

DEBBIE KROGER, COUNCIL MEMBER DENISE BUXTON, COUNCIL MEMBER KATHI SCROGGINS, COUNCIL MEMBER TREVA SHELTON, COUNCIL MEMBER KEITH MEFFORD, CLERK/ TREASURER **DEVON SHARPE, TOWN ATTORNEY**

APRIL 2022





No. ★ 11900860 ★	Konin astro herson
STATE OF VOIANA COMPANY	KATHRYN ROSE CASTRO JACKSON PROJECT MANAGER REGISTERED ENGINEER STATE OF INDIANA NO. 11900860
HE C. No. + 10707476 +	Schan
STATE OF	WAYNE C. MOOR PROJECT ENGINEER REGISTERED ENGINEER STATE OF INDIANA NO. 10707476



2022 SANITARY SYSTEM IMPROVEMENTS

TOWN OF HANOVER, INDIANA

LOCATION AND SCOPE OF WORK PLAN AND DRAWING INDEX

DRAWING INDEX				
2022 SANITARY SYSTEM IMPROVEMENTS				
	SHEET TIFE DEFINITIONS.			
	G - GENERAL			
7	D - DEMOLITION			
õ	Y - SITE			
IAT	C - CIVIL/PROCESS			
<u>l</u> GN	S - STRUCTURAL			
ES	P - PLUMBING			
Ш	N - INSTRUMENTATION AND CONTROL			
SН				
EA 1)				
1G1	COVER SHEET			
1G2	LOCATION AND SCOPE OF WORK PLANDLA AND DRAWING INDEX			
1G3	SYMBOLS AND ABBREVIATIONS AND GENERAL NOTES			
0\/4				
2¥1 2⊑1				
2⊏1				
3D1	EX IN SEVER DEMOLITION - LINE 1			
3D2_	EXIS VG SEWER DEMOLITION - LINE 2			
	EXISTING SEWER DEMOLITION - LINE 3			
3L	XISTING SEWER DEMOLITION - LINE 4			
¥1	NEW SANITARY SEWER LINE A - PLAN AND PROFILE			
3Y2	NEW SANITARY SEWER LINE A - PLAN AND PROFILE			
3Y3	NEW SANITARY SEWER LINE A - PLAN AND PROFILE			
3Y4	NEW SANITARY SEWER LINE B - PLAN AND PROFILE			
3Y5	NEW SANITARY SEWER LINE B - PLAN AND PROFILE			
3Y6	NEW SANITARY FORCE MAIN LINE C - PLAN AND PROFILE			
3Y7	NEW SANITARY FORCE MAIN LINE C - PLAN AND PROFILE			
3C1	NEW COLLEGE AVENUE LIFT STATION - SITE PLAN			
362	NEW COLLEGE AVENUE LIFT STATION - PLANS AND SECTION			
১⊑। ৫⊏০	NEW COLLEGE AVENUE LIFT STATION - ELECTRICAL SITE PLAN			
4D1	EXISTING PLANT LIFT STATION - DEMOLITION PLANS AND SECTION			
4C1	NEW PLANT LIFT STATION - PLANS AND SECTION			
4E1	NEW PLANT LIFT STATION - ELECTRICAL PLAN AND DETAILS			
ICATIONS	(AREA 5)			
5D1	EXISTING UV STRUCTURE - DEMOLITION PLANS AND SECTIONS			
5C1	EXISTING UV STRUCTURE - MODIFICATION PLAN AND SECTIONS			
5E1	EXISTING UV STRUCTURE - ELECTRICAL PLANS			
REA 6)				
6EC1				
6EC2	EROSION CONTROL DE TAILS			
601				
602				
603				
6F1	ELECTRICAL SYMBOLS AND ABBREVIATIONS			
6E2	DEMO ONE-LINE DIAGRAM			
6E3	WWTP MODIFICATION ONE-LINE			
6E4	CONTROL ONE-LINE DIAGRAM			
6E5	ELECTRICAL DETAILS			
6E6	CONTROL DETAILS			
6N1	PROCESS AND INSTRUMENTATION LEGEND			
6N2	PROCESS AND INSTRUMENTATION DIAGRAM			

DINTS	
LEVATION	DESCRIPTION
757.18	5/8" REBAR
762.86	5/8" REBAR
754.42	5/8" REBAR
761.35	5/8" REBAR
760.95	MAGNAIL
758.27	5/8" REBAR
756.54	5/8" REBAR
754.87	5/8" REBAR
746.07	5/8" REBAR
457.85	5/8" REBAR
480.59	5/8" REBAR
515.43	5/8" REBAR
734.31	5/8" REBAR
686.58	5/8" REBAR
651.48	MAGNAIL
615.80	MAGNAIL
589.98	5/8" REBAR
551.77	MAGNAIL

HORIZONTAL AND VERTICAL CONTROL INFORMATION

NOTES: 1. A FIELD SURVEY WAS PERFORMED IN (NOVEMBER 2021).

- 2. COORDINATES (INDIANA STATE PLANE, EAST ZONE, NAD 83) AND
- ELEVATIONS (NAVD 88) ARE BASED ON INCORS.
- UNITS ARE U.S. SURVEY FEET. 3. CONTROL POINTS WERE SET USING GPS.
- 5. A LEVEL LOOP WAS PERFORMED ON THE CONTROL POINTS AND TBMS.
- **BENCHMARK DESCRIPTION:** 1. TBM NO. 10 - CUT X IN EAST BOLT ON THE FIRE HYDRANT IN THE APPROXIMATELY 14' NORTH OF COLLEGE AVENUE AND 160' EAST OF CONTROL POINT NUMBER 8. EL 748.13
- 2. TBM NO. 11 RAILROAD SPIKE SET IN SOUTH SIDE OF LIGHT POLE APPROXIMATELY 7' NORTH OF MAIN STREET AND 113' WEST OF COLLEGE AVENUE. EL 757.01
- 3. TBM NO. 21 CUT SQUARE IN NORTHWEST WING WALL BRIDGE AT WWTP ENTRANCE APPROXIMATELY 1' WEST OF RIVER BOTTOM ROAD AND 422' NORTH OF HANOVER BEACH ROAD. EL 455.30

SHEET NO.

1G2

PAGE NO.

