

# FOREST LAKES FILING NO. 5, 6 & 7

COUNTY OF EL PASO, STATE OF COLORADO

## PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN

MAY 2019

(SECTIONS 27 AND 28, TOWNSHIP 11 SOUTH, RANGE 67 WEST)

Replace with the updated GEC Notes

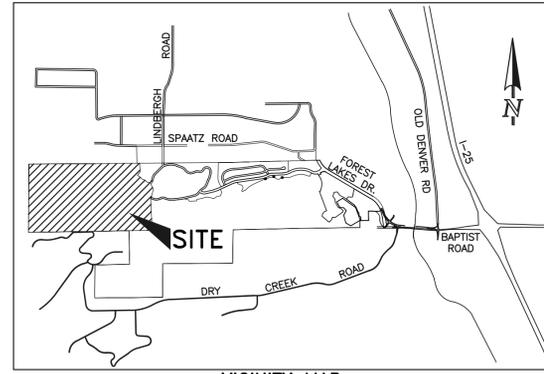


### EL PASO COUNTY GRADING AND EROSION CONTROL NOTES:

- STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.
- NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
- A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR AND SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- ONCE THE ESQCP IS APPROVED AND A NOTICE TO PROCEED HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
- CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT MAY CONTRIBUTE POLLUTANTS TO STORMWATER. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
- ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES IS NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN PRIOR TO IMPLEMENTATION.
- TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE STABILIZED.
- FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLAN DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
- ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE HYDROLOGY OR HYDRAULICS OF A PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
- ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE, UNLESS INFEASIBLE.
- COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED.
- ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
- CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUT SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY.
- DEWATERING OPERATIONS: UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT MAY NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF.
- EROSION CONTROL BLANKETING IS TO BE USED ON SLOPES STEEPER THAN 3:1.
- BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. BMP'S MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
- THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
- NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- BULK STORAGE OF PETROLEUM PRODUCTS OR OTHER LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL HAVE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCH FLOW LINE.
- INDIVIDUALS SHALL COMPLY WITH THE 'COLORADO WATER QUALITY CONTROL ACT' (TITLE 25, ARTICLE 8, CRS), AND THE 'CLEAN WATER ACT' (33 USC 1344), IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- PRIOR TO ACTUAL CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY \_\_\_\_\_ AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 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  
WCDC - PERMITS  
4300 CHERRY CREEK DRIVE SOUTH  
DENVER, CO 80246-1530  
ATTN: PERMITS UNIT

Fill in the blank



VICINITY MAP  
NOT TO SCALE

### STANDARD NOTES FOR EL PASO COUNTY CONSTRUCTION PLANS:

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

### SHEET INDEX

TITLE SHEET	SHEET 1 OF 12
OVERLOT GRADING PLAN INCLUDING EROSION CONTROL	SHEET 2 OF 12
OVERLOT GRADING PLAN INCLUDING EROSION CONTROL	SHEET 3 OF 12
OVERLOT GRADING PLAN INCLUDING EROSION CONTROL	SHEET 4 OF 12
OVERLOT GRADING PLAN INCLUDING EROSION CONTROL	SHEET 5 OF 12
OVERLOT GRADING PLAN INCLUDING EROSION CONTROL	SHEET 6 OF 12
OVERLOT GRADING PLAN INCLUDING EROSION CONTROL	SHEET 7 OF 12
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OVERLOT GRADING PLAN INCLUDING EROSION CONTROL	SHEET 9 OF 12
OVERLOT GRADING PLAN INCLUDING EROSION CONTROL	SHEET 10 OF 12
OVERLOT GRADING PLAN INCLUDING EROSION CONTROL	SHEET 11 OF 12
OVERLOT GRADING PLAN DETAILS	SHEET 12 OF 12

### BASIS OF BEARINGS:

A PARCEL OF LAND LYING WITHIN THE SOUTH HALF OF THE SECTION 27 AND THE SOUTH HALF OF SECTION 28, TOWNSHIP 11 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARINGS ARE BASED ON THE NORTHEAST RIGHT-OF-WAY LINE OF FOREST LAKES DRIVE SHOWN IN FOREST LAKES FILING NO. 1, MONUMENTED WITH A #4 REBAR AND YELLOW PLASTIC CAP, LS 4842 AND ASSUMED TO BEAR S59°33'25"E.

### BENCHMARKS:

- THE SOUTHWESTERLY CORNER OF LOT 15 AS PLATTED IN FOREST LAKES FILING NO. 1 BEING MONUMENTED BY A NO. 4 REBAR AND RED PLASTIC SURVEYORS CAP STAMPED "ROCKWELL PLS 19586" ELEVATION = 7039.42
- THE NORTHEASTERLY CORNER OF LOT 2 AS PLATTED IN FOREST LAKES FILING NO. 1 BEING MONUMENTED BY A NO. 4 REBAR AND RED PLASTIC SURVEYORS CAP STAMPED "ROCKWELL PLS 19586" ELEVATION = 6966.24

Update per GEC checklist

### AGENCIES:

DEVELOPER:	FOREST LAKES RESIDENTIAL DEVELOPMENT, LLC 6385 CORPORATE DRIVE, SUITE 200 COLORADO SPRINGS, CO 80919 MR. JIM BOULTON (719) 592-3259
CIVIL ENGINEER:	CLASSIC CONSULTING ENGINEERS & SURVEYORS 619 N. CASCADE AVENUE, SUITE 200 COLORADO SPRINGS, CO 80903 MR. KYLE R. CAMPBELL, P.E. (719) 785-2800
COUNTY ENGINEERING:	DEVELOPMENT SERVICES DEPARTMENT 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, CO 80910 MR. GILBERT LAFORCE, (719) 520-7945
WATER & SANITATION DISTRICT:	FOREST LAKES METROPOLITAN DISTRICT 2 N. CASCADE AVENUE, SUITE 1280 COLORADO SPRINGS, CO 80903 MS. ANN NICHOLS, (719) 633-9500
FIRE DISTRICT:	TRI-LAKES MONUMENT FIRE PROTECTION DISTRICT 166 SECOND STREET MONUMENT, COLORADO 80132 (719) 484-0911
GAS COMPANY:	BLACK HILLS ENERGY 18965 BASE CAMP ROAD, A-7 MONUMENT, CO 80132 (888) 890-5554
ELECTRIC COMPANY:	MOUNTAIN VIEW ELECTRIC 11140 E. WOODMEN ROAD FALCON, COLORADO 80831 (719) 495-2861
TELEPHONE COMPANY:	CENTURY LINK COMMUNICATIONS (LOCATORS) (800)-922-1987 A.T.&T. (LOCATORS) (719) 635-3674

### APPROVALS:

#### DESIGN ENGINEER'S STATEMENT:

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

KYLE R. CAMPBELL, COLORADO P.E. #29794  
FOR AND ON THE BEHALF OF CLASSIC CONSULTING ENGINEERS & SURVEYORS

DATE

#### OWNER/DEVELOPER STATEMENT:

THE OWNER WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

JIM BOULTON  
FOREST LAKES RESIDENTIAL DEVELOPMENT, LLC  
6385 CORPORATE DRIVE, SUITE 200  
COLORADO SPRINGS, CO 80919

DATE

### EL PASO COUNTY:

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, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

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

DATE

Add PCD Project No. EGP194

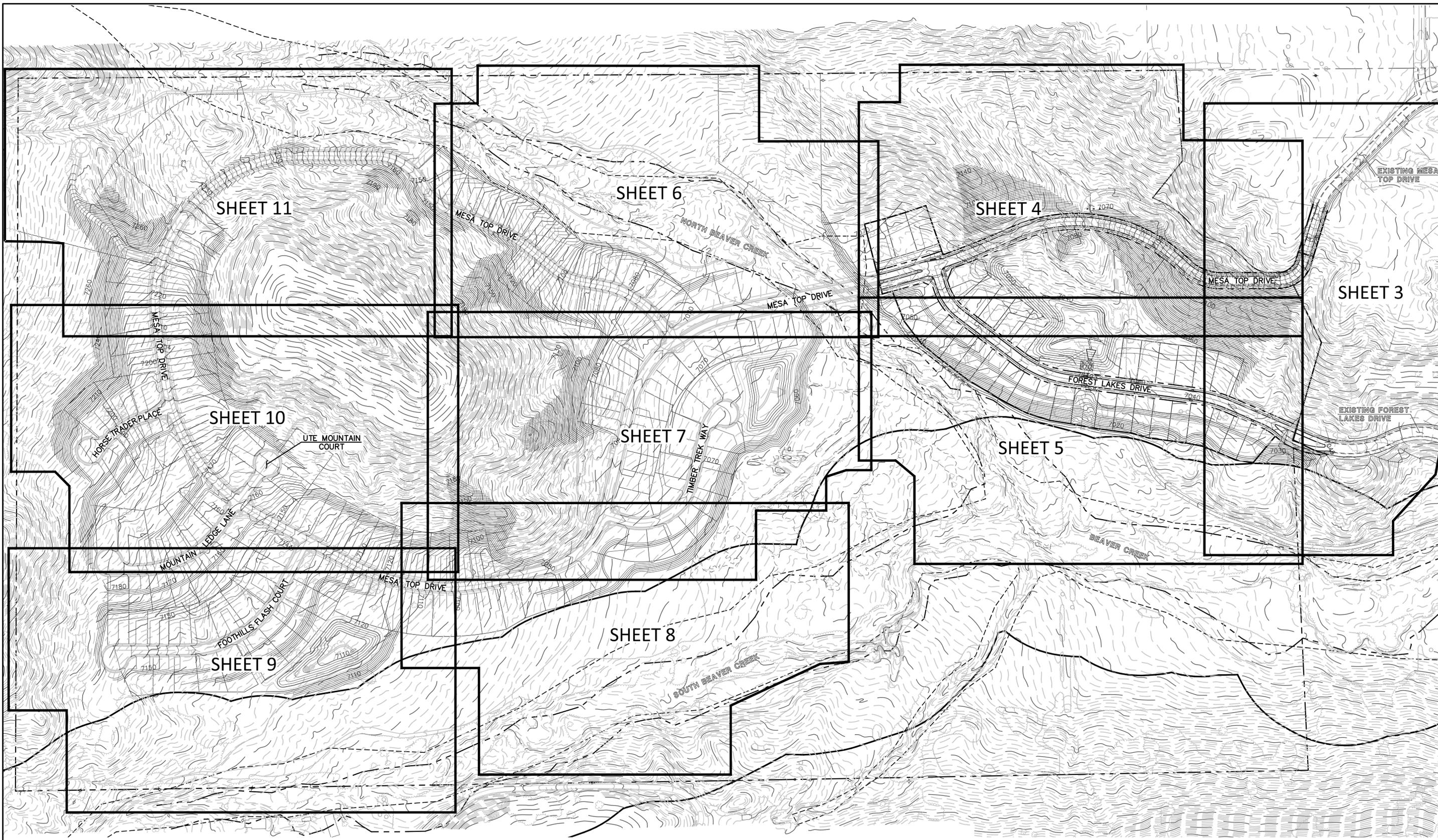
48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS <b>811</b> UTILITY NOTIFICATION CENTER OF COLORADO IT'S THE LAW	NO. REVISION	DATE
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.		

