

WALDEN PRESERVE 2 FILING NO.5 WALDEN PRESERVE 5 FILING NO.1 WALDEN PRESERVE 2 FILING NO.1

BENCHMARK:

BENCHMARK 4 BB RESET 1984 NAVD 88 DATUM ELEV = 7570.80 FOUND BRASS CAP IN CONCRETE INT HWY 83 & HODGEN RD.

NOT TO SCALE

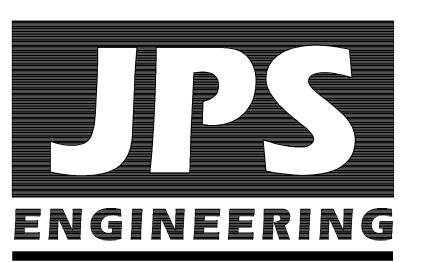
BASIS OF BEARINGS:
THE BEARINGS FOR THIS SURVEY ARE BASED UPON THE SOUTH LINE OF LOT 7, FOREST HIGHLANDS SUBDIVISION AS RECORDED AT BOOK G-2, PAGE 6 IN THE RECORDS OF THE CLERK AND RECORDERS OFFICE, COUNTY OF EL PASO, STATE OF COLORADO, BEING ALSO A PORTION OF THE NORTH RIGHT-OF-WAY LINE OF DAWSON ROAD, BEING MONUMENTED AT THE SOUTHWEST CORNER OF SAID LOT 7 BY A FOUND REBAR & CAP MARKED "LS 9477" AND AT THE SOUTHEAST CORNER OF SAID LOT 7 BY A FOUND REBAR AND CAP MARKED "LS 9477". SAID LINE BEARS S89°05'35"E, A DISTANCE OF 601.38 FEET MEASURED (601.33 FEET PLATTED).

WALDEN PRESERVE 2 FILING NO. 5 Grading & Erosion Control Plans El Paso County, Colorado

Custom Castles, Inc.

17145 Colonial Park Drive Monument, CO 80132

PREPARED BY:



PREPARED BY:

19 East Willamette Avenue Colorado Springs, Colorado 80903 JULY, 2022

AGENCIES/CONTACTS

STATE HIGHWAY

WATER/WASTEWATER: DEVELOPER: CUSTOM CASTLES, INC. WALDEN CORPORATION 17145 COLONIAL PARK DRIVE PO BOX 1870 MONUMENT, CO 80132 MONUMENT, CO 80132 MR. MATT DUNSTON (719)339-2410 MR. BILL DUNSTON (719)243-1111 GAS DEPARTMENT: BLACK HILLS ENERGY CIVIL ENGINEER: JPS ENGINEERING, INC. MR. SEBASTIAN SCHWENDER (719)399-3176 19 E. WILLAMETTE AVENUE COLORADO SPRINGS, CO 80903 MR. JOHN P. SCHWAB, P.E. (719)477-9429 LOCAL ROADS EL PASO COUNTY PCD ELECTRIC DEPARTMENT: MOUNTAIN VIEW ELECTRIC ASSOCIATION & DRAINAGE: 2880 INTERNATIONAL CIRCLE 11140 E. WOODMEN ROAD

TELEPHONE COMPANY:

COLORADO DEPARTMENT OF TRANSPORTATION REGION 2 5615 WILLS BLVD. PUEBLO, CO 81008 MR. ART GONZALES (719)546-5732

COLORADO SPRINGS, CO 80910

(719)520 - 6300

A.T. & T. (LOCATORS) (719)635-3674

COLORADO SPRINGS, CO 80908

CENTURY LINK COMMUNICATIONS

(LOCATORS) (800)922-1987

MR. DAVE WALDNER (719)495-2283

SHEET INDEX

	SHEET INDEX
G1-GEC	TITLE SHEET
C1	OVERALL SITE PLAN
TY1	TYPICAL SECTIONS & DETAILS
C1.1	SITE GRADING & EROSION CONTROL PLAN
C1.2	LOT GRADING NOTES & DETAILS
C2.1	SITE GRADING PLAN — SOUTH
C2.2	SITE GRADING PLAN — NORTH
C3.1	GRADING & EROSION CONTROL NOTES
C3.2	EROSION CONTROL DETAILS
C3.3	EROSION CONTROL DETAILS
C4.1	RAIN GARDEN C4 PLAN & DETAILS
C5.1	DETENTION POND C8 PLAN & DETAILS
C6.1	RAIN GARDEN C12 PLAN & DETAILS

ENGINEER:

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.

JOHN P. SCHWAB, P.E. #29891

OWNER'S STATEMENT:

MONUMENT, COLORADO 80132

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

CUSTOM CASTLES, INC. 17145 COLONIAL PARK DRIVE

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 MANUAL, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THEY WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

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

PCD FILE NO. SF-2211

DATE

DATE

DATE



19 E. Willamette Ave. Colorado Springs, CO 80903

PH: 719-477-9429 FAX: 719-471-0766 www.jpsengr.com



CALL UTILITY NOTIFICATION
CENTER OF COLORADO

-800-922-1987

SALL 2-BUSINESS DAYS IN ADVANCE
FORE YOU DIG, GRADE, OR EXCAVATE
OR THE MARKING OF UNDERGROUND

MITTAL JPS 1/10/22 CALL UTIL CENTER JPS 7/7/22 1—800-

N

No.
REVISION
A FINAL PLAT SUBMITTAL
B EPC COMMENTS

LE SHEET

ORZ. SCALE:

HS DRAWN:

BJC

BJC

BJC

CHECKED:

RAMPART

REATED:

9/14/20

ROJECT NO:

040201

DRAWN:

BJC

CHECKED:

JPS

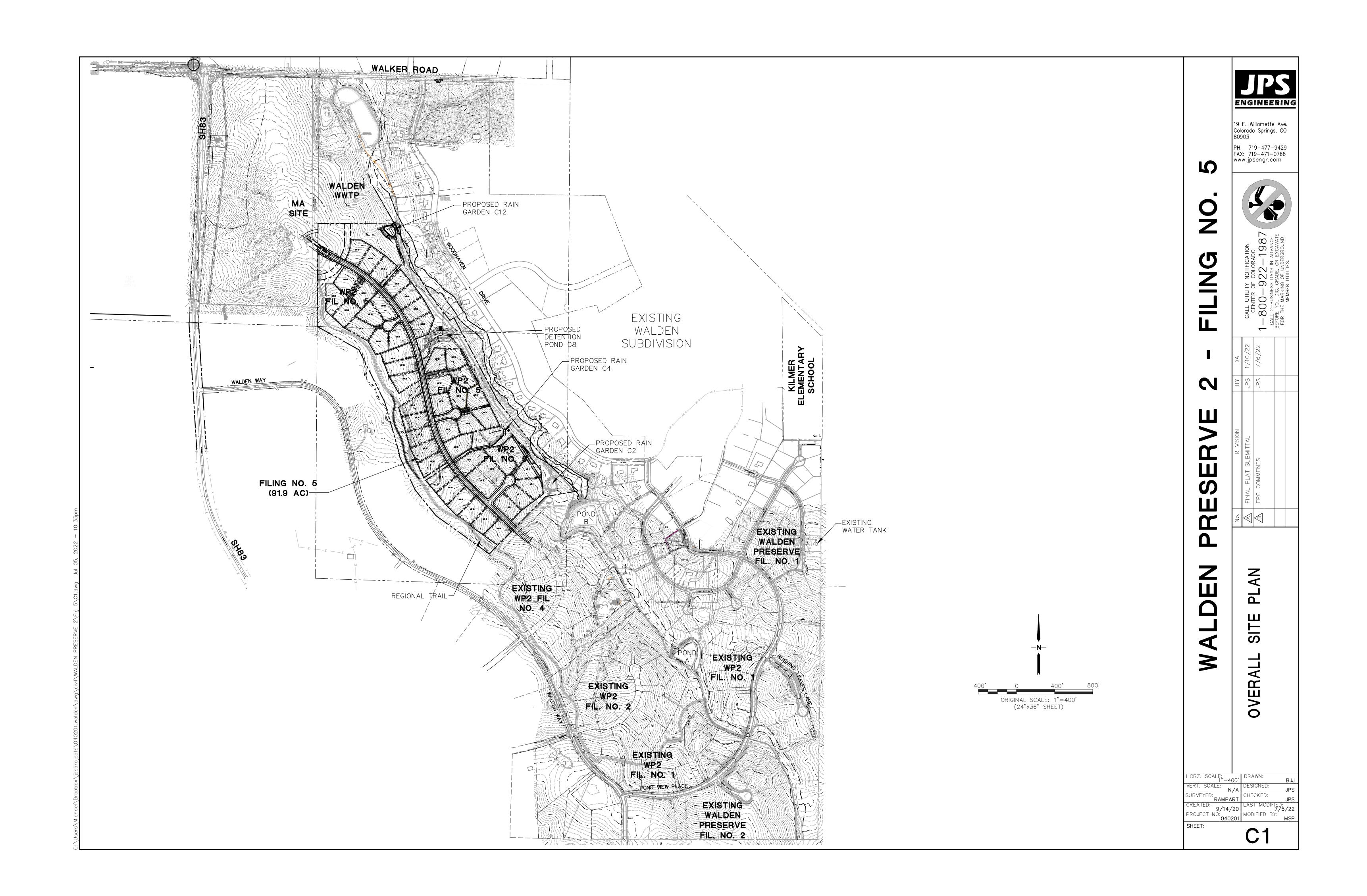
CHECKED:

