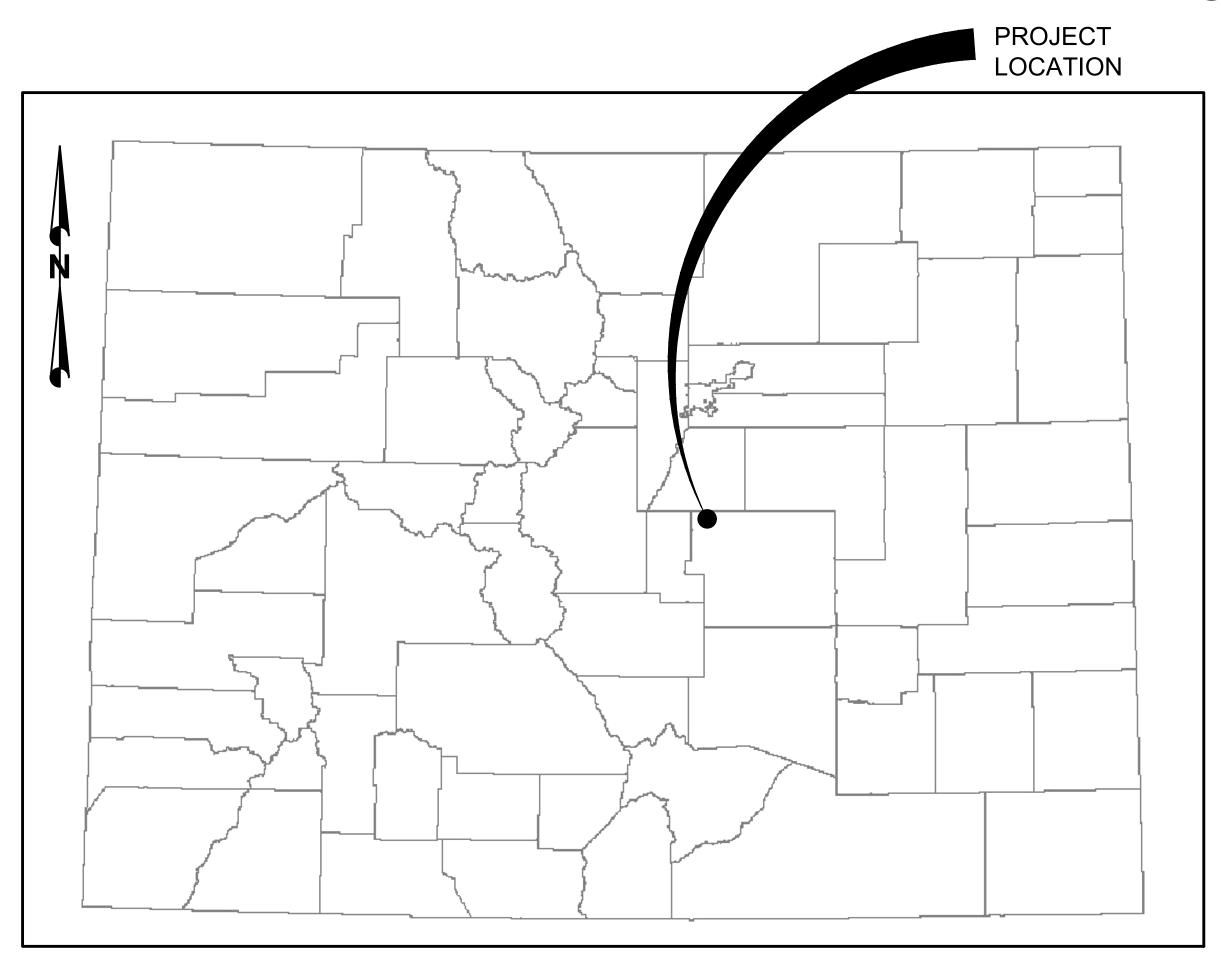
# TOWN OF MONUMENT 2.0 MG WATER STORAGE TANK

## MONUMENT COLORADO



## PROJECT LOCATION MAP

## **DESIGN 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

MES ADAMS, PE #38375

SPECIFICATIONS.

4/21/22 DATE

## OWNER/DEVELOPER'S STATEMENT:

I. THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN AND ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND

TOWN OF MONUMENT

TOM THARNISH, PUBLIC WORKS DIRECTOR 645 BEACON LITE RD, MONUMENT, CO 80132

## EL PASO COUNTY:

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

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

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

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

## SHEET INDEX

NO.	TITLE
	COVER SHEET
TS 100	SITE PLAN
TS 101	GRADING PLAN
TS 102	TANK PROFILE
TS 103	LANDSCAPING PLAN
E01	ELECTRICAL LEGEND
E02	ELECTRICAL ONE-LINES
E03	ELECTRICAL SITE PLAN

OWNER: TOWN OF MONUMENT

CONTACT: TOM THARNISH, PUBLIC WORKS DIRECTOR EMAIL: TTHARNISH@TOMGOV.ORG

APPLICANT: TOWN OF MONUMENT

PLAN PREPARER: FORSGREN ASSOCIATES, INC. CONTACT: JAMES ADAMS, PE PHONE: 720-214-5884 EMAIL: JADAMS@FORSGREN.COM

PROPERTY ADDRESS: 744 FOREST VIEW WAY, MONUMENT, CO 80132

PROPERTY TAX SCHEDULE NUMBER: 7116204006

LEGAL DESCRIPTION: LOT 6 FOREST VIEW ESTATES IV.

