

NOTE:

ALL EXISTING UNDERGROUND AND ABOVE GROUND UTILITY LOCATIONS, INVERTS AND SIZES ARE APPROXIMATE ONLY AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION. THE IN POINTS SHALL BE POTHOLED AND LOCATIONS, INVERTS 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 EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.

2. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE, AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.

3. A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) 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 PRE-CONSTRUCTION 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 ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.

9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT AFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.

10. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.

11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENEED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).

12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.

13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE 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, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.

20. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.

21. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ONSITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.

22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FACILITIES.

23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.

24. OWNER/DEVELOPER AND THEIR AGENTS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICT BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL, OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.

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

26. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.

27. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.

28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY _____ AND SHALL BE CONSIDERED A PART OF THESE PLANS.

29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION
WOOD - 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 REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:

- EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
- CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 & 2
- COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
- 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-FACT WILL BE ENTIRELY 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 PLANNING AND COMMUNITY DEVELOPMENT (PCD) INSPECTIONS, PRIOR TO STARTING 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 PCD. 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 PCD.

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

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 DEPARTMENT AND MUTCD CRITERIA.

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

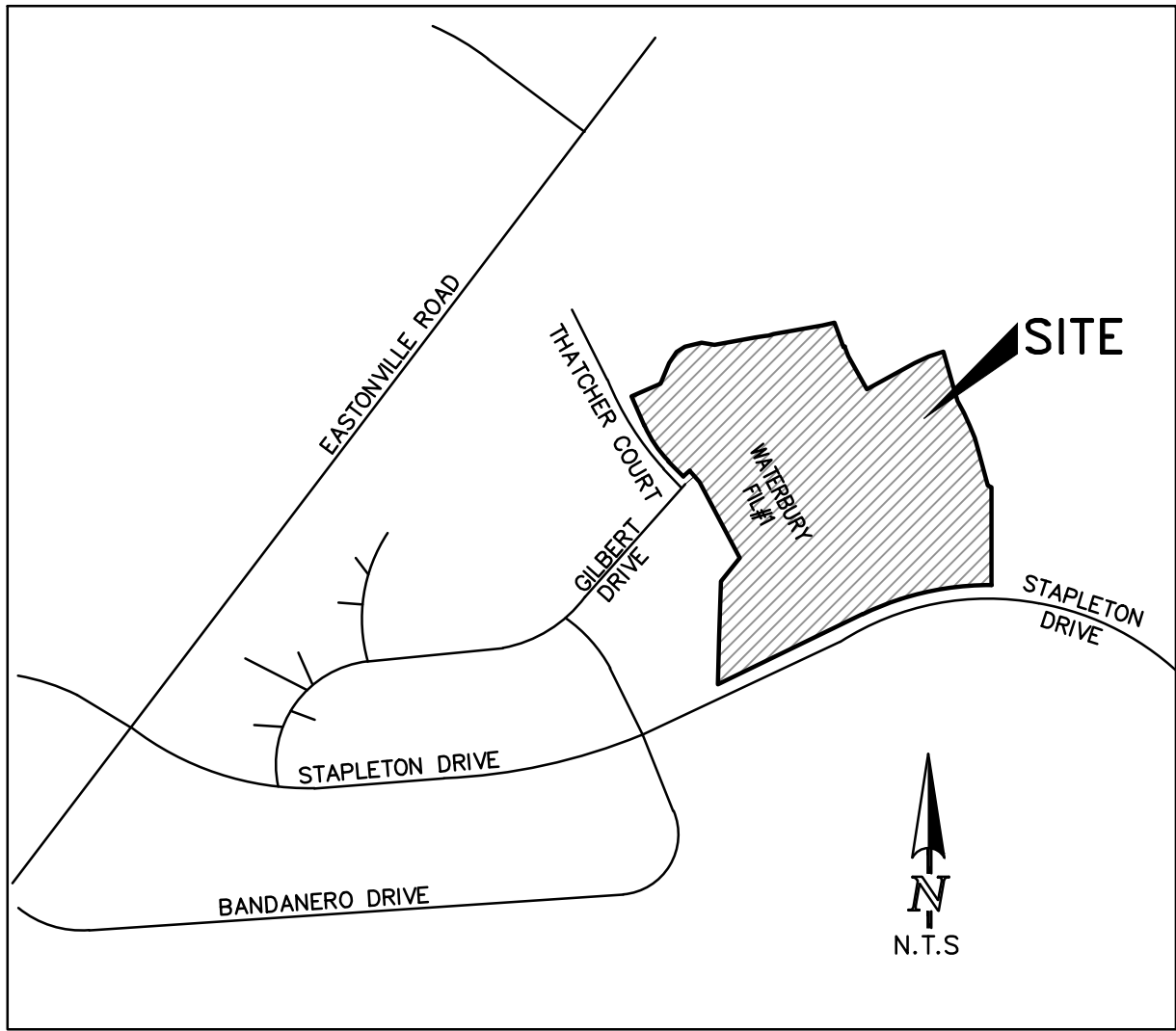
15. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING OR CONSTRUCTION.

WATERBURY FILING NO. 1

EL PASO COUNT, CO

CONSTRUCTION SET

SEPTEMBER 2021



VICINITY MAP

GENERAL NOTES

- 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.
- 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.
- BULK GRADING SHALL BE COMPLETED TO A SUBGRADE TOLERANCE OF PLUS OR MINUS 0.2'.
- CONTRACTOR TO OBTAIN COPIES OF THE SOILS REPORT FROM THE GEOTECHNICAL ENGINEER AND TO BE KEPT ONSITE DURING ALL EARTHWORK OPERATIONS.
- MAXIMUM CUT/FILL SLOPES SHALL NOT EXCEED 3:1, UNLESS OTHERWISE NOTED.
- EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IN A MANNER THAT WILL PROTECT PROPERTIES AND PUBLIC FACILITIES FROM THE ADVERSE EFFECTS OF EROSION AND SEDIMENTATION AS A RESULT OF CONSTRUCTION AND EARTHWORK ACTIVITIES WITHIN THE PROJECT SITE.
- EROSION CONTROL DEVICES SHOULD BE CHECKED AFTER EVERY STORM. REPAIRS OR REPLACEMENT SHOULD BE MADE AS NECESSARY TO MAINTAIN PROPER PROTECTION.
- ADDITIONAL EROSION CONTROL STRUCTURES MAY BE REQUIRED AT THE TIME OF CONSTRUCTION
- ALL STATIONING CENTERLINE UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
- ALL DISTURBED PAVEMENT EDGES SHALL BE CUT TO NEAT LINES. REPAIR SHALL CONFORM TO THE EPC ECM APPENDIX K - 1.2.C
- ALL INTERSECTION ACCESS TO BE CONSTRUCTED WITH A 25 FOOT SIGHT VISIBILITY TRIANGLES EXCEPT STAPLETON DRIVE WHICH IS AN ARTERIAL AND A 50 FOOT SIGH VISIBILITY TRIANGLE IS REQUIRED AND THERE SHALL BE NO OBSTRUCTIONS GREATER THAN 18" IN THIS AREA.
- ALL CULVERT AND STORM DRAIN PIPES SHALL BE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE (HDPE) OR REINFORCED CONCRETE PIPE (RCP). ALL CULVERTS SHALL BE PLACED 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 SECTIONS 3.32 - CULVERTS.
- TYPE L RIPRAP W/ MIRAFI FW 700 OR EQUAL IS REQUIRED UNDER ALL RIP RAP PADS.
- ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN COMPLIANCE WITH AND ALL APPLICABLE EL PASO COUNTY STANDARDS AND WITH 4WAY RANCH METRO DISTRICT CONSULTING ENGINEER APPROVAL.
- ALL POTABLE WATER MATINS SHALL BE AWWA C900--DR14 PVC WITH PUSH ON SINGLE GASKET TYPE JOINTS AND SHALL MEET THE REQUIREMENTS OF ANSI/NSF 61
- 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.
- 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.
- 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, MANHOLES AND LOCATIONS OF WATER AND SEWER SERVICES.
- 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 INSTALLATION 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

- ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- 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.
- ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT.
- 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.
- STREET NAME AND REGULATORY STOP SIGNS SHALL BE ON THE SAME POST AT INTERSECTIONS.
- ALL REMOVED SIGNS SHALL BE DISPOSED OF IN A PROPER MANNER BY THE CONTRACTOR
- 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. MULTI-LANE ROADWAYS WITH SPEED LIMITS OF 40 MPH OR HIGHER SHALL HAVE 8" UPPER-LOWER CASE LETTERING ON 18" 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"
- ALL TRAFFIC SIGNS SHALL HAVE A MINIMUM HIGH INTENSITY PRISMATIC GRADE SHEETING.
- 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.
- ALL SIGNS SHALL BE SINGLE SHEET ALUMINUM WITH 0.100" MINIMUM THICKNESS.
- 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 12" WIDE AND 8' LONG PER CDOT S-627-1.
- 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.
- THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (719) 520-6819 PRIOR TO AND UPON COMPLETION OF SIGNING AND STRIPING.
- THE CONTRACTOR SHALL OBTAIN A WORK IN THE RIGHT OF WAY PERMIT FROM THE EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS (DPW) PRIOR TO ANY SIGNAGE OR STRIPING WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY.

TRAFFIC CONTROL NOTE

THE CONTRACTOR SHALL PROVIDE ALL TRAFFIC CONTROL DEVICES AND MONITORING NECESSARY TO SAFELY COMPLETE THE WORK SHOWN IN THESE CONSTRUCTION DOCUMENTS IN CONFORMANCE WITH M.U.T.C.D. GUIDELINES. THE CONTRACTOR SHALL COMPLETE ALL NECESSARY WORK FOR PLAN REVIEW, PERMITS AND PROCESSING. TRAFFIC CONTROL WILL NOT BE PAID SEPARATELY BUT IS INCLUDED IN THE COST OF THE PROJECT.

SHEET INDEX

COVER SHEET	1
SAYBROOK ROAD	2
SAYBROOK ROAD CONT'D & GILBERT DR.	3
SANDY NECK CIR.	4
SANDY NECK CIR. CONT'D & BAYSHORE WAY	5
SUNKEN MEADOW ROAD	6
FISH CAMP CIR.	7
MANOR HAVEN WAY	8
BEECH CIRCLE DR.	9
MUDDY POND ST.	10
MASONBORO WAY & MEGANSETT WAT	11
ROUNDAABOUT CURB RETURN PROFILE	12
ROUNDAABOUT STRIPING	13
ROUNDAABOUT FASTEST PATH	14
STAPELTON ROAD PLAN & PROFILE	15
STAPELTON ROAD CROSS SECTIONS	16
STAPELTON ROAD SIGNAGE & STRIPING	17
STORM SEWER RUN 1 & 2	18
STORM SEWER RUN 3 & 4	19
STORM SEWER RUN 5 & 6	20
STORM SEWER RUN 7 & LATERALS 1 & 2	21
STORM SEWER RUN 8 & LATERAL 3	22
STORM LATERALS 4, 5 & 6	23
STORM SEWER RUNS 9 & 10 & LATERAL 9 & 10	24
STORM SEWER RUN 9 CONT'D & LATERAL 8	25
STORM SEWER RUN 10, 11 & 12	26
GILBERT OR CULVERTS	27
POND 1 DETAILS	28
POND 1 DETAILS CONT'D	29
POND 2 DETAILS	30
POND 3 DETAILS	31
POND 3 DETAILS	32

CONTACT INFORMATION:

OWNER:	4-WAY RANCH JOINT VENTURE P.O. BOX 50223 COLORADO SPRINGS, CO 80949 PETER MARTZ (719) 447-8773
CIVIL ENGINEER:	TERRA NOVA ENGINEERING, INC. 721 S. 23RD STREET COLORADO SPRINGS, COLORADO 80904 QUENTIN ARMJO, P.E., (719) 635-6422
ENGINEERING DIVISION	EL PASO COUNTY DEVELOPMENT SERVICES 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, COLORADO 80910 JEFF RICE P.E. (719) 520-6300
METRO DISTRICT	4-WAY RANCH METRO DISTRICT P.O. BOX 50223 COLORADO SPRINGS, CO 80949
GAS DEPARTMENT	BLACK HILLS ENERGY 7060 ALEGRE ST. FOUNTAIN, CO 80817 GEORGE PETERSON (719) 393-6625
ELECTRIC DEPARTMENT	MOUNTAIN VIEW ELECTRIC ASSOCIATION 11140 E. WOODMEN ROAD FALCON, COLORADO 80831 DARYL EDWARDS (719) 495-2283
FIRE DEPARTMENT	STATION 3 / HEADQUARTERS 7030 OLD MERIDIAN ROAD PEYTON, COLORADO 80831 (719) 495-4050
TELEPHONE COMPANY	A.T.&T. LOCATORS (719) 635-3674 CENTURY LINK LOCATORS 811

BENCHMARKS

1. THE TOP OF A 1-1-1/2' ALUMINUM SURVEYORS CAP STAMPED JR LTD PLS 31161, AT THE MOST EASTERLY CORNER OF LOT 36 AS PLATED IN 4-WAY RANCH FILING NO. 1 RECORDED UNDER RECEPTION NO. 206712416 RECORDS OF EL PASO COUNTY, COLORADO ELEV= 6931.92

2. THE TOP OF A 1-1-1/2' ALUMINUM SURVEYORS CAP STAMPED JR LTD PLS 82820, AT THE MOST NORTHERLY CORNER OF LOT 42 AS PLATED IN 4-WAY RANCH FILING NO. 1 RECORDED UNDER RECEPTION NO. 206712416 RECORDS OF EL PASO COUNTY, COLORADO ELEV= 6973.99

BASIS OF BEARING

THE NORTH LINE OF SECTION 28, TOWNSHIP 12 SOUTH, RANGE 64 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO BEING MONUMENTED AT EACH END BY A 3-1/4" ALUMINUM SURVEYOR'S CAP STAMPED "PSINC LS 30087 AND ASSUMED TO BEAR S89°47'04"E A DISTANCE OF 5,285.07 FEET

ENGINEER'S STATEMENT

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

OWNER/DEVELOPER'S STATEMENT

I THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

PETER MARTZ, OWNER
4-WAY RANCH JOINT VENTURE
P.O. BOX 50223
COLORADO SPRINGS, CO 80949

EL PASO COUNTY APPROVAL

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

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

JENNIFER IRVINE, P.E.
COUNTY ENGINEER / DIRECTOR

4-WAY RANCH METROPOLITAN DISTRICT

THESE CONSTRUCTION DOCUMENTS HAVE BEEN REVIEWED AND APPROVED FOR SANITARY SEWER, WATER MAIN AND ASSOCIATED UTILITY SERVICE CONSTRUCTION.

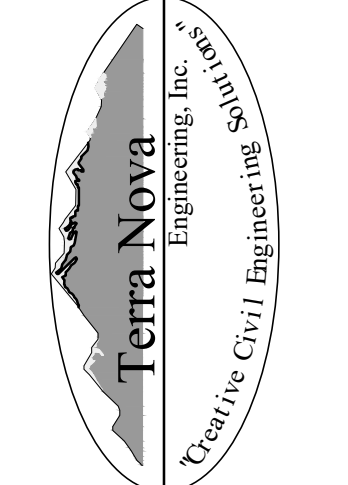
FOR AND ON BEHALF OF THE 4-WAY RANCH METRO. DISTRICT

PUDSP-005-21

REVISIONS	NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE ENGINEERING DIVISION OF EL PASO COUNTY, COLORADO. TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED BY WRITTEN AUTHORIZATION.

PREPARED FOR:
4-WAY RANCH JOINT VENTURE
ATTN: PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-315

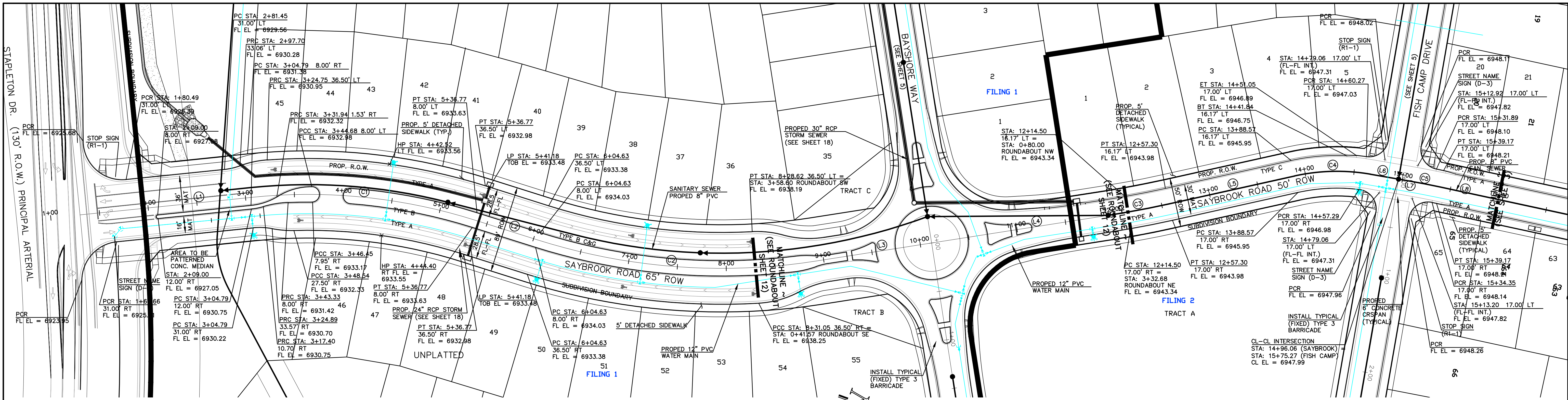


721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnengine.com

WATERBURY FILING NO. 1 & 2

CONSTRUCTION SET
COVER SHEET

DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY
H-SCALE AS SHOWN
V-SCALE N/A
JOB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 1 OF 32



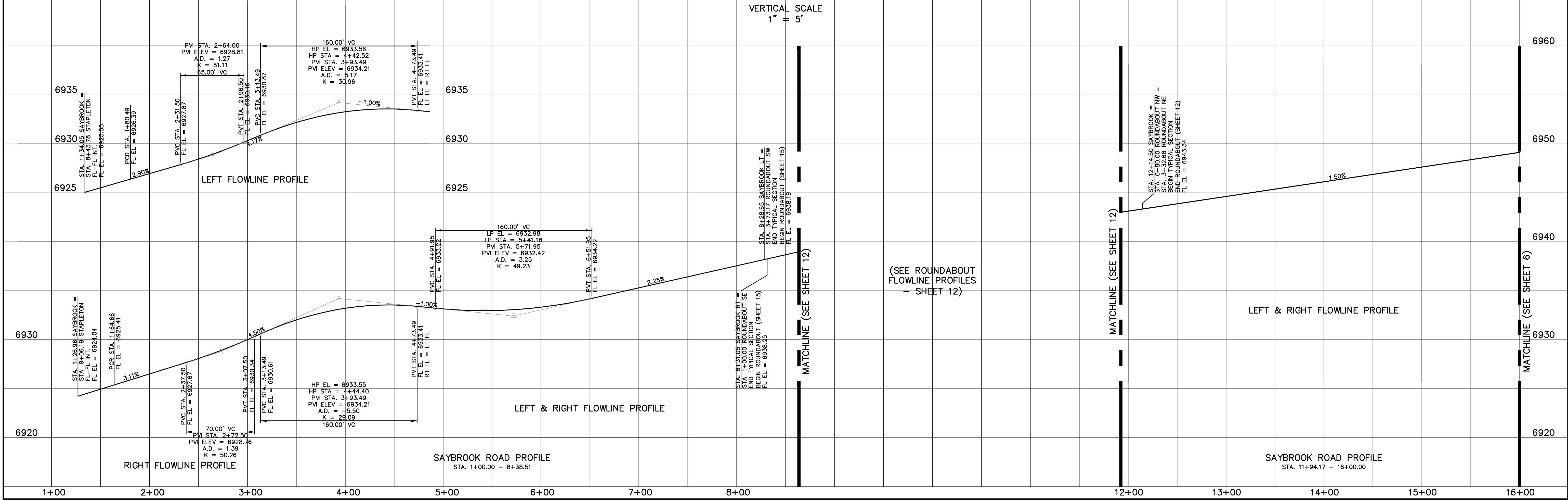
CENTERLINE CURVE TABLE					CENTERLINE LINE TABLE		SAYBROOK ROAD		POSTED SPEED LIMIT	
CURVE	LENGTH	RADIUS	DELTA	ANGLE	LINE	LENGTH	BEARING	STA. 1+00.00 - 10+00.00 - RES. COLLECTOR	IS 30 M.P.H.	
C1	230.17	565.00	23°20'28"		L1	111.60	S25°50'28"E	(DESIGN SPEED 35 MPH)		
C2	287.80	625.00	26°23'00"		L2	67.86	S02°30'00"E			
C3	63.12	1000.00	03°37'00"		L3	119.22	S28°53'00"E			
C4	77.96	200.00	22°20'00"		L4	182.53	S28°53'00"E			
C5	32.58	800.00	02°20'00"		L5	131.57	S32°30'00"E			
					L6	29.23	S10°10'00"E			
					L7	10.53	S10°10'00"E			
					L8	105.97	S07°50'00"E			

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

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

4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

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



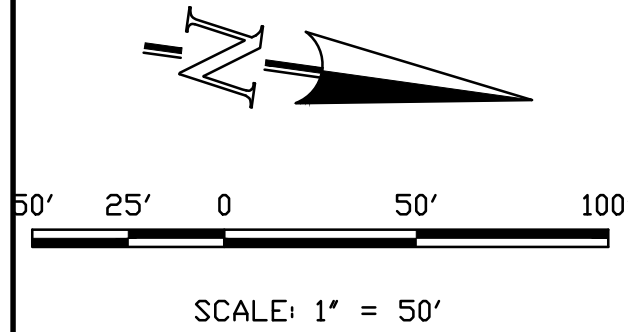
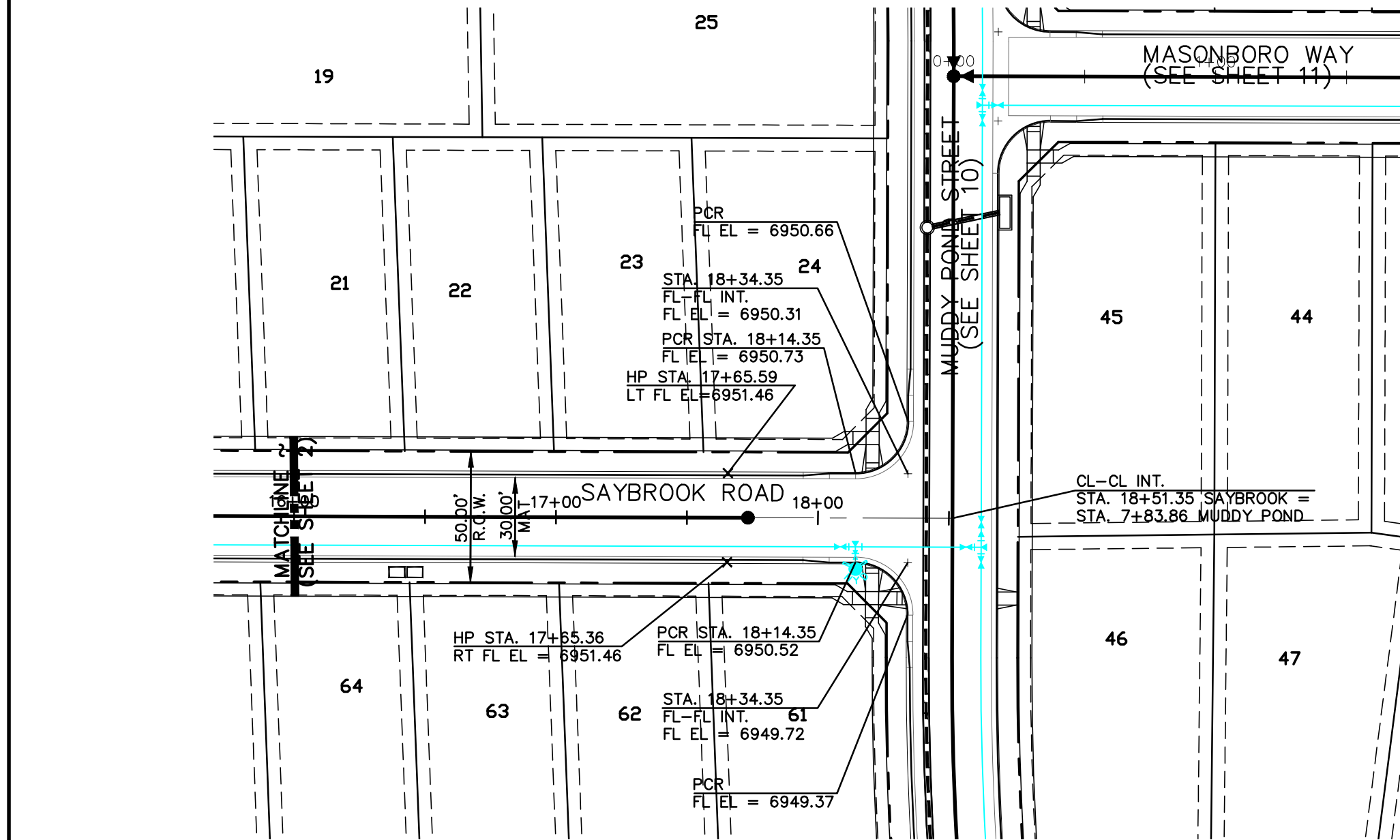
REVISIONS

NO.	DESCRIPTION	DATE

DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY
H-SCALE 1"=50'
V-SCALE 1"=5'
JOB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 2 OF 32

WATERBURY FILING NO. 1 & 2
CONSTRUCTION SET
STREET PLAN AND PROFILE
SAYBROOK ROAD

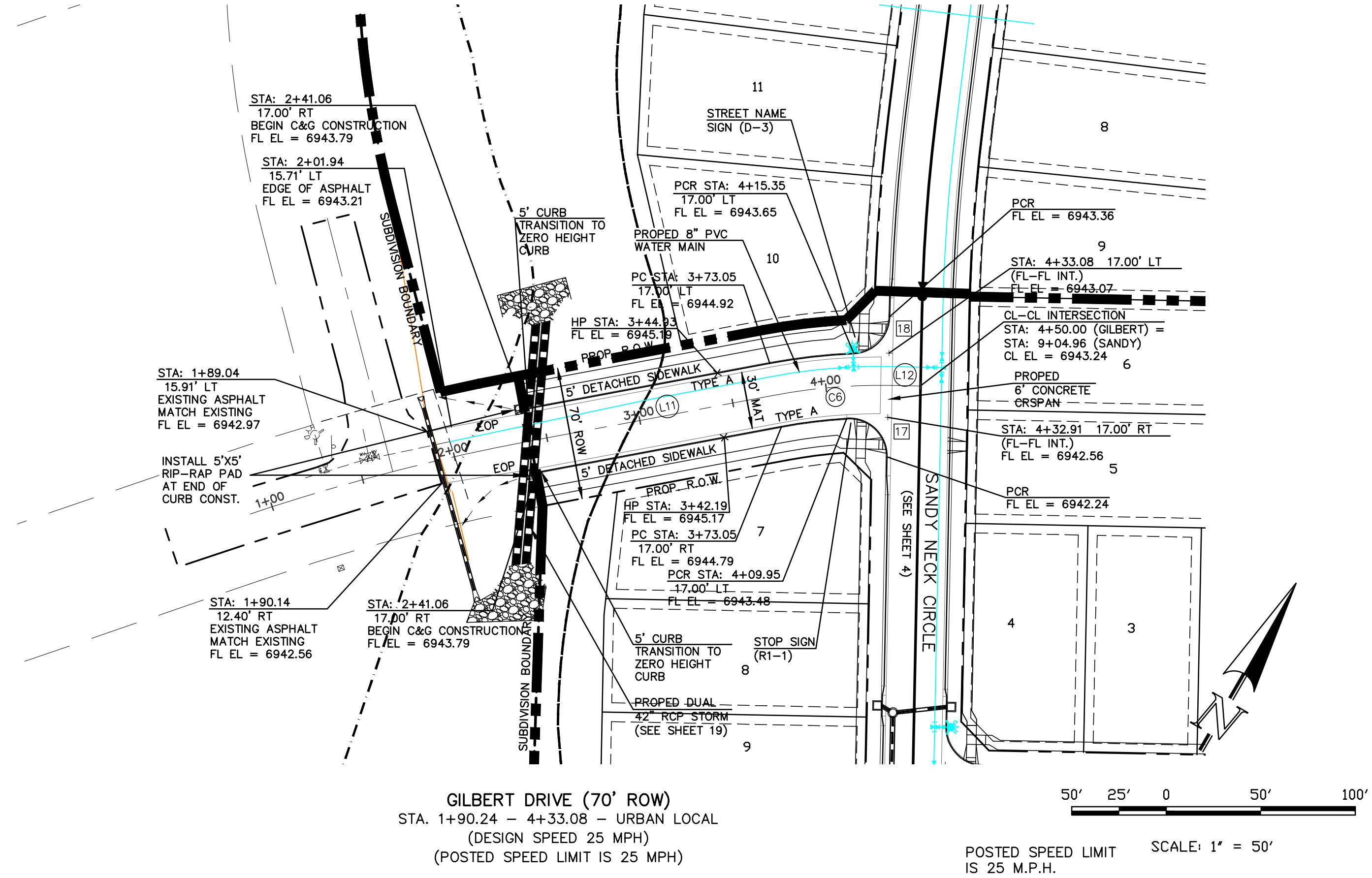
Terra Nova Engineering, Inc.
Creative Civil Engineer Inc.
721 S. 2960 STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnasec.com



SAYBROOK ROAD
STA. 16+45.14 - 18+34.35 - URBAN LOCAL
(DESIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

CENTERLINE CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	ANGLE
C6	61.44	300.00	11°44'02"	

CENTERLINE LINE TABLE		
LINE	LENGTH	BEARING
L9	336.57	N61°07'00"E
L10	98.75	N61°07'00"E
L11	131.99	N49°22'58"E
L12	15.51	N61°07'00"E



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

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



SAYBROOK ROAD PROFILE
STA. 16+00.00 - 18+34.35

RIGHT FLOWLINE PROFILE

GILBERT DRIVE
STA. 1+89.04 - 4+33.08

LEFT FLOWLINE PROFILE

REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE REVIEWING AGENCIES, THE REVIEWING AGENCIES, TERRA NOVA ENGINEERING AND SURVEYING, INC. APPROVES THEIR USE ONLY AS SHOWN HEREIN. ANY OTHER USE IS WITHOUT AUTHORIZATION.

4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

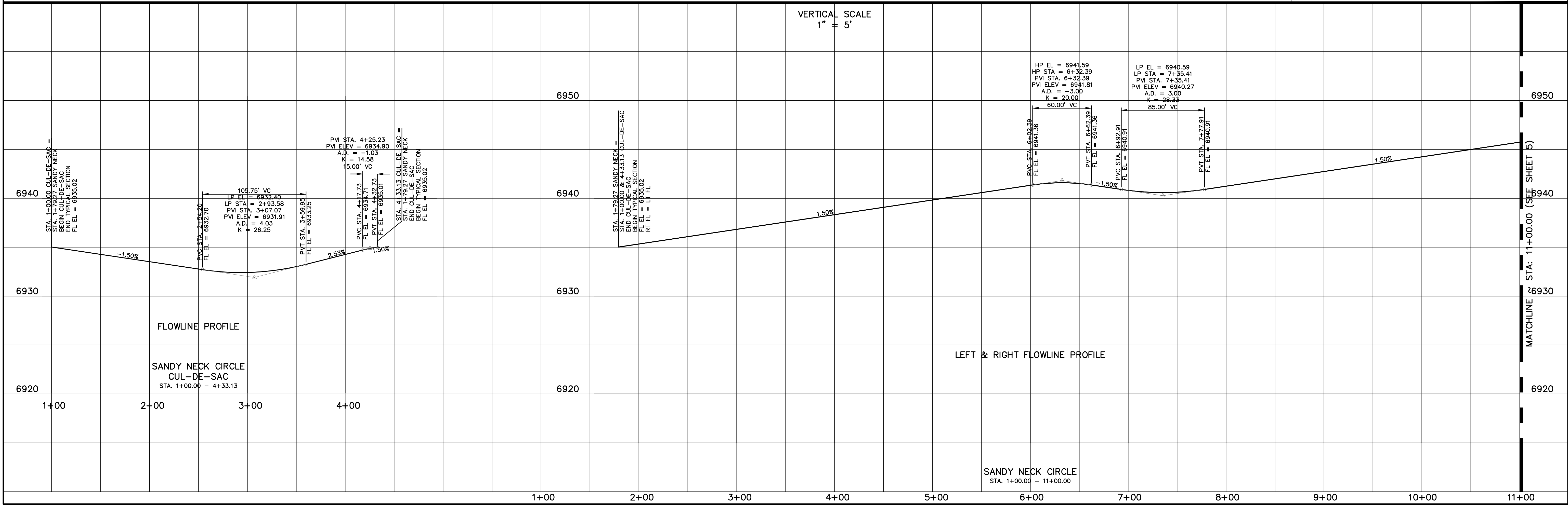
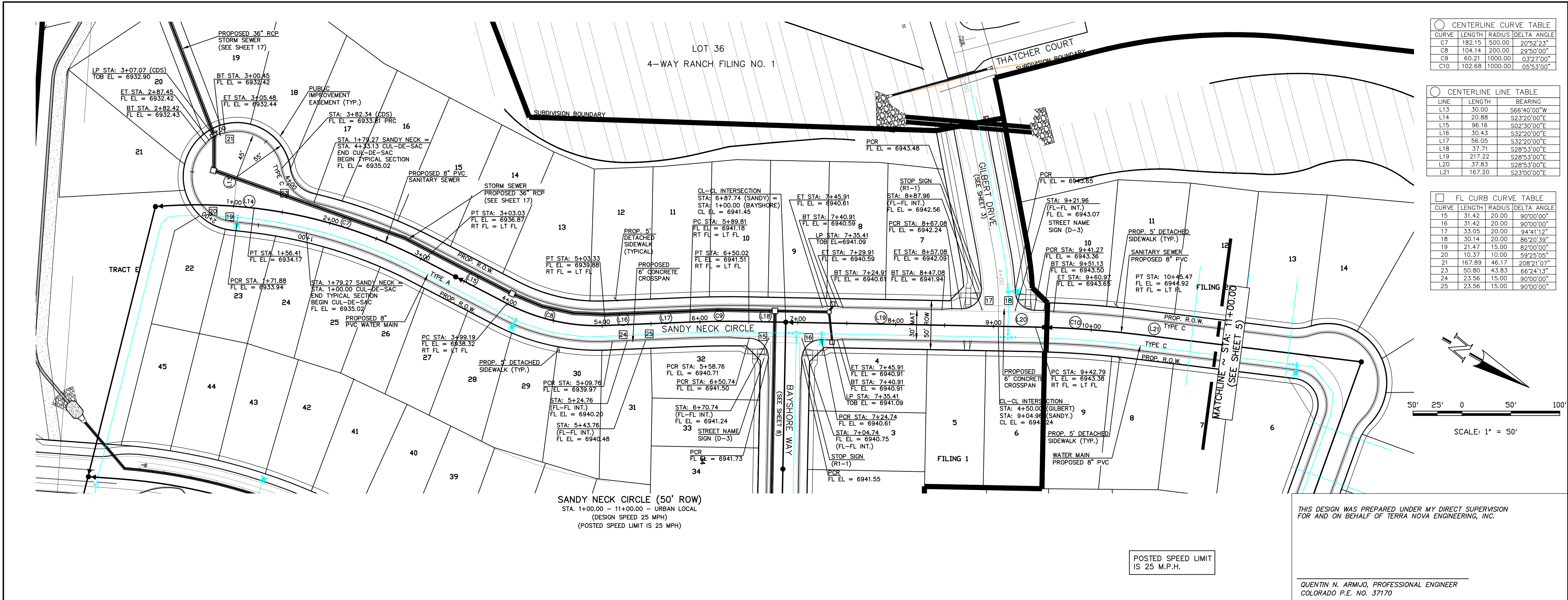
PREPARED FOR:

4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY

H-SCALE 1"=50'
V-SCALE 1"=5'

