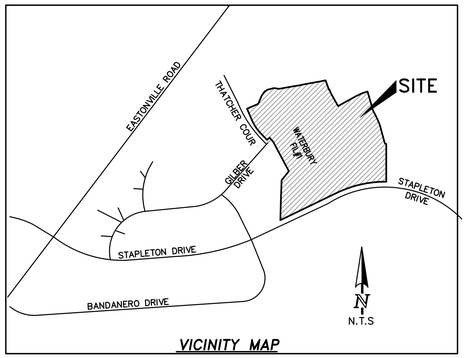
WATERBURY FILING NO. 1

EL PASO COUNTY, CO

CONSTRUCTION SET

APRIL 2026



VICINITY MAP

NOTE:

ALL EXISTING UNDERGROUND AND ABOVE GROUND UTILITY LOCATIONS, INVERS AND SIZES ARE APPROXIMATE ONLY AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION. TIE IN POINTS SHALL BE POTHOLED AND LOCATIONS, INVERS AND SIZES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS

1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARH 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 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 ACHIEVED WHEN ALL GROUND 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 ALERNATIVE 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. EARH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHOREST 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 APPROVED.

11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILRATION 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 INFILRATION 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 EARH 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 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 PLAN. 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, DIR, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURENANCES AS A RESUL 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, ARICLE 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 DUIST, 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 EARHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARHWORK EQUIPMENT AND WIND.

28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY ENTECH ENGINEERING AND SHALL BE CONSIDERED A PART OF THESE PLANS. SOIL, GEOLOGY, AND GEOLOGIC HAZARD REPORT AND ADDENDUM, WATERBURY, FILINGS 1 AND 2, DATED OCTOBER 18, 2021 AND FEBRUARY 2, 2022, BY ENTECH ENGINEERING

29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED STAR 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 DEPARMENT OF PUBLIC HEALH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PAR. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARMENT OF PUBLIC HEALH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION
WQCD - PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1530
ATTN: PERMITS UNIT

EL PASO COUNTY STANDARD CONSTRUCTION NOTES:

1. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 & 2 AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).

3. CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPOR, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
   A. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
   B. CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 & 2
   C. COLORADO DEPARMENT OF TRANSPORATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
   D. CDOT M & S STANDARDS.

4. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACE WILL BE ENTIERELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.

5. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.

6. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY DEPARMENT OF PUBLIC WORKS (DPW) INSPECTIONS, PRIOR TO STARING CONSTRUCTION.

7. IT IS THE CONTRACTORS RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.

8. CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND DPW. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.

9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY DPW.

10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY DPW PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.

11. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.

12. SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.

13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY PUBLIC WORK DEPARMENT AND MUTCD CRITERIA.

14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DPW, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPOR PERMITS.

15. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING OR CONSTRUCTION.

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GENERAL NOTES

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE 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.
2. THE CONTRACTOR WILL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES, BUILDINGS, FENCES, AND ROADWAYS FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE ABOVE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR.
3. BULK GRADING SHALL BE COMPLETED TO A SUBGRADE TOLERANCE OF PLUS OR MINUS 0.2'.
4. CONTRACTOR TO OBTAIN COPIES OF THE SOILS REPOR FROM THE GEOTECHNICAL ENGINEER AND TO BE KEPT ONSITE DURING ALL EARHWORK OPERATIONS.
5. MAXIMUM CUT/FILL SLOPES SHALL NOT EXCEED 3:1, UNLESS OTHERWISE NOTED.
6. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IN A MANNER THAT WILL PROTECT PROPERIES AND PUBLIC FACILITIES FROM THE ADVERSE EFFECTS OF EROSION AND SEDIMENTATION AS A RESUL OF CONSTRUCTION AND EARHWORK ACTIVITIES WITHIN THE PROJECT SITE.
7. EROSION CONTROL DEVICES SHOULD BE CHECKED AFTER EVERY STORM. REPAIRS OR REPLACEMENT SHOULD BE MADE AS NECESSARY TO MAINTAIN PROPER PROTECTION.
8. ADDITIONAL EROSION CONTROL STRUCTURES MAY BE REQUIRED AT THE TIME OF CONSTRUCTION
9. ALL STATIONING CENTERLINE UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
10. ALL DISTURBED PAVEMENT EDGES SHALL BE CUT TO NEAT LINES. REPAIR SHALL CONFORM TO THE EPC ECM APPENDIX K – 1.2.C
11. ALL INTERSECTION ACCESS TO BE CONSTRUCTED WITH A 25 FOOT SIGHT VISIBILITY TRIANGLES EXCEPT STAPLETON DRIVE WHICH IS AN ARERIAL AND A 50 FOOT SIGH VISIBILITY TRIANGLE IS REQUIRED AND THERE SHALL BE NO OBSTRUCTIONS GREATER THAN 18" IN THIS AREA.
12. ALL CULVER AND STORM DRAIN PIPES SHALL BE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE (HDPE) OR REINFORCED CONCRETE PIPE (RCP). ALL CULVERS SHALL BE PLACED WITH FLARED END SECTIONS. ADEQUACY OF MATERIAL THICKNESS FOR ANY CSP INSTALLED SHALL BE VERIFIED BY OWNER'S GEOTECHNICAL ENGINEER TO SUPPOR MINIMUM 50 YEAR DESIGN LIFE. CULVERS MUST CONFORM TO EPC ECM SECTIONS 3.32 – CULVERS.
13. TYPE L RIPRAP W/ MIRAFI FW 700 OR EQUAL IS REQUIRED UNDER ALL RIP RAP PADS.
14. ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN COMPLIANCE WITH AND ALL APPLICABLE EL PASO COUNTY STANDARDS AND WITH 4WAY RANCH METRO DISTRICT CONSULING ENGINEER APPROVAL.
15. ALL POTABLE WATER MATINS SHALL BE AWWA C9000-DR14 PVC WITH PUSH ON SINGLE GASKET TYPE JOINTS AND SHALL MEET THE REQUIREMENTS OF ANSI/NSF 61
16. ALL WATER MAIN FITINGS SHALL BE CAST IRON AND FURNISHED WITH MECHANICAL JOINT ENDS. ALL FITTINGS SHALL HAVE A PRESSURE RATING OF 250 PSI AND SHALL MEET THE REQUIREMENTS OF ANSI/NSF 61.
17. MAXIMUM DEFLECTION OF 8' & 12" PVC WATER MAIN JOINTS IS 4 DEGREES. CORRESPONDING MINIMUM CURVE RADIUS IS 286'. ADDITIONAL 11.25 DEGREE OR 22.5 DEGREE BENDS MAY BE REQUIRED FOR PROPER ALIGNMENT.
18. CONTRACTOR IS RESPONSIBLE FOR PROVIDING DETAILED AS-BUILTS OF ALL WATER MAIN, STORM SEWER, AND SANITARY SEWER MAIN INSTALLATIONS, INCLUDING ACCURATE DISTANCES OF MAIN LINES, VALVES, FITTINGS, MANHOLES AND LOCATIONS OF WATER AND SEWER SERVICES.
19. SANITARY SEWER PIPE AND FITTING: PVC 4"-8" STM D3034, TYPE PSM, SDR 35 PUSH ON JOINTS AND MOLDED RUBBER GASKETS MAXIMUM HORIZONTAL DEFLECTION, AFTER INSTALLLATION AND BACK FILLING SHALL NOT EXCEED 3% OF THE PIPE DIAMETER. MINIMUM CURVE RADIUS IS 100' FOR 8"VC SANITARY SEWER MAIN.

SIGNING AND STRIPING NOTES

1. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A METHOD THAT DOES NOT MATERIALLY DAMAGE THE PAVEMENT. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT THAT THEY WILL NOT BE VISIBLE UNDER DAY OR NIGHT CONDITIONS. AT NO TIME WILL IT BE ACCEPTABLE TO PAINT OVER EXISTING PAVEMENT MARKINGS.
3. ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT.
4. ALL SIGNS SHOWN ON THE SIGNING AND STRIPING PLAN SHALL BE NEW SIGNS. EXISTING SIGNS MAY REMAIN OR BE REUSED IF THEY MEET CURRENT EL PASO COUNTY AND MUTCD STANDARDS.
5. STREET NAME AND REGULATORY STOP SIGNS SHALL BE ON THE SAME POST AT INTERSECTIONS.
6. ALL REMOVED SIGNS SHALL BE DISPOSED OF IN A PROPER MANNER BY THE CONTRACTOR
7. ALL STREET NAME SIGNS SHALL HAVE "D" SERIES LETTERS, WITH LOCAL ROADWAY SIGNS BEING 4" UPPER-LOWER CASE LETTERING ON 8" BLANK AND NON-LOCAL ROADWAY SIGNS BEING 6" LETTERING, UPPER-LOWER CASE ON 12" BLANK, WITH A WHITE BORDER THAT IS NOT RECESSED. MULI-LANE ROADWAYS WITH SPEED LIMITS OF 35 MPH OR HIGHER SHALL HAVE 8" UPPER-LOWER CASE LETTERING ON 12" BLANK WITH A WHITE BORDER THAT IS NOT RECESSED. THE WIDTH OF THE NON-RECESSED WHITE BORDERS SHALL MATCH PAGE 255 OF THE 2012 MUTCD "STANDARD HIGHWAY SIGNS"
8. ALL TRAFFIC SIGNS SHALL HAVE A MINIMUM HIGH INTENSITY PRISMATIC GRADE SHEETING.
9. ALL LOCAL RESIDENTIAL STREET SIGNS SHALL BE MOUNTED ON A 1.75" X 1.75" SQUARE TUBE SIGN POST AND STUB POST BASE. FOR OTHER APPLICATIONS, REFER TO THE CDOT STANDARD S-614-8 REGARDING USE OF THE P2 TUBULAR STEEL POST SLIPBASE DESIGN.
10. ALL SIGNS SHALL BE SINGLE SHEET ALUMINUM WITH 0.100" MINIMUM THICKNESS.
11. ALL LIMIT LINES/STOP LINES, CROSSWALK LINES, PAVEMENT LEGENDS, AND ARROWS SHALL BE A MINIMUM 125 MIL THICKNESS PREFORMED THERMOPLASTIC PAVEMENT MARKINGS WITH TAPERED LEADING EDGES PER CDOT STANDARD S-627-1. WORD AND SYMBOL MARKINGS SHALL BE THE NARROW TYPE. STOP BARS SHALL BE 24" IN WIDTH. CROSSWALKS LINES SHALL BE 24" WIDE AND 9' LONG PER CDOT S-627-1.
12. ALL LONGITUDINAL LINES SHALL BE A MINIMUM 15MIL THICKNESS EPOXY PAINT. ALL NON-LOCAL RESIDENTIAL ROADWAYS SHALL INCLUDE BOTH RIGHT AND LEFT EDGE LINE STRIPING AND ANY ADDITIONAL STRIPING AS REQUIRED BY CDOT S-627-1.
13. THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (719) 520-6819 PRIOR TO AND UPON COMPLETION OF SIGNING AND STRIPING.
14. THE CONTRACTOR SHALL OBTAIN A WORK IN THE RIGHT OF WAY PERMIT FROM THE EL PASO COUNTY DEPARMENT OF PUBLIC WORKS (DPW) PRIOR TO ANY SIGNAGE OR STRIPING WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY.

ROADWAY, EMBANKMENT, & STORMWATER CONSTRUCTION NOTES:

1. TEMPORARY DE-WATERING MAY BE NEEDED WHERE GROUNDWATER IS ENCOUNTERED IN CUT AREAS. UNSTABLE SOIL AREAS MAYBE ENCOUNTERED AND RUBBER TIRED EQUIPMENT MAY NEED SHOT ROCK OR GEO-GRIDS.
2. AREAS TO RECEIVE FILL SHALL HAVE TOPSOIL AND ORGANIC MATERIAL REMOVED PRIOR TO FILL PLACEMENT AND ENTECH ENGINEERING SHALL OBSERVE THE SUBGRADE. FILL SLOPES SHALL NOT EXCEED 3:1 AND BE PROPERLY BENCHED AND COMPACTED.
3. SUBGRADE SHALL BE SCARIFIED AND MOISTURE CONDITIONED TO WITHIN 2% OF OPTIMUM MOISTURE CONTENT AND COMPACTED TO A MINIMUM 95% OF MAX MODIFIED PROCTOR DRY DENSITY, ASTM D-1557, PRIOR TO PLACING NEW FILL. AREA RECEIVING FILL MAY REQUIRE STABILIZATION WITH ROCK OR FABRIC IF SHALLOW GROUNDWATER CONDITIONS ARE ENCOUNTERED.
4. NEW FILL SHALL BE PLACED IN THIN LIFTS NOT TO EXCEED 6" AND MAINTAIN 95% OF MAX MODIFIED PROCTOR DRY DENSITY, ASTM D-1557 AND PLACED AT OPTIMUM MOISTURE CONTENT OF 2% PROCTOR OPTIMUM MOISTURE CONTENT. SANDSTONE/CLAYSTONE WILL REQUIRE PROCESSING TO BREAK IT DOWN FOR USE IN FILLS. THE PLACEMENT AND COMPACTION OF SILL SHALL BE OBSERVED AND TESTED BY ENTECH DURING CONSTRUCTION AND ANY IMPORT SHALL SHALL BE APPROVED BY ENTECH PRIOR TO HAULING AND PLACING.
5. THE ENTRANCE ROAD SAYBROOK OFF OF STAPLETON DRIVE WILL REQUIRE SOIL STABILIZ

EROSION CONTROL LEGEND

KEY	TITLE	SYMBOL	IMPLEMENATION PHASE
SF	SILT FENCE	SF	INITIAL
CF	CONSTRUCTION FENCE	CF	INITIAL
SCL	SEDIMENT CONTROL LOGS	SCL	INITIAL
SP	STOCKPILE PROTECTION	SP	INITIAL
VTC	VEHICLE TRACKING CONTROL	VTC	INITIAL
SSA	STABILIZED STAGING AREA	SSA	INITIAL
TSB	TEMPORARY SEDIMENT BASIN	TSB	INITIAL
DW	DEWATERING	DW	INITIAL

GRADING LEGEND

8' EXISTING CONTOUR	6810
1' EXISTING CONTOUR	6802
5' PROPED CONTOUR	6810
1' PROPED CONTOUR	6802
LIMITS OF DISTURBANCE/ CONSTRUCTION BOUNDARY	
SUBDIVISION BOUNDARY	
CUT/FILL LINE	CUT FILL
TRIBUTARY AREA TO TSB	
DIRECTION OF SURFACE FLOW	1.5%
HIGH POINT	HPX
LOW POINT	LPX
A LOT	"A"
B LOT	"B"
WALK OUT LOT MODIFIED	"WO"
GARDEN LEVEL LOT MODIFIED	"GO"
100-Y FEMA FLOODPLAIN	
AREAS OF DE-WATERING	

MATCHLINE SEE SHEET 3 FOR OFFSITE EDB POND 2

DEWATERING NOTE:
CONTRACTOR TO DISCHARGE GROUND WATER TO THE PR TEMPORARY SEDIMENT BASINS PER DETAIL ON SHEET 10

NOTES:
1. NO BATCH PLANTS ARE PR
2. ALL CONTROL MEASURES ARE BEING IMPLEMENTED BY THE OWNER/DEVELOPER/CONTRACTOR
3. SWALE E-E IS TO BE SEEDED AND MULCHED IN INITIAL PHASE

100' 0 100' 200'
SCALE: 1"=100'

PR PVT FSD POND 3
PR 3-36" CULVERTS
530 LF SILT FENCE
570 LF SILT FENCE
1140 LF SILT FENCE
80 LF CONST. FENCE
80 LF SILT FENCE
1520 LF CONST. FENCE
700 LF CONST. FENCE
700 LF SILT FENCE
2400 LF SILT FENCE
1520 LF CONST. FENCE
2400 LF SILT FENCE
821 LF SCL
818 LF SCL
350 LF SILT FENCE
1,718 LF SCL
1,140 LF CONST. FENCE
1,050 LF SILT FENCE
1,050 LF CONST. FENCE
660 LF SILT FENCE
314 LF SCL
2,400 LF SILT FENCE
EXISTING WETLANDS
EXISTING CHANNEL
SUBDIVISION BOUNDARY
LIMITS OF DISTURBANCE/ CONSTRUCTION BOUNDARY
PR DIVERSION SWALE SEE DETAIL B-B ON SHEET 3
PR DIVERSION SWALE SEE DETAIL C-C ON SHEET 3
PR DIVERSION SWALE SEE DETAIL D-D ON SHEET 3
PR DIVERSION SWALE SEE DETAIL E-E ON SHEET 3 PERMANENT SEEDING AND MULCHING TO BE INSTALLED IN INITIAL PHASE
PR DIVERSION SWALE SEE DETAIL A-A ON SHEET 3
SWALE MAINTENANCE ACCESS FROM TEMPORARY TURNAROUND
INSTALL TEMPORARY SLOPE DRAIN SEE DETAIL SHT 10
INSTALL TEMPORARY SLOPE DRAIN TYPICAL OF 2
INSTALL 22'W18'L SPILLWAY W/ D50=9" TYPE L RIPRAP BURY DEPTH =18"
22'Wx18'L SPILLWAY W/ D50=9" TYPE L RIPRAP BURY DEPTH =18"
12'Wx16'L SPILLWAY W/ D50=9" TYPE L RIPRAP BURY DEPTH =18"
22'Wx45'L SPILLWAY W/ D50=9" TYPE L RIPRAP BURY DEPTH =18"
5'Wx5'L D50=9" TYPE L RIPRAP
22'Wx18'L SPILLWAY W/ D50=9" TYPE L RIPRAP BURY DEPTH =18"
INV=6930.00 47'-6" PVC @ 2.08%
INV=6931.25
INV=6927.25 60'-8" PVC @ 10.45
INV=6921.25 70'-6" PVC @ 1.79%
INV=6921.00 5'Wx5'L D50=9" TYPE L RIPRAP
EXISTING 12" WATER MAIN
EXISTING STOCK POND TO BE CONVERTED TO TEMPORARY SEDIMENT BASIN
STABILIZED STAGING AREA
STOCKPILE PROTECTION
VTC
TSB 1
TSB 2
TSB 3
TSB 4
PR TSB 1
TRIBUTARY AREA=4.65 AC
(BOTTOM EL=6926)
(TOP EL= 6930)
(4:1 SLOPES/4' DEPTH)
(TOP RISER=6929)
(BOT RISER=6927.25)
(HOLE DIA=21/32")
(# OF HOLES=5)
(SPILLWAY LENGTH=8'
PR TSB 2
TRIBUTARY AREA=19.08 AC
(73.25'Lx36.5'W)
(BOTTOM EL=6920)
(TOP EL= 6924)
(4:1 SLOPES/4' DEPTH)
(TOP RISER=6923)
(BOT RISER=6921.25)
(HOLE DIA=1-3/16")
(# OF HOLES=5)
(SPILLWAY LENGTH=22'
PR TSB 3
TRIBUTARY AREA=16.63 AC
(73.25'Lx36.5'W)
(BOTTOM EL=6932)
(TOP EL= 6936)
(4:1 SLOPES/4' DEPTH)
(TOP RISER=6935)
(BOT RISER=6933.25)
(HOLE DIA=1-3/16")
(# OF HOLES=5)
(SPILLWAY LENGTH=22'
PR TSB 4
TRIBUTARY AREA=7.07 AC
(73.25'Lx36.5'W)
(BOTTOM EL=6930)
(TOP EL= 6934)
(4:1 SLOPES/4' DEPTH)
(TOP RISER=6933)
(BOT RISER=6931.25)
(HOLE DIA=27/32")
(# OF HOLES=5)
(SPILLWAY LENGTH=12'
EXISTING 24" RCP STORM & 4'x4' CONC. OUTLET
EXISTING DUAL 4'x8' CONCRETE BOX CULVERTS
EXISTING RIPRAP
EX 36" RCP CULVERTS & RIPRAP OUTLET
EX DUAL 24" RCP CULVERTS W/ HEADWALL & RIPRAP OUTLET
EX DROP STRUCTURES
TYPE H RIP-RAP d50 = 18" DEPTH = 36"
PR 2-48" CULVERTS
PR 18" CULVERT
TYPE H RIP-RAP d50 = 18" DEPTH = 36"
100-YEAR FEMA FLOODPLAIN
100-YEAR FLOODPLAIN
CHANNEL MAINTENANCE EASEMENT #216057816
OFFSITE GRADING TO IN PUBLIC ROW TO BE APPROVED BY EL PASO COUNTY
PROP. DRAINAGE ESMT. REC #
PROP. DRAINAGE ESMT. REC #
EXISTING 24" RCP STORM & 4'x4' CONC. OUTLET
EXISTING CHANNEL
EXISTING CHANNEL
EXISTING CHANNEL
EXISTING CHANNEL
STAPLETON DRIVE
GILBERT DRIVE
THATCHER COURT
BANDANERO DRIVE
SUBDIVISION BOUNDARY
SUBDIVISION BOUNDARY
SUBDIVISION BOUNDARY
SUBDIVISION BOUNDARY
SUBDIVISION BOUNDARY
LIMITS OF DISTURBANCE/ CONSTRUCTION BOUNDARY
LIMITS OF DISTURBANCE/ CONSTRUCTION BOUNDARY
LIMITS OF DISTURBANCE/ CONSTRUCTION BOUNDARY
LIMITS OF DISTURBANCE/ CONSTRUCTION BOUNDARY
LIMITS OF DISTURBANCE/ CONSTRUCTION BOUNDARY
LIMITS OF DISTURBANCE/ CONSTRUCTION BOUNDARY
LIMITS OF DISTURBANCE/ CONSTRUCTION BOUNDARY
LIMITS OF DISTURBANCE/ CONSTRUCTION BOUNDARY
LOT 15
ZONED RR-2.5
Use: Single-Family Res.
PARCEL 4232104001
LOT 35
ZONED RR-2.5
Use: Single-Family Res.
PARCEL 4229402001
4 WAY RANCH FIL NO 1
LOT 36
ZONED RR-2.5
Use: Single-Family Res.
PARCEL 4229402002
LOT 37
ZONED RR-2.5
Use: Single-Family Res.
PARCEL 4229401012
LOT 38
ZONED RR-2.5
Use: Single-Family Res.
PARCEL 4229401013
LOT 39
ZONED RR-2.5
Use: Single-Family Res.
PARCEL 4229401014
4 WAY RANCH FIL NO 1
ACM ALF VIII JV SUB II LLC
4100 E. MISSISSIPPI AVE., STE 500
Denver, CO 80246
ZONED PUD
Use: Vacant Land
PARCEL 4200000366
ACM ALF VIII JV SUB II LLC
4100 E. MISSISSIPPI AVE., STE 500
Denver, CO 80246
ZONED PUD
Use: Vacant Land
PARCEL 4200000417
KO1515 LLC
PO BOX 1385
COLORADO SPRINGS CO, 80901-1385
ZONED PUD
(PLANNED UNIT DEVELOPMENT)
Use: Vacant
PARCEL 4200000399
935 DEVELOPMENT INC.
4100 E. MISSISSIPPI AVE., STE 500
Denver, CO 80246
ZONED PUD
(PLANNED UNIT DEVELOPMENT)
Use: Vacant
PARCEL 4200000399

REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR:
ACM ALF VIII JV SUB II LLC
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303-984-9800

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Creative Civil Engineering Solutions
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WATERBURY FILING NO. 1

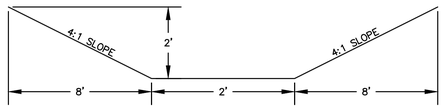
GRADING AND EROSION CONTROL PLAN
INITIAL EROSION CONTROL PLAN 1

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

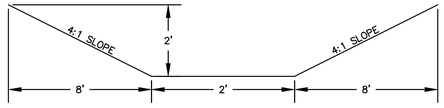
COLORADO LICENSED
QUENTIN N ARMIJO
37170
04/17/26
PROFESSIONAL ENGINEER

DESIGNED BY	DLF
DRAWN BY	QNA
CHECKED BY	QNA
H-SCALE	1" = 100'
V-SCALE	N/A
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	2 OF 58



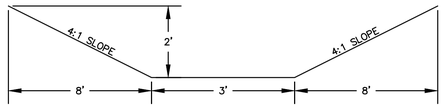
DIVERSION SWALE A–A

SEE PREVIOUS SHEET



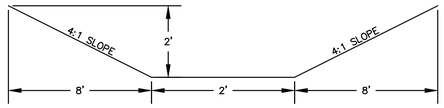
DIVERSION SWALE B–B

SEE PREVIOUS SHEET



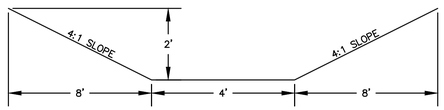
DIVERSION SWALE C–C

SEE PREVIOUS SHEET



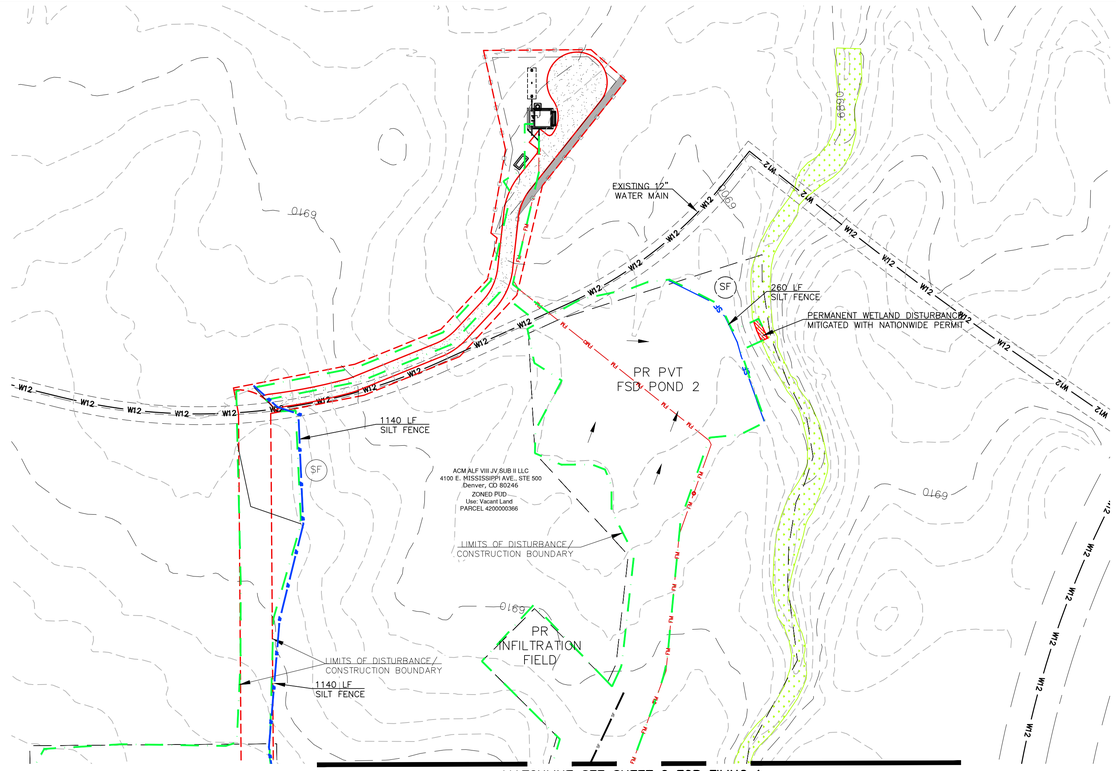
DIVERSION SWALE D–D

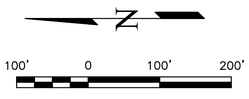
SEE PREVIOUS SHEET



DIVERSION SWALE E–E

SEE PREVIOUS SHEET





SCALE: 1"=100'

NOTES:
NO BATCH PLANTS ARE PR
ALL CONTROL MEASURES ARE BEING IMPLEMENTED BY THE OWNER/DEVELOPER/CONTRACTOR

GRADING LEGEND

10' EXISTING CONTOUR	6810
2' EXISTING CONTOUR	6802
LIMITS OF DISTURBANCE/ CONSTRUCTION BOUNDARY	
SUBDIVISION BOUNDARY	
TRIBUTARY AREA TO TSB	
PR DIVERSION SWALE	
DIRECTION OF SURFACE FLOW	
EXISTING WETLANDS	
100–Y FEMA FLOODPLAIN	
AREAS OF DE–WATERING	
PERMANENT WETLAND DISTURBANCE	

GENERAL NOTES

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE 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.
2. THE CONTRACTOR WILL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES, BUILDINGS, FENCES, AND ROADWAYS FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE ABOVE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR.
3. BULK GRADING SHALL BE COMPLETED TO A SUBGRADE TOLERANCE OF PLUS OR MINUS 0.2'.
4. CONTRACTOR TO OBTAIN COPIES OF THE SOILS REPORT FROM THE GEOTECHNICAL ENGINEER AND TO BE KEPT ONSITE DURING ALL EARTHWORK OPERATIONS.
5. MAXIMUM CUT/FILL SLOPES SHALL NOT EXCEED 3:1, UNLESS OTHERWISE NOTED.
6. ALL BOTTOM OF WALL (BW) CALLOUTS ARE FOR THE BOTTOM OF WALL AT GRADE. THEY DO NOT REPRESENT THE BOTTOM OF THE CONSTRUCTED WALL OR FOOTING, WHICH IS NOT SPECIFIED ON THESE PLANS.

SOIL TYPES

ONSITE SOILS ARE HYDROLOGIC GROUPS "A" (COLUMBINE GRAVELLY SANDY LOAM) AND "B" (STAPLETON SANDY LOAM) (PER NRCS WEB SOIL SURVEY MAP)

AREA OF DISTURBANCE

ESTIMATED AREA OF DISTURBANCE = 75.90 ACRES

EARTHWORK VOLUMES

ESTIMATED CUT = 73,990 CY, ESTIMATED FILL = 287,149* CY, NET = 213,159 CY <FILL>
*20% COMPACTION ASSUMED FOR PLACEMENT OF FILL

BLACK SQUIRREL CREEK NOTE:

IF AN UNDERDRAIN SYSTEMS ARE NEEDED FOR HOMES LOCATED WITH HIGH GROUNDWATER WILL NEED TO DISCHARGE INTO A GROUNDWATER RECHARGE FACILITY, NOT A STORM DRAIN SYSTEM.

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

COLORADO LICENSED
QUENTIN N ARMIJO
37170
04/17/26
PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE

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ACM ALF VIII JV SUB II LLC
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303-984-9800

Terra Nova Engineering, Inc.
Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
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www.tnsinc.com

WATERBURY FILING NO. 1

GRADING EROSION CONTROL PLAN
INITIAL EROSION CONTROL PLAN 2

DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA
H–SCALE AS SHOWN
V–SCALE N/A
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 3 OF 58

EROSION CONTROL LEGEND

KEY	TITLE	SYMBOL	IMPLEMENATION PHASE
SF	SILT FENCE	SF	INITIAL
CF	CONSTRUCTION FENCE	CF	INITIAL
CIP	CULVERT INLET PROTECTION		INTERIM
IP	INLET PROTECTION		INTERIM
SBB	STRAW BALE BARRIER		INTERIM
SP	STOCKPILE PROTECTION		INITIAL
VTC	VEHICLE TRACKING CONTROL		INITIAL
CWA	CONCRETE WASHOUT AREA		INTERIM
SSA	STABILIZED STAGING AREA		INITIAL
TSM	TEMPORARY SEEDING AND MULCHING		INTERIM
DW	DEWATERING		INITIAL
TSB	TEMPORARY SEDIMENT BASIN		INITIAL

GRADING LEGEND

8' EXISTING CONTOUR	6810
1' EXISTING CONTOUR	6802
5' PROPED CONTOUR	6810
1' PROPED CONTOUR	6802
LIMITS OF DISTURBANCE/ CONSTRUCTION BOUNDARY	
SUBDIVISION BOUNDARY	
CUT/FILL LINE	FILL / CUT
TRIBUTARY AREA TO TSB	
DIRECTION OF SURFACE FLOW	4.0%
HIGH POINT	HP
LOW POINT	LP
A LOT	"A"
B LOT	"B"
WALK OUT LOT MODIFIED	"WO*"
GARDEN LEVEL LOT MODIFIED	"G*"
100-Y FEMA FLOODPLAIN	
AREAS OF DE-WATERING	

WETLANDS LEGEND

EXISTING WETLANDS	
PERMANENT WETLAND DISTURBANCE	

100' 0 100' 200'

SCALE: 1"=100'

VEGETATION NOTE:

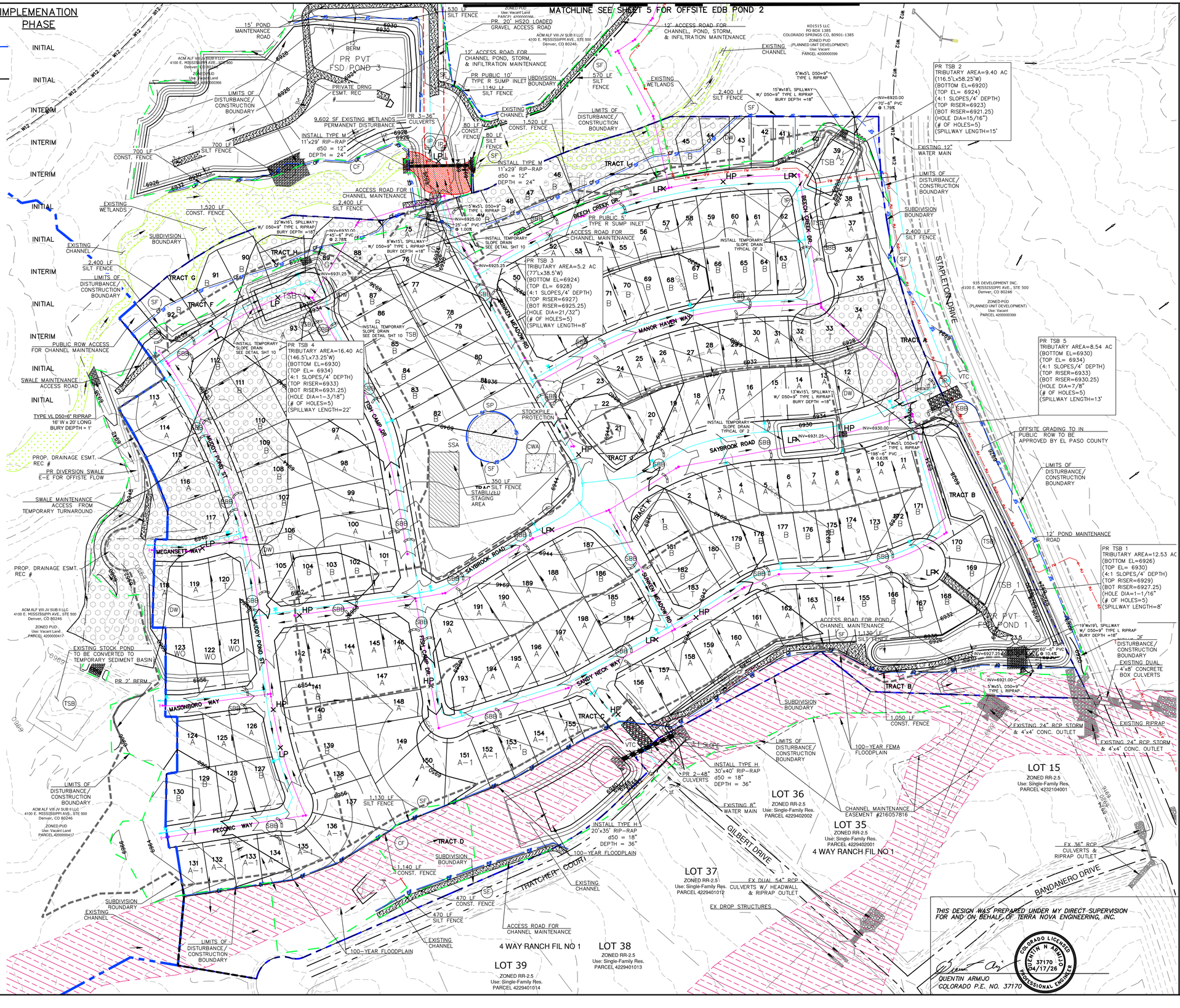
EXISTING VEGETATION CONSISTS OF NATIVE PRAIRIE GRASSES AND SHRUBS WITH FAIR TO GOOD COVERAGE OF 50% TO 70%

NOTES:

NO BATCH PLANTS ARE PR
ALL CONTROL MEASURES ARE BEING IMPLEMENTED BY THE OWNER/DEVELOPER/CONTRACTOR

GENERAL NOTE:

ALL AREAS TO BE VEGETATED WITH PERMANENT SEEDING SHOULD ALSO BE TEMPORARY STABILIZED VIA TRACK ROLLING OR SOME OTHER MEANS.



NO.	DESCRIPTION	DATE
	REVISIONS	

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303-984-9800

Terra Nova Engineering, Inc.
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WATERBURY FILING NO. 1

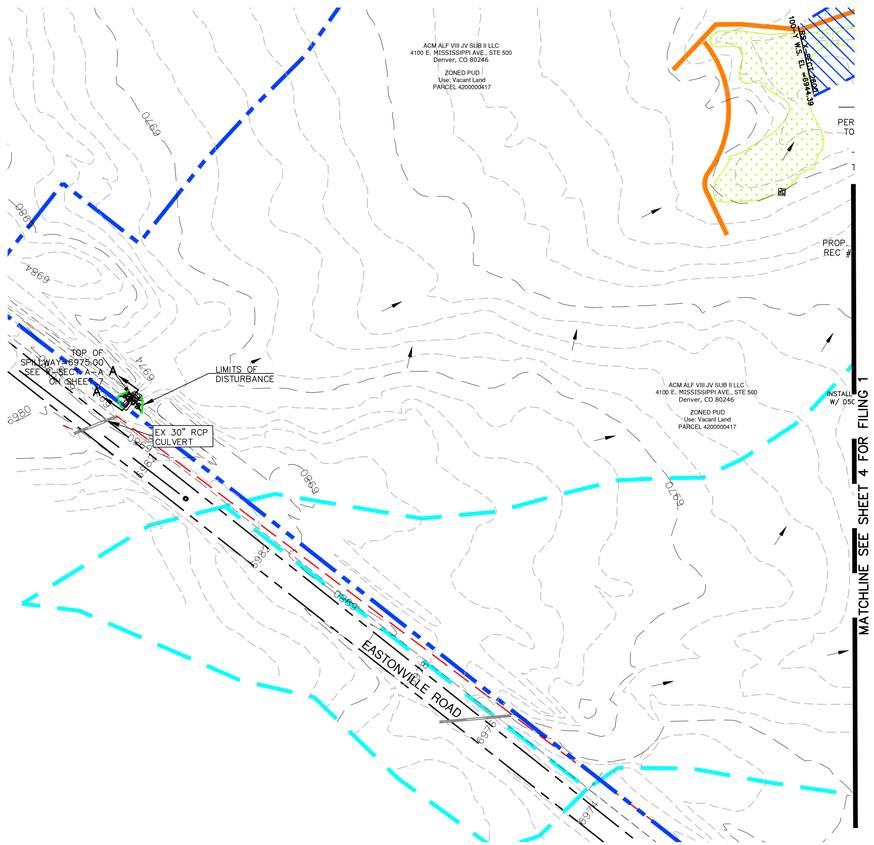
GRADING AND EROSION CONTROL PLAN
INTERIM EROSION CONTROL PLAN 1

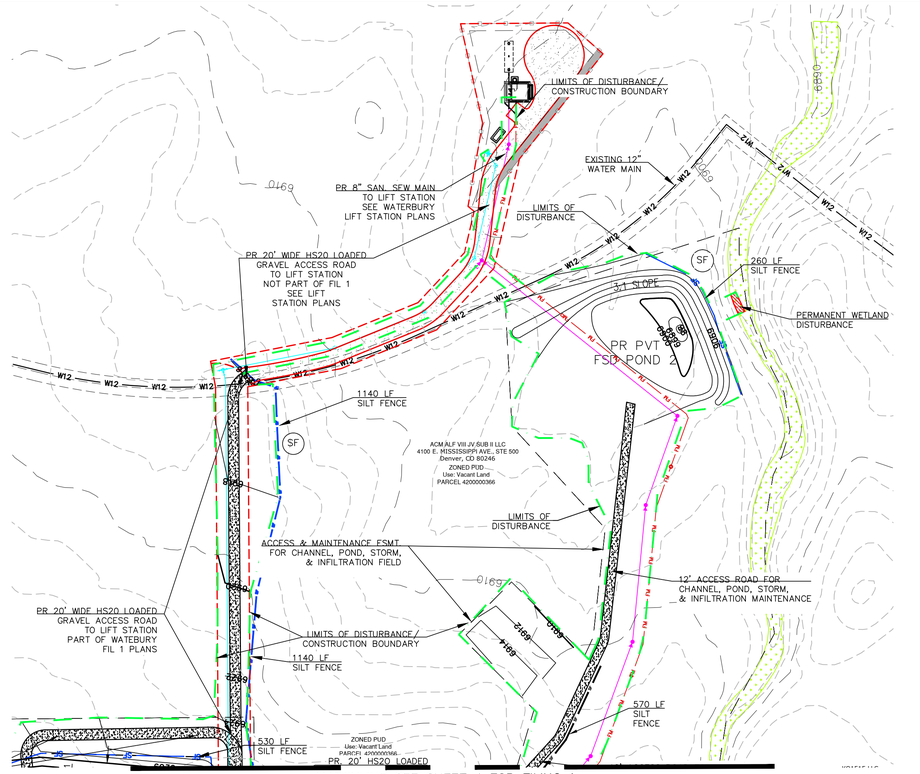
THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

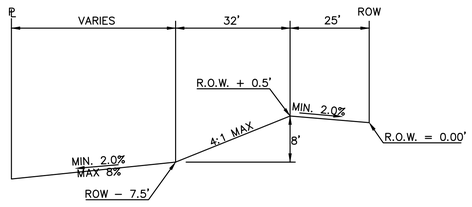
QUENTIN N ARMIJO
37170
04/17/26
PROFESSIONAL ENGINEER

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

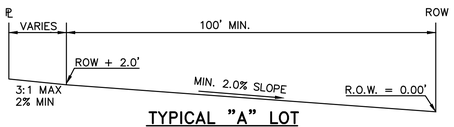
DESIGNED BY	DLF
DRAWN BY	QNA
CHECKED BY	QNA
H-SCALE	1" = 100'
V-SCALE	N/A
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	4 OF 58



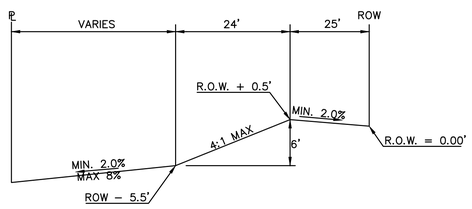




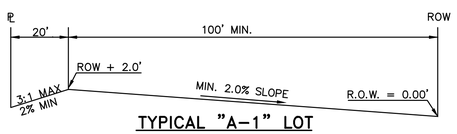
TYPICAL "WALK-OUT" LOT
SEE PREVIOUS SHEET



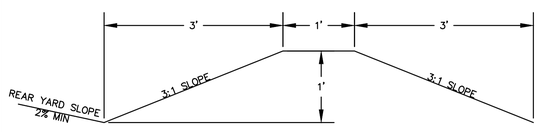
TYPICAL "A" LOT
SEE PREVIOUS SHEET



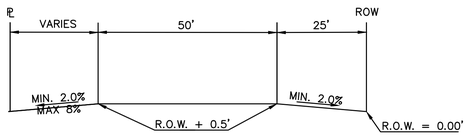
TYPICAL "GARDEN LEVEL" LOT
SEE PREVIOUS SHEET



TYPICAL "A-1" LOT
SEE PREVIOUS SHEET



REAR YARD BERM LOTS 43-49 & 88-92
SEE PREVIOUS SHEET



TYPICAL "B" LOT
SEE PREVIOUS SHEET

GRADING LEGEND

8' EXISTING CONTOUR	6810
1' EXISTING CONTOUR	6802
5' PROPED CONTOUR	6810
1' PROPED CONTOUR	6802
LIMITS OF DISTURBANCE/ CONSTRUCTION BOUNDARY	
SUBDIVISION BOUNDARY	
CUT/FILL LINE	FILL CUT
TRIBUTARY AREA TO TSB	
DIRECTION OF SURFACE FLOW	4.0%
HIGH POINT	HP
LOW POINT	LP
A LOT	"A"
B LOT	"B"
WALK OUT LOT MODIFIED	"WO*"
GARDEN LEVEL LOT MODIFIED	"G*"

WETLANDS LEGEND

EXISTING WETLANDS	
PERMANENT WETLAND DISTURBANCE	

NOTES:
NO BATCH PLANTS ARE PR
ALL CONTROL MEASURES ARE BEING IMPLEMENTED BY THE OWNER/DEVELOPER/CONTRACTOR

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE

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WATERBURY FILING NO. 1

GRADING EROSION & STORMWATER CONTROL PLAN
INTERIM EROSION CONTROL PLAN 2

DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA
H-SCALE AS SHOWN
V-SCALE N/A
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 5 OF 58

EROSION CONTROL LEGEND

KEY	TITLE	SYMBOL
SF	SILT FENCE	SF
CF	CONSTRUCTION FENCE	CF
CIP	CULVERT INLET PROTECTION	
IP	INLET PROTECTION	
SBB	STRAW BALE BARRIER	
SP	STOCKPILE PROTECTION	
VTC	VEHICLE TRACKING CONTROL	
CWA	CONCRETE WASHOUT AREA	
SSA	STABILIZED STAGING AREA	
TSM	TEMPORARY SEEDING AND MULCHING	
PSM	PERMANENT SEEDING AND MULCHING	
DW	DE-WATERING	

IMPLEMENATION PHASE

INITIAL
INITIAL
INTERIM
INTERIM
INTERIM
INITIAL
INITIAL
INTERIM
INITIAL
FINAL
FINAL

MATCHLINE SEE SHEET 7 FOR OFFSITE STORM

GRADING LEGEND

10' EXISTING CONTOUR	6810
2' EXISTING CONTOUR	6802
10' PROPED CONTOUR	6810
2' PROPED CONTOUR	6802
LIMITS OF DISTURBANCE/ CONSTRUCTION BOUNDARY	
SUBDIVISION BOUNDARY	
CUT/FILL LINE	FILL / CUT
TRIBUTARY AREA TO TSB	
DIRECTION OF SURFACE FLOW	4.0%
HIGH POINT	HP
LOW POINT	LP
A LOT	"A"
B LOT	"B"
WALK OUT LOT MODIFIED	"WO*"
GARDEN LEVEL LOT MODIFIED	"G*"
100-Y FEMA FLOODPLAIN	
100-Y HWL PER HECRAS ANLYSIS	
AREAS OF DE-WATERING	

WETLANDS LEGEND

EXISTING WETLANDS	
PERMANENT WETLAND DISTURBANCE	

RUNOFF REDUCTION LEGEND

UNCONNECTED IMPERVIOUS AREA	
RECEIVING PERVIOUS AREA	
EXCLUDED UNDEVELOPED PERVIOUS AREA PER THE EXCLUSION IN ECM APPENDIX I.7.1.B.7 — SITES WITH LAND DISTURBANCE TO UNDEVELOPED LAND THAT WILL REMAIN UNDEVELOPED	

100' 0 100' 200'

SCALE: 1"=100'

VEGETATION NOTE:

EXISTING VEGETATION CONSISTS OF NATIVE PRAIRIE GRASSES AND SHRUBS WITH FAIR TO GOOD COVERAGE OF 50% TO 70%

GENERAL NOTE:

ALL AREAS TO BE VEGETATED WITH PERMANENT SEEDING SHOULD ALSO BE TEMPORARY STABILIZED VIA TRACK ROLLING OR SOME OTHER MEANS.

GENERAL NOTE:

1. NO BATCH PLANTS ARE PR
2. ALL CONTROL MEASURES ARE BEING IMPLEMENTED BY THE OWNER/DEVELOPER/CONTRACTOR
3. FOR INFORMATION ONLY? FOR PRES-SUBDIVISION SITE GRADING THERE WILL BE NO CURB AND GUTTER AND STORM DRAIN, ONLY SEEDING AND MULCHING.

MATCHLINE SEE SHEET 7 FOR OFFSITE EDB POND 2

MINIMUM FINISHED FLOOR ELEVATIONS BASED 100-Y HWL

LOT	Min. FF	UPSTREAM 100-Y HWL	FF ABOVE 100-Y HWL
44	6919.00	6914.59	4.41
45	6919.00	6914.59	4.41
46	6924.00	6917.87	6.13
47	6926.00	6918.14	7.86
48	6928.00	6919.39	8.61
49	6928.00	6919.39	8.61
75	6929.00	6924.07	4.93
88	6930.00	6924.94	5.06
89	6930.00	6926.63	3.37
90	6935.50	6931.11	4.39
91	6939.50	6933.84	5.66
92	6943.50	6937.50	6.00
113	6944.00	6939.43	4.57
131	6965.00	6962.36	2.64
132	6963.00	6959.85	3.15
133	6961.50	6957.55	3.95
134	6960.55	6957.55	3.00
135	6960.55	6956.33	4.22
136	6957.00	6953.22	3.78
137	6956.50	6951.80	4.70
150	6953.00	6949.64	3.36
151	6951.50	6948.23	3.27
152	6949.50	6945.90	3.60
153	6949.00	6941.97	7.03
154	6948.00	6941.23	6.77
155	6947.00	6940.97	6.03
156	6944.00	6939.32	4.68
157	6943.00	6939.32	3.68
158	6943.00	6939.32	3.68
159	6943.00	6936.76	6.24
160	6943.00	6935.71	7.29
161	6942.00	6935.71	6.29
162	6940.50	6934.20	6.30
163	6940.00	6934.20	5.80
164	6939.00	6932.42	6.58
165	6937.50	6932.42	5.08

REVISIONS	NO.	DESCRIPTION	DATE

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WATERBURY FILING NO. 1

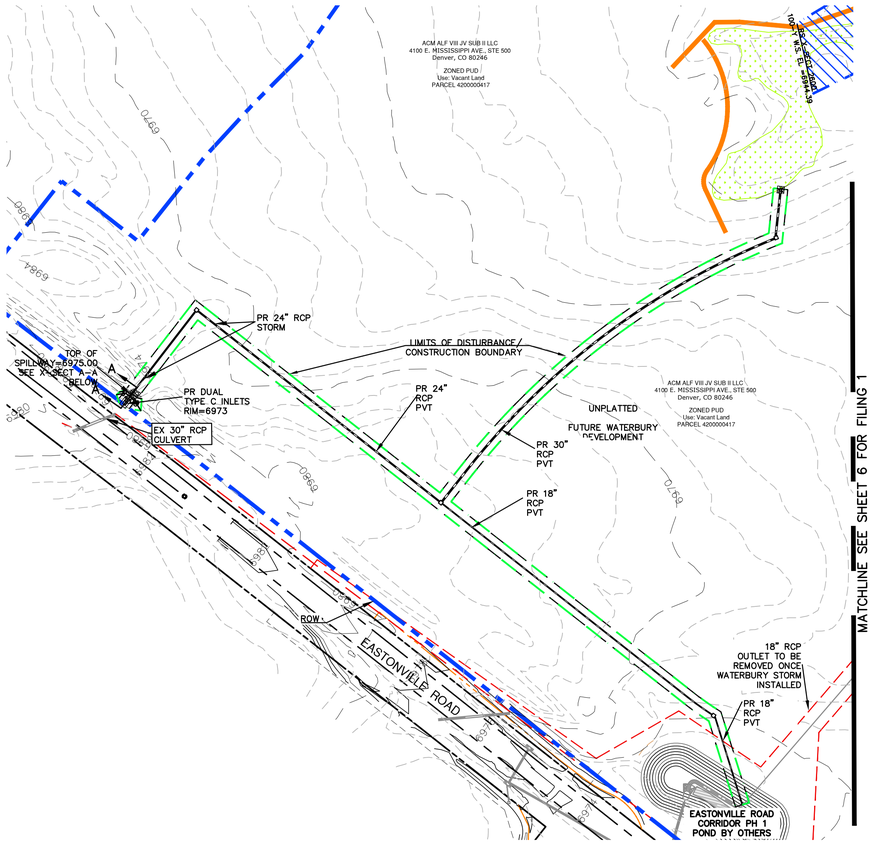
GRADING AND EROSION CONTROL PLAN
FINAL EROSION CONTROL PLAN 1

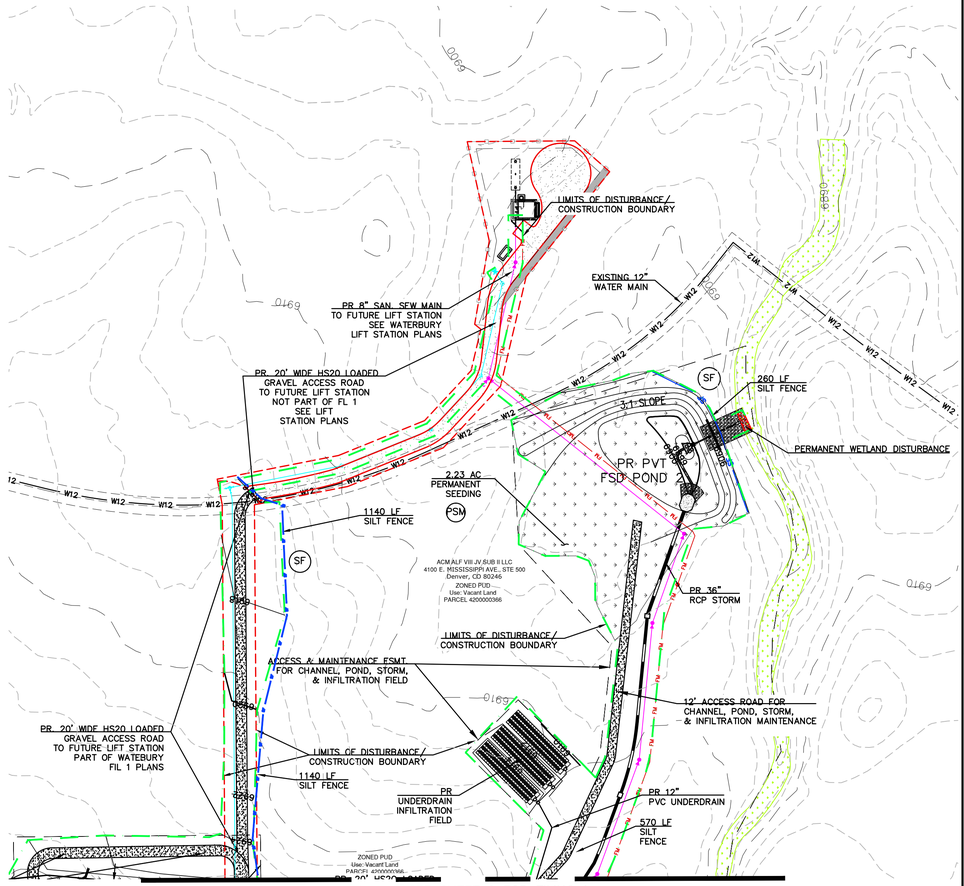
DESIGNED BY	DLF
DRAWN BY	QNA
CHECKED BY	QNA
H-SCALE	1" = 100'
V-SCALE	N/A
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	6 OF 58

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN N ARMIJO
COLORADO LICENSED
37170
04/17/26
PROFESSIONAL ENGINEER

QUENTIN ARMIJO
COLORADO P.E. NO. 37170



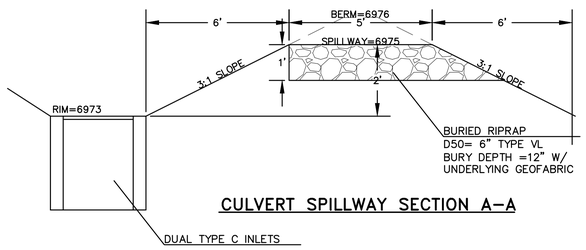


100' 0 100' 200'

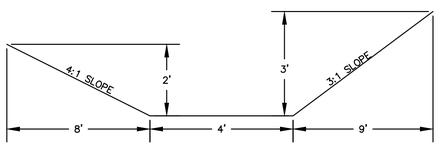
SCALE: 1"=100'

MINIMUM FINISHED FLOOR ELEVATIONS BASED 100-Y HWL

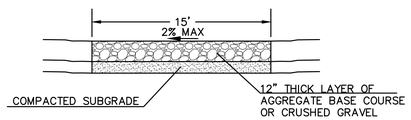
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160	6943.00	6935.71	7.29
161	6942.00	6935.71	6.29
162	6940.50	6934.20	6.30
163	6940.00	6934.20	5.80
164	6939.00	6932.42	6.58
165	6937.50	6932.42	5.08



CULVERT SPILLWAY SECTION A–A



DIVERSION SWALE E–E



12' TO 20' MAINTENANCE ACCESS ROAD SECTION

SCALE: N.T.S.

EROSION CONTROL LEGEND

KEY	TITLE	SYMBOL
SF	SILT FENCE	SF
CF	CONSTRUCTION FENCE	CF
CIP	CULVERT INLET PROTECTION	
IP	INLET PROTECTION	
SBB	STRAW BALE BARRIER	
SP	STOCKPILE PROTECTION	
VTC	VEHICLE TRACKING CONTROL	
CWA	CONCRETE WASHOUT AREA	
SSA	STABILIZED STAGING AREA	
TSM	TEMPORARY SEEDING AND MULCHING	
PSM	PERMANENT SEEDING AND MULCHING	
DW	DE–WATERING	

NOTES:
NO BATCH PLANTS ARE PR
ALL CONTROL MEASURES ARE BEING IMPLEMENTED BY THE OWNER/DEVELOPER/CONTRACTOR

GRADING LEGEND

10' EXISTING CONTOUR	6810
2' EXISTING CONTOUR	6802
10' PROPED CONTOUR	6810
2' PROPED CONTOUR	6802
LIMITS OF DISTURBANCE/ CONSTRUCTION BOUNDARY	
SUBDIVISION BOUNDARY	
CUT/FILL LINE	FILL CUT
TRIBUTARY AREA TO TSB	
DIRECTION OF SURFACE FLOW	4.0%
HIGH POINT	HP
LOW POINT	LP
A LOT	"A"
B LOT	"B"
WALK OUT LOT MODIFIED	"WO*"
GARDEN LEVEL LOT MODIFIED	"G*"
100–Y FEMA FLOODPLAIN	
100–Y HWL PER HECRAS ANLYSIS	
AREAS OF DE–WATERING	

WETLANDS LEGEND

EXISTING WETLANDS	
PERMANENT WETLAND DISTURBANCE	

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE

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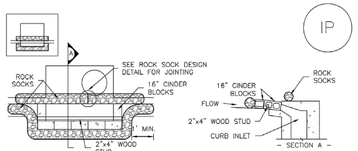
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WATERBURY FILING NO. 1

GRADING EROSION & CONTROL PLAN
FINAL EROSION CONTROL PLAN 2

DESIGNED BY	DLF
DRAWN BY	QNA
CHECKED BY	QNA
H–SCALE	AS SHOWN
V–SCALE	N/A
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	7 OF 58



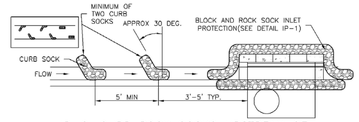
IP–1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.