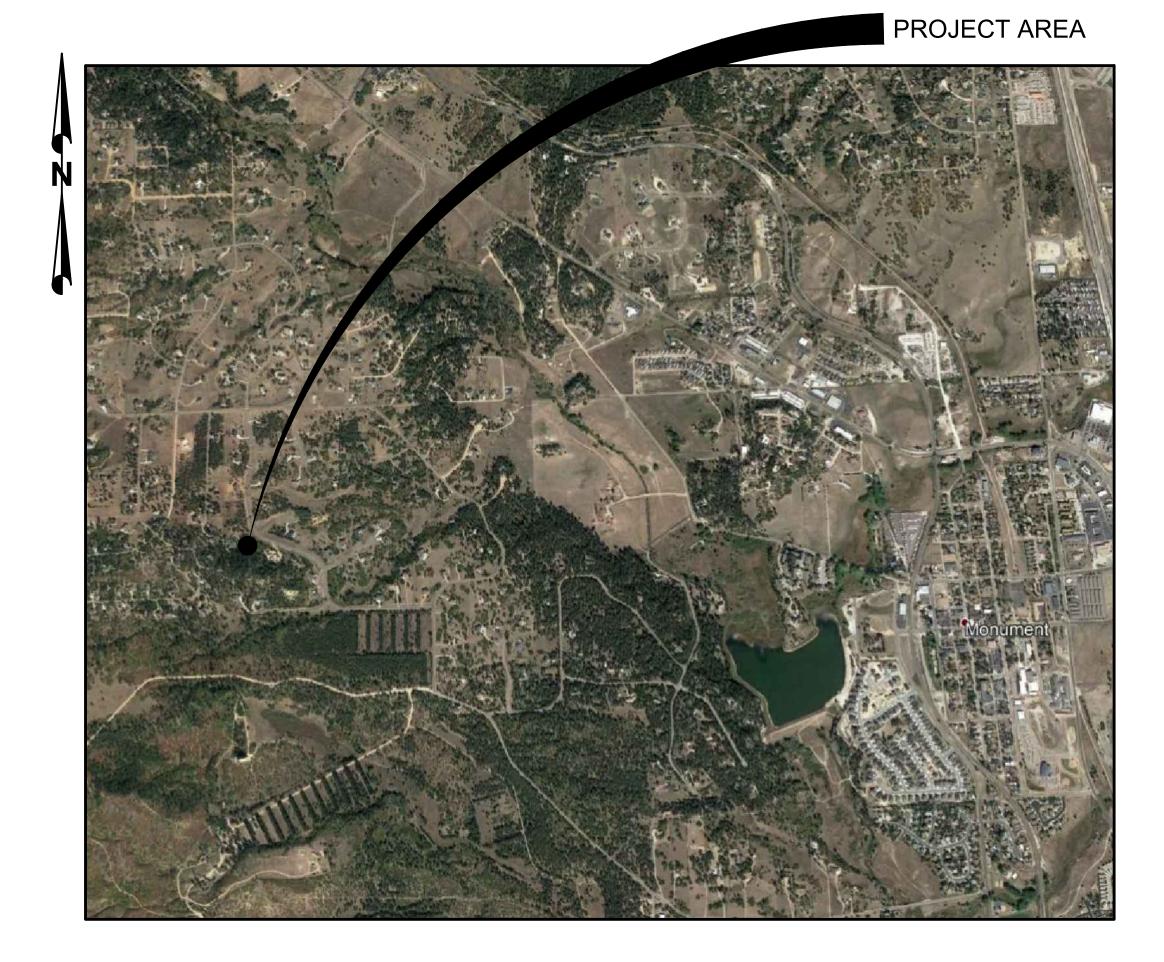
LOT/PARCEL SIZE: 2.55 ACRES

EXISTING/PROPOSED LAND USE AND ZONING: RR-2.5

TOTAL GROSS BUILDING SQUARE FOOTAGE: TANK SQUARE FOOTAGE = APPROX. 11,120 SF

