

PRELIMINARY SITE GRADING CONSTRUCTION PLANS
FOR
LORSON RANCH EAST
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 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.

Approved



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

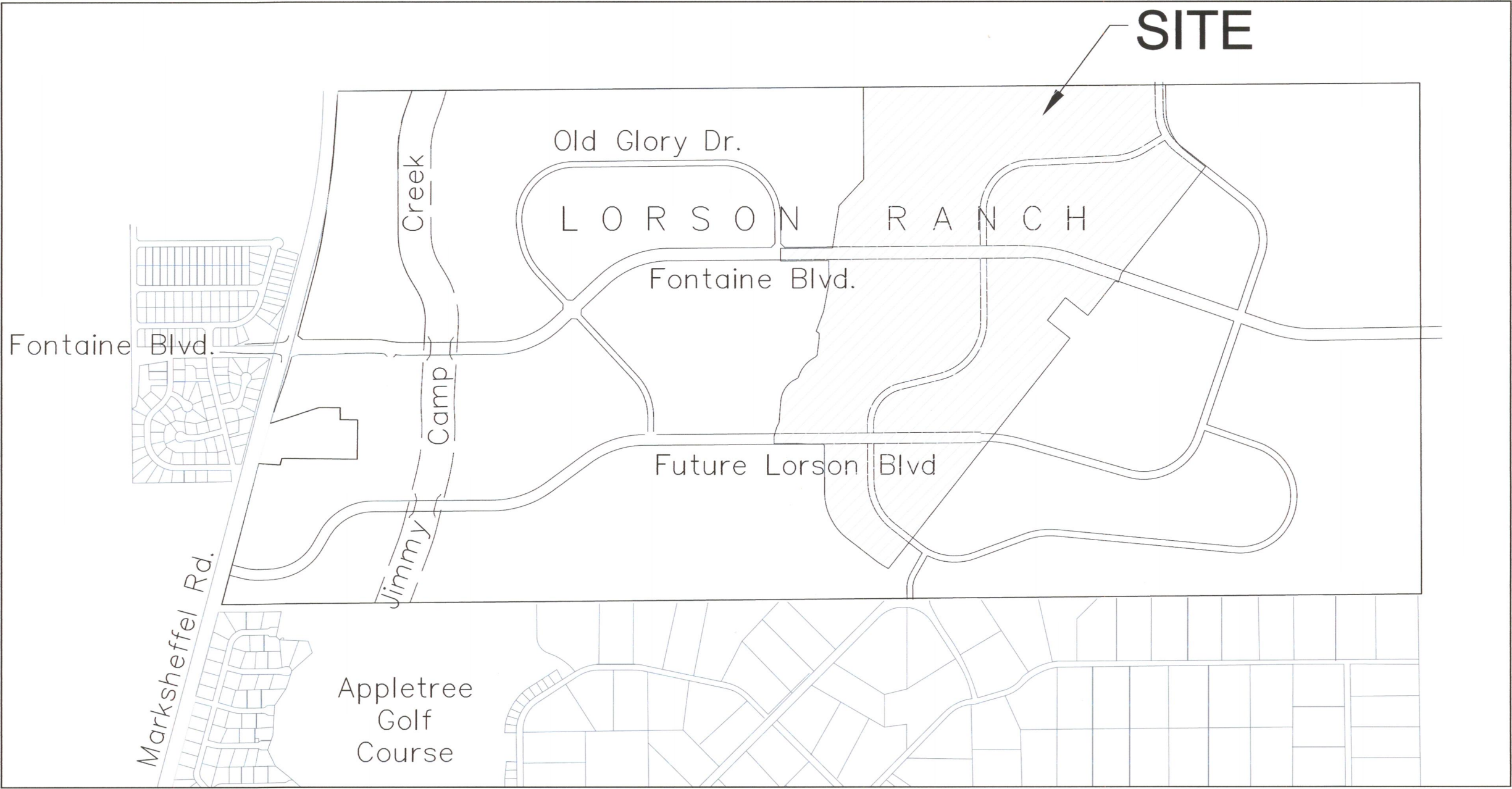
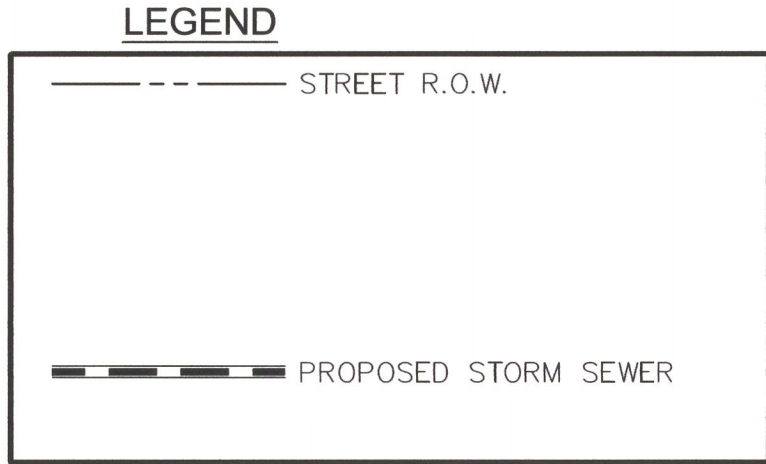
By: Jennifer Irvine, County Engineer
Date: 02/05/2018

El Paso County Department of Public Works

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



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.

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

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 89°15'2" 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.

PUDSP-16-003

**CORE
ENGINEERING GROUP**



15004 1ST AVE. S. 55306
BURNSVILLE, MN 55306
PHONE: 763-257-1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

DATE	DESCRIPTION	NO.	PROJECT
			LORSON, LLC 212 N. WAHSATCH AVE., SUITE 301 COLORADO SPRINGS, COLORADO 80903 CONTACT: JEFF MARK
			LORSON RANCH EAST FONTAINE BLVD. - EAST TRIBUTARY EL PASO COUNTY, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

COVER SHEET
OVERLOT EARLY SITE GRADING
AND EROSION CONTROL PLANS

DATE
DECEMBER 18, 2017

PROJECT NO.
100.040

SHEET NUMBER
C0.1

TOTAL SHEETS: 28

CONSTRUCTION NOTES

1. ALL WORK SHALL COMPLY WITH THE CODES AND POLICIES FOR EL PASO COUNTY.
2. 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.
3. 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
4. THE CONTRACTOR IS RESPONSIBLE FOR THE RE–ESTABLISHMENT OF ALL SURVEY MONUMENTS DISTURBED WITHIN THE PROJECT LIMITS.
5. 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.
6. 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.
7. SUBGRADE MATERIALS DEEMED UNSUITABLE BY THE ENGINEER SHALL BE EXCAVATED, DISPOSED OF AND REPLACED WITH APPROVED MATERIALS.
8. FILL SHALL BE PLACED IN 8–INCH MAXIMUM LOOSE LIFTS AND SHALL BE COMPACTED PRIOR TO SUCCESSIVE LIFTS.
9. 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.
10. 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.
11. ALL GRADING SHALL CONFORM TO THE GEOTECHICAL RECOMMENDATIONS FOR LORSON RANCH EAST PREPARED BY RMG, "PRELIMINARY SOILS AND GEOLOGY FOR LORSON RANCH EAST", DATED SEPTEMBER 7, 2016. CONSTRUCTION OF DETENTION PONDS SHALL CONFORM TO THE GEOTECHNICAL RECOMMENDATIONS IN A REPORT BY RMG TITLED "LORSON RANCH EAST DETENTION PONDS" DATED NOVEMBER 28, 2017. THIS INCLUDES POND OUTFALL DESIGN, KEY–IN, AND SLOPE/EMBANKMENT COMPACTION REQUIREMENTS.
12. 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.

WORK WITHIN CSU SOUTHERN DELIVERY SYSTEM EASEMENT CONSTRUCTION NOTES

1. CONTRACTOR SHALL COMPLY WITH CSU LESS 2.6.H.8 "CROSSING RAW WATER TRANSMISSION MAINS" FOR ALL WORK WITHIN THE CSU WATERMAIN EASEMENT
2. UTILITIES CROSSING OVER THE SDS WATERMAIN MUST BE POTHOLED WITH HYDRO–VAC AT EVERY CROSSING TO OBTAIN VISUAL VERIFICATIN OF THE WATERMAIN ELEVATION.
3. A COLORADO SPRINGS UTILITIES WATER INSPECTOR SHALL BE NOTIFIED, 719–668–4658, AND PRESENT BEFORE AND DURING CONSTRUCTION ACTIVITIES WITHIN THE SDS EASEMENT
4. CONTACT WAYNE RUST, 719–668–3996, COLORADO SPRINGS UTILITIES, FOR ADDITIONAL INFORMATION REGARDING THE SDS FIBER LINE.
5. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 5' OF COVER OVER THE SDS WATERMAIN.
6. CONTRACTOR SHALL SALVAGE AND REPLACE ALL CARSONITE WATER MARKERS OVER THE WATERMAIN AFTER CONSTRUCTION.

EL PASO COUNTY STANDARD CONSTRUCTION NOTES:

1. 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.
2. 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).
3. 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:
 - a. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
 - b. CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
 - c. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
 - d. CDOT M & S STANDARDS
4. 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.
5. 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.
6. CONTRACTOR SHALL SCHEDULE A PRE–CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) – INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
7. 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.
8. 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.
9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
10. 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.
11. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
12. 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.
13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY PUBLIC WORK DEPARTMENT AND MUTCD CRITERIA.
14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY PWD, INCLUDING WORK WITHIN THE RIGHT–OF–WAY AND SPECIAL TRANSPORT PERMITS.
15. 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

1. CONSTRUCTION MAY NOT COMMENCE UNTIL A CONSTRUCTION PERMIT IS OBTAINED FROM PCD AND A PRECONSTRUCTION CONFERENCE IS HELD WITH PCD INSPECTIONS.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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 SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPs SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED.
7. 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.
8. 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).
9. 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.
10. 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.
11. 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.
12. 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.
13. EROSION CONTROL BLANKETING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
14. 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.
15. VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF–SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
16. 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.
17. 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.
18. 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.
19. 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.
20. 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.
21. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCHLINE.
22. 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.
23. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
24. PRIOR TO ACTUAL CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
25. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
26. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY RMG AND SHALL BE CONSIDERED A PART OF THESE PLANS.
27. 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
WOOD – PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246–1530
ATTN: PERMITS UNIT

EPC 2/5/18

CORE
ENGINEERING GROUP

15004 1ST AVE. S.
DENVER, CO 80202
PHONE: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@eg1.com

DATE

NO.

DESCRIPTION

PROJECT:

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

LORSON RANCH EAST
FONTAINE BLVD. – EAST TRIBUTARY
EL PASO COUNTY, COLORADO

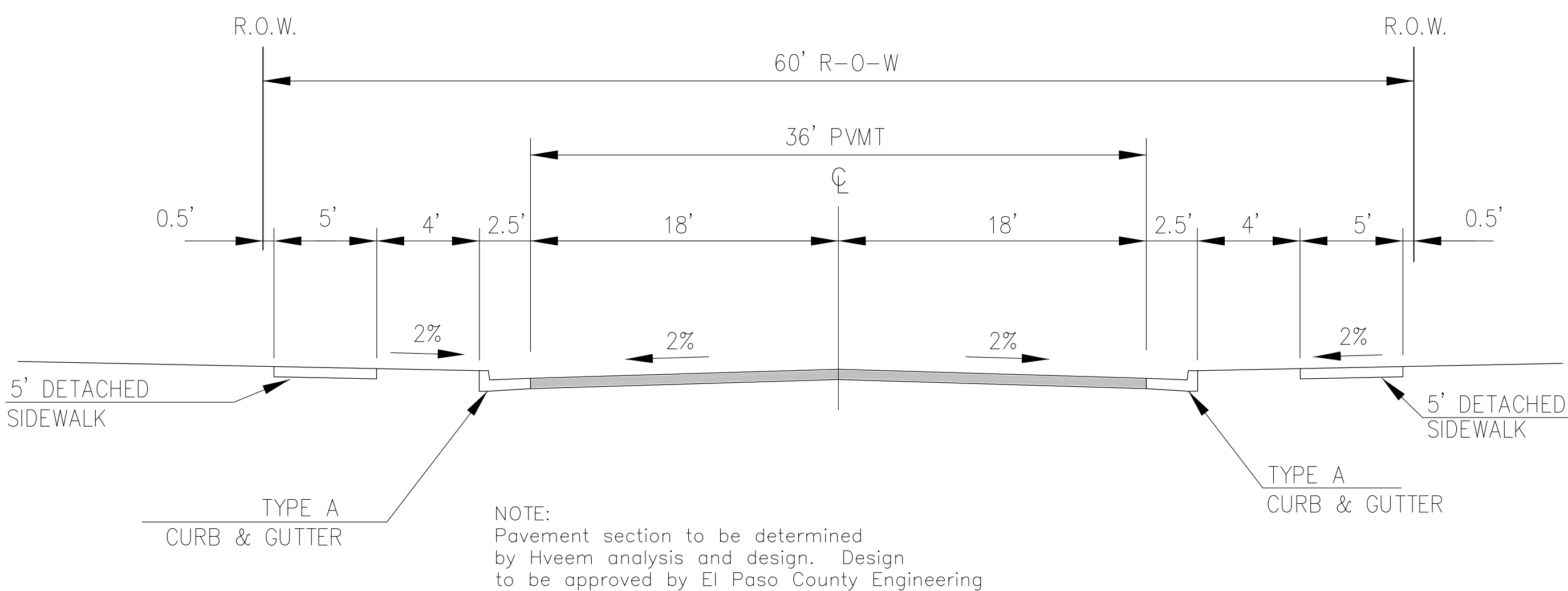
OVERLOT EARLY
SITE GRADING PLAN
NOTES

DATE
DECEMBER 18, 2017

PROJECT NO.
100.040

SHEET NUMBER
C0.2

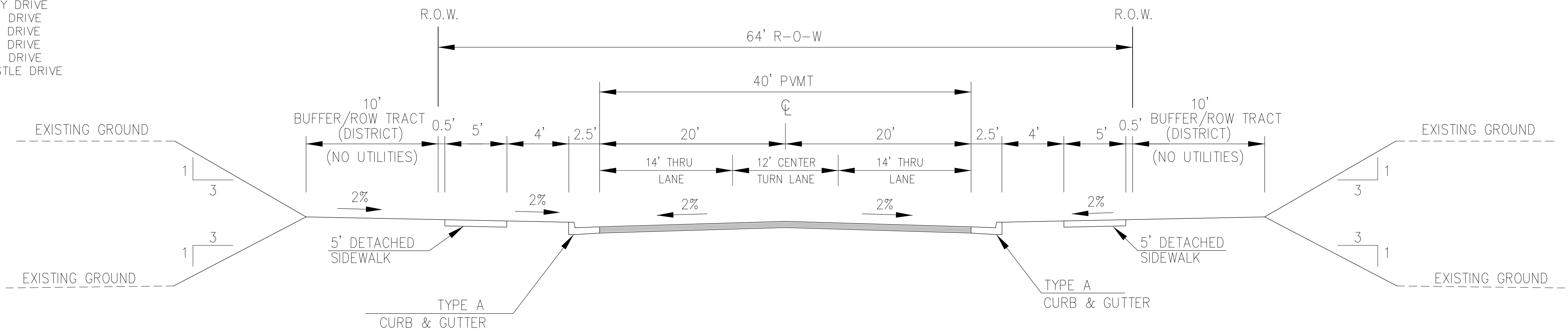
TOTAL SHEETS: 28



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

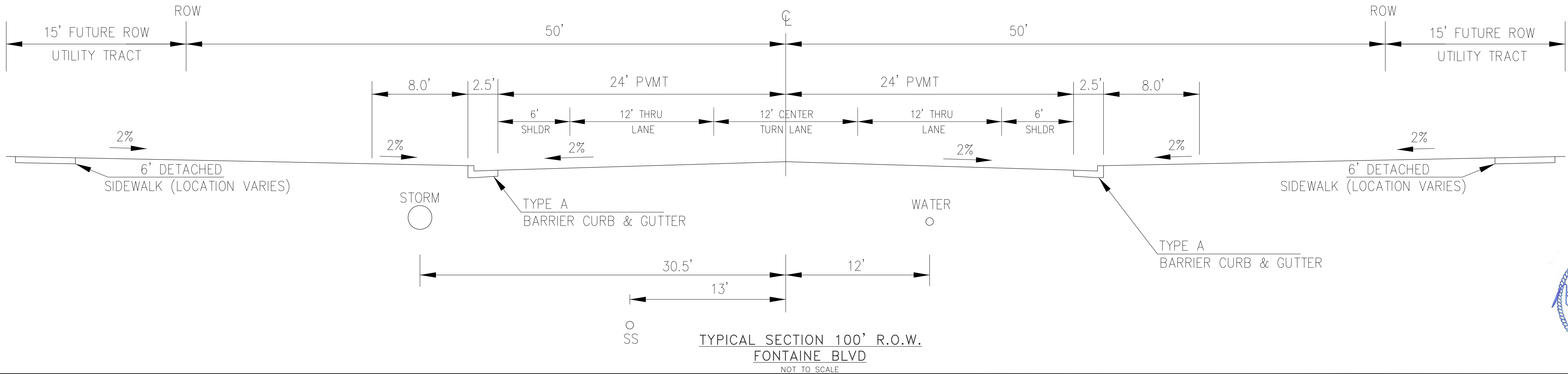
TYPICAL SECTION 60' R.O.W.
RESIDENTIAL URBAN COLLECTOR
NOT TO SCALE

LAMPREY DRIVE
TRAPPE DRIVE

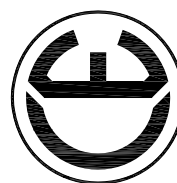


TYPICAL SECTION 64' R.O.W.
RESIDENTIAL URBAN COLLECTOR
NOT TO SCALE

LORSON BOULEVARD
(STINGRAY LN TO LAMPREY DR)



TYPICAL SECTION 100' R.O.W.
FONTAINE BLVD
 NOT TO SCALE



NO.	DESCRIPTION	DATE
PROJECT: LORSON RANCH EAST FONTAINE BLVD. – EAST TRIBUTARY EL PASO COUNTY, COLORADO		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

