

CITY OF GROSSE POINTE WOODS PLANNING COMMISSION AGENDA

Tuesday, August 26, 2025, at 7:00 PM

Robert E. Novitke Municipal Center - Council Chambers / Municipal Court, 20025 Mack Plaza, Grosse Pointe Woods, MI 48236 | (313) 343-2426

- 1. CALL TO ORDER
- 2. ROLL CALL
- 3. RECOGNITION OF COUNCIL REPRESENTATIVE/s
- 4. PLEDGE OF ALLEGIANCE
- 5. ACCEPTANCE OF AGENDA
- 6. RECEIPT OF FINAL APPROVED MINUTES
 - A. Planning Commission Meeting July 22, 2025
- 7. PUBLIC HEARING /s
 - A. Hold Public Hearing on the Special Land Use for 20647 Mack Avenue (Playa Bowls)
- 8. **NEW BUSINESS**
 - <u>A.</u> Consideration of the Site Plan for 20647 Mack Avenue (Playa Bowls)
 - B. Consideration of the Sign Permit for 19815 Mack Avenue (Myndthera)
 - C. Consideration of the Site Plan for 19271 Mack Avenue (Churchills Cigar Bar)
- 9. OLD BUSINESS
 - A. Consideration of the Site Plan for 19483 Mack Avenue (My Nails Salon)
- 10. BUILDING OFFICIAL'S MONTHLY REPORT
 - A. Building Department Report July to August 2025
- 11. COUNCIL REPORT/s
 - A. Last Month: July 14, July 21 O'Keefe
 - B. This Month: August 4 Vitale, August 18 O'Keefe
 - C. Next Month: September 4, September 18 Fenton
- **12. INFORMATION ONLY** (none)
- **13. PUBLIC COMMENT** (Limited to 3-minutes per person)
- **14. ADJOURNMENT** (Next Regular Meeting: September 23, 2025)

The City of Grosse Pointe Woods will provide necessary, reasonable auxiliary aids and services, such as signers for the hearing impaired, or audio tapes of printed materials being considered at the meeting to individuals with disabilities. All such requests must be made at least five days prior to a meeting. Individuals with disabilities requiring auxiliary aids or services should contact the City of Grosse Pointe Woods by writing or call the City Clerk's office, 20025 Mack Plaza, Grosse Pointe Woods, MI 48236 (313) 343-2440 or Telecommunications Device for the Deaf (TDD) 313 343-9249.

MINUTES OF THE **PLANNING COMMISSION** MEETING OF THE CITY OF GROSSE POINTE WOODS HELD ON **JULY 22, 2025**, IN THE COUNCIL-COURT ROOM OF THE ROBERT E. NOVITKE MUNICIPAL CENTER, 20025 MACK PLAZA, GROSSE POINTE WOODS, MICHIGAN.

The meeting was called to order at 7:08 p.m. by Vice Chair Hamborsky.

Roll Call: Vice Chair Hamborsky

Commission Members: Fuller, Gilezan, Marx, O'Keefe

Absent: Fenton, Vitale

Also Present: City Planner John Jackson

City Planner Laura Haw City Attorney Debra Walling

Recording Secretary Gretchen Miotto

Vice Chair Hamborsky recognized Council Member Granger.

The Planning Commission, staff, and the public, Pledged Allegiance to the U. S. Flag.

MOTION by Gilezan, seconded by Fuller, to excuse Commission Members Fenton and Vitale from attendance at tonight's meeting.

Motion carried by the following vote:

YES: Fuller, Gilezan, Hamborsky, Marx, O'Keefe,

NO: None

ABSENT: Fenton, Vitale

MOTION by Gilezan, seconded by O'Keefe, to accept tonight's agenda as presented and place on file.

Motion carried by the following vote:

YES: Fuller, Gilezan, Hamborsky, Marx, O'Keefe,

NO: None

ABSENT: Fenton, Vitale

MOTION by O'Keefe, seconded by Marx, that the May 27, 2025, Planning Commission meeting minutes be approved as presented (the June meeting was cancelled).

Motion carried by the following vote:

YES: Fuller, Gilezan, Hamborsky, Marx, O'Keefe,

NO: None

ABSENT: Fenton, Vitale

The first item, under **New Business**, was **to Consider the Site Plan for 19483 Mack Avenue** (My Nails Salon).

Chip Berschback, representing the applicants, requested that this topic be tabled until all Planning Commission members are present.

MOTION by Marx, seconded by O'Keefe, that the, Planning Commission postpone the Consideration of the Site Plan for 19483 Mack Avenue (My Nails Salon) until the August 2025 meeting.

Motion carried by the following vote:

YES: Fuller, Gilezan, Hamborsky, Marx, O'Keefe,

NO: None

ABSENT: Fenton, Vitale

The next item, under **New Business**, was **to Consider the Site Plan for 20778 Mack Avenue** (**Verus Development**).

Planner Haw introduced herself and provided an overview of the project which is to renovate and expand the existing building to create a 7,200 sq. ft. single-story retail building. The applicant must clarify the loading needs of the site; the screening wall along 1875 Hawthorne is an outstanding item; the lighting intensity and placement is an outstanding item.

Discussion ensued around the lighting and the impact on neighbors, as well as the material and height of the screening wall along 1875 Hawthorne. There was discussion to clarify that the eastern property line is at the alley edge, and not at the neighbor's property line. A variance might be required if the applicant and neighbor agree to screening at the neighbor's property line, since the wall/solid fence would not be built on the applicant's property. It was also noted that the depth of the building would likely need to be reduced if a wall is built at the property line, in order to maintain parking and sidewalk dimensions.

Frank Arcori, Verus Development Group, 950 S. Old Woodward, Birmingham, MI, presented samples of the building materials. Regarding tenants, Mr. Arcori stated they're working with Schummer's, an existing tenant, to remain in one of the new spaces. The remaining spaces do not have identified tenants. Overall, the building will be reduced by about 1000 sq. ft. The majority of the building will be demolished.

The commission agreed the building materials are quality and acceptable; Verus will work with the neighbor on a preferred type and height of the screening which is now a chain link fence. The ordinance gives the Planning Commission discretion on the acceptable type of screening.

MOTION by O'Keefe, seconded by Marx, that the, Planning Commission postpone the Consideration of the Site Plan for 20778 Mack Avenue until the August 2025 meeting giving the applicant time to submit a revised lighting plan and resolve the neighbor fencing issue.

Motion carried by the following vote:

YES: Fuller, Gilezan, Hamborsky, Marx, O'Keefe,

NO: None

ABSENT: Fenton, Vitale

The next item, under **New Business**, was a **to Consider the Rezoning of 20160 Mack Avenue** (**Rezoning from RO-1 to C**).

Commissioner Hamborsky provided the history of this topic and the commission's original recommendation to Council who subsequently requested that the Commission revisit the recommendation. The Master Plan was discussed along with the lack of demand for RO-1 properties.

Planner Jackson provided an overview of the objectives and plans to implement the Master Plan and apply the approved mixed-use corridor so all residents and occupants can enjoy a vibrant corridor. A single purpose district is not economically resilient and that is why the Master Plan encourages a Corridor Mixed Use district. Of the 4 non-resident zoning districts within the city, the Commercial district most closely aligns with the concepts spelled out in the Master Plan. The Commercial district allows for office usage, retail usage, service usage, and allows on a restrictive basis, restaurants. Restaurants have to go through a Special Land Use process. This particular property, due to its location, width and depth, makes it appropriate for commercial use.

Bruce Nichols and Justin Buccellato, representing the applicant, stated that they've revised the site plan, have attempted mediation with the residents, have adhered to the guidance within the Master Plan, and it appears, by the number of lawn signs, that there is a general opposition to rezoning of any type. Mr. Buccellato is very interested in creating a beautiful property, in harmony with the city, to replace the existing dilapidated building.

Commissioner Hamborsky reiterated the Master Plan's description of the Corridor Mixed Use and the vision statement that was the result of the 10-to-20-year plan for the city. The Commercial district allows for the greatest usage, while RO-1 zoned properties will remain stagnant. Other cities have mechanisms called PUDs (Planned Unit Development) and contract-based zoning which are tied to a specific site plan. PUDs allow negotiation between the applicant and the city, while contract-based zoning is a type of usage proposed by the applicant and the city agrees or disagrees (yes/no). There is no negotiation. These mechanisms may be something the city should consider

Commissioner O'Keefe spoke from a realtor and a resident perspective and addressed some of the things she's heard or read about resident commentary about this project. Facts on improved real estate values, positive neighborhood revitalizations, and the desire of potential residents for walkability were provided. Existing buildings in the city are very old and very

expensive to renovate, and are sitting empty due to that and high rent costs. As a resident living next to the Bucharest parking lot, she has not experienced any higher traffic, rodent issues, trash, or noise and have found the owners to be very responsive to any issue.

Commissioner Fuller provided data from GPW Public Safety & the Building Dept. related to the Bucharest/Crispelli's location, and there have been minimal complaints about traffic, rodents, trash, noise, or altercations. He also stated that most concerns from residents centered around the site plan and that the applicant has made numerous changes to the site plan that seem to resolve all those issues, and their input has made a tremendous number of changes to the plans.

MOTION by Marx, seconded by O'Keefe, that the Planning Commission reaffirm their prior recommendation to City Council to rezone 20160 Mack Avenue from RO-1 to C.

Motion carried by the following vote:

YES: Fuller, Gilezan, Hamborsky, Marx, O'Keefe,

NO: None

ABSENT: Fenton, Vitale

City Council to schedule a Public Hearing on August 18, and if approved, it will go to a Second Reading possibly in September 2025.

The next item, under New Business, was to Consider the Site Plan for 20160 Mack Avenue.

Planner Jackson provided a summary of the revised site plan and recommends this topic be postponed until the August 2025 meeting in order for the GPW Public Safety traffic study be completed.

MOTION by Gilezan, seconded by Fuller, that the, Planning Commission postpone the 20160 Site Plan Review to a meeting to be held after City Council considers the rezoning.

Motion carried by the following vote:

YES: Fuller, Gilezan, Hamborsky, Marx, O'Keefe,

NO: None

ABSENT: Fenton, Vitale

Discussion was had around when the next meeting that the applicant would be before the Planning Commission, noting that a Commercial Site Plan cannot be considered unless Council approves the rezoning.

The next item, under **New Business**, was to **Consider an Amendment to the Planning Commission By-Laws**.

Planner Haw provided an overview of the proposed amendment to add parameters around Public Comments at the meetings.

MOTION by O'Keefe, seconded by Gilezan, that the Planning Commission amend the By-Laws with the proposed language around Public Comments.

Motion carried by the following vote:

YES: Fuller, Gilezan, Hamborsky, Marx, O'Keefe,

NO: None

ABSENT: Fenton, Vitale

The next item was the **Building Official's Reports**, **May 2025 to June 2025**, **June 2025 to July 2025**.

Planner Jackson provided an overview of current projects and permits.

The next item was the City Council Reports for June and July, 2025.

Commissioner McNelis, who has since resigned, was to attend the June meetings. No report.

Commissioner O'Keefe attended the July 14 meeting and reported the recommended lot split was approved. Vitale attended the July 21 meeting.

Commissioner O'Keefe will attend the August meetings instead of Vitale.

The next item was Information Only – New McKenna Staffing of PC/Council Meetings.

Laura Haw, McKenna VP, will be attending Council and Planning Commission meetings and she and Ashley Jankowski will still work as a team.

Under **Public Comment**, the following were heard:

- 1. Laura McEnery, 1451 Oxford, requested that the city paint pedestrian zones where side streets meet Mack Avenue (from sidewalk to sidewalk). This is a safety issue due to limited visibility when buildings are built right up to the sidewalk.
- 2. Gary Felts, 1680 Oxford, appreciates the traffic study at 20160 Mack, and spoke in opposition of the proposed architecture style at that site.
- 3. Christina Pitts, 1501 Oxford, stated there is a failure of due process within the city administration, the planning commission, the building department, and code enforcement.

She read aloud from a prepared statement.

- 4. Rob Szabo, 1620 Fairholme, spoke in opposition to the rezoning of 20160 Mack.
- 5. Patrick Turnbull, 1485 Fairholme, spoke in opposition to the proposed architectural style for 20160 Mack.
- 6. Jane Frahm, 1350 N. Oxford, read a prepared statement in opposition of the rezoning of 20160 Mack.
- 7. Jon Dougherty, 1665 S. Renaud, disagreed with the Planning Commission's decision on the rezoning of 20160 Mack and rezoning to Commercial in general.
- 8. Patricia Dougherty, 1665 S. Renaud, expressed disappointment with the Planning Commission's decision on 20160 Mack.
- 9. Lynn Aldrich, 1501 Oxford, believes serious mistakes have been made by the city departments in the rezoning and building process. She read aloud from a prepared statement. She opposes the rezoning of 20160 Mack.

MOTION by Gilezan, seconded by O'Keefe, to adjourn at 9:24 p.m.

Motion carried by the following vote:

YES: Fuller, Gilezan, Hamborsky, Marx, O'Keefe,

NO: None

ABSENT: Fenton, Vitale

Respectfully Submitted, Gretchen Miotto Clerk's Confidential Administrative Assistant & Recording Secretary



CITY OF GROSSE POINTE WOODS

Building Department

20025 Mack Plaza, Grosse Pointe Woods, MI 48236 (313) 343-2426 – E-mail: building@gpwmi.us

SITE PLAN REVIEW & SPECIAL LAND USE

C—Commercial Business CF—Community Facilities RO-1—Restricted Office C-2—High Intensity City Ctr P-1—Vehicular Parking
Property Owner Name: Mathew Caplan Date: 7/16/25
GPW Property Address: 20647 Mack Ave
Telephone #: Work Home/Cell: 248 - 500 - 4737
Contractor/Applicant Name: JK Construction, Inc. Telephone # 248-855-3303 Cell Phone # 248-739-0720
Telephone # 248-855-3303 Cell Phone # 248-739-0720
Contractor/Applicant Address: 7001 Orchard Lake Rd., ste. 324. W. Bloom Field, MI
E-mail: Dryan Dryan C DRIONSTRUCTION ANTCHISAN COM 48322
MI Builder's License #: N/A MI Driver's License #: K450 0 18 5 8 5 194
Nature of Proposed Work:
Buildout of a 1,200 S.F. take-out restarrent (Playa Bowls).
Value of Construction \$ 200,000
Section 23a of State Construction Code Act of 1972, No. 230 of the Public Acts of 1972, being Section 125.1523a of the Michigan Compiled Laws, prohibits a person from conspiring to circumvent the licensing requirements of the State relating to persons who are to perform work on a residential building or a residential structure. Violations of Section 23a are subject to civil fines. Applicant Signature: I hereby certify that the proposed work is authorized by the owner of record and that I have been a
to make this application as his authorized agent and we agree to conform to all applicable laws of this jurisdiction.
For Planning & Zoning Use Only Review category: Site Plan – Planning Commission Site Plan – Administration Special Land Use Use Variance Non-Use Dimensional Variance Public Hearing #
For Office Use Only
Approved: Denied: Zoning Board of Approval Required #
Inspector: Date:

2. CONTRACTOR SHALL FOLLOW ACCEPTED TRADE PROCEDURES AND MANUFACTURER'S STANDARDS AND SHALL PRODUCE THE PROJECT IN A GOOD AND WORKMAN LIKE MANNER. ALL MATERIALS ARE TO BE NEW AND CONTRACTOR SHALL NOT SUBSTITUTE ANY STRUCTURAL GRADE MATERIALS WITHOUT PRIOR WRITTEN APPROVAL FROM THE ARCHITECT.

3. THESE PLANS ARE THE INTELLECTUAL PROPERTY OF THE ARCHITECT. THEY MAY NOT BE COPIED, REUSED, OR ALTERED WITHOUT THE ARCHITECTS EXPLICIT APPROVAL. DUPLICATION OF THESE DOCUMENTS MAY OCCUR ONLY FOR THE PURPOSE OF BIDDING, ESTIMATING, CREATING SHOP DRAWINGS, AND DURING PROJECT CONSTRUCTION.

4. DRAWINGS ARE NOT INTENDED TO BE SCALED. USE DIMENSIONS NOTED ON DRAWINGS. IF ANY DIMENSIONS ARE MISSING OR REQUIRE CLARIFICATION, THE CONTRACTOR IS TO SUBMIT A REQUEST FOR THIS INFORMATION IN WRITING. I.E. LETTER TRANSMITTAL OR EMAIL.

IMMEDIATELY UPON RECEIVING SAME. PERMITS TO BE POSTED AS REQUIRED.

6. THE GENERAL CONTRACTOR SHALL COMPLETE, SUBMIT, AND FILE PERMIT APPLICATIONS.

APPROVED PERMIT TO BE PAID FOR AND PICKED UP BY GENERAL CONTRACTOR. COPIES OF SAID PERMIT SHALL BE FORWARDED TO THE OWNER, TENANT, AND ARCHITECT.

THE CONTRACTOR SHALL PRODUCE ALL PERMITS REQUIRED AND PROCEED WITH THE WORK

7. CONTRACTOR TO REVIEW ARCHITECTURAL AND ENGINEERING PLANS - BOTH DISCIPLINES INDICATE THE TOTAL SCOPE OF WORK. WHERE DISCREPANCIES OCCUR ARCHITECT TO BE NOTIFIED.

8. IN THE EVENT MOLD OR WHAT APPEARS TO BE MOLD IS FOUND DURING CONSTRUCTION. THE OWNER IS TO NOTIFIED IMMEDIATELY. AT THAT TIME A CERTIFIED MOLD TESTING INSPECTING FIRM IS TO BE CONTACTED IMMEDIATELY TO REVIEW THE SUSPECT MATERIAL(S). PROPER PRACTICE AND REMOVAL OF ANY IDENTIFIED MATERIAL WITH MOLD CONTAMINATION IS TO FOLLOW.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL SUBCONTRACTORS HAVE A
VALID COPY OF THE ENTIRE SET OF CONSTRUCTION DOCUMENTS, AND INFORMATION FOR BIDDING.
 ALL NEW DOORS SHALL HAVE A FINISH AND HARDWARE UNLESS OTHERWISE NOTED. ALL DOORS
AND HARDWARE ON DOORS TO BE LEVER / ADA COMPLIANT (UNLESS IN PRIVATE RESIDENCE).
 THE CONTRACTOR SHALL MAINTAIN CURRENT AND COMPLETE SETS OF ALL CONSTRUCTION
DOCUMENTS, INCLUSIVE OF ALL ADDENDUM ITEMS, DURING ALL PHASES OF CONSTRUCTION FOR USE BY

12. CONTRACTOR IS RESPONSIBLE FOR THE HOOKING UP AND TESTING OF ALL NEW EQUIPMENT (RTU'S, HW HEATERS, SUMP PUMPS, ETC) SHOWN ON THE DRAWINGS. THIS INCLUDES ALL ELECTRICAL WIRING, GAS PIPING, WATER PIPING, DRAINS, CURBS, ETC. IF NO QUESTIONS OR CLARIFICATIONS ARE MADE IN WRITING DURING PRICING/ BIDDING IT IS UNDERSTOOD THAT THE G.C HAS INCLUDED ALL NECESSARY UTILITIES IN THE BASE PRICE

13. HVAC- CONTRACTOR IS RESPONSIBLE FOR MAKING ALL NEW HVAC UNITS FULLY OPERATIONAL WITH TRUNK LINE INTO SPACE, THERMOSTAT, WIRING, AND CONTROLS WILL BE INCLUDED. IF TENANT FIT UP IS SHOWN ON THE DRAWINGS CONTRACTOR IS RESPONSIBLE FOR ALL DUCTWORK SHOP DRAWINGS, REGISTERS, CONTROLS AND THERMOSTATS. UNLESS FULLY ENGINEERED DRAWINGS ARE PROVIDED, THIS IS DESIGN/BUILD BASED ON THE DESIGN CONCEPT PROVIDED BY ARCHITECT.

14. WHEN THE ARCHITECTS DRAWINGS NOTE THE LOCATION AND TYPE OF ELECTRICAL DEVICES (OUTLETS, SWITCHES, HORNS, STROBES, PULL STATIONS, LIGHTS, DETECTORS, ETC.) WITHOUT ANY WIRING OR PANEL SCHEDULES, THE ELECTRICAL CONTRACTOR SHALL WIRE AND INSTALL WIRE AND INSTALL SAME AS PER NEC - CURRENT VERSION. ELECTRICAL CONTRACTOR TO REVIEW EXISTING SERVICE PANELS AND WIRING TO DETERMINE METHOD TO PRICE THE PROJECT AND PROCEED IN IMPLEMENTATION. ALL ELECTRICAL DEVICES ARE ASSUMED TO BE 110V UNLESS OTHERWISE NOTED.

15. EXISTING LIGHTING AND HVAC VOLTAGE TO BE CONFIRMED/VERIFIED BY THE CONTRACTORS ELECTRICAL SUBCONTRACTOR DURING THE PRICING/ BIDDING PROCESS TO ASSESS THAT THE CORRECT

FIXTURES AND EQUIPMENT ARE INCLUDED IN THE BID ESTIMATE.

16. THE TERM GENERAL CONTRACTOR OR CONSTRUCTION MANAGER NOTED IN THE DRAWINGS, NOTES, ADDENDUM, MINUTES, SPECIFICATIONS, ETC. ARE TO BE UNDERSTOOD AS THE SAME RESPONSIBILITY OR OBLIGATION BEING REQUESTED WITHIN THE CONSTRUCTION DOCUMENTS.

17. THE GENERAL CONTRACTOR / CONSTRUCTION MANAGER IS RESPONSIBLE FOR REVIEWING THE CONSTRUCTION DOCUMENTS AND INCLUDING ALL NECESSARY HOOK-UPS, UTILITIES, DRAINS, ELECTRICAL CONNECTIONS / SERVICE, GAS CONNECTIONS / SERVICE, WASTE LINES, VENTS, WATER CONNECTIONS / SERVICE, FOR EQUIPMENT SHOWN ON THE PLANS. EQUIPMENT INCLUDED BUT NOT LIMITED TO; HVAC UNITS, HOT WATER HEATERS, SUMP PUMPS, VENTILATION AND EXHAUST FANS, PLUMBING FIXTURES, HEATERS, BOILERS, ETC.

18. THESE DRAWINGS MAY NOT SHOW SPECIFIC PIPING OR WIRING DIAGRAMS TO EQUIPMENT, BUT IT IS CLEAR, ALL EQUIPMENT ARE TO BE FULLY OPERATIONAL FOR INSPECTION BY THE ARCHITECT AND APPROVING MUNICIPAL AUTHORITY FOR OCCUPATION OF THE SPACE OR BUILDING.

19. CONTRACTOR HAS REVIEWED THESE DOCUMENTS FOR THE DESIGN INTENT AND FINAL USE. ANY ADDITIONAL DETAILS OR INFORMATION NEEDED FOR BIDDING OR CONSTRUCTION PRICING ARE TO BE REQUESTED IN WRITING TO THE ARCHITECT PRIOR TO BID DUE DATE. SUBMISSION OF BID WILL CONSTITUTE ALL INFORMATION NECESSARY TO PROVIDE A COMPREHENSIVE BID HAS BEEN RECEIVED.
20. ALL LICENSED SUBCONTRACTORS ARE TO INCLUDE OR INDICATE TO THE ARCHITECT, IN WRITING ANY CODE REQUIRED "ELEMENT" THAT MIGHT NOT BE SHOWN OR NOTED IN THE DRAWINGS. IF REQUIRED TO COMPLETE THE DESIGN INTENT OR WOULD BE NECESSARY TO OBTAIN INSPECTION APPROVALS, "ELEMENT" (EQUIPMENT, DEVICE OR FIXTURE) IS TO BE INCLUDED BY CONTRACTOR AT NO ADDITIONAL

CHARGE.
21. ANY CONDITION, CODE ISSUE OR DEFICIENCY IN THE CONSTRUCTION DOCUMENTS THAT COULD HAVE BEEN CLARIFIED DURING THE BIDDING PROCESS WILL BE A PART OF THE BASE BID AND NOT OPEN TO CHANGE ORDER CONSIDERATION, UNLESS STIPULATED AS AN ALTERNATE PRICE OR EXCLUSION ON THE BID PROPOSAL, THESE ITEMS ARE A PART OF THE SCOPE.

22. ALL CONTRACTORS TO REVIEW ALL OF THE INFORMATION LISTED ON THE SPECIFICATIONS SHEET ATTACHED TO THESE DRAWINGS. THE SPECIFICATION SHEET INCLUDES INFORMATION THAT IS INCLUDED IN THE SCOPE OF WORK AND CONTRACTORS BASE BID.

23. AT ALL RESTROOMS, BOILER ROOMS, MOP AREAS, AND WET LOCATIONS, MOLD RESISTANT

GYPSUM WALL BOARD IS TO BE USED INSIDE THE ENTIRE ROOM UNLESS OTHERWISE NOTED. MOISTURE RESISTANT (MR) GYPSUM BOARD IS NOT AN ACCEPTABLE SUBSTITUTE.

24. ALL CONCRETE MASONRY BLOCK USED ON AN EXTERIOR WALL, BE IT ABOVE OR BELOW GRADE, SHALL AND MUST BE DRY BLOCK WITH DRY MORTAR INSTALLED TO BUILD SUCH WALLS. DRY BLOCK ALONE DOES NOT PROVIDE WATERPROOFING FOR THE EXTERIOR ENVELOPE OF A BUILDING. ALL BLOCK WITH A MASONRY BASEMENT OR CRAWL SPACE SHALL HAVE A MEMBRANE GLUED WITH MASTIC TO THE

ALONE DOES NOT PROVIDE WATERPROOFING FOR THE EXTERIOR ENVELOPE OF A BUILDING. ALL BLOCK WITH A MASONRY BASEMENT OR CRAWL SPACE SHALL HAVE A MEMBRANE GLUED WITH MASTIC TO THE EXTERIOR OF THE BUILDING FROM GRADE TO BOTTOM EDGE OF FOOTING. ALL BLOCK ABOVE GRADE SHALL HAVE SOME FORM OF SIDING, BRICK VENEER, OR DRYVIT (EIFS: STUCCO IS NEVER PERMITTED.) WHEN USING EIFS, PROVIDE DRAIN BOARDS, WEEPS, AND COUNTER- FLASHING AS PER MANUFACTURER'S DIRECTIONS.

25. CONTRACTORS ARE TO REVIEW ALL GENERAL NOTES, SPECIFICATIONS AND LISTED INFORMATION WITHIN THIS SET OF DRAWINGS. SOME OF THESE NOTES MAY NOT REQUIRE AN ACTION, OBLIGATION OR WORK ON THIS PROJECT. IF THE CONTRACTOR IS UNSURE IF AN ITEM CONTAINED IN THESE DOCUMENTS A WRITTEN REQUEST FOR INFORMATION IS TO BE SUBMITTED TO THE ARCHITECT. IF THE CONTRACTOR IS NOT INCLUDING SOMETHING. THE ITEM/WORK IS TO BE SPECIFICALLY WRITTEN AS INCLUDED OR EXCLUDED INTO THE BID AND OR CONTRACT. IF DEEMED REQUIRED BUT SILENT IN THE BID/CONTRACT AND NO REQUEST FOR INFORMATION ARE PROVIDED THE ITEM/WORK IS TO BE INCLUDED IN THE PROJECT WITHOUT ADDITIONAL COST OR TIME TO THE PROJECT.

General Notes

IN RENOVATIONS, RESTRUCTURING OR ALTERATIONS, THE LEVEL OF EXISTING FLOORS CAN NOT HAVE DEVIATIONS GREATER THAN A 1/4" PER FOOT. LEVELING IS DICTATED BY DOOR LOCATIONS AND COORDINATION WITH ANY ADJOINING FLOORS. ENTIRE FLOOR IS TO BE REVIEWED PRIOR TO ANY FLOOR.

FINISHES BEING INSTALLED.

2. DURING DEMOLITION ALL HEATING AND COOLING SYSTEMS, EXHAUST SYSTEMS OR AIR CIRCULATION DEVICES ARE TO BE TURNED OFF FROM START OF DEMOLITION TO TIME OF ADEQUATE DUST SETTLEMENT. TEMPERATURE OF SPACE TO BE MONITORED AS TO NOT ALLOW EXISTING OR NEW WATER AND SPRINKLER PIPING FROM BEING COMPONISED. SYSTEMS TO BE RETURNED BACK TO

NORMAL AFTER WORK IS COMPLETE- DAILY/HOURLY ETC.

3. IF THE BUILDING HAS SPRINKLERS AND WE ARE ADDING AND/OR RELOCATING 5 OR MORE SPRINKLER HEADS - SHOP DRAWINGS ARE REQUIRED AND HYDRAULIC CALCULATIONS AS REQUIRED BY

THE BUILDING AND FIRE DEPARTMENT.

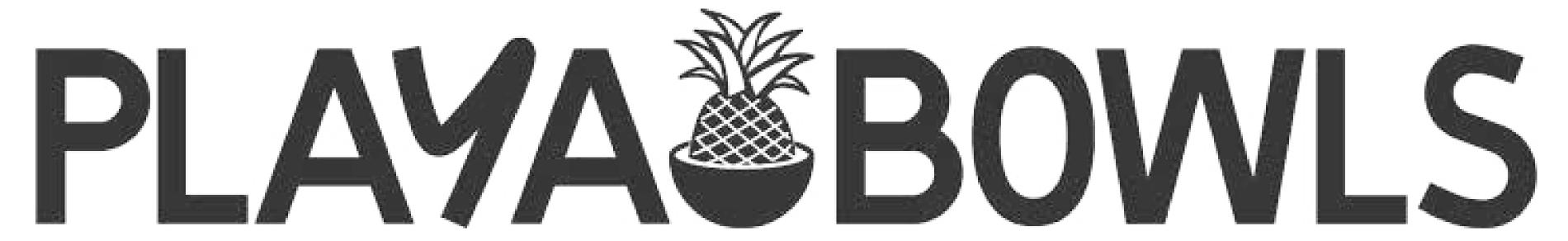
4. IF THE WORK IS REMOVING, ALTERING, AND OR ADDING ROOMS/SPACES THE ELECTRICIAN IS TO RE-CIRCUIT EXISTING AND NEW WIRING TO SEPARATE, CONJOIN, AND ISOLATE WIRING / SWITCHING AS REQUIRED. ARCHITECTS DRAWINGS NOTE LIGHTING PLACEMENT AND SPECIFICATIONS BUT TYPICALLY NO WIRING OR CIRCUIT LAYOUT. INDIVIDUAL OFFICES TO BE CONTROLLED BY SWITCH IN OFFICE AND GENERAL OPEN AREAS TO BE CONTROL ON 1 OR 2 THREE WAY SWITCHES IN THE AREA THEY SERVE (REMOVE FROM EACH OTHER).

5. THE INTENT OF DESIGN BUILD HVAC (IF ENGINEERING DRAWING ARE NOT PROVIDED) IS FOR THE HVAC AND GC. CONTRACTORS TO REVIEW THE EXISTING UNITS FOR USEFUL LIFE, GENERAL CONDITIONS AND LOCATIONS AT TIME OF BID. ALL WORK NOTED MAY REQUIRE CHANGES TO REGISTER LOCATIONS, DUCTWORK REVISIONS AND OTHER CONTROL CHANGES TO DISTRIBUTE AND BALANCE AIR WITHIN THE WORK AREA. THESE DESIGN BUILD CONDITIONS ARE INCLUDED IN BASE BID.

Renovation Notes

THESE DRAWINGS INDICATE THE GENERAL SCOPE OF THE PROJECT IN TERMS OF ARCHITECTURAL DESIGN CONCEPT, THE DIMENSIONS OF THE BUILDING, THE MAJOR ARCHITECTURAL ELEMENTS AND THE TYPE OF STRUCTURAL, MECHANICAL, AND ELECTRICAL SYSTEMS. AS SCOPE DOCUMENTS THE DRAWINGS DO NOT NECESSARILY INDICATE OR DESCRIBE ALL THE WORK REQUIRED FOR THE FULL PERFORMANCE AND COMPLETION OF THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. ON THE BASIS OF THE GENERAL SCOPE INDICATED OR DESCRIBED THE CONTRACTOR SHALL FURNISH ALL ITEMS REQUIRED FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK. DECISIONS OF THE ARCHITECT AS TO THE ITEMS OF WORK INCLUDED WITHIN THE SCOPE OF THIS DOCUMENT SHALL BE FINAL AND BINDING ON THE OWNER AND THE CONTRACTOR. THESE DRAWINGS WHEN USED FOR BIDDING / CONSTRUCTION PRICING ARE TO BE REVIEWED FOR FINAL INTENT; WHICH IS TO IMPROVE OR CREATE A STRUCTURE FOR A CERTIFICATE OF APPROVAL OR CERTIFICATE OF OCCUPANCY. THE INTENT IS TO PROVIDE THE OWNER OR CLIENT A SPACE OR BUILDING THEY CAN OCCUPY/ USE AFTER THE CONSTRUCTION IS COMPLETE.

Scope Document



20647 MACK AVE GROSSE POINTE, MI 48236

AD	OPTED CODES & S	STAND	ARDS	S	
	Reference Code		Edition	Effective Date	
Michigan Building Code - Incorporating the Code as published by the International Codamendments			2021	APR 9, 2025	
Michigan Rehabilitation Code Incorporating Existing Building Code as published by the (ICC) with state amendments		2021	APR 9, 2025		
Michigan Energy Code – Part 10a. – Non- 2015 International Energy Conservation Co- International Code Council (ICC), ANSI/AS 2013, and state amendments	de as published by the		2015	FEB 8, 2022	
Michigan Electrical Code - Incorporating the Code as published by NFPA with state ame			2023	MAR 12,2024	
Michigan Mechanical Code - Incorporating Plumbing Code as published by ICC with si	the 2021 International		2021	MAR 12,2024	
Michigan Plumbing Code - Incorporating th Plumbing Code as published by ICC with si	e 2021 International		2021	MAR 12,2024	
ASHRAE 90.1			2019	SEP 06, 2022	
BL	JILDING DEPARTM	ENT N	OTES	S	
Item	Code Section			Comments	
BUILDING USE	CHAPTER 3 (OCCUPANCY CLASSIFICATION AND	USE)	BUSINESS		
OCCUPANCY CLASSIFICATION	CHAPTER 3 (OCCUPANCY CLASSIFICATION AND	USE)	BUSINESS (E	3)	
CONSTRUCTION CLASSIFICATION	S FOR BUILDING	TYPE 2B - NO	ON-COMBUSTIBLE		
AREA		1224 SF			
SPRINKLER REQUIREMENT	504 (BUILDING HEIGHT AND NO. OF STORIES)	REQUIRED/SPRINKLERED			
OCCUPANT LOAD	PER OCCUPANT)	SEE LIFE SA LOAD	FETY PLAN FOR OCCUPANT		
EGRESS CAPACITY	1005 (MEANS OF EGRESS SIZING)		SEE LIFE SA	FETY PLAN FOR INFO	
MEANS OF EGRESS	1017.2 (EXIT ACCESS TRAVEL DISTANCE) IBC 2021, MI ED - TABLE 1006.2.1 COMMON PATH OF EGRESS				

1006 (NUMBER OF EXITS AND EXIT ACCESS DOORWAYS) NO CHANGE IN NUMBER OF EXITS

7.21.1 (MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES) TOTAL/2= OF EACH SEX

	DRAWING LIS			
Sheet No.	Sheet Name		Current Revision	Revision Date
G-001	COVER SHEET			
G-002	SYMBOLS AND ABBREVIATIONS			
G-003	RESPONSIBILITY MATRIX AND TENANT SCHEDULE			
A-001	LIFE SAFETY PLAN			
D-100	DEMO PLAN			
A-100	CONSTRUCTION FLOOR PLAN			
A-101	REFLECTED CEILING PLAN / LIGHTING SCHEDULE			
A-102	FINISH PLAN AND SCHEDULE			
A-103	EQUIPMENT PLAN			
A-104	ENLARGED RESTROOM PLAN			
A-200	INTERIOR ELEVATIONS			
A-201	INTERIOR ELEVATIONS			
A-400	WALL AND MILLWORK DETAILS AND NOTES			
A-401	TYPICAL DETAILS			
A-402	TRASH CAN DETAILS			
A-600	ANSI A117.1 REFERENCES			
A-601	ANSI A117.1 REFERENCES			
A-602	GENERAL SPECIFICATIONS			
A-603	GENERAL SPECIFICATIONS			
A-604	GENERAL NOTES			
SHEET#	DRAWING LIST - ST	RUCTURA SHEET NAME	AL ENGIN	EERING
SHEET#			AL ENGIN	EERING
SHEET#	GENERAL NOTES	SHEET NAME		EERING
SHEET#	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN	SHEET NAME		Revision Date
SHEET # S1 S2 Sheet No.	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L	SHEET NAME	HANICAL	
SHEET # S1 S2 Sheet No. M100	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L Sheet Name	SHEET NAME	HANICAL	
SHEET # S1 S2 Sheet No. M100 M200	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L Sheet Name MECHANICAL SPECIFICATION	SHEET NAME	HANICAL	
SHEET # S1 S2 Sheet No. M100 M200 M201	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L Sheet Name MECHANICAL SPECIFICATION MECHANICAL PLAN & SCHEDULE	SHEET NAME	HANICAL	
SHEET # S1 S2 Sheet No. M100 M200 M201	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L Sheet Name MECHANICAL SPECIFICATION MECHANICAL PLAN & SCHEDULE MECHANICAL ROOF PLAN	SHEET NAME	HANICAL Current Revision	
SHEET # S1 S2 Sheet No. M100 M200 M201	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L Sheet Name MECHANICAL SPECIFICATION MECHANICAL PLAN & SCHEDULE MECHANICAL ROOF PLAN MECHANICAL DETAILS	SHEET NAME	HANICAL Current Revision	
SHEET # S1 S2 Sheet No. M100 M200 M201 M300 Sheet No.	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L Sheet Name MECHANICAL SPECIFICATION MECHANICAL PLAN & SCHEDULE MECHANICAL ROOF PLAN MECHANICAL DETAILS DRAWING L	SHEET NAME	CTRICAL	Revision Date
SHEET # S1 S2 Sheet No. M100 M200 M201 M300 Sheet No. E-1	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L Sheet Name MECHANICAL SPECIFICATION MECHANICAL PLAN & SCHEDULE MECHANICAL ROOF PLAN MECHANICAL DETAILS DRAWING L Sheet Name	SHEET NAME	CTRICAL	Revision Date
SHEET # S1 S2 Sheet No. M100 M200 M201 M300 Sheet No. E-1 E-2	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L Sheet Name MECHANICAL SPECIFICATION MECHANICAL PLAN & SCHEDULE MECHANICAL ROOF PLAN MECHANICAL DETAILS DRAWING L Sheet Name ELECTRICAL SPECIFICATIONS	SHEET NAME	CTRICAL	Revision Date
SHEET # S1 S2 Sheet No. M100 M200 M201 M300 Sheet No. E-1 E-2 E-3	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L Sheet Name MECHANICAL SPECIFICATION MECHANICAL PLAN & SCHEDULE MECHANICAL DETAILS DRAWING L Sheet Name ELECTRICAL SPECIFICATIONS ELECTRICAL SPECIFICATIONS ELECTRICAL POWER PLAN	SHEET NAME	CTRICAL	Revision Date
SHEET # S1 S2 Sheet No. M100 M200 M201 M300 Sheet No. E-1 E-2 E-3 E-4	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L Sheet Name MECHANICAL SPECIFICATION MECHANICAL PLAN & SCHEDULE MECHANICAL ROOF PLAN MECHANICAL DETAILS DRAWING L Sheet Name ELECTRICAL SPECIFICATIONS ELECTRICAL SPECIFICATIONS	SHEET NAME	CTRICAL	Revision Date
SHEET # S1 S2 Sheet No. M100 M200 M201 M300 Sheet No. E-1 E-2 E-3 E-4	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L Sheet Name MECHANICAL SPECIFICATION MECHANICAL PLAN & SCHEDULE MECHANICAL ROOF PLAN MECHANICAL DETAILS DRAWING L Sheet Name ELECTRICAL SPECIFICATIONS ELECTRICAL SPECIFICATIONS ELECTRICAL POWER PLAN ELECTRICAL LIGHTING PLAN	IST - MEC	CTRICAL Current Revision CTRICAL Current Revision	Revision Date
SHEET # S1 S2 Sheet No. M100 M200 M201 M300 Sheet No. E-1 E-2 E-3 E-4 E-5	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L Sheet Name MECHANICAL SPECIFICATION MECHANICAL PLAN & SCHEDULE MECHANICAL DETAILS DRAWING L Sheet Name ELECTRICAL SPECIFICATIONS ELECTRICAL SPECIFICATIONS ELECTRICAL POWER PLAN RISER & PANEL SCHEDULE DRAWING DRAWING	IST - MEC	CTRICAL Current Revision CTRICAL Current Revision JMBING	Revision Date Revision Date
SHEET # S1 S2 Sheet No. M100 M200 M201 M300 Sheet No. E-1 E-2 E-3 E-4 E-5 Sheet No.	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L Sheet Name MECHANICAL SPECIFICATION MECHANICAL PLAN & SCHEDULE MECHANICAL DETAILS DRAWING L Sheet Name ELECTRICAL SPECIFICATIONS ELECTRICAL SPECIFICATIONS ELECTRICAL POWER PLAN RISER & PANEL SCHEDULE DRAWING Sheet Name	IST - MEC	CTRICAL Current Revision CTRICAL Current Revision	Revision Date
SHEET # S1 S2 Sheet No. M100 M200 M201 M300 Sheet No. E-1 E-2 E-3 E-4 E-5 Sheet No. P1-01	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L Sheet Name MECHANICAL SPECIFICATION MECHANICAL PLAN & SCHEDULE MECHANICAL DETAILS DRAWING L Sheet Name ELECTRICAL SPECIFICATIONS ELECTRICAL SPECIFICATIONS ELECTRICAL POWER PLAN ELECTRICAL LIGHTING PLAN RISER & PANEL SCHEDULE DRAWING Sheet Name PLUMBIN NOTES	IST - MEC	CTRICAL Current Revision CTRICAL Current Revision JMBING	Revision Date Revision Date
SHEET # S1 S2 Sheet No. M100 M200 M201 M300 Sheet No. E-1 E-2 E-3 E-4 E-5	GENERAL NOTES PARTIAL EXISTING ROOF FRAMING PLAN DRAWING L Sheet Name MECHANICAL SPECIFICATION MECHANICAL PLAN & SCHEDULE MECHANICAL DETAILS DRAWING L Sheet Name ELECTRICAL SPECIFICATIONS ELECTRICAL SPECIFICATIONS ELECTRICAL POWER PLAN RISER & PANEL SCHEDULE DRAWING Sheet Name	IST - MEC	CTRICAL Current Revision CTRICAL Current Revision JMBING	Revision Date Revision Date





N

INTERIOR FIT-UP

NUMBER OF EXITS

PLUMBING REQUIREMENTS

ALL WORK AS INDICATED ON THESE ARCHITECTURAL DRAWINGS TO OCCUR ON THE INTERIOR EXCEPT FOR REAR DOOR, HVAC AND ROOF WORK. NO OTHER WORK SHALL BE CONSTRUED TO BE PART OF THE SCOPE OF WORK OF THESE DOCUMENTS. UNLESS OTHERWISE NOTED EXISTING INCOMING UTILITIES MAY OR MAY NOT BE INCREASED, SEE DRAWING NOTES. SPACES FOR THESE FIT UPS ARE TYPICALLY FULL DEMOLITION OF INTERIOR WALL, DOORS, CEILINGS, LIGHTS AND ALL FINISHES. UTILITIES ARE TYPICALLY TO REMAIN IN PLACE AND MOTIFIED, EXTENDED, OR CHANGED AS REQUIRED.

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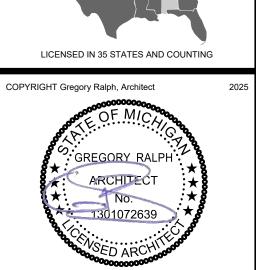
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TEL: 908 731 1626

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Gregory Ralph
MICHIGAN
NOT VALD FOR BUILDING LINLESS SIGNED AND SEALED BY ARCHITECT

CENSE #: 130107263

(PIRATION: 3/08/202

I HEARBY CERTIFY THAT THESE DOCUMENTS WERE

I HEARBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAW OF THE THIS STATE.

EXISTING CONDITIONS
SCHEMATIC DESIGN
DESIGN DEVELOPMENT
PROGRESS PRINT
FULL RELEASE
ISSUED TO:

NO. DESCRIPTION DATE

NO. DESCRIPTION DATE

DESIGNED BY: JG DRAWN BY: CM
CHECKED BY: JG APPROVED BY: JG
PROJECT #: STQ-0994-0125

PROJECT:
PLAYA BOWLS

20647 MACK AVE GROSSE POINTE, MI 48236

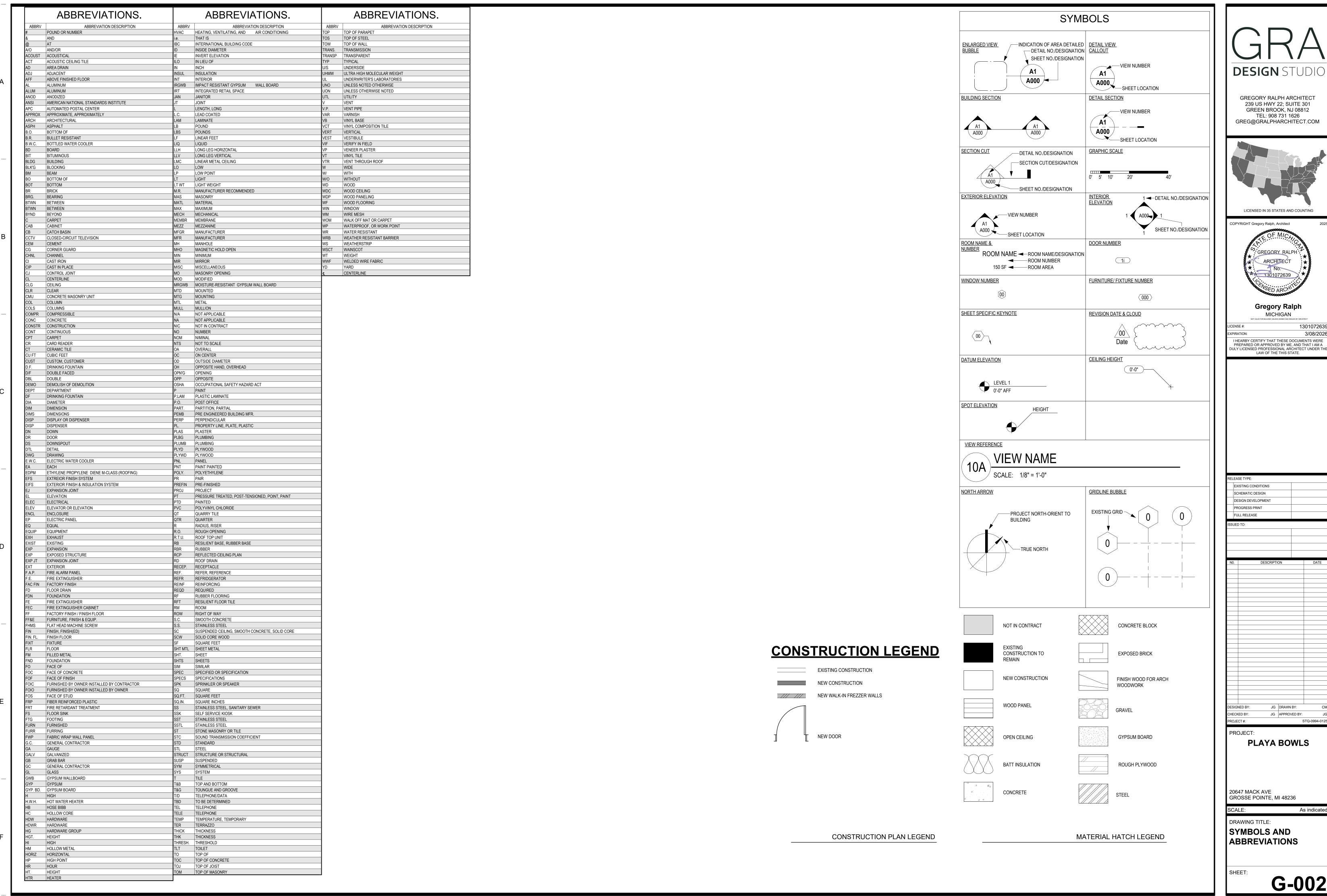
12" = 1'-0"

DRAWING TITLE:

COVER SHEET

T: G-0

3 5 7



DESIGN STUDIO GREG@GRALPHARCHITECT.COM



1301072639

I HEARBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE

G-002

NOTE:	RESPONSIBILITY MATRIX	Τ_	
NOTE:	O = OWNER, G.C. = GENERAL CONTRACTOR, V = VENDOR, L.L. = LANDLORD	FURNISH	INSTALL
	UNLESS NOTED OTHERWISE, ALL WORK SHOWN IN THESE DRAWINGS SHALL BE THE RESPONSBILITY OF THE GENERAL CONTRACTOR OF RECORD	<u> </u>	SZ .
FLOOR WORK & DEMO	SMOOTH, LEVEL CONCRETE FLOOR WITH ADA TRANISITON REQUIREMENTS	G.C.	G.C.
	REPAIR, LEVEL AND SLOPE FINISHES AND TRANSITIONS	G.C.	G.C.
FLOOR	TILE, BASE AND GROUT, EPOXY FLOOR, & TRANSITIONS	G.C.	G.C.
700 00V	WATERPROOF MEMBRANE (IF REQUIRED)	G.C.	G.C.
OR / ONT	ENTRY / EXIT DOORS AND HARDWARE	G.C.	G.C.
EXTERIOR WALLS / ORE FROM	SERVICE / EXIT DOOR AND HARDWARE	G.C.	G.C.
EXTERIOR WALLS / STORE FRONT	ALUMINUM STOREFRONT AND GLAZING (BRING EXISTING TO 'LIKE NEW' CONDITION)	G.C.	G.C.
	FRAMING, PLYWOOD BLOCKING AND GYP. BD	G.C.	G.C.
	F.R.P. PANELS AND WAINSCOT	G.C.	G.C.
	WATERPROOF MEMBRANE (IF REQUIRED)	G.C.	G.C.
SNOI	GYPSUM BOARD CEILING AND SOFFIT	G.C.	G.C.
RTIT	SERVICE LINE AND DINING AREA KNEE WALL AT SERVICE	G.C.	G.C.
OR PARTITIONS	PREP / PRIME / PAINT BASE COLORS	G.C.	G.C.
INTERIC	MURAL PAINTINGS	0	0
Z	GYPSUM BOARD WITH SUSPENSION SYSTEM LAY-IN CEILING WITH SUSPENSION SYSTEM	G.C.	G.C.
	DOORS, FRAMES AND HARDWARE	G.C.	G.C.
	ARTWORK PACKAGE	0.0.	0
	'COMING SOON' WINDOW POSTERS	V	٧
	DINING ROOM TABLES	V	G.C.
	TELEVISION SCREENS	0	G.C.
	TOILET ACCESSORIES	G.C.	G.C.
(0	KITCHEN EQUIPMENT (FF&E PACKAGE)	0	G.C. OR
FURNISHINGS	WALK-IN COOLER	0	G.C. OR
SNIS	SELF CONTAINED WALK-IN REFRIGERATION PACKAGE	0	G.C. OR
FUR	REMOTE WALK-IN REFRIGERATION PACKAGE	0	G.C. OR
	OFFICE SHELVING AND CHAIR	0	G.C.
	SNEEZE GUARD - C.R. LAWRENCE	G.C.	G.C.
	WALL MOUNTED SHELVING AND BLOCKING (BLOCKING PROVIDED BY GC)	G.C.	G.C.
ш	EXTERIOR SIGN (SEPERATE PERMIT)	0.0.	V
SIGNAGE	MENU BOARD	0	0
SIC	RESTROOM SIGNAGE	G.C.	G.C.
	HVAC ROOF TOP UNIT(S), CURBS AND DROPS	G.C.	L.L.
	ROOF SPACE AND SUPPORT FOR HVAC EQUIPMENT	G.C.	L.L.
	ROOF REPAIRS AND FLASHING (USE LANDLORDS WARRANTY ROOFING CONTRACTOR, IF APPLICABLE)	G.C.	G.C.
HVAC	WIRING AND CONNECTIONS	G.C.	G.C.
全	AIR BALANCE REPORT	G.C.	G.C.
	DUCTWORK, DAMPERS AND GRILLES	G.C.	G.C.
	THERMOSTATS AND CONTROLS TOILET EXHAUST FAN	G.C.	G.C.
	CODE COMPLAIANT AREA FOR EXHAUST FANS, MAU, ETC.	G.C.	G.C.
	SANITARY WASTE LINE TO SPACE	G.C.	G.C.
	GREASE TRAP OR GREASE LINE STUBBED INTO SPACE	G.C.	G.C.
	WATER METER AND SERVICE STUBBED TO PREMISES	G.C.	G.C.
(D	GAS METER AND SERVICE TO SPACE	G.C.	G.C.
PLUMBING	FINAL CONNECTIONS	G.C.	G.C.
PLUI	HVAC CONNECTIONS	G.C.	G.C.
	GAS PIPING A/C	G.C.	G.C.
	WATER HEATERS	0	G.C.
	ALL SINKS AND FAUCETS, EXCEPT MOP SINK MOP SINK & FAUCET	G.C.	G.C.
	SEPARATELY METERED 200 AMP, 120/208 V, 3 PHASE, 4W SERVICE	L.L. OR G.C.	0
	FLUSH MOUNTED PANEL WITH BREAKERS AND WITH 200 AMP BREAKER PANEL FOR TENANTS SUB PANEL	G.C.	G.C.
	INTERNET SERVICE AND CABLE PULLS	0	G.C.
CAL	LIGHT FIXTURES, MOUNTING ACCESSORIES, AND LAMPS (FKG TO SUPPLY)	FKG	G.C.
ELECTRICAL	CEILING FANS (FKG TO SUPPLY)	FKG	G.C.
ELE	MUSIC SYSTEM AND SPEAKERS	0	G.C.
	EXIT/EMERGENCY LIGHT SYSTEMS	G.C.	G.C.
	P.O.S CONDUIT, CABLES & JACKS	G.C.	G.C.
	P.O.S. EQUIPMENT INSTALLATION	0	0
NO	FIRE ALARM SHOP DRAWINGS AND PERMIT SUBMITTAL	G.C.	G.C.
FIRE PROTECTION	FIRE ALARM INSTALL AND CONNECTION TO BUILDING MAIN CONTROL PANEL, IF APPLICABLE	G.C.	G.C.
F	SPRINKLER SHOP DRAWINGS AND PERMIT SUBMITTAL	G.C.	G.C.
0_	CODDINIZED INSTALL AND CONNECTION TO BUILDING MAIN SYSTEM IS ADDUCADED		00

SPRINKLER INSTALL AND CONNECTION TO BUILDING MAIN SYSTEM, IF APPLICABLE

G.C.

G.C.

4

L	OCATION	FLO	OOR		WALLS		COUNTERTOP	CASEWORK CABINET		CEILING		NOTES		NOTES	
	NAME	FLOOR	BASE I	PRIMARY	ACCENT	TRIM			M	ATERIAL	COLOR	HEIGHT			
	DINING	FT-1	WB-2	NOTES 2,9	NOTE 9	NOTE 3	20	-	E)	EXPOSED SEE A101		1,2,3	,2,3,4,8,9		
5	SERVICE	ET-1	WB-1	NOTES 5,9	NOTE 9	NOTE 3	CT-1	NOTE 6	5 A	ACT-22	WHITE	SEE A101	3,4,5	,6,8,9	
ŀ	KITCHEN	ET-1	WB-1	FRP-1	-	NOTE 3	-	-	A	ACT-24	WHITE	SEE A101	3,7,8		
RE	STROOMS	FT-1	WB-1	NOTE 9	-	WP-3		-	G	SWB-1	WHITE	9'-0"	3,9,1	1	
609.618.7 FOR WAS RIPPED I 2. V 3. E 4. F 5. F 6. F 7. F 8. A 9. V 10. 141, A FINISH.	7606. PROVIDE SQUASTE AND EXTRAS WEDOWN TO NOTED SILVED-1 UP TO UNDERSTOOM TRIM PNT-3. TO UNDERSTOOM PINEWOOD FOR TO UNDERSTOOM	ARE FOOTAGES OF THE MEN ORDERING IN THE CONTRACT OF WOOD CONTRACT OF CEILING FOR THE HEART OF THE HEART OF LOCATIONS WARNISH WITH FIRMATTER TO THE HEART OF THE	OF ALL NEEDED MAMATERIALS, ALL HE ACTOR AS NEEDED AP OR DISPLAY COL PNT-4 BE SCHULTER-RENG G SIDE AND FRP-1 FI LOCK WOOD TO BE WITH ROCK CANDY SS ALL WOOD TO B RE HAZARD CLASSII	TERIAL. PLEASI MLOCK WOOD UNTER. PAINT A D-U INISH ON SERV PAINTED WITH PAINT CREW. (E FIRE RETARE FICATION. CLAS	E ACCOUNT FOR WILL BE SHIPED ABOVE TO UNDE ICE SIDE A KILZ WATERBOONTACT: RAMONT TREATED,	R 15-20% OF THE D APPROXIMATEL ERSIDE OF CEILIF ASE PRIMER, SA DNA SCHATZER S BY CONTRACTO	.ND LIGHTLY AFTER P	OOTAGE D BE AINTING ROL		2 COATS COLOR: BEHR PF EGGSHE 2 COATS COLOR: BEHR PF SEMI-GL 2 COATS COLOR: RUST- FLAT F MANUE	ELL FINISH OVER PRIM BLACK REMIUM PLUS OSS FINISH OVER PRIM P480-6 "ARU	S SURF" S INTERIOR P S INTERIOR P ER BA BLUE" CIALTY PAINT S & PRIMER P	AINT .	FRP-1	1X3 ROUGH PINE WOOD BASE W/ NEW WHI WASH FINISH AS SUPPLIED BY RECYCLING THE PAST. CONTACT MATT WHITE 609.618.7606 (SEE NOTE #1) STANDARD FRP PANELS AS MANUF. BY MARLITE. PEBBLED SURFACE COLOR:P199 BRIGHT WHITE NON-SLIP EPOXY FLOORING SYSTEMS AS MANUF. BY ELITE CRETE SYSTEMS (OR APPROVED EQUAL) COLOR: WOMBAT
6"X36" WOOD-LOOK NON-SLIP CERAMIC FLR. TILE AS MANUF. BY GAYAFORES SERIES: TRIBECA COLORS: EQUAL MIX OF BLANCO, AQUA AND GRIS. MUST BE LAID IN HERRINGBONE PATTERN. 1/8" JOINT GROUT: LACTICRETE SPECTRALOCK COLOR: #78 STERLING SILVER WORLDWIDE FLOORING: 1055 ROUTE 1 SOUTH EDISON, NJ 08837 TEL: (908)285-1110 DSB@WORLWIDEWHOLESALE.COM					STICAL CEILING FACED CEILING /16" SQUARE, B	TILE.ULTIME SQUAR TILE. KITCHEN ZONE Y ARMSTRONG	E TEGULAR E CEILING	WC-1	I .	H PINE WOOI					
WT-1	3"X6" GLAZED CEI DALTILE. SERIES: WHITE #0190 TOP TRIM: WALL E BASE: COVE BASE	CLASSIC COLOI BULLNOSE S-436	R WHEEL. COLOR:	ARTIC WB-	4" STANDAF COLOR: #12		BASE AS MANUF. BY	ROPPE	CT-1	SUPPLIED CONTACT STAINED 8	BY RECYCLING: MATT WHITE 60	9.618.7606. TO B ONTRACTOR BEF	E		

DESIGN STUDIO GREGORY RALPH ARCHITECT 239 US HWY 22; SUITE 301 GREEN BROOK, NJ 08812 TEL: 908 731 1626 GREG@GRALPHARCHITECT.COM LICENSED IN 35 STATES AND COUNTING COPYRIGHT Gregory Ralph, Architect **Gregory Ralph** MICHIGAN I HEARBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAW OF THE THIS STATE. EXISTING CONDITIONS DESIGN DEVELOPMENT FULL RELEASE DESIGNED BY: PROJECT: **PLAYA BOWLS**

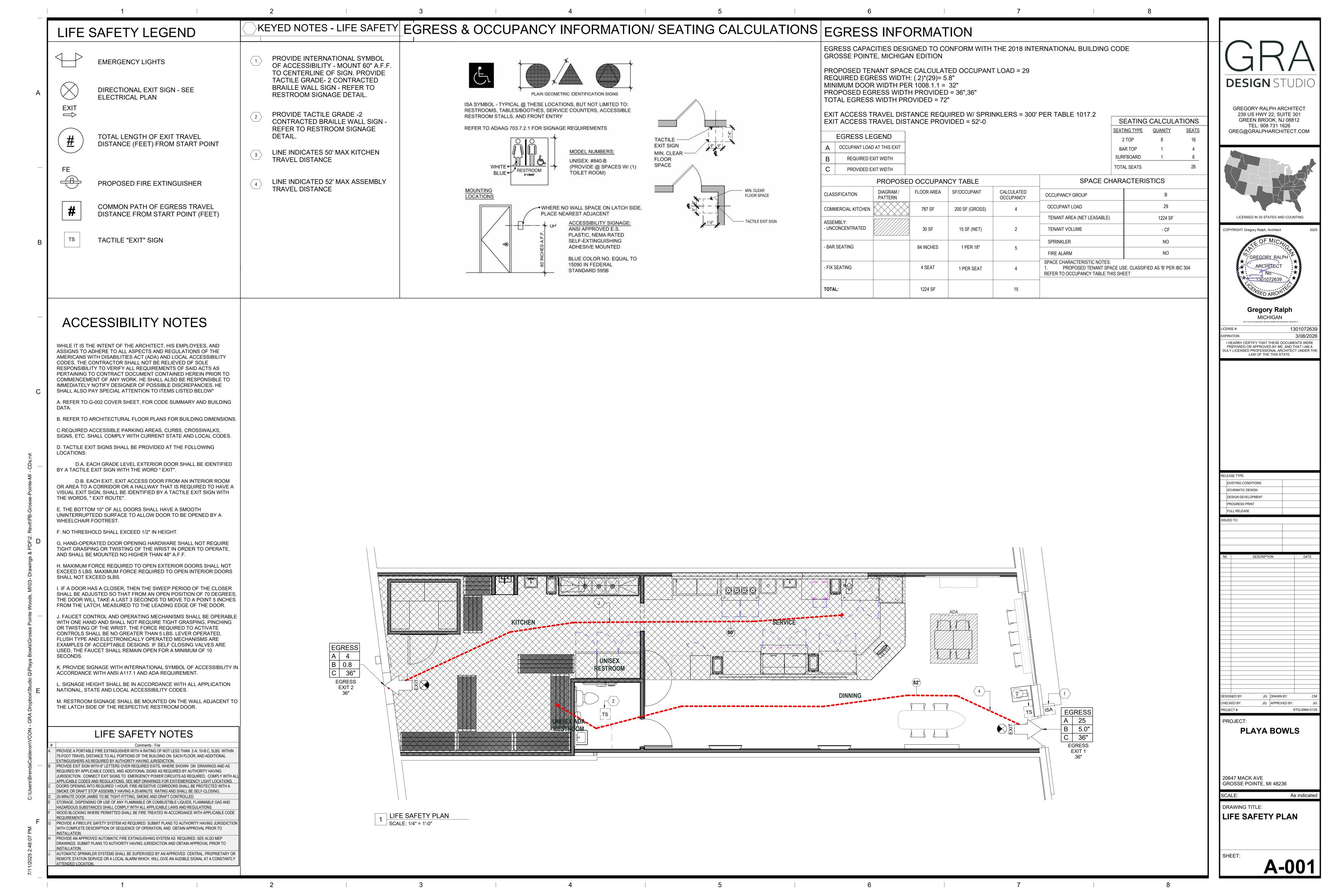
1301072639

JG DRAWN BY:

20647 MACK AVE GROSSE POINTE, MI 48236

DRAWING TITLE: RESPONSIBILITY MATRIX AND TENANT SCHEDULE

SHEET:



- CONTRACTOR TO PROVIDE CEILING SAMPLES FOR OWNER APPROVAL, ALTERNATE TO BE APPROVED BY ARCHITECT.
- ALL CEILING HEIGHTS ARE ABOVE FINISHED FLOOR.
- ALL CEILINGS ARE 9'-6' AFF UNO.
- CEILING TILES SHALL BE INSTALLED SO GRAIN LINES OF TILE ARE RUNNING IN SAME DIRECTION ON ALL CEILINGS.
- COMMUNICATION DEVICES AND CEILING MOUNTED EQUIPMENT TO BE CENTERED IN CEILING TILE UNO.
- ALL CEILING GRIDS TO BE CENTERED IN ROOMS UNO.
- ARCHITECTURAL CEILING PLAN SHALL GOVERN FOR LOCATIONS OF ALL DEVICES AS SHOWN. ENGINEERING DOCUMENTATIONS SHALL PREVAIL ONLY IN CASE OF SCOPE OF WORK AND ELEMENTS OCCURRING ABOVE CEILING DISCREPANCIES.
- SINGLE LIGHT FIXTURES IN GYPSUM BOARD CEILINGS TO BE CENTERED IN BOTH DIRECTIONS UNO.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL AUDIO/VISUAL REQUIREMENTS WITH TENANT AND/OR AV CONSULTANT.
- ATTACHED ALL GRID SUPPORTED LIGHT FIXTURES TO CEILING AND TO BUILDING STRUCTURE.
- LOUVERS AND PANEL FRONTS SHALL BE SPRAY PAINTED TO MATCH ADJACENT SURFACES, INCLUDING FACTORY FINISHED ITEMS, UNO. BRUSH PAINTING OF THESE ITEMS WILL NOT BE
- ALL EXPOSED GYPSUM BOARD SHALL BE SEALED WITH ONE COAST OF SEALER, FOLLOWED BY TWO COATS PER PAINT FINISH W/ SMOOTH FINISH.
- DO NOT LOCATE ANY JUNCTION BOXES, HVAC BOXES, TRANSFORMERS, ETC. ABOVE HARD CEILING AREA. ANY ITEMS ABOVE HARD CEILNG REQUIREING AN ACCESS PANEL SHALL BE RELO ATED SO AS TO AVOID NECCISITY OF ACCES PANEL.