FA PROJECT NO. 01-18-0124

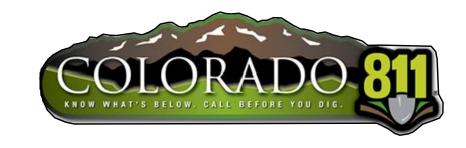
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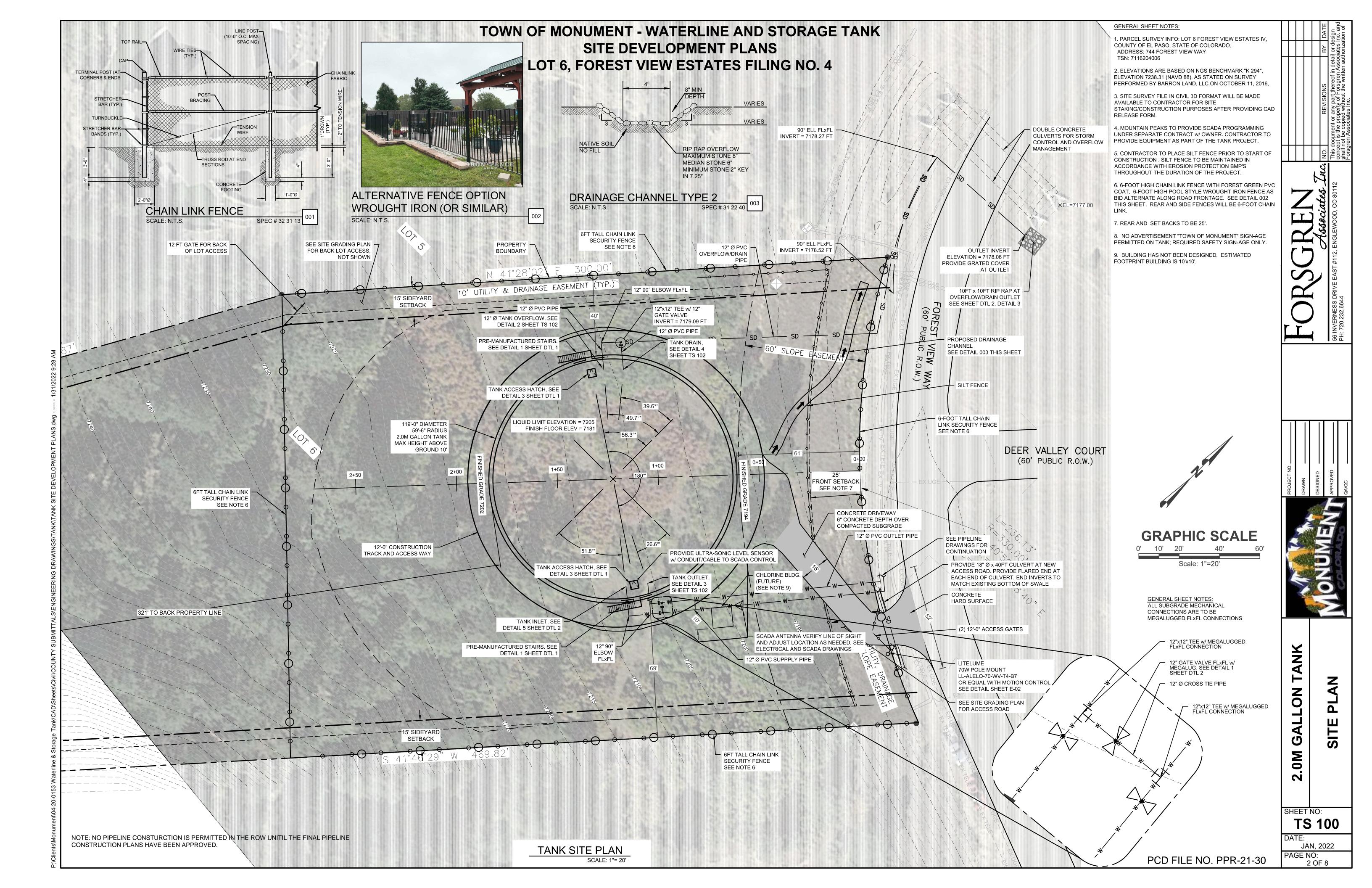


**VICINITY MAP** 

N.T.S.