REVIEW:	
PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC	
KYLE R. CAMPBELL, COLORADO P.E. #29794	DATE

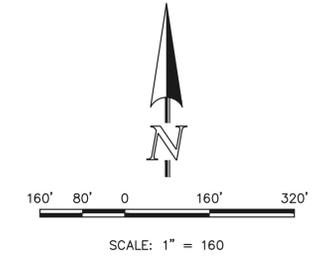
619 N. Cascade Avenue, Suite 200  
Colorado Springs, Colorado 80903  
(719) 785-0790  
(719) 785-0799 (fax)

FOREST LAKES FILING NO. 5, 6, & 7			
TITLE SHEET			
PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN			
DESIGNED BY	MAL	SCALE	DATE 05/21/19
DRAWN BY	BB	(H) 1" = NA	SHEET 1 OF 12
CHECKED BY		(V) 1" = NA	JOB NO. 1175.50





**KEY MAP**  
SCALE: 1" = 160'



48 HOURS BEFORE YOU DIG,  
CALL UTILITY LOCATORS  
**811**  
UTILITY NOTIFICATION CENTER OF COLORADO  
IT'S THE LAW

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

NO.	REVISION	DATE

REVIEW:

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF  
CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

KYLE R. CAMPBELL, COLORADO P.E. #29794      DATE

**CLASSIC CONSULTING**  
618 N. Cascade Avenue, Suite 200  
Colorado Springs, Colorado 80903  
(719)785-0790  
(719)785-0799(Fax)

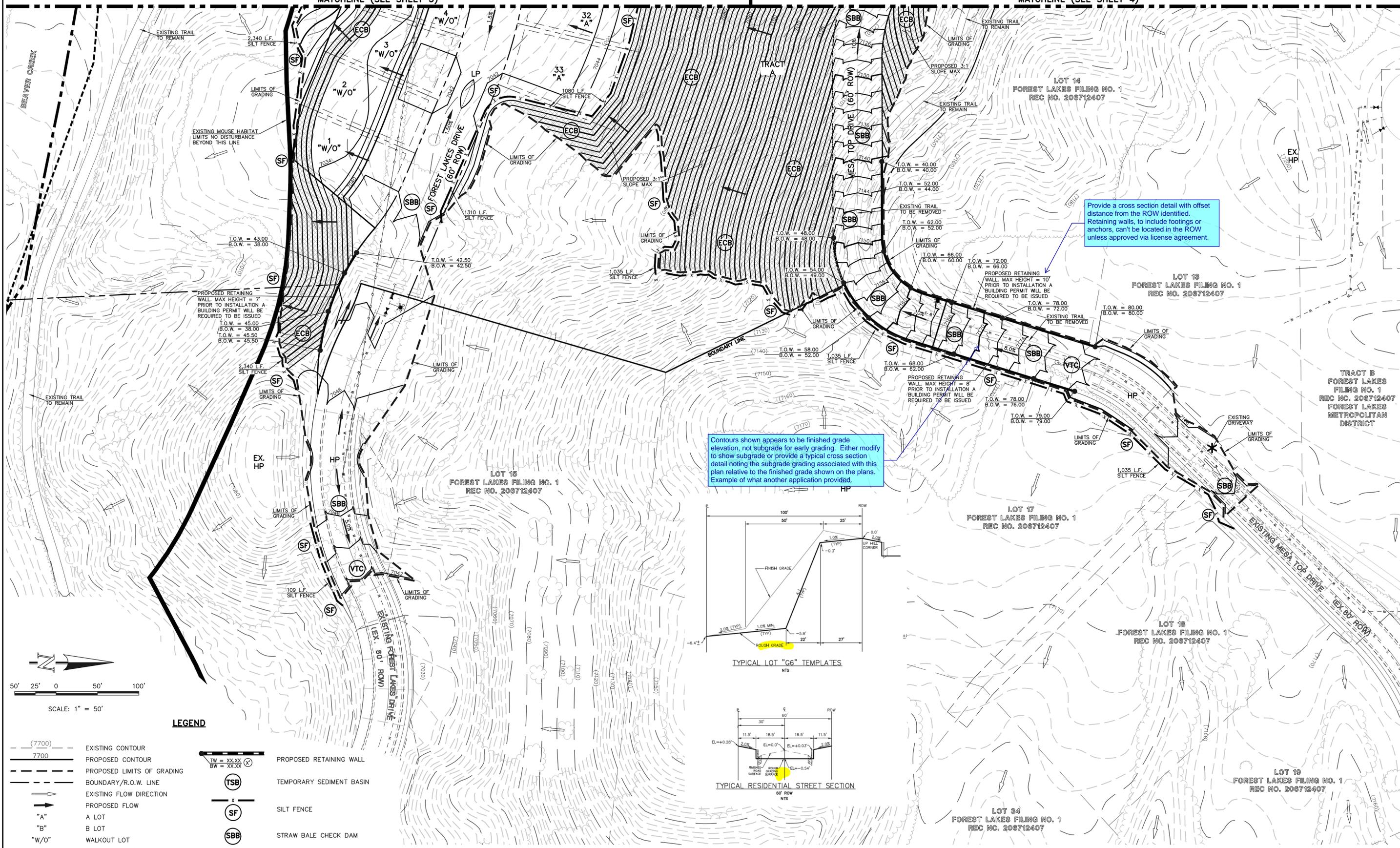
<b>FOREST LAKES FILING NO. 5, 6 &amp; 7 GRADING INDEX REFERENCE SHEET</b>			
PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN			
DESIGNED BY	MAL	SCALE	DATE 05/21/19
DRAWN BY	BB	(H) 1" = 160'	SHEET 2 OF 12
CHECKED BY		(V) 1" = N/A	JOB NO. 1175.50



N: 117550.DRAWINGS: CONSTRUCTION EARLY GRADING: 117550.GR: 02.dwg: 6/25/2019 4:35:40 PM: 1:1

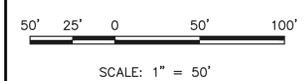
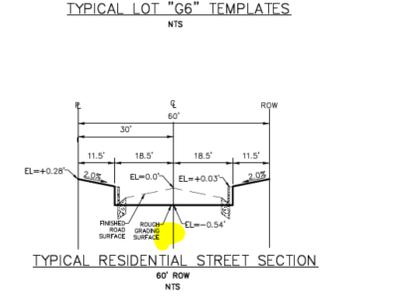
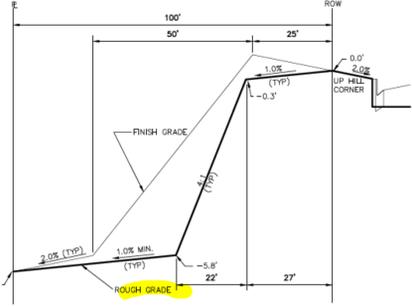
MATCHLINE (SEE SHEET 5)

MATCHLINE (SEE SHEET 4)



Provide a cross section detail with offset distance from the ROW identified. Retaining walls, to include footings or anchors, can't be located in the ROW unless approved via license agreement.

Contours shown appears to be finished grade elevation, not subgrade for early grading. Either modify to show subgrade or provide a typical cross section detail noting the subgrade grading associated with this plan relative to the finished grade shown on the plans. Example of what another application provided.



**LEGEND**

- (---) (7700) EXISTING CONTOUR
- (---) 7700 PROPOSED CONTOUR
- (---) PROPOSED LIMITS OF GRADING
- (---) BOUNDARY/R.O.W. LINE
- (---) EXISTING FLOW DIRECTION
- (---) PROPOSED FLOW
- (---) "A" A LOT
- (---) "B" B LOT
- (---) "W/O" WALKOUT LOT
- (---) "T" TRANSITION LOT
- (---) "G" GARDEN LOT
- (---) PROPOSED INLET
- (---) PROPOSED STORM SEWER PIPE
- (---) HP PROPOSED HIGH POINT
- (---) LP PROPOSED LOW POINT
- (---) TW = XX.XX PROPOSED RETAINING WALL
- (---) BW = XX.XX
- (---) (TSB) TEMPORARY SEDIMENT BASIN
- (---) (SF) SILT FENCE
- (---) (SBB) STRAW BALE CHECK DAM
- (---) (IP) INLET PROTECTION
- (---) (VTC) VEHICLE TRACKING CONTROL
- (---) (ECB) EROSION CONTROL BLANKET
- (---) (HP) EXISTING VEGETATION

**NOTE:**  
SEE SHEET 08 FOR LOT TEMPLATES  
SEE SHEET 12 FOR EROSION CONTROL DETAILS

48 HOURS BEFORE YOU DIG,  
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UTILITY NOTIFICATION CENTER OF COLORADO  
IT'S THE LAW

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NO.	REVISION	DATE

REVIEW:

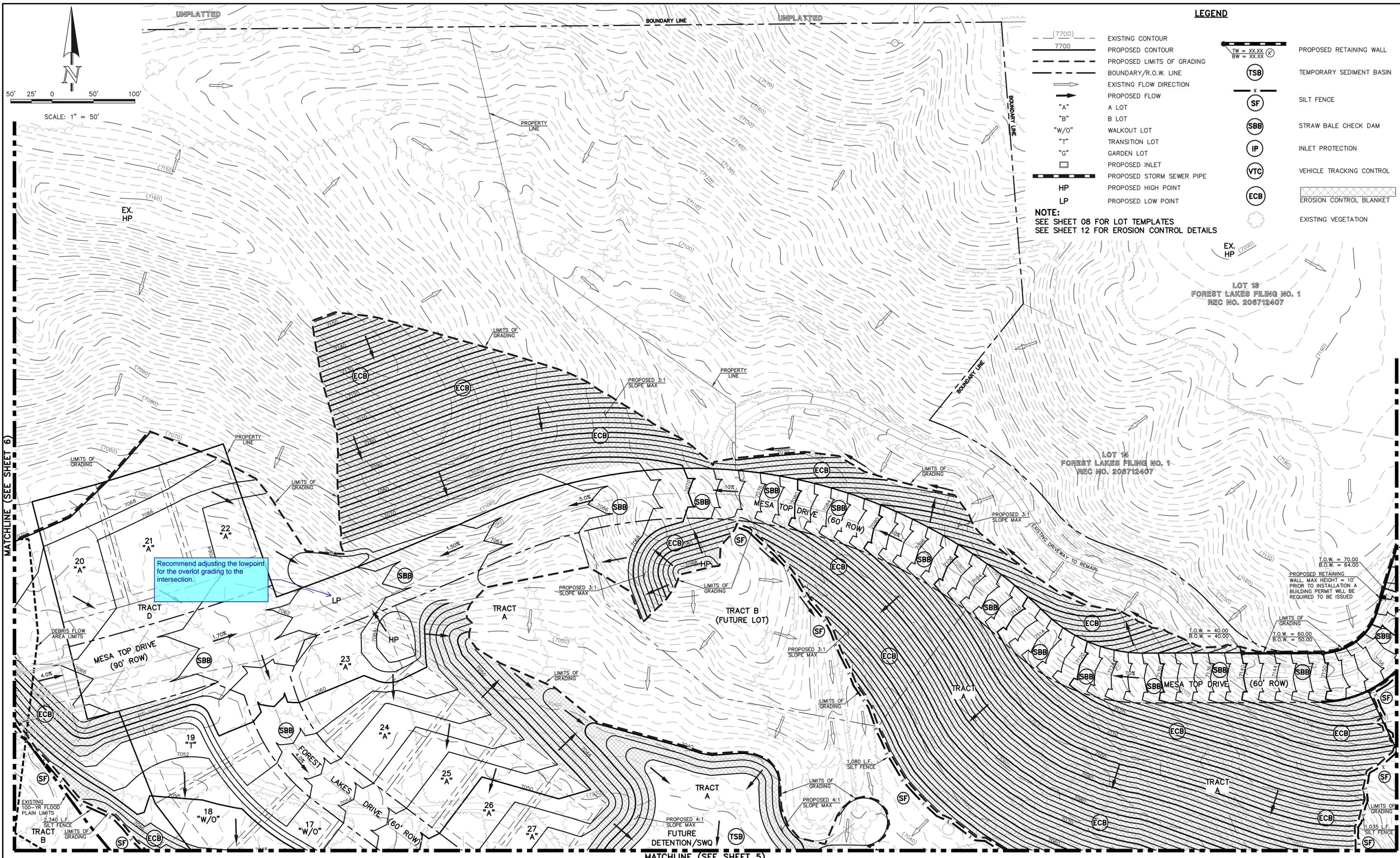
PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

