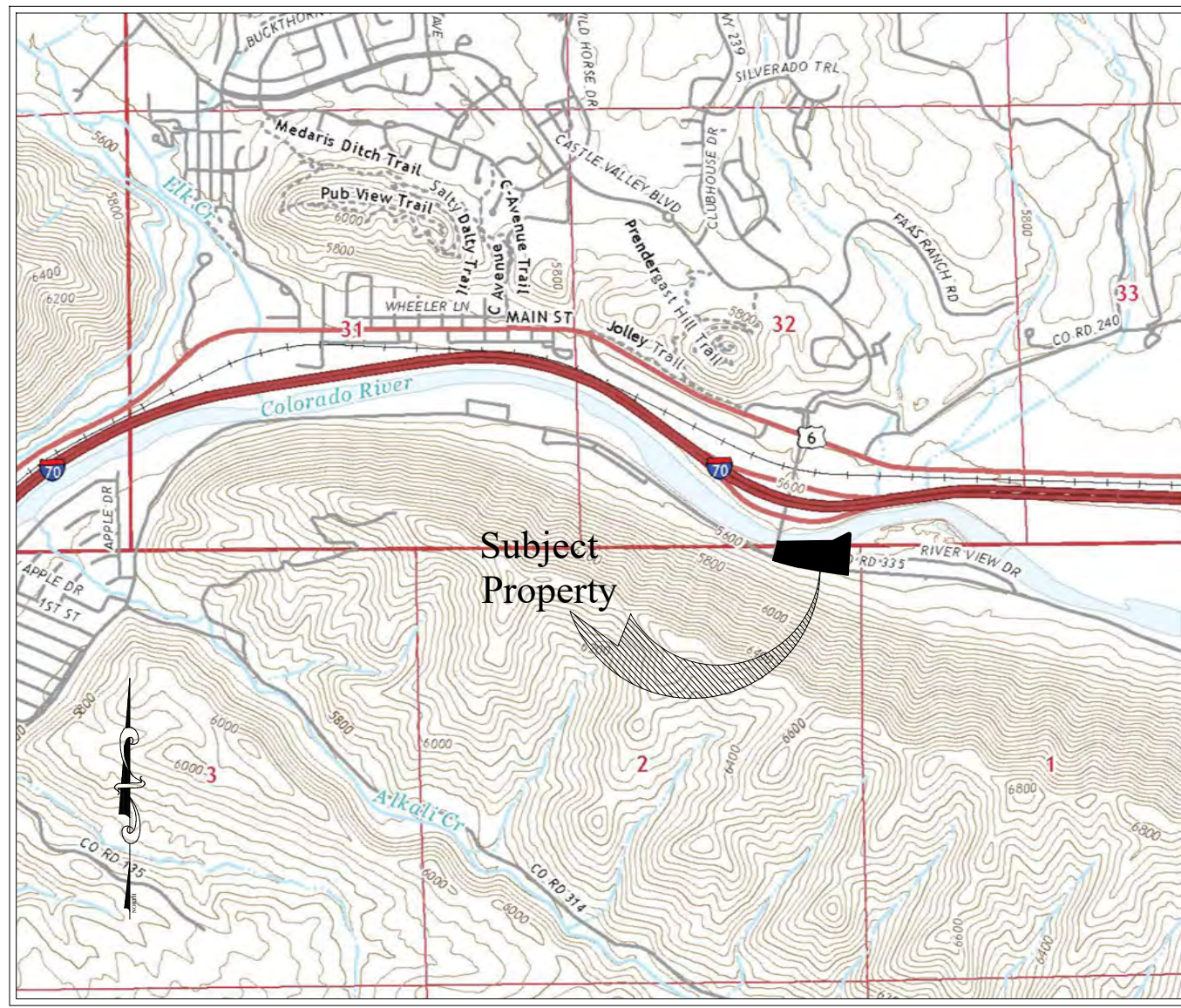
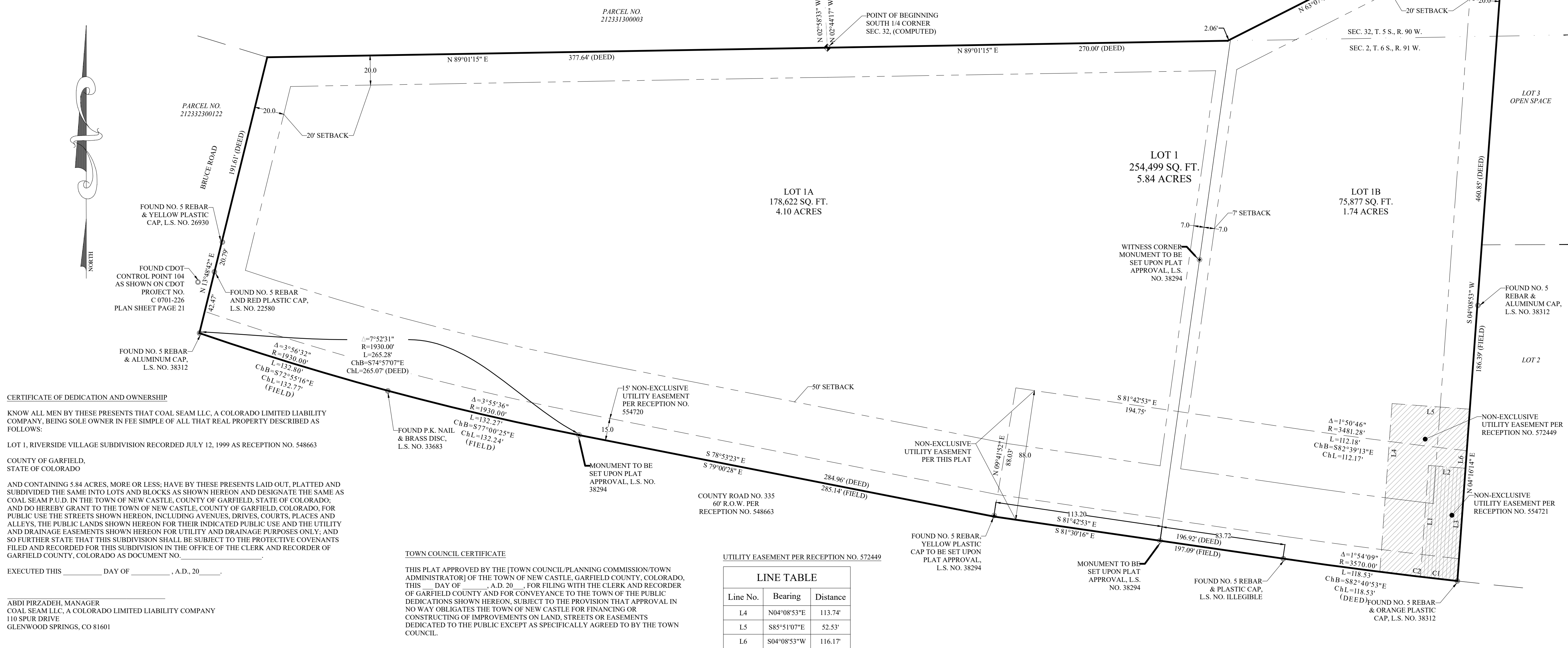


FINAL SUBDIVISION PLAT & FINAL P.U.D. DEVELOPMENT PLAN
COAL SEAM P.U.D.
 A RESUBDIVISION OF LOT 1, RIVERSIDE PARK SUBDIVISION
 RECORDED JULY 12, 1999 AS RECEPTION NO. 548663
 TOWN OF NEW CASTLE, COUNTY OF GARFIELD, STATE OF COLORADO



VICINITY MAP
 SCALE 1" = 2,000'



CLERK AND RECORDER'S CERTIFICATE
 THIS PLAT WAS FILED FOR RECORD IN THE OFFICE OF THE CLERK AND RECORDER AT _____ O'CLOCK _____ M., _____ 20____, AND IS DULY RECORDED IN BOOK _____ PAGE NO. _____
 CLERK AND RECORDER
 BY _____
 DEPUTY

LAND USE SUMMARY

LOT 1A	178,622 SQ. FT.	4.10 ACRES
LOT 1B	75,877 SQ. FT.	1.74 ACRES
TOTAL	254,499 SQ. FT.	5.84 ACRES

CERTIFICATE OF DEDICATION AND OWNERSHIP
 KNOW ALL MEN BY THESE PRESENTS THAT COAL SEAM LLC, A COLORADO LIMITED LIABILITY COMPANY, BEING SOLE OWNER IN FEE SIMPLE OF ALL THAT REAL PROPERTY DESCRIBED AS FOLLOWS:
 LOT 1, RIVERSIDE VILLAGE SUBDIVISION RECORDED JULY 12, 1999 AS RECEPTION NO. 548663
 COUNTY OF GARFIELD,
 STATE OF COLORADO
 AND CONTAINING 5.84 ACRES, MORE OR LESS, HAVE BY THESE PRESENTS LAID OUT, PLATTED AND SUBDIVIDED THE SAME INTO LOTS AND BLOCKS AS SHOWN HEREON AND DESIGNATE THE SAME AS COAL SEAM P.U.D. IN THE TOWN OF NEW CASTLE, COUNTY OF GARFIELD, STATE OF COLORADO; AND DO HEREBY GRANT TO THE TOWN OF NEW CASTLE, COUNTY OF GARFIELD, COLORADO, FOR PUBLIC USE THE STREETS SHOWN HEREON, INCLUDING AVENUES, DRIVES, COURTS, PLACES AND ALLEYS, THE PUBLIC LANDS SHOWN HEREON FOR THEIR INDICATED PUBLIC USE AND THE UTILITY AND DRAINAGE EASEMENTS SHOWN HEREON FOR UTILITY AND DRAINAGE PURPOSES ONLY; AND SO FURTHER STATE THAT THIS SUBDIVISION SHALL BE SUBJECT TO THE PROTECTIVE COVENANTS FILED AND RECORDED FOR THIS SUBDIVISION IN THE OFFICE OF THE CLERK AND RECORDER OF GARFIELD COUNTY, COLORADO AS DOCUMENT NO. _____
 EXECUTED THIS _____ DAY OF _____, A.D. 20____.

TOWN COUNCIL CERTIFICATE
 THIS PLAT APPROVED BY THE [TOWN COUNCIL/PLANNING COMMISSION/TOWN ADMINISTRATOR] OF THE TOWN OF NEW CASTLE, GARFIELD COUNTY, COLORADO, THIS _____ DAY OF _____, A.D. 20____, FOR FILING WITH THE CLERK AND RECORDER OF GARFIELD COUNTY AND FOR CONVEYANCE TO THE TOWN OF THE PUBLIC DEDICATIONS SHOWN HEREON, SUBJECT TO THE PROVISION THAT APPROVAL IN NO WAY OBLIGATES THE TOWN OF NEW CASTLE FOR FINANCING OR CONSTRUCTING OF IMPROVEMENTS ON LAND, STREETS OR EASEMENTS DEDICATED TO THE PUBLIC EXCEPT AS SPECIFICALLY AGREED TO BY THE TOWN COUNCIL.

