFIED IN THESE CONSTRUCTION PLANS.
- SUBGRADE TO BE 12" THICK CLEAN FILL COMPACTED TO 95% STANDARD PROCTOR DENSITY PER ASTM M698 UNDER STRUCTURE.
- 4" SLOTTED UNDERDRAIN SHALL BE CONTECH A-2000 OR EQUAL MEETING ASTM F949. SLOTS SHALL BE 1-1/16" LONG, 0.032" WIDE, 0.413" ON CENTER, AND HAVE AN OPEN AREA OF 1.90 SQUARE INCHES.
- SAND FILTER MATERIAL SHALL MEET CDOT CLASS C FILTER MATERIAL. SEE CDOT TABLE 703-7
- REFER TO SHEET C9.9 FOR PRESEDIMENTATION/FOREBAY DESIGN.
- ENGINEER SHALL BE NOTIFIED PRIOR TO BEGINNING CONSTRUCTION OF OUTLET STRUCTURE TO SCHEDULE OBSERVATION VISITS FOR STRUCTURES AND SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES WITHIN THESE PLANS.

GRADATION SPECIFICATIONS FOR CDOT CLASS C FILTER MATERIAL

| SIEVE SIZE | MASS PERCENT PASSING SQUARE MESH SIEVES |
|------------------|---|
| 37.5 mm (1.5") | |
| 19.0 mm (0.75") | 100 |
| 4.75 mm (No. 4) | 60-100 |
| 1.18 mm (No. 16) | |
| 300 um (No. 50) | 10-30 |
| 150 um (No. 100) | 0-10 |
| 75 um (No. 200) | 0-3 |

SOURCE: CDOT TABLE 703-7



CORE ENGINEERING GROUP
15004 1ST AVENUE S.
DENVER, CO 80202
PH: 303.791.9700
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceng.com

DATE: _____
DESCRIPTION: _____
NO: _____

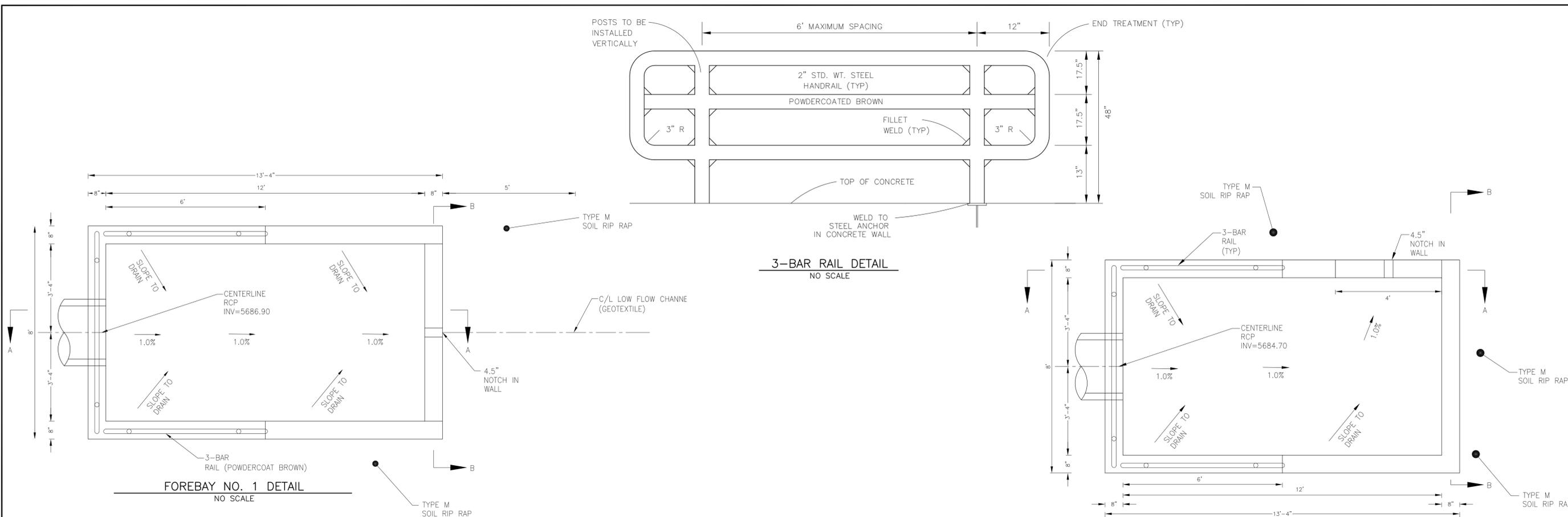
PREPARED FOR: **LORSON, LLC**
212 N. WAHSATCH AVE. SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: JEFF MARK

PROJECT: **CREEKSIDE AT LORSON**
RANCH FILING NO. 1
LORSON BLVD-OLD GLORY DR.
COLORADO SPRINGS, COLORADO

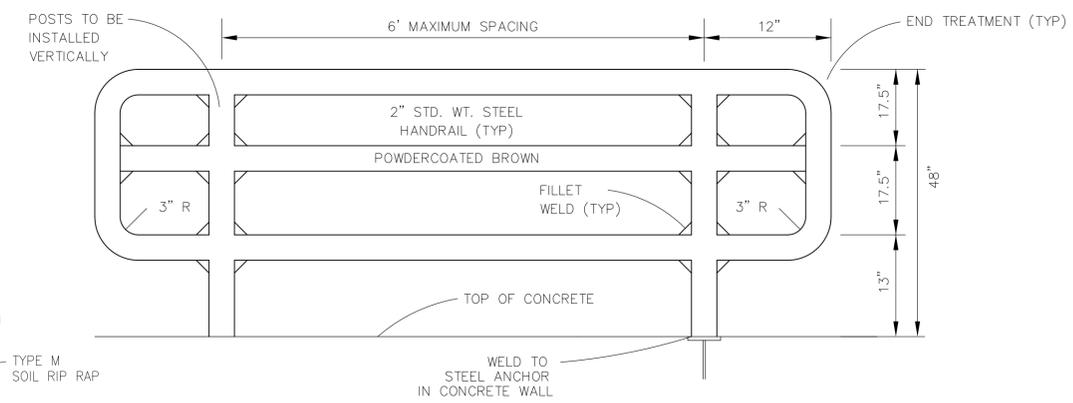
DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

