CONSTRUCTION PLANS FOR: UNION CITY DRINKING WATER IMPROVEMENTS **DIVISION III (WATER MAINS)** UNION CITY, INDIANA 47390

PLANS PREPARED FOR:

UNION CITY BOARD OF PUBLIC WORKS **115 N COLUMBIA STREET** UNION CITY, IN 47390 TELEPHONE: (765) 964-3700 X 2 CONTACT PERSON: STEVE SHOEMAKER, CITY MANAGER EMAIL: citymanager@unioncity-in.gov

OPERATING AUTHORITIES:

SANITARY SEWER UNION CITY INDIANA WATER **115 N COLUMBIA STREET** UNION CITY, IN 47390 TELEPHONE: (765) 964-5101 **ROB MYERS**

WATER UNION CITY INDIANA WATER **115 N COLUMBIA STREET** UNION CITY, IN 47390 TELEPHONE: (765) 964-5101 BRAD MINK

TELEPHONE CENTURY TELEPHONE: (800) 244-1111

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REVISIONS					
REVISION NUMBER	REVISION DESCRIPTION	DATE			

FLOOD NOTE:

THE ACCURACY OF ANY FLOOD HAZARD DATA SHOWN ON THESE PLANS IS SUBJECT TO MAP SCALE UNCERTAINTY AND TO ANY OTHER UNCERTAINTY IN LOCATION OR ELEVATION ON THE REFERENCED FLOOD INSURANCE RATE MAP. THE WITHIN DESCRIBED TRACT OF LAND LIES WITHIN FLOOD HAZARD ZONE X AS SAID TRACT PLOTS BY SCALE ON COMMUNITY PANEL NUMBER 18135C0185C DATED 03/04/2013 FOR THE FLOOD INSURANCE RATE MAPS FOR RANDOLPH COUNTY, INDIANA (AREA 180429).



1-800-382-5544 CALL TOLL FREE PER INDIANA STATE LAW IC8-1-26. IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

CALL 2 WORKING DAYS BEFORE YOU DIG

PLANS PREPARED BY:

RQAW CORPORATION 8770 NORTH STREET, SUITE 110 FISHERS, INDIANA 46038 TELEPHONE: (317) 588-1784 CONTACT PERSON: WHITNEY WEIDENBENNER EMAIL: wweidenbenner@dccm.com

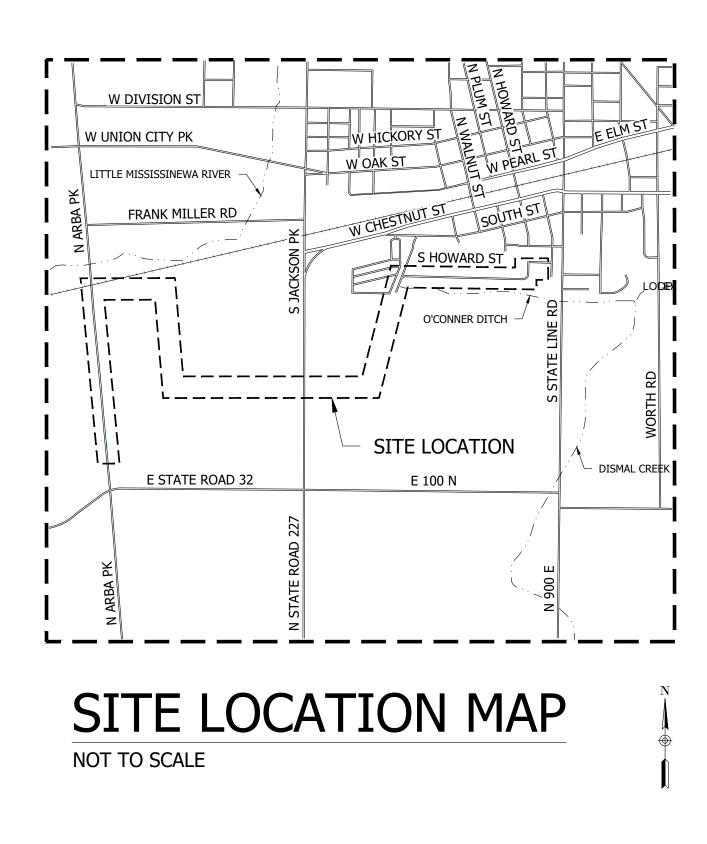




ELECTRIC **INDIANA MICHIGAN POWER** 701 DAYTON STREET DECATUR, IN 46733 TELEPHONE: (260) 724-1850 CASSIE EZELL

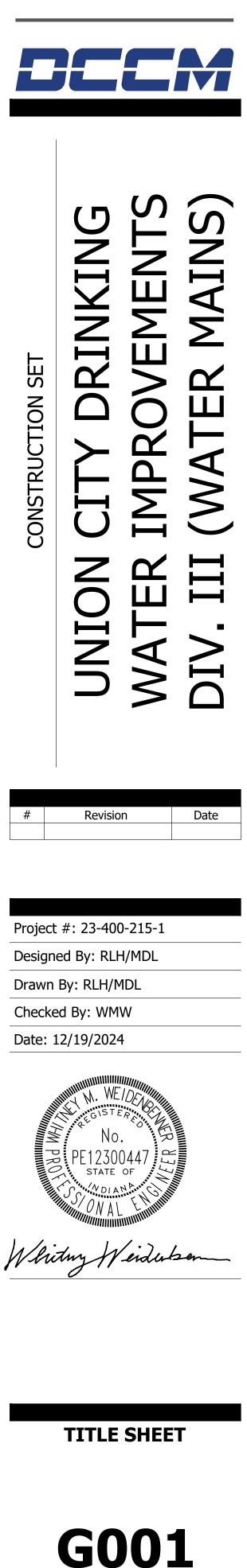
GAS OHIO VALLEY GAS 215 W FRANKLIN STREET WINCHESTER, IN 47394 TELEPHONE: (765) 584-5501 SCOTT WILLIAMS

CABLE/INTERNET SPECTRUM TELEPHONE: (800) 425-2225





SITE VICINITY MAP



	GENERAL NOTES	CIVIL L	INETYPES
1.	ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS FOR THIS PROJECT. ADDITIONS, DELETIONS, AND/OR REVISIONS SHALL NOT BE MADE WITHOUT PRIOR APPROVAL BY THE ENGINEER. KEEP AND MAINTAIN IN GOOD CONDITION A COMPLETE SET OF THE CONTRACT DOCUMENTS ON	LINETYPE	
2.	THE JOB SITE AT ALL TIMES. ALL WORK SHALL COMPLY WITH LOCAL, STATE, AND FEDERAL CODES, ORDINANCES, RULES, REGULATIONS,	PL	GIS APPAREI
3.	ORDERS, AND OTHER LEGAL REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.		EXISTING CL
з.	POTENTIAL UTILITY CONFLICT, NOTIFY THE ENGINEER IMMEDIATELY FOR CLARIFICATION PRIOR TO PROCEEDING WITH THE CONSTRUCTION OF THE PORTION OF THE WORK IN QUESTION. FIELD LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. VERTICAL AND HORIZONTAL LOCATIONS TO BE CONFIRMED.	<<	EXISTING FL
	ANY NECESSARY PIPE MODIFICATIONS SHALL BE MADE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.		EXISTING GF
4.	CONSTRUCTION SHALL NOT COMMENCE UNTIL ALL LOCAL NECESSARY PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, OR VERIFYING, THAT ALL PERMITS AND APPROVALS ARE OBTAINED FROM THE RESPECTIVE CITY, COUNTY, AND STATE AGENCIES PRIOR TO STARTING CONSTRUCTION.	X X	EXISTING TR
5.	ALL RIGHT-OF-WAY AND PROPERTY LINES AND EASEMENTS ARE APPARENT AND WERE DETERMINED BASED UPON AVAILABLE INFORMATION. VERIFY ALL RIGHT-OF-WAY AND PROPERTY LINES. STAKE ALL RIGHT-OF-WAY, PROPERTY, AND EASEMENT LINES THROUGHOUT THE DURATION OF CONSTRUCTION.	[ОН-Е]	EXISTING O
6.	CONSTRUCTION STAKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. PROPERTY LINES AND RIGHT-OF-WAY SHALL BE STAKED FOR THE DURATION OF CONSTRUCTION ACTIVITIES.	[ST][ST] [W][W]	EXISTING ST
7.	PROTECT ALL EXISTING UTILITIES FROM DAMAGE, IN A MANNER APPROVED BY THE UTILITY COMPANIES AND THE ENGINEER. COORDINATE WITH UTILITY COMPANIES AS NECESSARY TO COMPLETE THE WORK. PROTECT BENCH MARKS, SURVEY CONTROL POINTS, AND EXISTING STRUCTURES FROM UNNECESSARY DAMAGE OR DISPLACEMENT.	[s][s]	EXISTING SA PROPOSED V
8.	PROVIDE ALL AUTOMOBILE AND PEDESTRIAN TRAFFIC CONTROL DEVICES REQUIRED BY FEDERAL, STATE, OR LOCAL AGENCIES. THE AMOUNT, LOCATION, AND SIZE SHALL BE AS REQUIRED IN ACCORDANCE WITH MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.	W	PROPOSED V
9.	DURING CONSTRUCTION IT MAY BE NECESSARY TO TRIM OR REMOVE A TREE WITHIN THE RIGHT-OF-WAY OR AN EASEMENT. NOTIFY THE ENGINEER, OWNER, AND ANY AFFECTED PROPERTY OWNER PRIOR TO ANY REQUIRED TREE REMOVAL. TREE TRIMMING AS REQUIRED WITHIN THE RIGHT-OF-WAY OR EASEMENT SHALL BE MINIMIZED. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR TREE REMOVAL OR TRIMMING.		
10.	ALL DISTURBED AREAS, INCLUDING, BUT NOT LIMITED TO, STREETS, DRIVES, WALKS, LAWNS, FENCES, RETAINING WALLS, ETC. SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.		
11.	IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ALL MUD, DIRT, GRAVEL, AND ANY OTHER MATERIALS TRACKED ONTO ANY PUBLIC OR PRIVATE STREETS, PARKING LOTS, OR WALKS. THIS MATERIAL REMOVAL OR SWEEPING OF THE STREETS SHALL BE DONE AS FREQUENTLY AS NECESSARY TO MAINTAIN AREAS REASONABLY CLEAN. AIRBORNE DUST SHALL BE KEPT TO A MINIMUM BY USING WATER OR OTHER METHODS AS NECESSARY.		
12.	PROVIDE TEMPORARY GRASS SEED WITHIN 7-DAYS OF ALL EARTH DISTURBING ACTIVITIES.		
13.	PROVIDE AND MAINTAIN ALL NECESSARY STRAW BALES, FILTER FENCE, INLET PROTECTION ETC. IN EXISTING AND PROPOSED DITCHES, CULVERTS, STORM PIPES, AND DRAINAGE STRUCTURES TO PREVENT DAMAGE. BIO-DEGRADABLE EROSION CONTROL DEVICES SHOULD BE PLACED IN ALL DISTURBED DRAINAGE DITCHES WITH DEPTHS GREATER THAN 12".		
14.	REGRADE AREAS AS NECESSARY WITHIN THE CONSTRUCTION LIMITS TO ALLOW PROPER DRAINAGE TO EXISTING STORM SEWER STRUCTURES.		
15.	MAINTAIN 10'-0" HORIZONTAL AND 1'-6" VERTICAL SEPARATION FROM STORM AND SEWER MAIN, UNLESS SPECIFICALLY NOTED IN THE PLANS.		
16.	PROVIDE FILL AROUND PROPOSED AND EXISTING PIPING AT ALL OPEN-CUT UTILITY CROSSINGS TO ADEQUATELY SUPPORT AND PROTECT EACH CONDUIT.		
17.	PRESERVE EXISTING RIGHT-OF-WAY MARKERS. IF RIGHT-OF-WAY MARKERS ARE DISTURBED, RESET MARKERS AT NO ADDITIONAL COST TO THE OWNER.		
18.	CALL LOCAL UTILITY LINE INFORMATION SERVICE NOT LESS THAN THREE WORKING DAYS BEFORE PERFORMING WORK. REQUEST UNDERGROUND UTILITIES TO BE LOCATED AND MARKED WITHIN AND SURROUNDING CONSTRUCTION AREAS. IDENTIFY REQUIRED LINES, LEVELS, CONTOURS, AND DATUM LOCATIONS.		
19.	ESTABLISH TEMPORARY TRAFFIC CONTROL LAND DETOURS WHEN TRENCHING IS PERFORMED IN PUBLIC RIGHT-OF-WAY. RELOCATE CONTROLS AND REROUTE TRAFFIC AS REQUIRED DURING PROGRESS OF WORK.		
20.	DO NOT LEAVE MORE THAN 50 FEET OF TRENCH OPEN AT END OF WORKING DAY. PROTECT OPEN TRENCH TO PREVENT DANGER TO THE PUBLIC.		
21.	STOCKPILE EXCAVATED AND FILL MATERIALS ON SITE AT LOCATIONS APPROVED BY OWNER. STOCKPILE IN SUFFICIENT QUANTITIES TO MEET PROJECT SCHEDULE AND REQUIREMENTS. SEPARATE DIFFERENT AGGREGATE MATERIALS WITH DIVIDERS OR STOCKPILE QUANTITIES TO MEET PROJECT SCHEDULE AND REQUIREMENTS, SEPARATE DIFFERENT AGGREGATE MATERIALS WITH DIVIDERS OR STOCKPILE INDIVIDUALLY TO PREVENT MIXING. DIRECT SURFACE WATER AWAY FROM STOCKPILE SITE TO PREVENT EROSION OR DETERIORATION OF MATERIALS. STOCKPILE CLEANUP: REMOVE STOCKPILE, AND LEAVE AREA IN CLEAN AND NEAT CONDITION. GRADE SITE SURFACE TO PREVENT FREE STANDING SURFACE WATER.		
22.	ALL ELEVATIONS AT CONSTRUCTION LIMITS SHALL MATCH EXISTING GRADE. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT STACKED GRADES MATCH DESIGN ELEVATIONS AND POSITIVE DRAINAGE TO STORMWATER MANAGEMENT SYSTEM IS ACHIEVED. CONTACT ENGINEER IF DESIGN ELEVATIONS DO NOT PROVIDE POSITIVE DRAINAGE.		
23.	FINAL CONTOURS: PERFORM FINISH GRADING AND BLEND INTO CONFIRMATION WITH REMAINING NATURAL GROUND SURFACES. LEAVE ALL FINISHED GRADING SURFACES SMOOTH AND FIRM TO DRAIN. FINISH GRADES TO ELEVATIONS WITHIN PLUS OR MINUS 0.10 FOOT OF EXISTING OR CONTOUR SHOWN.		
24.	ALL CONNECTIONS TO EXISTING MAIN SHOULD BE MADE VIA DRY TAP WHEREVER POSSIBLE. CONTRACTOR TO COORDINATE ISOLATION AND CONNECTIONS WITH CITY. WET TAPS MAY BE REQUIRED IN SOME AREAS, COORDINATE WITH CITY TO DETERMINE CONNECTION METHOD.		

5		SYME	BOLS			ABBREV	IATIONS	
CIVIL TYPE	⊠ ST	STREET LIGHTING PULL BOX	\bowtie	GATE VALVE	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
RENT PROPERTY LINE	\square	TRAFFIC SIGNAL POST	1/1	BUTTERFLY VALVE	AFF	ABOVE FINISHED FLOOR	FCO	FLOOR CLEANOUT
TOP OF BANK	\bigcirc	TRAFFIC SIGNAL POST	<i>/</i>	DUTTERFLT VALVE	ATR	ALL THREAD ROD	GV	GATE VALVE
	\bigcirc	BOLLARD	\square	CHECK VALVE	AS	AQUASTAT	GLV	GLOBE VALVE
CULTIVATED FIELD EDGE	PM	PHONE MANHOLE		AIR RELEASE VALVE	AAV	AIR ADMITTANCE VALVE	HSP	HIGH SERVICE PUMP
FLOW LINE					AC	AIR COMPRESSOR	HB	HOSE BIBB
GRAVEL EDGE	$^{\circ}$ RD	ROOF DRAIN	\bigcirc	BALL VALVE	ARV	AIR RELEASE VALVE	HWRP	HOT WATER RETURN PUMP
TREE LINE		SIGN	PR	PRESSURE RELIEF VALVE	AP	ACCESS PANEL	MV	MANUAL AIR VENT
FENCE LINE	12"				AD	AREA DRAIN	М	MOTOR - OPERATED VALVE
	12"	TREE	BP	BACK PRESSURE VALVE	AV	ANGLE VALVE	ORD	OVERFLOW ROOF DRAIN
OVERHEAD ELECTRIC	္ဂဝ	SANITARY CLEANOUT	8	SOLENOID VALVE	AUV	AUTOMATIC AIR VALVE	PTU	PACKAGED TREATMENT UNIT
STORM SEWER	\bigcirc				BV	BALL VALVE	PV	PLUG VALVE
WATER LINE		STORM CATCH BASIN	PD	PULSATIPON DAMPER	BFV		PA	PIPE ANCHOR
SANITARY SEWER	\mathcal{N}	RESIDUALS MANHOLE	\bigcirc	PUMP	BFPA	BACKFLOW PREVENTER ASSEMBLY	PG	
	(SS)	SANITARY MANHOLE		ISOLATOR	BS	BASKET STRAINER	PS PRV	
D WATER EASEMENT	(33)	SANITART MANHOLE	4_14	ISOLATOK	CTLV	CONTROL VALVE, 2-WAY	PRV	PRESSURE RELIEF VALVE
D WATER MAIN	ST	STORM MANHOLE		QUICK CONNECT ADAPTER	CV	CHECK VALVE		POST INDICATOR VALVE
	<i>\Delta</i>	POWER POLE		INJECTOR	CR	CONCENTRIC REDUCER/ INCREASER	PRG	PRESSURE GAUGE WITH GAUGE COOK
					DU	DIELECTRIC UNION	PRS	PRESSURE SWITCH
	E	ELECTRIC MANHOLE		STATIC MIXER	DBL	DOUBLE	ROW	RIGHT-OF-WAY
	EM ⊠	ELECTRIC METER	φ	PRESSURE GAUGE	ECO	EXTERIOR CLEANOUT	RD	ROOF DRAIN
	W				EL	EXPANSION LOOP	SV	SOLENOID VALVE
		WATER VALVE	PS-	PRESSURE SWITCH	EC	ECCENTRIC REDUCER/ INCREASER	TPV	TEMPERATURE PRESSURE RELIEF VALVE
	ŞÇ.	FIRE HYDRANT	PT-	PRESSURE TRANSDUCER	EJ	EXPANSION JOINT	Т	THERMOMETER
	GV	GAS VALVE		LEVEL PROBE	FFE	FINISHED FLOOR ELEVATION	U	UNION
	GM		'		F	FLANGE	WCO	WALL CLEANOUT
	GM	GAS METER	ŀγ	STRAINER	FS	FLOW SWITCH	WHA	WATER HAMMER ARRESTOR
	\bigcirc	SET 5/8" IRON ROD CAPPED	M	FLOW METER	FM	FLOW METER	WS	WYE STRANNER
		FOUND 1" IRON PIPE SET	I	SLUICE GATE	FC	FLEXIBLE CONNECTOR	WH	WALL HYDRANT
		FOUND I IRON PIPE SET	Ď	SLOICE GATE	FD	FLOOR DRAIN	YB	YARD BOX
	X	'MAG' NAIL	Μ	NON-MODULATING ACTUATOR				
	+	CUT CROSS	MOD	MODULATING ACTUATOR				
	(R)	RECORD		FLAP GATE				
	(M)	MEASURE	۵F	FLEX COUPLING				
	(C)	CALCULATED	\sim	FLEX TUBING				
	MB	MAILBOX		REDUCER/ INCREASER				
		YARD HYDRANT	BP	BOOSTER PUMP				
	CW	CONCRETE WASHOUT		TIDEFLEX VALVE				



UNION CITY DRINKING WATER IMPROVEMENTS DIV. III (WATER MAINS)

#	Revision	Date

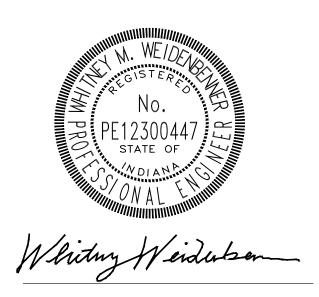
Project #: 23-400-215-1

Designed By: RLH/MDL

Drawn By: RLH/MDL

Checked By: WMW

Date: 12/19/2024



GENERAL NOTES



PL	GIS APPARENT PROPERTY LINE		
	EXISTING TOP OF BANK		
	EXISTING CULTIVATED FIELD EDGE		FILE STATE
< <	EXISTING FLOW LINE		LITTLE MISSISSINEWA
	EXISTING GRAVEL EDGE	57	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	EXISTING TREE LINE		The second se
- x x	EXISTING FENCE LINE		FRANK MILLER RD
[OH-E]	EXISTING OVERHEAD ELECTRIC		
-[ST][ST]	EXISTING STORM SEWER	5	and the second second
[w][w]	EXISTING WATER LINE		
[s][s]	EXISTING SANITARY SEWER		
	PROPOSED WATER UTILITY EASEMENT		PL PL
W	PROPOSED WATER MAIN	- PL	
	PL PL C202		

C206

C205

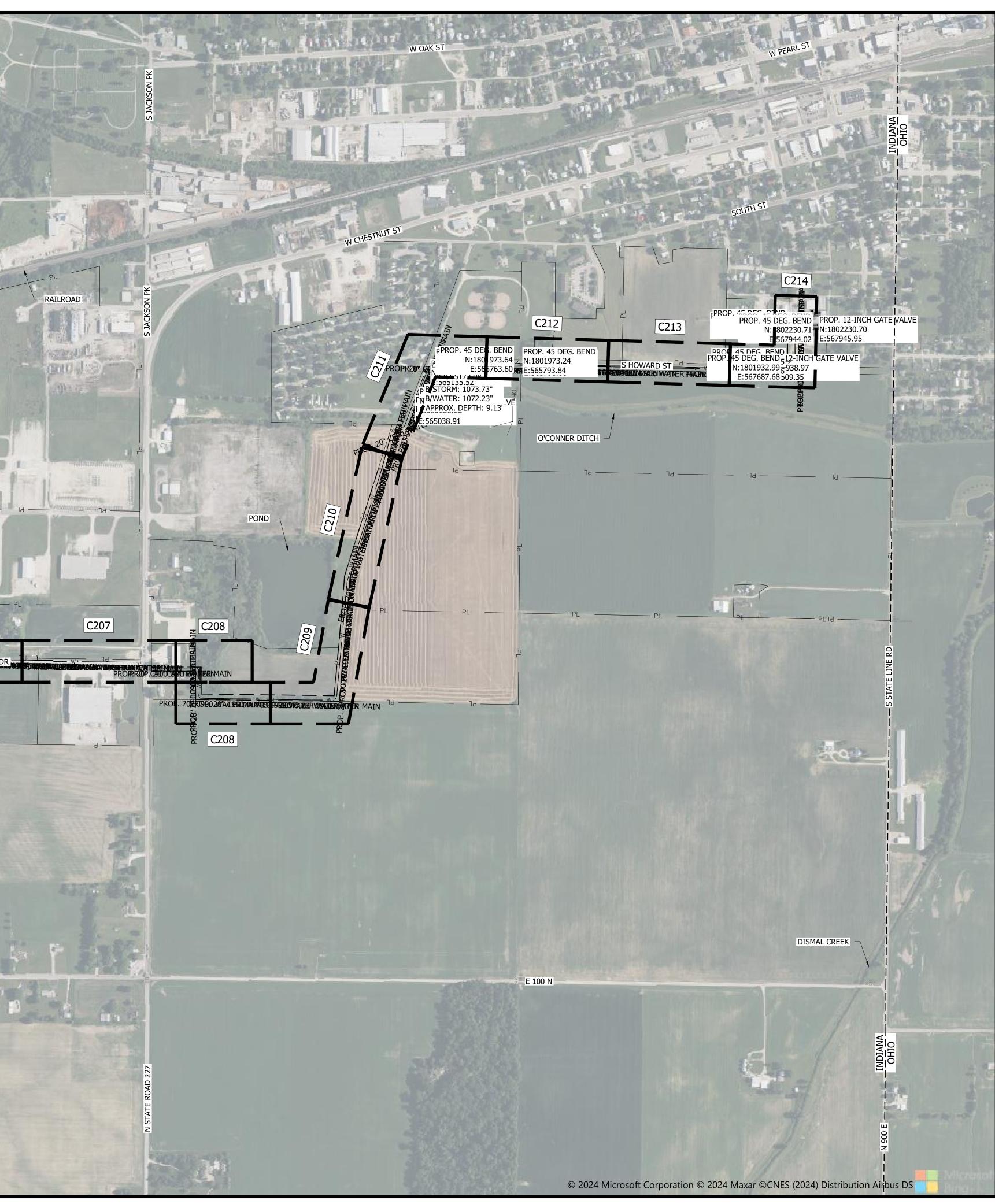
E STATE ROAD 32

PROP.

