MAP NOTES

1. BOUNDARY BEARINGS AND DISTANCES SHOWN ON THIS MAP ARE RELATIVE TO THE SOUTH LINE OF SANCTUARY OF PEACE RESIDENTIAL COMMUNITY TO BEAR N89°51'41"W.

2. THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN WAS PREPARED BY MVE, INC. USING DATA PROVIDED BY POLARIS SURVEYING INC. ELEVATIONS SHOWN ARE RELATIVE TO THE CITY OF COLORADO SPRINGS CONTROL NETWORK (FIMS DATUM).

GENERAL NOTES:

- LOCATION OF ALL UTILITIES MAY NOT BE SHOWN OR MAY NOT HAVE BEEN LOCATED. BELOW GROUND LOCATIONS HAVE NOT BEEN PERFORMED, THEREFORE, THE RELATIONSHIP BETWEEN PROPOSED WORK AND EXISTING FACILITIES, STRUCTURES AND UTILITIES MUST BE CONSIDERED APPROXIMATE. ALL UTILITIES SHALL BE LOCATED PRIOR TO ANY EARTH WORK OR DIGGING (1-800-922-1987 OR 811). THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL SUBSURFACE UTILITY OWNERS PRIOR TO BEGINNING WORK TO DETERMINE LOCATION OF UTILITY FACILITIES
- THE CONTRACTOR SHALL 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 SOLE EXPENSE AND ANY DISRUPTION SHALL BE SETTLED BY THE
- 4. EXISTING CONDITIONS SHALL BE VERIFIED BY THE GENERAL CONTRACTOR. DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER PRIOR
- THE CONTRACTOR SHALL ENDEAVOR NOT TO DISTURB ANY OFFSITE AREAS. THE CONTRACTOR SHALL RESTORE TO THE ORIGINAL CONDITION, ADJACENT (OFF-SITE) PROPERTY DISTURBED BY THIS OPERATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT GRADED AREAS FROM, AND AS NECESSARY RESTORE TO GRADE, ANY RUTS, WASHES OR OTHER CHANGES FROM THE DESIGN ELEVATIONS SHOWN HEREON, UNTIL GRADING WORK IS ACCEPTED BY THE OWNER OR
- CONTRACTOR IN THE PERFORMANCE OF THIS WORK SHALL, AT ALL TIMES, WHETHER OR NOT SPECIFICALLY DIRECTED BY OWNER OR ENGINEER, STRICTLY OBSERVE SAFETY PROVISIONS OF ALL FEDERAL, STATE AND MUNICIPAL LAWS AND BUILDING AND CONSTRUCTION CODES RELATING TO PUBLIC SAFETY. CONTRACTOR SHALL CONTINUOUSLY CONDUCT HIS OPERATIONS WORK IN A MANNER THAT SUCH WORK WILL NOT BECOME A HAZARD TO LIFE AND LIMB, ENDANGER PROPERTY OR ADVERSELY AFFECT THE SAFETY, USE OR STABILITY OF THE PUBLIC WAY, DRAINAGE CHANNEL OR OTHER PROPERTY ASSOCIATED WITH THIS PROJECT.
- 8. ALL WORK IN THE PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED ACCORDING TO THE EL PASO COUNTY STANDARD SPECIFICATIONS, LATEST

STANDARD EL PASO COUNTY GRADING & EROSION CONTROL PLAN NOTES:

1. 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.

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 field.

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

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 greas 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

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 achieved when all around disturbing 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 effect the design or function of permanent stormwater management structures must be approved by the ECM Administrator prior to

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 inteasible and specifically requested and approved.

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 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.

15. 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

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 Plan. control measures may be required by El Paso County Engineering if deemed necessary, based on specific

18. Tracking of soils and construction debris off-site shall be minimized. Materials tracked off-site shall be cleaned up and properly disposed

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 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 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

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

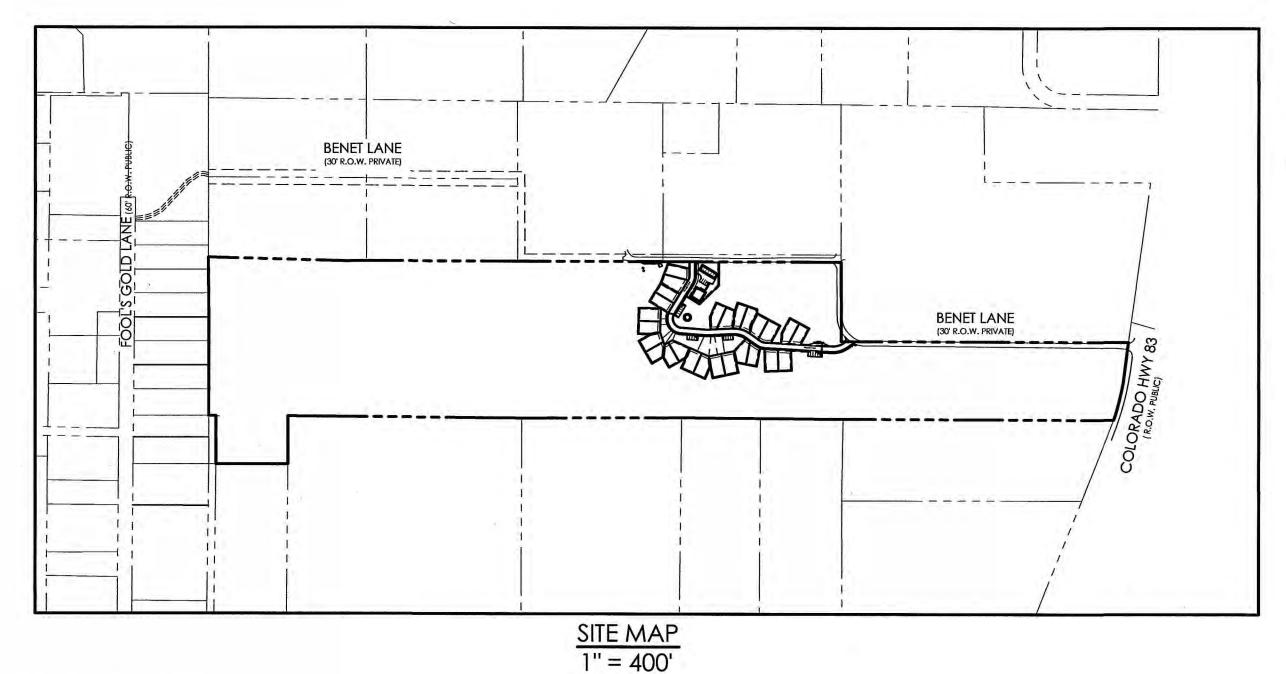
28. The soils report for this site has been prepared by Entech Engineering titled Soil, Geology and Geologic Hazard Study, Sanctuary of Peace Filing No. 1, and dated October 28, 2019 and shall be considered a part of these plans.

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 contains certification of completion of a stormwater management plan (SWMP), of which this Grading and Erosion Control Plan may be a part. For information or application materials contact:

Colorado Department of Public Health and Environment Water Quality Control Division WQCD - Permits 4300 Cherry Creek Drive South Denver, CO 80246-1530 Attn: Permits Unit



GRADING AND EROSION CONTROL PLAN SANCTUARY OF PEACE RESIDENTIAL COMMUNITY EL PASO COUNTY, COLORADO



GRADING NOTES:

- ALL WEEDS, TRASH, DEBRIS, RUBBLE, BROKEN ASPHALT, ORGANIC MATERIAL (EXCLUDING TOPSOIL) AND REFUSE, OR ANY OTHER MATERIAL WHICH WOULD NOT BE DELETERIOUS AS FILL MATERIAL OR INCAPABLE OF SUPPORTING THE BUILDING. VEHICULAR AND/OR OVERBURDEN LOADS TO BE IMPOSED SHALL BE CLEARED. GRUBBED OR EXCAVATED AS THE CASE MAY DICTATE PRIOR TO GRADING AND SHALL BE REMOVED FROM
- 2. PROPOSED CONTOURS SHOWN ARE FINISH GRADES AND READ TO TOP OF PAVEMENT AND FINISH SOIL
- 3. THE CONTRACTOR SHALL ENDEAVOR NOT TO DISTURB ANY OFFSITE AREAS, THE CONTRACTOR SHALL RESTORE TO THE ORIGINAL CONDITION, ADJACENT (OFF-SITE) PROPERTY DISTURBED BY HIS OPERATIONS
- 4. THE GENERAL CONTRACTOR SHALL STRIP TOPSOIL FROM CONSTRUCTION AREAS AND STOCKPILE TOPSOIL AT AREA SHOWN ON THIS PLAN. PLACE TOPSOIL WITH APPROPRIATE EROSION CONTROL AND IN A MANNER SO AS TO NOT CONFLICT WITH OTHER TRADES AND CONSTRUCTION PROCESS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT GRADED AREAS FROM, AND AS NECESSARY RESTORE TO GRADE, ANY RUTS, WASHES OR OTHER CHANGES FROM THE DESIGN ELEVATIONS SHOWN HEREON, UNTIL GRADING WORK IS ACCEPTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- 4. ALL GRADING SHALL BE DONE TO INSURE POSITIVE DRAINAGE AWAY FROM FOUNDATIONS AND STRUCTURES.
- 5. FINISHED GRADE OF ALL PERVIOUS EARTH SURFACES THAT CONTACT FOUNDATION WALLS SHALL BE A MINIMUM OF 6" BELOW ANY UNTREATED WOOD MATERIAL OR IN ACCORDANCE WITH APPLICABLE CODES AND THE RECOMMENDATIONS OF THE OWNER'S GEOTECHNICAL ENGINEERING REPORT OR DESIGN.
- 6. PERVIOUS EARTH SURFACES SHALL SLOPE AWAY FROM ALL FOUNDATION WALLS AT A MINIMUM RATE OF 6" IN 10 FEET (5%) FOR THE FIRST 10 FEET ADJACENT TO THE FOUNDATION OR IN ACCORDANCE WITH APPLICABLE CODES AND THE RECOMMENDATIONS OF THE OWNER'S GEOTECHNICAL ENGINEERING REPORT OR DESIGN,
- 7. CONCRETE OR OTHER IMPERVIOUS SURFACES THAT CONTACT FOUNDATION WALLS SHALL SLOPE AWAY FROM ALL FOUNDATION WALLS AT A MINIMUM RATE OF 1/4" PER FOOT (2,00%) OR IN ACCORDANCE WITH APPLICABLE CODES AND THE RECOMMENDATIONS OF THE OWNER'S GEOTECHNICAL ENGINEERING REPORT
- 8. ANY FILL MATERIAL REQUIRED TO BRING GRADES UP TO PROPOSED ELEVATIONS SHALL BE PROVIDED BY THE
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTING TOPSOIL THROUGHOUT THE LAWN AND PLANTING AREAS ACCORDING TO APPROVED LANDSCAPE PLANS, BY OTHERS.
- 10. THE NATURE OF WORK PROPOSED BY THIS PLAN IS GRADING AND THE EXTENT OF SAID PROPOSED GRADING IS SHOWN BY THE EXISTING AND PROPOSED CONTOURS HEREON.
- FOR ANY OTHER PURPOSE THAN OVER LOT GRADING OPERATIONS. 12. CONTRACTOR SHALL USE MECHANICAL METHODS TO GO FROM THE EXISTING TO PROPOSED CONTOURS IN

