BID ADDENDUM NO. 1 – PHASE D

PROJECT:

EDISON TECHNICAL SCHOOL
PHASE 2 –CONSTRUCTION PACKAGE
655 COLFAX STREET
ROCHESTER, NY 14606

S.E.D. PROJECT 26-16-00-01-0-111-032 REVIEW NO. 17-0660
D.W.T. NO. 26-16-00-01-7-999-020

DATE: June 28, 2019

FROM:

LaBella Associates, DPC
300 State Street
Rochester, New York 14614

Include this Addendum as part of the Contract Documents. It supplements portions of the original specifications/project manual and drawings, the extent of which shall remain, except as revised herein:

BY: 

Michael Ferreri, Project Manager
LaBella Associates, P.C
300 State Street, Suite 201
Rochester, NY 14614
(585) 454-6110
(585) 454-3066 Fax
E-Mail: mferreri@labellapc.com

CHANGES TO THE SPECIFICATIONS

1.10) **ADD** Section 002500 - Hazardous Material Information
1.11) **ADD** Section 002500A - Limited Pre-Renovation Regulated Materials Inspection
1.12) **ADD** Section 003132 - Geotechnical Information
1.13) **ADD** Section 122413 – Roller Window Shades

CHANGES TO THE DRAWINGS

GENERAL

1.14) -**REMOVE** Drawing G001 Project Information in its entirety
-**ADD** Drawing G001 Project Information in its entirety

STRUCTURAL

1.15) –**ADD** Drawing S001 General Notes
1.16) –**ADD** Drawing S101 East Elevation Retaining Wall Repair
1.17) –**ADD** Drawing S102 East Elevation Retaining Wall Repair
1.18) –**ADD** Drawing S103 North Elevation Retaining Wall Repair
1.19) –**ADD** Drawing S104 North Elevation Retaining Wall Repair
1.20) –**ADD** Drawing S201 Chiller Support Framing Plan
1.21) –**ADD** Drawing S501 Retaining Wall Repair Details

ELECTRICAL

1.22) –**ADD** Drawing E000 Electrical Notes, Symbols, & Abbreviations
1.23) –**ADD** Drawing E001 Electrical Site Plan Demo
1.24) –**ADD** Drawing E002 Electrical Site Plan
1.25) –**ADD** Drawing E012 Roof Electrical Demolition Plan – Lightning Protection Area D, E, F, G, & H
1.26) –**ADD** Drawing E013 Roof Special Systems Plan – Areas: D, E, F, G, & H
1.27) –**ADD** Drawing E101 Mechanical Room Electrical Demolition Plan
1.28) –**ADD** Drawing E102 Basement Electrical Demolition Plan – Area G/H
1.29) –**ADD** Drawing E103 Roof and Penthouse 1 Electrical Demolition Plan
1.30) –**ADD** Drawing E104 Penthouse 3 and 5 Electrical Demolition and New Work Plan
1.31) –**ADD** Drawing E201 Mechanical Room Electrical Plan
1.32) –**ADD** Drawing E202 First Floor Electrical Special Systems Plan – Areas: A, B, C, D & E
1.33) –**ADD** Drawing E203 First Floor Electrical Special Systems Plan – Areas: F, G & H
1.34) –**ADD** Drawing E204 Basement Electrical Plan – Area G/H
1.35) –**ADD** Drawing E205 Roof and Penthouse 1 Electrical Plan
1.36) –**ADD** Drawing E302B Second Floor Lighting Plan – Area B
1.37) –**ADD** Drawing E401 Enlarged Electrical Plans 1st and 2nd FLR

ATTACHMENTS

- Specification Sections:
  - 002500 - Hazardous Material Information

  - 002500A - Limited Pre-Renovation Regulated Materials Inspection
  - 003132 - Geotechnical Information
  - 122413 – Roller Window Shades
- Drawings:
  - G001 Project Information in its entirety
  - S001 General Notes
  - S101 East Elevation Retaining Wall Repair
  - S102 East Elevation Retaining Wall Repair
  - S103 North Elevation Retaining Wall Repair
  - S104 North Elevation Retaining Wall Repair
  - S201 Chiller Support Framing Plan
  - S501 Retaining Wall Repair Details
  - E000 Electrical Notes, Symbols, & Abbreviations
  - E001 Electrical Site Plan Demo
  - E002 Electrical Site Plan
  - E012 Roof Electrical Demolition Plan – Lightning Protection Area D, E, F, G, & H
  - E013 Roof Special Systems Plan – Areas: D, E, F, G, & H
  - E101 Mechanical Room Electrical Demolition Plan
  - E102 Basement Electrical Demolition Plan – Area G/H
  - E103 Roof and Penthouse 1 Electrical Demolition Plan
  - E104 Penthouse 3 and 5 Electrical Demolition and New Work Plan
  - E201 Mechanical Room Electrical Plan
  - E202 First Floor Electrical Special Systems Plan – Areas: A, B, C, D & E
  - E203 First Floor Electrical Special Systems Plan – Areas: F, G & H
  - E204 Basement Electrical Plan – Area G/H
  - E205 Roof and Penthouse 1 Electrical Plan
  - E302B Second Floor Lighting Plan – Area B
  - E401 Enlarged Electrical Plans 1st and 2nd FLR

SECTION 00 25 00 – Hazardous Material Information

PART 1 – GENERAL

1.1 SUMMARY

A. The attached Limited Pre-Renovation Regulated Building Materials Inspection report is provided for contractor reference.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

LABELLA Associates, D.P.C.
Engineering
Architecture
Environmental
Planning

300 State Street, Suite 201 | Rochester, NY 14614 | p 585.454.6110 | f 585.454.3066 | www.labellapc.com

Limited Pre-Renovation Regulated Building Materials Inspection

Location:

Edison Technical School
655 Colfax Street
Rochester, New York 14606

Prepared for:

Rochester Schools Modernization Program
1776 N. Clinton Avenue
Rochester, New York 14621

LaBella Project No. 2170218

May 2017

Table of Contents

I. Project Description

In accordance with current regulations, LaBella Associates, D.P.C. (LaBella) conducted a Limited Pre-Renovation Regulated Building Materials (RBM) Inspection of the areas scheduled to be impacted by upcoming Phase 2 renovations.

The objective was to identify suspect RBMs, such as Asbestos-Containing Materials (ACM), Lead-Based Paint (LBP), and PCB-containing caulking and glazing compounds which may require abatement or removal prior to or during renovation due to applicable regulations. The areas inspected were in conjunction with the upcoming Phase 2 renovation project.

Materials and locations understood to be impacted by this project were determined from information provided by LaBella's Architectural Division.

II. Inspection Procedures

The following procedures were used to obtain the data for this Report:

A. Existing documentation was requested for review. Inspection results from sampling performed by LaBella on October 29th, 2015 were reviewed to develop an understanding of confirmed RBMs at the Site.

B. A visual inspection of the Phase 2 Renovation areas was conducted to identify visible and accessible sources of the above referenced suspect RBMs. Photographs captured during this inspection are attached in Appendix C.

C. Bulk samples of select RBMs were collected and submitted for laboratory analysis.

D. Asbestos samples were submitted for laboratory analysis. Preliminary Polarized Light Microscopy analyses of non-friable, organically bound (NOB) materials were performed by LaBella Laboratories, a NYSDOH accredited laboratory, to determine the presence and percentage of asbestos in each sample. Transmission electron microscopy analyses of NOB materials, if necessary, were performed by AMA Laboratories.

E. Suspect LBP was spot checked in the field using XRF testing procedures.

F. Results of the laboratory analyses, field testing and the visual on-site inspection were compiled and summarized.

III. Inspection Limitations

This inspection was conducted in accordance with generally accepted environmental engineering practices for this region. Collection of bulk samples of suspect RBMs was limited to those materials readily accessible using hand tools or hand-held power tools. Homogeneous materials were identified and located based on visual observation from readily accessible points. The data derived from representative samples of any given homogeneous material represent conditions that apply only at that particular location. Inspection protocol and methodology requires that sample data be used to draw conclusions about the entire homogeneous area, but such conclusions may not necessarily apply to the general Site as a whole.

No sub-surface investigations were performed to determine the possible presence of regulated materials on or in the immediate vicinity of the Site. No record drawings of the building were available for review as part of this investigation.

LaBella makes no other warranty or representation, either expressed or implied, nor is one intended to be included as part of its services, proposals, contracts or reports. No inspection can wholly eliminate the uncertainty regarding the potential for undiscovered RBMs. The Work performed by LaBella is intended to reduce, but not eliminate, uncertainty regarding the potential for RBMs at the Site.

This inspection report is not intended to be a bid document for an abatement scope of work. This report is intended to satisfy the requirements of NYS Code Rule 56-5 for inspections. Abatement project design can only be performed by a certified Project Designer.

IV. Inspection Results

Asbestos-Containing Materials (ACMs)

Based on laboratory analyses of bulk samples collected, the following materials were determined to contain greater than 1% asbestos. However, the following table does not include all of the materials sampled during this inspection; for a full list of materials sampled see the Asbestos Bulk Sample Summary Table immediately following this report:

Type of Material	Typical Location[1]	Estimated Amount[2]	Friability	Condition
Tan Sheet Vinyl and Associated Mastic	Flooring in Rooms 1A5 and 1A11	340 SF	Non-Friable	Good

Sheet Vinyl and Associated Mastic

Tan asbestos-containing sheet vinyl and its associated tan asbestos-containing mastic is located on the floor of rooms 1A5 and 1A11. The sheet vinyl and mastic are generally in good condition, and cover an area of approximately 180 square feet in room 1A5, and 160 square feet in room 1A11.

[1] Typical Location may not be inclusive of all material locations present at the subject structure.

[2] For general reference only: Quantities reflect only those materials understood to be impacted by the project as identified by LaBella's Architectural Division. Estimated amounts of confirmed ACM listed above were obtained through field observations made during site visits. Quantities are approximations and LaBella assumes no responsibility if used for bidding.

PCB-Containing Materials

Caulking and Glazing Compounds

It has recently been discovered that certain caulking and glazing compounds have the potential to contain PCBs. Caulking and glazing compounds containing equal to or greater than 50 ppm PCB must be disposed of as PCB-Contaminated hazardous waste. Therefore, several caulking and glazing compounds were observed, sampled and analyzed for the presence of PCBs. Based on laboratory analysis, these caulking and glazing compounds are *not* considered to be PCB-Contaminated (i.e. NOT $\geq$ 50 ppm PCBs).

Lead – Based Paint

Several representative painted surfaces were tested for the presence of lead-based paint using XRF testing procedures. The following components were found to be positive for the presence of lead:

- Red painted interior doors and frames
- Orange painted lockers

In accordance with Environmental Protection Agency (EPA) protocols, no other materials were found to contain lead above the action level thresholds of 1.0 mg/cm^2 and 0.5% by weight.

The buildings and spaces inspected for this project do not include or comprise residential spaces applicable to the requirements of EPA lead-based paint management regulations. Therefore, EPA 40 Code of Federal Regulations (CFR) 745: Lead-Based Paint Renovation, Repair and Painting (RRP) Program Rule requirements do not apply. However, lead was detected at low concentrations in a variety of building materials (i.e., red exterior doors and door frames, red lockers, overhead doors). Renovation and demolition contractors should be informed of the presence of lead for OSHA compliance considerations.

V. Observations and Cautionary Statements

Grey Vermiculite

Vermiculite has been used as loose insulation in attics, walls, CMU block, and as a component of plaster, fireproofing and other building materials. The NYS Department of Health considers Vermiculite to be an asbestos-containing material, and that building materials containing more than 10% Vermiculite should be treated as asbestos-containing.

Vermiculite was not observed in spaces and materials inspected for this project. Testing for Vermiculite was performed at various locations throughout the inspected area by drilling into the CMU cavities. No loose fill Vermiculite was observed.

Cautionary measures should be taken during construction, renovation, and demolition to ensure that proper steps are taken if Vermiculite is discovered in previously inaccessible locations. If Vermiculite is discovered, work should be stopped immediately to address the issue and prevent the uncontrolled release and distribution of an asbestos-containing material.

Potentially Hidden/Inaccessible RBMs

As stated earlier, collection of bulk samples of suspect RBMs was limited to those materials readily accessible. Since the building is occupied and in operation as a school open to the public, destructive sampling techniques were used, but in a limited fashion, in order to minimize disruption to business operations and damage to building components.

Although this inspection was conducted in a manner consistent with recognized professional practices, the potential does exist for additional RBMs to be inaccessible, hidden, and undiscovered in the area inspected.

J:\Rochester Joint Schools Construction Board\2170218 - Edison Tech Phase 2\Environmental\Report\RBM Report Boiler 2016.doc

Asbestos Bulk Sample Summary Tables

Asbestos Bulk Sample Summary Table

Edison Technical High School
Phase 2 Renovation Project

Items in Bold are Confirmed ACM

Sample #	Type of Material	Sample Location	Results % Asbestos
ET-1A	Black EPDM Layer	Roof System Above Stair 1 Stairwell	None Detected
ET-1B	Black EPDM Layer	Roof System Above Stair 1 Stairwell	None Detected
ET-2A	Tan Fiber Board	Roof System Above Stair 1 Stairwell	None Detected
ET-2B	Tan Fiber Board	Roof System Above Stair 1 Stairwell	None Detected
ET-3A	Yellow Insulation	Roof System Above Stair 1 Stairwell	None Detected
ET-3B	Yellow Insulation	Roof System Above Stair 1 Stairwell	None Detected
ET-4A	Black Tar Paper	Roof System Above Stair 1 Stairwell	None Detected
ET-4B	Black Tar Paper	Roof System Above Stair 1 Stairwell	None Detected
ET-5A	Gray Roof Caulk	Roof System Above Stair 1 Stairwell	None Detected
ET-5B	Gray Roof Caulk	Roof System Above Stair 1 Stairwell	None Detected
ET-6A	Black Tar	Roof System Above Stair 1 Stairwell	None Detected
ET-6B	Black Tar	Roof System Above Stair 1 Stairwell	None Detected
ET-7A	Gray 2x2 Speckled Ceiling Tile	Room 1A3 Suspended Ceiling	None Detected
ET-7B	Gray 2x2 Speckled Ceiling Tile	Room 1A3 Suspended Ceiling	None Detected
ET-8A	Gray Mudded Fitting	Room 1A3 Pipe Fitting	None Detected
ET-8B	Gray Mudded Fitting	Room 1A6 Pipe Fitting	None Detected
ET-8C	Gray Mudded Fitting	Room 1C12 Pipe Fitting	None Detected
ET-9A	Gray 2x2 Flat Ceiling Tile	Room 1A3 Suspended Ceiling	None Detected
ET-9B	Gray 2x2 Flat Ceiling Tile	Room 1A5 Suspended Ceiling	None Detected

Asbestos Bulk Sample Summary Table

Edison Technical High School
Phase 2 Renovation Project

Items in Bold are Confirmed ACM

Sample #	Type of Material	Sample Location	Results % Asbestos
ET-10A	Tan Ceramic Mastic	Room 1A1 Sink Wall	None Detected
ET-10B	Tan Ceramic Mastic	Room 1A1 Sink Wall	None Detected
ET-11A	White Ceramic Grout	Room 1A1 Sink Wall	None Detected
ET-11B	White Ceramic Grout	Room 1A1 Sink Wall	None Detected
ET-12A	Brown Caulking Compound	Room 1A1 Exterior Side of Exterior Door	None Detected
ET-12B	Brown Caulking Compound	Room 1A1 Exterior Side of Exterior Door	None Detected
ET-13A	Dark Brown Caulking Compound	Room 1A1 Interior Side of Exterior Door	None Detected
ET-13B	Dark Brown Caulking Compound	Room 1C2 Interior Side of Exterior Door	None Detected
ET-14A	Brown Cove Base mastic	Room 1A5 Cove Base	None Detected
ET-14B	Brown Cove Base mastic	Room 1A11 Cove Base	None Detected
ET-15A	**Tan Sheet Vinyl**	**Room 1A5 Floor**	**25% Chrysotile**
ET-15B	**Tan Sheet Vinyl**	**Room 1A11 Floor**	**Not Analyzed Stop Positive**
ET-16A	**Tan Sheet Vinyl Mastic**	**Room 1A5 Floor**	**3% Chrysotile**
ET-16B	**Tan Sheet Vinyl Mastic**	**Room 1A11 Floor**	**Not Analyzed Stop Positive**
ET-17A	Black Glazing Compound	Room 1A1 Interior Door Transum Window	None Detected
ET-17B	Black Glazing Compound	Room 1A2 Interior Door Transum Window	None Detected
ET-18A	Light Gray 2x2 Ceiling Tile	Room 1A7 Vestibule Drop Ceiling	None Detected
ET-18B	Light Gray 2x2 Ceiling Tile	Room 1A7 Vestibule Drop Ceiling	None Detected
ET-19A	Gray Drywall	Room 1A18A Wall	None Detected

Asbestos Bulk Sample Summary Table

Edison Technical High School
Phase 2 Renovation Project

Items in Bold are Confirmed ACM

Sample #	Type of Material	Sample Location	Results % Asbestos
ET-19B	Gray Drywall	Room 1A18 Wall	None Detected
ET-20A	White Joint Compound	Room 1A18A Wall	None Detected
ET-20B	White Joint Compound	Room 1A18A Wall	None Detected
ET-20C	White Joint Compound	Room 1C3 Wall	None Detected
ET-21A	Gray Cove Mastic	Room 1A18A Cove Base	None Detected
ET-21B	Gray Cove Mastic	Room 1A18A Cove Base	None Detected
ET-22A	Gray Caulking Compound	Room 1A18 Exterior Door Seam	None Detected
ET-22B	Gray Caulking Compound	Room 1A18 Exterior Door Seam	None Detected
ET-23A	Gray Spray-On Fireproofing	Ceiling Deck	None Detected
ET-23B	Gray Spray-On Fireproofing	Ceiling Deck	None Detected
ET-23C	Gray Spray-On Fireproofing	Ceiling Deck	None Detected
ET-24A	Gray Ceramic Grout	Room 1C1 Sink Wall	None Detected
ET-24B	Gray Ceramic Grout	Room 1C1 Sink Wall	None Detected
ET-25A	Brown Ceramic Mastic	Room 1C1 Sink Wall	None Detected
ET-25B	Brown Ceramic Mastic	Room 1C1 Sink Wall	None Detected
ET-26A	Black Caulking Compound	Exterior Window Seam	None Detected
ET-26B	Black Caulking Compound	Exterior Window Seam	None Detected

Appendix A
Inspection Fact Sheet

Inspection Fact Sheet

Name and Address of Building/Structure

Edison Technical School

655 Colfax Street

Rochester, New York 14606

Name and Address of Building/Structure Owner

Rochester Schools Modernization Program

1776 North Clinton Avenue

Rochester, New York 14621

Name and Address of Owner's Agent

LaBella Associates, D.P.C.

300 State Street, Suite 201

Rochester, New York 14614

Name of the Firm & Person Conducting the Inspection

LaBella Associates, D.P.C.

Gregory Lindsay *(NYSDOL Cert. #06-08692)*

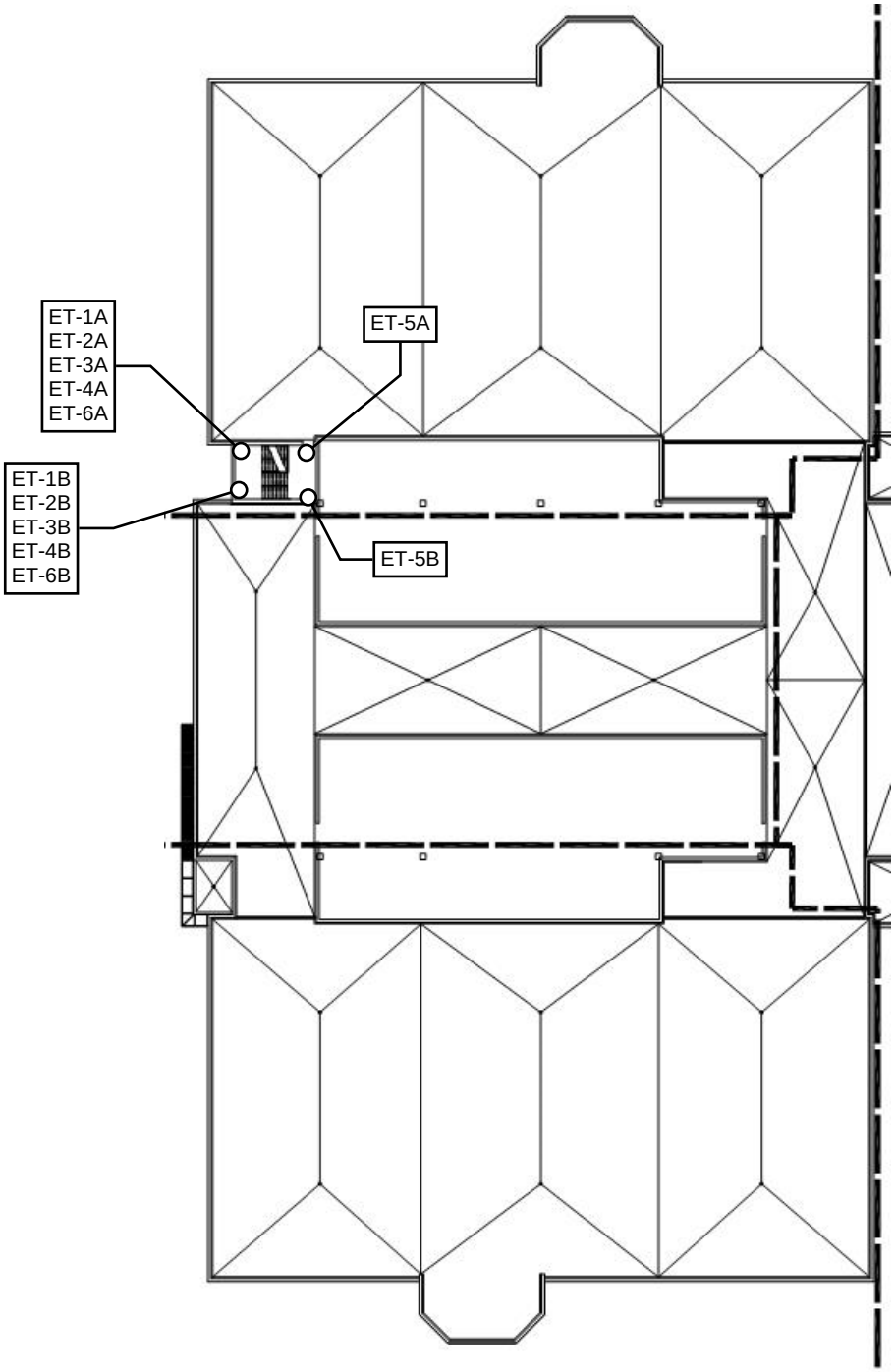
Date(s) the Inspection Was Conducted

May 17th, 2017

Appendix B
Sample Location Drawing

Approximate Sample Locations

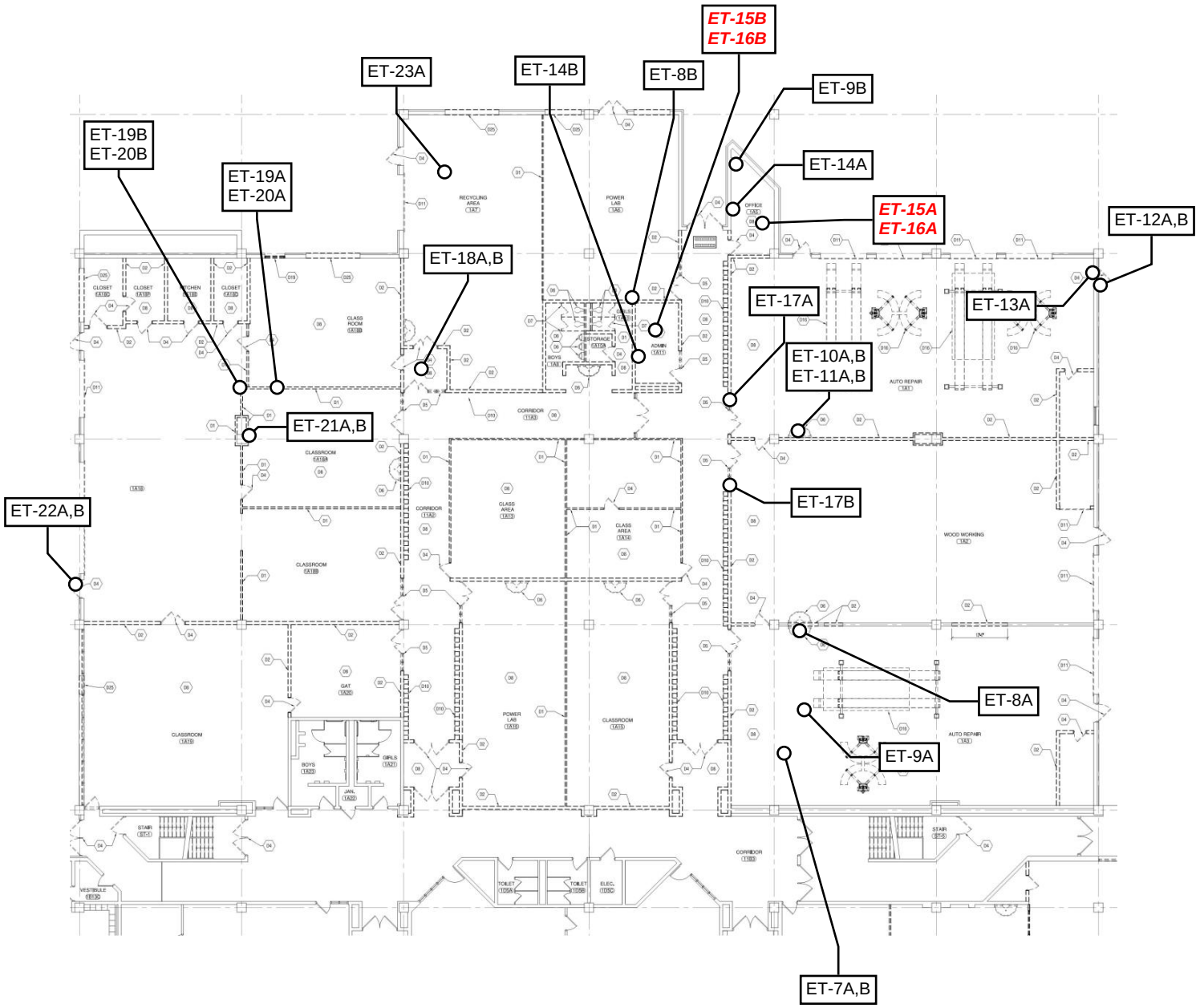
Stairwell #1 Roof



Bold Italicized Confirmed ACMs

Approximate Sample Locations

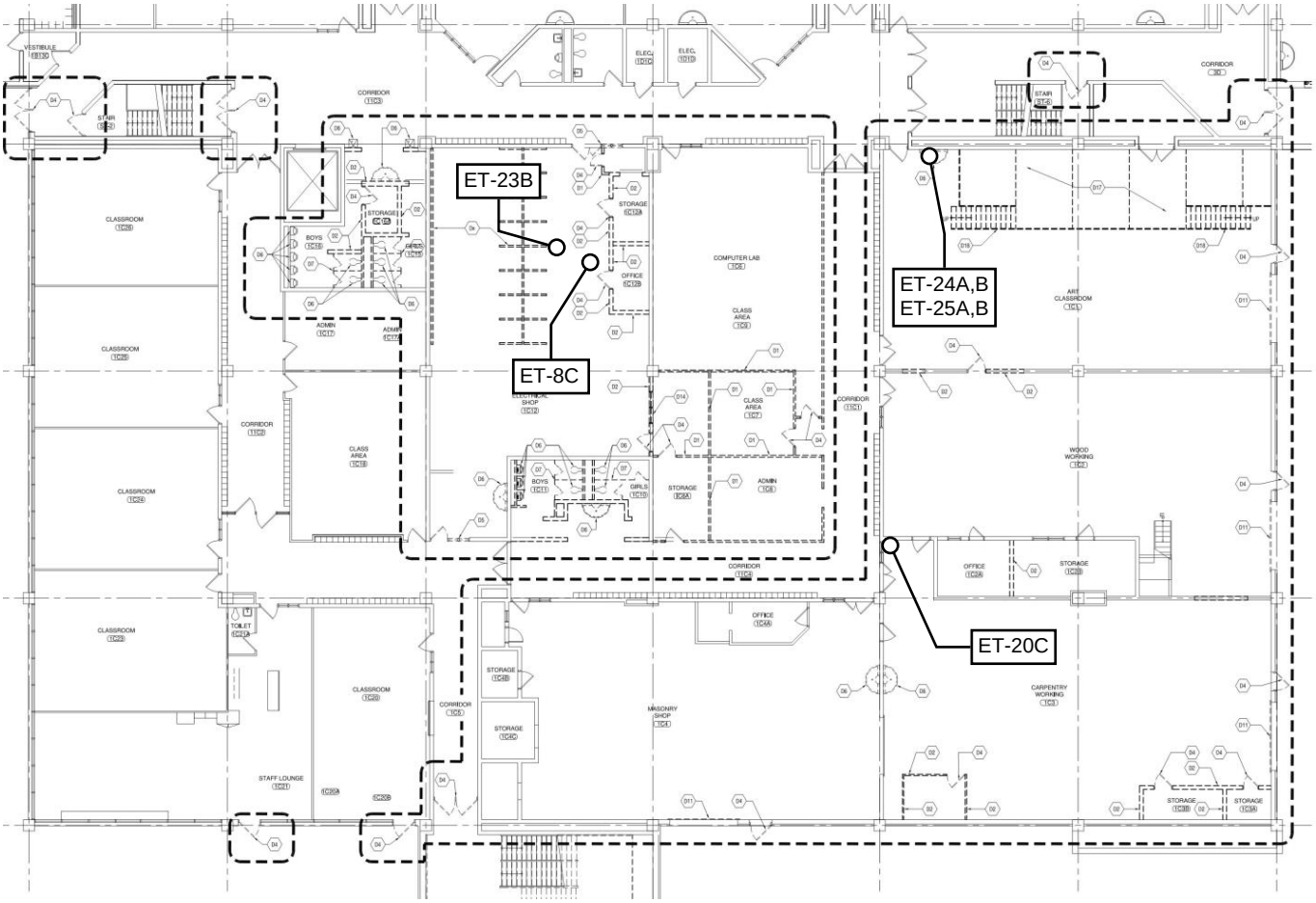
1st Floor Area A



Bold Italicized Confirmed ACMs

Approximate Sample Locations

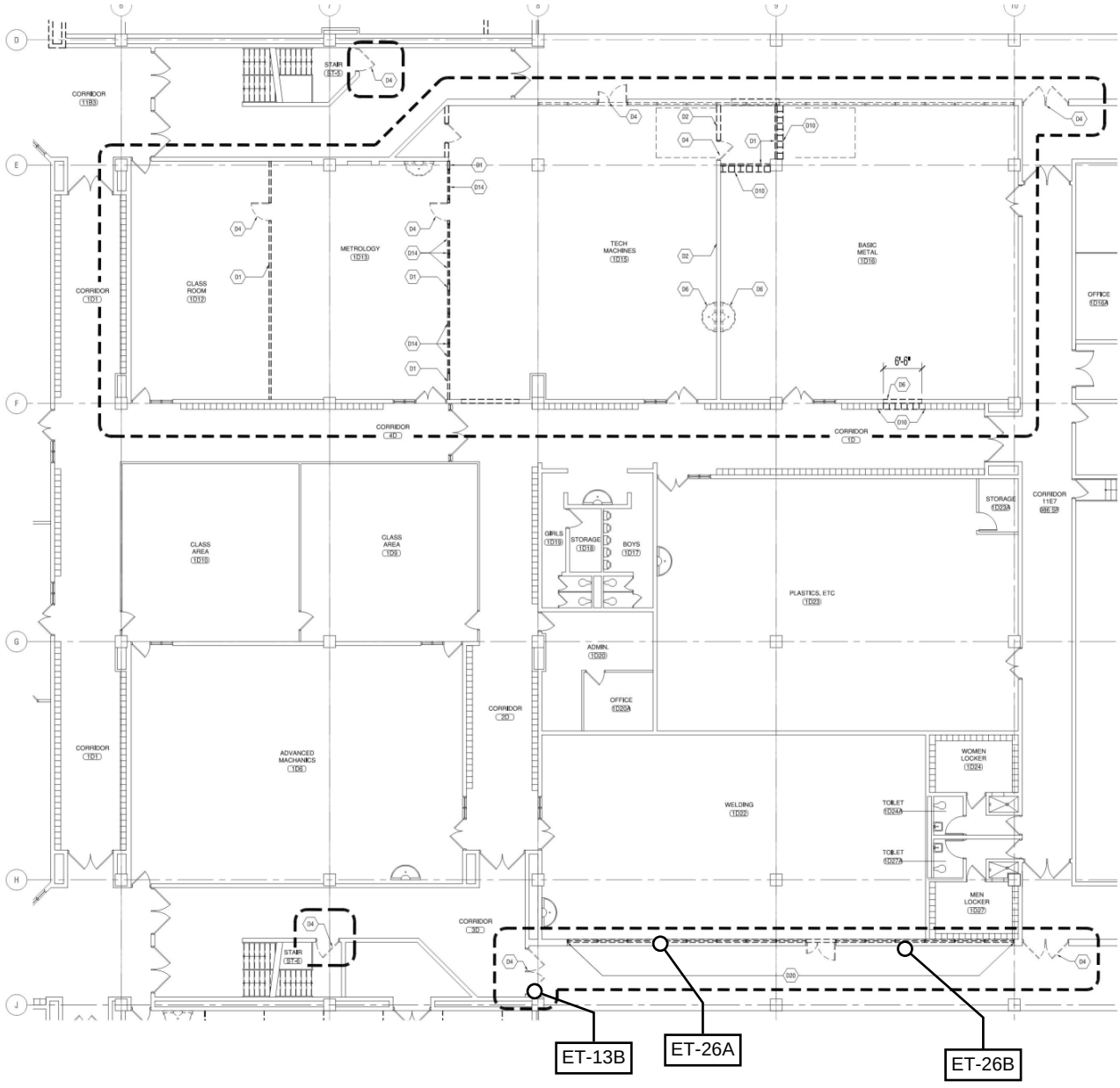
1st Floor Area C



Bold Italicized Confirmed ACMs

Approximate Sample Locations

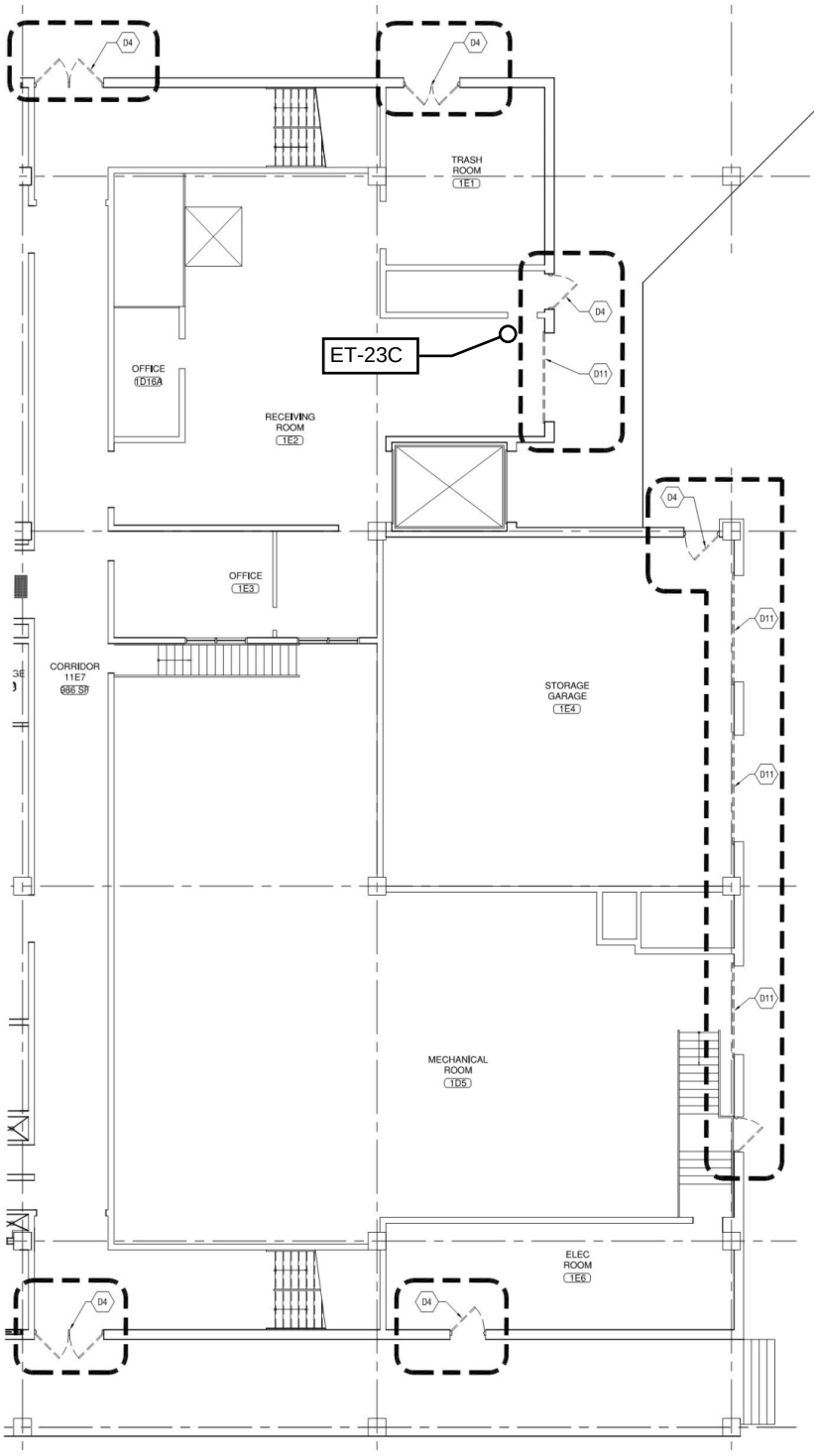
1st Floor Area D



Bold Italicized Confirmed ACMs

Approximate Sample Locations

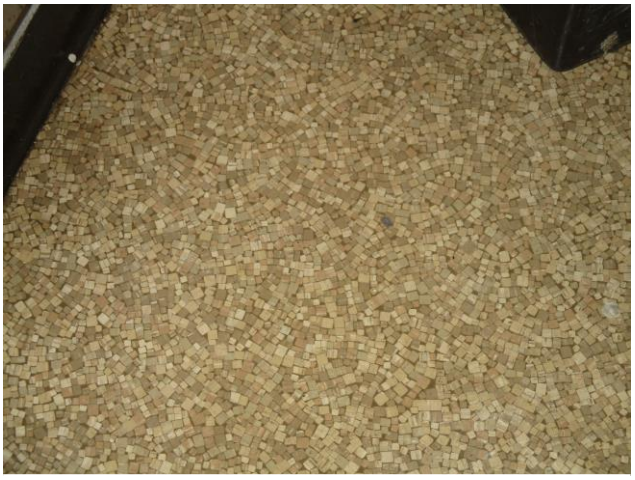
1st Floor Area E



Bold Italicized Confirmed ACMs

Appendix C
Inspection Photos

Stairwell #1 Roof



Tan Asbestos-Containing Sheet Vinyl and
Associated Tan Asbestos-Containing Mastic

Orange Lead-Based Painted Lockers

Appendix D
Laboratory Analytical Reports

BULK SAMPLE ASBESTOS ANALYTICAL REPORT

LABELLA ASSOCIATES, P. C.
ANALYTICAL LABORATORY
300 STATE STREET
ROCHESTER, NY 14614
(585) 454-6110 FAX(585) 454-3066

ELAP # 11184
AMA Lab TEM ELAP# 10920

LBL JOB # 100315

PLM Methods: 198.1, 198.4, & 198.6
RSD: 14.2%

LABELLA PROJECT # 2150947

1003

CLIENT: LaBella Associates, PC
ADDRESS: 300 State Street
Rochester, NY 14614

SAMPLE TYPE: PLM Bulk
SAMPLE DATE: 10/29/2015

PROJECT LOCATION: Edison Career & Technology High School

FIELD ID	LBL ID	method	ASBESTOS TYPE	%	OTHER FIBERS	%	MATRIX	%	COLOR / DESCRIPTION
ETHS-1A	100315-1	T	ND		CELL/GLASS	25	TAR	75	BLACK BUILT-UP ROOFING
ETHS-1B	100315-2	T	ND		CELL/GLASS	25	TAR	75	BLACK BUILT-UP ROOFING
ETHS-2A	100315-3	T	ND		CELL/GLASS	30	TAR	70	BLACK BUILT-UP FLASHING
ETHS-2B	100315-4	T	ND		CELL/GLASS	30	TAR	70	BLACK BUILT-UP FLASHING
ETHS-3A	100315-5	T	ND		CELLULOSE	20	TAR	80	BLACK TAR
ETHS-3B	100315-6	T	ND		CELLULOSE	18	TAR	82	BLACK TAR
ETHS-4A	100315-7	T	ND		ND		MIN/BINDER	100	GRAY CAULK
ETHS-4B	100315-8	T	ND		ND		MIN/BINDER	100	GRAY CAULK
ETHS-5A	100315-9	P	ND		ND		MINERAL	100	GRAY GROUT
ETHS-5B	100315-10	P	ND		ND		MINERAL	100	GRAY GROUT
ETHS-6A	100315-11	P	ND		ND		MINERAL	100	GRAY CEMENT
ETHS-6B	100315-12	P	ND		ND		MINERAL	100	GRAY CEMENT
ETHS-7A	100315-13	P	ND		FIBERGLASS	83	MINERAL	17	GRAY FIREPROOFING
ETHS-7B	100315-14	P	ND		FIBERGLASS	83	MINERAL	17	GRAY FIREPROOFING
ETHS-7C	100315-15	P	ND		FIBERGLASS	84	MINERAL	16	GRAY FIREPROOFING

Lab Supervisor: Matt Smith Date: 11/4/15

ND - None Detected CELL-Cellulose JC - Joint Compound MIN - Mineral GLASS - Fiberglass <1 = Trace PLAS - Plaster
P - Friable PLM analytical result N - NOB PLM analytical result T - TEM analytical result IN - Inconclusive[1]
G - Gravimetric Matrix Reduction; Sample residue weight <1% of original sample weight, TEM not required. Vermiculite: Vermiculite is reported as an asbestos-containing mineral in accordance with NYSDOH determinations. See NYSDOH guidance, available upon request.

* **Please note**: Due to interference from sample matrix components, results reported via PLM method ELAP 198.1 as negative or Trace (<1%) may be inaccurate and reported as a False Negative. It is recommended that additional analytical techniques such as gravimetric reduction, TEM and others be used to reduce obscuring effects of matrix components yielding more accurate results.

1 "Polarized-light microscopy (PLM) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can be used to determine if this material can be considered to be non-asbestos containing."

BULK SAMPLE ASBESTOS ANALYTICAL REPORT

LABELLA ASSOCIATES, P. C.
ANALYTICAL LABORATORY
300 STATE STREET
ROCHESTER, NY 14614
(585) 454-6110 FAX(585) 454-3066

ELAP # 11184
AMA Lab TEM ELAP# 10920

LBL JOB # 37617
PLM Methods: 198.1, 198.4, & 198.6
RSD: 14.2%

376

LABELLA PROJECT # 2170218

CLIENT: LaBella Associates, PC
ADDRESS: 300 State Street
Rochester, NY 14614

SAMPLE TYPE: PLM Bulk
SAMPLE DATE: 05/11/2017

PROJECT LOCATION: Edison Tech School

FIELD ID	LBL ID	method	ASBESTOS TYPE	%	OTHER FIBERS	%	MATRIX	%	COLOR / DESCRIPTION
ET-1A	37617-1	P	ND		ND		RUBBER	100	BLACK ROOFING COVE MEMBRANE
ET-1B	37617-2	P	ND		ND		RUBBER	100	BLACK ROOFING COVE MEMBRANE
ET-2A	37617-3	P	ND		CELLULOSE	100	ND		TAN FIBERBOARD
ET-2B	37617-4	P	ND		CELLULOSE	100	ND		TAN FIBERBOARD
ET-3A	37617-5	P	ND		FIBERGLASS	100	ND		YELLOW INSULATION
ET-3B	37617-6	P	ND		FIBERGLASS	100	ND		YELLOW INSULATION
ET-4A	37617-7	G	ND		CELLULOSE	75	TAR	25	BLACK TAR PAPER
ET-4B	37617-8	G	ND		CELLULOSE	75	TAR	25	BLACK TAR PAPER
ET-5A	37617-9	T	ND		ND		MIN/BINDER	100	GRAY CAULK
ET-5B	37617-10	T	ND		ND		MIN/BINDER	100	GRAY CAULK
ET-6A	37617-11	G	ND		FIBERGLASS	5	TAR	95	BLACK TAR
ET-6B	37617-12	G	ND		FIBERGLASS	5	TAR	95	BLACK TAR

Lab Supervisor: Matt Smith Date: 5/11/17

ND - None Detected CELL-Cellulose JC - Joint Compound MIN - Mineral GLASS - Fiberglass <1 = Trace PLAS - Plaster
P - Friable PLM analytical result N - NOB PLM analytical result T - TEM analytical result IN - Inconclusive[1]
G - Gravimetric Matrix Reduction: Sample residue weight <1% of original sample weight. TEM not required. Vermiculite: Vermiculite is reported as an asbestos-containing mineral in accordance with NYSDOH determinations. See NYSDOH guidance, available upon request.

* **Please note**: Due to interference from sample matrix components, results reported via PLM method ELAP 198.1 as negative or Trace (<1%) may be inaccurate and reported as a False Negative. It is recommended that additional analytical techniques such as gravimetric reduction, TEM and others be used to reduce obscuring effects of matrix components yielding more accurate results.

1 "Polarized-light microscopy (PLM) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can be used to determine if this material can be considered to be non-asbestos containing."

BULK SAMPLE ASBESTOS ANALYTICAL REPORT

LABELLA ASSOCIATES, P. C.
ANALYTICAL LABORATORY
300 STATE STREET
ROCHESTER, NY 14614
(585) 454-6110 FAX(585) 454-3066

ELAP # 11184
AMA Lab TEM ELAP# 10920

LBL JOB # 40617
PLM Methods: 198.1, 198.4, & 198.6
RSD: 14.2%

406

LABELLA PROJECT # 2170218

CLIENT: LaBella Associates, PC
ADDRESS: 300 State Street
Rochester, NY 14614

SAMPLE TYPE: PLM Bulk
SAMPLE DATE: 05/17/2017

PROJECT LOCATION: Edison Tech School

FIELD ID	LBL ID	method	ASBESTOS TYPE	%	OTHER FIBERS	%	MATRIX	%	COLOR / DESCRIPTION
ET-7A	40617-1	T	ND		CELL/GLASS	100	ND		GRAY CEILING TILE
ET-7B	40617-2	T	ND		CELL/GLASS	100	ND		GRAY CEILING TILE
ET-8A	40617-3	P	ND		FIBERGLASS	25	MINERAL	75	GRAY MUDDED FITTING
ET-8B	40617-4	P	ND		FIBERGLASS	27	MINERAL	73	GRAY MUDDED FITTING
ET-8C	40617-5	P	ND		FIBERGLASS	24	MINERAL	76	GRAY MUDDED FITTING
ET-9A	40617-6	T	ND		CELL/GLASS	100	ND		GRAY CEILING TILE
ET-9B	40617-7	T	ND		CELL/GLASS	100	ND		GRAY CEILING TILE
ET-10A	40617-8	T	ND		ND		MIN/BINDER	100	TAN MASTIC
ET-10B	40617-9	T	ND		ND		MIN/BINDER	100	TAN MASTIC
ET-11A	40617-10	P	ND		ND		MINERAL	100	WHITE GROUT
ET-11B	40617-11	P	ND		ND		MINERAL	100	WHITE GROUT
ET-12A	40617-12	T	ND		ND		MIN/BINDER	100	BROWN CAULK
ET-12B	40617-13	T	ND		ND		MIN/BINDER	100	BROWN CAULK
ET-13A	40617-14	T	ND		ND		MIN/BINDER	100	BROWN CAULK
ET-13B	40617-15	T	ND		ND		MIN/BINDER	100	BROWN CAULK
ET-14A	40617-16	T	ND		ND		MIN/BINDER	100	BROWN MASTIC
ET-14B	40617-17	T	ND		ND		MIN/BINDER	100	BROWN MASTIC
ET-15A	40617-18	N	CHRYSOTILE	25	CELLULOSE	15	MIN/VINYL	60	TAN SHEET VINYL
ET-16A	40617-19	N	CHRYSOTILE	2.8	CELLULOSE	0.2	MIN/BINDER	97	TAN MASTIC
ET-17A	40617-20	G	ND		ND		MIN/BINDER	100	BLACK GLAZING COMPOUND
ET-17B	40617-21	G	ND		ND		MIN/BINDER	100	BLACK GLAZING COMPOUND

Lab Supervisor: Matt Smith Date: 5/18/17

ND - None Detected CELL-Cellulose JC - Joint Compound MIN - Mineral GLASS - Fiberglass <1 = Trace PLAS - Plaster
P - Friable PLM analytical result N - NOB PLM analytical result T - TEM analytical result IN - Inconclusive[1]
G - Gravimetric Matrix Reduction: Sample residue weight <1% of original sample weight. TEM not required. Vermiculite: Vermiculite is reported as an asbestos-containing mineral in accordance with NYSDOH determinations. See NYSDOH guidance, available upon request.

* **Please note**: Due to interference from sample matrix components, results reported via PLM method ELAP 198.1 as negative or Trace (<1%) may be inaccurate and reported as a False Negative. It is recommended that additional analytical techniques such as gravimetric reduction, TEM and others be used to reduce obscuring effects of matrix components yielding more accurate results.

1 "Polarized-light microscopy (PLM) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can be used to determine if this material can be considered to be non-asbestos containing."

BULK SAMPLE ASBESTOS ANALYTICAL REPORT

LBL JOB # 40617

PLM Methods 198.1, 198.4, 198.6 & EPA 600/M4/82/020

FIELD ID	LBL ID	method	ASBESTOS TYPE	%	OTHER FIBERS	%	MATRIX	%	COLOR / DESCRIPTION
ET-18A	40617-22	P	ND		FIBERGLASS	90	BINDER	10	GRAY CEILING TILE
ET-18B	40617-23	P	ND		FIBERGLASS	90	BINDER	10	GRAY CEILING TILE
ET-19A	40617-24	P	ND		ND		MINERAL	100	GRAY DRYWALL
ET-19B	40617-25	P	ND		ND		MINERAL	100	GRAY DRYWALL
ET-20A	40617-26	P	ND		ND		MINERAL	100	WHITE JOINT COMPOUND
ET-20B	40617-27	P	ND		ND		MINERAL	100	WHITE JOINT COMPOUND
ET-20C	40617-28	P	ND		ND		MINERAL	100	WHITE JOINT COMPOUND
ET-21A	40617-29	T	ND		ND		MIN/BINDER	100	GRAY MASTIC
ET-21B	40617-30	T	ND		ND		MIN/BINDER	100	GRAY MASTIC
ET-22A	40617-31	T	ND		ND		MIN/BINDER	100	GRAY CAULK
ET-22B	40617-32	T	ND		ND		MIN/BINDER	100	GRAY CAULK
ET-23A	40617-33	P	ND		CELLULOSE	100	ND		GRAY FIREPROOFING
ET-23B	40617-34	P	ND		FIBERGLASS	90	BINDER	10	GRAY FIREPROOFING
ET-23C	40617-35	P	ND		FIBERGLASS	90	BINDER	10	GRAY FIREPROOFING
ET-24A	40617-36	P	ND		ND		MINERAL	100	GRAY GROUT
ET-24B	40617-37	P	ND		ND		MINERAL	100	GRAY GROUT
ET-25A	40617-38	T	ND		ND		MIN/BINDER	100	BROWN MASTIC
ET-25B	40617-39	T	ND		ND		MIN/BINDER	100	BROWN MASTIC
ET-26A	40617-40	T	ND		ND		MIN/BINDER	100	BLACK CAULK
ET-26B	40617-41	T	ND		ND		MIN/BINDER	100	BLACK CAULK

Lab Supervisor: Matt Smith Date: 5/18/17

ND - None Detected CELL-Cellulose JC - Joint Compound MIN - Mineral GLASS - Fiberglass <1 = Trace PLAS - Plaster
P - Friable PLM analytical result N - NOB PLM analytical result T - TEM analytical result IN - Inconclusive[1]
G - Gravimetric Matrix Reduction: Sample residue weight <1% of original sample weight. TEM not required. Vermiculite: Vermiculite is reported as an asbestos-containing mineral in accordance with NYSDOH determinations. See NYSDOH guidance, available upon request.

* **Please note**: Due to interference from sample matrix components, results reported via PLM methods EPA 600/M4/82/020 and ELAP 198.1 as negative or Trace (<1%) may be inaccurate and reported as a False Negative. It is recommended that additional analytical techniques such as gravimetric reduction, TEM and others be used to reduce obscuring effects of matrix components yielding more accurate results.

1 "Polarized-light microscopy (PLM) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can be used to determine if this material can be considered to be non-asbestos containing."