OVERLOT EARLY
SITE GRADING
TYPICAL ROADWAY SECTIONS

EPC 2/5/18

DATE
DECEMBER 18, 2017

PROJECT NO.
100.040

SHEET NUMBER

C0.3

TOTAL SHEETS: 28



LEGEND

■■■■■ PHASE LINE

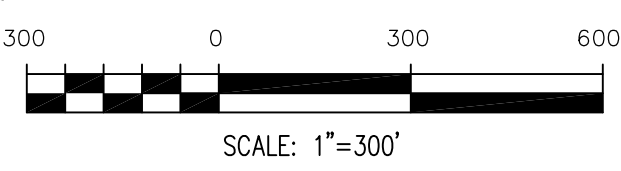
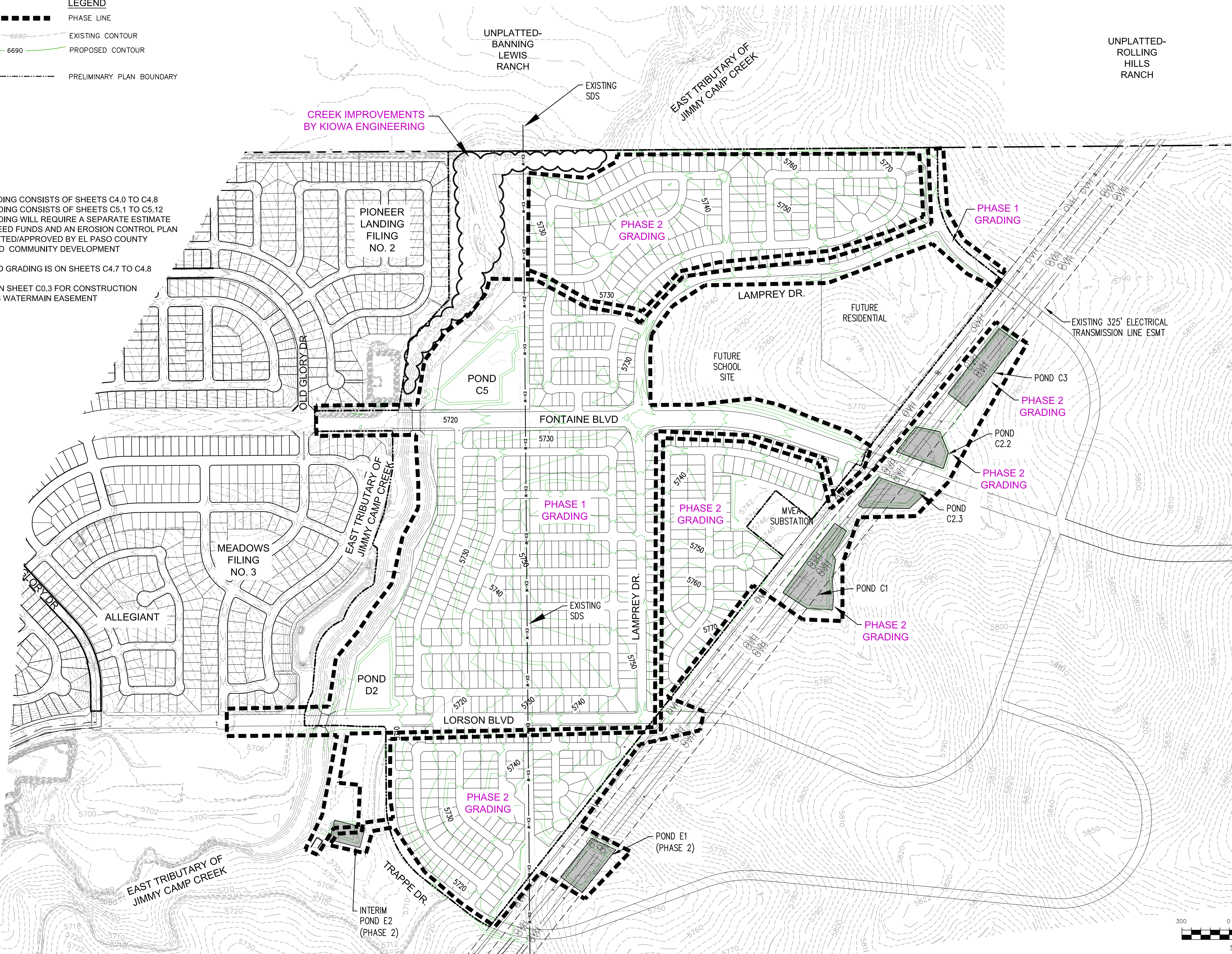
--- 6690 --- EXISTING CONTOUR

— 6690 — PROPOSED CONTOUR

----- PRELIMINARY PLAN BOUNDARY

NOTE:

1. PHASE 1 GRADING CONSISTS OF SHEETS C4.0 TO C4.8
2. PHASE 2 GRADING CONSISTS OF SHEETS C5.1 TO C5.12
PHASE 2 GRADING WILL REQUIRE A SEPARATE ESTIMATE OF GUARANTEED FUNDS AND AN EROSION CONTROL PLAN TO BE SUBMITTED/APPROVED BY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT
3. PHASE 1 POND GRADING IS ON SHEETS C4.7 TO C4.8
4. SEE NOTES ON SHEET C0.3 FOR CONSTRUCTION WITHIN THE SDS WATERMAIN EASEMENT



CORE ENGINEERING GROUP

15004 1ST AVENUE S.
DENVER, CO 80206
PHONE: 303.750.1100
CONTACT: RICHARD L. SCHNIDLER, P.E.
EMAIL: Rich@cegi.com

DATE	
DESCRIPTION	
NO.	
PROJECT	LORSON RANCH EAST EAST OF THE EAST TRIBUTARY EL PASO COUNTY, COLORADO
DRAWN: LJA DESIGNED: LAB CHECKED: RLS	PREPARED FOR: LORSON LLC 212 NORTH WAHATCH AVE. SUITE 301 COLORADO SPRINGS, COLORADO 80903 (719) 635-3200 CONTACT: JEFF MARK

OVERALL EARLY OVERLOT GRADING

LORSON RANCH EAST

EPC 2/5/18

DATE:
DECEMBER 18, 2017

PROJECT NO.
100.040

SHEET NUMBER
C0.4

TOTAL SHEETS: 27

5721-----

5720-----

-----5720

(SF) x x x

(IP)

EXISTING MINOR CONTOUR

EXISTING MAJOR CONTOUR

PROPOSED CONTOUR

EXISTING STORM SEWER

PERIMETER EROSION CONTROL
SILT FENCE, EROSION LOG, OR EARTH BERM

SUBDIVISION BOUNDARY

LIMITS OF CONSTRUCTION

INLET PROTECTION

ETRIB MAINTENANCE ROAD FROM KIOWA ENGR.

100-YR FEMA FLOODPLAIN

100-YR FLOODPLAIN PER CLOMR

STRAW BALE DAM

FEMA 100-YR FLOODWAY

VEHICLE TRACKING CONTROL

CHECK DAM (SD-3-62)

STRAW BALE CHECK

PROPOSED RIP RAP

NOTE:
1. SLOPES SHALL BE 3:1 UNLESS OTHERWISE NOTED
2. POND SLOPES SHALL BE 3:1
2. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES AND PERMANENT SLOPES 6:1 OR STEEPER.
4. FILL IN FLOODPLAIN NORTH OF FONTAINE BLVD. REQUIRES A FLOODPLAIN DEVELOPMENT PERMIT AND AN APPROVED CLOMR. FLOODPLAIN TO BE MODIFIED PER A CLOMR.

The main site plan shows Fontaine Blvd running horizontally across the middle. To the north of the road are several basins and swales. Fontaine Blvd is shown with a centerline and edge lines. To the south of the road are more basins and swales. The plan includes various annotations for basins, swales, and erosion control measures. Key features include: Fontaine Blvd, Old Glory Dr, Fontaine Bridge, Intermediate Sedimentation Basins 2 and 3, Intermediate Sedimentation Basin 3, Pond C5, and various swales and rip rap areas. The plan also shows existing and proposed contours, floodplains, and erosion control measures.

EXISTING
POND B1

POND C5
SEE POND DETAILS

FONTAINE BLVD.

FONTAINE BLVD.

MATTA DR.

Diagram showing a cross-section of a temporary swale and a temporary swale to pond bottom. The swale has a 1.5' depth and 1:3 side slopes. The temporary swale to pond bottom has a 1.5' depth and 1:3 side slopes. The diagram includes labels for the swale, the temporary swale to pond bottom, and the coconut ECB.

Diagram showing a cross-section of an overflow swale DP-18. The swale has a bottom width of 27', a depth of 1.5', a velocity of 7.59 ft/s, a slope of 2.0%, a Q100 of 230 cfs, and a flow depth of 0.98'. The diagram includes labels for the bottom, depth, velocity, slope, Q100, and flow depth.

Diagram showing a cross-section of an overflow swale DP-56. The swale has a bottom width of 8', a depth of 2.5', a velocity of 8.38 ft/s, a slope of 2.0%, a Q100 of 150 cfs, and a flow depth of 1.34'. The diagram includes labels for the bottom, depth, velocity, slope, Q100, and flow depth.

Key map showing the location of the site. The map includes Fontaine Blvd, Lorson Blvd, East Tributary, and various basins and swales. The map is labeled with C4.0, C4.1, C4.2, C4.3, C4.4, C4.5, C4.6, C4.7, and C4.8. The map is labeled with a north arrow and a scale of 1"=60'.

Professional Engineer stamp for Richard L. Schindler, P.E. The stamp includes the text "COLORADO REGISTERED PROFESSIONAL ENGINEER", "33997", "12-18-2017", and "RICHARD L. SCHINDLER, P.E.".

CORE
ENGINEERING GROUP

15004 1ST AVE. S.
SUITE 100
PHOENIX, AZ 85006
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

DATE

DESCRIPTION

NO.

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

PROJECT: LORSON RANCH EAST
FONTAINE BLVD. - EAST TRIBUTARY
EL PASO COUNTY, COLORADO

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

LORSON RANCH EAST
OVERLOT EARLY GRADING AND E.C. PLAN
PHASE 1

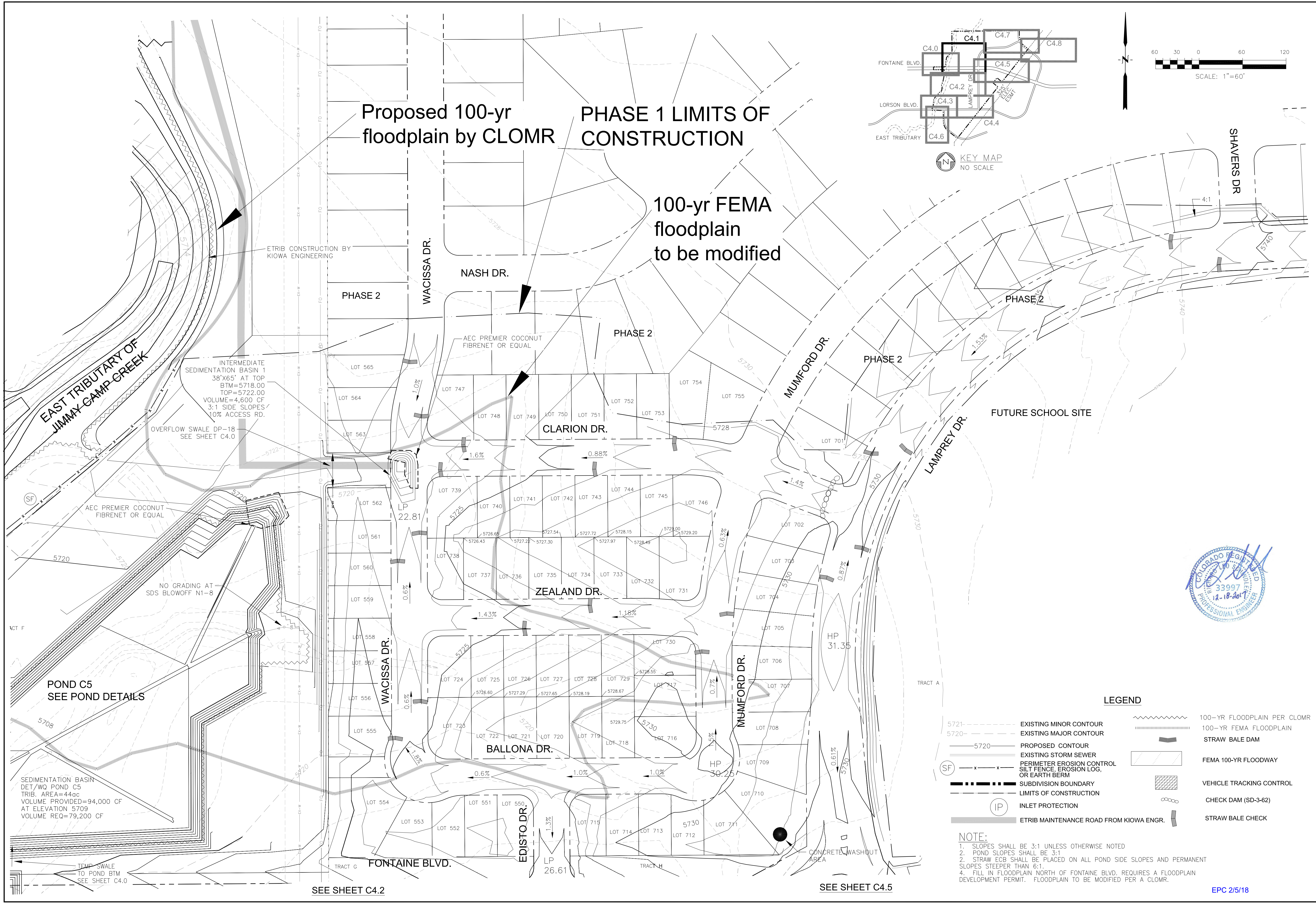
DATE
DECEMBER 18, 2017

PROJECT NO.
100.040

SHEET NUMBER
C4.0

TOTAL SHEETS: 28

EPC 2/5/18



15004 1ST AVE. S.
BURNHELM, CO 80906
PHONE: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

CORE
ENGINEERING GROUP

DATE
1/22/2019

DESCRIPTION
RAISE LAMPREY 1" FROM CLARION TO YAMHILL

NO.
1

PROJECT:
LORSON RANCH EAST
FONTAINE BLVD. - EAST TRIBUTARY
EL PASO COUNTY, COLORADO

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

LORSON RANCH EAST
OVERLOT EARLY GRADING AND E.C. PLAN
PHASE 1

DATE
DECEMBER 18, 2017

PROJECT NO.
100.040

SHEET NUMBER
C4.1

TOTAL SHEETS: 28

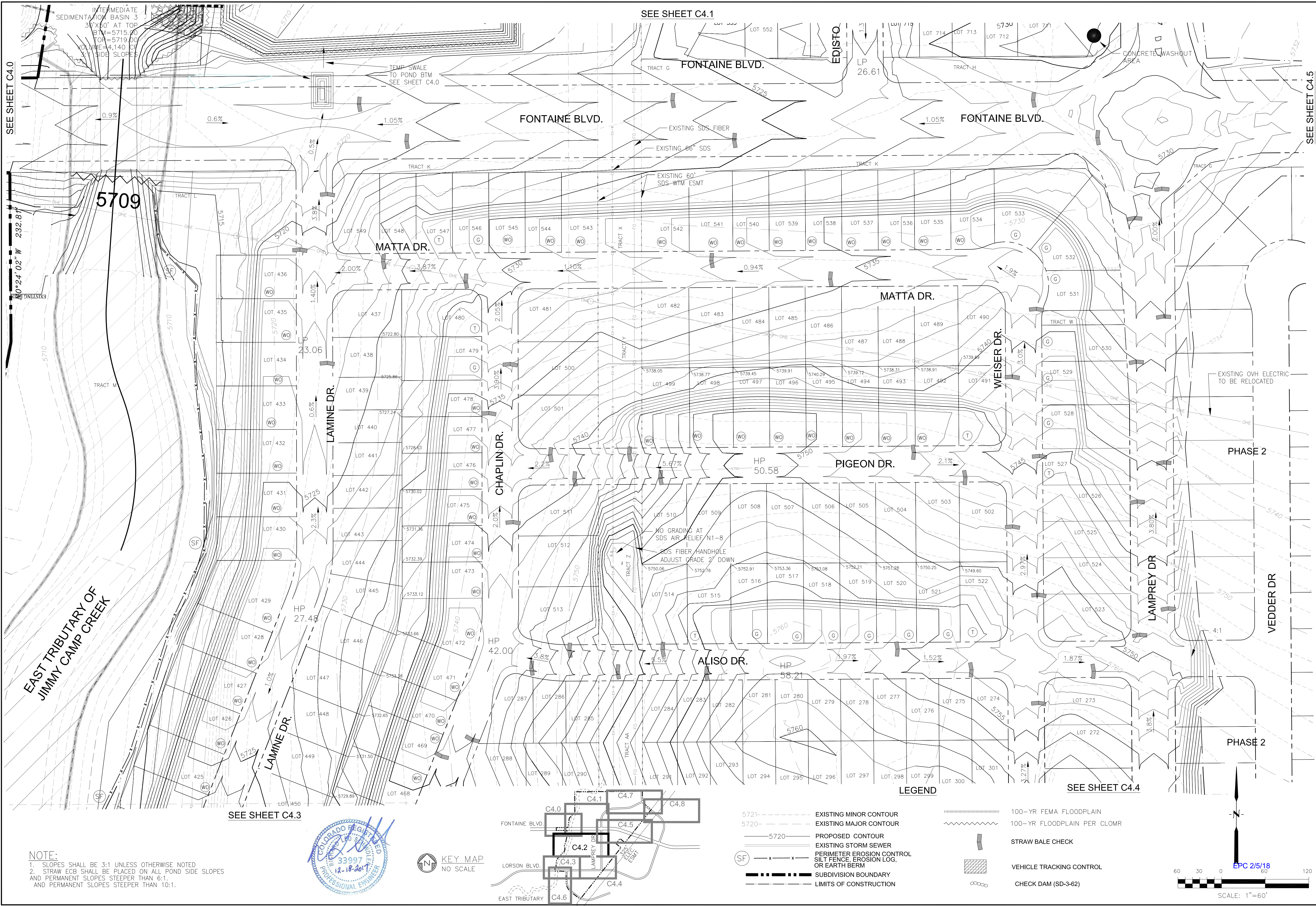
LEGEND

- 5721- - - - - EXISTING MINOR CONTOUR
- 5720- - - - - EXISTING MAJOR CONTOUR
- 5720- - - - - PROPOSED CONTOUR
- x x --- EXISTING STORM SEWER
- x x --- PERIMETER EROSION CONTROL SILT FENCE, EROSION LOG, OR EARTH BERM
- - - - - SUBDIVISION BOUNDARY
- - - - - LIMITS OF CONSTRUCTION
- (IP) INLET PROTECTION
- ETRIB MAINTENANCE ROAD FROM KIOWA ENGR.
- 100-YR FLOODPLAIN PER CLOMR
- 100-YR FEMA FLOODPLAIN
- STRAW BALE DAM
- FEMA 100-YR FLOODWAY
- VEHICLE TRACKING CONTROL
- CHECK DAM (SD-3-62)
- STRAW BALE CHECK

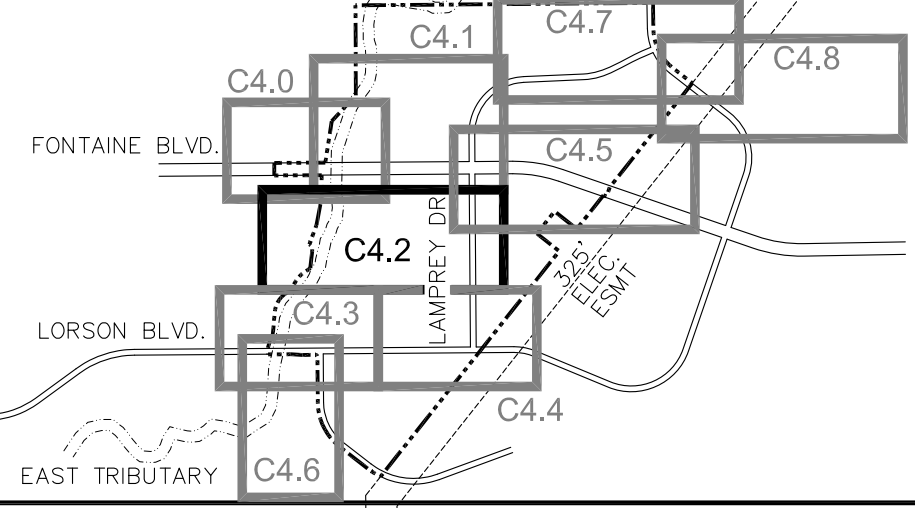
NOTE:

1. SLOPES SHALL BE 3:1 UNLESS OTHERWISE NOTED
2. POND SLOPES SHALL BE 3:1
3. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES AND PERMANENT SLOPES STEEPER THAN 6:1.
4. FILL IN FLOODPLAIN NORTH OF FONTAINE BLVD. REQUIRES A FLOODPLAIN DEVELOPMENT PERMIT. FLOODPLAIN TO BE MODIFIED PER A CLOMR.