JOB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 3 OF 32



DATE: _____

REVISIONS: _____

NO. _____

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

PREPARED FOR:
4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

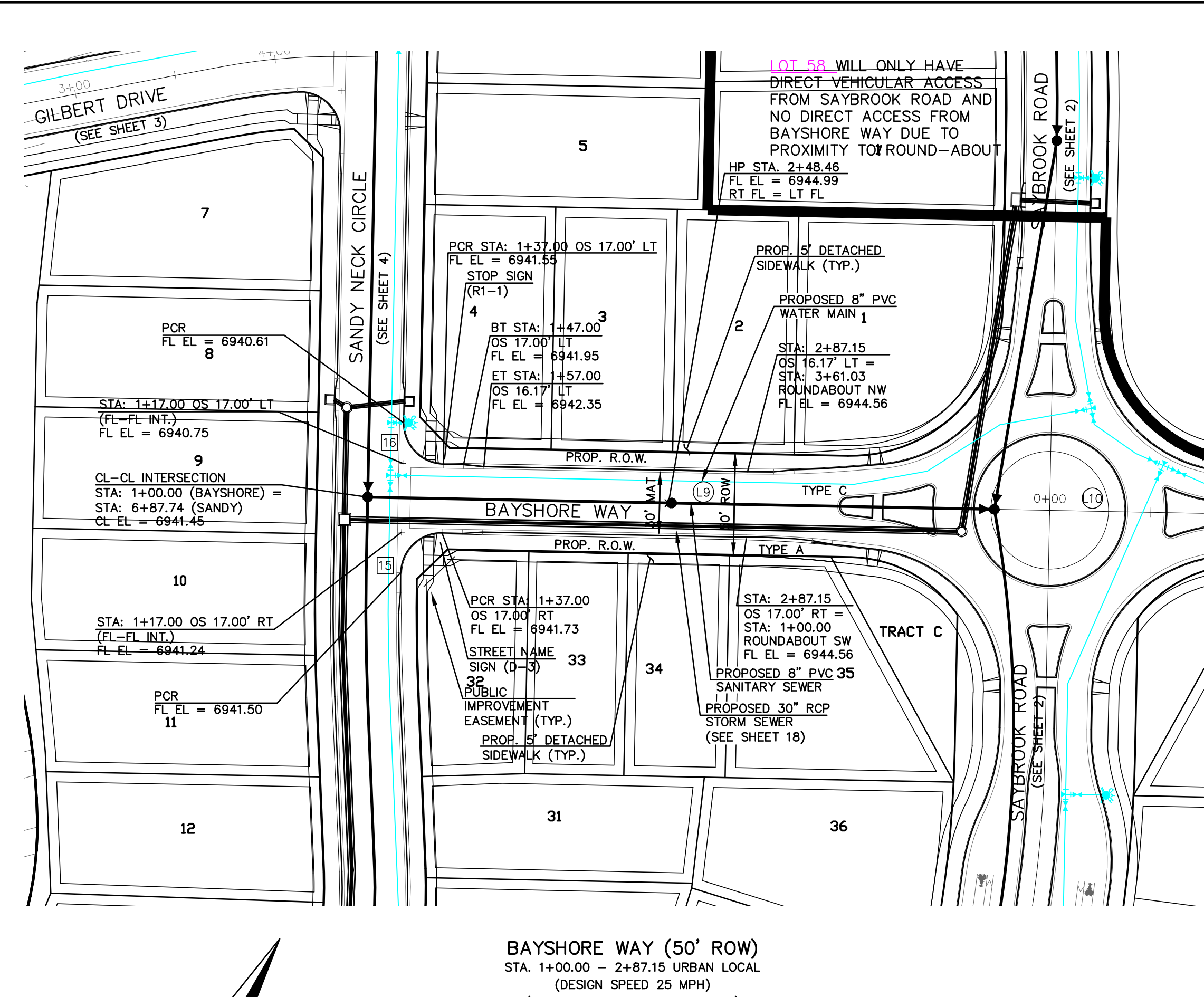
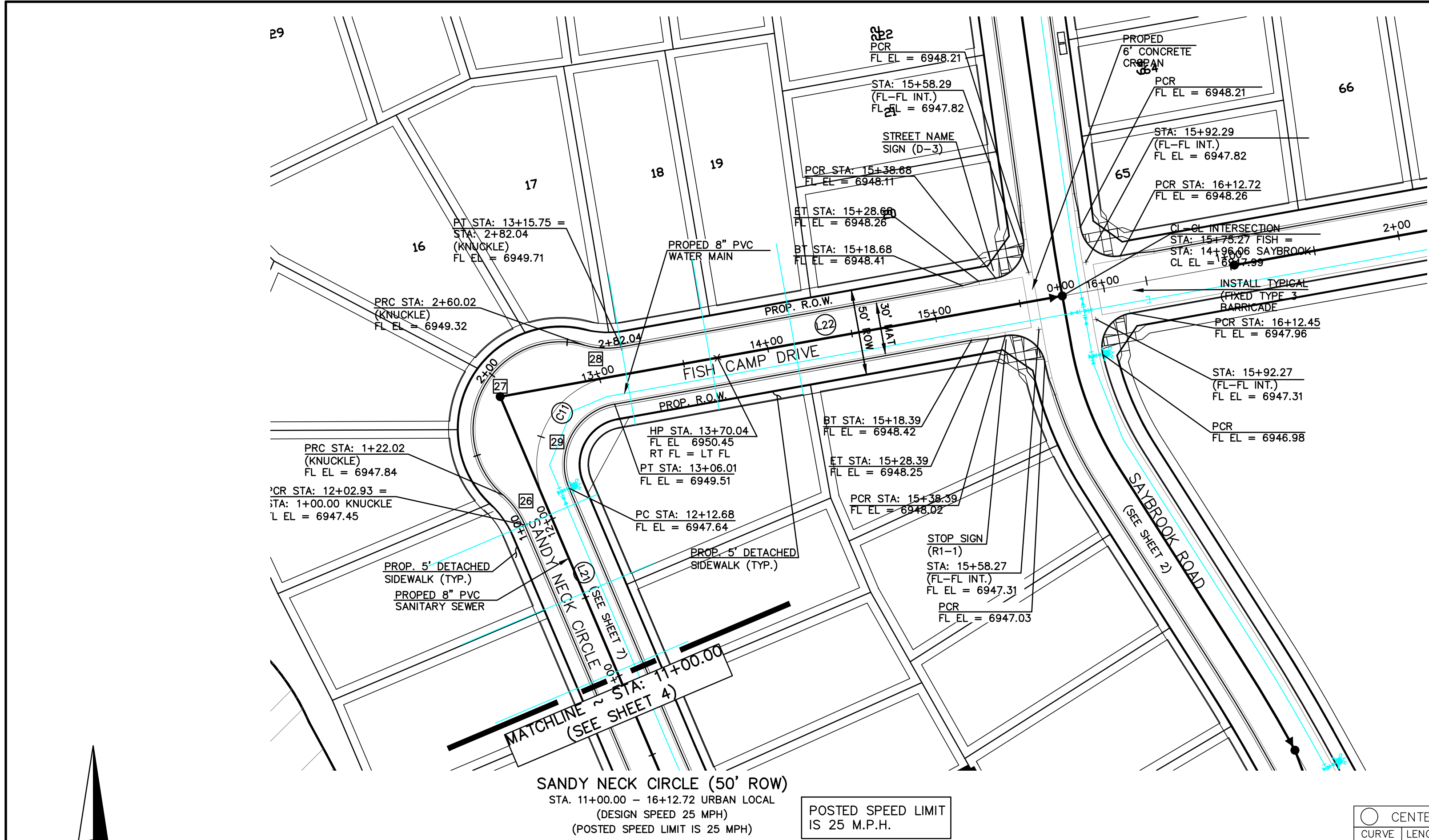
Terra Nova
Engineering, Inc.
Creative Civil Engineer Inc.

721 S. 2900 STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnasinc.com

DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY _____

H-SCALE 1"=50'
V-SCALE 1"=5'

JOB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 4 OF 32



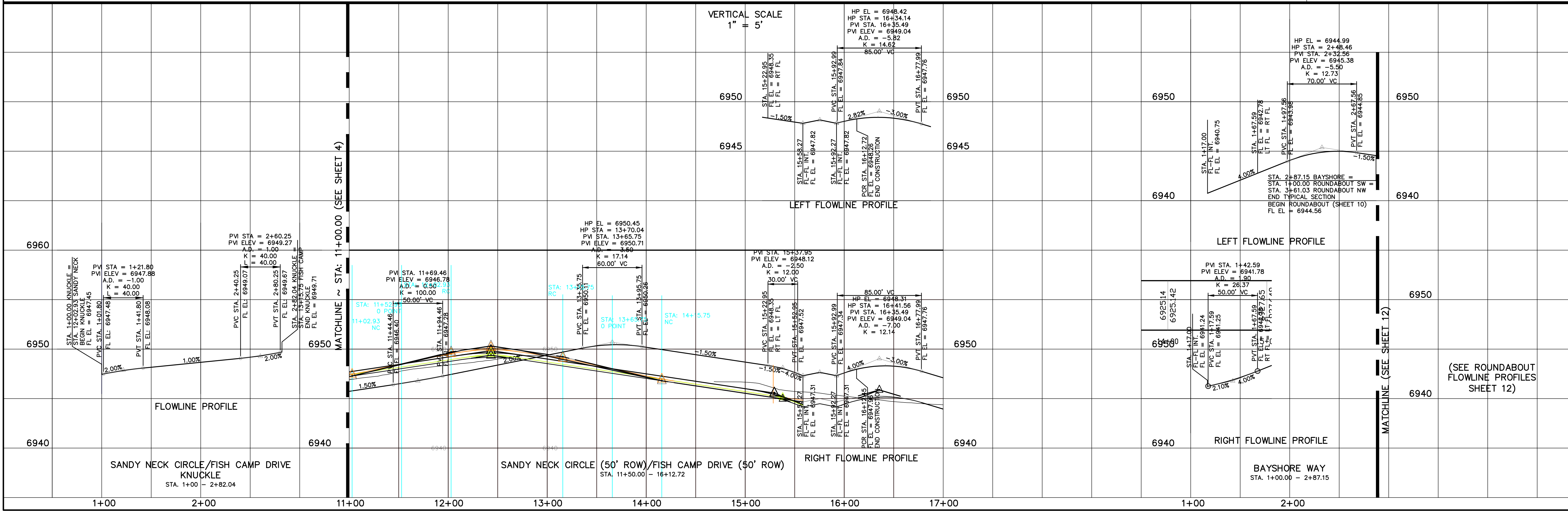
CENTERLINE CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	ANGLE
C1	93.33	52.00	102°50'00"	

CENTERLINE LINE TABLE			
LINE	LENGTH	BEARING	
L21	167.20	S23°00'00"E	
L22	269.26	S79°50'00"W	
L23	40.07	S79°50'00"W	

BAYSHORE WAY (50' ROW)
STA. 1+00.00 - 2+87.15 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. ARMJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170



REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE REVIEWING AGENCIES, THE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. AND SURVEYING, INC. APPROVE THEIR USE ONLY FOR THE PROJECT DESCRIBED HEREIN. ANY OTHER USE WITHOUT AUTHORIZATION IS PROHIBITED.

4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

PREPARED FOR:

721 S. 2960 STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnashinc.com

Terra Nova
Engineering, Inc.
Creative Civil Engineer Inc.

DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY

H-SCALE 1"=50'
V-SCALE 1"=5'

JOB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 5 OF 32

WATERBURY FILING NO. 1 & 2

CONSTRUCTION SET
STREET PLAN AND PROFILE
SANDY NECK CIRCLE & BAYSHORE WAY



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



CONSTRUCTION SET
STREET PLAN AND PROFILE
SUNKEN MEADOW ROAD

DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY

H-SCALE	1"=50'
V-SCALE	1"=5'

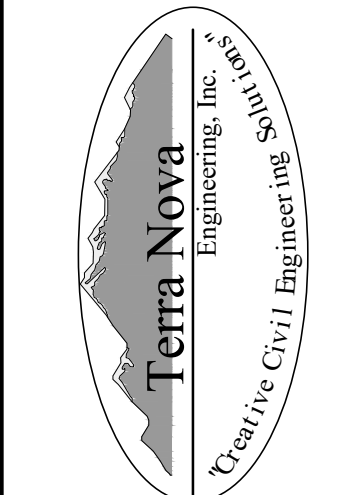
JOB NO. 1715.00

DATE ISSUED 9/25/21

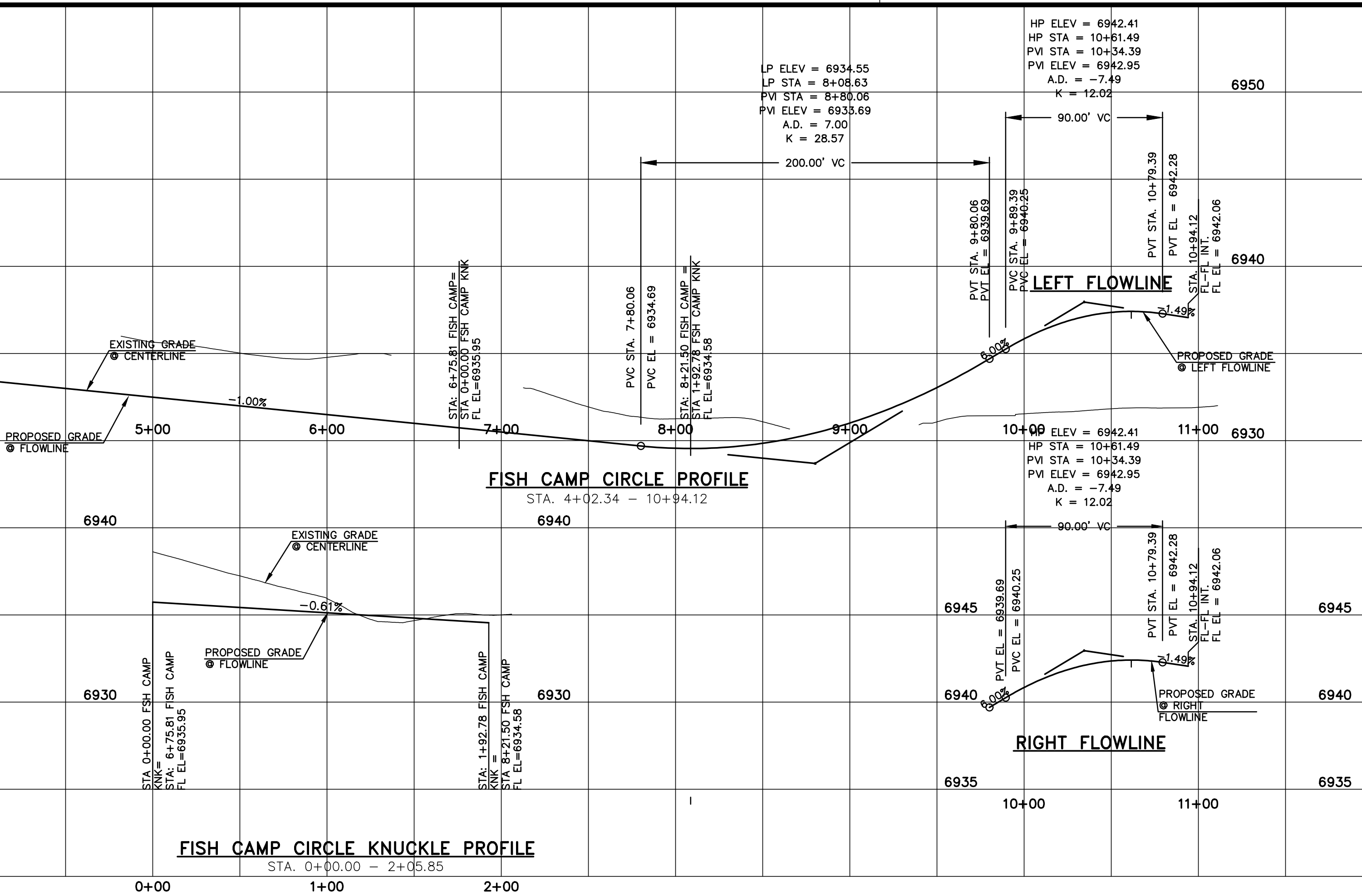
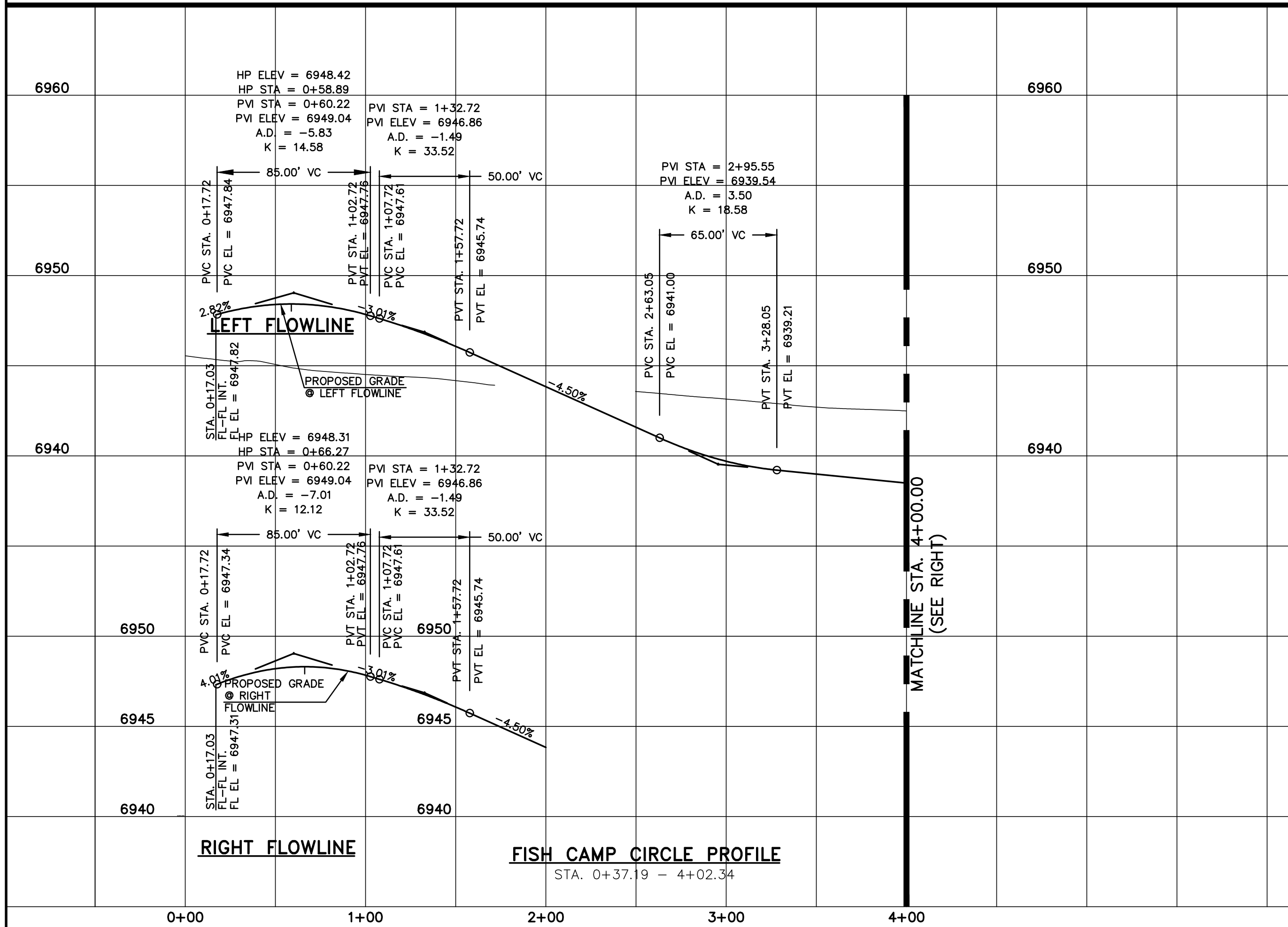
SHEET NO. 6 OF 32


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.	NO.	REVISIONS
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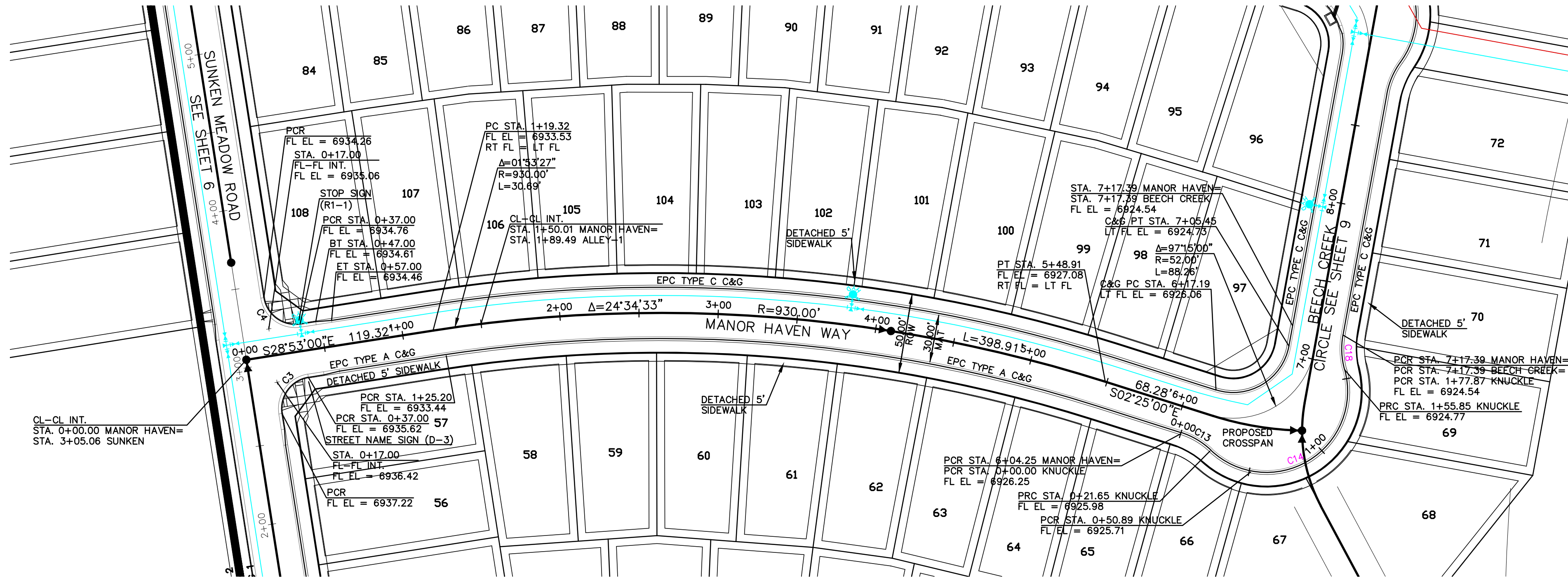
PREPARED FOR:
4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150



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



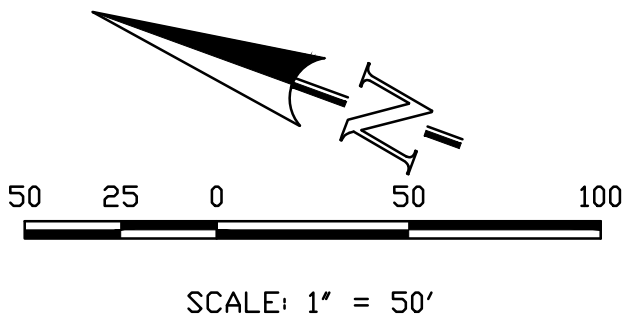
WATERBURY FILING NO. 1 & 2		721 S. 23RD STREET COLORADO SPRINGS, CO 80904		 <p>Tetra Nova Engineering, Inc. <i>Tetra Nova Civil Engineering</i></p>		PREPARED FOR: 4-WAY RANCH JOINT VENTURE PETER MARTZ P.O. BOX 50223 COLORADO SPRINGS, CO 80949 719-491-3150		UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, THIS DOCUMENT IS NOT TO BE USED FOR ANYTHING OTHER THAN THE PROJECT AND SURVEYING INC. APPROVES THEIR USE ONLY FOR THE PROJECT AND PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.		REVISIONS NO. _____ DESCRIPTION _____ DATE _____	
DESIGNED BY QNA											
DRAWN BY QNA											
CHECKED BY:											
H=SCALE 1"=50'											
V=SCALE 1"=5'											
JOB NO. 1715.00											
DATE ISSUED 9/25/21											
SHEET NO. 7 OF 32											



BEECH CREEK CIRCLE
STA. 7+17.39 - 8+00.00 - URBAN LOCAL
(DESIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

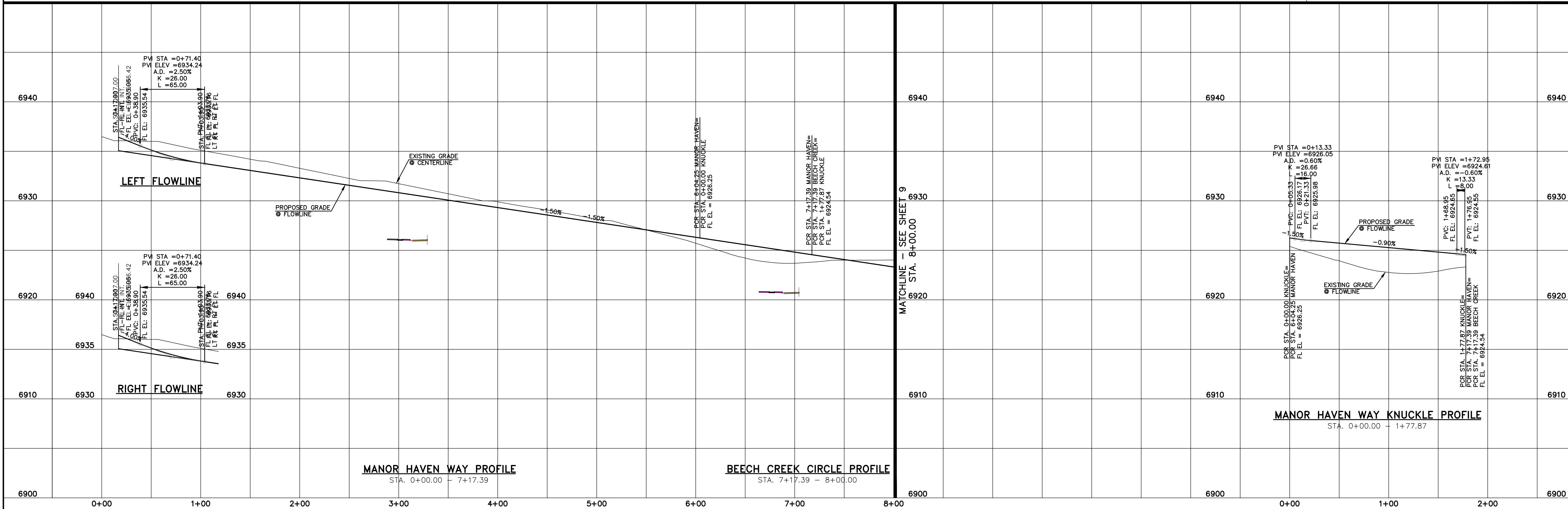
CURB CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	
C3	31.42	20.00	90°00'00"	
C4	31.42	20.00	90°00'00"	
C11	23.47	15.00	89°38'14"	
C12	24.48	15.00	93°29'28"	
C13	22.02	48.83	25°50'31"	
C14	133.01	51.17	148°56'02"	
C15		NOT USED		
C16		NOT USED		
C17		NOT USED		
C18	22.02	48.83	25°50'31"	

MANOR HAVEN WAY
STA. 0+00.00 - 7+17.39 - 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. ARMJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170

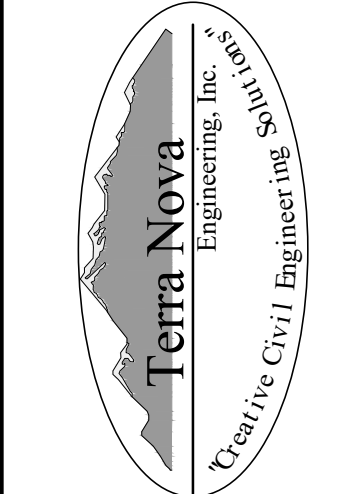


WATERBURY FILING NO. 1 & 2

CONSTRUCTION SET
STREET PLAN AND PROFILE
MANOR HAVEN WAY

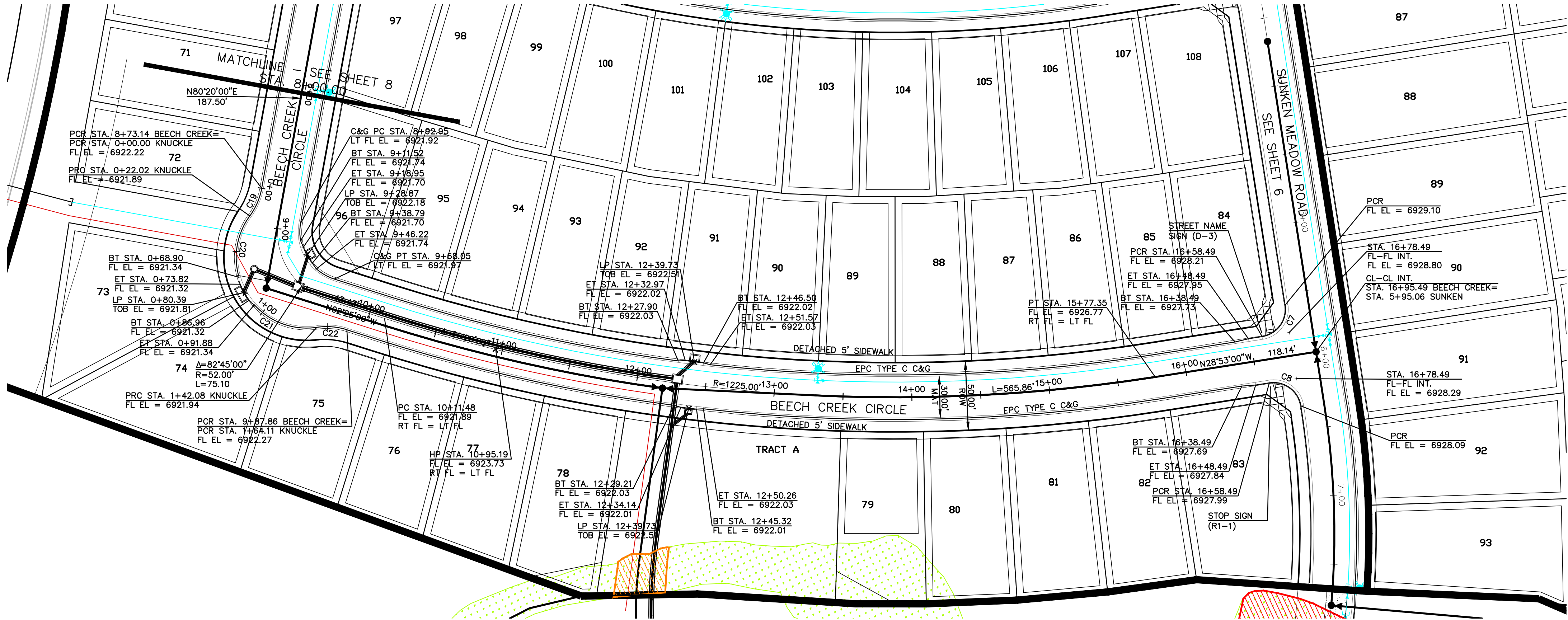
DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY
H-SCALE 1"=50'
V-SCALE 1"=5'
JOB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 8 OF 32

721 S. 2900 STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnec.com



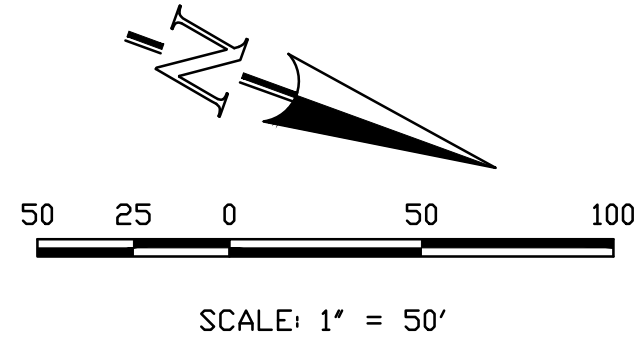
PREPARED FOR:
4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

REVISIONS
NO. DESCRIPTION DATE
UNTIL SUCH TIME AS THESE
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BY THE AGENCIES
TERRA NOVA ENGINEERING,
AND SURVEYING, INC.
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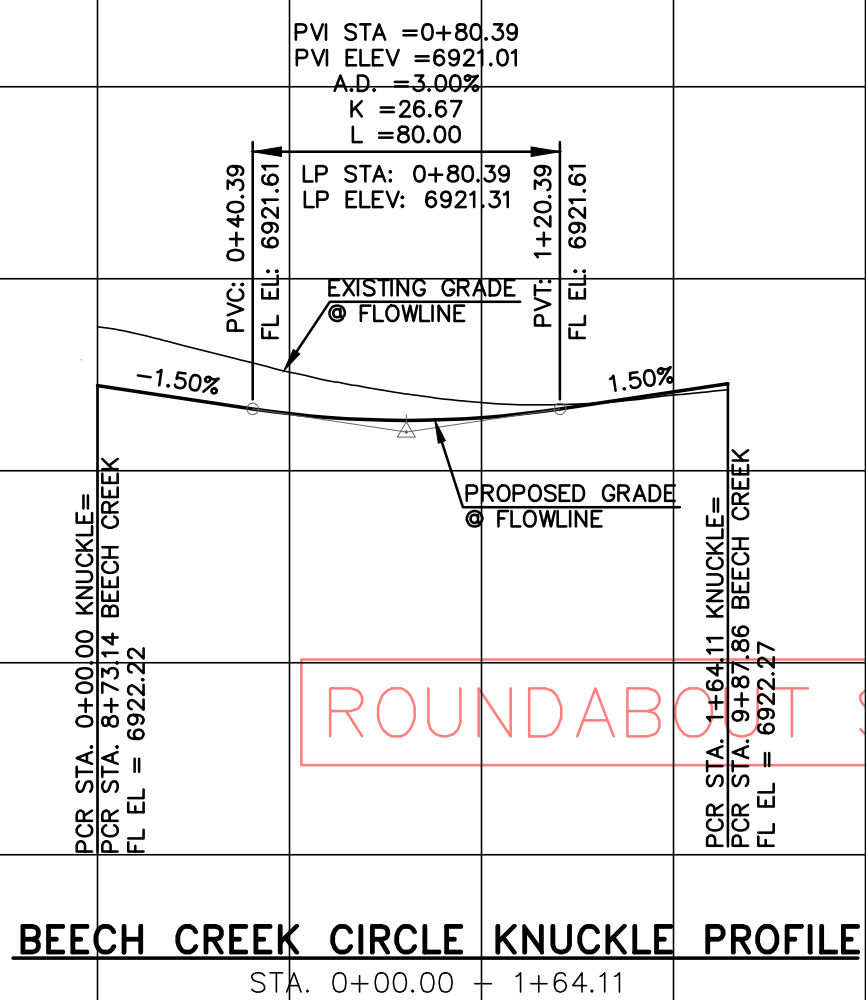
BEECH CREEK CIRCLE
STA. 8+00.00 - 16+95.49 - URBAN LOCAL
(DESIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

CURB CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C7	31.42	20.00	90°00'00"
C8	31.42	20.00	90°00'00"
C19	22.02	48.83	25°50'31"
C20	48.88	51.17	52°29'30"
C21	50.21	51.17	56°13'06"
C22	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. ARMJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170



BEECH CREEK CIRCLE KNUCKLE PROFILE
STA. 0+00.00 - 1+64.11

BEECH CREEK CIRCLE PROFILE
STA. 8+00.00 - 16+95.49

LEFT FLOWLINE

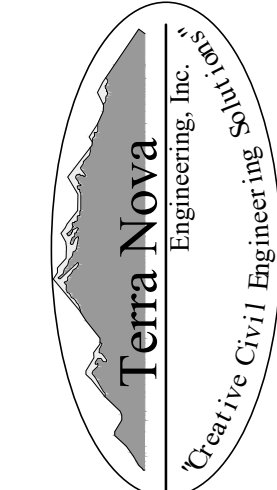
RIGHT FLOWLINE

WATERBURY FILING NO. 1 & 2

CONSTRUCTION SET
STREET PLAN AND PROFILE
BEECH CREEK CIRCLE

DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY
H-SCALE 1"=50'
V-SCALE 1"=5'
JOB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 9 OF 32

721 S. 2900 STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnasec.com



PREPARED FOR:
4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

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

REVISIONS

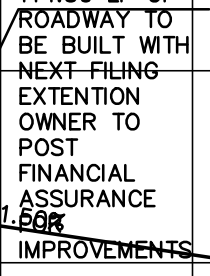
NO.