XRF Lead Sampling Summary Table
Edison Technical School
655 Colfax Street
Rochester, New York 14606
LaBella Project No. 2170218

Reading No.	Location (Room)	Wall (A, B, C D) & Structure	Substrate	Color	XRF Result
1	Calibration Check	-----	-----	-----	PASS
2	1A5	Wall	Block	Blue	0.0
3	1A5	Door Frame	Metal	Brown	0.0
4	1A5	Door	Metal	Tan	0.0
5	Hallway	Wall	Ceramic Tile	Gray	0.0
6	1A6	Wall	Block	Brown	0.0
7	1A6	Wall	Metal	Brown	0.0
8	1A6	Door Frame	Metal	Tan	0.0
9	**1A6**	**Door**	**Metal**	**Dark Brown**	**+ 1.89**
10	1A11	Wall	Block	Tan	0.0
11	1A11	Door Frame	Metal	Brown	0.0
12	1A11	Door	Metal	Tan	0.0

XRF Lead Sampling Summary Table
Edison Technical School
655 Colfax Street
Rochester, New York 14606
LaBella Project No. 2170218

Reading No.	Location (Room)	Wall (A, B, C D) & Structure	Substrate	Color	XRF Result
13	Hallway	Door	Metal	Red	0.0
14	Hallway	Wall	Metal	Tan	0.0
15	Hallway	Door	Metal	White	0.0
16	1A14	Wall	Block	Gray	0.0
17	1A14	Wall	Metal	Tan	0.0
18	1A15	Wall	Metal	Gray	0.0
19	1A15	Wall	Block	White	0.0
20	1A7	Wall	Block	Tan	0.0
21	1A7	Wall	Metal	Tan	0.0
22	1A7	Sink	Ceramic	Tan/ White	0.0
23	1A7	Overhead Door	Metal	Brown	0.01
24	1A18A	Wall	Metal	Tan	0.0

XRF Lead Sampling Summary Table
Edison Technical School
655 Colfax Street
Rochester, New York 14606
LaBella Project No. 2170218

Reading No.	Location (Room)	Wall (A, B, C D) & Structure	Substrate	Color	XRF Result
25	1A18A	Wall	Drywall	Tan	0.0
26	1A18A	Door Frame	Metal	Brown	0.0
27	1A18	Door	Metal	Tan	0.0
28	1A18	Wall	Drywall	Tan	0.0
29	1A18	Wall	Block	Tan	0.0
30	1A18	Door	Metal	Light Brown	0.01
31	1A18	Wall	Drywall	White	0.0
32	Hallway	Locker	Metal	Yellow	0.0
33	1A20	Wall	Metal	Blue	0.0
34	1A20	Wall	Block	Tan	0.0
35	1C12	Wall	Wood	Brown	0.0
36	1C12	Wall	Block	Tan	0.0

XRF Lead Sampling Summary Table
Edison Technical School
655 Colfax Street
Rochester, New York 14606
LaBella Project No. 2170218

Reading No.	Location (Room)	Wall (A, B, C D) & Structure	Substrate	Color	XRF Result
37	1C12	Door	Metal	Tan	0.0
38	1C1	Door	Metal	Turquoise	0.0
39	1C1	Stairs	Metal	Gray	0.0
40	1C1	Door	Metal	Gray	0.0
41	Hallway	Wall	Block	White	0.0
42	1C2	Wall	Wood	Tan	0.0
43	1C2	Wall	Block	Tan	0.0
44	1C4	Wall	Block	Tan	0.0
45	**Hallway**	**Door**	**Metal**	**Red**	**+ 1.09**
46	Hallway	Door	Metal	Red	0.65
47	Hallway	Door	Metal	Red	0.68
48	Hallway	Door	Metal	Black	0.0

XRF Lead Sampling Summary Table
Edison Technical School
655 Colfax Street
Rochester, New York 14606
LaBella Project No. 2170218

Reading No.	Location (Room)	Wall (A, B, C D) & Structure	Substrate	Color	XRF Result
49	Hallway	Door	Metal	Red	0.61
50	**Hallway**	**Locker**	**Metal**	**Orange**	**+ 1.20**
51	Hallway	Locker	Metal	Red	0.82
52	Calibration Check	-----	-----	-----	Pass

Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer: Labella Associates (1126)
Address: 300 State Street
Rochester, NY 14614-1098

Attn:

Project: Rochester Joint Schools Const.
Location: Edison Technical School
Number: 2170218

Order #: 213279

Matrix Bulk
Received 05/12/17
Reported 05/15/17

PO Number:

Sample ID / Parameter	Cust. Sample ID / Method	Result	RL*	Units	Analysis Date	Analyst
213279-001	ET-5					
Semi-volatile Organic Compounds						
Aroclor - 1016	SW846 8082A	**<463**	463	µg/Kg	05/12/17	TLS
Aroclor - 1221	SW846 8082A	**<463**	463	µg/Kg	05/12/17	TLS
Aroclor - 1232	SW846 8082A	**<463**	463	µg/Kg	05/12/17	TLS
Aroclor - 1242	SW846 8082A	**<463**	463	µg/Kg	05/12/17	TLS
Aroclor - 1248	SW846 8082A	**<463**	463	µg/Kg	05/12/17	TLS
Aroclor - 1254	SW846 8082A	**<463**	463	µg/Kg	05/12/17	TLS
Aroclor - 1260	SW846 8082A	**<463**	463	µg/Kg	05/12/17	TLS
Aroclor - 1262	SW846 8082A	**<463**	463	µg/Kg	05/12/17	TLS
Aroclor - 1268	SW846 8082A	**<463**	463	µg/Kg	05/12/17	TLS
PCB - Surrogate Recoveries						
DCB	150%					
TCMX	125%					

213279-05/15/17 11:23 AM

Reviewed By: **Thoria Nadiem**
Analyst

All internal QC parameters were met. Unusual sample conditions, if any, are described. Surrogate Spike results designated with "D" indicate that the analyte was diluted out. "MI" indicates matrix interference. Concentration and *Reporting Limit (RL) based on areas provided by client. Values are reported to three significant figures. Solid PPM = mg/kg | PPB = µg/kg and Water PPM = mg/L | PPB = µg/L. The test results reported relate only to the samples submitted.

Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer: Labella Associates (1126)
Address: 300 State Street
Rochester, NY 14614-1098

Attn:

Project: Rochester Joint Schools Const.
Location: Edison Technical School
Number: 2170218

Order #: 213279

Matrix Bulk
Received 05/12/17
Reported 05/15/17

PO Number:

Sample ID / Parameter	Cust. Sample ID / Method	Location	Result	RL*	Units	Analysis Date	Analyst

State Certifications

Method	Parameter	New York	Virginia
SW846 8082A	Aroclor - 1016	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1221	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1232	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1242	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1248	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1254	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1260	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1262	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1268	ELAP Certified	VELAP Certified

State	Certificate Number
New York	ELAP 56000
Virginia	VELAP 9017

All internal QC parameters were met. Unusual sample conditions, if any, are described. Surrogate Spike results designated with "D" indicate that the analyte was diluted out. "MI" indicates matrix interference. Concentration and *Reporting Limit (RL) based on areas provided by client. Values are reported to three significant figures. Solid PPM = mg/kg | PPB = µg/kg and Water PPM = mg/L | PPB = µg/L. The test results reported relate only to the samples submitted.

Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer: Labella Associates (1126)
Address: 300 State Street
Rochester, NY 14614-1098

Attn:

Project: Edison Tech School
Location: Rochester, NY
Number: 2170218

Order #: 214428

Matrix Bulk
Received 05/22/17
Reported 05/24/17

PO Number:

Sample ID / Parameter	Cust. Sample ID / Method	Result	RL*	Units	Analysis Date	Analyst
214428-001	ET-12					
Semi-volatile Organic Compounds						
Aroclor - 1016	SW846 8082A	**<2410**	2410	µg/Kg	05/24/17	AE
Aroclor - 1221	SW846 8082A	**<2410**	2410	µg/Kg	05/24/17	AE
Aroclor - 1232	SW846 8082A	**<2410**	2410	µg/Kg	05/24/17	AE
Aroclor - 1242	SW846 8082A	**<2410**	2410	µg/Kg	05/24/17	AE
Aroclor - 1248	SW846 8082A	**<2410**	2410	µg/Kg	05/24/17	AE
Aroclor - 1254	SW846 8082A	**<2410**	2410	µg/Kg	05/24/17	AE
Aroclor - 1260	SW846 8082A	**<2410**	2410	µg/Kg	05/24/17	AE
Aroclor - 1262	SW846 8082A	**<2410**	2410	µg/Kg	05/24/17	AE
Aroclor - 1268	SW846 8082A	**<2410**	2410	µg/Kg	05/24/17	AE
PCB - Surrogate Recoveries						
DCB	D					
TCMX	D					
214428-002	ET-13					
Semi-volatile Organic Compounds						
Aroclor - 1016	SW846 8082A	**<242000**	242000	µg/Kg	05/24/17	AE
Aroclor - 1221	SW846 8082A	**<242000**	242000	µg/Kg	05/24/17	AE
Aroclor - 1232	SW846 8082A	**<242000**	242000	µg/Kg	05/24/17	AE
Aroclor - 1242	SW846 8082A	**<242000**	242000	µg/Kg	05/24/17	AE
Aroclor - 1248	SW846 8082A	**<242000**	242000	µg/Kg	05/24/17	AE
Aroclor - 1254	SW846 8082A	**<242000**	242000	µg/Kg	05/24/17	AE
Aroclor - 1260	SW846 8082A	**<242000**	242000	µg/Kg	05/24/17	AE
Aroclor - 1262	SW846 8082A	**<242000**	242000	µg/Kg	05/24/17	AE
Aroclor - 1268	SW846 8082A	**<242000**	242000	µg/Kg	05/24/17	AE
PCB - Surrogate Recoveries						
DCB	D					
TCMX	D					

All internal QC parameters were met. Unusual sample conditions, if any, are described. Surrogate Spike results designated with "D" indicate that the analyte was diluted out. "MI" indicates matrix interference. Concentration and *Reporting Limit (RL) based on areas provided by client. Values are reported to three significant figures. Solid PPM = mg/kg | PPB = µg/kg and Water PPM = mg/L | PPB = µg/L. The test results reported relate only to the samples submitted.

Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer: Labella Associates (1126)
Address: 300 State Street
Rochester, NY 14614-1098

Attn:

Project: Edison Tech School
Location: Rochester, NY
Number: 2170218

Order #: 214428

Matrix Bulk
Received 05/22/17
Reported 05/24/17

PO Number:

Sample ID / Parameter	Cust. Sample ID / Method	Result	RL*	Units	Analysis Date	Analyst
214428-003	ET-17					
Semi-volatile Organic Compounds						
Aroclor - 1016	SW846 8082A	**<442**	442	µg/Kg	05/24/17	AE
Aroclor - 1221	SW846 8082A	**<442**	442	µg/Kg	05/24/17	AE
Aroclor - 1232	SW846 8082A	**<442**	442	µg/Kg	05/24/17	AE
Aroclor - 1242	SW846 8082A	**<442**	442	µg/Kg	05/24/17	AE
Aroclor - 1248	SW846 8082A	**<442**	442	µg/Kg	05/24/17	AE
Aroclor - 1254	SW846 8082A	**<442**	442	µg/Kg	05/24/17	AE
Aroclor - 1260	SW846 8082A	**<442**	442	µg/Kg	05/24/17	AE
Aroclor - 1262	SW846 8082A	**<442**	442	µg/Kg	05/24/17	AE
Aroclor - 1268	SW846 8082A	**<442**	442	µg/Kg	05/24/17	AE
PCB - Surrogate Recoveries						
DCB	MI					
TCMX	63%					
214428-004	ET-22					
Semi-volatile Organic Compounds						
Aroclor - 1016	SW846 8082A	**<193000**	193000	µg/Kg	05/24/17	AE
Aroclor - 1221	SW846 8082A	**<193000**	193000	µg/Kg	05/24/17	AE
Aroclor - 1232	SW846 8082A	**<193000**	193000	µg/Kg	05/24/17	AE
Aroclor - 1242	SW846 8082A	**<193000**	193000	µg/Kg	05/24/17	AE
Aroclor - 1248	SW846 8082A	**<193000**	193000	µg/Kg	05/24/17	AE
Aroclor - 1254	SW846 8082A	**<193000**	193000	µg/Kg	05/24/17	AE
Aroclor - 1260	SW846 8082A	**<193000**	193000	µg/Kg	05/24/17	AE
Aroclor - 1262	SW846 8082A	**<193000**	193000	µg/Kg	05/24/17	AE
Aroclor - 1268	SW846 8082A	**<193000**	193000	µg/Kg	05/24/17	AE
PCB - Surrogate Recoveries						
DCB	D					
TCMX	D					

All internal QC parameters were met. Unusual sample conditions, if any, are described. Surrogate Spike results designated with "D" indicate that the analyte was diluted out. "MI" indicates matrix interference. Concentration and *Reporting Limit (RL) based on areas provided by client. Values are reported to three significant figures. Solid PPM = mg/kg | PPB = µg/kg and Water PPM = mg/L | PPB = µg/L. The test results reported relate only to the samples submitted.

Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer: Labella Associates (1126)
Address: 300 State Street
Rochester, NY 14614-1098

Attn:

Project: Edison Tech School
Location: Rochester, NY
Number: 2170218

Order #: 214428

Matrix Bulk
Received 05/22/17
Reported 05/24/17

PO Number:

Sample ID / Parameter	Cust. Sample ID / Method	Result	RL*	Units	Analysis Date	Analyst
214428-005	ET-26					
Semi-volatile Organic Compounds						
Aroclor - 1016	SW846 8082A	**<231000**	230000	µg/Kg	05/24/17	AE
Aroclor - 1221	SW846 8082A	**<231000**	230000	µg/Kg	05/24/17	AE
Aroclor - 1232	SW846 8082A	**<231000**	230000	µg/Kg	05/24/17	AE
Aroclor - 1242	SW846 8082A	**<231000**	230000	µg/Kg	05/24/17	AE
Aroclor - 1248	SW846 8082A	**<231000**	230000	µg/Kg	05/24/17	AE
Aroclor - 1254	SW846 8082A	**<231000**	230000	µg/Kg	05/24/17	AE
Aroclor - 1260	SW846 8082A	**<231000**	230000	µg/Kg	05/24/17	AE
Aroclor - 1262	SW846 8082A	**<231000**	230000	µg/Kg	05/24/17	AE
Aroclor - 1268	SW846 8082A	**<231000**	230000	µg/Kg	05/24/17	AE
PCB - Surrogate Recoveries						
DCB	D					
TCMX	D					

214428-05/24/17 01:50 PM

Reviewed By: **Tracy Scarberry**
Organics Manager

All internal QC parameters were met. Unusual sample conditions, if any, are described. Surrogate Spike results designated with "D" indicate that the analyte was diluted out. "MI" indicates matrix interference. Concentration and *Reporting Limit (RL) based on areas provided by client. Values are reported to three significant figures. Solid PPM = mg/kg | PPB = µg/kg and Water PPM = mg/L | PPB = µg/L. The test results reported relate only to the samples submitted.

Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer: Labella Associates (1126)
Address: 300 State Street
Rochester, NY 14614-1098

Attn:

Project: Edison Tech School
Location: Rochester, NY
Number: 2170218

Order #: 214428

Matrix Bulk
Received 05/22/17
Reported 05/24/17

PO Number:

Sample ID / Parameter	Cust. Sample ID / Method	Location	Result	RL*	Units	Analysis Date	Analyst

State Certifications

Method	Parameter	New York	Virginia
SW846 8082A	Aroclor - 1016	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1221	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1232	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1242	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1248	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1254	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1260	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1262	ELAP Certified	VELAP Certified
SW846 8082A	Aroclor - 1268	ELAP Certified	VELAP Certified

State	Certificate Number
New York	ELAP 56000
Virginia	VELAP 9017

All internal QC parameters were met. Unusual sample conditions, if any, are described. Surrogate Spike results designated with "D" indicate that the analyte was diluted out. "MI" indicates matrix interference. Concentration and *Reporting Limit (RL) based on areas provided by client. Values are reported to three significant figures. Solid PPM = mg/kg | PPB = µg/kg and Water PPM = mg/L | PPB = µg/L. The test results reported relate only to the samples submitted.

Appendix E
Licenses and Certifications

New York State – Department of Labor
Division of Safety and Health
License and Certificate Unit
State Campus, Building 12
Albany, NY 12240

ASBESTOS HANDLING LICENSE

La Bella Associates PC
Suite 201
300 State Street

Rochester, NY 14614

FILE NUMBER: 99-1172
LICENSE NUMBER: 29278
LICENSE CLASS: RESTRICTED
DATE OF ISSUE: 01/31/2017
EXPIRATION DATE: 01/31/2018

Duly Authorized Representative – Robert Pepe:

This license has been issued in accordance with applicable provisions of Article 30 of the Labor Law of New York State and of the New York State Codes, Rules and Regulations (12 NYCRR Part 56). It is subject to suspension or revocation for a (1) serious violation of state, federal or local laws with regard to the conduct of an asbestos project, or (2) demonstrated lack of responsibility in the conduct of any job involving asbestos or asbestos material.

This license is valid only for the contractor named above and this license or a photocopy must be prominently displayed at the asbestos project worksite. This license verifies that all persons employed by the licensee on an asbestos project in New York State have been issued an Asbestos Certificate, appropriate for the type of work they perform, by the New York State Department of Labor.

Eileen M. Franko, Director
For the Commissioner of Labor

SH 432 (8/12)

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2018
Issued April 01, 2017

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. MATTHEW SMITH
LABELLA ASSOCIATES
300 STATE STREET SUITE 200
ROCHESTER, NY 14614

NY Lab Id No: 11184

is hereby APPROVED as an Environmental Laboratory for the category
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved subcategories and/or analytes are listed below:

Miscellaneous

Asbestos in Friable Material	Item 198.1 of Manual
Asbestos in Non-Friable Material-PLM	Item 198.6 of Manual (NOB by PLM)

Serial No.: 55912

United States Environmental Protection Agency

This is to certify that

Labella Associates, P.C.

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226

In the Jurisdiction of:

New York

This certification is valid from the date of issuance and expires September 26, 2018

NY-2226-6

Certification #

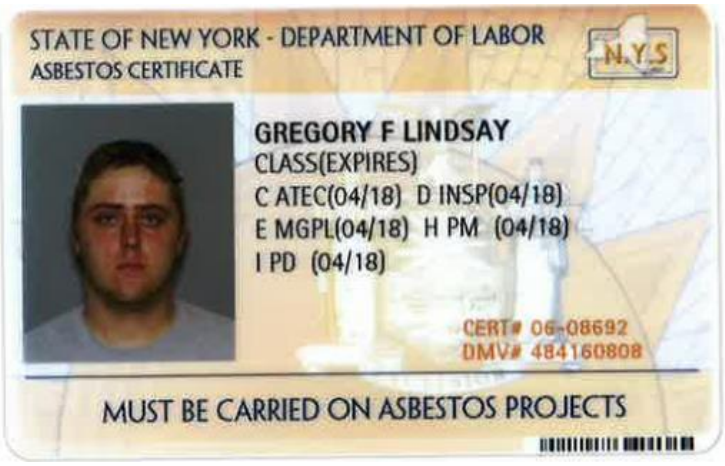
September 24, 2015

Issued On

Michelle Price, Chief

Lead, Heavy Metals, and Inorganics Branch

300 State Street, Suite 201 | Rochester, NY 14614 | p 585.454.6110 | f 585.454.3066 | www.labellapc.com



SECTION 00 31 32 – Geotechnical Information

PART 1 – GENERAL

1.1 SUMMARY

A. The attached Geotechnical report is provided for contractor reference.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

CME Associates, Inc.

6035 Corporate Drive
East Syracuse, New York 13057
(315) 701-0522
(315) 701-0526 (Fax)

www.cmeassociates.com

Transmittal

June 5, 2019

LaBella Associates, DPC
300 State Street
Rochester, New York 14614

Attn: Mr. Michael Ferreri, Project Designer

Re: Edison Technical School North Parking Lot Reconstruction Project
Rochester, New York
CME Project No.: 27498-05

Gentlepeople:

Enclosed you will find....

Number of Copies	Report Number	Description
3	27498B-02-0619	Asphalt Pavement Report

This report was emailed to Mr. Michael Ferreri at mferreri@labellapc.com on 06/05/19.

Respectfully submitted,
CME Associates, Inc.

Gary M. Gantney, P.E.
Project Engineer

GMG.cw

CME Associates, Inc.

6035 Corporate Drive
East Syracuse, New York 13057
(315) 701-0522
(315) 701-0526 (Fax)

www.cmeassociates.com

June 5, 2019

LaBella Associates, DPC
300 State Street
Rochester, New York 14614

Attn: Mr. Michael Ferreri, Project Manager

Re: Asphalt Pavement Report
Edison Technical School North Parking Lot Reconstruction Project
Rochester, New York
CME Report No.: 27498B-02-0619

1.0 INTRODUCTION

CME Associates, Inc. (CME) conducted a limited subsurface exploration at the subject project site and issued the attached Subsurface Exploration Report, labeled CME Report Number: 27498B-01-0519 (Report B-01). A summary of subsurface conditions, findings of asphalt pavement coring, and all exploration logs are included in the above referenced report.

This report provides a site characterization and asphalt pavement thickness design recommendations. The above referenced report and this report completes CME's Scope of Services for this project, as contracted in CME Proposal/Agreement Number: 05.5739R(1), executed by LaBella Associates, DPC (Client).

2.0 SITE CHARACTERIZATION AND ENGINEERING SIGNIFICANCE

The subject project site is located within the former Emerson Street Landfill, which was operated by the City of Rochester from about the early 1940's to 1971. As reported in a report[1] by LaBella Associates, DPC, the Landfill at the subject project site consists of up to about 23 feet of Fill Material consisting of putrescible waste (wood, paper, miscellaneous refuse), metal, plastic, brick, glass and ash. Peat and Silt soils consistent with soils to be expected in a marsh/swamp were reported to be present below the Landfill in areas of this site. The Landfill Material and the underlying Peat is subject to volume loss over time, due to creep and decay of organic and putrescible material.

Please note, a pavement structure constructed to bear over the existing Landfill Material will undergo long-term settlement. Also, the settlement will likely be uneven due to the random nature of the Landfill Material and its variable thickness.

[1] Guidance for Waste-fill Management During Former Emerson Street Landfill, labeled LaBella Project No. 210173.

3.0 ASPHALT PAVEMENT DESIGN RECOMMENDATIONS

The existing asphalt pavement in the area shown on the attached as "Proposed Pavement Reconstruction Limits", is planned to be replaced with a new one, consisting of a heavy-duty pavement section. Finish grade is planned to approximately match existing. Per attached email from Michael Ferreri, dated May 23, 2019, CME was directed to use the traffic count information given in the attached LaBella Email, dated 05/11/17.

Pavement constructed over the existing Landfill Material and Peat will experience long-term settlement which will be uneven across the site, regardless of how thick the pavement cross-section is and how well the subbase course is reinforced. To eliminate this risk, subgrade replacement with Engineered Structural Fill would be required, which is not an option at this site. Therefore, it makes sense to design a pavement section that will hold up as best as feasible, with the understanding that whatever pavement section is built above the Landfill and Peat will settle over time. The above concerns were discussed with the design team, and CME recommended that the pavement design be delegated to a company that produces geogrids, so that a pavement section with geogrid reinforced subgrade and subbase could be designed for this project. The design team concurred with this recommendation.

CME worked with Tensar International Corporation (TIC) to have them perform a Delegated Pavement Section Design for this project. TIC utilized the subsurface information presented in CME Report B-01 and traffic count information given in the attached LaBella Email and designed a pavement section, given in their Roadway Design Report, attached. This pavement section along with all quality control testing and inspection requirements by TIC shall be incorporated into the Contract Documents. No substitution of materials shall be allowed, since the design responsibility lies with TIC.

A Roadway Design Report signed and sealed by TIC is attached to this report. Please refer to said report for design details, pavement section specifications, quality control requirements, pavement maintenance requirements and limitations statements.

Additionally, please forward the Contract Documents that pertain to this work, for CME to review and comment, prior to bid issuance.

4.0 CLOSING

CME has endeavored to conduct the services identified herein in a manner consistent with that level of care and skill ordinarily exercised by members of the geotechnical engineering profession currently practicing in the same locality and under similar conditions as this project. No warranty, either express or implied, is made or intended by CME's proposal, contract, and written and oral reports, all of which warranties are hereby expressly disclaimed. CME shall not be responsible for the acts or omissions of Client, its contractors, agents and consultants. CME has relied upon information supplied by Client, its contractors, agents and consultants, or information available from generally accepted reputable sources, without independent verification, and CME assumes no responsibility for the accuracy thereof.

No other representations, expressed or implied, are intended or made with respect to the information provided herein, and including but not limited to, its suitability for use by others.

In accordance with CME's Terms and Conditions for Geotechnical Services, CME will dispose of all unconsumed samples thirty (30) days after submission of this report. All consumed samples were disposed of immediately after test completion. If you would like to keep the unconsumed samples, please email a request to do so, within five (5) business days from the date of this report to Cristina White at cwhite@cmeassociates.com.

Please do not hesitate to contact our office if you have any questions regarding this report, its conclusions, its recommendations, or its application to actual field conditions revealed during construction.

Respectfully Submitted,
CME Associates, Inc.

Gary M. Gantney, P.E.
Supervisor of Special Inspections

Reviewed By,
CME Associates, Inc.

Anas N. Anasthas, P.E.
Geotechnical Engineer

GG.cw

Attachments: CME Report Number: 27498B-01-0519 (21 of 21)
Proposed Pavement Reconstruction Limits (1 of 1)
LaBella Email, dated 05/23/19 (1 of 1)
LaBella Email, dated 5/11/17 (2 of 2)
Roadway Design Report by TIC (8 of 8)
Laboratory Test Summary Report (3 of 3)

CME Associates, Inc.

6035 Corporate Drive
East Syracuse, New York 13057
(315) 701-0522
(315) 701-0526 (Fax)

www.cmeassociates.com

Transmittal

May 17, 2019

LaBella Associates, DPC
300 State Street
Rochester, New York 14614

Attn: Mr. Michael Ferreri, Project Designer

Re: Edison Technical School North Parking Lot Reconstruction Project
Rochester, New York
CME Project No.: 27498-05

Gentlepeople:

Enclosed you will find....

Number of Copies	Report Number	Description
3	27498B-01-0519	Subsurface Exploration Report

This report was emailed to Mr. Michael Ferreri at mferreri@labellapc.com on 05/17/19.

Respectfully submitted,
CME Associates, Inc.

Gary M. Gantney, P.E.
Project Engineer

GMG.cw

Subsurface Exploration Report

Edison Technical School North Parking Lot Reconstruction Project
Rochester, New York

Prepared For: (Client)

LaBella Associates, DPC
Attn: Mr. Michael Ferreri, Project Designer
300 State Street
Rochester, New York 14614
Direct: 585-770-2513
Office: 585-454-6110
Email: mferreri@labellapc.com

Prepared By:

CME Associates, Inc.
Attn: Gary M. Gantney, P.E., Project Engineer
6035 Corporate Drive
East Syracuse, New York 13057
Office: 315-701-0522
Fax: 315-701-0526
Email: ggantney@cmeassociates.com

CME Report No.: 27498B-01-0519
May 17, 2019

Table of Contents

Attachment Listing:

Edison Technical School North Parking Lot Reconstruction Project
Rochester, New York

1.0 INTRODUCTION
CME Associates, Inc. (CME) conducted a subsurface exploration consisting of Pavement Coring, Test Borings and prepared this report. CME's Scope of Work and this report have been provided pursuant to the written authorization of CME Proposal/Agreement No.: 05.5739R(1) by LaBella, DPC (Client). This report provides a summary of the subsurface conditions identified in the explorations conducted at the subject project site. All exploration logs, an Exploration Location Plan, GPS Coordinates and Elevations for Exploration Locations, Pavement Core Summary Table and Pavement Core Photographs, are attached to this report, among other attachments. Laboratory index testing on selected soil samples is in progress, and the test results will be presented under a separate cover.

2.0 EXPLORATION METHODOLOGY
The exploration locations (B-101 through B-105) were selected and staked in the field by CME. Please refer to the attached Exploration Location Plan, labeled ELP-1, for approximate location of the explorations. GPS coordinates and elevations for all explorations were obtained by CME, and are attached to this report.

2.1 Test Borings and Pavement Cores
A total of 5 Test Borings/Pavement Cores, labeled B-101 through B-105, were advanced. The asphalt pavement cores were first extracted at each exploration location using a portable core drill equipped with a 6" nominal diameter core barrel with water used as a lubricant. Subsequently, the Test Borings were advanced through the same hole using a Central Mine Equipment Model 45c, Truck-mounted, rotary exploration drill rig, equipped with 3-¼" I.D. hollow stem augers. Soil Sampling was conducted using a 140-pound auto hammer dropping through a distance of 30 inches to drive a 2" O.D. split barrel sampler, in general conformance with ASTM Standard Practice D1586. Each borehole was backfilled with auger cuttings and topped with asphalt cold patch to nearly match existing grade.

The samples were logged and visually classified in the field by the CME Drillers, and a portion of each soil sample was placed and sealed in a glass jar. The core samples were bagged in a Ziploc bag. The soil classifications and core descriptions were later reviewed by CME Geologist Mr. Mark Schumacher, P.G. The visual soil classifications were made using the modified Burmister Classification System, as described in the attached document entitled, *"General Information & Key to Test Boring Logs."*

3.0 SUBSURFACE CONDITIONS

This section summarizes the subsurface conditions identified in the explorations conducted at the site. The subsurface conditions presented herein have been generalized for simplicity and brevity by the undersigned CME Engineer from the actual data obtained from the Subsurface Exploration conducted at the subject project site. It is possible for the subsurface conditions between the sampling intervals and the exploration locations to vary from that inferred and/or given in this section. Please, refer to the attached CME Test Boring Logs and Pavement Core Summary Report for actual conditions encountered at the time, location and elevation of each sampling.

3.1 Surface Conditions and Subsurface Profile

CME's explorations were advanced through existing asphalt pavements across the site. Please refer to the attached Exploration Location Plan, labeled ELP-1, for existing site features.

The Borings penetrated Asphalt Pavement, overlying Subbase Material, overlying Miscellaneous Fill.

Asphalt Pavement and Subbase Course Material: Please refer to the attached Pavement Core Summary Table and Pavement Core Photographs for details of existing pavement sections identified in the explorations.

Miscellaneous Fill: Miscellaneous Fill was penetrated in the Test Borings to boring termination depth (6 feet). The Miscellaneous Fill comprised of soil (silt, clay, sand, gravel), mixed with miscellaneous refuse material (leather, plastic, acetate, glass, concrete, wood, ash, thread, brick, porcelain, etc.). These materials are believed to have been dumped at the site between about 1940 and 1971, when the site was used as a Municipal Landfill as reported in a report, titled "Guidance for Waste-fill Management During Site Development on the Former Emerson Street Landfill", labeled LaBella Project No. 210173, dated October 2013. According to this report, the Fill depth at/near this site could be up to 23 feet below existing grade.

3.2 Groundwater Observations

Groundwater level observations and measurements were made by the CME Crew when groundwater accumulates in the boreholes. The CME Drillers noted water levels inside the boreholes during advancement and following casing removal. If the hole caves-in after casing removal, the depth of cave-in is noted on the CME Boring logs. The drillers also note whether samples retrieved are dry, moist, wet or saturated. The conditions and times of groundwater level observations are noted on the individual Test Boring Logs.

Groundwater was not observed within the exploration depths, during the short exploration period. Groundwater fluctuations should be expected to occur at this site depending on several factors, such as rainfall, seasonal changes, prevailing climate, ambient weather conditions and adjacent construction operation, among other factors.

4.0 CLOSING COMMENTS

CME has endeavored to conduct the services identified herein in a manner consistent with that level of care and skill ordinarily exercised by members of the geotechnical engineering profession currently practicing in the same locality and under similar conditions as this project. No warranty, either express or implied, is made or intended by CME's proposal, contract, and written and oral reports, all of which warranties are hereby expressly disclaimed. CME shall not be responsible for the acts or omissions of Client, its contractors, agents and consultants. CME has relied upon information supplied by Client, its contractors, agents and consultants, or information available from generally accepted reputable sources, without independent verification, and CME assumes no responsibility for the accuracy thereof.

No other representations, expressed or implied, are intended or made with respect to the information provided herein, and including but not limited to, its suitability for use by others.

Please do not hesitate to contact our office if you have any questions regarding this report, its conclusions, or its application to actual field conditions revealed during construction.

Respectfully Submitted,
CME Associates, Inc.

Gary M. Gantney, P.E.
Project Engineer

Reviewed By,
CME Associates, Inc.

Anas N. Anasthas, P.E.
Geotechnical Engineer

CME EXPLORATION LOCATION PLAN ELP-1

Edison Tech North Parking Lot Pavement Reconstruction Project
Rochester, New York

Attachment to CME Report No. 27498B-01-0519

ATTACHMENT TO CME REPORT NO.: 27498B-01-0519

GPS Coordinates and Elevations
Edison Tech North Parking Lot Pavement Reconstruction Project
Rochester, New York

Boring ID	Latitude	Longitude	Elevation (FT. AMSL)
B-101	43.17788431	-77.67199576	531.3
B-102	43.17814600	-77.67165000	530.3
B-103	43.17818003	-77.67020003	529.8
B-104	43.17784883	-77.67066469	526.7
B-105	43.17716327	-77.67203850	531.3
BM-1	43.17823451	-77.67196900	530.1
BM-2	43.17790829	-77.67048241	528.8

Notes:
AMSL: Above Mean Sea Level

GPS coordinates were obtained utilizing a Spectra Precision Ranger 3.
NYSDOT CORS positions are based on NAD 83 (2011).

Elevation at grade determined using standard survey equipment and referencing an onsite benchmark designated as BM-1: the top of a storm sewer manhole located in the roadway to the north of the northwest parking area (listed elevation of 530.05 feet).

An additional reference point elevation was determined at the following location:
BM-2: the top of a storm sewer grate located southern portion of the northeast parking area.

Pavement Core Summary

Attachment to CME Report Number: 27498B-01-0519 Page 1

Project Name: Edison Tech North Parking Lot Pavement Reconstruction Project
Rochester, New York

Prepared By: Nicholas A. Smith, P.G.
Date: 5/8/2019

Asphalt Core ID	Total Asphalt Thickness (in.)	Thickness of Top Course (in.)	Thickness of Binder Course (in.)	Subbase Course Material		Geotextile Fabric Present Below Subbase?	Visual Subgrade Soil Classification (3)	Notes
				Thickness (in.)(2)	Visual Soil Classification (3)			
B-101	5	2 1/4	2 3/4	12	Run of Crush; Grey/Brown cmf gravel, some cmf sand, trace silt	No	See Boring Log B-101	
B-102	5 3/8	2 1/4	3 1/8	12	Run of Crush; Grey/Brown cmf gravel, some cmf sand, trace silt	No	See Boring Log B-102	
B-103	4	2 1/4	1 3/4	12	Run of Crush; Grey cmf gravel, some cmf sand, trace silt	No	See Boring Log B-103	Binder course weathered and broken
B-104	2	1	1	12	Run of Crush; Grey/Brown cmf gravel, some cmf sand, litle silt	No	See Boring Log B-104	
B-105	5 1/2	1 1/4	4 1/4	12	Grey cmf gravel, little silt, little cmf sand	No	See Boring Log B-105	Lower 1 3/4" of binder course slightly weathered

Remarks: 1) See attached Pavement Core Photographs

2) Approximate thickness estimated using sample recovery in split-spoon and/or change of material depth. Actual thickness may vary.

3) See "General Information & Key to Test Boring Log" for methods used in visual classification.

Pavement Core Photographs

Photograph 1: Boring B-101 Asphalt Core

Photograph 2: Boring B-102 Asphalt Core

Photograph 3: Boring B-103 Asphalt Core

Photograph 4: Boring B-103 Asphalt Core (Bottom view of binder course)

Pavement Core Photographs

Photograph 5: Boring B-104 Asphalt Core

Photograph 6: Boring B-105 Asphalt Core

SUBSURFACE EXPLORATION – TEST BORING LOG

Project: Edison Tech North Parking Lot Pavement Reconstruction Project, Rochester, New York
Report No.: 27498B-01-0519
Client: LaBella Associates, D.P.C.
Date Started: 05/07/19 **Finished:** 05/07/19
Location of Boring: See Exploration Location Plan ELP-1
Elevation of Surface of Boring: 531.3'

METHODS OF INVESTIGATION

Casing: 3-1/4" ID H. Stem Auger **Driller:** Beau Fletcher
Casing Hammer: **Driller:** Ryan Casatelli
Other: 6" Thin Wall Core Barrel **Inspector:**
Soil Sampler: 2" OD Split Barrel **Rod Size:** AWJ
Sampler Hammer: Wt. 140 lbs. **Fall:** 30 in.
Make & Model of Drill Rig: CME 45C Truck Mounted

GROUND WATER OBSERVATIONS

Date	Time	Depth	Casing At
05/07/19	While drilling	0.1'*	2.0'
05/07/19	Before casing removed	0.1'*	6.0'
05/07/19	After casing removed	0.1'*	out
05/07/19	After casing removed	caved @ 1.9'	out

LOG OF BORING SAMPLES / **CLASSIFICATION OF MATERIAL**

Depth Scale (Feet)	Casing Blows/ Foot	Sample I.D.	Depth of Sample (Feet) From	Depth of Sample (Feet) To	Sample Type/ Recovery (Inches)	Blows On Sampler Per 6 inches	Depth Of Change (feet)	**c** – **c**oarse **m** – **m**edium **f** – **f**ine / **and** – 35 to 50 % **some** – 20 to 35 % **little** – 10 to 20 % **trace** – 0 to 10 %	SPT "N" or RQD
0	CORE		0.0	0.4			0.4	Asphalt	
	XXX	1A	0.5	1.5	SS/16	13-11-19	1.5	FILL; Subbase - *Run of crush* – Grey/Brown cmf gravel, some cmf sand, trace silt (wet*)	30
	H	1B	1.5	2.0				Miscellaneous FILL; Grey/Brown silt, cmf sand, mf gravel, leather, plastic (moist)	
	S	2	2.0	4.0	SS/8	3-5-8-6		Miscellaneous FILL; Grey silt, clay, cmf gravel, cmf sand, acetate pieces (moist)	13
5	A	3	4.0	6.0	SS/10	6-5-3-3		FILL; Grey/Brown silt, cmf sand, mf gravel (moist)	8
	XXX							Bottom of Boring @ 6.0'	
10									
15									
20									

SS – Split Spoon, U – Undisturbed Tube, C – Core, WH – Weight of Hammer, WR – Weight of Rod
Remarks: *Water added during asphalt coring.

SUBSURFACE EXPLORATION – TEST BORING LOG

Project: Edison Tech North Parking Lot Pavement Reconstruction Project, Rochester, New York
Report No.: 27498B-01-0519
Client: LaBella Associates, D.P.C.
Date Started: 05/07/19 **Finished:** 05/07/19
Location of Boring: See Exploration Location Plan ELP-1
Elevation of Surface of Boring: 530.3'

METHODS OF INVESTIGATION

Casing: 3-1/4" ID H. Stem Auger **Driller:** Beau Fletcher
Casing Hammer: **Driller:** Ryan Casatelli
Other: 6" Thin Wall Core Barrel **Inspector:**
Soil Sampler: 2" OD Split Barrel **Rod Size:** AWJ
Sampler Hammer: Wt. 140 lbs. **Fall:** 30 in.
Make & Model of Drill Rig: CME 45C Truck Mounted

GROUND WATER OBSERVATIONS

Date	Time	Depth	Casing At
05/07/19	While drilling	*	2.0'
05/07/19	Before casing removed	None Noted	6.0'
05/07/19	After casing removed	None Noted	out
05/07/19	After casing removed	caved @ 5.5'	out

LOG OF BORING SAMPLES / **CLASSIFICATION OF MATERIAL**

Depth Scale (Feet)	Casing Blows/ Foot	Sample I.D.	Depth of Sample (Feet) From	Depth of Sample (Feet) To	Sample Type/ Recovery (Inches)	Blows On Sampler Per 6 inches	Depth Of Change (feet)	**c** – **c**oarse, **m** – **m**edium, **f** – **f**ine; **and** – 35 to 50 %, **some** – 20 to 35 %, **little** – 10 to 20 %, **trace** – 0 to 10 %	SPT "N" or RQD
0	CORE		0.0	0.4			0.4	Asphalt	
	XXX	1A	0.5	1.5	SS/18	8-9-9	1.5	FILL; Subbase - *Run of crush* – Grey/Brown cmf gravel, some cmf sand, trace silt (wet*)	18
	H	1B	1.5	2.0				Miscellaneous FILL; Grey silt, cmf sand, cmf gravel, concrete, glass (moist)	
	S	2	2.0	4.0	SS/18	5-11-17-18		Miscellaneous FILL; Grey silt, clay, cmf sand, cmf gravel, glass (moist)	28
5	A	3	4.0	6.0	SS/14	17-26-11-12		Miscellaneous FILL; Grey silt, cmf gravel, cmf sand, wood (moist)	37
	XXX							Bottom of Boring @ 6.0'	
10									
15									
20									

SS – Split Spoon, U – Undisturbed Tube, C – Core, WH – Weight of Hammer, WR – Weight of Rod
Remarks: *Water added during asphalt coring.

SUBSURFACE EXPLORATION – TEST BORING LOG

Project: Edison Tech North Parking Lot Pavement Reconstruction Project, Rochester, New York
Report No.: 27498B-01-0519
Client: LaBella Associates, D.P.C.
Date Started: 05/07/19 **Finished:** 05/07/19
Location of Boring: See Exploration Location Plan ELP-1
Elevation of Surface of Boring: 529.8'

METHODS OF INVESTIGATION

Casing: 3-1/4" ID H. Stem Auger **Driller:** Beau Fletcher
Casing Hammer: **Driller:** Ryan Casatelli
Other: 6" Thin Wall Core Barrel **Inspector:**
Soil Sampler: 2" OD Split Barrel **Rod Size:** AWJ
Sampler Hammer: Wt. 140 lbs. **Fall:** 30 in.
Make & Model of Drill Rig: CME 45C Truck Mounted

GROUND WATER OBSERVATIONS

Date	Time	Depth	Casing At
05/07/19	While drilling	*	2.0'
05/07/19	Before casing removed	None Noted	6.0'
05/07/19	After casing removed	None Noted	out
05/07/19	After casing removed	caved @ 4.3'	out

LOG OF BORING SAMPLES / **CLASSIFICATION OF MATERIAL**

Depth Scale (Feet)	Casing Blows/ Foot	Sample I.D.	Depth of Sample (Feet) From	Depth of Sample (Feet) To	Sample Type/ Recovery (Inches)	Blows On Sampler Per 6 inches	Depth Of Change (feet)	**c** – **c**oarse **m** – **m**edium **f** – **f**ine / **and** – 35 to 50 % **some** – 20 to 35 % **little** – 10 to 20 % **trace** – 0 to 10 %	SPT "N" or RQD
0	CORE		0.0	0.3			0.3	Asphalt	
	XXX	1A	0.5	1.5	SS/18	14-15-14	1.5	FILL; Subbase - *Run of crush* – Grey cmf gravel, some cmf sand, trace silt (wet*)	29
	H	1B	1.5	2.0				Miscellaneous FILL; Brown silt, cmf sand, cmf gravel, wood (moist)	
	S	2	2.0	4.0	SS/15	6-6-15-21		Miscellaneous FILL; Grey/Brown silt, clay, cmf sand, fine gravel, porcelain (moist)	21
5	A	3	4.0	6.0	SS/16	7-7-9-20		Grey/Brown SILT, trace cmf SAND, trace cmf GRAVEL (moist, very stiff) *Potential fill or reworked material*	16
	XXX							Bottom of Boring @ 6.0'	
10									
15									
20									

SS – Split Spoon, U – Undisturbed Tube, C – Core, WH – Weight of Hammer, WR – Weight of Rod
Remarks: *Water added during asphalt coring.

SUBSURFACE EXPLORATION – TEST BORING LOG

Project: Edison Tech North Parking Lot Pavement Reconstruction Project, Rochester, New York
Report No.: 27498B-01-0519
Client: LaBella Associates, D.P.C.
Date Started: 05/07/19 **Finished:** 05/07/19
Location of Boring: See Exploration Location Plan ELP-1
Elevation of Surface of Boring: 526.7'

METHODS OF INVESTIGATION

Casing: 3-1/4" ID H. Stem Auger **Driller:** Beau Fletcher
Casing Hammer: **Driller:** Ryan Casatelli
Other: 6" Thin Wall Core Barrel **Inspector:**
Soil Sampler: 2" OD Split Barrel **Rod Size:** AWJ
Sampler Hammer: Wt. 140 lbs. **Fall:** 30 in.
Make & Model of Drill Rig: CME 45C Truck Mounted

GROUND WATER OBSERVATIONS

Date	Time	Depth	Casing At
05/07/19	While drilling	*	2.2'
05/07/19	Before casing removed	None Noted	6.2'
05/07/19	After casing removed	None Noted	out
05/07/19	After casing removed	caved @ 5.8'	out

LOG OF BORING SAMPLES / **CLASSIFICATION OF MATERIAL**

Depth Scale (Feet)	Casing Blows/ Foot	Sample I.D.	Depth of Sample (Feet) From	Depth of Sample (Feet) To	Sample Type/ Recovery (Inches)	Blows On Sampler Per 6 inches	Depth Of Change (feet)	**c** – **c**oarse **m** – **m**edium **f** – **f**ine **and** – 35 to 50 % **some** – 20 to 35 % **little** – 10 to 20 % **trace** – 0 to 10 %	SPT "N" or RQD
0	CORE		0.0	0.2			0.2	Asphalt	
	XXX	1A	0.2	1.2	SS/18	8-8-5-10	1.5	FILL; Subbase - *Run of crush* – Grey/Brown cmf gravel, some cmf sand, little silt (wet*)	13
	H	1B	1.2	2.2				Miscellaneous FILL; Brown silt, cmf sand, cmf gravel, glass (moist)	
	S	2	2.2	4.2	SS/16	9-15-20-26		FILL; Brown silt, cmf sand, mf gravel (moist)	35
5	A	3	4.2	6.2	SS/16	9-16-10-10		FILL; Grey/Brown silt, clay, mf gravel, cmf sand (moist) *Reworked material*	26
	XXX							Bottom of Boring @ 6.2'	
10									
15									
20									

SS – Split Spoon, U – Undisturbed Tube, C – Core, WH – Weight of Hammer, WR – Weight of Rod
Remarks: *Water added during asphalt coring.

SUBSURFACE EXPLORATION – TEST BORING LOG

Project: Edison Tech North Parking Lot Pavement Reconstruction Project, Rochester, New York
Report No.: 27498B-01-0519
Client: LaBella Associates, D.P.C.
Date Started: 05/07/19 **Finished:** 05/07/19
Location of Boring: See Exploration Location Plan ELP-1
Elevation of Surface of Boring: 531.3'

METHODS OF INVESTIGATION

Casing: 3-1/4" ID H. Stem Auger **Driller:** Beau Fletcher
Casing Hammer: **Driller:** Ryan Casatelli
Other: 6" Thin Wall Core Barrel **Inspector:**
Soil Sampler: 2" OD Split Barrel **Rod Size:** AWJ
Sampler Hammer: Wt. 140 lbs. **Fall:** 30 in.
Make & Model of Drill Rig: CME 45C Truck Mounted

GROUND WATER OBSERVATIONS

Date	Time	Depth	Casing At
05/07/19	While drilling	*	2.0'
05/07/19	Before casing removed	None Noted	6.0'
05/07/19	After casing removed	None Noted	out
05/07/19	After casing removed	caved @ 5.5'	out

LOG OF BORING SAMPLES / **CLASSIFICATION OF MATERIAL**

Depth Scale (Feet)	Casing Blows/ Foot	Sample I.D.	Depth of Sample (Feet) From	Depth of Sample (Feet) To	Sample Type/ Recovery (Inches)	Blows On Sampler Per 6 inches	Depth Of Change (feet)	**c** – **c**oarse **m** – **m**edium **f** – **f**ine **and** – 35 to 50 % **some** – 20 to 35 % **little** – 10 to 20 % **trace** – 0 to 10 %	SPT "N" or RQD
0	CORE		0.0	0.5			0.5	Asphalt	
	XXX	1A	0.5	1.5	SS/18	9-13-7	1.5	FILL – Subbase; Grey cmf gravel, little silt, little cmf sand (wet*)	20
	H	1B	1.5	2.0				Miscellaneous FILL; Brown/Grey silt, clay, cmf sand, cmf gravel, ash, plastic, glass (moist)	
	S	2	2.0	4.0	SS/14	3-3-3-3		Miscellaneous FILL; Grey silt, clay, mf gravel, cmf sand, brick, thread (moist)	6
5	A	3	4.0	6.0	SS/8	3-3-4-5		Miscellaneous FILL; Grey silt, cmf gravel, clay, cmf sand, glass (wet)	7
	XXX							Bottom of Boring @ 6.0'	
10									
15									
20									

SS – Split Spoon, U – Undisturbed Tube, C – Core, WH – Weight of Hammer, WR – Weight of Rod
Remarks: *Water added during asphalt coring.

GENERAL INFORMATION & KEY TO TEST BORING LOGS

The **Subsurface Exploration – Test Boring Logs produced by CME Associates, Inc**. present the observations and mechanical data collected by the driller while at the site, supplemented, at times, by classification of the materials removed from the borings determined through visual identification by technicians in the laboratory. It is cautioned that the materials removed from the borings represent only a fraction of the total volume of the deposits at the site and may not necessarily be representative of the subsurface conditions between adjacent borings or between the sampled intervals. The data presented on the Exploration Logs together with the recovered samples will provide a basis for evaluating the character of the subsurface conditions relative to the proposed construction. The evaluation must consider all the recorded details and their significance relative to each other. Often, analyses of standard boring data indicate the need for additional testing and sampling procedures to more accurately evaluate the subsurface conditions. Any evaluations of the contents of CME's report and the recovered samples must be performed by Licensed Professionals having experience in Soil Mechanics and Foundation Engineering. The information presented in this Key defines some of the procedures and terms used on the CME Exploration Logs to describe the conditions encountered. Refer to the Log on page 4 for key number.

Key No. **Description**

1. The figures in the **DEPTH SCALE** column define the vertical scale of the Boring Log.

2. **CASING BLOWS/FOOT** – shows the number of blows required to advance the casing a distance of 12 inches. The casing size, the hammer weight and the length of drop are noted under the **Methods of Investigation**. If the casing is advanced by means other than driving, the method of advancement will be indicated under **Methods of Investigation** at the top of the Log. If Hollow Stem Augers or Coring is used, it will be so noted in this column.

3. The **SAMPLE I.D.** is used for identification on the sample containers and in the Laboratory Test Report or Summary.

4. The **DEPTH OF SAMPLE** column gives the exact depth range from which a sample was recovered.

5. The **SAMPLE TYPE/RECOVERY** column is used to signify the various type of sample attempt. "SS is Split Spoon, "P" is Piston tube, "U" is Undisturbed tube. For soil samples, the recovered length of the sample is also indicated, in inches. If a rock core sample is taken, the core bit size designation is given here.

6. **BLOWS ON SAMPLER** – shows the results of the "Standard Penetration Test (SPT) ASTM D1586", recording the number of blows required to drive a split spoon sampler into the soil beneath the casing. The number of blows required for each six inches of penetration is recorded. The total number of blows required for the 6 inch to 18 inch interval is summarized in the **SPT "N"** column and represents the "Standard Penetration Number". The outside diameter of the sampler, the hammer weight and the length of drop are noted in the **Methods of Investigation** portion of the log. A "WH" or "WR" in this column indicates that the sample spoon advanced the 6 inch interval under **W**eight of **H**ammer or **W**eight of **R**ods, respectively.

7. The **DEPTH OF CHANGE** column designates the depth (in feet) that the driller noted a compactness or stratum change. In soft materials or soil strata exhibiting a consistent relative density, it is difficult for the driller to determine the exact change from one stratum to the next. In addition, a grading or gradual change may exist. In such cases the depth noted is approximate or estimated only and may be represented by a dashed line.

8. **CLASSIFICATION OF MATERIAL** – **Soil materials** encountered and sampled are described by the driller on the original log. Notes of the driller observations are also placed in this column. Recovered samples may also be visually classified by a Soil Technician upon receipt in the Laboratory. Visual sample classification is by Burmister System and strata may be classified additionally by the Unified System. The Burmister System is a type of visual-manual textural classification estimated by the Driller or Technician on the basis of weight-fraction of the recovered soil. See Table 1 **"Classification of Materials"**. The description of the relative soil compactness or consistency is based upon the standard penetration number as defined in Table 2. The description of the soil moisture condition is described as dry, moist, wet, or saturated. Water used to advance the boring may have affected the in-situ moisture content of the sample. Special terms are used as required to describe materials in greater detail, such terms are listed in ASTM D653. When sampling gravelly soils with a standard two-inch O.D. Split Spoon, the true percentage of gravel is often not recovered due to the relatively small sampler diameter. The presence of boulders, cobbles, and large gravel is sometimes, but not necessarily, detected by an evaluation of the casing and sampler blows or through the "action" of the drill rig as reported by the driller.

   The Description of **Rock** is based upon the recovered rock core. Terms frequently used in the description are included in Table 3. The length of core run is defined as length of penetration between retrievals of the core barrel from the bore hole, expressed in inches. The core recovery expressed the length of core recovered from the core barrel per core run, in percent. The size core barrel used is noted in **Column 5**. The more commonly used sizes of core barrels are denoted "AX" and "NX". An "NX" core, being larger in diameter than "AX" core, often produces better recovery, and is frequently utilized where accurate information regarding the geologic conditions and engineering

properties is needed. A better estimate of in-situ rock quality is provided by a modified core recovery ratio known as the **"Rock Quality Designation" (RQD)**. This ratio is determined by considering only pieces of core that are at least 4 inches long and are hard and sound. Breaks obviously caused by drilling are ignored. The diameter of the core should preferably be not less than 2 inches (NX). The percentage ratio between the total length of such core recovered and the length of core drilled on a given run is the RQD. Table 4 gives the rock quality description as related to the **RQD**.

9. The **SPT "N"** or **RQD** is given in this column as applicable to the specific sample taken. In Very Compact coarse grained soils the N-value may be indicated as 50+, and in Hard fine-grained soils the N-value may be indicated as 30+. This typically means that the blow count was achieved prior to driving the sampler the entire 6 inch interval or the sampler refused further penetration. For the "NX" rock cores, the RQD is reported here, expressed in percent.