2

	EXISTING FEATURES LEGEND			TABLE OF ABBREVIATIONS			<u>GENERAL N</u> 1. NOTIFY			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION	DOCUMI OR REL/ 2 ANY ALT
BM	BENCH MARK	CIS	CISTERN	· ·	EASEMENT - CONSTRUCTION/PERMANENT	AFF	ABOVE FINISHED FLOOR	IPS	IRON PIPE SIZE	
твм	TEMPORARY BENCH MARK	EM	ELECTRIC METER		LOT BOUNDARY	ALUM	ALUMINUM	ISPC	INDIANA STATE PLANE	3. USE CAU
SB 01						APP	APPARENT	IB	POUND(S)	PRIVATE
•				۳ <u>ــــــ</u> ۲		APPROX	APPROXIMATE(LY)	LF	LINEAR FEET	REPLAC REPLAC
•	SECTION CORNER	XXX	UTILITY RISER (DEFINED BY UTILITY)		RIGHT-OF-WAY - TEMPORARY/PERMANENT	ASPH	ASPHALT	LN	LANE	4. TAKE CA
•	DRILL HOLE IN CONCRETE/HARRISON MONUMENT	XXX	UTILITY PEDESTAL (DEFINED BY UTILITY)		- SECTION BOUNDARY	ASSOC	ASSOCIATES	LS	LIFT STATION	
CP	CONTROL POINT (SET/FOUND)	X	UTILITY MARKER (DEFINED BY UTILITY)	· ·	- WETLANDS	ASTM	AMERICAN SOCIETY OF TESTING MATERIAL	S MA EX		- ADDITIO
MG	MAGNETIC NAIL (SET/FOUND)			840		AVG	AVENUE		MECHANICAL JOINT	6. COMPLY WILL BE
				040		BLDG	BUILDING	MAX	MAXIMUM	THE TIM 7. ALL PRIV
BS	BOAT SPIKE (SET/FOUND)	(L)	LIGHT POLE	850	CONTOUR - INDEX ELEVATION	BLVD	BOULEVARD	МН	MANHOLE	
PK	PK NAIL (SET/FOUND)	P	LIGHT ON POWER POLE	OHE OHE	OVERHEAD ELECTRIC	ВМ	BENCHMARK	MIN	МІЛІМИМ	
RS	RAILROAD SPIKE (SET/FOUND)	Ú.	LIGHT ON JOINT POLE	ОНС ОНС	OVERHEAD CABLE TV	CO		MISC	MISCELLANEOUS	- INDIANA
RW	R/W MARKER - CONCRETE/GRANITE/STONE					CL	CAST IRON CENTER LINE	N	NORTHING, NORTH	ADVANC 9. DETERM
						CMA	COLD MIX ASPHALT	NGS	NATIONAL GEODETIC SURVEY	- PRIOR T DISCREE
0	IRON PIPE/IRON PIN/REBAR (WITH DIAMETER)	(T)	TELEPHONE POLE	UGC	UNDERGROUND CABLE TV	СМР	CORRUGATED METAL PIPE	NO.	NUMBER	10. EXISTIN
BP	BRASS PLUG	$\dot{\mathbf{x}}$	LAMP POST	UGE		CMU	CONCRETE MASONRY UNIT	OC	ON CENTER	ROUTE (
C	CABLE TV MANHOLE	\rightarrow	GUY ANCHOR	UGF UGF	UNDERGROUND FIBER OPTIC	CONC	CONCRETE	OD		
Ē						CONT				
						CP	CONTROL POINT	PI		
G	GAS MANHOLE		CONTROLLER CABINET	DG DG	DIGESTER GAS	CPP	CORRUGATED PLASTIC PIPE	POT	POINT ON TANGENT	INTERRU
0	OTHER MANHOLE	(FP)	FLAG POLE	P P P P	PETROLEUM MAIN	CR STN	CRUSHED STONE	PT	POINT OF TANGENT (EVECUPVE)	13. USE CAU REPLAC
T	TELEPHONE MANHOLE	0	POST	UGT	UNDERGROUND TELEPHONE	CYD	CUBIC YARD	PSI	POUNDS PER SOLER NO	14. BRACE A UTILITY
ТСІ						D		PT		15. MAINTAI 16. DO NOT
				vv vv vv vv				PVC		- 17. ALL EQU
	TRAFFIC MANHOLE	Μ	MAILBOX	W W W	- WATER SERVICE	DBL	DOUBLE	ROW	A OF-WAY	DESIGN
H	TRAFFIC HANDHOLE	MM	DOUBLE/MULTIPLE MAILBOX	FM FM	FORCEMAIN	DIA	DIAMETER	RCP	REINFORCED CONCRETE PIPE	- REMOVE SUCH DI
Ŵ	WATER MANHOLE				GRAVITY SEWER PIPE	DIP	DUCTILE IRON PIPE		ROAD	18. COORDI 19. ALL CON
		\square				DIPS			SOUTH	STREET
						F	EASTING EAST	SR	STATE ROUTE STAINI ESS STEEL	- WATER
<u>(S)</u>	SANITARY SEWER MANHOLE		SIGNAL LOOP DETECTOR BOX		TOP OF BANK/TOE OF SLOPE	EF	EACH FACE	SVA	SERVICE VALVE ASSEMBLY	21. PLACE N 22. ALL EXIS
D	DRAINAGE/STORM SEWER MANHOLE	\bigcirc	SIGNAL LOOP DETECTOR LOOP	<u></u>	CENTERLINE OF DITCH/SWALE/STREAM	EW	EACH WAY	SB	SOIL BORING	OWNER THROUG
co	SANITARY SEWER CLEANOUT	- -	SIGN - SINGLE POST	xxxx	FENCE - FIELD	EA	EACH	SCHED	SCHEDULE	23. THE WO CONDUI
ST	SEPTIC ΤΔΝΚ					EJ	EAST DEDAN RON WORKS	SDR	STANDARD DIMENSION RATIO	BE SHO
						EX		SF	SQUARE FEET	24. NEW PIF
	VALVE VAULT		SIGN - RAILROAD SIGNAL		FENCE - WOOD	EXP	EXPANSION	SHT	SHEET	25. INSPECT
	BEEHIVE INLET	<u> </u>	SIGN - RAILROAD CROSSING	<u> </u>	GUARDRAIL		FINISH FLOOR ELEVATION	SPECS	SPECIFICATION(S)	AND AD. 26. COMPLE
	CURB INLET	\bigcirc	BUSH		STREAM		FORCE MAIN	SQ	SQUARE	
			STUMP				FOUND	SRF	STATE REVOLVING FUND	SPECIFI
		<u></u>				FTG	FEET	STA	STATION	CONSTR
		***	TREE - CONIFEROUS			GALV	GALVANIZED	SYD	SQUARE YARD	PIPING (
\bigcirc	DOWNSPOUT	상	TREE - DECIDUOUS			GPS	GLOBAL POSITIONING SYSTEM	ТВМ	TEMPORARY BENCHMARK	28. LENGTH
GM	GAS METER	\bigcirc	ROCK OUTCROP			НМА	HOT MIX ASPHALT	ТС	TOP OF CASTING	TO CEN 29. NORTHI
GV	GAS VALVE	s A >	SATELLITE			HDPE		TYP		30. PLACE N
G ^S O		SPH		C		ID		USGS	US GEOLOGICAL SURVEY	- 31. VERIFY
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	GAS SERVICE VALVE		SPRINKLER CONTROL VALVE	6.2		IE	INVERT ELEVATION	VERT	VERTICAL	32. ADJUST
PV	PETROLEUM VALVE		WATER METER	C		INC	INCORPORATED	VLV	VALVE	ADJUST 33. INSTALL
<b>°</b> ^S o	PETROLEUM SHUTOFF VALVE	wv  >	WATER VALVE			INDOT	INDIANA DEPARTMENT OF TRANSPORTATION	w	WIDTH, WEST	34. ALL SAN
(GMW)	GAS STATION MONITORING WELL	nso	WATER SERVICE VALVE	YYM		INSTR	INSTRUMENT	WSE	WATER SURFACE ELEVATION	SPECIFIC WVES A
						INV	INVERT	YR	YEAR	SEWER
(GFC)	GAS STATION FILL GAP			Car Sol	now what's <b>below</b> .	*NOTE: THIS TABLE IS PLAN SET. IF A QUES	S A LISTING OF TYPICAL ABBREVIATIONS AND TION ARISES ON THE MEANING OF AN ABBREV	MAY NOT INCLUDE ALL A IATION NOT LISTED IN T	ABBREVIATIONS FOUND WITHIN THIS THIS TABLE, PLEASE CONTACT THE	35. RESET A 36. IF REQU
GW	NATURAL GAS WELL/STORAGE WELL	(w w)	WET YELL		<b>Call</b> before you dia.	ENGINEER FOR CLAR	IFICATION.		, <u>.</u>	OWNER
S P X	SPRINKLER HEAD		FUE LITERANT					UTILITY	CONTACTS	
Y	YARD HYDRANT		PROCESS VALVE	1			ELECTRIC:	CABLE	 E: WATI	ER:
*NOTE:	L THIS TABLE IS A LISTING OF TYPICAL	A SYMBOLS A	L ND MAY NOT INCLUDE ALL EXISTING	L					ARNER CABLE TOWN	

SYMBOLS FOUND WITHIN THIS PLAN SET. ALLER OPOSED ITEMS WILL BE CALLED OUT ON THEIR PLAN SHEETS. IF A QUESTION ARISES ON THE MILLION OF ANY SYMBOL NOT LISTED IN THIS TABLE, PLEASE CONTACT THE ENGINEER FOR CLAR FLIATICA. THE SYMBOLS ARE NOT TO SCALE.



DATE REVISION INITIALS SCALE VERIFICATION NO. DRAWN BY MLN CHECKED BY ALT BAR IS ONE INCH LONG ON ORIGINAL DRAWING KRCJ APPROVED BY ISSUE DATE **APRIL 2022** PROJECT NUMBER 247521-04-001



BLOOMINGTON, IN 47403

<u>GAS:</u> VECTREN 2520 LINCOLN DRIVE CLARKSVILLE, INDIANA 47129

CONTACT: FRANK WARD

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**2022 SANITARY SYS** 

DESCRIPTIONS	





SYMBOLS AND ABBREVIATION

RAL NOTES:

IF REQUIRED, PLACE TEMPORARY OVERNIGHT AGGREGATE WEDGES AT DRIVEWAYS TO ALLOW PROPERTY OWNER ACCESS.

