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U.01	WELL PROFILE
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# WELL NO. 3 IMPROVEMENTS

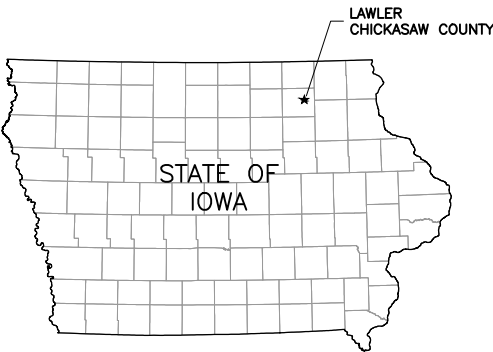
FOR

# CITY OF LAWLER LAWLER, IOWA

24-289

CHICKASAW COUNTY

11/04/2025

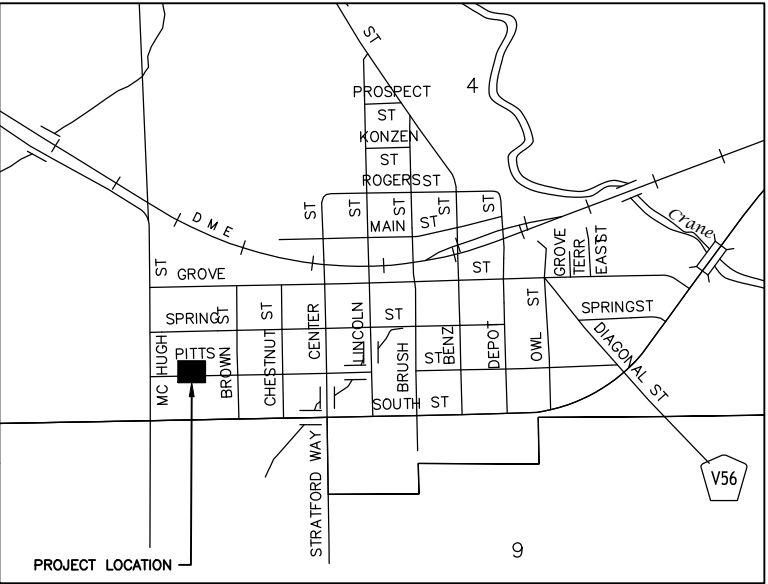


OWNER/DEV	CITY OF LAWLER
ADDRESS	414 EAST GROVE STREET
	LAWLER, IA 52154
P#	563.238.3614

CITY ADMINISTRATION	
MAYOR.....	MARK MUETERTHIES
COUNCIL MEMBERS.....	JEREMY SCHEIDEL
	KAREN WILSON
	DALE KING
	KURT CROELL
	COLE ROBERSON
CITY SUPERINTENDENT.....	JAY UHLENHAKE
CITY CLERK.....	SUZIE BRYNE

UTILITIES	
UTILITY TYPE	COMMON NAME
WATER & SEWER	CITY OF LAWLER
ELECTRIC	CITY OF LAWLER
TELEPHONE	HAWKEYE TELEPHONE
GAS	BLACK HILLS ENERGY
CABLE	WINDSTREAM
COMMUNICATIONS	IOWA COMMUNICATIONS NETWORK (ICN)

(CONTRACTOR TO BE RESPONSIBLE FOR COORDINATING ANY ADJUSTMENTS TO BE MADE.)



LOCATION MAP

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL

ILLINOIS

IOWA

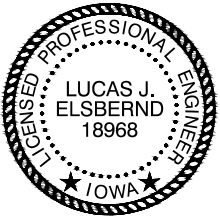
WISCONSIN

MANCHESTER, IOWA  
221 E. MAIN STREET, SUITE 301  
MANCHESTER, IA 52057  
P# (563) 927-2060

THE 2025 VERSION OF THE STATEWIDE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, ALSO KNOWN AS SUDAS (2025), PLUS FEHR GRAHAM SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS SHALL APPLY TO CONSTRUCTION WORK ON THIS PROJECT.



BID



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

*Lucas J. Elsbernd*

Lucas J. Elsbernd, P.E.

License Number 18968

My license renewal date is December 31, 2025.

Pages or sheets covered by this seal: All

11/4/2025

Date

ORIGINAL SET FOR PROJECT: 24-289 DATE CREATED: 11/04/2025














REVISIONS		
REV. NO.	DESCRIPTION	DATE











ABBREVIATIONS		ABBREVIATIONS	
<	ANGLE	PE	POLYETHYLENE PIPE
ABC	AGGREGATE BASE COURSE	PI	POINT OF INTERSECTION
AC	ACRE(S)	PL	PLATE
ACI	AMERICAN CONCRETE INSTITUTE	PLG	PLUG VALVE
AGR	AGGREGATE	PLP	POLYPROPYLENE PIPE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	PLYWD	PLYWOOD
ARCH	ARCHITECT	PR	PRINCIPAL MERIDIAN
ASPH	ASPHALT	PR	PRESSURE REGULATORS
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS	PRC	POINT OF REVERSE CURVATURE
B	BALL VALVE	PRESS	PRESSURE
BFP	BACKFLOW PREVENTER	PR, PROP	PROPOSED
BIT	BITUMINOUS	PRV	PRESSURE REDUCING VALVE
BLDG	BUILDING	PSF	POUNDS PER SQUARE FOOT
BLK	BLOCKING	PSI	POUNDS PER SQUARE INCH
BM	BENCHMARK	PSL	PIPE SLEEVE
BOT	BOTTOM	PT	POINT OF TANGENCY
BSMT	BASEMENT	PLG	PLUG VALVE
BV	BUTTERFLY VALVE	PVC	POLYVINYL CHLORIDE (PLASTIC) PIPE
B-B	BACK-TO-BACK OF CURB DIMENSION	R	RADIUS
CL or G	CENTERLINE	RDCR	REDUCER
C to C	CENTER TO CENTER	RCCP	REINFORCED CONCRETE CYLINDER PIPE
C & G	CURB AND GUTTER	RECP	REINFORCED CONCRETE PIPE
CF	CUBIC FEET	RD	ROOF DRAIN
CHD	CHORD LENGTH	REINF	REINFORCING
CI	CAST IRON PIPE	REQD	REQUIRED
CHK	CHECK VALVE	ROW	RIGHT OF WAY
CLR	CLEAR	RFR	RAFTER
CMP	CORRUGATED METAL PIPE	RND	ROUND
CMU	CONCRETE MASONRY UNIT	RR	RAILROAD
CTY	COUNTY	RRSP	RAILROAD SPIKE
CONC	CONCRETE	RT	RIGHT
CONT	CONTINUOUS	R&R	REMOVE AND REPLACE
C-B	CENTERLINE TO BACK OF CURB DIMENSION	S	SOUTH
COORD	COORDINATE	SB	STREAM BED
CU	COPPER PIPING	SCHED	SCHEDULE
CTRS	CENTERS	SEC	SECTION
CY	CUBIC YARDS	SF	SQUARE FEET
CS	CORPORATION STOP	SHR	SHOWER
D	DEGREE OF CURVE	SHT	SHEET
DEP	DEPRESSED	SHTG	SHEATHING
DET	DETAIL	SP	SANITARY PIPE
DIAG	DIAGONAL	SPA	SPACING OR SPACES
DIM	DIMENSION	SPEC	SPECIFICATION
DI	DUCTILE IRON PIPE	SQ	SQUARE
DN	DOWN	SS	SANITARY SERVICE
DNSTR	DOWNSTREAM	STA	STATION
DP	DRAINAGE PIPE/STORM PIPE	STD	STANDARD
DWG	DRAWING	STL	STEEL
E	EAST	STRUCT	STRUCTURAL
EL	EXPANSION JOINT	SW	SIDEWALK
EL, ELEV	ELEVATION	SY	SQUARE YARDS
EP	EDGE OF PAVEMENT	SYM	SYMMETRICAL
EQUIP	EQUIPMENT	TAN	TANGENT LENGTH
EQUIV	EQUIVALENT	TBC	TOP BACK OF CURB
EW	EACH WAY	TBM	TEMPORARY BENCH MARK; BASED ON BENCHMARK DATUM
EXP	EXPANSION	TD	TILE DRAIN
EX, EXIST	EXISTING	THK	THICK
EXT	EXTERIOR	TREAD	TREAD
E =	EXTERNAL DISTANCE	TY	TYPE
FD	FLOOR DRAIN	TYP	TYPICAL
FDN	FOUNDATION	U.O.N.	UNLESS OTHERWISE NOTED
FE	FIELD ENTRANCE	UP	UTILITY POLE
FF	FINISH FLOOR	UPSTR	UPSTREAM
FIL	FILLET	UR	URINAL
FIN	FINISH	USGS	US GEOLOGICAL SURVEY
FL	FLOW LINE	VC	VERTICAL CURVE
FLR	FLOOR	VCP	VITRIFIED CLAY PIPE
FM	FORCE MAIN	VERT	VERTICAL
FND	FOUND	VOL	VOLUME
FRMG	FRAMING	VPC	VERTICAL POINT OF CURVATURE
FTG	FOOTING	VPI	VERTICAL POINT OF INTERSECTION
F-F	FACE TO FACE	VPRC	VERTICAL POINT OF REVERSE CURVATURE
GA	GAUGE	VPT	VERTICAL POINT OF TANGENCY
GI	GALVANIZED IRON PIPE	W	WEST
GRD	GRADE	WC	WATER CLOSET
GRS	GRATING SUPPORT	WF	WIDE FLANGE
GRT	GROUT	WM	WATER MAIN
GV	GAS VALVE	WMQ	WATER MAIN QUALITY
GYP	GYPSPUM	WV	WATER VALVE
HSE	HOUSE	WGT	WEIGHT
HC	HORIZONTAL CURVE	WP	WEATHER PROOF
HMA	HOT MIX ASPHALT	WS	WATER SERVICE
HNGR	HANGER	WWF	WELDED WIRE FABRIC
HORIZ	HORIZONTAL	W/O	WITHOUT
H.P.	HIGH POINT	XP	EXPLOSION PROOF
HW	HOT WATER		
HWH	HOT WATER HEATER		
Δ, =	CENTRAL ANGLE		

















