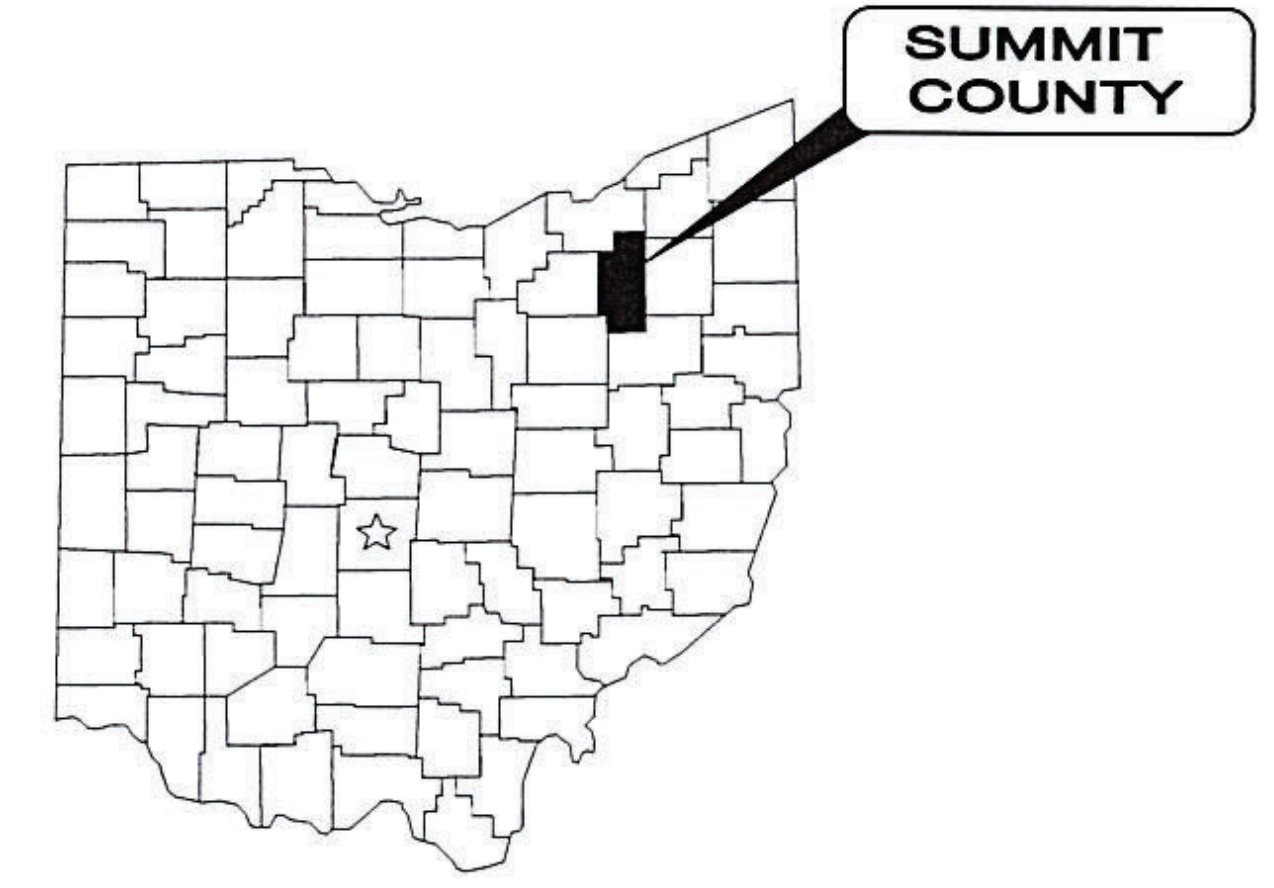


THE CITY OF BARBERTON RETURN SLUDGE PUMP STATION IMPROVEMENTS PROJECT BARBERTON, OHIO



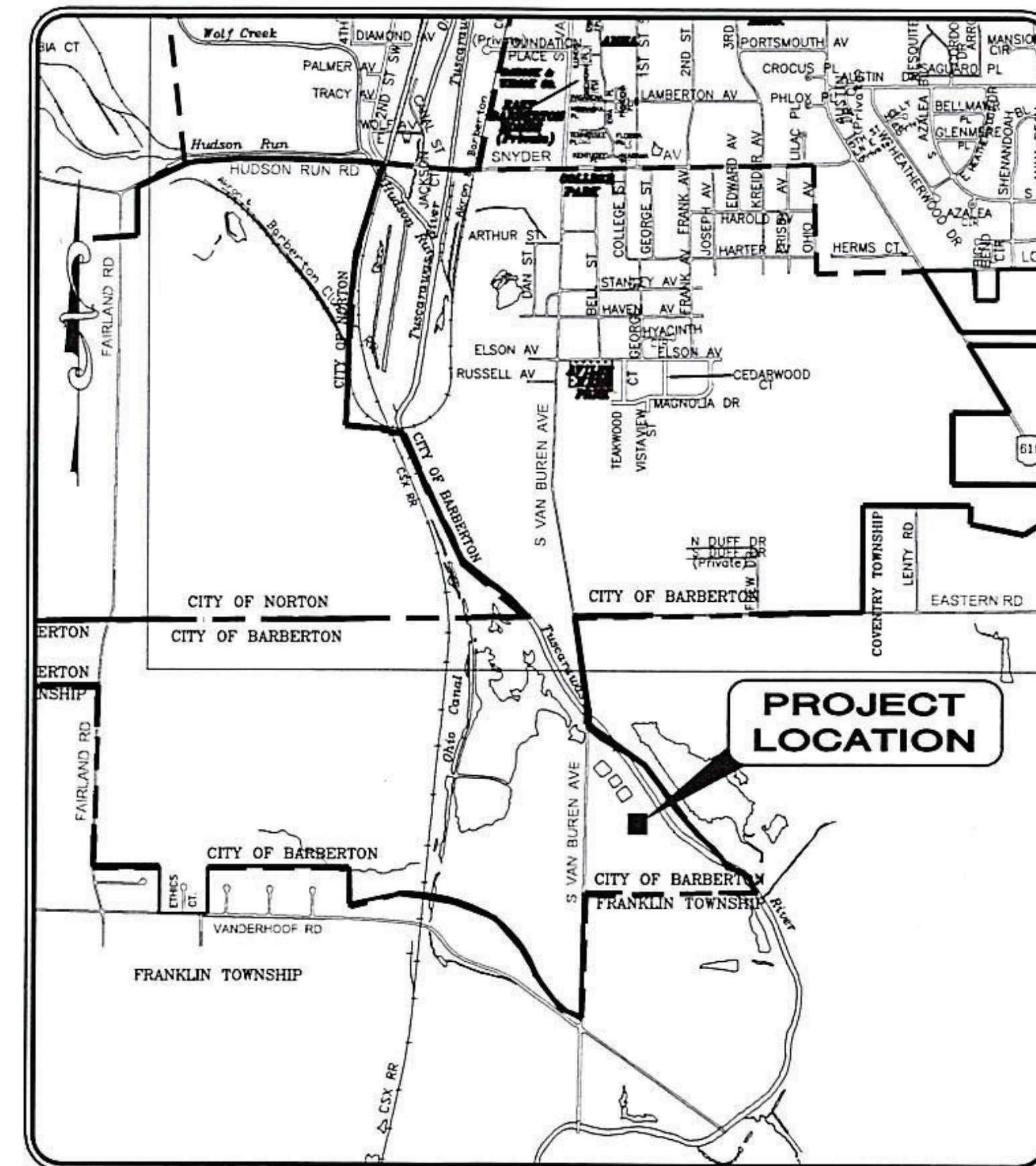
OCTOBER 2024

ADMINISTRATION

William B. Judge, _____ Mayor
 Jeremy Flaker, Jr. _____ Finance Director
 Lisa Okolish Miller _____ Law Director
 Todd Shreve _____ Service Director
 Jaime Iceman _____ Director of Public Safety
 Dennis Weaver _____ Utilities Director
 Rob Burkhard _____ Utilities Manager, WWTP

COUNCIL

Justin Greer _____ President
 Thomas Heitic _____ At-Large
 Taylor Marie Thompson _____ At-Large
 Jennifer Hager _____ 1st Ward
 Kenneth Cheatham _____ 2nd Ward
 Shorter Griffin _____ 3rd Ward
 Emily Beck _____ 4th Ward
 Rebecca Gearhart _____ 5th Ward
 Monte Harris _____ 6th Ward
 Laura Ries-Price _____ Clerk of Council



LOCATION MAP
NOT TO SCALE

APPROVALS

Todd Shreve _____ 10-2-2024
 TODD SHREVE, SERVICE DIRECTOR _____ DATE
Dennis K. Weaver _____ 10/02/24
 DENNIS WEAVER, UTILITIES DIRECTOR _____ DATE

ENGINEER:

CT CONSULTANTS, INC.
 3875 EMBASSY PKWY. SUITE 200
 AKRON, OHIO 44333

(330) 375-0800 PHONE
 (300) 665-0620 FAX

Eric M. Fallon

ERIC M. FALLON

P.E. No. 67551

10/01/2024

DATE



ENGINEER'S PROJECT No. 20051102



OUPS DESIGN SERIAL NUMBERS:
 A62B701350-00A - WWTP SITE

1. UNDERGROUND BUILDING SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING AND REPLACING AS NECESSARY TO ENSURE CONTINUAL SERVICE TO BUILDINGS.
2. THE CONTRACTOR IS RESPONSIBLE TO CALL OHIO UTILITIES PROTECTION SERVICE @ 1-800-362-2764, THREE WORKING DAYS PRIOR TO CONSTRUCTION.