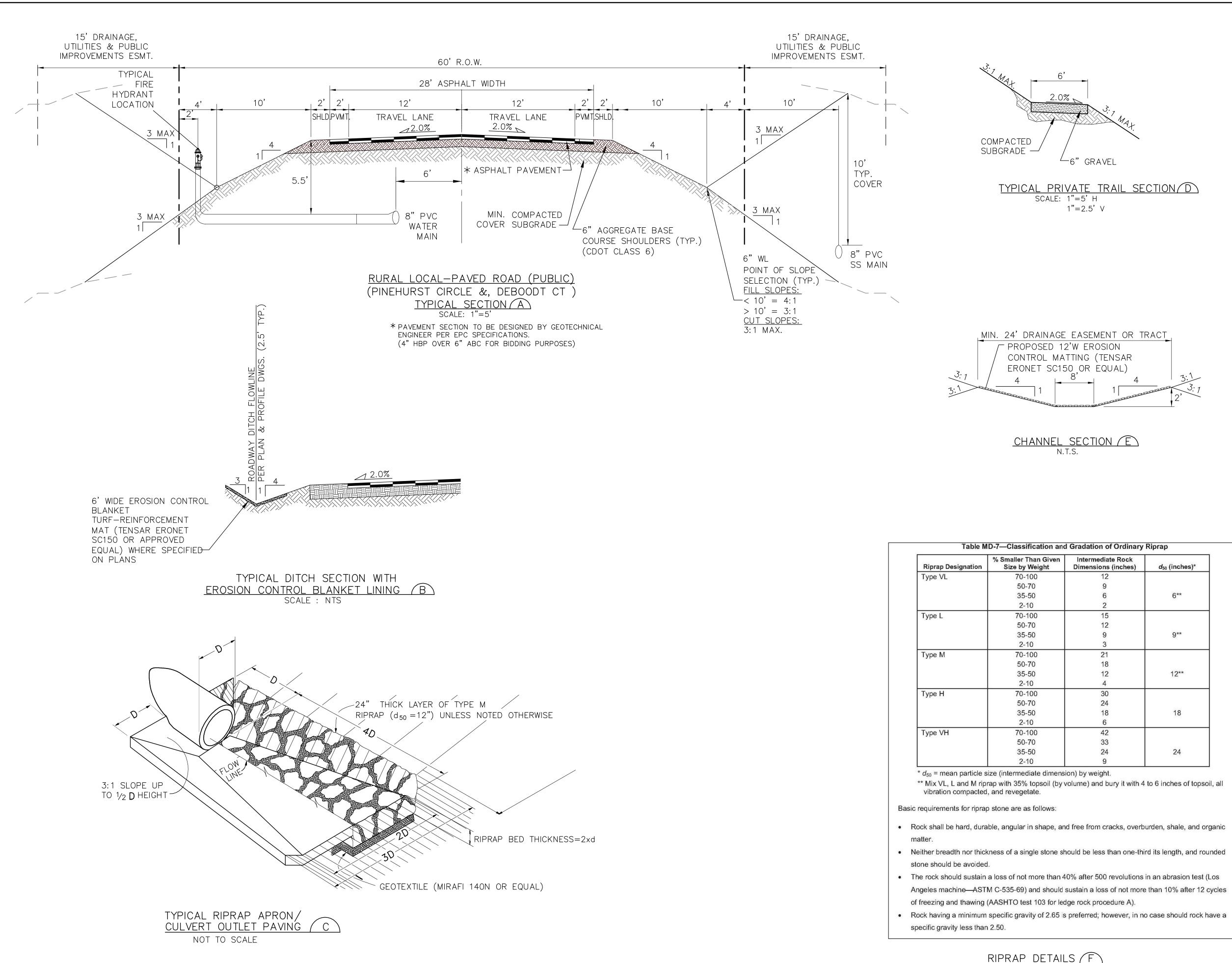
JPS

MODIFIED BY:

MSF

G1-GEC





T ENGINEERING 19 E. Willamette Ave. Colorado Springs, CO 80903 PH: 719-477-9429 FAX: 719-471-0766

www.jpsengr.com

CALL UTILITY NOTIFICENTER OF COLOI-800-922-LL 2-BUSINESS DAYS I

CTIONS AIL Ш S Ш \triangleleft AND PIC

HORZ. SCALE: DRAWN: JURVEYED: RAMPART CREATED: 9/16/20 LAG.
PROJECT NO: 040201 MODIFIED BY.

SHEET:

RIPRAP DETAILS (F)

∠6" GRAVEL

1"=2.5' V

Intermediate Rock

Dimensions (inches)

