TOWN OF ODON DAVIESS COUNTY, INDIANA

WATER UTILITY IMPROVEMENTS PROJECT

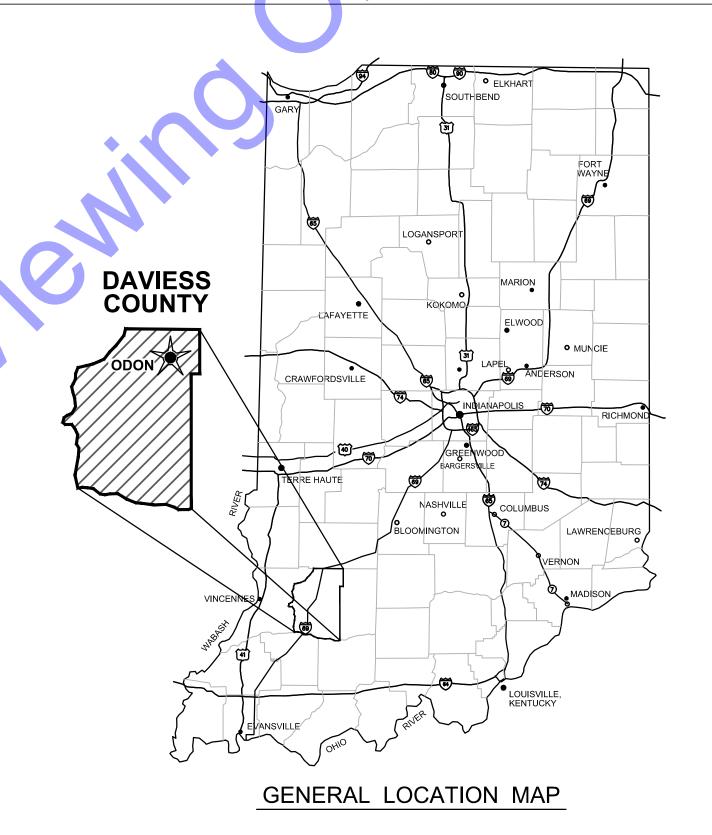
DIVISION "B" - NEW WATER STORAGE TANK DECEMBER 2024

TOWN COUNCIL

PRESIDENT SUSIE ROACH BJ SANDERS.. MEMBER

DOUG BENJAMIN...MEMBER

MANDY WILZ. .CLERK-TREASURER . TOWN SUPERINTENDENT JOSH KIDWELL





INDIANA P.E. No. 12000723

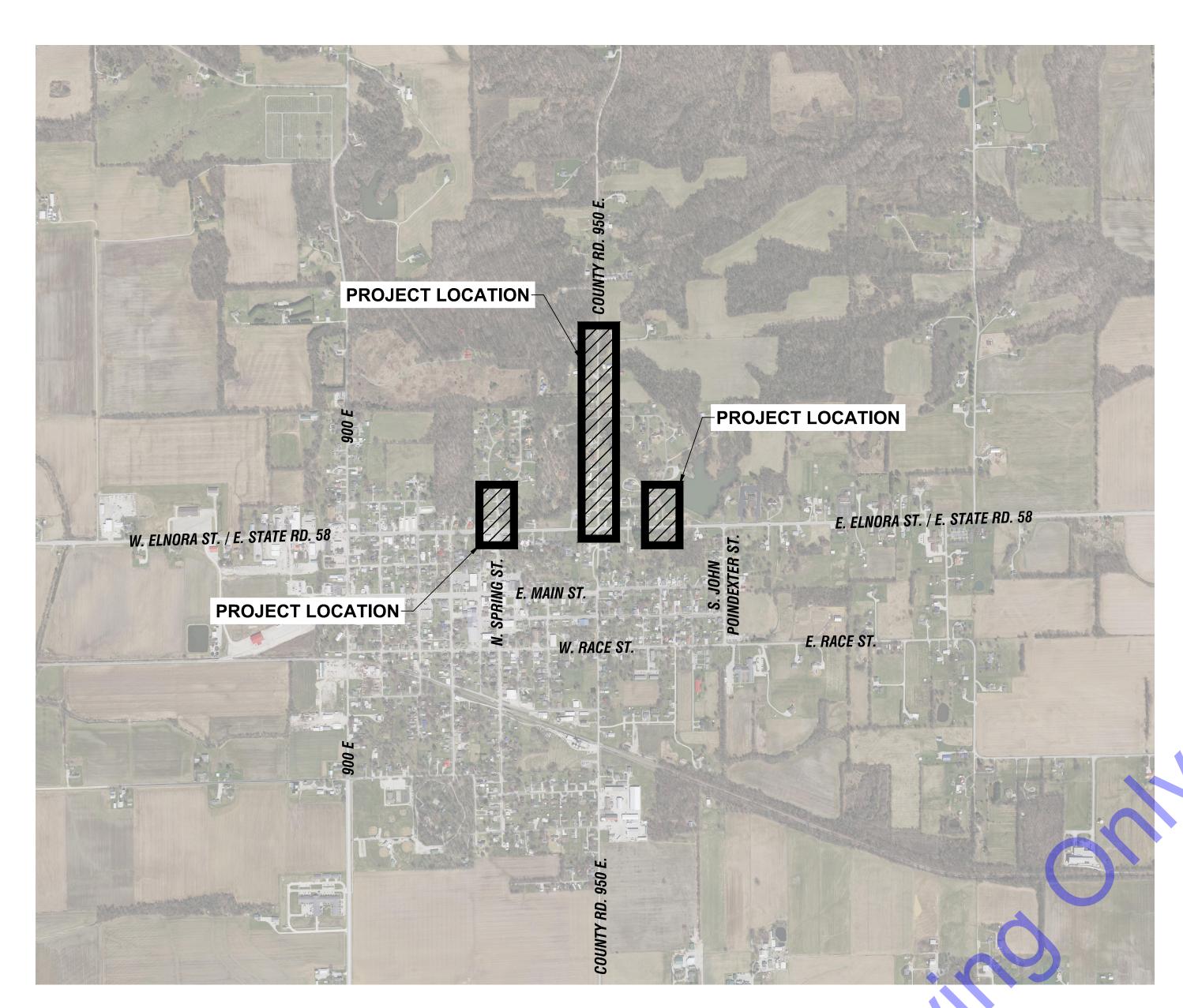
04/22/2025 DATE:

AARON R. ROHNER

04/22/2025 DATE:

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CONTRACT NO. : W21115



PROJECT LOCATION MAP

SCALE: 1"=800'-0"

0 800' 1600'

	С	PRAWING SET INDEX
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03	G3	GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS
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30	E3-0	ELECTRICAL- GROUND STORAGE TANK MIXER
31	E5-0	ELECTRICAL- DETAILS



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Submittal / Revision	UPDATE INDEX - NEW SHEET										
By	AR										
Date	2/202										

Issue Date: Project No: Scale: 04/22/2025 W21115 AS SHOWN

PROJECT LOCATION MAP AND DRAWING SET INDEX

Sheet: 02 OF 31

G2

GENERAL ABBREVIATIONS

	<u> </u>		ABBITE VIII TITO		
Α	AIR	FLD	FILTRATE DRAIN	P/L	PROPERTY LINE
AB	ANCHOR BOLT	FLG	FLANGE	POJ	PUSH ON JOINT
	ABOVE FINISH FLOOR				POUNDS PER SQUARE FOOT
AFF		FL	FLUSHING LINE	PSF	
ALT	ALTERNATE	FLR	FLOOR	PSI PVO	POUNDS PER SQUARE INCH
ALUM	ALUMINUM	FM	FORCE MAIN	PVC	POLYVINYL CHLORIDE
@	AT	FRP	FIBER REINFORCED PLASTIC	PW	POTABLE WATER
APP.	APPARENT	FT	FEET OR FOOT	_	
ATT	AERATION TANK TRANSFER	FTG	FOOTING	R	RECIRCULATION
AUTO	AUTOMATIC	FW	FINISHED WATER	RAD	RADIUS
AVG	AVERAGE	_		RAS	RETURN ACTIVATED SLUDGE
_	B 4 5 5 1 5	G	GAS	RCP	REINFORCED CONCRETE PIPE
В	BAFFLE	GALV	GALVANIZED	RD	ROOF DRAIN
BLDG	BUILDING	GEN	GENERAL	REINF	REINFORCING
BM	BENCH MARK	GRD	GROUND OR GRADE	REQ'D	REQUIRED
BOT	BOTTOM			R/W (ROW)	RIGHT-OF-WAY
BRG	BEARING	НВ	HOSE BIBB		
		HORIZ	HORIZONTAL	SAN	SANITARY
CFM	CUBIC FEET PER MINUTE	HP	HORSEPOWER	SAS	SANITARY SEWER
CL	CENTERLINE	HW	HOT WATER	SCH	SCHEDULE
CO	CLEAN OUT			SECT	SECTION
COL/C	COLUMN	ID	INSIDE DIAMETER	SF	SQUARE FEET
CONC	CONCRETE	IJ	ISOLATION JOINT	SHT	SHEET
COP	COPPER	INV	INVERT	SL	SAMPLE LINE
CJ	CONSTRUCTION JOINT	IP	IRON PIN	SOS	STORM SEWER
CW	COLD WATER			SP	STOP PLATE
CY	CUBIC YARD	LAV	LAVATORY	SQ	SQUARE
		LB	POUND	STD	STANDARD
D	DRAIN	LL	LIVE LOAD	S STL, SS	STAINLESS STEEL
DEC	DECANT	LLV	LONG LEG VERTICAL	STL	STEEL
DIA	DIAMETER	LTG	LIGHTING	SUP	SUPERNATANT
DIM	DIMENSION			SY	SQUARE YARD
DI	DUCTILE IRON PIPE	MAX	MAXIMUM		
DL	DEAD LOAD	MCC	MOTOR CONTROL CENTER	TOS	TOP OF SLAB
DSPT	DOWN SPOUT	MGD	MILLIONS GALLONS PER DAY	TOW	TOP OF WALL
DWG	DRAWING	МН	MANHOLE	TW	TERTIARY WATER
		MIN	MINIMUM, MINUTE	TYP	TYPICAL
E	ELECTRICAL CONDUIT	MJ	MECHANICAL JOINT		
EA	EACH			V	VACUUM OR VALVE
EF	EACH FACE	NC	NORMALLY CLOSED	VAR	VARIES
EFFL	EFFLUENT	NG	NATURAL GAS	VERT	VERTICAL
EL	ELEVATION	NIC	NOT IN CONTRACT	V =	VEITIONE
EOP	EDGE OF PAVEMENT	NO	NORMALLY OPEN	W	WEIR
EW	EACH WAY	NO.	NUMBER	W/	WITH
EX	EXISTING	NPW	NON-POTABLE WATER	W/O	WITHOUT
EXF	EXHAUST FAN	141 44	NOIVI OTABLE WATER	WAS	WASTE ACTIVATED SLUDGE
EXP JP	EXPANSION JOINT	OC	ON CENTER	WC	WATER CLOSET
		OD	OUTSIDE DIAMETER	WH	WATER GEOSET WATER HEATER
F	FILTER	OPG	OPENING	WL	WATER LINE
FCAR	FLANGED COUPLING ADAPTER,	OPG	OPPOSITE	WWF	WELDED WIRE FABRIC
IUAN	RESTRAINED	OFF	OFFOSITE	V V V I	WELDED WIRE FADRIC
FD	FLOOR DRAIN	PB	PULL BOX	ΥH	YARD HYDRANT
FDN	FOUNDATION	PB PE	POLYETHYLENE EXP. JT.	IП	IARD DIDKANI
FDN FH	FIRE HYDRANT	FC			
ιП	I INE HTURANT		MATERIAL		

BOOSTER PUMP

AIR RELIEF VALVE

FLOW CONTROL VALVE

ECCENTRIC PLUG VALVE

INCREASER / REDUCER

PIPE THROUGH FLOOR / WALL

BLIND FLANGE OR PLUG

HOSE BIBB

STOP PLATE

BUTTERFLY VALVE

FLOW METER

GATE VALVE

CHECK VALVE

GENERAL SCHEMATIC LEGEND

QUICK DISCONNECT

BALL CHECK VALVE

MOTOR ACTUATOR

90° V-NOTCH WEIR

FLEXIBLE CONNECTION

MAGNETIC FLOW METER

NEW PIPING AND EQUIPMENT

EXISTING PIPING AND EQUIPMENT

FUTURE PIPING AND EQUIPMENT

ULTRASONIC SENSOR

PUMP

FLANGE FILLER & S.S. MESH SCREEN

 \Box

SCR

W | V90

FLANGED SPOOL SECTION

PRESSURE REDUCER VALVE

FLANGED COUPLING ADAPTER

GENERAL NOTES

- 1. ALL PROPERTY AND RIGHT-OF-WAY LINES INFORMATION SHOWN IN DRAWING SET ARE APPARENT AND SHALL NOT BE DEEMED EXACT LOCATIONS, UNLESS OTHERWISE NOTED. INFORMATION WAS OBTAINED VIA "INDIANA ON-LINE" GIS WEBSITE.
- 2. CONTRACTOR SHALL MAINTAIN 10'-0" HORIZONTAL AND 1'-6" VERTICAL SEPARATION BETWEEN SEWERS (INCLUDING SERVICE LATERALS & WATER MAINS IN ACCORDANCE WITH IDEM REQUIREMENTS, UNLESS SPECIFICALLY NOTED IN THE PLANS OTHERWISE.) MANHOLES AND WATER MAINS SHALL HAVE MIN. 8'-0" SEPARATION, UNLESS OTHERWISE NOTED IN PLANS.
- 3. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING LOCATIONS OF ALL EXISTING UTILITIES NEAR ALL PROPOSED WORK ACTIVITIES. IF UTILITY CONFLICTS OCCUR, CONTRACTOR SHALL NOTIFY RPR PRIOR TO PROCEEDING WITH WORK.
- 4. EXISTING UTILITY INFORMATION SHOWN IN DRAWING SET, MEETS "ASCE 36-02" QUALITY LEVEL "C", UNLESS OTHERWISE NOTED.

UTILITY COORDINATION AND PROJECT DEPICTION OF EXISTING SUBSURFACE UTILITY DATA:

UTILITY QUALITY LEVEL DESCRIPTIONS:

UTILITY QUALITY LEVEL A - PRECISE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES OBTAINED BY THE ACTUAL EXPOSURE (OR VERIFICATIONS OF PREVIOUSLY EXPOSED AND SURVEYED UTILITIES) AND SUBSEQUENT MEASUREMENT OF SUBSURFACE UTILITIES, USUALLY A A SPECIFIC POINT. ACCURACY OF LOCATION MATCHES PROJECT SURVEY TOLERANCE. **UTILITY QUALITY LEVEL B** - INFORMATION OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION SUBSURFACE UTILITIES. THE RELIABILITY OF THIS INFORMATION IS SURVEYED TO PROJECT CONTROL AND SUBJECT TO ACCURACY LEVELS OF THE GEOPHYSICAL TOLERANCE DEFINED BY THE PROJECT. **UTILITY QUALITY LEVEL C** - INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE

UTILITY QUALITY LEVEL D - INFORMATION DERIVED FROM EXISTING RECORDS OR VERBAL RECOLLECTIONS. 5. NORTHING AND EASTING COORDINATES SHOWN ON ALL MANHOLE, INLETS, ETC. ARE SHOWN FROM

CENTER OF STRUCTURE NOT CASTING, UNLESS OTHERWISE NOTED.

HATCHING SYMBOLS

- GROUT

- CONCRETE

- STEEL

-CMU WALL (PLAN VIEW)

-GRANULAR BACKFILL (PROFILE VIEW)

- DEMOLITION (CONTRACTOR SHALL REFER TO DETAILED SPECIFICATIONS)

- COMPACTED GRANULAR BACKFILL OR

COMPACTED FOUNDATION

- ABANDONED IN PLACE

ABOVE GROUND UTILITY FEATURES AND CORRELATING QUALITY LEVEL "D" INFORMATION.

PROJECT NOTES

- 1. CONTRACTOR TO LOCATE ALL EXISTING CUSTOMER WATER METERS AND REPLACE PER SPECIFICATIONS
- 2. IN THE AREAS WHERE WATER MAIN IS BEING REPLACED AND ABANDONED, CONTRACTOR TO RECONNECT ALL SERVICES FROM THE ABANDONED WATER MAINS TO THE NEW 6" WATER MAINS AND REPLACE THE LENGTH OF SERVICE LINE FROM THE CUSTOMER METER AND/OR RIGHT OF WAY PER SPECIFICATION.
- 3. CONTRACTOR TO LOCATE AND REPLACE ALL EXISTING CUSTOMER METERS PER SPECIFICATION.



UTILITY / PROJECT CONTACT INFORMATION

THIS SECTION SHALL BE USED FOR ANY SPECIFIC PROJECT CONTACT INFORMATION THE PROJECT MANAGER WOULD LIKE TO INCLUDE (REMINDER, THIS IS ALSO IN THE

SPECIFICATIONS, SO UNLESS OTHERWISE DIRECTED, THIS SHOULD NOT BE ON THE PLANS)

DRAWING SET LEGEND

VVIIVC	JOLI LLOLIND		
\oplus	MONUMENT	Ø PP	POWER POLE
4	CONTROL POINT	$ \varnothing \xrightarrow{PP} $	POWER POLE WITH GUY WIRE
D	FLAG POLE	$\varnothing \xrightarrow{GP}$	GUY POLE WITH GUY WIRE
\circ	POST	Ø 1UE/1U0	CPOWER POLE WITH UNDERGROUND ELECTRIC OR COMMUNICATIONS
0	STUMP	[©] SL	STREET LIGHT ON POWER POLE
#	BUSH / HEDGE	[©] LP	PARKING LOT LIGHT POLE
	DECIDUOUS TREE	∼ LP ○ EM	
	CONIFEROUS TREE	0	ELECTRIC METER
•	SIGN	O UE	UNDERGROUND ELECTRIC CONDUIT
0	LARGE ROCK	Ø TP	TELEPHONE POLE
₫	UTILITY LOCATE FLAG	© TMH	TELEPHONE POLE WITH GUY WIRE
	GAS METER	•	TELEPHONE LINE MANHOLE
\Diamond	GAS LINE MARKER	O CB	COMMUNICATIONS BOX/PEDISTAL
Ø	POWER/LIGHT POLE	O FOV	FIBER OPTIC VAULT
EM	ELECTRIC METER	O FOX	FIBER OPTIC MARKER
\rightarrow	GUY WIRE	O GV	GAS VALVE
	ELECTRIC PANEL	⊖ GM	GAS METER
<ped th="" □<=""><th>TEL/TV PEDESTAL</th><th>OUG</th><th>UNDERGROUND GAS PIPE STUB</th></ped>	TEL/TV PEDESTAL	OUG	UNDERGROUND GAS PIPE STUB
	WATER METER	$^{\circ}$ WV	WATER VALVE WITH RIM AND VALVE ELEVATION
×	VALVE	$^{\circ}$ WM	WATER METER
A	FIRE HYDRANT	$_{\bigcirc}$ WX	WATER LINE MARKER
F	FLUSH HYDRANT	უ FH	FIRE HYDRANT
M	WALL SPIGOT	SSMH	SANITARY SEWER MANHOLE
-	EXISTING PIPE PLUG	LS MH	LIFT STATION MANHOLE
	EXISTING STORM MANHOLE/INLET	OVP MH	VALVE PIT MANHOLE
0	EXISTING SANITARY MH		FORCE MAIN VALVE WITH RIM
	TOP OF PIPE	O FMV	AND VALVE ELEVATION
	CURB INLET	O CO	SANITARY CLEAN OUT
	STORM INLET SQUARE	⊕ AD	AREA DRAIN
	STORM INLET ROUND	$_{\bigcirc}$ PI	PIPE INVERT
×	NEW VALVE	OMB	MAIL BOX
A	NEW FIRE HYDRANT	OAC	AIR CONDITIONER
T E	NEW FLUSH HYDRANT	OBBP	
₽×	NEW WET SADDLE AND VALVE BODY	⊖ 2"P	BASKETBALL POLE
0	NEW PLUG	O CP#	2" FENCE POST NEAR MONUMENTS CONTROL POINT w/DESCRIPTION
LS	NEW LINE STOP	.	CONTROL FOINT W/DESCRIPTION
\otimes	NEW SANITARY MH		

			DIVAVVIIV	J OLT LLOLIND		
	EXOHT EXOHT	EXISTING OVERHEAD TELEPHONE LINE	\oplus	MONUMENT	Ø PP	POWER POLE
-	— EXG — EXG — EXG	EXISTING GAS LINE AND VALVE	�	CONTROL POINT	$\varnothing \xrightarrow{PP}$	POWER POLE WITH GUY
-	— EXW —— EXW ———	EXISTING WATER LINE AND VALVE		FLAG POLE	$\varnothing \stackrel{GP}{\longrightarrow}$	GUY POLE WITH GUY WIF
_	— EXF/O —— EXF/O ——	EXISTING FIBER OPTIC LINE	\circ	POST	Ø 1UE/1U	CPOWER POLE WITH UNDE ELECTRIC OR COMMUN
-	EXOHE EXOHE	EXISTING OVERHEAD ELECTRIC LINE	0	STUMP	Μ,	CTDEET LICHT ON DOWE
-	— EXBE —— EXBE ——	EXISTING BURIED ELECTRIC	\$	BUSH / HEDGE	[∰] SL	STREET LIGHT ON POWE
_	NPW NPW	EXISTING NON-POTABLE WATER LINE		DECIDUOUS TREE	[©] LP	PARKING LOT LIGHT POLI
-	POT —— POT —— POT ——	EXISTING POTABLE WATER LINE		CONIFEROUS TREE	OEM	ELECTRIC METER
-	EXBT	EXISTING BURIED TELEPHONE LINE		SIGN	OUE	UNDERGROUND ELECTRI
-	EXSN — EXSN —	EXISTING SANITARY SEWER	(LARGE ROCK	Ø TP	TELEPHONE POLE
_	EXST EXST	EXISTING STORM SEWER	ď	UTILITY LOCATE FLAG	$\varnothing \xrightarrow{TP}$	TELEPHONE POLE WITH (
_	xxxx	EXISTING FENCE	©	GAS METER		TELEPHONE LINE MANHO
_	APP. R/W	APPARENT RIGHT-OF-WAY	\Diamond	GAS LINE MARKER	O CB	COMMUNICATIONS BOX/F
_	APP. P/L	APPARENT PROPERTY LINE	Ø	POWER/LIGHT POLE	OFOV	FIBER OPTIC VAULT
			EM	ELECTRIC METER	OFOX	FIBER OPTIC MARKER
-		EDGE OF ROAD	\rightarrow	GUY WIRE	O GV	GAS VALVE
=	=======================================	EDGE OF ROAD WITH CURB	≡≡	ELECTRIC PANEL	OGM	GAS METER
=	=======================================	EDGE OF ROAD WITH CORB	<ped th="" □<=""><td>TEL/TV PEDESTAL</td><td>OUG</td><td>UNDERGROUND GAS PIP</td></ped>	TEL/TV PEDESTAL	OUG	UNDERGROUND GAS PIP
_	— — — 785 — — —	EXISTING MAJOR CONTOUR LINE		WATER METER	$_{\bigcirc}$ WV	WATER VALVE WITH RIM AND VALVE ELEVATION
-		EXISTING MINOR CONTOUR LINE	×	VALVE	$_{\bigcirc}$ WM	WATER METER
-	— w —— w ——	NEW WATER LINE	A	FIRE HYDRANT	OWX	WATER LINE MARKER
-	785	PROPOSED MAJOR CONTOUR LINE	F	FLUSH HYDRANT	ე FH	FIRE HYDRANT
_	784	PROPOSED MINOR CONTOUR LINE	×	WALL SPIGOT	⊕SSMH	
	104	THE TOTAL MINER CONTROL LINE	-	EXISTING PIPE PLUG		SANITARY SEWER MANHOLE
				EXISTING STORM MANHOLE/INLET	LS MH	
			0	EXISTING SANITARY MH	O ND WH	VALVE PIT MANHOLE
				TOP OF PIPE	○ FMV	FORCE MAIN VALVE WITH AND VALVE ELEVATION
				CURB INLET	OCO	SANITARY CLEAN OUT
				STORM INLET SQUARE	⊕ AD	AREA DRAIN
				STORM INLET ROUND	⊖ PI	PIPE INVERT
			XX		\circ	I II L IINVLIXI

Drawing No:

Designed By:| Drawn By: | Checked B

04/22/2025 | W21115 | AS SHOW

GENERAL NOTES,

ABBREVIATIONS, AND SYMBOLS

ssue Date: | Project No: |

Sheet: 03 OF 31

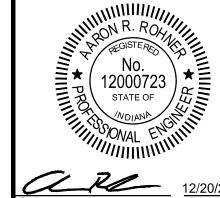


	COI	NTROL PO	INT INFOR	MATION
	IDENTIFIER	NORTHING	EASTING	DESCRIPTION
	CP-1	1311298.74	2980056.10	5/8" IRON PIN W/ CAP
	CP-2	1310557.92	2980013.00	5/8" IRON PIN W/ CAP
	CP-3	1309820.38	2980054.71	5/8" IRON PIN W/ CAP
>	CP-4	1309812.06	2979063.20	MAG NAIL
,	CP-5	1309924.08	2980696.54	5/8" IRON PIN W/ CAP

Project coordinates are based on the following:

HORIZONTAL-US State plane coordinates: NAD83 (North American Datum) Indiana West Zone
(1302)

VERTICAL- USGS 1988 NAVD (North American Vertical Datum)-per GPS observations (Not verified by physical location of published USGS monuments)