3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.



IP–2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.

2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.

3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.

4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON–GRADE INLETS.

GENERAL INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
–LOCATION OF INLET PROTECTION.
–TYPE OF INLET PROTECTION (IP.1, IP.2, IP.3, IP.4, IP.5, IP.6)

2. INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.

3. 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.

INLET PROTECTION MAINTENANCE NOTES

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 FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR ¼ OF THE HEIGHT FOR STRAW BALES.

5. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.

6. WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

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.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF INLET PROTECTION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY PROPRIETARY INLET PROTECTION METHODS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY INLET PROTECTION; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.

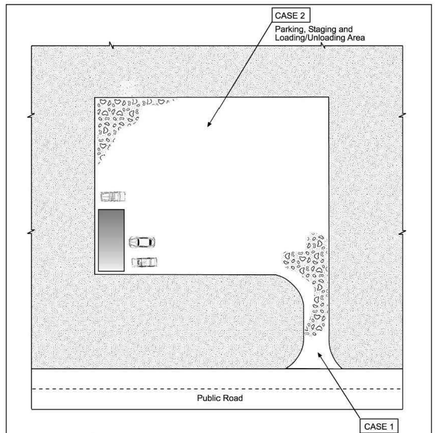


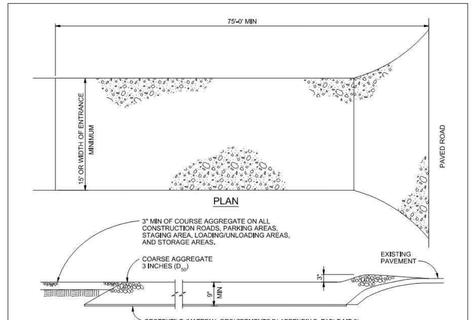
Table VT-1

	Case 1	Case 2
Gravel Thickness	9"	3"
Filter Fabric	YES	NO

City of Colorado Springs
Storm Water Quality

Figure VT-1
Vehicle Tracking
Application Examples

DENAM153722.CS.CSFig\VT-1/9-99



VEHICLE TRACKING
NTS

VEHICLE TRACKING NOTES

INSTALLATION REQUIREMENTS

1. ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.

2. CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APRON TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP.

3. AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.

4. CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.

5. CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.

MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.

2. STONES ARE TO BE REAPPLIED PERIODICALLY AND WHEN REPAIR IS NECESSARY.

3. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS.

4. STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.

5. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

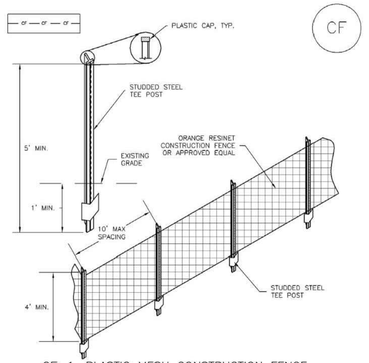
City of Colorado Springs
Stormwater Quality

Figure VT-2
Vehicle Tracking
Application Examples

Table 14-10. Recommended Seed Mix for Transition Areas[1]

Common Name (Variety)	Scientific Name	Growth Season	Growth Form	Seeds/Lb	Lbs PLS/Acre Drilled	Lbs PLS/Acre Broadcast or Hydroseeded
Sheep fescue (Durar)	*Festuca ovina*	Cool	Bunch	680,000	1.3	2.6
Western wheatgrass (Arriba)	*Pascopyrum smithii*	Cool	Sod	110,000	7.9	15.8
Alkali sacaton	*Spolobolus airoides*	Warm	Bunch	1,758,000	0.5	1.0
Slender wheatgrass	*Elymus trachycaulus*	Cool	Bunch	159,000	5.5	11.0
Canadian bluegrass (Ruebens)[1]	*Poa compressa*	Cool	Sod	2,500,000	0.3	0.6
Switchgrass (Pathfinder)	*Panicum virgatum*	Warm	Sod/ Bunch	389,000	1.3	2.6
Annual rye	*Lolium multiflorum*	Cool	Cover crop	227,000	10.0	20.0
				TOTAL	**26.8**	**53.6**
Wildflowers						
Blanket flower	*Faillardia aristata*	---	---	132,000	0.25	0.50
Prairie coneflower	*Ratibida columnaris*	---	---	1,230,000	0.20	0.40
Purple prairie clover	*Petalostemum purpurea*	---	---	210,000	0.20	0.40
Gayfeather	*Liatris punctata*	---	---	138,000	0.06	0.12
Flax	*Linum lewisii*	---	---	293,000	0.20	0.40
Penstemon	*Penstemon strictus*	---	---	592,000	0.20	0.40
Yarrow	*Achillea millefolium*	---	---	2,770,000	0.03	0.06
				TOTAL	**1.14**	**2.28**

[1]For side slopes or between wet and dry areas.
[2]Substitute 1.7 lbs PLS/acre of inland saltgrass (*Distichlis spicata*) in salty soils.



CF–1. PLASTIC MESH CONSTRUCTION FENCE

CONSTRUCTION FENCE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
–LOCATION OF CONSTRUCTION FENCE.

2. CONSTRUCTION FENCE SHOWN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

3. CONSTRUCTION FENCE SHALL BE COMPOSED OF ORANGE, CONTRACTOR–GRADE MATERIAL THAT IS AT LEAST 4' HIGH. METAL POSTS SHOULD HAVE A PLASTIC CAP FOR SAFETY.

4. STUDDED STEEL TEE POSTS SHALL BE UTILIZED TO SUPPORT THE CONSTRUCTION FENCE. MAXIMUM SPACING FOR STEEL TEE POSTS SHALL BE 10'.

5. CONSTRUCTION FENCE SHALL BE SECURELY FASTENED TO THE TOP, MIDDLE, AND BOTTOM OF EACH POST.

CONSTRUCTION FENCE MAINTENANCE NOTES

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.

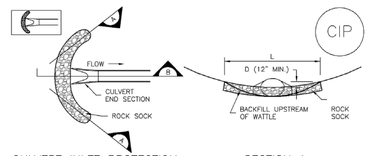
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. CONSTRUCTION FENCE SHALL BE REPAIRED OR REPLACED WHEN THERE ARE SIGNS OF DAMAGE SUCH AS RIPS OR SAGS. CONSTRUCTION FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

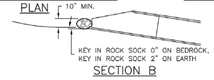
5. WHEN CONSTRUCTION FENCES ARE REMOVED, ALL DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE FENCE SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

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.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)



CULVERT INLET PROTECTION PLAN



SECTION A
SECTION B

CIP–1. CULVERT INLET PROTECTION

CULVERT INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR
–LOCATION OF CULVERT INLET PROTECTION.

2. SEE ROCK SOCK DESIGN DETAIL FOR ROCK GRADATION REQUIREMENTS AND JOINTING DETAIL.

CULVERT INLET PROTECTION MAINTENANCE NOTES

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 FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE CULVERT SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS ½ THE HEIGHT OF THE ROCK SOCK.

5. CULVERT INLET PROTECTION SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

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SEED MIX FOR POND BOTTOMS

THE CITY OF COLORADO SPRINGS ENGINEERING DEPARTMENT GENERAL SPECIFICATIONS SHOULD BE USED AS A RESOURCE WHEN DEVELOPING TECHNICAL SPECIFICATIONS FOR RE–VEGETATION. GENERAL GUIDELINES AND RECOMMENDATIONS FOR RE–VEGETATION INCLUDE:

1. SEED MIXTURES SHOULD BE SOWN AT THE PROPER TIME OF YEAR FOR THE MIXTURE. GENERALLY, THERE ARE TWO OPTIMAL SEEDING PERIODS DURING THE YEAR. THE FIRST PERIOD IS IN THE SPRING, MARCH TO MAY. THE SECOND PERIOD IS IN LATE SUMMER TO EARLY FALL, AUGUST TO SEPTEMBER.

2. SEED SHOULD BE DRILL–SEEDED, WHENEVER POSSIBLE.

3. BROADCAST SEEDING OR HYDRO–SEEDING MAY BE SUBSTITUTED ON SLOPES STEEPER THAN 3:1 OR ON OTHER AREAS NOT PRACTICAL TO DRILL SEED.

4. SEEDING RATES SHOULD BE DOUBLED FOR BROADCAST SEEDING OR INCREASED BY 50% IF USING A BRILLION DRILL OR HYDRO–SEEDING.

5. BROADCAST SEED SHOULD BE LIGHTLY HAND–RAKED INTO THE SOIL.

6. SEED DEPTH SHOULD BE ¼ TO ½ INCH FOR MOST MIXTURES.

7. SEEDED AREAS SHOULD BE MULCHED, AND THE MULCH SHOULD BE ADEQUATELY SECURED.

8. IF HYDRO–SEEDING IS CONDUCTED, MULCHING SHOULD BE CONDUCTED AS A SEPARATE, SECOND OPERATION.

9. CONTAINERIZED NURSERY STOCK SHOULD BE KEPT IN A LIVE AND HEALTHY CONDITION PRIOR TO INSTALLATION.

10. CONTAINERIZED TREES AND SHRUBS SHOULD BE INSTALLED ACCORDING TO THE PLANTING DETAILS PROVIDE IN THE COLORADO SPRINGS LANDSCAPE CODE AND POLICY MANUAL, UNIT FOUR, APPENDICES FOR TREE AND SHRUB PLANTING DETAILS.

11. LIVE STAKES, POLES AND WILLOW BUNDLES SHOULD BE INSTALLED WHEN DORMANT (LATE WINTER AND EARLY SPRING).

12. IF BEAVER ARE KNOWN TO BE IN THE AREA, BEAVER PROTECTION SHOULD BE PROVIDED FOR TREES AND SHRUBS.

ALLOWABLE PLANT VARIETIES

SPECIES

WESTERN WHEATGRASS (PASCOPYRUM SMITHII)
SWITCHGRASS (PANICUM VIRGATUM)
SLENDER WHEATGRASS (ELYMUS TRACHYCAULUS SSP. TRACHYCAULUS
PUBESCENT WHEATGRASS (TRIGIA INTERMEDIA SSP. TRICHOPHORUM)
INDIAN GRASS (ACHNATHERUM HYMENOIDES)
BIG BLUESTEM (POA AMPLA)
BLUE GRAMA (BOUTELOUA GRACILIS)
SWITCHGRASS (PANICUM VIRGATUM)
SIDE–OATS GRAMA (BOUTELOUA CURTIPENDULA)
NEEDLE AND THREAD (HESPEROSTIPA COMATA SSP. COMATA)

SEED MIX SHOULD BE APPROVED BY THE COUNTY

REVISIONS
NO. DESCRIPTION DATE

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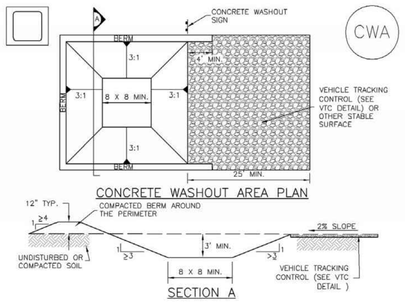
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Terra Nova Engineering, Inc. "Innovative Civil Engineering Solutions"
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WATERBURY FILING NO. 1

GRADING EROSION & STORMWATER CONTROL PLAN
EROSION CONTROL DETAILS

DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA
H–SCALE N/A
V–SCALE N/A
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 8 OF 58



CWA–1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. 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.

CWA MAINTENANCE NOTES

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 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'.

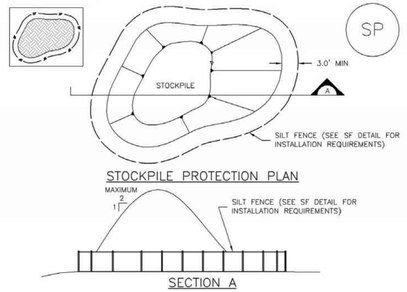
5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER–TIGHT CONTAINER AND DISPOSED OF PROPERLY.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.

7. WHEN THE CWA IS REMOVED, 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).

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.



SP–1. STOCKPILE PROTECTION

STOCKPILE PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –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.

STOCKPILE PROTECTION MAINTENANCE NOTES

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 FAILURE.

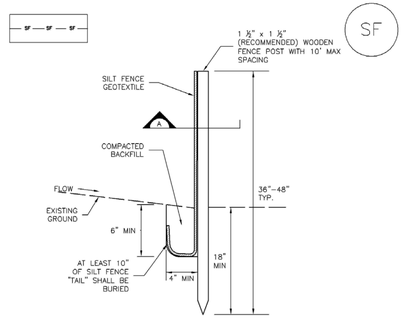
STOCKPILE PROTECTION MAINTENANCE NOTES

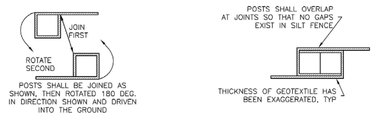
4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.

5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.

(DETAILS ADAPTED FROM PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

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SF–1. SILT FENCE

SILT FENCE INSTALLATION NOTES

1. 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.

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

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 1" 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.

SILT FENCE MAINTENANCE NOTES

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 FAILURE.

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".

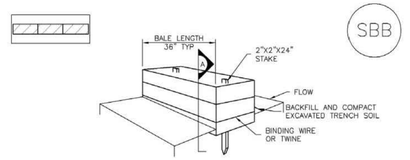
5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

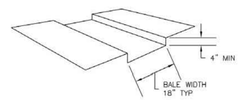
6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

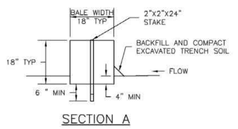
7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

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.







SBB–1. STRAW BALE

STRAW BALE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –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.

STRAW BALE MAINTENANCE NOTES

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 FAILURE.

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 ½ 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.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

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.

REVISIONS		
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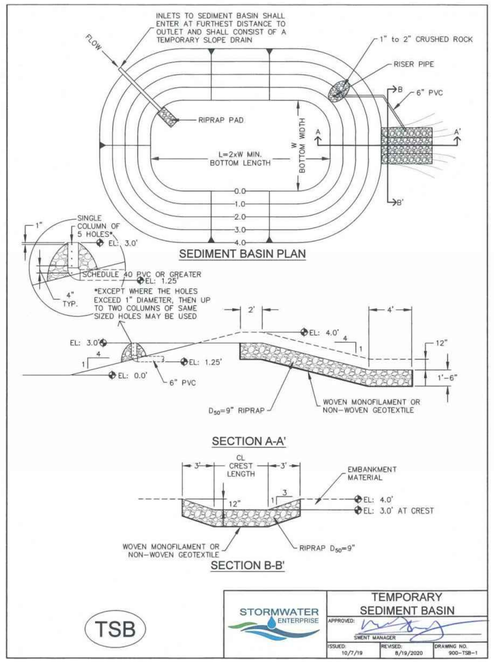
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WATERBURY FILING NO. 1

GRADING AND EROSION CONTROL PLAN
EROSION CONTROL DETAILS

DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA
H–SCALE N/A
V–SCALE N/A
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 9 OF 58



TSB

STORMWATER ENTERPRISE

TEMPORARY SEDIMENT BASIN

APPROVED: CHIEF MANAGER

ISSUED:	REVISED:	DRAWING NO.
10/7/19	8/19/2020	900-TSB-1

TABLE SB-1, SIZING INFORMATION FOR STANDARD SEDIMENT BASIN

UPSTREAM DRAINAGE AREA (ROUNDED TO NEAREST ACRE), (AC)	BASIN BOTTOM WIDTH (W), (FT)	SPILLWAY CREST LENGTH (CL), (FT)	HOLE DIAMETER (HD), (IN)
1	12½"	2	9/32
2	21	3	13/32
3	28	5	1/2
4	33½	6	9/16
5	38½	8	21/32
6	43	9	23/32
7	47¼	11	25/32
8	51	12	27/32
9	55	13	7/8
10	58½	15	15/16
11	61	16	31/32
12	64	18	1
13	67½	19	1 1/16
14	70½	21	1 1/8
15	73¼	22	1 3/16

INSTALLATION NOTES

1. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.
2. 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.
3. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-698.
4. PIPE SCHEDULE 40 OR GREATER SHALL BE USED.
5. THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 15 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. DESIGN CALCULATIONS MUST BE APPROVED PRIOR TO IMPLEMENTATION.

MAINTENANCE NOTES

1. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
2. SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN CONTROL MEASURE EFFECTIVENESS, TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E. TWO FEET BELOW SPILLWAY CREST).
3. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED.
4. PERMANENTLY STABILIZE AREA AFTER SEDIMENT BASIN REMOVAL.

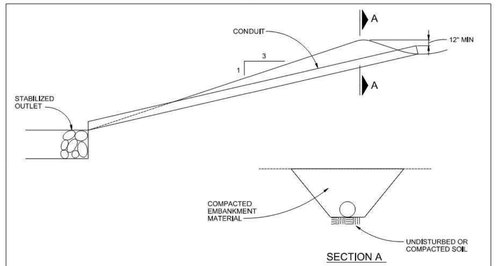
TSB

STORMWATER ENTERPRISE

TEMPORARY SEDIMENT BASIN

APPROVED: CHIEF MANAGER

ISSUED:	REVISED:	DRAWING NO.
10/7/19	8/19/2020	900-TSB-2



SLOPE DRAIN

NTS

SLOPE DRAIN NOTES

INSTALLATION REQUIREMENTS

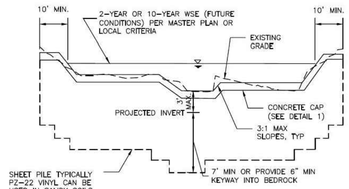
1. THE SLOPE DRAIN IS TO BE DESIGNED TO CONVEY THE PEAK RUNOFF FOR THE 2-YEAR STORM.
2. PIPE MATERIAL MAY INCLUDE CORRUGATED METAL, OR RIGID OR FLEXIBLE PLASTIC.
3. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL WITH A MINIMUM OF 15% PASSING A #200 SIEVE. EXCAVATED SOIL CAN BE USED IF IT MEETS THIS REQUIREMENT.
4. EMBANKMENT IS TO BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT ACCORDING TO ASTM D 698.
5. SLOPE DRAIN SECTIONS ARE TO BE SECURELY FASTENED TOGETHER AND HAVE WATERTIGHT FITTINGS.
6. THE OUTLET IS TO BE STABILIZED AND, UNLESS THE DRAIN DISCHARGES DIRECTLY TO A SEDIMENT BASIN, A TEMPORARY SURFACE IS TO BE PROVIDED TO CONVEY FLOWS DOWN STREAM.
7. IMMEDIATELY STABILIZE ALL AREAS DISTURBED BY INSTALLATION OR REMOVAL OF THE PIPE SLOPE DRAIN.

MAINTENANCE REQUIREMENTS

1. INLET AND OUTLET POINTS ARE TO BE CHECKED REGULARLY, AND AFTER HEAVY STORMS FOR CLOGGING AND OVERCHARGING. ANY BREAKS IN THE PIPE ARE TO BE PROMPTLY REPAIRED, AND CLOGS REMOVED AS NEEDED.
2. WATER IS NOT TO BYPASS OR UNDERCUT THE INLET OR PIPE. IF THESE PROBLEMS DO EXIST, THE HEADWALL NEEDS TO BE REINFORCED WITH COMPACT EARTH OR SANDBAGS.
3. THE OUTLET POINT IS TO BE FREE OF EROSION, AND, IF NECESSARY, ADDITIONAL OUTLET PROTECTION SHOULD BE INSTALLED.
4. CONSTRUCTION TRAFFIC IS NOT TO CROSS THE SLOPE DRAIN AND MATERIALS ARE NOT TO BE PLACED ON IT.
5. THE SLOPE DRAIN IS TO REMAIN IN PLACE UNTIL THE SLOPE HAS BEEN COMPLETELY STABILIZED OR UP TO 30 DAYS AFTER PERMANENT SLOPE STABILIZATION.

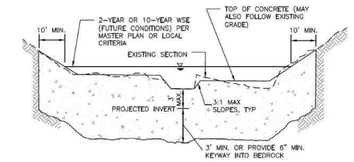
City of Colorado Springs
Stormwater Quality

Figure SD-1
Slope Drain
Construction Detail and Maintenance Requirements



NOTE: THE STRUCTURE MAY BE COVERED WITH 6" OF SOIL OUTSIDE OF THE LOW FLOW AREA.

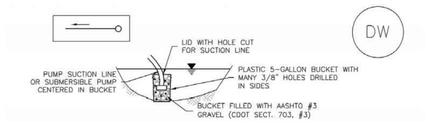
SECTION (A1)
SHEET PILE CHECK



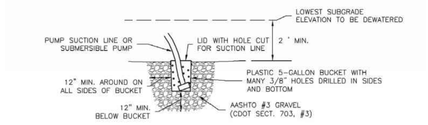
NOTES: 1. TRENCH IN UNDISTURBED SOIL. FORM TOP 6" OF CHECK. DO NOT OVER EXCAVATE TO FORM WALLS OR CONSTRUCT A FOOTING.
2. THE STRUCTURE MAY BE COVERED WITH 6" OF SOIL OUTSIDE OF THE LOW FLOW AREA.
3. VIBRATE CONCRETE INTO TRENCH.

SECTION (A2)
CONCRETE CHECK

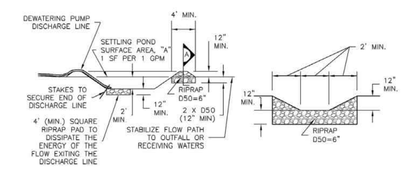
Figure 9-27. Check structure details (Part 2 of 3)



DW-1. DEWATERING POND ALREADY FILLED WITH WATER

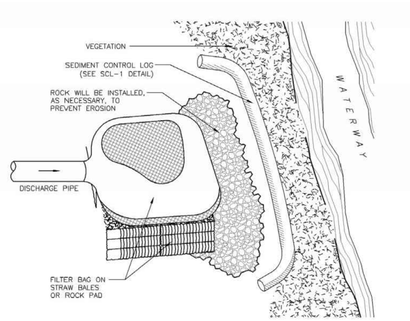


DW-2. DEWATERING SUMP FOR SUBMERSED PUMP



DW-3. SUMP DISCHARGE SETTLING BASIN

SETTLING BASIN SECTION A



DW-4. DEWATERING FILTER BAG

DEWATERING INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   -LOCATION OF DEWATERING EQUIPMENT.
   -TYPE OF DEWATERING OPERATION (DW-1 TO DW-4).
2. THE OWNER OR CONTRACTOR SHALL OBTAIN A CONSTRUCTION DISCHARGE (DEWATERING) PERMIT FROM THE STATE PRIOR TO ANY DEWATERING OPERATIONS DISCHARGING FROM THE SITE. ALL DEWATERING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMIT.
3. THE OWNER OR OPERATOR SHALL PROVIDE, OPERATE, AND MAINTAIN DEWATERING SYSTEMS OF SUFFICIENT SIZE AND CAPACITY TO PERMIT EXCAVATION AND SUBSEQUENT CONSTRUCTION IN DRY CONDITIONS AND TO LOWER AND MAINTAIN THE GROUNDWATER LEVEL A MINIMUM OF 2-FEET BELOW THE LOWEST POINT OF EXCAVATION AND CONTINUOUSLY MAINTAIN EXCAVATIONS FREE OF WATER UNTIL BACK-FILLED TO FINAL GRADE.

DEWATERING INSTALLATION NOTES

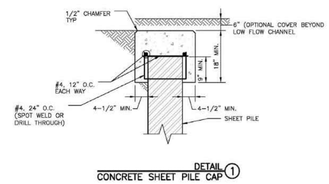
4. DEWATERING OPERATIONS SHALL USE ONE OR MORE OF THE DEWATERING SUMPS SHOWN ABOVE, WELL POINTS, OR OTHER MEANS APPROVED BY THE LOCAL JURISDICTION TO REDUCE THE PUMPING OF SEDIMENT, AND SHALL PROVIDE A TEMPORARY SEDIMENT BASIN OR FILTRATION BMP TO REDUCE SEDIMENT TO ALLOWABLE LEVELS PRIOR TO RELEASE OFF SITE OR TO A RECEIVING WATER. A SEDIMENT BASIN MAY BE USED IN LIEU OF SUMP DISCHARGE SETTLING BASIN SHOWN ABOVE. IF A 4-FOOT-SQUARE RIPRAP PAD IS PLACED AT THE DISCHARGE POINT AND THE DISCHARGE END OF THE LINE IS STAKED IN PLACE TO PREVENT MOVEMENT OF THE LINE.

DEWATERING MAINTENANCE NOTES

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 FAILURE.
4. DEWATERING BMPs ARE REQUIRED IN ADDITION TO ALL OTHER PERMIT REQUIREMENTS.
5. TEMPORARY SETTLING BASINS SHALL BE REMOVED WHEN NO LONGER NEEDED FOR DEWATERING OPERATIONS. ANY DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

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.

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



DETAIL (1)
CONCRETE SHEET PILE CAP

Figure 9-28. Check structure details (Part 3 of 3)

REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR:
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100 E. MISSISSIPPI AVE., STE 500
DENVER, CO 80246
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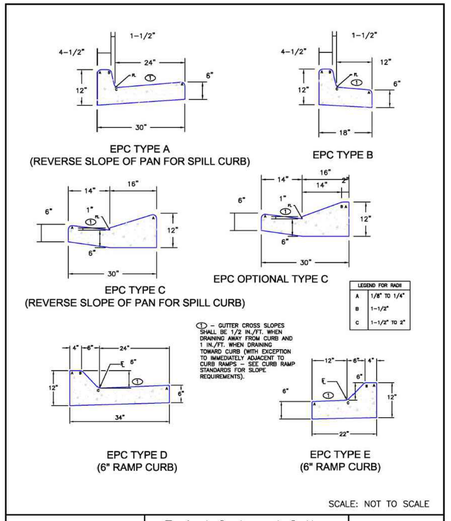
Terra Nova Engineering, Inc. Surveying
Creative Civil Engineering
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tneainc.com

WATERBURY FILING NO 1

GRADING AND EROSION CONTROL PLAN
EROSION CONTROL DETAILS

DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA
H-SCALE N/A
V-SCALE N/A
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 10 OF58

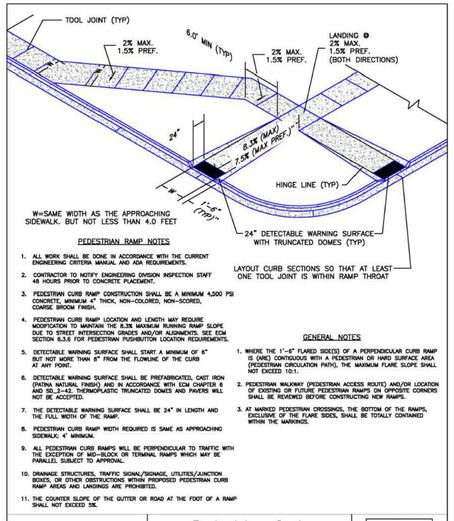
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DATE APPROVED:		
6/23/20	Typical Curb and Gutter Details Standard Drawing	
Jennifer E. Irvine DEPARTMENT OF PUBLIC WORKS	REVISION DATE: 6/23/20	FILE NAME: SD_2–20

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PEDESTRIAN RAMP NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT ENGINEERING CRITERIA MANUAL AND ADA REQUIREMENTS.
2. CONTRACTOR TO NOTIFY ENGINEERING DIVISION INSPECTION STAFF 48 HOURS PRIOR TO CONCRETE PLACEMENT.
3. PEDESTRIAN CURB RAMP CONSTRUCTION SHALL BE A MINIMUM 4,500 PSI CONCRETE, MINIMUM 4" THICK, NON–COLORED, NON–SCORED, COARSE BROOM FINISH.
4. IF PEDESTRIAN CURB RAMP LOCATION AND LENGTH MAY REQUIRE MODIFICATION TO MAINTAIN THE 8.3% MAXIMUM RUNNING RAMP SLOPE DUE TO STREET INTERSECTION GRADES AND/OR ALIGNMENTS, SEE ECM SECTION 8.3.6 FOR PEDESTRIAN FOUNDATION LOCATION REQUIREMENTS.
5. DETECTABLE WARNING SURFACE SHALL START A MINIMUM OF 6" BUT NOT MORE THAN 8" FROM THE FLOWLINE OF THE CURB AT ANY POINT.
6. DETECTABLE WARNING SURFACE SHALL BE PREFABRICATED, CAST IRON (PATINA NATURAL FINISH) AND IN ACCORDANCE WITH ECM CHAPTER 6 AND SD_2–42. THERMOPLASTIC TRUNCATED DOMES AND PAVERS WILL NOT BE ACCEPTED.
7. THE DETECTABLE WARNING SURFACE SHALL BE 24" IN LENGTH AND THE FULL WIDTH OF THE RAMP.
8. PEDESTRIAN CURB RAMP WIDTH REQUIRED IS SAME AS APPROACHING SIDEWALK; 4' MINIMUM.
9. ALL PEDESTRIAN CURB RAMPS WILL BE PERPENDICULAR TO TRAFFIC WITH THE EXCEPTION OF MID–BLOCK OR TERMINAL RAMPS WHICH MAY BE PARALLEL SUBJECT TO APPROVAL.
10. DRAINAGE STRUCTURES, TRAFFIC SIGNAL/SIGNAGE, UTILITIES/JUNCTION BOXES, OR OTHER OBSTRUCTIONS WITHIN PROPOSED PEDESTRIAN CURB RAMP AREAS AND LANDINGS ARE PROHIBITED.
11. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A RAMP SHALL NOT EXCEED 5%.

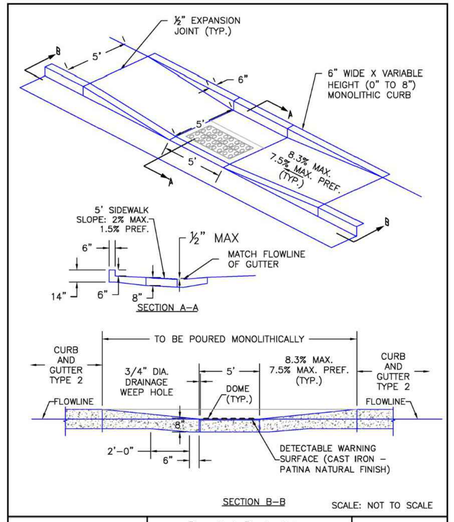
GENERAL NOTES

1. WHERE THE 1'–6" FLARED SIDE(S) OF A PERPENDICULAR CURB RAMP IS (ARE) CONTIGUOUS WITH A PEDESTRIAN OR HARD SURFACE AREA (PEDESTRIAN CIRCULATION PATH), THE MAXIMUM FLARE SLOPE SHALL NOT EXCEED 10:1.
2. PEDESTRIAN WALKWAY (PEDESTRIAN ACCESS ROUTE) AND/OR LOCATION OF EXISTING OR FUTURE PEDESTRIAN RAMPS ON OPPOSITE CORNERS SHALL BE REVIEWED BEFORE CONSTRUCTING NEW RAMPS.
3. AT MARKED PEDESTRIAN CROSSINGS, THE BOTTOM OF THE RAMPS, EXCLUDING OF THE FLARE SIDES, SHALL BE TOTALLY CONTAINED WITHIN THE MARKINGS.

DATE APPROVED:		
6/23/20	Pedestrian Curb Ramp Detail Standard Drawing	
Jennifer E. Irvine DEPARTMENT OF PUBLIC WORKS	REVISION DATE: 6/23/20	FILE NAME: SD_2–41

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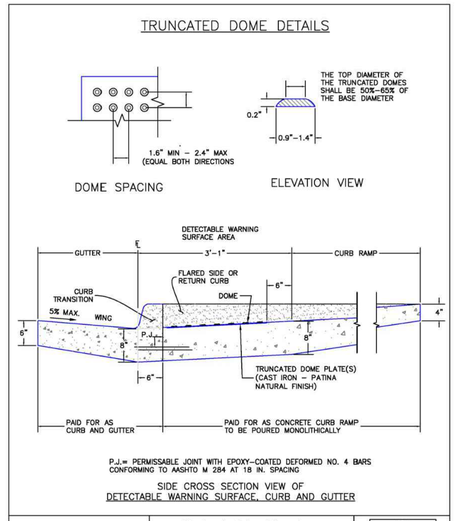
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DATE APPROVED:		
6/23/20	Parallel Pedestrian Curb Ramp Detail Standard Drawing	
Jennifer E. Irvine DEPARTMENT OF PUBLIC WORKS	REVISION DATE: 6/23/20	FILE NAME: SD_2–50

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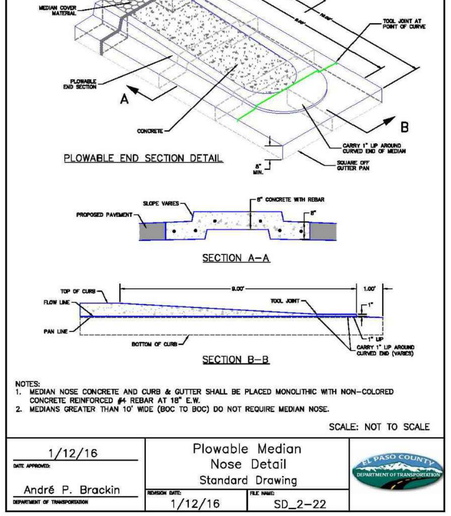
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DATE APPROVED:		
6/23/20	Detectable Warning Surface Details Standard Drawing	
Jennifer E. Irvine DEPARTMENT OF PUBLIC WORKS	REVISION DATE: 6/23/20	FILE NAME: SD_2–42

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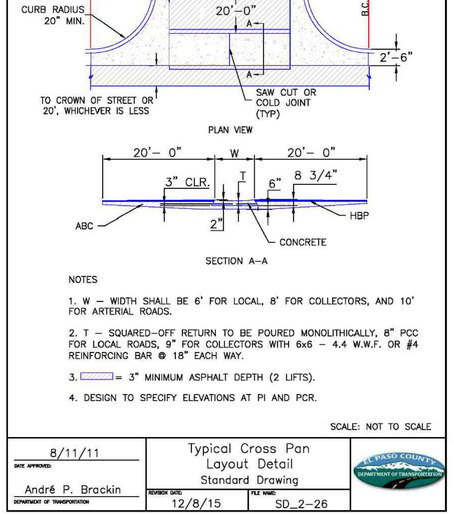
NOTES:
1. MEDIAN NOSE CONCRETE AND CURB & GUTTER SHALL BE PLACED MONOLITHIC WITH NON–COLORED CONCRETE REINFORCED #4 REBAR AT 18" E.W.
2. MEDIANS GREATER THAN 10' WIDE (BOC TO BOC) DO NOT REQUIRE MEDIAN NOSE.

SCALE: NOT TO SCALE

DATE APPROVED:		
1/12/16	Plowable Median Nose Detail Standard Drawing	
André P. Brackin DEPARTMENT OF TRANSPORTATION	REVISION DATE: 1/12/16	FILE NAME: SD_2–22

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NOTES

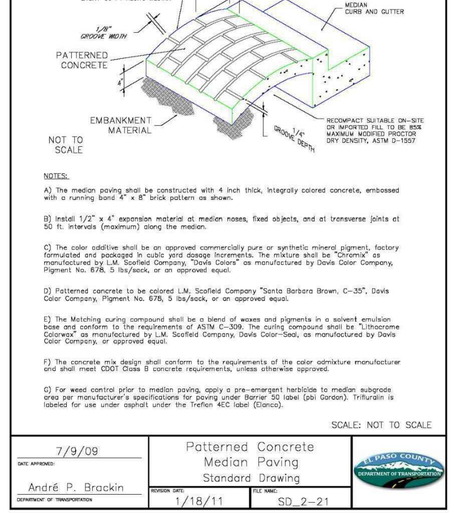
1. W – WIDTH SHALL BE 6' FOR LOCAL, 8' FOR COLLECTORS, AND 10' FOR ARTERIAL ROADS.
2. T – SQUARED–OFF RETURN TO BE POURED MONOLITHICALLY, 8" PCC FOR LOCAL ROADS, 9" FOR COLLECTORS WITH 6x6 – 4.4 W.W.F. OR #4 REINFORCING BAR @ 18" EACH WAY.
3. = 3" MINIMUM ASPHALT DEPTH (2 LIFTS).
4. DESIGN TO SPECIFY ELEVATIONS AT PI AND PCR.

SCALE: NOT TO SCALE

DATE APPROVED:		
8/11/11	Typical Cross Pan Layout Detail Standard Drawing	
André P. Brackin DEPARTMENT OF TRANSPORTATION	REVISION DATE: 12/8/15	FILE NAME: SD_2–26

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NOTES:

A) The median paving shall be constructed with 4 inch thick, integrally colored concrete, embossed with a running bond 4" x 8" brick pattern as shown.

B) Install 1/2" x 4" expansion material at median noses, fixed objects, and at transverse joints at 50 ft. intervals (maximum) along the median.

C) The color additive shall be an approved commercially pure or synthetic mineral pigment, factory formulated and packaged in cubic yard dosage increments. The mixture shall be "Chromix" as manufactured by L.M. Scofield Company, "Davis Colors" as manufactured by Davis Color Company, Pigment No. 678, 5 lbs/sack, or an approved equal.

D) Patterned concrete to be colored L.M. Scofield Company "Santa Barbara Brown, C–35", Davis Color Company, Pigment No. 678, 5 lbs/sack, or an approved equal.

E) The Matching curing compound shall be a blend of waxes and pigments in a solvent emulsion base and conform to the requirements of ASTM C–309. The curing compound shall be "Lithacrome Colorwax" as manufactured by L.M. Scofield Company, Davis Color–Seal, as manufactured by Davis Color Company, or approved equal.

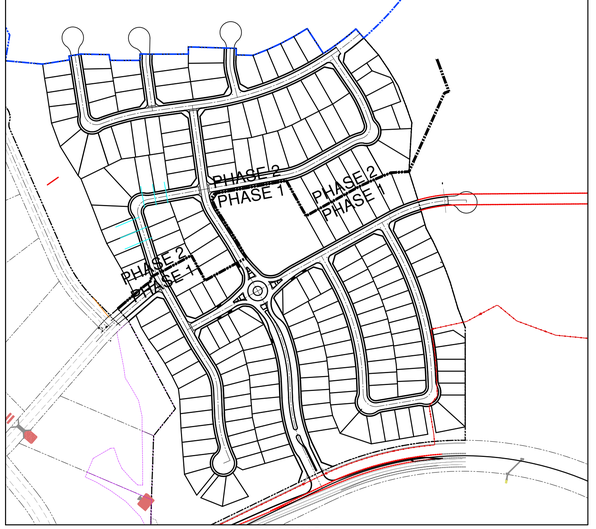
F) The concrete mix design shall conform to the requirements of the color admixture manufacturer and shall meet CDOT Class B concrete requirements, unless otherwise approved.

G) For weed control prior to median paving, apply a pre–emergent herbicide to median subgrade area per manufacturer's specifications for paving under Barrier 50 label (pbi Gordon). Trifluralin is labeled for use under asphalt under the Trefilan 4EC label (Clarica).

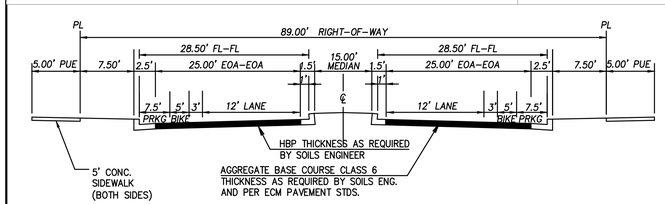
SCALE: NOT TO SCALE

DATE APPROVED:		
7/9/09	Patterned Concrete Median Paving Standard Drawing	
André P. Brackin DEPARTMENT OF TRANSPORTATION	REVISION DATE: 1/18/11	FILE NAME: SD_2–21

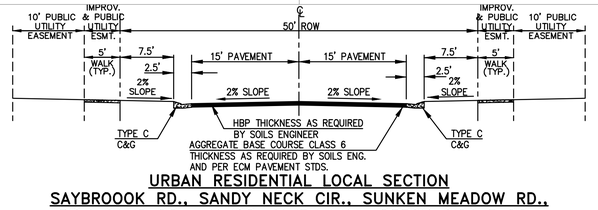
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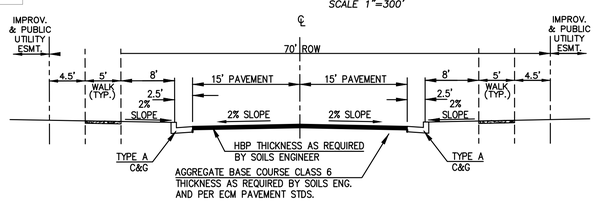
PHASING
SCALE 1"=300'



MODIFIED COLLECTOR SECTION
SAYBROOK ROAD
DESIGN SPEED 40 MPH
POSTED SPEED 30 MPH
NO SCALE



URBAN RESIDENTIAL LOCAL SECTION
SAYBROOOK RD., SANDY NECK CIR., SUNKEN MEADOW RD., FISH CAMP DR., MANOR HAVEN WAY, BEECH CIRCLE DR., MUDDY POND ST., MASONBORO WAY, MEGANSETT WAY
DESIGN SPEED 25 MPH
POSTED SPEED 25 MPH
NO SCALE



MODIFIED URBAN RESIDENTIAL LOCAL SECTION
GILBER RD.
DESIGN SPEED 25 MPH
POSTED SPEED 25 MPH
NO SCALE

REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

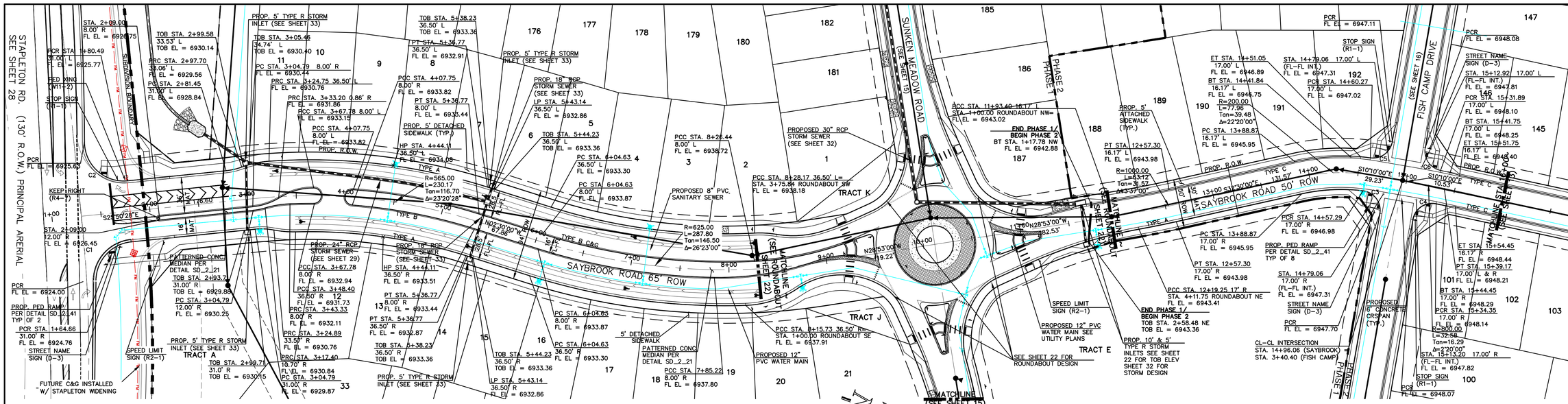
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
ATTN: JASON POCK
8350 E CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303–984–9800

Terra Nova Engineering, Inc.
Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719–635–6422
FAX: 719–635–6426
www.tnesinc.com

WATERBURY FILING NO. 1

CONSTRUCTION SET
STREET DETAILS

DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA
H–SCALE N/A
V–SCALE N/A
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 11 OF 58



CURB RETURN CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	58.27'	40.00'	83°28'17"
C2	66.73'	40.00'	95°35'02"
C3	32.37'	20.00'	92°43'54"
C4	32.11'	20.00'	91°59'17"
C5	30.76'	20.00'	88°07'18"
C6	30.78'	20.00'	88°11'16"

SAYBROOK ROAD PHASE 1

STA. 1+00.00 – 8+28.17– RES. COLLECTOR
(DESIGN SPEED 35 MPH)

POSTED SPEED LIMIT IS 30 M.P.H.

SEE APPROVED DEVIATION REQUESTS FOR LEFT AND RIGHT TURN LANES, MEDIAN WITHIN SAYBROOK ROAD AND POSTED SPEED LIMIT REDUCTION.

SAYBROOK ROAD PHASE 2

STA. 11+94.17 – 16+00.00 – LOCAL
(DESIGN SPEED 25 MPH)

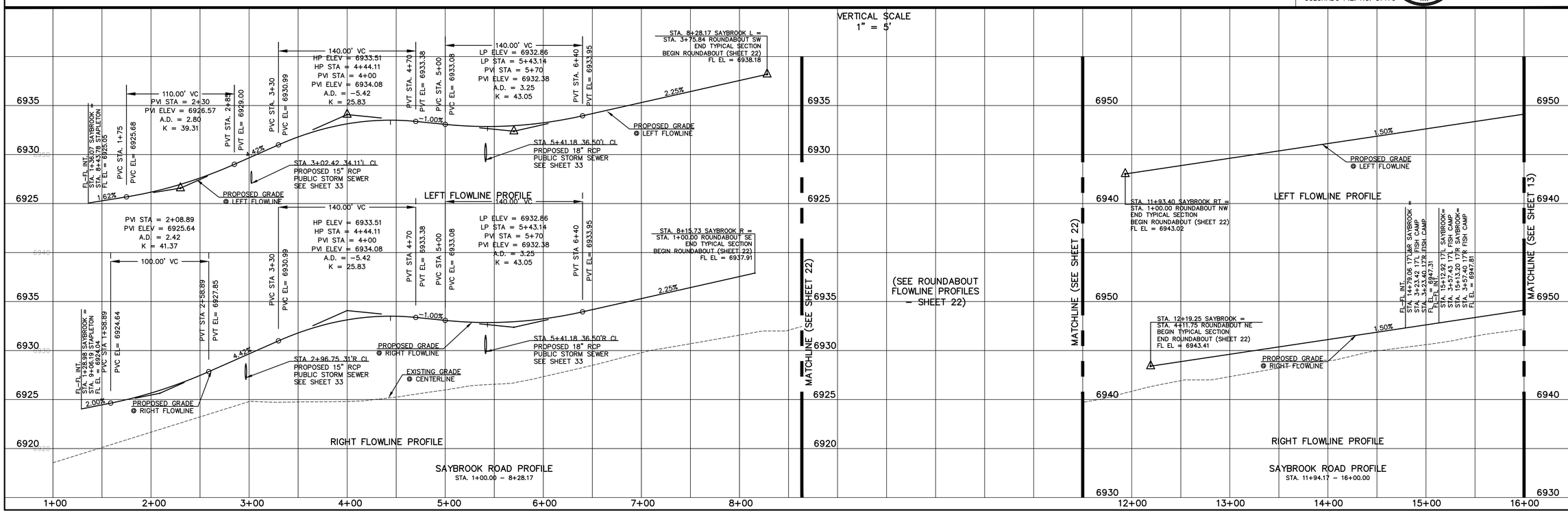
POSTED SPEED LIMIT IS 25 M.P.H.

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170

COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

VERTICAL SCALE
1" = 5'



Terra Nova Engineering, Inc. Surveying
Civil Engineering
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tneinc.com

REVISIONS		
NO.	DESCRIPTION	DATE

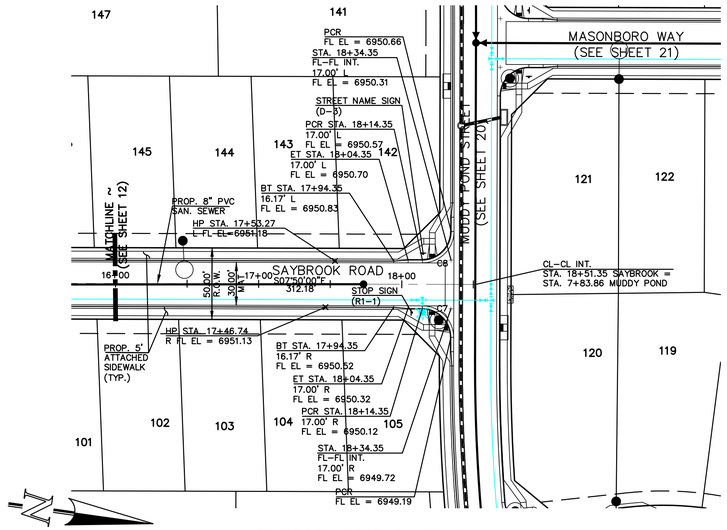
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING AND SURVEYING, INC. APPROVES THEIR USE ONLY FOR PERMITTED PURPOSES AND AUTHORIZATION.

PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E. CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303-984-9800

WATERBURY FILING NO. 1

CONSTRUCTION SET
STREET PLAN AND PROFILE
SAYBROOK ROAD

DESIGNED BY	QNA
DRAWN BY	QNA
CHECKED BY	JS
H-SCALE	1"=50'
V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	12 OF58

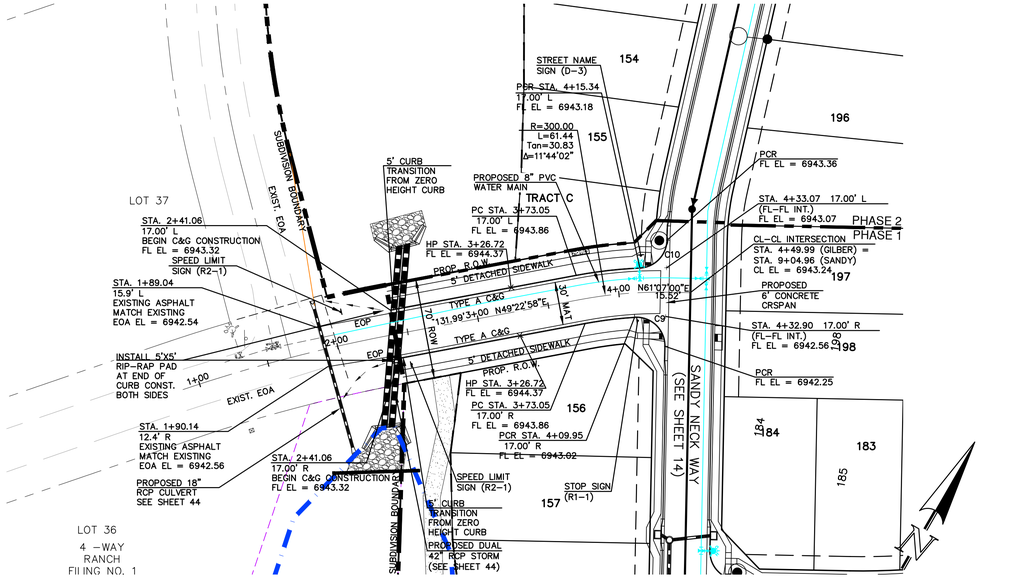


SAYBROOK ROAD PHASE 2
STA. 16+00.00 – 18+34.35 – URBAN LOCAL
(DEIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

50′ 25′ 0 50′ 100′

SCALE: 1″ = 50′

CURB RETURN CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C7	31.42'	20.00'	90°00'00"
C8	31.42'	20.00'	90°00'00"
C9	33.05'	20.00'	94°41'12"
C10	30.14'	20.00'	86°20'39"



GILBERT DRIVE (70' ROW) PHASE 1
STA. 1+90.24 – 4+33.08 – URBAN LOCAL
(DESIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

50′ 25′ 0 50′ 100′

POSTED SPEED LIMIT
IS 25 M.P.H.

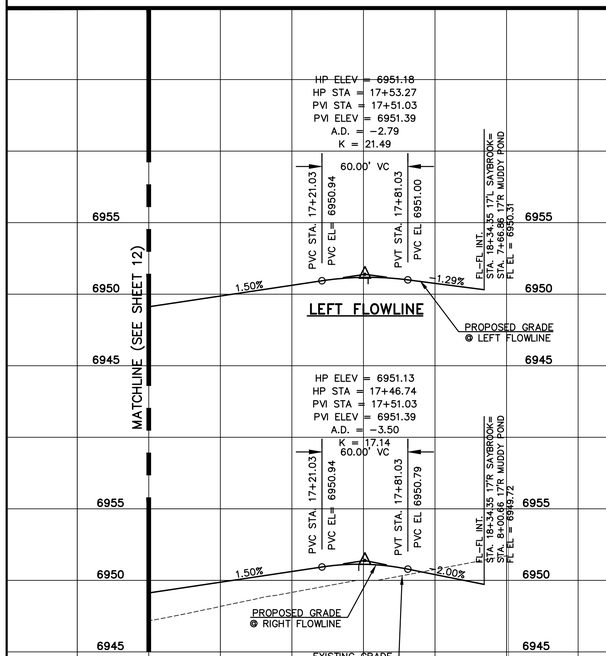
SCALE: 1″ = 50′

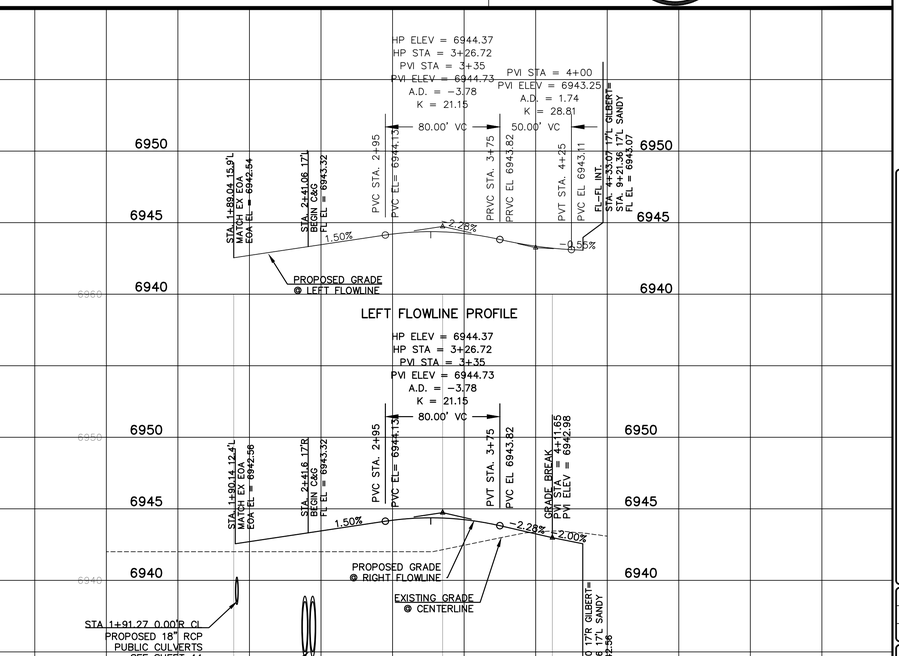
THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170

COLORADO LICENSED
QUENTIN N ARMIJO
37170
04/17/26
PROFESSIONAL ENGINEER

VERTICAL SCALE
1″ = 5′





REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING AND SURVEYING, INC. APPROVES THEIR USE ONLY FOR CONSTRUCTION BY WRITTEN AUTHORIZATION.

PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc. Surveying
Traffic Civil Engineering
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tneainc.com

WATERBURY FILING NO. 1

CONSTRUCTION SET
STREET PLAN AND PROFILE
SAYBROOK ROAD CONT'D & GILBERT DRIVE

DESIGNED BY	QNA
DRAWN BY	QNA
CHECKED BY	JS
H-SCALE	1"=50'
V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	13 OF58

LOT 36
4–WAY RANCH FILING NO. 1

SUBDIVISION BOUNDARY

THATCHER COURT

TRACT B

TRACT D

PROPOSED 36" RCP STORM SEWER (SEE SHEET 31)

PROP. 10' TYPE R STORM INLET (SEE SHEET 31)

LP STA. 3+07.07 (CDS) FL EL = 6932.44

TOB STA. 2+98.82 CDS TOB EL = 6932.94

BT STA. 3+01.81 CDS FL EL = 6932.45

ET STA. 3+06.81 CDS FL EL = 6932.48

PRC STA. 3+81.76 (CDS) FL EL = 6933.87

TOB STA. 2+87.93 CDS TOB EL = 6932.94

ET STA. 2+84.98 CDS FL EL = 6932.46

BT STA. 2+79.97 CDS FL EL = 6932.46

S66°40'00"W 30.00

R45.0

45'

55'

TYPE C C&G

STA. 1+79.27 16.17'L SANDY= STA. 4+32.56 CUL–DE–SAC END CUL–DE–SAC BEGIN TYP. SECTION FL EL = 6935.02

PROPOSED 8" PVC SANITARY SEWER

STORM SEWER PROPOSED 36" RCP (SEE SHEET 31)

PT STA. 3+03.03 16.17' R & L FL EL = 6936.87

PT STA. 1+81.23 CL 2+00

1+00

2+00

3+00

4+00

5+00

6+00

7+00

8+00

9+00

10+00

11+00

12+00

S23°20'06"E 21.23

PT STA. 1+56.16 CDS FL EL = 6934.18

PC STA. 1+77.39 CDS FL EL = 6933.86

R=500.00 L=181.81 Tan=91.92 Δ=20°50'00"

STA. 1+79.27 16.17'L SANDY= STA. 1+00.00 CUL–DE–SAC END TYP. SECTION BEGIN CUL–DE–SAC FL EL = 6935.02

PROPOSED 8" PVC WATER MAIN

PROP. R.O.W.

S32°30'00"E 98.1592'

N32°20'00"W 86.48'

PT STA. 5+03.33 16.17' R & L FL EL = 6939.88

PROP. 5' DETACHED SIDEWALK (TYP.)

PC STA. 5+89.81 16.17' R & L FL EL = 6941.17

CL–CL INTERSECTION STA. 6+87.74 (SANDY) = STA. 1+00.00 (BAYSHORE)

R=1000.00 L=66.21 Tan=33.12 Δ=3°47'00"

PT STA. 6+50.02 16.17' R & L FL EL = 6941.51

PC STA. 3+99.19 16.17' R & L FL EL = 6938.32

PROP. 5' DETACHED SIDEWALK (TYP.)

