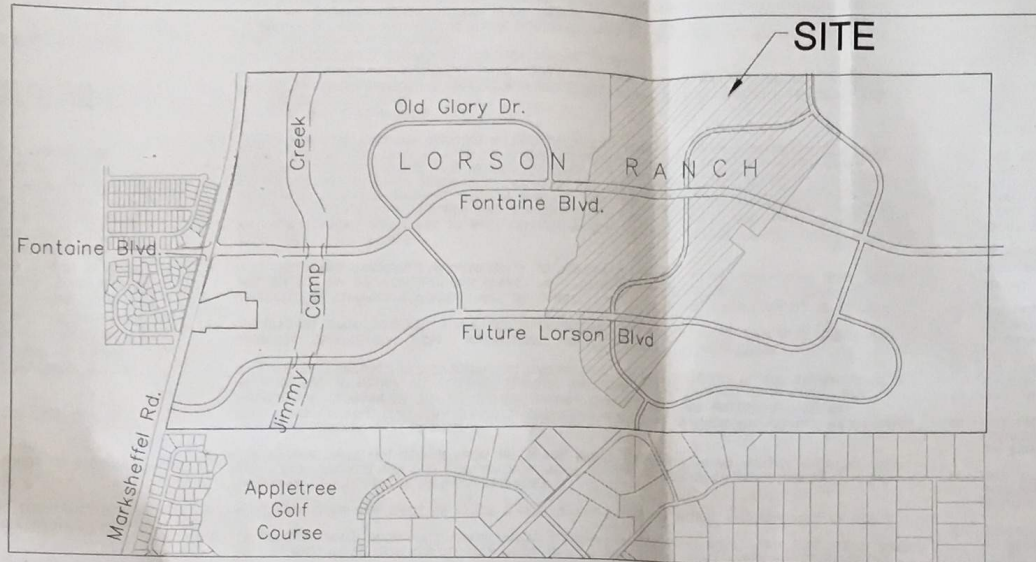


PRELIMINARY SITE GRADING CONSTRUCTION PLANS
FOR
LORSON RANCH EAST
EARLY GRADING / EROSION CONTROL PLANS



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



SHEET INDEX	
SHEET NO.	SHEET DESCRIPTION
CO.1	COVER SHEET
CO.2	NOTES (GENERAL, GRADING, EROSION CONTROL)
CO.3	TYPICAL SECTIONS
CO.4	OVERALL GRADING LAYOUT
C4.0 ~ C4.6	GRADING AND EROSION CONTROL PLAN - PHASE 1
C4.7 ~ C4.8	POND GRADING - PHASE 1
C5.1 ~ C5.6	GRADING AND EROSION CONTROL PLAN - PHASE 2
C5.7 ~ C5.12	POND GRADING - PHASE 2
C12.1 ~ C12.2	DETAILS

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.

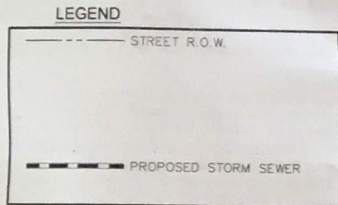
FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUALS VOLUME 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED. CONSTRUCTION DOCUMENTS WILL BE VALID FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER.

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

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



VICINITY MAP
NO SCALE

- WATER / SANITARY**
WIDEFIELD WATER AND SANITATION DISTRICT
37 WIDEFIELD BLVD.
SECURITY, CO 80911
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°1'52" 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.

CONSTRUCTION APPROVAL
COLORADO SPRINGS UTILITIES FOR GRADING WITHIN THE SDS EASEMENT

CSU REPRESENTATIVE _____ DATE _____

Phase 1: include all massing areas
Phase 2: off-site pond
no pipes w/ outlet
not complete
revised pending
PDR revisions

PUDSP-16-003

RECEIVED VERSION
JUL 19 2017 2

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

CE

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

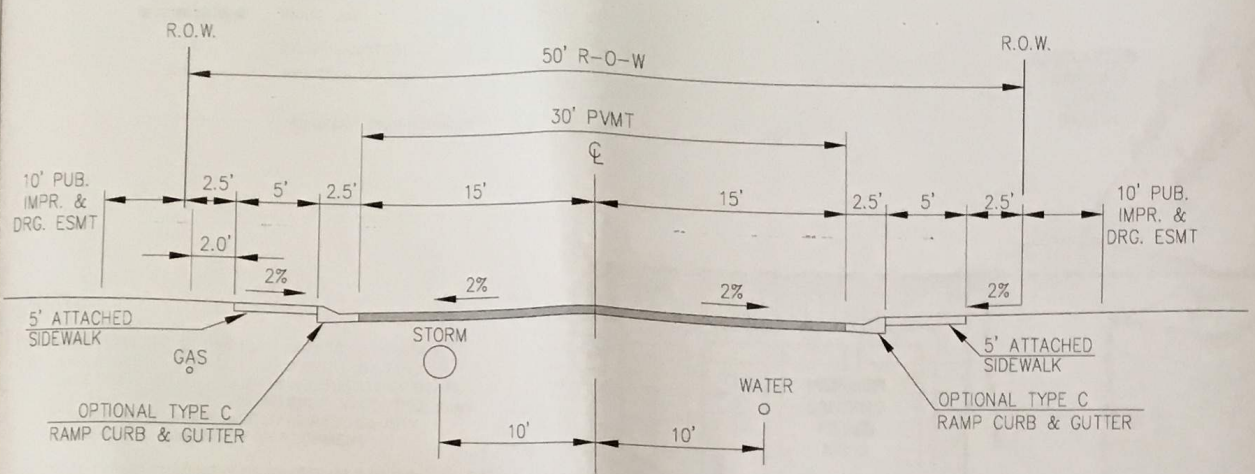
PREPARED FOR: **LORSON, LLC**

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

COVER SHEET
OVERLOT EARLY SITE GRADING
AND EROSION CONTROL PLANS

DATE: **JUNE 30, 2017**
PROJECT NO: **100.040**
SHEET NUMBER: **CO.1**
TOTAL SHEETS: **27**

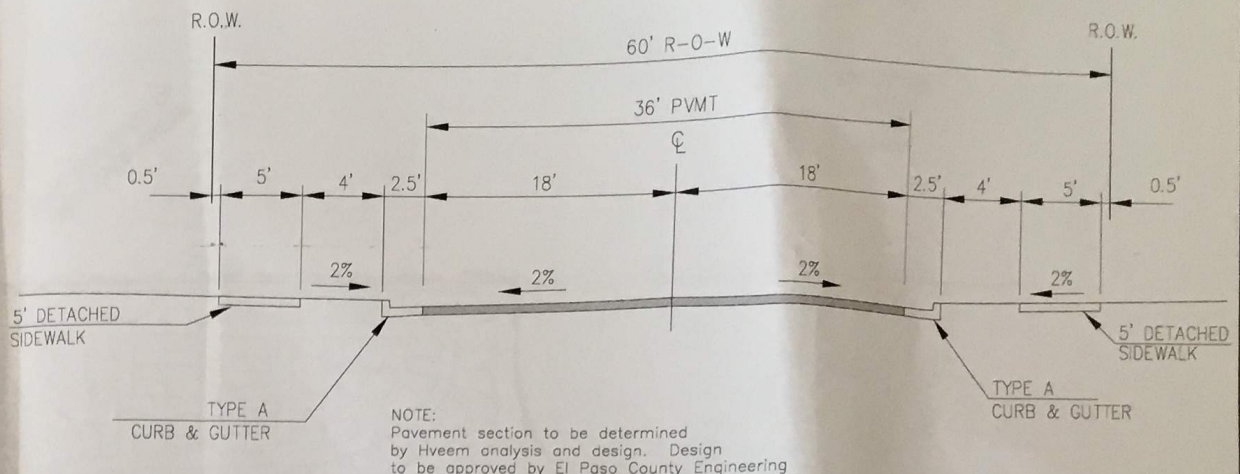
PCP Redlines #2
8/14/17 RLS



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

- NORTH AREA**
EDISTO DRIVE
BALLONA DRIVE
MUMFORD DRIVE
WAGISSA DRIVE
CLARION DRIVE
NASH DRIVE
ZEALAND DRIVE
TARBELL DRIVE
SHAVERS DRIVE
NAPA DRIVE
YAMHILL DRIVE
HAUFAX DRIVE
TOLT DRIVE
- MIDDLE AREA**
LAMINE DRIVE
MATTA DRIVE
CHAPLIN DRIVE
WEISER DRIVE
WILLAPA DRIVE
VEDDER DRIVE
TILLAMOOK DRIVE
PIGEON DRIVE
ALISO DRIVE
ROWLEY DRIVE
NOLIN DRIVE
YUBA DRIVE
SACO DRIVE
TIFFIN DRIVE
ROCKCASTLE DRIVE
- SOUTH AREA**
VOLGA DRIVE
YOCONA DRIVE
ABITA DRIVE
SKUNA DRIVE
WITCHER DRIVE
HORTON DRIVE
M^A 30THY DRIVE

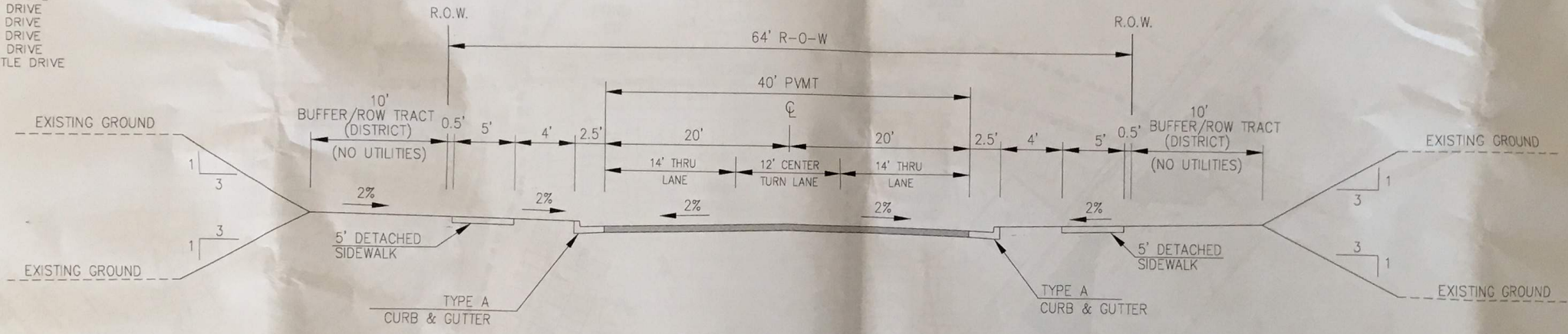
NOTE:
Pavement section to be determined by Hveem analysis and design. Design to be approved by El Paso County Engineering



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

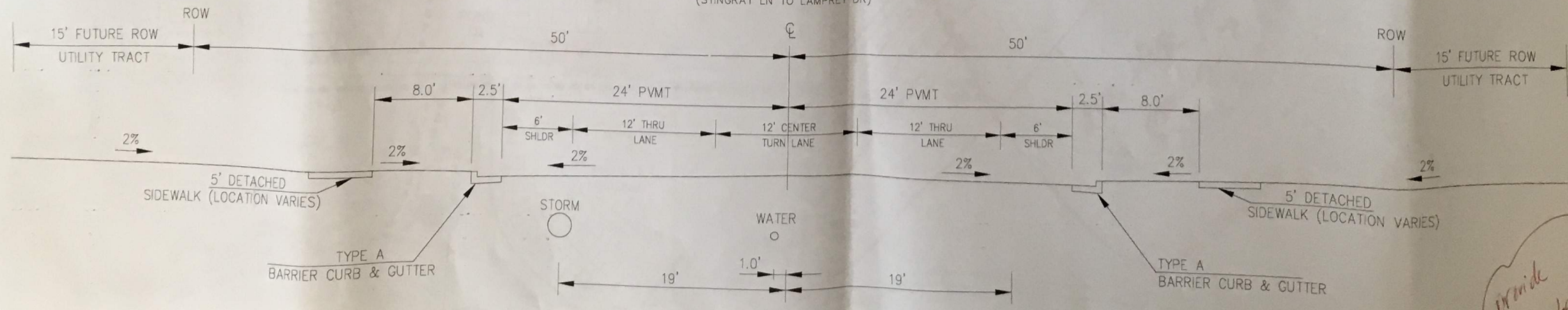
LAMPREY DRIVE
TRAPPE DRIVE

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



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

Provide 72' Lorson Blvd section w/ turn lane

CORE ENGINEERING GROUP
15004 1ST AVE S
DENVER, CO 80232
PH 719.270.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@coreeng.com