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Date	2/20;									
Бý	AR									
Submittal / Revision	ADD NEW MAIN TO MAP									
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esigned By:			Dr	awr	/ :	(cke Δ\//	d B	y:	

Issue Date: Project No: Scale: 04/22/2025 W21115 AS SHOWN

SURVEY CONTROL AND DRAWING INDEX MAP

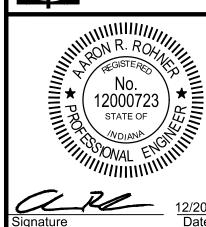
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INDICATES PHOTO NUMBER AND DIRECTION OF PHOTO (PHOTOS TAKEN BY COMMONWEALTH ENGINEERS, INC. - MARCH, 2023)

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DAVIESS COUNTY, INDIANA
WATER UTILITY
IMPROVEMENTS PROJECT

DIVISION "B" - NEW WATER STORAGE TANK

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NEW TANK SITE PLAN
AND PHOTO INDEX

Drawing **G**

Sheet: 05 OF 31





PHOTO #2

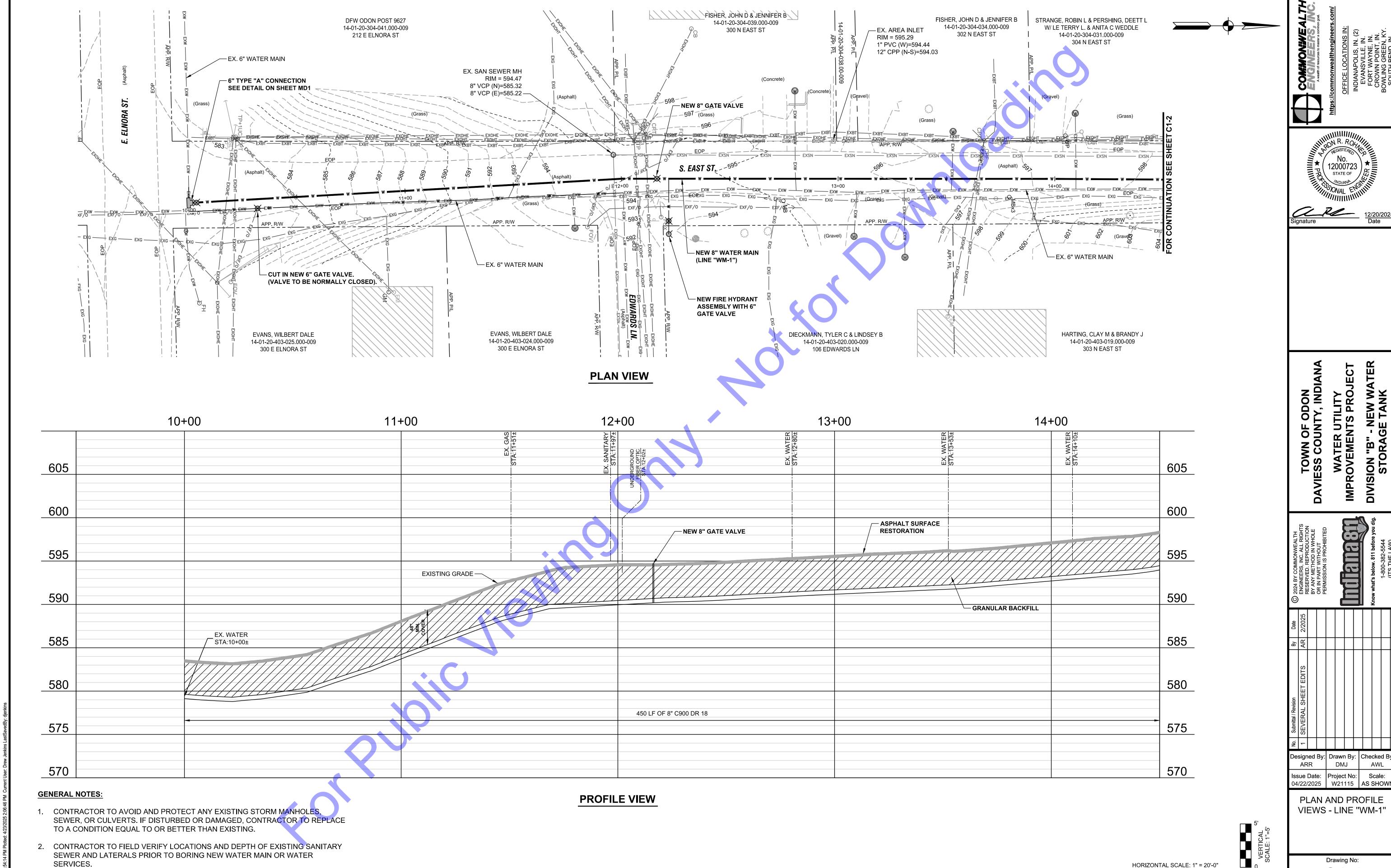


PHOTO #3

PHOTO #1

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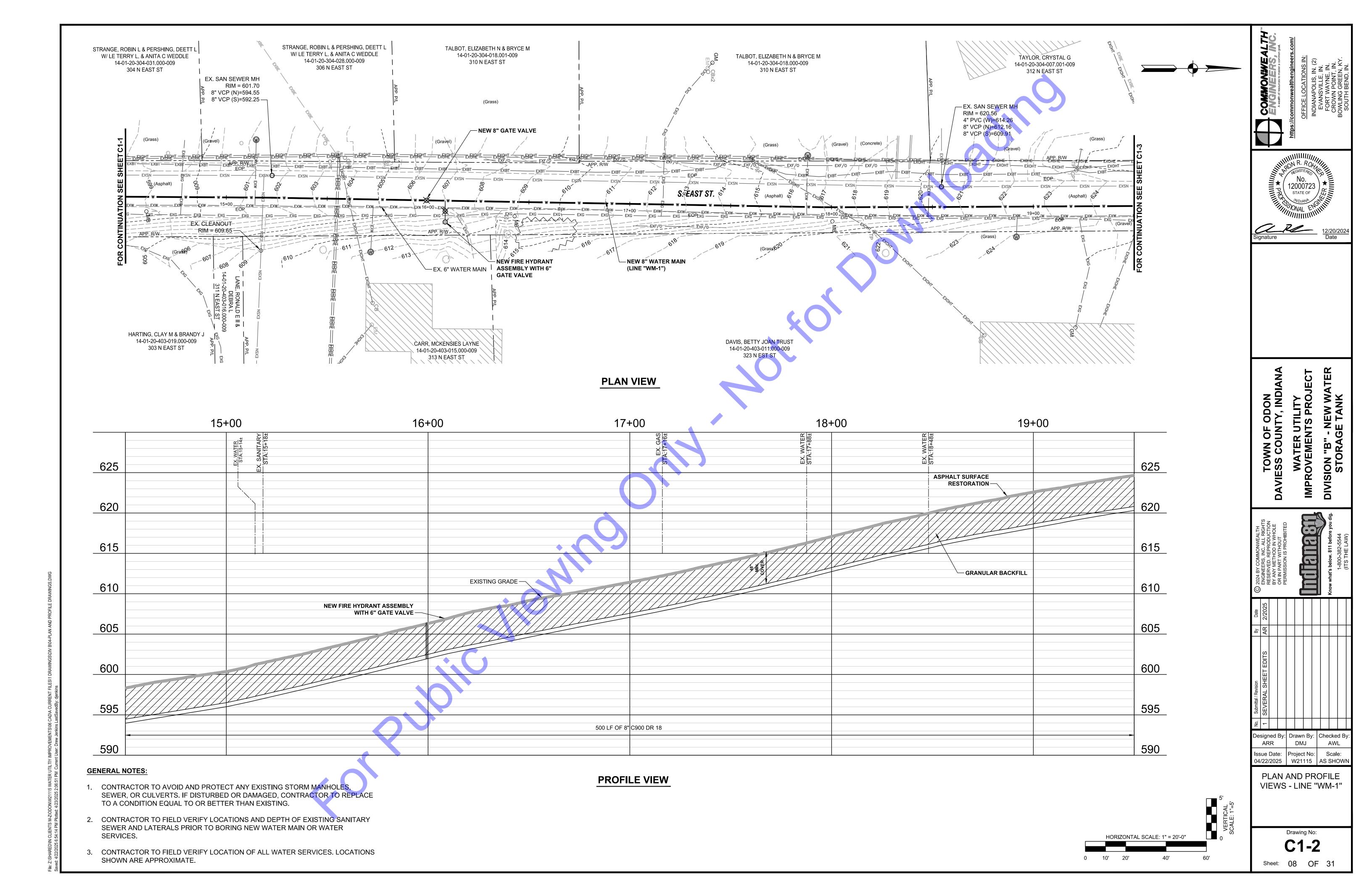
DIVISION "B" - NEW W STORAGE TANK Designed By: Drawn By: Checked By ARR DMJ AWL Issue Date: Project No: Scale: 04/22/2025 W21115 AS SHOWN PHOTO LOG

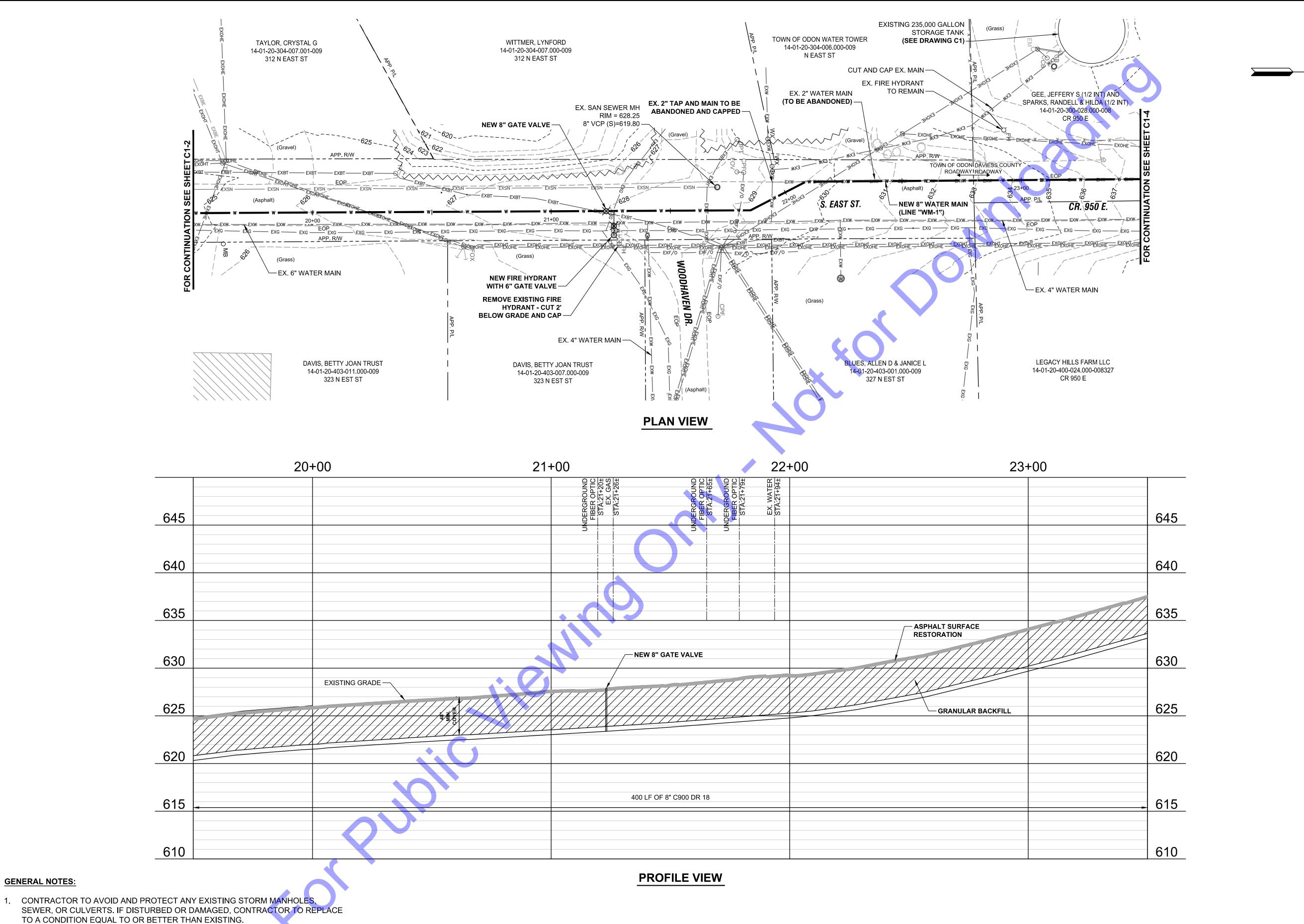


3. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL WATER SERVICES. LOCATIONS

SHOWN ARE APPROXIMATE.

C1-1Sheet: 07 OF 31





GENERAL NOTES:

SERVICES.

SHOWN ARE APPROXIMATE.

2. CONTRACTOR TO FIELD VERIFY LOCATIONS AND DEPTH OF EXISTING SANITARY SEWER AND LATERALS PRIOR TO BORING NEW WATER MAIN OR WATER

3. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL WATER SERVICES. LOCATIONS

HORIZONTAL SCALE: 1" = 20'-0" 0 10' 20'

PLAN AND PROFILE VIEWS - LINE "WM-1"

Designed By: Drawn By: Checked By

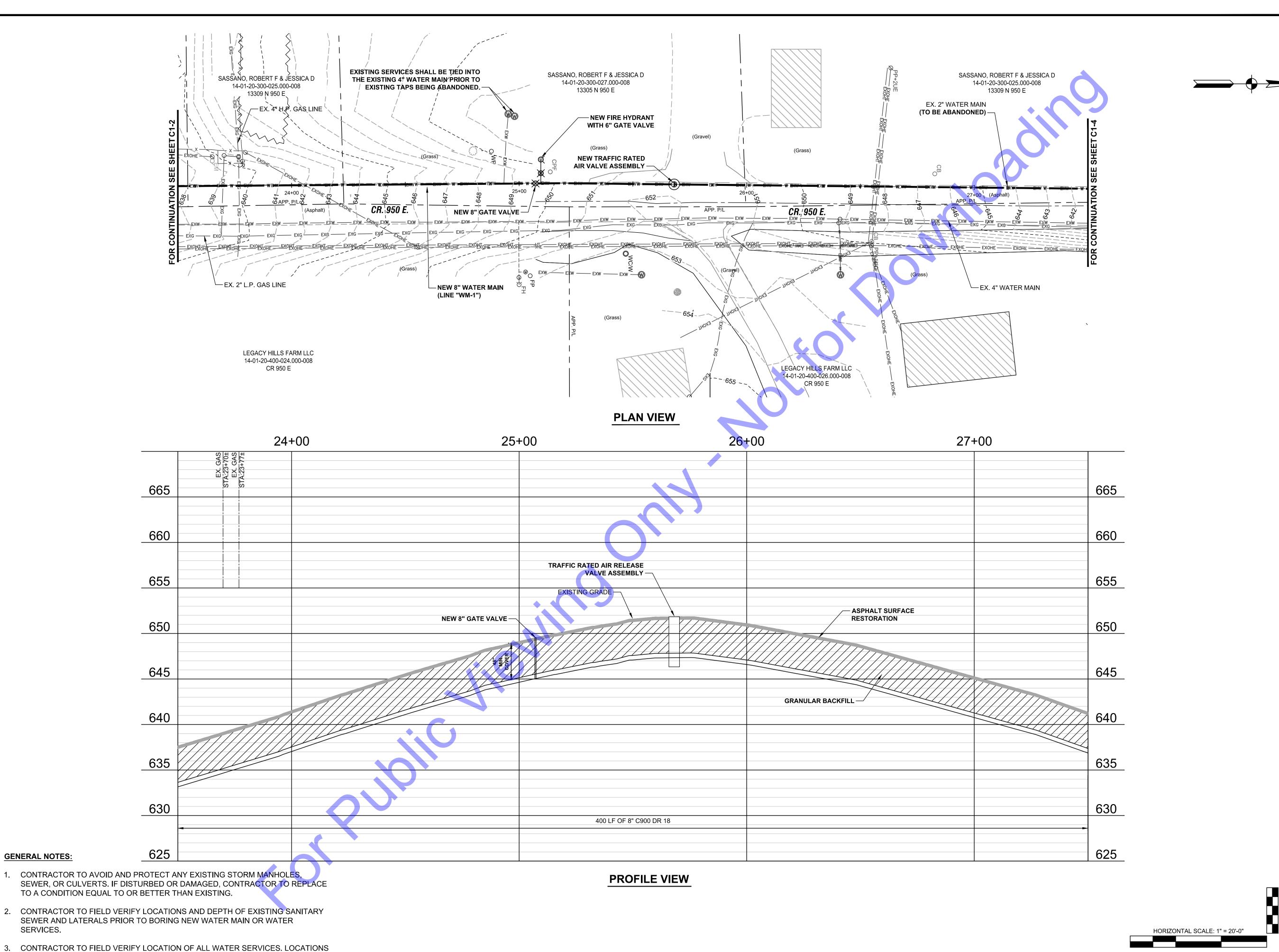
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TOWN OF ODON AVIESS COUNTY, INDIANA

DIVISION "B" - NEW W STORAGE TANK

C1-3

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SHOWN ARE APPROXIMATE.

TOWN OF ODON AVIESS COUNTY, INDIANA

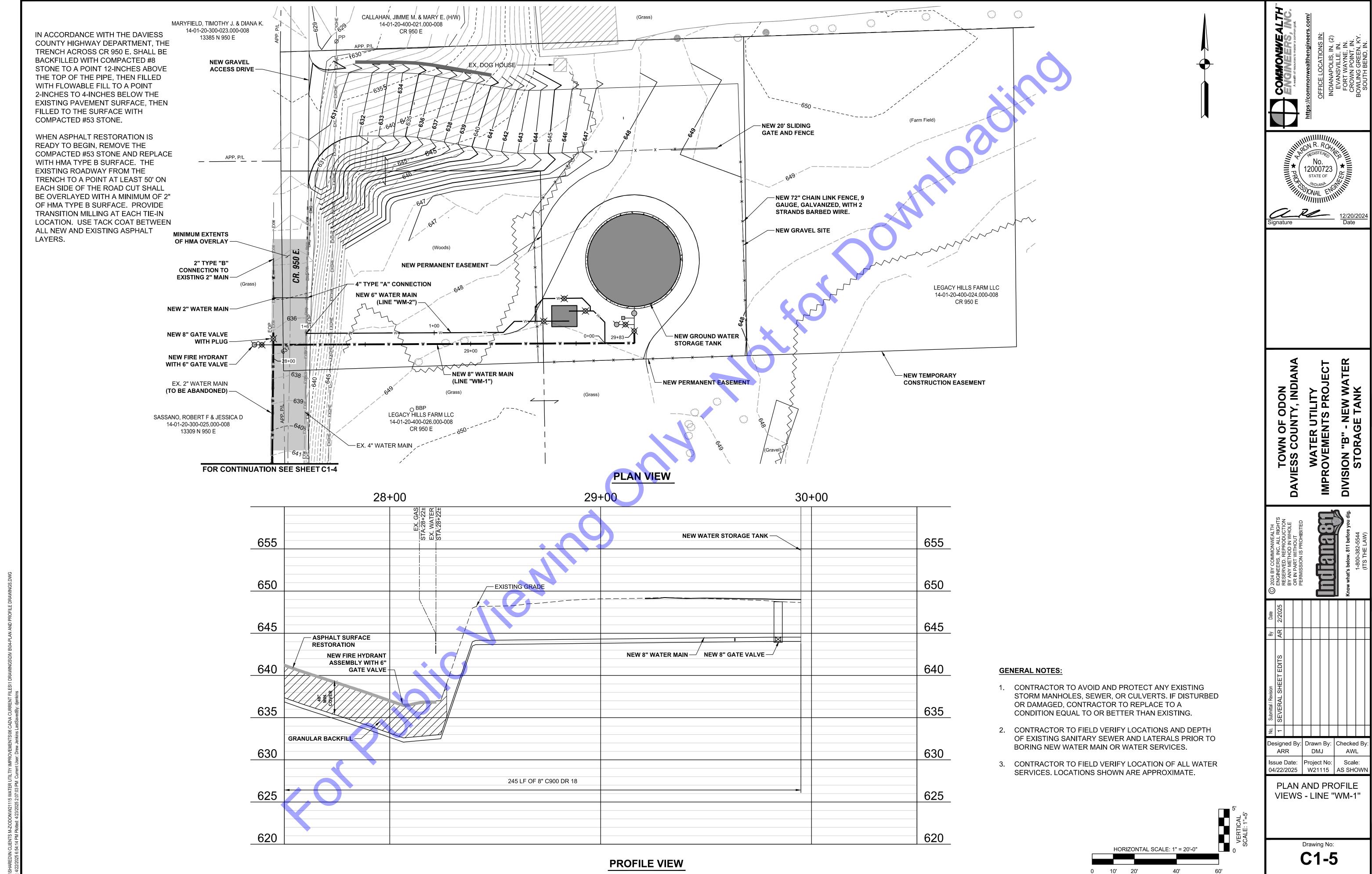
DIVISION "B" - NEW W. STORAGE TANK

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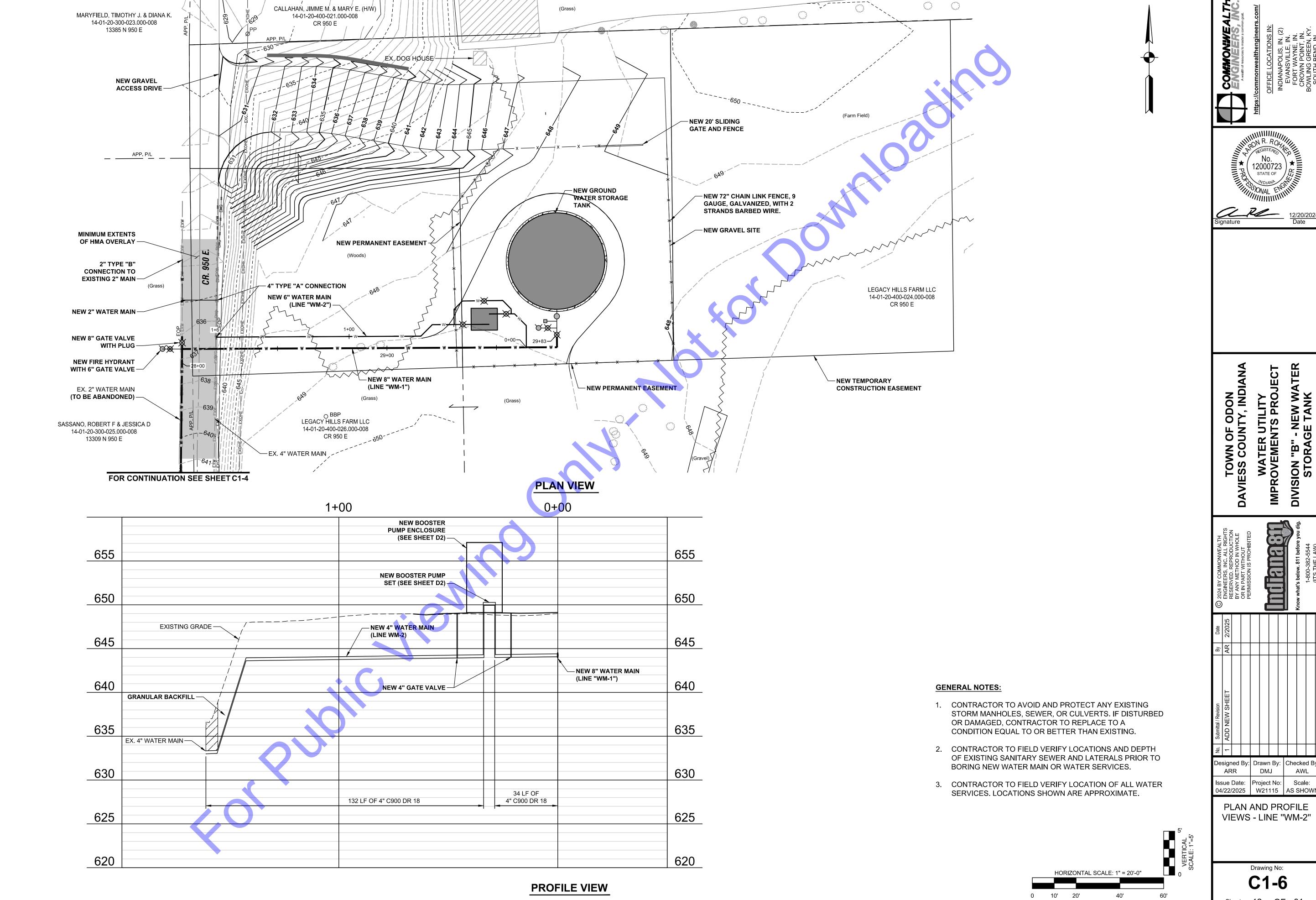
Designed By: Drawn By: Checked By

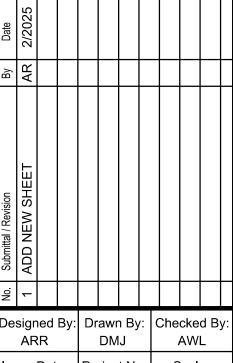
ssue Date: | Project No: | Scale: 04/22/2025 | W21115 | AS SHOWN

PLAN AND PROFILE VIEWS - LINE "WM-1"