UTILITY EASEMENT PER RECEPTION NO. 572449

Line No.	Bearing	Distance
L4	N04°08'53"E	113.74'
L5	S85°51'07"E	52.53'
L6	S04°08'53"W	116.17'

Curve No.	Arc Length	Radius	Delta Angle	Chord Bearing	Chord Length
C2	52.59'	3570.00'	0°50'39"	S83°12'38"E	52.59'

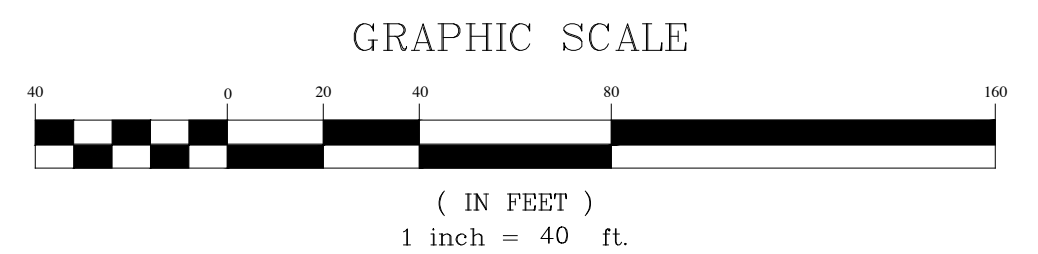
UTILITY EASEMENT PER RECEPTION NO. 554721

Line No.	Bearing	Distance
L1	N04°08'53"E	75.23'
L2	S85°51'07"E	25.00'
L3	S04°08'53"W	76.29'

Curve No.	Arc Length	Radius	Delta Angle	Chord Bearing	Chord Length
C1	25.02'	3570.00'	0°24'06"	N83°25'55"W	25.02'

PLAT NOTES:
 1) THERE SHALL BE A BLANKET UTILITY AND ACCESS EASEMENT UNDER THE PARKING LOT AND SIDEWALK AREAS AS CONSTRUCTED.
SURVEY NOTES:
 1) THIS PROPERTY IS SUBJECT TO RESERVATIONS, RESTRICTIONS, COVENANTS, SETBACKS AND EASEMENTS OF RECORD, OR IN PLACE AND EXCEPTIONS TO TITLE SHOWN IN THE TITLE COMMITMENT PREPARED BY TITLE COMPANY OF THE ROCKIES, COMMITMENT NO. 0603996-C2 DATED NOVEMBER 23, 2022.
 2) THE DATE OF THIS SURVEY WAS SEPTEMBER 25, 2025.
 3) BASIS OF BEARINGS FOR THIS SURVEY IS A FIELD BEARING OF N89°50'49"W BETWEEN THE CENTER 1/4 OF SECTION 32, A 3" BRASS CAP FOUND IN PLACE, AND THE 1/4 CORNER OF SECTION 32 AND SECTION 33, A 3" BRASS CAP FOUND IN PLACE. BEARINGS ARE BASED ON THE FINAL PLAT RIVERSIDE PARK SUBDIVISION RECORDED JULY 12, 1999 AS RECEPTION NO. 548663.
 4) UNITS OF MEASURE FOR ALL DIMENSIONS SHOWN HEREON IS U.S. SURVEY FEET.
 5) THIS SURVEY IS BASED ON THE SPECIAL WARRANTY DEED RECORDED JANUARY 31, 2023 AS RECEPTION NO. 983168 AND THE FINAL PLAT RIVERSIDE PARK SUBDIVISION RECORDED JULY 12, 1999 AS RECEPTION NO. 548663 IN THE GARFIELD COUNTY CLERK AND RECORDER'S OFFICE AND CORNERS FOUND IN PLACE.
 6) ALL CORNERS, FOUND OR SET, UNLESS NOTED ARE FLUSH WITH THE GROUND.
 7) CLERICAL ERRORS IN THE EASEMENT RECORDED AS RECEPTION NO. 554721 HAVE BEEN CORRECTED ON THIS PLAT.

SURVEYOR'S CERTIFICATE
 I, TRAVIS J. KAISER, DO HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR LICENSED UNDER THE LAWS OF THE STATE OF COLORADO. THAT THIS PLAT, THE TITLE COMPANY'S COMMITMENT AND SPECIAL WARRANTY DEED ARE Laid Out, Platted, Dedicated and Shown Hereon, THAT SUCH PLAT WAS MADE FROM AN ACCURATE SURVEY OF SAID PROPERTY BY ME AND UNDER MY SUPERVISION AND CORRECTLY SHOWS THE LOCATION AND DIMENSIONS OF THE LOTS, ALLEYS, STREETS AND STREETS OF SAID SUBDIVISION AS THE SAME ARE STATED ON UPON THE RECORDS OF THE CLERK AND RECORDER OF GARFIELD COUNTY, COLORADO GOVERNING THE SUBDIVISION OF LAND.
 IN WITNESS WHEREOF I HAVE SET MY HAND AND SEAL THIS _____ DAY OF _____, A.D. 2025.
 BY _____
 TRAVIS J. KAISER, L.S. NO. 38294
 FOR AND ON BEHALF OF DRAKE CONSULTING, INC.



STATE OF COLORADO)
) JSS
 COUNTY OF GARFIELD)
 THE FOREGOING CERTIFICATE OF DEDICATION AND OWNERSHIP WAS ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____, A.D. 20____, BY ABDI PIRZADEH.
 MY COMMISSION EXPIRES: _____
 WITNESS MY HAND AND SEAL
 NOTARY PUBLIC
 EXECUTED THIS _____ DAY OF _____, A.D. 20____.
 OWNER(S)
 COUNTY OF GARFIELD) SS.
 STATE OF COLORADO)
 HE FOREGOING DEDICATION WAS ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____, A.D. 20____ BY _____
 WITNESS MY HAND AND SEAL
 NOTARY PUBLIC

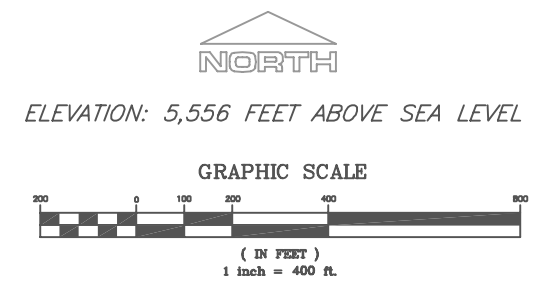
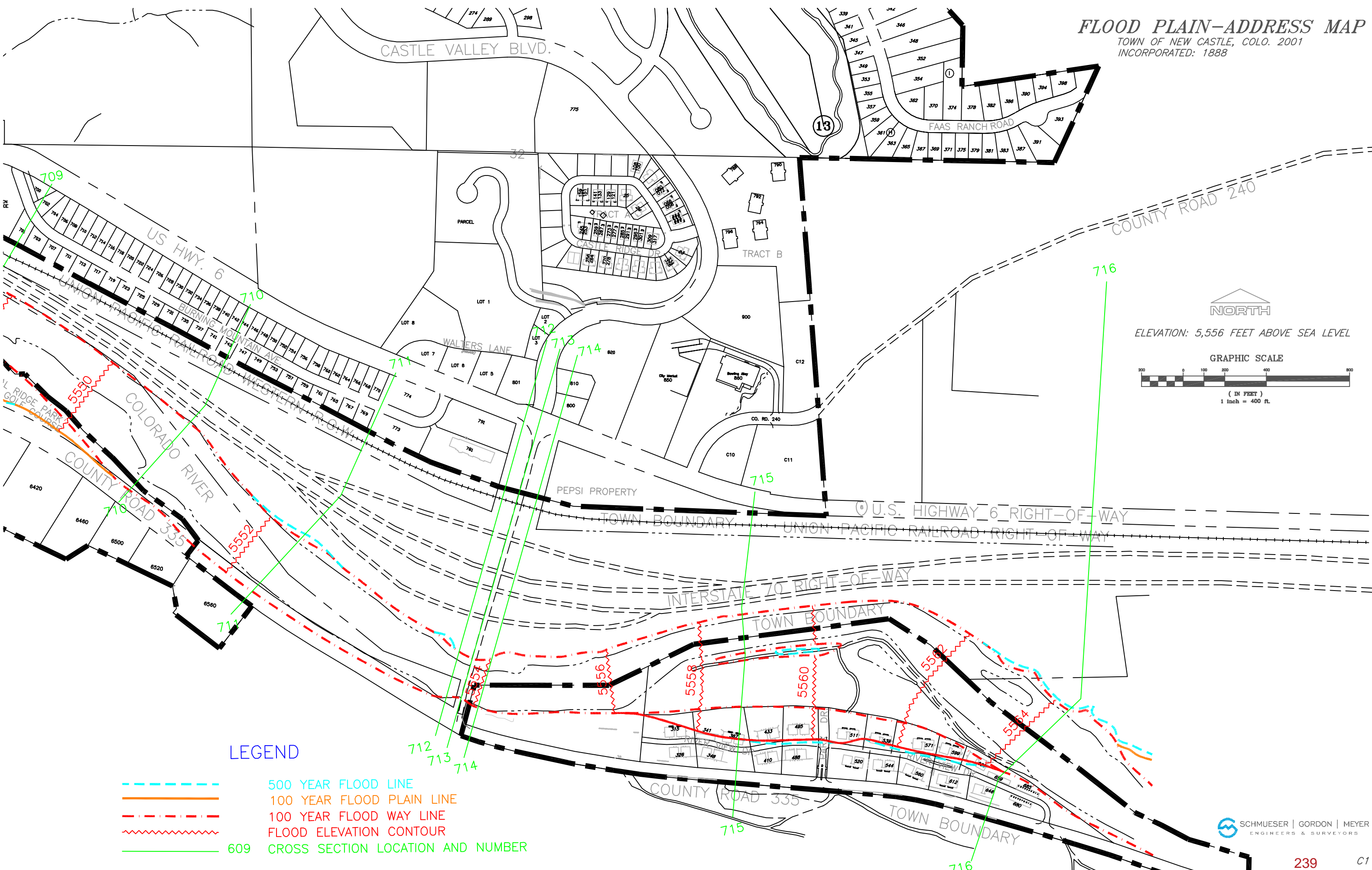
TITLE CERTIFICATE
 _____ DOES HEREBY CERTIFY THAT TITLE COMPANY OF THE ROCKIES HAS EXAMINED THE TITLE TO ALL LANDS DEDICATED AND SHOWN UPON THIS PLAT, AND TITLE TO SUCH LANDS IN THE DEDICATOR FREE AND CLEAR OF ALL LIENS, TAXES, AND ENCUMBRANCES EXCEPT AS FOLLOWS:

LIENHOLDER CONSENT AND SUBORDINATION
 THE UNDERSIGNED LIENHOLDER HEREBY CONSENTS TO AND APPROVES THE RECORDING OF THIS COAL SEAM P.U.D. PLAT AND HEREBY SUBORDINATES ITS LIEN RECORDED AS RECEPTION NUMBER _____ IN THE REAL PROPERTY RECORDS FOR GARFIELD COUNTY THERE TO.
 LIENHOLDER NAME & TITLE _____

Drake Consulting, Inc. Land Surveying PO Box 709 Rifle, CO 81650 Phone 970-987-1389 DrakeConsultingInc.com	Drawn By:	ARK	NO.	Date	Revision	By
	Checked By:	TJK				
	Date:	OCTOBER 30, 2025				
	Computer File:	046-PLAT-TSS				
		COAL SEAM, LLC 7051 COUNTY RD 335, NEW CASTLE, CO		Project NO. 25046		
		FINAL SUBDIVISION PLAT & P.U.D. COAL SEAM P.U.D.				1 OF 1

NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BE BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

