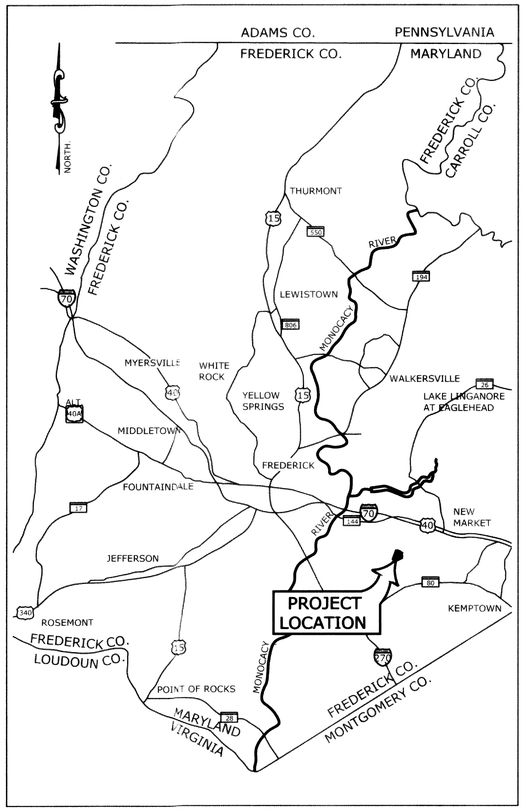
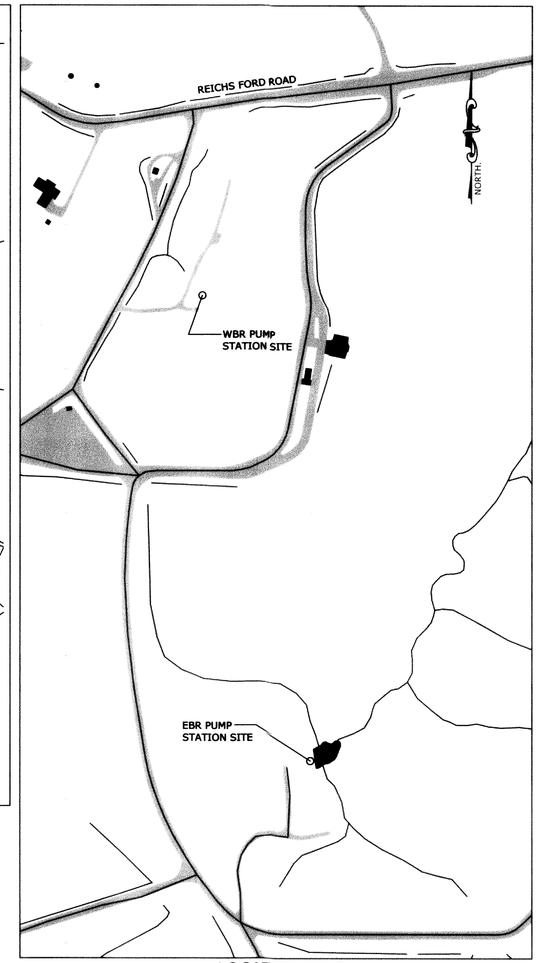
LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS
DIVISION OF UTILITIES AND SOLID WASTE MANAGEMENT
FREDERICK COUNTY CONTRACT NO. SW0745
FREDERICK COUNTY, MARYLAND

GENERAL NOTES

1. ALL CONSTRUCTION PROCEDURES SHALL BE IN ACCORDANCE WITH THE FREDERICK COUNTY "GENERAL CONDITIONS AND STANDARD SPECIFICATIONS", "STANDARD DETAILS", SPECIAL PROVISIONS, DESIGN GUIDELINES AND AMENDMENTS.
2. THE CONTRACTOR SHALL CONTACT MISS UTILITY (1-800-257-7777), 72 HOURS PRIOR TO BEGINNING ANY EXCAVATION.
3. EXISTING UTILITIES ARE SHOWN FROM THE BEST AVAILABLE RECORDS AS PROVIDED BY THE COUNTY AT TIME OF DESIGN. THE CONTRACTOR SHALL TEST PIT IN THE AREAS OF KNOWN UTILITIES TO VERIFY SIZE, ELEVATION, LOCATION AND TYPE PRIOR TO PERFORMING WORK. ANY UTILITY, WHETHER SHOWN OR NOT, THAT IS DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED IMMEDIATELY AND AT NO EXPENSE TO THE OWNER. SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS, THE OWNER IS TO BE NOTIFIED IMMEDIATELY. SHOULD THE CONTRACTOR MAKE FIELD CORRECTIONS AND/OR ADJUSTMENTS WITHOUT THE AUTHORIZATION OF THE OWNER, THEN THE CONTRACTOR WILL ASSUME FULL RESPONSIBILITY FOR SAID CORRECTIONS AND/ORADJUSTMENTS.
4. WHERE EXISTING UNDERGROUND UTILITIES OR OTHER STRUCTURES APPEAR TO BE IN CLOSE PROXIMITY TO PROPOSED CONSTRUCTION, OR WHEN APPROACHING EXISTING UTILITIES OR STRUCTURESFOR CROSSING OR CONNECTIONS, THE TRENCH SHALL BE OPENED A SUFFICIENT DISTANCE AHEAD OF THE WORK, OR TEST PITS MADE TO VERIFY EXACT LOCATIONS, SIZE AND INVERT OF THE UTILITY TO ALLOW FOR POSSIBLE CHANGES IN GRADE, ANY NECESSARY CHANGES IN LINE, GRADE OR MATERIAL CAUSED BY FAILURE TO TAKE SUCH PRECAUTIONS SHALL BE AT THE EXPENSE OF THE CONTRACTOR. MINOR CHANGES IN ALIGNMENT SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS IN THE PREPARATION OF REQUIRED SHOP DRAWINGS BEFORE SUBMITTING FOR APPROVAL. NO MATERIALS OR EQUIPMENT SHALL BE ORDERED OR FABRICATED PRIOR TO SHOP DRAWING APPROVAL. SHOP DRAWING APPROVAL SHALL NOT RELIEVE THE CONTRACTOR OF ANY OBLIGATIONS IN PROVIDING A COMPLETE AND FUNCTIONAL SYSTEM.
6. ANY NECESSARY ADJUSTMENTS TO EXISTING UTILITIES, VALVES, ETC. ARE TO BE DONE SO BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING ANY EXISTING FENCES, DRIVEWAYS, SIGNS, DRAINAGE DITCHES, MAILBOXES, SHRUBS/TREES, ETC. DAMAGED OR REMOVED DURING CONSTRUCTION. ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR ORIGINAL OR BETTER CONDITION.
7. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING ROADS, DRIVEWAYS, CULVERTS, DRAINAGE DITCHES, DRAIN FIELDS,UTILITIES, PIPING, STRUCTURES, FENCES AND EQUIPMENT WHICH OCCURS AS A RESULTS OF HIS WORK ON THIS PROJECT, AND SHALL REPAIR TO CURRENT CONDITION OR REPLACE IN KIND ANY DAMAGED ITEMS AT NO ADDITIONAL COST TO THE OWNER.
8. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING TRUCKS AND/OR OTHER EQUIPMENT OF MUD AND/OR LOOSE SOIL PRIOR TO TRAVELING ON A PUBLIC RIGHT-OF-WAY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAN STREETS OF MUD AND DUST AND TAKE WHATEVER MEASURES NECESSARY TO ENSURE THAT THE ROAD IS MAINTAINED IN A MUD AND DUST FREE CONDITION AT ALL TIMES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING SILT AND DEBRIS OUT OF THE STORM DRAINAGE SYSTEM FOR THE DURATION OF THE CONTRACT.
10. PROPERTY LINES, RIGHTS-OF-WAY AND EASEMENTS SHOWN ON THESE PLANS ARE AS SHOWN AND INDICATED IN LIBER 958 FOLIO 233. ALL PART OF THE LAND RECORDS OF FREDERICK COUNTY, MD.
11. THE PROPOSED ELEVATIONS PROVIDED ON THESE CONTRACT DOCUMENTS ARE BASED ON EXISTING RECORD DRAWINGS AND AS SUCH SHOULD BE CONSIDERED APPROXIMATELY AND SUBJECT TO APPROPRIATE FIELD ADJUSTMENT AS REQUIRED.
12. THE CONTRACTOR SHALL PROVIDE ALL CONDUIT AND WIRING REQUIRED TO SUPPORT ALL INSTALLED EQUIPMENT, EXISTING OR NEW.
13. NO WETLANDS ARE PRESENT.
14. THE PROJECT CONTAINS A TOTAL OF 820 SF ± OF TOTAL DISTURBED AREA.
15. THE FREDERICK COUNTY DIVISION OF UTILITIES AND SOLID WASTE MANAGEMENT IS EXEMPT FROM THE PLANNING AND ZONING (SUBDIVISION) REGULATIONS/ORDINANCES, PURSUANT TO SECTION 2-13-03 (d)5, (III) CODE OF PUBLIC LOCAL LAWS OF FREDERICK COUNTY.
16. THIS PROJECT DOES NOT DISTURB MORE THAN 5,000 SF OF LAND AREA AND IS THEREFORE EXEMPT FROM THE REQUIREMENTS OF PROVIDING STORMWATER MANAGEMENT.



VICINITY MAP
SCALE: 1"=3 MILES



LOCATION MAP
SCALE: 1"= 200'

LEGEND

EXISTING (E)		PROPOSED	
	Flow Arrow	SF — SF	Silt Fence
245	Contour	LOD	Limits Of Disturbance
Bldg.	Buildings		
	Paved Area		
	Tree Line		
E	Electric		
	Water Valve		
(E)	Existing		

LIST OF DRAWINGS

SHEET	DWG	TITLE
1	G-1	COVER SHEET
2	C-1	SITE PLANS
3	C-2	EBR PAVILLION PLANS, SECTIONS AND DETAILS
4	C-3	EBR PAVILION SECTION
5	C-4	WBR PAVILLION PLANS, SECTIONS AND DETAILS
6	C-5	WBR PAVILION SECTION
7	C-6	EBR PROPOSED PUMP SECTIONS
8	C-7	WBR PROPOSED PUMP SECTIONS
9	E1.1	EBR PUMP STATION - DEMOLITION
10	E1.2	EBR PUMP STATION - ELECTRICAL
11	E1.3	EBR PUMP STATION - DETAILS/LEGEND
12	E1.4	EBR PUMP STATION - RISERS
13	E2.1	WBR PUMP STATION - DEMOLITION
14	E2.2	WBR PUMP STATION - DEMOLITION
15	E2.3	WBR PUMP STATION - DETAILS/LEGEND
16	E2.4	WBR PUMP STATION - RISERS

FREDERICK COUNTY DIVISION OF
UTILITIES AND SOLID WASTE MANAGEMENT

REVIEWED: _____ 11/1/2013
DIRECTOR DATE

REVIEWED: _____ 11/1/2013
DEPARTMENT HEAD DATE

THE ABOVE SIGNATURES ARE FOR THE COUNTY'S PURPOSE INDICATING THE DESIGN COMPLIES WITH THE PROGRAM OBJECTIVES AND TO AUTHORIZE THE PROJECT TO PROCEED TO THE NEXT STAGE IN THE CONSTRUCTION PROCUREMENT PROCESS. THIS REVIEW DOES NOT IN ANY WAY RELIEVE THE ARCHITECT/ENGINEER OF THEIR RESPONSIBILITY FOR THE PROFESSIONAL QUALITY, TECHNICAL ADEQUACY, AND COORDINATION OF ALL DESIGNS, DRAWINGS, SPECIFICATIONS AND OTHER SERVICES FURNISHED UNDER THIS AGREEMENT.

STATE OF MARYLAND PROFESSIONAL ENGINEER

SEAL 10-1-13
DATE

REVISIONS

REV. #	DATE	DESCRIPTION

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 30728, EXPIRATION DATE: 06-30-14

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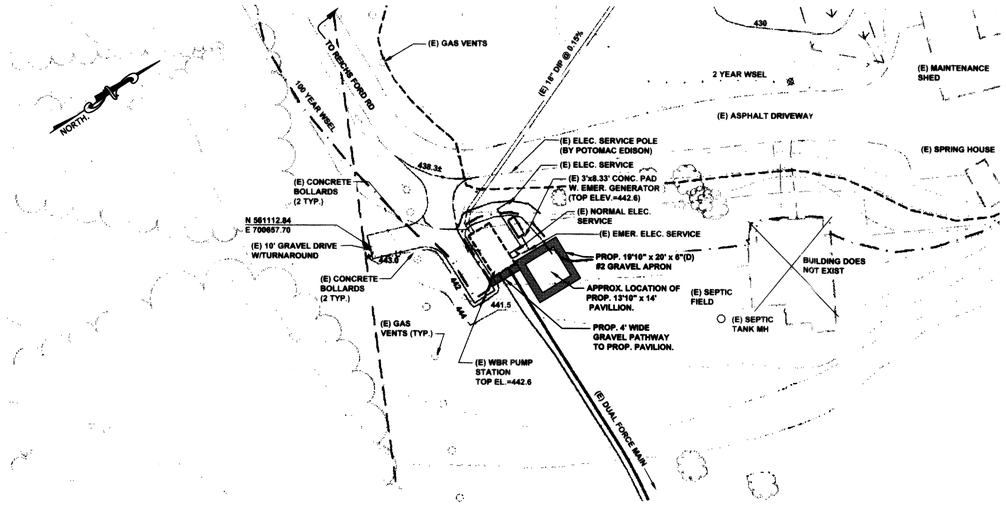
DATE:	Sept. 11, 2013
JOB NUMBER:	C1130003
SCALE:	As Shown
DRAWN BY:	C.W.M.
DESIGNED BY:	R.J.R.
APPROVED BY:	R.J.R.
FOLDER REFERENCE:	N/A

COVER SHEET
FOR:
LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS
FREDERICK COUNTY, MARYLAND
TAX MAP #0097, GRID #0009, PARCEL #0119
PREPARED FOR: FRED. CO. DUSWM

SHEET: 1 of 16 G-1

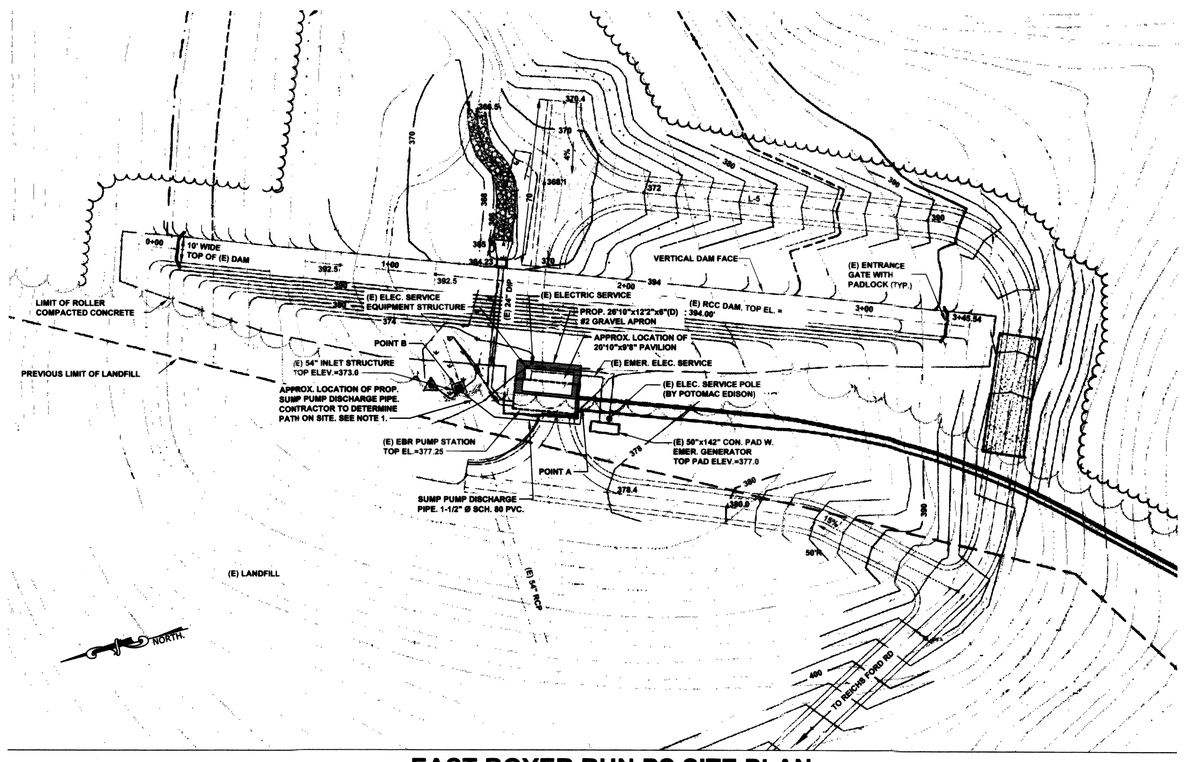
FILE NO.:
Cover Sheet.dwg

PLOTTED: Oct 29 , 2013 - 9:09am Q:\11130003 - Frederick Co_Landfill Pump Station\Design\Drawings\Cover Sheet.dwg.....Tab:COVER SHEET



WEST BOYER RUN PS SITE PLAN

SCALE: 1" = 30'



EAST BOYER RUN PS SITE PLAN

SCALE: 1" = 30'

NOTES

1. CONTRACTOR TO FIELD REROUTE (E) 1-1/2" Ø SCHEDULE 80 PVC SUMP PUMP DISCHARGE FROM POINT A TO POINT B. PIPE TO BE BURIED A MINIMUM OF 3' BELOW GRADE. CONTRACTOR TO CORE THROUGH (E) CONCRETE STRUCTURE TO TERMINATE PIPE. PIPE TO BE GROUTED AT STRUCTURE UPON COMPLETION.