R=200.00 L=104.14 Tan=53.28 Δ=29°50'00"

PCR STA. 6+30.40 16.17' R FL EL = 6941.58

PCR STA. 6+40.57 17.00' R FL EL = 6941.57

PCR STA. 6+50.74 17.00' R FL EL = 6941.50

STA. 6+70.74 (FL–FL INT.) 17' R FL EL = 6941.24

STREET NAME SIGN (D–3)

PCR FL EL = 6941.39

PROPOSED 6" CONCRETE CROSSPAN

PCR FL EL = 6941.15

SUNKEN MEADOW (SEE SHEET 16)

PCR FL EL = 6943.02

TOB STA. 7+29.41 TOB EL = 6941.07

ET STA. 7+29.41 17.00' L FL EL = 6940.58

BT STA. 7+24.41 16.17' L FL EL = 6940.59

LP STA. 7+35.34 17.00' L TOB EL=6940.57

TOB STA. 7+38.41 TOB EL = 6941.07

BT STA. 7+41.41 17.00' L FL EL = 6940.58

ET STA. 7+46.41 16.17' L FL EL = 6940.59

ET STA. 8+57.08 17.00' L FL EL = 6942.10

BT STA. 8+47.08 16.17' L FL EL = 6941.95

STOP SIGN (R1–1)

STA. 8+87.96 (FL–FL INT.) 17'L FL EL = 6942.56

PCR STA. 8+67.08 16.17' L FL EL = 6942.25

PROPOSED 6" CONCRETE CROSSPAN

CL–CL INTERSECTION STA. 4+50.00 (GILBERT) STA. 9+04.96 (SANDY.) CL EL = 6943.24

PROP. 5' TYPE R STORM INLETS (SEE SHEET 32)

LP STA. 7+35.34 17.00' R FL EL = 6940.57

TOB STA. 7+32.41 TOB EL = 6941.07

PCR STA. 7+24.74 17.00' R FL EL = 6940.59

STA. 7+04.74 (FL–FL INT.) 17'R FL EL = 6940.74

STOP SIGN (R1–1)

GILBERT DRIVE (SEE SHEET 13)

PHASE 2 PHASE 1

PCR FL EL = 6943.18

STA. 9+21.96 (FL–FL INT.) 17.00' L FL EL = 6943.07

STREET NAME SIGN (D–3)

TRACT C

PCR STA. 9+41.27 17.00' L FL EL = 6943.36

BT STA. 9+50.61 17.00' L FL EL = 6943.50

END PHASE 1/ BEGIN PHASE 2

PC STA. 9+59.89 16.17' L FL EL = 6943.64

STA. 9+50.61 17.00' R FL EL = 6943.50

END PHASE 1/ BEGIN PHASE 2

PC STA. 9+42.79 16.17' R & L FL EL = 6943.38

PROP. 5' DETACHED SIDEWALK (TYP.)

WATER MAIN PROPOSED 8" PVC

R=200.00 L=40.80 Tan=20.47 Δ=11°41'21"

PT STA. 9+83.59 16.17' R & L FL EL = 6943.99

SANITARY SEWER PROPOSED 8" PVC

PCR STA. 11+99.80 16.17'L= STA. 1+00.00 KNUCKLE FL EL = 6947.24

PROP. R.O.W.

TYPE C C&G

S17°17'39"E 229.00'

R=52.00 L=88.06 Tan=58.80 Δ=97°01'39"

PCR STA. 12+12.59 FL EL = 6947.44

PC STA. 12+12.59

13+00.85

C44

50' 25' 0 50' 100'

SCALE: 1" = 50'

CURB RETURN CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C9	33.05'	20.00'	94°41'12"
C10	30.14'	20.00'	86°20'39"
C11	60.68'	35.83'	97°01'39"
C12	121.10'	51.17'	135°36'09"
C13	31.42'	20.00'	90°00'00"
C14	31.42'	20.00'	90°00'00"
C43	23.17'	68.83'	19°17'15"
C44	23.17'	68.83'	19°17'15"

SANDY NECK WAY PHASE 1 & 2

STA. 1+00.00 – 11+00.00 – URBAN LOCAL
(DESIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

POSTED SPEED LIMIT IS 25 M.P.H.

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

COLORADO LICENSED QUENTIN N ARMIJO 37170 PROFESSIONAL ENGINEER 4/17/26

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170

VERTICAL SCALE
1" = 5'

FLOWLINE PROFILE

SANDY NECK CIRCLE
CUL–DE–SAC
STA. 1+00.00 – 4+33.13

LP ELEV = 6932.44
LP STA = 2+92.05
PVI STA = 3+07.07
PVI ELEV = 6931.91
A.D. = 4.13
K = 26.62
110.00' VC

STA. 4+32.56 CUL–DE–SAC = STA. 1+79.27 16.17'L SANDY NECK END CUL–DE–SAC BEGIN TYPICAL SECTION FL EL = 6935.02

GRADE BREAK PVI STA. = 3+82.53 PVI ELEV = 6933.89 PVT STA. 3+62.07

PVC EL 6933.36

PVC STA. 2+52.07 PVC EL= 6932.74

STA. 1+00.00 CUL–DE–SAC = STA. 1+79.27 16.17'R SANDY NECK BEGIN CUL–DE–SAC END TYPICAL SECTION FL EL = 6935.02

2.25%

2.63%

–1.50%

PROPOSED GRADE @ FLOWLINE

EXISTING GRADE @ CENTERLINE

STA. 1+79.27 16.17'L&R SANDY NECK= STA. 1+00.00 CUL–DE–SAC= STA. 4+33.13 CUL–DE–SAC BEGIN TYPICAL SECTION FL EL = 6935.02

LEFT & RIGHT FLOWLINE PROFILE

SANDY NECK CIRCLE
STA: 1+00.00 – 11+00.00

HP ELEV = 6941.59
HP STA = 6+32.43
PVI STA = 6+32.39
PVI ELEV = 6941.81
A.D. = –2.99
K = 20.04
60.00' VC

LP ELEV = 6940.57
LP STA = 7+35.34
PVI STA = 7+35.41
PVI ELEV = 6940.27
A.D. = 2.99
K = 26.71
80.00' VC

PVC STA. 6+02.39 PVC EL= 6941.36

PVT STA. 6+62.39 PVC EL 6941.36

PVC STA. 6+95.41 PVC EL= 6940.87

PVT STA. 7+75.41 PVC EL 6940.87

1.50%

–1.49%

EXISTING GRADE @ CENTERLINE

PROPOSED GRADE @ LEFT & RIGHT FLOWLINE

FL–FL INT. STA. 6+70.74 17R SANDY= STA. 0+17.00 17L SUNKEN FL EL = 6941.24

FL–FL INT. STA. 7+04.74 17R SANDY= STA. 0+17.00 17L SUNKEN FL EL = 6940.75

STA 7+35.41 0.00'R CL PROPOSED 18" RCP PUBLIC STORM SEE SHEET 32

STA 6+76.49 0.00'R CL PROPOSED 30" RCP PUBLIC STORM SEE SHEET 32

FL–FL INT. STA. 8+87.96 17'L SANDY= STA. 4+32.86 17'R GILBERT FL EL = 6942.56

FL–FL INT. STA. 9+21.96 17'L SANDY= STA. 4+54.96 17'L GILBERT FL EL = 6943.07

GRADE BREAK STA 11+99.80 16.17'L SANDY CL= STA. 1+00.00 SANDY KNK FL EL=6947.424

6950 6940 6930 6920

4+00 3+00 2+00 1+00 1+50 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00 11+00 12+00

NO.	REVISIONS DESCRIPTION	DATE

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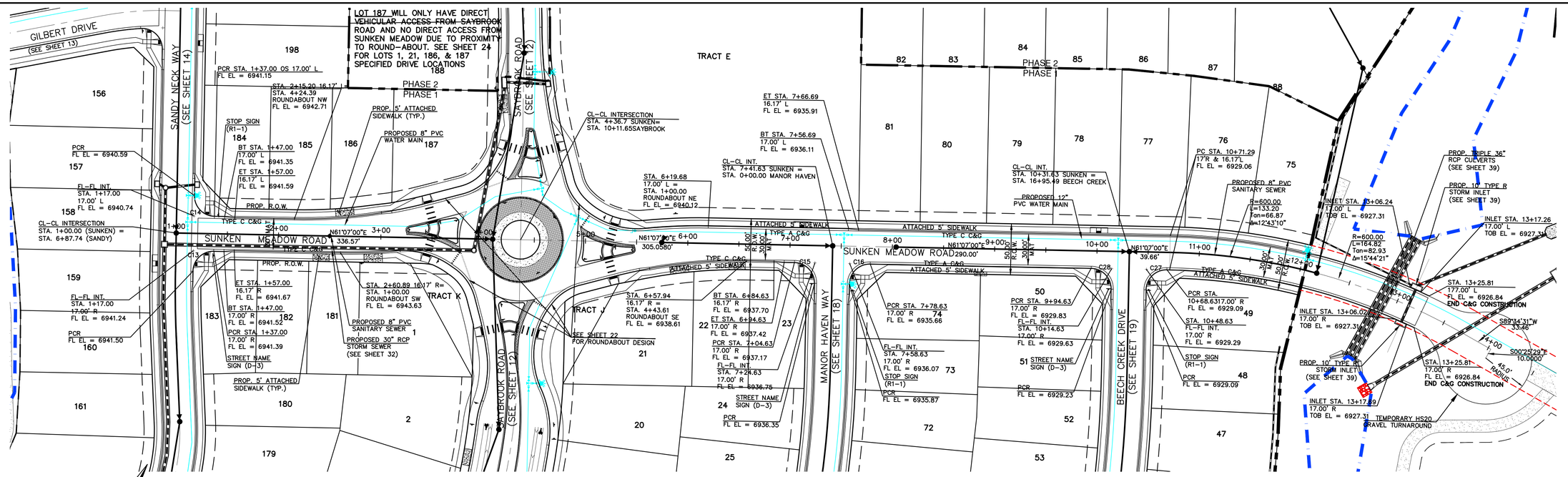
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E. CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc. Surveying
"Creative Civil Engineering Solutions"
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnesinc.com

WATERBURY FILING NO. 1

CONSTRUCTION SET
STREET PLAN AND PROFILE
SANDY NECK WAY

DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY JS
H–SCALE 1"=50'
V–SCALE 1"=5'
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 14 OF 58



CURB RETURN CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C13	31.42'	20.00'	90°00'00"
C14	31.42'	20.00'	90°00'00"
C15	31.42'	20.00'	90°00'00"
C16	32.51'	20.00'	93°07'57"
C27	31.42'	20.00'	90°00'00"
C28	31.42'	20.00'	90°00'00"

50' 25' 0 50' 100'

SCALE: 1" = 50'

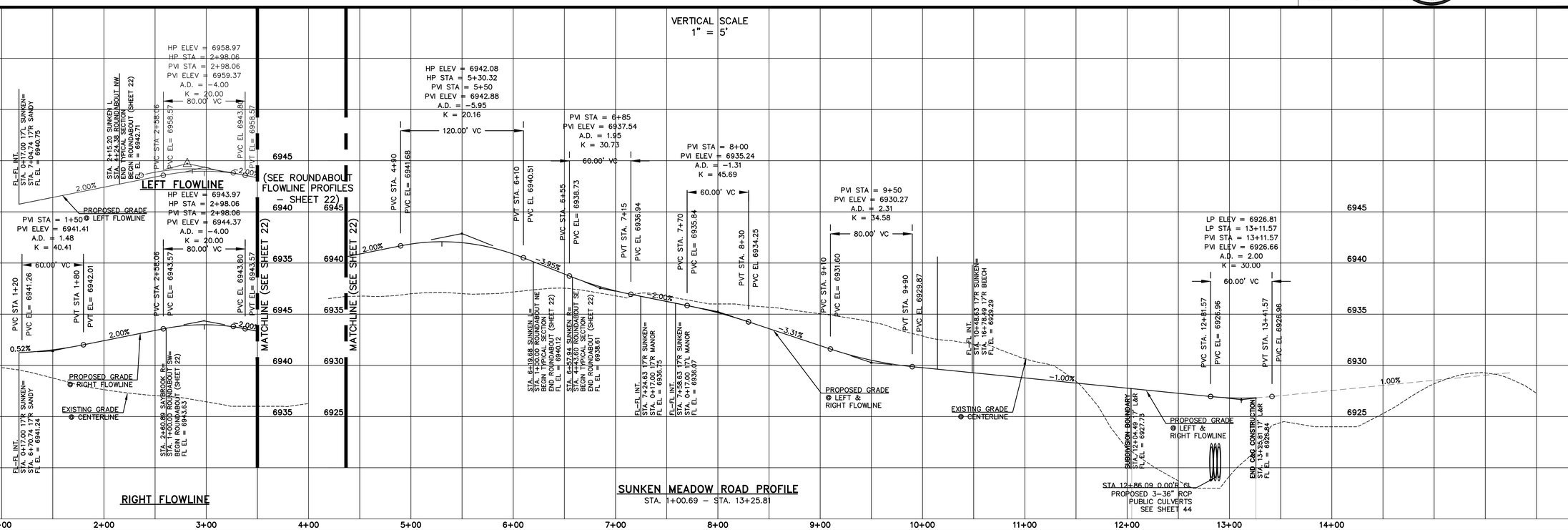
SUNKEN MEADOW ROAD

STA. 1+00.00 – STA. 13+25.81 – URBAN LOCAL
(DESIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

COLORADO LICENSED QUENTIN N ARMIJO 37170 PROFESSIONAL ENGINEER 04/17/26

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170



REVISIONS		
NO.	DESCRIPTION	DATE

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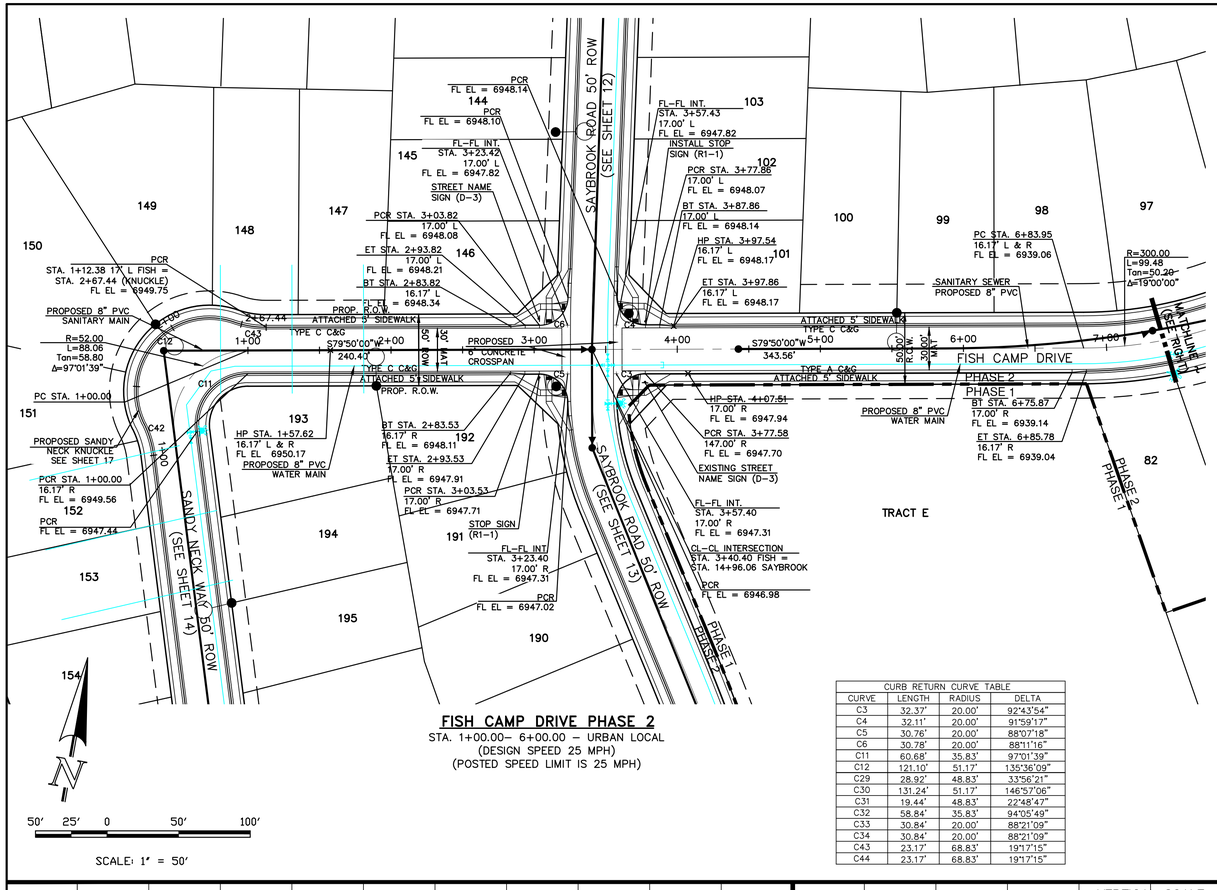
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc.
Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnsinc.com

WATERBURY FILING NO. 1

CONSTRUCTION SET
STREET PLAN AND PROFILE
SUNKEN MEADOW ROAD

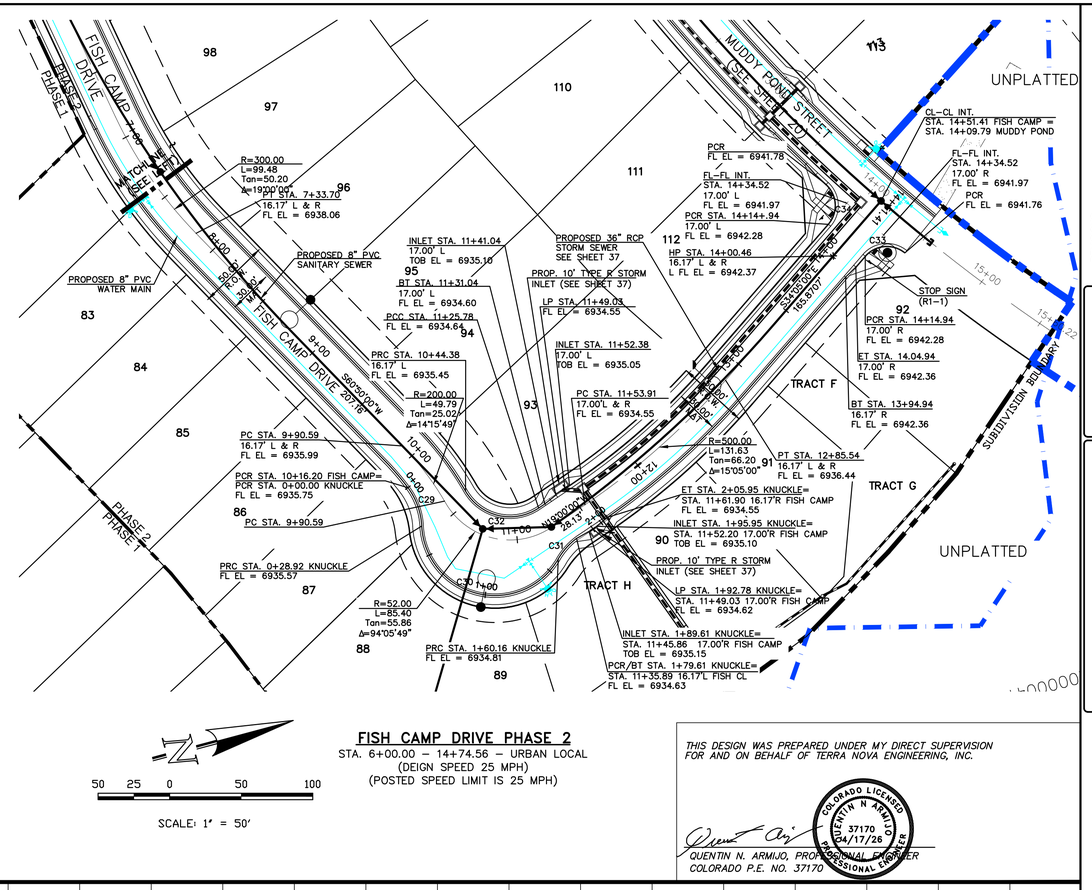
DESIGNED BY	QNA
DRAWN BY	QNA
CHECKED BY	JS
H-SCALE	1"=50'
V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	15 OF58



FISH CAMP DRIVE PHASE 2

STA. 1+00.00– 6+00.00 – URBAN LOCAL
(DESIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

CURB RETURN CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C3	32.37'	20.00'	92°43'54"
C4	32.11'	20.00'	91°59'17"
C5	30.76'	20.00'	88°07'18"
C6	30.78'	20.00'	88°11'16"
C11	60.68'	35.83'	97°01'39"
C12	121.10'	51.17'	135°36'09"
C29	28.92'	48.83'	33°56'21"
C30	131.24'	51.17'	146°57'06"
C31	19.44'	48.83'	22°48'47"
C32	58.84'	35.83'	94°05'49"
C33	30.84'	20.00'	88°21'09"
C34	30.84'	20.00'	88°21'09"
C43	23.17'	68.83'	19°17'15"
C44	23.17'	68.83'	19°17'15"



FISH CAMP DRIVE PHASE 2

STA. 6+00.00 – 14+74.56 – URBAN LOCAL
(DEIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170

COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

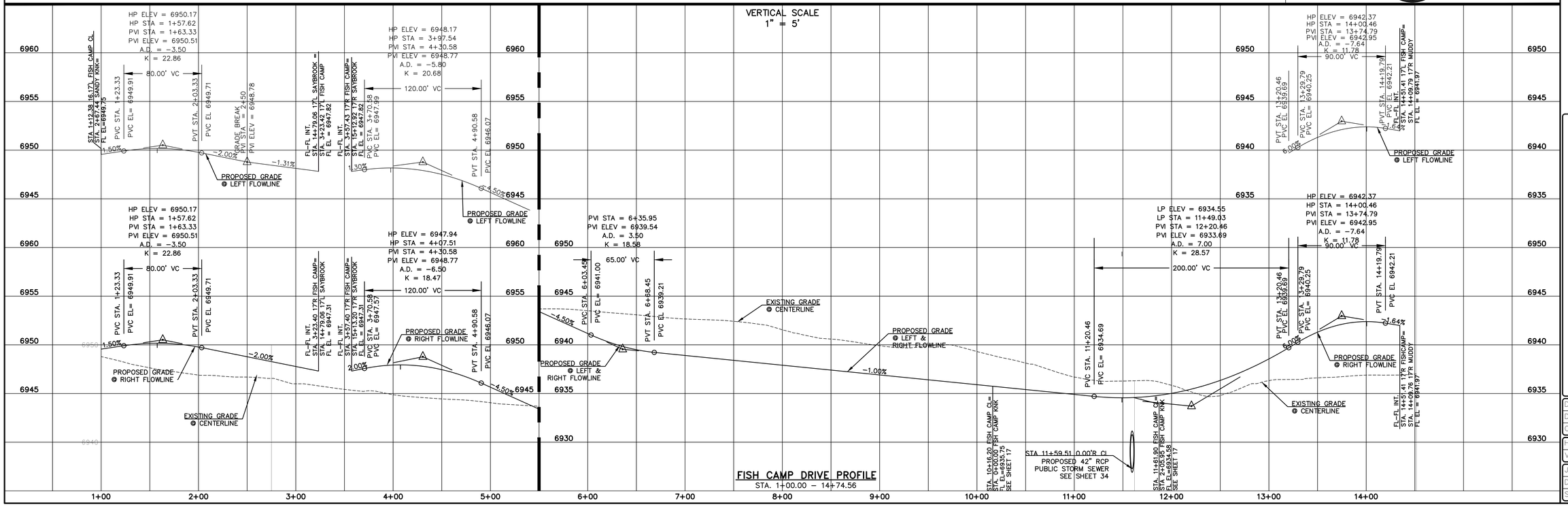
REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING AND SURVEYING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES INDICATED IN WRITTEN AUTHORIZATION.

PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc. Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tneinc.com



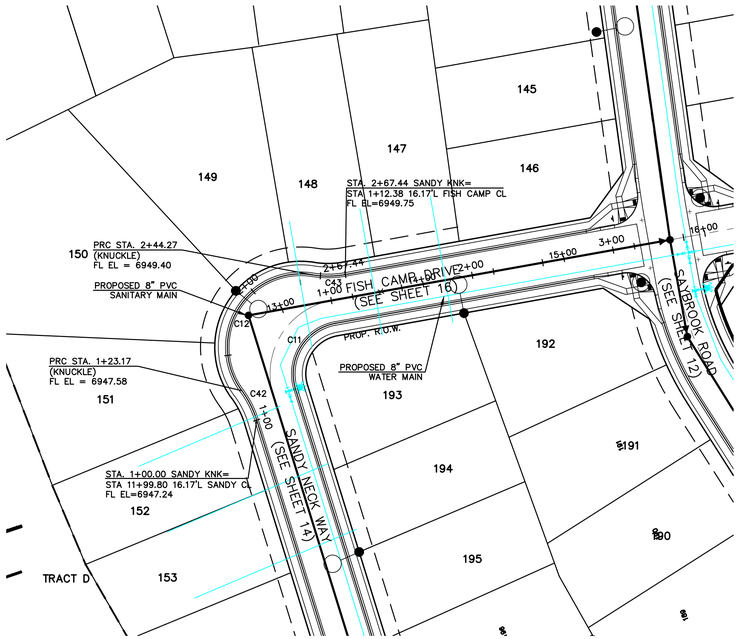
FISH CAMP DRIVE PROFILE

STA. 1+00.00 – 14+74.56

WATERBURY FILING NO. 1

CONSTRUCTION SET
STREET PLAN AND PROFILE
FISH CAMP DRIVE

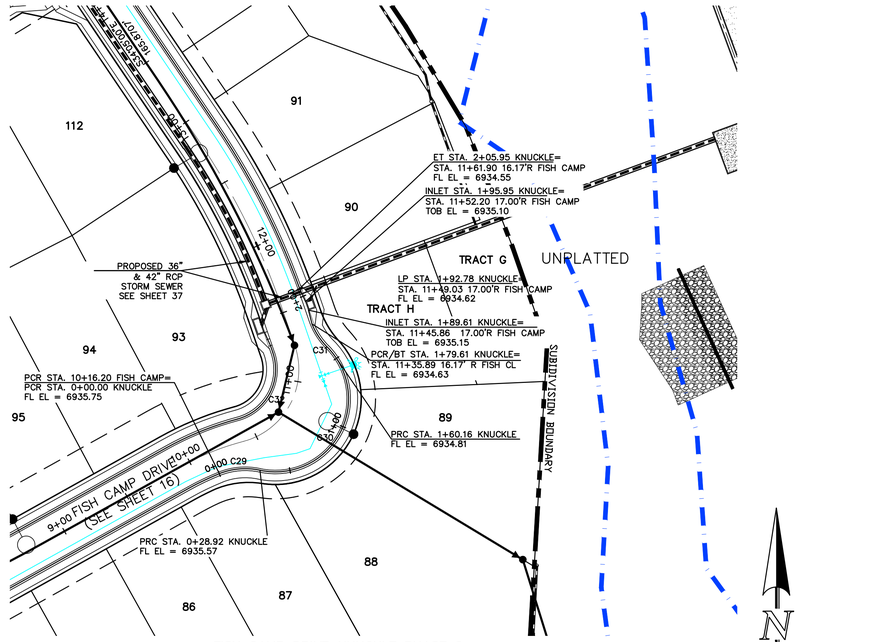
DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY JS
H-SCALE 1"=50'
V-SCALE 1"=5'
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 16 OF 58



SANDY NECK WAY/FISH CAMP DRIVE
KNUCKLE PHASE 2
STA. 1+00.00 – 2+67.44 URBAN LOCAL
(DESIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 M.P.H.

POSTED SPEED LIMIT
IS 25 M.P.H.

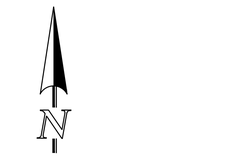
CURB RETURN CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C11	60.68'	35.83'	97°01'39"
C12	121.10'	51.17'	135°36'09"
C29	28.92'	48.83'	33°56'21"
C30	131.24'	51.17'	146°57'06"
C31	19.44'	48.83'	22°48'47"
C32	58.84'	35.83'	94°05'49"
C43	23.17'	68.83'	19°17'15"
C44	23.17'	68.83'	19°17'15"



FISH CAMP DRIVE KNUCKLE PHASE 2
STA. 1+00.00 – 2+05.95 URBAN LOCAL
(DESIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 M.P.H.)

POSTED SPEED LIMIT
IS 25 M.P.H.

50′ 25′ 0 50′ 100′
SCALE: 1″ = 50′



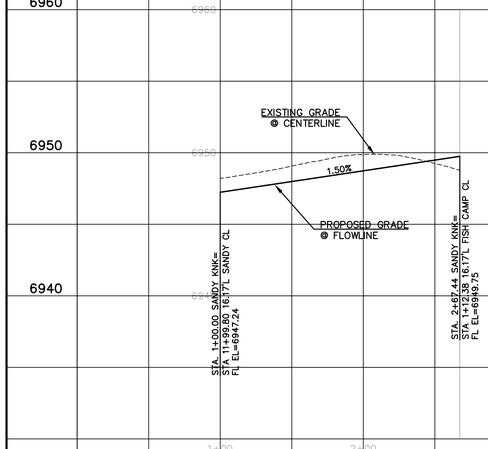
50′ 25′ 0 50′ 100′
SCALE: 1″ = 50′

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

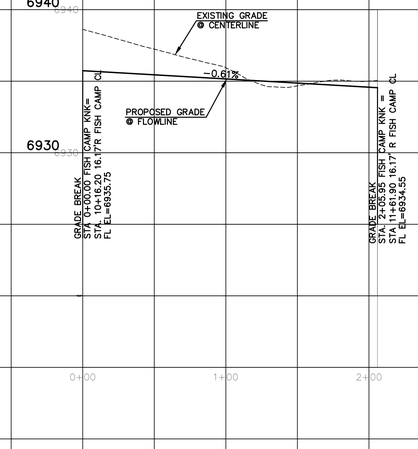
COLORADO LICENSED
QUENTIN N ARMIJO
37170
04/17/26
PROFESSIONAL ENGINEER

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170

VERTICAL SCALE
1" = 5'



SANDY NECK WAY/FISH CAMP DRIVE
KNUCKLE
STA. 1+00 – 2+67.44



FISH CAMP KNUCKLE
STA. 0+00.00 – 2+05.95

REVISIONS		
NO.	DESCRIPTION	DATE

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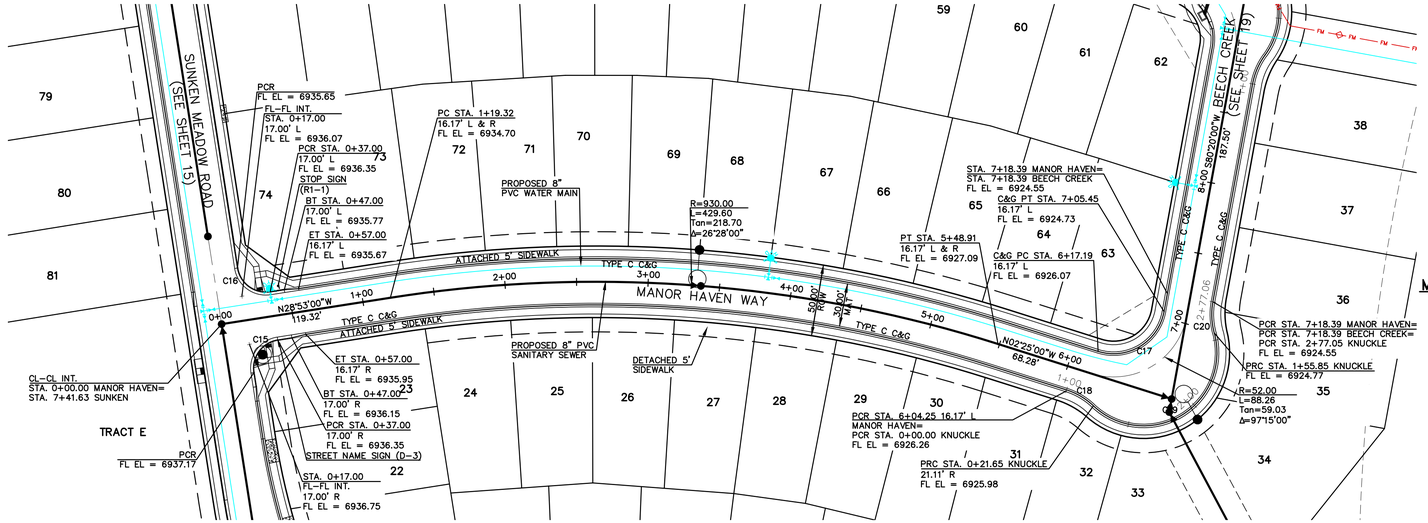
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303-948-9800

Terra Nova
Engineering, Inc.
"Creative Civil Engineering Solutions"
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnesinc.com

WATERBURY FILING NO. 1

CONSTRUCTION SET
STREET PLAN AND PROFILE
SANDY NECK/FISH CAMP KNUCKLE - FISH CAMP KNUCKLE

DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY JS
H-SCALE 1"=50'
V-SCALE 1"=5'
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 17 OF 58



MANOR HAVEN WAY PHASE 2

STA. 0+00.00 – 7+17.39 – URBAN LOCAL
(DESIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

MANOR HAVEN WAY KNUCKLE PHASE 2

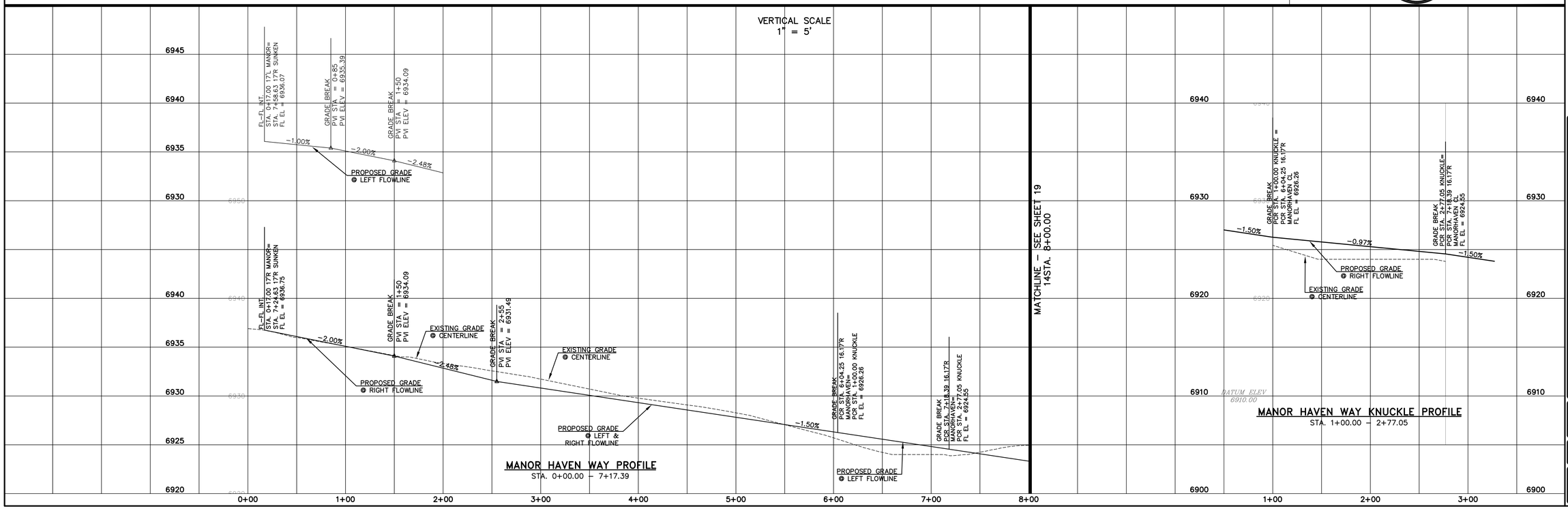
STA. 1+00.00 – 2+77.05 – URBAN LOCAL
(DESIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

CURB RETURN CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C15	31.42'	20.00'	90°00'00"
C16	32.51'	20.00'	93°07'57"
C17	60.82'	35.83'	97°15'00"
C18	22.02'	48.83'	25°50'31"
C19	133.01'	51.17'	148°56'02"
C20	22.02'	48.83'	25°50'31"

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170

COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER



MANOR HAVEN WAY PROFILE

STA. 0+00.00 – 7+17.39

MANOR HAVEN WAY KNUCKLE PROFILE

STA. 1+00.00 – 2+77.05

REVISIONS

NO.	DESCRIPTION	DATE

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PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303-948-9800

Terra Nova Engineering, Inc. Surveying
Civil Engineering
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
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www.tneainc.com

WATERBURY FILING NO. 1

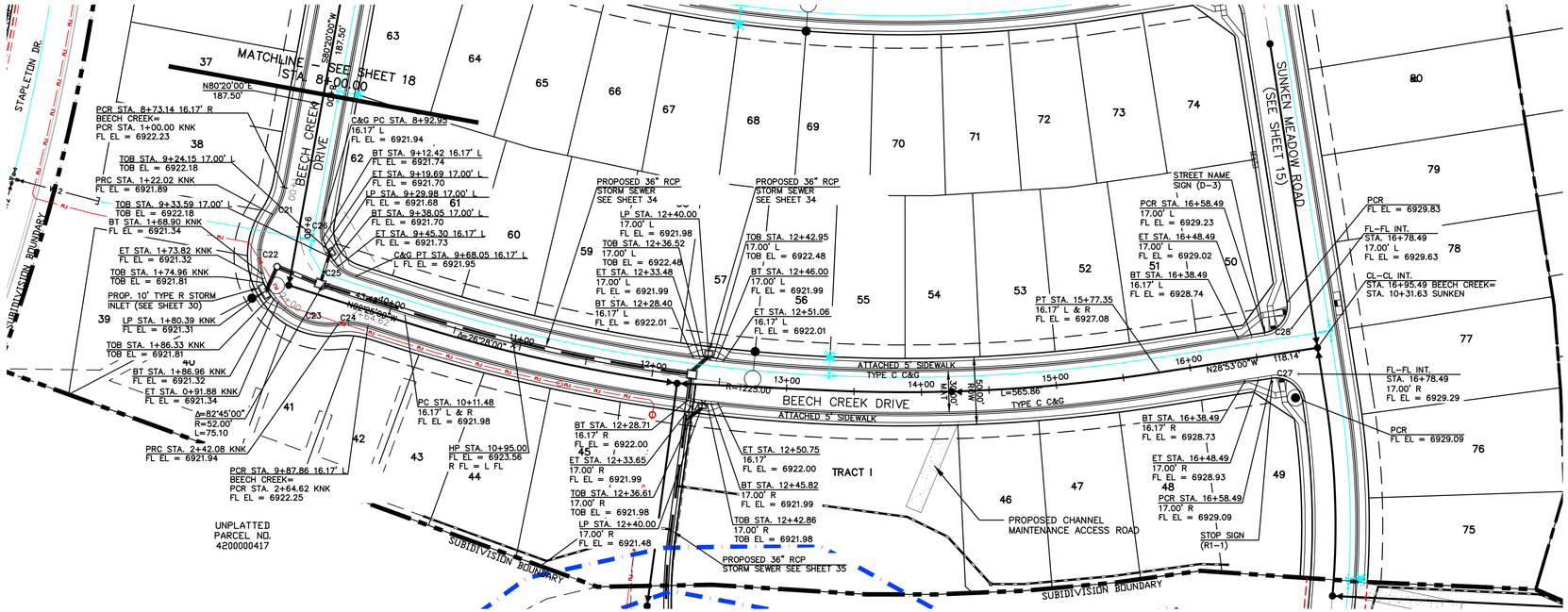
CONSTRUCTION SET
STREET PLAN AND PROFILE
MANOR HAVEN WAY

DESIGNED BY	QNA
DRAWN BY	QNA
CHECKED BY	JS
H-SCALE	1"=50'
V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	18 OF58

BEECH CREEK KNUCKLE PHASE 2

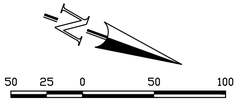
STA. 1+00.00 – 2+77.05 – URBAN LOCAL
(DESIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

CURB RETURN CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C21	22.02'	48.83'	25°50'31"
C22	45.94'	51.17'	51°26'26"
C23	49.27'	51.17'	55°10'01"
C24	22.02'	48.83'	25°50'31"
C25	15.04'	35.83'	24°03'23"
C26	12.80'	35.83'	20°27'48"
C27	31.42'	20.00'	90°00'00"
C28	31.42'	20.00'	90°00'00"



BEECH CREEK DRIVE PHASE 2

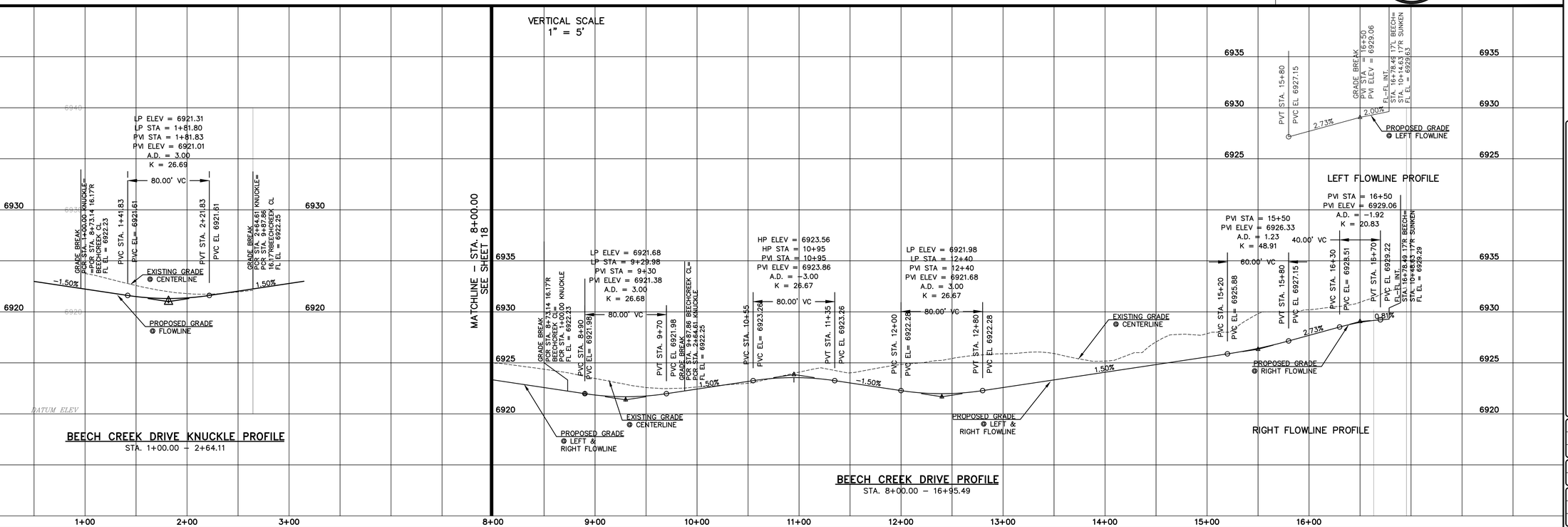
STA. 8+00.00 – 16+95.49 – URBAN LOCAL
(DESIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)



THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170

COLORADO LICENSED
QUENTIN N ARMIJO
37170
4/17/26
PROFESSIONAL ENGINEER



Terra Nova Engineering, Inc. Surveying
Civil Engineering
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tneinc.com

REVISIONS		
NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING AND SURVEYING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES ORIGINALLY INTENDED BY WRITTEN AUTHORIZATION.

PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303-934-9800

WATERBURY FILING NO. 1

CONSTRUCTION SET
STREET PLAN AND PROFILE
BEECH CREEK DRIVE

DESIGNED BY	QNA
DRAWN BY	QNA
CHECKED BY	JS
H-SCALE	1"=50'
V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	19 OF58

CURB RETURN CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C6	30.78'	20.00'	88°11'16"
C7	31.42'	20.00'	90°00'00"
C33	30.84'	20.00'	88°21'09"
C34	30.84'	20.00'	88°21'09"
C35	32.03'	20.00'	91°44'53"
C36	32.03'	20.00'	91°44'53"
C37	31.42'	20.00'	90°00'00"
C38	30.92'	20.00'	88°34'27"
C39	21.53'	68.83'	17°55'21"
C40	122.31'	51.17'	136°57'24"
C41	20.94'	68.83'	17°25'53"
C42	63.88'	35.83'	102°09'18"

TEMPORARY HS20 GRAVEL TURNAROUND

UNPLATTED

SUBDIVISION BOUNDARY

BEGIN CONSTRUCTION
STA. 0+47.59
16.17' L & R
FL EL = 6961.71

PC STA. 0+50.81
16.17' L & R
FL EL = 6961.64

R=500.00
L=3.21
Tan=1.61
Δ=0°22'06"

TRACT D

TYPE C C&G
ATTACHED 5' SIDEWALK

MASONBORO WAY (SEE SHEET 21)

MEGANSETT WAY (SEE SHEET 21)

SAYBROOK WAY (SEE SHEET 13)

MUDDY POND STREET

TYPE A C&G
ATTACHED 5' SIDEWALK

PROP. 5' TYPE R STORM INLET (SEE SHEET 38)

PROP. 10' TYPE R STORM INLET (SEE SHEET 36)

PROPOSED 36" RCP STORM SEWER SEE SHEET 38

PROPOSED 6' CONC. CRSPAN

STOP SIGN (R1-1)

STREET NAME SIGN (D-3)

CL-CL INT.
STA. 7+83.86 MUDDY POND=
STA. 18+51.35 SAYBROOK

CL-CL INT.
STA. 9+75.64 MUDDY POND=
STA. 0+00.00 MEGANSETT

CL-CL INT.
STA. 14+09.79 MUDDY POND=
STA. 14+51.41 FISH CAMP

END C&G CONSTRUCTION
STA. 14+45.73
16.17' L
FL EL = 6941.78

INSTALL 2-TYPE 3 BARRICADES

CURB, GUTTER, & ASPHALT TO BE EXTENDED WHEN FUTURE FILING IS CONSTRUCTED

FISH CAMP DRIVE

TRACT F

TRACT G

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170

37170 04/17/26

SCALE: 1" = 50'

MUDDY POND STREET PHASE 2

STA. 0+00.00 – 15+67.06 – URBAN LOCAL
(DEIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

VERTICAL SCALE
1" = 5'

EXISTING GRADE @ CENTERLINE

PROPOSED GRADE @ LEFT & RIGHT FLOWLINE

PROPOSED GRADE @ FLOWLINE

BEGIN CONSTRUCTION STA. 0+33.02 16.17' L&R MUDDY CL FL EL = 6962.04

LP ELEV = 6952.45
LP STA = 4+85.01
PVI STA = 4+80
PVI ELEV = 6951.88
A.D. = 4.17
K = 26.52
110.50' VC

HP ELEV = 6953.36
HP STA = 5+76.39
PVI STA = 5+75
PVI ELEV = 6953.68
A.D. = -3.64
K = 19.21
70.00' VC

LP ELEV = 6941.22
LP STA = 13+13.84
PVI STA = 13+10
PVI ELEV = 6940.82
A.D. = 3.25
K = 30.77
100.00' VC

HP ELEV = 6942.02
HP STA = 14+10
PVI STA = 14+10
PVI ELEV = 6942.32
A.D. = -3.00
K = 26.67
80.00' VC

STA 4+91.43 0.00'R CL
PROPOSED 18" RCP PUBLIC STORM SEWER SEE SHEET 32

STA 6+74.52 0.00'R CL
PROPOSED 18" RCP PUBLIC STORM SEWER SEE SHEET 36

STA 9+65.64 0.00'R CL
PROPOSED 30" RCP PUBLIC STORM SEWER SEE SHEET 36

STA 13+12.89 0.00'R CL
PROPOSED 18" RCP PUBLIC STORM SEWER SEE SHEET 34

114.50 LF OF ROADWAY TO BE BUILT WITH NEXT FILING EXTENTION OWNER TO POST FINANCIAL ASSURANCE FOR IMPROVEMENTS

STA. 15+60.23
FL EL = 6940.07
RT EL = LIP
CONSTRUCTION LIMIT

MUDDY POND STREET KNUCKLE PROFILE

STA. 0+00.00 – 1+64.82

MUDDY POND STREET PROFILE

STA. 0+33.02 – 15+67.06

REVISIONS

NO.	DESCRIPTION	DATE

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PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E. CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303-984-9800

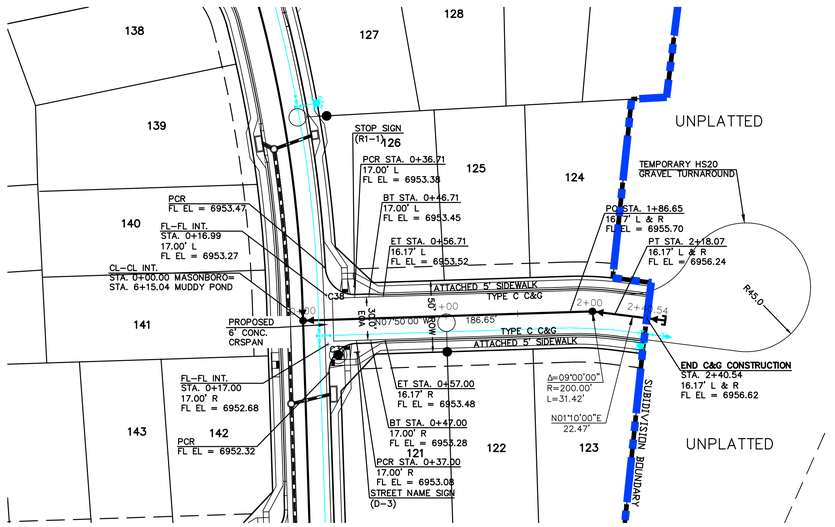
Terra Nova Engineering, Inc. Civil Engineering Surveying

721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnsinc.com

WATERBURY FILING NO. 1

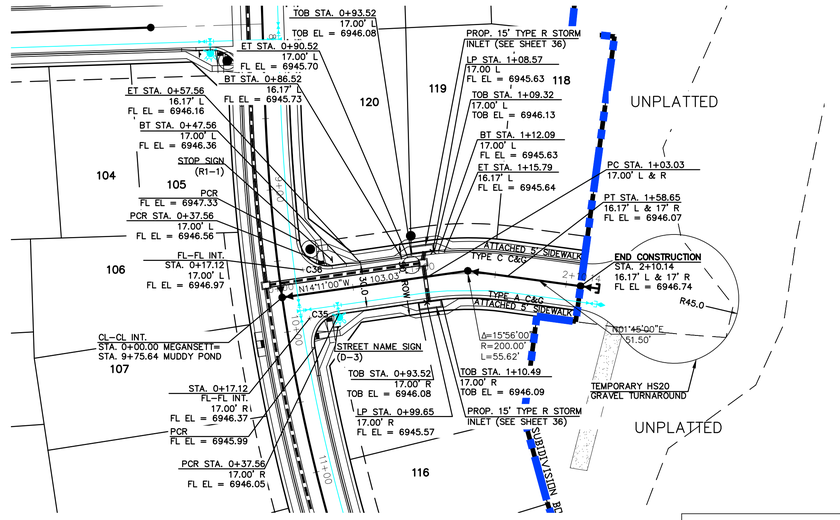
CONSTRUCTION SET
STREET PLAN AND PROFILE
MUDDY POND ST.

DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY JS
H-SCALE 1"=50'
V-SCALE 1"=5'
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 20 OF 58



MASONBORO WAY PHASE 2
STA. 0+00.00 – 2+40.54 – URBAN LOCAL
(DEIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

CURB RETURN CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C35	32.03'	20.00'	91°44'53"
C36	32.03'	20.00'	91°44'53"
C37	31.42'	20.00'	90°00'00"
C38	30.92'	20.00'	88°34'27"



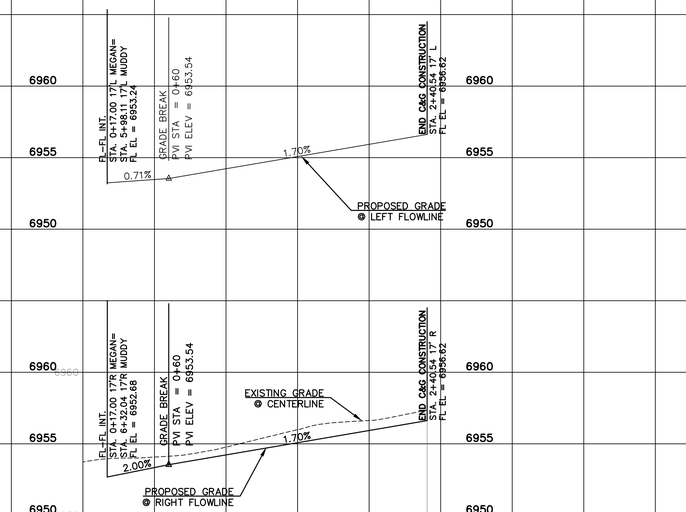
MEGANSETT WAY PHASE 2
STA. 0+00.00 – 2+10.14 – URBAN LOCAL
(DEIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

SCALE: 1" = 50'

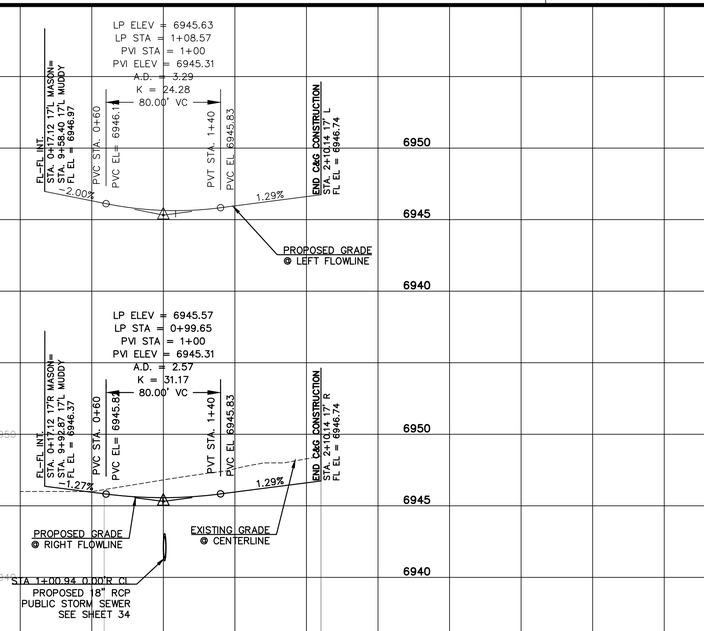
THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170



MASONBORO WAY PROFILE
STA. 0+00.00 – 2+40.54



MEGANSETT WAY PROFILE
STA. 0+00.00 – 2+10.14

REVISIONS		
NO.	DESCRIPTION	DATE

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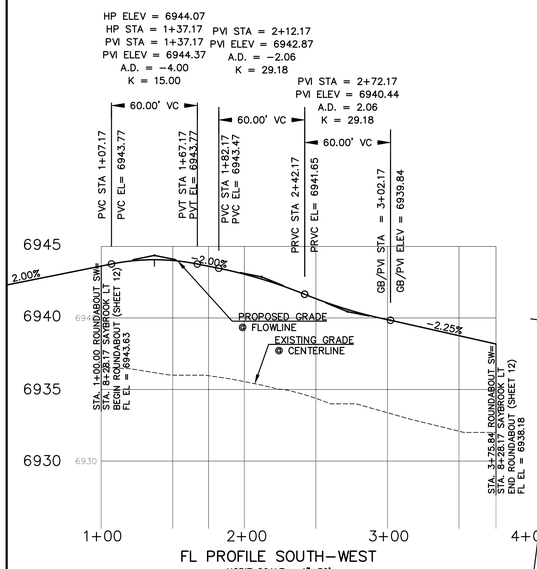
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc.
Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnsinc.com

WATERBURY FILING NO. 1

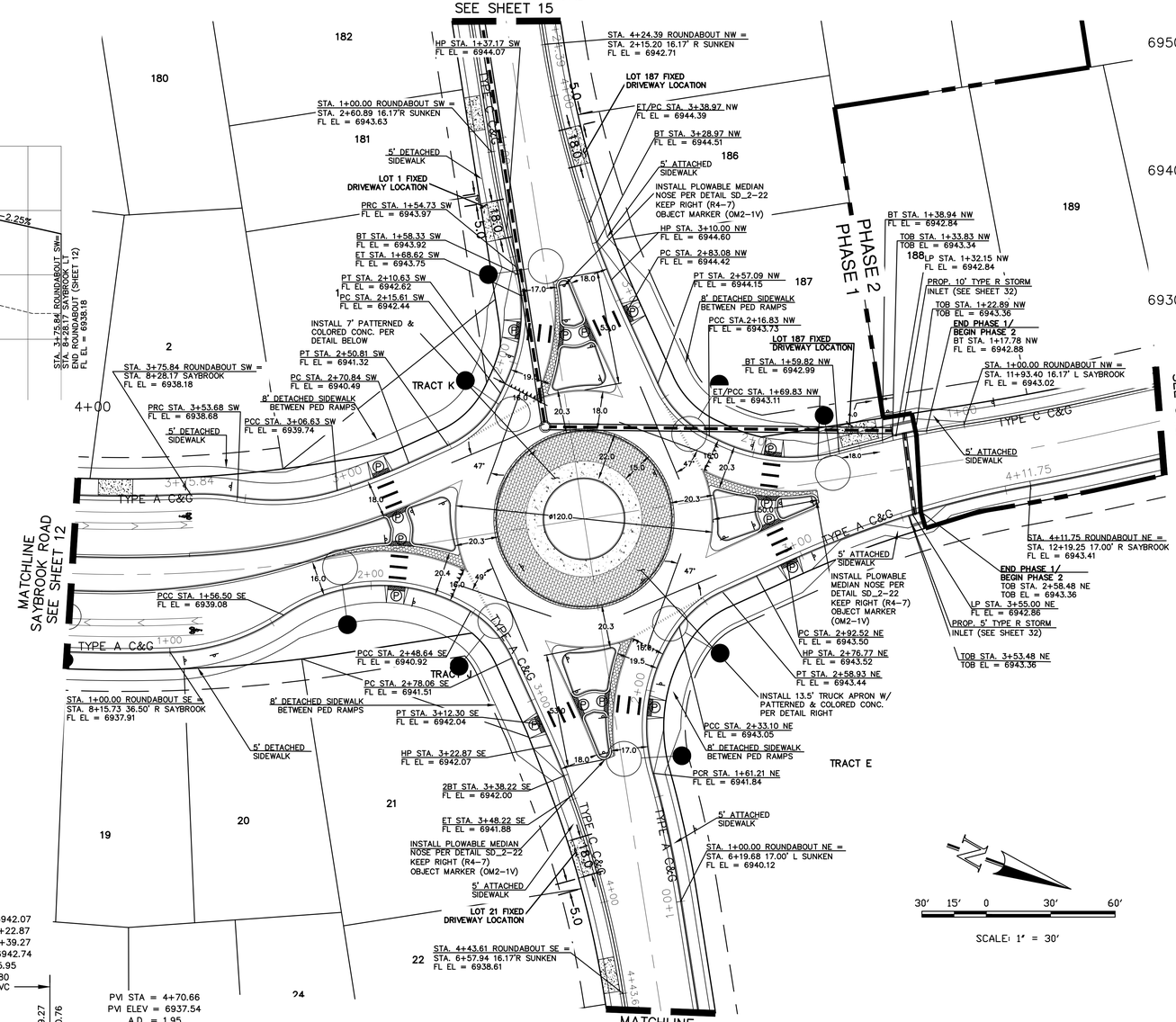
CONSTRUCTION SET
STREET PLAN AND PROFILE
MASONBORO WAY & MEGANSETT WAY

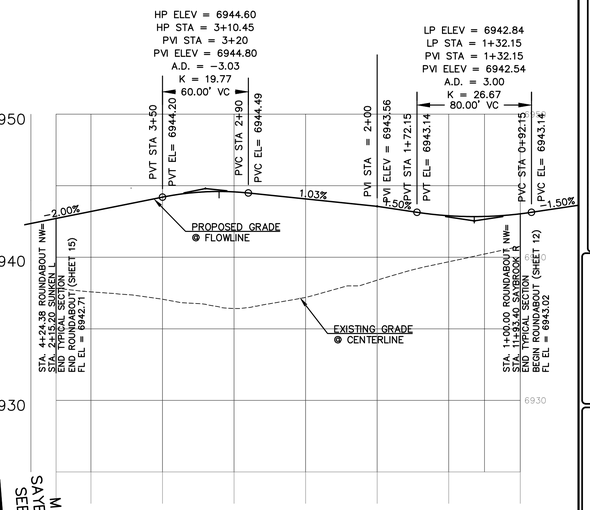
DESIGNED BY	QNA
DRAWN BY	QNA
CHECKED BY	JS
H-SCALE	1"=50'
V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	21 OF 58



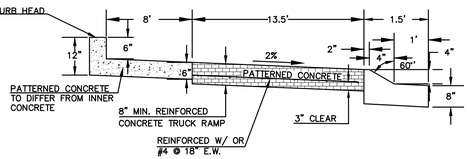
FL PROFILE SOUTH−WEST
HORIZ SCALE = 1"=50'
VER SCALE = 1"=5'

MATCHLINE
SUNKEN MEADOW ROAD
SEE SHEET 15

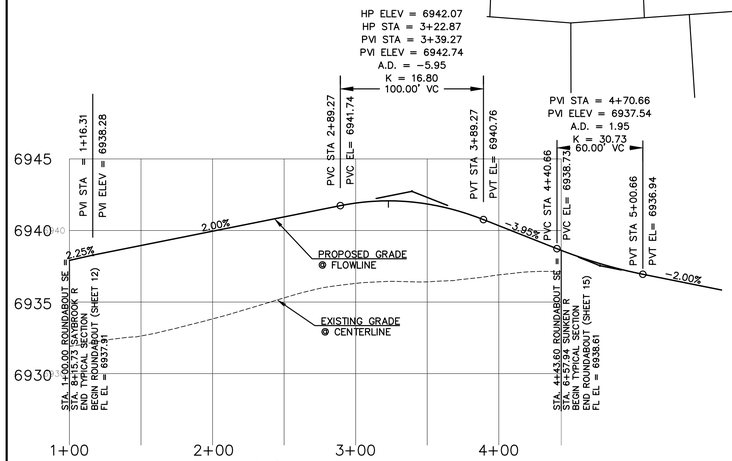




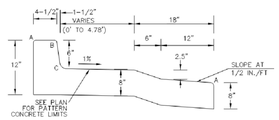
FL PROFILE NORH−WEST
HORIZ SCALE = 1"=50'
VER SCALE = 1"=5'



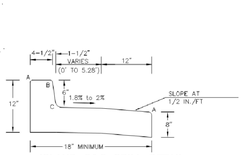
TRUCK APRON DETAIL
N.T.S.