12

42

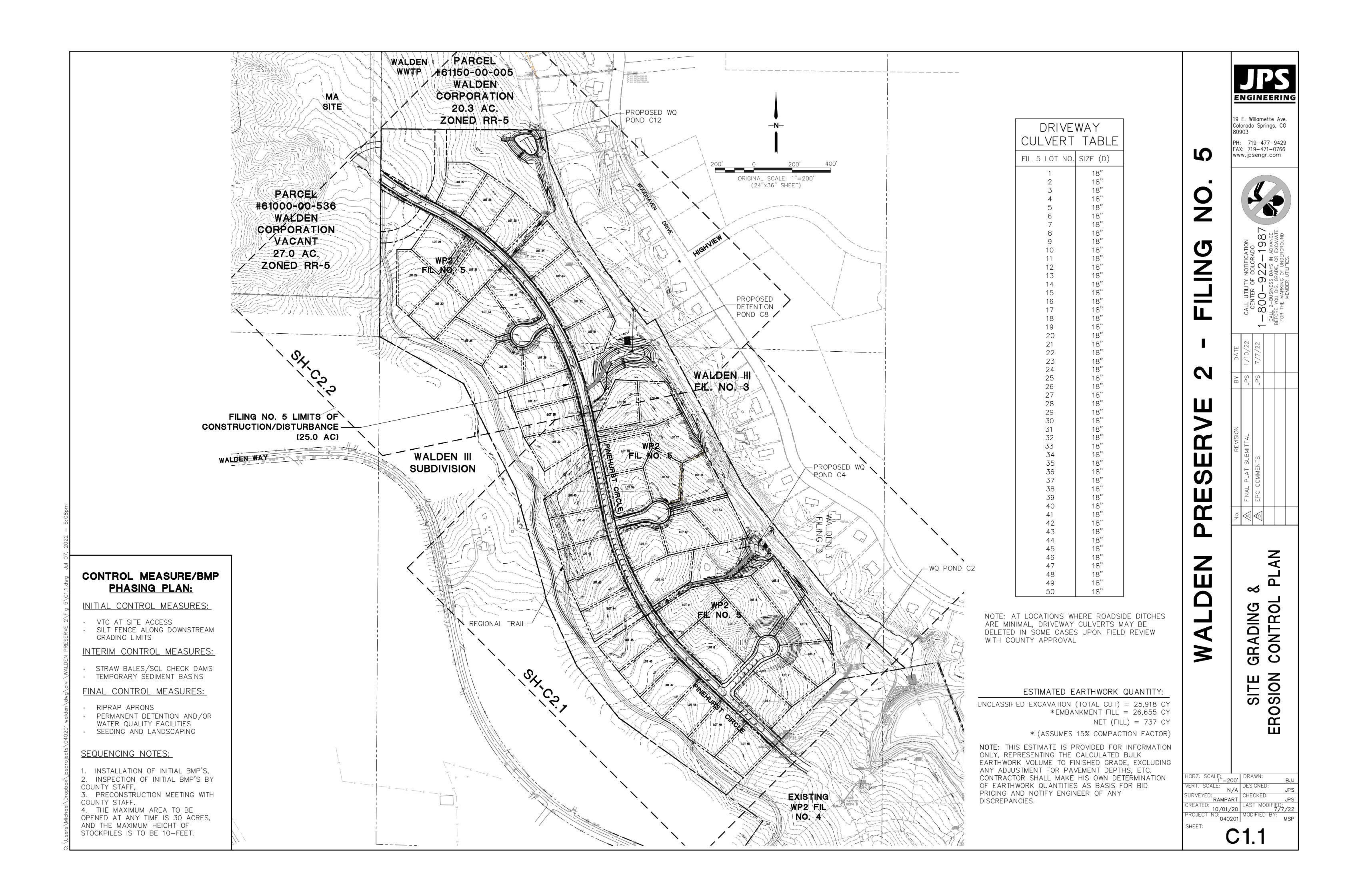
33

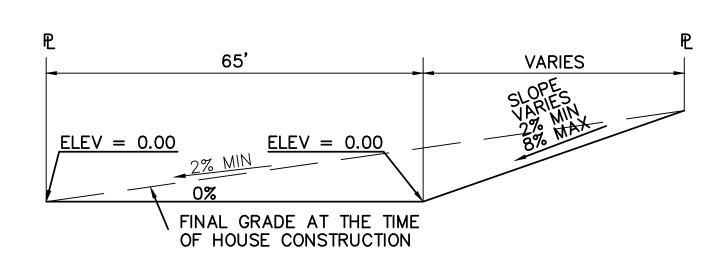
d₅₀ (inches)*

6**

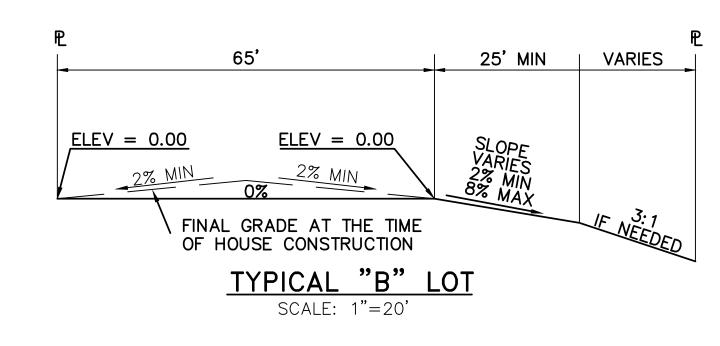
12**

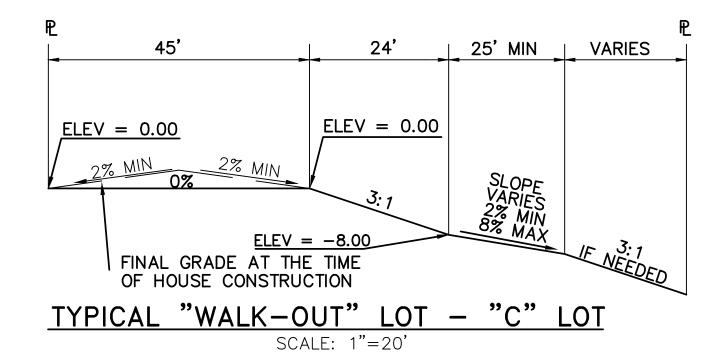
24





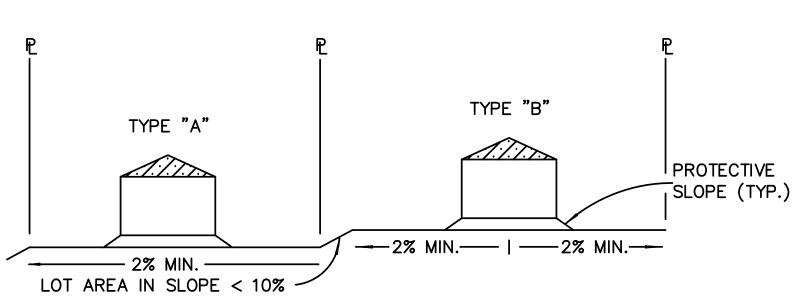
TYPICAL "A" LOT SCALE: 1"=20'





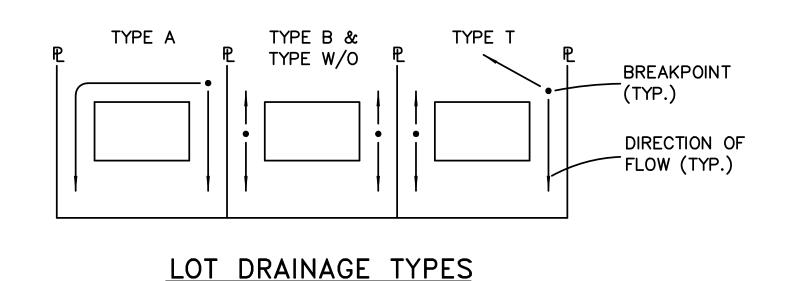
OVERLOT GRADING NOTE:

WHILE SIGNIFICANT OVERLOT GRADING IS NOT PLANNED AS PART OF THIS SUBDIVISION DEVELOPMENT, SELECTED LOTS MAY BE GRADED PER THE RECOMMENDED LOT TYPES AS NOTED ON SH. C1.1 TO ASSIST IN BALANCING EARTHWORK ON SITE.



TYPICAL LOT SECTION DETAIL N.T.S.

NOTE: FINAL GRADING TO COMPLY WITH H.U.D. STANDARDS CONTAINED IN SECTION 310 AND 602 OF THE MINIMUM PROPERTY STANDARDS (MPS) 4900.1, HANDBOOK 4140.3 CHG (DATA SHEET 79g), IF APPLICABLE, AND ALL LEGAL STANDARDS.



N.T.S.

NOTES:

DOWNGRADIENT LOTS.

AND ALL LEGAL STANDARDS.

INDIVIDUAL LOT BUILDERS & OWNERS.

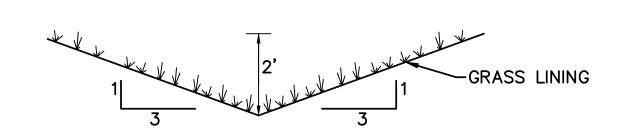
1. LOT GRADING & DRAINAGE IS THE SOLE RESPONSIBILITY OF THE

2. INDIVIDUAL BUILDERS SHALL PROVIDE POSITIVE DRAINAGE WITHIN

EACH LOT AND ACCOUNT FOR POTENTIAL CROSS-LOT DRAINAGE ON

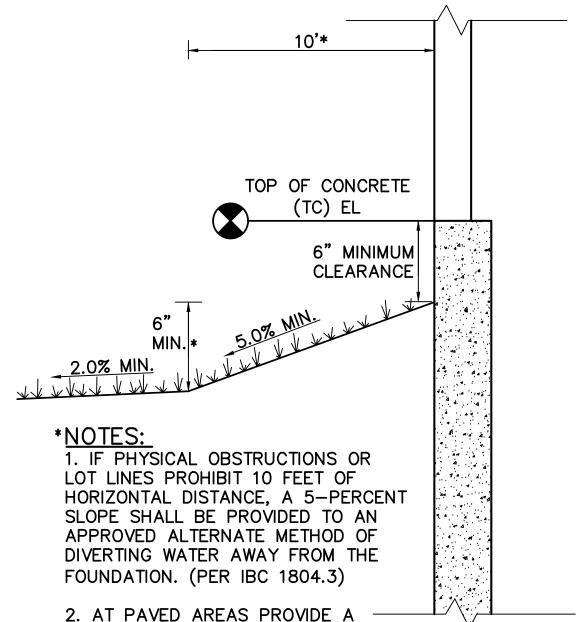
3. FINAL GRADING TO COMPLY WITH H.U.D. STANDARDS CONTAINED IN SECTION 310 AND 602 OF THE MINIMUM PROPERTY STANDARDS (MPS)

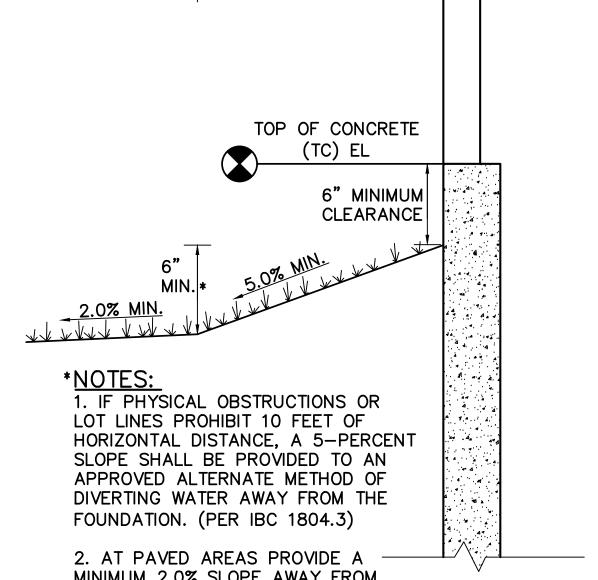
4900.1, HANDBOOK 4140.3 CHG (DATA SHEET 79g), IF APPLICABLE,





NOTE: BUILDERS AND OWNERS SHALL MAINTAIN PROPER PROTECTIVE SLOPES & SIDE/REAR LOT SWALES DURING AND AFTER HOME CONSTRUCTION.