STATE OF MARYLAND — RYAN MARTIN KNEPP — REG. NO. 39728 — PROFESSIONAL ENGINEER

SEAL 6-1-13

DATE

REVISIONS

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DESIGNED BY:	R.J.R./C.W.M.
APPROVED BY:	R.J.R.
FOLDER REFERENCE:	N/A

SITE PLANS

FOR:

LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS

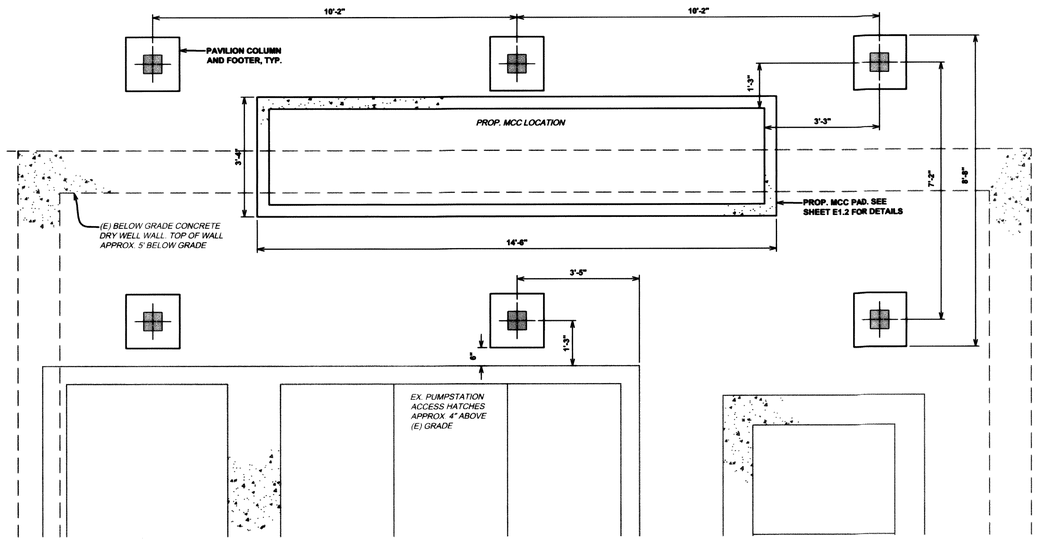
FREDERICK COUNTY, MARYLAND

TAX MAP #0087, GRID #0009, PARCEL #0119

PREPARED FOR: FRED. CO. DUSWM

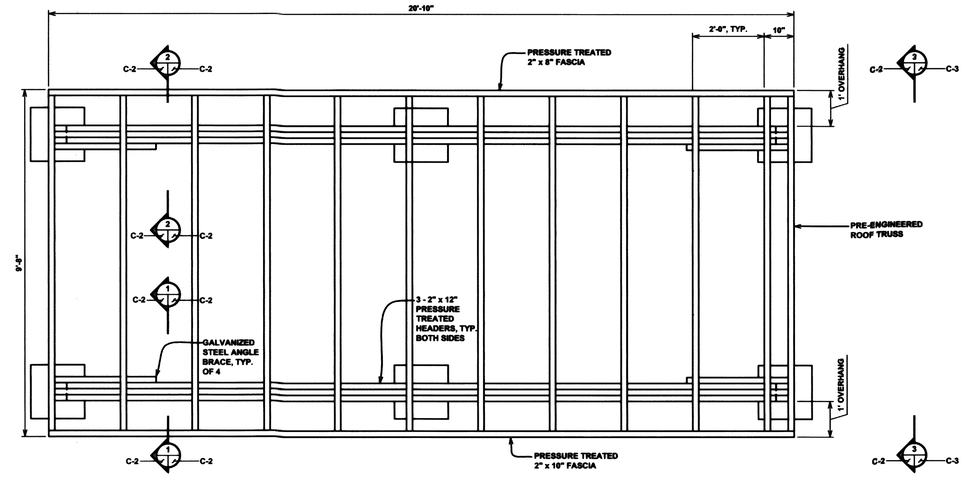
SHEET: 2 of 16 C-1

FILE NO.: PS PLAN AND SECTIONS.dwg



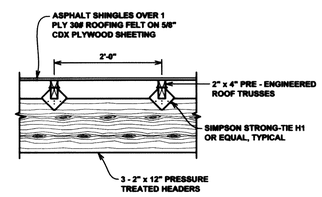
PAVILION - PLAN

SCALE: 1/2" = 1'-0"



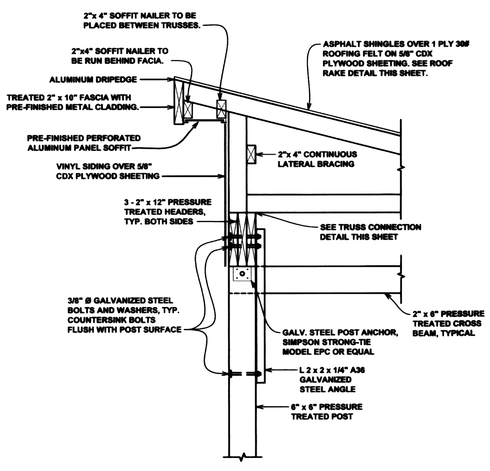
PAVILION ROOF FRAMING - PLAN

SCALE: 1/2" = 1'-0"



TRUSS TO HEADER CONNECTION DETAIL

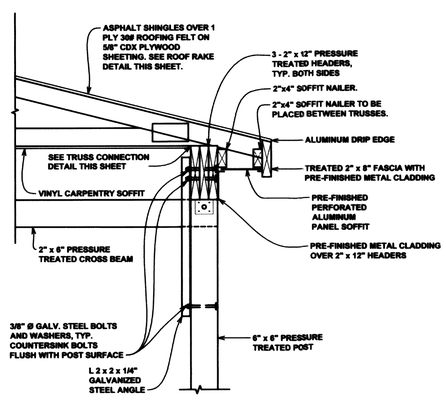
SCALE: 3/4" = 1'-0"



1 SECTION

SCALE: 3/4" = 1'-0"

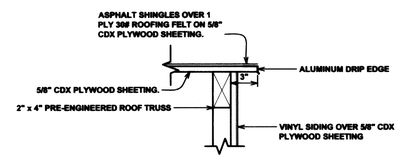
C-2 C-2



2 SECTION

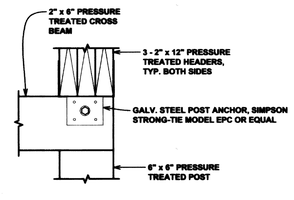
SCALE: 3/4" = 1'-0"

C-2 C-2



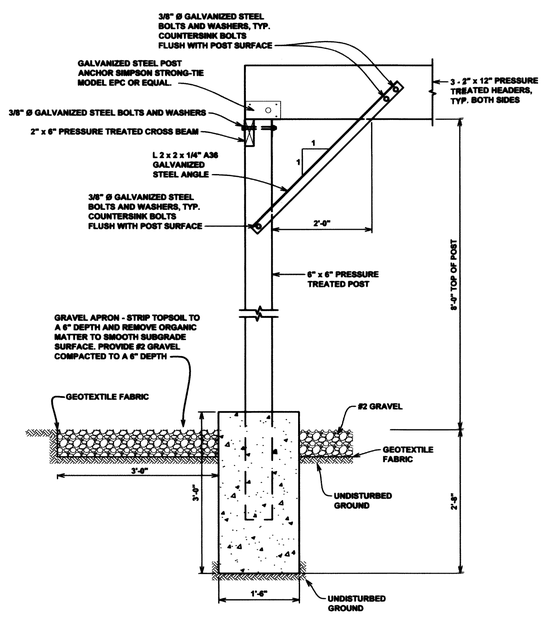
ROOF RAKE DETAIL

SCALE: 1-1/2" = 1'-0"



CROSS BEAM TO POST CONNECTION DETAIL

SCALE: 1 1/2" = 1'-0"



GALVANIZED STEEL ANGLE CONNECTION DETAIL

SCALE: 3/4" = 1'-0"

ALL LUMBER DRAWN USING NOMINAL DIMENSIONS.

STATE OF MARYLAND PROFESSIONAL ENGINEER

SEAL 10-1-13

DATE

REVISIONS

REV. #	DATE	DESCRIPTION

PROFESSIONAL CERTIFICATION

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DRAWN BY:	S.T.W.
DESIGNED BY:	R.J.R.
APPROVED BY:	R.J.R.
FOLDER REFERENCE:	N/A

EBR PAVILLION PLANS, SECTIONS AND DETAILS

FOR:

LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS

FREDERICK COUNTY, MARYLAND

TAX MAP #0087, GRID #0009, PARCEL #0119

PREPARED FOR: FRED. CO. DUSWM

SHEET: 3 of 16 C-2

FILE NO.: PAVILION.dwg

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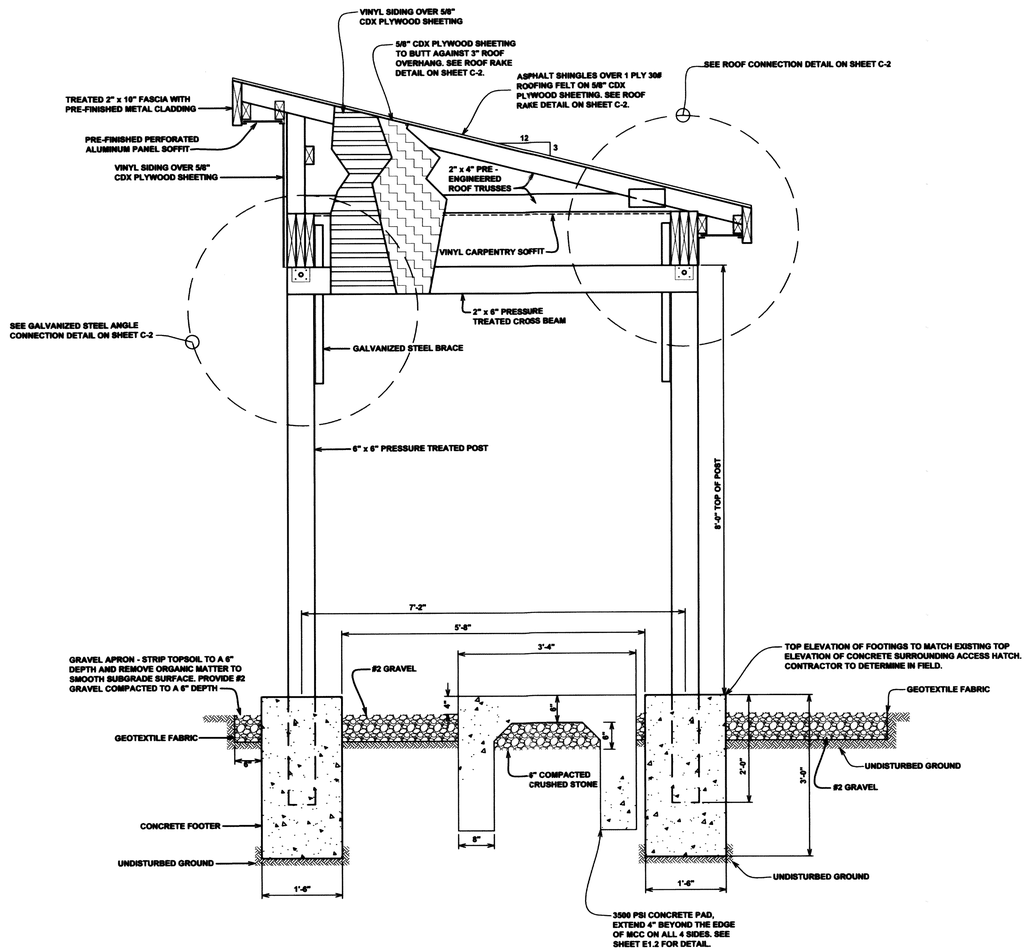

3 SECTION
SCALE: 3/4" = 1'-0"
C-2 C-3

ALL LUMBER DRAWN USING NOMINAL DIMENSIONS.