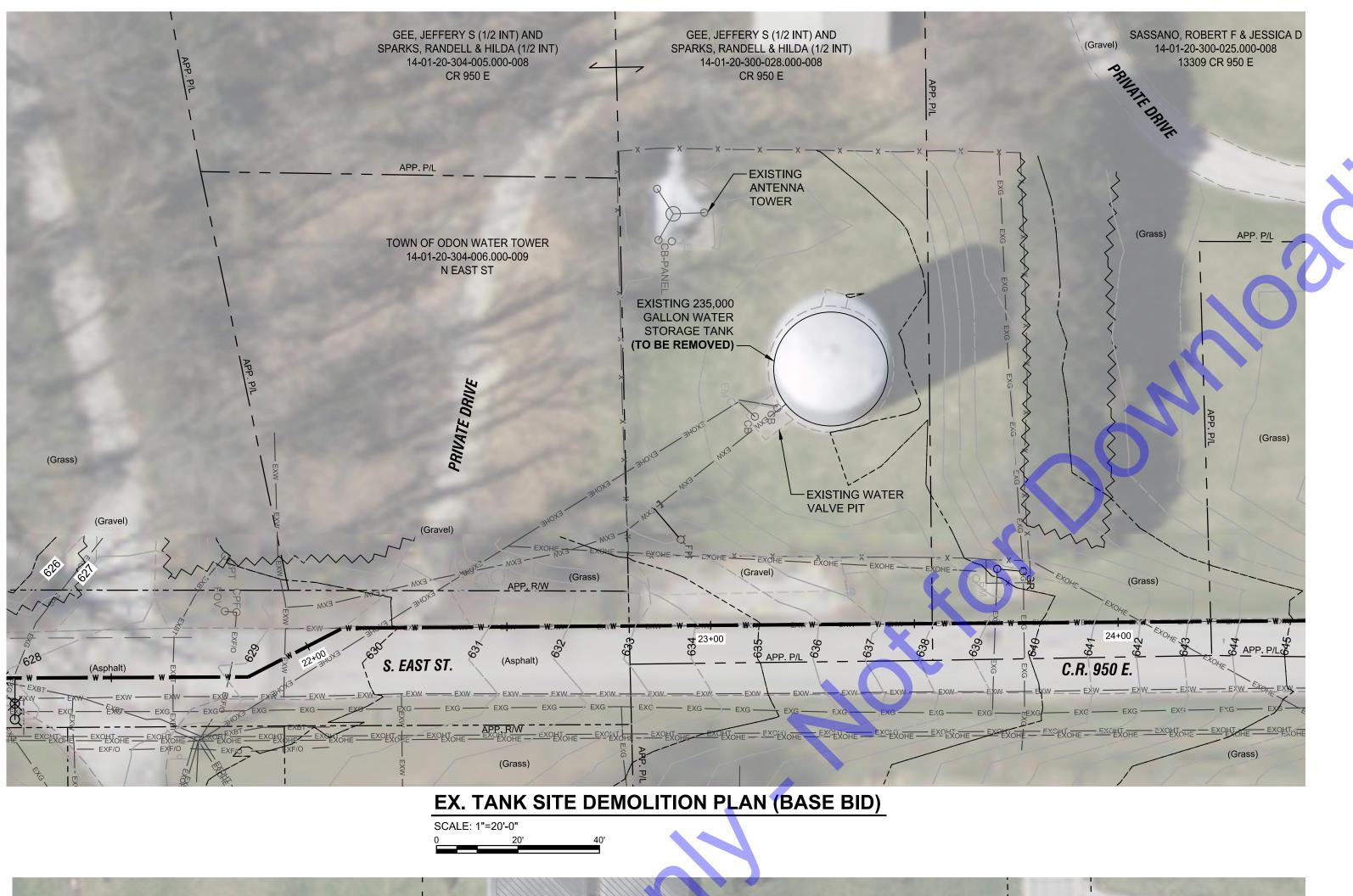


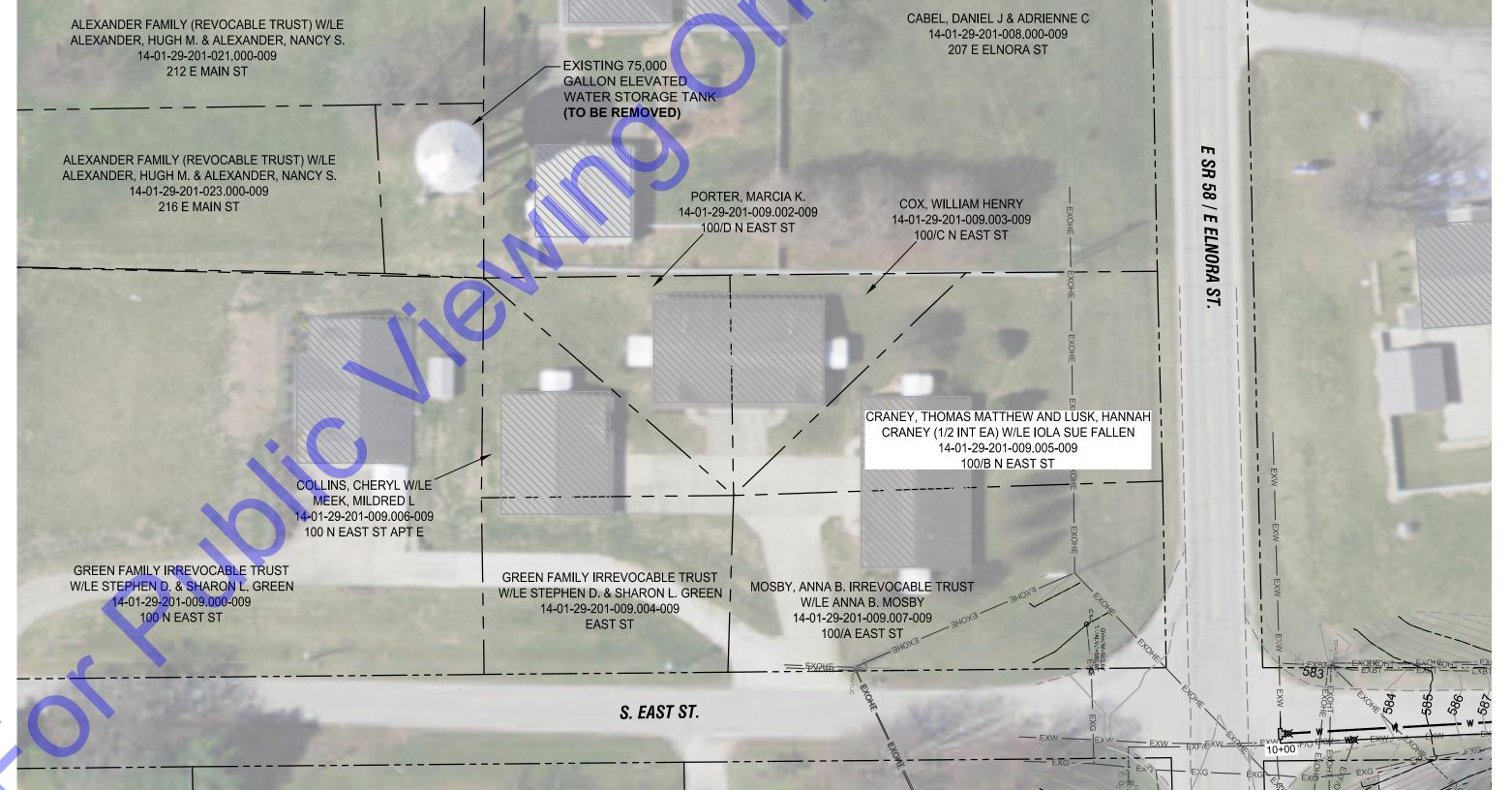
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EX. ELEVATED TANK SITE DEMOLITION PLAN (MANDATORY ALTERNATE BID)





TOWN OF ODON AVIESS COUNTY, INDIANA

DIVISION "B" - NEW W STORAGE TANK

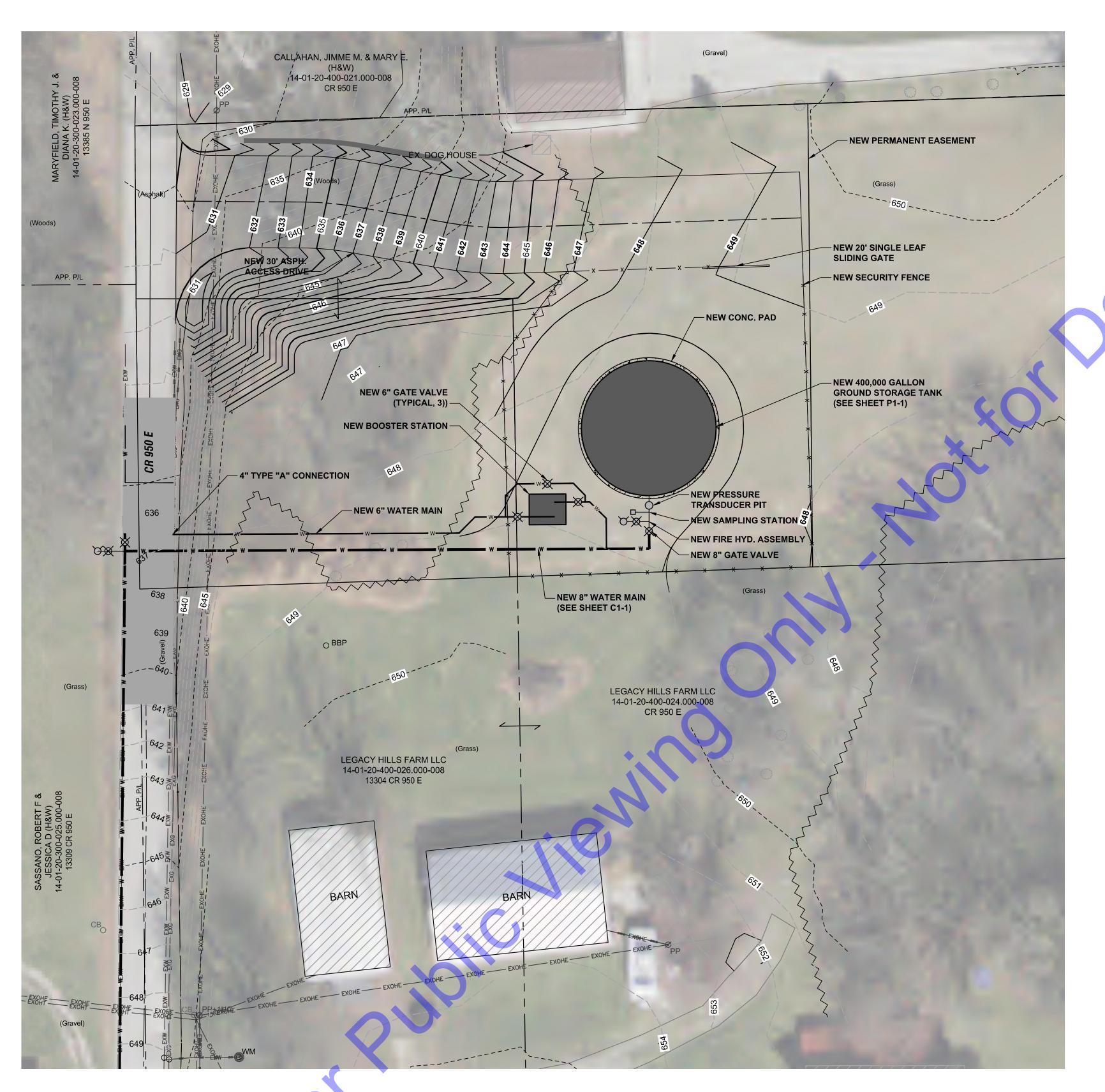
By Date	AR 2/2025								
Submittal / Revision	ADD MAN. ALT. BID PLAN								
No.	_								
De	Designed By: ARR			Dr	awr DM	/ :	Che	cke AW	

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EXISTING TANK SITE DEMOLITION PLAN

C2-1

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NEW TANK SITE IMPROVEMENTS AND PIPING PLAN

SCALE: 1"=20'-0" 0 20' 40'

SHEET NOTES:

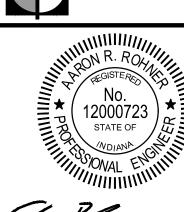
- JOINT RESTRAINTS ON EXISTING AND NEW PIPE SHALL BE PER JOINT RESTRAIN MANUFACTURER.
- 2. CONTRACTOR SHALL NOT UTILIZE EXISTING GRAVEL PARKING AREA OR DRIVE FOR STAGING/STORAGE DURING CONSTRUCTION. EXISTING GRAVEL DRIVE SHALL BE USED ONLY FOR ACCESS TO/FROM PROJECT SITE, UNLESS OTHERWISE APPROVED BY OWNER AND PROPERTY OWNER.
- CONTRACTOR SHALL RESTORE GRAVEL PARKING AREA AND DRIVE TO CONDITION PRIOR TO CONSTRUCTION OR BETTER.
- 4. CONTRACTOR SHALL POUR A 6" THICK CONCRETE RING, 6" IN DIAMETER AROUND VALVE BOXES WITH ARROWS STAMPED IN DIRECTION OF OPENING.

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12/20/2 Date

DAVIESS COUNTY, INDIANA
WATER UTILITY
IMPROVEMENTS PROJECT
DIVISION "B" - NEW WATER
STORAGE TANK

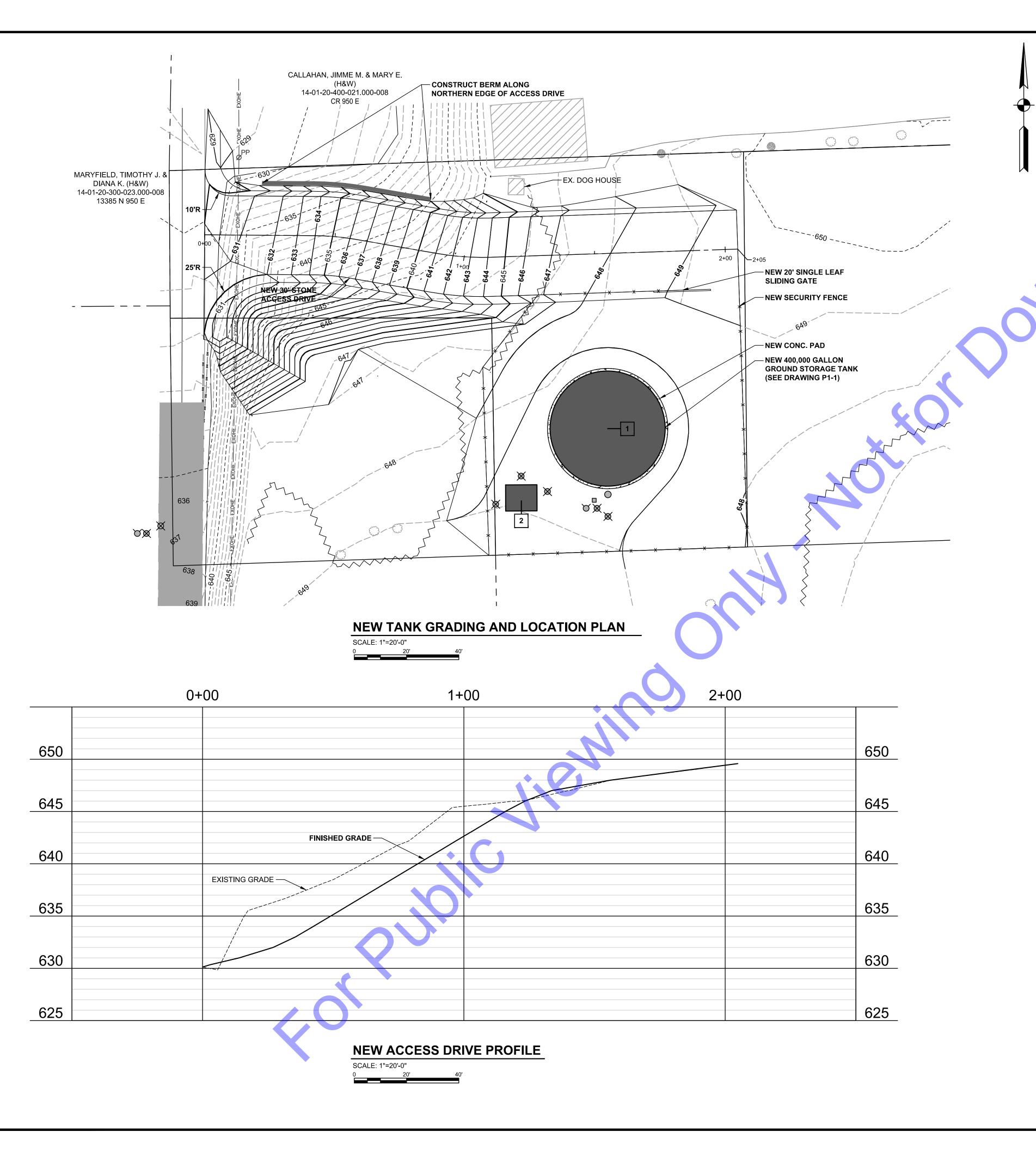
No. Submittal / Revision and a series of serie

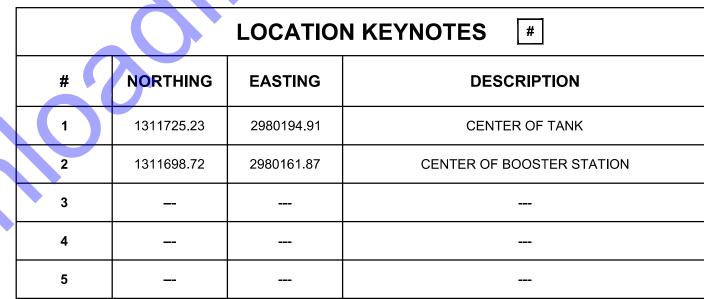
NEW TANK SITE IMPROVEMENTS AND PIPING PLAN

04/22/2025 | W21115 | AS SHOWN

C2-

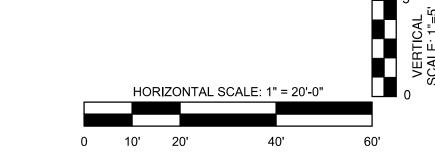
Sheet: 14 OF 31





SHEET NOTES:

- 1. ALL DISTURBED UNPAVED AREAS INSIDE NEW FENCELINE SHALL BE GRASS SEEDED PER SPECS.
- 2. CONTRACTOR SHALL NOT UTILIZE EXISTING GRAVEL PARKING AREA OR DRIVE FOR STAGING/STORAGE DURING CONSTRUCTION. EXISTING GRAVEL DRIVE SHALL BE USED ONLY FOR ACCESS TO/FROM PROJECT SITE, UNLESS OTHERWISE APPROVED BY OWNER AND PROPERTY OWNER.
- 3. CONTRACTOR SHALL RESTORE GRAVEL PARKING AREA AND DRIVE TO CONDITION PRIOR TO CONSTRUCTION OR BETTER.



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DIVISION "B" - NEW WATER STORAGE TANK TOWN OF ODON DAVIESS COUNTY, INDIANA

Designed By: Drawn By: Checked By ssue Date: | Project No: | Scale: 12/11/2024 | W21115 | AS SHOWN

> **NEW TANK SITE GRADING AND** LOCATION PLAN

Sheet: 15 OF 31

VALVE REPLACEMENT PLAN VIEW
N SPRING ST & E ELNORA ST

SCALE: 1"=20'-0" 0 20' 4(



VALVE REPLACEMENT PLAN VIEW E ELNORA ST & LAKE DR

SCALE: 1"=20'-0" 0 20' 40' COMMONWEALTH

FORMAN EALTH

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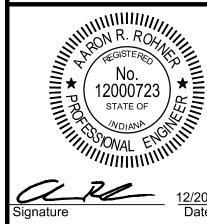
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A wealth of resources to master a common goal.

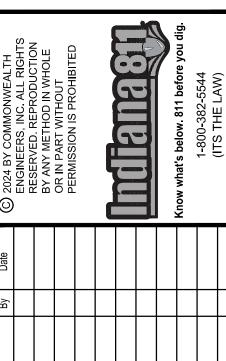
A wealth of resources to master a common goal.

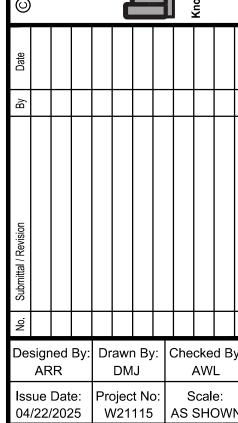
A wealth of resources to master a common goal.

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DAVIESS COUNTY, INDIANA
WATER UTILITY
IMPROVEMENTS PROJECT
STORAGE TANK



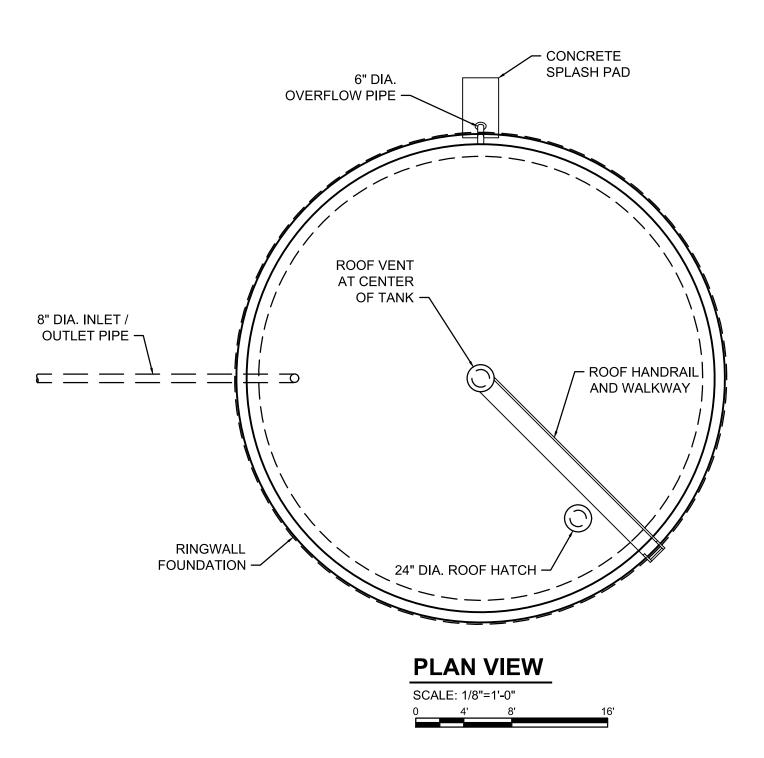


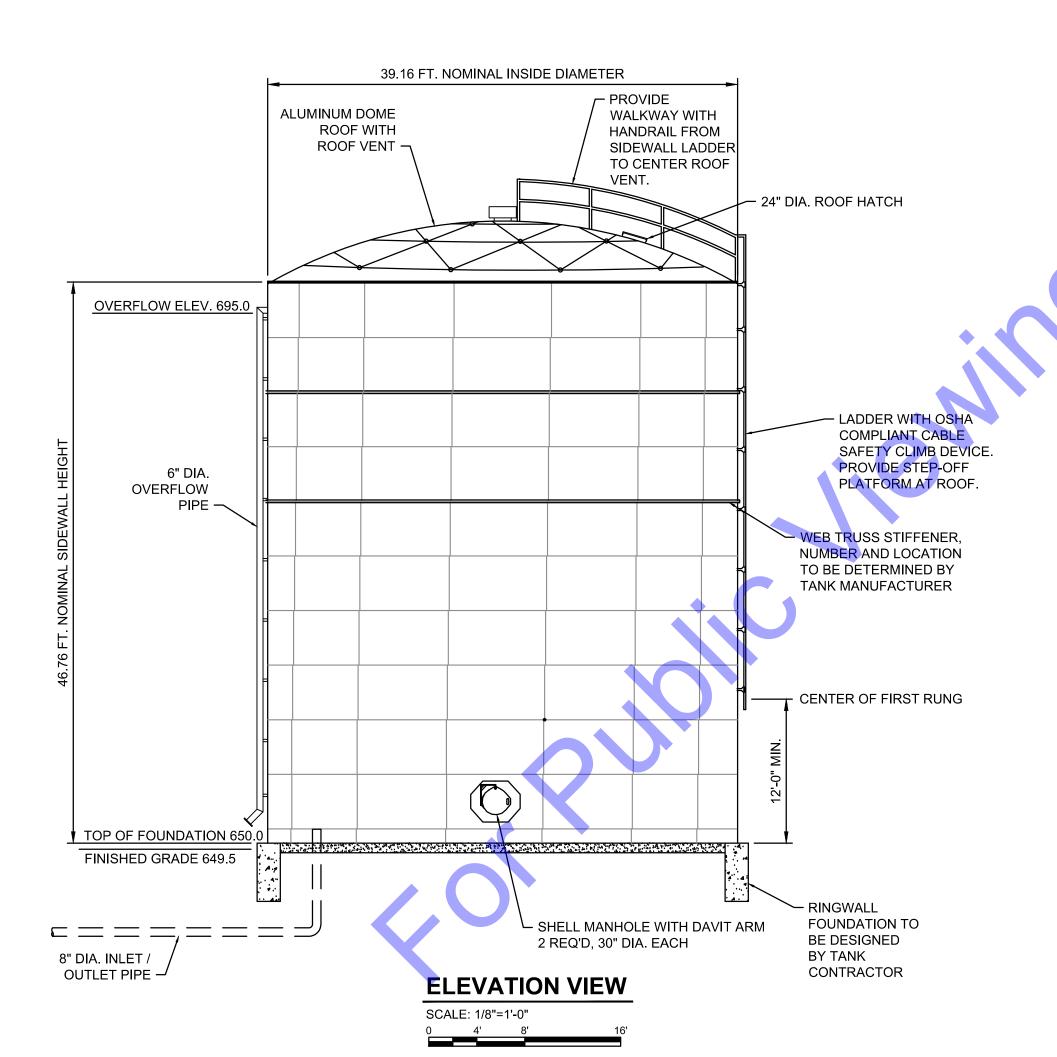
VALVE REPLACEMENT PLAN VIEWS

Drawing No:

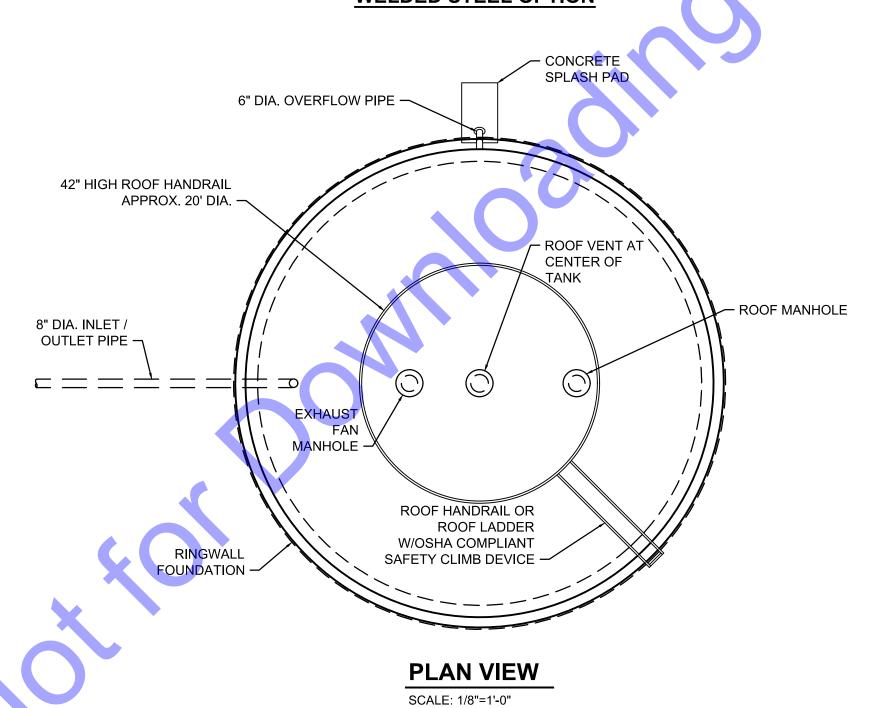
Sheet: 16 OF 31

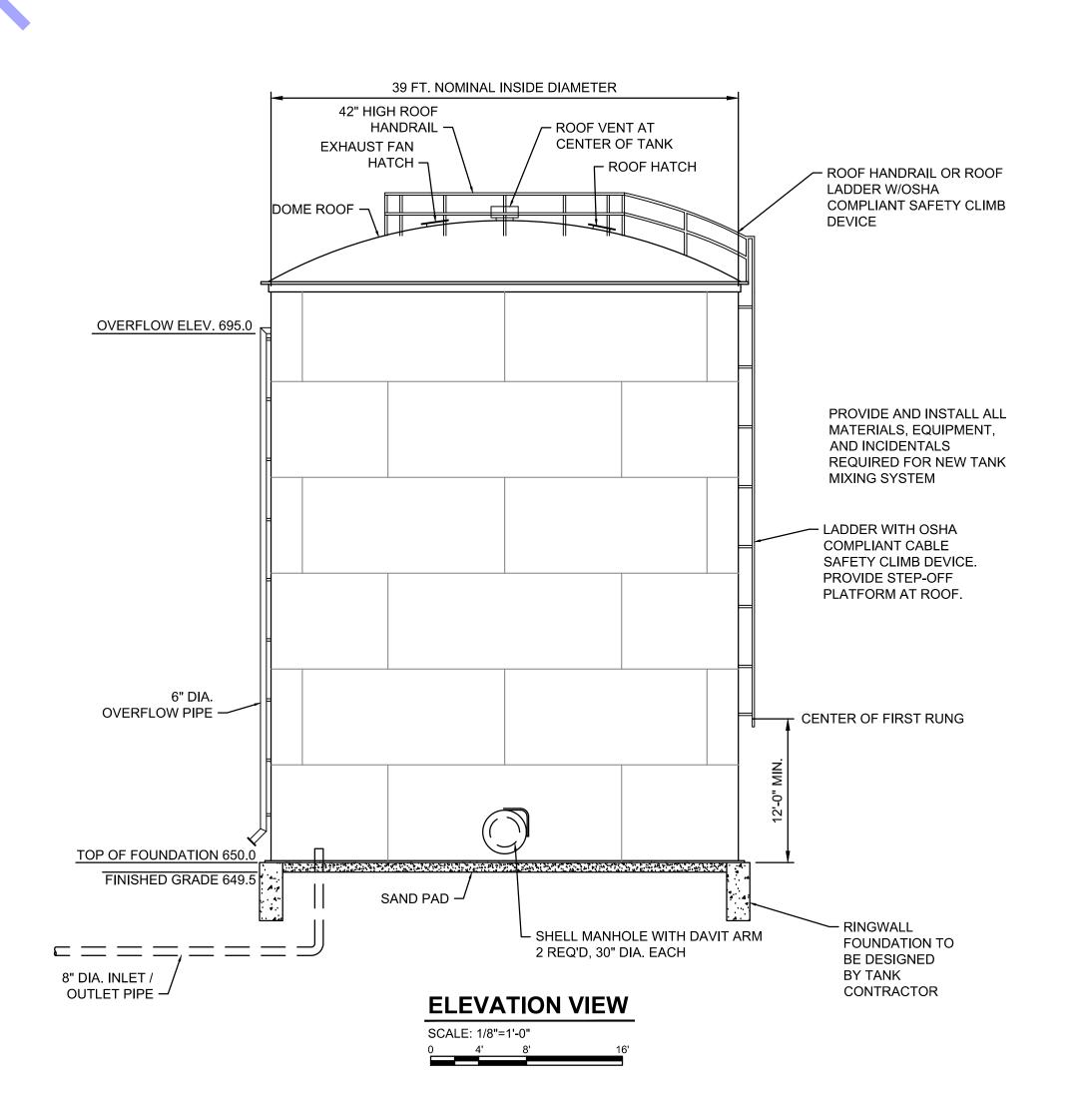
400,000 GALLON GROUND STORAGE TANK FACTORY COATED, BOLTED OPTION

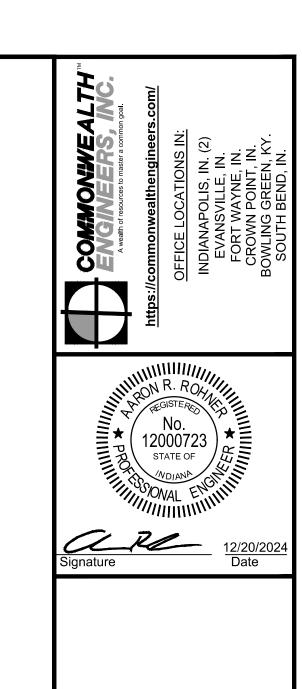




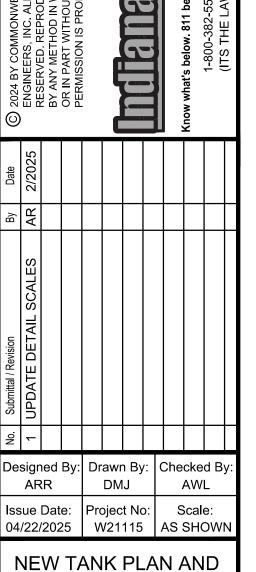
400,000 GALLON GROUND STORAGE TANK WELDED STEEL OPTION







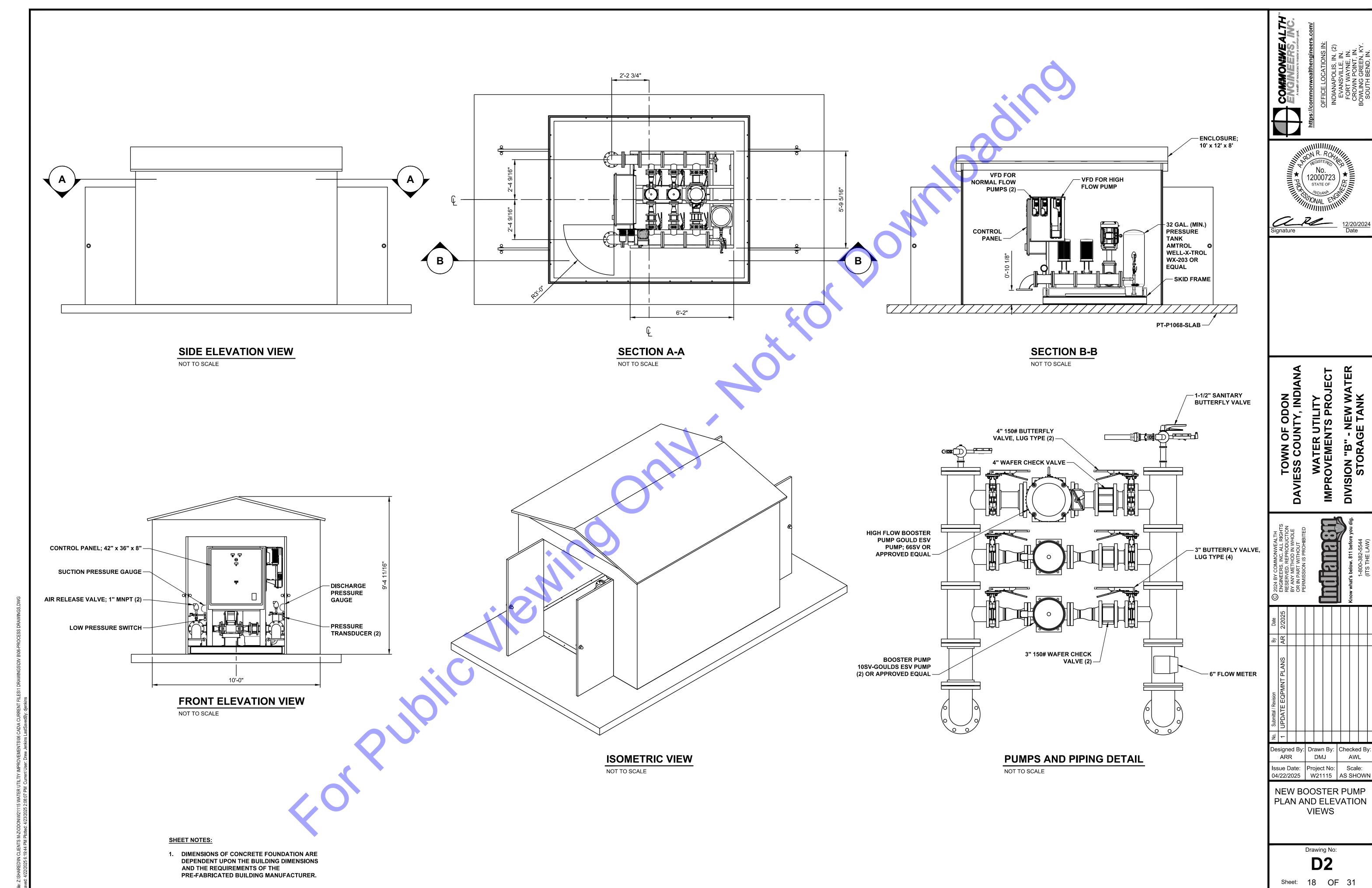
DAVIESS COUNTY, INDIANA
WATER UTILITY
IMPROVEMENTS PROJECT
DIVISION "B" - NEW WATER
STORAGE TANK

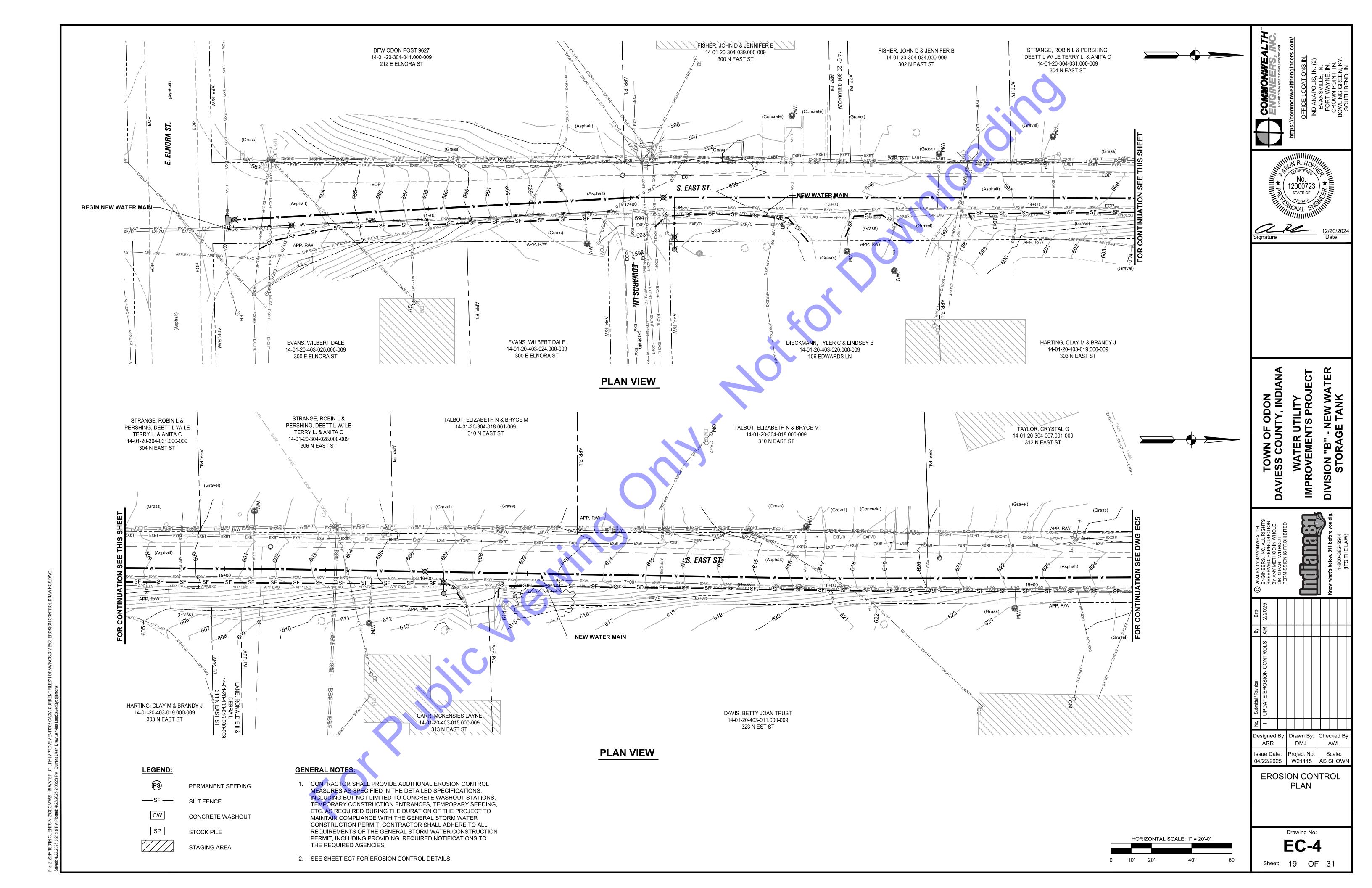


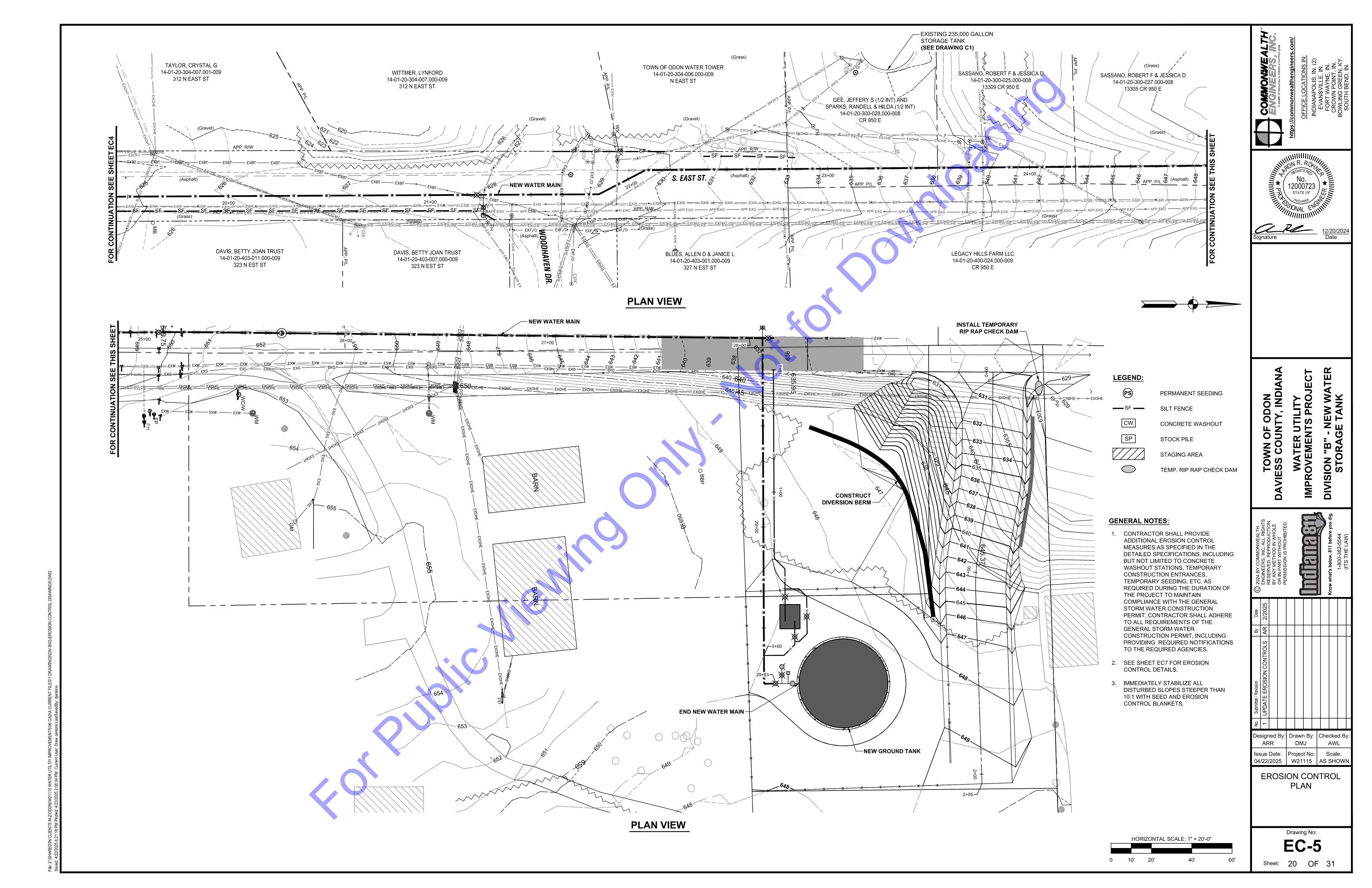
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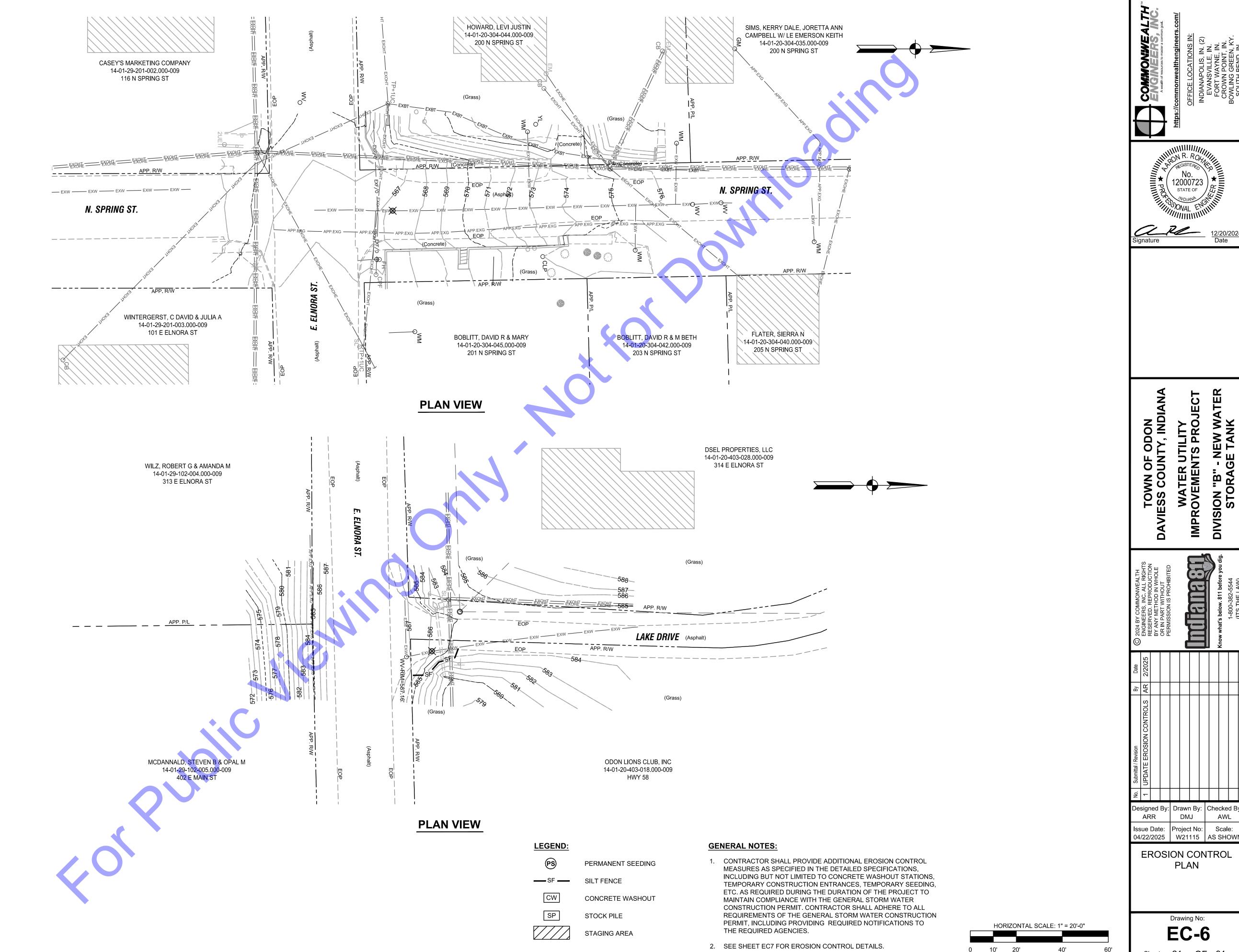
ELEVATION VIEWS

Sheet: 17 OF 31



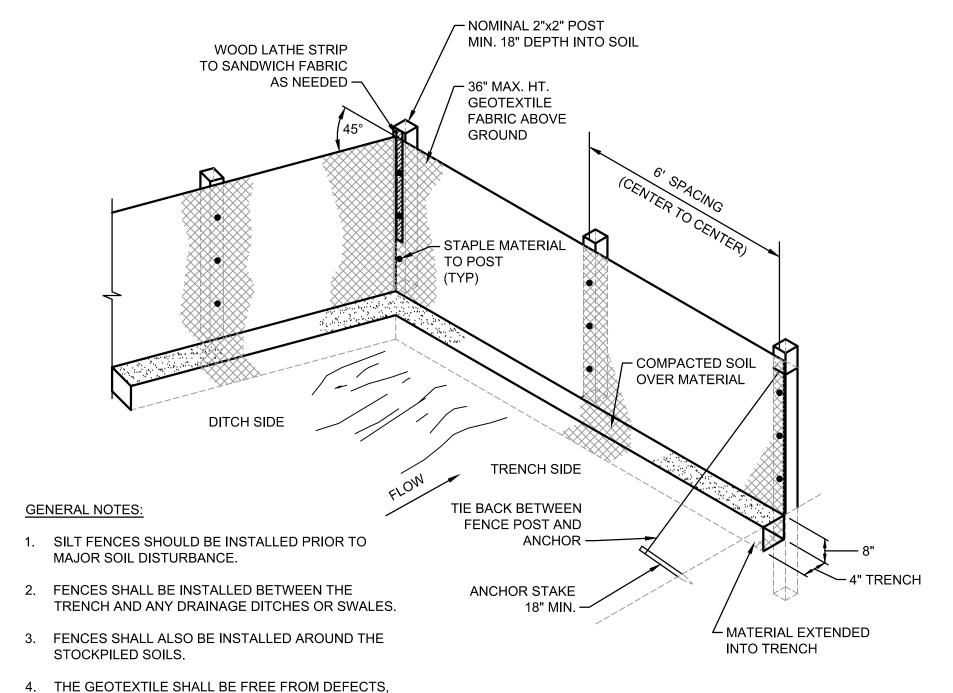






DIVISION "B" - NEW W STORAGE TANK

Sheet: 21 OF 31



SANDBAGS - STACK IN A "RUNNING BOND"

& RED TEXT

- FINISH GRADE

- EARTH OR PAVEMENT

— 2"x2" POST

TEARS, PUNCTURES, FLAWS, DETERIORATION OR DAMAGE INCURRED DURING MANUFACTURE, TRANSPORTATION, STORAGE, OR INSTALLATION.