CEILING PLAN NOTES

ALL DIMENSIONS ARE TO FACE OF FINISH U.O.N.

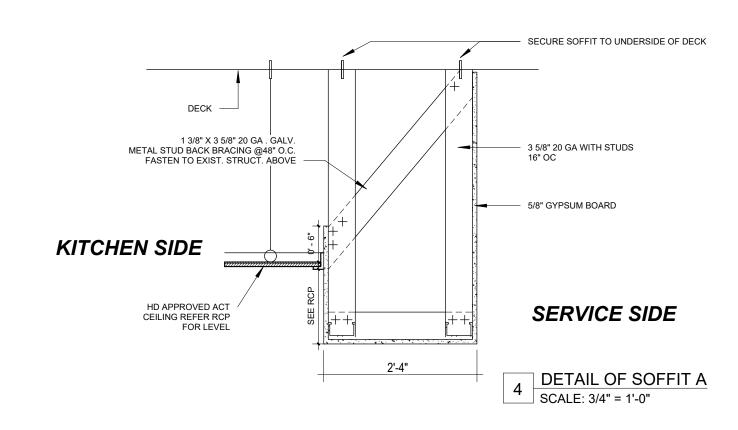
- ACOUSTICAL PANEL INSTALLATION: INSTALL ACOUSTICAL PANELS WITH EDGES IN
- CLOSE CONTACT WITH METAL SUPPORTS AND IN TRUE ALIGNMENT.
- ALLOWABLE VARIATIONS FROM FLAT AND LEVEL SURFACE: 1/8" IN 10'-0" MAX. ALLOWABLE VARIATIONS FROM PLUMB OF GRID MEMBERS: AS CAUSED BY ECCENTRIC
- LOADS, 2 DEGRESS MAX. INSTALL SYSTEM AFTER MAJOR ABOVE CLG. WORK IS COMPLETE. COORD LOCATIONS OF HNAGERS WITH RELATED WORK.

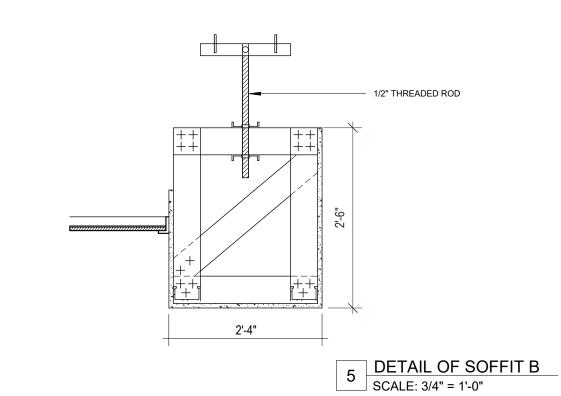
KEY NOTES \bigcirc

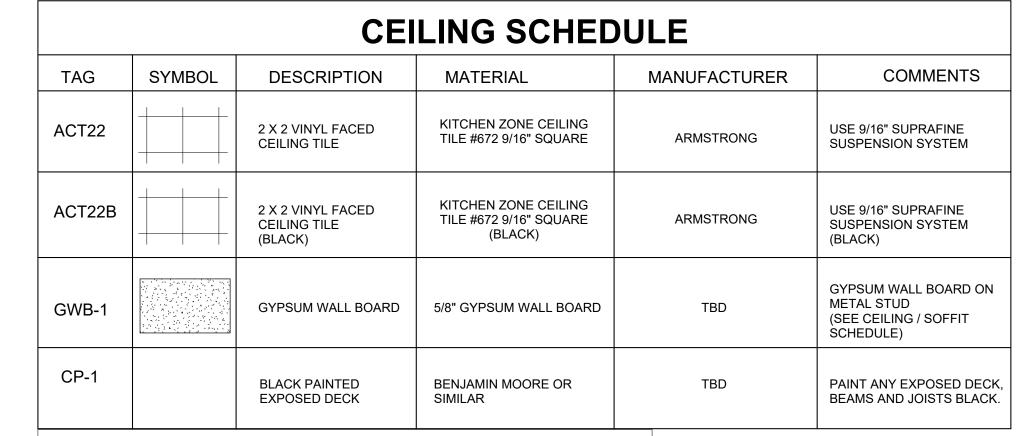
(1) CEILING GRID STARTING POINT

2 HANGING CHALK BOARDS

 \langle 3 \rangle SPEAKER. DINING ROOM SPEAKERS TO BE WALL MOUNTED

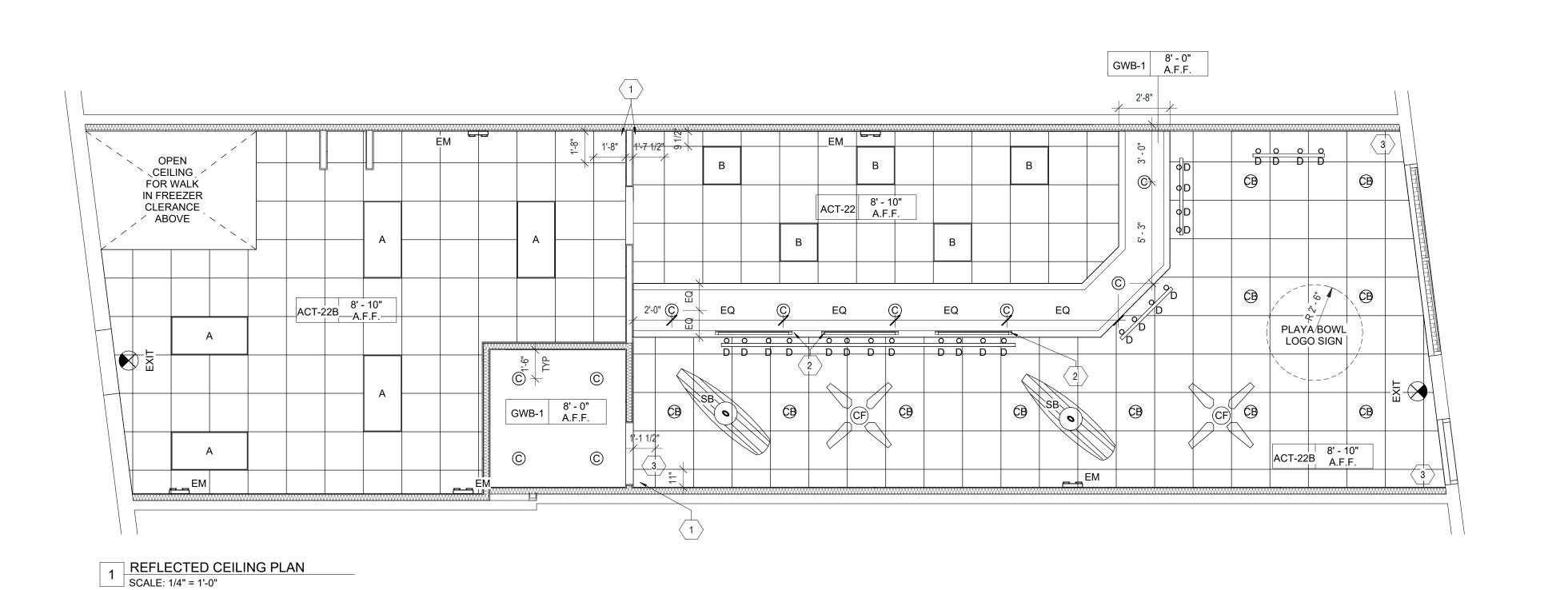






LIGHT SCHEDULE

SYMBOL	TYPE
ф с	6" RECESSED CAN LIGHT - MODEL #: MIC-HH-CCTS-WS-6IN - WATTS 23
- СВ	6" RECESSED CAN LIGHT - MODEL #: MIC-HH-CCTS-WS-6IN - WATTS 23 COLOR: BLACK
В	2X2 FLAT PANEL LED - MODEL #: MIC-22F-CCTS-45W - WATTS 45
A	2X4 FLAT PANEL LED - MODEL #: MIC-24FP-CCTS-50W - WATTS 50
 D	TRACK HEAD LIGHT 10W 3000K (BLACK) - MODEL #: TH-10W-3K-BLACK - WATTS 10
⊗ E	EXIT/EMERGENCY COMBO - MODEL #: EMEXIT2H-90-6IN - WATTS 2.2
EM	EMERGENCY LIGHT - MODEL #: EM2H-90 - WATTS 2.2
€ F	BASKET WEAVE BAMBOO PENDANT FIXTURE - MODEL#: CST-101-002
CF	CEILING FAN - MODEL #: KBS-52K1121
SB	SURFBOARD TO BE PROVIDED BY THE OWNER AND INSTALLED BY THE CONTRACTOR



DESIGN STUDIO GREGORY RALPH ARCHITECT 239 US HWY 22; SUITE 301 GREEN BROOK, NJ 08812



TEL: 908 731 1626

GREG@GRALPHARCHITECT.COM

LICENSED IN 35 STATES AND COUNTING



MICHIGAN

I HEARBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAW OF THE THIS STATE.

EXISTING CONDITIONS SCHEMATIC DESIGN DESIGN DEVELOPMENT PROGRESS PRINT FULL RELEASE

DESIGNED BY JG DRAWN BY: PROJECT #: PROJECT:

20647 MACK AVE GROSSE POINTE, MI 48236

DRAWING TITLE: REFLECTED CEILING PLAN / LIGHTING

SHEET:

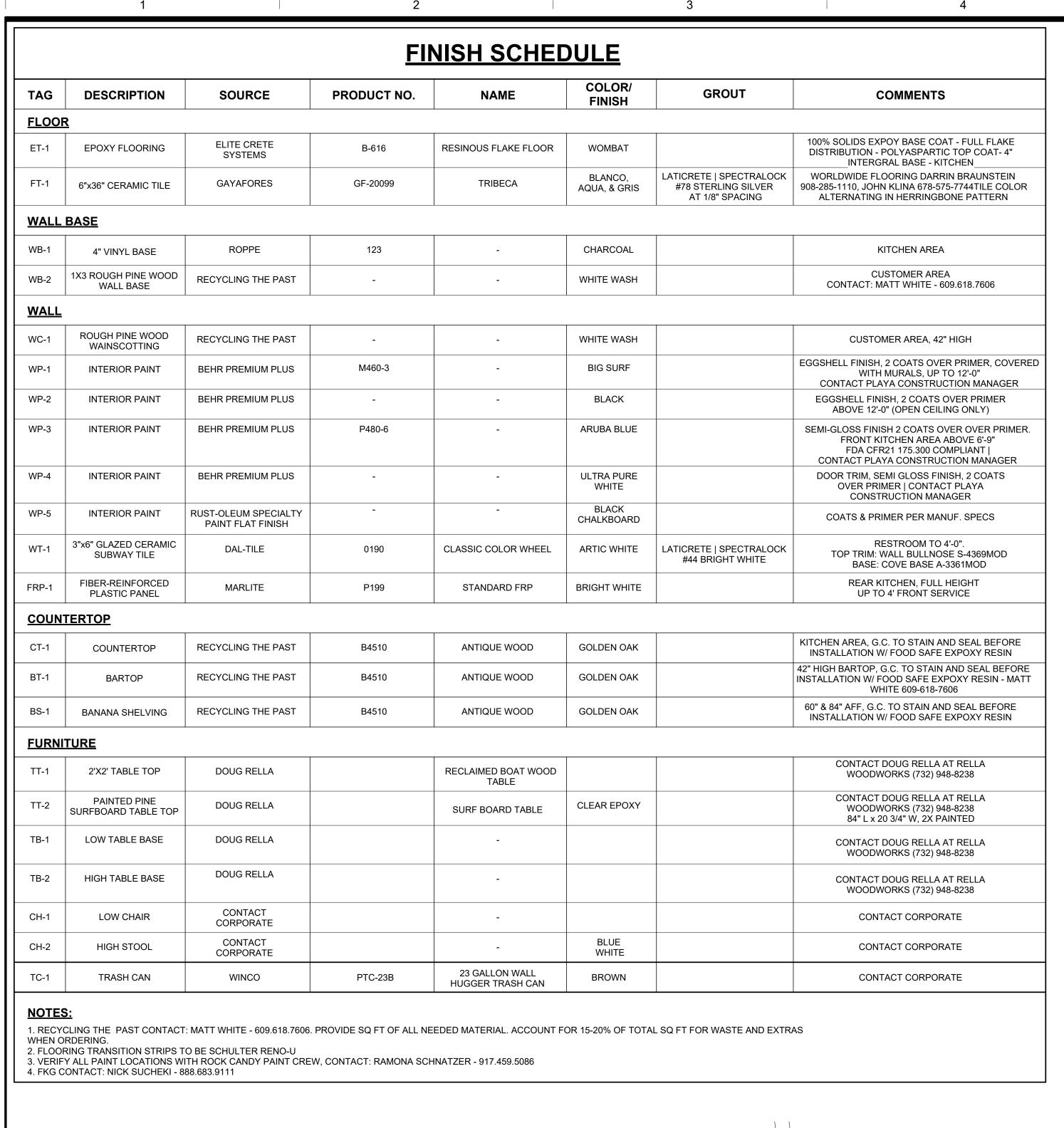
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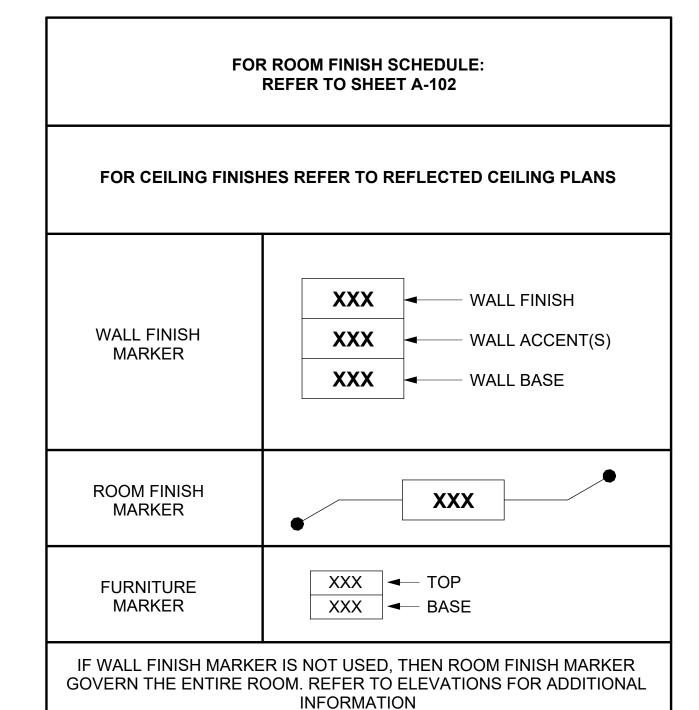
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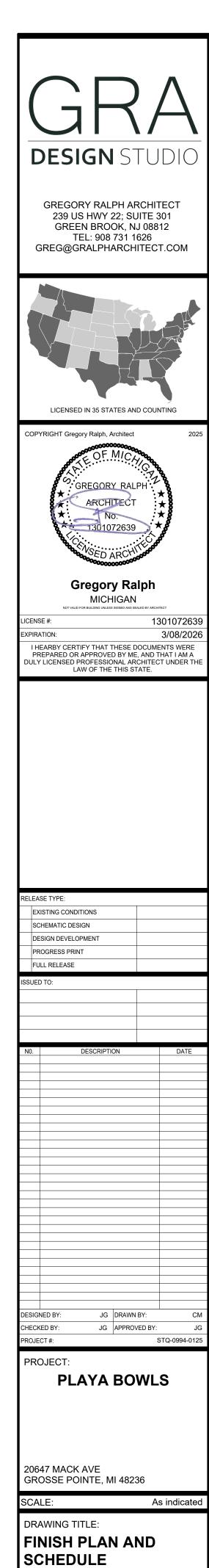
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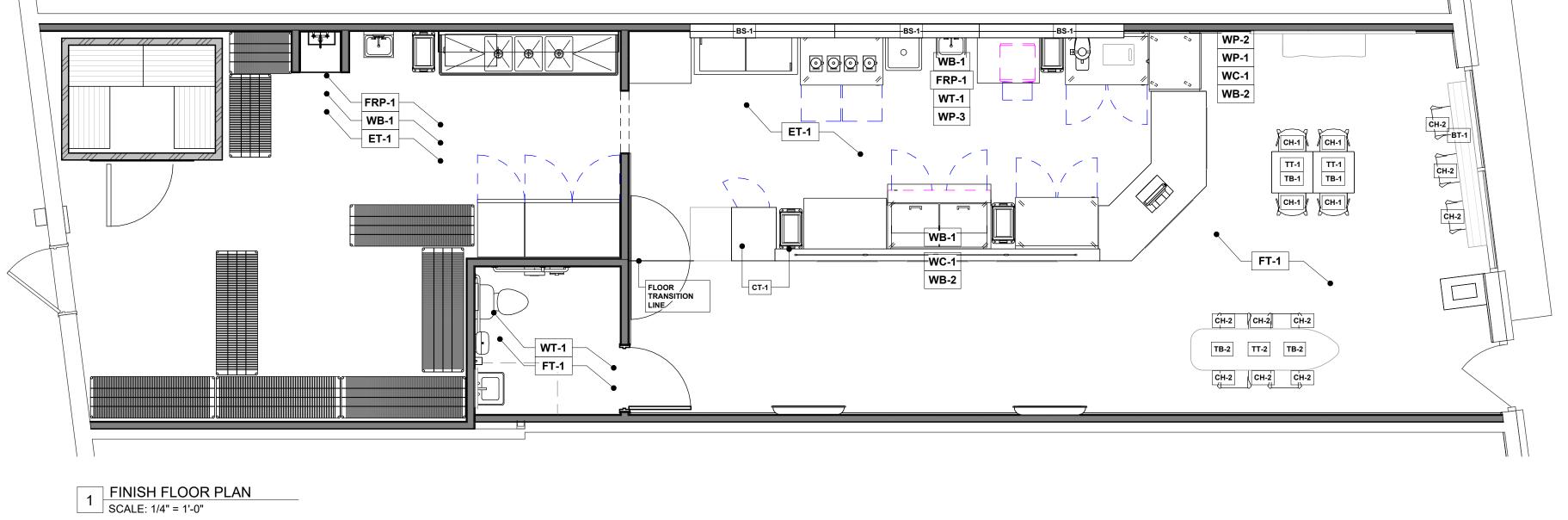
PLAYA BOWLS

As indicated





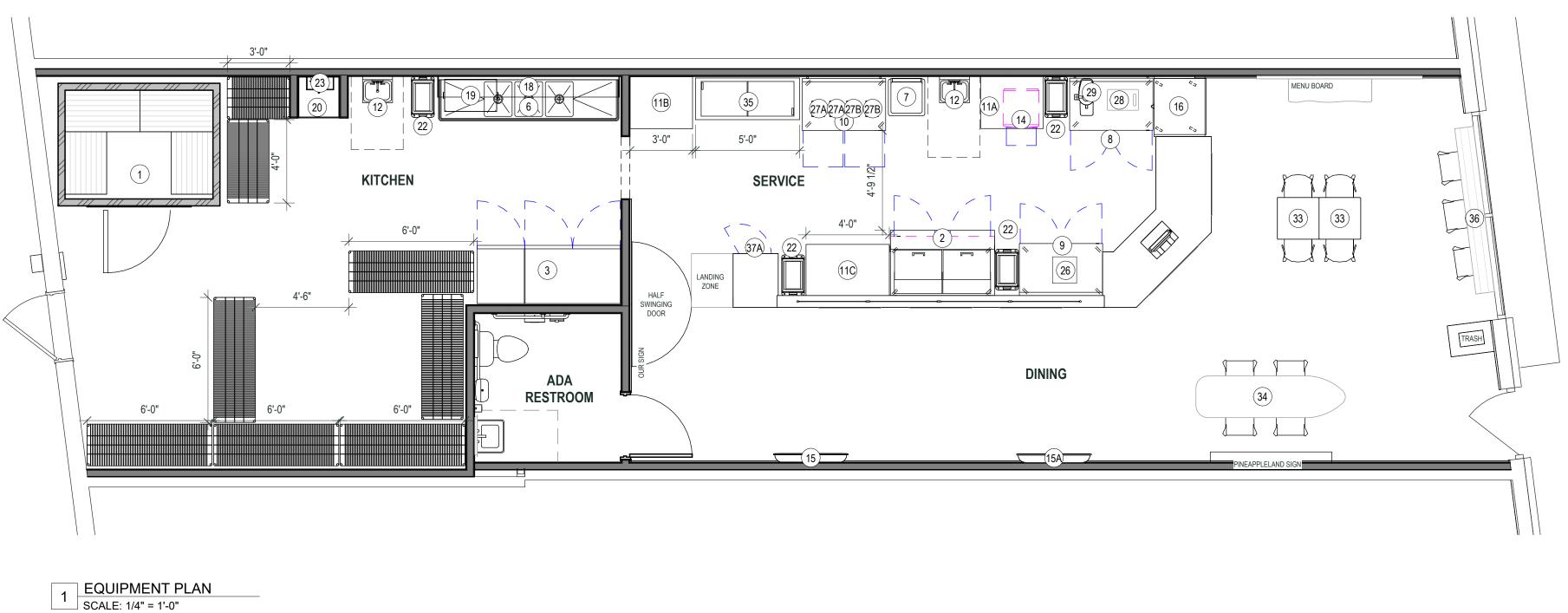




SHEET:

2 WALK-IN FREEZER CLEARANCE SCALE: 3/4" = 1'-0"



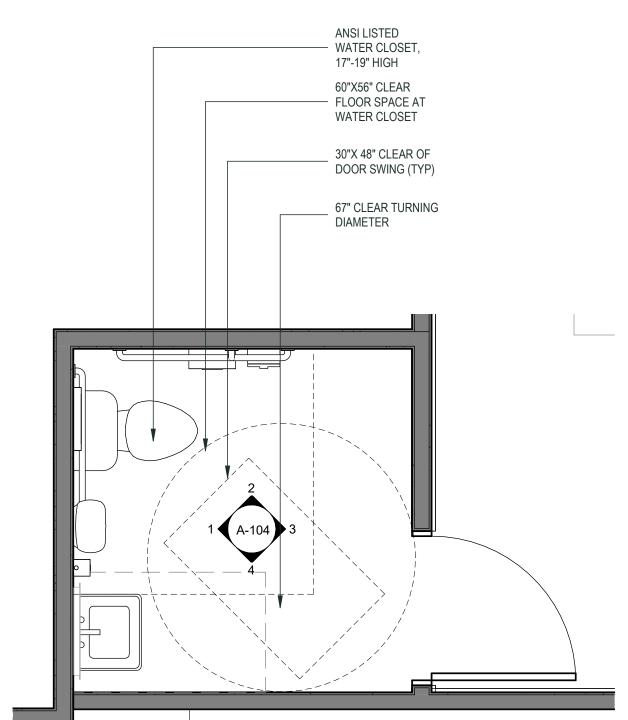


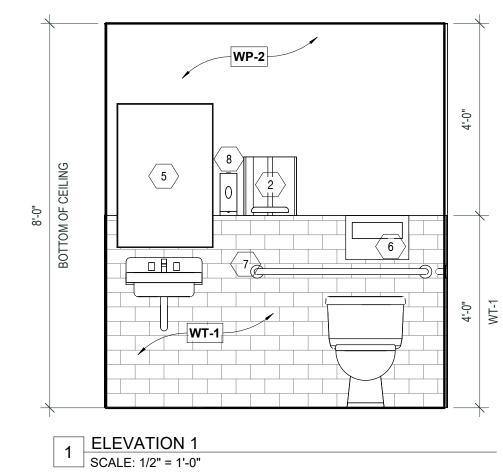
DESIGN STUDIO GREGORY RALPH ARCHITECT 239 US HWY 22; SUITE 301 GREEN BROOK, NJ 08812 TEL: 908 731 1626 GREG@GRALPHARCHITECT.COM LICENSED IN 35 STATES AND COUNTING COPYRIGHT Gregory Ralph, Architect **Gregory Ralph** MICHIGAN 1301072639 I HEARBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAW OF THE THIS STATE. EXISTING CONDITIONS SCHEMATIC DESIGN DESIGN DEVELOPMENT PROGRESS PRINT FULL RELEASE DESIGNED BY JG DRAWN BY: PROJECT #:

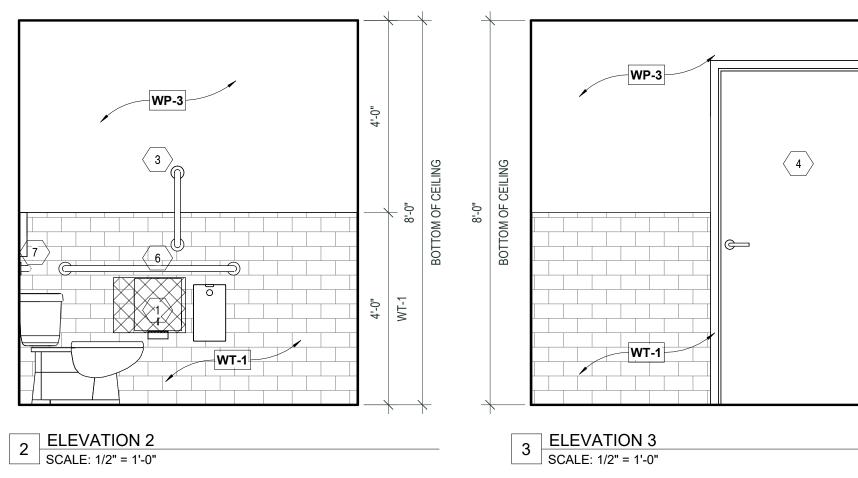
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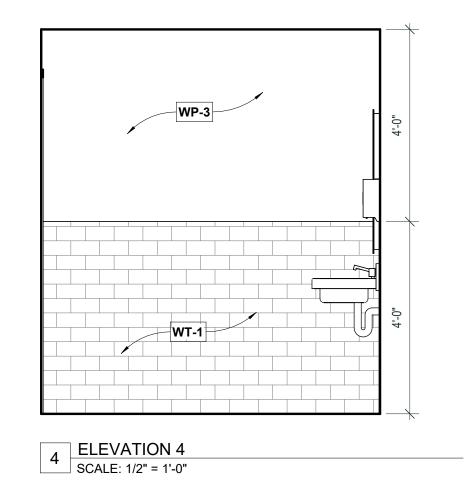
20647 MACK AVE GROSSE POINTE, MI 48236

As indicated DRAWING TITLE: **EQUIPMENT PLAN**









9 ENLARGED RESTROOM PLAN
SCALE: 1/2" = 1'-0"

	COPYRIGHT Gregory Ralph, Architect OF MICHOS GREGORY RALPH ARCHITECT NO. 1301072639 Gregory Ralp MICHIGAN NOT VALD FOR BUILDING UNLESS SIGNED AND SEALED BY ICENSE #:	2025
	XPIRATION: I HEARBY CERTIFY THAT THESE DOCL PREPARED OR APPROVED BY ME, AN DULY LICENSED PROFESSIONAL ARCHIT LAW OF THE THIS STATE ELEASE TYPE: EXISTING CONDITIONS SCHEMATIC DESIGN DESIGN DEVELOPMENT PROGRESS PRINT FULL RELEASE	ID THAT I AM A TECT UNDER THE
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DESIGN STUDIO

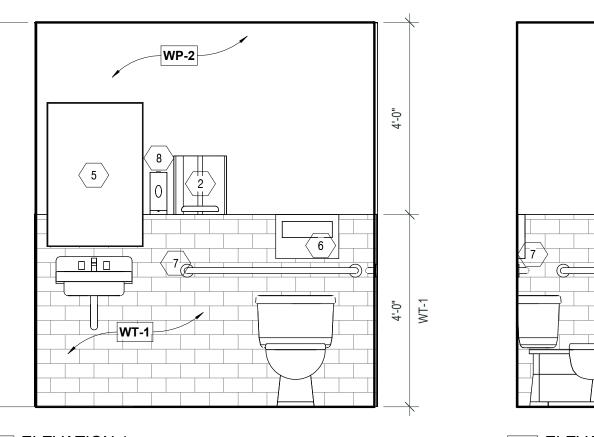
GREGORY RALPH ARCHITECT 239 US HWY 22; SUITE 301

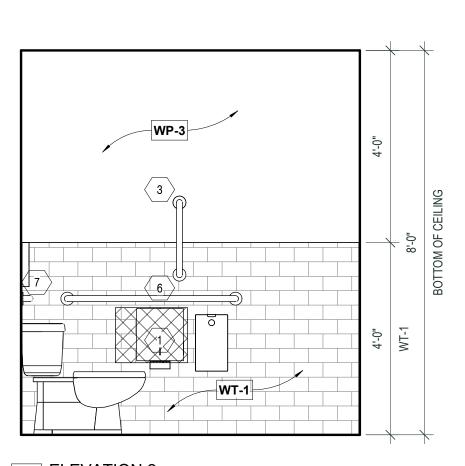
GREEN BROOK, NJ 08812 TEL: 908 731 1626

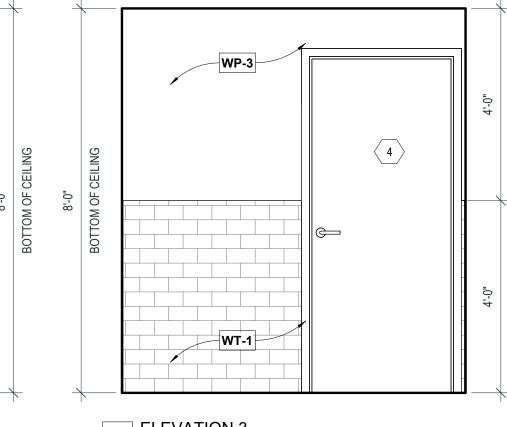
GREG@GRALPHARCHITECT.COM

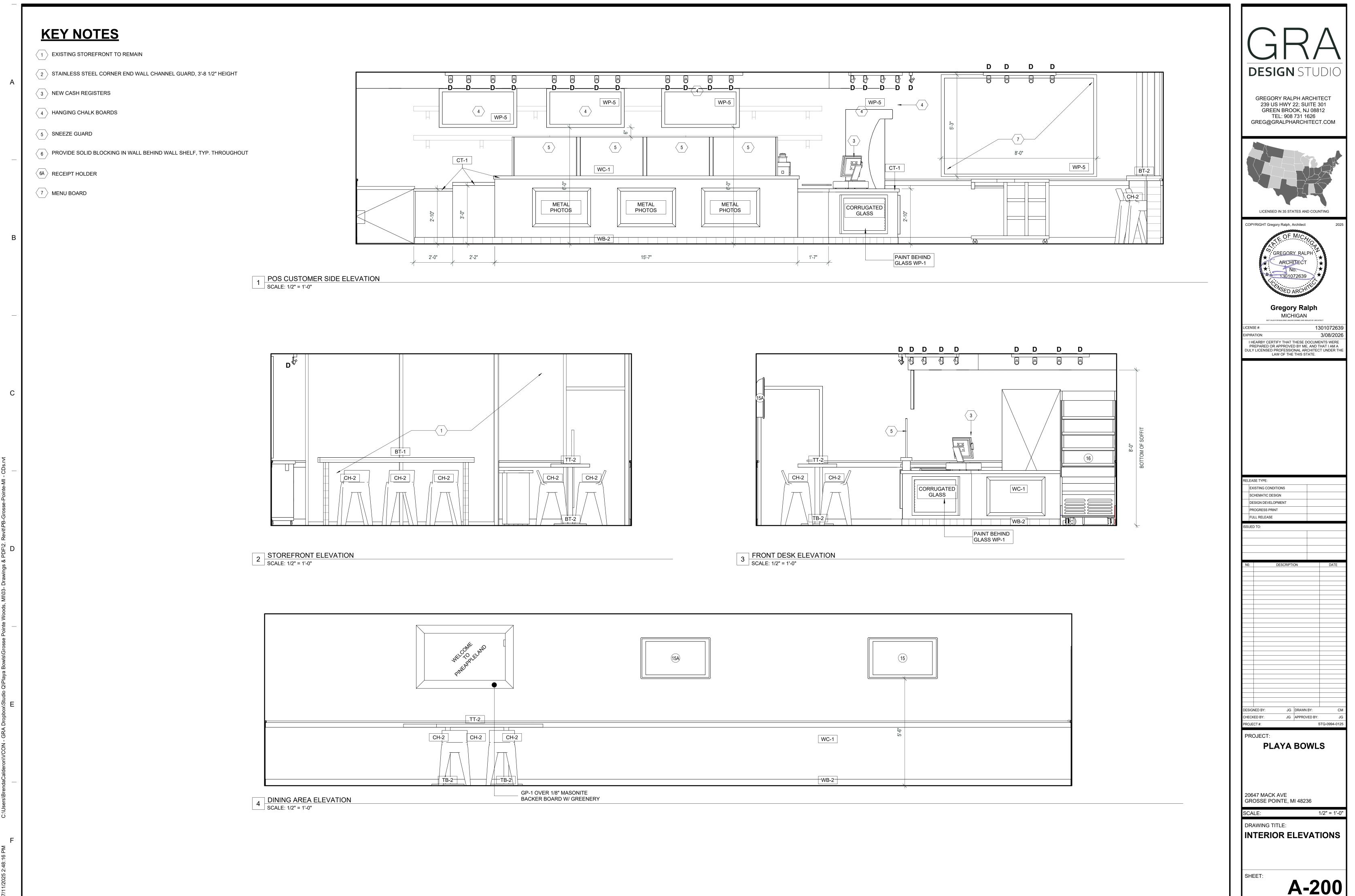
(1) TISSUE DISPENSER | SURFACE MOUNTED TOILET PAPER DISPENSER | SUMMIT 2 PAPER TOWELS $\left|\begin{array}{c} 3 \end{array}\right|$ 18" GRAB BAR 4 COAT HOOKS (5) MIRROR

PROVIDE CONCEALED BLOCKING AND STRUCTURAL SUPPORT FOR ALL GRAB BARS, TOWEL BARS AND MIRRORS, FOR A MINIMUM OF 250 LB. LOADING. ALL EXPOSED PIPES UNDER SINKS TO BE PROTECTED MITH ADA COMPLIANT PIPE JACKETS. MIRROR GLASS TO BE 1/4* TEMPERED.

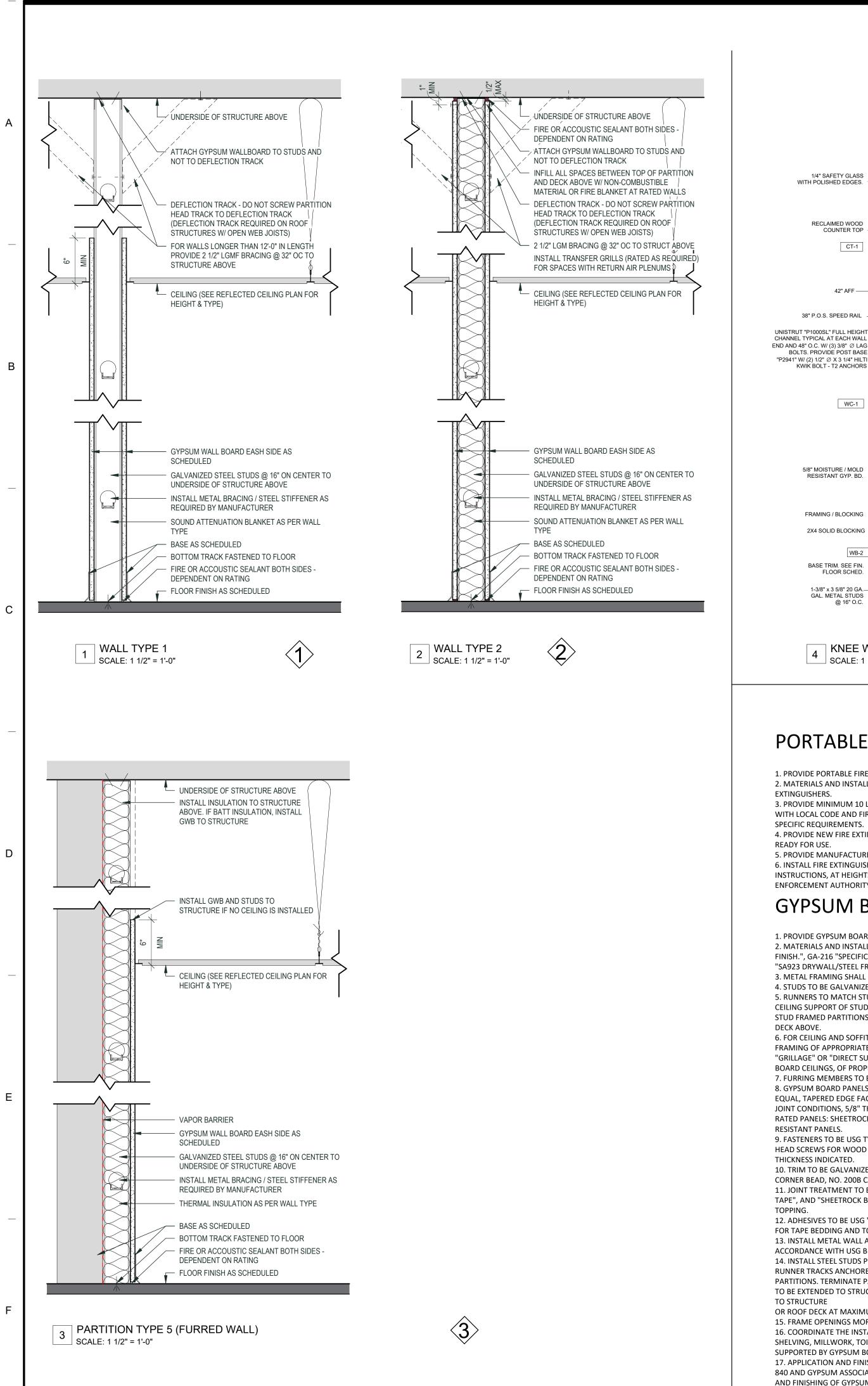


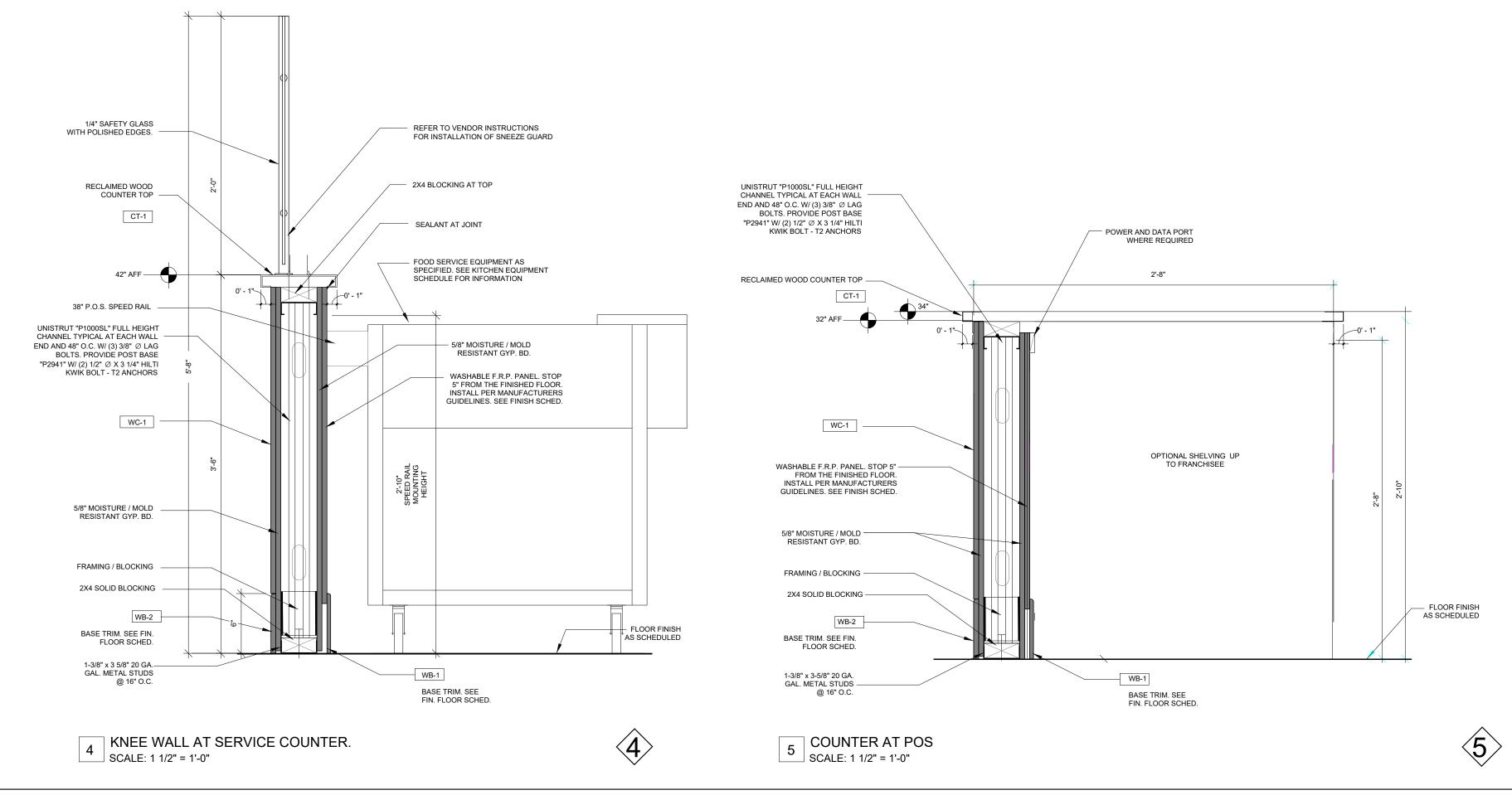






KEY NOTES 1 EXISTING STOREFRONT TO REMAIN **DESIGN** STUDIO $\left\langle 2 \right\rangle$ STAINLESS STEEL CORNER END WALL CHANNEL GUARD, 3'-8 1/2" HEIGHT GREGORY RALPH ARCHITECT 239 US HWY 22; SUITE 301 GREEN BROOK, NJ 08812 TEL: 908 731 1626 GREG@GRALPHARCHITECT.COM 3 NEW CASH REGISTERS 4 HANGING CHALK BOARDS 5 SNEEZE GUARD 6 PROVIDE SOLID BLOCKING IN WALL BEHIND WALL SHELF, TYP. THROUGHOUT 6A RECEIPT HOLDER 7 MENU BOARD LICENSED IN 35 STATES AND COUNTING 5 5 5 5 COPYRIGHT Gregory Ralph, Architect CT-1 1x2 HEMLOCK Gregory Ralph MICHIGAN 1301072639 1 FRONT LINE EMPLOYEE SIDE ELEVATION SCALE: 1/2" = 1'-0" I HEARBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAW OF THE THIS STATE. EXISTING CONDITIONS DESIGN DEVELOPMENT FULL RELEASE PAINT TDB: CONTACT YOUR PLAYA BOWLS CONSTRUCTION MANAGER TOP SHELF TO ALIGN WITH END OF TILE WT-1 **300** WB-1 DESIGNED BY: JG DRAWN BY: 2 REAR LINE ELEVATION
SCALE: 1/2" = 1'-0" PROJECT: **PLAYA BOWLS** 20647 MACK AVE GROSSE POINTE, MI 48236 1/2" = 1'-0" DRAWING TITLE: INTERIOR ELEVATIONS





PORTABLE FIRE EXTINGUISHES

1. PROVIDE PORTABLE FIRE EXTINGUISHERS AS SHOWN AND SPECIFIED. 2. MATERIALS AND INSTALLATION SHALL CONFORM TO NFPA 10 "STANDARD FOR PORTABLE FIRE

3. PROVIDE MINIMUM 10 LB. CAPACITY FIRE EXTINGUISHERS IN QUANTITY AND TYPE COMPLYING WITH LOCAL CODE AND FIRE REGULATIONS REQUIREMENTS. REFER TO DRAWINGS FOR LOCATION

4. PROVIDE NEW FIRE EXTINGUISHERS FULLY LOADED, TESTED, UL AND FM LABELED AND LISTED AND READY FOR USE.

5. PROVIDE MANUFACTURER'S RECOMMENDED MOUNTING BRACKETS AND HARDWARE. 6. INSTALL FIRE EXTINGUISHERS IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. AT HEIGHTS AND LOCATIONS ACCEPTABLE TO THE LOCAL FIRE REGULATIONS

GYPSUM BOARD SYSTEMS

1. PROVIDE GYPSUM BOARD SYSTEMS AS SHOWN AND SPECIFIED.

2. MATERIALS AND INSTALLATION SHALL CONFORM TO THE GA 214-90 "LEVELS OF GYPSUM BOARD FINISH.", GA-216 "SPECIFICATIONS FOR APPLICATION AND FINISHING OF GYPSUM BOARD.", USG "SA923 DRYWALL/STEEL FRAMED SYSTEMS."

3. METAL FRAMING SHALL COMPLY WITH ASTM C 754 AND ASTM C 645 FOR MATERIALS AND SIZES. 4. STUDS TO BE GALVANIZED STEEL, C-SHAPED, SIZES INDICATED, 20 GAGE "ST20" 5. RUNNERS TO MATCH STUDS, TYPE RECOMMENDED BY STUD MANUFACTURER FOR FLOOR AND

CEILING SUPPORT OF STUDS. PROVIDE FLEXIBLE CEILING RUNNERS FOR FULL HEIGHT METAL STUD FRAMED PARTITIONS CONTINUOUS FROM FLOOR TO UNDERSIDE OF STRUCTURAL MEMBERS OR DECK ABOVE.

6. FOR CEILING AND SOFFIT METAL FRAMING/SUSPENSION SYSTEMS, PROVIDE EITHER METAL STUD FRAMING OF APPROPRIATE SIZE AND GAGE FOR SPANS INDICATED OR FURRING CHANNEL "GRILLAGE" OR "DIRECT SUSPENSION SYSTEM" DESIGNED FOR CONCEALED SUPPORT OF GYPSUM BOARD CEILINGS, OF PROPER TYPE FOR USE INDICATED.

7. FURRING MEMBERS TO BE 20 GAGE, GALVANIZED STEEL SCREW TYPE, HAT-SHAPED FURRING. 8. GYPSUM BOARD PANELS TO BE USG "SHEETROCK" COMPLYING WITH ASTM C1396 OR APPROVED EQUAL, TAPERED EDGE FACE PANELS, 48" WIDE, IN MAXIMUM LENGTHS AVAILABLE TO MINIMIZE END JOINT CONDITIONS, 5/8" THICK. FOR GENERAL USE PANELS: SHEETROCK REGULAR PANELS. FIRE RATED PANELS: SHEETROCK FIRECODE CORE PANELS. WATER-RESISTANT PANELS: MOISTURE RESISTANT PANELS.

9. FASTENERS TO BE USG TYPE "S" BUGLE HEAD SCREWS FOR METAL FRAMING, USG TYPE "W" BUGLE HEAD SCREWS FOR WOOD FRAMING, MANUFACTURER'S RECOMMENDED LENGTH FOR PANEL THICKNESS INDICATED.

10. TRIM TO BE GALVANIZED STEEL WITH KNURLED AND PERFORATED FLANGES. USG DUR-A-BEAD CORNER BEAD, NO. 200B CASING BEAD METAL TRIM, NO. 093 CONTROL JOINT. 11. JOINT TREATMENT TO BE USG JOINT TREATMENT SYSTEM, UTILIZING "SHEETROCK BRAND JOINT TAPE", AND "SHEETROCK BRAND SETTING-TYPE (DURABOND)" COMPOUND FOR TAPE BEDDING AND

12. ADHESIVES TO BE USG "SHEETROCK BRAND SETTING-TYPE (DURABOND) 210 OR 90" COMPOUND

FOR TAPE BEDDING AND TOPPING. 13. INSTALL METAL WALL AND PARTITION FRAMING AND CEILING SUSPENSION/ SUPPORT SYSTEMS IN ACCORDANCE WITH USG BULLETIN SA 923 AND COMPLYING WITH ASTM C754.

14. INSTALL STEEL STUDS PER SCHEDULE OR AT SPACING INDICATED WITH BOTTOM AND TOP RUNNER TRACKS ANCHORED TO SUBSTRATES. PROVIDE FLEXIBLE CEILING RUNNER TRACKS AT FULL HEIGHT PARTITIONS. TERMINATE PARTITION STUD SYSTEM 4" ABOVE CEILINGS, EXCEPT WHERE INDICATED TO BE EXTENDED TO STRUCTURAL SUPPORT OR ROOF DECK ABOVE. BRACE TOPS OF PARTITION FRAMING TO STRUCTURE

OR ROOF DECK AT MAXIMUM 4'-0" ON CENTER SPACING. 15. FRAME OPENINGS MORE THAN 2'-0" WIDE WITH TWO 20 GAGE STUDS AT EACH JAMB. 16. COORDINATE THE INSTALLATION OF SUPPLEMENTARY BLOCKING AND NAILERS, TO SUPPORT SHELVING, MILLWORK, TOILET ACCESSORIES, AND SIMILAR WORK THAT CANNOT BE ADEQUATELY SUPPORTED BY GYPSUM BOARD ALONE.

17. APPLICATION AND FINISHING: INSTALL AND FINISH GYPSUM BOARD TO COMPLY WITH ASTM C 840 AND GYPSUM ASSOCIATION GA 216 "RECOMMENDED SPECIFICATIONS FOR THE APPLICATION AND FINISHING OF GYPSUM BOARD."

FINISH CARPENTRY AND MILLWORK

1. MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE FOLLOWING: AWI "ARCHITECTURAL WOODWORK QUALITY STANDARDS - 1999."

2. MILLWORK MATERIALS AND CONSTRUCTION AS DETAILED ON THE DRAWINGS. 3. MILLWORK DESIGN AND FABRICATION DETAILS SHOWN ON THE DRAWINGS INDICATE DESIGN INTENT. UNLESS OTHERWISE INDICATED, PROVIDE MANUFACTURER'S STANDARD FABRICATION

METHODS. 4. FABRICATE MILLWORK IN ACCORDANCE WITH AWI "CUSTOM GRADE" REQUIREMENTS. WHERE

DETAILS ARE NOT SHOWN, COMPLY WITH APPLICABLE QUALITY STANDARDS OR WITH ALTERNATE DETAILS ACCEPTABLE TO ARCHITECT AS FABRICATOR'S OPTION. 5. FABRICATE FINISHED WORK PROPERLY FRAMED, CLOSELY FIT AND ACCURATELY SET TO REQUIRED

LINES AND LEVELS AND RIGIDLY SECURED IN PLACE. 6. FABRICATE WORK STRAIGHT, PLUMB, LEVEL AND IN TRUE ALIGNMENT; NEATLY AND ACCURATELY

FIT, SCRIBED AND THOROUGHLY SECURED. PLANE AND SAND MITERS AND OTHER JOINTS. EASE ALL SQUARE EDGES. PROVIDE MILLWORK CLEAN AND FREE FROM WARP, TWIST, OPEN JOINTS AND OTHER DEFECTS.

7. INSTALL FINISH CARPENTRY AND MILLWORK PRODUCTS PLUMB, LEVEL, TRUE AND STRAIGHT WITH NO DISTORTION. SHIM AS REQUIRED USING CONCEALED SHIMS. INSTALL TO A TOLERANCE OF 1/8" IN 8'-0" FOR PLUMB AND LEVEL (INCLUDING COUNTERTOPS) AND WITH 1/16" MAXIMUM OFFSET IN FLUSH ADJOINING SURFACES, 1/8" MAXIMUM OFFSETS IN REVEALED ADJOINING SURFACES. 8. ANCHOR FINISH CARPENTRY AND MILLWORK ITEMS TO BUILT-IN PLACE BLOCKING, OR DIRECTLY ATTACH TO SUBSTRATE FRAMING. SECURE TO GROUNDS, BLOCKING AND NAILERS WITH COUNTERSUNK, CONCEALED FASTENERS AND BLIND NAILING AS REQUIRED FOR A COMPLETE

INSTALLATION. 9. INSTALL CASEWORK WITHOUT DISTORTION SO THAT DOORS AND DRAWERS WILL FIT OPENINGS PROPERLY AND BE ACCURATELY ALIGNED. ADJUST HARDWARE TO CENTER DOORS AND DRAWERS IN OPENINGS AND TO PROVIDE UNENCUMBERED OPERATION.

DEMOLITION

1. IT IS NOT INTENDED TO SHOW ON DRAWINGS OR DESCRIBE HEREIN EACH AND EVERY ITEM TO BE REMOVED. THE CONTRACTOR SHALL CONSULT THE DRAWINGS AND DETAILS FOR NEW WORK TO ENSURE CONTINUING PROGRESS OF THE WORK WITHOUT INTERMITTENT DEMOLITION.

2. ALL DEBRIS SHALL BE REMOVED FROM THE PREMISES DAILY. DO NOT MAINTAIN A CONDITION OF THE WORK THAT REPRESENTS A THREAT TO LIFE SAFETY OR PROPERTY.

3. OBTAIN AND PAY FOR ALL PERMITS AND NOTICES REQUIRED FOR THE DEMOLITION WORK. NOTIFY THE LOCAL POLICE DEPARTMENT WHEN THERE IS A REQUIREMENT TO BLOCK TRAFFIC, EITHER PEDESTRIAN OR VEHICULAR. 4. COMPLY WITH ALL APPLICABLE NOISE AND DUST POLLUTION REGULATIONS

5. LOCATE FIRE EXTINGUISHERS AS DIRECTED BY THE LOCAL OFFICIAL, ONE PER EXIT DOOR MINIMUM.

6. ALL INTERIOR EXITS ARE TO BE MAINTAINED UNOBSTRUCTED. 7. COORDINATE UTILITY OUTAGES WITH THE OWNER.

8. OBTAIN THE SERVICES AND PAY FOR A LICENSED PROFESSIONAL ENGINEER TO DESIGN REQIURED SHORING AND UNDERPINNING.

9. STRUCTURAL DAMAGE CAUSED BY DEMOLITION WORK SHALL BE IMMEDIATELY REPORTED TO THE OWNER AND REPAIRED AT THE CONTRACTORS EXPENSE. 10. VERIFY LOCATION OF AND PROTECT EXISTING PIPING AND WIRING TO REMAIN. 11. CLOSE HEATING VENTS IN THE AREA OF WORK AND INSTALL ZIPPERED DUST DOORS. TO MINIMIZE THE AMOUNT OF CONSTRUCTION DEBRIS AFFECTING THE UNALTERED PORTIONS OF THE STRUCTURE.

SUSPENDED CEILING SYSTEMS

1. PROVIDE ACOUSTICAL CEILING SYSTEMS AS SHOWN AND SPECIFIED. 2. MATERIALS AND INSTALLATION SHALL CONFORM TO, CISCA "ACOUSTICAL CEILINGS - USE AND PRACTICE.", ASTM C635, AND ASTM C636.

3. MATERIALS AND FINISHES AS INDICATED ON DRAWINGS 4. PROVIDE INTERMEDIATE DUTY, STRUCTURAL CLASS, DIRECT HUNG SYSTEMS ADEQUATE TO SUPPORT LIGHT FIXTURES, CEILING DIFFUSERS AND OTHER NORMAL ACCESSORIES. 5. RE-USE EXISTING CEILING GRID AS INDICATED ON DRAWINGS, OR ORDER NEW "TEE" GRID SYSTEM

TO MATCH EXISTING. 6. HANGER WIRE TO BE NO. 12 SWG GALVANIZED STEEL WIRE. 7. INSTALL ACOUSTICAL CEILING MATERIALS AND SUSPENSION SYSTEMS IN STRICT ACCORDANCE

WITH MANUFACTURER'S RECOMMENDATIONS, COMPLYING WITH GOVERNING REGULATIONS AND INDUSTRY STANDARDS APPLICABLE TO THE WORK. 8. NEW SUSPENSION SYSTEM INSTALLATION SHALL BE LASER LEVELED WITH A MAXIMUM SURFACE

LEVELING TOLERANCE OF 1/8" IN 12'-0". ADJUST EXISTING SUSPENSION SYSTEM A REQUIRED. 9. INSTALL EXPOSED TEE SUSPENSION SYSTEMS WITH MAIN TEES NOMINALLY 12 FEET LONG SPACED 48 INCHES O.C. AND CROSS TEES NOMINALLY 4 FEET LONG SPACED 24 INCHES O.C. 10. HANGER WIRE SHALL BE SPACED 48" O.C. ALONG MAIN TEES, AT ALL FOUR CORNERS OF LIGHT

FIXTURES (WHERE APPLICABLE), AT MIDPOINT OF CROSS TEES ADJACENT TO LIGHT FIXTURES AND DUCT OUTLETS, AND ADJACENT TO MAIN TEE SPLICES.

11. SECURE WIRE HANGERS BY LOOPING AND WIRE-TYING EITHER DIRECTLY TO BUILDING

STRUCTURE OR TO HANGERS THAT ARE SECURE AND APPROPRIATE FOR SUBSTRATE. 12. PROVIDE EDGE TRIM MOLDING AT PERIMETER OF ACOUSTICAL CEILING AT NEW INSTALLATION AND INTERMEDIATE VERTICAL SURFACES. USE MAXIMUM LENGTHS. MITER TRIM CORNERS TO

PROVIDE TIGHT, ACCURATE JOINTS. CONNECT MOLDINGS SECURELY TO SUBSTRATE SURFACES. 13. INSTALL LAY-IN PANELS LEVEL, IN UNIFORM PLANE, WITH JOINTS SNUG AND SQUARE AND PANELS FREE FROM DAMAGE OR SOILING. FIT BORDER UNITS NEATLY AGAINST ABUTTING SURFACES. SCRIBE AND CUT PANELS TO FIT ACCURATELY AT BORDERS AND PENETRATIONS.

CERAMIC TILE

1. PROVIDE CERAMIC WALL TILE AS SHOWN AND SPECIFIED. 2. MATERIALS AND INSTALLATION SHALL CONFORM TO ANSI A137.1 "CERAMIC TILE." AND TCA

"HANDBOOK FOR CERAMIC TILE INSTALLATION." 3. REFER TO SCHEDULES ON PLANS FOR MANUFACTURER AND FINISH INFORMATION.

MECHANICAL WORK

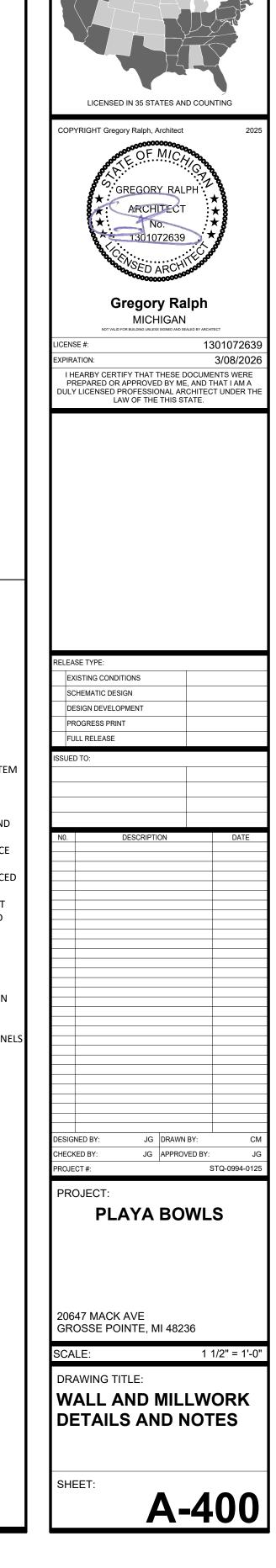
1. REFER TO MECHANICAL SPECIFICATIONS IN MECHANICAL DRAWING SET.