MINIMUM 2.0% SLOPE AWAY FROM THE BUILDING FOR THE FIRST 10 FEET OF HORIZONTAL DISTANCE.

> TYPICAL BUILDING DRAINAGE DETAIL

19 E. Willamette Ave. Colorado Springs, CO 80903

PH: 719-477-9429 FAX: 719-471-0766 www.jpsengr.com

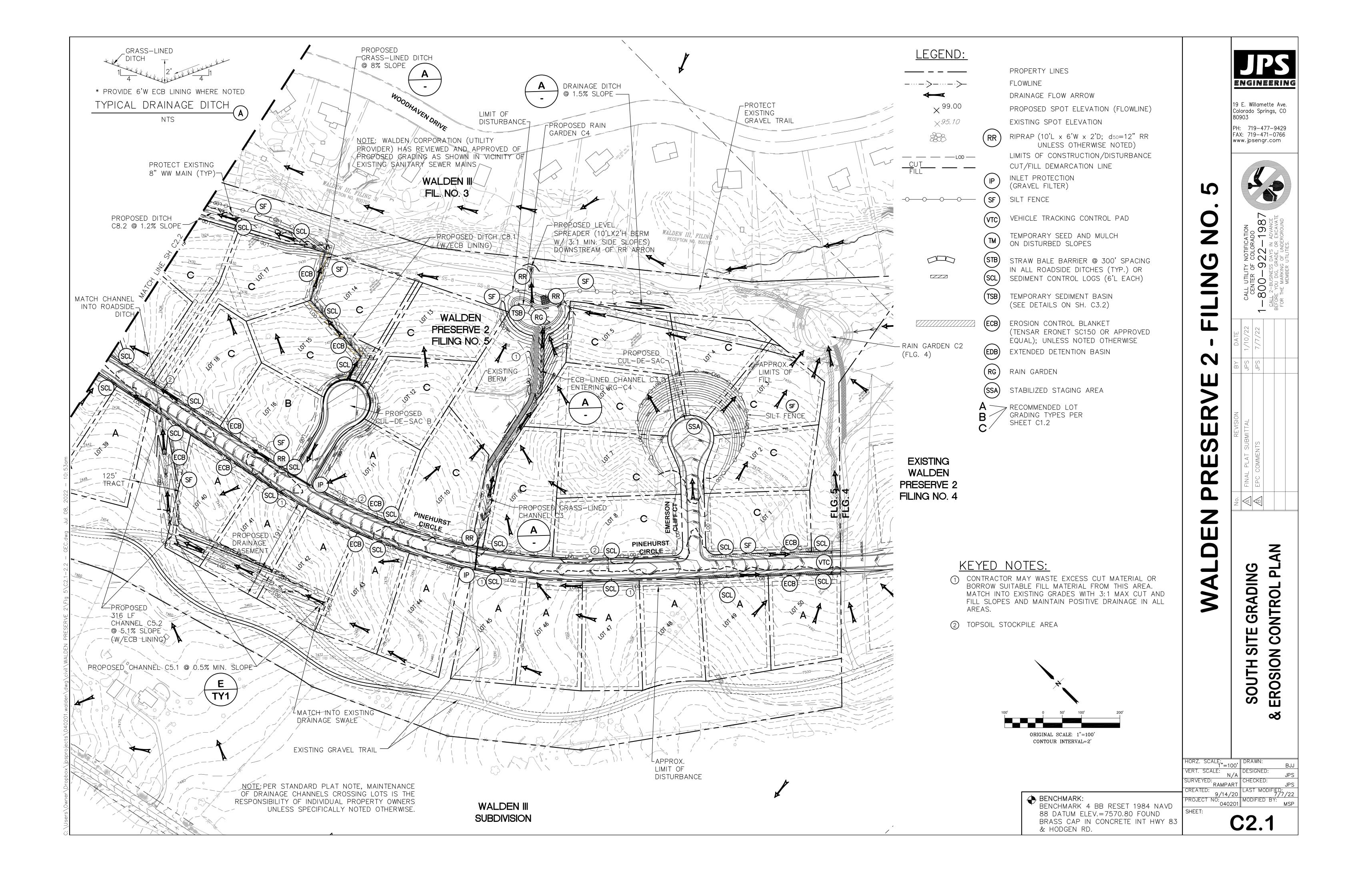


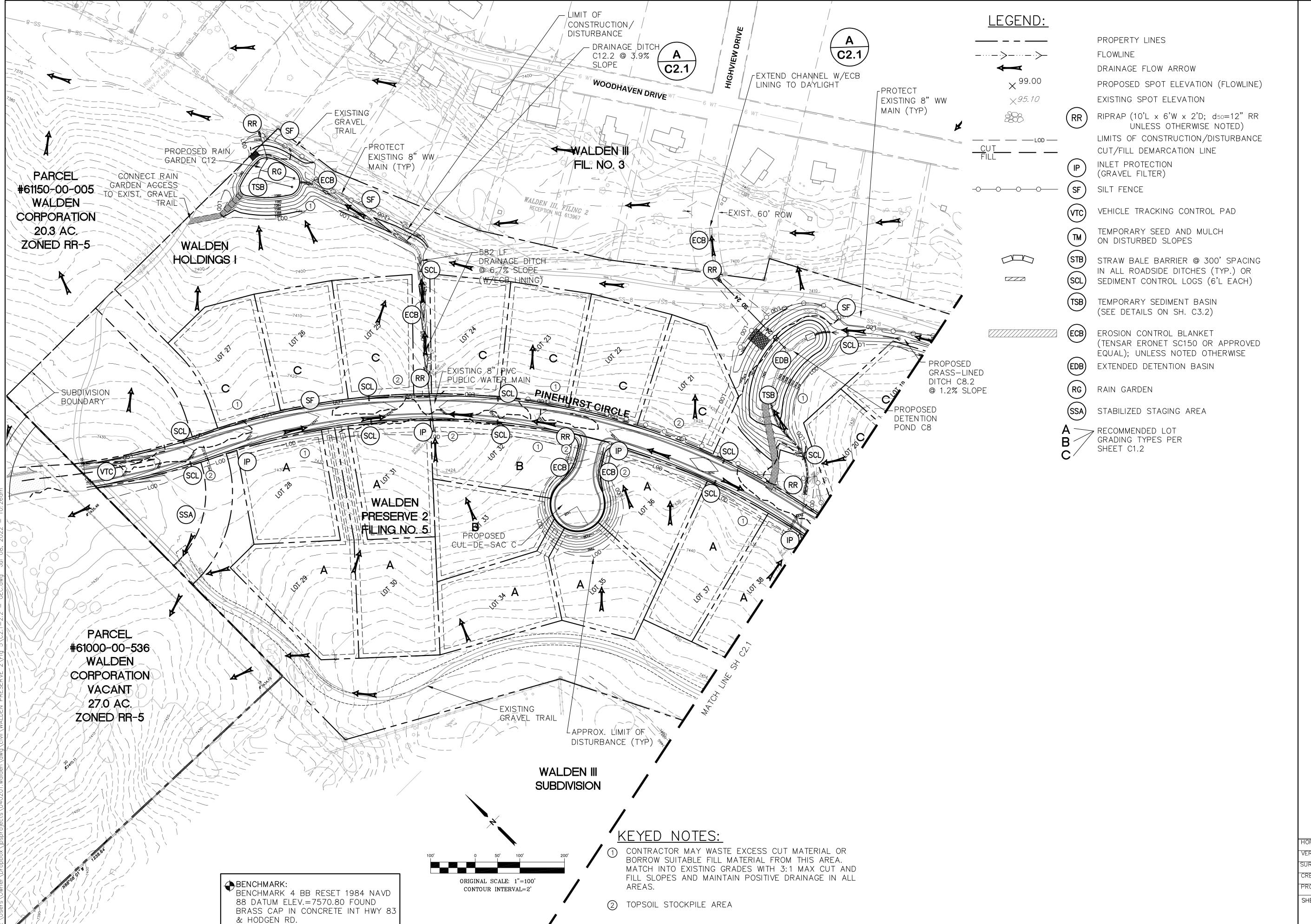
FILING

NOTE! DETAIL DING \triangleleft **四** <u>5</u> ංජ 0

DEN

⁻ RAMPART 040201 SHEET:





ENGINEERING

19 E. Willamette Ave. Colorado Springs, CO

PH: 719-477-9429 FAX: 719-471-0766 www.jpsengr.com



NOTIFICOLOGICAL STATES UTILI TER O SALL CEN

2

WAL

GRADING 귑 CONTROL EROSION NORTH **∞**ŏ

C2.2

STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS:

REVISED 7/02/19

- 1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE
- 2. 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.
- 3. A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE
- 4. 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.
- 5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
- 6. 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 ARE 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.
- 7. 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.
- 8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
- 9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT AFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
- 10. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND
- 11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
- 12. 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.
- 13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK OR STREAM.
- 14. DURING DEWATERING OPERATIONS OF UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.
- EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- 16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- 17. 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 MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- 18. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- 19. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
- 20. 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.
- 21. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ONSITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- 22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS. ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FACILITIES.
- 23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
- 24. OWNER/DEVELOPER AND THEIR AGENTS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL, OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
- 25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
- 26. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- 27. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- 28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY KUMAR & ASSOC., DATED 2/25/19 AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- 29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER QUALITY CONTROL DIVISION

WQCD - PERMITS

4300 CHERRY CREEK DRIVE SOUTH DENVER, CO 80246-1530 ATTN: PERMITS UNIT

LEGEND

NEW/EXISTING UGE UGE UNDERGROUND ELECTRIC LINE NEW/EXISTING ----- SECTION LINE - NEW/EXISTING — UGE —— UGE —— UGE —— UGE — UNDERGROUND ELECTRIC - NEW/EXISTING ---- --- EASEMENT LINE - NEW/EXISTING TELEPHONE - NEW/EXISTING -6230 ----- 6230 ---- CONTOUR - NEW/EXISTING — GAS — GAS — GAS — GAS — GAS — NEW/EXISTING ------ PROPERTY LINE - NEW/EXISTING FENCE - NEW/EXISTING ______WT ______ WT _____ WT _____ WT ____ - WATER - NEW/EXISTING OVERHEAD ELECTRIC LINE W/ POWER POLE ECB - DITCH LINING NEW/EXISTING SECTION NUMBER SHEET ON WHICH SECTION IS SHOWN

GENERAL DRAINAGE NOTES:

. INDIVIDUAL BUILDERS SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND ACCOUNT FOR POTENTIAL CROSS-LOT DRAINAGE IMPACTS WITHIN EACH

2. BUILDERS AND PROPERTY OWNERS SHALL IMPLEMENT & MAINTAIN EROSION CONTROL BEST MANAGEMENT PRACTICES FOR PROTECTION OF DOWNSTREAM PROPERTIES AND FACILITIES INCLUDING PROTECTION OF EXISTING GRASS BUFFER STRIPS ALONG THE DOWNSTREAM PROPERTY BOUNDARIES.

3. GRADING AND DRAINAGE WITHIN LOTS IS THE RESPONSIBILITY OF THE INDIVIDUAL BUILDERS AND PROPERTY OWNERS.

SEEDING MIX:

	<u>AM</u>	OUNT IN PLS
<u>GRASS</u>	<u>VARIETY</u> <u>LB</u>	S. PER ACRE
CRESTED WHEAT GRASS PERENIAL RYE WESTERN WHEATGRASS SMOOTH BROME GRASS	LINN SARTON LINCOLN OR MANCHAR	2.0 LBS. 3.0 LBS. 5.0 LBS.
SIDEOATS GRAMA	EPHRAIM	2.5 LBS.
	TOTAL:	16.5 LBS.

SEEDING & FERTILIZER APPLICATION:

HYDRO-SEED PER CDOT SPEC. SECTION 212.

MULCHING APPLICATION:

CONFORM TO CDOT SPEC-SECTION 213.

DRILL SEED OR

ESTIMATED TIME SCHEDULE:

INSTALL BMP'S GRADING START GRADING COMPLETION	AUGUST, 2022 AUGUST, 2023
SEEDING & MULCHING	AUGUST, 2023
STABILIZATION	AUGUST, 2024

SEDIMENT CONTROL MAINTENANCE PROGRAM: **FREQUENCY 1**

PERIODIC SITE INSPECTIONS RE-VEGETATION OF EXPOSED SOILS SEDIMENT REMOVAL FROM BMP'S REMOVAL OF BMP'S

BI-WEEKLY WITHIN 21 DAYS OF GRADING 2 MONTHLY AFTER STABILIZATION ACHIEVED

AND AFTER ANY PRECIPITATION OR SNOW MELT EVENT THAT CAUSES SURFACE EROSION

²ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED WHEN THE SEDIMENT LEVEL REACHES ONE HALF THE HEIGHT OF THE BMP OR AT ANY TIME THAT SEDIMENT OR DEBRIS ADVERSELY IMPACTS THE FUNCTION OF THE BMP.

PROJECT GENERAL NOTES:

- 1. EXISTING CONTOUR DATA CONSISTS OF AERIAL TOPOGRAPHIC SURVEY DATA PROVIDED BY OWNER. JPS ENGINEERING TAKES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING TOPOGRAPHIC MAPPING.
- 2. STATIONING IS AT CENTERLINE UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE AT EDGE OF ASPHALT (EOA) UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE FROM EDGE OF ASPHALT TO EDGE OF ASPHALT UNLESS OTHERWISE NOTED.
- 3. PROPOSED CONTOURS SHOWN ARE TO FINISHED GRADE.
- 4. LENGTHS SHOWN FOR STORM SEWER PIPES ARE TO CENTER OF MANHOLE.
- 5. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, DEBRIS, WASTE AND OTHER UNSUITABLE FILL MATERIAL FOUND WITHIN THE LIMITS OF EXCAVATION.
- 6. MATCH INTO EXISTING GRADES AT 3:1 MAX CUT AND FILL SLOPES.
- 7. REVEGETATION OF ALL DISTURBED AREAS SHALL BE DONE WITH SPECIFIED SEED MIX WITHIN 60 DAYS AFTER FINE GRADING IS COMPLETE.

8. EROSION CONTROL SHALL CONSIST OF SILT FENCE AND BMP'S AS SHOWN ON THE DRAWING, AND TOPSOIL WITH GRASS SEED, WHICH WILL BE WATERED UNTIL VEGETATION HAS BEEN REESTABLISHED.

9. THE EROSION CONTROL MEASURES OUTLINED ON THIS PLAN ARE THE RESPONSIBILITY OF THE DEVELOPER TO MONITOR AND REPLACE, REGRADE, AND REBUILD AS NECESSARY UNTIL VEGETATION IS RE-ESTABLISHED.

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

11. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED BY SITE CONDITIONS.

12. THE CONTRACTOR WILL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE UTILITIES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR.

13. ALL BACKFILL, SUB-BASE, AND/OR BASE COURSE MATERIAL SHALL BE COMPACTED PER EL PASO COUNTY AND CDOT STANDARDS AND SPECIFICATIONS.

14. ALL FINISHED GRADES SHALL HAVE A MINIMUM 1.0% SLOPE TO PROVIDE POSITIVE DRAINAGE. 15. IN CASE OF CONFLICT BETWEEN PROPOSED SLOPES AND PROPOSED SPOT ELEVATIONS, SPOT ELEVATIONS SHALL GOVERN.

16. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO BEGINNING WORK.