DESCRIPTION

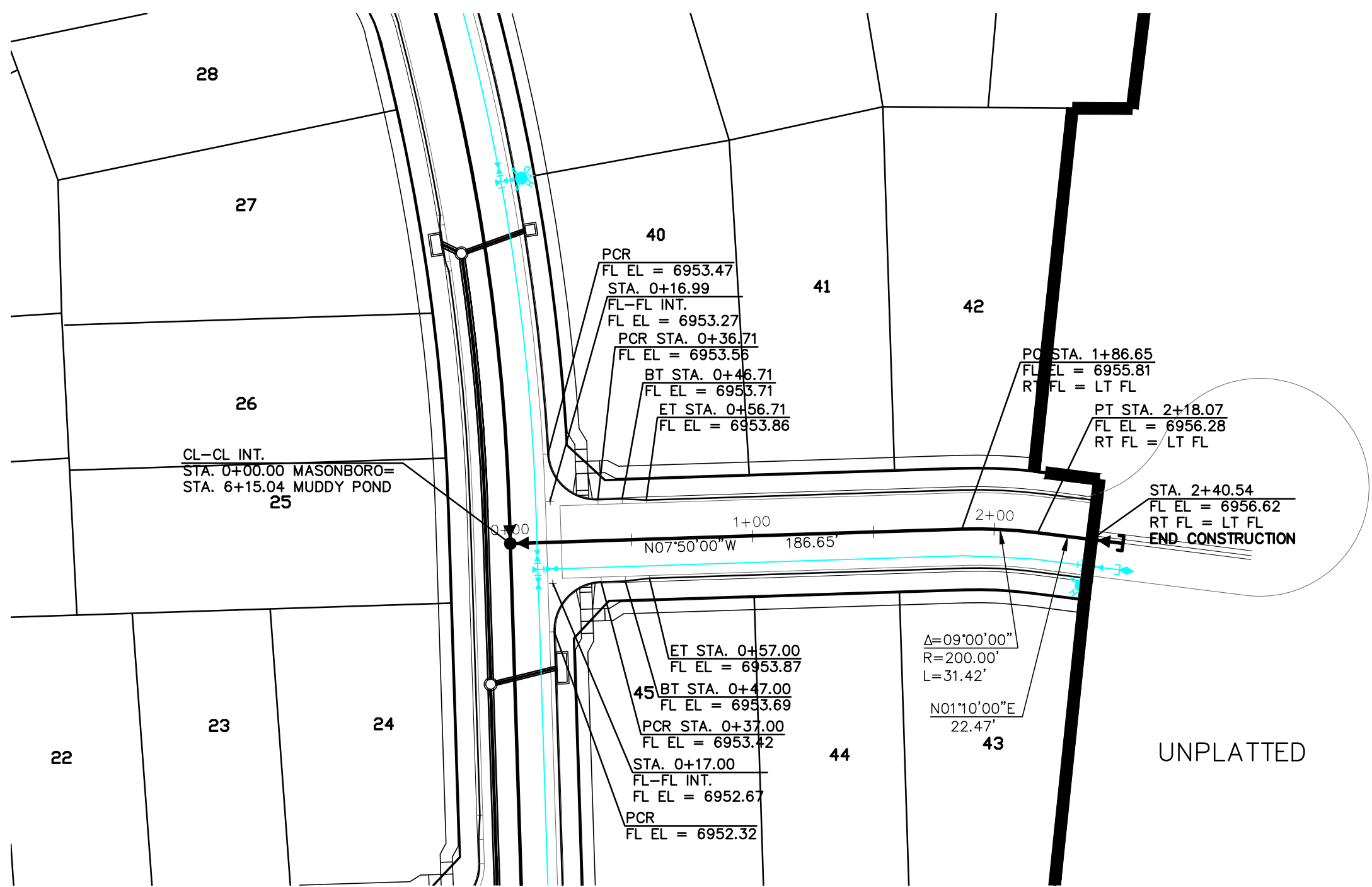
DATE



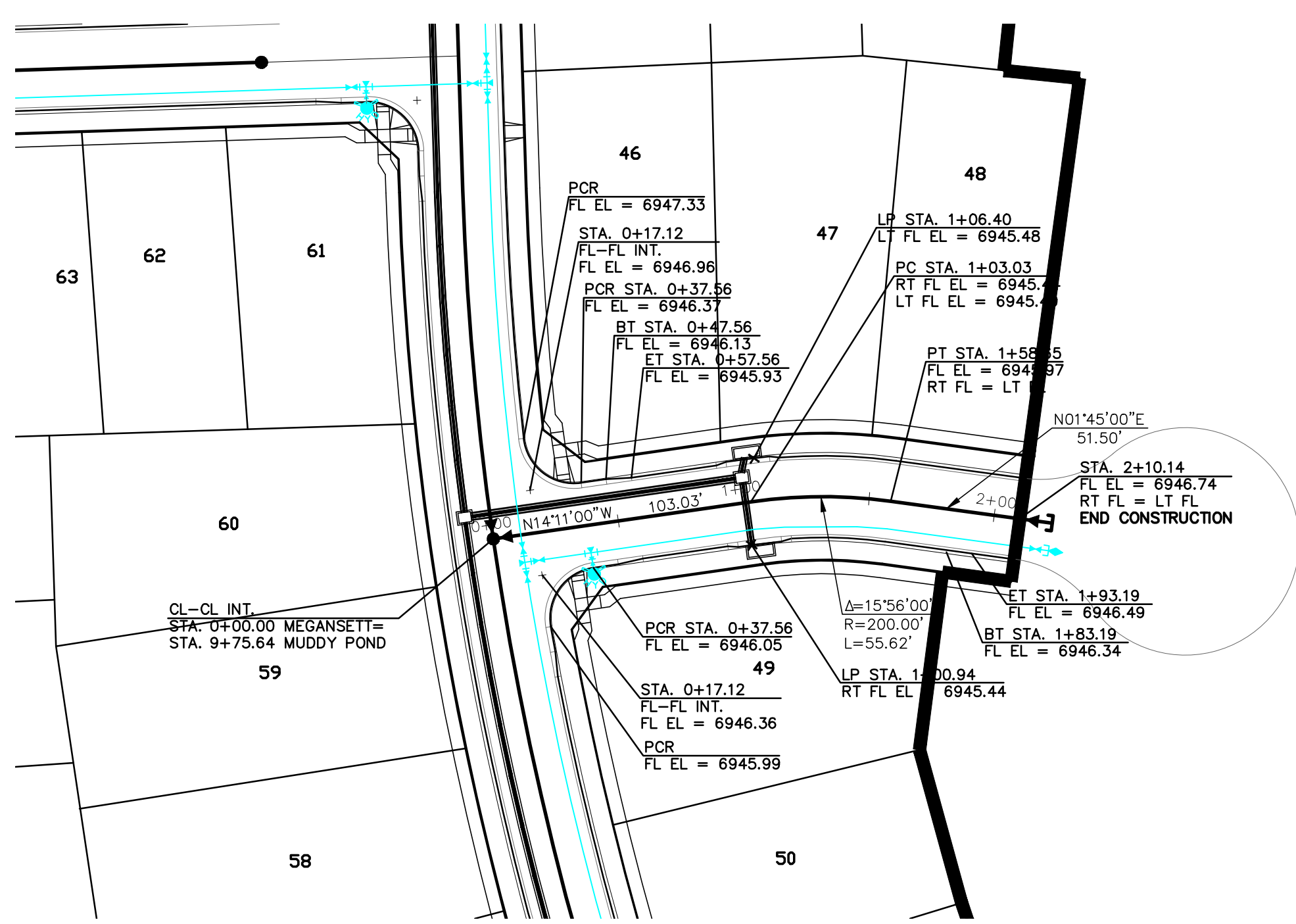
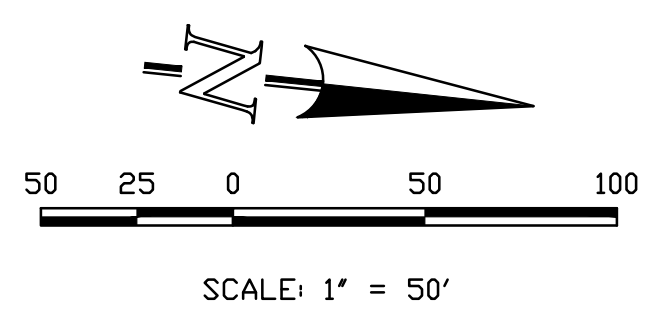
QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170



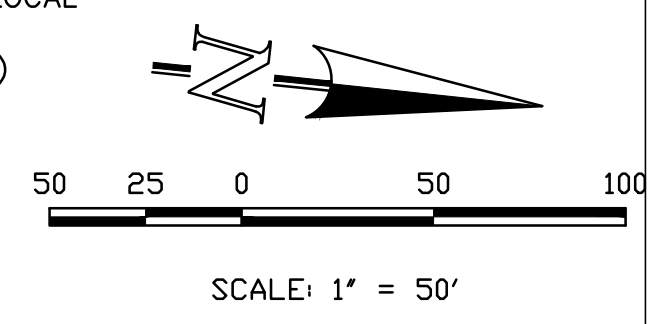
WATERBURY FILING NO. 1 & 2		DESIGNED BY QNA	
CONSTRUCTION SET		DRAWN BY QNA	
STREET PLAN AND PROFILE		CHECKED BY	
MANOR HAVEN WAY		H-SCALE 1"=50'	
		V-SCALE 1"=5'	
		JOB NO. 1715.00	
		DATE ISSUED 9/25/21	
		SHEET NO. 10 OF 32	



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

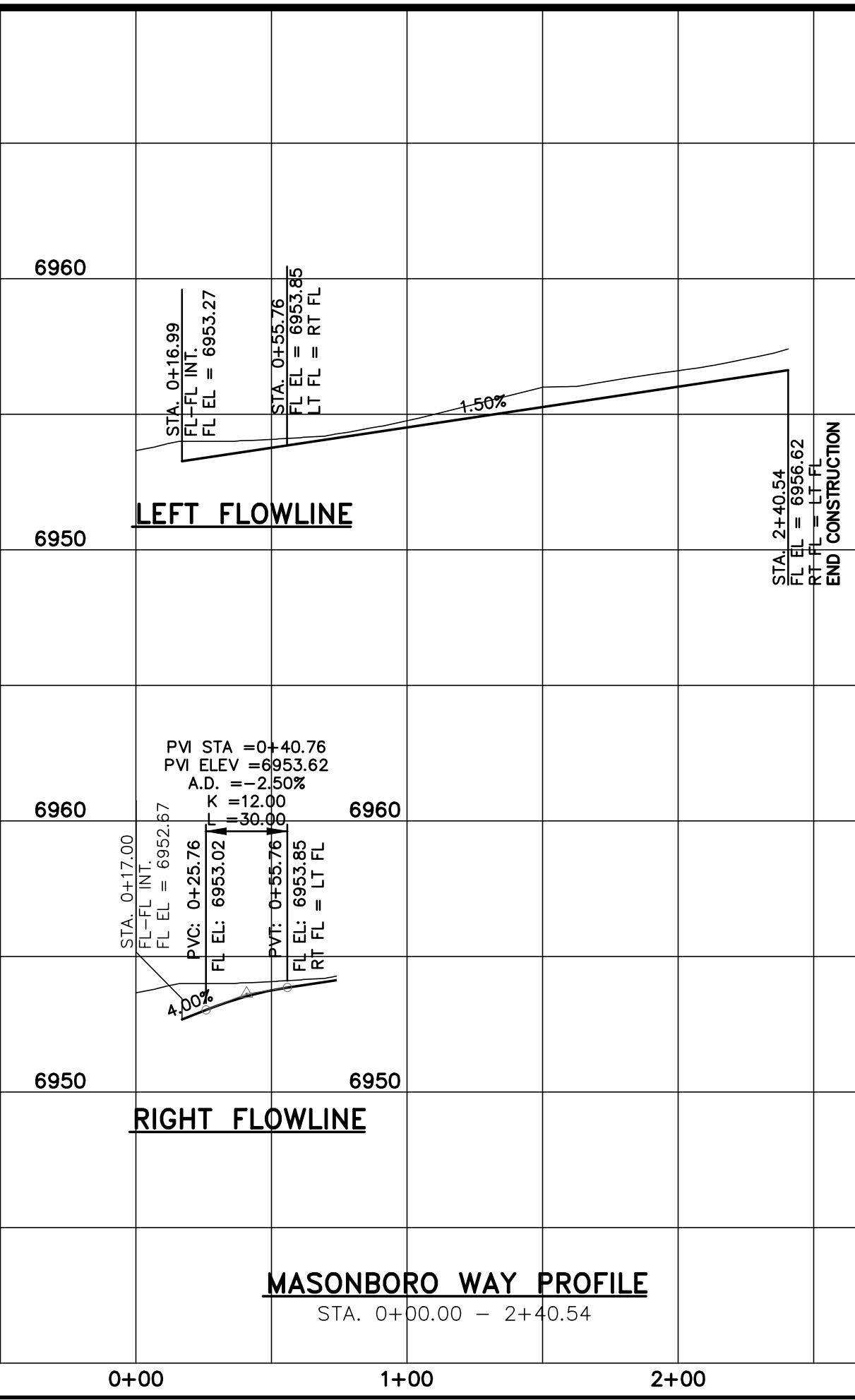


MEGANSETT WAY
STA. 0+00.00 - 2+10.14 - URBAN LOCAL
(DEIGN SPEED 25 MPH)
(POSTED SPEED LIMIT IS 25 MPH)

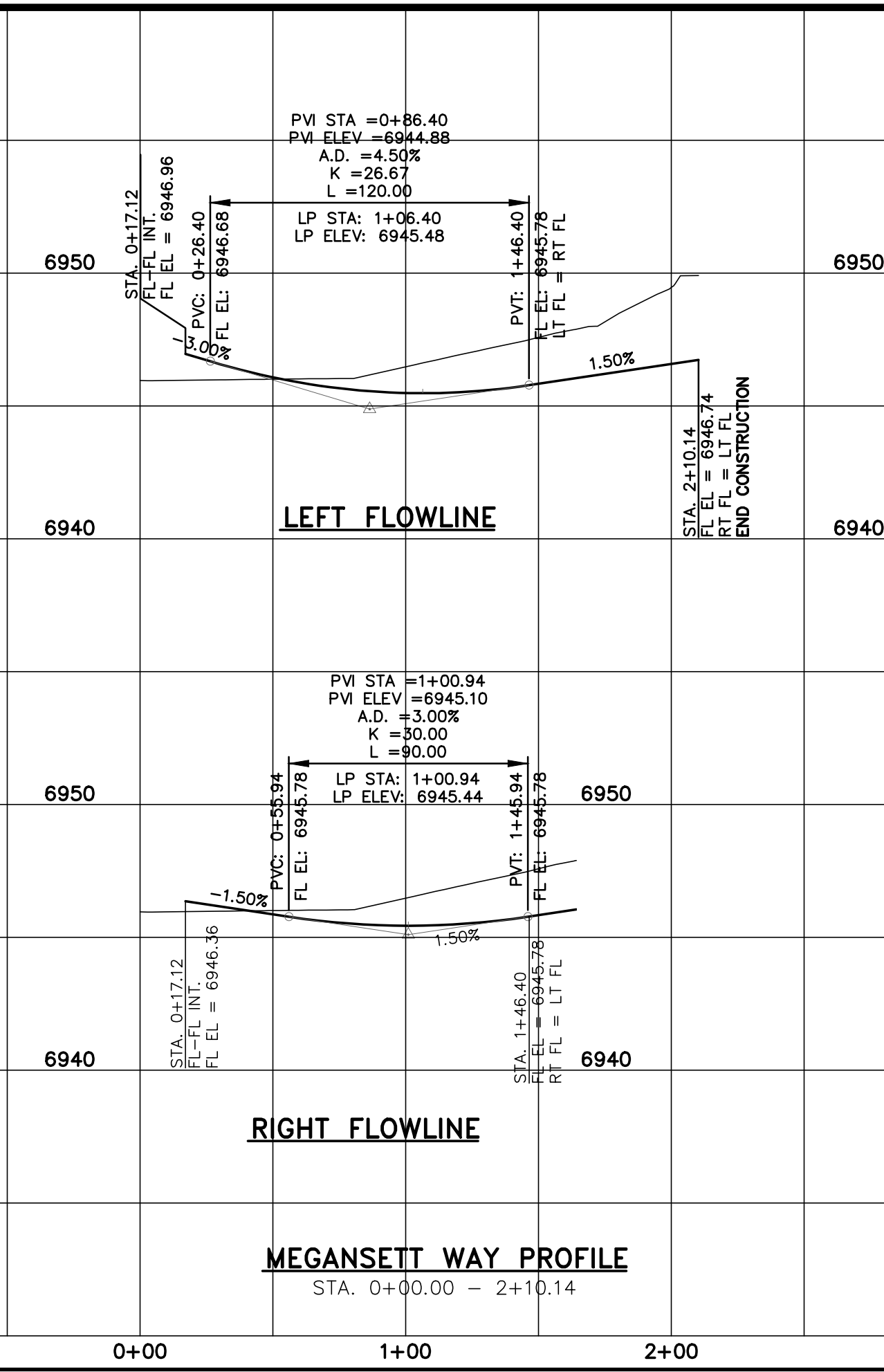


THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION
FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

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



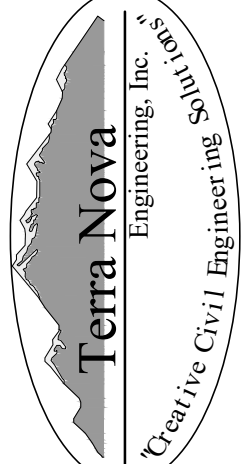
MASONBORO WAY PROFILE
STA. 0+00.00 - 2+40.54



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

REVISIONS		DESCRIPTION	DATE
NO.			
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE REVIEWING AGENCIES, THE REVIEWING AGENCIES, TERRA NOVA ENGINEERING AND SURVEYING, INC. APPROVES THEIR USE ONLY FOR THE PROJECT DESIGNATED BY WRITTEN AUTHORIZATION.			

PREPARED FOR:
4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150



721 S. 2900 STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnaseinc.com

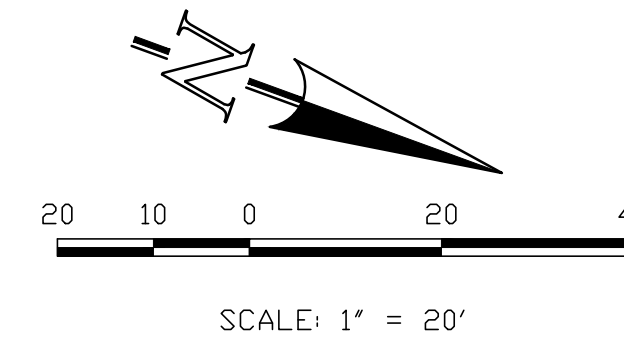
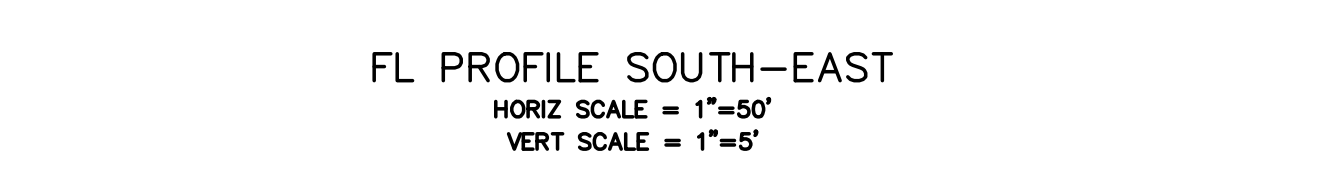
WATERBURY FILING NO. 1 & 2

CONSTRUCTION SET
STREET PLAN AND PROFILE
MANOR HAVEN WAY


DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY

H-SCALE 1"=50'
V-SCALE 1"=5'

JOB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 11 OF 32



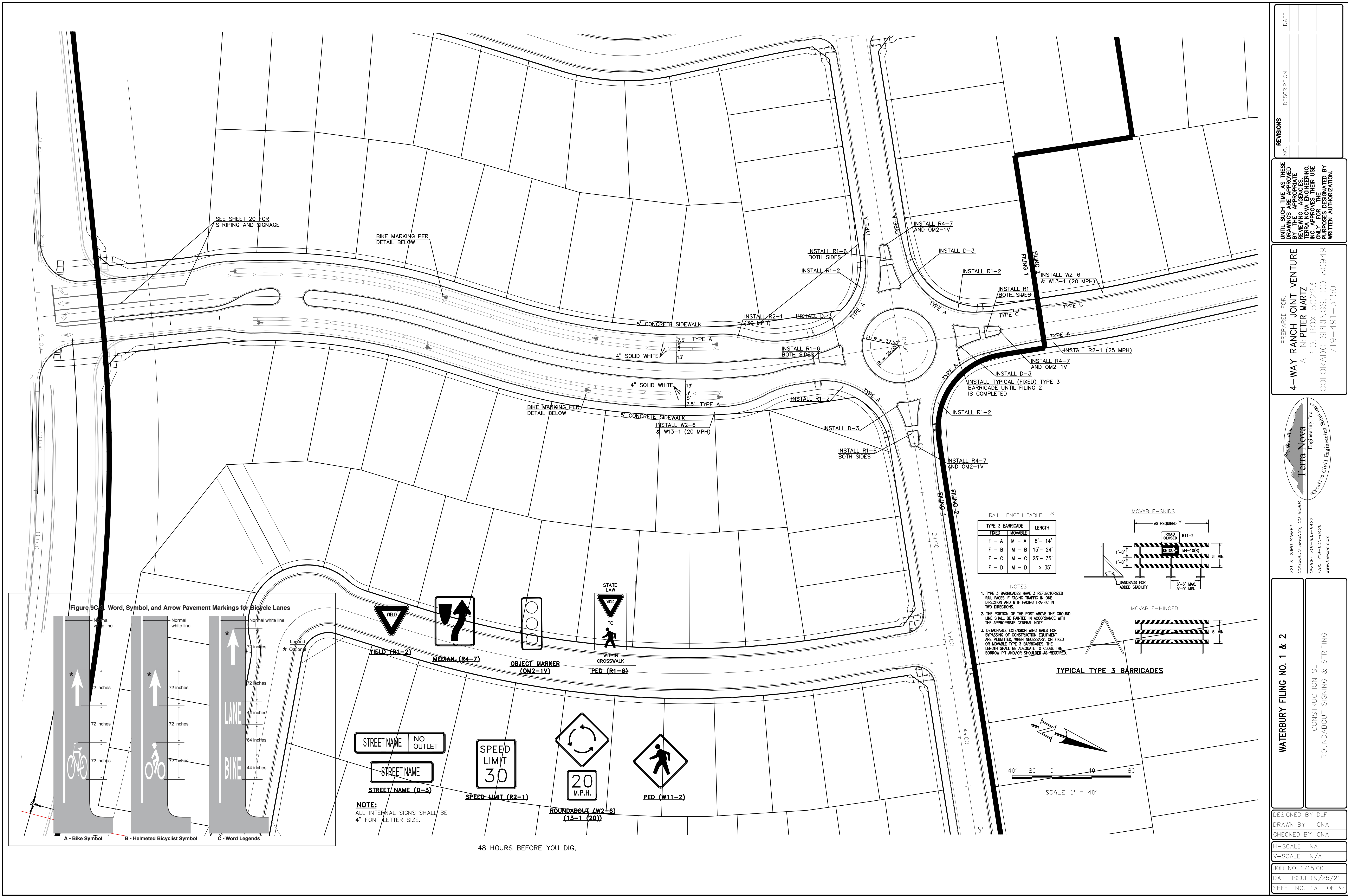
UNTIL SUCH TIME AS THESE
DRAWINGS ARE APPROVED
BY THE APPROPRIATE
REVIEWING AGENCIES,
TERRA NOVA ENGINEERING,
INC. APPROVES THEIR USE
ONLY FOR THE
PURPOSES DESIGNATED BY
WRITTEN AUTHORIZATION.



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DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA
1-SCALE NA
2-SCALE N/A
3-SCALE
4-SCALE
5-SCALE
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228-SCALE
229-SCALE
230-SCALE



REVISIONS

NO.	DESCRIPTION	DATE

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PREPARED FOR:
4-WAY RANCH JOINT VENTURE
ATTN: PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

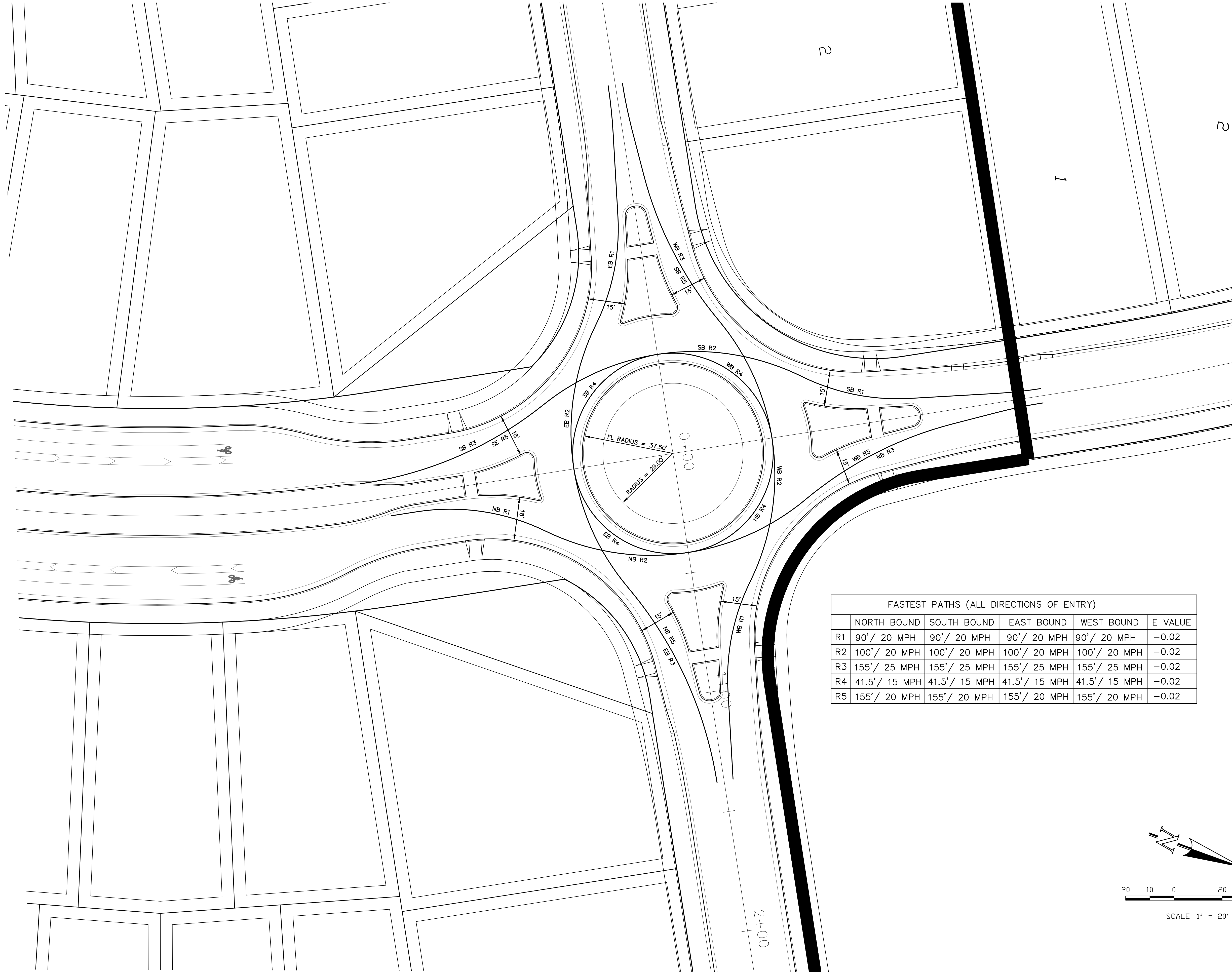
Terra Nova Engineering, Inc.
Creative Civil Engineering

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

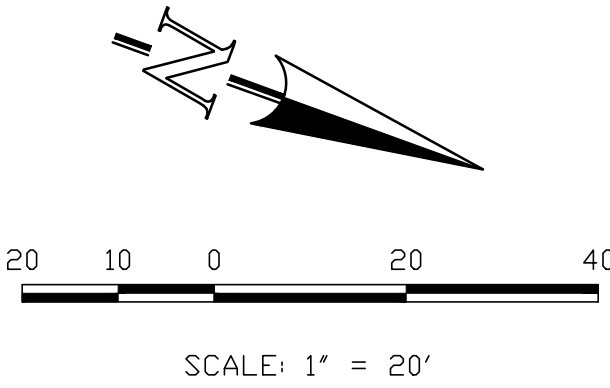
WATERBURY FLING NO. 1 & 2

CONSTRUCTION SET
ROUNDABOUT SIGNING & STRIPING

DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA
H-SCALE N/A
V-SCALE N/A
JOB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 13 OF 32



FASTEST PATHS (ALL DIRECTIONS OF ENTRY)					
	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND	E VALUE
R1	90' / 20 MPH	90' / 20 MPH	90' / 20 MPH	90' / 20 MPH	-0.02
R2	100' / 20 MPH	100' / 20 MPH	100' / 20 MPH	100' / 20 MPH	-0.02
R3	155' / 25 MPH	155' / 25 MPH	155' / 25 MPH	155' / 25 MPH	-0.02
R4	41.5' / 15 MPH	41.5' / 15 MPH	41.5' / 15 MPH	41.5' / 15 MPH	-0.02
R5	155' / 20 MPH	155' / 20 MPH	155' / 20 MPH	155' / 20 MPH	-0.02



DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA
H-SCALE NA
V-SCALE N/A
JOB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 14 OF 32

WATERBURY FILING NO. 1 & 2
CONSTRUCTION SET
ROUNDABOUT FASTEST PATH

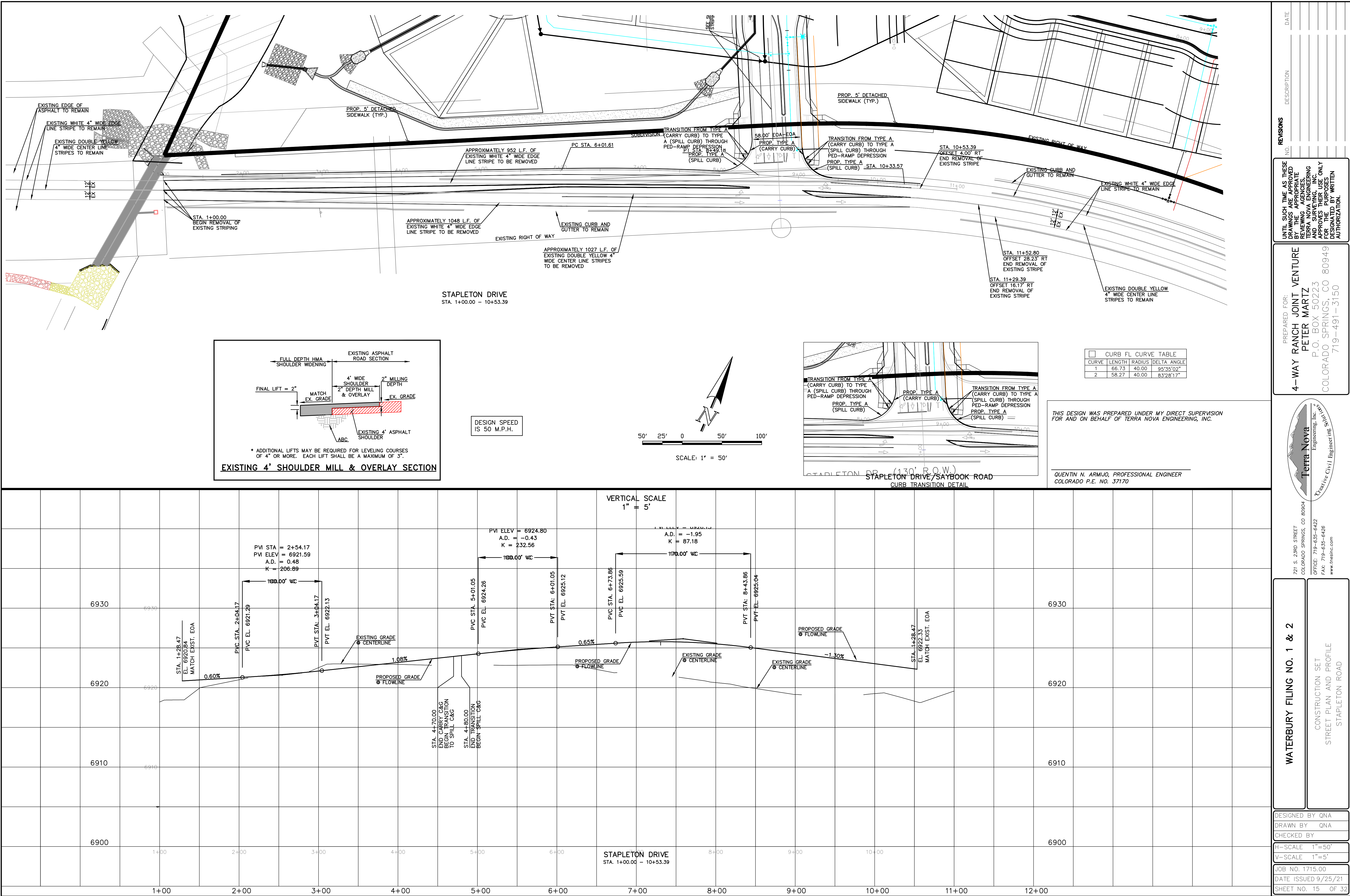
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnecinc.com

Terra Nova
Engineering, Inc.
Creative Civil Engineering

PREPARED FOR:
4-WAY RANCH JOINT VENTURE
ATTN: PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

UNLESS OTHERWISE NOTED, ALL
DRAWINGS ARE APPROVED
FOR THE PROJECT BY THE
REGISTERED PROFESSIONAL
ENGINEER, TERRA NOVA
ENGINEERING, INC.
ONLY FOR THE PROJECT
AND NOT FOR ANY OTHER
PROJECT WITHOUT THE
WRITTEN AUTHORIZATION.

REVISIONS
NO. DESCRIPTION DATE



REVISIONS

NO.	DESCRIPTION	DATE
-----	-------------	------

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PREPARED FOR:

4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY

H-SCALE 1"=50'
V-SCALE 1"=5'

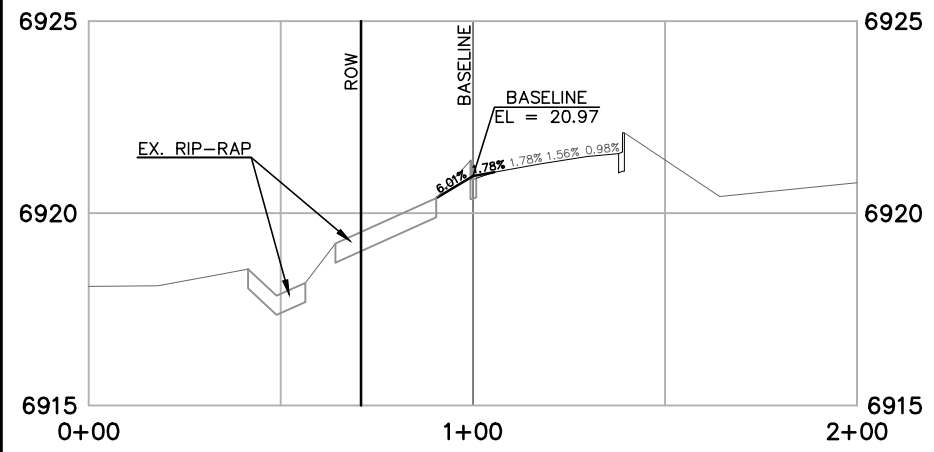
JOB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 15 OF 32

WATERBURY FILING NO. 1 & 2

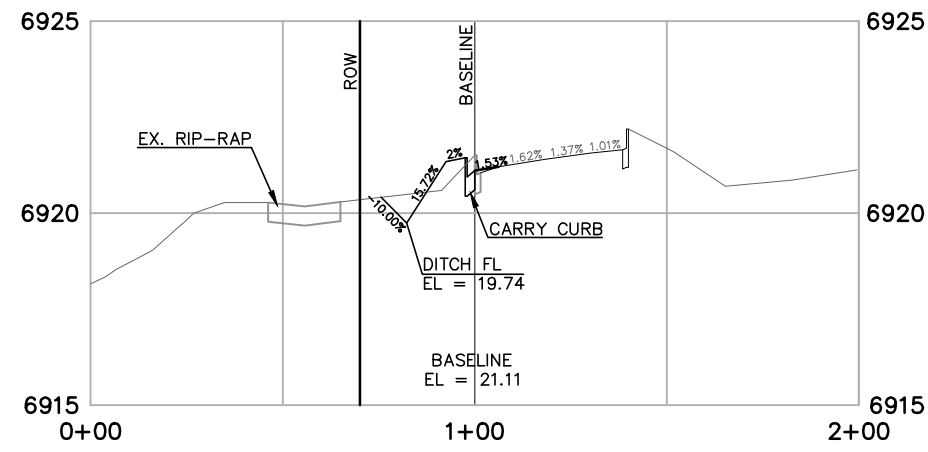
CONSTRUCTION SET
STREET PLAN AND PROFILE
STAPLETON ROAD

721 S. 2900 STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnasinc.com

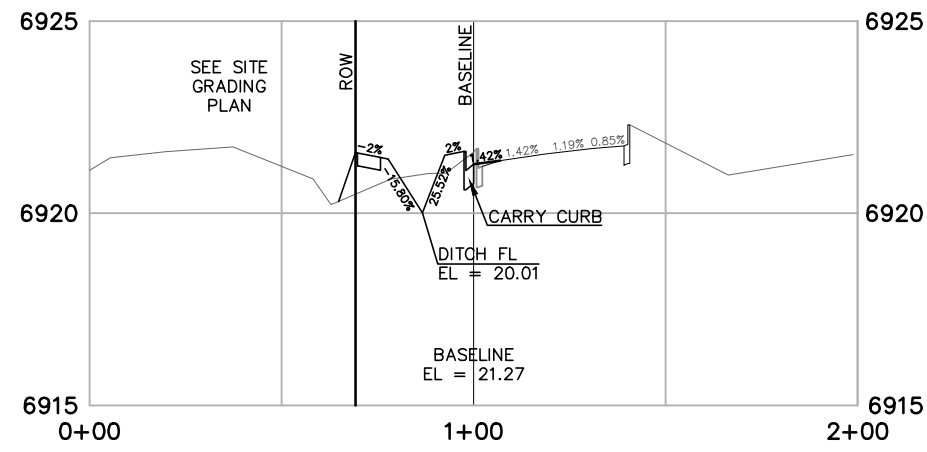
Terra Nova
Engineering, Inc.
Creative Civil Engineering



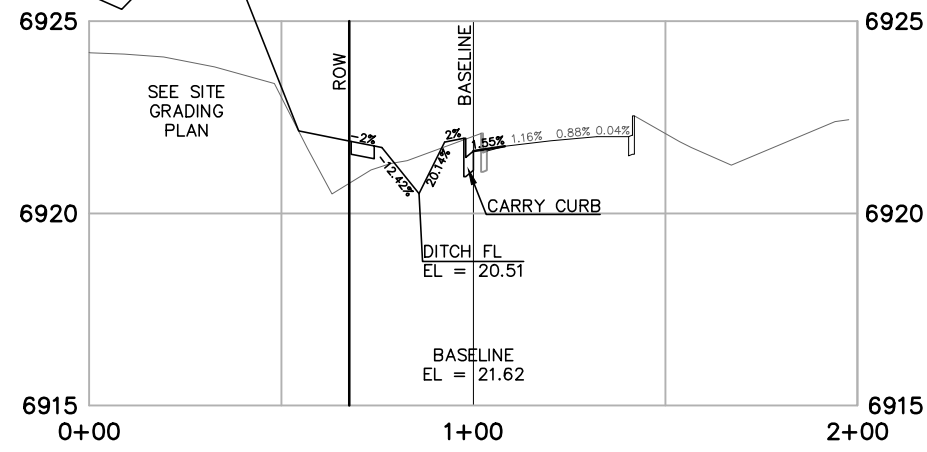
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VERTICAL SCALE: 1"=5'