PLUMBING WORK

1. REFER TO PLUMBING SPECIFICATIONS IN PLUMBING DRAWING SET.

ELECTRICAL WORK

1. REFER TO ELECTRICAL SPECIFICATIONS IN ELECTRICAL DRAWING SET.



DESIGN STUDIO

GREGORY RALPH ARCHITECT

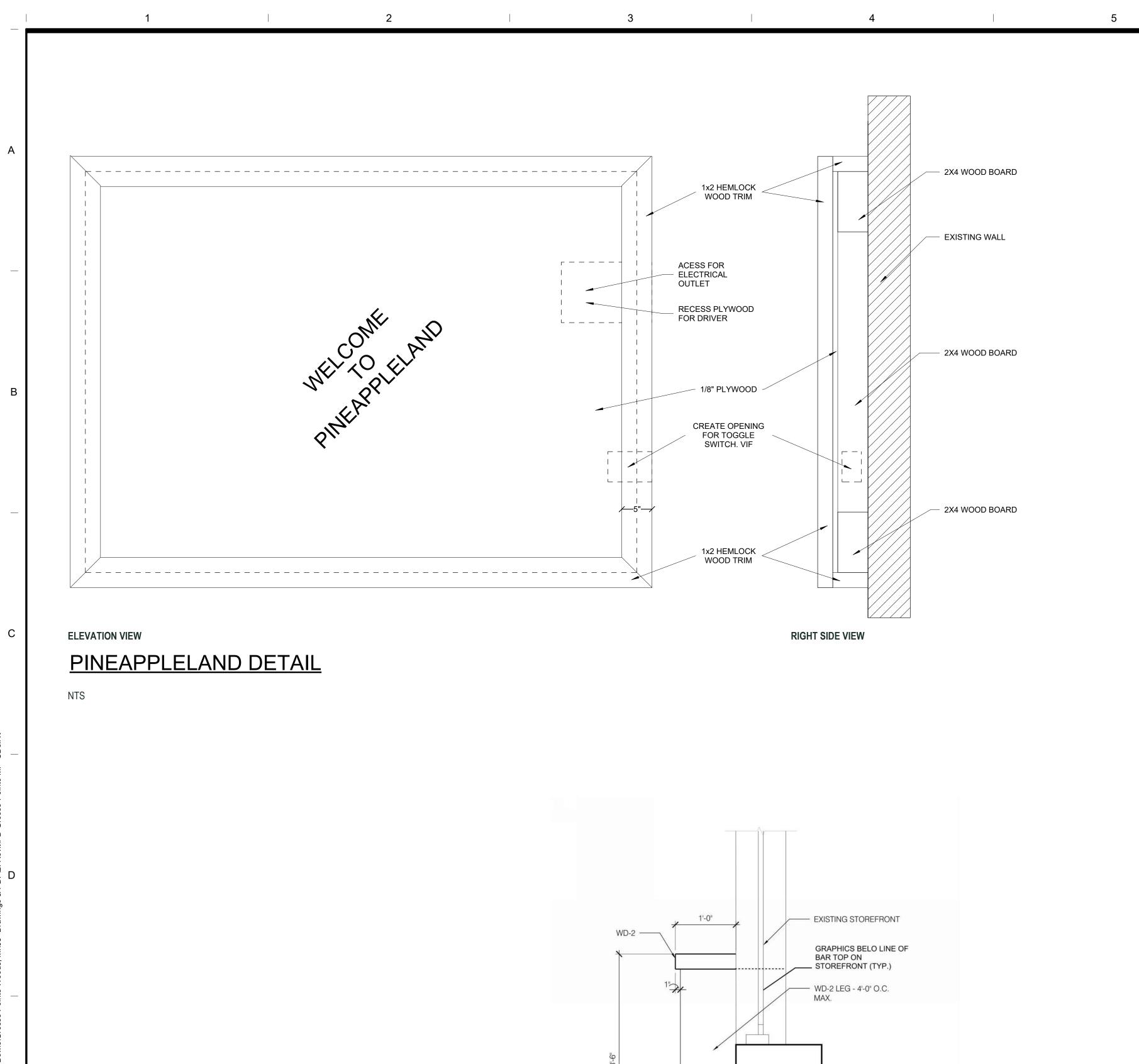
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GREEN BROOK, NJ 08812

TEL: 908 731 1626

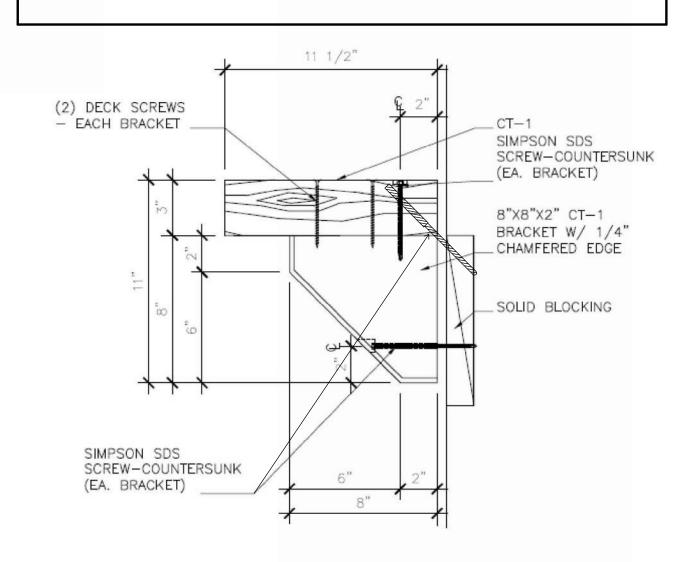
GREG@GRALPHARCHITECT.COM

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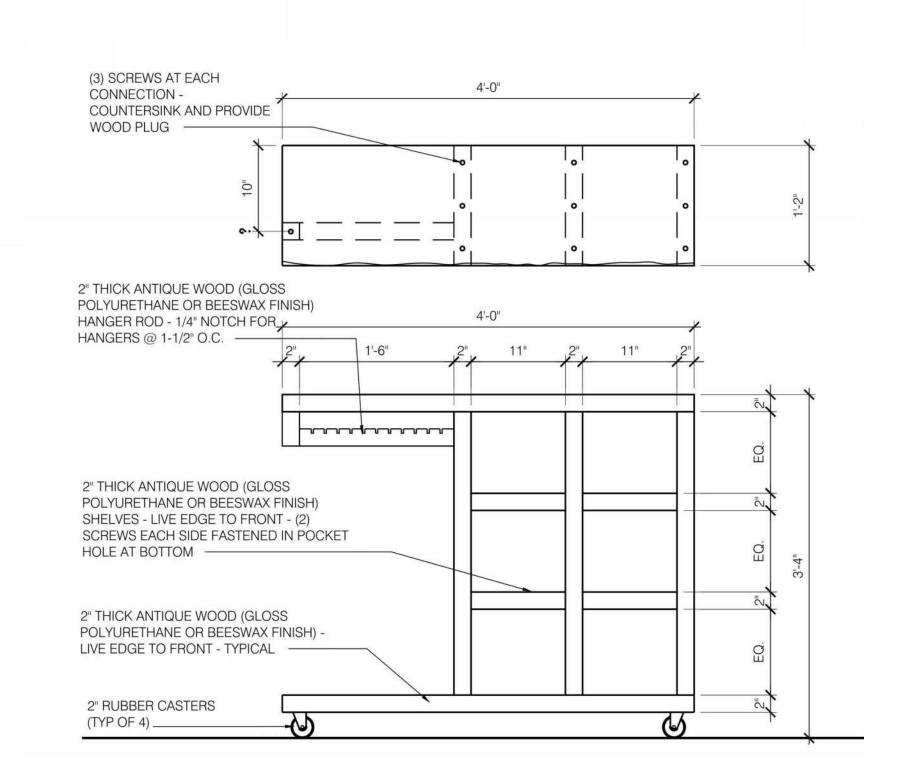


GENERAL NOTE:

PAINT TDB - CONTACT YOUR PLAYA **BOWLS CONSTRUCTION MANAGER**



BANANA SHELVES DETAIL



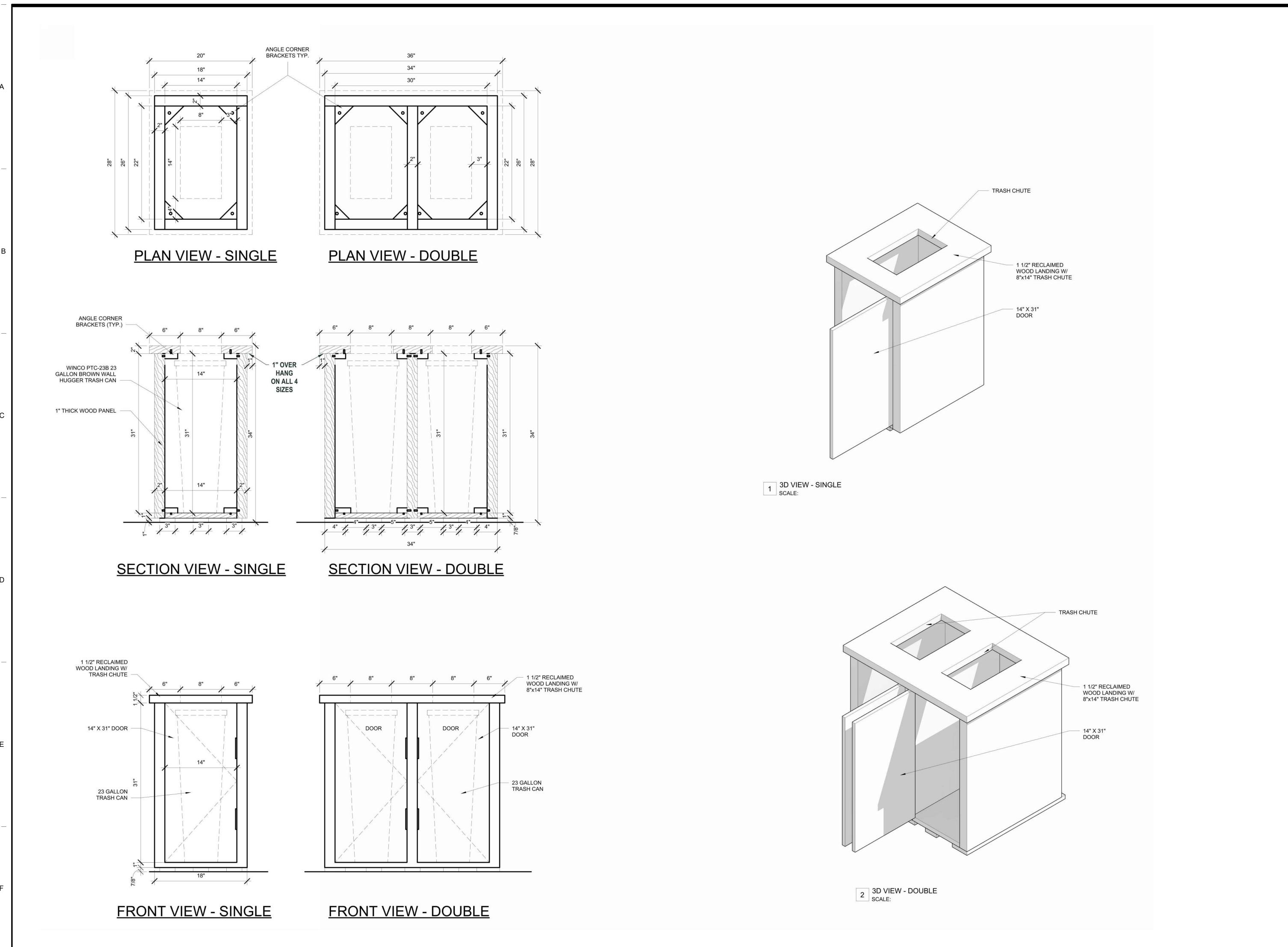
MERCH CART DETAIL

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METAL CLIP ANGLE

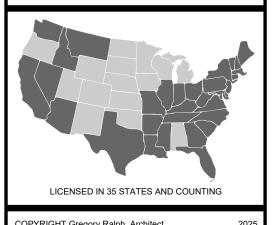
BAR TOP @ STOREFRONT DETAIL

TAPCON TO FLOOR-TYP.

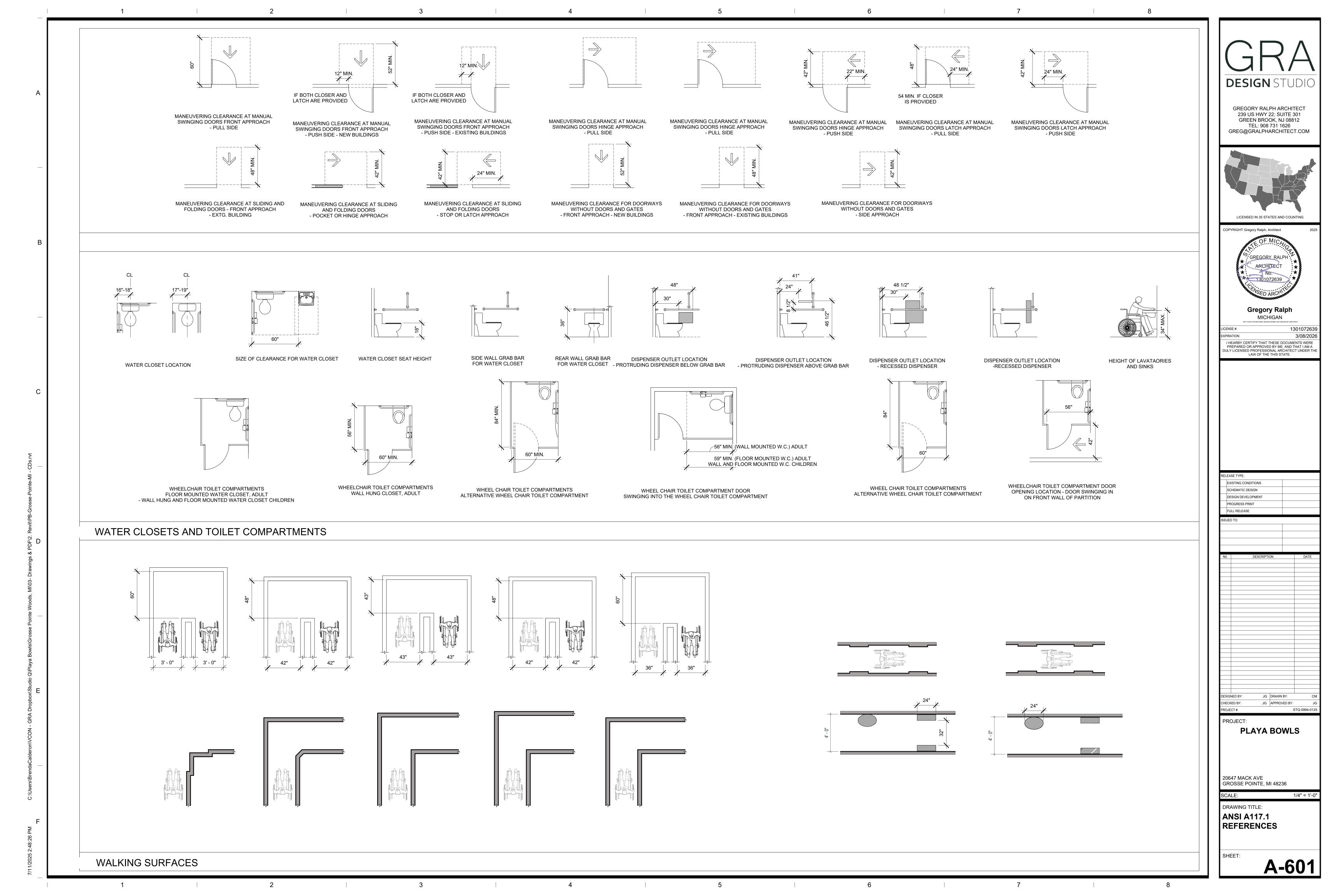


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A-402







DOCUMENTS B. PRIOR TO FABRICATION AND INSTALLATION OF NEW COMPONENTS, FIELD VERIFY ALL EXISTING AND NEW DIMENSIONS AND INSTALLATION CONDITIONS THAT MAY AFFECT THE WORK. DO NOT SCALE THE DRAWINGS TO ESTABLISH LOCATIONS OF ITEMS THAT ARE NOT LOCATED USING DIMENSIONS.

1. ALL DIMENSIONS ARE TO ROUGH FACE OF STUD OR CENTERLINE OF STRUCTURE, UNLESS OTHERWISE INDICATED. 2. VERIFY THAT ALL SUBCONTRACTORS HAVE REVIEWED AND COORDINATED

LOCATIONS OF THEIR EQUIPMENT AND FURNISHINGS EXPOSED TO VIEW WITH

THE ARCHITECTURAL DRAWINGS. REVIEW QUESTIONS WITH THE ARCHITECT C. COORDINATE NEW WORK INDICATED ON THE CONTRACT DOCUMENTS WITH NEW WORK THAT MAY BE PROVIDED BY THE OWNER AND TENANT UNDER SEPARATE

D. COORDINATE THE WORK OF VENDORS, CONTRACTORS AND SUBCONTRACTORS PROVIDING FIXTURES. FURNITURE AND EQUIPMENT IDENTIFIED AS "BY OWNER" IN THESE DRAWINGS AND SPECIFICATIONS

 NOTIFY THE TENANT IN TIMELY FASHION IF ANY PROBLEMS DEVELOP WITH THE PERFORMANCE OF THESE VENDORS, CONTRACTORS OR SUBCONTRACTORS. E. COORDINATE THE SCHEDULING, SEQUENCING, AND THE WORK OF ALL TRADES AND SUBCONTRACTORS TO ASSURE EFFICIENT AND ORDERLY SEQUENCES OF

INSTALLATION OF INTERDEPENDENT CONSTRUCTION ELEMENTS F. VERIFY THAT THE UTILITY REQUIREMENT CHARACTERISTICS OF OPERATING EQUIPMENT ARE COMPATIBLE WITH THE BUILDING UTILITY SERVICES. COORDINATE WORK OF THE VARIOUS SPECIFICATION SECTIONS HAVING INTERDEPENDENT RESPONSIBILITIES FOR INSTALLING, CONNECTING TO, AND PLACING IN SERVICE SUCH FOUIPMENT

G. COORDINATE THE INSTALLATION AND PHYSICAL SPACE REQUIREMENTS OF PLUMBING, MECHANICAL AND ELECTRICAL WORK THAT ARE INDICATED DIAGRAMMATICALLY ON THE DRAWINGS. FOLLOW ROUTING SHOWN FOR PIPING DUCTS AND CONDUIT AS CLOSELY AS PRACTICAL. INSTALL RUNS PARALLEL WITH AND PERPENDICULAR TO THE LINE OF THE BUILDING. UTILIZE SPACES AS EFFICIENTLY AS POSSIBLE TO MAXIMIZE ACCESSIBILITY FOR OTHER WORK INSTALLATION AND FOR MAINTENANCE AND FOR REPAIR

1. CONCEAL PIPING, DUCTS AND CONDUIT WITHIN THE CONSTRUCTION, EXCEPT AS OTHERWISE INDICATED. 2. COORDINATE LOCATIONS OF REGISTERS, FIXTURES AND OUTLETS WITH FINISH

H. COORDINATE COMPLETION AND CLEANUP WORK OF ALL TRADES AND SUBCONTRACTORS IN PREPARATION FOR SUBSTANTIAL COMPLETION. I. TO MINIMIZE DISRUPTION OF OWNER'S ACTIVITIES AFTER TENANT OCCUPANCY OF THE PROPERTY, COORDINATE ACCESS TO THE PROPERTY WITH THE TENANT'S CONSTRUCTION MANAGER FOR CORRECTION OF DEFECTIVE WORK AND WORK NOT IN

ACCORDANCE WITH THE CONTRACT DOCUMENTS.

SUBMITTALS: A. ONLY WHEN INDICATED IN THE SPECIFICATIONS OR DRAWINGS SUBMIT SHOP DRAWINGS, PRODUCT DATA, AND/OR SAMPLES TO THE ARCHITECT FOR REVIEW. ALL SUBMITTALS SHALL BE MADE DIRECTLY TO THE ARCHITECT BY THE GENERAL CONTRACTOR. ONLY SUBMITTALS FOR SPECIFIED PRODUCTS WILL BE ACCEPTED UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FOR A SUBSTITUTION (REFER TO SECTION 01630). SUBMITTALS SHALL BE MADE WITH RESPECT TO THE CONSTRUCTION SCHEDULE TO ALLOW FOR ADEQUATE REVIEW TIME: ALLOW (5) BUSINESS DAYS FOR REVIEW OF SUBMITTALS DIVISIONS 3 THROUGH 10 AND ALLOW (10) BUSINESS DAYS FOR REVIEW OF SUBMITTALS IN ALL OTHER DIVISIONS.

> SHOP DRAWINGS a. SUBMIT ELECTRONIC COPIES OF EACH SHEET OF DRAWINGS. SHOP DRAWINGS ARE ORIGINAL DRAWINGS PREPARED BY THE SUBCONTRACTOR OR VENDOR FOR THE PURPOSE OF CONVEYING INFORMATION TO THE ARCHITECT AND/OR ENGINEER ON HOW A BUILDING ELEMENT OR PRODUCT WILL BE CONSTRUCTED IN SUFFICIENT DETAIL FOR THE ARCHITECT AND/OR ENGINEER TO DETERMINE COMPLIANCE WITH THE DESIGN INTENT.

B. IN ALL CASES ONE COPY OF THE SUBMITTAL SHALL BE RETURNED TO THE GENERAL CONTRACTOR. ELECTRONIC SUBMITTALS FOR SHOP DRAWING OR PRODUCT DATA IN EITHER PDF OR DWF FORMAT ARE ACCEPTABLE FOR REVIEW. ALL SUBMITTALS. REGARDLESS OF FORMAT, MUST BEAR THE GENERAL CONTRACTOR'S STAMP INDICATING THE SUBMITTAL HAS BEEN REVIEWED AND APPROVED. ANY SUBMITTAL NOT MEETING THE REQUIREMENTS SET FORTH WILL BE REJECTED BY THE ARCHITECT.

REQUESTS FOR INFORMATION A. IN THE EVENT THAT THE GENERAL CONTRACTOR, OR A SUBCONTRACTOR, AT ANY TIER, DETERMINES THAT SOME PORTION OF THE DRAWINGS, SPECIFICATIONS, OR OTHER CONTRACT DOCUMENTS REQUIRES A CLARIFICATION OR INTERPRETATION BY THE ARCHITECT. THE GENERAL CONTRACTOR SHALL SUBMIT A REQUEST FOR

INFORMATION IN WRITING TO THE ARCHITECT IN AN ELECTRONIC COPY. B. REQUESTS FOR INFORMATION MAY ONLY BE SUBMITTED BY THE GENERAL CONTRACTOR AND MAY ONLY BE SUBMITTED TO THE ARCHITECT. THE GENERAL CONTRACTOR SHALL CLEARLY AND CONCISELY SET FORTH THE ISSUE FOR WHICH CLARIFICATION OR INTERPRETATION IS SOUGHT AND WHY A RESPONSE IS NEEDED FROM THE ARCHITECT OR THE ARCHITECT'S CONSULTANTS. IN THE REQUEST FOR INFORMATION. THE GENERAL CONTRACTOR SHALL SET FORTH AN INTERPRETATION OR UNDERSTANDING OF THE REQUIREMENT ALONG WITH AN EXPLANATION OF WHY

SUCH AN UNDERSTANDING WAS REACHED. RESPONSES TO REQUESTS FOR INFORMATION SHALL BE ISSUED UPON RECEIPT. BUT NO LATER THAN FIVE (5) WORKING DAYS OF RECEIPT OF THE REQUEST FROM THE GENERAL CONTRACTOR; UNLESS THE ARCHITECT DETERMINES THAT A LONGER AMOUNT OF TIME IS NECESSARY TO PROVIDE AN ADEQUATE RESPONSE. IF A LONGER AMOUNT OF TIME IS DETERMINED NECESSARY BY THE ARCHITECT. THE ARCHITECT WILL, WITHIN FIVE (5) WORKING DAYS OF RECEIPT OF THE REQUEST, NOTIFY THE GENERAL CONTRACTOR OF THE ANTICIPATED RESPONSE TIME.

 RESPONSES TO REQUESTS FOR INFORMATION FROM THE ARCHITECT WILL NOT CHANGE ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. IN THE EVENT THAT THE GENERAL CONTRACTOR BELIEVES THAT A RESPONSE TO A REQUEST FOR INFORMATION WILL CAUSE A CHANGE TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, THE GENERAL CONTRACTOR SHALL IMMEDIATELY GIVE WRITTEN NOTICE TO THE ARCHITECT AND THE OWNER STATING THAT THE GENERAL CONTRACTOR CONSIDERS THE RESPONSE TO BE A CHANGE ORDER. FAILURE TO GIVE SUCH WRITTEN NOTICE IMMEDIATELY SHALL WAIVE THE GENERAL CONTRACTOR'S (OR ANY SUBCONTRACTOR'S) RIGHT TO SEEK ADDITIONAL TIME OR COST UNDER THE ADMINISTRATIVE REQUIREMENTS OF THESE CONTRACT

SECTION 01400 - QUALITY REQUIREMENTS

REGULATORY REQUIREMENTS: A. PERFORM ALL WORK IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL BUILDING CODES, PLUMBING CODES, MECHANICAL CODES, ELECTRICAL CODES, ORDINANCES AND RULES AND REGULATIONS GOVERNING FOOD SERVICE

ESTABLISHMENTS. B. COMPLY WITH LOCAL, STATE AND FEDERAL REQUIREMENTS GOVERNING ACCESSIBILITY.

C. OBTAIN ALL REQUIRED DEMOLITION AND EROSION CONTROL PERMITS REQUIRED BY AUTHORITIES HAVING JURISDICTION. QUALITY CONTROL:

A. MAINTAIN QUALITY CONTROL OVER MANUFACTURERS, SUPPLIERS, PRODUCTS, SERVICES, SITE CONDITIONS AND WORKMANSHIP, TO PRODUCE WORK OF SPECIFIED

B. COMPLY WITH MANUFACTURER'S INSTRUCTIONS AND APPLICABLE TRADE

C. HANDLE, INSTALL, CONNECT, CLEAN, CONDITION AND ADJUST PRODUCTS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND COMPLYING WITH SPECIFIED REQUIREMENTS. 1. REQUEST CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING, WHERE

MANUFACTURER'S INSTRUCTIONS CONFLICT WITH THE CONTRACT DOCUMENTS. D. COMPLY WITH SPECIFIED STANDARDS AS A MINIMUM QUALITY FOR THE WORK, EXCEPT WHEN MORE STRINGENT TOLERANCES, CODES OR SPECIFIED

REQUIREMENTS INDICATE HIGHER STANDARDS OR MORE PRECISE WORKMANSHIP. E. PERFORM WORK BY PERSONS QUALIFIED TO PRODUCE WORKMANSHIP OF THE SPECIFIED QUALITY. SECURE PRODUCTS IN PLACEWITH POSITIVE ANCHORAGE DEVICES DESIGNED, SIZED AND INSTALLED TO WITHSTAND STRESS, VIBRATION,

PHYSICAL DISTORTION OR DISFIGUREMENT. F. ALL DIMENSIONS SHALL BE CONSIDERED "HOLD-TO" DIMENSIONS UNLESS INDICATED

OTHERWISE (E.G. MINIMUM OR MAXIMUM DIMENSIONS.) A. EMPLOY AND PAY FOR THE SERVICES OF AN INDEPENDENT TESTING LABORATORY TO PERFORM INSPECTIONS, TESTS AND OTHER SERVICES WHEN REQUIRED.

B. INCLUDE INSPECTION AND TESTS AS INDICATED IN THE SPECIFICATION SECTIONS. DRAWINGS. AND AS REQUIRED BY AUTHORITIES HAVING JURISDICTION. a. TEST CONCRETE IN ACCORDANCE WITH SECTION 03300 AND DRAWING

REQUIREMENTS b. TEST STRUCTURAL STEEL IN ACCORDANCE WITH SECTION 05110 AND DRAWING REQUIREMENTS.

SECTION 01500 - TEMPORARY FACILITIES AND CONTROLS

B. TEMPORARY HEATING, VENTILATING AND COOLING:

A. CODES AND STANDARDS: PROVIDE TEMPORARY CONSTRUCTION FACILITIES AND

PROVIDE TEMPORARY FACILITIES AND CONTROLS AS SHOWN AND SPECIFIED:

CONTROLS COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL LOCAL LAWS, REGULATIONS AND CODES AND UTILITY COMPANY REQUIREMENTS.

1. PROVIDE, PAY FOR AND MAINTAIN ALL TEMPORARY HEATING, VENTILATING AND

COOLING EQUIPMENT AND FACILITIES REQUIRED DURING THE PROGRESS OF THE WORK TO PROTECT MATERIALS, FINISHED WORK, AND EQUIPMENT AGAINST DAMAGE FROM LOW AND HIGH TEMPERATURES AND HUMIDITY. PROVIDE TEMPORARY HEATING, VENTILATING AND COOLING WHEN THE OUTSIDE

TEMPERATURE AND HUMIDITY IS LOW/HIGH ENOUGH TO DAMAGE OR AFFECT IN ANY WAY THE PERFORMANCE OR QUALITY OF MATERIAL AND PRODUCT STORED IN THE BUILDING, IN ANY TEMPORARY STORAGE AREA, OR ANY MATERIAL OR PRODUCT INCORPORATED INTO THE WORK.

3. PROVIDE TEMPORARY HEATING, VENTILATING AND COOLING WHEN THE OUTSIDE TEMPERATURE AND HUMIDITY IS LOW/HIGH ENOUGH TO SIGNIFICANTLY SLOW OR HAMPER EFFECTIVENESS OF WORKERS AND TO PROVIDE SUITABLE WORKING CONDITIONS

C. TEMPORARY ELECTRICAL LIGHTING AND POWER:

 PROVIDE, PAY FOR AND MAINTAIN ALL TEMPORARY ELECTRICAL SERVICE FOR LIGHTING AND POWER REQUIRED DURING THE PROGRESS OF THE WORK. INCLUDE ALL NECESSARY WIRING, FUSES, DISCONNECT SWITCHES, SAFETY DEVICES, JUNCTION BOXES, PANELS, GROUND FAULT PROTECTIONS, AND TRANSFORMER IF REQUIRED. INCLUDE COST FOR PROVIDING TEMPORARY ELECTRIC GENERATORS IN THE CONTRACT SUM, IF TEMPORARY ELECTRIC SERVICE IS NOT AVAILABLE FOR USE DURING PROGRESS OF THE WORK

2. TEMPORARY SERVICE AND LIGHTING AND POWER ITEMS AND INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE NFPA NATIONAL ELECTRIC CODE AND

OSHA OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970. WATER: PROVIDE, PAY FOR AND MAINTAIN ALL TEMPORARY WATER REQUIRED DURING THE PROGRESS OF THE WORK. INCLUDE ALL NECESSARY STORAGE TANKS, PIPING, VALVES,

FITTINGS, HOSE AND HOSE CONNECTIONS DURING CONSTRUCTION AND TESTING. E. TEMPORARY TOILETS: PROVIDE, PAY FOR AND MAINTAIN TEMPORARY TOILET FACILITIES FOR USE BY THE CONTRACTOR, CONTRACTOR'S EMPLOYEES AND ALL SUBCONTRACTORS AND SUBCONTRACTORS' EMPLOYEES. WHEN REQUIRED, COMPLY WITH ALL LOCAL REQUIREMENTS FOR INSTALLATION, USE AND MAINTENANCE OF TEMPORARY TOILET FACILITIES.

F. BARRIERS AND ENCLOSURES:

1. PROVIDE TEMPORARY CONSTRUCTION BARRIERS IN ACCORDANCE WITH PROJECT REQUIREMENTS. EXERCISE ALL NECESSARY PRECAUSTIONS TO PROTECT ADJACENT PROPERITES, OUTSIDE PROJECT CONTACT LIMITS, DURING PROGRESS OF THE WORK. TAKE SPECIAL PRECAUTIONS TO AVOID DAMAGE TO EXISTING OVERHEAD AND UNDERGROUND UTILITIES AND SERVICES OWNED OR OPERATED BY THE OWNER OR BY PUBLIC OR PRIVATE UTILITY COMPANIES.

2. PROVIDE TEMPORARY WEATHER-TIGHT ENCLOSURES AT EXTERIOR OPENINGS TO PROVIDE ACCEPTABLE WORKING CONDITIONS AND PROTECTION OF MATERIAL AND TO ALLOW FOR TEMPORARY HEATING, VENTILATING AND COOLING.

G. SAFTEY AND SECURITY

PROVIDE AND MAINTAIN ALL NECESSARY SAFETY PROVISONS FOR PROTECTION AND SAFETY OF THE PROJECT WORK, WORKERS AND GENERAL PUBLIC 2. PROVIDE AND MAINTAIN OPERABLE FIRE EXTINGUISHING DEVICES IN WELL-MARKED, ACCESSIBLE LOCATIONS THROUGHOUT THE PROJECT. PROVIDE TYPES, QUANTITIES

AND LOCATION IS IN COMPLIANCE WITH GOVERNING CODES AND ORDINANCES. PROVIDE ALL NECESSARY SECURITY BARRIERS AND ENCLOSURES TO PROTECT THE WORK AND OWNER'S OPERATIONS FROM UNAUTHORIZED ENTRY OF PERSONS, VANDALISM AND THEFT. PROVIDE DOORS, WHEN REQUIRED, WITH SELF-CLOSING HARDWARF AND LOCKS

4. PROVIDE WEEKLY PHOTOGRAPHIC DOCUMENTATION OF PROJECT PROGRESSION TO OWNER

H. SAFETY AND SECURITY PROVIDE AND MAINTAIN ALL NECESSARY SAFETY PROVISIONS FOR PROTECTION AND

SAFETY OF THE PROJECT WORK, WORKERS AND GENERAL PUBLIC. 2. PROVIDE AND MAINTAIN OPERABLE FIRE EXTINGUISHING DEVICES IN WELL-MARKED, ACCESSIBLE LOCATIONS THROUGHOUT THE PROJECT. PROVIDE TYPES, QUANTITIES AND LOCATIONS IN COMPLIANCE WITH GOVERNING CODES AND ORDINANCES.

PROVIDE ALL NECESSARY SECURITY BARRIERS AND ENCLOSURES TO PROTECT THE WORK AND TENANT'S OPERATIONS FROM UNAUTHORIZED ENTRY OF PERSONS. VANDALISM AND THEFT. PROVIDE DOORS, WHEN REQUIRED, WITH SELF-CLOSING HARDWARE AND LOCKS. CLEANING 1. DURING CONSTRUCTION: PROVIDE AN APPROVED ON-SITE CONTAINER FOR THE USE

OF ALL CONTRACTORS AND SUBCONTRACTORS FOR THE COLLECTION OF WASTE MATERIALS. DEBRIS AND RUBBISH. EXECUTE PERIODIC CLEANING TO KEEP THE WORK, THE SITE AND ADJACENT PROPERTIES FREE FROM ACCUMULATIONS OF WASTE MATERIALS, RUBBISH AND WINDBLOWN DEBRIS, RESULTING FROM CONSTRUCTION OPERATIONS. REMOVE CRATES AND CARTONS IN WHICH MATERIALS, EQUIPMENT, OR FIXTURES ARE RECEIVED TO ON-SITE CONTAINERS DAILY. a. MAINTAIN THE PROPERTY IN A CLEAN AND ORDERLY CONDITION. REMOVE WASTE MATERIALS. DEBRIS AND RUBBISH FROM THE SITE ON A DAILY BASIS AND

DISPOSE OF AT LEGAL DISPOSAL AREAS AWAY FROM THE SITE. a. REMOVE DEBRIS AND RUBBISH FROM PIPE CHASES, PLENUMS AND OTHER

SIMILAR CLOSED OR REMOTE SPACES PRIOR TO COVERING OR ENCLOSING THE b. SWEEP AND VACUUM CLEAN INTERIOR SURFACES BEFORE START OF SURFACE

FINISHING AND PAINTING. CONTINUE CLEANING ON AN AS-NEEDED BASIS UNTIL FINISHING AND PAINTING IS COMPLETED.

SECTION 01630 - SUBSTITUTIONS

ACCEPTANCE.

1. 1.1 GENERAI A. PRODUCTS, INCLUDING MATERIALS, EQUIPMENT AND SYSTEMS DESCRIBED IN THE CONTRACT DOCUMENTS ESTABLISH THE STANDARDS OF REQUIRED FUNCTION, DIMENSION, APPEARANCE, QUALITY AND PERFORMANCE OF THE WORK. BASE ALL BIDS

ON THE "STANDARDS" INDICATED. B. REQUESTS BY THE CONTRACTOR FOR CHANGES IN PRODUCTS, MANUFACTURERS, FABRICATORS, SUPPLIERS, INSTALLERS, AND METHODS OF CONSTRUCTION REQUIRED BY THE CONTRACT DOCUMENTS ARE CONSIDERED REQUESTS FOR "SUBSTITUTIONS:" SUBSTITUTIONS WILL BE CONSIDERED ONLY UNDER THE FOLLOWING CONDITIONS:

THE INDICATED "STANDARD" CANNOT BE PROVIDED WITHIN THE CONTRACT TIME THE INDICATED "STANDARD" CANNOT RECEIVE NECESSARY APPROVAL BY THE GOVERNING AUTHORITY

3. A SUBSTANTIAL ADVANTAGE IS OFFERED THE OWNER, IN TERMS OF COST, TIME, ENERGY CONSERVATION OR OTHER CONSIDERATIONS OF MERIT AS DETERMINED BY

C. SUBMIT EACH REQUEST FOR SUBSTITUTION TO THE ARCHITECT. IDENTIFY THE PRODUCT, MANUFACTURER, FABRICATOR, SUPPLIER, INSTALLER OR THE FABRICATION OR INSTALLATION METHOD TO BE REPLACED IN EACH REQUEST. IDENTIFY RELATED SPECIFICATION SECTION AND DRAWING NUMBERS. PROVIDE DOCUMENTATION AS

DIRECTED BY THE ARCHITECT. (OMITTED) SUBSTITUTE PRODUCTS, MANUFACTURERS, FABRICATORS, SUPPLIERS, AND INSTALLERS SHALL NOT BE USED FOR THE PROJECT WITHOUT TENANT AND ARCHITECT'S WRITTEN

<u>SECTION 01700 - EXECUTION REQUIREMENTS</u>

A. PROTECTION OF EXISTING CONSTRUCTION: USE ALL NECESSARY CARE AND APPROPRIATE MEANS AND METHODS TO PROTECT AND PREVENT DAMAGE TO EXISTING CONSTRUCTION AND PROPERTY NOT PART OF THE CONTRACT WORK. REPAIR AND REFINISH OR REPLACE CONSTRUCTION AND PROPERTY DAMAGED DURING CONSTRUCTION WORK, AT

CONTRACTOR'S EXPENSE 2. SELECTIVE DEMOLITION: PROVIDE SELECTIVE DEMOLITION AS SHOWN AND SPECIFIED. A. PREPARATION:

1. COORDINATE WORK OF THIS SECTION WITH WORK OF VARIOUS CONTRACTORS AND 2. MATERIALS: OWNER'S STAFF. MAINTAIN PROTECTED ACCESS AT ALL TIMES.

ERECT AND MAINTAIN WEATHERPROOF CLOSURES AT EXTERIOR OPENINGS. 4. ERECT AND MAINTAIN DUST-PROOF INTERIOR PARTITIONS TO PREVENT SPREAD OF DUST OR FUMES.

5. ERECT AND MAINTAIN BARRICADES, ENCLOSURES, BRACING, SHORING, LIGHTS,

WARNING SIGNS AND GUARDS NECESSARY FOR WORKER AND PUBLIC SAFETY AND PROTECTION OF PROPERTY 6. DISCONNECT, REMOVE AND CAP DESIGNATED UTILITY SERVICES. IDENTIFY AND MARK LOCATIONS OF DISCONNECTED AND CAPPED UTILITIES AT THE PROJECT SITE AND ON

PROJECT RECORD DOCUMENTS 7. COORDINATE HOURS OF OPERATION AND CONSTRUCTION ACCESS WITH THE BUILDING OWNER

B. SELECTIVE DEMOLITION REMOVE EXISTING CONSTRUCTION TO ACCOMMODATE NEW CONSTRUCTION AS

2. PERFORM SELECTIVE DEMOLITION IN AN ORDERLY, SYSTEMATIC AND CAREFUL MANNER WITH LEAST POSSIBLE DISTURBANCE TO PUBLIC AND ADJACENT PROPERTY. 3. IMMEDIATELY REMOVE FROM THE SITE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS, EXCEPT AS INDICATED OTHERWISE. DO NOT BURN OR BURY MATERIALS

ON THE PROJECT SITE. A. FINAL CLEANING: PERFORM FINAL CLEANING UPON COMPLETION OF PROJECT WORK.

1. REMOVE WASTE AND SURPLUS MATERIALS, RUBBISH, TOOLS, EQUIPMENT AND TEMPORARY CONSTRUCTION FACILITIES FROM THE SITE 2. CLEAN EXTERIOR GROUNDS; REMOVE STAINS, SPILLS AND FOREIGN MATERIALS FROM PAVED AREAS, POWER WASH AND SWEEP CLEAN. RAKE CLEAN LANDSCAPED

SURFACES OF THE GROUNDS. 3. REMOVE TEMPORARY PROTECTION AND LABELS NOT REQUIRED TO REMAIN. 4. CLEAN ALL FINISHED SURFACES. REMOVE GREASE, MASTIC, ADHESIVES, DUST, DIRT, STAINS, FINGERPRINTS, LABELS AND OTHER FOREIGN MATERIALS FROM EXPOSED INTERIOR AND EXTERIOR SURFACES

A. CLEAN ALL PLUMBING, FIRE PROTECTION AND ELECTRICAL FIXTURES AND EQUIPMENT INCLUDING CEILING AREA ELEVATED DUCTWORK AND LIGHTING B. CLEAN PERMANENT EQUIPMENT FILTERS AND REPLACE TEMPORARY

DISPOSABLE FILTERS IN MECHANICAL UNITS USED DURING CONSTRUCTION. C. CLEAN DUCTS, BLOWERS AND COILS IF MECHANICAL UNITS WERE OPERATED WITHOUT FILTERS DURING CONSTRUCTION.

5. CLEAN INTERIOR AND EXTERIOR GLAZING AND MIRRORS, POLISH TRANSPARENT AND GLOSSY SURFACES AND CLEAN FLOORS WITH APPROPRIATE MATERIALS AND

6. REMOVE WASTE, FOREIGN MATERIAL AND DEBRIS FROM ROOFS, AREAWAYS AND DRAINAGE SYSTEMS 7. BEFORE TENANT OCCUPANCY, CONDUCT AN INSPECTION, WITH THE TENANT, OF

EXPOSED INTERIOR AND EXTERIOR SURFACES AT ALL WORK AREAS, TO VERIFY THAT THE ENTIRE WORK IS CLEAN. STARTING AND ADJUSTING: A. PRIOR TO SUBSTANTIAL COMPLETION, COORDINATE THE START-UP, TEST AND BALANCE, PLACEMENT IN OPERATION AND ADJUSTMENT ALL SYSTEMS, CONTROLS AND EQUIPMENT TO VERIFY PROPER OPERATION. ALL SYSTEMS SHALL BE COMPLETE AND OPERATING

PRIOR TO FINAL INSPECTION. CONTRACT CLOSEOUT

> B. RECORD/AS BUILT DOCUMENTS: PREPARE AND MAINTAIN ON SITE ONE SET OF THE FOLLOWING RECORD/AS BUILT DOCUMENTS:

 A. CONTRACT DOCUMENTS. CONSTRUCTION DOCUMENTS.

CHANGE ORDERS AND OTHER MODIFICATIONS TO THE CONTRACT. D. SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES. E. CONSTRUCTION SCHEDULE.

2. STORE RECORD/AS BUILT DOCUMENTS SEPARATE FROM DOCUMENTS USED FOR CONSTRUCTION RECORD ACTUAL REVISIONS TO THE WORK, CONCURRENTLY WITH CONSTRUCTION

4. LEGIBLY MARK AND RECORD A DESCRIPTION OF ACTUAL PRODUCTS INSTALLED AT EACH SPECIFICATION SECTION, INCLUDING THE FOLLOWING:

A. MANUFACTURER'S NAME AND PRODUCT MODEL AND NUMBER. B. APPROVED PRODUCT SUBSTITUTIONS OR ALTERNATES UTILIZED. C. CHANGES MADE BY ADDENDA, CHANGE ORDERS, AND OTHER MODIFICATIONS. 5. LEGIBLY MARK EACH ITEM TO RECORD ACTUAL CONSTRUCTION, INCLUDING THE

FOLLOWING: A. MEASURED DEPTHS OF FOUNDATIONS IN RELATION TO FINISH FIRST MAIN FLOOR DATUM.

B. MEASURED HORIZONTAL AND VERTICAL LOCATIONS OF UNDERGROUND UTILITIES AND APPURTENANCES, REFERENCED TO PERMANENT SURFACE

C. MEASURED LOCATIONS OF INTERNAL UTILITIES AND APPURTENANCES CONCEALED IN CONSTRUCTION, REFERENCED TO VISIBLE AND ACCESSIBLE FEATURES OF THE WORK.

D. FIELD CHANGES OF DIMENSION AND DETAIL.

E. DETAILS NOT ON ORIGINAL CONTRACT DOCUMENT DRAWINGS. 6. SUBMIT RECORD/AS BUILT DOCUMENTS TO THE TENANT WITH FINAL APPLICATION FOR PAYMENT IN ACCORDANCE WITH EXHIBIT C OF THE CONSTRUCTION CONTRACT.

C. WARRANTIES AND BONDS: 1. COMPILE WARRANTIES AND BONDS REQUIRED BY THE CONTRACT DOCUMENTS. 2. SUBMIT DUPLICATE COPIES OF WARRANTIES AND BONDS TO THE TENANT WITH FINAL APPLICATION FOR PAYMENT IN ACCORDANCE WITH EXHIBIT C OF THE

CONSTRUCTION CONTRACT. D. MAINTENANCE MATERIALS AND SPARE PARTS:

1. PROVIDE EXTRA MAINTENANCE MATERIALS AND SPARE PARTS IN QUANTITIES INDICATED IN THE SPECIFICATION SECTIONS. 2. PLACE IN LOCATION AS DIRECTED BY THE TENANT'S CONSTRUCTION MANAGER.

SECTION 05400 - COLD-FORMED METAL FRAMING

GENERAL: PROVIDE COLD-FORMED METAL FRAMING IN ACCORDANCE WITH THE GENERAL STRUCTURAL NOTES AND STRUCTURAL DRAWINGS AND DETAILS. A. STANDARDS: MATERIALS AND CONSTRUCTION SHALL CONFORM TO FOLLOWING:

AISI SG02.2-01 "DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS." AWS "STRUCTURAL WELDING CODES, D1.3-SHEET STEEL." MATERIALS:

A. MATERIALS COMPLIANCE: WHEN REQUESTED, SUBMIT ACCEPTABLE DATA DOCUMENTING MATERIALS COMPLIANCE FOR EACH TYPE OF MATERIAL REQUIRED. B. LOAD-BEARING COLD-FORMED METAL FRAMING: ASTM A1003, GAGE, GRADE AND TYPE

1. COMPONENTS: PROVIDE SIZES AND SHAPES INDICATED. 2. FINISH: GALVANIZED COMPLYING WITH ASTM A653, MINIMUM G60 COATING.

C. FABRICATION: 1. COLD-FORMED METAL FRAMING MAY BE PREFABRICATED INTO PANELS BEFORE ERECTION. FABRICATE PANELS PLUMB, SQUARE, TRUE TO LINE AND BRACED AGAINST RACKING WITH JOINTS WELDED.

A. PROVIDE ONE-PIECE FULL-LENGTH COLD-FORMED METAL FRAMING MEMBERS. SPLICING NOT PERMITTED. ATTACH AND JOIN OTHER COMPONENTS BY WELDING OR SCREW FASTENERS, AS INDICATED. WIRE TYING OF FRAMING COMPONENTS IS NOT PERMITTED.

3. CUT FRAMING TO FIT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS OR AS REQUIRED FOR ANGULAR FIT AGAINST ABUTTING MEMBERS. HOLD MEMBERS SECURELY IN POSITION UNTIL PROPERLY FASTENED. 4. SAW CUT FIELD CUT FRAMING. TORCH CUTTING NOT ACCEPTABLE. ERECTION: ERECT COLD-FORMED METAL FRAMING MEMBERS OF GAGE AND AT

SPACING INDICATED ON THE STRUCTURAL DRAWINGS. ALIGN AND SECURE STUDS TO TOP AND BOTTOM RUNNER TRACKS BY WELDING OR SCREW FASTENERS AT BOTH INSIDE AND OUTSIDE FLANGES.

2. TOLERANCE ACCEPTANCE: INSTALL COLD-FORMED METAL FRAMING MEMBER AS INDICATED ON THE PLANS. INSTALL TO 1/16" TOLERANCE.

SECTION 06100 - ROUGH CARPENTRY GENERAL: PROVIDE ROUGH CARPENTRY WORK AS SHOWN AND SPECIFIED.

A. STANDARDS: MATERIALS AND CONSTRUCTION SHALL CONFORM TO FOLLOWING: NIST PS-1-95 "CONSTRUCTION AND INDUSTRIAL PLYWOOD. NIST PS-2-95 "PERFORMANCE STANDARDS FOR WOOD-BASED STRUCTURAL-USE

NIST PS-20-99 "AMERICAN SOFTWOOD LUMBER STANDARD." NF&PA NDS-97 "WOOD CONSTRUCTION AND SUPPLEMENT." AWPA "WOOD TREATMENT STANDARDS."

 A. LUMBER: FACTORY GRADE-MARKED, DRESSED, SEASONED DIMENSION LUMBER, S4S, AIR-DRIED, MAXIMUM 19% MOISTURE CONTENT COMPLYING WITH PS-20, DIMENSIONS

1. BLOCKING, NAILERS AND SIMILAR MEMBERS: STANDARD GRADE WESTERN DIMENSION LUMBER OR SOUTHERN PINE SPECIES. a. PROVIDE PRESERVATIVE TREATED LUMBER, WHERE INDICATED.

PLYWOOD: FACTORY GRADE-MARKED. COMPLYING WITH PS-1. SQUARE EDGE. 5/8" THICK. 1 APA-RATED SHEATHING EXP a. PROVIDE EXTERIOR GRADE (EXT) PLYWOOD, WHERE INDICATED.

PROVIDE FIRE-RETARDANT TREATED PLYWOOD, WHERE REQUIRED BY BUILDING ORIENTED STRAND BOARD (OSB): FACTORY GRADE-MARKED, COMPLYING WITH PS-2, SQUARE EDGE, 5/8" THICK.

WOOD TREATMENT: A. PRESERVATIVE TREATMENT: COMPLY WITH APPLICABLE REQUIREMENTS OF AWPA STANDARDS C2 (LUMBER) 1. PRESSURE PRESERVATIVE TREAT LUMBER WITH WATER-BORNE PRESERVATIVES.

ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, TO A MINIMUM RETENTION OF 0.25 PCF. 2. TREAT WOOD BLOCKING, NAILERS AND SIMILAR MEMBERS IN CONNECTION WITH

ROOFING AND FLASHING. 3. TREAT WOOD PLATES, BLOCKING, FURRING AND SIMILAR CONCEALED MEMBERS IN CONTACT WITH MASONRY OR CONCRETE.

B. FIRE-RETARDANT TREATMENT: COMPLY WITH APPLICABLE REQUIREMENTS OF AWPA STANDARDS C27 (PLYWOOD). IDENTIFY "FIRE-RETARDANT-TREATED PLYWOOD" WITH APPROPRIATE UL CLASSIFICATION MARKING. TREATED MATERIALS SHALL MEET "INTERIOR TYPE A" FR-S RATINGS OF NOT MORE THAN 25 FOR FLAME SPREAD, SMOKE DEVELOPED AND FUEL CONTRIBUTED WHEN TESTED IN ACCORDANCE WITH UL 723 OR ASTM E84. WITH NO INCREASE IN FLAME

SPREAD AND EVIDENCE OF SIGNIFICANT PROGRESSIVE COMBUSTION UPON CONTINUATION OF TEST FOR ADDITIONAL 30 MINUTES. C. KILN-DRY ALL TREATED LUMBER AND PLYWOOD MATERIALS AFTER TREATMENT TO

MAXIMUM 15% MOISTURE CONTENT. INSTALLATION: A. LUMBER: PROVIDE WOOD BLOCKING, NAILERS AND SIMILAR MEMBERS WHERE SHOWN AND WHERE REQUIRED FOR ATTACHMENT OF OTHER WORK AND SURFACE APPLIED ITEMS. ATTACH TO SUBSTRATE AS REQUIRED TO SUPPORT APPLIED LOADING.

> 1. USE ONLY SOUND, SEASONED MATERIALS OF LONGEST PRACTICAL LENGTHS AND SIZES TO MINIMIZE JOINTS. 2. USE MATERIALS FREE OF WARP. MAKE TIGHT CONNECTIONS BETWEEN MEMBERS.

SECTION 06210 - FINISH CARPENTRY AND MILLWORK GENERAL: PROVIDE FINISH CARPENTRY AND MILLWORK AS SHOWN AND SPECIFIED. A. STANDARDS: MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE FOLLOWING:

AWI "ARCHITECTURAL WOODWORK QUALITY STANDARDS - 1999." B. DOORS AND DOOR HARDWARE: INSTALL ALL DOOR HARDWARE FURNISHED UNDER DIVISION 8 SPECIFICATION SECTIONS.

C. SUBMIT SHOP DRAWINGS FOR DESIGNATED MILLWORK. INCLUDE COMPLETE DETAILS, MATERIALS LISTS AND DRAWINGS SHOWING FABRICATION OF TYPICAL UNITS, UNIT ASSEMBLIES, LOCATIONS AND INSTALLATION DETAILS. LIST PROPOSED CABINET HARDWARE TO SUIT INDICATED UNIT USE OR FUNCTION.

OBTAIN SHOP DRAWING APPROVAL BEFORE STARTING FABRICATION. MATERIALS: A. PLYWOOD: AWI SECTION 200

CONCEALED USE SUBSTRATES: D-3 PAINT GRADE HARDWOOD PLYWOOD, WITH ASPEN VENEER CORE, 3/4" THICK. EXPOSED TO VIEW FINISHES: PLUMB CREEK, AC SANDED FACE EXTERIOR FIR

IDENTIFY MATERIALS REQUIRED TO COMPLETE WORK READY FOR INSTALLATION.

PLYWOOD, 23/32" THICK BY 4'-0" BY 8'-0". PRESSURE TREATED WITH D-BLAZE TO MEET CLASS A FIRE RATING, WHERE REQUIRED. MILLWORK: MATERIALS AND CONSTRUCTION AS DETAILED ON THE DRAWINGS. C. FABRICATION:

MILLWORK DESIGN AND FABRICATION DETAILS SHOWN ON THE DRAWINGS INDICATE DESIGN INTENT. UNLESS OTHERWISE INDICATED, PROVIDE MANUFACTURER'S STANDARD FABRICATION METHODS. INDICATE ALL PROPOSED VARIATIONS FROM THE DRAWING DESIGN AND FABRICATION DETAILS ON SHOP DRAWINGS. FABRICATE MILLWORK IN ACCORDANCE WITH AWI "CUSTOM GRADE" REQUIREMENTS. WHERE DETAILS ARE NOT SHOWN, COMPLY WITH APPLICABLE QUALITY STANDARDS

OR WITH ALTERNATE DETAILS ACCEPTABLE TO ARCHITECT AS FABRICATOR'S A. ALL SHOP JOINTS MADE WITH STANDARD CONSTRUCTION ADHESIVE GLUED UNDER PRESSURE

FABRICATE FINISHED WORK PROPERLY FRAMED, CLOSELY FIT AND ACCURATELY SET TO REQUIRED LINES AND LEVELS AND RIGIDLY SECURED IN PLACE. FABRICATE WORK STRAIGHT. PLUMB. LEVEL AND IN TRUE ALIGNMENT: NEATLY AND ACCURATELY FIT. SCRIBED AND THOROUGHLY SECURED. PLANE AND SAND MITERS AND OTHER JOINTS. EASE ALL SQUARE EDGES. PROVIDE MILLWORK CLEAN AND FREE FROM WARP, TWIST, OPEN JOINTS AND OTHER DEFECTS. PROVIDE FINISHED WOODWORK DRESSED AND SANDED FREE FROM MACHINE AND

TOOL MARKS, ABRASIONS, RAISED GRAIN OR OTHER DEFECTS ON SURFACES EXPOSED TO VIEW IN FINISHED WORK. INSTALLATION

A. INSTALL FINISH CARPENTRY AND MILLWORK PRODUCTS PLUMB, LEVEL, TRUE AND

TO A TOLERANCE OF 1/8" IN 8'-0" FOR PLUMB AND LEVEL (INCLUDING COUNTERTOPS) AND WITH 1/16" MAXIMUM OFFSET IN FLUSH ADJOINING SURFACES, 1/8" MAXIMUM OFFSETS IN REVEALED ADJOINING SURFACES.

STRAIGHT WITH NO DISTORTION. SHIM AS REQUIRED USING CONCEALED SHIMS. INSTALL

1. SCRIBE AND CUT FINISH CARPENTRY AND MILLWORK PRODUCTS TO FIT ADJOINING ANCHOR FINISH CARPENTRY AND MILLWORK ITEMS TO BUILT-IN PLACE BLOCKING. FURNISHED UNDER SECTION 06100, OR DIRECTLY ATTACH TO SUBSTRATE FRAMING SECURE TO GROUNDS, BLOCKING AND NAILERS WITH COUNTERSUNK, CONCEALED FASTENERS AND BLIND NAILING AS REQUIRED FOR A COMPLETE INSTALLATION. USE FINISH NAILS FOR EXPOSED NAILING, COUNTERSUNK AND FILLED FLUSH WITH

WOODWORK AND MATCHING FINAL FINISH WHERE CLEAR FINISH IS INDICATED. 3. TOUCH-UP SHOP FINISHED PLYWOOD MATERIALS MARRED OR DAMAGED DURING DELIVERY, STORAGE AND INSTALLATION WITH CUSTOM BLENDED POLYURETHANE TO EQUAL MINWAX "WIPE ON POLY"

TO BASE UNITS AND OTHER SUPPORT SYSTEMS AS INDICATED.

B. INSTALL CASEWORK WITHOUT DISTORTION SO THAT DOORS AND DRAWERS WILL FIT OPENINGS PROPERLY AND BE ACCURATELY ALIGNED. ADJUST HARDWARE TO CENTER DOORS AND DRAWERS IN OPENINGS AND TO PROVIDE UNENCUMBERED OPERATION. C. INSTALL PLASTIC LAMINATE COUNTERTOPS, SHELVING AND TRIM. PROVIDE WORK LEVEL TRUE TO ALIGNMENT, ACCURATELY FIT TO WALL CONDITIONS AND SECURELY FASTENED **SECTION 07210 - BUILDING INSULATION** GENERAL: PROVIDE BUILDING INSULATION AS SHOWN AND SPECIFIED.

MATERIALS: A. EXTRUDED POLYSTYRENE FOAM RIGID BOARD INSULATION: DOW CHEMICAL CO..

866-583-2583, INTERNET WWW.DOWBUILDINGMATERIALS.COM 1. TYPE: DOW "STYROFOAM" TYPE IV, 1.6 PCF MINIMUM DENSITY, 25 PSI COMPRESSIVE STRENGTH COMPLYING WITH ASTM C 578, R-VALUE EQUAL 5 PER INCH OF THICKNESS PROVIDE LENGTHS AND WIDTHS AS REQUIRED TO COORDINATE WITH SPACE

2. PERIMETER FOUNDATION WALLS: STYROFOAM SE, R-VALUE INDICATED/ 2" THICKNESS

B. GLASS FIBER BATT/BLANKET INSULATION: OWENS CORNING CORP., (800) 438-7465, INTERNET WWW.OWENSCORNING.COM. 1. TYPE: OWENS CORNING "THERMAL BATT" TYPE I UNFACED GLASS FIBERS AND

BINDERS FORMED INTO FLEXIBLE BLANKETS OR BATTS COMPLYING WITH ASTM C665. PROVIDE LENGTHS AND WIDTHS REQUIRED TO COORDINATE WITH SPACES 2. EXTERIOR WALLS: UNFACED, R-VALUE/THICKNESS INDICATED C. VAPOR BARRIER MEMBRANE: POLYETHYLENE, MINIMUM 6 MILS THICK, COMPLYING WITH

ASTM D 4397, MAXIMUM PERMEANCE RATING OF 0.13 PERM 1. JOINT TAPE: PRESSURE SENSITIVE TAPE DESIGNED FOR SEALING JOINTS AND PENETRATIONS OF ABOVE AND BELOW GRADE VAPOR BARRIER SHEETS. 2. MOUNTING TAPE: DOUBLE-FACED PRESSURE SENSITIVE TAPE SUITABLE FOR

MOUNTING VAPOR BARRIERS TO STEEL FRAMING.

INSTALLATION: A. GENERAL

1. INSTALL INSULATION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS 3. FOR CONDITIONS OF INSTALLATION INDICATED. INSTALL INSULATION IN SINGLE LAYER OF REQUIRED THICKNESS OVER ENTIRE AREA TO BE INSULATED. CUT AND FIT TIGHTLY AROUND OBSTRUCTIONS. FILL ALL VOIDS.

2. INSTALL EXTERIOR WALL INSULATION CONTINUOUS BEHIND ELECTRICAL BOXES, CONDUIT, PIPING AND DUCTWORK. B. FOUNDATION PERIMETER WALLS AND SLABS:

HORIZONTALLY UNDER SLABS, EXTENDING A MINIMUM 36" IN FROM EXTERIOR WALLS. 2. PROTECT INSULATION FROM DISPLACEMENT AND DAMAGE DURING BACKFILLING AND SLAB PLACEMENT C. EXTERIOR WALLS:

INSTALL RIGID FOAM INSULATION VERTICALLY FROM TOP OF SLAB TO FROST LINE OR

 INSTALL BATT/BLANKET INSULATION FULL HEIGHT AT EXTERIOR WALL FRAMING. USE BLANKET WIDTHS AND LENGTHS THAT FILL CAVITIES FORMED BY FRAMING MEMBERS AND PROVIDE A FRICTION FIT BETWEEN EDGES OF INSULATION AND METAL FRAMING 2. PROVIDE GALVANIZED WIRE MESH OR METAL STRAPPING TO PROVIDE

PERMANENT PROPER LOCATION. D. VAPOR BARRIERS: 1. INSTALL A SINGLE LAYER OF VAPOR BARRIER MEMBRANE OVER THE INTERIOR OF EXTERIOR METAL WALL FRAMING AFTER INSTALLATION OF INSULATION. SECURE WITH DOUBLE FACED TAPE AT WALL FRAMING 2. PROVIDE SINGLE UNSPLICED MATERIAL HEIGHT. HORIZONTAL JOINTS NOT

SUPPLEMENTARY SUPPORT WHEN REQUIRED TO MAINTAIN INSULATION IN

WINDOW FRAMES, PIPING, CONDUIT, DUCTWORK, REGISTERS AND THE VAPOR 3. SEAL ALL CUTS AND PENETRATIONS OF VAPOR BARRIER MEMBRANE WITH TAPE

ACCEPTABLE. MINIMIZE VERTICAL JOINTS. LAP VERTICAL JOINTS AND SECURE IN

PLACE WITH JOINTS TAPED. PROVIDE TAPE SEALED CONTACT WITH DOOR FRAMES,

SECTION 07600 - FLASHING AND SHEET METAL GENERAL: PRE-MANUFACTURED PERIMTER EDGE METAL AND ACCESSORIES. REQUIRED FOR 15

BEFORE INSTALLING SURFACE FINISHES.

YR TOTAL SYSTEM ROOF WARRANTY. MANUFACTURER: DURO-LAST ROOFING / EXCEPTIONAL METALS, INC, (800) 248-0280, JASON DARK, WWW.DURO-LAST.COM A. DURO-LAST / EXCEPTIONAL METALS FASCIA BAR SYSTEM COMPRISED OF A 1 ¾" VINYL FASCIA BAR AND COVER MADE OF 24-GAUGE GALVANIZED STEEL, COVER PROVIDED WITH A PAINT GRIP FINISH. MEETS ANSI/SPRI ES-1 2003 METHOD RE-2 TESTING REQUIREMENTS. B. DURO-LAST / EXCEPTIONAL METALS VINYL BACKED COLLECTOR. SCUPPER PROFILE & SIZE

INDICATED FIG 1-20. C. COLLECTOR BOX TO BE MADE OF 24-GAUGE GALVANIZED STEEL PROVIDED WITH A PAINT GRIP FINISH PROFILE & SIZED ACCORDINGLY, DOWNSPOUTS TO BE MADE OF 24-GAUGE GALVANIZED STEEL PROVIDED WITH A PAINT GRIP FINISH. PROFILE & SIZE INDICATED FIG. 1-31, WITH STRAP HANGER FIG.1-35

GENERAL: MISCELLANEOUS SHEET METAL A. STANDARDS: MATERIALS AND CONSTRUCTION SHALL CONFORM TO FOLLOWING: SMACNA "ARCHITECTURAL SHEET METAL MANUAL- 1993." B. INSTALLATION: PERFORMED UNDER SECTION 07540 WORK. MATERIALS:

A. GALVANIZED STEEL: ASTM A653 COMMERCIAL QUALITY SHEET STEEL WITH 0.2% COPPER, G90 HOT-DIP GALVANIZED. GAGE INDICATED. B. ALUMINUM SHEET: ASTM B209 ALLOY 3003, TEMPER AS REQUIRED FOR FORMING AND PERFORMANCE. THICKNESS INDICATED

C. JOINT SEALERS: ONE-COMPONENT SILICONE ELASTOMERIC JOINT SEALANT COMPLYING WITH ASTM C920. COLOR MATCHED TO SHEET METAL FINISH D. METAL ACCESSORIES: PROVIDE SHEET METAL FASTENERS, CLIPS, STRAPS, ANCHORING DEVICES AND SIMILAR ACCESSORY UNITS AS REQUIRED FOR INSTALLATION OF WORK, MATCHING OR COMPATIBLE WITH MATERIAL INSTALLED, NON-CORROSIVE, SIZE AND GAGE AS REQUIRED FOR PERFORMANCE AND ACCEPTABLE TO THE ARCHITECT.

SIZES INDICATED AND TO COMPLY WITH STANDARD INDUSTRY STANDARDS AS SHOWN BY SMACNA IN THE "ARCHITECTURAL SHEET METAL MANUAL." INSTALLATION: A. PREPARATION: COORDINATE SHEET METAL WORK WITH OTHER WORK FOR THE CORRECT SEQUENCING OF ITEMS WHICH MAKE UP THE ENTIRE ROOF SYSTEM OF

FABRICATION: SHOP FABRICATE SHEET METAL WORK TO COMPLY WITH PROFILES AND

WEATHERPROOFING AND RAIN DRAINAGE: B. INSTALLATION: COMPLY WITH SMACNA "ARCHITECTURAL SHEET METAL MANUAL" RECOMMENDATIONS, DRAWING DETAILS AND APPROVED SHOP DRAWINGS FOR INSTALLATION OF THE WORK 1. ANCHOR SHEET METAL ITEMS SECURELY IN PLACE BY METHODS INDICATED,

PROVIDING FOR THERMAL EXPANSION. CONCEAL FASTENERS AND EXPANSION PROVISIONS WHENEVER POSSIBLE. INSTALL JOINT SEALANTS WHERE REQUIRED. 2. SET UNITS TRUE TO LINES AND LEVELS INDICATED. INSTALL WORK WITH SEALED LAPS, JOINTS AND SEAMS THAT WILL PERMANENTLY WATERTIGHT AND WEATHERPROOF. BED FLANGES OF SHEET METAL WORK IN THICK COAT OF ROOFING CEMENT OR SEALANT COMPATIBLE WITH ROOFING MEMBRANE.