EPC 2/5/18

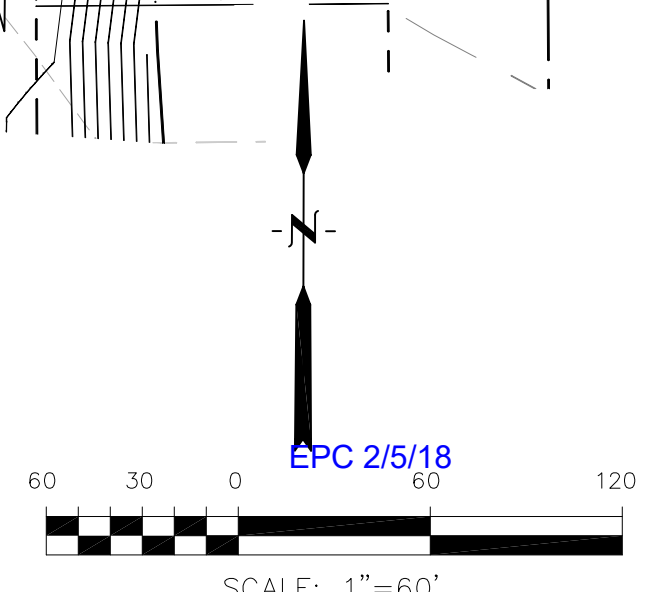


NOTE:
1. SLOPES SHALL BE 3:1 UNLESS OTHERWISE NOTED
2. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES
AND PERMANENT SLOPES STEEPER THAN 6:1
AND PERMANENT SLOPES STEEPER THAN 10:1.



- LEGEND
- 5721- - - - - EXISTING MINOR CONTOUR
 - 5720- - - - - EXISTING MAJOR CONTOUR
 - 5720- - - - - PROPOSED CONTOUR
 - x — x — EXISTING STORM SEWER
 - x — x — PERIMETER EROSION CONTROL
 - x — x — SILT FENCE, EROSION LOG, OR EARTH BERM
 - x — x — SUBDIVISION BOUNDARY
 - x — x — LIMITS OF CONSTRUCTION

- 100-YR FEMA FLOODPLAIN
- 100-YR FLOODPLAIN PER CLOMR
- STRAW BALE CHECK
- VEHICLE TRACKING CONTROL
- CHECK DAM (SD-3-62)



CORE ENGINEERING GROUP
15004 1ST AVE. S. SUITE 301
BURNING WOOD, CO 80903
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

DATE: _____

DESCRIPTION: _____

NO: _____

PROJECT: _____

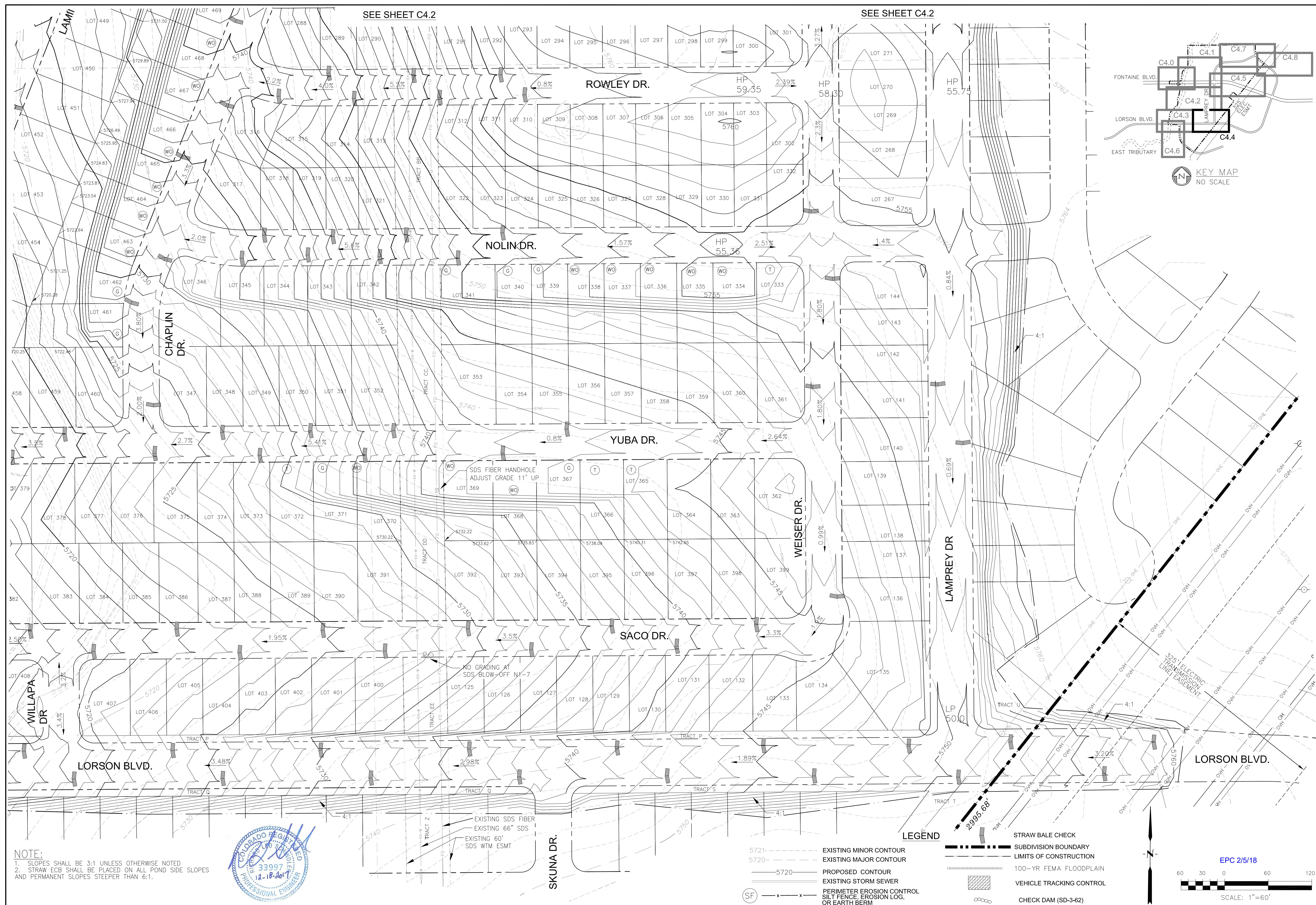
DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

PREPARED FOR:
LORSON RANCH EAST
FONTAINE BLVD. - EAST TRIBUTARY
EL PASO COUNTY, COLORADO

PROJECT NO:
100.040

SHEET NUMBER
C4.2

TOTAL SHEETS: **28**



CORE
ENGINEERING GROUP
15004 1ST AVE. S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

DATE: _____

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

DATE
DECEMBER 18, 2017

PROJECT NO.
100.040

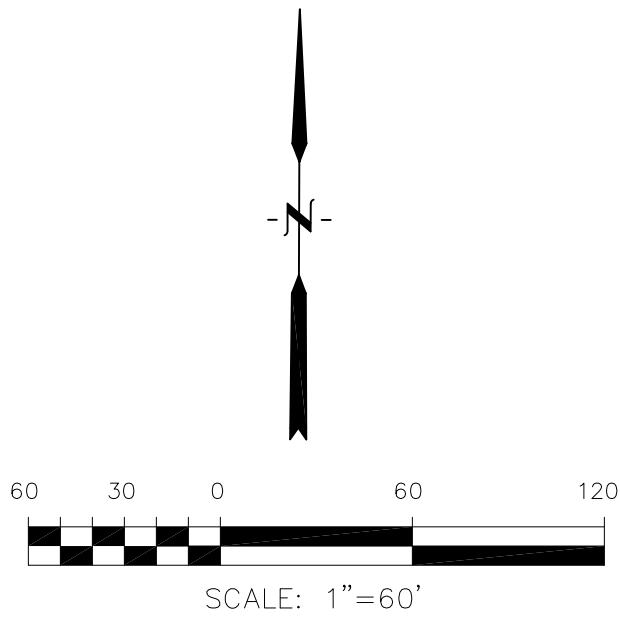
SHEET NUMBER
C4.4

TOTAL SHEETS: 28

NOTE:
1. SLOPES SHALL BE 3:1 UNLESS OTHERWISE NOTED
2. POND SLOPES SHALL BE 3:1
3. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES AND PERMANENT SLOPES STEEPER THAN 6:1.
4. FILL IN FLOODPLAIN NORTH OF FONTAINE BLVD. REQUIRES A FLOODPLAIN DEVELOPMENT PERMIT. FLOODPLAIN TO BE MODIFIED PER A CLOMR.

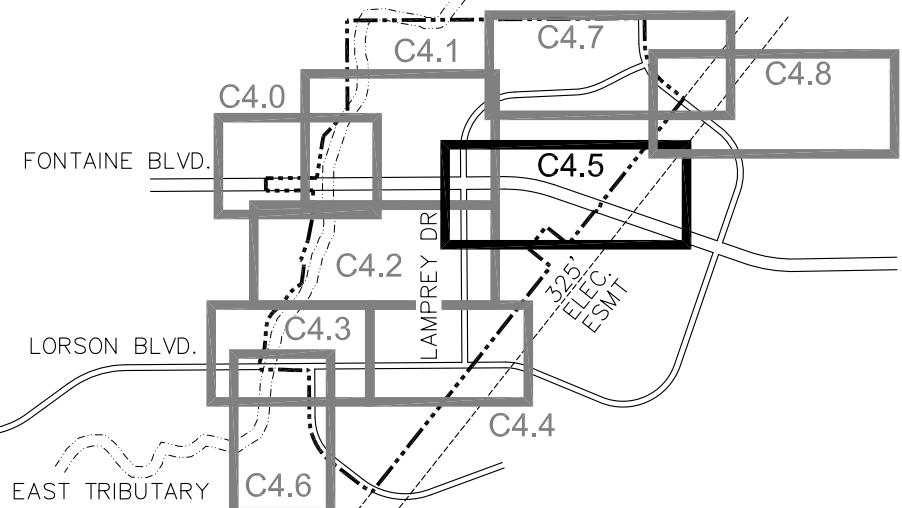
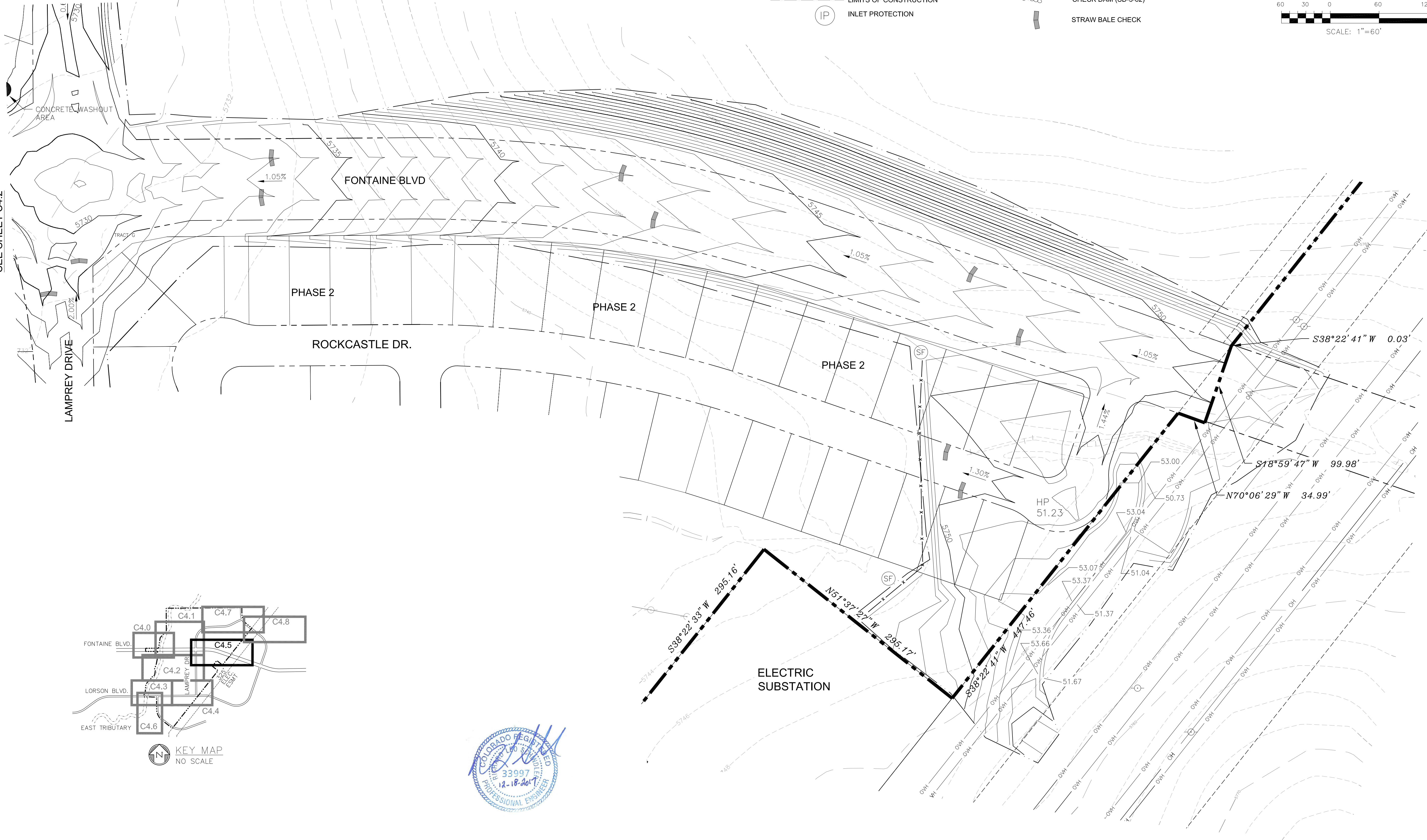
LEGEND

- 5721----- EXISTING MINOR CONTOUR
5720----- EXISTING MAJOR CONTOUR
----- PROPOSED CONTOUR
----- EXISTING STORM SEWER
(SF) ---x--- PERIMETER EROSION CONTROL, SILT FENCE, EROSION LOG, OR EARTH BERM
----- SUBDIVISION BOUNDARY
----- LIMITS OF CONSTRUCTION
(IP) INLET PROTECTION
- STRAW BALE DAM
FEMA 100-YR FLOODWAY
VEHICLE TRACKING CONTROL
CHECK DAM (SD-3-62)
STRAW BALE CHECK



SEE SHEET C4.1

SEE SHEET C4.2

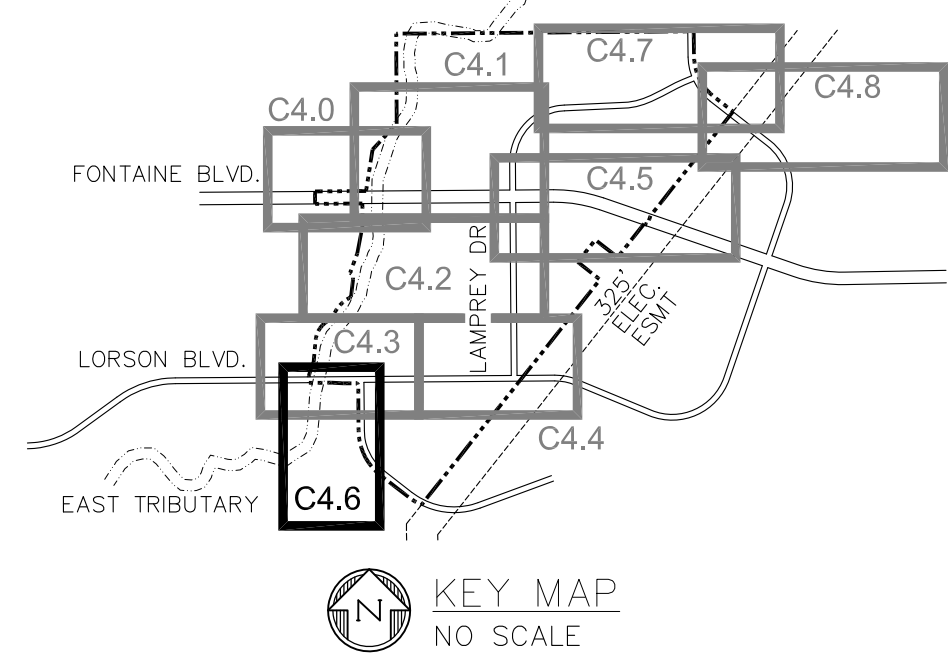


KEY MAP
NO SCALE

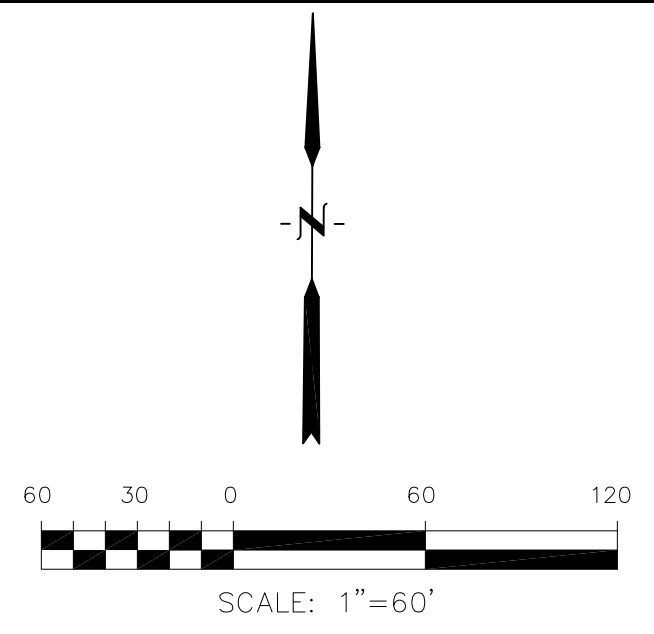


CORE ENGINEERING GROUP 15004 1ST AVE. S. BURNING WOOD, CO. 80506 PHONE: 719.570.1100 CONTACT: RICHARD L. SCHINDLER, P.E. EMAIL: Rich@ceg1.com	
DATE	
DESCRIPTION	
NO.	
PROJECT	LORSON RANCH EAST FONTAINE BLVD. - EAST TRIBUTARY EL PASO COUNTY, COLORADO
PREPARED FOR	LORSON, LLC 212 N. WAHSATCH AVE., SUITE 301 COLORADO SPRINGS, COLORADO 80903 (719) 635-3200 CONTACT: JEFF MARK
DRAWN: RLS	
DESIGNED: RLS	
CHECKED: RLS	
LORSON RANCH EAST OVERLOT EARLY GRADING AND E.C. PLAN PHASE 1	
DATE	DECEMBER 18, 2017
PROJECT NO.	100.040
SHEET NUMBER	C4.5
TOTAL SHEETS:	28


1. SLOPES SHALL BE 3:1 UNLESS OTHERWISE NOTED
2. POND SLOPES SHALL BE 3:1
3. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES AND PERMANENT SLOPES STEEPER THAN 6:1.
4. FILL IN FLOODPLAIN REQUIRES A FLOODPLAIN DEVELOPMENT PERMIT. FLOODPLAIN TO BE MODIFIED PER A CLOMR.