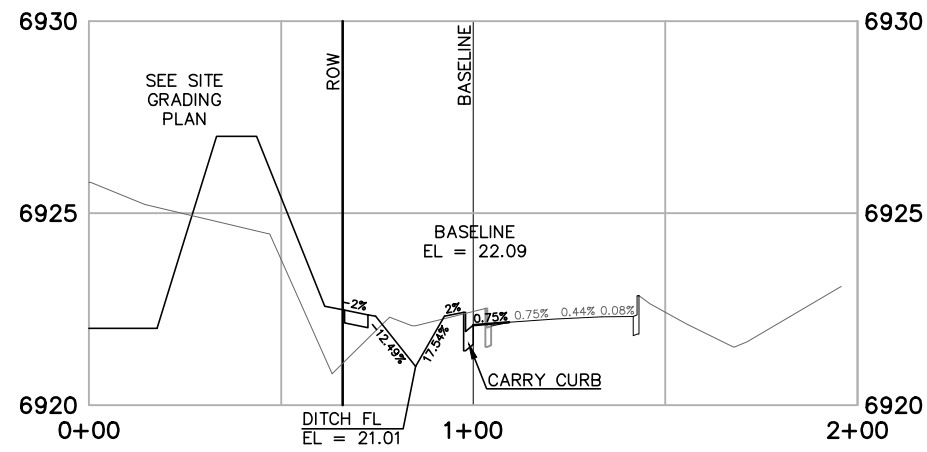
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SECTION 1+73.24
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VERTICAL SCALE: 1"=5'



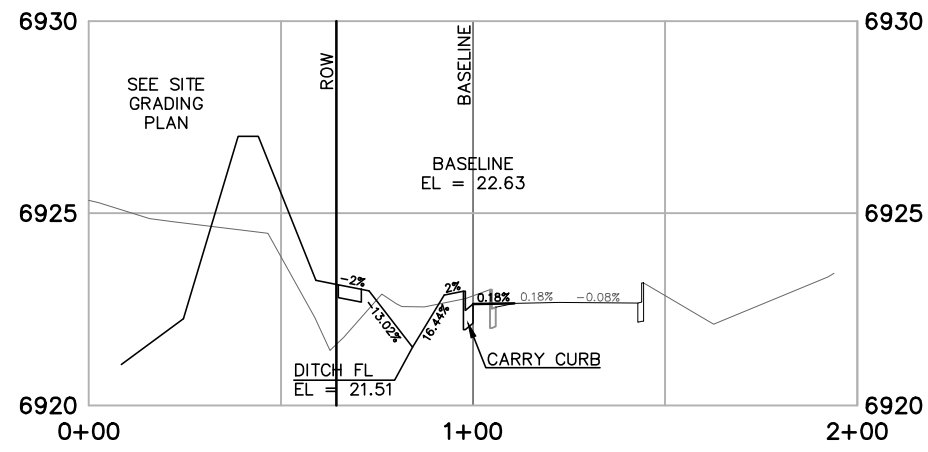
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VERTICAL SCALE: 1"=5'



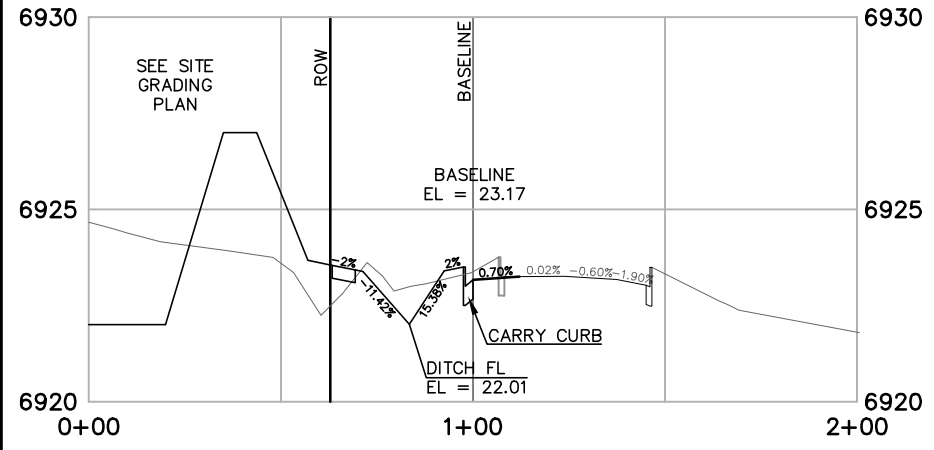
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HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1"=5'



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



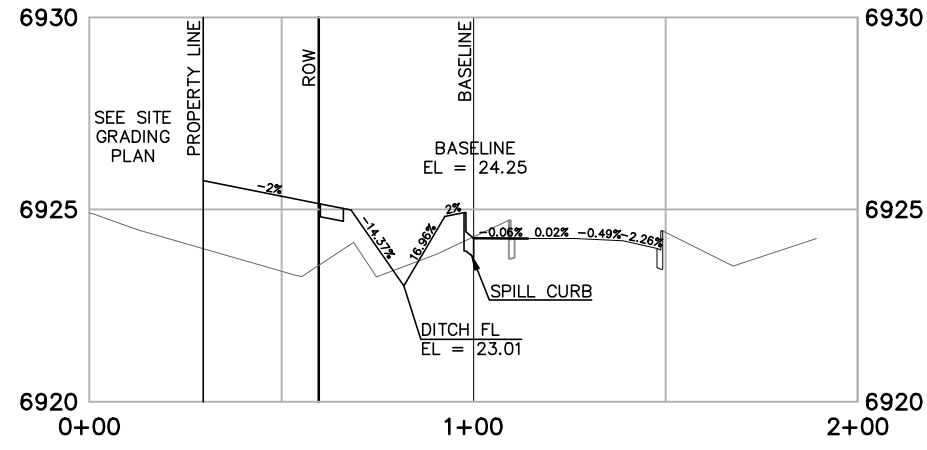
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VERTICAL SCALE: 1"=5'



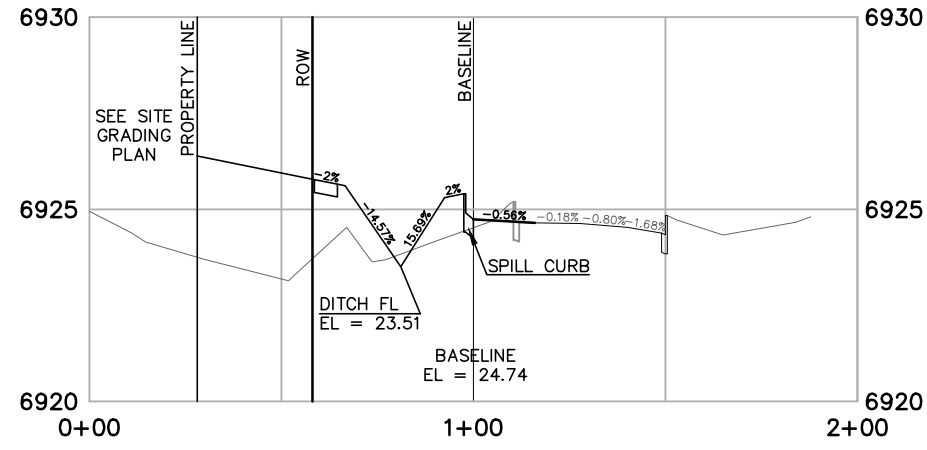
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VERTICAL SCALE: 1"=5'



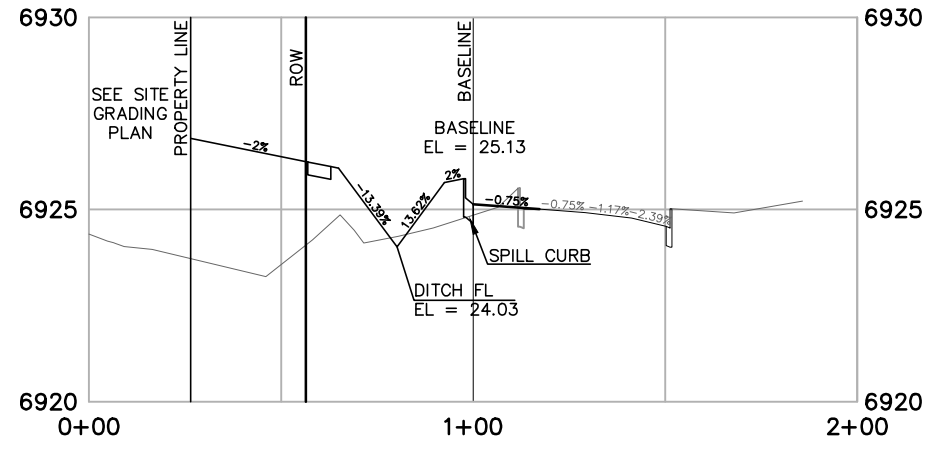
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HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1"=5'



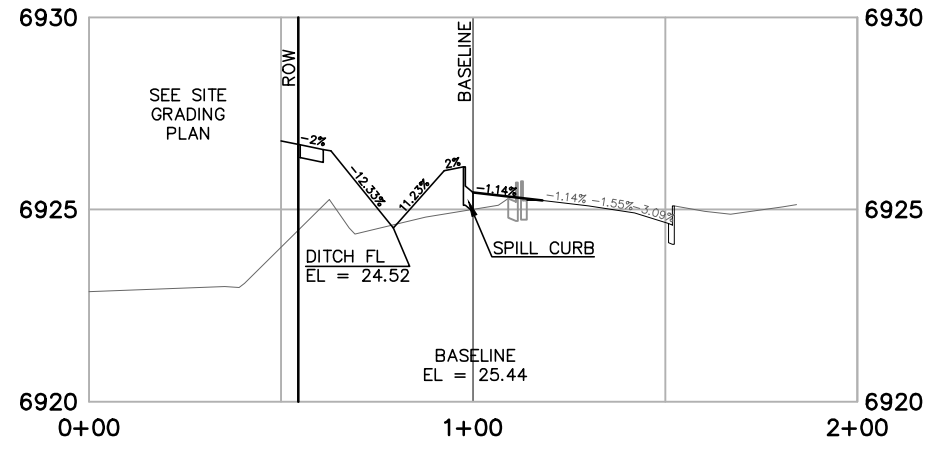
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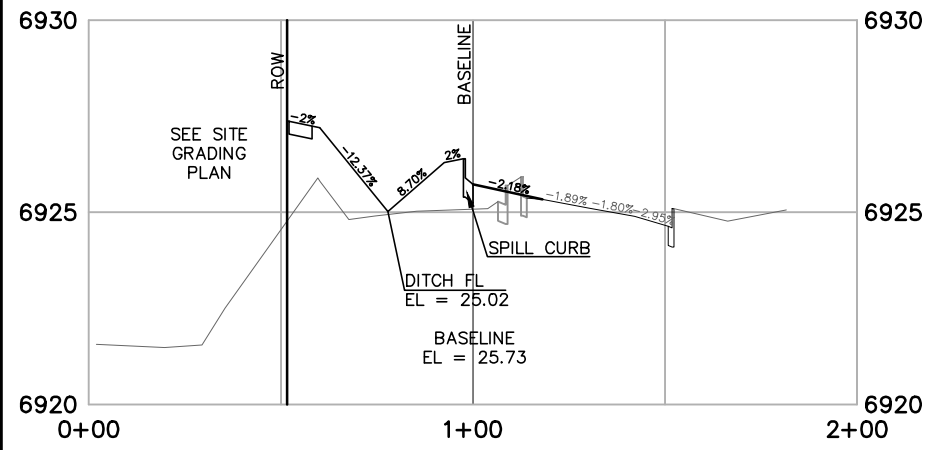
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VERTICAL SCALE: 1"=5'



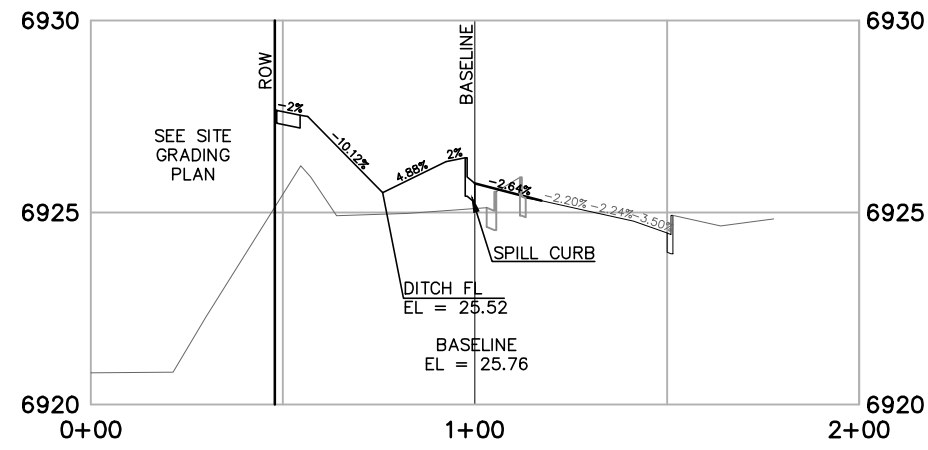
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VERTICAL SCALE: 1"=5'



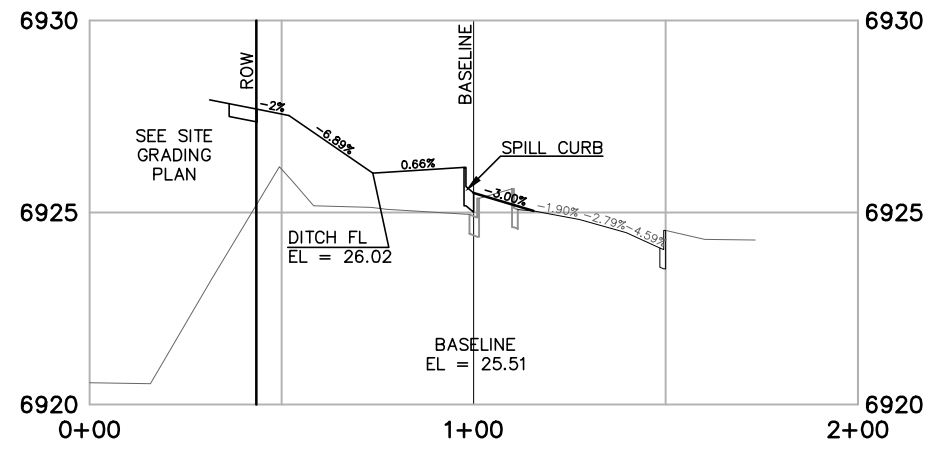
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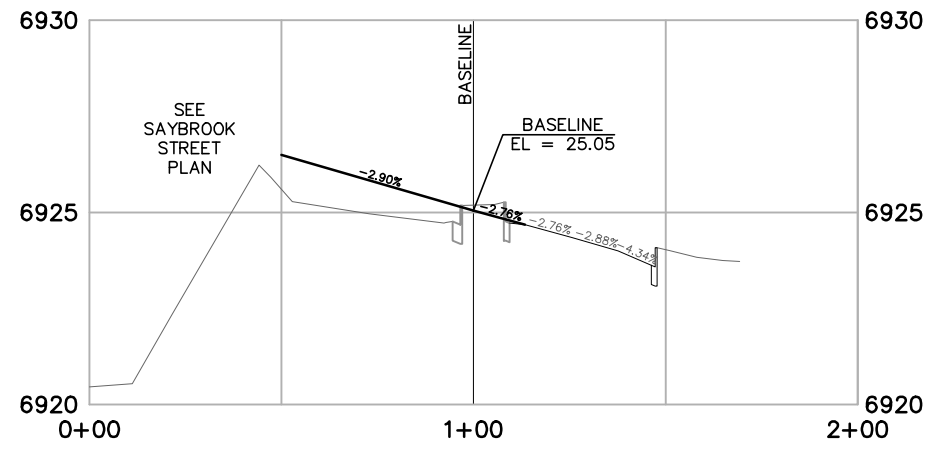
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VERTICAL SCALE: 1"=5'



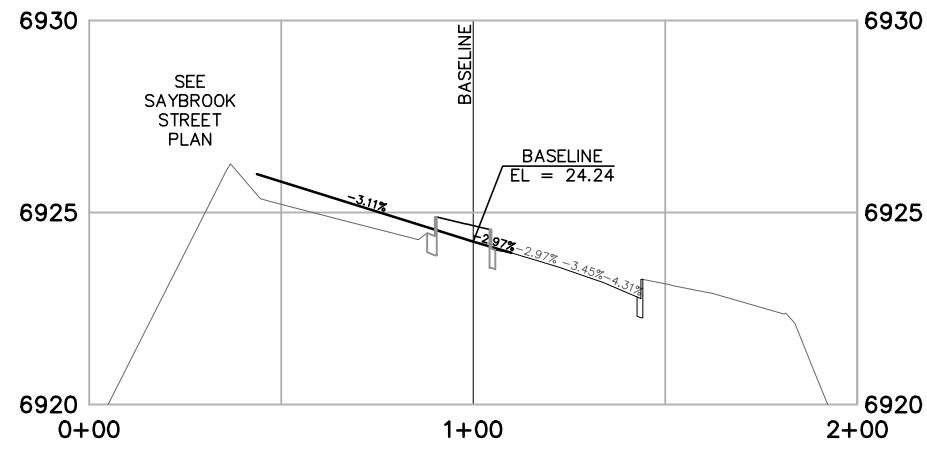
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VERTICAL SCALE: 1"=5'



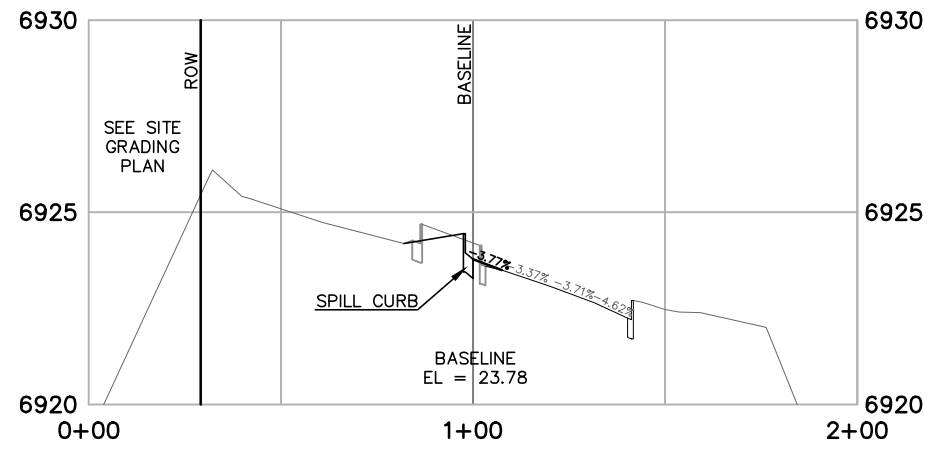
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VERTICAL SCALE: 1"=5'



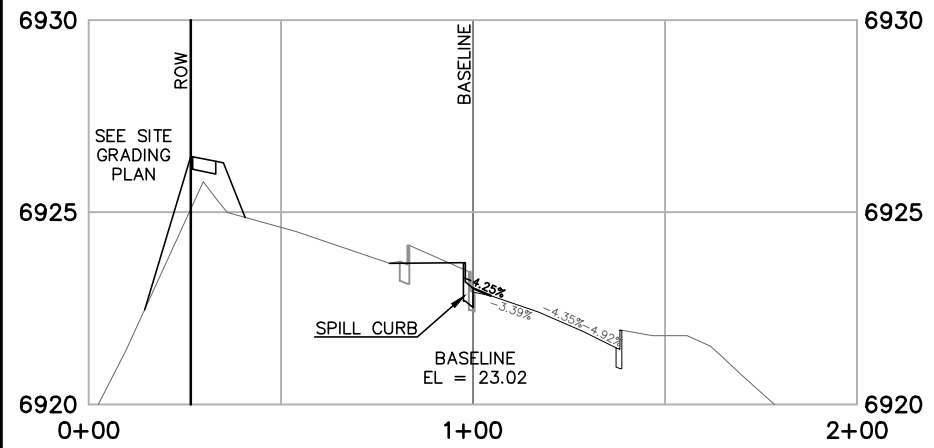
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VERTICAL SCALE: 1"=5'



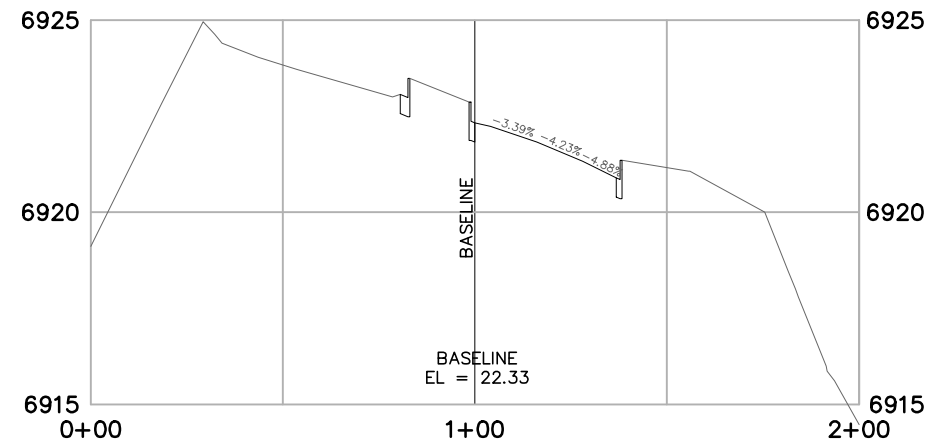
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SECTION 9+06.19
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1"=5'



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



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

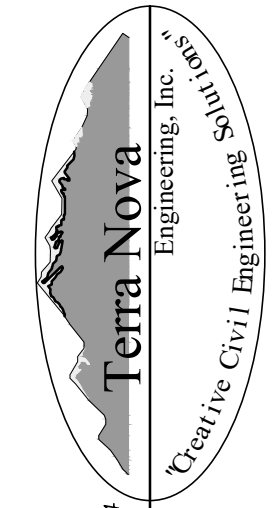


STAPLETON DRIVE
SECTION 10+53.39
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1"=5'

REVISIONS	
NO.	DESCRIPTION

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--

PREPARED FOR: 4-WAY RANCH JOINT VENTURE ATTN: PETER MARTZ P.O. BOX 50223 COLORADO SPRINGS, CO 80949 719-491-3150

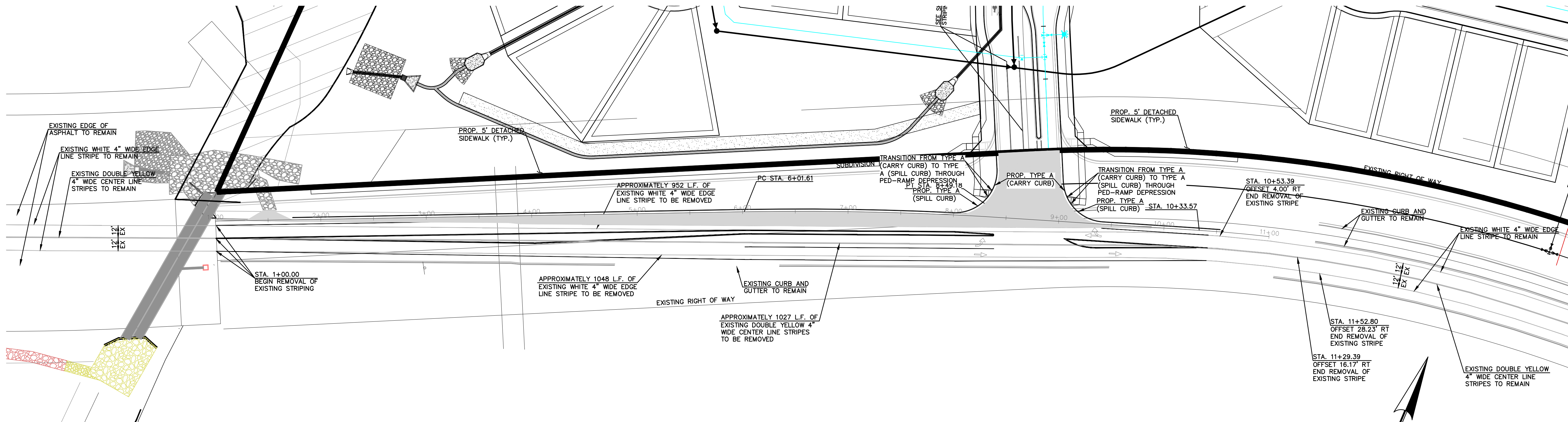
 Terra Nova Engineering, Inc. Creative Civil Engineering

721 S. 23RD STREET COLORADO SPRINGS, CO 80904 OFFICE: 719-635-6422 FAX: 719-635-6426 www.tnecinc.com
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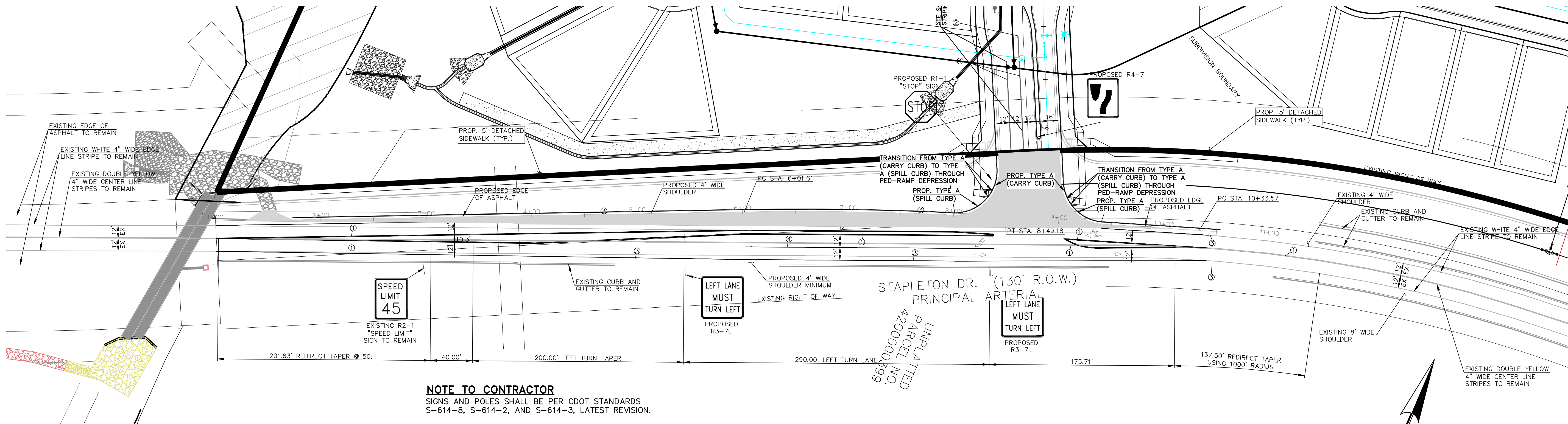
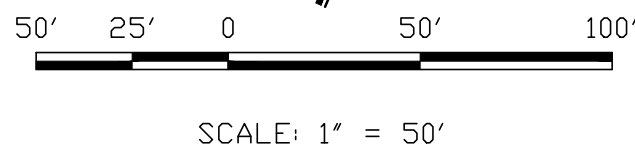
WATERBURY FILING NO. 1 & 2

CONSTRUCTION SET STAPLETON DRIVE CROSS SECTIONS

DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA
H-SCALE NA
V-SCALE N/A
JOB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 16 OF 32



STAPLETON DRIVE
STRIPING REMOVAL PLAN



STAPLETON DR. (130' R.O.W.)
PRINCIPAL ARTERIAL

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.



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

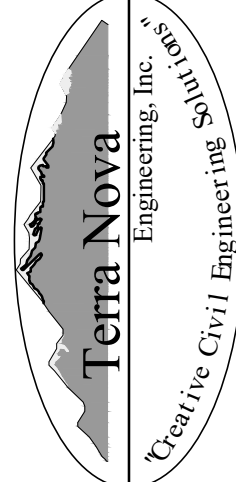
*NOTE: ALL STRIPING INSTALLATION SHALL BE PER COLORADO DEPARTMENT OF TRANSPORTATION
"M&S STANDARDS" STANDARD PLAN NO. S-627-1

REVISIONS

NO.	DESCRIPTION	DATE

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PREPARED FOR:
4-WAY RANCH JOINT VENTURE
ATTN: PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150



Terra Nova

Engineering, Inc.

Creative Civil Engineering

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

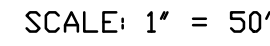
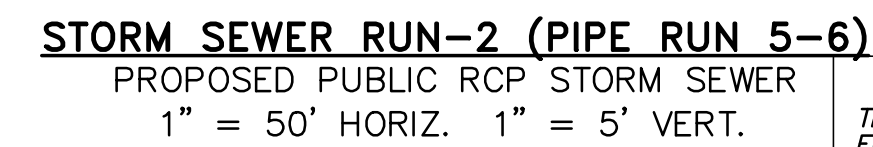
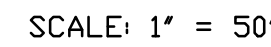
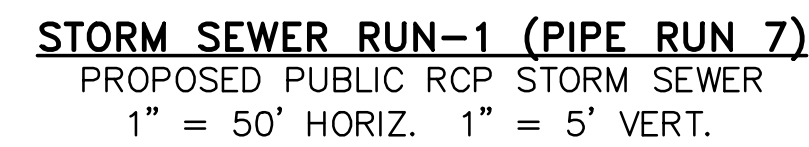
WATERBURY FILING NO. 1 & 2

SIGNING AND STRIPING
STAPLETON DRIVE

DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA

H-SCALE NA
V-SCALE N/A

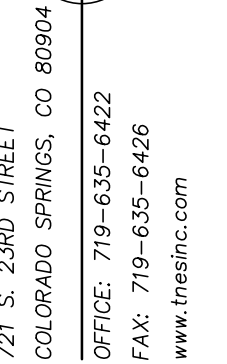
JOB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 17 OF 32



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



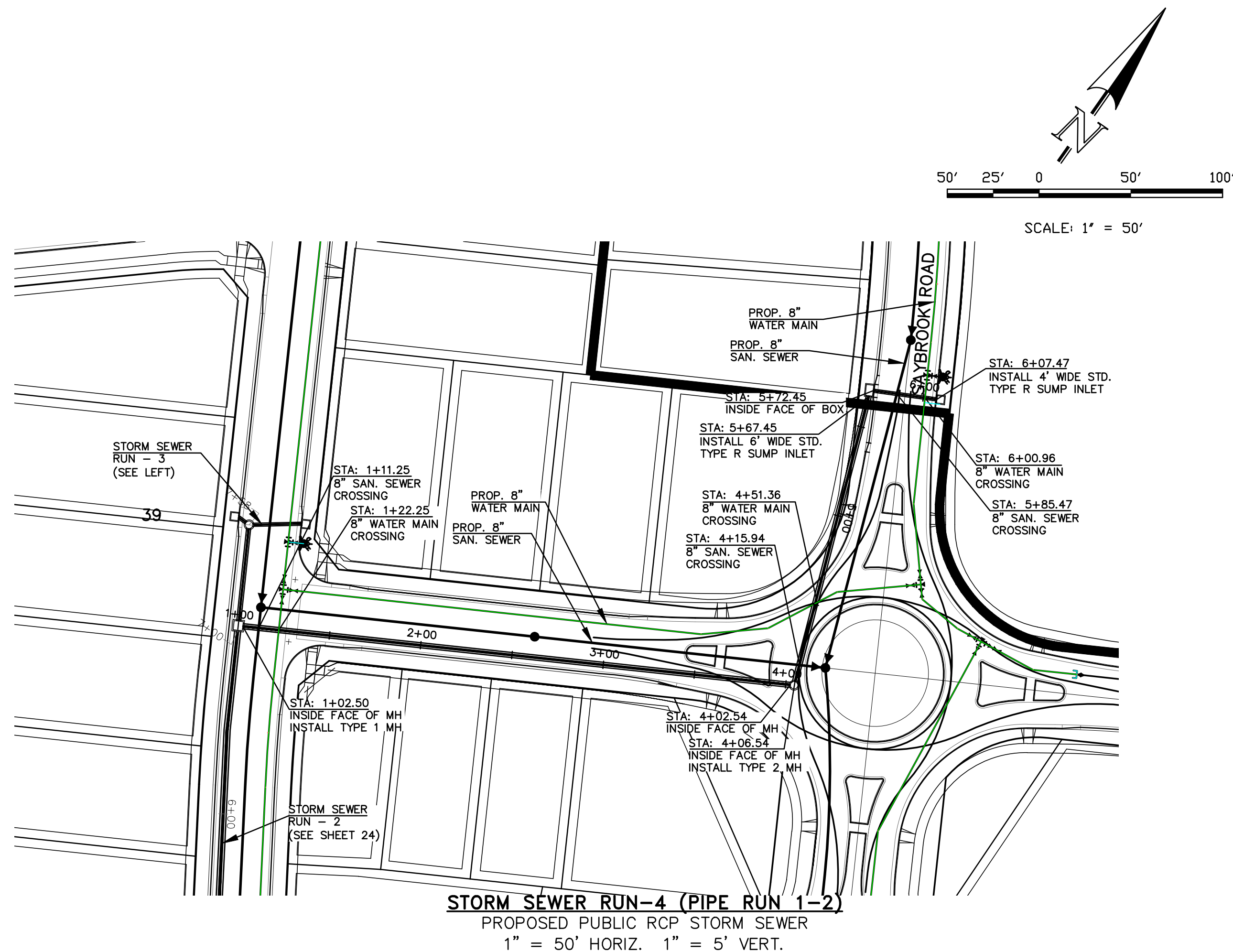
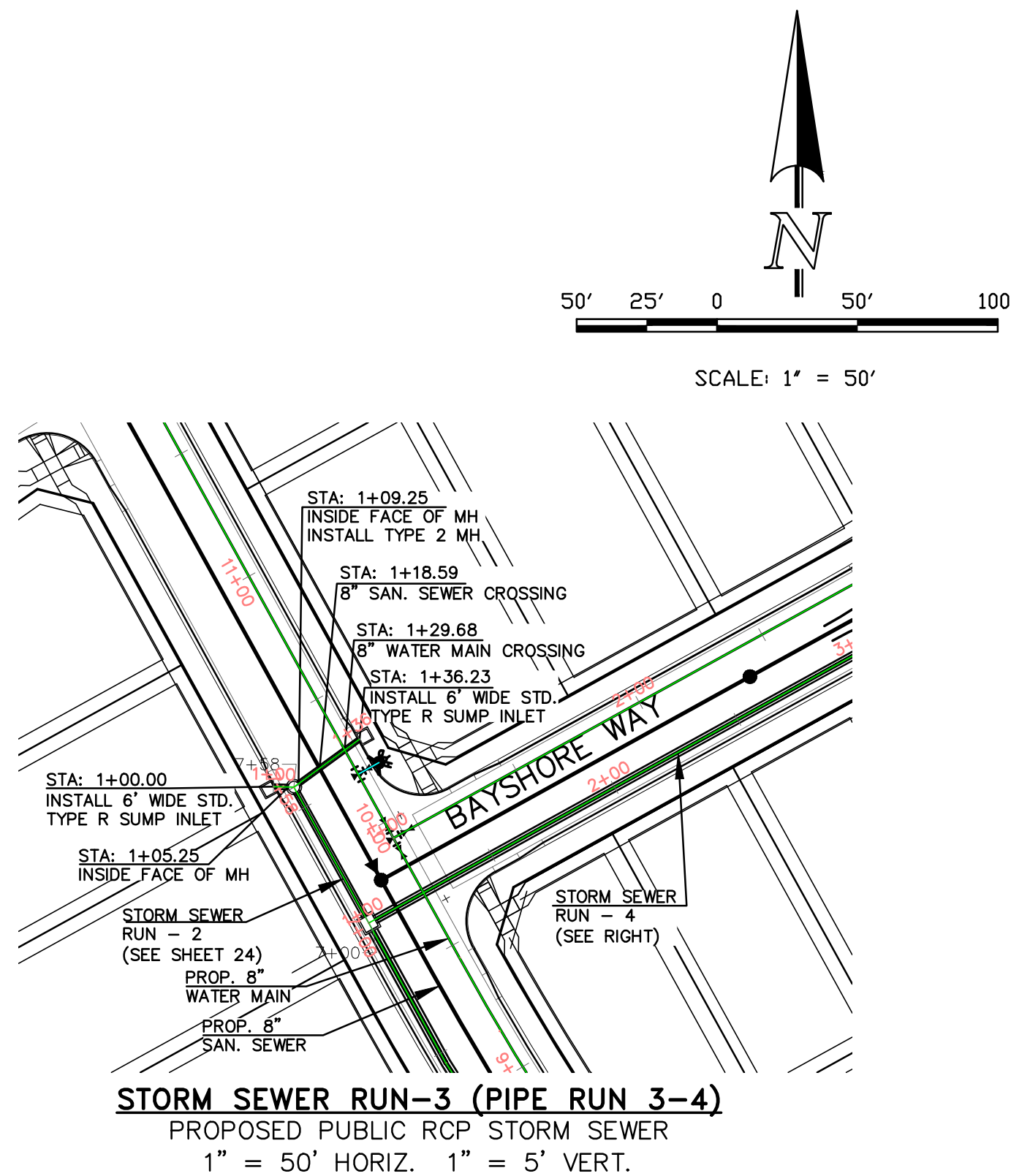
PREPARED FOR:
4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150