5. TIE BACKS SHALL BE PLACED AS REQUIRED.

- 2" X 2" WOOD OR STEEL FENCE POST W/ PROJECTION TO FASTEN FABRIC SPACING 6' O.C. FILTER FABRIC -WOVEN OR NON-WOVEN -NO JOINTS ALONG LENGTH -STAPLE OR WIRE TO POSTS -(AND WIRE FENCE IF USED) 8"D X 4"W TRENCH TO BE BACKFILLED AND COMPACTED UPSLOPE DOWNSLOPE

- 1. THE BOTTOM 1' OF THE FENCE SHALL BE BURIED IN THE TRENCH ON THE UPSLOPE SIDE.
- 2. FENCE SHALL BE INSTALLED ALONG LEVEL GRADES, NOT ACROSS FLOW CHANNELS. 3. IF OPTIONAL SUPPORT WIRE FENCE IS USED, POST SPACING MAY BE EXTENDED TO 8' O.C.

- I. INSPECT SILT FENCE PERIODICALLY (WEEKLY) AND AFTER EACH STORM EVENT.
- 2. IF FABRIC IS TORN OR DAMAGED OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED PORTION IMMEDIATELY.
- 3. REMOVE DEPOSITED SEDIMENT WHEN IT REACHES HALF THE HEIGHT OF THE FENCE, OR IT IS
- CAUSING THE FABRIC TO BULGE.
- 4. TAKE CARE NOT TO UNDERMINE THE FENCE DURING SEDIMENT REMOVAL.
- 5. AFTER THE CONTRIBUTING AREA HAS BEEN STABILIZED, REMOVE THE FENCE AND REMAINING SEDIMENT, BRING THE DISTURBED AREA TO GRADE, AND STABILIZE.

GEOTEXTILE FABRIC

SLOPE

GENERAL EROSION AND SEDIMENT CONTROL NOTES

- 1. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE INDIANA STORM WATER QUALITY MANUAL FROM THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AND LOCAL EROSION AND SEDIMENT CONTROL ORDINANCE, OR SWCD.
- 2. THE NOTICE OF INTENT (NOI) AND PUBLIC NOTICE FOR THE PROJECT SHALL BE POSTED ON A SIGN INSTALLED AT OR NEAR THE SITE CONSTRUCTION TRAILER. THE NOI SHALL LIST THE CONTACT INFORMATION FOR THE SITE CONTACT PERSON. THE SIGN AND INFORMATION SHALL BE MAINTAINED AND REMAIN LEGIBLE THROUGHOUT CONSTRUCTION.
- 3. A COPY OF THIS EROSION AND SEDIMENT CONTROL PLAN AND THE EROSION AND SEDIMENT CONTROL REPORT SHALL BE AVAILABLE AT THE PROJECT SITE THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD.
- 4. THE CONTRACTOR SHALL CONTROL WASTE, GARBAGE, DEBRIS, WASTEWATER, AND OTHER SUBSTANCES ON THE SITE SO THEY WILL NOT BE TRANSPORTED FROM THE SITE BY THE ACTION OF WIND, STORM WATER RUNOFF, OR OTHER FORCES. PROPER DISPOSAL OR MANAGEMENT OF ALL WASTES AND UNUSED BUILDING MATERIAL APPROPRIATE TO THE NATURE OF THE WASTE OR MATERIAL IS REQUIRED.
- 5. PUBLIC OR PRIVATE ROADWAYS SHALL BE KEPT CLEAR OF ACCUMULATED SEDIMENT. ALL SEDIMENT THAT IS CLEARED MUST BE RETURNED TO THE LIKELY POINT OF ORIGIN OR OTHER SUITABLE LOCATION. CLEARING OF LARGE AMOUNTS OF SEDIMENT SHALL NOT INCLUDE FLUSHING THE AREA WITH WATER.
- 6. MINIMIZE THE EXPOSURE OF BARE EARTH BY LIMITING THE WORK AREA TO THAT NECESSARY TO PERFORM THE WORK, AND BY PROPER SCHEDULING OF MANPOWER AND EQUIPMENT.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED, CLEANED, AND MAINTAINED FOLLOWING EACH STORM EVENT.
- WHEREVER POSSIBLE, MAINTAIN EXISTING VEGETATIVE COVER. USE NON-VEGETATIVE MATERIAL INCLUDING MULCH, EROSION BLANKETS, OR STONE TO CONTROL EROSION FROM DISTURBED AREAS.
- 9. A LOG SHALL BE MAINTAINED OF ALL INSPECTIONS (WEEKLY, AND FOLLOWING STORM EVENTS), MAINTENANCE AND REPAIR OF EROSION AND SEDIMENT CONTROL MEASURES. THE LOG SHALL BE MAINTAINED ON SITE AND BE AVAILABLE UPON REQUEST TO THE OWNERS REPRESENTATIVES AND THE OPERATING AUTHORITIES HAVING JURISDICTION OVER THE SITE.

EFFECTIVE LIFE THE FUNCTIONAL LIFE OF AN EROSION CONTROL BLANKET IS DEPENDENT ON THE MATERIALS USED.

SPECIFICATIONS

• STAPLES, PINS OR STAKES USED TO PREVENT MOVEMENT OR DISPLACEMENT OF BLANKET. (FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR SPECIFIC APPLICATIONS.)

MATERIALS

 ORGANIC (STRAW, EXCELSIOR, WOVEN PAPER, COCONUT FIBER, ETC.) OR SYNTHETIC INCORPORATED WITH A POLYPROPYLENE, NATURAL FIBER OR SIMILAR NETTING MATERIAL. (THE NETTING MAY BE BIODEGRADABLE, PHOTODEGRADABLE OR PERMANENT.)

NOTE: SOME EROSION CONTROL BLANKET NETTINGS MAY POSE A THREAT TO CERTAIN SPECIES OF WILDLIFE IF THEY BECOME ENTANGLED IN THE NETTING MATRIX.

SIX TO 12-INCH STAPLES, PINS, OR STAKES

INSTALLATION

- 1. SELECT THE TYPE AND WEIGHT OF EROSION CONTROL BLANKET TO FIT THE SITE CONDITIONS (E.G., SLOPE, CHANNEL, FLOW VELOCITY) PER THE MANUFACTURER'S RECOMMENDATIONS.
- 2. PREPARE THE SEEDBED, ADD SOIL AMENDMENTS, AND PERMANENTLY SEED THE AREA IMMEDIATELY FOLLOWING SEEDBED PREPARATION.
- 3. LAY EROSION CONTROL BLANKETS ON THE SEEDED AREA SO THAT THEY ARE IN CONTINUOUS CONTACT WITH THE SOIL WITH EACH UP-SLOPE OR UP-STREAM BLANKET OVERLAPPING THE DOWN-SLOPE OR DOWN-STREAM BLANKET BY AT LEAST EIGHT INCHES, OR FOLLOW MANUFACTURER'S RECOMMENDATIONS.
- 4. TUCK THE UPPERMOST EDGE OF THE UPPER BLANKETS INTO A CHECK SLOT (SLIT TRENCH), BACKFILL WITH SOIL AND TAMP DOWN. IN CERTAIN APPLICATIONS, THE MANUFACTURER MAY REQUIRE ADDITION CHECK SLOTS AT SPECIFIC LOCATIONS DOWN SLOPE FROM THE UPPERMOST EDGE OF THE UPPER BLANKETS.
- 5. ANCHOR THE BLANKETS IN PLACE BY DRIVING STAPLES, PINS, OR STAKES THROUGH THE BLANKET AND INTO THE UNDERLYING SOIL. FOLLOW AN ANCHORING PATTERN APPROPRIATE FOR THE SITE CONDITIONS AND AS RECOMMENDED BY THE MANUFACTURER.

MAINTENANCE

- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- CHECK FOR EROSION OR DISPLACEMENT OF THE BLANKET.
- IF ANY AREA SHOWS EROSION, PULL BACK THAT PORTION OF THE BLANKET COVERING THE ERODED AREA, ADD SOIL AND TAMP, RESEED THE AREA, REPLACE AND STAPLE THE BLANKET.

CHANNEL LININGS UTILIZE STAPLE PATTERN "C" WITH ADDITIONAL STAPLES ON SIDE SLOPES AT PROJECTED WATER LINE.

STAPLE PATTERNS APPLY TO ALL NORTH AMERICAN GREEN EROSION CONTROL BLANKETS. STAPLE PATTERNS MAY VARY DEPENDING UPON SOIL TYPE AND AVERAGE RAINFALL.

AT SLOPE LENGTHS GREATER THAN 300 FEET OR WHERE DRAINAGE OVER LARGE AREAS IS DIRECTED ONTO THE BLANKETS, STAPLE PATTERN "C" SHOULD BE UTILIZED.

REVETMENT POLYETHYLENE LINING (2 LAYERS - 10 MIL. **SECTION A-A** THICK MIN.) THE LINING SHOULD BE HELD IN PLACE BY A LAYER OF SAND BAGS AND EXTEND OVER THE SAND BAGS. 10'-0" MIN. **KEY IN GEOTEXTILE** - SANDBAGS - STACK IN FABRIC AT ENDS A "RUNNING BOND" (TYP) — SECTION PERPENDICULAR TO FLOWLINE 1 FOOT THICK POLYETHYLENE LINING LAYER OF COURSE (2 LAYERS - 10 MIL. AGGREGATE No. 5 — THICK MIN.) THE LINING SHOULD - REVETMENT RIPRAP BE HELD IN PLACE BY A LAYER OF SAND BAGS AND EXTEND OVER 2:1 SLOPE -- 2:1 SLOPE THE SAND BAGS. 1 STAPLE PER SQ. YD. - WHITE BACKGROUND **PLAN VIEW**

SILT FENCE DETAIL

NOT TO SCALE

KEY IN GEOTEXTILE FABRIC AT ENDS (TYP) -

> RIPRAP DITCH CHECK DAMS SHALL BE PLACED SUCH THAT THE TOP OF THE DOWNSTREAM CHECK DAM IS AT THE SAME ELEVATION AS THE TOE OF THE ADJACENT UPSTREAM CHECK DAM.

SECTION PARALLEL TO FLOWLINE

2. AFTER COMPLETION OF CONTRACT, OR AS REQUESTED BY OWNER, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL ITEMS, REMOVE ALL ACCUMULATED DEPOSITS AND, AS REQUIRED, SEED AND MULCH OR SOD AS REQUIRED TO ESTABLISH AREA TO CONDITION PRIOR TO CONSTRUCTION.

1 1/2 STAPLES PER SQ. YD. 2 STÀPLES PER SQ. YD. GENERAL STAPLE RECOMMENDATIONS ADD'TL STAPLES AS — REQ'D. DUE TO DEPTH OF FLOW LENGTH 150 2:1 CHANNEL LINING SLOPE GRADIENT

SHALL SUBMIT ANY DESIGN ALTERATIONS TO THE ENGINEER. CONCRETE WASHOUT STRUCTURE SHALL BE RE-LOCATED CLOSE TO AREAS RECEIVING CONCRETE, AS CONSTRUCTION PROGRESSES.

DUE TO SITE CONSTRAINTS THE MINIMUM INTERIOR DIMENSION MAY BE ADJUSTED TO FIT THE SITE.

THE STRUCTURE'S INTERIOR FOOTAGE OF 100 S.F. MUST BE MAINTAINED AND THE CONTRACTOR

36" MIN. OR

STABLE WEIGHTED

BASE ON PAVEMENT

CONCRETE WASHOUT PIT DETAIL

NOT TO SCALE

ROCK CHECK DAM

EROSION CONTROL BLANKET

NOT TO SCALE

EC-7

Designed By:| Drawn By: | Checked B

DMJ

04/22/2025 | W21115 | AS SHOWN

EROSION CONTROL

DETAILS

|Project No: | Scale:

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sue Date:

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STATE OF

WN OF ODON COUNTY, INDIANA

Sheet: 22 OF 31

TYPE "A" CONNECTION TO EXISTING WATER MAIN

NOT TO SCALE

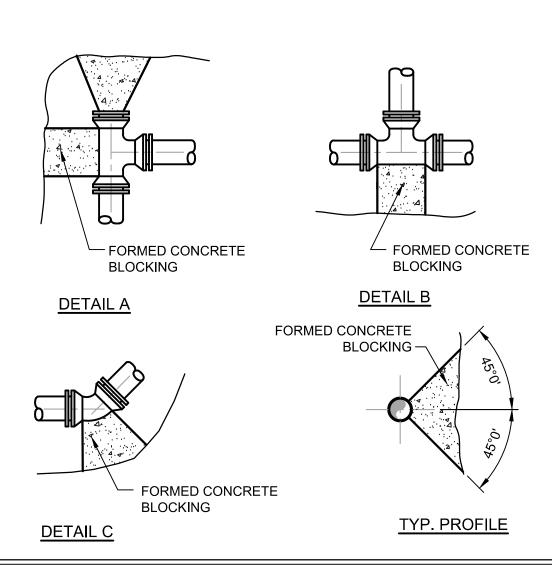
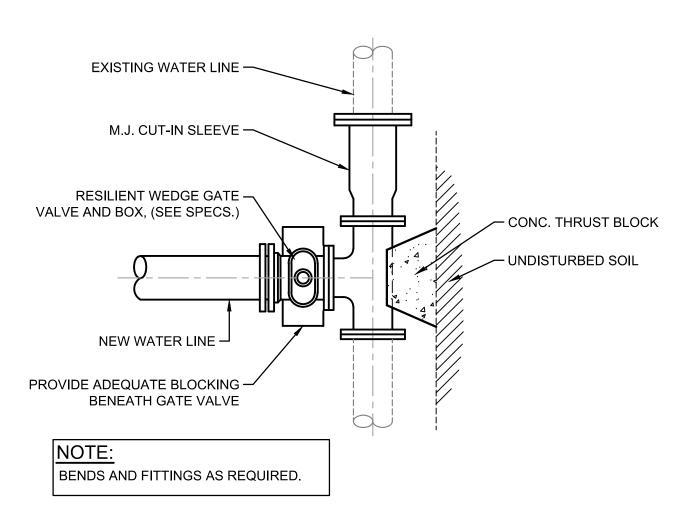


	TABLE OF DIMENSION FOR CONCRETE BLOCKING																								
SIZE		TE	E			F	PLUC	}			90° E	BEND)		45° E	BEND)	2	22° B	BEND)		11° E	BEND	,
PIPE	L	Т	W	D	L	Т	W	D	s	L	Т	W	D	L	Т	W	D	L	Т	W	D	L	Т	W	D
4"	18"	12"	12"	8"	18"	12"	18"	18"	2"	24"	12"	24"	8"	18"	8"	12"	8"	18"	8"	12"	8"	15"	8"	12"	6"
6"	18"	12"	12"	8"	18"	12"	18"	18"	2"	24"	15"	24"	8"	18"	10"	12"	8"	18"	10"	12"	8"	18"	10"	18"	6"
8"	30"	12"	24"	8"	30"	18"	30"	24"	4"	36"	16"	30"	8"	24"	12"	18"	8"	24"	18"	18"	8"	24"	12"	18"	8"
10"	36"	18"	30"	10"	36"	18"	36"	24"	4"	48"	20"	36"	10"	30"	14"	24"	10"	30"	14"	24"	10"	24"	14"	18"	8"
12"	48"	18"	36"	10"	42"	18"	42"	24"	4"	54"	24"	48"	10"	36"	16"	30"	10"	36"	16"	30"	10"	30"	16"	24"	10"
14"	54"	24"	42"	12"	48"	18"	48"	30"	6"	60"	28"	60"	12"	42"	16"	42"	12"	42"	16"	42"	12"	33"	16"	27"	12"
16"	60"	24"	48"	12"	54"	18"	54"	30"	6"	66"	32"	63"	12"	48"	18"	48"	12"	48"	18"	48"	12"	36"	18"	30"	12"
18"	66"	30"	60"	14"	60"	24"	60"	36"	6"	66"	36"	66"	14"	54"	18"	54"	14"	54"	18"	54"	14"	39"	18"	33"	14"
20"	72"	30"	60"	14"	66"	24"	66"	36"	8"	72"	40"	69"	14"	60"	20"	60"	14"	60"	20"	60"	14"	42"	20"	36"	14"
24"	84"	36"	72"	18"	78"	30"	78"	42"	8"	84"	48"	75"	18"	72"	22"	72"	18"	72"	22"	72"	18"	48"	22"	42"	18"
30"	96"	42"	78"	24"	96"	36"	78"	48"	10"	108"	54"	96"	24"	84"	24"	72"	24"	72"	26"	72"	24"	54"	26"	48"	24"
42"	144"	48"	96"	36"	144"	42"	96"	60"	10"	180"	66"	144"	36"	120"	36"	96"	36"	84"	34"	72"	36"	60"	34"	48"	36"

THRUST BLOCKING DETAIL

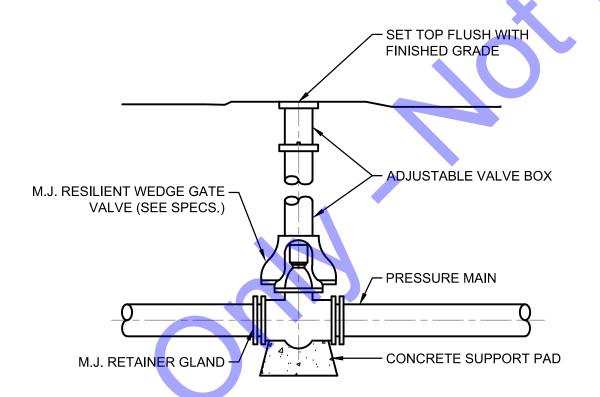
1. FOR TEE WITH BRANCH UNEQUAL TO RUN USE TEE TYPE KICKER WITH D, L, AND W DIMENSIONS THE SAME AS THOSE FOR PLUG WITH SAME DIAMETER AS BRANCH OF TEE, SELECT "T" DIMENSIONS FROM TEE TABLE UNDER COLUMN HEADED BY THE SIZE OF THE BRANCH

- IF EXACT SIZE PIPE BLOCKING IS NOT SHOWN USE NEXT LARGER SIZE
- 3. DEPTH "D" MAY BE GREATER THAN SPECIFIED TO ALLOW WORKING SPACE BLOCKING MUST BE PLACED AGAINST UNDISTURBED EARTH OR ROCK CONCRETE BLOCKING SHALL BE CLASS "B"



TYPE "B" CONNECTION TO EXISTING WATER MAIN

NOT TO SCALE



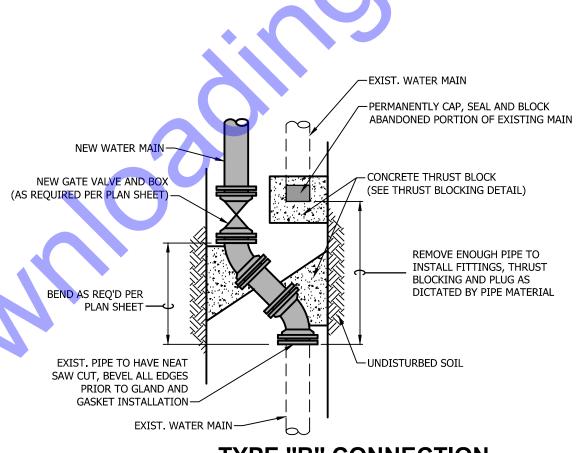
BURIED GATE VALVE AND BOX DETAIL

	LENGTH IN FEET REQUIRED FOR RESTRAINING JOINTS									
	А		В							
SIZE	TEE & PLUG	90° BEND	45° BEND	22-1/2° BEND	11-1/4° BEND					
6"	12'-0"	12'-0"	10'-0"	6'-0"	3'-0"					
8"	16'-0"	22'-0"	13'-0"	8'-0"	4'-0"					
10"	19'-0"	27'-0"	16'-0"	9'-0"	5'-0"					
12"	23'-0"	32'-0"	19'-0"	11'-0"	6'-0"					
14"	26'-0"	36'-0"	21'-0"	12'-0"	7'-0"					
16"	29'-0"	41'-0"	24'-0"	14'-0"	8'-0"					
18"	32'-0"	45'-0"	26'-0"	15'-0"	8'-0"					
20"	35'-0"	50'-0"	29'-0"	16'-0"	9'-0"					
24"	41'-0"	58'-0"	34'-0"	19'-0"	10'-0"					
30"	50'-0"	70'-0"	40'-0"	22'-0"	12'-0"					
36"	58'-0"	82'-0"	46'-0"	26'-0"	14'-0"					
42"	66'-0"	93'-0"	52'-0"	29'-0"	15'-0"					

NOTE:

- 1. THE LENGTHS OF PIPE WITH RESTRAINED JOINTS ARE BASED ON A COMPACTED SILTY SOIL SURROUNDING THE PIPE.
- 2. CONCRETE THRUST BLOCKS ARE STILL

REQUIRED.



TYPE "B" CONNECTION

NOT TO SCALE

WATER MAIN PIPE CONNECTION.

TYPE "B" GENERAL CONNECTION NOTES:

1. CONNECTIONS/POSITION OF NEW AND EXISTING MAINS WILL VARY. 2. FULLY RESTRAIN ALL NEW BRANCH WATER MAIN TO EXISTING

3. FULLY RESTRAIN EXISTING WATER MAIN JOINTS PER EBAA IRON RESTRAINT LENGTH CALCULATOR.

THE OWNER AND RPR.

GENERAL RECONNECTION NOTES:

- 1. NO CONNECTION SHALL BE MADE WITHOUT OWNER,
- ENGINEER, OR RPR APPROVAL. 2. THE USE OF M.J. FITTINGS WILL BE AT THE DISCRETION OF

DETAIL B DETAIL A DETAIL C

NOT TO SCALE

RESTRAINED JOINT DETAILS

Designed By: Drawn By: Checked By DMJ

ssue Date: Project No: Scale: 2/11/2024 | W21115 | AS SHOWN

MISCELLANEOUS

DETAILS

MD1

Sheet: 23 OF 31

NOT TO SCALE

SURFACE RESTORATION DETAIL FOR GRAVEL PAVEMENT - ROAD

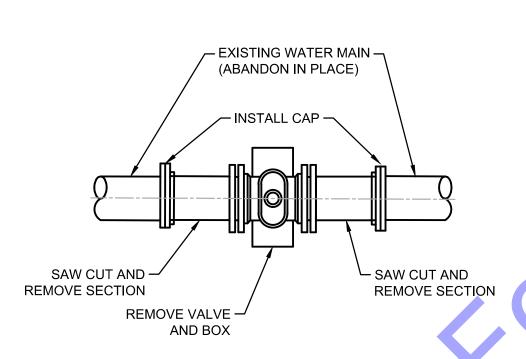
− 1-1/2" HMA TYPE "B" SURFACE TYPE "B" BASE -**EXISTING** EXISTING BASE SURFACE-COMPACTED STONE **EXCAVATED** TRENCH WIDTH

SURFACE RESTORATION DETAIL FOR ASPHALT PAVEMENT - ROAD

- COMPACTED GRANULAR

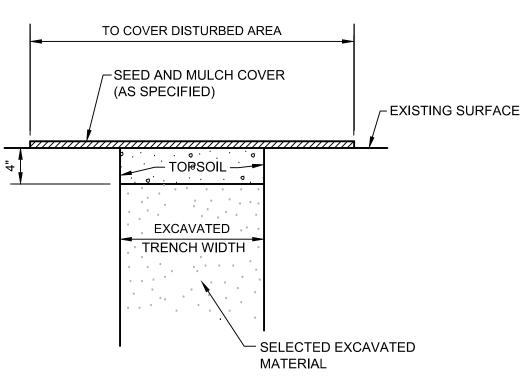
MATERIAL

NOT TO SCALE



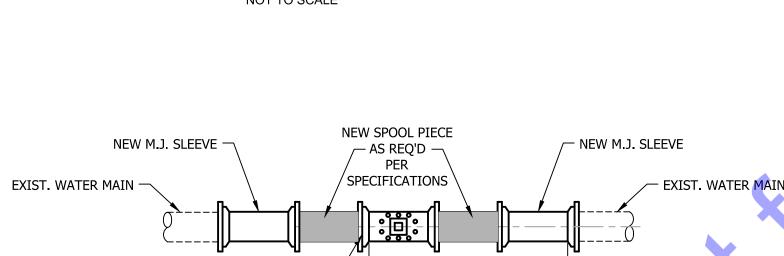
CUT AND CAP WITH VALVE REMOVED DETAIL

NOT TO SCALE



SURFACE RESTORATION DETAIL FOR GRASS AREAS

NOT TO SCALE



VALVE W/ BOX

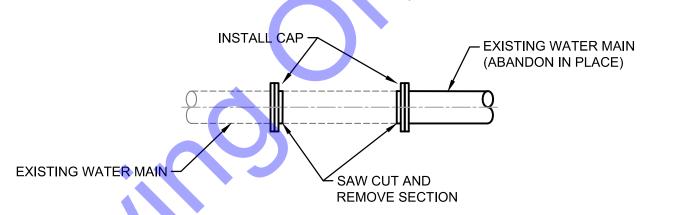
1. COORDINATE PARTIAL SYSTEM SHUT DOWN WITH MULTIPLE VALVE INSTALLATIONS WHEN EVER POSSIBLE.