SEPARATE SHEET METAL WORK FROM DISSIMILAR METALS AND TREATED WOOD

4. FABRICATE, SUPPORT AND ANCHOR CONDUCTOR BOXES AND DOWNSPOUTS TO

WITHOUT DAMAGE, DETERIORATION OR LEAKAGE

MATERIALS. PROVIDE ROSIN-SIZED PAPER SLIPSHEET OVER TREATED WOOD.

WITHSTAND THERMAL EXPANSION, STRESSES AND FULL LOADING BY ICE OR WATER

SECTION 07900 - JOINT SEALERS GENERAL: PROVIDE JOINT SEALERS AS SHOWN AND SPECIFIED.

BASED SEALER.

STANDARDS: COMPLY WITH ASTM C 920 REQUIREMENTS. B. APPLICATION: PERFORMED BY SKILLED, EXPERIENCED JOINT SEALANT APPLICATORS. MATERIALS

A. POLYURETHANE SEALANTS: TREMCO COMMERCIAL SEALANTS, (800) 321-7906, INTERNET WWW.TREMCOSEALANTS.COM,

1. "DYMONIC FC" ONE COMPONENT, FAST SKINNING, LOW MODULUS POLYURETHANE

TINTABLE FAST SETTING POLYURETHANE SEALANT. B. SILICONE SEALANTS: GENERAL ELECTRIC SILICONES (800) 295-2392, INTERNET WWW.GESILICONES.COM. 1. "SCS1700 SANITARY - MOLD/ MILDEW RESISTANT SILICONE", ONE COMPONENT

100% SILICONE, FUNGICIDAL BASED. "SCS2000 SILPRUF SILICONE" ONE COMPONENT MEDIUM MODULUS, NATURAL CURE SILICONE ALL PURPOSE SEALANT 3. "SILGLAZE II SCS2800 - GLAZING SEALANT" ONE COMPONENT, 100% SILICONE

"DYMERIC 240 FC" MULTI COMPONENT, GUN GRADE, CHEMICALLY CURING,

4. "GE PAINTABLE SILICONE" ONE COMPONENT PAINTABLE SILICONE. FIRESTOPPING SEALANTS: 3M FIRE PROTECTION PRODUCTS, (800) 328-1687, INTERNET WWW.3M.COM/FIRSTOP

1. "3M FIRE BARRIER CP 25WB+ CAULK" OR AN APPROVED EQUAL ONE-COMPONENT INTUMESCENT LATEX/WATER-BASED CAULK. JOINT BACKING: NON-ABSORPTIVE, NON-STAINING, NON-GASSING, POLYETHYLENE FOAM BACKER ROD COMPATIBLE WITH JOINT SEALANT, OVERSIZED 30%.

PREPARATION: CLEAN AND PREPARE JOINTS IMMEDIATELY BEFORE INSTALLING JOINT

SFALERS: WIPE SHIPPING OILS FROM SURFACES TO BE SEALED. REMOVE PROTECTIVE FILMS AND/ OR INSTALL JOINT BACKER ROD IF JOINT IS LARGER THAN 1/4" IN

B. INSTALLATION: INSTALL JOINT SEALANT MATERIALS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

APPLY JOINT SEALANTS IN UNIFORM, CONTINUOUS BEAD WITHOUT GAPS OR AIR POCKETS. HAND TOOL AND FINISH ALL JOINTS SO THAT A SMOOTH, LIP FREE UNIFORM LINE IS CREATED ALONG THE SUBSTRATE BEING SHOT. REMOVE ANY EXCESS MATERIALS FROM TOOLED EDGES AND ENDS OF JOINT.

2. INSTALL JOINT SEALANTS TO A DEPTH NO MORE THAN 1/2 THE WIDTH OF THE INSTALL SEALANTS BY PROVEN TECHNIQUES THAT RESULT IN SEALANTS DIRECTLY CONTACTING AND FULLY WETTING JOINT SUBSTRATES COMPLETELY FILLING RECESSES PROVIDED FOR EACH JOINT CONFIGURATION, AND PROVIDING UNIFORM, CROSS-SECTIONAL SHAPES AND DEPTHS RELATIVE TO

JOINT WIDTHS WHICH ALLOW OPTIMUM SEALANT MOVEMENT CAPABILITY. IMMEDIATELY, AFTER SEALANT APPLICATION, AND PRIOR TO TIME SKINNING OR CURING BEGINS, TOOL SEALANTS TO FORM SMOOTH, UNIFORM BEADS OF CONFIGURATION INDICATED TO ELIMINATE AIR POCKETS, AND TO ENSURE CONTACT AND ADHESION OF SEALANT WITH SIDES OF JOINT. REMOVE EXCESS SEALANTS FROM SURFACES ADJACENT TO JOINT. DO NOT USE TOOLING AGENTS WHICH DISCOLOR SEALANTS OR ADJACENT SURFACES OR ARE NOT

APPROVED BY SEALANT MANUFACTURER. CLEAN OFF EXCESS SEALANTS OR SEALANT SMEARS ADJACENT TO JOINTS AS WORK PROGRESSES BY METHODS AND WITH CLEANING MATERIALS APPROVED BY MANUFACTURERS OF JOINT SEALERS AND OF PRODUCTS IN WHICH JOINTS

INTERIOR SCHEDULE:

KITCHEN AREA:

A. PROVIDE A CONTINUOUS BEAD OF WHITE GESCS1700 SILICONE AT THE FOLLOWING LOCATIONS: a. ALL SINKS (MULTI-COMPARTMENT, HAND, MOP, AND PREP) TO TILE

 b. PAPER TOWEL DISPENSERS & SOAP DISPENSERS TO TILE WALLS. CEILING TILE PIPE PENETRATIONS. d. WALL PIPE PENETRATIONS AND/ OR ESCUTCHEONS PERIMETERS. (WATER & GAS LINES)

BATHROOMS: A. PROVIDE A CONTINUOUS BEAD OF WHITE GE SCS1700 SILICONE AT THE FOLLOWING LOCATIONS:

a. TOP OF WALL TILE TO DRYWALL CEILING. b. PERIMETER OF TOILETS/ URINALS TO FLOOR OR WALL TILE. PERIMETER OF MIRROR TO WALL TILE.

SINK TO WALL PERIMETER OF HAND DRYER TO WALL TOILET PAPER/ NAPKIN DISPOSAL UNITS TO TILE WALLS. STAINLESS SHELF TO WALL TILE.

h. TILE WALL PENETRATIONS UNDER SINK AND/ OR ESCUTCHEONS TO PERIMETERS. B. PROVIDE A CONTINUOUS BEAD OF DARK GRAY GE SCS2000 SILICONE AT THE FOLLOWING LOCATIONS:

WALL TILE TO HOLLOW METAL FRAMES. BASE OF WALL TILE TO POLYCRETE SCHLUTER STRIP. C. PROVIDE A CONTINUOUS BEAD OF WHITE GE PAINTABLE SILICONE AT THE

a. INTERIOR CORNER JOINTS AT WALL TILE

FOLLOWING LOCATIONS: a. BASE OF HOLLOW METAL DOOR FRAMES TO FLOOR. FIRE RATED WALLS: A. PROVIDE A CONTINUOUS BEAD OF 3M 25WB+ AT WALL/ CEILING

D. EXTERIOR SCHEDULE: PROVIDE A CONTINUOUS BEAD OR URETHANE SEALANT AND BACKER ROD AT THE FOLLOWING LOCATIONS. COLOR TO BE MATCHED TO ADJACENT SURFACES: A. HOLLOW METAL DOOR FRAME PERIMETER.

WEATHER BARRIER SEALANTS:

PENETRATIONS IN RATED WALLS.

EIFS JOINTS TO ABUTTING SURFACES. BRICK/ STONE CONTROL JOINTS. SIDEWALK/ CONCRETE EXPANSION JOINTS. ALLIMINUM FRAME PERIMETERS

> SEALANT TO MAINTAIN WATERTIGHT CONDITIONS. PRODUCTS: A. TREMCO 830 B. TREMCO BUTYL

> PROVIDE SEALANTS THAT COMPLY WITH ASTM C920, ELASTOMERIC POLYMER

C. SEALANTS RECOMMENDED BY THE WEATHER BARRIER MANUFACTURER.

GREGORY RALPH ARCHITECT 239 US HWY 22; SUITE 301 GREEN BROOK, NJ 08812 TEL: 908 731 1626 GREG@GRALPHARCHITECT.COM



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GREGORY RALPH

ARCHITECT

No.

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PREPARED OR APPROVED BY ME, AND THAT I AM A

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LAW OF THE THIS STATE.

EXISTING CONDITIONS SCHEMATIC DESIGN DESIGN DEVELOPMENT PROGRESS PRINT FULL RELEASE

SSUED TO:

ESIGNED BY JG DRAWN BY: JG APPROVED BY PROJECT #: STQ-0994-01

PLAYA BOWLS

20647 MACK AVE

PROJECT:

GROSSE POINTE, MI 48236 12" = 1'-0" **DRAWING TITLE: GENERAL**

SPECIFICATIONS

SHEET:

<u>GYPSUM WALL SYSTEMS</u>

SEE PLANS FOR WALL CONSTRUCTION AND PROVIDE METAL STUD SIZES AS SHOWN (20 GAUGE UNLESS OTHERWISE NOTED). PROVIDE TIE BACK BRACING. BOTH SIDES, WHERE EQUIPMENT IS ATTACHED OR WALL DOES NOT EXTEND TO DECK. EXTERIOR FACING TO BE 5/8" GYPSUM BOARD BOTH SIDES WITH FINISHES AS SHOWN ON PLANS. SECURELY FASTEN TRACK AT FLOOR AND AT CEILING OR DECK. DOUBLE UP STUDS AT ALL OPENINGS TYPICAL. PROVIDE CLOSURE STRIP AND FIRE-SAFING AT DECK FOR ALL RATED WALLS / **FNCLOSURES**

- GYPSUM BOARD WALL CONSTRUCTION SHALL BE LAID WITH JOINTS VERTICALLY AND FINISHED WITH A THREE-COAT SPACKLING METHOD. ALL WALL AND CEILING SURFACES SHALL BE SANDED SMOOTH AND UNIFORM, READY FOR A PAINTERS FINISH, PRIMED W/ 2 COATS OF PAINT, SATIN.PROVIDE 5/8" GYPSUM AT WALLS UNLESS OTHERWISE NOTED. ALL OUTSIDE CORNERS AT DRY WALL PARTITIONS SHALL HAVE METAL CORNER BEADS. TAPE AND SPACKLE SMOOTH WHERE REQUIRED. J-BEADED REQUIRED ON EXPOSED
- ALL CONCRETE BLOCK EXTERIOR WALLS SHALL BE FURRED OUT WITH 1 5/8" METAL STUD CHANNELS (MIN), R-13 INSULATION AND 5/8" GYPSUM BOARD.

SAFING FOR RATED WALL CONSTRUCTION AS SHOWN ON PLANS.

SOUND INSULATION SHALL BE 2" THERMAFIBER SOUND ATTENUATION BLANKETS TO THE UNDERSIDE OF ROOF DECK. FILL ALL SPACES BETWEEN ROUGH FRAME AND DOORS /WINDOWS- WITH SAME AT DEMISING PARTITIONS. PARTITIONS WHICH RUN FULL HEIGHT TO UNDERSIDE OF ROOF OR FLOOR DECK. A SLIP HEAD SHALL BE PROVIDED AND FIRE-

WOOD DOORS EQUAL TO 1-3/8" STANDARD PLYWOOD HOLLOW CORE, OR 1-3/4" SOLID CORE WHERE NOTED. BIRCH FACE FOR PAINTED FINISH, PREPARE AND TRIM DOORS FOR HARDWARE. UNDERCUT ALL BATHROOM DOORS, PROVIDE SADDLES WHERE FLOORING IS

- DISSIMILAR. ALL HARDWARE SHALL BE INCLUDED FOR A COMPLETE UNIT. (ADA COMPLIANT) MINOR DEMOLITION WORK AND OTHER WORK REQUIRED TO INSTALL NEW DOORS, FINISHES, ETC., ENTIRE EXISTING WALL CONSTRUCTION, MAY NOT BE SPECIFICALLY INDICATED BUT REMAIN THE RESPONSIBILITY OF THE CONTRACTOR AS PART OF THE
- ALL "B" LABEL DOORS ARE TO BE EQUIPPED WITH AN AUTOMATIC SELF-CLOSER AND BE UL LABELED 1-1/2 HOUR RATED. SADDLE IS ALSO REQUIRED
- ALL EXTERIOR DOORS ARE TO HAVE WEATHERSTRIPPING/SILENCERS. CONTRACTOR IS TO LOCATE AND COORDINATE EGRESS DOOR HARDWARE WITH ANY ALARM REQUIREMENTS
- PROVIDE DOOR BUMPERS WHERE APPLICABLE TO PREVENT DAMAGE TO FINISHES. ALL NEW DOORS SHALL HAVE A FINISH AND HARDWARE UNLESS OTHERWISE NOTED. ALL HARDWARE ON DOORS IS LEVER / ADA COMPLIANT
- DOORS TO BE ANSI A117.1-2009, SECTION 404 COMPLIANT, INCLUDING BUT NOT LIMITED TO 5.0 POUNDS MAXIMUM OF DOOR OPENING FORCE (404.2.8) AND EASILY GRASPABLE

SEE DOOR SCHEDULE. PROVIDE 2 KEYS EACH LOCKSET MASTER KEYED AS DIRECTED BY LANDLORD/OWNER. HARDWARE FINISH TO BE BRUSHED ALUMINUM IF NOT NOTED ON NOT TO DAMAGE FRAME/DOOR FINISHES. PROVIDE SILENCERS TYPICAL.

CAULKING AND SEALANTS

ALL CONSTRUCTION ADHESIVE SHALL BE SOLVENT FREE, LOW-VOC AND MUST PASS ASTM-D 3498 AND AFG-01 TESTS. (TRITEBOND OR RED DEVIL) ONLY USE BETWEEN 40°F AND 100°F PROVIDE FIRE SEALANT CONTINUOUS AT RATED WALL JUNCTURE WITH DECK OR

CAULKING SHALL BE GENERAL PURPOSE ACRYLIC LATEX COMPOUND FOR INTERIOR USE.

CAULKING SHALL BE THE PRODUCT OF ONE MANUFACTURER. CHECK WITH ARCHITECT ON APPLY BUTYL-BASED SELF ADHESIVE FLASHING AROUND ALL SIDES OF WINDOWS. DOORS. VENTS. ELECTRICAL OUTLETS AND OTHER VULNERABLE AREAS ON THE EXTERIOR OF THE

BUII DING

OF IBC 2021 EDITION.

PLASTIC LAMINATE SHALL BE EQUAL IN QUALITY TO "NEVAMAR" AS MANUFACTURING BY

- EXXON, COLORS AS PER ARCHITECT COLOR SELECTION. VINYL COMPOSITION TILE: SEE REQUIREMENTS. COLOR SELECTION TO BE APPROVED BY LANDLORD / TENANT/OWNER. STATIC RESISTANT RATED VCT IN ALL DATA AND TRADING
- ALL FINISHES TO MEET CODE REQUIREMENTS FOR FLAME SPREAD AND SMOKE CLASSIFICATIONS AND BE COMPATIBLE WITH CONSTRUCTION SHOWN. a. ACOUSTIC CEILINGS
- CEILING PANELS SHALL BE 24" X 48" X 5/8" ACOUSTICAL "LAY-IN" PANELS BY ARMSTRONG OR EQUAL. AS PER LANDLORD'S STANDARD, UNLESS OTHERWISE NOTED. SEE SCHEDULE ON PLANS FOR TYPES. SUSPENSION GRID SYSTEM SHALL BE GALVANIZED MEETING ASTM C635 STANDARD UTILIZING 12 GAUGE GALVANIZED HANGER WIRE OR BLACK IRON AS ALLOWED BY LOCAL BUILDING AUTHORITY. <u>PAINTING</u>
- AFTER INITIAL COAT OF PRIMER, 2 FINISH COATS SHALL BE APPLIED IN SUCCESSION ALLOWING PROPER DRYING BETWEEN. TEMPERATURE AND HUMIDITY CONDITIONS SHALL BE MAINTAINED DURING PAINTING AND CURING. REFER TO MANUFACTURERS DIRECTIONS. PAINTING SHALL BE AS PER TENANT STANDARD COLORS AND FINISHES AS PER SCHEDULE SHOWN ON PLANS. SUBJECT OF FINAL APPROVAL BY ARCHITECT, LANDLORD, TENANT OR OWNER.
- CARPETING, IF PROVIDED, IS TO BE AS PER TENANT STANDARDS/SUBJECT TO FINAL SELECTIONS / APPROVED BY LANDLORD / TENANT / OWNER / ARCHITECT. PADDING AS REQUIRED. STRETCH OR GLUE AS REQUIRED. ALL INTERIOR FINISHES ARE TO BE COORDINATED WITH THE TENANT PRIOR TO PROCEEDING WITH THE WORK. VERIFY WITH FINISH SCHEDULE MATERIAL TYPE AND
- FINISH. SEE PLANS FOR LOCATION/EXTENT OF FINISHES, IF NOTED ON PLANS. CHANGES FROM FINISHES SHOWN ARE TO BE BROUGHT TO THE CONTRACTORS/LANDLORDS ATTENTION BY THE TENANT OR WORK WILL PROCEED AS SHOWN. THE CONTRACTOR IS TO NOTIFY THE LANDLORD/ARCHITECT OF ALL TENANT IMPOSED
- CHANGES. CHANGES WHICH AFFECT THE SCOPE OF WORK/DETAILS SHOWN ARE TO BE CLARIFIED PRIOR TO THEIR INCORPORATION INTO THE WORK. AUTHORIZATION OF ALL ALLOWANCES SHALL BE SIGNED BY THE LANDLORD AND TENANT
- FIXING THE CONTRACTOR SUPPLIED COST OF ALL ALLOWANCE ITEMS, BEFORE THEY ARE INSTALLED, AND MAKING INCLUSION OR EXCLUSION ADJUSTMENTS TO TINE WORK AND TO THE CONTRACT SUM ACCORDINGLY. THE CONTRACTOR SHALL, UPON RECEIPT OF THE APPROVED LIST OF ALLOWANCE ITEMS IMPLEMENT THE WORK AS REQUIRED. ALL INTERIOR WALL AND CEILING FINISHES SHALL BE IN COMPLIANCE WITH TABLE 803.11

GENERAL CONSTRUCTION SPECIFICATIONS <u>MECHANICAL / ELECTRICAL / PLUMBING</u>

A. SEE EXISTING APPROVED BUILDING SET/MECHANICAL ENGINEERS DRAWINGS FOR HVAC, PLUMBING AND ELECTRICAL LAYOUTS/DESIGN. COORDINATE THE EQUIPMENT/RUNS NOTED WITH THE LAYOUTS / WORK INDICATED. PROVIDE AND MAINTAIN AND/OR MECHANICAL VENTILATION AS REQUIRED BY CODE AND IN

ACCORDANCE WITH THE DRAWINGS. ALL FURRING SHALL BE 7/8" METAL HAT SECTIONS SECURELY ANCHORED TO WALLS AT 24" C. DUCTS, PIPES AND CONDUIT PASSING THROUGH RATED CONSTRUCTION SHALL HAVE SPACES NOT EXCEEDING 1/2" PACKED WITH MINERAL WOOL AND CLOSED OFF WITH

- CLOSED FITTING METAL ESCUTHEONS. WHERE ALTERATION WORK IS SHOWN MODIFYING THE EXISTING BUILDING THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXTENDING ALL SERVICES TO THE SPACES SHOWN AND/OR ADDING TO THE PRESENT BUILDING SYSTEMS INCLUDING BUT NOT LIMITED TO SPRINKLERS, HEATING AND VENTILATING DUCTWORK SUPPLY AND RETURNS. FIRE ALARM. HEAT DETECTORS. AND EMERGENCY LIGHTING WHETHER SHOWN OR PART OF THE APPROVED DRAWINGS
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL MINOR DEMOLITION WORK INCLUDING BUT NOT LIMITED TO: CUTTING AND PATCHING FOR TIE-IN OF THE NEW WASTE LINE TO EXISTING RUNS IN THE FLOOR, AND PATCHING ELECTRICAL CONNECTIONS THROUGH EXISTING WALLS. AND HVAC RUNS. THESE MAY OR MAY NOT BE SPECIFICALLY INDICATED ON THE ARCHITECTURAL DRAWINGS, BUT REMAIN THE RESPONSIBILITY OF THE GENERAL CONTRACTORS
- ALL HVAC, ELECTRICAL AND PLUMBING EQUIPMENT UNCOVERED DURING DEMOLITION THAT IS NOT SHOWN TIED INTO NEW ADDITION OR TO RELOCATED UNITS IS TO BE "CAPPED OFF", COVERED AND LOCATION NOTED FOR FUTURE USE.
- INSTALL PUMPS, UNIT HEATERS AND MISCELLANEOUS EQUIPMENT. PROVIDE ALL NECESSARY CONNECTIONS TO VARIOUS SERVICES/ITEMS BY ALL TRADES INCLUSIVE IN THE SCOPE OF THE WORK. ALL OTHER EQUIPMENT, WHETHER INDICATED ON THE PLANS OR REQUIRED FOR NEW
- LOADS, SHALL BE PROVIDED/INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL COST. LIKEWISE, ANY ITEMS ADDED BY THE OWNER SHALL BE INCLUSIVE OF ALL WORK MODIFICATIONS REQUIRED FOR SUCH INSTALLATION.
- THE ELECTRICAL OUTLETS AND PLUMBING SHOWN ON THE ARCHITECTURAL DRAWING ARE ONLY THOSE WHICH HELP TO CLARIFY THE SUGGESTED FUNCTIONAL PATTERNS OF THE ROOMS. IN ALL CASES THE CONTRACTOR SHALL REFER TO THE MECHANICAL AND ELECTRICAL DRAWINGS FOR THE COMPLETE LAYOUT OF EACH RESPECTIVE SERVICE AS PROVIDED. PROVIDE NEW ELECTRICAL WIRING/LIGHTING AS CLOSE AS POSSIBLE TO LAYOUTS SHOWN
- ON PLANS UNLESS OTHERWISE DIRECTED BY TENANT. VERIFY EXISTING CONDITIONS, SPRINKLER LINE PIPING, MAIN RUNS, AND HEIGHTS SO AS NOT TO INTERFERE WITH LAYOUT SHOWN IF CONFLICT EXISTS NOTIFY THE ARCHITECT AT ONCE. ELECTRICAL WIRING AND DEVICES TO MEET ALL CODE REQUIREMENTS. CONTRACTOR TO PROVIDE ALL HOOKUPS TO EXISTING AS REQUIRED AFTER VERIFYING IF MAIN SERVICE IS

SUFFICIENT TO CARRY INCREASED LOAD. REPLACE AS REQUIRED AND/OR UPGRADE IF NOT

- ADEQUATE. COORDINATE NEW CONSTRUCTION WITH ALL REQUIRED MECHANICAL DUCTWORK AND PIPE PENETRATIONS. PROVIDE THROUGH WALL SLEEVES AS REQUIRED, TYPICAL ALL.
- M. ELECTRICAL SUBCONTRACTOR SHALL SUBMIT CATALOG CUTS OF ALL FIXTURES TO LANDLORD/TENANT/ARCHITECT FOR APPROVAL OF COLOR, STYLE, AND BULB TYPE. PROVIDE ACCESS TO EXISTING ELECTRICAL AND TELEPHONE PANELS WHERE REQUIRED. PHONE JACKS BY TELEPHONE CONTRACTOR. GENERAL CONTRACTOR TO COORDINATE WITH ALL TRADES. INCOMING SERVICE TO BE BY THE LOCAL OR THE REGIONAL
- P. IF HVAC DRAWINGS ARE NOT PROVIDED UNDER THIS SCOPE OF WORK. HVAC SHALL BE DESIGN /BUILD BY THE G.C. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR GIVING ALL SUBCONTRACTORS A COPY OF THE ENTIRE SET OF CONSTRUCTION DOCUMENTS FOR BIDDING.
- SCHEDULE. INTEGRATE ALL ALARM DEVICES AS REQUIRED AND INSTALL LOCKSETS SO AS Q. DURING DEMOLITION ALL HEATING AND COOLING SYSTEMS, EXHAUST SYSTEMS OR AIR CIRCULATION DEVICES ARE TO BE TURNED OFF FROM START OF DEMOLITION TO TIME OF ADEQUATE DUST SETTLEMENT. TEMPERATURE OF SPACE TO BE MONITORED AS TO NOT ALLOW EXISTING OR NEW WATER AND SPRINKLER PIPING FROM BEING COMPROMISED. SYSTEMS TO BE RETURNED BACK TO NORMAL AFTER WORK IS COMPLETE-DAILY/HOURLY
 - FRAMING OF ALL OPENINGS FOR DUCT WORK, RETURN AIR OPENINGS, AND GRILLE OPENINGS ABOVE AND BELOW HUNG OPENINGS SHALL BE COORDINATED WITH HVAC SHOP DRAWINGS. ALL OPENINGS SHALL BE PROPERLY SEALED FOR SOUNDPROOFING, FIRE STOP, AND VIBRATION.

GENERAL SPECIFICATIONS/NOTES

1. THESE ARE STANDARD SPECIFICATIONS, LEGENDS & NOTES. SOME OF THE ITEMS AND/OR NOTES MAY NOT BE APPLICABLE TO THIS SPACE. USE JUDGMENT AND COORDINATE WITH MECHANICAL. ELECTRICAL & HVAC DRAWINGS AND REQUIREMENTS WITH CONDITIONS SHOWN ON THE ARCHITECTURAL, VERIFY AND INTERFACE BETWEEN THE RESPECTIVE TRADES PRIOR TO THE START OF CONSTRUCTION. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH THE WORK OR ORDERING MATERIALS IN QUESTION. NOTE: THESE PLANS INDICATE THE DESIGN INTENT/SCOPE OF WORK TO BE PROVIDED. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS/LABOR TO PROVIDE A COMPLETE FINISHED PROJECT INCLUDING FIELD MODIFICATIONS AS REQUIRED. ALL GENERAL CONCEPTS, PROCEDURES, APPROVALS, RESPONSIBILITIES CHECKING AND

- REVIEWING NOTED HEREIN ARE REQUIRED FOR ALL PROJECTS AT ALL TIMES. THE CONTRACTOR SHALL FULLY ACQUAINT HIMSELF WITH THE EXISTING CONDITIONS AND SHALL HAVE VISITED AND INSPECTED THE JOB SITE AND BE FULLY INFORMED AS TO THE NATURE OF EQUIPMENT AND FACILITIES NEEDED FOR THE PROPER EXECUTION OF THE WORK. STARTING OF DEMOLITION AND REMOVAL OPERATIONS WILL BE CONSTRUED AS EVIDENCE THAT THE CONTRACTOR HAS COMPLIED WITH THESE REQUIREMENTS AND LATER CLAIMS FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN WILL NOT BE RECOGNIZED
- VERIFY ALL EXISTING ELEVATIONS, CONDITIONS, AND DIMENSIONS AT THE SITE AGAINST THE DRAWINGS AND INFORM THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK AND SUBMISSION OF ANY SHOP DRAWINGS
- 4. ALL WORK, WHETHER SHOWN OR IMPLIED, UNLESS SPECIFICALLY QUESTIONED IN WRITING, SHALL BE CONSIDERED FULLY UNDERSTOOD IN ALL RESPECTS BY THE GENERAL CONTRACTOR AND HE WILL BE RESPONSIBLE FOR ANY MISINTERPRETATIONS OR CONSEQUENCES THEREOF FOR ALL WORK ON ALL DRAWINGS.
- 5. CONTRACTOR SHALL FOLLOW ACCEPTED TRADE PROCEDURES AND MANUFACTURER'S STANDARDS AND SHALL PRODUCE THE PROJECT IN A GOOD AND WORKMANLIKE MANNER. ALL MATERIALS ARE TO BE NEW AND CONTRACTOR SHALL NOT SUBSTITUTE ANY
- STRUCTURAL MATERIALS WITHOUT PRIOR WRITTEN APPROVAL FROM THE ARCHITECT CONTRACTOR SHALL SCHEDULE ALL WORK TO CONFORMS TO THE GENERAL CONSTRUCTION SCHEDULE AND SHALL COOPERATE WITH OTHER CONTRACTORS IN THE REQUIRED SEQUENTIAL INSTALLATION SCHEDULE AS APPROVED BY THE ARCHITECT. ALL
- WORK SHALL COMMENCE AND CONTINUE UNTIL COMPLETION WITHOUT UNDUE DELAY. 7. THE CONTRACTORS SHALL PROVIDE SUPERINTENDENCE TO THE WORK AND SHALL FURNISH ALL LABOR, MATERIALS, TRANSPORTATION, APPARATUS AND EQUIPMENT REQUIRED FOR A COMPLETE INSTALLATION. THE CONTRACTORS SHALL INSTALL ALL MATERIALS IN A MANNER SUBJECT TO APPROVAL OF THE TENANT, ARCHITECT AND THE
- LANDLORD/OWNER. 8. THE CONTRACTORS SHALL LEAVE THE PREMISES IN A NEAT, CLEAN AND SAFE CONDITION AT THE COMPLETION OF WORK EACH DAY. STORAGE OF MATERIALS SHALL NOT INTERFERE WITH THE MEANS OF EGRESS OF THE SPACE OR ANY OTHER SPACE.
- THE CONTRACTORS SHALL CONFORM TO ALL APPLICABLE PROVISIONS OF THE NATIONAL AND STATE BUILDING CODES, AND LOCAL REQUIREMENTS OF THE MUNICIPALITY, INCLUDING, BUT NOT LIMITED TO ALL CURRENT ADA HANDICAP REQUIREMENTS. 10. ALL CONDITIONS WHICH OCCUR AND WHICH ARE NOT IN CONFORMANCE WITH THESE
- SPECIFICATIONS AND ADJACENT DRAWINGS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT FOR PROMPT RESOLUTION. FAILURE TO DO SUCH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. TO RECTIFY OR MODIFY TO COMPLY WITH THE DRAWINGS OR BUILDING CODES. 11. NO MATERIAL SUBSTITUTIONS SHALL BE MADE. THE ARCHITECT WILL CONSIDER MATERIAL

CHANGE REQUESTS ON AN INDIVIDUAL BASIS. CONTRACTOR SHALL SUBMIT SAMPLES AND

- CUTS FOR WRITTEN APPROVAL BY THE ARCHITECT PRIOR TO THE START OF ANY WORK. 12. PERMITS, APPROVALS AND C.O.: THE CONTRACTOR SHALL FILE FOR, OBTAIN AND PAY FOR AS PART OF THE WORK, AT NO ADDITIONAL COST TO HIS/HER CONTRACT, ALL NECESSARY PERMITS. FEES, INSPECTIONS, APPROVALS AND ANY APPLICABLE SALES TAX. INDIVIDUAL SUBCONTRACTORS TO COORDINATE WITH GENERAL CONTRACTOR IN SECURING PERMITS, INSPECTIONS AND APPROVALS ON THEIR RESPECTIVE WORK. NO WORK IS TO PROCEED UNTIL THE NECESSARY PERMITS ARE RECEIVED AND ISSUED BY THE LOCAL BUILDING
- 13. THE CONTRACTOR SHALL FILE FOR, OBTAIN AND FORWARD TO THE TENANT/LANDLORD/OWNER THE CERTIFICATE OF OCCUPANCY (ORIGINAL) AND ALL OTHER PERMITS AND CERTIFICATES OF INSPECTIONS AT THE COMPLETION OF THE PROJECT UNLESS OTHERWISE DIRECTED IN WRITING
- 14. ALL MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT SHALL BE SUPPLIED, INSTALLED, CONNECTED, ERECTED, USED, CLEANED AND CONDITIONED AS DIRECTED BY THE MANUFACTURERS, UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS.
- 15. EACH SUBTRADE WILL BE RESPONSIBLE FOR REVIEWING THE ENTIRE SET OF DRAWINGS AND NOTING HIS/HER WORK AS APPLICABLE. WORK INDICATED OR INFERRED ON THE DRAWINGS WITH REFERENCE TO THEIR TRADE/SCOPE OF WORK WILL BE DEEMED AND INCLUDED IN SUB-CONTRACTOR'S COSTS. SAME SHALL APPLY TO THE GENERAL CONTRACTOR.
- 16. THE GENERAL CONTRACTOR SHALL SUBMIT IN WRITING ALL PROPOSALS FOR ADDITIONAL WORK TO THE ARCHITECT OFFICE FOR REVIEW AND APPROVAL. NO WORK WITH-REFERENCE TO THE ADDITIONAL WORK IS TO PROCEED UNTIL A SIGNED PROPOSAL/CHANGE ORDER IS RETURNED TO THE ARCHITECT/OWNER. PROVIDE FULL AND COMPLETE PROTECTION REQUIRED FOR ALL AREAS REMAINING
- OPERATIONAL DURING ALL PHASES OF THIS PROJECT. CONTRACTOR TO TAKE ALL NECESSARY MEASURES TO PREVENT DAMAGE TO ANY ADJACENT PROPERTY OR PERSONS. THE CONTRACTOR SHALL REPAIR AND PATCH ANY AREAS THAT ARE ALTERED OR DAMAGED DURING PROCESS OF ALTERATION. 18. ANY EXISTING WORK DAMAGED BY THE CONTRACTORS OR THEIR SUBCONTRACTORS
- SHALL BE RETURNED TO ITS ORIGINAL CONDITION AT THE CONCLUSION OF THE PROJECT AT NO ADDITIONAL COST TO THE LANDLORD / OWNER. 19. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO KEEP THE BUILDING WEATHER TIGHT,
- AND MAINTAIN ALL BARRICADES. SHORING, BRACING AND OTHER SAFETY MEASURES REQUIRED TO PROTECT THE BUILDING, WORKMEN AND THE PUBLIC DURING CONSTRUCTION AND AFTER WORK HOURS
- 20. SHOP DRAWINGS: THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL FIELD MEASUREMENTS AND SUBMIT WITH PROMPTNESS SHOP DRAWINGS, SAMPLES, MANUALS, AND SCHEDULES REQUIRED FOR APPROVAL. THE ARCHITECT'S APPROVAL SHALL NOT RELIEVE THE GENERAL CONTRACTOR FROM RESPONSIBILITY FOR DEVIATIONS AT THE TIME OF SUBMISSION NOR SHALL IT RELIEVE HIM FROM RESPONSIBILITY FOR ERRORS IN SHOP DRAWINGS. THIS SHALL BE DONE PRIOR TO FABRICATION AND REVIEWED BY THE ARCHITECT, ALL SUB-CONTRACTOR'S SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL THROUGH THE GENERAL CONTRACTOR PRIOR TO WORK BEING PERFORMED UNLESS OTHERWISE NOTED.
- 21. APPROVALS: THE ARCHITECT WILL REVIEW SUBMITTALS WITH REASONABLE PROMPTNESS SO AS TO CAUSE NO DELAY, BUT ONLY FOR CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS.
- 22. ALL COLOR SELECTIONS SHALL BE MADE AND COORDINATED THROUGH THE OFFICES OF THE ARCHITECT EXCEPT AS OTHERWISE DIRECTED BY THE LANDLORD/OWNER. COLORS: UNLESS THE PRECISE COLOR AND/OR PATTERN IS SPECIFICALLY DESCRIBED IN THE CONTRACT DOCUMENTS, WHENEVER A CHOICE OF COLOR OR PATTERN IS AVAILABLE IN A SPECIFIED PRODUCT. SUBMIT ACCURATE COLOR CHARTS AND PATTERN CHARTS TO THE ARCHITECT FOR HIS REVIEW AND SELECTION. COLORS WILL AND CAN ONLY BE APPROVED WITH ACTUAL COLOR SAMPLES SUBMITTED FOR APPROVAL. ANY COLOR SUBMITTED IN WRITING ONLY WITHOUT A COLOR SAMPLE IS SUBJECT TO REJECTION AFTER THE
- 23. DETAILS SHOWN IN ANY SECTION APPLY TO ALL SIMILAR SECTIONS UNLESS OTHERWISE NOTED. THE GENERAL CONTRACTOR SHALL SUBMIT FINAL "AS BUILT' DRAWINGS - 6 PRINTS
- OF EACH TRADE AS PART OF THE CONTRACT FOR THE WORK INDICATED. 24. NO PORTION OF THE WORK REQUIRING A SUBMISSION SHALL BE COMMENCED BY THE CONTRACTOR, UNTIL THE SUBMISSION HAS BEEN REVIEWED AND NOTED BY THE ARCHITECT IN WRITING. ALL SUCH PORTIONS OF THE WORK SHALL BE IN ACCORDANCE
- WITH APPROVED SUBMITTAL, AND IF COMMENCED ARE AT THE CONTRACTORS OWN RISK. 25. WHEN CERTAIN ITEMS OF EQUIPMENT AND OTHER WORK ARE INDICATED AS "NIC" (NOT IN CONTRACT) OR TO BE FURNISHED AND INSTALLED UNDER OTHER CONTRACTS, ANY REQUIREMENTS FOR PREPARATION OF OPENINGS, PROVISION OF BACKING, ETC., FOR RECEIPT OF SUCH "NIC" WORK SHALL BE PROVIDED TO THE GENERAL CONTRACTOR BY THE TENANT FOR THE GENERAL CONTRACTOR TO PROPERLY FORM AND OTHERWISE PREPARE HIS WORK IN A SATISFACTORY MANNER TO RECEIVE SUCH "NIC" WORK.

- 26. UPON WRITTEN REQUEST BY THE CONTRACTOR, THE TENANT IS TO FURNISH TO THE GENERAL CONTRACTOR A SCHEDULE INDICATING DELIVERY DATES AND INSTALLATION REQUIREMENTS OF EQUIPMENT TO BE FURNISHED AND INSTALLED UNDER SEPARATE CONTRACTS.
- 27. IT WILL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY TO SEE THAT THE BUILDING AREAS ARE MADE READY TO RECEIVE AND INSTALL THE TENANT'S OR OWNER'S EQUIPMENT IN ACCORDANCE WITH THE DELIVERY SCHEDULE AND SPECIFIC REQUIREMENTS FURNISHED. FAILURE TO MEET THE SCHEDULE ON ITEMS OF THE TENANT-FURNISHED EQUIPMENT WILL BE CONSIDERED AS IMPORTANT TO THE COMPLETION
- SCHEDULE AS ANY OTHER PART OF THE WORK. 28. CONTRACTOR IS TO FURNISH AND INSTALL ALL ANGLES, STRUTS, BRACKETS, TOGGLES, EYE BOLTS, ETC., WHEREVER NECESSARY TO PROPERLY SUPPORT, BRACE OR REINFORCE ALL FINISHES, FRAMES, EQUIPMENT, AND ETC.
- 29. ALL BLOCK AND ADJACENT RATED WALL CONSTRUCTION SHALL MEET THE FIRE RESISTIVE RATINGS AND OTHER REQUIREMENTS OF BUILDING CODE AND REGULATIONS. LOCAL LAWS, ORDINANCES, REGULATIONS, AND AUTHORITIES HAVING JURISDICTION.
- 30. ALL CUTTING AND PATCHING OF EXTERIOR OPENINGS SHALL BE POINTED UP AND REPAIRED FOR AN AIRTIGHT AND WEATHER TIGHT SEAL. INTERIOR FINISHES TO BE COMPLETED AS PER PLANS.

31. DEMISING PARTITIONS, INCLUDING COLUMN AND RATED WALL CONSTRUCTION SHALL

- EXTEND FROM FLOOR SLAB TO UNDERSIDE OF DECK CONSTRUCTION ABOVE. TYPICAL ROOM WALLS TO TERMINATE TO THE UNDERSIDE OF THE EXISTING CEILING GRID UNLESS OTHERWISE NOTED. 32. ALIGNMENT OF NEW CONSTRUCTION TO EXISTING WALLS AND COLUMNS SHALL BE DONE
- IN A MANNER AS TO VISIBLY ELIMINATE THE POINT OF CONTACT OR JOINT OF NEW AND EXISTING MATERIALS. NEW CONSTRUCTION SHALL BE FLUSHED WITH EXISTING UNLESS NOTED OTHERWISE ON THE DRAWINGS
- 33. PARTITIONS SHALL BE CONTINUOUS OVER ALL BUILT-IN EQUIPMENT WHERE SHOWN ON PLANS AND DETAILS. FURNISH NECESSARY ANGLES, HANGERS, ETC., TO CARRY THESE PARTITIONS AND PROVIDE NECESSARY CLOSURE STRIPS AND TRIM AS REQUIRED. 34. PATCH ALL FLOOR AND WALL CRACKS AND SURFACE IRREGULARITIES AS REQUIRED PRIOR TO FINISH INSTALLATION SHOWN. FLASH PATCH AREAS AS REQUIRED TO PROVIDE A
- SMOOTH FLUSH SURFACE FOR SAME. THIS IS TO INCLUDE ANY RAMPING OR LEVELING OF EXISTING SURFACES. 35. ALL NEW PIPING, DUCTWORK, AND ELECTRICAL CONDUITS SHALL BE CONCEALED WITHIN NEW PARTITIONS, OR THE GENERAL CONTRACTOR IS TO PROVIDE FURRING, SOFFITS, CHASES, ETC., FOR ALL DUCTWORK, PIPING, CONDUIT, ETC., UNLESS INDICATED TO BE
- 36. THE GENERAL CONTRACTOR SHALL PATCH ALL CUTTING BY MECHANICAL AND ELECTRICAL TRADES AND ALL ADDITIONAL CUTTING BY OTHERS. COORDINATE THE WORK PRIOR TO THESE TRADES PROCEEDING. NO EXTRAS WILL BE ALLOWED DUE TO FAILURE TO COORDINATE SUCH OR PROCEEDING WITH WORK THAT COULD HAVE BEEN AVOIDED BY SUCH PROPER PLANNING.
- 37. ALL INTERIOR COLUMNS TO AFFORD THE SAME FIREPROOFING RATINGS AS SUBMITTED BY THE ARCHITECT OF RECORD FOR THE ENTIRE BUILDING PREVIOUSLY APPROVED OR AS
- 38. FIRE ALARM AND EMERGENCY LIGHTING ARE TO BE PROVIDED, MEETING ALL CODE REQUIREMENTS. ALL EXIT AREAS SHALL BE PROPERLY IDENTIFIED AND SUPPLIED WITH EMERGENCY EXIT LIGHTING TO MAINTAIN A MINIMUM OF ONE FOOT CANDLE IN ACCORDANCE WITH CURRENT CODES AS AMENDED BY THE ACCUMULATIVE SUPPLEMENTS. PROVIDE AND/OR MAINTAIN MECHANICAL VENTILATION AS REQUIRED BY CODE AS MODIFIED BY THESE DRAWINGS. ALL EXISTING FIRE ALARMS AND SAFETY RELATED EQUIPMENT/DEVICES TO REMAIN OPERATIONAL THROUGHOUT ENTIRE CONSTRUCTION/DEMOLITION PROCES
- 39. NEW WORK IS TO MEET OR EXCEED THE ENERGY CODE, NATIONAL ELECTRIC CODE NEC, NATIONAL STANDARD PLUMBING CODE (NSPC) . MECHANICAL CODES. OSHA (WHERE APPLICABLE), AND ALL, UL REQUIREMENTS. THE MOST RECENT PUBLICATION DATE OF ALL AFOREMENTIONED CODES SHALL APPLY.
- 40. HANDICAP NOTE: THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" SHALL BE STRICTLY ADHERED TO. SEE HANDICAP NOTES.
- 41. GUARANTEES: ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE UNLESS SPECIFIED OTHERWISE FOR A LONGER PERIOD OF TIME ON SPECIFIC ITEMS. FACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCIDENTAL THERETO, INCLUDING DAMAGE TO OTHER WORK, FURNISHINGS OR EQUIPMENT. IF THE CONTRACTOR, AFTER NOTICE IN WRITING FROM THE ARCHITECT AND OWNER FAILS TO PROCEED PROMPTLY TO COMPLY WITH THE TERMS OF THE GUARANTEE. THE LANDLORD MAY HAVE THE DEFECTS CORRECTED. AND THE CONTRACTOR RESPONSIBLE AND IS SURETY SHALL BE LIABLE FOR ALL EXPENSES INCURRED
- 42. THE CONTRACTOR SHALL OBTAIN AND PAY FOR COMPREHENSIVE LIABILITY INSURANCE COVERING THE ENTIRE WORK AND COMPENSATION INSURANCE IN ACCORDANCE WITH APPLICABLE CURRENT LAWS. PRIOR TO THE COMMENCEMENT OF THE WORK, THE CONTRACTOR SHALL SUBMIT TO THE TENANT/LANDLORD/OWNER COPIES OF ALL REQUIRED CERTIFICATES OF INSURANCE. UPON COMPLETION OF THE JOB THE GENERAL CONTRACTOR SHALL SUBMIT CERTIFICATES OF INSPECTION AND A CERTIFICATE OF SUBSTANTIAL COMPLETION (A.I.A. DOCUMENT G-704).
- 43. THE CONTRACTOR SHALL, TO THE FULL EXTENT PERMITTED BY LAW, DEFEND, INDEMNIFY AND SAVE HARMLESS THE TENANT AND THE ARCHITECT, AND ASSOCIATES AND THEIR RESPECTIVE DIRECTORS, OFFICERS, PARTNERS, EMPLOYEES AND AGENTS, FROM ANY AND ALL CLAIMS DIRECTLY OR INDIRECTLY ARISING OR ALLEGED TO ARISE OUT OF THE PERFORMANCE OF OR THE FAILURE TO PERFORM THE WORK, OR THE CONDITION OF THE WORK, THE JOB SITE, ADJOINING LAND OR DRIVEWAYS, OR STREETS OR ALLEYS USED IN CONNECTION WITH THE PERFORMANCE OF THE WORK, THE JOB SITE, ADJOINING LAND OR DRIVEWAYS, OR STREETS OR ALLEYS USED IN CONNECTION WITH THE PERFORMANCE OF THE WORK, AND FROM ANY AND ALL CLAIMS BY WORKMEN, SUPPLIERS, OR
- SUBCONTRACTORS WHO ARE INVOLVED IN THE PERFORMANCE OF THE WORK. 44. THE OBLIGATION SET FORTH IN THIS PROVISION SMALL SPECIFICALLY INCLUDE, BUT SHALL NOT BE LIMITED TO, ALL CLAIMS DIRECTLY OR INDIRECTLY ARISING OR ALLEGED TO ARISE UNDER ANY SCAFFOLDING. STRUCTURAL WORK OR SAFE PLACE LAW OR ANY LAW WITH RESPECT TO THE PROTECTION OF ADJACENT LANDOWNERS, BUT SHALL NOT INCLUDE ANY CLAIMS ARISING SOLELY FROM THE ACTIVE NEGLIGENCE OF THE PARTY ASKING TO BE
- DEFENDED. INDEMNIFIED OR SAVE HARMLESS. 45. THE CONTRACTOR SHALL BE NOTIFIED OF ANY CLAIMS AGAINST SUCH INDEMNIFIED PERSONS AND GIVEN SUCH REASONABLE INFORMATION, AUTHORITY AND ASSISTANCE AS MAY BE REQUESTED BY HIM TO ENABLE HIM TO PERFORM THE OBLIGATIONS SET FORTH IN THIS SECTION. A FAILURE TO NOTIFY THE CONTRACTOR OF A CLAIM OR TO GIVE SUCH INFORMATION. AUTHORITY AND ASSISTANCE SHALL DISCHARGE THE OBLIGATIONS SET FORTH IN THIS SECTION ONLY TO THE EXTENT THAT THE CONTRACTOR HAS BEEN
- PREJUDICED IN THE DEFENSE OF SUCH CLAIM. 46. THE CONTRACTOR ALSO EXPRESSLY WARRANTS AND GUARANTEES TO THE OWNER AND THE THE ARCHITECT ARCHITECTURAL GROUP AND HIS ASSOCIATES THAT ALL WORK PERFORMED BY THE CONTRACTOR AND BY ALL WORKMEN, SUPPLIERS, AND SUBCONTRACTORS OF THE CONTRACTOR SMALL CONFORM TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND SHALL BE PERFORMED IN A SAFE AND CAREFUL MANNER. THE FOREGOING SHALL NOT DEPRIVE THE OWNER AND THE ARCHITECT AND HIS ASSOCIATES OF ANY OTHER ACTION, RIGHT, OR REMEDY OTHERWISE AVAILABLE TO THEM, OR EITHER OF THEM, AT COMMON LAW OR OTHERWISE.

- 47. THE TERM "WORK" FOR PURPOSES OF THIS SECTION MEANS THE OBLIGATIONS UNDERTAKEN BY TIDE CONTRACTOR PURSUANT TO THE CONTRACT DOCUMENTS. WORK INCLUDES, UNLESS SPECIFICALLY EXCEPTED, THE FURNISHING OF ALL MATERIAL, LABOR, EQUIPMENT, SUPPLIES, PLANT, TOOLS, SCAFFOLDING, TRANSPORTATION, SUPERINTENDENCE, INSURANCE, TAXES AND ALL OTHER SERVICES, FACILITIES, AND EXPENSES NECESSARY FOR THE FULL PERFORMANCE AND COMPLETION OF THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. WORK ALSO INCLUDES THAT WHICH IS PRODUCED, CONSTRUCTED OR BUILT PURSUANT TO THE CONTRACT DOCUMENTS.
- 48. SEE THE BUILDING CONSTRUCTION SET OF STRUCTURAL/ARCHITECTURAL PLANS FOR ALL WORK AND SCOPE OF THE MODIFICATIONS SHOWN INCLUDING BUT NOT LIMITED TO PIERS, COLUMNS. FOUNDATIONS. FRAMING, STOREFRONTS, ROOFTOP, UNIT SUPPORT AND INTEGRATED MECHANICAL SYSTEMS PRESENT
- 49. ALL COLUMNS/DEMISING PARTITION SHALL BE ENCLOSED IN THE SAME FIRE-RATED CONSTRUCTION AFFORDED TO THE APPROVED BUILDING DESIGN. THE CONTRACTOR SHALL PROVIDE COLUMN, BEAM AND/OR FLOOR ASSEMBLIES WHICH MEET OR EXCEED THE PRESENT CODE REQUIREMENTS AND AS PREVIOUSLY APPROVED FOR EACH RESPECTIVE BUILDING CLASSIFICATION.
- 50. WHERE ALTERATION WORK IS SHOWN MODIFYING THE EXISTING BUILDING THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXTENDING ALL SERVICES TO THE SPACES SHOWN AND/OR ADDING TO THE PRESENT BUILDING SYSTEMS INCLUDING BUT NOT LIMITED TO SPRINKLERS, HEATING AND VENTILATING DUCTWORK SUPPLY AND RETURNS, FIRE ALARM, HEAT DETECTORS, EMERGENCY LIGHTING, ETC., WHETHER SHOWN OR PART OF TIDE APPROVED DRAWINGS
- 51. ALL MECHANICAL/STRUCTURAL AND/OR GENERAL CONSTRUCTION WORK AFFECTED BY THESE MODIFICATIONS SHALL, BE INCLUSIVE OF CHANGES TO WORK SHOWN ON THESE PLANS AND EXISTING WORK SHOWN ON THE PREVIOUSLY APPROVED SET OF CONSTRUCTION PLANS. IN NO CASE SHALL THE TWO SETS OF PLANS BE UTILIZED INDEPENDENTLY WITHOUT ACCOUNTING FOR CHANGES NECESSARY TO PERFORM SUCH WORK OR PROVIDING SUCH AS PER CODE. FAILURE TO DO SO WILL NOT BE CASE FOR
- ADDITIONAL MONIES. 52. WHERE CLEAR/HOLD DIMENSIONS ARE INDICATED FOR FILE NICHES, CORRIDORS ETC.
- DIMENSIONS INDICATED MUST BE MAINTAINED. 53. ALL BATHROOMS (EXISTING & NEW) MUST CONFORM TO ANSI A117.1 CURRENT EDITION
- HANDICAP CODE TO THE FULLEST EXTENT POSSIBLE. 54. PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL-CONTACT AND MEET WITH LANDLORD'S FIELD REPRESENTATIVE FOR A PRECONSTRUCTION MEETING. AT WHICH TIME, HE WILL PRESENT A LIST OF THE NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF THE SUBCONTRACTORS TO BE USED ON THIS PROJECT IF REQUIRED BY BUILDING OWNER.
- 55. ALL CONTRACTORS SHALL BE BONDABLE, LICENSED CONTRACTORS POSSESSING GOOD LABOR RELATIONS AND MUST BE CAPABLE OF PERFORMING QUALITY WORKMANSHIP AND BE RESPONSIBLE FOR ALL WORK COORDINATING THEIR WORK AND THAT OF OTHER CONTRACTORS WORKING ON THIS PROJECT. EITHER UNDER THEIR EMPLOYMENT OR
- HIRED DIRECTLY THROUGH THE LANDLORD. 56. THE CONTRACTOR SHALL MAINTAIN WORKMAN'S COMPENSATION AND EMPLOYER'S LIABILITY, (PART A & PART B - \$200,000 LIABILITY LIMIT) ALSO GENERAL LIABILITY INSURANCE \$5,000,000 LIABILITY LIMIT INCLUDING PRODUCTS COMPLETED OPERATIONS CONTRACTUAL, INDEPENDENT CONTRACTORS AND PREMISES OPERATIONS COVERAGE, AS WILL PROTECT THE LANDLORD AND TENANT FROM CLAIMS WHICH MAY ARISE FROM OPERATING UNDER THIS CONTRACT, WHETHER SUCH OPERATIONS ARE BY HIMSELE, HIS EMPLOYEES, HIS SUBCONTRACTORS OF ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY HIM OR HIS SUBCONTRACTORS. THE CONTRACTOR SHALL SUBMIT TO THE LANDLORD A CERTIFICATE OF INSURANCE PRIOR TO THE COMMENCEMENT OF ANY WORK, INSURANCE LIMITS TO BE VERIFIED WITH OWNERS. THE ABOVE ARE MINIMUMS.
- 57. THE TENANT RESERVES THE RIGHT TO LET OTHER CONTRACTS IN CONNECTION WITH THE WORK OF THE PROJECT. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORK AND ESTABLISHING SCHEDULES FOR ALL TRADES ; HE SHALL AFFORD OTHER CONTRACTORS REASONABLE OPPORTUNITY FOR THE INTRODUCTION AND
- STORAGE OF THEIR MATERIALS AND EQUIPMENT AND THE EXECUTION OF THEIR WORK. 58. THE CONTRACTOR IS TO PROVIDE DEDICATED OUTLETS FOR ALL EQUIPMENT AS SHOWN. COORDINATE SAME WITH TENANT REQUIREMENTS/EQUIPMENT. TENANT IS TO FURNISH THE LANDLORD ALL INTENDED EQUIPMENT POWER REQUIREMENTS/CUTS PRIOR TO THE START OF CONSTRUCTION.
- 59. THESE DRAWINGS ARE FOR CONSTRUCTION AND ARE TO BE USED IN CONJUNCTION WITH THE STRUCTURAL PLANS, ARCHITECTURAL PLANS, DETAILS/SHOP DRAWINGS APPROVED. THE CONTRACTOR SHALL COORDINATE THESE SYSTEMS PRIOR TO COMMENCEMENT OF ANY WORK. THE ARCHITECT'S RESPONSIBILITIES DURING THE CONSTRUCTION PHASE OF THE WORK
- 60. CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT, AND CURRENT BUILDING / LANDLORD RESTRICTIONS. 61. GENERAL CONTRACTOR SHALL APPLY AND PAY FOR ALL UTILITY METERS AND ALL
- TEMPORARY UTILITY SERVICES, DURING THE CONSTRUCTION PERIOD 62. GENERAL CONTRACTOR SHALL FURNISH AND INSTALL, AS REQUIRED, HAND OPERATED FIRE-EXTINGUISHER, U.L. RATED, AS PER LOCAL CODE REQUIREMENTS, QUANTITY AND LOCATION TO BE DETERMINED BY LOCAL FIRE MARSHALL / APPROVED BY LANDLORD'S
- REPRESENTATIVE. 63. CONTRACTOR SHALL SUPPLY ALL NAILERS AND GROUNDS FOR FIXTURES FITTINGS, AND
- EQUIPMENT AS REQUIRED TAKING PRECAUTIONS NOT TO DISTURB ADJACENT PREMISES. 64. ALL FLOOR PENETRATIONS IN THE TOILET ROOM SHALL HAVE WATERTIGHT SLEEVES. 65. NO COMBUSTIBLE WOOD (OF ANY TYPE) SHALL BE PERMITTED ABOVE THE SUSPENDED
- CEILINGS, WHEN CEILING IS A RETURN AIR PLENUM OR IN ANY CONCEALED SPACES. 66. ALL ROOF CUTS AND PATCHES REQUIRED BY TENANT SHALL BE DONE BY THE LANDLORD'S ROOFING CONTRACTOR AND IN ACCORDANCE WITH THE BUILDING STANDARD DETAILS, PAID BY THE TENANT'S GENERAL CONTRACTOR. COORDINATE SUCH WITH LANDLORD'S
- REPRESENTATIVE. 67. STRUCTURAL FRAMING FOR ALL NEW HVAC EQUIPMENT SHALL BE SIZED TO MEET ACTUAL UNIT WEIGHTS AND COORDINATED WITH LANDLORDS REPRESENTATIVE AND THE ARCHITECT PRIOR TO INSTALLATION, A SHOP DRAWING SHALL BE PROVIDED INDICATING INSTALLATION DETAIL, LOADS AND STRUCTURAL CALCULATIONS REQUIRED FOR THE OPENING/SIZE AND WEIGHT OF SELECTED UNIT.

LOCATIONS EXISTING, TIE IN REQUIREMENTS AND WORK OF OTHERS WHICH MIGHT

AFFECT THEIR WORK. FAILURE TO DO SUCH AND COORDINATE THEIR WORK WITH OTHERS

68. CONTRACTOR SHALL VERIFY THE EXISTING DIMENSIONS OF THE SPACE, SERVICE

WILL NOT BE ACCEPTED AS CAUSE FOR ADDITIONAL MONIES.



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Gregory Ralph

I HEARBY CERTIFY THAT THESE DOCUMENTS WERE

PREPARED OR APPROVED BY ME, AND THAT I AM A

DULY LICENSED PROFESSIONAL ARCHITECT UNDER T LAW OF THE THIS STATE

EXISTING CONDITIONS SCHEMATIC DESIGN DESIGN DEVELOPMENT PROGRESS PRINT FULL RELEASE

DESIGNED BY JG DRAWN BY:

PROJECT: **PLAYA BOWLS**

JG | APPROVED BY

STQ-0994-01

HECKED BY:

PROJECT #:

20647 MACK AVE GROSSE POINTE, MI 48236

GENERAL NOTES

DRAWING TITLE:

SHEET:

4

OCCUPANCY CATEGORY: II <u>DESIGN LOADS</u>

DESIGN LOADS **ROOF LIVE LOAD:** ROOF DEAD LOAD:

WIND LOAD DESIGN CRITERIA WIND IMPORTANCE FACTOR, I: **ULTIMATE WIND SPEED:** WIND EXPOSURE CATEGORY

SNOW LOAD DESIGN CRITERIA SNOW LOAD IMPORTANCE FACTOR, I: GROUND SNOW LOAD, Pg: FLAT ROOF SNOW LOAD, Pf: THERMAL FACTOR, Ct: EXPOSURE FACTOR, Ce: SEISMIC LOAD DESIGN CRITERIA

SEISMIC IMPORTANCE FACTOR. IS SITE CLASS: SPECTRAL RESPONSE ACCELERATION:

SEISMIC DESIGN CATEGORY:

GENERAL STRUCTURAL NOTES

THIS DRAWING SET IS TO BE VIEWED AS A WHOLE AND COORDINATED WITH ARCHITECTURAL, MECHANICAL AND OTHER DISCIPLINES. ALL WORK PERTAINING TO A SPECIFIC CONTRACTOR MAY OR MAY NOT BE SHOWN ON SPECIFIC DRAWING SECTIONS. IT IS EACH SUBCONTRACTOR'S RESPONSIBILITY TO PREPARE HIS BID FROM A COMPLETE SET OF PLANS.

20 psf

20 psf

+/- 0.18

1.0

20 psf

20 psf

1.0

1.0

1.0

D - ASSUMED

Ss=0.094g, S1=0.046g

Sds=0.100g, Sd1=0.074g

115 MPH (3 SEC GUST)

THE CONTRACTOR SHALL FOLLOW WRITTEN DIMENSIONS ONLY. DO NOT SCALE DRAWINGS. DIMENSIONS NOT SHOWN ON PLAN TO BE COORDINATED WITH ARCHITECTURAL PLANS.

WHERE INFORMATION PROVIDED IN THESE STRUCTURAL DRAWINGS CONTRADICTS INFORMATION PROVIDED IN PROJECT SPECIFICATIONS, THE SPECIFICATIONS SHALL TAKE PRECEDENCE

ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY AT ANY SIMILAR SITUATION ELSEWHERE ON THE JOB, EXCEPT WHERE A DIFFERENT DETAIL OR SECTION IS SHOWN.

THE STRUCTURE SHALL BE ADEQUATELY BRACED AND SHORED DURING ERECTION AGAINST WIND AND ERECTION LOADS. STRUCTURAL MEMBERS ARE DESIGNED FOR "IN-PLACE" LOADS ONLY

THE GENERAL CONTRACTOR SHALL VERIFY ALL OPENING SIZES, PAD SIZES, AND LOCATIONS WITH THE RESPECTIVE CONTRACTORS

THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN CONSTRUCTION DOCUMENTS AND ACTUAL FIELD CONDITIONS.

SEE ARCHITECTURAL PLANS FOR ADDITIONAL DETAILS AND INFORMATION. WHERE GENERAL NOTES OR TYPICAL DETAILS CONTRADICT INFORMATION PROVIDED IN

BUILDING SECTIONS, THE BUILDING SECTIONS TAKE PRECEDENCE. 10. ALL REINFORCEMENT AND SUBFRAMING INDICATED ON PLAN SHALL BE INSTALLED PRIOR TO PLACING EQUIPMENT

11. EQUIPMENT WEIGHING LESS THAN 100LBS NOT SHOWN ON PLAN. SEE MECHANICAL

WEIGHTS SHOWN ON DRAWING INCLUDE WEIGHTS OF UNIT, CURB, AND ALL ACCESSORIES. DO NOT PLACE UNIT WHEN OPERATING WEIGHT EXCEEDS THAT INDICATED. NOTIFY STRUCTURAL ENGINEER.

VERIFY LOCATIONS OF ALL MECHANICAL EQUIPMENT WITH MECHANICAL DRAWINGS 14. FV = FIELD VERIFY

(E) = EXISTING

EXISTING CONSTRUCTION NOTES

ALL DIMENSIONS AND ELEVATIONS TO EXISTING CONSTRUCTION ARE FOR REFERENCE ONLY. FIELD VERIFY DIMENSIONS AND ELEVATIONS PRIOR TO PREPARING SHOP DRAWINGS, FABRICATING MEMBERS (STRUCTURAL ITEMS), AND INSTALLATION. ALL HOLES THROUGH EXISTING CONSTRUCTION SHALL BE CORE-DRILLED OR SAWCUT DO NOT CUT ANY REINFORCING STEEL WHILE DRILLING INTO EXISTING CONCRETE. DO

NOT TORCH CUT. PRIOR TO SUBMITTING SHOP DRAWINGS TO ARCHITECT AND ENGINEER OF RECORD FOR APPROVAL, CONTRACTOR SHALL VERIFY DIMENSIONS BETWEEN NEW CONSTRUCTION AND EXISTING CONSTRUCTION, AND FORWARD TO FABRICATOR FOR THEIR REFERENCE.

NOTIFY STRUCTURAL ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND STRUCTURAL DRAWINGS.

FOR ALL EXISTING CONSTRUCTION: DUE TO LIMITED OBSERVATION, OR NOT BEING ABLE TO VISIT THE EXISTING BUILDING DURING THE PREPARATION OF THESE DOCUMENTS CASE ENGINEERING HAS ASSUMED THE EXISTING STRUCTURE IS IN LIKE-NEW CONDITION WITH NO CORROSION, DETERIORATION, OR DAMAGE, AND WAS CONSTRUCTED PER ANY ORIGINAL CONSTRUCTION DOCUMENTS PROVIDED (IF ANY EXIST). CONTRACTOR SHALL VERIFY THESE ASSUMPTIONS TO THE BEST OF THEIR ABILITY AND NOTIFY THE ENGINEER OF ANY CONCERNS, ISSUES, OR DISCREPANCIES.