GENERAL NOTES

1. THESE DRAWINGS AND THE PROJECT MANUAL COMPRISE THE CONTRACT DOCUMENTS FOR BARBERTON WASTEWATER TREATMENT PLANT IMPROVEMENTS AT SOUTH VAN BUREN AVENUE.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTORS TO VISIT THE SITE AND VERIFY THE EXTENT OF THE WORK TO BE PERFORMED PRIOR TO SUBMITTING HIS BID. THIS IS ESPECIALLY TRUE WITH REGARD TO ANY REMOVAL ITEMS.
3. THE CONTRACTORS SHALL FIELD VERIFY DIMENSIONS AND ELEVATIONS PRIOR TO PLACING PURCHASE ORDERS FOR EQUIPMENT/CONSTRUCTION AND SUBMIT ANY NECESSARY MODIFICATIONS TO THE CITY OF BARBERTON FOR APPROVAL.
4. NO WORK MAY COMMENCE WITHOUT AN EXECUTED NOTICE TO PROCEED.
5. THE CONTRACTORS SHALL NOTIFY THE CITY OF BARBERTON AT LEAST THREE WORKING DAYS PRIOR TO ANY CONSTRUCTION ACTIVITY. THE CONTRACTORS AND ALL SUBCONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTORS AND SUBCONTRACTORS TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
6. ANY DAMAGE TO EXISTING UTILITIES DURING THIS WORK BY THE CONTRACTORS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
7. THE CONTRACTORS SHALL REPAIR OR REPLACE ANY AND ALL EXISTING WORK DAMAGED DURING OR DUE TO THE EXECUTION OF THIS CONTRACT AT HIS OWN EXPENSE. ALL SAID WORK TO BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE CITY OF BARBERTON.
8. THE CONTRACTOR MUST COORDINATE HIS WORK WITH THE W.W.T.P. SUPERINTENDENT. THE CONTRACTOR MUST MAINTAIN ADEQUATE ACCESS FOR ALL VEHICLES WHICH UTILIZE THE FACILITY. THE SITE AT WHICH THE WORK WILL BE PERFORMED IS AN ACTIVE WASTEWATER TREATMENT PLANT AND WILL BE MAINTAINED DURING THE PERFORMANCE OF THESE CONTRACTS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF, AND AVOID INTERFERENCE TO TREATMENT OPERATIONS.
9. CONTRACTOR SHALL FURNISH ALL TEMPORARY PIPING, BLIND FLANGES, AND FITTINGS, AS REQUIRED TO MAINTAIN OPERATION OF THE WASTEWATER PLANT DURING THE COURSE OF HIS WORK.
10. THE INFORMATION PROVIDED WITHIN THESE PLANS IS SPECIFIC TO THE ANTICIPATED WORK AREAS AND IS NOT INCLUSIVE OF ALL TOPOGRAPHIC AND UTILITY FEATURES OUTSIDE OF THE AREA.
11. CONTRACTOR SHALL CLEAR ALL DEBRIS, DIRT, VEHICLES AND EQUIPMENT FROM WALKWAY AND TRAFFIC ROUTES AT THE CONCLUSION OF WORK EACH DAY.
12. OSHA PROHIBITS CRANE AND BACKHOE OPERATIONS WITHIN 10 FEET OF ENERGIZED PRIMARY CONDUCTORS. TEMPORARY RELOCATION OF ELECTRICAL UTILITIES, INCLUDING RESTRAINT OF POLES, RELOCATION OF POLES, AND RUBBER COVERING OF ENERGIZED CONDUCTORS MAY BE REQUIRED. THE COORDINATION AND COST OF THESE SERVICES IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR MAY RESTRAIN POLES IF THE METHOD OF SUPPORT HAS BEEN SUBMITTED TO AND APPROVED BY THE CITY OF BARBERTON.
13. THE CONTRACTOR SHALL MAINTAIN TWO (2) SCREW PUMPS AT ALL TIMES FOR THE DURATION OF THE WORK.
14. ANY EXISTING UTILITY (GAS, ELECTRIC, CABLE TELEVISION, TELEPHONE, WATER LINE, STORM OR SANITARY APPURTENANCE, ETC.) IN OR OUTSIDE THE CONSTRUCTION LIMITS DAMAGED DURING THE CONSTRUCTION OF THE PROPOSED PROJECT, WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
15. THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCH MARKS, PROPERTY CORNERS, REFERENCE POINTS AND STAKES AND IN CASE OF WILLFUL OR CARELESS DESTRUCTION, HE SHALL BE CHARGED WITH THE RESULTING EXPENSE OF REPLACEMENT AND SHALL BE RESPONSIBLE FOR ANY MISTAKES THAT MAY BE CAUSED BY THEIR UNNECESSARY LOSS OR DISTURBANCE. ANY EXISTING PROPERTY CORNER PINS OR MONUMENTS DAMAGED OR DESTROYED BY CONSTRUCTION SHALL BE RESET BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE UPON COMPLETION OF THE PROJECT PRIOR TO FINAL PAYMENT. A CERTIFICATION SHALL BE FURNISHED BY A REGISTERED SURVEYOR, STATING THAT SAID DAMAGES HAVE BEEN RESTORED.
16. ADDRESS: BARBERTON WWTP
5087 SOUTH VAN BUREN AVE.
BARBERTON, OHIO 44203