ADJUST SEWER LATERALS AS NECESSARY TO AVOID CONFLICTS. LATERALS THAT REQUIRE FIELD ADJUSTMENT SHALL BE LAID AT THE MINIMUM SLOPE AS SPECIFIED IN THE DRAWINGS AND SPECIFICATIONS. INSTALL SEWER SERVICE LATERALS TO THE RIGHT-OF-WAY OR EDGE OF EASEMENT. (CLIENT DEPENDANT) ALL SANITARY SEWER PIPE, INCLUDING GRAVITY SEWERS, LATERAL WYES AND SERVICE LATERAL PIPE LOCATED WITHIN 50 FEET OF PRIVATE WELLS SHALL BE SDR 21 PVC WATER GRADE PRESSURE PIPE UNLESS SPECIFICALLY INDICATED OTHERWISE. ALL SANITARY SEWER PIPE, INCLUDING GRAVITY SEWERS, LATERAL WYES AND SERVICE LATERAL PIPE NOT LOCATED WITHIN 50 FEET OF PRIVATE WELLS SHALL BE SDR 35 PVC SEWER GRADE PIPE, UNLESS SPECIFICALLY INDICATED OTHERWISE. RESET ALL MAILBOXES AND SIGNS DISTURBED BY CONSTRUCTION ACTIVITIES.

NOTIFY THE ENGINEER IF ANY CONFLICTING INFORMATION BECOMES APPARENT IN THE CONTRACT DOCUMENTS AS SOON AS POSSIBLE AND PRIOR TO THE COMMENCEMENT OF ANY WORK IN THE VICINITY OF OR RELATIVE TO THE APPARENT CONFLICT SO THAT CLARIFICATION MAY OCCUR PRIOR TO CONSTRUCTION. ANY ALTERATIONS TO THESE DRAWINGS NOT AUTHORIZED BY WESSLER ENGINEERING AND NOT IN ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS AND RECORDS ON FILE AT WESSLER ENGINEERING SHALL RELIEVE WESSLER ENGINEERING OF ANY RESPONSIBILITY FOR THE ACCURACY OF THE DRAWINGS. USE CAUTION DURING THE EXECUTION OF WORK TO PREVENT DAMAGE TO STATE, COUNTY, MUNICIPAL, AND PRIVATE PROPERTY. REPAIR ALL DAMAGES AS A RESULT OF OPERATIONS, INCLUDING DAMAGE TO DRAINAGE STRUCTURES, FIELD TILES, PUBLIC/PRIVATE ROADS, AND LANDSCAPING (INCLUDING FENCING), REPAIR AND REPLACE DAMAGED ITEMS AT NO ADDITIONAL COST TO THE OWNER. PERFORM ALL REPAIR AND REPLACEMENT WORK TO THE SATISFACTION OF THE PERMITTING AGENCY, THE OWNER AND THE ENGINEER. TAKE CARE TO AVOID DAMAGE TO PAVED AREAS WHICH ARE NOT SPECIFICALLY CALLED OUT FOR REPAIR OR REPLACEMENT. REPAIR, OR REPLACE ALL SUCH PAVEMENTS WHICH ARE DAMAGED BY CONSTRUCTION ACTIVITIES AND CONSTRUCTION TRAFFIC AT NO ADDITIONAL COST TO THE OWNER.

OBTAIN ALL TEMPORARY EASEMENTS REQUIRED FOR THE CONSTRUCTION OF THE OWNER. OBTAIN ALL TEMPORARY EASEMENTS REQUIRED FOR THE CONSTRUCTION OF THE OPECATION ADDITIONAL COST TO THE OWNER. COMPLY WITH ALL APPLICABLE PERMITS AND REGULATIONS. APPLICABLE PERMIT ISSUED TO THE OWNER WILL BE MADE AVAILABLE TO THE CONTRACTOR. CONTACT ALL APPLICAPES PERMITTING AGENCIES WITHIN THE TIME PERIOD SPECIFIED BY THAT AGENCY PRIOR TO BEGIN WAY COUS AUCTION. ALL PRIVATE WELL LOCATIONS SHOWN ON THE DRAWINGS ADE APPRIX MATE. FIELD VERIFY AND DETERMINE EXACT LOCATIONS OF ALL DRIVATE WELLS IN LHE DRIVELES AND RECORD.

ALL FRIVATE WELL LOCATIONS SHOWN ON THE DRAWINGS THE TRANSMATE. FIELD VERIFY AND DETERMINE EXACT LOCATIONS OF ALL PRIVATE WELLS IN THE PROJECT AREA. ALL EXISTING AND NEW UTILITY INFORMATION, INCLUING AUTHOT LIMITED TO LOCATION, SIZE AND INVERT ELEVATION, IS SHOWN BASED UPON AVAILABLE INFORMATION. THE ENGINEER DOES NOT GUARANTEE OR ASSUME SUCH INFORMATION TO BE TRUE, AND RATE ALL INCLUSIVE OR EVEN APPROXIMATE. CONTACT THE INDIANA UNDERGROUND PLANT PROTECTION SERVICE (IUPPS) AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVEY. CONTACT NON-MEMBER UTILITIES DIRECTLY.

DETERMINE WHICH UTILITIES MATEONFLICT WITH WORK AND VERIFY THEIR LOCATION, SIZE AND ELEVATION PRIOR TO CONSTRUCTION WILDET RMINE IF THERE ARE ANY DISCREPANCIES OR CONFLICTS. IF ANY DISCREPANCIES OR CONFLICTS DE DISCOVERED, NOTIFY THE ENGINEER AS SOON AS POSSIBLE. EXISTING UTILITY SERVICE LIVES TO INDIVIDUAL CUSTOMERS MAY NOT BE SHOWN ON THE DRAWINGS. ASSUME THAT I'VER ROUND SERVICE LINES FOR ALL UTILITIES EXIST TO EACH PROPERTY ALONG THE ROUTE OF THE PLA NED IMPROVEMENTS. COORD AT ALL WORK WITH THE RESPECTIVE UTILITIES. SCHEDULE WORK ACCORDINGLY, AND NOTIFY ALL UTILITIES ALL NIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY CONSTRUCTION ACTIVITY.

OR INATE PLANNED UTILITY SERVICE INTERRUPTIONS WITH THE RESPECTIVE UTILITIES AND THE ES' AFFECTED CUSTOMERS. SERVICE INTERRUPTIONS SHOULD NOT LAST MORE THAN FOUR (4) OURS. GIVE WRITTEN NOTICE TO ALL AFFECTED UTILITY CUSTOMERS AND PROPERTY OWNERS AT LEAST TWENTY-FOUR (24) HOURS BUT NOT MORE THAN SEVENTY-TWO (72) HOURS PRIOR TO ANY PLANNED INTERRUPTION OF UTILITY SERVICE.

USE CAUTION DURING THE EXECUTION OF WORK TO PREVENT DAMAGE TO EXISTING UTILITIES. REPAIR OR REPLACE ALL PUBLIC AND PRIVATE FACILITIES DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS. BRACE AND PROTECT ALL UTILITY POLES AND EXISTING STRUCTURES ADJACENT TO NEW EXCAVATIONS. UTILITY POLE BRACING SHALL BE AS DIRECTED BY THE GOVERNING UTILITY.

MAINTAIN EXISTING STORMWATER DRAINAGE FOR THE ENTIRE DURATION OF THE PROJECT.

DO NOT DISTURB EXISTING MANHOLES OR INLETS, UNLESS NOTED OTHERWISE. ALL EQUIPMENT, APPURTENANCES AND PIPING REMOVED AS PART OF THE DEMOLITION SHALL FIRST BE OFFERED TO THE OWNER FOR SALVAGE. DELIVER SALVAGED ITEMS SELECTED BY OWNER TO A LOCATION DESIGNATED BY THE OWNER OR ENGINEER. IN THE EVENT THE OWNER DOES NOT ELECT TO KEEP THE REMOVED ITEMS, REMOVE SUCH ITEMS FROM THE SITE AND DISPOSE OF AT A LOCATION APPROVED FOR SUCH DISPOSAL AT THE CONTRACTOR'S EXPENSE.