Proposed 100-yr floodplain by CLOMR

$$\begin{aligned}\Delta &= 51^{\circ}48'35'' \\ R &= 595.00' \\ L &= 538.03' \\ Ch &= N26^{\circ}18'20''W \\ ChL &= 519.88'\end{aligned}$$


EPC 2/5/18

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  <p>CORE ENGINEERING GROUP</p> </div> <div style="text-align: right;"> <p>15004 1ST AVE. S. BURNSVILLE, MN 55306 TEL: 612-891-7000 CONTACT: RICHARD L. SCHINDLER, P.E. EMAIL: Rich@ceg1.com</p> </div> </div>	
<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <p>NO.</p> <p>DESCRIPTION</p> <p>DATE</p> </div> <div style="width: 60%;"> <p>PROJECT:</p> <p>LORSON RANCH EAST FONTAINE BLVD. — EAST TRIBUTARY EL PASO COUNTY, COLORADO (719) 635-3200</p> </div> </div>	
<p>PREPARED FOR:</p> <p>LORSON, LLC 212 N. WAHSATCH AVE., SUITE 301 COLORADO SPRINGS, COLORADO 80903 CONTACT: JEFF MARK</p>	
<p>DRAWN: RLS DESIGNED: RLS CHECKED: RLS</p>	
<p style="text-align: center; font-size: 24pt;">LORSON RANCH EAST</p> <p style="text-align: center; font-size: 36pt;">OVERLOT EARLY GRADING AND E.C. PLAN</p> <p style="text-align: center; font-size: 24pt;">PHASE 1</p>	
<p style="text-align: center;">DATE</p> <p style="text-align: center;">DECEMBER 18, 2017</p>	
<p style="text-align: center;">PROJECT NO.</p> <p style="text-align: center;">100.040</p>	
<p style="text-align: center;">SHEET NUMBER</p> <p style="text-align: center;">C4.6</p>	
<p>TOTAL SHEETS: 28</p>	

NOTE:
1. SLOPES SHALL BE 3:1 UNLESS OTHERWISE NOTED
2. POND SLOPES SHALL BE 3:1
3. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES AND PERMANENT SLOPES STEEPER THAN 6:1.
4. FILL IN FLOODPLAIN REQUIRES A FLOODPLAIN DEVELOPMENT PERMIT.
FLOODPLAIN TO BE MODIFIED PER A CDMR.

LEGEND

- 5721-----

5720-----

-----5720

(SF) ---x---x---

(IP)
- -----

- 100-YR FEMA FLOODPLAIN

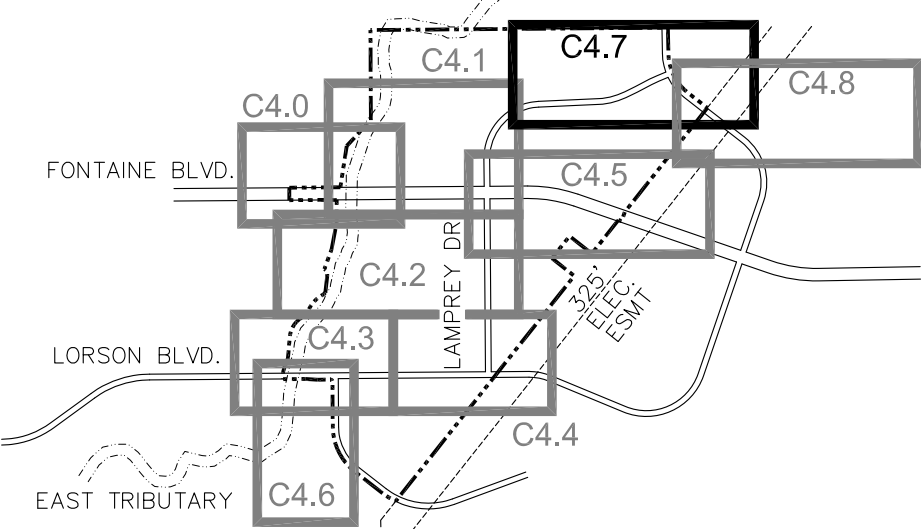
STRAW BALE DAM

FEMA 100-YR FLOODWAY

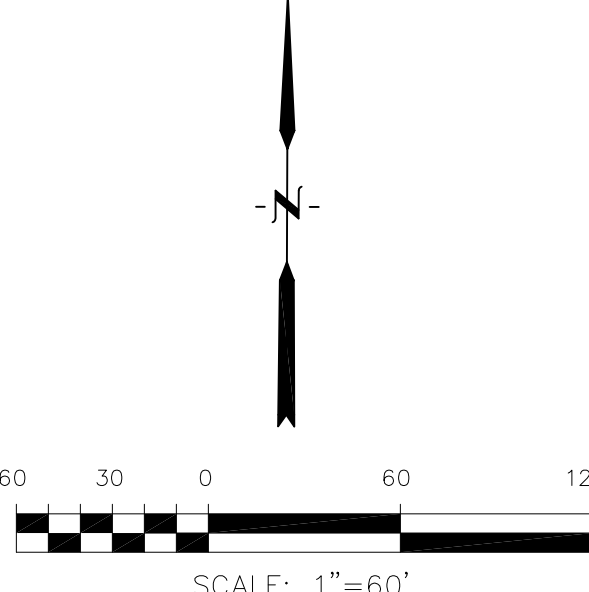
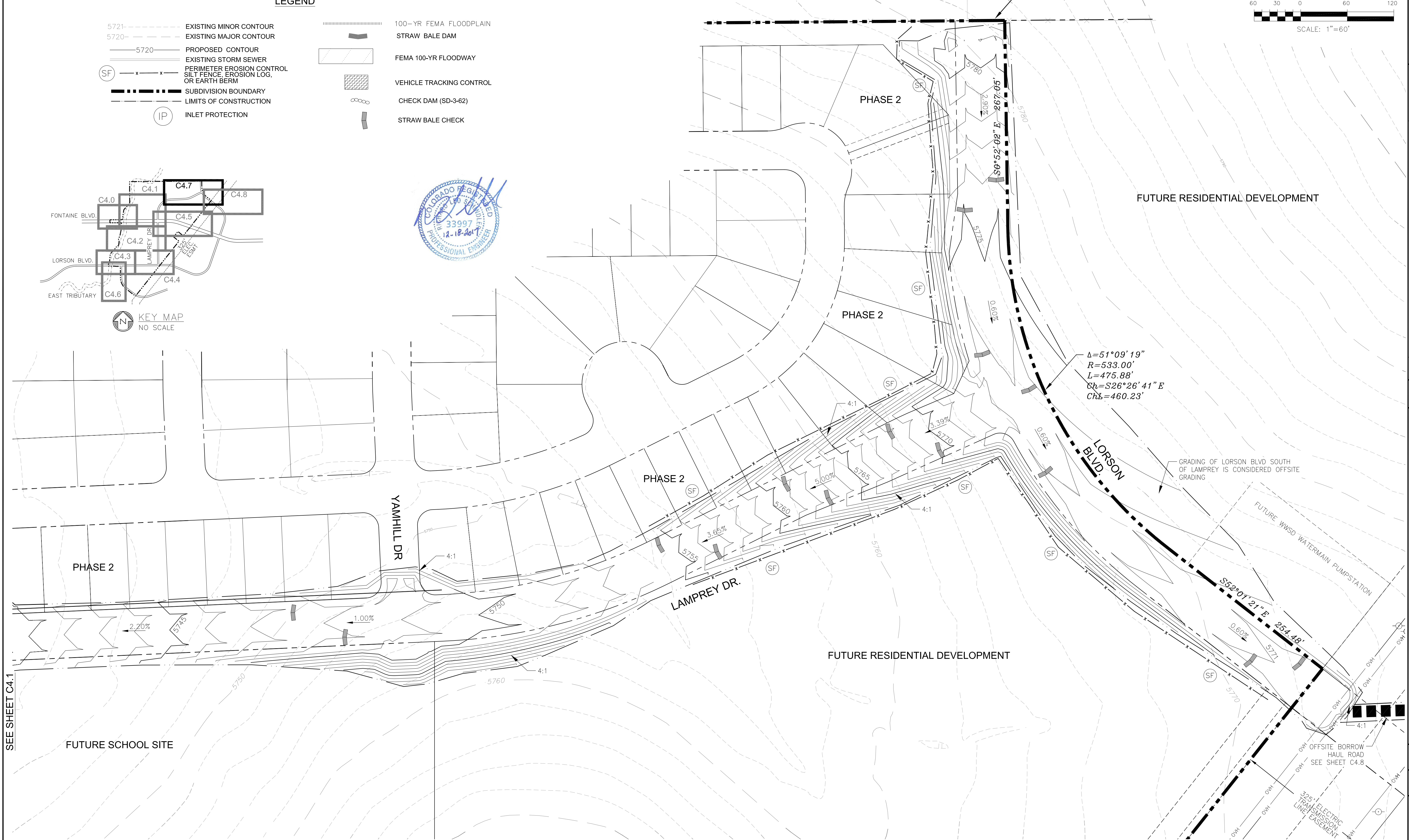
VEHICLE TRACKING CONTROL

CHECK DAM (SD-3-62)

STRAW BALE CHECK



KEY MAP
NO SCALE



CORE
ENGINEERING GROUP
15004 1ST AVE. S.
DENVER, CO 80202
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

NO.	DESCRIPTION	DATE
1.	RAISE LAMPREY 1' FROM CLARION TO YAMHILL	1/22/2019

PROJECT:
LORSON RANCH EAST
FONTAINE BLVD. - EAST TRIBUTARY
EL PASO COUNTY, COLORADO

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

DRAWN:	RLS
DESIGNED:	RLS
CHECKED:	RLS

LORSON RANCH EAST
OVERLOT EARLY GRADING AND E.C. PLAN
PHASE 1

DATE
DECEMBER 18, 2017

PROJECT NO.
100.040

SHEET NUMBER
C4.7

TOTAL SHEETS: 28

SEE SHEET C4.1

NOTE:
1. SLOPES SHALL BE 3:1 UNLESS OTHERWISE NOTED
2. POND SLOPES SHALL BE 3:1
3. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES AND PERMANENT SLOPES STEEPER THAN 6:1.
4. FILL IN FLOODPLAIN REQUIRES A FLOODPLAIN DEVELOPMENT PERMIT.
FLOODPLAIN TO BE MODIFIED PER A CLOMR.

LEGEND

- 5721-----

5720-----

-----5720

(SF) x x x

(IP)
- -----

- 100--YR FEMA FLOODPLAIN

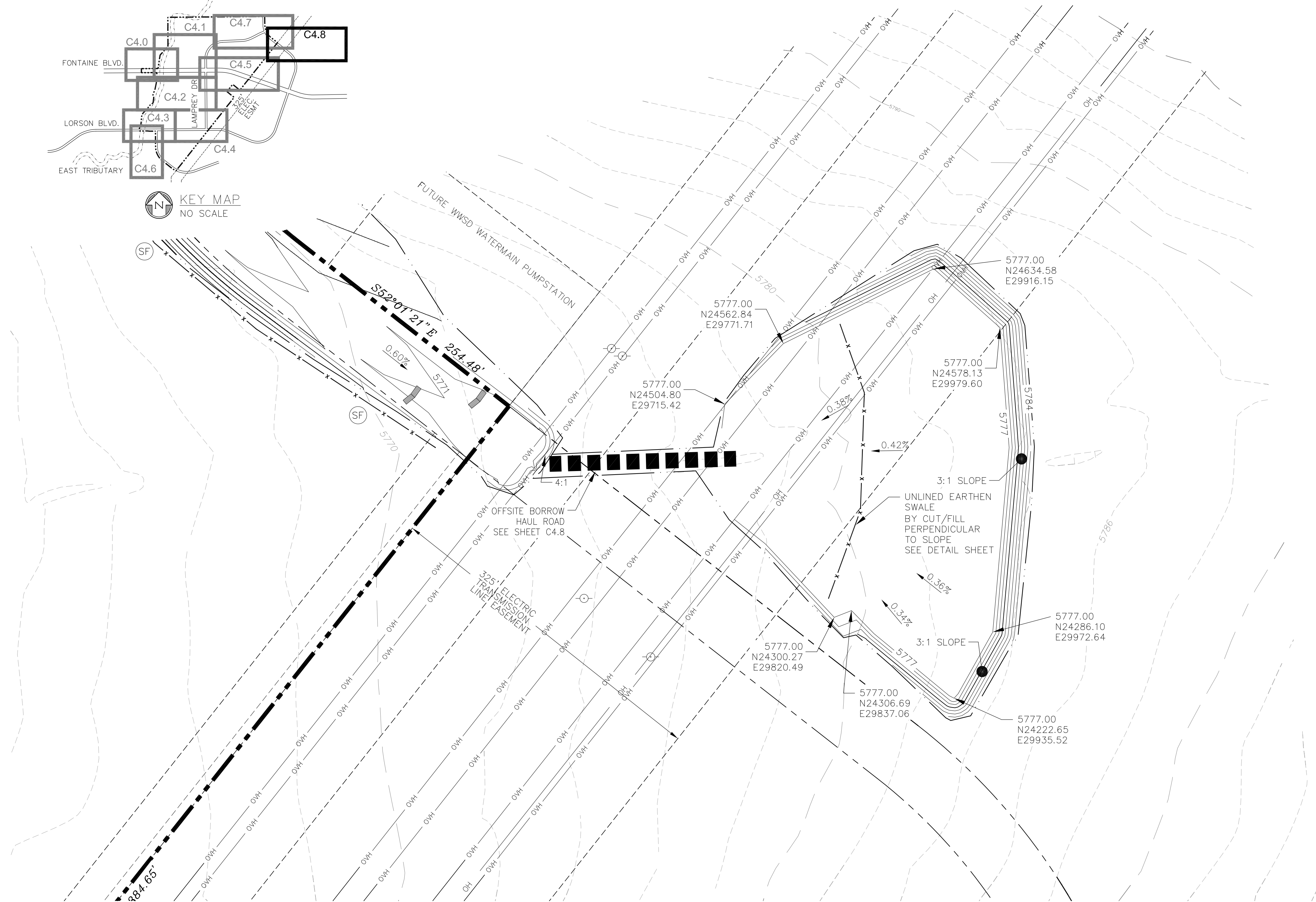
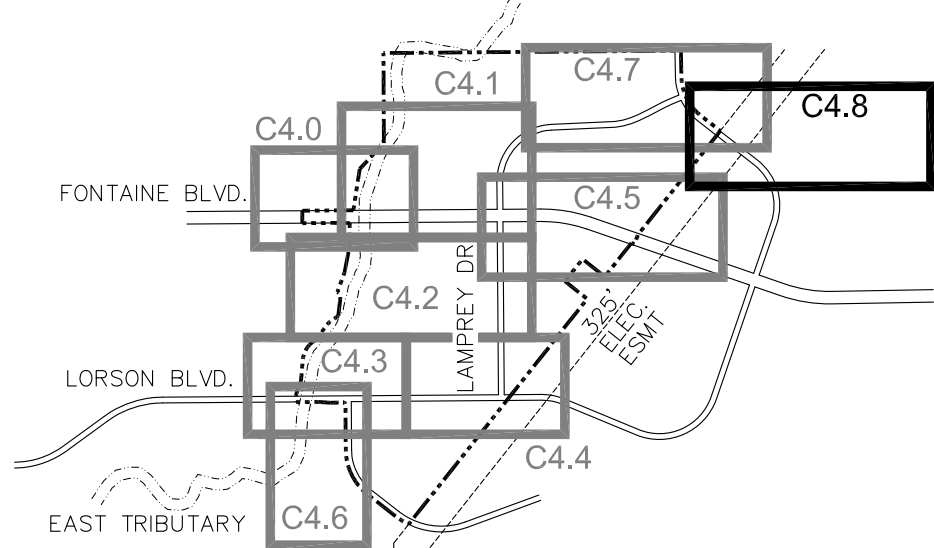
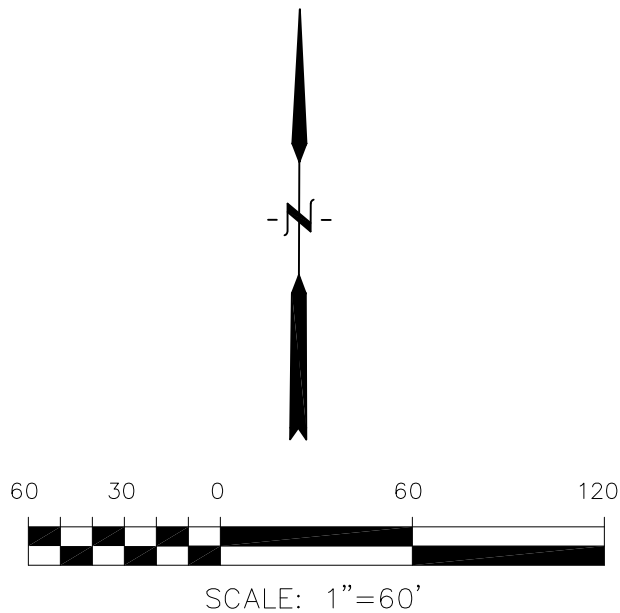
STRAW BALE DAM

FEMA 100-YR FLOODWAY

VEHICLE TRACKING CONTROL

CHECK DAM (SD-3-62)

STRAW BALE CHECK



EPC 2/5/18

CORE

ENGINEERING GROUP

15004 1ST AVE. S.
DENVER, CO 80202
PHONE: 303.555.0606
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

(CE)

DATE

DESCRIPTION

NO.