KYLE R. CAMPBELL, COLORADO P.E. #29794 DATE



FOREST LAKES FILING NO. 5, 6 & 7			
PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN			
DESIGNED BY	MAL	SCALE	DATE 05/21/19
DRAWN BY	BB	(H) 1" = 50'	SHEET 3 OF 12
CHECKED BY	(V) 1" = N/A	JOB NO.	1175.50





SCALE: 1" = 50'

- LEGEND**
- (7700) EXISTING CONTOUR
  - 7700 PROPOSED CONTOUR
  - PROPOSED LIMITS OF GRADING
  - - - - - BOUNDARY/R.O.W. LINE
  - EXISTING FLOW DIRECTION
  - PROPOSED FLOW
  - "A" A LOT
  - "B" B LOT
  - "W/O" WALKOUT LOT
  - "T" TRANSITION LOT
  - "G" GARDEN LOT
  - PROPOSED INLET
  - HP PROPOSED STORM SEWER PIPE
  - LP PROPOSED HIGH POINT
  - LP PROPOSED LOW POINT
  - TW = XX.XX  
BW = XX.XX --- PROPOSED RETAINING WALL
  - (TSB) TEMPORARY SEDIMENT BASIN
  - (SF) SILT FENCE
  - (SBB) STRAW BALE CHECK DAM
  - (IP) INLET PROTECTION
  - (VTC) VEHICLE TRACKING CONTROL
  - (ECB) EROSION CONTROL BLANKET
  - Existing Vegetation

**NOTE:**  
SEE SHEET 08 FOR LOT TEMPLATES  
SEE SHEET 12 FOR EROSION CONTROL DETAILS

Recommend adjusting the lowpoint for the overlot grading to the intersection.

PROPOSED RETAINING WALL MAX HEIGHT = 10' PRIOR TO INSTALLATION A BUILDING PERMIT WILL BE REQUIRED TO BE ISSUED

MATCHLINE (SEE SHEET 6)

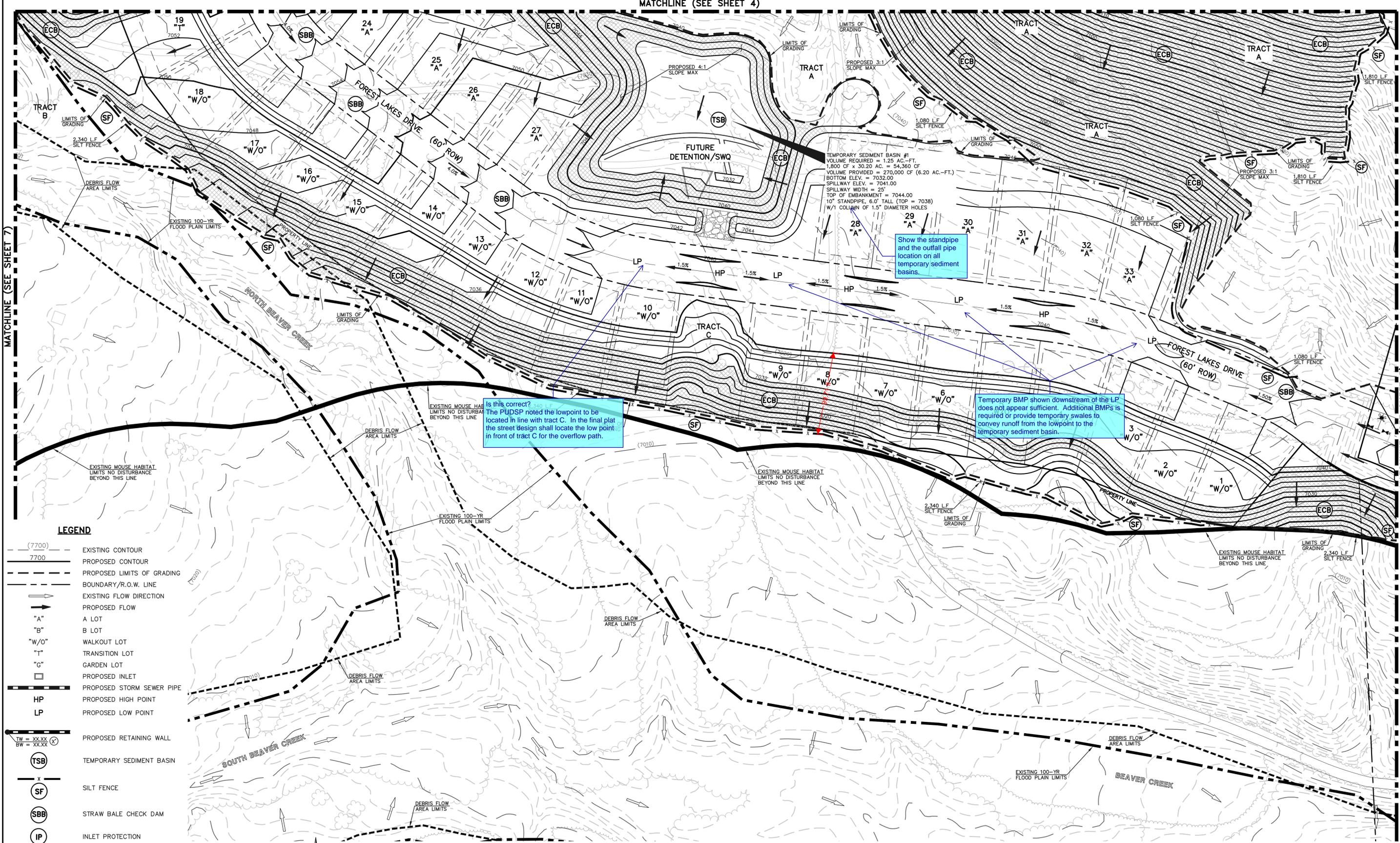
MATCHLINE (SEE SHEET 3)

MATCHLINE (SEE SHEET 5)

<p>48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS</p> <p><b>811</b> UTILITY NOTIFICATION CENTER OF COLORADO IT'S THE LAW</p> <p><small>THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.</small></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>REVISION</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	REVISION	DATE							<p>REVIEW:</p> <p>PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC</p> <p>KYLE R. CAMPBELL, COLORADO P.E. #29794      DATE</p>	<p><b>CLASSIC CONSULTING</b></p>	<p>FOREST LAKES FILING NO. 5, 6 &amp; 7</p> <p>PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>DESIGNED BY</td> <td>MAL</td> <td>SCALE</td> <td>DATE</td> <td>05/21/19</td> </tr> <tr> <td>DRAWN BY</td> <td>BB</td> <td>(H) 1" = 50'</td> <td>SHEET</td> <td>4 OF 12</td> </tr> <tr> <td>CHECKED BY</td> <td>(V) 1" = N/A</td> <td>JOB NO.</td> <td colspan="2">1175.50</td> </tr> </table>	DESIGNED BY	MAL	SCALE	DATE	05/21/19	DRAWN BY	BB	(H) 1" = 50'	SHEET	4 OF 12	CHECKED BY	(V) 1" = N/A	JOB NO.	1175.50	
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N: 117550.DRAWINGS\CONSTRUCTION\EARLY GRADING\117550 GR 04.dwg 6/26/2019 9:17:06 AM 1:1

MATCHLINE (SEE SHEET 4)



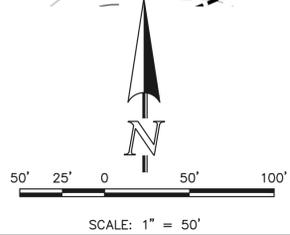
MATCHLINE (SEE SHEET 7)

MATCHLINE (SEE SHEET 3)

**LEGEND**

- (7700) --- EXISTING CONTOUR
- 7700 --- PROPOSED CONTOUR
- PROPOSED LIMITS OF GRADING
- BOUNDARY/R.O.W. LINE
- EXISTING FLOW DIRECTION
- PROPOSED FLOW
- "A" A LOT
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- "W/O" WALKOUT LOT
- "T" TRANSITION LOT
- "G" GARDEN LOT
- PROPOSED INLET
- PROPOSED STORM SEWER PIPE
- HP PROPOSED HIGH POINT
- LP PROPOSED LOW POINT
- TW = XXXX  
BW = XXXX (X) PROPOSED RETAINING WALL
- (TSB) TEMPORARY SEDIMENT BASIN
- (SF) SILT FENCE
- (SBB) STRAW BALE CHECK DAM
- (IP) INLET PROTECTION
- (VTC) VEHICLE TRACKING CONTROL
- (ECB) EROSION CONTROL BLANKET
- ☁ EXISTING VEGETATION

**NOTE:**  
 SEE SHEET 08 FOR LOT TEMPLATES  
 SEE SHEET 12 FOR EROSION CONTROL DETAILS



Is this correct?  
 The PUDSP noted the lowpoint to be located in line with tract C. In the final plat the street design shall locate the low point in front of tract C for the overflow path.

Show the standpipe and the outfall pipe location on all temporary sediment basins.

Temporary BMP shown downstream of the LP does not appear sufficient. Additional BMPs is required or provide temporary swales to convey runoff from the lowpoint to the temporary sediment basin.