COORDINATE STAGING AREA LOCATIONS WITH THE OWNER. ALL CONSTRUCTION TRAFFIC SHALL USE MAJOR ROADS. NO CONSTRUCTION TRAFFIC SHALL USE LOCAL

STREETS FOR INDIRECT ACCESS. TO CONTROL DUST, REMOVE SOIL FROM STREETS USED BY CONSTRUCTION TRAFFIC DAILY, VACUUM AND WATER AS NECESSARY AND/OR AS DIRECTED BY THE OWNER.

PLACE NEW ASPHALT PAVEMENT FLUSH WITH ADA RAMPS. ALL EXISTING PIPING MAY NOT BE SHOWN. REFERENCE EXISTING RECORD DRAWINGS ON FILE WITH THE OWNER AND WESSLER ENGINEERING FOR ADDITIONAL INFORMATION OF EXISTING PIPING AND CONDUIT THROUGHOUT THE PLANT SITE.

THE WORK SHOWN ON THESE DRAWINGS IS OCCURRING ON A PLANT SITE IN WHICH BURIED ELECTRICAL CONDUIT AND SMALL PIPING MAY EXIST THROUGHOUT AND IN THE VICINITY OF THE PROJECT AND MAY NOT BE SHOWN ON THESE DRAWINGS. EXPECT TO ENCOUNTER BURIED ELECTRICAL AND COMMUNICATIONS WIRING, WITH OR WITHOUT CONDUIT, SMALL PIPING, AND FIELD TILE WHILE DIGGING ON THIS SITE. NEW PIPING CARRYING LIQUIDS SHALL HAVE MINIMUM COVER AS DEFINED IN THE MISCELLANEOUS SITE DETAILS, UNLESS SPECIFIC ELEVATIONS ON THE DRAWINGS INDICATE OTHERWISE.

INSPECT THE SITE PRIOR TO BIDDING TO UNDERSTAND THE EXTENT OF THE DEMOLITION WORK INVOLVED AND ADJUST BID ACCORDINGLY.

COMPLETELY REMOVE UNDERGROUND PIPING THAT HAS PREVIOUSLY BEEN OR WILL BE TAKEN OUT OF SERVICE, IN CONFLICT WITH THE NEW WORK. UNLESS OTHERWISE NOTED, ABANDON IN PLACE ALL UNDERGROUND PIPING NOT IN CONFLICT WITH THE NEW WORK. DO NOT LEAVE ABANDONED PIPING LIVE. SEE SPECIFICATION SECTION 02050 FOR DEMOLITION PROCEDURES. SEE SPECIFICATION SECTION 01550 FOR PLANT OPERATIONS DURING CONSTRUCTION FOR COORDINATION OF DEMOLITION WORK AND NEW CONSTRUCTION.

ALL EQUIPMENT TO BE REMOVED THAT HAS ELECTRICAL COMPONENTS, CONDUIT AND WIRING, OR SMALL PIPING CONNECTED SHALL HAVE THE ELECTRICAL COMPONENTS AND SMALL PIPING REMOVED BACK TO THE

LENGTHS OF SEWERS AS SHOWN ON THE DRAWINGS AND INDICATED AS LINEAR FEET (LF) ARE FROM CENTER TO CENTER OF STRUCTURES.

NORTHING AND EASTING INFORMATION IS GIVEN AT CENTER OF STRUCTURE UNLESS OTHERWISE NOTED. PLACE NO. 8 CRUSHED AGGREGATE BETWEEN PIPES AT ALL PIPE CROSSINGS TO PREVENT PIPE SETTLEMENT UNLESS SHOWN OTHERWISE.

VERIFY EXISTING SEWER INVERTS AND LOCATIONS PRIOR TO CONSTRUCTION AND DETERMINE IF THERE ARE ANY DISCREPANCIES OR CONFLICTS.

SHEET NO.
<b>1G3</b>
PAGE NO.
3



![](_page_4_Picture_0.jpeg)

More than a Project™

Sch

PROJECT NUMBER

247521-04-001

ELECTRICAL

5

![](_page_5_Picture_0.jpeg)

TEM IMPROVEMENTS	SHEET NO.
	クロク
OVER, INDIANA	
	PAGE NO.
RICAL SITE PLAN	6
	6

![](_page_6_Figure_0.jpeg)

				6
				8
530			HANOVER PRESBYTERIAN TRUSTEE	83 89
	540		JUD LOWERY LAINE	220
	550			e e e e e e e e e e e e e e e e e e e
ABANDON IN PLACE	560			
AP	570		(WOODS)	$\pm = = = = = = = = = = = = = = = = = = =$
EX 18" PVC	=======================================			
SPH)				EXRO
		580	VER BEACH HILL	
		090		THE COLOR AND
		600		
S)		610		
		620		IE 393.22
		630	019	
PLA	N - I INF A	16		
<u>.                                     </u>	SCALE: 1" = 30'	SSIC		
		Nes	//	
	HANOV PR SBY	RIAN TRUSTEE		
		(WOODS)		EX ROW
	EX 18" PVC = = = = = = = = = = = = = = = = = = =	 ASPH)CP 17		Q
NOVEN BEACH				EX ROW
650				(WOODS)
660				
	······			TRUSTEES OF HANOVER COLLE
(WOODS)	680			522 BALL DRIVE
	690	APPROXIMATE LOCATION OF 150-FEET OF EXISTING PVC		APPROXIMATE LOC 100-FEET OF EXIS SEWER TO BE
	, 700	SEWER TO BE REMOVED		FROM PHI GAMMA DEL
		720	1	
		730		
	N - LINE A		•	
S S S S S S S S S S S S S S S S S S S	SCALE: 1" = 30'			PHI GAMMA DELTA HOUSE
DESCRIPTIONS	WINNINGSE CAST PARTIE		202:	2 SANITARY SYS'
	Hegister 6			TOWN OF HAN
	STATE OF			
	252.04.0	engineeRing More than a Project™	EXI	STING SEWER DE
	Kprink a trees processor			

![](_page_6_Figure_3.jpeg)

![](_page_7_Figure_0.jpeg)

ISSUE DATE

APRIL 2022

PROJECT NUMBER 247521-04-001

HANOVER PRESBYTERIAN TRUSTEE (WOODS) 300 LOWERY LANE . 36 37 26 26 - CUT AND CAP LINE TC 703.09 HANOVER BEACH HILL RD 18" PVC IE (NW) 694.89 18" PVC IE (E) 694.79 (WOODS) REMOVE ABOVE GROUND LATERAL TO BE REMOVED

2022 SANITARY SYS		ROSE CASTRO	DESCRIPTIONS
TOWN OF HANG		No. 8	
		B STATE OF	
EXISTING SEWER DE	More than a Project™	252.02	
		Mint a the Ackson	

![](_page_7_Picture_4.jpeg)

02101 AND DETAILS ON SHEET 6EC1.

# TEM IMPROVEMENTS

NOVER, INDIANA

EMOLITION - LINE 2

![](_page_7_Picture_9.jpeg)

![](_page_8_Figure_0.jpeg)

![](_page_9_Figure_0.jpeg)

![](_page_10_Figure_0.jpeg)

<b>FEM IMPROVEMENTS</b>	SHEET NO.
OVER, INDIANA	<b>3Y1</b>
	PAGE NO.
AND PROFILE	11

![](_page_11_Figure_0.jpeg)

![](_page_11_Figure_2.jpeg)

![](_page_12_Figure_0.jpeg)

![](_page_13_Figure_0.jpeg)

![](_page_14_Figure_0.jpeg)

![](_page_15_Figure_0.jpeg)

SHEET NO.
<b>3Y6</b>
PAGE NO.
16

![](_page_16_Figure_0.jpeg)

	705
	765
	760
	755
	750
	745
	740
55 88 726.42 SE) 723.88 EEP) LINE FULL DEPTI	735
EPOXYL EPOXYL	730
	725
J	720

TEM IMPROVEMENTS	SHEET NO.
OVER, INDIANA	<b>3Y7</b>
	PAGE NO.
AND PROFILE	17

![](_page_17_Figure_0.jpeg)