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

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

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

OVERLOT EARLY SITE GRADING TYPICAL ROADWAY SECTIONS

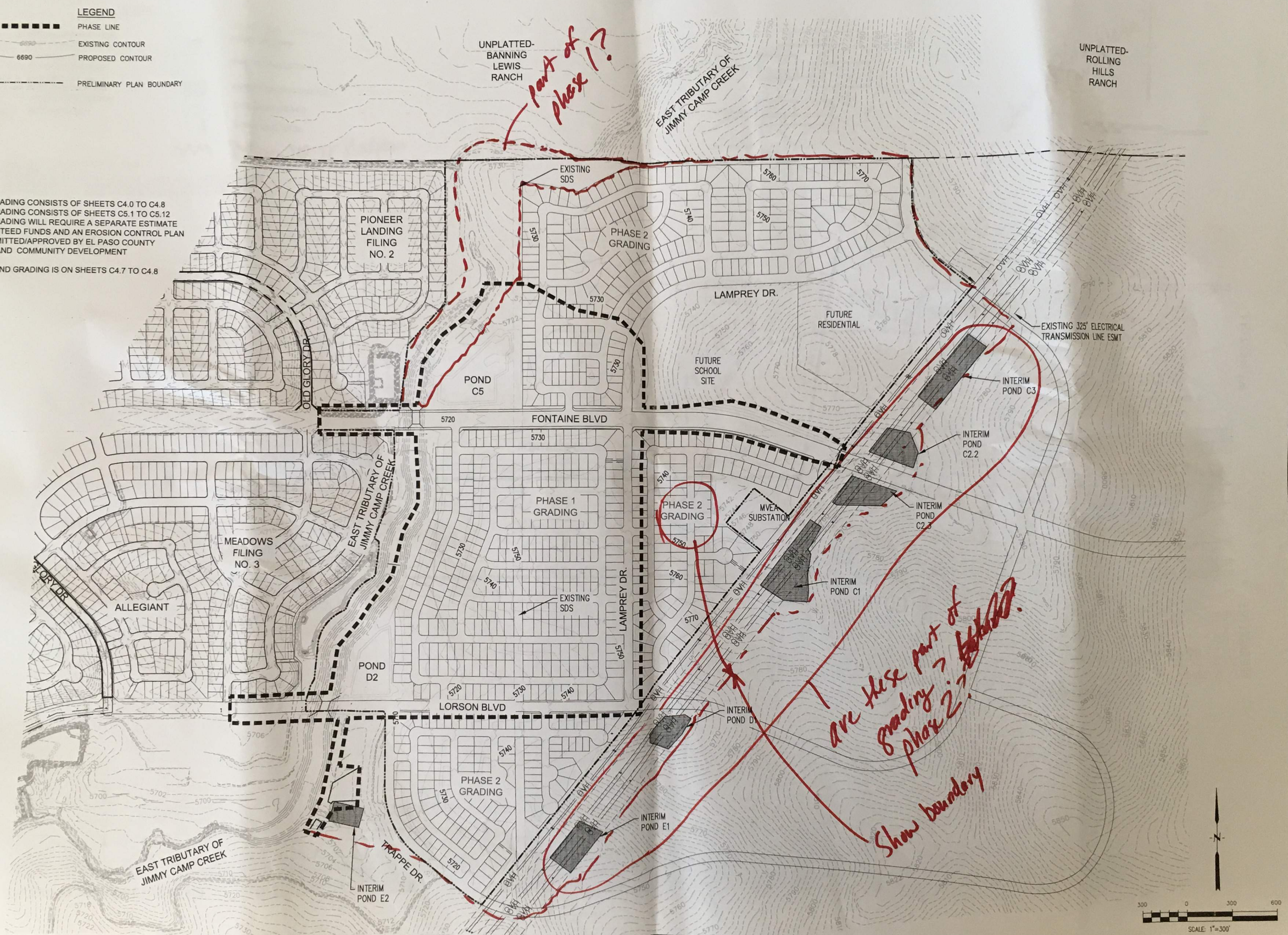
DATE: **JUNE 30, 2017**
PROJECT NO: **100.040**
SHEET NUMBER: **C0.3**

LEGEND

- PHASE LINE
- - - - - 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



CORE ENGINEERING GROUP
 15004 1ST AVENUE S.
 BURNSVILLE, MN 55308
 CONTACT: RICHARD L. SPANGLER, P.E.
 EMAIL: rich@coreg.com

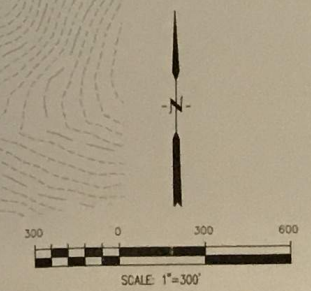
LORSON ILLC
 712 MARKET COLOREDADO BOULEVARD SUITE 101
 COLORADO SPRINGS, COLORADO 80903 (719) 633-3000
 CONTACT: LEFT MARK

DATE	
DESCRIPTION	
NO.	

DRAWN: L.A.
DESIGNED: LAB
CHECKED: RLS

**OVERALL EARLY OVERLOT GRADING
 LORSON RANCH EAST**

DATE:	JUNE 30, 2017
PROJECT NO.:	100.040
SHEET NUMBER:	C0.4
TOTAL SHEETS:	27



LEGEND

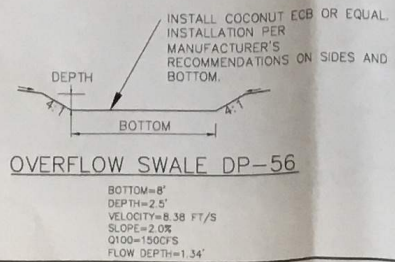
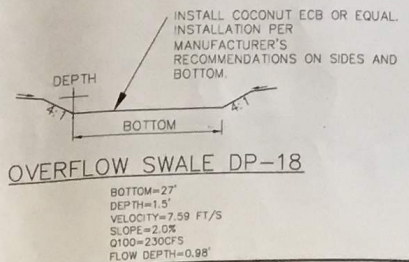
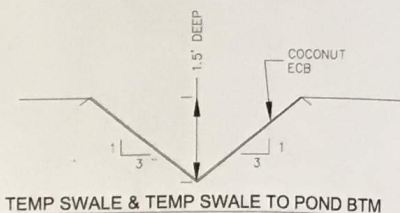
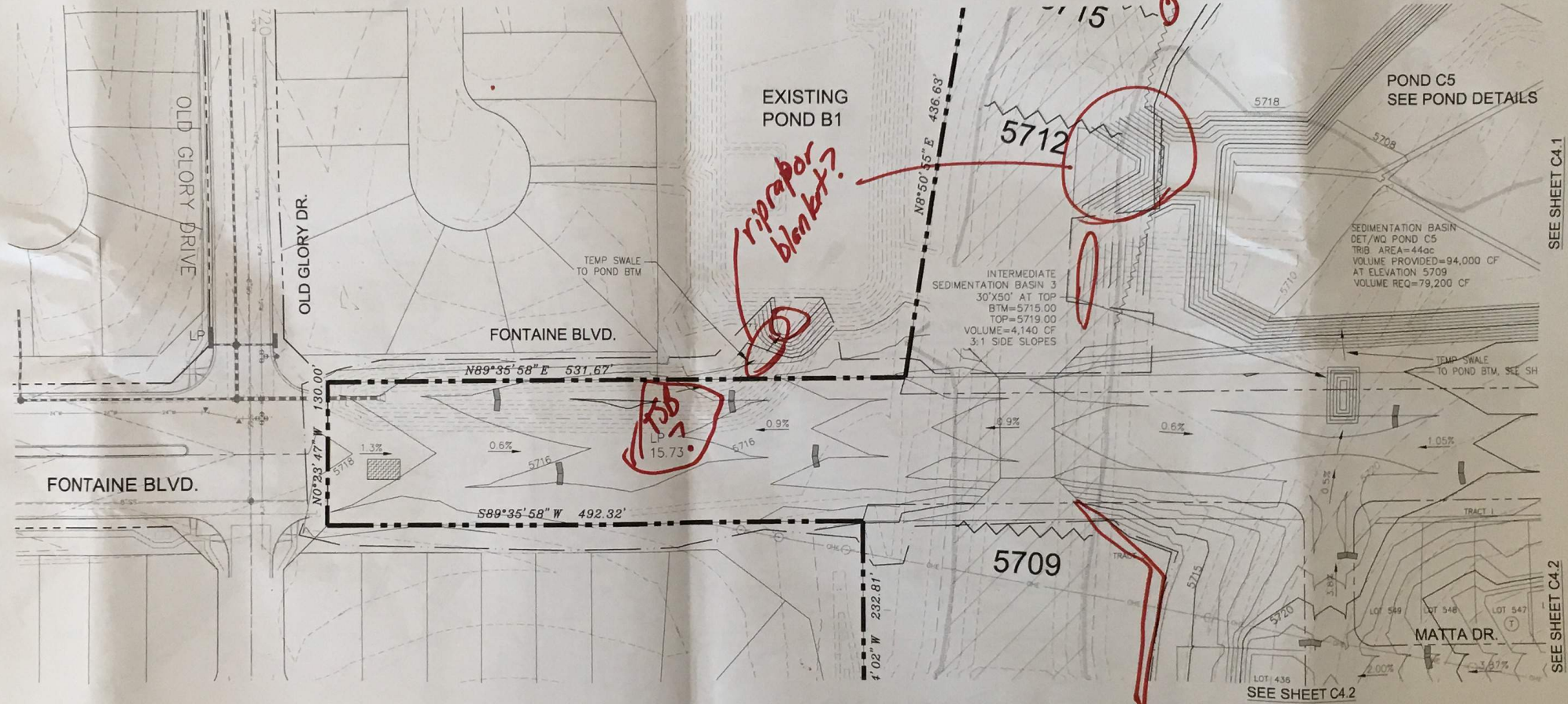
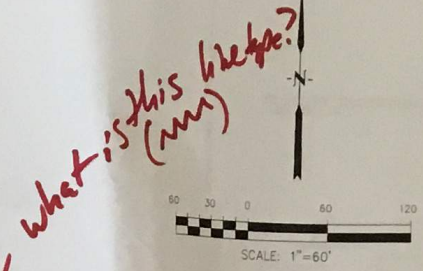
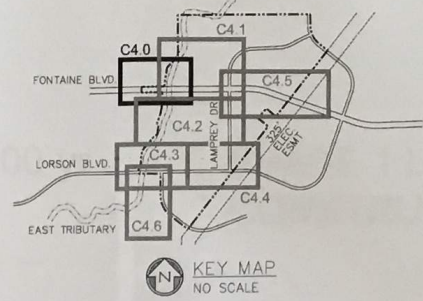
- 5721 - EXISTING MINOR CONTOUR
- 5720 - EXISTING MAJOR CONTOUR
- 5720 - PROPOSED CONTOUR
- SF - EXISTING STORM SEWER
- SF - PROPOSED SILT FENCE
- - - - - SUBDIVISION BOUNDARY
- - - - - LIMITS OF CONSTRUCTION
- (IP) - INLET PROTECTION

- [Symbol] - 100-YR FEMA FLOODPLAIN
- [Symbol] - STRAW BALE DAM
- [Symbol] - FEMA 100-YR FLOODWAY
- [Symbol] - VEHICLE TRACKING CONTROL
- [Symbol] - CHECK DAM (SD-3-62)
- [Symbol] - 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 4:1 SLOPE 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.

mm Prop. 100-yr floodplain



CORE ENGINEERING GROUP
15004 1ST AVE. S.
BURNSVILLE, MN 55336
CONTACT: (763) 291-1100
L. SCHINDLER, P.E.
EMAIL: Rch@cegi.com

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

DATE: JUNE 30, 2017
PROJECT NO.: 100.040
SHEET NUMBER: C4.0
TOTAL SHEETS: 27

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

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

LEGEND

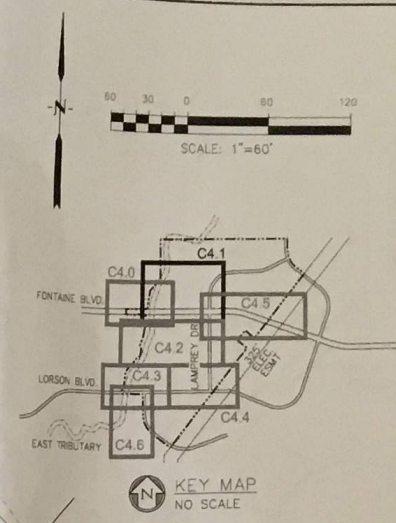
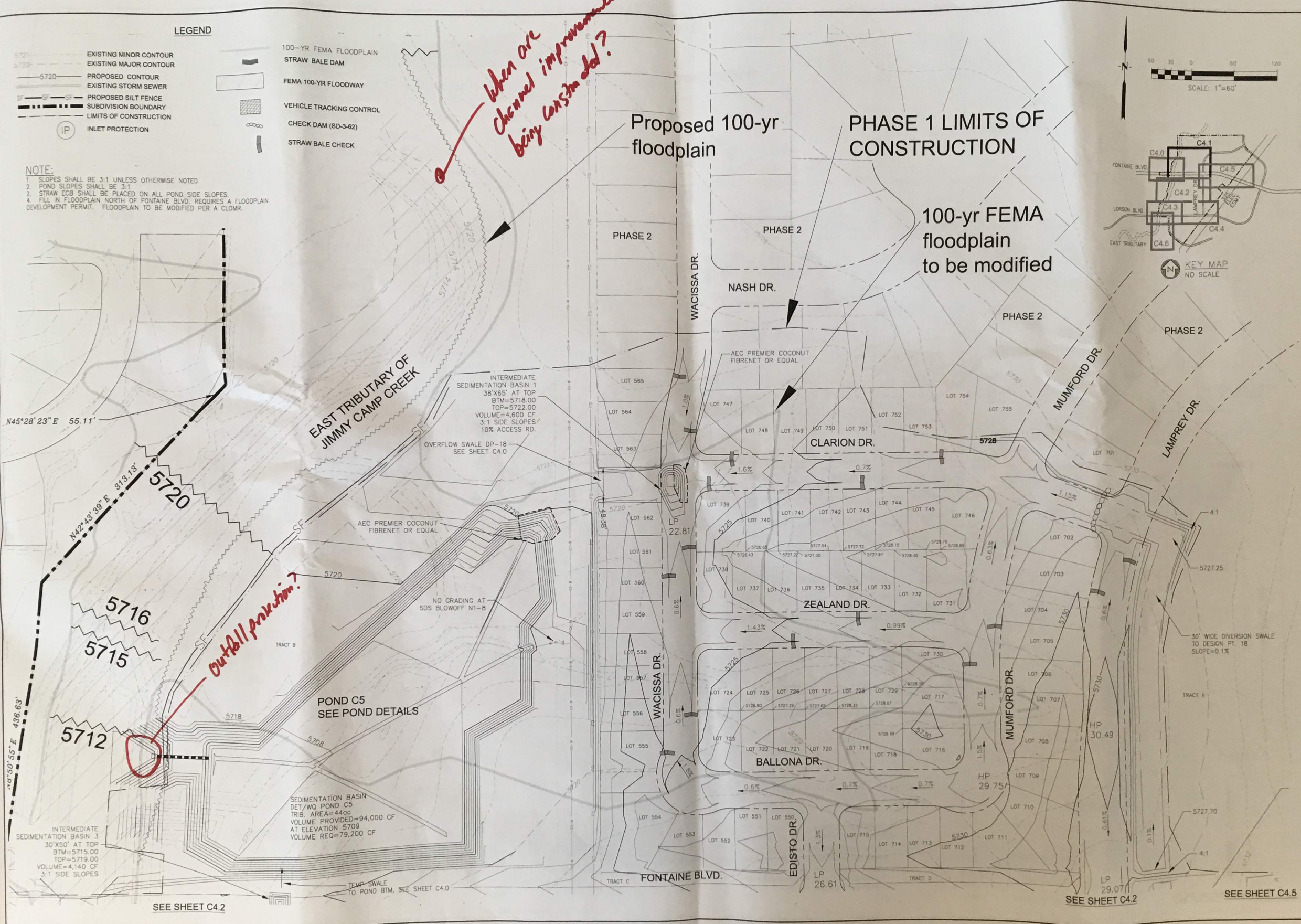
- 5720 --- EXISTING MINOR CONTOUR
- 5720 --- EXISTING MAJOR CONTOUR
- 5720 --- PROPOSED CONTOUR
- EXISTING STORM SEWER
- SF --- SF --- PROPOSED SILT FENCE
- SUBDIVISION BOUNDARY
- LIMITS OF CONSTRUCTION
- (IP) INLET PROTECTION
- 100-YR FEMA FLOODPLAIN
- STRAW BALE DAM
- FEMA 100-YR FLOODWAY
- VEHICLE TRACKING CONTROL
- CHECK DAM (SD-3-82)
- 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.
4. FILL IN FLOODPLAIN NORTH OF FONTAINE BLVD. REQUIRES A FLOODPLAIN DEVELOPMENT PERMIT. FLOODPLAIN TO BE MODIFIED PER A CLOMR.