I	MOMENT OF INERTIA
ID	INSIDE DIAMETER
INT	INTERIOR
INV	INVERT ELEVATION; BASED ON BENCH MARK DATUM
IP	IRON PIPE
JST	JOIST
L	LENGTH OF CURVE
LAT	LATERAL
LAV	LAVATORY
LF	LINEAL FEET
L.P.	LOW POINT
LT	LEFT OF SURVEY BASE LINE
MAX	MAXIMUM
ME	MATCH EXISTING
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MTL	METAL
N	NORTH
No. OR #	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OO	OUTSIDE TO OUTSIDE
OPNG	OPENING
OPP	OPPOSITE
PC	POINT OF CURVATURE
PCC	PORTLAND CEMENT CONCRETE
PCF	POUNDS PER CUBIC FOOT

HATCH PATTERNS			
	EARTH - FILL		BRICK
	EARTH - UNDISTURBED		STEEL
	ROCK (GEOLOGICAL)		INSULATION (LOOSE/ BATT)
	STONE OR RIP RAP		INSULATION (RIGID)
	GRAVEL		WOOD (ROUGH)
	CONCRETE		WOOD (BLOCKING)
	CONCRETE BLOCK		WOOD (FINISH)
	CMU		DETECTABLE WARNING
	ASPHALT PAVEMENT		

SYMBOLS		
EXISTING	CIVIL	PROPOSED
EXISTING R.O.W.	RIGHT-OF-WAY LINE	PROPOSED R.O.W.
	PROPERTY LINE	
	CENTERLINE	
	SETBACK LINE	
	EASEMENT LINE	
	SECTION LINE	
	SECTION CORNER	
	COORDINATE POINT ON GRID SYSTEM	
	FOUND OR SET PROPERTY PIN	SET
	RIGHT-OF-WAY MARKER	
	BENCHMARK	
	CONTOUR LINE	
	SPOT ELEVATION (AT ●)	
	FENCE LINE	
	SILT FENCE LINE	
	CURB AND GUTTER	
	TIP OUT CURB AND GUTTER	
	SAWCUT, LIMITS OF PAVEMENT REMOVAL & REPLACEMENT	
	DECIDUOUS TREE W/ SIZE	
	CONIFEROUS TREE W/ SIZE	
	TREE STUMP	
	HEDGEROW	
	BUSH OR SHRUB	
	TREE LINE	
	CONSTRUCTION LIMIT LINE	
	SIGN (MULTIPLE POST, SINGLE POST, STREET SIGN)	
	SIGN (PYLON)	
	GUARD RAIL	
	RAILROAD TRACKS	
	BUILDING	
	MAILBOX	
	FLAGPOLE	
	BOLLARD	
	AIR CONDITIONER	
EXISTING	WATER	PROPOSED
	WATER SERVICE	
	WATER PIPE	
	FIRE HYDRANT	
	YARD HYDRANT	
	WATER VALVE WITH BOX	
	CURB STOP W/CURB BOX	
	REDUCER	
	WATER VALVE VAULT	
	11.25° BEND	
	22.50° BEND	
	45° BEND	
	90° BEND	
	TEE	
	CAP	
	WATER METER	
	SPRINKLER HEAD	
	TRACER WIRE BOX	
EXISTING	STORM SEWER	PROPOSED
	STORM SEWER	
	DRAIN TILE	
	DITCH LINE (PAVED)	
	DITCH LINE (UNPAVED)	
	STORM MANHOLE	
	CATCH BASIN	
	STORM SEWER INLET	
	STORM SEWER INLET - BEHIND CURB	
	DOWNSPOUT	
	CULVERT AND SIZE	
	RCCP OR RCP EQRS (RCAP) END SECTION	
	METAL OR HDPE END SECTION	
	FLOW DIRECTION	
EXISTING	EROSION CONTROL	PROPOSED
	EROSION CONTROL BLANKET	
	TEMPORARY AND PERMANENT SEEDING AREA	
EXISTING	UTILITY	PROPOSED
	FIBER OPTIC LINE	
	UNDERGROUND TV CABLE	
	CABLE TV RISER PEDESTAL	
	OVERHEAD UTILITY	
	UNDERGROUND ELECTRIC	
	ELECTRIC RISER PEDESTAL	
	ELECTRIC MANHOLE	
	UNDERGROUND TELEPHONE	
	TELEPHONE RISER PEDESTAL	
	TELEPHONE MANHOLE	
	UTILITY POLE	
	UTILITY POLE W/ METER	
	UTILITY POLE W/ TRANSFORMER	
	UTILITY POLE W/ LIGHT	
	UTILITY POLE WITH GUY WIRE AND ANCHOR	
	LIGHT (MAST MOUNTED)	
	LIGHT POLE (SINGLE FIXTURE)	
	YARD LIGHT	
	GAS MAIN	
	GAS METER	
	GAS VALVE	
	GAS STRUCTURE	
	TRANSFORMER	
	GENERATOR	
EXISTING	TRAFFIC RELATED	PROPOSED
	CONTROLLER	
	MAST ARM ASSEMBLY AND POLE	
	SIGNAL HEAD AND POST	
	SIGNAL HEAD	
	PEDESTRIAN HEAD	
	PEDESTRIAN PUSH-BUTTON	
	HAND HOLE	
	DOUBLE HAND HOLE	
	HAND HOLE OR JUNCTION BOX	
	HEAVY-DUTY HAND HOLE	
	EXISTING CONDUIT (LENGTH AND SIZE) PROP GALVANIZED STEEL OR PVC CONDUIT UPPER NUMERAL INDICATES LENGTH "T" INDICATES CONDUIT IN TRENCH "P" INDICATED CONDUIT PUSHED	
EXISTING	MISC	PROPOSED
	SOIL BORING LOCATION AND NUMBER	

 MW #XX	MONITORING WELL REVISION NUMBER OUTLINE OF DETAILED AREA	 MW #XX  
	SECTION NUMBER SHEET WHERE SHOWN	
<u>EXISTING</u>  SAN >  SSF > SSF >  < FM 	<u>SANITARY SEWER</u> SANITARY SEWER SANITARY SEWER SERVICE SANITARY SEWER FORCE MAIN SANITARY CLEANOUT SANITARY MANHOLE	<u>PROPOSED</u>  SAN >  SSF > SSF >  < FM CO ● 

UNDISTURBED AREA	
STABILIZED CONSTRUCTION ENTRANCE	
SILT FENCE	
INLET PROTECTION	
TEMPORARY SEDIMENT TRAP	
CULVERT INLET PROTECTION	
ROCK OUTLET PROTECTION	
ROCK CHECK DAM — COURSE AGGREGATE	
ROCK CHECK DAM — RIP RAP	
DITCH CHECK	