FLOOD PLAIN-ADDRESS MAP
 TOWN OF NEW CASTLE, COLO. 2001
 INCORPORATED: 1888



LEGEND

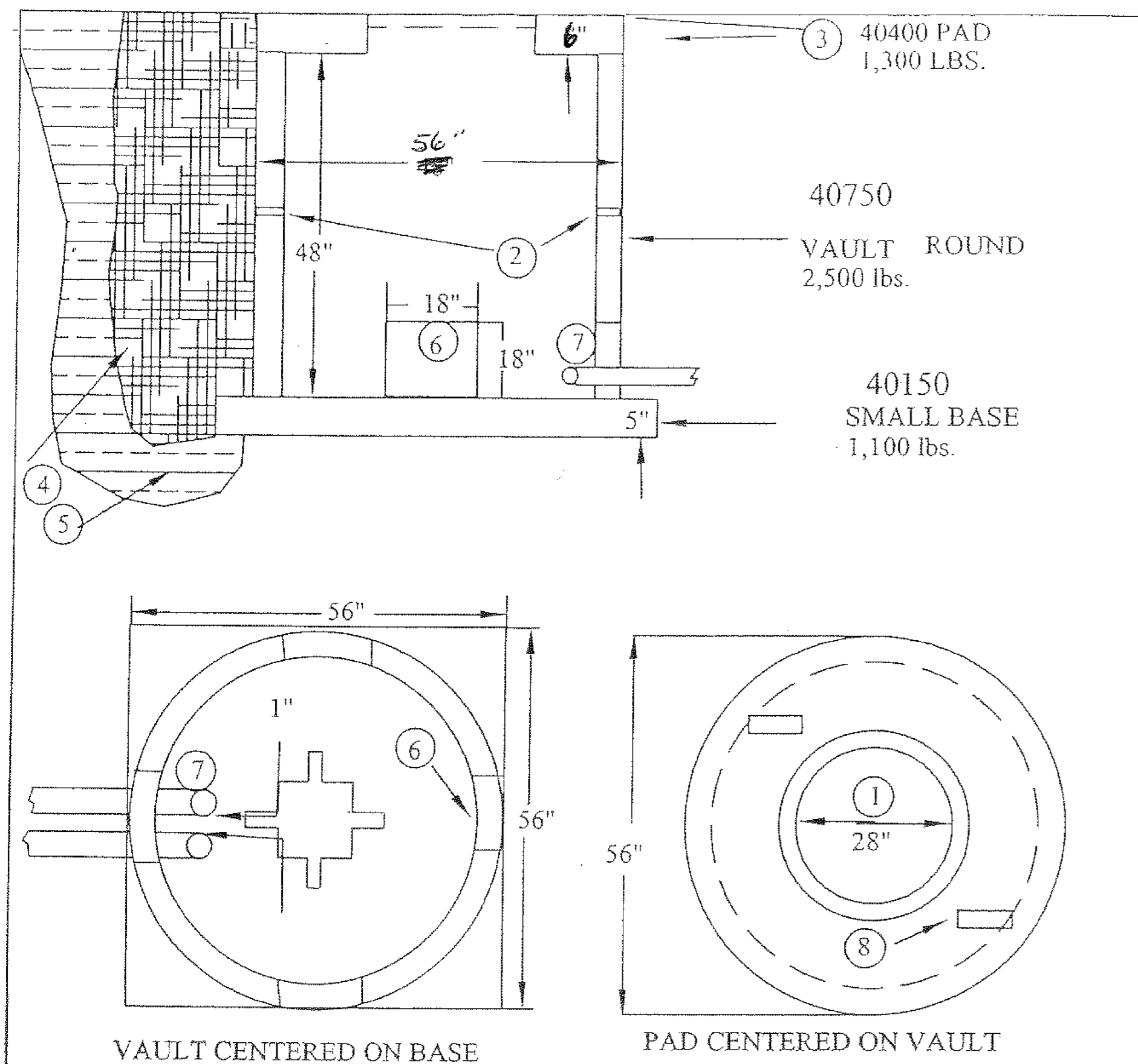
- - - - - 500 YEAR FLOOD LINE
- - - - - 100 YEAR FLOOD PLAIN LINE
- - - - - 100 YEAR FLOOD WAY LINE
- ~~~~~ FLOOD ELEVATION CONTOUR
- 609 CROSS SECTION LOCATION AND NUMBER



CABLE TV PEDESTAL CONNECTION PHOTO



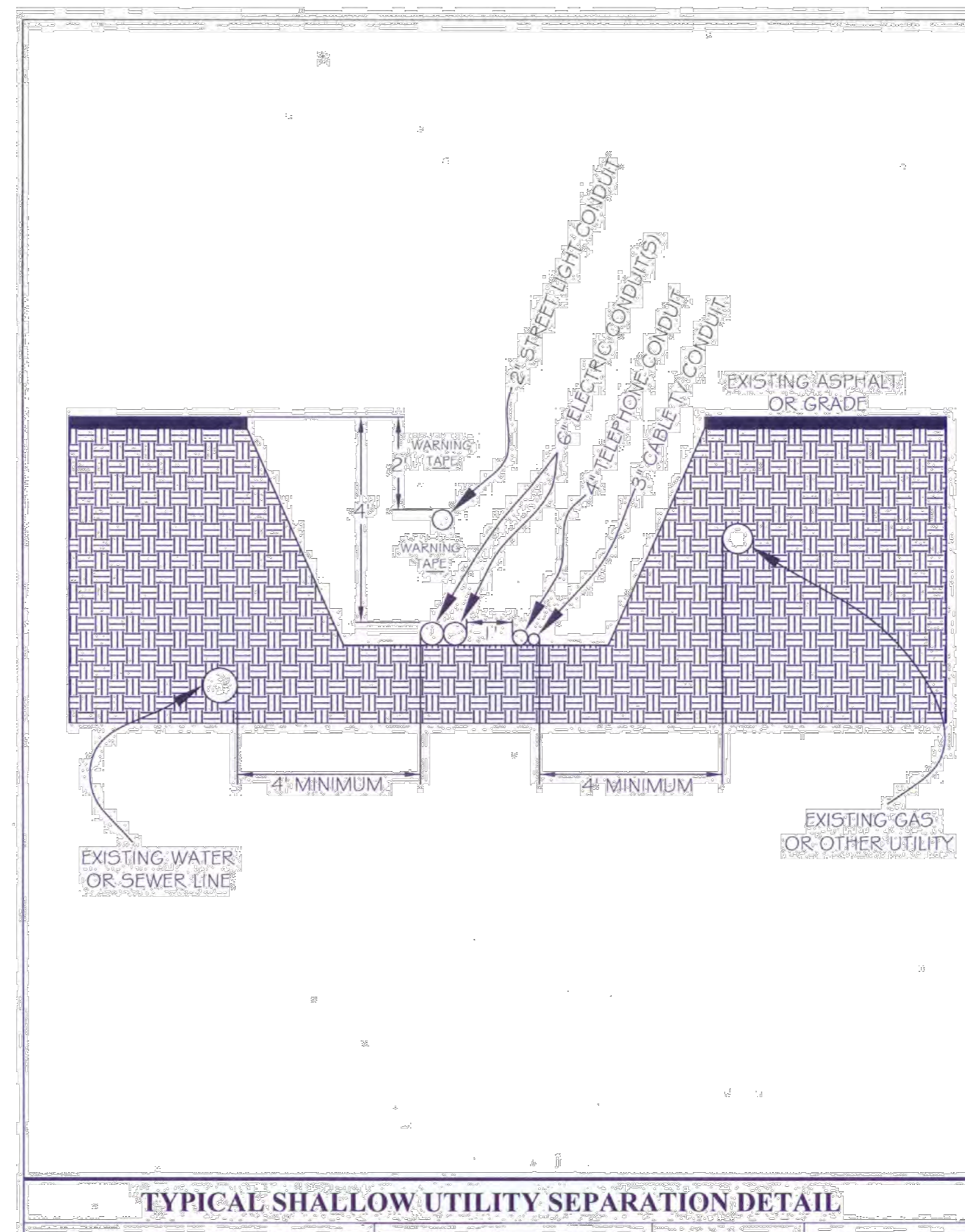
GAS LINE CONNECTION PHOTO



- NOTES:
1. 28" MANHOLE
 2. 3/4" HOLE (TOTAL OF FOUR)
 3. GROUND LEVEL
 4. BACKFILL TO BE WELL COMPACTED
 5. SOIL UNDER BASE TO BE UNDISTURBED OR WELL COMPACTED
 6. FOUR KNOCKOUTS (16" X 18")
 7. CONDUIT(S) INSTALLED THROUGH KNOCKOUTS SHALL BE GROUTED
 8. LIFTING HOLES

ROUND SPLICE VAULT SPECIFICATIONS

ELECTRIC MAIN CONNECTION DETAIL



TYPICAL SHALLOW UTILITY SEPARATION DETAIL



TELEPHONE PEDESTAL CONNECTION PHOTO

DRAWN & DESIGNED BY: H.E.B.	REVIEWED BY: _____
CHECKED BY: H.E.B.	DATE: _____ FOR _____

PINNACLE DESIGN CONSULTING GROUP, INC.
CONSULTING ENGINEERS • 0805 BUCK POINT ROAD
CARBONDALE, CO 81623 • (970) 963-2170

REVISION	DATE	DESCRIPTION	BY	CHK'D

COAL SEAM LLC	SCALE: N.T.S.	JOB NO: 2024.11	DATE: 2-19-26
LOT 1 HIGHWAY P.U.D. - 7051 COUNTY ROAD 335			C20
SHALLOW UTILITY CONNECTIONS AND DETAILS			

HYDROSTATIC TESTING

NEWLY INSTALLED WATER MAINS AND FIRE LINES SHALL BE HYDROSTATICALLY TESTED. HYDROSTATIC TESTS SHALL NOT BE MADE ON ANY PORTION OF THE PIPELINE UNTIL FIELD PLACED CONCRETE HAS HAD ADEQUATE CURING TIME.

ENGINEER SHALL BE NOTIFIED 24 HOURS IN ADVANCE OF TESTING. TESTING SHALL BE MADE IN THE PRESENCE OF THE TOWN OF NEW CASTLE.

ONLY THE FOLLOWING METHODS ARE ACCEPTABLE FOR SUPPLYING POTABLE WATER FOR HYDROSTATIC TESTING:

A. WATER MAY BE TAKEN FROM A NEARBY PRESSURIZED WATER SOURCE THAT WAS PREVIOUSLY CHLORINATED, TESTED, AND ACCEPTED, SUCH AS A FIRE HYDRANT.

B. WATER MAY BE DELIVERED TO THE SITE IN A STATE LICENSED CHLORINATED WATER TRUCK HAVING A MINIMUM CAPACITY OF 300 GALLONS. THE WATER TRUCK SHALL BE USED EXCLUSIVELY FOR THE TRANSPORTATION OF POTABLE WATER.

C. ANY PREVIOUSLY TESTED, CHLORINATED, AND ACCEPTED WATER MAIN THAT IS PRESSURIZED AND IS TO SERVE THE NEW MAIN EXTENSION MAY BE TAPPED ON THE PRESSURIZED SIDE OF THE CLOSED VALVE.

THE METHOD OF SUPPLYING WATER AND THE SOURCE OF WATER FOR HYDROSTATIC TESTING MUST BE CERTIFIED AND APPROVED BY THE TOWN OF NEW CASTLE. THE USE OF BARRELS, SANITARY OR OTHERWISE, TO SUPPLY WATER FOR HYDROSTATIC TESTING IS PROHIBITED.

CONTRACTOR SHALL FURNISH THE CALIBRATED METER FOR TESTING AND THE SUPPLY THE PUMP. THE PIPELINE SHALL BE PROPERLY BACKFILLED AND IN A STATE OF READINESS FOR TESTING. BULKHEADS, PUMPS, TAPS, AND APPURTENANCES NECESSARY TO FILL THE PIPELINE AND MAINTAIN THE REQUIRED PRESSURE SHALL BE IN PLACE AND THE PIPELINE FILLED WITH WATER. THE TEST PRESSURE OF 150 PSI SHALL THEN BE APPLIED TO THE PIPELINE BY MEANS OF A CONTINUOUSLY OPERATING PUMP THAT IS EQUIPPED WITH A BYPASS VALVE FOR PRESSURE REGULATION. THE PIPELINE SHALL BE FILLED AT A RATE THAT DOES NOT CAUSE SURGES AND DOES NOT EXCEED THE RATE AT WHICH AIR CAN BE RELEASED. AIR IN THE LINE SHALL BE PROPERLY PURGED. WHERE BLOWOFFS OR HYDRANTS ARE NOT AVAILABLE OR ARE NOT EFFECTIVE IN PURGING AIR FROM THE LINE, TOWN OF NEW CASTLE WILL REQUIRE A TAP TO PURGE THE LINE. THE LOCATION AND THE SIZE OF THE TAP TO BE USED IS AT THE TOWN OF NEW CASTLE'S DISCRETION.

WHILE THE TEST PRESSURE IS MAINTAINED, AN EXAMINATION SHALL BE MADE OF THE PIPELINE AND ANY LEAKS LOCATED AND REPAIRED. PIPE OR FITTINGS FOUND TO BE FAULTY SHALL BE REMOVED AND REPLACED. LEAKAGE IS NOT ALLOWED THROUGH THE BONNET OF THE LINE VALVE. A VALVE LEAKING THROUGH THE BONNET MAY BE REPAIRED IN PLACE OR REMOVED AND REPLACED. CUTTING AND REPLACEMENT OF PAVEMENT AS WELL AS EXCAVATION AND BACKFILLING MAY BE NECESSARY WHEN LOCATING AND REPAIRING LEAKS DISCOVERED DURING PRESSURE TESTING. AFTER VISIBLE LEAKS ARE STOPPED, THE FULL TEST PRESSURE SHALL BE MAINTAINED FOR 1 CONTINUOUS HOUR. ALLOWABLE LEAKAGE FOR EACH SECTION BETWEEN LINE VALVES SHALL NOT EXCEED THE FOLLOWING LEAKAGE RATES FOR 4 THROUGH 20-INCH DISTRIBUTION AND TRANSMISSION MAINS:

PIPE SIZE (INCHES)	ALLOWABLE LEAKAGE PER HOUR GALLONS PER 1,000 FEET OF PIPE
4"	0.33 GAL.
6"	0.50 GAL.
8"	0.66 GAL.
12"	0.99 GAL.
16"	1.32 GAL.
20"	1.66 GAL.

SHOULD TESTING SHOW A LEAKAGE RATE IN EXCESS OF THE RATES SHOWN, THE PIPELINE WILL NOT BE ACCEPTED. THE PIPELINE SHALL BE

CHLORINATION

MAIN EXTENSIONS AND PRIVATE PIPE EXTENSIONS SHALL BE CHLORINATED IN ACCORDANCE WITH AWWA C651 AND THE REQUIREMENTS OF THE LOCAL HEALTH AUTHORITY HAVING JURISDICTION PRIOR TO ACCEPTANCE BY THE TOWN OF NEW CASTLE.

Testing and Inspection

PRIOR TO ACCEPTANCE, A VISUAL EXAMINATION OF THE SEWER SYSTEM SHALL BE DONE. THE INSPECTOR SHALL VISUALLY LAMP THE PIPELINE CHECKING FOR A "FULL MOON" TO DETERMINE LAYING ALIGNMENT AND TO CHECK FOR BLOCKAGES. THE INSPECTOR SHALL VISUALLY CHECK EACH MANHOLE'S INTERIOR FOR FLAWS, CRACKS, HOLES, OR OTHER INADEQUACIES THAT MIGHT AFFECT THE OPERATION OR WATERTIGHT INTEGRITY OF THE MANHOLE. SHOULD ANY INADEQUACIES BE FOUND, THE CONTRACTOR SHALL MAKE REPAIRS DEEMED NECESSARY BY THE INSPECTOR.

