

# Engineering & Design

2977 Telegraph Road // Suite 1640 // Southfield, MI 48034  
248.663.1289

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**State of Michigan**  
DEPARTMENT OF TECHNOLOGY,  
MANAGEMENT, AND BUDGET

## Outdoor Adventure Center - Emergency Back Up Power

1801 Atwater St, Detroit, MI  
48207

**DTMB NUMBER: 751-23030 MNB**

 <p>STATE OF MICHIGAN DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET FACILITIES AND BUSINESS SERVICES ADMINISTRATION DESIGN AND CONSTRUCTION DIVISION ADAM P. LACH, RA, DIRECTOR</p>	
<p>DATE</p>	<p>DESCRIPTION</p>

11/14/2025

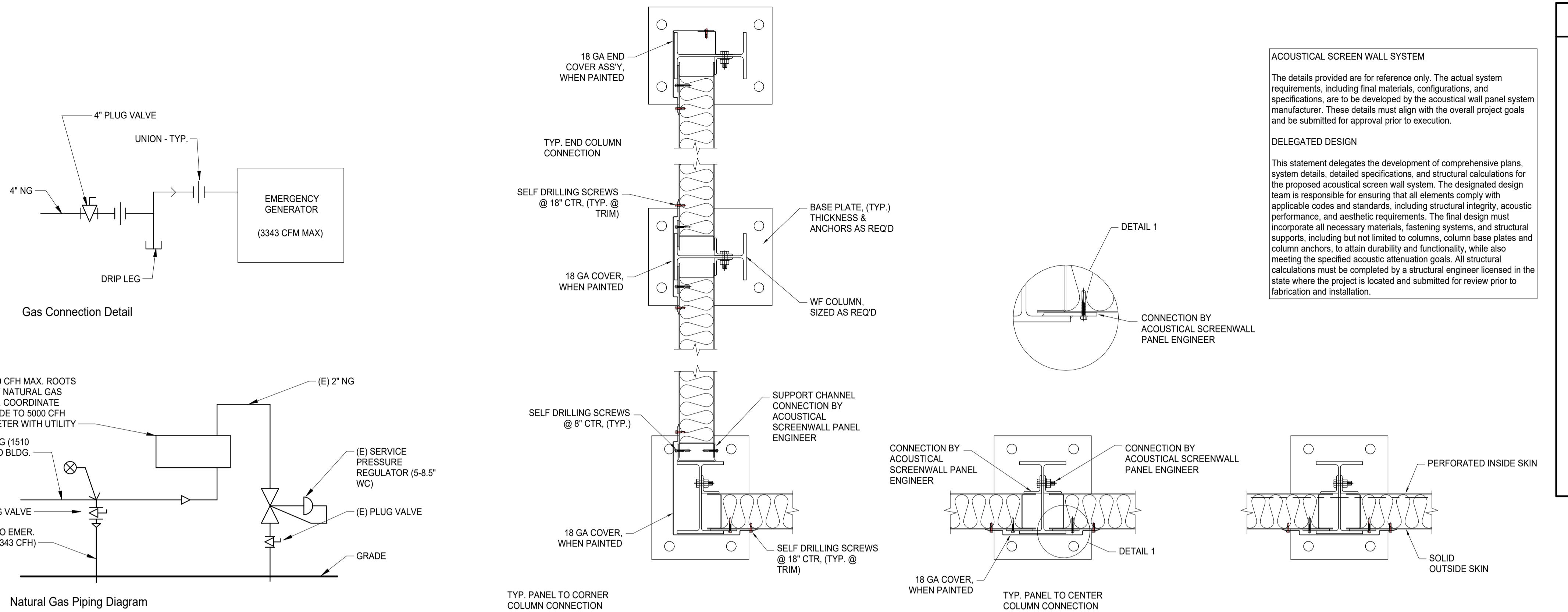
PROJECT CONTACT LIST		DRAWING INDEX																																																																								
<p><b>OWNER:</b> STATE OF MICHIGAN, DTMB TODD COVERDILL 3111 W ST. JOSEPH STREET LANSING, MI 48917 517.242.9945</p> <p><b>CONTRACTOR:</b> TBD</p>	<p><b>ARCHITECT:</b> COLLIERS ENGINEERING &amp; DESIGN DAVID MOSS 7050 WEST SAGINAW HWY. SUITE 200 LANSING, MI 48917 517.272.9835</p> <p><b>MECHANICAL ENGINEER:</b> COLLIERS ENGINEERING &amp; DESIGN TROY McCLURE 280 E BRAND ST, #200 ROCHESTER, NY 14604 585.232.5135</p>	<p><b>ELECTRICAL ENGINEER:</b> COLLIERS ENGINEERING &amp; DESIGN ANGELA ROBINSON 7050 WEST SAGINAW HWY. SUITE 200 LANSING, MI 48917 517.272.9835</p> <p><b>STRUCTURAL ENGINEER:</b> COLLIERS ENGINEERING &amp; DESIGN KIRA TENNES 7050 WEST SAGINAW HWY. SUITE 200 LANSING, MI 48917 517.272.9835</p>																																																																								
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		**811** PROTECT YOURSELF ALL STATE REQUIREMENT OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE Know who's below. Call before you dig. FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: [WWW.CALL811.COM](http://WWW.CALL811.COM)																																				
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**FILE NO.** **751-23030 MNB**	**IDENTIFICATION NO.** **Y24249**						--------------	------	------------		ISSUED FOR	DATE	DESIGNED		PRELIMINARY	□	K. MCCLURE		CONSTRUCTION	□	K. MCCLURE		PLAN REVIEW	□	checked		CORRECTION	□	11/14/2025		FINAL RECORD	□	APPROVED				D. MOSS	
**STATE REVIEW** **11/14/2025** CED PROJECT NUMBER: 23015965G **G000**																																						