C202

C200

N ARBA PK



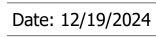


# UNION CITY DRINKING WATER IMPROVEMENTS DIV. III (WATER MAINS)

#	Revision	Date

Project #: 23-400-215-1 Designed By: RLH/MDL Drawn By: RLH/MDL

Checked By: WMW

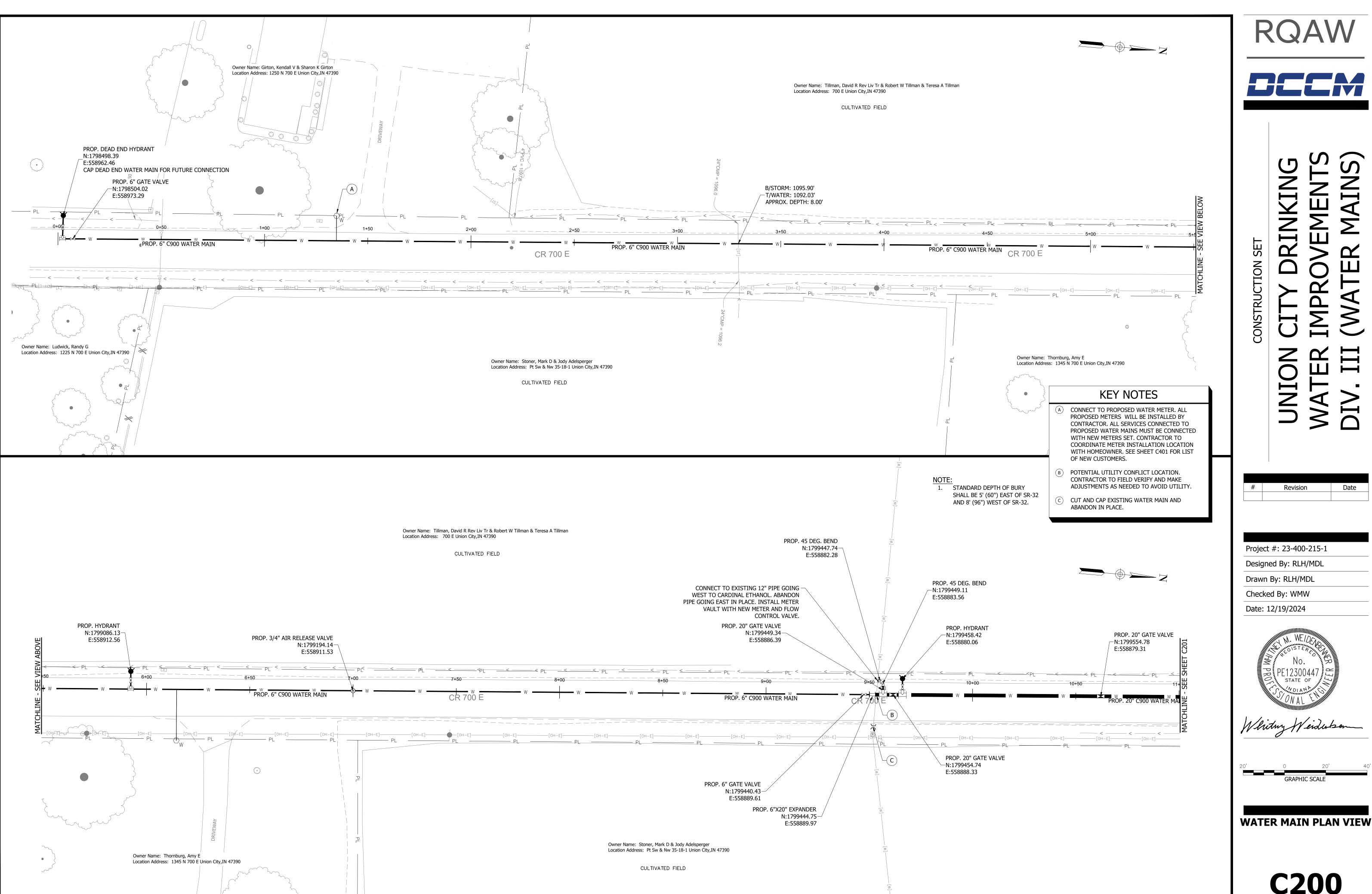




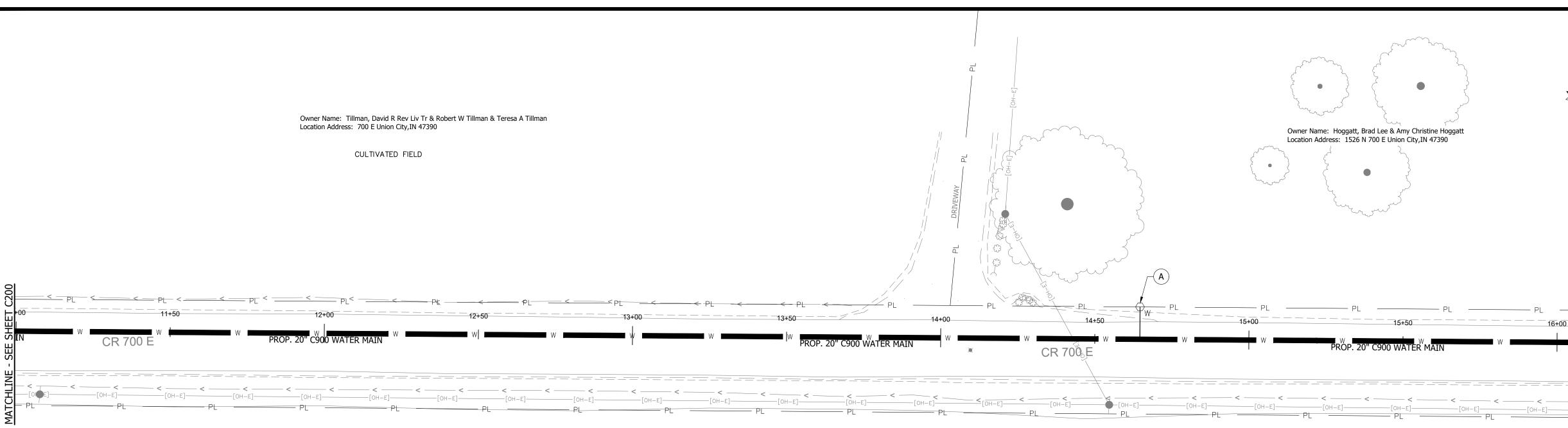
400' 0 400' GRAPHIC SCALE

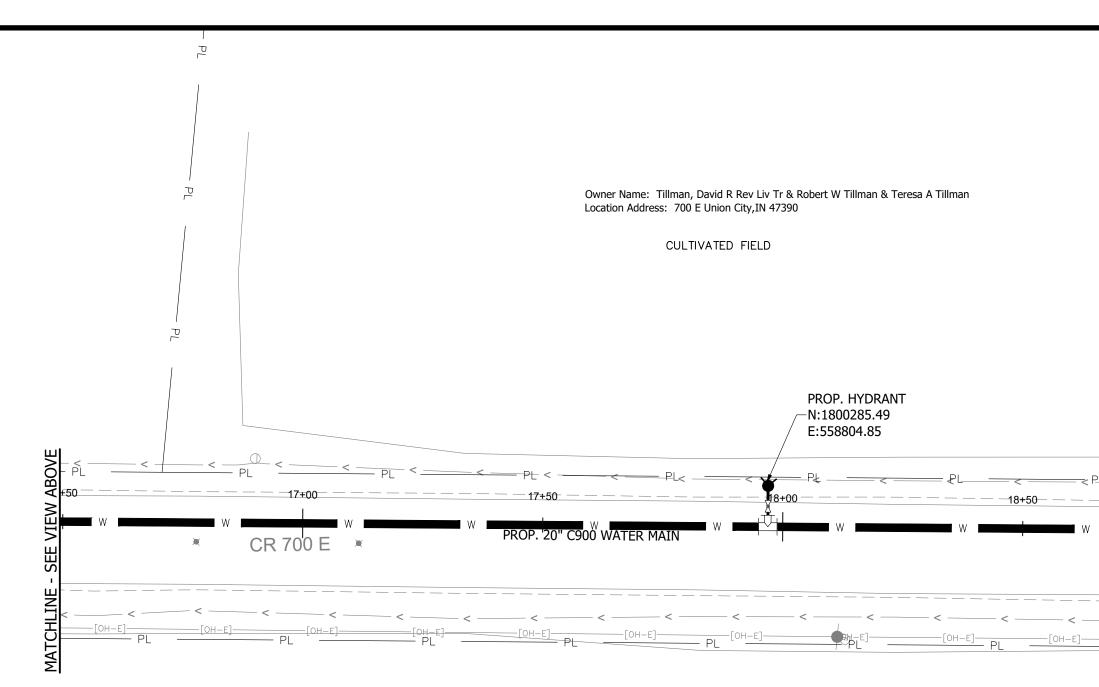
# **OVERALL SHEET INDEX**





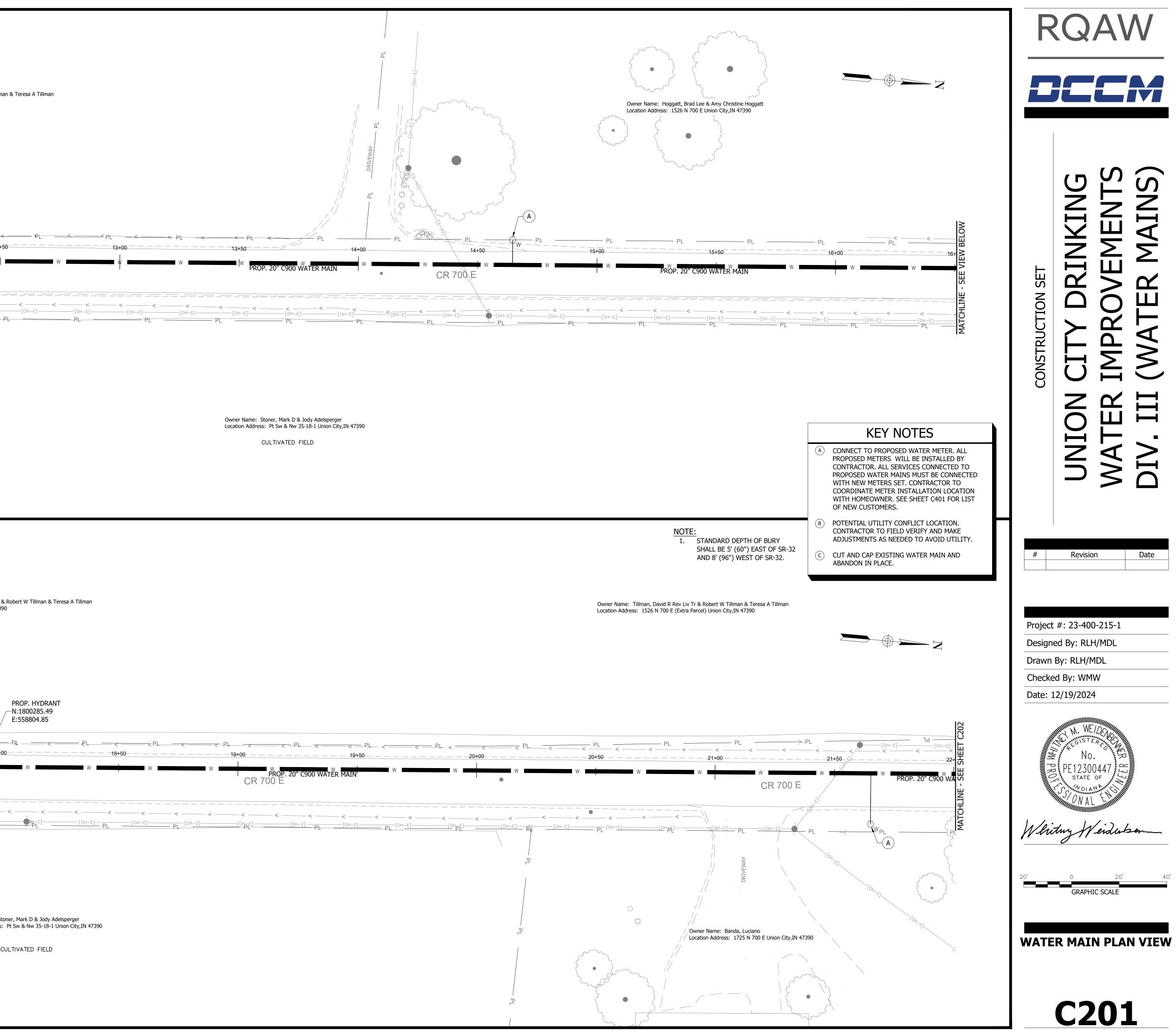


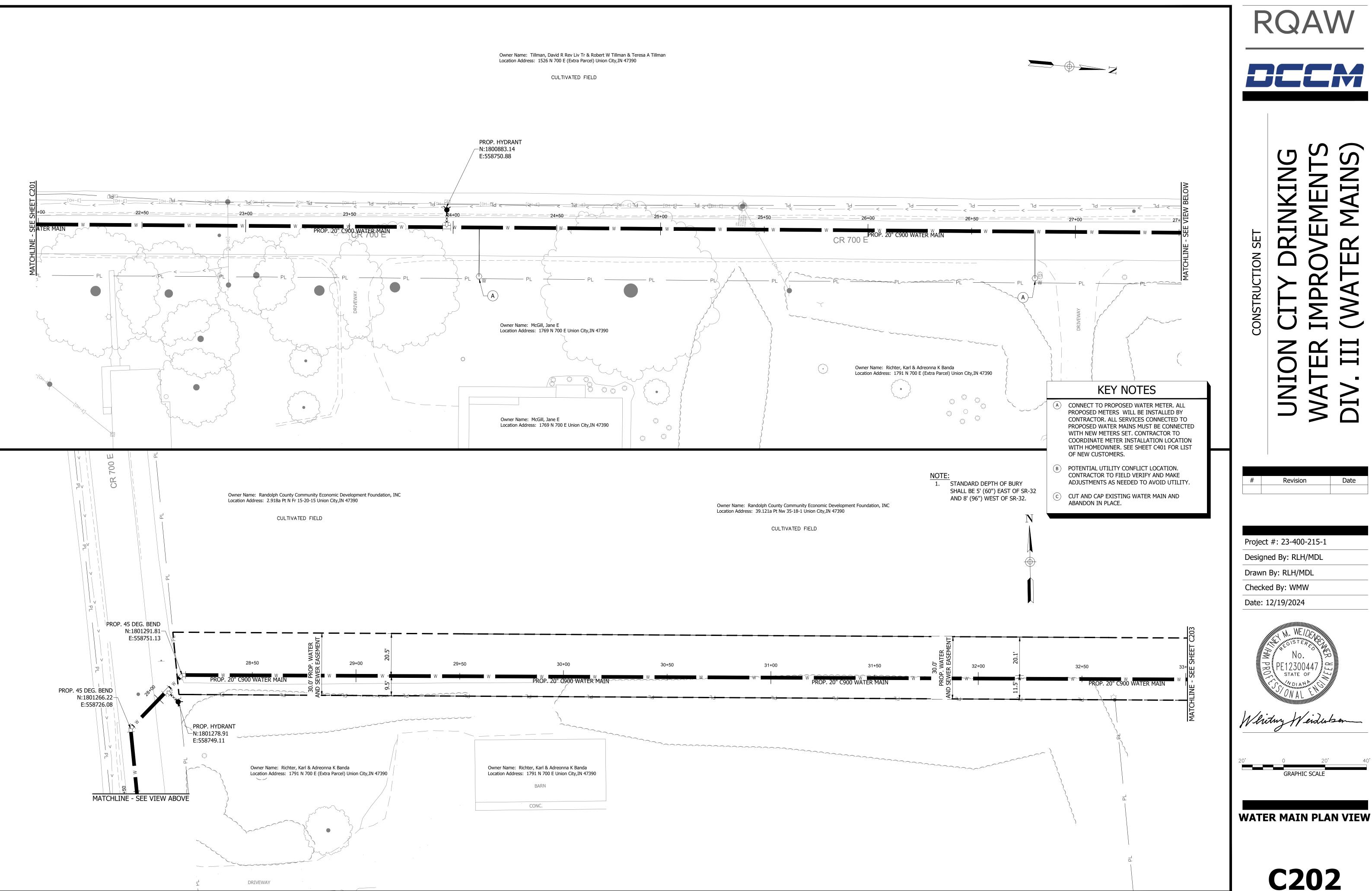


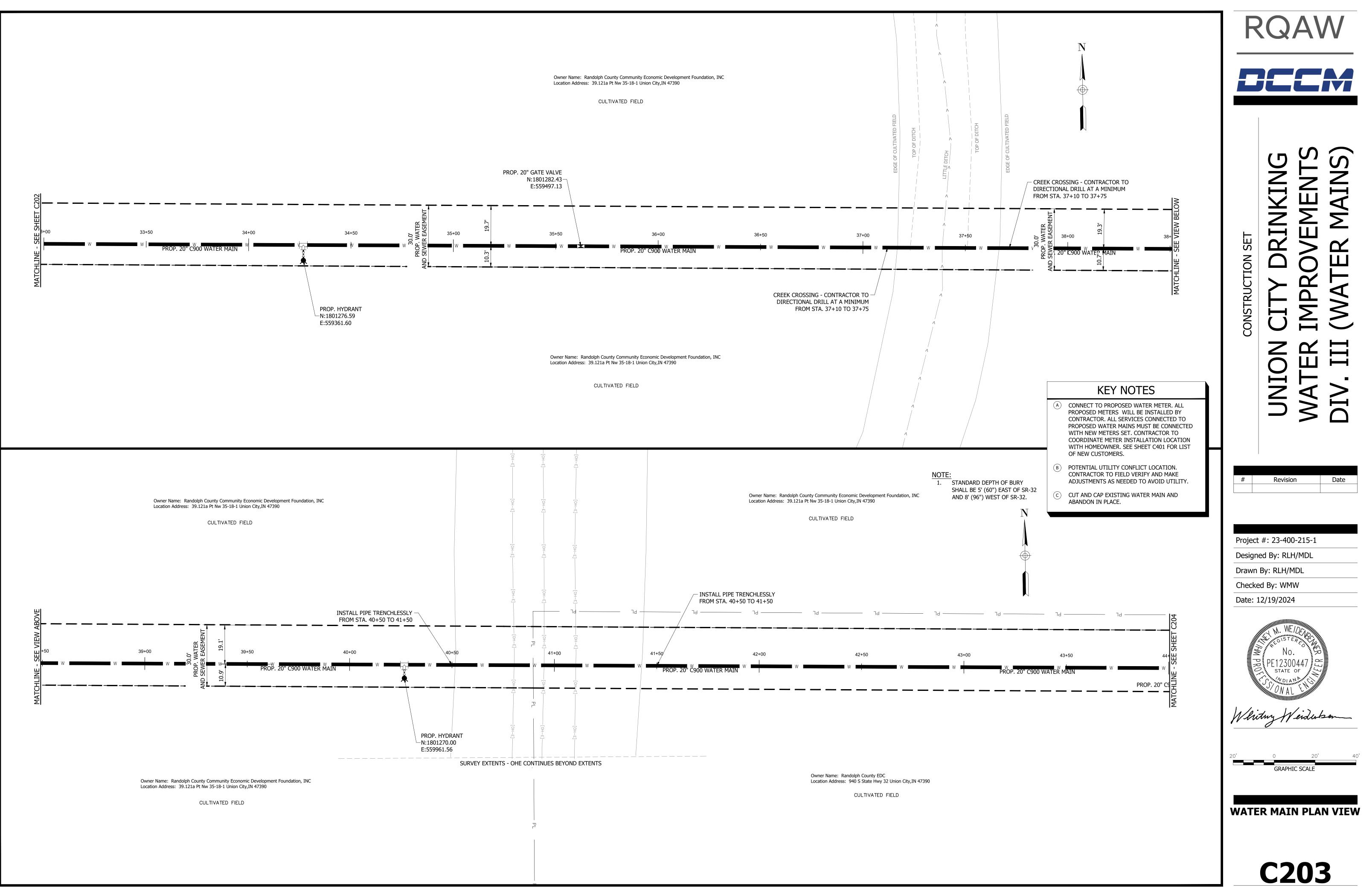


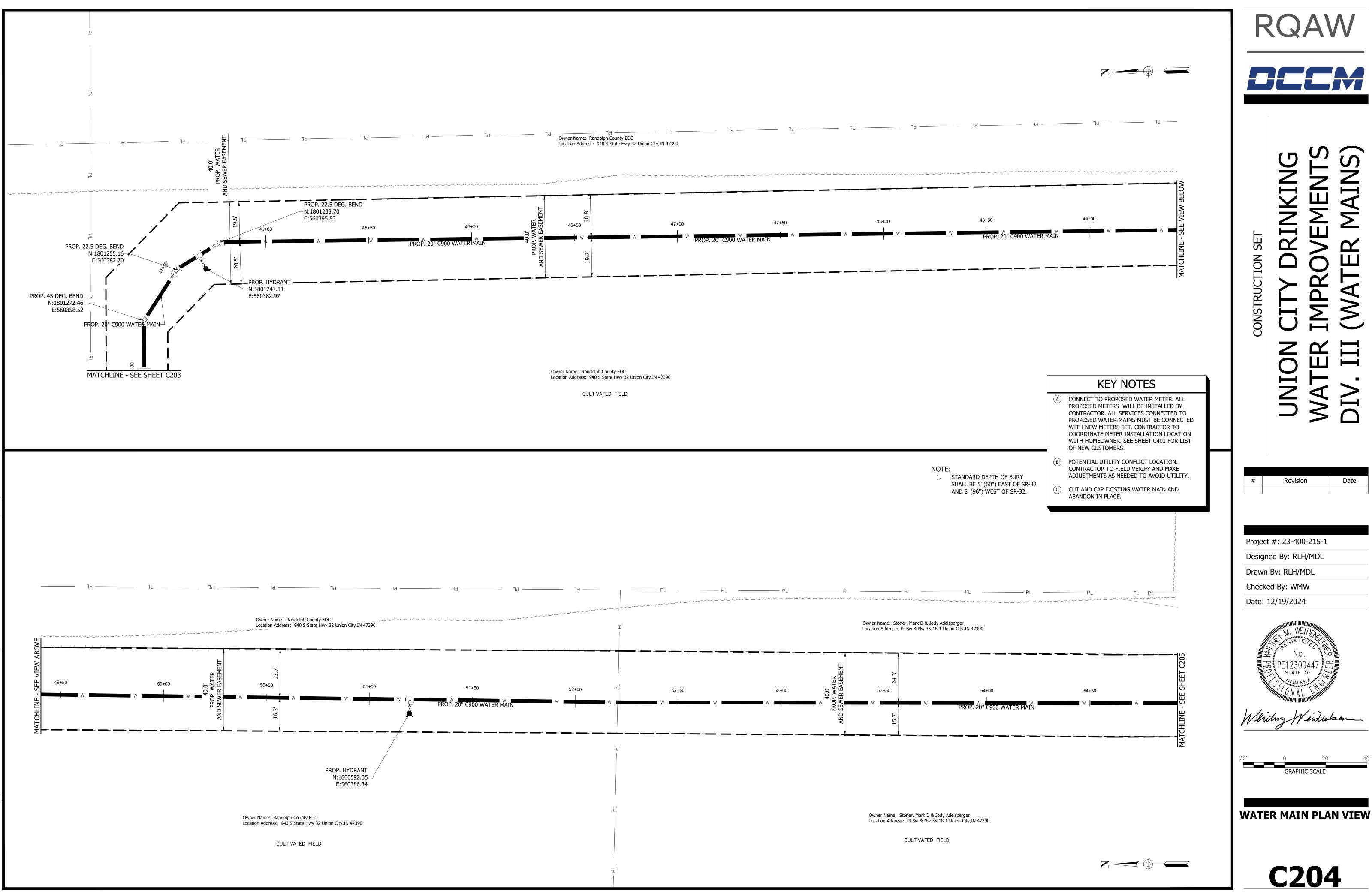
Owner Name: Stoner, Mark D & Jody Adelsperger Location Address: Pt Sw & Nw 35-18-1 Union City, IN 47390