STATE OF MARYLAND JULIAN RANGEL No. 30728 REGISTERED PROFESSIONAL ENGINEER

SEAL 10.1.13
DATE

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DESIGNED BY:	R.J.R.
APPROVED BY:	R.J.R.
FOLDER REFERENCE:	N/A

EBR PAVILION SECTION

FOR:

LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS
FREDERICK COUNTY, MARYLAND
TAX MAP #0087, GRID #0009, PARCEL #0119
PREPARED FOR: FRED. CO. DUSWM

SHEET: 4 of 16 C-3

FILE NO.: PAVILION.dwg

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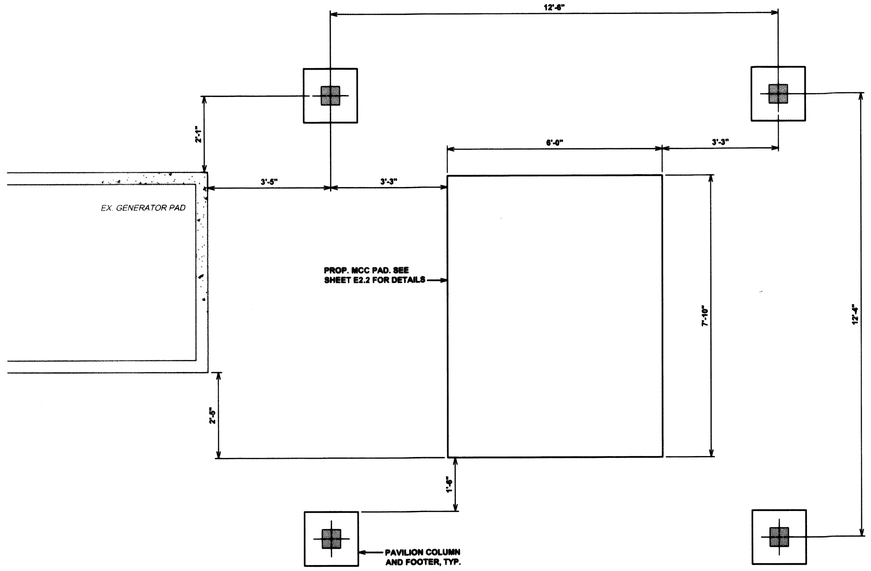
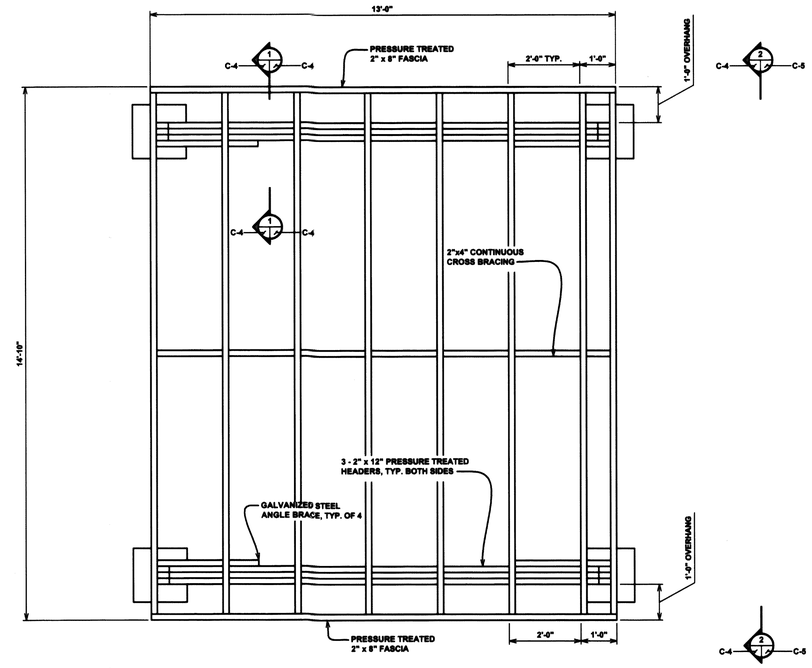


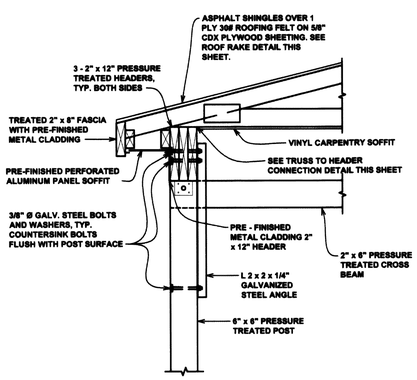
PAVILION - PLAN

SCALE: 1/2" = 1'-0"



PAVILION ROOF FRAMING - PLAN

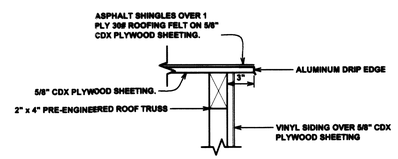
SCALE: 1/2" = 1'-0"



1 SECTION

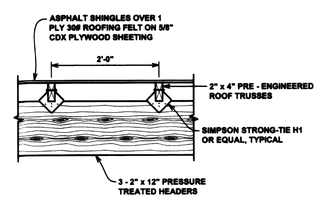
C-4 C-4

SCALE: 3/4" = 1'-0"



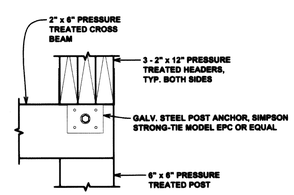
ROOF RAKE DETAIL

SCALE: 1-1/2"" = 1'-0"



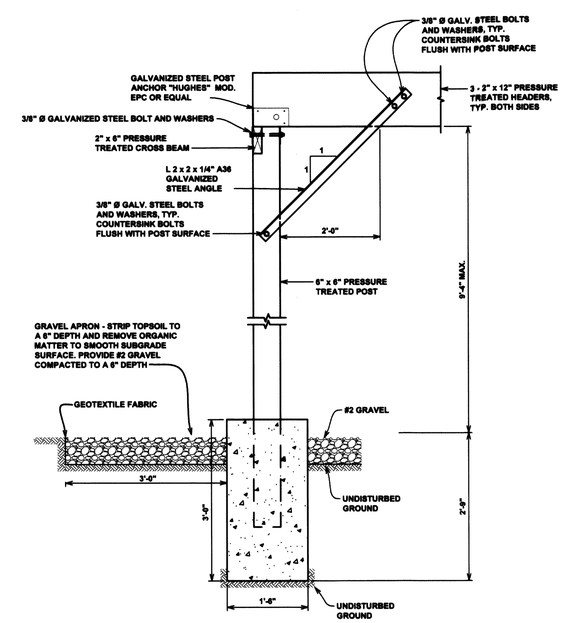
TRUSS TO HEADER CONNECTION DETAIL

SCALE: 3/4" = 1'-0"



CROSS BEAM TO POST CONNECTION DETAIL

SCALE: 1 1/2" = 1'-0"



GALVANIZED STEEL ANGLE CONNECTION DETAIL

SCALE: 3/4" = 1'-0"

ALL LUMBER DRAWN USING NOMINAL DIMENSIONS.

STATE OF MARYLAND PROFESSIONAL ENGINEER

SEAL 10-1-13

DATE

REVISIONS

REV. #	DATE	DESCRIPTION

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DRAWN BY:	S.T.W.
DESIGNED BY:	
APPROVED BY:	B.L.E.
FOLDER REFERENCE:	N/A

WBR PAVILION PLAN, SECTIONS AND DETAILS

FOR:

LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS

FREDERICK COUNTY, MARYLAND

TAX MAP #0097, GRID #0009, PARCEL #0119

PREPARED FOR: FRED. CO. DUSWM

SHEET: 5 of 16 C-4

FILE NO.: PAVILION.dwg

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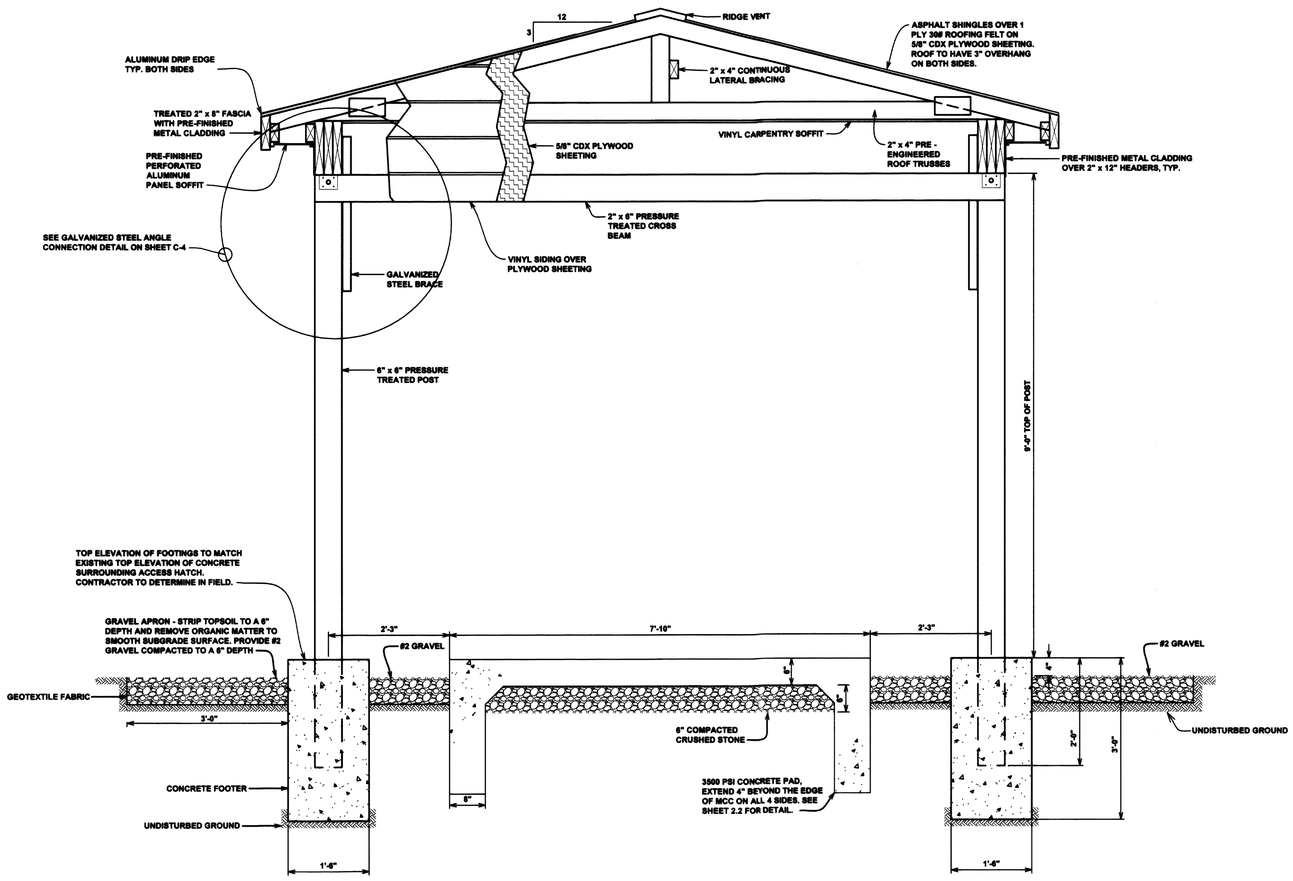

2 SECTION

SCALE: 3/4" = 1'-0"

C-4 C-5

ALL LUMBER DRAWN USING NOMINAL DIMENSIONS.

STATE OF MARYLAND PROFESSIONAL ENGINEER

SEAL 10-1-13
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DESIGNED BY:	
APPROVED BY:	B.L.E.
FOLDER REFERENCE:	N/A

WBR SECTION

FOR:

LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS

FREDERICK COUNTY, MARYLAND

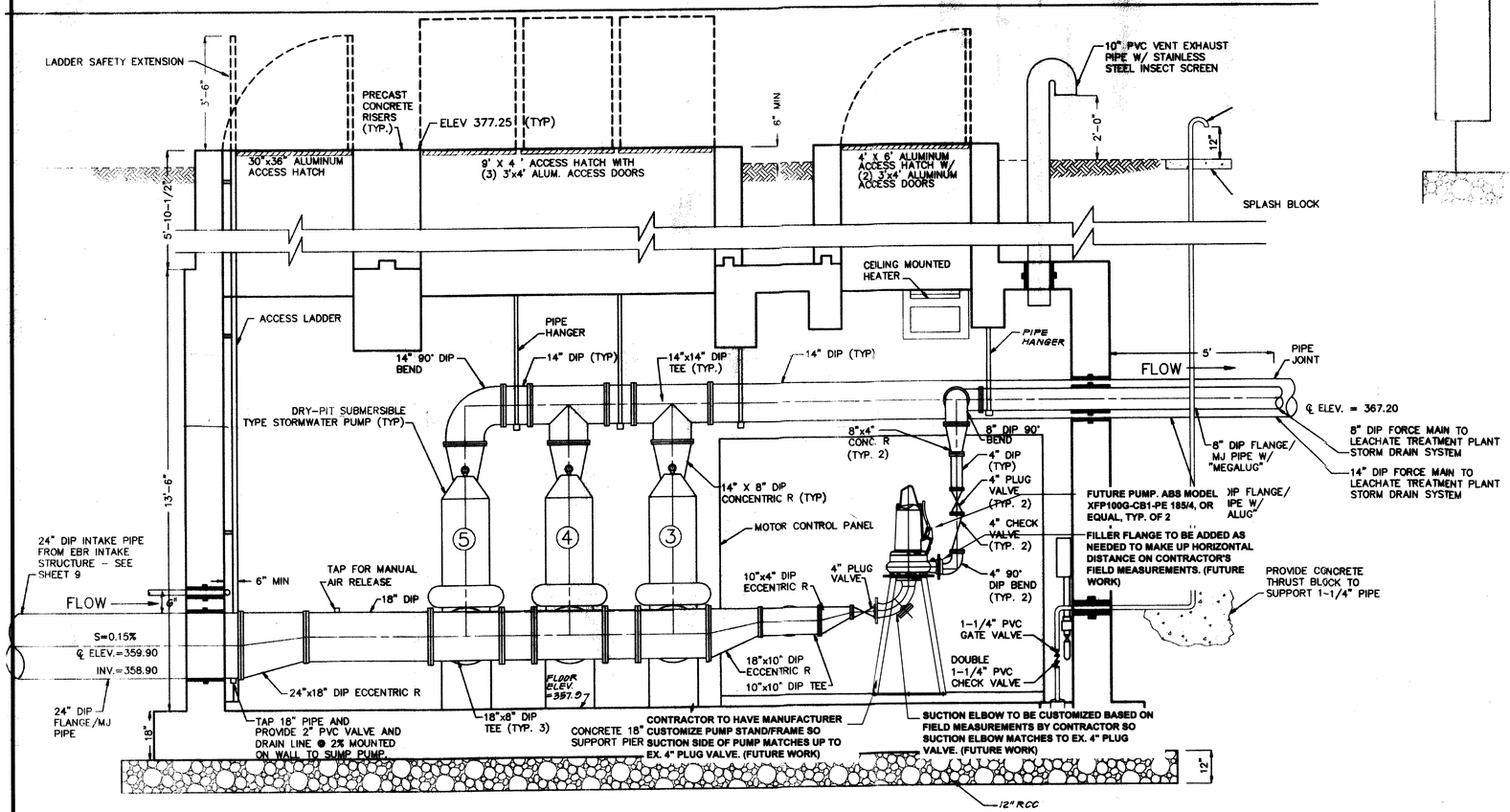
TAX MAP #0087, GRID #0000, PARCEL #0119

PREPARED FOR: FRED. CO. DUSWM

SHEET: 6 of 16 C-5

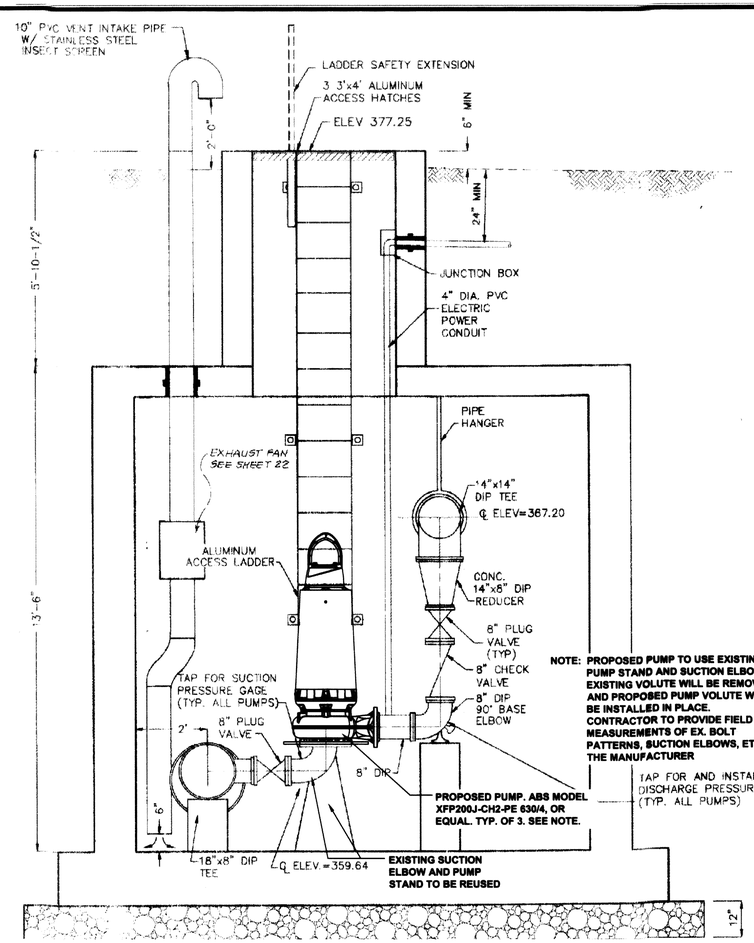
FILE NO.: PAVILION.dwg

PLOTTED: Oct 28 , 2013 - 6:35pm Q:\1130003 - Frederick Co_Landfill Pump Station\Design\Drawings\PAVILION.dwg.....Tab:WBR SECTION



EBR PS SECTION A VIEW

SCALE: 1/2" = 1'



EBR PS SECTION B VIEW

SCALE: 1/2" = 1'

NOTES

1. CONTRACTOR IS ONLY RESPONSIBLE TO PERFORM WORK ASSOCIATED WITH SECTION B. WORK IN SECTION A IS FOR FUTURE REFERENCE BY COUNTY AND IS NOT IN CONTRACT.