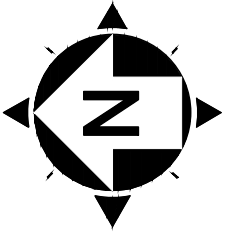
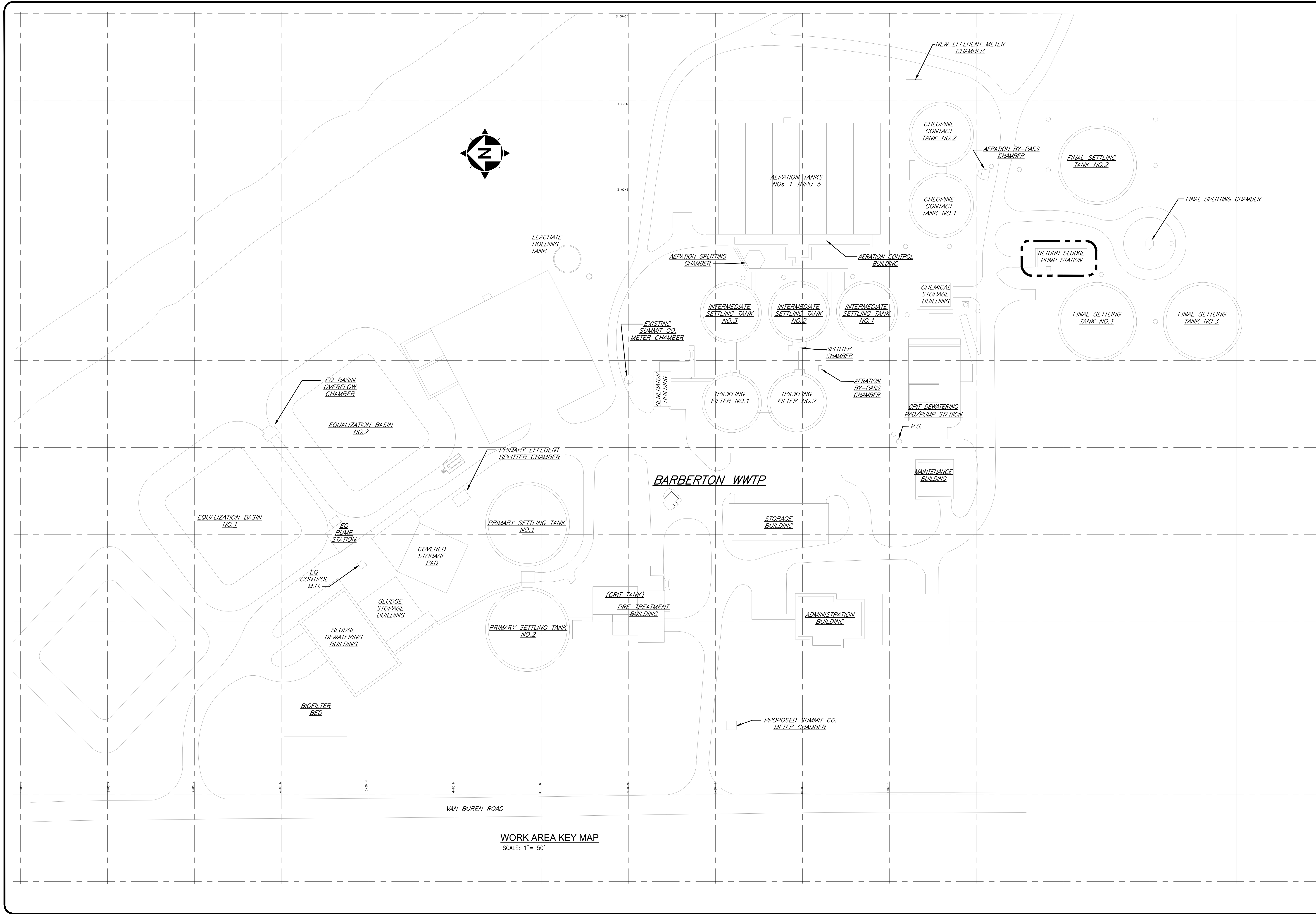
Sheet List Table		
Sheet Number	Sheet Title	SHEET NAME
1	G_200511 - COVER SHEET - 00G-01	00G-01
2	GENERAL NOTES & SHEET INDEX	00G-02
3	WORK LOCATION KEY	00G-03
4	SCREW PUMP DETAILS	10D-02
5	MODIFICATION SECTIONS	10D-02
6	Electrical Legend & General Notes	00E-01
7	One-Line & Elevation Diagrams & Panel Schedule	00E-02
8	MCC-2 Motor Control Diagrams	00E-03
9	MCC-2 Replacement Electrical Plan	00E-04



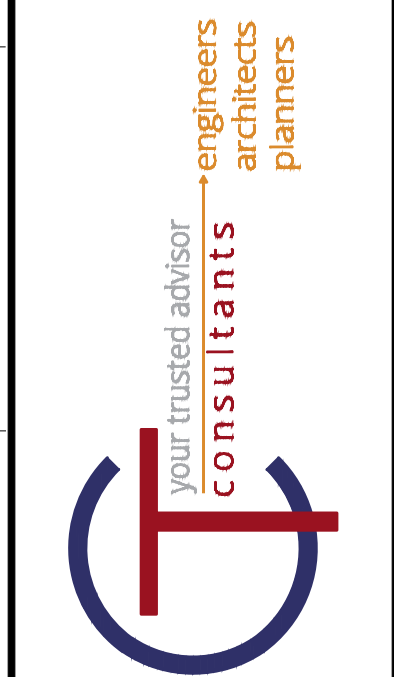
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REV	DESCRIPTION	DATE	DATE