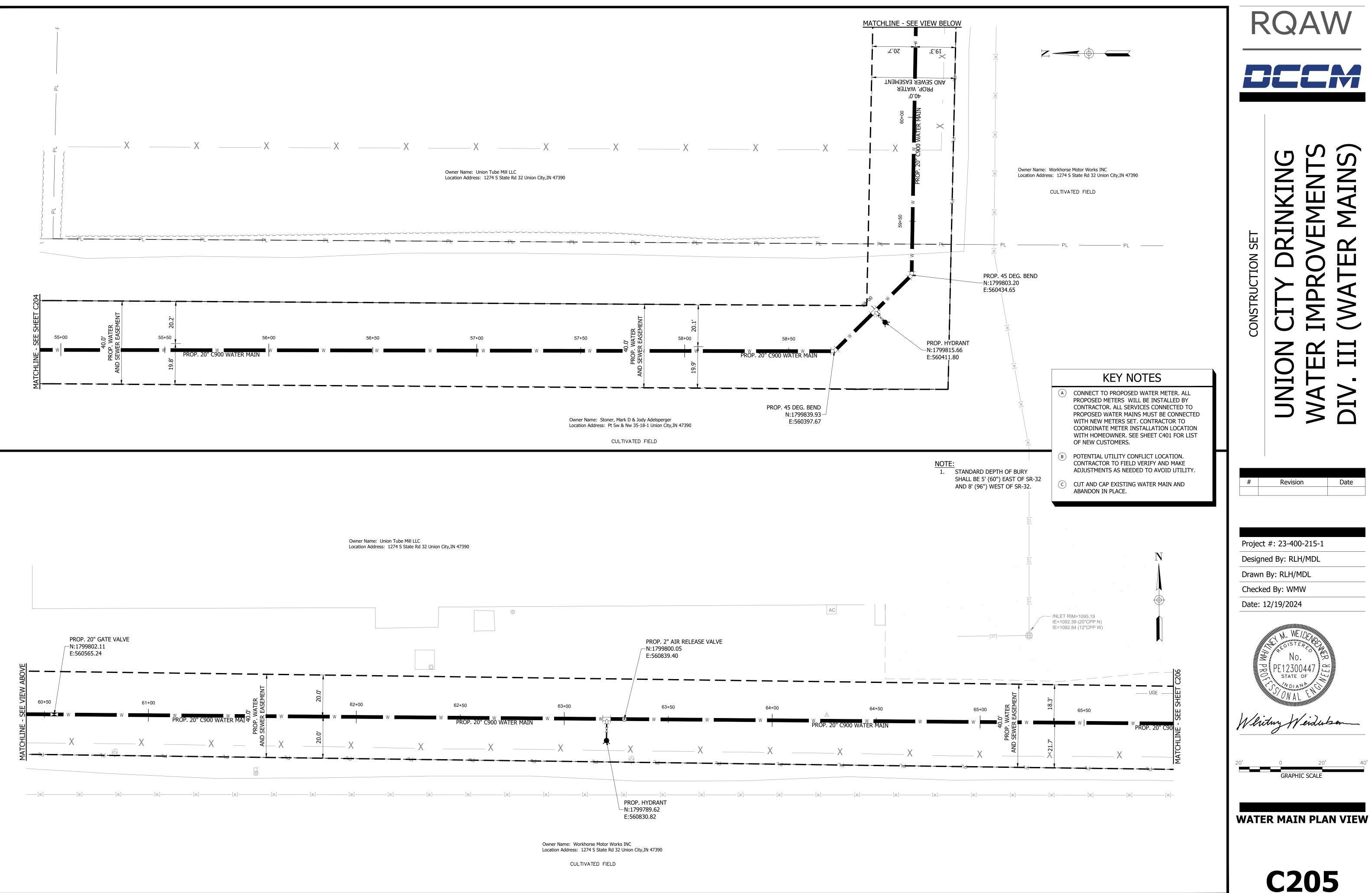
CULTIVATED FIELD



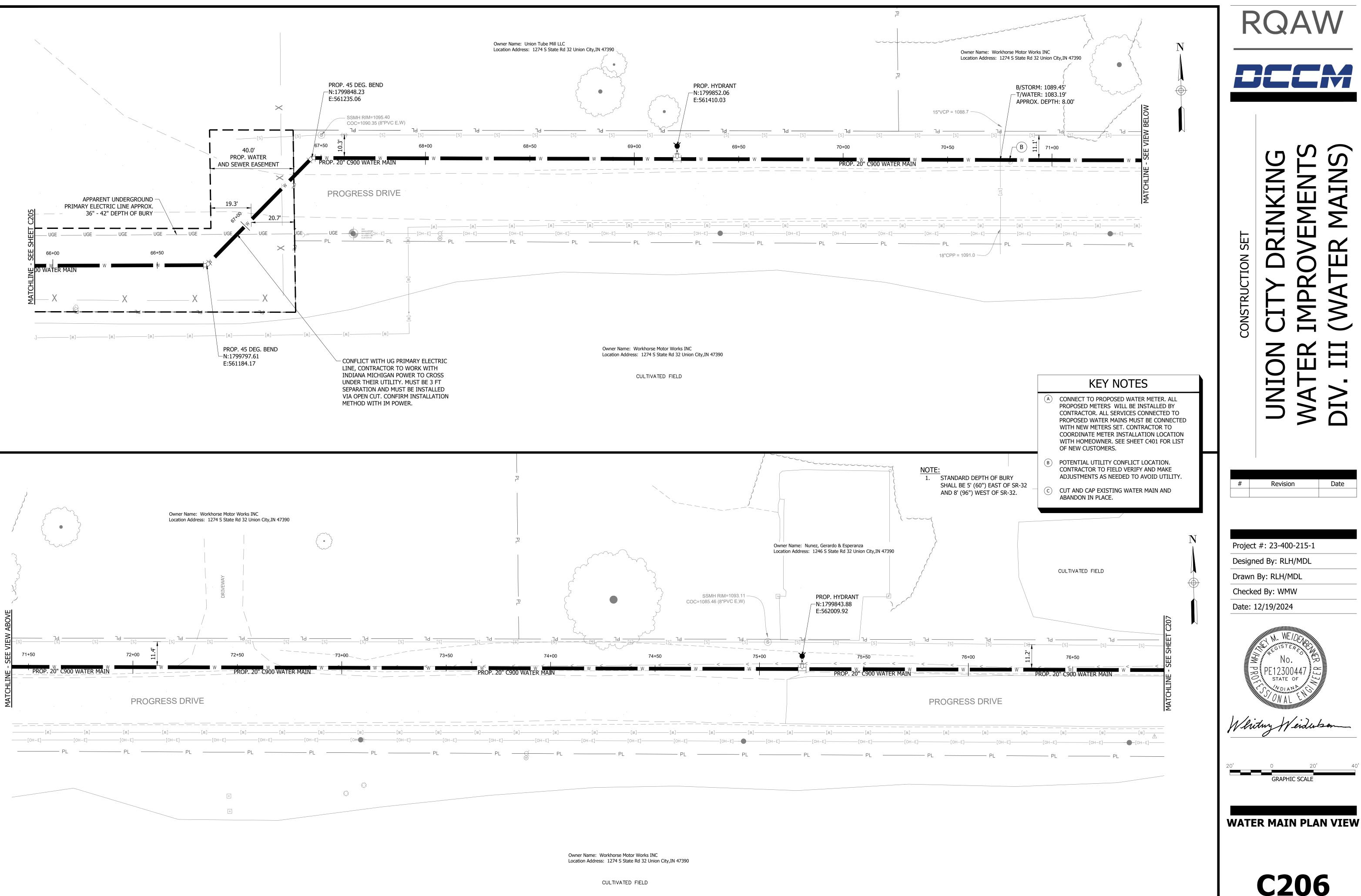


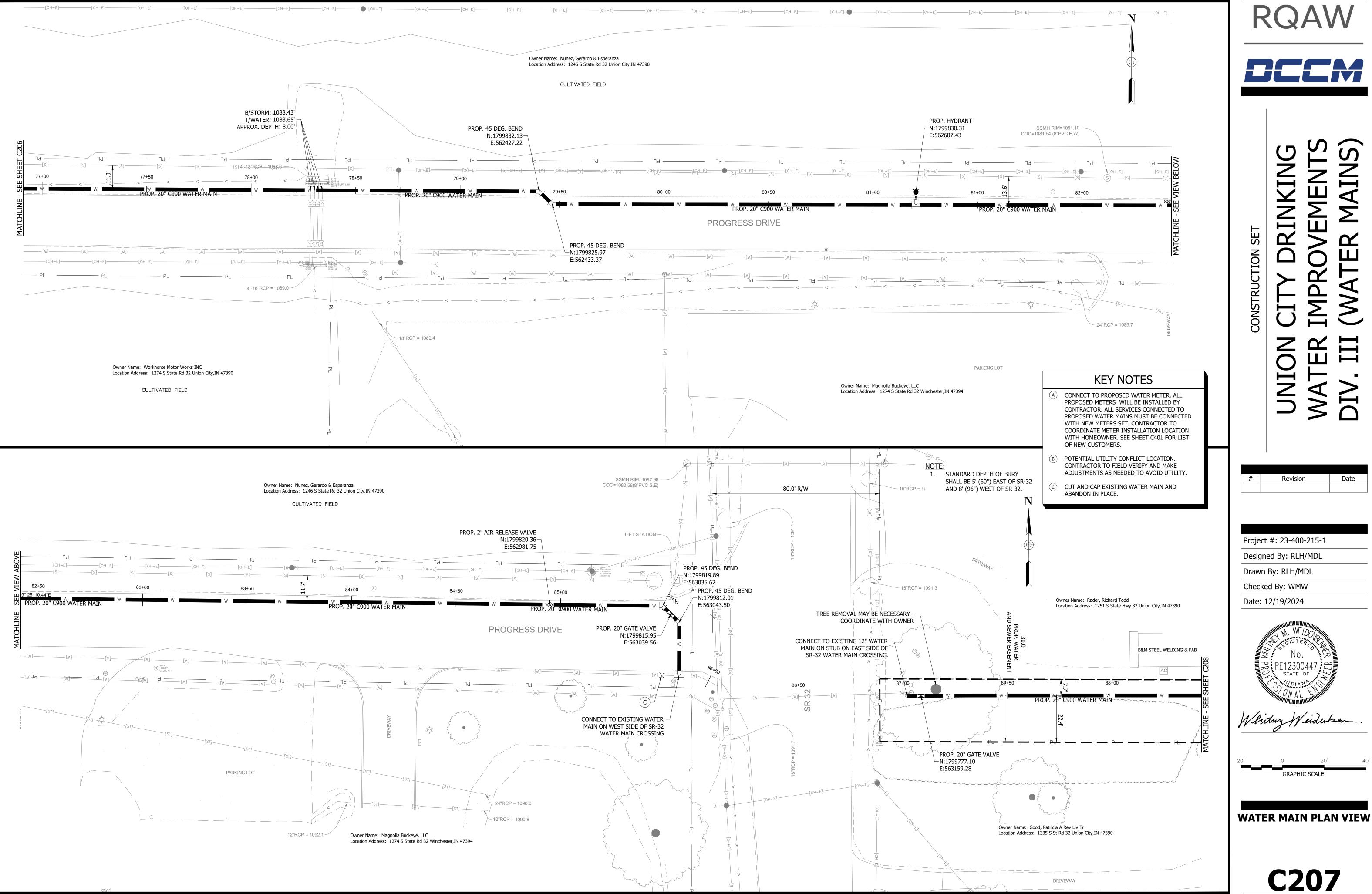


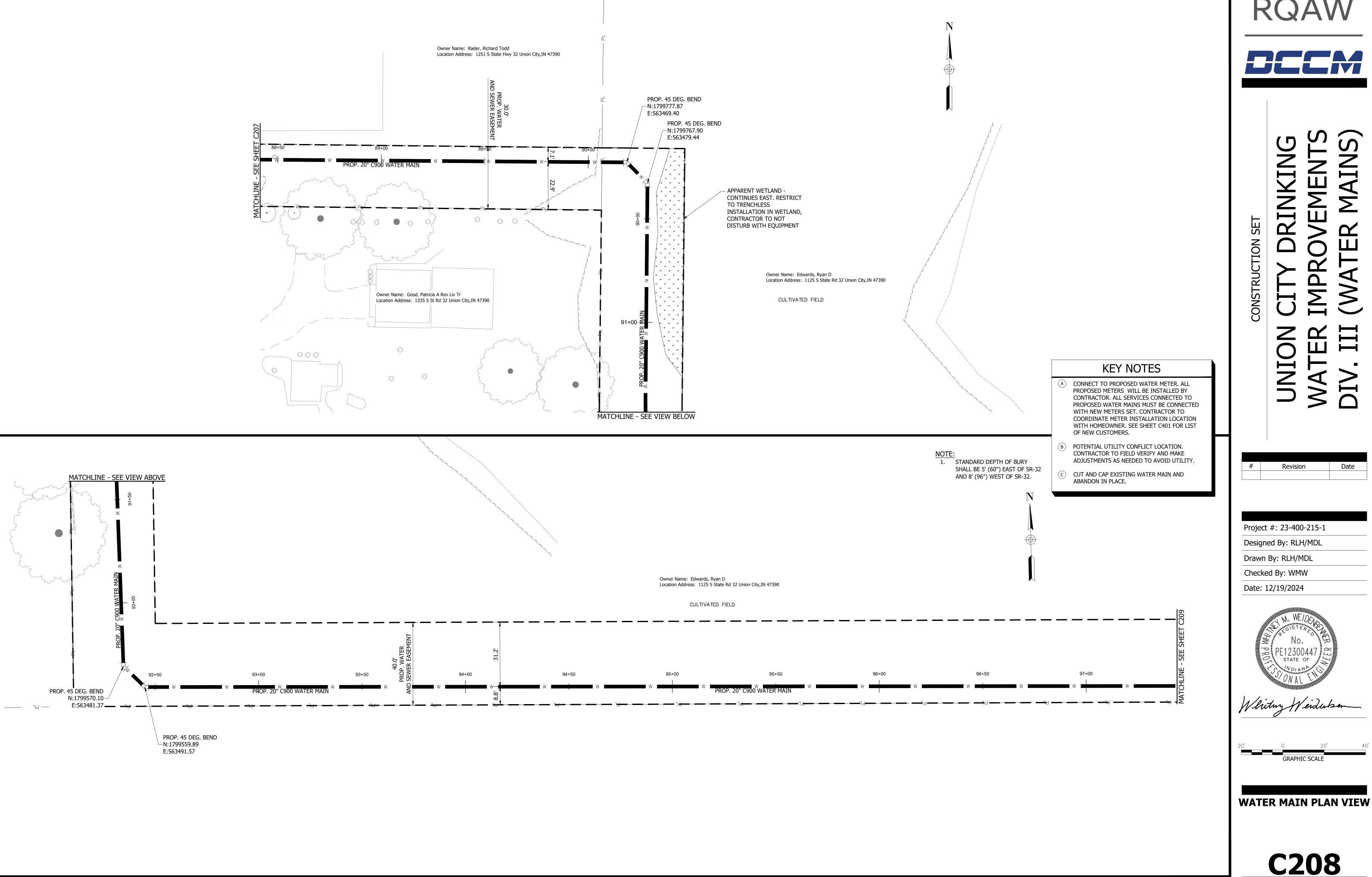




⁻ DATE: 12/31/24 SCALE: 1:186.91

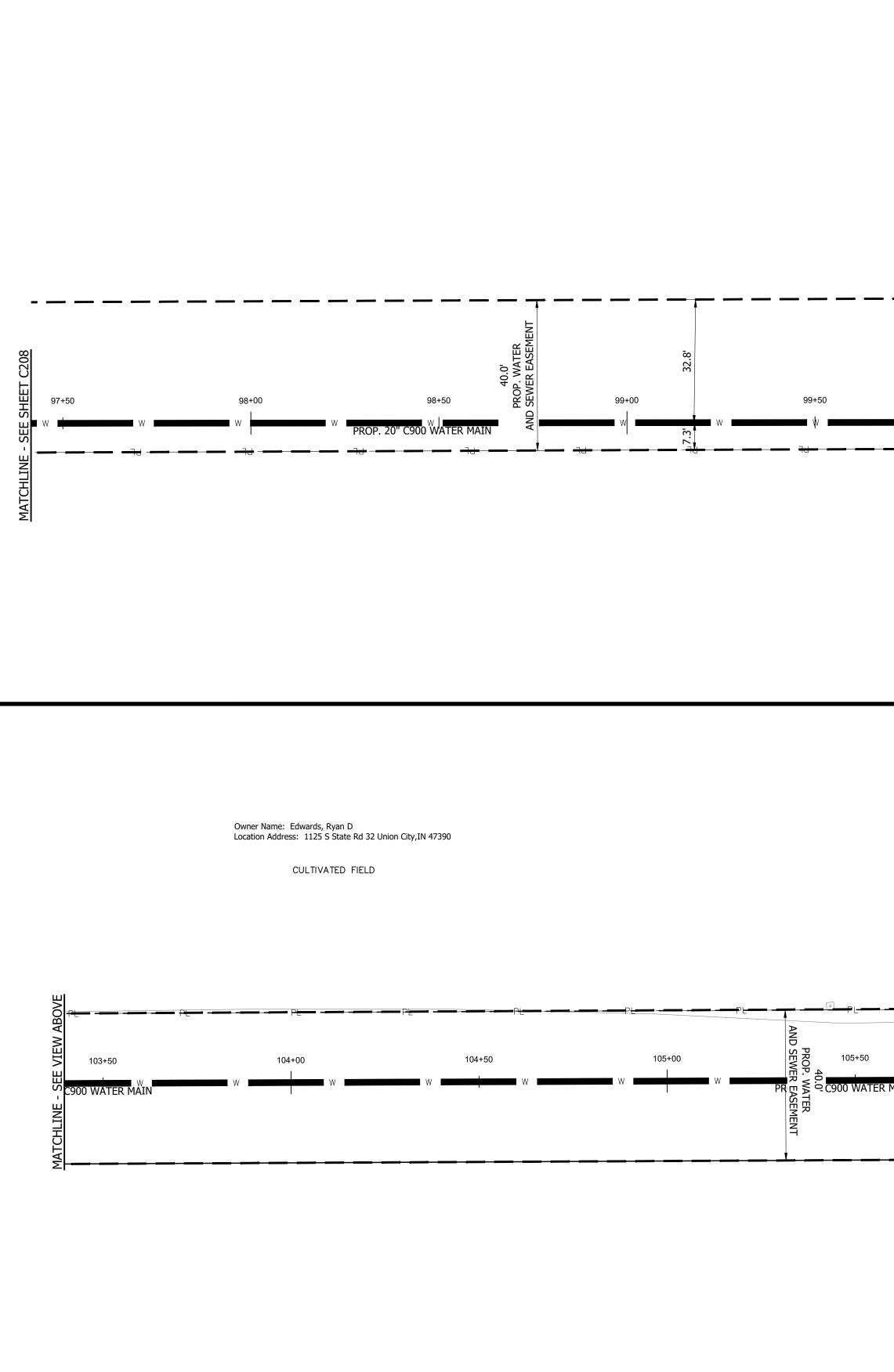






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31	94+50	95+00	95+50	96+00	96+50
■ W ■ 8.8	W W	1	OP. 20" C900 WATER MAIN		W
		— — — — — [—] — —	╶━━┓ๅ╉━━──━━━┓ๅ╉━━━──━	dd	b <b>F</b> d





T DATE: 12/31/24 SCALE: 1:186.91

#### Owner Name: Edwards, Ryan D Location Address: 1125 S State Rd 32 Union City, IN 47390

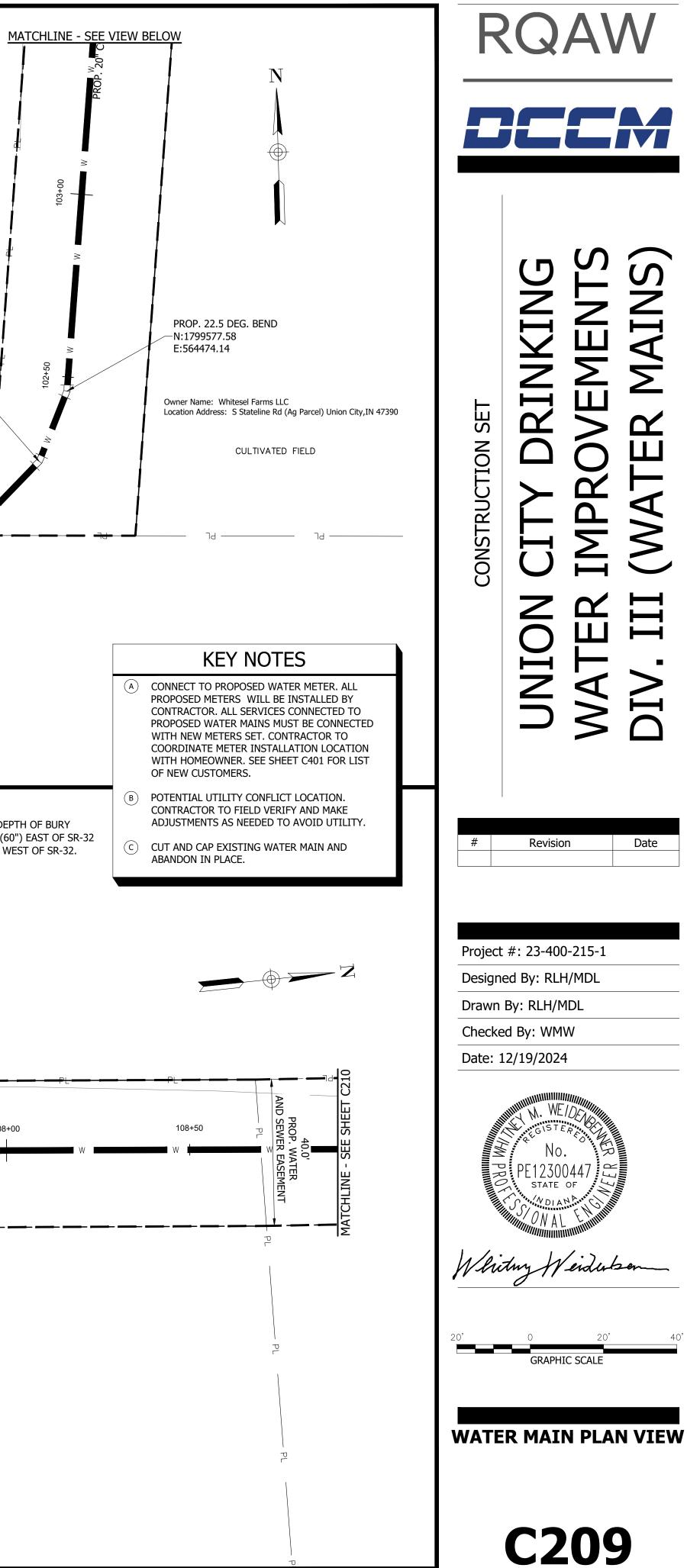
CULTIVATED FIELD

			PROP.	22.5 DEG. BEND N:1799558.58 E:564466.20
				DEG. BEND 799544.88 564452.61
100+00	100+50	101+00	101+50	102+00
W PROP. 20" C900 V			PROP. 20" C90	0 WATER MAIN

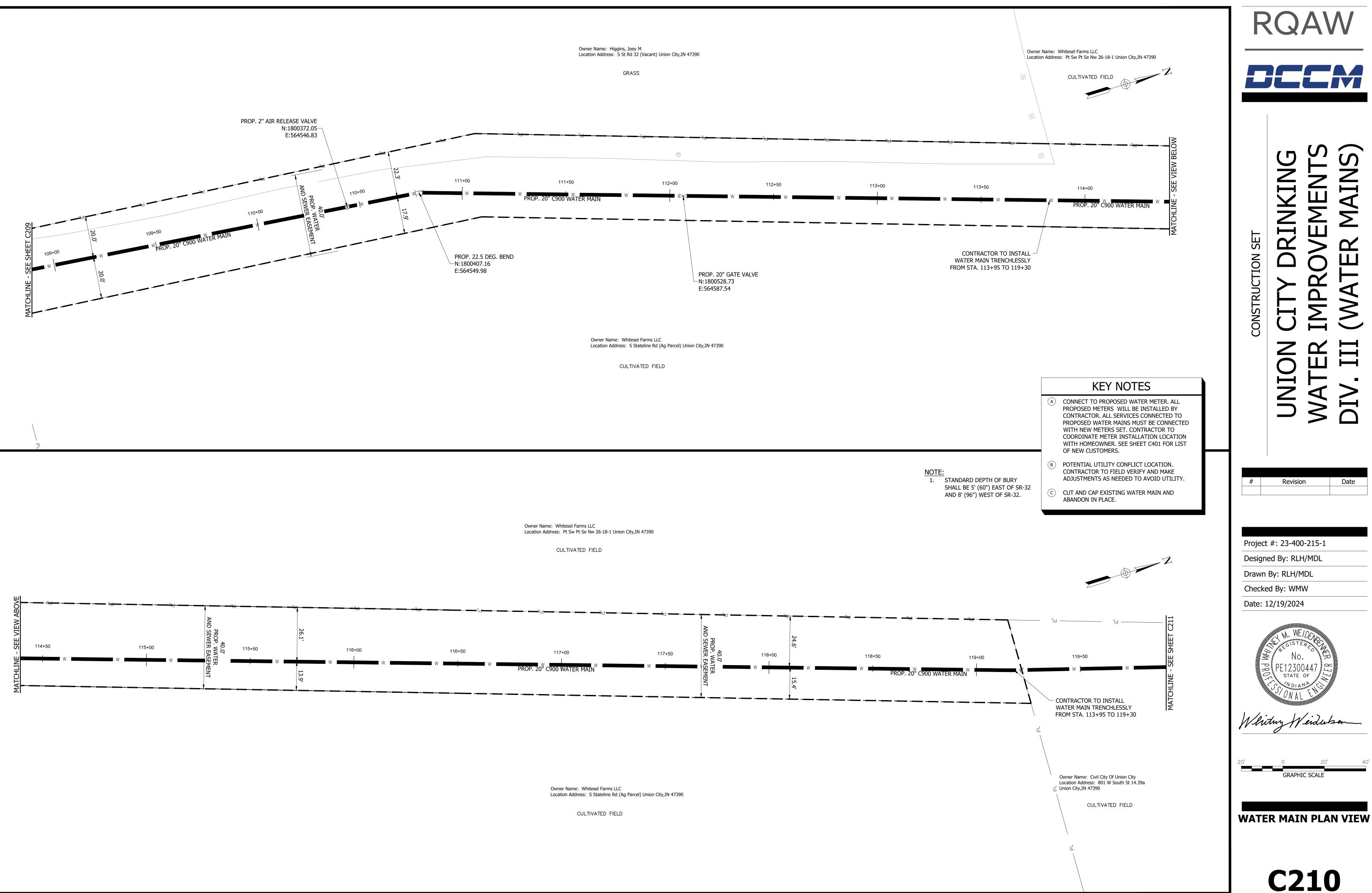
							NOTE 1.	STANDARD DEPTH OF B SHALL BE 5' (60") EAST AND 8' (96") WEST OF S
	PL			Owner Locatio	Name: Higgins, Joey M on Address: S St Rd 32 (Vacant) Un	nion City,IN 47390		
					GRASS			
	P							
	18.8 ¹	106+00	106+50		107+00	107+50		108+00
MAIN	w 21.2'	W		W	IPROP. 20" C900 WATE	ER MAIN	W	

Owner Name: Whitesel Farms LLC Location Address: S Stateline Rd (Ag Parcel) Union City, IN 47390

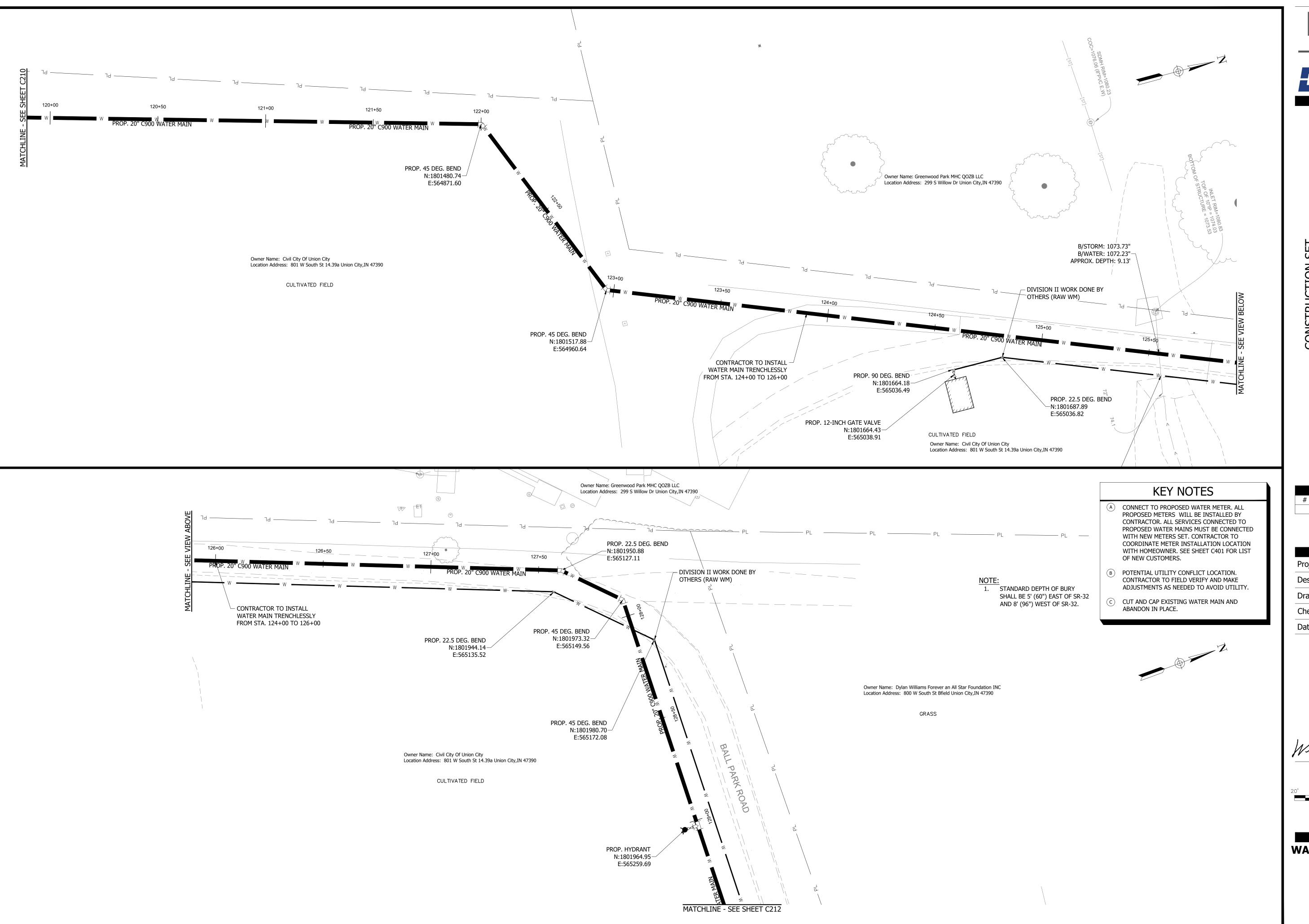
CULTIVATED FIELD



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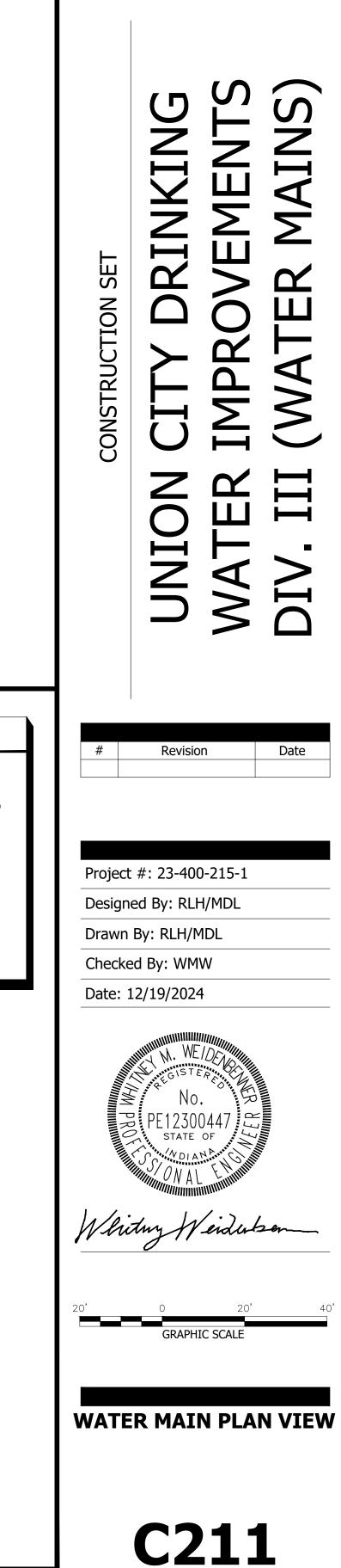
╾━━╾━━┓┫━━━╴━━┓┫━━━╴━━┓	━━━━━━━━	<b>→</b> → → → → → → → → → → → → → → → → → →			━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━
117+00 U PROP. 20 ¹¹ C900 WATER MAIN		40.0' PROP. WATER AND SEWER EASEMENT	118+00 15.4 15.4	118+50 W PRO	119+00 P. 20" C900 WATER MAIN

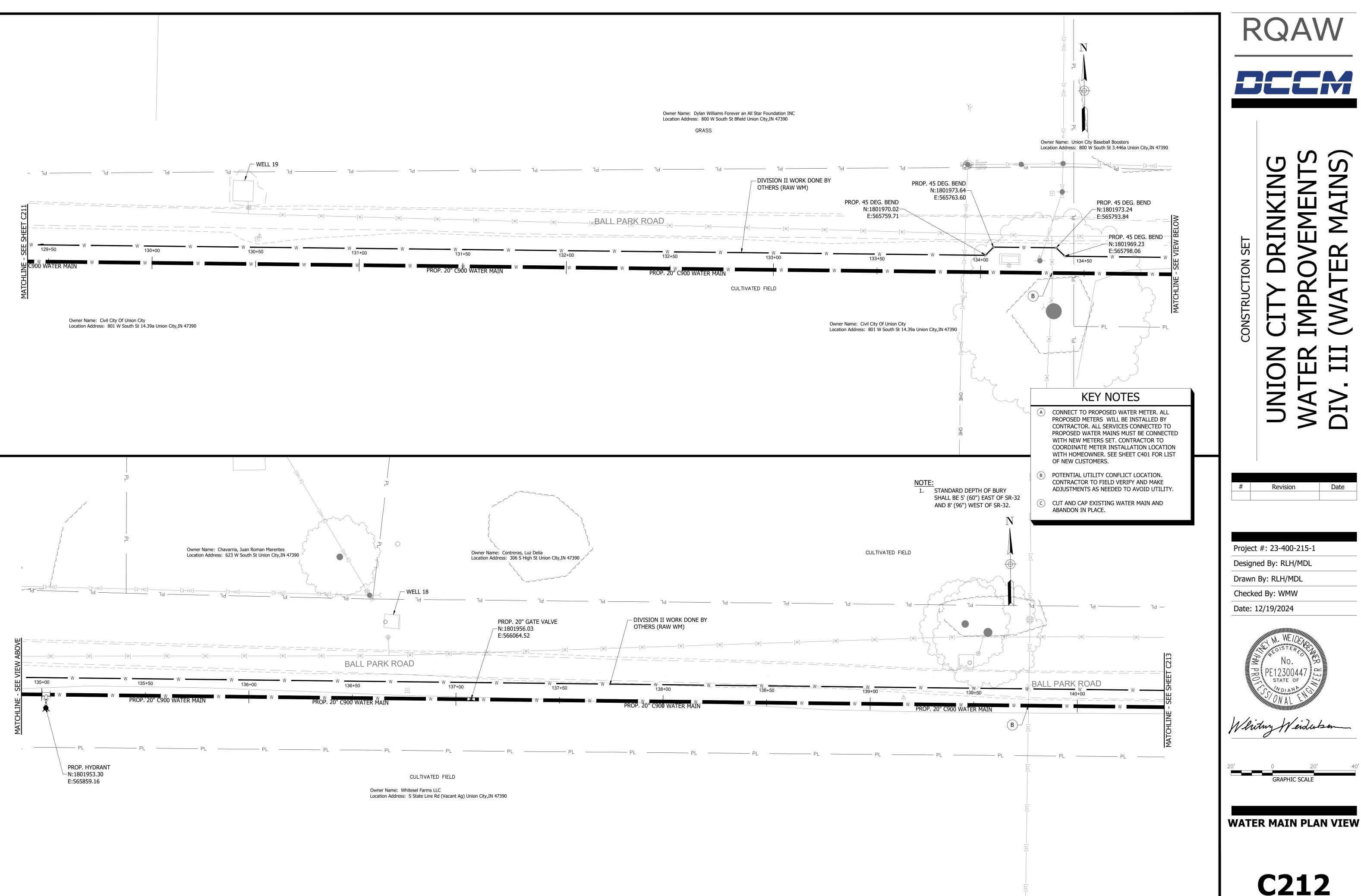


DATE: 12/31/24 SCALE: 1:186.91

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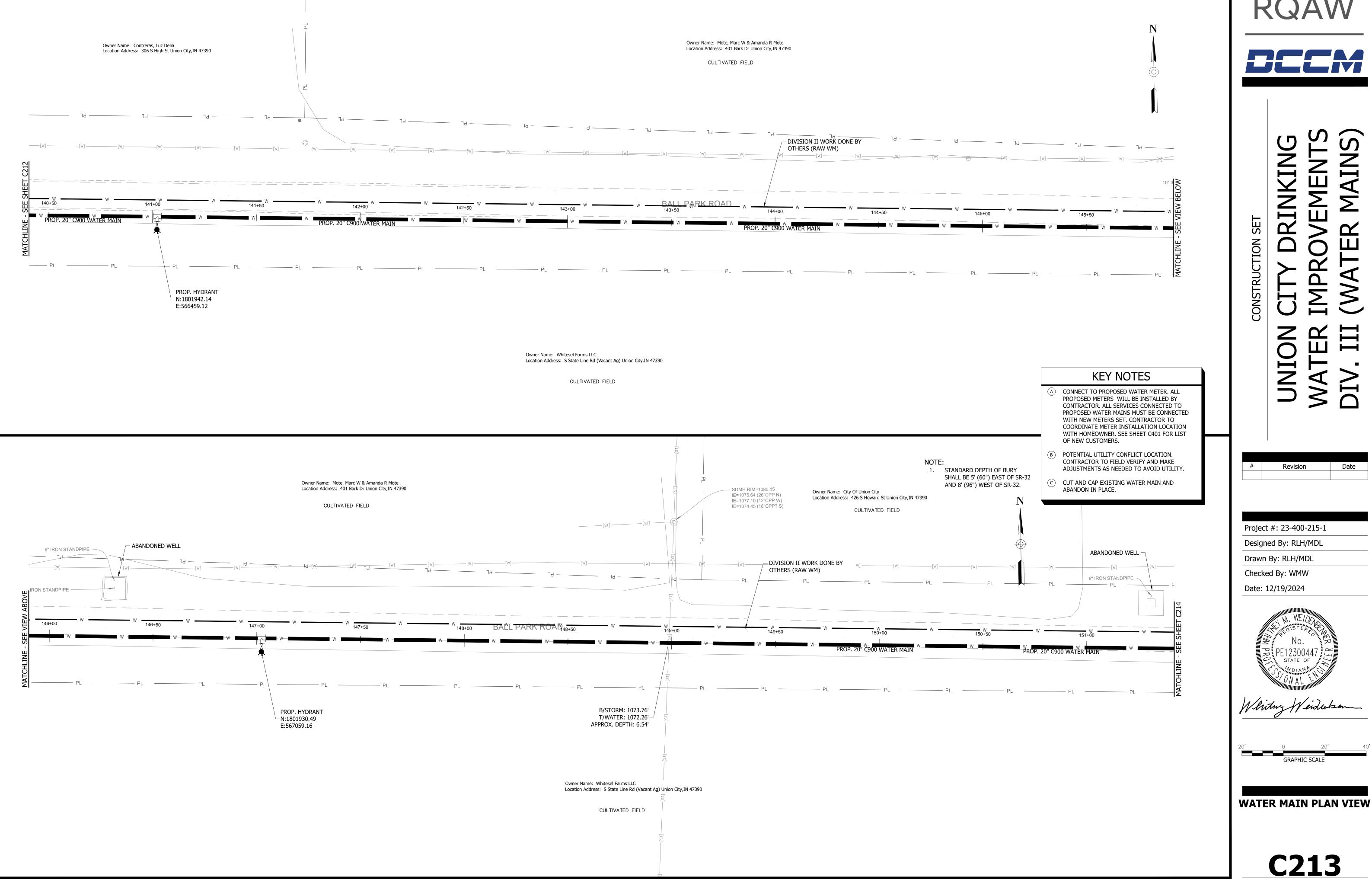
MAINS