CUT SECTION OUT OF MAIN

2. WASH PARTS IN 25 9PPM) CHLOROX SOLUTION BEFORE INSTALLING.

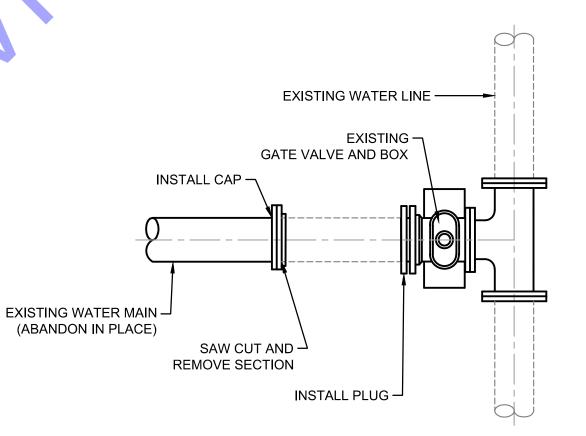
TYPICAL VALVE CUT-IN DETAIL

NOT TO SCALE



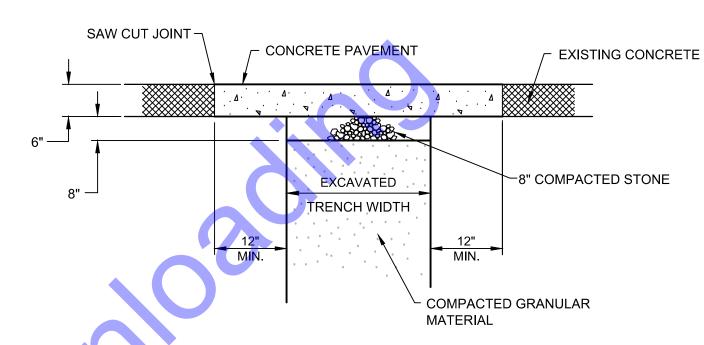
CUT AND CAP DETAIL

NOT TO SCALE



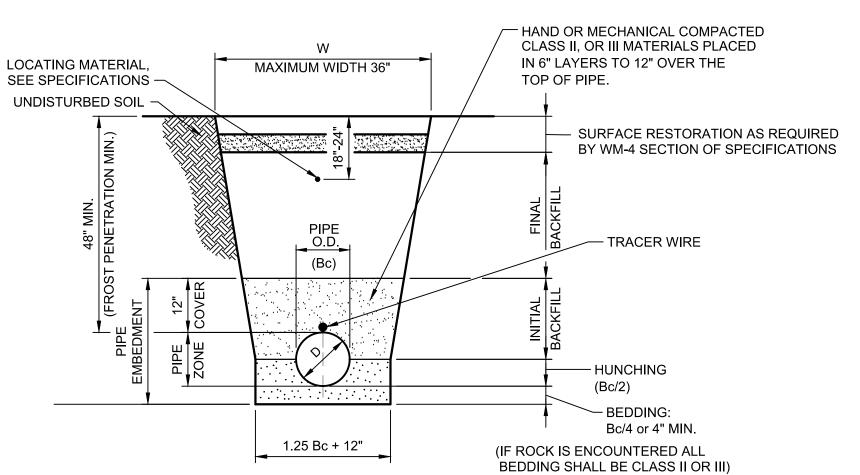
CUT AND CAP/PLUG DETAIL

NOT TO SCALE



SURFACE RESTORATION DETAIL FOR CONCRETE PAVEMENT - DRIVE

NOT TO SCALE



W = MAX. ALLOWABLE TRENCH WIDTH FOR PIPE SHALL NOT TO EXCEED 30 INCHES FOR 4" THROUGH 8" PIPE, 36" FOR 8" THROUGH 12" PIPE.

D = PIPE DIAMETER (INTERNAL)

Bc = PIPE DIAMETER (EXTERNAL)

<u>APPLICATION</u>	BEDDING & HUNCHING
	INITIAL BACKFILL
RASSY AREA OR EW PAVED AREAS	CLASS I, OR II MATERIAL (REFER TO WORKMANSHIP & MATERIALS SPECIFICATIONS

CLASS I, II OR III MATERIAL OR ANY AREA SUBJECT (REFER TO WORKMANSHIP & TO VEHICULAR TRAFFIC MATERIALS SPECIFICATIONS

<u>FINAL</u> **BACKFILL** SELECTED EXCAVATED

COMPACTED GRANULAR MATERIAL

MATERIAL

NOTES:

PAVEMENT AREA

- 1. INITIAL BACKFILL STOPS AT A POINT 12" ABOVE THE TOP OF THE PIPE. BACKFILLING ABOVE THIS POINT SHALL BE IN ACCORDING WITH THE SPECIFICATIONS AND AS REQUIRED BY HEREIN.
- 2. BEDDING, HUNCHING AND INITIAL BACKFILL SHALL BE CLASS I, II, OR III MATERIALS ACCORDING TO THE WORKMANSHIP AND MATERIALS SPECIFICATIONS.
- 3. WORK FALLING UNDER THE JURISDICTION OF THE INDIANA DEPARTMENT OF TRANSPORTATION (INDOT) SHALL UTILIZE COMPACTED GRANULAR BACKFILL MATERIAL FOR INITIAL AND FINAL BACKFILL ANYWHERE WITHIN 12 FEET OF THE EDGE OF PAVEMENT.
- 4. WORK NOT FALLING UNDER THE JURISDICTION OF IN. DEPT. OF TRANSPORTATION SHALL UTILIZE COMPACTED GRANULAR BACKFILL MATERIAL FOR INITIAL AND FINAL BACKFILL ANYWHERE WITHIN 5 FEET OF THE EDGE OF PAVEMENT.

TRENCH DETAIL FOR WATER MAIN

NOT TO SCALE





TOWN OF ODON AVIESS COUNTY, INDIANA SION "B" - NEW W STORAGE TANK

Designed By: Drawn By: Checked By DMJ ARR

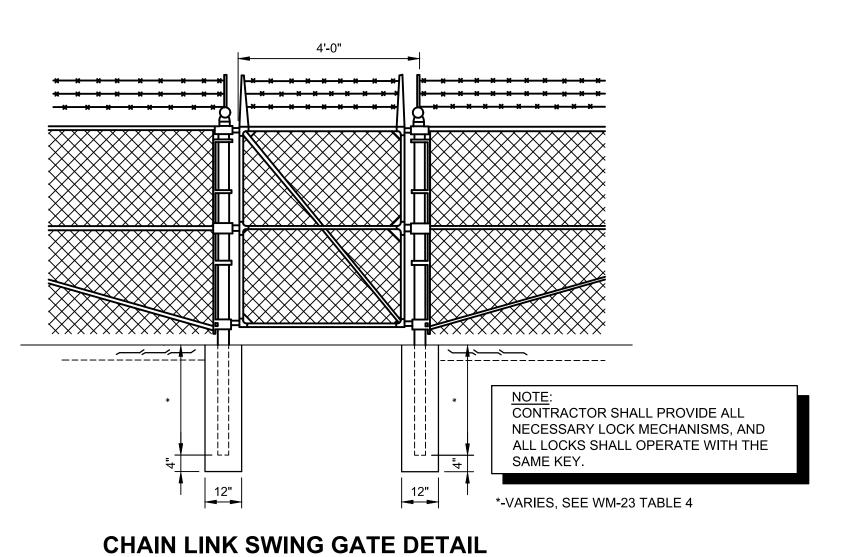
MISCELLANEOUS DETAILS

ssue Date: |Project No: | Scale:

2/11/2024 | W21115 | AS SHOWN

MD2

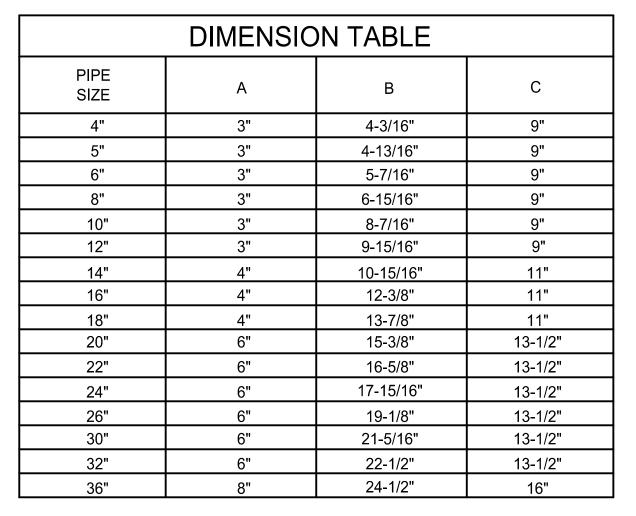
Sheet: 24 OF 31



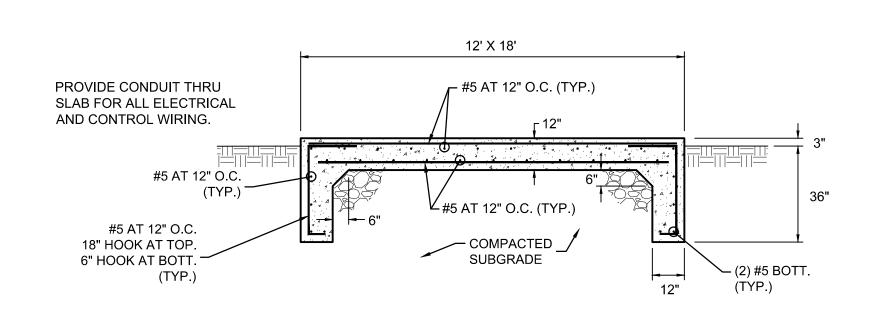
GRINNELL FIG. 259 OR FEE AND MASON FIG. 259 C.I. PIPE STANCHION SADDLE -PAINT SAME ___1 1/2" GROUT STD. PIPE FLANGE, -ATTACH TO CONC. OR MASONRY W/4 STAINLESS STEEL STUD TYPE CONCRETE PIPE SUPPORT **ANCHORS**

NOTES:

- 1. PROVIDE HALF ROUND RIGID INSULATION AND INSULATION PROTECTION SHIELD, SIMILAR TO GRINNELL FIG. 167 OR ELCEN FIG. 219, WHERE PIPING IS INSULATED
- 2. PROVIDE NEOPRENE WAFFLE INSULATION PAD, SIMILAR TO MASON TYPE "W" OR KORKFUND KORPAD 40 UNDER SUPPORT FOOT WHEN PIPING IS ISOLATED OR SUPPORT IS ADJACENT TO MECHANICAL EQUIPMENT.
- 3. FOR BASE HEIGHT AND FLANGE DIMENSIONS, SEE TABLE



PIPE SUPPORT AND TABLE DETAIL NOT TO SCALE



BOOSTER STATION BUILDING FOUNDATION DETAIL

NOT TO SCALE

ONE EXTENSION ARM WITH 3 STRANDS OF BARB WIRE	TO CENTER LINE TO CENTER LINE	2 5/6" O.D. GALVANIZED LINE POST
	* * * * * * * * * * * * * * * * * * * 	7 1 1/2" O.D. GALVANIZED TOP RAIL
2 1/2" O.D. GALV. TERMINAL POST —	(
1 5/8" O.D. BRACE RAIL		
1 5/8" O.D. BRACE RAIL		
1/4"x3/4" STRETCHER BAR		
#9 GAUGE WIRE MESH FABRIC		
3/8" TRUSS ROD		
12" @ CORNE		GRAVEL MOW STRIP GRAVEL LINE
	CHAIN LINK	FENCE DETAIL
	NOT TO SCALE	

NOT TO SCALE

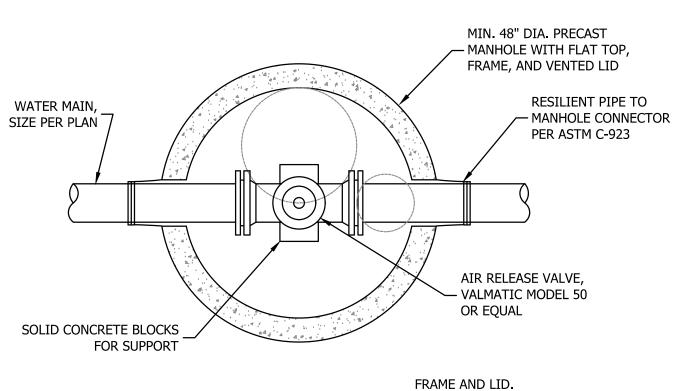
TOWN OF ODON AVIESS COUNTY, INDIANA DIVISION "B" - NEW W. STORAGE TANK Designed By: Drawn By: Checked By ARR DMJ ssue Date: Project No: Scale: 12/11/2024 | W21115 | AS SHOWN **MISCELLANEOUS** DETAILS

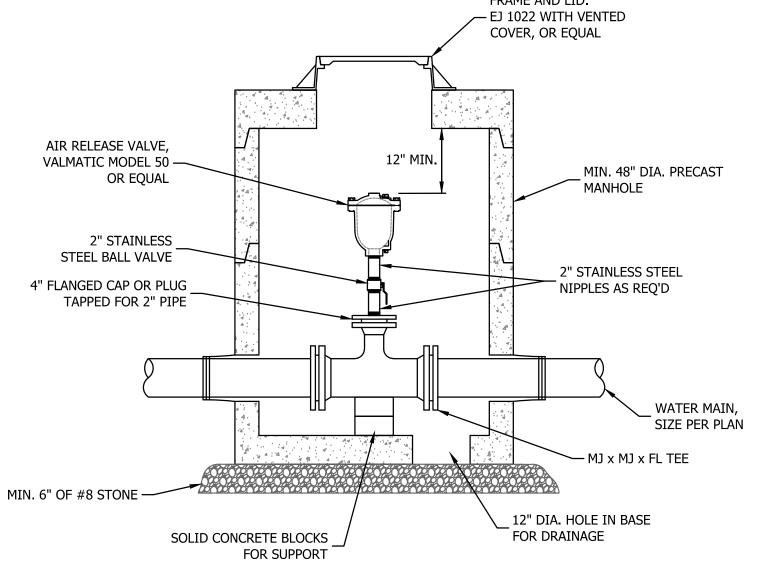
Drawing No:

MD3

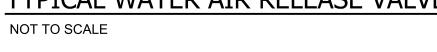
Sheet: 25 OF 31

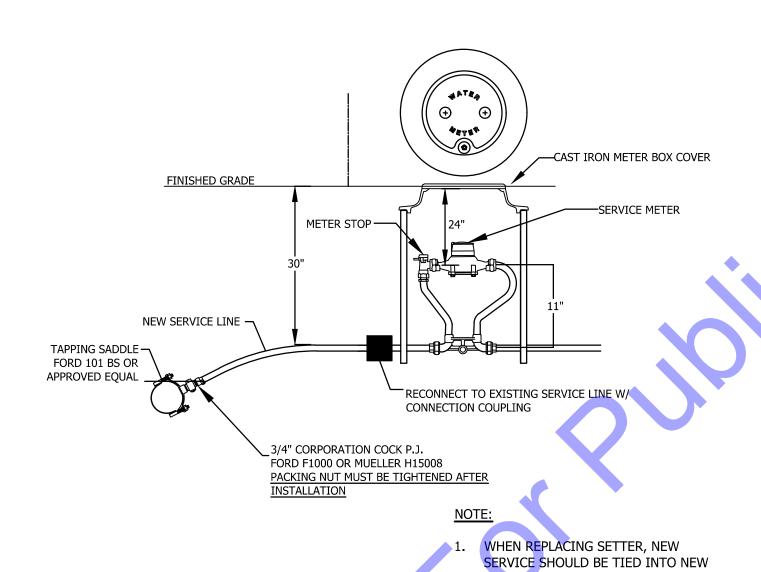
No. 12000723 STATE OF





TYPICAL WATER AIR RELEASE VALVE





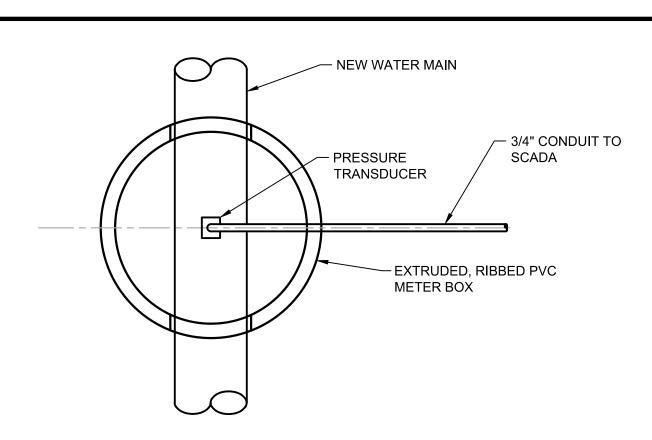
TYPICAL SERVICE CONNECTION/WATER METER INSTALLATION

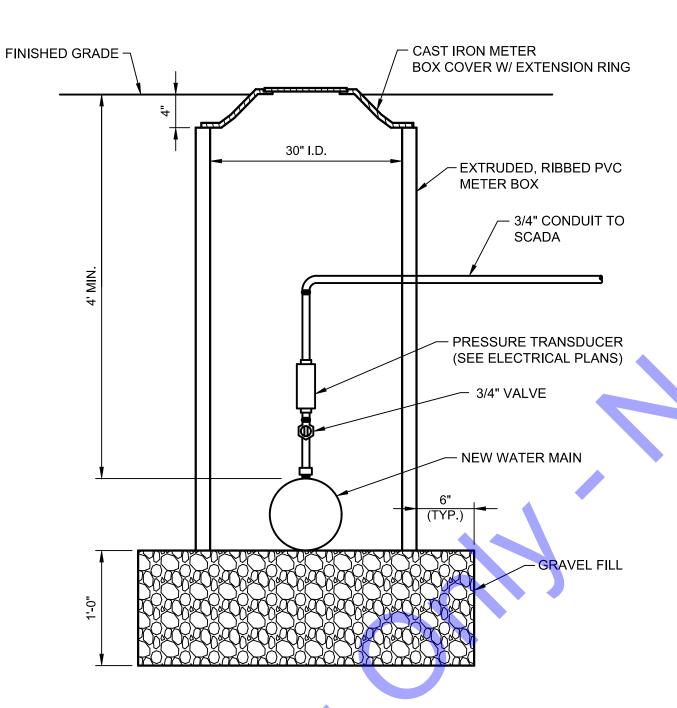
NOT TO SCALE

SETTER NOT OUTSIDE OF METER PIT.

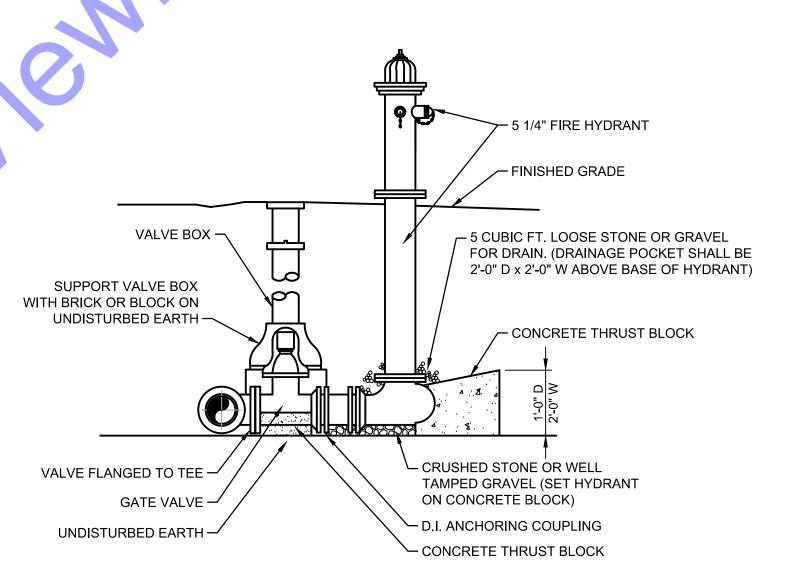
TOWN OF ODON TO COORDINATE

WHICH SETTERS ARE PLACED.

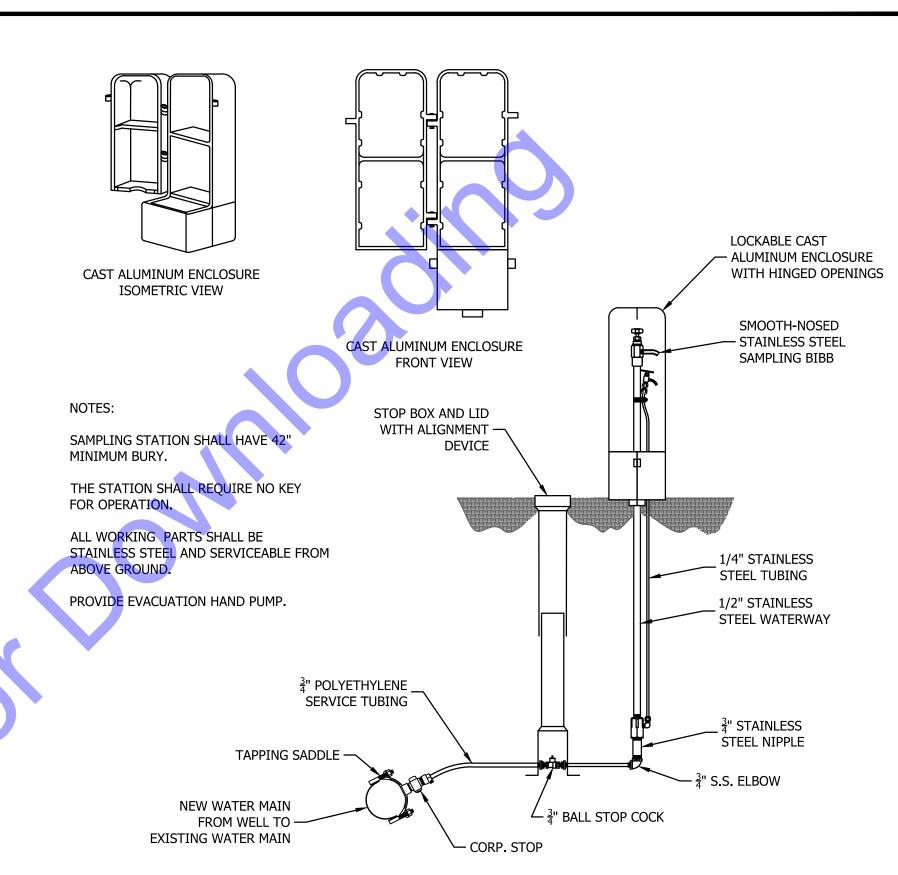




PRESSURE TRANSDUCER PIT DETAIL



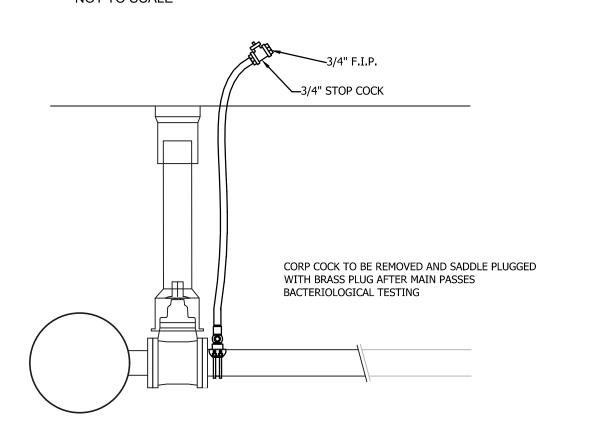
FIRE HYDRANT DETAIL



SAMPLING STATION DETAIL

NOT TO SCALE 2" GALV. PIPE -1/2" HOSE BIB FOR BACTERIAL SAMPLES —— 18" MIN. USE FOR ALL FLUSHING AND 30" MIN. SAMPLING POINTS 12" MIN. NOTE:
REMOVE ALL TEMPORARY BLOW OFFS AND 2" CORP. CORK REPLACE CORP COCK WITH PLUG PRIOR TO FINAL ACTIVATION. 2" TAPPING SADDLE CORP COCK TO BE REMOVED AND SADDLE PLUGGED WITH BRASS PLUG AFTER MAIN PASSES BACTERIOLOGICAL

TYPICAL TEMPORARY BLOWOFF ASSEMBLY NOT TO SCALE



CHLORINATION/DISINFECTION TAP



TOWN OF ODON AVIESS COUNTY, INDIANA

Designed By: Drawn By: Checked By DMJ

> Drawing No: MD4

ssue Date: |Project No: | Scale:

MISCELLANEOUS

DETAILS

2/11/2024 | W21115 | AS SHOWN

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		INSTRUMENT SOCIE	TY OF AMERICA TABLE						
	FIRST LETTER	d(S)	SUCCEEDING LETTER(S)						
LETTER	PROCESS OR INITIATING VARIABLE	MODIFIER	MODIFIER READOUT OR PASSIVE FUNCTION		MODIFIER				
Α	ANALYSIS	1	ALARM(W. LOGGING)	ANNUNCIATE					
В	BURNER COMBUSTION		USERS CHOICE(*)	USERS CHOICE(*)	USERS CHOICE(*)				
С	USERS CHOICE(*)		, i	CONTROL	CLOSE				
D	USERS CHOICE(*)	DIFFERENTIAL							
Е	VOLTAGE		PRIMARY ELEMENT						
F	FLOW RATE	RATIO			FEEDBACK				
G	USERS CHOICE(*)		GLASS						
Н	HAND (MANUAL)				HIGH				
	CURRENT		INDICATE						
.I	POWER	SCAN							
K	TIME OR SCHEDULE	TIME RATE OF CHANGE	KEYPAD(DATA ENTRY)	CONTROL STATION					
L	LEVEL		LIGHT(PILOT)		LOW				
M	MOTOR	MOMENTARY		1	MONITORING				
N	USERS CHOICE(*)		USERS CHOICE(*)	USERS CHOICE(*)	USERS CHOICE(*)				
0	USERS CHOICE(*)	1	ORIFICE	,	, , , , , , , , , , , , , , , , , , , ,				
Р	PRESSURE OR VACUUM		POINT TEST CONNECTION		_				
Ċ	QUANTITY	INTEGRATE		1					
R	RADIATION		RECORD, TREND, LOG		1				
S	SPEED OR FREQUENCY	SAFETY	1,200,10, 11,2110, 200	SWITCH					
т	TEMPERATURE			TRANSIT					
Ü	UNIVERSAL/MULTIVARIABLE(*)	1	MULTIFUNCTION(*)	MULTIFUNCTION(*)	MULTIFUNCTION(*)				
V	VIBRATION	1	VALUE	VALVE					
w	WEIGHT, FORCE, TORQUE		WELL	W					
X	UNCLASSIFIED(*)	X AXIS	UNCLASSIFIED(*)	UNCLASSIFIED(*)	UNCLASSIFIED(*)				
Ŷ	EVENT. STATE	Y AXIS	3.13E.13SI.1EB()	RELAY OR COMPUTE(*)					
Z	POSITION, DIMENSION	Z AXIS		DRIVE, ACTUATE OR UNCLASSIFIED FINAL CONTROL ELEMENT					

(*) WHEN USED, EXPLANATION IS SHOWN ADJACENT TO INSTRUMENT SYMBOI

SPECIAL CASES: ETM - ELAPSED TIME METER JBX - JUNCTION BOX NDX - INDFX # MS - MOTOR STARTER MOR - MOTOR OVERLOAD RELAY

MPR - MOTOR PROTECTION RELAY

CONDUIT NOTES

- RIGID ALUMINUM OR PVC COATED RGS CONDUIT IN CLASSIFIED AND CORROSIVE
- DECK, ABOVE A WALKWAY, OR IN AN AREA THAT IS COMMONLY TRAVELED. ALL SHALL BE INSTALLED BELOW GRADE OR IN THE CONCRETE DECKING OR PAD. CONDUIT INSTALLED IN CONCRETE DECKING OR PAD SHALL BE AVOIDED WHEN POSSIBLE, IF CONDUIT IS TO BE ROUTED IN A STRUCTURAL CONCRETE DECK, PAD. INSTALLATION. CONDUIT INSTALLED IN CONCRETE CAN IMPACT THE STRUCTURAL ANY REQUIREMENTS REQUIRED OF THE STRUCTURAL ENGINEER TO ACCOMMODATE THE INTEGRITY OF THE INSTALLATION AT NO COST TO THE OWNER. FOR A CONDUIT EMBEDDED IN CONCRETE TO BE CONSIDERED IT MUST BE THE ONLY REASONABLE SOLUTION AS DETERMINED BY THE ENGINEER. ALL PROPOSED INSTALLATIONS MUST
- ALL UNDERGROUND CONDUITS SHALL BE SEALED AT BOTH ENDS.
- NO CONDUIT PENETRATIONS ON THE TOP OF ANY OUTDOOR PANELS/ENCLOSURES.