THE CITY OF BARBERTON
RETURN SLUDGE PUMP STATION
IMPROVEMENTS PROJECT
 SUMMIT COUNTY
GENERAL - 00 SERIES
GENERAL NOTES & SHEET INDEX

PROJECT NO.	200511
DISCIPLINE	GENERAL
SHEET NAME	00G-02
SHEET	OF
2	9



WORK AREA KEY MAP
SCALE: 1" = 50'



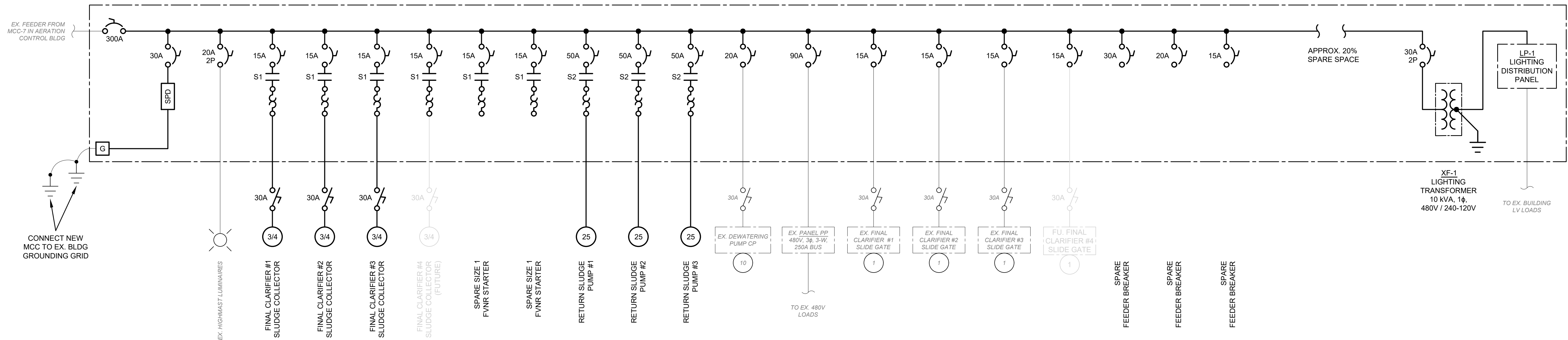
ISSUED FOR:		REVISIONS	
REV.	DESCRIPTION	REV.	DESCRIPTION
1	AS NOTED		
2	BTZ		
3	RSS		