![](_page_18_Figure_0.jpeg)

![](_page_19_Picture_0.jpeg)

CONTRACTOR COORDINATE NEW SERVICE WITH DUKE								
		) MOUNTED TR/ DUKE ENERGY	ANSFORMER					
				65K)	W NATURA	AL GAS GE <b>480V,3</b>	ENERATOR (GEN-CLS)	
2"C, 3#2,#2N, #6G	AUTOMATIC TRAN 100A, 480V, 3P, RATED, NEM ENCLOS	ISFER SWITCH 3PH, 3W, SE A 4X SST SURE					)100AF	
#6 BARE COPPEF GROUNE			1"C,4; <u>2"C, 3#2, ;</u> — 3"C, 3#2, #6G	#14 <b>—</b> #6G <b>—</b>		₽ <u></u>		
1"C, 2#1 ALARM.COM PANEL CLS	2, #12G			1"C,4 1"C,12 1"C,23	2#14 2#14 #10,#12G			
AUDIBLE HORN WITH SILENCE PUSHBUTTON 1"C,2#12,#120 PROVIDE WEATHER PROOF		CP-CLS	TO FLOW M	1ETER			TO FUTURE ODOR CONTROL 2"C, STUB UP 12" ABOVE	E
CORROSION RESISTANT RATED LIGHT SWITCH 120V GFCI WP CF RECEPTACLE WITH IN-USE COVEF			1"C, CAB 1"C,	MANU BLE 2#12,	JFACTURE #12G	:R'S 5	SHOWN ON SHEETS	
3"C, MANUFACTUREF PROVIDED CABLE 3"C, MANUFACTUREF PROVIDED CABLE	HI LEVEL ALARM PUMP ON		)					1
SUBMERSIBLE PRESSURE TRANSDUCEE	PUMP OFF OFF LOW ALARM BACKUP FLOATS (4)		3"C, MAN SUP	VFD R NUFAC PLIED	RATED TURER D CAPLE	Se	,0,,,	
CO	ہے۔ <u>+80V – 1</u> LLEGE LIFT S	12 CLS-1 P-CL 3PH SE STATION	2) S-2 RVKE					
		RAM FNONE						
GENERAL NOTES 1 LIFT STATION PUMP MOTORS ARE TOBE DUTY RATED FOR USE ON VARIABLE TRE DRIVES.	RVERTER EQUENCY							
<b>KU</b>	SCALE VERIFICATION	DRAWN BY	JRW	NO.	DATE	INITIALS	RE	VISIO
	BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	MLW			$\left  \right $		
		APPROVED BY	WCM E DATE					
			L 2022					
		24752	1-04-001					

![](_page_20_Figure_2.jpeg)

2022 SANITARY SYSTEM

![](_page_20_Picture_7.jpeg)

![](_page_21_Picture_0.jpeg)

PROJECT NUMBER

247521-04-001

![](_page_21_Picture_2.jpeg)

**REVISION DESCRIPTIONS** 

![](_page_21_Picture_4.jpeg)

![](_page_21_Picture_5.jpeg)

DEMOLISH EXISTING LIFT STATION AND VALVE VAULT IN ITS ENTIRETY AND BACKFILL PER SPEC 02200. DEMOLISH WIRING BACK TO SOURCE AS REQUIRED IN SPECIFICATIONS

**2022 SANITARY SYST** 

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**EXISTING PLANT LIFT STATION - D** 

TEM IMPROVEMENTS	SHEET NO.
OVER, INDIANA	4V I
	PAGE NO.
EMOLITION PLANS AND SECTION	22

![](_page_22_Picture_0.jpeg)

![](_page_23_Figure_0.jpeg)

![](_page_24_Figure_0.jpeg)

![](_page_25_Figure_0.jpeg)

![](_page_26_Picture_0.jpeg)

TEM IMPROVEMENTS	SHEET NO.
OVER, INDIANA	<b>5E1</b>
	PAGE NO.
E - ELECTRICAL PLANS	27

	TROL SCH		IDFRAT			
PRECONSTRUCTION ACTIVITIES: POST THE FOLLOWING INFORMATION NEAR THE MAIN ENTRANCE OF THE PROJECT SITE OR AT A PUBLICLY ACCESSIBLE LOCATION: NOTICE OF INTENT (NOI) DOCUMENT, COPY OF THE PUBLIC NOTICE, NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT NUMBER, NAME, ADDRESS, AND PHONE NUMBER OF THE LOCAL CONTACT PERSON, AND LOCATION OF A COPY OF THE CONSTRUCTION DRAWINGS AND STORMWATER POLLUTION PREVENTION PLAN (SWP3).	AUTHORIZATION AFTER SUBMITTA LOCAL AUTHORIT	UNDER THE CSGF L OF THE NOTICE Y BY THE OWNEF	P IS EFI E OF IN R.	FECTIVE 4 TENT TO I	B-HOUR	S D BLANKET I ANCI 3 USI WH
MAINTAIN DOCUMENTATION ON-SITE PER SPECIFICATION 02101 FOR THE PROJECT MANAGEMENT LOG. THE SWPPP SHOULD BE ONSITE AND SELF-MONITORING INSPECTION REPORTS MUST BE AVAILABLE WITHIN 48 HOURS OF REQUEST. INFORM OR TRAIN PERSONNEL ASSOCIATED WITH THE PROJECT OF THE TERMS AND CONDITIONS OF THE CSG AND THE SWPPP REQUIREMENTS.	H }P					BL/ AN
REVIEW THE EROSION CONTROL SCHEDULE ON THE DRAWINGS AND REVISE AS NEEDED TO PHASE CONSTRUCTION ACTIVITIES TO MINIMIZE THE FOOTPRINT OF DISTURBED UNSTABLE AREAS. SUBMIT A REVISED EROSION CONTROL SCHEDULE AS NEEDED FOR TEMPORARY AND PERMANENT EROSION CONTROL WORK AS APPLICABLE.	COMPLETE BEFO	RE CONSTRUCTIO	ON BEG	GINS.		
CONSTRUCTION ACCESS - ENTRANCE TO SITE, CONSTRUCTION ROUTES, AREAS DESIGNATED FOR EQUIPMENT PARKING OR MATERIAL STAGING AND WASTE HANDLING.	THIS IS THE FIRS SOON AS CONSTI BARE AREAS WIT VEGETATION.	Γ LAND-DISTURBI RUCTION BEGINS Η AGGREGATE ΑΙ	NG ACT , STABI ND TEM	FIVITY. AS LIZE ANY IPORARY		DIT
SEDIMENT TRAPS AND BARRIERS - BASIN TRAPS, SILT FENCE AND PERIMETER PROTECTION.	AFTER CONSTRU BE INSTALLED, W AND BARRIERS A PROTECTION FOF BUFFERS.	CTION IS ACCESS ITH THE ADDITION S NEEDED DURIN R NATURAL FEATI	SED, BA N OF M G GRA JRES, 1	SINS SHA ORE TRAF DING. SET FREES AN	ILL PS UP D	
RUNOFF CONTROL - DIVERSIONS, PERIMETER PROTECTION, CHECK DAMS, OUTLET PROTECTION.	RUNOFF CONTRO AFTER THE INSTA BEFORE LAND GF CONTROL MEASL GRADING.	L PRACTICES SH. LLATION OF SED ADING. ADDITION IRES MAY BE INS	ALL BE IMENT IAL RU TALLEC	INSTALLE TRAPS AN NOFF DURING	ED ND	PROD
RUNOFF CONVEYANCE SYSTEM - STABILIZE STREAM BANKS, STORM DRAINS, CHANNELS, INLET AND OUTLET PROTECTION, SLOPE DRAINS.	AS NECESSARY, S SLOPES OF RUNC USE EROSION CC TO PREVENT ERC TO PREVENT SEE DRAINAGE SYSTE PREVENT EROSIC	STABILIZE STREA )FF SYSTEMS AS INTROL BLANKET )SION. INSTALL II )IMENTS FROM EI EMS. PROTECT S )N.	M BANI SOON S OR S NLET P NTERIN TORM (	KS AND SI AS POSSI LOPE DRA ROTECTIC G STORM DUTLETS	DE BLE. AINS DN TO	1. N <u>NOTE</u> 1. P D <u>MAIN</u> 1. IN E
LAND CLEARING AND GRADING - SITE PREPARATION (CUTTING, FILLING, AND GRADING, SEDIMENT TRAPS, BARRIERS, DIVERSIONS, DRAINS, SURFACE ROUGHENING).	IMPLEMENT CLEA INSTALLATION OF CONTROL MEASL CONTROL MEASL BORROW AND DI	RING AND GRADI SEDIMENT TRAP IRES, AND INSTAL IRES AS GRADINC SPOSAL AREAS A	NG AFT S AND L ADDI G CONT S NEED	TER RUNOFF TIONAL INUES. CL DED.	EAR	2. II S 3. C
SURFACE STABILIZATION - TEMPORARY AND PERMANENT SEEDING, MULCHING, SODDING, RIPRAP, EROSION CONTROL BLANKET.	APPLY TEMPORA MEASURES IMME WHERE WORK HA DELAYED.	RY OR PERMANE DIATELY TO ANY AS BEEN EITHER (	NT STA DISTUF COMPL	BILIZING RBED ARE ETED OR	AS	
CONSTRUCTION - STRUCTURES, UTILITIES, PAVING, CONCRETE WASHOUT, AND CONSTRUCTION ENTRANCES.	DURING CONSTRUSEDIMENTATION NEEDED.	JCTION, INSTALL CONTROL MEASL	ANY EI JRES TI	ROSION A HAT ARE	ND	
LANDSCAPING AND FINAL STABILIZATION - TOPSOILING, TREES AND SHRUBS, PERMANENT SEEDING, MULCHING, SODDING, RIPRAP.	THIS IS THE LAST DISTURBED AREA AREAS, AND REM MEASURES. FINA DENSITY OF 70% NOTIFICATION TC HAS BEEN STABIL MATERIALS, WAS	CONSTRUCTION S, INCLUDING BC OVE ALL TEMPOR L STABILIZATION VEGETATION CO THE OWNER WH IZED AND ALL CC TES, AND EQUIPIN	PHASE PROW RARY C IS WHE VER IS EN THE DNSTRU IENT H	E. STABILI AND SPO ONTROL EN A UNIF MET. PRO E ENTIRE S JCTION AVE BEEN	ZE ALL IL ORM VIDE SITE I	
EROSION CON		EDULE				
		<b>``</b>	C	5	Se	MECHANICAL PR GRAB TENSILE S GRAB TENSILE EL PUNCTURE ST MULLEN BURST S TRAPEZOID TEAR UV RESIST APPARENT OPEL
Forviewin	19 K					FLOW RA PERMITTI MAINTENANCE: 1. DURING THE ACTI SPECIAL ATTENTI OBSERVE WHERE PROVIDED. 2. DISPOSE OF ACC SPECIFICATIONS. 3. REPLACE THE BA RATE TO AN IMPF SOURCE: KRISTAR DANDY DEWATERING SEDCATCH
•		<del></del>	NO	DATE	INITIALS	REVISION DESCRIPTIONS
SCALE VERIFICA	TION DRAWN BY					
SCALE VERIFICA BAR IS ONE INCH LON ORIGINAL DRAWIN	G ON G ON APPROVED BY	MLN ALT KRCJ				
SCALE VERIFICA BAR IS ONE INCH LON ORIGINAL DRAWIN	TION DRAWN BY IG ON IG APPROVED BY ISS APF	MLN ALT KRCJ UE DATE XIL 2022				