CONTROL WIRING REQUIREMENTS \

EACH ANALOG INPUT REQUIRES AN 18/2 TWISTED SHIELDED PAIR IN 3/4 CONDUIT UNLESS NOTED OTHERWISE.

EACH ANALOG OUTPUT REQUIRES AN 18/2 TWISTED SHIELDED PAIR IN 3/4"

CONDUIT UNLESS NOTED OTHERWISE. EACH DISCRETE INPUT REQUIRES 2 #14's IN 3/4" CONDUIT UNLESS NOTED OTHERWISE.

EACH DISCRETE OUTPUT REQUIRES 2 #14's IN 3/4" CONDUIT UNLESS NOTED OTHERWISE.

CONTROL WIRING OF THE <u>SAME TYPE</u> MAY BE COMBINED INTO THE SAME CONDUIT. EXAMPLES: TWO 4-20MA ANALOG SIGNALS MAY BE COMBINED, TWO 24VDC DISCRETE SIGNALS MAY BE COMBINED, AND TWO 120VAC DISCRETE SIGNALS MAY BE COMBINED NOTE: INSTRUMENTS AND CABLE SHALL BE AS REQUIRED BY THE

INSTRUMENT MANUFACTURER.

INSTRUMENT POWER

ELECTRICAL GENERAL NOTES

(GENERAL NOTES APPLICABLE TO ALL ELECTRICAL SHEETS)

CONTRACTOR SHALL EXAMINE NOT ONLY PLANS AND SPECIFICATIONS FOR

EVIDENCE THAT THE CONTRACTOR HAS EXAMINED ALL DRAWINGS AND

EXAMINATIONS BEEN MADE WILL NOT BE RECOGNIZED.

FROM USE OF THE SUBSTITUTED ITEM(S).

AVOID CONFLICTS AND INTERFERENCE.

HVAC SUPPLY DIFFUSERS.

SERVING THAT PARTICULAR FIXTURE.

CAUSING LAMPS TO RE-ENERGIZE.

MINIMIZE SOUND TRANSMISSION.

ELECTRICAL AND OTHER SYSTEMS.

GREATER THAN 36" IN LENGTH.

21. ALL CABLE SIZES SHALL UTILIZE COPPER CONDUCTORS

SEALING MATERIAL.

BACK TO THE PANEL

FRAMES AND TERMINALS.

SHALL BE STAINLESS STEEL.

SEPARATE RACEWAYS.

35.1. KITCHENS: ALL KITCHEN OUTLETS.

ROUTING EXCEEDS CAT 6E LIMITS.

ARE ACCESSIBLE OR AT GRADE LEVEL.

MECHANICAL EQUIPMENT IS LOCATED.

35.8. UTILITY ROOMS: ALL UTILITY ROOM OUTLETS.

LAUNDRY ROOMS: ALL LAUNDRY ROOM OUTLETS.

THIS PROJECT.

LEAVE "SPARE" BREAKERS IN "OFF" POSITION.

ELECTRICAL AND INSTRUMENTATION. BUT PLANS AND SPECIFICATIONS FOR OTHER

RELATED SECTIONS. VISIT THE SITE TO BECOME ACQUAINTED WITH ALL PROJECT

CONDITIONS INCLUDING EXISTING CONDITIONS. EXECUTION OF CONTRACT IS

SPECIFICATIONS AND THAT ALL CONDITIONS OF INSTALLING THE WORK IN THIS

THE DRAWINGS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO INCLUDE EVERY

DETAIL OF REQUIRED CONSTRUCTION, EQUIPMENT, AND MATERIALS. PROVIDE ALL

REASONABLY INFERRED ON THE DRAWINGS BUT WHICH ARE NECESSARY TO FULLY

TO DIFFICULTIES ENCOUNTERED, WHICH COULD HAVE BEEN FORESEEN HAD

MATERIALS AND WORK NOT SPECIFICALLY MENTIONED, SHOWN, OR CAN BE

WHEN SUBSTITUTING OTHER EQUIPMENT, MATERIALS, AND PRODUCTS THAN

. REVIEW THE CONTRACT DOCUMENTS OF OTHER DIVISIONS, AND COORDINATE

ELECTRICAL AND CONTROL WORK WITH THE WORK OF OTHER DISCIPLINES TO

UPON COMPLETION OF THE WORK REQUIRED UNDER THIS CONTRACT, PROVIDE

ALL MOUNTING HEIGHTS INDICATED ON DRAWINGS ARE TO CENTERLINE, UON.

IN AREAS HAVING FINISHED CEILINGS, LOCATE CEILING-MOUNTED ELECTRICAL

IN ELECTRICAL AND MECHANICAL EQUIPMENT SPACES, COORDINATE EXACT

THAT DIALS, GAUGES, METERS, ETC. ARE PROPERLY ILLUMINATED.

10. DO NOT USE ANY LIGHTING FIXTURE AS A RACEWAY FOR CONDUCTORS NOT

1. CONNECT BATTERY-OPERATED EMERGENCY LIGHTING UNITS AND EXIT SIGNS

HAVING BATTERY BACK-UP TO UNSWITCHED LEG OF LOCAL LIGHTING CIRCUIT IN

ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND NEC SUCH THAT

FAILURE OF CIRCUIT TRANSFERS UNIT FROM NORMAL TO EMERGENCY MODE,

13. COORDINATE ROUTING OF ALL LARGE CONDUITS (2" DIA AND LARGER) AND PULL

BOX LOCATIONS WITH GENERAL CONTRACTOR PRIOR TO INSTALLATION TO AVOID

CONFLICTS AND TO GUARANTEE REQUIRED CLEARANCE AND ACCESSIBILITY OF

14. COORDINATE WITH OWNER OR OWNER'S SELECTED VENDOR PRIOR TO ROUGH-IN

EQUIPMENT. VERIFY REQUIRED NEMA CONFIGURATION OF ALL SUCH OUTLETS

16. INCLUDE GREEN-INSULATED GROUNDING CONDUCTOR SIZED PER 2002 NEC TABL

17. MATCH A.I.C. RATINGS AND OTHER CHARACTERISTICS OF EXISTING DEVICES IN

18. ALL WORK SHALL BE IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE -

19. ALL CONNECTIONS TO EQUIPMENT SUBJECT TO MOVEMENT OR VIBRATION SHALL BE LIQUID TIGHT FLEXIBLE METAL CONDUIT, NOT LESS THAN 12" IN LENGTH, NOR

20. ALL CONDUIT PENETRATIONS SHALL BE SEALED WITH APPROPRIATE CONDUIT

22. FIELD VERIFY LOCATIONS OF BUILDING EXPANSION JOINTS WHEN ROUTING

23. FEEDERS FROM PANELBOARDS BACK TO MAIN SWITCHBOARD, BETWEEN AUTO RANSFER SWITCHES AND THEIR SOURCES/LOADS, BETWEEN DRY TRANSFORMER:

24. HOMERUNS SHALL NOT BE COMBINED IN A RACEWAY UNLESS SHOWN ON THE

25. EACH SINGLE PHASE BRANCH CONDUCTOR SHALL HAVE A DEDICATED NEUTRAL

27. WHERE LOW VOLTAGE (CONTROL) CABLING IS ALLOWED TO BE INSTALLED

28. ALL MOUNTING HARDWARE INCLUDING NUTS, BOLTS, SCREWS, WASHERS, ETC.

29. MOUNT JUNCTION BOXES AND DISCONNECT SWITCHES ON STAINLESS STEEL

30. ALL UNISTRUT, MOUNTING BRACKETS AND SUPPORTING STRUCTURES SHALL BE

31. DO NOT MIX CONTROL AND POWER CONDUCTORS IN THE SAME CONDUIT. DO NOT

MIX DISCRETE AND ANALOG CONTROL CONDUCTORS IN THE SAME CONDUIT.

33. CONTRACTOR SHALL COORDINATE WITH HEAT TRACE MANUFACTURER DURING BIDDING AND CONSTRUCTION AND SHALL PROVIDE ALL CONDUIT, WIRING, AND

34. CONTRACTOR SHALL NOT COMBINE POWER FEEDS FOR THREE PHASE LOADS.

35.2. BATHROOMS: GFCI OUTLETS ARE REQUIRED IN BATHROOMS NEAR THE SINK.

35.4. BASEMENTS: UNFINISHED BASEMENTS REQUIRE AT LEAST ONE GFCI OUTLET

35.5. OUTDOOR SPACES: GFCI OUTLETS ARE REQUIRED IN OUTDOOR AREAS THAT

36. LIMIT CAT 6E INSTALLATION TO 230' MAXIMUM DISTANCE. CONTRACTOR SHALL

CRAWL SPACES: GFCI OUTLETS ARE REQUIRED IN CRAWL SPACES WHERE

FURNISH AND INSTALL FIBER OPTIC CABLE AND MEDIA CONVERTERS IF CONDUIT

35.3. GARAGES: GFCI OUTLETS ARE REQUIRED IN GARAGES THAT HAVE SINKS.

35. THE BELOW LOCATIONS ARE WHERE GFCI OUTLETS ARE REQUIRED:

CIRCUITS AS REQUIRED. HEAT TRACE SHALL BE PROVIDED/INSTALLED COMPLETE.

32. ADJUSTABLE SPEED DRIVES (ASD) LINE AND LOAD WIRE SHALL BE RUN IN

ALL HEAT TRACE IS REQUIRED TO BE GFI PROTECTED.

WITHOUT A RACEWAY IT SHALL BE SUPPORTED NOT EXCEEDING INTERVALS OF 48"

AND NOT MORE THAN 6" FROM THE CABINETS, BOXES, FITTINGS, OUTLETS, RACKS,

CONTRACT DRAWINGS. SINGLE PHASE BRANCH CIRCUIT HOMERUNS MAY BE COMBINED AT THE CONTRACTORS DISCRETION NOT GREATER THAN (3) PHASE CONDUCTORS, NEUTRAL CONDUCTORS, AND A GROUNDING CONDUCTOR.

WORK, AND SHALL BE SIZED AS INDICATED ON THE LINE DIAGRAM.

26. ALL PENETRATIONS BELOW GRADE SHALL USE LINK SEALS.

CONDUIT. ALL CONDUITS CROSSING EXPANSION JOINTS SHALL BE INSTALLED WITH THE EXP<mark>AN</mark>SION FITTINGS EXPANSION FITTINGS SHALL BE INSTALLED IN

ACCORDANCE WITH THE NEC AND MANUFACTURERS WRITTEN RECOMMENDATIONS

ND THEIR SOURCES/LOADS ARE NOT INDICATED. FEEDERS ARE PART OF THE

PANELBOARD WHEN ADDING BREAKERS TO EXISTING PANELBOARDS.

LATEST EDITION ADOPTED BY INDIANA, THE INDIANA CODE AMENDMENT,

LOCAL/MUNICIPAL CODE, AND THE AUTHORITIES HAVING JURISDICTION.

250-122 WITH ALL BRANCH CIRCUIT CONDUCTORS SERVING LIGHTING FIXTURES,

RECEPTACLES, MECHANICAL OR OTHER DEVICES INSTALLED AT OR BELOW 8'-0".

15. PROVIDE APPROPRIATE PULL WIRE IN EACH EMPTY SYSTEMS CONDUIT

FOR EXACT LOCATIONS OF SPECIAL PURPOSE OUTLETS DEDICATED TO SPECIFIC

12. DO NOT INSTALL OUTLET BOXES BACK-TO-BACK IN NON-RATED PARTITIONS. OFFSET AND SEAL, SIMILAR TO REQUIREMENTS FOR RATED PARTITIONS, TO

LOCATIONS OF LIGHTING FIXTURES WITH CONDUIT BANKS, DUCTWORK, PIPING, STRUCTURE, SUPPORTS, AND OTHER OBSTRUCTIONS. LOCATE FIXTURES SUCH

DEVICES AND FIXTURES ACCORDING TO ARCHITECTURAL REFLECTED CEILING

PLAN. DO NOT INSTALL CEILING-MOUNTED SMOKE DETECTORS WITHIN 4 FEET OF

PROVIDE LIGHTING FIXTURES COMPATIBLE WITH CEILING CONSTRUCTION.

COORDINATE WITH ARCHITECTURAL ROOM FINISH SCHEDULES.

TYPED UPDATED DIRECTORY WITHIN DOOR OF EACH AFFECTED PANELBOARD.

SPECIFIED IN THE CONTRACT DOCUMENTS, INCLUDE IN PRICING ALL COSTS FOR

OTHER DESIGN CHANGES TO THE PROJECT (ALL DIVISIONS) WHICH WILL RESULT

SECTION ARE VERIFIED. LATE CLAIMS FOR LABOR AND MATERIALS REQUIRED DUI

- INSTRUMENTS REQUIRING 120 VAC:
- TURBIDITY TRANSMITTERS pH TRANSMITTERS
- ORP TRANSMITTERS
- 6. ULTRASONIC LEVEL TRANSMITTERS
- ULTRASONIC FLOW TRANSMITTERS INFLUENT AND EFFLUENT SAMPLERS
- AND IS NOT ALL INCLUSIVE. COORDINATE WITH THE GENERAL CONTRACTOR AND THE EQUIPMENT SUPPLIERS FOR DETAILED WIRING REQUIREMENTS OF INSTRUMENTS, SENSORS, AND EQUIPMENT.

☐ ☐ ☐ O OPEN LIGHTING FIXTURE SYMBOLOGY DENOTING FIXTURES CONNECTED TO NORMAL POWER: FIXTURE TYPE DETERMINES Q MOUNTING. SINGLE DIAGONAL LIGHTING FIXTURE SYMBOLOGY DENOTING FIXTURES CONNECTED TO CRITICAL OR EQUIPMENT BRANCH (OR EMERGENCY POWER), UON: FIXTURE TYPE DETERMINES MOUNTING. DOUBLE DIAGONAL LIGHTING FIXTURE SYMBOLOGY DENOTING FIXTURES CONNECTED TO LIFE SAFETY BRANCH (OR EMERGENCY POWER), UON: FIXTURE TYPE DETERMINES MOUNTING. BATTERY POWERED EMERGENCY LIGHTING UNIT 7'-6" XIT SIGN: ARROWS DENOTE DIRECTIONAL INDICATING CHEVRON RQMTS, SHADING DENOTES FACE(S) ORIENTATION. WALLWASH OR OTHER DIRECTIONALLY ADJUSTABLE/AIMABLE FIXTURE: OPEN SIDE DENOTES ORIENTATION. TYPE DETERMINES MOUNTING. abla abla abla ablaTRACK LIGHTING FIXTURE: TYPE DETERMINES MOUNTING. • POLE-MOUNTED SITE LIGHTING FIXTURE: TYPE DETERMINES MTG. FLOOD LIGHTING FIXTURE: TYPE DETERMINES MOUNTING. PHOTO-CELL ALL FIXTURES IN THIS SPACE SHALL BE SAME TYPE INDICATED, U.O.N. SINGLE-POLE TOGGLE SWITCH SINGLE-POLE TOGGLE SWITCH: SLASH DENOTES ESSENTIAL POWER SYSTEM CONNECTION - TYPICAL FOR ALL SWITCHES. DUAL TECHNOLOGY, WALL MNTD OCCUPANCY SENSOR WITH MANUAL OVERRIDE SWITCH SINGLE-POLE REMOTE OVERRIDE SWITCH FOR CEILING MNTI OCCUPANCY SENSOR DIMMER SWITCH THREE-WAY DIMMER SWITCH SINGLE-POLE TOGGLE SWITCH WITH PILOT LIGHT SINGLE-POLE MOTOR-RATED TOGGLE SWITCH DISCONNECT SINGLE-POLE OR DOUBLE-POLE MANUAL MOTOR STARTER WITH MELTING ALLOY ELEMENTS FOR THERMAL OVERLOAD PROTECTION OCCUPANCY SENSOR SWITCH INTERVAL TIMER RESET AND CONTROL SWITCH MUSHROOM HEAD TYPE PUSHBUTTON STATION AUTO DOOR CONTROL PUSHPLATE VARIABLE INTENSITY CONTROLLER INCLUDED WITH OWNER-FURNISHED-CONTRACTOR-INSTALLED SURGICAL LIGHTING FIXTURE LOW VOLTAGE CONTROL SWITCH FACTORY SUPPLIED WALL CONTROLLER FOR CEILING MOUNTED LIGHT-INSTALLED BY ELECTRICAL CONTRACTOR 120V DUPLEX RECEPTACLE, STANDARD MOUNTING HEIGHT 0V DUPLEX RECEPTACLE, SPECIAL MOUNTING HEIGH ABOVE COUNTER INSTALL AT SAME HEIGHT AS SWITCHES IF NO HEIGHT IS INDICATED 120V QUADRUPLEX RECEPTACLE, STANDARD MOUNTING HEIGHT V QUADRUPLEX RECEPTACLE, SPECIAL MOUNTING HEIGH ABOVE COUNTE INSTALL AT SAME HEIGHT AS SWITCHES IF NO HEIGHT IS INDICATED 120V SINGLE RECEPTACLE, AMP RATING (IF OTHER THAN 20A) '-6", UON SHOWN: STANDARD MOUNTING HEIGHT, OR OTHER HEIGHT AS NOTED 120V GFCI DUPLEX RECEPTACLE, STANDARD MOUNTING HEIGHT **ABOVE COUNTE** INSTALL AT SAME HEIGHT AS SWITCHES IF NO HEIGHT IS INDICATED OV GFCI DUPLEX RECEPTACLE, SPECIAL MOUNTING HEIGHT ABOVE COUNTE INSTALL AT SAME HEIGHT AS SWITCHES IF NO HEIGHT IS INDICATED SINGLE RECEPTACLE (OTHER THAN 120V), VOLTAGE, AMP RATING, NEMA CONFIGURATION, AND MOUNTING HEIGHT AS NOTED CONNECTION RQMTS WITH UNIT FURNISHED PRIOR TO ROUGH-IN 120V DUPLEX RECEPTACLE IN FLUSH FLOOR-MOUNTED BOX TELE-POWER POLE HALON DUMP STATION FIRE ALARM MANUAL PULL STATION FIRE ALARM MANUAL PULL STATION, KEY-OPERATED FIRE ALARM CEILING-MOUNTED SMOKE DETECTOR FIRE ALARM CEILING-MOUNTED HEAT DETECTOR FIRE ALARM SUPPLY AIR DUCT-MOUNTED SMOKE DETECTOR FIRE ALARM RETURN AIR DUCT-MOUNTED SMOKE DETECTOR FIRE ALARM PROJECTED BEAM SMOKE DETECTOR - RECEIVER AS NOTED FIRE ALARM PROJECTED BEAM SMOKE DETECTOR - TRANSMITTER AS NOTED FIRE ALARM CONNECTION TO SPRINKLER SYSTEM VALVE STATUS /ITCH (TAMPER SWITCH) FIRE ALARM CONNECTION TO SPRINKLER SYSTEM WATER FLOW SWITCH FID FIRE ALARM AUDIO/VISUAL NOTIFICATION DEVICE-CHIME & STROBE FIX FIRE ALARM AUDIO/VISIUAL NOTIFICATION DEVICE-HORN & STROBE FIRE ALARM VISUAL ONLY NOTIFICATION DEVICE - STROBE LIGHT FS) KFS) | FIRE ALARM SPEAKER: CEILING-MOUNTED, WALL-MOUNTED FIRE ALARM HORN, WALL-MOUNTED AS NOTED DUCT SMOKE DETECTOR ALARM REMOTE INDICATOR LIGHT: EILING-MOUNTED, WALL-MOUNTED DUCT SMOKE DETECTOR ALARM REMOTE INDICATOR LIGHT AND TEST /ITCH: CEILING-MOUNTED, WALL-MOUNTED FIRE ALARM ZONE ADDRESSABLE MODULE FIRE ALARM INDIVIDUAL ADDRESSABLE MODULE FIRE ALARM ELECTRO-MAGNETIC DOOR HOLDER FR I FIRE RELAY DESK MOUNTED INTERCOM (ID) ₩ WALL MOUNTED INTERCOM \$x EXPLOSION PROOF SWITCH

LEGEND

DESCRIPTION

TO CL, UON

SYMBOL

\$ _{WP}	NEMA 4X SWITCH	3'-
	PUMP AND METER LEGEND	
SYMBOL	DESCRIPTION	
М	MAGNETIC FLOW METER	
	SONIC FLOW METER	
Q	CENTRIFUGAL PUMP	
®	LOBE PUMP	
	PERISTALTIC PUMP	
_	SUBMERSIBLE PUMP	
Ŋ	GRINDER PUMP	·

\$₃ 3 WAY SWITCH

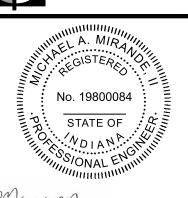
\$₄ 4 WAY SWITCH

		SEND VIATIONS						
	1	T						
ABV	ABOVE	IG	ISOLATED GROUND					
AFF	ABOVE FINISHED FLOOR	MON	MONITOR					
ACLG	ABOVE FINISHED CEILING	MTG	MOUNTING					
BFC	BELOW FINISHED CEILING	MV	MULTI-VIEWER					
С	CRITICAL BRANCH OR EMERG PWR- RED DEVICE & PLATE, UON.	MW	MICROWAVE OVEN					
CL	CENTER-LINE	NEC	NATIONAL ELECTRICAL CODE					
CLG	CEILING-MOUNTED	OCPD	OVERCURRENT PROTECTIVE DEVICE					
COF	COFFEE MAKER OFCI OWNER-FURNISHED-CO							
COP	COPIER	OFE	OWNER-FURNISHED EQUIPMENT					
CTR	COUNTER	PRT	PRINTER					
ECB	ENCLOSED CIRCUIT BREAKER	PTS	PNEUMATIC TUBE STATION					
EMER	EMERGENCY	Q	EQUIP BRANCH OR EMERG PWR- RED DEVICE & PLATE, UON.					
EWC	ELECTRIC WATER COOLER	REF	REFRIGERATOR					
EWH	ELECTRIC WATER HEATER	RQMTS	REQUIREMENTS					
FAX	FACSIMILE MACHINE	Т	TAMPERPROOF DEVICE					
FBO	FURNISHED BY OTHERS	TSP	TWISTED SHIELDED PAIR					
GFCI	GROUND FAULT CIRCUIT INTERRUPT- ING - PERSONNEL PROTECTION	UON	UNLESS OTHERWISE NOTED					
GFI	GROUND FAULT INTERRUPTING - EQUIPMENT PROTECTION	UCR	UNDER-COUNTER REFRIGERATOR					
HGT	HEIGHT	WP	WEATHERPROOF					
FPMR	FUSED PER MANUFACTURE'S RECOMMENDATIONS							

SYMBOL	DESCRIPTION	MTG HGT AF
$\overline{\Box}$	EXPOSED RACEWAY	
$\overline{}$	RACEWAY CONCEALED IN OR ABOVE CEILINGS AND WITHIN WALLS	
$\overline{}$	BRANCH CIRCUIT RACEWAY CONCEALED IN OR BELOW FLOOR SLAB OR BELOW GRADE	
	FEEDER RACEWAY CONCEALED BELOW FLOOR SLAB OR BELOW GRADE	
$\overline{\ }$	LIGHTNING PROTECTION CABLING	
	HOMERUN RACEWAY: NUMBER OF ARROWHEADS DENOTES NUMBER OF CIRCUITS.	
~	RACEWAY TURNING UP AS VIEWED FROM THE LOAD	
~	RACEWAY TURNING DOWN AS VIEWED FROM THE LOAD	
-	RACEWAY VERTICAL RISER WITH HORIZONTAL CONTINUATION AT TWO LEVELS SHOWN	
^	CAPPED RACEWAY	
	GENERAL LIGHTING OR OUTLET CIRCUIT - MAY BE DAISY CHAINED	
O)	JUNCTION BOX	AS NOTED
	ENCLOSED BREAKER	
<u>_</u>	FUSIBLE SAFETY SWITCH (AMP RATING, POLES, FUSE SIZE, AND NEMA ENCLOSURE TYPE IF OTHER THAN 1 NOTED)	
Z	NON-FUSIBLE SAFETY SWITCH (AMP RATING, POLES, AND NEMA ENCLOSURE TYPE IF OTHER THAN 1 NOTED)	
\boxtimes_1	COMBINATION MAGNETIC ACROSS-THE-LINE STARTER WITH MOTOR CIRCUIT PROTECTOR (NEMA STARTER SIZE NOTED)	
***	CONTROL PANEL FURNISHED INTEGRAL TO EQUIPMENT (SINGLE-POINT ELECTRICAL CONNECTION REQUIRED)	
0	MOTOR	
- ~	FLEXIBLE CONDUIT CONNECTION	
	SURFACE- OR FLUSH-MOUNTED LIGHTING/RECEPTACLE PANELBOARD	
	POWER DISTRIBUTION PANELBOARD	
TT	DRY TYPE TRANSFORMER	
XXX	MISCELLANEOUS SYSTEMS PANEL OR CABINET: REFER TO ABBREVIATIONS.	