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

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

PROJECT:
LORSON RANCH EAST
FONTAINE BLVD. - EAST TRIBUTARY
EL PASO COUNTY, COLORADO

LORSON RANCH EAST
OVERLOT EARLY GRADING AND E.C. PLAN
OFFSITE BORROW (FUTURE POND C4)

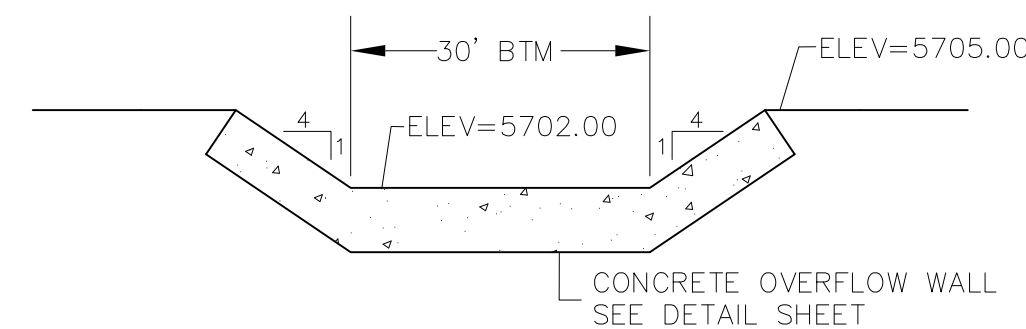
DATE
DECEMBER 18, 2017

PROJECT NO.
100.040

SHEET NUMBER
C4.8

TOTAL SHEETS: 28

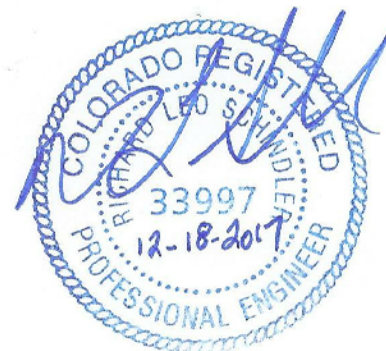
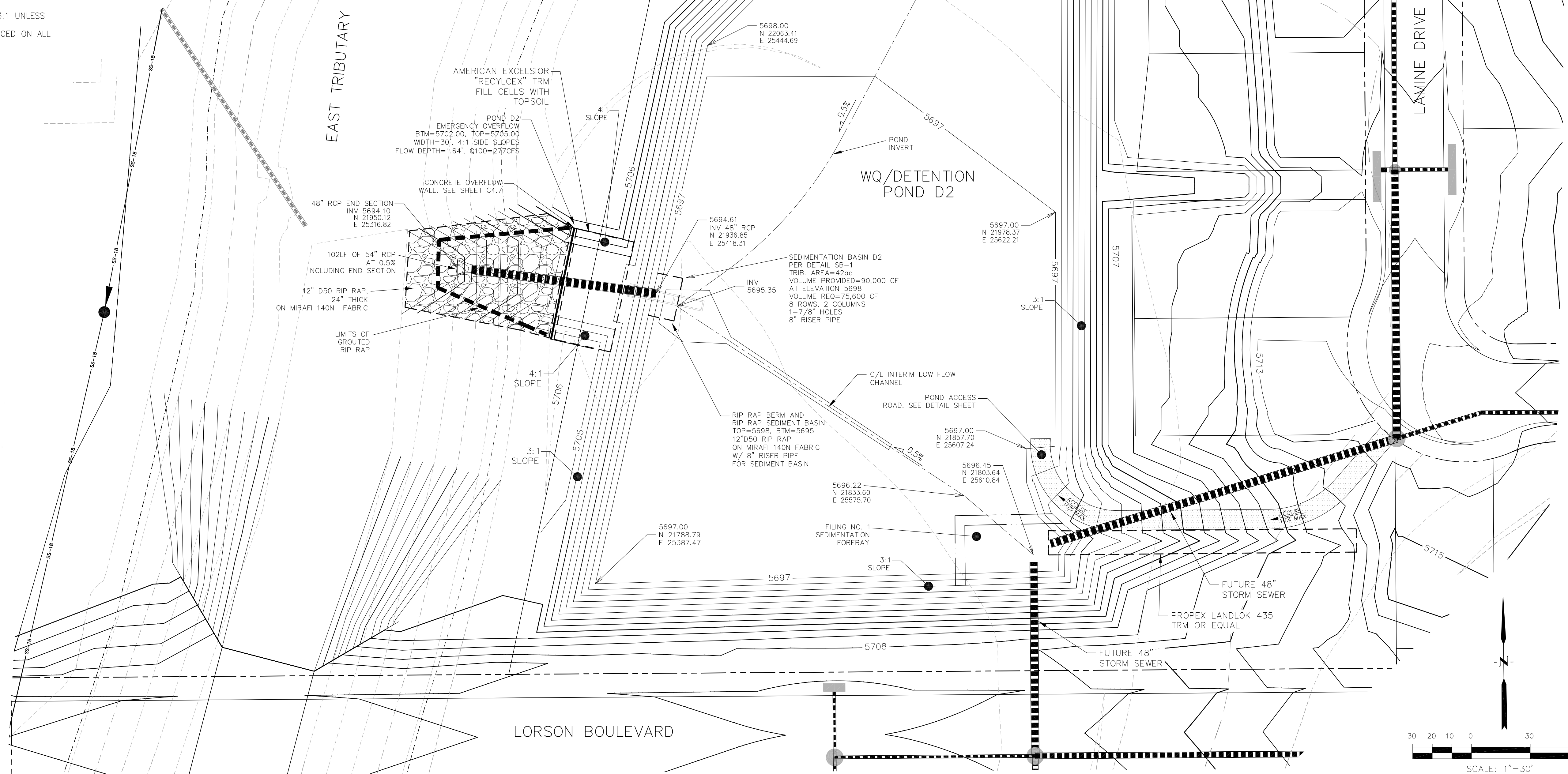
TOTAL SHEETS: 28



SCALE: NTS

1. POND SLOPES SHALL BE 3:1 UNLESS OTHERWISE NOTED

2. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES UNLESS NOTED OTHERWISE

[illegible]

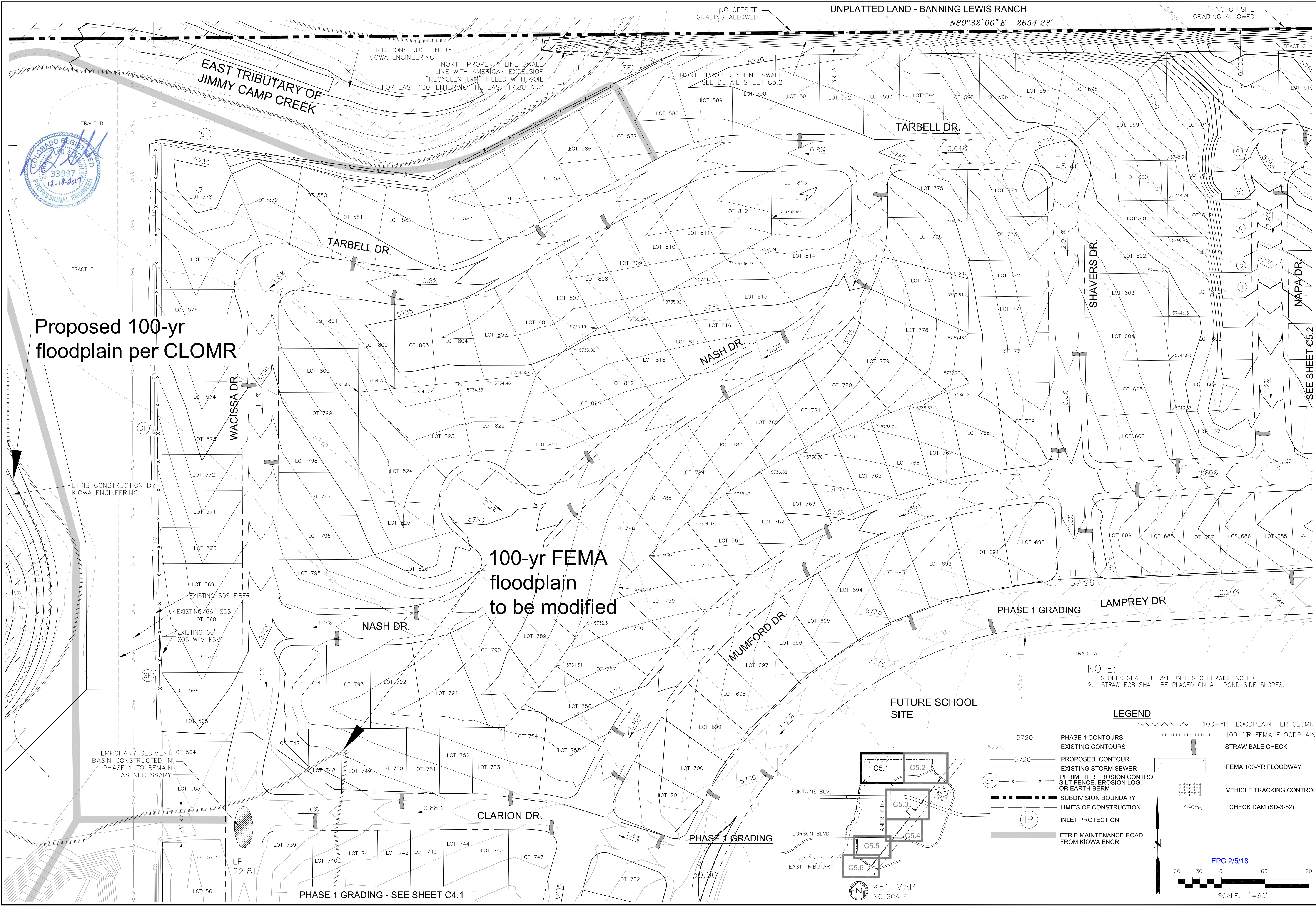
FULL SPECTRUM DETENTION POND D2
LORSON RANCH EAST

DATE
ECEMBER 18, 2017

PROJECT NO.
100.040

SHEET NUMBER
C4.10

TOTAL SHEETS: **28**



CORE
ENGINEERING GROUP

15004 1ST AVE. S.
SUITE 100
BURNING WOODS, CO 80606
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

DATE
1/22/2018

DESCRIPTION
RAISE LAMPREY 1" FROM CLARION TO YAMHILL

NO.
1.

PREPARED FOR:
LORSON RANCH EAST
FONTAINE BLVD. - EAST TRIBUTARY
EL PASO COUNTY, COLORADO

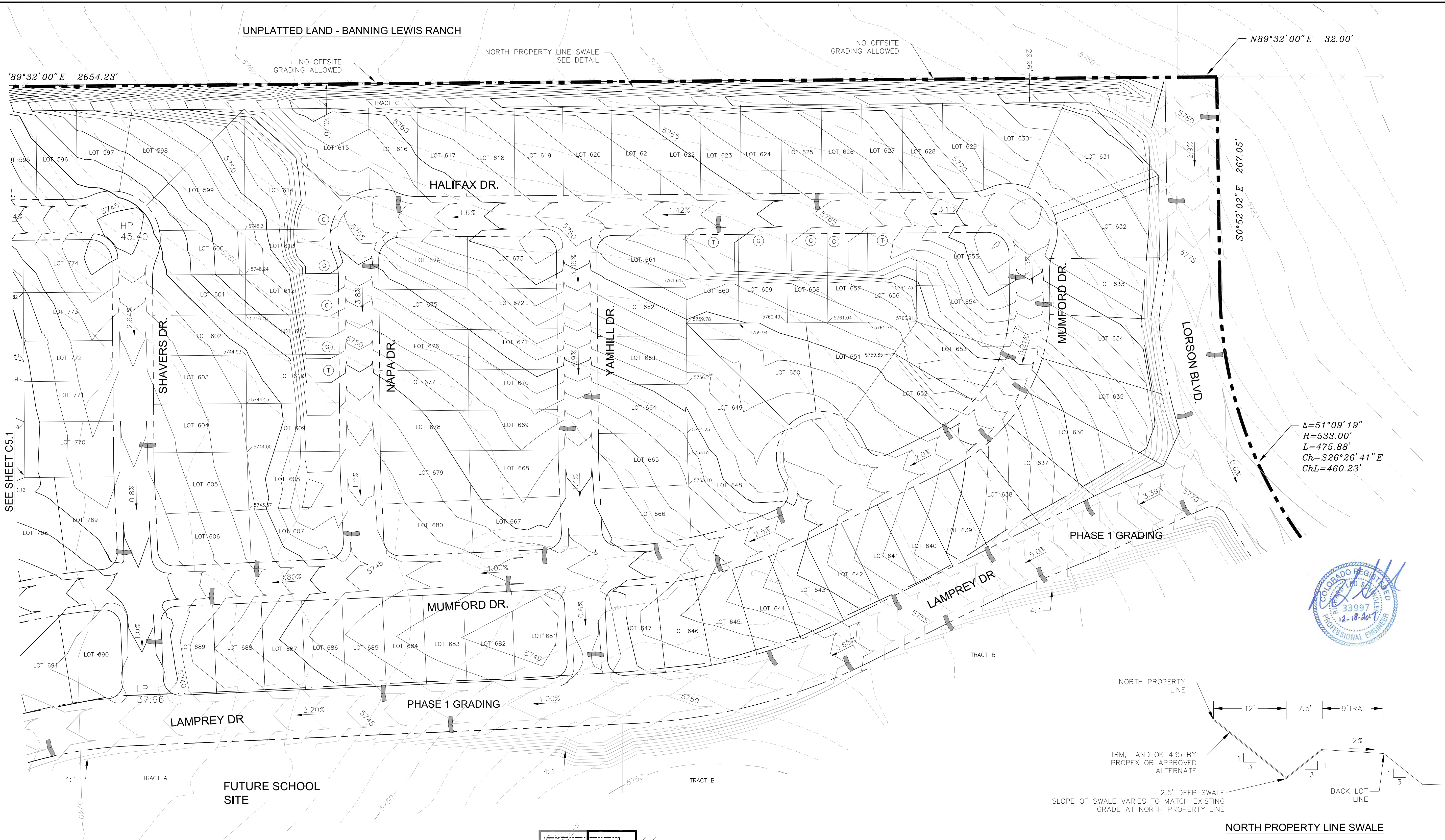
PROJECT:
LORSON, LLC
212 N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: JEFF MARK

DATE
DECEMBER 18, 2017

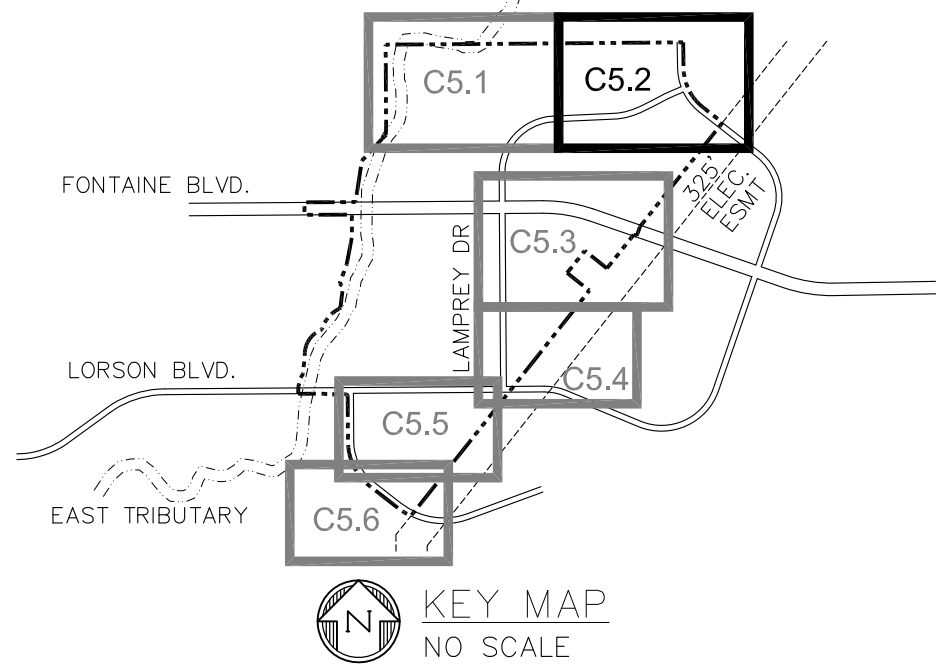
PROJECT NO.
100.040

SHEET NUMBER
C5.1

TOTAL SHEETS: 28



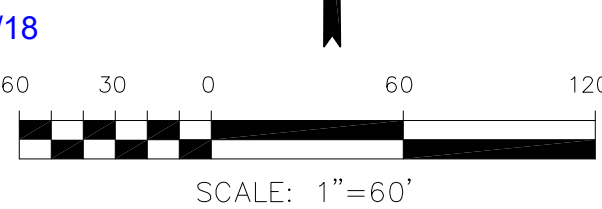
NOTE:
1. SLOPES SHALL BE 3:1 UNLESS OTHERWISE NOTED
2. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES.



- LEGEND
- 5720 PHASE 1 CONTOUR
 - 5720 EXISTING CONTOUR
 - 5720 PROPOSED CONTOUR
 - EXISTING STORM SEWER
 - (SF) PERIMETER EROSION CONTROL SILT FENCE, EROSION LOG, OR EARTH BERM
 - SUBDIVISION BOUNDARY
 - LIMITS OF CONSTRUCTION
 - 100-YR FEMA FLOODPLAIN
 - STRAW BALE CHECK
 - VEHICLE TRACKING CONTROL
 - CHECK DAM (SD-3-62)

NORTH PROPERTY LINE SWALE

Q5=9.4CFS, Q100=21.0CFS
FLOW DEPTH=1.3' DEEP AT 1%
VELOCITY=4.33 FT/S

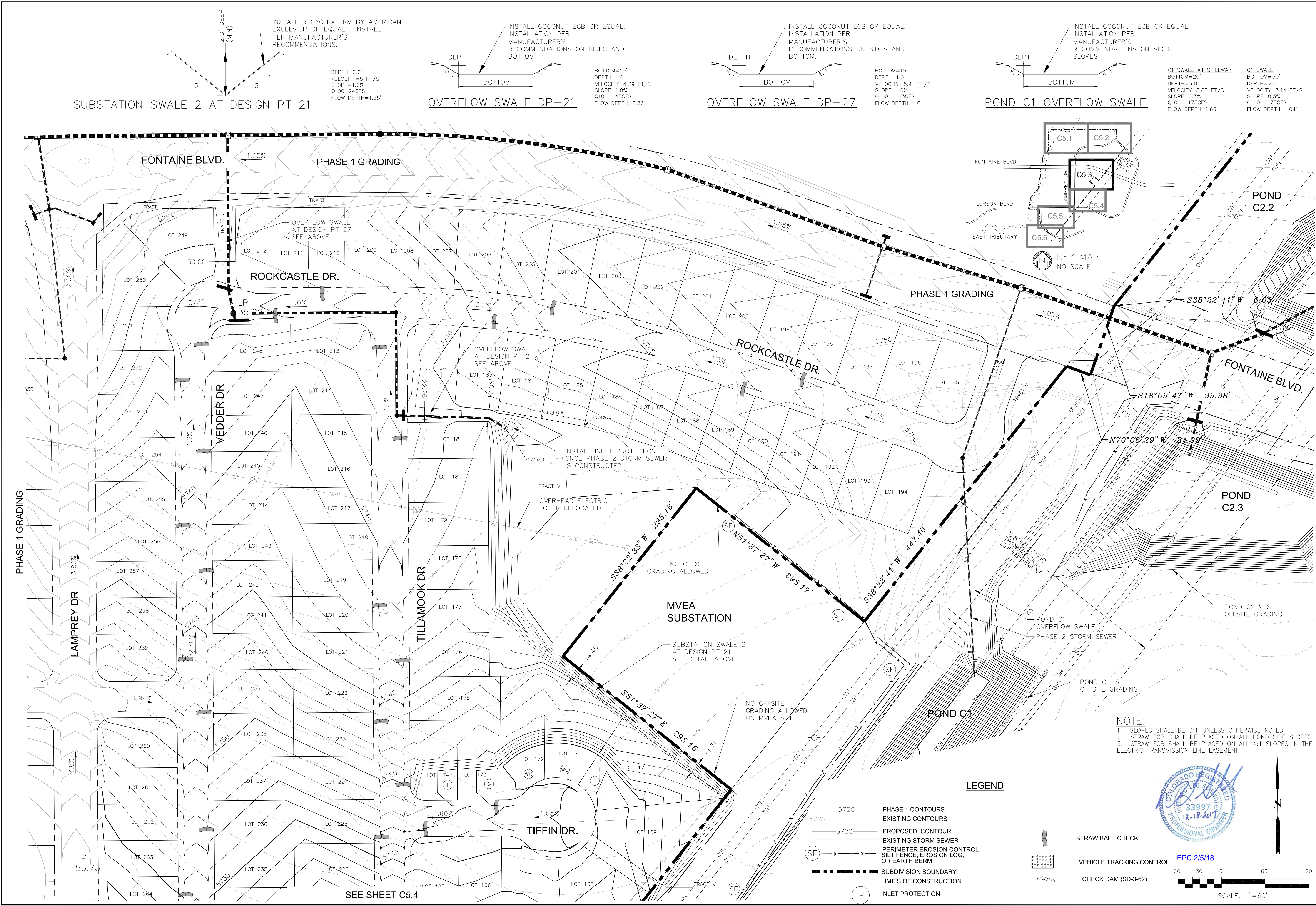


LORSON RANCH EAST
OVERLOT EARLY GRADING AND E.C. PLAN
PHASE 2

DATE
DECEMBER 18, 2017
PROJECT NO.
100.040
SHEET NUMBER
C5.2
TOTAL SHEETS: 28

NO. 1: RAISE LAMPREY 1' FROM CLARION TO YAMHILL
DESCRIPTION
DATE 1/22/2018
PROJECT: LORSON RANCH EAST
FONTAINE BLVD. - EAST TRIBUTARY
EL PASO COUNTY, COLORADO
PREPARED FOR: LORSON, LLC
212 N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com
CONTACT: JEFF MARK