Abbreviations					
ABV	ABOVE	D	GSKT GASKET	M	R
ACFC	ABOVE FINISHED CEILING	DL	DEAD LOAD	GEN GENERAL	RBT RABBIT
AFF	ABOVE FINISHED FLOOR	DEG	DEGREE	GC GENERAL CONTRACTOR	VAP BAR VAPOR BARRIER
ARF	ABOVE REFERENCED FINISH FLOOR	DEMO	DEMOLITION	GL GLASS	RAD PANEL RADIANT PANEL
AD ACCESS	ADDED ACCESS	DMT	DEMOUNTABLE PARTITION	GR GRAD	MAU MAKE-UP AIR UNIT
ACOUST	ACOUSTIC/ACOUSTICAL	DEPT	DEPARTMENT	GND GROUND	MDP MAIN DISTRIBUTION PANEL
ACT	ACOUSTICAL CEILING PANEL	DET DT	DETAIL	GFI GROUND FAULT INTERRUPTOR	MAINT MAINTENANCE
ADDM	ADDITIONAL	DTE	DETROIT	GYP GYPSUM	REC RECEIPE/ RECEIVING
ADDNL	ADDITIONAL	DIAG	DETROIT EDISON COMPANY	GYP BD GYPSUM BOARD	RECPT RECEPTACLE
ADJ	ADJUSTABLE	DIA	DIAGONAL	H	V
AC AIR CONDITIONING	AC	DIAMETER	DIAMETER	MACH MACHINE	VAP BAR VAPOR BARRIER
ACC AIR CONDITIONING COMPRESSOR	ACC	DIFF DIFFUSER	DIFFUSER	MACR RM MACHINE ROOM	VARN VARNISH
ACU AIR CONDITIONING UNIT	ACU	DIM DIMENSION	DIMENSION	GLZ GLAZING	RAD RADIUS
AHU AIR HANDLING UNIT	AHU	DISP DISPENSER	DISPENSER	GR GRAD	RWC RAIN WATER CONDUCTOR
ALT ALTERNATE	ALT	DIV DIVISION	DIVISION	GND GROUND	MDP MAIN DISTRIBUTION PANEL
ALU/ALUM ALUMINUM	ALU/ALUM	DR DOOR	DR DOOR	MAINT MAINTENANCE	REC RECEIPE/ RECEIVING
ANSI AMERICAN NATIONAL STANDARDS INSTITUTE	ANSI	DBL DOOR OPENING	DR DOOR OPENING	MI MANUFACTURER	RECPT RECEPTACLE
ANH ANCHOR	ANH	DW DOWEL	DW DOWEL	MFR MANUFACTURER	V
ANOD ANODIZED	ANOD	DN DOWN	DN DOWN	MAR MARBLE	VCT VINYL COMPOSITION TILE
APPROX APPROXIMATE	APPROX	DRN DRAIN	DRN DRAIN	MAS MASONRY	VIN VINYL
ARCH ARCH/ ARCHITECTURAL	ARCH	DWR DRAWER	DWR DRAWER	MO MASONRY OPENING	VNR VENEER
ATM AUTOMATIC TELLER MACHINE	ATM	DWG DRAWING	DWG DRAWING	MAX MAXIMUM	VTR VENT THRU ROOF
ASPH ASPHALT	ASPH	DF DRINKING FOUNTAIN	DF DRINKING FOUNTAIN	MECH MECHANICAL	VERT VERTICAL
ASSY ASSEMBLY	ASSY	DBWTR DUMBWAITER	DBWTR DUMBWAITER	MED MEDICAL	VEST VESTIBULE
AUTO AUTOMATIC	AUTO	DUP DUPLICATE	DUP DUPLICATE	MI MANUFACTURER	VIN VINYL
AUX AUXILIARY	AUX	DTTO THE SAME - REPEAT	DTTO THE SAME - REPEAT	MFR MANUFACTURER	VCT VINYL COMPOSITION TILE
AVG AVERAGE	AVG	E		REC RECEIPE/ RECEIVING	VIN VINYL
ACFC ABOVE FINISHED CEILING	ACFC	EAST		RECPT RECEPTACLE	VINYL COMPOSITION TILE
B B BACK TO BACK	B/B	EA EACH		V	VINYL
BF BARRIER FREE	BF	EF EACH FACE		VCT V	VINYL
BSMT BASEMENT	BSMT	ES EACH SIDE		VINYL COMPOSITION TILE	VINYL
BM BEAM	BM	EW EACH WAY		VINYL	VINYL
BRG BEARING	BRG	ELEC ELECTRIC/ ELECTRICAL	ELEC ELECTRIC CABINET	WAINS WAINS	VINYL
BFF BELOW FINISHED FLOOR	BFF	ELEC CLO ELECTRIC CLOSET	ELEC CLO ELECTRIC CLOSET	WAINSOT WAINSOT	VINYL
BWN BETWEEN	BWN	EP ELECTRICAL PANEL	HYD HYDRANT/ HYDRAULIC	WCO WALL CLEAN OUT	VINYL
BEV BEVEL	BEV	EWC ELECTRICAL WATER COOLER	I	RESIL RESILIENT	VINYL
BIT BITUMINOUS	BIT	ELVT ELEVATOR	IDEN IDENTIFICATION	RET RETURN	VINYL
BLK BLOCK	BLK	EMERG EMERGENCY	INCAN INCANDESCENT	RA RETURN AIR	VINYL
BLKG BLOCKING	BLKG	ENCL ENCLOSURE	INCHES INCHES	RAF RETURN AIR FAN	VINYL
BD BOARD	BD	END END	END END	WW WALL TO WALL	VINYL
BD BOT ENDS	BD	EIE END	EIE END	WH WATER HEATER	VINYL
BS BOTH SIDES	BS	ENAM ENAMEL	ENCL INCLUDE	RPM REVOLUTIONS PER MINUTE	VINYL
BW BOTH WAYS	BW	ENGR ENTRANCE	INFO INFORMATION	WT WEIGHT	VINYL
BOS BOTTOM OF STEEL	BOS	EPDM ETHYLENE PROPYLENE DIENE MONOMER	ID INSIDE DIAMETER	W WEST	VINYL
BOT BOTTOM	BOT	EQ EQUAL	IS/D INSIDE DIMENSION	W0 WINDOW OPENING	VINYL
BRKT BRACKET	BRKT	EQUIP EQUIPMENT	I/F INSIDE FACE	W GL WIRE GLASS	VINYL
BR BRASS	BR	EST ESTIMATE	INSP INSPECTION	W/ WITH	VINYL
BRKR BREAKER	BRKR	EQUIV EQUIVALENT	INSTL INSTALLATION	W/O WITHOUT	VINYL
BRZ BRONZE	BRZ	EF EXHAUST FAN	INSUL INSULATION	W/WOOD W/WOOD	VINYL
BLDG BUILDING	BLDG	EG EXHAUST GRILLE	INT INTERIOR	WL WORKING LINE	VINYL
BL BUILDING LINE	BL	ER EXHAUST REGISTER	INV INVERT	WP WORKING POINT	VINYL
BULL BULLETIN	BULL	EXG EXISTING	IE INVERT ELEVATION	WRB WROUGHT IRON	VINYL
B.B. BULLETIN BOARD	B.B.	EJ EXPANSION JOINT	J	RND ROUND	VINYL
BO BY OTHERS/BY OWNER	BO	EXT EXTERIOR	EIFS EXTERIOR INSULATION FINISH SYSTEM	RFT RUBBER FLOOR TILE	VINYL
C		F		RWB RUBBER WALL BASE	VINYL
CAB CABINET	CAB	FAB FABRICATED	JAN JANITOR	NATL NATIONAL	
CUH CABINET UNIT HEATER	CUH	F/F FACE TO FACE	JCT JANITOR CLOSET	NEC NATIONAL ELECTRICAL CODE	
CANT CANTILEVER	CANT	FAC FIN FACTORY FINISH	JB JUNCTION BOX	NFPA NATIONAL FIRE PROTECTION AGENCY	
CAP CAPACITY	CAP	FM FACTORY MUTUAL	K	NATL NATURAL	
CPT CARPET	CPT	FCU FAN COIL UNIT	P	SAN SANITARY	
CRS CARPET REDUCER STRIP	CRS	FS FAR SIDE		SCHED SCHEDULE	
CSMT CANTILEVER	CSMT	FT FEET		SCHEM SCHEMATIC	
C.R. CASH REGISTER	C.R.	FPM FEET PER MINUTE	KP KICK PLATE	SEAT SEATING	
CI CAST IRON	CI	FIG FIGURE	KIT KITCHEN	SECT SECTION	
CB CATCH BASIN	CB	FIN FINISH/ FINISHED	KB KNEE BRACE	S.S. SERVICE SINK	
CAULK CAULKING	CAULK	FF FINISH FLOOR	KD KNOCK DOWN	SHT SHEET	
CLG CEILING	CLG	FTR FINNED TUBE RADIATION	KO KNOCK OUT	SHT MET SHEET METAL	
C/H CLG HT CEILING HEIGHT	C/H	FA FIRE ALARM	KOP KNOCK OUT PANEL	SVF SHEET VINYL FLOORING	
CEM CEMENT	CEM	FD FIRE DAMPER	P	S.C. SHOPPING CENTER	
CEM PLAS CEMENT PLASTER	CEM PLAS	FDC FIRE DEPARTMENT CONNECTION		OFF OFFICE	
CTR CENTER	CTR	FEC FIRE EXTINGUISHER		OC ON CENTER	
CC CENTER TO CENTER	CC	FEC FIRE EXTINGUISHER CABINET		OPG/OPNG OPENING	
<OR C/C CENTERLINE	<OR C/C	FHC FIRE CABINET		OPER OPERATOR	
CT CERAMIC	CT	FIRE FIRE		OPP/OPPD OPPOSITE	
CT CERAMIC TILE	CT	FR FIRE GRAY		OPP/OPPD OPPOSITE HAND	
CH/KD FL CHECKERED PLATE	CH/KD FL	FRT WD FIRE TREATMENT REWARDED		OZ OUNCE	
CR PL CHROMIUM PLATE	CR PL	FVC FIRE VALVE CABINET		OA OUTSIDE AIR	
CIR CIRCLE	CIR	FPRG FIREPROOFING		OD OUTSIDE DIAMETER	
CLRM CLASSROOM	CLRM	FR FITTING ROOM		OS/D OUTSIDE DIMENSION	
C/O CLEAN OUT	C/O	FIXT FIXTURE		O/F OUTSIDE FACE	
CLR CLEAR	CLR	FLASH FLASHING		O/O OUTSIDE TO OUTSIDE	
CLR GL CLEAR GLASS	CLR GL	FL FL FLOOR		OA OVERALL	
CLO CLOSET	CLO	FFR FLOOR DRAIN		OHVHD OVERHEAD	
CMFM COLD FORMED METAL FRAMING	CMFM	FLR FIN FLOOR FINISH		OHVHD DR OVERHEAD DOOR	
COL COLOL COLORED LAQUER	COL	FLU FLUORESCENT		P	
CO COMPANY	CO	FTG FOOTING		PED PEDESTAL	
CONC CONCRETE	CONC	FINDN FOUNDATION		PT/PTN PAINTED	
CMU CONCRETE MASONRY UNIT	CMU	FR FRAME		PT/PNT PAINT	
CONF CONFERENCE	CONF	FRZR FREEZER		PR PAIR	
CONST CONSTRUCTION	CONST	F.S. FULL SIZE		PNL PANEL	
CJ CONTROL JOINT	CJ	FURN FURNITURE		PART PARTIAL	
CONT CONTINUE / CONTINUOUS	CONT	FURR FURRING		PARTN PARTITION	
CONTR CONTRACTOR	CONTR	FWRB FLUID-APPLIED		PVMT PAVEMENT	
CP CONTROL PANEL	CP	WEATHER-RESISTIVE BARRIER		PVG PAVING	
CONV CONVECTOR	CONV			T	
COORD COORDINATE CORP CORPORATION	COORD	G		PED/PLATE	
CNTR COUNTER	CNTR	GA GAUGE		PERF PERFORATED	
COV COV	COV	GAL GALLON		PERIM PERIMETER	
COV PLT COVER PLATE	COV PLT	GPH GALLONS PER HOUR		PERP PERPENDICULAR	
CU FT CUBIC FEET / CUBIC FOOT	CU FT	GPM GALLONS PER MINUTE		PH PHYSICALLY HANDICAPPED	
CY CUBIC YARD	CY	GALV GALVANIZED		PLAS PLASTIC	
CULV CULVERT	CULV	G.H. GARMET HANGER		PLAS LAM PLASTIC LAMINATE	
CYL CYLINDER	CYL	G GAS		PLR PLUMBING	
				PTD PAINTED	
				PT/PNT PAINT	
				PR PAIR	
				PNL PANEL	
				PART PARTIAL	
				PARTN PARTITION	
				PVMT PAVEMENT	
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				PED/PLATE	
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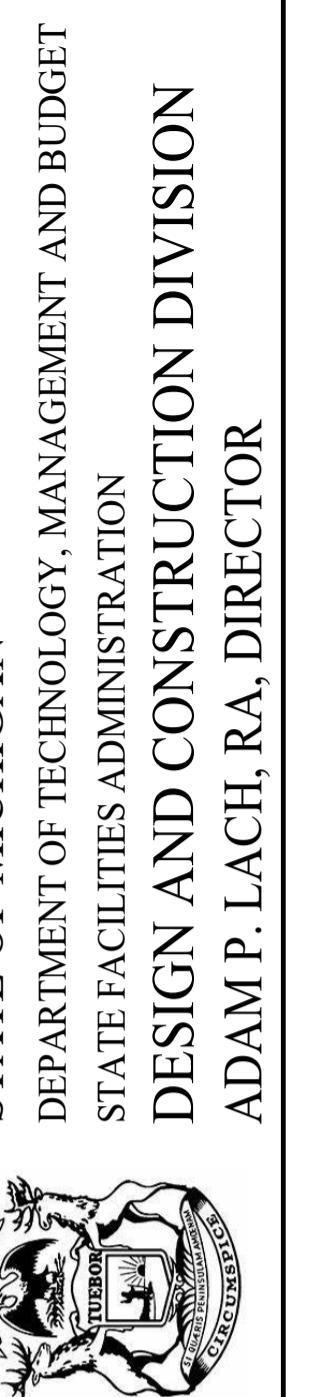
This figure contains a large number of technical drawings and tables, likely from a construction project's engineering and architectural documentation. The drawings include:

- Abbreviations Table:** A comprehensive list of abbreviations used in the drawings, covering topics like construction, materials, and specific codes.
- Design Loads Table:** A table detailing design criteria per the current building code and ASCE 7-10 load standard, including building occupancy categories and specific load types like roof and floor live loads.
- 3.00-02 - CONCRETE:** A detailed section on concrete design, including strength design provisions, concrete components, admixtures, and mix proportions.
- 5.00-01 - STRUCTURAL STEEL:** Requirements for structural steel work, including conformance to AISC specifications, material grade, welding, and galvanization.
- GENERAL CONDITIONS:** A list of 10 general conditions for the project, including structural conflicts, placement of structural components, and responsibilities of the contractor.
- COLLERS ENGINEERING & DESIGN:** A section for engineering and design, including a stamp for 750 West Saginaw Hwy, Lansing, MI 48917, and contact information.
- 811:** A logo for the Michigan Department of Technology, Management and Budget, with a message about notification requirements for excavations.
- 7. BURIED NG PIPING DETAIL:** A cross-section diagram of a buried piping system, showing components like a cast iron sleeve, gravel fill, and a 3000 psi min. strength concrete slab.
- 6. HOUSKEEPING SLAB AT GENERATOR DETAIL:** A detailed cross-section of a generator foundation slab, showing thicknesses, reinforcement, and coordination with generator requirements.
- 5. TYPICAL CONCRETE WALK/SLAB JOINT DETAIL:** A diagram of a concrete joint detail, showing expansion joints, control joints, and reinforcement.
- 4. CONCRETE CURB & GUTTER DETAIL:** A cross-section of a concrete curb and gutter detail, showing dimensions and materials.
- 3. SLAB AT COLUMN DETAIL:** A cross-section of a slab at a column, showing reinforcement, thickness, and slab edge details.
- 2. PERIMETER SLAB DETAIL:** A cross-section of a perimeter slab, showing thickness, reinforcement, and foundation details.
- 1. CONCRETE FOUNDATIONS:** A detailed cross-section of a concrete foundation, showing gravel fill, 4" NG (buried) water-tight gasket, and 6" cast iron sleeve.
- COLLERS ENGINEERING & DESIGN:** A stamp for 750 West Saginaw Hwy, Lansing, MI 48917, and contact information.
- STATE OF MICHIGAN DESIGN AND CONSTRUCTION DIVISION:** A stamp for the Michigan Department of Technology, Management and Budget, with a signature of Adam P. Lach, RA, Director.