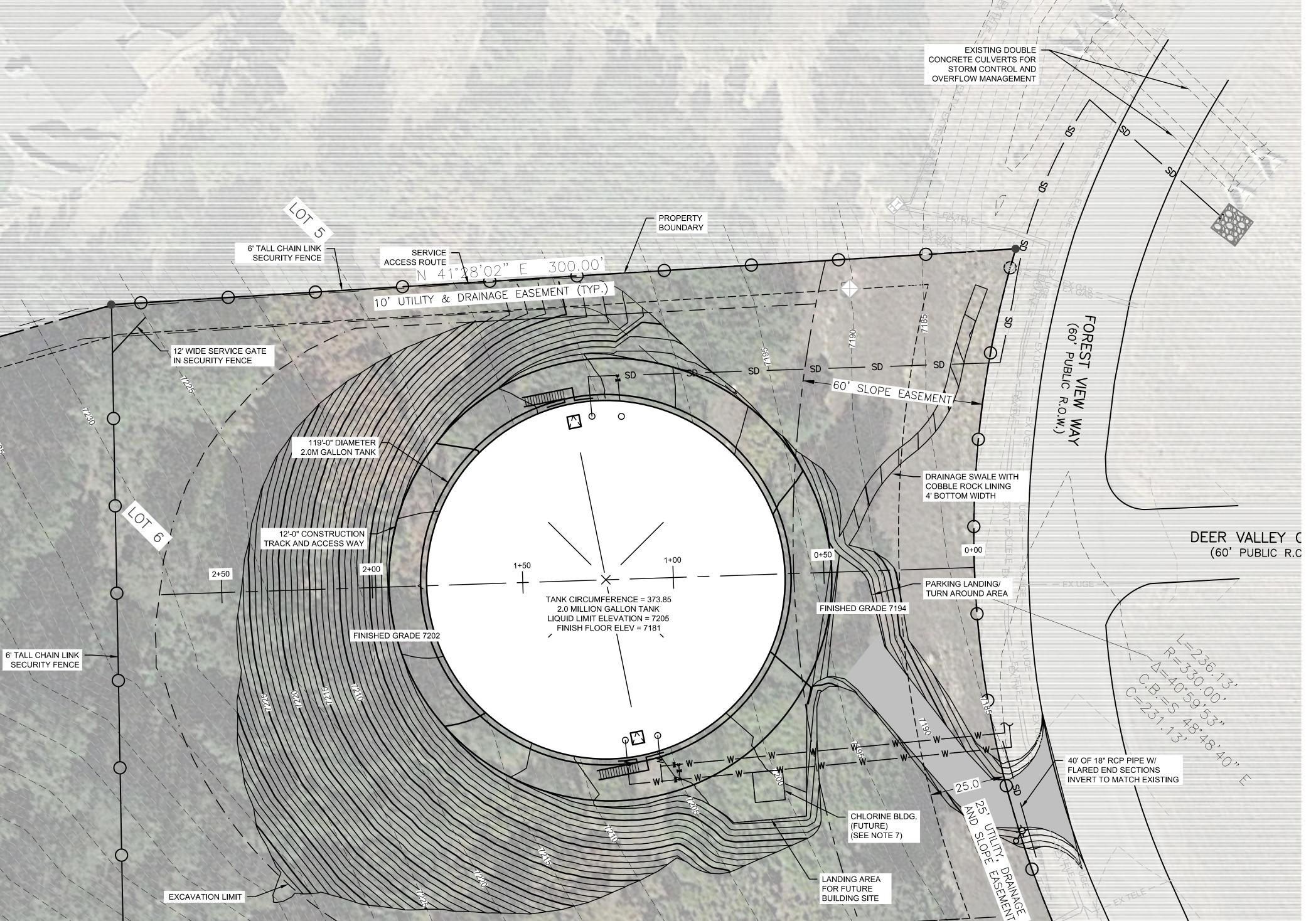




## **TOWN OF MONUMENT - WATERLINE AND STORAGE TANK** SITE DEVELOPMENT PLANS

**GRAPHIC SCALE** 

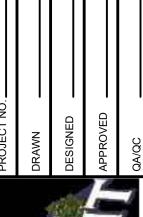




TANK SITE GRADING PLAN SCALE: 1"= 20'

## **GRADING NOTES**

- GRADING SHOWN ON PLAN REFLECTS THE EXISTING AND FINISHED GRADE FOR THE TANK
- TEMPORARY EXCAVATIONS FOR CONSTRUCTION OF THE TANK AND ASSOCIATED UTILITIES SHALL FOLLOW RECOMMENDATION OF THE GEOTECHNICAL REPORT PREPARED BY NINYO & MOORE DATED NOVEMBER 18, 2016.
- FINISHED GRADES SHALL NOT EXCEED A 2 HORIZONTAL TO 1 VERTICAL SLOPE UNLESS SPECIFICALLY AGREED TO IN WRITING BY THE ENGINEER FOR LIMITED LOCATIONS ON THE SITE WHERE EXPOSED ROCK MAY ALLOW A STEEPER SLOPE AND WHERE NECESSARY TO CATCH THE **EXISTING SURFACE.**
- SITE RESTORATION SHALL CONSIST OF PLACEMENT/REPLACEMENT OF 4" MINUMUM DEPTH TOPSOIL OVER LOOSELY COMPACTED SUB-SURFACE MATERIAL.
- TOPSOIL SHALL BE COVERED BY A DOUBLE NET STRAW/COCONUT BLANKET WITH BIODEGRADEABLE NETTING. BLANKET SHALL BE INSTALLED AND ANCHORED PER MANUFACTURER RECOMMENDATIONS.
- HYDROSEED WITH APPROVED NATIVE GRASS MIX.
- BUILDING HAS NOT BEEN DESIGNED. ESTIMATED FOOTPRINT BUILDING IS 10'X10'.