10. **GROUND WATER OBSERVATIONS** and timing noted by the driller are shown in this section. It is important to realize that the reliability of the water level observations depend upon the soil type (water does not readily stabilize in a hole through fine grained soils), and that drill water used to advance the borings may have influenced the observations. Ground water levels typically fluctuate seasonally so those noted on the log are only representative of that exhibited during the period of time noted on the log. One or more perched or trapped water levels may exist in the ground seasonally. All the available readings should be evaluated. If definite conclusions cannot be made, it is often prudent to examine the conditions more thoroughly through test pit excavations or ground water observation well installations.

TABLE 1 - VISUAL CLASSIFICATION OF MATERIALS (BURMISTER)	
GROUP	**TEXTURAL CLASSIFICATION SIZES**
BOULDERS	larger than 12" diameter
COBBLES	12" diameter to 3" sieve
GRAVEL	3" - coarse - 1" - medium - 1/2" - fine - #4 sieve
SAND	#4 - coarse - #10 - medium - #40 - fine - #200 sieve
SILT	#200 sieve (0.074mm) to 0.005mm size (see below *)
CLAY	0.005mm size to 0.001 mm size (see below *)

ABBREVIATIONS	**PERCENT OF TOTAL SAMPLE BY WEIGHT**	
f - fine	and	35 to 50%
m - medium	some	20 to 35%
c - coarse	little	10 to 20%
	trace	0 to 10%

***PLASTICITY DESCRIPTIONS**			
TERM	**PLASTICITY INDEX**	**DRY STRENGTH**	**FIELD TEST**
Non-plastic	0-3	Very low	falls apart easily
Slightly plastic	4 - 15	Slight	easily crushed by fingers
Plastic	15 - 30	Medium	difficult to crush
Highly plastic	31 or more	High	impossible to crush with fingers

*TABLE 2 - DESCRIPTION OF SOIL COMPACTNESS OR CONSISTENCY based on SPT "N"**		
Primary Soil Type	**Descriptive Term of Compactness**	**Range of Standard Penetration Resistance (N)**
COARSE GRAINED SOILS	Very loose	less than 4 blows per foot
(More than half of Material is larger than No. 200 sieve size.)	Loose	4 to 10
	Medium compact	10 to 30
	Compact	30 to 50
	Very compact	Greater than 50
FINE GRAINED SOILS	Descriptive Term of Consistency	Range of Standard Penetration Resistance (N)
(more than half of material is smaller that No. 200 sieve size)	Very soft	less than 2 blows per foot
	Soft	2 to 4
	Medium stiff	4 tp 8
	Stiff	8 to 15
	Very Stiff	15 to 30
	Hard	Greater than 30
*The number of blows of 140 pound weight falling 30 inches to drive 2 inch O.D., 1-3/8 inch I.D. sampler 12 inches is defined as the Standard Penetration Resistance designated "N".		

TABLE 3 - ROCK CLASSIFICATION TERMS		
Rock Classification Terms		**Field Test or Meaning of Term**
Hardness	Soft	Scratched by fingernail
	Medium Hard	Scratched easily by penknife
	Hard	Scratched with difficulty by penknife
	Very Hard	Cannot be scratched by penknife
Weathering	Very Weathered Weathered Sound	Judged from the relative amounts of disintegration, iron staining, core recovery, clay seams, etc.
Bedding (Natural Breaks in Rock Layers)	Laminated Thinly bedded Bedded Thickly bedded Massive	less than 1 inch 1 inch to 4 inches 4 inches to 12 inches 12 inches to 36 inches greater than 36 inches

TABLE 4 **Relation OF Rock Quality Designation (RQD) and in-situ Rock Quality**	
RQD %	**Rock Quality Term Used**
90 to 100	Excellent
75 to 90	Good
50 to 75	Fair
25 to 50	Poor
0 to 25	Very Poor

SUBSURFACE EXPLORATION – TEST BORING LOG

Project: **Report No.:**
Client: **Date Started:** **Finished:**
Location of Boring: See Exploration Location Plan **Elevation of Surface of Boring:**

METHODS OF INVESTIGATION			
Casing: 3-1/4" ID H. Stem Auger	**Driller:**		
Casing Hammer:	**Driller:**		
Other:	**Inspector:**		
Soil Sampler: 2" OD Split Barrel	**Rod Size:** AWJ		
Sampler Hammer: Wt. 140 lbs.	**Fall:** 30 in.		
Make & Model of Drill Rig:			

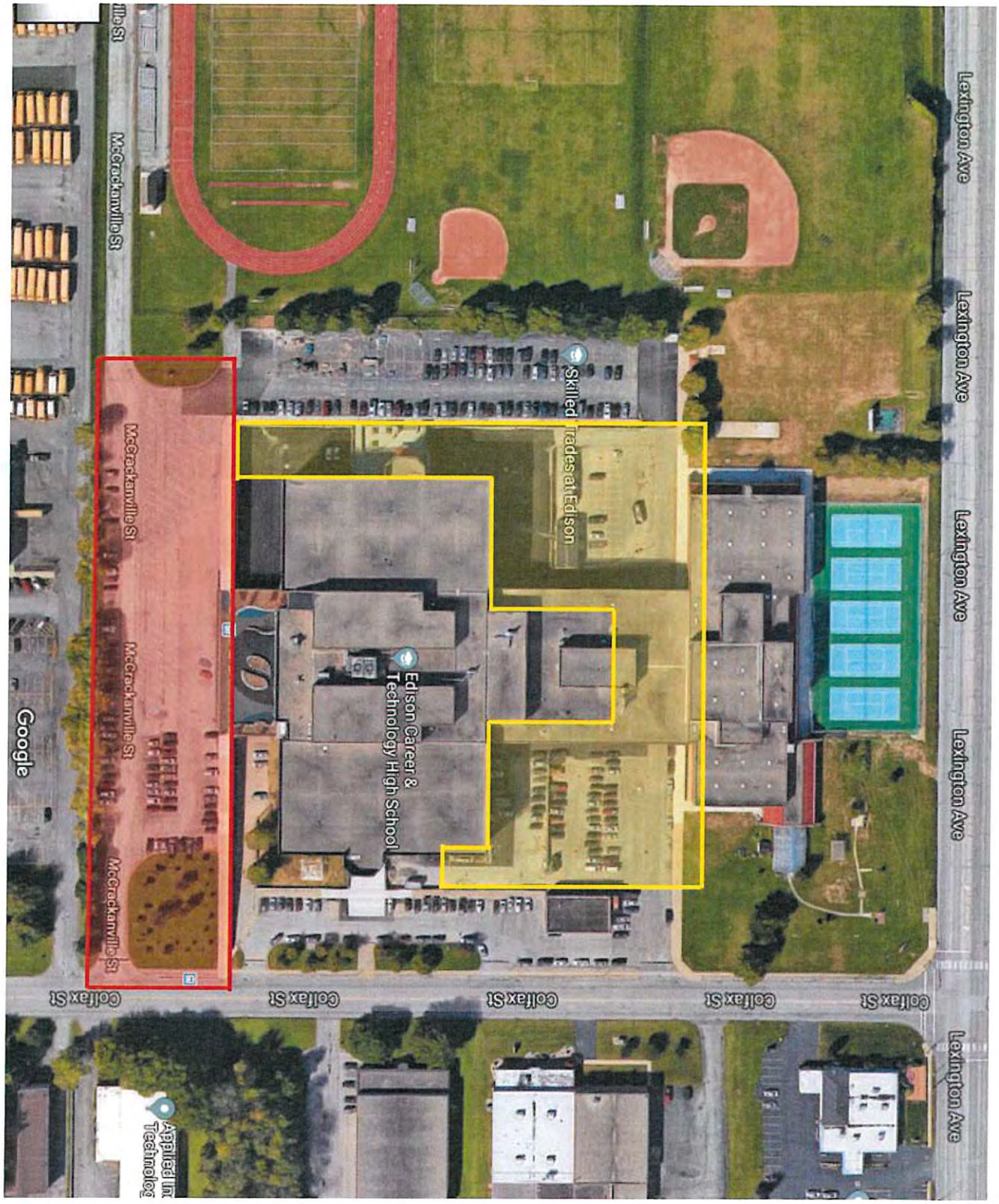
GROUND WATER OBSERVATIONS			
Date	Time	Depth	Casing At
	While drilling		
	Before casing removed		
	After casing removed		
	After casing removed		

LOG OF BORING SAMPLES **CLASSIFICATION OF MATERIAL**

Depth Scale (Feet)	Casing Blows/ Foot	Sample I.D.	Depth of Sample (Feet) From	Depth of Sample (Feet) To	Sample Type/ Recovery (Inches)	Blows On Sampler Per 6 inches	Depth Of Change (feet)	**c** – **c**oarse **m** – **m**edium **f** – **f**ine **and** – 35 to 50 % **some** – 20 to 35 % **little** – 10 to 20 % **trace** – 0 to 10 %	SPT "N" or RQD
1	**2**	**3**	**4**	**4**	**5**	**6**	**7**	**8**	**9**
5									
10									
15									
20									

SS – Split Spoon, U – Undisturbed Tube, C – Core, WH – Weight of Hammer, WR – Weight of Rod

Remarks:



4/17/19 Edison Tech Phase 2b Survey Limits

PROPOSED PAVEMENT RECONSTRUCTION LIMITS

ATTACHMENT TO CME RPT # 2749BB-02-061

Gary Gantney

From: Ferreri, Michael <MFerreri@LaBellaPC.com>
Sent: Thursday, May 23, 2019 8:55 AM
To: Gary Gantney
Cc: Anas Anasthas
Subject: RE: scan

Yes, this can be used again. Nothing has changed.

Michael Ferreri
LaBella Associates | Project Manager

585-770-2513 direct
585-454-6110 office

From: Gary Gantney [mailto:ggantney@cmeassociates.com]
Sent: Thursday, May 23, 2019 8:41 AM
To: Ferreri, Michael <MFerreri@LaBellaPC.com>
Cc: Anas Anasthas <an@cmeassociates.com>
Subject: FW: scan

Mike,

I have attached the estimated traffic counts used in the earlier report of two years ago for the South Parking lot. Please review this estimate and advise us if we can re-use it for this project.

Thank you,

Gary

From: Bobbi Jo Mannise <bmannise@cmeassociates.com>
Sent: Thursday, May 23, 2019 8:31 AM
To: Gary Gantney <ggantney@cmeassociates.com>
Subject: scan

Bobbi Jo Mannise
Administrative Assistant

CME Associates, Inc.
6035 Corporate Dr.
East Syracuse, New York 13057
315.701.0522 (Phone) Extension 237
315.701.0526 (Fax)
www.CMEAssociates.com

"A New York State Certified Woman-Owned Business Enterprise (WBE)"
Please consider the environment before printing this email. Thank You!

ATTACHMENT TO CME REPORT NUMBER: 27498B-02-0619

Anas Anasthas

From: Short, Michael <mshort@LaBellaPC.com>
Sent: Thursday, May 11, 2017 4:59 PM
To: Anas Anasthas
Cc: Andrew Britton; Stanley Nwokebuihe; AuClair, Mark A.
Subject: RE: CME#27226: Edison Tech, Rochester NY

Anas,

Per our understanding we will need to up the bus to 46 vs 36

Michael Short, AIA, LEED AP BD+C
LaBella Associates, D.P.C.
Direct: 585-295-6612

From: Short, Michael
Sent: Thursday, May 11, 2017 4:54 PM
To: 'an@cmeassociates.com'
Cc: 'Andrew Britton'; 'stanley.n@cmeassociates.com'; AuClair, Mark A.
Subject: FW: CME#27226: Edison Tech, Rochester NY

Anas,

I have never had these questions asked of us when we have asked for a geotechnical design. We know that buses will be driving on the entire site and trucks will be driving on the entire site. Andy has taken a stab at some numbers see below, but again no traffic study was completed and we have never been asked any of this information. Please expedite the necessary information so that the asphalt section can be designed and included in our construction documents.

Michael Short, AIA, LEED AP BD+C
LaBella Associates, D.P.C.
Direct: 585-295-6612

From: Anas Anasthas [mailto:an@cmeassociates.com]
Sent: Wednesday, May 10, 2017 8:46 AM
To: Andrew Britton <ABritton@edrdpc.com>
Cc: Stanley Nwokebuihe <stanley.n@cmeassociates.com>
Subject: CME#27226: Edison Tech, Rochester NY

Hi Andy,
Thank you for taking my call. Could you please forward us the grading plan for the subject project along with the following traffic loading information. Please provide the traffic information for each parking lot area planned to be reconstructed.

1. Design Life 20 years ?
2. Growth Rate ? (0% USED)
3. AADT (Annual Average Daily Traffic): *This assumes that a trip consists of driving in over the surface and driving back out over the surface.
    a. Passenger cars (number of trips per day): [Assuming 90% are cars] 360 cars x 1 trip/day = 360 TPD

ATTACHMENT TO CME REPORT NUMBER: 27498B-02-0619

b. Pickup trucks (number of trips per day): [Assuming 10% are pickup trucks] 40 pickups x 1 trip/day = 40 TPD
c. Busses (number of trips per day): 18 buses x 2 trips/day = 36 TPD
d. Delivery trucks (number of trips per day): 2 trucks x 1 trip/day = 2 TPD
e. Trash removal trucks/other trucks (number of trucks per day): 1 truck x 1 trip/day = 1 TPD
f. Tractor trailers(number of trips per day): 1 truck x 1 trip/day = 1 TPD

**Also, the District has asked that the entrances be larger concrete aprons (or something built to last longer) surrounding the trench drains as these areas sustain significant damage. We were just asked this yesterday.

As we spoke, Tensar is designing a pavement section with geogrid reinforcement and they need the above information for their design.
Thank you.

Anas N. Anasthas, PE
Geotechnical Engineer

CME Associates, Inc.
6035 Corporate Drive
East Syracuse, NY 13057
Phone 315.701.0522 Ext. 124
Fax 315.701.0526
www.CMEAssociates.com

A New York State Certified Woman-Owned Business Enterprise (WBE)
Please consider the environment before printing this email. Thank you!

Tensar International Corporation
2500 Northwinds Parkway
Alpharetta, GA 30009
Tel: 770.344.2090
Mob: 412.996.7531
sluptak@tensarcorp.com

Roadway Design Report

Edison Tech Pavement Reconstruction Project

Prepared for: CME Associates
Anas N. Anasthas, PE
Gary M. Gatney, PE

Date: June 4, 2019

Prepared by: Stephen A. Luptak, PE
NY PE # 090625

1. Introduction

Tensar International Corporation (TIC) has performed a set of analyses and prepared this report. This report provides guidance on a heavy-duty asphalt pavement section proposed for sitework at Edison Tech, Rochester, New York. The report presents analysis results, arrived at using industry design parameters, pavement design standards, and TIC design experience. The scope of work that TIC proposes to carry out and preliminary design recommendations are presented.

The documents and communications referenced by TIC in preparing the design are presented in Appendix A.

It is the responsibility of the Client to provide any updated documents to TIC that would affect the design of the pavement and pavement base aggregate. TIC has relied primarily on information contained in the geotechnical report by CME numbered - 27498-01-0519. We have also relied on email and verbal conversations with representatives for the owner and owner's engineers regarding traffic counts, project photos, etc. The design recommendations contained within this report should be reviewed by the project geotechnical engineer in order to verify the accuracy of any assumptions made regarding the design input parameters, prior to commencement of any construction activity. TIC has not and will not perform any independent geotechnical investigation or verification of the assumptions made in preparing this report.

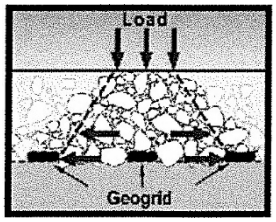
2. Project Description and Proposed Scope of Work

TIC has prepared this report using the Spectra Roadway Improvement Systems. The Spectra Systems consist of Tensar Structural Geogrids and conventional roadway and roadbed components/materials.

The roadway designs contained herein are intended to provide a roadway section that will meet the structural design life requirements. No other parts of the roadway design, including but not limited to, surface drainage, development of specifications for traditional roadway components or control of the work are addressed herein. All design recommendations contained within this document should be considered preliminary. Any party accepting this document does so in confidence and agrees that it shall not be duplicated in whole or in part, nor disclosed to others without the consent of Tensar International Corporation.

3. Tensar Structural Geogrids

Tensar TriAx® (TX) Geogrids are manufactured using select grades of high-density polypropylene (PP) resins that are formed into a continuous sheet then punched and drawn to form a geogrid structure. For aggregate reinforcement to work, it is necessary to transfer the loads from the unbound aggregate into the stiff geogrid. With Tensar Geogrids, this is achieved through Mechanical Interlock, a process whereby the granular particles partially penetrate the apertures of the geogrid and lock into place as the overlying material is compacted. Because of Tensar's patented manufacturing process, the



junction strength and stiffness of Tensar geogrids make them the best suited geosynthetics for providing lateral restraint. The geogrid confined aggregate results in a stiffer base course and a lower dynamic deflection of the pavement/roadbed structure during traffic loading.

4. TriAx® Geogrid superiority to Biaxial Geogrid

Geogrid usage has evolved steadily since the technology was first introduced in the early 1980's. Tensar Biaxial Geogrids have gained widespread acceptance in the Americas and elsewhere over the last 25 years, primarily as a solution to problems associated with roadways, haul roads and working surfaces constructed on soft or problematic subgrades. By examining all the design characteristics of biaxial geogrids and as a result of independent testing and research, the TIC development team identified the key geogrid properties that affect performance. These include the profile of the rib section, rib thickness, junction efficiency, aperture size, and in-plane stiffness. This research resulted in a revolutionary change from a rectangular to a triangular shaped grid aperture. This fundamental change to the grid structure, coupled with an increase in rib thickness and junction efficiency, results in greatly improved aggregate confinement and interaction, leading to improved structural performance of the Mechanically Stabilized Layer (MSL). The new TriAx® Geogrid outperforms biaxial geogrids for the following reasons:

Load Distribution

- Load distribution is 3-dimensional in nature and acts radially at all levels within the aggregate.
- For a stabilized layer to be effective it must have the ability to distribute load through 360 degrees.

To ensure optimum performance, the geogrid reinforcement in an MSL should have a high radial stiffness throughout the full 360 degrees.

Junction Integrity

- TriAx® is produced from an extruded sheet of polypropylene. This is then punched with an array of holes and stretched to create the unique TriAx® structure. This Tensar process, coupled with the design of the junctions, results in a product with high junction strength and stiffness.

Junction Efficiency

- Rigorous testing has been conducted in fine with each of the three rib directions. In each direction tested, the junction strength was found to be essentially equal to the rib strength - giving a junction efficiency of 100%.

Multi -Directional Properties

- Biaxial geogrids have tensile stiffness predominantly in two directions. TriAx® geogrids have three principal directions of stiffness, which is further enhanced by their rigid triangular geometry. This produces a significantly different structure than any other geogrid and provides high strength and stiffness around 360 degrees. TriAx® is a truly

multi-directional product with near isotropic properties and proven multi-directional performance.

Proving the Importance of Rib Profile

- TriAx® geogrids have greater rib depth compared with conventional biaxial geogrids.
- Trafficking tests and analytical modeling techniques were undertaken to compare performance advantages between the two forms of geogrid with various rib depths. The results were conclusive in confirming that a much-improved structural performance of an MSL was achieved with the TriAx® geogrid. Numerical modeling techniques also confirmed the importance of geogrid rib thickness on aggregate confinement and load dissipation.

5. Spectra Roadway Improvement System Design Models

Current pavement design methods, including the American Association of State Highway and Transportation Officials (AASHTO) R 50 -09 "Standard Practice for Geosynthetic Reinforcement of the Aggregate Base Course of Flexible Pavement Structures", offer a convenient method for designing geogrid-reinforced pavements. AASHTO R 50-09 indicates that geogrids can be expected to provide one or both of the following benefits:

1. Improved or extended service fife
2. A reduction in the thickness of the structural section

The improvements to the pavement system provided by geogrid reinforcement are frequently quantified using the following design parameters:

- Traffic Benefit Ratio (TBR) - defined as the ratio of the number of load cycles of a reinforced pavement structure to reach a defined failure state, to the number of loads for the same unreinforced section to reach the same defined failure state.
- Base Course Reduction Factor (BCR) - defined as the percentage of the base or sub-base thickness in an unreinforced pavement that can be removed using a geogrid with no loss in performance.

TIC has quantified the stiffness enhancement provided by Tensar Geogrids based on an extensive body of research work carried out both by TIC and independent researchers. This research work includes full-scale in ground performance tests, laboratory testing and state-of-the-art numerical modeling techniques.

In many cases the effect of a geogrid on the performance of a pavement structure can be empirically related to the layer coefficients of the aggregate base. The models developed include but are not limited to:

- Enhanced layer coefficients for aggregate base materials for use with the AASHTO 1993 design method
- Enhanced Modulus values for unbound aggregate used in M-E design methods

The design methods and the benefit assigned for the incorporation of a geogrid for any particular project will depend upon the pavement materials used, the original design thickness of

the pavement, the anticipated mode of failure and the optimization of the design. All models are based on increased contact forces and stresses around the geogrid, the stiffness of the adjacent unbound aggregate being increased significantly, and improved overall pavement performance. General trends relating geogrid benefits observed from previous studies indicate that the effects of aggregate confinement increase with decreasing subgrade strength and is sensitive to the pavement layer thickness. The Enhanced layer coefficients were utilized for this project because of the design method employed.

6. Design Parameters

Based upon the details in the geotechnical report provided by CME, industry standard design methodology, and traffic counts provided by the owner's engineers, the following parameters were used in the design analysis for the asphalt pavement section:

Layer	Description	Layer Coefficient	Drainage Coefficient
ACC1	Hot Mix Asphalt Surface Course	0.44	-
ACC2	Hot Mix Asphalt Binder Course	0.40	-
ABC	Aggregate Base Course	0.14	1.0

Table 1 Material Properties

Parameter	Value
Analysis Period (years)	20
Design ESAL	742,000
Design Reliability (%)	95[1]
Standard Normal Deviate	-1.645[1]
Standard Deviation	0.49[1]
Change in Serviceability (Initial & Terminal)	4.2 - 2.0[1]
Subgrade Resilient Modulus	9,000 psi[2]

Table 2 Input Parameters for AASHTO (1993) Equation

1. SpectraPave™ default settings, typically used for pavements where disruption due to reconstruction is problematic.
2. Subgrade soil resilient modulus assumed based on design and recommendations from geotechnical report by CME report # 27498-01-0519.

7. Pavement Design Recommendation

The asphalt pavement section reinforced with Tensar TX5 TriAx® Geogrid was designed to minimize the undercut required to stabilize the subgrade without loss in pavement design strength. The calculated Equivalent Single Axle Loadings or ESALs is presented below. The effect of including the geogrid was calculated by the SpectraPave™ software.

The proposed geogrid-reinforced pavement section is presented below:

Layer	Description	Stabilized
ACC1	Hot Mix Asphalt, Type 7 Top Course	1.5 inches
ACC2	Hot Mix Asphalt, Type 3 Binder Course	2.5 inches
ABC	Sub-base Course, Type 2	6.0 inches
Geogrid	-	Tensar TX7
ABC	Sub-base Course, Type 2	9 inches
Geogrid		Tensar TX7
ESALs	As calculated by SpectraPave™	1,017,000
Performance vs Traffic Volume	**Percentage of excess ESALs**	**37%**

Table 3 Pavement Design Summary

In addition to the above proposed section, TIC is compelled to point out the following additional considerations that will be critical to the success of the project as well as recommendations for pavement maintenance.

Construction Quality Control

The geotechnical engineer should provide the specifications for construction of the pavement section including QC guidelines for all pavement materials. In addition, the geotechnical engineer for the project should provide QC oversight during the preparation of the subgrade, confirmation of subgrade conditions, base course material and the asphalt paving operations.

The contractor should follow the recommendations for placement of the geogrid as required in the plans and in the Spectra System Installation Guide attached or included as an Appendix.

Pavement Maintenance

This section will experience conventional pavement's failure mode (rutting and AC cracking) at the end of design life. Another mode of pavement deterioration is aging effects as a result of the normal weathering process caused by solar radiation and oxidation. To avoid major full depth repair within design life, it is important to seal cracks in a timely manner to prevent water infiltration into the subgrade through the cracks.

By addressing pavement deterioration before the onset of serious damage, pavement preservation extends service life and defers more expensive remedies. The recommendations provided in this section are general in nature. The development of a project specific, comprehensive maintenance plan is beyond the scope of this report.

8. Report Limitations

The designs presented herein are based on information provided by others to TIC (see Appendix A, References). TIC has exercised the right to rely on this information in performing this design. TIC understands that this information has been or will be reviewed and confirmed to be true and correct by the appropriate parties. In the event that this information is deemed to have changed at any point during the design, TIC should be notified so that it may review the design based on the changed parameters.

This design is based upon specific properties of the specific Tensar products incorporated herein which are proprietary to TIC. Any substitution of the specified products will invalidate this design. This design is being furnished for use on this specific project. Any party accepting this document does so in confidence and agrees that it shall not be duplicated in whole or in part, nor disclosed to others without the consent of Tensar International Corporation.

Appendix A: References

AASHTO (1993). Guide for the design of pavement structures; The American Association of State Highway and Transportation Officials

AASHTO (2006). Standard Practice for Geotextiles - M288, Standard Specifications for Transportation Materials and Methods of Sampling and Testing. 251h Edition, American Association of State Highway and Transportation Officials, Washington, D.C.

AASHTO (2009). Standard Practice for Geosynthetic Reinforcement of the Aggregate Base Course of Flexible Pavement Structures, American Association of State Highway and Transportation Officials, Publication R 50-09, Washington, D.C.

Tensar International Corporation (2010)," Tensar TriAx® Geogrid Paved Applications Design Method", Tensar International Corporation, Atlanta, GA

Soils Investigation Report – Edison Tech Pavement Reconstruction Project, prepared by CME Associates, Inc., report number 27498-01-0519, dated 05/19/17.

CME Associates, Inc.

6035 Corporate Drive
East Syracuse, New York 13057
(315) 701-0522
(315) 701-0526 (Fax)

www.cmeassociates.com

LABORATORY TEST SUMMARY
Edison Tech North Parking Lot Pavement Reconstruction Project, Rochester, NY
CME Report No.: 27498L-01-0519
May 23, 2019

CME Representatives obtained soil samples from Test Borings advanced as part of the Subsurface Exploration Program conducted for the subject project. Selected samples were delivered to CME's East Syracuse facility, an AASHTO re:source[1] accredited laboratory for various laboratory testing. The results are presented below:

Sample ID Notations: B - Test Boring, S – Sample

I. Natural Moisture Content (ASTM D2216)

Sample ID	Natural Moisture (%)
B-101; S-3	13.0
B-102; S-3	15.9

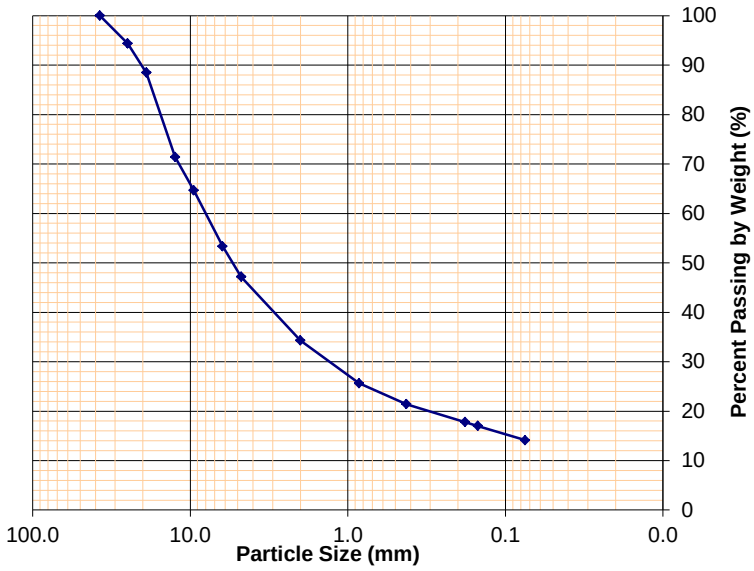
II. Particle Size Analysis (ASTM D422)

Sample #
B-101; S-1A

Classification
Grey cmf GRAVEL, some cmf SAND, little SILT

Grain Size Distribution Curve

Sieve Designation	Sieve Size (mm)	% Passing by Dry Weight
1-1/2"	37.5	100
1"	25.0	94
3/4"	19.0	88
1/2"	12.5	71
3/8"	9.5	65
1/4"	6.25	53
No.4	4.75	47
No.10	2.00	34
No.20	0.850	26
No.40	0.425	21
No.80	0.180	18
No.100	0.150	17
No.200	0.075	14



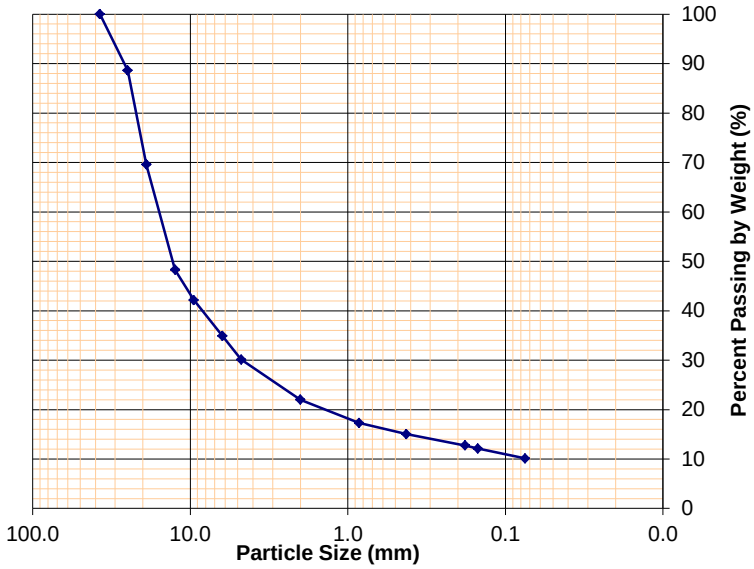
[1]**AASHTO re:source** – American Association of State Highway & Transportation Officials (AASHTO) Materials Reference Laboratory, a Federal Agency having jurisdiction to assess laboratory competency according to the Standards of the United States of America. CME East Syracuse accreditation includes testing of Portland Cement Concrete, Aggregate and Soil Materials. www.AASHTOresource.org.

Sample #
B-102; S-1A

Classification
Grey cmf GRAVEL, some cmf SAND, little SILT

Grain Size Distribution Curve

Sieve Designation	Sieve Size (mm)	% Passing by Dry Weight
1-1/2"	37.5	100
1"	25.0	89
3/4"	19.0	70
1/2"	12.5	48
3/8"	9.5	42
1/4"	6.25	35
No.4	4.75	30
No.10	2.00	22
No.20	0.850	17
No.40	0.425	15
No.80	0.180	13
No.100	0.150	12
No.200	0.075	10

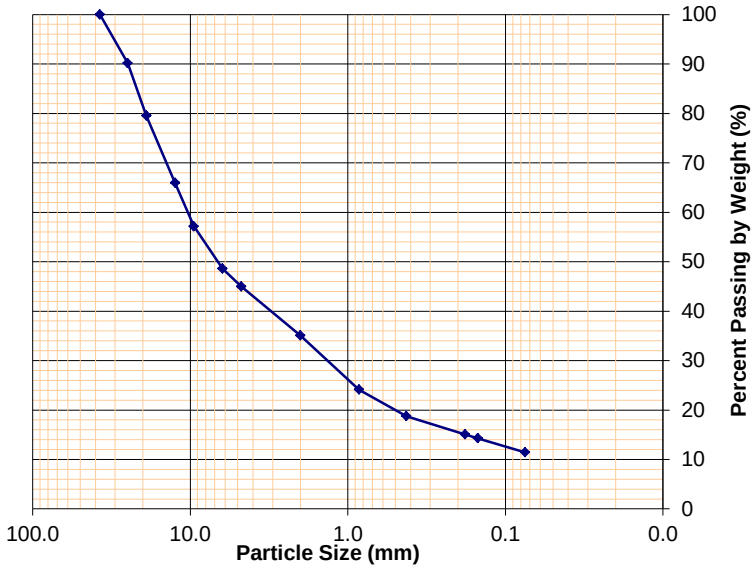


Sample #
B-103; S-1A

Classification
Grey cmf GRAVEL, some cmf SAND, little SILT

Grain Size Distribution Curve

Sieve Designation	Sieve Size (mm)	% Passing by Dry Weight
1-1/2"	37.5	100
1"	25.0	90
3/4"	19.0	80
1/2"	12.5	66
3/8"	9.5	57
1/4"	6.25	49
No.4	4.75	45
No.10	2.00	35
No.20	0.850	24
No.40	0.425	19
No.80	0.180	15
No.100	0.150	14
No.200	0.075	11

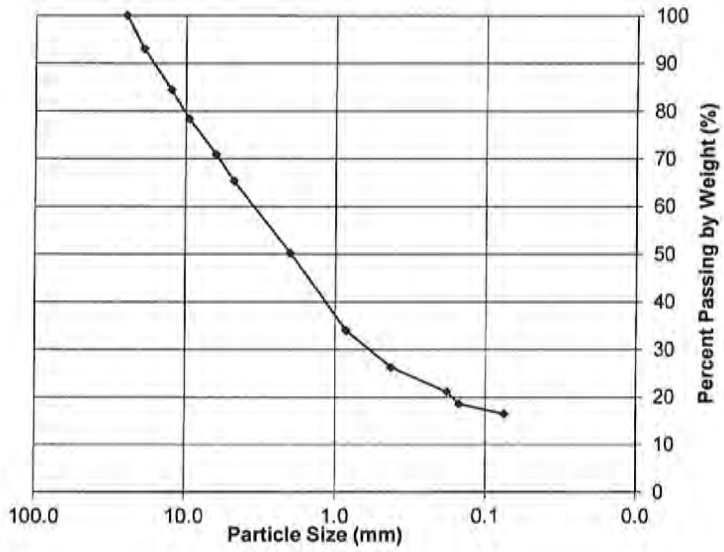


CME Associates, Inc.

Sample #
B-104; S-1A

Classification
Grey cmf SAND and mf GRAVEL, little SILT
Grain Size Distribution Curve

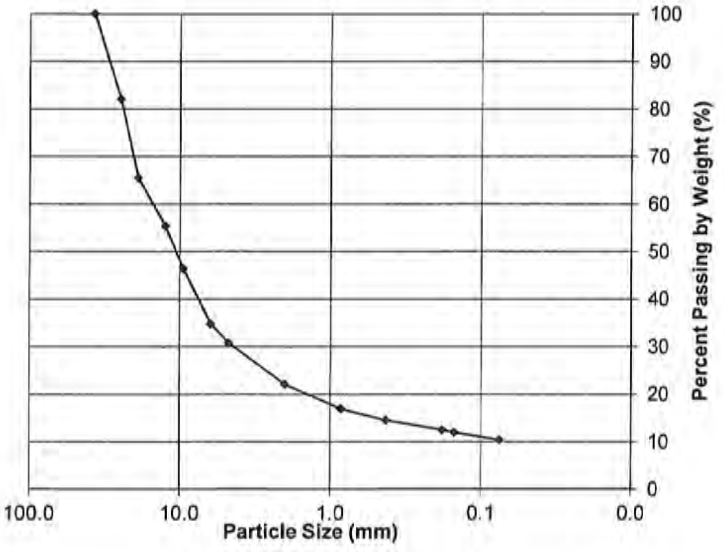
Sieve Designation	Sieve Size (mm)	% Passing by Dry Weight
1"	25.0	100
3/4"	19.0	93
1/2"	12.5	84
3/8"	9.5	78
1/4"	6.25	71
No.4	4.75	65
No.10	2.00	50
No.20	0.850	34
No.40	0.425	26
No.80	0.180	21
No.100	0.150	18
No.200	0.075	16



Sample #
B-105; S-1A

Classification
Grey cmf GRAVEL, some cmf SAND, little SILT
Grain Size Distribution Curve

Sieve Designation	Sieve Size (mm)	% Passing by Dry Weight
1-1/2"	37.5	100
1"	25.0	82
3/4"	19.0	65
1/2"	12.5	55
3/8"	9.5	46
1/4"	6.25	35
No.4	4.75	31
No.10	2.00	22
No.20	0.850	17
No.40	0.425	14
No.80	0.180	12
No.100	0.150	12
No.200	0.075	10



If you have any questions regarding this report please contact our office.

Michael Curry
Laboratory Supervisor

SECTION 122413 - ROLLER WINDOW SHADES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:
   1. Manual-operated roller shades with single rollers.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

   1. Include construction details, material descriptions, dimensions of individual components and profiles, features, finishes, and operating instructions for roller shades.

B. Shop Drawings: Show fabrication and installation details for roller shades, including shadeband materials, their orientation to rollers, and their seam and batten locations.

C. Samples: For each exposed product and for each color and texture specified, 10 inches long.

D. Samples for Initial Selection: For each type and color of shadeband material.

   1. Include Samples of accessories involving color selection.

E. Samples for Verification: For each type of roller shade.

   1. Shadeband Material: Not less than 10 inches square. Mark interior face of material if applicable.
   2. Roller Shade: Full-size operating unit, not less than 16 inches wide by 36 inches long for each type of roller shade indicated.
   3. Installation Accessories: Full-size unit, not less than 10 inches long.

F. Product Schedule: For roller shades. Use same designations indicated on Drawings.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

B. Product Certificates: For each type of shadeband material.

C. Product Test Reports: For each type of shadeband material, for tests performed by a qualified testing agency.

1.5 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For roller shades to include in maintenance manuals.

1.6 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Roller Shades: Full-size units equal to 5 percent of quantity installed for each size, color, and shadeband material indicated, but no fewer than two units.

1.7 QUALITY ASSURANCE

A. Installer Qualifications: Fabricator of products.

B. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for fabrication and installation.

1. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
2. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Deliver roller shades in factory packages, marked with manufacturer, product name, and location of installation using same designations indicated on Drawings.

1.9 FIELD CONDITIONS

A. Environmental Limitations: Do not install roller shades until construction and finish work in spaces, including painting, is complete and dry and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

B. Field Measurements: Where roller shades are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for operating hardware of operable glazed units through entire operating range. Notify Architect of installation conditions that vary from Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, available manufacturer offering products that may be incorporated into the Work include, but are not limited to, the following:

B. Basis of Design Product: Subject to compliance with the requirements, provide products from one of the following:
1. 3G-Mermet Company (Basis of Design)
2. Drapery Industries
3. Draper, Inc.
4. Architect approved equal

C. Source Limitations: Obtain roller shades from single source from single manufacturer.

2.2 MANUALLY OPERATED SHADES WITH SINGLE ROLLERS

A. Basis of Design Product: 3G-Mermet Company, M-Screen #8503 Window Shades

B. Chain-and-Clutch Operating Mechanisms: With continuous-loop bead chain and clutch that stops shade movement when bead chain is released; permanently adjusted and lubricated.

1. Bead Chains: #10 Stainless steel.

a. Loop Length:
1) Length required for bottom of chain to fall at 42”H above finished floor.

b. Limit Stops: Provide 5/16” diameter NPB along length of loop to prevent shade from traveling beyond the opening of the window.
c. Chain-Retainer Type: Chain tensioner, sill mounted at window types B and C.

2. Spring Lift-Assist Mechanisms: Manufacturer's standard for balancing roller shade weight and for lifting heavy roller shades.

a. Provide for shadebands that weigh more than 10 lb or for shades as recommended by manufacturer, whichever criterion is more stringent.

C. Rollers: Corrosion-resistant steel or extruded-aluminum tubes of diameters and wall thicknesses required to accommodate operating mechanisms and weights and widths of shadebands indicated without deflection. Provide with permanently lubricated drive-end assemblies and idle-end assemblies designed to facilitate removal of shadebands for service.

1. Roller Drive-End Location: Right side of interior face of shade.
2. Direction of Shadeband Roll: Regular, from back (exterior face) of roller.
3. Shadeband-to-Roller Attachment: Double sided tape designed to adhere PVC coated textiles to aluminum or steel.

D. Mounting Hardware: Brackets or endcaps, corrosion resistant and compatible with roller assembly, operating mechanism, installation accessories, and mounting location and conditions indicated. All hardware to match in color.

E. Roller-Coupling Assemblies: Coordinated with operating mechanism and designed to join up to three inline rollers into a multiband shade that is operated by one roller drive-end assembly.

F. Shadebands:

1. Shadeband Material: Light-filtering fabric.
2. Shadeband Bottom (Hem) Bar: Steel or extruded aluminum.

a. Type: Enclosed in sealed pocket of shadeband material.
b. Color and Finish: As selected by Architect from manufacturer's full range.

G. Installation Accessories:

1. Front Fascia: Aluminum extrusion that conceals front and underside of roller and operating mechanism and attaches to roller endcaps without exposed fasteners. Fascia can be mounted continuously across two or more shadebands.

a. Shape: L-shaped.
b. Height: Manufacturer's standard height required to conceal roller and shadeband assembly when shade is fully open.

2. Endcap Covers: To cover exposed endcaps.

3. Front facias and end caps to be furnished in color and finish as selected by the Architect from Manufacturer's full range.

2.3 BAND MATERIALS

A. Shadeband Material Flame-Resistance Rating: Comply with NFPA 701-10 TM#1 & California U.S. Title #19. Testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

B. Light-Filtering Fabric: Woven fabric, stain, peel, and fade resistant.

1. Source: 3G-Mermet Company.
2. Type: PVC-coated fiberglass.
3. Weight: 12.21 ounces per square yard.
4. Openness Factor: 3 percent.
5. Color: As selected by Architect from manufacturer's full range.

2.4 ROLLER SHADE FABRICATION

A. Product Safety Standard: Fabricate roller shades to comply with WCMA A 100.1, including requirements for flexible, chain-loop devices; lead content of components; and warning labels.

B. Unit Sizes: Fabricate units in sizes to fill window and other openings as follows, measured at 74 deg F:

1. Between (Inside) Jamb Installation: Width equal to jamb-to-jamb dimension of opening in which shade is installed less 1/4 inch per side or 1/2-inch total, plus or minus 1/8 inch. Length equal to head-to-sill or -floor dimension of opening in which shade is installed less 1/4 inch, plus or minus 1/8 inch.
2. Outside of Jamb Installation: Width and length as indicated, with terminations between shades of end-to-end installations at centerlines of mullion or other defined vertical separations between openings.

C. Shadeband Fabrication: Fabricate shadebands without battens or seams to extent possible, except as follows:

1. Vertical Shades: Where width-to-length ratio of shadeband is equal to or greater than 1:4, provide battens and seams at uniform spacings along shadeband length to ensure shadeband tracking and alignment through its full range of movement without distortion of the material.
2. Railroaded Materials: Railroad material where material roll width is less than the required width of shadeband and where indicated. Provide battens and seams as

required by railroaded material to produce shadebands with full roll-width panel(s) plus, if required, one partial roll-width panel located at top of shadeband.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, operational clearances, locations of connections to building electrical system, and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 ROLLER SHADE INSTALLATION

A. Install roller shades level, plumb, and aligned with adjacent units according to manufacturer's written instructions.

1. Opaque Shadebands: Located so shadeband is not closer than 2 inches to interior face of glass. Allow clearances for window operation hardware.

B. Electrical Connections: Connect motor-operated roller shades to building electrical system.

C. Roller Shade Locations: As indicated in window-covering schedule at the end of this section.

3.3 ADJUSTING

A. Adjust and balance roller shades to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.

3.4 CLEANING AND PROTECTION

A. Clean roller shade surfaces, after installation, according to manufacturer's written instructions.

B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure that roller shades are without damage or deterioration at time of Substantial Completion.

C. Replace damaged roller shades that cannot be repaired, in a manner approved by Architect, before time of Substantial Completion.

3.5 TESTING AND DEMONSTRATION

A. Test motorized window shades to verify that controls, limit switched, interface to other building systems, and other operating components are functions. Correct deficiencies.

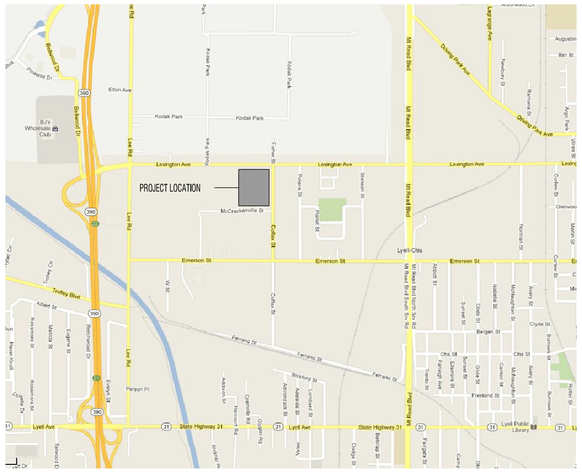
B. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain motor-operated roller shades.

ROLLER SHADE SCHEDULE

WINDOW TYPE	SHADE QUANTITY	SIZE
4	4	3’-10” L x 4’-8” H
9	5	3’-10” L x 4’-8” H
10	3	3’-10” L x 4’-8” H

DOOR NUMBER	FRAME TYPE	SHADE QUANTITY	SIZE
1A5.1	A2	3	3’-10” L x 3’-8” H
1A10.1	A1	2	3’-10” L x 3’-8” H

END OF SECTION 122413



SITE MAP

MATERIAL SYMBOLS

REFERENCE SYMBOLS

SIGNS

TOILET ROOM SIGN
3" = 1'-0"

HANDICAP TOILET
3" = 1'-0"

TOILET ROOM SIGN
3" = 1'-0"

HANDICAP TOILET
3" = 1'-0"

HANDICAP SYMBOL
3" = 1'-0"

ROOM NAME SIGN
3" = 1'-0"

ROOM NAME SIGN (2 LINE)
3" = 1'-0"

FLOOR SIGN
3" = 1'-0"

FIRE SIGN
3" = 1'-0"

DIRECTIONAL SIGN
3" = 1'-0"

DIRECTIONAL SIGN (2 LINE)
3" = 1'-0"

TYPICAL PLAN DIMENSIONING

GENERAL NOTES

1. CONSTRUCTION SHALL CONFORM TO THE "NEW YORK STATE UNIFORM FIRE PROTECTION AND BUILDING CODE", LATEST REVISION, THE NEW YORK STATE ENERGY CODE AND ANY OTHER CODES GOVERNED BY THE JURISDICTION IN WHICH THE PROJECT IS BEING CONSTRUCTED.
2. CONSTRUCTION SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES AND REGULATIONS.
3. ALL DRAWINGS ARE GRAPHIC REPRESENTATIONS OF APPROXIMATE LOCATIONS OF NEW MATERIALS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
4. CONTRACTORS ARE RESPONSIBLE FOR ALL MATERIALS, CONSTRUCTION METHODS AND CRAFTSMANSHIP.
5. CONTRACTORS ARE TO VERIFY ALL EXISTING CONDITIONS, REQUIREMENTS, NOTES, CODES AND DIMENSIONS, PRIOR TO THE START OF CONSTRUCTION AND SHALL NOTIFY THE ARCHITECT IF CONDITIONS VARY FROM THOSE SHOWN ON THE DOCUMENTS.
6. CONTRACTORS ARE TO PROVIDE ADEQUATE SUPPORT OF EXISTING FOUNDATION WALLS, LOAD BEARING WALLS AND PARTITIONS DURING DEMOLITION AND CONSTRUCTION.
7. THOROUGHLY COORDINATE WORK WITH OTHER TRADES AND DETERMINE THE EXACT ROUTE AND LOCATION OF UTILITIES, MATERIALS AND EQUIPMENT BEFORE FABRICATION AND INSTALLATION.
8. WHEN EXISTING CONSTRUCTION IS REMOVED, DISTURBED, DAMAGED, REPLACED OR RENOVATED IN ANY WAY, CONTRACTORS SHALL PROVIDE PATCHING, PAINTING AND MATERIALS OF SAME TYPE AND QUALITY AS TO MATCH ADJACENT EXISTING SURFACES, UNLESS OTHERWISE NOTED.
9. CONTRACTORS PROVIDE ALL BLOCKING, FURRING AND SHIMMING FOR INSTALLATION AND COMPLETION OF WORK.
10. ALL NEW WORK SHALL BE PLUMB, LEVEL AND SQUARE. SCRIBE AND MAKE FIT ALL NEW TO EXISTING.
11. CONTRACTORS VERIFY ALL DIMENSIONS BEFORE ORDERING MATERIAL OR DOING WORK. NO EXTRA COMPENSATION OR CHARGES WILL BE ACCEPTED DUE TO DIFFERENCES BETWEEN THE ACTUAL MEASUREMENTS AND MEASUREMENTS INDICATED ON THE DRAWINGS.
12. ITEMS NOTED AS 'BY OWNER" ARE TO BE FURNISHED AND INSTALLED BY THE OWNER OR THE OWNER'S VENDOR.
13. OWNER PROVIDED EQUIPMENT IS INDICATED FOR REFERENCE ONLY. VERIFY DIMENSIONS AND CLEARANCE REQUIREMENTS WITH ACTUAL EQUIPMENT PROVIDED.
14. SECURITY, WEATHERPROOFING, DUST CONTROL AND SAFETY SHALL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR.

ABBREVIATIONS

ACT	ACOUSTICAL CEILING TILE
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AHU	AIR HANDLING UNIT
ALUM	ALUMINUM
ALT	ALTERNATE
APPROX	APPROXIMATE (LY)
AVG	AVERAGE
BLDG	BUILDING
BO	BOTTOM OF
BUR	BUILT UP ROOF
CFM	CUBIC FEET PER MINUTE
CFMF	COLD FORMED METAL FRAMING
CJ	CONTROL JOINT
CLG	CEILING
CLR	CLEAR
CIP	CAST IN PLACE
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
CU	CUBIC
DEMO	DEMOLISH
DIA	DIAMETER
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVATION
EPDM	ETHYLENE PROPYLENE DIENE MONOMER
ETR	EXISTING TO REMAIN
EQ	EQUAL
EXIST	EXISTING
EXT	EXTERIOR
FIN	FINISH (ED
FL	FLOOR
FT	FOOT OR FEET
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GWB	GYPSUM WALL BOARD
HC	HEATING, VENTILATING AND AIR CONDITIONING CONTRACTOR
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
HORIZ	HORIZONTAL
ID	INSIDE DIAMETER
IN	INCH
INSUL	INSULATION
INT	INTERIOR
LOC	LOCATION
MAX	MAXIMUM
MFG	MANUFACTURER
MECH	MECHANICAL
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTD	MOUNTED
MTG	MOUNTING
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OPP	OPPOSITE HAND
PC	PLUMBING CONTRACTOR
PLAM	PLASTIC LAMINATE
PT	PRESSURE TREATED
PVC	POLYVINYL CLORIDE
QTY	QUANTITY
RD	ROOF DRAIN
REF	REFERENCE
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RTU	ROOF TOP UNIT
SIM	SIMILAR
SPEC	SPECIFICATION
SQ FT	SQUARE FOOT
SQ IN	SQUARE INCH
SS	STAINLESS STEEL
STD	STANDARD
TBD	TO BE DETERMINED
TEMP	TEMPORARY
TO	TOP OF
TYP	TYPICAL
UL	UNDERWRITER'S LABORATORY
UNO	UNLESS NOTED OTHERWISE
VIF	VERIFY IN FIELD
VOL	VOLUME
W/	WITH
W/O	WITHOUT

SIGN MOUNTING HEIGHTS

SIGN NOTES:

1. SIGN SIZES ARE APPROXIMATE AND MAY VARY BY MANUFACTURER
2. SIGN COLOR TO BE SELECTED BY ARCHITECT
3. CENTER LINE OF SIGNAGE TO BE 54" A.F.F.