PRIOR TO ACCEPTANCE, THE CONTRACTOR, AT HIS OWN EXPENSE, FOR ALL NEW SEWER CONSTRUCTION, WILL CONDUCT TESTS FOR WATER TIGHTNESS. TESTS SHALL BE COMPLETED UNDER THE DIRECTION OF THE UTILITIES DIRECTOR. THE UTILITIES DIRECTOR MAY REQUIRE THAT THE FIRST TWO (2) MANHOLES, INCLUDING THE MAIN BETWEEN THEM OF ALL SEWER PROJECTS BE TESTED BEFORE FURTHER CONSTRUCTION TO PERMIT INITIAL OBSERVATION OF THE QUALITY OF CONSTRUCTION WORKMANSHIP. THE UTILITIES DIRECTOR MAY REQUIRE ADDITIONAL TESTING DURING THE COURSE OF CONSTRUCTION IF INFILTRATION APPEARS TO BE EXCESSIVE OR THE QUALITY OF WORKMANSHIP IS QUESTIONABLE.

LOW PRESSURE AIR TESTING OF THE SEWER LINES (INCLUDING SERVICES) AND VACUUM TESTING OF ALL MANHOLES WILL BE REQUIRED BY THE UTILITIES DIRECTOR. AIR AND VACUUM TESTING SHALL BE COMPLETED IN ACCORDANCE WITH ASTM C-828 AND AS DESCRIBED HEREIN. THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT AND PERSONNEL NECESSARY TO PERFORM THE REQUIRED TESTS. THE UTILITIES DIRECTOR SHALL RECORD TIMES AND PRESSURE AND VACUUM READINGS DURING THE TEST PERIOD. A TEST SECTION SHALL NOT BE ANY LONGER THAN THE LENGTH OF PIPE BETWEEN ADJACENT MANHOLES. THE LOW-PRESSURE AIR TEST FOR SEWER LINES AND THE VACUUM TEST FOR MANHOLES SHALL BE DONE AFTER COMPLETION OF BACKFILLING AND COMPACTION. IF THE UTILITIES DIRECTOR DETERMINES THAT RELIABLE AND UNIFORM RESULTS ARE PRODUCED BY THE CONTRACTOR'S CONSTRUCTION METHODS, THE LOW-PRESSURE AIR TEST MAY BE DONE AFTER INITIAL BACKFILL AND COMPACTION.

AIR TESTING PIPELINE

THE ENDS OF THE SEWER PIPE BEING TESTED SHALL BE PLUGGED AND BRACED AND THE TEST SECTION SHALL BE PRESSURIZED TO FOUR (4) PSI. THE PRESSURE PUMP SHALL BE TURNED OFF AND THE AIR IN THE PIPE ALLOWED STABILIZING FOR A MINIMUM OF TWO (2) MINUTES OR UNTIL THE PRESSURE REACHES THREE AND ONE-HALF (3.5) PSI. THE TIME SHALL BE MONITORED AS THE LINE EITHER HOLDS PRESSURE OR DROPS NO MORE THAN ONE-HALF (.5) PSI (IF THE GROUND WATER IS HIGHER THAN THE TOP OF THE PIPE, THE TEST PRESSURE WILL BE INCREASED TO ACCOUNT FOR THE HIGH GROUNDWATER).

THE PORTION OF THE LINE BEING TESTED SHALL BE TERMED "ACCEPTABLE" IF THE TIME REQUIRED IN MINUTES FOR THE PRESSURE TO DECREASE FROM 3.5 TO 3.0 PSIG (GREATER THAN THE AVERAGE BACK PRESSURE OF ANY GROUND WATER THAT MAY BE OVER THE PIPE) SHALL NOT BE LESS THAN THE TIME SHOWN FOR THE GIVEN DIAMETERS IN THE FOLLOWING TABLE:

SPECIFICATION TIME REQUIRED FOR A 0.5PSIG PRESSURE DROP FOR SIZE AND LENGTH OF PIPE

DIAMETER (IN.)	MINIMUM FOR LENGTH (L) SHOWN (MIN:SEC)	100FT	150FT	200FT	250FT	300FT	350FT	400FT
8	3:47	3:47	3:47	3:47	3:48	4:26	5:04	

IF GROUND WATER IS KNOWN TO EXIST, THE TEST PRESSURE IS TO BE INCREASED. AN AIR PRESSURE ADJUSTMENT SHALL BE ADDED TO THE NORMAL TEST STARTING PRESSURE WHEN GROUND WATER IS PRESENT. THE HEIGHT OF GROUND WATER IN FEET SHALL BE DIVIDED BY ALL READINGS. (FOR EXAMPLE, IF THE HEIGHT OF WATER IS ELEVEN (11) AND ONE HALF (1/2) FEET, THEN THE ADDED PRESSURE WILL BE 5 PSIG. THIS INCREASES THE 3.5 PSIG TO 8.5 PSIG, AND THE 2.5 PSIG TO 7.5 PSIG. THE ALLOWABLE DROP OF ONE POUND AND THE TIMING REMAIN THE SAME. IN NO CASE HOWEVER, SHOULD THE STARTING TEST PRESSURE EXCEED 9.0 PSIG.

SECTIONS OF PIPE THAT FAIL THE AIR TEST SHALL HAVE THE DEFECTS REPAIRED AND THE TEST SHALL BE REPEATED. REPAIR AND REPEAT TESTING SHALL BE CONTINUED UNTIL THE TESTING REQUIREMENTS ARE MET.

VACUUM TESTING MANHOLES

MANHOLES SHALL BE TESTED BEFORE THE RING AND COVER AND GRADE ADJUSTMENT RINGS HAVE BEEN INSTALLED. ALL PIPES ENTERING THE MANHOLE SHALL BE PLUGGED AND BRACED AND A VACUUM OF TEN (10) INCHES OF MERCURY SHALL BE DRAWN. THE VACUUM PUMP SHALL BE TURNED OFF AND THE TIME MONITORED AS THE VACUUM DROPS ONE (1) INCH. THE VACUUM MUST NOT DROP MORE THAN ONE (1) INCH FOR THE DURATION OF THE TIME INDICATED IN THE FOLLOWING TABLE:

MINIMUM TEST TIMES FOR 48" DIAMETER

DIAMETER (IN.)	DEPTH (FT)	TIME (SEC)
48		
8	20	
10	25	
12	30	
14	35	
16	40	
18	45	
20	50	

MANHOLES THAT FAIL THE VACUUM TEST SHALL HAVE THE DEFECTS LOCATED AND REPAIRED AND THE TEST SHALL BE REPEATED. REPAIR AND REPEAT TESTING SHALL BE CONTINUED UNTIL THE TESTING REQUIREMENTS ARE MET.

DEFLECTION TESTING PIPING

ALL PVC SEWER PIPELINES SHALL JET-RODDED AND CCTV AT THE CONTRACTOR'S EXPENSE AFTER PLACEMENT AND COMPACTION OF BACKFILL. THE CONTRACTOR WILL ALSO BE REQUIRED TO CCTV ALL SEWER LINES AFTER FINAL ASPHALT PLACEMENT.

ALL PVC SEWER PIPELINES SHALL BE TESTED FOR VERTICAL DEFLECTION AFTER PLACEMENT AND COMPACTION OF BACKFILL UNLESS THE INSPECTOR SPECIFICALLY EXPECTS TESTING. METHOD OF TESTING SHALL BE BY DEFLECTOMETER OF THE RIGID GO/NO-GO TYPE DEVICE. AN ALTERNATIVE METHOD WILL BE PERMITTED ONLY BY WRITTEN PERMISSION OF THE INSPECTOR. MAXIMUM ALLOWABLE DEFLECTION SHALL BE FIVE (5) PERCENT OF THE PIPE DIAMETER. ANY AND ALL PIPE WITH VERTICAL DEFLECTION GREATER THAN THE ALLOWABLE SHALL BE EXCAVATED, REMOVED FROM THE PIPELINE, REPLACED, BACKFILLED AND COMPACTED AS SPECIFIED AND RETESTED.

WHEN REQUIRED, INFILTRATION TESTS SHALL BE CONDUCTED BY PLACING AN APPROVED, CALIBRATED V-NOTCH WEIR IN THE LINE JUST ABOVE THE LOWER MANHOLE AND PLUGGING THE LINE JUST ABOVE THE UPPER MANHOLE. UP TO AN HOUR TIME LAPSE WILL BE ALLOWED FOR THE LEVEL OF WATER BEHIND THE WEIR TO STABILIZE BEFORE IT IS READ. ANY FOREIGN MATTER HANGING TO THE WEIR WILL BE DISLODGED BEFORE READING. SUCCESSIVE READINGS WILL BE TAKEN UNTIL CONSISTENT RESULTS ARE ATTAINED.