TEMPORARY SEDIMENT BASIN #1  
 VOLUME REQUIRED = 1.25 AC.-FT.  
 1,800 CF x 30.20 AC. = 54,360 CF  
 VOLUME PROVIDED = 270,000 CF (6.20 AC.-FT.)  
 BOTTOM ELEV. = 7032.00  
 W/1 COLUMN OF 1.5" DIAMETER HOLES  
 SPILLWAY WIDTH = 25'  
 TOP OF EMBANKMENT = 7044.00  
 10" STANDPIPE, 6.0' TALL (TOP = 7038)  
 W/1 COLUMN OF 1.5" DIAMETER HOLES

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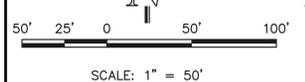
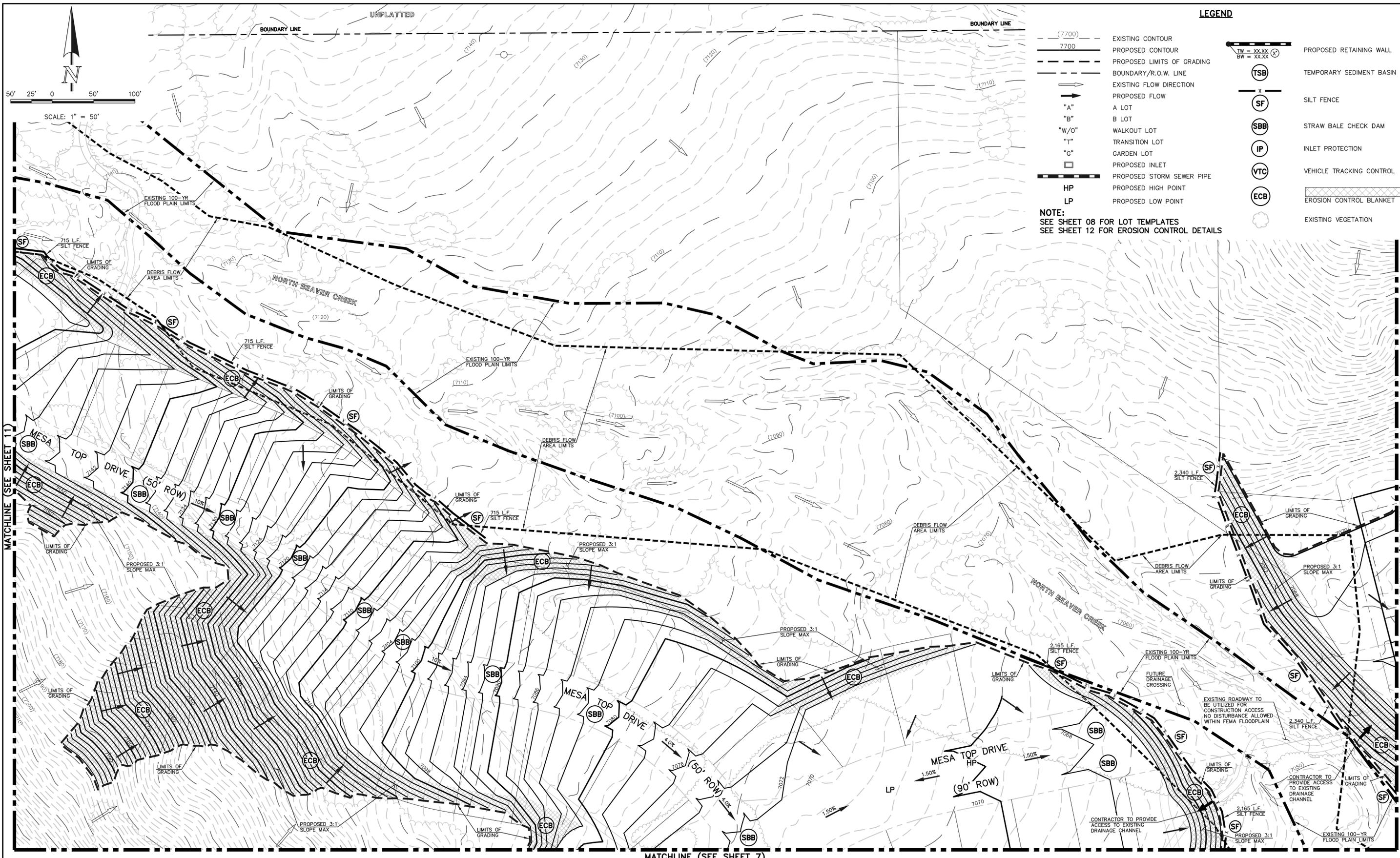
NO.	REVISION	DATE

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KYLE R. CAMPBELL, COLORADO P.E. #29794      DATE

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N: 117550.DRAWINGS\CONSTRUCTION\EARLY GRADING\117550 GR 05.dwg 6/26/2019 9:17:22 AM 1:1



LEGEND			
--- (7700) ---	EXISTING CONTOUR	--- TW = XX.XX BW = XX.XX ---	PROPOSED RETAINING WALL
— 7700 —	PROPOSED CONTOUR	(TSB)	TEMPORARY SEDIMENT BASIN
- - - - -	PROPOSED LIMITS OF GRADING	(SF)	SILT FENCE
- - - - -	BOUNDARY/R.O.W. LINE	(SBB)	STRAW BALE CHECK DAM
→	EXISTING FLOW DIRECTION	(IP)	INLET PROTECTION
→	PROPOSED FLOW	(VTC)	VEHICLE TRACKING CONTROL
"A"	A LOT	(ECB)	EROSION CONTROL BLANKET
"B"	B LOT		EXISTING VEGETATION
"W/O"	WALKOUT LOT		
"T"	TRANSITION LOT		
"G"	GARDEN LOT		
□	PROPOSED INLET		
— HP —	PROPOSED STORM SEWER PIPE		
— LP —	PROPOSED HIGH POINT		
	PROPOSED LOW POINT		

NOTE:  
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SEE SHEET 12 FOR EROSION CONTROL DETAILS

MATCHLINE (SEE SHEET 11)

MATCHLINE (SEE SHEET 4)

MATCHLINE (SEE SHEET 7)

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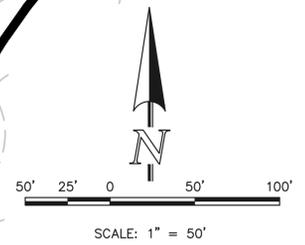
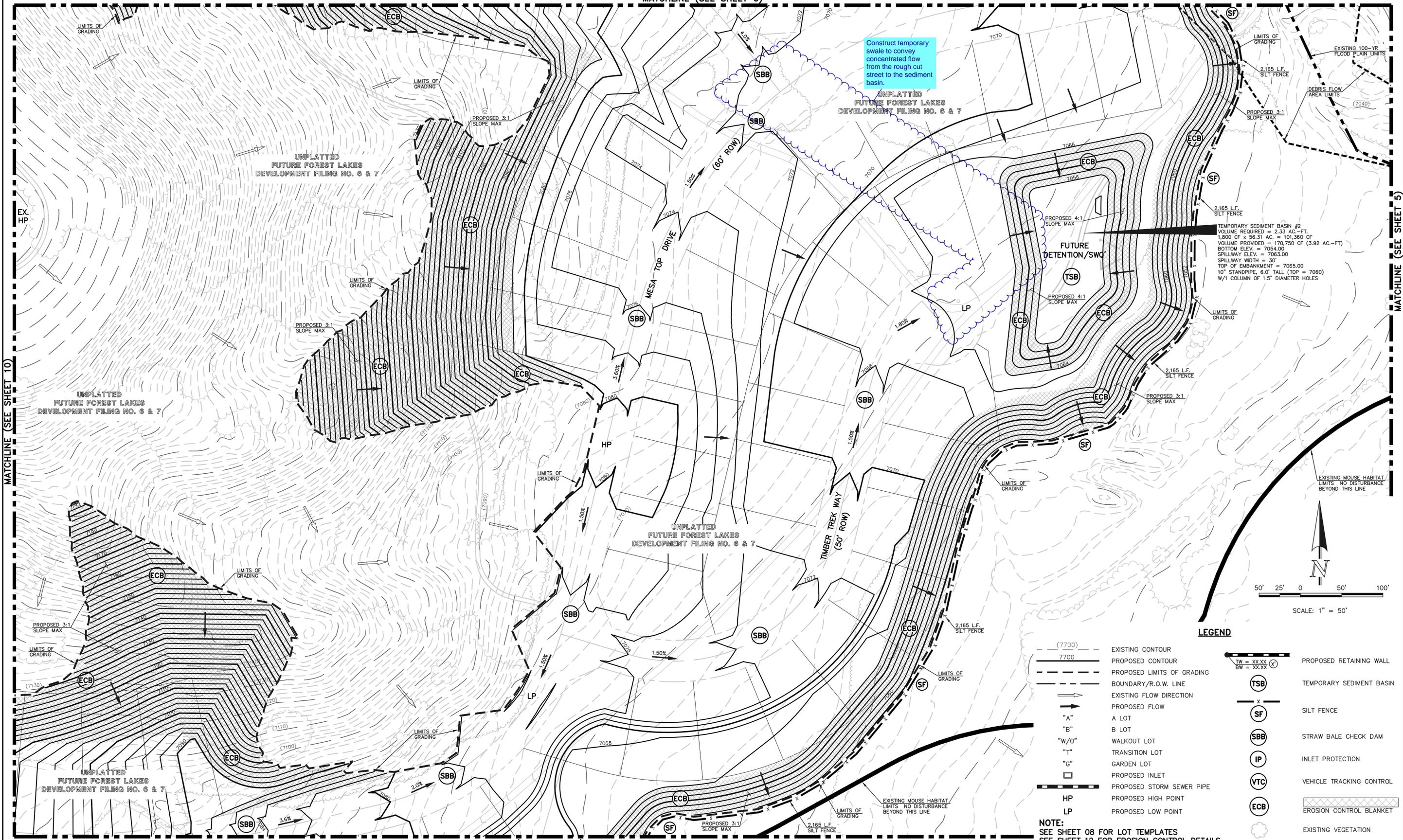
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PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN			
DESIGNED BY	MAL	SCALE	DATE 05/21/19
DRAWN BY	BB	(H) 1" = 50'	SHEET 6 OF 12
CHECKED BY		(V) 1" = N/A	JOB NO. 1175.50

N: 117550.DRAWINGS\CONSTRUCTION\EARLY GRADING\117550 GR 08.dwg 6/26/2019 9:17:55 AM 1:1

MATCHLINE (SEE SHEET 6)

MATCHLINE (SEE SHEET 10)

MATCHLINE (SEE SHEET 5)



**LEGEND**

(7700) ---	EXISTING CONTOUR	--- XX.XX (X)	PROPOSED RETAINING WALL
7700 ---	PROPOSED CONTOUR	--- XX.XX	TEMPORARY SEDIMENT BASIN
---	PROPOSED LIMITS OF GRADING	(SF)	SILT FENCE
---	BOUNDARY/R.O.W. LINE	(SBB)	STRAW BALE CHECK DAM
---	EXISTING FLOW DIRECTION	(IP)	INLET PROTECTION
---	PROPOSED FLOW	(VTC)	VEHICLE TRACKING CONTROL
"A"	A LOT	(ECB)	EROSION CONTROL BLANKET
"B"	B LOT		EXISTING VEGETATION
"W/O"	WALKOUT LOT		
"T"	TRANSITION LOT		
"G"	GARDEN LOT		
□	PROPOSED INLET		
---	PROPOSED STORM SEWER PIPE		
HP	PROPOSED HIGH POINT		
LP	PROPOSED LOW POINT		

**NOTE:**  
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 SEE SHEET 12 FOR EROSION CONTROL DETAILS

MATCHLINE (SEE SHEET 8)