11. M.V.E., INC. OR THE ENGINEER ASSUMES NO RESPONSIBILITY OR LIABILITY FOR USE OF THIS GRADING PLAN

- ACCORDANCE WITH THIS GRADING PLAN. QUALITY CONTROL OF SOILS AND GRADING OPERATION WILL BE AS DIRECTED BY OWNERS GEOTECHNICAL ENGINEER. 13. CONTRACTOR IN THE PERFORMANCE OF HIS GRADING WORK SHALL, AT ALL TIMES, WHETHER OR NOT
- SPECIFICALLY DIRECTED BY OWNER OR ENGINEER, STRICTLY OBSERVE SAFETY PROVISIONS OF ALL FEDERAL, STATE AND MUNICIPAL LAWS AND BUILDING AND CONSTRUCTION CODES RELATING TO PUBLIC SAFETY. CONTRACTOR SHALL CONTINUOUSLY CONDUCT HIS GRADING OPERATIONS WORK IN A MANNER THAT SUCH WORK WILL NOT BECOME A HAZARD TO LIFE AND LIMB, ENDANGER PROPERTY OR ADVERSELY AFFECT THE SAFETY, USE OR STABILITY OF THE PUBLIC WAY, DRAINAGE CHANNEL OR OTHER PROPERTY SHOWN ON THIS GRADING PLAN. GRADING OPERATIONS WORK COMPLETED IN ACCORDANCE WITH THIS GRADING PLAN WILL NOT BECOME A HAZARD TO LIFE AND LIMB, ENDANGER PROPERTY OR ADVERSELY AFFECT THE SAFFTY USE OR STABILITY OF THE PUBLIC WAY, DRAINAGE CHANNEL, OR OTHER PROPERTY SHOWN ON THIS GRADING
- 14. WHENEVER OWNER, ENGINEER OR CITY SAFETY DIRECTOR OR HIS DESIGNATED REPRESENTATIVE BECOMES AWARE OF CONTRACTORS FAILURE TO COMPLY WITH APPLICABLE SAFETY REGULATIONS, THE OWNER, ENGINEER OR CITY SAFETY DIRECTOR OR HIS DESIGNATED REPRESENTATIVE WILL INFORM THE CONTRACTOR WHO SHALL TAKE IMMEDIATE STEPS TO REMEDY THE NONCOMPLIANCE.
- 15. CONTRACTOR SHALL PROVIDE APPROPRIATE EROSION CONTROL MEASURES DURING EARTHWORK OPERATIONS TO CONTROL EROSION AND SEDIMENT TRANSFER TO ADJACENT PROPERTIES, EROSION CONTROL MEASURES ARE NOT LIMITED TO THOSE NOTED ON THE EROSION CONTROL PLAN.
- ALL DISTURBED AREAS SHALL BE REVEGETATED OR OTHERWISE LANDSCAPED AFTER CONSTRUCTION IN ACCORDANCE WITH THE REVEGETATION GUIDELINES CONTAINED IN THE STANDARD EROSION CONTROL NOTES ON THIS PLAN AND IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN FOR THIS PROJECT. THE APPROVED LANDSCAPE PLAN DEPICTS SOD AND SEEDING AREAS WITH SPECIFIED TYPES AND
- B. NETTING WILL BE PLACED ON CONSTRUCTED SLOPES GREATER THAN 3:1. SLOPE VALUES ARE ARE SHOWN ON THE PLAN. NETTING SHALL BE GREENFIX AMERICA WS072 OR EQUAL AGRICULTURAL STRAW BLANKET WITH PHOTODEGRADABLE NETTING ON BOTH SIDES. NETTING SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- C. STRAW BALES WILL BE PLACED AT TOP OF NEWLY CONSTRUCTED SLOPES OF 3:1 OR GREATER AT SELECTED LOCATIONS AS REQUIRED.
- D. PLACE SILT FENCE AS SHOWN ON THE EROSION CONTROL PLAN AND AS MAY BE REQUIRED TO PREVENT SEDIMENT MOVEMENT TO ADJACENT PROPERTY, STRAW BALES OR EROSION CONTROL LOGS MAY BE SUBSTITUTED WITH APPROVAL OF THE ENGINEER.
- 22. ALL WORK IN THE PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED ACCORDING TO THE EL PASO COUNTY STANDARD SPECIFICATIONS, LATEST REVISION.

SHEET INDEX

SHEET TITLE	MVE DRAWING NO.
COVER SHEET	61087-GEC-CS
GRADING PLAN (OVERALL)	61087-GEC-GP1
	61087-GEC-GP2
PRIVATE DRIVE PLAN / PROFILE	61087-GEC-PP
POND PLAN (A1)	61087-GEC-PD1
POND PLAN (C1)	61087-GEC-PD2
POND PLAN (C2)	61087-GEC-PD3
EROSION CONTROL PLAN	61087-GEC-EC
EROSION CONTROL DETAILS	61087-GEC-ED
SIGNAGE & STRIPPING PLAN	61087-GEC-SSP
	COVER SHEET GRADING PLAN (OVERALL) GRADING PLAN (DETAIL) PRIVATE DRIVE PLAN / PROFILE POND PLAN (A1) POND PLAN (C1) POND PLAN (C2) EROSION CONTROL PLAN EROSION CONTROL DETAILS

CONCRETE & CONCRETE REINFORCEMENT NOTES

ALL CAST IN PLACE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE YIELD STRENGTH OF 4,000 PSI UNLESS OTHERWISE SHOWN ON THESE PLANS. HIGHER COMPRESSIVE STRENGTH CONCRETE IS ACCEPTABLE TO ACHIEVE EARLY CONCRETE STRENGTH THAT MAY BE DEEMED NECESSARY TO MEET CONSTRUCTION SCHEDULE PRIORITIES.

2. ALL CAST IN PLACE CONCRETE REINFORCEMENT SHALL HAVE A MINIMUM TENSILE YIELD STRENGTH OF 60,000 PSI UNLESS OTHERWISE SHOWN ON THESE PLANS AND CONFORMANCE WITH CITY OF COLORADO SPRINGS SPECIFICATIONS, SECTION 603 IS REQUIRED.

ALL CONCRETE TESTING SHALL BE IN CONFORMANCE WITH EL PASO COUNTY STANDARDS AND SPECIFICATIONS.

STREET CONSTRUCTION NOTES:

AND GUTTER), UNLESS OTHERWISE SHOWN.

- 1. ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN COMPLIANCE WITH EL PASO COUNTY STANDARDS AND SPECIFICATIONS, EL PASO COUNTY ENGINEERING CRITERIA MANUAL, LATEST EDITION, AND THE EL PASO COUNTY LAND DEVELOPMENT CODE, LATEST EDITION AND THE EL PASO COUNTY DRAINAGE CRITERIA MANUAL,
- 2. ALL PRIVATE STREET CONSTRUCTION SHALL BE IN COMPLIANCE WITH WITH EL PASO COUNTY STANDARDS AND SPECIFICATIONS, UNLESS SHOWN OTHERWISE ON THESE PLANS.
- 3. CONCRETE USED IN CURB AND GUTTER, SIDEWALK AND CROSS PAN CONSTRUCTION SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
- 4. THE STREET PAVEMENT SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PAVEMENT DESIGN REPORT AS PREPARED BY THE PROJECT GEOTECHNICAL ENGINEER.
- 5. ALL BACKFILL, PAVEMENT SECTION SUBGRADE, SUB-BASE, AND/OR BASE COURSE (CLASS 5 OR 6) MATERIAL SHALL BE COMPACTED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. 6. ALL CURB RETURNS AND 10' EITHER SIDE OF CURB RETURNS SHALL BE 6" VERTICAL CURB ((EL PASO COUNTY TYPE A CURB AND GUTTER) WITH AN ADDITIONAL 10' OF TRANSITION TO 6" RAMP CURB (EL PASO COUNTY TYPE C CURB
- 7. ALL STATIONING IS CENTERLINE OF IMPROVEMENTS, UNLESS OTHERWISE INDICATED ALL ELEVATIONS ARE TOP BACK OF CURB (TBC) AND FLOWLINE (FL) AS INDICATED, FINISHED GRADE (FG) OF SIDEWALK OR ASPHALT PAVEMENT, OR TOP OF INLET OR BOX (TOB) AS INDICATED.
- 8. ALL PEDESTRIAN RAMPS SHALL BE INSTALLED AT INTERSECTIONS SHOWN AND SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE EL PASO COUNTY STANDARDS AND EL PASO COUNTY ENGINEERING CRITERIA MANUAL. LATEST EDITION. ALL PEDESTRIAN RAMP MATERIALS SHALL BE IN ACCORDANCE WITH EL PASO COUNTY APPROVED
- 9. THE CONTRACTOR SHALL PERFORM ALL GRADING OPERATIONS IN ACCORDANCE WITH THE APPROVED GRADING AND EROSION CONTROL PLAN FOR THIS PROJECT AND SHALL OBSERVE THE REQUIREMENTS OF THE STORM WATER 10. IN THE CASE OF ANY DISCREPANCY BETWEEN THE CONSTRUCTION DOCUMENTS AND EL PASO COUNTY STANDARDS

AND SPECIFICATIONS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR RESOLUTION.

CHANNEL OR OTHER PROPERTY ASSOCIATED WITH THIS PROJECT.

- 11. CONTRACTOR IN THE PERFORMANCE OF THIS WORK SHALL, AT ALL TIMES, WHETHER OR NOT SPECIFICALLY DIRECTED BY OWNER OR ENGINEER STRICTLY ORSERVE SAFETY PROVISIONS OF ALL FEDERAL STATE AND MUNICIPAL LAWS. AND BUILDING AND CONSTRUCTION CODES RELATING TO PUBLIC SAFETY. CONTRACTOR SHALL CONTINUOUSLY CONDUCT HIS OPERATIONS WORK IN A MANNER THAT SUCH WORK WILL NOT BECOME A HAZARD TO LIFE AND LIMB, ENDANGER PROPERTY OR ADVERSELY AFFECT THE SAFETY, USE OR STABILITY OF THE PUBLIC WAY, DRAINAGE
- 12. THE CONTRACTOR SHALL SECURE ALL APPLICABLE LICENSES AND PERMITS TO COMPLETE THE CONSTRUCTION IN COMPLIANCE WITH ALL LOCAL STATE AND FEDERAL REGULATIONS.
- 13. CONTRACTOR SHALL OBTAIN COPIES OF THE LATEST EDITION OF THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL AND THE EL PASO COUNTY DRAINAGE CRITERIA MANUAL TO BE KEPT ON SITE DURING ALL PUBLIC IMPROVEMENT CONSTRUCTION OPERATIONS.
- 14. CONTRACTOR SHALL OBTAIN COPIES OF THE SOILS REPORT AND PAVEMENT DESIGN REPORT FROM THE GEOTECHNICAL ENGINEER TO BE KEPT ON SITE DURING ALL EARTHWORK AND STREET CONSTRUCTION OPERATIONS.

