

Trustees
John Newman II
Gloria Peterson
Karen Lovejoy Roe
LaResha Thornton

ZONING BOARD OF APPEALS

Regular Meeting Agenda Wednesday February 05, 2025 6:30 P.M.

If you need any assistance due to a disability, please contact the Planning Department at least 48 hours in advance of the meeting at planning@ypsitownship.org or 734-544-4000 ext. 1.

- Call Meeting to Order
- 2. Roll Call Determination of a quorum
- 3. Approval of Agenda
- 4. Approval of the December 04, 2024, Regular Meeting Minutes
- 5. Public Hearing

Applicant: Bank of America

Location: 2250 W. Michigan Avenue, Ypsilanti, MI 48197

Parcel ID: K-11-18-100-024

Request: Article 13 – Section 1303.3 (A & B) Lighting Requirements – Request

to permit lighting levels along the western property line to exceed the maximum allowable illumination of 0.5 footcandles and allow light levels to exceed the maximum of 20 footcandles measured at ground

level.

- 6. Open discussion for issues not on the agenda
 - a. Planning Department report
 - b. Correspondence received.
 - c. Zoning Board of Appeals members
 - d. Members of the audience and public
- 7. Any other business that may come before the Zoning Board of Appeals
- 8. Adjournment

(THERE IS NO WORK SESSION)

CHARTER TOWNSHIP OF YPSILANTI ZONING BOARD OF APPEALS

Wednesday, December 4, 2024 6:30 pm

COMMISSIONERS PRESENT

Elizabeth El-Assadi Stan Eldridge David Marshall Edward Burnett

STAFF AND CONSULTANTS

Fletcher Reyher, Planning and Development Coordinator Sally Elmiger - Carlisle Wortman Associates Dennis McLain – Township Attorney

• <u>CALL TO ORDER/ESTABLISH QUORUM</u>

MOTION: Ms. El-Assadi called the meeting to order at 6:30 p.m. Ms. El-Assadi completed the roll call and confirmed a quorum was established.

• APPROVAL OF AGENDA

MOTION: Mr. Eldridge **MOVED** to approve the agenda as presented. The **MOTION** was **SECONDED** by Mr. Burnett and **PASSED** by unanimous consent.

• APPROVAL OF NOVEMBER 6, 2024, SPECIAL MEETING MINUTES

MOTION: Mr. Eldridge **MOVED** to approve November 6, 2024; Special Meeting Minutes as presented. The **MOTION** was **SECONDED** by Mr. Marshall and **PASSED** by unanimous consent.

• PUBLIC HEARING

Applicant: Andy Patel

Location: 350 & 460 Joe Hall Drive, Ypsilanti, MI 48197

Parcel ID: K-11-38-363-029 & K-11-38-363-003

Request: Article 4 – Sec. 414.3: Dimensional Requirements – To allow the hotel building to exceed 40–foot height by 14 Feet 8.5', for a total height of 54 Feet 8.5'.

Mr. Fletcher Reyher, Planning and Development Coordinator, presented a variance request from Andy Patel seeking a height variance for a Holiday Inn Express located at 350 and 460 Joe Hall Drive. The subject parcel is located on the north side of Joe Hall Drive. The applicant proposes a 93-room, 4-story Holiday Inn. The site is zoned Innovation and Technology (I-T), and the maximum building height is 40-feet. The applicant is seeking a variance to exceed the maximum building height.

Mr. Fletcher Reyher informed the ZBA that 54 feet 8.5 inches is the top of what is called a parapet. A parapet is a faux roof, when viewed from outside it appears as a roof but it's a hollowed-out wall with mechanical equipment stored on top of the roof.

Mr. Fletcher Reyher informed the ZBA that the variance would change from 40 feet to the height of the roof shown on the plans (ZBA Packet dated December 04, 2024); the motion made by the ZBA would cover what is proposed in the plans.

The applicant, Mr. Patel, attended a Planning Commission meeting (November 26, 2024); the motion for preliminary site plan was postponed in order for the applicant to come before the ZBA to seek variance.

The Zoning Board of Appeals may grant a dimensional or non-use variance only upon a finding that compliance with the strict letter of the restrictions governing area, setbacks, frontage, height, bulk, density, or other dimensional provisions would create a practical difficulty and unreasonably present the use of the property.

Criteria's:

• That there are exceptional or extraordinary circumstances or conditions applying to the property in question that do not apply generally to other properties or classes of uses in the same zoning district: The Innovation and Technology (I-T) district permits up to 4-stories, and 40-feet in height. The applicant complies with the maximum number of stories but exceeds the maximum height. The site is encumbered with regulated wetlands and woodlands, which reduce the total buildable area of the lot. Obtaining the required number of hotel rooms to make the hotel viable would require either significant detrimental impacts to the wetlands and woodlands or acquisition of additional property.

- That a variance is necessary for the preservation and enjoyment of a substantial property right possessed by other properties in the same zoning district and in the vicinity: The variances being requested would permit the use of the property for a hotel which is a permitted use in the Innovation and Technology (I-T) district. A height variance was granted to recent hotels including the Wolverine Eagle Hospitality hotel on Hewitt and Michigan Avenue and the Fairfield Inn on James L. Hart.
- That the authorizing of such a variance will not be a substantial detriment to adjacent property, will not be harmful to or alter the essential character of the area, and will not materially impair the purposes of this Ordinance or the public interest: The variance to extend the building height would not hinder the current character of the area as Hampton Inn and Fairfield Inn both on James L Hart Parkway are 54 feet in height.
- The property and resulting need for the variance has not been self-created by any action of the applicant or the applicant's predecessors: The applicant did not create the parcel conditions and is working within the parameters.
- The proposed variance will be the minimum necessary and no variance shall be granted where a different solution not requiring a variance would be possible: The Planning Department feels that the additional height to the structure is reasonable based on the natural feature encumbrances on the parcel and the similar heights of hotels in the immediate area.

The Applicant (Andy Patel) and the Engineer (Zach Boeve: VK Civil) were present at the meeting. Mr. Zach Boeve shared with the ZBA that they were requesting a height variance and the reason being in order to make the hotel profitable and successful; the extra four story would allow extra rooms which would require the exceeding of the 40 Foot requirement. Another reason would permit the minimization of the footprint of the hotel; preserving the existing trees/ avoids the existing wetland, while still remaining economical. The extra height would allow the storage of the mechanical equipment onto the roof, rather than on the ground level, which reduces the footprint of the impact of the development, providing a more aesthetic look. Hotels in the

surrounding area have received the same variance as requested; this would help in following a precedence that is been set.

The ZBA inquired with the applicant if they could spread out the floor plan and have more rooms instead of extending upwards since the site is on two lots; Mr. Zach Boeve stated that a large utility easement for both water and sewer for the township runs though the lot and it is considered a no built easement. The plan is to maximize the available space between that easement, the ordinance setbacks on the west property line, and the regulated easements to the front or in the rear.

Mr. Patel stated that he was not the owner until he had the approval to build. The ZBA shared their concern that Mr. Patel would not have extraordinary circumstances at that point, because he's not the owner of the property.

Sally Elmiger (Planning Consultant - Carlisle Wortman) informed the ZBA that Mr. Patel has an option to purchase the property and permission from the property owner to seek approvals to develop this land, the criteria would be within the context of that agreement. Mr. Patel could buy another piece of property; the district does permit him to have four stories. The owner has given Mr. Patel the authority to seek the site plan and planning approvals that are necessary to develop the property.

The ZBA inquired about the applicant's response to the traffic report; Mr. Patel stated the Township attorney had responded to the seller's letter; Mr. Patel informed the ZBA that he was meeting the seller to discuss the light, since it is part of the site plan approval.

Ms. El-Assadi discussed the height variance (40 feet to 41 feet, 10.5 inches) and the traffic light (obtain all outside agency approvals, including the arrangement for the installation of the traffic signal).

PUBLIC HEARING OPENED AT 6:55 PM

(Hearing no comments)

PUBLIC HEARING CLOSED AT 6:56 PM

MOTION: Mr. Elridge **MOVED** to approve the variance request to permit an increase in the overall height of the proposed building located within the Innovation and Technology (I-T) district from 40 feet to 41 feet and 10.5 inches to the roof line in order to permit the construction of a 93-room hotel upon the property located at 350

and 460 Joe Hall Drive (K-11-38-363-029, K-11-38-363-003). The plans being referenced are included in this packet with the following practical difficulties noted:

- The authorizing of the requested variance will not be a substantial detriment to adjacent property and will not materially impair the purposes of this ordinance or the public interest.
- The site is encumbered with regulated wetlands and woodlands, which reduce the total buildable area of the lot, and it has been determined and agreed that the subject parcel has exceptional conditions requiring the additional building height.
- The proposed height is similar to other hotels in the immediate area.
- This motion is further made with the following conditions: The applicant shall obtain Final Site Plan and Detailed Engineering Approval; and shall obtain all outside agency permits and approvals for the construction of the hotel, including, but not limited to the property owner or the developer. Entering into a road improvement agreement with the Washtenaw County Road Commission for the installation of a traffic signal at the intersection of Huron Street and Joe Hall drive as part of the development.

The **MOTION** was **SECONDED** by Mr. Marshall.

Roll Call Vote: Ms. Elizabeth El-Assadi (Yes); Mr. Stan Eldridge (Yes); Mr. David Marshall (Yes); Mr. Burnett (Yes).

MOTION PASSED.

• OPEN DISCUSSION FOR ISSUES NOT ON AGENDA

• PLANNING DEPARTMENT REPORT

2025 Schedule of Meetings: Mr. Fletcher Reyher presented on screen the 2025 calendar dates for the Zoning Board of Appeals Meetings.

MOTION: Mr. Elridge **MOVED** to accept the 2025 meeting schedule as mentioned in the report. The **MOTION** was **SECONDED** by Mr. Burnett and **PASSED** by unanimous consent.

• CORRESPONDENCE RECEIVED

No Report

No Report

• MEMBERS OF THE AUDIENCE/PUBLIC

No Report

• OTHER BUSINESS THAT MAY COME BEFORE THE ZONING BOARD

No Report

• ADJOURNMENT

MOTION: Mr. Eldridge **MOVED** to adjourn at 7:02 p.m. The **MOTION** was **SECONDED** by Mr. Burnett and **PASSED** by unanimous consent.

Respectfully submitted by Minutes Services



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Gloria Peterson
Karen Lovejoy Roe
LaResha Thornton

Zoning Board of Appeals Staff Report

February 05, 2025

Applicant: Bank of America

Location: 2250 W. Michigan Avenue, Ypsilanti, MI 48197, Parcel K-11-18-100-024

Zoning: RC, Regional Corridor, Site Type C

Action Requested: Request for variance to the lighting requirements outlined in Article

13 – Section 1303.3 (A & B)

Variance Request:

Request for a variance from the lighting regulations under Article 13 - Sec. 1303.3 (A & B) of the Township Zoning Ordinance, to permit lighting levels along the Western property line to exceed the maximum allowable illumination of 0.5 footcandles and allow light levels to exceed the maximum of 20 footcandles measured at ground level.

Location and Summary of Request:

The subject site is a 5.217-acre parcel located at the intersection of S. Hewitt Road and W. Michigan Avenue. The property is zoned R-C (Regional Corridor) with a Site Type C designation and is home to Bank of America, which provides essential banking services to the local community.

The applicant, Bank of America, is seeking a variance from Article 13, Sec. 1303.3 (A & B) of the Township Zoning Ordinance. The request pertains to exceeding the maximum allowable illumination of 0.5 footcandles at the property boundary and the maximum light level of 20 footcandles measured at ground level.

The proposed project includes replacing thirty-one (31) existing light fixtures, adding four (4) new fixtures, and installing two (2) additional light poles with fixtures. In total, thirty-eight (38) light fixtures will be replaced, and seven (7) new fixtures will be added to improve the property's lighting.

Cross References:

Article 13 – Site Design Standards Article 17 – Zoning Board of Appeals



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2250 W. Michigan Avenue, Ypsilanti, MI 48197 - Aerial Photograph 2023



Source: Map Washtenaw

Sec. 1303.3. (A & B)

Maximum Illumination Levels

Lighting Regulation	Permitted Level	Submitted Plans	Variance Required
Maximum illumination at ground level along the western property line (adjacent to residential property)	0.5 footcandles	0.0 to 13.5 footcandles	Up to 13 footcandles above the permitted level
Maximum illumination at ground level in any given area	20.0 footcandles	0.0 to 27.4 footcandles	Up to 7.4 footcandles above the permitted level



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Analysis:

The Zoning Board of Appeals may grant a dimensional or non-use variance only upon a finding that compliance with the strict letter of the restrictions governing area, setbacks, frontage, height, bulk, density, or other dimensional provisions would create a practical difficulty and unreasonably present the use of the property. A finding of practical difficulty shall require demonstration that all the following conditions are met:

1. That there are exceptional or extraordinary circumstances or conditions applying to the property in question that do not apply generally to other properties or classes of uses in the same zoning district.

The subject property, located at 2250 W. Michigan Avenue, is adjacent to a residential property to the west, making compliance with the ordinance's illumination standards critical to minimizing potential impacts on nearby residences. The applicant has not demonstrated any exceptional or extraordinary circumstances specific to this property that would prevent adherence to the lighting requirements under Section 1303.3(A & B).

2. That a variance is necessary for the preservation and enjoyment of a substantial property right possessed by other properties in the same zoning district and in the vicinity.

The lighting regulations outlined in the Township Zoning Ordinance are intended to balance functional site lighting with the protection of neighboring properties, particularly residential uses. The applicant has not provided evidence that exceeding the allowable lighting levels along the western property line or ground-level illumination is necessary to preserve a substantial property right. Other similarly situated properties within the same zoning district appear capable of complying with these illumination standards.

3. That the authorizing of such a variance will not be a substantial detriment to adjacent property, will not be harmful to or alter the essential character of the area, and will not materially impair the purposes of this Ordinance or the public interest.

The proposed lighting levels along the western property line, ranging from 0.0 to 13.5 footcandles, exceed the allowable limit of 0.5 footcandles adjacent to residential property. Additionally, the ground-level illumination of up to 27.4 footcandles exceeds the maximum permitted level of 20.0 footcandles. These increases could create light spillover and glare, potentially impacting the adjacent residential property and altering the character of the area. Approving the variance may undermine the intent of the ordinance to limit light pollution and protect residential uses.

4. The property and resulting need for the variance has not been self-created by any action of the applicant or the applicant's predecessors.



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The applicant has not provided a valid explanation or justification as to why compliance with the lighting regulations is not feasible. Based on the submitted information, the need for the variance appears to be self-created, as the site design and proposed lighting levels could potentially be modified to adhere to the ordinance.

5. The proposed variance will be the minimum necessary and no variance shall be granted where a different solution not requiring a variance would be possible.

The applicant has not demonstrated that the requested variance represents the minimum necessary or that alternative solutions—such as reducing light levels or modifying the lighting plan—are unfeasible. Without this information, it is not evident that the variance request is the least intrusive option to achieve the desired functionality.



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Suggested motions: The following suggested motions and conditions are provided to assist the Zoning Board of Appeals in making a complete and appropriate motion for this application. The ZBA may utilize, add, or reject any portion of the suggested motion or any conditions suggested herein, as deemed appropriate.

Postpone:

I move to postpone the variance requests at 2250 W. Michigan Avenue, Ypsilanti, MI 48197, Parcel K-11-18-100-024 to the lighting requirements of Article 13, Section 1303.3(A & B) of the Township Zoning Ordinance, as shown on the plans submitted with the Zoning Board of Appeals Packet dated February 05, 2025. This postponement is to provide the applicant with an opportunity to address the comments made at this evening's meeting and return with a revised proposal that reflects those comments.