EXISTING VEGETATION CONSISTS OF NATIVE GRASSES AND SHRUBS (APPROXIMATELY 50% COVERAGE)

ENGINEERING

19 E. Willamette Ave. Colorado Springs, CO

PH: 719-477-9429 FAX: 719-471-0766 www.jpsengr.com



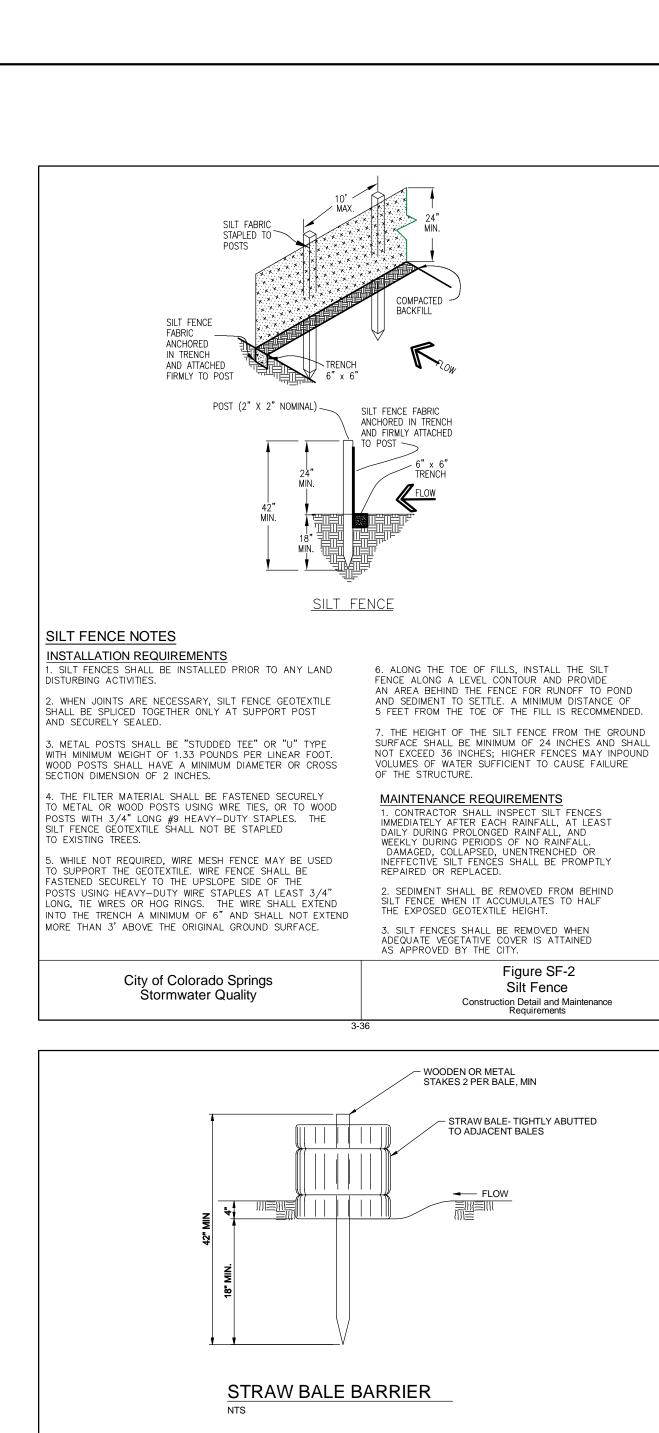
 ∞ တ 🖇 ∯ **⊘** δ ≥ × × ≥

SALL CEN

	REVISION	ВХ	DATE	
FINAL PLAT SUBMITTAL	JBMITTAL	SAP	JPS 1/10/22	
EPC COMMENTS	(0	JPS	JPS 7/7/22	

0 Ш S 0 0 \mathbf{C} Z ш 0 ∞ $\mathbf{\alpha}$ \vdash Z 0 C $\mathbf{\alpha}$ (7

NTS DRAWN: IORZ. SCALE: DESIGNED: RAMPART LAST MODIF 040201 SHEET:



STRAW BALE BARRIER NOTES

3-42

Figure SBB-2

Straw Bale Barrier

Construction Detail and Maintenance Requirements

INSTALLATION REQUIREMENTS

PRIOR TO ANY LAND DISTURBING ACTIVITIES.

1. STRAW BALE BARRIERS SHALL BE INSTALLED

2. BALES SHALL CONSIST OF APPROXIMATELY 5 CUBIC FEET OF CERTIFIED WEED FREE HAY OR STRAW AND WEIGH NOT LESS THAN 35 POUNDS.

3. BALES ARE TO BE PLACED IN A SINGLE ROW WITH THE END OF THE BALES TIGHTLY ABUTTING ONE ANOTHER.

4. EACH BALE IS TO BE SECURELY ANCHORED WITH AT LEAST TWO STAKES AND THE FIRST STAKE IS TO BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER.

5. STAKES ARE TO BE A MINIMUM OF 42 INCHES LONG. METAL STAKES SHALL BE STANDARD "T" OR "U" TYPE WITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT. WOOD STAKES SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2

6. BALES ARE TO BE BOUND WITH EITHER WIRE OR STRING AND ORIENTED SUCH THAT THE BINDINGS ARE AROUND THE SIDES AND NOT ALONG THE TOPS AND BOTTOMS OF THE BALE.

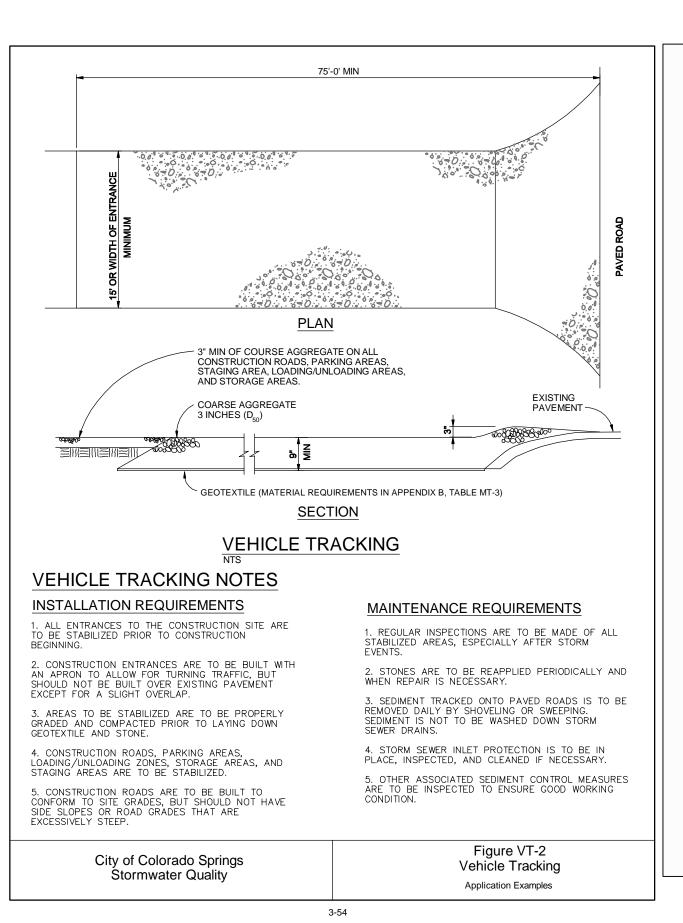
8. END BALES ARE TO EXTEND UPSLOPE SO THE TRAPPED RUNOFF CANNOT FLOW AROUND THE ENDS OF THE BARRIER.