WATERBURY FILING NO. 1 & 2

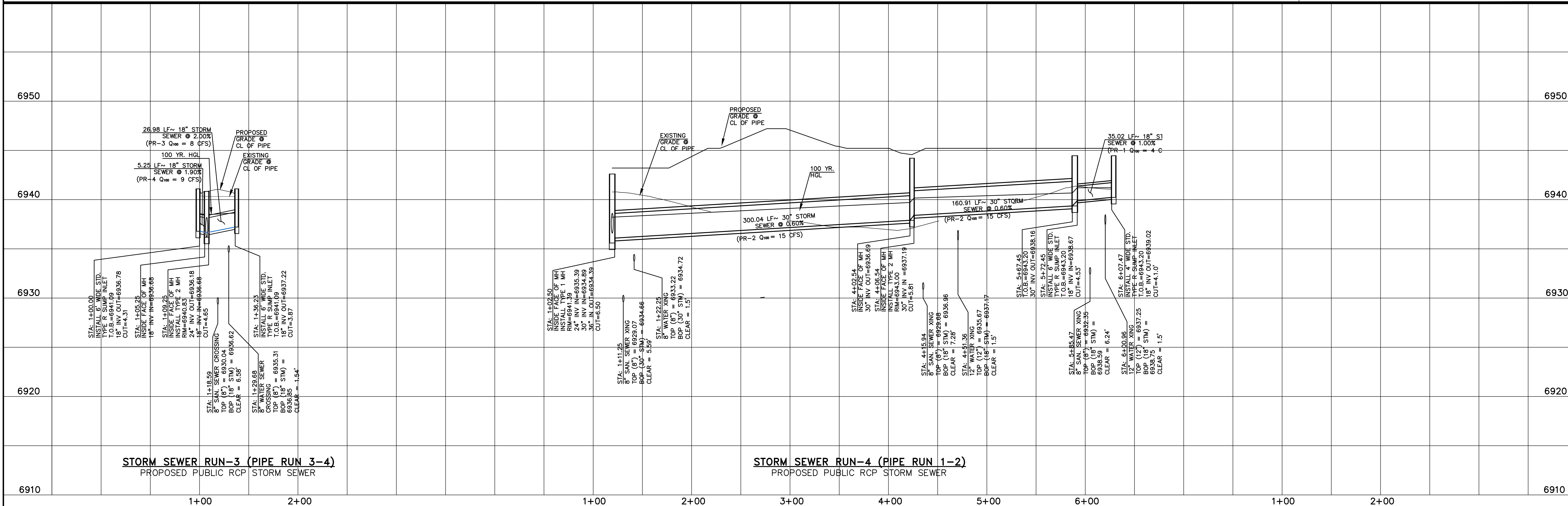
CONSTRUCTION SET
STORM SEWER PLAN AND PROFILE
STORM RUNS 1 & 2

DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY
-SCALE 1"=50'
-SCALE 1"=5'
DB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 18 OF 32



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

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



WATERBURY FILING NO. 1 & 2

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

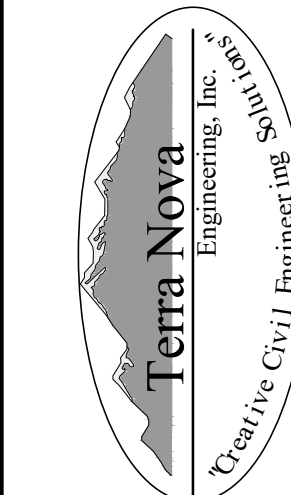
DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY

H-SCALE 1"=50'
V-SCALE 1"=5'

JOB NO. 1715.00
DATE ISSUED 9/25/21

SHEET NO. 22 OF 32

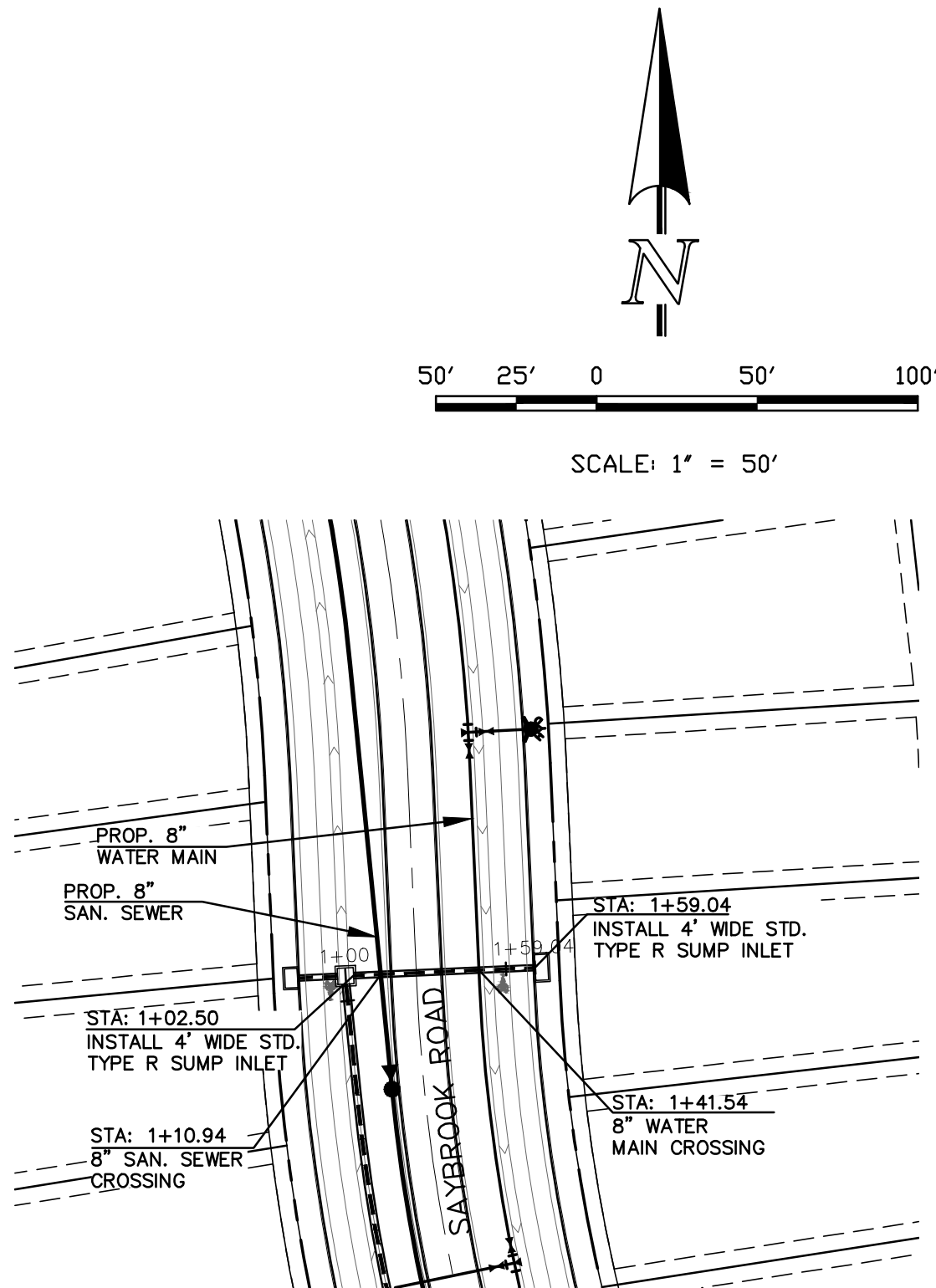
721 S. 2900 STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnasec.com



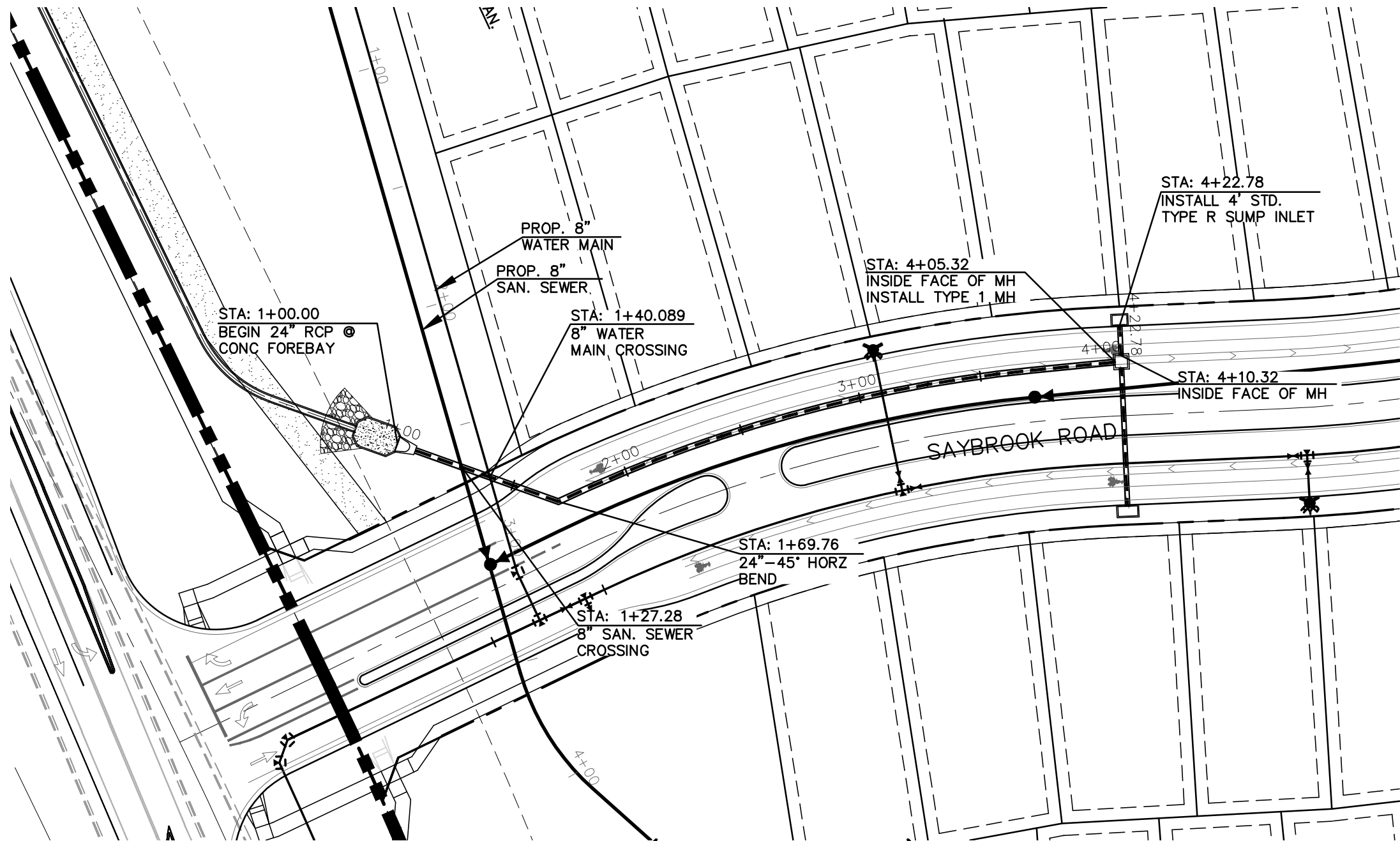
PREPARED FOR:
4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

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

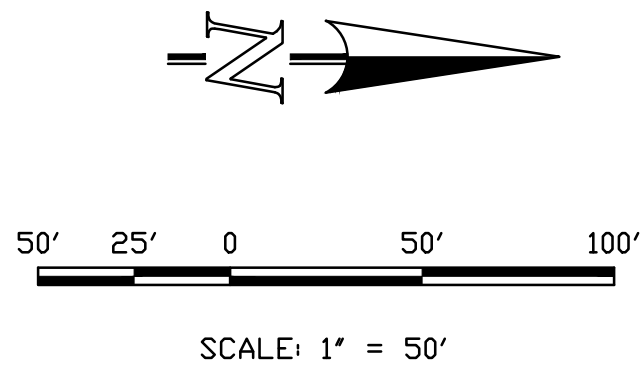
REVISIONS
NO. DESCRIPTION
DATE



STORM SEWER RUN-5 (PIPE RUN 9)
PROPOSED PUBLIC RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

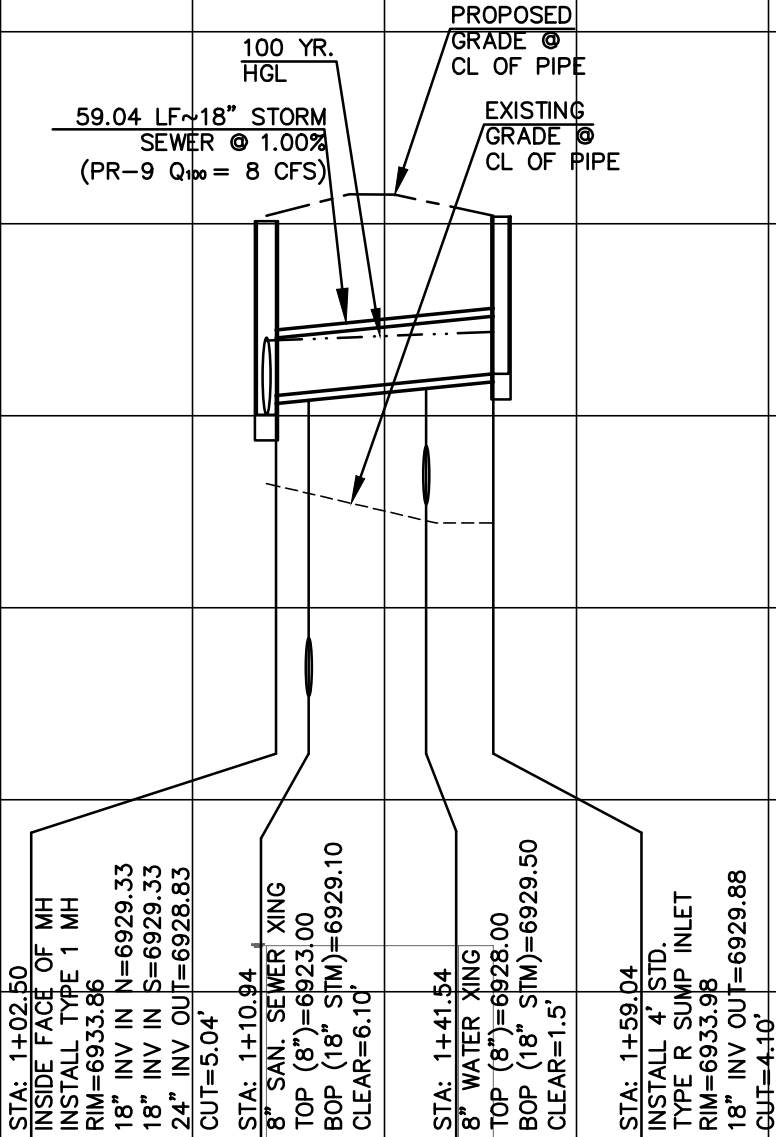


STORM SEWER RUN-6 (PIPE RUN 8 & 10)
PROPOSED PUBLIC RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.

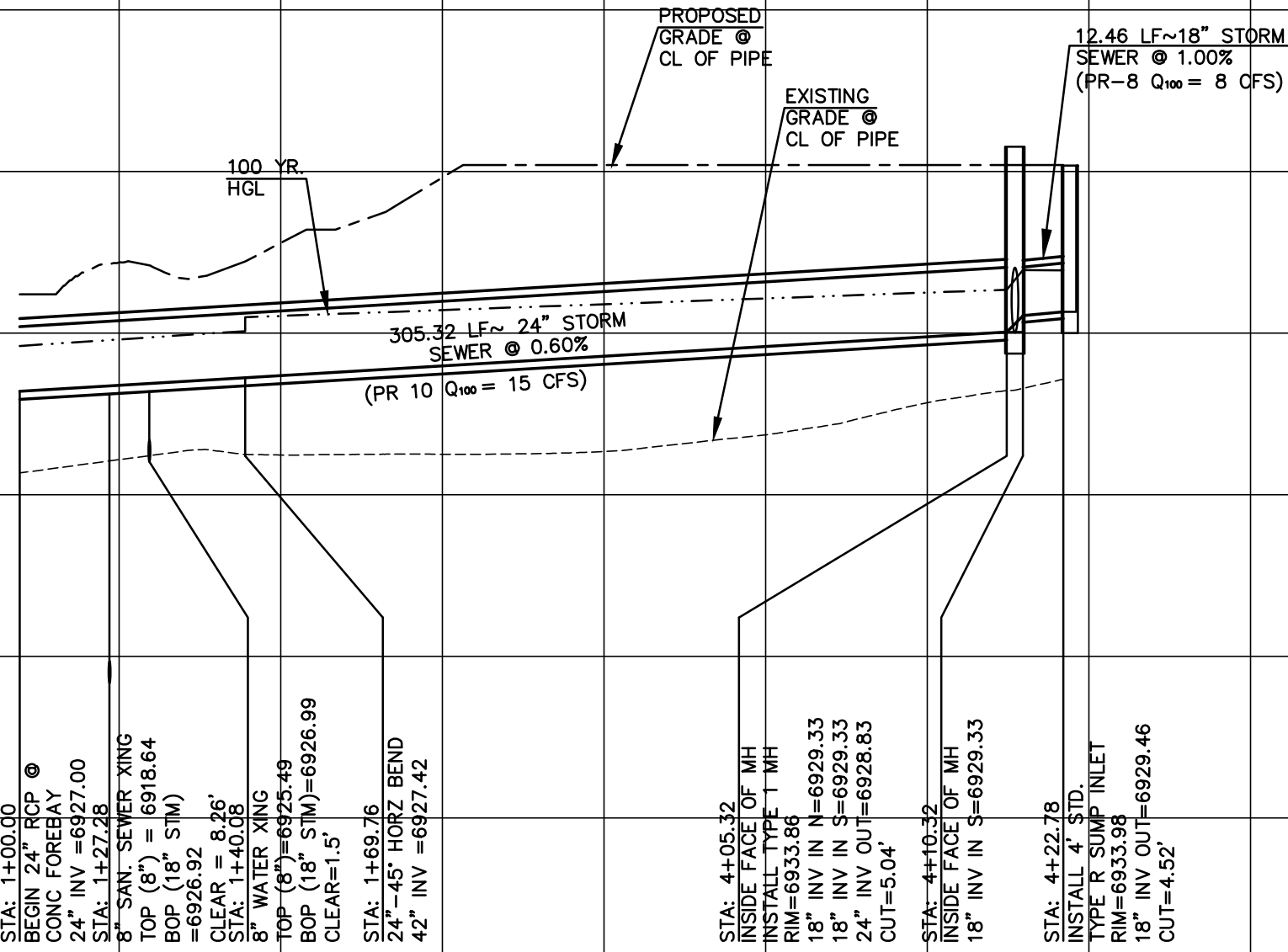


THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION
FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

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



STORM SEWER RUN-5 (PIPE RUN 9)
PROPOSED PUBLIC RCP STORM SEWER



STORM SEWER RUN-6 (PIPE RUN 8 & 10)
PROPOSED PUBLIC RCP STORM SEWER

REVISIONS

NO.	DESCRIPTION	DATE

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

PREPARED FOR:

4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

Terra Nova

Engineering, Inc.

Creative Civil Engineer Inc.

721 S. 2900 STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnaseinc.com

DESIGNED BY QNA

DRAWN BY QNA

CHECKED BY

H-SCALE 1"=50'

V-SCALE 1"=5'

JOB NO. 1715.00

DATE ISSUED 9/25/21

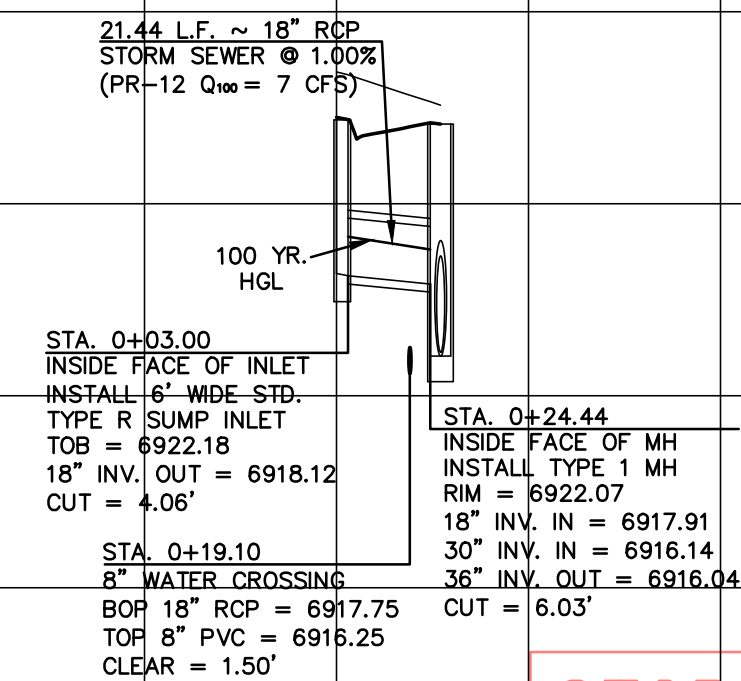
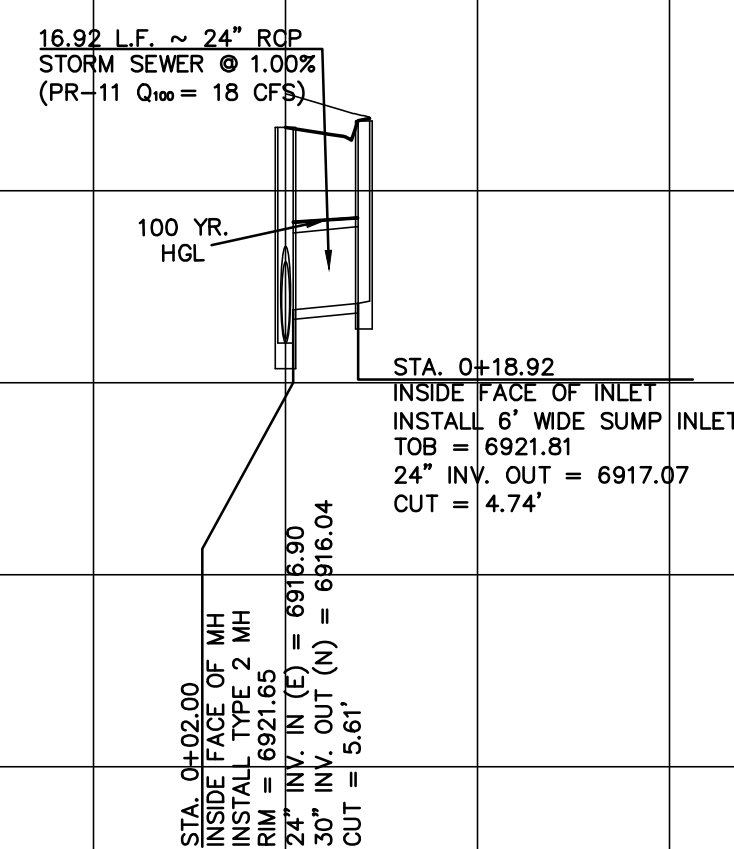
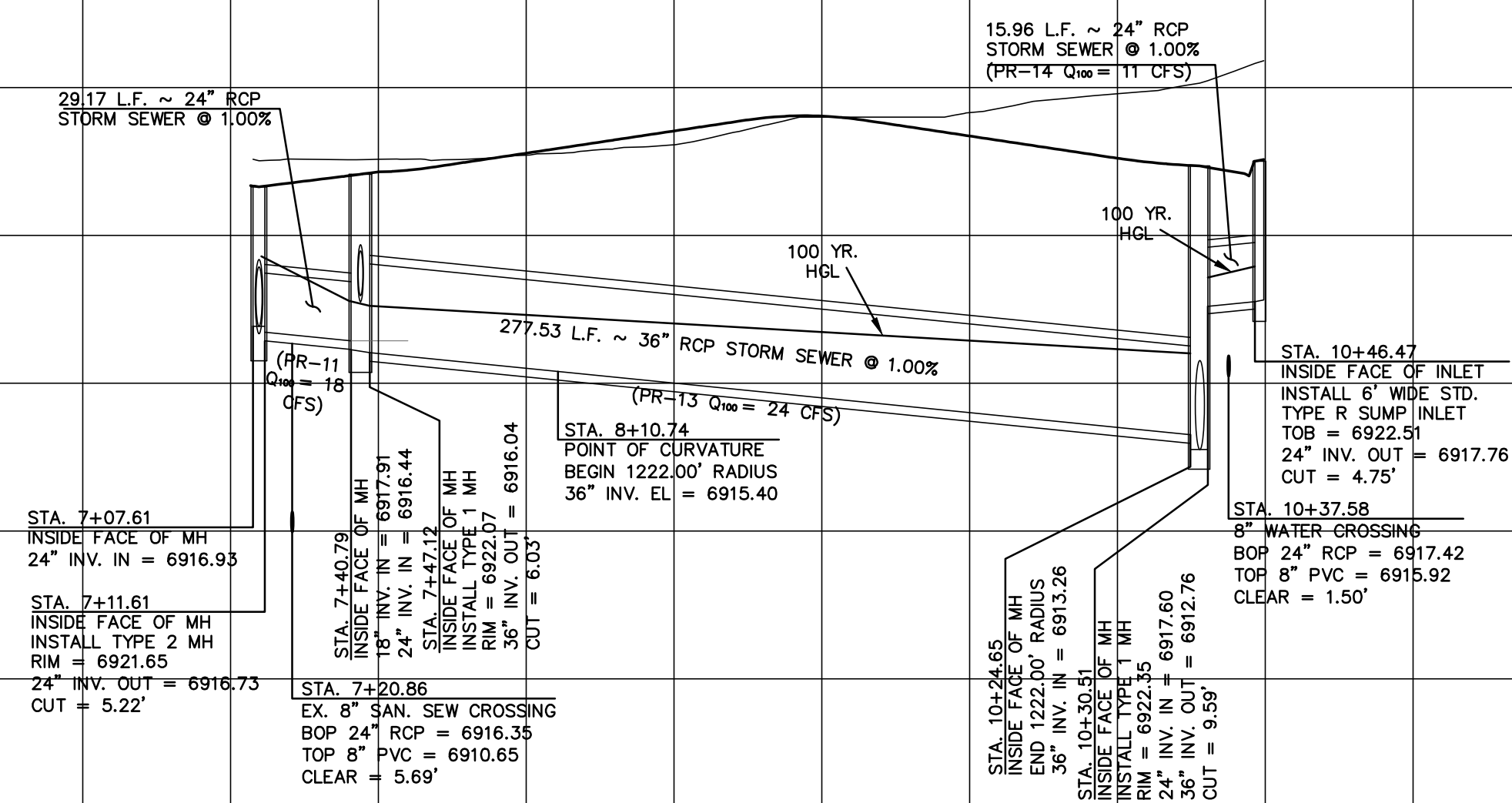
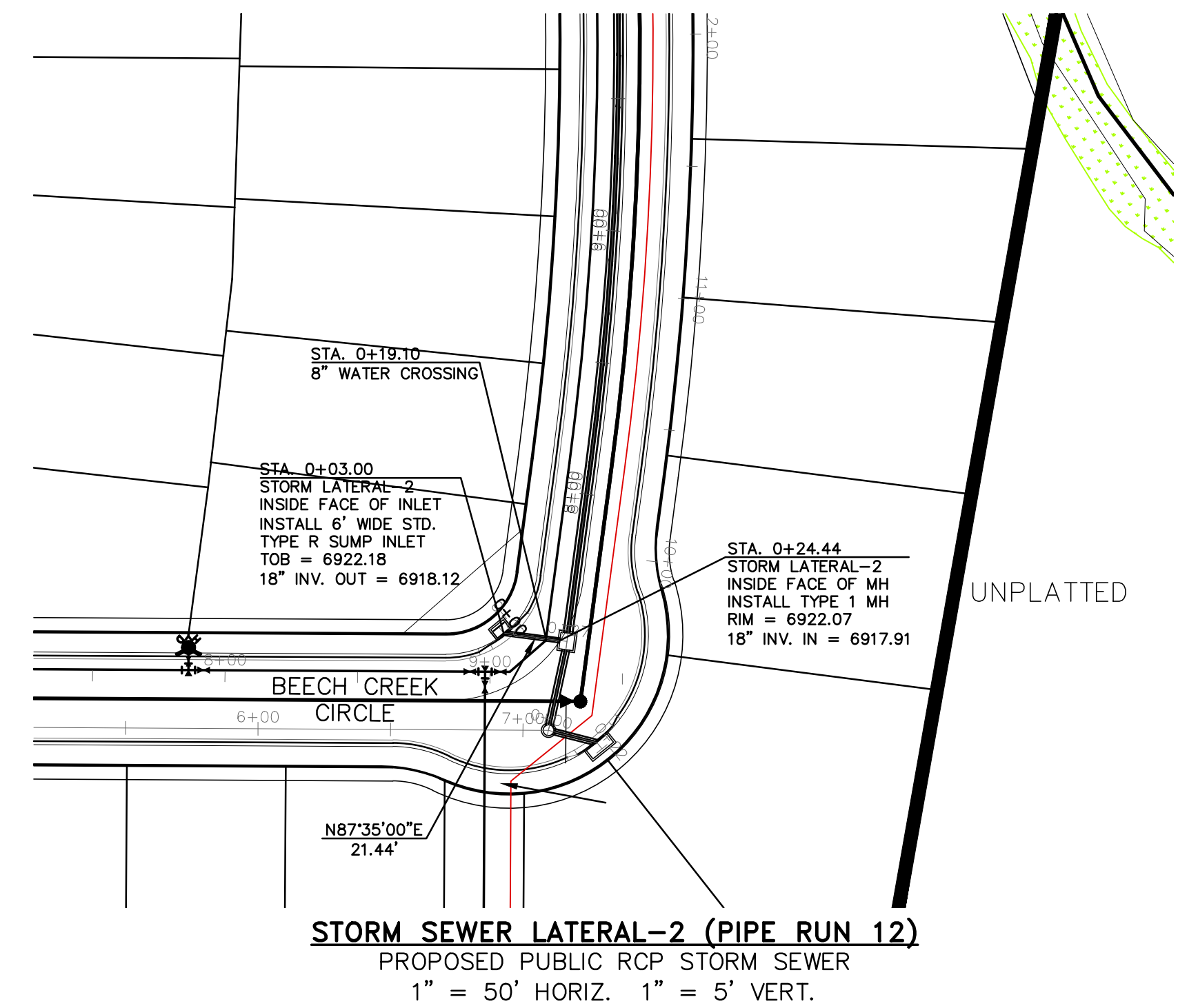
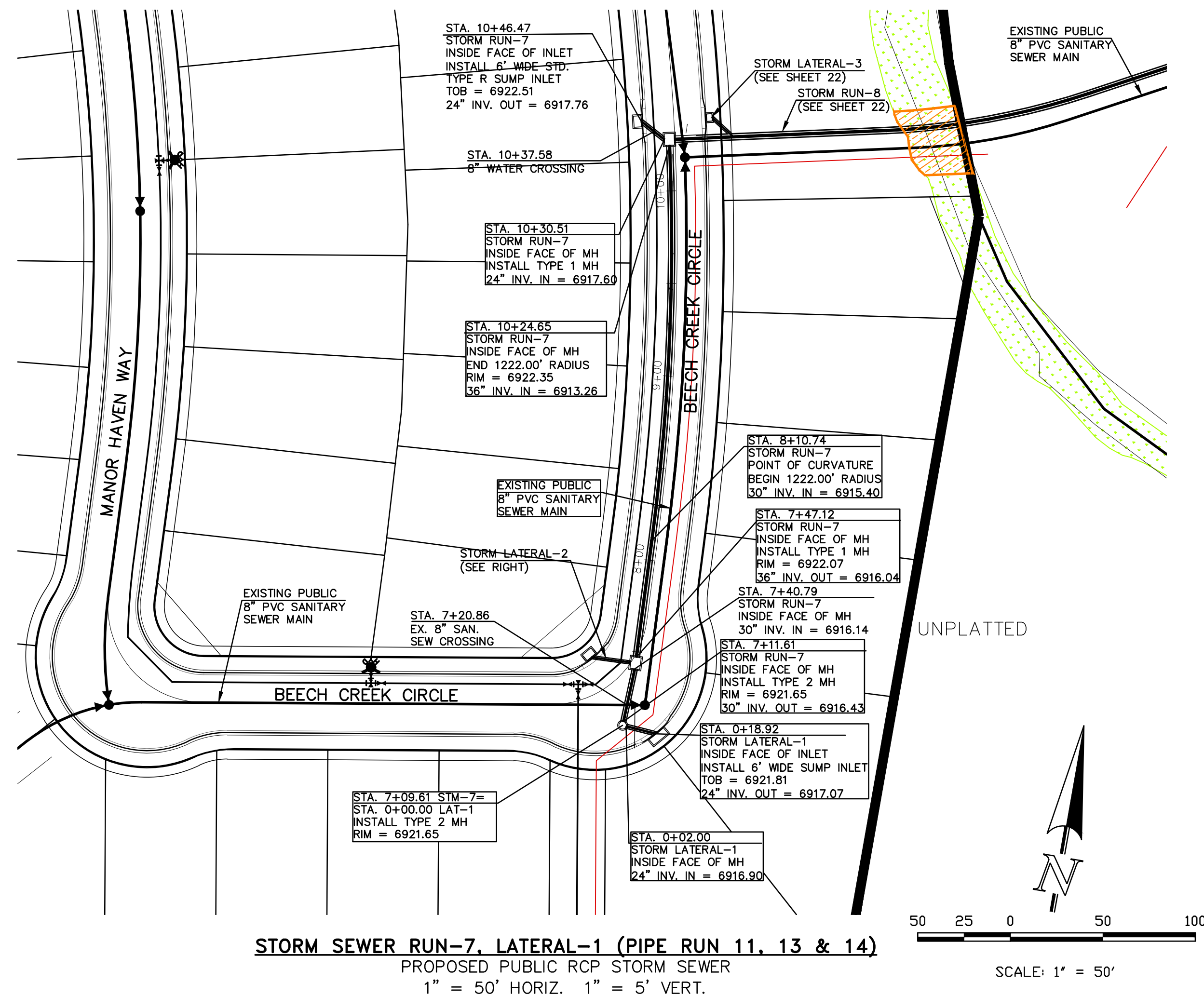
SHEET NO. 23 OF 32

WATERBURY FILING NO. 1 & 2

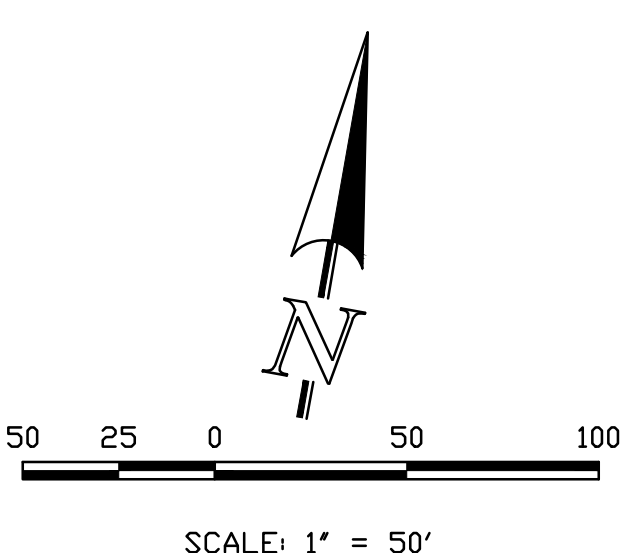
CONSTRUCTION SET

STORM SEWER PLAN AND PROFILE

STORM RUNS 5, 8 & 10

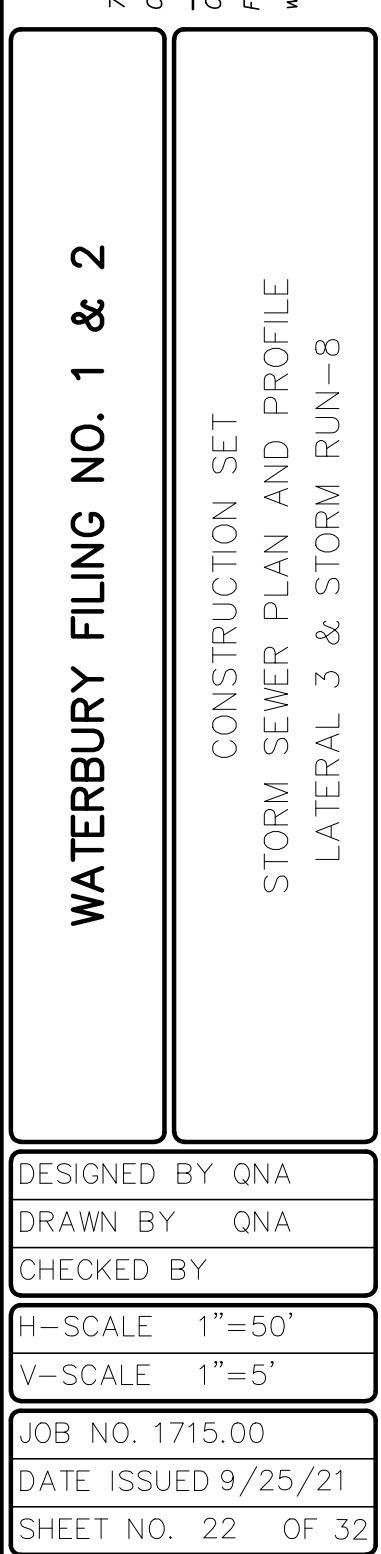


<p>WATERBURY FILING NO. 1 & 2</p> <p>CONSTRUCTION SET</p> <p>STORM SEWER PLAN AND PROFILE</p> <p>STORM RUN-7 & LATERALS 1-2</p>	<p>DESIGNED BY QNA</p>	<p>721 S. 23RD STREET COLORADO SPRINGS, CO 80904</p> <p>OFFICE: 719-635-6426 FAX: 719-635-6426 www.fresinc.com</p>		<p>PREPARED FOR:</p> <p>4-WAY RANCH JOINT VENTURE</p> <p>PETER MARTZ</p> <p>P.O. BOX 50223</p> <p>COLORADO SPRINGS, CO 80949</p> <p>719-491-3150</p>	<p>UNTIL SUCH TIME AS THESE PLANS ARE CANCELLED BY THE APPROPRIATE REVIEWING AGENCIES AND SURVEYING AND SURVEYING INC. APPROVES THEIR USE ONLY DESIGNATED BY WRITTEN AUTHORIZATION.</p>	<p>NO.</p> <p>DESCRIPTION</p> <p>DATE</p>
	<p>DRAWN BY QNA</p> <p>CHECKED BY</p> <p>SCALE 1"=50'</p> <p>SCALE 1"=5'</p> <p>DATE ISSUED 1/15/21</p>					
<p>SHEET NO. 1715 OF 31</p>						