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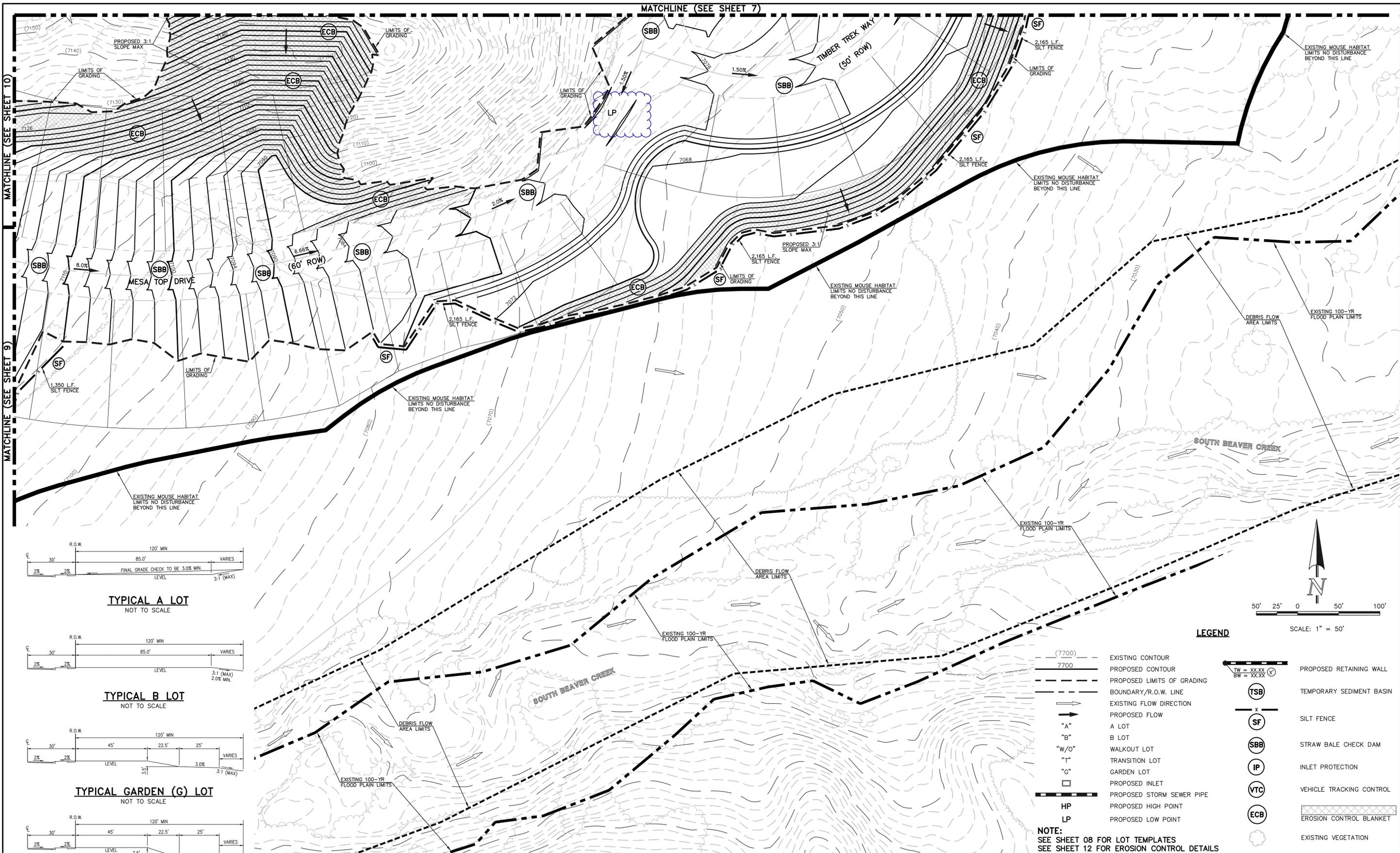
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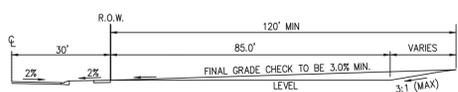
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CHECKED BY		(V) 1" = N/A	JOB NO. 1175.50

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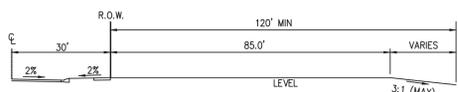


MATCHLINE (SEE SHEET 9)

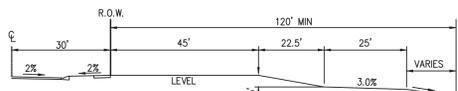
MATCHLINE (SEE SHEET 7)



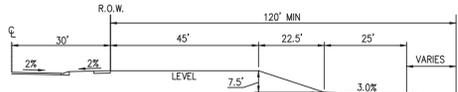
**TYPICAL A LOT**  
NOT TO SCALE



**TYPICAL B LOT**  
NOT TO SCALE

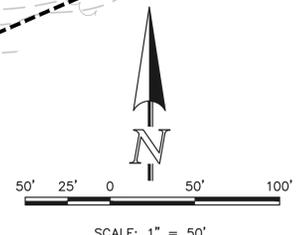


**TYPICAL GARDEN (G) LOT**  
NOT TO SCALE



**TYPICAL WALKOUT (W/O) LOT**  
NOT TO SCALE

**NOTE:**  
"T" LOTS OR "TRANSITION" LOTS OCCUR IN PLACES WHERE BOTH PROPERTY LINES CANNOT BE GRADED AS THE TYPICAL STANDARD LOT TEMPLATES SHOWN. THESE LOTS WILL STILL BE GRADED TO CREATE POSITIVE DRAINAGE AWAY FROM THE STRUCTURE.



**LEGEND**

- (---) (7700) EXISTING CONTOUR
- (---) 7700 PROPOSED CONTOUR
- (---) PROPOSED LIMITS OF GRADING
- (---) BOUNDARY/R.O.W. LINE
- (---) EXISTING FLOW DIRECTION
- (---) PROPOSED FLOW
- "A" A LOT
- "B" B LOT
- "W/O" WALKOUT LOT
- "T" TRANSITION LOT
- "G" GARDEN LOT
- (---) PROPOSED INLET
- (---) PROPOSED STORM SEWER PIPE
- HP PROPOSED HIGH POINT
- LP PROPOSED LOW POINT
- (---) TW = XX.XX  
BW = XXXX PROPOSED RETAINING WALL
- (TSB) TEMPORARY SEDIMENT BASIN
- (SF) SILT FENCE
- (SBB) STRAW BALE CHECK DAM
- (IP) INLET PROTECTION
- (VTC) VEHICLE TRACKING CONTROL
- (ECB) EROSION CONTROL BLANKET
- (---) EXISTING VEGETATION

**NOTE:**  
SEE SHEET 08 FOR LOT TEMPLATES  
SEE SHEET 12 FOR EROSION CONTROL DETAILS

48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS <b>811</b> UTILITY NOTIFICATION CENTER OF COLORADO IT'S THE LAW		NO. REVISION	DATE
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N: 117550.DRAWINGS\CONSTRUCTION\EARLY GRADING\117550\_GR\_08.dwg 6/25/2019 4:57:08 PM 1:1

MATCHLINE (SEE SHEET 10)

UNPLATTED FUTURE FOREST LAKES DEVELOPMENT FILING NO. 6 & 7

UNPLATTED FUTURE FOREST LAKES DEVELOPMENT FILING NO. 6 & 7

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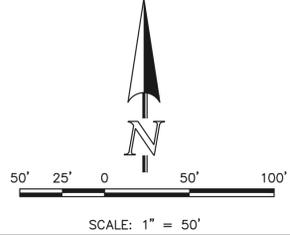
Construct temporary swale to convey concentrated flow from the rough cut street to the sediment basin. Verify if the erosion control blanket is sufficient or riprap is required for the quantity of runoff being conveyed.

TEMPORARY SEDIMENT BASIN #3  
VOLUME REQUIRED = 1.55 AC.-FT.  
1,800' CF x 37.55 AC. = 67,590 CF  
VOLUME PROVIDED = 165,530 CF (3.80 AC.-FT)  
BOTTOM ELEV. = 7108.00  
SPILLWAY ELEV. = 7117.00  
SPILLWAY WIDTH = 25'  
TOP OF EMBANKMENT = 7120.00  
10" STANDPIPE, 6.0' TALL (TOP = 7114)  
W/1 COLUMN OF 1.5" DIAMETER HOLES

LEGEND

- (---) (7700) --- EXISTING CONTOUR
- (---) 7700 --- PROPOSED CONTOUR
- (---) --- PROPOSED LIMITS OF GRADING
- (---) --- BOUNDARY/R.O.W. LINE
- (---) --- EXISTING FLOW DIRECTION
- (---) --- PROPOSED FLOW
- "A" --- A LOT
- "B" --- B LOT
- "W/O" --- WALKOUT LOT
- "T" --- TRANSITION LOT
- "G" --- GARDEN LOT
- (---) --- PROPOSED INLET
- (---) --- PROPOSED STORM SEWER PIPE
- HP --- PROPOSED HIGH POINT
- LP --- PROPOSED LOW POINT
- (---) TW = XXXX  
BW = XX.XX --- PROPOSED RETAINING WALL
- (TSB) --- TEMPORARY SEDIMENT BASIN
- (SF) --- SILT FENCE
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NOTE:  
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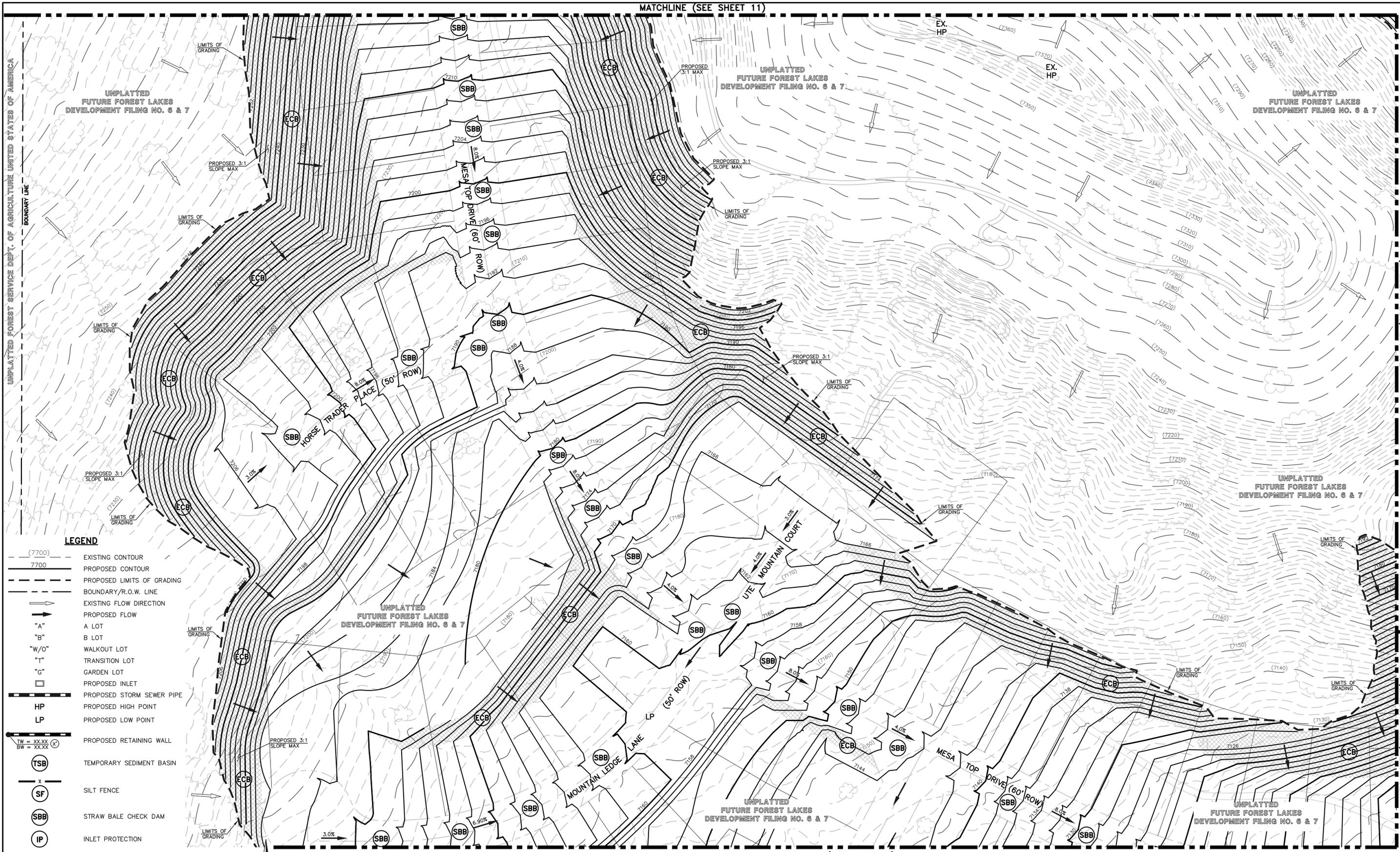
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MATCHLINE (SEE SHEET 8)