CONTRACTOR TO VERIFY TOP OF ROOF SLOPE IS AT LEAST 1/4" PER FOOT AFTER PLACEMENT OF ANY NEW LOADS APPLIED TO ROOF OR HUNG FROM ROOF FRAMING. LOADS FROM NEW OR REPLACED ITEMS MAY INCLUDE, BUT ARE NOT LIMITED TO, ROOF TOP MECHANICAL UNITS (RTU'S) AND ASSOCIATED DUCTWORK, HUNG HOODS, MAKE-UP AIR UNITS, CONDENSERS, COMPRESSORS, EXHAUST FANS, HUNG TRANSFORMERS, ROOFTOP GENERATOR(S), RE-ROOF MATERIALS, NEW CEILINGS, HUNG SIGNAGE, HUNG SPRINKLER PIPING, ETC. ALSO VERIFY THAT ALL ROOF DRAINS INCLUDING INTERIOR PRIMARY AND SECONDARY EMERGENCY OVERFLOW DRAINS AND ANY WALL SCUPPERS ARE CLEAR AND FREE-DRAINING. REPORT RESULTS IN WRITING TO ARCHITECT AND STRUCTURAL ENGINEER AS SOON AS PRACTICAL DURING THE CONSTRUCTION PROCESS.

COLD-FORMED STEEL FRAMING NOTES

STEEL FOR COLD-FORMED SECTIONS, AND STEEL SHEET AND PLATE USED IN COLD-FORMED STEEL CONSTRUCTION SHALL CONFORM TO SECTION A2.1 OF AISI STANDARD: "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL

STRUCTURAL MEMBERS", LATEST EDITION. ALL 12, 14, AND 16 GAUGE MEMBERS SHALL MEET THE REQUIREMENTS OF ASTM A1003 GRADE ST50H (MINIMUM YIELD OF 50,000 psi). ALL 18 AND 20 GAUGE MEMBERS SHALL MEET

THE REQUIREMENTS OF ASTM A1003 GRADE ST33H (MINIMUM YIELD OF 33,000 psi). SCREWS FOR COLD-FORMED STEEL CONSTRUCTION SHALL BE ITW BUILDEX TEK SCREWS

(ICC ESR-1976) OR APPROVED EQUAL ALL SCREWS SHALL BE INSTALLED SO THAT HEADS ARE FLUSH WITH OUTSIDE MATERIAL DO NOT OVERDRIVE SCREWS. SCREWS WITH WING-TIPS ARE NOT PERMITTED IN SHEAR WALLS OR DIAPHRAGMS.

SCREW FASTENERS MUST BE INSTALLED PERPENDICULAR, FULLY SEATED AND WITH A MINIMUM (3) SCREW THREADS EXPOSED BACKSIDE OF CONNECTION (UNO).

SECTION PROPERTIES ARE ASSUMED TO BE IN ACCORDANCE WITH THE AMERICAN IRON AND STEEL INSTITUTE "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" 2012 EDITION WITH SUPPLEMENTS. THE CONTRACTORS IS TO VERIFY THAT THE MATERIALS INSTALLED MEET OR EXCEED THESE DESIGN VALUES.

MECHANICAL BRIDGING SHALL BE USED IN ALL CASES WHERE INDICATED. INSTALLATION OF BRIDGING MUST BE COMPLETED BEFORE ANY LOADS ARE APPLIED TO THE SYSTEM. ALL BRIDGING SHALL BE TERMINATED AT JAMBS, CORNER STUDS OR COLUMNS. BRIDGING ENDS SHALL NOT HANG LOOSE. STUDS SHALL BE BRACED AGAINST ROTATION.

ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS. STUD ENDS MUST SEAT TIGHTLY INTO TRACKS IN ALL BEARING APPLICATIONS.

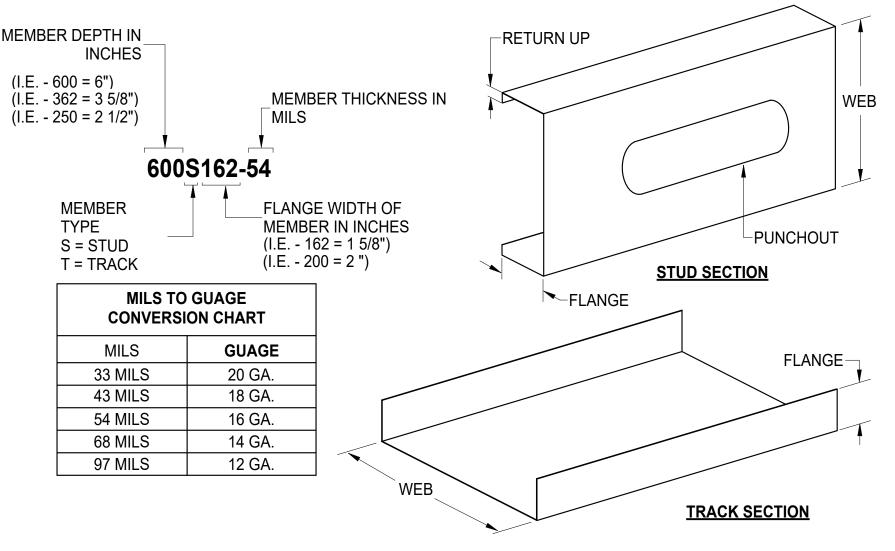
NO SPLICES IN STUDS, JOISTS, HEADERS, OR OTHER LOAD CARRYING MEMBERS MAY BE MADE WITHOUT PRIOR ENGINEERING REVIEW AND SPECIFIC DETAILS FOR ANY SUCH REVISION TO THE ORIGINAL DESIGN.

ALL WELDING SHALL BE PERFORMED BY AWS WELDERS QUALIFIED FOR WELDING COLD-FORMED STEEL CONFORMANCE WITH AWS D1.3 USING E60 ELECTRODES, UNLESS OTHERWISE NOTED. STEEL REQUIRING WELDING SHALL BE 16ga MINIMUM

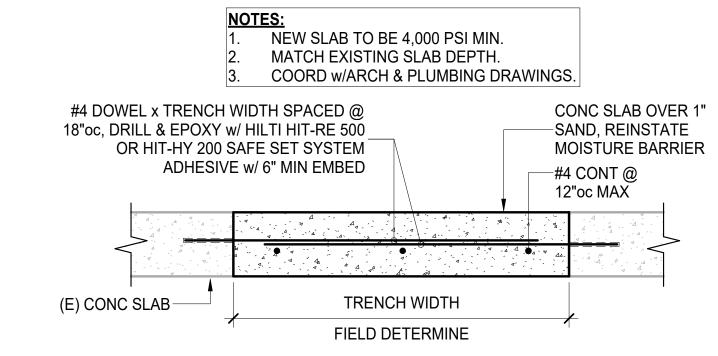
11. ALL COLD-FORMED STUDS AND JOISTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS REGARDING MINIMUM INSTALLATION STANDARDS FOR BEARING. BRIDGING. AND BRACING

12. BOTTOM TRACK TO MATCH STUD GAUGE WITH A MINIMUM 1-1/4" FLANGE UNLESS OTHERWISE NOTED.

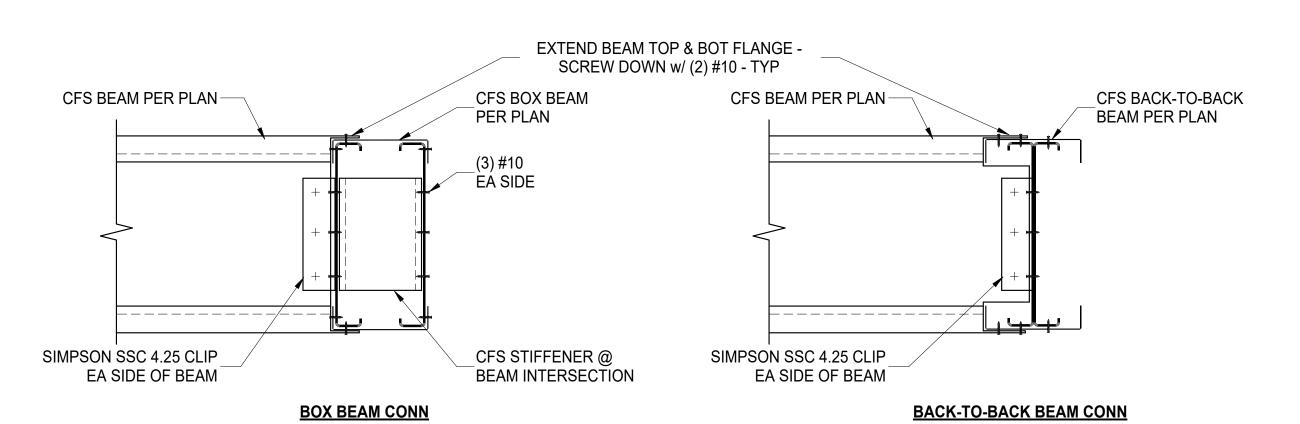
13. ALL EXTERIOR WALLS TO HAVE HORIZONTAL BRIDGING @ 4'-0" MAXIMUM



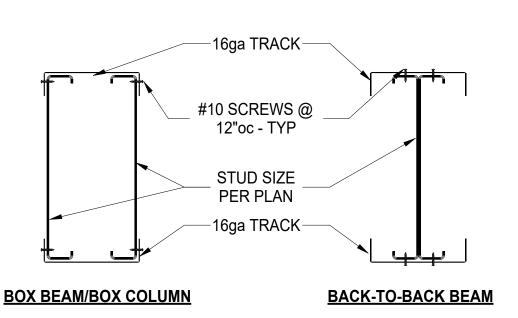
A TYP LT GAUGE STEEL CONVERSION CHART s1 է N.T.S.



B TYP SLAB REPAIR DETAIL



C TYPICAL CFS BEAM CONNECTION DETAIL S1 \ N.T.S.



TYPICAL BUILT UP MEMBER CONSTRUCTION DETAIL S1 \ N.T.S.

Engineering Inc. T 636.349.1600 796 Merus Court St. Louis, MO 63026

F 636.349.1730 CERTIFICATE OF AUTHORITY NO. 802229007

SHEET: **S1**

GENERAL NOTES

DESIGN STUDIC

GREGORY RALPH ARCHITECT

1924 ROUTE 22 EAST

BOUND BROOK, NJ 08805

TEL: 908 731 1626

GREG@GRALPHARCHITECT.COM

LICENSED IN 35 STATES AND COUNTING

Mcense No.

6201311700

I HEARBY CERTIFY THAT THESE DOCUMENTS WERE

PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE

EXPIRATION: 09/29/25

RELEASE TYPE:

EXISTING CONDITIONS

SCHEMATIC DESIGN DESIGN DEVELOPMENT

PROGRESS PRINT

DESCRIPTION

AG DRAWN BY:

PLAYA BOWLS

GROSSE POINT

AG APPROVED BY:

STQ-0994-0125

As indicated

FULL RELEASE

ISSUED TO:

DESIGNED BY

CHECKED BY:

PROJECT:

20647 MACK AVE

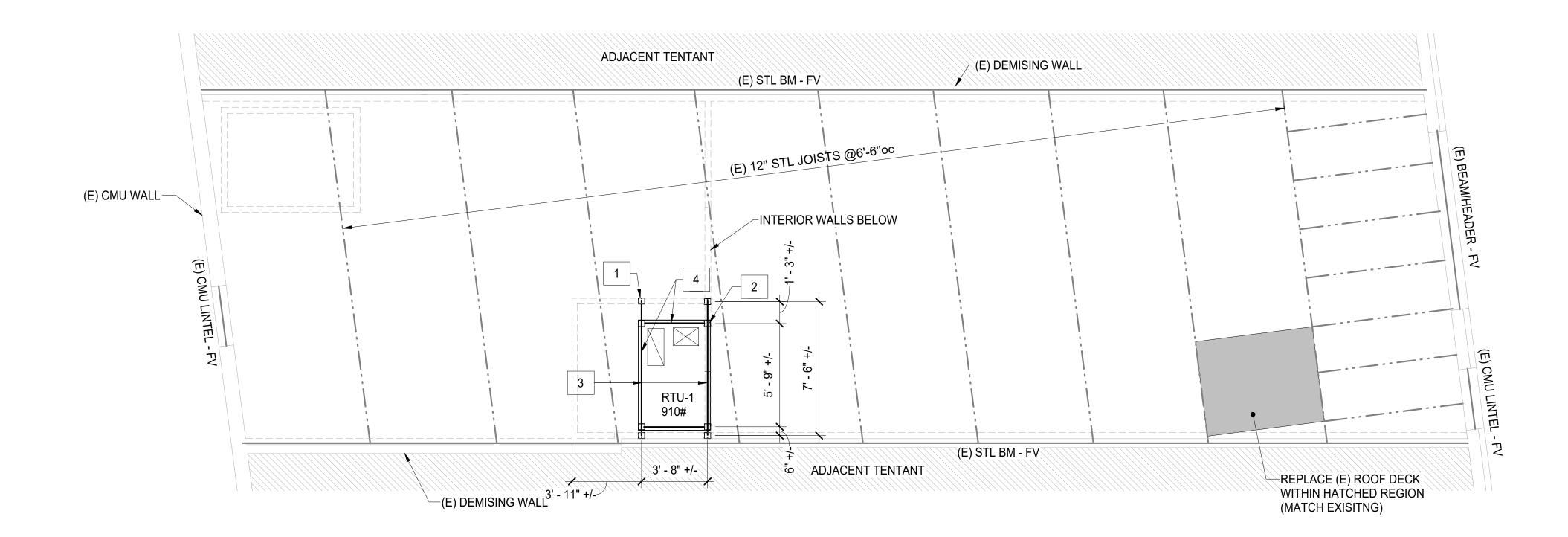
DRAWING TITLE:

SCALE:

GROSSE POINTE, MI 48236

CASE PROJECT #: GRA-MI-04-25 R24

MECH UNIT PER MECH MECH UNIT PER MECH-BEAM PER PLAN ALIGN w/ CURB BEAM PER PLAN -(6) #10 SELF TAPPING SCREWS PER ALIGN w/ CURB SIDE MIN CURB TO JOIST CURB PER MECH-(6) #10 SELF TAPPING SCREWS PER SIDE MIN MECH UNIT TO CURB 16ga TRACK SECTION COL CAP - TYP -CURB PER MECH SIMPSON FCB43.5 CLIP -SIMPSON FCB43.5 CLIP STUB BOX COL PER PLAN-−(E) TRUSS SIMPSON DTC DEFLECTION (E) ROOF DECK CLIP (2) PER STUB COL (E) ROOF DECK-(6) #12 SCREWS - TYP -16ga TRACK SECTION - TYP 16ga TRACK SECTION - TYP-BACK-TO-BACK <u>A - A</u> BEAM PER PLAN ATTCH PER BOX NOTE: THIS FRAME IS DESIGNED TO NOT ADD ANY LOAD TO THE EXISTING ROOF. COL DETAIL NO PART OF THE MECH UNIT, CURB, BEAMS, OR COLUMNS ARE TO BEAR ON OR SUPPORT ANY PART OF THE ROOF STRUCTURE. BOX COL PER PLAN-



	SELF-SUPPORTING CA	LLOUT SCHEDULE
MARK	DESCRIPTION	REMARKS:
1	(2) 362S200-54 BOXED COL (4 THUS)	N/A
2	(2) 600S200-54 BOXED STUB-COL (4 THUS)	N/A
3	(2) 600S200-54 BACK-TO-BACK BM UNDER ROOF DECK	N/A
4	(2) 600S200-54 BACK-TO-BACK BM UNDER EA EDGE OF UNIT CURB	N/A

PARTIAL EXISTING ROOF FRAMING PLAN



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

B TYPICAL SELF SUPPORTING MECHANICAL UNIT DETAIL

| S2 | N.T.S.

PLAN NOTES:

SEE SHEET S1 - S2 FOR GENERAL NOTES AND TYPICAL DETAILS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO BEGINNING

ARCHITECT AND ENGINEER OF RECORD IMMEDIATELY IF EQUIPMENT EXISTS THAT IS NOT SHOWN ON PLAN.

REFERENCE MECHANICAL DRAWINGS FOR EXACT WEIGHTS AND LOCATIONS OF MECHANICAL EQUIPMENT.

SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS, SECTIONS, AND ELEVATIONS NOT SHOWN HEREON. ALL NEW AND EXISTING MECHANICAL EQUIPMENT MOUNTED TO OR HUNG FROM EXISTING STRUCTURE THAT HAS BEEN ACCOUNTED FOR IN STRUCTURAL CAPACITY ANALYSIS IS SHOWN ON FRAMING PLAN. GENERAL CONTRACTOR SHALL NOTIFY

Engineering Inc. 796 Merus Court

St. Louis, MO 63026 CERTIFICATE OF AUTHORITY NO. 802229007

CASE PROJECT #:

F 636.349.1730

GRA-MI-04-25 R24

DESIGN STUDIO **GREGORY RALPH ARCHITECT** 1924 ROUTE 22 EAST BOUND BROOK, NJ 08805 TEL: 908 731 1626 GREG@GRALPHARCHITECT.COM





EXPIRATION: 09/29/25

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EXISTING CONDITIONS DESIGN DEVELOPMENT FULL RELEASE ISSUED TO:

DESIGNED BY STQ-0994-0125

PROJECT: **PLAYA BOWLS GROSSE POINT**

20647 MACK AVE GROSSE POINTE, MI 48236

As indicated SCALE: DRAWING TITLE:

PARTIAL EXISTING

ROOF FRAMING PLAN

S2

- APPLICABLE INSTRUCTIONS TO BIDDERS SHALL BE PART OF THESE SPECIFICATIONS. B. "PROVIDE" AS USED HEREIN MEANS TO FURNISH AND INSTALL COMPLETE. C. "FURNISH" AS USED HEREIN MEANS TO PURCHASE AND DELIVER TO THE
- D. "INSTALL" AS USED HEREIN MEANS TO STORE AND PROTECT FROM DAMAGE, INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS, AND MAKE ALL CONNECTIONS COMPLETE.
- E. THE TERM "CONTRACTOR" AS USED HEREIN MEANS ANY CONTRACTOR OR SUBCONTRACTOR CONTRACTED TO PERFORM WORK INCLUDED IN AND DEFINED BY THIS SECTION.

PROJECT SITE IN UNDAMAGED CONDITION. WHERE APPLICABLE, SUBMIT

FOR REVIEW AND APPROVAL AND COORDINATE WITH THE CONTRACT

MECHANICAL WORK SHALL BE PROVIDED IN STRICT COMPLIANCE WITH THE FOLLOWING CODES AND ALL APPLICABLE LOCAL ORDINANCES, STATE LAWS AND FEDERAL LAWS. INTERNATIONAL MECHANICAL CODE (IMC) - 2021

FIRE CODE (NFPA 1) - 2015 INTERNATIONAL BUILDING CODE (IBC) - 2021 INTERNATIONAL ENERGY CODE (IECC) - 2021

- A. THOROUGHLY REVIEW THE BID INSTRUCTIONS INCLUDING ALL CIVIL, ARCHITECTURAL, STRUCTURAL, AND MEP CONSTRUCTION DOCUMENTS. OBTAIN AND THOROUGHLY EXAMINE THE MANUFACTURERS' WRITTEN INSTALLATION INSTRUCTIONS, DETAILS, AND REQUIREMENTS FOR THE SCHEDULED AND SPECIFIED EQUIPMENT AND MATERIALS. FOR AMBIGUOUS, CONTRADICTORY, OR CONFLICTING ITEMS WITHIN THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL REQUEST CLARIFICATION IN A WRITTEN "REQUEST FOR INFORMATION" (RFI), AT LEAST FIVE (5) WORKING DAYS PRIOR TO BID DATE. RFI-RELATED WORK NOT CLARIFIED PRIOR TO BID SHALL BE PROVIDED PER THE ARCHITECT (ENGINEER) IN STRICT ACCORDANCE WITH THE MOST STRINGENT MATERIALS, EQUIPMENT, AND SCOPE OF WORK
- B. IF THE CONTRACTOR BELIEVES THE DRAWINGS AND SPECIFICATIONS CONFLICT WITH CODE REQUIREMENTS, IMMEDIATELY NOTIFY THE
- ARCHITECT (ENGINEER) IN WRITING. NO ALLOWANCES WILL BE MADE DUE TO CONTRACTOR'S UNFAMILIARITY WITH THE CONSTRUCTION DOCUMENTS OR FOR THE FAILURE OF THE CONTRACTOR TO OBTAIN CLARIFICATIONS PRIOR TO BID.
- VISIT THE JOB SITE AND THOROUGHLY INVESTIGATE CONDITIONS. THE LACK OF SPECIFIC INFORMATION ON THE DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY.
- REFER TO APPLICABLE CODES CITED IN CONSTRUCTION DOCUMENTS, EXAMINE GOVERNING STATE AND LOCAL CODES, AND LOCAL REGULATIONS AND ORDINANCES, AND PROVIDE ALL EQUIPMENT AND INSTALLATION IN STRICT ACCORDANCE WITH SAME
- REFER TO CONSTRUCTION DOCUMENTS FOR SCHEDULED AND SPECIFIED MATERIALS AND EQUIPMENT. INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS AND
- G. ALL WORK SHALL BE COMPLETED IN STRICT ACCORDANCE WITH THE LANDLORD'S CONSTRUCTION CRITERIA AND TENANT/LANDLORD AGREEMENT. THIS CONTRACTOR SHALL EXAMINE THE LANDLORD CRITERIA AND TENANT/LANDLORD AGREEMENT AND THEY SHALL BE PART OF THESE SPECIFICATIONS. NO ALLOWANCES WILL BE MADE DUE TO CONTRACTOR'S UNFAMILIARITY WITH THESE DOCUMENTS.

A. SUBMISSION OF A BID ACKNOWLEDGES THAT THE CONTRACTOR HAS REVIEWED THE BID INSTRUCTIONS, HAS VISITED THE SITE, EXAMINED ALL CONSTRUCTION DOCUMENTS, AND AGREES TO ALL ITEMS AND CONDITIONS WITHIN THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR'S BID SHALL INCLUDE ALL MECHANICAL WORK IN THE CONSTRUCTION DOCUMENTS, INCLUDING MECHANICAL WORK RELATED TO EQUIPMENT FURNISHED/PROVIDED BY OTHERS.

A. UNLESS OTHERWISE CONFIRMED IN WRITING WITH ARCHITECT AND PERMITTING EXPEDITERS, GC SHALL SECURE AND PAY FOR ALL PERMITS, LICENSES, AND INSPECTIONS REQUIRED BY THE AHJ FOR THIS WORK.

SUBSTITUTIONS

A. MANUFACTURERS' EQUIPMENT, APPLIANCES, AND MATERIALS SCHEDULED, NOTED, AND SPECIFIED IN THE CONSTRUCTION DOCUMENTS ARE THE DESIGN STANDARD. NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY THE ARCHITECT OR ENGINEER. IN BIDDING, CONTRACTOR SHALL NOT ASSUME ACCEPTANCE OF SUBSTITUTIONS. CONTRACTOR MUST STATE IN SUBSTITUTION REQUEST: "PROPOSED SUBSTITUTIONS ARE OF EQUAL OR HIGHER QUALITY, EFFICIENCY AND DEPENDABILITY COMPARED TO THE SPECIFIED EQUIPMENT AND MATERIAL. CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR ADDITIONAL ENGINEERING COSTS AND COSTS TO OTHER CONTRACTORS DUE TO SUBSTITUTIONS." IF DEEMED NECESSARY BY THE ARCHITECT OR ENGINEER, SUBSTITUTIONS WHICH ARE NOT APPROVED OR NOT EQUAL TO DESIGN STANDARD SHALL BE REMOVED AND THE SCHEDULED, NOTED, AND SPECIFIED EQUIPMENT AND MATERIALS SHALL BE INSTALLED AT CONTRACTOR'S EXPENSE. SUBMITTING CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR ADDITIONAL ENGINEERING COSTS AND COSTS TO OTHER CONTRACTORS DUE TO SUBSTITUTIONS.

A. THE UTILITY INFORMATION NOTED AND SPECIFIED IN THE CONSTRUCTION DOCUMENTS ARE THE DESIGN STANDARD AND AS ACCURATE AS COULD BE SECURED BUT IS NOT GUARANTEED. PRIOR TO INSTALLING ANY UTILITY-RELATED WORK, THIS CONTRACTOR SHALL CONTACT THE LOCAL UTILITY - IN WRITING - TO COORDINATE AND CONFIRM THE SERVICE AND CONNECTION REQUIREMENTS WITH THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL REQUEST THE UTILITY SERVICE AND CONNECTION IN AMPLE TIME TO MEET THE CONSTRUCTION SCHEDULE. ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND THE ACTUAL UTILITY SERVICE CONNECTION SHALL BE SUBMITTED WITHOUT DELAY TO THE ARCHITECT (ENGINEER) IN WRITING, AS A "REQUEST FOR INFORMATION" (RFI). RFI-SUBJECT UTILITY WORK MUST BE RESOLVED WITH THE ARCHITECT (ENGINEER) PRIOR TO INSTALLATION. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY AND ALL COSTS FOR WORK NOT COORDINATED WITH THE UTILITY AND NOT SUBMITTED TO THE ARCHITECT (ENGINEER) FOR RESOLUTION.

<u>SCHEDULING</u>

- A. ALL PERFORMANCE OF CONSTRUCTION SHALL BE AS REQUIRED BY THE PACE OF THE GENERAL CONSTRUCTION, AS SCHEDULED BY THE GC. PROVIDE COMPLETE INFORMATION AND FULL COOPERATION WITH OTHER CONTRACTORS AND TRADES, AS REQUIRED FOR THE TIMELY COMPLETION AND COORDINATION OF THE COMPLETE PROJECT.
- B. PROVIDE ALL TESTS AND INSPECTIONS REQUIRED BY AHJ
- C. PROVIDE A SIGNED CERTIFICATE OF INSPECTION AT THE PROJECT COMPLETION.

- PROVIDE PERMIT(S), INSPECTIONS, FINAL CERTIFICATE(S) OF INSPECTION BY AHJ, PERMIT AND INSPECTION FEES, AND ALL MATERIALS, EQUIPMENT, RIGGING, AND LABOR NECESSARY FOR A COMPLETE AND FULLY OPERATING HVAC SYSTEM.
- B. STRUCTURAL ENGINEERING FOR THE SUPPORT AND MOUNTING OF THE SCHEDULED AND SPECIFIED MATERIALS AND EQUIPMENT IS THE RESPONSIBILITY OF OTHERS . THE MECHANICAL CONSTRUCTION DOCUMENTS DO NOT INCLUDE STRUCTURAL ENGINEERING FOR SUPPORT OF MECHANICAL EQUIPMENT, APPLIANCES, OR SYSTEMS.

- THROUGHOUT CONSTRUCTION, THIS CONTRACTOR'S WORK SHALL INCLUDE ONGOING COORDINATION OF THIS WORK WITH THE CONSTRUCTION DOCUMENTS, THE WORK OF ALL OTHER TRADES, AND WITH UTILITY SERVICE(S) AND UTILITY CONNECTION(S). FOR AMBIGUOUS, CONTRADICTORY, OR CONFLICTING ITEMS WITHIN THE CONSTRUCTION DOCUMENTS, INCLUDING BUT NOT LIMITED TO THE ACTUAL UTILITY SERVICE AND CONNECTION REQUIREMENTS, THE CONTRACTOR SHALL REQUEST CLARIFICATION IN A WRITTEN "REQUEST FOR INFORMATION" (RFI). RFI SHALL BE ISSUED WITHOUT DELAY AND PRIOR TO PROCEEDING WITH ANY RFI-SUBJECT WORK. RFI NOT CLARIFIED PRIOR TO BID SHALL BE PROVIDED PER THE ARCHITECT (ENGINEER) IN STRICT ACCORDANCE WITH THE MOST STRINGENT MATERIALS, EQUIPMENT, AND SCOPE OF WORK, AT NO ADDITIONAL COST TO THE OWNER.
- PROVIDE HOISTING FOR ALL MATERIALS AND EQUIPMENT FURNISHED AND/OR INSTALLED, IN ACCORDANCE WITH ALL CITY, STATE AND FEDERAL RULES AND REGULATIONS.
- INSTALL ALL WORK AND EQUIPMENT RIGID, DEAD LEVEL, PLUMB, AND TRUE-TO-LINE. UNLESS NOTED OTHERWISE, SUPPORT AND MOUNTING OF EQUIPMENT, DUCT, PIPING, ETC., ARE THIS CONTRACTOR'S MEANS AND METHODS. THE CONTRACTOR SHALL UNDERSTAND THE SPECIFIED AND SCHEDULED EQUIPMENT AND MATERIALS AND MEANS AND METHODS OF INSTALLATION. THIS CONTRACTOR SHALL PROVIDE ALL ACCESSORIES REQUIRED FOR PROPER SUPPORT WHETHER SHOWN ON THE DRAWINGS OR NOT. IF SUPPORTS ARE REQUIRED, CONTRACTOR SHALL SUBMIT DRAWINGS TO THE ARCHITECT FOR APPROVAL
- PROVIDE ACCESSORY MOUNTING HARDWARE INCLUDING BUT NOT LIMITED TO STRUCTURAL STEEL, STRUT SYSTEMS, ALL THREAD RODS AND BRACES, AS REQUIRED TO MOUNT EQUIPMENT. PROVIDE STEEL SHAPES AND FRAMES TO SUPPORT EQUIPMENT WHERE NEEDED. ALL SYSTEMS SHALL BE SUPPORTED INDEPENDENT OF AND ISOLATED FROM
- PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' PRINTED INSTALLATION AND MAINTENANCE LITERATURE. COMPONENTS REQUIRING PERIODIC MAINTENANCE OR ADJUSTMENTS SHALL BE INSTALLED AS TO PERMIT ACCESS WITHOUT DAMAGE TO STRUCTURE, FINISHES, OR OTHER EQUIPMENT.
- PROVIDE ALL LABOR, EQUIPMENT AND MATERIAL REQUIRED FOR THE REINSTALLATION AND RE-SUPPORT OF EXISTING SERVICES (DUCTWORK, ELECTRICAL CONDUIT, PIPING, EXISTING EQUIPMENT, ETC.) DISTURBED BY THE INSTALLATION OF NEW WORK UNDER THIS CONTRACT, INCLUDING THE WORK OF OTHER TRADES.
- DEMOLITION: REFER TO THE ARCHITECTURAL DRAWINGS FOR THE GENERAL SCOPE OF DEMOLITION. THIS CONTRACTOR SHALL DISCONNECT AND CAREFULLY REMOVE ALL EXISTING HVAC EQUIPMENT LOCATED IN DEMOLISHED AREAS INCLUDING ROOF, PLENUMS, CEILINGS, WALLS, AND FLOORS. U.N.O., DISCONNECT AND REMOVE EXISTING HVAC SYSTEMS COMPLETE, INCLUDING EQUIPMENT, CURBS, DUCTS, INSULATION, AIR DEVICES, AND PIPING LOCATED IN THESE AREAS. ALL HVAC SYSTEM COMPONENTS INCLUDING AIR TERMINAL UNITS, FANS, MOTORS, CONTROL DEVICES AND SENSORS, DAMPERS, ACTUATORS, HANGERS, RESTRAINTS, MOUNTING HARDWARE, ETC., SHALL BE REMOVED AND LEGALLY DISPOSED OF BY THIS CONTRACTOR.
- UNLESS NOTED OTHERWISE, ABANDONMENT IN PLACE (AIP) IS NOT ACCEPTABLE. UNUSED EQUIPMENT, DUCT, PIPING, AND OTHER COMPONENTS WITHIN OR SERVING THIS SPACE MUST BE COMPLETELY REMOVED TO POINT OF ORIGIN. ENDS OF SYSTEMS BEYOND GENERAL SCOPE OF DEMOLITION MAY BE ABANDONED ONLY WITH WRITTEN APPROVAL OF ARCHITECT (ENGINEER). WHERE THESE ABANDONED ENDS TERMINATE, TRIM CLEANLY AND PROPERLY CAP OR SEAL IN AN APPROVED MANNER, LEAVING TERMINATION SAFE AND SECURE BEHIND NEW FINISHES. MAINTAIN SYSTEM CONTINUITY TO HVAC SYSTEMS SERVING AREAS BEYOND GENERAL DEMOLITION, AS NEEDED. THIS INCLUDES BUT IS NOT LIMITED TO REMOVAL, MODIFICATION AND/OR REINSTALLATION OF EQUIPMENT, AS NEEDED. COMPLETION OF THIS PROJECT SHALL INCLUDE RETURNING THESE ADJACENT AREAS TO FULLY FUNCTIONING OPERATION.
- CONTRACTOR SHALL PROVIDE DAILY CLEAN-UP, REMOVAL AND LEGAL DISPOSAL OF ALL RUBBISH GENERATED BY THIS WORK.
- AS-BUILT DRAWINGS: DURING CONSTRUCTION, AS WORK PROCEEDS, MAINTAIN AS-BUILT MARK-UPS OF ACTUAL INSTALLATION. AT CONSTRUCTION COMPLETION AND PRIOR TO TURNOVER TO OWNER PROVIDE FINAL MARK-UPS IN PDF AND DWG FORMAT TO ARCHITECT AND ENGINEER.
- M. PROVIDE FINAL CONNECTIONS TO EQUIPMENT FURNISHED/PROVIDED BY OTHERS, AS NOTED (GAS FIRED EQUIPMENT, COMMERCIAL KITCHEN EQUIPMENT, LAUNDRY EQUIPMENT, ETC.).
- N. DO NOT ROUTE ANY PIPING OR DUCTWORK ABOVE ELECTRICAL PANELS. UNLESS NOTED OTHERWISE, ALL DUCT AND PIPE SHALL BE RUN PARALLEL TO OR AT RIGHT ANGLES TO WALLS, BEAMS, OR COLUMNS. PIPE SHALL BE RUN AS DIRECT AS POSSIBLE - AVOID UNNECESSARY OFFSETS AND
- MAXIMIZE HEADROOM. PRIOR TO ORDERING EQUIPMENT, THIS CONTRACTOR SHALL PROVIDE FINAL COORDINATION OF ELECTRICAL POWER REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR.
- CONTRACTOR SHALL MAINTAIN ACTIVITIES WITHIN AREA APPROVED BY OWNER OR GC. CONTRACTOR'S ACTIVITIES SHALL NOT INTERFERE WITH THE OWNER'S OPERATIONS, EXCEPT AS APPROVED.
- EXCEPT THOSE COORDINATED AND APPROVED BY THE G.C., CONTINUITY OF ALL BUILDING SERVICES AND UTILITIES SERVING BUILDING FACILITIES SHALL BE MAINTAINED UNINTERRUPTED AT NO ADDITIONAL COST. PROVIDE ALL NECESSARY CROSS CONNECTIONS AND TEMPORARY CONNECTIONS REQUIRED TO PERFORM THE CONSTRUCTION, AS DETERMINED BY THE G.C., AND NEEDED TO MAINTAIN CONTINUITY OF THE BUILDING SERVICE(S). THIS CONTRACTOR SHALL SCHEDULE WORK SUCH THAT ANY AND ALL CONNECTIONS, AND/OR REARRANGEMENT OF EXISTING EQUIPMENT, PIPING, ETC., SHALL ASSURE FULL RESUMPTION OF SERVICE(S) AT THE G.C.'S DESIGNATED TIME.

A. ALL WORK SHALL COMPLY WITH THE CONSTRUCTION DOCUMENTS OR, AS DIRECTED BY THE ARCHITECT (ENGINEER), AND SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES, AND REGULATIONS OF THE AHJ, WHETHER SO SHOWN OR NOT. CONTRACTOR SHALL BE FAMILIAR WITH PROVISIONS OF ALL APPLICABLE CODES AND SHALL ENSURE THE WORK COMPLIES WITH ALL LOCAL, STATE AND FEDERAL CODES, TRADE STANDARDS AND MANUFACTURER'S RECOMMENDATIONS. IF CONTRACTOR BELIEVES THE DRAWINGS AND/OR SPECIFICATIONS CONFLICT WITH CODE REQUIREMENTS, IMMEDIATELY NOTIFY THE G.C. IN WRITING. DO NOT INSTALL WORK NOT COMPLYING WITH CODE REQUIREMENTS. IN CASE OF CONFLICT BETWEEN THE CONSTRUCTION DOCUMENTS AND THE CODES AND ORDINANCES, THE HIGHEST STANDARD SHALL APPLY. AS A MINIMUM STANDARD, CONTRACTOR SHALL SATISFY CODE REQUIREMENTS. ALL MODIFICATIONS REQUIRED BY AHJ SHALL BE MADE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. BEFORE COMMENCING WORK NOT SHOWN IN DOCUMENTS BUT REQUIRED TO ACHIEVE FULL COMPLIANCE WITH CODES, CONTRACTOR SHALL NOTIFY ARCHITECT (ENGINEER).

10. CUTTING & PATCHING

CORE-DRILL OR SAW-CUT EXISTING FLOORS, WALLS, ROOF, ETC., AS REQUIRED FOR EQUIPMENT, PIPE, OR DUCTWORK. PRIOR TO CUTTING, PERFORM NON-DESTRUCTIVE TESTING TO VERIFY LOCATION OF PIPING, CONDUIT, AND STRUCTURAL COMPONENTS. NOTIFY ARCHITECT (ENGINEER) OF ANY DISCREPANCIES. PATCH SURROUNDING AREAS FLUSH WITH ADJACENT SURFACE AND READY TO RECEIVE FINISH. PATCH AND REPAIR ROOF TO MATCH EXISTING ROOFING.

PROVIDE FIRE STOPPING FOR PENETRATIONS OF DUCT, PIPING, AND OTHER MECHANICAL EQUIPMENT THROUGH FIRE-RATED VERTICAL BARRIERS (WALLS AND PARTITIONS), HORIZONTAL BARRIERS (FLOOR/CEILING ASSEMBLIES), AND VERTICAL SERVICE SHAFT WALLS AND PARTITIONS. (WHERE THIS WORK IS BEING PERFORMED UNDER A GC. PRIOR TO INSTALLATION, THIS CONTRACTOR SHALL COORDINATE FIRESTOPPING WITH GC). FIRESTOP SYSTEM INSTALLATION MUST MEET

REQUIREMENTS OF ASTM E 814 OR UL 1479 TESTED ASSEMBLIES THAT PROVIDE A FIRE RATING EQUAL TO OR GREATER THAN THAT OF CONSTRUCTION BEING PENETRATED. INSTALL IN STRICT ACCORDANCE WITH UL FIRE RESISTANCE DIRECTORY, AHJ, AND MANUFACTURER'S SPECIFIED REQUIREMENTS. ONLY TESTED FIRESTOP SYSTEMS BY "3M", "HILTI", OR EQUAL SHALL BE USED. REFER TO ARCHITECTURAL DRAWINGS FOR ASSEMBLY RATING.

- ALL MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT SHALL BE NEW U.N.O., FREE OF DEFECTS, AND INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND DETAILS, AND INDEPENDENTLY TESTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY - UNDERWRITERS LABORATORIES (UL) OR INTERTEK (ETL). ALL LIKE MATERIALS USED SHALL BE OF THE SAME MANUFACTURE AND QUALITY U.N.O.
- B. ALL MATERIALS WITHIN PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84 OR UL 723. ALL MATERIALS INSTALLED IN
- PLENUM SPACES SHALL BE LISTED AND LABELED FOR SUCH APPLICATION. C. ALL WORK SHALL BE SUPERVISED BY THE INSTALLING CONTRACTOR'S COMPETENT AND SKILLED FOREMAN. ALL WORK SHALL BE PERFORMED BY COMPETENT AND SKILLED WORKERS, WITH ALL TRADE AND MANUFACTURER REQUIRED TRAINING, AND EXECUTED IN A NEAT AND WORKMANLIKE MANNER. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE BEST QUALITY STANDARDS OF THE TRADE AND IN CONFORMANCE WITH ALL FEDERAL, STATE, AND LOCAL CODES AND STANDARDS, INCLUDING APPLICABLE OSHA REGULATIONS. PROPERLY PROTECT WORK DURING CONSTRUCTION. AT CONSTRUCTION COMPLETION, THOROUGHLY CLEAN WORK AND REMOVE ALL DEBRIS FROM THE PREMISES.

13. PROTECTION OF WORK AND PROPERTY

- PROTECT ALL WORK FROM DAMAGE AND PROTECT THE OWNER'S PROPERTY FROM DIRT, DAMAGE, OR LOSS ARISING FROM CONTRACTOR
- COMPLY WITH OSHA REQUIREMENTS AND TAKE ALL NECESSARY PRECAUTIONS FOR EMPLOYEE SAFETY.
- C. PROTECT ALL OPEN PIPING, DUCT, AND EQUIPMENT, EXISTING AND NEW FROM CONSTRUCTION DIRT AND DUST, COVER, CAP, OR PLUG OPEN ENDS OF PIPING AND DUCT. KEEP EQUIPMENT CLOSED OR COVER AND SEAL EQUIPMENT OPENINGS. ANY MECHANICAL SYSTEMS, NEW AND/OR EXISTING OPERATED DURING CONSTRUCTION SHALL BE PROTECTED BY COVERING EACH RETURN AIR DUCT OPENING WITH MERV 8 FILTERS AND INSTALLING MERV 8 FILTER(S) IN EQUIPMENT FILTER RACK. PRIOR TO TESTING AND BALANCING, REMOVE FILTERS FROM FILTER RACKS AND INSTALL NEW MERV 8 FILTERS.
- AT COMPLETION OF WORK, PRIOR TO EQUIPMENT START-UP, REMOVE COVERS, CAPS, OR PLUGS ON DUCT AND PIPING.

14. <u>DAMAGE BY LEAKS</u>

THIS CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL DAMAGES TO THE PROPERTY (GROUNDS, WALKS, ROADS, BUILDING COMPONENTS, FINISHES. PIPING SYSTEMS, ELECTRICAL SYSTEMS, HVAC SYSTEMS, AND THEIR EQUIPMENT AND CONTENT) CAUSED BY LEAKS IN THE SYSTEMS BEING INSTALLED OR HAVING BEEN INSTALLED AS PART OF THIS WORK. ALL REPAIRS WILL BE MADE AT THIS CONTRACTOR'S EXPENSE.

15. DRAWINGS AND SPECIFICATIONS

- A. DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO SHOW GENERAL LOCATIONS OF DUCTS. PIPES. AND EQUIPMENT AND THE METHODS OF CONNECTING AND CONTROL. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONDITIONS AND THE WORK OF OTHER TRADES PERMIT. THE DRAWINGS ARE NOT INTENDED TO SHOW EVERY CONNECTION IN DETAIL OR ALL OFFSETS. TRANSITIONS, OR FITTINGS REQUIRED FOR A COMPLETE SYSTEM NOR IS IT IMPLIED THAT ALL CONFLICTS BETWEEN BUILDING ELEMENTS AND/OR OTHER TRADES ARE INDICATED. DO NOT SCALE DRAWINGS. EXAMINE FIELD CONDITIONS AND SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR EXACT LOCATION OF DOORS, WINDOWS, LIGHTS, ETC.
- THE DRAWINGS AND SPECIFICATIONS ARE MUTUALLY COMPLEMENTARY, AND ANY WORK REQUIRED BY ONE BUT NOT BY THE OTHER SHALL BE
- C. PRIOR TO INSTALLING EQUIPMENT, DUCT, OR PIPE COORDINATE PROPOSED LOCATIONS WITH EACH TRADE/DISCIPLINE AND GC. EXAMINE EACH DISCIPLINE'S DRAWINGS FOR CONSTRUCTION DETAILS, CEILING HEIGHTS, REQUIRED CLEARANCES, AND SPACE CONSTRAINTS. PROVIDE SYSTEMS INSTALLATION BASED ON THIS EXAMINATION AND COORDINATION. IMMEDIATELY REPORT INSTALLATION CONFLICTS IN WRITING TO THE GC. RESOLVE ALL CONFLICTS WITH GC AND OTHER TRADES PRIOR TO PROCEEDING. INSTALLING CONTRACTOR IS FULLY RESPONSIBLE FOR CORRECT INTERPRETATION AND APPLICATION OF ALL SIZES AND DIMENSIONS.
- SIGNIFICANT DEVIATIONS OR CHANGES FROM THE DRAWINGS, WHICH ARE REQUIRED TO ACCOMPLISH THE INTENT OF THE CONTRACT DOCUMENTS MUST BE REVIEWED AND APPROVED BY THE ARCHITECT (ENGINEER) BEFORE PROCEEDING. IF THE CONTRACTOR BELIEVES CHANGES TO THE CONTRACT DRAWINGS ARE NECESSARY, SHOP DRAWINGS WITH WRITTEN DESCRIPTIONS OF THE PROPOSED CHANGES SHALL BE SUBMITTED TO THE ARCHITECT (ENGINEER) FOR APPROVAL.
- ALL PIPE, DUCTS, VENTS, ETC., EXTENDING THROUGH WALLS AND ROOF SHALL BE FLASHED WATERPROOF. PROVIDE ALL FLASHING FOR PIPE AND DUCTWORK PENETRATING BUILDING ENVELOPE. PROVIDE DUCT AND/OR PIPE SLEEVES AT WALL PENETRATIONS. SEAL ANNULAR SPACE WEATHER

A. PROVIDE COMPLETE EQUIPMENT CONTROLS, INCLUSIVE OF ALL COMPONENTS, VOLTAGES, PROGRAMMING, WIRING ETC. FOR COMPLETE AND OPERATIONAL SYSTEMS. MOUNT THERMOSTATS AND SWITCHES 4'-0" ABOVE FINISHED FLOOR. MOUNT OTHER SENSORS (HUMIDITY, CO2, CO, NOX, ETC.) PER MANUFACTURER'S IOM. PRIOR TO MOUNTING, COORDINATE THERMOSTAT LOCATION(S) WITH FINAL FIXTURES AND EQUIPMENT. DO NOT MOUNT THERMOSTATS IN DIRECT SUNLIGHT, IN DISCHARGE OF SUPPLY GRILLE(S), NEAR HEAT PRODUCING APPLIANCES OR EQUIPMENT, ON WALLS WITH INTERNAL HEAT SOURCES (DUCT OR PIPING), OR ON EXTERIOR WALLS. IF EXTERIOR WALL MOUNTING IS NECESSARY, PROVIDE INSULATED MOUNTING BASE. WHERE THERMOSTAT LOCATION IS SUBJECT TO DAMAGE, PROVIDE LOCKABLE HIGH-IMPACT

- A. IN FINISHED AREAS, ALL PIPING SHALL BE CONCEALED UNLESS NOTED OTHERWISE.
- B. SEE PIPE SCHEDULE FOR PIPE MATERIALS AND PIPE INSULATION.
- C. DO NOT INSTALL PVC PIPING IN PLENUM AREAS.
- D. PAINT PIPE TO MATCH OWNER'S OR BUILDING STANDARD. PROVIDE PIPE LABELS AND FLOW DIRECTION PER BUILDING OR FACILITY'S
- STANDARD OR AS SCHEDULED. ORIENT ALL MARKERS SO AS TO BE VISIBLE FROM FLOOR LEVEL. AT A MINIMUM PIPE LABELS AND FLOW DIRECTION MARKERS SHALL BE LOCATED:
- AT LEAST ONCE IN EACH ROOM AT EQUIPMENT CONNECTIONS
- AT ACCESS DOORS
- AT BRANCH MAINS
- ON ALL ACCESSIBLE PIPE A MAXIMUM OF 25' BETWEEN MARKERS.
- F. BRANCH TAKE-OFFS SHALL BE MADE WITH SWING CONNECTIONS AS

REQUIRED TO AVOID STRESS AT THESE POINTS.

- G. DO NOT INSTALL ANY PIPING ABOVE ELECTRICAL PANELS AND/OR
- H. INSTALL AND SIZE REFRIGERANT PIPE IN STRICT ACCORDANCE WITH EQUIPMENT/APPLIANCE MANUFACTURER'S IOM. DO NOT INSTALL REFRIGERANT PIPE BELOW GROUND. REFRIGERANT PIPE INSTALLED ON BUILDING EXTERIOR SHALL BE ROUTED TO MINIMIZE EXTERIOR EXPOSURE. INSULATE REFRIGERANT PIPE PER MANUFACTURER'S IOM. PROVIDE INSULATION EXPOSED TO AMBIENT CONDITIONS WITH A CONTINUOUS 30 MIL PVC JACKET.
- ROUTE PIPE THROUGH ROOF WITH ALUMINUM PIPE HOOD, PATE CURB MODEL "PHA-2" WITH 14" TALL MODEL "PC-2" CURB. SEAL PIPE THROUGH CURB WEATHER-TIGHT.
- J. ON HYDRONIC PIPING, PROVIDE MANUAL AIR VENTS AT ALL HIGH POINTS TO ALLOW BLEEDING OF AIR FROM THE SYSTEM, AND BALL VALVES WITH HOSE END DRAIN FITTINGS AT ALL LOW POINTS TO ALLOW DRAINING THE
- K. PRIOR TO INSTALLING EQUIPMENT/APPLIANCES, CAREFULLY CONSIDER FALL REQUIREMENTS OF CONDENSATE DRAIN PIPE. PROVIDE MINIMUM 1/8" / FOOT SLOPE. EXTEND CONDENSATE DRAIN PIPE TO AN APPROVED RECEPTOR AND TERMINATE VIA AN INDIRECT CONNECTION.
- ALL HOLES REQUIRED THROUGH EXISTING FLOORS AND MASONRY WALLS SHALL BE CORE DRILLED.

18. <u>DUCT MOUNTED SMOKE DETECTORS</u>

A. DUCT MOUNTED SMOKE DETECTORS SHALL BE PROVIDED BY E.C. AND UPON DETECTING SMOKE, SHALL SHUT DOWN PROTECTED AIR SYSTEM

- A. SUBMIT SHOP DRAWINGS ON SCHEDULED AND NOTED EQUIPMENT AND MATERIALS. PRIOR TO SUBMITTAL, EACH SHOP DRAWING SHALL BE REVIEWED BY THE CONTRACTOR TO ASSURE THAT THE PROPOSED EQUIPMENT IS CLEARLY MARKED, HIGHLIGHTED, AND NOTED. ALL DIMENSIONS, QUANTITIES, CONNECTIONS, CAPACITATES AND ACCESSORIES SHALL BE CLEARLY SHOWN IN CONFORMANCE WITH THE CONTRACT DOCUMENTS, AND SHALL BE MARKED OR STAMPED TO CONFIRM THAT SUCH REVIEW WAS MADE AND COMPLIANCE WAS CONFIRMED. SHOP DRAWING SUBMITTED WITHOUT BEING MARKED,
- HIGHLIGHTED, AND NOTED WILL BE REJECTED WITHOUT REVIEW. B. PROVIDE ADEQUATE TIME FOR SUBMITTAL REVIEW AND CORRECTIONS, IF ANY, TO PREVENT CONSTRUCTION DELAY. DO NOT PERFORM ANY PORTION OF WORK WHICH REQUIRES APPROVED SUBMITTALS UNTIL THE RESPECTIVE SUBMITTALS HAVE BEEN APPROVED BY THE ENGINEER.
- C. REVIEW OF SHOP DRAWINGS BY THE OWNER, OWNER'S AGENT, ARCHITECT, OR ENGINEER IS FOR GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBILITY FOR COMPLYING WITH ALL TERMS OF THE CONTRACT DOCUMENTS AND FOR PERFORMANCE OF ALL EQUIPMENT AND MATERIALS PURCHASED, FOR QUANTITIES, PROPER FIT, AND OTHER DIMENSIONAL REQUIREMENTS.

- REFER TO KEYED NOTES FOR CLARIFICATION OF DUCT DIMENSIONS. PROVIDE ALL DUCTWORK IN STRICT ACCORDANCE WITH THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA) "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE", LATEST EDITION. U.N.O. ALL RIGID DUCTWORK SHALL BE GALVANIZED SHEET METAL. ALL EXPOSED DUCTWORK SHALL HAVE A MILL-PHOSPHATIZED FINISH FOR PAINT ADHESION. EXPOSED ROUND DUCT SHALL BE SPIRAL SEAM TYPE. NO FIBERGLASS DUCTBOARD WILL BE ALLOWED.
- B. PROVIDE TURNING VANES AT ALL CHANGES IN DIRECTION.
- C. UNLESS NOTED OTHERWISE, EACH DUCTED AIR DEVICE SHALL BE PROVIDED WITH A VOLUME DAMPER, WHETHER SHOWN ON THE PLANS OR NOT. PROVIDE A VOLUME DAMPER AT EACH BRANCH DUCT SERVING AN AIR DEVICE AND/OR AS SHOWN, DETAILED, AND SPECIFIED, WHERE A DUCT MOUNTED VOLUME DAMPER WOULD BE INACCESSIBLE. PROVIDE A VOLUME DAMPER IN THE AIR DEVICE GRILLE NECK OR A DAMPER WITH REMOTE CABLE CONTROL. PROVIDE EACH ROUND BRANCH DUCT TAKE-OFF FROM MAIN DUCT WITH SPIN-IN FITTING AND VOLUME BALANCING DAMPER. VOLUME DAMPERS SHALL BE YOUNG REGULATOR MODEL 5020R LOCKING QUADRANT VOLUME DAMPER WITH 2" HANDLE STANDOFF FOR INSULATION THICKNESS. WHERE BRANCH TAKE-OFF IS INACCESSIBLE FOR BALANCING, PROVIDE BALANCING DAMPER IN GRILLE NECK OR BOWDEN "270-275" REMOTE CABLE CONTROL.
- D. ALL FLEXIBLE DUCT SHALL BE THERMAFLEX TYPE MKE, MAXIMUM 5'-0" LONG. FLEXDUCT SHALL BE INSTALLED IN ACCESSIBLE CONCEALED SPACES ONLY, FULLY STRETCHED OUT AND WITHOUT SAGS OR KINKS. CONNECTIONS TO FITTINGS AND AIR DEVICES SHALL BE MADE WITH TWO (2) BAND CLAMPS. BAND CLAMP THE INNER LINER TIGHT TO FITTING OR AIR DEVICE, THEN THE INSULATION AND VAPOR-PROOF JACKET SHALL BE CLAMPED TIGHT. FLEX DUCT INSTALLATION ABOVE INACCESSIBLE CEILINGS IS UNACCEPTABLE.

 A. IN CONDITIONED AREAS, SEAL ALL LONGITUDINAL AND TRANSVERSE JOINTS WITH A NON-HARDENING, NON-MIGRATING MASTIC OR LIQUID ELASTIC SEALANT, WITH VOC CONTENT NO GREATER THAN 250G/L AND RECOMMENDED BY THE MANUFACTURER FOR SEALING SHEET METAL DUCT. SEAL ALL JOINTS, SPIN-IN FITTINGS, AND FASTENING SCREWS WITH MASTIC. HVAC SYSTEM LEAKAGE SHALL NOT EXCEED 5% OF DESIGN FLOW. DUCT TAPE IS NOT ALLOWED.

22. <u>DUCT INSULATION</u>

V. SEE KEYED NOTES.

- A. INSTALL ALL EQUIPMENT AND MATERIALS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION AND OPERATIONS MANUAL AND IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND REGULATIONS.
- B. U.N.O. PROVIDE ALL MOTORIZED EQUIPMENT WITH VIBRATION ISOLATION MOUNTING AND FLEXIBLE DUCT AND FLEXIBLE PIPE CONNECTIONS.
- C. LABEL ALL EQUIPMENT WITH ID TAGS, LETTERING SHALL BE 1" HIGH BLACK ON WHITE BACKGROUND. ID TAGS IN PLENUM SPACES SHALL BE PLENUM RATED. EQUIPMENT NOT PLENUM MOUNTED SHALL BE LABELED WITH ENGRAVED PHENOLIC RESIN NAMEPLATES ADHERED TO UNIT CABINET WITH RTV SILICONE. LETTERING SHALL BE 1" HIGH BLACK ON WHITE
- D. ALL EQUIPMENT, DUCT, PIPE, ETC. MOUNTED FROM BOLTED CONNECTIONS SHALL HAVE DOUBLE NUTS AT ATTACHMENT TO STRUCTURE AND HANGER, NO EXCEPTIONS.

24. FIRE AND FIRE-SMOKE DAMPERS

A. PROVIDE FIRE DAMPERS AND/OR FIRE SMOKE DAMPERS AT DUCT PENETRATIONS OF RATED ASSEMBLIES AND AS REQUIRED BY AHJ. REFER TO ARCHITECTURAL DRAWINGS FOR ASSEMBLY RATINGS. INSTALL DAMPERS IN STRICT ACCORDANCE WITH MANUFACTURER'S DETAILS AND MAINTAIN MANUFACTURER'S DETAILS ONSITE FOR AHJ REVIEW. PROVIDE ACCESS PANELS OF ADEQUATE SIZE TO FACILITATE SERVICE ACCESS OF DAMPER. IN LIEU OF ACCESS PANELS, A REMOVABLE DUCT SECTION IS ACCEPTABLE.

25. OUTDOOR AIR INTAKES

A. PROVIDE A MINIMUM 10'-0" HORIZONTAL CLEARANCE BETWEEN MECHANICAL EQUIPMENT OUTDOOR AIR INTAKES AND EXHAUST FAN DISCHARGES, COMBUSTION EXHAUST, PLUMBING VENTS, AND ANY OTHER HAZARDOUS OR NOXIOUS CONTAMINANT.

PROVIDE THREE (3) SETS OF NEW MERV 8 DISPOSABLE AIR FILTERS, PER THE FOLLOWING: FOR HVAC SYSTEMS OPERATED DURING CONSTRUCTION, PROVIDE FILTERS IN EQUIPMENT AND ON RETURN AIR DUCT OPENINGS TO PROTECT DUCT FROM DIRT; IN HVAC EQUIPMENT PRIOR TO AIR TESTING, ADJUSTING, AND BALANCING; AND AT PROJECT COMPLETION - ONE (1) SPARE SET FOR HVAC EQUIPMENT.

PROVIDE SEISMIC RESTRAINT OF SYSTEMS AND EQUIPMENT IN STRICT ACCORDANCE WITH THE BUILDING CODE. SUBMIT ALL REQUIRED DETAILS TO AHJ FOR REVIEW AND APPROVAL, IF REQUIRED BY AHJ, PROVIDE ENGINEERED SEISMIC-RESTRAINT DRAWINGS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER, LICENSED IN THE STATE. SUBMIT COPIES INCLUDING CALCULATIONS AND DETAILS, AS REQUIRED BY AHJ TO ARCHITECT (ENGINEER) AND TO AHJ FOR REVIEW AND APPROVAL.

 UPON COMPLETION OF WORK, INSPECT INSTALLATION OF ALL EQUIPMENT AND SYSTEMS. OPEN ALL ACCESS COVERS ON EQUIPMENT. REMOVE ALL SURPLUS MATERIALS AND DEBRIS AND PROPERLY DISPOSE OF SAME.

- PRIOR TO EQUIPMENT START-UP, REMOVE COVERS, CAPS, OR PLUGS ON DUCT AND PIPING.
- B. UPON COMPLETION OF WORK, MC SHALL PROVIDE HVAC TESTING: AFTER INSTALLING EQUIPMENT AND AFTER ELECTRICAL CIRCUITRY HAS BEEN ENERGIZED, TEST UNITS FOR COMPLIANCE WITH
 - REQUIREMENTS. ii. INSPECT FOR AND REMOVE SHIPPING BOLTS, BLOCKS, AND TIE-DOWN
- iii. OPERATIONAL TEST: AFTER ELECTRICAL CIRCUITRY HAS BEEN ENERGIZED, START UNITS TO CONFIRM PROPER MOTOR ROTATION BELT TENSION, DAMPER FUNCTION, COOLING FUNCTION, HEATING
- FUNCTION, AND UNIT OPERATION. iv. TEST AND ADJUST CONTROLS AND SAFETIES. REPLACE DAMAGED
- AND MALFUNCTIONING CONTROLS AND EQUIPMENT. v. REMOVE AND REPLACE MALFUNCTIONING UNITS AND RETEST AS
- SPECIFIED ABOVE. vi. SUBMIT TESTING REPORT TO ARCHITECT (ENGINEER).
- UPON COMPLETION OF WORK, PROVIDE AN HVAC TESTING, ADJUSTING, AND BALANCING REPORT PERFORMED BY AN INDEPENDENT CONTRACTOR CERTIFIED BY AABC, NEBB, OR TABB. BALANCE SYSTEMS WITHIN 10% OF DESIGN FLOW. TAB SHALL BE PERFORMED IN STRICT ACCORDANCE WITH SMACNA'S "TAB PROCEDURAL GUIDE", LATEST EDITION. MC SHALL BE PRESENT DURING TAB SHOULD ANY CORRECTIONS

30. CLOSEOUT - AT CONSTRUCTION COMPLETION AND PRIOR TO TURNOVER TO OWNER (TENANT)

- PROVIDE FINAL MARK-UPS IN PDF (DWG) FORMAT TO ARCHITECT AND
- PROVIDE A SIGNED CERTIFICATE OF INSPECTION AT THE PROJECT
- PROVIDE THE OWNER WITH A BOUND OWNER'S MANUAL. THE MANUAL SHALL CONSIST OF A THREE-RING LOOSE-LEAF BINDER CONTAINING ALL PRINTED MATERIAL FOR INSTALLED EQUIPMENT INCLUDING BUT NOT LIMITED TO: WARRANTY INFORMATION, SERVICE AND CLEANING INSTRUCTIONS, NOTICES TO OWNER, OPERATING MANUALS, AND
- MAINTENANCE INSTRUCTIONS. TRAIN THE OWNER IN THE THERMOSTATS FUNCTIONS AND OPERATING THE EQUIPMENT USING THE THERMOSTATS. CONTRACTOR SHALL PROGRAM THE THERMOSTATS PER THE OWNER'S TIME SCHEDULES AND

COMPLETION.

SETPOINTS.

- ON ALL WORK INCLUDED IN THIS CONTRACT, PROVIDE ONE (1) YEAR UNCONDITIONAL WRITTEN WARRANTY FOR LABOR, EQUIPMENT, AND MATERIALS TO REPLACE ALL FAULTY MATERIALS AND/OR LABOR, AT NO COST TO OWNER, BEGINNING ON DATE OF ACCEPTANCE BY OWNER.
- WITHIN THE WARRANTY PERIOD. DURING THE OPPOSITE SEASON (HEATING/COOLING) FROM THAT IN WHICH THE INITIAL ADJUSTMENTS WERE MADE, THIS CONTRACTOR SHALL MAKE AN INSPECTION OF THE INSTALLED BUILDING SYSTEMS. AT THIS INSPECTION, WITH SYSTEMS OPERATING, THIS CONTRACTOR SHALL MAKE ANY NECESSARY MODIFICATIONS TO THE INITIAL ADJUSTMENTS REQUIRED TO PRODUCE OPTIMUM OPERATION OF THE SYSTEM COMPONENTS, TO PRODUCE THE PROPER CONDITIONS IN EACH SPACE.

-- END OF SPECIFICATIONS --

EQUIPMENT SEQUENCE OF OPERATIONS

RTU - ALL

- UNOCCUPIED MODE:
- A. SETPOINT: HEATING 55°F/COOLING 85°F

(NOTE: ST=SPACE TEMPERATURE)

- B. OUTSIDE AIR DAMPER: CLOSED C. SUPPLY FAN: NORMALLY OFF, OPERATES ONLY ON THERMOSTAT
- CALL FOR HEATING OR COOLING. D. RTU: ENERGIZES IN HEATING MODE WHEN ST < SETPOINT-3°F
- E. COOLING STAGE(S): ENERGIZES WHEN ST > SETPOINT+3°F
- F. R.A. SMOKE DETECTOR/NORMAL MODE: NO ACTION G. R.A. SMOKE DETECTOR/ALARM MODE: SUPPLY FAN SHUT DOWN. H. INTEGRATED AIR ECONOMIZER: ENABLED AT OUTDOOR AIR
- TEMPERATURES BELOW 70 °F. RELIEF AIR: BAROMETRIC RELIEF VIA RTU.

3. OCCUPIED MODE (HOURS M-F):

A. SETPOINT: HEATING 68°F/COOLING 72°F

TEMPERATURES BELOW 70 °F.

- B. OUTSIDE AIR DAMPER: OPEN TO SCHEDULED CFM
- C. SUPPLY FAN: RUNS CONTINUOUSLY D. RTU: ENERGIZES IN HEATING MODE WHEN ST < SETPOINT-3°F
- E. COOLING STAGE(S): ENERGIZES WHEN ST > SETPOINT+3°F
- F. R.A. SMOKE DETECTOR/NORMAL MODE: NO ACTION G. R.A. SMOKE DETECTOR/ALARM MODE: SUPPLY FAN SHUT DOWN

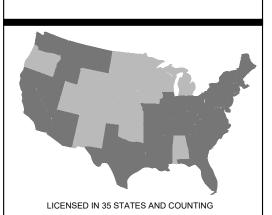
H. INTEGRATED AIR ECONOMIZER: ENABLED AT OUTDOOR AIR

RELIEF AIR: BAROMETRIC RELIEF VIA RTU.