GENERAL NOTES	
<b>Keynote Number</b>	<b>Keynote Description</b>
A1	5" THICK MASS POUR SLAB W/ #5 REINFORCEMENT @ 12" O.C. EACH WAY (4500 PSI CONCRETE WITH 4-6 AIR ENTRAINMENT) - SEE S-010 FOR DETAIL
A2	CONCRETE SLAB - PROVIDE BROOM FINISH, DIRECTION AS INDICATED ON THE PLAN
A3	ACOUSTICAL WALL PANEL BARRIER WALL SYSTEM AS SPECIFIED TYP
A4	4" CONCRETE EQUIPMENT HOUSEKEEPING SLAB AT GENERATOR, HOUSE KEEPING SLAB TO BE LEVEL IN ALL DIRECTIONS PER GENERATOR OPERATING REQUIREMENTS, COORDINATE PAD SIZE WITH GENERATOR REQUIREMENTS, SEE SHEET S-010 FOR DETAIL
A5	BACKUP GENERATOR - SEE ELECTRICAL FOR ALL REQUIREMENTS
A6	BACKUP GENERATOR SWITCH, DISCONNECT, AND CONDUIT, SEE ELECTRICAL
A7	SCREEN WALL PREFINISHED STEEL COLUMN BY ACOUSTICAL WALL PANEL MANUFACTURER (COLOR TO MATCH ACOUSTICAL SCREEN WALL PANEL - TYP)
A8	PROVIDE 1/2" ISOLATION JOINT BETWEEN EXISTING SLAB AND NEW SLAB, SEE TYPICAL DETAIL ON SHEET S-010 FOR ADDITIONAL REQUIREMENTS
A9	PROVIDE CONTINUOUS 3/4" CHAMFER SLAB EDGE, TYPICAL ALONG NORTH AND EAST EDGES OF NEW SLAB, REF SIS-010
A10	SLOPE SLAB DOWN 1/8" FT DOWN, DIRECTION AS INDICATED ON THE PLAN
A11	PROVIDE 6-INCH CONTINUOUS CAST IRON PIPE SLEEVE FOR UNDERGROUND GAS SERVICE LINE. SEE DETAIL ON SHEET S-010. PROVIDE WATERTIGHT GASKET SEAL AROUND GAS LINE AT EACH OF CAST IRON SLEEVES
A12	DRILL/ CORE THROUGH EXISTING REINFORCED CONCRETE FOOTING FOR UNDERGROUND UTILITY PIPE SLEEVE. BOTTOM OF CORE TO BE MINIMUM 12-INCHES ABOVE BOTTOM OF EXISTING FOOTING. PROVIDE CONTINUOUS 6-INCH CAST IRON SLEEVES THROUGHOUT FOR ALL UNDERGROUND GAS SERVICE
A13	PLAN S-010 TO EXISTING SLAB TO ELEVATE 12-INCHES BEYOND FACE OF EXISTING FOOTING INTO PROPOSED GENERATOR ENCLosURE. REFER TO THE PLAN AND DETAIL ON SHEET S-010 FOR ADDITIONAL REQUIREMENTS
A14	SAW CUT AND REMOVE PORTION OF EXISTING REINFORCED CONCRETE SLAB AS REQUIRED TO INSTALL NEW UNDERGROUND GAS SERVICE LINE FOR NEW BACKUP GENERATOR. SEE DETAIL ON SHEET S-010 FOR UNDERGROUND GAS SERVICE LINE AND SLAB INFILL REQUIREMENTS
A15	SCREEN FENCE SYSTEM AS SPECIFIED
A16	NATURAL GAS PIPING TRANSITION FROM UNDERGROUND TO ABOVEGROUND. ABOVEGROUND NG PIPING SHALL BE ROUTED 6" ABOVE GRADE. PROVIDE PIPE SUPPORTS SPACED WITHIN 12" OF DIRECTIONAL TRANSITIONS AND EVERY 8'-0" FOR HORIZONTAL PIPING

KEYNOTES #	
<b>Keynote Number</b>	<b>Keynote Description</b>
A1	5" THICK MASS POUR SLAB W/ #5 REINFORCEMENT @ 12" O.C. EACH WAY (4500 PSI CONCRETE WITH 4-6 AIR ENTRAINMENT) - SEE S-010 FOR DETAIL
A2	CONCRETE SLAB - PROVIDE BROOM FINISH, DIRECTION AS INDICATED ON THE PLAN
A3	ACOUSTICAL WALL PANEL BARRIER WALL SYSTEM AS SPECIFIED TYP
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A5	BACKUP GENERATOR - SEE ELECTRICAL FOR ALL REQUIREMENTS
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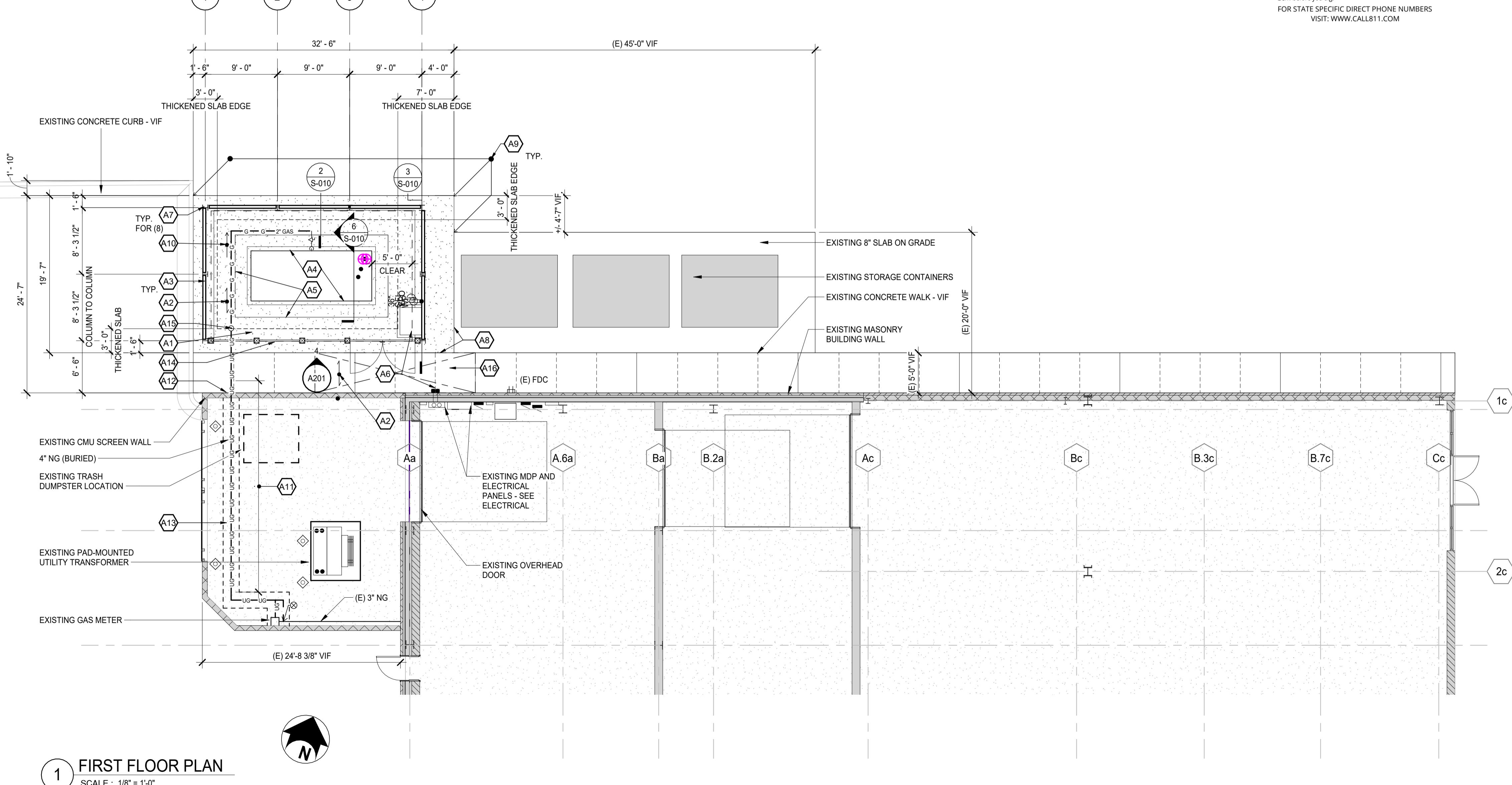