THE CITY OF BARBERTON
RETURN SLUDGE PUMP STATION
IMPROVEMENTS PROJECT
SUMMIT COUNTY
BARBERTON, OHIO

GENERAL - 00 SERIES
WORK LOCATION KEY

PROJECT NO.	200511
DISCIPLINE	GENERAL
SHEET NAME	00G-03
SHEET	3
OF	9

PR. MCC-2
480/277V, 3φ, 4-W, 600A BUS, 42 KAIC



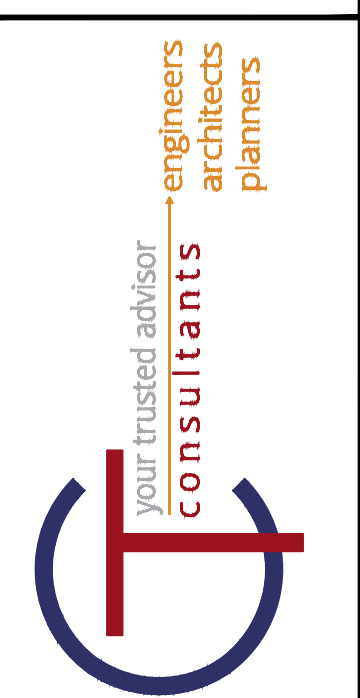
PROPOSED MCC-2 ONE-LINE DIAGRAM

INCOMING FEEDER LUGS (600A)	FINAL CLARIFIER #3 SLUDGE COLLECTOR FVNR SIZE 1, 15A	FINAL CLARIFIER #3 SLIDE GATE FEEDER 15A CB (100AF) (FUTURE) FINAL CLARIFIER #4 SLIDE GATE FEEDER 15A CB (100AF)	SPARE SPACE	SPARE SPACE
MAIN CIRCUIT BREAKER 300A CB (400AF)	(FUTURE) FINAL CLARIFIER #4 SLUDGE COLLECTOR FVNR SIZE 1, 15A	SPARE SPACE	SPARE SPACE	LP-1 LIGHTING PANEL MLO, 100A BUS 240/120V, 1φ, 3-W (18 - 24 SPACES)
	SPARE SPACE	RETURN SLUDGE PUMP #3 FVNR SIZE 2, 50A	SPARE SPACE	
SURGE PROTECTION DEVICE	SPARE FEEDER 30A CB (100AF)	RETURN SLUDGE PUMP #1 FVNR SIZE 2, 50A	PANEL PP FEEDER 90A CB (100AF)	XF-1 LIGHTING TRANSFORMER 10 kVA 480-240/120V, 1φ, 3-W (30A CB PRIMARY)
HIGH MAST LUMINAIRES FEEDER 20A CB (100AF)	SPARE FEEDER 15A CB (100AF)	RETURN SLUDGE PUMP #2 FVNR SIZE 2, 50A	SPARE SPACE	
SPARE SPACE	FINAL CLARIFIER #1 SLUDGE COLLECTOR FVNR SIZE 1, 15A	FINAL CLARIFIER #1 SLIDE GATE FEEDER 15A CB (100AF)	DEWATERING PUMP CP FEEDER 20A CB (100AF)	SPARE SPACE
FINAL CLARIFIER #2 SLUDGE COLLECTOR FVNR SIZE 1, 15A	FINAL CLARIFIER #2 SLIDE GATE FEEDER 15A CB (100AF)	SPARE SPACE	SPARE MOTOR STARTER FVNR SIZE 1, 15A	SPARE SPACE

PROPOSED MCC-2 ELEVATION DIAGRAM

PANELBOARD		LP-1	
PANEL TYPE	_____	NQOD OR EQUAL	
NEMA TYPE	_____	NEMA 1	
VOLTAGE	_____	240V/120V	
OCPD	_____	MLO	
MOUNTING	_____	INTEGRATED INTO MCC	
		PHASE	1
		WIRE	3
		BUSS	100A
LOAD DESCRIPTION	LOAD	BKR.	CKT. NO.
EXTERIOR LIGHTS & SLUDGE PIT	984	20/1	1
CEILING LIGHTS	360	20/1	3
EXH. FAN EXF-UJ & LOUVER FAL-UJ	240	20/1	5
INSTRUMENT POWER	100	20/1	7
SPARE		20/1	9
SPARE		20/1	11
SPARE		20/1	13
SPARE		20/1	15
SPARE		20/1	17
SPARE		20/1	19
SPARE		20/1	21
SPARE		20/1	23
		4354 VA	CONNECTED
		4521.5 VA	DEMAND
		18.84 A @ 240/120V, 1P, 3W	

PROPOSED LIGHTING PANEL LP-1 SCHEDULE (INSIDE MCC-2)