LEGEND

	EASEMENT LINE		
	LOT LINE		
	BUILDING SETBACK LINE		
	ADJACENT PROPERTY LINE		111
EXISTING		PROPOSED	
	INDEX CONTOUR	5985——	INDEX CONTOUR
 	INTERMEDIATE CONTOUR	84	INTERMEDIATE CONTOUR
4 4 4	CONCRETE AREA	4 4 4 4 4	CONCRETE AREA
	ASPHALT AREA		ASPHALT AREA
	CURB AND GUTTER		CURB AND GUTTER
	BUILDING/ BUILDING OVERHANG		BUILDING/ BUILDING OVERHANG
1	DECK		DECK
	RETAINING WALL - SOLID/ ROCK		RETAINING WALL - SOLID ROCK
-0 -0 0	SIGN	0 0 0	SIGN
B O	BOLLARD	B	BOLLARD
·	WOOD FENCE	86.0 TW 83.0 FG	TOP OF WALL/GRADE AT BOTTO
, o	CHAIN LINK FENCE	86.85 83.35	OF WALL TOP OF CURB/FLOWLINE
xx	BARBED WIRE FENCE	84.96 TSW	SPOT ELEVATION FL = FLOWLINE
● ₩	TREE (EVERGREEN/DECIDUOUS) SHRUB	FF = 5986.00	TSW = TOP OF SIDEWALK FINISHED FLOOR ELEVATION
8	ROCK		

P.E. CERTIFICATION OF PERMANENT BMP's

FACILITIES. ADHERENCE TO THE ITEMS LISTED BELOW WILL HELP FACILITATE A P.E. CERTIFICATION AT THE COMPLETION OF THE PERMANENT BMP CONTRACTOR TO OBSERVE ALL MATERIAL TESTING AND COMPACTION TESTING REQUIREMENTS OF EL PASO COUNTY STANDARDS AND SPECIFICATIONS FOR ALL BMP EMBANKMENTS. CONTRACTOR TO PROVIDE SUBMITTALS FOR ANY BMP RIP RAP, GRANULAR BEDDING, GRANULAR FILTER MATERIAL, OR GROWING MEDIA AS INDICATED ON THESE PLANS AND PROVIDE VERIFICATION OF MATERIALS USED AT COMPLETION OF THE

CONTRACTOR TO CONTACT THE DESIGN ENGINEER IMMEDIATELY IF CONSTRUCTION VARIES IN ANY WAY FROM THE PLANS. CONTRACTOR TO PROVIDE PROJECT SCHEDULE TO ENGINEER IN WRITING AND WILL NOTIFY ENGINEER OF KEY POINT MILESTONES AS

P.E. CERTIFICATION OF PUBLIC IMPROVEMENTS

COUNTY ACCEPTANCE OF PUBLIC STREET AND STORM DRAIN IMPROVEMENTS REQUIRES THE ISSUANCE OF A CERTIFICATION LETTER BY A COLORADO REGISTERED ENGINEER. ADHERENCE TO THE ITEMS LISTED BELOW WILL HELP FACILITATE A P.E. CERTIFICATION AT THE COMPLETION OF THE PUBLIC IMPROVEMENT CONSTRUCTION. 2. CONTRACTOR TO OBSERVE ALL TESTING MATERIAL AND COMPACTION TESTING REQUIREMENTS OF EL PASO COUNTY. CONTRACTOR TO PROVIDE GEOTECHNICAL ENGINEERING CERTIFICATION LETTERS AT THE COMPLETION OF CONSTRUCTION OF PUBLIC IMPROVEMENTS. 3. CONTRACTOR TO CONTACT THE DESIGN ENGINEER IMMEDIATELY IF CONSTRUCTION VARIES IN ANY WAY FROM THE PLANS. CONTRACTOR TO NOTIFY ENGINEER PRIOR TO THE START OF CONSTRUCTION FOR THE PRE-CONSTRUCTION MEETING. CONTRACTOR TO PROVIDE PROJECT SCHEDULE TO ENGINEER IN WRITING AND WILL NOTIFY ENGINEER OF KEY POINT MILESTONES AS

ANTICIPATED STARTING AND COMPLETION TIME PERIOD OF SITE GRADING: EXPECTED DATE ON WHICH THE FINAL STABILIZATION WILL BE COMPLETED:	SEPTEMBER 2020 - MARCH 2021 FALL 2021
AREAS	

RECEIVING WATERS NAME OF RECEIVING WATERS:

DETERMINED IN THE PRE-CONSTRUCTION MEETING.

FLOODPLAIN STATEMENT NO PORTION OF THE SUBJECT PROPERTY IS LOCATED WITHIN FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA (SFHA'S) AS INDICATED ON THE FLOOD INSURANCE RATE MAP (FIRM) FOR EL PASO COUNTY, COLORADO AND INCORPORATED AREAS - MAP NUMBER 08041C0295G, EFFECTIVE

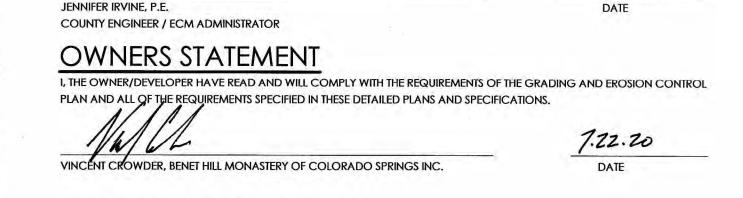
BLACK SQUIRREL & SMITH CREEKS

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.

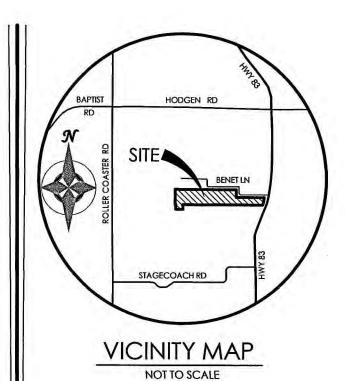
IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF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



ENGINEER'S STATEMENT THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS

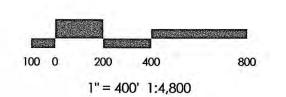
HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

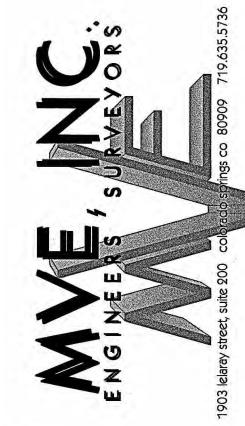




BENCHMARK FOUND PROPERTY CORNER SOUTHWEST OF BENET LANE WHERE BENET LANES TURNS NORTH (APPROX. 1200 FT FROM HIGHWAY 83), ELEVATION = 7502.79"





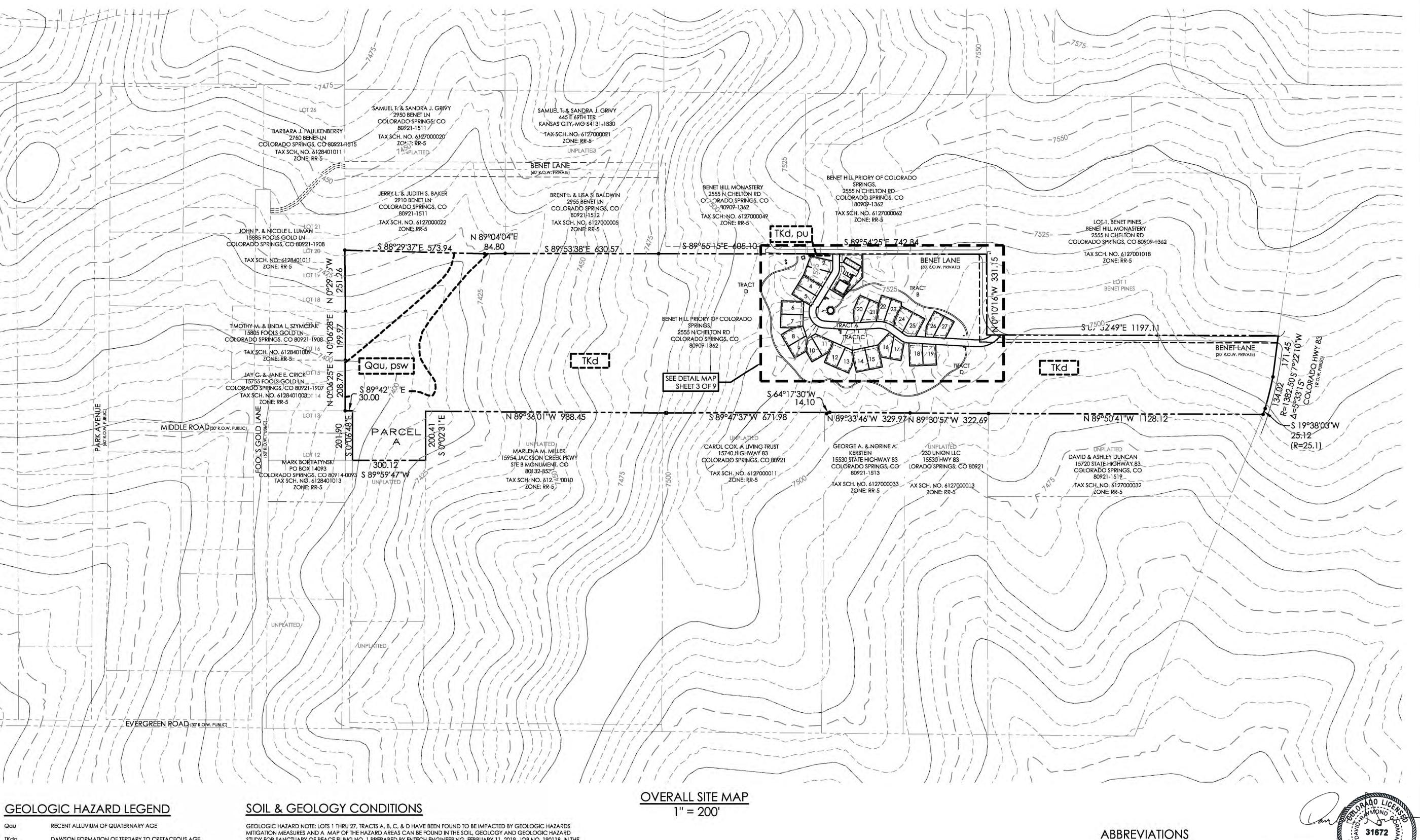


REVISIONS

DESIGNED BY DRAWN BY CHECKED BY **AS-BUILTS BY** CHECKED BY ____

SANCTUARY OF PEACE RESIDENTIAL COMMUNITY

GRADING & EROSION



DAWSON FORMATION OF TERTIARY TO CRETACEOUS AGE

POTENTIALLY SEASONAL SHALLOW GROUNDWATER

POTENTIALLY UNSTABLE SLOPE

STUDY FOR SANCTUARY OF PEACE FILING NO. 1 PREPARED BY ENTECH ENGINEERING, FEBRUARY 11, 2019, JOB NO. 190118, IN THE SANCTUARY OF PEACE RESIDENTIAL COMMUNITY FILE (PUDSP-19-002) AVAILABLE AT THE EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT.

- EXPANSIVE SOILS (LOTS 1 THRU 27, TRACTS A, B, C, & D)

- POTENTIALLY SEASONAL SHALLOW GROUND WATER (LOTS 1 THRU 27, TRACTS A, B, C, & D) - POTENTIALLY UNSTABLE SLOPE (TRACT D & LOT 2)

MAP NOTES

1. BOUNDARY BEARINGS AND DISTANCES SHOWN ON THIS MAP ARE RELATIVE TO THE SOUTH LINE OF LOT 1, BENET PINES, ASSUMED TO BEAR \$89°52'49"E. 2. THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN WAS PREPARED AND PROVIDED BY POLARIS SURVEYING INC. ELEVATIONS SHOWN ARE RELATIVE TO THE CITY OF COLORADO SPRINGS CONTROL NETWORK (FIMS DATAM)

3. ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS MAP ARE FROM UTILITY MAIN RECORD MAPS AND UTILITY SERVICE LOCATION MAPS. THE LOCATION OF UTILITIES AS SHOWN ARE APPROXIMATE. ALL UTILITIES MAY NOT BE SHOWN OR MAY NOT HAVE BEEN LOCATED. BELOW GROUND UTILITY LOCATIONS WERE NOT PERFORMED.