CORE
ENGINEERING GROUP
15004 1ST AVE. S.
SUITE 100
BURNING WOODS, UT 84401
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

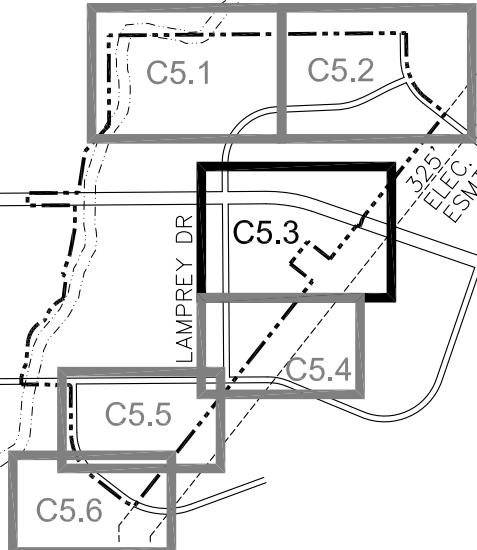


SUBSTATION SWALE 2 AT DESIGN PT 21

OVERFLOW SWALE DP-21

OVERFLOW SWALE DP-27

POND C1 OVERFLOW SWALE

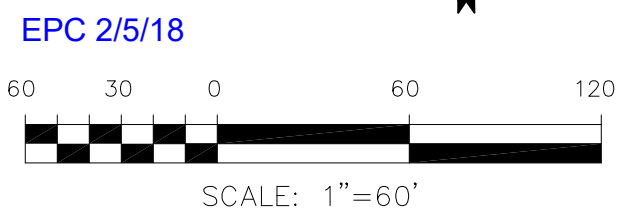


NOTE:
1. SLOPES SHALL BE 3:1 UNLESS OTHERWISE NOTED.
2. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES.
3. STRAW ECB SHALL BE PLACED ON ALL 4:1 SLOPES IN THE ELECTRIC TRANSMISSION LINE EASEMENT.

LEGEND

- 5720 PHASE 1 CONTOURS
- 5720 EXISTING CONTOURS
- 5720 PROPOSED CONTOUR
- EXISTING STORM SEWER
- PERIMETER EROSION CONTROL SILT FENCE, EROSION LOG, OR EARTH BERM
- SUBDIVISION BOUNDARY
- LIMITS OF CONSTRUCTION
- INLET PROTECTION

- STRAW BALE CHECK
- VEHICLE TRACKING CONTROL
- CHECK DAM (SD-3-62)



CORE
ENGINEERING GROUP

15004 1ST AVE. S.
SUITE 100
BURNING WOODS, MN 55306
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

DATE

DESCRIPTION

NO.

PROJECT

DRAWN

DESIGNED

CHECKED

RLS

RLS

RLS

PREPARED FOR:

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

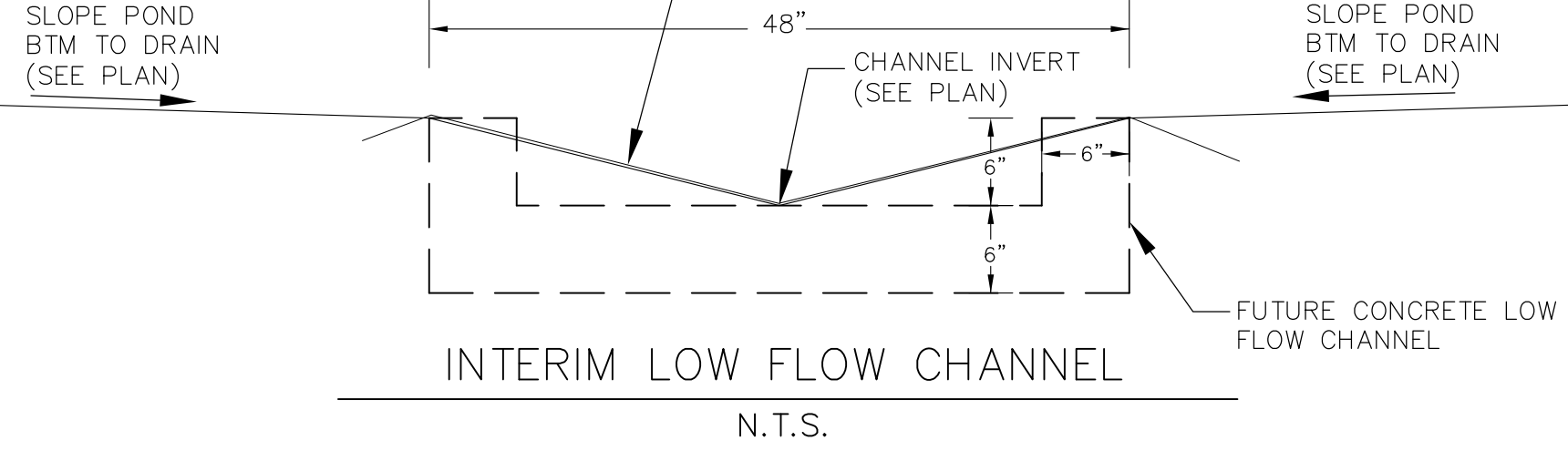
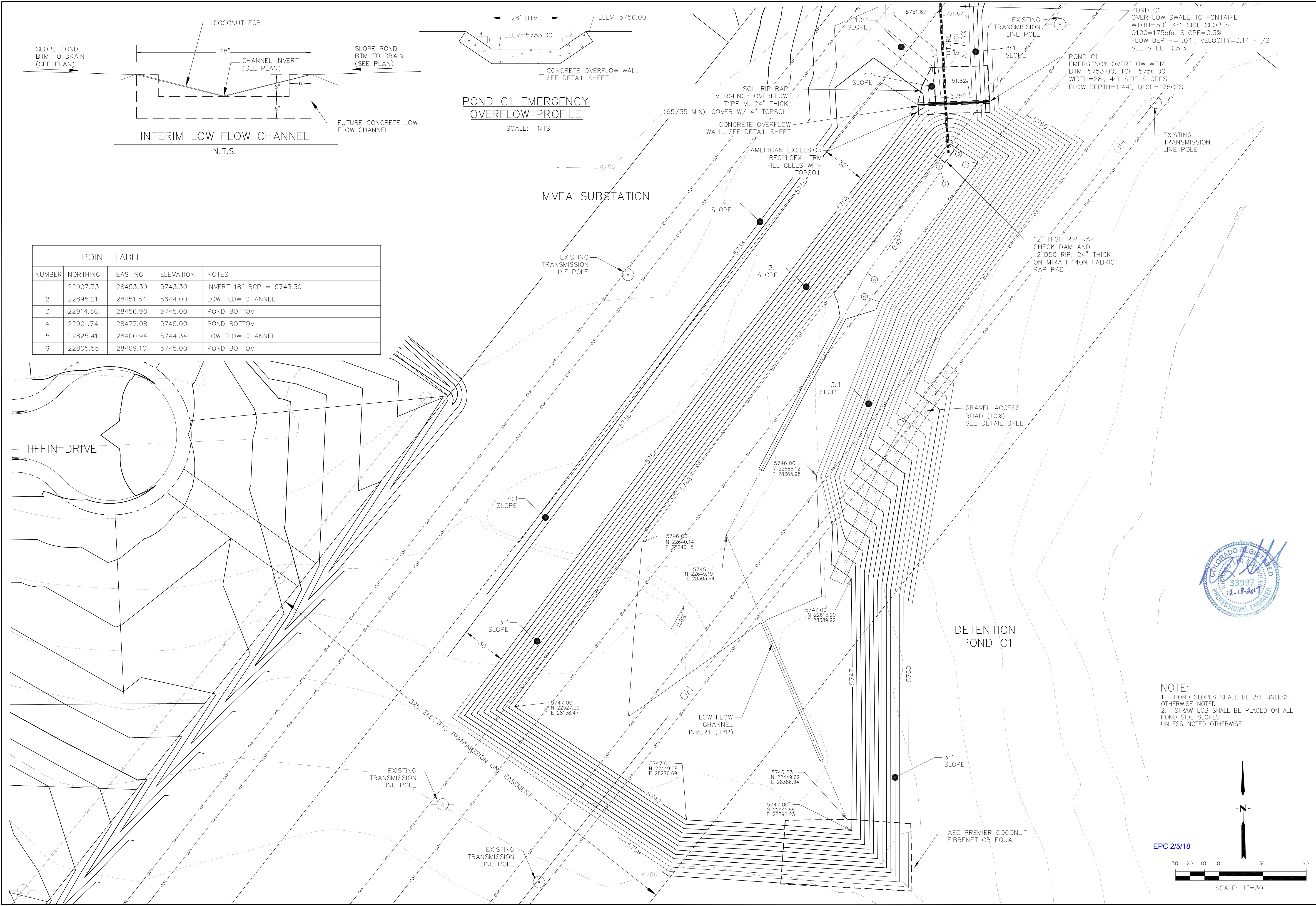
LORSON RANCH EAST
OVERLOT EARLY GRADING AND E.C. PLAN
PHASE 2

DATE
DECEMBER 18, 2017

PROJECT NO.
100.040

SHEET NUMBER
C5.3

TOTAL SHEETS: 28



POND C1 EMERGENCY OVERFLOW PROFILE
SCALE: NTS

POINT TABLE				
NUMBER	NORTHING	EASTING	ELEVATION	NOTES
1	22907.73	28453.39	5743.30	INVERT 18" RCP = 5743.30
2	22895.21	28451.54	5644.00	LOW FLOW CHANNEL
3	22914.56	28456.90	5745.00	POND BOTTOM
4	22901.74	28477.08	5745.00	POND BOTTOM
5	22825.41	28400.94	5744.34	LOW FLOW CHANNEL
6	22805.55	28409.10	5745.00	POND BOTTOM

CORE
ENGINEERING GROUP

15004 1ST AVE. S.
SUITE 301
BURNING WOOD, CO 80903
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

DATE

DESCRIPTION

NO.

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

PROJECT: LORSON RANCH EAST
FONTAINE BLVD. - EAST TRIBUTARY
EL PASO COUNTY, COLORADO

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

DETENTION POND C1 (PHASE 2)
LORSON RANCH EAST

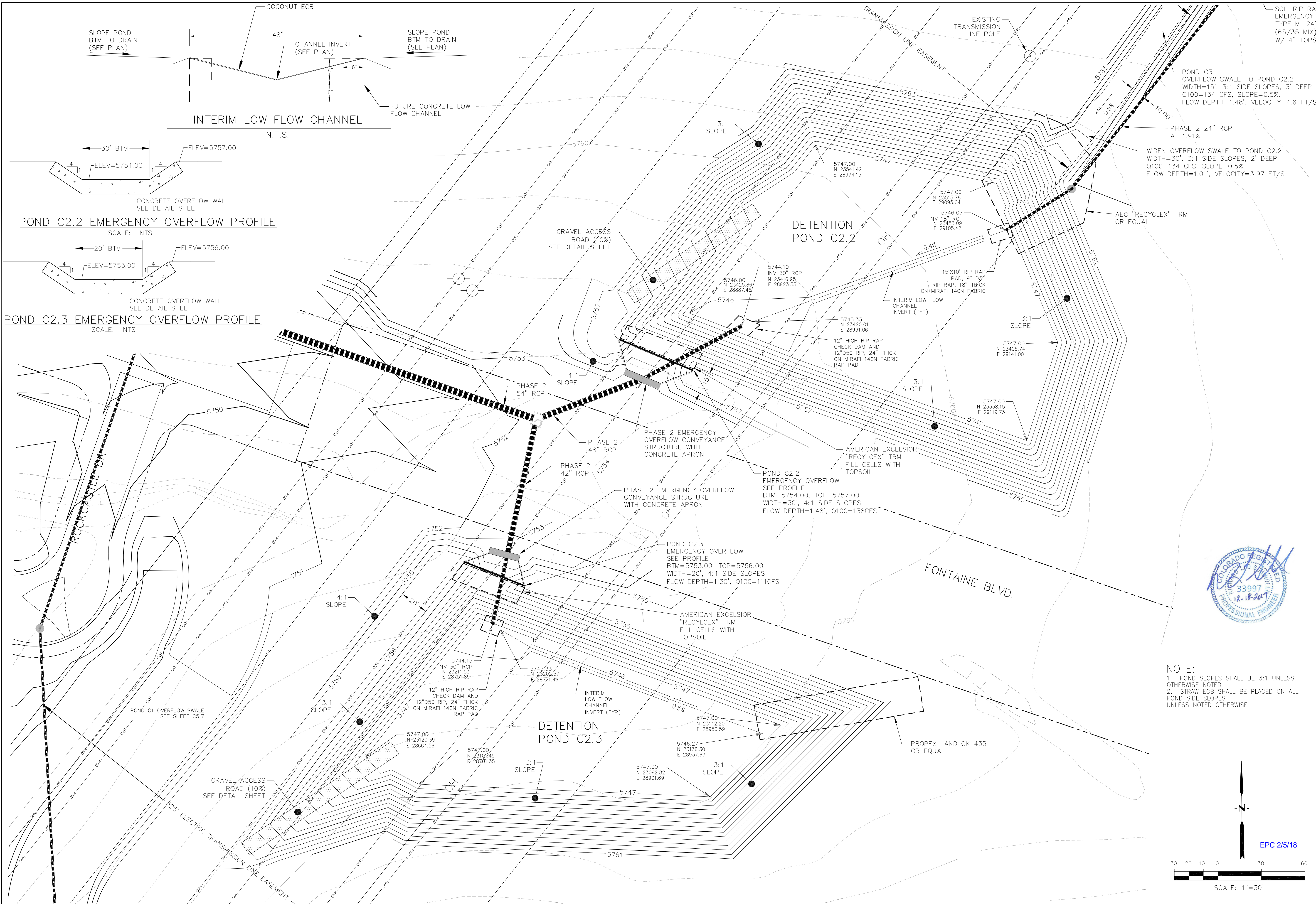
DATE
DECEMBER 18, 2017

PROJECT NO.
100.040

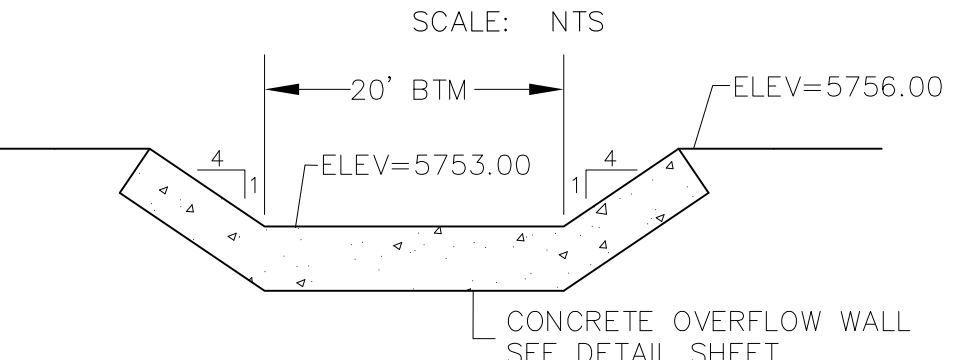
SHEET NUMBER
C5.7

TOTAL SHEETS: 28

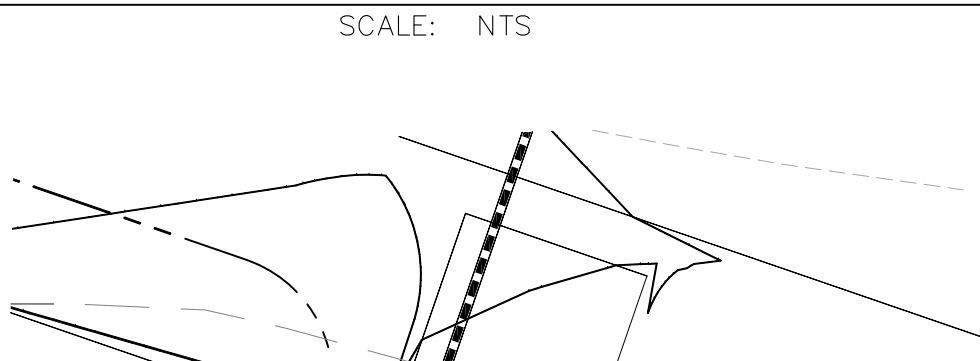
NOTE:
1. POND SLOPES SHALL BE 3:1 UNLESS OTHERWISE NOTED
2. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES UNLESS NOTED OTHERWISE