STATE OF MARYLAND — MICHAEL J. RIGGS — No. 30728 — PROFESSIONAL ENGINEER

SEAL 10-1-13
DATE

REVISIONS

REV. #	DATE	DESCRIPTION

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 30728, EXPIRATION DATE: 06-30-14

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DATE:	Sept. 11, 2013
JOB NUMBER:	C1130003
SCALE:	As Shown
DRAWN BY:	C.W.M.
DESIGNED BY:	R.J.R./C.W.M.
APPROVED BY:	R.J.R.
FOLDER REFERENCE:	N/A

EBR PROPOSED PUMP SECTIONS

FOR:

LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS

FREDERICK COUNTY, MARYLAND

TAX MAP #0087, GRID #0009, PARCEL #0119

PREPARED FOR: FRED. CO. DUSWM

SHEET: 7 of 16 C-6

FILE NO.: PS PLAN AND SECTIONS.dwg

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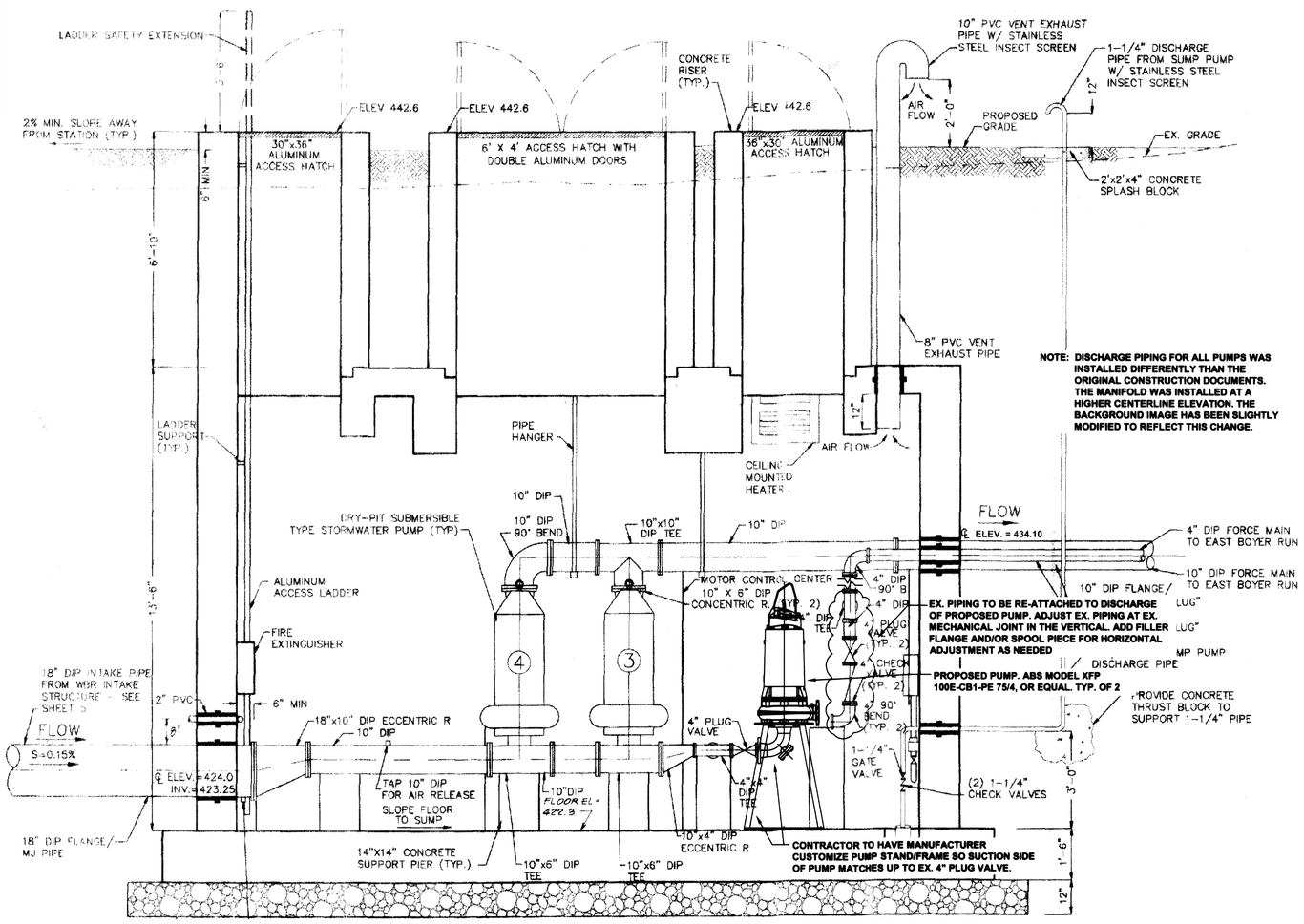
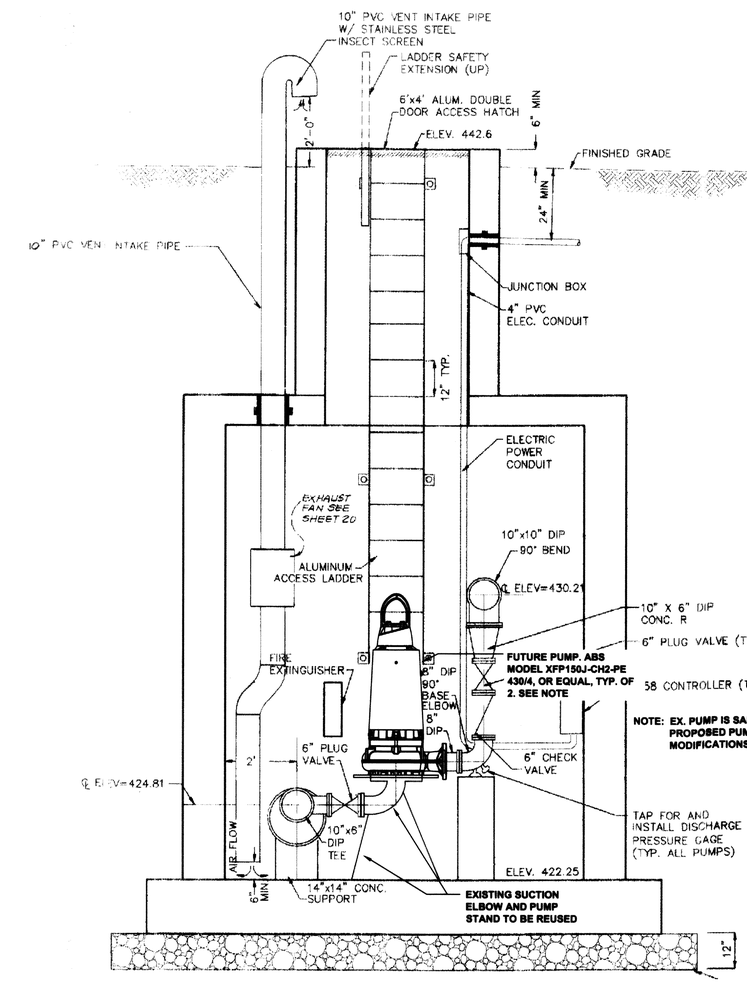


WBR PS SECTION C VIEW

SCALE: 1/2" = 1'



WBR PS SECTION D VIEW (ALL FUTURE WORK)

SCALE: 1/2" = 1'

NOTES

1. CONTRACTOR IS ONLY RESPONSIBLE TO PERFORM WORK ASSOCIATED WITH SECTION C. WORK IN SECTION D IS FOR FUTURE REFERENCE BY COUNTY AND IS NOT IN CONTRACT.

STATE OF MARYLAND — RICHARD JAY FRANCIS — REGISTERED PROFESSIONAL ENGINEER

SEAL 10.1.13
DATE

REVISIONS

REV. #	DATE	DESCRIPTION

PROFESSIONAL CERTIFICATION

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APPROVED BY:	R.J.R.
FOLDER REFERENCE:	N/A

WBR PROPOSED PUMP SECTIONS

FOR:

LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS

FREDERICK COUNTY, MARYLAND

TAX MAP #0087, GRID #0009, PARCEL #0119

PREPARED FOR: FRED. CO. DUSWM

SHEET:
8 of 16 C-7

FILE NO.:
PS PLAN AND SECTIONS.dwg

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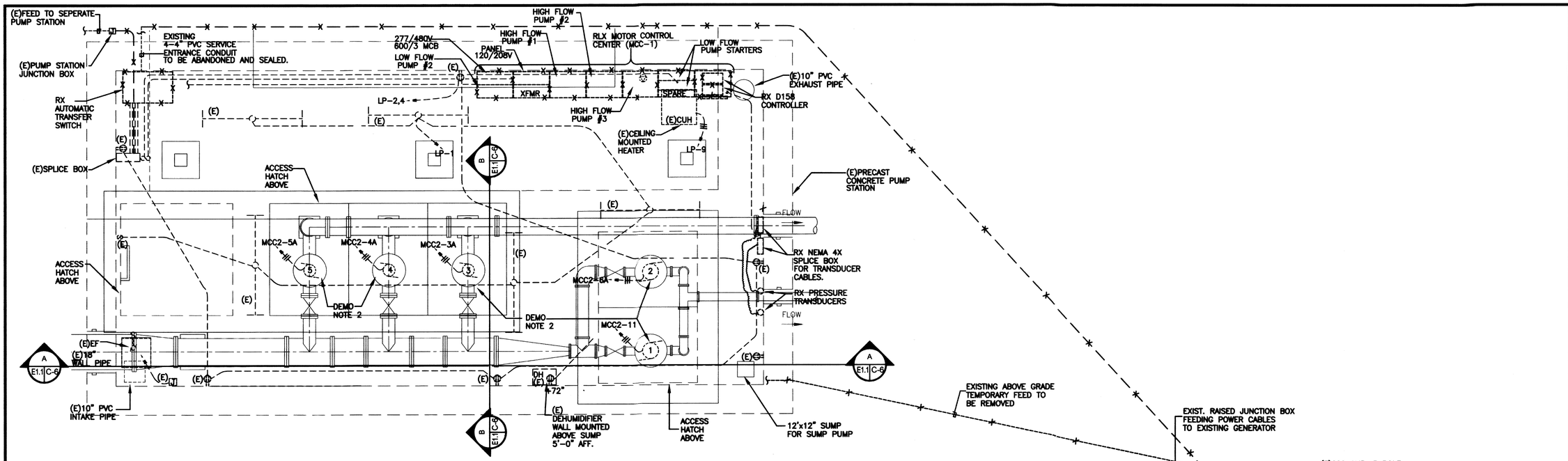
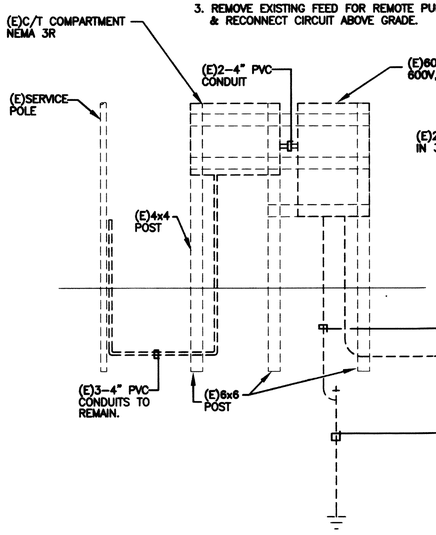


EBR PUMP STATION ELECTRICAL PLAN VIEW - DEMOLITION

SCALE: 1/2"=1'-0"

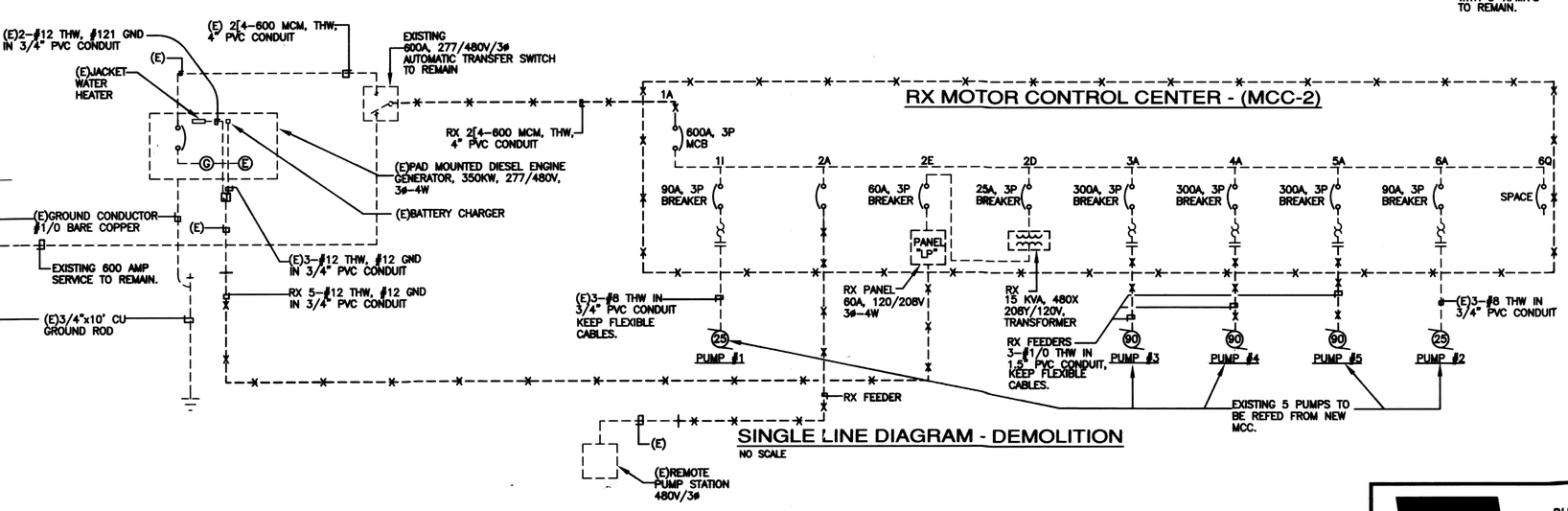
DEMOLITION NOTES

1. THE EXISTING PUMP STATION SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. NO DEMOLITION SHALL OCCUR UNTIL THE NEW MOTOR CONTROL CENTER IS OPERATIONAL.
2. DISCONNECT EXISTING PUMP POWER CABLES & SEAL HIGH TEMP ALARM CABLES. RETAIN AS MUCH CABLE AS POSSIBLE. THE CABLES SHALL BE RECONNECTED TO THE NEW MCC FEEDS.
3. REMOVE EXISTING FEED FOR REMOTE PUMP STATION. PROVIDE A JUNCTION BOX & RECONNECT CIRCUIT ABOVE GRADE.