EL	ELEVATION
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PCR	POINT OF CURVE RETURN
PRC	POINT OF REVERSE CURVATURE
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
GB	GRADE BREAK
CSP	CORRUGATED STEEL PIPE
RCP	REINFORCED CONCRETE PIPE
CBC	CONCRETE BOX CULVERT

TOP BACK CURB TOP OF CURB FLOW LINE

BEGIN TAPER / TRANSITION END TAPER / TRANSITION EDGE OF CONCRETE ROW RIGHT-OF-WAY

RADIUS TANGENT LENGTH LINEAR FEET CENTERLINE

CL X.XX' R DIMENSION RIGHT OF CL X.XX' L DIMENSION LEFT OF CL PROPERTY LINE PVRC POINT OF VERTICAL REVERSE CURVATURE VERTICAL CURVE **ANGLE POINT** STATION STA INV **INVERT**

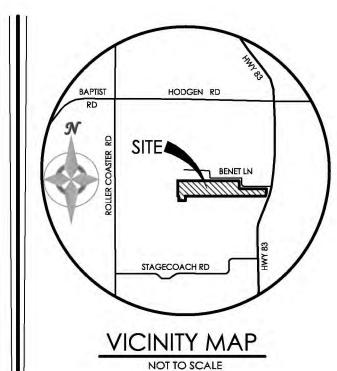
TW

LP

GRADING & EROSION TOP OF WALL FG/FW FINISHED GRADE AT FACE WALL LOW POINT HP HIGH POINT

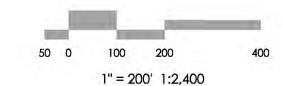
APRIL 28, 2020 SHEET 2 OF 10

PUDSP-19-002



BENCHMARK FOUND PROPERTY CORNER SOUTHWEST OF BENET LANE WHERE BENET LANES TURNS NORTH (APPROX. 1200 FT FROM HIGHWAY 83), ELEVATION = 7502.79







DESIGNED BY

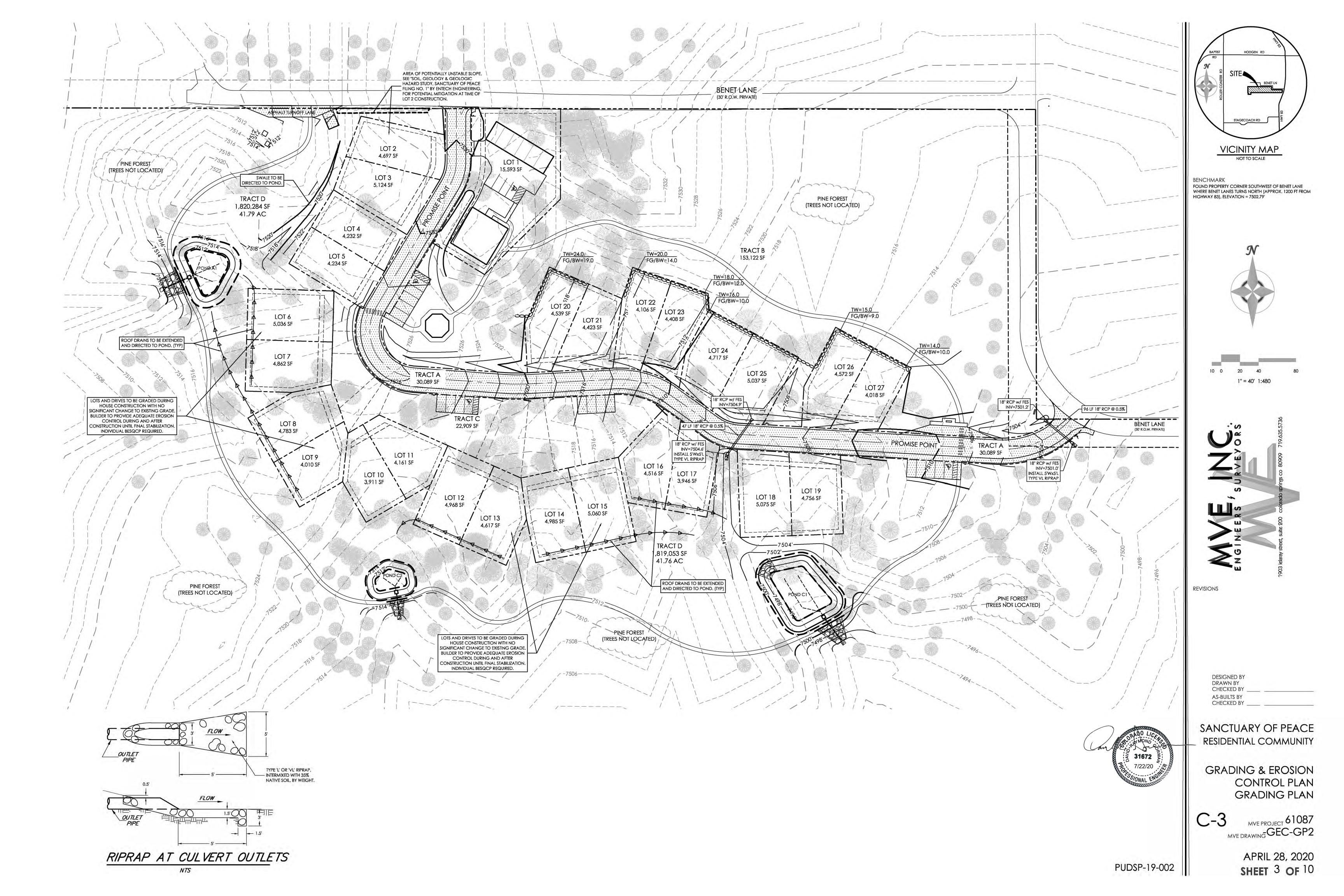
DRAWN BY

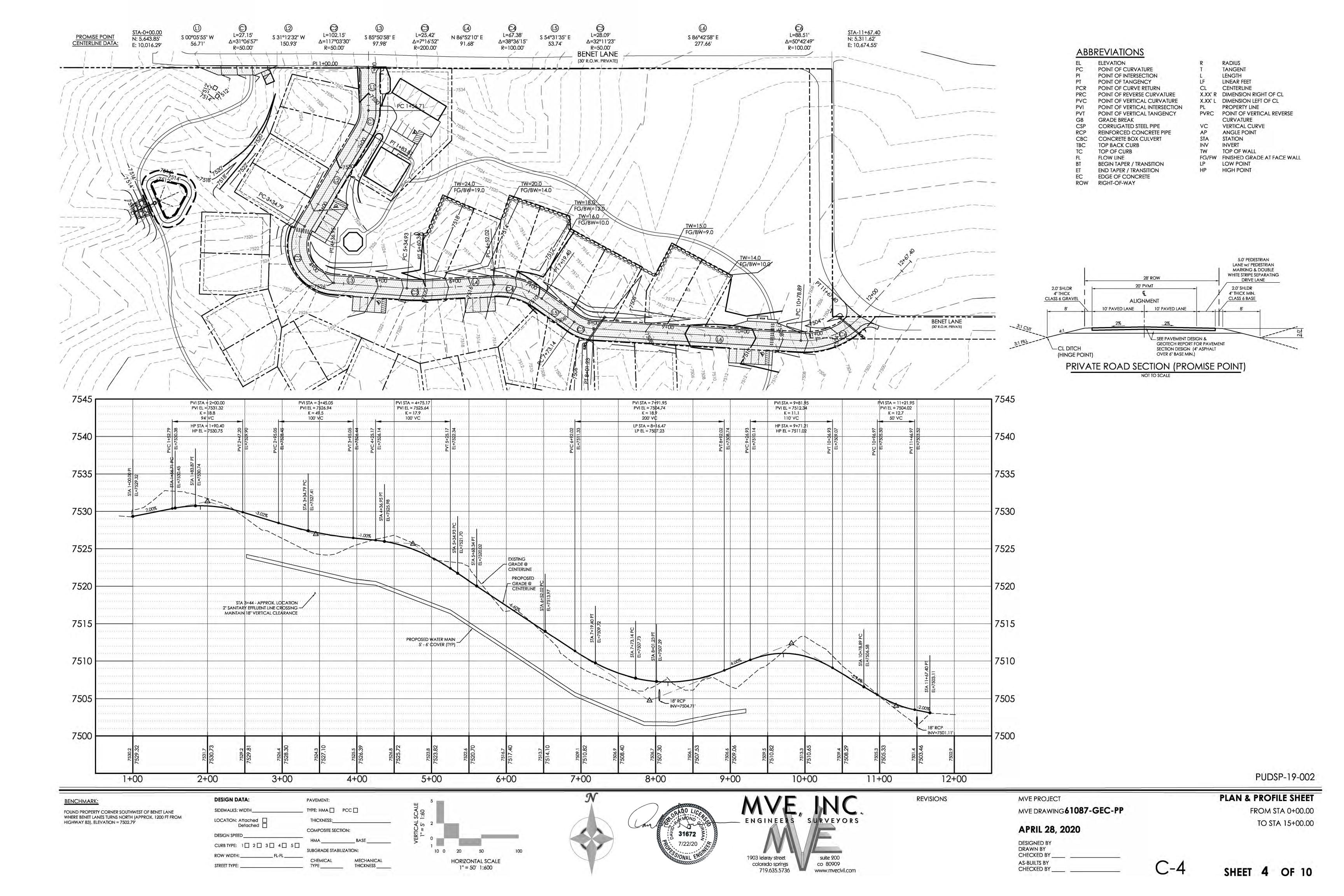
CHECKED BY AS-BUILTS BY CHECKED BY

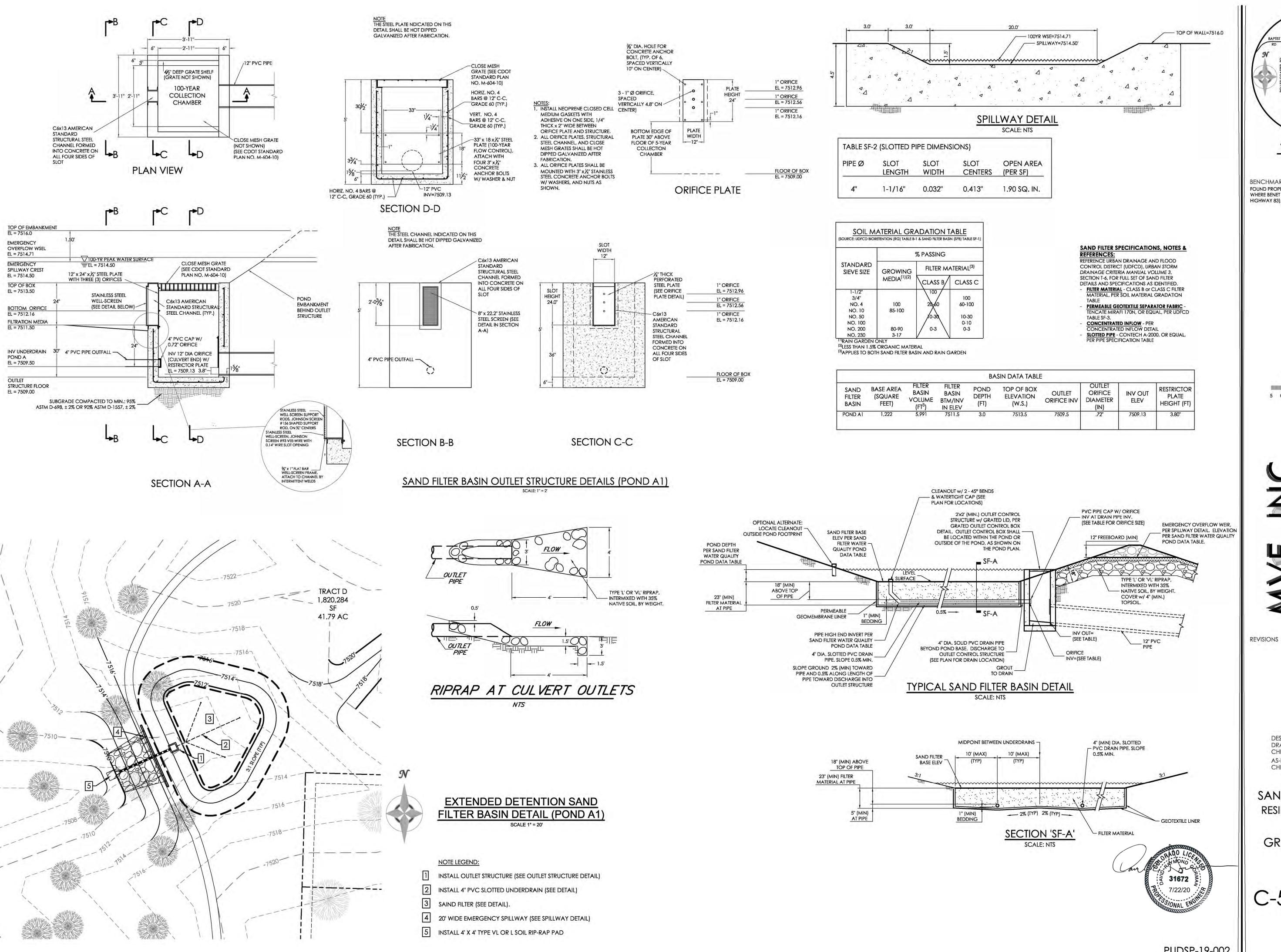
SANCTUARY OF PEACE RESIDENTIAL COMMUNITY