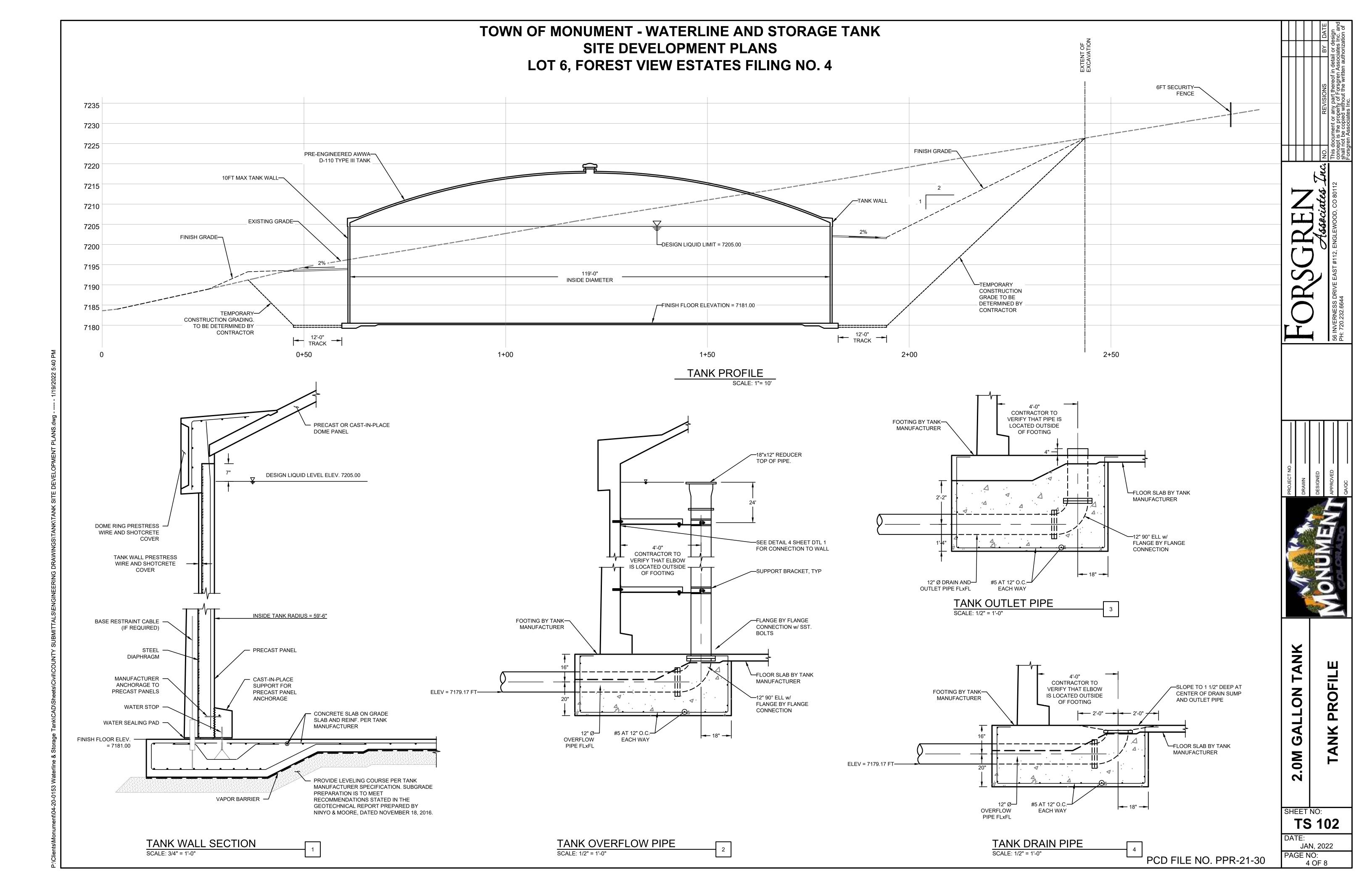
GRADIN 2.0M

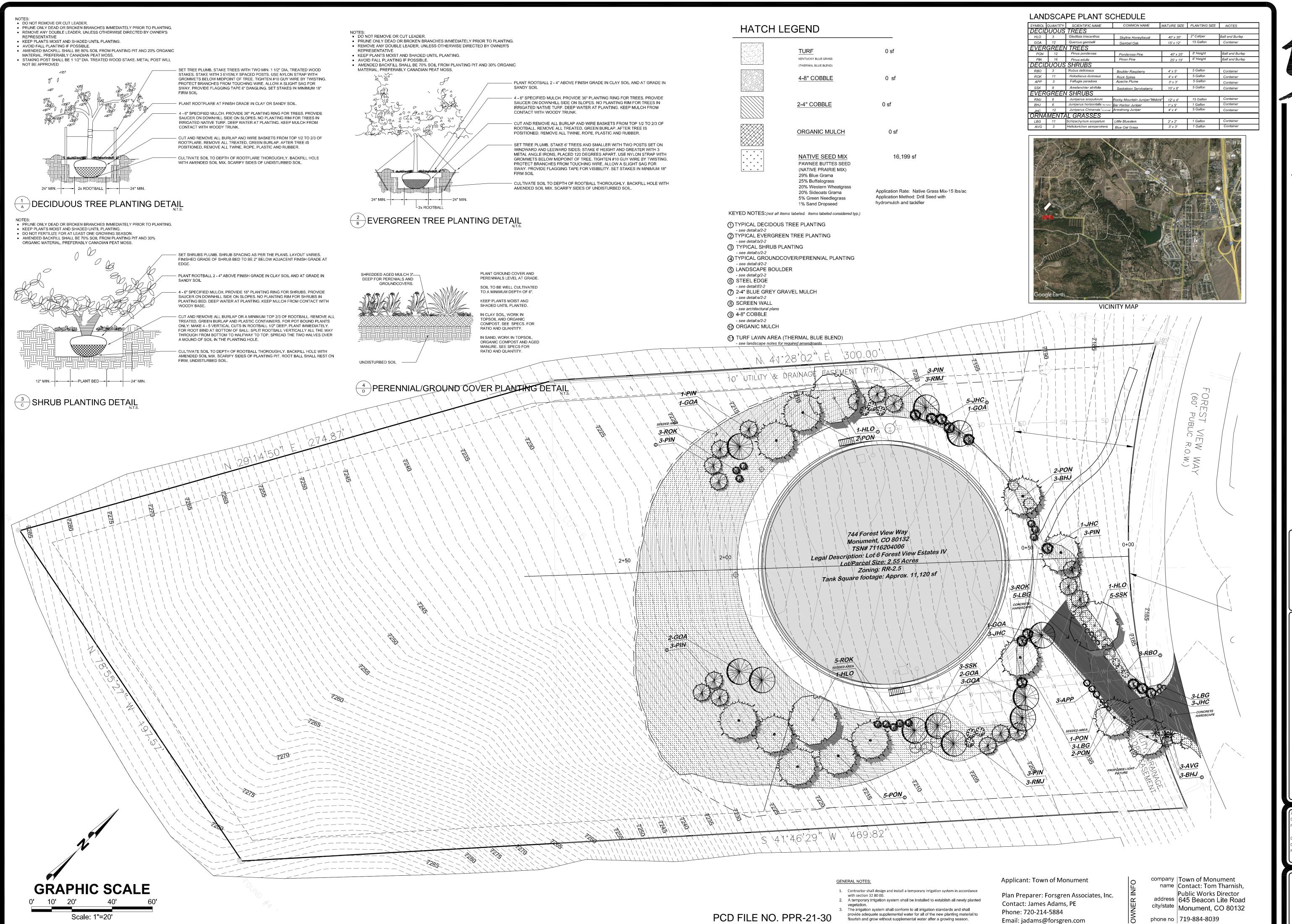
SHEET NO: **TS 101** 

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JAN, 2022 PAGE NO:

6' TALL CHAIN LINK SECURITY FENCE





YOW ARCHITECTS PC

e & Storage Tank

Waterline
820'07
744 Forest Vi

lob No. 20,028
Directory Landscape
file LANDSCAPING PLAN
12-20-2021
Drawn By DBN
Date 8.23.2021

DRAWING NO.

1 of 1

FINAL LANDSCAPE

## **ABBREVIATIONS**

**KVAR** 

MCC

MCM

**FORWARD** 

HANDHOLE

FLOW SWITCH

GREEN, GROUND

#8 GROUND WIRE

HIGH, HUMIDISTAT

HAND-OFF-AUTO

HORSEPOWER

HERTZ (CYCLE)

INPUT/OUTPUT

JUNCTION BOX KILOVOLT

**KILOVAR** 

KILOWATT

LOW, LEVEL

LWCO LOW WATER CUTOFF

MILLIAMPERE

STARTER

KILOVOLT AMPERE

KILOWATT HOUR

LIGHTING PANEL

LIMIT SWITCH, LEVEL

MAGNETIC MOTOR

MAIN CIRCUIT BREAKER

MOISTURE DETECTOR

MANHOLE, MOUNTING

MOTOR CONTROL CENTER

THOUSAND CIRCULAR MIL

MOTOR OPERATED VALVE

MANUAL MOTOR STARTER

NORMALLY OPEN, NUMBER

PUSH BUTTON, PULL BOX

PHASE (CHEMICAL TERM)