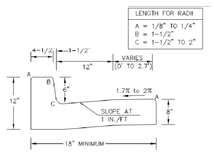
FL PROFILE SOUTH−EAST
HORIZ SCALE = 1"=50'
VER SCALE = 1"=5'



RAISED CONCRETE PLATFORM
N.T.S.



ISLAND C&G SPILL DETAIL
N.T.S.



ISLAND C&G CATCH DETAIL
N.T.S.

30' 15' 0 30' 60'

SCALE: 1" = 30'

NOTES

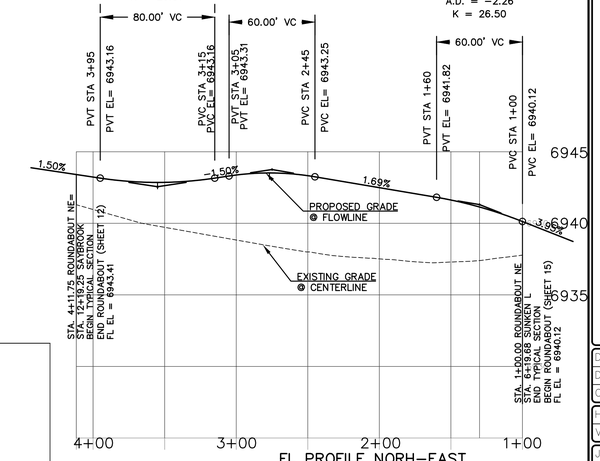
Ⓟ 1. DENOTES PEDESTRIAN RAMP

2. DENOTES RAISED CONCRETE PLATFORM SEE DETAIL TO LEFT

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

COLORADO LICENSED QUENTIN N ARMIJO 37170 4/17/26 PROFESSIONAL ENGINEER



FL PROFILE NORH−EAST
HORIZ SCALE = 1"=50'
VER SCALE = 1"=5'

NO.	DESCRIPTION	DATE

REVISIONS

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PREPARED FOR:
ACM ALF VIII JV SUB II LLC
ATTN: JASON POCK
8350 E CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303−984−9800

Terra Nova Engineering, Inc.
Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719−635−6422
FAX: 719−635−6426
www.tnesinc.com

WATERBURY FILING NO. 1

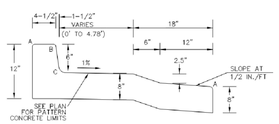
CONSTRUCTION SET
ROUNDABOUT DETAILED GRADING

DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA
H−SCALE AS SHOWN
V−SCALE AS SHOWN
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 22 OF 58

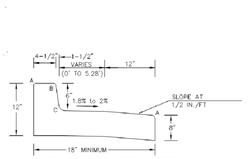
ROUNDABOUT ISLAND CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	TYPE C&G
C1	28.99'	97.00'	17°07'24"	SPILL
C2	91.94'	301.90'	17°26'57"	SPILL
C3	3.10'	2.00'	88°40'34"	SPILL
C4	0.93'	2.00'	26°37'49"	CARRY
C5	2.87'	2.00'	82°16'43"	SPILL
C6	5.58'	12.00'	26°37'49"	SPILL
C7	3.13'	2.00'	89°35'44"	SPILL
C8	16.28'	97.00'	9°36'56"	SPILL
C9	4.22'	2.00'	120°52'49"	CARRY
C10	18.69'	64.00'	16°44'06"	SPILL
C11	7.68'	4.00'	109°57'33"	SPILL
C12	3.23'	2.00'	92°32'44"	SPILL
C13	7.35'	2.50'	168°26'54"	SPILL
C14	16.00'	97.00'	9°26'59"	SPILL
C15	2.89'	2.00'	82°54'05"	SPILL
C16	1.08'	2.00'	30°50'43"	SPILL
C17	3.11'	2.00'	89°12'04"	SPILL
C18	16.99'	500.00'	1°56'47"	SPILL
C19	6.46'	12.00'	30°50'43"	CARRY
C20	3.11'	2.00'	88°58'41"	CARRY
C21	16.45'	97.00'	9°43'01"	SPILL
C22	4.28'	2.00'	122°37'40"	SPILL
C23	18.43'	64.00'	16°29'57"	SPILL
C24	7.72'	4.00'	110°36'47"	CARRY
C25	3.31'	2.00'	94°50'33"	CARRY
C26	7.28'	2.50'	166°54'50"	SPILL
C27	13.23'	97.00'	7°48'45"	SPILL
C28	2.86'	2.00'	81°56'28"	CARRY
C29	1.10'	2.00'	31°27'17"	CARRY
C30	3.11'	2.00'	89°07'39"	CARRY
C31	14.18'	500.00'	1°37'28"	SPILL
C32	6.59'	12.00'	31°27'17"	SPILL
C33	3.14'	2.00'	89°55'48"	SPILL
C34	16.12'	97.00'	9°31'15"	SPILL
C35	4.22'	2.00'	120°56'17"	SPILL
C36	17.27'	64.00'	15°27'31"	SPILL
C37	7.71'	4.00'	110°22'54"	SPILL
C38	3.32'	2.00'	95°11'04"	SPILL
C39	7.35'	2.50'	168°26'54"	CARRY
C40	16.00'	97.00'	9°26'59"	SPILL
C41	2.89'	2.00'	82°54'05"	SPILL
C42	1.08'	2.00'	30°50'43"	SPILL
C43	3.11'	2.00'	89°12'04"	CARRY
C44	16.99'	500.00'	1°56'47"	CARRY
C45	6.46'	12.00'	30°50'43"	CARRY
C46	3.11'	2.00'	88°58'41"	CARRY
C47	16.45'	97.00'	9°43'01"	SPILL
C48	4.28'	2.00'	122°37'40"	SPILL
C49	18.43'	64.00'	16°29'57"	SPILL
C50	7.72'	4.00'	110°36'47"	SPILL
C51	3.31'	2.00'	94°50'33"	CARRY

ROUNDABOUT ISLAND LINE TABLE			
LINE	LENGTH	BEARING	TYPE C&G
L1	3.92	S48°49'28"W	CARRY
L2	4.47	S75°27'16"W	CARRY
L3	3.57	N75°27'16"E	SPILL
L4	13.96	S38°37'48"E	SPILL
L5	3.79	N48°49'28"E	SPILL
L6	3.46	S13°23'02"E	SPILL
L7	2.80	S44°13'45"E	SPILL
L8	2.72	N13°23'02"W	CARRY
L9	14.08	N50°36'49"E	SPILL
L10	2.60	N44°13'45"W	CARRY
L11	3.19	S76°55'44"W	CARRY
L12	2.34	S45°28'28"W	SPILL
L13	2.21	S76°55'44"W	SPILL
L14	13.90	N39°20'28"W	SPILL
L15	2.09	S45°28'28"W	SPILL
L16	3.46	N13°23'02"W	SPILL
L17	2.80	N44°13'45"W	SPILL
L18	2.72	S13°23'02"E	CARRY
L19	14.08	S50°36'49"W	CARRY
L20	2.60	S44°13'45"E	CARRY

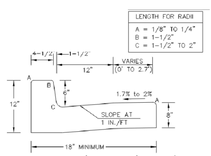
NOTE
LINE AND CURVE TABLES REFER TO THE FLOWLINE OF THE C&G



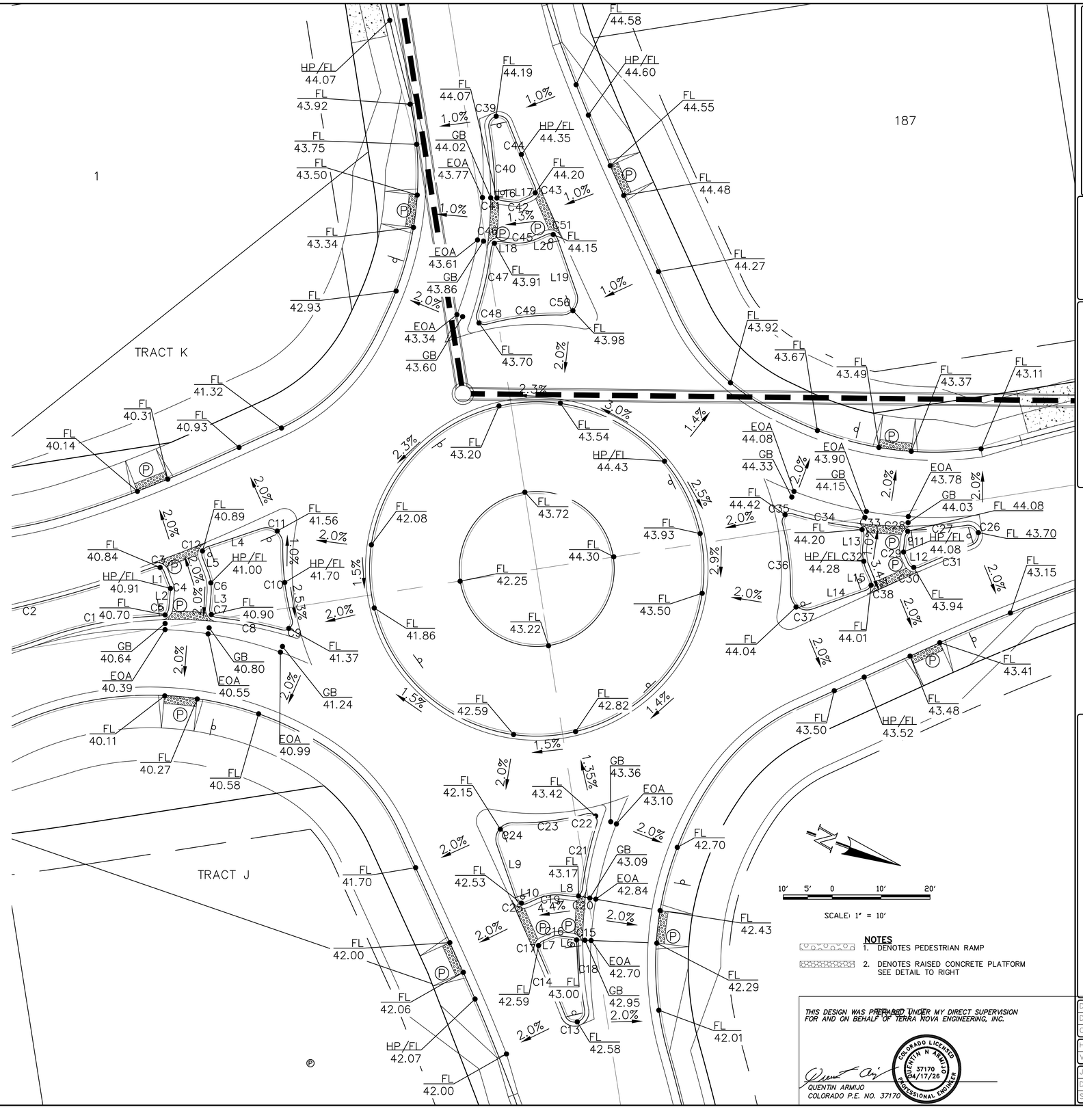
RAISED CONCRETE PLATFORM
N.T.S.



ISLAND C&G SPILL DETAIL
N.T.S.



ISLAND C&G CATCH DETAIL
N.T.S.



NOTES
1. DENOTES PEDESTRIAN RAMP
2. DENOTES RAISED CONCRETE PLATFORM SEE DETAIL TO RIGHT

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

REVISIONS		
NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

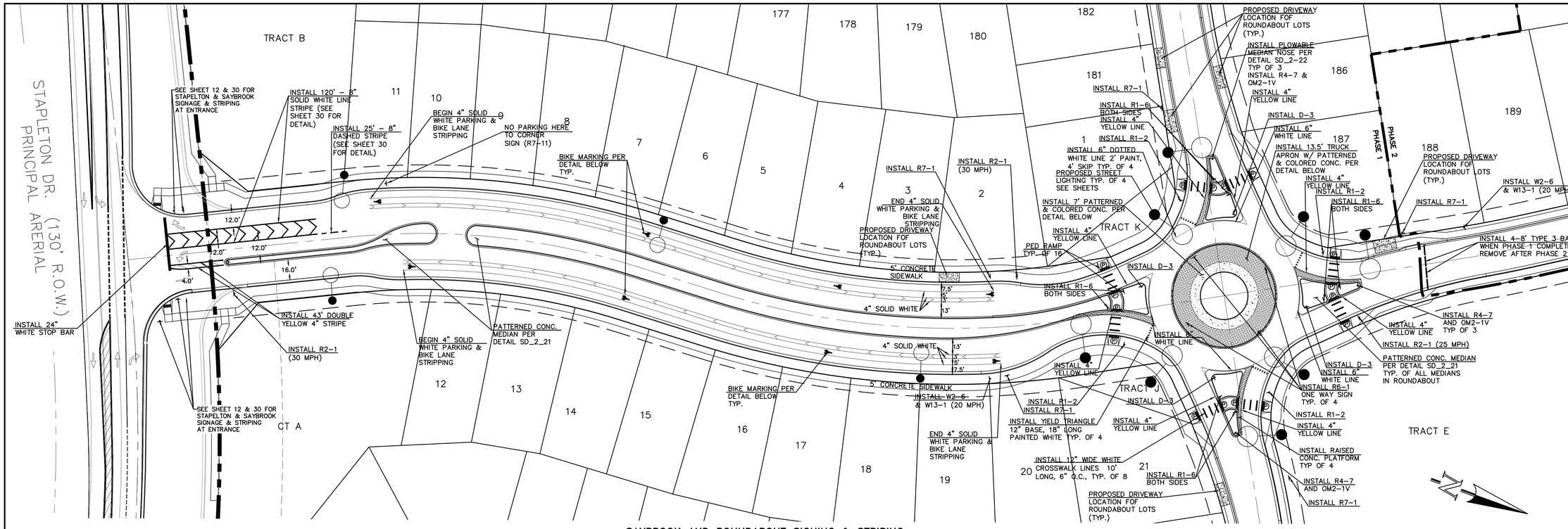
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
ATTN: JASON POCK
8350 E CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc. | Creative Civil Engineering
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnesinc.com

WATERBURY FILING NO. 1

CONSTRUCTION SET
ROUNDABOUT DETAILED GRADING

DESIGNED BY	DLF
DRAWN BY	QNA
CHECKED BY	QNA
H-SCALE	AS SHOWN
V-SCALE	N/A
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	23 OF 58



SAYBROOK AND ROUNDABOUT SIGNING & STRIPING

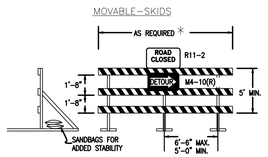
40' 20 0 40 80

SCALE: 1" = 40'

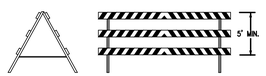
RAIL LENGTH TABLE *

TYPE 3 BARRICADE		LENGTH
FIXED	MOVABLE	
F – A	M – A	8'– 14'
F – B	M – B	15'– 24'
F – C	M – C	25'– 35'
F – D	M – D	> 35'

MOVABLE–SKIDS



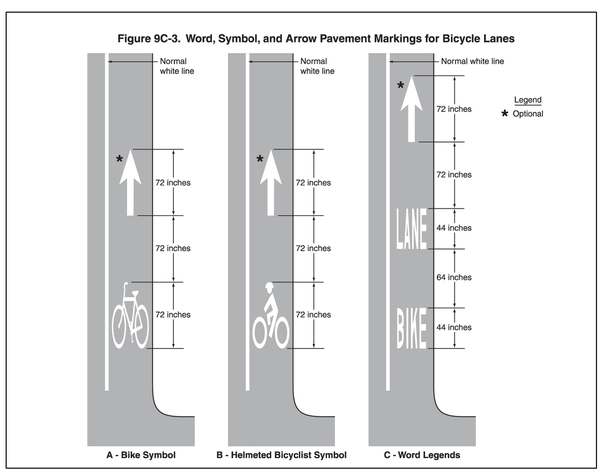
MOVABLE–HINGED

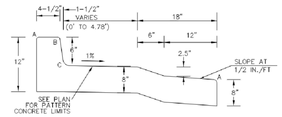


BARRICADE NOTES

1. TYPE 3 BARRICADES HAVE 3 REFLECTORIZED RAIL FACES IF FACING TRAFFIC IN ONE DIRECTION AND 6 IF FACING TRAFFIC IN TWO DIRECTIONS.
2. THE PORION OF THE POST ABOVE THE GROUND LINE SHALL BE PAINTED IN ACCORDANCE WITH THE APPROPRIATE GENERAL NOTE.
3. DETACHABLE EXTENSION WING RAILS FOR BYPASSING OF CONSTRUCTION EQUIPMENT ARE PERMITTED, WHEN NECESSARY, ON FIXED OR MOVABLE TYPE 3 BARRICADES. THE LENGTH SHALL BE ADEQUATE TO CLOSE THE BORROW PIT AND/OR SHOULDER AS REQUIRED.

TYP. TYPE 3 BARRICADES

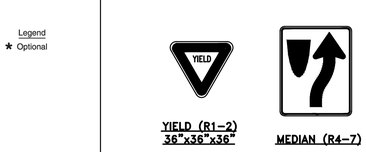




RAISED CONCRETE PLATFORM
N.T.S.

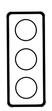
NOTES

1. DENOTES PEDESTRIAN RAMP
2. DENOTES RAISED CONCRETE PLATFORM SEE DETAIL TO LEFT
3. DENOTES A PROPOSED DRIVEWAY LOCATION



YIELD (R1-2)
36"x36"x36"

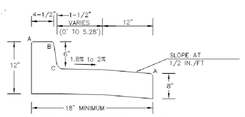
MEDIAN (R4-7)



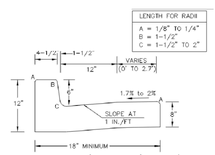
OBJECT MARKER (OM2-1V)



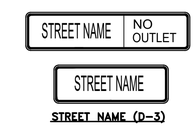
PED (R1-6)



ISLAND C&G SPILL DETAIL
N.T.S.



ISLAND C&G CATCH DETAIL
N.T.S.



STREET NAME (D-3)



SPEED LIMIT (R2-1)



ONE WAY (R6-1)



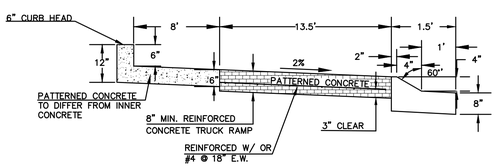
PED (W11-2)



NO PARKING (R7-1)

NOTE:
ALL INTERNAL SIGNS SHALL BE 4" FONT LETTER SIZE.

STAPELTON ROAD INTERSECTION SIGNS SHALL BE 6" FONT LETTER SIZE



TRUCK APRON DETAIL
N.T.S.

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE

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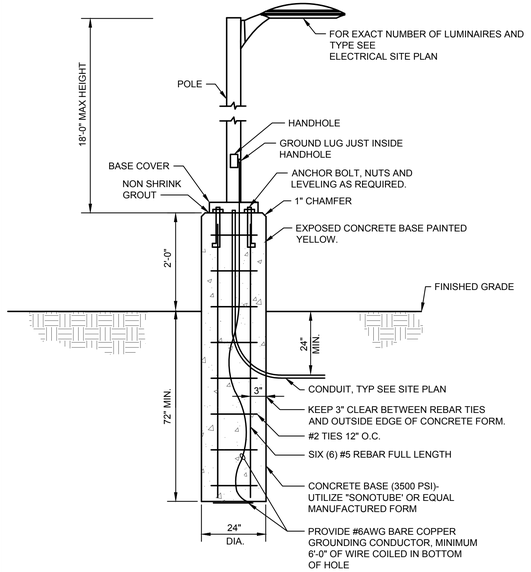
PREPARED FOR:
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ATTN: JASON POCK
8350 E CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc.
Creative Civil Engineering Solutions
721 S. 23RD STREET
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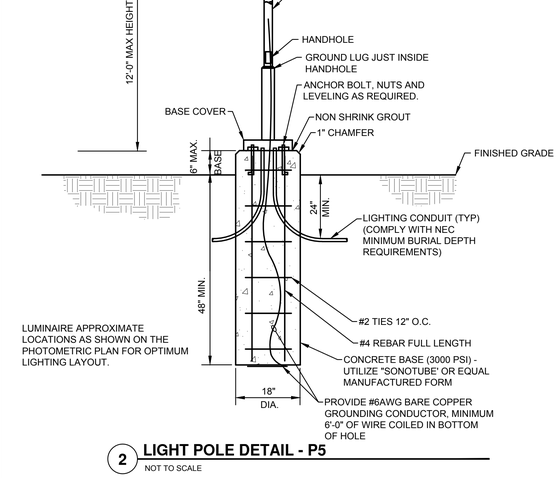
WATERBURY FILING NO. 1

CONSTRUCTION SET
SIGNING & STRIPING
SAYBROOK & ROUNDABOUT

DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA
H-SCALE AS SHOWN
V-SCALE N/A
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 24 OF 58



1 LIGHT POLE DETAIL - P3, P4
NOT TO SCALE



2 LIGHT POLE DETAIL - P5
NOT TO SCALE

WATERBURY SITE LIGHTING FIXTURE SCHEDULE

LUMINAIRE								LAMPS				
ID	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	DISTRIBUTION	VOLTAGE	DIMMING	MOUNTING	QTY.	TYPE	WATTS	LUMENS	COLOR TEMP\CRI
P3	KIM LIGHTING	UR20-56L-75-4K7-3-UNV-A34-BLT-7PR-TL-CLR POLE: RSS-H-18-40-B-1-K2-BLT	20"DIAX3.6"H ROUND OUTDOOR LED AREA FIXTURE. TYPE 3 DISTRIBUTION, 0-10V DRIVER, SUITABLE FOR -40 DEG. C TO 40 DEG. C, STANDARD CLEAR LENS AND PHOTOCELL 7-PIN TWIST LOCK CONTROLS, IP66 RATED AND WET LOCATIONS LISTED, 5 YEAR WARRANTY.	TYPE 3	120-277V	0-10V	POLE 18'-0"	19	LED	76	9,633	4000K/70CRI
P4	KIM LIGHTING	UR20-56L-75-4K7-4W-UNV-A34-BLT-7PR-TL-CLR POLE: RSS-H-18-40-B-1-K2-BLT	SAME AS TYPE P1 BUT TYPE 4 WIDE DISTRIBUTION.	TYPE 4 WIDE	120-277V	0-10V	POLE 18'-0"	10	LED	76	9,862	4000K/70CRI
P5	KIM LIGHTING	UR20-56L-75-4K7-5W-UNV-PT34-BLT-7PR-TL-CLR POLE: RSS-H-12-40-B-TC-K2-BLT	SAME AS TYPE P1 BUT POST TOP VERSION AND TYPE 5 ROUND WIDE DISTRIBUTION.	TYPE 5 WIDE	120-277V	0-10V	POLE 12'-0"	10	LED	76	10,289	4000K/70CRI



ELECTRICAL SITE DEVELOPMENT PLAN
SCALE: 1" = 100'-0"

GENERAL NOTES

A. FIXTURES SIZES SHOWN ARE DIAGRAMMATICAL AND ARE LOCATED TO STAY OUTSIDE MVEA EASEMENTS.

B. STREET LIGHTS SHALL BE OWNED AND MAINTAINED BY THE WATERBURY METROPOLITAN DISTRICT NO. 1 UNDER A LICENSE AGREEMENT WITH EL PASO COUNTY.

1

REVISIONS		
NO.	DESCRIPTION	DATE
1	ROUNDABOUT LIGHTING UPGRADE	03/24/2026

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR:
WATERBURY SITE DEVEOPMENT
STAPLETON ROAD AND EASTONVILLE ROAD
FALCON

Terra Nova Engineering, Inc
Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnesinc.com

ELECTRICAL SITE DEVELOPMENT PLAN

COLORADO LICENSED
TIMOTHY P. PLANT
31074
10/4/2024
PROFESSIONAL ENGINEER

DESIGNED BY CAO
DRAWN BY PJN/CAO
CHECKED BY MPP
H-SCALE AS NOTED
V-SCALE AS NOTED
JOB NO. 24086
DATE ISSUED 10/04/24
SHEET NO. 25 OF 58

PLANT
ENGINEERING CONSULTANTS
320 WEST FILLMORE STREET COLORADO SPRINGS CO 80907
719 473 7077 www.planteci.com

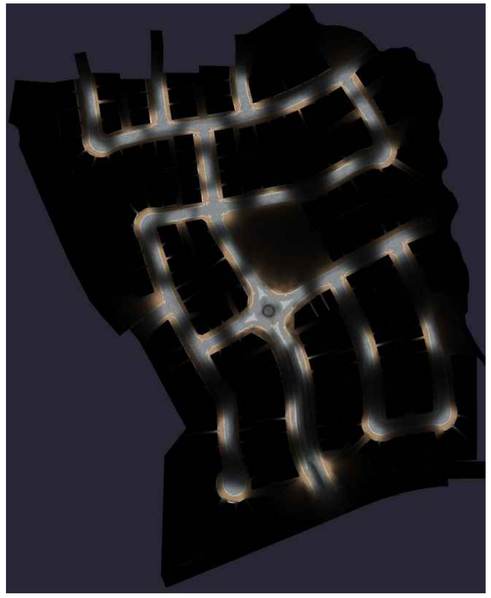
GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO ANY EXCAVATION. NOT ALL EXISTING CONDITIONS ARE SHOWN FOR CLARITY.

B. CONTRACTOR SHALL PROVIDE ALL REQUIRED CUTTING, TRENCHING, BACKFILLING, AND RESTORATION.

C. THESE PHOTOMETRIC CALCULATIONS ARE BASED ON MANUFACTURER'S IES FILES AND 0.95 LIGHT DEPRECIATION FACTOR.

D. ACTUAL ILLUMINANCE LEVELS MAY DIFFER FROM THE FOOT CANDLE LEVELS SHOWN DUE TO VARIABLE FIELD CONDITIONS, SUCH AS NEARBY EXISTING LUMINAIRES, LUMINAIRE DIRT DEPRECIATION, LANDSCAPING, AND FUTURE DEVELOPMENTS.



1 **WATERBURY SITE DEVELOPMENT RENDERING - TOP VIEW**
SCALE: NO SCALE

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
10' Property Line	Illuminance	Fc	0.00	0.1	0.0	N.A.	N.A.
Property Line	Illuminance	Fc	0.00	0.1	0.0	N.A.	N.A.
Site	Illuminance	Fc	0.27	4.3	0.0	N.A.	N.A.



DEVELOPMENTAL SITE PHOTOMETRIC PLAN
SCALE: 1" = 100'-0"

REVISIONS NO.	DESCRIPTION	DATE
1	ROUNDABOUT LIGHTING UPGRADE	03/24/2026

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR:
WATERBURY SITE DEVEOPMENT
STAPLETON ROAD AND
EASTONVILLE ROAD
FALCON

Terra Nova Engineering, Inc
Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6428
www.tneainc.com

DEVELOPMENTAL SITE PHOTOMETRIC PLAN

COLORADO LICENSED
MITCHELL P. PLANT
31074
10/4/2024
PROFESSIONAL ENGINEER

DESIGNED BY	CAO
DRAWN BY	PJN/CAO
CHECKED BY	MPP
H-SCALE	AS NOTED
V-SCALE	AS NOTED
JOB NO.	24086
DATE ISSUED	10/04/24
SHEET NO.	26 OF 58

PLANT
ENGINEERING CONSULTANTS
320 WEST FILLMORE STREET COLORADO SPRINGS CO 80907
719 473 7077 www.planteci.com

KIM LIGHTING®

UR20-Arm Mount

ARCHITECTURAL AREA/SITE

DATE: | LOCATION:

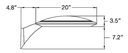
TYPE: | PROJECT:

CATALOG #:

P3,P4

Ouro™





FEATURES

- 20" size in post top, pole and wall mount
- High performance optics up to 17,000 delivered lumens
- Elegant form factor
- Diffusion lens option
- UL/cUL listed for wet locations, IP66 and 4G/1.5G vibration rated

3000K and warmer CCTs only

CONTROL TECHNOLOGY

LIGHTGRID®

SPECIFICATIONS

CONSTRUCTION

- Low copper aluminum alloy die-casting is designed as one-piece with internal cooling fins.
- Solid, cast aluminum wall creates a thermal barrier between the optical and electrical compartments.
- Molded silicone gasket throughout insures the sealing between the two compartments and provides ingress protection.
- Housing is designed with integral LED heat sink utilized for thermal transfer and for securing the location of each LED module.
- All external fasteners are stainless steel.
- One-piece low copper aluminum alloy die-cast lens frame is secured to housing with 6 screws.

OPTICS

- LEDs mount to a metal printed circuit board assembly (MCPCB).
- Optical lenses are clear injection molded PMMA acrylic.
- Optional Backlight Control on each LED module to completely control unwanted backlight.

LENS

- Standard lens (CLR) IK08
- Clear Polycarbonate Lens (CP) IK10

INSTALLATION

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

ELECTRICAL

- Universal voltage, 120 through 277V with a ±10% tolerance. Driver is Underwriters Laboratories listed.
- High voltage configurations, 347/480. Driver has a 0-10V dimming interface for multi-level illumination options. Driver is Underwriters Laboratories listed.
- "Thermal Shield", secondary side, thermistor provides protection for the sustainable life of LED module and electronic components
- Drivers shall have greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments.
- Luminaire shall be capable of operating at 100% brightness in a 40°C environment. Both driver and optical array have integral thermal protection that will dim the luminaire upon detection of temperatures in excess of 85°C.
- Surge protection: 10,000k in parallel, 20,000k in series
- Wiring: No. 18AWM rated 105°C, wet rating.

CONTROLS

7PR

- Fully gasketed and wired 7-pin receptacle option. Easy access location above the electrical compartment. 7-pin construction allows for a user-defined interface and provides a controlled definition of operational performance. ANSI twist-lock control module by-others.

Standard customer operation modes:

- Traditional on/off photoelectric control.
- 5-pin wireless photoelectric control for added dimming feature.
- 7-pin wireless photoelectric control for dimming and additional I/O connections for customer use.

	Weight	EPA
UR20	32 lbs / 14.5 kg	0.372 ft.²

[1] Clear Polycarbonate Lens (CP) IK10, Standard lens (CLR) IK08, Consult factory for details

(Specifications continued on page 5)

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KIM LIGHTING®

UR20-Arm Mount

ARCHITECTURAL AREA/SITE

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

P3,P4

ORDERING GUIDE

Example: UR20-24L-25-3K8-3-L-UNV-ASQ-BLT-7PR-BC

CATALOG #

HOUSING

UR20

Model	LED Engine	CCT/CRI	Distribution	Rotation	Voltage
UR20 Ouro	**No Lens or Clear Lens**	**AM** [11] Amber, 595nm	**No Lens or Clear Lens**	**(Blank)** Blank for no rotation	**UNV** 120-277V
	24L-25 3,000 lm	**27K8** 2700K, 80 CRI	**FR** Type 1/Front Row		**347** 347V
	24L-65 7,000 lm	**3K7** 3000K, 70 CRI	**2** Type II	**L** [1] Optic rotation left	**480** 480V
	56L-75 10,000 lm	**3K8** 3000K, 80 CRI	**3** Type III	**R** [1] Optic rotation right	
	56L-110 15,000 lm	**35K8** 3500K, 80 CRI	**4** Type IV		
	56L-140 17,000 lm	**3K9** 3000K, 90 CRI	**4W** Type IV Wide		
	HDL - High Diffusion Lens	**4K7** 4000K, 70 CRI	**5QM** [3] Type V Square Medium		
	28L-30 3,000 lm	**4K8** 4000K, 80 CRI	**5QN** [3] Type V Square Narrow		
	28L-70 7,000 lm	**5K7** 5000K, 70 CRI	**5R** [3] Type V Rectangular		
	68L-80 9,000 lm	Consult factory for other CCTs and CRIs	**5W** [3] Type V Wide (Round)		
	68L-115 13,000 lm		**HDL - High Diffusion Lens**		
	68L-150 15,000 lm		**3** Type III/Asymmetric		
			5W Type V/Symmetric		

Mounting		Fixture Finish		Control Options		Options		Control Accessories	
ASQ	Arm Square pole	**BLS**	Black Gloss Smooth	**7PR-TL**	7 pin PCR with twist lock photocontrol	**BC** [4]	Back-light Control	**WIR-RME-L**	LightGRID™ External Fixture Module
A34	Arm mt 3.3-4.2" OD pole	**BLT**	Black Matte Textured	**7PR-SC**	7 pin PCR with shorting cap	**SF**	Single Fuse	**SCH-R**	Occ. Sensor for Round Pole (up to 30' MH)
A46	Arm mt 4.5-6.0" OD pole	**DBS**	Dark Bronze Gloss Smooth	**7PR**	7 pin PCR, wireless control enabled	**DF**	Double Fuse	**SCH-S**	Occ. Sensor for Square Pole (up to 30' MH)
MAF	Horizontal Slip Fitter 2 3/8" OD arm	**DBT**	Dark Bronze Matte Textured	**AD-01** [2]	AstroDIM: 50% output at midnight	**TB**	Terminal Block		
SVSF	Square Vertical Slipfitter for 2"Tenon (2-3/8"OD)	**GTT**	Graphite Matte Textured	**AD-02** [2]	AstroDIM: 50% output midnight to 4 AM	**CLR** [5,6,7]	Clear Lens		
VSF	Round Vertical Slipfitter for 2"Tenon (2-3/8"OD)	**LGS**	Light Grey Gloss Smooth	**AD-03** [2]	AstroDIM: 50% output 10PM	**TPL**	Tamper proof latch	**NXOFM-1R1D-UNV**	NX 7-Pin Twist-Lock® with NX Networked Wireless Radio, Integral Automatic Dimming Photocell, Integral Single Pole Relay with Dimming, and Bluetooth Programming
WB	Wall Bracket	**LGT**	Light Grey Matte Textured	**AD-04** [2]	AstroDIM: 50% output 10PM to 4AM	**CP** [5,6,7]	Clear Polycarbonate Lens		
		PSS	Platinum Silver Gloss Smooth	**NXW**	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor				
		VGT	Verde Green Matte Textured	**WSP-40F-1** [3,9]	Dimming Occ. Sensor for up to 40' MH, 120/277/347V				
		WHS	White Gloss Smooth	**WSP-40F-2** [3,9]	Dimming Occ. Sensor for up to 40' MH, 208/240V				
		WHT	White Matte Textured	**WSP-40F-3** [3,9]	Dimming Occ. Sensor for up to 40' MH, 480V				
		Color Option		**NXWS16F** [3,11]	NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming				
		CC [7]	Custom Color	**NXWS40F** [3,11]	NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming				

1 Not available with 5QM, 5QN, and 5W distributions.
2 Not available with other sensor or wireless control options
3 Not available with 347V and 480V.
4 Not available with HDL option
5 24L and 56L only
6 Not available with HDL option
7 Consult factory for custom color, marine and corrosive finish options.
8 Turtle Friendly.
9 Please see Delivered Lumens chart on Page 5 for lumen
10 Not available with 24L-65 and the 56L-140 configuration of the LED Engine
11 Not available with BC option.
12 IK10 rated. Consult factory for details
13 IK08 rated. Consult factory for details

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KIM LIGHTING

UR20 - Post Top

ARCHITECTURAL AREA/SITE

DATE: | LOCATION:

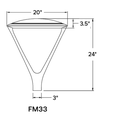
TYPE: | PROJECT:

CATALOG #:

P5

Ouro™





FM33



FMSA33/PTSA23
FMSA34, PTSA24, PTSA34

FEATURES

- 20" size in single/dual arm post top, pole and wall mount
- High performance optics up to 16,874 delivered lumens
- Elegant form factor
- Diffusion lens option
- UL/cUL listed for wet locations, IP66 and 4G/1.5G vibration rated

3000K and warmer CCTs only

CONTROL TECHNOLOGY

LIGHTGRID®

SPECIFICATIONS

CONSTRUCTION

- Low copper aluminum alloy die-casting is designed as one-piece.
- Molded silicone gasket throughout insures the sealing between the two compartments and provides ingress protection.
- All external fasteners are stainless steel.
- Cover is secured to Lens frame by the latch and hinge.

OPTICS

- LEDs mount to a metal printed circuit board assembly (MCPCB).
- Optical lenses are clear injection molded PMMA acrylic.
- Optional Backlight Control on each LED module to completely control unwanted backlight.
- Optional fixture finish optical surfaces will not exceed BUG ratings of the standard white finish.

LENS

- Standard lens (CLR) IK08
- Clear Polycarbonate Lens (CP) IK10

INSTALLATION

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

ELECTRICAL

- Universal voltage, 120 through 277V with a ±10% tolerance. Driver is Underwriters Laboratories listed.
- High voltage configurations, 347/480. Driver has a 0-10V dimming interface for multi-level illumination options. Driver is Underwriters Laboratories listed.
- "Thermal Shield", secondary side, thermistor provides protection for the sustainable life of LED module and electronic components
- Drivers shall have greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments.
- Luminaire shall be capable of operating at 100% brightness in a 40°C environment. Both driver and optical array have integral thermal protection that will dim the luminaire upon detection of temperatures in excess of 85°C.
- Surge protection: 10,000k in parallel, 20,000k in series
- Wiring: No. 18AWM rated 105°C, wet rating.

CONTROLS

7PR

- Fully gasketed and wired 7-pin receptacle option. Easy access location above the electrical compartment. 7-pin construction allows for a user-defined interface and provides a controlled definition of operational performance. ANSI twist-lock control module by-others.

Standard customer operation modes:

- Traditional on/off photoelectric control.
- 5-pin wireless photoelectric control for added dimming feature.
- 7-pin wireless photoelectric control for dimming and additional I/O connections for customer use.

	Weight	EPA
UR20	35 lbs / 15.8 kg	0.512 ft.²

(Specifications continued on page 5)

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KIM LIGHTING

UR20 - Post Top

ARCHITECTURAL AREA/SITE

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

P5

ORDERING GUIDE

Example: UR20-24L-25-3K8-3-L-UNV-FMSA33-BLT-7PR-BC

CATALOG #

HOUSING

UR20

Model	LED Engine	CCT/CRI	Distribution	Rotation	Voltage
UR20 Ouro	**No Lens or Clear Lens**	**AM** [11] Amber, 595nm	**No Lens or Clear Lens**	**(Blank)** Blank for no rotation	**UNV** 120-277V
	24L-25 3,000 lm	**27K8** 2700K, 80 CRI	**FR** Type 1/Front Row		**347** 347V
	24L-65 7,000 lm	**3K7** 3000K, 70 CRI	**2** Type II	**L** [1] Optic rotation left	**480** 480V
	56L-75 10,000 lm	**3K8** 3000K, 80 CRI	**3** Type III	**R** [1] Optic rotation right	**Consult factory**
	56L-110 15,000 lm	**35K8** 3500K, 80 CRI	**4** Type IV		
	56L-140 17,000 lm	**3K9** 3000K, 90 CRI	**4W** Type IV Wide		
	HDL - High Diffusion Lens	**4K7** 4000K, 70 CRI	**5QM** [3] Type V Square Medium		
	28L-30 3,000 lm	**4K8** 4000K, 80 CRI	**5QN** [3] Type V Square Narrow		
	28L-70 7,000 lm	**5K7** 5000K, 70 CRI	**5R** [3] Type V Rectangular		
	68L-80 9,000 lm	Consult factory for other CCTs and CRIs	**5W** [3] Type V Wide (Round)		
	68L-115 13,000 lm		**HDL - High Diffusion Lens**		
	68L-150 15,000 lm		**3** Type III/Asymmetric		
			5W [3] Type V/Symmetric		

Mounting		Fixture Finish		Control Options		Options		Control Accessories	
FM33	Flush mt 3.0" OD pole, 3" fixture base	**BLS**	Black Gloss Smooth	**7PR-TL**	7 pin PCR with twist lock photocontrol	**BC** [4]	Back-light Control	**WIR-RME-L**	LightGRID+™ External Fixture Module
FM44	Flush mt 3.6" to 4.0" OD pole, 4" fixture base	**BLT**	Black Matte Textured	**7PR-SC**	7 pin PCR with shorting cap	**SF**	Single Fuse	**SCH-R**	Occ. Sensor for Round Pole (up to 30' MH)
PT23	3" Post Top mount for 2 3/8" OD x 4" Long Tenon Tenon	**DBS**	Dark Bronze Gloss Smooth	**7PR**	7 pin PCR, wireless control enabled	**DF**	Double Fuse	**SCH-S**	Occ. Sensor for Square Pole (up to 30' MH)
PT24	4" Post Top mount for 2 3/8" OD T x 4" Long Tenon	**DBT**	Dark Bronze Matte Textured	**AD-01** [2]	AstroDIM: 50% output at midnight	**CLR** [5,6,7,9]	Clear Lens		
PT34	4" Post Top mount for 2 7/8" OD x 4" Long Tenon Tenon	**GTT**	Graphite Matte Textured	**AD-02** [2]	AstroDIM: 50% output midnight to 4 AM	**TPL**	Tamper proof latch		
FMSA33	Solo Arm Post Top Flush Mount 3.0" OD Pole, 3" fixture base	**LGS**	Light Grey Gloss Smooth	**AD-03** [2]	AstroDIM: 50% output 10PM	**CP** [5,6,7]	Clear Polycarbonate Lens		
FMSA44	Solo Arm Post Top Flush Mount 3.6" to 4.0" OD Pole, 4" fixture base	**LGT**	Light Grey Matte Textured	**AD-04** [2]	AstroDIM: 50% output 10PM to 4AM	**WBFM3**	Wall Bracket Arm for FM33 or FMSA33		
PTSA23	3" Solo Arm Post Top Mount for 2-3/8" OD x 4" Long Tenon	**PSS**	Platinum Silver Gloss Smooth	**NXW** [7]	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor	**WBFM4**	Wall Bracket Arm for FM44 or FMSA44		
PTSA24	4" Solo Arm Post Top Mount for 2-3/8" OD x 4" Long Tenon	**VGT**	Verde Green Matte Textured	**WSP-40F-1** [3,8]	Dimming Occ. Sensor for up to 40' MH, 120/277/347V	**TAFM3** [12,13]	Twin Arm mount for FM33 or FMSA33		
PTSA34	4" Solo Arm Post Top Mount for 2-7/8" OD x 4" Long Tenon	**WHS**	White Gloss Smooth	**WSP-40F-2** [3,8]	Dimming Occ. Sensor for up to 40' MH, 208/240V	**TAFM4** [12,13]	Twin Arm mount for FM44 or FMSA44		
		WHT	White Matte Textured	**WSP-40F-3** [3,8]	Dimming Occ. Sensor for up to 40' MH, 480V				
		Color Option		**NXWS16F** [4,7,9]	NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming				
		CC [5]	Custom Color	**NXWS40F** [4,7,9]	NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming				

1 Turtle Friendly.
2 Not available with 24L-65 and the 56L-140 configuration of the LED Engine
3 Not available with BC option.
4 Not available with 5QM, 5QN and 5W distributions.
5 Consult factory for custom color, marine and corrosive finish options.
6 Not available with other sensor or wireless control options.
7 Not available with Solo Arm Post Top (FMSA/PTSA)
8 24L and 56L only
9 Not available with HDL option.
10 IK08 rated. Consult factory for details
11 IK10 rated. Consult factory for details
12 Pole requires 2-3/8" x 4" Long tenon
13 Order one for each pair of fixtures per pole.

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REVISIONS

NO.	DESCRIPTION	DATE
1	ROUNDABOUT LIGHTING UPGRADE	03/24/2026

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR DESIGNATED PURPOSES AND BY WRITTEN AUTHORIZATION.

PREPARED FOR:
WATERBURY SITE DEVELOPMENT
STAPLETON ROAD AND EASTONVILLE ROAD
FALCON

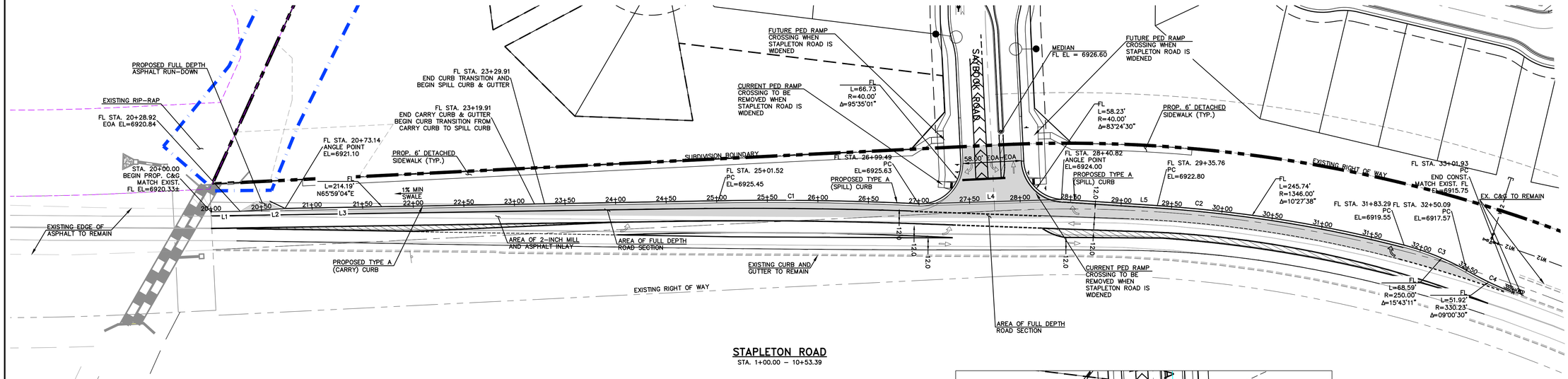
CUT SHEETS

Terra Nova Engineering, Inc.
Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnsinc.com

COLORADO LICENSED
MITCHELL P. PLANT
31074
10/4/2024
PROFESSIONAL ENGINEER

PLANT
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320 WEST FILLMORE STREET COLORADO SPRINGS CO 80907
719 473 7077
www.planteci.com

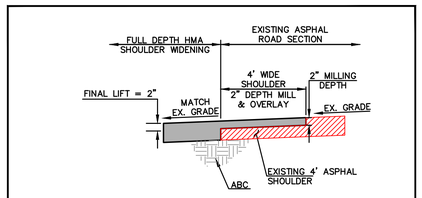
DESIGNED BY CAO
DRAWN BY PJN/CAO
CHECKED BY MPP
H-SCALE AS NOTED
V-SCALE AS NOTED
JOB NO. 24086
DATE ISSUED 10/04/24
SHEET NO. 27 OF 58



STAPLETON ROAD
STA. 1+00.00 – 10+53.39

FLOWLINE LINE TABLE		
LINE	LENGTH (LF)	BEARING
L1	28.92	N65°59'04"E
L2	44.22	N63°23'32"E
L3	214.19	N65°59'04"E
L4	141.33	N65°14'44"E
L5	94.94	N70°45'02"E

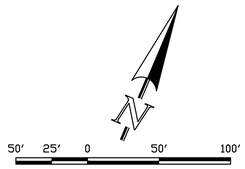
FLOWLINE CURVE TABLE			
CURVE	LENGTH (LF)	RADIUS (LF)	Δ
C1	197.97	3018	03°45'30"
C2	245.74	1346	10°27'38"
C3	68.59	250	15°43'11"
C4	51.92	330.23	09°00'30"



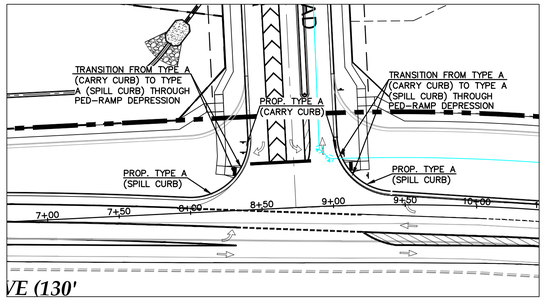
* ADDITIONAL LIFTS MAY BE REQUIRED FOR LEVELING COURSES OF 4" OR MORE. EACH LIFT SHALL BE A MAXIMUM OF 3".

EXISTING 4' SHOULDER MILL & OVERLAY SECTION

DESIGN SPEED IS 50 M.P.H.