When are channel improvements being considered?

Outfall protection?



CORE ENGINEERING GROUP
 15004 1ST AVE. S.
 BURTONVILLE, CO 80016
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceeg1.com

DATE: _____
 DESCRIPTION: _____
 PREPARED FOR: **LORSON RANCH EAST**
 212 N. WANSATCH AVE., SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 (719) 633-3200
 CONTACT: JEFF MARR

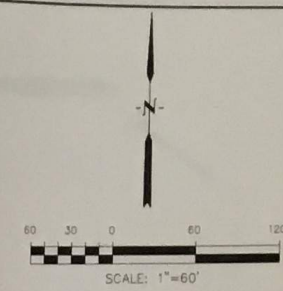
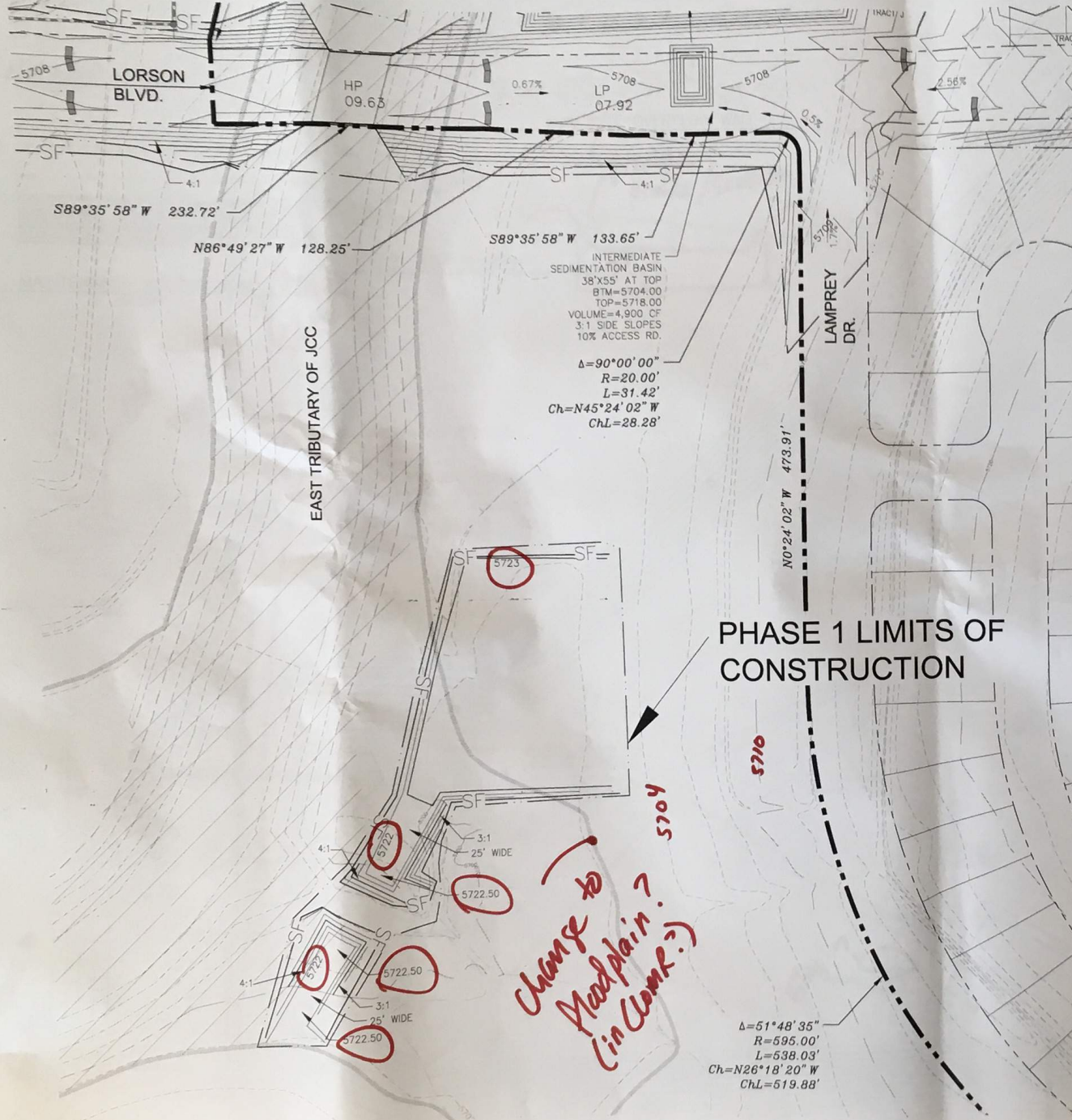
NO. _____
 DRAWN: RLB
 DESIGNED: RLB
 CHECKED: RLB

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

DATE: **JUNE 30, 2017**
 PROJECT NO.: **100.040**
 SHEET NUMBER: **C4.1**
 TOTAL SHEETS: **27**

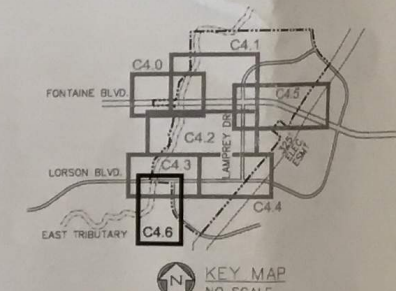
- NOTE:**
1. SLOPES SHALL BE 3:1 UNLESS OTHERWISE NOTED
 2. POND SLOPES SHALL BE 3:1
 3. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES.
 4. FILL IN FLOODPLAIN REQUIRES A FLOODPLAIN DEVELOPMENT PERMIT. FLOODPLAIN TO BE MODIFIED PER A CLOMR.

SEE SHEET C4.3



LEGEND

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



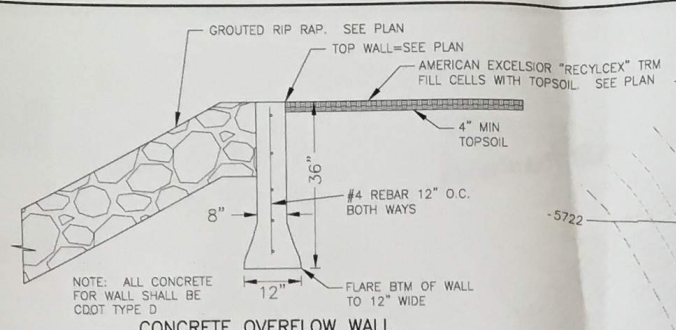
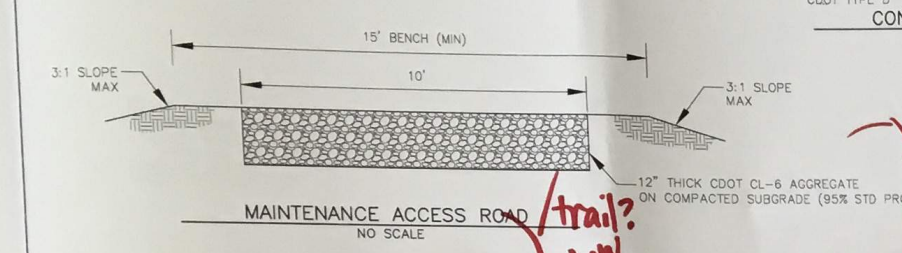
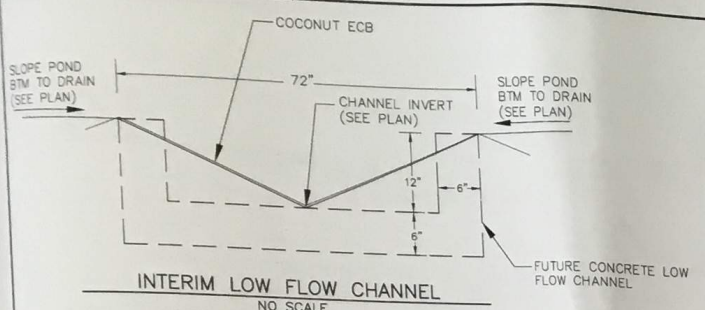
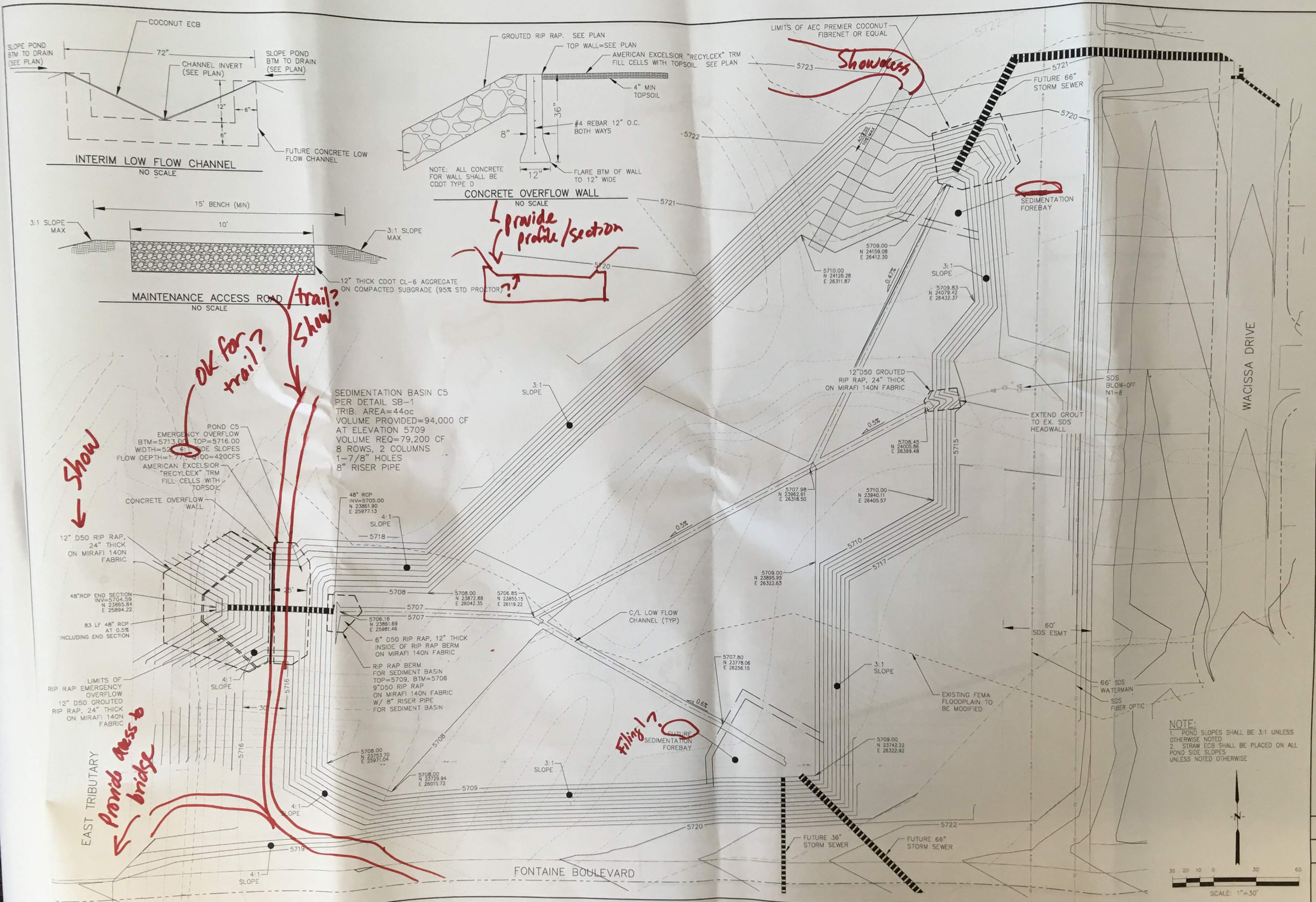
CORE ENGINEERING GROUP
13004 1ST AVE S
DENVER, CO 80201
PH: 719.576.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rlsch@cog1.com

DATE: _____
DESCRIPTION: _____
NO. _____
PROJECT: LORSON RANCH EAST
FOR: LORSON RANCH EAST
212 N WAGSATCH AVE., SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: GUY BARK
PREPARED FOR: LORSON, LLC

DRAWN:	RLS
DESIGNED:	RLS
CHECKED:	RLS

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

DATE:	JUNE 30, 2017
PROJECT NO.:	100.040
SHEET NUMBER:	C4.6
TOTAL SHEETS:	27



SEDIMENTATION BASIN C5
 PER DETAIL SB-1
 TRIB. AREA=44ac
 VOLUME PROVIDED=94,000 CF
 AT ELEVATION 5709
 VOLUME REQ=79,200 CF
 8 ROWS, 2 COLUMNS
 1-7/8" HOLES
 8" RISER PIPE

48" RCP
 INV=5705.00
 N 23861.90
 E 25977.13
 4-1
 SLOPE
 5718

EAST TRIBUTARY
 Provide access to bridge

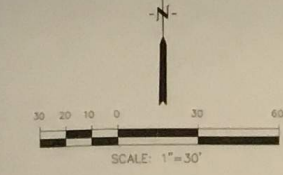
provide profile/section
 ?