FULL SPECTRUM POND CR3 WITH SAND FILTER BASIN OUTLET STRUCTURE DETAILS

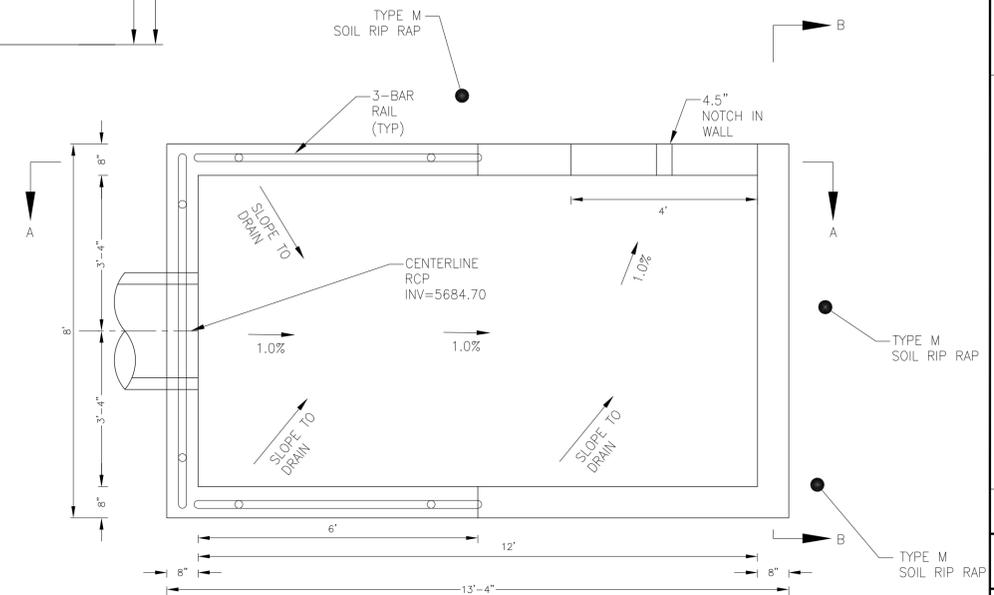
DATE: DECEMBER 5, 2018
PROJECT NO. 100.045
SHEET NUMBER C9.7
TOTAL SHEETS: 17



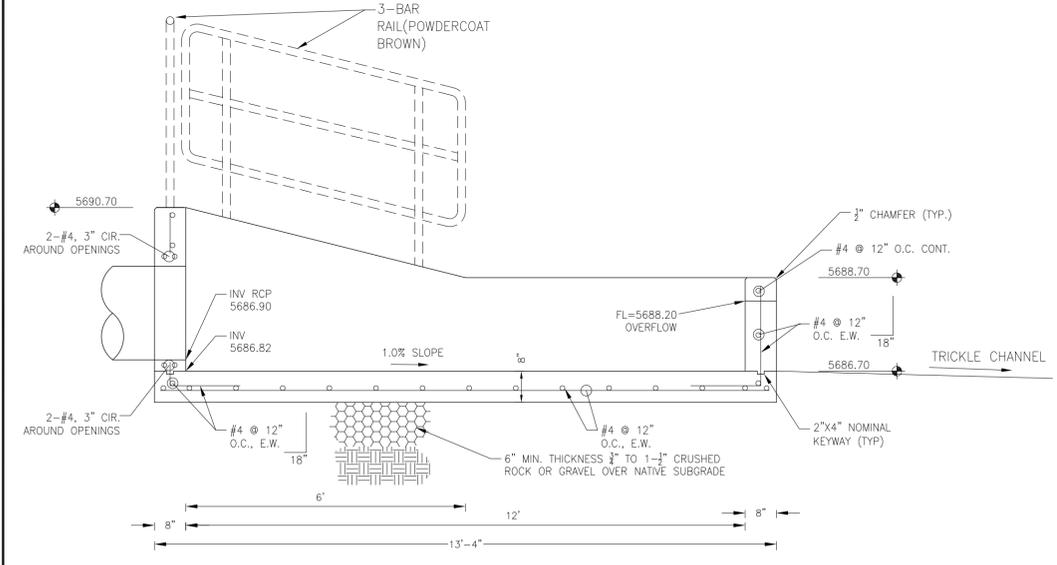
FOREBAY NO. 1 DETAIL
NO SCALE



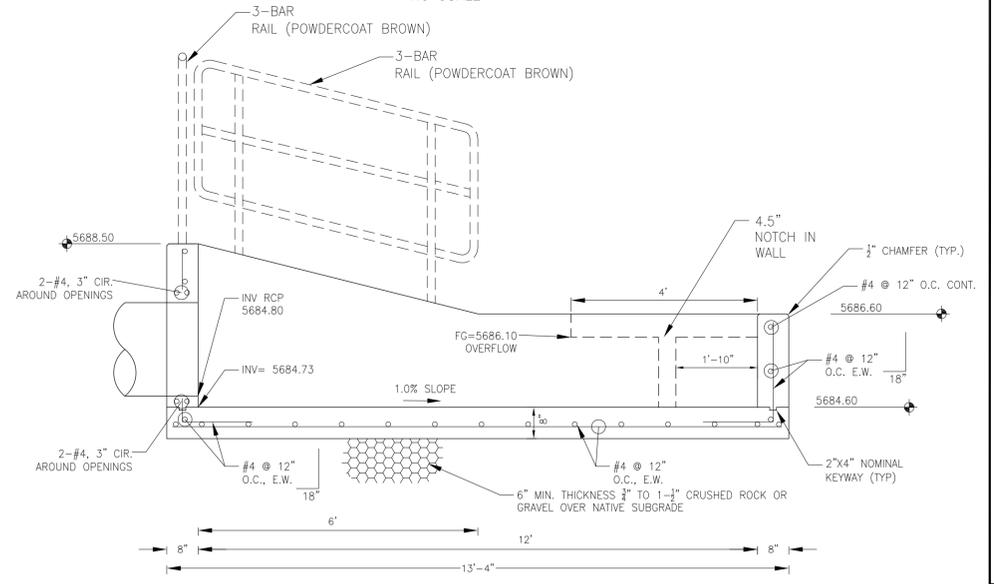
3-BAR RAIL DETAIL
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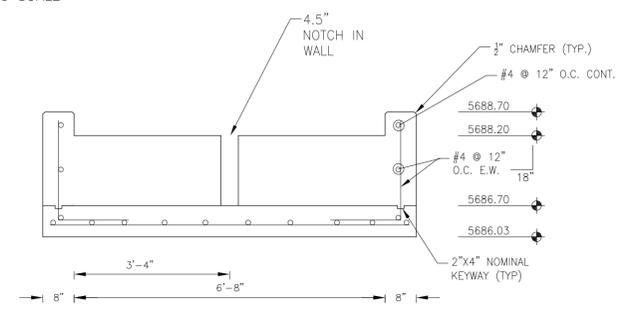
FOREBAY NO. 2A & 2B DETAIL
NO SCALE