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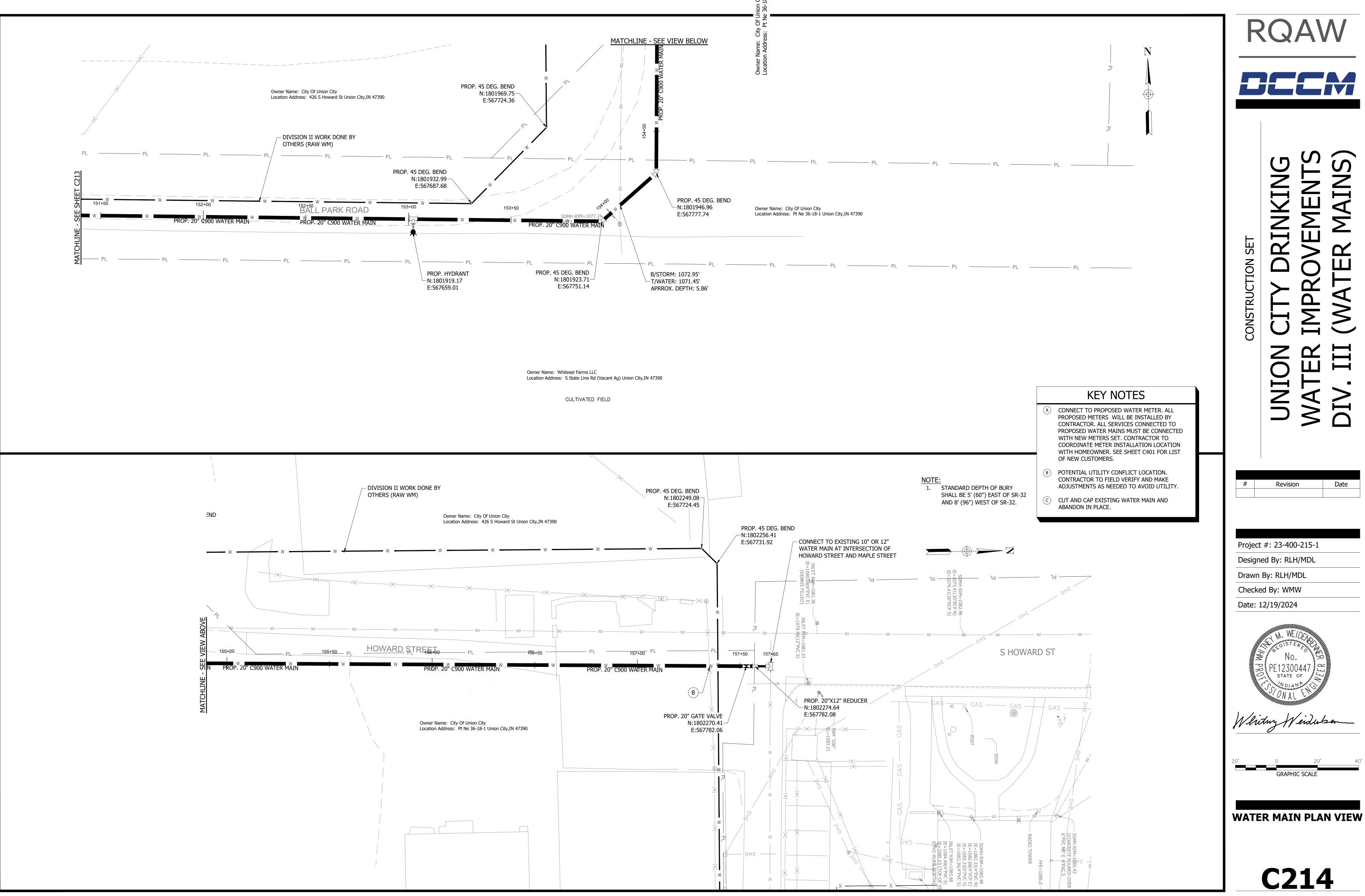
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Date



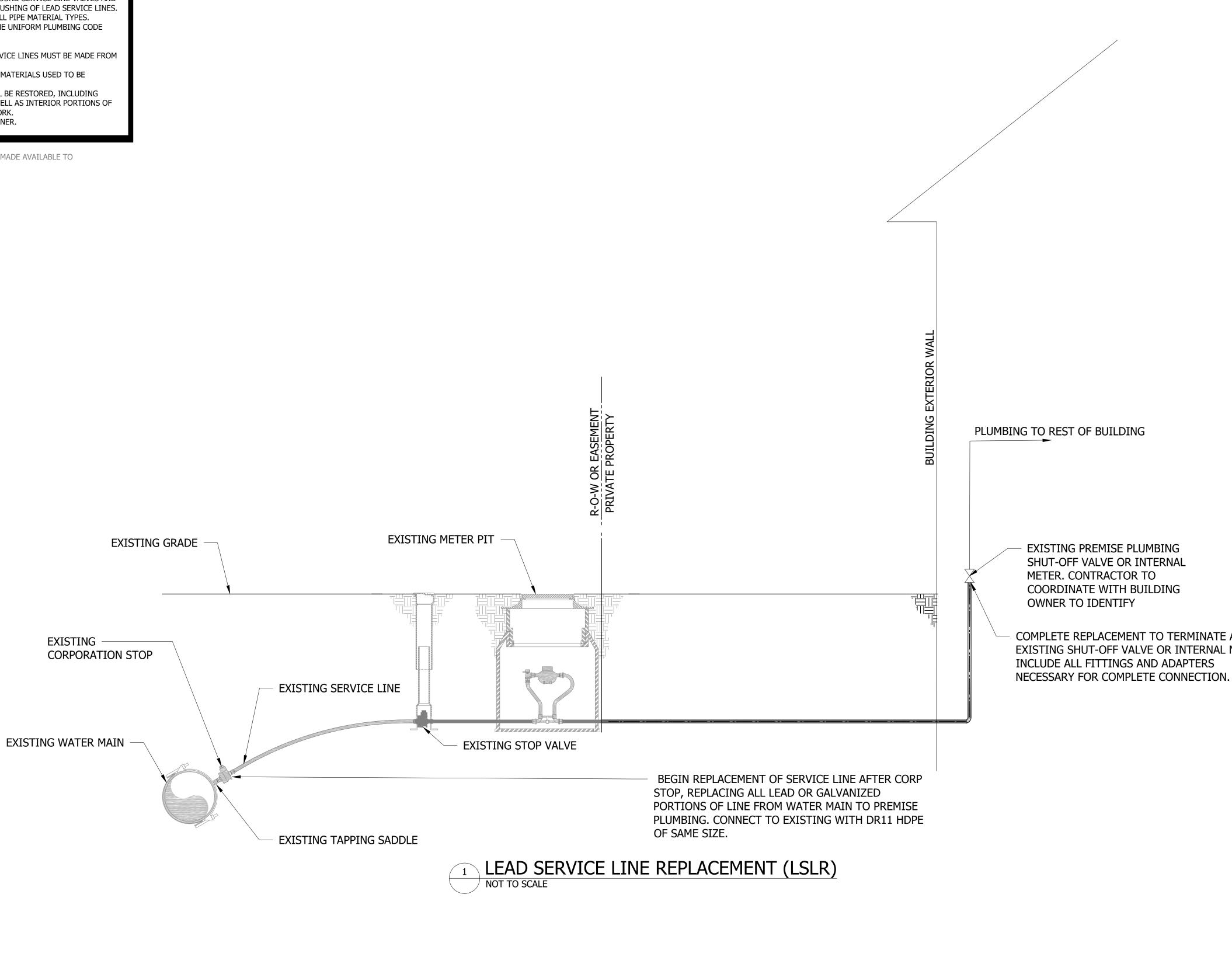




## **GENERAL NOTES** HOMEOWNER COORDINATION: 1. RIGHT-OF-ENTRY (ROE) IS REQUIRED PRIOR TO ENTRY OF ANY PRIVATELY OWNED PROPERTY TO DO WORK. 2. CONTRACTOR SHALL WORK WITH CITY TO ADDRESS COMMUNICATIONS TO CITY CUSTOMERS WHICH INCLUDES BUT IS NOT LIMITED TO: a. CONTRACTOR TO FIRST NOTIFY EACH HOMEOWNER OF WORK SCHEDULED AT THEIR PROPERTY 2 WEEKS PRIOR. b. CONTRACTOR TO SEND REMINDER NOTIFICATION TO EACH HOMEOWNER AT AT LEAST 3 DAYS PRIOR TO WORK. 3. ENSURE COMPANY VEHICLES, UNIFORMS, AND OTHER SIGNAGE TO IDENTIFY CONTRACTORS IS PRESENT FOR HOMEOWNERS. PROJECT CONSIDERATIONS:

- 1. CONTRACTOR SHALL FOLLOW ALL AWWA STANDARDS FOR SERVICE LINE REPLACEMENT INCLUDING AWWA C800-21 UNDERGROUND SERVICE LINE VALVES AND FITTINGS AND AWWA C810-17 REPLACEMENT AND FLUSHING OF LEAD SERVICE LINES. CONTRACTOR TO FOLLOW THESE STANDARDS FOR ALL PIPE MATERIAL TYPES. 2. CONTRACTOR SHALL FOLLOW ALL GUIDELINES OF THE UNIFORM PLUMBING CODE DURING INSTALLATION.
- 3. COMPLIANCE WITH NSF/ANSI 61 IS REQUIRED.
- 4. REPLACEMENT OF LEAD AND GALVANIZED STEEL SERVICE LINES MUST BE MADE FROM METER PIT TO PREMISE PLUMBING OF BUILDING.
- 5. CONTRACTOR MUST PROVIDE A SUBMITTAL FOR ALL MATERIALS USED TO BE APPROVED BY ENGINEER.
- 6. ALL PROPERTY DISTURBED BY CONSTRUCTION SHALL BE RESTORED, INCLUDING SEEDING FOR GRASS AREAS ON THE PROPERTY AS WELL AS INTERIOR PORTIONS OF ANY BUILDING ON THE PROPERTY DISTURBED BY WORK.
- 7. DISPOSE OF ALL LEAD SERVICE LINES IN A SAFE MANNER.

NOTE: A LIST OF SERVICES IDENTIFIED BY CITY WILL BE MADE AVAILABLE TO CONTRACTOR.





CONSTRUCTION SET	UNION CITY DRINKING	WATER IMPROVEMENTS	DIV. III (WATER MAINS)			
#	Revisio	n	Date			
Design Drawn Checke	Project #: 23-400-215-1 Designed By: RLH/MDL Drawn By: RLH/MDL Checked By: WMW Date: 12/19/2024					
Date: 12/19/2024 M. WE/D. No. PE12300447 STATE OF ON AL Whithy Weiduban						





EXISTING SHUT-OFF VALVE OR INTERNAL METER.

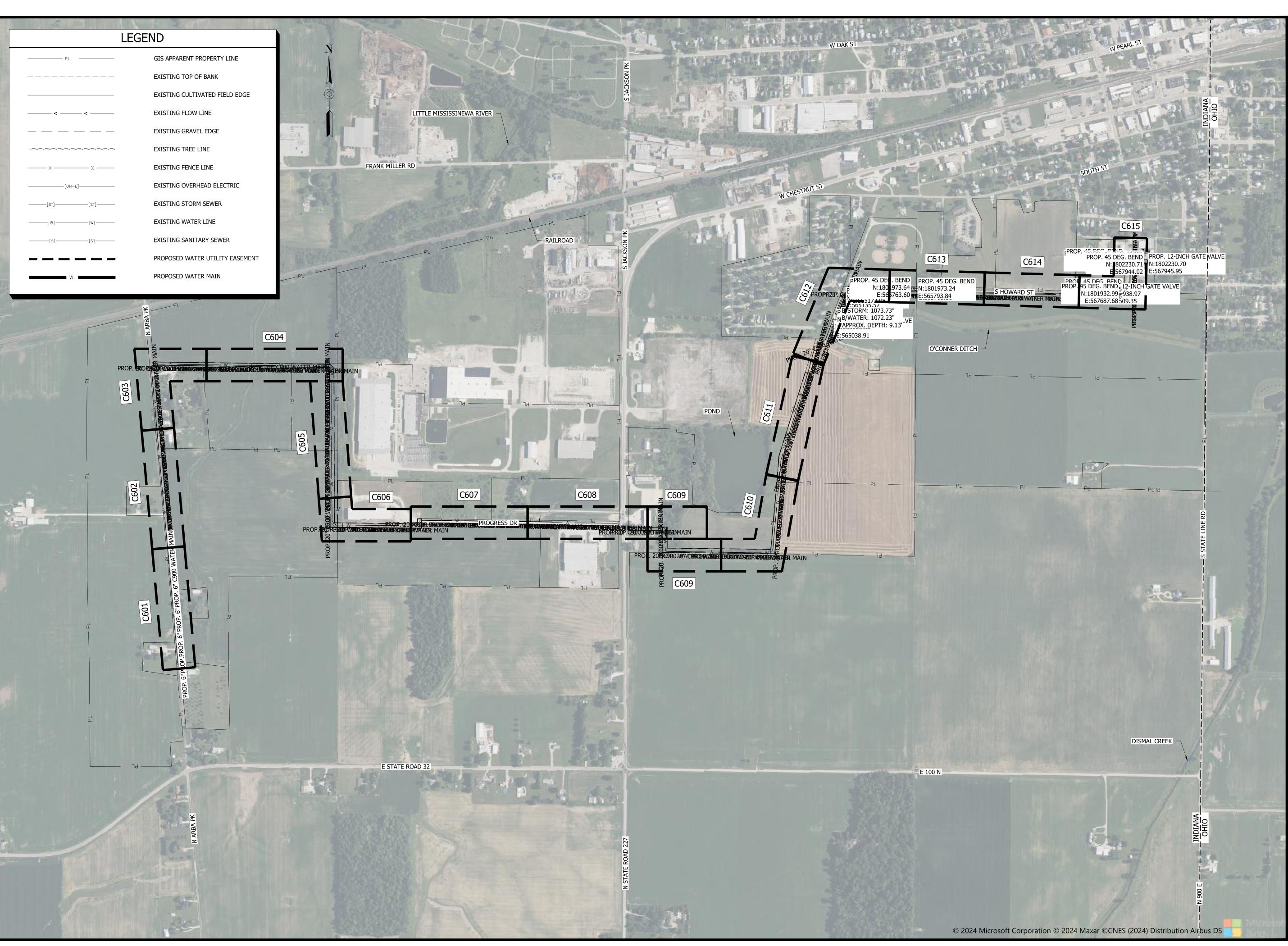
COMPLETE REPLACEMENT TO TERMINATE AT

OWNER	ADDRESS	LOCATION	TYPE
Girton, Kendall V & Sharon K Girton	1250 N 700 E Union City, IN 47390	Front yard facing N CR 700 E	Residential
Thornburg, Amy E	1345 N 700 E Union City, IN 47390	Front yard facing N CR 700 E	Residential
Hoggatt, Brad Lee & Amy Christine Hoggatt	1526 N 700 E Union City, IN 47390	Front yard facing N CR 700 E	Residential
Banda, Luciano	1725 N 700 E Union City, IN 47390	Front yard facing N CR 700 E	Residential
McGill, Jane E	1769 N 700 E Union City, IN 47390	Front yard facing N CR 700 E	Residential
Richter, Karl & Adreonna K Banda	1791 N 700 E Union City, IN 47390	Front yard facing N CR 700 E	Residential

RQAW	/
DEEA	

CONSTRUCTION SET	UNION CITY DRINKING	WATER IMPROVEMENTS	DIV. III (WATER MAINS)
#	Revisio	n	Date
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**C401** 





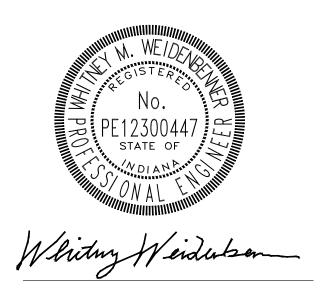
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#	Revision	Date

Project #: 23-400-215-1 Designed By: RLH/MDL Drawn By: RLH/MDL

Checked By: WMW

Date: 12/19/2024

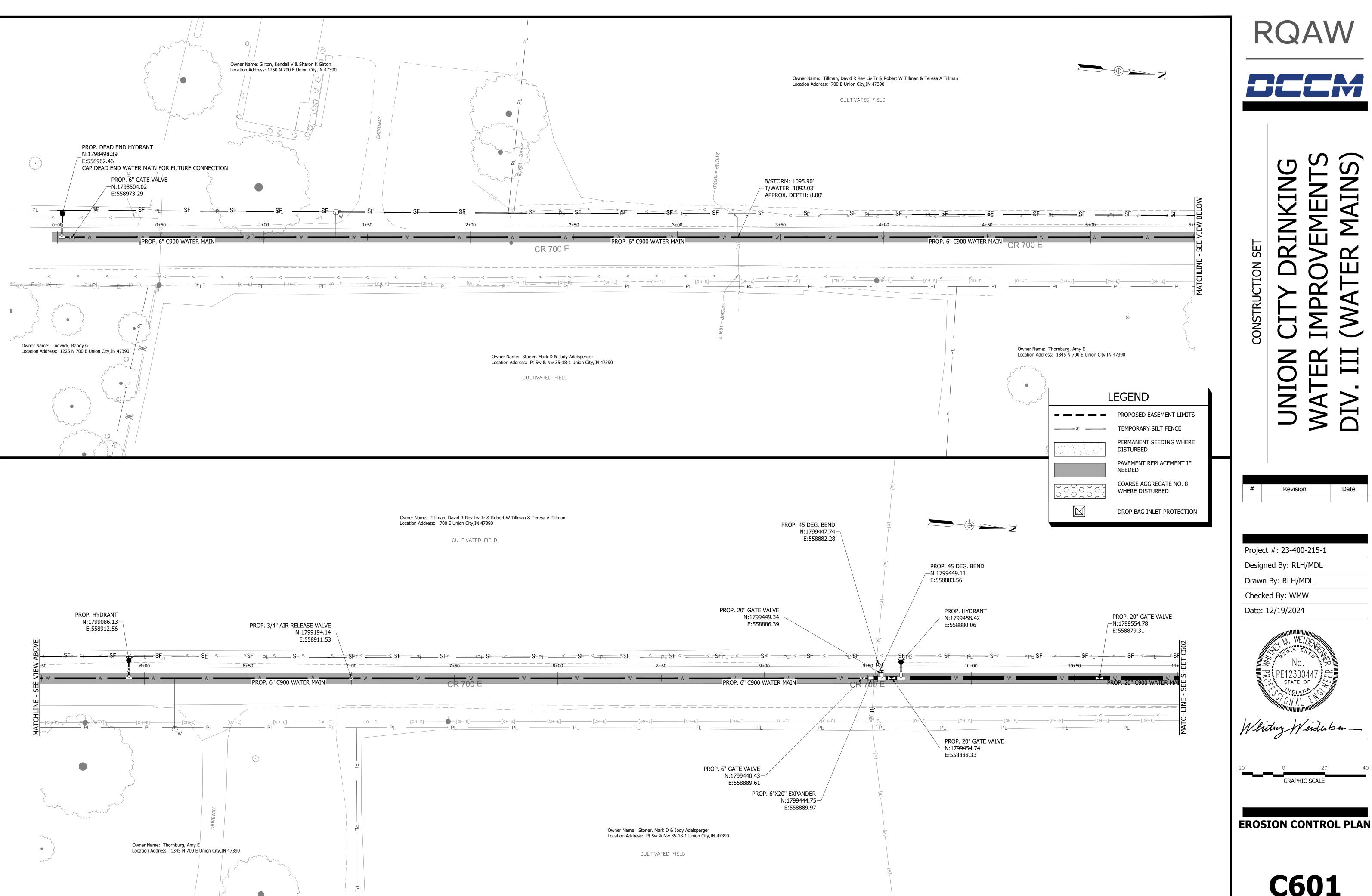








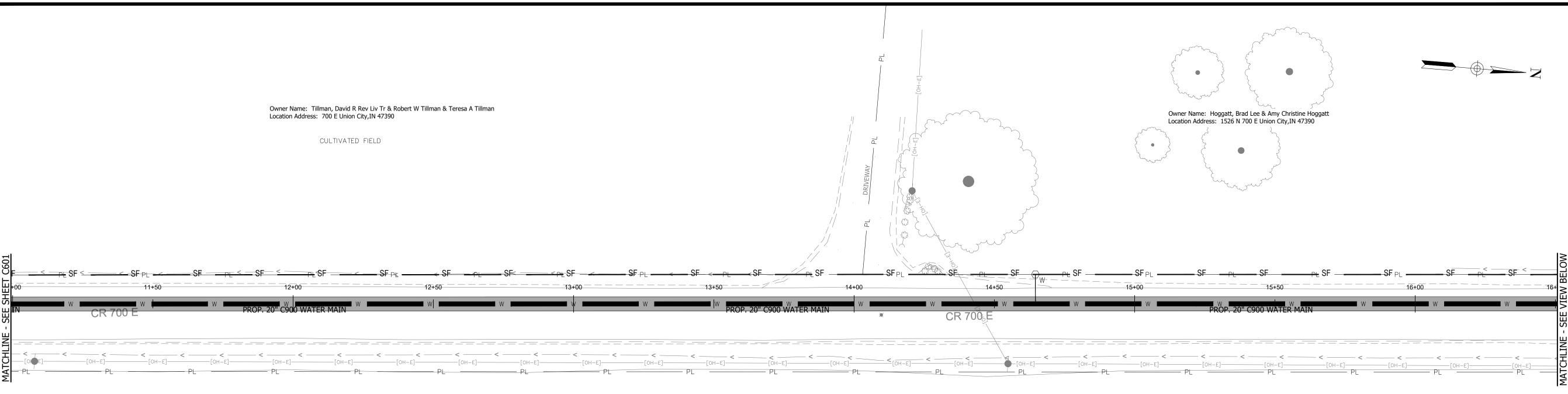
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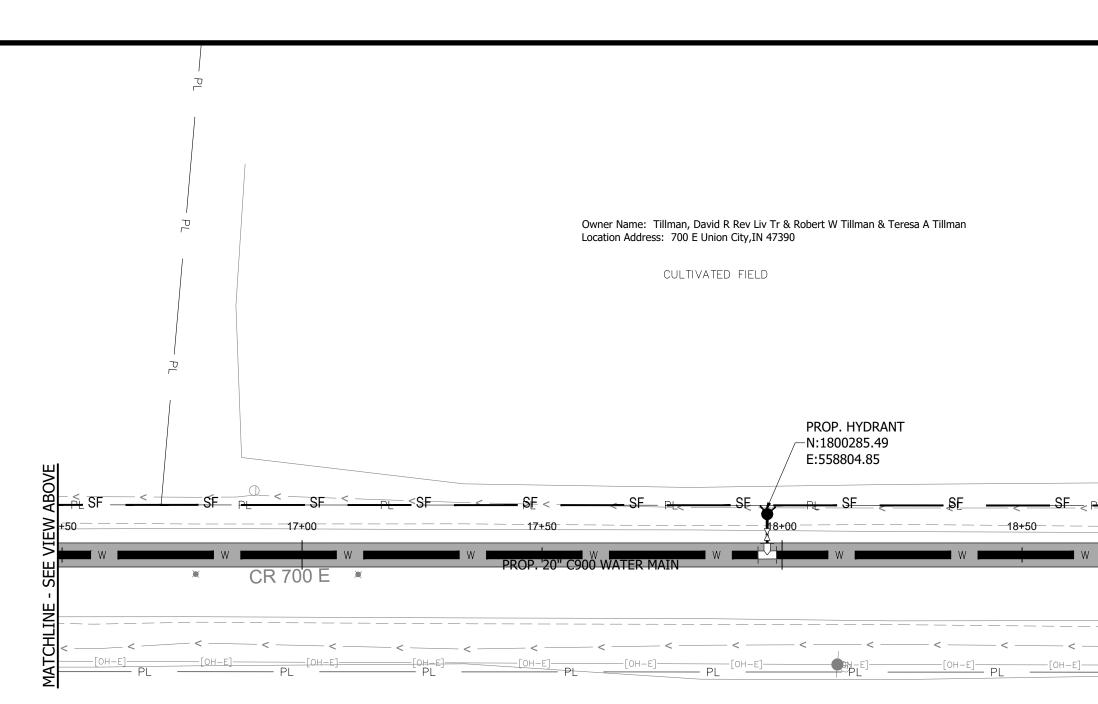




Date

**C601** 





Owner Name: Stoner, Mark D & Jody Adelsperger Location Address: Pt Sw & Nw 35-18-1 Union City,IN 47390

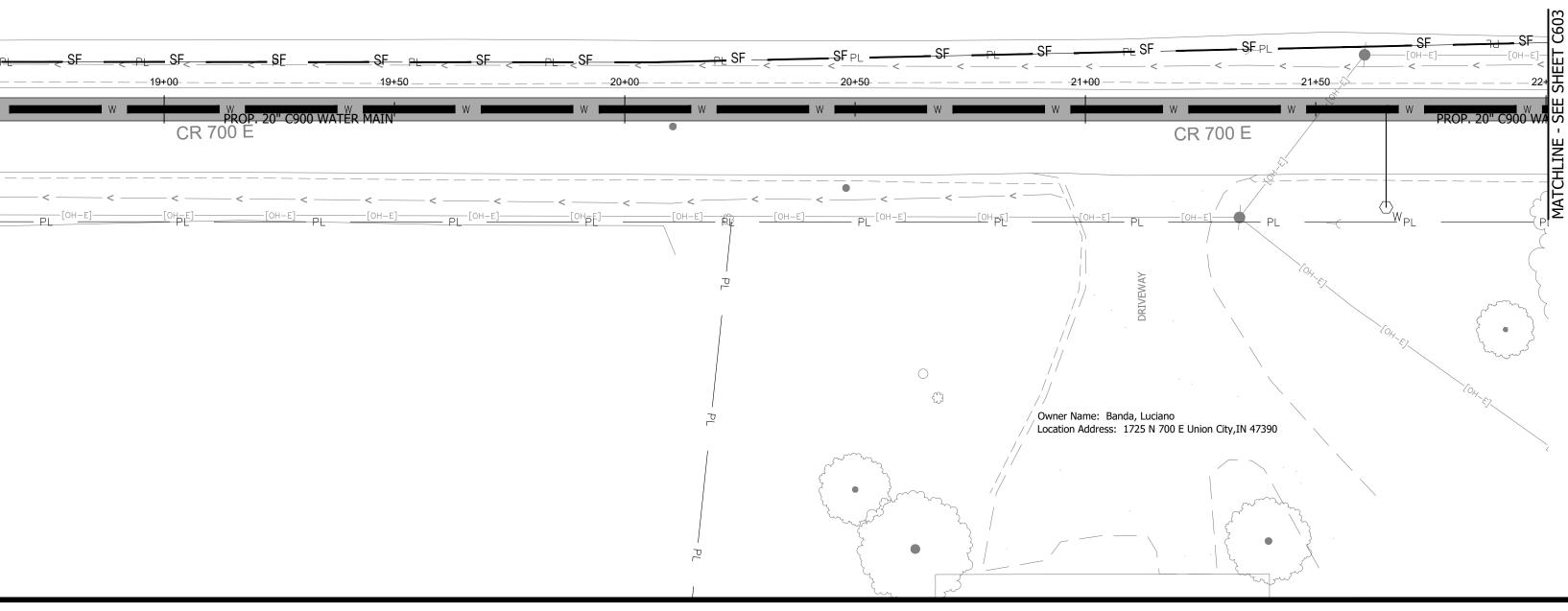
CULTIVATED FIELD

1/24 EDIT DATE: 12/3

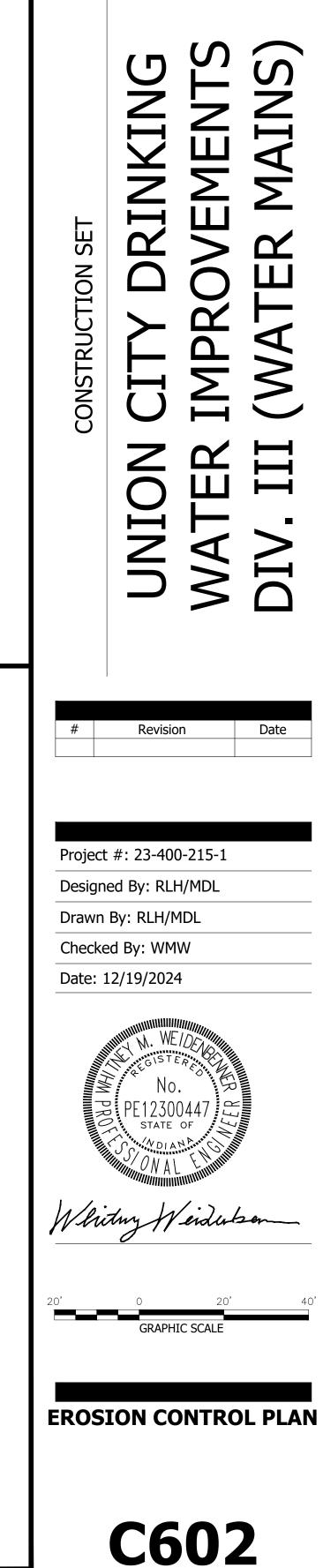
Owner Name: Stoner, Mark D & Jody Adelsperger Location Address: Pt Sw & Nw 35-18-1 Union City, IN 47390

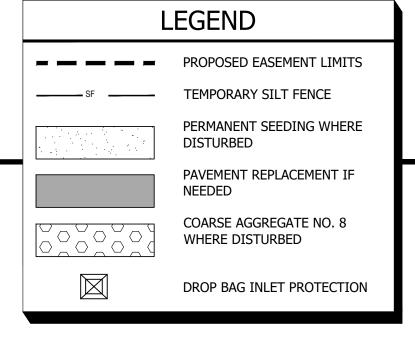
CULTIVATED FIELD

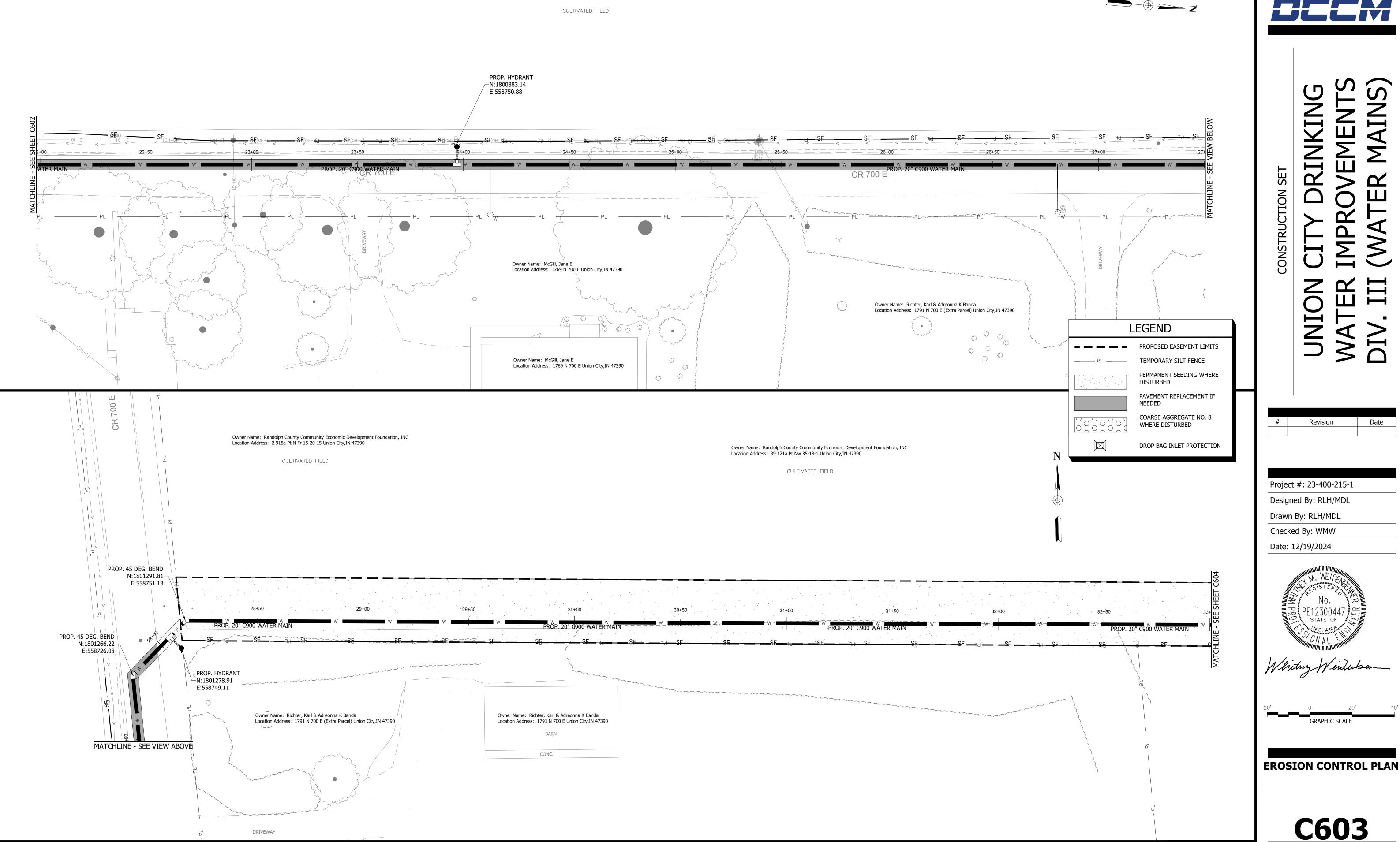
Owner Name: Tillman, David R Rev Liv Tr & Robert W Tillman & Teresa A Tillman Location Address: 1526 N 700 E (Extra Parcel) Union City, IN 47390