TRANSFORMER, PROGRAM

POWER FACTOR METER

PROGRAMMABLE LOGIC

MOTOR SPACE HEATER

NORMALLY CLOSED

OPEN

OVERLOAD

CONTROLLER

**POWER PANEL** 

POTENTIAL

2 POLE

REVERSE

PRESSURE SWITCH

RED, RAISE, RELAY,

LIGHTNING ARRESTOR

LOCAL AREA NETWORK

HAND-OFF-REMOTE

HIGH WATER CUTOFF

GEARED LIMIT SWITCH

GROUND FAULT INTERRUPTER

HIGH MOTOR TEMPERATURE

A AC	AMBER, AMPERE, ALARM ALTERNATING CURRENT	RECP RGS	RIGID GALVANIZED STEEL
AFD	ADJUSTABLE FREQUENCY	RTD	
^	DRIVE	DTU	DETECTOR
AFF AM	ABOVE FINISHED FLOOR AMMETER	RTU RVSS	
ATO	AUTOMATIC THROWOVER	RVSS	STATE STARTER
AWG		S2	SIZE 2 STARTER
C	CLOSE, COUNTER,	SCADA	
O	CONTACTOR	OONDA	DATA ACQUISITION
CAP	CAPACITOR	SP	SINGLE POLE
CB	CIRCUIT BREAKER	SPDT	
CD	CONTROL DAMPER	SPST	
CKT		SS	SELECTOR SWITCH
CL2	CHLORINE	SV	SOLENOID VALVE
CP	CONTROL PANEL	SWB	SWITCHBOARD
CPT	CONTROL POWER	SWGR	
	TRANSFORMER	Т	THERMOSTAT, TIMER,
CS	CONTROL STATION		TOTALIZER
CT	CYCLE TIMER, CURRENT	TACH	TACHOMETER
	TRANSFORMER	TB	TERMINAL BLOCK
CTM	CYCLE TIMER MOTOR	TD	TIME DELAY RELAY
2/C	2 CONDUCTOR	TEMP	
4"C		TQ TO	TORQUE
DC	DIRECT CURRENT	TS	TEMPERATURE SWITCH
DM	DAMPER MOTOR, DEMAND	UG UPS	UNDERGROUND
DDDT	METER	UPS	UNINTERRUPTIBLE POWER SUPPLY
DPDT DPST	DOUBLE POLE DOUBLE THROW	V	VOLTS
DPS	DOUBLE POLE SINGLE THROW DIFFERENTIAL PRESSURE	VA	VOLT AMPERE
DP3	SWITCH	VLS	VALVE LIMIT SWITCH
DS	DISCONNECT SWITCH	VM	VOLTMETER
E	ELECTRIC OPERATOR FOR	W	WHITE, WATTS
_	CONTROL DAMPER OR VALVE	WH	WATTHOUR METER
EMH		WM	WATT METER
ETM	ELAPSED TIME METER	WP	WEATHERPROOF
EX	EXISTING	XFMR	TRANSFORMER

**EXPLOSION PROOF** 

**AUXILIARY RELAY** 

POSITION SWITCH

YELLOW

### AREA DESIGNATIONS

THE SPECIAL AREA DESIGNATION BOXES, AS DEFINED BELOW, ARE LOCATED ON THE PLAN DRAWINGS TO DEFINE ELECTRICAL INSTALLATION REQUIREMENTS. DESIGNATION BOXES ARE LOCATED WITHIN ROOM OR BELOW ROOM NUMBER. ALL INDOOR AREAS NOT INDICATED OTHERWISE ARE AREA TYPE 1 AND MINIMUM NEMA TYPE 1 ENCLOSURES.

AREA TYPE 1 INDOOR AND DRY AREA. REQUIRES MINIMUM NEMA TYP 1 ENCLOSURES FOR ALL EQUIPMENT AND GASKETED FITINGS IN CONDUIT SYSTEMS.

AREA TYPE 1A CORROSIVE CHEMICAL FEED AND STORAGE ROOMS. CONDUIT SYSTEM SHALL BE EXPOSED PVC COATED CONDUIT WITH FITTINGS, AND ACCESSORIES.

AREA TYPE 4 INDOOR WET LOCATIONS SUCH AS VAULTS, HOSEDOWN AREAS, BASEMENTS, ETC MINIMUM NEMA TYPE 4 ENCLOSURE FOR EQUIPMENT AND GASKETED FITTINGS IN A CONDUIT SYSTEM.

AREA TYPE 7A CLASS 1, DIVISION 1 AREA AS DEFINED BY NEC. ALL EQUIPMENT AND CONDUIT SYSTEMS SHALL BE RATED FOR USE IN THIS AREA.

AREA TYPE 7B CLASS 1, DIVISION 2, GROUP C AND D (METHANE, GASOLINE) AS DEFINED BY NEC. EQUIPMENT AND CONDUIT SYSTEMS SHALL BE RATED FOR USE IN THIS AREA.

AREA TYPE 12 INDOOR, DRY, DIRTY AREA. REQUIRES MINIMUM NEMA TYPE 12 GASKETED  $^{\mathtt{J}}$  ENCLOSURES FOR ALL EQUIPMENT AND GASKETED FITTINGS IN CONDUIT SYSTEMS.