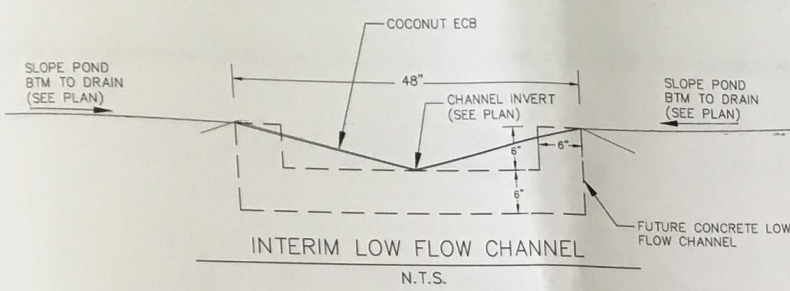
Show access

OK for trail?
 trail?
 Show

Filing?

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





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

provide access to bridge

*provide profile section
 Show manit access/trail*

Permanent TRM

WQ/DETENTION POND D2

SEDIMENTATION BASIN D2
 PER DETAIL SB-1
 TRIB. AREA=42ac
 VOLUME PROVIDED=90,000 CF
 AT ELEVATION 5698
 VOLUME REQ.=75,600 CF
 8 ROWS, 2 COLUMNS
 1-7/8" HOLES
 8" RISER PIPE

AMERICAN EXCELSIOR "RECYCLOC" TRM FILL CELLS WITH TOPSOIL
 POND D2 EMERGENCY OVERFLOW
 BTM=5702.00, TOP=5705.00
 WIDTH=30', 4:1 SIDE SLOPES
 FLOW DEPTH=1.96', Q100=307CFS

48" RCP END SECTION
 5694.06
 N 21818.09
 E 23303.28

92LF OF 48" RCP AT 0.5% INCLUDING END SECTION

12" D50 RIP RAP, 24" THICK ON MIRAFI 140N FABRIC

LIMITS OF RIP RAP EMERGENCY OVERFLOW
 12" D50 GROUTED RIP RAP, 24" THICK ON MIRAFI 140N FABRIC

RIP RAP BERM FOR SEDIMENT BASIN
 TOP=5698, BTM=5695.4
 9" D50 RIP RAP ON MIRAFI 140N FABRIC W/ 8" RISER PIPE FOR SEDIMENT BASIN

POND ACCESS ROAD, SEE SHEET C4.7

5695.40
 N 21801.85
 E 25398.63

C/L LOW FLOW CHANNEL

5694.52
 NW 48" RCP
 N 21802.54
 E 25393.47

6" D50 RIP RAP, 12" THICK INSIDE OF RIP RAP BERM ON MIRAFI 140N FABRIC

POND INVERT

5697.00
 N 21978.37
 E 25622.21

5697.00
 N 21857.70
 E 25607.24

5696.45
 N 21803.64
 E 25610.84

FUTURE SEDIMENTATION FOREBAY

5694.52
 N 21802.54
 E 25393.47

FUTURE 48" STORM SEWER

FUTURE 48" STORM SEWER

CORE ENGINEERING GROUP
 1530 S. BURNSVILLE AVENUE, SUITE 300
 PH: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@cegl.com

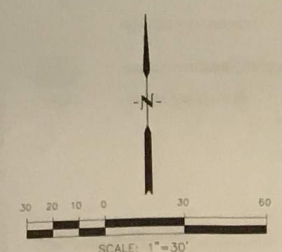
DATE: _____
 DESCRIPTION: _____
 NO. _____

PREPARED FOR: **LORSON RANCH EAST**
 212 N. WASHINGTON AVE. SUITE 201
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

FULL SPECTRUM DETENTION POND D2
LORSON RANCH EAST

DATE: **JUNE 30, 2017**
 PROJECT NO: **100.040**
 SHEET NUMBER: **C4.8**
 TOTAL SHEETS: **27**



UNPLATTED LAND - BANNING LEWIS RANCH

N89°32'00"E 2654.23'

EAST TRIBUTARY OF JIMMY CAMP CREEK

NORTH PROPERTY LINE SWALE LINE WITH AMERICAN EXCELSIOR "RECYCLE TRM" FILLED WITH SOIL FOR LAST 130' ENTERING THE EAST TRIBUTARY

NORTH PROPERTY LINE SWALE SEE DETAIL SHEET C5.2

CORE ENGINEERING GROUP
 15004 1ST AVE S
 BURNSVILLE, MN 55306
 PH: 763.270.1100
 FAX: 763.270.1100
 EMAIL: Rich@cegi.com

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

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

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

DATE: JUNE 30, 2017
 PROJECT NO: 100.040
 SHEET NUMBER: C5.1
 TOTAL SHEETS: 27

Proposed 100-yr floodplain

check dam? (what is flow right here?)

100-yr FEMA floodplain to be modified

Phase 1?

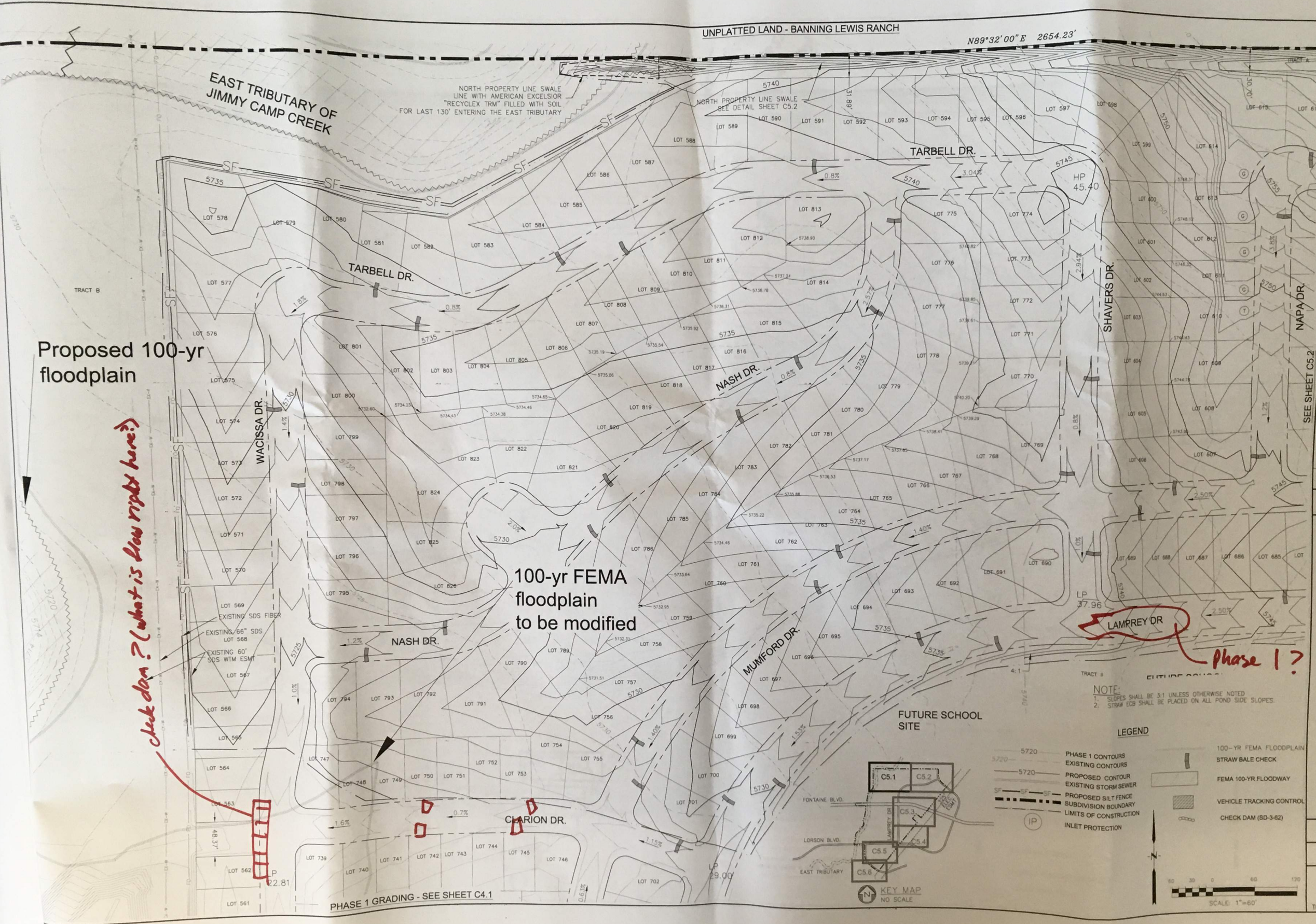
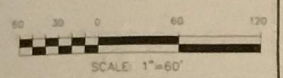
PHASE 1 GRADING - SEE SHEET C4.1

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

LEGEND

- 5720 PHASE 1 CONTOURS
- 5720 EXISTING CONTOURS
- PROPOSED CONTOUR
- EXISTING STORM SEWER
- SF PROPOSED SILT FENCE
- SUBDIVISION BOUNDARY
- LIMITS OF CONSTRUCTION
- IP INLET PROTECTION
- 100-YR FEMA FLOODPLAIN
- STRAW BALE CHECK
- FEMA 100-YR FLOODWAY
- VEHICLE TRACKING CONTROL
- CHECK DAM (SD-3-62)

KEY MAP
NO SCALE



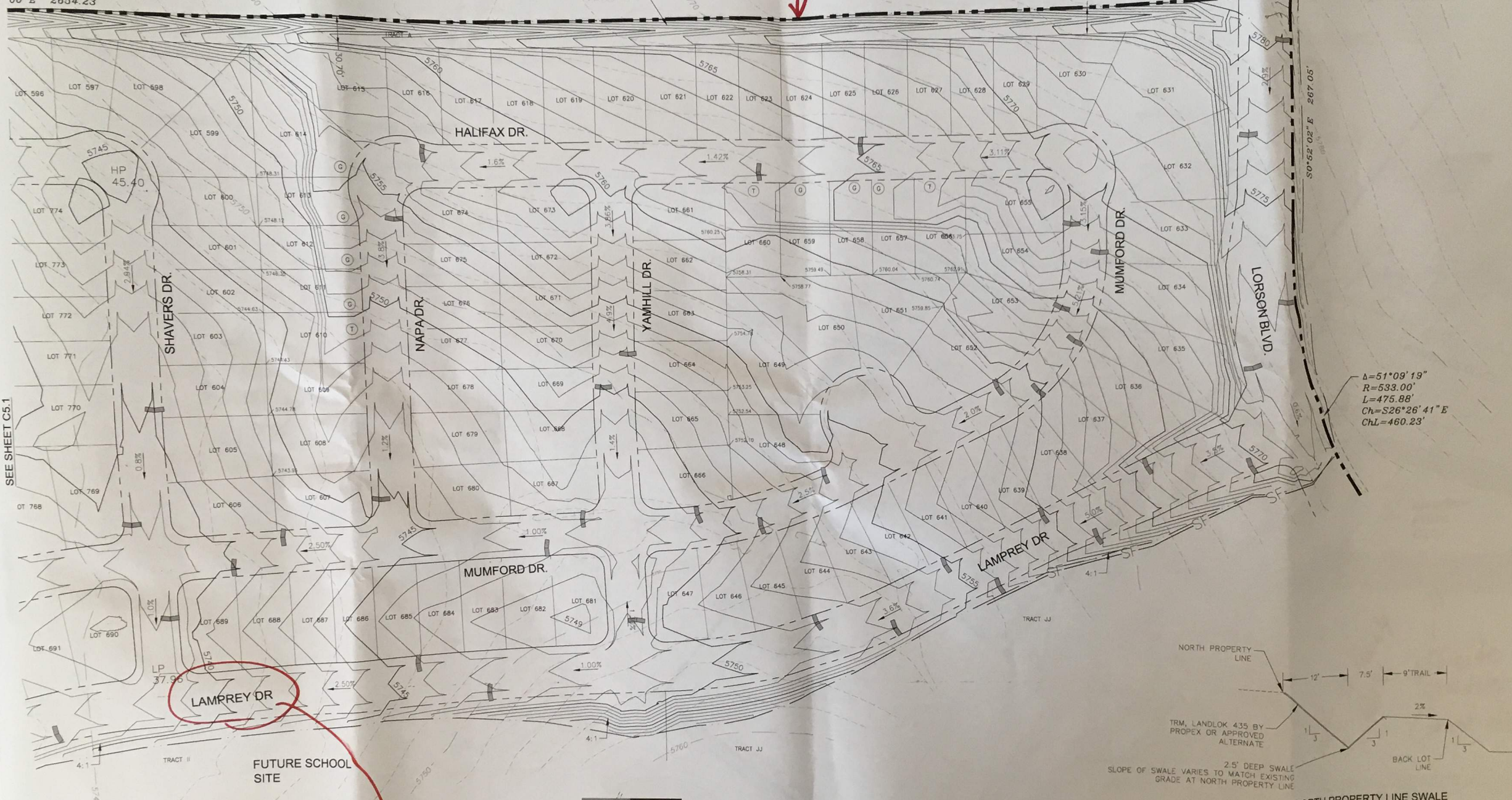
UNPLATTED LAND - BANNING LEWIS RANCH

offsite const. limit?