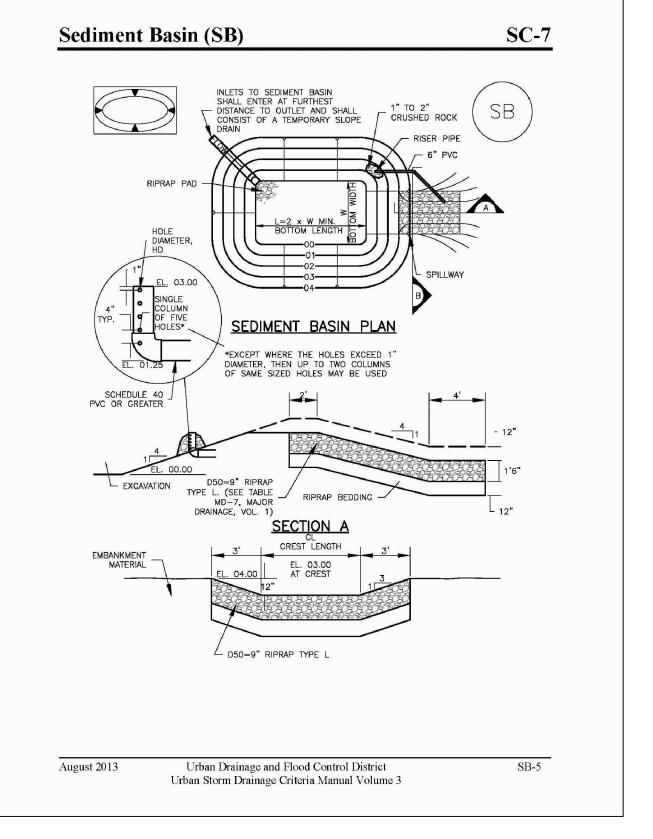
City of Colorado Springs

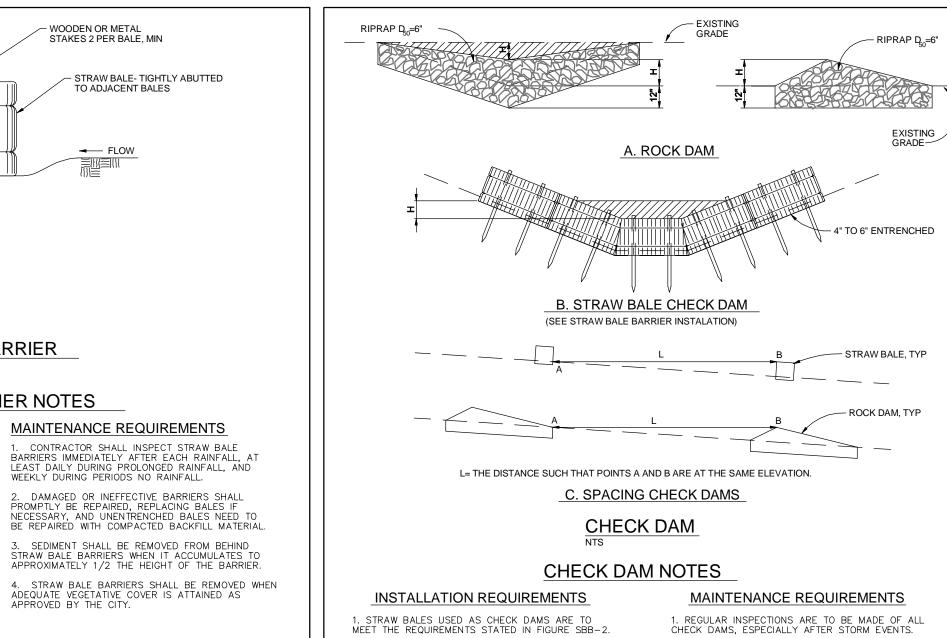
Stormwater Quality

7. GAPS BETWEEN BALES ARE TO BE CHINKED (FILLED BY WEDGING) WITH STRAW OR THE SAME MATERIAL OF THE BALE.

OF 2 INCHES.







2. REPLACE STONE AS NECESSARY TO MAINTAIN THE CORRECT HEIGHT OF THE DAM.

3. ACCUMULATED SEDIMENT AND DEBRIS IS TO BE REMOVED FROM BEHIND THE DAMS AFTER EACH STORM OR WHEN 1/2 OF THE ORIGINAL HEIGHT OF THE DAM IS REACHED.

3. CHECK DAMS ARE TO REMAIN IN PLACE AND OPERATIONAL UNTIL THE DRAINAGE AREA AND CHANNEL ARE PERMANENTLY STABILIZED.

4. WHEN CHECK DAMS ARE REMOVED THE CHANNEL LINING OR VEGETATION IS TO BE RESTORED.

Figure CD-1

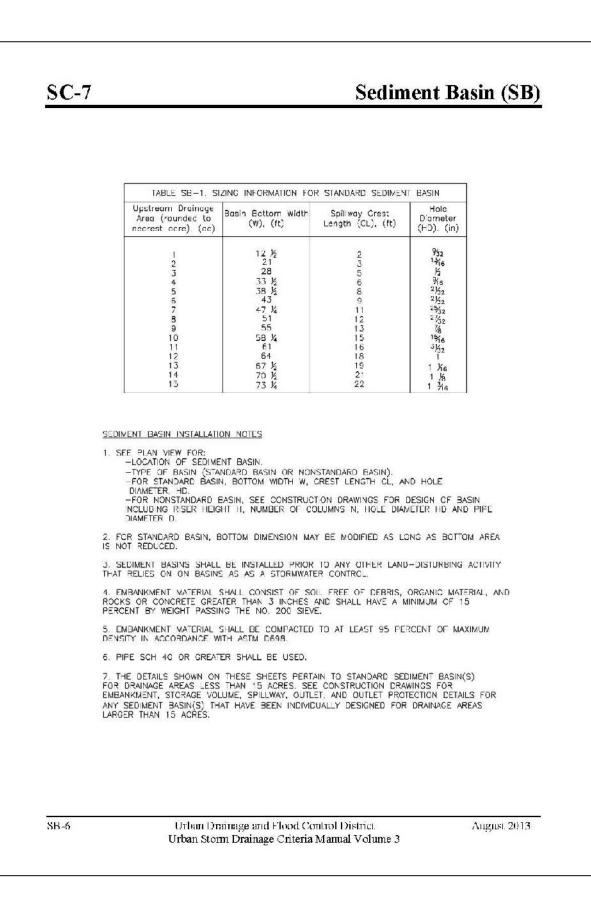
Check Dam

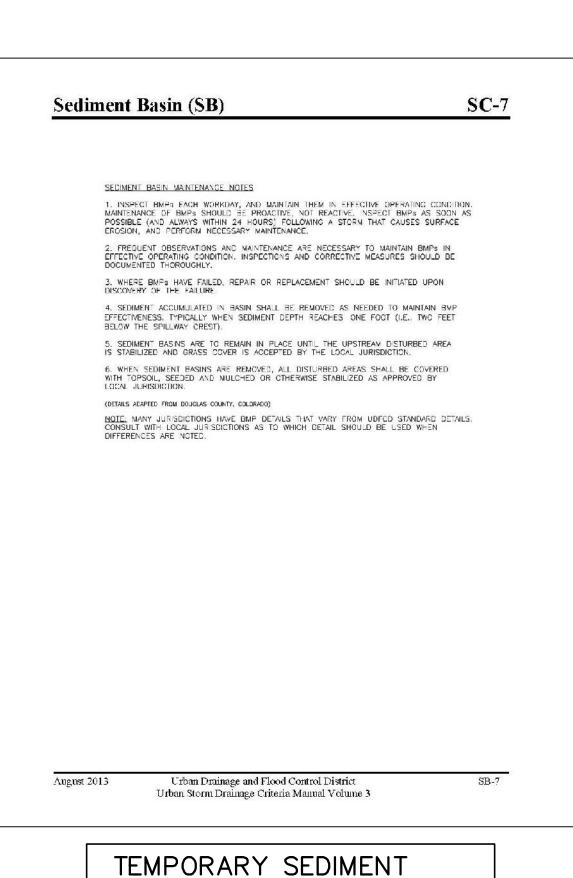
Construction Detail and Maintenance Requirements

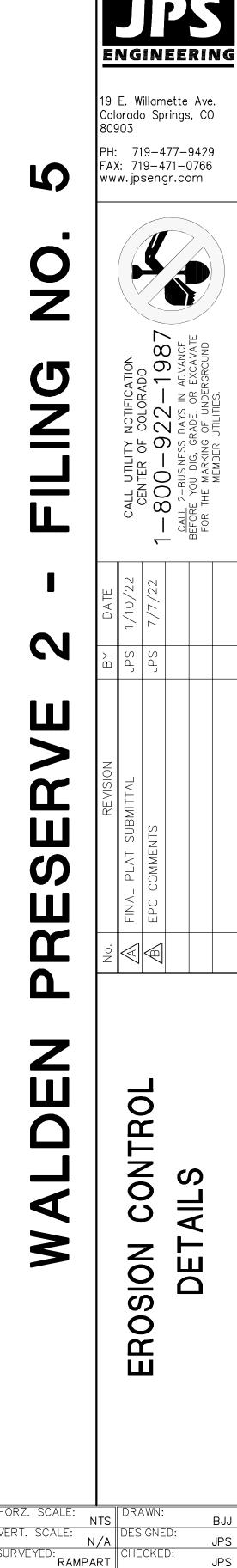
2. THE "H" DIMENSION SHALL BE SELECTED TO PROVIDE WEIR FLOW CONVEYANCE FOR 2—YEAR FLOW OR GREATER.