Approve:

I move to approve the variance requests at 2250 W. Michigan Avenue, Ypsilanti, MI 48197, Parcel K-11-18-100-024 to the lighting requirements of Article 13, Section 1303.3(A & B) of the Township Zoning Ordinance, as shown on the plans submitted with the Zoning Board of Appeals Packet dated February 05, 2025. Granting the requested variances meets the criteria for a non-use variance in Section 1704(D) of the Zoning Ordinance. Specifically, the approval is based on the following findings:

1.	 	 	
_			
2.	 	 	

Denial:

I move to deny the variance requests at 2250 W. Michigan Avenue, Ypsilanti, MI 48197, Parcel K-11-18-100-024 to the lighting requirements of Article 13, Section 1303.3(A & B) of the Township Zoning Ordinance, as shown on the plans submitted with the Zoning Board of Appeals Packet dated February 05, 2025, based on the following findings of fact:

- The applicant has not demonstrated the presence of exceptional or extraordinary circumstances applying to the property that would prevent compliance with the lighting standards. The property conditions are typical of other commercial properties adjacent to residential areas within the zoning district.
- 2. The request is not necessary for the preservation of a substantial property right, as other similarly situated properties in the zoning district comply with the ordinance requirements without requiring a variance.
- 3. The proposed lighting levels, which exceed 0.5 footcandles along the western



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property line and 20.0 footcandles at ground level, would likely result in adverse impacts to the adjacent residential property, contrary to the purpose of the lighting regulations in protecting neighboring properties.

- 4. The need for the variance appears to be self-created, as the applicant has not provided a valid justification as to why the lighting plan cannot be modified to comply with the ordinance.
- 5. The variance requested does not appear to be the minimum necessary to achieve adequate site lighting, as alternative solutions to reduce light levels have not been explored or provided by the applicant.

Respectfully Submitted,

Fletcher Reyher

Fletcher Reyher, AICP
Planning and Development Coordinator
Charter Township of Ypsilanti Planning Department

Charter Township of Ypsilanti Office of Community Standards 7200 S. Huron Drive, Ypsilanti, MI 48197 Phone: (734) 544-4000 ext. #1 Website: https://ypsitownship.org

ZONING BOARD OF APPEALS APPLICATION

I. APPLICATION TYPE				
☐ Variance				
		es: Temporary Uses and S	Structures)	
☐ Administrative Rev	riew Appeal			
II. PROJECT LOCATION				
Address:		Parcel ID #: <u>K-11-</u>		_ Zoning
Lot Number:	Subdivision:			
III. APPLICANT INFORM	MATION			
Applicant:			Phone:	
Address:		City:	Phone: Stat	e: Zip:
Fax:	Email:			
Property Owner:			Phone: Stat	
Address:		City:	Stat	e: Zip:
Fax:	Email:			
IV. COST AND FEES				
Total: \$		Breakdown of fee:	Residential:	\$ 125.00
· 			Non-residential:	
V. APPLICANT SIGNAT	URE			
The undersigned		represents	:	
	Applicant	Prop	perty Owner	
1. That	ty Owner is/are t	he owner(s) of lot(s)	located in the	Subdivision
Subdivision , Ypsilanti	Township, Michigan, c	therwise known as		Subdivision and the property is
zoned			1303.3 B &	
Zoning District 2. That the petitioner	hereby request	under Secti		of the Ypsilanti Township
Zoning Ordinance.	Varian	ce/Temporary Use egular Meeting	Section Article	
3. The petitioner furth	er state that h	nave/has read and under	stands the provisions of	said zoning ordinance as it
applies to this petition	1. 201. 1			
4. That the following is	submitted in support	of the petition (attach al	pertinent data to suppo	rt the request).
Brian Kra	rke			
Applicant Signature	Print	t Name	Date	_



Charter Township of Ypsilanti Office of Community Standards 7200 S. Huron Drive, Ypsilanti, MI 48197 Phone: (734) 544-4000 ext. #1 Website: https://ypsitownship.org

OFFICE USE ONLY

All Zoning Board of Appeals Applications	
 ☐ The application is filled out in its entirety. ☐ If the applicant is not the property owner, written and signed permission from the property owner is required. ☐ Fees 	Plot plan or lot survey to scale showing the following: All property lines and dimensions All existing and proposed structures and dimensions Lot area calculations necessary to show compliance with
Letter of interest of the applicant in the property	regulations Easements and dimensions, if applicable Location of drives, sidewalks, and other paved areas on the property and on the adjacent streets. Location and dimensions of the nearest structures on adjacent properties.



2250 W Michigan Ave, Ypsilanti, MI 48197 MI8-166

PROJECT AREA LOCATION



ELECTRICAL:

	DRAWING INDEX
SHEET	DESCRIPTION
E-001	ELECTRICAL SYMBOLS, NOTES, LEGEND & INDEX
E-101	ELECTRICAL SITE LIGHTING PLAN AND SCHEDULES
E-102	ELECTRICAL SITE PHOTOMETRIC PLANS
E-401	ELECTRICAL PANEL SCHEDULES
E-501	LIGHT FIXTURE CUTSHEETS

STRUCTURAL:

	DRAWING INDEX
SHEET	DESCRIPTION
S-001	STRUCTURAL NOTES & DETAILS

ISSUED FOR PERMIT: 11/03/2023

PROJECT MANAGER: CBRE

CBRE GLOBAL WORKPLACE SOLUTIONS
100 S. Charles Street, 3rd Floor
Baltimore, MD. 21201
Tel: (703) 302-2529
Contact: Sergio Merino
email: Sergio.Merino@cbre.com

ENGINEERING, PLLC 80 State Street Albany, NY 12207-2543 TEFA No.:521167

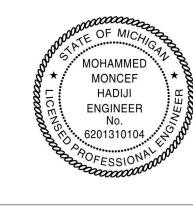
PROJECT BY:

TEFA ENGINEERING, PLLC 80 State Street Albany, NY 12207-2543 Tel: (321) 877-4292 Contact: Justin Mulhollan

email: justin.mulhollan@tlc-eng.com



GMR
1629 Smirl Drive, Suite 200
Heath, TX. 75032
Office: (972) 771-6038
www.gmr1.com



BUILDING AUTOMATION SYSTEM CONTROL PANEL

LIGHTING CONTROL PANEL

LCP

NOTE: SOME SYMBOLS SHOWN ON THIS LEGEND MAY NOT PERTAIN TO THIS PROJECT

WEATHER PROOF

XFMR

XFR

ELECTRICAL GENERAL NOTES

ELECTRICAL EQUIPMENT

ENERAL REQUIREMENTS THE DRAWINGS AND APPLICABLE SPECIFICATIONS SHALL BE CONSIDERED SUPPLEMENTARY, ONE TO THE OTHER AND ARE CONSIDERED THE "CONTRACT DOCUMENTS". ALL WORKMANSHIP, METHODS: AND/OR MATERIALS DESCRIBED OR IMPLIED BY ONE AND NOT DESCRIBED OR IMPLIED BY THE OTHER SHALL BE PROVIDED. FURNISHED OR PERFORMED AS IF IT HAD APPEARED IN BOTH SECTIONS. THE TERM "CONTRACT DOCUMENTS" DESCRIBED HEREIN IS NOT LIMITED SOLELY TO THE ELECTRICAL PORTION OF THE DRAWINGS AND SPECIFICATIONS, BUT ENCOMPASSES THE DRAWINGS AND SPECIFICATIONS OF ALL DIVISIONS

THE DRAWINGS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW EVERY DETAIL OF CONSTRUCTION, METHODS, MATERIALS AND EQUIPMENT, OR EXACT LOCATIONS, ROUTING, ETC. THEY INDICATE THE RESULT TO BE ACHIEVED BY THE ASSEMBLAGE OF SEVERAL SYSTEMS FOR A COMPLETE. AND OPERATIONAL FLECTRICAL SYSTEM, DO NOT SCALE THE CONTRACT DOCUMENTS. COORDINATE EXACT EQUIPMENT LOCATIONS WITH THE ARCHITECTURAL. CIVIL AND STRUCTURAL CONTRACT DOCUMENTS, AS WELL AS FIELD CONDITIONS, APPROVED SHOP DRAWINGS AND WORK OF ALL OTHER

DIVISIONS/TRADES THE TERM "PROVIDE" USED IN THE CONTRACT DOCUMENTS INDICATES TO FURNISH AND INSTALL MATERIALS REQUIRED FOR CORRECT INSTALLATION OF A COMPLETE SYSTEM, UNLESS SPECIFICALLY NOTED OTHERWISE

UNLESS NOTED AS EXISTING, ALL ELECTRICAL INDICATED ON THE CONTRACT DOCUMENTS SHALL BE NEW, SHALL BE U.L. LISTED, AND SHALL BEAR A U.L. LABEL. WHERE NO U.L. LABEL OR LISTING IS AVAILABLE, THE MATERIAL SHALL BE LISTED WITH AN APPROVED, NATIONALLY RECOGNIZED ELECTRICAL TESTING AGENCY PROVIDE EXPERIENCED, QUALIFIED AND RESPONSIBLE SUPERVISION FOR ALL WORK REQUIRED BY THE CONTRACT DOCUMENTS. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER, TO THE SATISFACTION

OF THE ARCHITECT/ENGINEER AND OWNER. CARRY ALL INSURANCE REQUIRED TO PROTECT AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF GUARANTEE ALL MATERIALS AND WORKMANSHIP ARE FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR

FROM THE DATE OF FINAL ACCEPTANCE BY THE ARCHITECT/ENGINEER AND OWNER, UNLESS NOTED OTHERWISE IN DIVISION 1 AT NO ADDITIONAL COSTS, PROVIDE THE CORRECTION OF ANY DEFECTS INCLUDING REPAIR OR REPLACEMENT INCLUDE ALL COSTS ASSOCIATED WITH PERMITS, LICENSES, FEES, INSPECTIONS, TESTING AND TEMPORARY POWER IN THE

IF HAZARDOUS MATERIALS ARE ENCOUNTERED, COMPLY WITH ALL APPLICABLE RULES, REGULATIONS AND GUIDELINES CONCERNING REMOVAL, HANDLING, DISPOSAL AND PROTECTION AGAINST ENVIRONMENTAL EXPOSURE OR POLLUTION. PROVIDE DOCUMENTATION OF SAID COMPLIANCE . PROVIDE ELECTRONIC SUBMITTALS (PRODUCT DATA & SHOP DRAWINGS) FOR EACH MAJOR COMPONENT OF THE ELECTRICAL

SYSTEM FOR REVIEW BY THE ARCHITECT/ENGINEER AND OWNER. MAJOR COMPONENTS INCLUDE, BUT ARE NOT LIMITED TO, RACEWAYS, BOXES, WIRE AND CABLE, EQUIPMENT, DEVICES, LIGHT FIXTURES, SWITCHGEAR, PANELBOARDS, CIRCUIT BREAKERS, SAFETY SWITCHES, FIRE ALARM SYSTEM, ETC. ALL SUBMITTALLS ARE TO BE REVIEWED AND APPROVED BY THE CONTRACTOR FOR CONFORMANCE WITH THE PROJECT REQUIREMENTS PRIOR TO SUBMITTING TO THE ARCHITECT/ENGINEER. ALLOW A MINIMUM OF TEN (10) BUSINESS DAYS FOR REVIEW BY ARCHITECT/ENGINEER, UNLESS

NOTED OTHERWISE IN DIVISION 1. . THE ELECTRICAL PORTION OF THE CONTRACT DOCUMENTS ARE COORDINATED WITH THE DESIGN BASIS EQUIPMENT SPECIFIED BY DIVISION 26 AND OTHER DIVISIONS. WHERE THE CONTRACTOR ELECTS TO SUBSTITUTE A PRODUCT IN LIEU OF PROVIDING THE DESIGN BASIS, AND SAID SUBSTITUTION IS ACCEPTED BY THE ARCHITECT/ENGINEER AND OWNER. THI CONTRACTOR SHALL MAKE ALL CORRECTIONS TO THE ELECTRICAL SYSTEM NECESSARY IN ORDER TO ENSURE A COMPLETE AND OPERATIONAL INSTALLATION OF THE EQUIPMENT AT NO ADDITIONAL COSTS. WHERE THE CONTRACTOR'S DESIGN SUBSTITUTION RESULTS IN THE NEED FOR THE ENGINEER TO REVISE THE CONTRACT DOCUMENTS. THE ENGINEER RESERVE

THE RIGHT TO REQUEST COMPENSATION FROM THE CONTRACTOR FOR SAID SERVICES . MAINTAIN A CURRENT AND ACCURATE SET OF PROJECT RECORD DOCUMENTS (AS-BUILTS) AT THE SITE THROUGHOUT THE DURATION OF THE PROJECT. RECORD DRAWINGS SHALL BE UPDATED EACH DAY TO REFLECT THE ACTUAL LOCATIONS, SIZES, ROUTING, ETC. OF EACH PORTION OF THE ELECTRICAL SYSTEM AFFECTED BY THIS WORK. A FINAL SET OF RECORD DOCUMENTS SHALL BE ISSUED TO THE ARCHITECT/ ENGINEER FOR REVIEW AND THEN SUBMITTED TO THE OWNER WITHIN 30 DAYS AFTER THE DATE OF FINAL ACCEPTANCE. PROVIDE RECORD DRAWINGS OF THE ACTUAL INSTALLATION INCLUDING SINGLE LINE DIAGRAM, POWER RISER DIAGRAM OF THE BUILDING ELECTRICAL DISTRIBUTION SYSTEM, SITE PLANS AND ALL ELECTRICAL FLOOR PLANS,

DETAILS, PANEL SCHEDULES, ETC . PROVIDE AN OPERATING AND MAINTENANCE MANUAL TO OWNER PRIOR TO THE FINAL ACCEPTANCE. THE MANUAL SHAL INCLUDE, AS A MINIMUM, (1) SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF FOLIPMENT REQUIRING MAINTENANCE, ALSO PROVIDE TWO OPERATIONS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINEMAINTENANCE ACTIONS AND METHOD OF OPERATION FOR EQUIPMENT SHALL BE CLEARLY IDENTIFIED, AND THE NAME, PHONE NUMBER AND ADDRESS OF AT LEAST ONE QUALIFIED

SERVICE AGENCY. . INCLUDE ALL COSTS FOR EXCAVATION, SAW CUTTING, DIRECTIONAL BORING, CORE DRILLING. BACKFILLING, SURFACE RESTORATION. REPAIR OF FINISHES. ETC. THAT IS REQUIRED IN ORDER TO MEET. THE PROJECT. REQUIREMENTS. S INCLUDE IN RID ALL COSTS ASSOCIATED WITH TEMPORARY ELECTRICAL SERVICE AS REQUIRED FOR USE. BY ALL TRADES DURING CONSTRUCTION. REMOVE TEMPORARY POWER AT THE COMPLETION OF THE PROJECT, OBTAIN AND PAY FOR ALL REQUIRED PERMITS FOR TEMPORARY POWER. ENGINEER OF RECORD SHALL BE PROVIDED WITH ADDITIONAL COMPENSATION FROM THE CONTRACTOR WHERE SIGNED & SEALED DRAWINGS ARE REQUESTED BY THE CONTRACTOR TO THE ENGINEER OF RECORD IF REQUIRED BY THE AHJ FOR THE TEMPORARY POWER.

6. $\,$ LOCATE, IDENTIFY, PROTECT AND DOCUMENT ALL UTILITY LINES LOCATED WITHIN THE PROJECT $\,$ BOUNDARY. FOR LOCATING SITE UTILITIES, CONTACT ALL LOCAL MUNICIPALITIES AND UTILITIES AT LEAST 48 HOURS PRIOR TO DIGGING. INCLUDE IN BID THE TRANSPORT AND DISPOSAL OR RECYLING OF ALL WASTE MATERIALS GENERATED BY THIS PROJECT IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL RULES, REGULATIONS AND GUIDELINES APPLICABLE. COMPLY FULLY WITH ALL APPLICABLE STATUTES REGARDING MERCURY- CONTAINING DEVICES, AND WITH ALL LOCAL, STATE AND FEDERAL APPLICABLE GUIDELINES AT THE TIME OF DISPOSAL. PROVIDE OWNER WITH WRITTEN CERTIFICATION OF ACCEPTED DISPOSAL.