00° E 2654.23'

NORTH PROPERTY LINE SWALE
SEE DETAIL

N89°32'00" E 32.00'

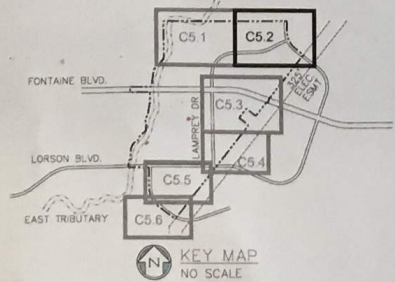


$\Delta=51^{\circ}09'19''$
 $R=533.00'$
 $L=475.88'$
 $Ch=L=26^{\circ}26'41'' E$
 $ChL=460.23'$

SEE SHEET C5.1

FUTURE SCHOOL SITE

Phase 1?



LEGEND

- 5720 PHASE 1 CONTOUR
- 5720 EXISTING CONTOUR
- 5720 PROPOSED CONTOUR
- SF — SF — SF PROPOSED SILT FENCE
- SUBDIVISION BOUNDARY
- LIMITS OF CONSTRUCTION
- 100-YR FEMA FLOODPLAIN
- STRAW BALE CHECK
- VEHICLE TRACKING CONTROL
- CHECK DAM (SD-3-82)

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

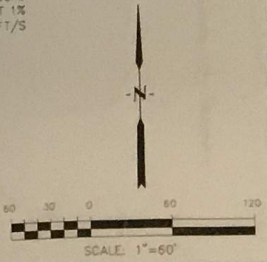
CORE ENGINEERING GROUP
 15004 1ST AVE. S.
 BURBANK, MN 55006
 PH: 763.250.4000
 CONTACT: RICHARD L. SCANDLER, P.E.
 EMAIL: Rich@ce1.com

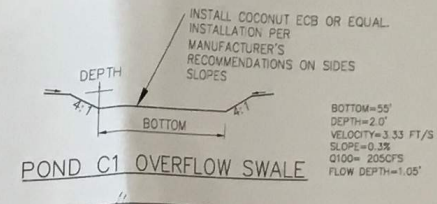
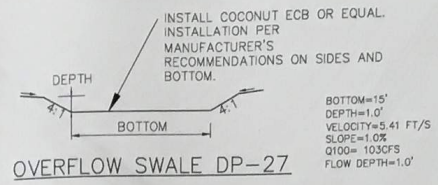
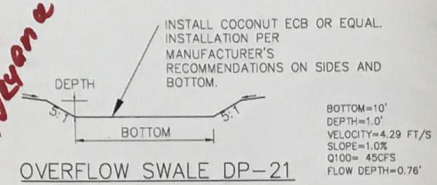
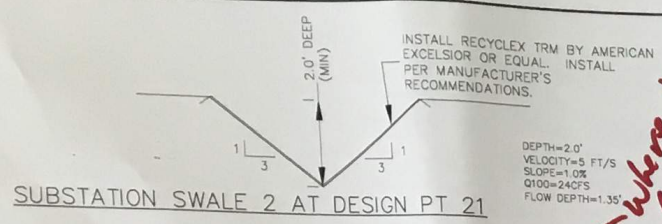
DATE: _____
 DESCRIPTION: _____
 NO: _____
 PREPARED FOR: **LORSON, LLC**
 212 N. WALSATCH AVE., SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

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

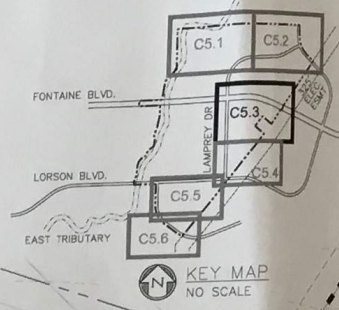
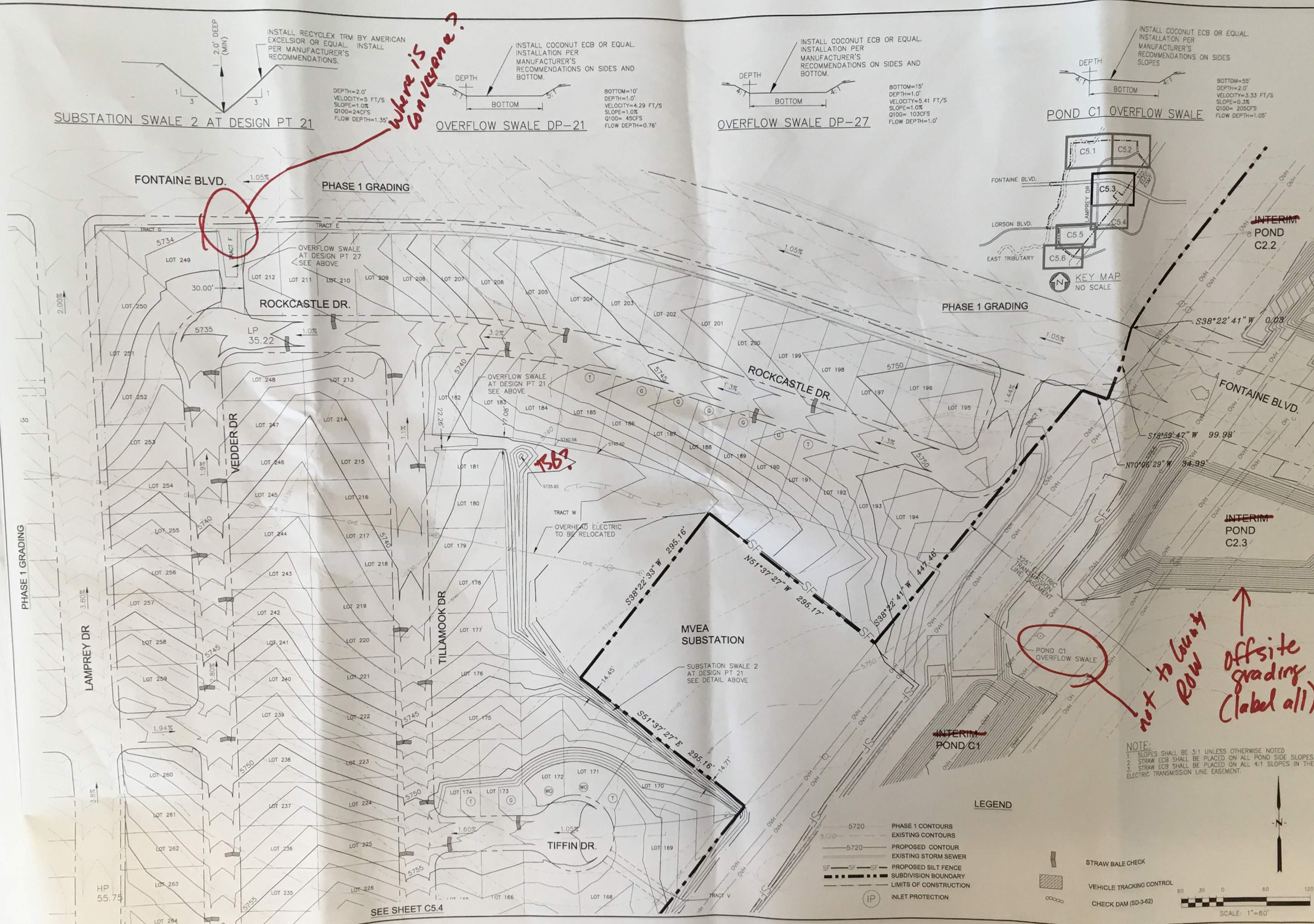
DATE: JUNE 30, 2017
 PROJECT NO: 100.040
 SHEET NUMBER: C5.2
 TOTAL SHEETS: 27





Where is boundary?

*not to County Row
offsite grading (label all)*



LEGEND

- 5720 PHASE 1 CONTOURS
- 5720 EXISTING CONTOURS
- 5720 PROPOSED CONTOUR
- EXISTING STORM SEWER
- SF PROPOSED SILT FENCE
- SUBDIVISION BOUNDARY
- LIMITS OF CONSTRUCTION
- IP INLET PROTECTION
- STRAW BALE CHECK
- VEHICLE TRACKING CONTROL
- CHECK DAM (SD-3-62)

SCALE: 1"=60'

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.

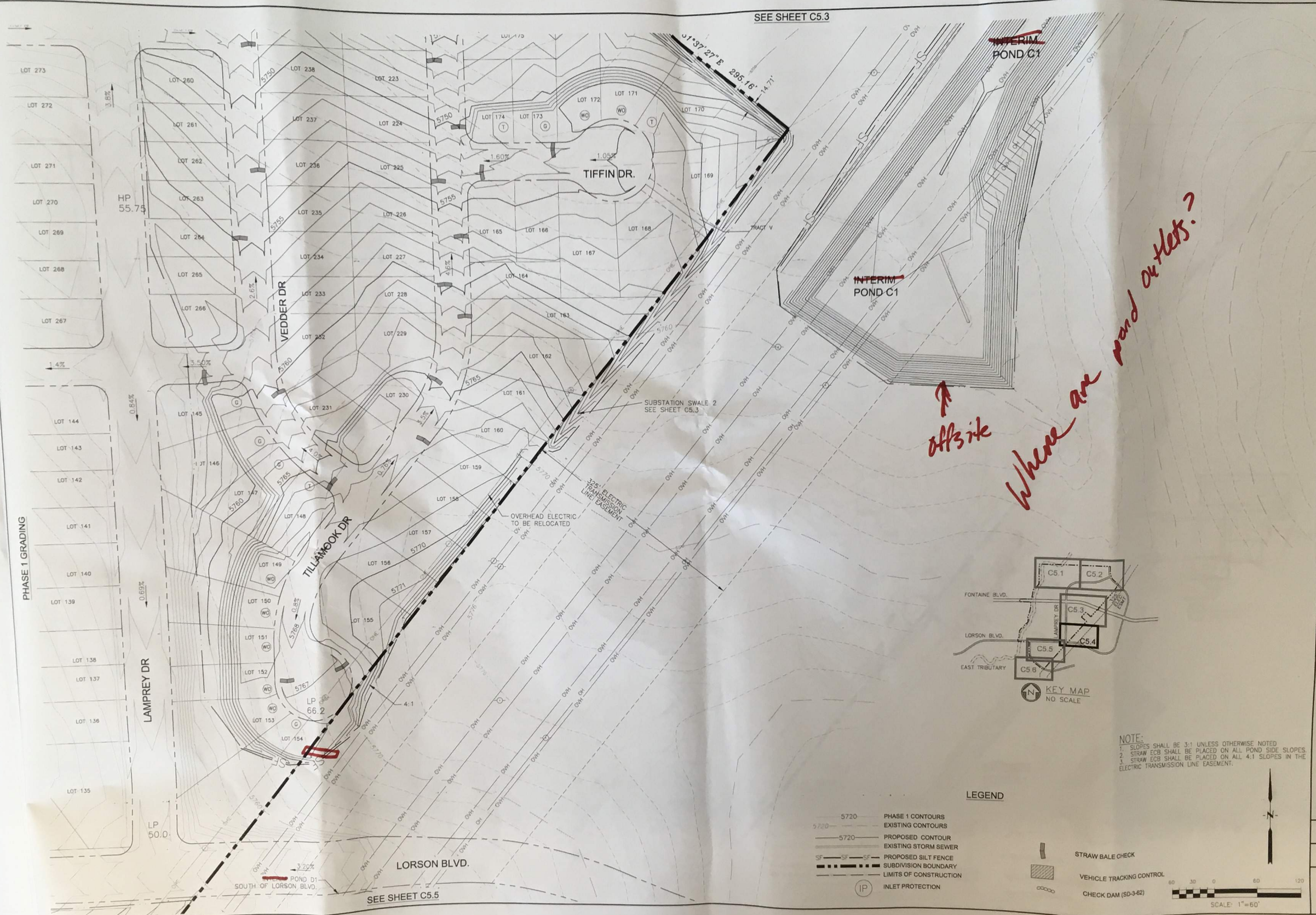
CORE ENGINEERING GROUP
 15004 1ST AVE. S.
 FRIEDLAND, MN 55306
 PH: 763-251-1111
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@cegi.com

LORSON RANCH EAST
 212 N. W. 1/4 SECTION 30, T10N, R10E
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

LORSON RANCH EAST
 PREPARED FOR:
 LORSON, LLC
 212 N. W. 1/4 SECTION 30, T10N, R10E
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

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

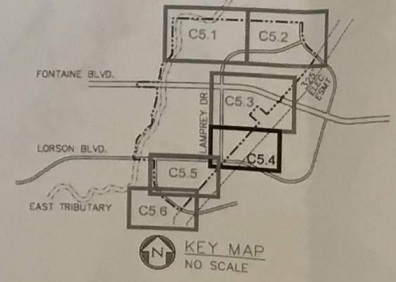
DATE: JUNE 30, 2017
 PROJECT NO: 100.040
 SHEET NUMBER: C5.3
 TOTAL SHEETS: 27



SEE SHEET C5.3

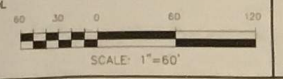
offsite

Where are pond outlets?