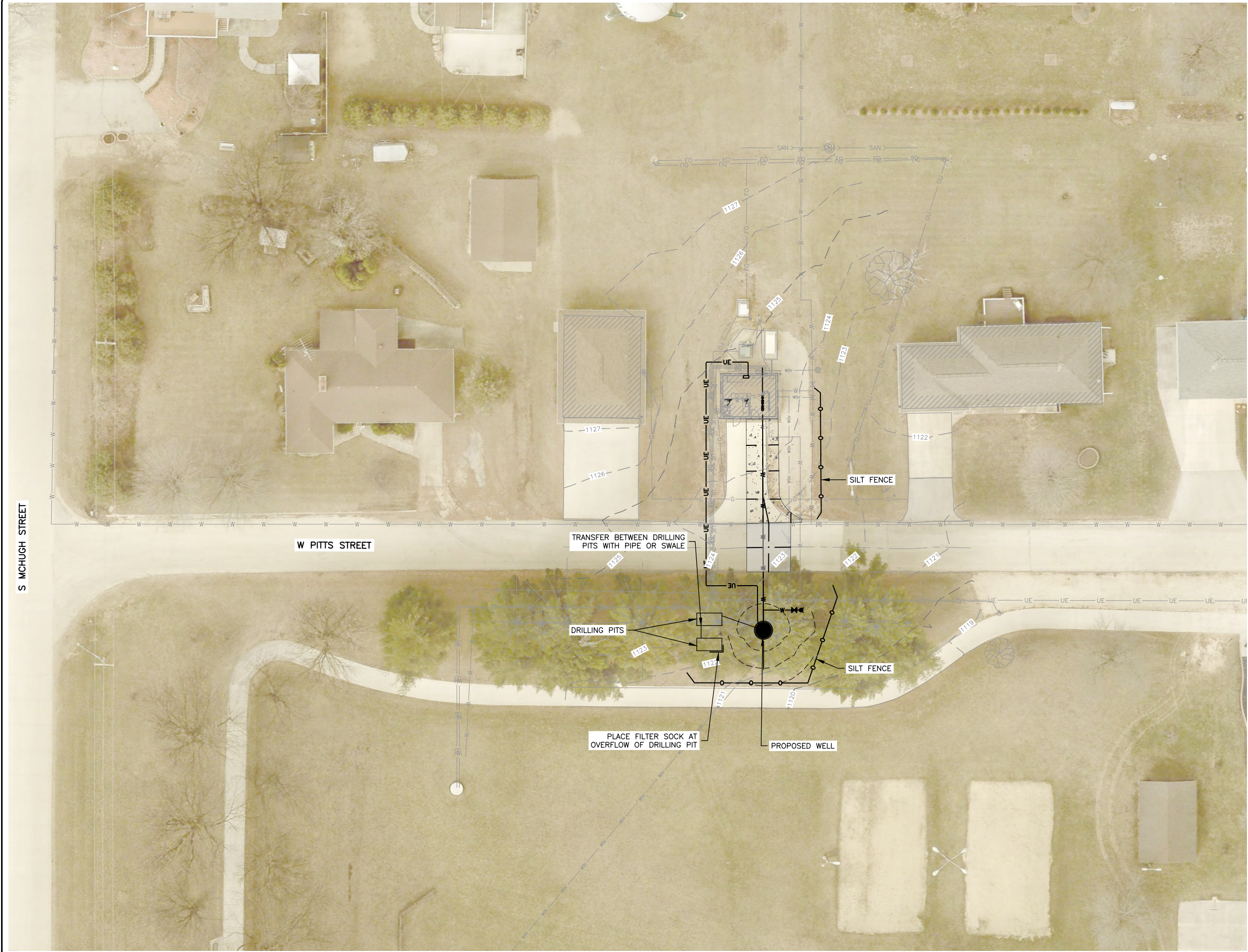
	LOWER NUMERAL INDICATES SIZE AND TYPE	
	LUMINAIRE	
	ARROW - THROUGH, TURN LEFT	
	ARROW - THROUGH	
	ARROW - TURN LEFT	
	ARROW - TURN RIGHT	
	ONE DIRECTION TURN ONLY	
	HANDICAPPED PARKING STALL	
	TRAFFIC DETECTOR LOOP	





REVISIONS		
REV. NO.	DESCRIPTION	DATE





WELL WATER POLLUTION PREVENTION (WWPPP) – EROSION CONTROL PRACTICES.

1. ALL PROPOSED EROSION CONTROL BMPs SHALL BE IN PLACE IN FIELD PRIOR TO THE BEGINNING OF WELL CONSTRUCTION. 12" FILTER SOCKS SHALL COMPLY WITH SUDAS FIGURE 9040.2.
2. SEDIMENT SHALL BE REMOVED FROM DRILLING PITS AS NECESSARY AND DISPOSED OF OFF SITE.
3. BREAKS AND GAPS IN SEDIMENT BARRIERS THAT OCCUR SHALL BE REPAIRED IMMEDIATELY.
4. ALL INSTALLED EROSION CONTROL PRACTICES WILL BE MAINTAINED UNTIL THE DISTURBED AREAS THEY PROTECT ARE RE-STABILIZED.
5. CONTRACTOR SHALL COORDINATE ALL WELL WATER DISCHARGE WORK WITH THE CITY OF LAWLER.

WELL WATER POLLUTION PREVENTION PLAN (WWPPP) – DESCRIPTION OF PLANNED ACTIVITY.

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMIT AND PROVIDING INSPECTIONS. COPIES OF INSPECTION WILL BE PROVIDED TO ENGINEER.
2. PROJECT INCLUDES DRILLING A MUNICIPAL WATER SUPPLY WELL APPROXIMATELY 1,280 FEET IN DEPTH. THE WELL WATER THAT IS DISCHARGED DURING WELL DEVELOPMENT MAY INCLUDE, BENTONITE DRILLING FLUID, SOILS SEDIMENT, FOAM, AND OTHER PRODUCTS NEEDED FOR THE WELL CONSTRUCTION.
3. THE PLANNED WELL CONFIGURATION INCLUDING CASING DIAMETERS AND LOCATION IS SHOWN WITHIN THE PROJECT PLANS.