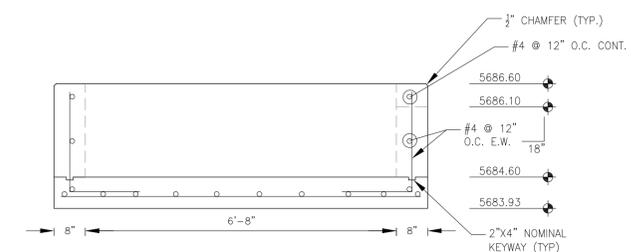
FOREBAY NO. 1 SECTION A-A
NO SCALE



FOREBAY NO. 2A & 2B SECTION A-A
NO SCALE

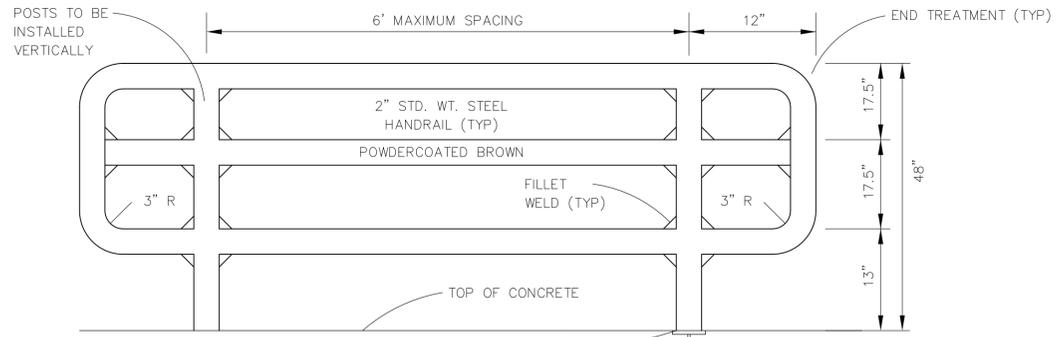


FOREBAY NO. 1 SECTION B-B
NO SCALE

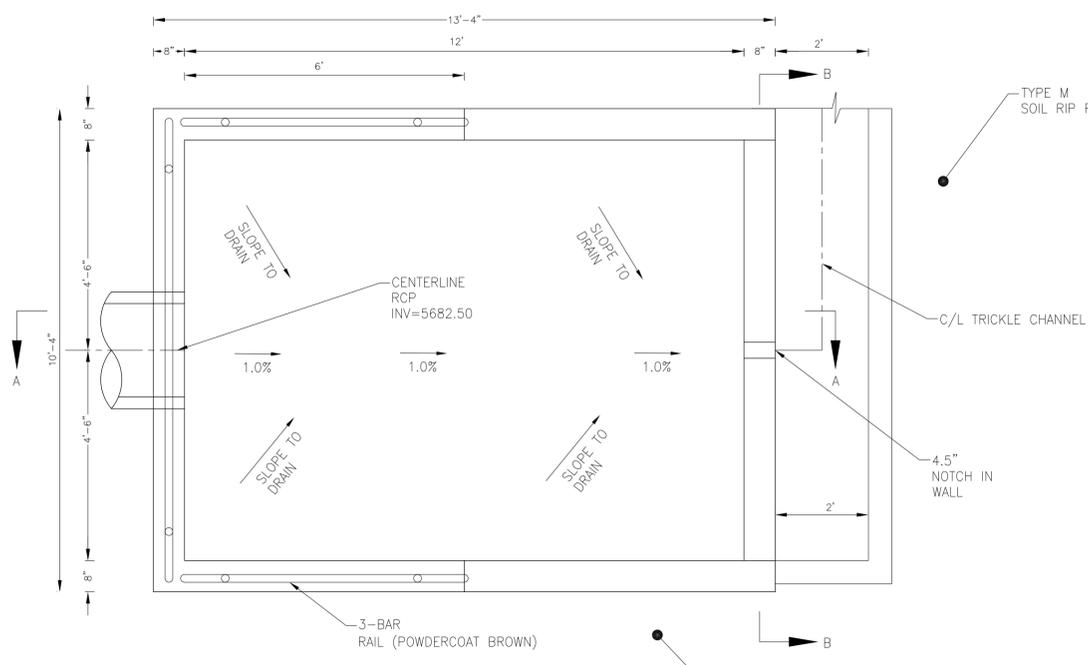


FOREBAY NO. 2A & 2B SECTION B-B
NO SCALE

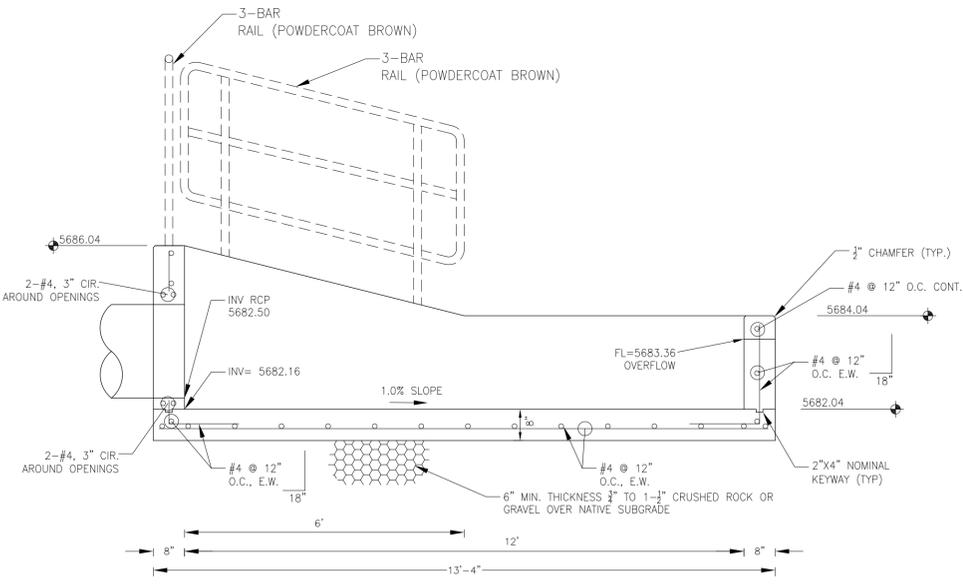
| | |
|---|---|
| CORE ENGINEERING GROUP | |
| 15004 1ST AVENUE S. BOULDER, CO 80506 PH: 719.570.1100 CONTACT: RICHARD L. SCHINDLER, P.E. EMAIL: Rich@ceg1.com | |
| DATE | |
| DESCRIPTION | |
| NO. | |
| PREPARED FOR: LORSON, LLC 212 N. WAHSATCH AVE, SUITE 301 COLORADO SPRINGS, COLORADO 80903 (719) 635-3200 CONTACT: JEFF MARK | PROJECT: CREEKSIDE AT LORSON RANCH FILING NO. 1 LORSON BLVD-OLD GLOFFY DR. COLORADO SPRINGS, COLORADO |
| DRAWN: RLS | DESIGNED: RLS |
| CHECKED: RLS | |
| FOR INFORMATION ONLY | |
| FUTURE FOREBAY NO. 1, 2 A, & 2B | |
| DETAILS | |
| DATE: | DECEMBER 5, 2018 |
| PROJECT NO. | 100.045 |
| SHEET NUMBER | C9.8 |
| TOTAL SHEETS: | 17 |