VERIFY AND COORDINATE LOCATIONS OF ANY MISCELLANEOUS EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS (I.E COPIERS, FAX MACHINES, PRINTERS, KITCHEN APPLIANCES, LAUNDRY APPLIANCES, PROJECTION SCREENS, SHOP TOOLS, MACHINE, ELEVATORS, ETC.) WITH APPROVED SHOP DRAWINGS, OWNER-PROVIDED CUT SHEETS, MANUFACTURER'S INSTRUCTIONS, AND EQUIPMENT NAMEPLATE INFORMATION, PRIOR TO ROUGH IN, AND PROVIDE ALL NECESSARY ELECTRICAL

VERIFY AND COORDINATE LOCATIONS AND EXACT ELECTRICAL REQUIREMENTS FOR ALL MECHANICAL, PLUMBING AND FIRE PROTECTION EQUIPMENT PRIOR TO SUBMITTAL OF SHOP DRAWINGS OF ELECTRICAL EQUIPMENT. PROVIDE ALL NECESSARY RACEWAYS, CONDUCTORS, BOXES, EQUIPMENT, ACCESSORIES, ASSOCIATED DISCONNECT SWITCHES, CIRCUIT BREAKERS. CONTROL TRANSFORMERS, FIRE ALARM SHUTDOWN, ETC. REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. COORDINATE WITH APPROPRIATE TRADE'S APPROVED SHOP DRAWINGS, MANUFACTURER'S INSTRUCTIONS, AND EQUIPMENT NAMEPLATE INFORMATION, PRIOR TO ROUGH IN, AND PROVIDE ALL NECESSARY ELECTRICAL REQUIRED, UNLESS NOTED

ALL WORK ON THE ELECTRICAL SYSTEM REQUIRED BY THE CONTRACT DOCUMENTS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER DIVISIONS/TRADES PRIOR TO COMMENCEMENT OF WORK. AVOID INTERFERENCES WITH THE PROGRESS OF OTHER DIVISIONS/TRADES.

REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION, CIVIL, LANDSCAPE, INTERIOR DESIGN, TECHNOLOGY STRUCTURAL, AND VENDOR EQUIPMENT DRAWINGS FOR RELATED INFORMATION AND ADDITIONAL INSTALLATION REQUIREMENTS TO BE PERFORMED AS PART OF THE WORK. WHERE A DISCREPANCY OR CONFLICT IS FOUND BETWEEN ONE DRAWING AND ANOTHER, OR BETWEEN A DRAWING AND APPLICABLE SPECIFICATIONS, NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY IN WRITTEN FORM. IN GENERAL, THE MOST STRINGENT REQUIREMENT SHALL GOVERN UNLESS THE DISCREPANCY CONFLICTS WITH APPLICABLE CODES OR OWNER'S

DESIGN STANDARDS, WHEREIN THE CODE OR OWNER'S DESIGN STANDARDS SHALL GOVERN. CAREFULLY EXAMINE THOSE PORTIONS OF THE BUILDING AND/OR SITE AFFECTED BY THIS WORK PRIOR TO SUBMITTING BII PRICE, SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT MAY AFFECT EXECUTION OF THE WORK. SUBMISSION OF A BID PRICE SHALL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT AND/OR MATERIALS REQUIRED DUE TO DIFFICULTIES ENCOUNTERED THAT COULD HAVE BEEN REASONABLY OBSERVED WILL NOT BE RECOGNIZED.

COORDINATE ALL PROJECT SCHEDULING AND PHASING REQUIREMENTS WITH ARCHITECT/ENGINEER AND OWNER PRIOR TO SUBMITTING BID PRICE. THIS PROJECT MAY REQUIRE PHASING SEQUENCES AND POTENTIAL PREMIUM TIME WORK AND ALL COSTS FOR SUCH SHALL BE INCLUDED IN THE BID PRICE. PROVIDE ADEQUATE WORK FORCE AND EQUIPMENT, AND INCLUDE PREMIUM TIME AS MAY BE REQUIRED IN ORDER TO ADHERE TO THE PROJECT SCHEDULE. ADDITIONALLY, ENSURE THAT LONG LEAD ITEMS DO NOT IMPACT THE PROJECT'S SCHEDULE OR PHASING. ANY TEMPORARY INTERRUPTION OF POWER REQUIRED FOR THE SYSTEM TIE-IN OR SWITCHOVER FOR ANY PORTION OF THE ELECTRICAL SYSTEM SHALL BE PRE-APPROVED IN WRITING BY THE OWNER AND SCHEDULED IN ADVANCE.

COORDINATE EXACT REQUIREMENTS WITH THE LOCAL UTILITY COMPANIES AND PROVIDERS (ELECTRIC, TELEPHONE, CABLE TV, ETC.) AND INCLUDE ALL COSTS FOR PROVIDING TEMPORARY AND PERMANENT SERVICES REQUIRED FOR THIS PROJECT IN THE BID PRICE. BID PRICE SHALL INCLUDE, BUT NOT BE LIMITED TO, EXCAVATION, RACEWAYS, BACKFILL, EQUIPMENT, EQUIPMENT PADS, BACKBOARDS, METERS, GROUNDING, UTILITY ENGINEERING AND IMPACT FEES . CONDUCT WORK OPERATIONS AND DEBRIS REMOVAL IN A MANNER THAT ENSURES MINIMUM INTERFERENCE WITH NORMA BUSINESS OPERATIONS, TRAFFIC, PARKING, ETC. ONGOING IN ADJACENT OCCUPIED SPACES OR FACILITIES. PROVIDE ALL IHAT IS REQUIRED TO EFFECTIVELY PROTECT SURROUNDING OCCUPANTS, EQUIPMENT, FINISHES, FURNITURE, ETC. FROM DAMAGE OR EXCESSIVE NOISE THROUGHOUT THE DURATION OF THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR ANY LOSSES OR ANY DAMAGE RESULTING FROM THE FAILURE TO ADHERE TO THIS REQUIREMENT. RESTORE DAMAGED ELEMENTS TO ORIGINAL CONDITION TO THE SATISFACTION OF THE ARCHITECT/ENGINEER AND OWNER, AT NO ADDITIONAL COSTS. REPORT OF ANY SUCH OCCURRENCE TO THE ARCHITECT/ENGINEER AND OWNER IMMEDIATELY AND AWAIT WRITTEN DIRECTION PRIOR TO PROCEEDING WITH REPAIRS.

COORDINATE THE LOCATION OF ALL LIGHT FIXTURES, DEVICES AND BOXES WITH WINDOWS, MIRRORS, MILLWORK, CABINETS, GLASS CURTAIN WALLS, AND GLASS WALLS PRIOR TO INSTALLATION OF CONDUITS OR BOXES. REVIEW ALL CONTRACT DRAWINGS TO ASCERTAIN ANY CONFLICTS PRIOR TO BIDDING. OBTAIN CLARIFICATION FROM THE ARCHITECT/ENGINEER PRIOR TO BID. CONTRACTOR SHALL NOT BE ENTITLED TO ADDITIONAL COMPENSATION FOR WORK REQUIRED TO RELOCATE OUTLET BOXES OR RACEWAYS FOR COORDINATION WITH OTHER TRADE'S WORK.

ALL FEEDERS AND BRANCH CIRCUITS SHALL INCLUDE AN EQUIPMENT GROUND CONDUCTOR. METAL RACEWAYS SHALL NOT BE USED AS THE SOLE EQUIPMENT GROUND. WHERE A PHASE CONDUCTOR IS INCREASED IN SIZE DUE TO VOLTAGE DROP, THE EQUIPMENT GROUND CONDUCTOR SHALL BE INCREASED IN SIZE PROPORTIONATELY. PROVIDE A GROUND BUS BAR IN EACH ELECTRICAL ROOM AND TELECOMMUNICATIONS / IDF/ MDF ROOM FOR ALL NEW CONSTRUCTION AND NEW ROOMS IN EXISTING CONSTRUCTION. AND IN EXISTING CONSTRUCTION WHERE THERE IS NONE INSTALLED WITHIN AN EXISTING ROOM.

FLEXIBLE METAL CONDUIT AND LIQUIDTIGHT FLEXIBLE METAL CONDUIT (FMC & LFMC) SHALL NOT BE USED IN LENGTHS THAT EXCEED 6'-0" UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS THE ARCHITECT/ENGINEER GRANTS WRITTEN

ALL FEEDER AND BRANCH CIRCUIT CONDUCTORS, INCLUDING LOW VOLTAGE SYSTEMS, SHALL BE INSTALLED IN A COMPLETE RACEWAY SYSTEM (CONDUIT) UNLESS SPECIFICALLY NOTED OTHERWISE THE USE OF ELECTRICAL NON-METALLIC TUBING (ENT) AND LIQUIDTIGHT FLEXIBLE NON-METALLIC CONDUIT (LFNC) ARE PROHIBITED UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS THE ARCHITECT/ENGINEER OR OWNER GRANTS

CONNECTIONS TO TRANSFORMERS, AHU'S, AND PUMPS SHALL BE WITH LIGUIDTIGHT, FLEXIBLE METAL CONDUIT. NO PVC CONDUIT MAY BE USED INSIDE OF BUILDING UNLESS ROUTED UNDERGROUND, AND UNLESS NOTED OTHERWISE. ALL CONDUIT TERMINATIONS AT TERMINAL BOARDS ARE TO HAVE GROUNDING BUSHINGS AT CONDUIT ENDS. ALL CONDUITS ARE TO BE CONCEALED UNLESS IMPOSSIBLE DUE TO EXISTING CONDITIONS (I.E., EXPOSED CEILINGS BUILDING EXTERIOR WALL RUNS). CONCEAL ALL CONDUITS ABOVE CEILINGS OR IN WALLS AND MILLWORK. WHERE EXISTING CONDITIONS DICTATE THAT CONDUITS CANNOT BE CONCEALED, NOTIFY ARCHITECT/ENGINEER PRIOR TO

INSTALLING CONDUIT FOR RESOLUTION TO ROUTING. SEAL ALL PENETRATIONS AND OPENINGS MADE DURING EXECUTION OF WORK IN FIRE-RATED AND SMOKE-RATED WALLS. WALLS SHALL BE SEALED WITH UL-APPROVED PRODUCT WITH THE SAME OR GREATER RATING OF WALL PENETRATED. ROVIDE ALL PENETRATIONS THROUGH FLOORS. WALLS. CEILINGS AND ROOFS WHERE REQUIRED. COORDINATE LOCATIONS AND SIZES WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS, FIELD CONDITIONS AND WORK OF ALL OTHER DIVISIONS/TRADES, ALL OPENINGS ARE TO BE SEALED WATERTIGHT. 0. ALL RACEWAYS THAT TURN UP THROUGH THE SLAB OR INTO ELECTRICAL EQUIPMENT FROM UNDERGROUND SHALL BE

RIGID GALVANIZED STEEL (RGS) WITH BITUMASTIC COATING FOR AT LEAST THE FINAL 18" LENGTH. THE USE OF NON-METALLIC CONDUIT ABOVE GRADE IS PROHIBITED. . PANEL SCHEDULES AND FLOOR PLANS MAY INDICATE DEDICATED HOMERUNS FOR EACH BRANCH CIRCUIT. BRANCH CIRCUITS MAY BE GROUPED IN A COMMON HOMERUN WHERE THE HOMERUN DOES NOT EXCEED 3 PHASE CONDUCTORS, 3 NEUTRAL CONDUCTORS, AND 1 EQUIPMENT GROUND. THE HOMERUN RACEWAY SIZE AND CONDUCTOR SIZE SHALL BE INCREASED AS NECESSARY TO COMPLY WITH THE NEC FOR 40% MAXIMUM FILL AND DERATING REQUIREMENTS. PROVIDE SEAL OFF FITTINGS, APPROVED FOR SUCH USE, WHERE RACEWAYS PENETRATE BETWEEN A DRY,

CONDITIONED ENVIRONMENT AND THE EXTERIOR OR OTHER WET ENVIRONMENTS AND ADDITIONAL AREAS WHERE CONDUITS PASS FROM WARM TO COLD LOCATIONS SUCH AS WALK-IN COOLERS OR FREEZERS, BOILER ROOMS, ETC. PROVIDE POLYOLEFIN JET-LINE #232 (NYLON PULL STRING) IN EACH EMPTY CONDUIT WITH ENGRAVED METAL TAG INDICATING CONDUIT DESIGNATION. 4. ALL HOMERUNS SHALL BE IN 3/4" RACEWAY MINIMUM. 1/2" RACEWAY IS ACCEPTABLE FOR A SINGLE CIRCUIT FROM THE

HOMERUN TO REMAINING DEVICES. 5. CONDUIT SHALL USE SET SCREW TYPE FITTINGS OR COMPRESSION FITTINGS. CONTRACTOR SHALL USE COMPRESSION FITTINGS ONLY FOR EMT CONDUIT

Y. RACEWAYS SHALL NOT BE PERMITTED TO BE INSTALLED WITHIN SLABS. . WHERE RACEWAYS ARE INSTALLED IN SLABS, THE MINIMUM SPACING, MAXIMUM RACEWAY SIZE, AND ANY OTHER STRUCTURAL LIMITATIONS SHALL BE COORDINATED WITH THE STRUCTURAL DRAWINGS AND THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION.

EQUIPMENT SHALL BE OF MATERIALS SUITABLE FOR AND RATED FOR THE ENVIRONMENT IN WHICH THEY ARE TO BE INSTALLED. ALL COMPONENTS OF THE ELECTRICAL SYSTEM LOCATED OUTDOORS OR INDOORS WHERE EXPOSED TO SIGNIFICANT MOISTURE SHALL BE WEATHERPROOF, NEMA 3R, AS A MINIMUM, WHETHER INDICATED ON THE CONTRACT DRAWINGS OR NOT. TERMINATION PROVISIONS FOR ALL ELECTRICAL EQUIPMENT (PANELBOARDS, SWITCHBOARD, TRANSFORMERS, DISCONNECT

SWITCHES, MOTOR CONTROLLERS, AUTOMATIC TRANSFER SWITCHES, ENCLOSED CIRCUIT BREAKERS, BUSWAYS, ETC.) SHALL BE LISTED AND IDENTIFIED FOR USE WITH MINIMUM 75 DEG. F CONDUCTORS IN ACCORDANCE WITH NEC. WORKING CLEARANCES FOR ELECTRICAL EQUIPMENT SHALL BE IN COMPLIANCE WITH NEC

THE ELECTRICAL DEDICATED EQUIPMENT SPACE EXTENDING FROM FLOOR TO 6' ABOVE ELECTRICAL EQUIPMENT OR TO THE STRUCTURAL CEILING, WHICHEVER DISTANCE IS LOWER, WITH A WIDTH AND, DEPTH, OF THE PANELBOARD OR SWITCHBOARD MUST BE CLEAR OF ALL PIPING, DUCTS. ARCHITECTURAL APPURTENANCES AND OTHER EQUIPMENT FOREIGN TO THE ELECTRICAL INSTALLATION IN ACCORDANCE WITH NEC

PROVIDE A REINFORCED CONCRETE PAD. SIZED 4" LARGER IN ALL DIRECTIONS THAN THE FOOTPRINT OF THE EQUIPMENT. AND 4" HIGH, FOR ALL FREESTANDING, FLOOR-MOUNTED ELECTRICAL EQUIPMENT. PROVIDE VIBRATION ISOLATORS AND/OR ANCHORS PER MANUFACTURER'S INSTRUCTIONS ALL PANELBOARDS OR DISCONNECT SWITCHES LOCATED IN KITCHEN AREAS SHALL BE STAINLESS STEEL (COVER AND DOOR WHERE PANEL IS FLUSH MOUNTED; PANEL BOX, COVER & DOOR WHERE SURFACE MOUNTED) PROVIDE SURGE PROTECTION DEVICE FOR ALL MAIN SERVICE EQUIPMENT, PANELBOARDS SERVING SENSITIVE ELECTRONIC

EQUIPMENT (DATA RACKS) OR COMPUTERS, EMERGENCY SWITCHBOARDS AND PANELBOARDS, LIGHTING PANELS SERVING

EXTERIOR LIGHTING, POWER CIRCUITS OR LOW VOLTAGE (FIREALARM, TELECOMMUNICATIONS) EXITING THE BUILDING.