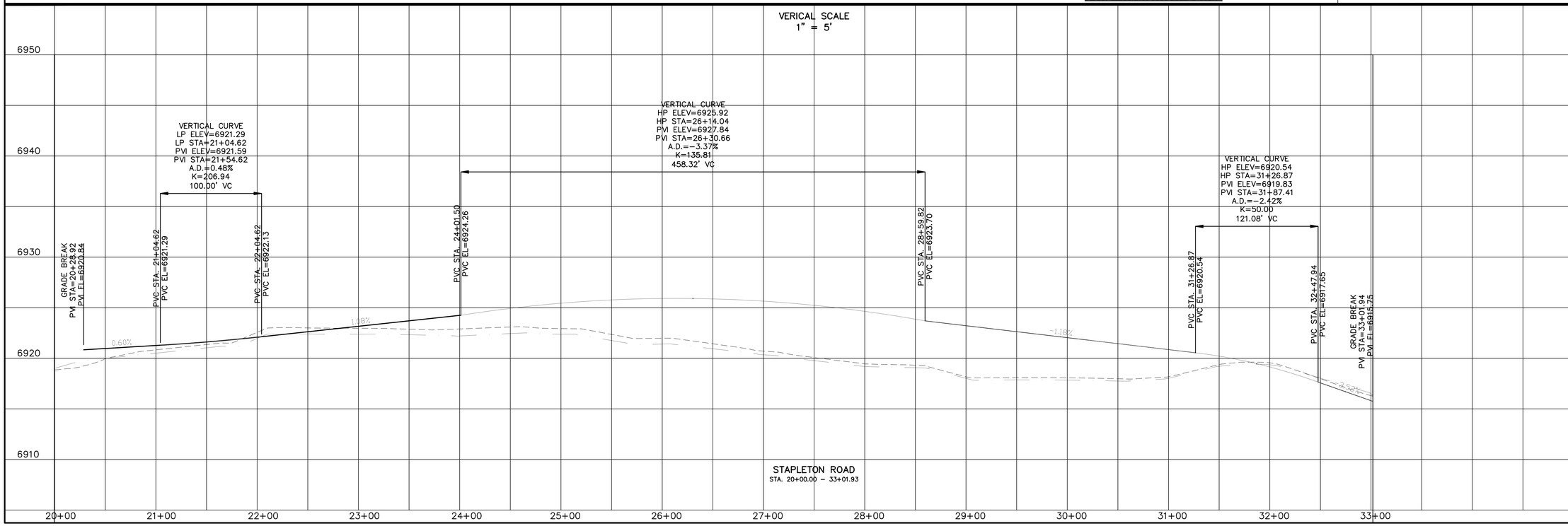
SCALE: 1" = 50'



STAPLETON ROAD/SAYBOOK ROAD CURB TRANSITION DETAIL

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170



STAPLETON ROAD
STA. 20+00.00 – 33+01.93

REVISIONS

NO.	DESCRIPTION	DATE

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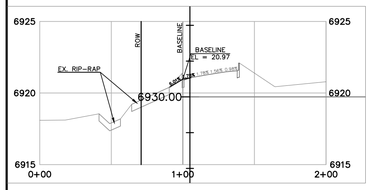
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc. Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
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FAX: 719-635-6426
www.tnsinc.com

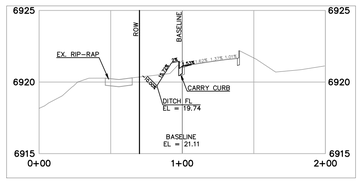
WATERBURY FILING NO. 1

CONSTRUCTION SET
STREET PLAN AND PROFILE
STAPLETON ROAD

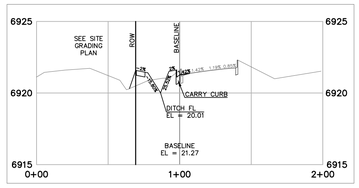
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DRAWN BY	QNA
CHECKED BY	JS
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V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	28 OF58



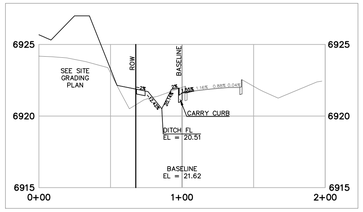
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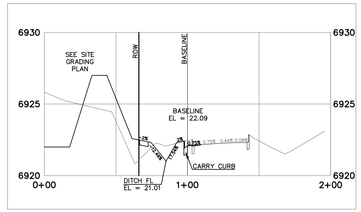
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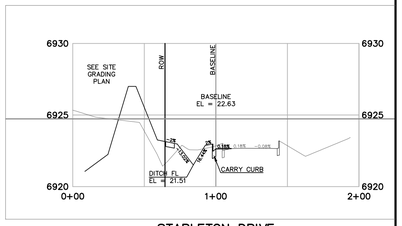
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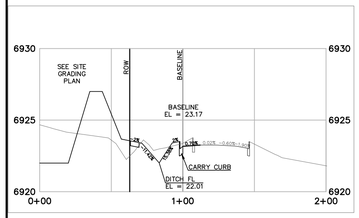
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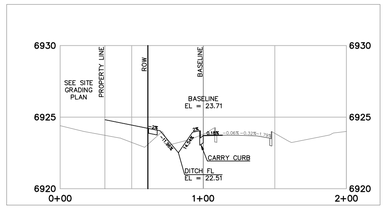
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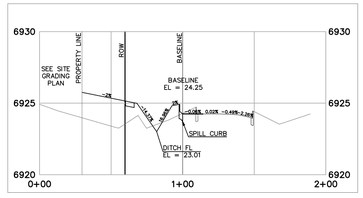
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VERICAL SCALE: 1"=5'



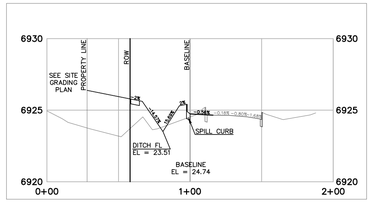
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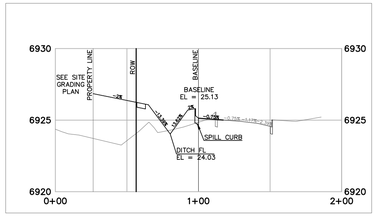
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VERICAL SCALE: 1"=5'



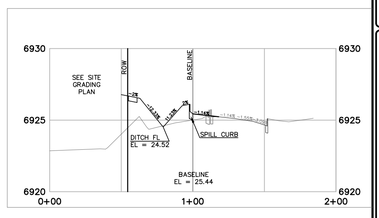
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VERICAL SCALE: 1"=5'



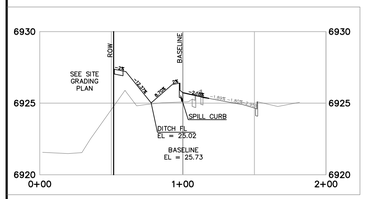
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SECTION 5+50.00
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VERICAL SCALE: 1"=5'



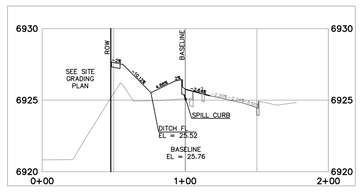
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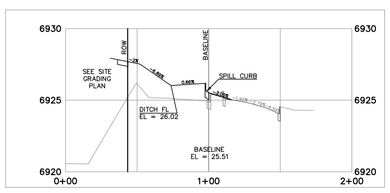
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VERICAL SCALE: 1"=5'



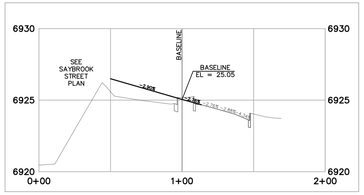
STAPLETON DRIVE
SECTION 7+00.00
HORIZONTAL SCALE: 1" = 50'
VERICAL SCALE: 1"=5'



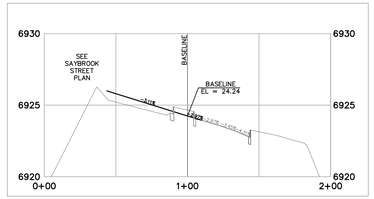
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SECTION 7+50.00
HORIZONTAL SCALE: 1" = 50'
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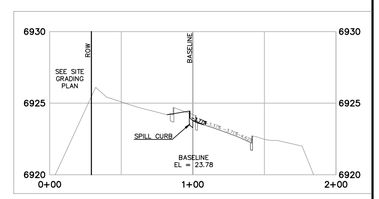
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VERICAL SCALE: 1"=5'



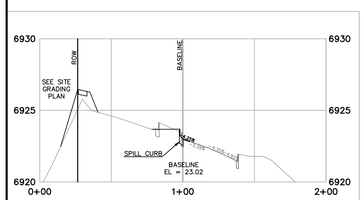
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VERICAL SCALE: 1"=5'



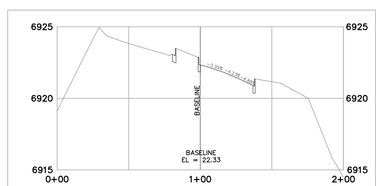
STAPLETON DRIVE
SECTION 9+06.19
HORIZONTAL SCALE: 1" = 50'
VERICAL SCALE: 1"=5'



STAPLETON DRIVE
SECTION 9+41.64
HORIZONTAL SCALE: 1" = 50'
VERICAL SCALE: 1"=5'



STAPLETON DRIVE
SECTION 10+00.00
HORIZONTAL SCALE: 1" = 50'
VERICAL SCALE: 1"=5'



STAPLETON DRIVE
SECTION 10+53.39
HORIZONTAL SCALE: 1" = 50'
VERICAL SCALE: 1"=5'

REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR:
ACM ALF VIII JV SUB II LLC
ATTN: JASON POCK
8350 E CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc.
Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnesinc.com

WATERBURY FILING NO. 1

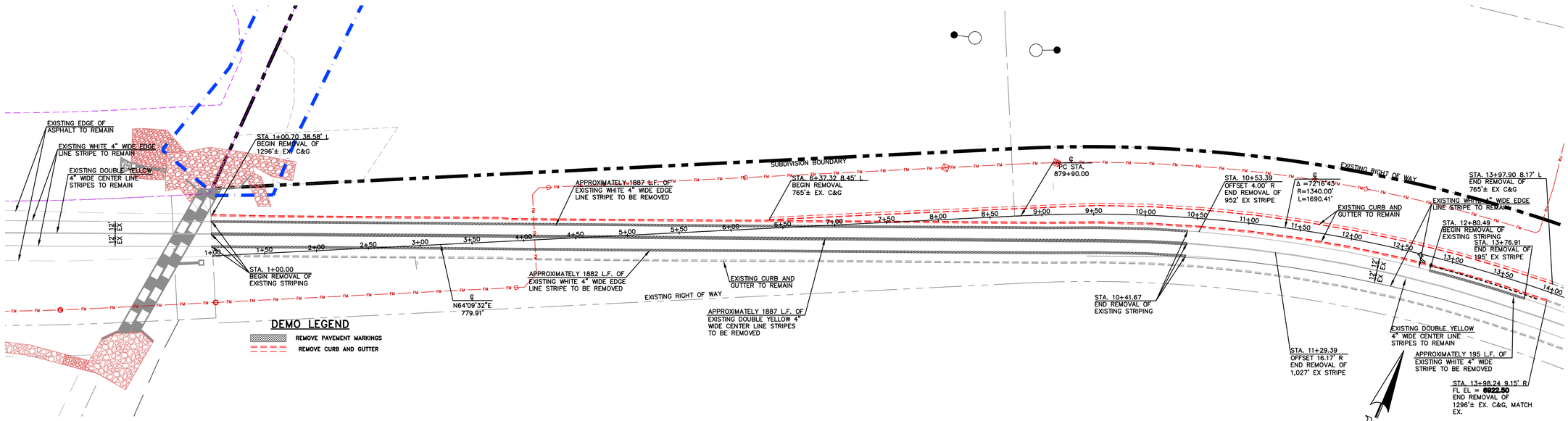
CONSTRUCTION SET
STAPLETON DRIVE
CROSS SECTIONS

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

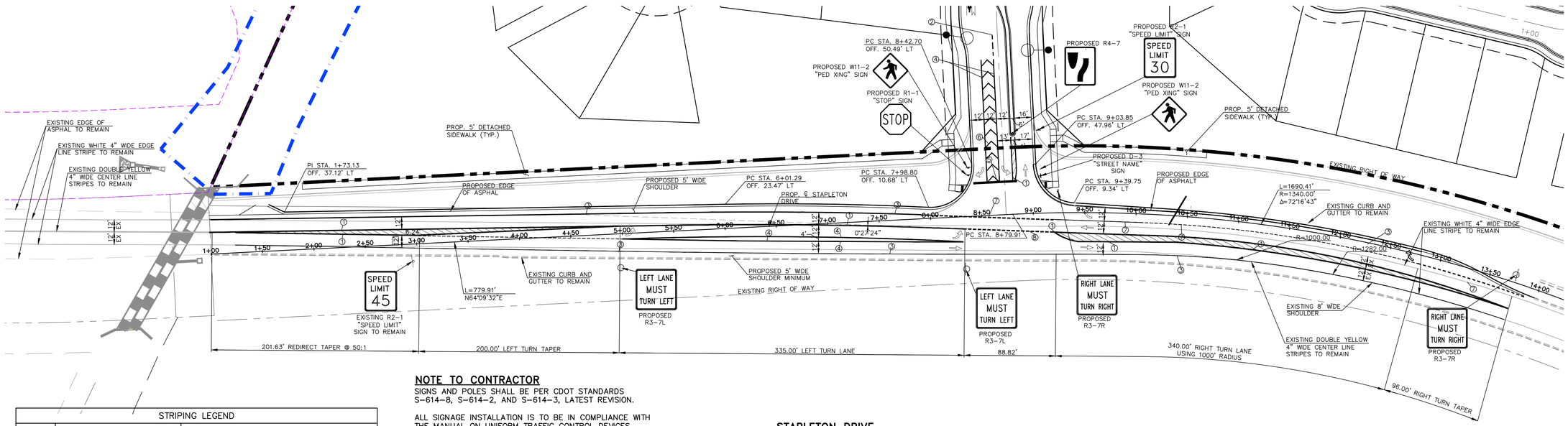
QUENTIN ARMIJO
COLORADO P.E. NO. 37170

COLORADO LICENSED
QUENTIN N ARMIJO
37170
04/17/26
PROFESSIONAL ENGINEER

DESIGNED BY	DLF
DRAWN BY	QNA
CHECKED BY	QNA
H-SCALE	N/A
V-SCALE	N/A
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	29 OF 58



STAPLETON DRIVE
C&G AND STRIPING REMOVAL PLAN



STRIPING LEGEND		
STRIPE ○	PAVEMENT MARKINGS	MARKING DESCRIPTION
1	CENTER LINES (EPOXY)	DOUBLE SOLID YELLOW, 4" WIDE–SPACED 3" APART
2	LANE LINES (EPOXY)	BROKEN WHITE, 4" WIDE–10' SEGMENTS WITH 30' GAPS
3	EDGE LINES (EPOXY)	SOLID WHITE, 4" WIDE
4	CHANNELIZING LINES (EPOXY)	SOLID WHITE, 8" WIDE
5	STOP LINES (THERMO PLASTIC)	SOLID WHITE, 24" WIDE
6	CHEVRON LINES (THERMO PLASTIC)	SOLID WHITE, 8" WIDE, 8' C–C, 45° ANGLE
7	SKIP CHANNELIZING LINES (EPOXY)	SOLID WHITE, 4" WIDE, 2'–4' SKIP
8	CENTER LINES (EPOXY)	DOUBLE BROKEN YELLOW, 4" WIDE–SPACED 3" APART

*NOTE: ALL STRIPING INSTALLATION SHALL BE PER COLORADO DEPARMENT OF TRANSPORATION "M&S STANDARDS" STANDARD PLAN NO. S-627-1

NOTE TO CONTRACTOR

SIGNS AND POLES SHALL BE PER CDOT STANDARDS S-614-8, S-614-2, AND S-614-3, LATEST REVISION.

ALL SIGNAGE INSTALLATION IS TO BE IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL 4", 8" SOLID OR SKIP PAVEMENT MARKING ARE TO BE EPOXY.

STOP BARS ARE TO BE 90 MIL PREFORMED THERMOPLASTIC PAVEMENT MARKING TYPE B. (INLAYED)

STAPLETON DRIVE
SIGNAGE AND STRIPING PLAN

DESIGN SPEED IS 50 M.P.H.

50' 25' 0 50' 100'

SCALE: 1" = 50'

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE

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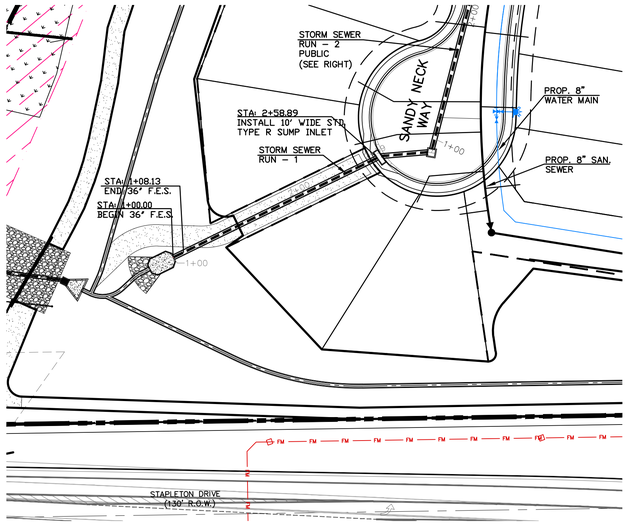
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
ATTN: JASON POCK
8350 E CRESCENT PKWY, #200,
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc. Surveying
Creative Civil Engineering
721 S 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnesinc.com

WATERBURY FILING NO. 1

SIGNING & STRIPING
C&G AND STRIPING REMOVAL
STAPLETON DRIVE

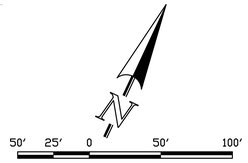
DESIGNED BY	DLF
DRAWN BY	QNA
CHECKED BY	QNA
H-SCALE	AS SHOWN
V-SCALE	N/A
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	30 OF 58



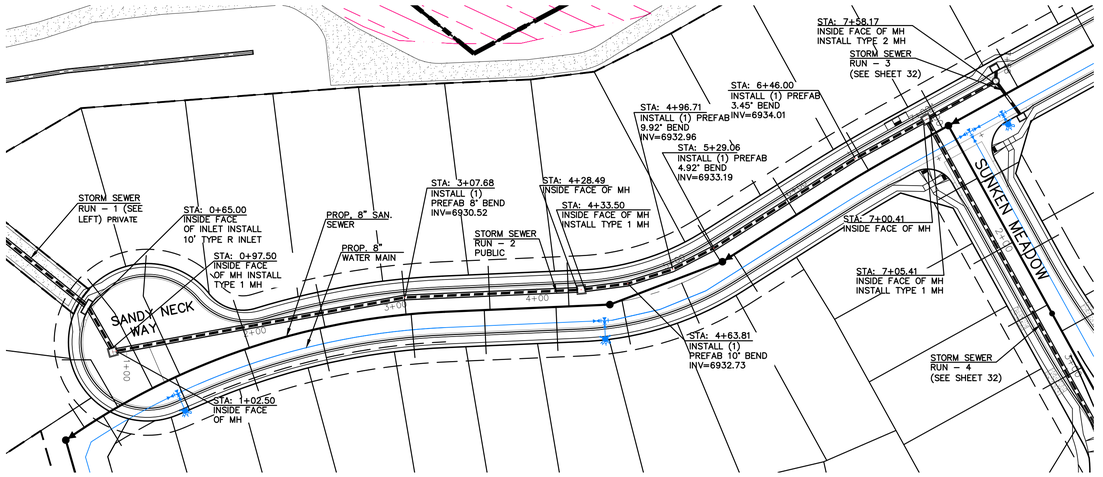
STORM SEWER RUN–1 (PIPE RUN 7) PHASE 1

PROPOSED PRIVATE RCP STORM SEWER

1" = 50' HORIZ. 1" = 5' VERT.



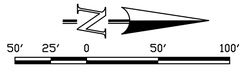
SCALE: 1" = 50'



STORM SEWER RUN–2 (PIPE RUN 5–6) PHASE 1

PROPOSED PUBLIC RCP STORM SEWER

1" = 50' HORIZ. 1" = 5' VERT.

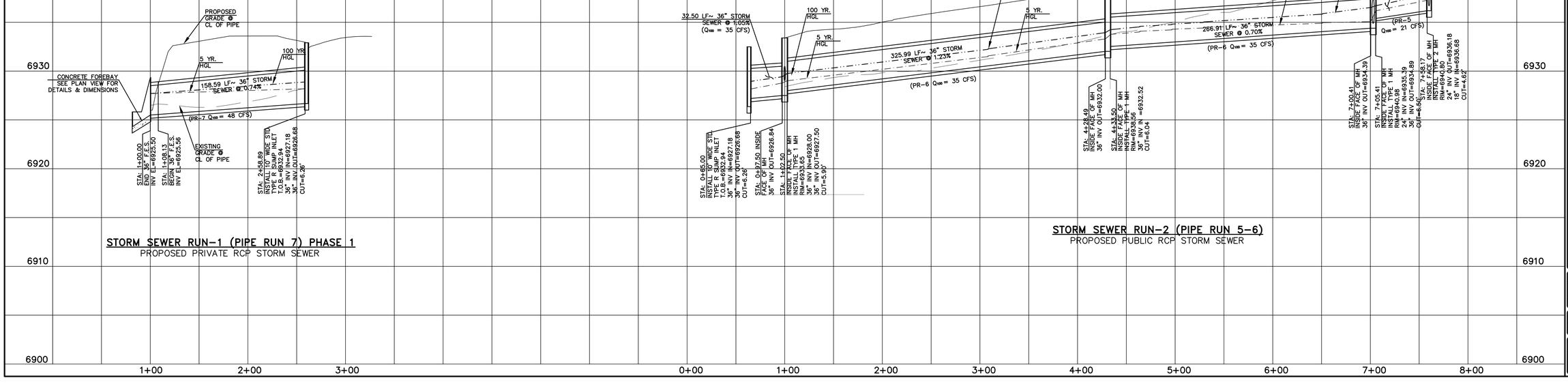


SCALE: 1" = 50'

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

COLORADO LICENSED
QUENTIN N ARMIJO
37170
04/17/26
PROFESSIONAL ENGINEER

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170



STORM SEWER RUN–1 (PIPE RUN 7) PHASE 1

PROPOSED PRIVATE RCP STORM SEWER

STORM SEWER RUN–2 (PIPE RUN 5–6)

PROPOSED PUBLIC RCP STORM SEWER

REVISIONS

NO.	DESCRIPTION	DATE

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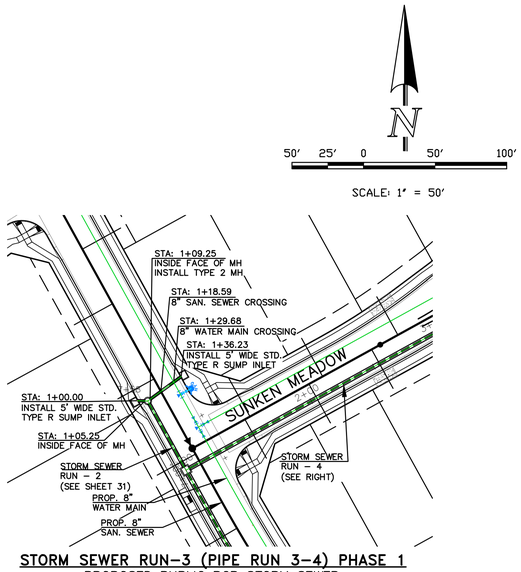
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
303-984-9800

Terra Nova
Engineering, Inc.
Creative Civil Engineering Solutions
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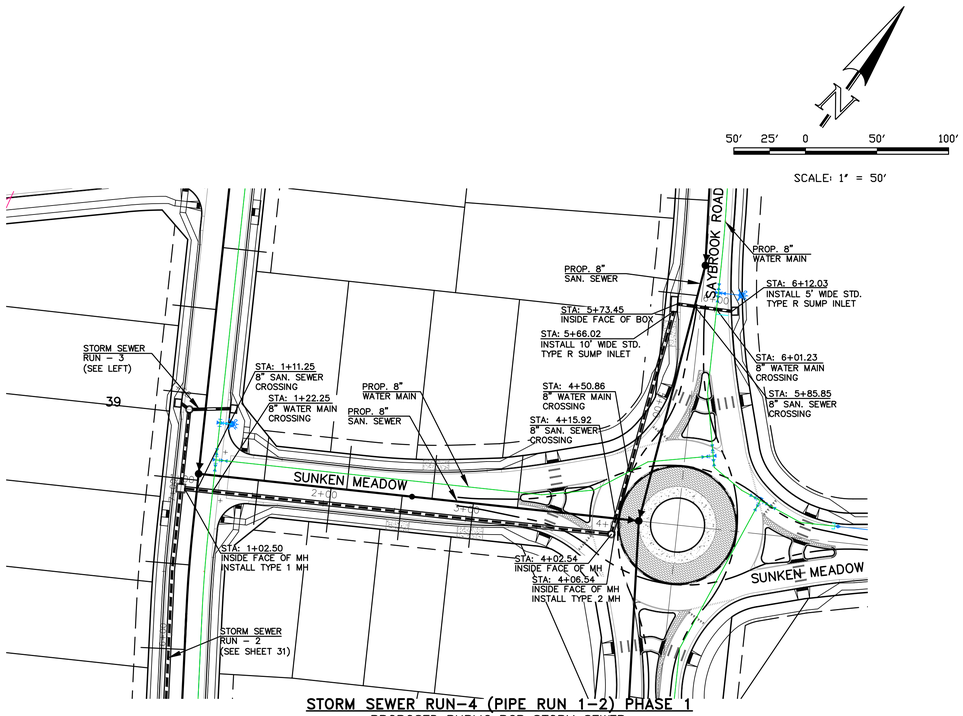
WATERBURY FILING NO. 1

CONSTRUCTION SET
STORM SEWER PLAN AND PROFILE
STORM RUNS 1 & 2

DESIGNED BY	QNA
DRAWN BY	QNA
CHECKED BY	JS
H-SCALE	1"=50'
V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	31 OF58



STORM SEWER RUN-3 (PIPE RUN 3-4) PHASE 1
PROPOSED PUBLIC RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.



STORM SEWER RUN-4 (PIPE RUN 1-2) PHASE 1
PROPOSED PUBLIC RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170

REVISIONS

NO.	DESCRIPTION	DATE

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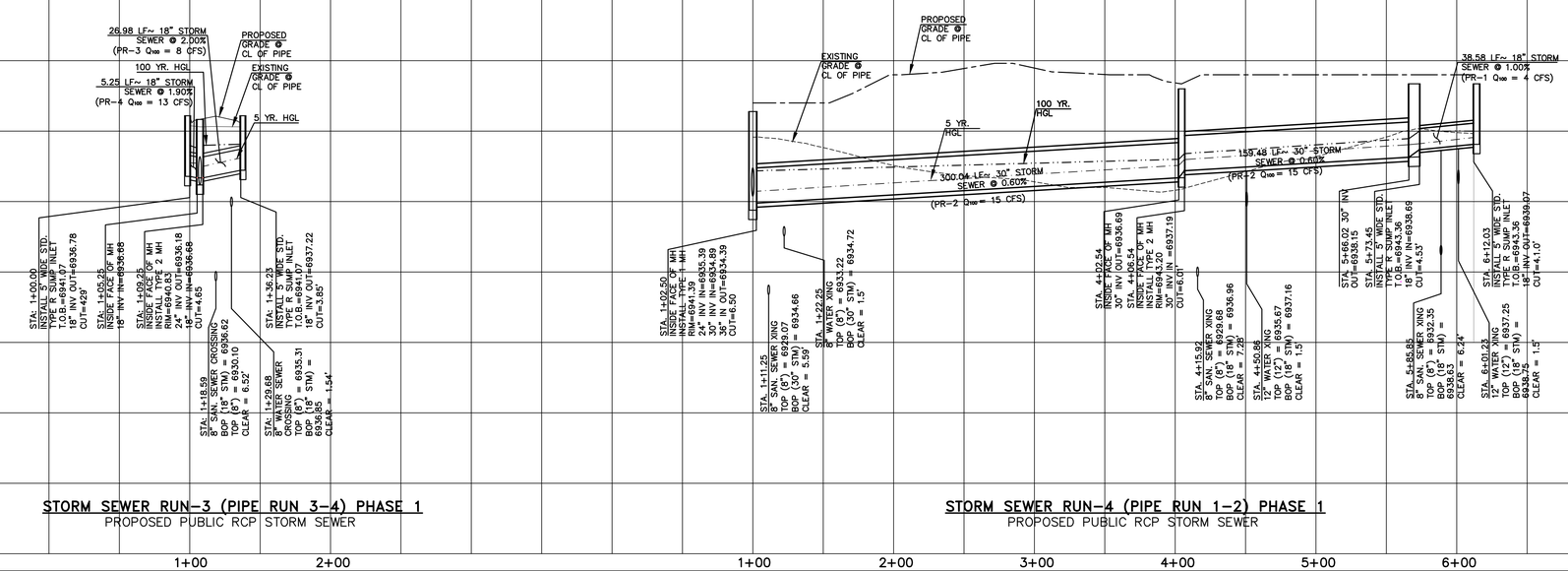
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc.
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WATERBURY FILING NO. 1

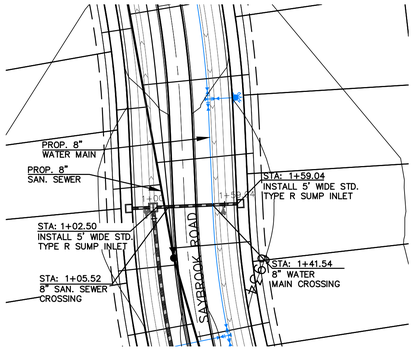
CONSTRUCTION SET
STORM SEWER PLAN AND PROFILE
STORM RUNS 3 & 4

DESIGNED BY	QNA
DRAWN BY	QNA
CHECKED BY	JS
H-SCALE	1"=50'
V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	32 OF58



STORM SEWER RUN-3 (PIPE RUN 3-4) PHASE 1
PROPOSED PUBLIC RCP STORM SEWER

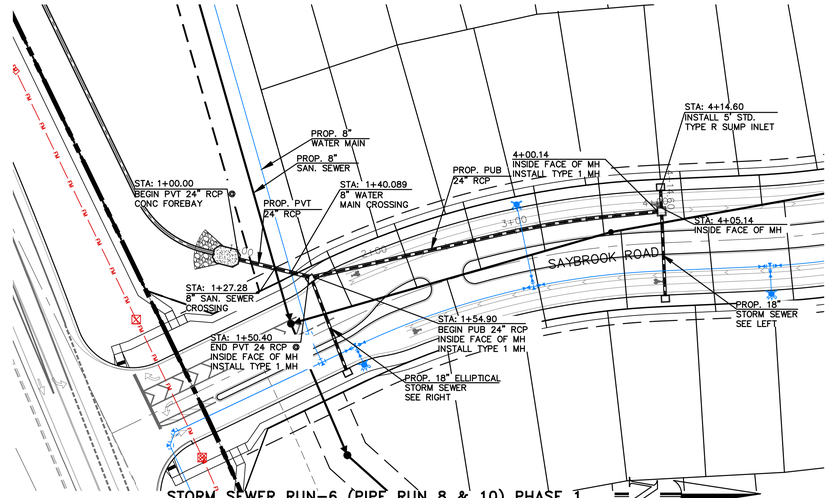
STORM SEWER RUN-4 (PIPE RUN 1-2) PHASE 1
PROPOSED PUBLIC RCP STORM SEWER



STORM SEWER RUN-5 (PIPE RUN 9) PHASE 1

PROPOSED PUBLIC RCP STORM SEWER

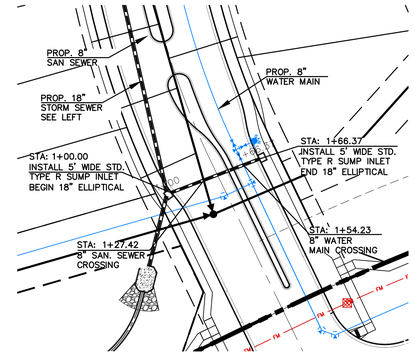
1" = 50' HORIZ. 1" = 5' VERT.



STORM SEWER RUN-6 (PIPE RUN 8 & 10) PHASE 1

PROPOSED PRIVATE/PUBLIC RCP STORM SEWER

1" = 50' HORIZ. 1" = 5' VERT.



STORM SEWER LATERAL-11 (PIPE RUN 10A) PHASE 1

PROPOSED PUBLIC 18" ELLIPTICAL RCP STORM SEWER

1" = 50' HORIZ. 1" = 5' VERT.

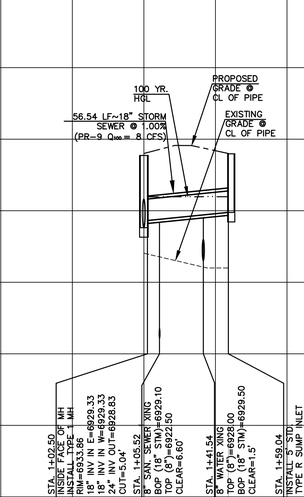
50' 25' 0 50' 100'

SCALE: 1" = 50'

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

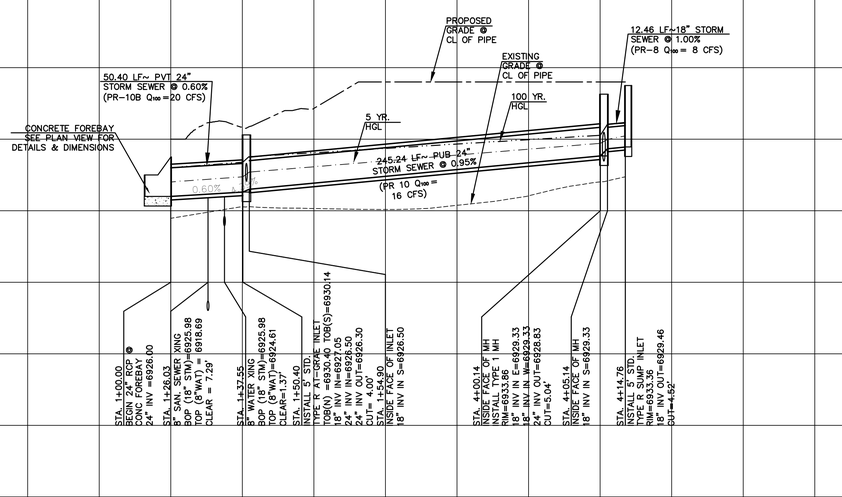
QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170

COLORADO LICENSED QUENTIN N ARMIJO 37170 4/17/26 PROFESSIONAL ENGINEER



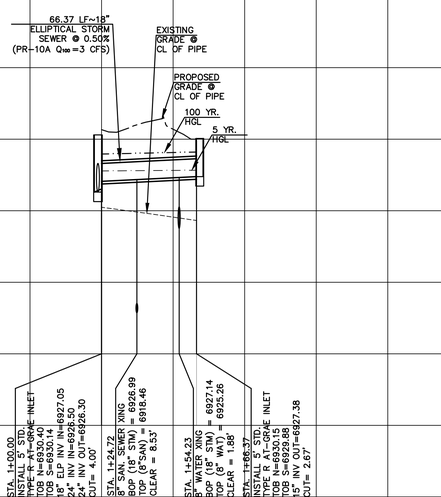
STORM SEWER RUN-5 (PIPE RUN 9) PHASE 1

PROPOSED PUBLIC RCP STORM SEWER



STORM SEWER RUN-6 (PIPE RUN 8 & 10) PHASE 1

PROPOSED PRIVATE/PUBLIC RCP STORM SEWER



STORM SEWER LATERAL-11 (PIPE RUN 10A) PHASE 1

PROPOSED PUBLIC RCP STORM SEWER

6950 6940 6930 6920 6910

1+00 2+00 1+00 2+00 3+00 4+00 5+00 6+00 1+00 2+00

50' 25' 0 50' 100'

SCALE: 1" = 50'

REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING AND SURVEYING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNED AND WRITTEN AUTHORIZATION.

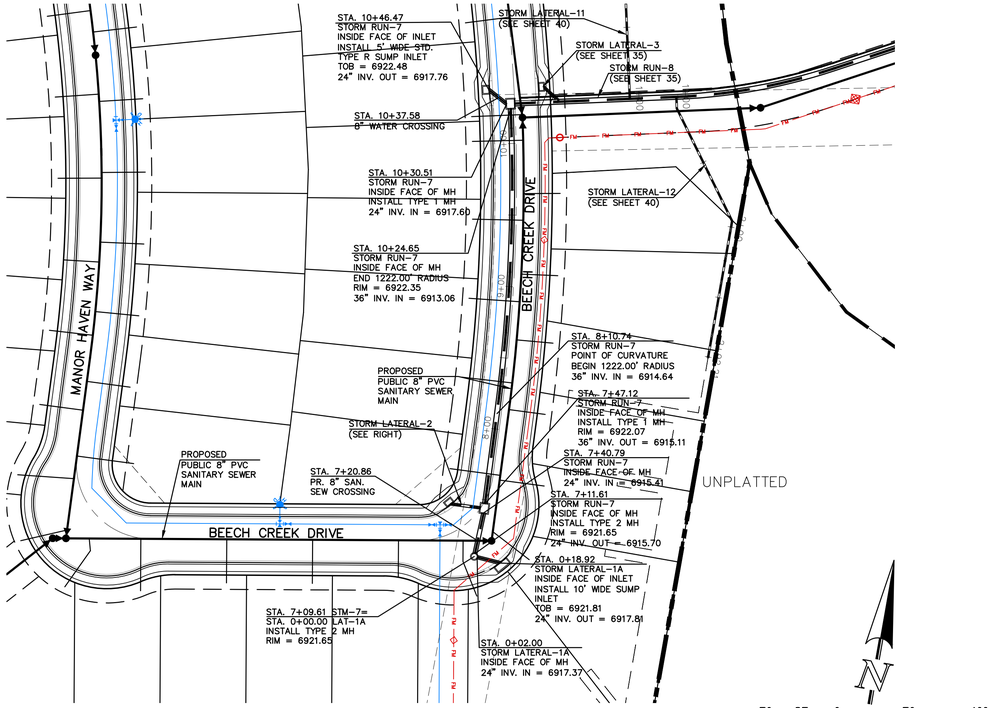
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
2350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc. Surveying
"Creative Civil Engineering Solutions"
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnesinc.com

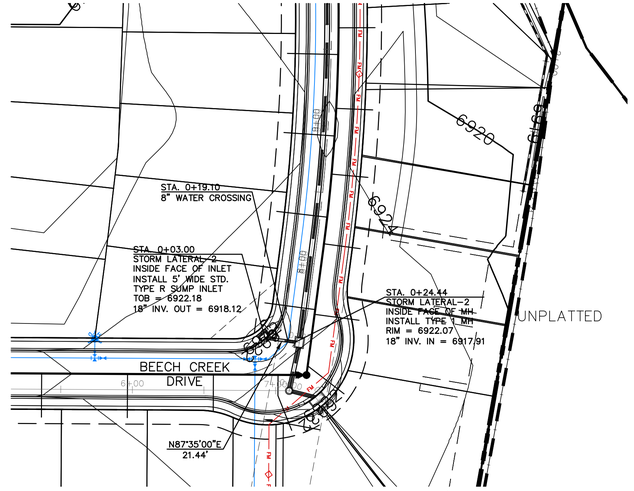
WATERBURY FILING NO. 1

CONSTRUCTION SET
STORM SEWER PLAN AND PROFILE
STORM RUNS 5, 8 & 10

DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY JS
H-SCALE 1"=50'
V-SCALE 1"=5'
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 33 OF 58



STORM SEWER RUN-7 & LATERAL-1 (PIPE RUN 11, 13 & 14) PHASE 1
PROPOSED PUBLIC RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.



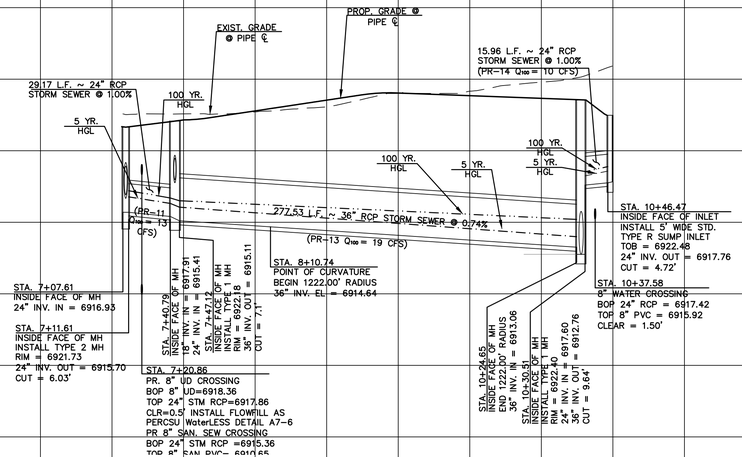
STORM SEWER LATERAL-2 (PIPE RUN 12) PHASE 1
PROPOSED PUBLIC RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

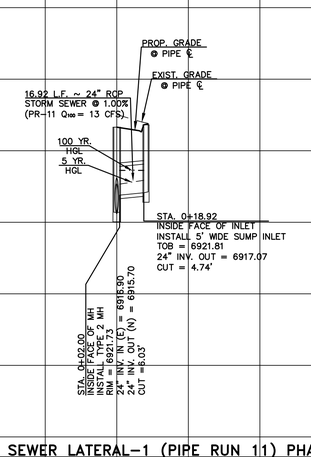
QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170

COLORADO LICENSED
QUENTIN N ARMIJO
37170
04/17/26
PROFESSIONAL ENGINEER

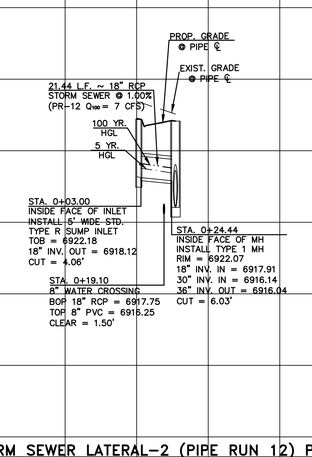
*USE WATERTIGHT JOINTS FOR PR-11 & PR 13



STORM SEWER RUN-7 LATERAL-1 (PIPE RUN 11, 13 & 14) PHASE 1
PROPOSED PUBLIC RCP STORM SEWER



STORM SEWER LATERAL-1 (PIPE RUN 11) PHASE 1
PROPOSED PUBLIC RCP STORM SEWER



STORM SEWER LATERAL-2 (PIPE RUN 12) PHASE 1
PROPOSED PUBLIC RCP STORM SEWER

REVISIONS

NO.	DESCRIPTION	DATE

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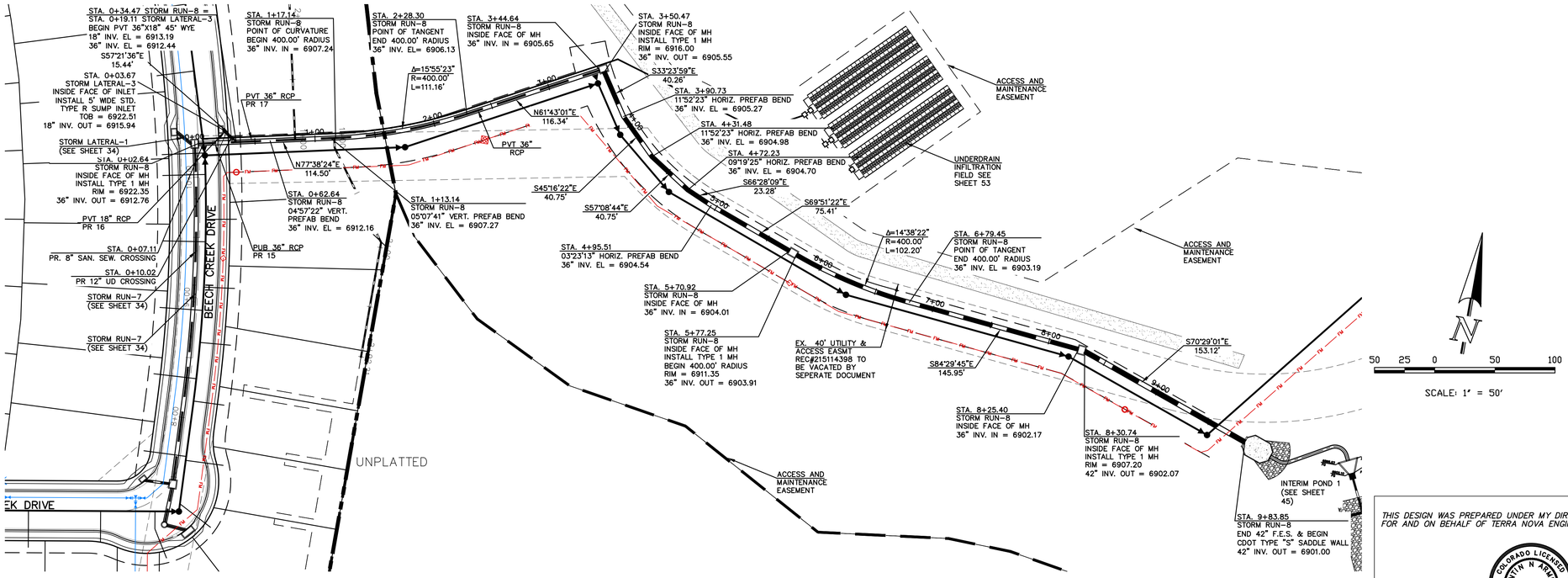
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
303-934-9800

Terra Nova Engineering, Inc. Surveying, Inc.
Creative Civil Engineering
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnsinc.com

WATERBURY FILING NO. 1

CONSTRUCTION SET
STORM SEWER PLAN AND PROFILE
STORM RUN-7 & LATERALS 1-2

DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY JS
H-SCALE 1"=50'
V-SCALE 1"=5'
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 34 OF58



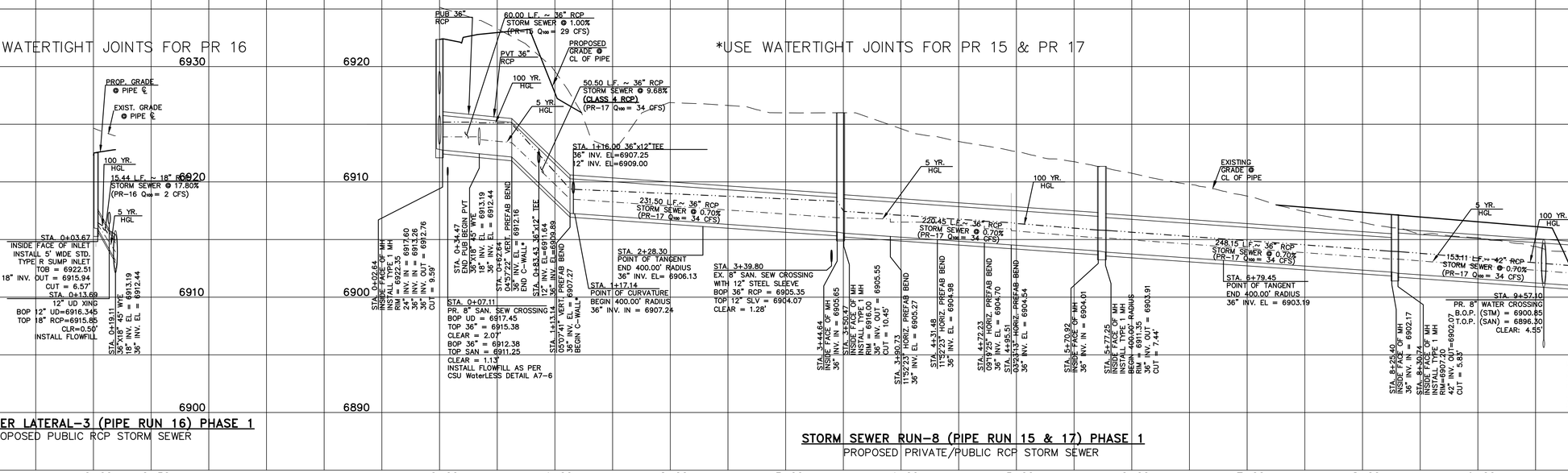
STORM SEWER LATERAL-3 & RUN-8 (PIPE RUN 15, 16 & 17) PHASE 1
PROPOSED PRIVATE/PUBLIC RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

*C-WALL RCP ADDS AN ADDITIONAL ¾ INCH TO THE WALL THICKNESS. CONTACT MANUFACTURER FOR INFORMATION.

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170

COLORADO LICENSED
QUENTIN N ARMIJO
37170
04/17/26
PROFESSIONAL ENGINEER



STORM SEWER LATERAL-3 (PIPE RUN 16) PHASE 1
PROPOSED PUBLIC RCP STORM SEWER

STORM SEWER RUN-8 (PIPE RUN 15 & 17) PHASE 1
PROPOSED PRIVATE/PUBLIC RCP STORM SEWER

REVISIONS		
NO.	DESCRIPTION	DATE

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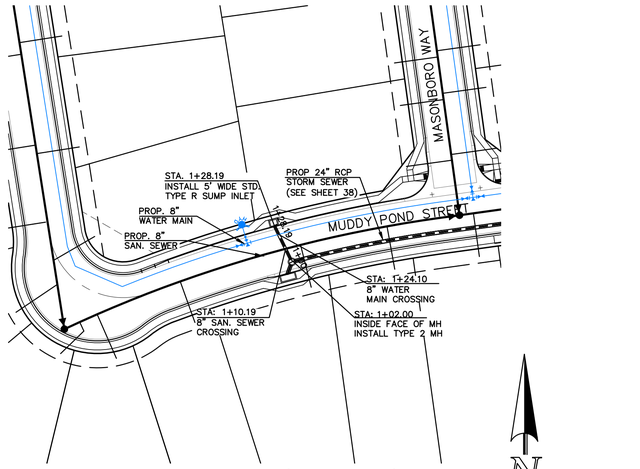
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc.
Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnsinc.com

WATERBURY FILING NO. 1

CONSTRUCTION SET
STORM SEWER PLAN AND PROFILE
LATERAL 3 & STORM RUN-8

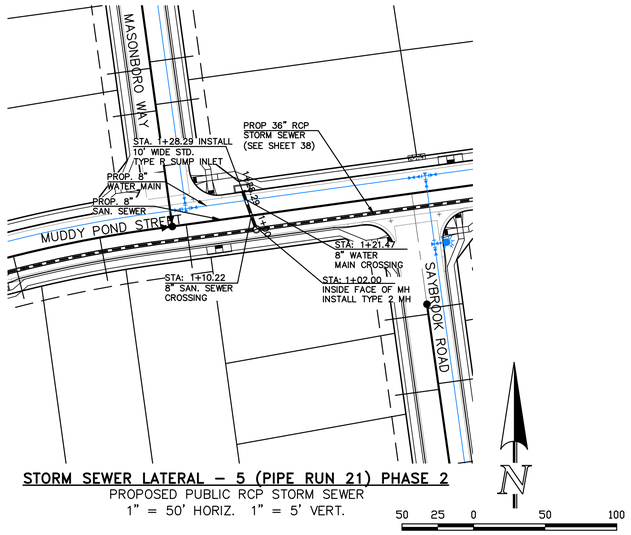
DESIGNED BY	QNA
DRAWN BY	QNA
CHECKED BY	JS
H-SCALE	1"=50'
V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	35 OF58



STORM SEWER LATERAL – 4 (PIPE RUN 19) PHASE 2
PROPOSED PUBLIC RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

50 25 0 50 100

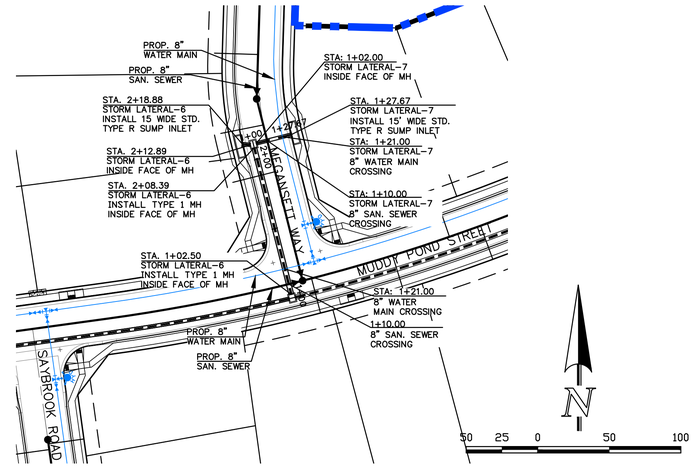
SCALE: 1" = 50'



STORM SEWER LATERAL – 5 (PIPE RUN 21) PHASE 2
PROPOSED PUBLIC RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

50 25 0 50 100

SCALE: 1" = 50'



STORM SEWER LATERAL–6 & 7 (PIPE RUN 23, 24 & 25) PHASE 2
PROPOSED PUBLIC RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

50 25 0 50 100

SCALE: 1" = 50'

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN N. ARMIJO
COLORADO LICENSED
37170
04/17/26
PROFESSIONAL ENGINEER

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170

REVISIONS

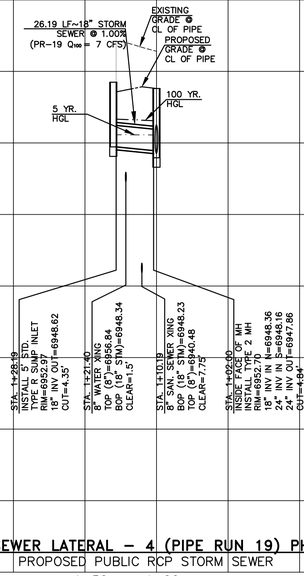
NO.	DESCRIPTION	DATE

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PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
303-984-9800

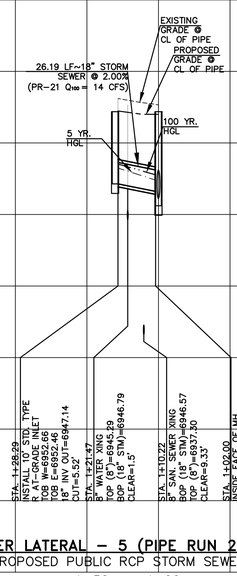
Terra Nova Engineering, Inc.
Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnesinc.com

*USE WATERTIGHT JOINTS FOR PR 19



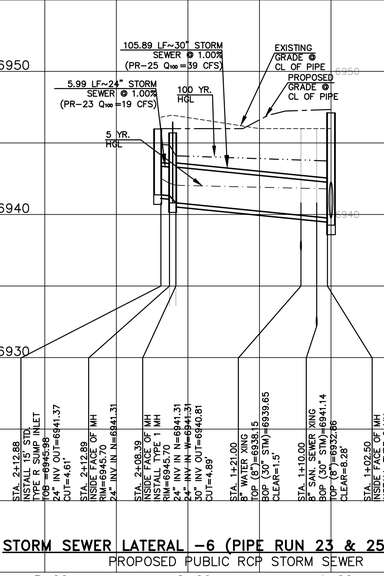
STORM SEWER LATERAL – 4 (PIPE RUN 19) PHASE 2
PROPOSED PUBLIC RCP STORM SEWER
1+50 1+00

*USE WATERTIGHT JOINTS FOR PR 21



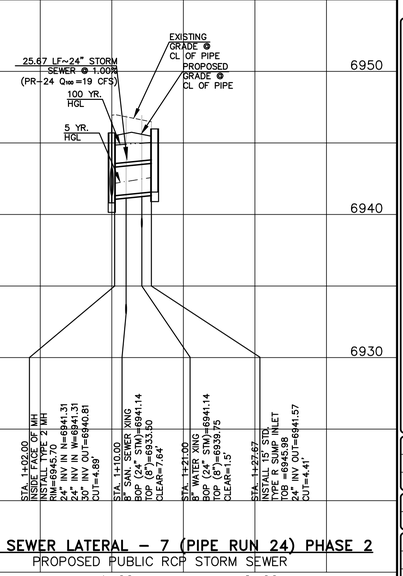
STORM SEWER LATERAL – 5 (PIPE RUN 21) PHASE 2
PROPOSED PUBLIC RCP STORM SEWER
1+50 1+00

*USE WATERTIGHT JOINTS FOR PR 23 & PR 25



STORM SEWER LATERAL –6 (PIPE RUN 23 & 25) PHASE 2
PROPOSED PUBLIC RCP STORM SEWER
3+00 2+00 1+00

*USE WATERTIGHT JOINTS FOR PR 24

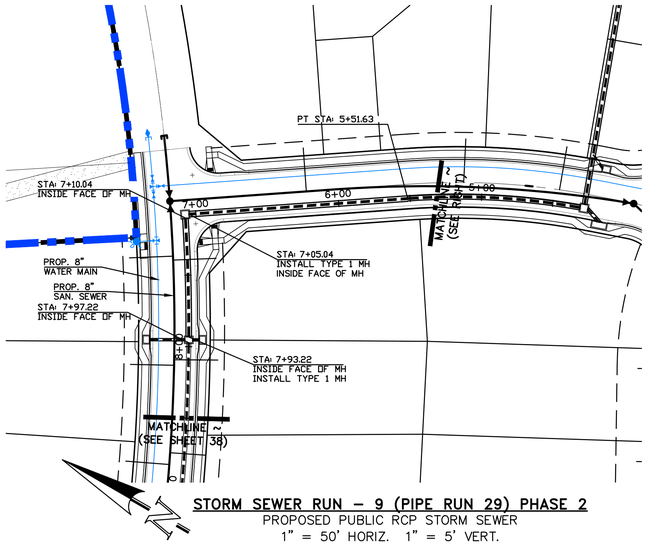


STORM SEWER LATERAL – 7 (PIPE RUN 24) PHASE 2
PROPOSED PUBLIC RCP STORM SEWER
1+00 2+00

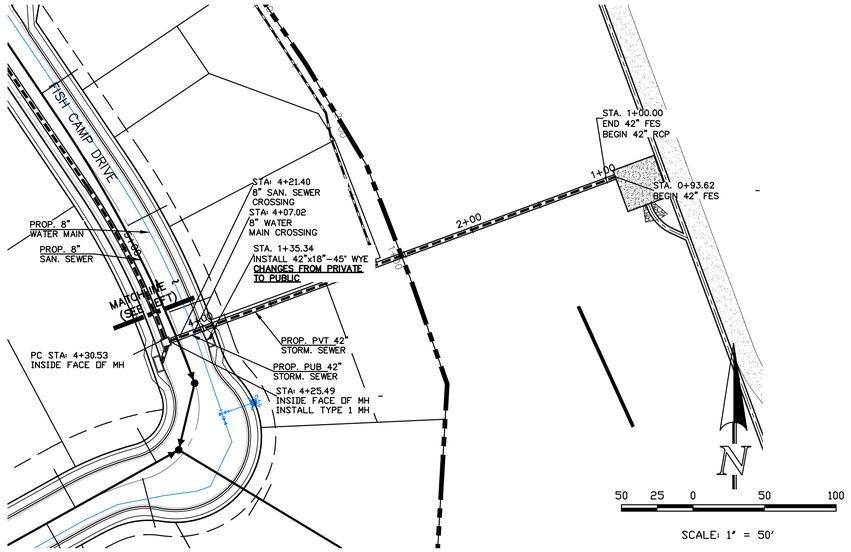
WATERBURY FILING NO. 1

CONSTRUCTION SET
STORM SEWER PLAN AND PROFILE
LATERALS 4-6

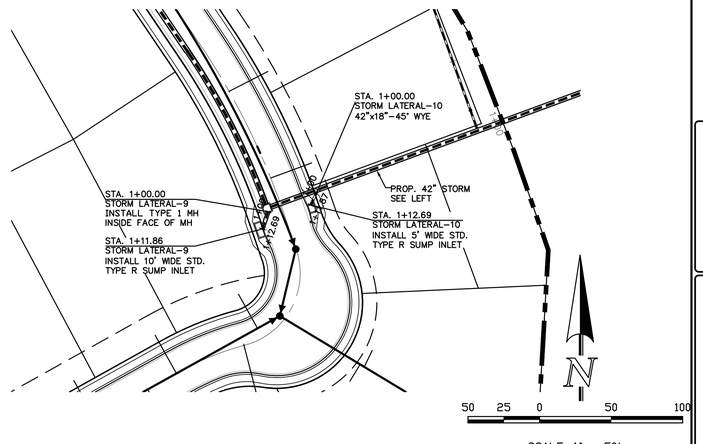
DESIGNED BY	QNA
DRAWN BY	QNA
CHECKED BY	JS
H-SCALE	1"=50'
V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	36 OF58



STORM SEWER RUN – 9 (PIPE RUN 29) PHASE 2
PROPOSED PUBLIC RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.



STORM SEWER RUN – 9 (PIPE RUN 31 & 33) PHASE 2
PROPOSED PUBLIC/PRIVATE RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

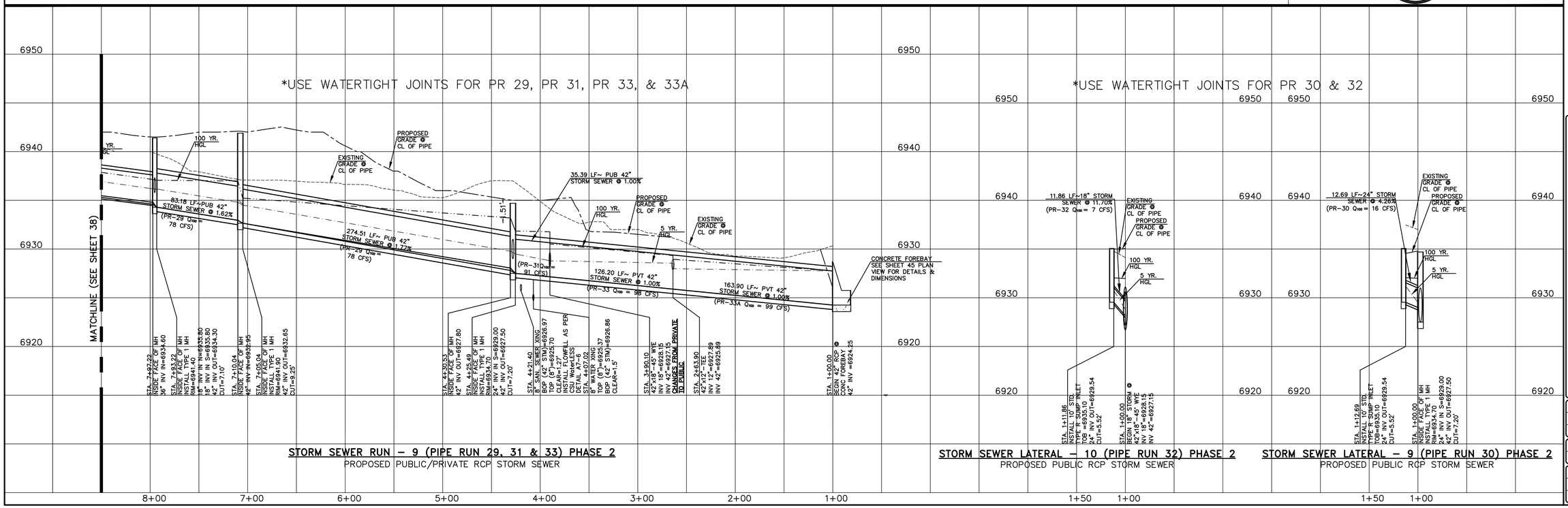


STORM SEWER LATERAL – 9 & 10 (PIPE RUN 30 & 32) PHASE 2
PROPOSED PUBLIC RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170

COLORADO LICENSED
QUENTIN N ARMIJO
37170
04/17/26
PROFESSIONAL ENGINEER



STORM SEWER RUN – 9 (PIPE RUN 29, 31 & 33) PHASE 2
PROPOSED PUBLIC/PRIVATE RCP STORM SEWER

STORM SEWER LATERAL – 10 (PIPE RUN 32) PHASE 2
PROPOSED PUBLIC RCP STORM SEWER

STORM SEWER LATERAL – 9 (PIPE RUN 30) PHASE 2
PROPOSED PUBLIC RCP STORM SEWER

REVISIONS

NO.	DESCRIPTION	DATE

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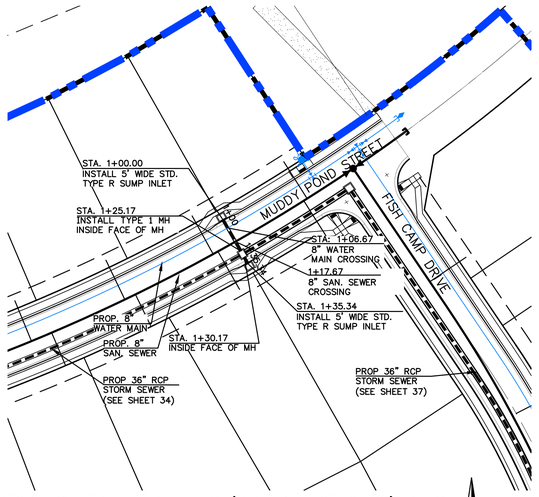
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc. Surveying
Civil Engineering
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnsinc.com

WATERBURY FILING NO. 1

CONSTRUCTION SET
STORM SEWER PLAN AND PROFILE
RUNS 9 & 10 AND LATERAL 9 & 10

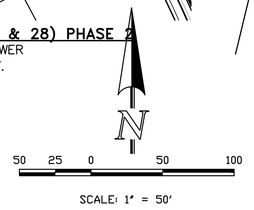
DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY JS
H-SCALE 1"=50'
V-SCALE 1"=5'
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 37 OF58

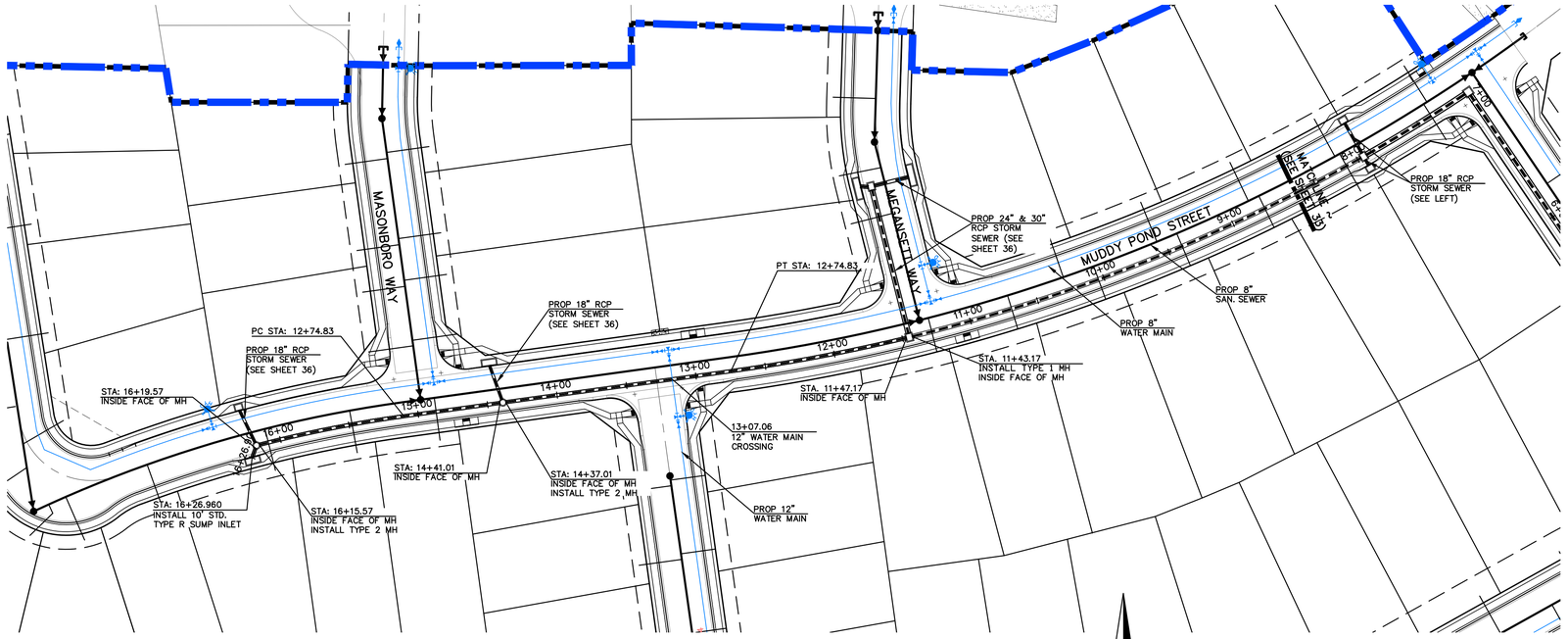


STORM SEWER LATERAL – 8 (PIPE RUN 27 & 28) PHASE 2

PROPOSED PUBLIC RCP STORM SEWER

1" = 50' HORIZ. 1" = 5' VERT.