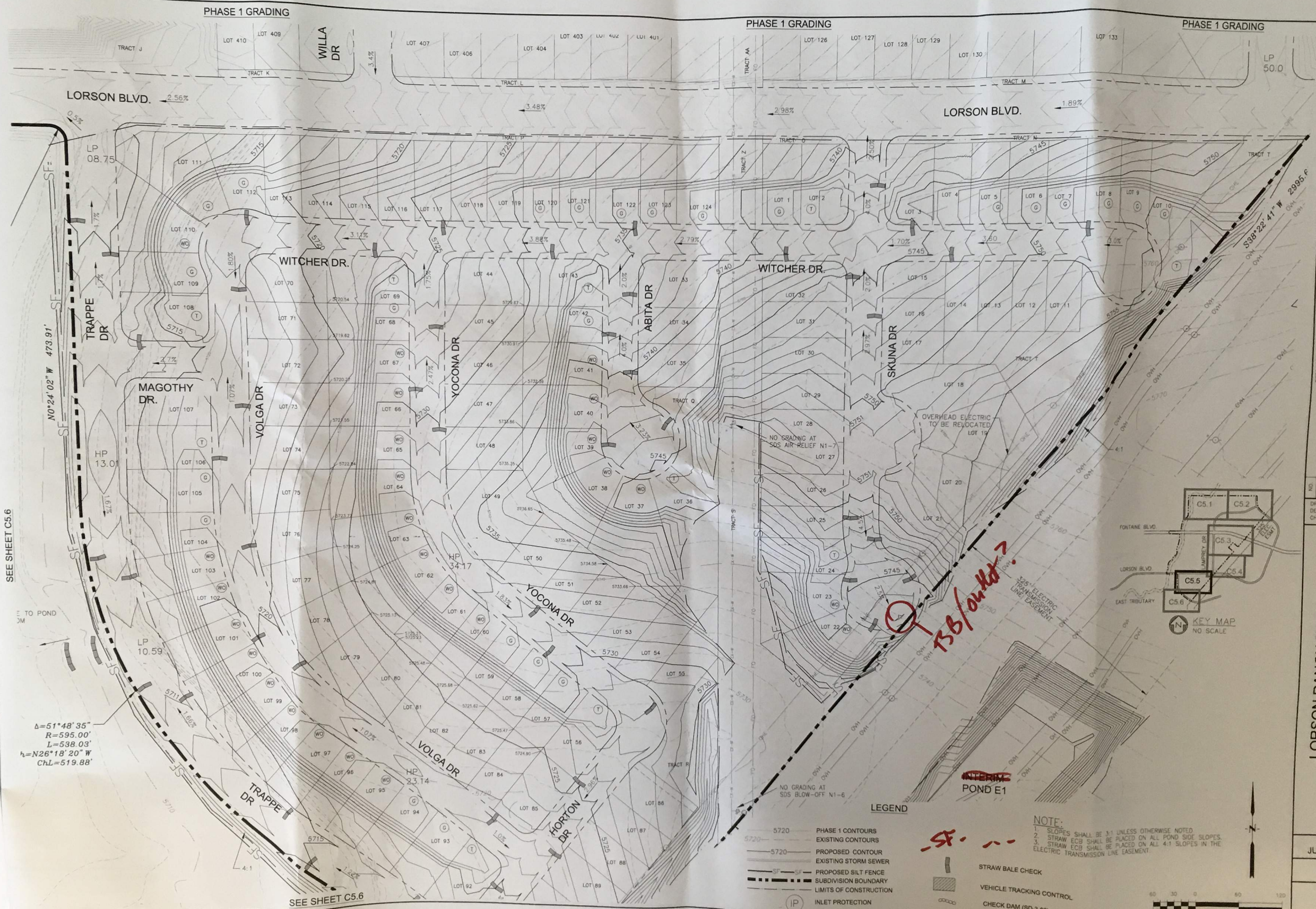


NOTE:
 1. SLOPES SHALL BE 3:1 UNLESS OTHERWISE NOTED
 2. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES
 3. STRAW ECB SHALL BE PLACED ON ALL 4:1 SLOPES IN THE ELECTRIC TRANSMISSION LINE EASEMENT.

- LEGEND**
- 5720 PHASE 1 CONTOURS
 - 5720 EXISTING CONTOURS
 - 5720 PROPOSED CONTOUR
 - — — — — EXISTING STORM SEWER
 - SF — SF — SF PROPOSED SILT FENCE
 - — — — — SUBDIVISION BOUNDARY
 - — — — — LIMITS OF CONSTRUCTION
 - (P) INLET PROTECTION
 - STRAW BALE CHECK
 - VEHICLE TRACKING CONTROL
 - CHECK DAM (SD-3-62)



CORE ENGINEERING GROUP							
15004 1ST AVE. S. FORT COLLINS, CO 80526 PH: 970.226.1100 CONTACT: RICHARD L. SCHINDLER, P.E. EMAIL: Rich@ceeg1.com							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">NO.</th> <th style="width: 80%;">DESCRIPTION</th> <th style="width: 10%;">DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DESCRIPTION	DATE				<p style="text-align: center;">LORSON RANCH EAST PHASE 2 OVERLOT EARLY GRADING AND E.C. PLAN</p> <p style="text-align: center;">PREPARED FOR: LORSON, LLC 212 N. WASHINGTON AVE. SUITE 101 COLORADO SPRINGS, COLORADO 80903 (719) 635-3200 CONTACT: JEFF MARK</p>
NO.	DESCRIPTION	DATE					
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">DRAWN: RLS</td> <td style="width: 30%;">DESIGNED: RLS</td> <td style="width: 30%;">CHECKED: RLS</td> </tr> </table>	DRAWN: RLS	DESIGNED: RLS	CHECKED: RLS	<p style="text-align: center;">PHASE 1 GRADING</p>			
DRAWN: RLS	DESIGNED: RLS	CHECKED: RLS					
<p>DATE: JUNE 30, 2017</p> <p>PROJECT NO.: 100.040</p> <p>SHEET NUMBER: C5.4</p> <p>TOTAL SHEETS: 27</p>							



SEE SHEET C5.6

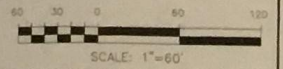
SEE SHEET C5.6

$\Delta = 51^\circ 48' 35''$
 $R = 595.00'$
 $L = 538.03'$
 $\Delta = N26^\circ 18' 20'' W$
 $ChL = 519.88'$

- LEGEND**
- 5720 PHASE 1 CONTOURS
 - EXISTING CONTOURS
 - PROPOSED CONTOUR
 - EXISTING STORM SEWER
 - PROPOSED SILT FENCE
 - SUBDIVISION BOUNDARY
 - LIMITS OF CONSTRUCTION
 - (IP) INLET PROTECTION
 - STRAW BALE CHECK
 - VEHICLE TRACKING CONTROL
 - CHECK DAM (SD-3-62)

NOTE:

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



CORE ENGINEERING GROUP
 15004 1ST AVE. S.
 PHOENIX, AZ 85036
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@cegi.com

PROJECT: **LORSON RANCH EAST**
 FONTANE BLVD. EAST TRIBUTARY
 EL PASO COUNTY, COLORADO

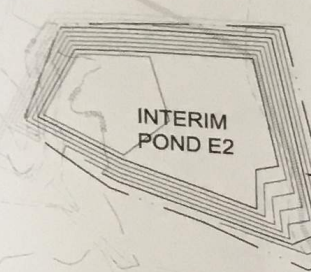
PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE. SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

NO.	DESCRIPTION	DATE

DRAWN:	RLB
DESIGNED:	RLB
CHECKED:	RLB

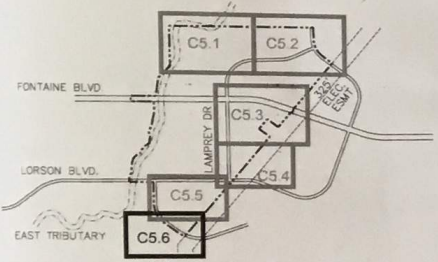
**LORSON RANCH EAST
 OVERLOT EARLY GRADING AND E.C. PLAN
 PHASE 2**

DATE:	JUNE 30, 2017
PROJECT NO.:	100.040
SHEET NUMBER:	C5.5
TOTAL SHEETS:	27

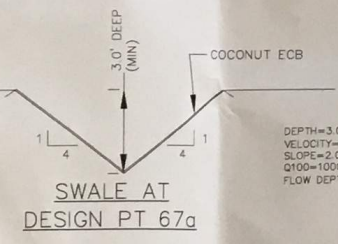


SEDIMENTATION BASIN
DET/WQ POND
TRIB. AREA=140c
VOLUME PROVIDED=31,045 CF
AT ELEVATION 5697.00
VOLUME REQ=25,200 CF

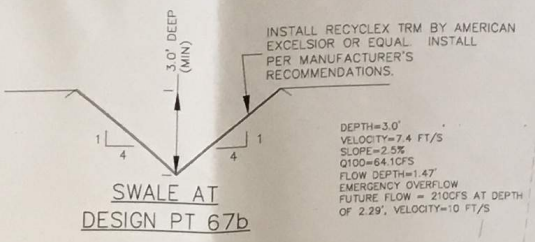
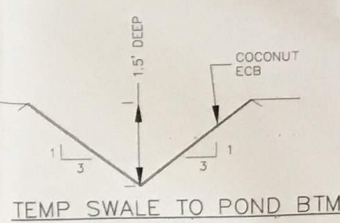
$\Delta=51^{\circ}48'35''$
 $R=595.00'$
 $L=638.03'$
 $Ch=N26^{\circ}18'20''W$
 $ChL=519.88'$



KEY MAP
NO SCALE



DEPTH=3.0'
VELOCITY=8.08 FT/S
SLOPE=2.0%
Q100=100CFS
FLOW DEPTH=1.88'



DEPTH=3.0'
VELOCITY=7.4 FT/S
SLOPE=2.5%
Q100=64.1CFS
FLOW DEPTH=1.47'
EMERGENCY OVERFLOW
FUTURE FLOW = 210CFS AT DEPTH
OF 2.29', VELOCITY=10 FT/S

- LEGEND**
- 5720 PHASE 1 CONTOURS
 - 5770 EXISTING CONTOURS
 - 5720 PROPOSED CONTOUR
 - EXISTING STORM SEWER
 - PROPOSED SILT FENCE
 - SUBDIVISION BOUNDARY
 - LIMITS OF CONSTRUCTION
 - INLET PROTECTION
 - STRAW BALE CHECK
 - VEHICLE TRACKING CONTROL
 - CHECK DAM (SD-3-62)

$\Delta=11^{\circ}45'40''$
 $R=780.00'$
 $L=160.11'$
 $Ch=N58^{\circ}05'27''W$
 $ChL=159.83'$

$N52^{\circ}12'37''W$ 365.17'

SEE SHEET C5.5

325' ELECTRIC TRANSMISSION LINE EASEMENT

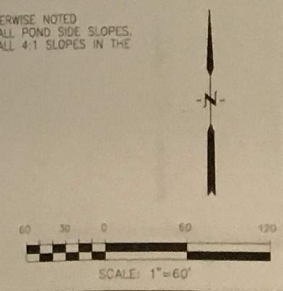
NO GRADING AT SDS BLOW-OFF N1-6

SWALE AT DESIGN PT 67b SEE DETAIL TO THE LEFT

SWALE AT DESIGN PT 67a SEE DETAIL TO THE LEFT

EXISTING SDS FIBER
EXISTING 66" SDS
EXISTING 60" SDS WTM ESMT

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.



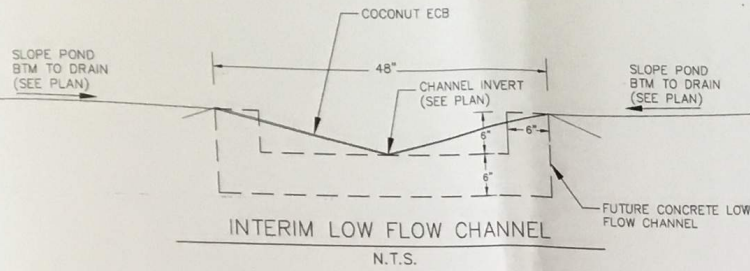
CORE ENGINEERING GROUP
1500A 1ST AVE. S.
DENVER, CO 80202
PH: 719.370.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cegi.com

DATE: _____
DESCRIPTION: _____
NO. _____
PROJECT: **LORSON RANCH EAST**
PREPARED FOR: **LORSON, LLC**
512 N. WASHINGTON AVE. SUITE 301
COLORADO SPRINGS, CO 80903
CONTACT: JEFF MARK