POND C2.2 EMERGENCY OVERFLOW PROFILE



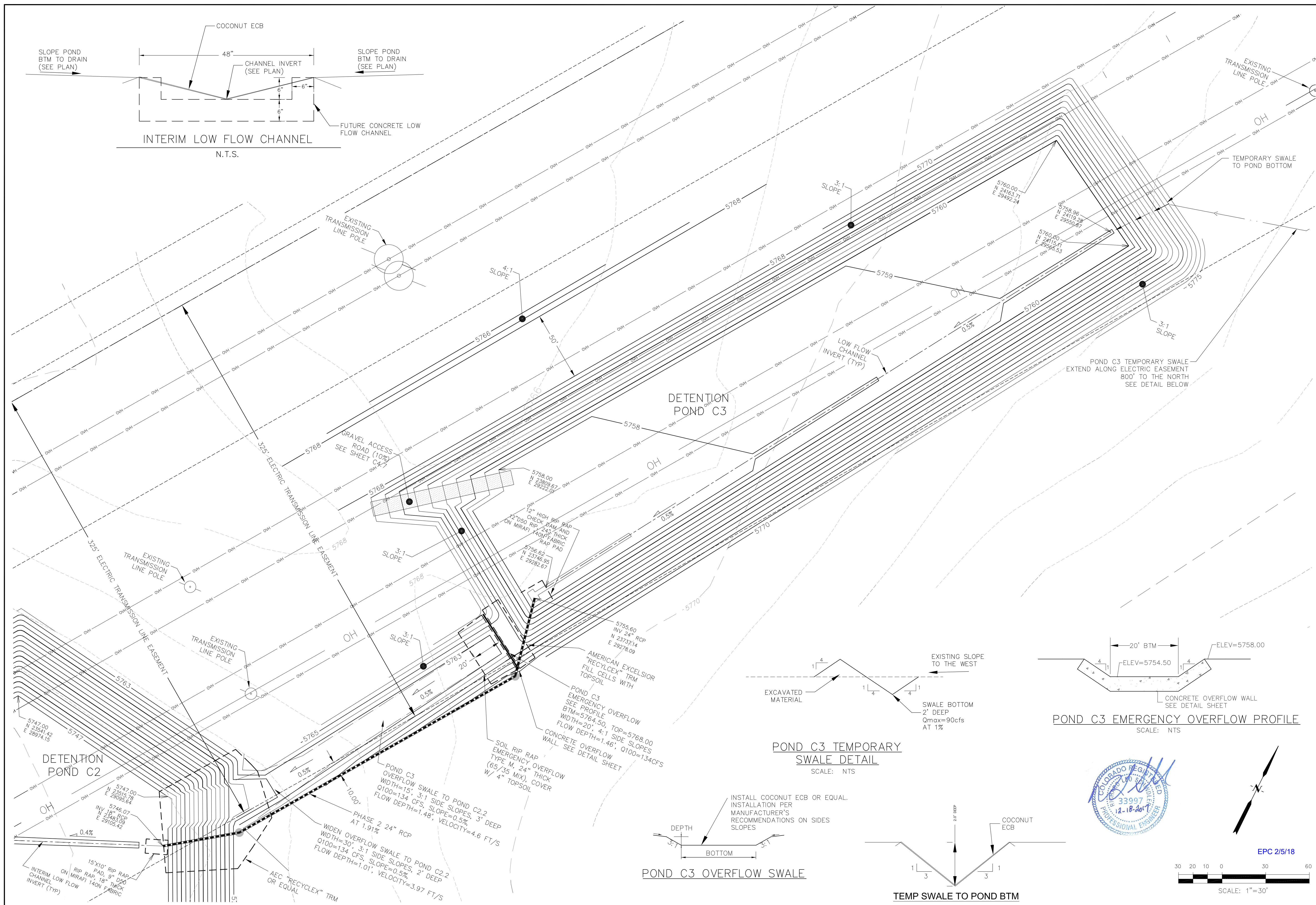
POND C2.3 EMERGENCY OVERFLOW PROFILE

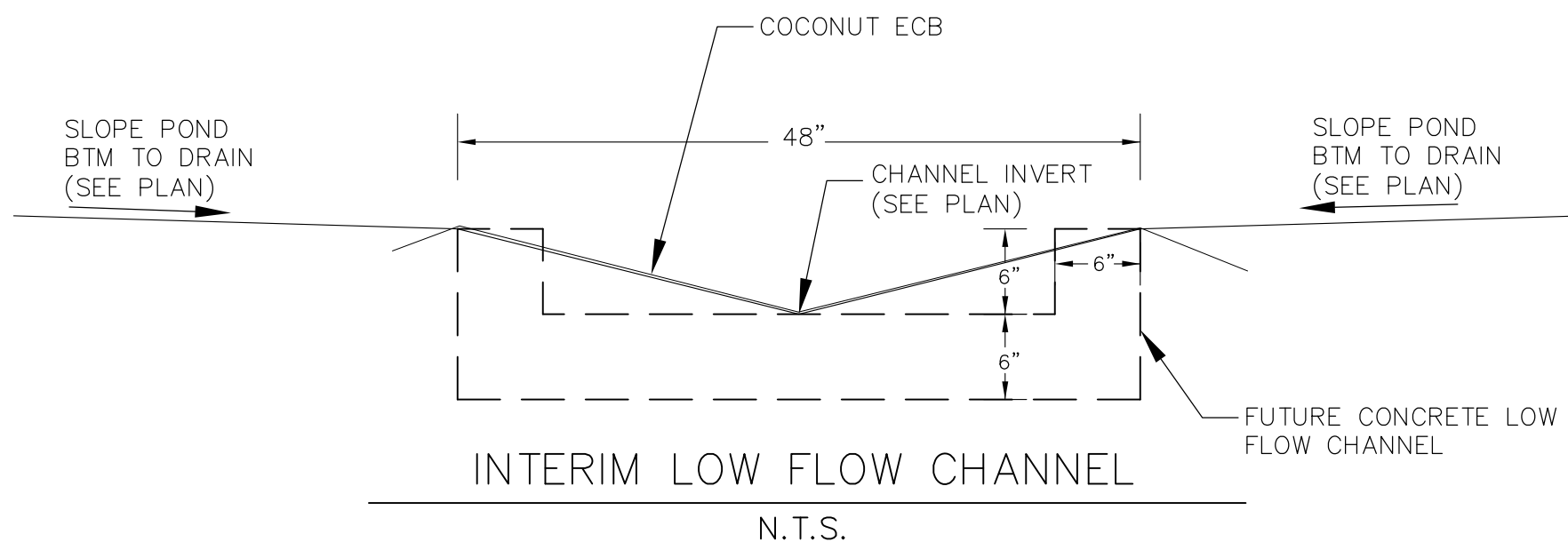


NOTE:
1. POND SLOPES SHALL BE 3:1 UNLESS OTHERWISE NOTED
2. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES UNLESS NOTED OTHERWISE



CORE ENGINEERING GROUP 15004 1ST AVE. S. SUITE 301 BURNING WOOD, CO 80903 CONTACT: RICHARD L. SCHINDLER, P.E. EMAIL: Rich@ceg1.com	
DATE	DECEMBER 18, 2017
DESCRIPTION	DETENTION POND POND C2.2 and C2.3 (PHASE 2) LORSON RANCH EAST
NO.	PROJECT NO. 100.040
DRAWN: RLS DESIGNED: RLS CHECKED: RLS	SHEET NUMBER C5.8
TOTAL SHEETS: 28	





YOCONA DRIVE
HORTON DRIVE

SKUNA DRIVE

GRAVEL ACCESS ROAD (10%)
SEE SHEET C4.7

5730.00
N 20763.44
E 26785.98

3:1
SLOPE

FUTURE
24" RCP
AT 0.5%

12" HIGH RIP RAP
CHECK DAM AND
12"D50 RIP, 24" THICK
ON MIRAFI 140N FABRIC
RAP PAD

5728.31
N 20736.73
E 26779.89

24" RCP
INV=5727.90
N 20735.16
E 26772.79

5729.63
N 20661.16
E 26844.00

DETENTION
POND E1

30 20 10 0 30 60
SCALE: 1"=30'

EPC 2/5/18

CORE
ENGINEERING GROUP
15004 1ST AVE. S.
SUITE 100
BURNING WOODS, CO 80633
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com



DATE
DESCRIPTION
NO.
PROJECT: LORSON RANCH EAST
212 N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: JEFF MARK

PREPARED FOR:
LORSON RANCH EAST
FONTAINE BLVD. - EAST TRIBUTARY
EL PASO COUNTY, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

DETENTION POND E1 (PHASE 2)
LORSON RANCH EAST

DATE
DECEMBER 18, 2017

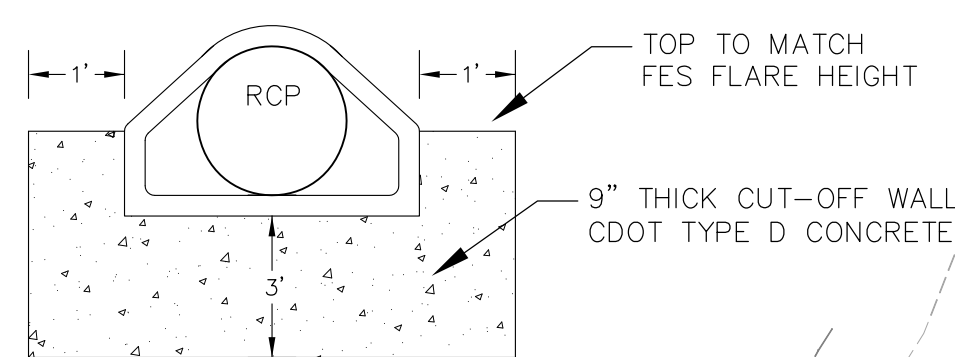
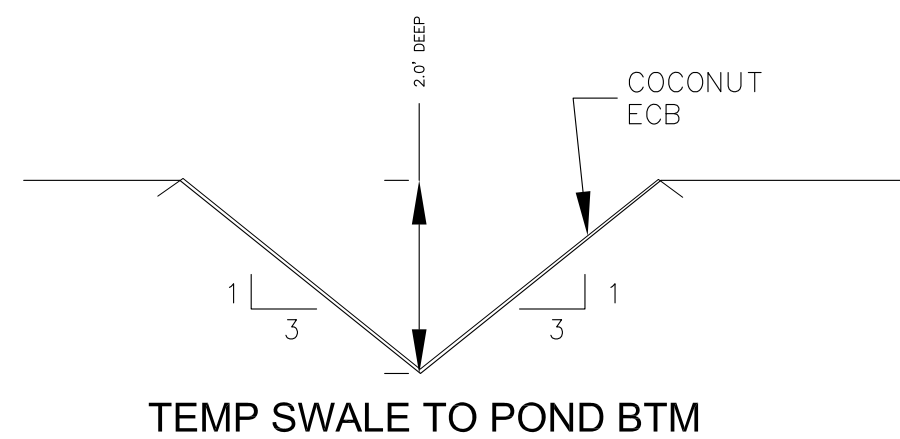
PROJECT NO.
100.040

SHEET NUMBER

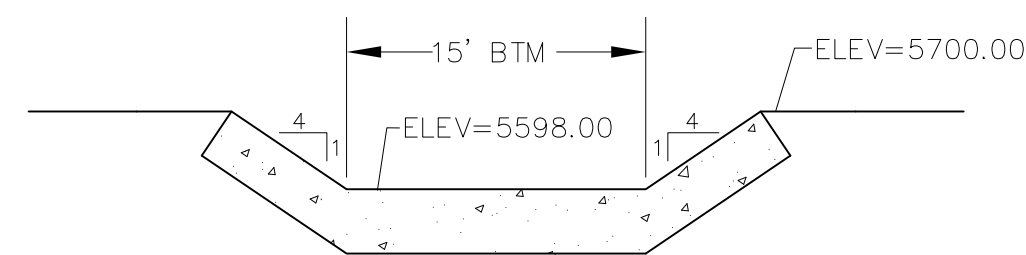
C5.10

TOTAL SHEETS: 28





CONCRETE CUT-OFF WALL
N.T.S.



INTERIM POND E2 EMERGENCY OVERFLOW PROFILE

SCALE: NTS

EAST TRIBUTARY OF JCC

INTERIM DETENTION
POND E2

SEDIMENTATION BASIN E2
PER DETAIL SB-1
TRIB. AREA=14ac
VOLUME PROVIDED=26,000 CF
AT ELEVATION 5696.50
VOLUME REQ=25,200 CF
8 ROWS, 1 COLUMNS
1-3/8" HOLES
8" RISER PIPE

TEMP SWALE
TO POND BOTTOM

FUTURE

CESS
C4.7

EXISTING
100-YEAR FLOODPLAIN



SCALE: 1"=30'

[illegible]