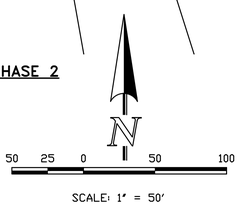




STORM SEWER RUN – 9 (PIPE RUN 20, 22 & 26) PHASE 2

PROPOSED PUBLIC RCP STORM SEWER

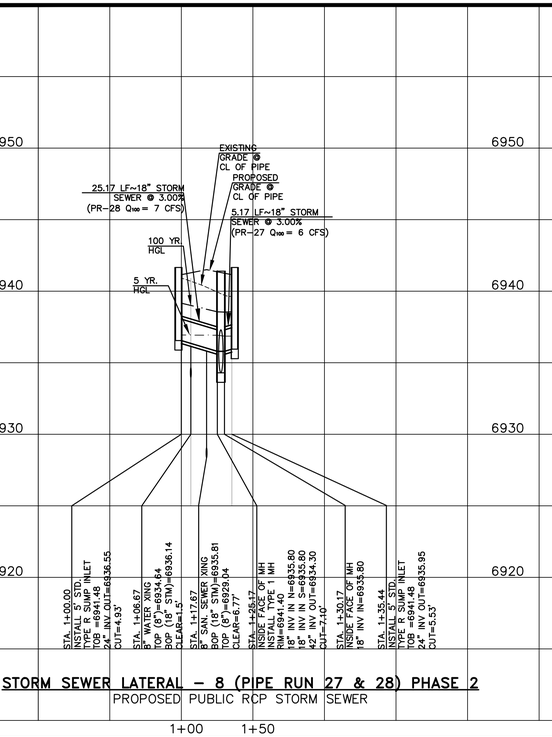
1" = 50' HORIZ. 1" = 5' VERT.



THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

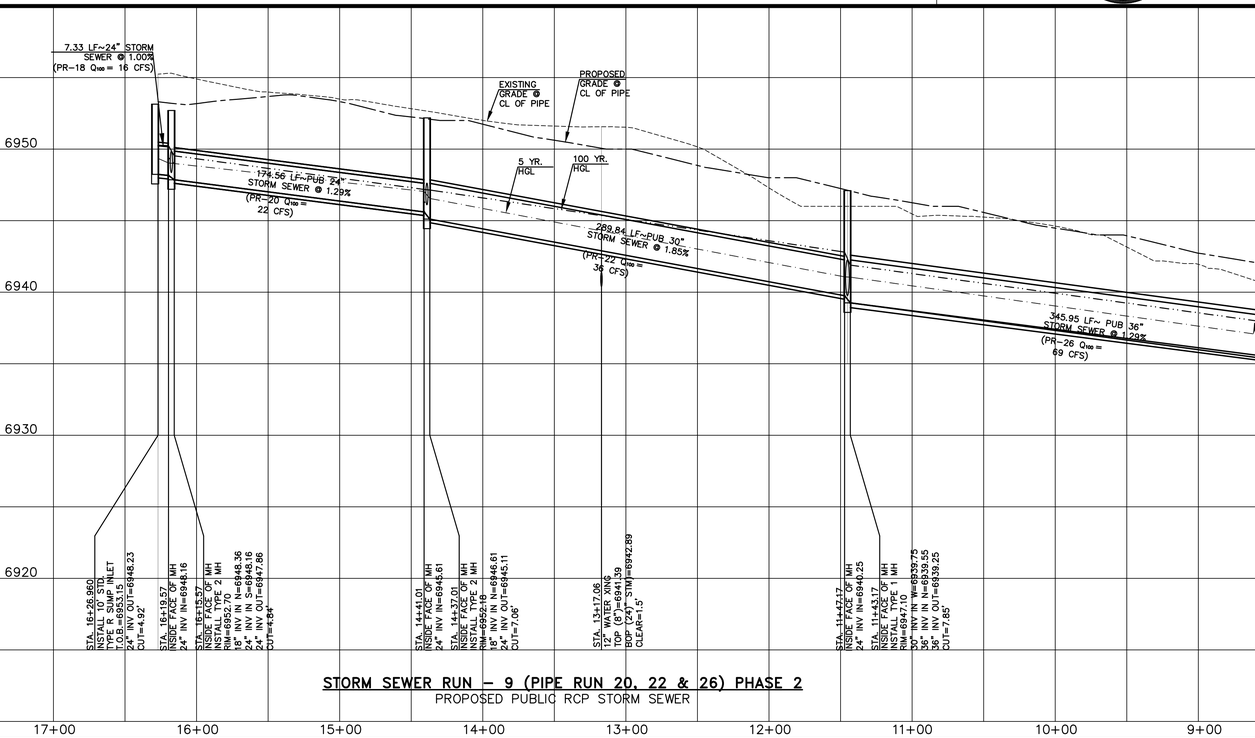
COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170



STORM SEWER LATERAL – 8 (PIPE RUN 27 & 28) PHASE 2

PROPOSED PUBLIC RCP STORM SEWER



STORM SEWER RUN – 9 (PIPE RUN 20, 22 & 26) PHASE 2

PROPOSED PUBLIC RCP STORM SEWER

REVISIONS

NO.	DESCRIPTION	DATE

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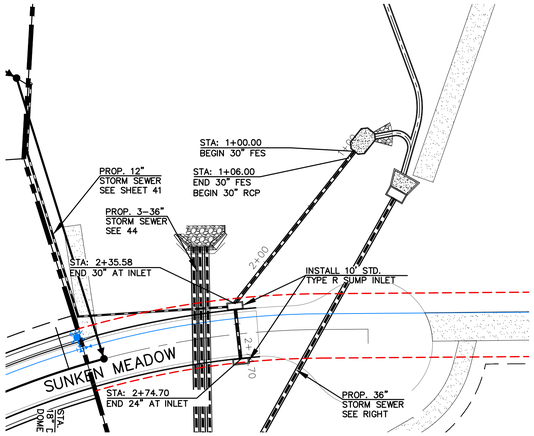
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc. Creative Civil Engineering Solutions
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OFFICE: 719-635-6422
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WATERBURY FILING NO. 1

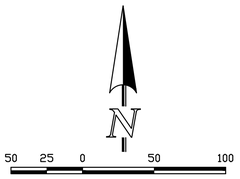
CONSTRUCTION SET
STORM SEWER RUN 9 & LATERAL 8

DESIGNED BY	QNA
DRAWN BY	QNA
CHECKED BY	JS
H-SCALE	1"=50'
V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	38 OF58

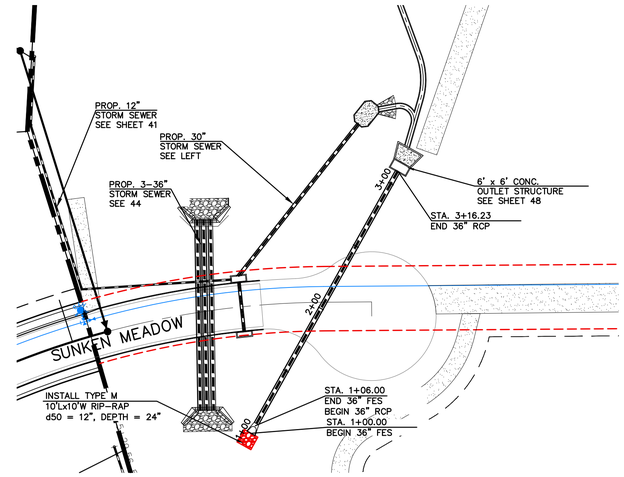


STORM SEWER LATERAL – 10 (PIPE RUN 34) PHASE 1

PROPOSED PRIVATE RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

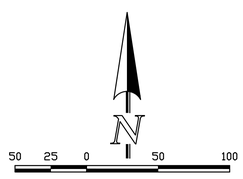


SCALE: 1" = 50'



STORM SEWER RUN – 12 (PIPE RUN 35) PHASE 1

PROPOSED PRIVATE RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

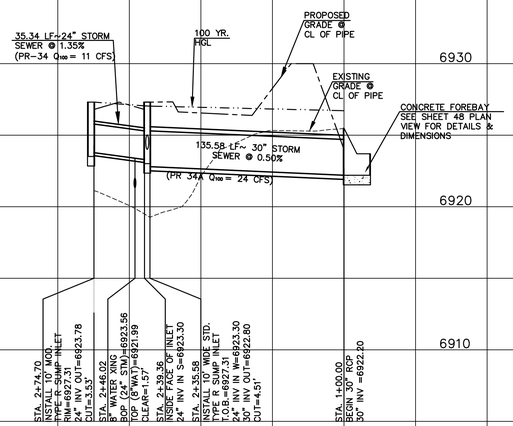


SCALE: 1" = 50'

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

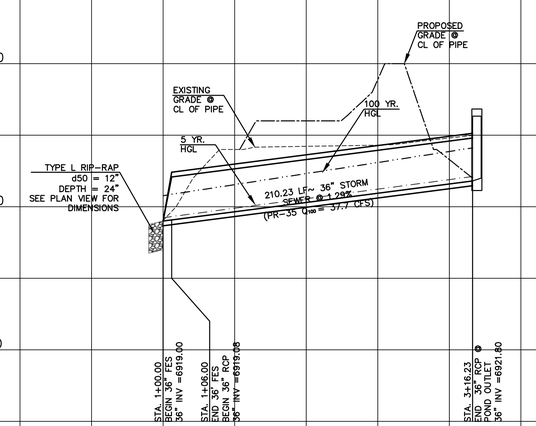
COLORADO LICENSED
QUENTIN N ARMIJO
37170
04/17/26
PROFESSIONAL ENGINEER

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170



STORM SEWER RUN – 10 (PIPE RUN 34) PHASE 1

PROPOSED PUBLIC RCP STORM SEWER



STORM SEWER RUN – 12 (PIPE RUN 35) PHASE 1

PROPOSED PRIVATE RCP STORM SEWER

REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING AND SURVEYING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES ESTABLISHED BY WRITTEN AUTHORIZATION.

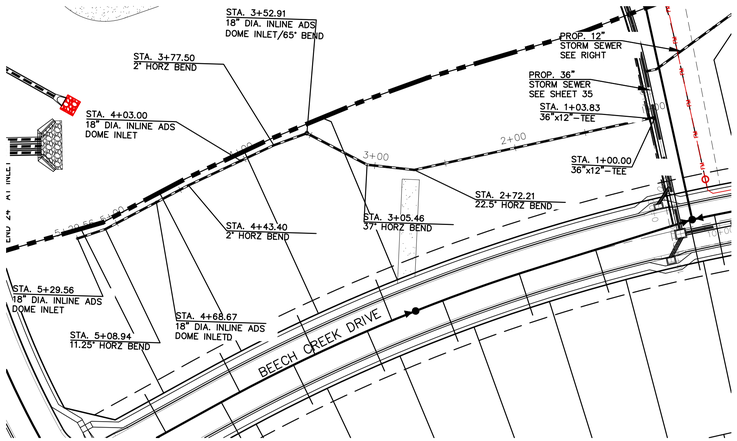
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc.
Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnsinc.com

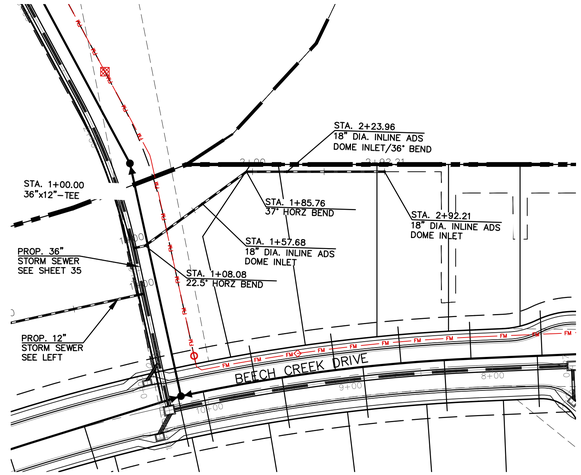
WATERBURY FILING NO. 1

CONSTRUCTION SET
STORM SEWER RUN 10, 11 & 12

DESIGNED BY	QNA
DRAWN BY	QNA
CHECKED BY	JS
H-SCALE	1"=50'
V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	39 OF58



STORM SEWER LATERAL-12 (PIPE RUN 39) PHASE 1
PROPOSED PRIVATE 12" HDPE STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.



STORM SEWER LATERAL-13 (PIPE RUN 40) PHASE 1
PROPOSED PRIVATE 12" HDPE STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.



SCALE: 1" = 50'

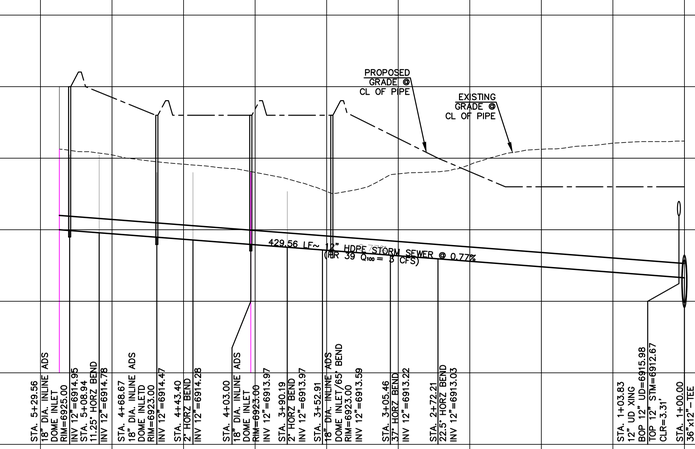


SCALE: 1" = 50'

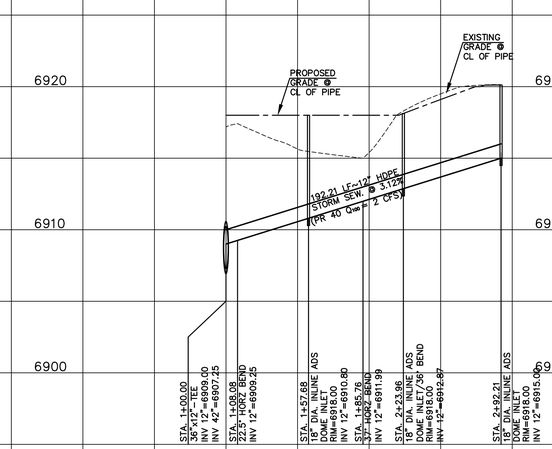
THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN N. ARMIJO
COLORADO LICENSED PROFESSIONAL ENGINEER
37170
04/17/26

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170



STORM SEWER LATERAL-12 (PIPE RUN 39) PHASE 1
PROPOSED PRIVATE 12" HDPE STORM SEWER



STORM SEWER LATERAL-13 (PIPE RUN 40) PHASE 1
PROPOSED PRIVATE 12" HDPE STORM SEWER

REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING AND SURVEYING, INC. APPROVES THEIR USE ONLY FOR THE DESIGNATED PURPOSES AND ONLY BY WRITTEN AUTHORIZATION.

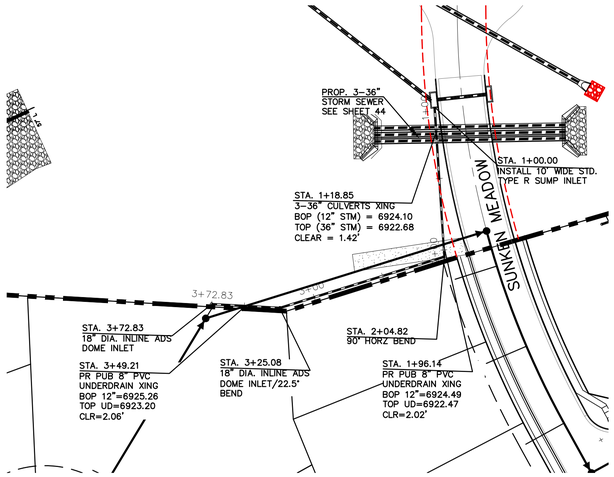
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc. Surveying
Creative Civil Engineering
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tneainc.com

WATERBURY FILING NO. 1

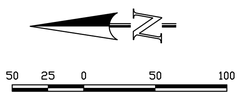
CONSTRUCTION SET
STORM SEWER LATERAL 13, 14

DESIGNED BY	QNA
DRAWN BY	QNA
CHECKED BY	JS
H-SCALE	1"=50'
V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	40 OF58

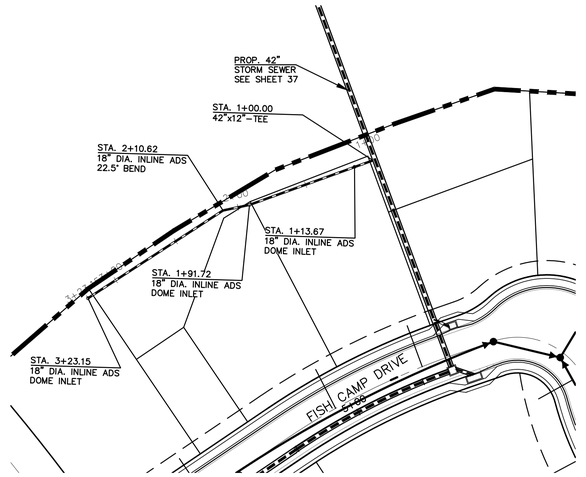


STORM SEWER LATERAL-14 PIPE RUN 38 PHASE 2

PROPOSED PRIVATE 12" HDPE STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

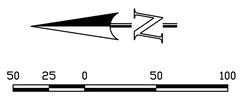


SCALE: 1" = 50'



STORM SEWER LATERAL-15 (PIPE RUN 37) PHASE 2

PROPOSED PRIVATE 12" HDPE STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

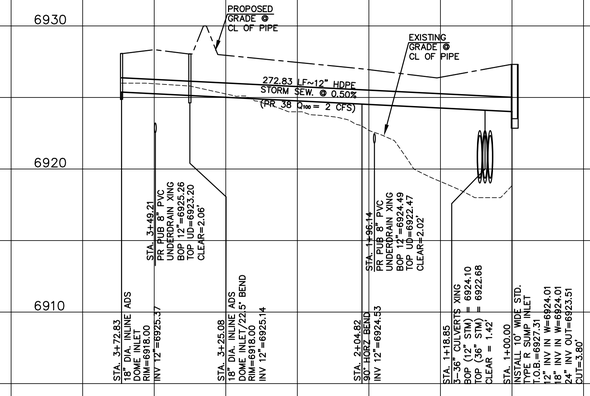


SCALE: 1" = 50'

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

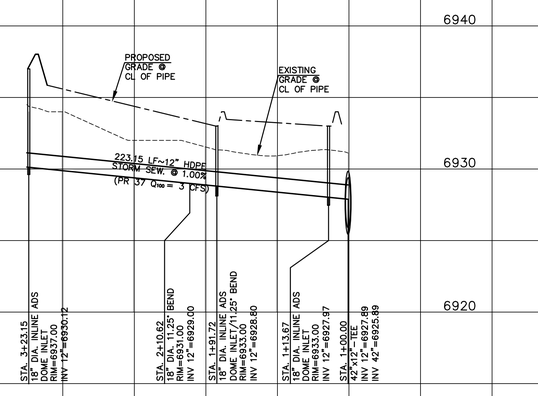
COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170



STORM SEWER LATERAL-14 (PIPE RUN 38) PHASE 2

PROPOSED PRIVATE 12" HDPE STORM SEWER



STORM SEWER LATERAL-15 (PIPE RUN 37) PHASE 2

PROPOSED PRIVATE 12" HDPE STORM SEWER

REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING AND SURVEYING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

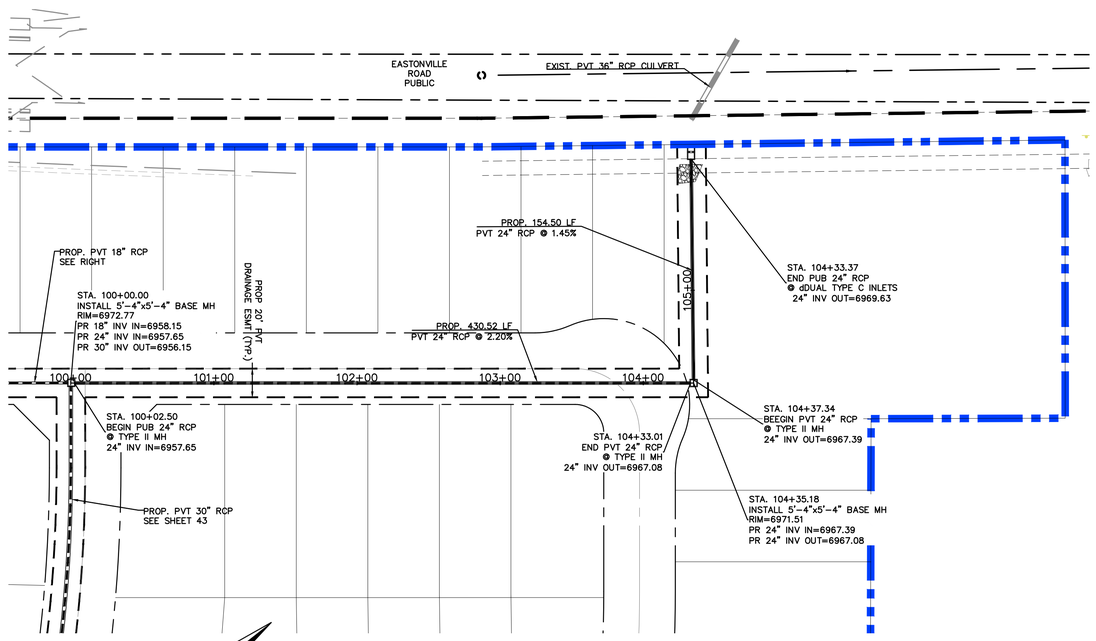
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc. Surveying
Terra Nova Civil Engineering
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnesinc.com

WATERBURY FILING NO. 1

CONSTRUCTION SET
STORM SEWER LATERAL 11, 12

DESIGNED BY	QNA
DRAWN BY	QNA
CHECKED BY	JS
H-SCALE	1"=50'
V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	41 OF58

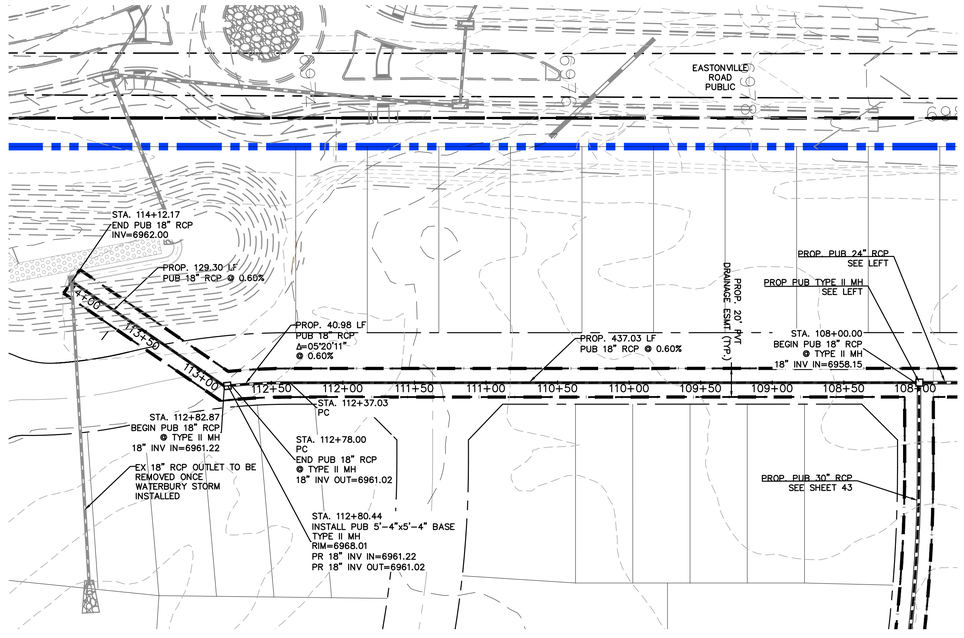


STORM SEWER RUN-16 (PIPE RUN 41 & 43) PHASE 1

PROPOSED PRIVATE 24" RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

50 25 0 50 100

SCALE: 1" = 50'



STORM SEWER RUN-17 (PIPE RUN 44) PHASE 1

PROPOSED PRIVATE 18' RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

NOTE:
STORM RUN 16, 17, & 18 WILL BE PRIVATE WITH WATERBURY METROPOLITAN DISTRICT #1 BEING RESPONSIBLE FOR MAINTENANCE UNTIL THE TIME THAT THE CORRESPONDING PUBLIC ROADS ARE CONSTRUCTED AND ACCEPTED FOR EL PASO COUNTY MAINTENANCE.

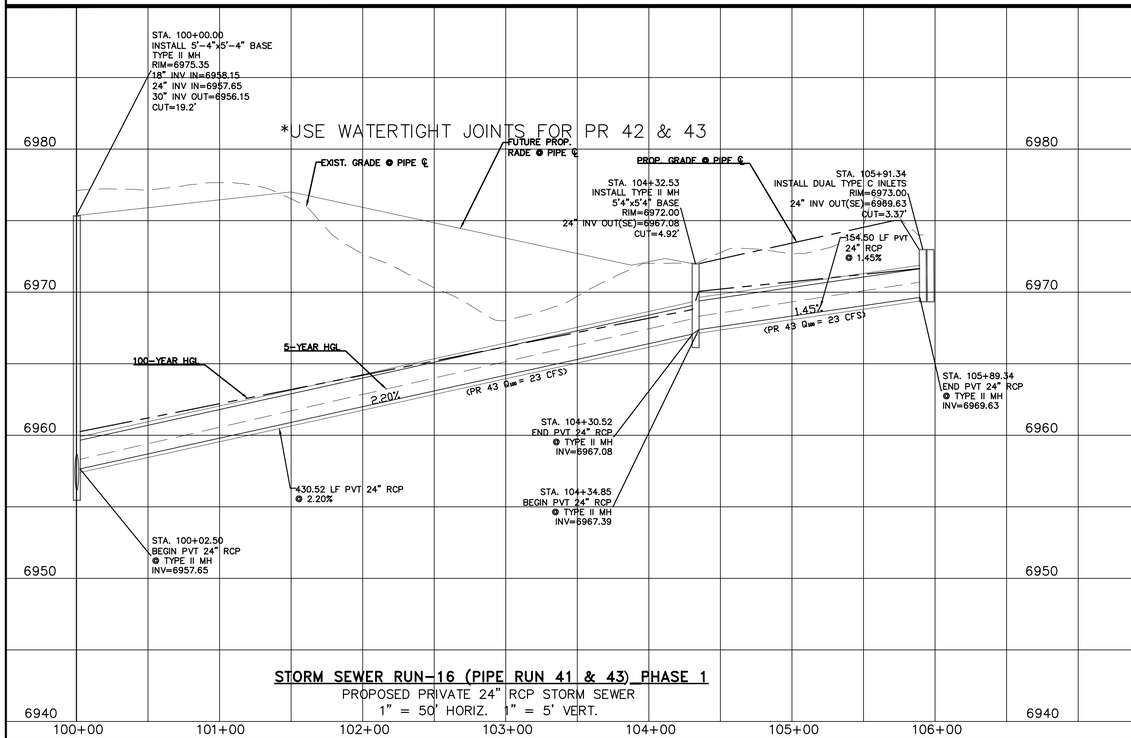
50 25 0 50 100

SCALE: 1" = 50'

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

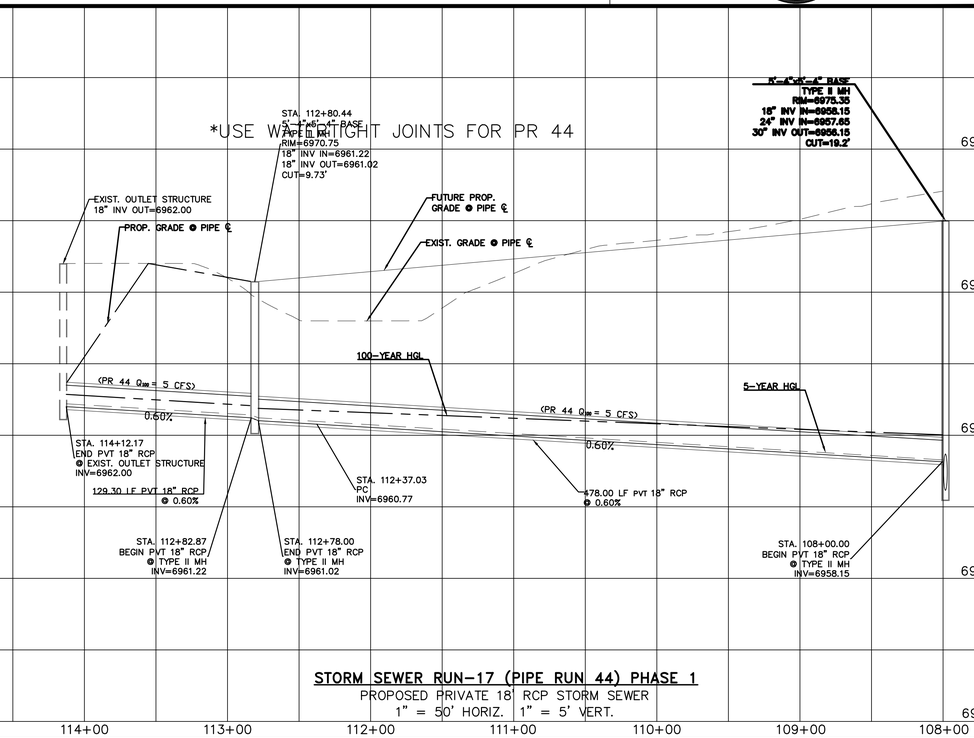
COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170



STORM SEWER RUN-16 (PIPE RUN 41 & 43) PHASE 1

PROPOSED PRIVATE 24" RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.



STORM SEWER RUN-17 (PIPE RUN 44) PHASE 1

PROPOSED PRIVATE 18' RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING AND SURVEYING, INC. APPROVES THEIR USE ONLY AS PRELIMINARY DOCUMENTS DESIGNATED BY WRITTEN AUTHORIZATION.

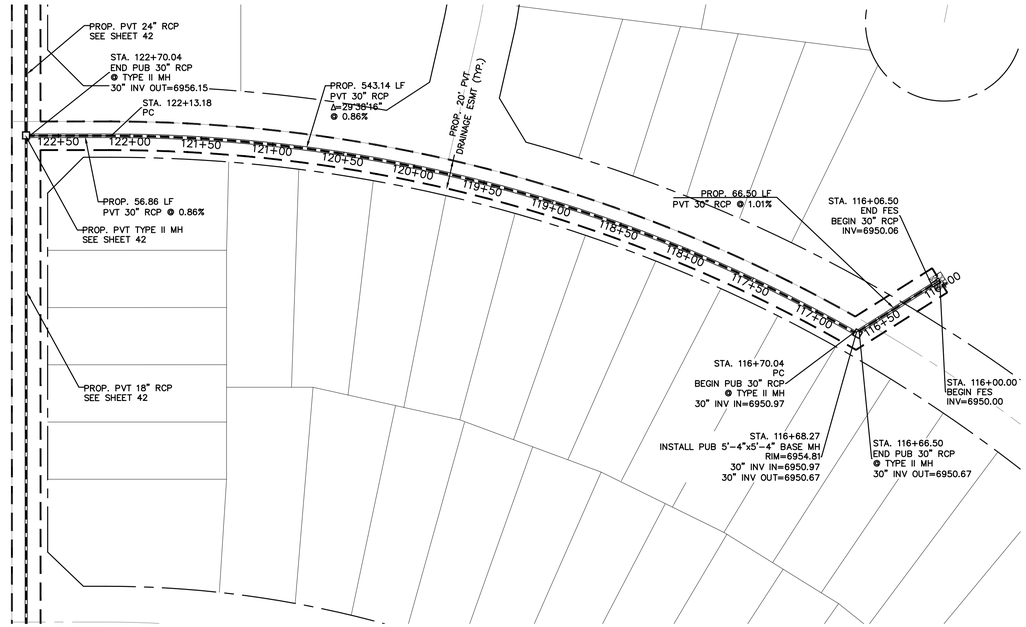
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc. Surveying
Creative Civil Engineering
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
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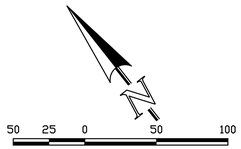
WATERBURY FILING NO. 1

CONSTRUCTION SET
STORM SEWER RUNS 16 & 17

DESIGNED BY	QNA
DRAWN BY	JS
CHECKED BY	JS
H-SCALE	1"=50'
V-SCALE	1"=5'
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	42 OF58



NOTE:
STORM RUN 16, 17, & 18 WILL BE PRIVATE WITH WATERBURY METROPOLITAN DISTRICT #1 BEING RESPONSIBLE FOR MAINTENANCE UNTIL THE TIME THAT THE CORRESPONDING PUBLIC ROADS ARE CONSTRUCTED AND ACCEPTED FOR EL PASO COUNTY MAINTENANCE.

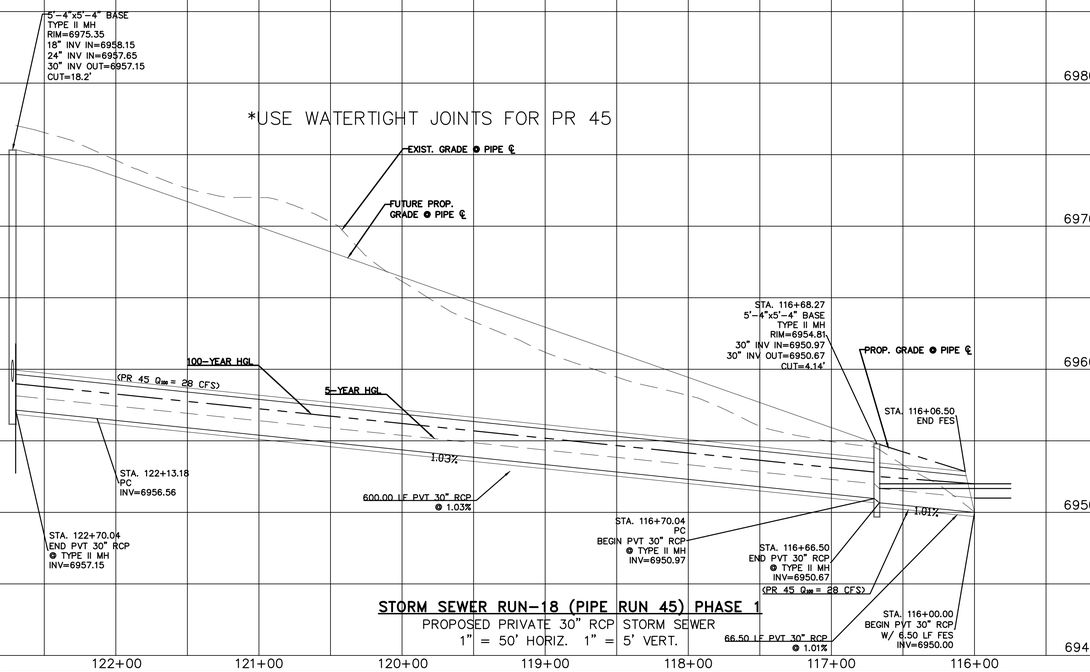


STORM SEWER RUN-18 (PIPE RUN 45) PHASE 1
PROPOSED PRIVATE 30" RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

COLORADO LICENSED
QUENTIN N ARMIJO
37170
04/17/26
PROFESSIONAL ENGINEER

QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170



STORM SEWER RUN-18 (PIPE RUN 45) PHASE 1
PROPOSED PRIVATE 30" RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING AND SURVEYING, INC. ASSUMES NO RESPONSIBILITY FOR THE USE OF THESE PLANS FOR ANY PURPOSES OTHER THAN THOSE DESIGNATED BY WRITTEN AUTHORIZATION.

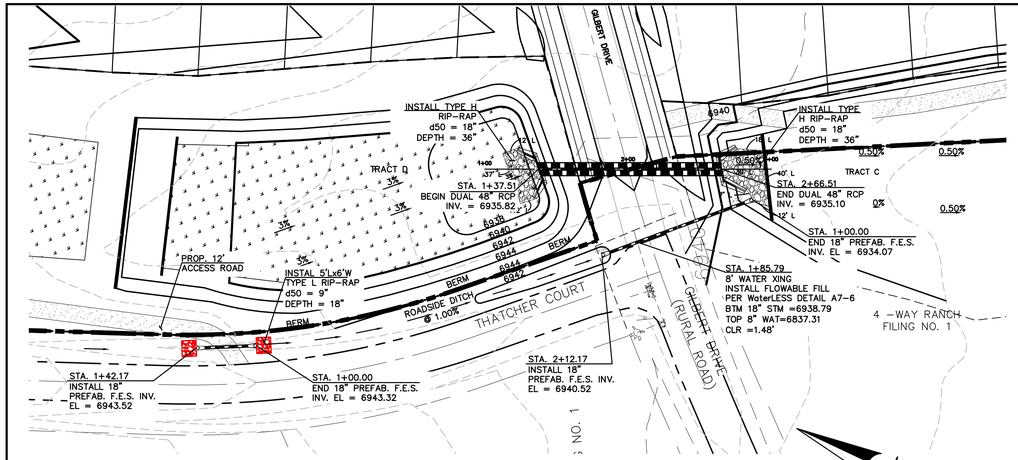
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
JASON POCK
8350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc.
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnesinc.com

WATERBURY FILING NO. 1

CONSTRUCTION SET
STORM SEWER RUNS 15 & 18

DESIGNED BY QNA
DRAWN BY JS
CHECKED BY JS
H-SCALE 1"=50'
V-SCALE 1"=5'
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 43 OF58



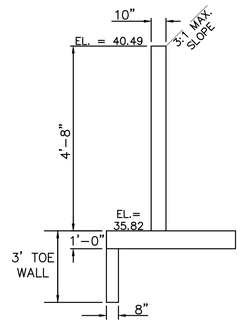
GILBERT DRIVE DUAL 48" RCP STORM SEWER CROSSING & 18" RCP GILBERT DR DITCH CULVERT CROSSING PLAN PHASE 1 & 18" RCP THATCHER RD DITCH ACCESS CULVERT CROSSING PLAN PHASE 1

50' 25' 0 50' 100'

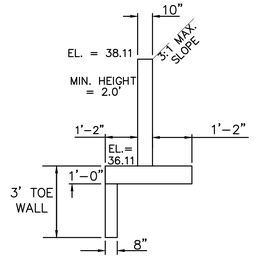
SCALE: 1" = 50'

DUAL 48" NORTH HEADWALL/WINGWALLS

PER CDOT M-601-20
SEE CDOT M-601-20 FOR DESIGN REQUIREMENTS
INV. IN EL = 6935.82
EL AT TOP OF HEADWALL = 6941.07
EL AT TOP OF WINGWALL NW1 & NE1= 6940.49
EL AT TOP OF WINGWALL NW2 & NE2 = 6938.11
EL AT TOP OF NW1 & NE1 FOOTING = 6935.82
EL AT TOP OF NW2& NE2 FOOTING = 6936.11



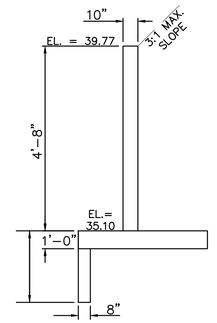
NW & NE WINGWALL 1
TOP
N.T.S.
(WALL NW1 & NE1)



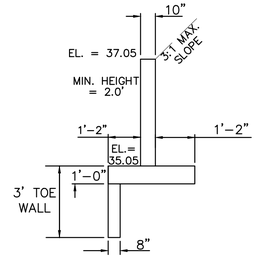
NW & NE WINGWALL 2
BOTTOM
N.T.S.
(WALL NW2 & NE2)

DUAL 48" SOUTH HEADWALL/WINGWALLS

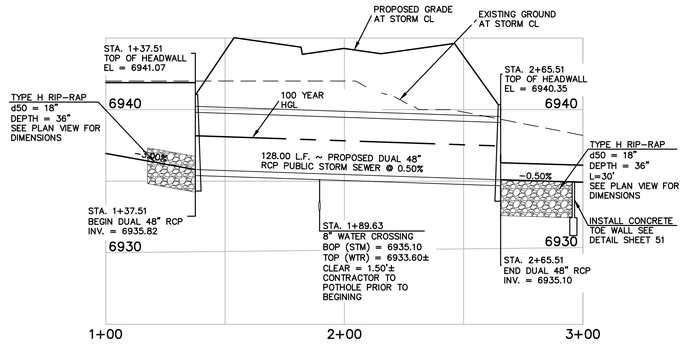
PER CDOT M-601-20
SEE CDOT M-601-20 FOR DESIGN REQUIREMENTS
INV. OUT EL = 6935.10
EL AT TOP OF HEADWALL = 6940.35
EL AT TOP OF WINGWALL SE1 = 6939.77
EL AT TOP OF WINGWALL SE2 = 6937.05
EL AT TOP OF SE1 FOOTING = 6935.10
EL AT TOP OF SE2 FOOTING = 6935.05



SE & SW WINGWALL 1
TOP
N.T.S.
(WALL SE1 & SW1)

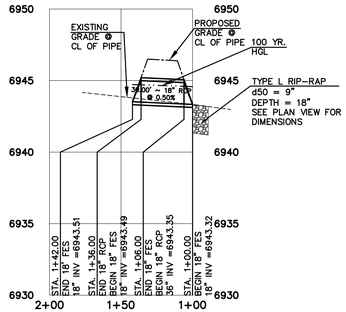


SE & SW WINGWALL 2
BOTTOM
N.T.S.
(WALL SE2 & SW2)



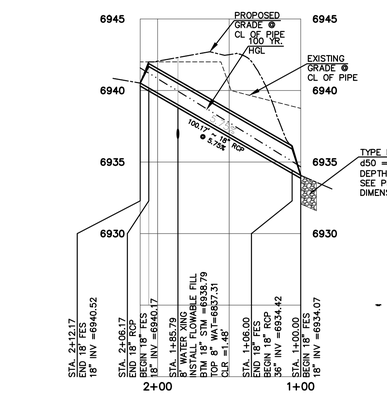
DUAL 48" RCP STORM SEWER CULVERT PROFILE PHASE 1

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'



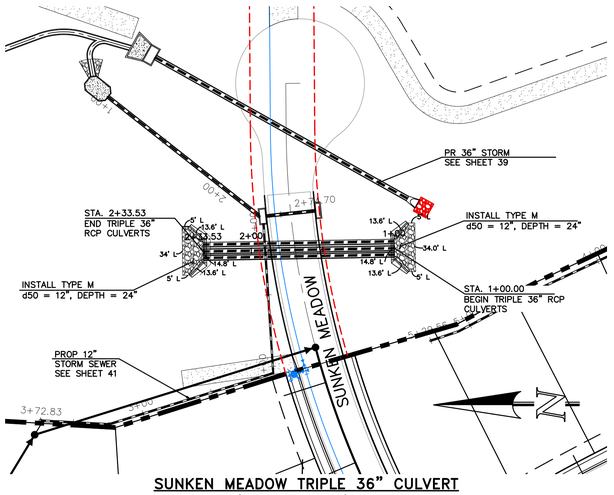
18" RCP THATCHER RD CULVERT PROFILE PHASE 1

HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



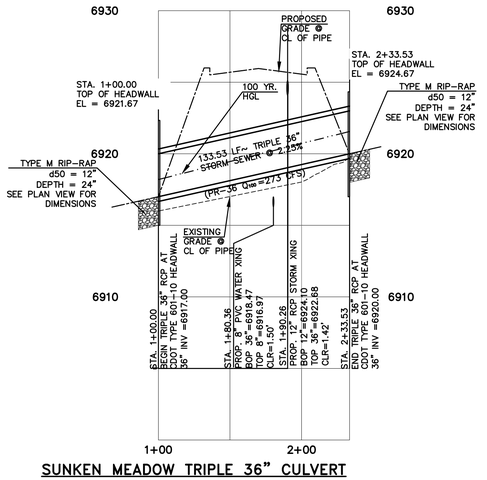
18" RCP GILBERT DR CULVERT PROFILE PHASE 1

HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



SUNKEN MEADOW TRIPLE 36" CULVERT PLAN (PIPE RUN 36) PHASE 1

PROPOSED PUBLIC RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

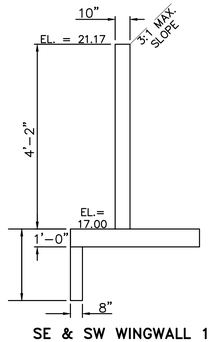


SUNKEN MEADOW TRIPLE 36" CULVERT PROFILE (PIPE RUN 36) PHASE 1

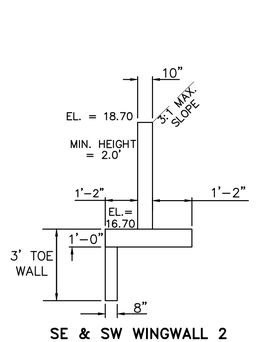
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'

TRIPLE 36" SOUTH HEADWALL/WINGWALLS

PER CDOT M-601-20
SEE CDOT M-601-20 FOR DESIGN REQUIREMENTS
INV. OUT EL = 6917.00
EL AT TOP OF HEADWALL = 6921.67
EL AT TOP OF WINGWALL SE1 & SW1 = 6921.17
EL AT TOP OF WINGWALL SE2 & SW2 = 6918.70
EL AT TOP OF SE1 & SW1 FOOTING = 6917.00
EL AT TOP OF SE2 & SW2 FOOTING = 6916.70



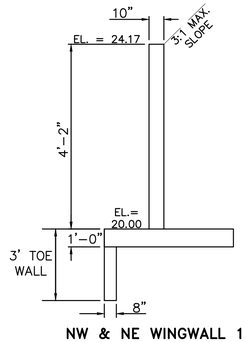
SE & SW WINGWALL 1
TOP
N.T.S.
(WALL SE1 & SW1)



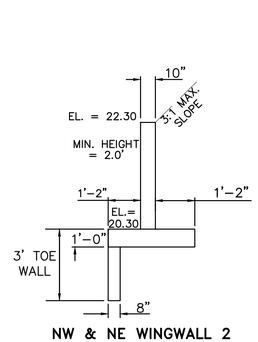
SE & SW WINGWALL 2
BOTTOM
N.T.S.
(WALL SE2 & SW2)

TRIPLE 36" NORTH HEADWALL/WINGWALLS

PER CDOT M-601-20
SEE CDOT M-601-20 FOR DESIGN REQUIREMENTS
INV. IN EL = 6920.00
EL AT TOP OF HEADWALL = 6924.67
EL AT TOP OF WINGWALL NW1 & NE1= 6924.17
EL AT TOP OF WINGWALL NW2 & NE2 = 6922.30
EL AT TOP OF NW1 & NE1 FOOTING = 6920.00
EL AT TOP OF NW2& NE2 FOOTING = 6920.30



NW & NE WINGWALL 1
TOP
N.T.S.
(WALL NW1 & NE1)



NW & NE WINGWALL 2
BOTTOM
N.T.S.
(WALL NW2 & NE2)

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN N ARMIJO — COLORADO LICENSED — 37170 — 04/17/26 — PROFESSIONAL ENGINEER

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

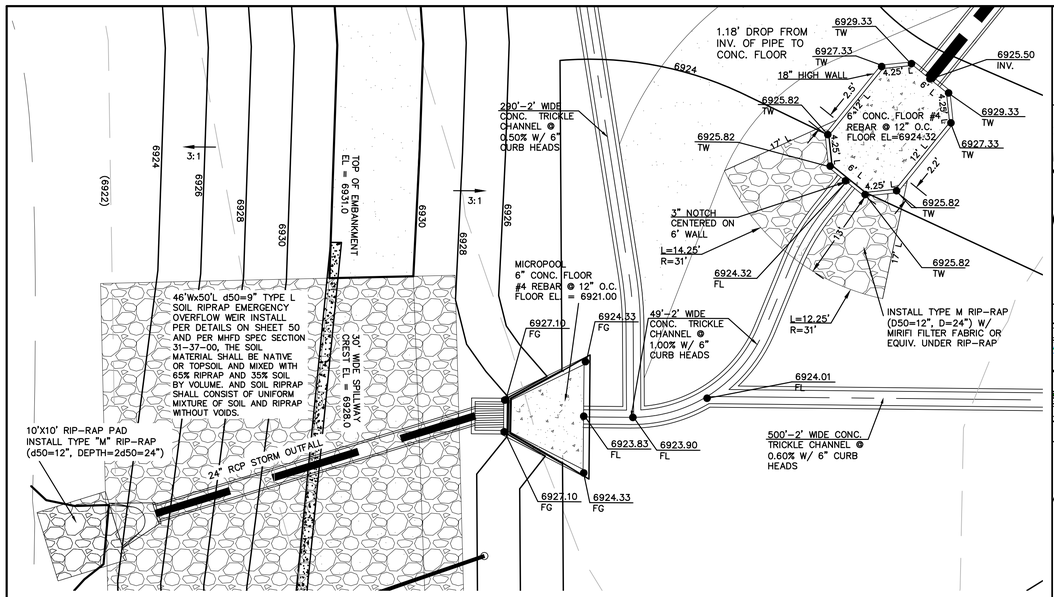
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
ATTN: JASON POCK
8350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc.
Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnsinc.com

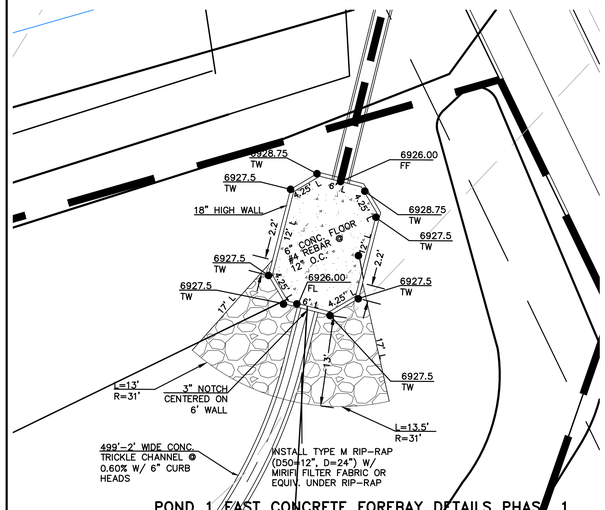
WATERBURY FILING NO. 1

CONSTRUCTION SET
STORM SEWER PLAN AND PROFILE
GILBERT DRIVE CROSSING CULVERTS

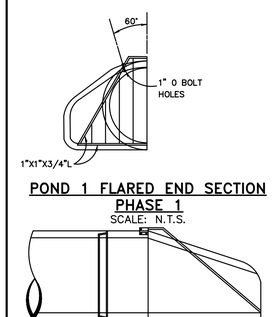
DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA
H-SCALE AS SHOWN
V-SCALE AS SHOWN
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 44 OF 58



POND 1 WEST CONCRETE FOREBAY/MICROPOOL DETAILS PHASE 1

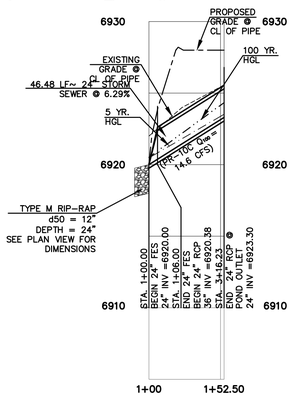


POND 1 EAST CONCRETE FOREBAY DETAILS PHASE 1

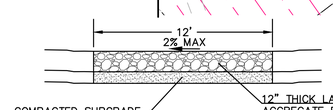


POND 1 FLARED END SECTION PHASE 1
SCALE: N.T.S.

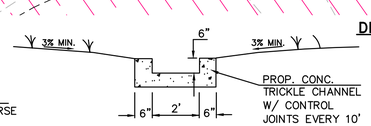
POND 1 TRASH RACK F.E.S. DETAIL PHASE 1
SCALE: N.T.S.



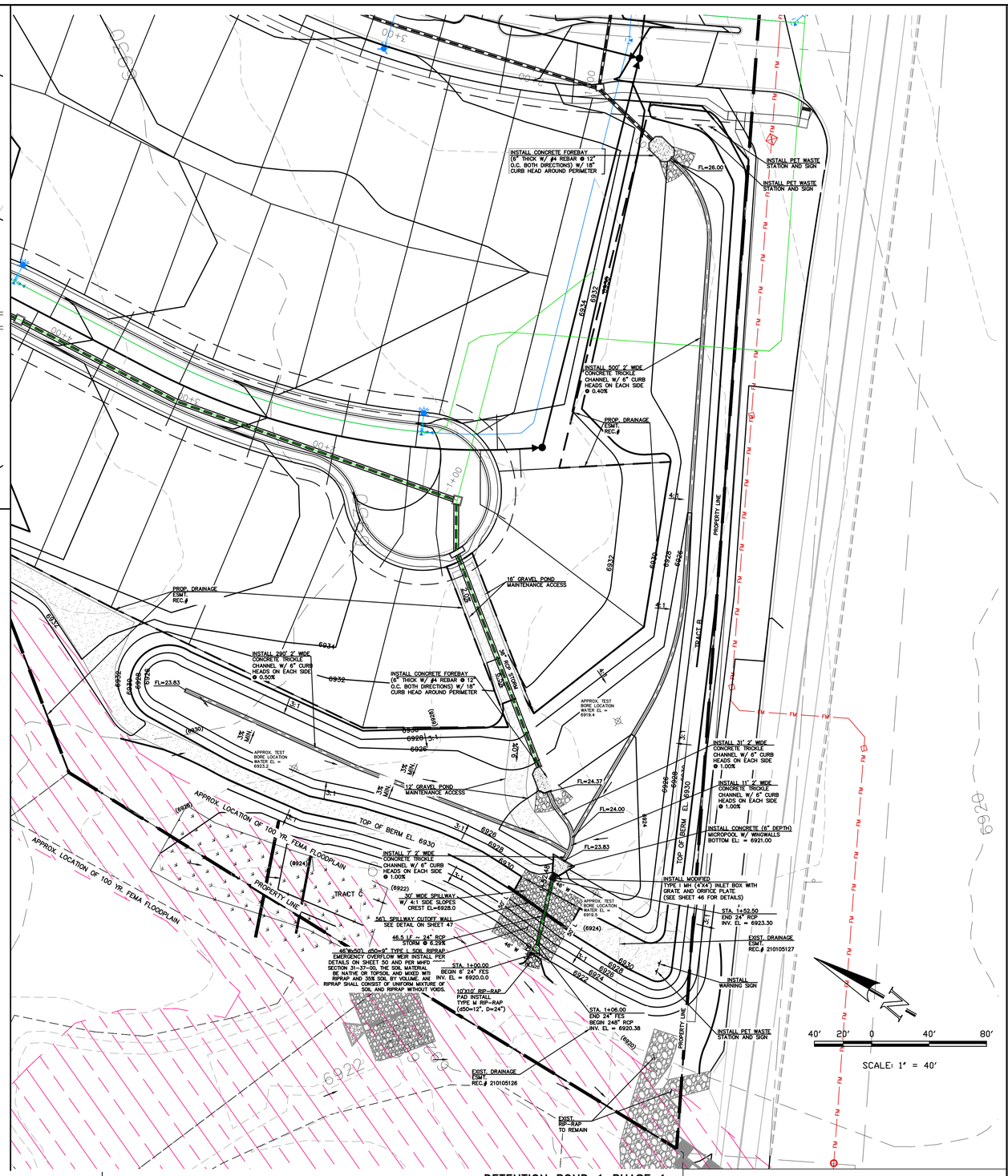
24" RCP POND 1 OUTFALL PROFILE PHASE 1
PRIVATE
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



15' MAINTENANCE ACCESS ROAD SECTION PHASE 1
NOT TO SCALE



TRICKLE CHANNEL PHASE 1 TYPICAL SECTION
N.T.S.