PROVIDE MINIMUM 30A/3P BREAKER IN BRANCH CIRCUIT PANELBOARDS AND 60A/3P IN DISTRIBUTION PANELBOARDS OR SWITCHBOARDS. UNLESS NOTED OTHERWISE. OR PER THE SPD MANUFACTURER'S RECOMMENDATIONS FOR SURGE PROTECTION DEVICE . FOR ANY PROJECT THAT INCLUDES MULTIPLE ELEVATORS OR THE INSTALLATION/MODIFICATION OF EMERGENCY POWER DISTRIBUTION SYSTEMS (INCLUDING LEGALLY REQUIRED STANDBY SYSTEMS THE OVERCURRENT PROTECTION DEVICES ASSOCIATED WITH THOSE SYSTEMS SHALL BE SELECTIVELY COORDINATED A REQUIRED BY THE NEC. PROVIDE DOCUMENTATION TO DEMONSTRATE THE SELECTIVE COORDINATION OF THE DISTRIBUTION SYSTEM TO THE ENGINEER/AHJ. AN OVERCURRENT PROTECTIVE DEVICE COORDINATION STUDY SHALL BE SUBMITTED AT THE

SAME TIME AS THE SUBMITTALS FOR ANY EQUIPMENT CONTAINING OVERCURRENT PROTECTION DEVICES. CONTRACTOR

SHALL SUBMIT OVERCURRENT PROTECTIVE DEVICE SETTINGS FOR ALL ADJUSTABLE BREAKERS AND SHALL ENSURE ALL

LECTRICAL DEVICES OUTLET BOXES, JUNCTION BOXES LIGHT SWITCHES SHALL BE MOUNTED 48 INCHES ABOVE FINISHED FLOOR TO CENTER LINE OF DEVICE, UNLESS NOTED RECEPTACLES, VOICE/DATA OUTLETS AND WALL FURNITURE FEEDS SHALL BE MOUNTED 18 INCHES ABOVE FINISHED FLOOR TO

DEVICES ARE ADJUSTED TO MATCH APPROVED SETTINGS.

SPLASH TO CENTERLINE OF DEVICE, UNLESS NOTED OTHERWISE. IT IS THE INTENT THAT ALL DEVICE OUTLET BOXES (POWER AND SYSTEMS) BE FLUSH MOUNTED IN WALLS, CEILINGS OR FLOORS, AND JUNCTION BOXES FLUSH MOUNTED IN WALLS, CEILINGS, OR FLOORS, OR CONCEALED ABOVE ACCESSIBLE CEILINGS, AND NOT SURFACE MOUNTED, UNLESS SPECIFICALLY NOTED ON THE CONTRACT DRAWINGS, OR UNLESS THE ARCHITECT/ENGINEER GRANTS WRITTEN PERMISSION ALL COMPONENTS OF THE ELECTRICAL SYSTEM (INCLUDE RACEWAYS, ELECTRICAL EQUIPMENT, OUTLET BOXES, JUNCTION

CENTER LINE OF DEVICE, UNLESS NOTED OTHERWISE. ABOVE COUNTER RECEPTACLES SHALL BE MOUNTED 6" ABOVE BACK

BOXES, ETC.) LOCATED IN A HAZARDOUS (CLASSIFIED) LOCATION SHALL BE APPROVED FOR USE IN SAID LOCATION, AS DEFINED BY THE NEC, WHETHER INDICATED ON THE CONTRACT DOCUMENTS OR NOT. ALL DEVICES SHALL BE MOUNTED VERTICALLY, UNLESS NOTED OTHERWISE.

WHERE DEVICES ARE SHOWN IN WALLS BACK-TO-BACK ON OPPOSITE SIDES, INSTALL SO THAT THEY ARE SEPARATED BY AT RECEPTACLES OR JUNCTION BOXES FOR ELECTRIC WATER COOLERS AND VENDING MACHINES SHALL BE LOCATED DIRECTL BEHIND SAID APPLIANCE, CONCEALED FROM DIRECT VIEW. RECEPTACLES AND/OR HARD WIRED EQUIPMENT CONNECTIONS SHALL BE PROTECTED BY A READILY ACCESSIBLE GFCI FEED-THRU DEVICE LOCATED IMMEDIATELY ADJACENT TO THE APPLIANCE OR BE PROTECTED BY GFCI BREAKER IN THE PANELBOARD. ALL GFCI DEVICES MUST BE READILY ACCESSIBLE PER THE NEC. ALL EXTERIOR RECEPTACLES OR RECEPTACLES LOCATED IN AREAS SUBJECT TO MOISTURE (PARKING GARAGE, WASHDOWN

AREAS IN KITCHEN, ETC) SHALL BE GFCI TYPE. ALL EXTERIOR RECEPTACLES SHALL WE PROVIDED WITH CAST METAL, IN-USE COVER UNLESS NOTED OTHERWISE. ALL RECEPTACLES LOCATED IN KITCHENS, BATHROOMS, MECHANICAL ROOMS, JANITOR CLOSETS, ELEVATOR SHAFTS ELEVATOR EQUIPMENT ROOMS, FOR ELEVATOR SUMP PUMP(S) OR INSTALLED WITHIN 6' OF THE INSIDE FACE OF A SINK, SHAL GECLTYPE OR GECLPROTECTED

WHEN ELECTRICAL BOXES ARE LOCATED IN VERTICAL FIRE-RESISTIVE ASSEMBLIES. THEY SHALL BE INSTALLED WITHOU AFFECTING THE FIRE CLASSIFICATION. ALL OF THE FOLLOWING CONDITIONS SHALL BE MET:

A. ALL ELECTRICAL BOXES SHALL BE METALLIC B. BOX OPENING SHALL OCCUR ONLY ON ONE SIDE OF FRAMING SPACE.

ALL RECEPTACLES SHALL BE MOUNTED SUCH THAT THE GROUND PIN IS MOUNTED UP.

C. BOX OPENING SHALL NOT EXCEED 16 SQUARE INCHES.

D. ALL CLEARANCES BETWEEN OUTLET BOX AND GYPSUM BOARD SHALL BE COMPLETELY FILLED WITH JOINT COMPOUND (OR OTHER APPROVED MATERIAL) E. PROVIDE A WALL AROUND OUTLETS LARGER THAN 16 INCHES SQUARE. THE INTEGRITY OF THE WALL RATING SHALL BE F. THE TOTAL AGGREGATE SURFACE AREA OF THE BOXES SHALL NOT EXCEED 100 SQUARE INCHES PER 100 SQUARE FEET

OUTLET BOXES LOCATED ON OPPOSITE SIDES OF FIRE RESISTIVE ASSEMBLIES SHALL BE SEPARATED BY A MINIMUM HORIZONTAL DISTANCE OF 24 INCHES. H. OUTLET BOXES SHALL BE SECURELY FASTENED TO WALL FRAMING MEMBERS. THE OPENING IN THE GYPSUM BOARD FACING SHALL BE CUT NOT TO EXCEED 1/8 INCH BETWEEN THE EDGES OF THE OUTLET BOX AND THE EDGES OF THE OPENING.

CONDUCTORS ALL WIRE SHALL BE SIZED AS SHOWN ON THE DRAWINGS. IF NO WIRE SIZE IS SHOWN. THEN WIRE SHALL BE #12 AWG. BRANCH CIRCUITS SHALL BE INCREASED IN SIZE AS REQUIRED TO COMPENSATE FOR VOLTAGE DROP FROM LENGTH OF CIRCUIT DUE TO FIELD ROUTING. FINAL INSTALLATION SHALL NOT EXCEED A MAXIMUM OF 3% VOLTAGE DROP FOR BRANCH CIRCUITS. REFER TO VOLTAGE DROP TABLE BELOW FOR CONDUCTOR SIZES FOR BRANCH CIRCUITS AS FOLLOWS:

A. 120V, 20A CIRCUITS SHALL BE: i. #12 FROM 0-70 FT ii. #10 FROM 71-115FT

iii. #8 FROM 116-180FT B. 277V. 20A CIRCUITS SHALL B

DROP FOR BRANCH CIRCUITS

i. #12 FROM 0-140F ii. #10 FROM 141-220F

iii. #8 FROM 221-350FT ANYTHING LONGER THAN THE ABOVE SHALL BE SUBMITTED TO THE ENGINEER WITH CALCULATIONS FOR APPROVAL. ALL CONDUCTORS IN CABINETS MUST BE CAREFULLY FORMED AND HARNESSED SO THAT EACH CONDUCTOR DROPS OFF

IRECTLY OPPOSITE TO TERMINA ALL WIRE SIZES ARE BASED ON AMPACITIES FOR 60 DEG F TEMPERATURE RATING FROM 0-100A AND 75 DEG. F TEMPERATURE RATING LISTED IN NEC FOR 100A AND ABOVE ALL CONDUCTORS SHALL BE COPPER, THHN/THWN; SOLID FOR #10 AWG AND SMALLER; STRANDED FOR #8 AWG AND LARGER.

CONDUCTORS USED IN WET LOCATIONS, INCLUDING BUT NOT LIMITED TO UNDERGROUND CONDUITS/DUCTBANKS AND XTERIOR CONDUITS SHALL COMPLY WITH NEC 310.10 AND BE LISTED FOR USE IN WET LOCATIONS.

7. ALL POWER CIRCUITS HAVE BEEN DESIGNED TO MEET 2% OR LESS VOLTAGE DROP FOR FEEDERS, AND 3% OR LESS VOLTAGE

ELECTRICAL DEMOLITION NOTES

<u>IDENTIFICATION</u> PROVIDE TYPED PANEL DIRECTORIES FOR ALL NEW PANELBOARDS, AND EXISTING PANELBOARDS AFFECTED BY THIS PROJECT. DIRECTORIES SHALL REFLECT PROJECT AS-BUILT CONDITIONS FOR ALL BRANCH CIRCUITS. DIRECTORIES SHALL INCLUDE WHERE EACH PANEL IS FED FROM. ADDITIONALLY, EACH BRANCH CIRCUIT LOAD DESCRIPTION SHALL INCLUDE THE ROOM NUMBER(S) FOR EACH LOAD (I.E., RECEPTACLES-RMS 501,503). ROOM NUMBERS SHALL BE BASED ON ACTUAL ROOM

SIGNAGE INSTALLED IN FIELD. COORDINATE EXACT ROOM NUMBERS WITH ARCHITECT/ENGINEER AND OWNER PRIOR TO COMPLETION OF PANEL DIRECTORIES. PROVIDE ENGRAVED PLASTIC LAMINATE NAME TAGS ON EACH SWITCHBOARD, SWITCHGEAR, DISTRIBUTION PANEL PANELBOARD, MOTOR CONTROL CENTER, SAFETY SWITCH, ENCLOSED CIRCUIT BREAKER, CABINET, STEP-DOWN

TRANSFORMER. TRANSFER SWITCH. ETC.. AND ANY OTHER MAJOR COMPONENT OF THE ELECTRICAL SYSTEM. PROVIDE ENGRAVED PLASTIC LAMINATE NAME TAGS FOR EACH DISTRIBUTION BREAKER OR BRANCH CIRCUIT BREAKER IN SWITCHGEAR. SWITCHBOARDS, MOTOR CONTROL CENTERS AND OTHER DISTRIBUTION EQUIPMENT. NAME TAG SHALL INCLUDE LOAD DESCRIPTION AND ROOM NUMBER FOR EACH LOAD

ARC FLASH DANGER/WARNING LABELS SHALL BE APPLIED TO SWITCHBOARD. PANELBOARDS, AND EQUIPMENT CONTROLLERS PROVIDE LABELS ON THE INSIDE OF EACH DEVICE COVERPLATE, IDENTIFYING THE PANEL(S)/ CIRCUIT NUMBER(S) DEVICE IS

PROVIDE NEATLY, HANDWRITTEN IDENTIFICATION ON THE EXTERIOR COVER OF ALL JUNCTION BOXES, PULLBOXES AND

WIREWAYS, IDENTIFYING THE PANEL(S)/ CIRCUIT NUMBER(S) CONTAINED WITHIN. PROVIDE A PERMANENT SIGN ON THE MAIN ELECTRICAL ROOM DOOR TO THE BUILDING STATING THAT THE MAIN SERVICE DISCONNECTING MEANS IS LOCATED INSIDE. PROVIDE A PERMANENT LABEL ON ALL PANELBOARDS, SWITCHBOARDS, SWITCHGEAR, MOTOR CONTROL CENTERS AND

CONNECTED TO

DISTRIBUTION PANELS STATING "DO NOT WORK ON EQUIPMENT WHILE ENERGIZED. LOCK-OUT TAG-OUT REQUIRED". PROVIDE REQUIRED IDENTIFICATION PER ANSI STANDARDS, NEC REQUIREMENTS, AND OWNER'S PUBLISHED DESIGN STANDARDS WHERE APPLICABLE.

. PROVIDE ENGRAVED PHENOLIC LABEL ON ALL NEW SERVICE EQUIPMENT TO INDICATE THE MAXIMUM $\;\;$ AVAILABLE FAULT CURRENT AND THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED. PROVIDE LABEL ON ALL EXISTING SERVICE EQUIPMENT WHEN MODIFICATIONS OCCUR THAT AFFECT THE MAXIMUM AVAILABLE FAULT CURRENT AT THE SERVICE. . PROVIDE ARC FLASH HAZARD ANALYSIS PER NFPA 70E FOR ANY EQUIPMENT INCLUDED WITHIN THE SCOPE OF WORK. INCIDENT ENERGY VALUES SHALL BE INCLUDED ON THE ARC FLASH WARNING LABELS FOR EACH EQUIPMENT

LIGHT FIXTURES SUPPORTED BY CEILING GRID SHALL BE SUPPORTED AS FOLLOWS: LIGHT FIXTURES WEIGHING LESS THAN 10 POUNDS SHALL HAVE 12-GAUGE HANGER WIRE CONNECTED FROM THE LIGHT FIXTURE TO THE STRUCTURE ABOVE. LIGHT FIXTURES WEIGHING 10 POUNDS OR MORE SHALL HAVE (2) 12- GAUGE HANGER WIRES ATTACHED AT OPPOSITE CORNERS OF THE LIGHT FIXTURE TO THE STRUCTURE ABOVE.

COORDINATE EXACT LOCATIONS OF LIGHT FIXTURES IN LAY-IN AND GYPBOARD CEILINGS WITH ARCHITECTURAL REFLECTED CEILING PLANS, AND WALL MOUNTED EXTERIOR AND INTERIOR LIGHT FIXTURES WITH ARCHITECTURAL ELEVATIONS PRIOR TO INSTALLATION. WHERE THE QUANTITY OF LIGHTS DIFFERS BETWEEN THE ARCHITECTURAL RCP AND THE FLECTRICAL LIGHTING PLANS, PROVIDE THE HIGHEST QUANTITY OF FIXTURES IN THE BID PRICE. THE DISCREPANCY IN QUANTITY SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER. THE HIGHEST QUANTITY SHALL BE CIRCUITED TO THE LOCAL ROOM OR AREA LIGHTING CIRCUITS AND LIGHTING CONTROL DEVICES, UNLESS OTHERWISE DIRECTED IN WRITING BY THE ARCHITECT/ENGINEER.