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

INTERIM DETENTION POND E2 (PHASE 2)
LORSON RANCH EAST

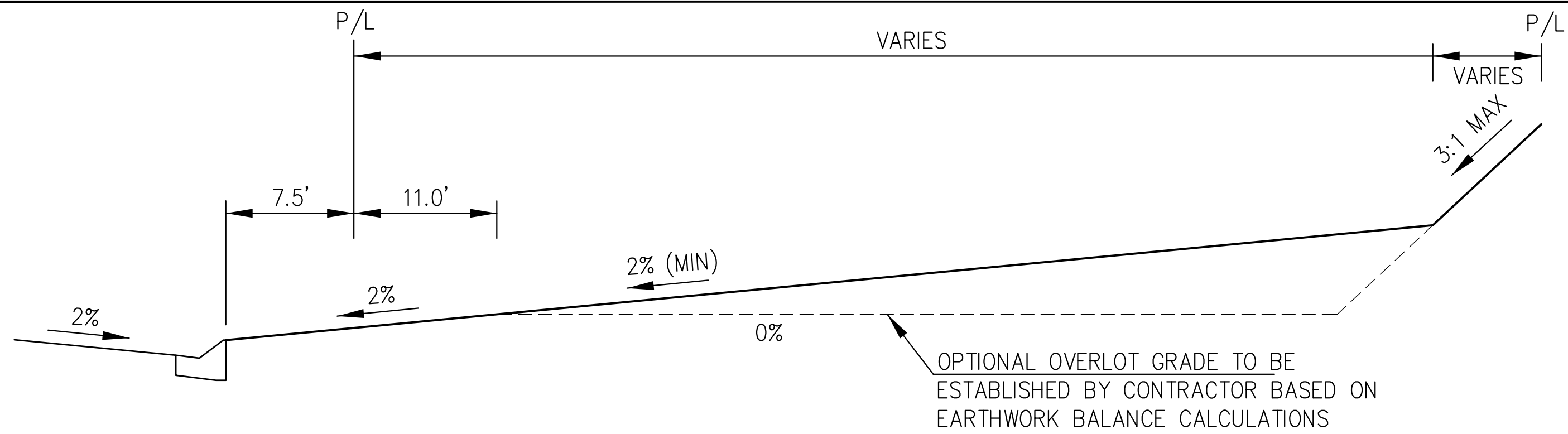
DATE
DECEMBER 18, 2017

PROJECT NO.
100.040

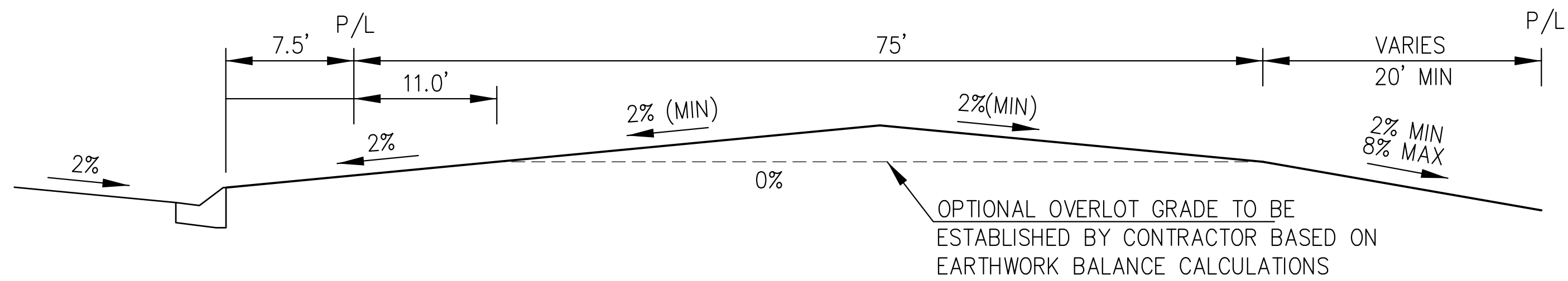
SHEET NUMBER

C5.11

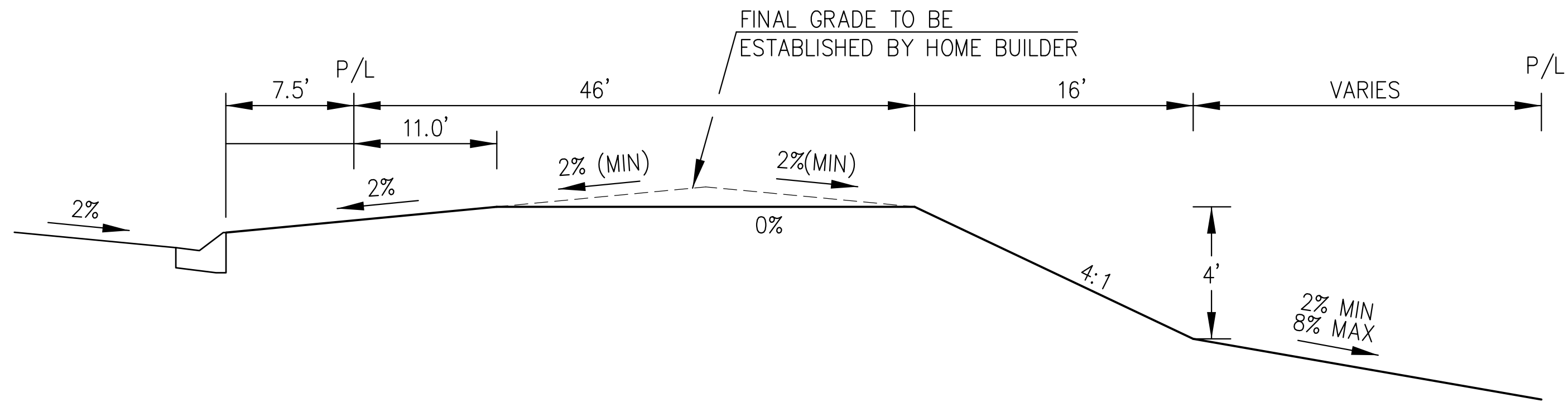
TOTAL SHEETS: 28



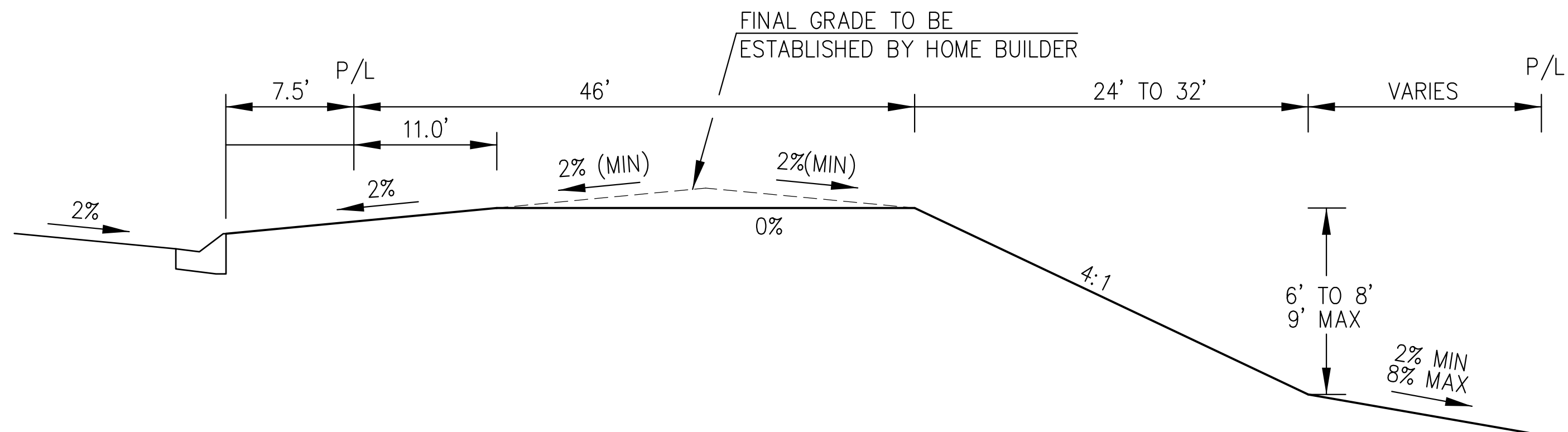
TYPICAL "A" LOT



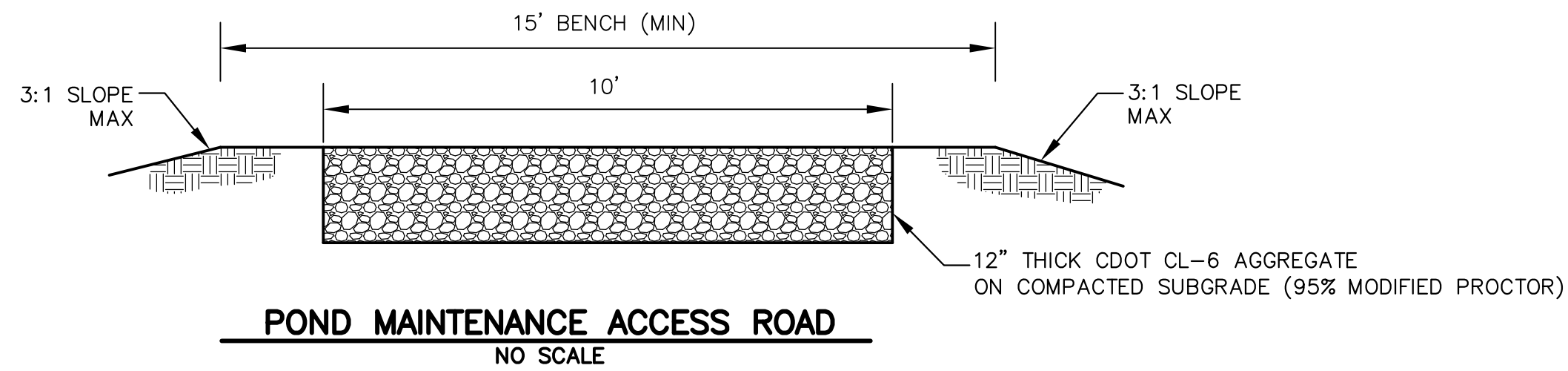
TYPICAL "B" LOT



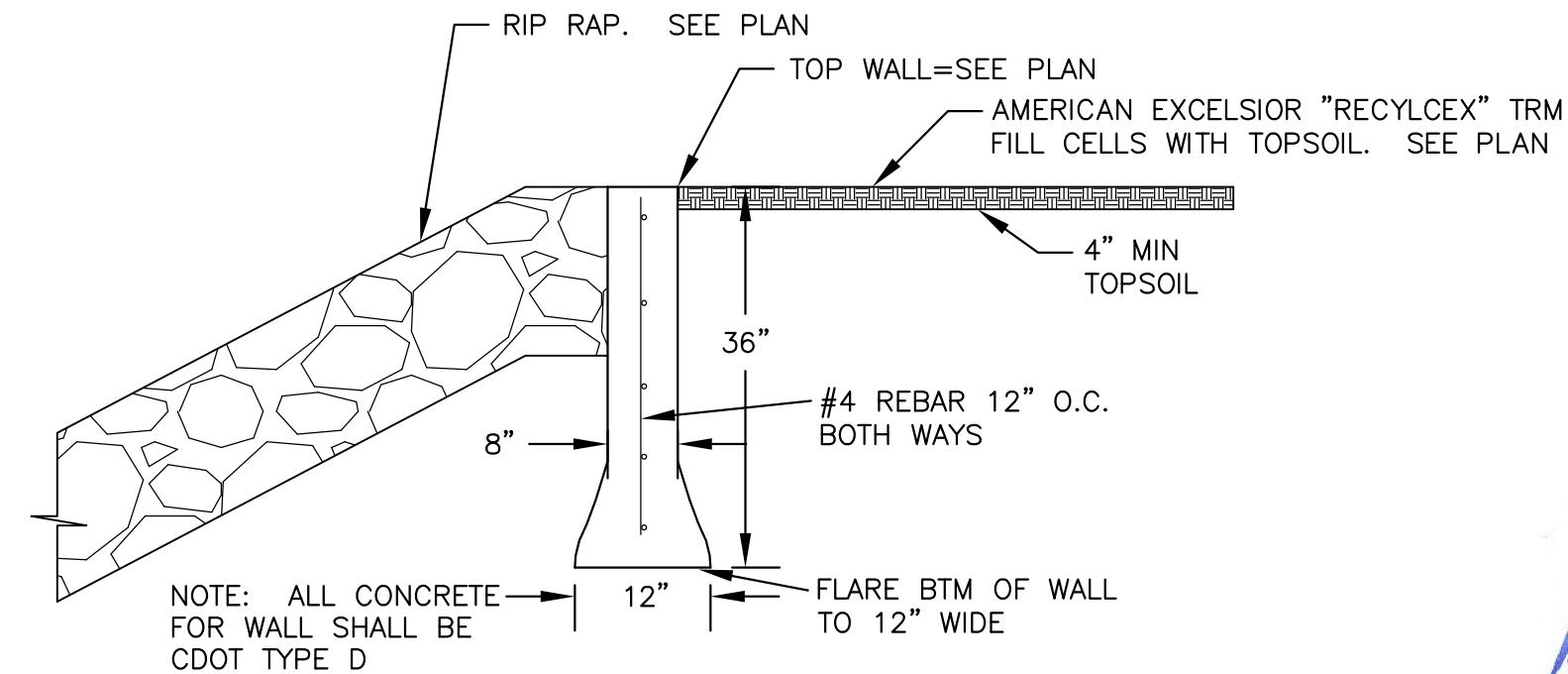
TYPICAL "GARDEN" LOT



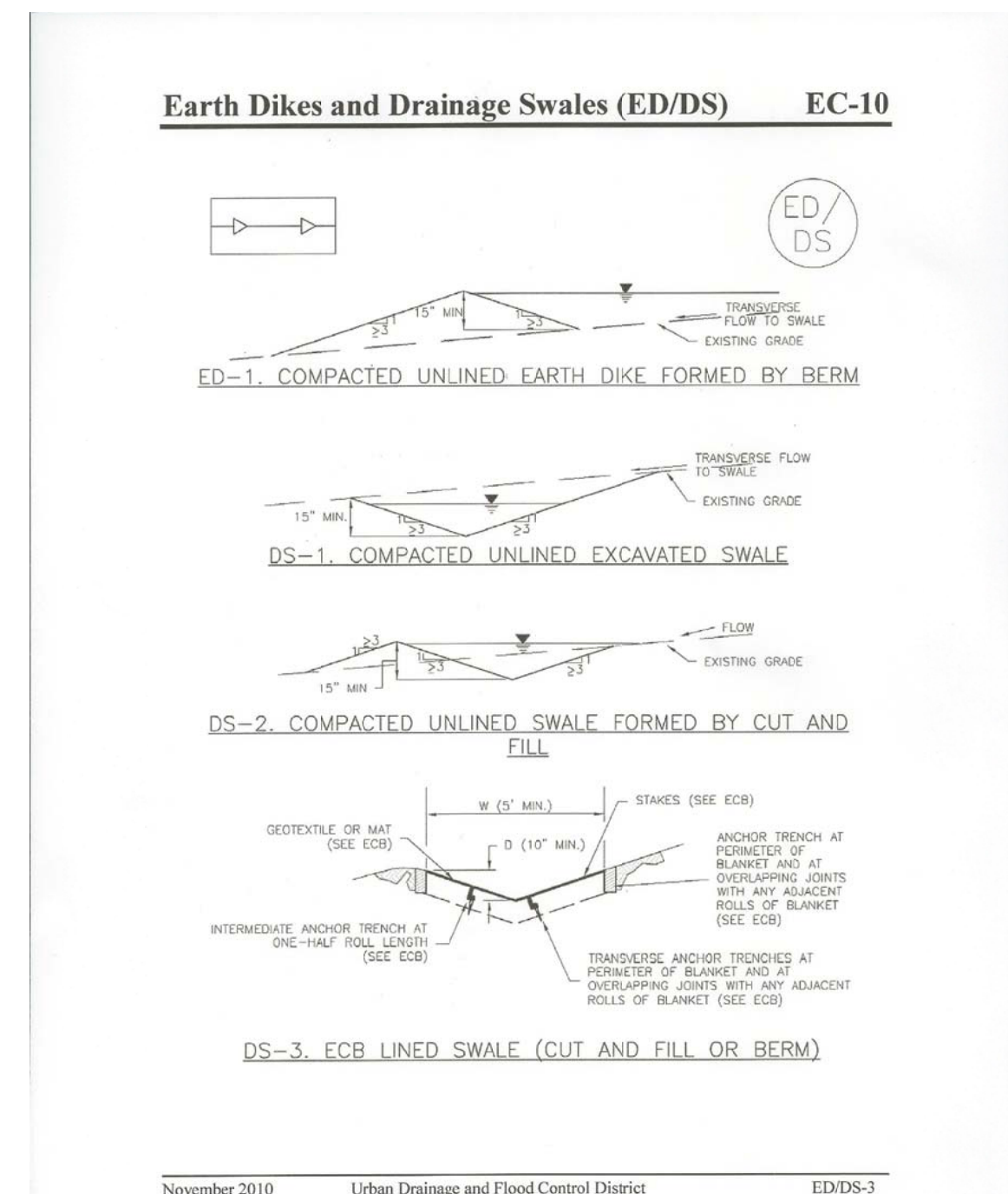
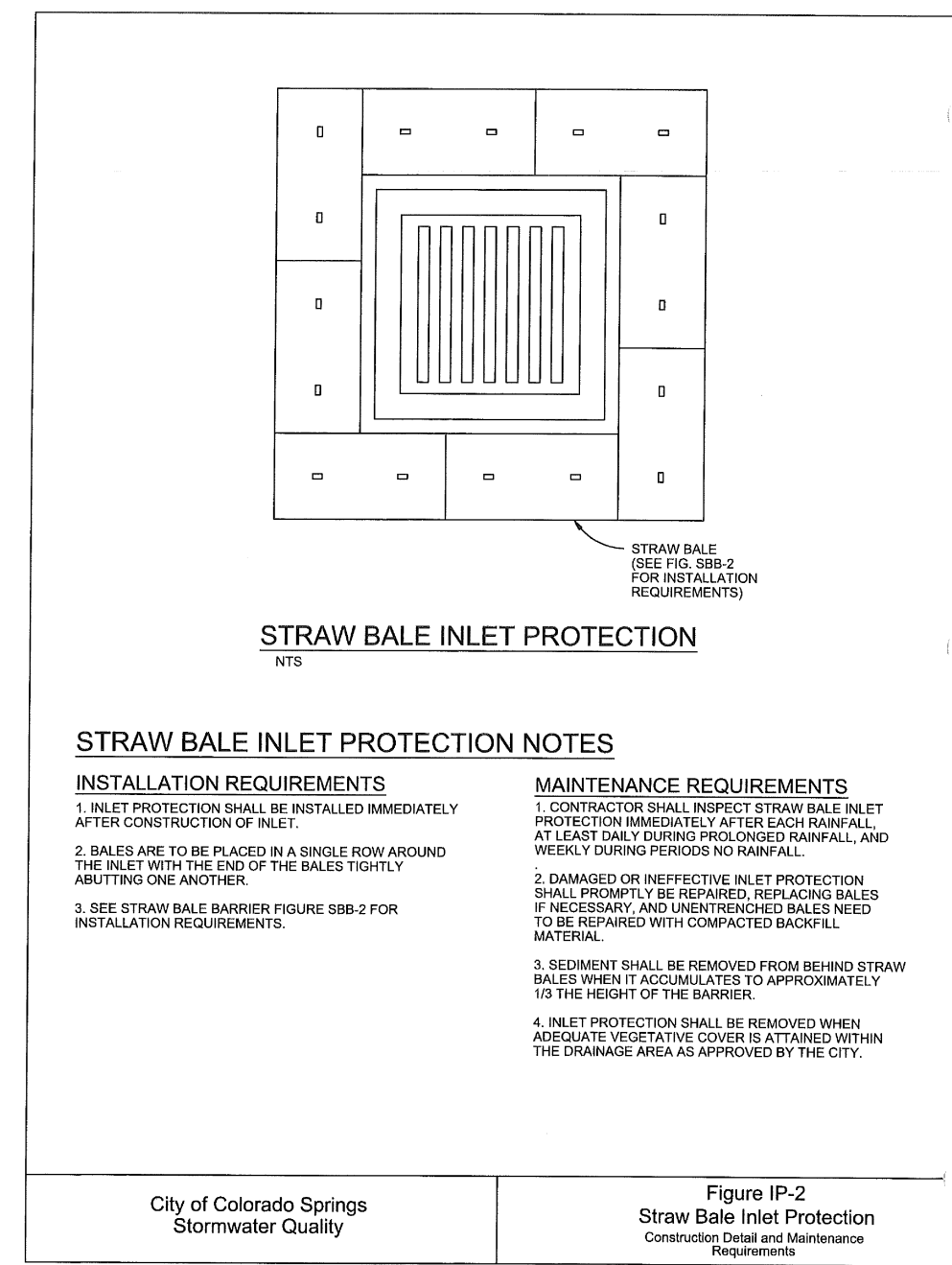
TYPICAL "WALKOUT" LOT



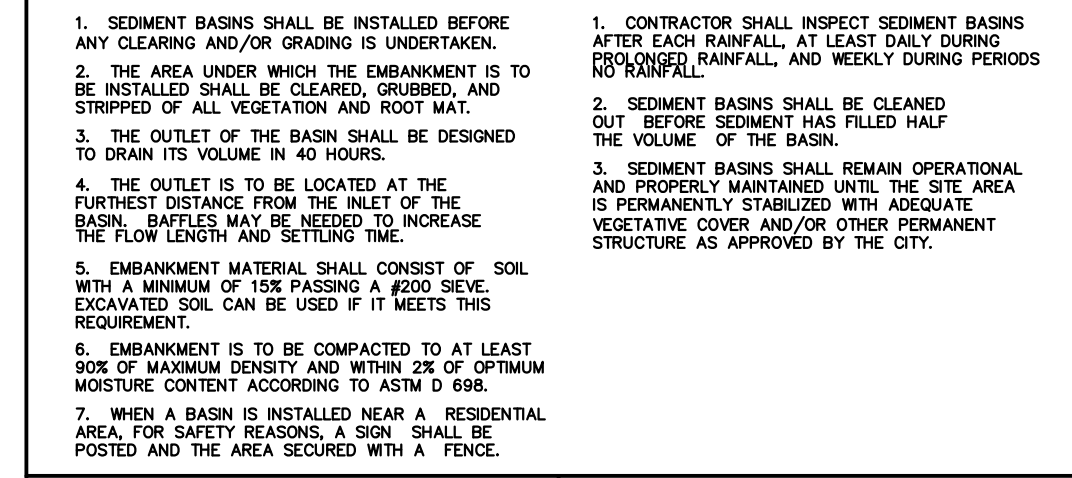
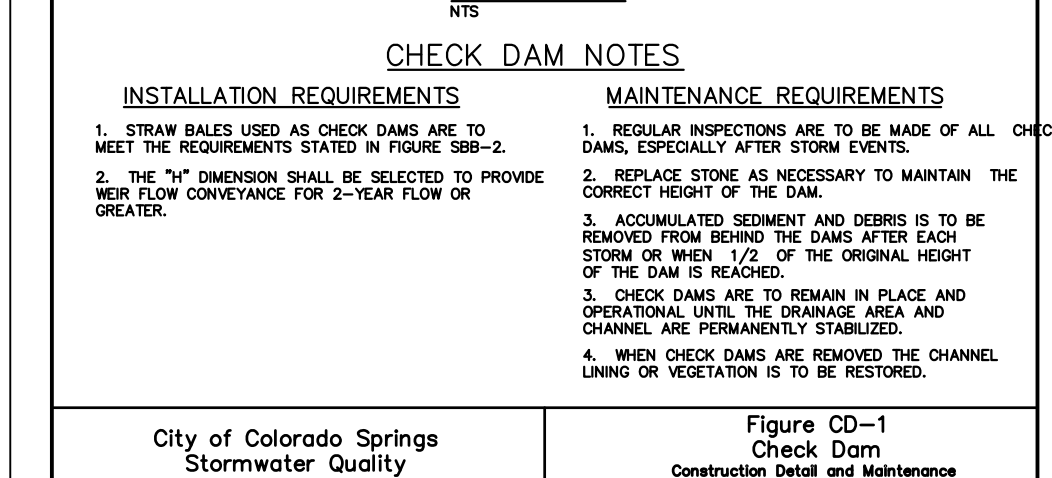
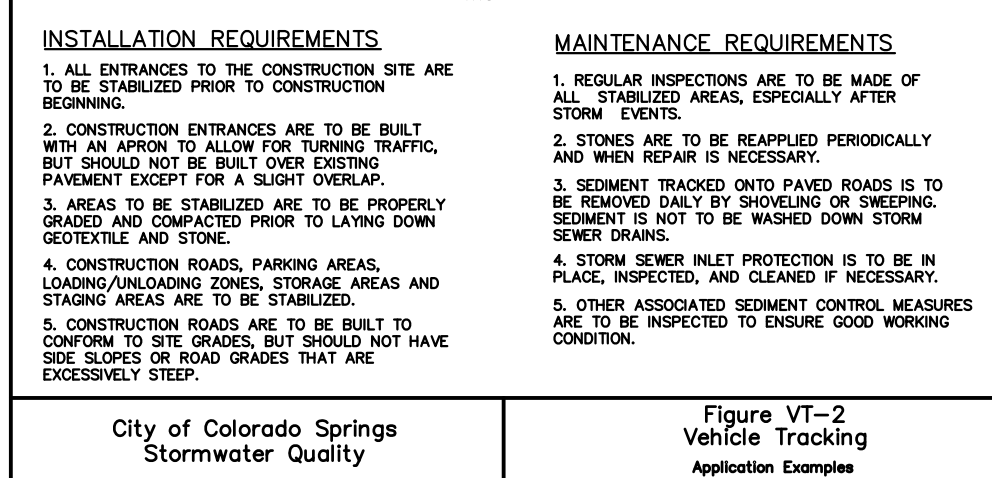
POND MAINTENANCE ACCESS ROAD
NO SCALE



POND OVERFLOW CONCRETE WALL
NO SCALE



CORE ENGINEERING GROUP 15004 1ST AVE. S. BURNING WOODS, CO 80506 PHONE: 719.476.1100 CONTACT: RICHARD L. SCHINDLER, P.E. EMAIL: Rich@ceg1.com	
DATE	NOVEMBER 18, 2017
DESCRIPTION	GRADING AND EROSION CONTROL DETAILS
NO.	100.040
PROJECT	LORSON RANCH EAST FONTAINE BLVD. - EAST TRIBUTARY EL PASO COUNTY, COLORADO
PREPARED FOR	LORSON, LLC 212 N. WAHSATCH AVE., SUITE 301 COLORADO SPRINGS, COLORADO 80903 CONTACT: JEFF MARK
DRAWN	RLS
DESIGNED	RLS
CHECKED	RLS
DATE DECEMBER 18, 2017	
PROJECT NO. 100.040	
SHEET NUMBER C12.1	
TOTAL SHEETS: 28	



Sediment Control Log (SCL)		SC-2
<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> SCL — SCL — SCL — </div>		