LIST OF DRAWINGS:

GENERAL

G000	COVER SHEET
G001	PROJECT INFORMATION & DRAWING LIST
G101	FIRST FLOOR CODE PLAN
G102	SECOND FLOOR CODE PLAN
G103	THIRD FLOOR CODE PLAN

CIVIL

G101	GENERAL NOTES & ABBREVIATIONS
V001	EXISTING CONDITIONS PLAN
L001	LOGISTICS PLAN
C001	DEMOLITION PLAN
C002	DEMOLITION PLAN
C003	DEMOLITION PLAN
C101	SITE MATERIALS, LAYOUT & PLANTING PLAN
C102	SITE MATERIALS, LAYOUT 4 PLANTING PLAN
C103	SITE MATERIALS, LAYOUT & PLANTING PLAN
C201	GRADING PLAN
C202	GRADING PLAN
C203	GRADING PLAN
C301	UTILITY PLAN
C302	UTILITY PLAN
C601	DETAILS
C602	DETAILS
C603	DETAILS
C604	DETAILS
C605	DETAILS
C606	AGENCY DETAILS
C607	AGENCY DETAILS

1

STRUCTURAL

S001	GENERAL STRUCTURAL NOTES & DESIGN CRITERIA
S101	EAST ELEVATION RETAINING WALL REPAIRS
S102	EAST ELEVATION RETAINING WALL REPAIRS
S103	NORTH ELEVATION RETAINING WALL REPAIRS
S104	NORTH ELEVATION RETAINING WALL REPAIRS
S201	CHILLER SUPPORT DEMOLITION AND FRAMING PLANS
S501	RETAINING WALL REPAIR DETAILS

ARCHITECTURAL

A033	PARTIAL BASEMENT DEMOLITION PLAN - AREA F
A034	PARTIAL FIRST FLOOR DEMOLITION PLAN - AREA B
A035	PARTIAL FIRST FLOOR DEMOLITION PLAN - AREA C
A036	PARTIAL FIRST FLOOR DEMOLITION PLAN - AREA D
A037	PARTIAL FIRST FLOOR DEMOLITION PLAN - AREA E
A038	PARTIAL FIRST FLOOR DEMOLITION PLAN - AREA F
A039	PARTIAL FIRST FLOOR DEMOLITION PLAN - AREA G & H
A040	PARTIAL SECOND FLOOR DEMOLITION PLAN - AREA A
A041	PARTIAL SECOND FLOOR DEMOLITION PLAN - AREA C
A042	PARTIAL SECOND FLOOR DEMOLITION PLAN - AREA D
A043	PARTIAL SECOND FLOOR DEMOLITION PLAN - AREA E
A044	PARTIAL SECOND FLOOR DEMOLITION PLAN - AREA F
A045	PARTIAL SECOND FLOOR DEMOLITION PLAN - AREA G
A046	PARTIAL THIRD FLOOR DEMOLITION PLAN - AREA A
A047	PARTIAL THIRD FLOOR DEMOLITION PLAN - AREA C
A103	ENLARGED ROOF PLAN
A133	PARTIAL BASEMENT PLAN - AREA F
A134	PARTIAL FIRST FLOOR PLAN - AREA B
A135	PARTIAL FIRST FLOOR PLAN - AREA C
A136	PARTIAL FIRST FLOOR PLAN - AREA D
A137	PARTIAL FIRST FLOOR PLAN - AREA E
A138	PARTIAL FIRST FLOOR PLAN - AREA F
A139	PARTIAL FIRST FLOOR PLAN - AREA G & H
A140	PARTIAL SECOND FLOOR PLAN - AREA C
A141	PARTIAL SECOND FLOOR PLAN - AREA D
A142	PARTIAL SECOND FLOOR PLAN - AREA E
A143	PARTIAL SECOND FLOOR PLAN - AREA F
A144	PARTIAL SECOND FLOOR PLAN - AREA G
A145	PARTIAL THIRD FLOOR PLAN - AREA A
A146	PARTIAL THIRD FLOOR PLAN - AREA C
A215	PARTIAL FIRST FLOOR REFLECTED CEILING PLAN - AREA B
A301	EXTERIOR ELEVATIONS
A302	EXTERIOR ELEVATIONS
A404	ENLARGED DEMOLITION FLOOR PLANS
A405	ENLARGED TOILET ROOM PLANS
A406	ENLARGED TOILET ROOM PLAN RCP
A501	ROOF REPLACEMENT DETAILS
A502	ROOF RESTORATION DETAILS
A503	ROOF DETAILS
A612	DOOR/FRAME TYPES AND DOOR SCHEDULE
A613	WINDOW ELEVATIONS
A614	WINDOW DETAILS

1

1

MECHANICAL

M000	MECHANICAL NOTES, LEGENDS, AND DETAILS
M001	BASEMENT DEMOLITION PLAN - AREA B, D, & E
M002	BASEMENT DEMOLITION PLAN - AREA G & H
M003	FIRST FLOOR DEMOLITION PLAN
M004	SECOND FLOOR DEMOLITION PLAN
M005	THIRD FLOOR DEMOLITION PLAN
M006	PENTHOUSE 1 AND 2 DEMOLITION PLAN
M007	ENLARGED DEMOLITION PLANS
M101	BASEMENT NEW WORK PLAN - AREA B, D, & E
M102	BASEMENT NEW WORK PLAN - AREA G & H
M103	FIRST FLOOR NEW WORK PLAN
M104	SECOND FLOOR NEW WORK PLAN
M105	THIRD FLOOR NEW WORK PLAN
M106	PENTHOUSE 1 AND 2 NEW WORK PLAN
M401	MECHANICAL ENLARGED PLANS
M501	CHILLED WATER PLANT SCHEMATIC - DEMOLITION
M502	CHILLED WATER PLANT SCHEMATIC - NEW WORK
M601	MECHANICAL DETAILS
M602	MECHANICAL DETAILS
M701	MECHANICAL SCHEDULES
M901	CONTROLS SCHEMATICS - CHILLER PLANT
M902	CONTROLS SCHEMATICS - AHU-1-6, AHU-1E5, AHU-5-31

PLUMBING

P000	PLUMBING NOTES, LEGENDS, AND SCHEDULES
P401	ENLARGED DEMOLITION PLANS
P402	ENLARGED NEW PLANS

1

ELECTRICAL

E000	ELECTRICAL NOTES, SYMBOLS, & ABBREVIATIONS
E001	ELECTRICAL SITE PLAN DEMO
E002	ELECTRICAL SITE PLAN
E012	ROOF ELECTRICAL DEMOLITION PLAN - LIGHTNING PROTECTION AREA D, E, F, G, & H
E013	ROOF SPECIAL SYSTEMS PLAN - AREAS D, E, F, G, & H
E101	MECHANICAL ROOM ELECTRICAL DEMOLITION PLAN
E102	BASEMENT ELECTRICAL DEMOLITION PLAN - AREAS G & H
E103	ROOF AND PENTHOUSE 1 ELECTRICAL DEMOLITION PLAN
E104	PENTHOUSE 3 AND 5 ELECTRICAL DEMOLITION PLAN
E201	MECHANICAL ROOM ELECTRICAL PLAN
E202	FIRST FLOOR ELECTRICAL SPECIAL SYSTEMS PLAN - AREAS A, B, C, D, & E
E203	FIRST FLOOR ELECTRICAL SPECIAL SYSTEMS PLAN - AREAS F, G, & H
E204	BASEMENT ELECTRICAL PLAN - AREA G/H
E205	ROOF AND PENTHOUSE 1 ELECTRICAL PLAN
E302B	SECOND FLOOR LIGHTING PLAN
E401	ENLARGED ELECTRICAL PLANS 1ST AND 2ND FLOOR

1

LaBella
Powered by partnership.

300 State Street, Suite 201
Rochester, NY 14614
585-454-6110

labellapc.com

RSMP

ROCHESTER CITY SCHOOL DISTRICT

Savin Engineers, P.C. | in association with Gilbane

POPLI DESIGN GROUP
555 Penbrooke Drive • Penfield, NY 14526
main: 585.388.2060 • fax: 585.388.2070

edr

Razak Associates
ARCHITECTURE
ENGINEERING
LAND SURVEYING
INTERIORS
PLANNING
LANDSCAPE
2060 FAIRPORT-NINE MILE POINT ROAD, SUITE 410
PENFIELD, NY 14526
PHONE: 585.377.3550 • FAX: 585.377.3559

It is a violation of New York Education Law Article 145 Sec.7209, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO:	DATE:	DESCRIPTION:
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218

DRAWN BY: CRG

REVIEWED BY: MES

ISSUED FOR: BID DOCUMENTS

DATE: JUNE 26, 2019

DRAWING NAME:

PROJECT INFORMATION

DRAWING NUMBER:

G001

GENERAL STRUCTURAL NOTES

GENERAL

G1 ALL CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF ALL BUILDING CODES, ORDINANCES, AND REGULATIONS, THE NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE, THE NATIONAL ELECTRIC CODE (NEC), INCLUDING BUT NOT LIMITED TO THE STANDARDS AND SPECIFICATIONS OF THE AMERICAN CONCRETE INSTITUTE (ACI), AMERICANS WITH DISABILITIES ACT (ADA), AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE), AMERICAN WELDING SOCIETY (AWS), AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM), SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION (SMACNA), AND NATIONAL ROOFING CONTRACTOR'S ASSOCIATION (NRCA). IN CASE OF CONFLICT THE MOST STRINGENT SHALL GOVERN.

G2 TEMPORARY FACILITIES AND CONTROLS, INCLUDING TEMPORARY UTILITIES, SUPPORT FACILITIES, SECURITY AND PROTECTION FACILITIES SHALL BE PROVIDED AS REQUIRED FOR THE PROJECT TO PROGRESS IN A LOGICAL AND SAFE MANNER. MAINTAIN TEMPORARY FACILITIES AND CONTROLS UNTIL FACILITIES ARE NO LONGER NEEDED OR ARE REPLACED BY AUTHORIZED USE OF COMPLETED PERMANENT FACILITIES. COORDINATE THE REMOVAL OF TEMPORARY FACILITIES WITH THE OWNER'S REPRESENTATIVE.

G3 SCHEDULE AND COORDINATE ALL CONSTRUCTION ACTIVITIES SO THAT WORK IS COMPLETED IN A TIMELY FASHION AND FINISHED ON OR BEFORE THE PROJECT COMPLETION DATE SET BY THE CONTRACT.

G4 PHASE AND PERFORM THE WORK AS REQUIRED TO MAINTAIN OPERATION OF THE FACILITY. COORDINATE ALL REQUIRED CLOSURES WITH THE OWNER'S REPRESENTATIVE. PROVIDE AND MAINTAIN ADEQUATE PROTECTION OF VEHICULAR AND PEDESTRIAN TRAFFIC AT ALL TIMES.

G5 FIELD VERIFY ALL DIMENSIONS AND EXISTING SURFACE AND SUBSURFACE CONDITIONS, FEATURES, UTILITIES, AND ELEVATIONS AT THE SITE PRIOR TO FABRICATION OF ANY COMPONENT OR SYSTEM AND COMMENCING CONSTRUCTION. PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES, QUESTIONS OF INTENT OR CLARITY IN THE DOCUMENTS.

G6 DO NOT SCALE THE DRAWINGS. NOTIFY THE OWNER'S REPRESENTATIVE IF ADDITIONAL DIMENSIONING IS REQUIRED. UNLESS INDICATED OTHERWISE, DIMENSIONS ARE ACTUAL.

G7 ALL DIMENSIONS ARE TAKEN FROM THE FINISHED/EXTERIOR FACE OF CONSTRUCTION UNLESS NOTED OTHERWISE.

G8 PROVIDE PRODUCTS AND MATERIALS INDICATED GRAPHICALLY AND NOTED. SUBMIT DOCUMENTATION (4 COPIES) THAT ALL PROPOSED PRODUCTS AND MATERIALS CONFORM TO THE SPECIFIED REQUIREMENTS. THIS INCLUDES BUT IS NOT LIMITED TO MANUFACTURER'S PRODUCT DATA, COLOR CHARTS, AND ACTUAL SAMPLES FOR VERIFICATION BY THE OWNER'S REPRESENTATIVE. NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES IN IDENTIFICATION OF REQUIRED PRODUCTS AND MATERIALS.

G9 WORK SHALL BE EXECUTED BY PERSONS EXPERIENCED IN THE TRADE THEY ARE PERFORMING. PRODUCTS SHALL BE INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INSTRUCTIONS, SPECIFICATIONS, AND ACCEPTABLE TRADE INDUSTRY STANDARDS.

G10 INSTALL ALL MATERIALS ACCORDING TO THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDATIONS, AND TO ACCEPTABLE PROFESSIONAL TRADE INDUSTRY STANDARDS FOR FIRST CLASS WORK OF SIMILAR NATURE AND CHARACTER.

G11 CONTINUOUSLY MAINTAIN THE WORK AREA IN A CLEAN AND SAFE CONDITION. WORK AREAS SHALL BE MADE WATERTIGHT AT THE END OF EACH WORK DAY AND AS NECESSARY IN THE EVENT OF RAIN.

G12 PROTECT EXISTING FINISHES, EQUIPMENT, ETC. FROM DAMAGE DURING THE WORK. REPAIR EXISTING CONSTRUCTION AND FINISHES DISTURBED BY CONSTRUCTION ACTIVITY TO MATCH EXISTING ADJACENT CONDITIONS.

G13 FIRE-SEAL PENETRATIONS THROUGH ALL VERTICAL AND HORIZONTAL ASSEMBLIES, INCLUDING BUT NOT LIMITED TO WALLS, FLOORS, AND ROOFS IN ACCORDANCE WITH THE PROVISIONS OF THE NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE. RESTORE DAMAGED ASSEMBLIES AND ELEMENTS AT ALL PENETRATIONS AND OPENINGS TO MATCH EXISTING CONDITIONS. MAINTAIN THE FIRE RATING OF ALL EXISTING CONSTRUCTION. ACCEPTABLE PRODUCTS INCLUDE THOSE MANUFACTURED BY TREMCO, DOW CORNING, HILTI, OR 3M.

G14 EXERCISE CAUTION WHEN WORKING IN THE VICINITY OF EXISTING ELECTRICAL AND COMMUNICATION CABLES AND FIRE-SUPPRESSION SYSTEMS.

CONCRETE REPAIR

CR1 REPAIR QUANTITIES INDICATED ON THE DRAWINGS ARE ESTIMATED; ACTUAL QUANTITIES MAY VARY. PERFORM A PRE-CONSTRUCTION SURVEY WITH THE OWNER'S REPRESENTATIVE TO VERIFY LOCATION, TYPE, AND EXTENT OF DETERIORATION AND REQUIRED REPAIRS.

CR2 REPAIRS INDICATED ON THE DRAWINGS ARE SUBJECT TO MODIFICATION AS DETERMINED BY THE PRE-CONSTRUCTION SURVEY, CONDITIONS THAT MAY BE DISCOVERED AS THE WORK PROGRESSES, AND AS DETERMINED BY THE OWNER'S REPRESENTATIVE.

CR3 MODIFICATIONS TO AND/OR THE USE OF ALTERNATE REPAIR MATERIALS AND/OR PROCEDURES MAY BE PERMITTED SUBJECT TO APPROVAL BY THE OWNER'S REPRESENTATIVE.

CR4 PRIOR TO COMMENCING CONCRETE REPAIRS, PREPARE AND SUBMIT COORDINATION DRAWINGS THAT IDENTIFY ALL PROPOSED CONCRETE REPAIRS INCLUDING LOCATION, TYPE, AND QUANTITIES TO THE OWNER'S REPRESENTATIVE FOR REVIEW.

CR5 MAINTAIN A SET OF WORKING DRAWINGS THROUGHOUT THE COURSE OF THE PROJECT THAT DOCUMENT ALL COMPLETED REPAIRS AND MODIFICATIONS TO THE CONSTRUCTION DRAWINGS. PREPARE AND SUBMIT FINAL "AS-BUILT" RECORD DRAWINGS TO THE OWNER'S REPRESENTATIVE.

CR6 ALL CONCRETE REPAIRS SHALL BE PERFORMED IN A NEAT MANNER IN ACCORDANCE WITH ACI, ASTM, ICRI, AND PROFESSIONAL TRADE INDUSTRY STANDARDS FOR FIRST CLASS WORK OF SIMILAR NATURE AND CHARACTER.

CR7 REPAIR AREAS SHALL BE NEATLY CUT IN SQUARE OR RECTANGULAR SHAPES AROUND THE PERIMETER USING "PLUNGE-TYPE" SAWCUTS.

CR8 CONCRETE REMOVALS SHALL EXTEND A MINIMUM OF 2" BEYOND THE LIMITS OF OBSERVED CONCRETE DETERIORATION, AND 1" BEYOND EXISTING REINFORCING STEEL, INTO STABLE SUBSTRATE FREE FROM SPALLS, LOOSE AND DELETERIOUS MATERIALS.

CR9 PROTECT EXISTING EMBEDDED REINFORCING STEEL. REPAIR OR REPLACE ALL REINFORCING STEEL DAMAGED DURING CONSTRUCTION TO MAINTAIN THE ORIGINAL DESIGN STRENGTH/CAPACITY.

CR10 PROVIDE ADDITIONAL REINFORCING STEEL MATCHING THE SIZE, TYPE, SPACING OF EXISTING REINFORCEMENT WHERE EXISTING REINFORCING STEEL IS DAMAGED OR MISSING. BARS SHALL BE OF SUFFICIENT LENGTH TO PROVIDE CONTACT LAP SPLICES NO LESS THAN 40 BAR DIAMETERS AT EACH END.

CR11 PROVIDE ADDITIONAL REINFORCING STEEL MATCHING THE SIZE, TYPE, SPACING OF EXISTING REINFORCEMENT WHERE CORROSION OF EXISTING REINFORCING STEEL HAS RESULTED IN SECTION LOSS GREATER THAN OR EQUAL TO 25-PERCENT OF THE ORIGINAL BAR. BARS SHALL BE OF SUFFICIENT LENGTH TO PROVIDE CONTACT LAP SPLICES NO LESS THAN 40 BAR DIAMETERS AT EACH END.

CR12 CONCRETE REPAIR MATERIALS SHALL BE DELIVERED, STORED, MIXED, APPLIED, FINISHED, AND CURED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDATIONS. PROVIDE ALL ACCESSORY PRODUCTS AND MATERIALS RECOMMENDED BY THE MANUFACTURER FOR A COMPLETE REPAIR.

CR13 DESIGN, FABRICATE, AND INSTALL ALL FORMWORK, ACCESS PORTS, BRACING AND TEMPORARY SHORING AS REQUIRED TO SUPPORT AND COMPLETE THE REPAIRS. INCLUDE PROVISIONS TO ACCOMMODATE PROPOSED REPAIR PROCEDURES AND METHODS, WET WEIGHT OF REPAIR MATERIALS, SUPPORTING FRAMEWORK, EXISTING CONSTRUCTION, WORKER ACCESS AND SUPPORT, AND OTHER REQUIREMENTS.

CR14 WHERE TEMPORARY SHORING IS REQUIRED TO PERFORM THE WORK, PREPARE AND SUBMIT DETAILED SHORING DESIGN CALCULATIONS AND DRAWINGS TO THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCING WORK. DOCUMENTS SHALL BEAR THE SEAL AND SIGNATURE OF THE NEW YORK STATE LICENSED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

MISCELLANEOUS

M1 CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB. REPORT DISCREPANCIES TO THE ARCHITECT IMMEDIATELY. VERIFICATION OF EXISTING DIMENSIONS AND CONDITIONS SHALL BE DONE PRIOR TO THE PREPARATION OF SHOP DRAWINGS.

M2 REFER TO THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR VERIFICATION OF LOCATIONS AND DIMENSIONS OF CHASES, INSERTS, OPENINGS, SLEEVES, WASHES, REVEALS, DEPRESSIONS AND OTHER PROJECT REQUIREMENTS.

M3 TYPICAL DETAILS SHALL APPLY TO ALL DRAWINGS AND SHALL BE USED EXCEPT WHERE OTHERWISE SHOWN OR NOTED.

M4 WORK SHALL CONFORM TO THE LATEST EDITIONS OF THE CODE OF NEW YORK STATE, THE AISC CODE, THE ACI BUILDING CODE, THE AMERICAN WELDING SOCIETY CODE AND ALL APPLICABLE ASTM STANDARDS. IN CASES OF CONFLICT, THE MOST STRINGENT SHALL GOVERN.

M5 REPRODUCTION OF ARCHITECT'S DRAWINGS SHALL NOT BE USED AS SHOP DRAWINGS OR ERECTION DRAWINGS.

M6 THIS PROJECT REQUIRES STRUCTURAL TESTS AND SPECIAL INSPECTIONS IN ACCORDANCE WITH THE 2017 UNIFORM CODE SUPPLEMENT OF NEW YORK STATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE STATEMENT OF SPECIAL INSPECTIONS, SUBMIT ALL REQUIRED DOCUMENTATION, AND ALLOW THE OWNER'S TESTING AND INSPECTION AGENCY ACCESS TO PERFORM ALL REQUIRED TESTS AND INSPECTIONS. AS PART OF THIS PROGRAM, THE CONTRACTOR SHALL ALSO SUBMIT A COPY OF THEIR QUALITY CONTROL PROCEDURES AND CONTACT INFORMATION FOR ALL PERSONNEL RESPONSIBLE FOR EXECUTION OF THE SAME.

STRUCTURAL STEEL

S1 STRUCTURAL STEEL SHALL BE NEW STEEL CONFORMING TO THE FOLLOWING REQUIREMENTS:

A. W-SHAPES	ASTM A992
B. CHANNELS	ASTM A36
C. ANGLES	ASTM A36
D. MISC. SHAPES, PLATES, & BARS	ASTM A36

S2 HIGH STRENGTH BOLTS, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A325 OR A490 (3/4" MINIMUM DIAMETER).

S3 ALL WELD MATERIAL SHALL BE 70 KSI.

S4 WELDING WORK SHALL BE PERFORMED BY CERTIFIED WELDERS, SUBMIT DOCUMENTATION.

S5 BEAM-TO-BEAM AND BEAM-TO-COLUMN CONNECTIONS SHALL BE SIMPLE SHEAR CONNECTIONS CAPABLE OF END ROTATIONS PER AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL BUILDINGS" SECTION J1.2 - SIMPLE CONNECTIONS UNLESS NOTED OTHERWISE. CONNECTIONS SHALL UTILIZE HIGH STRENGTH BOLTS IN "SNUG-TIGHT" BEARING CONNECTIONS UNLESS OTHERWISE NOTED, WITH THE THREADS EXCLUDED FROM THE SHEAR PLANE. DESIGN ALL CONNECTIONS FOR THE FOLLOWING MINIMUM REACTIONS, UNLESS NOTED OTHERWISE:

W27 - 95 KIPS	W18 - 60 KIPS	W12 - 30 KIPS
W24 - 85 KIPS	W16 - 45 KIPS	W10 - 15 KIPS
W21 - 75 KIPS	W14 - 45 KIPS	W8 - 12 KIPS

S6 THE MINIMUM SIZE OF FILLET WELDS SHALL BE AS REQUIRED BY THE AISC SPECIFICATION SECTION J2 - WELDS, BUT SHALL NOT BE LESS THAN ¼" UNLESS SPECIFICALLY NOTED ON THE DRAWINGS.

S7 CONNECTION TO THE EXISTING STRUCTURE SHALL BE AS DETAILED ON THE DRAWINGS OR AS APPROVED BY THE ARCHITECT. THE CONTRACTOR SHALL MAKE ALL NECESSARY FIELD MEASUREMENTS OF, COORDINATE DETAILS WITH AND FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO THE PREPARATION OF SHOP DRAWINGS.

S8 TEMPORARY ERECTION BRACING SHALL BE PROVIDED AS REQUIRED TO HOLD STRUCTURAL STEEL SECURELY IN POSITION. IT SHALL NOT BE REMOVED UNTIL PERMANENT BRACING HAS BEEN INSTALLED. THE BUILDING SHALL BE TRUE AND PLUMB BEFORE CONNECTIONS MAY BE FINALLY BOLTED OR WELDED.

S9 NOTE SPECIFICATION REQUIREMENTS FOR SPECIAL INSPECTION OF STRUCTURAL STEEL WORK.

S10 WHERE NO CAMBER IS INDICATED, BEAMS SHALL BE FABRICATED WITH NATURAL CAMBER UPWARD.

STRUCTURAL DESIGN LOADS AND PARAMETERS

IBC SECTION 1603: CONSTRUCTION DOCUMENTS

GOVERNING BUILDING CODE	2015 INTERNATIONAL BUILDING CODE WITH 2017 NEW YORK STATE SUPPLEMENT
BUILDING OCCUPANCY CATEGORY	III
DESIGN SOIL BEARING CAPACITY	8000 PSF (ROCK - BASED ON ORIGINAL CONSTRUCTION DRAWINGS)
ROOF LIVE LOAD	
ROOF CONSTRUCTION LOAD	20 PSF
SNOW LOAD	
SNOW LOAD IMPORTANCE FACTOR, I_s	1.10
GROUND SNOW LOAD, P_g	40 PSF
FLAT ROOF SNOW LOAD, P_f	30.5 PSF
SNOW EXPOSURE FACTOR, C_e	1.00
THERMAL FACTOR, C_t	1.00
SNOW DRIFTING - MAXIMUM LOADS (PER ASCE 7-10)	
WIND LOAD - MAIN WIND FORCE RESISTING SYSTEM	
BASIC WIND SPEED, V	120 MPH
WIND EXPOSURE	C
VELOCITY PRESSURE EXPOSURE COEFFICIENT, Kz	1.08
TOPOGRAPHIC FACTOR, Kzt	1.00
WIND DIRECTIONALITY FACTOR, Kd	0.85

WIND LOAD - COMPONENTS AND CLADDING

REFER TO COMPONENTS AND CLADDING TABLE BELOW. FOR EFFECTIVE WIND AREAS BETWEEN THOSE SPECIFICALLY LISTED, DESIGN WIND LOADS SHALL BE INTERPOLATED.

NOTES:

1. *POSITIVE AND NEGATIVE NUMBERS INDICATE FORCES/PRESSURES ACTING TOWARD AND AWAY FROM THE SURFACES RESPECTIVELY.*
2. *END ZONES EXTEND FROM BUILDING CORNERS A DISTANCE EQUAL TO 10% OF THE LEAST HORIZONTAL DIMENSION BUT NOT LESS THAN 3 FEET.*

SEISMIC LOAD	
SEISMIC IMPORTANCE FACTOR, I_E	1.25
SITE SOIL CLASSIFICATION	D (ASSUMED)
MAPPED SHORT PERIOD SPECTRAL ACCELERATION, S_S	0.165 g
MAPPED ONE SECOND PERIOD SPECTRAL ACCELERATION, S_1	0.060 g
SHORT PERIOD SPECTRAL DESIGN ACCELERATION, S_{DS}	0.176 g
ONE SECOND PERIOD SPECTRAL DESIGN ACCELERATION, S_{D1}	0.096 g
SEISMIC DESIGN CATEGORY	B
ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING COMPONENTS REQUIRING SEISMIC BRACING	
ARCHITECTURAL COMPONENTS	
IMPORTANCE FACTOR, Ip = 1.0	EXEMPT
IMPORTANCE FACTOR, Ip = 1.5	EXEMPT
M / E / P COMPONENTS	
IMPORTANCE FACTOR, Ip = 1.0	EXEMPT
IMPORTANCE FACTOR, Ip = 1.5	EXEMPT

ABBREVIATIONS

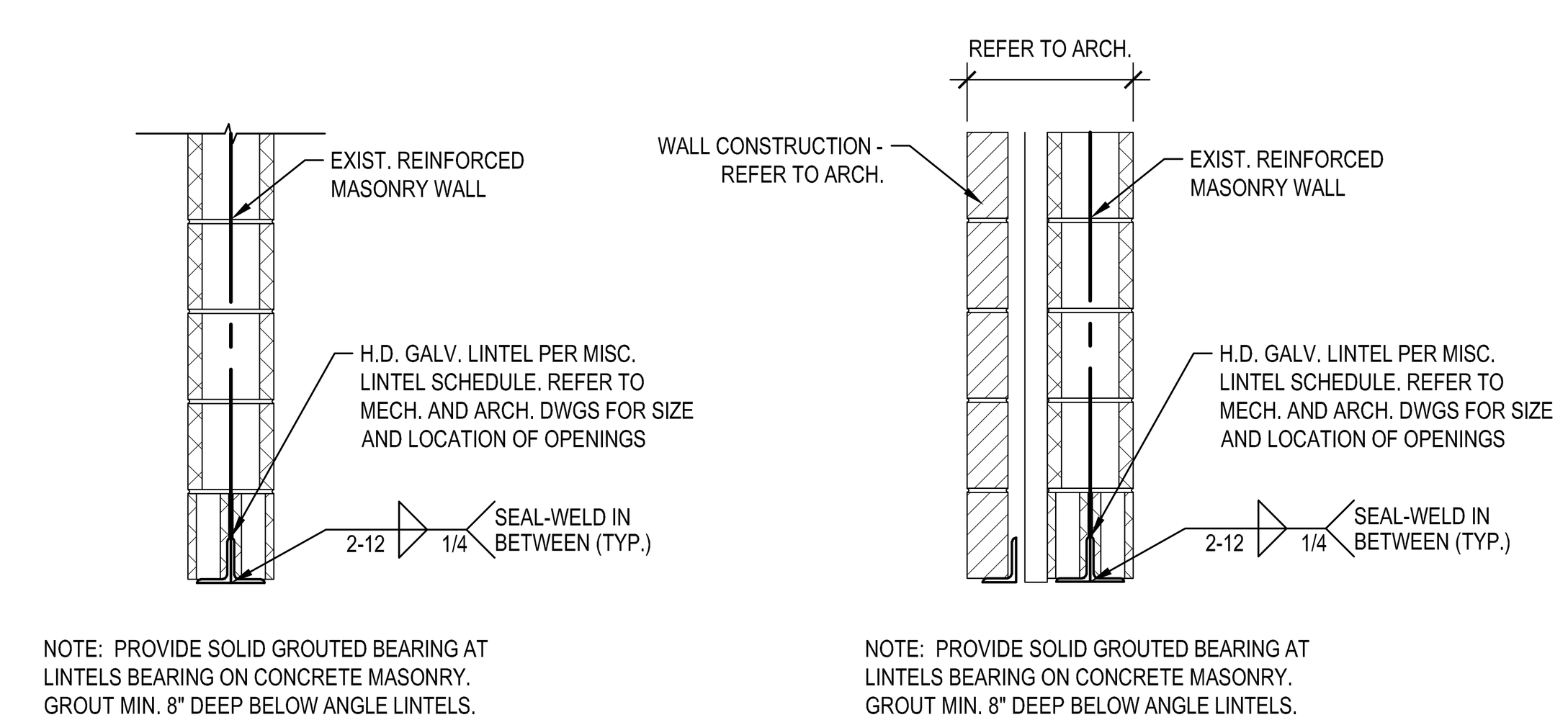
AFF	ABOVE FINISH FLOOR
ARCH.	ARCHITECTURAL
BRG.	BEARING
B/	BOTTOM OF
CLR.	CLEAR
C.J.	CONSTRUCTION JOINT
CONC.	CONCRETE
CONT.	CONTINUOUS
CMU	CONCRETE MASONRY UNIT
DIA.	DIAMETER
DN	DOWN
DWG.	DRAWING
ELEC.	ELECTRICAL
ELEV.	ELEVATION
EQ.	EQUAL
EA.	EACH
E.W.	EACH WAY
E.J.	EXPANSION JOINT
E.J.D.	EXPANSION JOINT W/DOWEL
ELEV.	ELEVATION
EXIST.	EXISTING
EXP.	EXPANSION
FIN. FLR.	FINISH FLOOR
FT.	FOOT
FND.	FOUNDATION
GA	GAUGE
GALV.	GALVANIZED
HORIZ.	HORIZONTAL
H.D.	HOT DIP
I.D.	INSIDE DIAMETER
LF	LINEAR FEET
LLV	LONG LEG VERTICAL
M.E.	MATCH EXISTING
MAX.	MAXIMUM
MECH.	MECHANICAL
MIN.	MINIMUM
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O.D.	OUTSIDE DIAMETER
O.C.	ON CENTER
R	RADIUS
REF.	REFERENCE
REINF.	REINFORCEMENT
S.J.	SAWCUT JOINT
SCH.	SCHEDULE
SIM.	SIMILAR
SF	SQUARE FEET
ST.	STAINLESS
STD.	STANDARD
STL.	STEEL
THK.	THICK
T.J.	TOOLED JOINT
T/	TOP OF
TYP.	TYPICAL
VERT.	VERTICAL
V.I.F.	VERIFY IN FIELD
WT	WEIGHT
WWF	WELDED WIRE FABRIC
W/	WITH
WF	WIDE FLANGE

MISCELLANEOUS LINTEL SCHEDULE

(NON-LOAD BEARING WALLS ONLY)

WALL THICKNESS	MASONRY OPENING UP TO 4'-0	MASONRY OPENING 4'-1 TO 6'-0	MASONRY OPENING 6'-1 TO 8'-0	DETAIL
4"	L 3 1/2 x 3 1/2 x 1/4 OR ST3 x 6.25			┘ OR ┴
6"	2 L'S 3 1/2 x 2 1/2 x5/16	WT 7 x 11	WT 7 x 11	┘└ OR ┴
8"	2 L'S 3 1/2 x 3 1/2 x 1/4	2 L'S 4 x 3 1/2 x 5/16	2 L'S 5 x 3 1/2 x 5/16	┘└
10"	L 5 x 3 1/2 x 1/4 L 4 x 4 x 1/4	L 5 x 3 1/2 x 5/16 L 4 x 4 x 5/16	L 5 x 5 x 5/16 L 4 x 4 x 5/16	─┘└
12"	3 L'S 3 1/2 x 3 1/2 x 5/16	3 L'S 4 x 3 1/2 x 5/16	3 L'S 6 x 3 1/2 x 5/16	┘ ┘└
16"	4 L'S 3 1/2 x 3 1/2 x 5/16	4 L'S 4 x 3 1/2 x 5/16	4 L'S 6 x 3 1/2 x 5/16	┘└┘└
BEARING LENGTH	4"	6"	8"	ALL ANGLES L.L.V.

NOTE:
1. HOT-DIP GALVANIZE ALL PIECES OF ALL LINTELS IN EXTERIOR WALLS.
2. LINTELS FOR OPENINGS LARGER THAN 8" X 8" FOR HVAC, ELECTRICAL AND PLUMBING SHAL BE PROVIDED AND INSTALLED BY THE GENERAL CONTRACTOR. COORDINATE QUANTITY, LOCATION AND SIZES WITH ALL TRADES.
3. LINTELS ON EXTERIOR WALLS SHALL HAVE A MINIMUM THICKNESS OF 5/16".
4. FOR OPENINGS ON MASONRY WALLS NOT MARKED ON PLAN, USE APPROPRIATE SIZE FROM THIS TABLE OR CONTACT ARCHITECT / ENGINEER.



1 / S001 TYPICAL ANGLE LINTEL DETAIL
N.T.S.

LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP — ROCHESTER CITY SCHOOL DISTRICT — SAVIN Savin Engineers, P.C. — in association with Gilbane — PDG POPLI DESIGN GROUP — edr — Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO:	DATE:	DESCRIPTION:
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218

DRAWN BY: ERL

REVIEWED BY: JMF

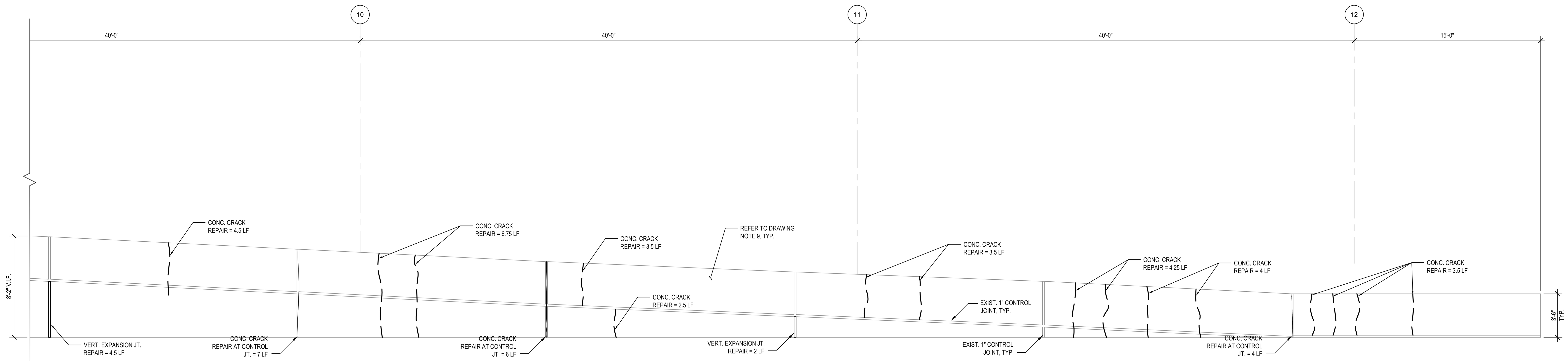
ISSUED FOR: BID DOCUMENTS

DATE: JUNE 26, 2019

DRAWING NAME: **GENERAL STRUCTURAL NOTES & DESIGN CRITERIA**

DRAWING NUMBER: **S001**

Date & Time: 6/24/2019 10:37 AM By: Eric Liddle
Path: P:\Buildings\SC17034 RSMP PH 2B Edison Tech - LaBella\BIM-CAD\Struct\Phase 2D\17034_S001 GENERAL NOTES.dwg

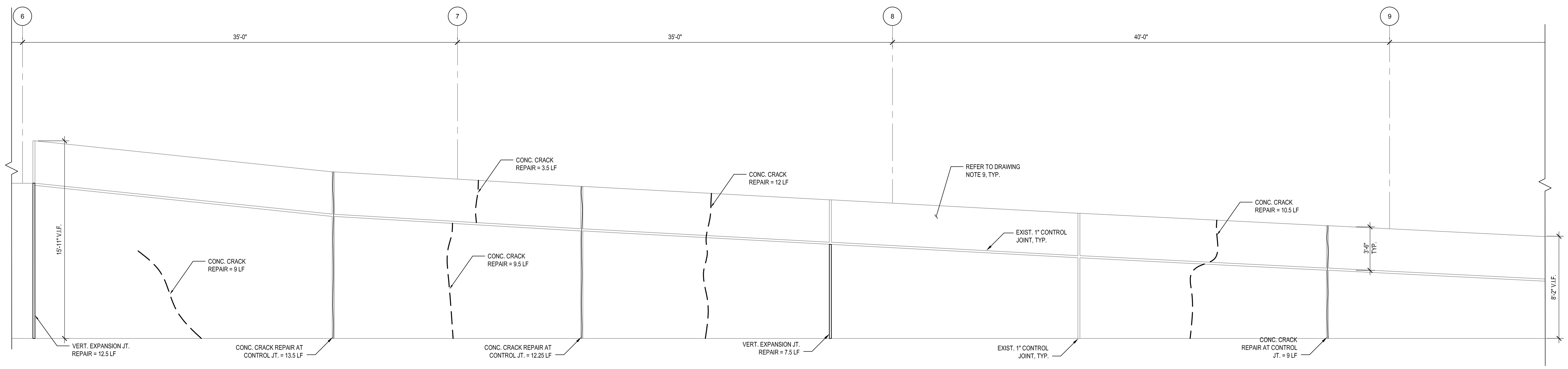


1 / S-101 PARTIAL EAST ELEVATION RETAINING WALL REPAIRS

1/4"=1'-0"

DRAWING NOTES:

1. EXISTING PAVEMENT IS ELEVATION 531.00'± UNLESS NOTED OTHERWISE.
2. REPAIR QUANTITIES SHOWN ARE APPROXIMATE; ACTUAL QUANTITIES MAY VARY. PERFORM A PRE-CONSTRUCTION SURVEY WITH THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE TO VERIFY LOCATION, TYPE, AND EXTENT OF DETERIORATION AND REQUIRED REPAIRS.
3. REPAIRS ARE SUBJECT TO MODIFICATION AS DETERMINED BY THE PRE-CONSTRUCTION SURVEY. CONDITIONS THAT MAY BE DISCOVERED AS THE WORK PROGRESSES, AND AS DETERMINED BY THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE.
4. PREPARE AND SUBMIT COORDINATION DRAWINGS THAT IDENTIFY ALL PROPOSED CONCRETE REPAIRS INCLUDING LOCATION, TYPE, AND QUANTITIES PRIOR TO COMMENCING REPAIR WORK.
5. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS RELATED TO THE INDICATED WORK PRIOR TO THE PREPARATION OF SHOP/COORDINATION DRAWINGS FOR THAT WORK.
6. REFER TO DRAWING S001 FOR GENERAL STRUCTURAL NOTES.
7. REFER TO DRAWING S501 FOR TYPICAL CONCRETE REPAIR DETAILS.
8. REFER TO AND COORDINATE WITH A-, M-, AND E- SERIES DRAWINGS FOR OTHER WORK TO BE PERFORMED.
9. UPON COMPLETION OF REPAIRS, POWER WASH ENTIRETY OF EXISTING CONCRETE RETAINING WALL.



2 / S-101 PARTIAL EAST ELEVATION RETAINING WALL REPAIRS

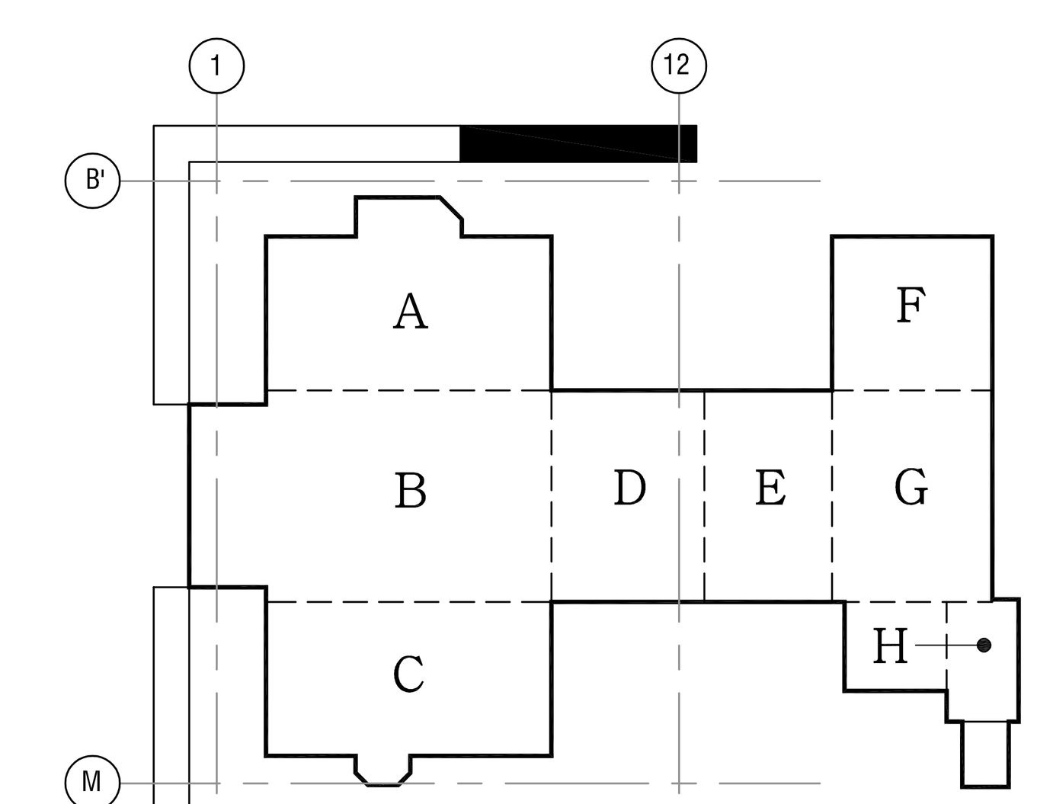
1/4"=1'-0"

DRAWING NOTES:

1. EXISTING PAVEMENT IS ELEVATION 531.00'± UNLESS NOTED OTHERWISE.
2. REPAIR QUANTITIES SHOWN ARE APPROXIMATE; ACTUAL QUANTITIES MAY VARY. PERFORM A PRE-CONSTRUCTION SURVEY WITH THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE TO VERIFY LOCATION, TYPE, AND EXTENT OF DETERIORATION AND REQUIRED REPAIRS.
3. REPAIRS ARE SUBJECT TO MODIFICATION AS DETERMINED BY THE PRE-CONSTRUCTION SURVEY. CONDITIONS THAT MAY BE DISCOVERED AS THE WORK PROGRESSES, AND AS DETERMINED BY THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE.
4. PREPARE AND SUBMIT COORDINATION DRAWINGS THAT IDENTIFY ALL PROPOSED CONCRETE REPAIRS INCLUDING LOCATION, TYPE, AND QUANTITIES PRIOR TO COMMENCING REPAIR WORK.
5. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS RELATED TO THE INDICATED WORK PRIOR TO THE PREPARATION OF SHOP/COORDINATION DRAWINGS FOR THAT WORK.
6. REFER TO DRAWING S001 FOR GENERAL STRUCTURAL NOTES.
7. REFER TO DRAWING S501 FOR TYPICAL CONCRETE REPAIR DETAILS.
8. REFER TO AND COORDINATE WITH A-, M-, AND E- SERIES DRAWINGS FOR OTHER WORK TO BE PERFORMED.
9. UPON COMPLETION OF REPAIRS, POWER WASH ENTIRETY OF EXISTING CONCRETE RETAINING WALL.

RETAINING WALL REPAIR SCHEDULE

REPAIR TYPE	UNIT	ESTIMATED QUANTITY THIS SHEET	ESTIMATED TOTAL PROJECT QUANTITY	DETAIL
CONCRETE EXPANSION JOINT REPAIR	LF	26.5	217.5	4&5/S501
CONCRETE CRACK REPAIR	LF	106	438	2/S501
CONCRETE CRACK REPAIR CONTROL JOINT	LF	51.75	155	2/S501
SPALLED CONCRETE REPAIR	SF	0	143	3/S501



KEY PLAN

N.T.S.

LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP
ROCHESTER CITY SCHOOL DISTRICT
SAVIN Savin Engineers, P.C. in association with Gilbane
PDG POPLI DESIGN GROUP
edr
Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO.	DATE:	DESCRIPTION:
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218

DRAWN BY: ERL

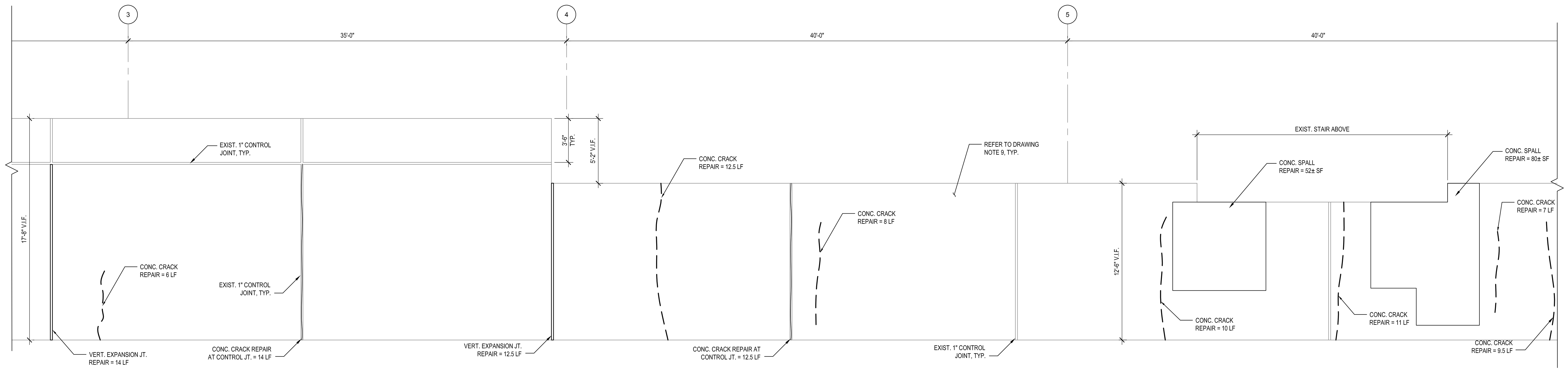
REVIEWED BY: JMF

ISSUED FOR: BID DOCUMENTS

DATE: JUNE 26, 2019

DRAWING NAME: **EAST ELEVATION RETAINING WALL REPAIRS**

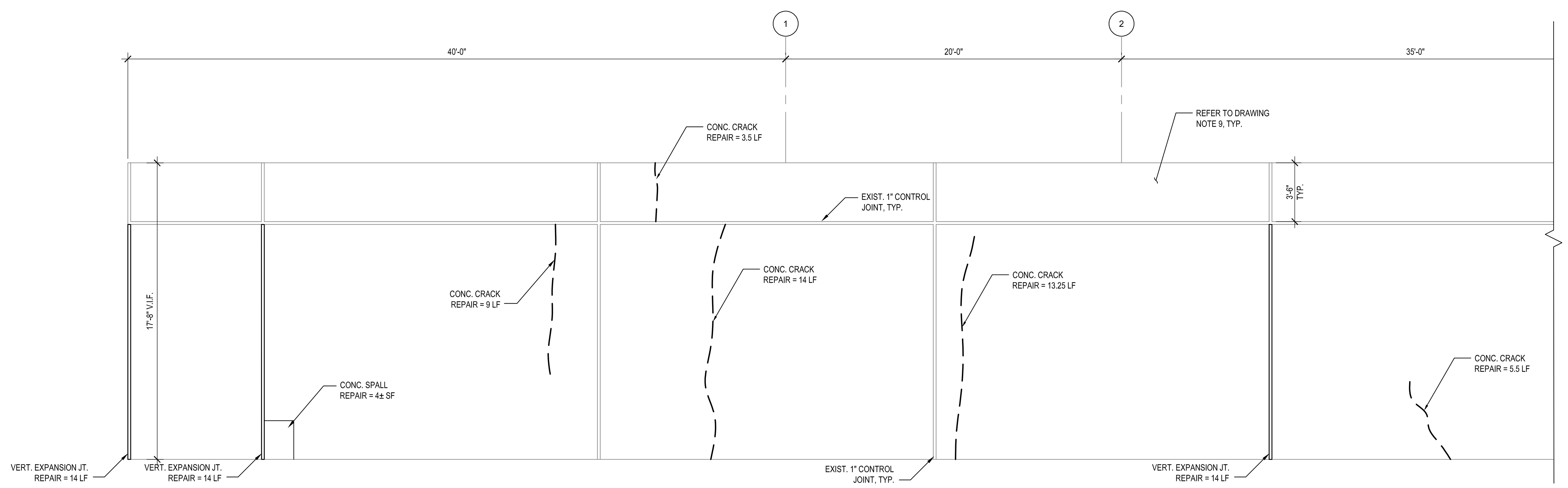
DRAWING NUMBER: **S101**



1 PARTIAL EAST ELEVATION RETAINING WALL REPAIRS
S-102 1/4"=1'-0"

DRAWING NOTES:

1. EXISTING PAVEMENT IS ELEVATION 531.00± UNLESS NOTED OTHERWISE.
2. REPAIR QUANTITIES SHOWN ARE APPROXIMATE; ACTUAL QUANTITIES MAY VARY. PERFORM A PRE-CONSTRUCTION SURVEY WITH THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE TO VERIFY LOCATION, TYPE, AND EXTENT OF DETERIORATION AND REQUIRED REPAIRS.
3. REPAIRS ARE SUBJECT TO MODIFICATION AS DETERMINED BY THE PRE-CONSTRUCTION SURVEY. CONDITIONS THAT MAY BE DISCOVERED AS THE WORK PROGRESSES, AND AS DETERMINED BY THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE.
4. PREPARE AND SUBMIT COORDINATION DRAWINGS THAT IDENTIFY ALL PROPOSED CONCRETE REPAIRS INCLUDING LOCATION, TYPE, AND QUANTITIES PRIOR TO COMMENCING REPAIR WORK.
5. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS RELATED TO THE INDICATED WORK PRIOR TO THE PREPARATION OF SHOP/COORDINATION DRAWINGS FOR THAT WORK.
6. REFER TO DRAWING S001 FOR GENERAL STRUCTURAL NOTES.
7. REFER TO DRAWING S501 FOR TYPICAL CONCRETE REPAIR DETAILS.
8. REFER TO AND COORDINATE WITH A-, M-, AND E- SERIES DRAWINGS FOR OTHER WORK TO BE PERFORMED.
9. UPON COMPLETION OF REPAIRS, POWER WASH ENTIRETY OF EXISTING CONCRETE RETAINING WALL.



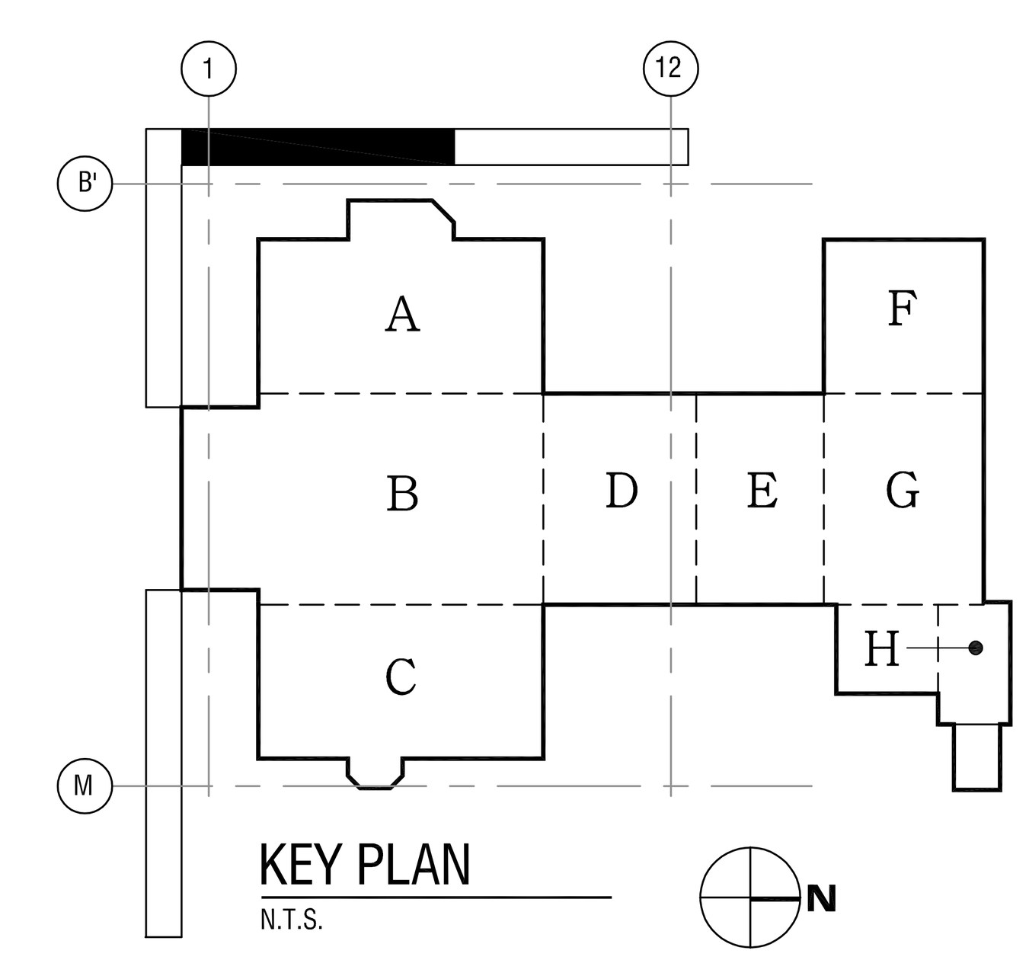
2 PARTIAL EAST ELEVATION RETAINING WALL REPAIRS
S-102 1/4"=1'-0"

DRAWING NOTES:

1. EXISTING PAVEMENT IS ELEVATION 531.00± UNLESS NOTED OTHERWISE.
2. REPAIR QUANTITIES SHOWN ARE APPROXIMATE; ACTUAL QUANTITIES MAY VARY. PERFORM A PRE-CONSTRUCTION SURVEY WITH THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE TO VERIFY LOCATION, TYPE, AND EXTENT OF DETERIORATION AND REQUIRED REPAIRS.
3. REPAIRS ARE SUBJECT TO MODIFICATION AS DETERMINED BY THE PRE-CONSTRUCTION SURVEY. CONDITIONS THAT MAY BE DISCOVERED AS THE WORK PROGRESSES, AND AS DETERMINED BY THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE.
4. PREPARE AND SUBMIT COORDINATION DRAWINGS THAT IDENTIFY ALL PROPOSED CONCRETE REPAIRS INCLUDING LOCATION, TYPE, AND QUANTITIES PRIOR TO COMMENCING REPAIR WORK.
5. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS RELATED TO THE INDICATED WORK PRIOR TO THE PREPARATION OF SHOP/COORDINATION DRAWINGS FOR THAT WORK.
6. REFER TO DRAWING S001 FOR GENERAL STRUCTURAL NOTES.
7. REFER TO DRAWING S501 FOR TYPICAL CONCRETE REPAIR DETAILS.
8. REFER TO AND COORDINATE WITH A-, M-, AND E- SERIES DRAWINGS FOR OTHER WORK TO BE PERFORMED.
9. UPON COMPLETION OF REPAIRS, POWER WASH ENTIRETY OF EXISTING CONCRETE RETAINING WALL.