N: 117550.DRAWINGS\CONSTRUCTION\EARLY GRADING\117550 GR 09.dwg 6/28/2019 9:18:41 AM 1:1

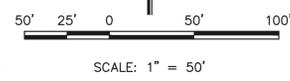
MATCHLINE (SEE SHEET 11)



**LEGEND**

- (7700) --- EXISTING CONTOUR
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- PROPOSED LIMITS OF GRADING
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- TW = XX.XX  
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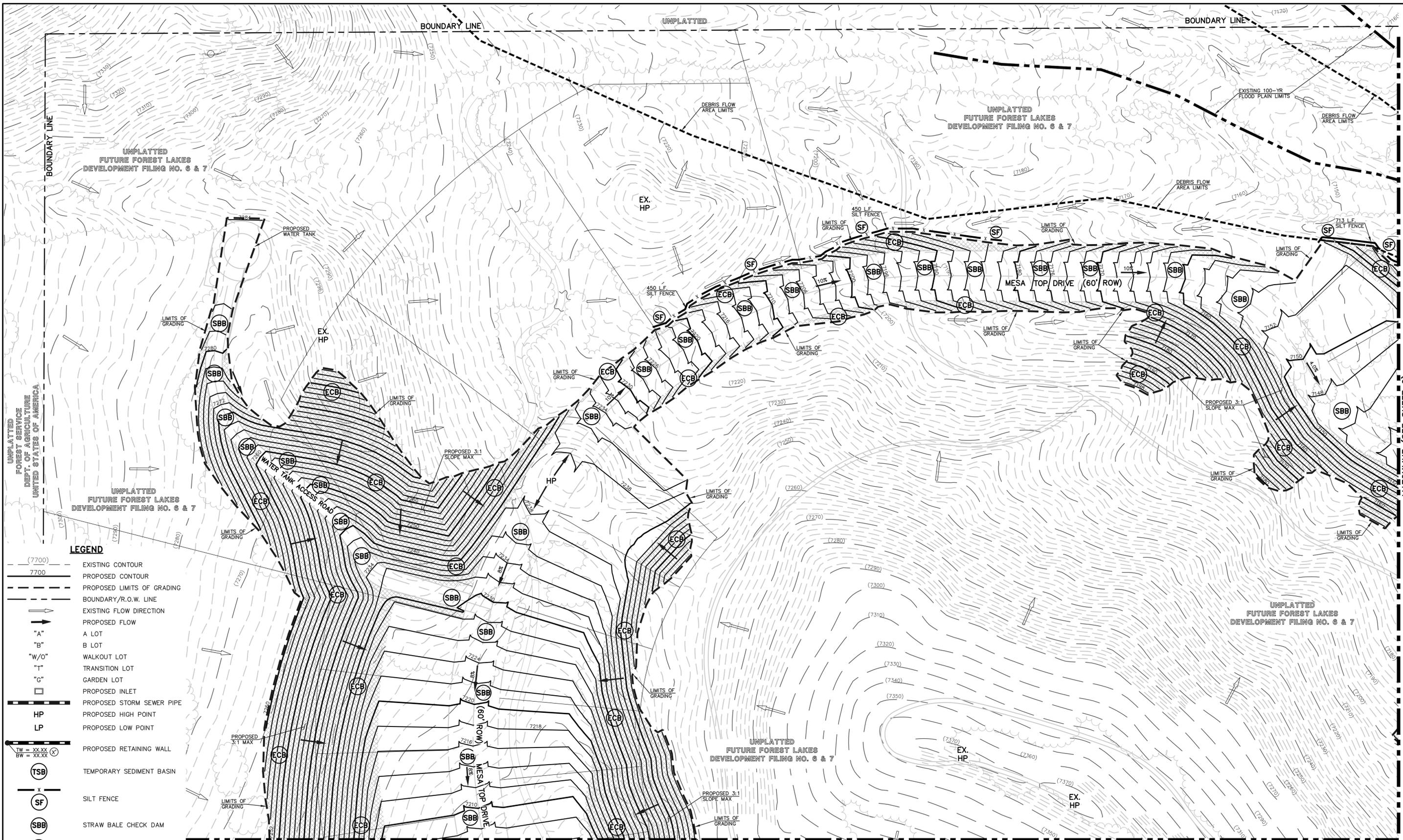
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 PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

KYLE R. CAMPBELL, COLORADO P.E. #29794      DATE

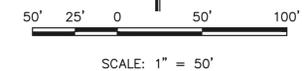
FOREST LAKES FILING NO. 5, 6 & 7			
PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN			
DESIGNED BY	MAL	SCALE	DATE 05/21/19
DRAWN BY	BB	(H) 1" = 50'	SHEET 10 OF 12
CHECKED BY	(V) 1" = N/A	JOB NO.	1175.50

N: 117550.DRAWINGS: CONSTRUCTION EARLY GRADING: 117550.GR: 10.dwg: 6/26/2019 9:19:24 AM: 1:1



- LEGEND**
- (7700) --- EXISTING CONTOUR
  - 7700 --- PROPOSED CONTOUR
  - PROPOSED LIMITS OF GRADING
  - BOUNDARY/R.O.W. LINE
  - EXISTING FLOW DIRECTION
  - PROPOSED FLOW
  - "A" A LOT
  - "B" B LOT
  - "W/O" WALKOUT LOT
  - "T" TRANSITION LOT
  - "G" GARDEN LOT
  - PROPOSED INLET
  - PROPOSED STORM SEWER PIPE
  - HP PROPOSED HIGH POINT
  - LP PROPOSED LOW POINT
  - TW = XX.XX  
BW = XX.XX PROPOSED RETAINING WALL
  - (TSB) TEMPORARY SEDIMENT BASIN
  - (SF) SILT FENCE
  - (SBB) STRAW BALE CHECK DAM
  - (IP) INLET PROTECTION
  - (VTC) VEHICLE TRACKING CONTROL
  - (ECB) EROSION CONTROL BLANKET
  - ☁ EXISTING VEGETATION

**NOTE:**  
SEE SHEET 08 FOR LOT TEMPLATES  
SEE SHEET 12 FOR EROSION CONTROL DETAILS



48 HOURS BEFORE YOU DIG,  
CALL UTILITY LOCATORS  
**811**  
UTILITY NOTIFICATION CENTER OF COLORADO  
IT'S THE LAW

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

NO.	REVISION	DATE

REVIEW:

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

KYLE R. CAMPBELL, COLORADO P.E. #29794 DATE



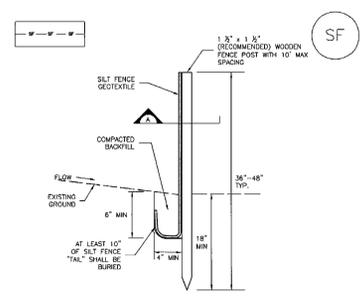
FOREST LAKES FILING NO. 5, 6 & 7			
PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN			
DESIGNED BY	MAL	SCALE	DATE 05/21/19
DRAWN BY	BB	(H) 1" = 50'	SHEET 11 OF 12
CHECKED BY	(V)	1" = N/A	JOB NO. 1175.50

MATCHLINE (SEE SHEET 6)

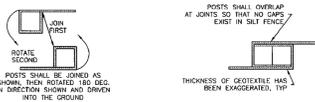
MATCHLINE (SEE SHEET 10)

N: 117550.DRAWINGS\CONSTRUCTION\EARLY GRADING\117550.DWG, 6/25/2019 4:59:05 PM, 1:1

**Silt Fence (SF) SC-1**



SILT FENCE

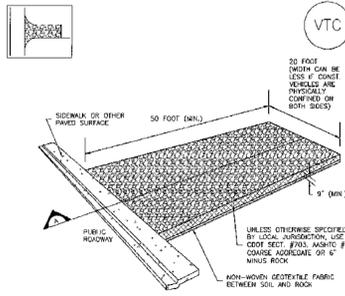


SECTION A

SF-1. SILT FENCE

November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 SF-3

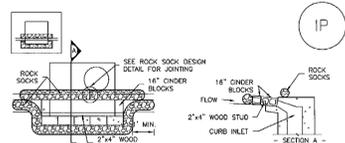
**Vehicle Tracking Control (VTC) SM-4**



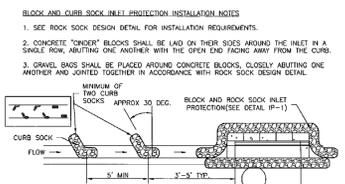
VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 VTC-3

**SC-6 Inlet Protection (IP) C-6 Inlet Protection (IP)**



IP-1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION

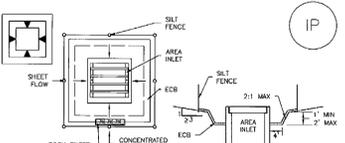


IP-2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

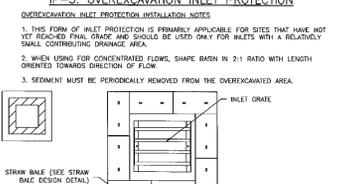
- BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES**
- SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
  - CONCRETE "TONGUE" BLOCKS SHALL BE LAD ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, INSTALLED ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.
  - GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ADJUTING ONE ANOTHER AND JOINED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.
- CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES**
- SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
  - PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR TO THE OPPOSITE DIRECTION OF FLOW.
  - SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.
  - AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.