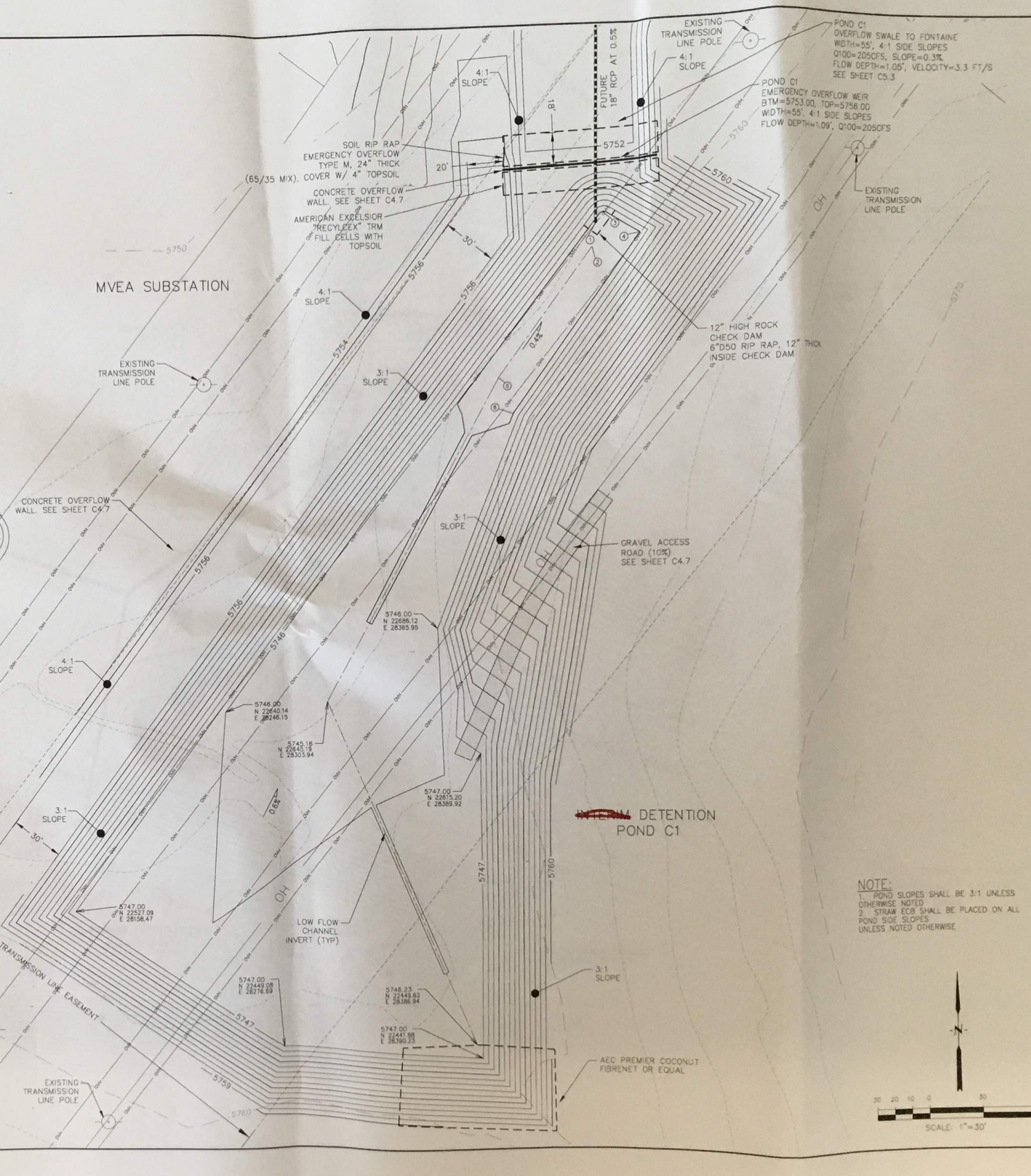
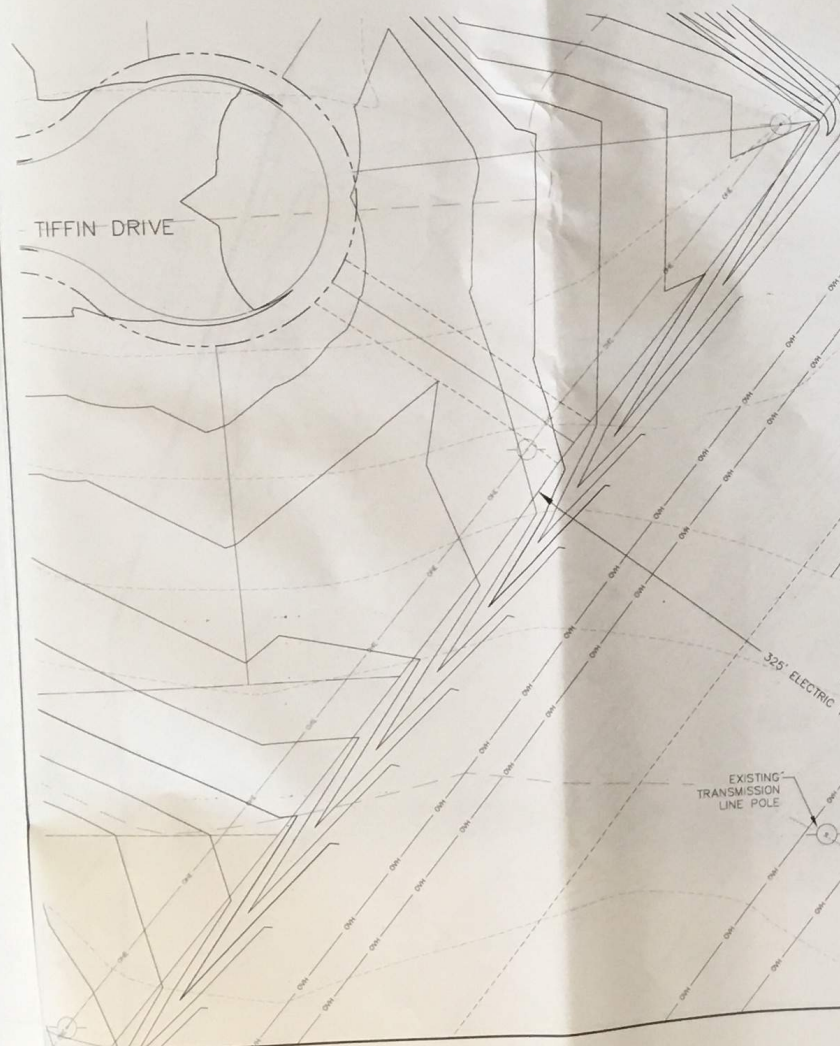
DRAWN:	RLB
DESIGNED:	RLB
CHECKED:	RLB

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

DATE:	JUNE 30, 2017
PROJECT NO.:	100.040
SHEET NUMBER:	C5.6
TOTAL SHEETS:	27



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
 BURNSVILLE, MN 55306
 PH: 719.570.1100
 FAX: 719.570.1100
 EMAIL: info@coreeng.com

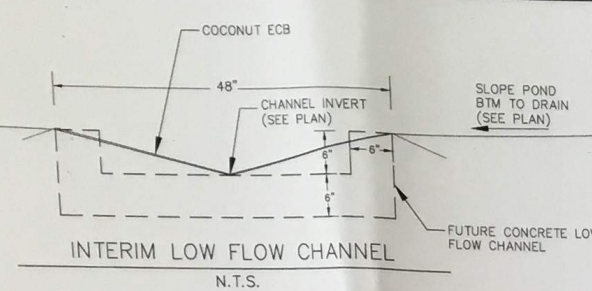
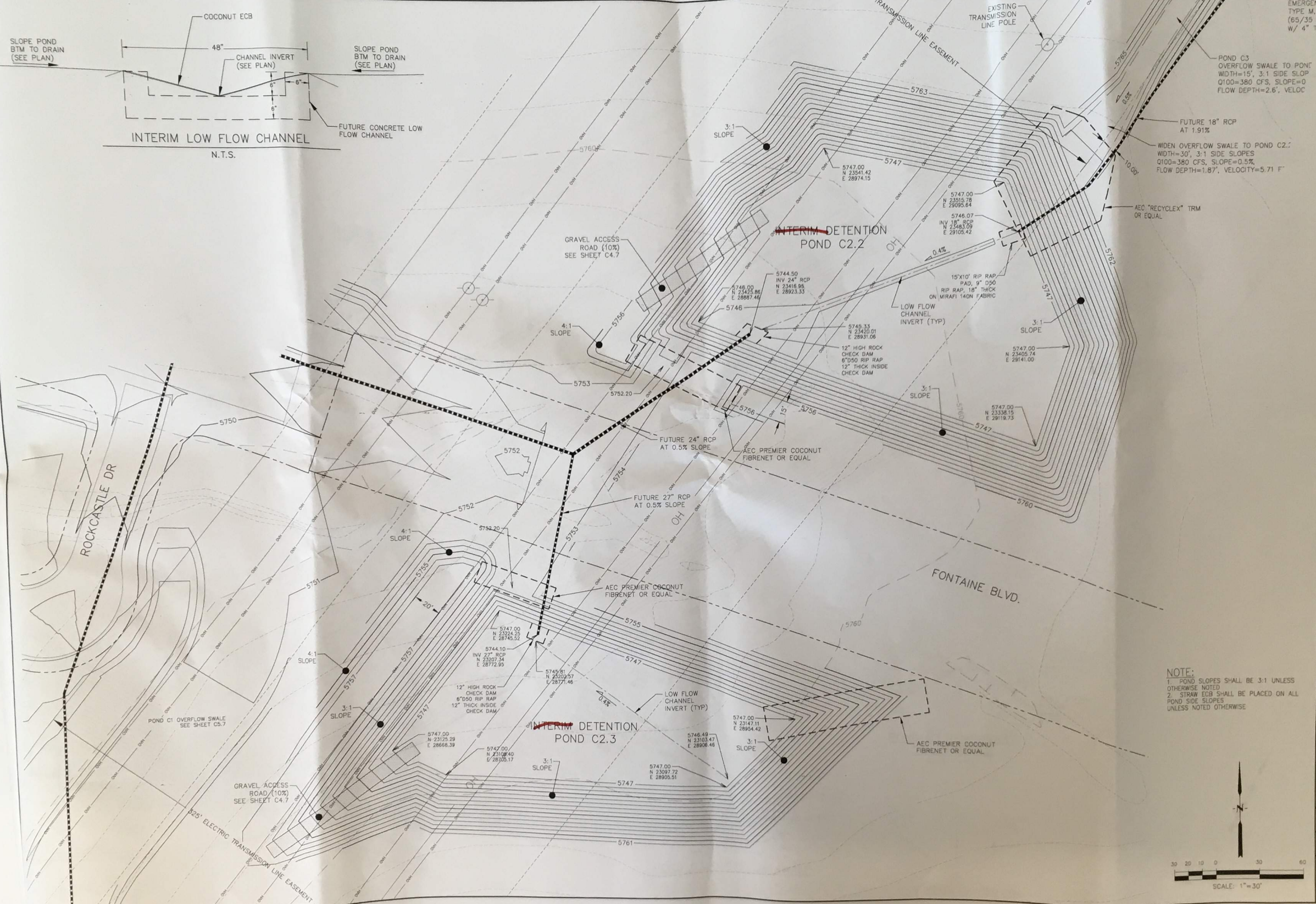
LORSON, LLC
 212 N. MANATCH AVE. SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

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

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

INTERIM-DETENTION POND C1 (PHASE 2)
LORSON RANCH EAST

DATE: JUNE 30, 2017
 PROJECT NO: 100.040
 SHEET NUMBER: C5.7
 TOTAL SHEETS: 27

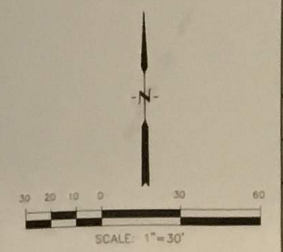


SOIL RIP RA EMERGENCY TYPE M, 2 (65/35 MI W/ 4" TC

POND C3 OVERFLOW SWALE TO POND 1 WIDTH=15', 3:1 SIDE SLOP Q100=380 CFS, SLOPE=0 FLOW DEPTH=2.6', VELOC

WIDEN OVERFLOW SWALE TO POND C2.1 WIDTH=30', 3:1 SIDE SLOPES Q100=380 CFS, SLOPE=0.5%, FLOW DEPTH=1.87', VELOCITY=5.71 F'

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.
 PHOENIX, AZ 85006
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@cegi.com

LORSON RANCH EAST

215 W. SPRING AVE. SUITE 301
 COLORADO SPRING, COLORADO 80903
 CONTACT: JEFF MARK

INTERIM DETENTION POND

POND C2.2 and C2.3 (PHASE 2)

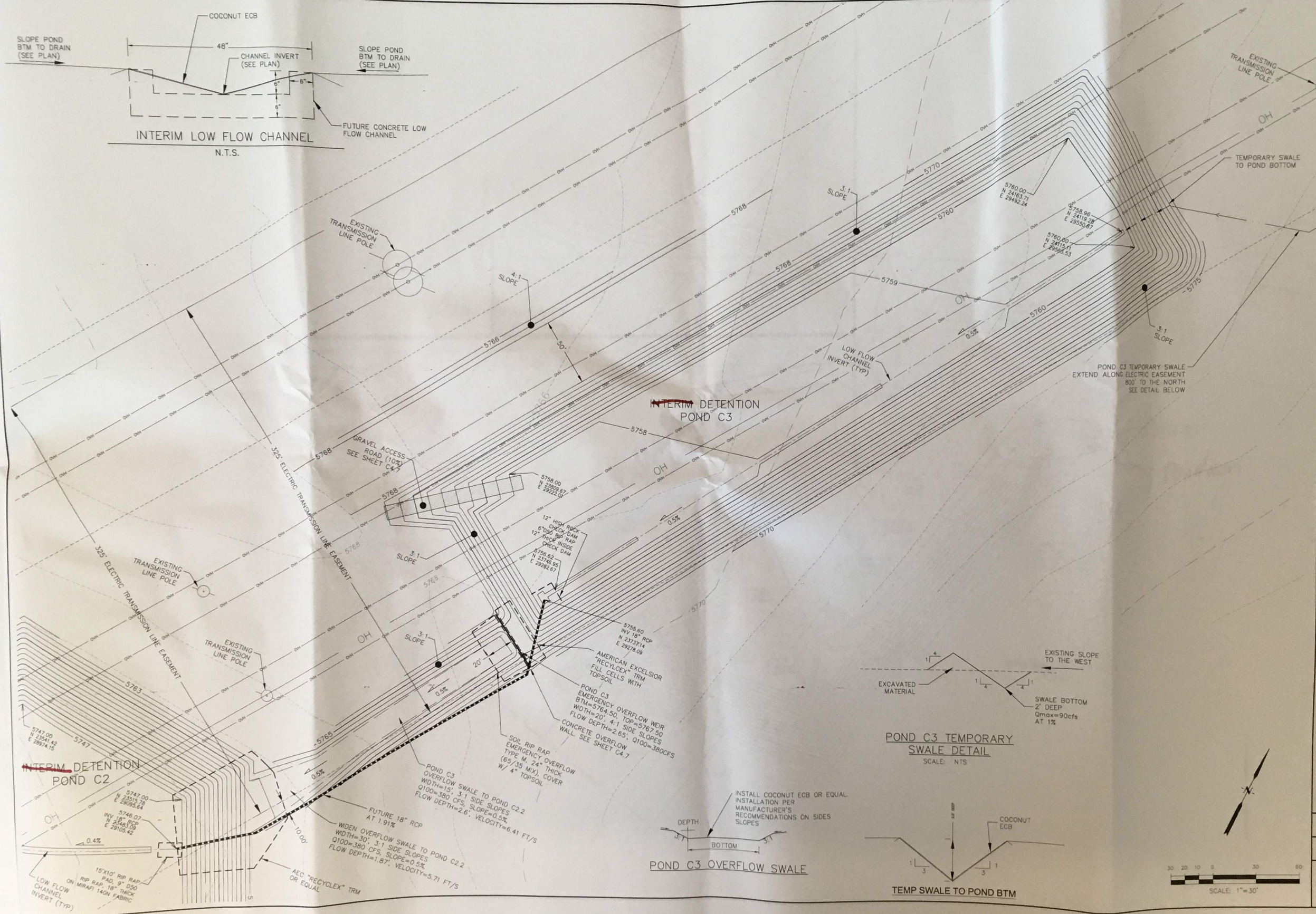
LORSON RANCH EAST

DATE: JUNE 30, 2017

PROJECT NO: 100.040

SHEET NUMBER: C5.8

TOTAL SHEETS: 27



CORE ENGINEERING GROUP
 15004 1ST AVE S
 BURBANK, MN 55306
 PH: 763-237-0000
 CONTACT: RICHARD L. SCHMIDLER, P.E.
 EMAIL: Rich@ceg1.com