MOTOR CONTROLLER LEGEND											
SYMBOL	DESCRIPTION										
Мѕ	ACROSS THE LINE MOTOR STARTER										
ss	SOFT STARTER										
VFD	VARIABLE FREQUENCY DRIVE										
MS	ACROSS THE LINE MOTOR STARTER WITH INTEGRAL DISCONNECT										
ss	SOFT STARTER WITH INTEGRAL DISCONNECT										
VFD	VARIABLE FREQUENCY DRIVE WITH INTEGRAL DISCONNECT										

LIGHTING LEGEND									
SYMBOL	DESCRIPTION								
0	FIXTURE WITH STANDARD BALLAST.								
•	FIXTURE WITH STANDARD BALLAST AND EMERGENCY BALLAST.								



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LECTRICAL- LEGENDS AND SCHEDULES

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PVC SCHEDULE 40 BELOW GRADE. RIGID ALUMINUM OR PVC COATED RGS CONDUIT ABOVE GRADE OUTDOORS.

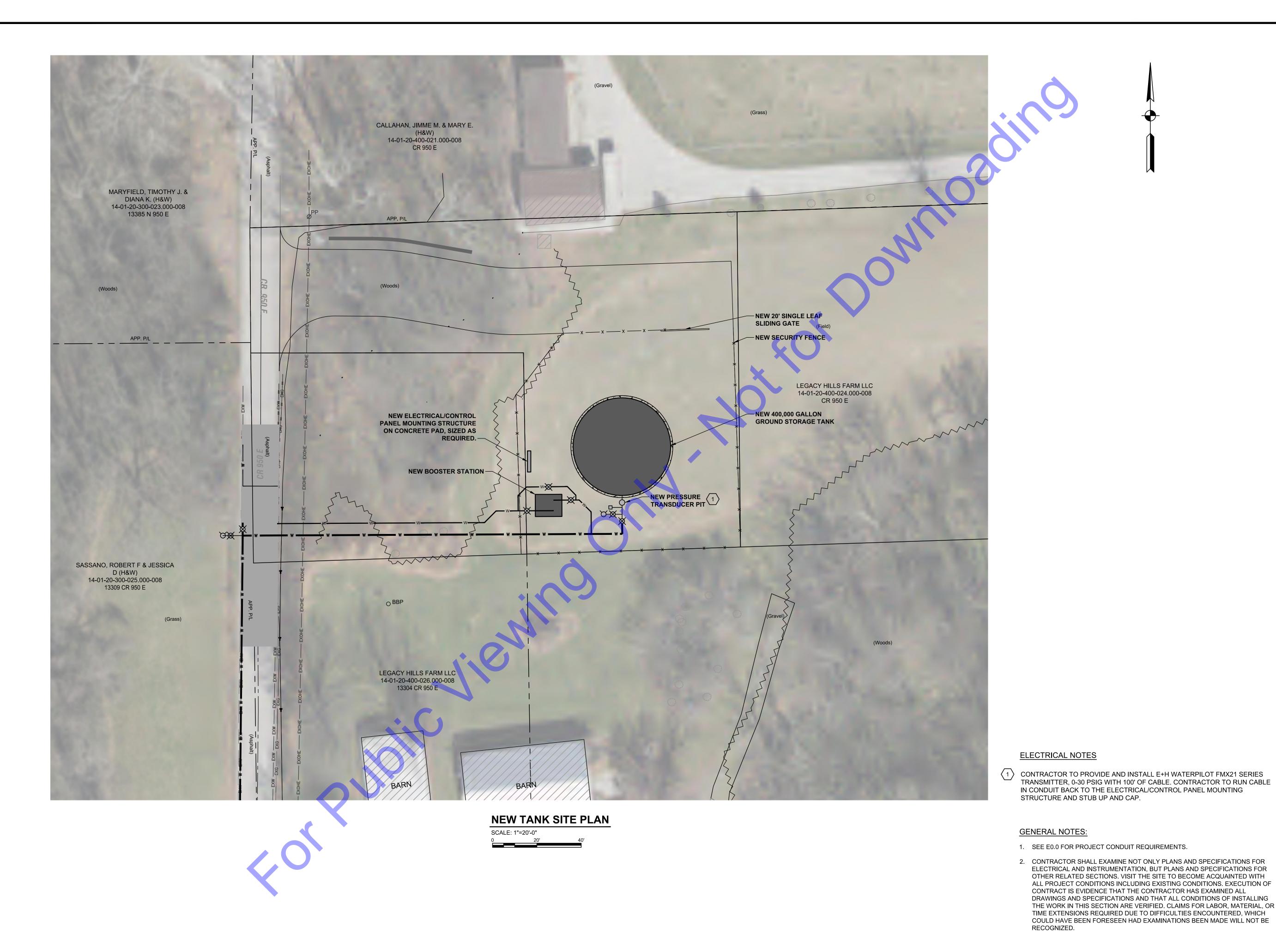
NO CONDUIT SHALL BE INSTALLED ON TOP OF A DECK. ON A WALKWAY, OR IN AN AREA THAT MAY POSE A TRIP HAZARD. NO CONDUIT SHALL BE INSTALLED ABOVE A CONDUIT IN SUCH AREAS SHALL BE COORDINATED WITH THE OWNER/ENGINEER AND WALL. ETC. IT SHALL BE COORDINATED AND APPROVED BY THE ENGINEER PRIOR TO INTEGRITY OF CONCRETE. IT IS THE CONTRACTORS RESPONSIBILITY TO CONFORM TO

COMPLY WITH ACI 318 AND BE ENGINEER APPROVED.

EMT IS ACCEPTABLE IN CONDITIONED ELECTRICAL ROOMS AND OFFICE/BREAK AREAS ONLY. EMT SHALL BE TRANSITIONED PRIOR TO EXITING NON CORROSIVE SPACES. EMT SHALL NOT BE USED WHEN IT CAN BE EXPOSED TO ANY CORROSIVE GASES.

DO TRANSMITTERS

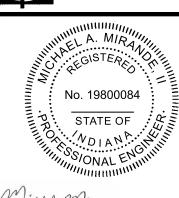
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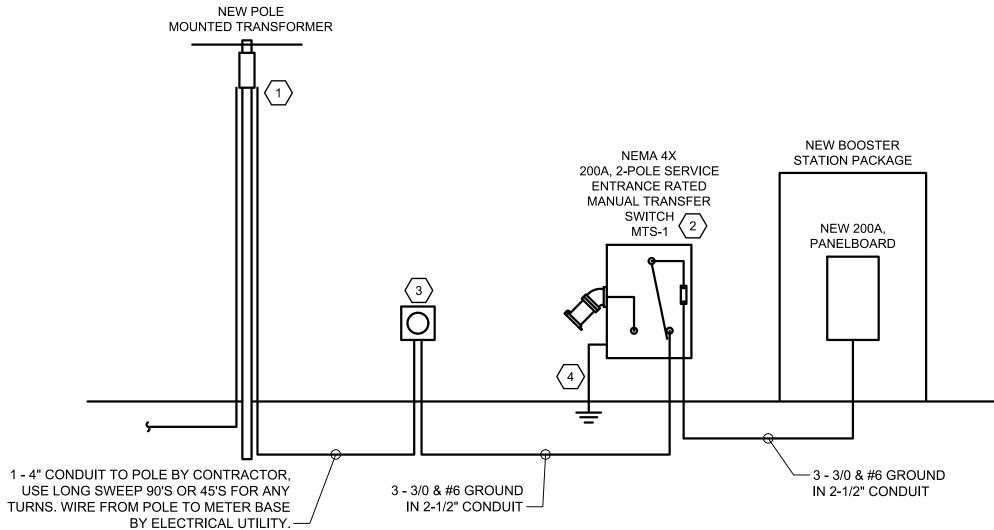
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ELECTRICAL- SITE PLAN

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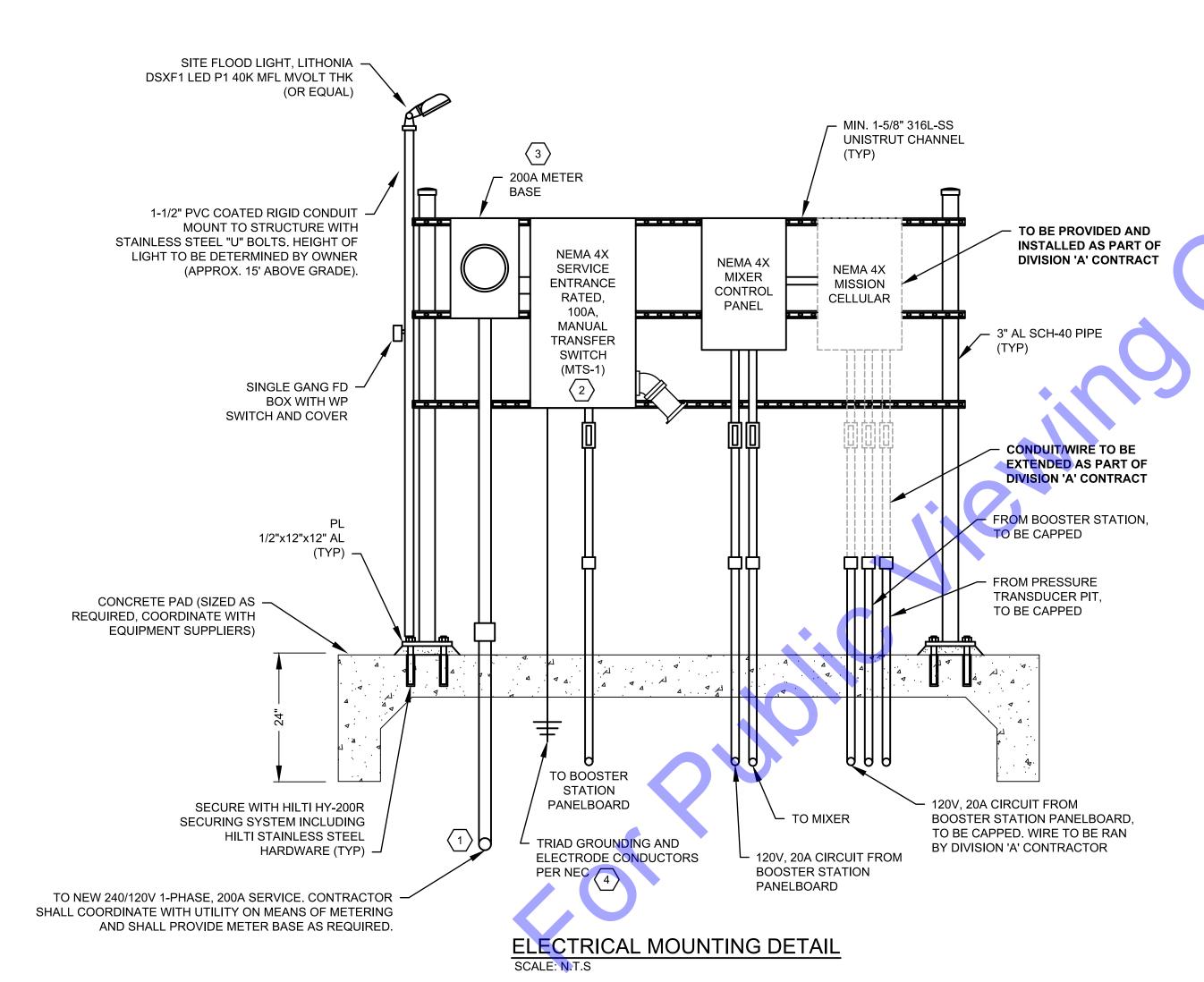
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RISER DIAGRAM

SCALE: NTS

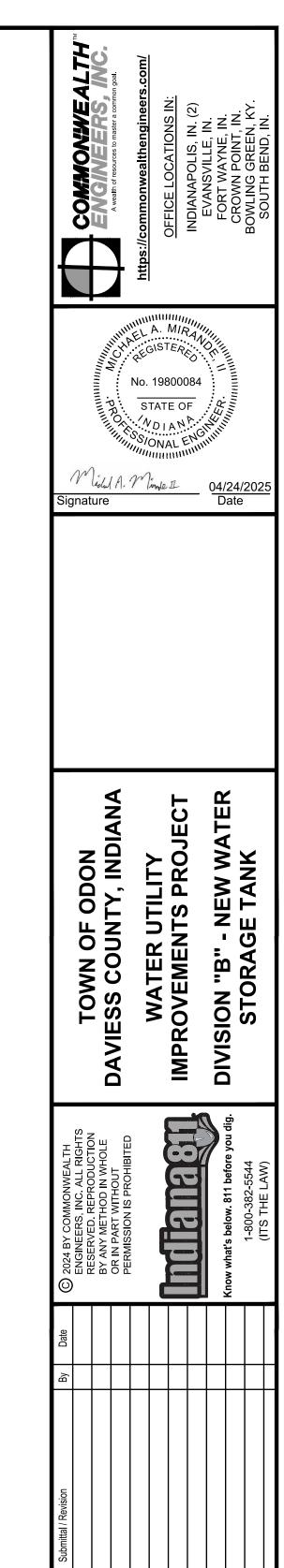


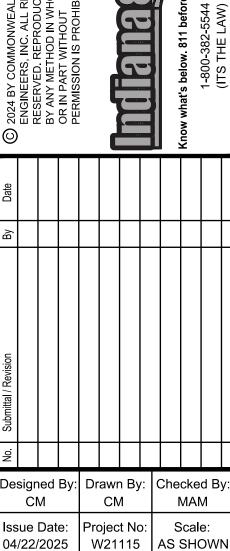
ELECTRICAL NOTES

- CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY TO INSTALL NEW 120/240 VAC, 1-PHASE, 200-AMP SERVICE. THE CONTRACTOR IS RESPONSIBLE FOR ALL MATERIAL AND LABOR NOT PROVIDED BY UTILITY. THE CONTRACTOR SHALL COORDINATE WITH UTILITY DURING BIDDING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR BUT NOT LIMITED TO; INSTALLATION AND PROVISION OF PRIMARY CONDUIT AND SECONDARY CONDUIT AND WIRE AS REQUIRED.
- THE CONTRACTOR SHALL FURNISH AND INSTALL NEW SERVICE ENTRANCE RATED NEMA 4X 120/240 VAC, 1-PHASE, 200-AMP MANUAL TRANSFER SWITCH (MTS-1) WITH EMERGENCY RECEPTACLE WITH ANGLE ADAPTER. COORDINATE WITH OWNER FOR EXACT PART NUMBER BEFORE ORDERING.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE METER BASE AND MOUNTING AS REQUIRED BY LOCAL UTILITY. COORDINATE DURING BIDDING AND CONSTRUCTION.
- PROVIDE TRIAD GROUNDING SYSTEM.

GENERAL NOTES:

1. SEE E0.0 FOR PROJECT CONDUIT REQUIREMENTS.





ELECTRICAL- NEW GROUND STORAGE TANK

E2-0

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GS Series Requirements - 120V

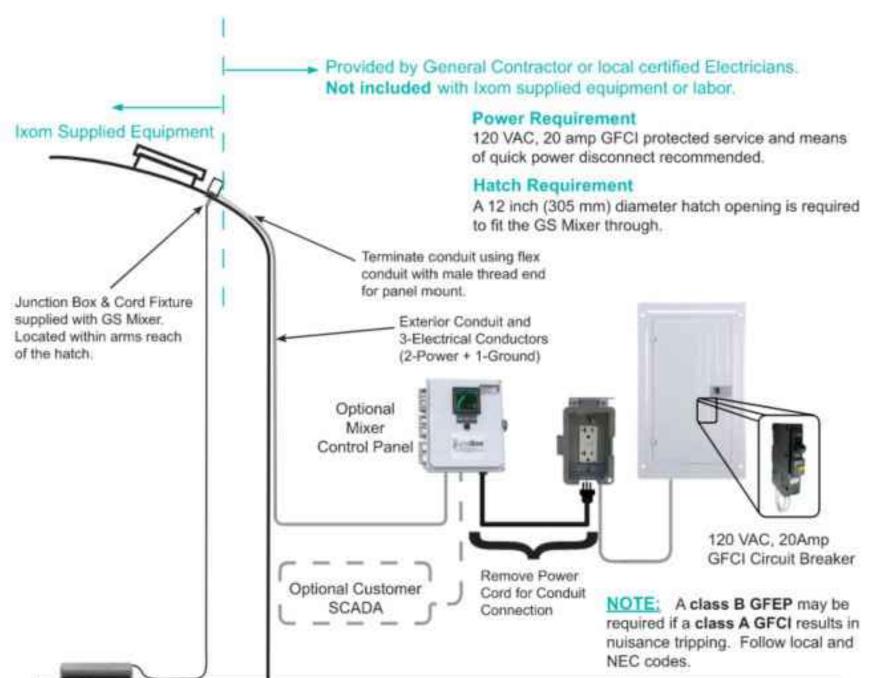


Figure 1: Typical GS Placement

		RATING			FULL		MAX	MUM AD	WINDING (1) RES. IN OHMS	EFFICIENCY %		POWER FACTOR %		LOCKED	KVA
HP	KW	VOLTS	HZ	S.F.	(2) AMPS	WATTS	(2) AMPS	WATTS	M=MAIN RES. S=START RES.	FL	S.F.	F.L.	S.F.	AMPS	CODE
1/2	0.37	115	60	1.6	7.9	910	9.8	1120	1.4-2.0	42	54	99	99	28	н

(1) Main winding - yellow to black, Start winding - yellow to red

(2) Y = Yellow lead (White) - line amps, B = Black lead - main winding amps, R = Red lead - start or auxiliary winding amps

					rvice Ent med on S										
Mi	tor Rati	ng:				60° C	and 75° C	insulatio	n - AWG	Copper W	fire Size		4		
Volts	HP	kW	14	12	10	8	6		3	1.	- 1	0	10	000	2000
115	1/2	0.37	100	160	250	390	620	960	1190	1460	1780	2160	2630	3140	3770

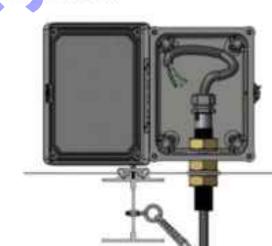
Aluminum Geodesic Dome Roof

GS Series

General Notes:

- Cord seal fitting.
- 2. Brass nut.
- 3. Plastic seal washer with Lexel.
- Top of tank junction box.
- 5. Penetration fixture.
- Aluminum geodesic dome
 panel
- Aluminum geodesic dome batten bar.
- 8. Support I-beam.
- 9. Quick link.
- 10. Kellem grip.
- A 1-5/16" dia. hole drilled through panel and sealed with Lexel. Locate penetration within arms reach of an access point.
- Eyebolt drilled through support I-beam to support kellem grip and retrieval chain. Eyebolt not included.

NOT DESIGNED AS A SUBMERSIBLE PENETRATION.





GENERAL NOTES:

- 1. MIXER TO BE INSTALLED AT THE NEW GROUND STORAGE TANK.
- 2. GRIDBEE MIXERS IS THE BASIS OF DESIGN. COORDINATE DURING BIDDING AND CONSTRUCTION WITH MANUFACTURERS FOR DETAILS ON MIXER INSTALLATION AND INTERLOCK WIRING REQUIREMENTS. REFER TO THE MIXER SPECIFICATION FOR FURTHER DETAIL.
- RUN CONDUIT/WIRE UP TO TOP OF THE TANK ADJACENT TO LADDER. CONDUIT SHALL NOT IMPEDE CLIMBING OF LADDER IN ANY MANNER. CONDUIT SHALL EXTEND THROUGH TOP OF TANK THROUGH SEALED TANK PENETRATION FITTING TO MIXER J-BOX.



nature Date

DAVIESS COUNTY, INDIANA
WATER UTILITY
IMPROVEMENTS PROJECT
DIVISION "B" - NEW WATER
STORAGE TANK

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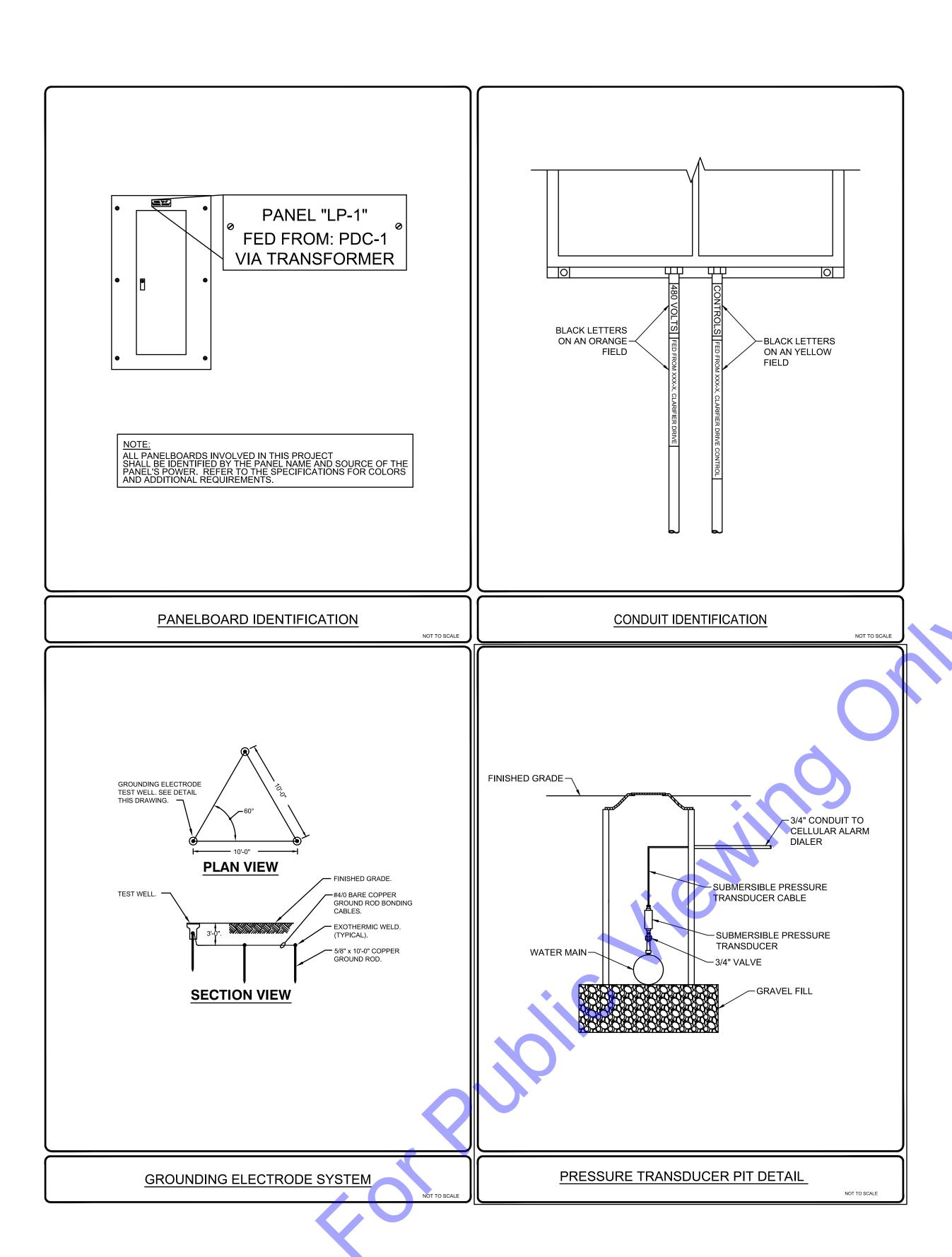
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ELECTRICAL- GROUND STORAGE TANK MIXER

E3-0

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STATE OF DIVISION "B" - NEW WATER STORAGE TANK TOWN OF ODON DAVIESS COUNTY, INDIANA WATER UTILITY IMPROVEMENTS PROJECT Designed By: Drawn By: Checked By ssue Date: | Project No: | Scale: 04/22/2025 | W21115 | AS SHOWN **ELECTRICAL- DETAILS**

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