Engineering & Design  
Collars

7000 West Saginaw Hwy.  
Suite 200, Bldg. M, #48917  
517.272.9835  
Fax: 517.272.9836  
www.colliersengineering.com

### 3 Gas Connection Details

### 2 Panel Plan Details



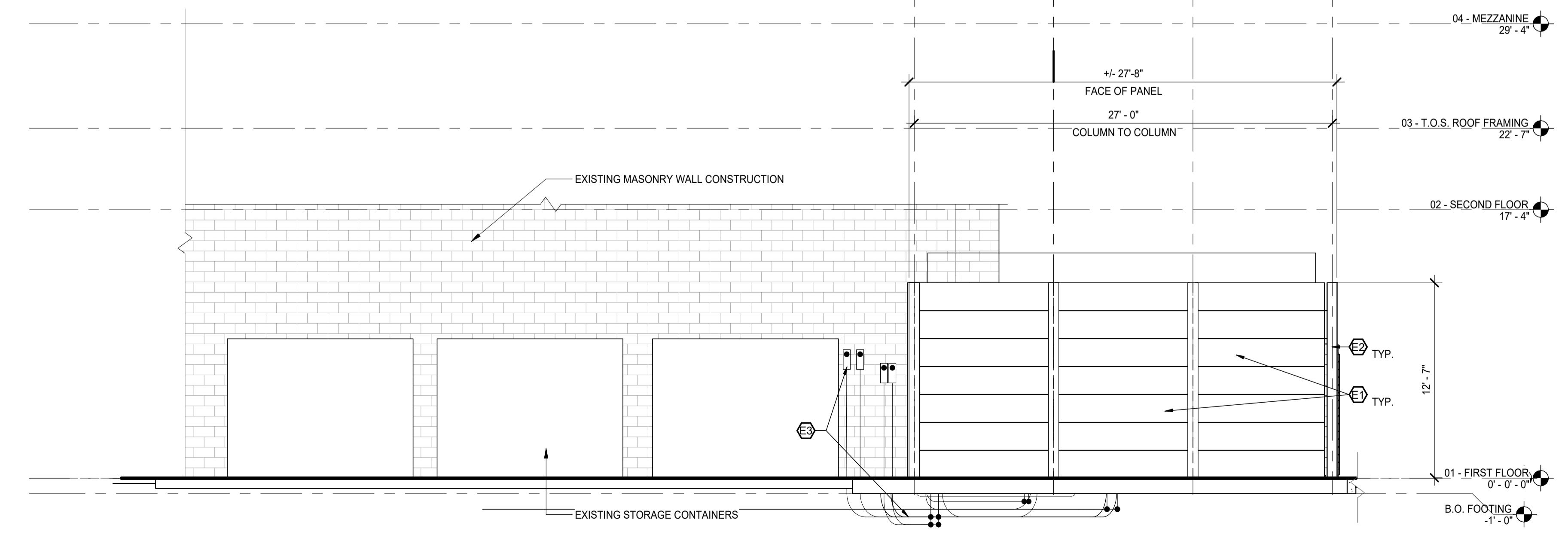
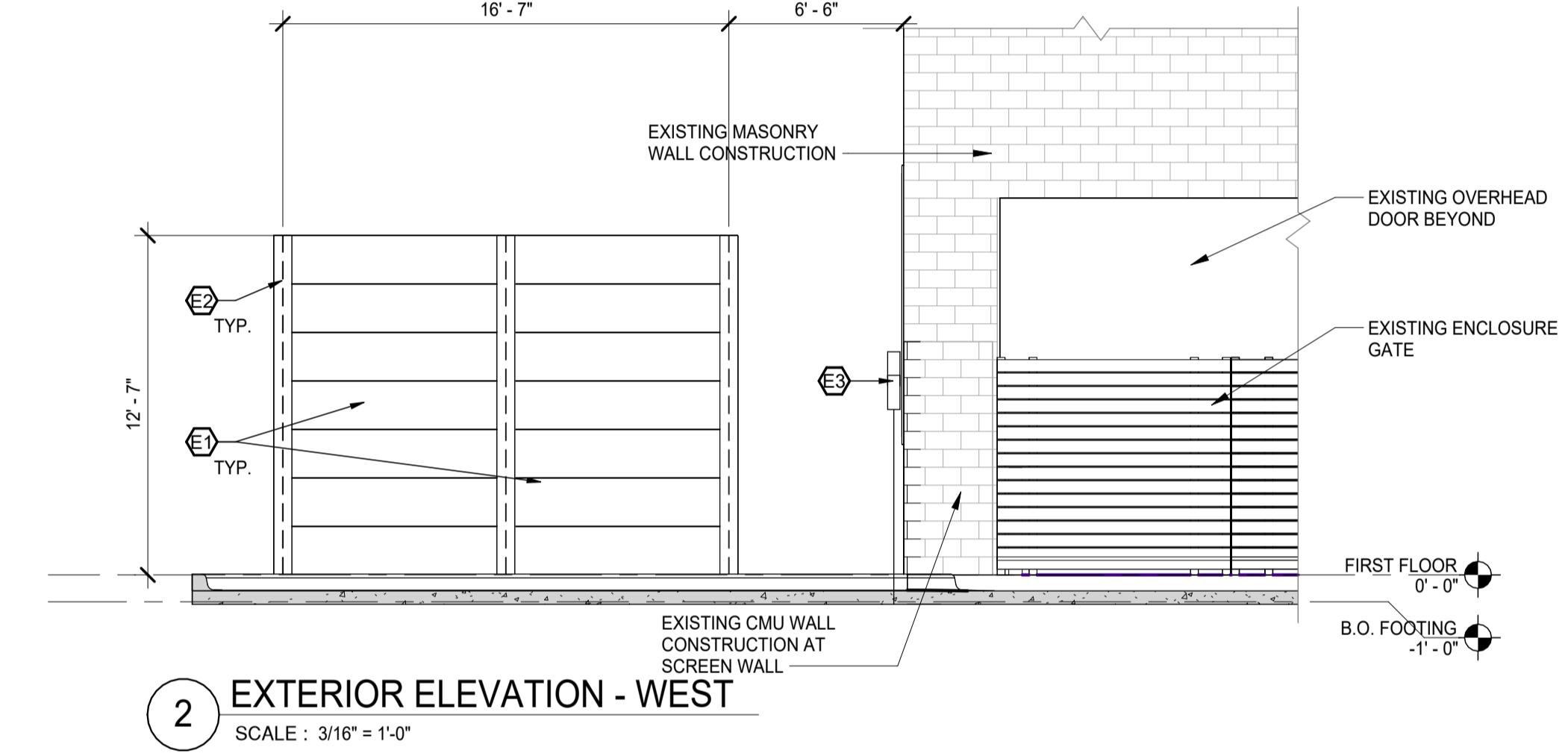
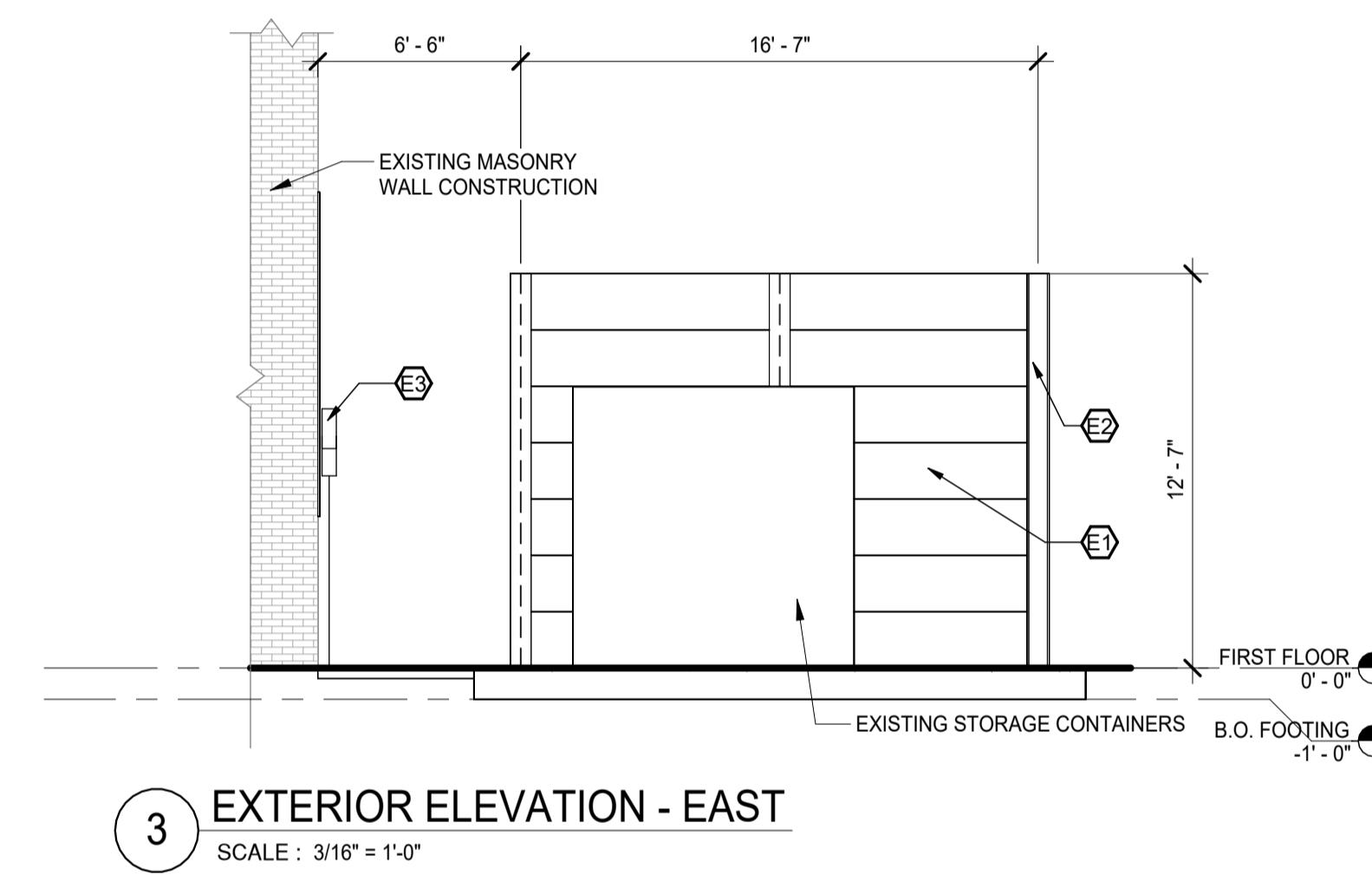
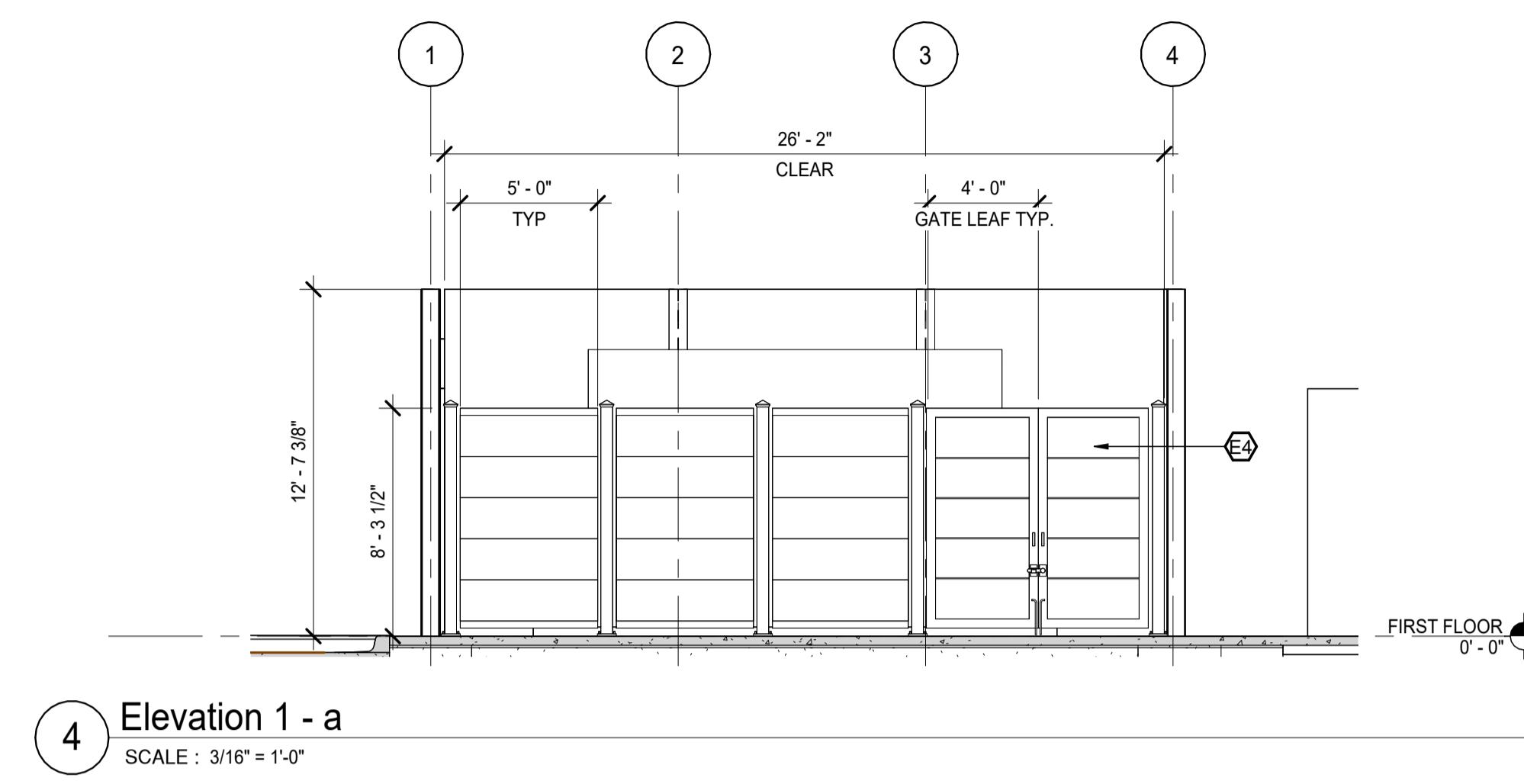
### ENVIRONMENTAL REQUIREMENTS DURING EARTHWORK