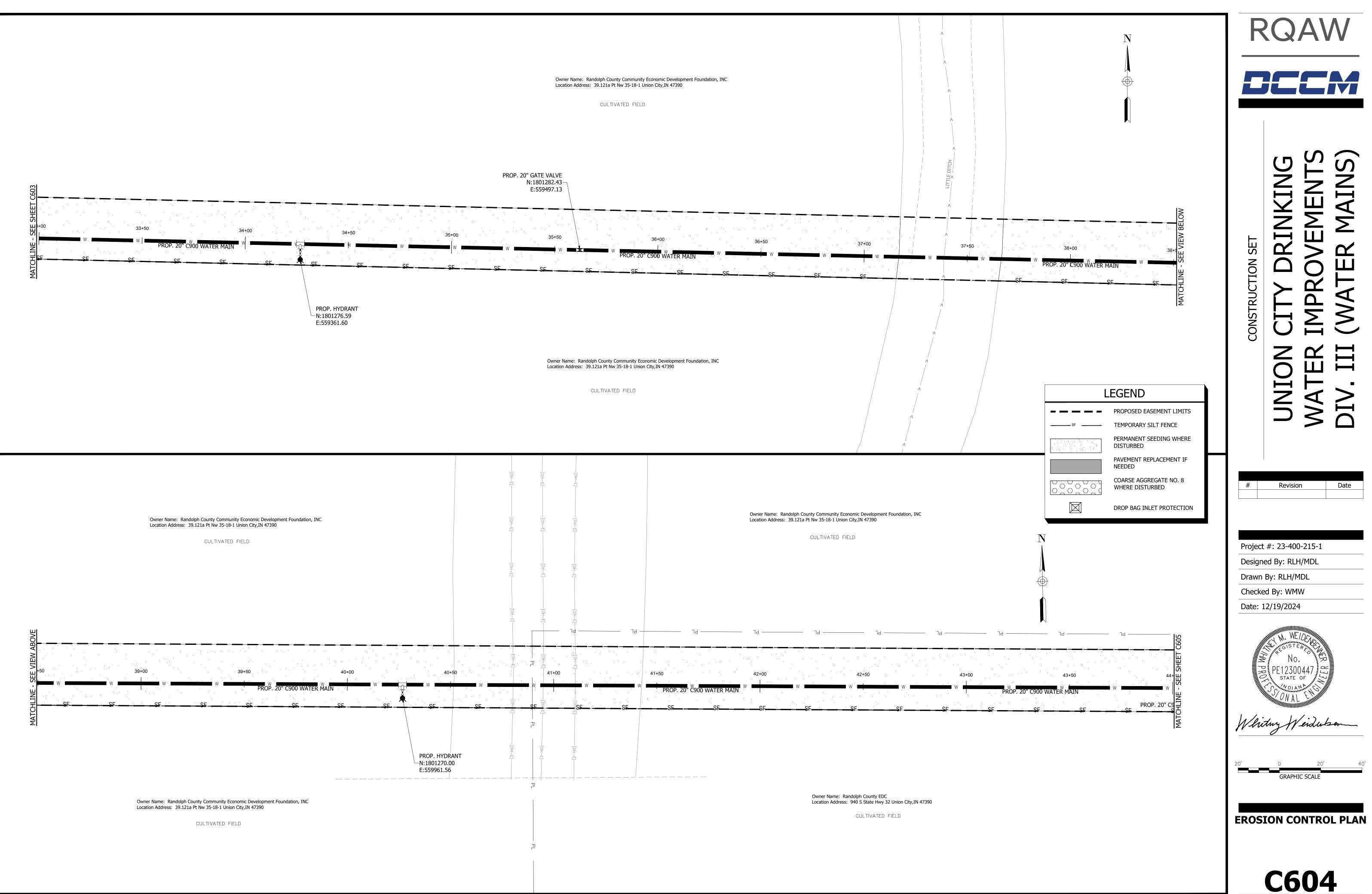


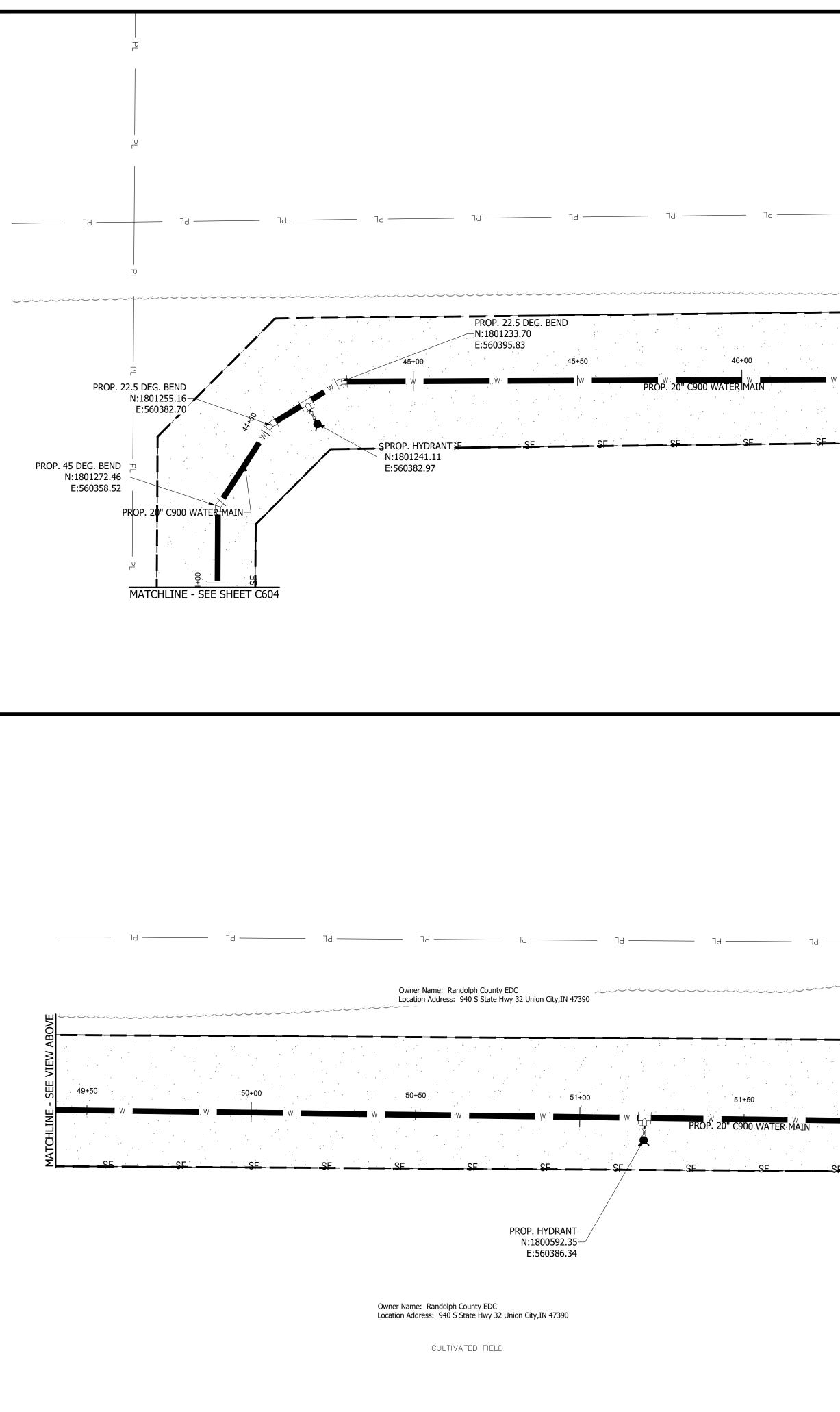


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# Owner Name: Tillman, David R Rev Liv Tr & Robert W Tillman & Teresa A Tillman Location Address: 1526 N 700 E (Extra Parcel) Union City,IN 47390





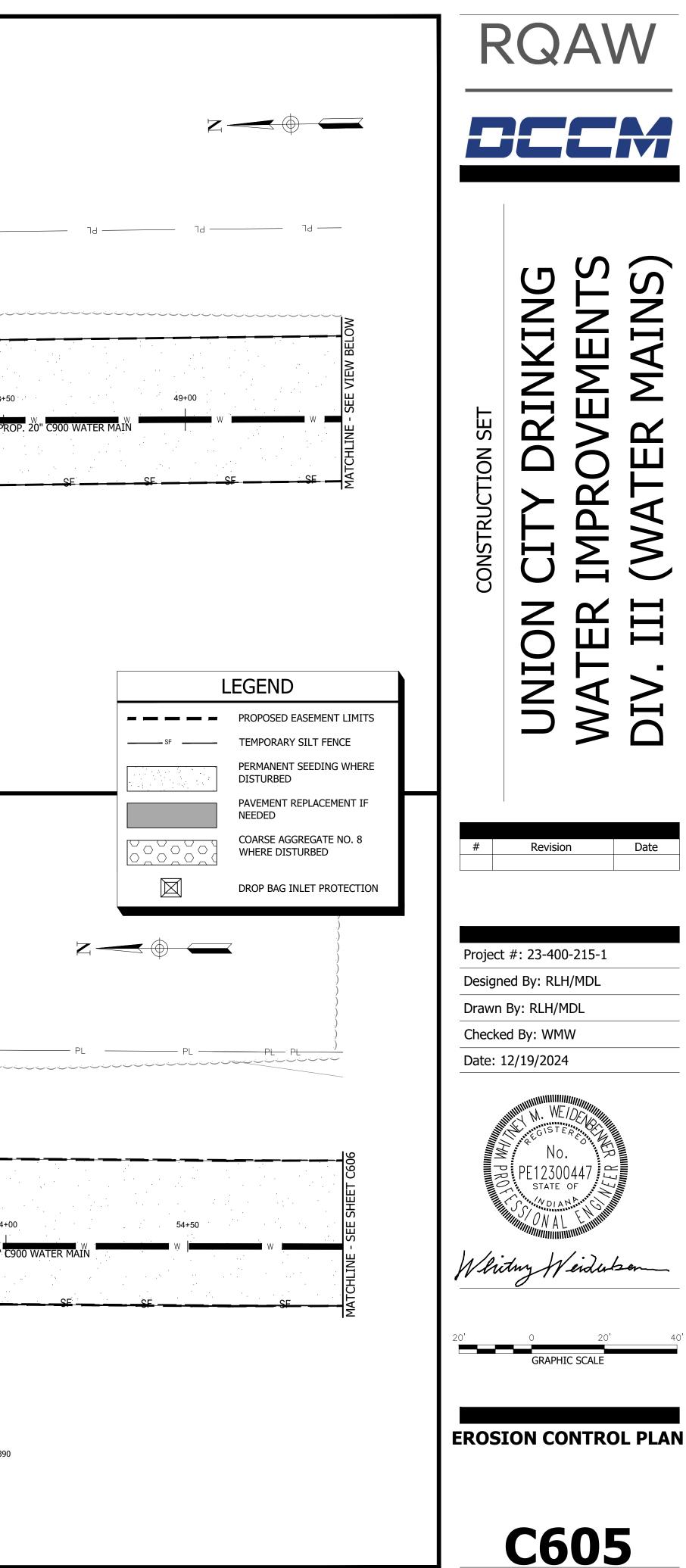


#### Owner Name: Randolph County EDC Location Address: 940 S State Hwy 32 Union City,IN 47390

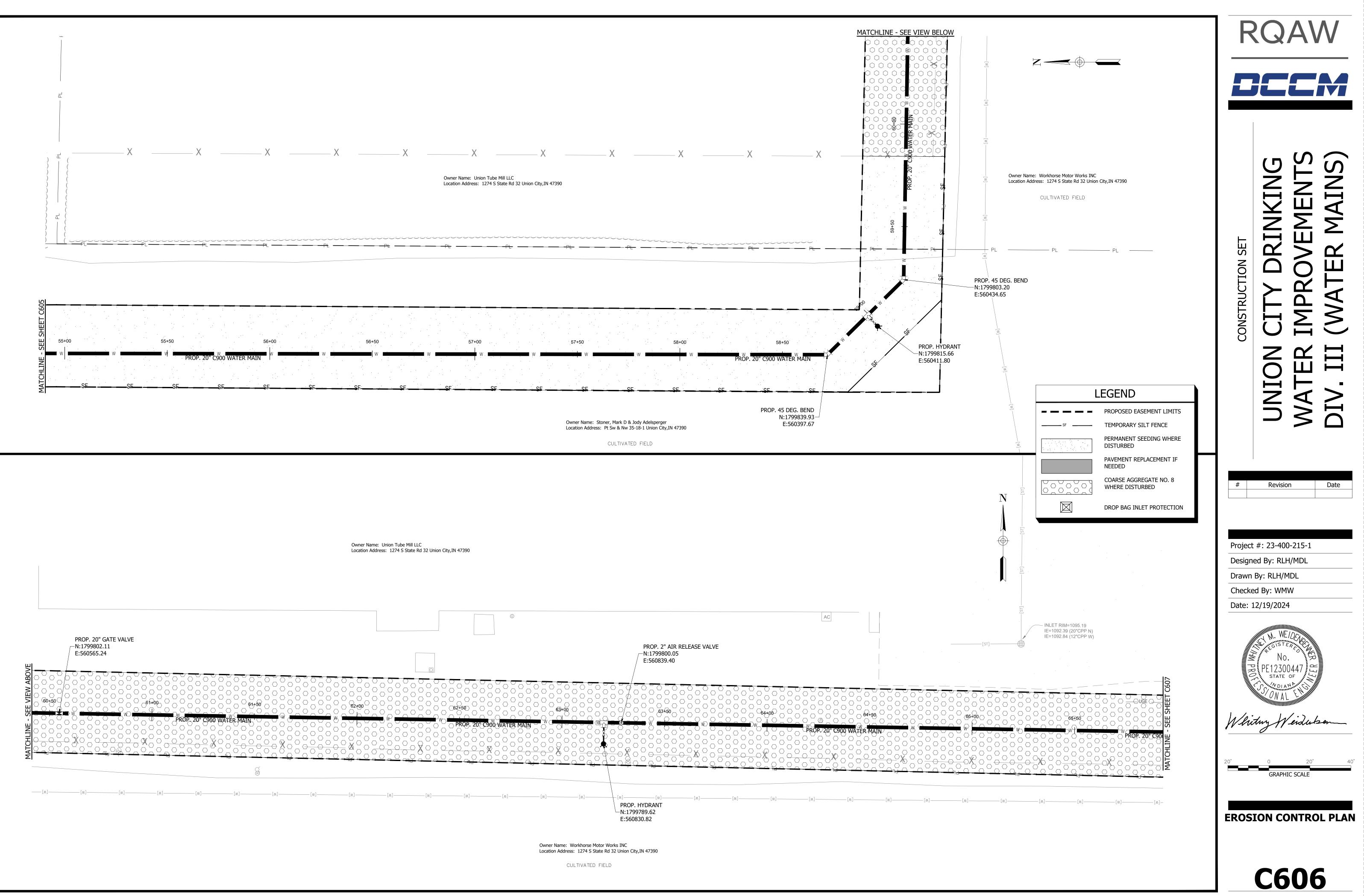
Owner Name: Randolph County EDC Location Address: 940 S State Hwy 32 Union City, IN 47390

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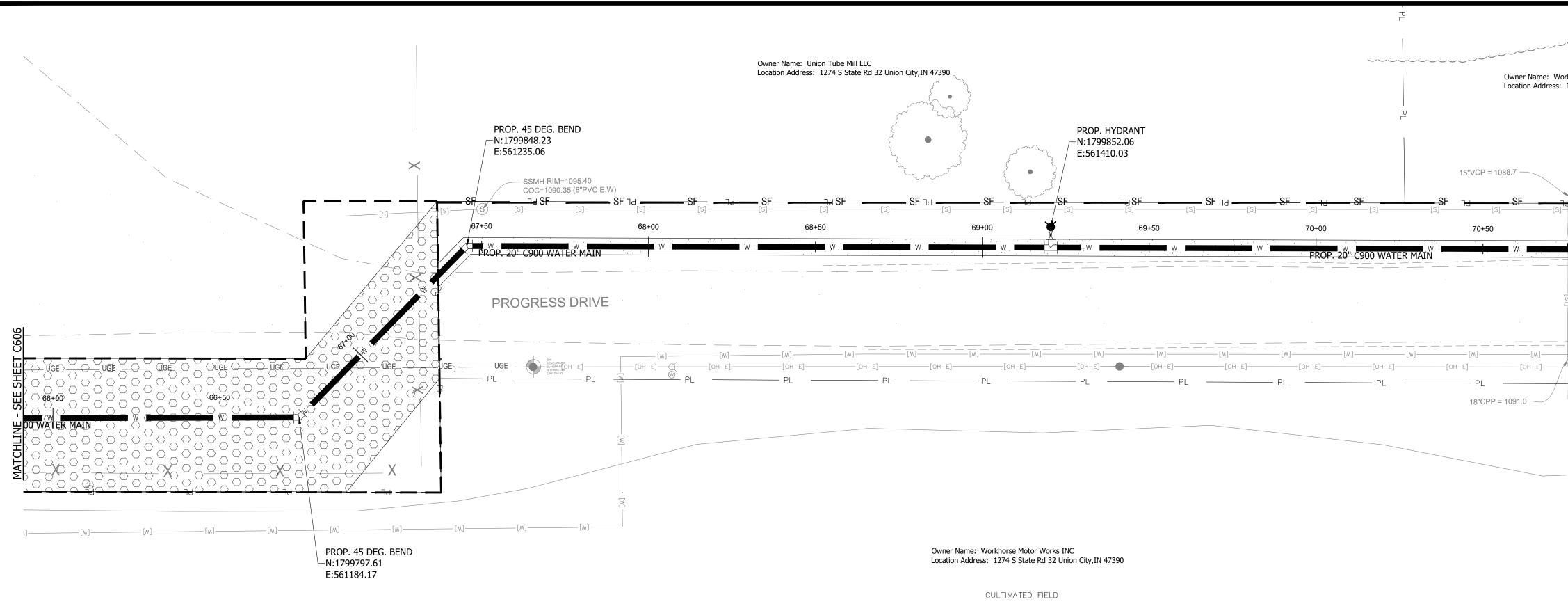
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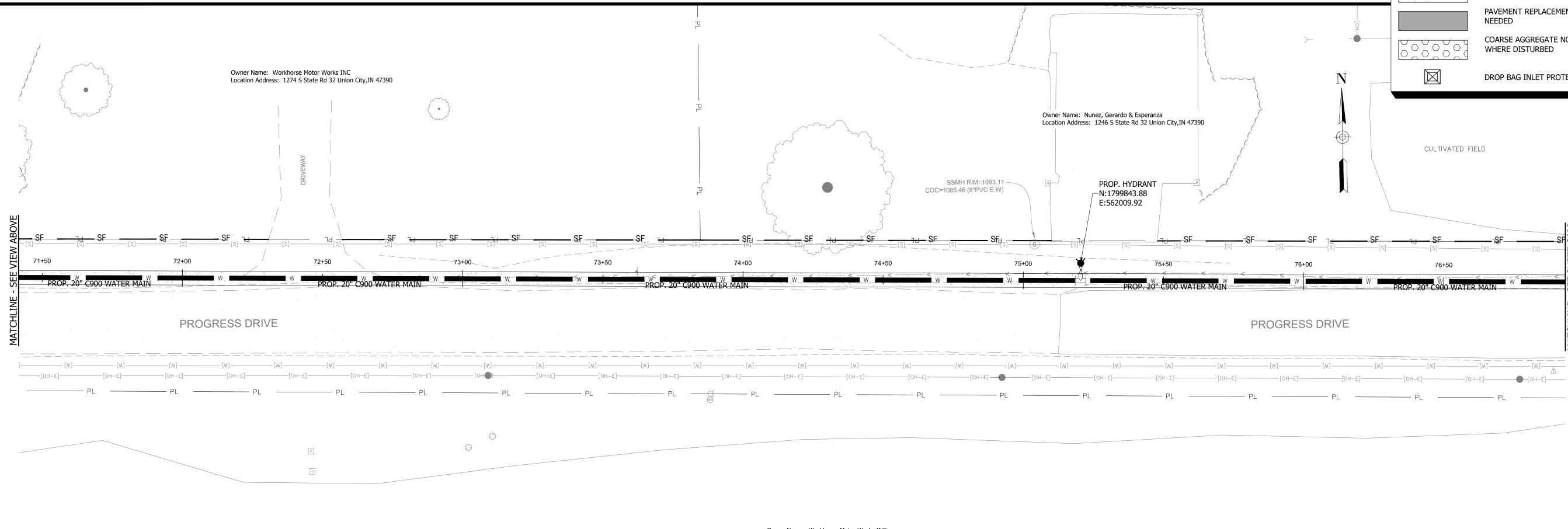


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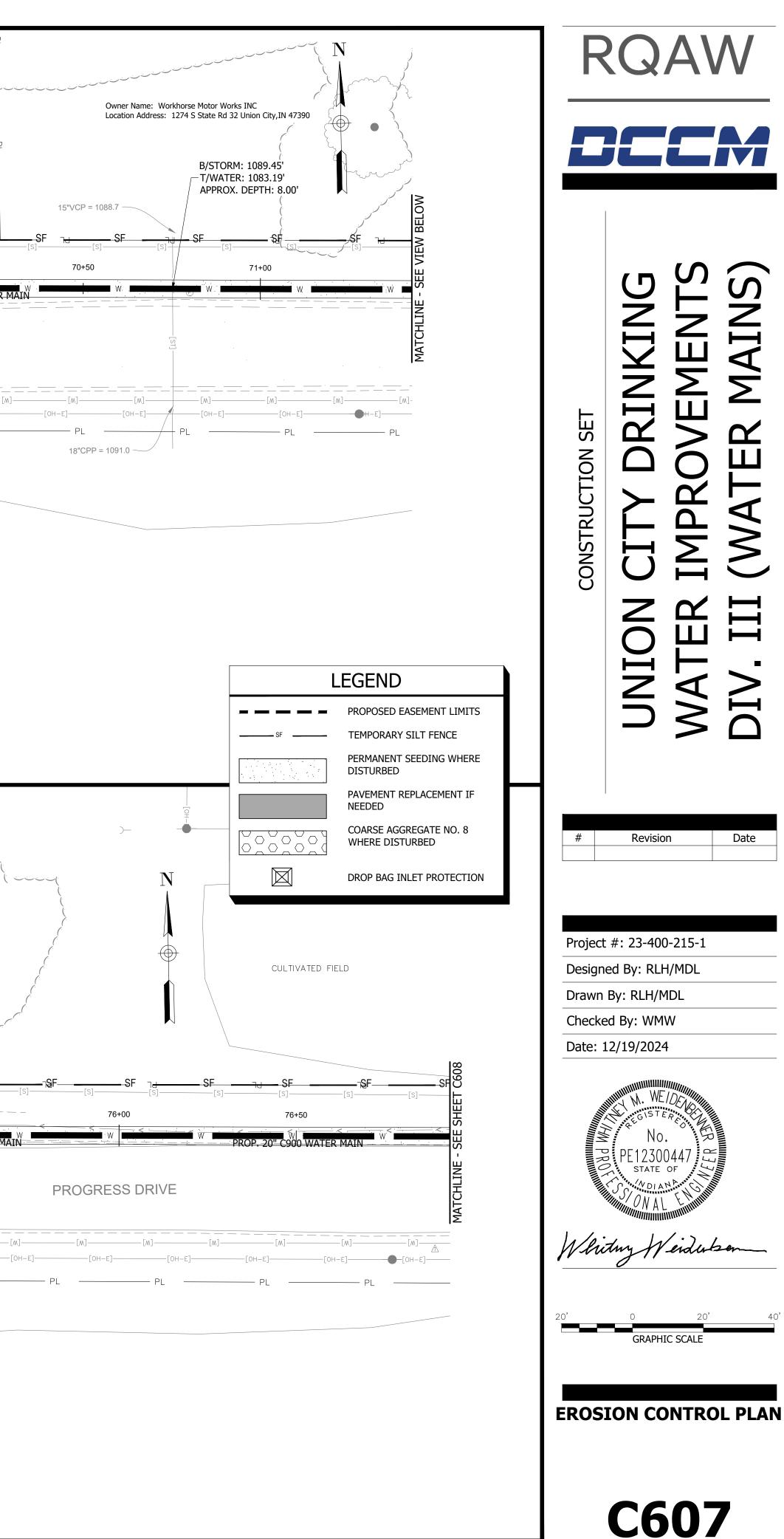
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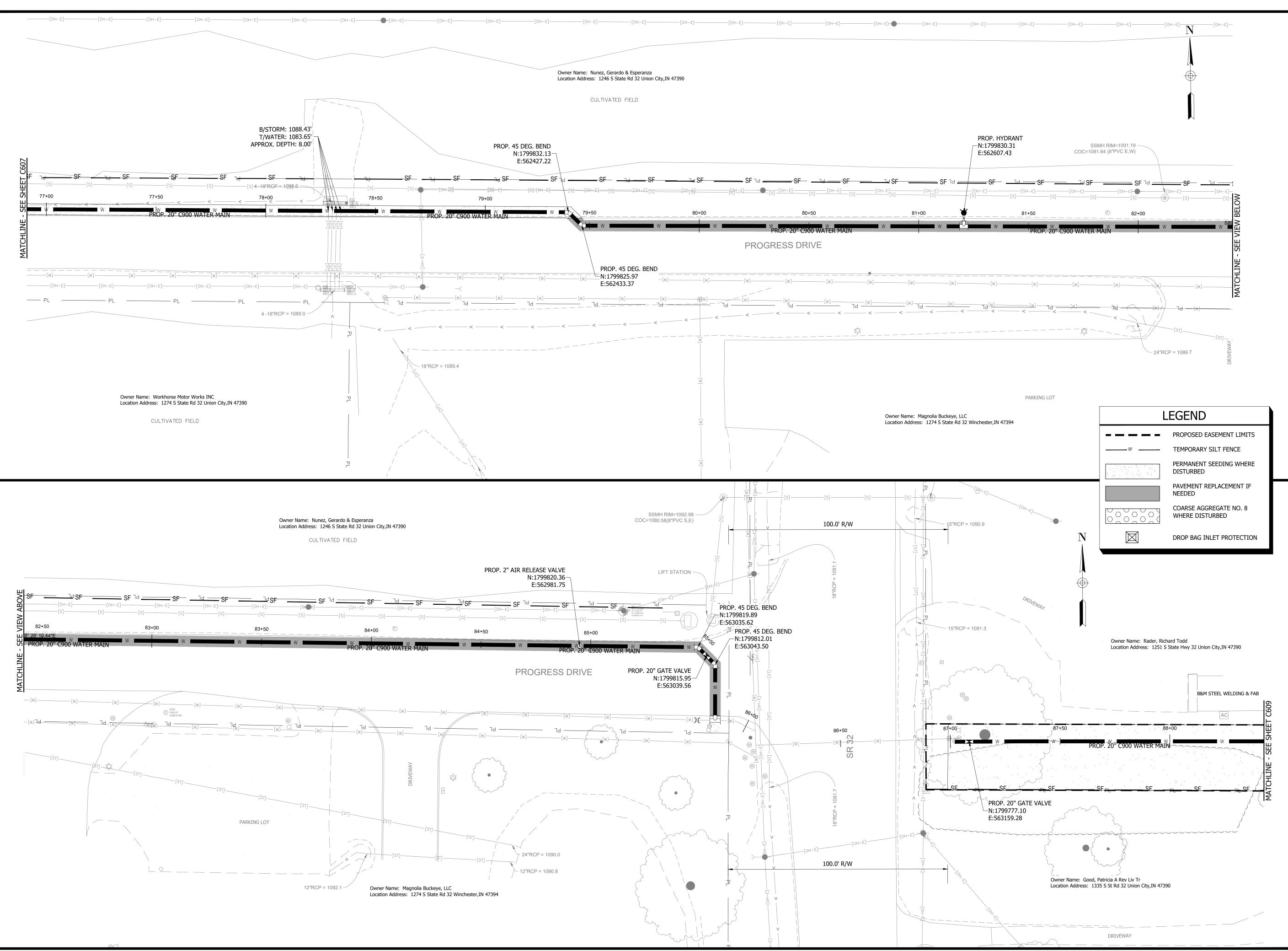