WHEN REQUIRED, EXFILTRATION TESTS WILL BE CONDUCTED BY PLUGGING THE LINE JUST ABOVE BOTH THE UPPER AND LOWER MANHOLES AND ADDING WATER TO THE SEWER UP TO A LEVEL MARKED IN THE UPPER MANHOLE TO PRODUCE A FOUR (4) FOOT HEAD ON THE INVERT OF THE LINE AT THE MIDPOINT BETWEEN MANHOLES. THE WATER WILL BE ALLOWED TO STAND FOR A MINIMUM OF FOUR (4) HOURS (PREFERABLY OVERNIGHT) TO ALLOW ABSORPTION TO TAKE PLACE IN THE WALLS OF THE MANHOLE AND PIPE. WATER WILL THEN BE ADDED TO BRING THE WATER SURFACE BACK TO THE MARK. AFTER A CAREFULLY TIMED INTERVAL, VARYING FROM FIFTEEN (15) MINUTES TO SIXTY- (60) MINUTES, THE DROP IN ELEVATION OF THE WATER SURFACE WILL BE RECORDED AND CONVERTED TO AN EXFILTRATION RATE. OR A MEASURED AMOUNT OF WATER WILL BE ADDED TO BRING THE WATER LEVEL BACK TO THE MARK AND THIS AMOUNT OF WATER CONVERTED TO AN EXFILTRATION RATE.

THE EXFILTRATION RATE OF THE UPPER MANHOLE MAY BE DETERMINED IN THE SAME MANNER BY PLUGGING THE LINE IN BOTH SIDES OF THIS MANHOLE. THIS AMOUNT OF EXFILTRATION MAY BE SUBTRACTED FROM THE RATE DETERMINED ABOVE FOR THE FIRST TEST REQUIRED ON THE PROJECT IN ORDER TO DETERMINE THE ACTUAL EXFILTRATION RATE RESULTING FROM THE PIPE JOINT LEAKAGE. THE PRACTICAL UPPER LIMIT OF HEAD APPLIED TO THE LOWER PART OF THE LINE BEING TESTED IS TWENTY (20) FEET. WHENEVER THE LINE IS SO STEEP AS TO REQUIRE MORE HEAD THAN THIS, AN EXFILTRATION TEST WILL NOT BE ATTEMPTED. THE BASIC EXFILTRATION LEAKAGE ALLOWANCE WILL BE INCREASED BY TEN PERCENT (10%) FOR EACH TWO (2) FEET THAT THE AVERAGE ACTUAL HEAD EXCEEDS THE BASIC FOUR (4) FEET OF HEAD, UP TO A MAXIMUM OF THIRTY PERCENT (30%).

WHENEVER THE RATE OF INFILTRATION OR EXFILTRATION IS FOUND TO EXCEED THE PRESCRIBED AMOUNT, THE CONTRACTOR SHALL STOP ALL CONSTRUCTION. THE CONTRACTOR SHALL MAKE APPROPRIATE REPAIRS BY METHODS ACCEPTABLE TO THE UTILITIES DIRECTOR AND WILL CONTINUE TO TEST THE CONDUIT UNTIL IT IS PROVEN SATISFACTORY.

DRAWN & DESIGNED BY: H.E.B.	REVIEWED BY: _____
CHECKED BY: H.E.B.	DATE: _____ FOR _____

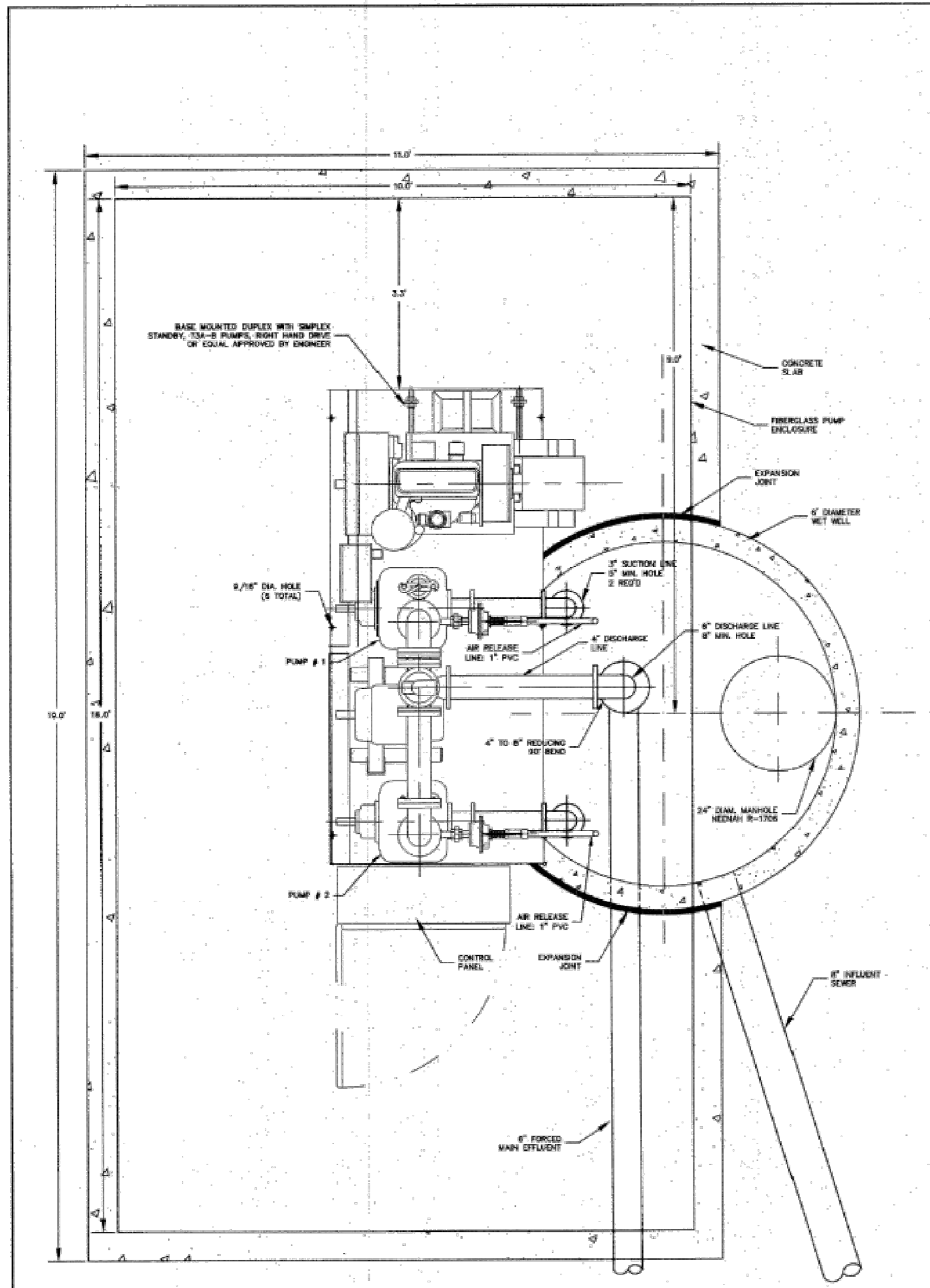
PINNACLE DESIGN CONSULTING GROUP, INC.
CONSULTING ENGINEERS • 0805 BUCK POINT ROAD
CARBONDALE, CO 81623 • (970) 963-2170
pinnacle@sporis.net

REVISION	DATE	DESCRIPTION	BY	CHKD

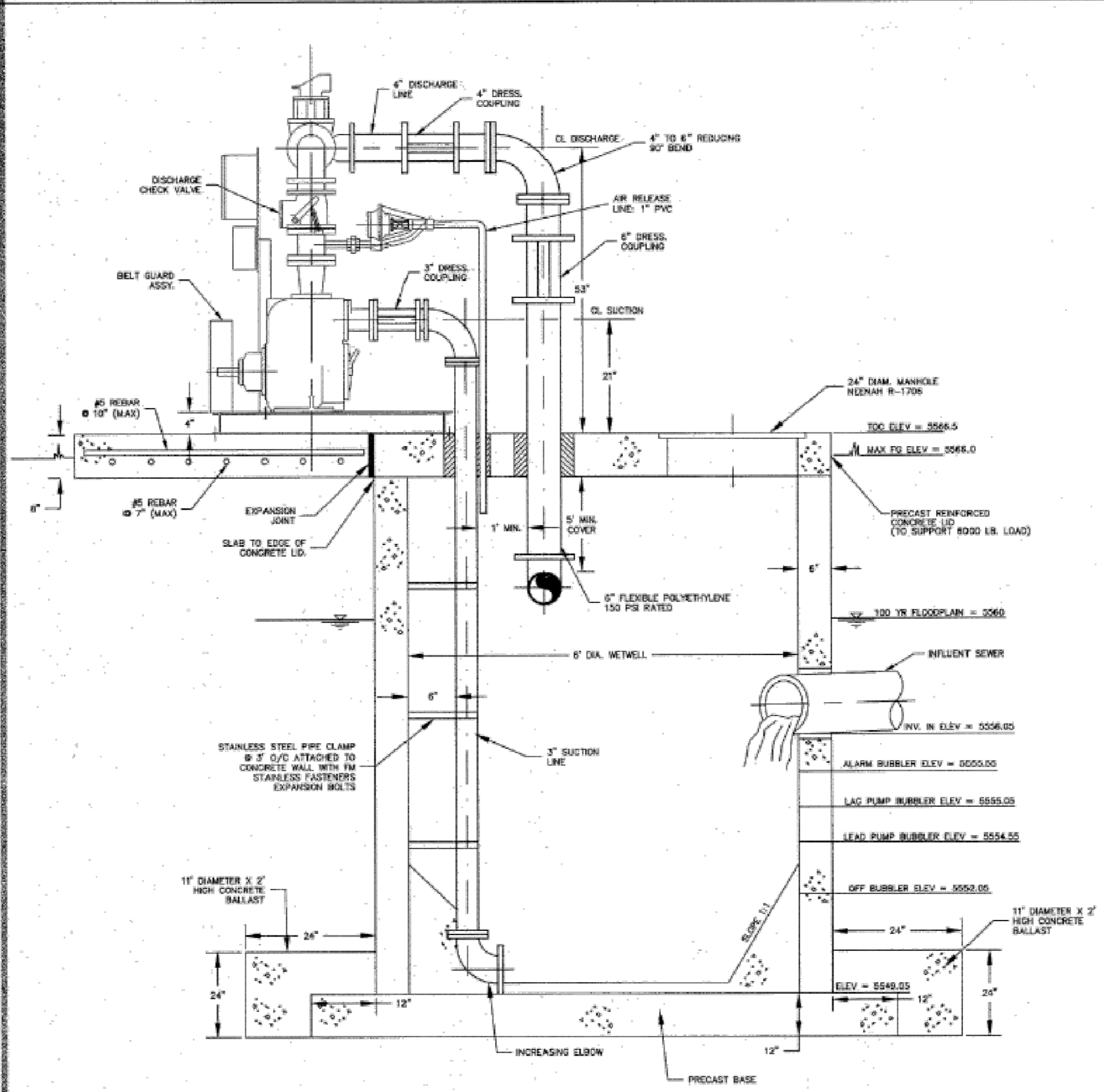
COAL SEAM LLC

LOT 1 HIGHWAY P.U.D. - 7051 COUNTY ROAD 335
WATER AND SEWER TESTING SPECS

SCALE: N.T.S.	JOB NO: 2024.11	DATE: 2-19-26
SHEET NO:		C21



EXTERIOR PLAN VIEW



CROSS SECTION

Pump Data: Discharge Size 4"

Suction Size 3"

TH (FT) 24 @ GPM 150

HP (Minimum) 15

RPM 1750

Voltage 480

Phase THREE PHASE

Force Main Size 6"

Pump (Manufacturer and Model Number) GORMAN-RUPP T3A3-B PUMPS

FIBERGLASS ENCLOSURE TO BE SUPPLIED BY GORMAN-RUPP CO. LOCAL DISTRIBUTOR: CANYON SYSTEMS 1-800-987-8703

THIS DRAWING IS NOT FOR CONSTRUCTION PURPOSES. LAYOUT IS FOR SUBMITTAL DATA ONLY AND CAN VARY IN THE SHOP. CERTIFIED DIMENSIONS FURNISHED UPON REQUEST.

DATE	REVISION	BY	CHK.
10/18/07	PERMAN ON CHG		SM
	39511003.DGN	45126055.S01	
		45113013.DGN	

THE GORMAN-RUPP CO.
WARRFIELD, OHIO ST. THOMAS, ONTARIO

NAME	ABOVEGROUND SEWAGE LIFT STATION W/DUPLEX T3A3-B PUMPS WITH SIMPLEX STANDBY
DWG. NO.	45113-013
DATE	3/18/75
SERIAL NO.	

INFER-MOUNTAIN Engineering Inc.

WINTERGREEN HOMES

ABOVE GROUND SEWAGE LIFT STATION

RIVER PARK

TOWN OF NEW CASTLE

GARFIELD COUNTY, COLORADO

DATE: 11-21-08

PROJECT NO: 14-0081E

SHEET NO: C18 OF 37

SPECIFICATIONS

PUMPS SHALL HAVE A CAPACITY AS FOLLOWS:
115 GPM EXCESS FOR EACH PUMP ABOVE EXISTING RIVER PARK PUMPING REQUIREMENTS. ENGINEER OF RECORD WILL COORDINATE WITH THE TOWN OF NEW CASTLE PUBLIC WORKS DEPARTMENT PRIOR TO CONSTRUCTION.

DRAWN & DESIGNED BY: H.E.B.	REVIEWED BY:
CHECKED BY: H.E.B.	DATE: _____ FOR _____

PINNACLE DESIGN CONSULTING GROUP, INC.
CONSULTING ENGINEERS • 0805 BUCK POINT ROAD
CARBONDALE, CO 81623 • (970) 963-2170
pinnacle@design@sopris.net

REVISION	DATE	DESCRIPTION	BY	CHKD

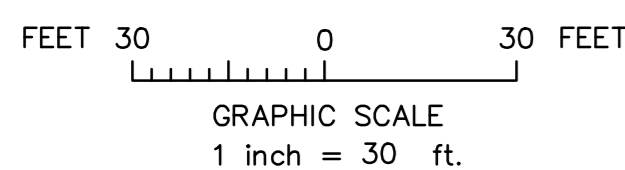
COAL SEAM LLC

LOT 1 HIGHWAY P.U.D. - 7051 COUNTY ROAD 335
SEWER LIFT STATION DETAILS

SCALE: N.T.S.	JOB NO: 2024.11	DATE: 2-19-26
SHEET NO:		C22

Legend

- = Electric Transformer
- = Phone Pedestal
- = Electric Meter
- = Gas Head
- = Sanitary Manhole
- = Hydrant
- = Irrigation Valve
- = Water Shutoff
- = Water Valve
- = Cleanout
- PROPOSED ELECTRIC TRANSFORMER
- PROPOSED PRIMARY ELECTRIC
- WATER LINE AS DESCRIBED
- SEWER LINE AS DESCRIBED
- PROPOSED NATURAL GAS MAIN
- PROPOSED TELEPHONE LINE
- PROPOSED ELECTRIC, CABLE TV AND TELEPHONE
- EX. FORCE MAIN SEWER
- PROPOSED FIRE HYDRANT
- PROPOSED SEWER MANHOLE
- WATER VALVE

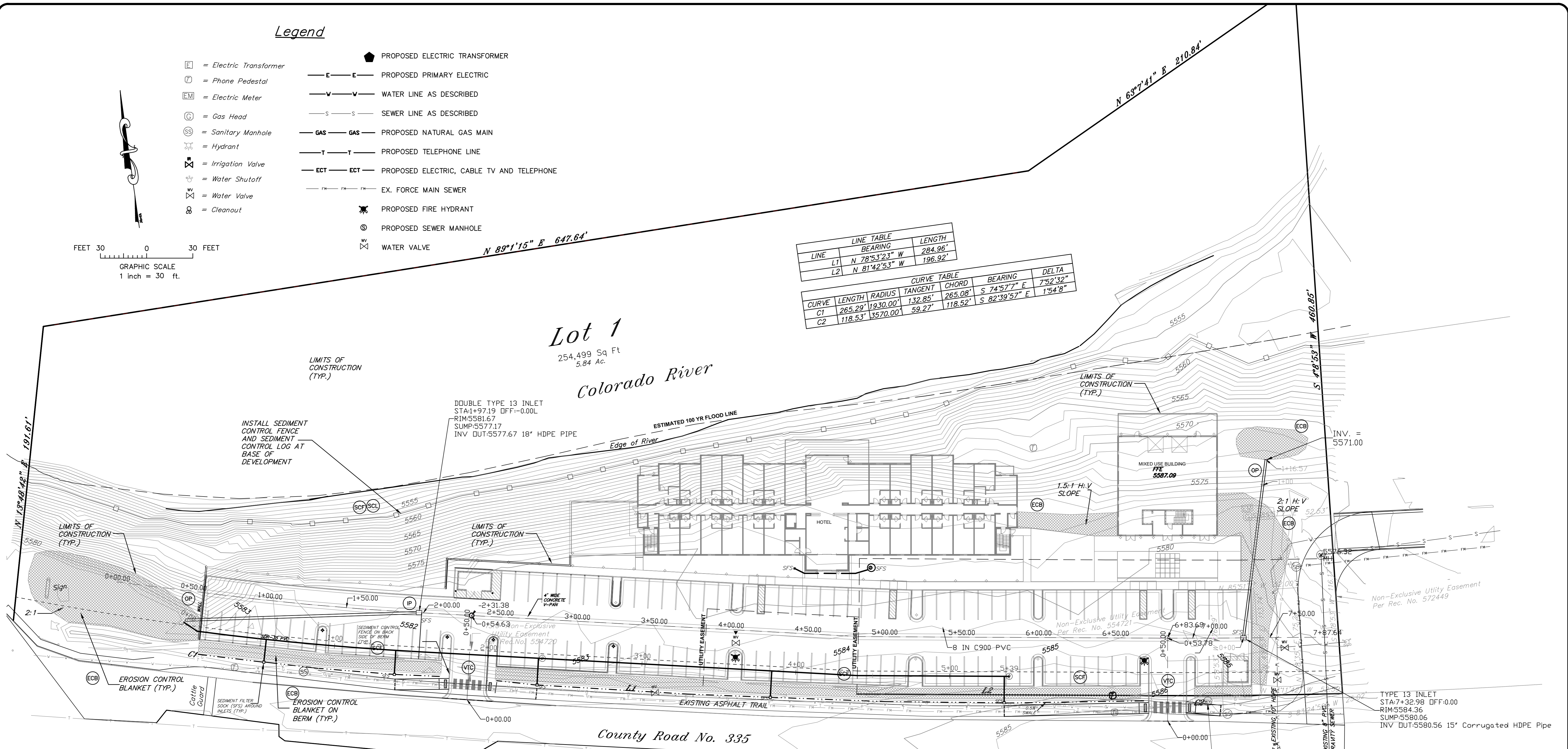


LINE TABLE		
LINE	BEARING	LENGTH
L1	N 78°53'23" W	284.96'
L2	N 81°42'53" W	196.92'

CURVE TABLE						
CURVE	LENGTH	RADIUS	TANGENT	CHORD	BEARING	DELTA
C1	265.29'	1930.00'	132.85'	265.08'	S 74°57'7" E	7°52'32"
C2	118.53'	13570.00'	59.27'	118.52'	S 82°39'57" E	1°54'8"

Lot 1
254,499 Sq Ft
5.84 Ac.

Colorado River



DRAWN & DESIGNED BY: H.E.B.	REVIEWED BY: _____
CHECKED BY: H.E.B.	DATE: _____ FOR _____

PINNACLE DESIGN CONSULTING GROUP, INC.
CONSULTING ENGINEERS • 0805 BUCK POINT ROAD
CARBONDALE, CO 81623 • (970) 963-2170
pinnacle设计@sopris.net

REVISION	DATE	DESCRIPTION	BY	CHD

COAL SEAM LLC
LOT 1 HIGHWAY P.U.D. - 7051 COUNTY ROAD 335
EROSION CONTROL PLAN