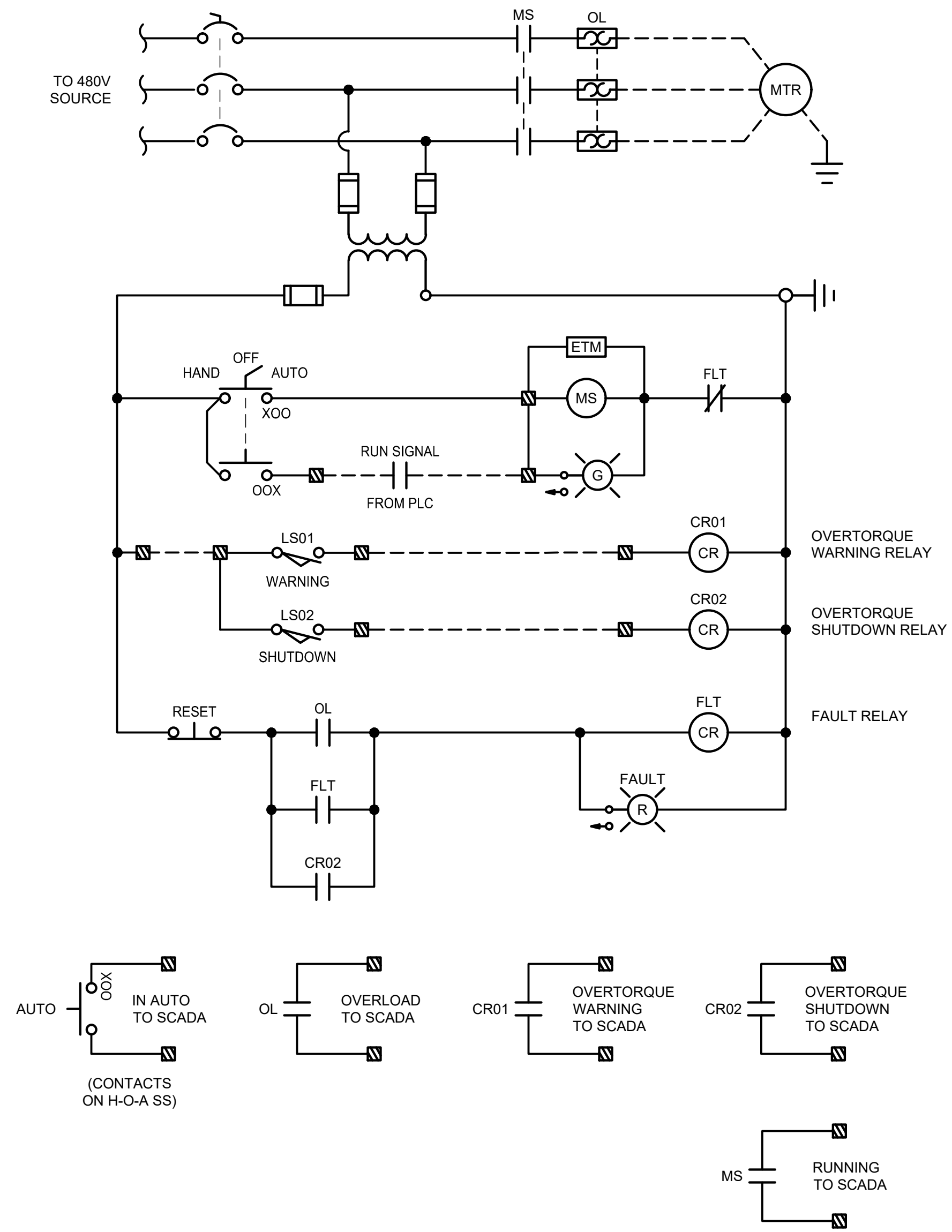


REVISIONS	REV.	DESCRIPTION	DATE

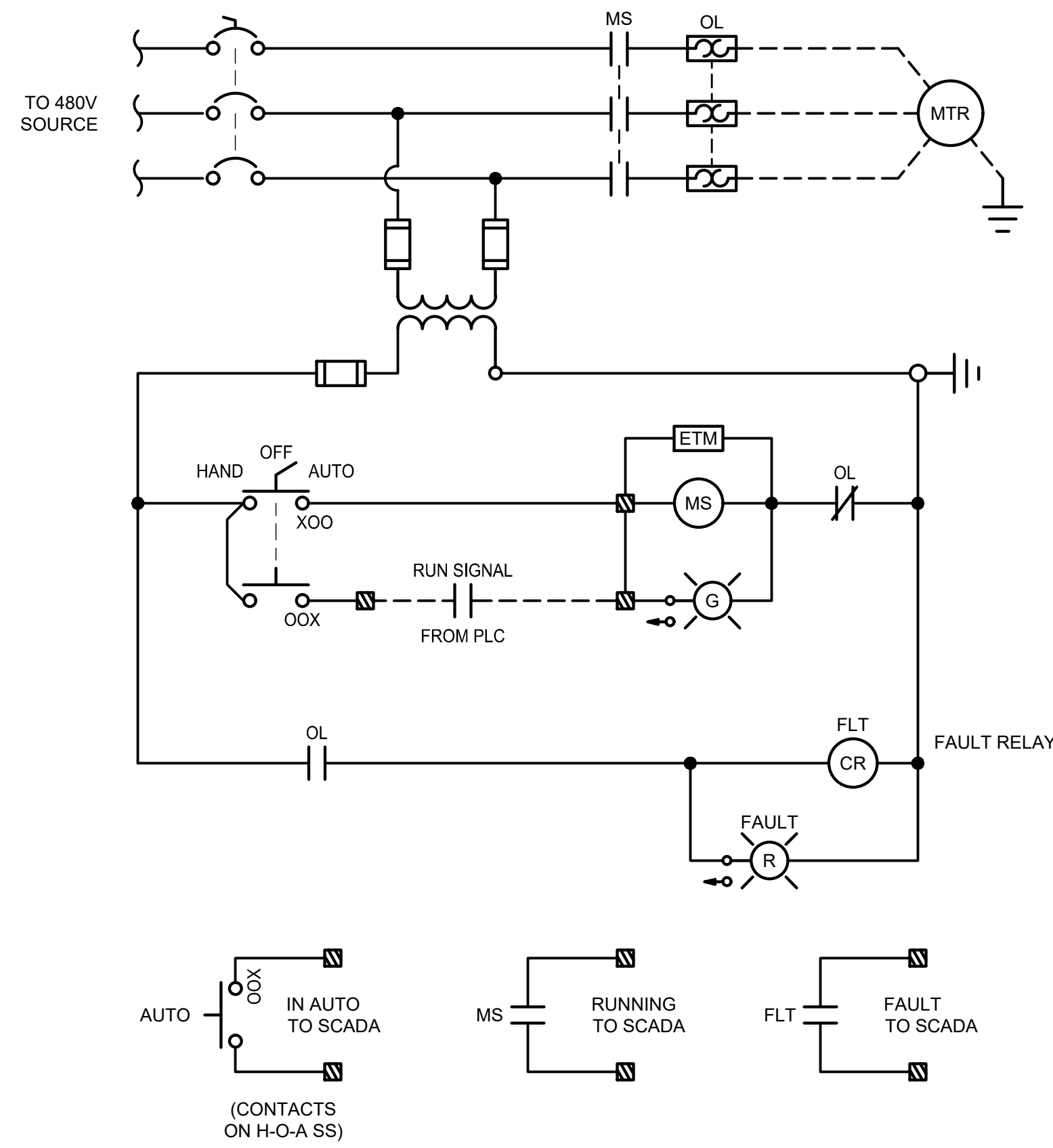
ISSUED FOR:	REVIEW	DATE	SCALE	AS NOTED	ELE	ELE	EMF
		9/23/24					

THE CITY OF BARBERTON
RETURN SLUDGE PUMP STATION
IMPROVEMENTS PROJECT
SUMMIT COUNTY
BARBERTON, OHIO
ELECTRICAL - E-SERIES
ONE-LINE & ELEVATION DIAGRAMS & PANEL SCHEDULE