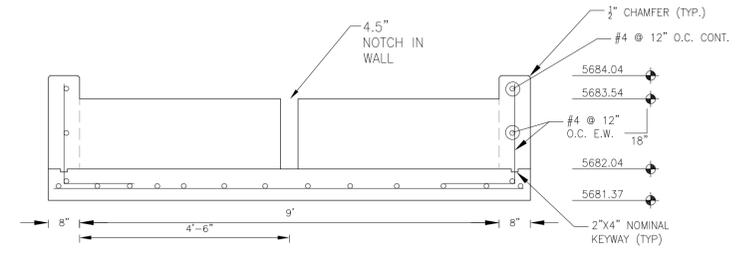
3-BAR RAIL DETAIL
NO SCALE



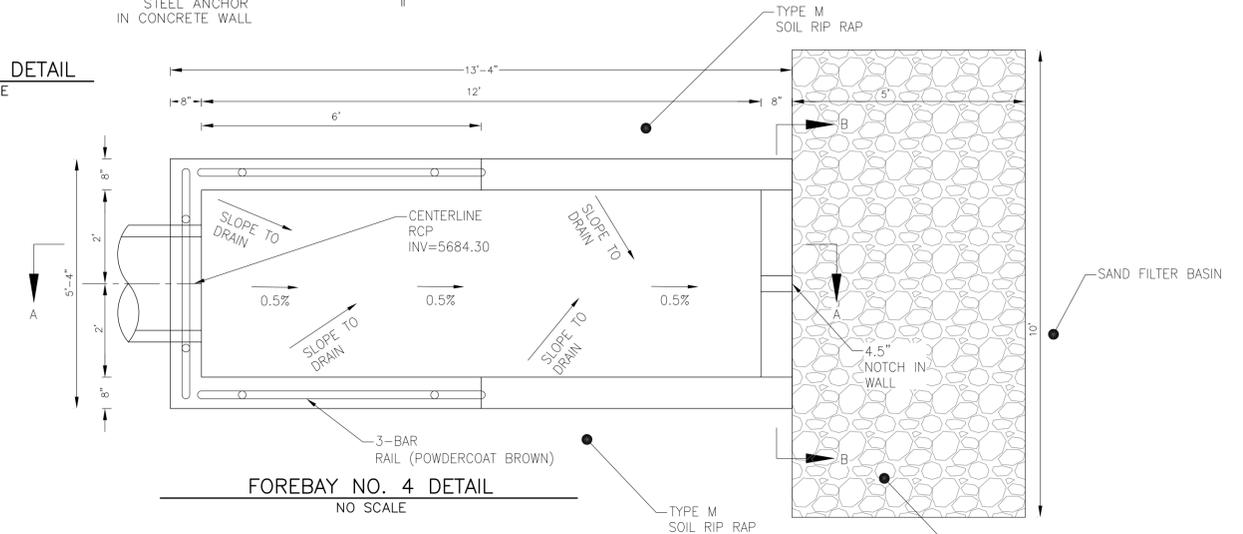
FOREBAY NO. 3 DETAIL
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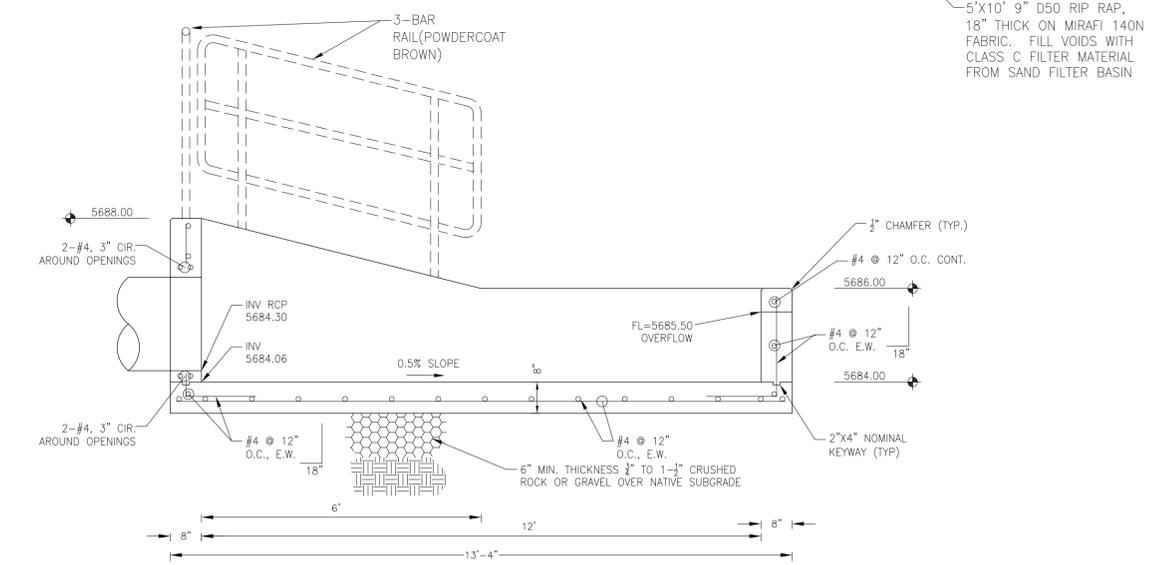
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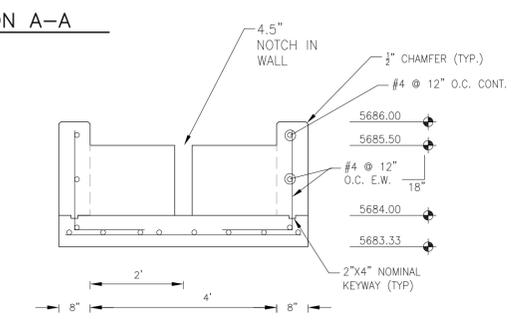
FOREBAY NO. 3 SECTION B-B
NO SCALE



FOREBAY NO. 4 DETAIL
NO SCALE



FOREBAY NO. 4 SECTION A-A
NO SCALE



FOREBAY NO. 4 SECTION B-B
NO SCALE

CORE
ENGINEERING GROUP
15004 1ST AVENUE, S.E.
DENVER, CO 80232
PHONE: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cegi.com

DATE: _____
DESCRIPTION: _____
NO: _____
PREPARED FOR: **LORSON, LLC**
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: JEFF MARK
PROJECT: **CREEKSIDE AT LORSON RANCH FILING NO. 1**
LORSON BLVD-OLD GLODY DR.
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