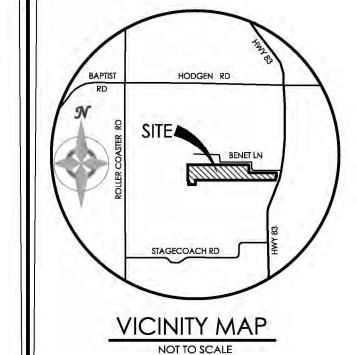
CONTROL PLAN **OVERALL GRADING**

MVE DRAWING -GEC-CS



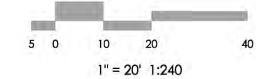


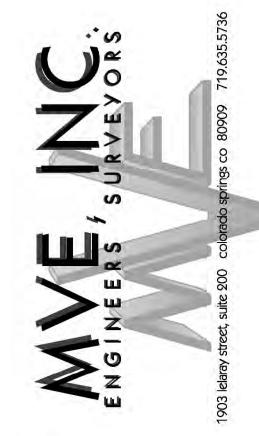




BENCHMARK FOUND PROPERTY CORNER SOUTHWEST OF BENET LANE WHERE BENET LANES TURNS NORTH (APPROX. 1200 FT FROM HIGHWAY 83), ELEVATION = 7502.79







DESIGNED BY DRAWN BY CHECKED BY AS-BUILTS BY CHECKED BY

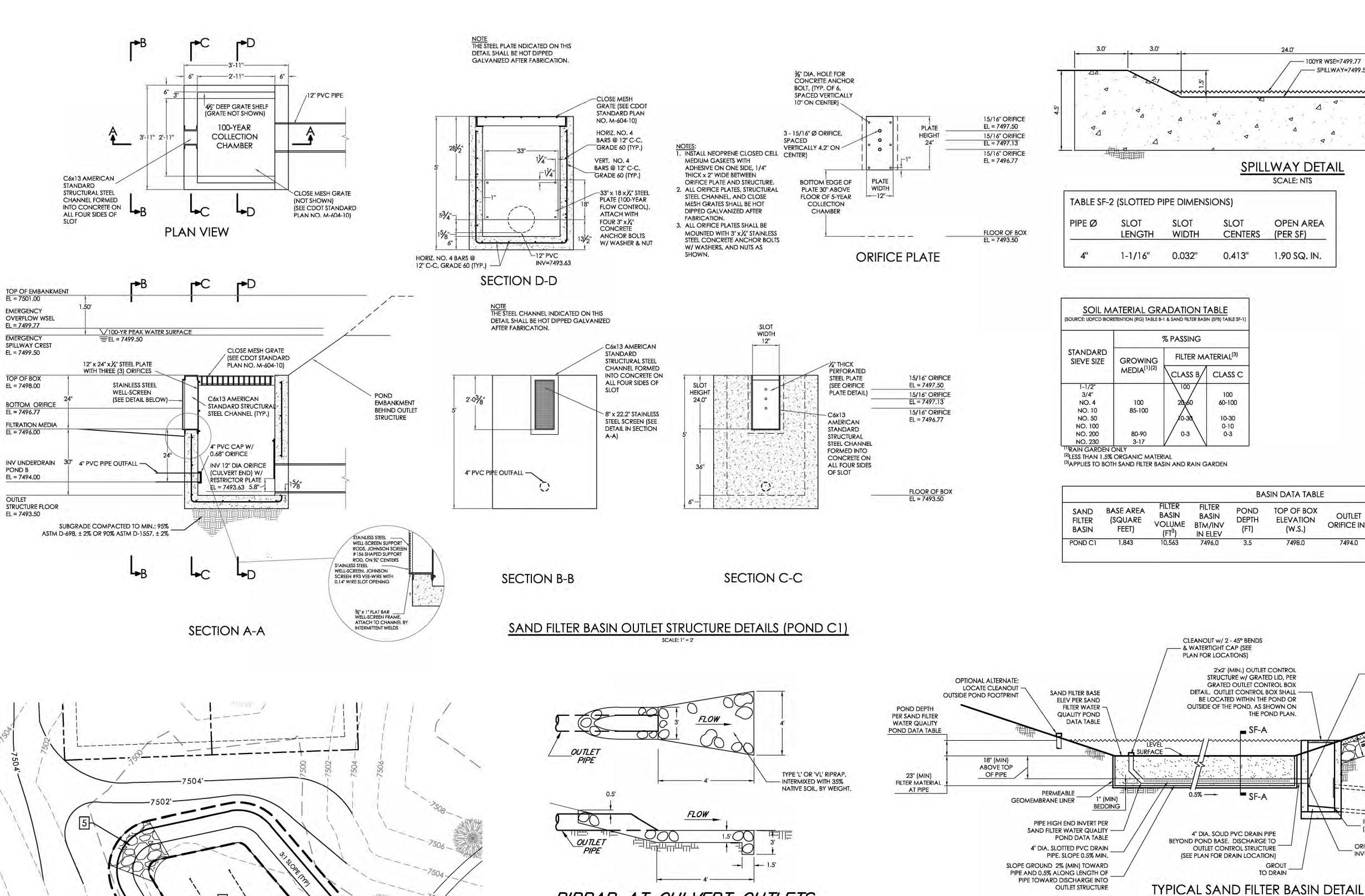
SANCTUARY OF PEACE RESIDENTIAL COMMUNITY

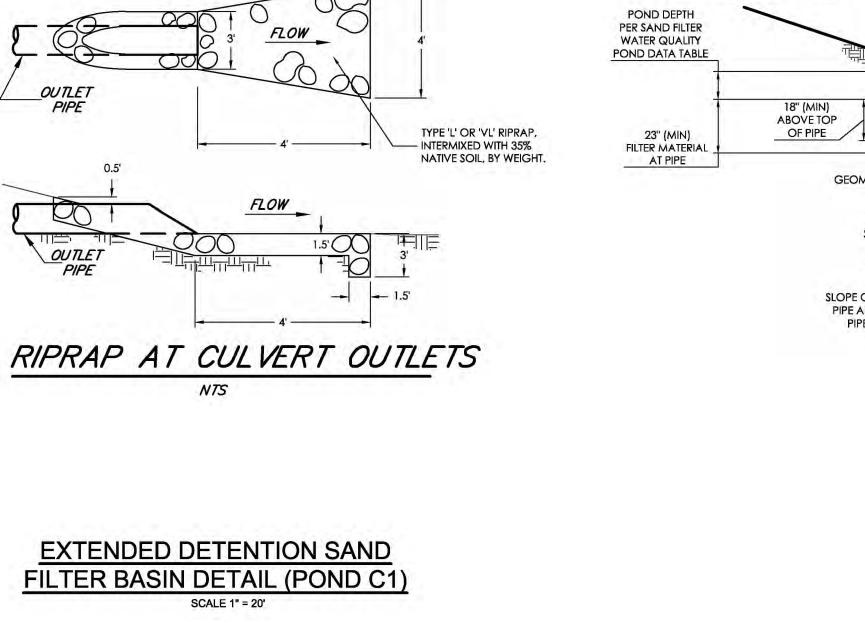
GRADING & EROSION CONTROL PLAN POND PLAN (A1)

MVE PROJECT 61087 MVE DRAWING GEC-PD1

> APRIL 28, 2020 SHEET 5 OF 10

PUDSP-19-002

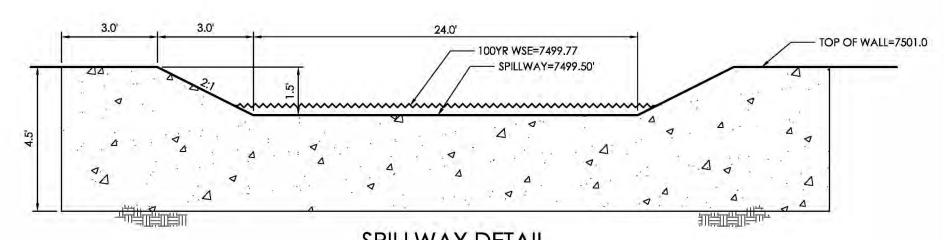




EXTENDED DETENTION SAND FILTER BASIN DETAIL (POND C1)

NOTE LEGEND:

- INSTALL OUTLET STRUCTURE (SEE OUTLET STRUCTURE DETAIL)
- 2 INSTALL 4" PVC SLOTTED UNDERDRAIN (SEE DETAIL)
- 3 SAIND FILTER (SEE DETAIL).
- 24' WIDE EMERGENCY SPILLWAY (SEE SPILLWAY DETAIL)
- 5 INSTALL 16' WIDE TYPE VL SOIL RIPRAP 18" THICK
- 6 INSTALL 4' X 4' TYPE VL OR L SOIL RIP-RAP PAD



SPILLWAY DETAIL SCALE: NTS

PIPE Ø	SLOT	SLOT	SLOT	OPEN AREA
	LENGTH	WIDTH	CENTERS	(PER SF)

		% PASSING		
STANDARD SIEVE SIZE	GROWING	FILTER MATERIAL(3)		
	MEDIA ⁽¹⁾⁽²⁾	CLASS B	CLASS C	
1-1/2" 3/4"		100	100	
NO. 4	100	20,60	60-100	
NO. 10	85-100	- X	44 .44	
NO. 50		10-30	10-30	
NO. 100	27.2		0-10	
NO. 200	80-90	0-3	0-3	
NO. 230	3-17			

				BA	SIN DATA TABLE				
SAND FILTER BASIN	BASE AREA (SQUARE FEET)	FILTER BASIN VOLUME (FT ³)	FILTER BASIN BTM/INV	POND DEPTH (FT)	TOP OF BOX ELEVATION (W.S.)	OUTLET ORIFICE INV	OUTLET ORIFICE DIAMETER	INV OUT ELEV	RESTRICTOR PLATE HEIGHT (FT)

PLAN FOR LOCATIONS)

0.5% ——

SAND FILTER

BASE ELEV

18" (MIN) ABOVE TOP OF PIPE

5" (MIN) AT PIPE

23" (MIN) FILTER

MATERIAL AT PIPE

2'x2' (MIN.) OUTLET CONTROL

STRUCTURE W/ GRATED LID, PER

GRATED OUTLET CONTROL BOX DETAIL, OUTLET CONTROL BOX SHALL -

THE POND PLAN.