SERVICE ENTRANCE

NO SCALE



SINGLE LINE DIAGRAM - DEMOLITION

NO SCALE

RHL ENGINEERING COMPANY, INC.
3 West Second Street
Frederick, Md. 21701
OFFICE: (301) 695-9424
FAX: (301) 293-6338
E-mail:rhlengr@rhlengr.com

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SCALE:	As-Shown
DRAWN BY:	DWS
DESIGNED BY:	MGT
APPROVED BY:	RHL/MGT
FOLDER REFERENCE:	N/A

EBR PUMP STATION - DEMOLITION

FOR:

LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS

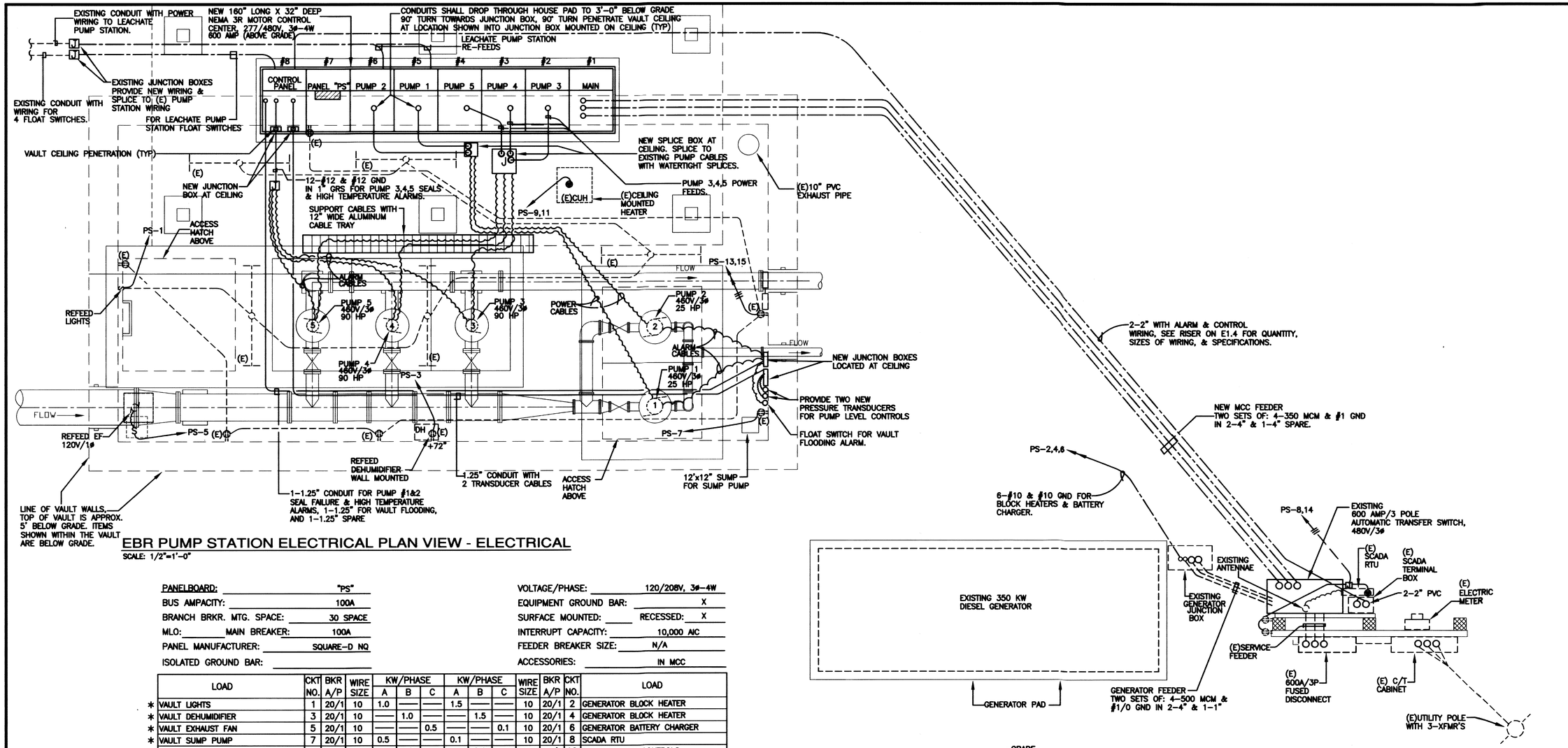
FREDERICK COUNTY, MARYLAND

TAX MAP #0087, GRID #0008, PARCEL #0119

PREPARED FOR: FRED. CO. DUSWM

SHEET: E1.1 9 OF 16

FILE NO.: 12222E1.1



EBR PUMP STATION ELECTRICAL PLAN VIEW - ELECTRICAL

SCALE: 1/2"=1'-0"

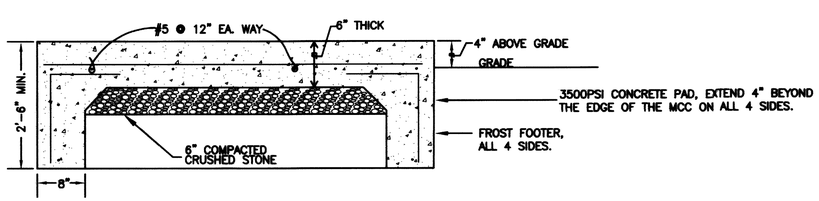
PANELBOARD:	"PS"
BUS AMPACITY:	100A
BRANCH BRKR. MTG. SPACE:	30 SPACE
MLO: MAIN BREAKER:	100A
PANEL MANUFACTURER:	SQUARE-D NQ
ISOLATED GROUND BAR:	

VOLTAGE/PHASE:	120/208V, 3ø-4W
EQUIPMENT GROUND BAR:	X
SURFACE MOUNTED: ____ RECESSED:	X
INTERRUPT CAPACITY:	10,000 AIC
FEEDER BREAKER SIZE:	N/A
ACCESSORIES:	IN MCC

	LOAD	CKT NO.	BKR A/P	WIRE SIZE	KW/PHASE A	KW/PHASE B	KW/PHASE C	KW/PHASE A	KW/PHASE B	KW/PHASE C	WIRE SIZE	BKR A/P	CKT NO.	LOAD
*	VAULT LIGHTS	1	20/1	10	1.0	—	—	1.5	—	—	10	20/1	2	GENERATOR BLOCK HEATER
*	VAULT DEHUMIDIFIER	3	20/1	10	—	1.0	—	—	1.5	—	10	20/1	4	GENERATOR BLOCK HEATER
*	VAULT EXHAUST FAN	5	20/1	10	—	—	0.5	—	—	0.1	10	20/1	6	GENERATOR BATTERY CHARGER
*	VAULT SUMP PUMP	7	20/1	10	0.5	—	—	0.1	—	—	10	20/1	8	SCADA RTU
*	VAULT EUH	9	30/2	8	—	1.0	—	—	0.1	—	12	20/1	10	PUMP STATION CONTROLS
		11			—	—	1.0	—	—	0.1	12	20/1	12	PUMP STATION CONTROLS - BACKUP
*	VAULT RECEPTACLES	13	20/1	10	0.5	—	—	0.4	—	—	12	20/1	14	SERVICE RECEPTACLES
*	VAULT RECEPTACLES	15	20/1	10	—	0.5	—	—	—	—		20/1	16	SPARE
		17			—	—		—	—			20/1	18	SPARE
		19				—	—		—	—		20/1	20	SPARE
		21			—		—	—		—		20/1	22	SPARE
		23			—	—		—	—			30/2	24	SPARE
		25				—	—		—	—			26	
		27			—	—		—	—	—		20/2	28	SPARE
		29			—	—		—	—				30	
	SUBTOTAL / PHASE				2.0	2.5	1.5	1.6	1.6	0.2				
	TOTAL / PHASE				3.6	4.1	1.7							

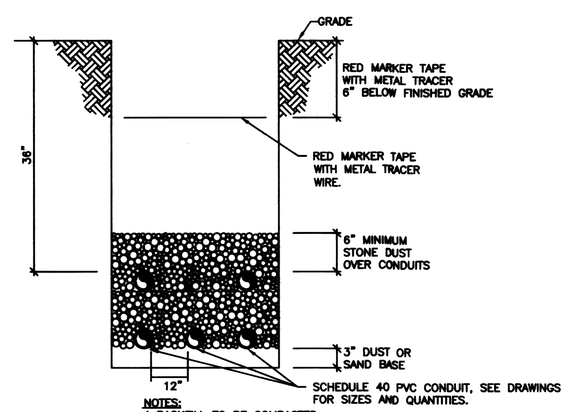
TOTAL KVA = 9.4 AMPS = 26

* GFI TYPE B FOR EQUIPMENT PROTECTION BREAKER.



EXTERIOR EQUIPMENT PAD DETAIL

NO SCALE



NOTES:
1. BACKFILL TO BE COMPACTED IN 6 INCH LAYERS TO AVOID SETTLING.
2. CONDUITS ARE TO HAVE 12" HORIZONTAL SEPARATION BETWEEN POWER AND LOW VOLTAGE.
3. SPARE CONDUITS SHALL BE ON TOP.

UNDERGROUND CONDUIT DETAIL

NO SCALE

GENERAL SITE NOTES

1. SUCCESSFUL CONTRACTOR SHALL CALL MISS UTILITY 72 HOURS PRIOR TO ANY EXCAVATION AND MAKE PROVISIONS TO FIELD LOCATE ALL EXISTING UTILITIES.
2. NOTE EXISTING UNDERGROUND UTILITIES ARE NOT LOCATED ON THIS PLAN. CONTRACTOR SHALL CONTACT MISS UTILITY AND MAKE PROVISIONS TO FIELD LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION. THIS PLAN SHALL NOT BE USED AS A GUIDE TO LOCATE EXISTING UTILITIES.

RHL ENGINEERING COMPANY, INC.
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OFFICE: (301) 695-9424
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SCALE:	As-Shown
DRAWN BY:	DWS
DESIGNED BY:	MGT
APPROVED BY:	RHL/MGT
FOLDER REFERENCE:	N/A

EBR PUMP STATION - ELECTRICAL

FOR:

LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS

FREDERICK COUNTY, MARYLAND

TAX MAP #0087, GRID #0009, PARCEL #0119

PREPARED FOR: FRED. CO. DUSWM

SHEET: E1.2 10 OF16

FILE NO.: 12222E1.1

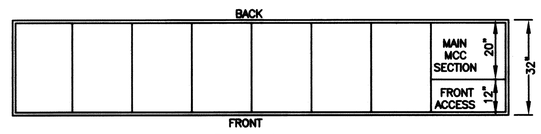
MOTOR STARTER SCHEDULE (NOMINAL 20"x20" SECTIONS)

MARK	SECTION	MOUNTING SPACE	DESCRIPTION	VOLTAGE	BREAKER/MOTOR CIRCUIT PROTECTOR AMPS	BREAKER/MOTOR CIRCUIT PROTECTOR POLES	HORSE POWER	MOTOR STARTER SIZE/FRAME	MOTOR STARTER TYPE	MOTOR STARTER ACCESSORIES	CONTROL DEVICE	NOTES
1A	1	36"	600 AMP MAIN BREAKER	480V/3ø	600	3	N/A	N/A	N/A	N/A	N/A	
2A	2	60"	PUMP #3 STARTER	480V/3ø	200	3	90	C14	SOFT START WITH CONTACTOR BYPASS	HOA SELECTOR, RED RUN PILOT LIGHT, SOLIDE STATE OVERLOAD PHASE LOSS PROTECTION, CONTACTOR BYPASS	PRESSURE TRANSDUCER, MEASURING WATER STORMWATER POND	CONTROLLED BY SIEMENS INTRALINK LC150 TRIPLEX (P-3,4,5) CONTROLLER (HIGH FLOW). SET POINTS TO MATCH EXISTING.
3A	3	60"	PUMP #4 STARTER	480V/3ø	200	3	90	C14	SOFT START WITH CONTACTOR BYPASS	HOA SELECTOR, RED RUN PILOT LIGHT, SOLIDE STATE OVERLOAD PHASE LOSS PROTECTION, CONTACTOR BYPASS	PRESSURE TRANSDUCER, MEASURING WATER STORMWATER POND	CONTROLLED BY SIEMENS INTRALINK LC150 TRIPLEX (P-3,4,5) CONTROLLER (HIGH FLOW). SET POINTS TO MATCH EXISTING.
4A	4	60"	PUMP #5 STARTER	480V/3ø	200	3	90	C14	SOFT START WITH CONTACTOR BYPASS	HOA SELECTOR, RED RUN PILOT LIGHT, SOLIDE STATE OVERLOAD PHASE LOSS PROTECTION, CONTACTOR BYPASS	PRESSURE TRANSDUCER, MEASURING WATER STORMWATER POND	CONTROLLED BY SIEMENS INTRALINK LC150 TRIPLEX (P-3,4,5) CONTROLLER (HIGH FLOW). SET POINTS TO MATCH EXISTING.
5A	5	42"	PUMP #1 STARTER	480V/3ø	50	3	27	D47	SOFT START WITH CONTACTOR BYPASS	HOA SELECTOR, RED RUN PILOT LIGHT, SOLIDE STATE OVERLOAD PHASE LOSS PROTECTION, CONTACTOR BYPASS	PRESSURE TRANSDUCER, MEASURING WATER STORMWATER POND	CONTROLLED BY SIEMENS INTRALINK LC150 DUPLEX (P-1,2) CONTROLLER (LOW FLOW). SET POINTS TO MATCH EXISTING.
6A	6	42"	PUMP #2 STARTER	480V/3ø	50	3	27	D47	SOFT START WITH CONTACTOR BYPASS	HOA SELECTOR, RED RUN PILOT LIGHT, SOLIDE STATE OVERLOAD PHASE LOSS PROTECTION, CONTACTOR BYPASS	PRESSURE TRANSDUCER, MEASURING WATER STORMWATER POND	CONTROLLED BY SIEMENS INTRALINK LC150 DUPLEX (P-1,2) CONTROLLER (LOW FLOW). SET POINTS TO MATCH EXISTING.
7A	7	30"	30 KVA TRANSFORMER	480V/3ø	40	3	N/A	N/A	N/A	N/A	N/A	
7B	7	33"	PANEL "PS"	120/208V 3ø	100	3	N/A	N/A	N/A	N/A	N/A	
1B	1	6"	SURGE SUPPRESSOR				N/A	N/A	N/A	N/A	N/A	120KA/PHASE UL 1449 3RD EDITION
1C	1	12"	SPARE	480V/3ø	100 AMP FUSED SWITCH		N/A	N/A	N/A	N/A	N/A	FUSE TO MATCH EXISTING
1D	1	18"	SPARE STARTER	480V/3ø	60	3	N/A	1	FVNR	HOA SELECTOR, RED RUN PILOT LIGHT, SOLIDE STATE OVERLOAD PHASE LOSS PROTECTION	N/A	
2B	2	12"	SPARE SWITCH	480V/3ø	60	3	N/A	N/A	N/A	N/A	N/A	
3B	3	12"	SPARE SWITCH	480V/3ø	60	3	N/A	N/A	N/A	N/A	N/A	
4B	4	12"	SPARE SWITCH	480V/3ø	60	3	N/A	N/A	N/A	N/A	N/A	
5B	5	12"	SPARE SWITCH	480V/3ø	30	3	N/A	N/A	N/A	N/A	N/A	
6B	6	12"	SPARE SWITCH	480V/3ø	30	3	N/A	N/A	N/A	N/A	N/A	
5C	5	18"	LEACHATE PUMP 1	480V/3ø	30	3	12	2	FVNR	HOA SELECTOR, RED RUN PILOT LIGHT, SOLIDE STATE OVERLOAD PHASE LOSS PROTECTION	FLOAT SWITCHES IN LEACHATE WET WELL CONNECTED TO HEALY-RUFF FLOAT-PAK DUPLEX CONTROLLER	
6C	6	18"	LEACHATE PUMP 2	480V/3ø	30	3	12	2	FVNR	HOA SELECTOR, RED RUN PILOT LIGHT, SOLIDE STATE OVERLOAD PHASE LOSS PROTECTION	FLOAT SWITCHES IN LEACHATE WET WELL CONNECTED TO HEALY-RUFF FLOAT-PAK DUPLEX CONTROLLER	
8A	8	72"	CONTROL PANEL									CONTROLS & ALARMS FOR P-1 THRU P-5 & FOR LEACHATE PUMP STATION PUMP 1 AND PUMP 2