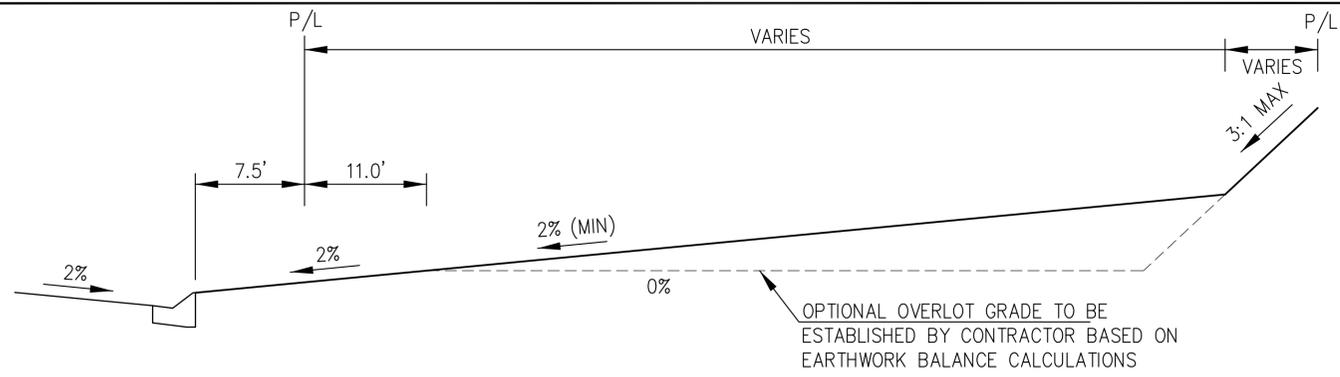
FOR INFORMATION ONLY
FUTURE FOREBAY NO. 3 AND NO. 4
DETAILS

DATE:
DECEMBER 5, 2018

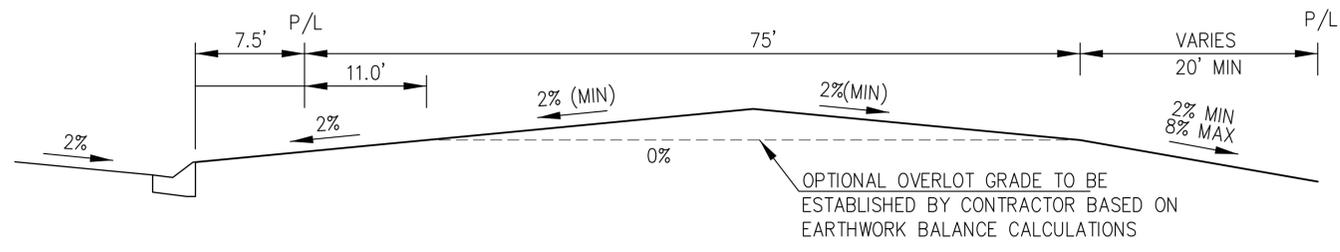
PROJECT NO.
100.045

SHEET NUMBER
C9.9

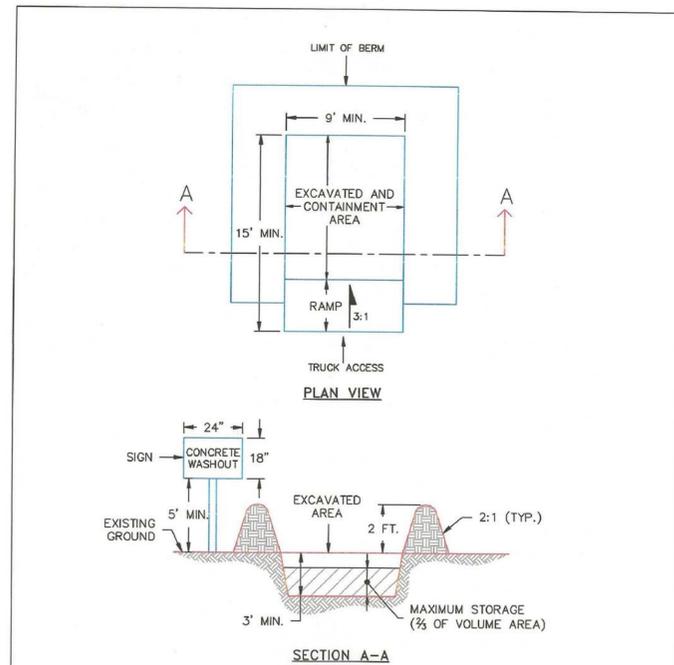
TOTAL SHEETS: 17



TYPICAL "A" LOT

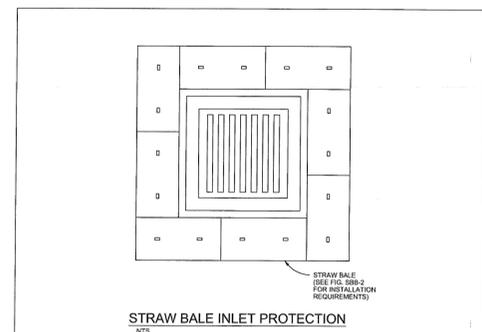


TYPICAL "B" LOT



NOTES:
 1. SIGN MATERIAL, EXCAVATION, AND RESTORATION ARE INCLUDED IN THE COST OF THE CONCRETE WASHOUT STRUCTURE.
 2. EROSION BALES MAY BE USED AS AN ALTERNATIVE FOR THE BERM.

| | | |
|---|--|--|
| DATE APPROVED: 1/1/08 John A. McCarty DEPARTMENT OF TRANSPORTATION | Concrete Washout Structure Standard Drawing REVISION DATE: 7/17/07 FILE NAME: SD_3-84 | |
|---|--|--|



STRAW BALE INLET PROTECTION NOTES

INSTALLATION REQUIREMENTS

1. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF INLET.
2. BALES ARE TO BE PLACED IN A SINGLE ROW AROUND THE INLET WITH THE END OF THE BALES TIGHTLY ADJUTING ONE ANCHOR.
3. SEE STRAW BALE BARRIER FIGURE 98B-2 FOR INSTALLATION REQUIREMENTS.

MAINTENANCE REQUIREMENTS

1. CONTRACTOR SHALL INSPECT STRAW BALE INLET PROTECTION IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS OF RAINFALL.
2. DAMAGED OR INEFFECTIVE INLET PROTECTION SHALL PROMPTLY BE REPAIRED, REPLACING BALES IF NECESSARY, AND UNDETACHED BALES NEED TO BE REPAIRED WITH COMPACTED BACKFILL MATERIAL.
3. SEDIMENT SHALL BE REMOVED FROM BEHIND STRAW BALES WHEN IT ACCUMULATES TO APPROXIMATELY 1/3 THE HEIGHT OF THE BARRIER.
4. INLET PROTECTION SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED WITHIN THE DRAINAGE AREA AS APPROVED BY THE CITY.

City of Colorado Springs
Stormwater Quality

Figure IP-2
Straw Bale Inlet Protection
Construction and Maintenance Requirements

CORE
ENGINEERING GROUP
 1500 S. 1ST AVENUE, SUITE 100
 COLORADO SPRINGS, CO 80903
 PHONE: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@egi.com

DATE: _____
 DESCRIPTION: _____
 NO. _____

PREPARED FOR:
LORSON, LLC
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 (719) 635-3200
 CONTACT: JEFF MARK