RETAINING WALL REPAIR SCHEDULE

REPAIR TYPE	UNIT	ESTIMATED QUANTITY THIS SHEET	ESTIMATED TOTAL PROJECT QUANTITY	DETAIL
CONCRETE EXPANSION JOINT REPAIR	LF	68.5	217.5	4&5/S501
CONCRETE CRACK REPAIR	LF	109.25	438	2/S501
CONCRETE CRACK REPAIR CONTROL JOINT	LF	26.5	155	2/S501
SPALLED CONCRETE REPAIR	SF	136	143	3/S501



KEY PLAN
N.T.S.

LaBella Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP
Rochester City School District
Savin Engineers, P.C.
in association with Gilbane
PDG Popli Design Group
edr
Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO:	DATE:	DESCRIPTION:
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218

DRAWN BY: ERL

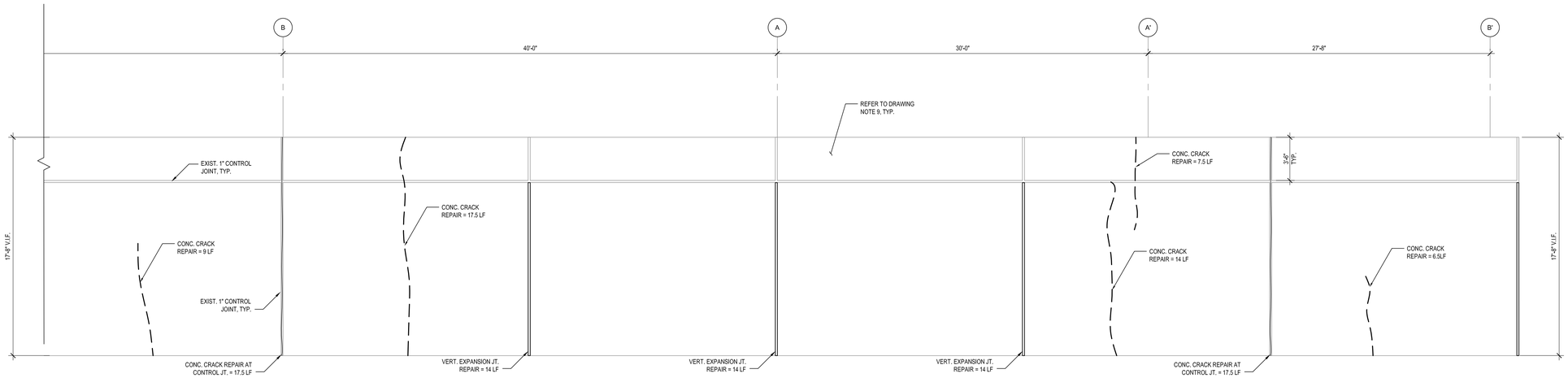
REVIEWED BY: JMF

ISSUED FOR: BID DOCUMENTS

DATE: JUNE 26, 2019

DRAWING NAME: EAST ELEVATION RETAINING WALL REPAIRS

DRAWING NUMBER: S102

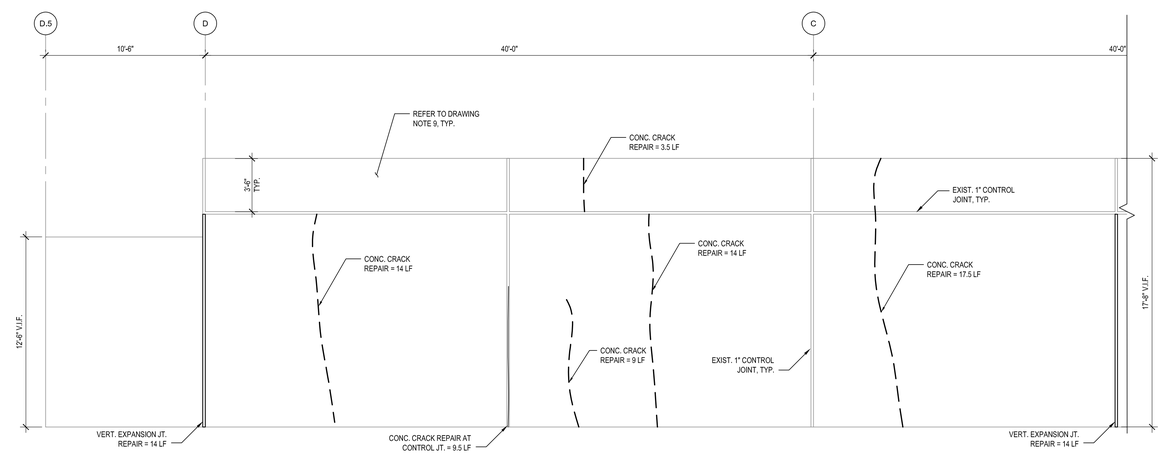


1 S-103 PARTIAL NORTH ELEVATION RETAINING WALL REPAIRS

1/4"=1'-0"

DRAWING NOTES:

1. EXISTING PAVEMENT IS ELEVATION 531.00'± UNLESS NOTED OTHERWISE.
2. REPAIR QUANTITIES SHOWN ARE APPROXIMATE; ACTUAL QUANTITIES MAY VARY. PERFORM A PRE-CONSTRUCTION SURVEY WITH THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE TO VERIFY LOCATION, TYPE, AND EXTENT OF DETERIORATION AND REQUIRED REPAIRS.
3. REPAIRS ARE SUBJECT TO MODIFICATION AS DETERMINED BY THE PRE-CONSTRUCTION SURVEY. CONDITIONS THAT MAY BE DISCOVERED AS THE WORK PROGRESSES, AND AS DETERMINED BY THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE.
4. PREPARE AND SUBMIT COORDINATION DRAWINGS THAT IDENTIFY ALL PROPOSED CONCRETE REPAIRS INCLUDING LOCATION, TYPE, AND QUANTITIES PRIOR TO COMMENCING REPAIR WORK.
5. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS RELATED TO THE INDICATED WORK PRIOR TO THE PREPARATION OF SHOP/COORDINATION DRAWINGS FOR THAT WORK.
6. REFER TO DRAWING S001 FOR GENERAL STRUCTURAL NOTES.
7. REFER TO DRAWING S501 FOR TYPICAL CONCRETE REPAIR DETAILS.
8. REFER TO AND COORDINATE WITH A-, M-, AND E- SERIES DRAWINGS FOR OTHER WORK TO BE PERFORMED.
9. UPON COMPLETION OF REPAIRS, POWER WASH ENTIRETY OF EXISTING CONCRETE RETAINING WALL.



2 S-103 PARTIAL NORTH ELEVATION RETAINING WALL REPAIRS

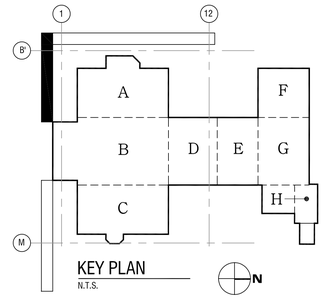
1/4"=1'-0"

DRAWING NOTES:

1. EXISTING PAVEMENT IS ELEVATION 531.00'± UNLESS NOTED OTHERWISE.
2. REPAIR QUANTITIES SHOWN ARE APPROXIMATE; ACTUAL QUANTITIES MAY VARY. PERFORM A PRE-CONSTRUCTION SURVEY WITH THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE TO VERIFY LOCATION, TYPE, AND EXTENT OF DETERIORATION AND REQUIRED REPAIRS.
3. REPAIRS ARE SUBJECT TO MODIFICATION AS DETERMINED BY THE PRE-CONSTRUCTION SURVEY. CONDITIONS THAT MAY BE DISCOVERED AS THE WORK PROGRESSES, AND AS DETERMINED BY THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE.
4. PREPARE AND SUBMIT COORDINATION DRAWINGS THAT IDENTIFY ALL PROPOSED CONCRETE REPAIRS INCLUDING LOCATION, TYPE, AND QUANTITIES PRIOR TO COMMENCING REPAIR WORK.
5. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS RELATED TO THE INDICATED WORK PRIOR TO THE PREPARATION OF SHOP/COORDINATION DRAWINGS FOR THAT WORK.
6. REFER TO DRAWING S001 FOR GENERAL STRUCTURAL NOTES.
7. REFER TO DRAWING S501 FOR TYPICAL CONCRETE REPAIR DETAILS.
8. REFER TO AND COORDINATE WITH A-, M-, AND E- SERIES DRAWINGS FOR OTHER WORK TO BE PERFORMED.
9. UPON COMPLETION OF REPAIRS, POWER WASH ENTIRETY OF EXISTING CONCRETE RETAINING WALL.

RETAINING WALL REPAIR SCHEDULE

REPAIR TYPE	UNIT	ESTIMATED QUANTITY THIS SHEET	ESTIMATED TOTAL PROJECT QUANTITY	DETAIL
CONCRETE EXPANSION JOINT REPAIR	LF	70	217.5	4&5/S501
CONCRETE CRACK REPAIR	LF	112.5	438	2/S501
CONCRETE CRACK REPAIR CONTROL JOINT	LF	44.5	155	2/S501
SPALLED CONCRETE REPAIR	SF	0	143	3/S501



LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP
Rochester City School District
Savin Engineers, P.C. in association with Gilbane
PDG Popli Design Group
edr
Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

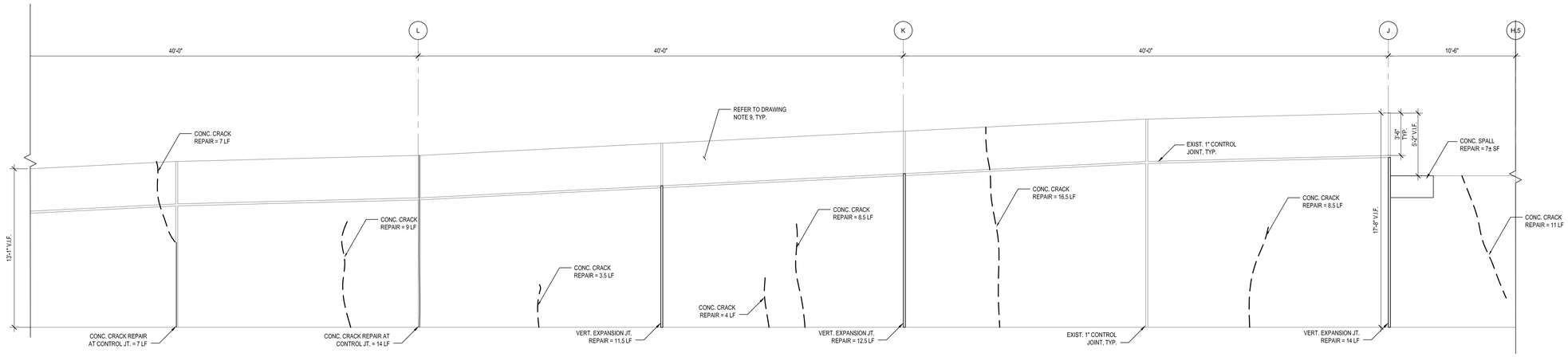
NO:	DATE:	DESCRIPTION:
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218
DRAWN BY: ERL
REVIEWED BY: JMF
ISSUED FOR: BID DOCUMENTS
DATE: JUNE 26, 2019
DRAWING NAME:

NORTH ELEVATION RETAINING WALL REPAIRS

DRAWING NUMBER:

S103

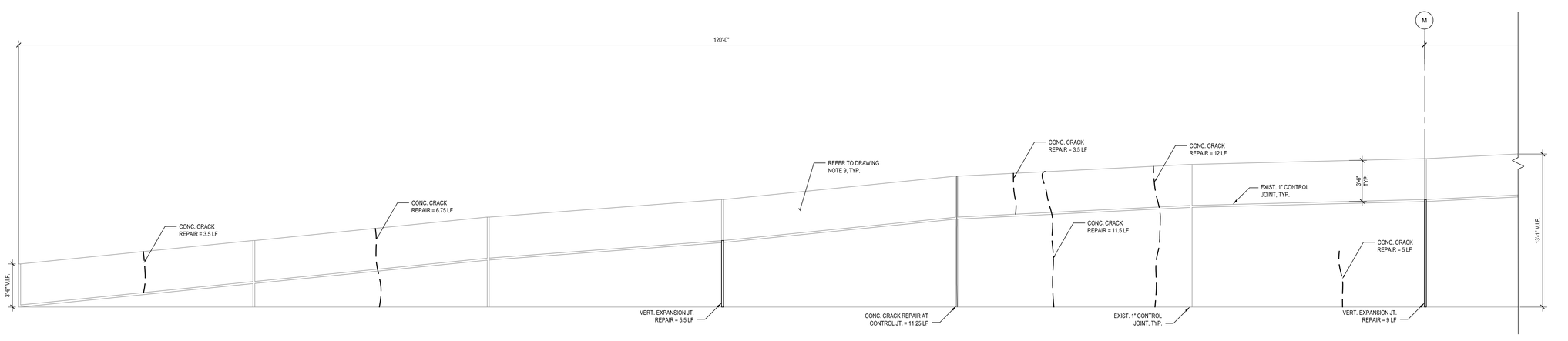


1 S-104 PARTIAL NORTH ELEVATION RETAINING WALL REPAIRS

1/4"=1'-0"

DRAWING NOTES:

1. EXISTING PAVEMENT IS ELEVATION 531.00'± UNLESS NOTED OTHERWISE.
2. REPAIR QUANTITIES SHOWN ARE APPROXIMATE; ACTUAL QUANTITIES MAY VARY. PERFORM A PRE-CONSTRUCTION SURVEY WITH THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE TO VERIFY LOCATION, TYPE, AND EXTENT OF DETERIORATION AND REQUIRED REPAIRS.
3. REPAIRS ARE SUBJECT TO MODIFICATION AS DETERMINED BY THE PRE-CONSTRUCTION SURVEY. CONDITIONS THAT MAY BE DISCOVERED AS THE WORK PROGRESSES, AND AS DETERMINED BY THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE.
4. PREPARE AND SUBMIT COORDINATION DRAWINGS THAT IDENTIFY ALL PROPOSED CONCRETE REPAIRS INCLUDING LOCATION, TYPE, AND QUANTITIES PRIOR TO COMMENCING REPAIR WORK.
5. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS RELATED TO THE INDICATED WORK PRIOR TO THE PREPARATION OF SHOP/COORDINATION DRAWINGS FOR THAT WORK.
6. REFER TO DRAWING S001 FOR GENERAL STRUCTURAL NOTES.
7. REFER TO DRAWING S501 FOR TYPICAL CONCRETE REPAIR DETAILS.
8. REFER TO AND COORDINATE WITH A-, M-, AND E- SERIES DRAWINGS FOR OTHER WORK TO BE PERFORMED.
9. UPON COMPLETION OF REPAIRS, POWER WASH ENTIRETY OF EXISTING CONCRETE RETAINING WALL.



2 S-104 PARTIAL NORTH ELEVATION RETAINING WALL REPAIRS

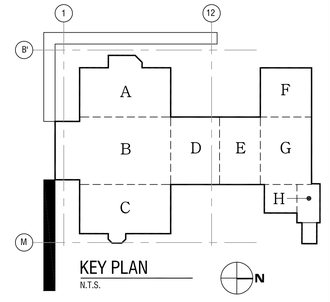
1/4"=1'-0"

DRAWING NOTES:

1. EXISTING PAVEMENT IS ELEVATION 531.00'± UNLESS NOTED OTHERWISE.
2. REPAIR QUANTITIES SHOWN ARE APPROXIMATE; ACTUAL QUANTITIES MAY VARY. PERFORM A PRE-CONSTRUCTION SURVEY WITH THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE TO VERIFY LOCATION, TYPE, AND EXTENT OF DETERIORATION AND REQUIRED REPAIRS.
3. REPAIRS ARE SUBJECT TO MODIFICATION AS DETERMINED BY THE PRE-CONSTRUCTION SURVEY. CONDITIONS THAT MAY BE DISCOVERED AS THE WORK PROGRESSES, AND AS DETERMINED BY THE OWNER AND/OR IT'S DESIGNATED REPRESENTATIVE.
4. PREPARE AND SUBMIT COORDINATION DRAWINGS THAT IDENTIFY ALL PROPOSED CONCRETE REPAIRS INCLUDING LOCATION, TYPE, AND QUANTITIES PRIOR TO COMMENCING REPAIR WORK.
5. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS RELATED TO THE INDICATED WORK PRIOR TO THE PREPARATION OF SHOP/COORDINATION DRAWINGS FOR THAT WORK.
6. REFER TO DRAWING S001 FOR GENERAL STRUCTURAL NOTES.
7. REFER TO DRAWING S501 FOR TYPICAL CONCRETE REPAIR DETAILS.
8. REFER TO AND COORDINATE WITH A-, M-, AND E- SERIES DRAWINGS FOR OTHER WORK TO BE PERFORMED.
9. UPON COMPLETION OF REPAIRS, POWER WASH ENTIRETY OF EXISTING CONCRETE RETAINING WALL.

RETAINING WALL REPAIR SCHEDULE

REPAIR TYPE	UNIT	ESTIMATED QUANTITY THIS SHEET	ESTIMATED TOTAL PROJECT QUANTITY	DETAIL
CONCRETE EXPANSION JOINT REPAIR	LF	52.5	217.5	4&5/S501
CONCRETE CRACK REPAIR	LF	110.25	438	2/S501
CONCRETE CRACK REPAIR CONTROL JOINT	LF	32.25	155	2/S501
SPALLED CONCRETE REPAIR	SF	7	143	3/S501



LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP

Rochester City School District

Savin Engineers, P.C. in association with Gilbane

PDG Popli Design Group

edr

Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO:	DATE:	DESCRIPTION:
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218

DRAWN BY: ERL

REVIEWED BY: JMF

ISSUED FOR: BID DOCUMENTS

DATE: JUNE 26, 2019

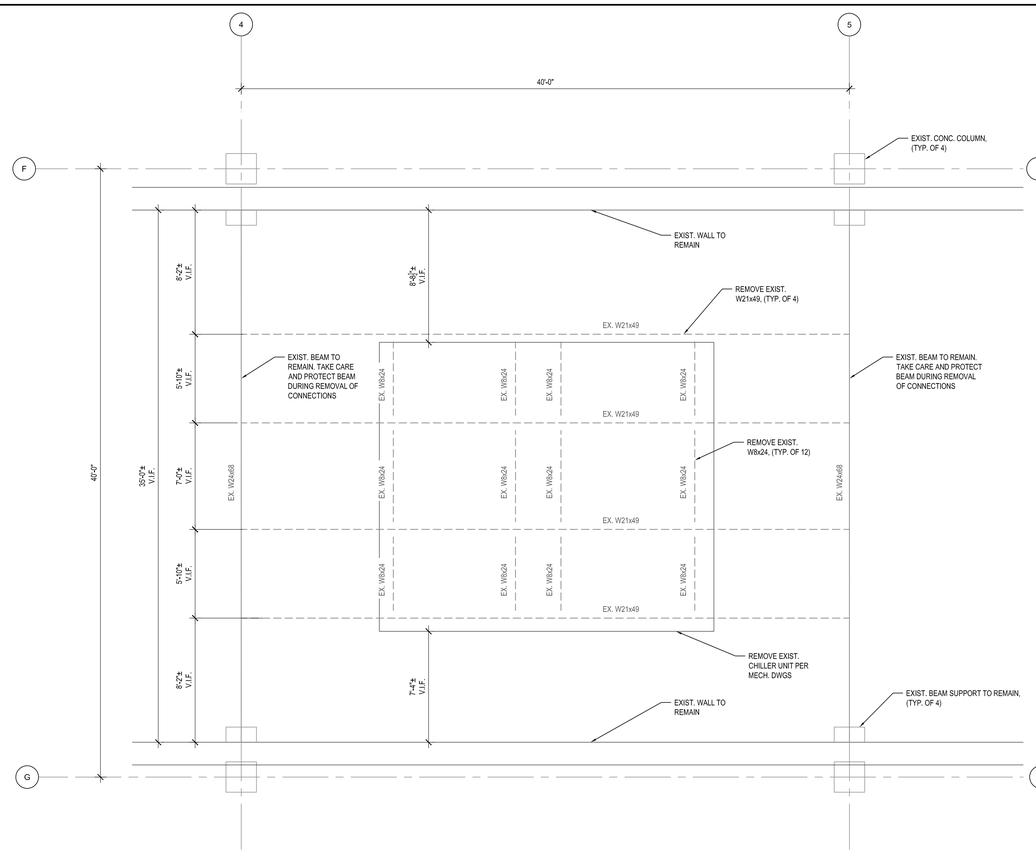
DRAWING NAME:

NORTH ELEVATION RETAINING WALL REPAIRS

DRAWING NUMBER:

S104

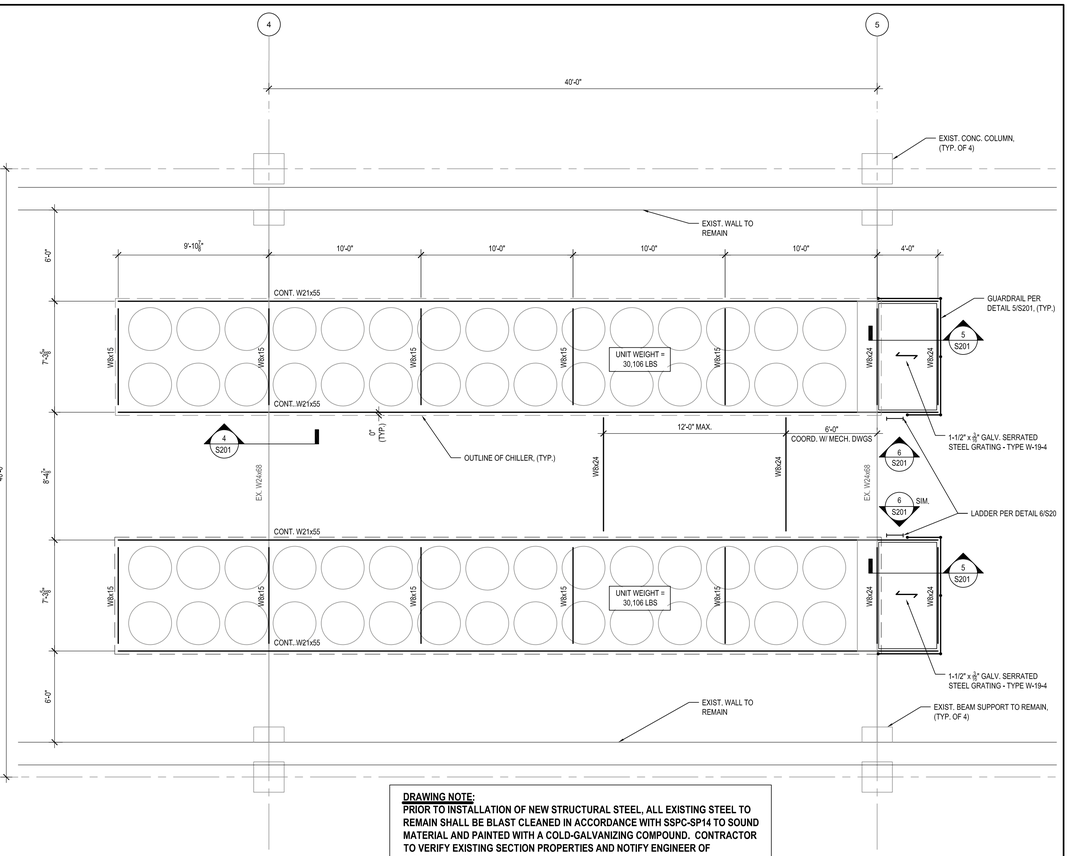
Date & Time: 6/24/2019 11:00 AM By: Eric Liddle
Path: P:\Buildings\SC\17034 RSMP Ph 2B Edison Tech - LaBella\BIM-CAD\Struct\Phase 2\D\17034_S-101-104 RETAINING WALL REPAIR PLANS.dwg



1 EXIST. CHILLER TOWER SUPPORT DEMOLITION PLAN
S201 1/4"=1'-0"

FRAMING NOTES:

1. TYPICAL TOP OF STEEL + 53'-0⅜"± (V.I.F.) ABOVE LEVEL 1 FLOOR ELEVATION 0'-0" (+531'-0") UNLESS NOTED OTHERWISE.
2. TAKE CARE AND PROTECT EXISTING STEEL TO REMAIN DURING REMOVAL OF CONNECTIONS.
3. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS RELATED TO THE INDICATED WORK PRIOR TO THE PREPARATION OF COORDINATION SHOP DRAWINGS FOR THAT WORK.
4. REFER TO MECHANICAL DRAWINGS FOR EXISTING UNIT SIZE, LOCATION, AND OTHER MISCELLANEOUS REQUIREMENTS.
5. REFER TO DRAWING S001 FOR GENERAL STRUCTURAL NOTES AND DRAWING S201 FOR TYPICAL STRUCTURAL DETAILS.



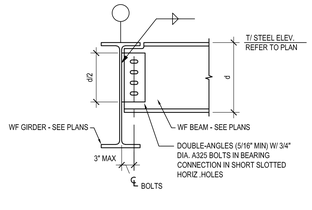
2 CHILLER SUPPORT FRAMING PLAN
S201 1/4"=1'-0"

FRAMING NOTES:

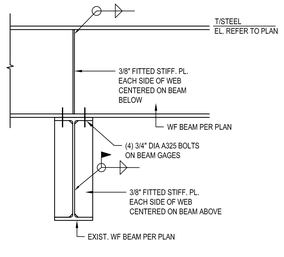
1. TYPICAL TOP OF STEEL + 53'-0⅜"± (V.I.F.) ABOVE LEVEL 1 FLOOR ELEVATION 0'-0" (+531'-0") UNLESS NOTED OTHERWISE.
2. ALL EXTERIOR STEEL FRAMING AND CONNECTIONS SHALL BE HOT DIPPED GALVANIZED AND PAINTED WITH A HIGH PERFORMANCE COATING SYSTEM.
3. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS RELATED TO THE INDICATED WORK PRIOR TO THE PREPARATION OF SHOP/COORDINATION DRAWINGS FOR THAT WORK.
4. REFER TO MECHANICAL DRAWINGS FOR UNIT SIZE, LOCATION, AND OTHER MISCELLANEOUS REQUIREMENTS. CONFIRM FRAMING DIMENSIONS, REQUIRED OPENINGS AND ACCESS SPACE WITH APPROVED MECHANICAL UNIT MANUFACTURER PRIOR TO THE PREPARATION OF SHOP DRAWINGS.
5. REFER TO DRAWING S001 FOR GENERAL STRUCTURAL NOTES AND DRAWING S201 FOR TYPICAL STRUCTURAL DETAILS.

DRAWING NOTE:
PRIOR TO INSTALLATION OF NEW STRUCTURAL STEEL, ALL EXISTING STEEL TO REMAIN SHALL BE BLAST CLEANED IN ACCORDANCE WITH SSPC-SP14 TO SOUND MATERIAL AND PAINTED WITH A COLD-GALVANIZING COMPOUND. CONTRACTOR TO VERIFY EXISTING SECTION PROPERTIES AND NOTIFY ENGINEER OF DISCREPANCIES.

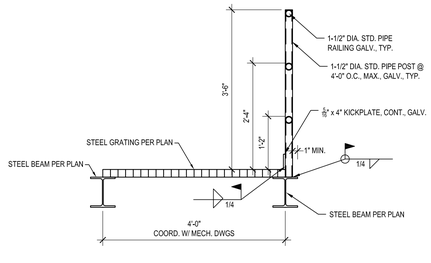
CONTRACTOR SHALL HAVE A LICENSED SURVEYOR VERIFY EXISTING ELEVATIONS AND STRUCTURE HEIGHTS BEFORE ORDERING, FABRICATING OR DETAILING STRUCTURAL FRAMING, OR COMMENCING CONSTRUCTION. CONFIRMATION OF ELEVATIONS SHALL TAKE PLACE AT ALL LOCATIONS WHERE NEW FRAMING MEETS EXISTING CONSTRUCTION.



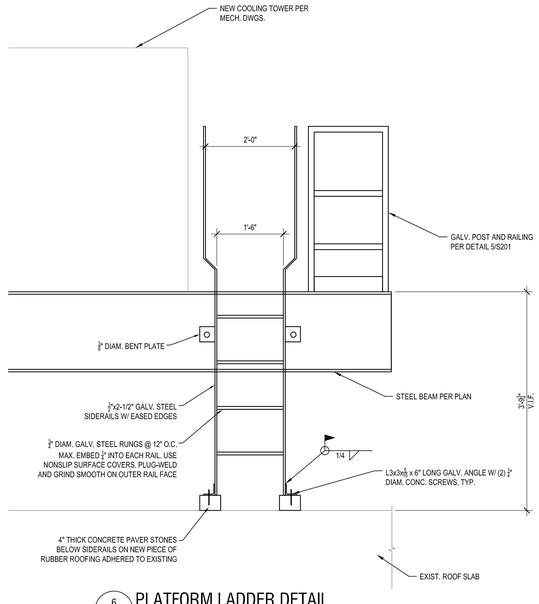
3 TYP. FRAMED BEAM CONN.
S201 3/4" = 1'-0"



4 TYP. BEAM ON BEAM CONN.
S201 3/4" = 1'-0"



5 RAILING CONNECTION DETAIL
S201 3/4" = 1'-0"



6 PLATFORM LADDER DETAIL
S201 3/4" = 1'-0"

LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP
Rochester City School District
Savin Engineers, P.C. | in association with Gilbane
IPD3 Popli Design Group
edr
Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM
1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL
655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS		
NO:	DATE:	DESCRIPTION:
1	6.28.19	BID ADDENDUM 1

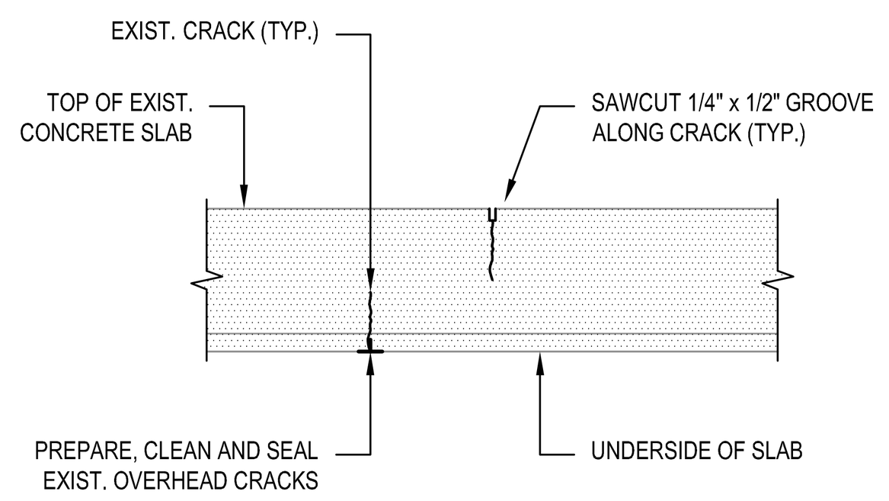
PROJECT NUMBER: 2170218
DRAWN BY: ERL
REVIEWED BY: JMF
ISSUED FOR: BID DOCUMENTS
DATE: JUNE 26, 2019
DRAWING NAME:

CHILLER SUPPORT DEMOLITION AND FRAMING PLANS

DRAWING NUMBER:

S201

Date & Time: 6/26/2019 9:56 AM By: Eric Little
Path: P:\Buildings\SC17034 RSMP PH 2B Edison Tech - LaBella\BIM-CAD\Struct\Phase 2D\17034_S-201 CHILLER SUPPORT PLAN.dwg

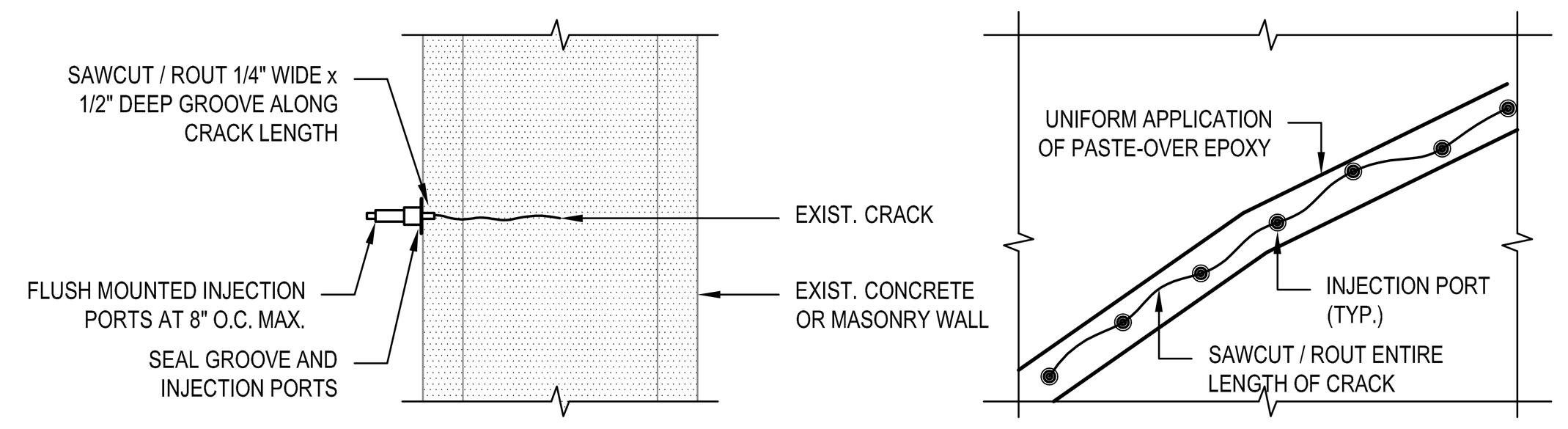


HORIZONTAL CRACK REPAIR PROCEDURE:

1. WIDEN EXISTING CRACK(S) BY SAWCUTTING OR GRINDING TO INDICATED DIMENSIONS.
2. THOROUGHLY CLEAN THE CRACK WITH COMPRESSED AIR AND/OR HIGH-PRESSURE WATER TO REMOVE ALL LOOSE PARTICLES / DIRT AND FLUSH WITH POTABLE WATER. USE DETERGENT AND/OR SOLVENT TO REMOVE OIL, TAR AND GREASE.
3. APPLY EPOXY RESIN REPAIR MATERIAL BY GRAVITY FEED INTO CRACK AT TOP OF SLAB SO AS TO COMPLETELY FILL THE CRACK. TOOL AND TRIM REPAIR MATERIAL FLUSH WITH ADJACENT SURFACE.
4. PREPARE, CLEAN, AND SEAL OVERHEAD CRACKS (BOTTOM OF SLAB) AND INJECT EPOXY RESIN REPAIR MATERIAL PER VERTICAL CRACK REPAIR PROCEDURE.

1 / S501 TYPICAL HORIZONTAL CONCRETE CRACK REPAIR

N.T.S.

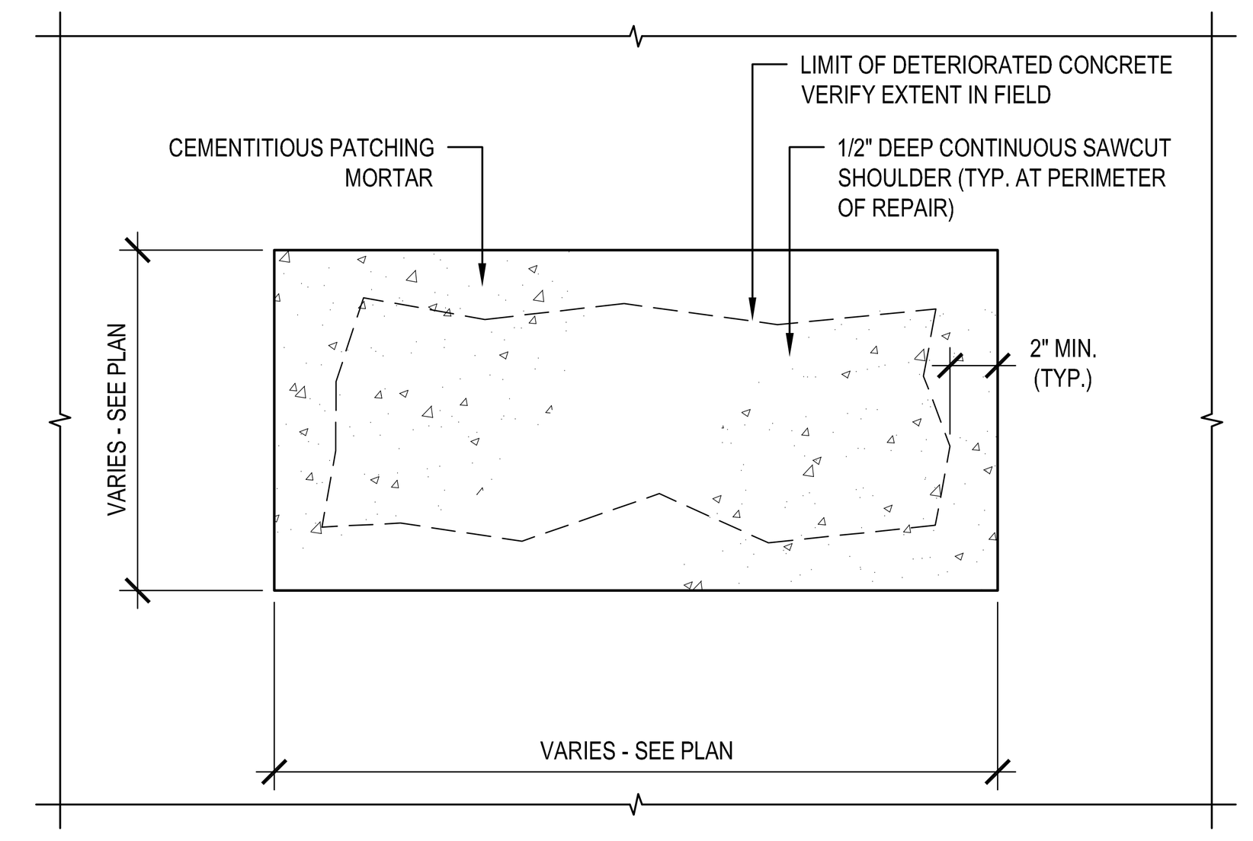


VERTICAL CRACK REPAIR PROCEDURE:

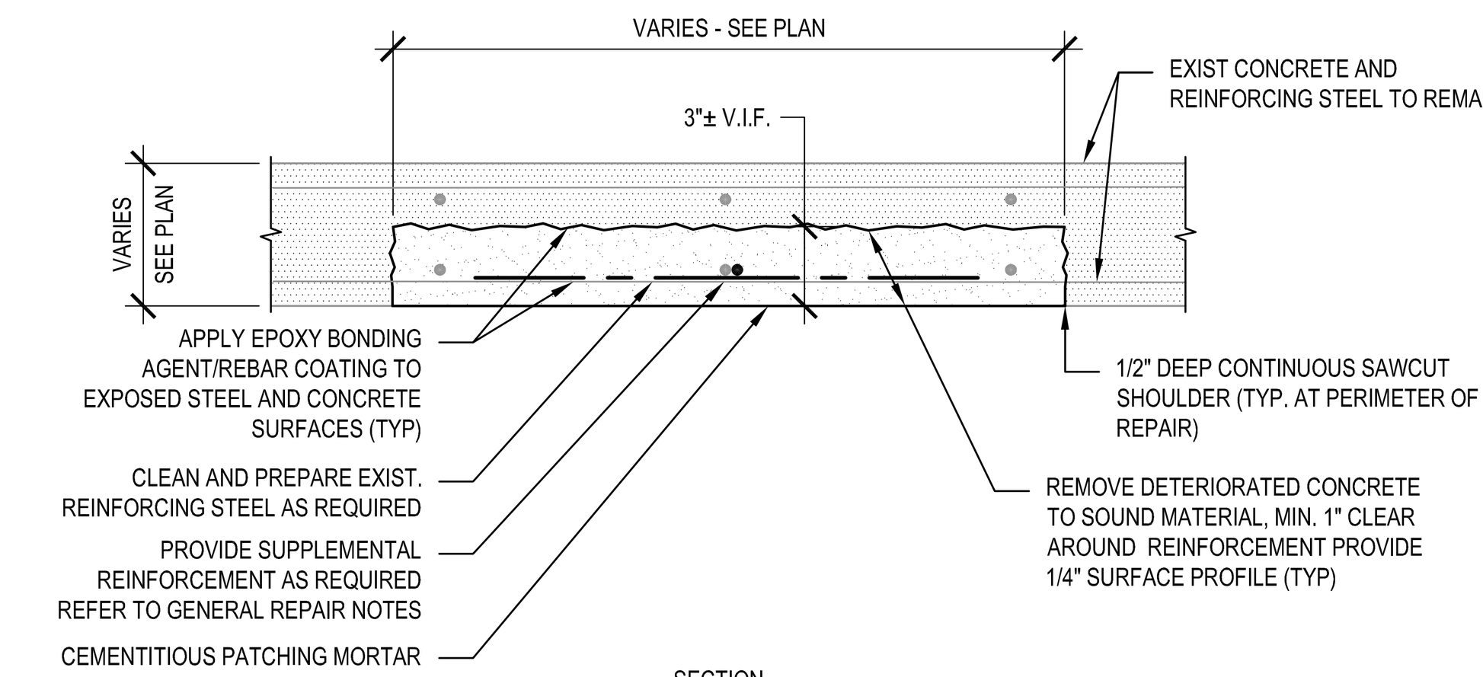
1. PRESSURE INJECTION SHALL BE SUPERVISED AND PERFORMED BY QUALIFIED PERSONNEL EXPERIENCED IN PRESSURE INJECTION.
2. WIDEN EXISTING CRACK(S) BY SAWCUTTING OR GRINDING TO INDICATED DIMENSIONS.
3. THOROUGHLY CLEAN THE CRACK WITH COMPRESSED AIR AND/OR HIGH-PRESSURE WATER TO REMOVE ALL LOOSE PARTICLES / DIRT AND FLUSH WITH POTABLE WATER. USE DETERGENT AND/OR SOLVENT TO REMOVE OIL, TAR, GREASE, AND OTHER DELETERIOUS SUBSTANCES.
4. PERFORM PRESSURE INJECTION IN STRICT ACCORDANCE WITH EPOXY RESIN MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDATIONS USING APPROPRIATE EQUIPMENT. BEGIN EPOXY INJECTION AT LOWEST PORT AND CONTINUE UNTIL PORT DOES NOT ACCEPT ADDITIONAL EPOXY. CLOSE ADJACENT PORTS IF EPOXY EMERGES WHILE FIRST PORT STILL ACCEPTS EPOXY, CONTINUE INJECTION UNTIL FIRST PORT REFUSES EPOXY.
5. MOVE TO LAST PORT EPOXY APPEARED AND CONTINUE INJECTING EPOXY INTO PORT. REPEAT PROCESS UNTIL CRACK HAS BEEN COMPLETELY FILLED.
6. REMOVE PASTE-OVER EPOXY WITH HAND-HELD CHISEL, SCRAPER, OR GRINDER WHEN INJECTION HAS BEEN COMPLETED.

2 / S501 TYPICAL VERTICAL CONCRETE CRACK REPAIR

N.T.S.



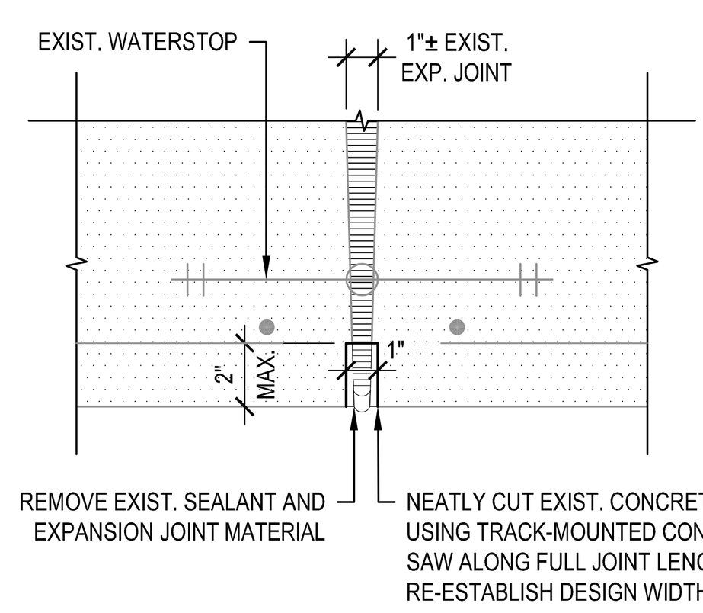
PLAN / ELEVATION VIEW



SECTION

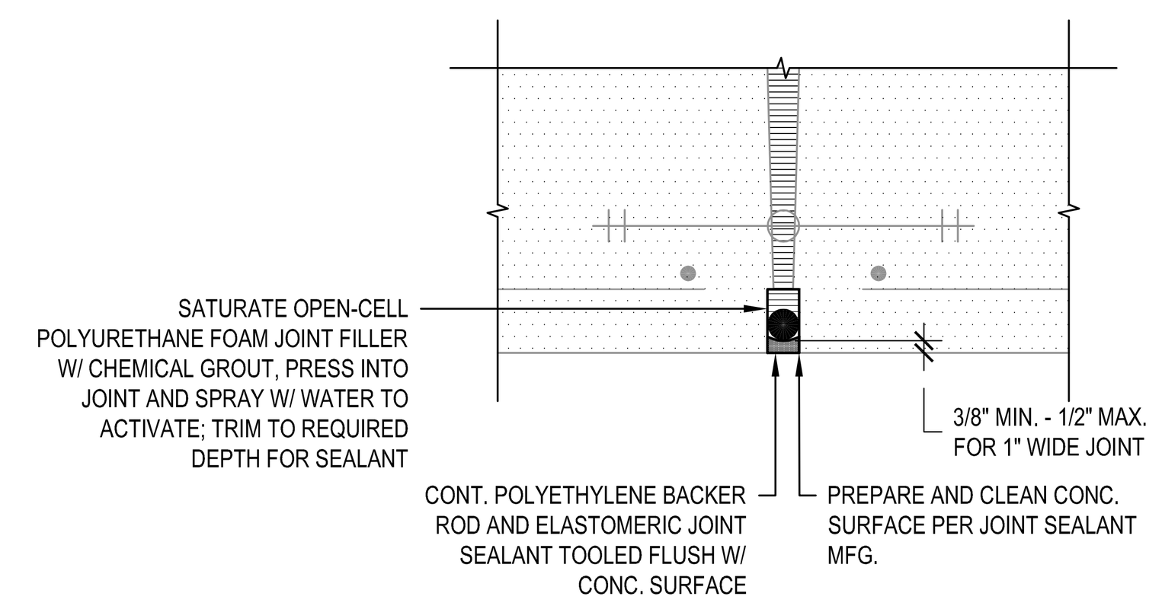
3 / S501 TYPICAL CONCRETE SPALL REPAIR

N.T.S.



4 / S501 TYPICAL EXPANSION JOINT REMOVAL

N.T.S.



5 / S501 TYPICAL EXPANSION JOINT REPAIR

N.T.S.

LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP · Rochester City School District · Savin Engineers, P.C. in association with Gilbane · PDG Popli Design Group · edr · Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO:	DATE:	DESCRIPTION:
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218

DRAWN BY: ERL

REVIEWED BY: JMF

ISSUED FOR: BID DOCUMENTS

DATE: JUNE 26, 2019

DRAWING NAME: **RETAINING WALL REPAIR DETAILS**

DRAWING NUMBER: **S501**

Date & Time: 6/25/2019 8:05 AM By: Eric Liddle
Path: P:\Buildings\SC17034 RSMP PH 2B Edison Tech - LaBella\BIM-CAD\Struct\Phase 2D\17034_S-501 RETAINING WALL REPAIR DETAILS.dwg

LaBella
Powered by partnership.

300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

ELECTRICAL GENERAL NOTES:

A ELECTRICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL DEVICE PLACEMENT AND ELEVATIONS WITH CASEWORK SUPPLIER ANDA ARCHITECT PRIOR TO ROUGH-IN. GENERAL CONTRACTOR SHALL PROVIDE ALL DRILLING AND GROMMETING IN CASEWORK FOR CORD ACCESS IF REQUIRED.

B COORDINATE LOCATIONS OF ALL RECEPTACLES IN MECHANICAL SPACES WITH HVAC CONTRACTOR TO AVOID CONFLICTS WITH EQUIPMENT.

C COORDINATE LOCATION OF LIGHT FIXTURES IN MECHANICAL SPACES WITH HVAC EQUIPMENT AND DUCT WORK.

D ALL EXPOSED CONDUIT/J-BOXES NEED TO BE PREPPED FOR PAINTING BY OTHERS.

E PROVIDE FIRE-PROOFING SEALANT FOR ANY PENETRATIONS THROUGH FIRE-SAFE WALLS.

E CLOSE-OUT. PROJECT PROVIDE TRAINING FOR APPROPRIATE DISTRICT PERSONNEL. TRAINING WILL REVIEW COMPLETE OPERATIONS AND MAINTENANCE (O&M) MANUAL, INCLUDING BUT NOT LIMITED TO, PROGRAMMING AND SETUP OF ANY CONTROL SYSTEMS, REQUIRED MAINTENANCE, AND TROUBLESHOOTING, INCLUDING CONTACT NAMES AND PHONE NUMBERS FOR FACTORY SUPPORT.

F OUTAGES.
A MINIMUM OF SEVEN CALENDAR DAYS, IN ADVANCE, COORDINATE ALL ELECTRICAL SERVICE OUTAGES WITH THE DISTRICT AND THE POWER COMPANY. CONFIRM OUTAGE TIMES WITH RCSD REPRESENTATIVE, IN ADVANCE, A MINIMUM OF 48 HOURS. PLAN ALL WORK SO THAT THE DURATION OF OUTAGE IS KEPT TO AN ABSOLUTE MINIMUM. PROVIDE TEMPORARY WIRING AS REQUIRED IN ORDER TO MAINTAIN CONTINUOUS SERVICE TO OCCUPIED PORTIONS OF THE BUILDING DURING BUSINESS HOURS.

G SALVAGE. RCSD HAS FIRST RIGHTS OF SALVAGE FOR EQUIPMENT AND MATERIALS REMOVED DURING CONSTRUCTION. COORDINATE PROJECT SPECIFIC DETAILS WITH THE RCSD REPRESENTATIVE.

ELECTRICAL GENERAL DEMOLITION NOTES:

A THIS CONTRACTOR SHALL REMOVE ONLY EXISTING ELECTRIC ITEMS IN AREAS OF RENOVATIONS, UNLESS OTHERWISE NOTED, TO ACCOMMODATE THE NEW CONSTRUCTION. REROUTING OF EXISTING MAY BE REQUIRED AT NEW OPENINGS IN EXISTING CONSTRUCTION OR INTERFERENCE WITH OTHER NEW WORK, AS NOTED BELOW.

B DRAWINGS INDICATE SPECIFIC ITEMS TO BE REMOVED AND/OR RELOCATED IN ORDER TO INDICATE GENERAL SCOPE. WIRING & CIRCUITRY ARE NOT SHOW BUT SHALL BE INCLUDED. THE ELECTRICAL CONTRACTOR SHALL REMOVE, RELOCATE, OR REROUTE ADDITIONAL ITEMS NOT INDICATED BUT NECESSARY FOR PROJECT RENOVATIONS. THEREFORE, THE ELECTRICAL CONTRACTOR SHALL ASSUME WITHIN HIS BASE BID A NOMINAL AMOUNT OF UNKNOWN BRANCH CIRCUITS, FIXTURES, DEVICES, AND SYSTEMS WIRING, WITHIN WALLS OR OPENINGS BEING REMOVED OR RELOCATIONS REQUIRED FOR NEW WORK.

C WHERE DEVICES, FIXTURES, ETC. ARE INDICATED TO BE REMOVED, THEY AND THEIR RELATED WIRING/CONDUIT, ALL SUPPORT SHALL BE REMOVED BACK TO THE SOURCE PANELBOARD. IF CIRCUITS ARE FOUND THAT HAVE OTHER ITEMS ON THEM THAT ARE TO REMAIN, THESE CIRCUITS SHALL REMAIN. MAINTAIN CIRCUIT CONTINUITY TO FEED THRU TO ANY REMAINING DEVICES, FIXTURES, EQUIPMENT, ETC. RELOCATE ANY CIRCUITS THAT ARE TO REMAIN, AS REQUIRED, TO AVOID CONFLICT WITH NEW CONSTRUCTION. PROPERLY TERMINATE ALL WIRING.

D MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING REMAINING ELECTRICAL SYSTEMS PASSING THRU RENOVATED SPACES OR WHERE ONLY A PORTION OF A CIRCUIT IS REMOVED. EXISTING SYSTEMS IN THIS BUILDING INCLUDE POWER DISTRIBUTION AND LIGHTING INCLUDING EMERGENCY POWER, FIRE ALARM SYSTEM & PUBLIC ADDRESS/INTERCOM/TELEPHONE SYSTEM.

E REFER TO ARCHITECTURAL DEMOLITION DRAWINGS & NOTES FOR COORDINATION.

F VISIT THE SITE TO DETERMINE THE EXACT EXTENT OF ELECTRICAL DEMOLITION WORK REQUIRED TO COMPLETE THE NEW CONSTRUCTION. EXISTING CONDITIONS ARE TAKEN FROM FIELD OBSERVATION & EXISTING BUILDING CONSTRUCTION DOCUMENTS. OTHER ITEMS MAY EXIST.

ELECTRICAL ABBREVIATIONS

AFF	ABOVE FINSIHED FLOOR
AFG	ABOVE FINISHED GRADE
ATS	AUTOMATIC TRANSFER SWITCH
BLDG.	BUILDING
C	CONDUIT (OR "COVER" WHEN NEXT TO A FIRE ALARM DEVICE)
CB	CIRCUIT BREAKER
CKT.	CIRCUIT
DISC	DISCONNECT SWITCH
E.C.	ELECTRICAL SUB CONTRACTOR
ECB	ENCLOSED CIRCUIT BREAKER
EMT	ELECTRIC METAL TUBING
ER	INDICATES REMOVE EXISTING DEVICE AND RELOCATE
ETR	EXISTING TO REMAIN
EX	EXISTING
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FAAP	FIRE ALARM ANNUNCIATOR PANEL
G.C.	GENERAL CONTRACTOR
GND, GR	GROUND
HP	HORSEPOWER
JB	JUNCTION BOX
KVA	KILOVOLT AMPERES
KW	KILOWATT
LCP	LIGHTING CONTROL PANEL
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MLO	MAIN LUGS ONLY
MTD	MOUNTED
MTG	MOUNTING
(N)	INDICATES NEW DEVICE
N.C.	NORMALLY CLOSED CONTACT
N.O.	NORMALLY OPEN CONTACT
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OL	OVERLOAD
Φ	PHASE
P	POLE
RECEP.	RECEPTACLE
REL	RELOCATE
SD	SMOKE DAMPER
ST	SHUNT TRIP
SWBD	SWITCHBOARD
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
UOI	UNLESS OTHERWISE INDICATED
V	VOLTS
VFD	VARIABLE FREQUENCY DRIVE
VOIP	VOICE OVER IP
W	WIRE
WG	WIRE GUARD (OR "W" IF NEXT TO A FIRE ALARM DEVICE)
WP	EQUIPMENT/MATERIAL TO BE WEATHERPROOF TYPE
WSA	WIRE SIZING AMPS

DEMOLITION LEGEND

- EX — RECESSED LIGHT FIXTURE
- DUPLEX RECEPTACLE
- $ — LIGHT SWITCH
- GFCI OUTLET
- TELEPHONE JACK
- SPECIAL PURPOSE OUTLET
- SMOKE DETECTOR
- SURFACE MOUNTED LIGHT
- BOUNDARY OF DEMOLITION
- K — KEY PAD (RETURN TO OWNER)
- S — ELECTRICAL CONTROL DEVICE
- M — MONITOR
- POWER PANEL
- C — SECURITY CAMERA (RETURN TO OWNER)
- M — EQUIPMENT CONNECTION
- HC — HANDICAPPED PUSH BUTTON
- MAG LOCK (RETURN TO OWNER)

SYMBOL LIST

LIGHTING

- XX / xx — LUMINAIRE, TYPE INDICATED IN CAPITAL LETTER LOWER CASE LETTER INDICATES SWITCHING CIRCUIT REFER TO LUMINAIRE SCHEDULE FOR DESCRIPTION
- XX — LUMINAIRE CONNECTED TO LOCAL UNSWITCHED LIGHTING CIRCUIT.
- EMERGENCY LIGHT
- SITE LIGHTING FIXTURE REFER TO SITE LIGHTING SCHEDULE FOR DESCRIPTION
- EXIT LIGHT, WALL MOUNT, DIRECTIONAL ARROWS AS INDICATED ON PLANS
- EXIT LIGHT, CEILING MOUNT, DIRECTIONAL ARROWS AS INDICATED ON PLANS
- $a — SWITCH, TOGGLE, 20 AMP, 120 VAC, SINGLE CIRCUIT a - INDICATES SWITCHING DESIGNATION
- $ab — SWITCH, TOGGLE, 20 AMP, 120 VAC, TWO CIRCUIT
- $L — SWITCH, LOW VOLTAGE
- $o — SWITCH, OCCUPANCY SENSING TYPE, SINGLE CIRCUIT WATT STOPPER #WS-120 OR EQUAL
- $o ab — SWITCH, OCCUPANCY SENSING TYPE, TWO CIRCUIT
- LTD — UL924 LOAD TRANSFER DEVICE- PROVIDE LOCAL SWITCHED AND UNSWITCHED CIRCUITRY AS WELL AS UNSWITCHED EMERGENCY CIRCUITRY TO DEVICE, TO POWER ALL EMERGENCY FIXTURES IN SPACE
- CS — OCCUPANCY SENSOR, CEILING MOUNTED PROVIDE POWER PACK AS REQUIRED

POWER

- DUPLEX RECEPTACLE, 2P, 3W, 20AMP, 120VAC.
- SINGLE RECEPTACLE, 2P, 3W, 20AMP, 120VAC.
  - C - INDICATES ABOVE COUNTER. COORDINATE WITH G.C.
  - UC - INDICATES UNDER COUNTER. COORDINATE WITH G.C.
  - WC - INDICATES WATER COOLER RECEPTACLE. COORDINATE WITH P.C.
  - V - INDICATES VENDING MACHINE RECEPTACLE
  - TV - INDICATES TELEVISION/MONITOR OUTLET AT CEILING
  - IG - INDICATES ISOLATED GROUND TYPE
  - +xx" INDICATES HEIGHT OF RECEPTACLE ABOVE FINISHED FLOOR
  - EX - INDICATES EXISTING DEVICE
  - M - INDICATES MICROWAVE RECEPTACLE
  - P - INDICATES PROJECTOR RECEPTACLE AT CEILING
  - R - INDICATES REFRIGERATOR RECEPTACLE
  - USB -INDICATES RECEPTACLE WITH USB PORT
- WP — DUPLEX RECEPTACLE, GFCI PROTECTED
  - C - INDICATES ABOVE SINK OR COUNTER. COORDINATE WITH G.C.
  - WP - INDICATES WEATHERPROOF COVER
  - +xx" - INDICATES HEIGHT OF RECEPTACLE
- QUADPLEX RECEPTACLE; 2P, 3W, 20 AMP, 120 VAC, GFCI
- FLOOR RECEPTACLE/OUTLET
- J — JUNCTION BOX
- T — TRANSFORMER AS SCHEDULED
- $M — MOTOR RATED SWITCH, 120V, 20A
- 0 — MAGNETIC STARTER, NEMA SIZE INDICATED
- 30 — DISCONNECT SWITCH, NON-FUSIBLE SWITCH SIZE INDICATED
- 20/30 — DISCONNECT SWITCH, FUSIBLE FUSE/SWITCH SIZE INDICATED
- 0 — COMBINATION MOTOR STARTER, NON-FUSIBLE NEMA SIZE INDICATED
- 0/30 — COMBINATION MOTOR STARTER, FUSIBLE NEMA SIZE /FUSE SIZE INDICATED
- ECB 200 — ENCLOSED CIRCUIT BREAKER, 3POLE, RATING INDICATED
- C — CONTACTOR, 120VAC, NEMA 1 ENCL. NUMBER OF POLES AS REQUIRED.
- M — MANUAL MOTOR STARTER
- T — REVERSE ACTING THERMOSTAT FURNISHED BY MECHANICAL CONTRACTOR; INSTALLATION BY ELECTRICAL CONTRACTOR
- FSC — FAN SPEED CONTROLLER FURNISHED BY MECHANICAL CONTRACTOR; INSTALLATION BY ELECTRICAL CONTRACTOR
- P/B — PULL BOX
- LOW VOLTAGE CONTROL WIRING BETWEEN DEVICES
- CONDUIT AND WIRING BELOW GRADE OR FINISHED FLOOR
- EM — CONDUIT AND WIRING FOR EMERGENCY CIRCUIT. 2 #12 AWG IN 1/2 CONDUIT UNLESS OTHERWISE INDICATED.
- 10 — HOME RUN TO PANEL. CIRCUIT NUMBER INDICATED
- LP — PANELBOARD DESIGNATION
- BRANCH CIRCUIT PANELBOARD, 208Y/120V, 3Ø, 4W
- DISTRIBUTION PANELBOARD , NOMINAL 600V RATING, 3ϕ, 4W
- BRANCH CIRCUIT PANELBOARD, 480Y/277V , 3ϕ, 4W

LIGHTNING PROTECTION

- AT — COPPER AIR TERMINAL
- GROUND ROD CONNECTION
- BOND CONNECTION TO COPPER CABLE
- BASKET WEAVE COPPER CABLE

FIRE ALARM

- HEAT DETECTOR, ADDRESSABLE
- CO — CO BASE HEAT DETECTOR, ADDRESSABLE
- SMOKE DETECTOR, ADDRESSABLE
- AHU — SMOKE DETECTOR, ADDRESSABLE, DUCT TYPE, MECHANICAL UNIT INDICATED
- SD — SMOKE DETECTOR ALSO FOR SMOKE DAMPER OPERATION, ADDRESSABLE
- CO — CO BASED SMOKE DETECTOR,ADDRESSABLE
- 15 F — FIRE ALARM STROBE UNIT, WALL MOUNTED STROBE CANDELA INDICATED
- 15 — COMBINATION FIRE ALARM HORN/STROBE UNIT, STROBE CANDELA INDICATED
- FSR — FAN SHUTDOWN RELAY
- SD — FIRE SMOKE DAMPER RELAY

PANEL SCHEDULE LP1E

DESIGN BASE: SQUARE D ---------- OR APPROVED EQUAL
LOCATION: LOADING DOCK
RATING: --- Amps
MAIN: 225 Amp MLO

S.C. RATING: 14,000 Amps RMS SYM.
SERVICE: 277/480V, 3Ø, 4W
MOUNTING: SURFACE
FEED: EXISTING

CKT.	LOAD DESIGNATION	LOAD (kVA)	WIRE SIZE	BREAKER TRIP	BREAKER POLE	PHASE A B C	BREAKER POLE	BREAKER TRIP	WIRE SIZE	LOAD (kVA)	LOAD DESIGNATION	CKT.
1											SPACE	2
3	EXISTING LOAD										SPACE	4
5											SPACE	6
7	EXISTING LOAD										EXISTING LOAD	8
9	EXISTING LOAD										EXISTING LOAD	10
11	SPACE										EXISTING LOAD	12
13	SPACE										EXISTING LOAD	14
15	EXISTING LOAD										EXISTING LOAD	16
17	EXISTING LOAD										EXISTING LOAD	18
19	EXISTING LOAD										EXISTING LOAD	20
21	SPACE										EXISTING LOAD	22
23	SPACE										EXISTING LOAD	24
25	EXISTING LOAD										SPACE	26
27	EXISTING LOAD										EXISTING LOAD	28
29	EXISTING LOAD										EXISTING LOAD	30
31	EXISTING LOAD										EXISTING LOAD	32
33	SPACE										EXISTING LOAD	34
35	SPACE										SPACE	36
37			#10AWG						#10 AWG			38
39	WEST P LOT LTG		#10AWG	20				20	#10 AWG		EAST P LOT	40
41			#10AWG						#10 AWG			42

BUILDING LUMINAIRE SCHEDULE

TYPE	DESCRIPTION	LAMPS	LUMENS (MIN)	WATTS (MAX)	CRI (MIN)	CCT	DRIVER	DISTRIBUTION	MOUNTING	MT. HEIGHT	DESIGN BASE	REMARKS
A	2X2 RECESSED DIRECT/INDIRECT	WHITE LED	2,500	20.2	80	4000	UNV	-	RECESSED	-	METALUX: 22ALNG SERIES	CURVED SHIELDING, 0-10V DIMMING DRIVER EXCEPT IN RESTROOMS AND CORRIDORS
B	4 FT LENSED LED STRIPLIGHT	WHITE LED	3,805	30.6	80	4000	UNV	-	SUSPENDED	10'	METALUX: SNLED LENSED	LENSED, Y TOGGLE ACCESSORY

SITE LUMINAIRE SCHEDULE / POLE

TYPE	LAMP NO.	LAMP TYPE	DESIGN BASE	MIN. LUMEN OUTPUT	WATTS (MAX)	DESCRIPTION	FINISH	CRI	ARRANGEMENT	ACCESSORIES	POLE DESCRIPTION	POLE HEIGHT	POLE MFR/CATALOG #
A	-	LED	MC GRAW EDISON-GLEON AF-02 SERIES	12,050	113	EXTRUDED ALUMINUM LED AREA LUMINAIRE, FULL CUTOFF MAST ARM MOUNT, TYPE IV WIDE THROW, IP 66 RATED, DLC LISTED, LM79/LM80 COMPLIANT	DARK BRONZE TO MATCH SOUTH LOT LUMINAIRES	80	SINGLE	PHOTOCELL		25 FT	
B	-	LED	MC GRAW EDISON-GLEON AF-03 SERIES	18,000	166	EXTRUDED ALUMINUM LED AREA LUMINAIRE, FULL CUTOFF MAST ARM MOUNT, TYPE IV WIDE THROW, IP 66 RATED,DLC LISTED, LM79/LM80 COMPLIANT	DARK BRONZE TO MATCH SOUTH LOT LUMINAIRES	80	SINGLE	PHOTOCELL		25 FT	
C	-	LED	MC GRAW EDISON-GLEON AF-02 SERIES	12,200	113	EXTRUDED ALUMINUM LED AREA LUMINAIRE, FULL CUTOFF MAST ARM MOUNT, TYPE IV FORWARD THROW, IP 66 RATED, DLC LISTED, LM79/LM80 COMPLIANT	DARK BRONZE TO MATCH SOUTH LOT LUMINAIRES	80	SINGLE	PHOTOCELL		20 FT	
D	-	LED	MC GRAW EDISON-GLEON AF-01 SERIES	6,300	59	FIELD ADJUSTABLE EXTRUDED ALUMINUM LED AREA LUMINAIRE, TYPE IV WIDE THROW, IP 66 RATED, LM79/LM80 COMPLIANT	DARK BRONZE TO MATCH SOUTH LOT LUMINAIRES	80	SINGLE	PHOTOCELL	4" SQUARE,STRAIGHT, ALUMINUM, FINISH TO MATCH HEAD	15 FT	STREETWORKS SSA
E	-	LED	MC GRAW EDISON-GLEON AF-01 SERIES	6,300	59	FIELD ADJUSTABLE EXTRUDED ALUMINUM LED AREA LUMINAIRE, TYPE IV WIDE THROW, IP 66 RATED, LM79/LM80 COMPLIANT	DARK BRONZE TO MATCH SOUTH LOT LUMINAIRES	80	SINGLE	PHOTOCELL		12FT	
F	-	LED	MC GRAW EDISON-GLEON AF-01 SERIES	6,300	59	FIELD ADJUSTABLE EXTRUDED ALUMINUM LED AREA LUMINAIRE, TYPE IV WIDE THROW, IP 66 RATED, LM79/LM80 COMPLIANT	DARK BRONZE TO MATCH SOUTH LOT LUMINAIRES	80	SINGLE	PHOTOCELL		20FT	
G	-	LED	MC GRAW EDISON-GLEON AF-02 SERIES	12,050	113	FIELD ADJUSTABLE EXTRUDED ALUMINUM LED AREA LUMINAIRE, TYPE IV WIDE THROW, IP 66 RATED, LM79/LM80 COMPLIANT	DARK BRONZE TO MATCH SOUTH LOT LUMINAIRES	80	SINGLE	PHOTOCELL		20FT	
H	-	LED	MC GRAW EDISON-GLEON AF-02 SERIES	12,050	113	FIELD ADJUSTABLE EXTRUDED ALUMINUM LED AREA LUMINAIRE, TYPE IV WIDE THROW, IP 66 RATED, LM79/LM80 COMPLIANT	DARK BRONZE TO MATCH SOUTH LOT LUMINAIRES	80	SINGLE	PHOTOCELL		15FT	

NOTES:
1. LUMINAIRES TO BE CONTROLLED BY EXISTING BUILDING TIME CLOCK (IN LOADING DOCK) AND OVERRIDE BY INTEGRAL PHOTOSENSING DEVICE SPECIFIED. PROVIDE ONLY (1) PHOTOCELL PER CIRCUIT).
2. POLE HEIGHTS ARE BASIS OF DESIGN. WHERE REUSING EXISTING POLE BASES, EXISTING POLE HEIGHT MUST BE MATCH.
3. WHERE EXISTING CIRCUITING IS TO BE REUSED, LUMINAIRES MUST BE ORDERED TO MATCH EXISTING VOLTAGE, PHASING AND CONFIGURATION.

EQUIPMENT CONNECTION SCHEDULE

LABEL	DESCRIPTION	LOCATION	LOAD	FLA	VOLTS, PHASE	FEED	CIRCUIT BREAKER	WIRE & CONDUIT	CONTROLLER TYPE	CONTROLLER SIZE	CONTROLLER ACCESSORIES	DISCONNECT	REMARKS
DH-1	DEHUMIDIFIER	POOL EQUIPMENT ROOM	2 HP	23.3	480V, 3PH	LP-014, CKT#22,24,26	30A-3P	3#10 AWG AND (1) #10 GND IN 3/4" C	PROVIDED WITH UNIT	N/A	N/A	PROVIDED WITH UNIT	PROVIDE NEW WIRING/CIRCUITING, CIRCUIT BREAKER FOR SIEMENS PANEL, VFD AND DISCONNECT.
P-DH-1	DEHUMIDIFIER PUMP	POOL EQUIPMENT ROOM	3/4 HP	1.6	480V, 3PH	LP-014,CKT#1,3,5	15A-3P	3#12 AWG AND (1) #12 GND IN 3/4" C	PROVIDED WITH UNIT	N/A	N/A	15A	PROVIDE NEW WIRING/CIRCUITING, CIRCUIT BREAKER FOR SIEMENS PANEL, VFD AND DISCONNECT.
012-47P	PUMP	POOL EQUIPMENT ROOM	1/2 HP	1.1	480V, 3PH	MCC 014	15A-3P	3#12 AWG AND (1) #12 GND IN 3/4" C	PROVIDED WITH UNIT	N/A	N/A	15A	PROVIDE NEW WIRING, DISCONNECT AND SQUARE D OVERCURRENT PROTECTION IN MCC014. PROVIDE ELECTRICAL CONNECTION TO CONTROLLER SUPPLIED BY OTHERS.
014-46P	PUMP	POOL EQUIPMENT ROOM	3/4 HP	1.6	480V, 3PH	MCC 014	15A-3P	3#12 AWG AND (1) #12 GND IN 3/4" C	PROVIDED WITH UNIT	N/A	N/A	15A	PROVIDE NEW WIRING, DISCONNECT AND SQUARE D OVERCURRENT PROTECTION IN MCC014. PROVIDE ELECTRICAL CONNECTION TO CONTROLLER SUPPLIED BY OTHERS.
EF-1	EXHAUST FAN	MECHANICAL ROOM	5 HP	7.6	480V, 3PH	LP-08, CKT #8,10,12	15A-3P	3#12 AWG AND (1) #12 GND IN 3/4" C	PROVIDE ABB VFD	N/A	N/A	15A	REUSE EXISTING WIRING/CIRCUITING BUT PROVIDE NEW CIRCUIT BREAKER FOR SQUARE D PANEL, VFD AND DISCONNECT.
EF-3-37	EXHAUST FAN	PENTHOUSE 3	2 HP	3.4	480V, 3PH	MCC 43	15A-3P	3#12 AWG AND (1) #12 GND IN 3/4" C	PROVIDED WITH UNIT	N/A	N/A	15A	PROVIDE NEW WIRING, DISCONNECT AND SQUARE D OVERCURRENT PROTECTION IN MCC 43. PROVIDE ELECTRICAL CONNECTION TO CONTROLLER SUPPLIED BY OTHERS.
CWP-3	CHILLER PUMP	MECHANICAL ROOM	40 HP	52	480V, 3PH	LP-09, CKT #1,3,5	90A-3P	3#4 AWG AND (1) #8 GND IN 1 1/4" C	PROVIDE ABB VFD	N/A	N/A	100A	PROVIDE NEW WIRING/CIRCUITING, CIRCUIT BREAKER FOR SQUARE D PANEL, VFD AND DISCONNECT.
CWP-4	CHILLER PUMP	MECHANICAL ROOM	40 HP	52	480V, 3PH	LP-09, CKT #7,9,11	90A-3P	3#4 AWG AND (1) #8 GND IN 1 1/4" C	PROVIDE ABB VFD	N/A	N/A	100A	PROVIDE NEW WIRING/CIRCUITING, CIRCUIT BREAKER FOR SQUARE D PANEL, VFD AND DISCONNECT.
CWP-5	CHILLER PUMP	MECHANICAL ROOM	40 HP	52	480V, 3PH	LP-10, CKT# 32,34,36	90A-3P	3#4 AWG AND (1) #8 GND IN 1 1/4" C	PROVIDE ABB VFD	N/A	N/A	100A	PROVIDE NEW WIRING/CIRCUITING, CIRCUIT BREAKER FOR SQUARE D PANEL, VFD AND DISCONNECT.
AHU-E-35	AIR HANDLING UNIT	MECHANICAL ROOM	5 HP	6.6	480V, 3PH	MCC 08	15A-3P	3#12 AWG AND (1) #12 GND IN 3/4" C	PROVIDED WITH UNIT	N/A	N/A	15A	PROVIDE NEW WIRING, DISCONNECT AND SQUARE D OVERCURRENT PROTECTION IN MCC 08. PROVIDE ELECTRICAL CONNECTION TO CONTROLLER SUPPLIED BY OTHERS.
AHU-5-31	AIR HANDLING UNIT	PENTHOUSE 5	10 HP	50	480V, 3PH	MCC 45	60A-3P	3#6 AWG AND (1) #10 GND IN 1" C	PROVIDED WITH UNIT	N/A	N/A	PROVIDED WITH UNIT	PROVIDE AN ADDITIONAL 120V/1PH,20A CIRCUIT FROM AVAILABLE SPARES IN NEAREST PANELBOARD. PROVIDE NEW WIRING AND SQUARE D OVERCURRENT PROTECTION IN MCC 45. PROVIDE ELECTRICAL CONNECTION TO CONTROLLER AND DISCONNECT SUPPLIED BY OTHERS.
AHU-1-6	AIR HANDLING UNIT	PENTHOUSE 1	10 HP	54	480V, 3PH	MCC 41	60A-3P	3#6 AWG AND (1) #10 GND IN 1" C	PROVIDED WITH UNIT	N/A	N/A	PROVIDED WITH UNIT	PROVIDE NEW WIRING/CIRCUITING AND SQUARE D OVERCURRENT PROTECTION IN MCC 41. PROVIDE ELECTRICAL CONNECTION TO CONTROLLER AND DISCONNECT SUPPLIED BY OTHERS.PROVIDE AN ADDITIONAL 120V/1PH,20A CIRCUIT FROM AVAILABLE SPARES IN NEAREST PANELBOARD.
ACC-1	AIR COOLED CHILLER	ROOF	-	1098	480V, 3PH	MAIN SWITCHGEAR	1200A-3P	(3) SETS OF 500KCMILAND (1) 3/0 IN 4" C	PROVIDED WITH UNIT	N/A	N/A	PROVIDED WITH UNIT	PROVIDE NEW WIRING AND SIEMENS BPS SWITCH IN MAINSWITCHGEAR. PROVIDE ELECTRICAL CONNECTION TO CONTROLLER AND DISCONNECT SUPPLIED BY OTHERS. REFER TO ELECTRICAL SITE PLAN FOR MAIN SWITCHGEAR LOCATION.
ACC-2	AIR COOLED CHILLER	ROOF	-	1098	480V, 3PH	MAIN SWITCHGEAR	1200A-3P	(3) SETS OF 500KCMILAND (1) 3/0 IN 4" C	PROVIDED WITH UNIT	N/A	N/A	PROVIDED WITH UNIT	PROVIDE NEW WIRING AND SIEMENS BPS SWITCH IN MAINSWITCHGEAR. PROVIDE ELECTRICAL CONNECTION TO CONTROLLER AND DISCONNECT SUPPLIED BY OTHERS.REFER TO ELECTRICAL SITE PLAN FOR MAIN SWITCHGEAR LOCATION.
ACC-3	AIR COOLED CHILLER	ROOF	-	105	480V, 3PH	MCC 42	125A-3P	3#2 AWG AND (1) #6 GND IN 1 1/2" C	PROVIDED WITH UNIT	N/A	N/A	PROVIDED WITH UNIT	PROVIDE NEW WIRING AND SQUARE D OVERCURRENT PROTECTION IN MCC 42. PROVIDE ELECTRICAL CONNECTION TO CONTROLLER AND DISCONNECT SUPPLIED BY OTHERS.
CWP-1	CHILLER PUMP	PENTHOUSE 1	20 HP	27	480V, 3PH	MCC 41	60A-3P	3#6 AWG AND (1) #10 GND IN 1" C	PROVIDE ABB VFD	N/A	N/A	30A	PROVIDE NEW WIRING, DISCONNECT, CONTROLLER AND SQUARE D OVERCURRENT PROTECTION IN MCC 41.
CWP-2	CHILLER PUMP	PENTHOUSE 1	20 HP	27	480V, 3PH	MCC 41	60A-3P	3#6 AWG AND (1) #10 GND IN 1" C	PROVIDE ABB VFD	N/A	N/A	30A	PROVIDE NEW WIRING, DISCONNECT, CONTROLLER AND SQUARE D OVERCURRENT PROTECTION IN MCC 41.

ROCHESTER SCHOOLS MODERNIZATION PROGRAM
1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL
655 COLFAX STREET
ROCHESTER, NY 14606

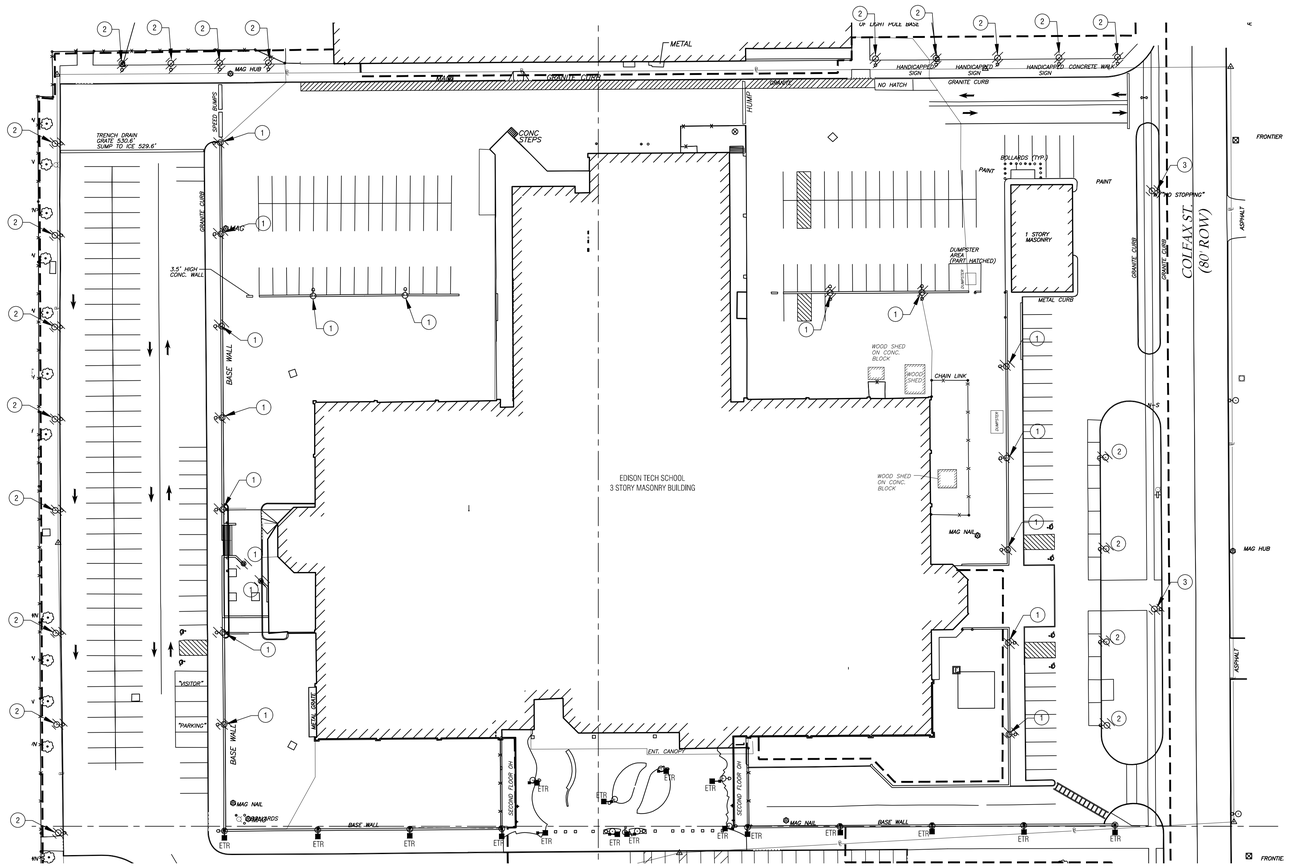
SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO:	DATE:	DESCRIPTION:
-	-	-
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218
DRAWN BY: MHB
REVIEWED BY: MVR
ISSUED FOR: BID DOCUMENTS
DATE: JUNE 26, 2019
DRAWING NAME: **ELECTRICAL NOTES, SYMBOLS, & ABBREVIATIONS**
DRAWING NUMBER: **E000**

Date & Time: 6/26/2019 12:40 PM By: Hernandez-Bernier, Melissa
Path: J:\Rochester Joint Schools Construction Board\2170218 - Edison Tech Phase 2\Drawings\MEEP\Edison Tech Phase 2\Views\Elec\Additional Scope BP02\E000 NOTES, SYMBOLS, & ABBREVIATIONS.dwg



1 ELECTRICAL SITE PLAN
E-002 SCALE: 1"=40'

N

LEGEND:

------	UNDERGROUND OR SURFACE CONDUIT
E	ELECTRICAL HAND HOLE
J	JUNCTION BOX
	NEW LIGHT POLE
	EXISTING LIGHT POLE
▨	SURFACE MOUNT PANELBOARD
AWG	AMERICAN WIRE GAUGE
CKT	CIRCUIT
ETR	EXISTING TO REMAIN
GND	GROUND

ELECTRIC GENERAL NOTES:

1. WHERE FIXTURES ARE INDICATED TO BE REMOVED, THEY AND THEIR RELATED WIRING/CONDUIT SHALL BE REMOVED BACK TO THE SOURCE PANEL BOARD. IF CIRCUITS ARE FOUND TO HAVE OTHER LOADS ON THEM THAT ARE TO REMAIN, THESE CIRCUIT SHALL REMAIN. MAINTAIN CIRCUIT CONTINUITY TO FEED THRU TO ANY REMAINING LOADS. PROPERLY TERMINATE ALL WIRING.
2. FIELD VERIFY EXISTING CIRCUITING WITH OWNER.
3. PROVIDE SCHEDULE 40 PVC FOR UNDERGROUND CONDUITS. TRANSITION TO GALVANIZED STEEL RMC AT EXTERIOR WALL PENETRATIONS.
4. EXISTING CONDUITS MAY BE REUSED WHERE POSSIBLE.
5. UNDERGROUND CONDUITS SHALL BE A MINIMUM OF 30" BELOW FINISH GRADE.
6. TRANSFER TO ABOVE GRADE WITH GALVANIZED STEEL RMC PRIOR TO PENETRATING THE BUILDING.
7. VISIT THE SITE TO DETERMINE THE EXACT EXTENT OF ELECTRICAL DEMOLITION WORK REQUIRED TO COMPLETE THE NEW CONSTRUCTION. EXISTING CONDITIONS ARE TAKEN FROM FIELD OBSERVATION AND EXISTING BUILDING CONSTRUCTION DOCUMENTS. OTHER ITEMS MAY EXIST.
8. ALL LIGHTING CIRCUITS ARE TO BE MAINTAINED FOR REUSE.
9. PROVIDE NEW PANEL LOAD SCHEDULES FOR ALL PANELS, BOTH EXISTING AND NEW. ALL EXISTING LOADS SHALL BE TRACED AND CONFIRMED IN THE FIELD.
10. PAINT PULL BOXES TO MATCH WALL AND CEILINGS IF LOCATED IN FINISHED AREA, EXPOSED TO VIEW.

ELECTRIC GENERAL DEMOLITION NOTES:

① REMOVE POLE, FIXTURE HEAD AND WIRING BACK TO SOURCE, EXISTING CONCRETE BASE TO BE REUSED IF BASE BOLTS ARE FOUND IN GOOD CONDITION AFTER COVER REMOVAL AND INSPECTION. EXISTING WALL MOUNT CONDUIT TO BE REUSED FOR NEW CONDUIT.

② REMOVE LIGHT POLE, CONCRETE BASE, FIXTURE HEAD, CONDUIT AND WIRING BACK TO SOURCE.

③ DISCONNECT AND REMOVE STREET LIGHT POLES. COORDINATE WITCH CITY OF ROCHESTER AND RGE.

LaBella
Powered by partnership.

300 State Street, Suite 201
Rochester, NY 14614
585-454-6110

labellapc.com

RSMP

ROCHESTER CITY SCHOOL DISTRICT

Savin Engineers, P.C.

in association with Gilbane

POPLI DESIGN GROUP
555 Penbrooke Drive • Penfield, NY 14526
main: 585.388.2060

edr

Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO:	DATE:	DESCRIPTION:
-	-	-
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218

DRAWN BY: MHB

REVIEWED BY: MVR

ISSUED FOR: BID DOCUMENTS

DATE: JUNE 26, 2019

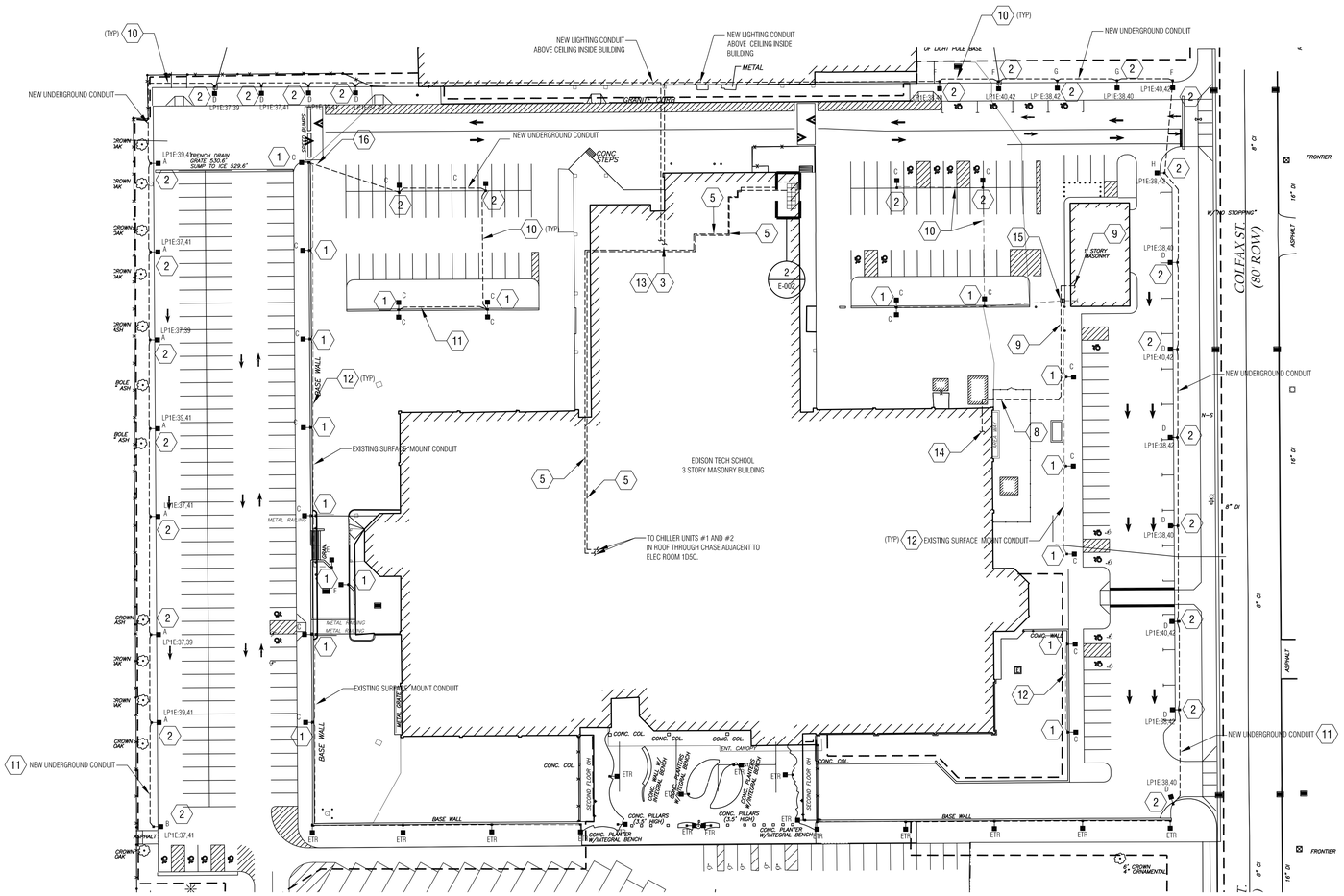
DRAWING NAME:

ELECTRICAL
SITE PLAN
DEMO

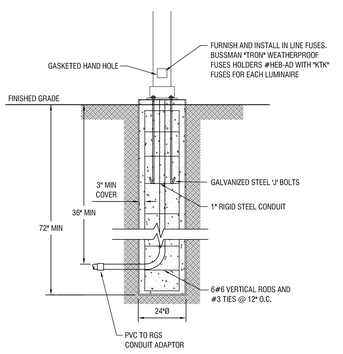
DRAWING NUMBER:

E-001

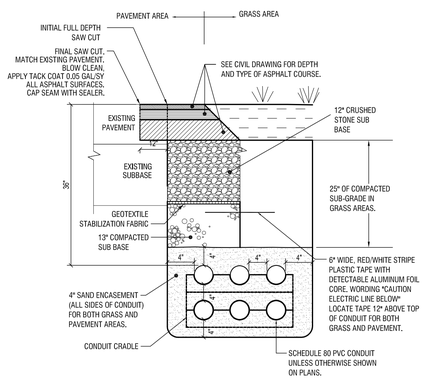
Date & Time: 6/26/2019 11:15 AM By: Hernandez-Bernier, Melissa
Path: J:\Rochester Joint Schools Construction Board\2170218 - Edison Tech Phase 2\Drawings\MEEP\Edison Tech Phase 2\Views\Elec\Additional Scope BP02\E001 Site Plan.dwg



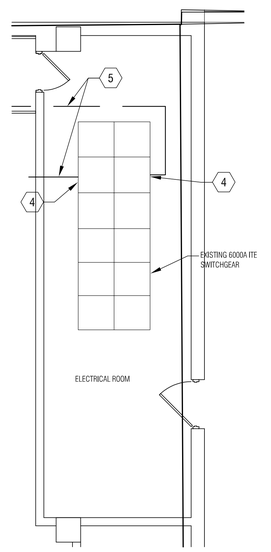
1 E-002 ELECTRICAL SITE PLAN
SCALE: 1"=40'



3 E-002 LIGHT POLE BASE DETAIL
SCALE: N.T.S.



4 E-002 CONDUIT TRENCH DETAIL
SCALE: N.T.S.



2 E-002 ELECTRICAL ROOM
SCALE: 1"=5'

LEGEND:

- UNDERGROUND OR SURFACE CONDUIT
- ELECTRICAL HAND HOLE
- JUNCTION BOX
- NEW LIGHT POLE
- EXISTING LIGHT POLE
- SURFACE MOUNT PANELBOARD
- AWG AMERICAN WIRE GAUGE
- CKT CIRCUIT
- ETR EXISTING TO REMAIN
- GND GROUND

ELECTRIC GENERAL NOTES:

1. WHERE FIXTURES ARE INDICATED TO BE REMOVED, THEY AND THEIR RELATED WIRING/CONDUIT SHALL BE REMOVED BACK TO THE SOURCE PANEL BOARD. IF CIRCUITS ARE FOUND TO HAVE OTHER LOADS ON THEM THAT ARE TO REMAIN, THESE CIRCUIT SHALL REMAIN, MAINTAIN CIRCUIT CONTINUITY TO FEED THRU TO ANY REMAINING LOADS. PROPERLY TERMINATE ALL WIRING.
2. FIELD VERIFY EXISTING CIRCUITING WITH OWNER.
3. PROVIDE SCHEDULE 40 PVC FOR UNDERGROUND CONDUITS. TRANSITION TO GALVANIZED STEEL RMC AT EXTERIOR WALL PENETRATIONS.
4. EXISTING CONDUITS MAY BE REUSED WHERE POSSIBLE.
5. UNDERGROUND CONDUITS SHALL BE A MINIMUM OF 30" BELOW FINISH GRADE.
6. TRANSFER TO ABOVE GRADE WITH GALVANIZED STEEL RMC PRIOR TO PENETRATING THE BUILDING.
7. VISIT THE SITE TO DETERMINE THE EXACT EXTENT OF ELECTRICAL DEMOLITION WORK REQUIRED TO COMPLETE THE NEW CONSTRUCTION. EXISTING CONDITIONS ARE TAKEN FROM FIELD OBSERVATION AND EXISTING BUILDING CONSTRUCTION DOCUMENTS. OTHER ITEMS MAY EXIST.
8. ALL LIGHTING CIRCUITS ARE TO BE MAINTAINED FOR REUSE.
9. PROVIDE NEW PANEL LOAD SCHEDULES FOR ALL PANELS, BOTH EXISTING AND NEW. ALL EXISTING LOADS SHALL BE TRACED AND CONFIRMED IN THE FIELD.
10. PAINT PULL BOXES TO MATCH WALL AND CEILINGS IF LOCATED IN FINISHED AREA, EXPOSED TO VIEW.

ELECTRICAL KEYED NOTES:

1. PROVIDE LIGHT POLE, WITH LED HEAD FIXTURE AND INTEGRAL PHOTOCELL. PROVIDE ONLY (1) PHOTOCELL PER LIGHTING CIRCUIT.
2. PROVIDE LIGHT POLE, BASE AND LED HEAD FIXTURE AND INTEGRAL PHOTOCELL. PROVIDE ONLY (1) PHOTOCELL PER LIGHTING CIRCUIT.
3. PROVIDE NEW CIRCUITS ABOVE CEILING FROM AVAILABLE SPACES OR SPARES IN PANEL LP-1E IN LOADING DOCK FOR SITE LIGHTING. CIRCUIT ROUTE MUST GO UP ABOVE 2ND FLOOR CEILING AND DOWN ON THE GYM BUILDING SIDE.
4. PROVIDE NEW 1200A SIEMENS SWITCH, 480V, 3PH FOR NEW CHILLER UNIT. REMOVE EXISTING VERTICAL BUS IN SECTION AND REPLACE WITH (2) 3/16 INCHES THICK BY 4 INCHES WIDE NEW ALUMINUM BUS BARS FOR A 1200A BUS BAR RATING PER PHASE. BUS BAR WORK MUST BE PERFORMED BY A SIEMENS CERTIFIED PERSONNEL.
5. CHILLER FEEDERS EXPOSED THROUGH BASEMENT: (3) SETS OF 500KCMIL AND (1) 3/0 GND IN 4" CONDUIT.
6. NOT USED.
7. EXISTING LIGHTING CIRCUIT TO REMAIN.
8. NEW SPARE CONDUIT FOR FUTURE STORAGE BUILDING FIRE ALARM UPGRADE.
9. NEW STORAGE BUILDING FIRE ALARM WALL MOUNT SPARE CONDUIT.TERMINATE CONDUIT INSIDE BUILDING WITH A JUNCTION BOX.
10. (3)#10 AWG WIRES AND (1)#10 GND IN 1" CONDUIT.
11. (2)#10 AWG WIRES AND (1)#10 GND IN 1" CONDUIT.
12. (3)#10 AWG WIRES AND (1)#10 GND IN EXISTING CONDUIT, REUSE EXISTING CIRCUITING.
13. PROVIDE SURFACE MOUNT LIGHTING PANELBOARD.
14. PROVIDE NEW JBOX TO TIE IN NEW SPARE CONDUIT FOR STORAGE BUILDING FIRE ALARM SYSTEM TO ROOM 1C3 EXISTING FIRE ALARM CONDUIT.
15. PROVIDE NEW ELECTRICAL HANDHOLE AND EXTEND EXISTING LIGHTING CIRCUITING TO PARKING LOT LIGHTING.
16. EXTEND EXISTING CIRCUITING TO PARKING LOT LIGHTING.

LaBella Powered by partnership
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP | Rochester City School District | Savin Engineers, P.C. in association with Gilbane | PDT Popli Design Group | edr | Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM
1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL
655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

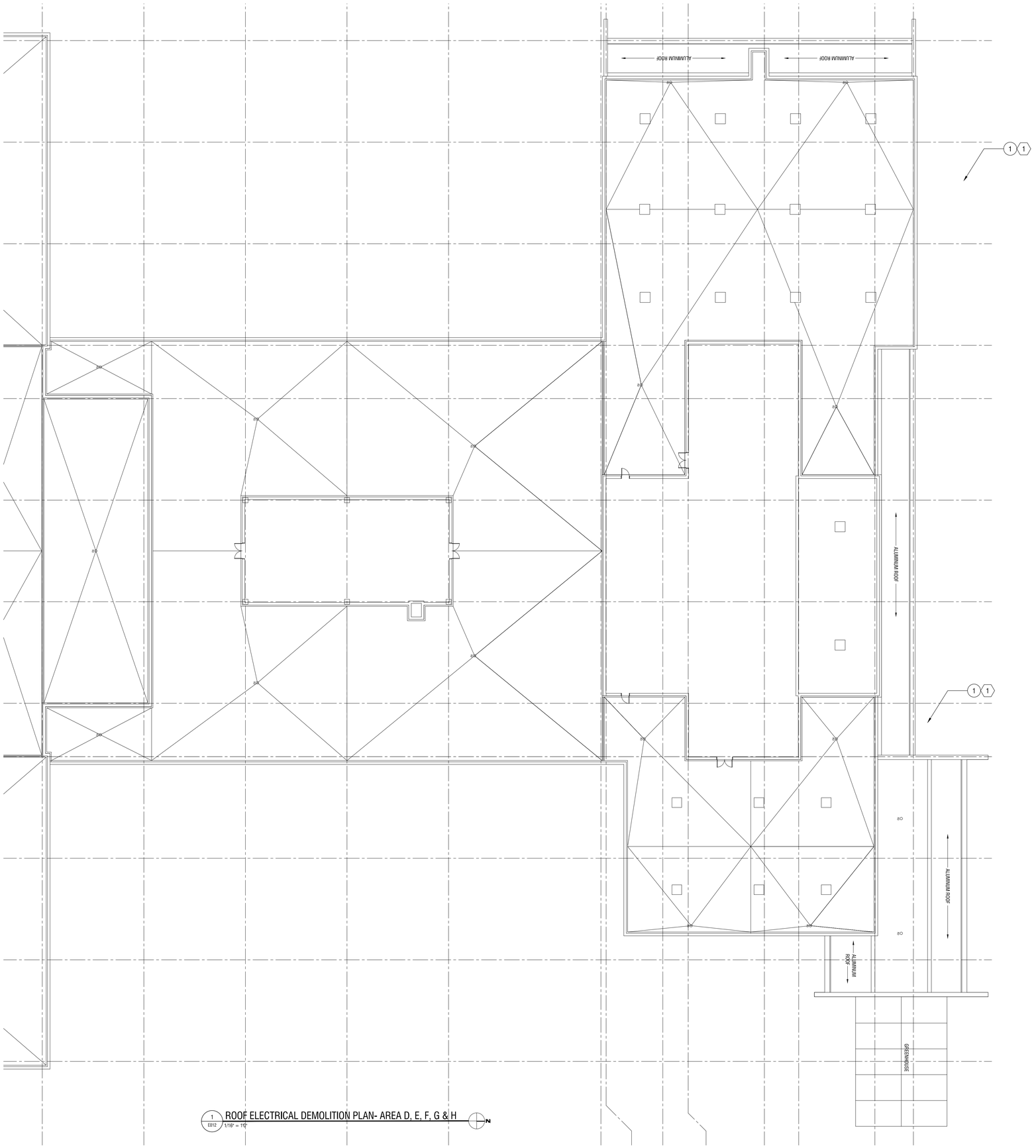
NO:	DATE:	DESCRIPTION:
-	-	-
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218
DRAWN BY: MHB
REVIEWED BY: MVR
ISSUED FOR: BID DOCUMENTS
DATE: JUNE 26, 2019
DRAWING NAME:

ELECTRICAL SITE PLAN

DRAWING NUMBER:

E-002



1 E012 ROOF ELECTRICAL DEMOLITION PLAN- AREA D, E, F, G & H
1/16" = 1'-0"

GENERAL LIGHTNING PROTECTION NOTES

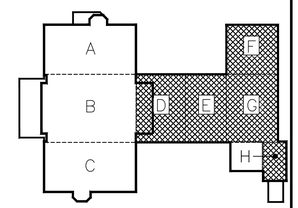
1. THE LIGHTNING PROTECTION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH U.L. 96A, NFPA 780 AND ANSI CODE REQUIREMENTS.
2. CONDUCTORS SHALL MAINTAIN A HORIZONTAL OR DOWNWARD COURSE, FREE FROM "U" OR "V" (UP AND DOWN) POCKETS.
3. NO BEND OF A CONDUCTOR SHALL HAVE A BEND RADIUS OF LESS THAN 8 INCHES.
4. ACTUAL JOB SITE CONDITIONS SHALL REQUIRE SLIGHT ALTERATIONS IN AIR TERMINAL AND GROUND ROD LOCATIONS.
5. BARE COPPER MATERIALS SHALL NOT BE INSTALLED ON ALUMINUM SURFACE AND ALUMINUM MATERIALS SHALL NOT BE INSTALLED ON COPPER SURFACE. ALUMINUM COMPONENTS SHALL NOT BE IN DIRECT CONTACT WITH EARTH. ALUMINUM DOWN CONDUCTORS SHALL BE CONNECTED TO COPPER CONDUCTORS USING BIMETALLIC FITTINGS WITHIN 18 INCHES OF EARTH.
6. THE LIGHTNING PROTECTION SYSTEM SHALL BE INSTALLED IN A NEAT WORKMANLIKE AND INCONSPICUOUS MANNER SO THAT ALL COMPONENTS WILL BLEND IN WITH BUILDING AESTHETICS.
7. ALL ADHESIVE AIR TERMINALS BASES AND FITTINGS SHALL BE SECURED TO ROOF WITH AN ADHESIVE COMPOUND OR PITCH WHICH COMPLIES WITH ROOFING BOND REQUIREMENTS. ATTACHMENT OF CABLE SECURED TO AIR TERMINALS, AND BUILDING SHALL BE SECURED ALONG THE CABLE RUN AND ATTACHMENTS AND SHALL NOT BE MORE THAN 3 FT APART.
8. EACH INDIVIDUAL ITEM OF THE LIGHTNING PROTECTION SYSTEM IS NOT LABELED FOR SAKE OF CLARITY, ITEMS ARE INDICATED AT RANDOM LOCATIONS ONLY. PROVIDE A COMPLETE SYSTEM THAT SHALL INCLUDE A UL "MASTER LABEL" CERTIFICATION.
9. CONDUCTOR SUPPORTS SHALL BE CORROSION RESISTANT TYPE.
10. WHERE TERMINALS GREATER THAN 24 INCHES IN HEIGHT ARE USED, THEY SHALL BE SUPPORTED AT A POINT AT LEAST HALF THE HEIGHT OF THE ROD AND BE SPACED MORE THAN 20 BUT NOT LESS THAN 25 FEET APART FOR PERIMETER PROTECTION.
11. METAL BODIES WITHIN 6'-0" OF THE LIGHTNING PROTECTION SYSTEM SHALL BE BONDED TO THE SYSTEM IN ACCORDANCE WITH UL96A.
12. ALL LIGHTNING PROTECTION SYSTEM COMPONENTS SHALL BE LISTED, EXCEPTING HARDWARE SCREWS, BOLTS, ETC.
13. MAIN SIZE CONDUCTORS USED FOR BONDING OTHER SYSTEMS TO INCLUDE BUT NOT LIMITED TO: METALLIC WATER SYSTEMS, STEAM OR HOT WATER HEATING SYSTEMS, ELECTRIC SERVICES, TELEPHONE SYSTEMS, ANTENNA GROUNDS, OTHER LARGE UNGROUNDED METALLIC MASSES SHALL NOT BE SMALLER THAN 6 AWG.

DEMOLITION NOTES

1 DISCONNECT AND REMOVE LIGHTNING PROTECTION WIRING LAID ON GROUND WITH CARE FOR ROOF WORK. STORE IN A SECURE LOCATION AND PROTECT FROM DEMOLITION WORK.