*PRIOR TO PROGRAMMING, COORDINATE WITH OWNER TIME OF DAY SCHEDULES AND SPACE SETPOINT TEMPERATURES. MECHANICAL CONTRACTOR SHALL TRAIN OWNER IN THERMOSTAT CONTROLS.

DESIGN STUDIC

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MICHIGAN 6201310434

09/30/2025 I HEARBY CERTIFY THAT THESE DOCUMENTS WERE ULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAW OF THE THIS STATE.



St. Louis, MO 63026 CERTIFICATE OF AUTHORITY NO. 802229007

EXISTING CONDITIONS DESIGN DEVELOPMENT

FULL RELEASE

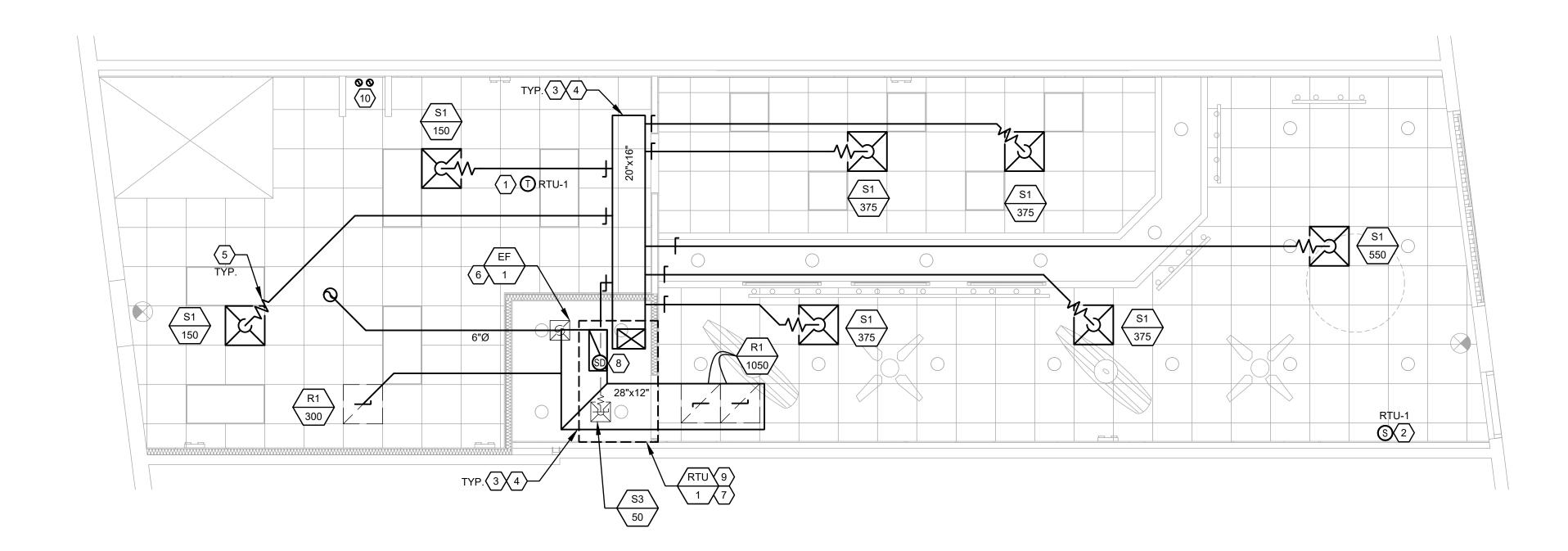
EC DRAWN BY: JT APPROVED BY:

PLAYA BOWLS

PROJECT:

20647 MACK AVE GROSSE POINTE, MI 48236 AS INDICATED

DRAWING TITLE MECHANICAL **SPECIFICATIONS**





	ROOFTOP UNIT SCHEDULE																	
									COOLING				ING					
					O.A.				OOOLING			GAS MBH		ELECT	RICAL	EER/ IEER		
MARK	MFR	MODEL NO.	TONS	CFM	CFM	ESP	HP	MBH TTL/SEN	EDB/EWB (°F)	LDB/LWB (°F)	AMB (°F)	IN/OUT	LT (°F)	MCA/MOCP	V/PH		WEIGHT (LBS)	REMARKS
RTU-1	DAIKIN	DSG072	6.0	2400	585	0.8	1.2	69/51.06	78.21/65.1	58.5/57.98	95	140/112	96	27.2/40	208/3	11.8/16.7	910	1,2,3
																	-	

PROVIDE NEW ROOF CURB 14" TALL. FIELD VERIFY ACTUAL RTU LOCATION.

VERIFY ELECTRICAL VOLTAGE/PHASE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING UNIT. PROVIDE ROOFTOP UNIT IN FULL COMPLIANCE WITH LOCAL CODES. ACCESSORIES: DIFFERENTIAL ENTHALPY ECONOMIZER, ECONOMIZER CONTROLS, OUTDOOR AIR DAMPERS, HAIL GUARDS, NON-FUSED

ELECTRICAL DISCONNECT, UNPOWERED CONVENIENCE OUTLET, 2" MERV - 8 THROWAWAY FILTERS, HOT-GAS REHEAT, AND BAROMETRIC RELIEF,.

	FAN SCHEDULE										
MANUF	MANUFACTURER: GREENHECK				ESP MOTOR WE				WEIGHT		
MARK	FAN TYPE	MODEL	CFM	IN.W.G.	SONES	DRIVE	WATTS	V/PH/HZ	LBS.	CONTROL	REMARKS
EF-1	CEILING MOUNTED	SP-A390-VG	75	0.375	3.0	DIRECT	17	115/1/60	28	Α	1,2

1. PROVIDE WITH FACTORY SPEED CONTROLLER. 2. PROVIDE BACKDRAFT DAMPER, VIBRATION ISOLATION MOUNTING, NON-FUSED ELECTRICAL DISCONNECT, AND FLEXIBLE DUCT

A. CONTROL THROUGH LIGHT SWITCH. FAN TO ENERGIZE WITH LIGHTS.

	AIR DEVICE SCHEDULE						
PLAN MARK	MANUFACTURER	MODEL	MATL.	NECK SIZE	FRAME TYPE	PANEL SIZE	REMARKS
S1	TITUS	OMNI	ST	SCHED	LAY-IN	24"x24"	1,2
S3	TITUS	OMNI	ST	SCHED	FLANGED	12"x12"	1,2,3
R1	TITUS	PAR	ST	22"x22"	LAY-IN	24"x24"	2,4

- BRANCH DUCT SAME DIAMETER AS GRILLE NECK SIZE.
- 2. DIFFUSER COLOR TO MATCH ARCHITECTURAL SHEETS.
- 3. PROVIDE WITH FACTORY BALANCING DAMPER IN GRILLE NECK. 4. BRANCH DUCT DIAMETER PER DIFFUSER NECK SIZE SCHEDULE.

DIFFUSER NECK SIZE SCHEDULE						
NECK SIZE	CFM					
6"Ø	0 - 100					
8"Ø	110 - 250					
10"Ø	260 - 400					
12"Ø	410 - 600					
14"Ø	610 - 1000					
16"Ø	1010 - 1400					

DUCT CONSTRUCTION SCHEDULE								
DUCT SYSTEM	MATERIAL	PRESSURE CLASS W.C.	SEAL CLASS	INSULATION				
LOW PRESSURE SUPPLY	STEEL	2"	А	TYPICAL: 2" FIBERGLASS DUCT WRAP @ 1 LBS DENSITY				
RETURN/TRANSFER DUCTS	STEEL	2"	А	TYPICAL: 2" FIBERGLASS DUCT WRAP @ 1 LBS DENSITY				
ALL DUCTWORK DIMENSIONS INDICATED ON THE PLANS ARE CLEAR, INSIDE DIMENSIONS. CONTRACTOR SHALL INCREASE SHEETMETAL SIZE AS REQUIRED TO ACCOMMODATE DUCT LINER. GENERAL DUCTWORK NOTES A. All rectangular ducts shall be "Pittsburgh Lock" longitudinal joints. Snaplock is not acceptable. B. All round ducts and flat oval ducts shall have spiral seams or continuously welded longitudinal seams. C. All transverse joints in rectangular ductwork 48" and larger shall be Ductmate, SMACNA T-25, or approved equivalent. All flanged ductwork, regardless of pressure class, shall use gaskets, corner closures, and be TEK screwed or riveted on 10" centers with a minimum of two (2) per side. D. Transverse joints in rectangular ductwork smaller than 48" shall be made in accordance with SMACNA suitable with the pressure class. E. All transverse joints in round and oval ductwork 24" and larger shall be Ductmate, or approved equivalent. Transverse joints in round and overall ductwork smaller than 24" shall be beaded sleeve joints.								

MECHANICAL SYMBOLS LEGEND THERMOSTAT FLEXIBLE DUCT VOLUME DAMPER FD ■ FIRE DAMPER CEILING SUPPLY AIR DIFFUSER CEILING RETURN AIR GRILLE SIDEWALL AIR DIFFUSER OR GRILLE NEW DUCTWORK EXISTING DUCTWORK — CD — │ CONDENSATE DRAIN — G — | GAS PIPING PIPE TURNING DOWN ──O | PIPE TURNING UP BALL VALVE ——— GATE VALVE CONNECTION OF NEW TO EXISTING **─**✓ ———☐— | GAS COCK PRESSURE GAUGE STRAINER ABOVE FINISHED FLOOR S - SUPPLY R - RETURN / s1 \ 100/ E - EXHAUST TURNING VANES RECTANGULAR TO ROUND TRANSITION MOTORIZED DAMPER

KEYED NOTES

- PROVIDE 7-DAY PROGRAMMABLE THERMOSTAT AND RELATED WIRING. MOUNT 48" A.F.F.
- PROVIDE WALL MOUNTED REMOTE ZONE TEMPERATURE SENSOR AT 60" AFF, AND WIRED BACK TO RESPECTIVE THERMOSTAT. COORDINATE PLACEMENT WITH WALL DECOR AND EQUIPMENT. FIELD VERIFY WITH THE OWNER'S REPRESENTATIVE FOR THE FINAL LOCATION PRIOR TO INSTALLATION. MULTIPLE SENSORS ARE TEMPERATURE AVERAGING.
- $\langle 3 \rangle$ PROVIDE GALVANIZED STEEL DUCTWORK, SIZES AS NOTED ON DRAWINGS. DUCTWORK SIZES ARE SHEET METAL SIZES. CONCEALED DUCTWORK TO BE INSULATED PER DUCTWORK INSULATION SCHEDULE ON THIS SHEET.
- 4 ROUTE DUCT TIGHT TO DECK.
- $\langle 5 \rangle$ MAXIMUM FIVE (5) FEET OF FLEXIBLE DUCT. ONLY ONE 90° ELBOW ALLOWED IN FLEXIBLE DUCTWORK.
- 6 PROVIDE NEW CEILING MOUNTED RESTROOM EXHAUST FAN (EF-1) PROVIDE 6"Ø EXHAUST DUCT UP THRU ROOF TO ROOF CAP. MAINTAIN MINIMUM 10'-0" DISTANCE FROM OUTSIDE AIR INTAKES.
- 7 PROVIDE GAS HEATING ELECTRIC COOLING PACKAGED ROOF TOP UNIT (RTU-1), AS SCHEDULED AND SPECIFIED. SHIM CURB AS NEEDED TO SET UNIT DEAD LEVEL. PROVIDE S.A. AND R.A. DUCT DROPS FULL SIZE FROM UNIT CONNECTIONS WITH FLEXIBLE CONNECTIONS BELOW ROOF DECK. PROVIDE GAS PIPING FULL SIZE OF UNIT CONNECTION AND AS DETAILED. COORDINATE EXACT LOCATION IN FIELD. ROOF CURB TO BE FULLY INSULATED AT INSIDE SURFACES OF PERIMETER, AND/OR WITH R19 BATT FILLING VOIDS.
- (8) PROVIDE 120V RETURN DUCT MOUNTED SMOKE DETECTOR. SMOKE DETECTOR SHALL BE INTERLOCKED TO DE-ENERGIZE UNIT UPON DETECTION OF SMOKE. POWER WIRING BY ELECTRICAL CONTRACTOR, COORDINATE WITH ELECTRICAL DRAWINGS/ CONTRACTOR.
- $\langle 9 \rangle$ ROUTE 1"Ø CONDENSATE LINE FROM NEW RTU TO NEAREST ROOF DRAIN.
- (10) 3" PVC/CPVC COMBUSTION AIR INTAKE AND FLUE EXHAUST FROM GAS TANKLESS WATER HEATER UNIT UP TO ROOF. COMBINE RIGHT BEFORE ROOF PENETRATION WITH CONCENTRIC VENT KIT. VERIFY EXACT LOCATION IN THE FIELD. MAINTAIN MINIMUM 10'-0" CLEARANCE FROM OUTSIDE AIR INTAKES.

DESIGN STUDIO

GREGORY RALPH ARCHITECT 1924 ROUTE 22 EAST BOUND BROOK, NJ 08805 TEL: 908 356 0132 GREG@GRALPHARCHITECT.COM





MICHIGAN

6201310434 I HEARBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAW OF THE THIS STATE.

CERTIFICATE OF AUTHORITY NO. 802229007

REI	LEASE TYPE:	
	EXISTING CONDITIONS	
	SCHEMATIC DESIGN	
	DESIGN DEVELOPMENT	
	PROGRESS PRINT	
	FULL RELEASE	

DESCRIPTION	DATE

JT APPROVED BY:

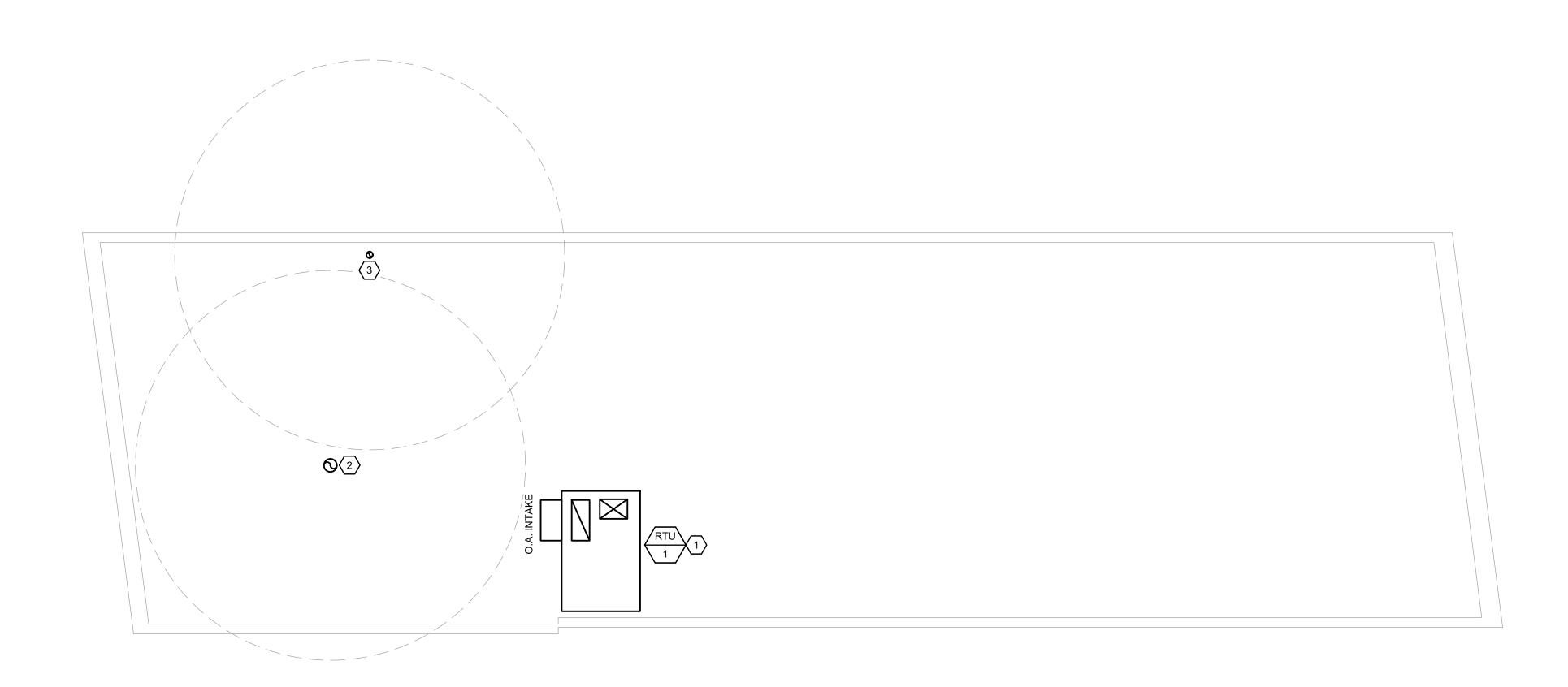
PROJECT: PLAYA BOWLS

20647 MACK AVE GROSSE POINTE, MI 48236

SCHEDULES

AS INDICATED DRAWING TITLE: MECHANICAL PLAN &

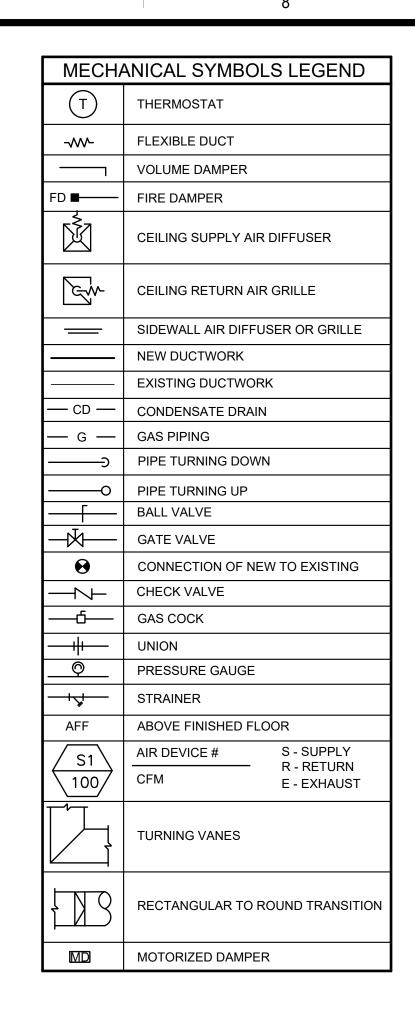
SHEET:





oom Name-Number	Served By:	Floor Number:	Occupancy Category	Area (sq.ft.)	1	Area Outdoor Airflow Rate CFM/Ft2 Table 403.3.1.1		Area Outdoor Air	Zone Population 0* Az/1000	Occupant Outdoor Air	Breathing Zone Outdoor Air		Zone Outdoor Air Req'd	Zone Outdoor Air Provided	Supply Air Design
				Az	Rp	Ra	0	Ra*Az	Pz	Rp*Pz	Vbz=RpPz+RaAz	Ez	Voz=Vbz/Ez	Voz	Vpz
Dining/Ordering	RTU-1	1	DINING ROOMS	532	7.5	0.18	70	96	28	210	306	0.8	382	316.88	1300
Service	RTU-1	1	KITCHEN (NON-COOKING)	292	7.5	0.18	70	53	4	30	83	0.8	103	182.81	750
Restroom	RTU-1	1	RESTROOM	50	0	0	0	0	0	0	0	0.8	0	12.19	50
Storage	RTU-1	1	STORAGE	396	0	0.12	0	48	1	0	48	0.8	59	73.13	300

An entry of "0" indicates "not required per code"

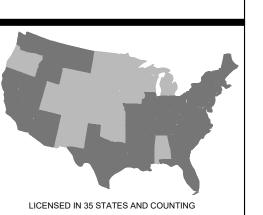


KEYED NOTES

- PROVIDE ROOFTOP UNIT, (RTU-1) AT LOCATION SHOWN. VERIFY EXACT LOCATION WITH LANDLORD REPRESENTATIVE AND STRUCTURAL DRAWINGS. VERIFY THAT OUTSIDE AIR INTAKE IS AT LEAST 10'-0" AWAY FROM ALL EXHAUST/VENT DISCHARGES.
- TERMINATE RESTROOM EXHAUST AIR DUCT UP THROUGH ROOF IN ACCORDANCE WITH LOCAL CODES. VERIFY EXACT LOCATION IN FIELD. MAINTAIN MINIMUM 10'-0" DISTANCE FROM ALL OUTSIDE AIR INTAKES.
- ROUTE 3" WH COMBUSTION AIR AND VENT EXHAUST THROUGH ROOF WITH CONCENTRIC VENT KIT. TERMINATE AT MINIMUM 3'-0" ABOVE ANY BUILDING INTAKES AND 10'-0" HORIZONTALLY FROM ANY BUILDING INTAKES.

GRA DESIGN STUDIO

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NOT VALID FOR BUILDING UNLESS SIGNED AND SEALED BY ENGINEER

SE #: 6201:

LICENSE #: 6201310434

EXPIRATION: 09/30/2025

I HEARBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAW OF THE THIS STATE.

CASE Engineering Inc.

St. Louis, MO 63026 F 636.349.1730
CERTIFICATE OF AUTHORITY NO. 802229007

RELEASE TYPE:	
EXISTING CONDITIONS	
SCHEMATIC DESIGN	
DESIGN DEVELOPMENT	
PROGRESS PRINT	
FULL RELEASE	

DESCRIPTION	DATE
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PROJECT#: STQ-09
PROJECT:
PLAYA BOWLS

JT APPROVED BY:

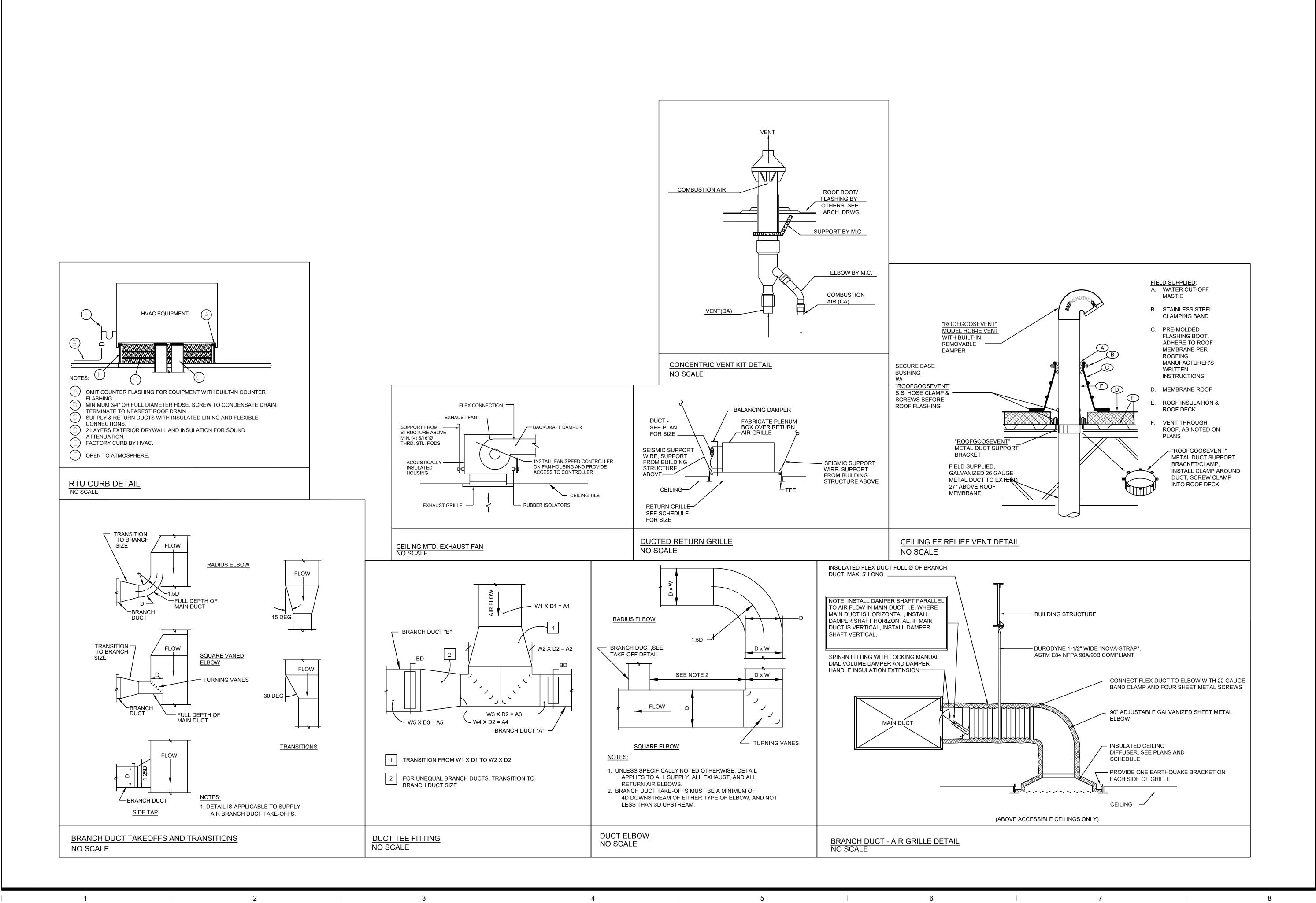
20647 MACK AVE GROSSE POINTE, MI 48236

DRAWING TITLE:

MECHANICAL ROOF
PLAN

SHEET:

M201

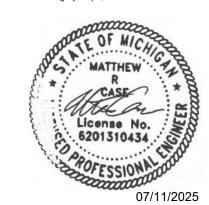


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CERTIFICATE OF AUTHORITY NO. 802229007

RELEASE TYPE:

EXISTING CONDITIONS

SCHEMATIC DESIGN

DESIGN DEVELOPMENT

PROGRESS PRINT

FULL RELEASE

ISSUED TO:

NO. DESCRIPTION DAT

DESIGNED BY: EC DRAWN BY:
CHECKED BY: JT APPROVED BY:

PROJECT#: STQ-C
PROJECT:
PLAYA BOWLS

SCALE: AS INDICATED

DRAWING TITLE:

GROSSE POINTE, MI 48236

MECHANICAL DETAILS

20647 MACK AVE

SHEET:

M300

- A. GENERAL AND SUPPLEMENTARY CONDITIONS WITHIN THE SPECIFICATIONS ARE HEREBY INCORPORATED AND BECOME PART OF THESE SPECIFICATIONS AND AS SUCH SHALL BE APPLICABLE TO THE WORK OF THE ELECTRICAL CONTRACT.
- B. PRIOR TO SUBMISSION OF A BID PROPOSAL, THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS AND LIMITATIONS THAT IMPACT THE WORK OF THIS CONTRACT. NO ADDITIONAL COSTS TO THE OWNER SHALL BE PERMITTED FOR CHANGES TO THE WORK AS A RESULT OF THE CONTRACTORS FAILURE TO VISIT THE SITE PRIOR TO BIDDING AND IDENTIFY ITEMS THAT WERE ABLE TO BE VERIFIED DURING A SITE VISIT PRIOR TO THE SUBMISSION OF A BID PROPOSAL.
- C. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, EQUIPMENT, RIGGING, AND MISCELLANEOUS ITEMS AS REQUIRED FOR A COMPLETE, OPERATIONAL, FUNCTIONAL AND CODE COMPLIANT ELECTRICAL INSTALLATION AS SHOWN ON THE DRAWINGS AND AS SPECIFIED IN THESE SPECIFICATIONS.

LANDLORDS REQUIREMENTS

- A. ALL WORK OF THIS CONTRACT SHALL BE COMPLETED IN STRICT ACCORDANCE WITH ALL APPLICABLE LANDLORD REQUIREMENTS INCLUDING BUT NOT NECESSARILY LIMITED TO; LANDLORD'S WORK LETTER, LANDLORD'S CONSTRUCTION CRITERIA AND/OR THE TENANT/LANDLORD AGREEMENT. THIS CONTRACTOR SHALL EXAMINE THESE DOCUMENTS PRIOR TO THE SUBMISSION OF A BID PROPOSAL.
- B. ALL APPLICABLE LANDLORD REQUIREMENTS INCLUDING BUT NOT NECESSARILY LIMITED TO THE LANDLORD'S WORK LETTER, LANDLORDS CONSTRUCTION CRITERIA AND/OR THE TENANT/LANDLORD AGREEMENT DOCUMENTS SHALL BE CONSIDERED PART OF THESE SPECIFICATIONS.

EXISTING CONDITIONS

A. THE CONTRACT DOCUMENTS ARE BASED ON INFORMATION PROVIDED TO THE CONSULTANT AT THE TIME OF DESIGN. THIS CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING A BID PROPOSAL

BIDS AND SUBSTITUTIONS

- A. PRIOR TO SUBMISSION OF A BID PROPOSAL, CONTRACTOR SHALL THOROUGHLY REVIEW THE BID INSTRUCTIONS AND ALL CIVIL, ARCHITECTURAL, STRUCTURAL, FOOD SERVICE AND MEPFP AND TELECOMMUNICATION CONSTRUCTION DOCUMENTS.
- B. SHOULD THE CONTRACTOR WISH TO SUBMIT AN ALTERNATE PRODUCT TO THE MANUFACTURERS NAMED IN THESE SPECIFICATIONS OR ON THE DRAWINGS FOR ANY EQUIPMENT. THE CONTRACTOR SHALL SUBMIT A VOLUNTARY ALTERNATIVE A MINIMUM OF SEVEN (7) CALENDAR DAYS PRIOR TO BID, STATING THE MANUFACTURER'S NAME, MODEL NUMBER, WRITTEN, DETAILED PRODUCT DATA.
- C. WORK PERFORMED OR CONSTRUCTED WITH UNAPPROVED EQUALS IS AT CONTRACTOR'S RISK AND ANY REQUIRED CORRECTION OF WORK INCORPORATING UNAPPROVED EQUALS SHALL BE AT CONTRACTOR'S SOLE COST AND EXPENSE.
- D. NO SUBSTITUTIONS PERMITTED FOR LIGHTING FIXTURES.

QUALITY ASSURANCE

DIFFERENCES

- A. ALL MATERIALS AND EQUIPMENT SHALL BE NEW.
- B. PROVIDE PERMITS, INSPECTIONS, FINAL CERTIFICATES OF INSPECTION BY THE AUTHORITY HAVING JURISDICTION, PERMIT AND INSPECTION FEES AND ALL MATERIALS, EQUIPMENT AND LABOR AS REQUIRED FOR A COMPLETE, FUNCTIONAL, FULLY OPERATIONAL AND CODE COMPLIANT ELECTRICAL SYSTEM.
- C. THIS CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR AND ACCESSORIES FOR A COMPLETE FUNCTIONAL AND CODE COMPLIANT ELECTRICAL INSTALLATION, WHETHER OR NOT SHOWN ON THE DRAWINGS OR SPECIFIED IN THESE SPECIFICATIONS.
- D. EC SHALL VERIFY THE VOLTAGE AND AMPERAGE REQUIREMENTS OF ALL EQUIPMENT DELIVERED TO THE SITE PRIOR TO CONNECTION. EC SHALL NOTIFY THE OWNER OF ANY
- E. REQUIREMENTS OF REGULATORY AGENCIES:
- 1. PERMITS: ARRANGE AND PAY FOR ALL PERMITS, INSPECTIONS AND UTILITY CONNECTIONS REQUIRED.
- 2. PROVIDE ALL TESTS AND INSPECTIONS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
- 3. PROVIDE A SIGNED CERTIFICATE OF INSPECTION AT THE COMPLETION OF THE PROJECT. INCLUDE IN OPERATION AND MAINTENANCE MANUALS.

F. CODES AND STANDARDS

- 1. COMPLY WITH SPECIFIED CODES AND STANDARDS. IF CONFLICT EXISTS BETWEEN CODES OR STANDARDS AND DRAWINGS, PROJECT MANUAL OR ADDENDA REQUIREMENTS, REQUEST CLARIFICATION FROM ARCHITECT/ENGINEER.
- 2. CONFORM TO THE INSTALLATION RULES AND REGULATIONS OF THE CODES AND STANDARDS LISTED INCLUDING ALL SUBSEQUENTLY PUBLISHED AMENDMENTS THERETO ISSUED PRIOR TO THE DATE OF THE BIDDING DOCUMENTS.
- 3. CONFORM TO THE REQUIREMENTS OF ALL LOCAL, STATE AND FEDERAL AGENCIES WHICH HAVE AUTHORITY OVER THIS PROJECT.
- 4. COMPLY WITH THE APPLICABLE EDITION OF THE FOLLOWING CODES AND STANDARDS THAT HAVE BEEN ADOPTED BY AND ARE ENFORCED BY THE AUTHORITY HAVING JURISDICTION:
- a. INTERNATIONAL BUILDING CODE.
- b. INTERNATIONAL ENERGY CONSERVATION CODE
- c. INTERNATIONAL MECHANICAL CODE
- d. NATIONAL ELECTRICAL CODE
- e. INTERNATIONAL FIRE CODE
- f. LIFE SAFETY CODE, NFPA 101 g. AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES
- h. ALL LOCAL CODES AND ORDINANCES ADOPTED AND ENFORCED BY THE AUTHORITY HAVING JURISDICTION.

G. REFERENCED STANDARDS:

- 1. ALL EQUIPMENT, APPARATUS, MATERIALS AND SYSTEMS SHALL BE RATED, TESTED, FABRICATED AND INSTALLED IN ACCORDANCE WITH THE APPLICABLE INDUSTRY
- 2. ALL EQUIPMENT, APPARATUS, MATERIALS AND SYSTEMS SHALL BE LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY (UL, ETL, ETC)

ELECTRICAL CONTRACT DOCUMENTS

- A. THE ELECTRICAL DRAWINGS (DRAWINGS) AND THE SPECIFICATIONS SHALL TOGETHER FORM A SET OF CONTRACT DOCUMENTS FOR THE ELECTRICAL WORK. NEITHER THE DRAWINGS OR THE SPECIFICATIONS SHALL BE COMPLETE WITHOUT THE OTHER. ANY ITEM SHOWN ONLY ON THE DRAWINGS OR SPECIFIED ONLY IN THE SPECIFICATIONS SHALL BE CONSIDERED AS IF SHOWN AND SPECIFIED IN BOTH.
- B. ELECTRICAL DRAWINGS AND SPECIFICATIONS: COMPLY WITH THE FOLLOWING
- 1. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH ALL DRAWINGS AND SPECIFICATIONS WITHIN THE CONTRACT DOCUMENTS, INCLUDING, BUT NOT NECESSARILY LIMITED TO, GEOTECHNICAL, LANDSCAPE, CIVIL, ARCHITECTURAL, STRUCTURAL, FOOD SERVICE, MECHANICAL, PLUMBING, TELECOMMUNICATION AND FIRE PROTECTION DRAWINGS AND SPECIFICATIONS.
- 2. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE INTENDED TO INDICATE APPROXIMATE LOCATION ONLY OF ELECTRICAL WORK. THE ACTUAL LOCATION OF ANY ELECTRICAL WORK SHALL NOT INTERFERE WITH THE LOCATION, CLEARANCES, ETC. REQUIRED BY THE WORK OF OTHER TRADES.
- 3. PRIOR TO ROUGH-IN, CONTRACTOR SHALL COORDINATE ALL DEVICE LOCATIONS WITH THE ARCHITECTURAL WALL ELEVATIONS, CASEWORK/CABINETRY ELEVATIONS AND DETAILS AND THE FINAL, APPROVED FOOD SERVICE SHOP DRAWINGS.
- C. DEFINITIONS: THE FOLLOWING TERMS ARE USED ON THE ELECTRICAL DRAWINGS AND IN THE SPECIFICATIONS AND SHALL BE DEFINED AS FOLLOWS:
- 1. CONTRACTOR THE ELECTRICAL CONTRACTOR OR ANY OF THEIR SUB-CONTRACTORS

- 3. FURNISH PURCHASE, SUBMIT FOR REVIEW AND APPROVAL, COORDINATE WITH THE CONTRACT DOCUMENTS AND DELIVER TO THE PROJECT SITE IN NEW, UNDAMAGED CONDITION, STORE AS DIRECTED, PROTECT FROM DAMAGE DURING STORAGE.
- 4. INSTALL INSTALL IN PLACE, MAKE READY FOR CONNECTION TO THE REQUIRED
- 5. CONNECT CONNECT TO THE REQUIRED SERVICE AS REQUIRED FOR PROPER OPERATION, TEST FOR PROPER OPERATION AND FUNCTIONALITY IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND REQUIREMENTS SPECIFIED WITHIN THESE SPECIFICATIONS AND TURN OVER TO THE OWNER IN FULL OPERATING CONDITION.
- 6. PROVIDE FURNISH, INSTALL AND CONNECT AS DEFINED HEREIN FOR A COMPLETE, FUNCTIONAL AND CODE COMPLIANT INSTALLATION READY FOR INTENDED USE.
- 7. FINISHED SPACE SPACES HAVING WALLS PAINTED OR FINISHED WITH WALL COVERING, LAY-IN OR DRYWALL CEILINGS, AND FINISHED FLOORING MATERIALS. EXAMPLES OF FINISHED SPACES INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, ALL SPACES IN A DWELLING UNIT, OFFICES, LOBBIES, CORRIDORS, TOILET ROOMS,
- 8. UNFINISHED SPACES SPACES WITH UNFINISHED WALLS AND FLOORS AND TYPICALLY ARE NOT EQUIPPED WITH A CEILING. EXAMPLES INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, MECHANICAL ROOMS, ELECTRICAL ROOMS, SERVICE AREAS, ETC.
- 9. SHALL ACTION THAT IS REQUIRED WITHOUT OPTION OR QUALIFICATION.
- 10. REMOVE DETACH ITEMS FROM EXISTING CONSTRUCTION AND LEGALLY DISPOSE OF THEM OFF SITE UNLESS INDICATED TO BE REMOVED AND SALVAGED OR REMOVED AND RE-INSTALLED
- 11. REMOVE AND SALVAGE CAREFULLY DETACH FROM EXISTING CONSTRUCTION IN A MANNER TO PREVENT DAMAGE AND DELIVER TO OWNER READY FOR RE-USE.
- 12. REMOVE AND REINSTALL DETACH ITEMS FROM EXISTING CONSTRUCTION, PREPARE FOR RE-USE, RE-INSTALL AND RECONNECT WHERE INDICATED SUCH THAT THE RE-INSTALLED ITEM IS FULLY OPERATIONAL.
- 13. EXISTING TO REMAIN EXISTING ITEMS OF CONSTRUCTION THAT ARE NOT TO BE PERMANENTLY REMOVED AND THAT ARE NOT OTHERWISE INDICATED TO BE REMOVED, REMOVED AND SALVAGED OR REMOVED AND RE-INSTALLED.

- A. REVIEW OF THE SHOP DRAWINGS IS RENDERED AS A SERVICE ONLY AND SHALL NOT BE CONSIDERED AS A GUARANTEE OF MEASUREMENTS OR OF BUILDING CONDITIONS; NOR SHALL IT BE CONSTRUED AS RELIEVING THE CONTRACTOR'S OF BASIC RESPONSIBILITIES UNDER HIS CONTRACT. ARCHITECT/ENGINEER WILL REVIEW SHOP DRAWINGS ONLY FOR CONFORMANCE WITH DESIGN CONCEPT OF THE PROJECT. REVIEW BY THE ARCHITECT/ENGINEER SHALL NOT BE CONSTRUED:
 - 1. AS PERMITTING ANY DEPARTURE FROM THE CONTRACT REQUIREMENTS.
 - 2. AS RELIEVING THE CONTRACTOR OF THE RESPONSIBILITY FOR ANY ERROR IN DETAILS, DIMENSIONS OR OTHERWISE THAT MAY EXIST.
- 3. AS APPROVED DEPARTURES FROM ADDITIONAL DETAILS OR INSTRUCTIONS PREVIOUSLY FURNISHED BY THE ARCHITECT/ENGINEER.

B. SHOP DRAWINGS:

- 1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND DESCRIPTIVE LITERATURE OF EQUIPMENT TO BE FURNISHED UNDER THIS CONTRACT. DRAWINGS SHALL STATE CAPACITIES, SIZES, ETC., OF ALL EQUIPMENT AND SHALL BE CERTIFIED. SEE GENERAL CONDITIONS AND SUPPLEMENTARY CONDITIONS FOR ADDITIONAL REQUIREMENTS.
- 2. PROVIDE SUBMITTALS FOR LIGHTING FIXTURES, PANELBOARDS, LIGHTING CONTROL DEVICES, CONTACTORS, WIRING DEVICES, DISCONNECT SWITCHES, POWER SYSTEM
- C. THE CONTRACTOR SHALL PERFORM NO PORTION OF THE WORK REQUIRING SUBMITTAL AND REVIEW OF SHOP DRAWINGS, PRODUCT DATA, SAMPLES OR SIMILAR SUBMITTALS UNTIL THE RESPECTIVE SUBMITTALS HAS BEEN APPROVED BY THE ENGINEER.

ELECTRICAL COORDINATION DRAWINGS

- A. PREPARE ELECTRICAL COORDINATION DRAWINGS AS REQUIRED BY THE WORK AND AS DIRECTED BY THE GENERAL CONTRACTOR.
- B. MEET WITH REPRESENTATIVES OF THE OTHER DISCIPLINES/TRADES TO COORDINATE THE ELECTRICAL WORK WITH THE WORK OF EACH DISCIPLINE AND TO OBTAIN INFORMATION REGARDING THEIR WORK THAT IS TO BE INDICATED ON THE COORDINATION DRAWINGS.

POWER SYSTEM STUDIES - GENERAL

- A. PROVIDE COMPUTER-BASED, POWER SYSTEM STUDIES THAT INCLUDES:
- 1. A SHORT CIRCUIT STUDY TO DETERMINE THE MINIMUM INTERRUPTING CAPACITY OF CIRCUIT PROTECTIVE DEVICES;
- 2. AN ARC-FLASH STUDY TO DETERMINE THE ARC-FLASH HAZARD DISTANCE AND THE INCIDENT ENERGY TO WHICH PERSONNEL COULD BE EXPOSED DURING WORK ON OR NEAR ELECTRICAL EQUIPMENT.
- B. STUDIES SHALL BE PERFORMED UTILIZING COMPUTER PROGRAMS THAT ARE DISTRIBUTED NATIONALLY AND ARE IN WIDE USE. SOFTWARE ALGORITHMS SHALL COMPLY WITH REQUIREMENTS OF STANDARDS AND GUIDES SPECIFIED IN THIS SECTION. MANUAL CALCULATIONS ARE UNACCEPTABLE.
- C. SOFTWARE DEVELOPERS: SUBJECT TO COMPLIANCE WITH SPECIFIED REQUIREMENTS, PERFORM STUDIES UTILIZING SOFTWARE PRODUCTS BY ONE OF THE FOLLOWING:
- 2. POWER ANALYTICS CORPORATION
- 3. SKM SYSTEMS ANALYSIS
- D. ALL STUDIES SHALL BE BASED ON THE DEVICE CHARACTERISTICS OF ACTUAL EXISTING COMPONENTS AND THE NEW COMPONENTS BEING INSTALLED.
- E. PROVIDE ALL FIELD LABOR AS REQUIRED TO OBTAIN ALL DATA NECESSARY TO CONDUCT THE STUDIES SPECIFIED HEREIN.
- F. SUBMIT STUDIES FOR REVIEW BEFORE SUBMITTING THE SYSTEM OVERCURRENT PROTECTIVE DEVICE AND POWER DISTRIBUTION EQUIPMENT SUBMITTALS. SUBMIT STUDY REPORT FOR REVIEW PRIOR TO RECEIVING FINAL APPROVAL OF THE OVERCURRENT PROTECTIVE DEVICE AND DISTRIBUTION EQUIPMENT SUBMITTALS.
- G. WHERE FORMAL COMPLETION OF STUDIES WILL CAUSE A DELAY IN THE ORDERING AND MANUFACTURING OF OVERCURRENT PROTECTIVE DEVICES AND POWER DISTRIBUTION EQUIPMENT, OBTAIN APPROVAL FROM ENGINEER FOR PRELIMINARY SUBMITTAL OF SUFFICIENT STUDY DATA TO ENSURE THAT THE SELECTION OF DEVICES AND ASSOCIATED CHARACTERISTICS IS SATISFACTORY AND IN COMPLIANCE WITH THE RESULTS OF THE STUDIES BEING PERFORMED.
- H. STUDY SHALL BE SIGNED AND SEALED BY THE PROFESSIONAL ENGINEER RESPONSIBLE FOR PROVIDING THE STUDY.

SHORT CIRCUIT STUDY

- A. PROVIDE A COMPUTER-BASED, SHORT CIRCUIT STUDY TO DETERMINE THE MINIMUM INTERRUPTING CAPACITY OF CIRCUIT PROTECTIVE DEVICES.
- B. FOR NEW EQUIPMENT, USE CHARACTERISTICS SUBMITTED UNDER THE PROVISIONS OF ACTION SUBMITTALS AND INFORMATION SUBMITTALS FOR THIS PROJECT.
- C. FOR EXISTING RELOCATED EQUIPMENT AND EXISTING EQUIPMENT THAT IS EXISTING TO REMAIN, OBTAIN REQUIRED ELECTRICAL DISTRIBUTION SYSTEM DATA BY FIELD INVESTIGATION AND SURVEYS, CONDUCTED BY QUALIFIED TECHNICIANS AND ENGINEERS. THE QUALIFICATIONS OF TECHNICIANS AND ENGINEERS SHALL BE QUALIFIED AS DEFINED BY NFPA 70E.
- D. GATHER AND TABULATE ALL REQUIRED DATA TO SUPPORT THE SHORT-CIRCUIT STUDY.

- REQUIRED TO BE ACQUIRED IN THE FIELD.
- E. BEGIN SHORT-CIRCUIT CURRENT ANALYSIS AT THE SERVICE, EXTENDING DOWN TO THE SYSTEM OVERCURRENT PROTECTIVE DEVICES AS FOLLOWS:
- 1. TO NORMAL SYSTEM LOW-VOLTAGE LOAD BUSES WHERE FAULT CURRENT IS 10 KA

ARC FLASH HAZARD STUDY

- A. PROVIDE A COMPUTER-BASED, ARC-FLASH HAZARD STUDY TO DETERMINE THE ARC-FLASH HAZARD DISTANCE AND THE INCIDENT ENERGY TO WHICH PERSONNEL COULD BE EXPOSED DURING WORK ON OR NEAR EXISTING AND NEW ELECTRICAL EQUIPMENT.
- B. ELECTRICAL SURVEY DATA: GATHER AND TABULATE ALL REQUIRED INPUT DATA TO SUPPORT STUDY. COMPLY WITH RECOMMENDATIONS IN IEEE 1584 AND NFPA 70E AS TO THE AMOUNT OF DETAIL THAT IS REQUIRED TO BE ACQUIRED IN THE FIELD.
- C. FOR NEW EQUIPMENT, USE CHARACTERISTICS SUBMITTED UNDER THE PROVISIONS OF ACTION SUBMITTALS AND INFORMATION SUBMITTALS FOR THIS PROJECT.
- D. FOR EXISTING EQUIPMENT, WHETHER OR NOT RELOCATED, OBTAIN REQUIRED ELECTRICAL DISTRIBUTION SYSTEM DATA BY FIELD INVESTIGATION AND SURVEYS, CONDUCTED BY QUALIFIED TECHNICIANS AND ENGINEERS.
- E. HAZARD LABELS SHALL HAVE AN ORANGE HEADER WITH THE WORDING, "WARNING, ARC-FLASH HAZARD," AND SHALL INCLUDE THE FOLLOWING INFORMATION TAKEN DIRECTLY FROM THE ARC-FLASH HAZARD ANALYSIS:
- LOCATION DESIGNATION.
- NOMINAL VOLTAGE.
- 3. FLASH PROTECTION BOUNDARY.
- HAZARD RISK CATEGORY.
- INCIDENT ENERGY. WORKING DISTANCE.
- 7. ENGINEERING REPORT NUMBER, REVISION NUMBER, AND ISSUE DATE.
- F. ARC FLASH HAZARD WARNING LABELS SHALL BE A 3.5-BY-5-INCH THERMAL TRANSFER LABEL OF HIGH-ADHESION POLYESTER FOR EACH WORK LOCATION INCLUDED IN THE ANALYSIS.
- G. LABELS SHALL BE MACHINE PRINTED, WITH NO FIELD-APPLIED MARKINGS.

ORDERS, AND ENGINEERS

- A. DURING THE PROGRESS OF THE WORK, CONTRACTOR SHALL MAINTAIN A CURRENT (DAILY) AS-BUILT SET OF THE DRAWINGS AND SPECIFICATIONS, INDICATING THEREON ALL WORK INSTALLED AT VARIANCE WITH SUCH CONTRACT DOCUMENTS INCLUDING, WITHOUT LIMITATION, WORK COVERED BY ADDENDA, FIELD WORK ORDERS, CHANGE
- B. CONTRACTOR SHALL PROVIDE THE TENANT WITH THE FINAL AS-BUILT SET OF DRAWINGS AT THE COMPLETION OF THE WORK.

COORDINATION WITH LANDLORD AND UTILITY COMPANIES

- A. PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL COORDINATE THE WORK OF THIS CONTRACT WITH THE LANDLORD'S AUTHORIZED REPRESENTATIVE AND AUTHORIZED REPRESENTATIVES OF EACH SERVING UTILITY THAT WILL PROVIDE SERVICE TO THIS SITE, INCLUDING BUT NOT NECESSARILY LIMITED TO, ELECTRIC, TELEPHONE AND
- CABLE/SATELLITE TV SERVICE PROVIDERS. B. CONTRACTOR SHALL MEET WITH AUTHORIZED REPRESENTATIVES OF THE LANDLORD AND EACH UTILITY TO DISCUSS LANDLORD UTILITY COMPANY SCOPE OF WORK, CONTRACTOR SCOPE OF WORK, POINT OF SERVICE PICK-UP, DETAILS REGARDING SYSTEM INTERFACE. UTILITY COMPANY STANDARDS TO BE COMPLIED WITH, ETC.

COORDINATION WITH OTHER TRADES

- A. ELECTRICAL WORK SHALL BE INSTALLED SO AS TO NOT CONFLICT WITH THE WORK OF OTHER TRADES.
- B. SET ALL SLEEVES AND CUT AND PATCH ALL MISCELLANEOUS HOLES NECESSARY FOR THE CONVENIENT AND PROPER INSTALLATION OF THE WORK.
- C. CONFER WITH THE OTHER CONTRACTORS REGARDING THE LOCATION AND SIZE OF PIPES, EQUIPMENT, DUCTS, OPENINGS AND SPECIAL ARCHITECTURAL TREATMENTS IN ORDER THAT THERE MAY BE NO INTERFERENCES BETWEEN THE INSTALLATION OR THE PROGRESS OF THE WORK OF ANY CONTRACTOR ON THE PROJECT.
- D. ALL LINE VOLTAGE WIRING AND FINAL CONNECTIONS TO COMPLETE MECHANICAL SYSTEMS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
- E. PROVIDE FINAL ELECTRICAL CONNECTIONS TO EQUIPMENT FURNISHED/PROVIDED BY OTHERS, (HVAC EQUIPMENT, PLUMBING EQUIPMENT, COMMERCIAL KITCHEN EQUIPMENT, ETC.
- F. COORDINATE THE NEMA CONFIGURATION OF THE RECEPTACLE TO BE PROVIDED WITH THE NEMA PLUG CONFIGURATION OF THE CORD/PLUG ASSEMBLY FURNISHED WITH THE EQUIPMENT TO BE INSTALLED. PROVIDE RECEPTACLES HAVING A NEMA CONFIGURATION THAT MATCHES THE NEMA CONFIGURATION OF THE PLUG ON THE EQUIPMENT.
- G. PROVIDE FINAL COORDINATION OF AVAILABLE POWER (VOLTAGE/PHASE) WITH OTHER TRADES PRIOR TO THEIR ORDERING OF EQUIPMENT.
- H. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING
- ELECTRICAL WORK TO BE PROVIDED ASSOCIATED WITH MECHANICAL EQUIPMENT. WHERE ELECTRICAL WORK (CONDUIT BOXES, RECEPTACLES, DISCONNECT SWITCHES, ETC.) ARE SECURED DIRECTLY TO THE HOUSING OF MECHANICAL EQUIPMENT, THEY SHALL BE INSTALLED ON A PORTION OF THE EQUIPMENT HOUSING NOT REQUIRED TO BE REMOVED FOR ROUTINE MAINTENANCE. PRIOR TO INSTALLATION, COORDINATE ALL

ELECTRICAL WORK AT MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR.

- A. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED TEMPORARY CONSTRUCTION POWER AND LIGHTING TO ALLOW ALL CONTRACTORS AND SUB-CONTRACTORS TO PERFORM THE
- B. PRIOR TO THE SUBMISSION OF A BID PROPOSAL, THE CONTRACTOR SHALL CONTACT THE GENERAL CONTRACTOR TO COORDINATE THE TYPE OF EQUIPMENT TO BE UTILIZED DURING THE WORK OF THIS CONTRACT

SEQUENCING AND SCHEDULING

WORK OF THEIR CONTRACTS.

A. COORDINATE ELECTRICAL EQUIPMENT INSTALLATION WITH OTHER BUILDING COMPONENTS AND THE PROJECT PHASING PLAN.

UTILITY COMPANY METERING EQUIPMENT

- A. PROVIDE ALL EQUIPMENT REQUIRED FOR ELECTRICITY METERING BY UTILITY COMPANY. ALL METERING EQUIPMENT AND THE INSTALLATION OF THE EQUIPMENT SHALL BE IN COMPLIANCE WITH ALL UTILITY COMPANY REQUIREMENTS.
- B. ELECTRICAL SERVICE CONNECTIONS: COORDINATE WITH UTILITY COMPANIES AND COMPONENTS THEY FURNISH AS FOLLOWS:
- 2. COORDINATE INSTALLATION AND CONNECTION OF UTILITIES AND SERVICES,

1. COMPLY WITH REQUIREMENTS OF UTILITIES PROVIDING ELECTRICAL POWER

CONTRACTOR. D. METER SOCKETS: COMPLY WITH REQUIREMENTS OF ELECTRICAL-POWER UTILITY

INCLUDING PROVISION FOR ELECTRICITY-METERING COMPONENTS.

C. METERS SHALL BE FURNISHED BY UTILITY COMPANY; INSTALLED BY ELECTRICAL

E. INSTALL ALL CONDUITS AND EQUIPMENT ACCORDING TO UTILITY COMPANY'S WRITTEN REQUIREMENTS. PROVIDE EMPTY CONDUITS FOR METERING LEADS AND EXTEND GROUNDING CONNECTIONS AS REQUIRED BY UTILITY COMPANY.

FIRE STOPPING

- A. PROVIDE FIRE STOPPING FOR PENETRATIONS BY CONDUIT OR CABLES AND OTHER EQUIPMENT THROUGH FIRE-RATED VERTICAL BARRIERS (WALLS AND PARTITIONS), HORIZONTAL BARRIERS (FLOOR/CEILING ASSEMBLIES) AND VERTICAL SHAFT WALLS AND
- B. FIRESTOP SYSTEM INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF ATME E 814 OR UL 1479 TESTED ASSEMBLIES THAT PROVIDE A FIRE RATING EQUAL TO OR GREATER THAN THAT OF THE CONSTRUCTION BEING PENETRATED.

- A. PROVIDE SEISMIC RESTRAINT FOR ELECTRICAL WORK AND SYSTEMS AND EQUIPMENT IN STRICT ACCORDANCE WITH THE APPLICABLE BUILDING CODE AND THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
- B. SUBMIT ALL REQUIRED DETAILS TO THE AUTHORITY HAVING JURISDICTION FOR REVIEW AND APPROVAL.

CUTTING & PATCHING

- A. PRIOR TO CORE DRILLING OR SAW CUTTING OPERATIONS, CONTRACTOR SHALL X-RAY OR GROUND PENETRATING RADAR (GPR) THE EXISTING SLAB TO DETERMINE THE LOCATION OF ANY EXISTING UTILITIES, STRUCTURAL MEMBERS. ETC. COORDINATE ALL SCANNING. CUTTING AND CORE DRILLING OPERATIONS WITH GC AND LANDLORD PRIOR TO COMMENCEMENT OF WORK.
- B. CORE-DRILL OR SAW-CUT EXISTING FLOORS, WALLS, ROOF, ETC., AS REQUIRED FOR THE INSTALLATION OF THE ELECTRICAL WORK. EXISTING UTILITIES AND STRUCTURAL COMPONENTS, INCLUDING BUT NOT NECESSARILY LIMITED TO, COLUMNS, BEAMS, GIRDERS, PLATES OR JOISTS SHALL NOT BE CUT.
- C. PATCH SURROUNDING AREAS FLUSH WITH ADJACENT SURFACES AND PREPARE TO RECEIVE SPECIFIED FINISHES.
- D. PATCH AND REPAIR ROOF TO MATCH EXISTING ROOFING SYSTEM. ALL ROOF WORK SHALL BE PERFORMED TO MEET THE WARRANTY REQUIREMENTS OF THE EXISTING ROOFING

- A. PROVIDE ELECTRICAL SYSTEM AND EQUIPMENT GROUNDING IN ACCORDANCE WITH APPLICABLE N.E.C. REQUIREMENTS.
- B. THE METALLIC CONDUIT SYSTEM SHALL BE GROUNDED AND BONDED TO FORM AN EQUIPMENT GROUNDING CONDUCTOR.
- C. PROVIDE AN INSULATED EQUIPMENT GROUND CONDUCTOR WITHIN ALL FEEDERS AND BRANCH CIRCUITS. THIS EQUIPMENT GROUND CONDUCTOR SHALL BE IN ADDITION TO THE EQUIPMENT GROUND CONDUCTOR FORMED BY THE METALLIC CONDUIT SYSTEM.
- D. PROVIDE AN ISOLATED GROUND CONDUCTOR IN ADDITION TO THE EQUIPMENT GROUNDING CONDUCTOR IN SELECT BRANCH CIRCUITS AS NOTED ON THE DRAWINGS.
- E. PROVIDE A #6 AWG GREEN INSULATED GROUNDING CONDUCTOR FROM THE GROUND BAR AT TELEPHONE TERMINAL BOARD TO THE ELECTRICAL SERVICE GROUND.
- F. PROVIDE A COPPER GROUNDING BAR AT THE TELEPHONE TERMINAL BACKBOARD. GROUNDING BAR SHALL BE 1/4 INCH X 4 INCHES X 12 INCHES, PRE-DRILLED FOR CONDUCTOR TERMINATIONS, WITH NON-METALLIC STAND-OFF BRACKETS WITH INSULATORS. CHATSWORTH PRODUCTS 10622-012 OR APPROVED EQUAL.

- A. PROVIDE EQUIPMENT LABELS ON PANELBOARDS, DISCONNECT SWITCHES, CONTACTORS, CONTROLS, ETC. EQUIPMENT LABELS SHALL BE ENGRAVED PHENOLIC RESIN NAMEPLATES ATTACHED TO ENCLOSURE WITH MECHANICAL FASTENERS. SELF-ADHESIVE NAMEPLATES ARE NOT ACCEPTABLE. LETTERING SHALL BE 1/2" HIGH, BLACK TEXT ON WHITE
- BACKGROUND. B. ENGRAVED NAMEPLATES ATTACHED TO COMPONENTS SHALL IDENTIFY THE EQUIPMENT DESIGNATION, NAME OF THE "UPSTREAM" POWER SOURCE (AS APPLICABLE), VOLTAGE
- C. THE COVERS OF ALL OUTLET AND JUNCTION BOXES INSTALLED ABOVE CEILINGS AND INSTALLED EXPOSED IN UNFINISHED SPACES SHALL BE LABELED TO IDENTIFY THE SERVING PANEL, VOLTAGE, PHASE AND CIRCUIT NUMBERS CONTAINED WITHIN THE BOX.

LABEL SHALL BE LEGIBLY HANDWRITTEN WITH BLACK, FELT TIP PERMANENT MARKER.

D. THE COVER PLATES OF ALL WIRING DEVICES SHALL BE LABELED TO IDENTIFY THE SERVING

PANEL AND THE CIRCUITS SERVING THE DEVICE. LABELS SHALL BE MACHINE PRINTED,

BLACK TEXT ON A CLEAR, SELF ADHESIVE LABEL.

- **CONDUIT AND FITTINGS** A. ALL INTERIOR AND EXTERIOR CONDUITS SHALL BE INSTALLED AND SUPPORTED IN
- ACCORDANCE WITH N.E.C. REQUIREMENTS.

B. MINIMUM CONDUIT SIZE SHALL BE ¾" TRADE SIZE. SWITCH LEGS SHALL BE ½" TRADE

C. WITHIN INTERIOR FINISHED SPACES, ALL CONDUIT SHALL BE INSTALLED CONCEALED

WITHIN NEW AND EXISTING WALLS AND ABOVE NEW AND EXISTING CEILINGS.

- D. CONDUIT INSTALLED WITHIN THE INTERIOR OF THE BUILDING SHALL BE GALVANIZED ELECTRICAL METALLIC TUBING (EMT). CONDUIT FITTINGS FOR INDOOR EMT CONDUITS
- SHALL BE CAST METAL, COMPRESSION TYPE. E. EMT SHALL BE USED FOR INTERIOR FEEDERS AND BRANCH CIRCUITS INSTALLED EXPOSED IN UNFINISHED SPACES, CONCEALED ABOVE NEW OR EXISTING CEILINGS OR CONCEALED
- WITHIN EXISTING AND NEW INTERIOR PARTITIONS. F. CONDUITS INSTALLED EXPOSED ON THE EXTERIOR OF THE BUILDING SHALL BE
- GALVANIZED RIGID STEEL. FITTINGS SHALL BE THREADED TYPE. G. CONDUITS INSTALLED UNDER SLAB ON GRADE CONSTRUCTION SHALL BE RIGID NON-METALLIC (RNC), SCHEDULE 40 PVC. RNC COMPLYING WITH NEMA TC 2 AND UL 651 UNLESS OTHERWISE INDICATED. FITTINGS FOR RIGID NON-METALLIC CONDUIT SHALL
- COMPLY WITH NEMA TC 3; MATCH TO CONDUIT TYPE AND MATERIAL. H. PROVIDE CONDUIT EXPANSION FITTINGS IN ALL CONDUIT RUNS THAT EXTEND ACROSS
- BUILDING EXPANSION JOINTS AND WHERE MOVEMENT MAY BE ENCOUNTERED.
- I. CONDUIT SHALL BE SUPPORTED FROM STRUCTURE ONLY.

EXPANSION AND CONTRACTION.

- J. PVC CONDUIT SHALL ONLY BE USED BELOW GRADE. K. PROVIDE FLEXIBLE METAL CONDUIT FOR CONNECTIONS TO VIBRATING EQUIPMENT
- WITHIN INTERIOR DRY LOCATIONS. MAXIMUM CONDUIT LENGTH SHALL BE 36 INCHES. L. PROVIDE LIQUID-TIGHT FLEXIBLE METAL CONDUIT FOR CONNECTIONS TO VIBRATING EQUIPMENT IN WET OR OUTDOOR LOCATIONS. MAXIMUM CONDUIT LENGTH SHALL BE
- M. PROVIDE FLEXIBLE METAL CONDUIT FOR FINAL CONNECTIONS TO RECESSED LIGHT
- N. PROVIDE LIQUID-TIGHT FLEXIBLE METAL CONDUIT FOR FINAL ELECTRICAL CONNECTIONS TO FOOD SERVICE EQUIPMENT. O. CONDUITS THAT EXTEND UP TO THE ROOF LEVEL TO SERVE ROOF MOUNTED

MECHANICAL EQUIPMENT INSTALLED ON A CURB SHALL BE ROUTED WITHIN THE

FIXTURES (FIXTURE WHIPS). MAXIMUM CONDUIT LENGTH SHALL BE 72 INCHES.

EQUIPMENT CURB. COORDINATE ELECTRICAL WORK WITH MECHANICAL EQUIPMENT INSTALLER. P. PROVIDE CONDUIT SEALING FITTINGS IN ALL CONDUITS THAT EXTEND FROM NON-REFRIGERATED SPACES TO REFRIGERATED SPACES PER NEC 300.7(A). PROVIDE

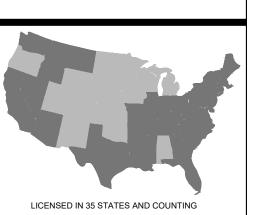
EXPANSION JOINTS FOR CONDUIT AS REQUIRED TO COMPENSATE FOR THERMAL

- Q. ALL CONDUITS INSTALLED IN ASSOCIATION WITH THE WALK-IN COOLER FREEZER SHALL BE INSTALLED IN ACCORDANCE WITH THE WALK-IN MANUFACTURERS RECOMMENDATIONS AND REQUIREMENTS. COORDINATE ALL CONDUIT INSTALLATION WITH WALK-IN EQUIPMENT INSTALLER.
- WHEATLAND, ELECTRI-FLEX AND ANACONDA. S. ACCEPTABLE MANUFACTURERS FOR CONDUIT FITTINGS SHALL BE THOMAS AND BETTS OR APPROVED EQUAL.