City of Colorado Springs

Stormwater Quality







BASIN DESIGN DATA BASIN DRAINAGE CL AREA (AC) (FT) 22 17.6

40.6

29.3

1-3/16"

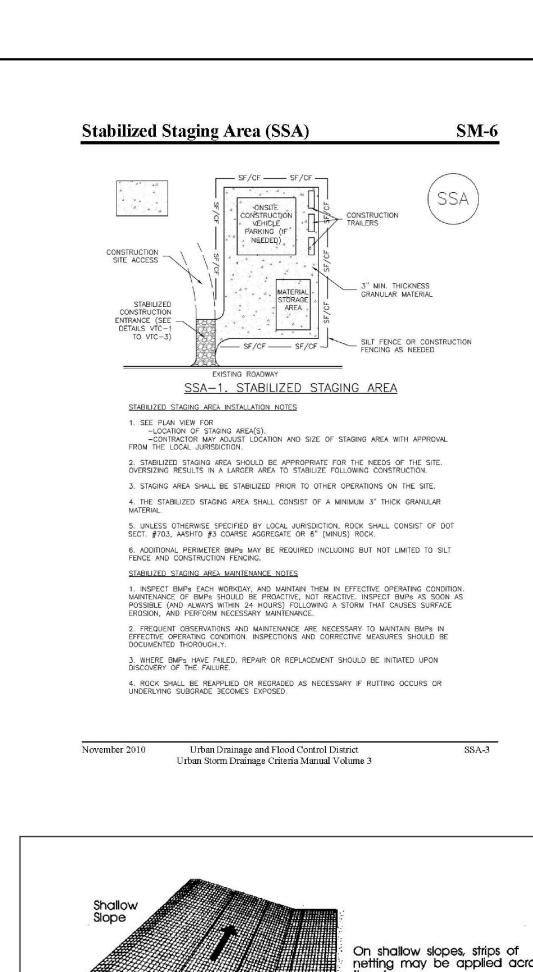
1-3/16"

| 1-3/16"

22

22

´RAMPART∥ CREATED: LAST MODIFIE 7
PROJECT NO: MODIFIED BY: SHEET:



SM-6

STABILIZED STACING AREA MAINTENANCE NOTES

(DETAILS ADAPTED FROM COUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLCADING/LOADING OPERATIONS.

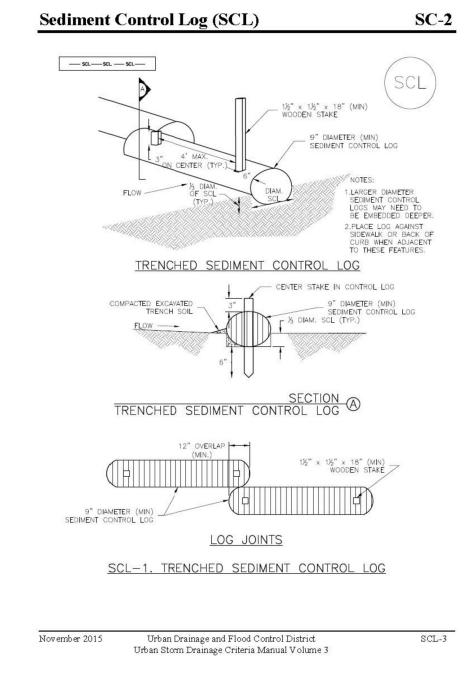
6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPHOVED BY THE LOCAL JURISJICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR CITHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

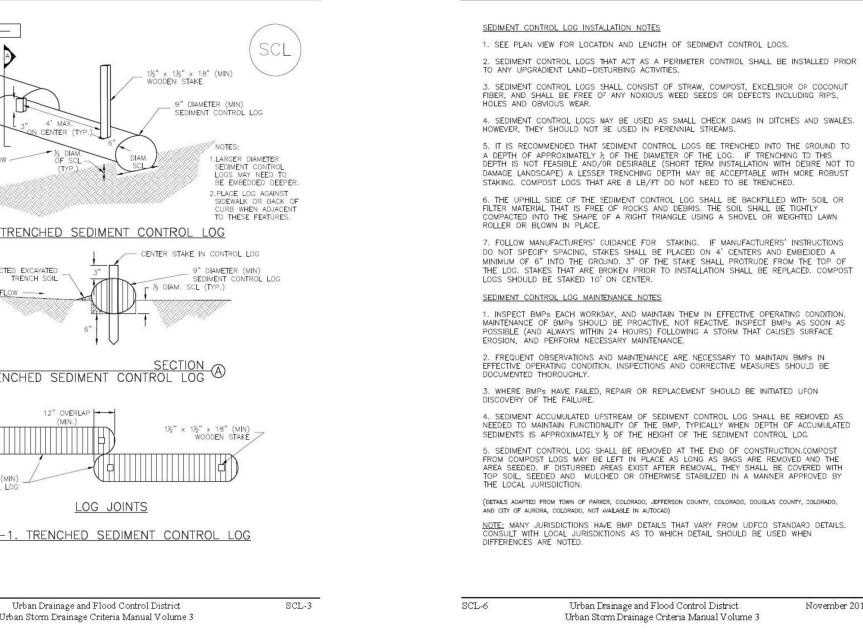
NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DEFICULTIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

Urban Drainage and Flood Control District

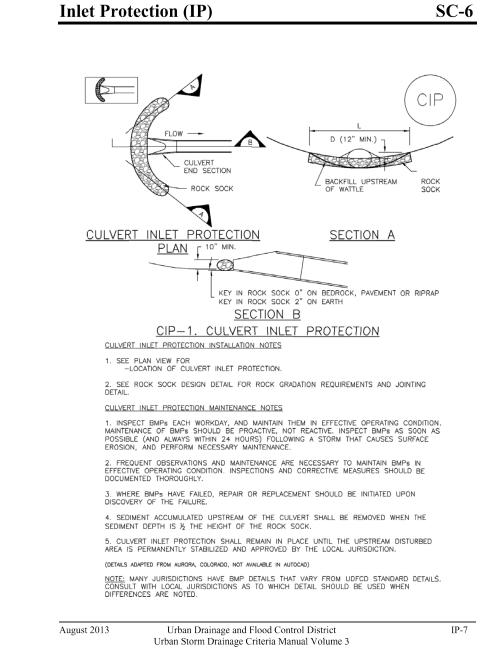
Urban Storm Drainage Criteria Manual Volume 3

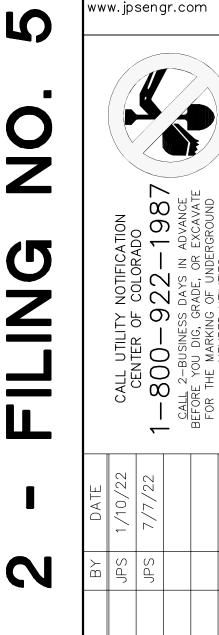




Concrete Washout Area (CWA)

Sediment Control Log (SCL)





ENGINEERING

19 E. Willamette Ave.

Colorado Springs, CO

PH: 719-477-9429 FAX: 719-471-0766

80903

0

H . O AIL O <u>N</u> DE 0 $\mathbf{\alpha}$

HORZ. SCALE: NTS DRAWN: ^{''}RAMPART CREATED: 10/01/20 LAST MODIFIED BY:

C3.3

PCD File No. SF-2211

Ш

Ш

 \geq Ш

`040201 || <u>'</u>

SHEET:

On shallow slopes, strips of netting may be applied across the slope. Where there is a berm at the top of the stope, bring the netting over the berm and anchor it behind the berm. On steep slopes, apply strips of netting parallel to the direction of flow and anchor securely. Bring netting down to a level area before terminating the installation. Turn the end under 6" and staple at 12" intervals. In ditches, apply netting parallel to the direction of flow. Use check slots every 15 feet. Do not join strips in the center of the ditch.

City of Colorado Springs

DEN/M/153722.CS.CB/FigECB-1/9-99

Storm Water Quality

Figure ECB-1

Erosion Control Blanket

Application Examples

Concrete Washout Area (CWA) MM-1CONCRETE WASHOUT CONCRETE WASHOUT AREA PLAN 8 X 8 MIN. SECTION A CWA-1. CONCRETE WASHOUT AREA CWA INSTALLATION NOTES SEE PLAN VIEW FOR:
 -CWA INSTALLATION LOCATION. 2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED. 3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE. 4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP. 5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'. 6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA. 7. SIGNS 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 RIGS. 8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

Urban Drainage and Flood Control District

Urban Storm Drainage Criteria Manual Volume 3

Stabilized Staging Area (SSA)

CWA MAINTENANCE NOTES INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION.
MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS
POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE
EROSION, AND PERFORM NECESSARY MAINTENANCE. 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs in effective operating condition. Inspections and corrective measures should be documented thoroughly. 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. 4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'. 5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY. 6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED. 7. WHEN THE CWA IS RENOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION. (DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD). $\underline{\text{NOTE:}}$ many jurisdictions have BMP details that vary from udfcd standard details. Consult with local jurisdictions as to which detail should be used when differences are noted.

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

MM-1