- PRIOR SITE PREPARATION HAS INCLUDED REMOVAL OF IMPACTED SURFACE SOILS. PLACEMENT OF A DEMARcation LAYER (ORANGE-COLORED "SNOW-FENCE" MATERIAL) OVER REMAINING SUBGRADE SOILS, AND PLACEMENT OF CLEAN IMPORTED TOPSOIL OVER THE DEMARcation LAYER TO CREATE AN UNCONTAMINATED GROUND SURFACE. SIMILAR IMPACTED SOILS MAY BE ENCOUNTERED IF CONSTRUCTION EXCAVATION EXTENDS BELOW THE DEMARcation LAYER.
- POTENTIAL IMPACTED SOILS MAY BE IDENTIFIED BY odORS, STAINING, SHEENS, OR OILy LIQUIDS. THE MANAGEMENT (I.E., HANDLING, RELOCATION, OR GRADING) OF IMPACTED SOIL SHALL BE CONDUCTED IN ACCORDANCE WITH THE OWNER-PROVIDED "SOIL MANAGEMENT PLAN".
- AT THE COMPLETION OF IMPACTED SOIL EXCAVATION AND RE-GRADING ACTIVITIES, THE DEMARcation LAYER, CLEAN TOPSOIL, AND/OR SURFACE PAVEMENT SHALL BE RECONSTRUCTED. VEGETATIVE COVER SHALL BE RE-ESTABLISHED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS TO SECURE THE SURFACE MATERIALS AGAINST STORMWATER OR WIND EROSION.
- PERSONNEL WORKING IN CONTACT WITH IMPACTED SOILS BENEATH THE DEMARcation LAYER ON THE SITE SHALL WEAR CLOTHING, GLOVES, AND WORK BOOTS THAT COVER ALL EXPOSED SKIN BELOW THE NECK-LINE. BOOTS WORN ON SITE SHOULD BE REMOVED BEFORE ENTERING PERSONAL RESIDENCES. CLOTHING WORN ON SITE SHOULD BE WASHED SEPARATELY FROM OTHER CLOTHING WHENEVER THEY BECOME SOILED. CONSTRUCTION WORKERS SHALL WASH HANDS AND ANY SOILED SKIN PRIOR TO EATING, SMOKING, OR LEAVING THE SITE.
- IF IMPACTED SOILS ARE ENCOUNTERED DURING SITE WORK, THE ENVIRONMENTAL COMPLIANCE SUPERVISOR SHALL BE IMMEDIATELY NOTIFIED. IMMEDIATE ACTIONS SHALL BE TAKEN TO PREVENT RELEASES OF HAZARDOUS SUBSTANCES TO THE ENVIRONMENT, AND TO PROTECT SITE OCCUPANTS AND WORKERS. ACTIVITIES SHOULD BE PAUSED IN THAT AREA UNTIL AN ASSESSMENT OF THE POTENTIAL FOR ENVIRONMENTAL RISK IS PROPERLY CHARACTERIZED.
- SUBJECT TO THE PROJECT SPECIFICATIONS AND PLANS, IMPACTED SOIL EXCAVATED AT THE SITE SHALL BE PLACED BACK IN THE AREA FROM WHICH IT WAS REMOVED TO THE EXTENT POSSIBLE. EXCESS IMPACTED SOILS THAT CANNOT BE BACKFILLED ON SITE WILL REQUIRE WASTE CHARACTERIZATION PRIOR TO OFFSITE DISPOSAL AT A LICENSED LANDFILL.
- EXCESS IMPACTED SOILS SHALL BE STOCKPILED IN A DESIGNATED AREA UNTIL CHARACTERIZATION IS COMPLETE AND APPROPRIATE DISPOSAL OR RELOCATION OPTIONS ARE DETERMINED. STOCKPILED IMPACTED SOILS MUST BE COVERED EACH NIGHT WITH SECURED TARP OR PLASTIC MATERIAL TO MINIMIZE FUGITIVE DUST, UNNECESSARY CONTACT, AND EROSION OR RUNOFF DUE TO PRECIPITATION.
- IMPACTED SOIL REQUIRING OFFSITE DISPOSAL WILL BE TRANSPORTED BY A LICENSED NON-HAZARDOUS WASTE HAULER AND DISPOSED INTO A LICENSED NON-HAZARDOUS LANDFILL FACILITY (TYPE II LANDFILL). CONTACT THE LANDFILL MANAGER OR WASTE HAULER FOR APPROPRIATE ANALYSES OF SOILS FOR DISPOSAL.
- TRANSPORT TRUCKS OR CONTAINERS LEAVING THE CONSTRUCTION SITE FOR OFFSITE DISPOSAL SHALL BE COVERED WITH TARPS AND CLEARED OF ANY LOOSE MATERIALS ON THE EXTERIOR, FRAME, OR WHEELS OF THE TRANSPORT VEHICLE TO PREVENT TRACK-OUT OR ACCIDENTAL DEPOSITION OF IMPACTED SOIL AT UNAPPROVED LOCATIONS. ALL HAUL ROADS OR TRUCK ROUTES SHALL BE KEPT CLEAN OF SOILS TRACKED FROM THE SITE TO PREVENT WIND-BORNE MIGRATION OR STORMWATER RUNOFF OF IMPACTED SOILS.
- OFF-SITE SOIL DISPOSAL ACTIVITIES WILL BE RECORDED BY APPROPRIATE DOCUMENTATION INCLUDING MANIFESTS, TRUCKING LOGS, LANDFILL RECEIPTS, AND OTHER DOCUMENTATION CONSISTENT WITH PA 451, SECTION 201202. PROPOSED FORMS FOR THIS DOCUMENTATION SHALL BE SUBMITTED TO COLLARS FOR APPROVAL ALONG WITH PRE-CONSTRUCTION SUBMITTALS.
- EACH LOAD OF IMPACTED SOIL LEAVING THE SITE FOR OFFSITE DISPOSAL SHALL BE DOCUMENTED WITH A NON-HAZARDOUS WASTE MANIFEST, IN TRIPPLICATE, AND BEARING A UNIQUE SEQUENTIAL IDENTIFYING NUMBER. THE LOAD MANIFEST SHALL IDENTIFY THE GENERATOR (SITE OWNER), TRANSPORTER (TRUCKING CONTRACTOR), AND RECEIVER (DISPOSAL FACILITY) OF THE LOAD.
- THE GENERATOR AND TRANSPORTER SHALL SIGN THE LOAD MANIFEST PRIOR TO DEPARTURE FROM THE SITE. THE APPROVED RECEIPT FOR THE LOAD SHALL SIGN THE MANIFEST UPON ACCEPTANCE OF THE LOAD, AND ISSUE A LOAD ACCEPTANCE/WEIGHT RECEIPT FOR EACH LOAD ACCEPTED. THE WEIGHT RECEIPT SHALL INCLUDE THE LOADED WEIGHT OF THE INBOUND TRANSPORTER, AND THE TARE WEIGHT OF THE EMPTY OUTBOUND TRANSPORTER, AS MEASURED AT THE RECEIVING FACILITY SCALES.
- COMPLETED SIGNED COPIES OF EACH LOAD MANIFEST, AND MATCHING ACCEPTANCE/WEIGHT RECEIPT, SHALL BE RETURNED TO THE COLLARS SITE REPRESENTATIVE DAILY. THE COLLARS SITE REPRESENTATIVE WILL MAINTAIN A LOG OF EACH TRUCK LEAVING THE SITE, THE MANIFEST NUMBER THAT WAS ISSUED WITH THAT LOAD, AND THE LOAD ACCEPTANCE/WEIGHT RECEIPT RETURNED FOR THAT LOAD. MISSING LOAD ACCEPTANCE/WEIGHT RECEIPTS MAY DISQUALIFY A LOAD FROM PAYMENT UNDER THE CONTRACT TERMS. AT THE COMPLETION OF CONSTRUCTION, THE COLLARS SITE REPRESENTATIVE WILL PREPARE A SUMMARY REPORT OF ALL DISPOSAL DOCUMENTATION FOR THE OWNER'S RECORD-KEEPING.
- CONSTRUCTION-RELATED HAZARDOUS MATERIALS INCLUDING FUEL, PETROLEUM PRODUCTS, LUBRICANTS, BATTERIES, OR OTHER CHEMICALS, SHALL BE STORED WITHIN APPROVED LOCATIONS IDENTIFIED IN THE PROJECT CONSTRUCTION DOCUMENTS, IN A MANNER THAT WILL PREVENT RELEASES OF HAZARDOUS MATERIALS INCLUDING THE USE OF DOUBLE-WALLED CONTAINERS OR TEMPORARY SECONDARY CONTAINMENT SYSTEMS.
- IF THERE IS A RELEASE OF HAZARDOUS MATERIALS DURING CONSTRUCTION, ACTIONS CONSISTENT WITH REQUIREMENTS OF MICHIGAN ACT 451, PART 201 OR PART 213, AS APPLICABLE, SHALL BE IMPLEMENTED, INCLUDING:
  - IMMEDIATELY STOPPING OR PREVENTING THE RELEASE AT ITS SOURCE(S);
  - DETERMINE THE EXTENT AND SEVERITY OF THE RELEASE;
  - IMMEDIATELY IDENTIFY AND ELIMINATE ANY THREAT OF FIRE OR EXPLOSION OR ANY DIRECT CONTACT HAZARDS;
  - REPORT THE RELEASE TO THE COLLARS SITE REPRESENTATIVE OR OWNER'S REPRESENTATIVE;
  - IF THE RELEASE EXCEEDS THE APPLICABLE REPORTABLE QUANTITY (IF ANY) OR THERE IS A THREAT OR IMMINENT AND SUBSTANTIAL ENDANGERMENT TO THE PUBLIC OR THE ENVIRONMENT, REPORT TO THE POLLUTION EMERGENCY ALERTING SYSTEM (PEAS), 1-800-292-4706.