SCALE: 1" = 30'	JOB NO: 2024.11	DATE: 2-19-26
SHEET NO: C23		

DESIGN NOTES:

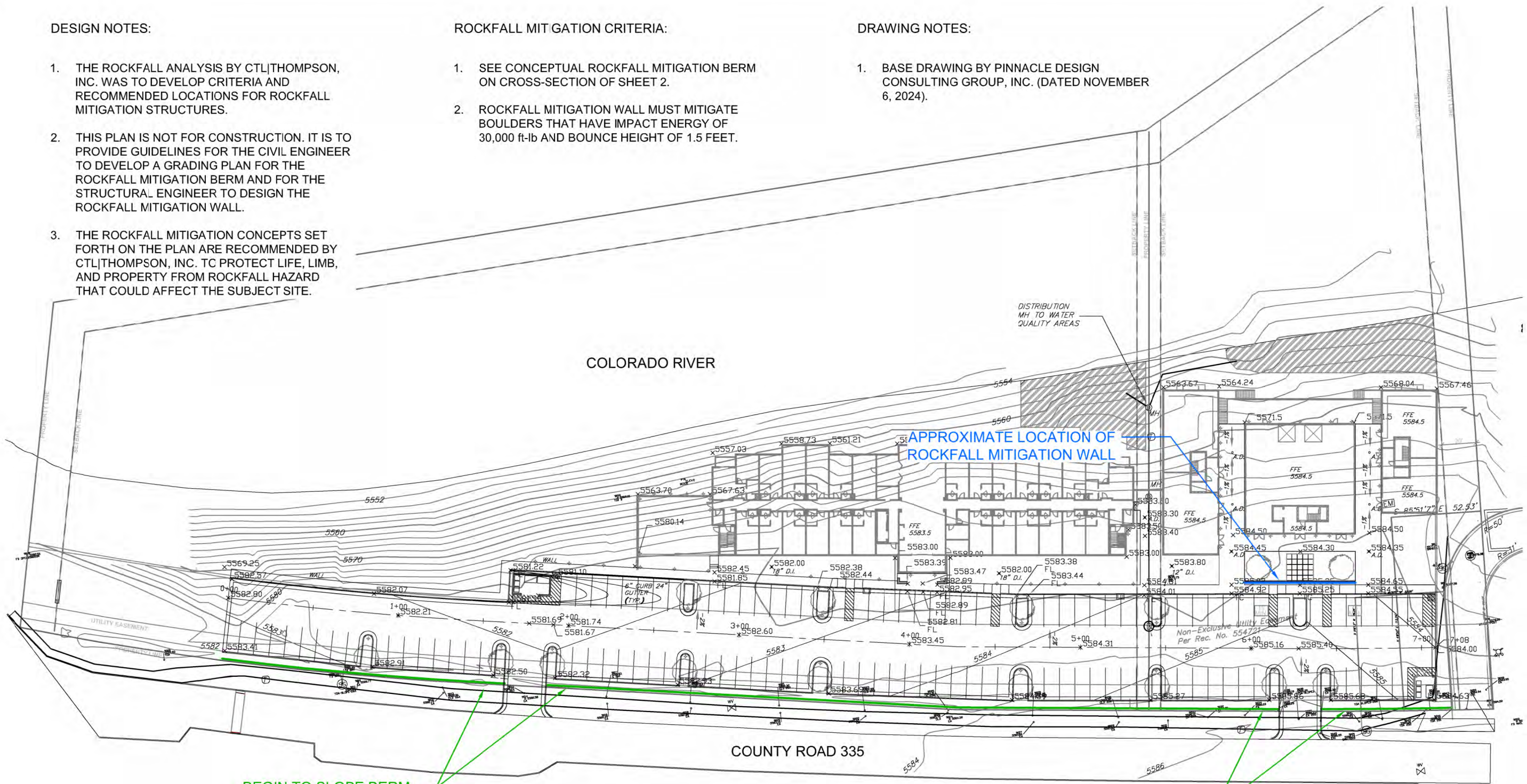
1. THE ROCKFALL ANALYSIS BY CTL|THOMPSON, INC. WAS TO DEVELOP CRITERIA AND RECOMMENDED LOCATIONS FOR ROCKFALL MITIGATION STRUCTURES.
2. THIS PLAN IS NOT FOR CONSTRUCTION. IT IS TO PROVIDE GUIDELINES FOR THE CIVIL ENGINEER TO DEVELOP A GRADING PLAN FOR THE ROCKFALL MITIGATION BERM AND FOR THE STRUCTURAL ENGINEER TO DESIGN THE ROCKFALL MITIGATION WALL.
3. THE ROCKFALL MITIGATION CONCEPTS SET FORTH ON THE PLAN ARE RECOMMENDED BY CTL|THOMPSON, INC. TO PROTECT LIFE, LIMB, AND PROPERTY FROM ROCKFALL HAZARD THAT COULD AFFECT THE SUBJECT SITE.

ROCKFALL MITIGATION CRITERIA:

1. SEE CONCEPTUAL ROCKFALL MITIGATION BERM ON CROSS-SECTION OF SHEET 2.
2. ROCKFALL MITIGATION WALL MUST MITIGATE BOULDERS THAT HAVE IMPACT ENERGY OF 30,000 ft-lb AND BOUNCE HEIGHT OF 1.5 FEET.

DRAWING NOTES:

1. BASE DRAWING BY PINNACLE DESIGN CONSULTING GROUP, INC. (DATED NOVEMBER 6, 2024).



DISTRIBUTION MH TO WATER QUALITY AREAS

COLORADO RIVER

APPROXIMATE LOCATION OF ROCKFALL MITIGATION WALL

COUNTY ROAD 335

BEGIN TO SLOPE BERM TO INGRESS/EGRESS

BEGIN TO SLOPE BERM TO INGRESS/EGRESS

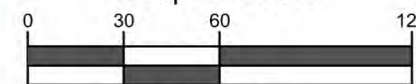
LEGEND:

- APPROXIMATE CENTERLINE OF ROCKFALL MITIGATION BERM
- APPROXIMATE ALIGNMENT OF ROCKFALL MITIGATION WALL

FOR CIVIL ENGINEERING AND STRUCTURAL ENGINEERING USE



Graphic Scale

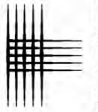


In Feet: 1" = 60'

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CTL | THOMPSON



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F: 970-945-7411
www.ctlthompson.com

PROJECT LOCATION:

ROCKFALL MITIGATION BERM
LOT 1, RIVERSIDE PUD
NEW CASTLE, COLORADO

ROCKFALL BERM AND WALL ALIGNMENTS

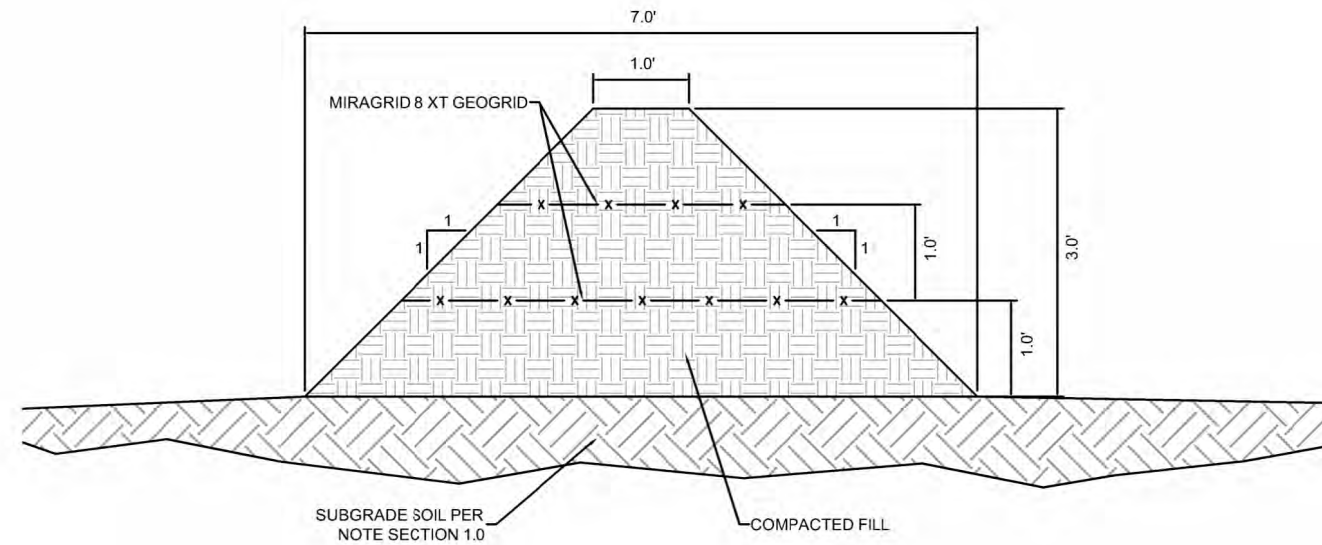
NO.	DATE	REVISION/ISSUE
A	06/27/25	REVISION TO BERM GEOMETRY

CLIENT:

ASPEN BUILT
1101 VILLAGE RD, SUITE #LL-1B
CARBONDALE, CO 81623
ATTENTION: ABDI PIRZADEH
Contact: (970) 618-3555

ISSUE/NO.	DATE	SHEET
JDK		S1
RRB		S2
PROJECT	GS06637.000	
DATE	06/27/2025	
PER PLAN	244	

GENERAL NOTES FOR ROCKFALL MITIGATION BERM



CONCEPTUAL ROCKFALL MITIGATION BERM SECTION

NOT TO SCALE

1.0 SUBGRADE AND BERM MATERIALS

- 1.1 PRIOR TO CONSTRUCTION OF THE ROCKFALL MITIGATION BERM, THE CONTRACTOR SHALL CLEAR AND GRUB THE AREA BELOW THE BERM, REMOVING EXISTING FILL, TOPSOIL, ORGANICS, AND DELETERIOUS MATERIAL. UNSUITABLE SOILS SHALL BE OVER-EXCAVATED AND REPLACED WITH DENSELY COMPACTED FILL AS DIRECTED BY CTL|THOMPSON, INC.
- 1.2 SUBGRADE SOIL BELOW THE BASE OF THE BERM SHALL BE NATIVE UNDISTURBED SOIL OR DENSELY COMPACTED FILL. SUBGRADE SOILS BELOW THE BERM ALIGNMENT SHALL BE OBSERVED BY CTL|THOMPSON, INC. PRIOR TO PLACING FILL FOR BERM CONSTRUCTION TO CONFIRM THAT THE SOIL HAS BEEN PROPERLY PREPARED.
- 1.3 GEOGRID REINFORCEMENT SHALL BE MIRAGRID 8XT AND SHALL BE INSTALLED PER MANUFACTURER'S CONSTRUCTION GUIDELINES.
- 1.4 THE BERM SHOULD BE ON-SITE CLAYEY SAND SOILS, FREE OF ROCKS LARGER THAN 6 INCHES, ORGANICS, AND DEBRIS. BERM FILL SHALL BE PLACED IN LOOSE LIFTS OF 8 INCHES THICK OR LESS, MOISTURE-TREATED TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT, AND COMPACTED TO AT LEAST 95 PERCENT OF STANDARD PROCTOR (ASTM D 698) MAXIMUM DRY DENSITY. CTL|THOMPSON, INC. SHOULD BE CALLED TO CHECK MOISTURE AND DENSITY OF FILL DURING PLACEMENT.

2.0 SPECIAL PROVISIONS

- 2.1 VERIFICATION OF MATERIAL SPECIFICATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DENSITY TESTS OF FILL SHALL BE PERFORMED AT INTERVALS DEEMED NECESSARY BY CTL|THOMPSON, INC. TEST LOCATIONS SHALL BE AT THE DISCRETION OF CTL|THOMPSON, INC.
- 2.2 THE CONTRACTOR SHALL VERIFY THE BERM LOCATION, ELEVATIONS, AND GEOMETRY AS WELL AS ANY EXISTING STRUCTURES OR UNDERGROUND FEATURES PRIOR TO EXCAVATION AND CONSTRUCTION.

3.0 DESIGN NOTES

- 3.1 THE ROCKFALL ANALYSIS BY CTL|THOMPSON, INC. WAS TO DEVELOP CRITERIA AND RECOMMENDED LOCATIONS FOR ROCKFALL MITIGATION STRUCTURES.
- 3.2 THIS PLAN IS NOT FOR CONSTRUCTION. IT IS TO PROVIDE GUIDELINES FOR THE CIVIL ENGINEER TO DEVELOP A GRADING PLAN FOR THE ROCKFALL MITIGATION BERM AND FOR THE STRUCTURAL ENGINEER TO DESIGN THE ROCKFALL MITIGATION WALL.
- 3.3 THE ROCKFALL MITIGATION CONCEPTS SET FORTH ON THIS PLAN ARE RECOMMENDED BY CTL|THOMPSON, INC. TO PROTECT LIFE, LIMB, AND PROPERTY FROM ROCKFALL HAZARD THAT COULD AFFECT THE SUBJECT SITE.



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P: 970-945-2809
F: 970-945-7411
www.ctlthompson.com

PROJECT LOCATION:
ROCKFALL MITIGATION BERM
LOT 1, RIVERSIDE PUD
NEW CASTLE, COLORADO

BERM SECTION AND NOTES

NO.	DATE	REVISION/ISSUE
1	06/27/25	REVISION TO BERM GEOMETRY

CLIENT:
ASPEN BUILT
1101 VILLAGE RD. SUITE #LL-1B
CARBONDALE, CO 81623
ATTENTION: ABDI PIRZADEH
Contact: (970) 618-3555

DESIGNER JDK	SHEET S2
DATE 06/27/2025	
PROJECT GS06837.000	SHEET S2
SCALE PER PLAN	

SHEET GENERAL NOTES

- Contractor shall verify all dimensions and jobsite conditions before commencing work and shall coordinate any discrepancies with the Engineer.
- Contractor shall review and verify all dimensions shown on Structural drawings with those shown on Architectural and Civil drawings. Contractor shall notify the Architect of any discrepancies between the drawings and receive written clarifications of discrepancies before proceeding with construction.