VERIFY ACTUAL CEILING CONSTRUCTION TYPE AS DEFINED ON THE ARCHITECTURAL DRAWINGS AND FURNISH ALL LIGHT FIXTURES WITH THE CORRECT MOUNTING DEVICES WHETHER OR NOT SUCH VARIATIONS ARE INDICATED BY THE LIGHT FIXTURE CATALOG NUMBER. VERIFY THE DEPTH OF ALL RECESSED LIGHT FIXTURES WITH THE ARCHITECTURAL DRAWINGS PRIOR TO ORDERING LIGHT FIXTURES. ANY DISCREPANCIES THAT WOULD CAUSE THE RECESSED LIGHT FIXTURES NOT TO INTO CEILING SHALL BE REPORTED TO ARCHITECT/ENGINEER PRIOR TO ORDERING

LIGHT FIXTURES RECESSED IN FIRE-RATED CEILINGS SHALL BE PROVIDED WITH APPROVED FIRE- RATED ENCLOSURE WITH A FIRE RATING EQUAL TO THAT OF THE CEILING. PROVIDE A MINIMUM OF 3" CLEARANCE FROM SIDES AND TOP OF RECESSED LIGHT FIXTURES MODIFY ALL LIGHT FIXTURE CATALOG NUMBERS AS REQUIRED TO COORDINATE WITH THE LIGHTING BRANCH CIRCUIT

VOLTAGES INDICATED. COORDINATE THE CATALOG NUMBERS WITH THE EXACT FIXTURE MOUNTING AND TRIM REQUIRED BY THE CEILING IN WHICH EACH FIXTURE IS BEING INSTALLED. ALL LIGHT FIXTURES SHALL BE PROVIDED COMPLETE WITH LAMPS, UNLESS OTHERWISE NOTED. ALL EXIT LIGHTS, LIGHT FIXTURES INDICATED WITH UNSWITCHED CIRCUIT (NIGHTLIGHT N/L), EMERGENCY TWIN-HEAD

FIXTURES WITH INTEGRAL BATTERY PACKS, AND BATTERY PACKS INTEGRAL TO LIGHT FIXTURES, SHALL BE WIRED AHEAD OF ANY LOCAL SWITCHING OR LIGHTING CONTROLS. PROVIDE UL WET LABEL OR IP67 RATED LIGHT FIXTURES FOR ALL FIXTURES LOCATED OUTSIDE OR IN PARKING GARAGES, IN SHOWERS, OR OPEN STRUCTURES. EXTERIOR LIGHTING BALLASTS/DRIVERS SHALL HAVE A MINMUM STARTING TEMPERATURE OF -40 DEGREE C, AND A NORMAL AMBIENT OPERATING TEMPERATURE OF 40 DEGREE C

PROVIDE FUSING FOR ALL EXTERIOR LIGHT FIXTURES, OR FIXTURES IN PARKING GARAGES OR OPEN STRUCTURES. PROVIDE ALL TEMPORARY NORMAL LIGHTING, EMERGENCY LIGHTING AND EXIT SIGNS REQUIRED DURING THE PROJECT . COORDINATE EXACT FOUNDATION AND/OR COMPACTING REQUIREMENTS FOR ALL POLE MOUNTED LIGHT FIXTURES WITH

MANUFACTURER'S AND/OR INSTALLER'S STRUCTURAL ENGINEER. POLE BASES SHALL MEET OR EXCEED ALL WIND LOAD RATINGS, GUST FACTORS, IMPORTANCE FACTORS, ETC. REQUIRED BY NATIONAL AND/OR LOCAL CODES, SHOP DRAWINGS SHALL INCLUDE STRUCTURAL DRAWINGS FOR ALL POLE BASES, POLE, ASSEMBLY AND OVERTURN CALCULATIONS REQUIRED IN THIS PROJECT, SIGNED AND SEALED BY A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE PROJECT STATE. . REFER TO LIGHT FIXTURE SCHEDULE FOR LIGHT FIXTURE TYPES, DESCRIPTIONS, CATALOG NUMBERS AND ADDITIONAL INFORMATION PERTINENT TO THE LIGHT FIXTURE OR INSTALLATION THEREOF.

. COORDINATE LIGHT FIXTURE TRIM TYPE AND FINISH COLOR WITH ARCHITECT PRIOR TO ORDERING. EACH LIGHTING CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL. 6. PROVIDE LIGHTING CONTROLS TO AUTOMATICALLY SHUTOFF BUILDING FACADE AND LANDSCAPE LIGHTING AS A FUNCTION OF DAWN/DUSK AND OPENING/CLOSING TIME. PROVIDE LIGHTING CONTROLS TO AUTOMATICALLY REDUCE THE CONNECTED LIGHTING POWER OF EXTERIOR SITE/AREA

LIGHTING BY NOT LESS THAN 30 PERCENT FROM NOT LATER THAN MIDNIGHT TO 6AM, FROM ONE HOUR AFTER BUSINESS CLOSING TO ONE HOUR BEFORE BUSINESS OPENING OR DURING ANY PERIOD WHEN ACTIVITY HAS BEEN DETECTED FOR A TIME OF LONGER THAN 15 MINUTES.

APPLICABLE CODES

DEVICES, LIGHT FIXTURES AND EQUIPMENT SHOWN IN DASHED LINE TYPE ARE EXISTING TO BE DEMOLISHED; DEVICES LIGHT FIXTURES AND EQUIPMENT SHOWN IN LIGHT (SCREENED) SOLID LINE TYPE ARE EXISTING TO REMAIN, UNLESS NOTED

EXISTING EQUIPMENT, LIGHT FIXTURES AND DEVICES SHOWN ARE BASED ON FIELD SURVEYS AND RECORD DRAWING PROVIDED BY THE OWNER, AND ARE NOT NECESSARILY INCLUSIVE OF ALL EXISTING ELECTRICAL EQUIPMENT, LIGHT FIXTURES AND DEVICES WITHIN PROJECT AREAS. IT IS THE INTENT THAT THE DEMOLITION PLANS PROVIDE A GENERAL KNOWLEDGE OF THE EXISTING CONDITIONS WITHIN THE PROJECT AREA. ANY DISCREPANCIES OR CONDITIONS NOT SHOWN ON THE PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR ALL

REQUIRED ELECTRICAL DEMOLITION WHETHER INDICATED ON THE PLANS OR NOT EXISTING CIRCUITING SHOWN IS BASED ON RECORD DRAWINGS AND THE SURVEYED PANEL DIRECTORIES, WHERE THEY WERE AVAILABLE. THE ACTUAL CONDITIONS MAY VARY. ALL EXISTING CONDITIONS MUST BE VERIFIED PRIOR TO BID. THE CONDITIONS SHOWN ARE INTENDED TO SHOW THE LOCATIONS OF EXISTING DEVICES, LIGHT FIXTURES AND EQUIPMENT WHERE SHOWN ON THE PLAN DRAWINGS, AND IN NO WAY RELIEVES THE CONTRACTOR FROM PROVIDING ANY AND ALL COORDINATION NECESSARY TO COMPLETE THE NEW WORK. FIELD CONDITIONS SHALL GOVERN. WHERE EXISTING DEVICES ARE INDICATED TO REMAIN OR BE RELOCATED, ARE WITHIN THE SCOPE OF THIS PROJECT AND

EXISTING CIRCUITING INFORMATION IS UNAVAILABLE, CONTRACTOR IS TO PROVIDE CIRCUIT TRACING TO IDENTIFY PANEL AND CIRCUIT SERVING THE DEVICE TO AND PROVIDE THAT INFORMATION TO THE ARCHITECT/ENGINEER PRIOR TO ROUTING CONDUITS AND WIRING FOR NEW DEVICES AND EQUIPMENT WITHIN THE SCOPE OF THIS PROJECT. WHERE EXISTING DEVICES ARE TO REMAIN, CONTRACTOR MUST EXTEND EXISTING CIRCUITING WHERE NECESSARY T MAINTAIN CONTINUITY OF CIRCUIT. COORDINATE WITH THE OWNER FOR DISPOSITION OF ELECTRICAL ITEMS TO BE DEMOLISHED. OWNER SHALL HAVE THE

TRANSFORMERS, ETC. NOT BEING USED IN THE FINISHED WORK. COORDINATE WITH THE OWNER PRIOR TO START OF DEMOLITION. PROPERLY AND LEGALLY DISPOSE OF ALL EQUIPMENT AND MATERIALS BEING REMOVED. COORDINATE EXACT AREAS, WALLS, CEILINGS, ETC. TO BE DEMOLISHED WITH ARCHITECTURAL, STRUCTURAL, PLUMBING AND MECHANICAL DEMOLITION PLANS. WHERE EXISTING DEVICES, LIGHT FIXTURES AND EQUIPMENT ARE INDICATED TO BE DEMOLISHED, REMOVE ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE PANEL OR TO NEAREST JUNCTION BOX TO MAINTAIN CIRCUIT CONTINUITY OF

DEVICES AND EQUIPMENT TO REMAIN. WHERE PANELS ARE TO REMAIN, TURN BREAKER TO "OFF" POSITION AND LABEL THE

OPTION TO RETAIN REUSABLE ITEMS SUCH AS COVERPLATES, RECEPTACLES, LIGHT FIXTURES, PANELBOARDS,

CIRCUIT AS "SPARE" ON THE PANEL DIRECTORY. ALL AREAS OUTSIDE THE SCOPE OF CONSTRUCTION ARE TO REMAIN ENERGIZED. COORDINATE PHASING WITH CONSTRUCTION MANAGER AND OWNER PRIOR TO DEMOLITION OF ANY ITEM WHICH MAY RESULT IN INTERRUPTION OF POWER REFER TO ARCHITECTURAL DEMOLITION DRAWINGS FOR EXTENT OF AREA REQUIRING DEMOLITION AND ADDITIONAL INFORMATION ON ELECTRICAL DEMOLITION WITHIN THAT AREA. DISCONNECT ELECTRICAL SERVICE TO ALL EQUIPMENT BEING REMOVED. DEMOLITION SHALL BE PHASED AS REQUIRED BY DIVISION 1, OR DIRECTED BY THE OWNER. REMOVE ALL CONDUIT LEFT EXPOSED BY REMOVAL OF WALLS AND CEILINGS IN REMODELED OR RENOVATED AREA. CAP

BOTH ENDS OF REMAINING CONDUIT IN WALL OR FLOOR WHERE CUT. ELECTRICAL DEVICES CONCEALED BY STORAGE SHELVING, CASEWORK, FURNITURE, ETC., AND NOT NOTED ON THE DEMOLITION DRAWINGS ARE TO BE REMOVED AS REQUIRED, UNLESS SHOWN AS EXISTING TO REMAIN. I. CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ALL OPENINGS IN EXISTING CONSTRUCTION AFTER REMOVAL OF EQUIPMENT AND ELECTRICAL DEVICES, UNLESS OTHERWISE NOTED ON ARCHITECTURAL PLANS. REPAIRS ARE TO BE DONE TO LOGICAL EDGES OF SURFACES AFFECTED AND SHALL MATCH IMMEDIATELY ADJACENT AREAS IN CONSTRUCTION, MATERIAL, FIRE RATING, FINISH AND COLOR. PROVIDE BLANK COVERPLATES WHERE DEVICES ARE BEING REMOVED FROM EXISTING WALLS TO REMAIN. MATCH COLOR OF

NEW ADJACENT DEVICE COVERPLATES. 15. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORK AND OBTAIN CLARIFICATIONS FROM ARCHITECT/ENGINEER IF NECESSARY. COORDINATE ALL POWER INTERRUPTION WITH CONSTRUCTION MANAGER, OWNER, LANDLORD, AND UTILITY COMPAN (WHERE APPLICABLE) AND DO NOT INTERRUPT POWER WITHOUT WRITTEN PERMISSION. PROVIDE A MINIMUM OF ONE WEEK'S WRITTEN NOTIFICATION PRIOR TO WHEN POWER IS DESIRED TO BE INTERRUPTED. CONTRACTOR SHALL INVESTIGATE AND

IDENTIFY ALL LOADS TO BE AFFECTED BY THE REQUESTED INTERRUPTION. CONTRACTOR SHALL SUBMIT WRITTEN SEQUENCE OF STEPS FOR EACH SHUTDOWN ALONG WITH THE ESTIMATED INTERRUPTION DURATIONS. MAKE ARRANGEMENTS TO MAINTAIN POWER TO ALL EXISTING NECESSARY LIGHTING, DEVICES AND EQUIPMENT AS NEEDED AND REQUESTED BY THE OWNER PRIOR TO COMMENCEMENT OF WORK . EXERCISE EXTREME CAUTION WHEN REMOVING/ RELOCATING WIRING AND EQUIPMENT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT OTHER WIRING DEVICES. EQUIPMENT AND LIGHT FIXTURES THAT MAY BE CONNECTED TO THE SAME CIRCUIT REMAIN OPERATIONAL AND ACTIVE.

I. INFORMATION INDICATED IN THE DEMOLITION PORTION OF THE CONTRACT DRAWINGS IS DIAGRAMMATIC IN NATURE. FIELD VERIFY ELECTRICAL CIRCUIT HOMERUNS TO ALL ELECTRICAL ITEMS SCHEDULED TO BE DEMOLISHED AND PERFORM THE WORK AS INTENDED AND DEPICTED ON THE DRAWINGS 19. UPDATE ALL EXISTING ELECTRICAL EQUIPMENT NAMEPLATES AND DIRECTORIES AS NECESSARY TO REFLECT FINAL AS-BUILT CONDITIONS AT THE END OF CONSTRUCTION. 0. STORE ITEMS INDICATED TO BE RETURNED TO THE OWNER IN A DRY, CLEAN AND PROTECTED AREA. NOTIFY OWNER WHEN

ITEMS ARE READY TO BE REMOVED. 1. COORDINATE ANY ALTERATION AND CHANGES TO THE ELECTRICAL SERVICE WITH THE LOCAL UTILITY COMPANY AND THE OWNER PRIOR TO COMMENCEMENT OF WORK. 2. ALL CONDUITS SERVING OTHER SPACES THAT RUN THROUGH THE PROJECT AREA SHALL REMAIN ACTIVE DURING CONSTRUCTION SO AS NOT TO CAUSE DISRUPTION TO THESE OTHER SPACES, ENSURE THAT ALL CONDUITS, NEW OR EXISTING WITHIN THE PROJECT AREA ARE PROPERLY SUPPORTED IN ACCORDANCE WITH THE NEC.

ALL WORK UNDER THIS DIVISION SHALL BE IN STRICT COMPLIANCE AND IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE FOLLOWING CODES AND STANDARDS INCLUDING THE REGULATIONS OF GOVERNING LOCAL, STATE, COUNTY AND OTHER APPLICABLE CODES. REFER TO SPECIFICATIONS FOR ADDITIONAL CODE REQUIREMENTS:

 INTERNATIONAL BUILDING CODE (2015 WITH AMENDMENTS) INTERNATIONAL ENERGY CONSERVATION CODE (2015 WITH AMENDMENTS)

BUILDING CODES:

ADDITIONAL CODES, STANDARDS, AND REQUIREMENTS . AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI). INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE). . NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA). 4. REQUIREMENTS OF LOCAL POWER COMPANY 5. THE AMERICANS WITH DISABILITIES ACT (ADA) 6. OWNER'S PUBLISHED DESIGN STANDARDS.

ALL MATERIALS SHALL BE NEW AND FREE OF DEFECTS, AND SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LAB, AS DEFINED BY OSHA. WHERE NO LABELING OR LISTING SERVICE IS AVAILABLE FOR CERTAIN TYPES OF EQUIPMENT, TEST DATA SHALL BE SUBMITTED TO VALIDATE THAT EQUIPMENT MEETS OF EXCEEDS AVAILABLE STANDARDS.