GROUT

MIDPOINT BETWEEN UNDERDRAINS -

TO DRAIN

10' (MAX)

1" (MIN) BEDDING

SCALE: NTS

BE LOCATED WITHIN THE POND OR

OUTSIDE OF THE POND, AS SHOWN ON

OUTLET CONTROL STRUCTURE

SAND FILTER SPECIFICATIONS, NOTES &

REFERENCES: REFERENCE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT (UDFCD), URBAN STORM DRAINAGE CRITERIA MANUAL VOLUME 3, SECTION T-6, FOR FULL SET OF SAND FILTER DETAILS AND SPECIFICATIONS AS IDENTIFIED. FILTER MATERIAL - CLASS B or CLASS C FILTER
MATERIAL, PER SOIL MATERIAL GRADATION

- PERMEABLE GEOTEXTILE SEPARATOR FABRIC TENCATE MIRAFI 170N, OR EQUAL, PER UDFCD
- TABLE SF-3.
- CONCENTRATED INFLOW PER CONCENTRATED INFLOW DETAIL
- SLOTTED PIPE CONTECH A-2000, OR EQUAL, PER PIPE SPECIFICATION TABLE

PVC PIPE CAP W/ ORIFICE

(SEE TABLE FOR ORIFICE SIZE)

12" FREEBOARD (MIN)

TOPSOIL.

4" (MIN) DIA. SLOTTED

PVC DRAIN PIPE. SLOPE

FILTER MATERIAL

0.5% MIN.

- INV AT DRAIN PIPE INV.

(SEE TABLE)

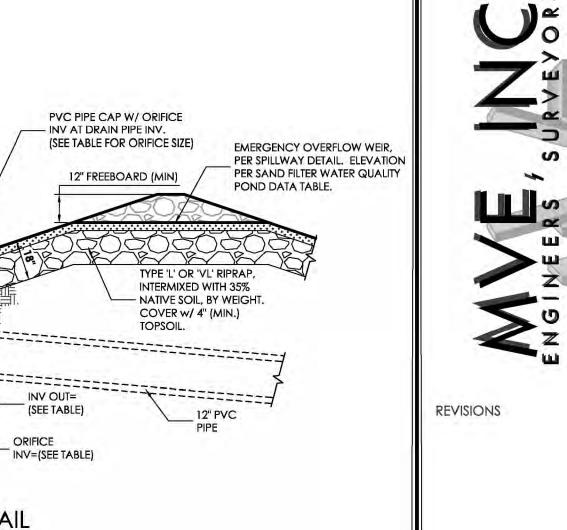
INV=(SEE TABLE)

____ 2% (TYP) 2% (TYP) ____

SECTION 'SF-A'

SCALE: NTS

				BA	SIN DATA TABLE	5			
SAND FILTER BASIN	BASE AREA (SQUARE FEET)	FILTER BASIN VOLUME (FT ³)	FILTER BASIN BTM/INV IN ELEV	POND DEPTH (FT)	TOP OF BOX ELEVATION (W.S.)	OUTLET ORIFICE INV	OUTLET ORIFICE DIAMETER (IN)	INV OUT ELEV	RESTRICTOR PLATE HEIGHT (FT)
POND C1	1,843	10,563	7496.0	3.5	7498.0	7494.0	1"	7493.63	5.80"



DESIGNED BY DRAWN BY CHECKED BY AS-BUILTS BY CHECKED BY

HODGEN RD

NOT TO SCALE

FOUND PROPERTY CORNER SOUTHWEST OF BENET LANE

HIGHWAY 83), ELEVATION = 7502.79

WHERE BENET LANES TURNS NORTH (APPROX. 1200 FT FROM

1" = 20' 1:240

BENCHMARK

SANCTUARY OF PEACE

RESIDENTIAL COMMUNITY

GRADING & EROSION CONTROL PLAN POND PLAN (C1)

MVE PROJECT 61087 MVE DRAWING GEC-PD2

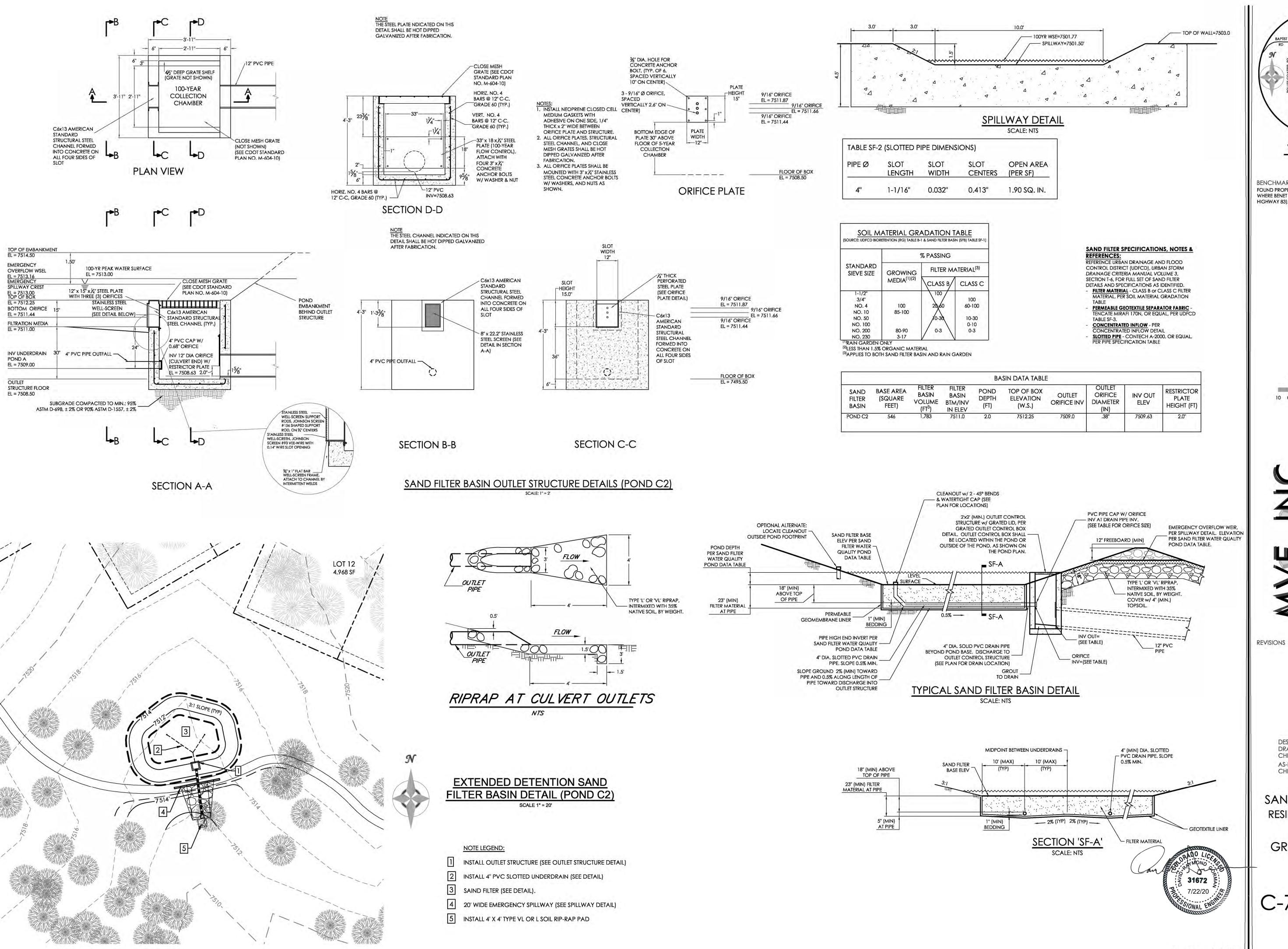
PUDSP-19-002

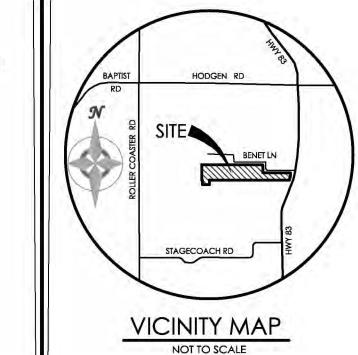
- GEOTEXTILE LINER

31672

7/22/20

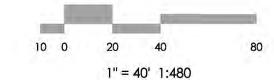
APRIL 28, 2020 SHEET 6 OF 10

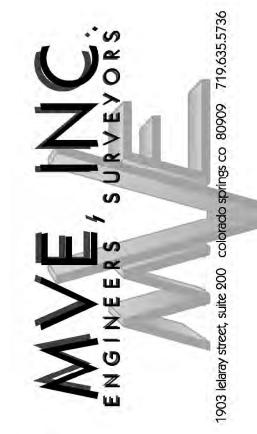




BENCHMARK
FOUND PROPERTY CORNER SOUTHWEST OF BENET LANE
WHERE BENET LANES TURNS NORTH (APPROX. 1200 FT FROM
HIGHWAY 83), ELEVATION = 7502.79'