![](_page_27_Figure_2.jpeg)

2022 SANITARY SYST

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## **EROSION CONT**

TEM IMPROVEMENTS	SHEET NO.
OVER, INDIANA	<b>6EC1</b>
	PAGE NO.
ROL DETAILS	28

![](_page_28_Figure_0.jpeg)

![](_page_28_Picture_15.jpeg)

29

SHEET NO. **6EC2** 

TREE DIAMETER (DBH)	TREE PROTECTION ZONE (RADIUS FROM TRUNK)	TREE DIAMETER (DBH)	TREE PROTECTION ZONE (RADIUS FROM TRUNK)
1"	2'	26"	22'
2"	2'	27"	23'
3"	3'	28"	
4"	3'	29"	
5"	4'	30	25'
6"	5'	31"	26'
7"	6'	52"	27'
8"	7'	33"	28'
9"		34"	28'
10"		35"	29'
11	9'	36"	30'
	10'	37"	31'
13"	11'	38"	32'
14"	12'	39"	33'
15"	13'	40"	33'
16"	13'	45"	38'
17"	14'	50"	42'
18"	15'	55"	46'
19"	16'	60"	50'
20"	17'	65"	54'
21"	18'	70"	58'
22"	18'	75"	63'
23"	19'	80"	67'
24"	20'	85"	71'
25"	21'	90"	75'

![](_page_29_Figure_0.jpeg)

J:\Hanover\Projects\247521 Hanover 2022 San System Impr\CAD\DWG\Sheets\247521-MD.dwg | Layout: 6C1 | Plotted: 05/03/22 @ 03:58:10 | LastSave

![](_page_30_Figure_0.jpeg)

MISCEL	LANEO

SCALE: NONE	
TEM IMPROVEMENTS	SHEET NO.
OVER, INDIANA	6C2
	PAGE NO.
OUS DETAILS	31

NOTES: 1. ALL FENCE BOARDS AND RAILS SHALL BE EITHER CEDAR OR PRESSURE TREATED LUMBER.

2. ACCESS GATES ARE TO MEET AN OPENING SIZE SHOWN ELSEWHERE. THE GATE FRAME AND MOUNTING HARDWARE SHALL BE HOT DIPPED GALVANIZED STEEL GATE POSTS SHALL BE 6"X6" WOODEN POSTS. GATE PANELS SHALL BE 1"X6" HORIZONTAL SLATS TO MATCH THE FENCING.

3. GATE SHALL HAVE A LATCH AND LATCH CATCH CENTER RESTS AND IRON BOLT FOR CLOSED POSITION, AND CHAIN HOLD FOR OPEN POSITION. CENTER STOP TO BE ROUND DISC WITH GROOVE TYPE. GATE LATCH SHALL BE PAD-LOCKABLE, WHICH MAY BE ATTACHED AND OPERATED FROM EITHER SIDE OF THE GATE

![](_page_31_Figure_0.jpeg)

A + KITAN	NOSE CASTAG No. 1190086	
BOL	STATE OF	C HIM COLOS
	Knu atto pickon	<b>'V'</b>

![](_page_32_Figure_0.jpeg)

![](_page_32_Picture_4.jpeg)

![](_page_32_Picture_5.jpeg)

2" S.S. UNION

2" S.S. GATE VALVE —

FORCE MAIN/LOW PRESSURE

SEWER MAIN

6" OF NO.8 CRUSHED

STONE OR FRACTURED -

FACE AGGREGATE

COUPLING

**INLINE AIR RELEASE VALVE** 

SCALE: NONE

PIPE SUPPORT

![](_page_32_Picture_6.jpeg)

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	Louis a then brows

**2022 SANITARY SYST** 

ELBOW

KOR-N-SEAL

OR EQUAL

S.S. BLOW OFF VALVE

- MANHOLE WALL

CONCRETE BASE ON

6" OF NO.8 BEDDING

TOWN OF HAN

- TRAFFIC CONTROL DRUM
- **H** BARRICADE TYPE IIIB
- (G20-2) "END ROAD WORK" (G20-2)
- **5** FLAGGER SIGN (W20-7)
- (W20-4) "ONE LANE ROAD AHEAD"
- (3) "ROAD WORK XXX FT" (W20-1)
- "ROAD WORK AHEAD" (W20-1) OR "UTILITY WORK AHEAD" (W21-7)
- WORKSITE ADDED PENALTY (G20-7) ONLY FOR INDOT ROADS
- TYPE A CONSTRUCTION WARNING LIGHT
- WORK AREA(S)

![](_page_32_Figure_39.jpeg)

### CONSTRUCTION SIGN PLACEMENT SCALE: NONE

SPEED	DISTANCE (FEET)								
(MPH)	А	В	в С		E				
20 OR LESS	120	100	100	100	100				
25	160	100	100	100	100				
30	200	100	100	100	100				
35	280	100	350	350	350				
40	320	100	350	350	350				
45	360	100	500	500	500				
50	440	100	500	500	500				
55	520	100	500	500	500				
60	600	100	1,000	1,600	2,640				
65	680	100	1,000	1,600	2,640				
70	760	100	1,000	1,600	2,640				

NOTES: 1. DISTANCES SHOWN ARE APPROXIMATE. ADJUST SIGN FOR CURVES, HILLS, INTERSECTIONS, DRIVEWAYS, ETC TO IMPROVE SIGN VISIBILITY.