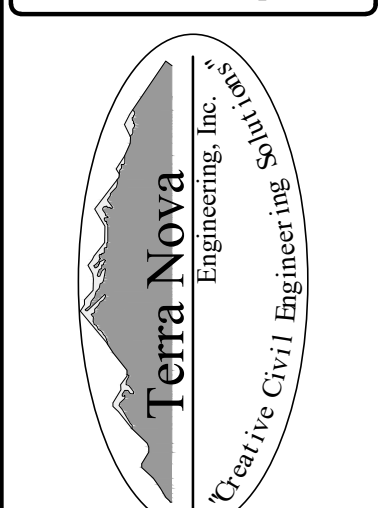
THIS DESIGN WAS PREPARED UNDER MY DIRECT SUPERVISION
FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

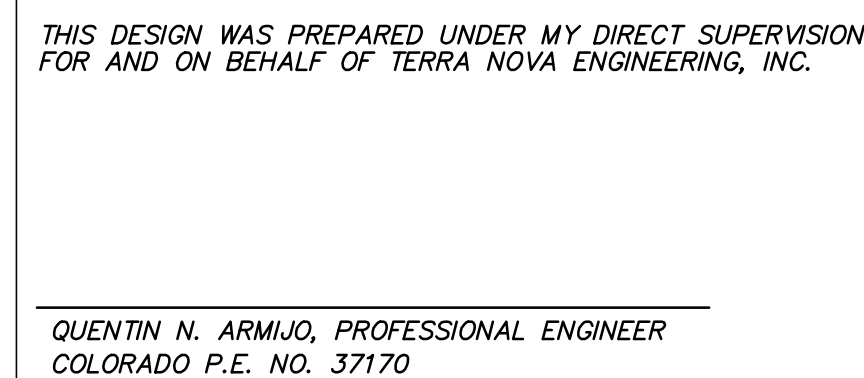
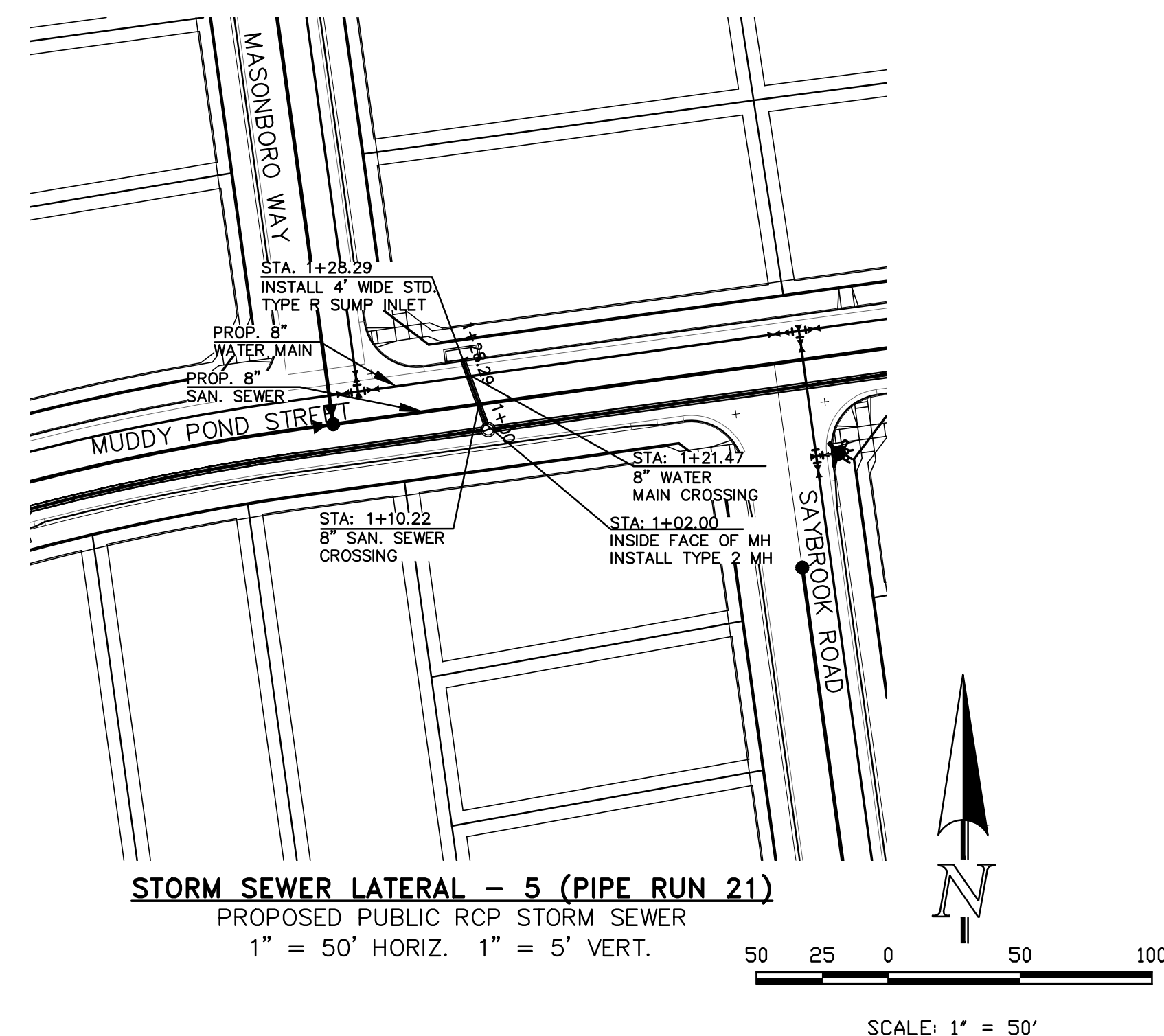
QUENTIN N. ARMIJO, PROFESSIONAL ENGINEER
COLORADO P.E. NO. 37170



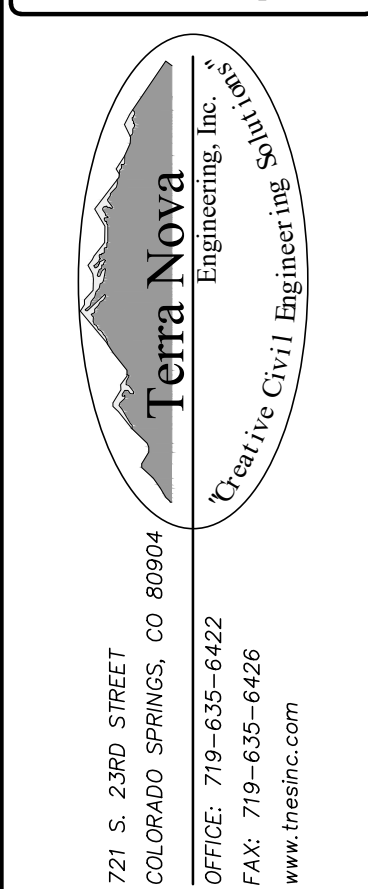
REVIEWS		DATE
NO.	DESCRIPTION	
<p>UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE AGENCY, TERRA NOVA ENGINEERING AND SURVEYING, INC. APPROVES THEIR USE. NO OTHER PERSONS ARE DESIGNATED BY WRITTEN AUTHORIZATION.</p>		
<p>PREPARED FOR: 4-WAY RANCH JOINT VENTURE PETER MARTIZ P.O. BOX 50223 COLORADO SPRINGS, CO 80949 719-491-3150</p>		

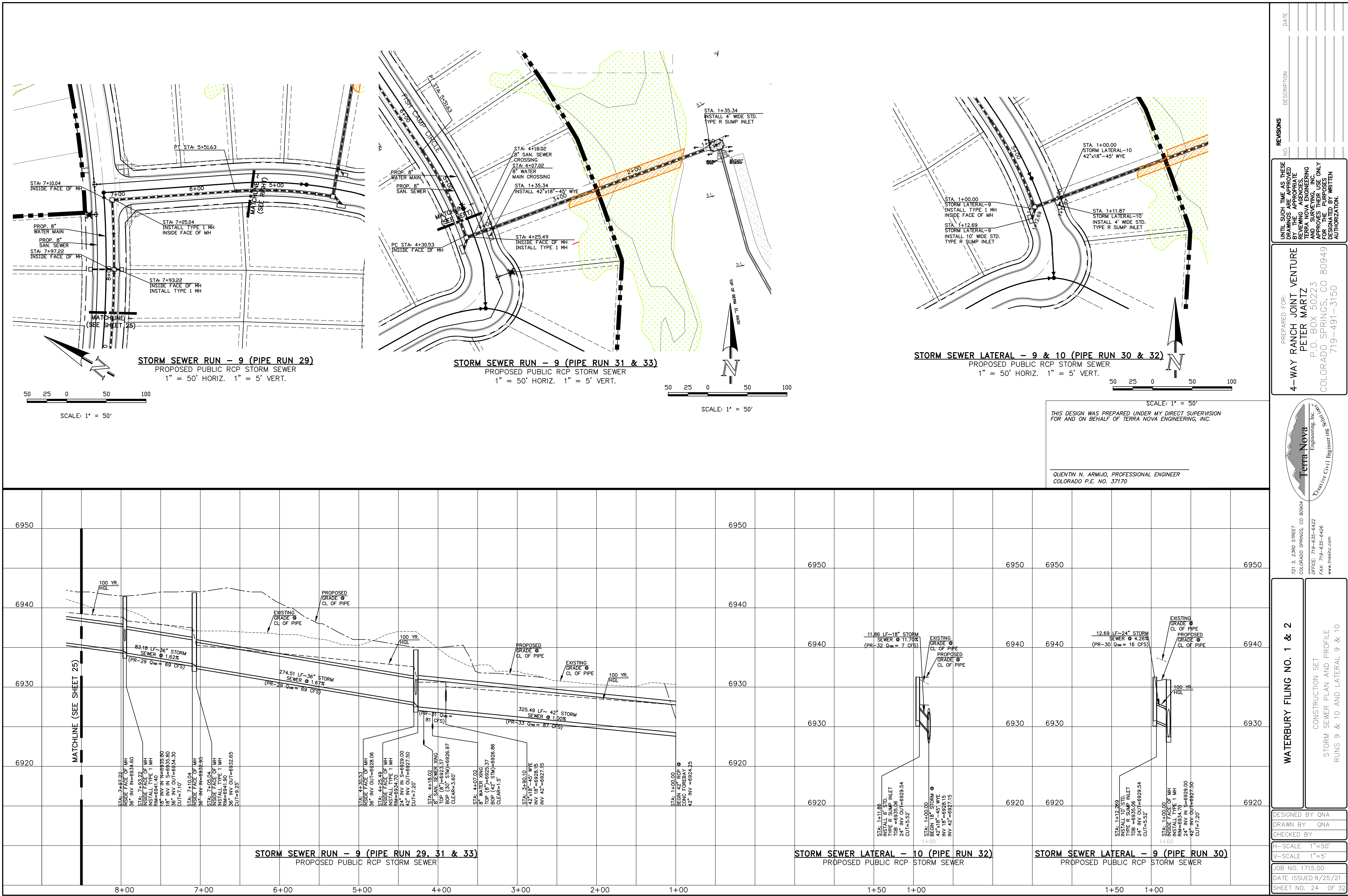
PREPARED FOR:
4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150





PREPARED FOR: 4-WAY RANCH JOINT VENTURE PETER MARTZ P.O. BOX 50223 COLORADO SPRINGS, CO 80949 719-491-3150	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE TERMS NOVIA ENGINEERING AND SURVEYING, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES SPECIFICALLY WRITTEN AUTHORIZATION		NO.	DESCRIPTION	DATE





REVISIONS

NO.	DESCRIPTION	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE REVIEWING AGENCIES, THE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. AND SURVEYING, INC. APPROVES THEIR USE ONLY FOR THE PROJECT DESCRIBED HEREIN. ANY OTHER USE WITHOUT AUTHORIZATION.

PREPARED FOR:

4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

Terra Nova

Engineering, Inc.

Creative Civil Engineer Inc.

721 S. 2900 STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnasec.com

DESIGNED BY QNA

DRAWN BY QNA

CHECKED BY

H-SCALE 1"=50'

V-SCALE 1"=5'

JOB NO. 1715.00

DATE ISSUED 9/25/21

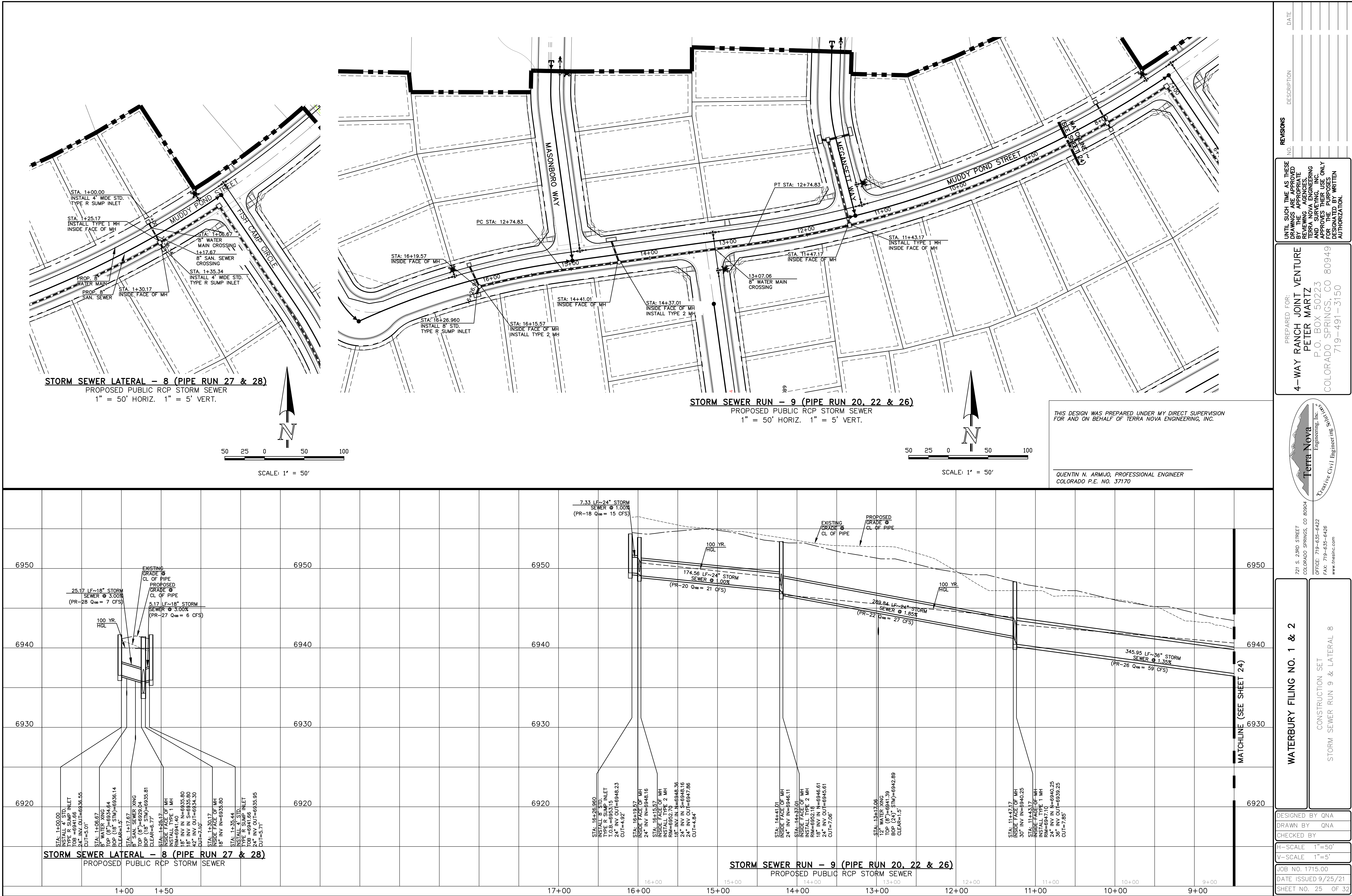
SHEET NO. 24 OF 32

WATERBURY FILING NO. 1 & 2

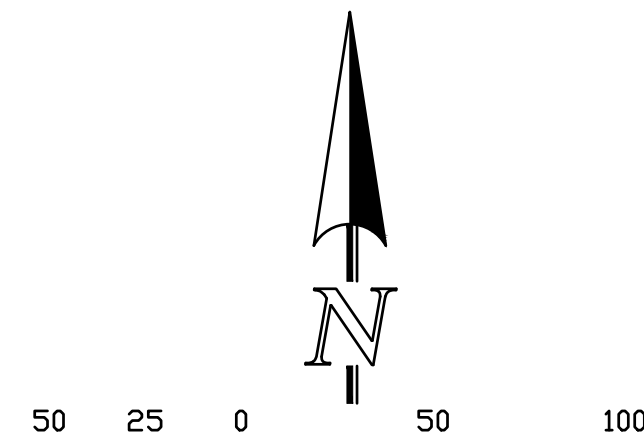
CONSTRUCTION SET
STORM SEWER PLAN AND PROFILE
RUNS 9 & 10 AND LATERAL 9 & 10

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

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

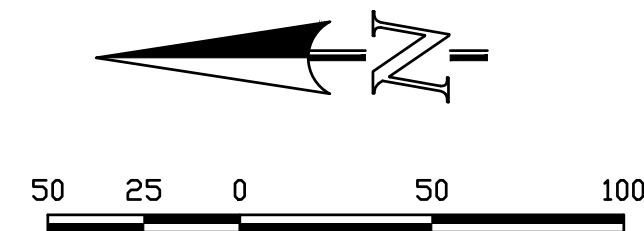


STORM SEWER LATERAL - 10 (PIPE RUN 34)
 PROPOSED PUBLIC RCP STORM SEWER
 1" = 50' HORIZ. 1" = 5' VERT.



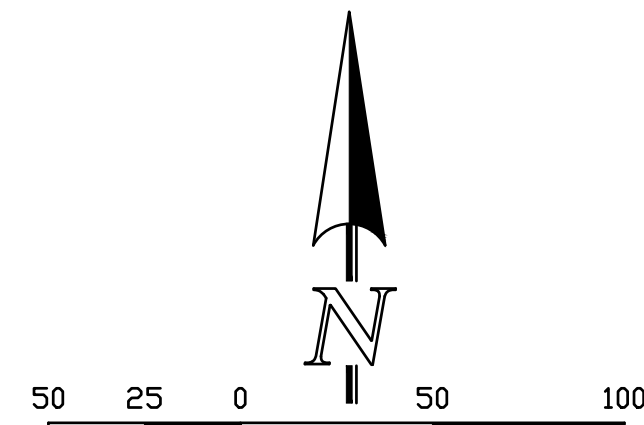
SCALE: 1" = 50'

STORM SEWER RUN - 11 (PIPE RUN 36)
PROPOSED PUBLIC RCP STORM SEWER
1" = 50' HORIZ. 1" = 5' VERT.



SCALE: 1" = 50'

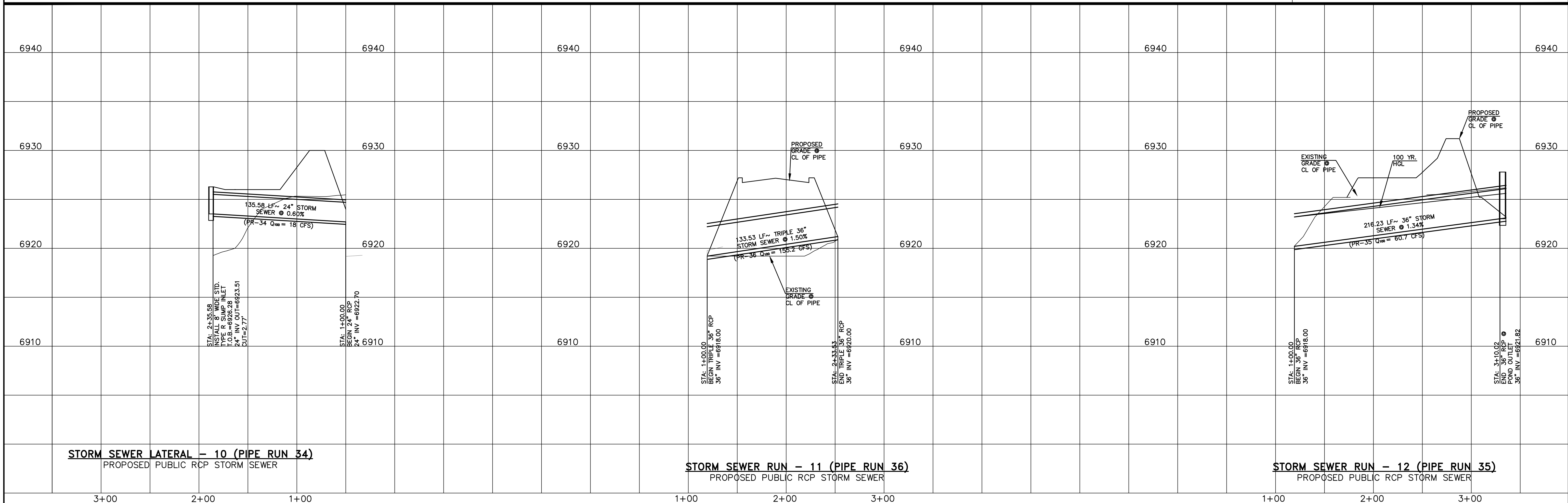
STORM SEWER RUN - 12 (PIPE RUN 35)
 PROPOSED PUBLIC RCP STORM SEWER
 1" = 50' HORIZ. 1" = 5' VERT.



SCALE: 1" = 50'

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

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



WATERBURY FILING NO. 1 & 2

CONSTRUCTION SET
STORM SEWER RUN 10, 11 & 12

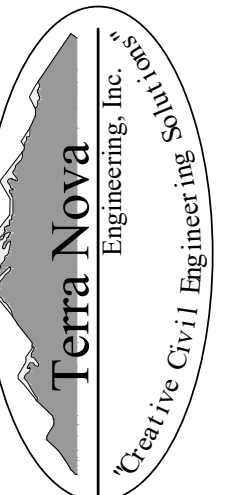
DESIGNED BY	QNA
DRAWN BY	QNA
CHECKED BY	

SCALE	1"=50'
SCALE	1"=5'

DB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 26 OF 32

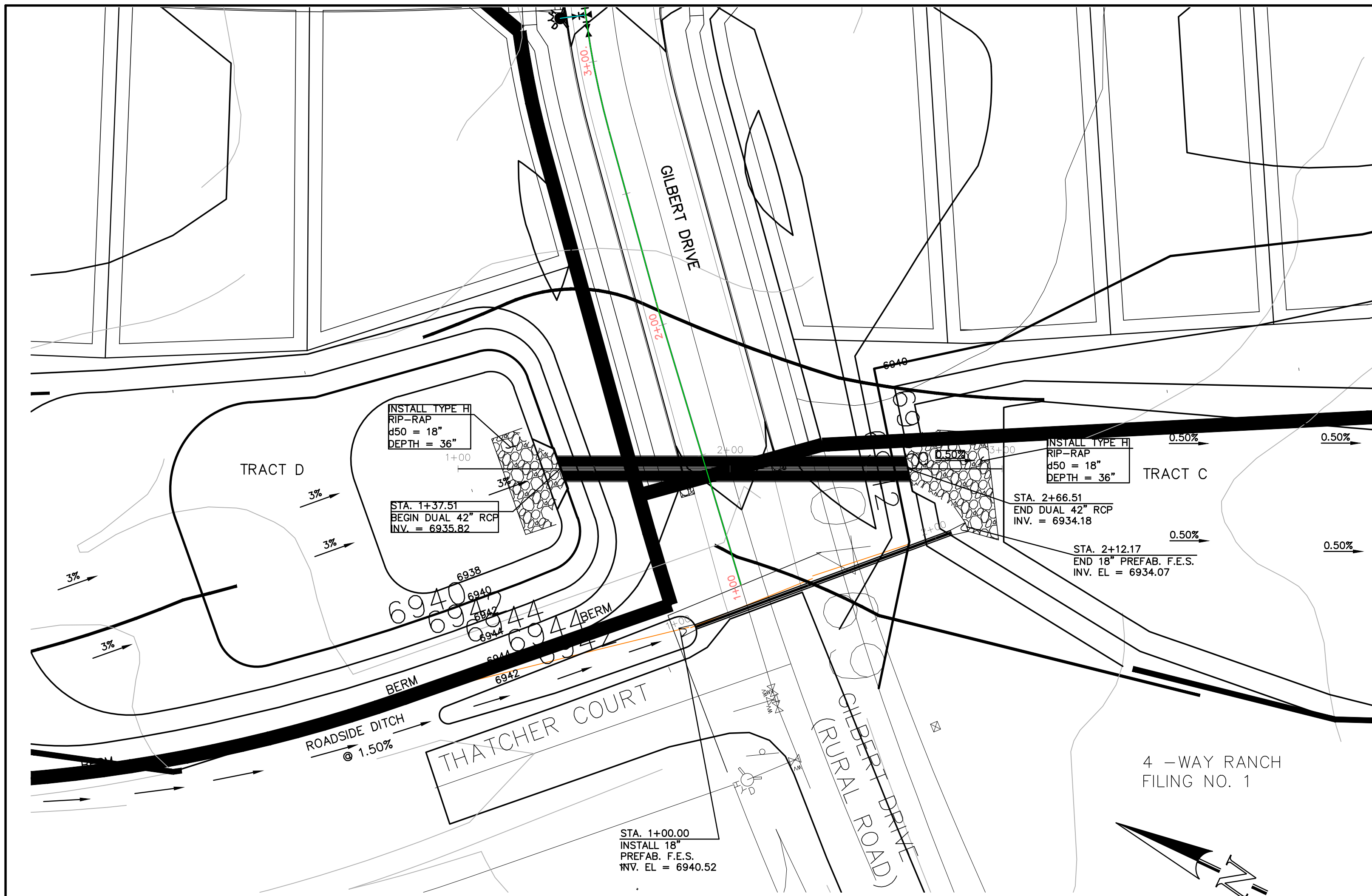
UNTIL SUCH TIME AS THESE
DRAWINGS ARE APPROVED
BY THE APPROPRIATE
REVIEWING AGENCIES,
TERRA NOVA ENGINEERING
AND SURVEYING, INC.,
APPROVES THEIR USE ONLY
FOR THE PURPOSES
DESIGNATED BY WRITTEN
AUTHORIZATION.

PREPARED FOR:
4-WAY RANCH JOINT VENTURE
PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

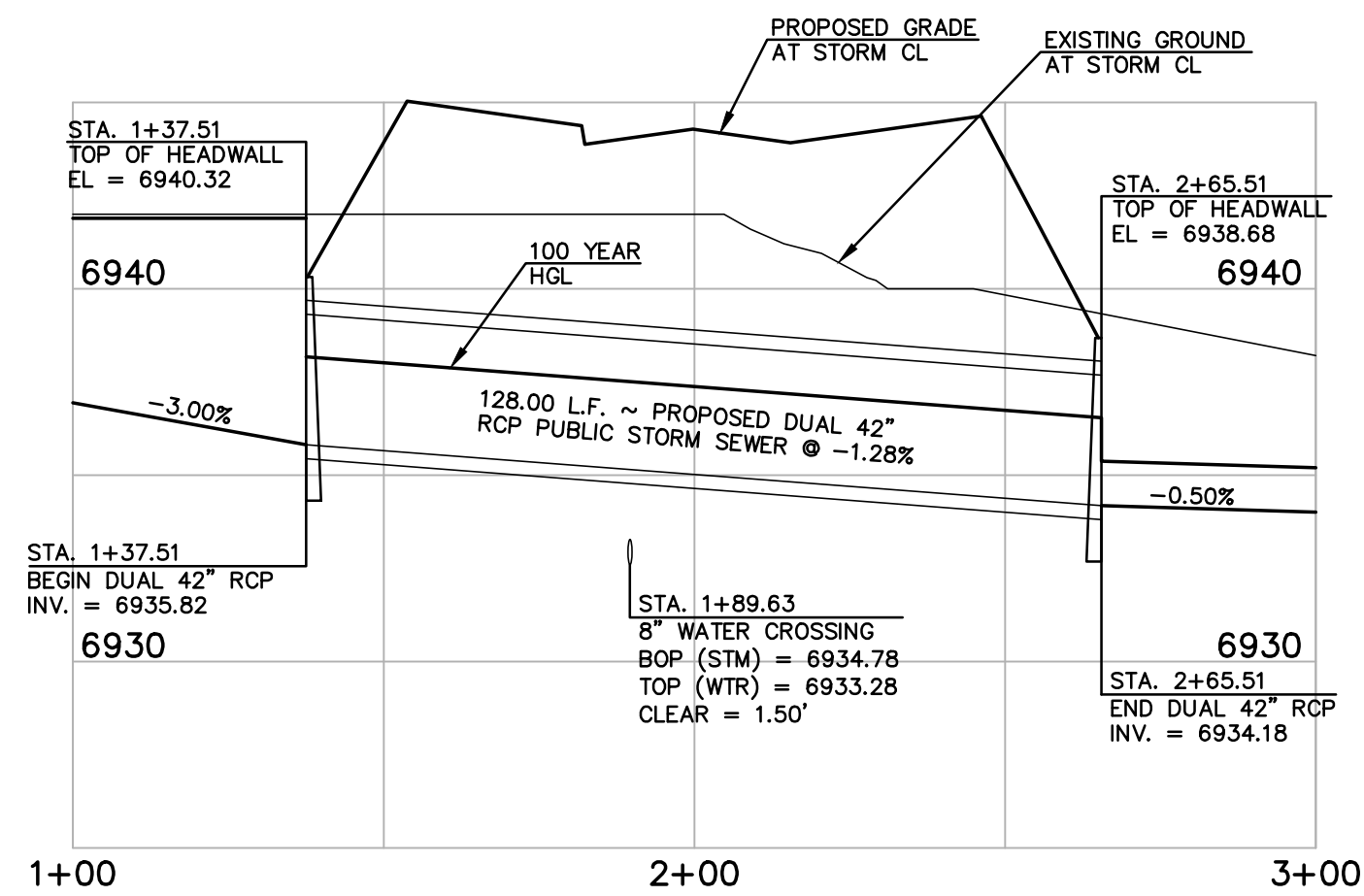


721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
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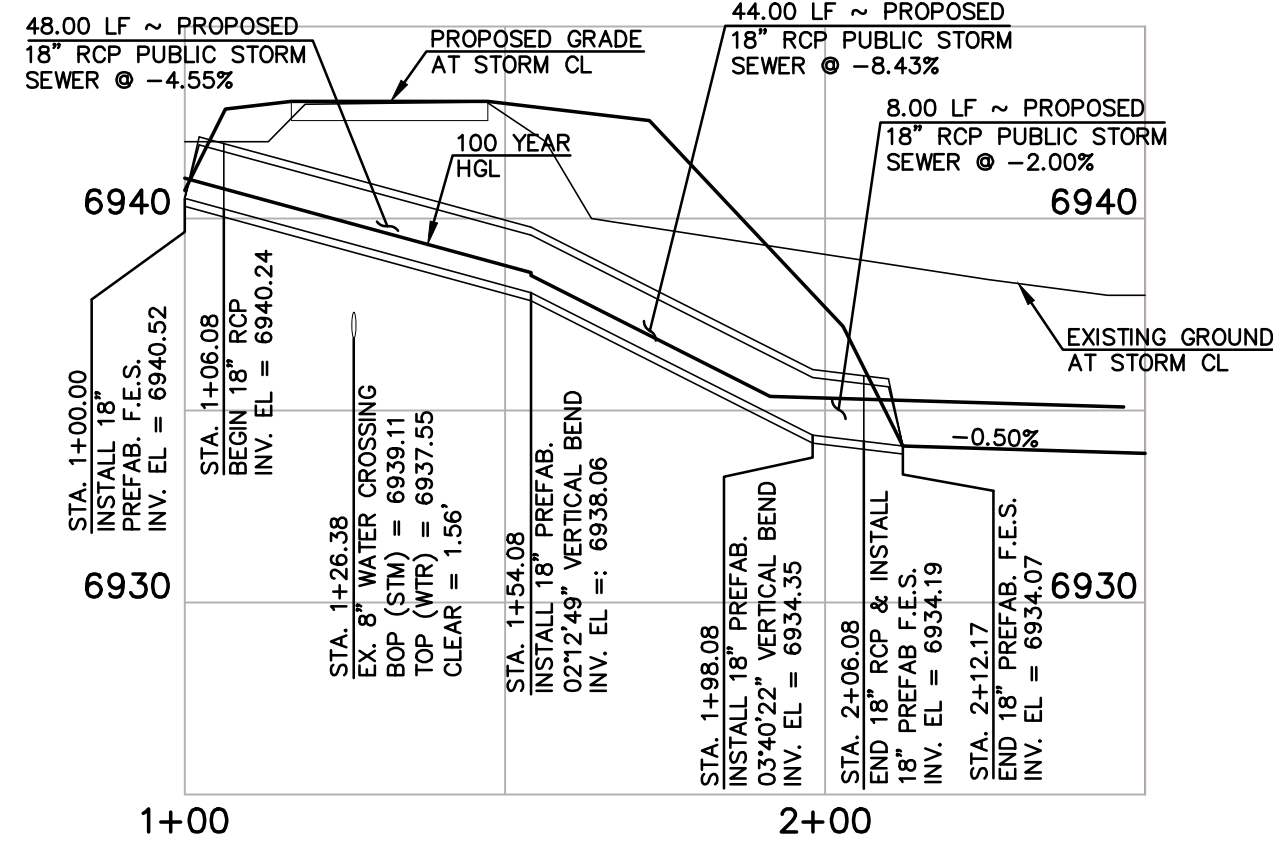
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DUAL 42" RCP STORM SEWER CROSSING
& 18" RCP SIDE DITCH CULVERT CROSSING



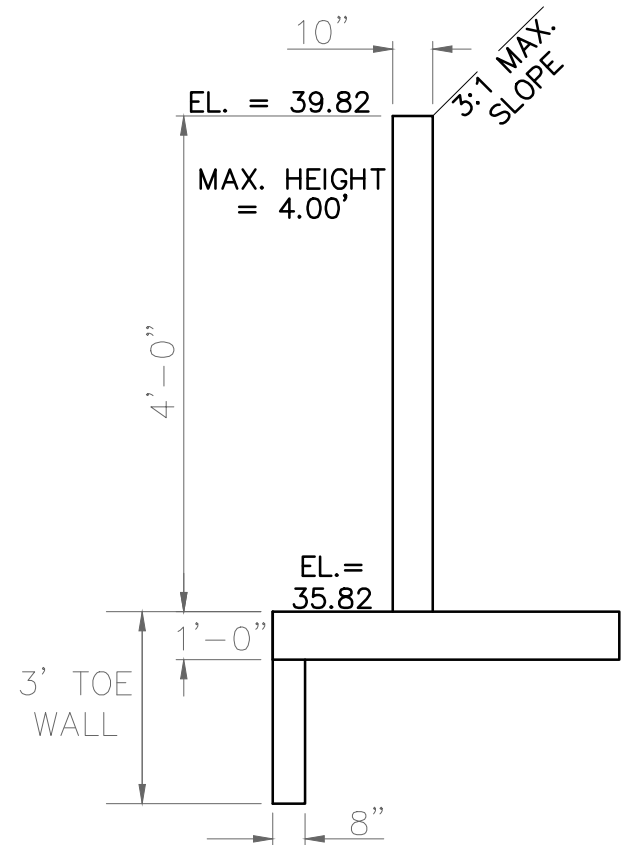
DUAL 42" RCP STORM SEWER CROSSING
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'



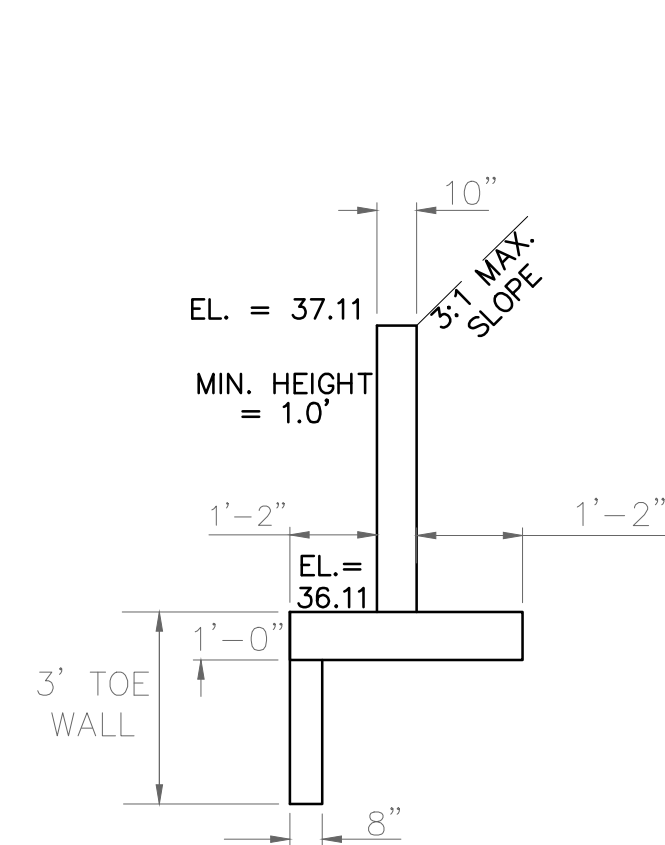
18" RCP STORM SEWER CROSSING
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

NORTHWEST 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 = 6940.32
EL AT TOP OF WINGWALL NW1 = 6939.82
EL AT TOP OF WINGWALL NW2 = 6937.11
EL AT TOP OF NW1 FOOTING = 6935.82
EL AT TOP OF NW2 FOOTING = 6936.11