PROJECT:
CREEKSIDE AT LORSON
RANCH FILING NO. 1
 LORSON BUILD-OLD GLOFFY DR.
 COLORADO SPRINGS, COLORADO

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

**GRADING AND EROSION
 CONTROL DETAILS**

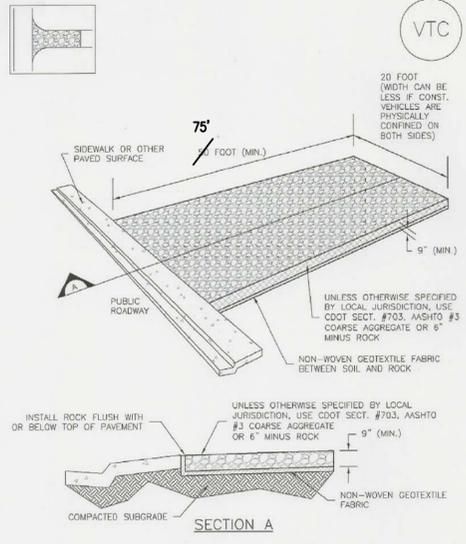
DATE:
DECEMBER 5, 2018

PROJECT NO.
100.045

SHEET NUMBER
C12.1

TOTAL SHEETS: 17

Vehicle Tracking Control (VTC) SM-4



VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

November 2010 Urban Drainage and Flood Control District Stormwater Quality VTC-3

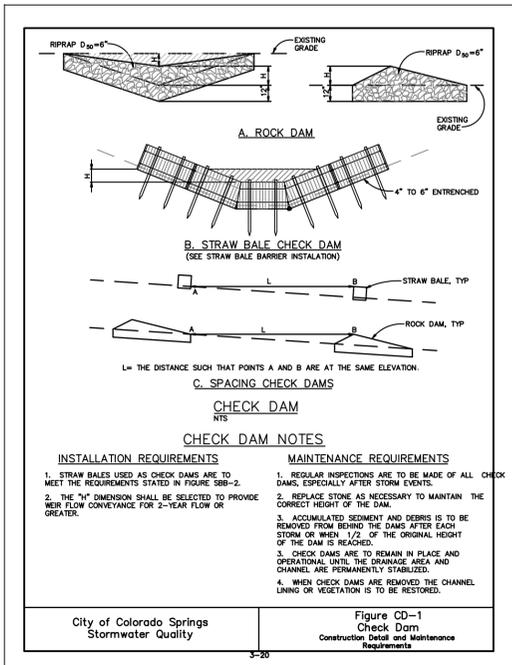


Figure CD-1 Check Dam Construction Detail and Maintenance Requirements

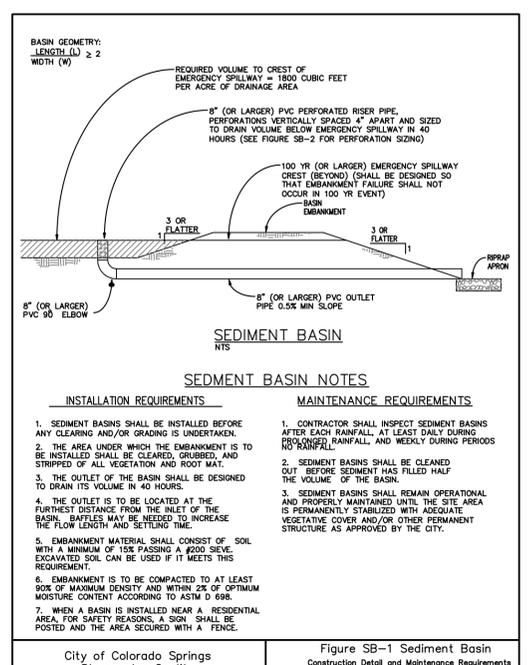
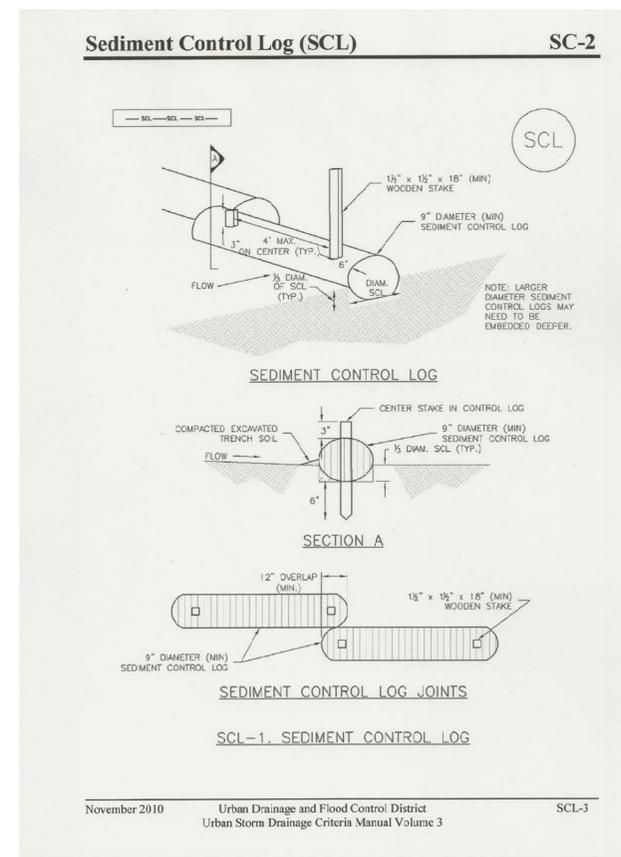


Figure SB-1 Sediment Basin Construction Detail and Maintenance Requirements

| SEED MIX TABLE | | |
|---|--------------------|----------------------------|
| GRASS MIX FOR QUICK REVEGETATION ALL SITES: | | |