DESIGNED BY
DRAWN BY
CHECKED BY ______
AS-BUILTS BY

CHECKED BY

SANCTUARY OF PEACE RESIDENTIAL COMMUNITY

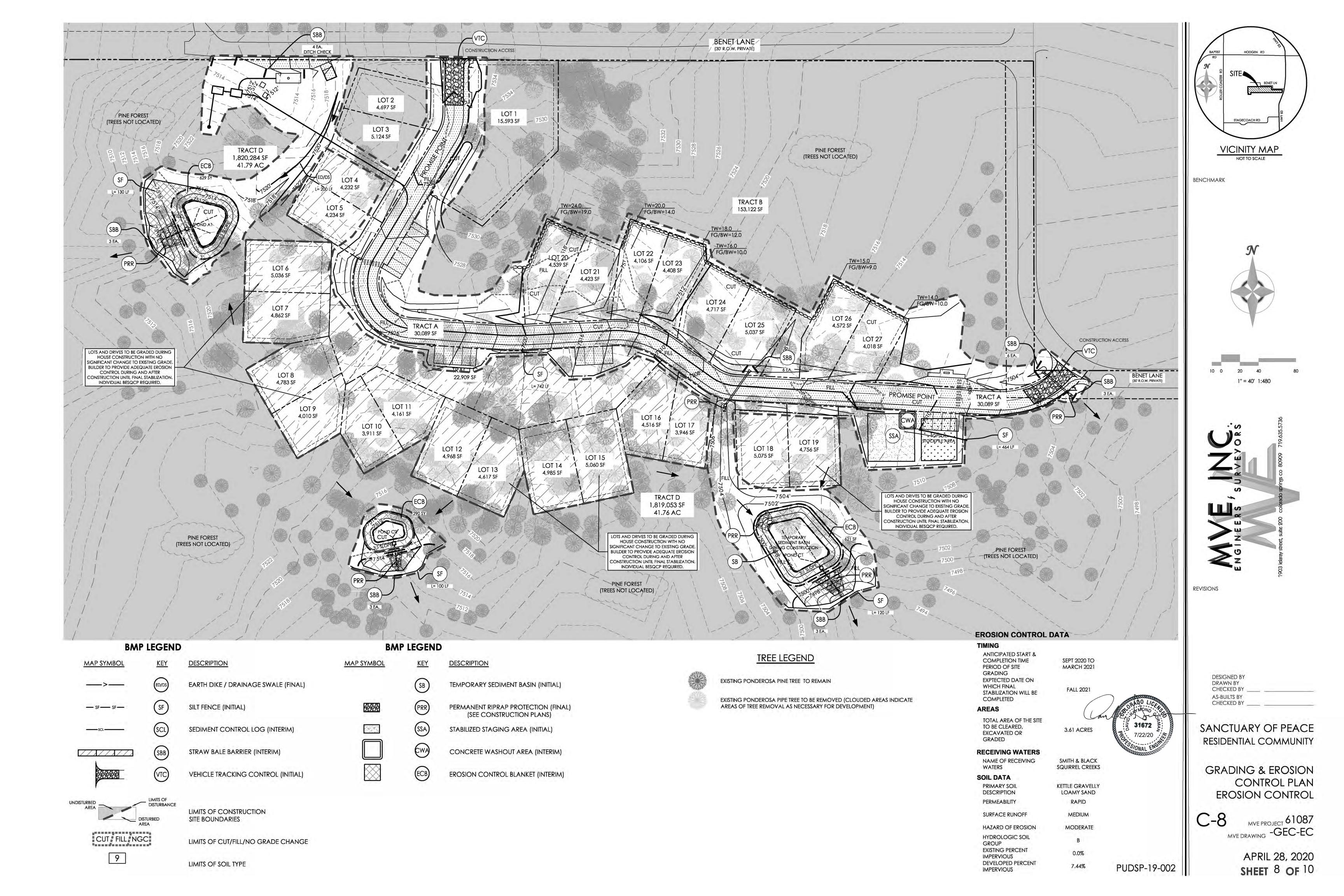
GRADING & EROSION CONTROL PLAN

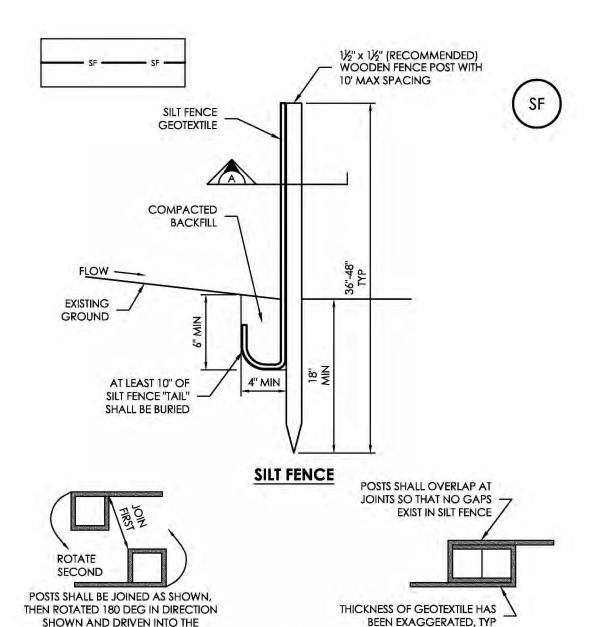
POND PLAN (C2)

C-7
MVE PROJECT 61087
MVE DRAWING GEC-PD3

PUDSP-19-002

APRIL 28, 2020 SHEET 7 OF 10





SECTION A SF-1. SILT FENCE

GROUND

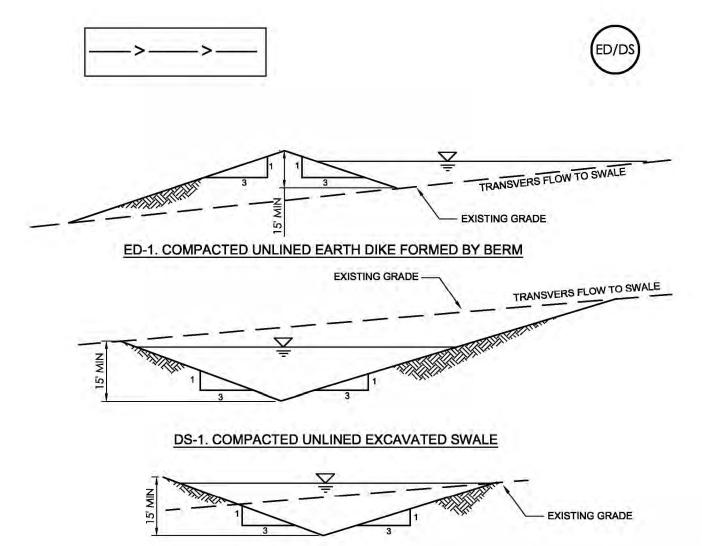
- SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.
- INSTALLATION DEVICE, NO ROAD GRADERS. BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED. 3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE

- 4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES, THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.
- 5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING I" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.
- 6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J—HOOK," THE "J—HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20').
- 7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

- <u>SILT FENCE MAINTENANCE NOTES</u>

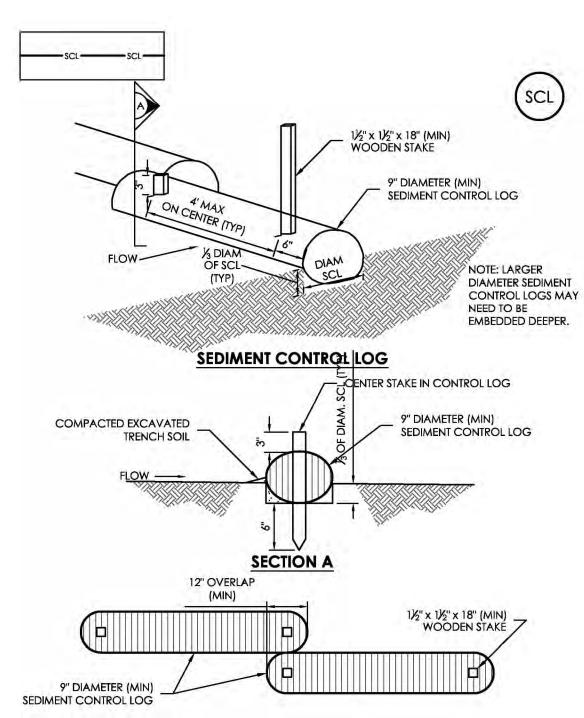
 1. INSPECT BMPS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPS AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- 2. FREQUENT OBSERVATIONS 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 4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN
- THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".
- 5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR
- 6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED
- BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP. 7. WHEN SILT FENCE IS REMOVED. ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.



DS-2. COMPACTED UNLINED SWALE FORMED BY CUT AND FILL

Earth Dikes and Drainage Swales (ED/DS) NOT TO SCALE

- 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.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPS IN EFFECTIVE OPERATING CONDITION, INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED
- WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE
- 4. SWALES SHALL REMAIN IN PLACE UNTIL THE END OF CONSTRUCTION; IF APPROVED BY LOCAL
- JURISDICTION, SWALES MAY BE LEFT IN PLACE. WHEN A SWALE IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED, AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL. JURISDICTION.



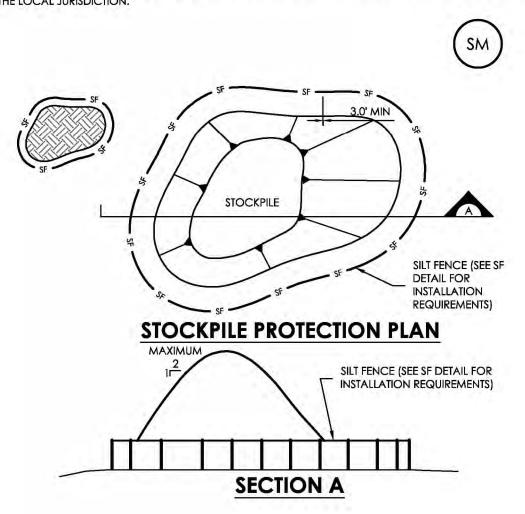
SEDIMENT CONTROL LOG JOINTS

SCL-1. SEDIMENT CONTROL LOG

- EDIMENT CONTROL LOG INSTALLATION NOTES:
 SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.
- 2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT
- 3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF
- ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR. 4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER. THEY SHOULD NOT
- BE USED IN PERENNIAL STREAMS OR HIGH VELOCITY DRAINAGE WAYS. 5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY 1/3 OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE
- 6. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER.
- 7. FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL

PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED.

- EDIMENT CONTROL LOG 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. 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. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/2 OF THE HEIGHT
- OF THE SEDIMENT CONTROL LOG. 5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF DISTURBED AREAS EXIST AFTER REMOVAL. THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

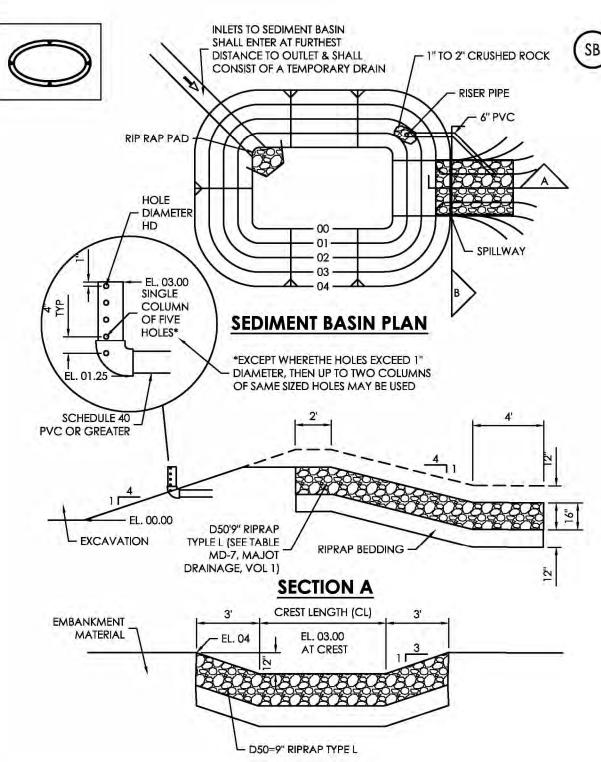


SP-1. STOCKPILE PROTECTION

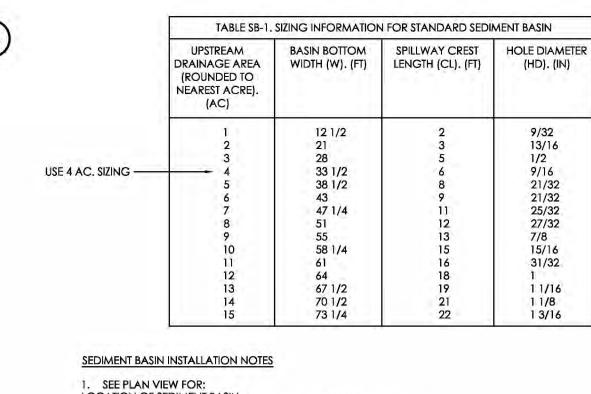
-LOCATION OF STOCKPILES.

- —TYPE OF STOCKPILE PROTECTION 2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE
- EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS. 3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).
- 4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE. WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL. ARE IN PLACE. STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

- I. 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. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE. REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY. 5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.



SECTION B



LOCATION OF SEDIMENT BASIN.