KEY NOTES

1 INSTALL LIGHTNING PROTECTION WIRING AS INDICATED ON ROOF PLAN.



KEY PLAN
N.T.S.

LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP
ROCHESTER CITY SCHOOL DISTRICT
Savin Engineers, P.C. in association with Gilbane
PDG Pofli Design Group
edr
Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM
1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL
655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

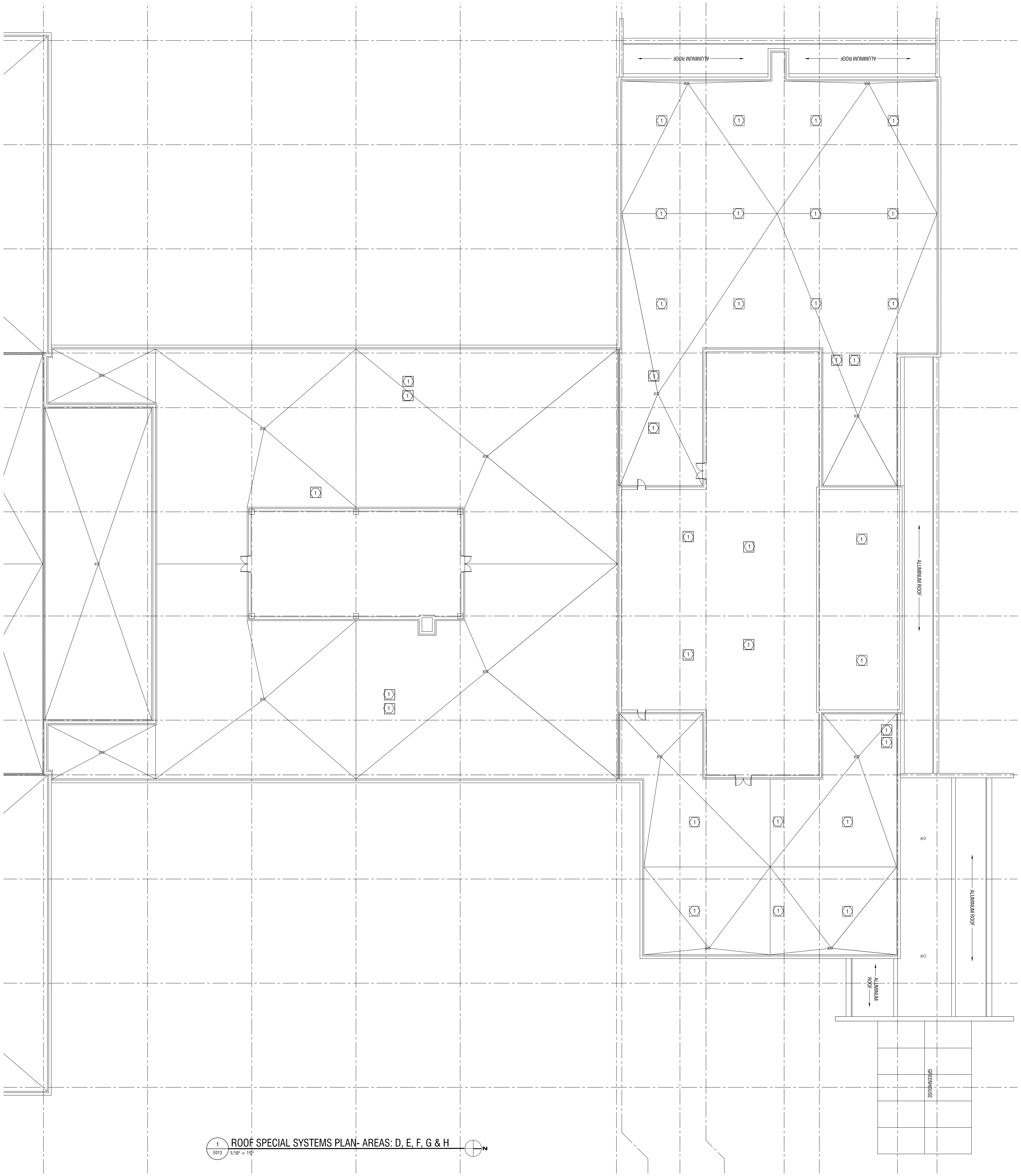
NO:	DATE:	DESCRIPTION:
-	-	-
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218
DRAWN BY: VP
REVIEWED BY: MVR
ISSUED FOR: BID DOCUMENTS
DATE: JUNE 26, 2019
DRAWING NAME:

ROOF ELECTRICAL DEMOLITION PLAN- LIGHTNING PROTECTION AREA D, E, F, G, & H

DRAWING NUMBER:

E012



1 E013 ROOF SPECIAL SYSTEMS PLAN- AREAS: D, E, F, G & H
1/16" = 1'0"

ELECTRIC GENERAL NOTES:

A ELECTRICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL DEVICE PLACEMENT AND ELEVATIONS WITH CASEWORK SUPPLIER AND ARCHITECTS PRIOR TO ROUGH-IN. GENERAL CONTRACTOR SHALL PROVIDE ALL DRILLING AND GROMMETING IN CASEWORK FOR CORD ACCESS IF REQUIRED.

B COORDINATE LOCATIONS OF CEILING DEVICES IN MECHANICAL SPACES WITH HVAC CONTRACTOR TO AVOID CONFLICTS WITH EQUIPMENT.

C PROVIDE NEW WIRING FOR ALL NEW ADDRESSABLE FIRE ALARM SYSTEM DEVICES.

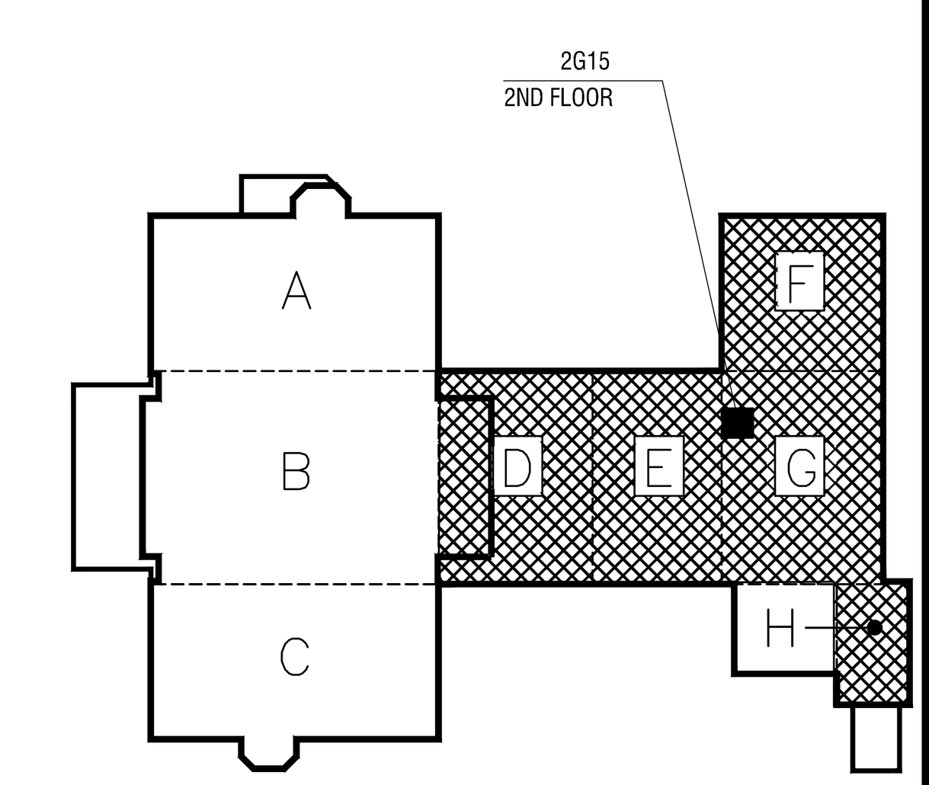
D WHERE DOOR HOLDERS ARE SHOWN, IF EXISTING DOOR HARDWARE IS TO REMAIN PROVIDE A POWER SUPPLY WITH A 24V WIRING.

E POWER TO SMOKE DAMPER ACTUATORS MUST BE THRU A FIRE SYSTEM RELAY. RELAY TO BE MOUNT ADJACENT TO DAMPER. UPON NEAREST UPSTREAM SD SMOKE DETECTOR ACTIVATION, RELAY SENDS ACTUATOR SIGNAL TO CLOSE DAMPER. REFER TO MECHANICAL PLANS FOR FIRE SMOKE DAMPER LOCATIONS.

ELECTRIC KEYED NOTES:

1 DISCONNECT EXISTING SMOKE DETECTOR AT SMOKE HATCH AND REUSE EXISTING CIRCUITING IF IT'S AN EMERGENCY CIRCUIT. IF ON NORMAL POWER, REMOVE WIRING BACK TO SOURCE, LABEL BRANCH BREAKER AS AVAILABLE AND PROVIDE NEW 120V, 20A EMERGENCY CIRCUIT FROM NEAREST PANEL. PROVIDE A NEW ADDRESSABLE 120V SMOKE DETECTOR. AND CONNECT TO BUILDING FIRE ALARM PANEL THROUGH 24V LINE FOR SMOKE DETECTOR STATUS MONITORING AND TO ELECTRIC THERMOLATCH.

NEW EMERGENCY CIRCUITS FROM AVAILABLE SPACES AVAILABLE IN PANEL EP2G IN ROOM 2G15.



KEY PLAN
N.T.S.

LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP | ROCHESTER CITY SCHOOL DISTRICT

SAVIN Savin Engineers, P.C. | in association with Gilbane

PDG POPLI DESIGN GROUP | edr | Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO.	DATE:	DESCRIPTION:
-	-	-
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218

DRAWN BY: MHB

REVIEWED BY: MVR

ISSUED FOR: BID DOCUMENTS

DATE: JUNE 26, 2019

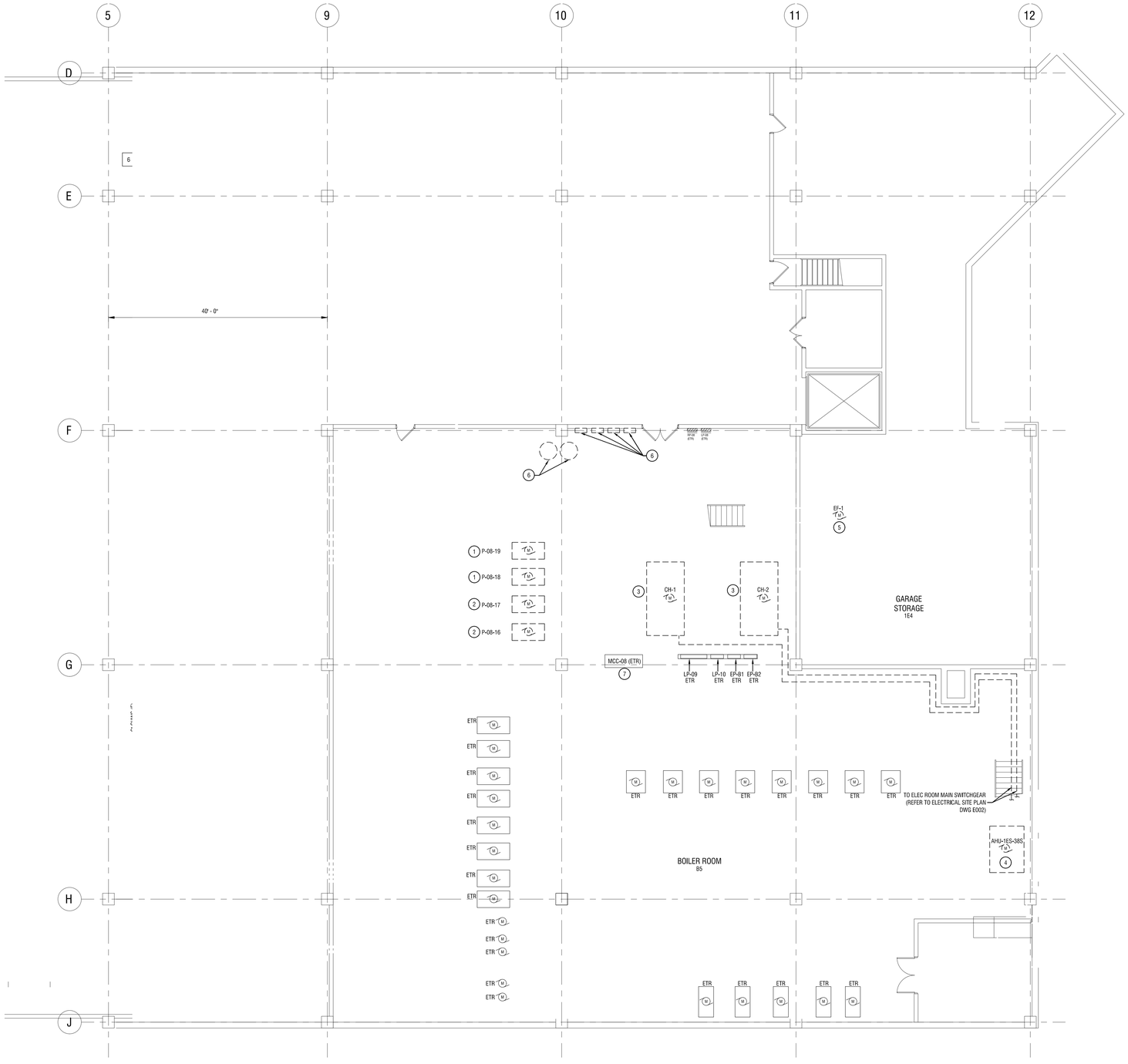
DRAWING NAME:

ROOF SPECIAL SYSTEMS PLAN- AREAS: D, E, F, G, & H

DRAWING NUMBER:

E013

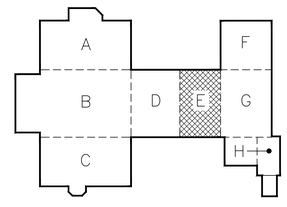
Date & Time: 6/26/2019 11:16 AM By: Hernandez-Bernier, Melissa
Path: J:\Rochester Joint Schools Construction Board\2170218 - Edison Tech Phase 2\Drawings\MEP\Edison Tech Phase 2\Views\Elec\Additional Scope BP02\E013 - Roof Electrical Plan_Fire Alarm.dwg



1 E101 MECHANICAL ROOM ELECTRICAL DEMOLITION PLAN
1/8" = 1'-0"

ELECTRIC DEMOLITION NOTES:

1. REMOVE POWER TO EXISTING PUMP. DISCONNECT SWITCH AND ALL ASSOCIATED WIRING BACK TO LP-09.
2. REMOVE POWER TO EXISTING PUMP AND WIRING BACK TO MCC-08.
3. REMOVE POWER TO EXISTING CHILLER UNIT, WIRING BACK TO MAIN SWITCHGEAR, DISCONNECT AND BREAKER.
4. REMOVE POWER TO EXISTING AHU, DISCONNECT AND WIRING BACK TO MCC-08.
5. REMOVE POWER TO EXISTING EXHAUST FAN, DISCONNECT AND WIRING BACK TO LP-08.
6. REMOVE POWER TO EXISTING EQUIPMENT AND ELECTRICAL CONNECTIONS.
7. REMOVE MOTOR CONTROLS FOR UNITS BEING REPLACED FROM MCC TUBES. PROVIDE NEW REPLACEMENT BREAKERS AS INDICATED IN SCHEDULE IN DWG E000.



KEY PLAN
N.T.S.

LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP
Rochester City School District
Savin Engineers, P.C. in association with Gilbane
PDG Popli Design Group
edr
Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO:	DATE:	DESCRIPTION:
-	-	-
1	6.28.19	BID ADDENDUM 1

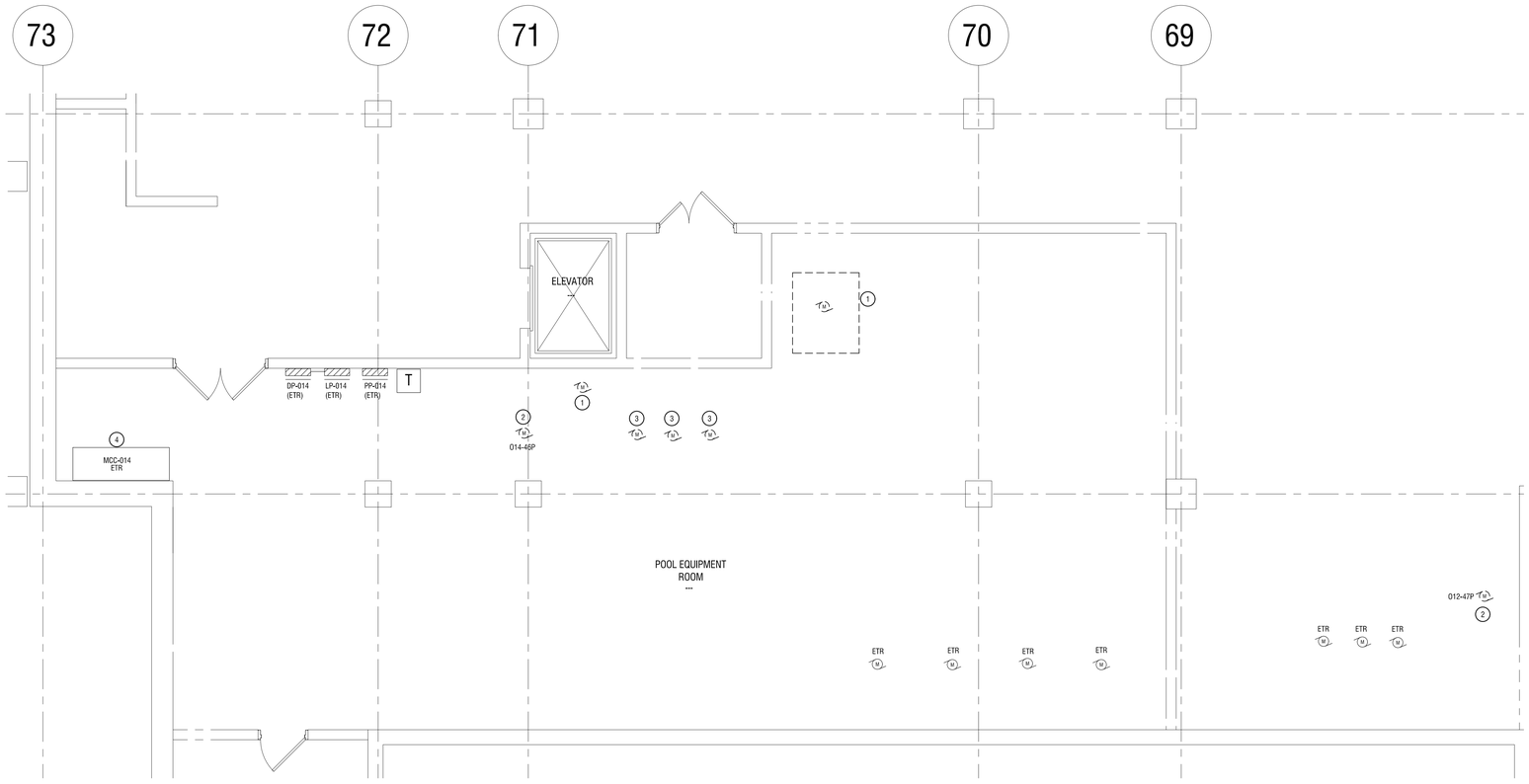
PROJECT NUMBER: 2170218
DRAWN BY:
REVIEWED BY: MHB MVR
ISSUED FOR: BID DOCUMENTS
DATE: JUNE 26, 2019
DRAWING NAME:

MECHANICAL ROOM ELECTRICAL DEMOLITION PLAN

DRAWING NUMBER:

E101

Date & Time: 6/26/2019 11:16 AM By: Hernandez-Bernier, Melissa
Path: J:\Rochester Joint Schools Construction Board\2170218 - Edison Tech Phase 2\Drawings\MEEP\Edison Tech Phase 2\Revit\Elec\Additional Scope BP\DWG\E101 Mechanical Room Electrical Demolition Plan.dwg

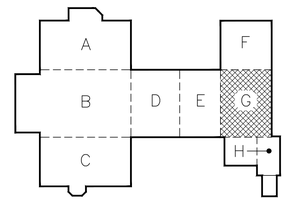


1 E102 BASEMENT ELECTRICAL DEMOLITION PLAN- AREA G/H

1/4" = 1'-0"

ELECTRIC DEMOLITION NOTES:

1. REMOVE POWER TO EXISTING DEHUMIDIFIER, PUMP, DISCONNECT SWITCH AND ALL ASSOCIATED WIRING BACK TO LP-014.
2. REMOVE POWER TO EXISTING PUMP, DISCONNECT AND WIRING BACK TO MCC-014.
3. DISCONNECT POWER TO EQUIPMENT FOR NEW PIPING WORK AND RECONNECT ONCE NEW PIPING WORK IS COMPLETED.
4. REMOVE MOTOR CONTROLS FOR UNITS BEING REPLACED FROM MCC TUBES.PROVIDE NEW REPLACEMENT BREAKERS AS INDICATED IN SCHEDULE IN DWG E000.



KEY PLAN
N.T.S.

LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP

ROCHESTER CITY SCHOOL DISTRICT

Savin Engineers, P.C. in association with Gilbane

POPLI DESIGN GROUP
300 Pinnacle Drive • Penfield, NY 14526
main: 585-388-0360 • fax: 585-388-2070

edr

Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS		
NO:	DATE:	DESCRIPTION:
-	-	-
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218

DRAWN BY: MHB

REVIEWED BY: MVR

ISSUED FOR: BID DOCUMENTS

DATE: JUNE 26, 2019

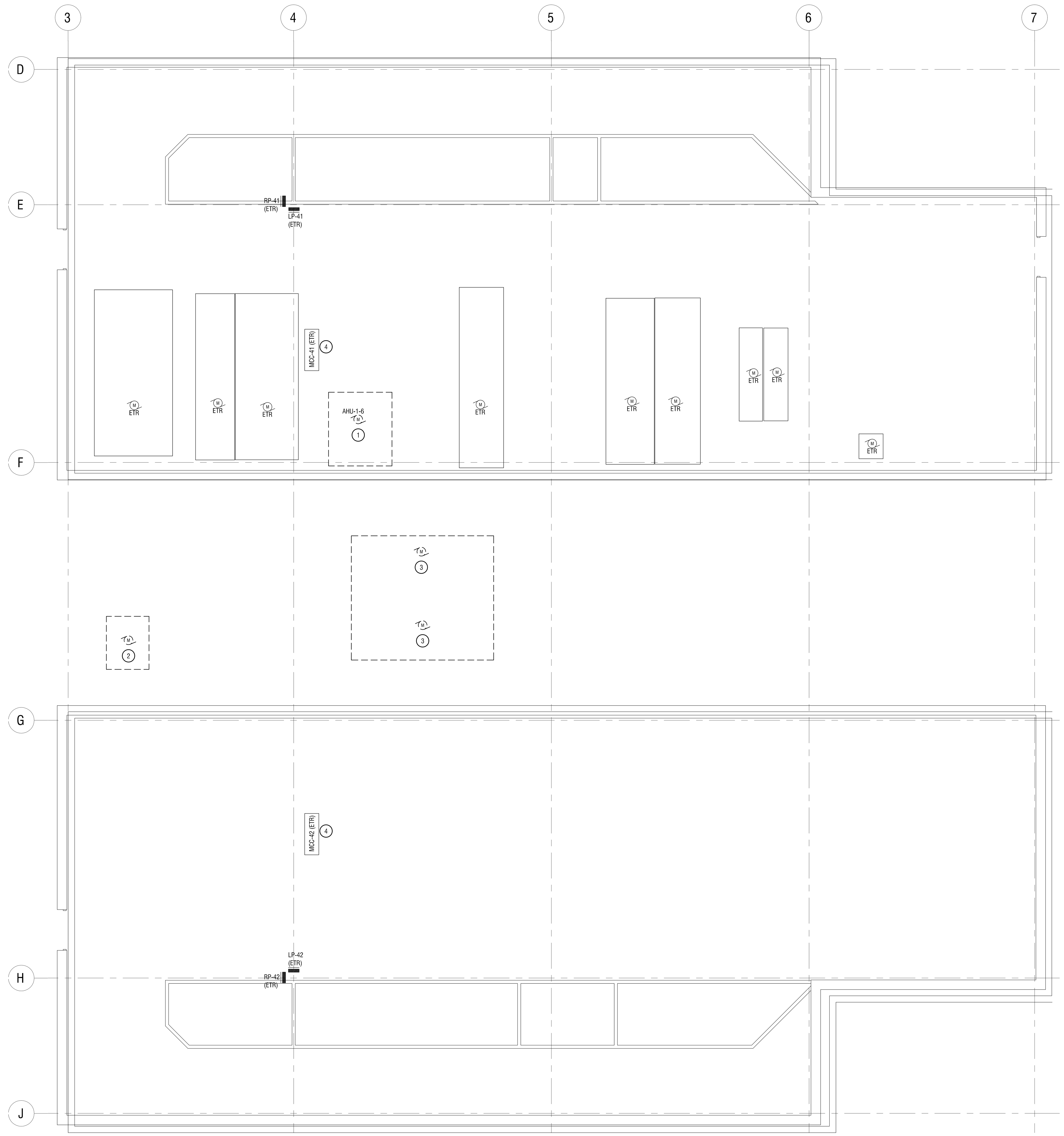
DRAWING NAME:

BASEMENT ELECTRICAL DEMOLITION PLAN- AREA G/H

DRAWING NUMBER:

E102

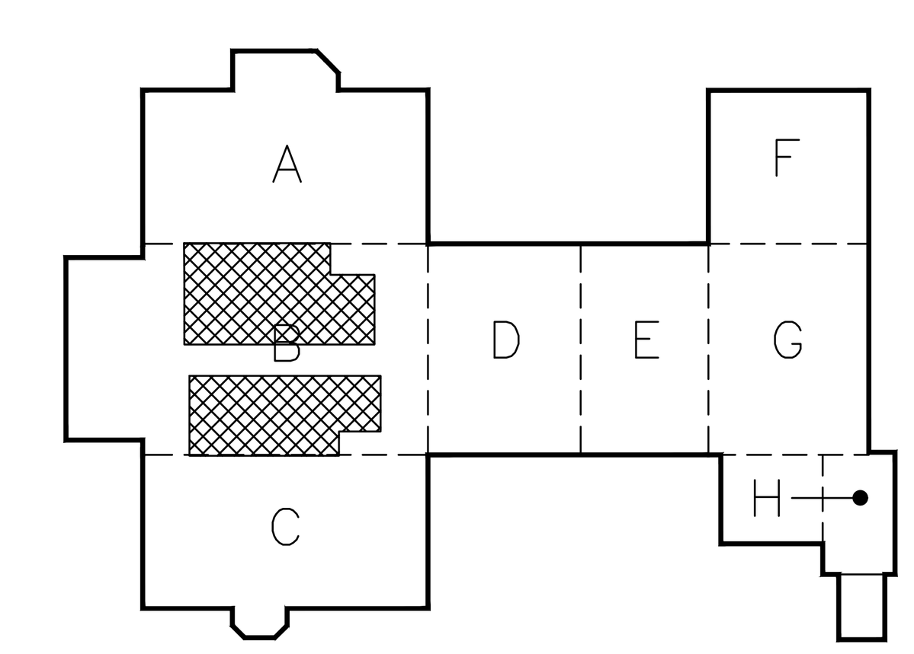
Date & Time: 6/26/2019 11:16 AM By: Hernandez Berrier, Melissa
Path: J:\Rochester Joint Schools Construction Board\2170218 - Edison Tech Phase 2\Drawings\MEEP\Edison Tech Phase 2\Views\Elec-Additional Scope BP\DWG\E102 Basement Electrical Demolition Plan Area G H.dwg



1 E103 ROOF AND PENTHOUSE 1 ELECTRICAL DEMOLITION PLAN
1/8" = 1'-0"

ELECTRIC DEMOLITION NOTES:

1. REMOVE POWER TO EXISTING AIR HANDLING UNIT, FAN ABOVE AND ASSOCIATED DISCONNECT SWITCH.
2. REMOVE POWER TO EXISTING CHILLER AND ASSOCIATED DISCONNECT SWITCH.
3. REMOVE POWER TO EXISTING COOLING TOWERS AND ASSOCIATED DISCONNECT SWITCH.
4. REMOVE MOTOR CONTROLS FOR UNITS BEING REPLACED FROM MCC TUBES. PROVIDE NEW REPLACEMENT BREAKERS AS INDICATED IN SCHEDULE IN DWG E000.



KEY PLAN
N.T.S.

LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP
Rochester City School District
Savin Engineers, P.C. in association with Gilbane
PDG Popli Design Group
edr
Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO:	DATE:	DESCRIPTION:
-	-	-
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218

DRAWN BY: MHB

REVIEWED BY: MVR

ISSUED FOR: BID DOCUMENTS

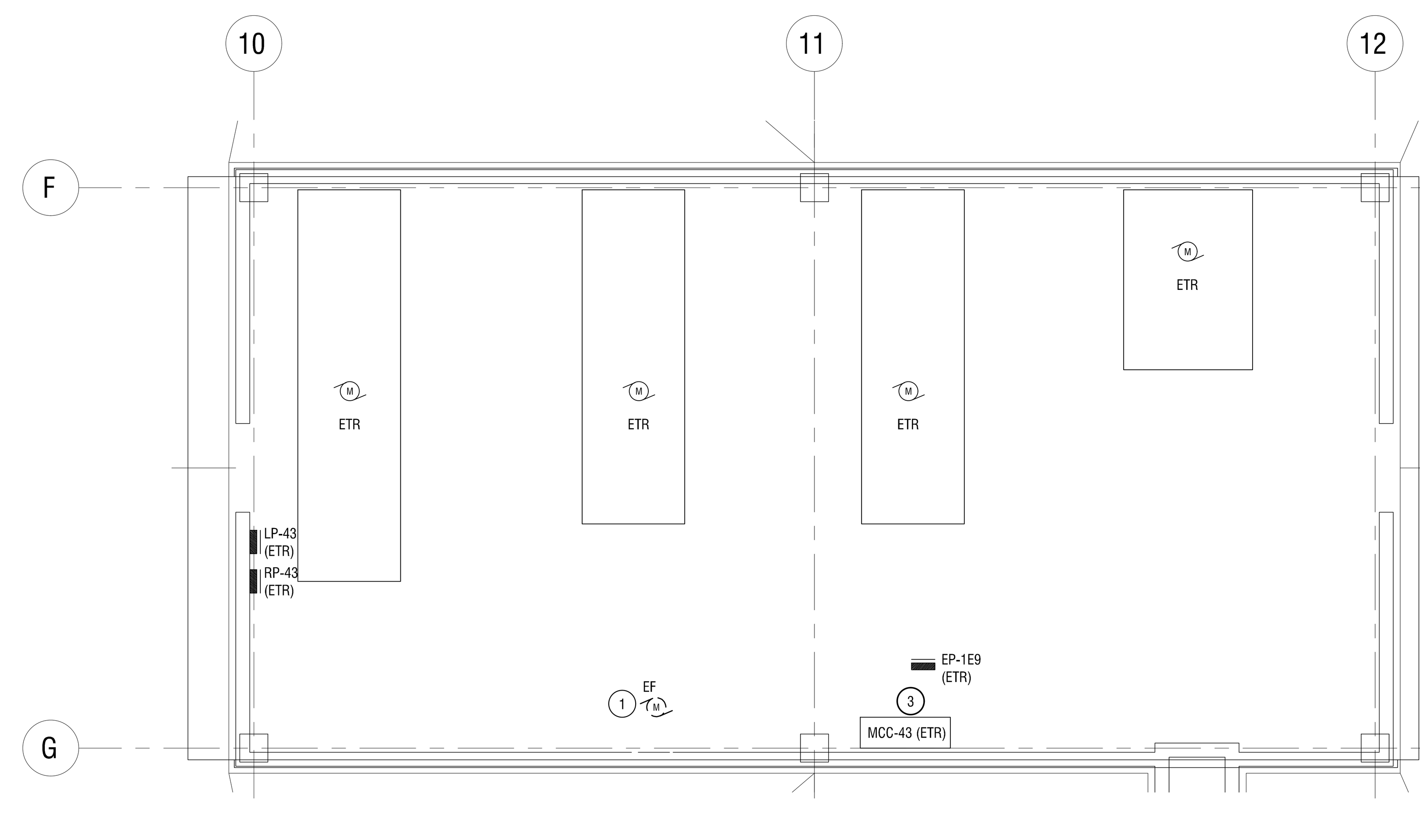
DATE: JUNE 26, 2019

DRAWING NAME:

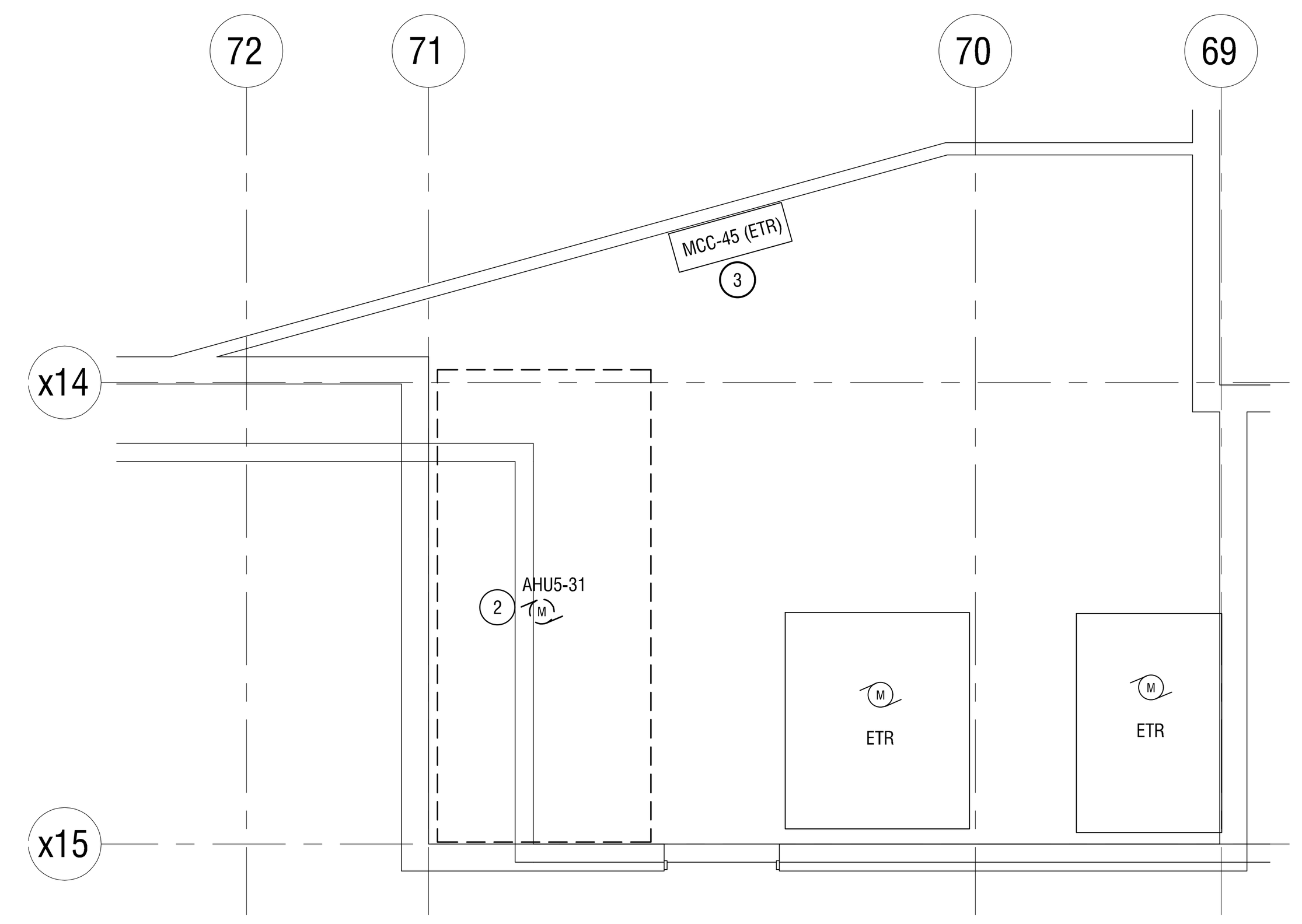
ROOF AND PENTHOUSE 1 ELECTRICAL DEMOLITION PLAN

DRAWING NUMBER:

E103



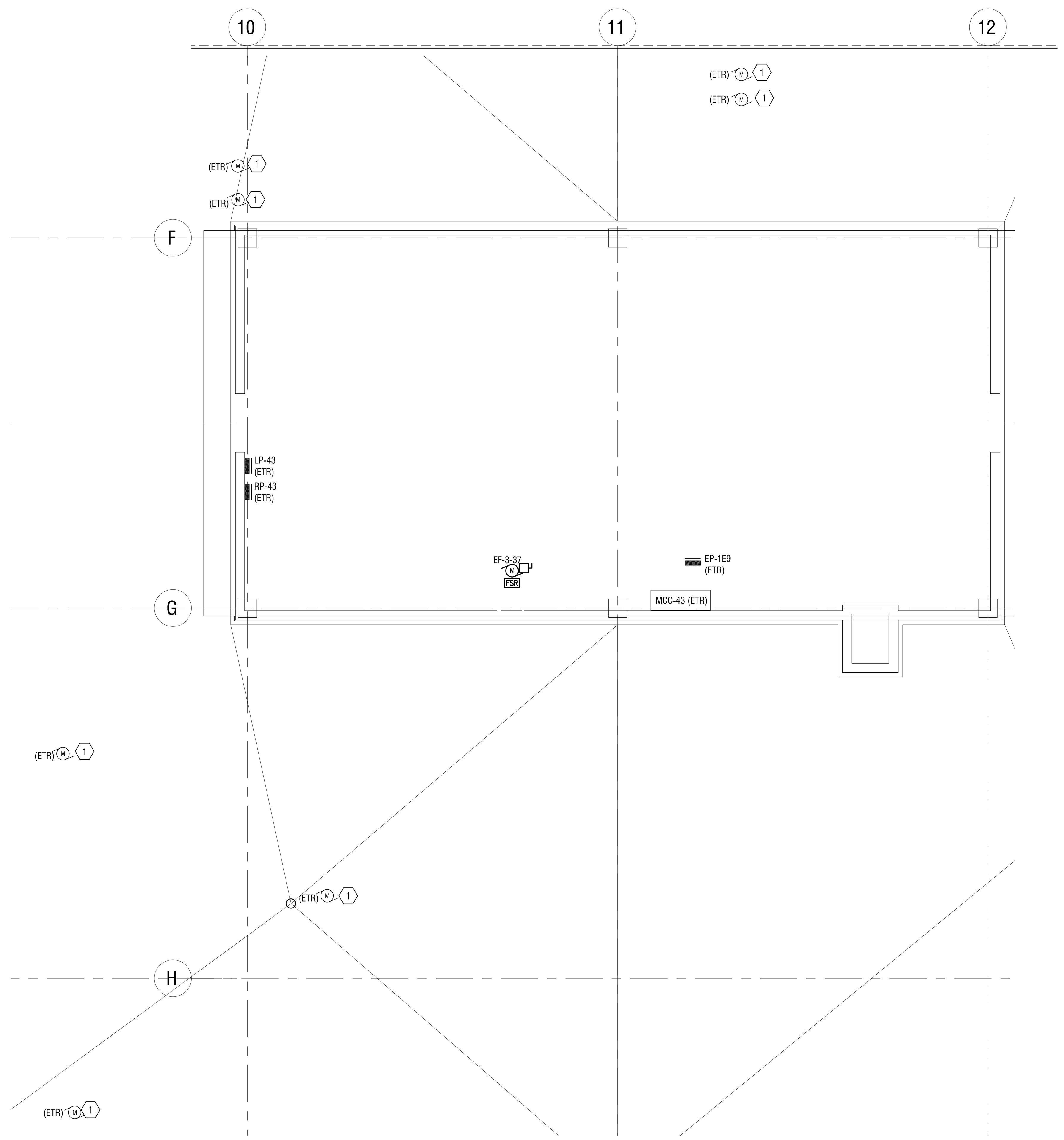
1 E104 PENTHOUSE 3 ELECTRICAL DEMOLITION PLAN
1/8" = 1'-0"



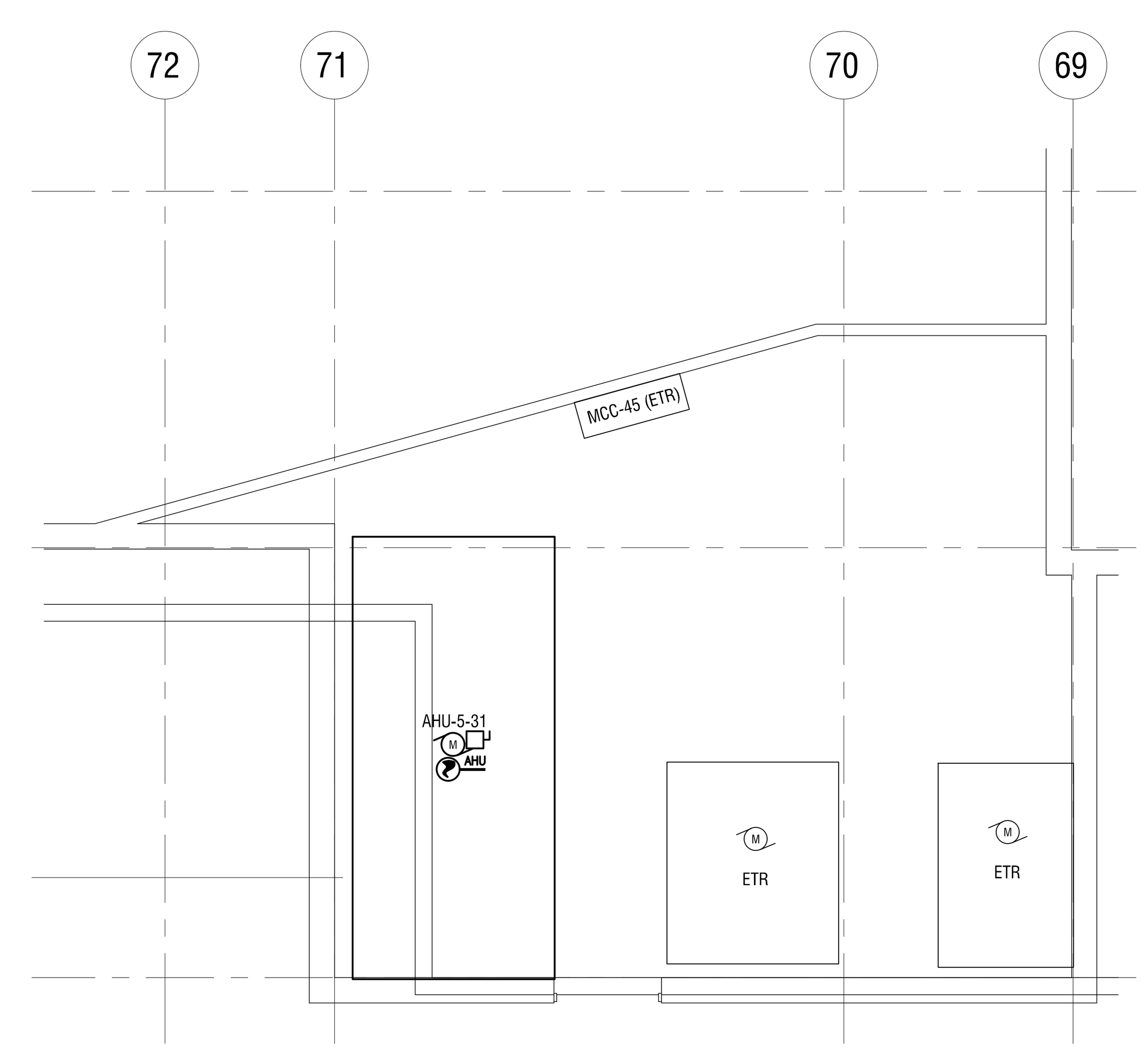
2 E104 PENTHOUSE 5 ELECTRICAL DEMOLITION PLAN
1/8" = 1'-0"

ELECTRIC DEMOLITION NOTES:

1. REMOVE POWER TO EXISTING EXHAUST FAN AND ASSOCIATED DISCONNECT SWITCH.
2. REMOVE POWER TO EXISTING AHU AND ASSOCIATED DISCONNECT SWITCH.
3. REMOVE MOTOR CONTROLS FOR UNITS BEING REPLACED FROM MCC TUBES. PROVIDE NEW REPLACEMENT BREAKERS AS INDICATED IN SCHEDULE IN DWG E000.



3 E104 PENTHOUSE 3 ELECTRICAL PLAN
1/8" = 1'-0"



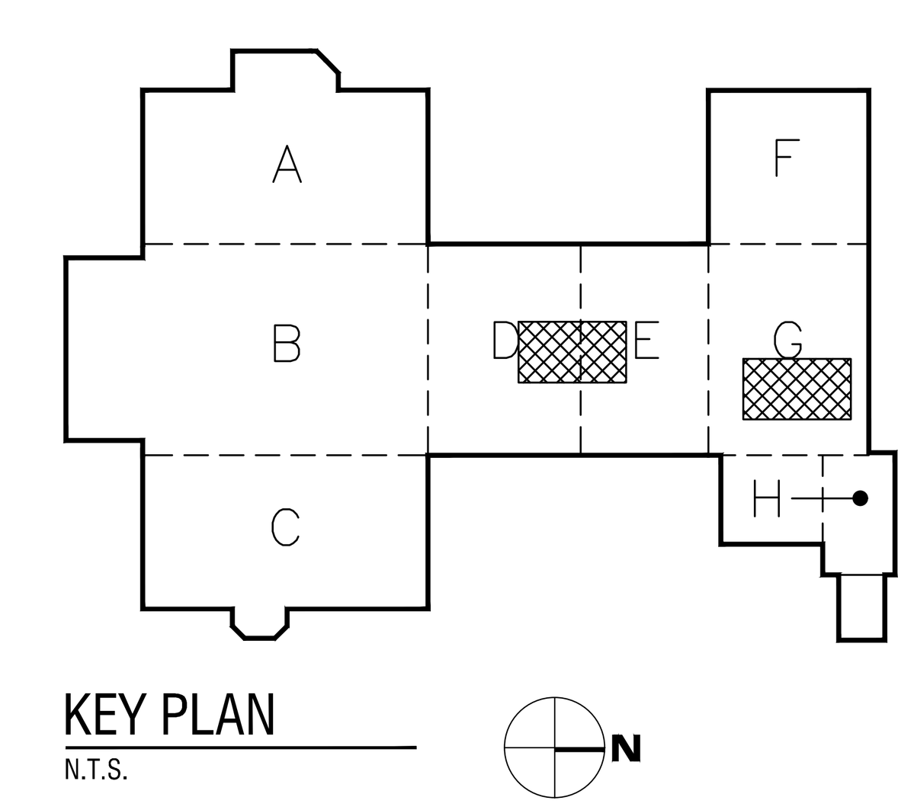
4 E104 PENTHOUSE 5 ELECTRICAL PLAN
1/8" = 1'-0"

GENERAL NOTES:

1. CONNECT FIRE ALARM DEVICE TO BUILDING ADDRESSABLE FIRE ALARM SYSTEM.

ELECTRIC KEYED NOTES:

1. DISCONNECT POWER TO EXISTING EQUIPMENT. EXTEND EXISTING CIRCUITING AND RECONNECT UNIT.(REFER TO MECHANICAL DRAWINGS FOR DETAILS)



KEY PLAN
N.T.S.

LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP
Rochester City School District
Savin Engineers, P.C. in association with Gilbane
PDG Popli Design Group
edr
Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO.	DATE:	DESCRIPTION:
-	-	-
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218

DRAWN BY: MHB

REVIEWED BY: MVR

ISSUED FOR: BID DOCUMENTS

DATE: JUNE 26, 2019

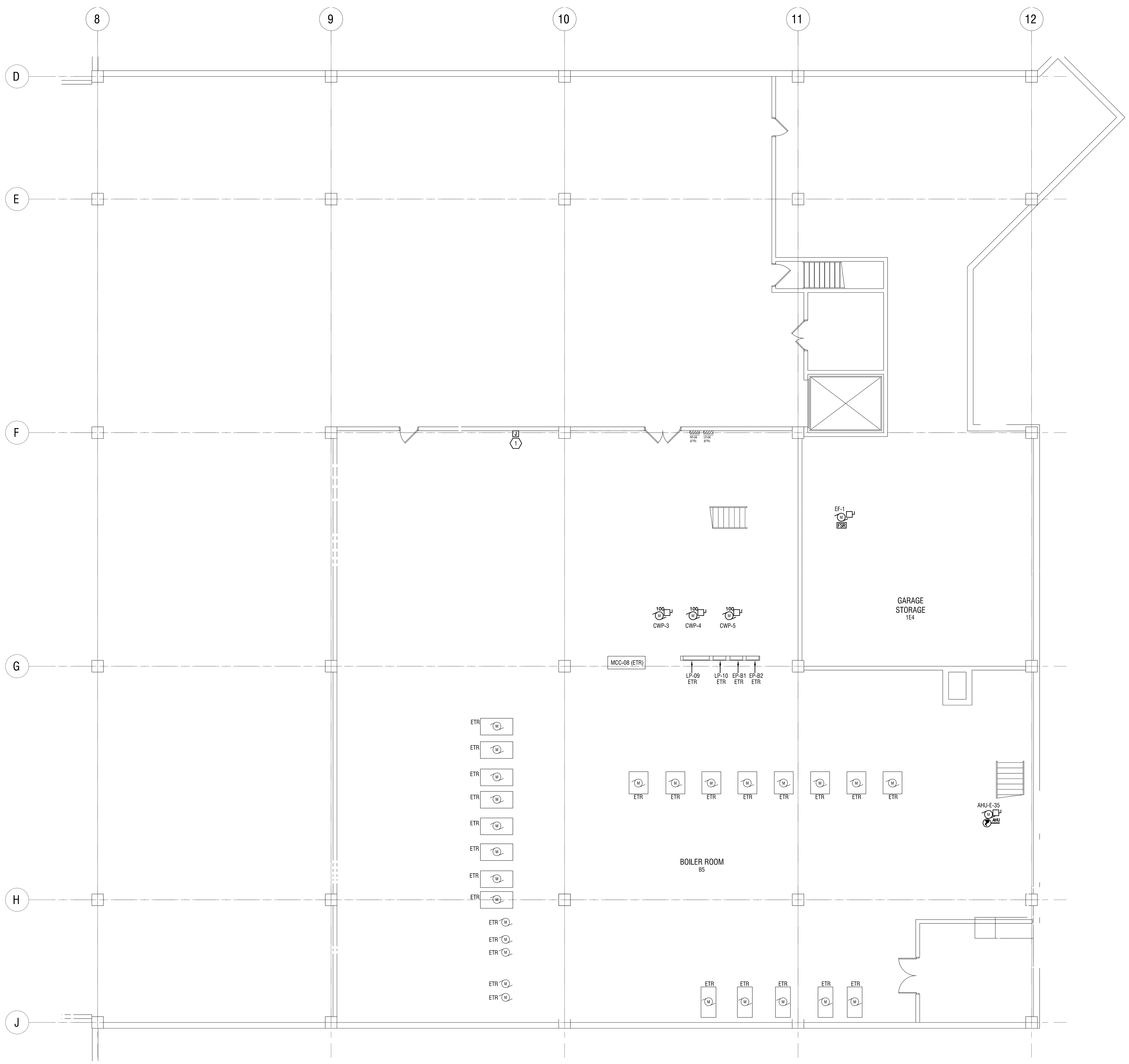
DRAWING NAME:

PENTHOUSE 3 AND 5 ELECTRICAL DEMOLITION AND NEW WORK PLAN

DRAWING NUMBER:

E104

Date & Time: 6/26/2019 11:16 AM By: Hernandez-Bernier, Melissa



1 / E201 MECHANICAL ROOM ELECTRICAL PLAN

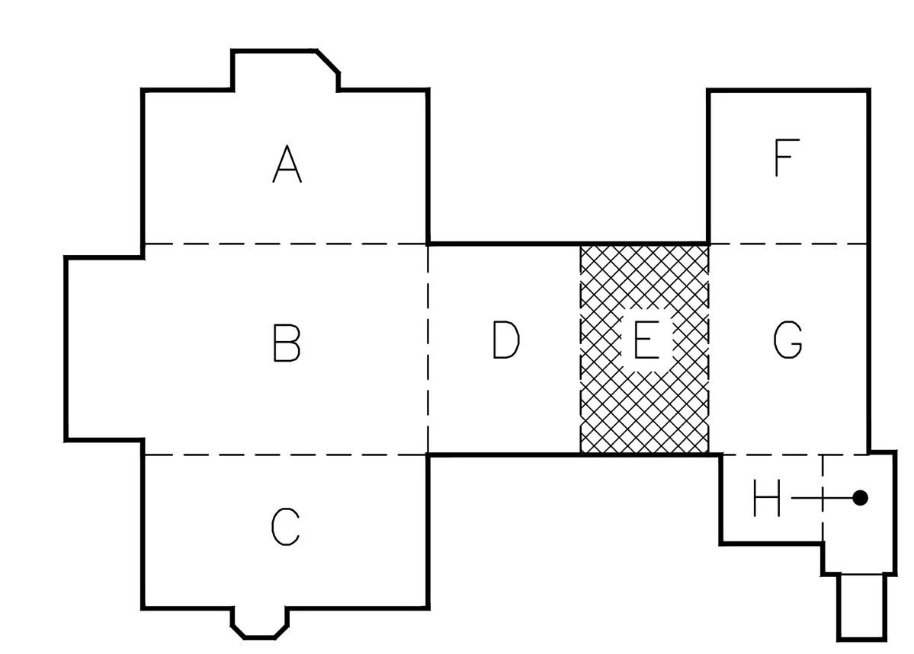
1/8"=1'-0"

GENERAL NOTES:

1. CONNECT FIRE ALARM DEVICE TO BUILDING ADDRESSABLE FIRE ALARM SYSTEM.

ELECTRIC KEYED NOTES:

1. PROVIDE (1) 120V, 20A CIRCUIT FOR GLYCOL STATION POWER FROM CIRCUITS AVAILABLE FROM DEMOLITION WORK.



KEY PLAN

N.T.S.