CONTACTS:  
COLLIERS ENGINEERING SITE REPRESENTATIVE:  
SOMAT ENGINEERING REPRESENTATIVE: BRIAN SMITS, (313)-912-5291

PLANS FOR:		Outdoor Adventure Center - Emergency Back Up Power	
1801 Atwater Street		Detroit, MI 48207	
IDENTIFICATION NO.	ISSUED FOR	DATE	DESIGNED
FILE NO.	PRELIMINARY	1/14/2025	K. RICART
CONTRACT NO.	CONSTRUCTION	CHECKED	K. RICART
751-23030-MNB	PLAN REVIEW	1/14/2025	J. E. MOSS
V24249	CORRECTION	APPROVED	D. MOSS
	FINAL RECORD		

SHEET **A101**

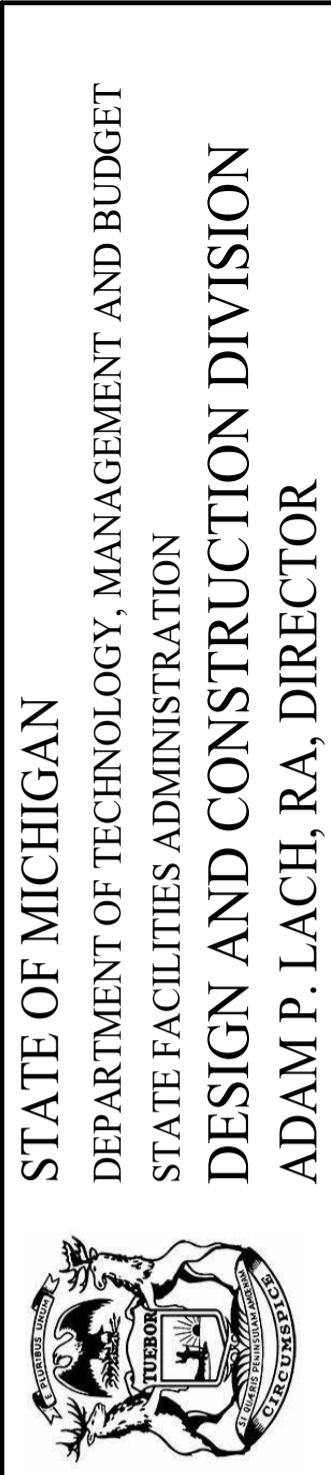


#### KEYNOTES

Keynote Number	Keynote Description
E1	ACOUSTICAL WALL PANEL BARRIER SYSTEM AS SPECIFIED - TYP.
E2	SCREEN WALL PREFINISHED STEEL COLUMN BY ACOUSTICAL WALL PANEL MANUFACTURER (COLOR TO MATCH ACOUSTICAL SCREEN WALL PANEL -TYP.)
E3	ELECTRICAL SERVICE CONDUITS FROM GENERATOR, SEE ELECTRICAL
E4	SCREENWALL FENCE SYSTEM AS SPECIFIED. PROVIDE SLIDE BOLT CANE (EA. LEAF) AND PADLOCK HASP - SCREENWALL AND INFILL PANEL COLOR TO MATCH ACOUSTIC SCREENWALL COLOR-TYP.

#### GENERAL EXTERIOR ELEVATION NOTES

- ALL EXISTING CONDITIONS ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF THE WORK. ANY DISCREPANCIES BETWEEN THE EXISTING CONSTRUCTION AND THE PROPOSED NEW WORK SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION PRIOR TO COMMENCEMENT OF THE WORK FOR DIRECTION.
- WHERE THE EXISTING EXTERIOR FINISH MATERIAL IS DAMAGED OR IDENTIFIED FOR NEW CONSTRUCTION, THE CONTRACTOR SHALL PATCH, REPAIR, AND/OR REPLACE THE EXISTING ADJACENT FINISHES AS REQUIRED TO MATCH THE EXISTING PREMISES AND EXTERIOR FINISHES IN LIKE NEW CONDITION.
- REFINISHING AND/OR PAINTING OF THE EXISTING SURFACES SHALL BE FOR THE ENTIRE SURFACE AREA (EDGE TO EDGE) WHERE THE NEW WORK OR REQUIRED PATCHING, REPAIRING AND/OR REPLACEMENT WORK IS IDENTIFIED.



7000 West Saginaw Hwy.  
Suite 200, Bldg. 100  
Lansing, MI 48917  
Phone: 517.277.9885  
Fax: 517.277.9886  
www.collierengineering.com

PLANS FOR:  
**Outdoor Adventure Center - Emergency Back Up Power**  
1801 Atwater Street  
Detroit, MI 48207

SHEET	IDENTIFICATION NO.	ISSUED FOR	DATE	DESIGNED
FILE NO. 751-2930-MNB CONTRACT NO. V24249	PRELIMINARY CONSTRUCTION PLAN REVIEW CORRECTION FINAL RECORD	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	1/14/2025	D. MOSS K. MC CART K. MC CART S.E.C. APPROVED D. MOSS

**A201**

## DRAWING SYMBOLS

## VIEW TITLES

## 1 VIEW NAME

SCALE : 1/8" = 1'-0"

VIEW TITLE: SCALED

## 1 VIEW NAME

VIEW TITLE: NO SCALE

## VIEW NAME

VIEW TITLE: TITLE ONLY

## 1 VIEW NAME

SCALE : NTS

## SECTION MARK

## VIEWING DIRECTION

## SECTION NO.

## BUILDING SECTION

## VIEWING DIRECTION

## DETAIL SECTION

## VIEWING DIRECTION

## WORKING SECTION

## VIEWING DIRECTION

## EQUIPMENT IDENTITY (SEE MECM)

## EQUIPMENT ABBREVIATION LIST

## EQUIPMENT NUMBER

## SYSTEM NUMBER (IF APPLICABLE)

## DETAIL CALLOUT

## DETAIL NO.

## HEAVY LINE WEIGHT INDICATES ITEMS TO REMAIN OR PROVIDED BY OTHERS.

## HEAVY LINE WEIGHT INDICATES ITEMS TO BE PROVIDED BY E.C.

## HEAVY DASHED LINE INDICATES ITEMS TO BE REMOVED OR RELOCATED BY E.C.

## ELEVATION MARKER

## ELEVATION NO.

## LIGHT FIXTURE

## UPPER CASE LETTERS INDICATE FIXTURE TYPE. REFER TO LUMINAIRE SCHEDULE FOR DETAILS.

## LOWER CASE LETTERS INDICATE SWITCHING ARRANGEMENT. NUMBER INDICATES BRANCH

## 'EM' OR SHADING INDICATES EMERGENCY LIGHTING.

## EXIST SIGN LIGHT - WALL, CEILING OR PENDANT MOUNTED. LETTERS INDICATE FIXTURE TYPE. REFER TO LUMINAIRE SCHEDULE FOR DETAILS.

## ARROWS INDICATE DIRECTION. SHADING INDICATES NUMBER OF FACES.

## SEE SHEET AD101A

## SEE SHEET AD101A

## SEE SHEET AD101A

## MATCHLINE SYMBOLS

## NORTH ARROW (SHOWN IN KEYPLAN)

## NORTH ARROW PLAN SIZE

## REVISION TAG

## CENTERLINE

## ELEVATION NOTATION

## LEVEL HEAD FAMILY

## EQUIPMENT IDENTITY (SEE MECM)

## EQUIPMENT ABBREVIATION LIST

## EQUIPMENT NUMBER

## SYSTEM NUMBER (IF APPLICABLE)

## BREAK MARKS

## BREAK RECTANGLE

## BREAK ROUND

## BREAK PIPE

## MOUNTING HEIGHTS

## CARD READER

## 42" AFF

## CLOCK HANGER OUTLETS

## 42" AFF

## EXIT LIGHTS - FLOOR

## 8' AFF TO BOTTOM OF SIGN, 4" FROM FRONT EDGE OF SIGN TO DOOR FRAME

## PROXIMITY

## ABOVE DOORS (MAX. 96" AFF)

## EXIT LIGHTS - WALL MOUNTED

## 84" AFF

## FIRE ALARM HORN/STROBE

## FIRE ALARM PULL STATION

## 44" AFF

## LIGHT SWITCHES

## 42" AFF

## MOTOR STARTERS

## 72" AFF MAX TO OPERATING HANDLE

## PANEL BOARDS (LIGHTING AND RECEPTACLE)

## 72" AFF MAX TO TOP OF CIRCUIT BREAKER

## RECEPTACLE - TYPICAL

## 18" AFF (U.O.N.)

## SAFETY SWITCHES

## 72" MAX TO OPERATING HANDLE

## TELEPHONE - DATA OUTLET

## 18" AFF

## TELEPHONE - PAY STATION

## 48" AFF

## TELEPHONE - WALL TYPE

## 48" AFF

## NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR ADA LOCATIONS. ALL DEVICES TO BE MOUNTED WITHIN A RANGE OF 34" TO BOTTOM OF DEVICE BACKBOX TO 48" AFF TO TOP OF DEVICE BACKBOX. PREFERRED MOUNTING HEIGHT IS 48" AFF TO TOP OF DEVICE BACKBOX. CONTRACTOR TO MOUNT AT LOWER HEIGHT WITHIN THE LISTED RANGE TO OVERCOME ANY INTERFERENCES WHERE REQUIRED.

## NOTE

NOT ALL SYMBOLS AND ABBREVIATIONS INDICATED APPEAR ON THESE CONTRACT DRAWINGS. INDIVIDUAL DRAWINGS MAY HAVE SHEET LEGENDS FOR UNIQUE SYMBOLS AND FOR CONVENIENCE.

## ELECTRICAL SYMBOL LIST

## GENERAL

LIGHT LINE WEIGHT INDICATES EXISTING ITEMS TO REMAIN OR PROVIDED BY OTHERS.

HEAVY LINE WEIGHT INDICATES ITEMS TO BE PROVIDED BY E.C.

HEAVY DASHED LINE INDICATES ITEMS TO BE REMOVED OR RELOCATED BY E.C.

## POWER

MAG. MOTOR STARTER OR CONTACTOR

COMB. MOTOR STARTER (NON-FUSED)

COMB. MOTOR STARTER (FUSED)

## ELEVATION MARKER

REF 1 ELEVATION NO.

REF 1 DRAWING NO.

## LIGHT FIXTURE

UPPER CASE LETTERS INDICATE FIXTURE TYPE. REFER TO LUMINAIRE SCHEDULE FOR DETAILS.

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ARROWS INDICATE DIRECTION. SHADING INDICATES NUMBER OF FACES.