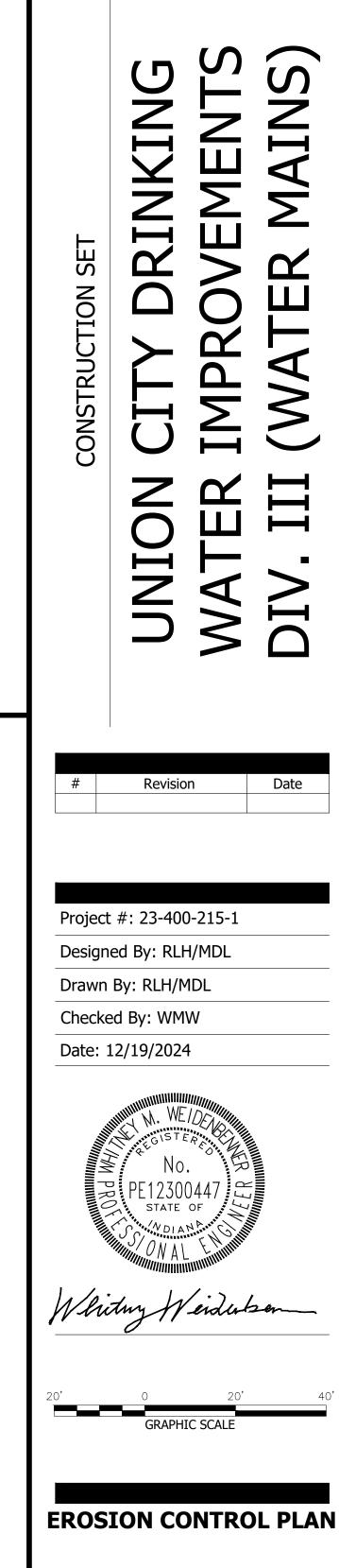
Owner Name: Workhorse Motor Works INC Location Address: 1274 S State Rd 32 Union City, IN 47390

CULTIVATED FIELD

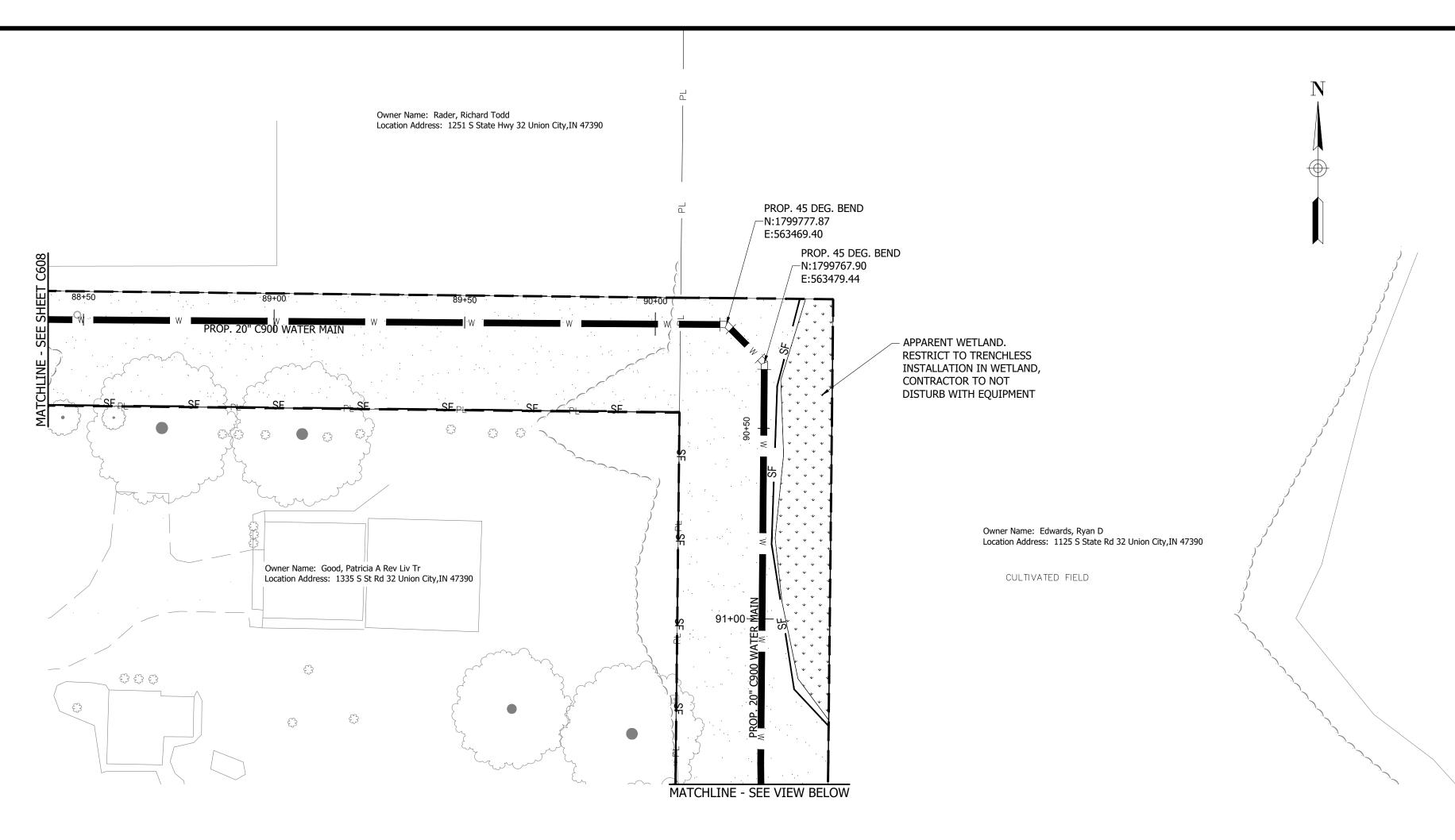


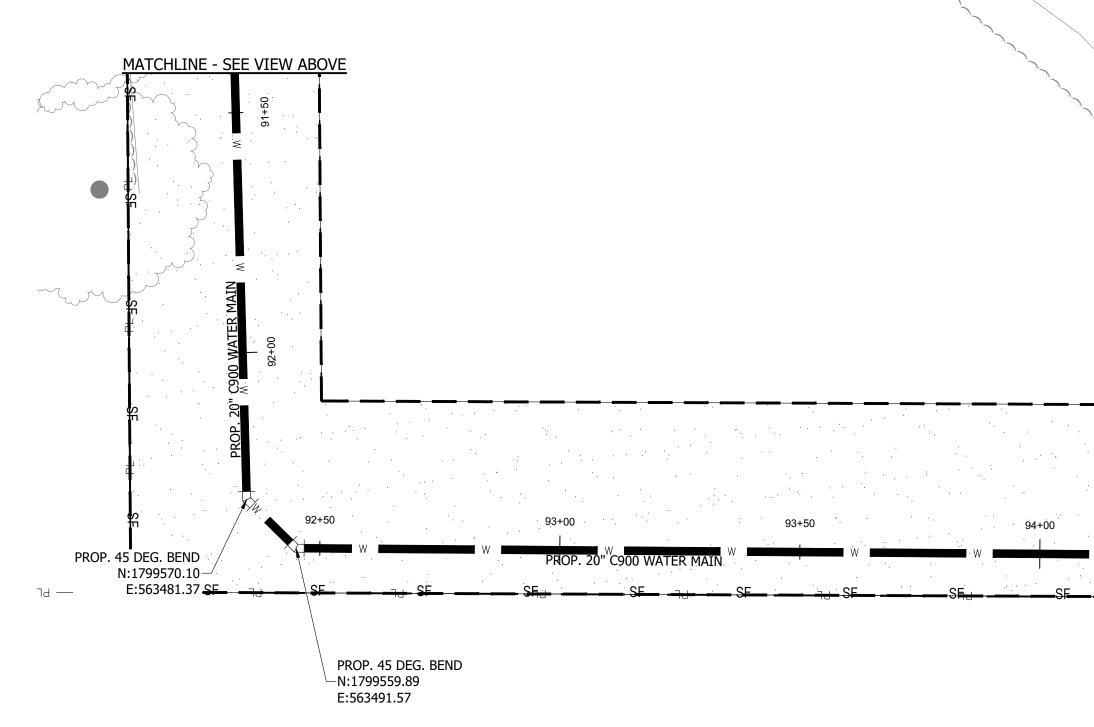






**C608** 





Owner Name: Edwards, Ryan D Location Address: 1125 S State Rd 32 Union City,IN 47390

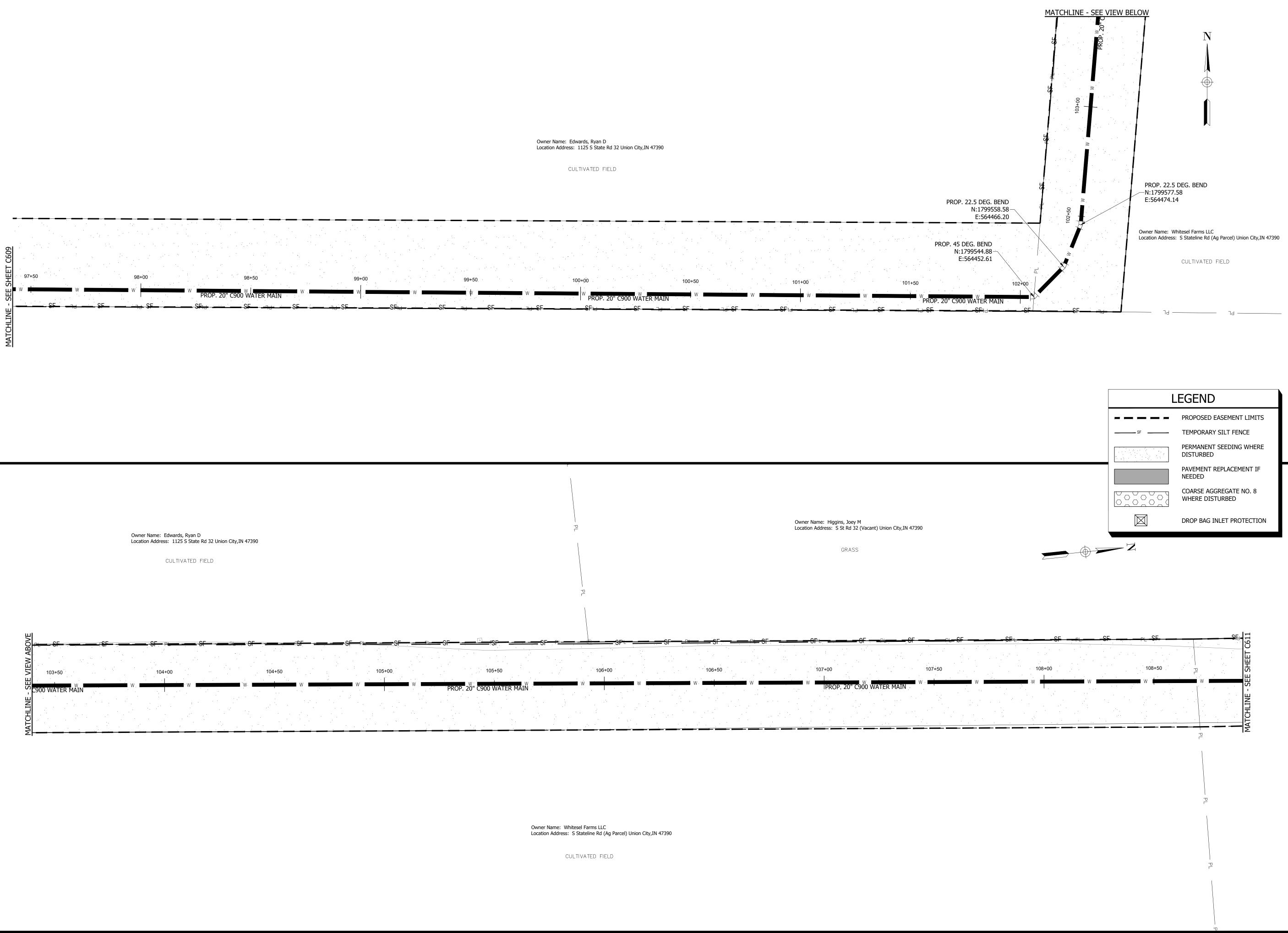
CULTIVATED FIELD

94+50 95+00 95+50 96+00 96+50 W W W W PROP. 20" C900 WATER MAIN W SF 35 SF 3



CONSTRUCTION SET	UNION CITY DRINKING	WATER IMPROVEMENTS	DIV. III (WATER MAINS)
#	Revisio	n	Date
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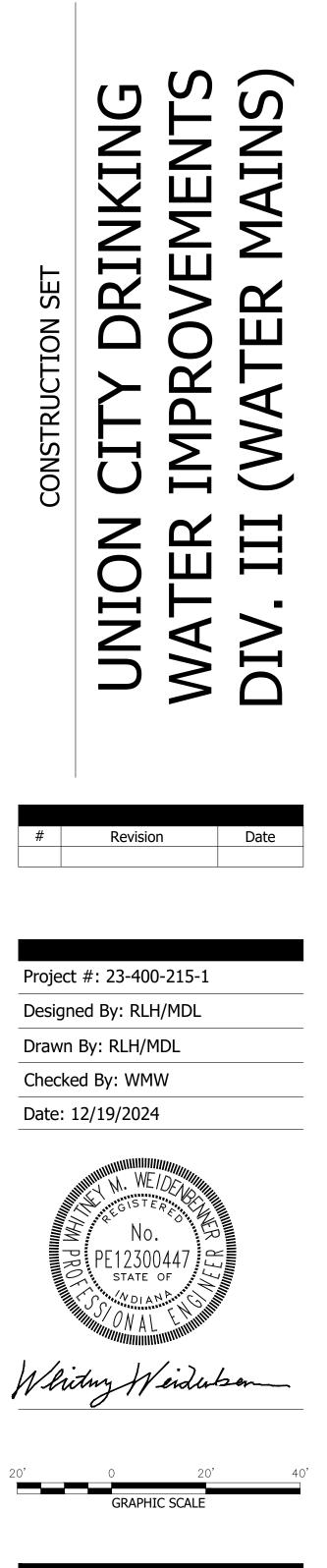
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			97+00 W	MATCHLINE - SEE SHEET C610
			97+00	MATCHLINE - SEE SHEET C610



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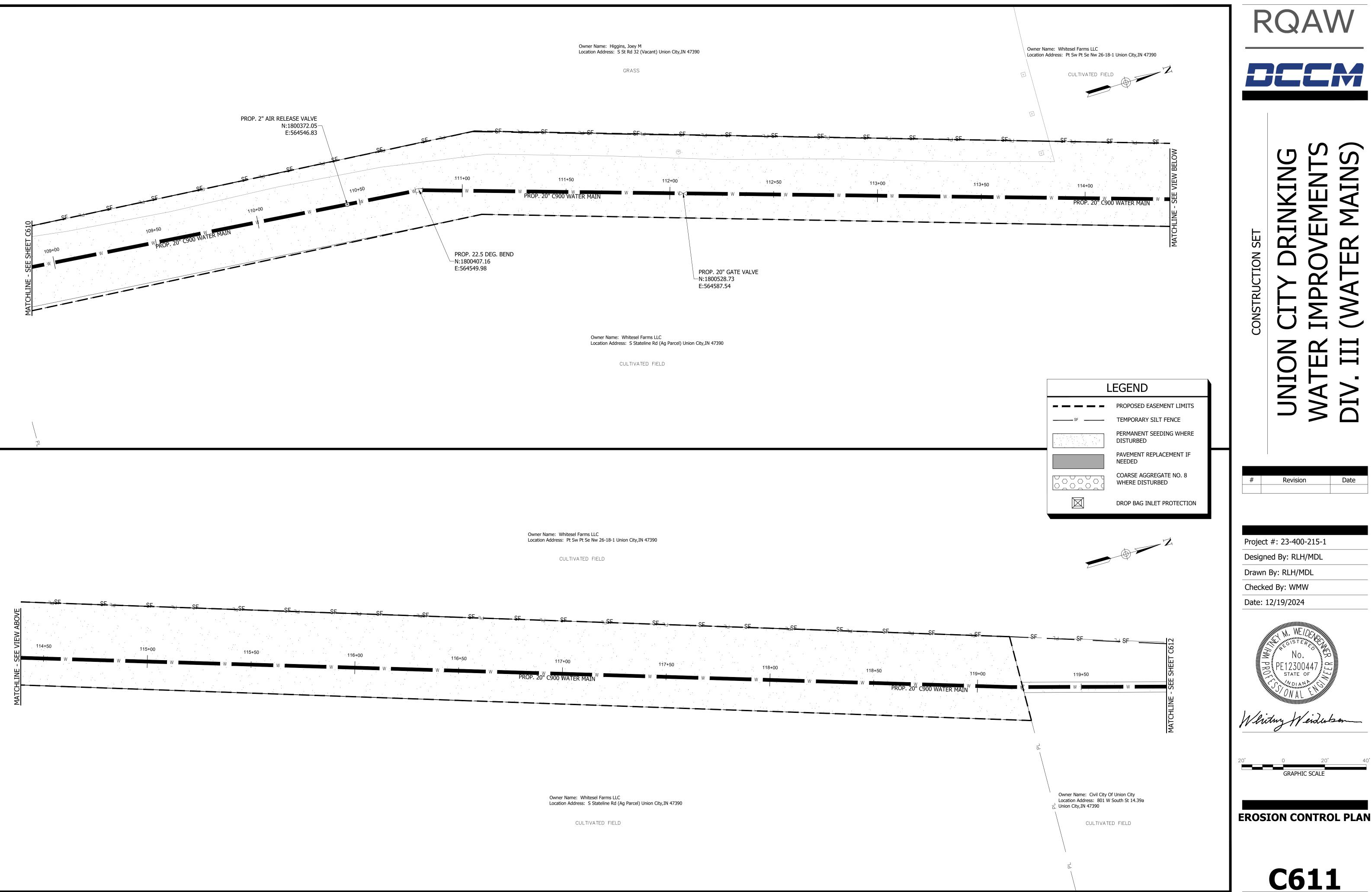
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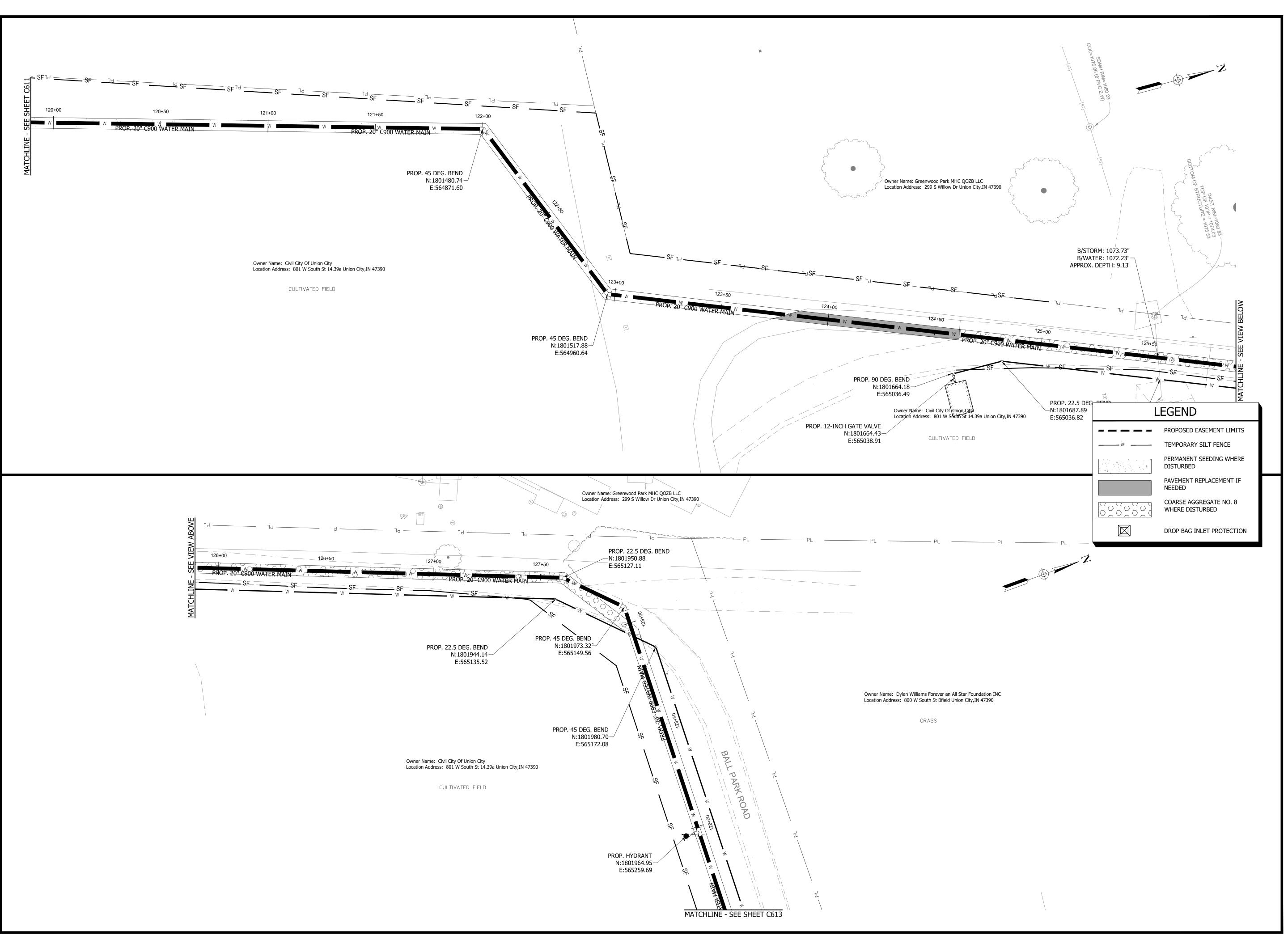