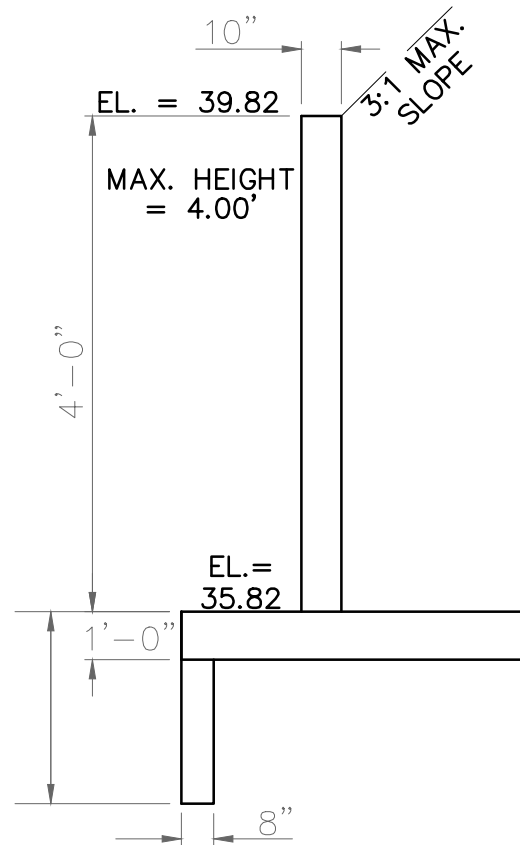
NORTHWEST WINGWALL
TOP
N.T.S.
(WALL NW1)



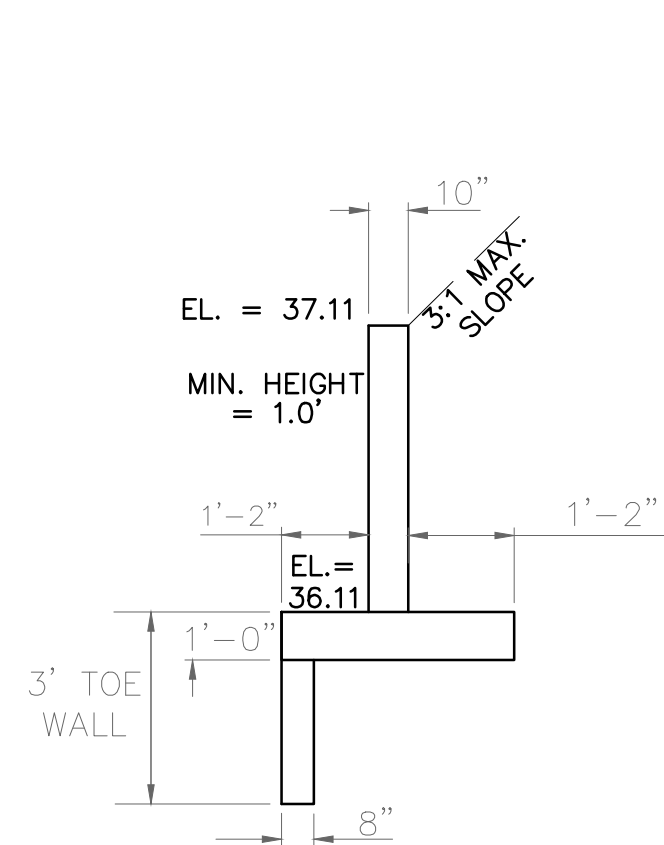
NORTHWEST WINGWALL
BOTTOM
N.T.S.
(WALL NW2)

NORTHEAST 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 = 6940.32
EL AT TOP OF WINGWALL NE1 = 6939.82
EL AT TOP OF WINGWALL NE2 = 6937.11
EL AT TOP OF NE1 FOOTING = 6935.82
EL AT TOP OF NE2 FOOTING = 6936.11



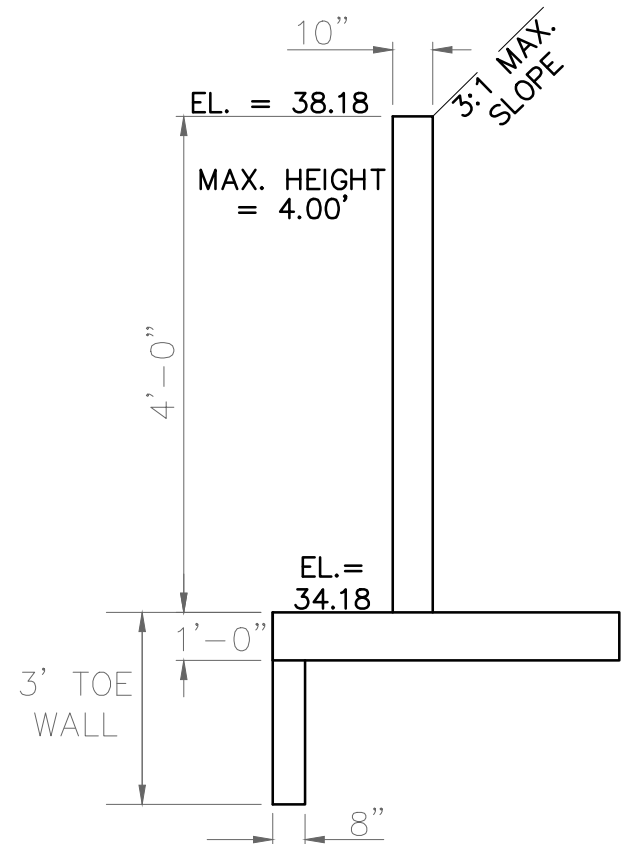
NORTHEAST WINGWALL
TOP
N.T.S.
(WALL NE1)



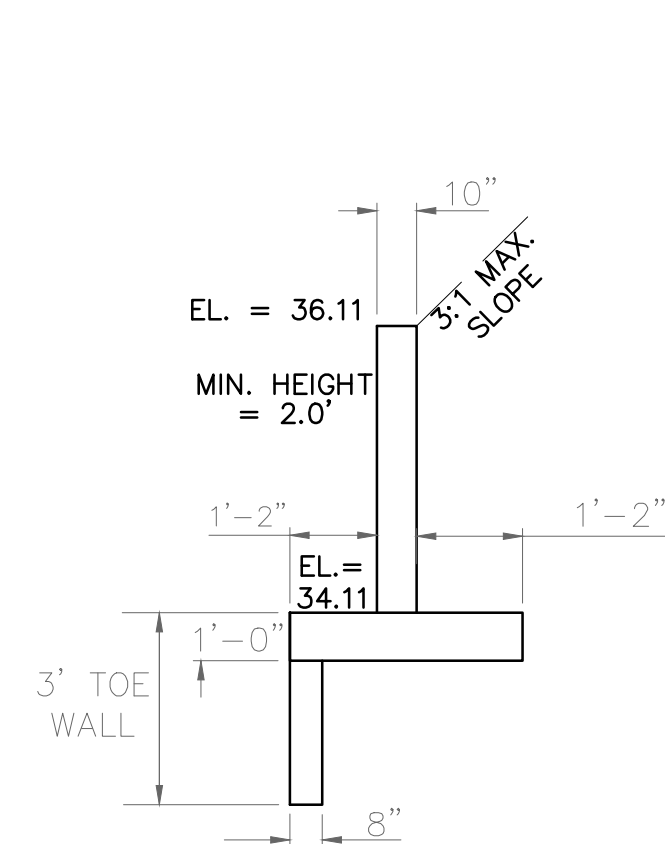
NORTHEAST WINGWALL
BOTTOM
N.T.S.
(WALL NE2)

SOUTHWEST HEADWALL/WINGWALLS

PER CDOT M-601-20
SEE CDOT M-601-20 FOR DESIGN REQUIREMENTS
INV. OUT EL = 6934.18
EL AT TOP OF HEADWALL = 6938.68
EL AT TOP OF WINGWALL SW1 = 6938.18
EL AT TOP OF WINGWALL SW2 = 6936.11
EL AT TOP OF SW1 FOOTING = 6934.18
EL AT TOP OF SW2 FOOTING = 6934.11



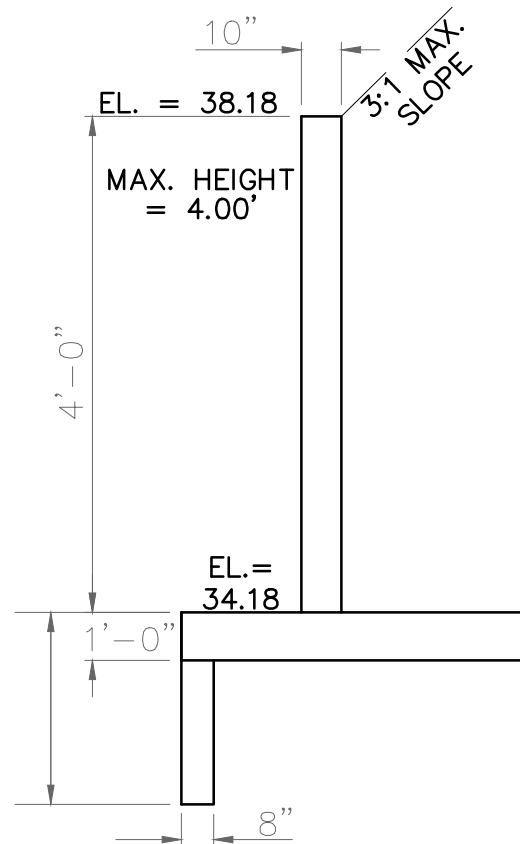
SOUTHWEST WINGWALL
TOP
N.T.S.
(WALL SW1)



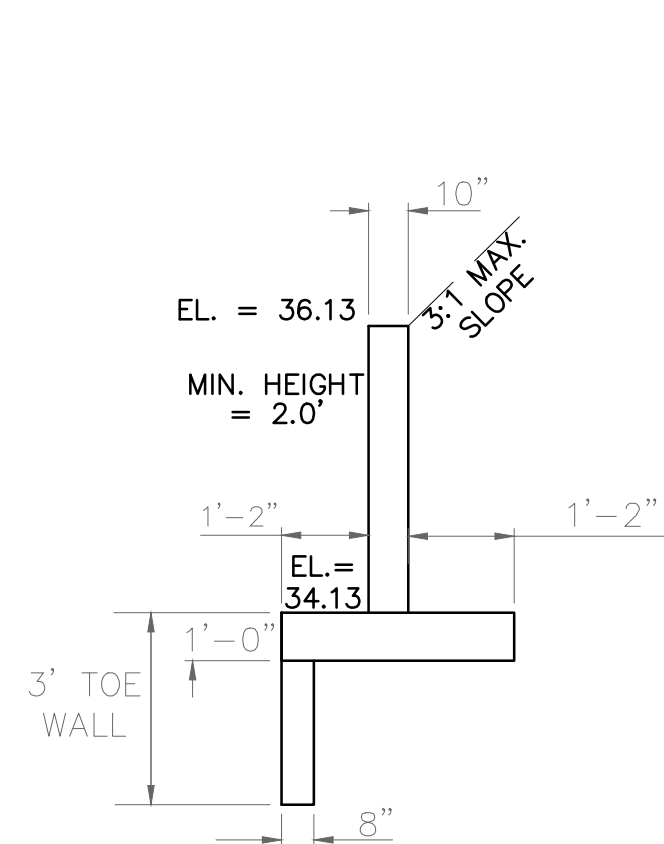
SOUTHWEST WINGWALL
BOTTOM
N.T.S.
(WALL SW2)

SOUTHEAST HEADWALL/WINGWALLS

PER CDOT M-601-20
SEE CDOT M-601-20 FOR DESIGN REQUIREMENTS
INV. OUT EL = 6934.18
EL AT TOP OF HEADWALL = 6938.68
EL AT TOP OF WINGWALL SE1 = 6938.18
EL AT TOP OF WINGWALL SE2 = 6936.13
EL AT TOP OF SE1 FOOTING = 6934.18
EL AT TOP OF SE2 FOOTING = 6934.13



SOUTHEAST WINGWALL
TOP
N.T.S.
(WALL SE1)

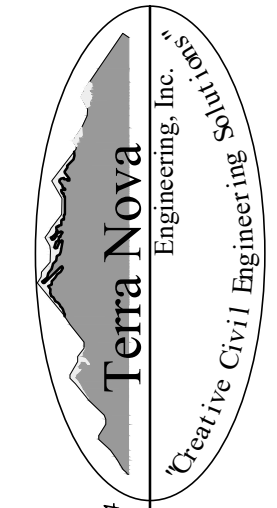


SOUTHEAST WINGWALL
BOTTOM
N.T.S.
(WALL SE2)

REVISIONS		DATE
NO.	DESCRIPTION	

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PREPARED FOR:
4-WAY RANCH JOINT VENTURE
ATTN: PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

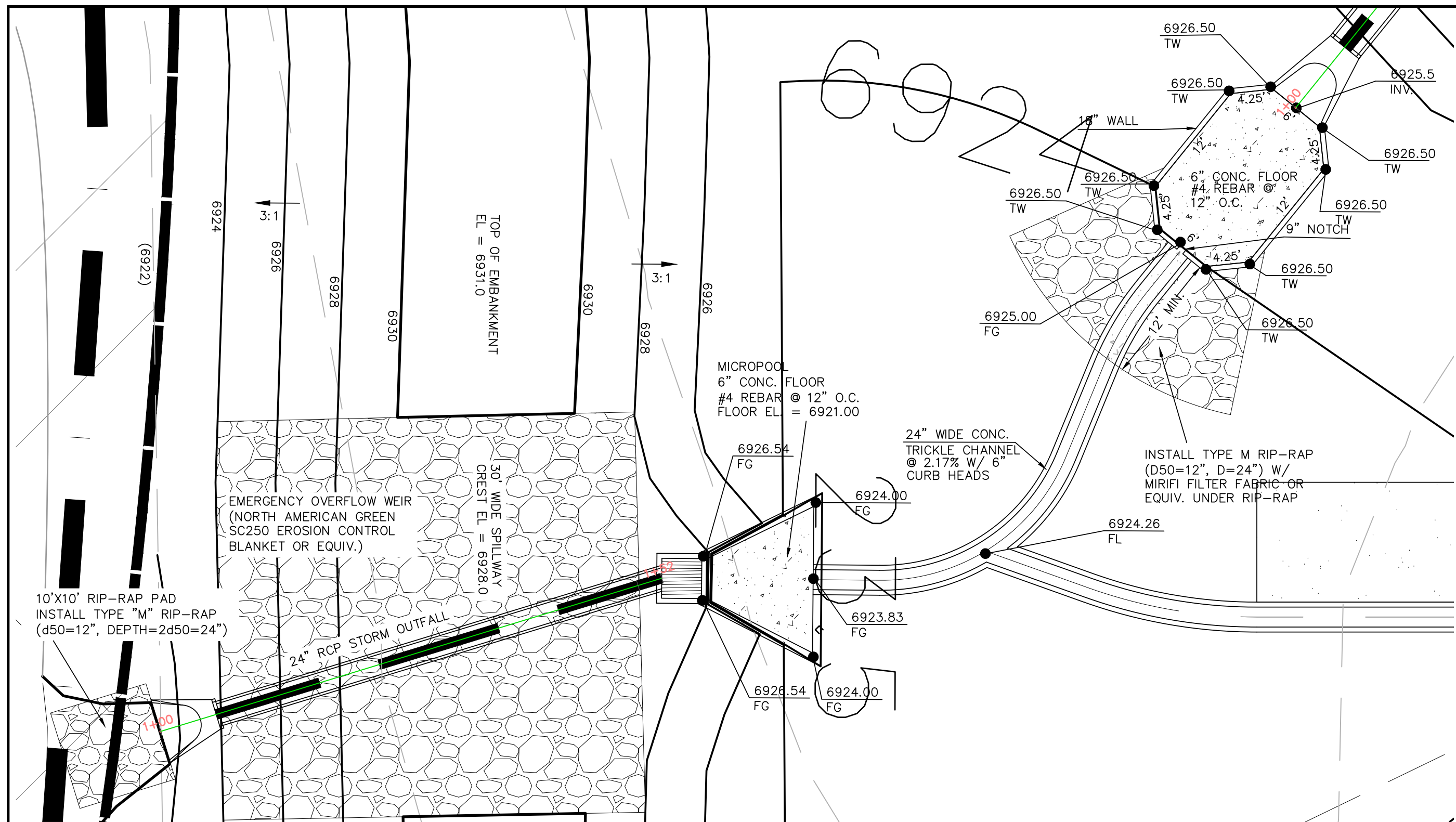

Terra Nova
Engineering, Inc.
Creative Civil Engineering

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

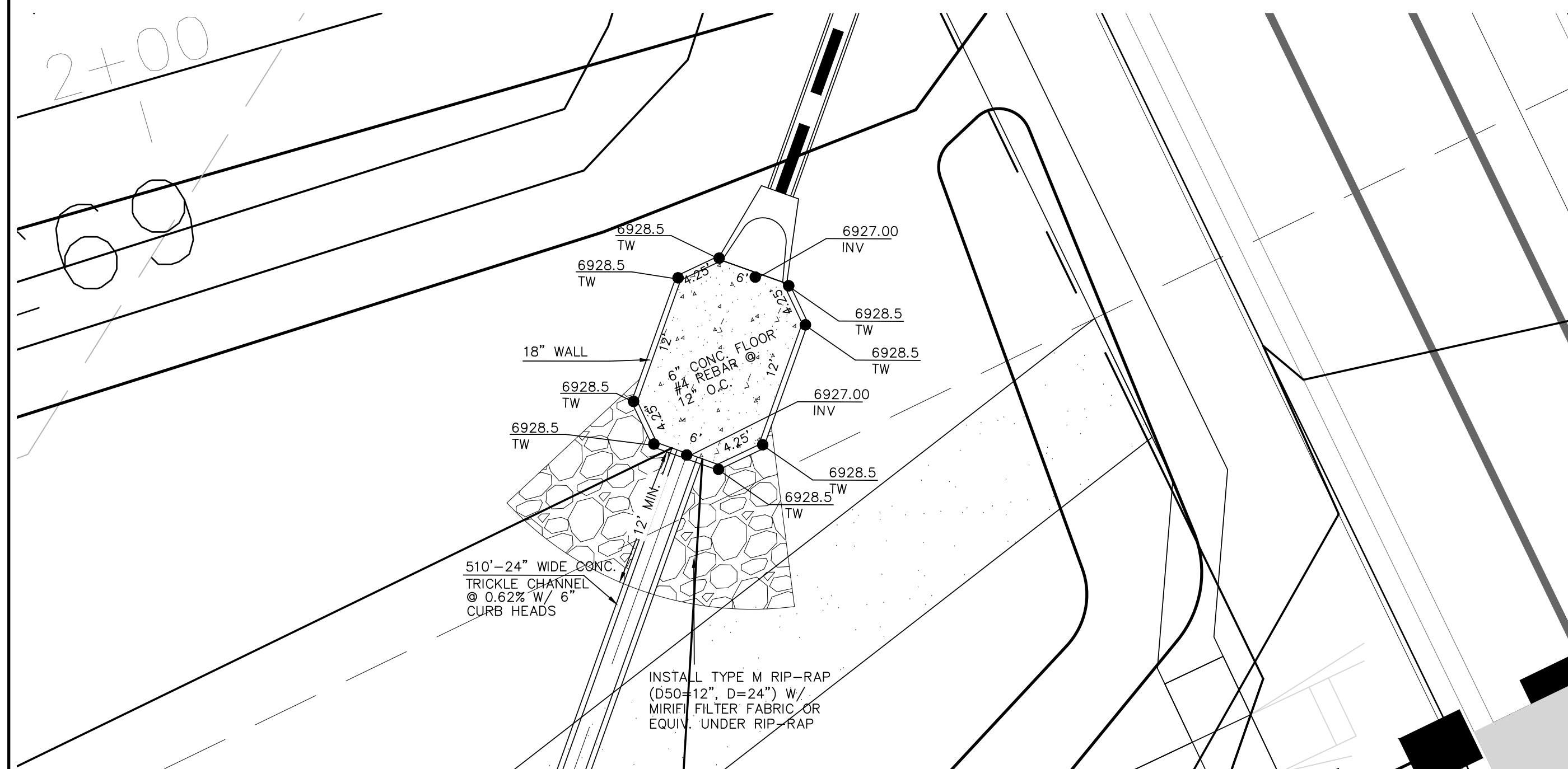
DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA

H-SCALE NA
V-SCALE N/A

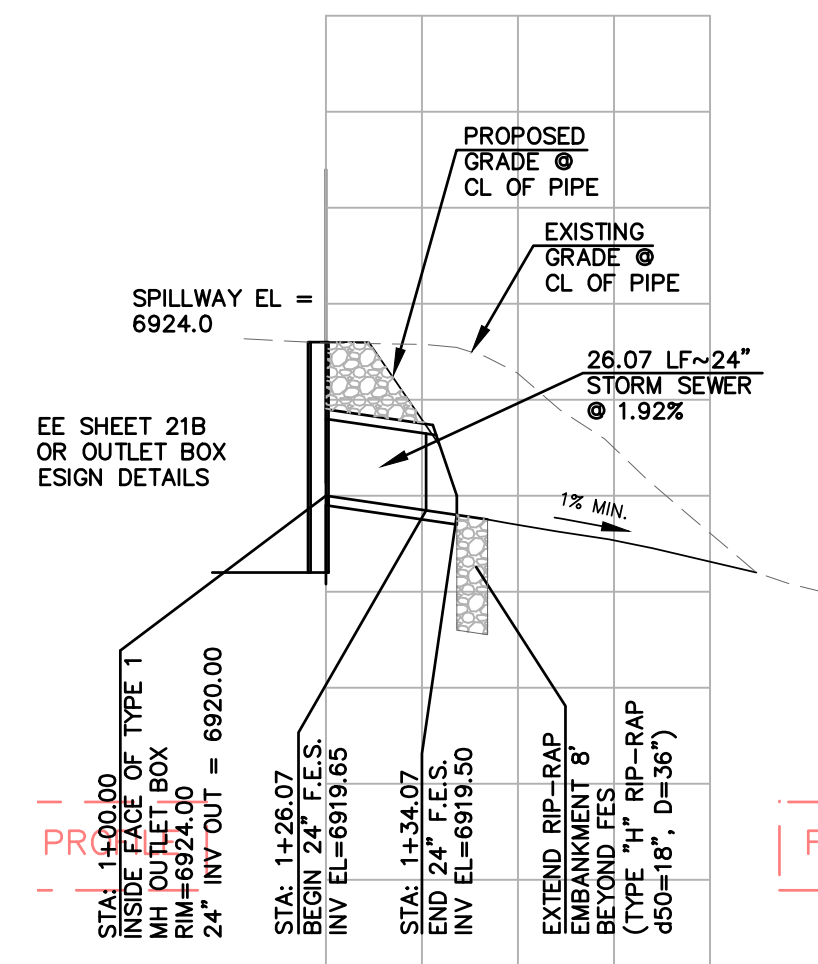
JOB NO. 1715.00
DATE ISSUED 9/25/21
SHEET NO. 27 OF 32



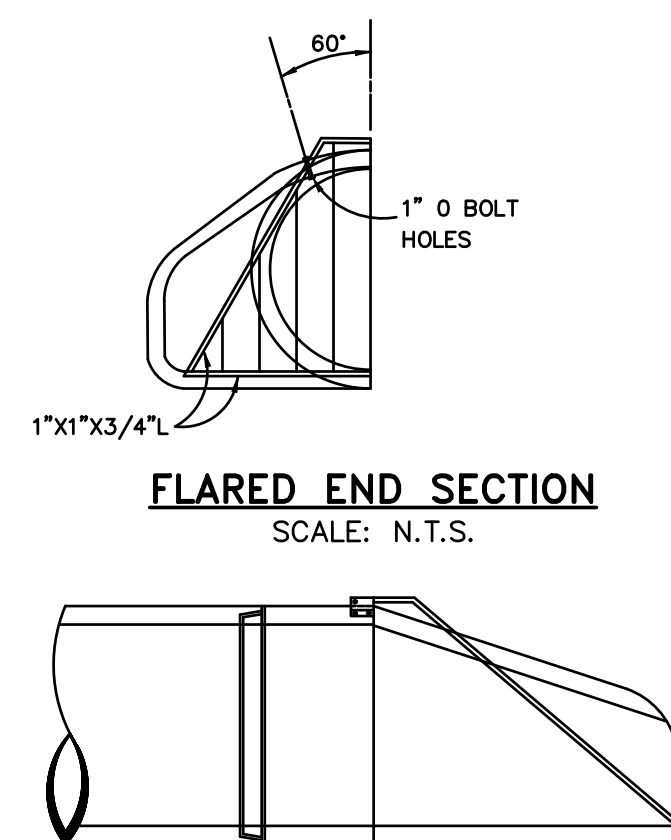
WEST CONCRETE FOREBAY/MICROPOOL DETAILS



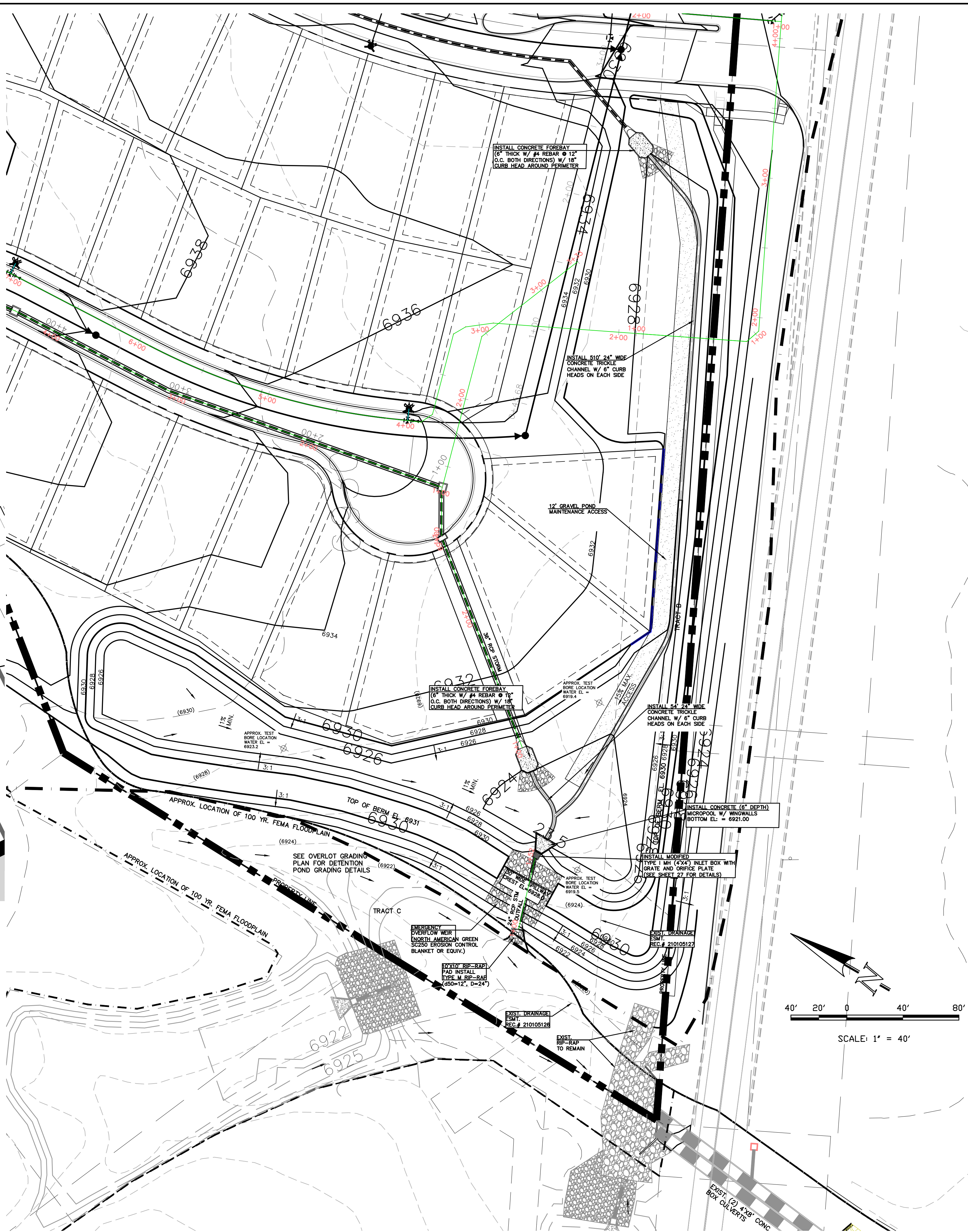
EAST CONCRETE FOREBAY DETAILS



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

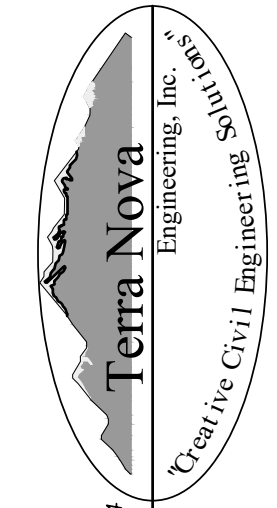


TRASH RACK DETAIL:
F.E.S. DETAIL
SCALE: N.T.S.



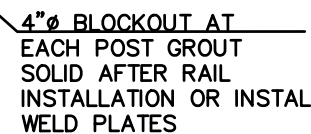
DETENTION FACILITY 1

REVISIONS		DESIGN INFORMATION	
NO.	DESCRIPTION	DATE	BY
1	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR THE PROJECTS LISTED BY WRITTEN AUTHORIZATION.		

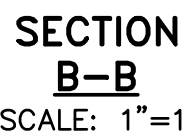
PREPARED FOR: 4-WAY RANCH JOINT VENTURE ATTN: PETER MARTZ P.O. BOX 50223 COLORADO SPRINGS, CO 80949 719-491-3150	 Terra Nova Engineering, Inc. Civil Engineering
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DESIGNED BY DLF DRAWN BY QNA CHECKED BY QNA H-SCALE NA V-SCALE N/A JOB NO. 1715.00 DATE ISSUED 9/25/21 SHEET NO. 28 OF 3	WATERBURY FILING NO. 1 & 2 POND 1 DETAILS
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Missing or invalid reference



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



FABRICATED STEEL STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH AISC AND AWS SPECIFICATIONS.

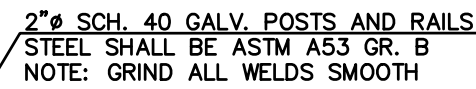
THE OUTLET STRUCTURE BARGRATE IS DESIGNED FOR A VERTICAL LOAD OF 300 LBS./SQ. FT.

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.

WELDS NOT INDICATED SHALL BE 1/8" MINIMUM FILLET OR GROOVE, CONTINUOUS SO FAR AS POSSIBLE, CONSIDER VANDALISM LOADS, WELD ACCORDINGLY AT CRITICAL LOCATIONS.

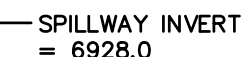
PRIOR TO PAINTING REMOVE ALL OIL, SCALE, AND SLAG, GRIND OFF BURRS AND SHARP EDGES.

PAINT WITH ONE SHOP COAT OF ZINC RICH PRIMER AND TWO COATS OF ALUMINUM PAINT, AASHTO M-69

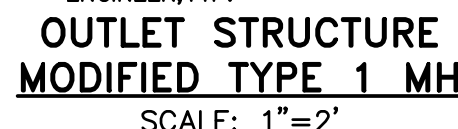


SCALE: 1"=2'

SCALE: 1"=2'



SCALE: N.T.S.

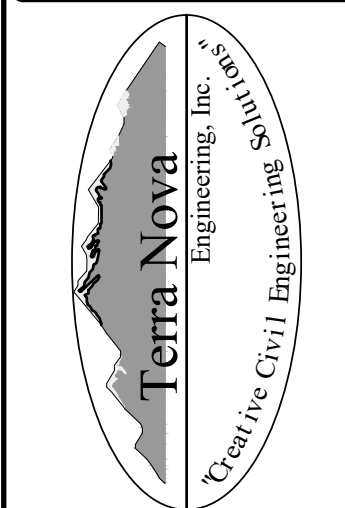


SCALE: 1"=2'

[illegible]

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:
4-WAY RANCH JOINT VENTURE
ATTN: PETER MARTZ
P.O. BOX 50223
COLORADO SPRINGS, CO 80949
719-491-3150

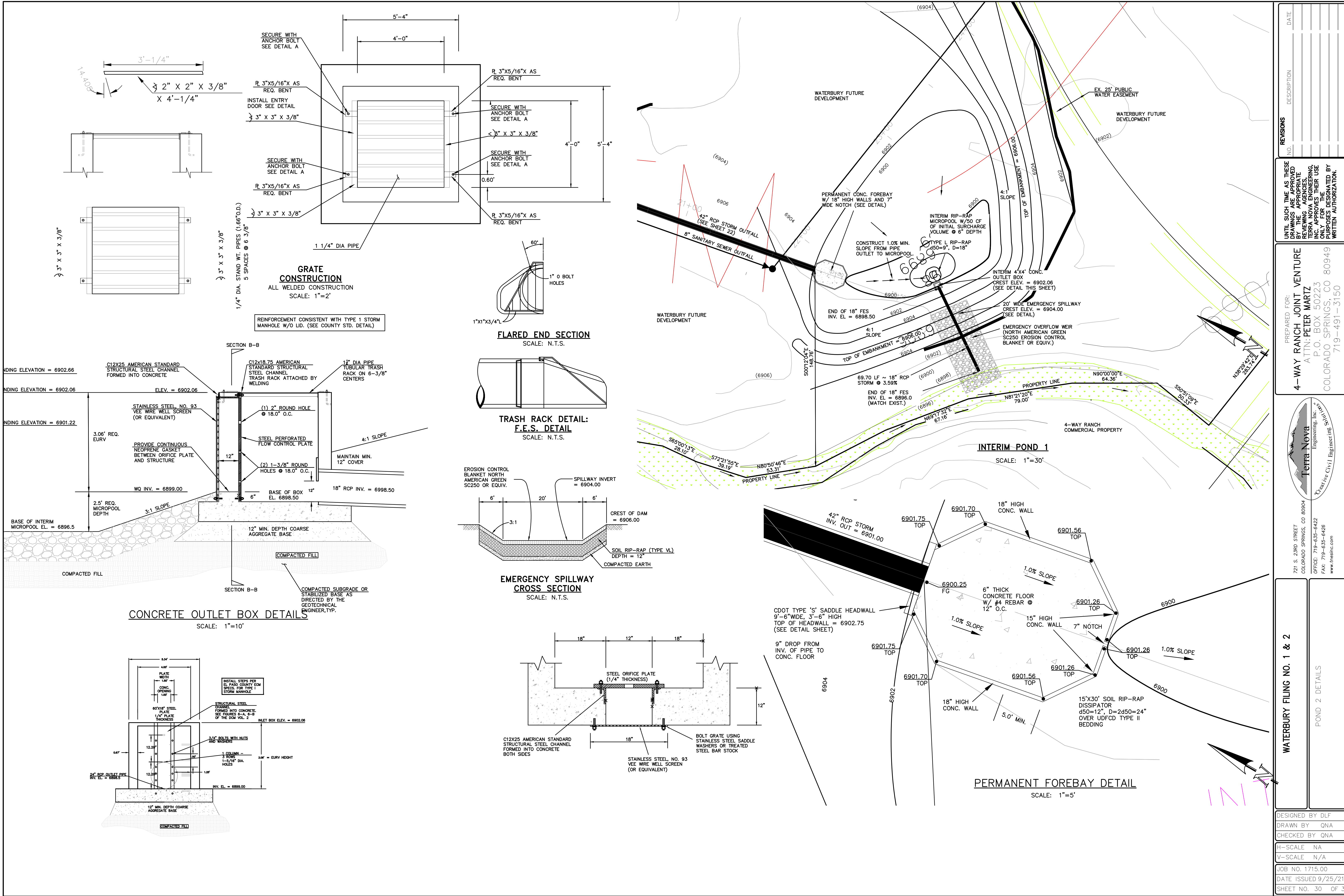


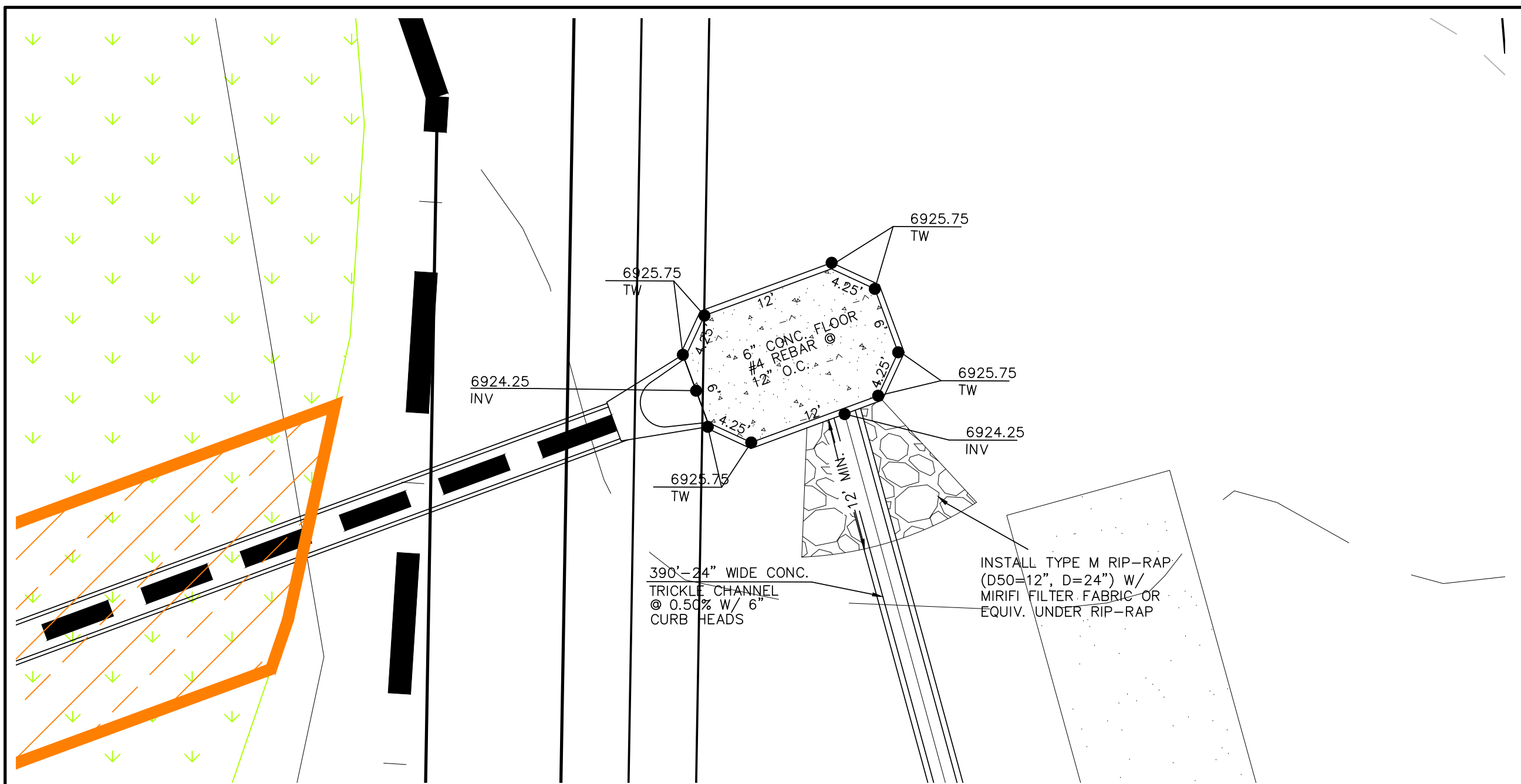
721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tresinc.com