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL

ILLINOIS  
IOWA  
WISCONSIN

OWNER/DEVELOPER:  
CITY OF LAWLER  
414 EAST GROVE ST  
LAWLER, IOWA 52154

PROJECT AND LOCATION:  
WELL NO. 3 IMPROVEMENTS  
LAWLER, IOWA

DRAWN BY: GSE  
APPROVED BY: LJE  
DATE: 11/04/2025  
SCALE: AS NOTED

REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:  
WWPPP

SET TYPE: BID  
G:\C30\24\24-289\24-289 Design.dwg, A.04

JOB NUMBER:  
24-289

SHEET NUMBER:  
A.04



GENERAL NOTES

1. ALL WORK SHALL CONFORM TO AND BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.
2. THE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS (SUDAS), 2025 EDITION PLUS SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS AS PREPARED BY FEHR GRAHAM SHALL BE CONSIDERED A PART OF THESE DOCUMENTS AS IF BOUND HEREIN.
3. THE QUANTITIES INDICATED ON THE PROPOSAL FORM ARE APPROXIMATE ONLY, AND DO NOT CONSTITUTE A WARRANTY OR GUARANTEE BY THE JURISDICTION AS TO THE ACTUAL QUANTITIES INVOLVED IN THE WORK. SUCH QUANTITIES ARE TO BE USED FOR THE PURPOSE OF COMPARISON OF BIDS AND DETERMINING THE AMOUNT OF BID SECURITY, CONTRACT, AND PERFORMANCE, PAYMENT, AND MAINTENANCE BOND. IN THE EVENT OF DISCREPANCIES BETWEEN UNIT PRICES AND UNIT PRICE EXTENSIONS LISTED IN A BIDDER'S PROPOSAL, UNIT PRICES SHALL GOVERN AND UNIT PRICE EXTENSIONS SHALL BE CORRECTED, AS NECESSARY, FOR AGREEMENT WITH UNIT PRICES. THE JURISDICTION EXPRESSLY RESERVES THE RIGHT TO INCREASE OR DECREASE THE QUANTITIES DURING CONSTRUCTION, AND TO MAKE REASONABLE CHANGES IN DESIGN, PROVIDED SUCH CHANGES DO NOT MATERIALLY CHANGE THE INTENT OF THE CONTRACT. THE AMOUNT OF WORK TO BE PAID FOR SHALL BE BASED UPON THE ACTUAL QUANTITIES PERFORMED.
4. CONSTRUCTION SURVEY FOR THIS PROJECT TO BE PROVIDED BY THE OWNER. **THE CONTRACTOR IS REQUIRED TO PROVIDE MINIMUM OF TWO BUSINESS DAYS' NOTICE TO THE ENGINEER WHEN REQUESTING STAKES.**
5. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE ENGINEERING DEPARTMENTS AND UTILITY COMPANIES PRIOR TO CONSTRUCTION. ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO AVOID DAMAGE TO ANY EXISTING UTILITY. IOWA CODE 480, UNDERGROUND FACILITIES INFORMATION, REQUIRES NOTICE TO IOWA ONE CALL (1-800-292-8989) NOT LESS THAN 48 HOURS BEFORE EXCAVATION, EXCLUDING WEEKENDS AND LEGAL HOLIDAYS.
6. THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND ROCK ELEVATIONS ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES AND ROCK ELEVATIONS BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES AND ROCK ELEVATIONS.
7. THE CONTRACTOR SHALL VISIT THE SITE AND INSPECT THE PROJECT AREA AND BECOME THOROUGHLY FAMILIAR WITH THE ACTUAL JOB CONDITIONS PRIOR TO BIDDING AND THE START OF ANY WORK. FAILURE TO VISIT THE SITE SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING THE WORK IN ACCORDANCE WITH THESE DRAWINGS.
8. THE CONTRACTOR SHALL VERIFY AT THE SITE, ALL DIMENSIONS AND CONDITIONS SHOWN ON THE DRAWINGS, AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES, OMISSIONS, AND/OR CONFLICT PRIOR TO PROCEEDING WITH THE WORK.
9. THE CONTRACTOR SHALL NOT SCALE DRAWINGS. DIMENSIONS SHALL GOVERN. LARGE SCALE DRAWINGS SHALL GOVERN OVER SMALL SCALE DRAWINGS. NOTES AND DETAILS ON THE DRAWINGS SHALL APPLY TO ALL SIMILAR CONDITIONS WHETHER THEY ARE REPEATED OR NOT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES OUTSIDE THE CONSTRUCTION LIMITS RESULTING FROM NEGLIGENCE.
11. CONTRACTOR SHALL PROTECT EXISTING FACILITIES, BUILDINGS, AND OTHER APPURTENANCES NOT TO BE REMOVED FROM THE SITE DURING THE CONSTRUCTION ACTIVITIES.
12. CONTRACTOR SHALL CONFINE HIS WORK TO THE CONSTRUCTION LIMITS AND EASEMENTS. IF THE CONTRACTOR OBTAINS ADDITIONAL EASEMENT FOR THE STORAGE OF EQUIPMENT AND MATERIALS, COPIES OF THE AGREEMENTS WITH THE PROPERTY OWNERS SHALL BE PROVIDED TO THE OWNER.
13. CONTRACTOR SHALL SUBMIT A DETAILED CONSTRUCTION SCHEDULE AND STAGING PLAN A MINIMUM OF TWO (2) DAYS PRIOR TO THE PRECONSTRUCTION MEETING.
14. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ACCESS TO INDIVIDUAL PROPERTIES DURING CONSTRUCTION WHENEVER PRACTICAL. CONTRACTOR SHALL NOTIFY RESIDENTS OF ACCESS RESTRICTIONS MINIMUM OF 24 HOURS PRIOR TO REMOVAL OF EXISTING ACCESS.
15. CONTRACTOR SHALL SUBMIT FOR ACCEPTANCE WORK PLANS AND SCHEDULES FOR ACCOMPLISHMENT OF TEMPORARY AND PERMANENT EROSION CONTROL PRIOR TO THE START OF CONSTRUCTION.
16. CONTRACTOR SHALL COORDINATE TEMPORARY DISRUPTION OF UTILITY SERVICES WITH THE CITY OF NEW ALBIN, AFFECTED UTILITY COMPANIES AND/OR AFFECTED PROPERTY OWNERS WHEN RELOCATING EXISTING FACILITIES, CONNECTING TO EXISTING FACILITIES AND PLACING NEW SERVICES.

ESTIMATED QUANTITIES

NO.	CODE	DESCRIPTION	QUANTITY	UNIT
1	2010-C	CLEARING AND GRUBBING, STUMPS	1	LS
2	2010-D-1	TOPSOIL, ON-SITE	20	CY
3	2010-J-1	SUBBASE, SPECIAL BACKFILL	40	TON
4	2010-999-C	FILL, PROVIDE AND PLACE	20	CY
5	5010-A-1	WATER MAIN, TRENCHED, DIP, 6"	80	LF
6	5010-999-A	CONNECTION TO EXISTING WATER MAIN	1	EA
7	5020-999-A	FLUSHING HYDRANT ASSEMBLY	1	EA
8	7020-B	PAVEMENT, PCC, 6"	45	SY
9	7030-A-3	REMOVAL OF PAVEMENT	65	SY
10	7030-H-1	DRIVEWAY, PAVED, PCC, 6"	20	SY
11	8030-A	TEMPORARY TRAFFIC CONTROL	1	LS
12	9010-A	CONVENTIONAL SEEDING, FERTILIZING, AND MULCHING	0.10	AC
13	9040-N-1	SILT FENCE OR SILT FENCE DITCH CHECK	40	LF
14	9040-N-2	SILT FENCE OR SILT FENCE DITCH CHECK, REMOVAL OF SEDIMENT	40	LF
15	9040-N-3	SILT FENCE OR SILT FENCE DITCH CHECK, REMOVAL OF DEVICE	40	LF
16	11,020-A	MOBILIZATION	1	LS
17	11,050-A	CONCRETE WASHOUT	1	LS
18	012201-1.01-B-1	EROSION AND SEDIMENT CONTROL	1	LS
19	012201-1.01-B-1	DRILL NOMINAL 24" DIA. HOLE	40	VF
20	012201-1.01-B-1	FURNISH AND INSTALL 20" DIA. SURFACE CASING	40	VF
21	012201-1.01-B-1	DRILL NOMINAL 17" DIA. HOLE	210	VF
22	012201-1.01-B-1	FURNISH AND INSTALL 14" DIA. SURFACE CASING	250	VF
23	012201-1.01-B-1	DRILL NOMINAL 12" DIA. HOLE	580	VF
24	012201-1.01-B-1	FURNISH AND INSTALL 8" DIA. CASING	830	VF
25	012201-1.01-B-1	EQUIPMENT SETUP FOR GROUTING	1	LS
26	012201-1.01-B-1	FURNISH AND INSTALL NEAT CEMENT GROUT	580	SACK
27	012201-1.01-B-1	DRILL NOMINAL 8" DIA. OPEN HOLE	450	VF
28	012201-1.01-B-1	WELL DEVELOPMENT	2	HR
29	012201-1.01-B-2	TEST PUMP SETUP	1	LS
30	012201-1.01-B-2	TEST PUMP WELL	26	HR
31	012201-1.01-B-3	PLUMBNESS AND ALIGNMENT TEST	1	LS
32	012201-1.01-B-3	WATER QUALITY TESTING	1	LS
33	012201-1.01-B-4	WELL DISINFECTION	1	LS
34	012201-1.01-B-5	SAMPLES AND RECORDS	1	LS
35	012201-1.01-B-6	PITLESS UNIT AND WELL PROTECTION STRUCTURE	1	LS
36	012201-1.01-B-7	FURNISH AND INSTALL WELL PUMP	1	LS
37	012201-1.01-B-8	FURNISH AND INSTALL DROP PIPING	350	VF
38	012201-1.01-C	WELL HOUSE PIPING	1	LS
39	012201-1.01-D	CHEMICAL FEED SYSTEMS	1	LS
40	012201-1.01-E	WATER SYSTEM ELECTRICAL AND CONTROLS	1	LS