AREA TYPE 4X OUTDOOR AND INDOOR WET LOCATIONS SUBJECT TO CORROSION. CONDUIT SYSTEM SHOULD BE PVC COATED RIGID GALVANIZED STEEL WITH PVC COATED FITTINGS,

### GENERAL REQUIREMENTS

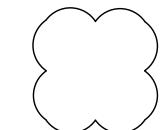
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING ALL CONDUITS NOT SHOWN ON THE PLANS. THIS SHALL INCLUDE ALL CONDUITS SHOWN ON THE ONE-LINES AND HOME-RUNS SHOWN ON THE PLAN DRAWINGS. CONDUITS SHALL BE ROUTED AS DEFINED IN THE SPECIFICATIONS.

BOXES, AND STAINLESS STEEL HARDWARE.

- 2. SPARE WIRES SHALL BE TAPED AND COILED.
- 3. IF EQUIPMENT SUPPLIED BY MANUFACTURER HAS A LARGER LOAD THAN VALUE SHOWN, THE CABLE CONDUIT AND ELECTRICAL EQUIPMENT SHALL BE ENLARGED, AS REQUIRED, TO ACCOMODATE THE HIGHER VALUE.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING PROPERLY SIZED STARTER OVERLOADS FOR EQUIPMENT FURNISHED.
- 5. LIGHTING AND RECEPTACLE CIRCUITS DESIGNATED ON THE FLOOR PLANS ARE NOT SHOWN ON THE ONE-LINES. CONDUCTORS FOR LIGHTING, RECEPTACLES, AND MISCELLANEOUS 120VAC CIRCUITS SHALL BE MINIMUM NO. 12 AWG. CONDUIT FOR LIGHTING, RECEPTACLES, AND MISCELLANEOUS 120VAC CIRCUITS SHALL BE MINIMUM
- 6. IN AREAS WHERE THERE ARE OVERHEAD BRIDGE CRANES, HOISTS, ETC., NO CONDUITS SHALL BE RUN OVERHEAD THAT WILL INTERFERE WITH THE OPERATION OF THE EQUIPMENT.

## GENERAL NOTES

- SOLID LINES INDICATE NEW WORK OR EQUIPMENT.
- 2. DOTTED LINES . . . INDICATE EXISTING WORK OR EQUIPMENT.
- 3. DASHED LINES \_\_\_\_\_ INDICATE FUTURE WORK OR EQUIPMENT
- 4. THIS IS A GENERAL LEGEND SHEET. SOME SYMBOLS AND ABBREVIATIONS MAY NOT BE UTILIZED ON THIS SPECIFIC PROJECT.
- 5. INFORMATION RELATED TO CIRCUIT IDENTIFICATION, WIRE & CONDUIT SIZES, AND ROUTING, IS ON THE FOLLOWING DRAWING TYPES.
- A. ONE-LINE DIAGRAMS SHOW CIRCUIT IDENTIFICATION, WIRE QUANTITY AND SIZES, AND CONDUIT SIZE WITHIN STRUCTURES. ONE-LINE DIAGRAMS ALSO INDICATE ORIGIN AND DESTINATION OF CIRCUITS, AND IDENTIFY CIRCUITS ROUTED UNDERGROUND.
- B. FOR CIRCUITS WITHOUT UNDERGROUND PORTIONS, BUILDING FLOOR PLANS SHOW LOCATION OF EQUIPMENT FOR DETERMINING CIRCUIT LENGTH WITHIN THE STRUCTURE. FOR CIRCUITS WITH UNDERGROUND PORTIONS, ANTICIPATED PENETRATION OF UNDERGROUND CONDUITS ARE SHOWN ON STRUCTURE PLANS FOR DETERMINING THE LENGTH OF IN-STRUCTURE PORTIONS OF CIRCUITS. BUILDING FLOOR PLANS MAY ALSO SHOW HOME RUNS FOR LIGHTING, RECEPTACLE, AND OTHER MISCELLANEOUS EQUIPMENT CIRCUITS.
- C. SITE PLANS INDICATE THE GENERAL ROUTING OF UNDERGROUND CONDUITS AND DUCT BANKS. CIRCUITS ROUTED IN UNDERGROUND CONDUITS OR DUCT BANKS ARE INDICATED IN DUCT BANK SECTIONS REFERENCED ON THE SITE PLAN.
- D. DUCT BANK SECTIONS AND SCHEDULES IDENTIFY CONDUIT SIZE, CONDUIT MATERIAL, ARRANGEMENT OF THE UNDERGROUND CONDUITS, AND CIRCUITS ROUTED IN EACH UNDERGROUND CONDUIT.



CLOUDED MARKINGS INDICATE WORK IN EXISTING AREAS THAT IS NEW OR NEW WORK ON AN EXISTING PIECE OF EQUIPMENT.



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SHEET NO: **E01** 

DATE: MAY 2021 PAGE NO:

PCD FILE NO. PPR-21-30