NATIONAL FIRE PROTECTION (NFPA) STANDARDS: NFPA 70, 2017 EDITION, NATIONAL ELECTRICAL CODE®. NFPA 72, 2013 EDITION, NATIONAL FIRE ALARM AND SIGNALING CODE. NFPA 101, 2012 EDITION, LIFE SAFETY CODE®.

ENGINEERING, PLLC

80 State Street Albany, NY 12207-2543 TEFA No.:521167

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Revision	ons:				
No.	Date		De	escript	tion
TO TH	E REST OF	MY	KNOWLEDGE	THESE	DRΔ

MONCEF

AND SPECIFICATIONS COMPLY WITH THE APPLICABLE

PRINTED NAME: M. MOHAMMED HADI	JI
Project No.:	521167
Issue Date:	10.25.2024
Drawn By:	D. SAENGER

Scale: N.T.S Drawing Title: ELECTRICAL SYMBOLS, NOTES.

M. HADIJI

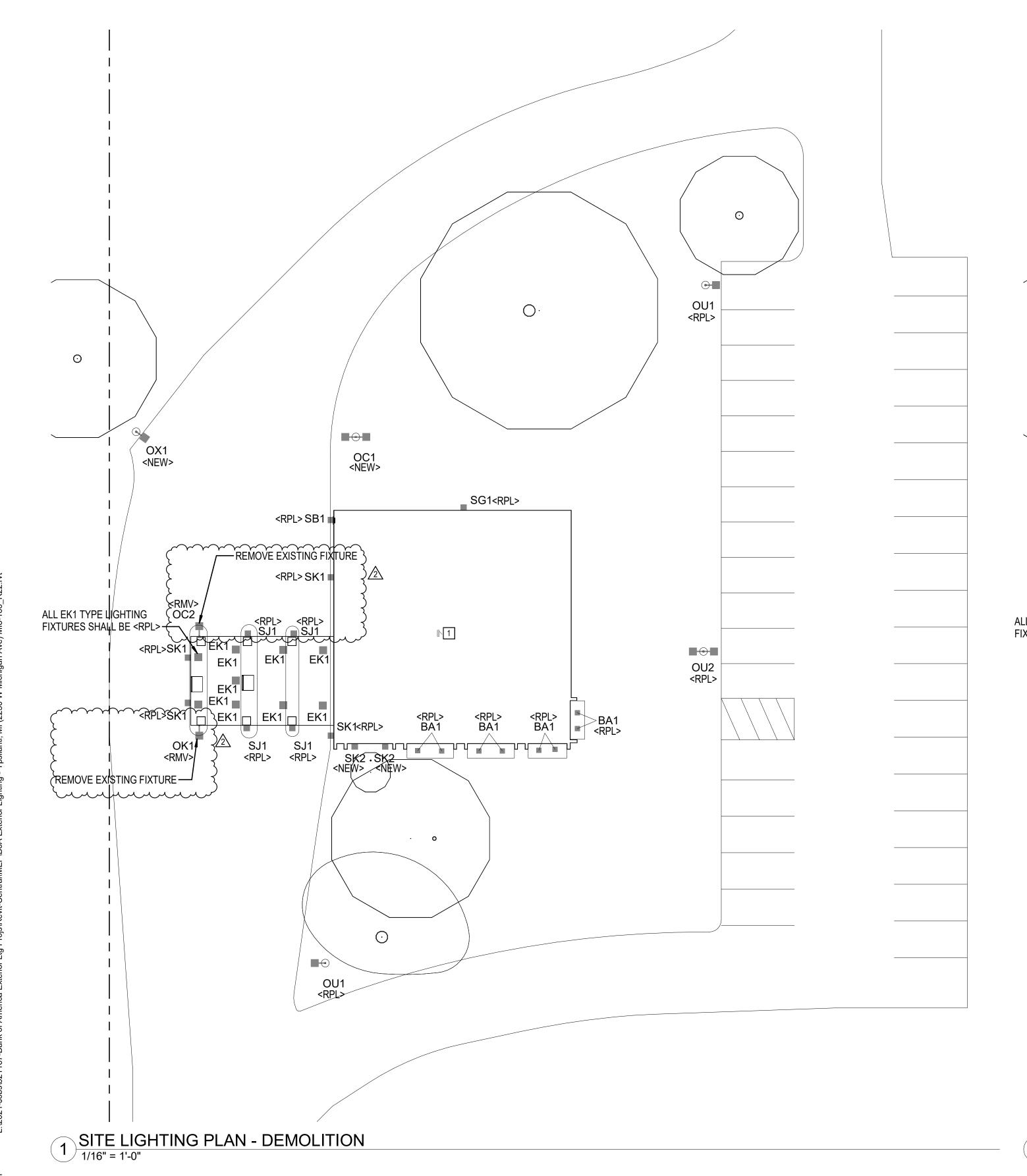
Drawing No.:

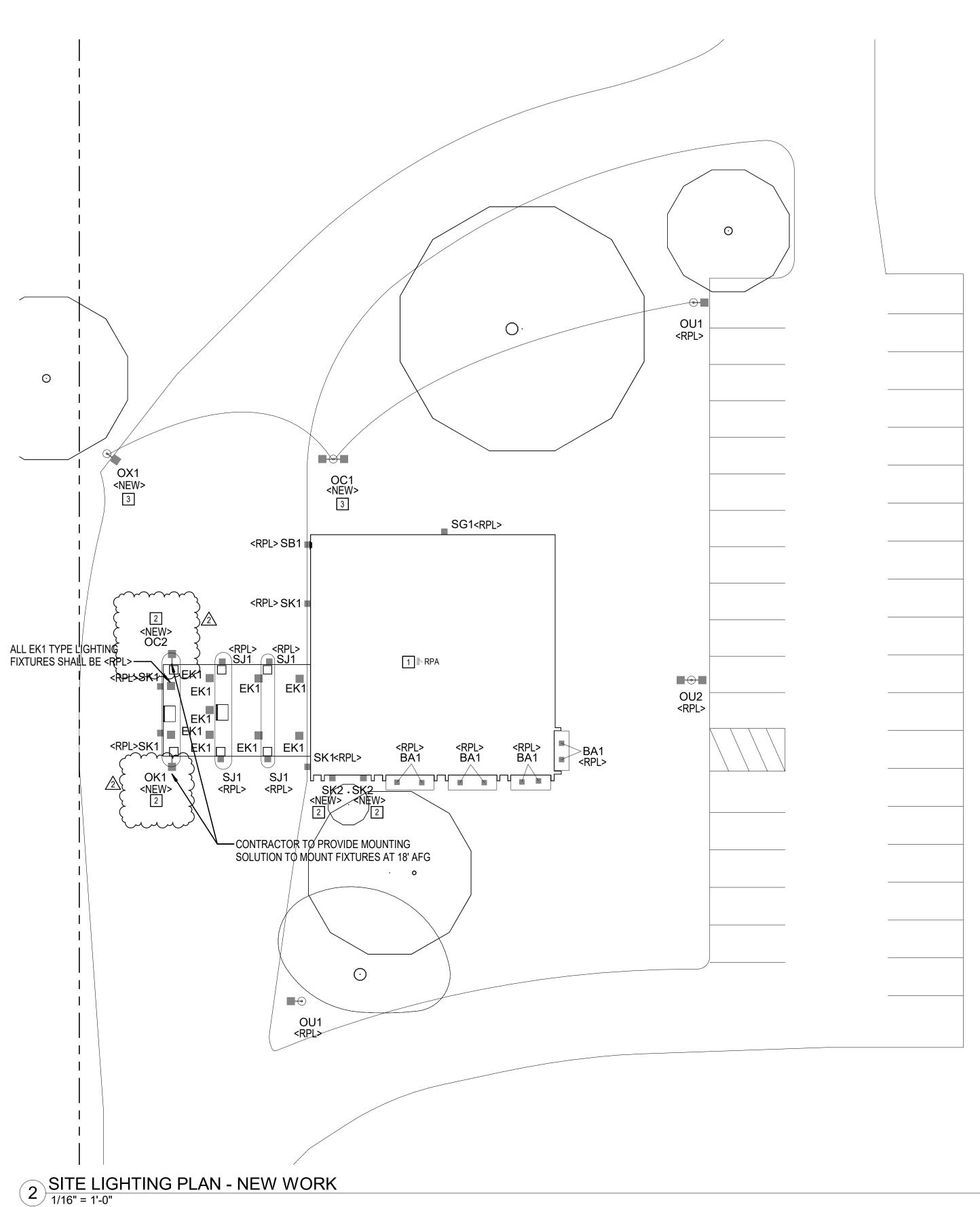
LEGEND & INDEX

Approved By

REMOVE ALL ABANDONED WIRING AND CONDUIT THAT IS WITHIN THE PROJECT AREA PRIOR TO THE END OF CONSTRUCTION.

		SEE FIXTU	RE CLARIFICATION NO	TE #9	LUMINAIRE SCHEDULE	**CONTRACTOR TO V	ERIFY MOUNTING ACCES	SORIES BEFORE ORDERING**		
TOTAL FIXTU	JRE TYPE NEW POLE	MANUFACTURER	MODEL	MODEL NUMBER		NOTES MOUNTING H	EIGHT MOUNTING ACCESSORY	BUG MOUNTING		T TOTAL R WATTAGE
8	BA1 -	CREE	CPY	CPY250-C-2L-40K7-F-UL-DM-BZ	REPLACE EXISTING FIXTURE	MATCH EXIST CANOPY HEIG		B1-U0-G0 SURFACE CANOPY MOUNT	0.014	112 W
9	EK1 -	CREE	ZR22	ZR-22-D-40L-840-CV-UNV-10V5	REPLACE EXISTING FIXTURE	MATCH EXIST CANOPY HEI		B2-U0-G1 RECESSED CANOPY MOUNT		243 W
2	OC1 1	CREE	OSQ	OSQM-C-16L-40K7-5N-UL-NM-BK	ADD NEW POLE AND FIXTURE	18' AFG	OSQ-ML-C-DA-BK	B3-U0-G2 POLE MOUNT	0.097	194 W
1	OC2 -	CREE	OSQ	OSQM-C-16L-40K7-5N-UL-NM-BK	ADD NEW FIXTURE	18' AFG	,	BK B3-U0-G2 WALL MOUNT	0.097	97 W
1	OK1 -	CREE	OSQ	OSQL-C-22L-40K7-4M-UL-NM-BK	ADD NEW FIXTURE	18' AFG	OSQ-ML-C-DA-BK, WM-DM-I	BK B3-U0-G3 WALL MOUNT	0.131	131 W
2	OU1 -	CREE	OSQ	OSQL-C-22L-40K7-3M-UL-NM-BK	REPLACE EXISTING FIXTURE	MATCH EXIST	ING OSQ-ML-C-DA-BK	B3-U0-G3 POLE MOUNT	0.131	262 W
2	OU2 -	CREE	OSQ	OSQL-C-22L-40K7-3M-UL-NM-BZ	REPLACE EXISTING FIXTURE	MATCH EXIST	ING OSQ-ML-C-DA-BZ	B3-U0-G3 POLE MOUNT	0.131	262 W
1	OX1 1	CREE	OSQ	OSQL-C-22L-40K7-3B-UL-NM-BK	ADD NEW POLE AND FIXTURE	18' AFG	OSQ-ML-C-DA-BK	B2-U0-G2 POLE MOUNT	0.131	131 W
1	SB1 -	CREE	SECURITY EDGE	SEC-EDG-2S-WM-02-E-UL-BZ-525-40K	REPLACE EXISTING FIXTURE	MATCH EXIST	ING -	B1-U0-G1 WALL MOUNT	0.037	37 W
1	SG1 -	CREE	SECURITY EDGE	SEC-EDG-3M-WM-04-E-UL-BZ-350-40K	REPLACE EXISTING FIXTURE	MATCH EXIST	ING -	B1-U0-G1 WALL MOUNT	0.046	46 W
4	SJ1 -	CREE	SECURITY EDGE	SEC-EDG-4M-WM-02-E-UL-BZ-700-40K	REPLACE EXISTING FIXTURE	MATCH EXIST	ING -	B1-U0-G1 WALL MOUNT	0.05	200 W
4	SK1 -	CREE	SECURITY EDGE	SEC-EDG-4M-WM-04-E-UL-BZ-525-40K	REPLACE EXISTING FIXTURE	MATCH EXIST	ING -	B2-U0-G2 WALL MOUNT	0.07	280 W
2	SK2 -	CREE	SECURITY EDGE	SEC-EDG-4M-WM-04-E-UL-BZ-525-40K	ADD NEW FIXTURE	11' - 6" AFG	-	B2-U0-G2 WALL MOUNT	0.07	140 W





GENERAL NOTES:

1. FOR ALL FIXTURES MARKED TO BE REPLACED IN KIND (<RPL>). REMOVE EXISTING LIGHT FIXTURE AND PREPARE EXISTING CIRCUIT TO RECEIVE NEW FIXTURE. CONNECT NEW FIXTURE TO EXISTING CIRCUIT & CONTROLS AS PREVIOUSLY REMOVED



A. PERFORM INSULATION IMPEDENCE (MEGGER) TEST TO DETERMINE IF CONDUCTOR REUSE IS VIABLE. REUSE CONDUCTORS IF TEST PASSES. IF TEST RESULTS FALL OUTSIDE OF NOMINAL VALUES, REMOVE CONDUCTORS BACK TO SOURCE AND REPLACE WITH NEW CONDUCTORS MATCHING EXISTING WIRE GAUGE, TYPE, MATERIAL AND INSULATION AS PREVIOUS.

B. IF INSULATION IMPEDENCE TEST FAILED, PERFORM CONDUIT INTEGRITY TESTS TO DETERMINE IF REUSE OF EXISTING CONDUIT IS VIABLE. REUSE CONDUIT IF TEST PASSES. IF TEST RESULTS FALL OUTSIDE OF NOMINAL VALUES, REMOVE CONDUIT BACK TO SOURCE AND REPLACE WITH NEW CONDUIT MATCHING EXISTING MATERIAL, SIZE & BURIAL DEPTH.

2. VOLTAGES OF ALL NEW FIXTURES SHALL MATCH THAT OF THE FIXTURE AND BRANCH CIRCUIT IT IS REPLACING OR MATCH THE EXISTING BRANCH CIRCUIT THAT IT WILL BE CONNECTED TO. REFER TO LIGHTING FIXTURE SCHEDULE FOR

ADDITIONAL INFORMATION. ALL NEW CONDUIT ROUTES SHALL BE INSTALLED SUCH THAT THEY ARE HIDDEN FROM VIEW. ROUTE CONDUITS UNDERGROUND, THRU WALLS, OR ABOVE CEILING, TYP. COORDINATE WITH PROJECT MANAGER FOR SPECIFIC ROUTING CONCERNS.

TRIM ALL TREES/LANDSCAPING TO MINIMIZE IMPEDING LIGHT FROM ANY LIGHT FIXTURES THAT IMPACT THE 60' RADIUS AROUND ALL ATMS AND A RADIUS OF 50' AROUND ALL AFTER-HOUR DEPOSITORIES. CONSIDERATION MUST BE GIVEN TO TREES/LANDSCAPING IN A STATE OF FULL FOLIAGE/BLOOM AND FUTURE GROWTH. ALL LANDSCAPING WORK WILL BE PERFORMED BY OTHERS WITH A SEPARATE PERMIT (IF REQUIRED).