ILLINOIS  
IOWA  
WISCONSIN

OWNER/DEVELOPER:  
CITY OF LAWLER  
414 EAST GROVE ST  
LAWLER, IOWA 52154

PROJECT AND LOCATION:  
WELL NO. 3 IMPROVEMENTS  
LAWLER, IOWA

DRAWN BY: GSE  
APPROVED BY: LJE  
DATE: 11/04/2025  
SCALE: AS NOTED

REVISIONS		
REV. NO.	DESCRIPTION	DATE

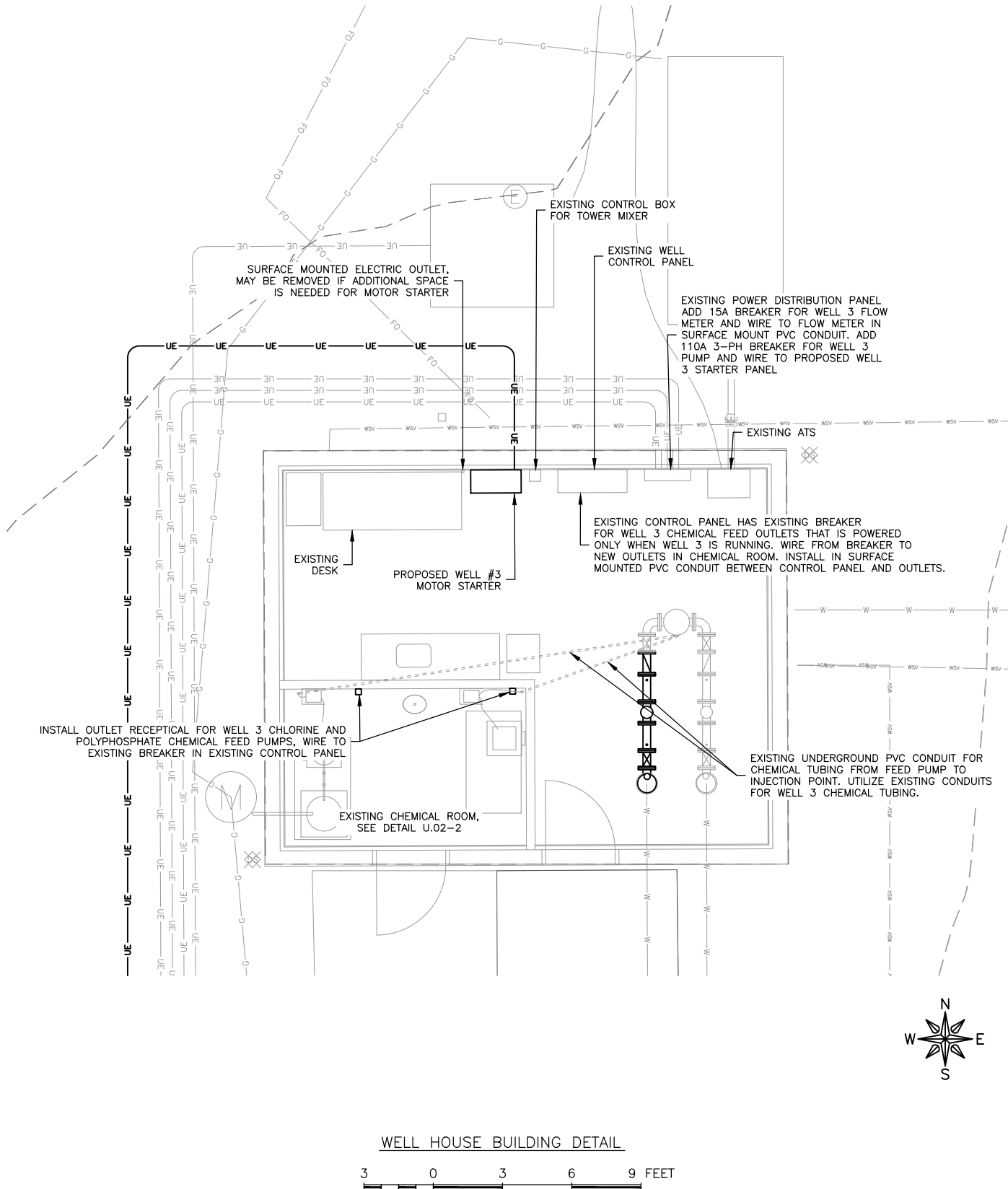
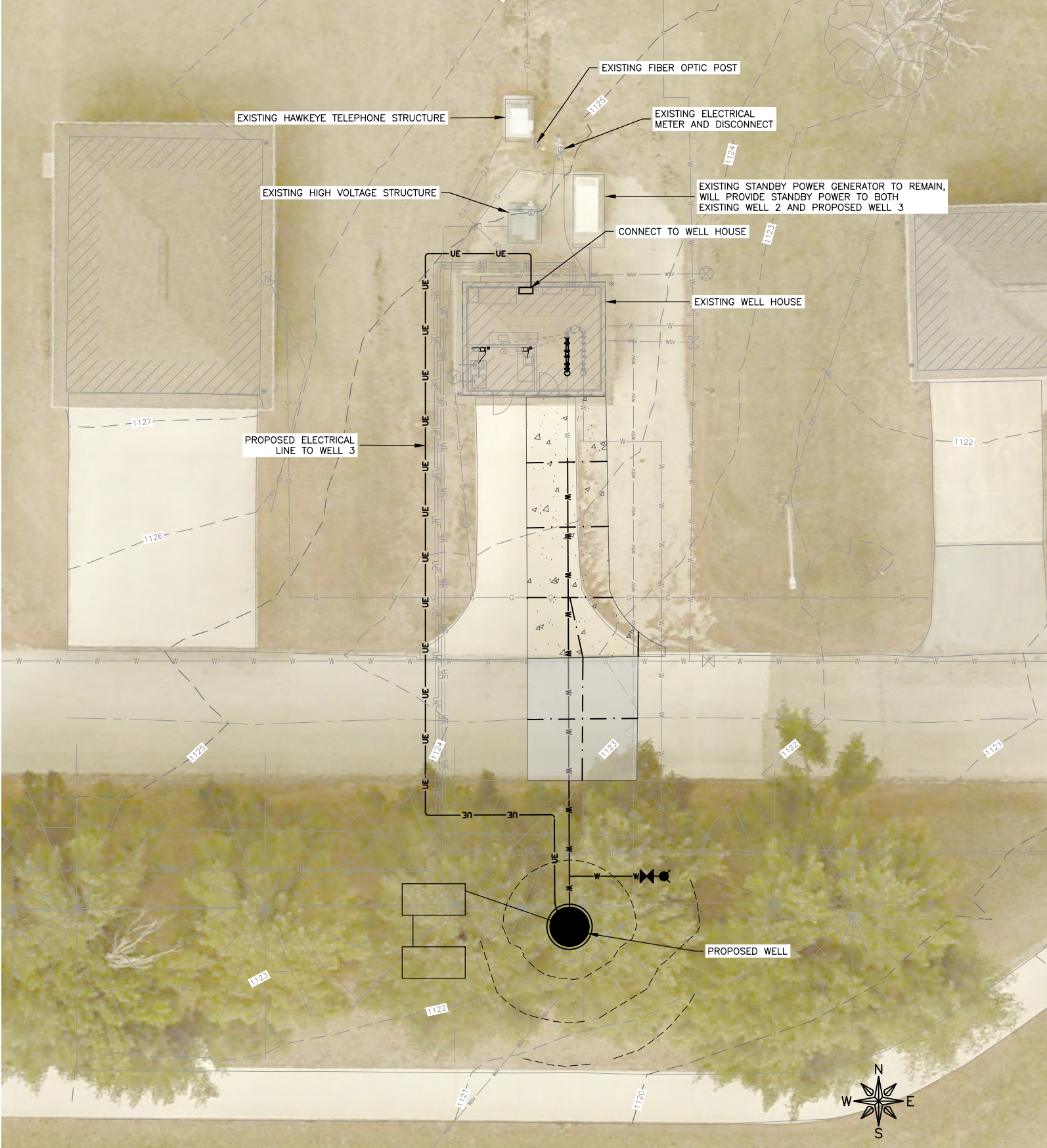
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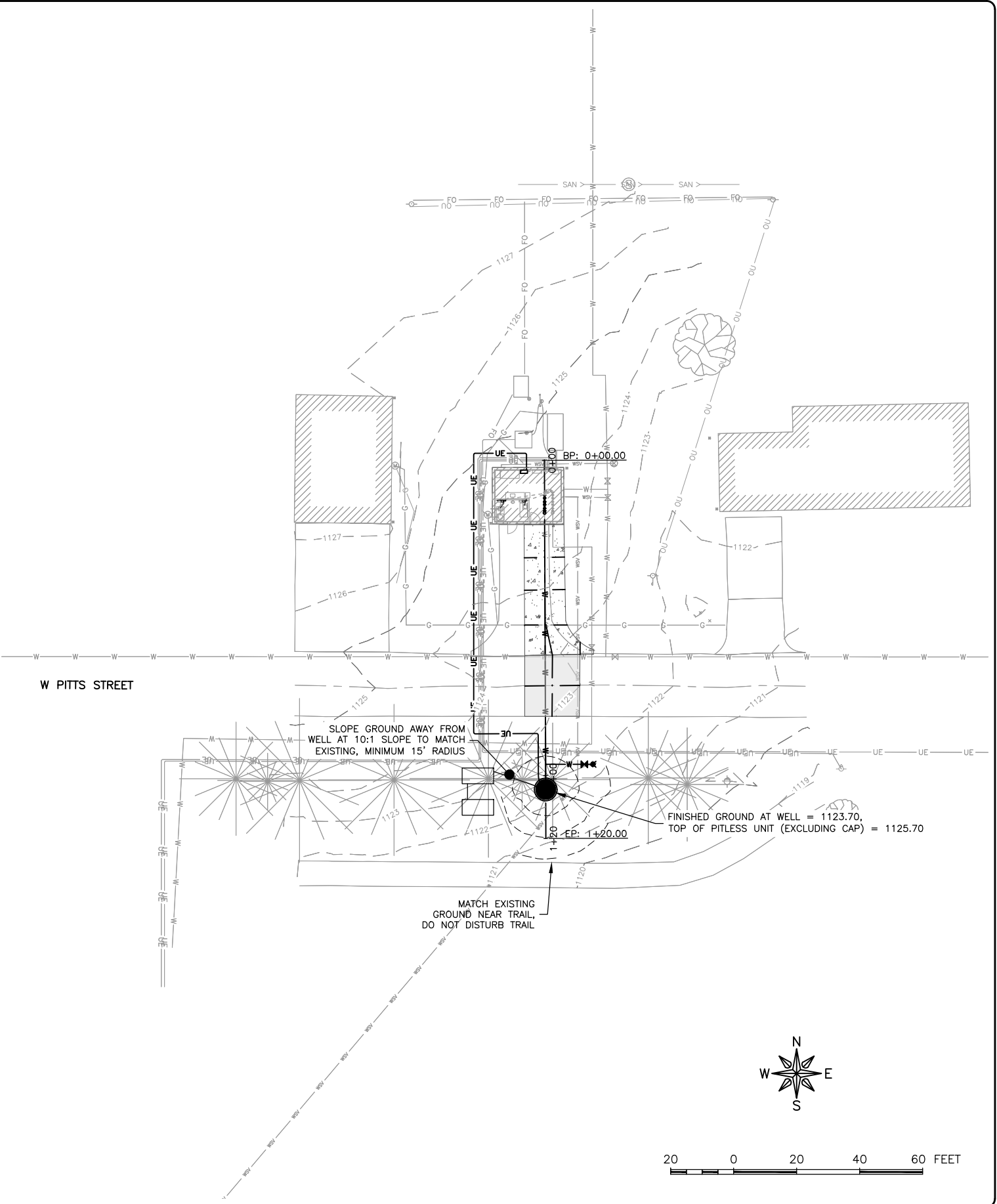
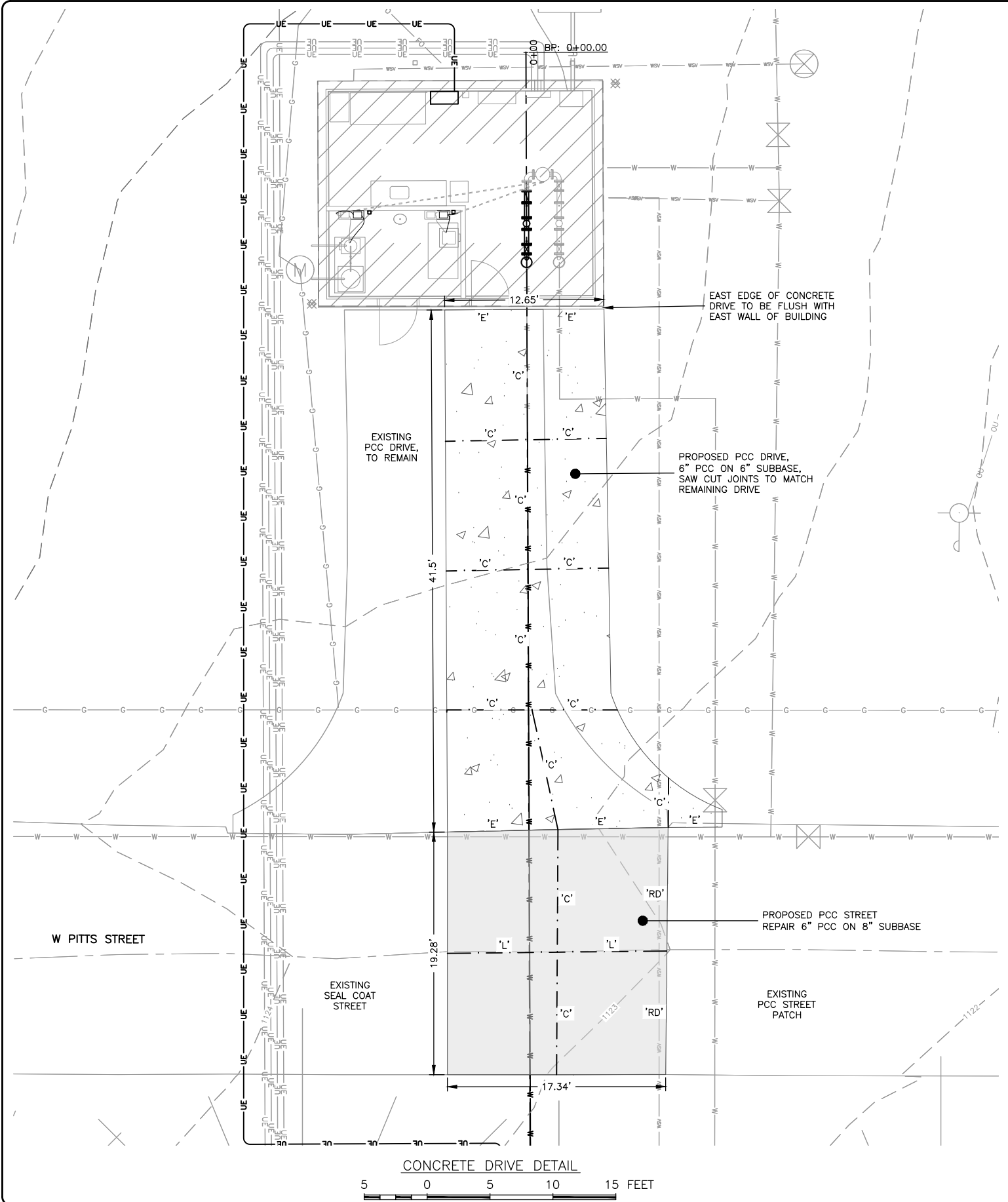
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REVISIONS		
REV. NO.	DESCRIPTION	DATE