| GRASS | VARIETY | AMOUNT IN PLS LBS PER ACRE |
| CRESTED WHEAT GRASS | EPHRAIM OR HYCREST | 4.0 |
| PERENNIAL RYE | LINN | 2.0 |
| WESTERN WHEAT GRASS | BARTON | 3.0 |
| SMOOTH BROME GRASS | LINCOLN OR MANCHAR | 5.0 |
| SIDEWHEAT GRAMA | EL RENO | 2.5 |
| | | TOTAL 16.5 LBS |
| GRASS MIX FOR SANDY SOILS: | | |
| GRASS | VARIETY | AMOUNT IN PLS LBS PER ACRE |
| SIDEWHEAT GRAMA | EL RENO | 3.0 |
| WESTERN WHEAT GRASS | BARTON | 2.5 |
| SLENDER WHEAT GRASS | NATIVE | 2.0 |
| LITTLE BLUESTEM | PASTURA | 2.0 |
| SAND DROPSEED | NATIVE | 0.5 |
| SWITCH GRASS | NEBRASKA 28 | 3.0 |
| WEEPING LOVE GRASS | MORPHA | 1.0 |
| | | TOTAL 14.0 LBS |
| GRASS MIX FOR HEAVIER SOIL AREAS: | | |
| GRASS | VARIETY | AMOUNT IN PLS LBS PER ACRE |
| WESTERN WHEAT GRASS | BARTON | 5.0 |
| SIDEWHEAT GRAMA | EL RENO | 3.0 |
| SLENDER WHEAT GRASS | SODAR | 2.5 |
| SMOOTH BROME | LINCOLN OR MANCHAR | 4.0 |
| CRESTEDWHEAT GRASS | EPHRAIM | 3.0 |
| | | TOTAL 17.5 LBS |