August 2013 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 IP-4

**IP-5 OVEREXCAVATION INLET PROTECTION IP-6 STRAW BALE FOR SUMP INLET PROTECTION**



IP-6. STRAW BALE FOR SUMP INLET PROTECTION

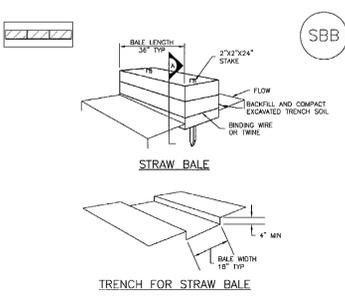


IP-5. OVEREXCAVATION INLET PROTECTION

- OVEREXCAVATION INLET PROTECTION INSTALLATION NOTES**
- THIS FORM OF INLET PROTECTION IS PRIMARILY APPLICABLE FOR SITES THAT HAVE NOT YET REACHED FINAL GRADE AND SHOULD BE USED ONLY FOR INLETS WITH A RELATIVELY SMALL CONTRIBUTING DRAINAGE AREA.
  - WHEN USING FOR CONCENTRATED FLOWS, SHAPE BASIN IN 2:1 RATIO WITH LENGTH ORIENTED TOWARDS DIRECTION OF FLOW.
  - SEDIMENT MUST BE PERIODICALLY REMOVED FROM THE OVEREXCAVATED AREA.
- STRAW BALE BARRIER INLET PROTECTION INSTALLATION NOTES**
- SEE STRAW BALE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
  - BALES SHALL BE PLACED IN A SINGLE ROW AROUND THE INLET WITH ENDS OF BALES TIGHTLY ADJUTING ONE ANOTHER.

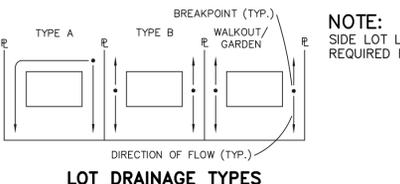
August 2013 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 IP-6

**SC-3 Straw Bale Barrier (SBB)**

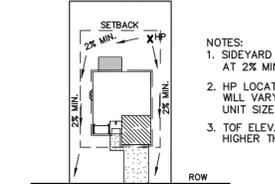


SBB-1. STRAW BALE

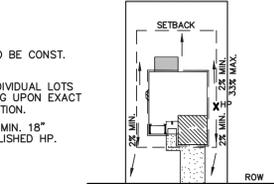
November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 SBB-2



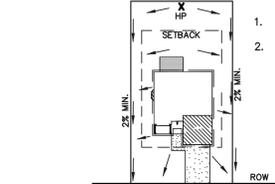
**NOTE:**  
SIDE LOT LINE SWALES ARE REQUIRED FOR ALL LOTS.



TYPICAL "A" LOT DRAINAGE PATTERN N.T.S.



TYPICAL "B", "G", "W/O" LOT DRAINAGE PATTERN N.T.S.



"A" LOTS W/SLOPE BEHIND DRAINAGE PATTERN N.T.S.

- MINIMUM LOT WIDTH ALONG SLOPE IS 70'.
- RIPRAP OR CONCRETE "V" NOTCH SWALES TO BE INSTALLED ALONG SHARED PROPERTY & WITHIN SIDE LOT EASEMENTS. SWALES TO DISCHARGE ONTO ROADWAY.

Enlarge details so text size are legible on 11x17 sheet. May need to provide additional detail sheets.

**EROSION CONTROL CRITERIA:**

EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IN A MANNER THAT WILL PROTECT PROPERTIES AND PUBLIC FACILITIES FROM THE ADVERSE EFFECTS OF EROSION AND SEDIMENTATION AS A RESULT OF CONSTRUCTION AND EARTHWORK ACTIVITIES WITHIN THE PROJECT SITE.

- THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NON-EXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- DURING GRADING OPERATIONS, LOCATE AND SET THE STRAW BALE CHECK DAMS AND SILT FENCES AS SHOWN ON THE EROSION CONTROL PLAN. AT THIS TIME RESEED ALL DISTURBED AREAS WITH AN EL PASO COUNTY APPROVED SEED MIX.
- SEEDING APPLICATION: DRILLED TO A DEPTH OF 25" TO 50" INTO SOIL WHERE POSSIBLE. BROADCAST AND RAKED TO COVER ON STEEPER THAN 3:1 SLOPES WHERE ACCESS IS LIMITED OR UNSAFE FOR EQUIPMENT.
- MULCHING REQUIREMENT AND APPLICATION: 1.5 TONS PER ACRE NATIVE HAY MECHANICALLY CRIMPED INTO SOIL.
- THE STRAW BALE CHECK DAMS AND SILT FENCES SHALL BE KEPT IN PLACE AND MAINTAINED UNTIL EROSION AND SEDIMENTATION POTENTIAL IS MITIGATED. REMOVAL OF SILT AND SEDIMENT COLLECTED BY THE STRAW BALES IS REQUIRED ONCE IT REACHES HALF THE HEIGHT OF THE STRAW BALES OR SILT FENCE.
- DISTURBED SOIL SHALL BE VEGETATED WITHIN 60 DAYS AFTER SUBSTANTIAL FINAL GRADING IS COMPLETE. PROVIDE TEMPORARY VEGETATION TO DISTURBED AREAS THAT WILL HAVE A PERIOD OF EXPOSURE OF 6 MONTHS OR LONGER PRIOR TO FINAL STABILIZATION.
- ALL FACILITIES, VEGETATION AND OTHER ITEMS REQUIRED BY THE APPROVED FINAL GRADING, EROSION CONTROL AND RECLAMATION PLAN SHALL BE PROPERLY MAINTAINED BY THE OWNERS OF THE PROPERTY. SUCH MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO KEEPING ALL EROSION CONTROL FACILITIES IN GOOD ORDER AND FUNCTIONAL, REPAIRING ANY EROSION DAMAGE THAT OCCURS, KEEPING ALL VEGETATION HEALTHY AND IN GROWING CONDITION AND REPLACING ANY DEAD VEGETATION AS SOON AS PRACTICABLE.
- ALL SILT FENCES ARE TO BE REGULARLY INSPECTED AND REPAIRED AS NEEDED.
- THE CONTRACTOR SHALL PROVIDE VEHICLE TRACKING CONTROL FACILITIES FOR EACH ENTRANCE/EXIT TO THE SITE. THE CONTRACTOR SHALL SUBMIT A PLAN WHICH WILL ASSURE USAGE OF THIS FACILITY BY ALL VEHICLES LEAVING THE SITE.
- EROSION CONTROL MEASURES SHALL BE CHECKED AFTER EACH STORM EVENT AND REPAIRED WHEN NECESSARY.
- CONTRACTOR SHALL MAINTAIN ALL TEMPORARY EROSION CONTROL FACILITIES IN GOOD WORKING ORDER UNTIL SUCH TIME AS PERMANENT FACILITIES ARE IN PLACE AND THE CONSTRUCTION MANAGER HAS APPROVED THEIR REMOVAL.
- ADDITIONAL EROSION CONTROL STRUCTURES MAY BE REQUIRED AT THE TIME OF CONSTRUCTION.
- THE EROSION CONTROL MEASURES OUTLINED ON THE PLAN ARE THE RESPONSIBILITY OF THE DEVELOPER TO MONITOR AND REPLACE, REGRADE AND REBUILD AS NECESSARY UNTIL VEGETATION IS ESTABLISHED.
- MAXIMUM ACREAGE OPEN AT ANY GIVEN TIME IS TO BE 30 ACRES.

**SCHEDULE OF ANTICIPATED CONSTRUCTION ACTIVITY:**

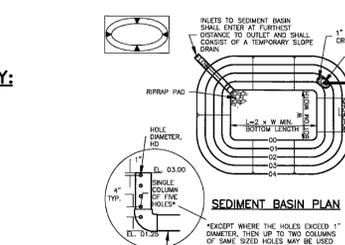
- INSTALL INITIAL BMP'S
- INSPECTION OF INITIAL BMP'S BY COUNTY STAFF
- PRECONSTRUCTION MEETING WITH COUNTY STAFF

BEGIN CONSTRUCTION UPON APPROVAL	ACTIVITY	COMPLETION	EROSION CONTROL
	ALL SITE ROADWAY GRADING AND UTILITY INSTALLATION	6 MONTHS	ALL SHOWN ON GRADING PLAN

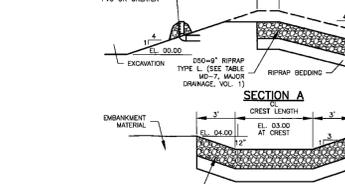
**SEEDING GUIDELINES**

- SEEDBED PREPARATION**  
THE SEEDBED SHOULD BE WELL-SETTLED AND FIRM, BUT FRIABLE ENOUGH THAT THE SEED CAN BE PLACED AT THE SPECIFIED DEPTHS. COMPETITIVE STANDS OF WEEDS THAT ARE PRESENT BEFORE SEEDING MUST BE CONTROLLED BY SHALLOW TILLAGE OR BY APPLICATION OF HERBICIDES. SOILS THAT HAVE BEEN OVER-COMPACTED BY TRAFFIC OR EQUIPMENT, ESPECIALLY WHEN WET, SHOULD BE TILLED TO BREAK UP ROOTING-RESTRICTIVE LAYERS, THAN HARROWED, ROLLED, OR PACKED TO PREPARE THE REQUIRED FIRM SEEDBED.
- FERTILIZER**  
FERTILIZER SHOULD BE APPLIED AT A RATE OF 50 POUNDS OF AVAILABLE NITROGEN PER ACRE AND 40 POUNDS OF AVAILABLE PHOSPHATE PER ACRE. THE TIME OF APPLICATION SHOULD BE IMMEDIATELY PRIOR TO SEEDING, AT THE TIME OF SEEDING, OR IMMEDIATELY FOLLOWING SEEDING, DEPENDING ON THE KIND OF FERTILIZER AND TYPE OF EQUIPMENT USED.
- SEEDING**  
SEED SHOULD BE PLANTED WITH A GRASS DRILL ON ALL SLOPES OF 3:1 (3:1) OR FLATTER. SEED MAY BE BROADCAST BY HAND, BY MECHANICAL SPREADER, OR BY HYDRAULIC EQUIPMENT ON AREAS THAT ARE SMALL, TOO STEEP, OR NOT ACCESSIBLE FOR SEED DRILL OPERATIONS. SEED PLANTED WITH A DRILL SHOULD BE COVERED WITH SOIL TO A DEPTH OF 1/4 TO 3/4 INCH. SEED PLANTED BY THE BROADCAST METHOD SHALL BE INCORPORATED INTO THE SOIL SURFACE, NOT TO EXCEED A DEPTH OF 3/4 INCH, BY RAKING, HARROWING, OR OTHER PROVEN METHOD.
- MULCHING**  
SEEDED AREAS SHOULD BE MULCHED TO CONSERVE MOISTURE, PREVENT SURFACE COMPACTION OR CRUSTING, REDUCE RUNOFF AND EROSION, CONTROL INSECTS; AND HELP ESTABLISH PLANT COVER.  
NATIVE HAY OR STRAW SHOULD BE APPLIED AT A RATE OF 4,000 POUNDS PER ACRE AND CRIMPED INTO THE GROUND. ON SLOPES GREATER THAN 3:1, AN AGRONOMY BLANKET SHOULD BE USED.
- SUPPLEMENTAL WATER**  
IN LOW RAINFALL AREAS, WHERE WATER IS AVAILABLE AND WHERE RAPID ESTABLISHMENT IS NEEDED, IRRIGATION OF NEW SEEDING SHOULD BE PERFORMED DURING THE FIRST GROWING SEASON. WATER SHOULD BE APPLIED AT APPROXIMATELY ONE WEEK INTERVALS, AT A RATE OF 3/4 TO 1 INCH PER APPLICATION, WHEN RAINFALL IS DEFICIENT FOR PLANT DEVELOPMENT.