GENERAL CONTRACTOR TO CONFIRM EXISTING POLE BASE CONDITIONS ARE SUITABLE FOR MOUNTING NEW POLE AND POLE MOUNTING

BRACKET. HALF SHADED LIGHTING FIXTURES SHALL BE PROVIDED WITH EMERGENCY BATTERY PACKS AND CONNECTED TO THE NEAREST UNSWITCHED COA: #0013733

KEYED NOTES:

1 EXACT LOCATION UNKNOWN. EXISTING ELECTRICAL PANEL TO REMAIN. CONTRACTOR TO TRACE AND LOCATE EXISTING SITE LIGHTING CIRCUIT AND SOURCE. VERIFY PANEL SIZE, VOLTAGE, AND BREAKER SIZE AND NOTIFY ENGINEER OF RECORD PRIOR TO ORDERING OR SUBMITTING EQUIPMENT.

LIGHTING LEGS.

2 PROVIDE NEW WALL MOUNTED LIGHTING FIXTURE. UTILIZE EXISTING EXTERIOR BUILDING LIGHTING CIRCUIT. REWORK/EXTEND EXISTING CONDUIT AND CONDUCTORS AS NECESSARY.

3 PROVIDE NEW POLE, NEW LIGHTING FIXTURE, AND NEW CONCRETE BASE. UTILIZE EXISTING SITE LIGHTING CIRCUIT SERVING SIMILAR FIXTURES AND MATCH CONTROL METHODOLOGY. REWORK/EXTEND CONDUIT AND CONDUCTORS WHERE NECESSARY TO ACHIEVE FULLY FUNCTIONAL AND OPERATIONAL SITE LIGHTING. MATCH EXISTING CONDUIT AND CONDUCTOR SIZES

LOAD DEMAND CALCULATION (EXTERI	OR POL	E LIGHTS)
	VA	AMPS @ 120V/1
EXISTING CALCULATED SITE LIGHTING LOAD	388 VA	3.23 A
DEMOLISHED CALCULATED SITE LIGHTING LOAD	-388 VA	-3.23 A
NEW LIGHTING LOAD	1077 VA	8.98 A
	388 VA	3.23

CONTRACTOR SHALL TRACE AND VERIFY ALL CIRCUITS BEING CONNECTED.

CALCULATED DEMAND LOAD

Project Manager:

Baltimore, MD. 21201 Tel: (703) 302-2529 Contact: Sergio Merino email: Sergio.Merino@cbre.com



No.	Date		Description
2	10/25/24	REV 1	

+8.98 A 8.98 A

TO THE BEST OF MY KNOWLEDGE THESE DRAWINGS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE BUILDING CODES.



ADIJI
521167
10.25.2024
D. SAENGER
M. HADIJI
As indicated

ELECTRICAL SITE LIGHTING PLAN AND SCHEDULES

E-101

) 0.0 0.0 0.0 0.1 0.1 0.1 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.3 0.5 0.9 2.3 0.2 0.1) 0.0 0.0 $_{1}$ 0.1 0.1 0.2 0.4 0.5 0.5 0.5 0.5 0.4 0.4 0.4 0.4 0.7 \ 1.6 $_{3}$ 5 6.8 6.6 $_{3}$ 5 1.2 5.7 7.7 3.9 1.2 $0.1 \quad 0.2 \quad 0.5 \quad 0.8 \quad 0.9 \quad 0.9 \quad 0.9 \quad 0.8 \quad 0.7 \quad 0.6 \quad 0.4 \quad 0.2 \quad 0.3 \quad 0.4$ 1 0.1 0.1 0.1 0.2 0.6 1.3 /2.1 2.2 2.3 2/2 1.8 1.4 0.8 0.8 0.7 1.0 2.0 4.5 8.8 7.2 3.7 1.3 1 0.1 \odot 0.3 † 0.6 | 1.6 $^{\prime}$ 3.1 4.1 6.1 6.2 $^{\prime}$ 5.8 5.1 $^{\prime}$ 2.8 1.1 1.0 0.8 0.9 1/4 3.0 4.5 4.8 3.1 1.2 1 0.2 0.3 2.0 4.8 5.6 6.1 8.9 14./1 14.2 9.4 4.9 1.7 1.3 1.0 0.9 1.1 1.8 2.9 3.4 2.5 1.1 2 0.5 1.3 7. № 8.9 6.9 5.3 6.8 10.8 0 0.3 7.5 4.3 2.5 1.7 1.2 1.0 1.0 1.3 2.0 2.3 2.0 1.1 3 0.7 2.2 1 6,5 8.3 6.4 5.1 10.8 16.3 14.8 11.8 8.7 5.9 2.7 1.7 1.6 1.6 1.7 2.0 2.1 1.9 1.1 4 1.1 3.3 5.8 6.9 5.0 5.8 13.7 SB14 2.3 2.9 3.0 <u>3.1 3.1</u> 2.4 1.2 3 1.7 3.9 | 7.0 7.9 7.6 9.4 13.7 1 | 3 3.1 4.6 5.1 5.1 4.5 2.9 1.2 7 1.7 4.2 9.6 15.4 15.5 17.0 16.9 14 4.1 7.2 8.5 8.4 6.8 3.7 1.4 7 1.6 4.5 11.0 24.3 12.3 15.5J1 13.1SJ123 8 5.0 9.8 16.9 16.4 9.1 4.1 1.3 7 1.6 4.7 12.**3**TM**2**0.5 27.4 EK1 ATM1 22.2 6.8 9.9 15.0 14.6 8.7 4.1 1.5 ASSOCIATE ENTRY 10.6 7.4 7.8 7.6 \ 7 1.6 5.2 | 13.5 28 KB1 | 22. ZK1 22.8 EK123.9 EK24 S 7 1.6 4.5 11.8 18.3 19.2 19.8 20.0 19.7 $\frac{51}{51}$ $\frac{7}{51}$ $\frac{15.8}{15.8}$ 15.7 14.8 1.6 7.9 5.0 4.6 4.4 3.9 2.6 1.1 4 0.8 1.9 | 3.2 4.8 6.5 7.5 7.5 | 5 | 8 2.3 3.2 2.7 1 | 8 1.4 1.4 1.4 1.3 1.2 1.1 1.1 1.0 0.6 3 0.7 1.4×1 2.0 3.0 4.4 5.9 5.9 4.4 2.3 1.3 1.2 6.9 0.6 0.6 0.6 0.6 0.5 0.5 0.5 0.5 0.5 0.4

PROOF STREET PHOTOMETRIC

E-102 1/16" = 1'-0"

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CALCULATION SUMMARY - FULL SITE

FULL SITE @ GRADE 2.5 fc 27.4 fc 0.0 fc 0.0

CALCULATION SUMMARY - COMPLIANCE) 0.0 0.0 0.0 0.1 0.1 0.1 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.3 0.5 0.9 2.3 0.2 0.1) 0.0 0.0 0.1 0.1 0.2 0.4 0.5 0.5 0.5 $0.4 \quad 0.4 \quad 0.4 \quad 0.7 \quad 1.6 \quad 35 \quad 6.8 \quad 6.6$) 0.0 0.1 0.1 0.2 0.5 0.8 \(\sqrt{0.9} 0.9 0.9 \sqrt{0.8} \(\begin{picture} 0.7 & 0.6 & 0.4 & 0.2 & 0.3 & 0.4 \end{picture} \) 1 0.1 0.1 0.2 0.6 1.3 2.1 2.2 2.3 2/2 1.8 1.4 0.8 0.8 0.7 1.0 2.0 4.5 8.8 7.2 1 0.1 \odot 0.3 | 0.6 | 1.6 $\sqrt{3}$.1 4.1 6.1 6.2 $\sqrt{5}$.8 5.1 \ 2.8 1.1 1.0 0.8 0.9 1/4 3.0 4.5 4.8 1 0.2 0.3 2.0 4.8 5.6 6.1 8.9 14./1 14.2 9.4 4.9 1.7 1.3 1.0 0.9 1.1 1.8 2.9 3.4 7.9 8.9 6.9 5.3 6.8 10.8 0 10.3 7.5 4.3 2.5 1.7 1.2 1.0 1.0 1.3 2.0 2.3 3 0.7 2.2 | 6|5 8.3 6.4 5.1 10.8 16.3 14.8 11.8 8.7 5.9 2.7 1.7 1.6 1.6 1.7 2.0 2.1 2.3 2.9 3.0 <u>3.1 3.1</u> 1 1.1 3.3 5.8 6.9 5.0 5.8 13.7 SB14 3 1.7 3.9 | 7.0 7.9 7.6 9.4 13.7 11|3 3.1 4.6 5.1 5.1 4.5 7 1.7 4.2 | 9.6 15.4 15.5 17.0 16.9 14 4.1 7.2 8.5 8.4 6.8 7 1.6 4.5 11.0 24.3 122.3 15.8 J1 13.1 SJ1 23 5.0 9.8 16.9 16.4 9.1 7 1.6 4.7 12.**A**TM**2**0.5 27.4 EK1 ATM1 6.8 9.9 15.0^{U2} 14.6 8.7 ASSOCIATE ENTRY 10.6 7.4 7.8 7.6 7 1.6 5.2 | 13.5 23 KM 22. EK1 22. 8 EK123 9 EK24 9 7 1.6 4.5 11.8 18.3 19.2 19.8 20.0 19.7 $\frac{27.8}{19.2}$ 15.8 15.5 15.7 14.8 1.6 7.9 5.0 4.6 4.4 3.9 5 1.2 3.0 | 5.8 9.9 11.8 12.7 14.7 | 3.2/ 3.3/ 8.1 8.0 / 5.8 5.5 4.3 3.4 2.8 2.6 2.4 2.3 1 0.8 1.9 3.2 4.8 6.5 7.5 7.5 58 2.3 3.2 2.7 18 1.4 1.4 1.4 1.3 1.2 1.1 1.1 3 0.7 $1.4 \times 10^{-2.0}$ 3.0 4.4 5.9 5.9 4.4 2.3 1.3 1.2 $1.0 \times 10^{-2.0}$ 0.6 0.6 0.6 0.6 0.5 0.5 0.5 1 COMPLIANCE AREA PHOTOMETRIC
1/16" = 1'-0"



ighting

Project Manager: Baltimore, MD. 21201

Tel: (703) 302-2529



No.	Date		Description
2	10/25/24	REV 1	

TO THE BEST OF MY KNOWLEDGE THESE DRAWINGS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE BUILDING CODES.



PRINTED NAME: M. MOHAMMED HADIJI	
Project No.:	52116
Issue Date:	10.25.202
Drawn By:	D. SAENGE
Approved By:	M. HADI
Scale:	1/16" = 1'-0

Drawing Title:
ELECTRICAL SITE PHOTOMETRIC **PLANS**

E-102

:0:16 PM L:\2021-Jobs\521167-Bank of America Exterior Ltg Projs\Revit-Central\MEP\BoA Exterior Lighting - Ypsilanti, MI (2250 W Michigan Ave) MI8-166_R22.rvt

GENERAL NOTES:

- 1. WHERE FIXTURES ARE BEING REPLACED, INPUT WATTAGE OF NEW LIGHT FIXTURES BEING INSTALLED IS LOWER THAN WATTAGE OF FIXTURES BEING REPLACED. EXISTING FIXTURES BEING REMOVED ARE TYPICAL OF TYPE HPS, MH, FLUORESCENT, ETC. WHILE THE NEW FIXTURES BEING INSTALLED ARE LED. LED FIXTURES, WITH THE SAME LIGHT OUTPUT AS THE EXISTING FIXTURES, ARE OF A HIGHER EFFICENCY THEREBY REQUIRING LESS LOAD.
- 2. ALL EXTERIOR BRANCH LIGHTING CIRCUITS WITH FIXTURES BEING REPLACED WILL HAVE A LOWER LOAD THAN PREVIOUS CONDITION. WHERE NEW LIGHT FIXTURES ARE ADDED TO EXISTING EXTERIOR LIGHTING BRANCH CIRCUITS, THE REVISED ELECTRICAL DEMAND LOAD HAS BEEN NET OVERALL REDUCED WHEN COMPARED TO THE ORIGINAL DEMAND.
- 3. OVERALL BUILDING ELECTRICAL DEMAND HAS
- BEEN REDUCED.

 4. CONTRACTOR SHALL TRACE AND VERIFY ALL
 BOLDED CIRCUITS. CONTRACTOR SHALL TRACE
 AND VERIFY ALL CIRCUITS BEING CONNECTED TO
 PER SHEET E-101.

Lo	ocation: Moun	ting: SURFAC	Ε	Dist. /	Phase / V	/ires:						tating: EXIST BUS Rating: 225 A	
Suppl	y From: Enclos	sure: TYPE 1		Max	Height Bu	sing: Yes	1				Mains	Type: MLO MCB Rating: N/A	
C K	Circuit Description	Trip (A)	P	A (I	(VA)	B (KVA)		C (KVA)		Р	Trip (A)		
1	BATHROOM, LOUNGE, & DRIVE-UP LTG	20	1	0.000	0.000					1	20	GENERAL RECEPTACLES	2
3	TELLERLINE LTG	20	1			0.000	0.000			1	20	GENERAL RECEPTACLES	4
5	PLATFORM WEST LIGHTS	20	1					0.000	0.000	1	20	GENERAL RECEPTACLES	6
7	EXTERIOR SOFFIT LIGHTS	20	1	0.000	0.000					1	20	GENERAL RECEPTACLES	8
9	CANOPY LTG	20	1			0.000	0.000			1	20	BATHROOM HEATERS GFI'S	10
11	OPEN/CLOSE LIGHTS	20	1					0.000	0.000	1	20	PHOTO EYE / LTG CONT.	12
13	RECEPT LEFT OF FRIDGE	20	1	0.000	0.000					1	20	CLOSING ROOM GEN. RECEPT	14
15	BASEMENT GENERAL RECEPTACLES	20	1			0.000	0.000			1	20	HALLWAY & CLOSING ROOM LIGHTS	16
17	BASEMENT GEN. RECEPT	20	1					0.000	0.000	1	20	CLOSING ROOM GEN. RECEPT.	18
	HEATER PANEL	20	1	0.000	0.000					1	20	SPARE	20
_	LOUNGE HEATER & GEN. RECEPT	20	1			0.000	0.000			1	20	EXTERIOR CANOPY LIGHTS	22
_	TELLERLINE IG RECEPT	20	1					0.000	0.000	1	20	LOBBY RECEPT	24
25	TELLERLINE IG RECEPT	20	1	0.000	0.000					1	20	BUILDING SIGN	26
	VAULT LIGHTS	20	1			0.000	0.000			1		POLE LIGHTS	28
	STAIRWAY LIGHTS	20	1					0.000	0.000	1	20	TELLER HEATER DRIVE UP	30
	ELECTRIC WATER HEATER	20	1	0.000	0.000					1	20	EXTERIOR CANOPY LIGHTS	32
	BASEMENT LIGHTS	20	1			0.000	0.000			1	20	NETWORK PRINTER	34
	BASEMENT LIGHTS	20	1					0.000	0.000	1	20	FAX/COPY MACHINE	36
	DRIVE-UP HEATER	20	1	0.000	0.000					1	20	KITCHEN RECEPTACLES	38
	DRIVE-UP IG RECEPT.	20	1			0.000	0.000			1		BACKDOOR LIGHT	40
_	DRIVE-UP GEN. RECEPT.	20	1					0.000	0.000	1		EXISTING EMERGENCY	42
Connected Phase			/A)	0.0	000	0.0	000		000				
		ed Phase Amps	′ (0.0	000	0.0	000	0.0	000	J			
oad Classification			Connected Load						Demand Load			Panel Totals	
											Tota	al Connected Load (KVA): 0.000	
											T	otal Demand Load (KVA): 0.000	
												Total Demand Current (A): 0	
											-	· · · · · · · · · · · · · · · · · · ·	
		1											

anel Keynotes (KN):

BOLDED CIRCUITS INDICATE POTENTIAL CIRCUITS FOR REUSE. CONTRACTOR SHALL TRACE AND VERIFY ALL EXISTING EXTERIOR LIGHTING BRANCH CIRCUITS.