2. THE SPACING OF CHANNELIZING DEVICES SHOULD BE A DISTANCE IN FEET EQUAL TO THE SPEED LIMIT IN MPH WHEN USED FOR TAPER CHANNELIZATION, AND A DISTANCE IN FEET EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH USED FOR TANGENT CHANNELIZATION.

### ADVANCE WARNING SIGN AND FLAGGER OPERATION SPACING SCALE: NONE

TEM IMPROVEMENTS	SHEET NO.
OVER, INDIANA	6C4
	PAGE NO.
DUS DETAILS	33

<b>A</b> <i>u</i>	<u>LIGHTING</u>					WIRING	G		
A #	SURFACE/PENDANT MOU	JNTED LIGHT ES TYPE, # DENOTED				CONDUI	Г НОМЕ	RUN	
	CIRCUIT, SHADING DENC AND/OR NIGHT LIGHT	DTES EMERGENCY				CONDUI	T EXPO	SED	
A #	SURFACE/PENDANT MOL	JNTED LIGHT				CONDUI	T CONC	EALED	
	FIXTURE LETTER DENOT CIRCUIT, SHADING DENO AND/OR NIGHT LIGHT	ES TYPE, # DENOTES DTES EMERGENCY		*		FLEXIBLI	E COND	UIT	
A #	RECESS MOUNTED LIGH DENOTES TYPE, # DENO SHADING DENOTES EME NIGHT LIGHT	T FIXTURE LETTER TED CIRCUIT, RGENCY AND/OR			X00	<u>SCHEI</u>	ΜΑΤΙΟ	<u>CS</u>	
A #	RECESS MOUNTED LIGH DENOTES TYPE, # DENO SHADING DENOTES EME	T FIXTURE LETTER TES CIRCUIT, RGENCY AND/OR			00X	3-POSITI HAND - C	ON SEL )FF - AU	ECTOR SWITCH ITO	
Å #	H.I.D. OR INCANDESCEN MOUNTED LETTER DENO	T FIXTURE CEILING OTES TYPE, #				PUSHBU TEXT DE	TTON S NOTES	WITCH N.O. LEGEND PLATE	
$\overset{A}{\rightarrowtail}$	WALL MOUNTED FIXTUR	E LETTER				DENOTE	S LEGE	ND PLATE	
	DENOTES TYPE, # DENO	TES CIRCUIT		E-STOP		MUSHRC STOP PU	OM HE	AD EMERGENCY TON SWITCH N.C.	
P	WALL MOUNTED PHOTO	CELL		<u>e   o</u>		MAINTAII LEGEND	NED TE PLATE	XT DENOTES	
$\bigotimes$	CEILING MOUNTED EXIT	SIGN		STOP			TTON S	WITCH N.C. WITH	
$\mathbf{\nabla}$	WALL MOUNTED EXIT SI	GN		<b>ee</b>		LEGEND	PLATE	DENOTED	
₩#	EMERGENCY LIGHT FIXT DENOTES CIRCUIT	URE #		0 0		DISCON	NECT S	WITCH N.O.	
٩	POLE MOUNTED FIXTUR	E		<del>0</del> 0		DISCON	NECT S	WITCH N.C.	
	RECEPTACLE			TS S				SWITCH OR	
<b># ~</b>	DUPLEX RECEPTACLE			5			/BER	I.O. TEXT DENOTES	
# <del>(</del>	DENOTES UNINTERRUPT # DENOTES CIRCUIT	TIBLE POWER SUPPLY		<del>۲۵ و ۲</del>		TEMPER THERMC TAG NUN	ATURE STAT N /IBER	SWITCH OR I.C. TEXT DENOTES	
<u></u>	SINGLE OUTLET RECEPT	TACLE				PRESSU DENOTE	RE SWI [:] S TAG N	TCH N.O. TEXT NUMBER	
				PS		PRESSU			
.0.						DENOTE	S TAG N	NUMBER	
						LEVEL S	WITCH I	N.O. TAG NUMBER	6
	PANELS AND BO	XES		LS		ILAI DE	NOTEO		
JB	JUNCTION BOX			J.		LEVEL S	WITCH I S TAG N	N.C. TEXT 4 NUMBER (	180- (3)
РВ	PULL BOX					ON DELA	Y TIME	D SWITCH N.O.T.C. TEXT	( )
	PANEL			$\sum_{i=1}^{n}$		DENOTE	S TAG N	NUMBER	
	HVAC AND FIRE	ALARM		o TR		ON DELA	Y TIME	D SWITCH N.C.T.O. TEXT	
	FIRE ALARM PULL STATI								
		ANEL		$\sim$			S TAG N	NUMBER	. 1
Ĭ	HORN/LIGHT DEVICE					OFF DEL		ED SWITCH N.C.T.C. TEXT	
DD	DUCT DETECTOR			+		DENOTE	STAGT	NUMBER	V
<u> </u>	SMOKE DETECTOR SUBS	SCRIPT		o TS		TORQUE TEXT DE	SWITC	H TAG NUMBER	
O _Z	Z DENOTES IONIZATIO P DENOTES PHOTOEL T DENOTES THERMAL	N ECTRIC		LS		LIMIT SW TEXT DE	/ITCH NOTES	TAGOMER	
$(\overline{})$	THERMOSTAT			# 		CONTAC		MALLY (N) #	
R	AMBIENT TEMPERATURE	TRANSMITTER (EXISTING)				DENOTE	sò 11	MBER	
	UNIT HEATER							MALLY CLOSED) #	
$\mathbf{\nabla}_{\#}$	WALL MOUNTED GAS DE	TECTION FIXTURE					O O OIL		
	<u>SWITCHES</u>			R)		INDICATO DENOTE	or ligi S colo	HT - LETTER IR	
	WALL SWITCH SUBSCRIPT DENOTES T	YPE:	0	PT G		PUSH-TC	)-TEST	NDICATOR LIGHT	
<b>\$</b> ₃	NO SUBSCRIPT DENOTE 3 DENOTES 3 WAY	S SINGLE POLE M DENOTES MANUAL	<b>. X</b>			LEITER	DENOT	ES COLOR	
	4 DENOTES 4 WAY	MOTOR STARTER	<b>X</b>	ETM		ELAPSE	D TIME I	METER	
	MOTOR STARTER							_	
-82	COMBINATION MOTOR S	TARTER		SV		SOLENO	ID VALV	/E	
4	DISCONNECT SWITCH	V ·			_	MECHAN	IICAL IN	TERLOCK CONNECTION	
42	FUSED DISCONNES SW	ИСН				COIL M DEI	NOTES	MOTOR STARTER	
LS	DOWNING SWITCH			$\binom{M}{XXX}$		CR DE TR DE	NOTES NOTES	CONTROL RELAY TIME DELAY RELAY	
	LOS CONTROL STATIC	DN				LC DE PR DE	NOTES NOTES	LIGHTING CONTACTOR INTERPOSING PILOT RELAY	
SS	SPEED SWITCH					XXX DE	ENOTES	REFERENCE LINE NUMBER	
		SCALE VERIFICATION	DRAWN BY	JRW	NO.	DATE	INITIALS	REVISION DESCRIPTIO	NS
			CHECKED BY	MLW					
		ORIGINAL DRAWING	APPROVED BY	WCM					
			ISSU	E DATE					
			APRI	L 2022					
			PROJEC						
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![](_page_33_Figure_1.jpeg)