**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL

ILLINOIS  
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DRAWN BY: GSE  
APPROVED BY: LJE  
DATE: 11/04/2025  
SCALE: AS NOTED

REVISIONS		
REV. NO.	DESCRIPTION	DATE

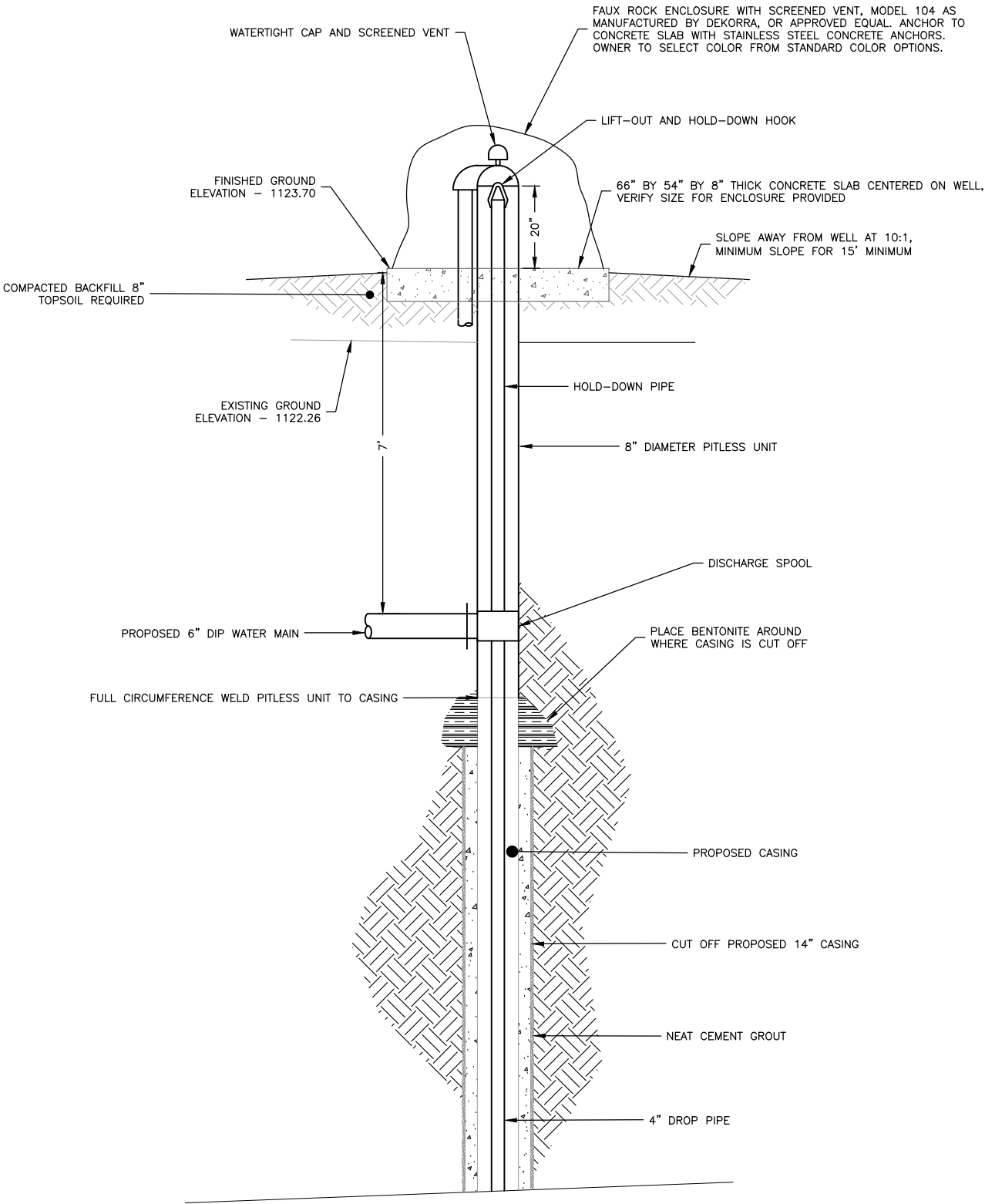
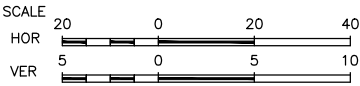
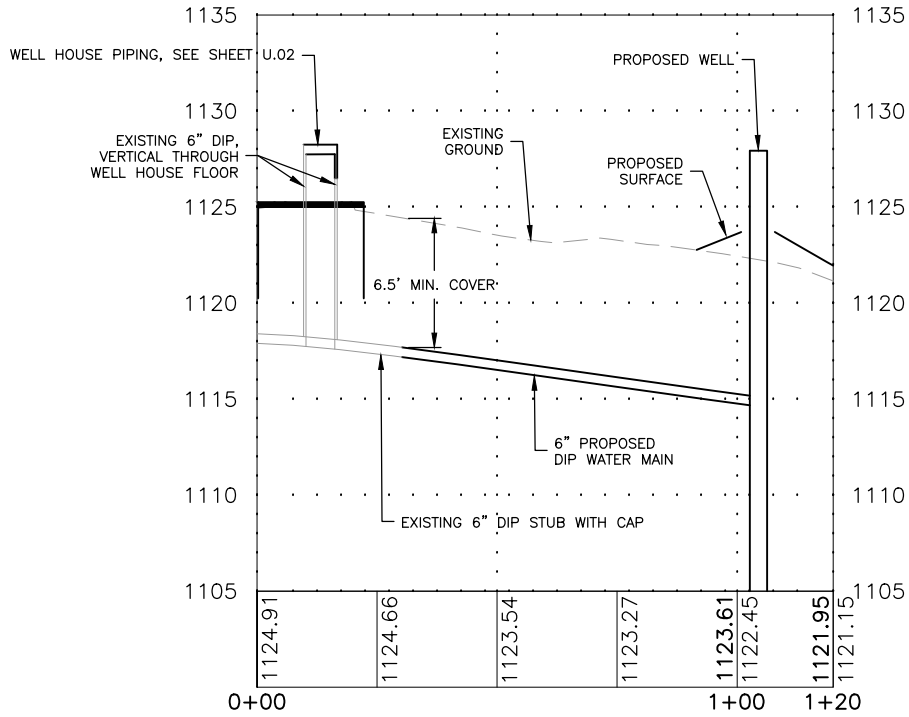
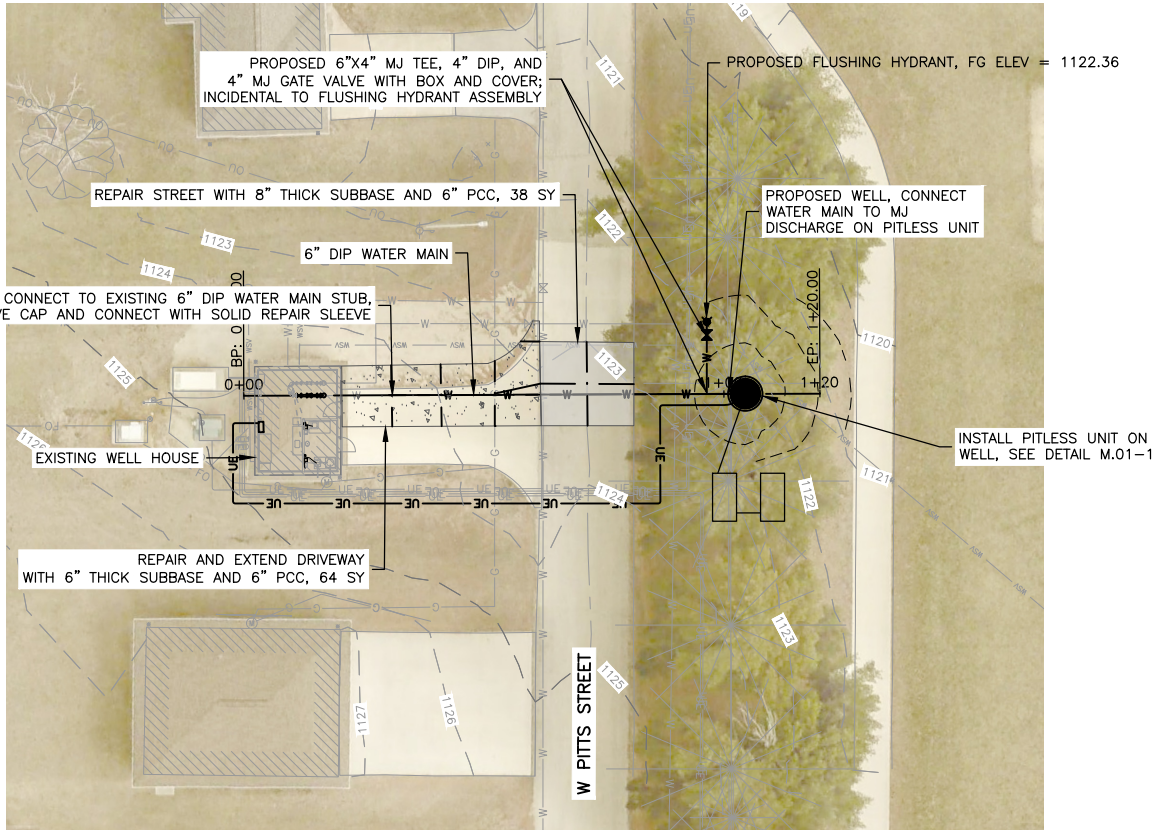
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JOB NUMBER:  
24-289