- Use written dimensions. Do not use scaled dimensions. Where no dimension is provided, consult the Engineer for clarification before proceeding with the work.
- The Contractor is responsible for implementing jobsite safety and construction procedures in accordance with national, state, and local safety requirements. The design, adequacy, and safety of erection bracing, shoring, temporary supports, et cetera, is the sole responsibility of the Contractor and has not been considered by the Engineer. The Contractor is responsible for the coordination of any penetration or use of structure for conduit, raceway, or non-structural items with the Engineer prior to the installation of the non-structural items.
- General notes shall not substitute for specifications. Conflicts between the two shall be brought to the Engineer's attention, or the stricter criteria shall be used.
- The Contractor will pay the Engineer for time and expense required to review, design, and coordinate items that were considered not in conformance with these drawings.
- The Contractor is responsible for locating and the protection of all existing utilities and adjacent structures throughout all phases of construction.

DESIGN CRITERIA

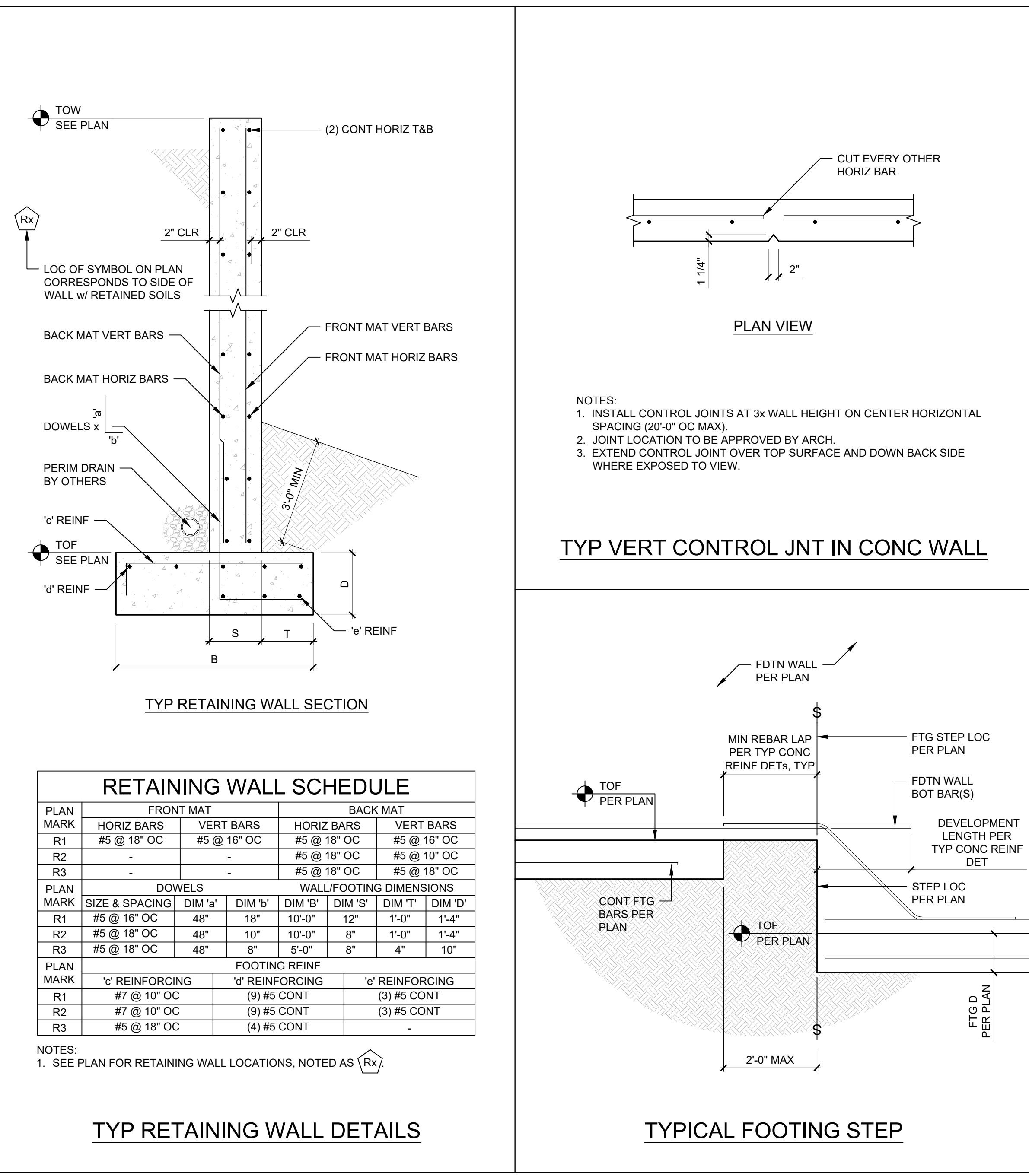
- CODE: 2021 International Building Code (IBC).
- DESIGN LOADS:
 - LIVE LOADS:
 - SURCHARGE = 250 PSF
 - VEHICLE IMPACT = 6,000 LB 27" above parking pavement
 - LATERAL LOADS:
 - WIND 90 MPH (3 Second Gust), Exposure C
 - SEISMIC Site Class D, Risk Category II, I = 1.0
 - Ss = 0.382 g, S1 = 0.082 g, Sds = 0.391 g, Sd1 = 0.130 g

FOUNDATION

- Recommendations for foundation type and design criteria were provided by the geotechnical report "Subsoil Study For Foundation Design Proposed Riverside Park Townhome Development," dated August 8, 1999, by Hepworth-Parkway Geotechnical, Inc., a separate consultant to the Owner. Contractor shall read and be familiar with all aspects and requirements for site and foundation sub-grade preparation. Unless noted otherwise, the geotechnical report shall be considered part of the construction documents and shall be followed.
- Design Parameters:
 - Maximum Allowable Bearing Capacity = 2,000 psf
 - Active Lateral Soil Pressure = 45 psf
 - Passive Soil Pressure = 300 psf ultimate
 - Coefficient of Friction = 0.35 ultimate
- The retaining walls are supported on spread footings bearing on competent subgrade. The bottom of all footings to bear 30" minimum below finished grade.
- The bottom of all footings shall bear on solid native, inorganic, undisturbed soil or approved compacted fill per the geotechnical report.
- A Geotechnical Engineer shall perform an open excavation inspection prior to placing foundations to ensure the bearing capacity is satisfactory.
- No concrete shall be placed on frozen soil or in excavation containing water.
- No concrete shall be placed in footings or foundation wall without 48 hours notification to allow Engineer to observe the reinforcement if deemed necessary.
- The design and erection of all shoring, sheeting, soil stability, and dewatering is the sole responsibility of the Contractor. The Contractor shall hire a licensed Engineer to design all shoring and sheeting.
- Utility and plumbing lines shall not go through or beneath the foundation unless indicated otherwise.

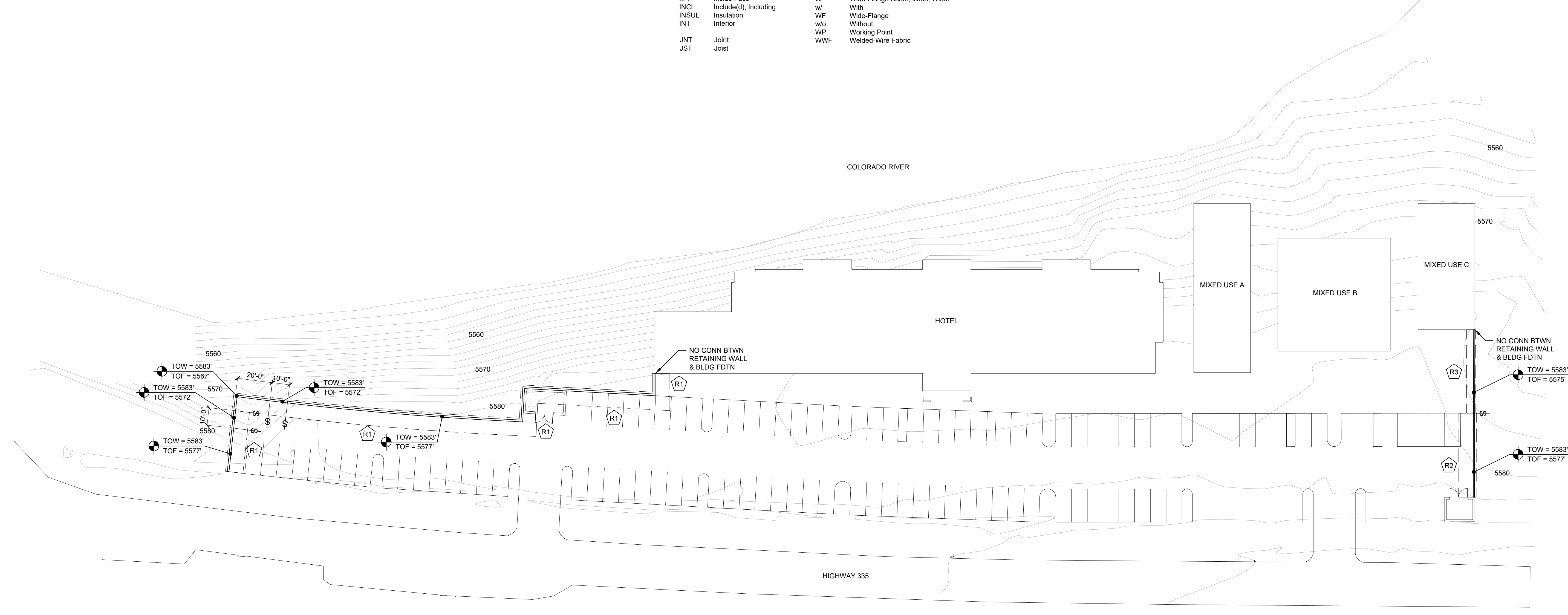
CAST-IN-PLACE CONCRETE

- Concrete properties shall be determined from designated Exposure Category F Class F3 as described in Section 19.3.1 of the latest edition of ACI 318 unless noted otherwise.
 - Minimum Compressive Strength, $f_c = 5,000$ psi at 28 days, normal weight.
 - Maximum water/cement ratio (limit w/c), 0.40.
 - Air Entrainment with 3/4" aggregate size where exposed to freeze/thaw = 6% +/- 1.5%.
- Concrete shall be ready-mixed in accordance with ASTM C94. Portland cement shall conform to ASTM C150, Type I or II. Normalweight aggregate shall conform to ASTM C33.
- Calcium Chloride shall not be added to concrete.
- Material, mixing, placement, and workmanship shall be in accordance with the requirements of the latest edition of the "Building Code Requirements for Reinforced Concrete" (ACI 318) and Section 1905 of the IBC. Each proposed concrete mix shall include test data.
- Concrete Placement: Cold weather is defined by ACI 306 as "The air temperature has fallen to, or is expected to fall below, 40°F; when cold weather conditions exist, place concrete complying with ACI 306. Hot weather is defined by ACI 306 as "any combination of high air temperature, low relative humidity, and wind velocity tending to impair the quality of fresh or hardened concrete or otherwise resulting in abnormal properties;" when hot weather conditions exist, place concrete complying with ACI 305.
- Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed on at least one composite sample for each 100 cubic yard or fraction thereof of each concrete mixture placed each day. Cast and laboratory- and/or field cure at least two sets of two standard cylinder specimens for each composite sample according to ASTM C 311/C 31M. Test one set of two specimens at 7 days and one set of two specimens at 28 days according to ASTM C 39/C 39M. A compressive-strength test shall be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated. Strength of each concrete mixture will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