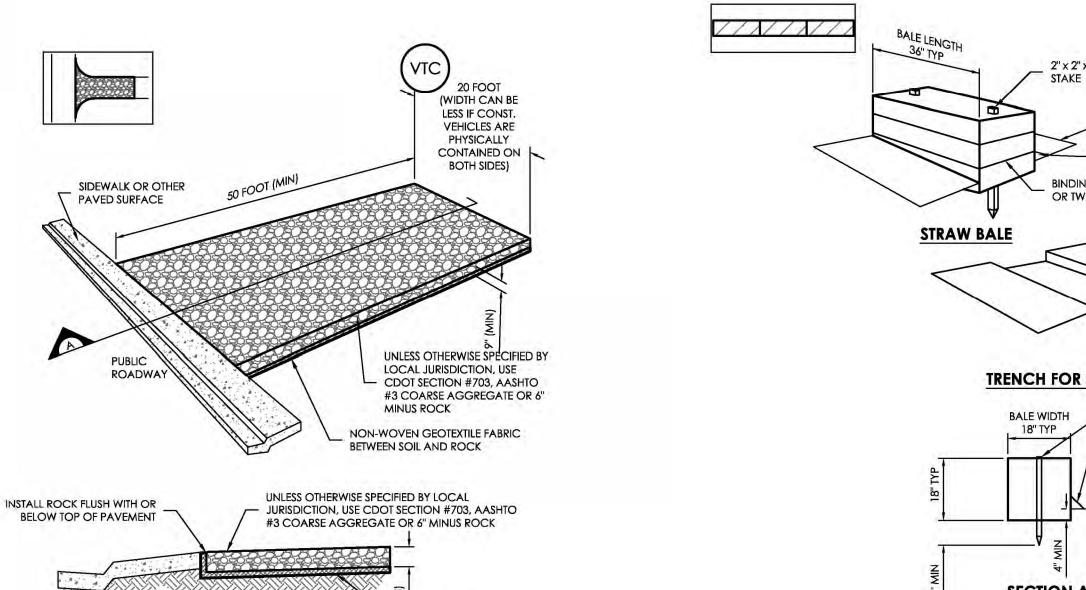
- TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN). FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE
- DIAMETER, HD.
- FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE DIAMETER D.
- FOR STANDARD 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 AS A
- 4. 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
- 6. PIPE SCH 40 OR GREATER SHALL BE USED. THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S)
- FOR DRAINAGE AREAS LESS THAN 1 S ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

SEDIMENT BASIN MAINTENANCE NOTES

DIFFERENCES ARE NOTED.

- 1. 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.
- WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E., TWO FEET BELOW THE SPILLWAY CREST). 5. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA
- IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION. 6, WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION, (DETAILS ADOPTED FROM DOUGLAS COUNTY, COLORADO)

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



STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

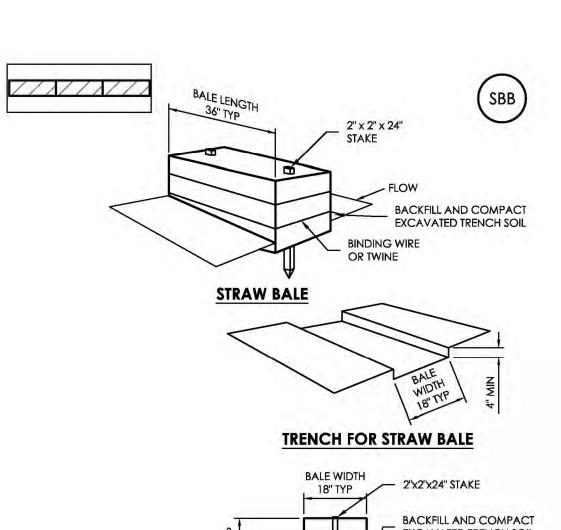
COMPACTED SUBGRADE -

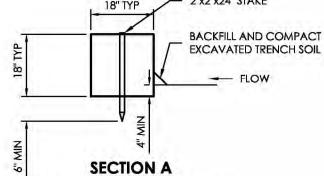
-LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S) TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT

SECTION A

GEOTEXTILE FABRIC

- 2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.
- 3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS.
- 4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING 5. A NON—WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION
- ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK. 6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION. ROCK SHALL CONSIST OF DOT SECT. #703,
- STABILIZED CONSTRUCTION ENTRANCE EXIT 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
- 4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH 5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF
- THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.



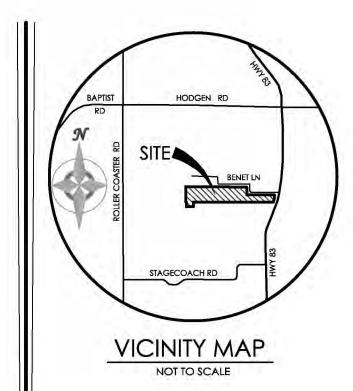


SBB-1. STRAW BALE

- —LOCATION(S) OF STRAW BALES.
- 2. STRAW BALES SHALL CONSIST OF CERTIFIED WEED FREE STRAW OR HAY. LOCAL JURISDICTIONS MAY REQUIRE
- PROOF THAT BALES ARE WEED FREE. 3. STRAW BALES SHALL CONSIST OF APPROXIMATELY 5 CUBIC FEET OF STRAW OR HAY AND WEIGH NOT LESS THAN 35 POUNDS.
- 4. WHEN STRAW BALES ARE USED IN SERIES AS A BARRIER, THE END OF EACH BALE SHALL BE TIGHTLY ABUTTING ONE ANOTHER. 5. STRAW BALE DIMENSIONS SHALL BE APPROXIMATELY 36"x18"x18".
- 6. A UNIFORM ANCHOR TRENCH SHALL BE EXCAVATED TO A DEPTH OF 4". STRAW BALES SHALL BE PLACED SO THAT BINDING TWINE IS ENCOMPASSING THE VERTICAL SIDES OF THE BALE(S). ALL EXCAVATED SOIL SHALL BE PLACED ON THE UPHILL SIDE OF THE STRAW BALE(S) AND COMPACTED.
- 7. TWO (2) WOODEN STAKES SHALL BE USED TO HOLD EACH BALE IN PLACE. WOODEN STAKES SHALL BE 2"x2"x24". WOODEN STAKES SHALL BE DRIVEN 6" INTO THE GROUND.

. 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
- 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
- 4. STRAW BALES SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, ROTTEN, OR DAMAGED BEYOND REPAIR. 5. SEDIMENT ACCUMULATED UPSTREAM OF STRAW BALE BARRIER SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY X,
- OF THE HEIGHT OF THE STRAW BALE BARRIER. 6. STRAW BALES ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION. 7. WHEN STRAW BALES ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND
- MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION. PUDSP-19-002



BENCHMARK





REVISIONS

DESIGNED BY DRAWN BY CHECKED BY AS-BUILTS BY

CHECKED BY

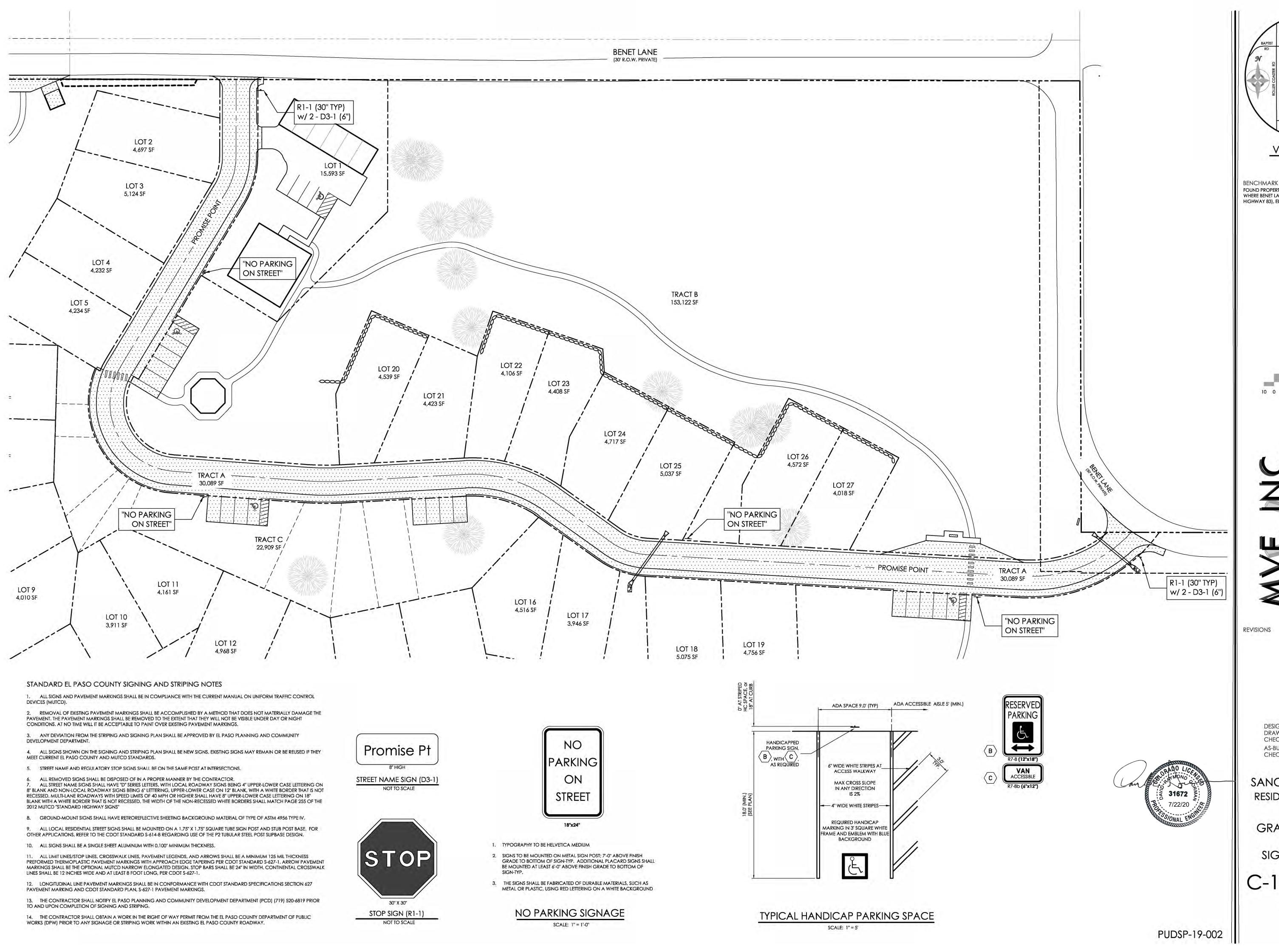
SANCTUARY OF PEACE RESIDENTIAL COMMUNITY

GRADING & EROSION CONTROL PLAN

EROSION DETAIL

MVE DRAWING -GEC-CS

SHEET 9 OF 10



BAPTIST HODGEN RD

SITE

STAGECOACH RD

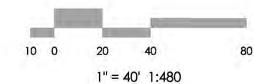
STAGECOACH RD

VICINITY MAP

NOT TO SCALE

BENCHMARK
FOUND PROPERTY CORNER SOUTHWEST OF BENET LANE
WHERE BENET LANES TURNS NORTH (APPROX. 1200 FT FROM
HIGHWAY 83), ELEVATION = 7502.79'







DESIGNED BY
DRAWN BY
CHECKED BY
AS-BUILTS BY
CHECKED BY

SANCTUARY OF PEACE RESIDENTIAL COMMUNITY

GRADING & EROSION CONTROL PLAN

CONTROL PLAN SIGNAGE & STRIPING

C-10 MVE PROJECT 61087 GEC-GP

APRIL 28, 2020 SHEET 10 OF 10