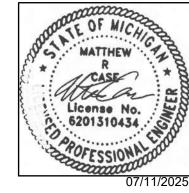
R. ACCEPTABLE MANUFACTURERS FOR GALVANIZED RIGID CONDUIT, EMT, FLEXIBLE METAL

CONDUITS AND LIQUID-TIGHT FLEXIBLE METAL CONDUITS SHALL BE ALLIED, REPUBLIC,

GREGORY RALPH ARCHITECT 1924 ROUTE 22 EAST BOUND BROOK, NJ 08805 TEL: 908 356 0132 GREG@GRALPHARCHITECT.COM



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MICHIGAN

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09/30/2025 I HEARBY CERTIFY THAT THESE DOCUMENTS WERE DULY LICENSED PROFESSIONAL ENGINEER UNDER THE



EXISTING CONDITIONS

DESIGN DEVELOPMENT

FULL RELEASE

CERTIFICATE OF AUTHORITY NO. 802229007

APPROVED BY PROJECT:

PLAYA BOWLS

20647 MACK AVE

AS INDICATE DRAWING TITLE: ELECTRICAL

SPECIFICATIONS

GROSSE POINTE, MI 48236

- A. ALL CONDUCTORS SHALL BE SOFT DRAWN, ANNEALED COPPER, #12 AWG MINIMUM.
- B. CONDUCTORS #12 AND #10 AWG SHALL BE SOLID; #8 AWG AND LARGER SHALL BE
- C. THE USE OF ALUMINUM CONDUCTORS IS NOT ACCEPTABLE.
- D. EXPOSED, INTERIOR FEEDERS: TYPE THHN-THWN, SINGLE CONDUCTORS IN CONDUIT.
- E. FEEDERS INSTALLED CONCEALED IN CEILINGS, WALLS, PARTITIONS: TYPE THHN-THWN, SINGLE CONDUCTORS IN CONDUIT.
- F. FEEDERS INSTALLED CONCEALED IN CONCRETE, BELOW SLABS-ON-GRADE AND UNDERGROUND: TYPE THHN-THWN, SINGLE CONDUCTORS IN PVC CONDUIT.
- G. EXPOSED, INTERIOR, BRANCH CIRCUITS: TYPE THHN-THWN, SINGLE CONDUCTORS IN
- H. BRANCH CIRCUITS CONCEALED IN EXISTING AND NEW CEILINGS, WALLS, AND PARTITIONS: TYPE THHN-THWN, SINGLE CONDUCTORS IN CONDUIT.
- I. BRANCH CIRCUITS CONCEALED BELOW SLABS-ON-GRADE, AND UNDERGROUND: TYPE THHN-THWN, SINGLE CONDUCTORS IN CONDUIT.
- J. ACCEPTABLE MANUFACTURERS FOR CONDUCTORS: GENERAL CABLE COMPANY, CAROL,
- K. CLASS 1 CONTROL CIRCUITS: TYPE THHN-THWN, IN CONDUIT.

ANACONDA, ROME, SOUTHWIRE.

- L. CLASS 2 CONTROL CIRCUITS: POWER-LIMITED PLENUM RATED CABLE, CONCEALED IN BUILDING FINISHES.
- M. THE USE OF NON-METALLIC-SHEATHED CABLE (TYPE NM) AND ARMORED CABLE (TYPE AC OR BX) IS NOT ACCEPTABLE
- N. WIRE CONNECTORS SHALL BE EQUAL TO SCOTCH LOCK FOR #8 AWG AND SMALLER, THOMAS AND BETTS LOCK-TITE FOR #6 AND LARGER.
- O. PROVIDE #10 AWG CONDUCTORS FOR BRANCH CIRCUITS HAVING A CONDUCTOR LENGTH LONGER THAN 75 FEET.
- P. SIZE OF CONDUCTORS AND CABLES INDICATED OR SPECIFIED ARE IN AMERICAN WIRE GAGE (AWG - BROWN AND SHARPE).
- Q. INSTALL ALL WIRING IN APPROVED RACEWAY AND ENCLOSURES, EXCEPT WHERE SPECIFIED OR INDICATED, FOR LOW-VOLTAGE WIRING OR, WHERE TYPE MC CABLE IS INDICATED. SPECIFIED AS ACCEPTABLE. OR BOTH.
- R. SUPPORT ALL CONDUCTORS AND CABLES IN VERTICAL INSTALLATIONS, AS REQUIRED BY NFPA-70, BY INSTALLING CABLE SUPPORTS OR PLUG-TYPE CONDUIT RISER SUPPORTS, OR WIRE-MESH SAFETY GRIPS.
- S. INSTALL ALL CONDUCTORS AND CABLE IN RACEWAYS CONTINUOUS WITHOUT TAPS OR SPLICES. SPLICE OR TAP ONLY IN APPROVED BOXES AND ENCLOSURES WITH APPROVED SOLDERLESS CONNECTORS, OR CRIMP CONNECTORS AND TERMINAL BLOCKS FOR CONTROL WIRING, AND KEEP TO THE MINIMUM REQUIRED. INSULATE ALL SPLICES, TAPS, AND JOINTS AS REQUIRED BY CODE.
- T. ALL MATERIALS USED TO TERMINATE, SPLICE OR TAP CONDUCTORS: DESIGNED, PROPERLY SIZED, AND UL LISTED FOR THE SPECIFIC APPLICATION AND CONDUCTORS INVOLVED, AND INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, USING THE MANUFACTURER'S RECOMMENDED TOOLS.
- U. WHERE WIRING IS INDICATED AS INSTALLED, BUT THE CONNECTION IS INDICATED "FUTURE" OR "BY OTHER DIVISION, TRADES, OR CONTRACTS", LEAVE A MINIMUM OF 3' FOOT "PIGTAIL" AT THE BOX, TAPE THE ENDS OF CONDUCTORS, AND COVER THE BOX.
- V. VOLTAGE DROP IN BRANCH CIRCUITS SHALL NOT EXCEED 3 PERCENT.
- W.WHEN NEW CONDUCTORS ARE CONNECTED TO EXISTING CONDUCTORS, THE NEW CONDUCTORS SHALL BE OF THE SAME AWG, CONDUCTOR MATERIAL, INSULATION TYPE TEMPERATURE RATING,. ETC. AS THE EXISTING CONDUCTORS TO WHICH BEING

A. A.TYPE MC CABLE: 600V, UNJACKETED: ANSI E119 AND E814, UL STANDARDS 44 OR 83 (AS APPLICABLE). AND 1569. NFPA 70 ARTICLE 330: ALUMINUM OR GALVANIZED STEEL INTERLOCKED ARMOR; THHM- OR XHHW-INSULATED CONDUCTORS; COLOR CODE: ICEA METHOD 1, WITH GREEN INSULATED GROUNDING CONDUCTOR.

B. USES PERMITTED

- B.1. IN LIEU OF FLEXIBLE CONDUIT AND WIRING FROM LIGHT FIXTURES IN ACCESSIBLE CEILINGS TO JUNCTION BOXES (ATTACHED TO BUILDING STRUCTURE) ABOVE THE CEILING. PROVIDE CABLE WHIPS OF SUFFICIENT LENGTHS TO ALLOW FOR RELOCATING EACH LIGHT FIXTURE WITHIN A 5' FOOT RADIUS OF ITS INSTALLED LOCATION, BUT NOT EXCEEDING 6' FEET IN UNSUPPORTED LENGTHS.
- B.2. FOR VERTICAL DROPS IN STUD WALLS.
- C. USES NOT PERMITTED: C.1. HOMERUNS TO PANELSBOARDS.
- C.2. WHERE EXPOSED TO VIEW. C.3. WHERE EXPOSED TO DAMAGE.
- C.4. HAZARDOUS LOCATIONS.
- C.5. WET LOCATIONS
- C.6. INSTALLED HORIZONTALLY WITHIN STUD WALL
- C.7. WHEN RESTRICTED OTHERWISE ABOVE, AND WHEN SPECIFICALLY DISALLOWED BY THE LOCAL AHJ, OWNER OR BOTH.
- D. PRIOR TO THE SUBMISSION OF A BID PROPOSAL, EC SHALL VERIFY THE PERMISSIBLE USE OF MC CABLE WITH THE AHJ.

CONDUCTOR COLOR CODING

- A. PROVIDE COLOR CODING SYSTEM AS LISTED BELOW FOR ALL FEEDERS AND BRANCH CIRCUITS AND USED AS A BASIS FOR BALANCING LOAD ON PANELS, AND TO BE PHASE IDENTIFICATION.
- B. COLOR CODING FOR CONDUCTOR #12 AWG THROUGH #10 AWG SHALL CONSIST OF COLOR CODED THERMOPLASTIC INSULATION OF THE COLORS SPECIFIED HEREIN.
- C. COLOR CODING FOR CONDUCTORS #8 AWG AND LARGER SHALL BE FIELD APPLIED SELF ADHESIVE TAPE OF THE COLOR SPECIFIED HEREIN FOR THE PARTICULAR PHASE.
- D. 120/240V DELTA: PHASE A--BLACK, PHASE B(HIGH LEG)--ORANGE, PHASE C--BLUE, NEUTRAL--WHITE, EQUIPMENT GROUND--GREEN, ISOLATED GROUND--GREEN WITH DISTINCTIVE WHITE OR YELLOW MARKINGS.

BOXES AND FITTINGS

- A. ALL OUTLET BOXES SHALL BE UL LISTED AND LABELED FOR USE IN THE SPACE THEY OCCUPY AND THE PURPOSE THEY SERVE.
- B. SHEET METAL OUTLET AND DEVICE BOXES FOR DRY, INTERIOR APPLICATIONS: COMPLY WITH NEMA OS 1 AND UL 514A.
- C. CAST-METAL OUTLET AND DEVICE BOXES FOR EXTERIOR APPLICATIONS: COMPLY WITH NEMA FB 1, FERROUS ALLOY, TYPE FS OR FD, WITH GASKETED COVER D. OUTLET BOXES INSTALLED WITHIN FIRE RATED ASSEMBLIES SHALL HAVE A FIRE RATING
- EQUAL TO OR GREATER THAN THE RATING OF THE WALL IN WHICH IT IS INSTALLED. E. OUTLET BOXES SHALL BE 4 INCHES SQUARE BY 2 1/8 INCHES DEEP , EXCEPT FOR 2" PARTITIONS SHALL BE AT LEAST 1-1/2" DEEP.
- F. OUTLET BOXES FOR VOICE AND DATA DEVICES SHALL BE 4 11/16 INCHES SQUARE BY 2 1/8 INCHES DEEP.
- G. ALL PULLBOXES SHALL BE CONSTRUCTED OF GALVANIZED STEEL, OF METAL GAUGE AND PHYSICAL SIZE AS REQUIRED BY THE N.E.C. FOR THE NUMBER AND SIZE OF CONDUITS AND CONDUCTORS ASSOCIATED WITH THE PULLBOX.

- LESS THAN 4" SQUARE. ALL OUTLET BOXES INTENDED TO SUPPORT FIXTURES SHALL BE EQUIPPED WITH 3/8" FIXTURE STUDS FASTENED THROUGH THE BOTTOM OF THE BOX WITH FOUR BOLTS.
- . PULLBOXES AND JUNCTION BOXES THAT ARE CUSTOM FABRICATED FOR THE APPLICATION SHALL BE FABRICATED BY A SHOP/FACILITY THAT IS CERTIFIED BY A NRTL FOR THE FABRICATION OF SUCH ENCLOSURES.
- J. NEW OUTLET BOXES INSTALLED WITHIN NEW OR EXISTING STUD WALL CONSTRUCTION SHALL BE MOUNTED TO A STUD OR MOUNTED IN A BRACKET THAT SPANS STUD-TO-STUD, CADDY TSGB BRACKET OR APPROVED EQUAL. THE USE OF "OLD WORK"
- TYPE BOXES THAT. SECURE ONLY TO THE DRYWALL ARE NOT ACCEPTABLE. K. ACCEPTABLE MANUFACTURERS FOR BOXES: APPLETON, STEEL CITY, RACO.

PANELBOARDS

- A. PANELBOARDS SHALL BE LIGHTING AND APPLIANCE TYPE, DEAD FRONT, SAFETY TYPE, FURNISHED WITH BRANCH CIRCUIT BREAKER OVERCURRENT PROTECTIVE DEVICES, COPPER PHASE, NEUTRAL AND EQUIPMENT GROUNDING BUS BARS, MAIN CIRCUIT BREAKER OR MAIN LUG ONLY AS NOTED ON THE DRAWINGS. MAIN BUSES AND CONNECTORS SHALL BE HARD DRAWN COPPER OF 98% CONDUCTIVITY. LOAD CENTERS ARE NOT ACCEPTABLE FOR USE.
- B. CIRCUIT BREAKERS SHALL BE MOLDED CASE, BOLT-ON TYPE SUITABLE FOR VOLTAGE AND AMPERE RATINGS INDICATED ON DRAWINGS AND IN PANEL SCHEDULES. REFER TO THE PANEL SCHEDULES ON THE DRAWINGS FOR ADDITIONAL ACCESSORIES TO BE PROVIDED AT SELECT CIRCUIT BREAKERS.
- C. CIRCUIT BREAKERS SHALL HAVE A MINIMUM AMPERE INTERRUPTING CAPACITY (AIC) OF 10,000 AMPERES FOR 120/208V SYSTEMS, 14,000 FOR 277/480V SYSTEMS
- D. WHERE THE POWER SYSTEM STUDY IDENTIFIES AVAILABLE FAULT CURRENT VALUES AT EXISTING AND NEW PANELS THAT ARE HIGHER THAN THE MINIMUM AIC RATINGS SPECIFIED HEREIN, PROVIDE CIRCUIT BREAKERS IN THE PANELS THAT HAVE AIC RATINGS GREATER THAN THE AVAILABLE FAULT CURRENT AT THE PANEL AS DETERMINED BY THE POWER SYSTEM STUDY.
- E. PROVIDE NEMA 1 ENCLOSURES FOR INTERIOR PANELS.
- F. PANELBOARDS SHALL BE EQUIPPED WITH FLUSH TYPE LOCK AND CATCH. ALL LOCKS SHALL BE KEYED ALIKE. WITH TWO KEYS SUPPLIED WITH EACH LOCK.
- G. CIRCUIT BREAKERS SERVING LIGHTING CIRCUITS SHALL BE RATED FOR SWITCH DUTY.
- H. CIRCUIT BREAKERS SERVING HVAC EQUIPMENT SHALL BE HACR RATED.
- I. ALL LUGS SHALL BE OF THE SOLDERLESS TYPE AND RATED AT A MINIMUM OF 75°C.
- J. PROVIDE NEW CIRCUIT DIRECTORIES WITHIN NEW AND EXISTING PANELS TO REFLECT THE WORK OF THIS CONTRACT. DIRECTORY SHALL BE TYPEWRITTEN OR COMPUTER GENERATED. HANDWRITTEN CIRCUIT DIRECTORIES ARE NOT ACCEPTABLE.
- K. UTILIZE FINAL, OWNER ASSIGNED ROOM NAMES AND NUMBERS TO IDENTIFY SPACES WITHIN THE CIRCUIT DIRECTORIES. COMPLY WITH NEC 408.4 WHEN IDENTIFYING CIRCUITS IN CIRCUIT DIRECTORIES.
- L. PANEL CIRCUITS SHALL BE CONFIGURED SUCH THAT THE LOAD IS DISTRIBUTED EVENLY ACROSS ALL THREE PHASES TO WITHIN 10%.
- M. ALL NEW AND EXISTING PANELBOARDS SHALL BE LABELED TO IDENTIFY THE AMOUNT OF FAULT CURRENT AVAILABLE AT THE PANEL AS DETERMINED BY THE POWER SYSTEM STUDY TO BE PERFORMED. LABEL SHALL BE MACHINE PRINTED, BLACK TEXT ON CLEAR, SELF ADHESIVE TAPE. INSTALL LABEL ADJACENT TO PANELBOARDS ENGRAVED NAMEPLATE.
- N. ALL NEW AND EXISTING PANELBOARDS SHALL BE LABELED TO IDENTIFY THE ARC FLASH HAZARD CHARACTERISTICS AT THE PANEL AS DETERMINED BY THE POWER SYSTEM STUDY TO BE PERFORMED.
- O. ALL "SPARE" CIRCUIT BREAKERS SHALL BE SET TO THE "OFF" POSITION.
- P. PROVIDE HANDLE TIES ON ALL MULTI-WIRE BRANCH CIRCUITS IN ACCORDANCE WITH NEC 210.4(B)
- Q. WHEN NEW CIRCUIT BREAKERS ARE ADDED TO AN EXISTING PANEL, THE NEW CIRCUIT BREAKERS SHALL BE OF THE SAME MANUFACTURE AS THE EXISTING PANEL, SHALL BE OF A 'LETTER TYPE' COMPATIBLE WITH THE EXISTING PANEL SUCH THAT THE UL LISTING OF THE EXISTING PANEL IS MAINTAINED AND SHALL HAVE AN AIC RATING EQUAL TO OR GREATER THAN THE AIC RATING OF THE EXISTING OVERCURRENT PROTECTIVE DEVICES WITHIN THE EXISTING PANEL.
- R. ACCEPTABLE MANUFACTURERS FOR PANELBOARDS BY SCHNEIDER, ABB, SIEMENS OR

SWITCHES

- A. TOGGLE SWITCHES SHALL BE SINGLE POLE, 3-WAY OR 4-WAY AS NOTED ON THE DRAWINGS, 20 AMPERES, 120/277 VOLT AC TYPE, SPECIFICATION GRADE WITH SCREW TERMINALS. HUBBELL 1221-X, 1223-X OR 1224-X OR APPROVED EQUIVALENT BY ONE OF THE ADDITIONAL MANUFACTURERS SPECIFIED HEREIN.
- B. TOGGLE SWITCHES SHALL BE MOUNTED AT DOORS, INSTALLED ADJACENT TO THE TRIM ON THE STRIKING SIDE OF THE DOOR, REGARDLESS OF THE LOCATION INDICATED ON THE DRAWINGS. VERIFY ALL DOOR SWINGS PRIOR TO INSTALLATION OF OUTLET BOXES FOR SWITCHES.
- C. DEVICE COLOR SHALL BE AS SELECTED BY THE OWNER/ARCHITECT.
- D. PROVIDE A NEUTRAL CONDUCTOR TO ALL SWITCH LOCATIONS
- E. SWITCHES SHALL BE INSTALLED SURFACE MOUNTED IN UNFINISHED AREA. FLUSH MOUNTED IN FINISHED SPACES.
- F. ADDITIONAL ACCEPTABLE MANUFACTURERS FOR SWITCHES: LEGRAND, LEVITON.

RECEPTACLES

- A. RECEPTACLES SHALL BE 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE, NEMA 5-20R WITH SCREW TERMINALS. HUBBELL 5362-W OR APPROVED EQUAL BY ONE OF THE ADDITIONAL MANUFACTURERS SPECIFIED HEREIN.
- B. GFCI RECEPTACLES SHALL BE 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE, NEMA 5-20R FEED THROUGH TYPE CAPABLE OF PROTECTING DOWNSTREAM RECEPTACLES ON A SINGLE CIRCUIT, SOLID STATE GROUND FAULT SENSING AND SIGNALING, 5 MILLIAMP TRIP LEVEL, NEMA 5-20R WITH SCREW TERMINALS. HUBBELL GF5362-X OR APPROVED EQUAL BY ONE OF THE ADDITIONAL MANUFACTURERS SPECIFIED HEREIN.
- C. ISOLATED GROUND RECEPTACLES SHALL BE ORANGE, 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE, NEMA 5-20R WITH SCREW TERMINALS. HUBBELL IG-5362-W OR APPROVED EQUAL BY ONE OF THE ADDITIONAL MANUFACTURERS SPECIFIED HEREIN.
- D. PROVIDE SPECIAL PURPOSE RECEPTACLES HAVING NEMA CONFIGURATIONS THAT MATE AND MATCH THE NEMA PLUG CONFIGURATION PROVIDED WITH THE EQUIPMENT TO BE CONNECTED.
- E. COVER PLATES FOR EXTERIOR RECEPTACLES SHALL BE RATED FOR "WEATHERPROOF WHILE IN USE".
- F. DEVICE COLOR SHALL BE AS SELECTED BY THE OWNER/ARCHITECT.
- G. QUAD RECEPTACLES SHALL CONSIST OF (2) DUPLE3X RECEPTACLES INSTALLED IN A SINGLE BOX UNDER A SINGLE COVER PLATE.
- H. RECEPTACLES SHALL BE INSTALLED SURFACE MOUNTED IN UNFINISHED SPACES, FLUSH MOUNTED IN FINISHED SPACES.
- I. ADDITIONAL ACCEPTABLE MANUFACTURERS FOR SWITCHES AND RECEPTACLES: LEGRAND, LEVITON.

A. ALL KITCHEN SINGLE PHASE RECEPTACLES RATED 150 VOLTS TO GROUND OR LESS, 50 AMPS OR LESS AND THREE PHASE RECEPTACLES RATED 150 VOLTS TO GROUND OR LESS,

- REQUIREMENT WITHIN THE APPLICABLE ELECTRICAL CODE.
- B. THE "GFCI" NOTATION AT A DEVICE OR CIRCUIT BREAKER INDICATES THAT GFCI PROTECTION SHALL BE PROVIDED FOR THE CIRCUIT OR CIRCUITS INDICATED. GFCI PROTECTION SHALL BE PROVIDED BY ONE OF THE FOLLOWING MEANS:
- INTEGRAL GFCI PROTECTION WITHIN THE DEVICE (NEMA 5-20R RECEPTACLES), WHEN THE DEVICE IS ABLE TO BE INSTALLED IN A READILY ACCESSIBLE LOCATION AS DEFINED BY THE APPLICABLE ELECTRICAL CODE.
- GFCI CIRCUIT BREAKER INSTALLED WITHIN THE PANEL FOR SERVICE TO THE CIRCUIT OR CIRCUITS.
- GFCI CIRCUIT BREAKER INSTALLED WITHIN AN INDIVIDUAL ENCLOSURE EXTERNAL TO THE PANEL FOR SERVICE TO THE CIRCUIT.
- DEAD-FRONT GFCI DEVICE INSTALLED IN A READILY ACCESSIBLE LOCATION AS DEFINED BY THE NEC (APPLICABLE TO 20 AMP, 120 VOLT CIRCUITS).
- AN INDIVIDUALLY MOUNTED EXTERNAL SPECIAL PURPOSE GROUND FAULT CIRCUIT INTERRUPTER (SPGFCI) DEVICE SIMILAR TO "SHOCK BLOCK" PRODUCTS AS MANUFACTURED BY LITTLEFUSE, OR APPROVED EQUAL.
- DEAD FRONT DEVICES SHALL BE BE LABELED TO IDENTIFY THE CIRCUIT AND THE LOAD SERVED BY THE DEVICE.

COVER PLATES FOR TOGGLE SWITCHES AND RECEPTACLES

- A. COVER PLATES WITHIN NON-FOOD SERVICE AREAS SHALL BE NYLON, OF CONFIGURATION TO MATCH THE WIRING DEVICE.
- B. COVER PLATES WITHIN THE FOOD SERVICE AREA SHALL BE STAINLESS STEEL WITH STAINLESS STEEL HARDWARE, UNLESS OTHERWISE NOTED.
- C. CONFIGURATION AND COLOR OF COVER PLATE SHALL MATCH THAT OF THE WIRING DEVICE THAT THE PLATE WILL BE INSTALLED ON.
- D. COVER PLATE COLOR SHALL BE AS SELECTED BY THE OWNER/ARCHITECT.
- E. ADDITIONAL ACCEPTABLE MANUFACTURERS FOR COVER PLATES: LEGRAND, LEVITON.

MOUNTING HEIGHTS FOR ELECTRICAL DEVICES AND EQUIPMENT

- A. DEVICES AND EQUIPMENT SHALL BE INSTALLED AT THE MOUNTING HEIGHTS NOTED BELOW UNLESS NOTED OTHERWISE ON THE DRAWINGS OR REQUIRED BY APPLICABLE **CODES AND STANDARDS:**
- 1. TOGGLE SWITCHES, WALL SWITCH OCCUPANCY SENSORS, VACANCY SENSORS AND DIMMERS FOR LIGHTING CONTROL - TOP OF DEVICE 48" AFF
- 2. CONVENIENCE RECEPTACLES -TOP OF DEVICE 18" AFF
- 3. CONVENIENCE RECEPTACLES AT COUNTERTOPS BOTTOM OF DEVICE 44" AFF OR AS NOTED ON THE DRAWINGS
- 4. RECEPTACLES AT FOOD SERVICE EQUIPMENT AS INDICATED ON THE FINAL, APPROVED FOOD SERVICE SHOP DRAWINGS.
- 5. TELEPHONE AND DATA OUTLETS TOP OF DEVICE 18" AFF, 44" AFF WHEN INSTALLED AT COUNTER TOPS.
- 6. DISCONNECT SWITCHES TOP OF ENCLOSURE 66" AFF
- 7. PANELBOARDS TOP OF ENCLOSURE 72" AFF

WITH A LUG FOR TERMINATION OF THE EQUIPMENT GROUNDING CONDUCTOR. B. DISCONNECT SWITCHES SHALL BE LOCKABLE WITH NEMA 1 ENCLOSURES FOR DRY, INDOOR APPLICATIONS; NEMA 3R ENCLOSURES FOR OUTDOOR OR WET LOCATION

A. DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE, UL LISTED AND LABELED, EQUIPPED

- C. DISCONNECT SWITCHES INSTALLED EXPOSED IN FOOD SERVICE AREAS SHALL BE NEMA 4X STAINLESS STEEL, LOCKABLE.
- D. TOGGLE DISCONNECTS SHALL BE 20A OR 30A AS REQUIRED. SINGLE POLE, 2-POLE OR 3-POLE AS REQUIRED, SINGLE THROW, MOTOR RATED SWITCH WITHOUT OVERLOAD PROTECTION. NEMA 1, 3R OR 4X STAINLESS STEEL ENCLOSURE AS REQUIRED BY
- E. ALL DISCONNECT SWITCHES SHALL BE EQUIPPED WITH AN ENGRAVED NAMEPLATE TO IDENTIFY THE SERVING PANEL, CIRCUIT NUMBERS AND THE LOAD SERVED BY THE
- F. ACCEPTABLE MANUFACTURERS FOR DISCONNECT SWITCHES: SCHNEIDER, ABB, SIEMENS OR EATON.

MOTOR CONTROLLERS

- A. PROVIDE ENCLOSED MOTOR CONTROLLERS AS SPECIFIED HEREIN FOR CONTROL OF MOTORS RATED FOR 600 VOLTS AND LESS.
- B. FRACTIONAL HORSEPOWER MANUAL CONTROLLERS: "QUICK-MAKE, QUICK-BREAK" TOGGLE OR PUSH-BUTTON ACTION; PILOT LIGHT TO INDICATE "MOTOR RUNNING", MARKED TO SHOW WHETHER UNIT IS OFF, ON, OR TRIPPED.
- 1. CONFIGURATION: NON-REVERSING.

APPLICATION, PADLOCK ATTACHMENT

- 2. OVERLOAD RELAYS: INVERSE-TIME-CURRENT CHARACTERISTICS; NEMA ICS 2, CLASS 10 TRIPPING CHARACTERISTICS; HEATERS MATCHED TO NAMEPLATE FULL-LOAD CURRENT OF ACTUAL PROTECTED MOTOR; EXTERNAL RESET PUSH
- 3. FLUSH MOUNTED WITHIN FINISHED SPACES; SURFACE MOUNTED WITHIN UNFINISHED SPACES.
- 4. ACCEPTABLE MANUFACTURERS: SCHNEIDER, ABB, SIEMENS, EATON.

- A. PROVIDE CARTRIDGE FUSES RATED FOR 250 VAC AND 600 VAC AND LESS FOR USE AS SPECIFIED HEREIN.
- B. COORDINATE FUSE RATINGS WITH UTILIZATION EQUIPMENT NAMEPLATE LIMITATIONS OF MAXIMUM FUSE SIZE AND WITH SYSTEM SHORT-CIRCUIT CURRENT LEVELS.
- C. CARTRIDGE FUSE APPLICATIONS:
- 1. CIRCUITS, UP TO AND INCLUDING 600 AMPS: CLASS J, BUSSMANN LPJ.
- 2. CONTROL POWER TRANSFORMER (CPT) CIRCUITS: CLASS CC, TIME DELAY, CONTROL TRANSFORMER DUTY.
- 3. BASIS OF DESIGN FOR FUSES SHALL BE BUSSMANN. ADDITIONAL ACCEPTABLE MANUFACTURERS FOR SPECIFIED FUSES SHALL BE LITTLEFUSE AND MERSEN.

LIGHTING FIXTURES

- A. ALL LIGHTING FIXTURES AND LIGHT SOURCES SHALL BE FURNISHED, INSTALLED AND
- CONNECTED BY THE ELECTRICAL CONTRACTOR, UNLESS NOTED OTHERWISE. B. THIS CONTRACTOR SHALL INSTALL LIGHTING FIXTURES AND LIGHT SOURCES AS INDICATED ON THE DRAWINGS AND AS SPECIFIED BELOW. PROVIDE LIGHTING FIXTURES COMPLETE WITH HANGERS, PLASTER FRAMES, AND ALL OTHER NECESSARY ACCESSORIES
- C. LED DRIVERS SHALL BE SOLID STATE AND ACCEPT 120 THROUGH 277 VAC AT 60 HZ INPUT. D. THE LED LIGHT SOURCE SHALL BE FULLY DIMMABLE WITH USE OF COMPATIBLE DIMMER SWITCH DESIGNATED FOR LOW VOLTAGE LOADS.
- COMPATIBLE WITH LED DRIVER BEING PROVIDED WITH THE FIXTURE. F. EXIT SIGNS INDICATED AS PROVIDING POWER TO REMOTE EXTERIOR EGRESS LIGHTS SHALL BE EQUIPPED WITH THE INCREASED BATTERY CAPACITY TO SERVE THE REMOTE

E. THE CONTRACTOR SHALL PROVIDE LIGHTING CONTROL DEVICES (DIMMERS) THAT ARE

EMERGENCY LIGHT. REMOTE EMERGENCY LIGHT SHALL BE A STANDARD ACCESSORY OF THE INTERIOR EXIT SIGN TO WHICH CONNECTED.

LIGHTING CONTROLS

- A. TIME SWITCHES, PHOTOCELLS AND CONTACTORS SHALL BE AS DETAILED ON DRAWINGS.
- B. WALL SWITCH OCCUPANCY SENSORS SHALL BE WATT STOPPER WS-250 OR APPROVED
- C. CEILING MOUNTED OCCUPANCY SENSORS SHALL BE DUAL TECHNOLOGY TYPE WITH POWER PACK. WATT STOPPER DT-300 WITH BZ-200 POWER PACK, OR APPROVED EQUAL.
- D. PROVIDE A NEUTRAL CONDUCTOR TO ALL SWITCH LOCATIONS

ROUGH-IN SYSTEM FOR VOICE AND DATA

- A. PROVIDE A ROUGH-IN SYSTEM AS SPECIFIED HEREIN FOR SERVICE TO THE OWNER'S VOICE AND DATA NETWORK.
- B. PROVIDE A PLYWOOD BACKBOARD FOR TERMINATION OF TELEPHONE SERVICE AND DISTRIBUTION COMPONENTS. PLYWOOD BACKBOARD SHALL BE 2' X 3' X 3/4", FIRE RATED, PAINTED WITH TWO (2) COATS OF LIGHT GRAY ENAMEL PAINT. MASK FIRE RATED LABEL TO PREVENT THE LABEL FROM BEING PAINTED OVER.
- C. OUTLET BOXES FOR TELEPHONE AND DATA DEVICES SHALL CONSIST OF 4 11/16 IN SQUARE BY 2 1/8 INCH DEEP OUTLET BOXES WITH SINGLE DEVICE COVER.
- D. PROVIDE A 3" EMPTY CONDUIT WITH PULLSTRING FROM THE WALL MOUNTED PLYWOOD TELEPHONE TERMINAL BOARD IN THE TENANT SPACE TO THE LANDLORDS TELEPHONE DISTRIBUTION OR POINT OF SERVICE DELIVERY. PROVIDE A NYLON BUSHING ON EACH END OF CONDUIT FOR CABLE PROTECTION.
- E. ROUGH-IN FOR WIRING DROPS TO WALL MOUNTED VOICE AND DATA DEVICES SHALL BE INSTALLED WITHIN EMT CONDUIT, 1". PROVIDE A CONDUIT STUB FROM THE DEVICE BOX TO ABOVE ACCESSIBLE CEILING. PROVIDE A PLENUM RATED NYLON BUSHING ON THE END OF THE CONDUIT STUB FOR PROTECTION OF THE WIRING.
- F. PRIOR TO BEGINNING WORK, THIS CONTRACTOR SHALL FULLY COORDINATE HIS CONSTRUCTION OPERATIONS AND ALL TERMINATION LOCATIONS WITH AUTHORIZED REPRESENTATIVE OF THE TELEPHONE UTILITY COMPANY AND THE OWNER'S DATA NETWORK PROVIDER BY TIMELY NOTICE OR SCHEDULING OF SERVICE EQUIPMENT DATES, SERVICE MODIFICATION DATES AND NOTIFICATION OF REQUIRED OWNER AUTHORIZATIONS INVOLVING THE UTILITY COMPANY.

DUCT MOUNTED SMOKE DETECTORS

- A. PROVIDE A 120 VOLT POWER SOURCE TO ALL DUCT MOUNTED SMOKE DETECTORS
- INSTALLED WITHIN NEW AND EXISTING MECHANICAL EQUIPMENT B. PROVIDE A DUCT MOUNTED SMOKE DETECTORS WITHIN NEW AND EXISTING MECHANICAL EQUIPMENT AS REQUIRED BY APPLICABLE CODES. FINAL ELECTRICAL CONNECTION AND ALL INTERLOCK WIRING BY THE ELECTRICAL CONTRACTOR.
- C. PROVIDE ALL INTERLOCK WIRING IN CONDUIT BETWEEN ALL DUCT DETECTORS SUCH THAT UPON DETECTING SMOKE IN ANY ONE DETECTOR, ALL ROOF TOP UNITS SHALL BE
- D. PROVIDE TEST/RESET SWITCH AND PIEZO ALERT SOUNDER AND REMOTE ANNUNCIATOR ALARM LED MOUNTED AS DIRECTED BY LOCAL AHJ. EC TO PROVIDE ALL REQUIRED INTERLOCK WIRING BETWEEN DUCT DETECTOR AND REMOTE SWITCH.

A. PROVIDE ALL TESTS AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

E. REFER TO DETAILS ON MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

- B. PROVIDE THE TESTS AS OUTLINED HEREINAFTER AND OTHER TESTS REQUIRED TO ESTABLISH THE ADEQUACY, QUALITY, SAFETY, COMPLETED STATUS AND SUITABLE OPERATION OF EACH SYSTEM.
- C. PROMPTLY CORRECT ANY FAILURES, DEFICIENCIES AND/OR DEFECTS REVEALED BY THESE TESTS. AFTER CORRECTING FAILURES, DEFICIENCIES OF DEFECTS, CONDUCT NEW TESTING TO VERIFY THAT THE DEFICIENCY HAS BEEN RECTIFIED AND THE SYSTEM IS FUNCTIONING
- +/- 10% VARIATION BETWEEN AVERAGE PHASE CURRENT AND MEASURED INDIVIDUAL E. AN OPERATIONAL TEST OF THE EMERGENCY LIGHTING/EXIT SIGNAGE SYSTEM SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER AND THE AUTHORITY HAVING

JURISDICTION TO DEMONSTRATE PROPER OPERATION AND COMPLIANCE WITH

D. NEW AND EXISTING PANELBOARDS SHALL HAVE PHASE CURRENTS BALANCED TO WITHIN

APPLICABLE CODES AND SPECIFIED REQUIREMENTS.

TRAINING OF OWNER'S DESIGNATED PERSONNEL

- **OPERATION AND MAINTENANCE MANUALS** A. THIRTY (30) DAYS PRIOR TO SUBSTANTIAL COMPLETION, SUBMIT OPERATING AND MAINTENANCE MANUALS FOR EQUIPMENT TO ENGINEER FOR APPROVAL. INCLUDE ONE COPY OF EACH FINAL APPROVED SUBMITTAL FOR RECORD PURPOSES, INDICATING THE ACTUAL PRODUCT INSTALLED. INCLUDE SIGNIFICANT CHANGES IN THE PRODUCT DELIVERED TO PROJECT SITE AND CHANGES IN MANUFACTURER'S WRITTEN
- INSTRUCTIONS FOR INSTALLATION. B. PROVIDE COMPREHENSIVE CONTACT LIST INCLUDING CONTRACTOR AND SUBCONTRACTOR'S NAMES, ADDRESSES, TELEPHONE AND CONTACT PERSON FOR

A. PREPARE AND SUBMIT OPERATING INSTRUCTIONS AND PROVIDE ON-SITE TRAINING OF OWNER'S PERSONNEL IN USE AND MAINTENANCE OF OPERATING EQUIPMENT.

- WARRANTY A. THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS, EQUIPMENT AND THE INSTALLATION TO BE FREE OF DEFECTS THAT MAY DEVELOP IN ANY PART OF THEIR WORK CAUSED BY FAULTY WORKMANSHIP, MATERIAL OR EQUIPMENT FAILURES, FOR A MINIMUM OF ONE (1) YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION OR FOR AS
- DATE OF OWNER ACCEPTANCE OF THE PROJECT, WHICHEVER IS LATER. B. DURING THE ONE (1) YEAR WARRANTY PERIOD, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR DEFECTS IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED UNDER THE WORK OF THE

LONG AS NORMAL EQUIPMENT MANUFACTURER WARRANTIES ARE IN EFFECT FROM THE

FIRE ALARM SYSTEM

ELECTRICAL CONTRACT.

FIRE ALARM WORK.

THE ELECTRICAL SCOPE OF WORK.

- A. FIRE ALARM SYSTEM WORK IS A DELEGATED DESIGN AND IS NOT INCLUDED AS PART OF
- B. FIRE ALARM SYSTEM WORK SHALL BE PROVIDED BY THE GENERAL CONTRACTOR AS A DELEGATED DESIGN.
- FIRE ALARM SYSTEM VENDOR/DESIGN PROFESSIONAL TO PREPARE THE FIRE ALARM SYSTEM DESIGN, DETAILS, CALCULATIONS, ETC. AS REQUIRED BY ALL APPLICABLE CODES AND THE AUTHORITY HAVING JURISDICTION. D. GC/VENDOR/DESIGN PROFESSIONAL SHALL BE RESPONSIBLE FOR VERIFYING ALL

APPLICABLE CODE REQUIREMENTS AND ALL LOCAL FIRE ALARM SYSTEM REQUIREMENTS

C. GENERAL CONTRACTOR (GC) SHALL BE RESPONSIBLE FOR RETAINING THE SERVICES OF A

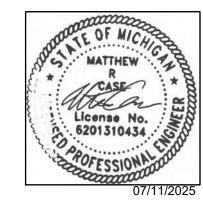
E. GC/VENDOR/DESIGN PROFESSIONAL SHALL BE RESPONSIBLE FOR PROVIDING ALL REQUIRED SUBMITTAL DRAWINGS TO THE AUTHORITY HAVING JURISDICTION FOR REVIEW AND APPROVAL PRIOR TO COMMENCING WORK.

F. GC/VENDOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR THE

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CERTIFICATE OF AUTHORITY NO. 802229007

St. Louis, MO 63026

EXISTING CONDITIONS SCHEMATIC DESIGN DESIGN DEVELOPMENT PROGRESS PRINT FULL RELEASE

STQ-0994-0125 PROJECT: PLAYA BOWLS

DRAWN BY

APPROVED BY

20647 MACK AVE

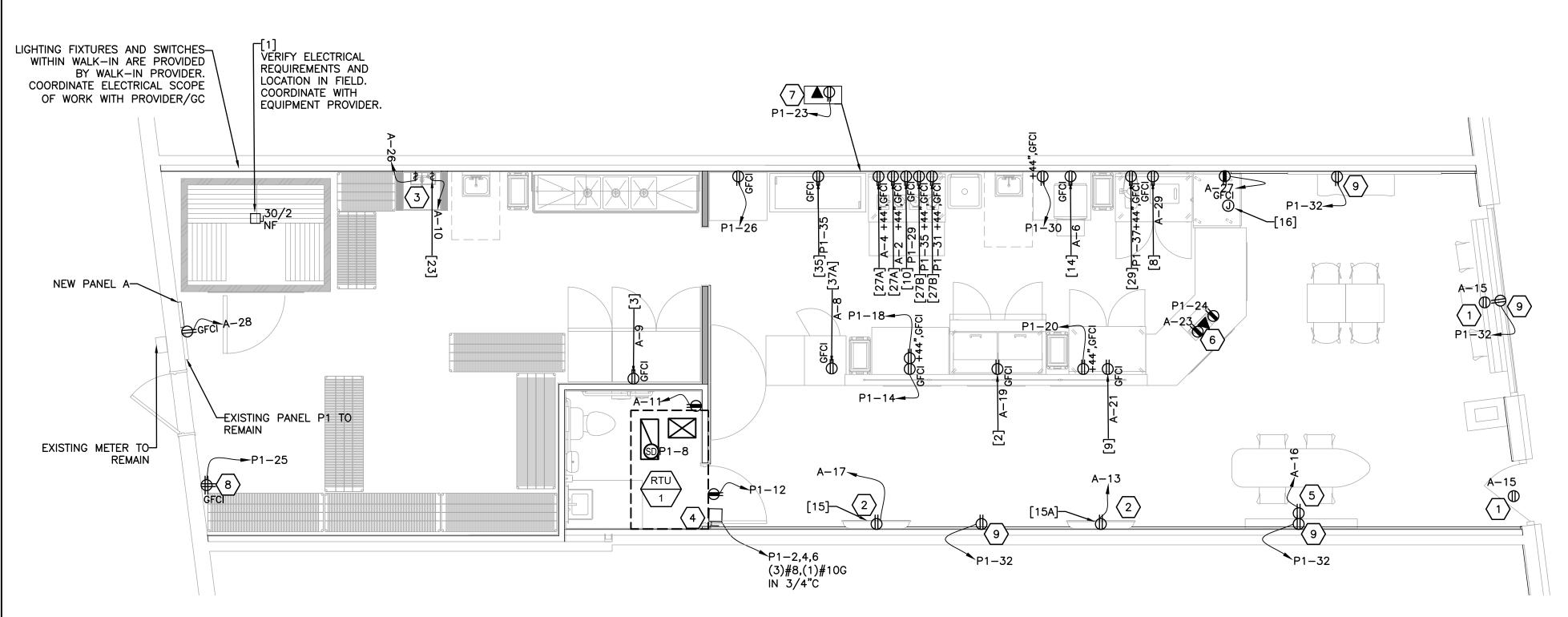
CHECKED BY:

AS INDICATED DRAWING TITLE: ELECTRICAL

GROSSE POINTE, MI 48236

SPECIFICATIONS

WITH THE LOCAL AUTHORITY HAVING JURISDICTION.

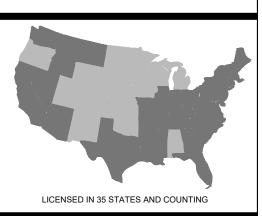


ELECTRICAL POWER PLAN SCALE: 1/4" = 1'-0"

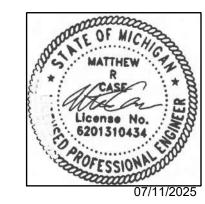
	KITCHEN EQUIPMENT SCHEDULE XX										
ITEM NUMBER	DESCRIPTION	VOLTAGE	PHASE	KW	H.P.	AMPS	CIR BRE SIZE	RCUIT EAKER POLES	WIRE SIZE	GND SIZE	CONDUIT SIZE REMARKS
1	6X8 WALK IN FRZR	208	1	_	_	_	_	_	_	-	LOAD TBD COORDINATE WITH MANUFACTURER/PROVIDER FOR ELECTRICAL REQUIREMENT
2	MEGA TOP SANDWICH UNIT/SALAD PREPARATION REFRIGERATION	115	1	_	_	4.9	20	1	(2)#12	12	3/4" -
3	REACH IN REFRIGERATOR 3 DOOR	115	1	_	_	6.3	20	1	(2)#12	12	3/4" –
8	REFRIGERATED WORK TOP	115	1	_	_	3.9	20	1	(2)#12	12	3/4" -
9	WORKTOP FREEZER 2 DOOR	115	1	_	_	6	20	1	(2)#12	12	3/4" -
10	4 DRAWER WORKTOP FREEZER	115	1	_	_	7	20	1	(2)#12	12	3/4" -
14	ICE MAKER WITH BIN, CUBE STYLE	115	1	_	_	5.2	20	1	(2)#12	12	3/4" -
15	50" TV W/ SWING MOUNT FOR PLAY PROMOTIONS	115	1	_	_	_	20	1	(2)#12	12	3/4" -
15A	50" TV W/ SWING MOUNT FOR PLAY ENTERTAINMENT	115	1	_	_	_	20	1	(2)#12	12	3/4" -
16	OPEN DISPLAY MERCHANDISER	115	1	_	_	11	20	1	(2)#12	12	3/4" -
23	GAS WATER HEATER	115	1	.2	_	_	20	1	(2)#12	12	3/4" -
27A	COMMERCIAL FOOD BLENDER	120	1	_	_	15	20	1	(2)#12	12	3/4" –
27B	COMMERCIAL FOOD BLENDER (QUIET)	120	1	_	_	15	20	1	(2)#12	12	3/4" –
29	MULTI PURPOSE JUICER	110	1	_	_	10.8	20	1	(2)#12	12	3/4" -
35	ICE CREAM NOVELTY MERCHANDISER	115	1	_	 	2	20	1	(2)#12	12	3/4" -
37A	UNDER COUNTER FREEZER MERCHANDISER	115	1	-	_	1.3	20	1	(2)#12	12	3/4" –



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CERTIFICATE OF AUTHORITY NO. 802229007

REI	LEASE TYPE:
	EXISTING CONDITIONS
	SCHEMATIC DESIGN
	DESIGN DEVELOPMENT
	PROGRESS PRINT
	FULL RELEASE

U. INLULI	TACLE FOR SERVICE TO DATA CADINET. FRIOR TO		
	H IN, COORDINATE MOUNTING HEIGHT AND POWER REMENTS WITH DATA CABINET EQUIPMENT PROVIDER.	NO.	DESCRIPTION
9. RECE	PTACLE TO BE USB CHARGING CAPABLE.		
	KITCHEN RECEPTACLE NOTES		
	EN SINGLE PHASE RECEPTACLES RATED 150 VOLTS TO DR LESS, 50 AMPERES OR LESS AND THREE PHASE		
RECEPTAC	LES RATED 150 VOLTS TO GROUND OR LESS, 100 OR LESS SHALL HAVE GROUND—FAULT		
	STERRUPTER PROTECTION FOR PERSONNEL PER NEC		

FRONT GFI DEVICE INSTALLED IN A READILY ACCESSBILE LOCATION

ALL 125V, 15A AND 20A CIRCUITS TO KITCHEN EQUIPMENT SHALL BE FED WITH A DEDICATED NEUTRAL WIRE.

POWER PLAN KEYED NOTES NOTES $\langle xx \rangle$

PROVIDE HORIZONTALLY MOUNTED SHOW WINDOW RECEPTACLES WITHIN 18" OF SHOW WINDOW AS REQUIRED BY NEC. ART. 210.62. PROVIDE CONDUIT AND CONDUCTORS TO EXTEND CIRCUIT THROUGH TIME CLOCK, SEE DETAIL #2 ON

PRIOR TO ROUGH IN, COORDINATE MOUNTING HEIGHT WITH TV

RECEPTACLE PROVIDED BY MECHANICAL CONTRACTOR. VERIFY

LOCATION OF NEW WATER HEATER AND CIRCULATION PUMP. COORDINATE LOCATION OF DISCONNECTS AND ALL ELECTRICAL

PROVIDER AND OWNER REP.

WORK WITH PLUMBING CONTRACTOR.

PROVIDED BY MECHANICAL CONTRACTOR.

4. NEW RTU-1 LOCATED ON ROOF. DISCONNECT AND

ELECTRICAL WORK WITH CASEWORK INSTALLER.

HEIGHTS WITH ARCHITECT DRAWINGS AND GC.

SHALL USED TO FEED THE CIRCUIT NOTED.

SECTION 210.8 (B) (1)-(10).

EXACT LOCATION AND ALL ELECTRICAL WORK WITH

MECHANICAL CONTRACTOR. CONVENIENCE RECEPTACLE

5. PINEAPPLE LAND SIGN OUTLET TO BE 5'-6" A.F.F. VERIFY LOCATION PRIOR TO ROUGH IN WITH ARCHITECT.

6. PROVIDE (2) DEDICATED POWER RECEPTACLES AND PROVIDE (3) CAT 6 DATA DROPS AT LOCATION SHOWN. (1) DEDICATED RECEPTACLE TO BE USB CHARGING CAPABLE. PRIOR TO ROUGH-IN COORDINATE ACTUAL DEVICE LOCATIONS AND ALL

7. PROVIDE DEDICATED POWER RECEPTACLE AND (3) CAT 6 DATA

DROPS ABOVE BANANA SHELF. PRIOR TO ROUGH-IN COORDINATE ACTUAL DEVICE LOCATIONS AND MOUNTING

8. RECEPTACLE FOR SERVICE TO DATA CABINET. PRIOR TO ROUGH IN, COORDINATE MOUNTING HEIGHT AND POWER REQUIREMENTS WITH DATA CABINET EQUIPMENT PROVIDER.

CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL PER NEC

ACCESSIBLE LOCATION OR A GFCI CIRCUIT BREAKER OR A DEAD

ALL GFCI RECEPTACLES SHALL BE INSTALLED IN A READILY

POWER PLAN GENERAL ELECTRICAL NOTES

- EXACT LOCATION, CUT-OUTS AND MOUNTING HEIGHTS FOR WIRING DEVICES IN CASEWORK SHALL BE COORDINATED WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
- VERIFY ALL EXISTING CONDITIONS IN THE FIELD PRIOR TO BID. NOTIFY OWNER OF ANY DISCREPANCIES. IF ACCEPTABLE TO OWNER'S REPRESENTATIVE, EXISTING EQUIPMENT MAY BE RE-USED. IF NOT ACCEPTABLE, FURNISH AND INSTALL NEW.
- ALL RECEPTACLES, DATA AND TELEPHONE OUTLETS ARE TO BE MOUNTED AT +18" ABOVE FINISHED FLOOR UNLESS NOTED
- PRIOR TO CONNECTION EC SHALL VERIFY THE VOLTAGE AND AMPERAGE REQUIREMENTS OF ALL EQUIPMENT DELIVERED TO THE SITE. EC SHALL NOTIFY OWNER OF ANY DIFFERENCE.
- EC TO VERIFY PLUG TYPE, AMPERAGE, VOLTAGE, AND LOCATION PRIOR TO BID AND ROUGH IN.
- EC TO VERIFY ALL POWER REQUIREMENTS WITH EQUIPMENT MANUFACTURER. PROVIDE HACR BREAKERS AS REQUIRED.
- WHEN POSSIBLE, OUTLETS TO BE MOUNTED ABOVE BACKSPLASH FOR COUNTER TOP EQUIPMENT AND BELOW COUNTER FOR UNDER COUNTER EQUIPMENT. PROVIDE POWER BELOW COUNTER FOR FRONT SERVING LINE COUNTER TOP EQUIPMENT. SEE ARCHITECTURAL DRAWINGS FOR COUNTER TOP HEIGHTS.

DESIGN DE	/ELOPMENT		
PROGRESS	PRINT		
FULL RELEA	SE		
SSUED TO:			
N0.	DESCRIPTION		DATE
ESIGNED BY:	DR	AWN BY:	
HECKED BY:	API	PROVED BY:	
ROJECT#:			STQ-0994-012

PLAYA BOWLS

AS INDICATED

SHEET:

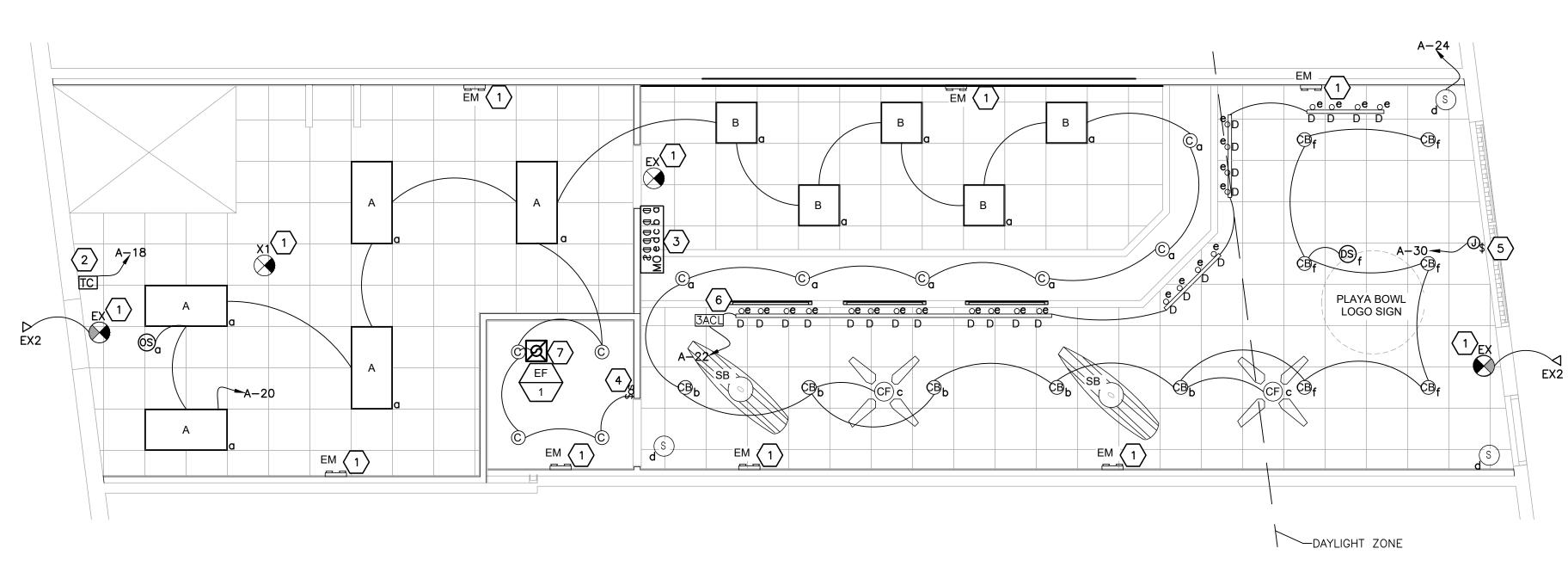
20647 MACK AVE

DRAWING TITLE:

PLAN

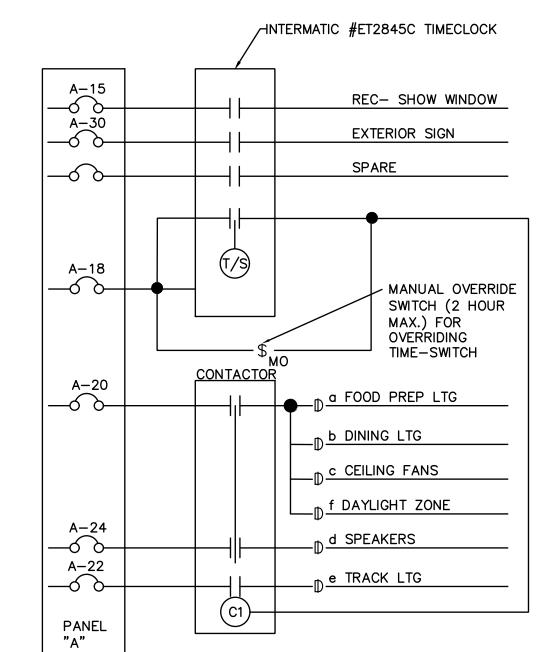
GROSSE POINTE, MI 48236

ELECTRICAL POWER



1 LIGHTING POWER PLAN
E-4 SCALE: 1/4" = 1'-0"

			l	LIGHT I	FIXTURE SCHEDULE	
TYPE	MODEL NUMBER	L	AMP DAT	A	DESCRIPTION	NOTES
		TYPE	VA	VOLTAGE		
Α	MIC-24FP-CCTS-50W	LED	50	120	2X4	
В	MIC-22F-CCTS-45W	LED	45	120	2X2	
С	MIC-HH-CCTS-WS-6IN	LED	22	120	RECESSED CAN	
D	TH-10W-3K-BLACK	LED	10	120	TRACK LIGHTING MOUNT 36" AWAY FROM FACE OF MENUBOARD 10'-0" AFF	
СВ	MIC-HH-CCTS-WS-6IN	LED	22	120	RECESSED CAN COLOR:BLACK	
CF	KBS-52K1121	LED	24	120	CEILING FAN W/ LIGHT	
SB	N/A	LED	16	120	SURFBOARD PROVIDED BY OWNER AND INSTLLED BY THE CONT	
EM	CST-EM2H-90	LED	3.4	120	EMERGENCY LIGHTS	
EX2	ERHR12	LED	2	120	MFG: ATLAS REMOTE HEAD	
EX	EMEXIT2H-90-6IN	LED	3.4	120	EXIT SIGN W/ DUAL HEAD, REMOTE CAPABLE	



LIGHTING CONTROL DIAGRAM

NO SC

LIGHTING PLAN KEYED NOTES NOTES (XX)

- 1. EXIT/EGRESS, EMERGENCY LIGHTS, CIRCUIT AS SHOWN ON PLAN AND CONNECTED TO UNSWITCHED LEG OF LOCAL LIGHTING CIRCUIT. VERIFY LOCATION, MAKE AND MODEL WITH TENANT BEFORE ROUGH—IN AND BID
- NEW TIMECLOCK. PROVIDE LIGHTING CONTACTORS AS REQUIRED. REFER TO LIGHTING CONTROL DIAGRAM ON THIS SHEET. SET TIME AS DIRECTED BY TENANT/LANDLORD. VERIFY LOCATION WITH TENANT/LAND LORD PRIOR TO BID AND ROUGH—IN.
- 3. PROVIDE NEW SWITCHBANK. WHEN FIXTURES ARE CONTROLLED BY SWITCHED WITH NO LINE OF SIGHT TO FIXTURES, PROVIDE A ILLUMINATED PILOT LIGHT INDICATOR TO SHOW STATUS OF FIXTURES. EC TO COORDINATE LOCATION OF SWITCHBANK AND MANUAL OVERRIDE SWITCH WITH OWNER REPRESENTATIVE PRIOR TO ROUGH—IN.
- 4. EC TO PROVIDE WALL-MOUNTED DUAL TECHNOLOGY TYPE OCCUPANCY SENSOR WITH INTEGRAL MANUAL SWITCH
- 5. PROVIDE 120V CIRCUIT WITH JUNCTION BOX AND LOCAL DISCONNECT SWITCH ABOVE CEILING FOR EXTERIOR SIGN. COORDINATE CONNECTION REQUIREMENTS AND EXACT LOCATION WITH ARCHITECT AND SIGN PROVIDER.
- 6. PROVIDE TRACK LIGHT CURRENT LIMITER OF AMPACITY SHOWN, AND OF TYPE COMPATIBLE WITH TRACK.
- EC TO CONNECT NEW EXHAUST FAN TO NEW BATHROOM LIGHTING POWER AND CONTROLS SHOWN.

GENERAL ELECTRICAL NOTES

- PLACEMENT OF LIGHT FIXTURES SHALL BE SET AS DIMENSIONED & AS SCHEDULED.
- 2. LIGHT FIXTURES SHALL BE SUPPLIED AS SCHEDULED WITH NO EXCEPTIONS.
- 3. ALL EMERGENCY AND EXIT LIGHTING SHALL BE WIRED AHEAD OF THE SWITCHING. EMERGENCY LIGHTING SHALL BE ON THE SAME CIRCUITRY AS THE GENERAL LIGHTING IN THE AREA THEY SERVE. EMERGENCY LIGHTING WIRING SHALL BE IDENTIFIED (MARKED) PER N.E.C. 700.9. PROVIDE GENERAL LIGHTING CIRCUITS, WHICH HAVE EMERGENCY LIGHTING CONNECTIONS, WITH LOCK—OUT ON BREAKER.
- 4. EC TO TEST ALL LIGHTING SYSTEMS TO ENSURE PROPER CALIBRATIONS, ADJUSTMENT, PROGRAMING, AND OPERATION.
- 5. ALL EMERGENCY, EXIT LIGHTS IN SUPPORT AREAS SHALL BE CIRCUITED TO LIGHTING CIRCUIT SERVICING SAME AREA WITH A LOCK ON DEVICE AT THE BREAKER PER N.E.C. 700.12.

GRA DESIGN STUDIO

> GREGORY RALPH ARCHITECT 1924 ROUTE 22 EAST BOUND BROOK, NJ 08805 TEL: 908 356 0132 GREG@GRALPHARCHITECT.COM



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MICHIGAN

NOT VALID FOR BUILDING UNLESS SIGNED AND SEALED BY ENGINEER

LICENSE #: 6201310434

EXPIRATION: 09/30/2025

I HEARBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAW OF THE THIS STATE.

CASE Engineering Inc.