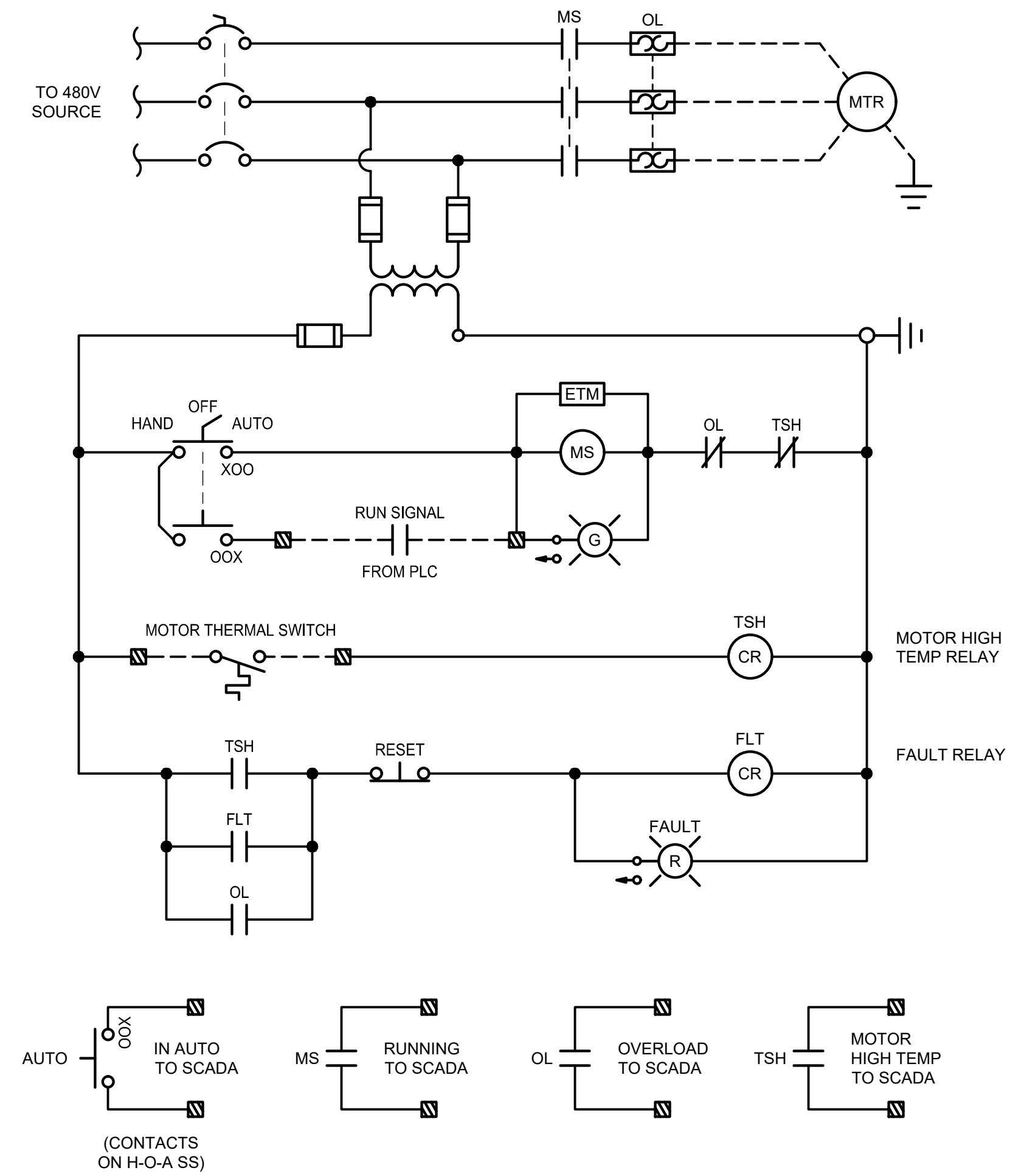
PROJECT NO.	200511
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SHEET	7
OF	9



FINAL CLARIFIER SLUDGE COLLECTOR MOTOR CONTROL CIRCUIT



RETURN SLUDGE PUMP MOTOR CONTROL CIRCUIT



SPARE FVNR MOTOR CONTROL CIRCUIT



ISSUED FOR:	REVIEW	DATE
REVISIONS	REV	DESCRIPTION
ISSUE DATE:	9/23/24	
SCALE:	AS NOTED	
DESIGNED BY:	ELE	
DRAWN BY:	ELE	
CHECKED BY:	EMF	

THE CITY OF BARBERTON
 RETURN SLUDGE PUMP STATION
 IMPROVEMENTS PROJECT
 SUMMIT COUNTY
ELECTRICAL - E-SERIES
 MCC-2 MOTOR CONTROL DIAGRAMS

PROJECT NO.	200511
DISCIPLINE	ELECTRICAL
SHEET NAME	00E-03
SHEET	8
OF	9