DATE: _____
 DESCRIPTION: _____
 NO: _____

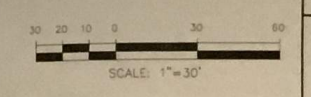
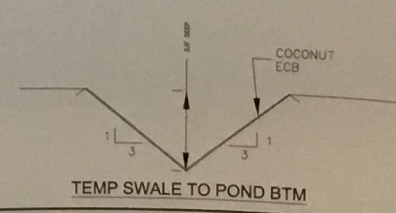
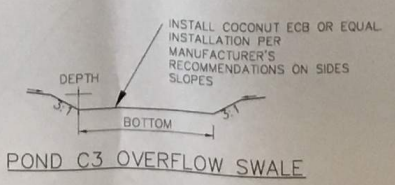
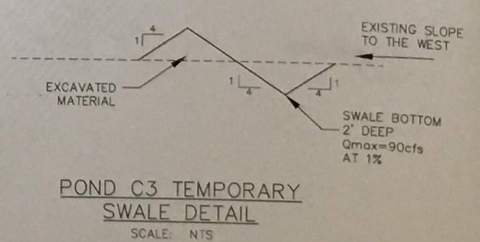
PREPARED FOR:
LORSON, LLC
 215 W. WASHCATCH AVE., SUITE 301
 COLORADO SPRING, COLORADO 80903
 CONTACT: JEFF MARK

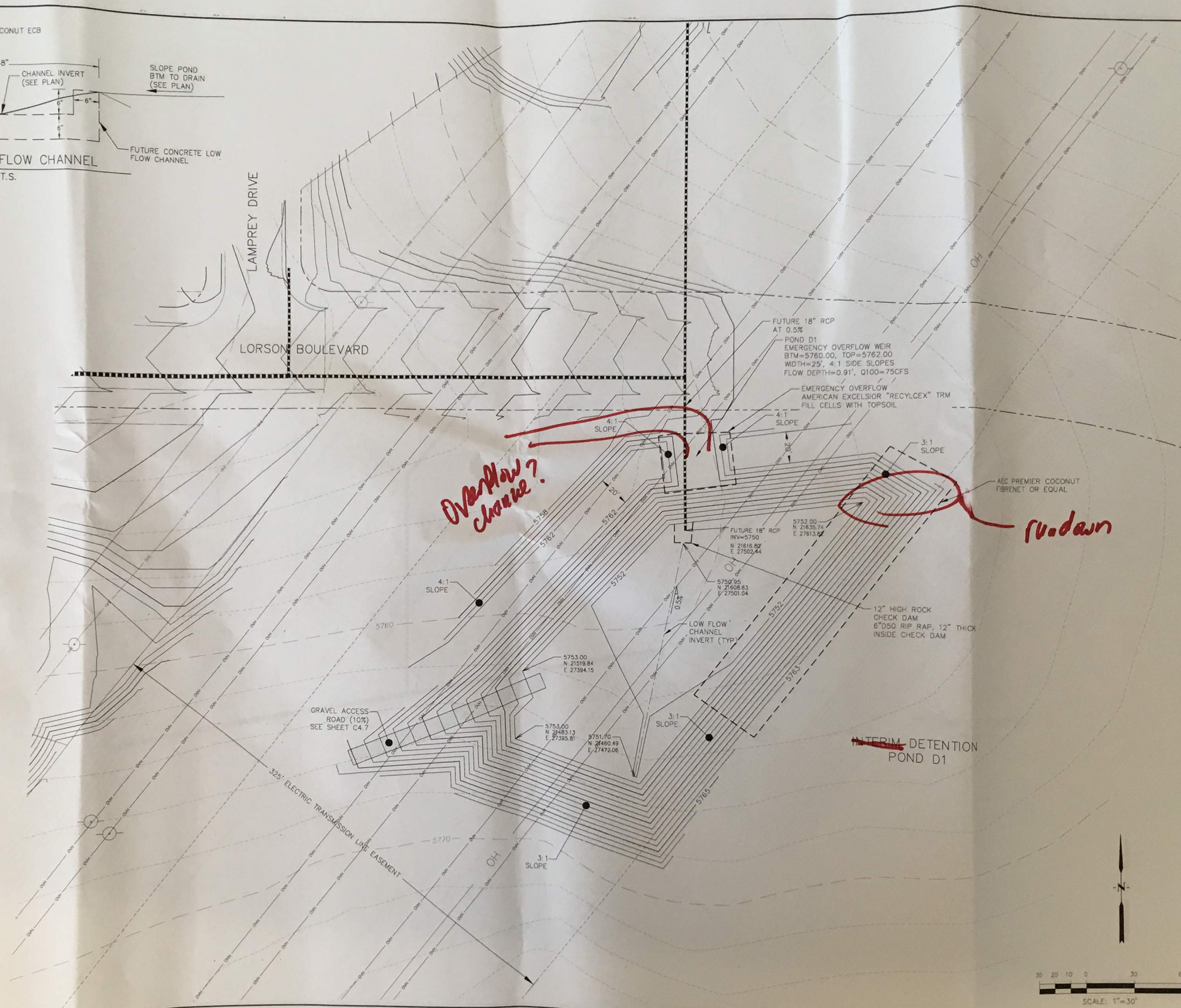
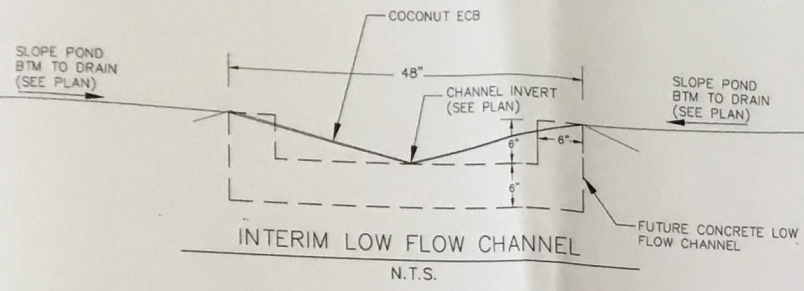
PROJECT:
LORSON RANCH EAST
 FONTAINE BLVD. - EAST TRACT
 EL PASO COUNTY, COLORADO

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

INTERIM DETENTION POND C3 (PHASE 2)
LORSON RANCH EAST

DATE: JUNE 30, 2017
 PROJECT NO: 100.040
 SHEET NUMBER: C5.9
 TOTAL SHEETS: 27





Overflow channel?

no dam

CORE ENGINEERING GROUP
 15004 1ST AVE. S.
 BURNSVILLE, MN 55306
 PH: 763.793.1100
 FAX: 763.793.1100
 WWW: CORE-ENG.COM
 EMAIL: RECH@core1.com

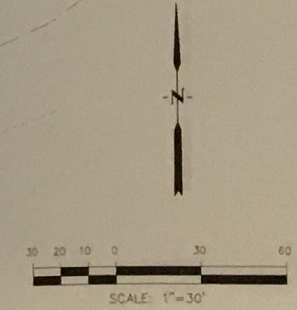
DATE: _____
 DESCRIPTION: _____
 NO. _____
 DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

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

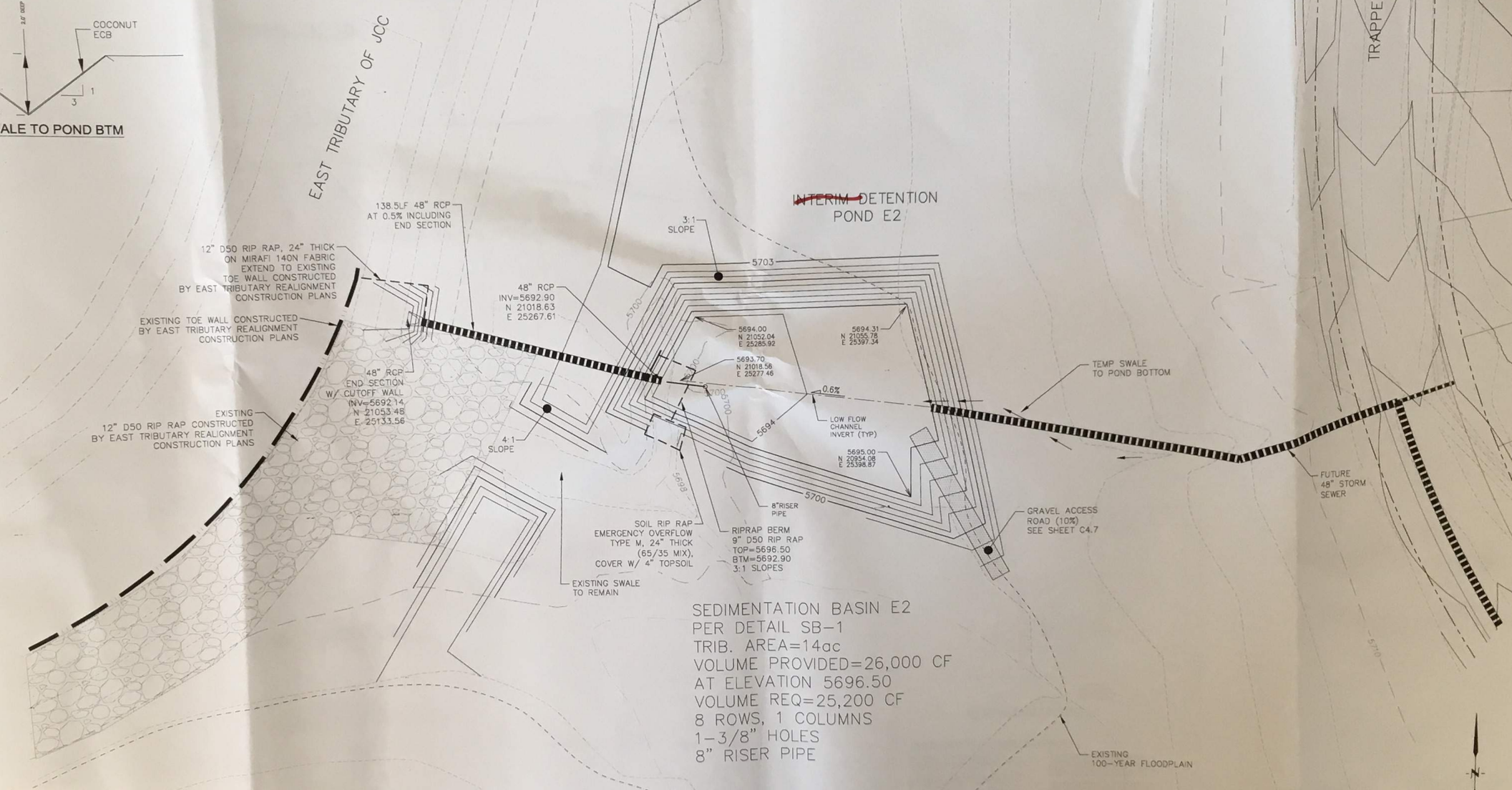
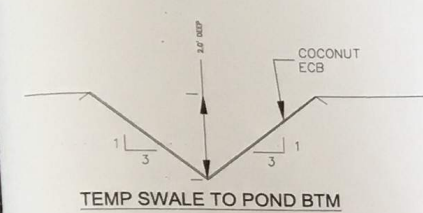
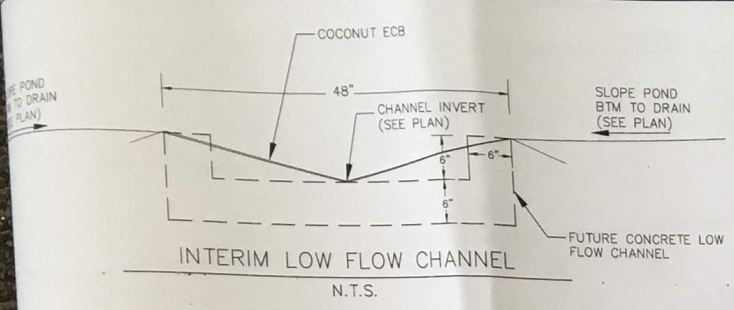
PROJECT:
LORSON RANCH EAST
 FONTAINE BLVD. QUARTARY
 EL PASO COUNTY, COLORADO

INTERIM DETENTION POND D1 (PHASE 2)
LORSON RANCH EAST

DATE: JUNE 30, 2017
 PROJECT NO. 100.040
 SHEET NUMBER C5.10
 TOTAL SHEETS: 27



INTERIM DETENTION POND E2 (PHASE 2)
LORSON RANCH EAST



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