WATERBURY FILING NO. 1 & 2

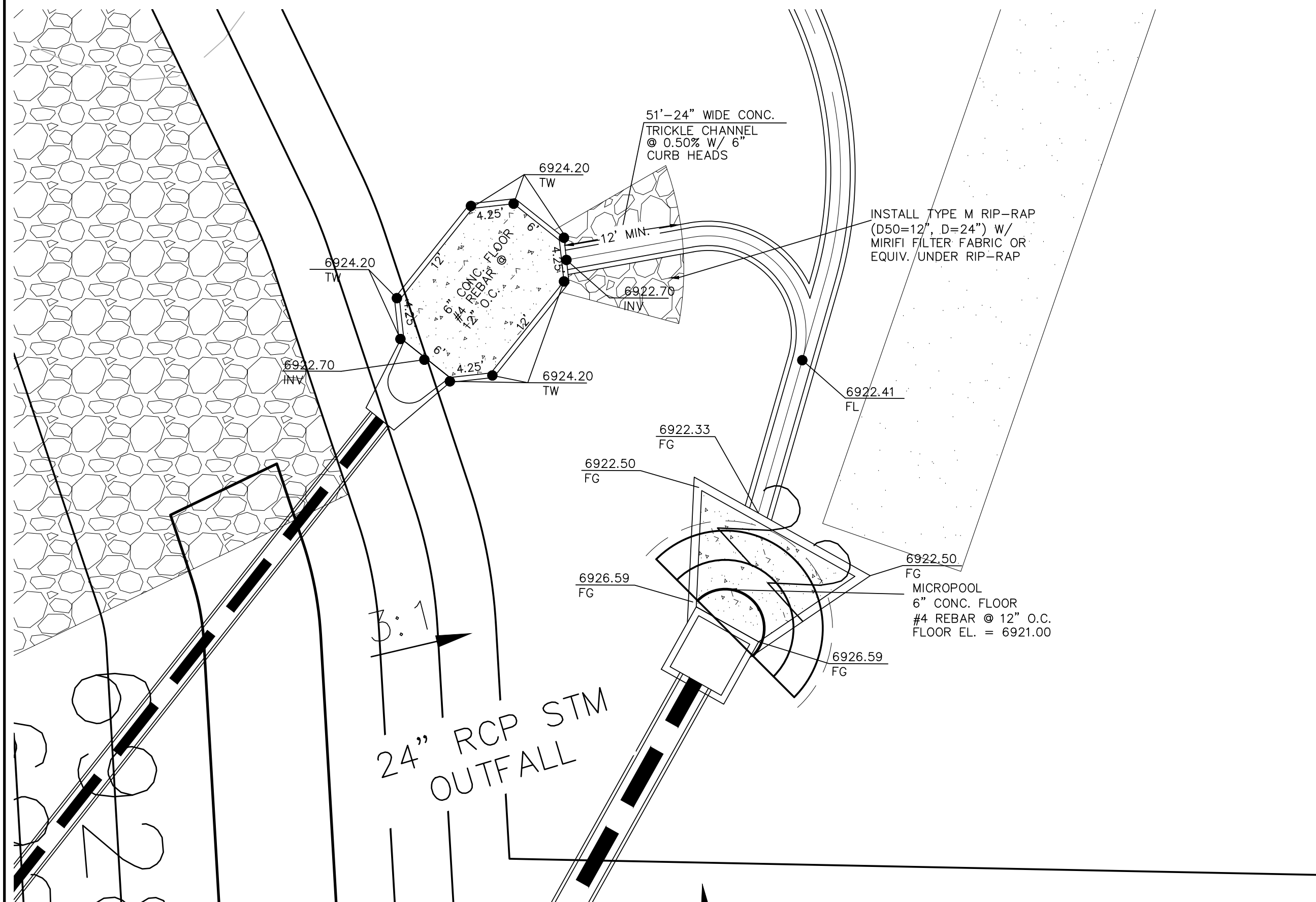
POND 1 DETAILS

DESIGNED BY	DLF
DRAWN BY	QNA
CHECKED BY	QNA
H-SCALE	NA
V-SCALE	N/A
JOB NO.	1715.00
DATE ISSUED	9/25/21
SHEET NO.	28 OF 3

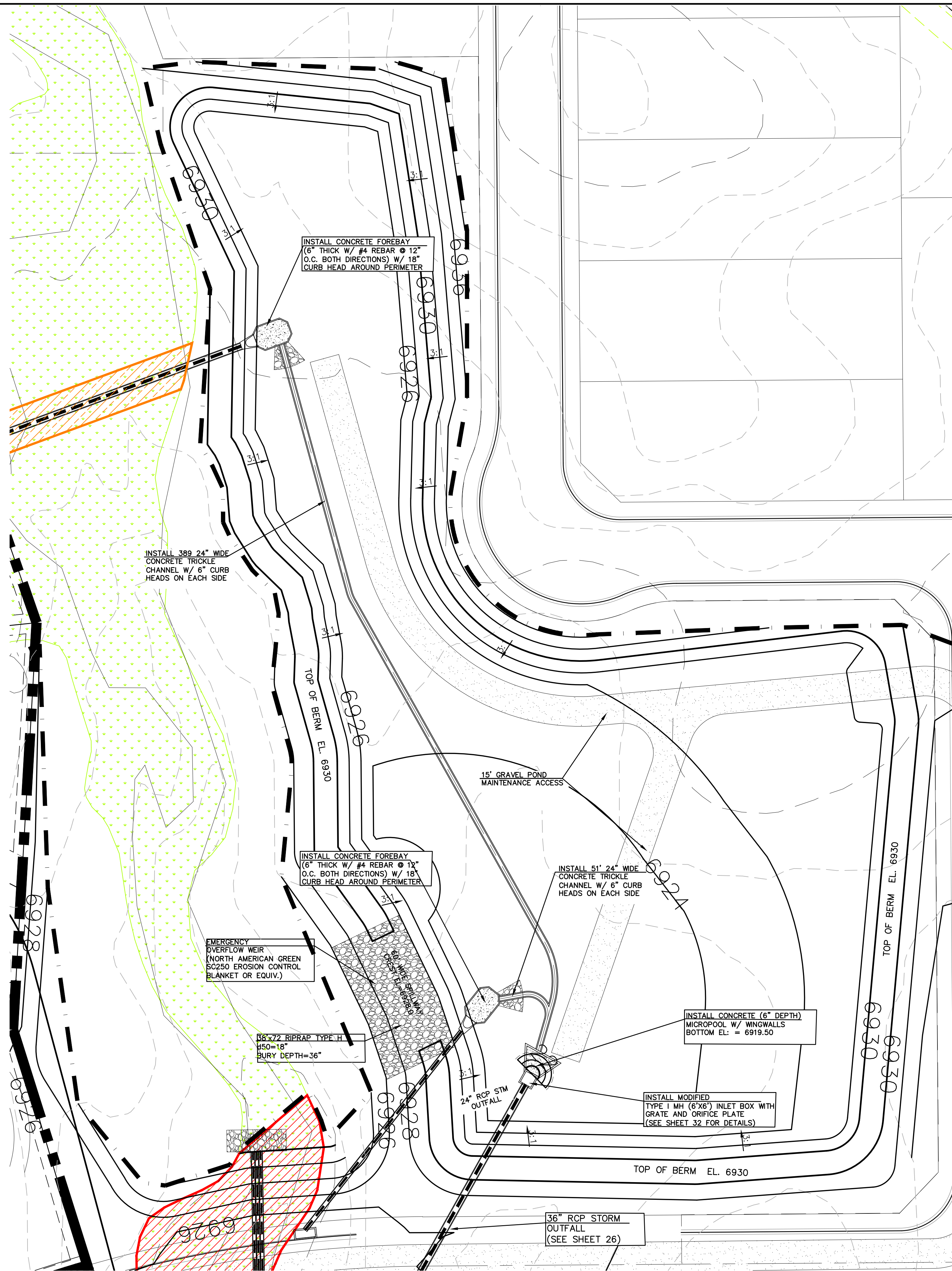
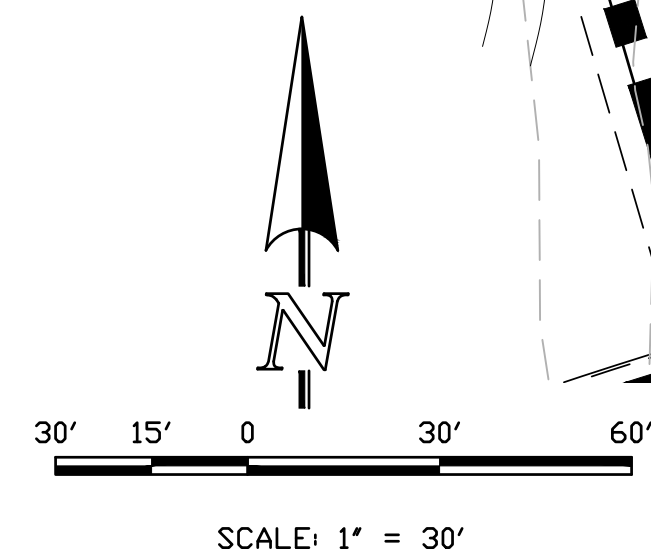
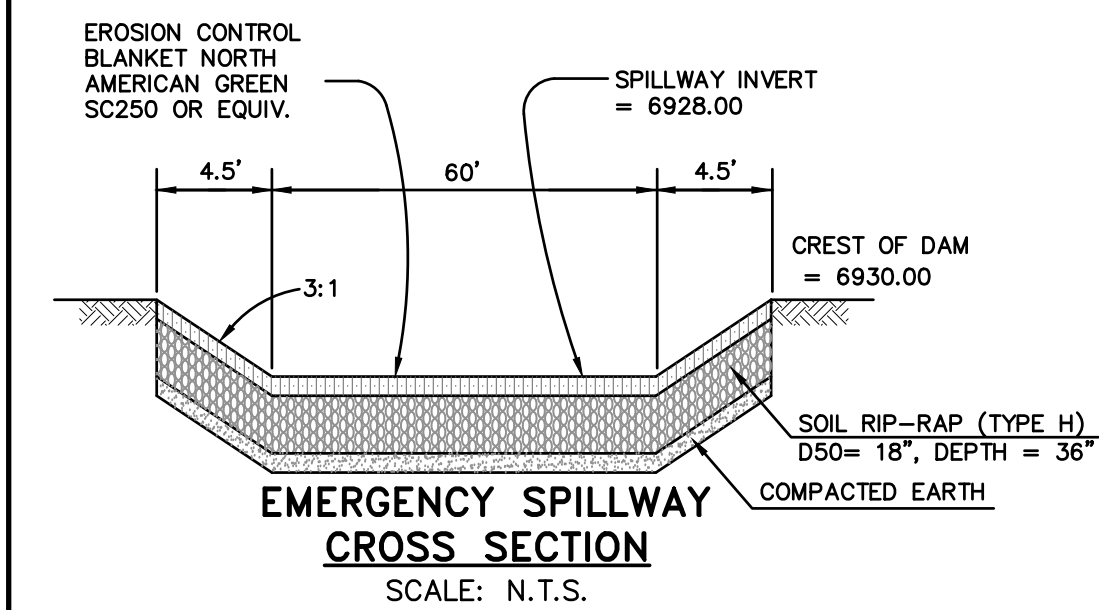




NORTH CONCRETE FOREBAY
SCALE: 1"=10'



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



POND 3
SCALE: 1"=30'

REVISIONS	
NO.	DESCRIPTION

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PREPARED FOR:
4-WAY RANCH JOINT VENTURE
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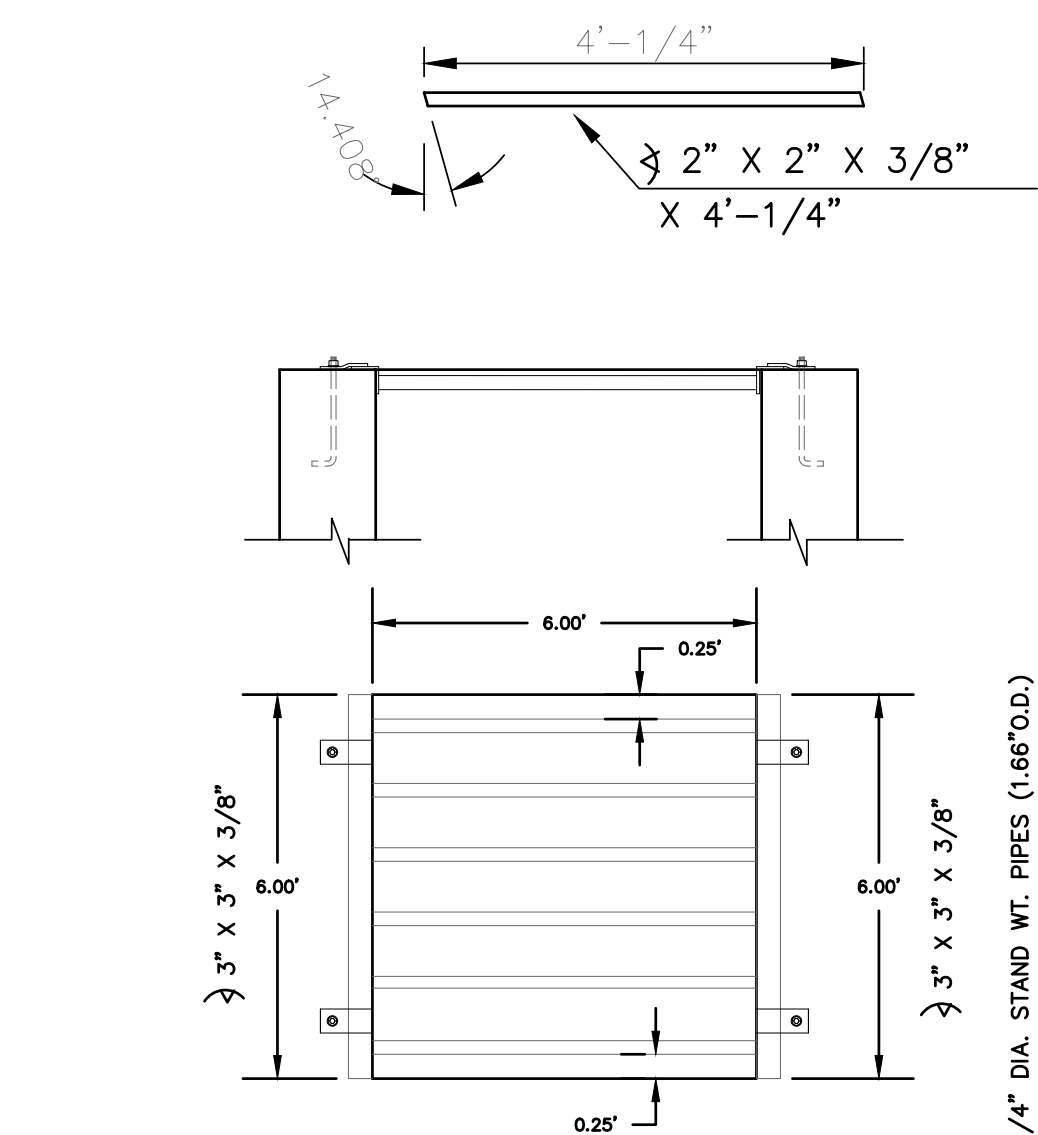
Terra Nova
Engineering, Inc.
Creative Civil Engineering

721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
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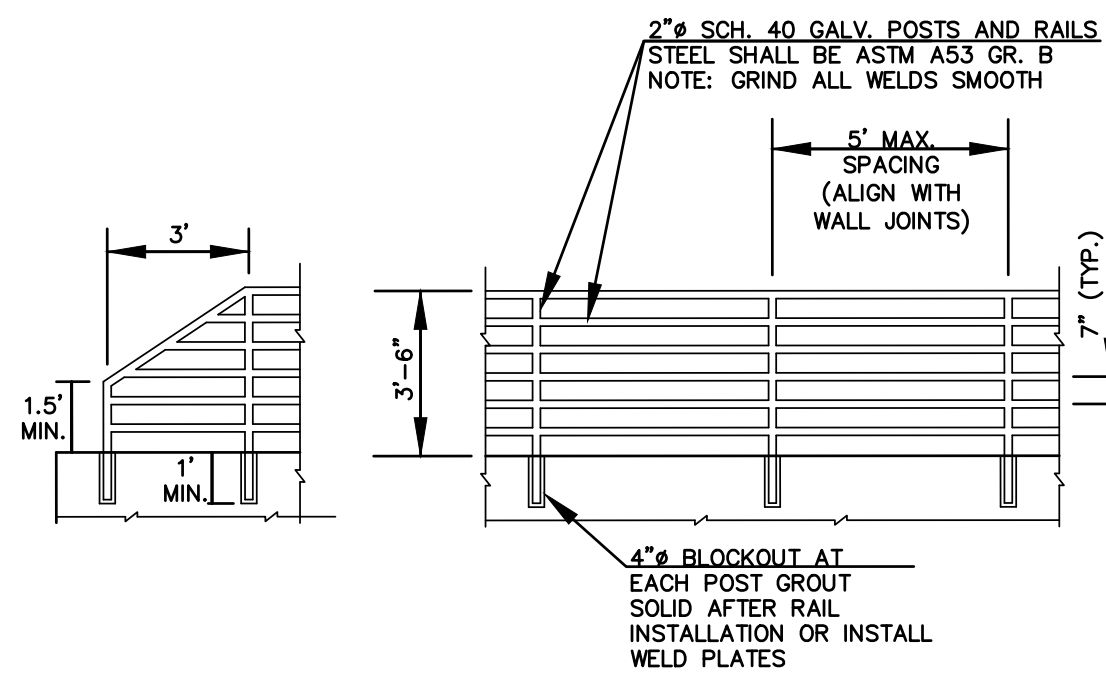
WATERBURY FILING NO. 1 & 2

POND 3 DETAILS

DESIGNED BY DLF
DRAWN BY QNA
CHECKED BY QNA
H-SCALE NA
V-SCALE N/A
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SHEET NO. 31 OF 3

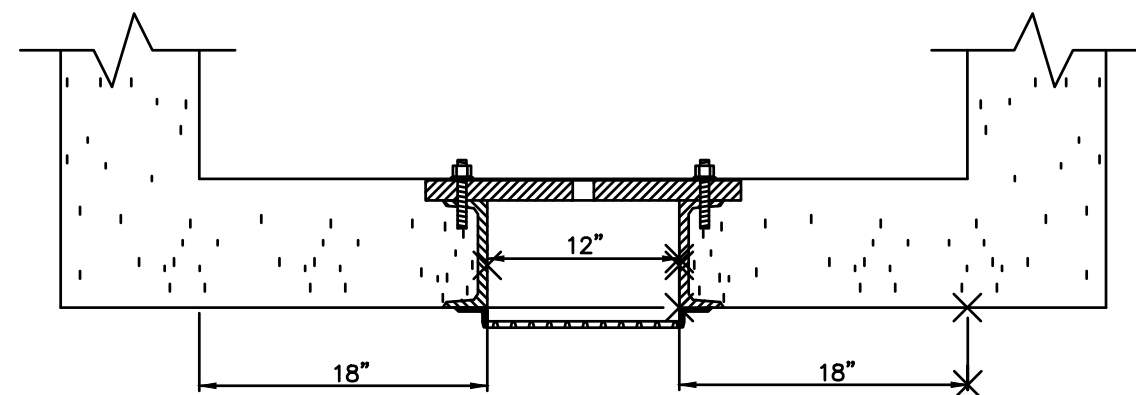


GRATE CONSTRUCTION
ALL WELDED CONSTRUCTION
SCALE: 1"=2'



NOTES:

1. WELD PLATES MAY BE SUBSTITUTED FOR PIPE EMBEDMENT.
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. HANDRAIL DESIGN SHALL BE COMPATIBLE WITH THE DESIGN OF THE WINGWALLS AND HEADWALLS.
4. RAILING POSTS SHALL BE SET TO NORMAL TO GRADE. RAILS SHALL RUN PARALLEL TO THE SLOPES OF TOPS OF THE WALLS.
5. 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'

1.

STEEL FABRICATION NOTES:

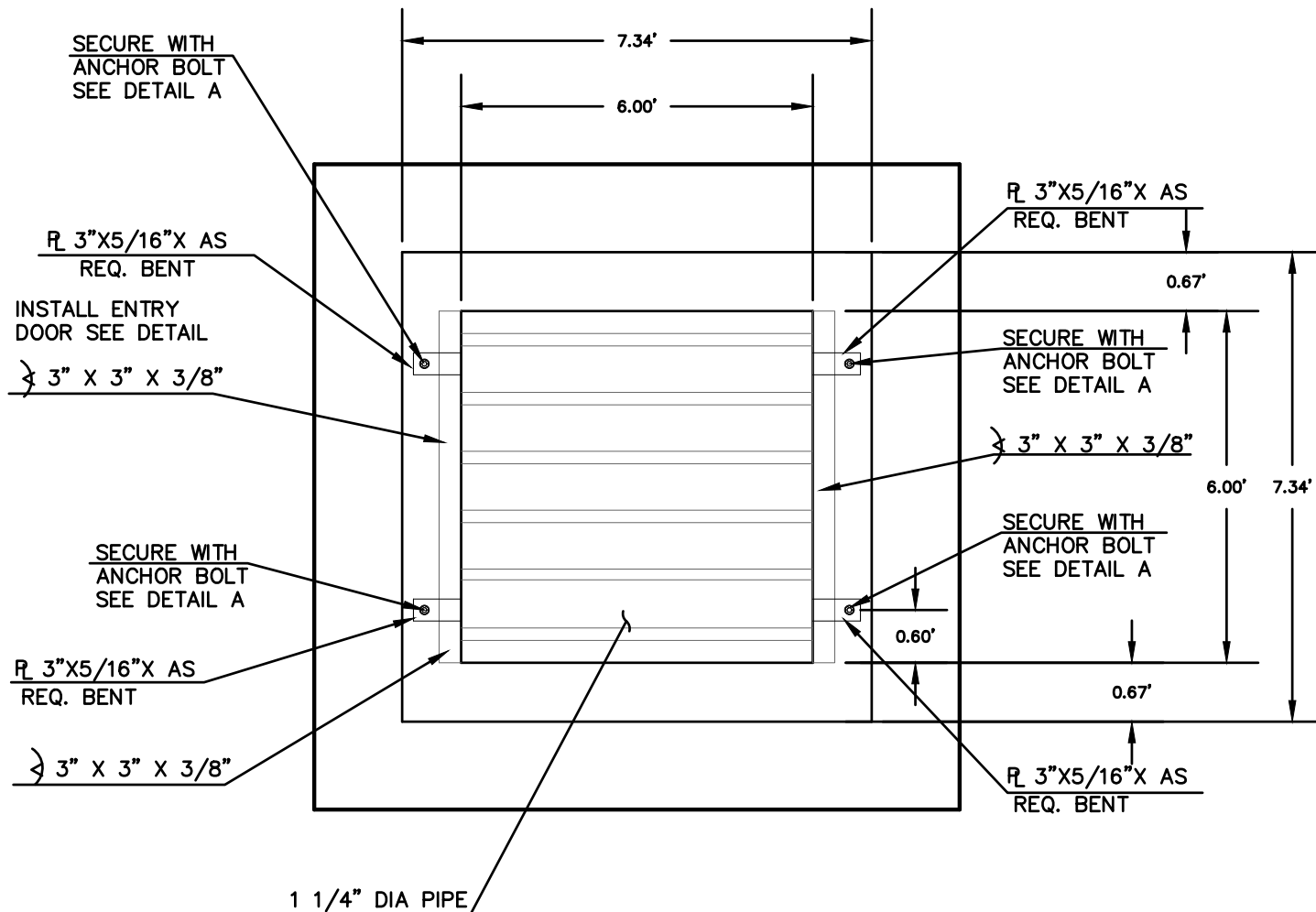
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3. THE OUTLET STRUCTURE BARGRATE IS DESIGNED FOR A VERTICAL LOAD OF 300 LBS./SQ. FT.

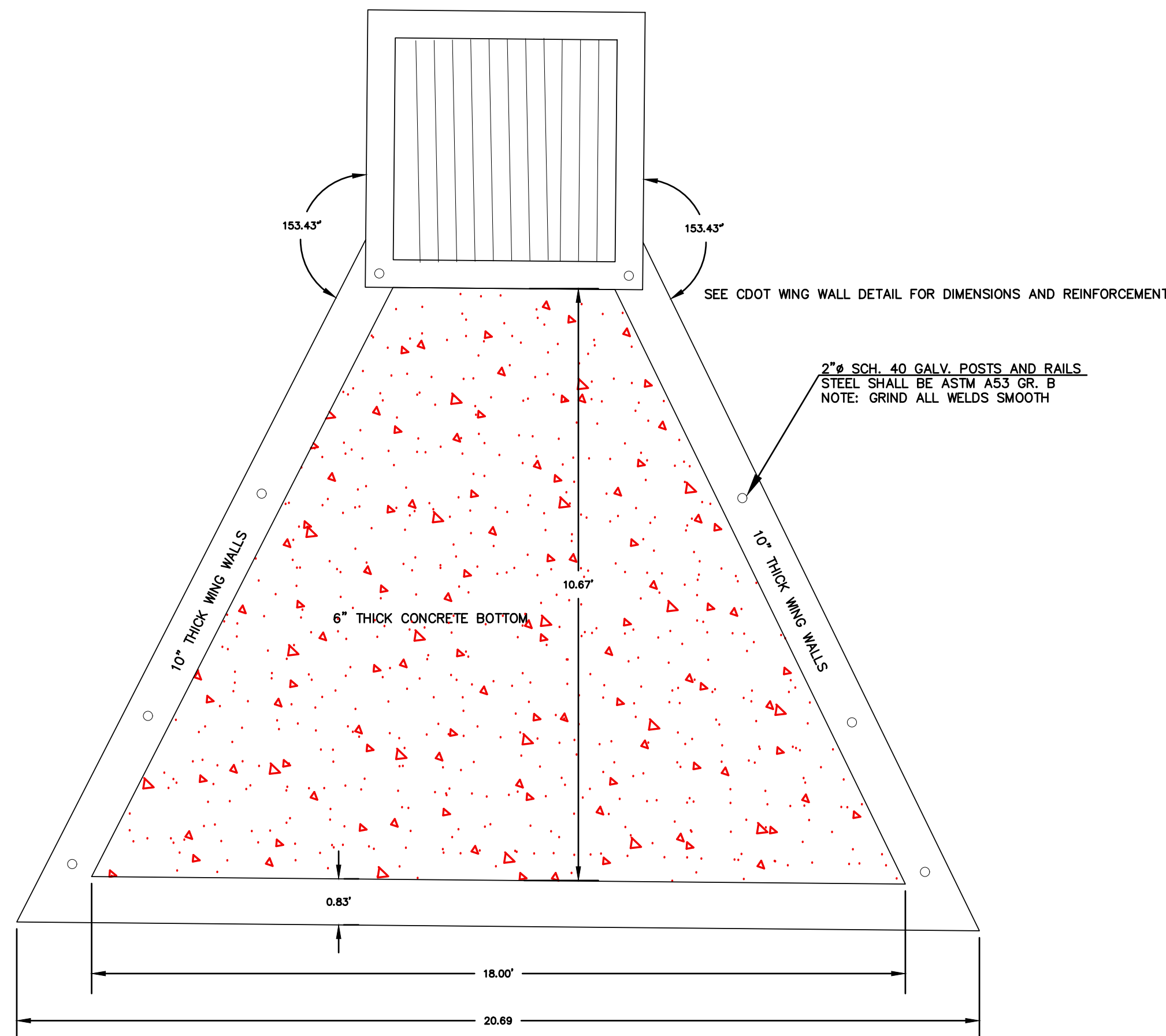
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6. PRIOR TO PAINTING REMOVE ALL OIL, SCALE, AND SLAG, GRIND OFF BURRS AND SHARP EDGES.

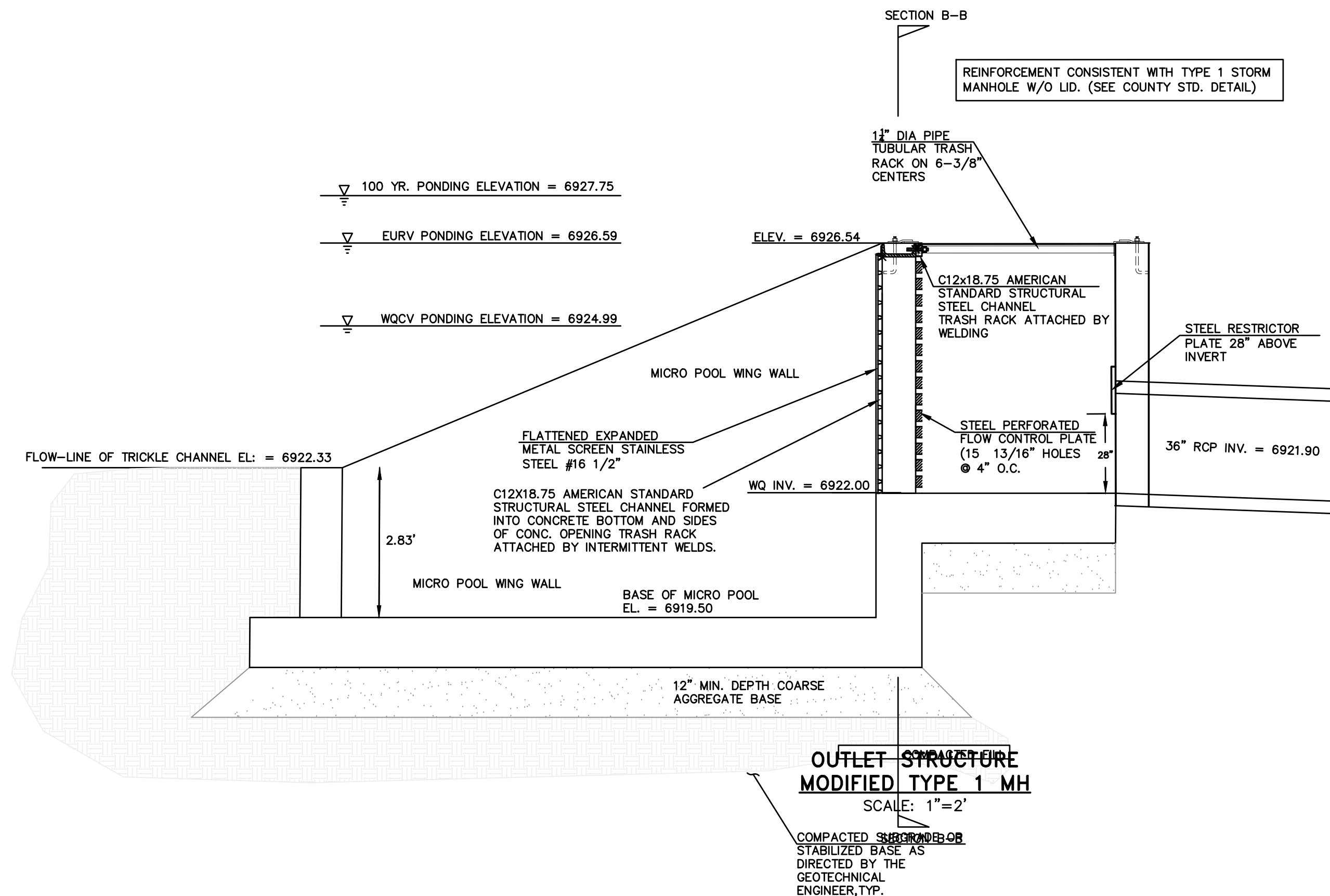


CONCRETE MICROPOOL
SCALE: 1"=2'

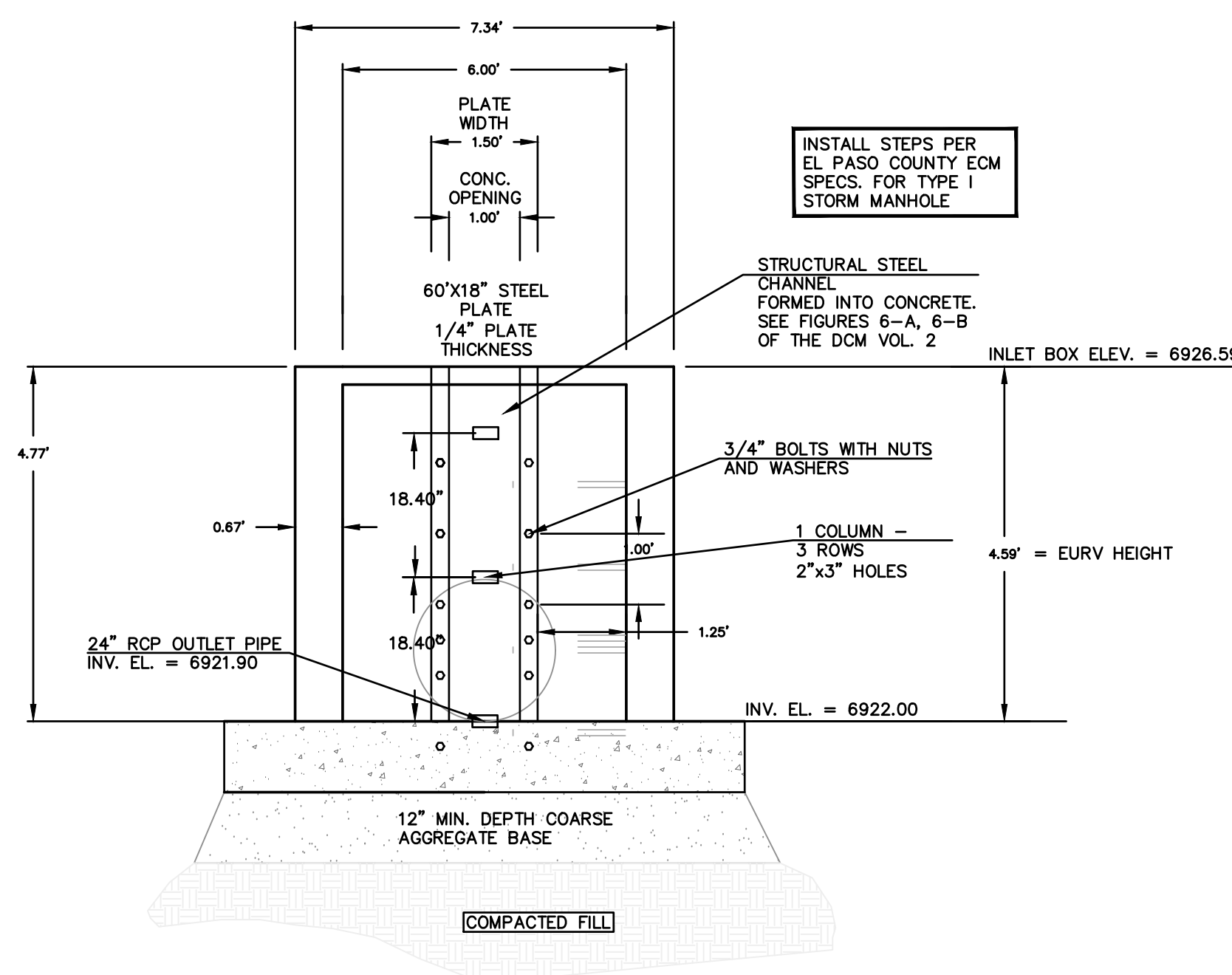


2" # SCH. 40 GALV. POSTS AND RAILS.
STEEL SHALL BE ASTM A53 GR. B
NOTE: GRIND ALL WELDS SMOOTH

FLOW-LINE OF TRICKLE CHANNEL EL. = 6922.33



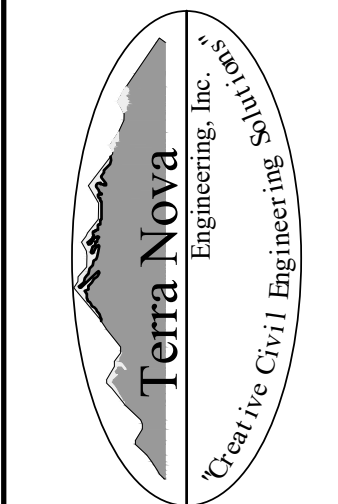
OUTLET STRUCTURE MODIFIED TYPE 1 MH
SCALE: 1"=2'



REVISIONS	NO.	DESCRIPTION	DATE

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WATERBURY FILING NO. 1 & 2

POND 3 DETAILS

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SHEET NO.	32 OF 3