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## ELECTRICAL SYMBOLS

ABBREVIATIONS							
А	AMPERE(S)	MAU	MAKEUP AIR UNIT				
AE	ANALYTICAL SENSOR	MCC	MOTOR CONTROL CENTER				
AFF	ABOVE FINISHED FLOOR	MH	MANHOLE				
AHU	AIR HANDLING UNIT	MOL	MOTOR OPERATED LOUVER				
AIT	ANALYTICAL INDICATOR TRANSMITTER	Ν	NEUTRAL				
AM	(EXISTING)	N/A	NOT APPLICABLE				
AMP	AMMETER	N.C.	NORMALLY CLOSED				
ATS	AMPERE(S)	NEC	NATIONAL ELECTRICAL CODE				
AWG	AUTOMATIC TRANSFER SWITCH	NF	N-FUSED				
BKR	AMERICAN WIRE GAUGE	0.	N RMALLY CLOSED				
BLDG	BREAKER	NIS	NOT TO SCALE				
С	BUILDING	JJL	OVERLOAD				
СВ	CONDUIT	PB	PUSHBUTTON				
СКТ		PLC	PROGRAMMABLE LOGIC CONTROLLER				
CR	CIRCUIT	PM	POWER METER/MONITOR				
CU	CORROSOLARESICANT	PNL	PANEL				
DISC	CORPER	RCPT	RECEPTACLE				
EF	DISCONNECT	RGS	RIGID GALVANIZED STEEL				
ELEV	EXHAUST FAN	R/S	RING SWITCH				
ИТ	ELEVATION	SF	SUPPLY FAN				
EQUIP	ELECTRICAL METALLIC TUBING	SHLD	SHIELDED				
EWC	EQUIPMENT	SP	SINGLE POLE				
EXP	ELECTRICAL WATER COOLER	SPD	SURGE PROTECTIVE DEVICE				
F	EXPLOSION PROOF	SST	STAINLESS STEEL				
FE	FUSED OR FUSE	STR	STARTER				
FIT	FLOW SENSOR	SW	SWITCH				
FLA	FLOW INDICATOR TRANSMITTER	SWBD	SWITCHBOARD				
G	(EXISTING)	SWGR	SWITCHGEAR				
GF	FULL LOAD AMPS	ТВ	TERMINAL BOX				
GFI	GROUND	TPS	TWISTED PAIR SHIELDED				
HOA	GROUND FAULT	TYP	TYPICAL				
HOR	GROUND FAULT INTERRUPTER	UGE	UNDERGROUND ELECTRICAL				
HP	HAND-OFF-AUTOMATIC	UGT	UNDERGROUND SIGNAL				
HPS	HAND-OFF-REMOTE	UH	UNIT HEATER				
JB	HORSEPOWER	UL	UNDERWRITERS LABORATORIES				
KV	HIGH PRESSURE SODIUM	UNO	UNLESS NOTED OTHERWISE				
KVA	JUNCTION BOX	V	VOLTS				
KVAR	KILOVOLTS	VFD	VARIABLE FREQUENCY DRIVE				
KW	KILOVOLTS AMPS	VM	VOLTMETER				
LCP	KILOVAR	VS	VOLTMETER SWITCH				
LE	KILOWATTS	W	WIRE/WATT				
LIT	LOCAL CONTROL PANEL	WH	WATER HEATER				
LOR	LEVEL SENSOR	WP	WEATHERPROOF				
		XFMR	TRANSFORMER				

LOCAL-OFF-REMOTE

LIGHTING

SHEET NO.
<b>6E1</b>
PAGE NO.
34

![](_page_34_Figure_0.jpeg)

TEM IMPROVEMENTS	SHEET NO.
OVER, INDIANA	6E2
	PAGE NO.
NE DIAGRAM	35

![](_page_35_Figure_0.jpeg)

PAGE NO.

36

![](_page_36_Figure_0.jpeg)

![](_page_36_Figure_1.jpeg)

REVISION DESCRIPTIONS			2022 SAN
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**TROLS ONE-**

- THE SYSTEM DESIGN IS BASED ON "WEDECO DURON UV SYSTEM". IF AN ALTERNATE VENDOR IS SELECTED, CONTRACTOR SHALL MODIFY THE SYSTEM AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM AT NO ADDITIONAL COST TO THE OWNER.
- MONITORING EQUIPMENT FOR BOTH BANKS, ALL BALLASTS FOR BOTH BANKS, LIFT CONTROLS FOR BOTH BANKS (THERE WILL NOT BE A SEPARATE "LIFT CONTROL BOX", ALL CONTROL EQUIPMENT THAT WOULD BE ON THIS SHALL BE LOCATED ON THE MAIN CONTROL PANEL) AND WIPER CONTROLS FOR BOTH BANKS (THERE WILL NOT BE A SEPARATE "WIPER CONTROL BOX", ALL CONTROL EQUIPMENT THAT WOULD BE ON THIS SHALL BE LOCATED ON THE MAIN CONTROL PANEL).
- ALL "WEDECO GERMANY SOURCED" CABLE TO BE S.O. RATED AND RUN IN CABLE TRENCH AS SHOWN ON DRAWINGS DIRECTLY TO CORRESPONDING EQUIPMENT. CERTAIN CABLES SHOULD BE BUNDLED 3 TOGETHER WITH RE-USABLE CABLE TIES FOR EASE OF IDENTIFICATION. ANALOG SIGNALS MUST BE RUN IN CONDUIT SEPARATE FROM THE CABLE TRENCH.

TEM IMPROVEMENTS	SHEET NO.
OVER, INDIANA	<b>6E4</b>
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	37

![](_page_37_Figure_0.jpeg)

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VALVE SYMB	OLS								
·	SEAT PORT								
	ECCENTRIC PLUG			$\ominus$	I	MUD			
— <u>b</u>	THREE - WAY			₩	I	BALL CHE	ECK		
+	BUTTERFLY				:	SWING C	HECK		
— <b>X</b>	BALL			<b>—</b> ⊀—	:	SPLIT DIS	SC CHEC	<	
— <b>X</b>	GLOBE					REGULAT PRESSUF	ED SIDE	ROL	
—¢	PRESSURE RELIEF				I	PINCH			
<u> </u>	AIR RELEASE AND VACUUM RELIEF				I	DIAPHRA	GM		
	GATE				I	NEEDLE			
$-\mathbf{k}$	KNIFE GATE			<b>—⋈</b> —		CALIBRA	TED BALA	ANCE	
	CONSTANT VOLUME FLOW REGULATOR			S	:	SOLENOI	D		
GATE SYMBO	DLS	_	_						
0	SLUICE GATE	E	SL	IDE GATE			7	FLAP GATE	
	WEIR GATE		<b></b> s1	TOP GATE				WEIR AND STOP	GATE
VALVE AND (	GATE POWER								
ACTUATOR S	SYMBOLS		_						
E T XX	ELECTRIC MOTOR	Гн Т		YDRAULIC WITH DLENOID					
E ² XX	ELECTRIC MOTOR WITH POSITIONER	P	2 PN XX PC	NEUMATIC WITH DSITIONER		XX: FC FIP = FIP = FIP = FO =	= Fail C = Fail IN Position = Fail To = Fail Op	LOSED FERMEDIATE LAST POSITION EN	
H ² XX	HYDRAULIC WITH POSITIONER	Р	3 PN XX SC	NEUMATIC WITH					
		·		NOTE: XX = FAIL (PNEUMAT	POSITIC	ON ON LO	SS OF PI AL)	RIMARY POWER	
									$\checkmark$
FLOW ELEME	ENTS SYMBOLS								
<u> </u>	- WEIR PLATE	_8		LAMP ON LTRASONIC FLOW	METER		G		
$\varkappa$	PARSHALL FLUME		M/	AGNETIC FLOWME ENTURI OR		5	50	-	
	ROTAMETER		FL						
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	TORDINE METER	:0	0						
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	EXISTING ITEM	JIIEM							
	EXISTING OR RELOC	ATED STRUCTURE							
	SCALE	VERIFICATION	DRAWN BY	JRW	NO.	DATE	INITIALS		REVISION
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		INAL DRAWING	APPROVED BY	WCM	┟┼		$\left  \right $		
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![](_page_39_Figure_2.jpeg)

TEM IMPROVEMENTS	SHEET NO.
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	PAGE NO.
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	PAGE NO.
MENTATION DIAGRAM	41