**SC-7 Sediment Basin (SB) C-7 Sediment Basin (SB)**



SEDIMENT BASIN PLAN



SECTION A

August 2013 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 SB-3

**SC-7 Sediment Basin (SB) C-7 Sediment Basin (SB)**

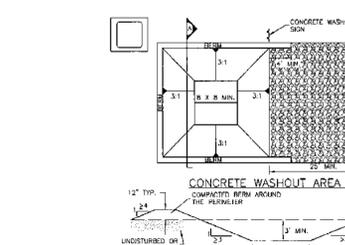
Upstream Drainage Area (rounded to nearest acre), (ac)	Basin Bottom Width (ft), (ft)	Spillway Crest Length (ft), (ft)	Basin Diameter (ft), (ft)
1	12.9	2	19.5
2	17.1	2	26.5
3	20.8	2	31.5
4	23.9	2	35.5
5	26.5	2	38.5
6	28.8	2	40.5
7	30.8	2	42.5
8	32.5	2	44.5
9	34.1	2	46.5
10	35.5	2	48.5
12	38.5	2	52.5
14	40.5	2	55.5
15	42.5	2	57.5
16	44.5	2	59.5
18	47.5	2	63.5
20	50.5	2	66.5
22	53.5	2	69.5

SEDIMENT BASIN INSTALLATION NOTES

- SEE PLAN VIEW FOR:
  - LOCATION OF SEDIMENT BASIN
  - TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN)
  - FOR STANDARD BASIN, BOTTOM WIDTH, W, CREST LENGTH, CL, AND HOLE DIAMETER, HD
  - FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN
  - FOR NONSTANDARD BASIN, NUMBER OF COLUMNS, N, HOLE DIAMETER HD AND PIPE DIAMETER D
- FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.
- SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-DISTURBING ACTIVITY THAT RELIES ON ON BASINS AS A STORMWATER CONTROL.
- EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.
- EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
- PIPE SIZE 40 OR GREATER SHALL BE USED.
- THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASINS FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASINS THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

August 2013 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 SB-4

**SC-3 Concrete Washout Area (CWA) MM-1 Concrete Washout Area (CWA)**



CONCRETE WASHOUT AREA PLAN

SECTION A

CWA-1. CONCRETE WASHOUT AREA

- CWA INSTALLATION NOTES**
- SEE PLAN VIEW FOR:
    - CWA INSTALLATION LOCATION
  - DO NOT LOCATE AN UNVALUED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY, DO NOT LOCATE WITHIN 1000' OF ANY WELLS OR DRINKING WATER SOURCES, OR SITE CONTAMINATED WITH HAZARDOUS, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE. THE CWA MUST BE INSTALLED WITH AN INTERMEDIATE LAYER (18 IN. MIN. THICKNESS) OF SURFACE STORAGE. A PERMEABLE USING PRECAST/CAST-IN-PLACE CONCRETE BLOCKS OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
  - THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
  - THE CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 6" BY 6" DEEPER LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3" OR FLATTER. THE PIT SHALL BE AT LEAST 1' DEEP.
  - BOTH SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
  - VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
  - SOAK SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP TRUCKS.
  - USE EXCAVATED MATERIAL FOR PERMANENT PERM CONSTRUCTION.

November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 CWA-3

**NOTES:**

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 THE 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

NO PORTION OF THIS SITE IS LOCATED WITHIN A FLOODPLAIN AS DETERMINED BY THE FLOOD INSURANCE RATE MAPS (F.I.R.M.) MAP NUMBER 0804100539F AND EFFECTIVE DATE, MARCH 17, 1997.

THE AVERAGE SOIL CONDITION REFLECTS \_\_\_\_\_ AS DETERMINED BY "SOIL SURVEY OF EL PASO COUNTY AREA" PREPARED BY THE U.S. SOIL CONSERVATION SERVICE.

EXISTING VEGETATION CONSISTS OF TALL NATIVE GRASSES AND WEEDS WITH SPORADIC CACTI AND YUCCAS THROUGH-OUT THE SITE.

EMERGENCY OVERFLOW SWALES FOR INLETS IN THE INTERIM UNTIL CURB AND ASPHALT IS INSTALLED WILL BE THE LOTS, FINAL WILL BE TO OVERTOP THE HIGH POINT IN ROADWAY TO THE NEXT AVAILABLE INLET OR TO PROPOSED POND.

STOCKPILE LOCATIONS FOR HOMEBUILDING TO BE ON EACH INDIVIDUAL LOT THAT IS BEING BUILT UPON.

LIMITS OF DISTURBANCE FOR THIS PLAN INCLUDE UTILITY INSTALLATION AND ROADWAY CONSTRUCTION WITHIN THE R.O.W., AND OVERLOT GRADING FOR DEVELOPMENT THEN INDIVIDUAL LOTS FOR HOMEBUILDING ONCE CONSTRUCTION OF THE HOME BEGINS.

GRADING WITHIN THIS PHASE WILL BE FULLY DEVELOPED WITH HOME BUILDING OPERATIONS.

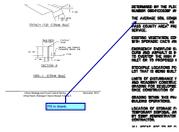
LOCATION OF STORAGE FOR MAINTENANCE EQUIPMENT AND TEMPORARY DISPOSAL AREAS WILL BE ADDED TO THIS PLAN BY SWMP ADMINISTRATOR UPON COORDINATION WITH SELECTED CONTRACTOR.

ALL AREAS ARE TO BE RESEEDD OUTSIDE OF THE FILING NO. 2A AREA. RESEED ALL AREAS AS NEEDED TO PREVENT EROSION AND SEDIMENT RUNOFF ONTO CONSTRUCTION ACTIVITIES.

48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS <b>811</b> UTILITY NOTIFICATION CENTER OF COLORADO IT'S THE LAW	NO. REVISION	DATE	REVIEW:		<b>FOREST LAKES FILING NO. 5, 6 &amp; 7</b> PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN DESIGNED BY MAL SCALE DATE 05/21/19 DRAWN BY BB (H) 1"= 50' SHEET 12 OF 12 CHECKED BY (V) 1"= N/A JOB NO. 1175.50
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.			PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC  KYLE R. CAMPBELL, COLORADO P.E. #29794 DATE		

# Markup Summary

dsdlaforce (23)



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**Page Index:** 12  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 1:17:54 PM  
**Color:** ■

Fill in blank.

Replace with the updated GEC Notes

EL PASO COUNTY GRADING AND EROSION CONTROL PLAN FOR THE IMPROVEMENT OF STATE HIGHWAY 91 WEST SIDE TURN

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**Page Index:** 1  
**Lock:** Unlocked  
**Author:** dsdlaforce  
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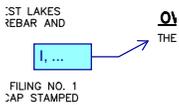
Replace with the updated GEC Notes



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**Author:** dsdlaforce  
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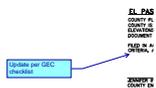


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**Date:** 7/24/2019 1:30:26 PM  
**Color:** ■



**Subject:** Callout  
**Page Index:** 1  
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**Author:** dsdlaforce  
**Date:** 7/24/2019 3:06:04 PM  
**Color:** ■

I, ...



**Subject:** Callout  
**Page Index:** 1  
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**Author:** dsdlaforce  
**Date:** 7/24/2019 3:07:34 PM  
**Color:** ■

Update per GEC checklist



**Subject:** Callout  
**Page Index:** 1  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 3:07:52 PM  
**Color:** ■

Fill in the blank

Add PCD Project No. EGP194

AKES FILING NO. 5, 6, & 7  
FT

**Subject:** Text Box  
**Page Index:** 1  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 3:19:39 PM  
**Color:** ■

Add PCD Project No. EGP194



**Subject:** Highlight  
**Page Index:** 3  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 3:26:28 PM  
**Color:** ■



**Subject:** Highlight  
**Page Index:** 3  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 3:26:30 PM  
**Color:** ■



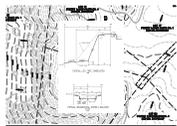
**Subject:** Callout  
**Page Index:** 3  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 3:28:02 PM  
**Color:** ■

Contours shown appears to be finished grade elevation, not subgrade for early grading. Either modify to show subgrade or provide a typical cross section detail noting the subgrade grading associated with this plan relative to the finished grade shown on the plans. Example of what another application provided.

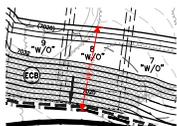


**Subject:** Callout  
**Page Index:** 3  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 3:37:43 PM  
**Color:** ■

Provide a cross section detail with offset distance from the ROW identified. Retaining walls, to include footings or anchors, can't be located in the ROW unless approved via license agreement.



**Subject:** Image  
**Page Index:** 3  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 3:38:21 PM  
**Color:** ■



**Subject:** Length Measurement  
**Page Index:** 5  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 4:02:18 PM  
**Color:** ■

99.71 ft



**Subject:** Callout  
**Page Index:** 5  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 4:20:03 PM  
**Color:** ■

Temporary BMP shown downstream of the LP does not appear sufficient. Additional BMPs is required or provide temporary swales to convey runoff from the lowpoint to the temporary sediment basin.



**Subject:** Callout  
**Page Index:** 4  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 5:00:57 PM  
**Color:** ■

Recommend adjusting the lowpoint for the overlaid grading to the intersection.



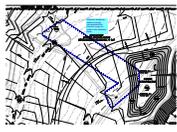
**Subject:** Callout  
**Page Index:** 5  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 5:02:30 PM  
**Color:** ■

Show the standpipe and the outfall pipe location on all temporary sediment basins.



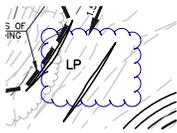
**Subject:** Callout  
**Page Index:** 5  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 5:04:50 PM  
**Color:** ■

Is this correct?  
 The PUDSP noted the lowpoint to be located in line with tract C. In the final plat the street design shall locate the low point in front of tract C for the overflow path.



**Subject:** Cloud+  
**Page Index:** 7  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 5:14:09 PM  
**Color:** ■

Construct temporary swale to convey concentrated flow from the rough cut street to the sediment basin.



**Subject:** Cloud  
**Page Index:** 8  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 5:16:55 PM  
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**Subject:** Cloud  
**Page Index:** 9  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 5:20:56 PM  
**Color:** ■



**Subject:** Cloud+  
**Page Index:** 9  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 5:22:16 PM  
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Construct temporary swale to convey concentrated flow from the rough cut street to the sediment basin. Verify if the erosion control blanket is sufficient or riprap is required for the quantity of runoff being conveyed.



**Subject:** Text Box  
**Page Index:** 12  
**Lock:** Unlocked  
**Author:** dsdlaforce  
**Date:** 7/24/2019 5:24:32 PM  
**Color:** ■

Enlarge details so text size are legible on 11x17 sheet. May need to provide additional detail sheets.