SCL-1. SEDIMENT CONTROL LOG

November 2010 Urban Drainage and Flood Control District Stormwater Quality SCL-3

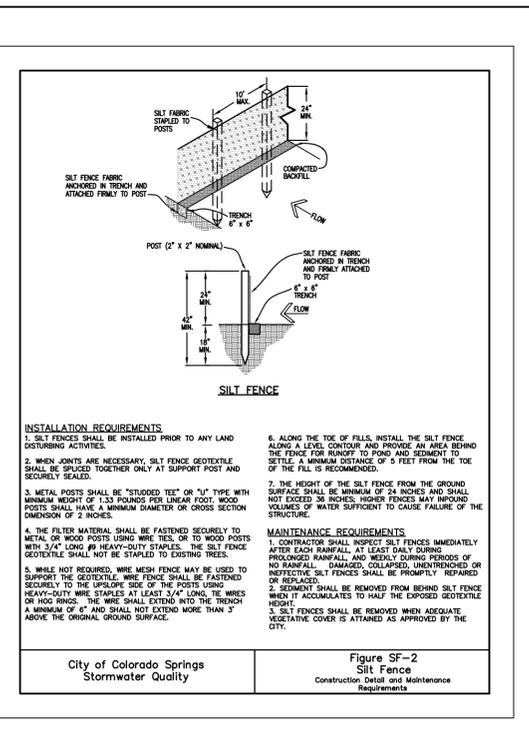


Figure SF-2 Silt Fence Construction Detail and Maintenance Requirements

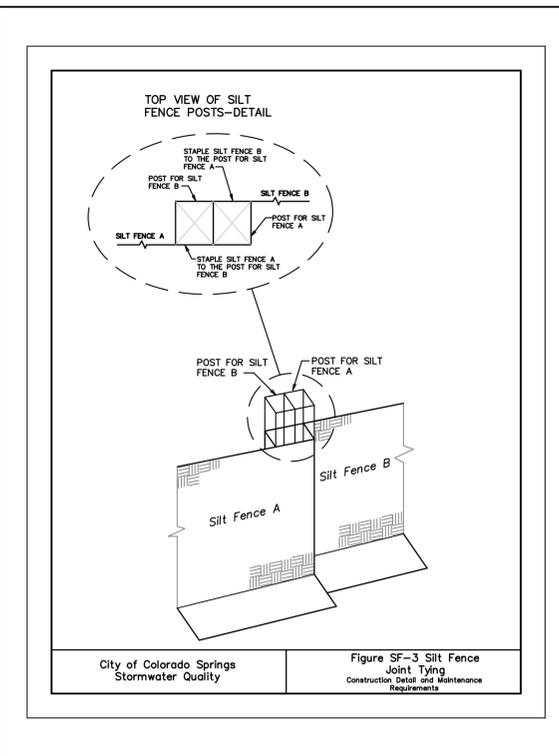
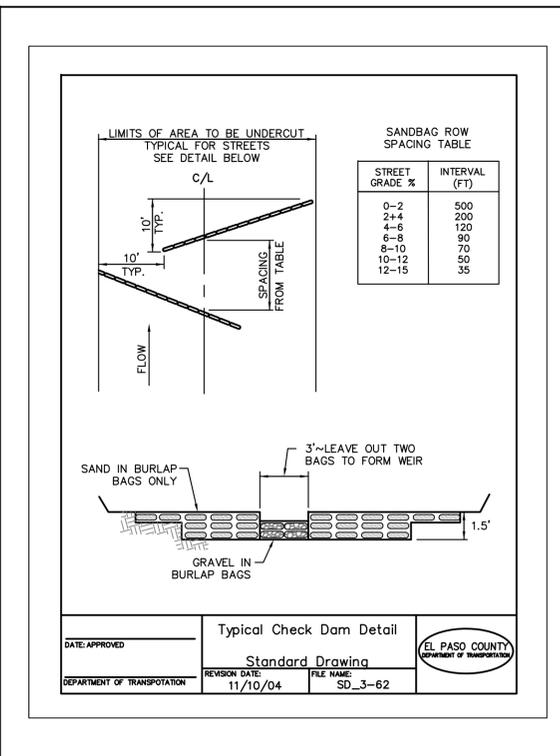


Figure SF-3 Silt Fence Joint Tying Construction Detail and Maintenance Requirements



Typical Check Dam Detail Standard Drawing

DATE APPROVED: 11/10/04 DEPARTMENT OF TRANSPORTATION REVISION DATE: FILE NAME: SD_3-62

CORE ENGINEERING GROUP
1500 K 1ST AVENUE, SUITE 3506
DENVER, CO 80202
PHONE: 303.733.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cegi.com

PREPARED FOR: **LORSON, LLC**
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

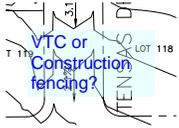
DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

GRADING AND EROSION CONTROL DETAILS

DATE: DECEMBER 5, 2018
PROJECT NO: 100.045
SHEET NUMBER: C12.2
TOTAL SHEETS: 17

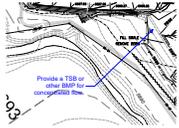
Markup Summary

dsdrice (3)



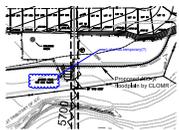
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VTC or Construction fencing?



Subject: Callout
Page Label: 5
Author: dsdrice
Date: 1/1/2019 6:47:05 PM
Color: ■

Provide a TSB or other BMP for concentrated flow.



Subject: Cloud+
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Date: 1/1/2019 6:52:51 PM
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Label as temporary(?)