## SEE SHEET AD101A

## SEE SHEET AD101A

## SEE SHEET AD101A

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## CARD READER

## 42" AFF

## CLOCK HANGER OUTLETS

## 42" AFF

## EXIT LIGHTS - FLOOR

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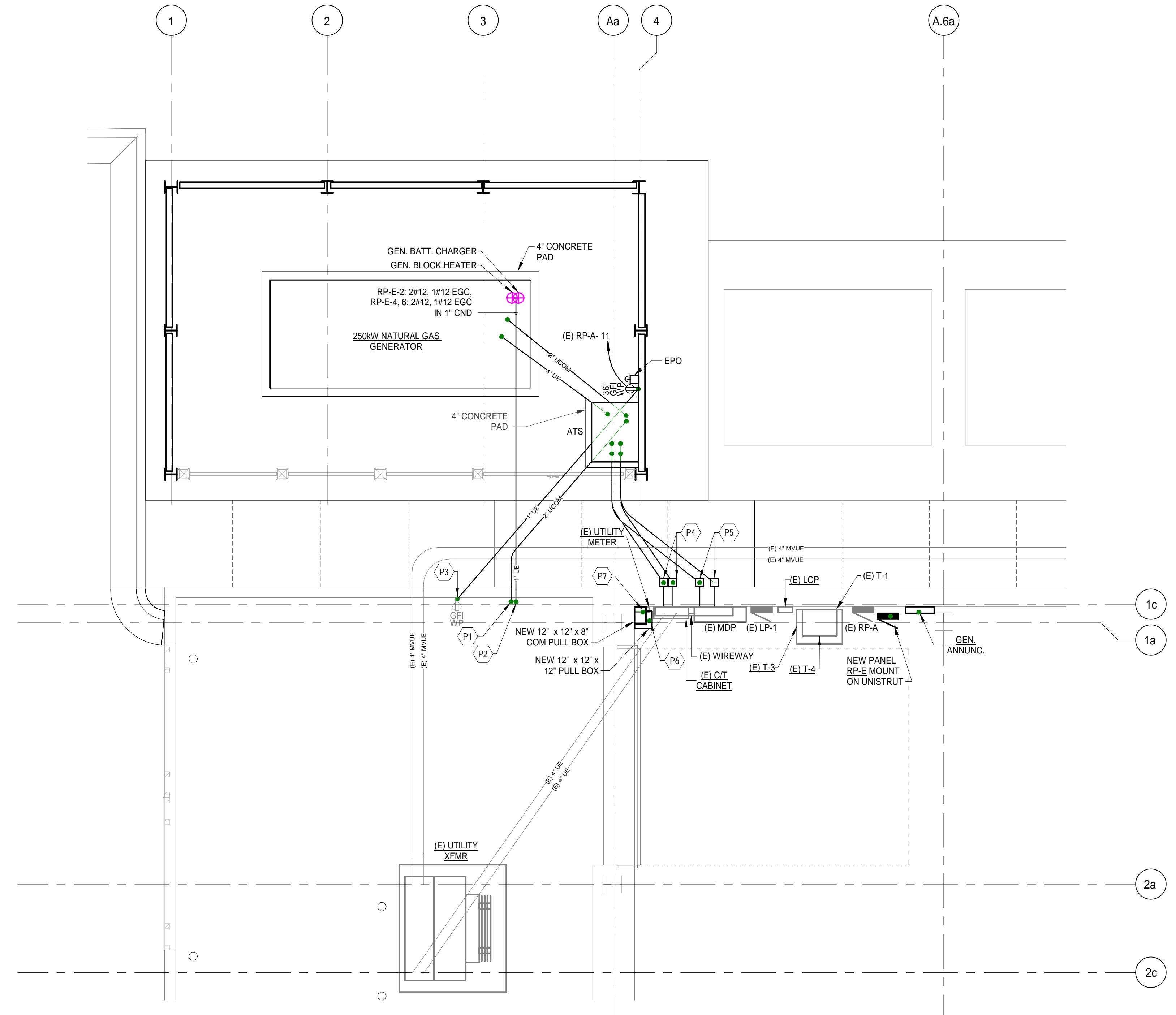
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**2 ENLARGED FIRST FLOOR PLAN - POWER**  
SCALE : 1/4" = 1'-0"

SCALE : 1/4" = 1

POWER KEYNOTES

- P1 ROUTE NEW COM CONDUIT UP WALL THEN THROUGH WALL INTO COM PULL BOX.
- P2 ROUTE NEW CONDUIT UP WALL THEN THROUGH WALL INTO PULL BOX.
- P3 EXTEND EXISTING CIRCUIT TO NEW WP, GFI RECEPTACLE NEXT TO ATS.
- P4 ROUTE NEW CONDUITS UP WALL INTO C/T CABINET.
- P5 ROUTE NEW CONDUITS UP WALL INTO WIREWAY.
- P6 ROUTE NEW 1-INCH CONDUIT FROM PULL BOX TO NEW PANEL RP-E.
- P7 ROUTE NEW 2-INCHES CONDUIT UP FROM COM PULL BOX TO GENERATOR ANNUNCIATOR PANEL.

STATE FACILITIES ADMINISTRATION  
DESIGN AND CONSTRUCTION DIVISION  
ADAM P. LACH, RA, DIRECTOR  
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET



# Outdoor Adventure Center - Emergency Back Up Power

1801 ATWATER STREET  
DETROIT, MI 48207



**PROTECT YOURSELF**

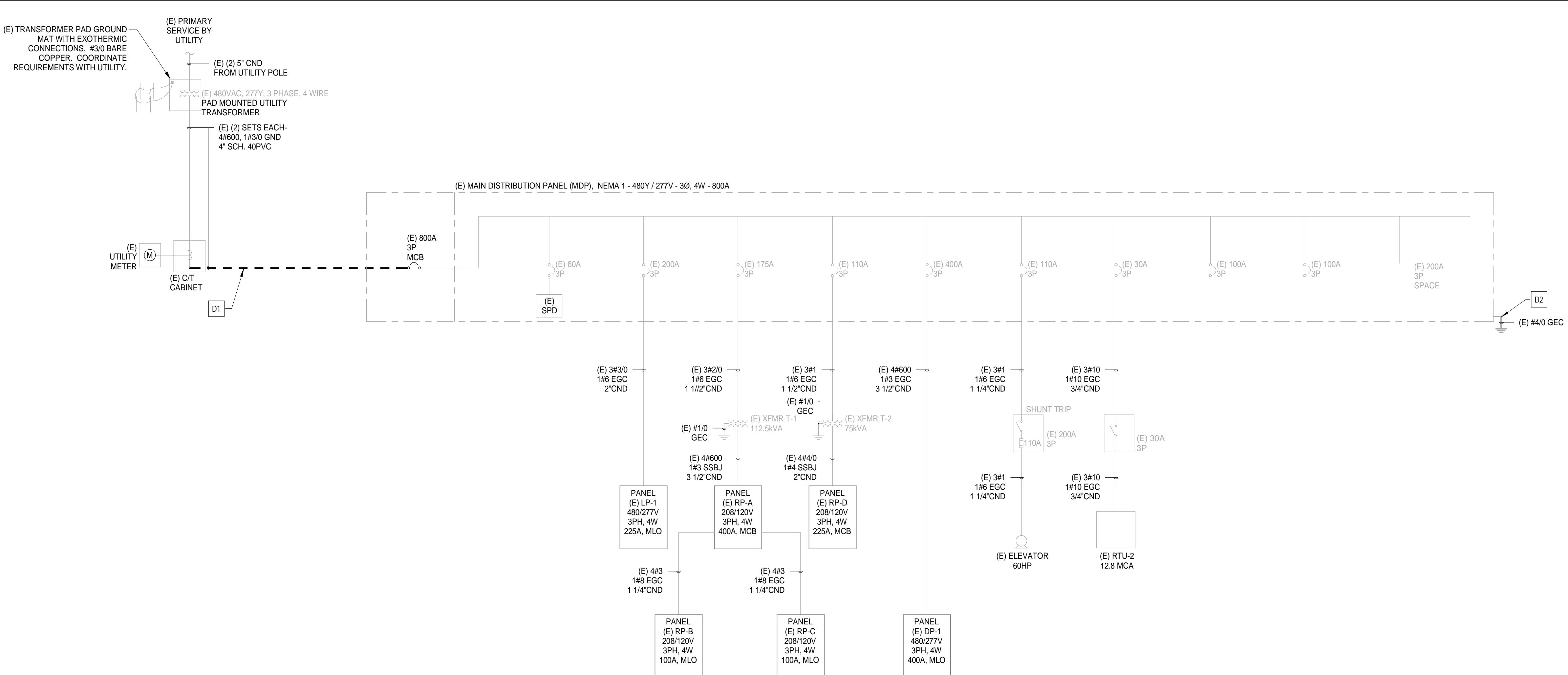
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

at's below.  
before you dig.

STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: [WWW.CALL811.COM](http://WWW.CALL811.COM)

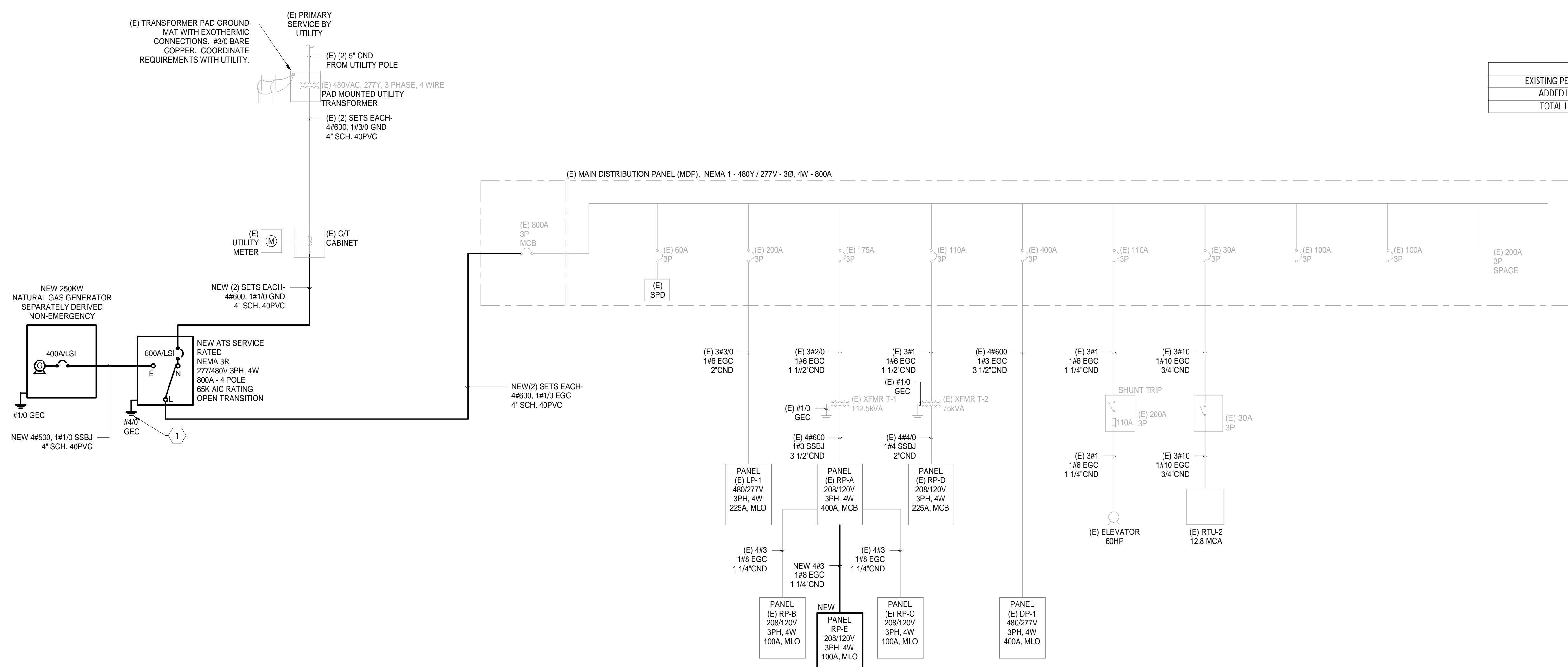
E101

FILE NO. 751-23030.MNB CONTRACT NO. Y24249	E101	DRAWN C. NIKONCHUK	CHECKED A. ROBINSON	APPROVED A. ROBINSON
PRELIMINARY <input type="checkbox"/>	CONSTRUCTION <input type="checkbox"/>	PLAN REVIEW <input checked="" type="checkbox"/>	CORRECTION <input checked="" type="checkbox"/>	FINAL RECORD <input type="checkbox"/>



## 1 EXISTING ONE LINE DIAGRAM

SCALE : N.T.S.