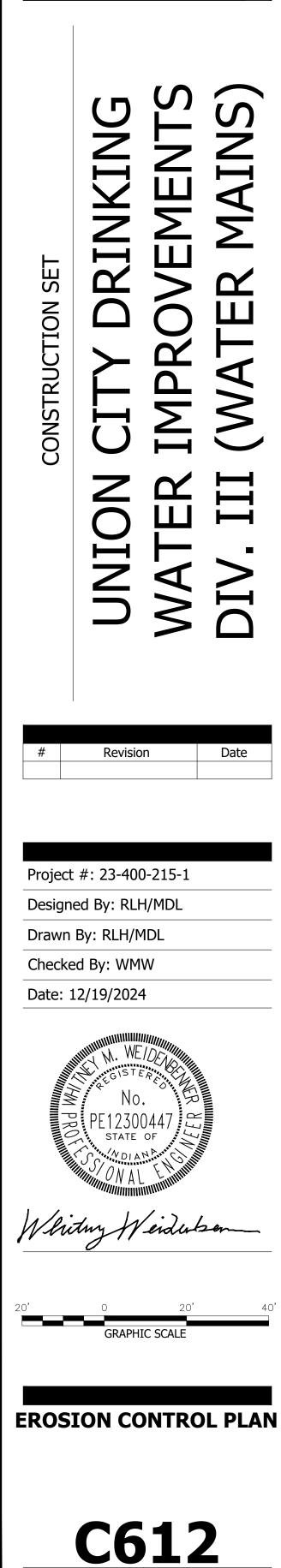
**EROSION CONTROL PLAN** 

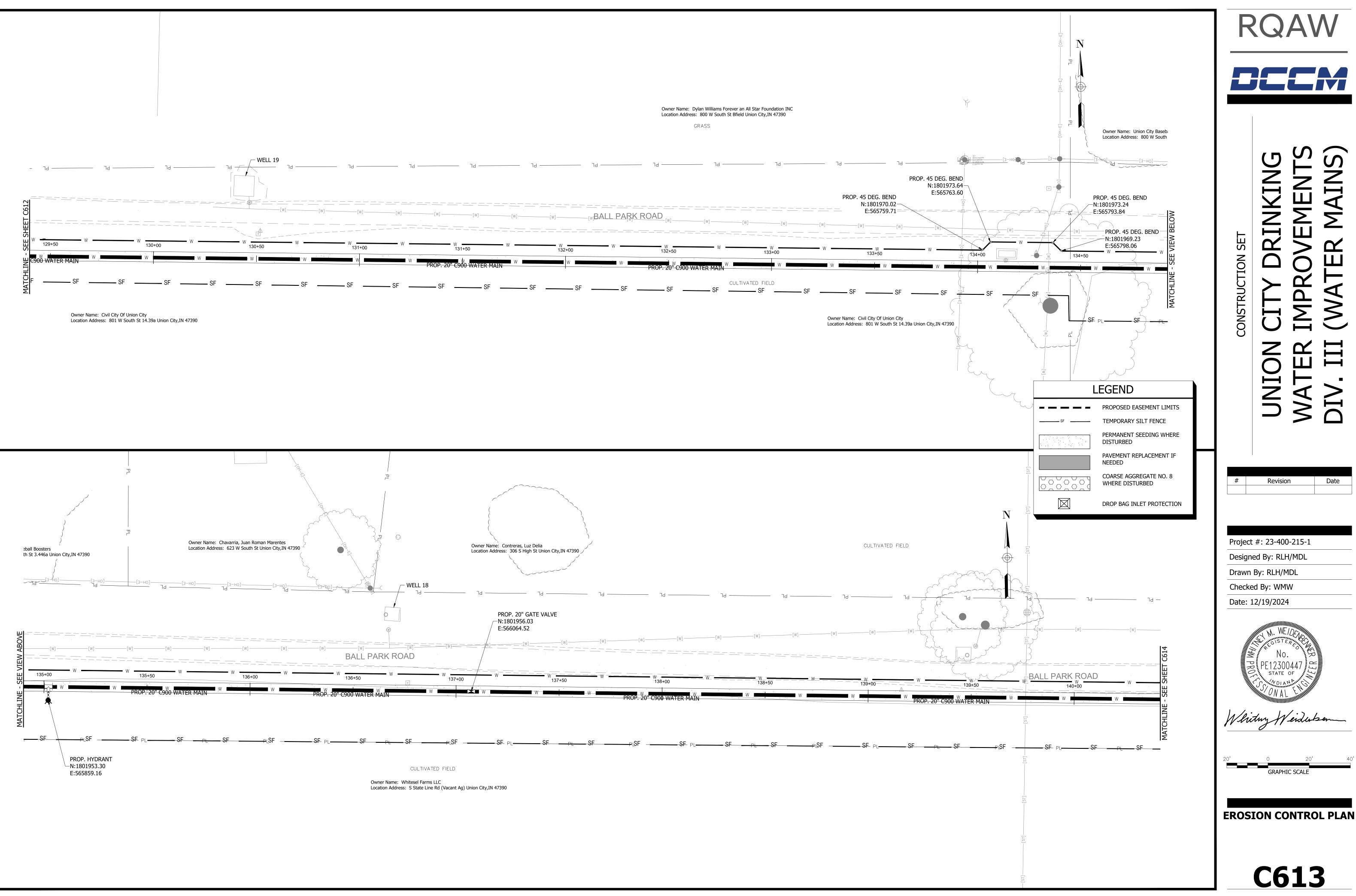


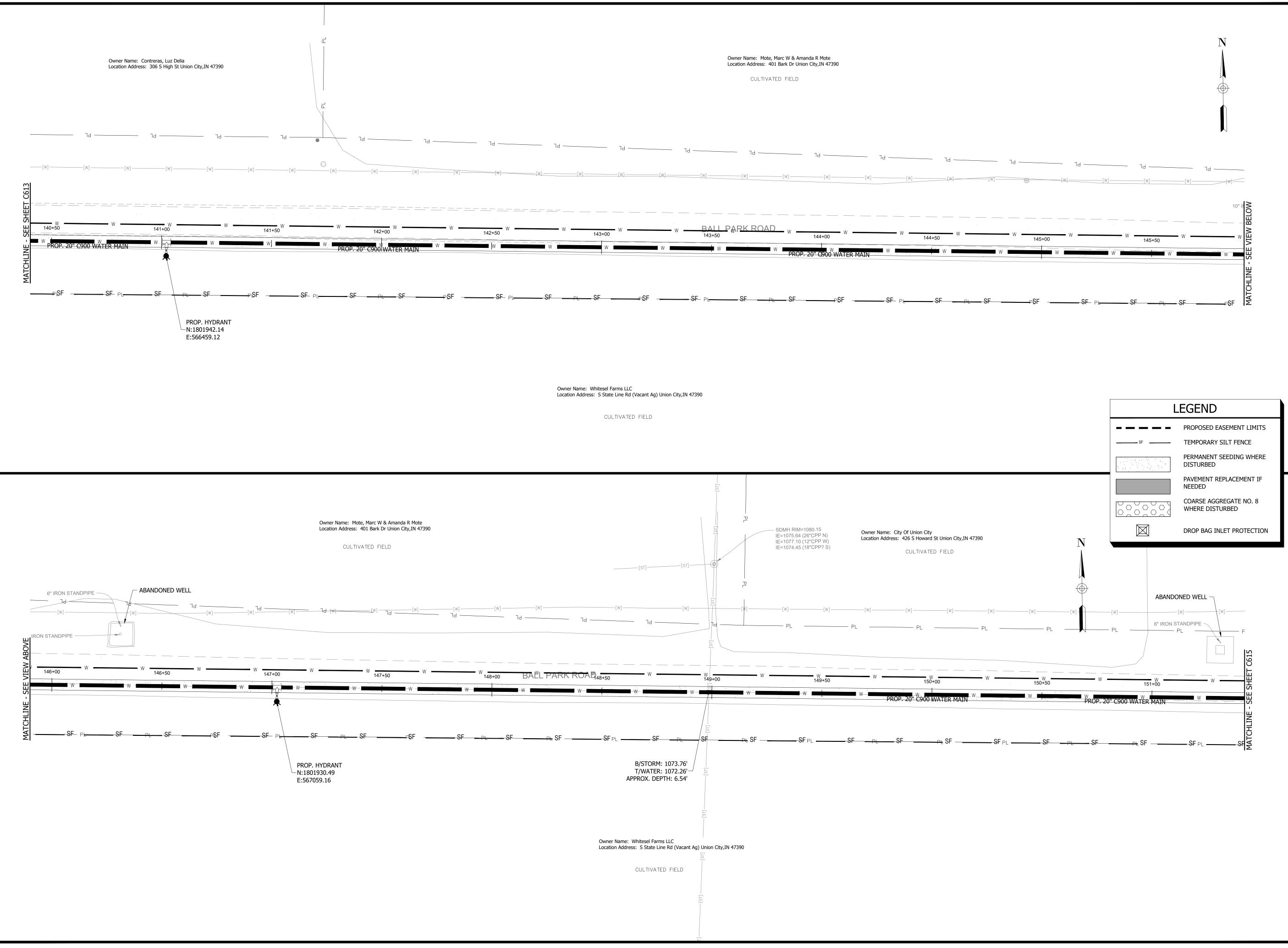






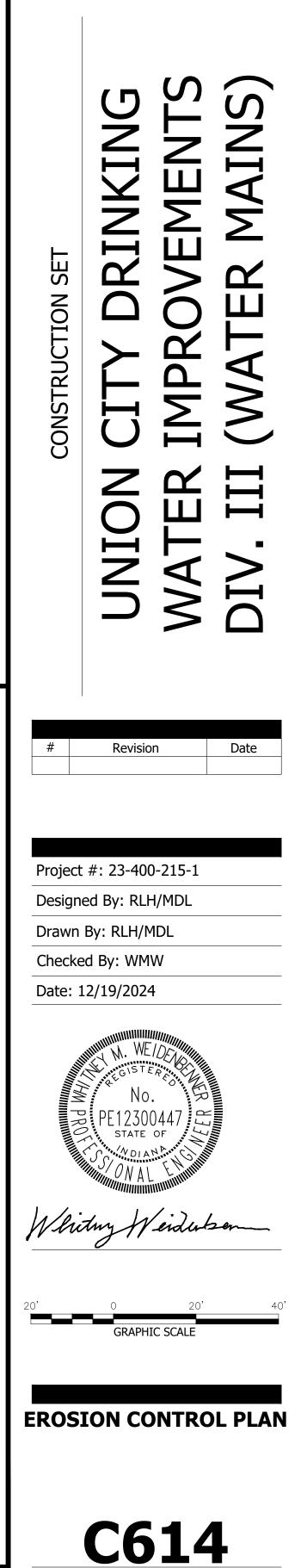


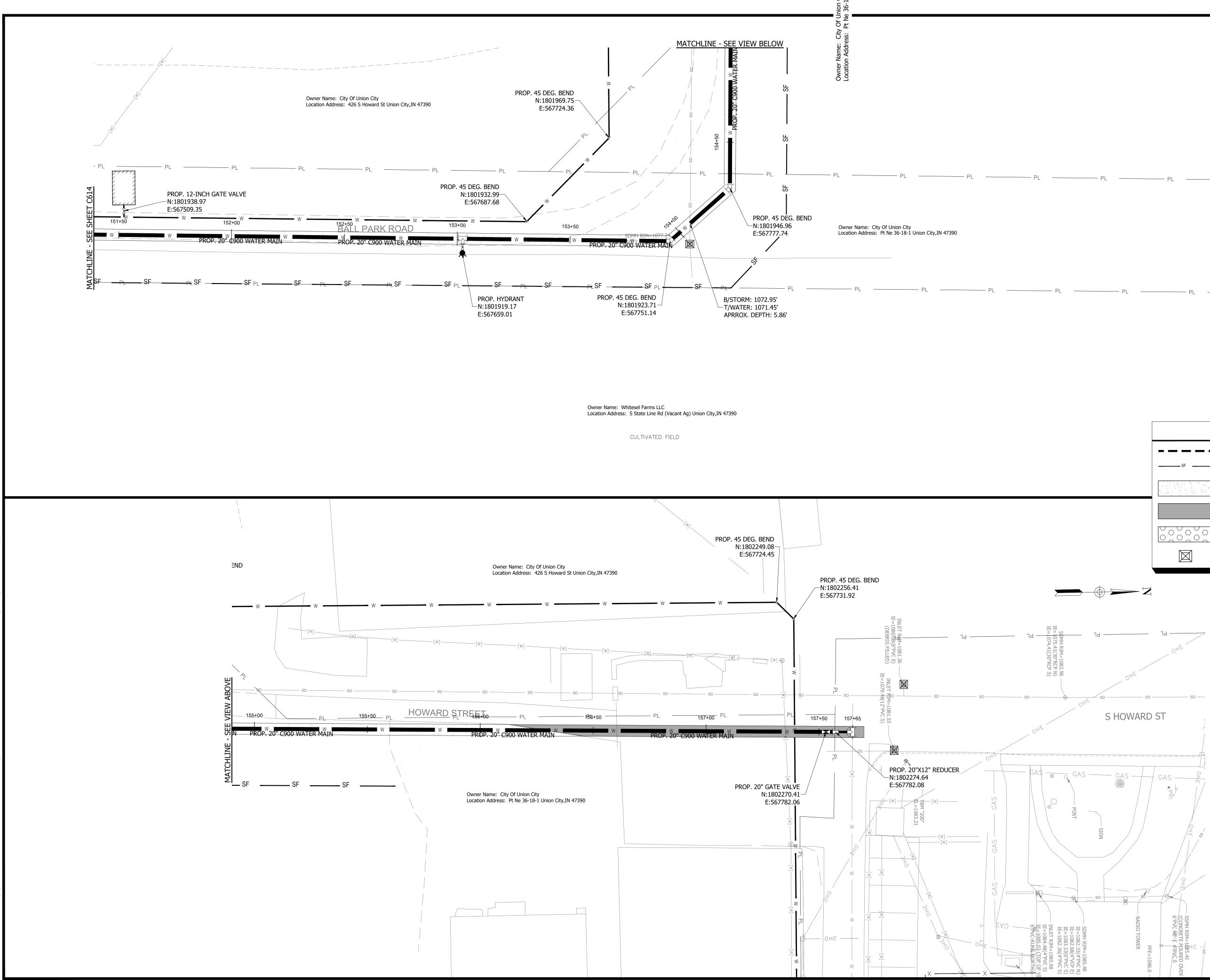




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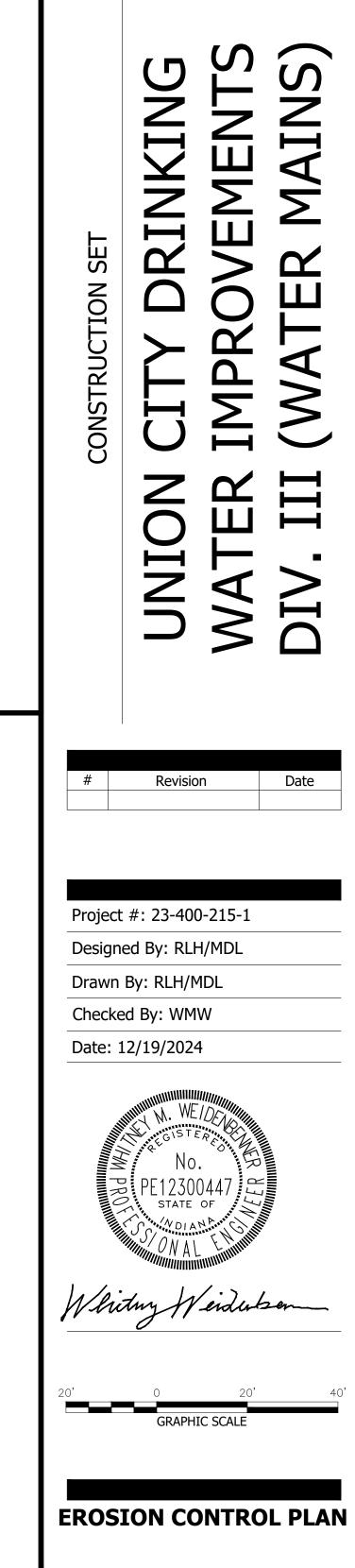






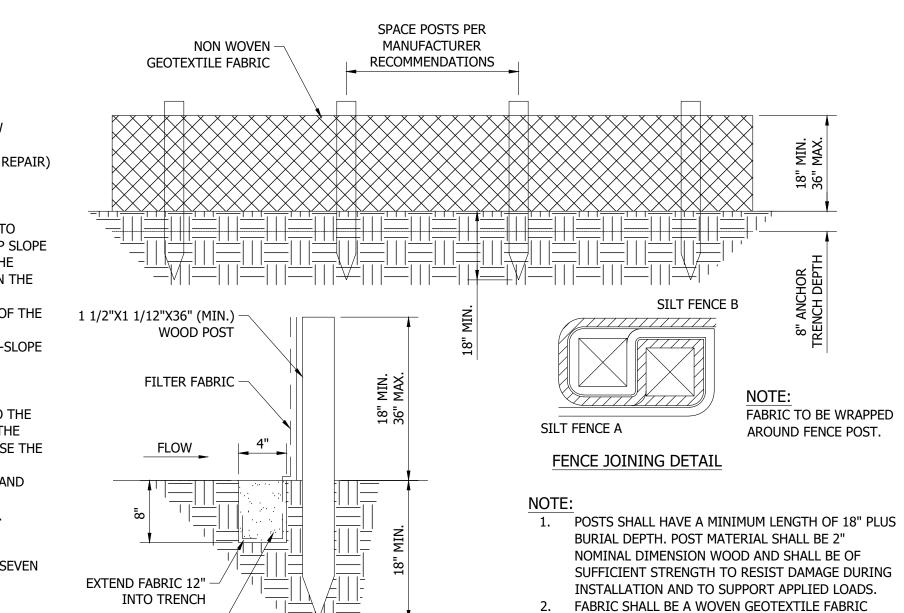
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L	EGEND
	PROPOSED EASEMENT LIMITS
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	PERMANENT SEEDING WHERE DISTURBED
	PAVEMENT REPLACEMENT IF NEEDED
	COARSE AGGREGATE NO. 8 WHERE DISTURBED
	DROP BAG INLET PROTECTION

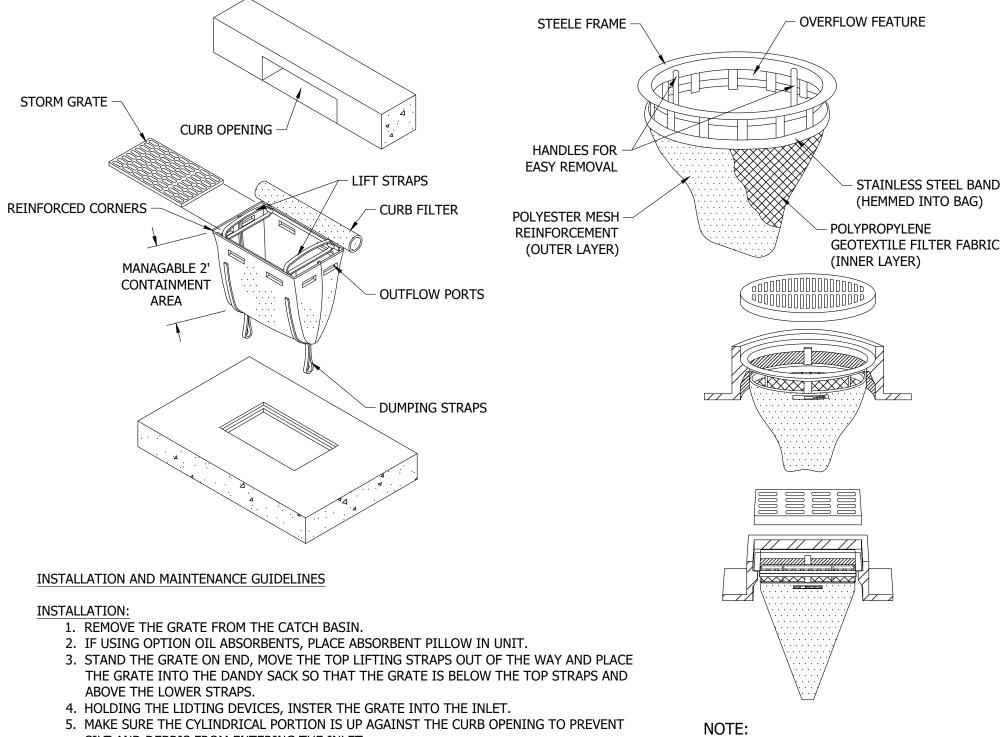




SILT FENCE DETAIL NOT TO SCALE

8"X4" ANCHOR TRENCH -

(COMP. BACKFILL)



CONSISTING OF STRONG, ROT RESISTANT,

ULTRAVIOLET AND HEAT EXPOSURE.

MATERIALS RESISTANT TO DETERIORATION FROM

- INSTALLATION:

- SILT AND DEBRIS FROM ENTERING THE INLET.
- MAINTENANCE:
- INSPECT DAILY.

# SILT FENCE:

# LOCATION

- INSTALLED PARALLEL TO THE SLOPE CONTOUR MINIMUM 10' BEYOND THE TOE OF SLOPE TO PROVIDE A BROAD, SHALLOW
- SEDIMENT POOL • ACCESSIBLE FOR MAINTENANCE (REMOVAL OF SEDIMENT AND SILT FENCE REPAIR)

INSTALLATION

- LAYOUT THE LOCATION OF THE FENCE SO THAT IT IS PARALLEL TO THE 1. CONTOUR OF THE SLOPE AND AT LEAST 10' BEYOND THE TOE OF SLOPE TO PROVIDE A SEDIMENT STORAGE AREA. TURN THE ENDS OF THE FENCE UP SLOPE SUCH THAT THE POINT OF THE CONTACT BETWEEN THE GROUND AND THE BOTTOM OF THE FENCE END TERMINATES AT A HIGHER ELEVATION THAN THE TOP OF THE FENCE AT ITS LOWEST POINT.
- EXCAVATE AN 8" DEEP BY 4" WIDE TRENCH ALONG THE ENTIRE LENGTH OF THE 2 FENCE LINE. INSTALLATION BY PLOWING IS ALSO ACCEPTABLE.
- 3. INSTALL THE SILT FENCE WITH THE FILTER FABRIC LOCATED ON THE UP-SLOPE SIDE OF THE EXCAVATED TRENCH AND THE SUPPORT POSTS ON THE DOWN-SLOPE SIDE OF THE TRENCH.
- 4. DRIVE THE SUPPORT POSTS AT LEAST 18" INTO THE GROUND. TIGHTLY STRETCHING THE FABRIC BETWEEN THE POSTS AS EACH IS DRIVEN INTO THE SOIL. A MINIMUM OF 12" OF THE FILTER FABRIC SHOULD EXTEND INTO THE TRENCH. (IF IT IS NECESSARY TO JOIN THE ENDS OF THE TWO FENCE, USE THE WRAP JOINT METHOD SHOWN).
- 5. LAY THE LOWER 4" OF FILTER FABRIC ON THE BOTTOM OF THE TRENCH AND EXTEND IT TOWARD THE UP-SLOPE SIDE OF THE TRENCH.
- BACKFILL THE TRENCH WITH SOIL MATERIAL AND COMPACT IT IN PLACE. 6.

# MAINTENANCE

• INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.

- IF FABRIC TEARS, STARTS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED PORTION IMMEDIATELY. NOTE: ALL REPAIRS SHOULD MEET SPECIFICATIONS AS OUTLINED WITH THIS MEASURE.
- REMOVE DEPOSITED SEDIMENT WHEN IT IS CAUSING THE FILTER FABRIC TO BULGE OR WHEN IT REACHES ONE-HALF THE HEIGHT OF THE FENCE AT ITS LOWEST POINT. WHEN CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE THE FENCE AND SEDIMENT DEPOSITS, FRADE THE SITE TO BLEND WITH THE SURROUNDING AREA, AND STABILIZE.

STABILIZATION PRACTICE:	JAN. FEB. MAR. APR. MAY JUNI	E JU
PERMANENT SEEDING	A*/ / / /]	]
DORMANT SEEDING	B	
TEMPORARY SEEDING	C ► E*/ / / /I	
SODDING	F** *	
MULCHING	G	

- A = KENTUCKY BLUEGRASS 40 LBS/ACRE: CREEPING RED FESCUE 40 LBS/ACRE:
- PLUS 2 TONS STRAW MULCH/ACRE, OR ADD ANNUAL RYEGRASS 20 LBS/ACRE
- C = SPRING OATS 3 BUSHEL/ACRE
- D = WHEAT OR RYE 2 BUSHEL/ACRE
- E = ANNUAL RYEGRASS 40 LBS/ACRE (1 LB/1000 SQ.FT.)
- F = SOD
- G = STRAW MULCH 2 TONS/ACRE
- */I/* IRRIGATION NEEDED DURING JUNE, JULY, AND/OR SEPTEMBER. ** IRRIGATION NEEDED FOR 2 TO 3 WEEKS AFTER APPLYING SOD.



• REMOVE ALL ACCUMULATED SEDIMENT AFTER EACH STORM EVENT. DISPOSE OF SEDIMENT IN AN AREA WHERE IT WILL NOT REENTER THE PAVED AREA OR STORM DRAINS. TO EMPTY UNIT,

LIFT THE UNIT OUT OF THE INLET BY USING THE LIFTING STRAPS AND REMOVE THE GRATE. • WHEN CONTRIBUTING DRAINAGE AREA HAD BEEN STABILIZED, REMOVE INLET PROTECTION. CONTRACTOR TO USE FLEXSTORM CATCH-IT INLET PROTECTOR, DANDY

BAG OR APPROVED ALTERNATE.



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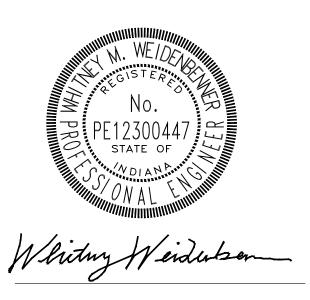
#	Revision	Date

Project #: 23-400-215-1

Designed By: RLH/MDL

Drawn By: RLH/MDL Checked By: WMW

Date: 12/19/2024





**C616** 



ONSTRUCT

JULY AUG. SEPT. OCT. NOV. DEC. //*----*/I/*---

B = KENTUCKY BLUEGRASS 60 LBS/ACRE: CREEPING RED FESCUE 60 LBS/ACRE: PLUS 2 TONS STRAW MULCH/ACRE, OR ADD ANNUAL RYEGRASS 30 LBS/ACRE

#### SITE NAME

The area scheduled for construction is known as "Union City Water System Improvements" (hereinafter referred to as the "Project")

PROJECT LOCATION

The project is located in the Union City, along various streets and easements in the City as well as at both Water Treatment Plants (North WTP: 160 W Deerfield Road; South WTP: 216 Maple Street)

#### OWNER'S INFORMATION

Name: Address:	UNION CITY BOARD OF PUBLIC WORKS 115 N COLUMBIA STREET UNION CITY, IN 47390
Contact:	STEVE SHOEMAKER
Title:	CITY MANAGER
Telephone:	(765) 964-3700 X2
Email:	citymanager@unioncity-in.gov

#### OPERATOR'S INFORMATION

Name:	UNION CITY DRINKING WATER UTILIT
Address:	216 MAPLE STREET
	UNION CITY, IN 47390
Contact:	BRAD MINK
Title:	WATER SUPERINTENDENT
Telephone:	(765) 220-6706
Email:	watersupt@cunioncity-in.gov

#### NOTICE OF INTENT

All parties defined as owners must submit a Notice of Intent (NOI) at least 48 hours prior to commencement of on-site construction activities. Submittal of late NOI's is not prohibited; however, authorization under the construction general permit is only for discharges that occur after permit coverage is granted. Unpermitted discharges may be subject to enforcement actions by the EPA. For the purposes of this permit, an owner is defined as any party meeting either of the following requirements:

1) The party has operational control over the construction plans and specifications, including the ability to make modifications to those plans and specifications.

2) The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a stormwater pollution prevention plan for the site or other permit conditions.

A2 11" x 17" PLAT

Division I: Refer to SITE IMPROVEMENTS PLAN sheet C400 Division II: Refer to SITE IMPROVEMENTS PLAN sheets C400-C401 Division III: Refer to OVERALL SHEET INDEX sheet G100.

#### A3 PROJECT NARRATIVE

Improve the City of Union City Drinking Water System with plant expansions and looping of water main.

#### A4 VICINITY MAP

Refer to TITLE PAGES sheet G001.

A5 LEGAL DESCRIPTION OF THE PROJECT SITE

Section: 25, 35, 36 Township: 18N Range: 1W

A6 LOCATION OF ALL LOTS AND PROPOSED SITE IMPROVEMENTS

There are three divisions of work: Division I - North WTP is located at 160 W Deerfield Road; Divison II - South WTP is located at 216 Maple Street; Division III is located along the alignment indicated on sheet G100 which includes Right of Way and Easement.

A7 HYDROLOGIC UNIT CODE (HUC)

#### 12 - Headwaters of Mississinewa River 051201030102 12 - Headwaters of Greenville Creek 050800011104

A8 STATE AND FEDERAL WATER QUALITY PERMITS

Indiana Department of Environmental Management (IDEM) Rule 5

#### A9 SPECIFIC POINTS WHERE STORMWATER DISCHARGE WILL LEAVE THE SITE

Stormwater drainage from the Project area drains via roadside storm inlets, roadside ditch storm inlets, culverts, and vegetated drainage ditches

A10 LOCATION AND NAME OF ALL WETLANDS, LAKES, AND WATERCOURSES ON AND ADJACENT TO THE SITE

Little Ditch, O'Conner Ditch A 11 IDENTIFICATION OF ALL RECEIVING WATERS

# Little Mississinewa River and Greenville Creek

A12 IDENTIFICATION OF ALL POTENTIAL DISCHARGES TO GROUNDWATER

There are no locations on site where surface water may be discharged into groundwater.

#### A13 100 YEAR FLOODPLAINS, FLOODWAYS, AND FLOODWAY FRINGES

The project site is located in an unshaded Zone X as indicated on the Randolph County, IN Flood Insurance Rate Map 18135C0190C dated 03/04/2013. See this sheet for Floodplain Map and Legend.

A14 PRE-CONSTRUCTION AND POST CONSTRUCTION ESTIMATE OF PEAK DISCHARGE

No significant increase in impervious area is anticipated with this project.

#### A15 ADJACENT LAND USE

AGRICULTURE/RESIDENTIAL

#### A16 LOCATIONS AND APPROXIMATE BOUNDARIES OF ALL DISTURBED AREAS

Approximate boundaries of disturbed areas are as identified on the EROSION CONTROL PLAN sheets.

#### A17 IDENTIFICATION OF EXISTING VEGETATIVE COVER

Approximate areas of existing vegetative cover are as shown on the SITE IMPROVEMENTS PLAN sheets for Division I and II as well as the PROPOSED WATER MAIN IMPROVEMENTS PLAN sheets for Division III.

#### A18 SOILS MAP INCLUDING SOIL DESCRIPTION AND LIMITATIONS

See this sheet for Soils Map and Legend. The on-site soil will be treated as recommended by the geotechnical engineer if the conditions are unsuitable for the proposed construction.

A19 LOCATIONS, SIZE, AND DIMENSIONS FOR THE PROPOSED STORMWATER SYSTEMS

#### No new stormwater systems are proposed.

A20 PLANS FOR ANY OFF-SITE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT

#### N/A

A21 LOCATIONS OF PROPOSED SOIL STOCKPILES AND/OR BORROW/DISPOSAL

Excess soil shall be immediately stockpiled, surrounded with silt fence, and seeded and/or removed from the project site in accordance with all applicable laws. If topsoil stockpiles are anticipated for this project, they are shown on the EROSION CONTROL PLANS.

## A22 EXISTING SITE TOPOGRAPHY

Refer to SITE IMPROVEMENTS PLAN sheets for Division I and II as well as the PROPOSED WATER MAIN IMPROVEMENTS PLAN sheets for Division III.

## A23 PROPOSED FINAL SITE TOPOGRAPHY

Refer to SITE IMPROVEMENTS PLAN sheets for Division I and II as well as the PROPOSED WATER MAIN IMPROVEMENTS PLAN sheets for Division III.

## A24 SIZE OF PROJECT AREA EXPRESSED IN ACRES

26.86 Acres

31/24 EDIT

12/

DATE:

A25 TOTAL EXPECTED LAND DISTURBANCE EXPRESSED IN ACRES

#### 3.70 Acres

B1 DESCRIPTION OF POTENTIAL POLLUTANT SOURCES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

The following potential pollutant sources may be associated with construction activities on site:

## 1. Material storage areas

3. Exposed soils

- 2. Construction waste material
- 4. Leaking vehicles and equipment
- 5. Sanitary waste from temporary toilet facilities 6. Litter
- Windblown dust
- The following materials may be staged or stored on site at various points during construction: 1. Structural fill
- 2. Pavement base stone
- 3. HDPE, PVC, RCP, or Ductile Iron Pipe

8. Soil tracking off site from construction equipment

4. Precast concrete, HDPE, or PVC drainage and sanitary structures B2 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION RELATIVE TO LAND-DISTURBING ACTIVITIES

## Pre-construction Activity

1. The exact locations of all existing utilities within the project limits are to verified prior to construction. 2. Schedule pre-construction meeting with local stormwater authority 48 hours prior to start of construction. 3. Install protection fencing for existing trees to remain in place within the project limits

- **Construction Site Access** 1. Install gravel construction entrances if needed. 2. Post the NOI and contact information at the construction entrance. NOI to remain posted for duration of the project.
- 3. Install construction staging pads, material storage areas, concrete washout, construction parking areas, and stabilize construction

#### Perimeter Controls

1. Utilize the gravel construction entrance for installation of the perimeter silt fence. Add additional stone to driveways if needed. Initial Land Clearing and Grading Activities

#### 1. Add inlet protection measures to existing inlets

2. Strip the topsoil and stabilize the topsoil stockpile. Secondary Land Grading Activities 1. Begin site grading/construction of detention basins (if applicable) and stabilize any soil stockpiles that will be left dormant for

- more than 10 days. 2. Complete the cut and fills on the site. Final grade and seed the pond slopes (if applicable). Stabilize slopes with erosion control blanket. 3. Install storm sewer system and install inlet protection immediately upon complete of the inlet and install rip-rap outlet protection
- prior to installing outlets. Surface Stabilization
- 1. Apply temporary seeding and stabilize slopes in areas where rough grading has been completed. 2. Apply permanent seeding and stabilize slopes in areas where final grading has been completed.
- Final Shaping/Landscaping
- 1. Utilize topsoil salvage in applicable areas and apply permanent seeding. 2. Apply permanent seeding around the perimeter of the site. Complete utility installation and paving
- 4. Install landscaping plant material and stabilize all disturbed areas. 5. Remove all erosion and sediment control practices when areas have a uniform grass cover.

#### B3 STABLE CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS

Construction entrances will be in place prior to any site construction or demolition. Entrances are shown on EROSION CONTROL PLAN sheets. Refer to EROSION CONTROL DETAILS sheet for details.

B4 SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS

#### Sheet flow areas will be protected by seed and mulch or hydroseeding. Erosion control blankets will be installed on sloped areas where the slope exceeds 4:1 (horizontal to vertical). Silt fencing will be utilized to prevent sedimentation from leaving the site. Refer to EROSION CONTROL PLAN for locations and EROSION CONTROL DETAILS for details.

#### **B5 SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS**

Install temporary rock check dams or sediment traps in appropriate strategic locations. Straw bales and silt fences will not be allowed as concentrated flow protection measures. Refer to EROSION CONTROL PLAN for locations and EROSION CONTROL DETAILS for details.

## B6 STORM SEWER INLET PROTECTION MEASURE LOCATIONS AND SPECIFICATIONS

The contractor shall install appropriate inlet protection measures at each inlet. Refer to EROSION CONTROL PLAN sheets for locations and EROSION CONTROL DETAILS sheet for details. Straw bales will not be allowed as inlet protection measures. These inlet protection measures should be installed prior to excavation or after new inlets are installed

B7 RUNOFF CONTROL MEASURES

All areas within the construction site will be bordered by silt fence.

#### **B8 STORMWATER OUTLET PROTECTION MEASURES**

N/A

#### **B9 GRADE STABILIZATION STRUCTURE LOCATIONS**

B12 PERMANENT SURFACE STABILIZATION SPECIFICATIONS

phosphorous, and 2 percent potassium by weight.

potassium made up of a composition by weight of 5 percent.

construction activities including tree and shrub installation.

specifications and mulching specifications.

Solid Waste Disposal

procedures.

Hazardous Wast

B13 MATERIAL HANDLING AND SPILL PREVENTION PLAN

municipality to accept the waste for disposal.

operator following on-site location of the facility.

Dust Control/Off-Site Vehicle Tracking

site should stabilized to reduce dust.

N/A

# B10 LOCATION, DIMENSIONS, SPECIFICATIONS, AND CONSTRUCTION DETAILS OF EACH STORMWATER QUALITY MEASURE Refer to EROSION CONTROL PLAN sheets for locations and EROSION CONTROL DETAILS sheet for details.

B11 TEMPORARY SURFACE STABILIZATION METHODS APPROPRIATE FOR EACH SEASON

is not possible, then silt fencing will need to be installed along the back of curbs.

fertilizer if planting will not follow placing of planting soil within a few days.

Surface stabilization is required on any bare or thinly vegetated areas that is scheduled or likely to remain inactive for a period of 10 days or

more. Refer to the Temporary Seeding Detail within the Erosion Control Details for specifics on soil amendments, seed mixtures, and mulching. The surface stabilization for the lots needs to be established as soon as possible to prevent dirt wash-out into the streets. If this

9.) Water newly planted lawn areas and keep moist until new grass is established. Immediately repair any lawn areas disturbed by

No solid material, including building materials, is permitted to be discharged to surface waters or buried on site. All solid waste materials,

including disposable materials incidental to construction activity, must be collected in containers or closed dumpsters. The collection

containers must be emptied periodically and the collected material hauled to a landfill permitted by the State and/or appropriate local

A foreman or supervisor should be designated in writing to oversee, enforce, and instruct construction workers on proper solid waste

Whenever possible, minimize the use of hazardous materials and generation of hazardous wastes. All hazardous waste materials will be

A foreman or supervisor should be designated in writing to oversee, enforce, and instruct construction workers on proper hazardous waste

procedures. The location of any hazardous waste storage areas should be indicated on the stormwater pollution prevention plan by the

During construction, water trucks should be used, as needed, by each contractor or subcontractor to reduce dust. After construction, the

Construction traffic should enter and exit the site at a Construction Entrance with a rock pad or equivalent device. The purpose of the rock

pad is to minimize the amount of soil and mud that is tracked onto existing street. If sediment escapes the construction site, off-site

disposed in the manner specified by federal, state, or local regulations or by the manufacturer.

Use containment berms in fueling and maintenance areas and where potential for spills is high.

accumulations of sediment must be removed a frequency sufficient to minimize off-site impacts.