· Lighting Pro

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PROPERTY ID: MI8-166 BULLETIN: 3-2020

Consultants:

Revisions:

Project Manager:

CBRE GLOBAL WORKPLACE SOLUTIONS

100 S. Charles Street, 3rd Floor

Baltimore, MD. 21201

Tel: (703) 302-2529

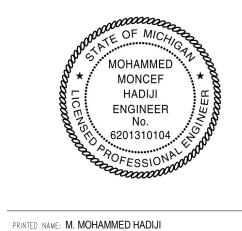
Contact: Sergio Merino
email: Sergio.Merino@cbre.com



Description

TO THE BEST OF MY KNOWLEDGE THESE DRAWINGS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE BUILDING CODES.

Seal



Project No.: 521167

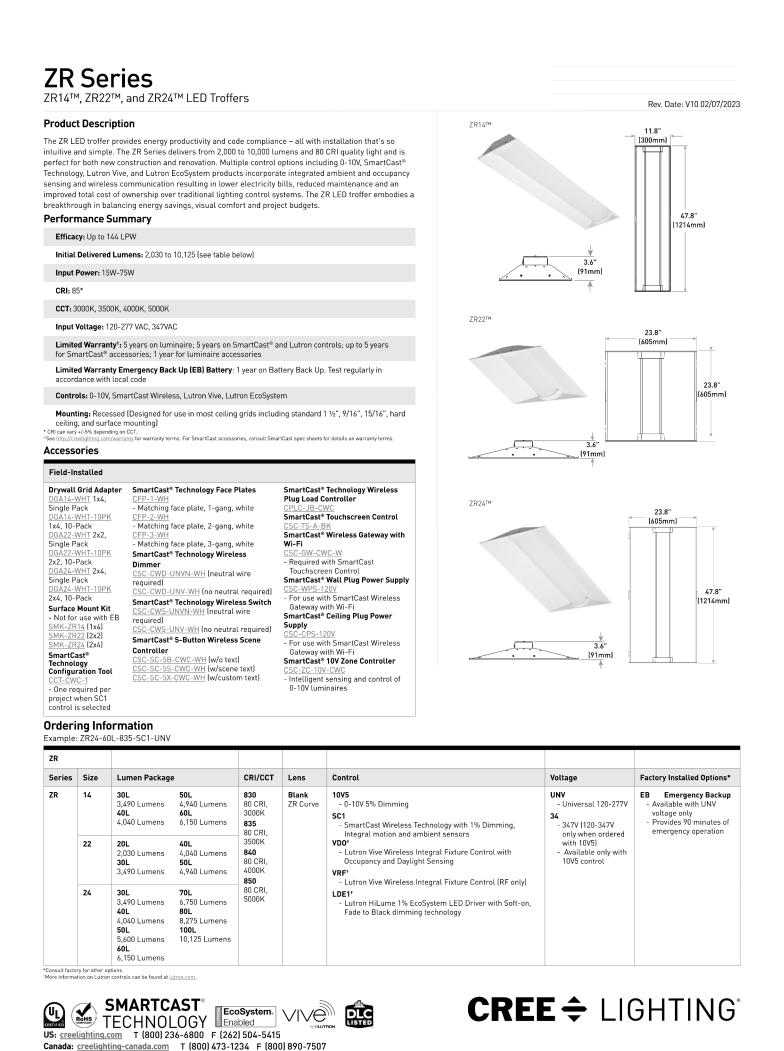
Issue Date: 10.25.2024

Drawn By: D. SAENGER
Approved By: M. HADIJI

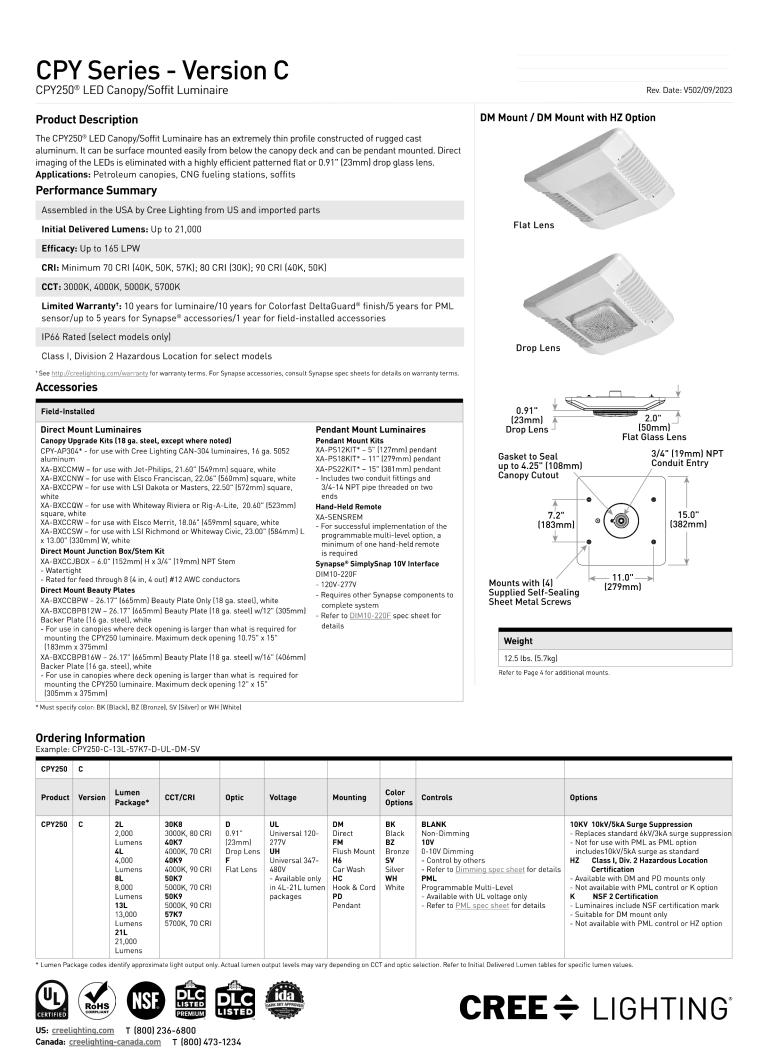
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ELECTRICAL PANEL
SCHEDULES

Drawing No.

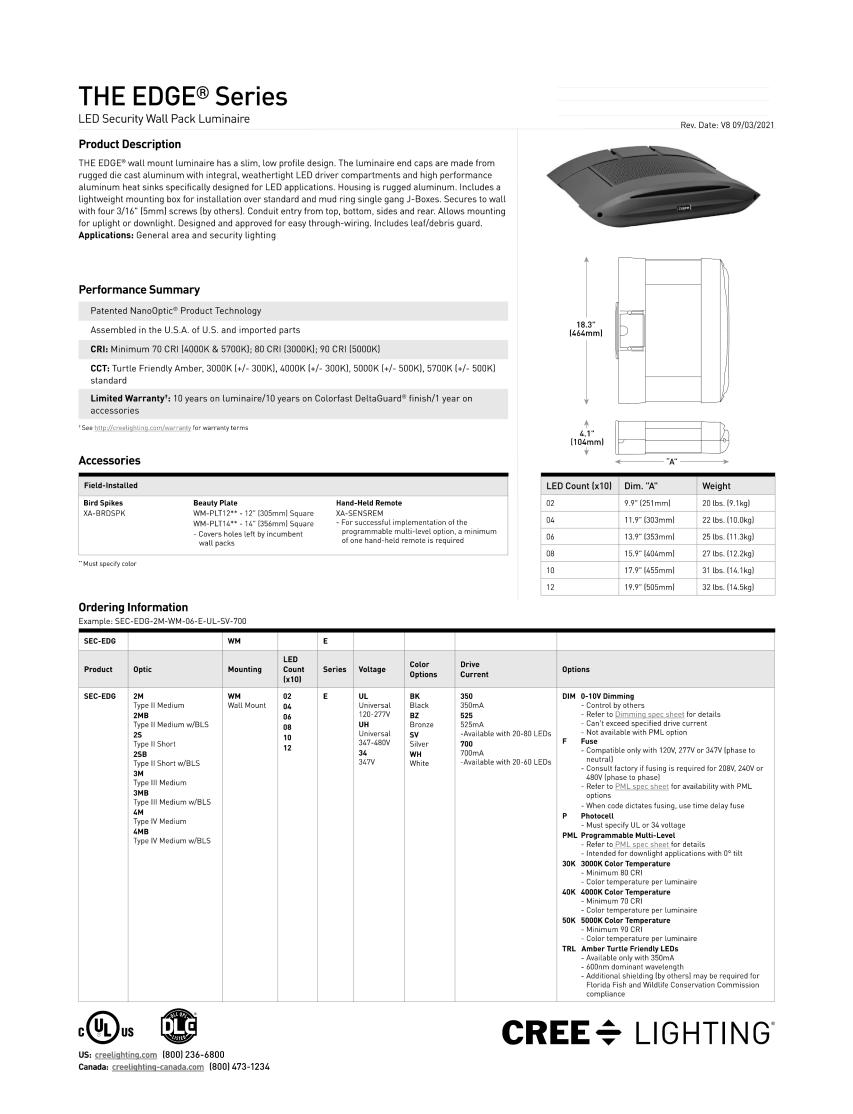
E-401



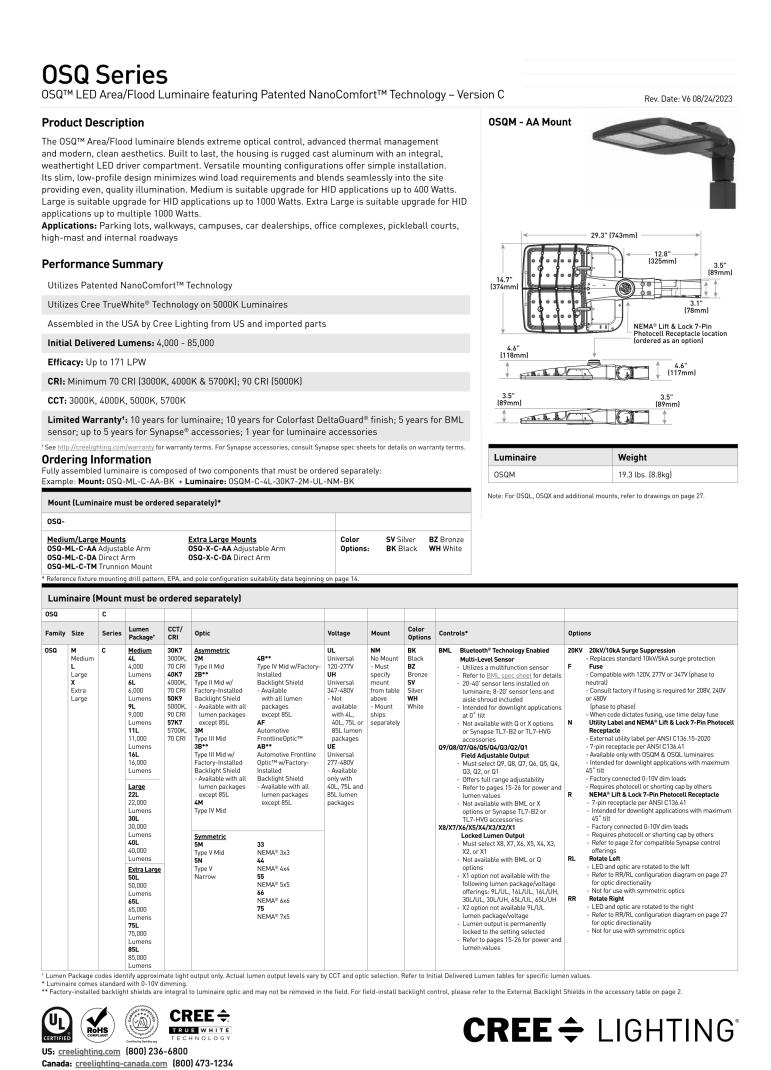
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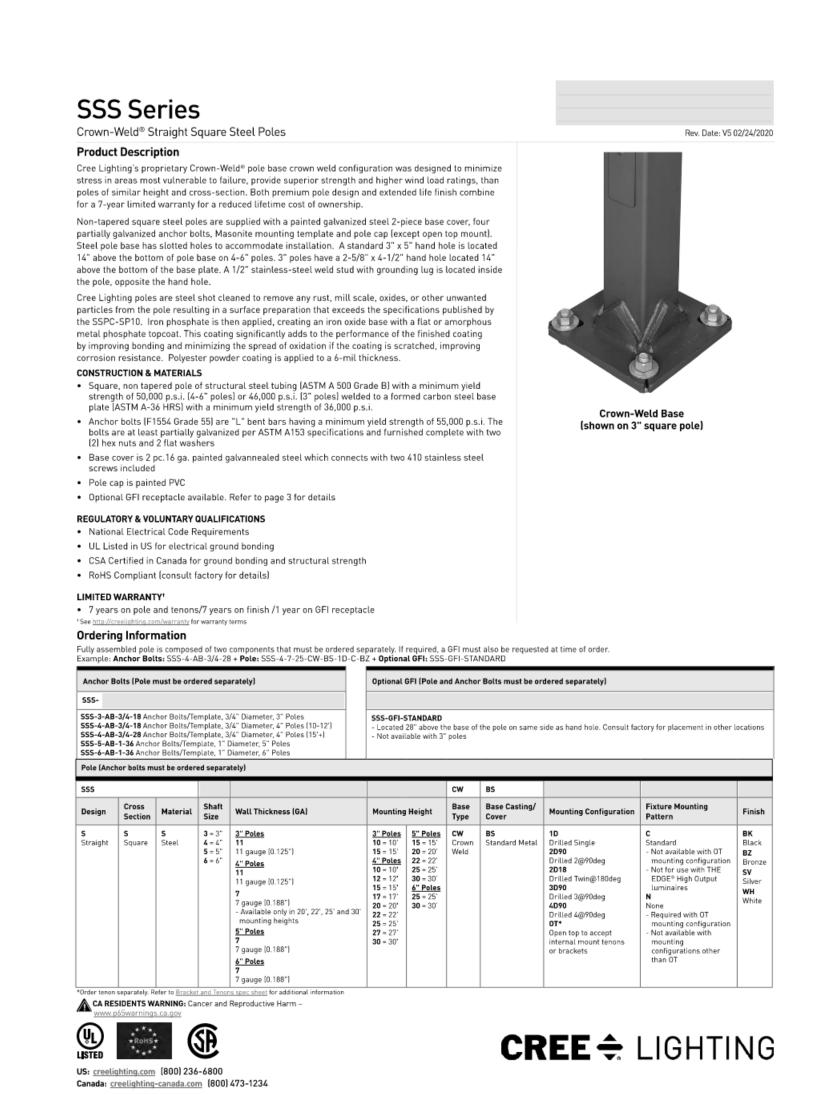
FIXTURE TYPE BA1



FIXTURE TYPE SB1, SG1, SJ1, SK1, SK2



FIXTURE TYPE OC1, OK1, OU1, OU2, OX1



LIGHT POLE CUTSHEET



k of America®

Bank of Ameri

Consultants:

Project Manager:

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Facility Analysis † Engineering

GMR

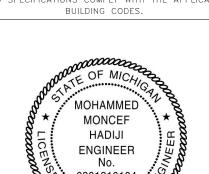
1629 Smirl Drive, Suite 200

Heath, TX. 75032

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No.	Date	Description
	PECIFICATIONS CO	NOWLEDGE THESE DRAWINGS OMPLY WITH THE APPLICABLE NG CODES.



PRINTED NAME: M. MOHAMMED HADI	JI
Project No.:	521
Issue Date:	10.25.20
Drawn Bv:	D. SAENG

Drawing Title:
LIGHT FIXTURE
CUTSHEETS

Approved By:

ving No.:

E-501

M. HADIJI