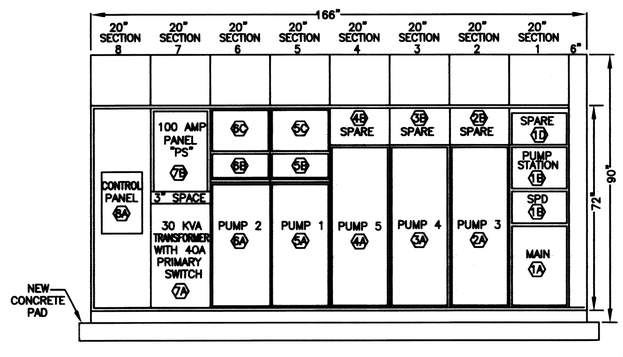
ELECTRICAL LEGEND AND ABBREVIATIONS

1. COORDINATE LOCATIONS AND SIZES WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. UNLESS OTHERWISE NOTED, MOUNTING HEIGHTS ARE TO CENTER LINE OF EQUIPMENT.

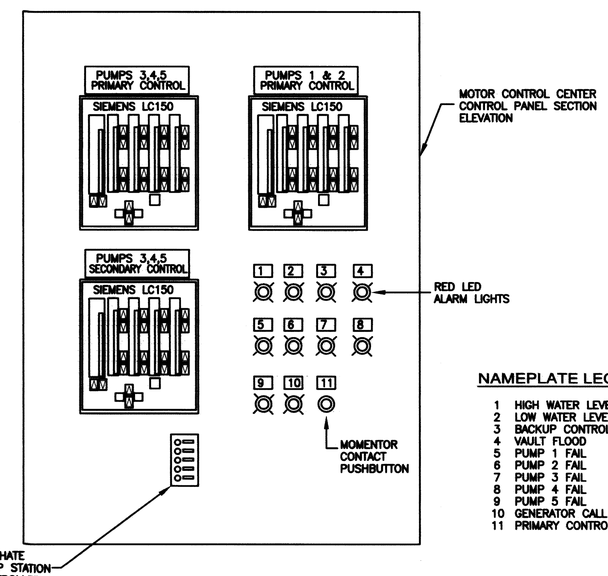
A-1	HOMERUN TO PANELBOARD; ARROWS INDICATE NUMBER OF CIRCUITS, SLASHES INDICATE NUMBER OF CONDUCTORS, LETTER(S) INDICATES PANEL, NUMBER INDICATES CIRCUIT. REFER TO PANEL SCHEDULES FOR CONDUCTOR SIZES.
	BRANCH CIRCUIT, WIRING RUN ON WALLS AND CEILING.
	WIRING IN CONDUIT, 24" BELOW GRADE
S	SIGNAL CABLE ASSEMBLY IN RACEWAY. PROVIDE 2-#16 TWISTED SHIELDED PAIR
C	CONTROL WIRING IN CONDUIT
A	ALARM WIRING IN CONDUIT
	FLEXIBLE METAL LIQUIDTIGHT RACEWAY WITH REQUIRED WIRING.
	DUPLEX RECEPTACLE, SPEC GRADE, 1PH, 125V, 20A, NEMA 5-20, MOUNTED +18" AFF UNLESS OTHERWISE NOTED. ADJACENT "CR" INDICATES CORROSION RESISTANT.
GFI	DUPLEX RECEPTACLE, GROUND FAULT INTERRUPTING, SPEC GRADE, 125V, 20A, FEED THRU TYPE. MOUNTED 48 INCHES AFF INDOORS.
	FLEXIBLE EQUIPMENT CONNECTION, HARD WIRED.
	JUNCTION BOX, OUTLET BOX, OR PULL BOX, SIZE AS REQUIRED.
	MOTOR CONNECTION
S	SWITCH, SPECIFICATION GRADE, 120/277V SINGLE POLE, 20A MOUNTED 48 INCHES AFF. MOUNT AT EQUIPMENT WHEN BEING USED AS A SERVICE SWITCH.
AFF	ABOVE FINISHED FLOOR.
(E)	EXISTING TO REMAIN
EC	EMPTY CONDUIT, PROVIDE PULL WIRE.
WP	WEATHERPROOF, TO SUIT INTENDED USAGE.
PT	PRESSURE TRANSDUCER
RX	REMOVE EXISTING



TOP VEW



FRONT ELEVATION



SECTION 8 - CONTROL PANEL LAYOUT

NAMEPLATE LEGEND

1 HIGH WATER LEVEL
2 LOW WATER LEVEL
3 BACKUP CONTROL SYSTEM "ON"
4 VAULT FLOOD
5 PUMP 1 FAIL
6 PUMP 2 FAIL
7 PUMP 3 FAIL
8 PUMP 4 FAIL
9 PUMP 5 FAIL
10 GENERATOR CALL
11 PRIMARY CONTROLS RESET

MOTOR CONTROL CENTER LAYOUT (NEMA 3R)

SCALE: 1/2"=1'-0"

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FOLDER REFERENCE: N/A

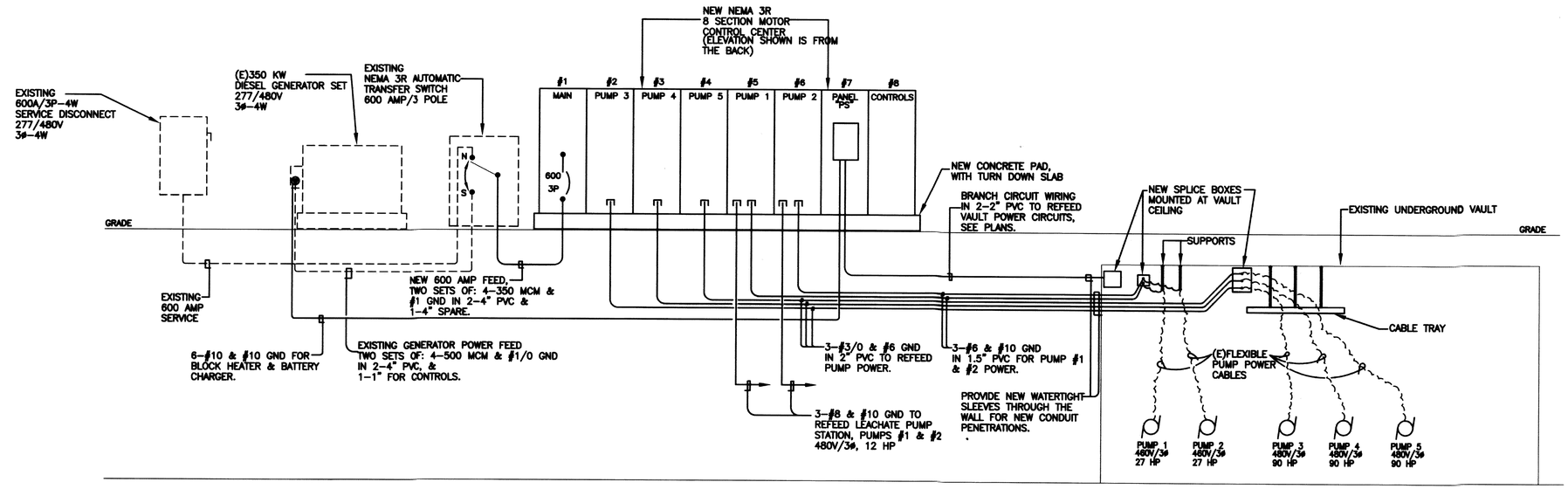
EBR PUMP STATION- DETAILS/LEGEND

FOR:

LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS
FREDERICK COUNTY, MARYLAND
TAX MAP #0087, GRID #0009, PARCEL #0119
PREPARED FOR: FRED. CO. DUSWM

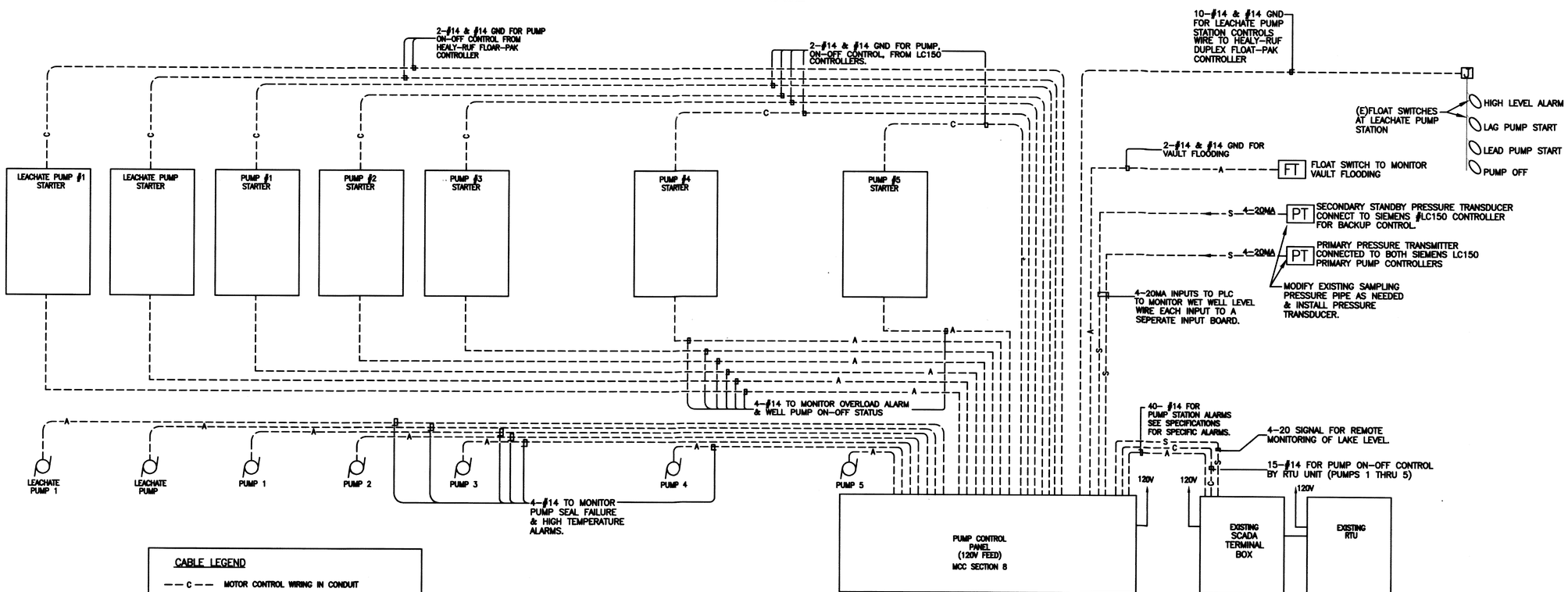
SHEET:
E1.3 11 OF 16

FILE NO.:
12222E1.3



ELECTRIC POWER RISER

NO SCALE



CABLE LEGEND

- C — MOTOR CONTROL WIRING IN CONDUIT
- A — ALARM WIRING IN CONDUIT
- S — TWISTED SHIELDED PAIR SIGNAL CABLE IN CONDUIT
- // — 120 VOLT POWER, SEE FLOOR PLAN FOR CIRCUITRY

ALARM/CONTROL BLOCK DIAGRAM - EBR PUMP STATION

NO SCALE

RHL ENGINEERING COMPANY, INC.
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Frederick, Md. 21701
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FAX: (301) 293-6338
E-mail:rhlengr@rhlengr.com

STATE OF MARYLAND REGISTERED PROFESSIONAL ENGINEER
SEAL
DATE 10/30/13

REVISIONS

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APPROVED BY:	RHL/MGT
FOLDER REFERENCE:	N/A

EBR PUMP STATION - RISERS

FOR:

LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS

FREDERICK COUNTY, MARYLAND

TAX MAP #0087, GRID #0009, PARCEL #0119

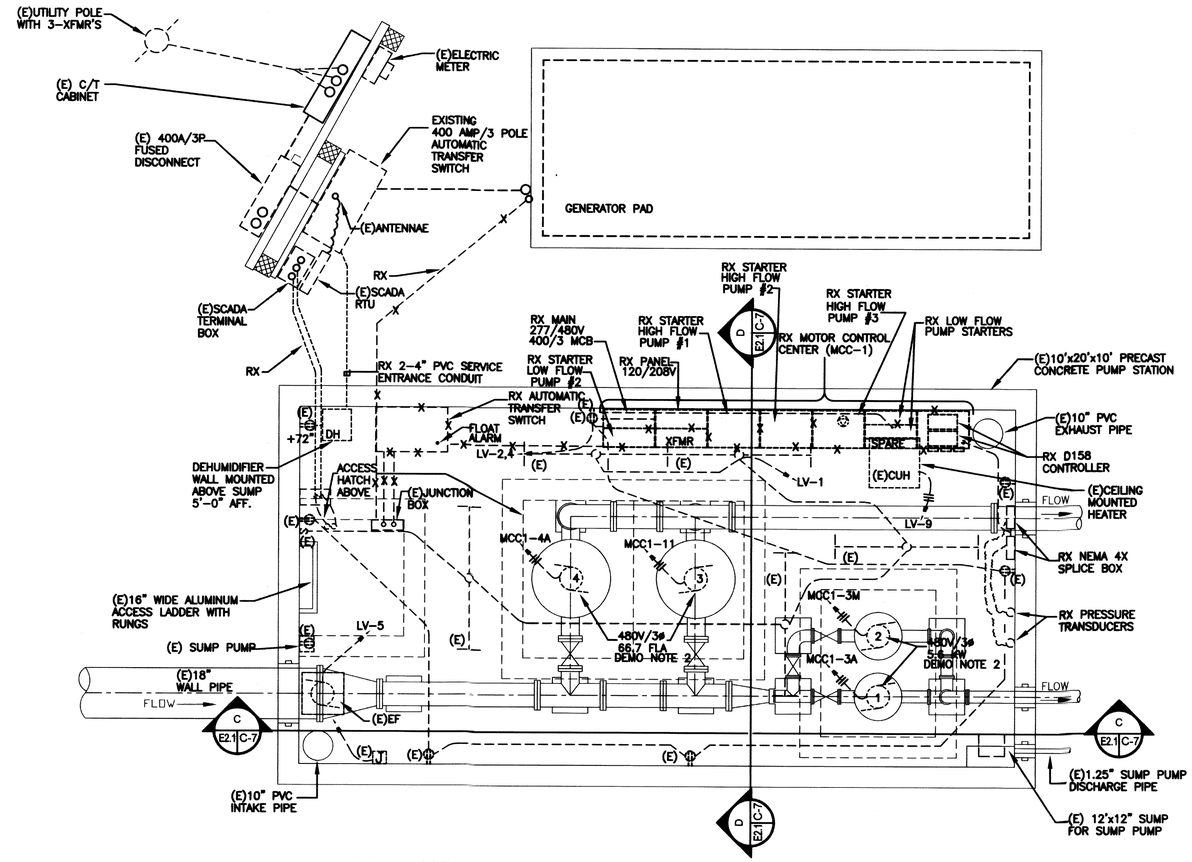
PREPARED FOR: FRED. CO. DUSWM

SHEET:
E1.4 12 OF 16

FILE NO.:
12222E1.4

MOTOR CONTROL CENTER SCHEDULE(TO BE REMOVED)