LaBella
Powered by partnership.

300 State Street, Suite 201
Rochester, NY 14614
585-454-6110

labellapc.com

RSMP

Rochester City School District

Savin Engineers, P.C. in association with Gilbane

PDG Popli Design Group

edr

Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO:	DATE:	DESCRIPTION:
-	-	-
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218

DRAWN BY: MHB

REVIEWED BY: MVR

ISSUED FOR: BID DOCUMENTS

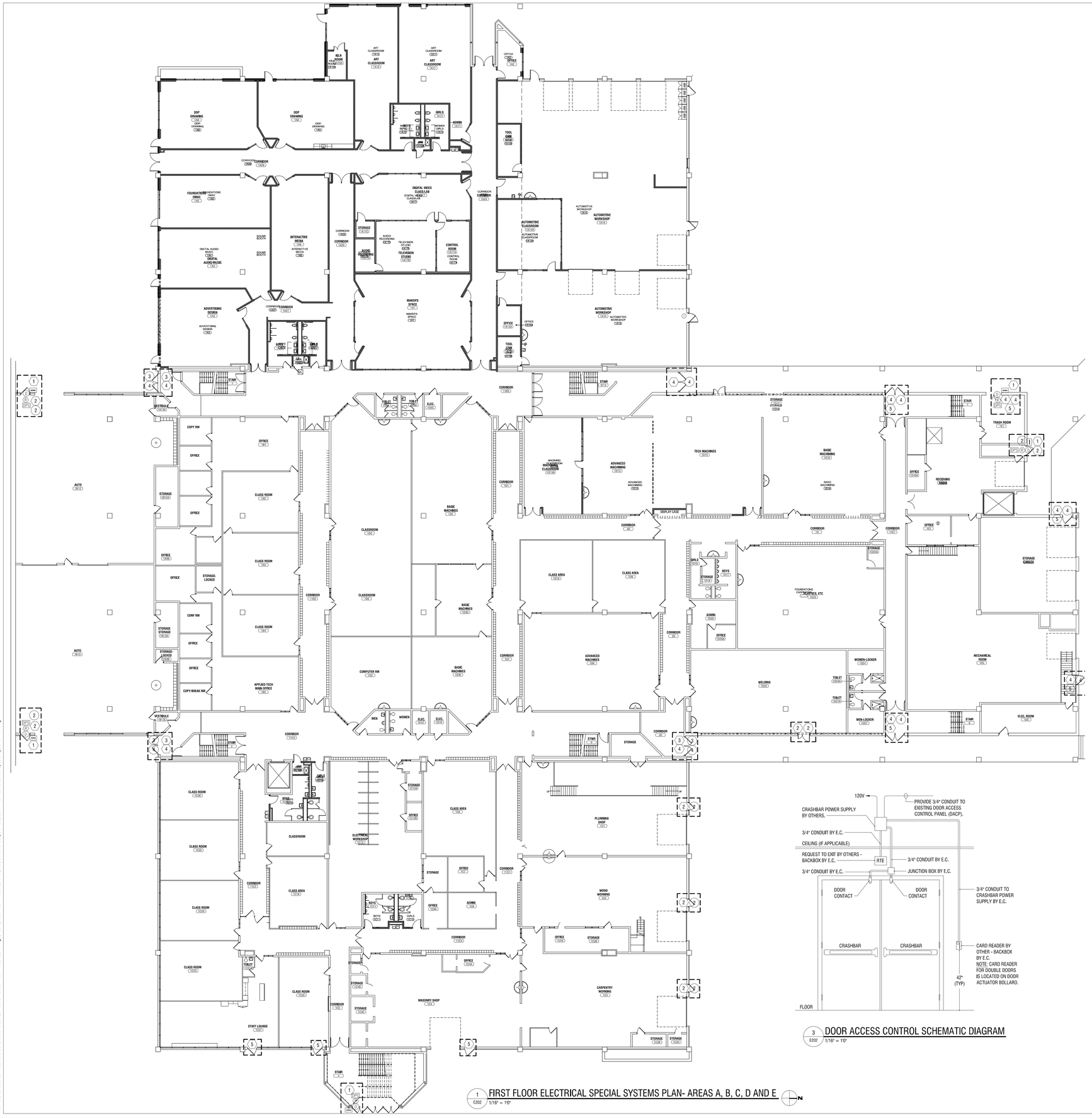
DATE: JUNE 26, 2019

DRAWING NAME:

MECHANICAL ROOM ELECTRICAL PLAN

DRAWING NUMBER:

E201



1 / E202
FIRST FLOOR ELECTRICAL SPECIAL SYSTEMS PLAN- AREAS A, B, C, D AND E
1/16" = 1'0"

ELECTRIC DEMOLITION NOTES:

① REMOVE EXISTING CARD READER.

② REMOVE EXISTING EXIT SIGN AND POWER TO DEVICES THAT WILL INTERFERE WITH DOOR DEMOLITION AND NEW WORK. SAVE EXIT SIGNS AND WIRING FOR REUSE.

③ REMOVE EXIT SIGN. SAVE WIRING FOR REUSE.

④ REMOVE POWER TO DEVICES THAT WILL INTERFERE WITH DOOR DEMOLITION AND NEW WORK.

ELECTRIC KEYED NOTES:

1 INSTALL NEW PROXIMITY CARD READER AND NECESSARY POWER FROM NEAREST PANEL WITH AVAILABLE SPARES. CARD READER TO MATCH BUILDING STANDARD.

2 RE-INSTALL EXIT SIGN AND POWER REMOVED DURING DEMOLITION.

3 PROVIDE NEW CEILING MOUNT EXIT SIGN. REUSE EXISTING CIRCUITING.

4 RESTORE POWER CONNECTIONS IMPACTED BY DEMOLITION WORK.

5 PROVIDE NEW CEILING MOUNT EXIT SIGN. POWER SOURCE MUST BE

3 / E202
DOOR ACCESS CONTROL SCHEMATIC DIAGRAM
1/16" = 1'0"

KEY PLAN
N.T.S.

LaBella
Powered by partnership.

300 State Street, Suite 201
Rochester, NY 14614
585-454-6110

labellapc.com

RSMP
ROCHESTER CITY SCHOOL DISTRICT
SAVIN Savin Engineers, P.C.
in association with Gilbane
PDG POPLI DESIGN GROUP
edr
Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO:	DATE:	DESCRIPTION:
-	-	-
1	6.28.19	BID ADDENDUM 1

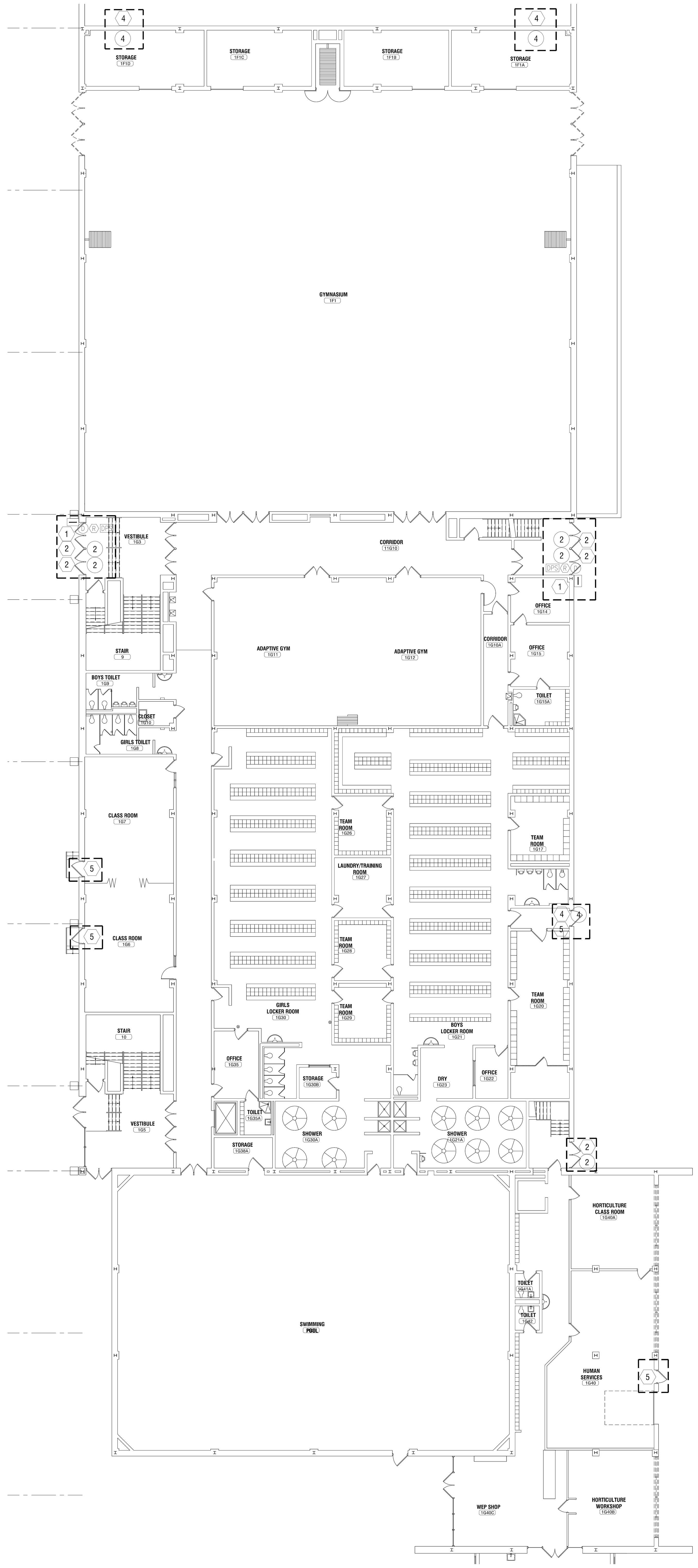
PROJECT NUMBER: 2170218
DRAWN BY: MHB
REVIEWED BY: MVR
ISSUED FOR: BID DOCUMENTS
DATE: JUNE 26, 2019
DRAWING NAME:

FIRST FLOOR ELECTRICAL SPECIAL SYSTEMS PLAN- AREAS: A,B,C,D & E

DRAWING NUMBER:

E202

Date & Time: 6/26/2019 11:16 AM By: Hernandez-Bernier, Melissa
Path: J:\Rochester Joint Schools Construction Board\2170218 - Edison Tech Phase 2\Drawings\MEEP\Edison Tech Phase 2\Views\Elec\Additional Scope BP02\E202 - First Floor Electrical Special Systems Plan.dwg



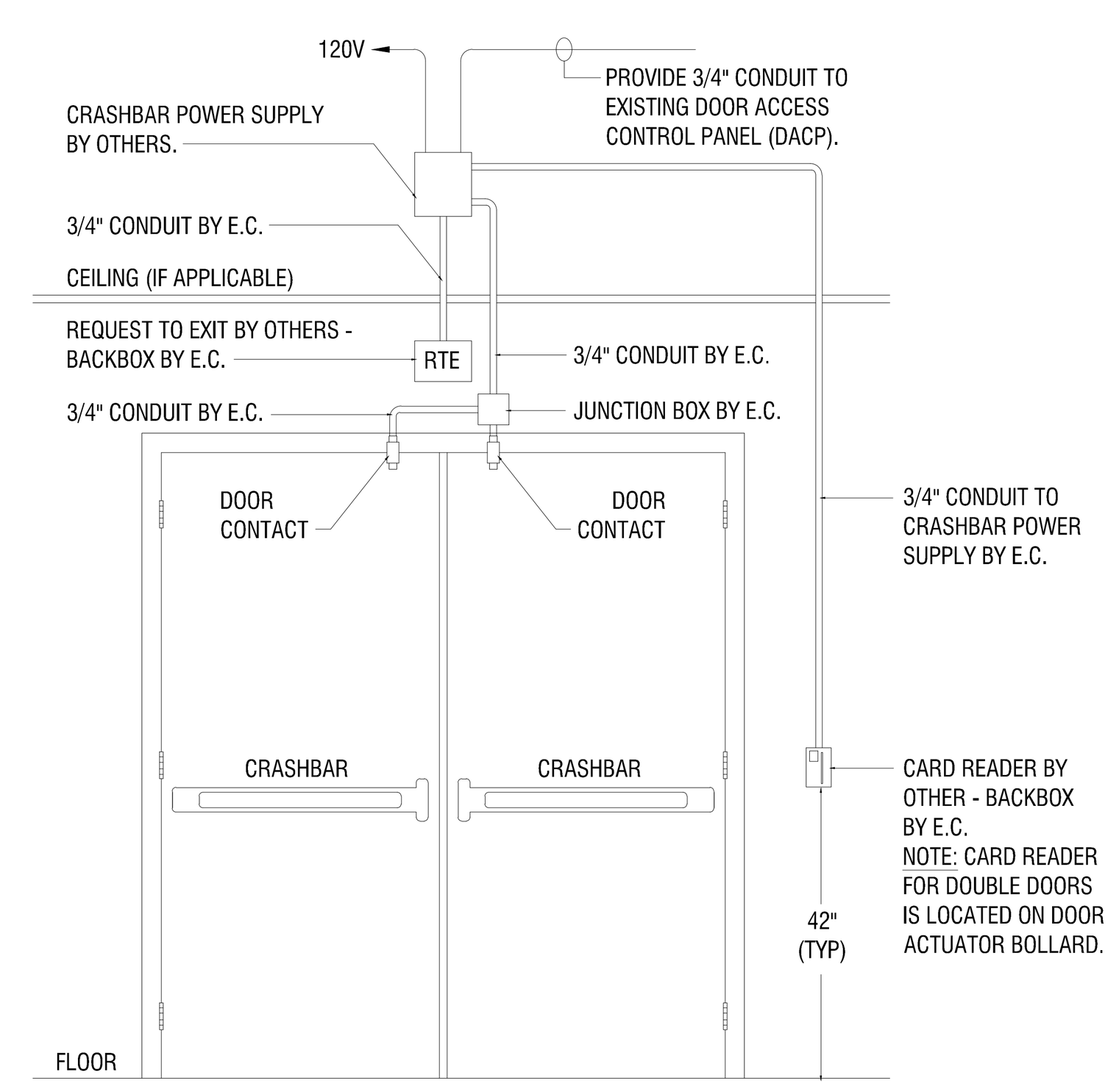
2 / E203 FIRST FLOOR ELECTRICAL SPECIAL SYSTEMS PLAN- AREAS: F,G &H
1/16" = 1'0"

ELECTRIC DEMOLITION NOTES:

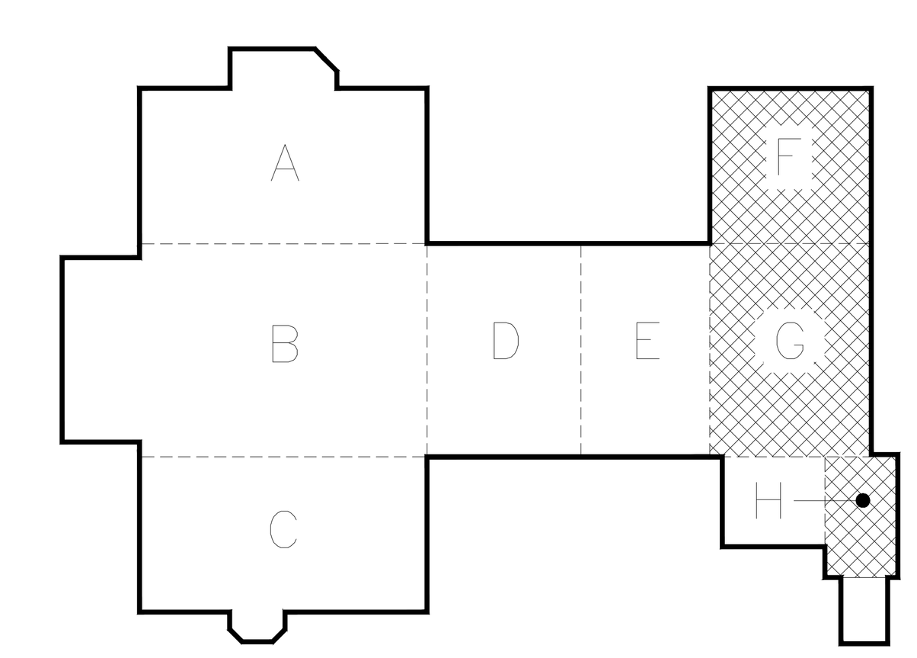
1. REMOVE EXISTING CARD READER.
2. REMOVE EXISTING EXIT SIGN AND POWER TO DEVICES THAT WILL INTERFERE WITH DOOR DEMOLITION AND NEW WORK. SAVE EXIT SIGNS AND WIRING FOR REUSE.
3. REMOVE EXIT SIGN. SAVE WIRING FOR REUSE.
4. REMOVE POWER TO DEVICES THAT WILL INTERFERE WITH DOOR DEMOLITION AND NEW WORK.

ELECTRIC KEYED NOTES:

1. INSTALL NEW PROXIMITY CARD READER AND NECESSARY POWER FROM NEAREST PANEL WITH AVAILABLE SPARES. CARD READER TO MATCH BUILDING STANDARD.
2. RE-INSTALL EXIT SIGN AND POWER REMOVED DURING DEMOLITION.
3. PROVIDE NEW CEILING MOUNT EXIT SIGN. REUSE EXISTING CIRCUITING.
4. RESTORE POWER CONNECTIONS IMPACTED BY DEMOLITION WORK.
5. PROVIDE NEW CEILING MOUNT EXIT SIGN. POWER SOURCE MUST BE



3 / E203 DOOR ACCESS CONTROL SCHEMATIC DIAGRAM
1/16" = 1'0"



KEY PLAN
N.T.S.

LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP | ROCHESTER CITY SCHOOL DISTRICT | SAVIN Savin Engineers, P.C. | in association with Gilbane | PDG Popli Design Group | edr | Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM
1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL
655 COLFAX STREET
ROCHESTER, NY 14606

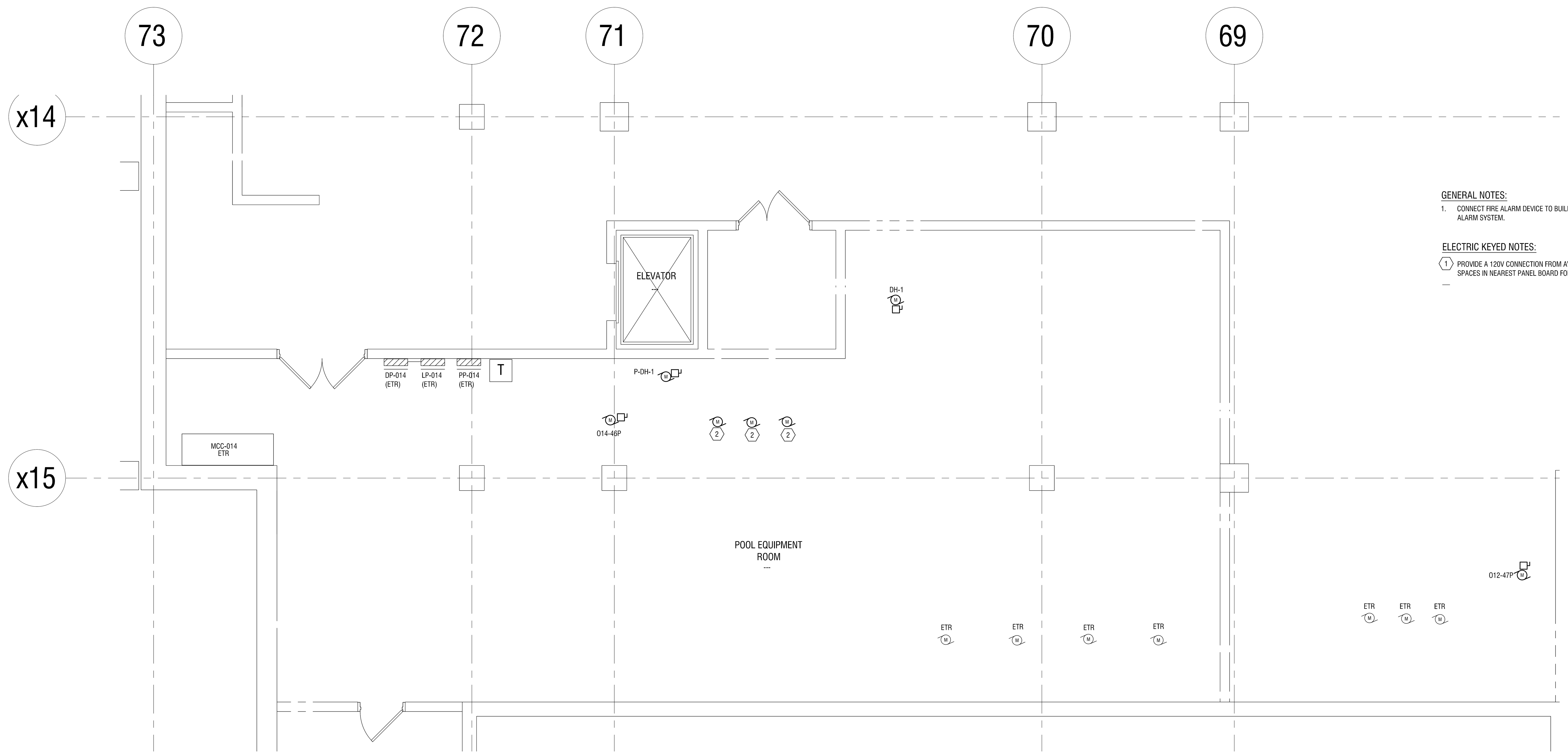
SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

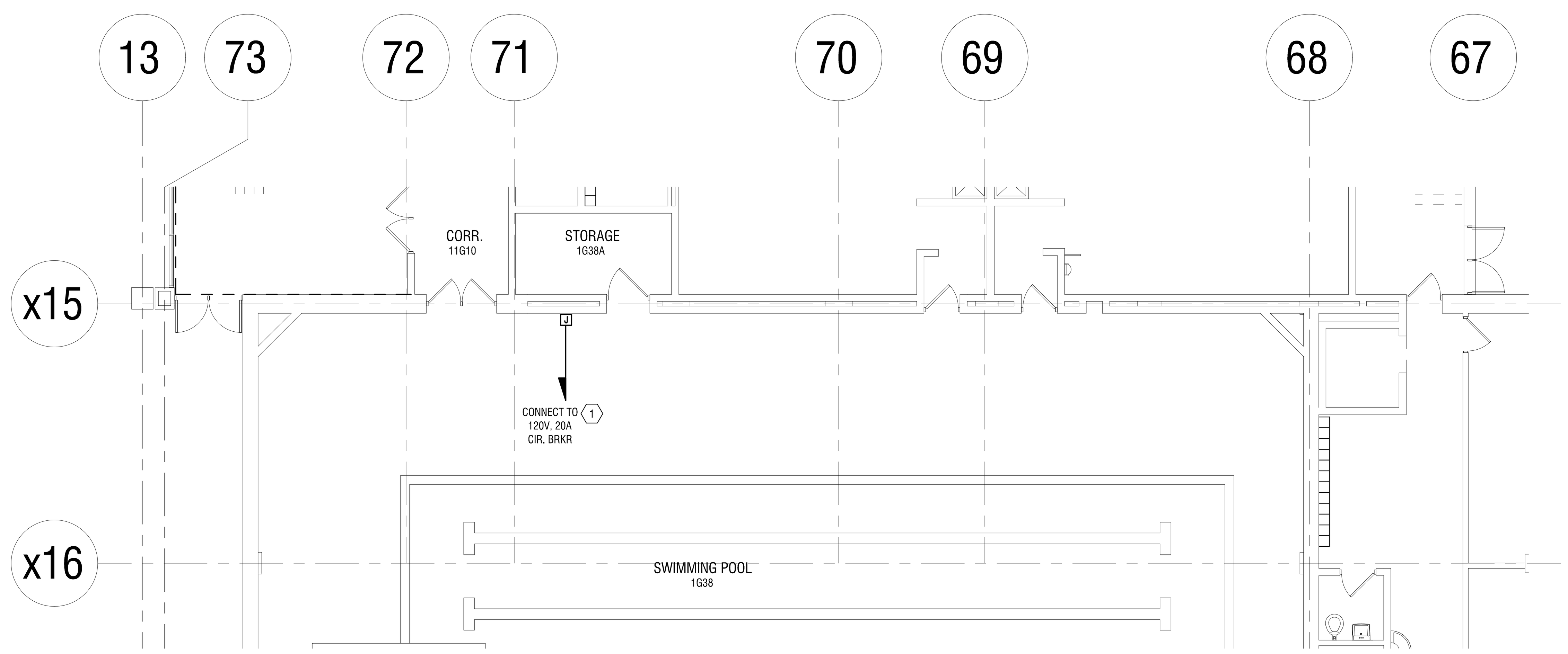
NO:	DATE:	DESCRIPTION:
-	-	-
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218
DRAWN BY: MHB
REVIEWED BY: MVR
ISSUED FOR: BID DOCUMENTS
DATE: JUNE 26, 2019
DRAWING NAME: FIRST FLOOR ELECTRICAL SPECIAL SYSTEMS PLAN- AREAS: F,G & H
DRAWING NUMBER: E203

Date & Time: 6/26/2019 11:16 AM By: Hernandez-Bernier, Melissa
Path: J:\Rochester Joint Schools Construction Board\2170218 - Edison Tech Phase 2\Drawings\MEEP\Edison Tech Phase 2\Views\Elec\Additional Scope BPD\E203 - First Floor Electrical Special Systems Plan.dwg



1 E204 BASEMENT ELECTRICAL PLAN- AREA G/H
1/4"=1'-0"



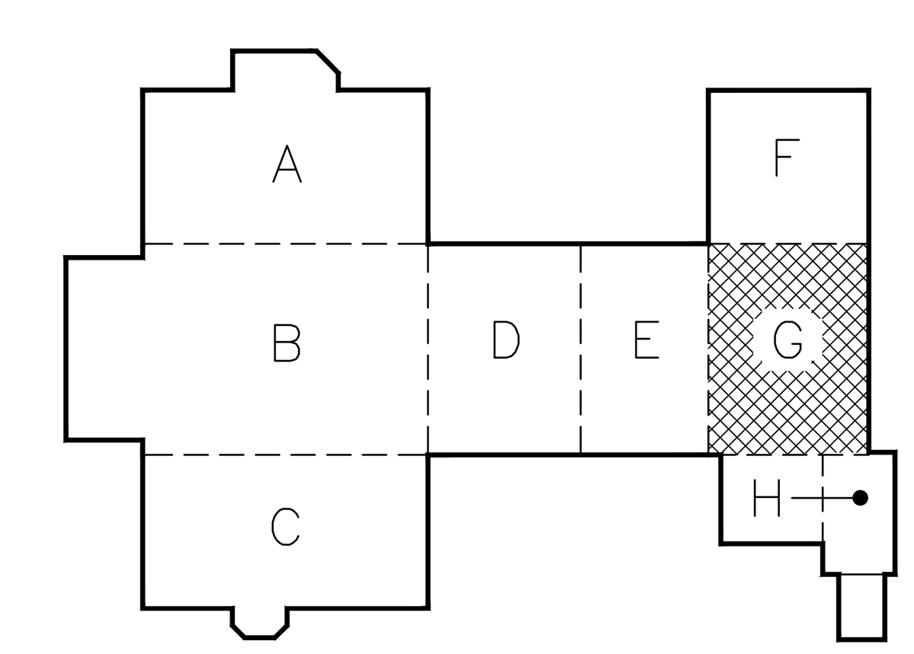
2 E204 FIRST FLOOR ELECTRICAL PLAN- AREA G
1/8"=1'-0"

GENERAL NOTES:

1. CONNECT FIRE ALARM DEVICE TO BUILDING ADDRESSABLE FIRE ALARM SYSTEM.

ELECTRIC KEYED NOTES:

1 PROVIDE A 120V CONNECTION FROM AVAILABLE SPARE BREAKERS OR SPACES IN NEAREST PANEL BOARD FOR POOL ALARM CONTROL PANEL.



KEY PLAN
N.T.S.

LaBella
Powered by partnership.

300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP
Rochester City School District
Savin Engineers, P.C. in association with Gilbane
PDG Popli Design Group
edr
Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO:	DATE:	DESCRIPTION:
-	-	-
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218

DRAWN BY: MHB

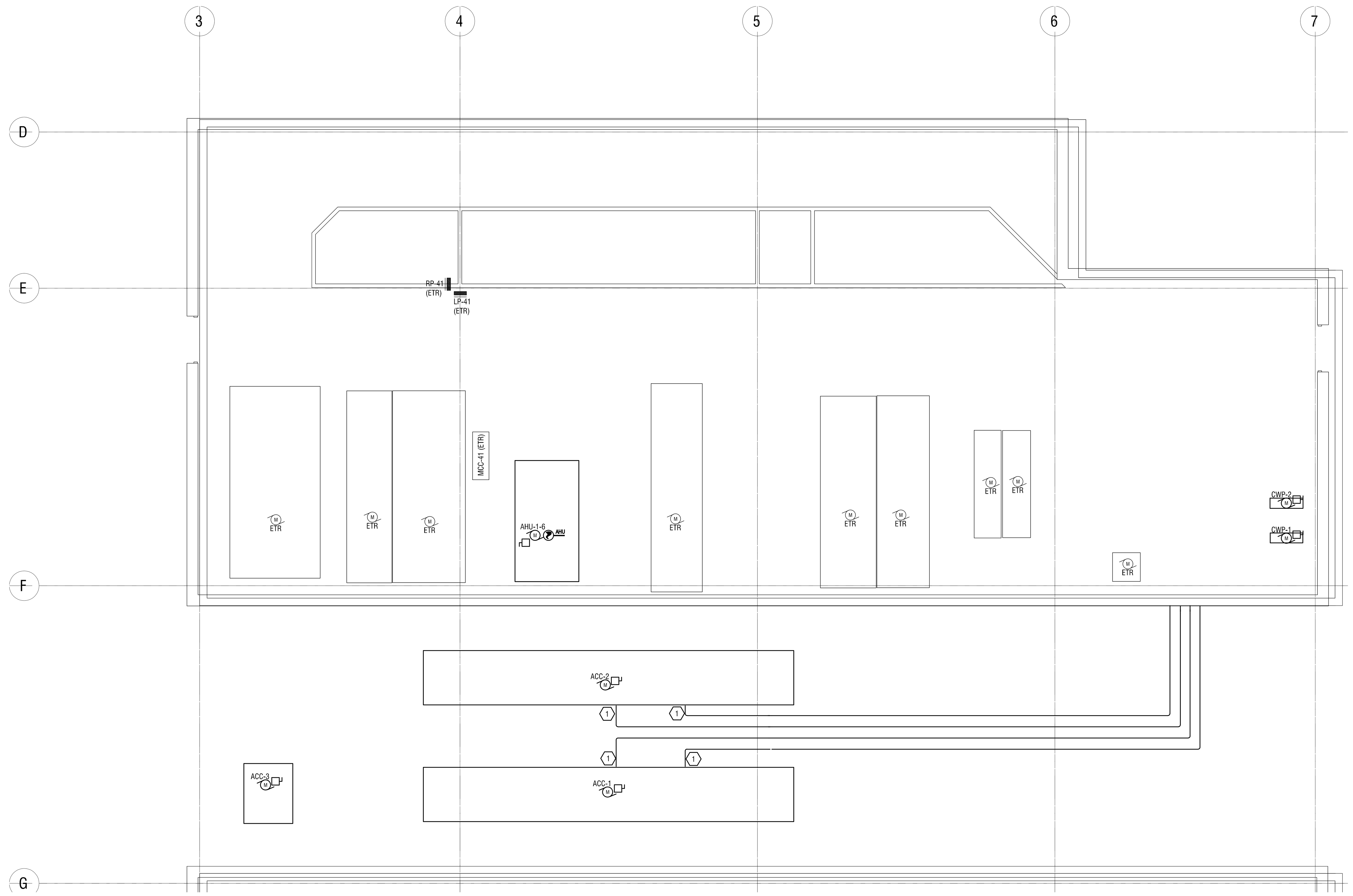
REVIEWED BY: MVR

ISSUED FOR: BID DOCUMENTS

DATE: JUNE 26, 2019

DRAWING NAME: BASEMENT ELECTRICAL PLAN- AREA G/H

DRAWING NUMBER: E204



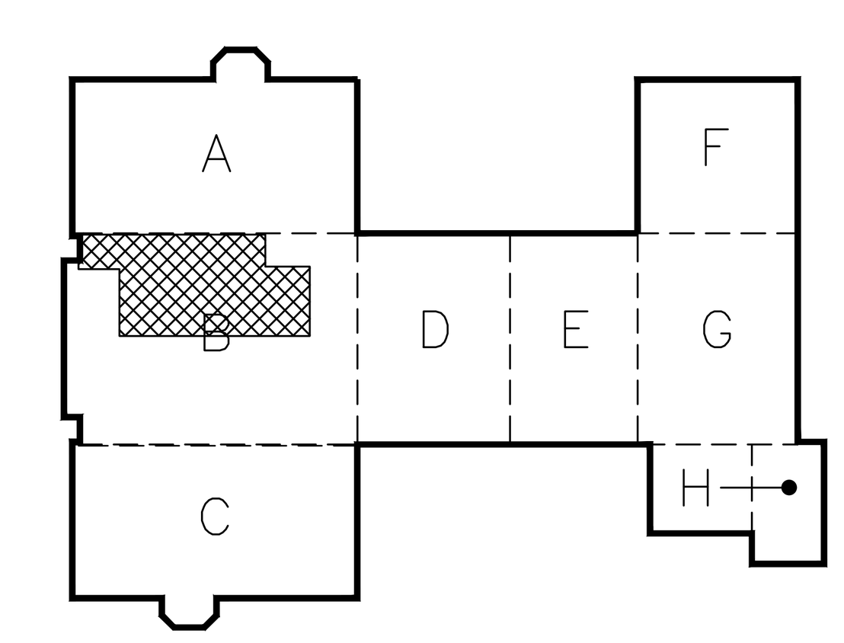
1 E205 ROOF AND PENTHOUSE 1 ELECTRICAL PLAN
1/8" = 1'-0"

GENERAL NOTES:

1. CONNECT FIRE ALARM DEVICE TO BUILDING ADDRESSABLE FIRE ALARM SYSTEM.

ELECTRIC KEYED NOTES:

1. PROVIDE POWER FOR PIPING HEAT TRACING FROM PANELS LP-41 OR RP-41. DESIGN BASIS APPROXIMATE POWER CONSUMPTION IS 8 WATTS/LF.



KEY PLAN
N.T.S.

LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP
Savin Engineers, P.C. in association with Gilbane
Razak Associates

It is a violation of New York Education Law Article 145 Sec.7209, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO:	DATE:	DESCRIPTION:
-	-	-
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218

DRAWN BY: MHB

REVIEWED BY: MVR

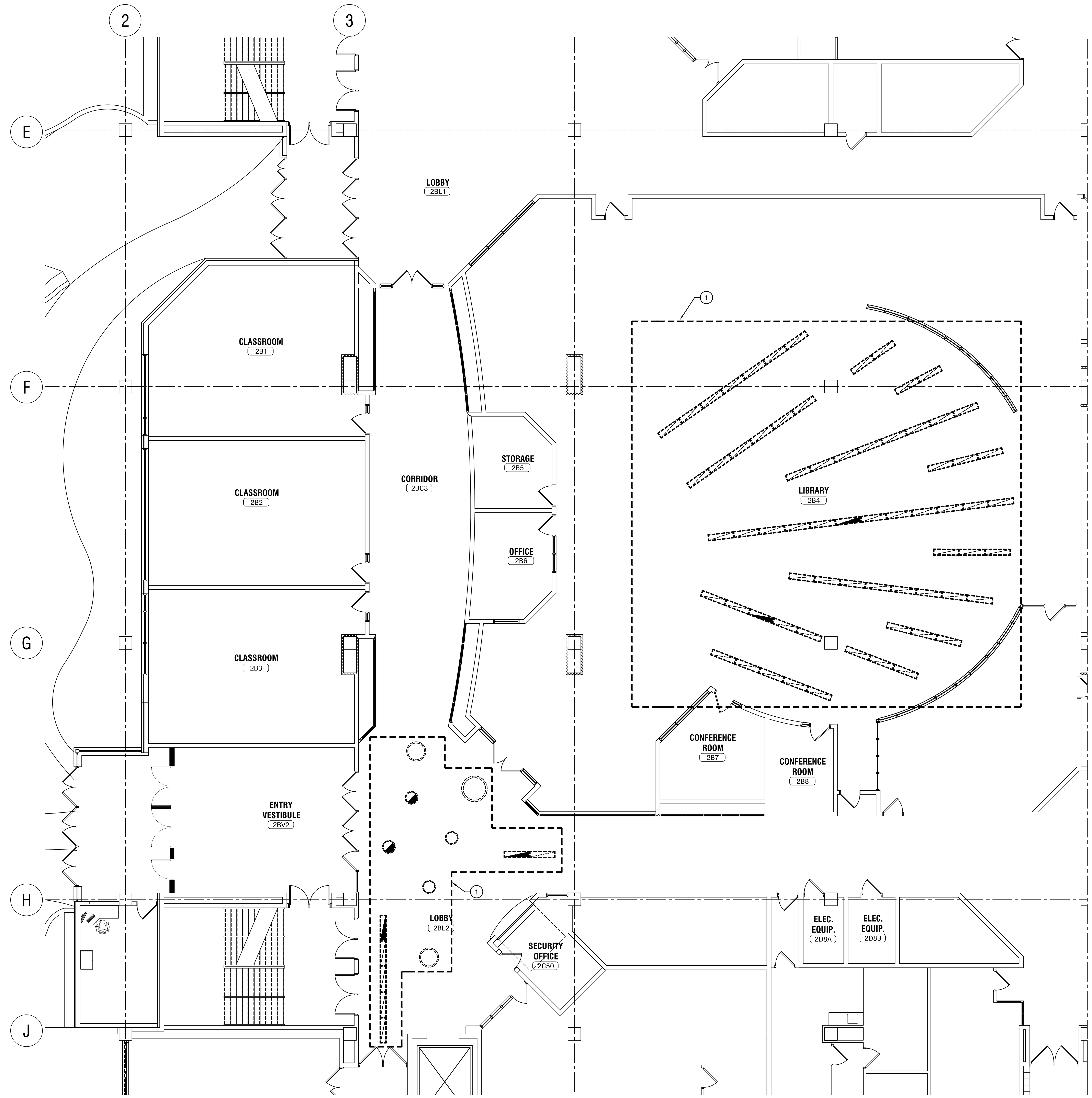
ISSUED FOR: BID DOCUMENTS

DATE: JUNE 26, 2019

DRAWING NAME: ROOF AND PENTHOUSE 1 ELECTRICAL PLAN

DRAWING NUMBER: E205

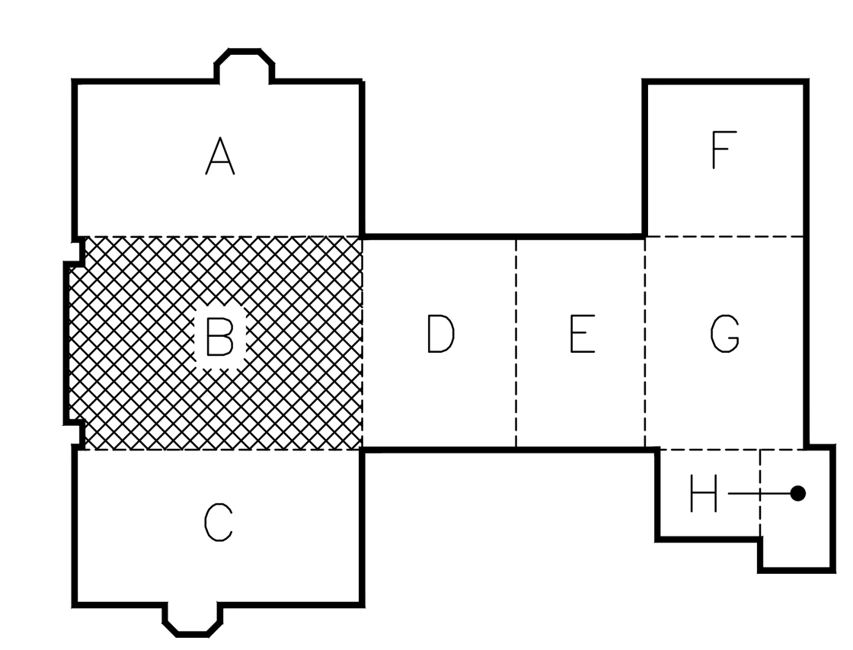
Date & Time: 6/26/2019 11:16 AM By: Hernandez-Bernier, Melissa
Path: J:\Rochester Joint Schools Construction Board\2170218 - Edison Tech Phase 2\Edison Tech Phase 2\Drawings\MEP\Edison Tech Phase 2\Views\Elec\Additional Scope BP02\E205 Roof and Penthouse 1 Electrical Plan.dwg



1 E302B SECOND FLOOR LIGHTING PLAN- AREA B
1/8" = 1'0"

ELECTRIC DEMOLITION KEY NOTES:

1. DISCONNECT AND REMOVE AREA LIGHTING THAT WILL INTERFERE WITH NEW CEILING WORK. REINSTALL LUMINAIRES PROVIDING NEW SUPPORTS AS NECESSARY.



KEY PLAN
N.T.S.

LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP

Savin Engineers, P.C. in association with Gilbane

Popli Design Group | edr | Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO:	DATE:	DESCRIPTION:
-	-	-
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218

DRAWN BY: MHB

REVIEWED BY: MVR

ISSUED FOR: BID DOCUMENTS

DATE: JUNE 26, 2019

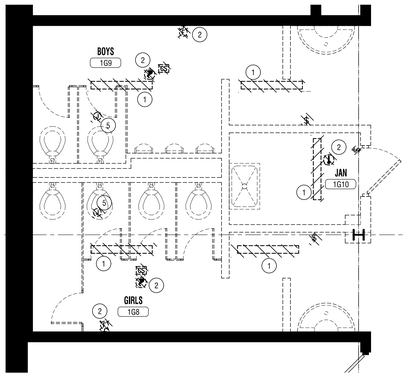
DRAWING NAME:

SECOND FLOOR LIGHTING PLAN- AREA B

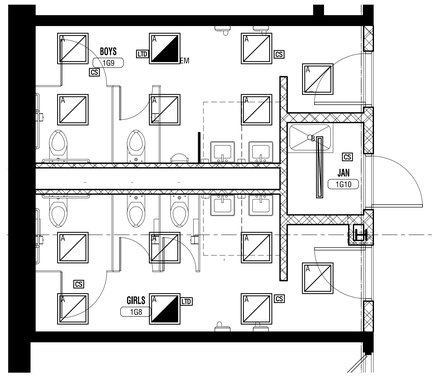
DRAWING NUMBER:

E302B

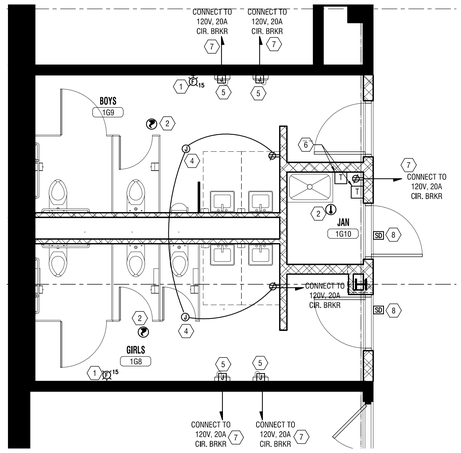
Date & Time: 6/26/2019 11:16 AM By: Hernandez-Bernier, Melissa
Path: J:\Rochester Joint Schools Construction Board\2170218 - Edison Tech Phase 2\Edison Tech Phase 2\Drawings\MEEP\Edison Tech Phase 2\Views\Elec\Additional Scope BP02\E302B - Second Floor Lighting Plan- Area B.dwg



1 E401 ENLARGED ELECTRICAL DEMOLITION PLAN
TOILET ROOMS 1G8, 1G9 AND 1G10
1/4"=1'-0"



2 E401 ENLARGED LIGHTING PLAN
TOILET ROOMS 1G8, 1G9 AND 1G10
1/4"=1'-0"



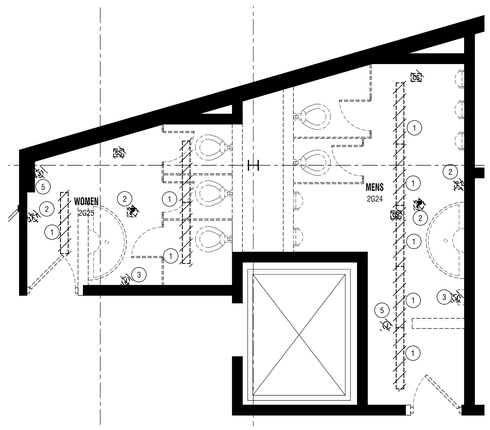
3 E401 ENLARGED ELECTRICAL PLAN
TOILET ROOMS 1G8, 1G9 AND 1G10
1/4"=1'-0"

ELECTRIC DEMOLITION NOTES:

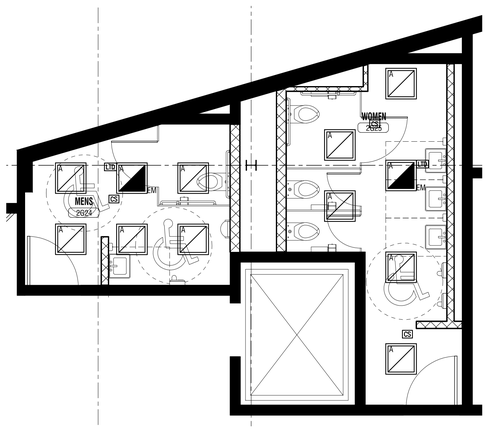
1. DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES AND ASSOCIATED LIGHTING CONTROLS. REUSE EXISTING CIRCUITING.
2. REMOVE EXISTING FIRE ALARM DEVICES AND SAVE FOR REUSE. REUSE EXISTING COVERS AND WIREGUARDS WHERE POSSIBLE. COIL WIRING ABOVE THE CEILING FOR REUSE.
3. REMOVE ELECTRICAL CONNECTION TO EXISTING HAND DRYER. SAVE CIRCUIT FOR REUSE.
4. REMOVE EXISTING RECEPTACLE .
5. DISCONNECT POWER FROM EXISTING EXHAUST FAN. SAVE EXISTING WIRING AND CONDUITS FOR REUSE FOR THE NEW EXHAUST FAN INSTALLATION.

ELECTRIC KEYED NOTES:

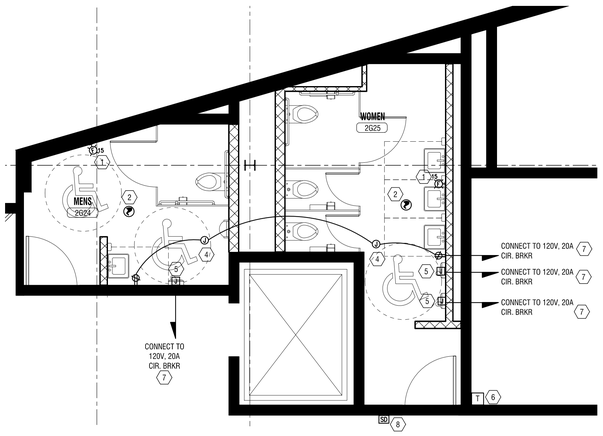
1. RE-INSTALL ADDRESSABLE LIGHT STROBE. EXTEND WIRING AS NECESSARY.
2. RE-INSTALL ADDRESSABLE HEAT/SMOKE DETECTOR, WITH WIRE GUARD.
3. PROVIDE GFCI RECEPTACLE FOR DRINKING FOUNTAIN, COORDINATE EXACT LOCATION AND ELEVATION WITH PLUMBING CONTRACTOR.
4. PROVIDE JUNCTION BOX ABOVE CEILING FOR WATER CLOSET/URINAL AND AUTO FLUSH VALVE TRANSFORMER. CIRCUIT AS INDICATED. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.
5. PROVIDE POWER FOR HAND DRYER, CIRCUIT AS INDICATED. COORDINATE EXACT LOCATION WITH GENERAL CONTRACTOR.
6. PROVIDE CONTROL TRANSFORMER FOR FIRE DAMPER, PRIMARY 120/277VAC, SECONDARY 24VAC, 40VA MAXIMUM. MOUNT TRANSFORMER NEAR FIRE DUMPER. CONNECT TO NEAREST 120V OR 277V, 20A EMERGENCY LIGHTING CIRCUIT. PROVIDE POWER TO ACTUATOR CONTROLLER THRU A FIRE SYSTEM RELAY- MOUNT RELAY ADJACENT TO DAMPER. PROGRAM RELAY TO CLOSE DAMPER WHEN ANY SPACE SMOKE DETECTOR GOES INTO ALARM. COORDINATE WIRING AND INSTALLATION WITH MECHANICAL CONTRACTOR.
7. CIRCUIT TO AVAILABLE SPACE IN NEAREST POWER PANEL 120/208V, PROVIDE 20A-1P CIRCUIT BREAKER AS REQUIRED. PROVIDE (2)#12 AND (1)#12 GRN IN 1/2" EMT. COORDINATE IN FIELD.
8. POWER TO SMOKE DAMPER ACTUATORS MUST BE THROUGH A FIRE SYSTEM RELAY. RELAY TO BE MOUNTED ADJACENT TO DAMPER, UPON NEAREST CORRIDOR SMOKE DETECTOR ACTIVATION. RELAY SENDS ACTUATOR SIGNAL TO CLOSE DAMPER. REFER TO MECHANICAL PLANS FOR FIRE SMOKE DAMPER LOCATION.



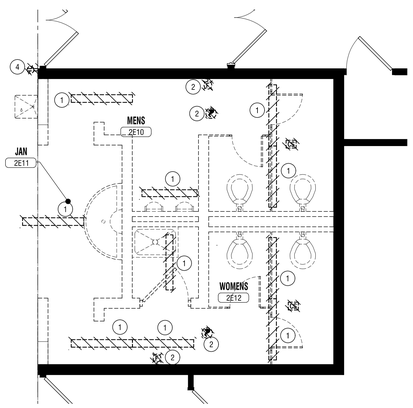
4 E401 ENLARGED ELECTRICAL DEMOLITION PLAN
TOILET ROOMS 2G24 AND 2G-25
1/4"=1'-0"



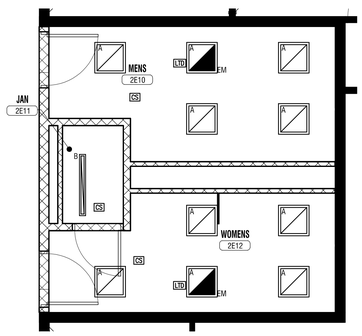
5 E401 ENLARGED ELECTRICAL LIGHTING PLAN
TOILET ROOMS 2G-24 AND 2G-25
1/4"=1'-0"



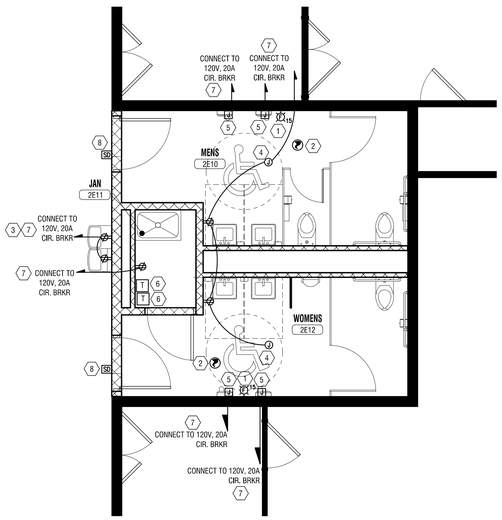
6 E401 ENLARGED ELECTRICAL PLAN
TOILET ROOMS 2G-24 AND 2G-25
1/4"=1'-0"



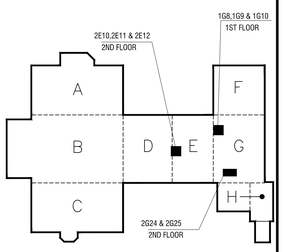
7 E401 ENLARGED ELECTRICAL DEMOLITION PLAN
TOILET ROOMS 2E10, 2E12 & JC RM 2E11
1/4"=1'-0"



8 E401 ENLARGED ELECTRICAL LIGHTING PLAN
TOILET ROOMS 2E10, 2E12 & JC RM 2E11
1/4"=1'-0"



9 E401 ENLARGED ELECTRICAL PLAN
TOILET ROOMS 2E10, 2E12 & JC RM 2E11
1/4"=1'-0"



KEY PLAN
N.T.S.

LaBella
Powered by partnership.
300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

RSMP · Rochester City School District · Savin Engineers, P.C. in association with Gilbane · PDG Populi Design Group · edr · Razak Associates

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

1776 N. CLINTON AVE
ROCHESTER, NY 14621

EDISON TECHNICAL SCHOOL

655 COLFAX STREET
ROCHESTER, NY 14606

SED NO. 26-16-00-01-0-111-032
DWT NO. 26-16-00-01-7-999-020

REVISIONS

NO:	DATE:	DESCRIPTION:
-		-
1	6.28.19	BID ADDENDUM 1

PROJECT NUMBER: 2170218
DRAWN BY: MHB
REVIEWED BY: MVR
ISSUED FOR: BID DOCUMENTS
DATE: JUNE 26, 2019
DRAWING NAME: ENLARGED ELECTRICAL PLANS 1 ST & 2 ND FLR
DRAWING NUMBER: E401