10.) Refer to the Permanent Seeding Details within the Erosion Control Detail Sheet, for timing of permanent seeding, grass seed

Sanitary/Septic Contractors and subcontractors must comply with all state and local sanitary sewer, portable toilet, or septic system regulations. Sanitary facilities shall be provided at the site by each contractor or subcontractor throughout construction activities. The sanitary facilities should be utilized by all construction personnel and be serviced regularly. All expenses associated with providing sanitary facilities are the responsibility of the contractors and subcontractors. The location of any sanitary facilities should be indicated on the stormwater pollution prevention plan by the operator following on-site location of said facilities.

> Water Source Water used to establish and maintain grass, to control dust, and for other construction purposes must originate from a public water supply or private well approved by the State or local health department.

> Equipment Fueling and Storage Areas Equipment fueling, maintenance, and cleaning should only be completed in protected areas (i.e., bermed area). Leaking equipment and maintenance fluids will be collected and not allowed to discharge onto soil where they may be washed away during a rain event.

Equipment wash-down (except wheel washes) should take place within an area surrounded by a berm. The use of detergents is prohibited.

Hazardous Material Storage

Chemicals, paint, solvents, fertilizers, and other toxic or hazardous materials should be stored in their original containers (if original container is not resealable, store the products in a clearly labeled, waterproof container). Except during application, the containers should be kept in trucks or in bermed areas within covered storage facilities. Runoff containing such materials shall be collected, removed from the site, and disposed of in accordance with the federal state, and local regulations.

As may be required by federal, state or local regulations, the Contractor should have a Hazardous Materials Management Plan and/or Hazardous Materials Spill and Prevention Program in place. A foreman or supervisor should be designated in writing to oversee, enforce, and instruct construction workers on proper hazardous materials storage and handling procedures. The location of any hazardous material storage areas should be indicated on the stormwater pollution prevention plan by the operator following on-site location of the storage areas.

Material Handling and Spill Prevention

Discharge of hazardous substances or oil into stormwater is subject to reporting requirements. In the event of a spill of a hazardous substance, the operator is required to notify the National Response Center (1-800-424-8802) to properly report the spill. In addition, the operator shall submit a written description of the release (including the type and amount of material released, the date of the release, the circumstances of the release, and the steps to be taken to prevent future spill) to the local governing authority. The SWPPP must be revised within 14 calendar days after the release to reflect the release, stating the information above along with modifications minimize the possibility of future occurrences. Each contractor and subcontactor is responsible for complying with these reporting requirements.

Concrete Washout

All concrete trucks waste material shall be completely contained and disposed in accordance with all local, state, and federal regulations. A pit or container is required when cleaning concrete chutes.

Spill Response Plar

Minor - Small spills that typically involve oil, gasoline, paint, hydraulic fluid, etc. can be controlled by the first responder at the discovery of the spill.

- Contain spill to prevent material from entering storm or groundwater. Do not flush with water or bury. • Use absorbent material to clean-up spill material and any subsequently contaminated soil and dispose of properly.
- Semi-Significant Spills Approximately ten gallons or less of pollutant with no contamination of ground or surface waters. Minor spills can be generally controlled by the first responder with help from other site personnel. This response may require other operations to
- stop to make sure the spill is quickly and safely addressed. At the discovery of the spill: • Contain spill to prevent material from entering storm or ground water. Do not flush with water or bury.
- possible to prevent migration deeper into the soil and groundwater. Dispose of contaminated soils or absorbents properly. • Contact 911 if the spill could be a safety issue
- Contact supervisors and designated site inspectors, including MS4 personnel, immediately. Contaminated solids are to be removed to an approved landfill.
- Major or Hazardous Spills More than ten gallons, there is the potential for death, injury or illness to humans or animals, or has the potential for surface or groundwater pollution.
- into the stormwater system • Immediately contact the local Fire Department at 911 to report any hazardous material spill. Contact supervisors and designated site inspectors immediately. Governing authorities, including MS4 personnel, responsible for stormeater facilities should be contacted as well. The contractor is responsible for having these contact numbers available at the
- As soon as possible but within 2 hours of discovery, contact the local agency responsible for spill management. The following information should be noted for future reports to the agency:
- •• The location of the spill
- The time of the spill
- Approximate quantity of the substance that has been spilled or may be further spilled
- The duration and source of the spill
- Name of spill response organization
- •• What measures were taken in the spill response
- Other information that may be significant

Additional regulations or requirement may be present. A spill response professional should be consulted to make sure all appropriate and required steps have been taken. Contaminated solids should only be removed from the site after approval is give by the appropriate agency.

B14 MONITORING AND MAINTENANCE GUIDELINES FOR EACH PROPOSED STORMWATER QUALITY MEASURE

#### Inspection Schedule/Reporting

All impacted areas, as well as all erosion and sediment control devices, will be inspected every seven (7) calendar days and within 24 hours after a rianfall of 0.5 inch or greater. Where sites have been final or temporarily stabilized or on sites where runoff is unlikely due to winter conditions (e.g. site is covered with snow, ice, or frozen ground exists), such inspections shall be conducted at least once every month.

Inspections shall be conducted and a written report prepared, by a designated and qualified person familiar with the USEPA NPDES Storm Water General Permit, this SWPPP, and the Project.

inspection, the date of the inspection, observations relating to the implementation of the SWPPP, and any actions taken as a result of incidents of noncompliance noted during the inspection. The inspection report should state whether the site was in compliance or identify and incidents of noncompliance. The contractor shall keep a copy of the inspection reports on site and permanently for a period of two years following construction. The on-site reports may be requested by inspections conducted by the local governing authority.

Locations where vehicles exit the site shall be inspected for evidence of off-site sediment tracking. Each contractor and subcontractor shall be responsible for maintaining the Construction Entrance and other controls as described in this SWPPP.

#### Material Storage Inspections

Inspectors must evaluate areas used for storage of materials that are exposed to precipitation. The purpose is to ensure that materials are protected and/or impounded so that pollutants cannot discharge from storage areas. Off-site material storage areas used solely b the subject project are considered to be part of the project and must be included in the erosion control plans and site inspection reports.

#### Soil Stabilization Inspections

Seeded areas will be inspected to confirm that a healthy stand of vegetation is maintained. The site has achieved final stabilization once all areas are covered with pavement or have a stand of vegetation with at least 70% of the background vegetation density. The density of 70% or greater must be maintained to be considered as stabilized. The operator or their representative will water, fertilize, and reseed disturbed areas as needed to achieve this goal.

Erosion and Sediment Control Inspections

All controls should be inspected at least once every seven (7) calendar days and following any storm event of 0.5 inch or greater. The following is a list of inspection/maintenance practices that will be used for specific controls:

- 1. Geotextiles/Erosion Control Mats: Missing or loose matting must be replaced or re-anchored 2. Inlet Protection: If silt fence inlet protection is to be used, sediment should be removed when it reaches approximately one-half
- the height of the fence. If a sump is used, sediment should be removed when the volume of the basin is reduced by 50%. 3. Mulching: Inspect for thin or bare spots caused by natural decomposition or weather-related events. Mulch in high traffic areas should be replaced on a regular basis to maintain uniform protection.
- 4. Silt Fence: Removal of built-up sediment will occur when the sediment reaches one-third the height of the fence.
- 5. Stabilized Construction Entrance: Periodic re-grading and top dressing with additional stone. . Vegetation: Protect newly seeded areas from excessive runoff and traffic until vegetation is established. Establish a watering
- and fertilizing schedule. 7. Good Housekeeping: Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges through screening of outfalls and daily pickup of litter.

In the event that sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize adverse impacts. An example of this may be the situation where sediment has washed into the street and could be carried into the storm sewers by the next rainfall and/or pose a safety hazard to user of public street.

#### Modifications/Revisions to SWPPF

Based on inspection results, any necessary modification to this SWPPP shall be implemented within seven (7) calendar days of the inspection. A modification is necessary if a control measure or operational procedure does not provide adequate pollutant control. All revisions shall be recorded on a Record of Revisions within seven (7) calendar days of the inspection.

It is the responsibility of the operator to maintain effective pollutant discharge controls. Physical site conditions or contractor/subcontractor practices could make it necessary to install more control than were originally planned. Fore example, localized concentrations of surface runoff or unusually steep areas could required additional silt barrier or other structural controls.

Assessing the need for and installing additional controls will be a continuing contractor/subcontractor responsibility until final stabilization is achieved. Contractors and subcontractors implementing this SWPPP must remain alert to the need to periodically refine and update this SWPPP in order to accomplish the intended goals.

#### Notice of Termination

Compliance of the site with the General Construction Permit remains the responsibility of all operators that have submitted an NOI until such time as they have submitted a Notice of Termination (NOT). The permittee's authorization to discharge under the General Construction Permit terminates at midnight of the day the NOT is signed.

PROJECT AREA —







the homeowner

The site is not currently subdivided, therefore the entire site is on this plan's Erosion Control Plan.

Pollutant Source: Passenger vehicles, delivery vehicles.

Pollutant Source: Building fragments from roofing system.

Pollutant Source: Trash Dumpster uneaten food products, bacteria.

Pollutant Source: Parking Lot Type of Pollutant: Any pollutant associated with vehicular sources, grit from asphalt wearing surface, bituminous compounds from periodic maintenance (sealing, resurfacing, and patching), pavement de-icing materials, paint fragments from parking stall striping, concrete fragments, wind-blown litter from off-site sources, elevated water temperatures from contact with impervious surfaces.

Pollutant Source: Lawn and Landscape Areas Type of Pollutant: Fertilizers, soil, organic material (leaves, mulch, grass clippings)

C2 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION

of these features is to filter pollutants and sediment.

sedimentation (settling of later suspended particles). Permanent Vegetation

Topsoil will be placed in lawn areas and seeded with grass, and graded not to exceed 3:1 slopes. Proposed landscape trees and shrubs will also be added. These bio areas will act as a natural filter strip to help improve stormwater quality. The vegetated areas will slow the velocities of stormwater runoff, reduce sediment runoff, and reduce problems associated with mud or dust from bare

Good Housekeeping Measures

C5 DESCRIPTION OF MAINTENANCE GUIDELINES FOR POST-CONSTRUCTION STORMWATER QUALITY MEASURES

described below.

N/A

• Use absorbent material to clean-up spills and dispose of properly. Spills on impervious surfaces should be disposed of as soon as

# • Control or contain the spill without risking bodily harm. Temporarily plug storm drains if possible to prevent migration of the spill

job site. A written report should be submitted to the owner as soon as possible.

# •• Name, address and phone number of person making the spill report

- Identification of the spilled substance
- Name and location of the damaged waters

Inspection reports shall be completed including scope of the inspection, name(s) and qualifications of personnel making the

Construction Entrance

1.) Loosen lawn area to a minimum depth of 6 inches. Mix soil amendments and fertilizers with topsoil at rates specified. Organic soil amendments such as peat, compost, or manure shall be applied at 2" depth evenly over soil and incorporated into the top 6" of topsoil. Provide fertilizer with percentage of nitrogen required to provide not less than 1 pound of actual nitrogen per 1,000 square feet of lawn area and not less than 4 percent phosphoric acid and 2 percent potassium. At least 50 percent of nitrogen to be organic form. Delay mixing of

2.) Fertilizer for lawns: provide a fast release fertilizer with a composition of 1 lb per 1,000 square feet of actual nitrogen, 4 percent 3.) Slow-release fertilizer for trees and shrubs: granular fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorous and

4.) Grade lawn and grass areas to a smooth, even surface with loose, uniformly fine texture. Limit fine grading to areas that can be planted within immediate future. Remove trash, debris, stones larger than 1 inch diameter, and other objects that may interfere with planting or maintenance operations. Sow seed using a spreader of seeding machine. Do not seed when wind velocity exceeds 5 miles per hour. 5.) Distribute seed evenly over entire area by sowing equal quantity in 2 directions at right angles to each other.

6.) Rake seed lightly into top 1/8 inch of soil, roll lightly, and water with a fine spray. 7.) Install erosion control blankets as indicated on the Erosion Control Plan. 8.) Protect seeded areas against erosion by spreading clean, seed-free straw mulch after completion of speeding operations. Spread uniformly to form a continuous blanket not less than 1-1/2 inches loose measurements over seeded areas.

All permittees must submit an NOT within thirty (30) days after one or more of the following conditions have been met: 1. Final stabilization has been achieved on all portions of the site for which the permittee was responsible. Another operator/permittee has assumed control over all areas of the site that have not been finally stabilized. 3. In residential construction operations, temporary stabilization has been completed and the residence has been transferred to

B15 EROSION AND SEDIMENT CONTROL SPECIFICATIONS FOR INDIVIDUAL BUILDING LOTS

C1 DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH THE PROPOSED LAND USE

Type of Pollutant: Oil, gasoline, diesel fuel, any hydrocarbon associated with vehicular fuels and lubricants, grease, antifreeze, windshield cleaner solution, brake fluid, dust, rubber, glass, metal and plastic fragments, grit, road de-icing materials.

Type of Pollutant: Cleaning solutions or solvents, leaks from HVAC equipment, grit from roof drainage, aggregate or rubber

Type of Pollutant: Cleaning solutions or solvents, litter (paper, plastic, general refuse associated with distribution operations),

The grass-lined channels and swales will serve as the permanent water quality features after construction is complete. The purpose

C3 DESCRIPTION OF PROPOSED POST-CONSTRUCTION STORMWATER QUALITY MEASURES

Vegetated swales are designed to reduce pollutant and sediment loads in stormwater runoff. Stormwater runoff is directioned in the swale which conveys the runoff from the site. While moving through the swale, runoff velocity is greatly decreased allowing biofiltration (uptake of nutrients by plants), infiltration (percolation of water through the swale's porous soil substrate), and

Good housekeeping measures such as regular street or pavement sweeping, installation of trash receptacles, and reduction in fertilizer overspray can be incorporated by the owner and/or occupant.

C4 LOCATION, DIMENSIONS, SPECIFICATIONS, AND CONSTRUCTION DETAILS OF EACH STORMWATER QUALITY MEASURE

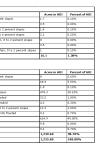
Refer to EROSION CONTROL PLAN sheets for locations and EROSION CONTROL DETAILS sheet for details.

Maintenance requirements for the stormwater quality measures which will remain in place after construction is complete, are

SOILS MAP



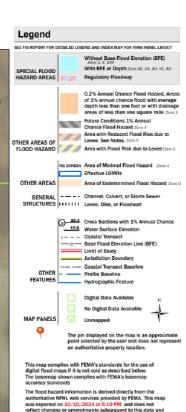
🐮 FEMA



## National Flood Hazard Layer FIRMette



Basemap Imagery Source: USGS National Map 2023



This map image is void if the one or more of the following n end, scale bar, map creation date, community identifiers RM panel number, and FIRM effective date. Map image



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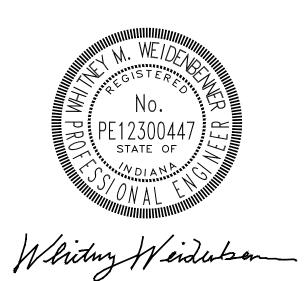
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Designed By: RLH/MDL

Drawn By: RLH/MDL

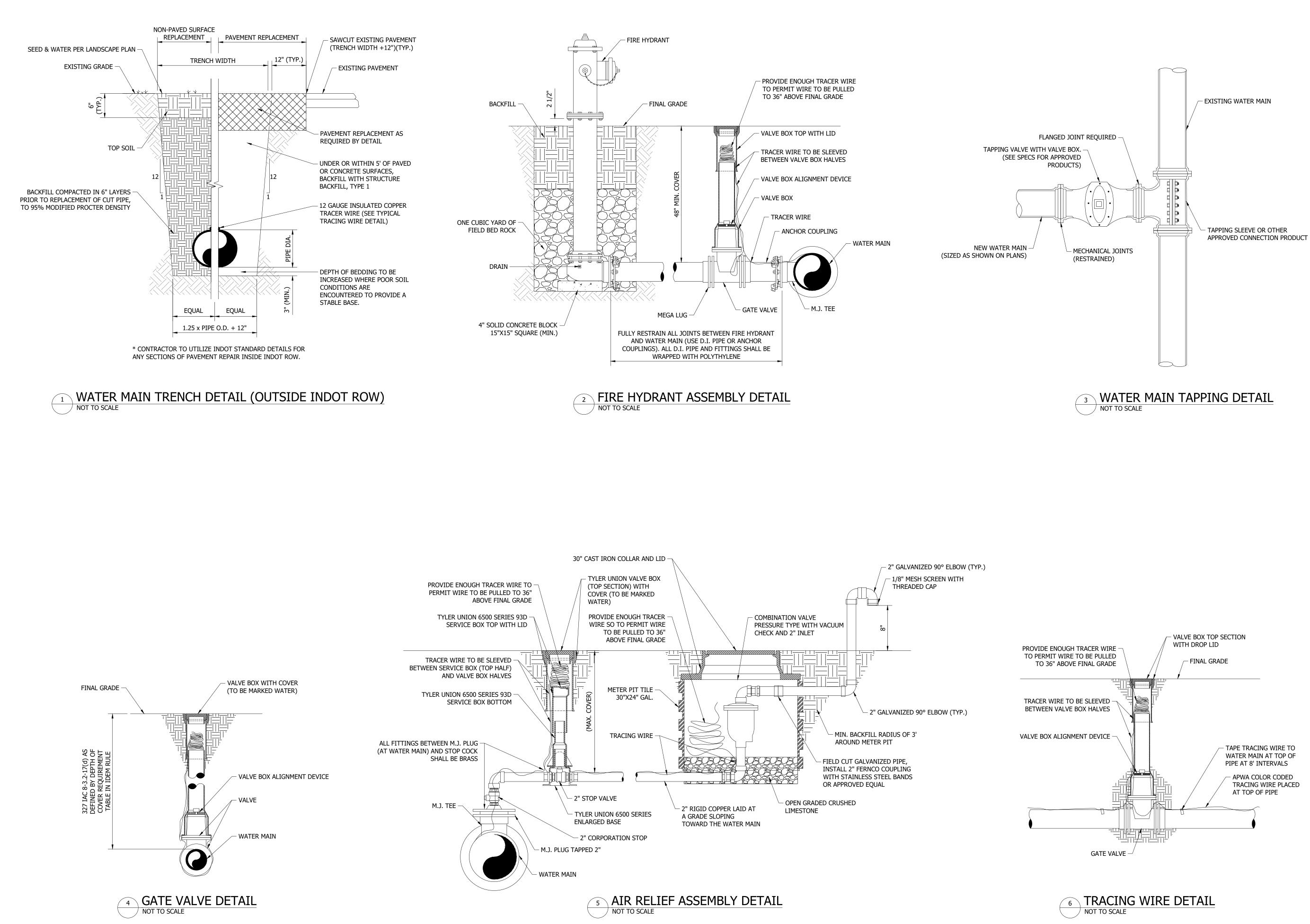
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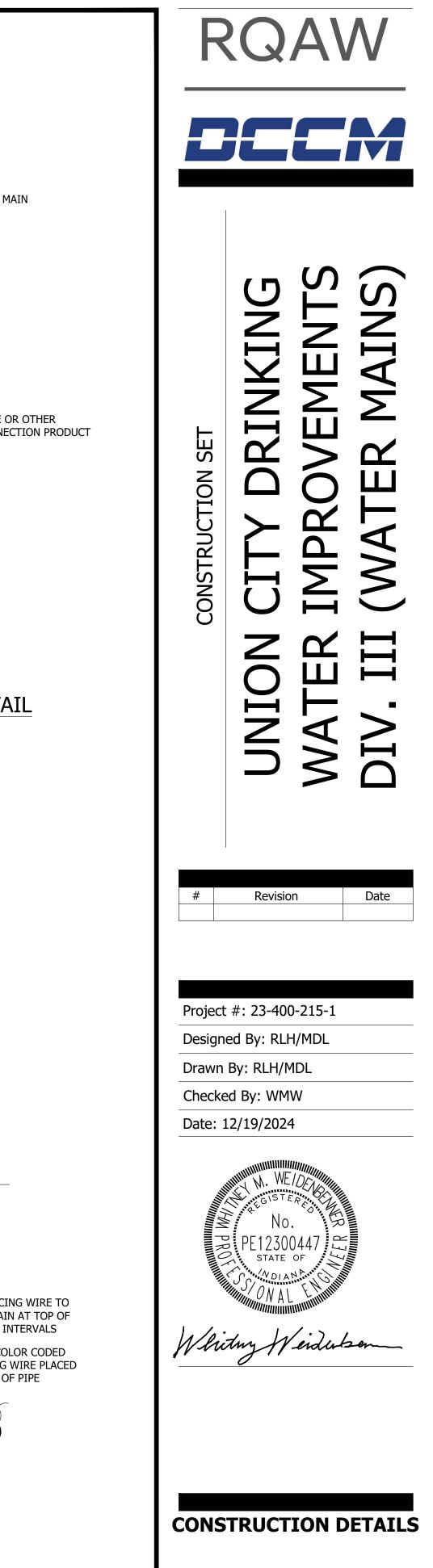
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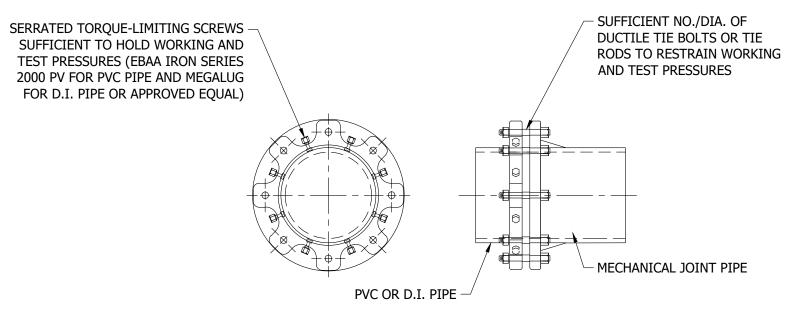
**STORM WATER** POLLUTION PREVENTION PLAN





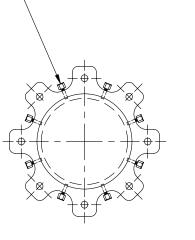


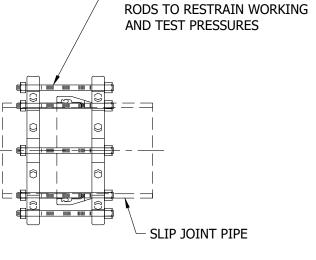
**C801** 



# RESTRAINED JOINTS ON MECHANICAL JOINT PIPE AND FITTINGS

SERRATED TORQUE-LIMITING SCREWS -SUFFICIENT TO HOLD WORKING AND TEST PRESSURES (EBAA IRON SERIES 2000 PV FOR PVC PIPE AND MEGALUG FOR D.I. PIPE OR APPROVED EQUAL)





- SUFFICIENT NO./DIA. OF

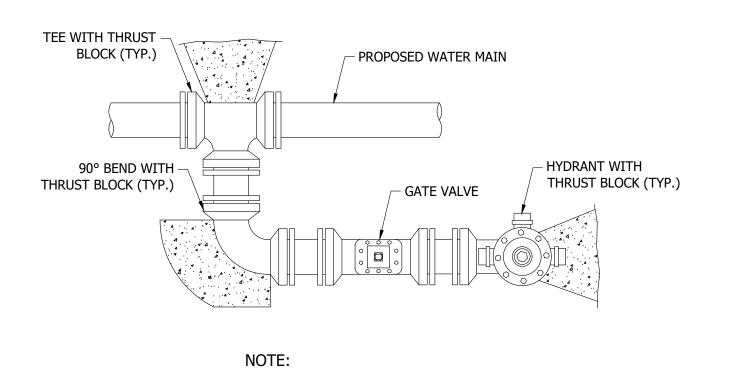
DUCTILE TIE BOLTS OR TIE

**RESTRAINED JOINTS ON SLIP JOINT PIPE** (USING GRIPPING TYPE RETAINERS)

<b>RESTRAINED LENGTHS FOR 6" DIA. PIPE</b>								
DEPTH OF PIPE	5'	5'	5'	5'	10'	10'	10'	10'
BEND ANGLE	11.25°	22.5°	45°	90°	11.25°	22.5°	45°	90°
RESTRAINED LENGTH	2'	4'	7'	17'	2'	3'	5'	11'
<b>RESTRAINED LENGTHS FOR 20" DIA. PIPE</b>								
DEPTH OF PIPE	5'	5'	5'	5'	10'	10'	10'	10'
BEND ANGLE	11.25°	22.5°	45°	90°	11.25°	22.5°	45°	90°
RESTRAINED LENGTH	6'	11'	23'	55'	4'	7'	15'	36'
REDUCE	RS AN	ID DE	AD EN	DS				

REDUCERS AND DEAD ENDS						
SIZE OF PIPE	6"	6"x20"	12"x20"			
FITTING TYPE	DEAD END	REDUCER	REDUCER			
RESTRAINED LENGTH	43'	102'	64'			

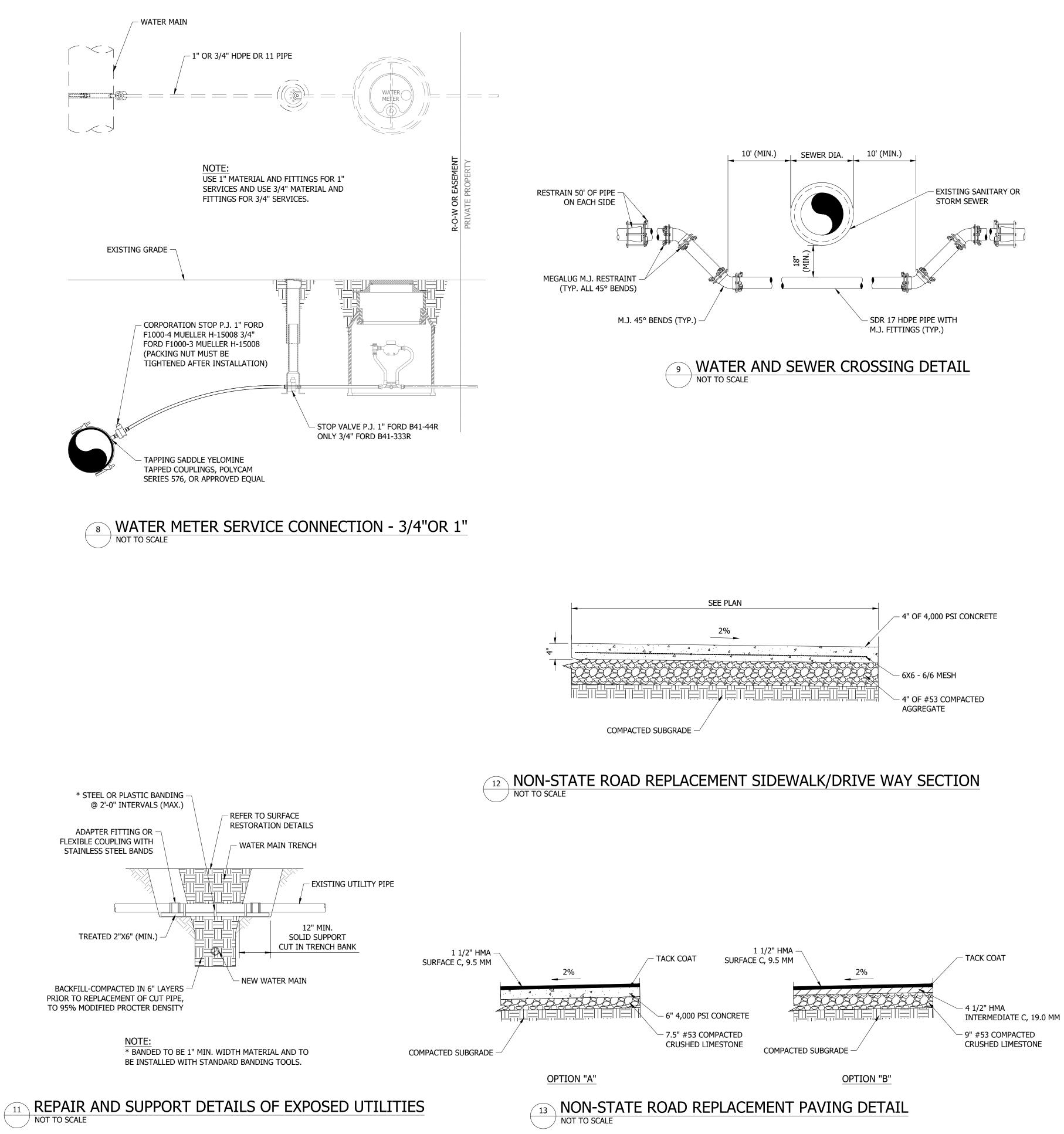


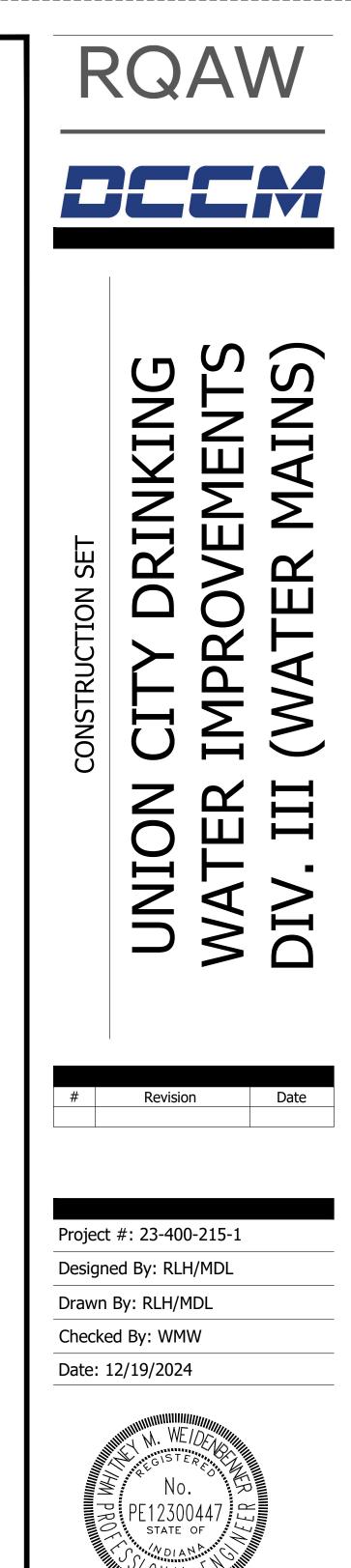


ALTERNATE HYDRANT ASSEMBLY FOR LIMITED DISTANCE TO R/W NOT TO SCALE

"MEGALUG" (OR EQUAL) RETAINER

GLAND REQUIRED AT ALL FITTINGS.







**CONSTRUCTION DETAILS** 

Whitny Weiduben