DETENTION POND 1 PHASE 1

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE

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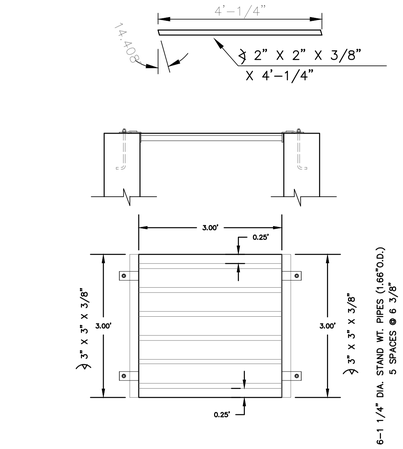
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
ATTN: JASON POCK
8350 E. CRESCENT PKWY, STE 20
GREENWOOD, CO 80111
303-984-9800

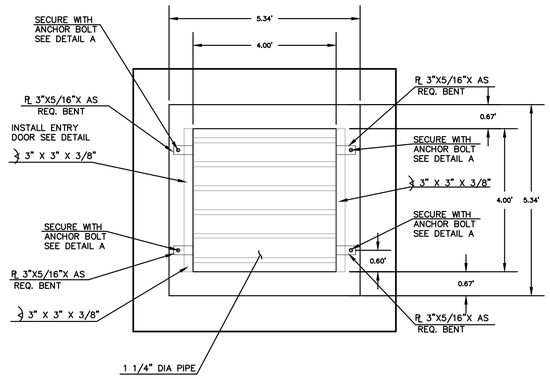
Terra Nova Engineering, Inc.
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnsinc.com
Civil Engineering Surveying

WATERBURY FILING NO. 1

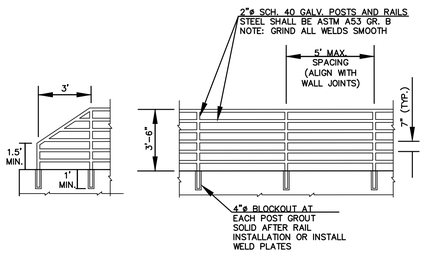
CONSTRUCTION SET
POND 1 DETAILS

DESIGNED BY	DLF
DRAWN BY	QNA
CHECKED BY	QNA
H-SCALE	AS SHOWN
V-SCALE	AS SHOWN
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	45 OF 58



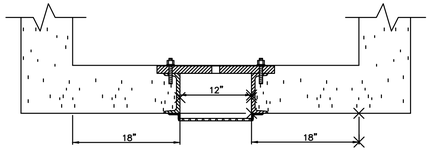


GRATE POND 1 & 2
PHASE 1 CONSTRUCTION
ALL WELDED CONSTRUCTION
SCALE: N.T.S.



NOTES:

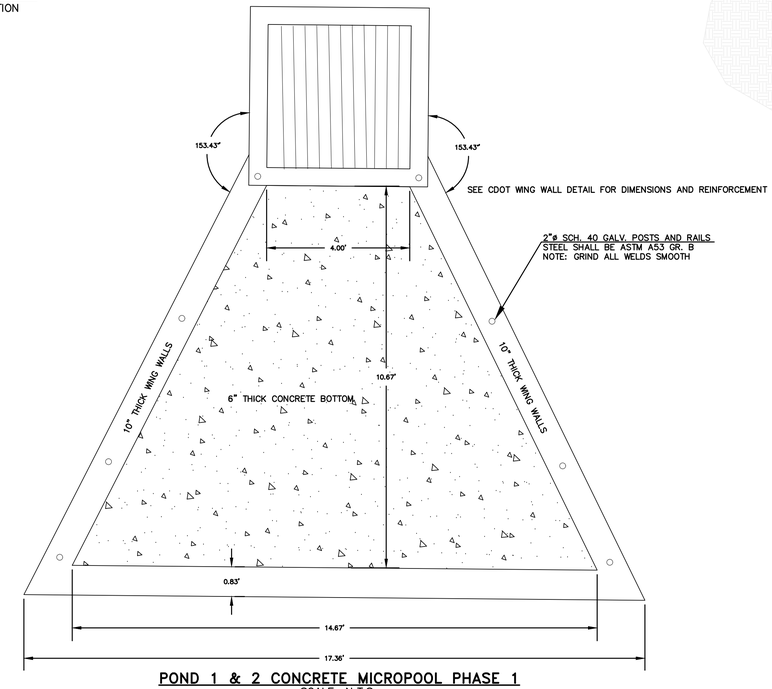
1. WELD PLATES MAY BE SUBSTITUTED FOR PIPE EMBEDDMENT.
2. CONTRACTOR SHALL SUBMIT HANDRAIL SHOP DRAWINGS TO ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION
3. DESIGN CRITERIA SHALL BE IN ACCORDANCE WITH AASHTO STANDARDS.
4. HANDRAIL DESIGN SHALL BE COMPATIBLE WITH THE DESIGN OF THE WINGWALLS AND HEADWALLS.
5. RAILING POSTS SHALL BE SET TO NORMAL TO GRADE. RAILS SHALL RUN PARALLEL TO THE SLOPES OF TOPS OF THE WALLS.
6. ALL RAILS SHALL HAVE EXPANSION JOINTS SPACED AT 40'-0 MAX. JOINT ENDS SHALL BE FREE OF ANY SHARP EDGES OR CORNERS.



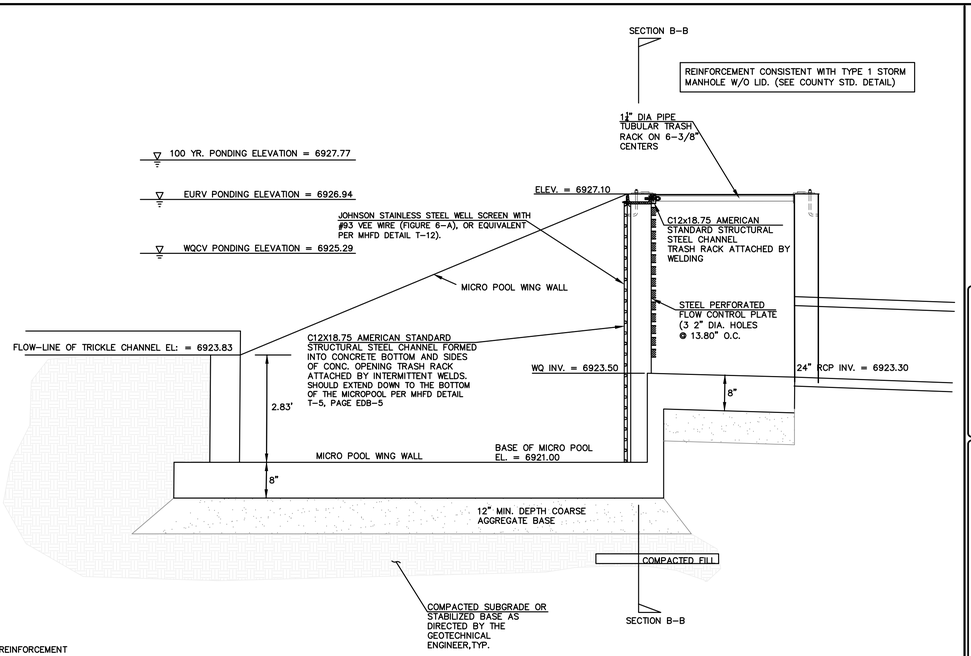
SECTION
B–B
SCALE: N.T.S.

STEEL FABRICATION NOTES:

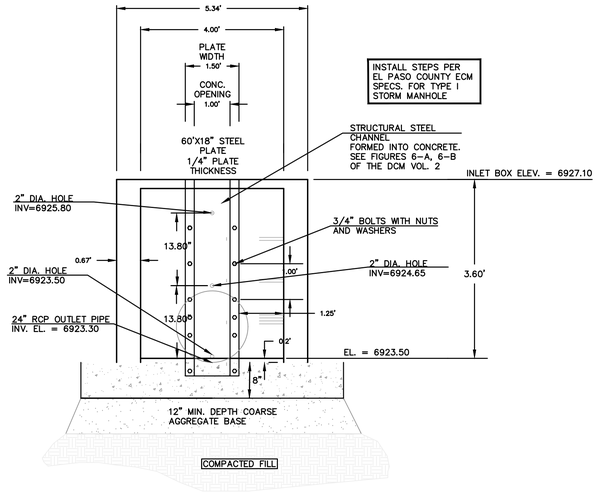
1. FABRICATED STEEL STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH AISC AND AWS SPECIFICATIONS.
2. THE OUTLET STRUCTURE BARGRATE IS DESIGNED FOR A VERTICAL LOAD OF 300 LBS./SQ. FT.
3. ALL STRUCTURAL STEEL SHAPES TO INCLUDE: ANGLE, PLATE, AND BAR SHALL MEET ASTM A36 SPECIFICATIONS, FY = 36 KSI MINIMUM. STRUCTURAL TUBING SHALL MEET ASTM A500 GRADE B SPECIFICATIONS, FY = 46 KSI MINIMUM. STEEL PIPE SHALL BE STANDARD WEIGHT PIPE ASTM A53 GRADE B, FY = 35 KSI MINIMUM.
4. WELDS NOT INDICATED SHALL BE 1/8" MINIMUM FILLET OR GROOVE, CONTINUOUS SO FAR AS POSSIBLE, CONSIDER VANDALISM LOADS, WELD ACCORDINGLY AT CRITICAL LOCATIONS.
5. PRIOR TO PAINTING REMOVE ALL OIL, SCALE, AND SLAG, GRIND OFF BURRS AND SHARP EDGES.
6. PAINT WITH ONE SHOP COAT OF ZINC RICH PRIMER AND TWO COATS OF ALUMINUM PAINT, AASHTO M-69



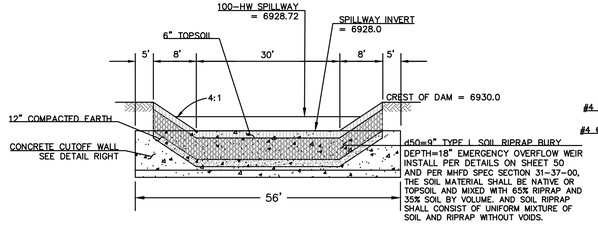
POND 1 & 2 CONCRETE MICROPOOL PHASE 1
SCALE: N.T.S.



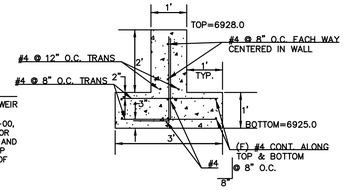
POND 1 OUTLET STRUCTURE PHASE 1
MODIFIED TYPE 1 MH
SCALE: N.T.S.



POND 1 OUTLET STRUCTURE PHASE 1
MODIFIED TYPE 1 MH
SCALE: N.T.S.



POND 1 EMERGENCY SPILLWAY
CROSS SECTION PHASE 1
SCALE: N.T.S.



POND 1 CUTOFF WALL
CROSS SECTION PHASE 1

WARNING
THIS AREA IS A STORMWATER FACILITY
AND IS SUBJECT TO PERIODIC FLOODING

WARNING SIGN

PET WASTE MUST BE PICKED UP

PET WASTE SIGN

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

COLORADO LICENSED
QUENTIN N ARMIJO
37170
04/17/26
PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE

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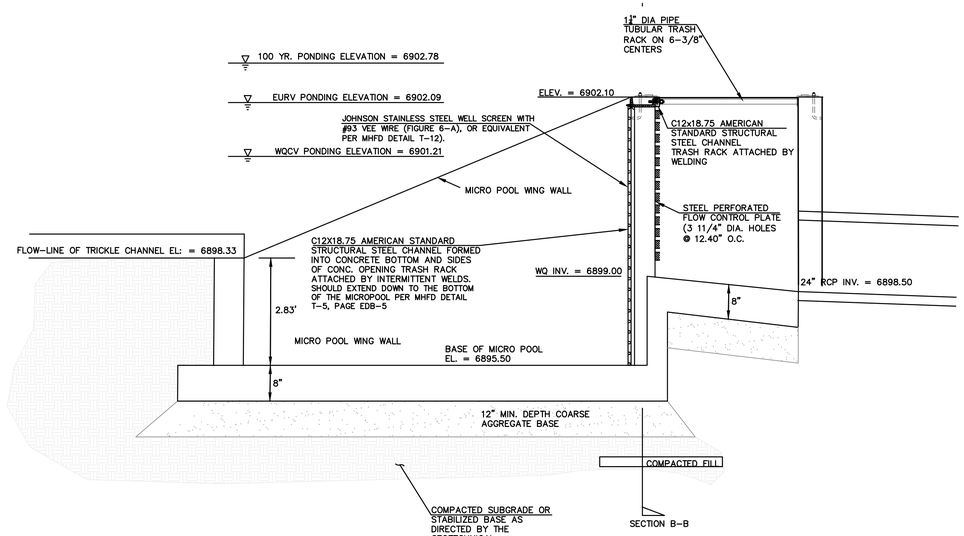
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
ATTN: JASON POCK
7350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
303-984-9800

Terra Nova Engineering, Inc.
Tenacious Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
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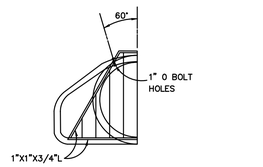
WATERBURY FILING NO. 1

CONSTRUCTION SET
POND 1 DETAILS

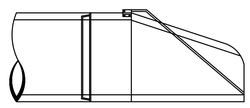
DESIGNED BY	DLF
DRAWN BY	QNA
CHECKED BY	QNA
H-SCALE	NA
V-SCALE	N/A
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	46 OF 58



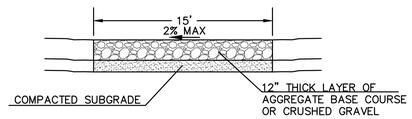
POND 2 CONCRETE OUTLET BOX DETAILS PHASE 1
SCALE: N.T.S.



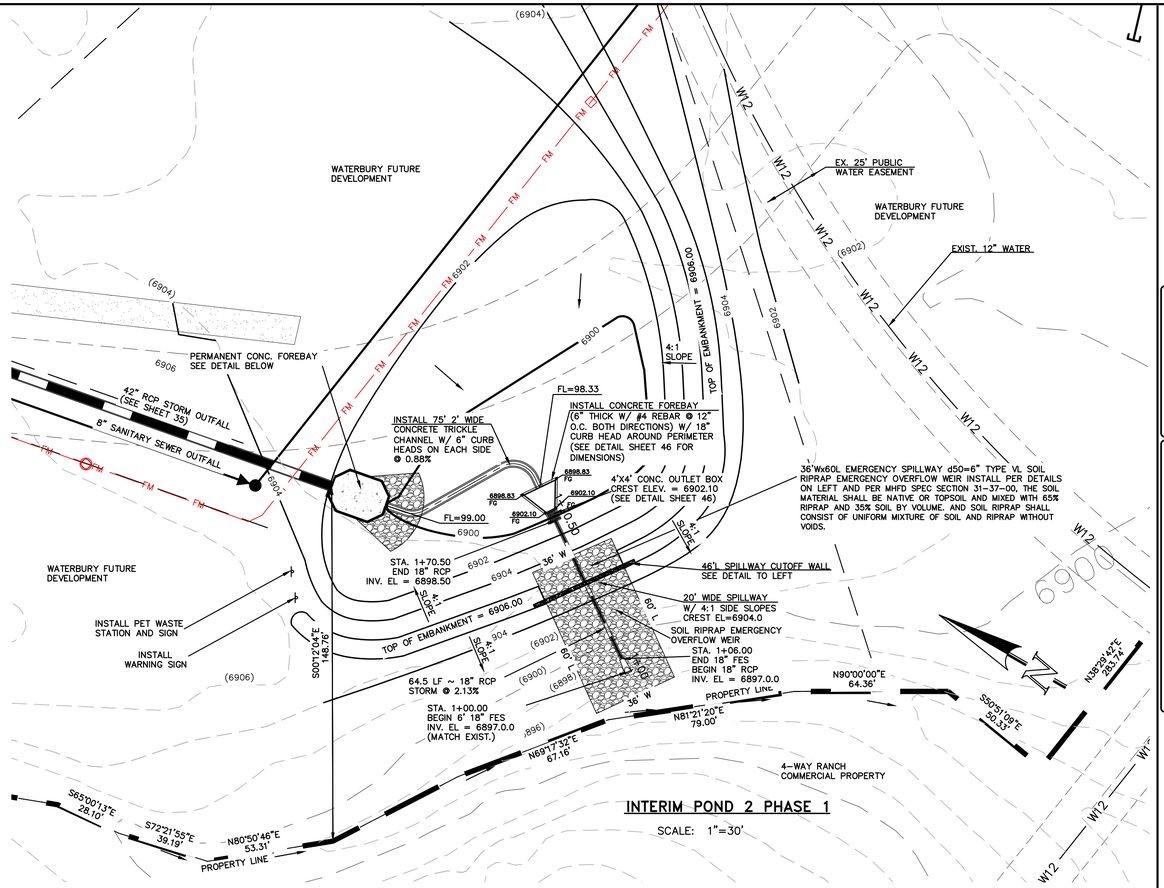
POND 2 FLARED END SECTION
SCALE: N.T.S.



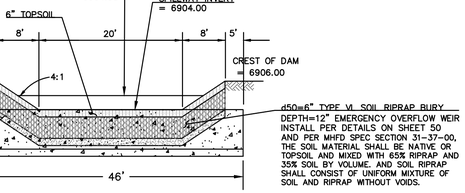
POND 2 TRASH RACK DETAIL: F.E.S. DETAIL
SCALE: N.T.S.



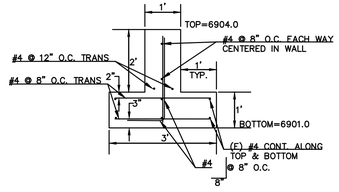
15' MAINTENANCE ACCESS ROAD SECTION PHASE 1
NOT TO SCALE



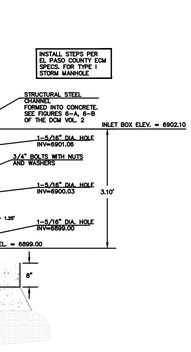
INTERIM POND 2 PHASE 1
SCALE: 1"=30'



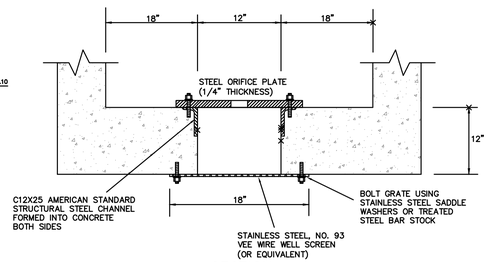
POND 2 EMERGENCY SPILLWAY CROSS SECTION PHASE 1
SCALE: N.T.S.



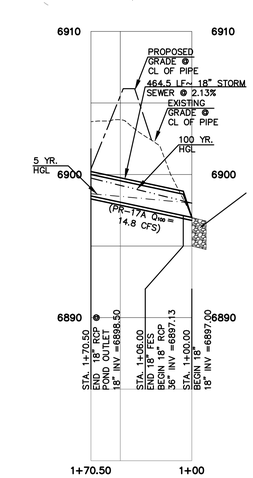
POND 2 CUTOFF WALL CROSS SECTION PHASE 1



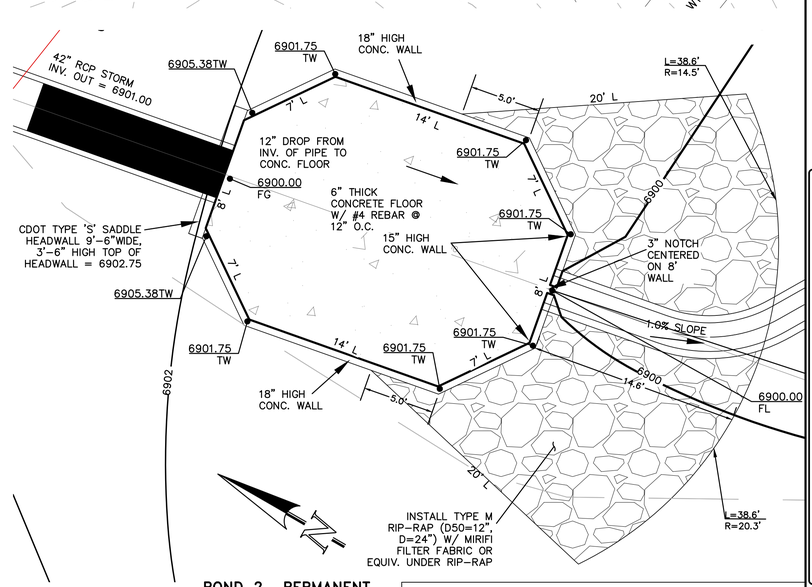
POND 2 OUTLET STRUCTURE MODIFIED TYPE 1 MH PHASE 1
SCALE: N.T.S.



SECTION B-B
SCALE: N.T.S.



24" RCP POND 2 OUTFALL PROFILE
PRIVATE
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



POND 2 PERMANENT FOREBAY DETAIL PHASE 1
SCALE: 1"=5'

WARNING
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WARNING SIGN

PET WASTE MUST BE PICKED UP

PET WASTE SIGN

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QUENTIN ARMIJO
COLORADO P.E. NO. 37170

COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

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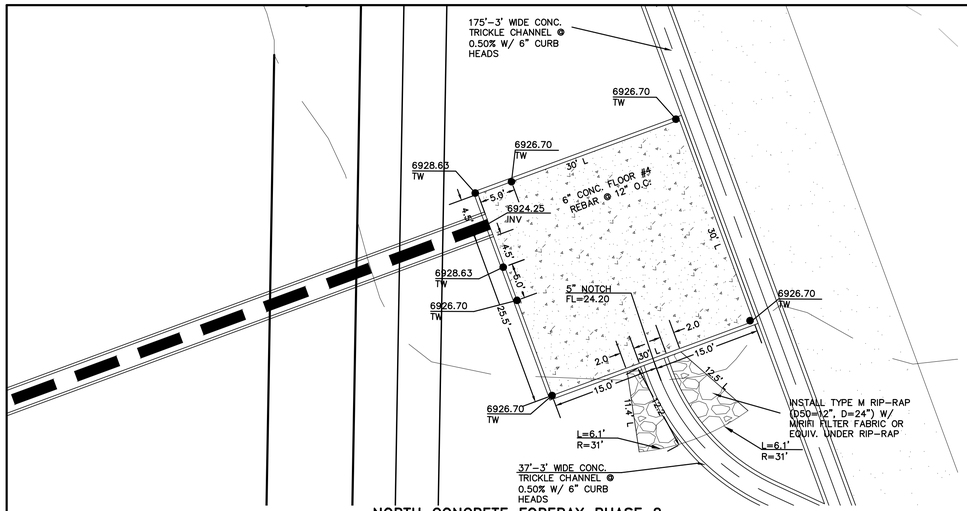
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
ATTN: JASON POCK
8350 E. CRESCENT PKWY, STE 200
GREENWOOD, CO 80111
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Terra Nova Engineering, Inc.
Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
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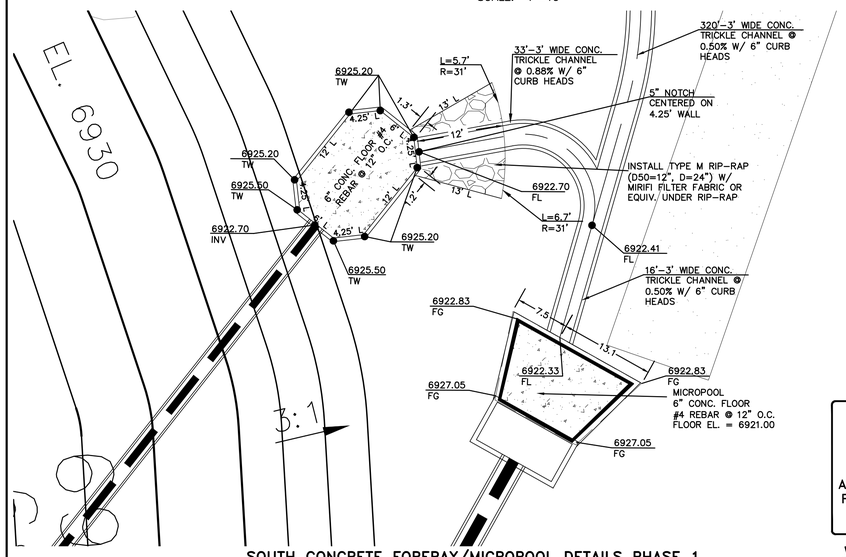
WATERBURY FILING NO. 1

CONSTRUCTION SET
POND 2 DETAILS

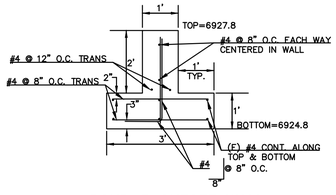
DESIGNED BY	DLF
DRAWN BY	QNA
CHECKED BY	QNA
H-SCALE	AS SHOWN
V-SCALE	AS SHOWN
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	47 OF 58



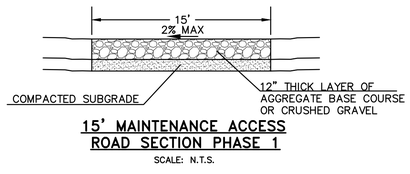
NORTH CONCRETE FOREBAY PHASE 2
SCALE: 1"=10'



SOUTH CONCRETE FOREBAY/MICROPOOL DETAILS PHASE 1
SCALE: 1"=10'



POND 3 CUTOFF WALL
CROSS SECTION PHASE 1



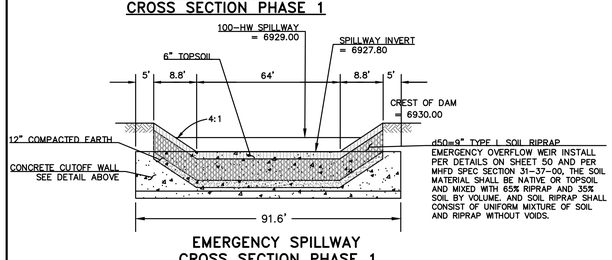
15' MAINTENANCE ACCESS
ROAD SECTION PHASE 1
SCALE: N.T.S.

WARNING
THIS AREA IS A STORMWATER FACILITY
AND IS SUBJECT TO PERIODIC FLOODING

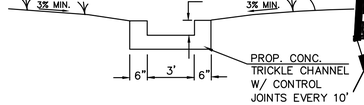
WARNING SIGN

PET WASTE MUST BE PICKED UP

PET WASTE SIGN



EMERGENCY SPILLWAY
CROSS SECTION PHASE 1
SCALE: N.T.S.

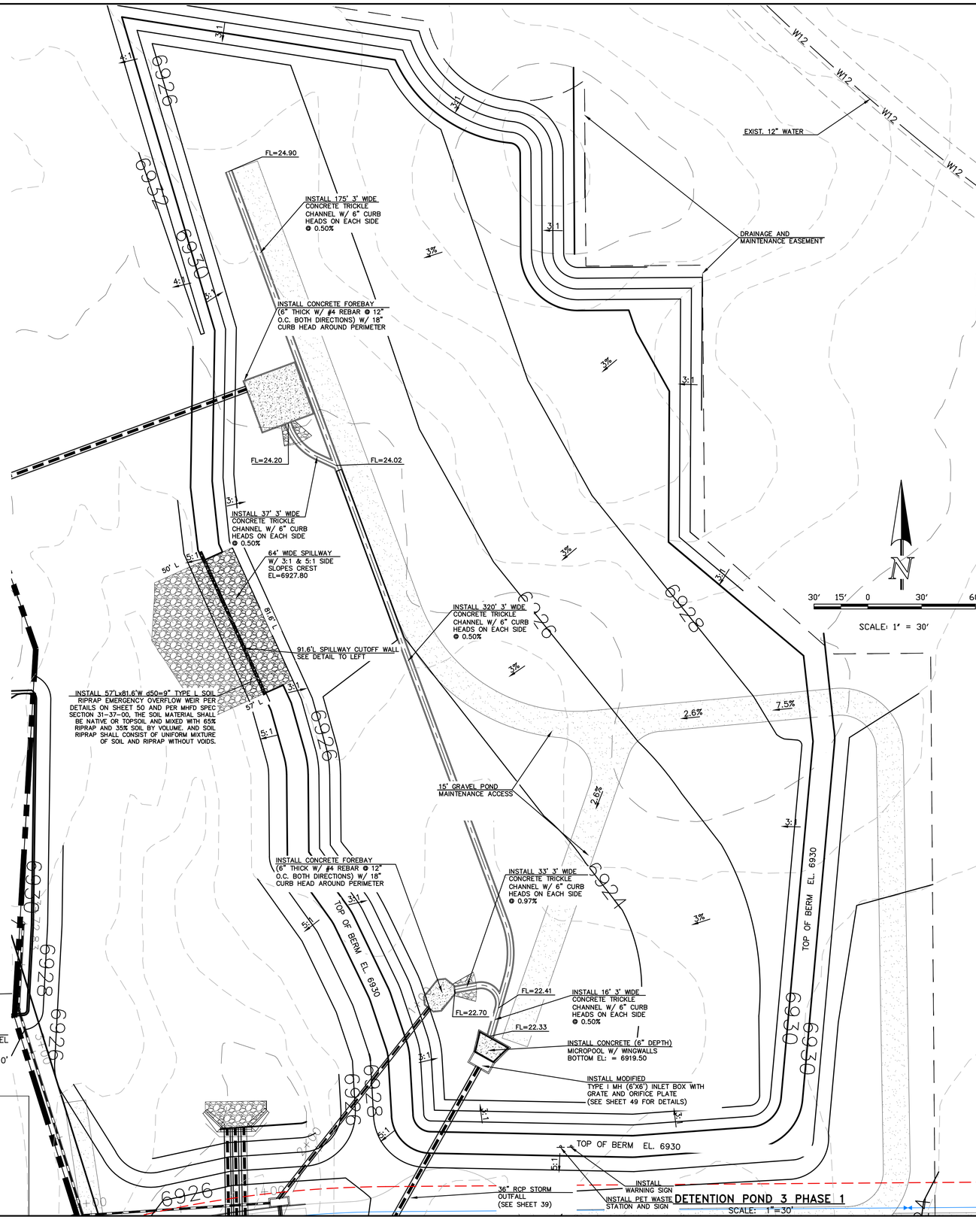


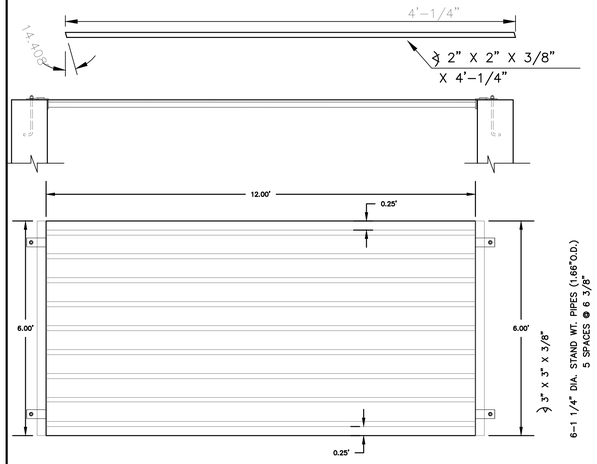
TRICKLE CHANNEL PHASE 1
TYPICAL SECTION
N.T.S.

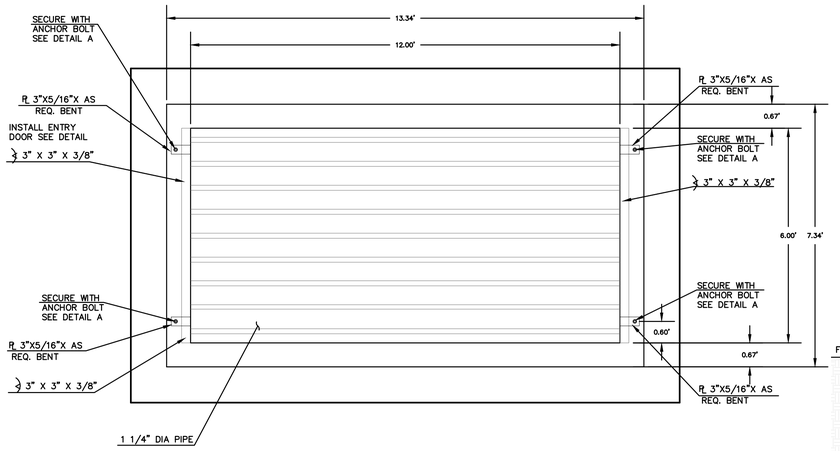
THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

COLORADO LICENSED
QUENTIN N ARMIJO
37170
04/17/26
PROFESSIONAL ENGINEER

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

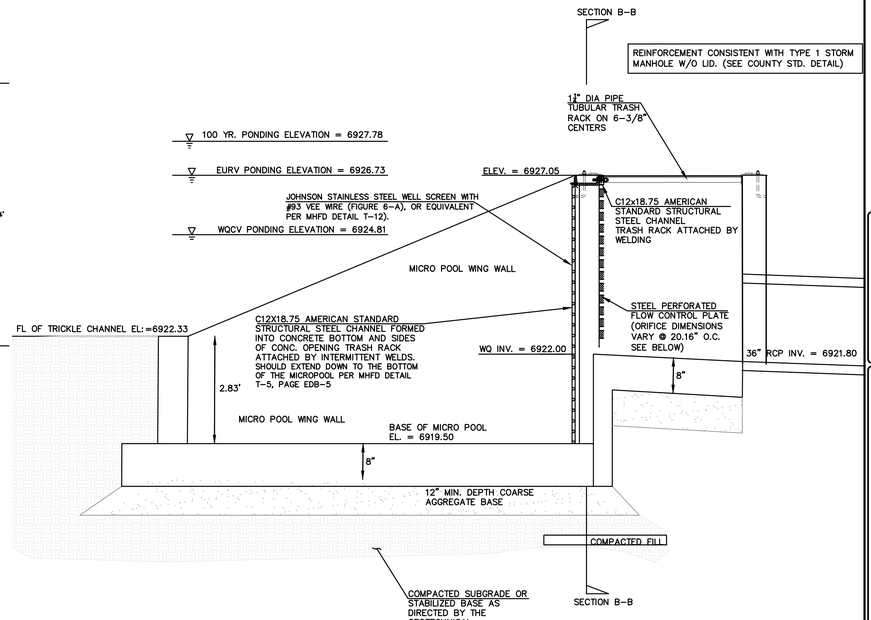

W12
EXIST. 12" WATER
DRAINAGE AND MAINTENANCE EASEMENT
FL=24.90
INSTALL 175' 3' WIDE CONCRETE TRICKLE CHANNEL W/ 6" CURB HEADS ON EACH SIDE @ 0.50%
INSTALL CONCRETE FOREBAY (6" THICK W/ #4 REBAR @ 12" O.C. BOTH DIRECTIONS) W/ 18" CURB HEAD AROUND PERIMETER
FL=24.20
FL=24.02
INSTALL 37' 3' WIDE CONCRETE TRICKLE CHANNEL W/ 6" CURB HEADS ON EACH SIDE @ 0.50%
64' WIDE SPILLWAY W/ 3:1 & 5:1 SIDE SLOPES CREST EL=6927.80
50' L
81.6' L
91.6'L SPILLWAY CUTOFF WALL SEE DETAIL TO LEFT
INSTALL 320' 3' WIDE CONCRETE TRICKLE CHANNEL W/ 6" CURB HEADS ON EACH SIDE @ 0.50%
INSTALL 57'Lx81.6'W d50=9" TYPE L SOIL RIPRAP EMERGENCY OVERFLOW WEIR PER DETAILS ON SHEET 50 AND PER MHFD SPEC SECTION 31-37-00, THE SOIL MATERIAL SHALL BE NATIVE OR TOPSOIL AND MIXED WITH 65% RIPRAP AND 35% SOIL BY VOLUME. AND SOIL RIPRAP SHALL CONSIST OF UNIFORM MIXTURE OF SOIL AND RIPRAP WITHOUT VOIDS.
15' GRAVEL POND MAINTENANCE ACCESS
INSTALL CONCRETE FOREBAY (6" THICK W/ #4 REBAR @ 12" O.C. BOTH DIRECTIONS) W/ 18" CURB HEAD AROUND PERIMETER
INSTALL 33' 3' WIDE CONCRETE TRICKLE CHANNEL W/ 6" CURB HEADS ON EACH SIDE @ 0.97%
TOP OF BERM EL. 6930
FL=22.41
FL=22.70
FL=22.33
INSTALL 16' 3' WIDE CONCRETE TRICKLE CHANNEL W/ 6" CURB HEADS ON EACH SIDE @ 0.50%
INSTALL CONCRETE (6" DEPTH) MICROPOOL W/ WINGWALLS BOTTOM EL: = 6919.50
INSTALL MODIFIED TYPE I MH (6'X6') INLET BOX WITH GRATE AND ORIFICE PLATE (SEE SHEET 49 FOR DETAILS)
TOP OF BERM EL. 6930
36" RCP STORM OUTFALL (SEE SHEET 39)
INSTALL WARNING SIGN
INSTALL PET WASTE STATION AND SIGN
DETENTION POND 3 PHASE 1
SCALE: 1"=30'
30' 15' 0 30' 60'
SCALE: 1" = 30'
6926
6928
6930
6932
6934
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6938
6940
6942
6944
6946
6948
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7004





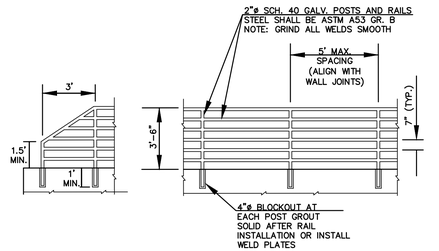
POND 3 GRATE PHASE 1 CONSTRUCTION

ALL WELDED CONSTRUCTION
SCALE: N.T.S.



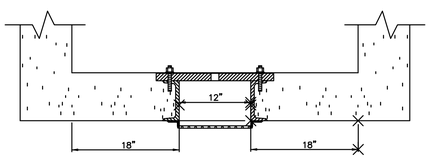
POND 3 OUTLET STRUCTURE MODIFIED TYPE 1 MH PHASE 1

SCALE: N.T.S.



NOTES:

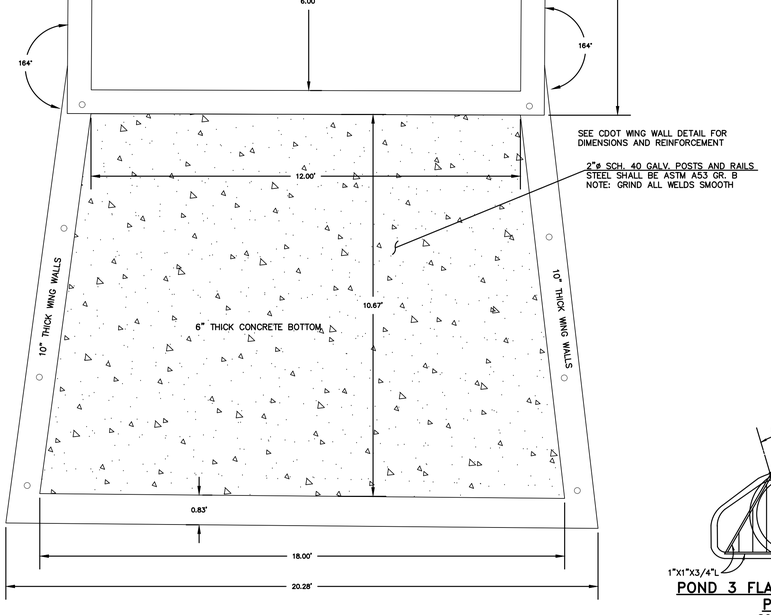
1. WELD PLATES MAY BE SUBSTITUTED FOR PIPE EMBEDDMENT.
2. CONTRACTOR SHALL SUBMIT HANDRAIL SHOP DRAWINGS TO ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION
3. DESIGN CRITERIA SHALL BE IN ACCORDANCE WITH AASHTO STANDARDS.
4. HANDRAIL DESIGN SHALL BE COMPATIBLE WITH THE DESIGN OF THE WINGWALLS AND HEADWALLS.
5. RAILING POSTS SHALL BE SET TO NORMAL TO GRADE. RAILS SHALL RUN PARALLEL TO THE SLOPES OF TOPS OF THE WALLS.
6. ALL RAILS SHALL HAVE EXPANSION JOINTS SPACED AT 40'-0 MAX. JOINT ENDS SHALL BE FREE OF ANY SHARP EDGES OR CORNERS.



SECTION B-B
SCALE: 1"=1'

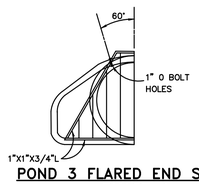
STEEL FABRICATION NOTES:

1. FABRICATED STEEL STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH AISC AND AWS SPECIFICATIONS.
2. THE OUTLET STRUCTURE BARGRATE IS DESIGNED FOR A VERTICAL LOAD OF 300 LBS./SQ. FT.
3. ALL STRUCTURAL STEEL SHAPES TO INCLUDE: ANGLE, PLATE, AND BAR SHALL MEET ASTM A36 SPECIFICATIONS, FY = 36 KSI MINIMUM. STRUCTURAL TUBING SHALL MEET ASTM A500 GRADE B SPECIFICATIONS, FY = 46 KSI MINIMUM. STEEL PIPE SHALL BE STANDARD WEIGHT PIPE ASTM A53 GRADE B, FY = 35 KSI MINIMUM.
4. WELDS NOT INDICATED SHALL BE 1/8" MINIMUM FILLET OR GROOVE, CONTINUOUS SO FAR AS POSSIBLE, CONSIDER VANDALISM LOADS, WELD ACCORDINGLY AT CRITICAL LOCATIONS.
5. PRIOR TO PAINTING REMOVE ALL OIL, SCALE, AND SLAG, GRIND OFF BURRS AND SHARP EDGES.



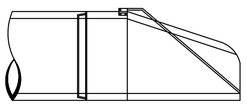
POND 3 CONCRETE MICROPOOL PHASE 1

SCALE: N.T.S.



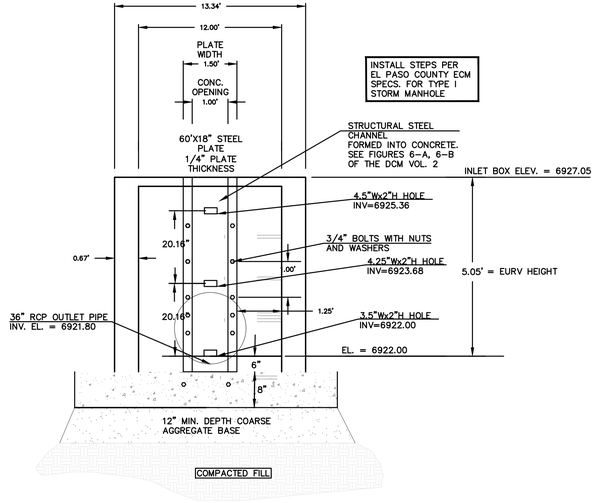
POND 3 FLARED END SECTION PHASE 1

SCALE: N.T.S.



POND 3 TRASH RACK PHASE 1 F.E.S. DETAIL

SCALE: N.T.S.



POND 3 OUTLET STRUCTURE MODIFIED TYPE 1 MH PHASE 1

SCALE: N.T.S.

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

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WATERBURY FILING NO. 1

CONSTRUCTION SET
POND 3 DETAILS

DESIGNED BY	DLF
DRAWN BY	QNA
CHECKED BY	QNA
H-SCALE	AS SHOWN
V-SCALE	N/A
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	49 OF 58

Riprap Materials

STEP 1 (Materials):

- Riprap should be crushed, angular granite.
- Verify that riprap meets requirements for color, size and gradation. Confirm size and gradations by checking delivery tickets and measure dimensions of the rock using a tape measure.
- Due to quarry availability and material variability, it may be necessary to adjust the size. Get approval from the Engineer before making any material adjustments.

The District has 5 different riprap sizes or gradations:

- Type VL (D50 6")
- Type L (D50 9")
- Type M (D50 12")
- Type H (D50 18")
- Type VH (D50 24")



Type VH Riprap (D50 = 24-inches)

Riprap Materials

Table 1: Riprap Gradation

Riprap Designation	% Smaller than Given Size by Weight	Intermmediate Rock Dimension (inches)	d_{50}* (inches)
Type VL	70 - 100 50 - 70 35 - 50 2 - 10	12 9 6 2	6
Type L	70 - 100 50 - 70 35 - 50 2 - 10	15 12 9 3	9
Type M	70 - 100 50 - 70 35 - 50 2 - 10	21 18 12 4	12
Type H	70 - 100 50 - 70 35 - 50 2 - 10	30 24 18 6	18
Type VH	70 - 100 50 - 70 35 - 50 2 - 10	41 33 24 9	24

*d_{50} - Mean Particle Size

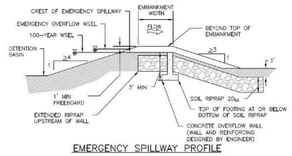
Soil Riprap Mixing

STEP 2 (Soil Riprap Mixing):

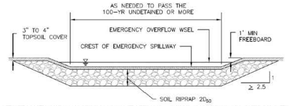
- Soil riprap is created by mixing 2/3 riprap with 1/3 soil by volume. Soil material should be native or topsoil.
- Front end loaders or excavators should be used to scoop up the riprap and soil material and add into a combined mixing pile.
- Verify that the proper proportions of the riprap and soil are used.
- Verify that the materials are thoroughly mixed using a loader or large track excavator. The final product should consist of a uniform mixture of soil and riprap without voids.



Soil riprap being mixed



EMERGENCY SPILLWAY PROFILE



EMERGENCY SPILLWAY SECTION AND SPILLWAY CHANNEL

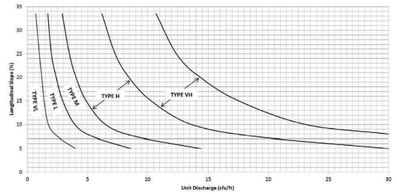


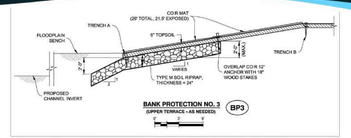
Figure 12-21. Embankment protection details and rock sizing chart (adapted from Arapahoe County)

Conventional/Soil Riprap Subgrade

STEP 3 (Subgrade):

Verify that the subgrade is prepared prior to riprap installation.

- Confirm that areas to receive riprap are excavated to a depth that accounts for the riprap thickness, topsoil and granular bedding thickness if specified.
- Subgrade should be firm and unyielding.
- There should be no groundwater present during riprap installation.





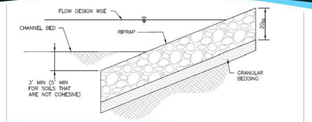
Excavated subgrade for riprap

Conventional/Soil Riprap Installation

STEP 4 (Bedding):

Granular bedding material is generally required under conventional riprap to prevent piping of underlying subgrade soils. It is not typically required for soil riprap. Verify that:

- Granular bedding is crushed, angular rock that meets gradation requirements.
- Granular bedding is placed at specified thickness.



Conventional Riprap with Bedding



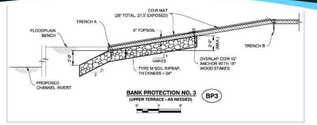
Granular Bedding

Conventional/Soil Riprap Installation

STEP 5 (Installation):

Riprap should be installed to the lines and grades shown on the plans. Verify that:

- Riprap is placed at thickness specified.
- Riprap is placed and well distributed such that there are no large accumulations of either smaller or larger sizes of stone. If segregation occurs during placement, riprap will need to be reworked to ensure that it is well mixed.
- Larger rock material is flush to the top surface and arranged to minimize voids with smaller rock material in between.





Soil riprap installation complete before topsoil placement

Conventional/Soil Riprap Installation

STEP 5 (Installation continued):

- Make sure that conventional and soil riprap is consolidated and compacted with an excavator bucket (plated) or a tracked piece of equipment to smooth the surface and interlock the rock material.
- For soil riprap, verify that there are no excessively thick zones or pockets of soil that could create a weak spot and be prone to washing out.



Conventional/Soil Riprap Installation

STEP 5 (Installation continued):

- Following placement, soil riprap is sometimes specified to be buried with several inches of topsoil.



Soil riprap installed and ready to be covered with topsoil

Finished Installation

After mixing, placing and compacting, soil riprap should be smooth on the surface and all the voids filled with soil.



Finished installation of soil riprap along channel bank (prior to being covered with topsoil)

REVISIONS

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WATERBURY FILING NO. 1

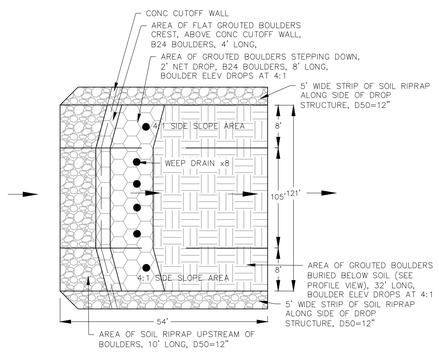
CONSTRUCTION SET
SOIL RIPRAP DETAILS

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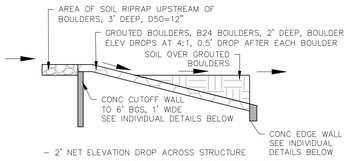
QUENTIN ARMIJO
COLORADO P.E. NO. 37170

COLORADO LICENSED
QUENTIN N ARMIJO
37170
04/17/26
PROFESSIONAL ENGINEER

DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA
H-SCALE NA
V-SCALE N/A
JOB NO. 2356.00
DATE ISSUED 4/17/26
SHEET NO. 50 OF58



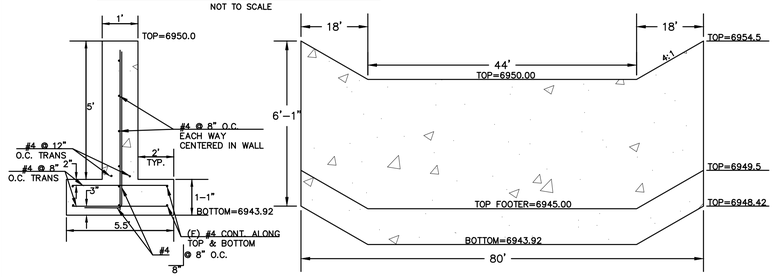
PLAN VIEW



PROFILE VIEW (CENTER LINE)

GROUTED BOULDER DROP STRUCTURE DETAIL

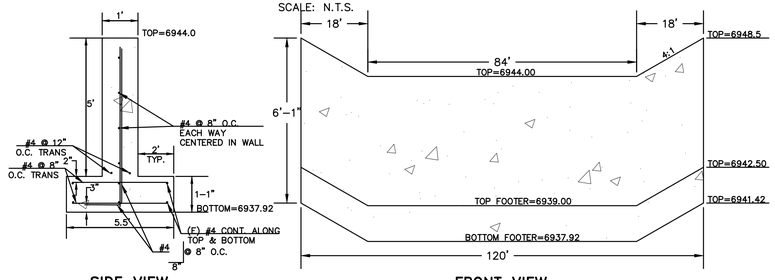
NOT TO SCALE



SIDE VIEW FRONT VIEW

STA 18+00.00 DROP STRUCTURE CONCRETE CUT OFF WALL

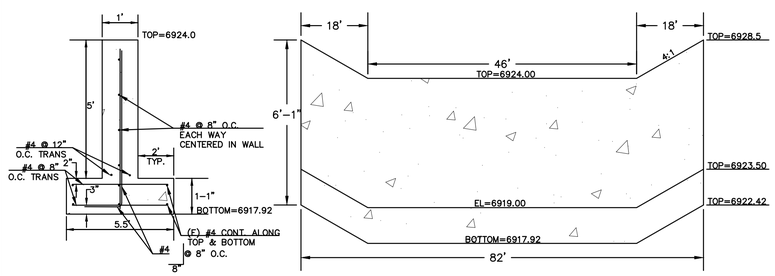
SCALE: N.T.S.



SIDE VIEW FRONT VIEW

STA 14+00.00 DROP STRUCTURE CONCRETE CUT OFF WALL

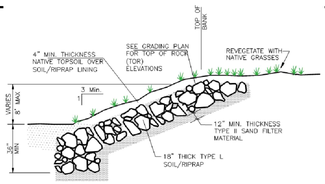
SCALE: N.T.S.



SIDE VIEW FRONT VIEW

STA 3+50.00 DROP STRUCTURE CONCRETE CUT OFF WALL

SCALE: N.T.S.



TYPICAL SOIL/RIPRAP BANK LINING

SCALE : N.T.S.

GENERAL NOTES

1. B24 BOULDERS ARE 24"ø MIN.

CONSTRUCTION REQUIREMENT NOTES

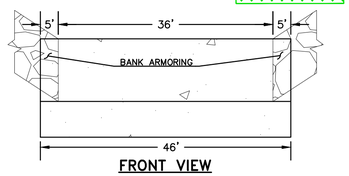
1. GROUT DEPTH RANGES FROM HALF TO FULL BOULDER HEIGHT. ALL GROUT SHALL BE A MINIMUM HALF BOULDER HEIGHT.
2. AN EDGE WALL IS REQUIRED AROUND THE ENTIRE DROP STRUCTURE.
3. THE MAX ALLOWABLE INDIVIDUAL DROP HEIGHT OFF A BOULDER IS 1.5' (0.5' USED IN DESIGN).

CHANNEL REVEGETATION SPECS (OUTSIDE WETLANDS)

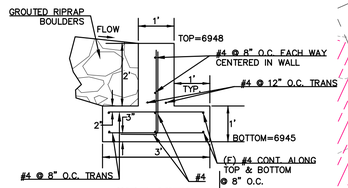
SEED DISTURBED CHANNEL AREA PER COLORADO SPRINGS SCM 'TABLE 5-1 EL PASO COUNTY CONSERVATION DISTRICT ALL-PURPOSE MIX FOR UPLAND, TRANSITION AND PERMANENT CONTROL MEASURE AREAS' AND COLORADO SPRINGS DCM VOL 1 TABLE 14-10 'WILDFLOWER MIX'. SEED ALL DISTURBED.

LEGEND

- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR 6810
- PROPOSED CONTOUR 6810
- SUBDIVISION BOUNDARY
- CHANNEL FLOW LINE
- 100-Y FEMA FLOODPLAIN
- EXISTING 100-Y HWL PER HECRAS ANLYSIS
- PROPOSED ACCESS ROAD
- PROPOSED RIPRAP
- PROPOSED PLANTING AREA

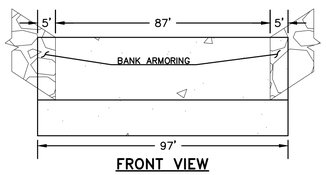


FRONT VIEW

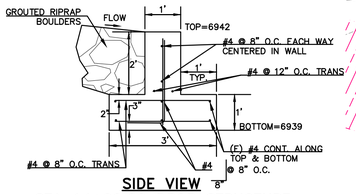


SIDE VIEW

STA 18+00.00 DROP STRUCTURE CONCRETE EDGE WALL

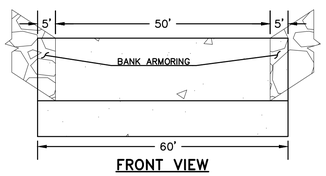


FRONT VIEW

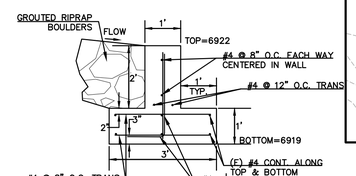


SIDE VIEW

STA 14+00.00 DROP STRUCTURE CONCRETE EDGE WALL



FRONT VIEW



SIDE VIEW

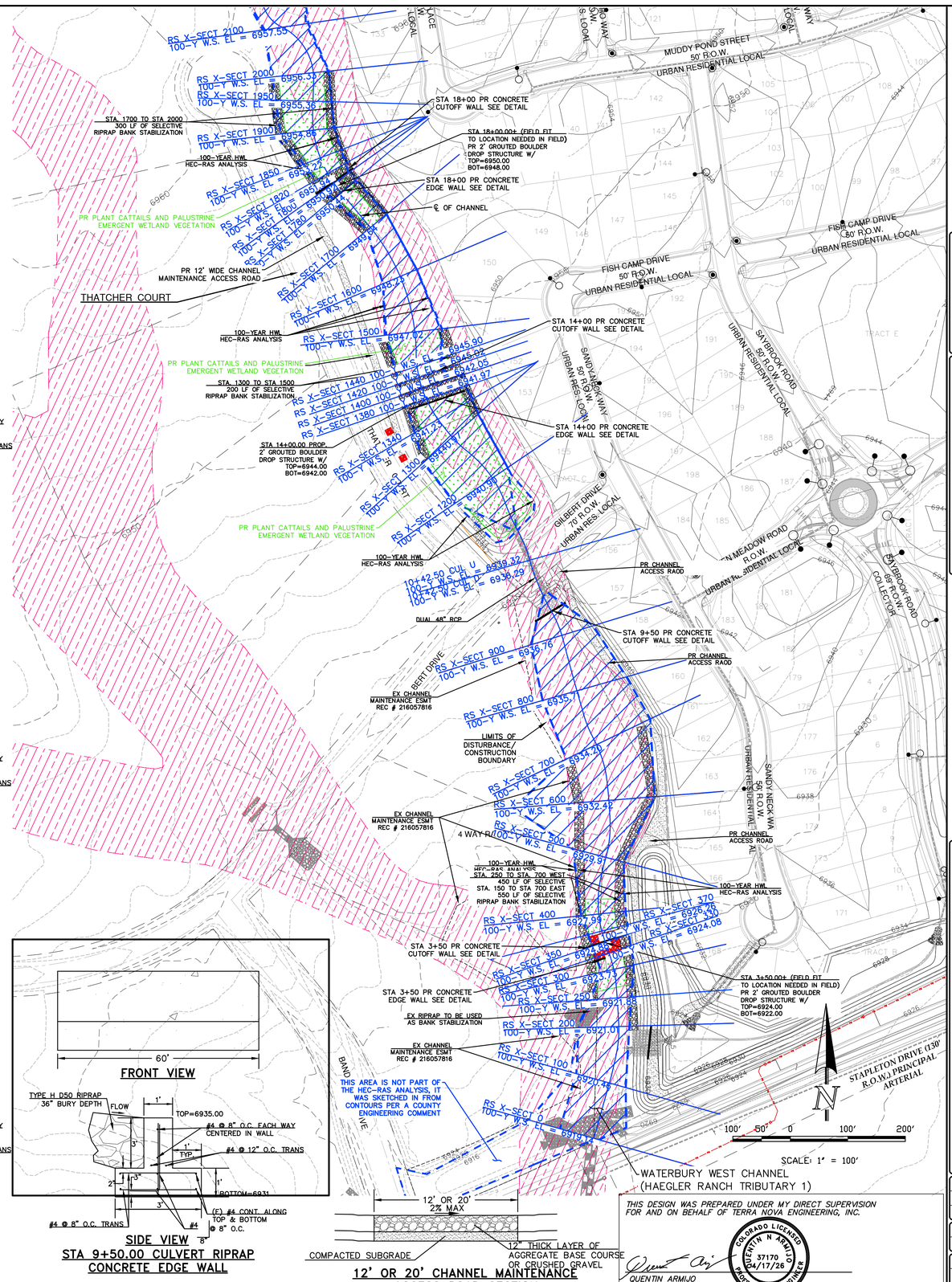
STA 3+50.00 DROP STRUCTURE CONCRETE EDGE WALL

FRONT VIEW SIDE VIEW

STA 9+50.00 CULVERT RIPRAP CONCRETE EDGE WALL

12' OR 20' CHANNEL MAINTENANCE ACCESS ROAD SECTION

SCALE: N.T.S.