	EQUIPMENT DESCRIPTION	MOTOR DATA			STARTER AND OVERCURRENT PROTECTION					REMARKS
		VOLTS	PHASE	HP	TYPE	NEMA SIZE	FRAME	POLE	TRIP	
1A	MAIN CIRCUIT BREAKER	480					400	3	400	
1I	PUMP #3	480	3	50	FVNR	3	200	3	175	
2A	SPACE	480	3							
2E	PANEL – LV						100	3	60	
2D	TRANSFORMER FOR PANEL LV						100	3	35	
3A	PUMP #1	480	3	8.5	FVNR	1	100	3	35	
3M	PUMP #2	480	3	8.5	FVNR	1	100	3	35	
4A	PUMP #4	480	3	50	FVNR	3	200	3	175	
4Q	SPACE	480	3							

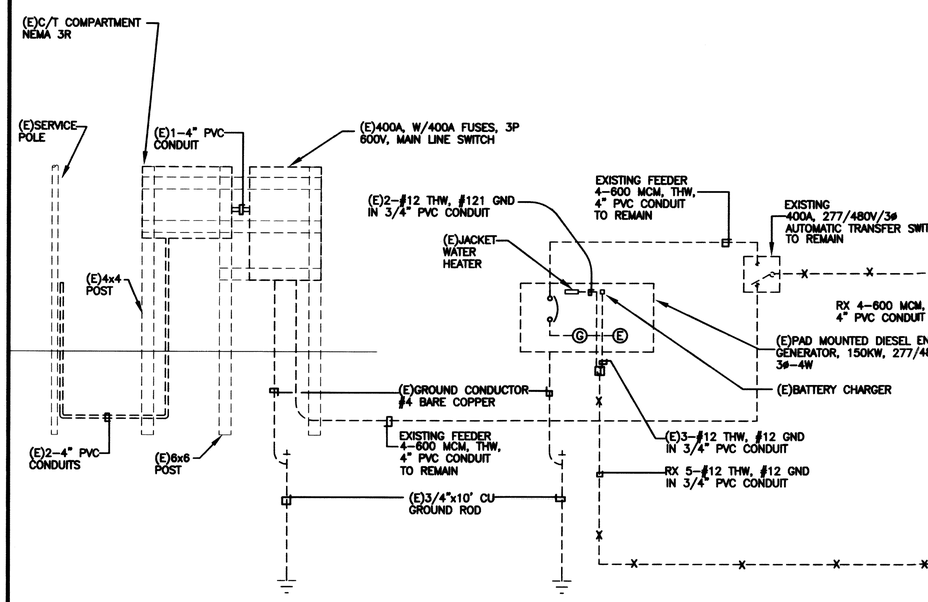


WBR PUMP STATION ELECTRICAL PLAN VIEW - DEMOLITION

SCALE: 1/2"=1'-0"

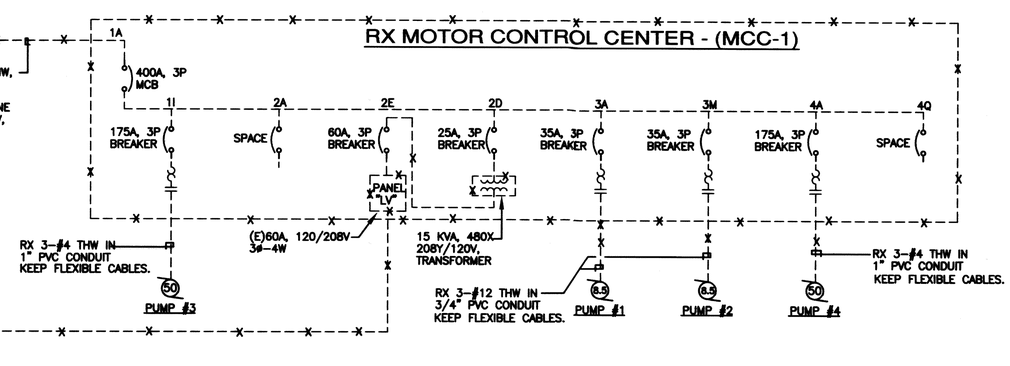
DEMOLITION NOTES

1. THE EXISTING PUMP STATION SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. NO DEMOLITION SHALL OCCUR UNTIL THE NEW MOTOR CONTROL CENTER IS OPERATIONAL.
2. DISCONNECT EXISTING PUMP POWER CABLES & SEAL HIGH TEMP ALARM CABLES. RETAIN AS MUCH CABLE AS POSSIBLE. THE CABLES SHALL BE RECONNECTED TO THE NEW MCC FEEDS.
3. REMOVE EXISTING FEED FOR REMOTE PUMP STATION. PROVIDE A JUNCTION BOX & RECONNECT CIRCUIT ABOVE GRADE.



SERVICE ENTRANCE DETAIL

NO SCALE



SINGLE LINE DIAGRAM - DIAGRAM

NO SCALE

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STATE OF MARYLAND — RICHARD H. LAWSON — PROFESSIONAL ENGINEER

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WBR PUMP STATION - DEMOLITION

FOR:

LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS

FREDERICK COUNTY, MARYLAND

TAX MAP #0087, GRID #0009, PARCEL #0119

PREPARED FOR: FRED. CO. DUSWM

SHEET: E2.1 13OF16

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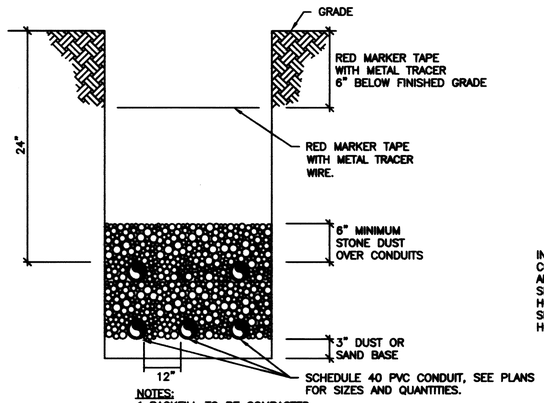
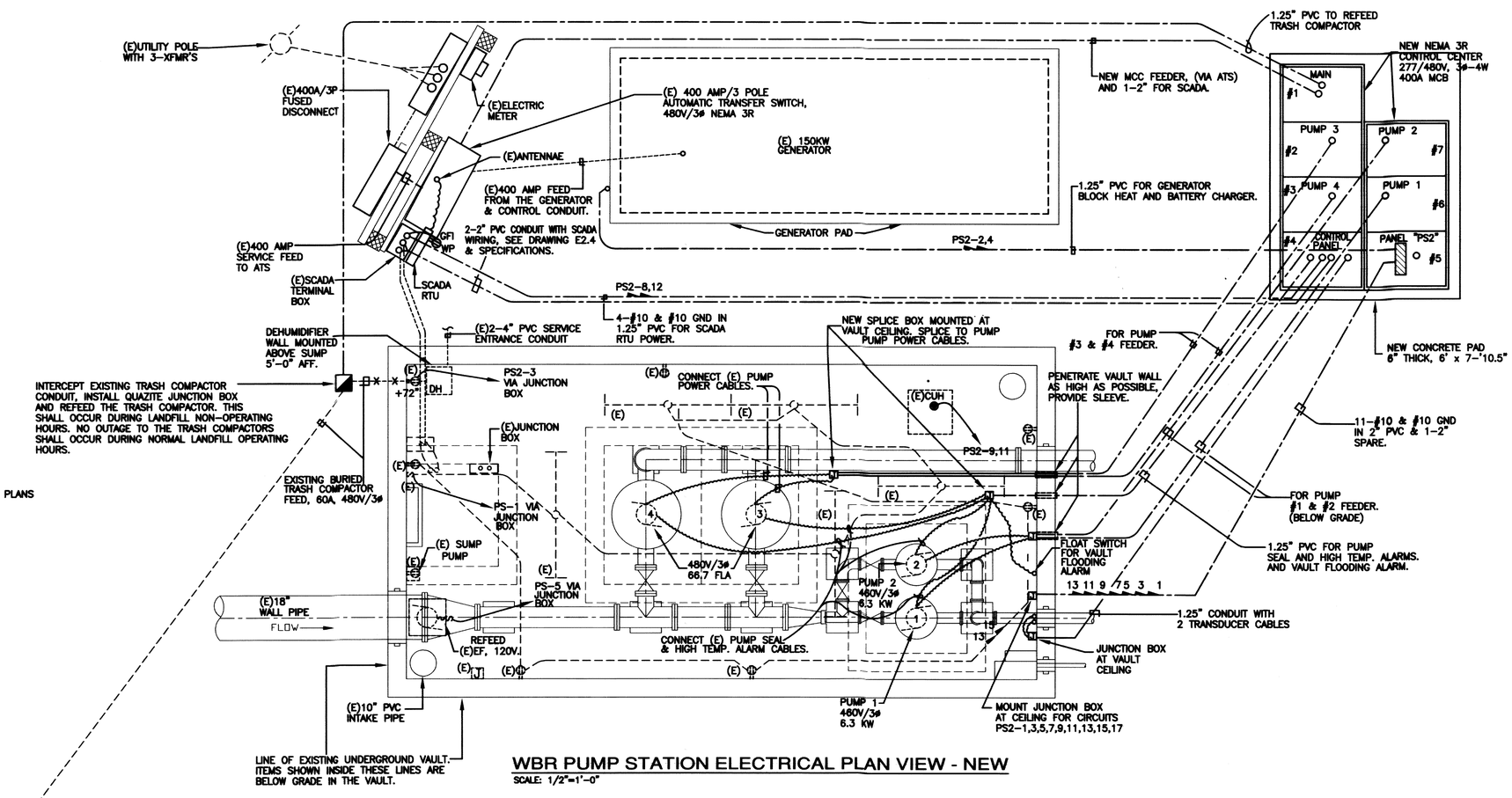


NOTES:
1. BACKFILL TO BE COMPACTED IN 6 INCH LAYERS TO AVOID SETTLING.
2. CONDUITS ARE TO HAVE 12" HORIZONTAL SEPARATION BETWEEN POWER AND LOW VOLTAGE.
3. SPARE CONDUITS SHALL BE ON TOP.

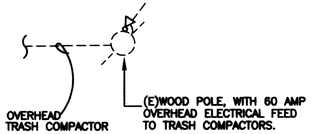
UNDERGROUND CONDUIT DETAIL

NO SCALE



WBR PUMP STATION ELECTRICAL PLAN VIEW - NEW

SCALE: 1/2"=1'-0"



GENERAL SITE NOTES

1. SUCCESSFUL CONTRACTOR SHALL CALL MISS UTILITY 72 HOURS PRIOR TO ANY EXCAVATION AND MAKE PROVISIONS TO FIELD LOCATE ALL EXISTING UTILITIES.
2. NOTE EXISTING UNDERGROUND UTILITIES ARE NOT LOCATED ON THIS PLAN. CONTRACTOR SHALL CONTACT MISS UTILITY AND MAKE PROVISIONS TO FIELD LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION. THIS PLAN SHALL NOT BE USED AS A GUIDE TO LOCATE EXISTING UTILITIES.

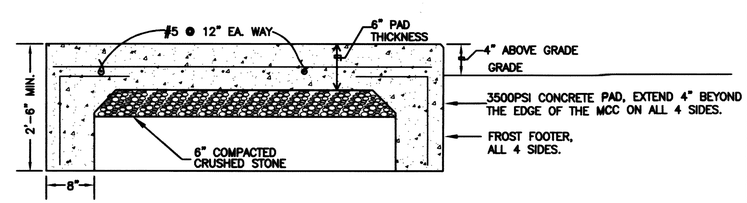
PANELBOARD: "PS2"
BUS AMPACITY: 100A
BRANCH BRKR. MTG. SPACE: 30 SPACE
MLO: MAIN BREAKER: 100A
PANEL MANUFACTURER: SQUARE-D NQ
ISOLATED GROUND BAR:

VOLTAGE/PHASE: 120/208V, 3ø-4W
EQUIPMENT GROUND BAR: X
SURFACE MOUNTED: RECESSED:
INTERRUPT CAPACITY: 10,000 AIC
FEEDER BREAKER SIZE: N/A
ACCESSORIES: IN MCC

LOAD	CKT NO.	BKR A/P	WIRE SIZE	KW/PHASE A	KW/PHASE B	KW/PHASE C	KW/PHASE A	KW/PHASE B	KW/PHASE C	WIRE SIZE	BKR A/P	CKT NO.	LOAD
* VAULT LIGHTS	1	20/1	10	1.0	—	—	1.5	—	—	10	20/1	2	GENERATOR BLOCK HEATER
* VAULT DEHUMIDIFIER	3	20/1	10	—	1.0	—	—	1.5	—	10	20/1	4	GENERATOR BLOCK HEATER
* VAULT EXHAUST FAN	5	20/1	10	—	—	0.7	—	—	0.2	10	20/1	6	GENERATOR BATTERY CHARGER
* VAULT SUMP PUMP	7	20/1	10	0.7	—	—	0.2	—	—	10	20/1	8	SCADA RTU
* VAULT EUH	9	30/2	8	—	1.0	—	—	0.2	—	10	20/1	10	PUMP STATION CONTROLS
	11			—	—	1.0	—	—	0.2		20/1	12	SERVICE RECEPTACLE
* VAULT RECEPTACLES	13	20/1	10	0.5	—	—		—	—		20/1	14	SPARE
* VAULT RECEPTACLES	15	20/1	10	—	0.5	—	—		—		20/1	16	SPARE
	17			—	—		—	—			20/1	18	SPARE
	19				—	—		—	—		20/1	20	SPARE
	21			—		—	—		—		20/1	22	SPARE
	23			—	—		—	—			20/2	24	SPARE
	25				—	—		—	—			26	
	27			—		—	—		—		30/2	28	SPARE
	29			—	—		—	—				30	
SUBTOTAL / PHASE				2.2	2.5	1.7	1.7	1.7	0.4				
TOTAL / PHASE				3.9	4.2	2.1							

TOTAL KVA = 10.2 AMPS - 28

* GFI TYPE B FOR EQUIPMENT PROTECTION BREAKER.