SHEET NUMBER:  
L.01





M.01 - 1  
PROFILE - WELL CONNECTION

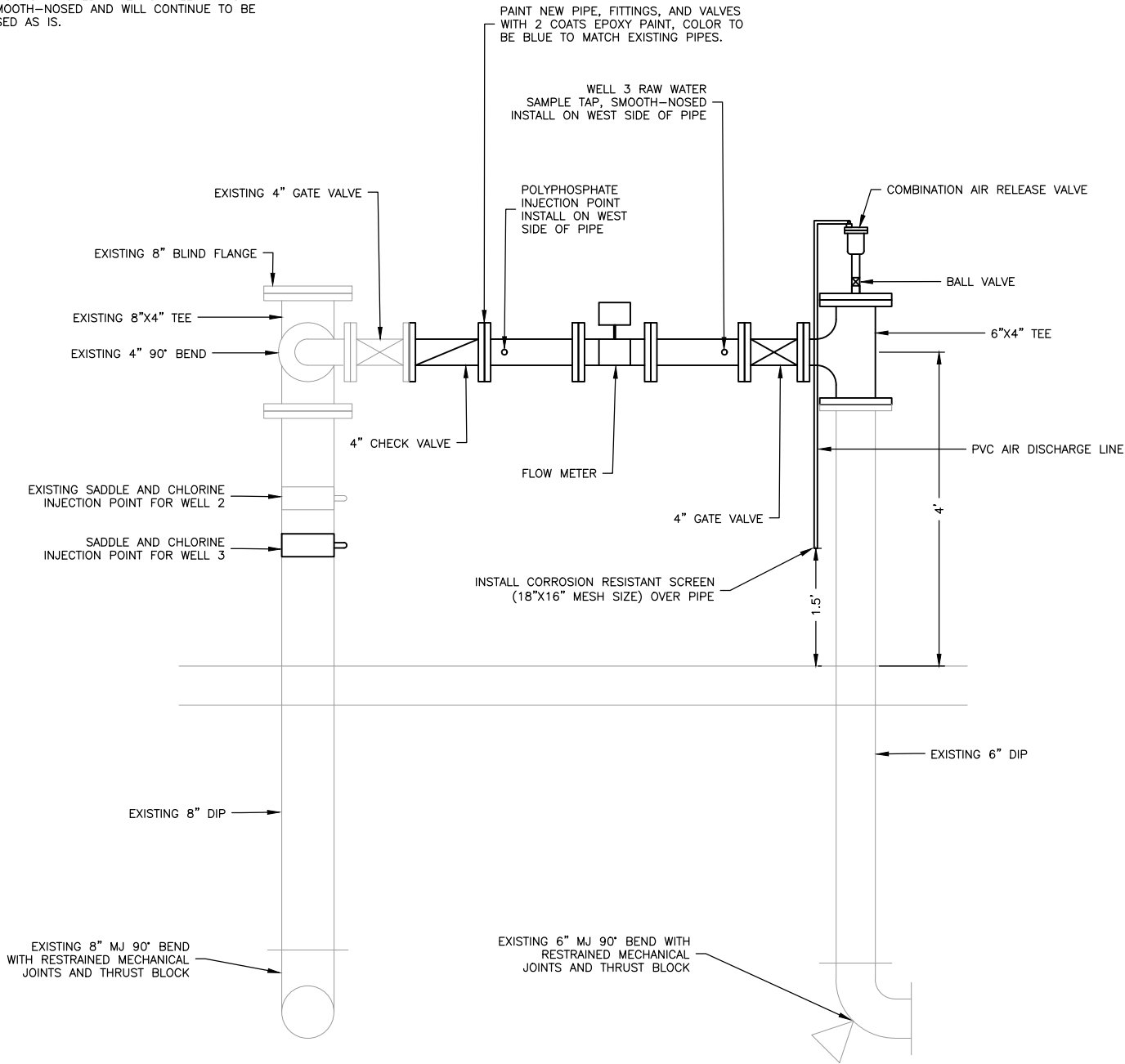
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REV. NO.	DESCRIPTION	DATE



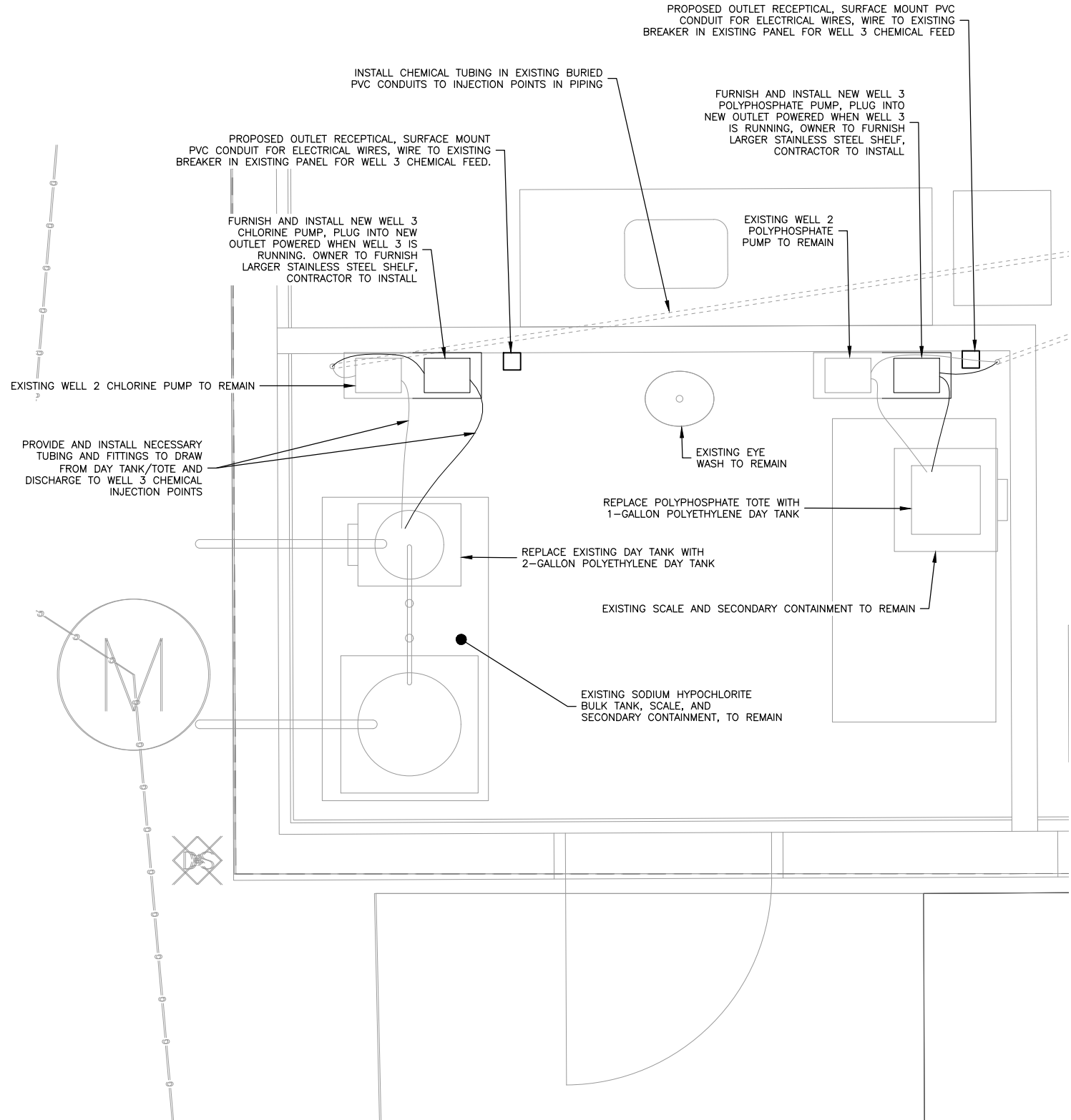




- NOTES:
1. INSTALL INJECTION POINTS ON SIDE OF PIPE. BEFORE ORDERING MATERIALS CONTRACTOR SHALL VERIFY CHEMICAL INJECTION POINTS AND FLOW METER MATCHES EXISTING EQUIPMENT INSTALLED FOR WELL 2.
  2. EXISTING FINISHED WATER SAMPLE TAP IS SMOOTH-NOSED AND WILL CONTINUE TO BE USED AS IS.



U.02 - 1  
WELL HOUSE PIPING PROFILE VIEW



U.02 - 2  
CHEMICAL ROOM PLAN VIEW

REVISIONS		
REV. NO.	DESCRIPTION	DATE