REVISIONS		
NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR:
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ATTN: JASON POCK
8100 E. MISSISSIPPI AVE., STE 500
DENVER, CO 80246
303-984-9800

Terra Nova Engineering, Inc.
Creative Civil Engineering Solutions
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnesinc.com

WATERBURY FILING NO. 1

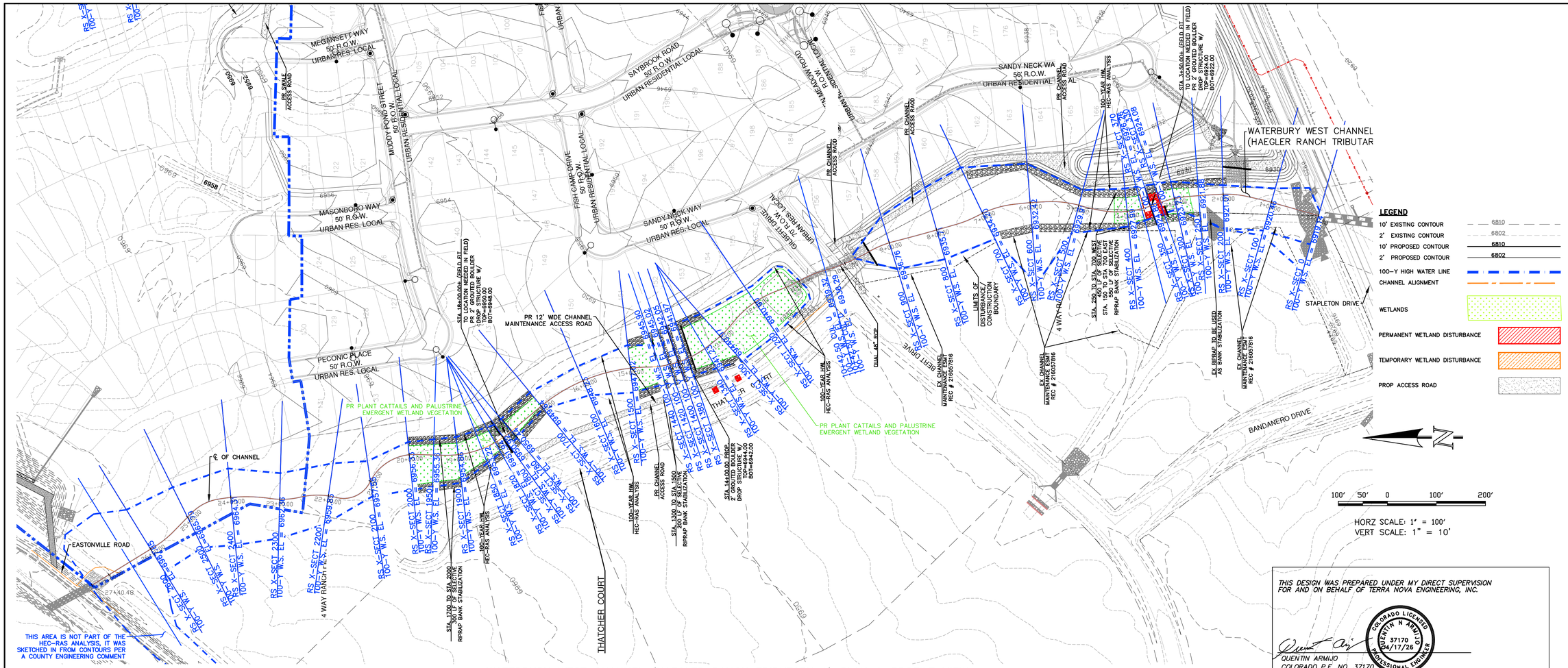
CONSTRUCTION SET
WEST CHANNEL - CHANNEL IMPROVEMENTS PLAN

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

COLORADO LICENSED QUENTIN N ARMIJO 37170 4/17/26 PROFESSIONAL ENGINEER

DESIGNED BY	DLF
DRAWN BY	QNA
CHECKED BY	QNA
H-SCALE	AS SHOWN
V-SCALE	N/A
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	51 OF 58



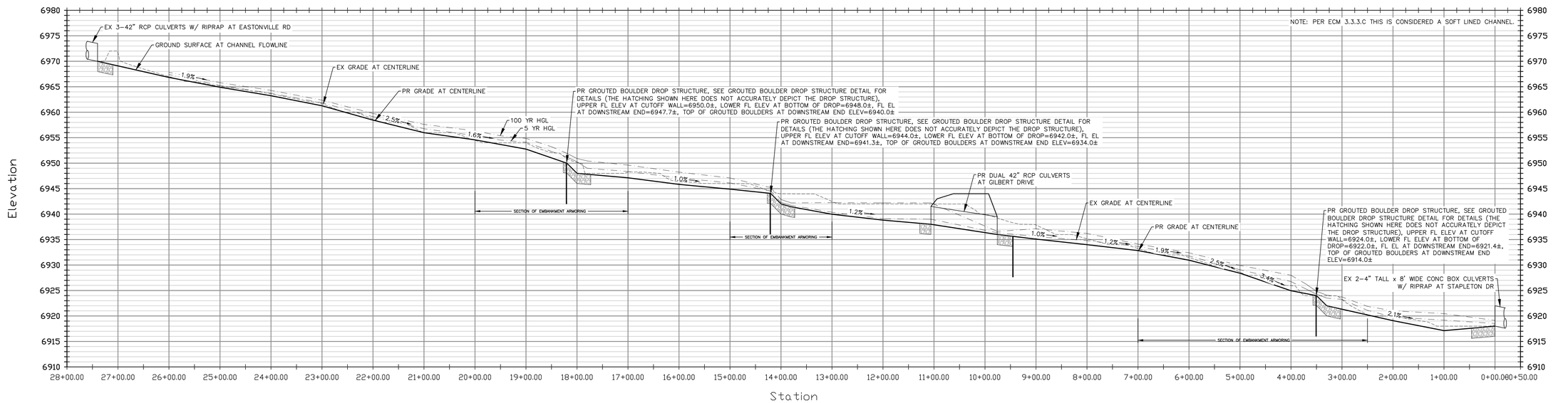
THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

COLORADO LICENSED
QUENTIN N ARMIJO
37170
4/17/26
PROFESSIONAL ENGINEER

QUENTIN ARMIJO
COLORADO P.E. NO. 37170

WATERBURY WEST CHANNEL (HAEGLER RANCH TRIBUTARY 1) PLAN & PROFILE VIEW

HORZ SCALE: 1"=100' – VERT SCALE: 1"=10'



REVISIONS

NO.	DESCRIPTION	DATE

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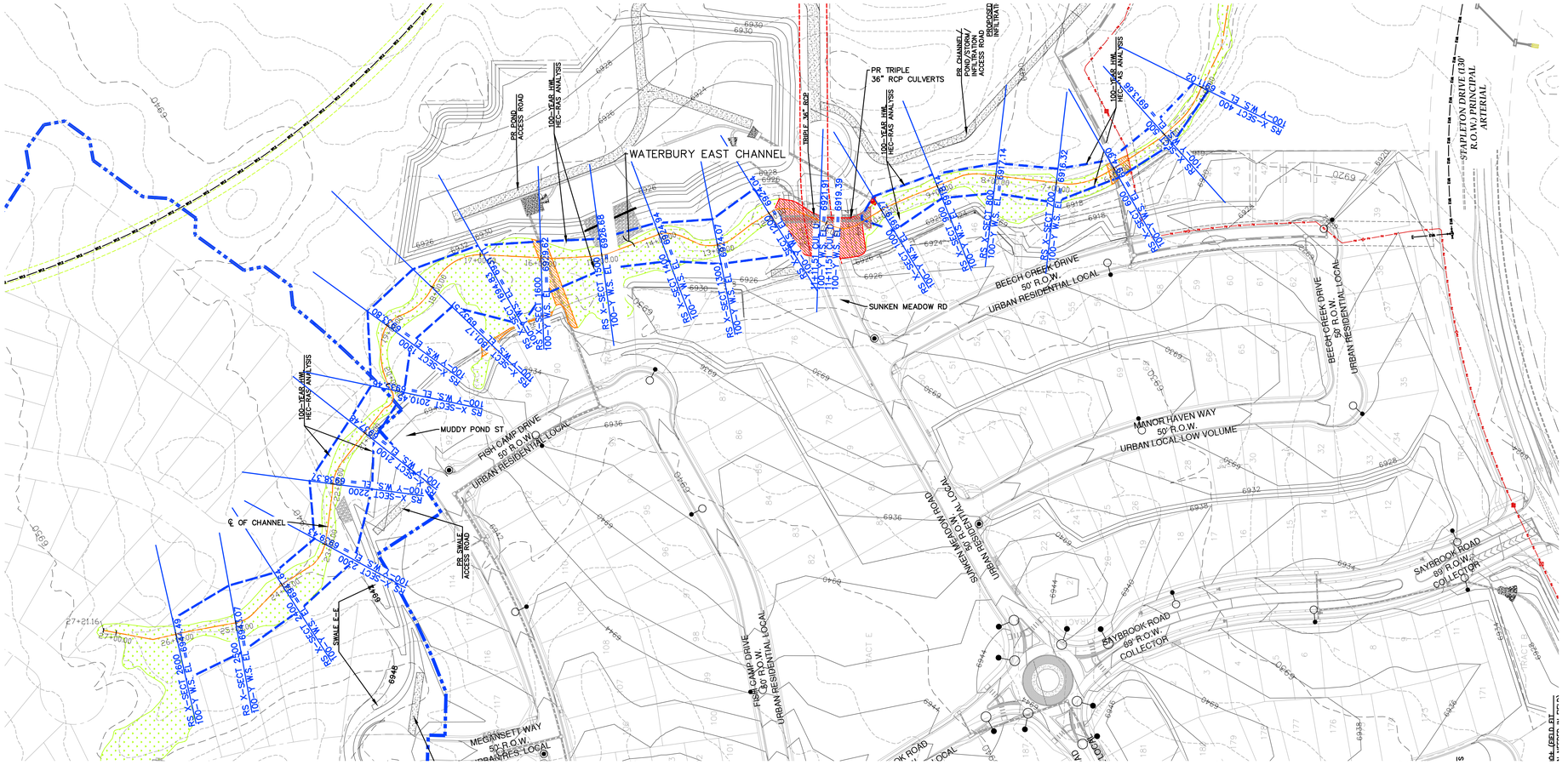
PREPARED FOR:
ACM ALF VIII JV SUB II LLC
ATTN: JASON POCK
100 E. MISSISSIPPI AVE., STE 500
DENVER, CO 80246
303-984-9800

Terra Nova Engineering, Inc.
Excellence in Civil Engineering Since 1994
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WATERBURY FILING NO. 1

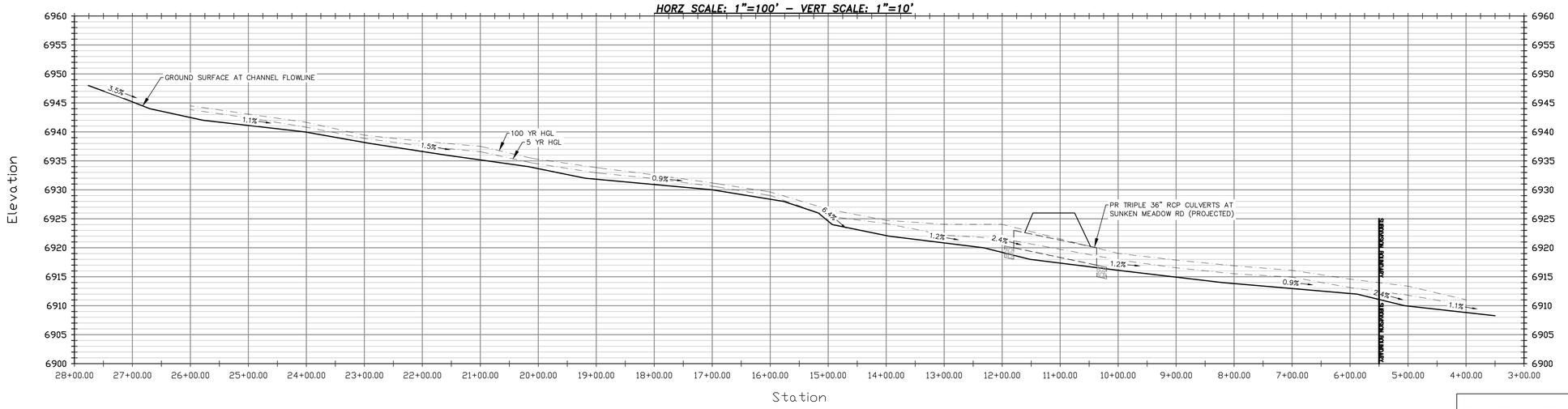
CONSTRUCTION SET
WEST CHANNEL – PLAN AND PROFILE

DESIGNED BY	DLF
DRAWN BY	QNA
CHECKED BY	QNA
H-SCALE	AS SHOWN
V-SCALE	AS SHOWN
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	52 OF 58



WATERBURY EAST CHANNEL PLAN & PROFILE VIEW

HORZ SCALE: 1"=100' – VERT SCALE: 1"=10'



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QUENTIN ARMIJO
COLORADO P.E. NO. 37170

COLORADO LICENSED QUENTIN N ARMIJO 37170 04/17/26 PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE

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303-984-9800

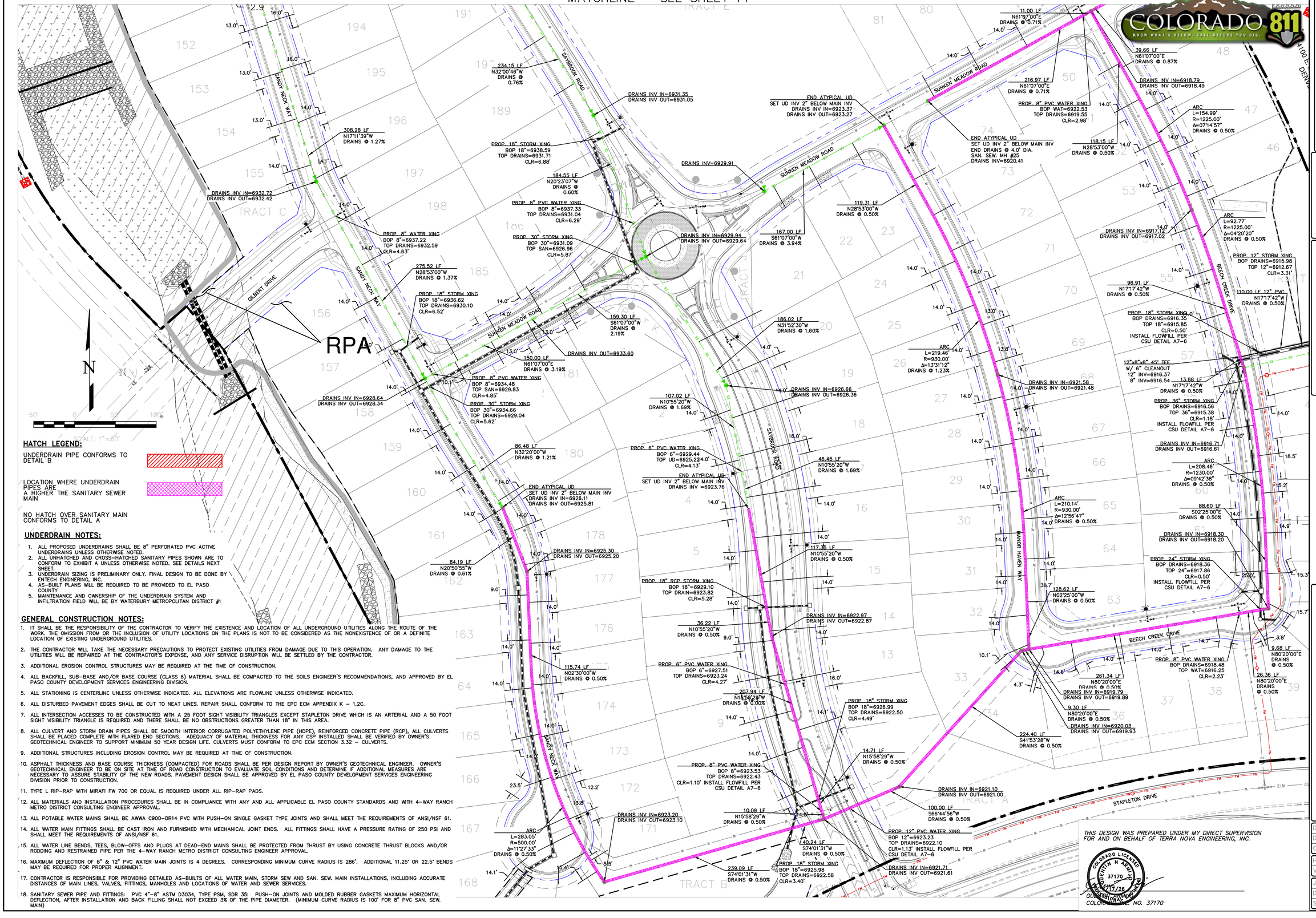
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WATERBURY FILING NO. 1

EAST CHANNEL – PLAN AND PROFILE

DESIGNED BY	DLF
DRAWN BY	QNA
CHECKED BY	QNA
H-SCALE	AS SHOWN
V-SCALE	AS SHOWN
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	53 OF 58

MATCHLINE – SEE SHEET 14



HATCH LEGEND:

UNDERDRAIN PIPE CONFORMS TO DETAIL B

LOCATION WHERE UNDERDRAIN PIPES ARE A HIGHER THE SANITARY SEWER MAIN

NO HATCH OVER SANITARY MAIN CONFORMS TO DETAIL A

UNDERDRAIN NOTES:

1. ALL PROPOSED UNDERDRAINS SHALL BE 8" PERFORATED PVC ACTIVE UNDERDRAINS UNLESS OTHERWISE NOTED.
2. ALL UNHATCHED AND CROSS–HATCHED SANITARY PIPES SHOWN ARE TO CONFORM TO EXHIBIT A UNLESS OTHERWISE NOTED. SEE DETAILS NEXT SHEET.
3. UNDERDRAIN SIZING IS PRELIMINARY ONLY. FINAL DESIGN TO BE DONE BY ENTECH ENGINERING, INC.
4. AS–BUILT PLANS WILL BE REQUIRED TO BE PROVIDED TO EL PASO COUNTY
5. MAINTENANCE AND OWNERSHIP OF THE UNDERDRAIN SYSTEM AND INFILTRATION FIELD WILL BE BY WATERBURY METROPOLITAN DISTRICT #1

GENERAL CONSTRUCTION NOTES:

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK. THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NONEXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.
2. 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.
3. ADDITIONAL EROSION CONTROL STRUCTURES MAY BE REQUIRED AT THE TIME OF CONSTRUCTION.
4. ALL BACKFILL, SUB–BASE AND/OR BASE COURSE (CLASS 6) MATERIAL SHALL BE COMPACTED TO THE SOILS ENGINEER'S RECOMMENDATIONS, AND APPROVED BY EL PASO COUNTY DEVELOPMENT SERVICES ENGINEERING DIVISION.
5. ALL STATIONING IS CENTERLINE UNLESS OTHERWISE INDICATED. ALL ELEVATIONS ARE FLOWLINE UNLESS OTHERWISE INDICATED.
6. ALL DISTURBED PAVEMENT EDGES SHALL BE CUT TO NEAT LINES. REPAIR SHALL CONFORM TO THE EPC ECM APPENDIX K – 1.2C.
7. ALL INTERSECTION ACCESSES TO BE CONSTRUCTED WITH A 25 FOOT SIGHT VISIBILITY TRIANGLES EXCEPT STAPLETON DRIVE WHICH IS AN ARTERIAL AND A 50 FOOT SIGHT VISIBILITY TRIANGLE IS REQUIRED AND THERE SHALL BE NO OBSTRUCTIONS GREATER THAN 18" IN THIS AREA.
8. ALL CULVERT AND STORM DRAIN PIPES SHALL BE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE (HDPE), REINFORCED CONCRETE PIPE (RCP), ALL CULVERTS SHALL BE PLACED COMPLETE WITH FLARED END SECTIONS. ADEQUACY OF MATERIAL THICKNESS FOR ANY CSP INSTALLED SHALL BE VERIFIED BY OWNER'S GEOTECHNICAL ENGINEER TO SUPPORT MINIMUM 50 YEAR DESIGN LIFE. CULVERTS MUST CONFORM TO EPC ECM SECTION 3.32 – CULVERTS.
9. ADDITIONAL STRUCTURES INCLUDING EROSION CONTROL MAY BE REQUIRED AT TIME OF CONSTRUCTION.
10. ASPHALT THICKNESS AND BASE COURSE THICKNESS (COMPACTED) FOR ROADS SHALL BE PER DESIGN REPORT BY OWNER'S GEOTECHNICAL ENGINEER. OWNER'S GEOTECHNICAL ENGINEER TO BE ON SITE AT TIME OF ROAD CONSTRUCTION TO EVALUATE SOIL CONDITIONS AND DETERMINE IF ADDITIONAL MEASURES ARE NECESSARY TO ASSURE STABILITY OF THE NEW ROADS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY DEVELOPMENT SERVICES ENGINEERING DIVISION PRIOR TO CONSTRUCTION.
11. TYPE L RIP–RAP WITH MIRAFI FW 700 OR EQUAL IS REQUIRED UNDER ALL RIP–RAP PADS.
12. ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN COMPLIANCE WITH ANY AND ALL APPLICABLE EL PASO COUNTY STANDARDS AND WITH 4–WAY RANCH METRO DISTRICT CONSULTING ENGINEER APPROVAL.
13. ALL POTABLE WATER MAINS SHALL BE AWWA C900–DR14 PVC WITH PUSH–ON SINGLE GASKET TYPE JOINTS AND SHALL MEET THE REQUIREMENTS OF ANSI/NSF 61.
14. ALL WATER MAIN FITTINGS SHALL BE CAST IRON AND FURNISHED WITH MECHANICAL JOINT ENDS. ALL FITTINGS SHALL HAVE A PRESSURE RATING OF 250 PSI AND SHALL MEET THE REQUIREMENTS OF ANSI/NSF 61.
15. ALL WATER LINE BENDS, TEES, BLOW–OFFS AND PLUGS AT DEAD–END MAINS SHALL BE PROTECTED FROM THRUST BY USING CONCRETE THRUST BLOCKS AND/OR RODDING AND RESTRAINED PIPE PER THE 4–WAY RANCH METRO DISTRICT CONSULTING ENGINEER APPROVAL.
16. MAXIMUM DEFLECTION OF 8" & 12" PVC WATER MAIN JOINTS IS 4 DEGREES. CORRESPONDING MINIMUM CURVE RADIUS IS 286'. ADDITIONAL 11.25° OR 22.5° BENDS MAY BE REQUIRED FOR PROPER ALIGNMENT.
17. CONTRACTOR IS RESPONSIBLE FOR PROVIDING DETAILED AS–BUILTS OF ALL WATER MAIN, STORM SEW AND SAN. SEW. MAIN INSTALLATIONS, INCLUDING ACCURATE DISTANCES OF MAIN LINES, VALVES, FITTINGS, MANHOLES AND LOCATIONS OF WATER AND SEWER SERVICES.
18. SANITARY SEWER PIPE AND FITTINGS: PVC 4"–8" ASTM D3034, TYPE PSM, SDR 35: PUSH–ON JOINTS AND MOLDED RUBBER GASKETS MAXIMUM HORIZONTAL DEFLECTION, AFTER INSTALLATION AND BACK FILLING SHALL NOT EXCEED 3% OF THE PIPE DIAMETER. (MINIMUM CURVE RADIUS IS 100' FOR 8" PVC SAN. SEW. MAIN)

COLORADO 811 KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

NO.	DESCRIPTION	DATE
REVISIONS		

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ATTN: JASON POCK
4100 E. MISSISSIPPI AVE., STE 500
DENVER, CO 80246
(303) 984–9800

Terra Nova Engineering, Inc.
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719–635–6422
FAX: 719–635–6426
www.tnsbinc.com

WATERBURY FILING NO. 1

CONSTRUCTION SET
UNDERDRAIN PLAN
SOUTH

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

COLORADO LICENSED QUENTIN N. ANNIO 37170 4/17/26 PROFESSIONAL ENGINEER

QUENTIN N. ANNIO
COLORADO P.E. NO. 37170

DESIGNED BY	QNA
DRAWN BY	JS
CHECKED BY	QNA
H–SCALE	1"=50'
V–SCALE	N/A
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	54 OF 58

Date & Time Plotted: 4/17/2026 2:43:17 PM

HATCH LEGEND:

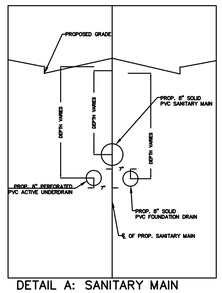
UNDERDRAIN PIPE CONFORMS TO DETAIL B

LOCATION WHERE UNDERDRAIN PIPES AREA HIGHER THAN SANITARY SEWER MAIN

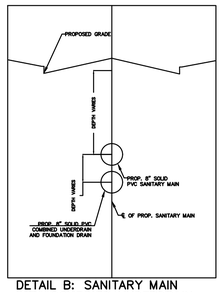
NO HATCH OVER SANITARY MAIN CONFORMS TO DETAIL A

UNDERDRAIN NOTES:

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3. UNDERDRAIN SIZING IS PRELIMINARY ONLY. FINAL DESIGN TO BE DONE BY ENTECH ENGINERING, INC.
4. AS-BUILT PLANS WILL BE REQUIRED TO BE PROVIDED TO EL PASO COUNTY
5. MAINTENANCE AND OWNERSHIP OF THE UNDERDRAIN SYSTEM AND INFILTRATION FIELD WILL BE BY WATERBURY METROPOLITAN DISTRICT #1



DETAIL A: SANITARY MAIN WITH SEPARATE UNDERDRAIN AND FOUNDATION DRAIN
N.T.S.



DETAIL B: SANITARY MAIN WITH COMBINED UNDERDRAIN AND FOUNDATION DRAIN
N.T.S.

SWALE E-E

DRAINS INV=6950.01
PLUG & CAP
BOTH PIPES

ARC
L=17.79'
R=500.00'
Δ=02°02'19"
DRAINS @ 1.00%

DRAINS INV IN=6949.83
DRAINS INV OUT=6949.53

DRAINS
INV=6944.36
PLUG & CAP
BOTH PIPES

DRAINS INV IN=6944.17
DRAINS INV OUT=6943.87

13.00 LF
N01°10'00"E
DRAINS @ 1.46%

38.21 LF
N01°10'00"E
DRAINS @ 2.61%

DRAINS INV IN=6942.87
DRAINS INV OUT=6942.57

DRAINS
INV=6934.41
PLUG & CAP
BOTH PIPES

DRAINS INV IN=6934.28
DRAINS INV OUT=6933.98

79.49 LF
N01°45'00"E
DRAINS @ 1.00%

13.00 LF
N01°45'00"E
DRAINS @ 1.00%

PROP. 24" STORM XING
BOP 24"=6941.14
TOP DRAINS=6933.50
CLR=7.64'

DRAINS INV IN=6933.19
DRAINS INV OUT=6932.89

PROP. 8" PVC WATER XING
BOP WAT=6940.33
TOP SAN=6932.81
CLR=7.52'

ARC
L=35.95'
R=1250.00'
Δ=01°38'52"
DRAINS @ 0.50%

END ATYPICAL UD
SET UD INV 2" BELOW MAIN INV
DRAINS INV IN=6927.24
DRAINS INV OUT=6926.94

PROP. 18" STORM XING
BOP 18"=6935.81
TOP SAN=6929.04
CLR=6.77'

ARC
L=434.15'
R=1250.00'
Δ=19°54'00"
DRAINS @ 1.00%

DRAINS
INV=6927.29
PLUG & CAP
BOTH PIPES

PROP. 12" PVC WATER XING
BOP 12"=6935.69
TOP SAN=6927.83
CLR=7.86'

MUDDY POND STREET

FISH CAMP DRIVE

MEGANSETT WAY

SAYBROOK ROAD

PECONIC PLACE

FOUNDATION DRAIN TYPICAL

314.72 LF
N08°54'30"W
DRAINS @ 2.18%

PROP PUB 8" PVC WATER XING
BOP WAT=6947.33
TOP SAN=6938.71
CLR=8.62'

ARC
L=275.08'
R=910.00'
Δ=17°19'11"
DRAINS @ 1.65%

13.44 LF
S82°10'00"W
DRAINS @ 1.65%

202.39 LF
N07°50'00"W
DRAINS @ 2.46%

222.06 LF
S82°10'00"W
DRAINS @ 1.50%

ARC
L=138.54'
R=1250.00'
Δ=06°21'00"
DRAINS @ 1.50%

131.02 LF
N14°11'00"W
DRAINS @ 0.77%

DRAINS INV IN=6931.88
DRAINS INV OUT=6931.58

PROP. 30" STORM XING
BOP 30"=6941.14
TOP DRAINS=6932.86
CLR=8.28'

PROP. 8" PVC WATER XING
BOP WAT=6942.73
TOP SAN=6935.43
CLR=7.30'

DRAINS INV IN=6937.60
DRAINS INV OUT=6937.30

PROP. 18" STORM XING
BOP 18"=6946.57
TOP DRAINS=6937.30
CLR=9.33'

DRAINS INV OUT=6938.07

PROP. 18" STORM XING
BOP 18"=6948.23
TOP DRAINS=6940.48
CLR=7.75'

DRAINS INV IN=6942.67
DRAINS INV OUT=6942.37

FOUNDATION DRAIN TYPICAL

ARC
L=33.72'
R=877.28'
Δ=13°38'18"
DRAINS @ 0.95%

47.99 LF
N13°25'02"E
DRAINS @ 0.50%

DRAINS INV IN=6923.86
DRAINS INV OUT=6923.56

PROP. 8" PVC WATER XING
BOP WAT=6929.06
TOP DRAINS=6923.53
CLR=5.53'

191.50 LF
S60°54'16"W
DRAINS @ 0.85%

ARC
L=145.08'
R=875.00'
Δ=09°30'00"
DRAINS @ 0.85%

DRAINS INV IN=6923.32
DRAINS INV OUT=6923.02

29.03 LF
N17°17'34"W
DRAINS @ 0.50%

199.39 LF
N58°52'15"W
DRAINS @ 0.50%

DRAINS INV IN=6922.02
DRAINS INV OUT=6921.72

PROP. 12" STORM XING
BOP 12"=6925.26
TOP DRAINS=6922.24
CLR=3.02'

144.93 LF
N17°17'34"W
DRAINS @ 0.50%

PROP. 12" STORM XING
BOP 12"=6924.49
TOP DRAINS=6921.52
CLR=2.97'

PROP. 8" PVC WATER XING
BOP DRAINS=6920.75
TOP WAT=6920.00
CLR=1.67'

20.48 LF
N17°17'34"W
DRAINS @ 0.50%

11.00 LF
N17°17'34"W
DRAINS @ 0.50%

ARC
L=145.19'
R=600.00'
Δ=09°30'00"
DRAINS @ 0.87%

DRAINS INV IN=6920.69
DRAINS INV OUT=6920.39

39.66 LF
N61°07'01"E
DRAINS @ 0.87%

SUNKEN MEADOW ROAD

ARC
L=175.10'
R=877.28'
Δ=13°38'18"
DRAINS @ 0.95%

116.23 LF
N34°05'00"W
DRAINS @ 0.95%

PROP. 42" STORM XING
BOP 42"=6926.97
TOP DRAINS=6924.85
CLR=2.12'

277.19 LF
N08°03'32"W
DRAINS @ 1.36%

DRAINS INV IN=6934.30
DRAINS INV OUT=6934.00

299.20 LF
S79°50'00"W
DRAINS @ 0.78%

DRAINS INV OUT=6936.64

145.00 LF
S79°50'00"W
DRAINS @ 2.89%

ARC
L=145.08'
R=875.00'
Δ=09°30'00"
DRAINS @ 2.89%

END ATYPICAL UD
SET UD INV 2" BELOW MAIN INV
DRAINS INV IN=6926.49
DRAINS INV OUT=6926.19

DRAINS INV OUT=6934.87

68.71 LF
N10°10'00"W
DRAINS @ 0.83%

PROP. 8" PVC WATER XING
BOP 8"=6941.28
TOP DRAINS=6934.75
CLR=6.53'

DRAINS INV IN=6933.43
DRAINS INV OUT=6933.13

234.15 LF
N32°00'46"W
DRAINS @ 0.76%

308.28 LF
N17°11'39"W
DRAINS @ 1.27%

TRACT G

TRACT F

TRACT E

N

50' 0 50' 100'

SCALE: 1"=50'

MATCHLINE – SEE SHEET 13

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

COLORADO LICENSED
QUENTIN N ARNOLD
5/17/26
37170
PROFESSIONAL ENGINEER

QUENTIN N. ARNOLD
COLORADO P.E. NO. 37170

REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR:
ACM ALF VIII JV SUB II LLC
ATTN: JASON POCK
4100 E. MISSISSIPPI AVE., STE 500
DENVER, CO 80246
(303) 984-9800

Terra Nova Engineering, Inc.
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnsinc.com

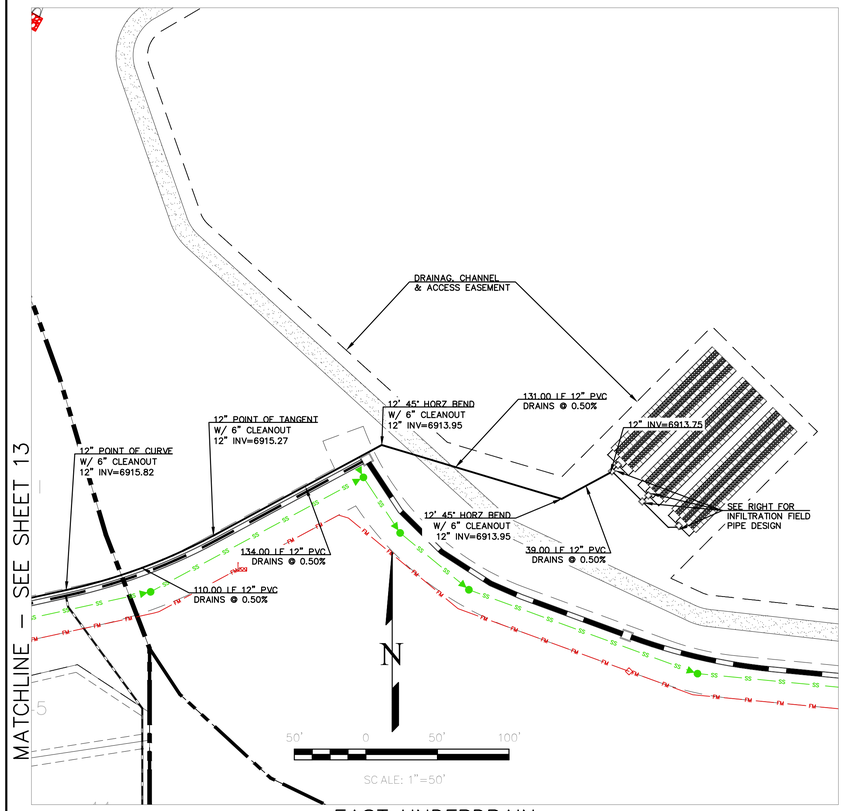
WATERBURY FILING NO. 1

CONSTRUCTION SET
UNDERDRAIN PLAN
NORTH

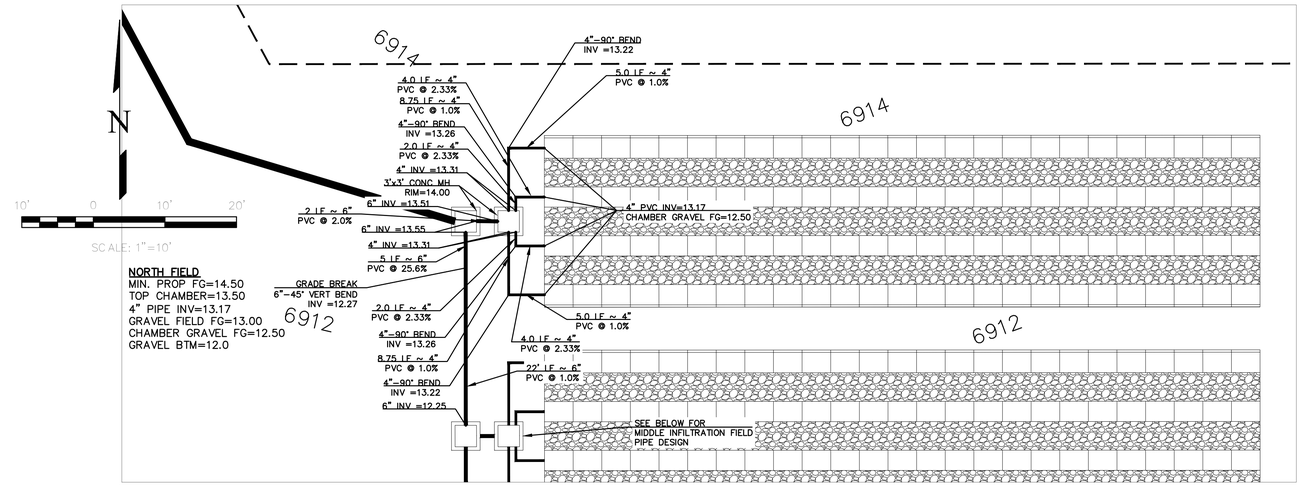
DESIGNED BY	QNA
DRAWN BY	JS
CHECKED BY	QNA
H-SCALE	1"=50'
V-SCALE	N/A
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	55 OF 58

ACM ALF VIII JV SU
4100 E. MISSISSIPPI A
DENVER, CO 8

G:\2023\2356.00\Drawings\Civil\2356.00 Sheet 7/16/2026 4:53:3 PM

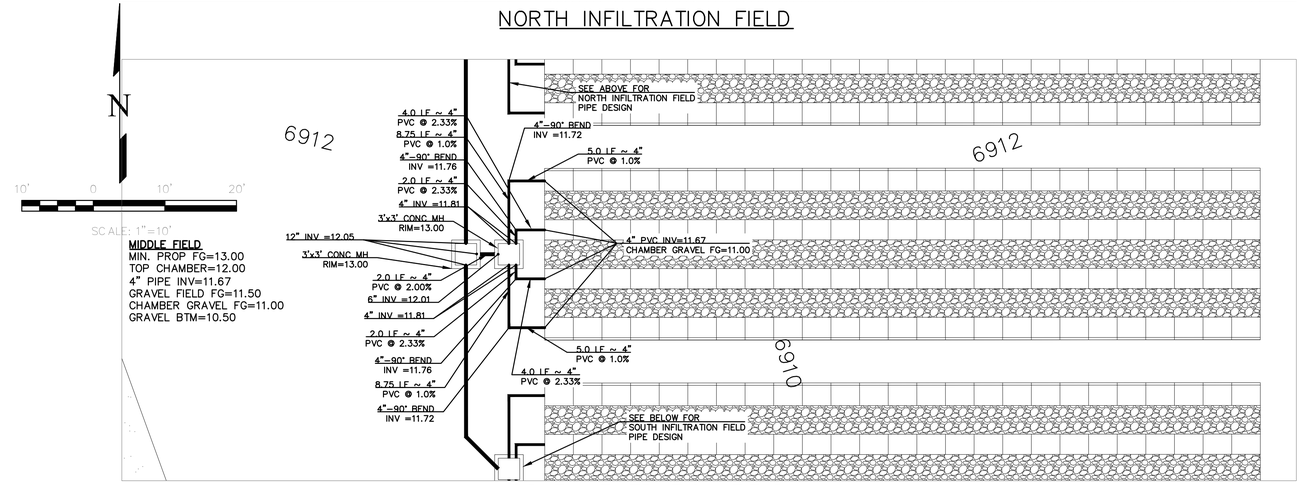


EAST UNDERDRAIN



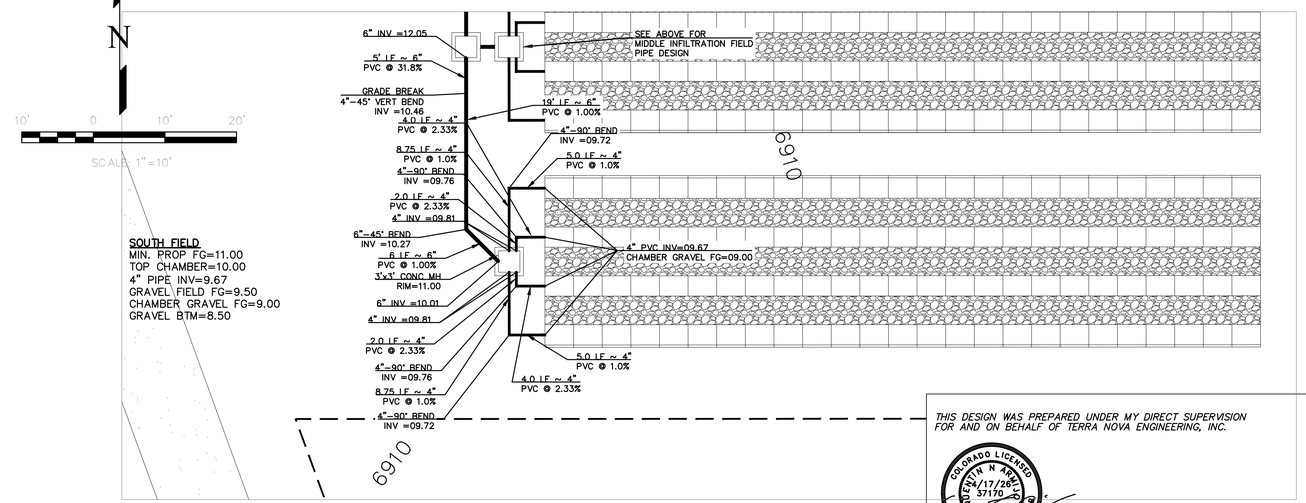
NORTH FIELD
MIN. PROP FG=14.50
TOP CHAMBER=13.50
4" PIPE INV=13.17
GRAVEL FIELD FG=13.00
CHAMBER GRAVEL FG=12.50
GRAVEL BTM=12.0

NORTH INFILTRATION FIELD



MIDDLE FIELD
MIN. PROP FG=13.00
TOP CHAMBER=12.00
4" PIPE INV=11.67
GRAVEL FIELD FG=11.50
CHAMBER GRAVEL FG=11.00
GRAVEL BTM=10.50

MIDDLE INFILTRATION FIELD



SOUTH FIELD
MIN. PROP FG=11.00
TOP CHAMBER=10.00
4" PIPE INV=9.67
GRAVEL FIELD FG=9.50
CHAMBER GRAVEL FG=9.00
GRAVEL BTM=8.50

SOUTH INFILTRATION FIELD

THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

COLORADO LICENSED JOSEPH R. KERN 37170 PROFESSIONAL ENGINEER

JOSEPH R. KERN
COLORADO P.E. NO. 37170

REVISIONS		
NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR:
ACM ALF VIII JV SUB II LLC
ATTN: JASON POCK
4100 E. MISSISSIPPI AVE., STE 500
DENVER, CO 80246
(303) 984-9800

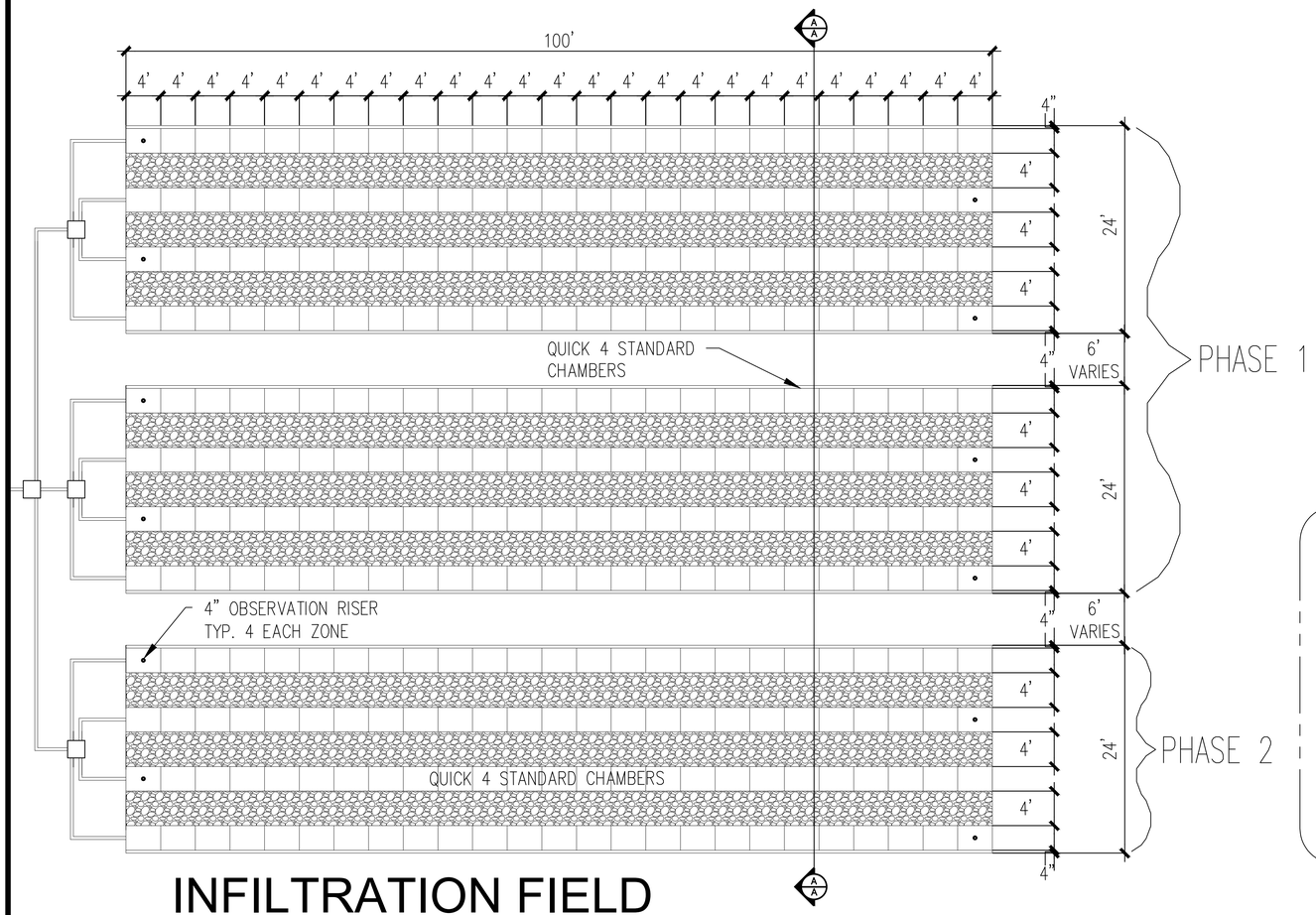
Terra Nova Engineering, Inc.
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnsinc.com

WATERBURY FILING NO. 1

CONSTRUCTION SET
UNDERDRAIN PLAN/INFILTRATION FIELD DESIGN AND DETAILS

DESIGNED BY	QNA
DRAWN BY	JS
CHECKED BY	QNA
H-SCALE	1"=50'
V-SCALE	N/A
JOB NO.	2356.00
DATE ISSUED	4/17/26
SHEET NO.	56 OF 58

DWG: K:\2023\2356.00\DRAWINGS\UD\UD2356.00 Sheet 4/16/2026 4:53:31 PM

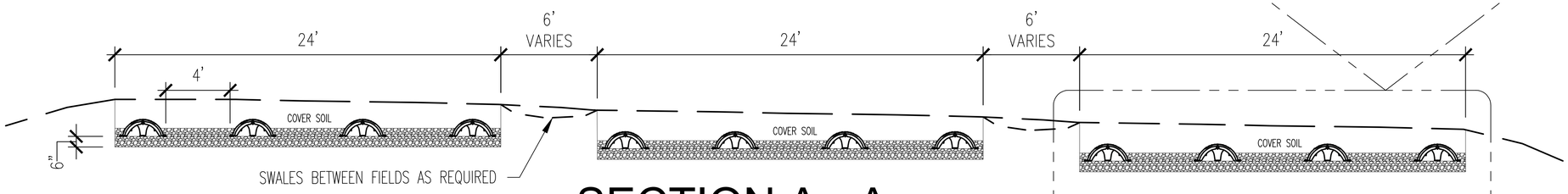


INFILTRATION FIELD

SCALE: 1/8" = 1'-0"

OPTION "A"

□= DISTRIBUTION BOX



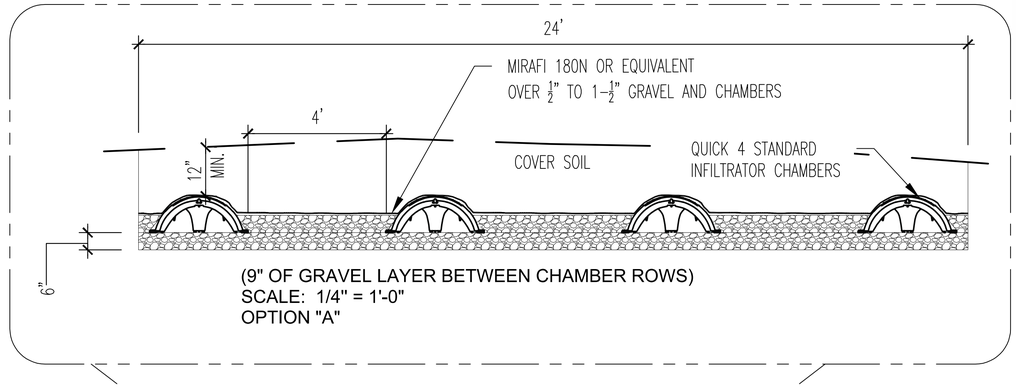
SECTION A - A

SCALE: 1/8" = 1'-0"

OPTION "A"

NOTES

- FIELD INFILTRATION RECHARGE BASIN CONFIGURATION/LOCATION TO BE FIELD DETERMINED. A MEETING WITH TERRA NOVA, ENTECH AND INSTALLER IS RECOMMENDED PRIOR TO EXCAVATION.
- EACH ZONE SHALL BE INSTALLED LEVEL. ZONES MAY BE TIERED AS TOPOGRAPHY DICTATES (MAX COVER 3 FEET)
- BASE AREA SHALL BE CLEARED OF VEGETATION AND TOPSOIL. THE SUBGRADE SHALL BE SCARIFIED AND LEVEL PRIOR TO GRAVEL PLACEMENT.
- THE EXCAVATION SHOULD BE OBSERVED BY ENGINEER PRIOR TO GRAVEL PLACEMENT
- GRADING AROUND INFILTRATION BASINS SHALL DIRECT SURFACE FLOWS AROUND THE FIELDS. INSTALL SWALES BETWEEN FIELDS AS REQUIRED.



(9" OF GRAVEL LAYER BETWEEN CHAMBER ROWS)
SCALE: 1/4" = 1'-0"
OPTION "A"

MODIFICATIONS TO THIS DESIGN MAY BE REQUIRED, TO BE DETERMINED AT THE TIME OF SITE OBSERVATIONS.

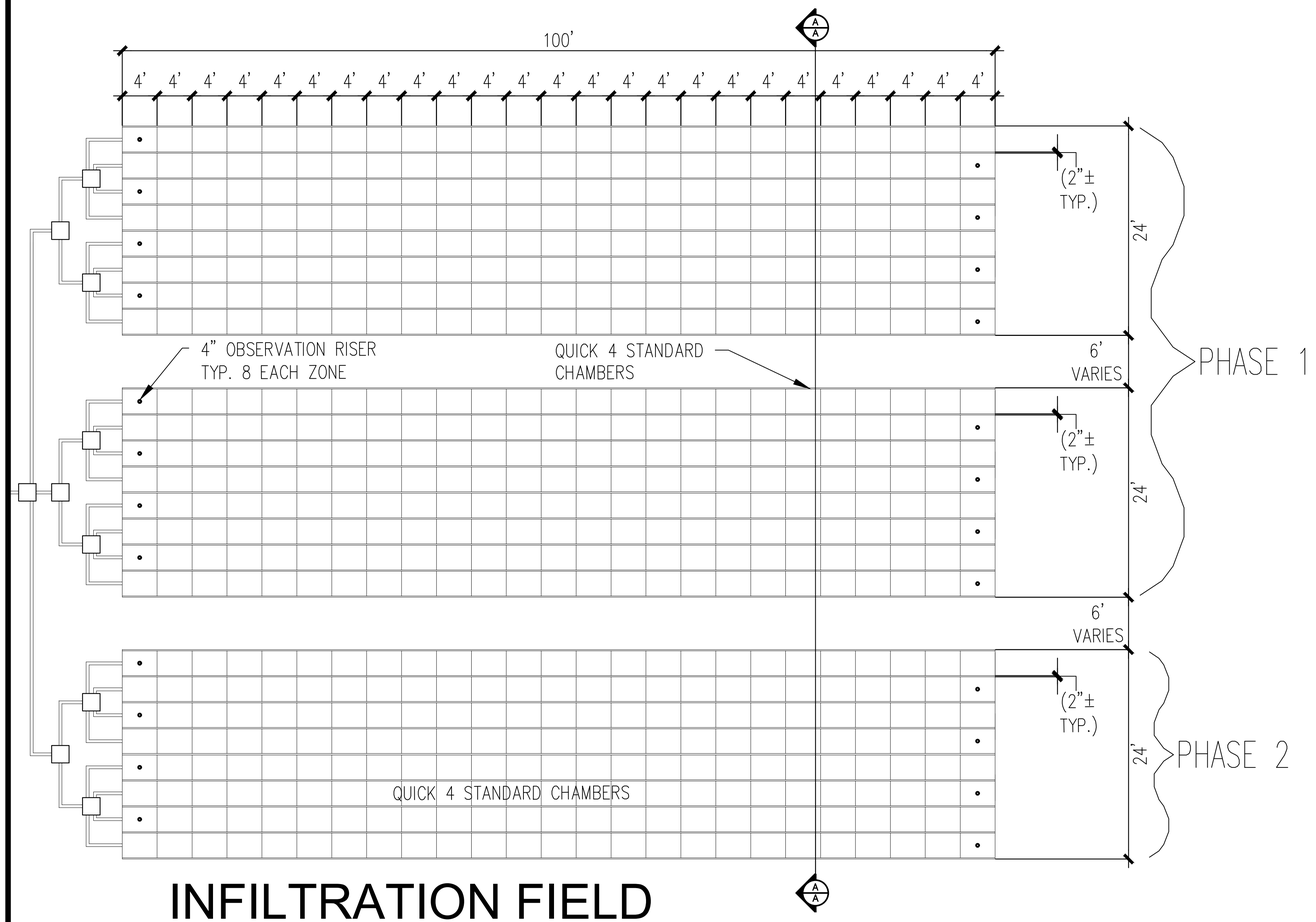
Revisions:

No.	Description	By	Date

ENTECH ENGINEERING, INC.

INFILTRATION FIELD - OPTION "A"
WATERBURY, PHASE 1
EL PASO COUNTY, CO
FOR: WESTSIDE INVESTMENTS

DRAWN BY:	ZTM
DESIGNED BY:	JG
CHECKED BY:	JG
DATE:	9/19/2025
SCALE:	AS SHOWN
JOB NO.:	250937
SHEET NO.:	57 OF 58

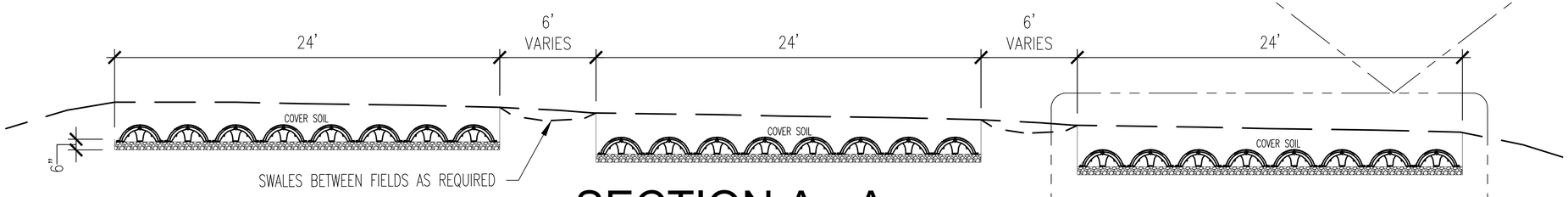


INFILTRATION FIELD

SCALE: 1/8" = 1'-0"

OPTION "B"

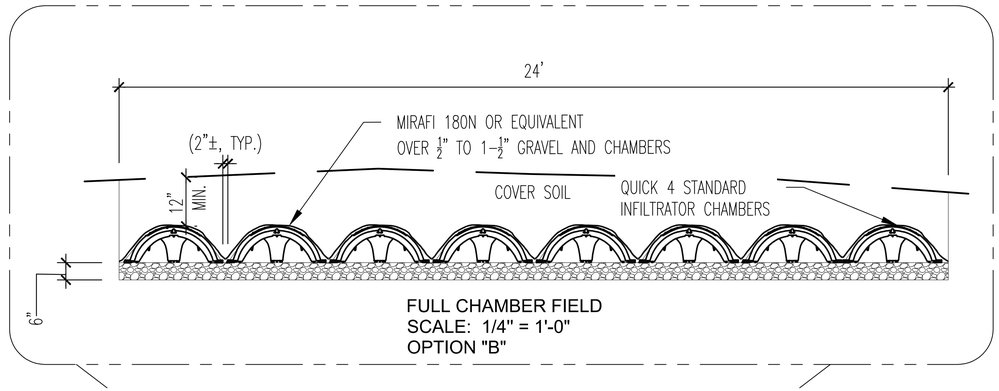
□= DISTRIBUTION BOX



SECTION A - A

SCALE: 1/8" = 1'-0"

OPTION "B"



FULL CHAMBER FIELD
SCALE: 1/4" = 1'-0"
OPTION "B"

MODIFICATIONS TO THIS DESIGN MAY BE REQUIRED, TO BE DETERMINED AT THE TIME OF SITE OBSERVATIONS.

NOTES

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- THE EXCAVATION SHOULD BE OBSERVED BY ENGINEER PRIOR TO GRAVEL PLACEMENT
- GRADING AROUND INFILTRATION BASINS SHALL DIRECT SURFACE FLOWS AROUND THE FIELDS. INSTALL SWALES BETWEEN FIELDS AS REQUIRED.

Revisions:

No.	Description	By	Date

ENTECH ENGINEERING, INC.

INFILTRATION FIELD - OPTION "B"
WATERBURY, PHASE 1
EL PASO COUNTY, CO
FOR: WESTSIDE INVESTMENTS

DRAWN BY:	ZTM
DESIGNED BY:	JG
CHECKED BY:	JG
DATE:	9/19/2025
SCALE:	AS SHOWN
JOB NO.:	250937
SHEET NO.:	58 OF 58