- All Detailing, Fabrication, and Erection of reinforcing shall conform to latest edition of ACI "Manual of Standard Practice for Detailing Reinforced Concrete Structures" (ACI 315) and the current "Building Code Requirements for Reinforced Concrete" (ACI 318).
- Reinforcing Steel:
 - ASTM A615: Grade 40 for #3, Grade 60 for #4 and larger.
- The following minimum concrete cover shall be provided for reinforcement per ACI 318. Concrete cast against and permanently exposed to earth: 3"
 - Concrete cast against forms and exposed to earth or weather
 - #6 through #18 bars: 2"
 - #5 bar and smaller: 1-1/2"
- Unless noted otherwise, lap splices in concrete shall be class "B" tension lap splices (2-0" minimum) per the latest edition of ACI 318. Stagger alternate splices a minimum of one lap length. Extend all horizontal reinforcing continuous around corners and intersections or provide bent corner bars to match and lap with horizontal bars at corners and intersections of footings and walls.
- Provide bar supports and spacers to support all reinforcement in proper locations and wire adequately at intersections to hold bars firmly in position while concrete is placed. Bar supports and spacers which rest on exposed surfaces shall be hot dipped-galvanized or epoxy-coated.
- Welding of reinforcement is not permitted unless specifically noted or approved in writing by the Engineer.
- Isolation Joint Material shall be 1/2" thick full height of joint, unless noted otherwise.



BWR STANDARD ABBREVIATIONS

AB	Anchor Bolt	K	King Stud
ABV	Above	KIP	Thousand Pounds
ADDL	Additional	KIP FT	Thousand Pound-feet
ALT	Alternate	L	Length, Steel Angle
APPROX	Approximate(s)	LAG	Lag Screw
ARCH	Architect, Architectural	LLH	Long Leg Horizontal
B PL	Base Plate	LLV	Long Leg Vertical
BF	Both Faces	LOC	Location
BLDG	Building	LONG	Longitudinal
BLKG	Blocking	LST	Laminated Strand Lumber
BOS	Bottom Of Slab	LVL	Laminated Veneer Lumber
B.O.	Bottom Of	MATL	Material
BOF	Bottom Of Footing	MAX	Maximum
BS	Both Sides	MC	Moment Connection
BOW	Bottom Of Wall	MECH	Mechanical
BROGS	Bracing	MFR	Manufacturer
BRG	Bearing	MIN	Minimum
BS	Both Sides	MO	Masonry Opening
BTWN	Between	(N)	New
BWP	Brice Wall Panel	NIC	Not In Contract
C	Steel Channel	NS	Near Side
CANTIL	Cantilever	N-S	North-South
CIP	Cast-in-place	NTS	Not To Scale
CJ	Construction/Control Joint	OC	On Center
CLR	Clear	O.F.	Outside Face
CMU	Concrete Masonry Unit	OPNG	Opening
COL	Column	OPT	Optional
CONC	Concrete	OSB	Oriented Strand Board
CONN	Connection	PERIM	Perimeter
CONT	Continue(s), Continuous	PERP	Perpendicular
CON	Cripple Post	PL	Plate
CSK	Countersink, Countersunk	PL	Parallel
CTR	Center	PLYWD	Plywood
D	Deep, Depth	PREFAB	Prefabricated
DBL	Double	PSL	Parallel Strand Lumber
DEMO	Demolition, Demolish	PT	Pressure Preservative Treated
DET	Detail	RD	Roof Drain
DIAG	Diagonal	REF	Reference
DIM	Dimension	REINF	Reinforce(d), Reinforcement
DWG	Drawing	REGD	Required
DWL	Dowel	REV	Reverse(d)
EA	Each	RO	Rough Opening
EAF	Each Face	RS	Rough Sawn
EJ	Expansion Joint	SCHED	Schedule
ELEV	Elevation	SHTHG	Sheathing
ELEV	Elevator	SN	Structural General Notes
EMBED	Embed(ment)	SIM	Similar
EN	Edge Nail	SIP	Structural Insulated Panel
ENGR	Engineer	SOG	Slab On Ground
EDS	Edge of Slab	EQ	Equal
EQ	Equal	EQL SP	Equally Spaced
EQL SP	Equally Spaced	EW	Each Way
EW	Each Way	E-W	East-West
E-W	East-West	(E), EXIST	Existing
(E), EXIST	Existing	EXP	Expansion
EXP	Expansion	EXT	Exterior
FAS	Fascia(e)	STRUC'	Structure, Structural
FD	Floor Drain	SW	Shear Wall
FDTN	Foundation	T	Trimmer
FLG	Flange	T&B	Top And Bottom
FLR	Floor	T&G	Tongue-And-Groove
FO	Face Of	TB	Trough Bolt
FOC	Face Of Concrete	TBR	To Be Removed
FOM	Face Of Masonry	TEMP	Temporary
FOS	Face Of Stud	THD	Thread(ed)
FS	Far Side	T.O.	Top Of
FSTNR	Fastener	TOB	Top Of Beam
FTG	Footing	TOC	Top Of Concrete
GA	Gauge	TOF	Top Of Footing
GALV	Galvanized(d)	TOS	Top Of Steel
GC	General Contractor	TOW	Top Of Wall
GL	Glued-Laminated Wood	TRANSV	Transverse
H	Height	TYP	Typical
HD	Hold-down	UNO	Unless Noted Otherwise
HDR	Header	VERT	Vertical
HGR	Hanger	VIF	Verify In Field
HORIZ	Horizontal	VNR	Veneer
HSS	Hollow Structural Section	W	Wide-Flange Beam, Wide, With
I.F.	Inside Face	w/	With
INCL	Includ(e), Including	WF	Wide-Flange
INSUL	Insulation	w/o	Without
INT	Interior	WP	Working Point
JNT	Joint	WWF	Welded-Wire Fabric
JST	Joist		



SITE RETAINING WALL PLAN

- SCALE: 1" = 30'
- PLAN NOTES:
- ELEVATIONS SHOWN ARE SITE ELEVATIONS. SEE CIVIL DRAWINGS FOR MORE INFORMATION.
 - SEE LANDSCAPE DRAWINGS FOR WALL AND STAIR DIMENSIONS AND ELEVATIONS NOT SHOWN IN THESE DRAWINGS.
 - PROVIDE VERT CONTROL JOINTS PER 'TYP VERT CONTROL JNT IN CONC WALL' THIS SHEET.
 - INDICATES FOOTING STEP. SEE 'TYP FOOTING STEP' THIS SHEET.
 - (R#) INDICATES RETAINING WALL TYPE. SEE 'TYP RETAINING WALL DETAILS' THIS SHEET.

RED

1001 Grand Ave #103
Glenwood Springs
CO 81601

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2024

Lot 1 Highway PUD

Lot 1 Highway PUD
New Castle, CO
81647

bwrpe
1010 W 24th St
Rifle, Colorado 81650
(970) 462-8652
bwr@bwr.pe
BWR Project No. 24011

SD 10/3/23
LAND USE APP. 06/11/24

NOT FOR CONSTRUCTION
Site Retaining Wall Plan

S-001