## REVISED ONE LINE DIAGRAM

SCALE : N.T.S.

## **GENERAL NOTES:**

- A. OVERCURRENT DEVICES OF ENTIRE DISTRIBUTION SYSTEM SHALL MEET STATED FAULT CURRENT VALUES WITH FULLY RATED EQUIPMENT.

**DEMO KEYNOTES** #

- D1 DISCONNECT AND REMOVE CONDUIT AND WIRE.
- D2 DISCONNECT AND REMOVE GROUNDING ELECTRODE CONDUCTOR.

## ONE LINE KEYNOTES

## 1 PROVIDE NEW GEC TO EXISTING GROUNDING SYSTEM.

	LOAD (kW)	LOAD (A)
EXISTING PEAK LOAD:	61.6	82.3
ADDED LOAD:	5.8	7.8
TOTAL LOAD:	67.4	90.1

Colliers  
Engineering & Design  
50 West Saginaw Hwy.  
Suite 200  
Lansing, MI 48917  
Phone: 517.272.9835  
Fax: 517.272.9836  
[www.colliersengineering.com](http://www.colliersengineering.com)



STATE OF MICHIGAN  
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET  
STATE FACILITIES ADMINISTRATION  
DESIGN AND CONSTRUCTION DIVISION  
ADAM P. LACH, RA, DIRECTOR

SHEET		IDENTIFICATION NO.	ISSUED FOR	DATE	
E601		FILE NO. 751-23030.MNB CONTRACT NO. Y24249	PRELIMINARY <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> PLAN REVIEW <input checked="" type="checkbox"/> CORRECTION <input type="checkbox"/> FINAL RECORD <input type="checkbox"/>	DRAWN C. NIKONCHUK  CHECKED A. ROBINSON  APPROVED A. ROBINSON	C. NIKONCHUK  A. ROBINSON  A. ROBINSON
<b>Outdoor Adventure Center -</b> <b>Emergency Back Up Power</b> <b>1801 ATWATER STREET</b> <b>DETROIT, MI 48207</b>					
PLANS FOR:					

**Branch Panel: (E) RP-A**

Location: STORAGE 136  
Supply From: (E) T-1  
Mounting: SURFACE  
Enclosure: NEMA1

Volts: 208Y/120  
Phases: 3  
Wires: 4

A.I.C. Rating: 10,000 AMPS SYMMETRICAL  
Mains Type: MLO  
Mains Rating: 400 A  
MCB Rating: 350 A

Notes:  
\*\*NEW LOAD IN BOLD\*\*

CKT	Circuit Description	Trip	Poles	PHASE A	PHASE B	PHASE C	Poles	Trip	Circuit Description	CKT	
1				8299	2000					2	
3	RP-C	100 A	3		6000	1328				4	
5					6600	1238	3	100 A	RP-E	6	
7	RECEPTACLE RM 132	20 A	1	400	400		1	20 A	RECEPTACLE RM 132	8	
9	RECEPTACLE RM 132	20 A	1		400	800	1	20 A	RECEPTACLE RMS 125, 129 & 130	10	
11	RECEPT OUTSIDE/GEN. EPO	20 A	1			917	1178	1	20 A	DOOR OPERATOR RM 136	12
13	DOOR OPERATOR RM 130	20 A	1	1178	510		1	20 A	SECURITY PANEL	14	
15	RECEPTALCE RMS 122 & 123	20 A	1		600	200	1	20 A	RECEPTACLE RM 120	16	
17	RECEPTACLE RM 124	20 A	1			1000	400	1	20 A	RECEPTACLE RM 124	18
19	RECEPTACLE RM 120	20 A	1	800	600		1	20 A	RECEPTACLE RM 120	20	
21	RECEPTACLE RM 120	20 A	1		600	1200	1	20 A	VENDING MACHINE	22	
23	EWH-2	20 A	1			2000	1200	1	20 A	VENDING MACHINE	24
25	CAVE LIGHTING	20 A	1	1000	1200		1	20 A	VENDING MACHINE	26	
27	OZONE	20 A	1		800	500	1	20 A	CAMERA	28	
29	HAND DRYER 122	20 A	1			1200	1000	1	20 A	3RD FLOOR LTG / GIFT SHOP	30
31	HAND DRYER 122	20 A	1	1200	1000		1	20 A	SOUTH WEST JBOX	32	
33	HAND DRYER 123	20 A	1		1200	1000	1	20 A	IT ROOM STATE OF MICHIGAN	34	
35	HAND DRYER 123	20 A	1			1200	1000	1	20 A	IT ROOM STATE OF MICHIGAN	36
37	RECEPTACKE RM 136	20 A	1	800	1000		1	20 A	IT ROOM STATE OF MICHIGAN	38	
39	RECEPTACLE RMS 135 & 133	20 A	1		1000	1248	2	20 A	WATERFALL PUMP #1 & #2	40	
41	RECEPTACLE RM 134	20 A	1			800	1248			42	
Total Load:				29668 VA	25518 VA	29018 VA					
Total Amps:				252 A	213 A	246 A					

Notes:

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals
Equipment	10192 VA	100.00%	10192 VA	
Other	19847 VA	100.00%	19847 VA	Total Conn. Load: 84204 VA
MTR	8273 VA	107.54%	8897 VA	Total Est. Demand: 68381 VA
RCPT	43894 VA	61.39%	26947 VA	Total Conn.: 234 A
LITES	1999 VA	125.00%	2499 VA	Total Est. Demand: 190 A

Notes:

**Branch Panel: RP-E**

Location: STORAGE 136  
Supply From: (E) RP-A  
Mounting: SURFACE  
Enclosure: NEMA1

Volts: 208Y/120  
Phases: 3  
Wires: 4

A.I.C. Rating: 10,000 AMPS SYMMETRICAL  
Mains Type: MLO  
Mains Rating: 100 A

Notes:

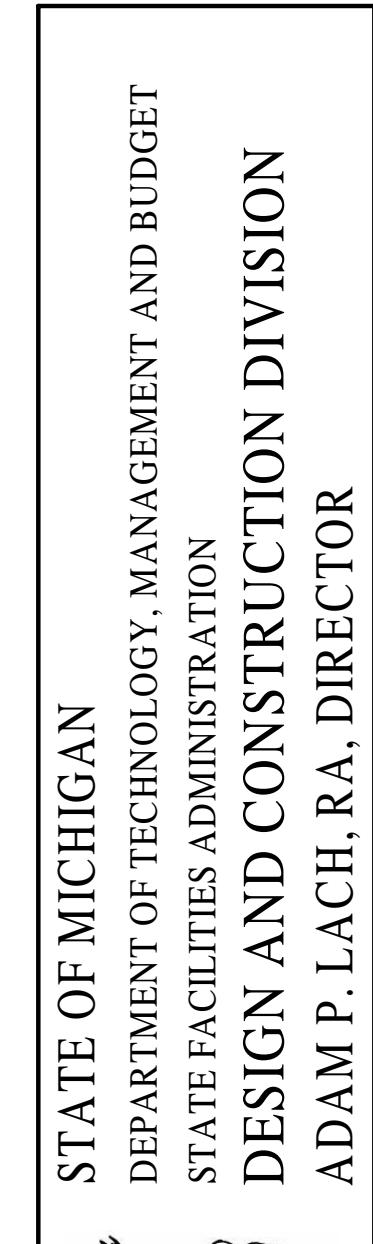
CKT	Circuit Description	Trip	Poles	PHASE A	PHASE B	PHASE C	Poles	Trip	Circuit Description	CKT	
1	RECEPTACLE RM 136	20 A	1	800	1200		1	20 A	GEN. BATTERY CHARGER	2	
3	RECEPTACLE RM 131	20 A	1		600	728	2	20 A	GENERATOR BLOCK HEATER	4	
5	FIRE ALARM PANEL	20 A	1			510	728	6			
7	SPARE	20 A	1	0	0		1	20 A	SPARE	8	
9	SPARE	20 A	1		0	0	1	20 A	SPARE	10	
11	SPARE	20 A	1			0	0	1	20 A	SPARE	12
13	SPACE	..	1	--	--		1	--	SPACE	14	
15	SPACE	..	1	--	--		1	--	SPACE	16	
17	SPACE	..	1	--	--		1	--	SPACE	18	
19	SPACE	..	1	--	--		1	--	SPACE	20	
21	SPACE	..	1	--	--		1	--	SPACE	22	
23	SPACE	..	1	--	--		1	--	SPACE	24	
25	SPACE	..	1	--	--		1	--	SPACE	26	
27	SPACE	..	1	--	--		1	--	SPACE	28	
29	SPACE	..	1	--	--		1	--	SPACE	30	

Total Load: 2000 VA 1328 VA 1238 VA  
Total Amps: 17 A 11 A 10 A

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals
Other	3166 VA	100.00%	3166 VA	
RCPT	1400 VA	100.00%	1400 VA	Total Conn. Load: 4566 VA
				Total Est. Demand: 4566 VA
				Total Conn.: 13 A
				Total Est. Demand: 13 A

Notes:  
\*\*CIRCUITS 1, 3 & 5 HAVE BEEN RELOCATED FROM PANEL RP-A.\*\*

SHEET	IDENTIFICATION NO.	ISSUED FOR	DATE	DESIGNED	PLANS FOR:
	FILE NO. 75-1-23030-MNB	PRELIMINARY CONSTRUCTION PLAN REVIEW CORRECTION FINAL RECORD	11/14/2025	C. NIKONCHUK D. NIKONCHUK CHECKED A. ROBINSON APPROVED A. ROBINSON	Outdoor Adventure Center - Emergency Back Up Power 1801 ATWATER STREET DETROIT, MI 48207
E801					



2700 West Saginaw Hwy.  
Lansing, MI 48917  
Phone: 517-272-3835  
Fax: 517-272-3836  
www.colliersengineering.com