EXTERIOR EQUIPMENT PAD DETAIL

NO SCALE

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STATE OF MARYLAND — RICHARD HOWARD LAWSON — PROFESSIONAL ENGINEER

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APPROVED BY: RHL/MGT
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WBR PUMP STATION - DEMOLITION

FOR:

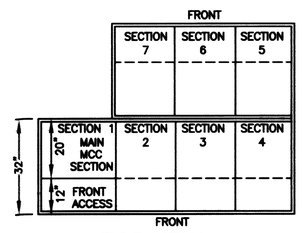
LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS
FREDERICK COUNTY, MARYLAND
TAX MAP #0087, GRID #0009, PARCEL #0119
PREPARED FOR: FRED. CO. DUSWM

SHEET: E2.2 14 OF 16

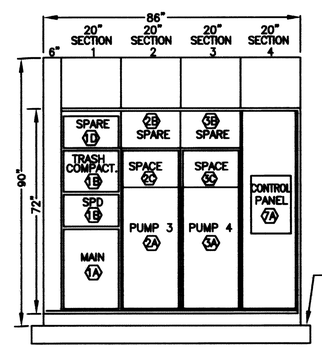
FILE NO.: 12222E2.1

MOTOR STARTER SCHEDULE (NEMA 3R) (NOMINAL 20"x20" SECTIONS)

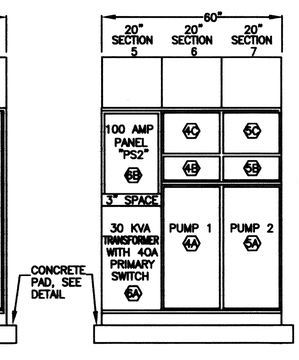
MARK	SECTION	MOUNTING SPACE	DESCRIPTION	VOLTAGE	BREAKER/MOTOR CIRCUIT PROTECTOR AMPS	POLES	HORSE POWER	MOTOR STARTER SIZE/FRAME	MOTOR STARTER TYPE	MOTOR STARTER ACCESSORIES	CONTROL DEVICE	NOTES
1A	1	36"	400 AMP MAIN BREAKER	480V/3ø	400	3	N/A	N/A	N/A	N/A	N/A	
2A	2	42"	PUMP #3 STARTER	480V/3ø	100	3	50	D75	SOFT START WITH CONTACTOR BYPASS	HOA SELECTOR, RED RUN PILOT LIGHT, SOLIDE STATE OVERLOAD PHASE LOSS PROTECTION, CONTACTOR BYPASS	PRESSURE TRANSDUCER, MEASURING WATER DEPTH IN STORMWATER POND	CONTROLLED BY SIEMEN INTRALINK LC150 CONTROLLER PUMPS 3 & 4 TO BE DUPLEXED.
3A	3	42"	PUMP #4 STARTER	480V/3ø	100	3	50	D75	SOFT START WITH CONTACTOR BYPASS	HOA SELECTOR, RED RUN PILOT LIGHT, SOLIDE STATE OVERLOAD PHASE LOSS PROTECTION, CONTACTOR BYPASS	PRESSURE TRANSDUCER, MEASURING WATER DEPTH IN STORMWATER POND	CONTROLLED BY SIEMEN INTRALINK LC150 CONTROLLER PUMPS 3 & 4 TO BE DUPLEXED.
4A	4	42"	PUMP #1 STARTER	480V/3ø	50	3	27	D17	SOFT START WITH CONTACTOR BYPASS	HOA SELECTOR, RED RUN PILOT LIGHT, SOLIDE STATE OVERLOAD PHASE LOSS PROTECTION, CONTACTOR BYPASS	PRESSURE TRANSDUCER, MEASURING WATER DEPTH IN STORMWATER POND	CONTROLLED BY SIEMEN INTRALINK LC150 CONTROLLER PUMPS 1 & 2 TO BE DUPLEXED.
5A	5	42"	PUMP #2 STARTER	480V/3ø	50	3	27	DI7	SOFT START WITH CONTACTOR BYPASS	HOA SELECTOR, RED RUN PILOT LIGHT, SOLIDE STATE OVERLOAD PHASE LOSS PROTECTION, CONTACTOR BYPASS	PRESSURE TRANSDUCER, MEASURING WATER DEPTH IN STORMWATER POND	CONTROLLED BY SIEMEN INTRALINK LC150 CONTROLLER PUMPS 1 & 2 TO BE DUPLEXED.
7A	7	72"	CONTROL PANEL									CONTROLS AND ALARMS FOR P-1 THRU P-4
6A	6	30"	30 KVA TRANSFORMER	480V/3ø	40	3	N/A	N/A	N/A	N/A	N/A	
6B	6	33"	PANEL "PS2"	120/208V 3ø	100	3	N/A	N/A	N/A	N/A	N/A	
1B	1	6"	SURGE SUPPRESSOR				N/A	N/A	N/A	N/A	N/A	120KA/PHASE UL 1449 3RD EDITION
1C	1	12"	TRASH COMPACTOR	480V/3ø	60 AMP FUSED SWITCH		N/A	N/A	N/A	N/A	N/A	FUSE TO MATCH EXISTING
1D	1	18"	SPARE STARTER	480V/3ø	60	3	N/A	1	FVNR	HOA SELECTOR, RED RUN PILOT LIGHT, SOLIDE STATE OVERLOAD PHASE LOSS PROTECTION, CONTACTOR BYPASS	N/A	
2B	2	12"	SPARE SWITCH	480V/3ø	60	3	N/A	N/A	N/A	N/A	N/A	
3B	3	12"	SPARE SWITCH	480V/3ø	60	3	N/A	N/A	N/A	N/A	N/A	
4B	4	12"	SPARE SWITCH	480V/3ø	60	3	N/A	N/A	N/A	N/A	N/A	
5B	5	12"	SPARE SWITCH	480V/3ø	30	3	N/A	N/A	N/A	N/A	N/A	
2C	2	18"	SPACE		N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3C	3	18"	SPACE		N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4C	4	18"	SPACE		N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5C	5	18"	SPACE		N/A	N/A	N/A	N/A	N/A	N/A	N/A	



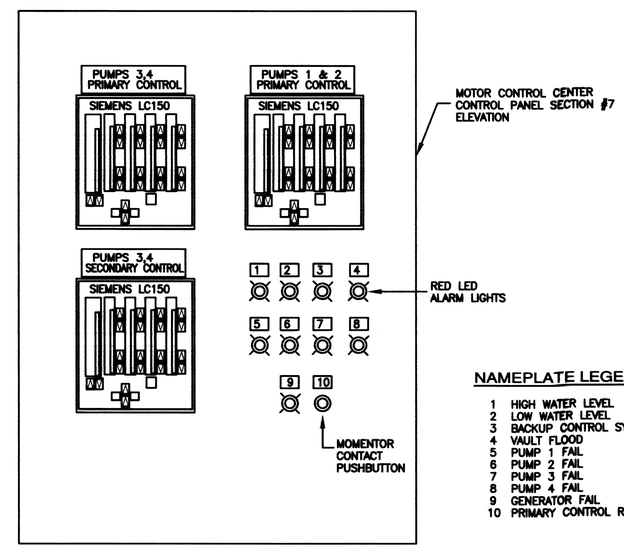
TOP VEW



FRONT ELEVATION



BACK ELEVATION



CONTROL PANEL SECTION #4

NAMEPLATE LEGEND

1 HIGH WATER LEVEL
2 LOW WATER LEVEL
3 BACKUP CONTROL SYSTEM "ON"
4 VAULT FLOOD
5 PUMP 1 FAIL
6 PUMP 2 FAIL
7 PUMP 3 FAIL
8 PUMP 4 FAIL
9 GENERATOR FAIL
10 PRIMARY CONTROL RESET

MOTOR CONTROL CENTER LAYOUT (NEMA 3R)
SCALE: 1/2"=1'-0"

ELECTRICAL LEGEND AND ABBREVIATIONS

1. COORDINATE LOCATIONS AND SIZES WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. UNLESS OTHERWISE NOTED, MOUNTING HEIGHTS ARE TO CENTER LINE OF EQUIPMENT.

A-1 HOMERUN TO PANELBOARD; ARROWS INDICATE NUMBER OF CIRCUITS, SLASHES INDICATE NUMBER OF CONDUCTORS, LETTER(S) INDICATES PANEL, NUMBER INDICATES CIRCUIT. REFER TO PANEL SCHEDULES FOR CONDUCTOR SIZES.

BRANCH CIRCUIT, WIRING RUN ON WALLS AND CEILING.

WIRING IN CONDUIT, 24" BELOW GRADE

-S- SIGNAL CABLE ASSEMBLY IN RACEWAY. PROVIDE 2-#16 TWISTED SHIELDED PAIR

-C- CONTROL WIRING IN CONDUIT

-A- ALARM WIRING IN CONDUIT

FLEXIBLE METAL LIQUIDTIGHT RACEWAY WITH REQUIRED WIRING.

DUPLEX RECEPTACLE, SPEC GRADE, 1PH, 125V, 20A, NEMA 5-20, MOUNTED +18" AFF UNLESS OTHERWISE NOTED. ADJACENT "CR" INDICATES CORROSION RESISTANT.

GFI DUPLEX RECEPTACLE, GROUND FAULT INTERRUPTING, SPEC GRADE, 125V, 20A, FEED THRU TYPE. MOUNTED 48 INCHES AFF INDOORS.

FLEXIBLE EQUIPMENT CONNECTION, HARD WIRED.

JB JUNCTION BOX, OUTLET BOX, OR PULL BOX, SIZE AS REQUIRED.

MOTOR CONNECTION

S SWITCH, SPECIFICATION GRADE, 120/277V SINGLE POLE, 20A MOUNTED 48 INCHES AFF. MOUNT AT EQUIPMENT WHEN BEING USED AS A SERVICE SWITCH.

AFF ABOVE FINISHED FLOOR.

(E) EXISTING TO REMAIN

EC EMPTY CONDUIT, PROVIDE PULL WIRE.

WP WEATHERPROOF, TO SUIT INTENDED USAGE.

PT PRESSURE TRANSDUCER

RX REMOVE EXISTING

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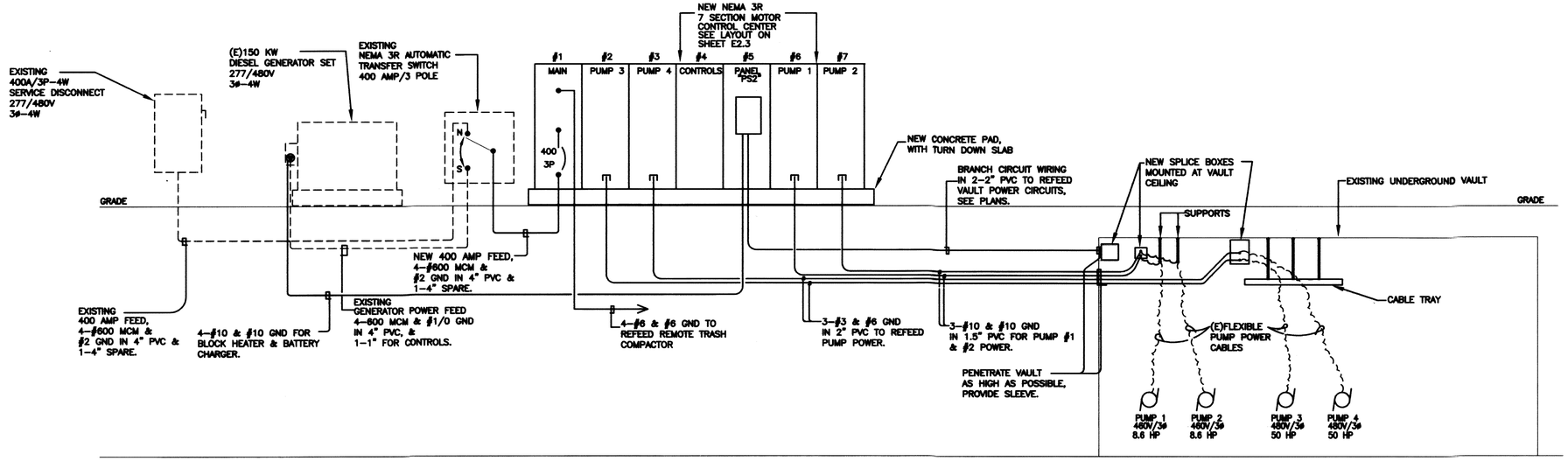
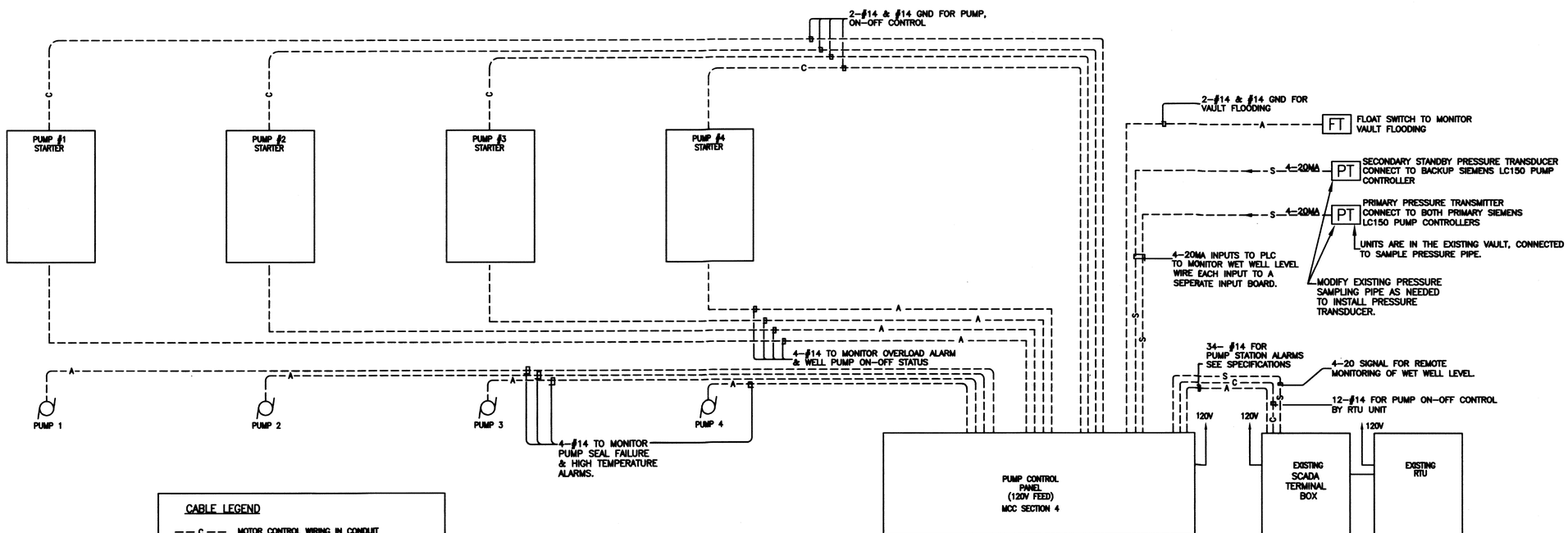


ELECTRIC POWER RISER

NO SCALE



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- A — ALARM WIRING IN CONDUIT
- S — TWISTED SHIELDED PAIR SIGNAL CABLE IN CONDUIT
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ALARM/CONTROL BLOCK DIAGRAM - EBR PUMP STATION

NO SCALE

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LANDFILL STORMWATER PUMP STATIONS IMPROVEMENTS

FREDERICK COUNTY, MARYLAND

TAX MAP #0087, GRID #0009, PARCEL #0119

PREPARED FOR: FRED. CO. DUSWM

SHEET: E2.4 16 OF 16

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