796 Merus Court | T 636.349.1600 St. Louis, MO 63026 | F 636.349.1730 CERTIFICATE OF AUTHORITY NO. 802229007

RELEASE TYPE:	
EXISTING CONDITIONS	
SCHEMATIC DESIGN	
DESIGN DEVELOPMENT	

	PROGRESS PRINT	
	FULL RELEASE	
ISSL	ED TO:	
N0	DESCRIPTION	DATE

CHECKED BY:
PROJECT #:

PROJECT:

APPROVED BY:
STQ-09

PLAYA BOWLS

20647 MACK AVE GROSSE POINTE, MI 48236

DRAWING TITLE:

ELECTRICAL LIGHTING
PLAN

SHEET:

E-4

	M	OUNT:	SURF	ACE	120/	240	3-PHASE, 4W HIGH LEG DELTA	P	ANEL		P	1	CAPACITY:	200A		INI	CAP:	EXISTI	NG	
Ī	LOCA	ΓΙΟN:	вон					LU	JGS:	200)A	мсв	DEMAND LOAD:	157A		AV. F	AULT:	9.0KA		7
ı	CKT	LTG	REC	HVAC	MISC	KIT	DESCRIPTION	AMP	POLE	ФД	MP	POLE	DESCRIPTION	LTG	REC	HVAC	MISC	KIT	CKT	7
1	1						SPARE	20	1	Α	T					3.77			2	1
1	3						HIGH LEG		1	В	40	3	RTU-1			3.77			4	1
1	5	1.50	1.00		0.60	4.00	PANEL A	400		С	l					3.77			6	1
ı	7	1.40	1.40			4.70	PANEL A	100	2	Α	20	1	SMOKE DETECTOR			0.20			8	
1	9						HIGH LEG		1	В		1	HIGH LEG						10	1
1	11						SPARE	20	1	C	20	1	RTU REC	0.18					12	1
T	13		***************************************				SPARE	20	1	Α	20	1	FUTURE KITCHEN EQUIPMENT					1.00	14	T
T	15						HIGH LEG		1	В		1	HIGH LEG						16	T
T	17						SPARE	20	1	С	20	1	FUTURE KITCHEN EQUIPMENT					1.00	18	T
1	19						SPARE	20	1	Α :	20	1	FUTURE KITCHEN EQUIPMENT					1.00	20	T
T	21						HIGH LEG		1	В		1	HIGH LEG						22	T
I	23		0.18				BANANA SHELF REC	20	1	С	20	1	POS		0.18				24	T
T	25		0.50				DATA CABINET	20	1	Α :	20	1	FUTURE KITCHEN EQUIPMENT					1.00	26	
	27						HIGH LEG		1	В		1	HIGH LEG						28	
	29					0.81	4 DRAWER WORKTOP FREEZER [10]	20	1	С	20	1	FUTURE KITCHEN EQUIPMENT					1.00	30	
	31					1.80	COMMERCIAL FOOD BLENDER [27B]	20	1	Α :	20	1	LOBBY RECS		0.72				32	
	33						HIGH LEG		1	В		1	HIGH LEG						34	
	35					1.80	COMMERCIAL FOOD BLENDER [27B]	20	1	C	20	1	SPARE						36	
	37					1.19	MULTI PURPOSE JUICER [29]	20	1		20	1	SPARE						38	
┛	39						HIGH LEG		1	В		1	HIGH LEG						40	
┛	41					0.23	ICE CREAM NOVELTY MERCHANDISER [35]	20	1	С	20	1	SPARE						42	┛
١	DL	ACE	BALAN	CE	LOAD	TYPE	CONNECTED		DEMA	ND		DEMA	AND FORMULA				TO	TAL LO	AD	
	Pr	ASE	MLAN	CE	LIGH	TING	3.1 KVA		3.9 K	VA		LOAD	X 125% NEC 210.19 CONTINUOUS			CONN	ECTED		DEMAND	1
I	ф	LO	AD	%	RECEP	TACLE	4.0 KVA		4.0 K	VA		10KVA	A + 50% REMAINDER NEC 220.44			38.7	KVA	3	2.6KVA	1
ľ	Α	18.7	KVA	48%	HV	AC	11.5 KVA		11.5 H	(VA		LOAD	X 100% (USED MCA IN CALCULATION)			186	.0A		156.9A	1
I	В	3.8	KVA	10%	MIS	sc	0.6 KVA		0.6 K	VA		LOAD	X 100% NEC 210.19 NON-CONT.					5 [7
Ī	C	16.2	KVA	42%	K	Τ	19.5 KVA		12.7 k	(VA		65%P	ER NEC TABLE 220.56					ring I		
H	NOTE:	<u> </u>						1			1					1				\dashv

3	M	OUNT:	SURF	ACE	120	/240	1-PHASE, 3W	P	ANEL	_	-	4	CAPACITY:	100A		INT	CAP:	10KA	
2	LOCA	TION:	вон		***************************************			LU	JGS:	1	00A	MLO	DEMAND LOAD:	51A		AV. F	AULT:	8.0KA	
-	CKT	LTG	REC	HVAC	MISC	KIT	DESCRIPTION	AMP	POL	Ε Φ	AMP	POLE	DESCRIPTION	LTG	REC	HVAC	MISC	KIT	CKT
1	1					***************************************	RESERVED FOR WALK-IN	20	1	Α	20	1	COMMERCIAL FOOD BLENDER [27A]		, , , , , , , , , , , , , , , , , , ,			1.8	2
\Box	3						RESERVED FOR WALK-IN	20	2	В	20	1	COMMERCIAL FOOD BLENDER [27A]					1.8	4
`	5						ALGERT STORY AND A			Α	20	1	ICE MAKER WITH BIN, CUBE STYLE [14]					0.6	6
	7						SPARE	20	1	В	20	1	FREEZER MERCHANDISER [37A]					0.7	8
١.	9					0.7	REACH IN REFRIGERATOR 3 DOOR [3]	20	1	Α	20	1	GAS WATER HEATER [23]				0.2		10
4	11		0.2				BATHROOM REC	20	1	В	20	1	SPARE						12
	13		0.5				50" TV W/ SWING MOUNT FOR PLAY ENTETAINMENT [15A]	20	1	Α	20	1	SPARE						14
	15		0.4				SHOW WINDOW RECS	20	1	В	20	1	PINEAPPLE LAND SIGN		0.5				16
	17		0.5				50" TV W/ SWING MOUNT FOR PLAY PROMOTIONS [15]	20	1	Α	20	1	TIMECLOCK				0.2		18
١	19					0.6	MEGA TOP SANDWICH UNIT/SALAD PREPARATION REFRIGERATION [2]	20	1	В	20	1	DINING/FOOD PREP LTG	0.9					20
١	21					0.7	WORKTOP FREEZER 2 DOOR [9]	20	1	Α	20	1	TRACK LTG	0.3					22
١	23		0.2				POS	20	1	В	20	1	SPEAKERS	0.5					24
	25						SPARE	20	1	Α	20	1	CP-1				0.2		26
١	27					1.3	OPEN DISPLAY MERCHANDISER [16]	20	1	В	20	1	PANEL REC		0.2				28
	29					0.4	REFRIGERATED WORK TOP [8]	20	1	Α	20	1	EXTERIOR SIGN	1.2					30
	DI	JACE	BALAN	CE.	LOAD	TYPE	CONNECTED		DEM.	AND)	DEM	AND FORMULA			-	TOTAL	LOAD	
	FI	IASLE	DALAIN	CL	LIGH	TING	2.9 KVA		3.6 I	KVA		LOAD	X 125% NEC 210.19 CONTINUOUS			CONNE	CTED	DEM/	AND
	ф	LC	AD	%	RECEP	TACLE	2.4 KVA		2.4 I	ΚVA		10KV	A + 50% REMAINDER NEC 220.44			14.6	KVA	12.3k	(VA
	Α	7.4	KVA	50%	HV	AC	0.0 KVA		0.0	KVA		LOAD	X 100% (USED MCA IN CALCULATION)			60.	7A	51.	IA
	В	7.2	KVA	50%	MI	sc	0.6 KVA		0.6 I	ΚVA		LOAD	X 100% NEC 210.19 NON-CONT.						
					K	ΙΤ	8.7 KVA		5.6 l	KVA		65% F	PER NEC TABLE 220.56			Eng	jiree	ring i	m «::

B. EXISTING SPACE/SPARE BREAKER TO REMAIN

C. NEW BREAKER FOR NEW LOAD

SERVICE EN	TRANCE	CALCULAT	ION
VOLTAGE (L-L):	240V	I-FLA=[RATED KV	/A * 1000]
PHASE (PH):	3	[V-LL*SQR	T(PHASE
AMPS:	200A	I-FLA=	`
FULL LOAD KVA:	83KVA	I-FLA=	241A
TRANSFORMER:	100KVA	M=100/%Z=	62.5
IMPEDANCE (%Z):	1.6%Z	I-SC=I-FLA*M=	15 KA
		TRANSFORMER SIZE WI	
		CONTACT UTILITY AND VE	
		ORMER. CONTACT ENGIN	EER FOR
CALCULATION IF LARG	SER THAN CALCUL	A IED.	
		"	
M	ETER FAULT CA	LC	
STARTING I-SC:	15 KA	IMPEDANCE BASED ON	3 SINGLE
VOLTAGE (L-L):	240V	CONDUCTORS IN NON-N	
PHASE (PH):	3	CONDUIT	
FEEDER SIZE:	3/0	CALCULAT	ION
FEEDER MATERIAL:	CU	*f=[SQRT(PHASE)*L*IS-C	
PARALLEL SETS (Q):	1	[Q*C*V-LL]	-
FEEDER LENGTH (L):	70FT		0.546
	13,923 FT/OHMS	M=1/(1+f)=	
FEET PER OHMS (C):			
FEET PER OHMS (C):	10,02011/01100	<u></u>	10 K A
		I-SC=I-SC*M=	10 KA
		I-SC=I-SC*M=	10 KA
NOTE: CALCULATION E	BASED ON BUSSMA	I-SC=I-SC*M= ANN SPD	10 KA
NOTE: CALCULATION E	BASED ON BUSSMA	I-SC=I-SC*M= ANN SPD ALCULATION	
NOTE: CALCULATION E PANEL P1 F STARTING I-SC:	BASED ON BUSSMA EEDER FAULT C	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON	3 SINGLE
NOTE: CALCULATION E PANEL P1 F STARTING I-SC: VOLTAGE (L-L):	BASED ON BUSSMA EEDER FAULT C 10 KA 240V	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N	3 SINGLE
NOTE: CALCULATION E PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH):	BASED ON BUSSMA EEDER FAULT C 10 KA 240V 3	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT	3 SINGLE
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE:	EEDER FAULT C 10 KA 240V 3 3/0	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT CALCULAT	3 SINGLE IAGNETIC
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL:	BASED ON BUSSMA EEDER FAULT C 10 KA 240V 3	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C	3 SINGLE IAGNETIC
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q):	EEDER FAULT C 10 KA 240V 3 3/0 CU	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL]	3 SINGLE IAGNETIC ION
STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q): FEEDER LENGTH (L):	BASED ON BUSSMA EEDER FAULT C 10 KA 240V 3 3/0 CU 1 10FT	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f=	3 SINGLE IAGNETIC ION I/
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q):	EEDER FAULT C 10 KA 240V 3 3/0 CU 1	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f= M=1/(1+f)=	3 SINGLE IAGNETIC TON 1/ 0.050 0.952
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q): FEEDER LENGTH (L): FEET PER OHMS (C):	EEDER FAULT C 10 KA 240V 3 3/0 CU 1 10FT 13,923 FT/OHMS	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f= M=1/(1+f)= I-SC=I-SC*M=	3 SINGLE IAGNETIC TON 1/ 0.050 0.952
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q): FEEDER LENGTH (L):	EEDER FAULT C 10 KA 240V 3 3/0 CU 1 10FT 13,923 FT/OHMS	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f= M=1/(1+f)= I-SC=I-SC*M=	3 SINGLE IAGNETIC TON 1/ 0.050 0.952
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q): FEEDER LENGTH (L): FEET PER OHMS (C): NOTE: CALCULATION E	BASED ON BUSSMA EEDER FAULT C 10 KA 240V 3 3/0 CU 1 10FT 13,923 FT/OHMS BASED ON BUSSMA	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f= M=1/(1+f)= I-SC=I-SC*M= ANN SPD	3 SINGLE IAGNETIC TON 1/ 0.050 0.952
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q): FEET PER OHMS (C): NOTE: CALCULATION E	EEDER FAULT C 10 KA 240V 3 3/0 CU 1 10FT 13,923 FT/OHMS	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f= M=1/(1+f)= I-SC=I-SC*M= ANN SPD	3 SINGLE IAGNETIC TON 0.050 0.952 9 KA
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q): FEEDER LENGTH (L): FEET PER OHMS (C): NOTE: CALCULATION E PANEL A FE	EEDER FAULT C 10 KA 240V 3 3/0 CU 1 10FT 13,923 FT/OHMS BASED ON BUSSM/	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f= M=1/(1+f)= I-SC=I-SC*M= ANN SPD	3 SINGLE IAGNETIC TON 0.050 0.952 9 KA 3 SINGLE
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q): FEEDER LENGTH (L): FEET PER OHMS (C): NOTE: CALCULATION E PANEL A FE STARTING I-SC: VOLTAGE (L-L):	EEDER FAULT C 10 KA 240V 3 3/0 CU 1 10FT 13,923 FT/OHMS BASED ON BUSSMA EEDER FAULT CA 9 KA 208V	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT *F=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f= M=1/(1+f)= I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N	3 SINGLE IAGNETIC TON 0.050 0.952 9 KA 3 SINGLE
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q): FEEDER LENGTH (L): FEET PER OHMS (C): NOTE: CALCULATION E PANEL A FE STARTING I-SC: VOLTAGE (L-L): PHASE (PH):	BASED ON BUSSMA EEDER FAULT C 10 KA 240V 3 3/0 CU 1 10FT 13,923 FT/OHMS BASED ON BUSSMA EEDER FAULT CA 9 KA 208V 3PHASE	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f= M=1/(1+f)= I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT	3 SINGLE IAGNETIC TON 0.050 0.952 9 KA 3 SINGLE
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q): FEET PER OHMS (C): NOTE: CALCULATION E PANEL A FE STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE:	BASED ON BUSSMA EEDER FAULT C 10 KA 240V 3 3/0 CU 1 10FT 13,923 FT/OHMS BASED ON BUSSMA EEDER FAULT CA 9 KA 208V 3PHASE 3	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f= M=1/(1+f)= I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUIT CALCULAT CONDUIT CALCULAT	3 SINGLE IAGNETIC TON 0.050 0.952 9 KA 3 SINGLE IAGNETIC
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER MATERIAL: PARALLEL SETS (Q): FEEDER LENGTH (L): FEET PER OHMS (C): NOTE: CALCULATION E PANEL A FE STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL:	BASED ON BUSSMA EEDER FAULT C 10 KA 240V 3 3/0 CU 1 10FT 13,923 FT/OHMS BASED ON BUSSMA EEDER FAULT CA 9 KA 208V 3PHASE	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-M CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f= M=1/(1+f)= I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-M CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C	3 SINGLE IAGNETIC TON 0.050 0.952 9 KA 3 SINGLE IAGNETIC
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER MATERIAL: PARALLEL SETS (Q): FEET PER OHMS (C): NOTE: CALCULATION E PANEL A FE STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q):	EEDER FAULT C 10 KA 240V 3 3/0 CU 1 10FT 13,923 FT/OHMS BASED ON BUSSMA EEDER FAULT CA 9 KA 208V 3PHASE 3 CU 1	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-M CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f= M=1/(1+f)= I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-M CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL]	3 SINGLE IAGNETIC TON 0.050 0.952 9 KA 3 SINGLE IAGNETIC
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q): FEET PER OHMS (C): NOTE: CALCULATION E PANEL A FE STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q): FEEDER LENGTH (L):	BASED ON BUSSMA EEDER FAULT C 10 KA 240V 3 3/0 CU 1 10FT 13,923 FT/OHMS BASED ON BUSSMA EEDER FAULT CA 9 KA 208V 3PHASE 3 CU 1 10FT	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f= M=1/(1+f)= I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f=	3 SINGLE IAGNETIC TON 0.050 0.952 9 KA 3 SINGLE IAGNETIC
PANEL P1 F STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER MATERIAL: PARALLEL SETS (Q): FEET PER OHMS (C): NOTE: CALCULATION E PANEL A FE STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAL: PARALLEL SETS (Q):	EEDER FAULT C 10 KA 240V 3 3/0 CU 1 10FT 13,923 FT/OHMS BASED ON BUSSMA EEDER FAULT CA 9 KA 208V 3PHASE 3 CU 1	I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f= M=1/(1+f)= I-SC=I-SC*M= ANN SPD ALCULATION IMPEDANCE BASED ON CONDUCTORS IN NON-N CONDUIT CALCULAT *f=[SQRT(PHASE)*L*IS-C [Q*C*V-LL] f=	3 SINGLE IAGNETIC TON 0.050 0.952 9 KA 3 SINGLE IAGNETIC TON 1/ 0.160 0.862

UTILITY TRANSFORMER FAULT CALCULATION

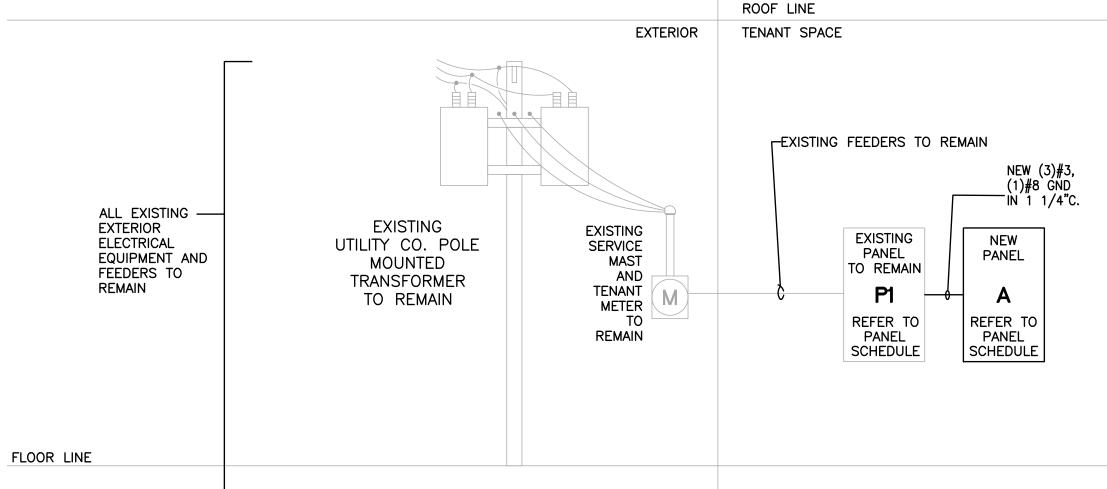
NIO-I FLL	DER FAULT CA	CULATION				
STARTING I-SC:	9 KA	IMPEDANCE BASED ON	3 SINGLE			
VOLTAGE (L-L):	240V	CONDUCTORS IN NON-N	IAGNETIC			
PHASE (PH):	3PHASE	CONDUIT				
FEEDER SIZE:	8	CALCULAT	ION			
FEEDER MATERIAL:	CU	*f=[SQRT(PHASE)*L*IS-C]/				
PARALLEL SETS (Q):	1	[Q*C*V-LL]				
FEEDER LENGTH (L):	25FT	f=	1.072			
FEET PER OHMS (C):	1,559 FT/OHMS	M=1/(1+f)=	0.483			
	•	I-SC=I-SC*M=	4 KA			

PANEL GENERAL NOTES								
1.	EC TO PROVIDE HANDLE TIE ON ALL MULTIWIRE BRANCH CIRCUITS PER NEC 210.4(B).							

- ALL SPARE CIRCUIT BREAKERS AND DISCONNECT SWITCHES SHALL BE LEFT IN THE OFF POSITION.
- EC SHALL VERIFY THE VOLTAGE AND AMPERAGE REQUIREMENTS OF ALL EQUIPMENT DELIVERED TO THE SITE PRIOR TO CONNECTION. EC SHALL NOTIFY OWNER OF ANY DIFFERENCE.
 - EC SHALL PROVIDE ARC FLASH LABELS FOR EXISTING SWITCHBOARDS AND PANELBOARDS AS PER N.E.C. REQUIREMENTS.
- 5. EC SHALL PROVIDE AVAILABLE FAULT CURRENT LABELS FOR EXISTING SWITCHBOARDS AND PANELBOARDS AS PER N.E.C. REQUIREMENTS.

EC IS RESPONSIBLE FOR FIELD VERIFICATION OF SITE CONDITIONS AND REPORTING ANY DIFFERENCES OR DISCREPANCIES TO ELECTRICAL ENGINEER PRIOR TO BID. NO EXTRAS OR CHANGE ORDERS SHALL BE GIVEN FOR CONTRACTOR'S FAILURE TO VERIFY SITE CONDITIONS PRIOR TO BIDDING. UNLESS SPECIFICALLY DETERMINED IN THE LEASE.

WHEN NEW CIRCUIT BREAKERS ARE ADDED TO AN EXISTING PANEL, THEY SHALL BE OF THE SAME MANUFACTURER AS THE EXISTING PANEL; SHALL BE OF A "LETTER TYPE" COMPATIBLE WITH THE EXISTING PANEL SUCH THAT THE UL LISTING OF THE EXISTING PANEL IS MAINTAINED AND SHALL HAVE AN AIC RATING EQUAL TO OR GREATER THAN THE AIC RATING OF THE EXISTING OVERCURRENT PROTECTIVE DEVICES WITHIN THE EXISTING PANEL.



— NEW EQUIPMENT --- EXISTING TO REMAIN

ELEC	CTRICAL SYMBOLS
SYMBOL	DESCRIPTION
AC CLG GC EC	ABOVE COUNTER CEILING MOUNTED GENERAL CONTRACTOR
MC WP	ELECTRICAL CONTRACTOR MECHANICAL CONTRACTOR WEATHERPROOF
NL GFI ST AFF UNO TTB PROVIDE	NIGHT LIGHT (CONNECT TO UNSWITCHED LEG OF CIRCUIT NOTED) GROUND FAULT CURRENT INTERRUPTER PROTECTED DEVICE SHUNT TRIP CIRCUIT ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE TELEPHONE TERMINAL BOARD FURNISH AND INSTALL COMPLETE JUNCTION BOX, MOUNTING HEIGHT
€	 20A, 1P, 125V, GROUNDING TYPE DUPLEX RECEPTACLE (+18" A
#	20A, 1P, 125V, GROUNDING TYPE DOUBLE DUPLEX RECEPTACLE
-	20A, 1P, 125V, GFCI TYPE DUPLEX RECEPTACLE
•	SPECIAL USE RECEPTACLE, COORDINATE WITH EQUIPMENT SU
\$ m	CEILING MOUNTED EXHAUST FAN WITH MANUAL DISCONNECT
□30/NF/3	DISCONNECT SWITCH: 30 AMP, NON-FUSED, 3 POLE
\$	LIGHT SWITCH
\$ ₃	LIGHT SWITCH (3 WAY)
\$ ₄	LIGHT SWITCH (4 WAY)
\$os	WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR SWITCH TO CENTERLINE (WATT STOPPER #DW100-WH OR EQUAL)
©S)	CEILING MOUNTED DAYLIGHT SENSOR SWITCH
<u>(S</u>	(WATT STOPPER #DT-355 OR EQUAL)
®	SMOKE/DUCT DETECTOR - COORDINATE WITH MECHANICAL CONTR
S	WALL MOUNTED SPEAKERS.
Ф	DIMMER SWITCH: LUTRON NOVA SERIES DIMMERS COMPATIBLE W VOLTAGE LIGHTING FIXTURES AND RATED FOR LOAD NOTED IN PAREFER TO LOADS AT PANELBOARD SCHEDULE. MOUNTING HEIGHT PER PLAN.
lack	COMMUNICATIONS JUNCTION BOX FOR DATA/COMM. DEVICE PLATE 3/4" CONDUIT WITH PULL STRING TO 6" ABOVE ACCESSIBLE CEIL AT 90° TOWARDS TTB. EC TO PROVIDE PLASTIC BUSHING ON END
	CONDUIT RUN CONCEALED IN CEILING OR WALL. NUMBER OF HAS INDICATE NUMBER OF #12 WIRES WHEN MORE THAN TWO ARE RINOTED OTHERWISE. ALL CIRCUITS SHALL INCLUDE EQUIPMENT GI

AFTER THE POUR.

CONDUIT INSTALLED BELOW FLOOR SLAB

AFF UNO) SUPPLIER I AT 3'-6" AFF TRACTOR/PLANS WITH LOW PANEL SCHEDULE. GHT AS INDICATED ATE. EC TO ROUTE EILING AND BEND END OF CONDUIT. ASH MARKS REQUIRED UNLESS NOTED OTHERWISE. ALL CIRCUITS SHALL INCLUDE EQUIPMENT GROUND SIZED PER NEC. HASH MARK AHEAD OF NEUTRAL INDICATES UNSWITCHED LEG. CURLED HASH MARK INDICATES DEDICATED GROUND WIRE REQUIRED. 12" ABOVE FINISHED FLOOR TO CENTERLINE PANELBOARD LIGHTING FIXTURE SWITCHING DESIGNATION - LETTER 'F' INDICATES THE FIXTURE TYPE (SEE FIXTURE SCHEDULE) THE NUMBER '5' INDICATES THE CIRCUIT IN THE PANEL NOTED AND THE LOWER CASE LETTER 'a' INDICATES THE SWITCH LEG TO CONNECT THE FIXTURE TO. PANELBOARD MULTI-COMPARTMENT FLOOR BOX - BOX SHALL BE STEEL, FULLY ADJUSTABLE

CERTIFICATE OF AUTHORITY NO. 802229007

DESIGN STUDIO

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LICENSED IN 35 STATES AND COUNTING

MATTHEW '

Mila

License No. . 6201310434 .*

MICHIGAN

I HEARBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAW OF THE THIS STATE.

6201310434

09/30/2025

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EXISTING CONDITIONS SCHEMATIC DESIGN DESIGN DEVELOPMENT PROGRESS PRINT

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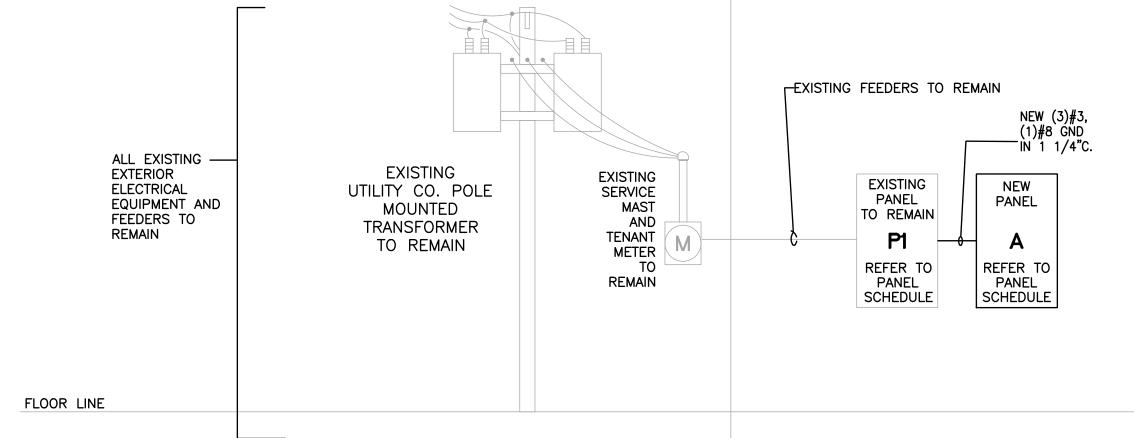
CHECKED BY: APPROVED BY: STQ-0994-0125 PROJECT:

PLAYA BOWLS

20647 MACK AVE GROSSE POINTE, MI 48236

AS INDICATED DRAWING TITLE: **RISER & PANEL** SCHEDULE

SHEET:



ONE-LINE DIAGRAM

1. PLUMBING CONTRACTOR SHALL ABIDE BY THE LOCAL CODES AND ORDINANCES.

2. PLUMBING CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATIONS AND SIZES OF ALL UTILITIES, INCLUDING THE DEPTHS OF ALL BELOW GRADE SANITARY SEWERS, PRIOR TO START OF WORK. THIS DRAWING IS NOT INTENDED TO INDICATE ALL EXISTING UTILITIES.

3. CONTRACTOR SHALL BE FAMILIAR WITH LANDLORD'S STANDARDS, RULES AND REGULATIONS. ALL LANDLORD'S CRITERIA SHALL BE COMPILED WITH AND INCLUDED IN THIS

4. CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID AND FIELD VERIFY EXISTING CONDITIONS TO ENSURE THAT THE WORK REPRESENTED ON THE DRAWINGS AND IN THESE SPECIFICATIONS CAN BE INSTALLED AS INDICATED. CONTRACTOR SHALL TAKE ALL INTERFERENCES INTO CONSIDERATION. PROVIDE ALL NECESSARY OFFSETS TO SUIT FIELD CONDITIONS AS REQUIRED.

5. CONTRACTOR SHALL VERIFY AND COORDINATE ALL UTILITY CONNECTION POINTS, INCLUDING SIZES AND INVERTS WITH EXISTING FIELD CONDITIONS PRIOR TO START OF

6. MAKE ALL UTILITY CONNECTIONS AND INSTALLATIONS IN FULL ACCORDANCE WITH ALL UTILITY REGULATIONS. PROVIDE ALL ADDITIONAL APPURTENANCES AS REQUIRED BY UTILITY COMPANY. THE COMPLETED INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE INDUSTRY STANDARDS OF GOOD PRACTICE AND SAFETY, AND THE MANUFACTURER'S STRICTEST RECOMMENDATIONS FOR EQUIPMENT AND PRODUCT APPLICATION AND INSTALLATION.

7. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS RELATED TO THE INSTALLATION OF THE WORK.

8. ALL WORK SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, LAWS, ACTS AND ALL AUTHORITIES HAVING JURISDICTION AND LANDLORD'S CRITERIA.

9. MAINTAIN ALL MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES FOR ALL FIXTURES AND EQUIPMENT. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS OF PLUMBING FIXTURES.

10. CUTTING OF ROOF AND FLASHING OF PIPE CURBS. SANITARY VENT THROUGH ROOF. ETC. SHALL BE COORDINATED WITH AND PERFORMED BY LANDLORD'S ROOFING CONTRACTOR, AT THIS CONTRACTOR'S EXPENSE, TO MAINTAIN ROOF WARRANTY. ALL VENT OUTLETS SHALL BE A MINIMUM OF 10'-0" AWAY FROM OR 3'-0" ABOVE ANY AIR INTAKES ON HVAC EQUIPMENT.

11. CONTRACTOR SHALL COORDINATE TIMES TO WORK IN SPECIFIC AREA OF THE EXISTING BUILDING WITH THE BUILDING MANAGER AND WITH THE OCCUPANTS OF THE AREA AFFECTED BY THE WORK.

12. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS BEFORE COMMENCING ANY

13. SLEEVE AND SEAL ALL PIPE PENETRATIONS OF WALLS AND FLOORS. APPLY INTUMESCENT FIRE SAFING COMPOUND AT PENETRATIONS AT FIRE RATED WALLS AND FLOORS, MAINTAINING INTEGRITY AND RATING OF FIRE SEPARATION. SLEEVES THROUGH FLOORS SHALL EXTEND 2" ABOVE FLOOR, BE GROUTED INTO PLACE AND WATERPROOFED. PIPING THROUGH EXTERIOR WALLS SHALL BE SLEEVED AND SEALED WEATHER TIGHT WITH SILICONE CAULK.

14. THE P.C. IS TO INSPECT THE EXISTING SANITARY DRAIN TO VERIFY THAT IT HAS SUFFICIENT DEPTH FOR THE NEW WORK AND TO VERIFY THE DIRECTION OF FLOW. PRESSURE TEST THE EXISTING SANITARY DRAIN PRIOR TO THE START OF WORK. VERIFY THAT SEWER IS ACTIVE BY FLUSHING WITH WATER, A MINIMUM OF FIVE GALLONS PER

MINUTE FOR FOUR HOURS PRIOR TO START OF WORK.

TABLE TO CALCULA	TABLE TO CALCULATE SUPPLY FIXTURE UNITS								
PLUMBING FIXTURE	SUPPLY FIXTURE UNITS	NUMBER OF FIXTURES	TOTAL SUPPLY FIXTURE UNITS						
WATER CLOSET FLUSH TANK	5.0	1	5.0						
LAVATORIES	1.0	1	1.0						
MOP SINK	3.0	1	3.0						
3-COMPARTMENT SINK	3.0	1	3.0						
BLENDER SINK	3.0	1	3.0						
HAND SINK	1.0	2	2.0						
ICE MACHINE	0.5	1	0.5						
	TOTAL SUPPLY	FIXTURE UNITS	17.500						
	GF	17							
	PIPE SIZE = 1"								

TABLE TO CALCULATE DRAINAGE FIXTURE UNITS

PLUMBING FIXTURE	DRAINAGE FIXTURE UNITS	NUMBER OF FIXTURES	TOTAL DRAINAGE FIXTURE UNITS
WATER CLOSET FLUSH TANK	4.0	1	4.0
LAVATORIES	1.0	1	1.0
MOP SINK	3.0	1	3.0
FLOOR SINK	6.0	3	18.0
HAND SINK	1.0	2	2.0
EMERGENCY FLOOR DRAIN	0.0	2	0.0
	TOTAL DRAINAG	E FIXTURE UNITS	28.0
		SA	NITARY WASTE SIZE= 4"

	BACK FLO	W PREVENTER A	SSEMBLY RE	QUIREMENTS				
MARK	TYPE OF EQUIP. ON SYSTEM	METHOD OF CROSS MANUFACTURE AND CONNECTION CONTROL MODEL NUMBER		REMARKS				
RPBFP	WATER SERVICE	REDUCED PRESSURE ZONE ASSEMBLY	ZURN 975XL2	LEAD FREE CAST COPPER WITH QUATER TURN				
RPZ	ICE MACHINE	DUAL CHECK WITH ATMOSPHERIC PORT	WATTS SD-3	STAINLESS STEEL BODY WITH QUARTER TURN VALVE SS STRAINER.				
2. I	1. CONTRACTOR SHALL PROVIDE INDIVIDUAL BACKFLOW PREVENTERS FOR EACH PIECE OF EQUIPMENT. 2. EACH BACKFLOW PREVENTER MUST HAVE TESTING PORTS. 3. BRONZE BODIED BACKFLOW PREVENTERS ARE PERMISSABLE IF ALLOWED BY LOCAL CODES.							

EQUIPMENT SCHEDULE										
ITEM NO.	QTY.	ITEM	MANUFACTURER	MODEL	VOLTAGE	AMPS				
6	1	3 COMPARTMENT SINK	NBR Equipment	3SS-182414LR24						
7	1	1 COMPARTMENT SINK	NBR Equipment	1BSG-1818						
12	2	HAND SINK	NBR Equipment	HS2-D2-S						
14	1	ICE MAKER WITH BIN, CUBE STYLE	Blue Air FSE LLC	BLUI-100A	115/60/1	5.2				
19	1	GREASE INTERCEPTOR (GI-1)	SCHIER	GB-2						
20	1	MOP SINK	Custom	63M						
23	1	WATER HEATER	RINNAI	RU 199iN						
30	1	BLENDER CONTAINER RINSER	Vitamix	1442						

PLUM	IBING SYMBOLS LEGEND
— са —	COMPRESSED AIR PIPING
— G —	NATURAL GAS PIPING
— CD —	CONDENSATE DRAIN PIPING
	COLD WATER PIPING
	HOT WATER PIPING (140°F)
	HOT WATER RETURN PIPING
	SANITARY DRAIN PIPING
	UNDERGROUND SANITARY PIPING
	SANITARY VENT PIPING
VTR	VENT THROUGH ROOF
	PIPE TURNING DOWN
	PIPE TURNING UP
<u> </u>	CHECK VALVE
─ ⊢	UNION
AFF	ABOVE FINISHED FLOOR
СО	CLEAN OUT
0	PRESSURE REGULATING VALVE (PRV)
	BALL VALVE
GCO	GRADE CLEAN OUT
	POINT OF CONNECTION
Ø	BALANCE VALVE

J۱	MBING SYMBOLS LEGEND		PIPE MATERIAL SCHEDULE				
_	COMPRESSED AIR PIPING		PIPE	MATERIALS			
	NATURAL GAS PIPING		ACTE DIDINO	BELOW GRADE: PIPING SHALL BE TYLER, AB&I OR CHARLOTTE NO-HUB CAST IRON DRAIN,			
_	CONDENSATE DRAIN PIPING	W.	ASTE PIPING	WASTE, SEWER, AND STORM SHALL COMPLY TO CISPI 301 AND/OR ASTM A888 AND BE LINED WITH A SUITABLE EPOXY COATING. PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE (CISPI) AND BE LISTED BY			
	COLD WATER PIPING			NSF			
	HOT WATER PIPING (140°F)			ABOVE GRADE: PIPING SHALL BE TYLER, AB&I OR CHARLOTTE NO-HUB CAST IRON DRAIN, WASTE, VENT, SEWER, AND STORM LINES SHALL CONFORM TO THE REQUIREMENTS OF			
_	HOT WATER RETURN PIPING			CISPI 301 AND/OR ASTM A888. PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE (CISPI) AND BE LISTED BY NSF.			
_	SANITARY DRAIN PIPING			JOINTS: ALL JOINTS SHALL BE HUSKY OR EQUIVALENT HEAVY DUTY COUPLINGS TESTED			
_	UNDERGROUND SANITARY PIPING			AND CERTIFIED TO THE REQUIREMENTS ASTM C1540. GASKET MATERIAL SHALL BE TESTED AND CERTIFIED TO ASTM C564 AND HAVE A SHIELD MADE OF 316 AISI STAINLESS STEEL WITH A .015MIL THICKNESS.			
_	SANITARY VENT PIPING			SCHEDULE 40 PVC/CPVC MAY BE CONSIDERED AS A VALUE ENGINEERED ALTERNATE			
	VENT THROUGH ROOF			WHERE ALLOWED BY LOCAL AHJ, NOT TO BE INSTALLED WITHIN PLENUM AREAS OR RECEIVING DISCHARGE TEMPERATURES OF OVER THE MANUFACTURERS LISTED			
)	PIPE TURNING DOWN			TEMPERATURES. PIPING SUBMITTAL MUST BE SUBMITTED TO ENGINEER FOR APPROVAL.			
)	PIPE TURNING UP			INSULATION: INSULATION FOR STORM PIPING SHALL BE 1/2" THICK ARMAFLEX UL LABELED OR FIBERGLASS 25 WITH ASJ/SSL FOIL/VINYL JACKET OR EQUAL. INSULATE ALL PIPING AND			
	CHECK VALVE			FITTINGS.			
	UNION	w	/ATER PIPING	UNDERGROUND: CERRO TYPE "K" COPPER TUBE, SOFT TEMPER OR EQUIVALENT. PLUMBER HAS THE OPTION TO USE PEX, CPVC, OR COPPER. AS LONG AS THEY FOLLOW THE LOCAL			
	ABOVE FINISHED FLOOR	,	IATER TITING	JURISDICTION			
	CLEAN OUT			ABOVEGROUND: CERRO TYPE "L" COPPER TUBE, HARD DRAWN OR EQUIVALENT. PLUMBER			
	PRESSURE REGULATING VALVE (PRV)			HAS THE OPTION TO USE PEX, CPVC, OR COPPER. AS LONG AS THEY FOLLOW THE LOCAL JURISDICTION			
_	BALL VALVE						
	GRADE CLEAN OUT			INSULATION: INSULATION FOR COLD WATER PIPING SHALL BE 1/2" (1" ON 1ST 8 FT. FROM TANK) THICK ARMAFLEX UL LABELED OR FIBERGLASS 25 WITH ASJ/SSL FOIL/VINYL JACKET			
	POINT OF CONNECTION			OR EQUAL. INSULATE ALL PIPING AND FITTINGS.			
	BALANCE VALVE			INSULATION: INSULATION FOR HOT WATER PIPING SHALL BE 1" ON PIPING 1-1/2" AND SMALLER AND INSUALTION SHALL BE SAME THICKNESS AS PIPE DIAMETER ON 2" AND ABOVE THICK ARMAFLEX UL LABELED OR FIBERGLASS 25 WITH ASJ/SSL FOIL/VINYL JACKET OR EQUAL. INSULATE ALL PIPING AND FITTINGS.			

NOMINAL PIPE DIAMETER NPS (IN)	MAXIMUM SUPPORT SPACING (FEET)									
	CAST IRON	COPPER	STEEL	SCH 40 PVC		SCH 4	CPVC	•		
				60°F	73°F	100°F	120°F	140°F		
1/2		8		-	5	4.5	4.5	4		
3/4		9		5	5	5	4.5	4		
1	5	9		5.5	5.5	5.5	5	4.5		
1 1/4	5	12	7	5.5	5.5	5.5	5.5	5		
1 1/2	5	12	9	6	6	5.5	5.5	5		
2	5	13	10	6	6	6	5.5	5		
2 1/2	5	14	11	7	7	6.5	6.5	6		
3	5	15	12	7	7	7	7	6		
4	5	17	12	7.5	7.5	7.5	7	6.5		
6	5	21	12	8.5	8.5	8	7.5	7		
8	5	24	12	9	9.5	9.5	8.5	7.5		
10	5	26	12	10	10.5	10.5	9.5	8		
12	5	30	12	11.5	11.5	10.5	10	8.5		

THE LOCAL LICENSED IN 35 STATES AND COUNTING COPYRIGHT Gregory Ralph, Architect . PLUMBER THE LOCAL

> NOTE: REFER TO FOOD SERVICE DRAWINGS FOR KITCHEN EQUIPMENT SPECIFICATIONS AND ADDITIONAL INFORMATION.

NOTE: PLUMBER HAS THE OPTION TO USE PEX, CPVC, OR COPPER. AS LONG AS ALLOWED BY THE LOCAL

JURISDICTION

GREASE INTERCEPTOR CALCULATIONS

Quote: 73241CBD

Reference No. 80321

Project Name: Playa Bowls Grosse Pointe, MI

Step 1: Flow rate to grease interceptor

Fixture flow rate: (cu in / 231) = $gal \times 0.75 / 2 min = 2 min flow rate$

3 Compartment Sink

Total

DIMENSIONS QTY CUIN FLOW RATE 18" x 18" x 12" (3) 1 11,664 18.94 GPM 18.94 GPM

Step 2: Grease Production

Servings per day x Grease production value x Days between pump-outs = Grease output

3 Compartment Sink

Servings per day: 250 Grease production value: 0.005 lbs per serving (Ice Cream / Yogurt / Smoothies: Low / No flatware)

Days between pump-outs: 90 days

 $250 \times 0.005 \times 90 = 112.5 \text{ lbs of FOG}$

SCHIER MODEL

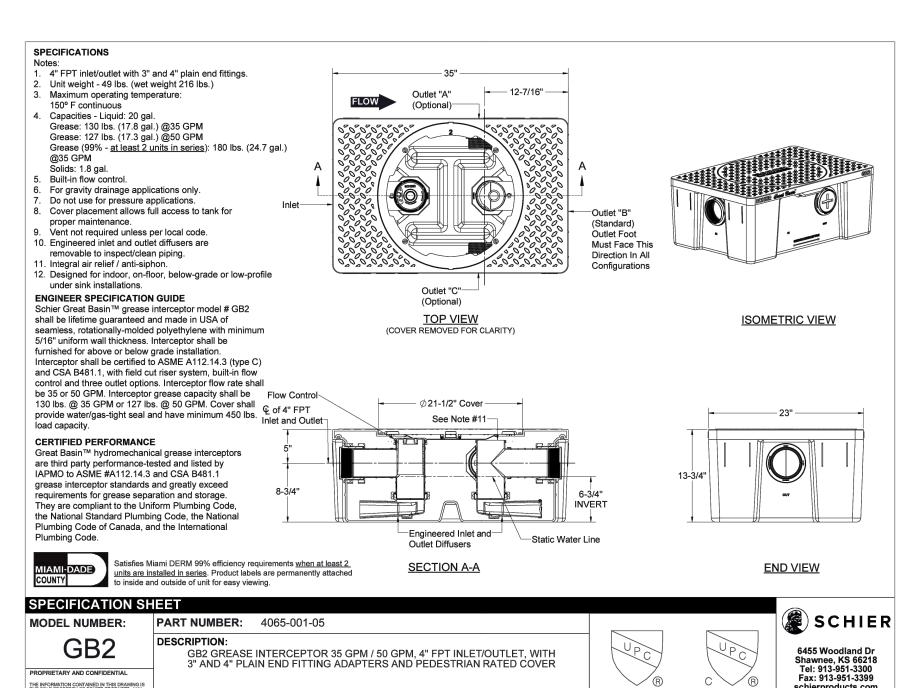
Description: GREASE INTERCEPTOR 35 GPM / 50 GPM, 4" FPT CONNECTIONS W/ 3" AND 4" PLAIN END ADAPTERS, PEDESTRIAN RATED POLYPROPYLENE

Dimensions: Length: 35", Width: 23", Height: 13.75" Flow Rate/Grease Capacity: 35 GPM / 130 lbs Liquid Capacity: 20 gal

GB2

Specification Note: This Great Basin model has been sized to the flow rate and grease production requirements of the application and may not be substituted by liquid capacity alone. Any substitution requests must be approved by the specifying engineer and the authority having jurisdiction.

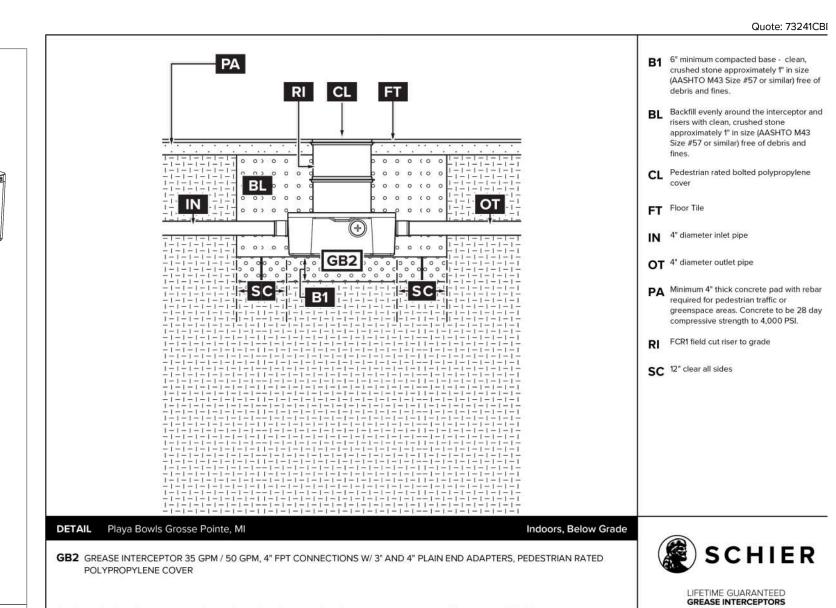
Please contact support@schierproducts.com for technical and procurement support for the specified Great Basin



GB2 GREASE INTERCEPTOR 35 GPM / 50 GPM, 4" FPT INLET/OUTLET, WITH 3" AND 4" PLAIN END FITTING ADAPTERS AND PEDESTRIAN RATED COVER

DWG BY: C.SINCLAIR DATE: 5/5/2022 REV: - ECO:

PROPRIETARY AND CONFIDENTIAL



sclaimer: this Detail represents manufacturer directed guidance regarding the grease interceptor system. The contents of this document are not a

substitute for local jurisdiction requirements and plumbing code standards. Please follow all local ordinances when installing.

DESIGN STUDIO GREGORY RALPH ARCHITECT 1924 ROUTE 22 EAST BOUND BROOK, NJ 08805 TEL: 908 356 0132 GREG@GRALPHARCHITECT.COM CASE License No. 07/11/2025 **MICHIGAN** 6201310434 EXPIRATION: 09/30/2025 I HEARBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME. AND THAT I AM A LAW OF THE THIS STATE. 796 Merus Court St. Louis, MO 63026 CERTIFICATE OF AUTHORITY NO. 802229007 EXISTING CONDITIONS SCHEMATIC DESIGN DESIGN DEVELOPMENT PROGRESS PRINT

STQ-0994-0125 PLAYA BOWLS

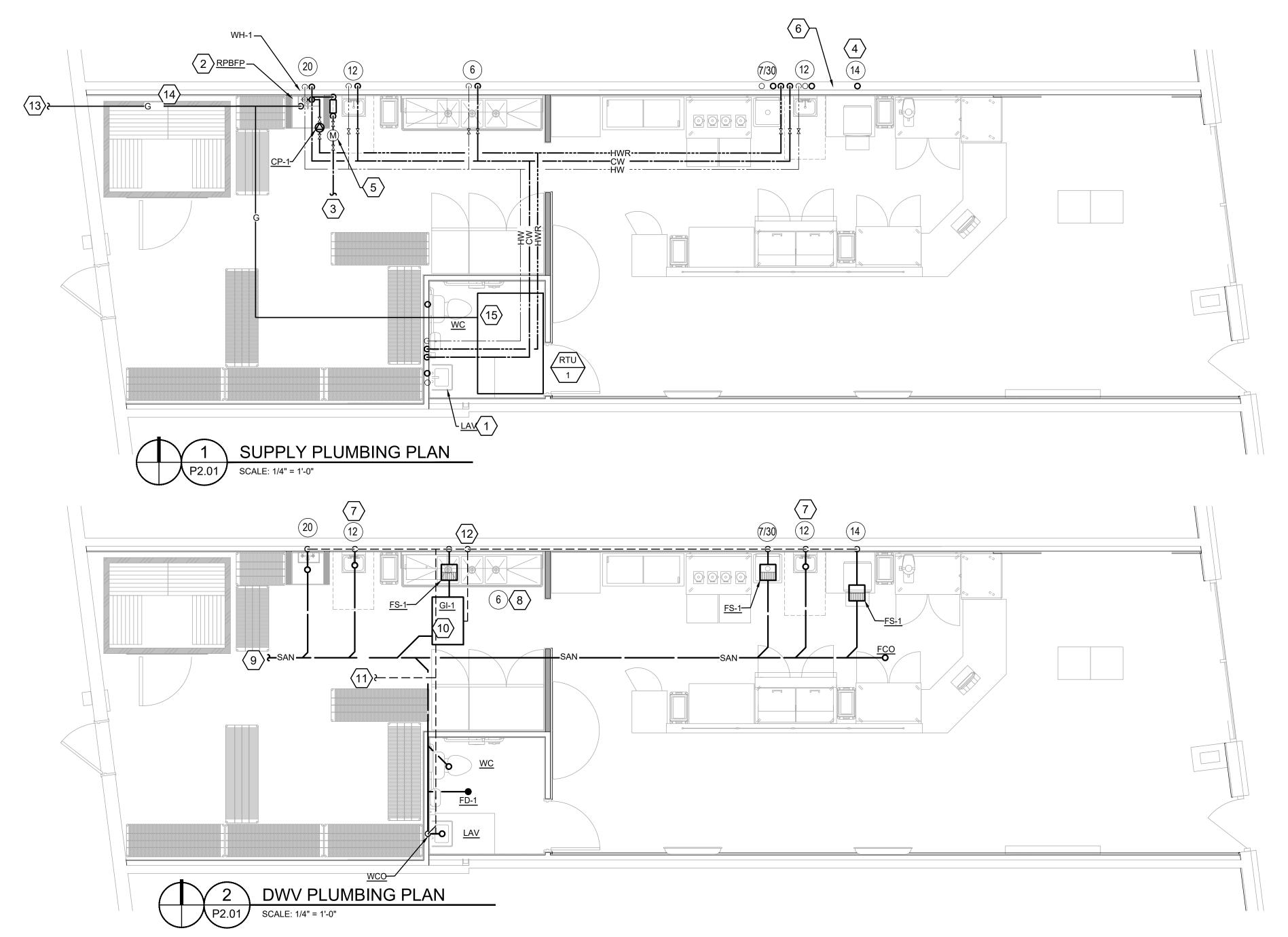
DRAWING TITLE: PLUMBING NOTES P1-01

AS INDICATED

20647 MACK AVE

schierproducts.com

GROSSE POINTE, MI 48236



PUMP SCHEDULE								
MFR	MODEL	GPM	TDH	OUTLET	VOLT/PHASE	REMARKS		
GRUNDFOS	ALPHA-15-55 HWR SF/T	1	10	3/4	120V/1PH	1,2		
		MFR MODEL	MFR MODEL GPM	MFR MODEL GPM TDH	MFR MODEL GPM TDH OUTLET	MFR MODEL GPM TDH OUTLET VOLT/PHASE		

339

339

COORDINATE EXACT VOLTAGE/PHASE WITH EC PRIOR TO PURCHASE AND ROUGH IN

EQUIPMENT

WATER HEATER

ROOF TOP UNIT

INCLUDING EQUIVALENT PIPE LENGTH | 56FT X 1.2

GAS LOAD SUMMARY

DESIGNATION

WH-1

TOTAL NATURAL GAS CONNECTED LOAD

MBH CAPACITY

<1000' AMSL

OTAL DEVELOPED LENGTH

OSSES TO GAS METER.

REGULATOR RATING

FOR FITTING AND VALVE FRICTION

CONSULT GAS UTILITY COMPANY FOR

SYSTEM

WH-1

RTU-1

GAS METER

REQUIREMENTS

SITE ELEVATION/

ALTITUDE

PLUMBING FIXTURE SCHEDULE

TAG	NAME	COLD WATER	HOT WATER	WASTE	VENT SIZE	REMARKS
FS-1	FLOOR SINK 12"x12"x8"	-	-	4"	2"	Z1751 WITH DRAIN STRAINER AND HALF GRATE
GI-1	GREASE INTERCEPTOR	ı	ı	4"	2"	SCHIER GB-2 50GPM RATED, 130LBS GREASE CAPACITY, INTEGRAL FLOW CONTROL
TMV-1	THERMOSTATIC MIXING VALVE ZURN 38-ZW2870XLT	1/2"	1/2 "	-	-	PLUMBER TO FURNISH AND INSTALL: SET TEMPERATURE TO 110°F.
FD-1	FLOOR DRAIN	-	-	3"	2"	ZURN ZB415-XNH-7B-P-VP-Y

ADDITIONAL REMARKS

REFER TO KITCHEN EQUIPMENT DRAWINGS FOR EXACT FIXTURE SELECTIONS, PLUMBING REQUIREMENTS, AND REMARKS FOR ALL NUMBERED EQUIPMENT (EG. 6, XS1, ETC.)

ANGLE STOPS SHALL BE LOOSE KEYED WITH INTEGRAL CHECK VALVE. MCGUIRE LFCK SERIES OR EQUIVALENT.

ALL ADA ACCESSIBLE SINKS PTRAP AND DRAIN PIPING SHALL BE PROVIDED WITH MCGUIRE PREWRAPPED PW2125 SERIES OR EQUIVALENT. ALL SUPPLIES SHALL BE TRUEBRO LAVGUARDS OR EQUIVALENT. WATCO IDEALLAV LAV DRAIN GRID DRAIN WITH INTERNAL STOPPER WITH P-TRAP WRAPPED IN TRUEBRO LAV GAURD IS ACCEPTABLE ALTERNATE.

NOT ALL COMPONENTS AND ACCESSORIES FOR FIXTURES ARE LISTED IN THE SCHEDULE. PLUMBING CONTRACTOR SHALL PROVIDE ALL ACCESSORIES RECOMMENDED BY THE MANUFACTURER TO PROVIDE A COMPLETE SYSTEM. PLUMBING CONTRACTOR SHALL REVIEW AND INSTALL ALL FIXTURES, COMPONENTS, AND ACCESSORIES AS DIRECTED BY THE MANUFACTURERS INSTALLATION MANUALS.

PUMP SCHEDULE									
MARK MFR MODEL GPM TDH OUTLET VOLT/PHASE REMARKS									
CP-1	GRUNDFOS	ALPHA-15-55 HWR SF/T	1	10	3/4	120V/1PH	1,2		
CONS	SULT MANUEACTURE	ER PRIOR TO PLIRCHASE E	OR EXACT MODE		SSORIES FOR	A COMPLETE SYSTI	=м		

_										
		WATER HEATER SCHEDULE								
		QTY	MARK	MFR	MODEL	STORAGE	GPM	°F. RISE	VOLT/PHASE	REMARKS
		2	WH-1	RINNAI	RU199iN	INSTANTANEOUS	4	90	120V	1,2,3
	Ī						-			

SET WATER HEATER TEMPERATURE TO 140°f. CONSULT MANUFACTURER PRIOR TO PURCHASE FOR EXACT MODEL AND ALL ACCESSORIES FOR A

CONFIRM VOLTAGE WITH ELECTRICAL CONTRACTOR PRIOR TO PURCHASE AND ROUGH IN.

INCOMING WATER TEMPERATURE (AVERAGE GROUND WATER TEMP) =							60°	
	HOT WATER TEMPERATURE =							
					TEMPEF	RATURE RISE =	80°	
PLUMBING FIXTURE	TOTAL FIXTURE OR FAUCET GPM	MIXED TEMPERATURE	HOT WATER GPM PER FIXTURE OR FAUCET	NO. OF FIXTURES OR FAUCETS	FULL HOT WATER FLOW (GPM)	ESTIMATED PERCENT USAGE	DESIGNED HOT WATER FLOW (GPM)	
3-COMP SINK	2.0	140°	2.00	1	2.00	100%	2.00	
HAND SINK	1.5	110°	0.94	2	1.88	50%	0.94	
MOP SINK	3.0	140°	3.00	1	3.00	50%	1.50	
PREP SINK	1.5	140°	1.50	1	1.50	100%	1.50	
LAVS	1.0	110°	0.63	1	0.63	100%	0.63	
FULL HOT WATER FLOW FOR ALL FIXTURES RUNNING = 8.38 GPM								

DESIGNED HOT WATER GALLONS PER MINUTE =

HOT WATER BALANCING NOTE:

PLUMBING CONTRACTOR SHALL PROVIDE JOMAR VALVE RECIRCSETTER™AUTOMATIC VARIABLE SET POINT BALANCING VALVE OR EQUIVALENT AT EACH HOT WATER CIRCULATION CONNECTION TO THE HOT WATER SYSTEM. ENSURE VALVES ARE INSTALLED IN AN ACCESSIBLE LOCATION FOR ADJUSTMENT AND SERVICE. SYSTEM SHALL BE SET FOR A 5 DEGREE TEMPERATURE DIFFERENCE FROM WATER HEATER SET POINT. CONSULT WITH THE CIRCULATING PUMP MANUFACTURER FOR ADDITIONAL CONTROLS AND BALANCING INSTRUCTION.

EXISTING SANITARY SEWER CONDITIONS NOTE:

SANITARY SEWER PIPING SHOWN ON DRAWINGS IS DIAGRAMMATIC AND MAY DIFFER SLIGHTLY FROM ACTUAL FIELD CONDITIONS. PLUMBING CONTRACTOR (PC) SHALL COORDINATE WITH EXISTING FIELD CONDITIONS VIA A SANITARY VIDEO SURVEY/SCOPE TO DETERMINE THE EXACT SIZE, LOCATION, INVERT ELEVATIONS AT THE PROPOSED CONNECTIONS TO EXISTING PLUMBING SERVICES PRIOR TO BID/CONSTRUCTION. IF ACTUAL FIELD FINDINGS VARY SIGNIFICANTLY FROM THOSE AS INDICATED ON PLANS, PC SHALL NOTIFY GENERAL CONTRACTOR (GC) IMMEDIATELY PRIOR TO STARTING ANY WORK. THE OWNER SHALL NOT BE RESPONSIBLE FOR ADDITIONAL COSTS INCURRED BY FAILED COORDINATION AFTER CONSTRUCTION HAS BEGUN. PC SHALL BE RESPONSIBLE FOR UTILIZING A REPUTABLE UTILITY LOCATING SERVICE PRIOR TO ANY

EXISTING WATER SERVICE CONDITIONS NOTE:

WATER PRESSURE IS SHOWN AS DIAGRAMMATIC ONLY. CONTRACTOR SHALL VERIFY EXISTING WATER PRESSURE IN FIELD PRIOR TO ANY WORK AND PIPING ROUGH IN. IF DISCOVERED ON SITE THAT EXISTING WATER PRESSURE IS LESS THAN 68 PSI, CONTACT ENGINEER IMMEDIATELY FOR PIPING DESIGN CHANGES. IF PRESSURE IS GREATER THAN 80 PSI PROVIDE PRESSURE REDUCING VALVE AND REDUCE DOWN TO 77 PSI.

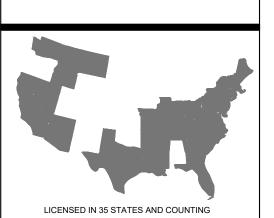
PRIOR TO WORK VERIFY INCOMING WATER QUALITY TO SPACE. WHEN INCOMING WATER IS ABOVE 3.5 GRAINS PER GALLON (60 PARTS PER MILLION) SCALE BUILD-UP WILL FORM INSIDE THE PLUMBING SYSTEM CAUSING DAMAGE TO SYSTEM COMPONENTS AND COPPER PIPE. TO AVOID DAMAGE DUE TO SCALE BUILD-UP, EITHER A WATER SOFTENER OR ANTI-SCALE DEVICE SHOULD BE INSTALLED AT POINT-OF-ENTRY. APPLICATIONS WHERE THERE IS A CONCERN FOR WATER SPOTS ON GLASS SHOWER DOORS, GLASS DISHES, VEHICLES IN CARWASHES, ETC., AND/OR THE EFFECTS OF HARD WATER ON HUMAN SKIN, A WATER SOFTENER SHOULD BE USED INSTEAD OF AN ANTI-SCALE DEVICE. ANTI-SCALE DEVICES REDUCE THE FORMATION OF SCALE IN A PLUMBING SYSTEM BUT DO NOT REMOVE THE CALCIUM AND MAGNESIUM FROM THE WATER, WHICH WILL REMAIN ONCE THE WATER HAS EVAPORATE LEAVING WATER SPOTS AND/OR DRYING OUT HUMAN SKIN. WATER SOFTENERS REMOVE CALCIUM AND MAGNESIUM FROM THE WATER BUT REQUIRE ROUTINE REFILLING OF SALT LEVELS IN THE BRINE TANK.

PLUMBING KEYED NOTES

- \langle 1 \rangle PROVIDE ASSE 1070 POINT OF USE THERMOSTATIC MIXING VALVE $\underline{\mathsf{TMV-1}}$ AT THIS FIXTURE TO PROVIDE 110°F MAX TEMPERATURE. IF NOT PROVIDED ALREADY
- $\langle \ 2 \ \rangle$ IF BUILDING DOMESTIC WATER SERVICE IS NOT ALREADY PROTECTED BY A MAIN BACKFLOW PREVENTER THEN, PROVIDE REDUCED PRESSURE BACKFLOW PREVENTOR AT AN ACCESSIBLE LOCATION. ABOVE THE MOP SINK WITH RELIEF VALVE DRANING INDIRECTLY INTO MOP SINK WITH CODE APPROVED AIR GAP. VERIFY IN FIELD PRIOR TO EQUIPMENT PURCHASE.
- (3) ROUTE DOMESTIC COLD WATER SERVICE TO CONNECT TO EXISTING DOMESTIC COLD WATER SERVING THE SPACE. VERIFY EXACT SIZE, ROUTING, DELIVERY PRESSURE, AND WATER METER INSTALLATION REQUIREMENTS WITH LANDLORD AND LOCAL WATER UTILITY COMPANY PRIOR TO ANY WORK.
- \langle 4 \rangle 1/2" CW TO ICE MACHINE FURNISH WITH REQUIRED BACK FLOW DEVICE AND SHUT OF VALVE. WATER FILTER BY VENDOR.
- PROVIDE WATER SUB METER WITH SHUT OFF VALVES FIELD VERIFY LOCATION PRIOR TO ANY WORK
- (6) ROUTE PIPING LOW IN WALL COORDINATE WITH ELECTRICAL CONTRACTOR.
- $\langle 7 \rangle$ 2" WASTE FROM HAND SINK.
- \langle 8 angle ROUTE WASTE FROM 3 COMPARTMENT SINK TO INDIRECTLY DISCHARGE INTO FLOOR SINK, EACH COMPARTMENT SHALL BE ROUTED SEPARATELY. WITH CODE APPROVED
- $\langle \ 9 \ \rangle$ ROUTE TO CONNECT TO EXISTING SANITARY WASTE PIPING. PLUMBING CONTRACTOR SHALL VERIFY EXACT SIZE, INVERT ELEVATION, LOCATION, ROUTING AND CONNECTION REQUIREMENTS WITH LANDLORD AND UTILITY COMPANY PRIOR TO BIDDING AND PERFORMING ANY EXCAVATION WORK. PROVIDE ALTERNATE BID FOR A SEWAGE LIFT STATION IF EXISTING TIE IN CONNECTION IS FOUND TO NOT BE DEEP ENOUGH TO RECEIVE THE DISCHARGE FROM THE NEW SANITARY SYSTEM.
- $\langle 10 \rangle$ PROVIDE NEW GREASE INTERCEPTOR BELOW GRADE WITH PEDESTRIAN RATTED COVER. COORDINATE WITH LANDLORD AND LOCAL AUTHORITIES FOR EXACT LOCATION. INSTALL PER MANUFACTURES MANUALS. VERIFY LOCATION, INVERT ELEVATION AND DIRECTION OF FLOW PRIOR TO ANY WORK.
- \$\langle 11 \rangle SANITARY VENT PIPING TO CONNECT TO EXISTING FIELD VERIFY LOCATION PRIOR TO
- VENT PIPING BELOW GRADE TO SERVE GREASE INTERCEPTOR. COORDINATE EXACT ROUTING IN FIELD, VERIFY ALL EXISTING UTILITIES PRIOR TO ANY WORK.
- $\langle 13
 angle$ new gas piping to connect to meter's demand=199mbh, (field verify actual LOCATION APPROXIMATE LENGTH FROM FURTHEST FIXTURE TO METER BANK 20 FEET CONTRACTOR TO VERIFY EXACT LENGTH, AVAILABLE PRESSURE AND INSTALLATION LOCATION IN FIELD. VERIFY WITH GAS COMPANY FOR EXACT CONNECTION AND METER INSTALLATION GUIDELINES AND REQUIREMENTS PRIOR TO ANY WORK.
- $\langle 14 \rangle$ NEW GAS PIPING ON ROOF. CONTRACTOR TO PROVIDE PROPER SUPPORTS FOR PIPING AND ALL CONNECTION TO ROOF TOP UNITS.
- $\langle 15
 angle$ CONNECT 1" LOW PRESSURE GAS TO RTU'S. PROVIDE 6" DIRTLEG AND SHUTOFF PLUG VALVE PRIOR TO FINAL CONNECTION.



GREGORY RALPH ARCHITECT 1924 ROUTE 22 EAST **BOUND BROOK, NJ 08805** TEL: 908 356 0132 GREG@GRALPHARCHITECT.COM





MICHIGAN

LAW OF THE THIS STATE

6201310434 09/30/2025 PREPARED OR APPROVED BY ME, AND THAT I AM A



St. Louis, MO 63026 CERTIFICATE OF AUTHORITY NO. 802229007

EXISTING CONDITIONS SCHEMATIC DESIGN DESIGN DEVELOPMENT PROGRESS PRINT FULL RELEASE

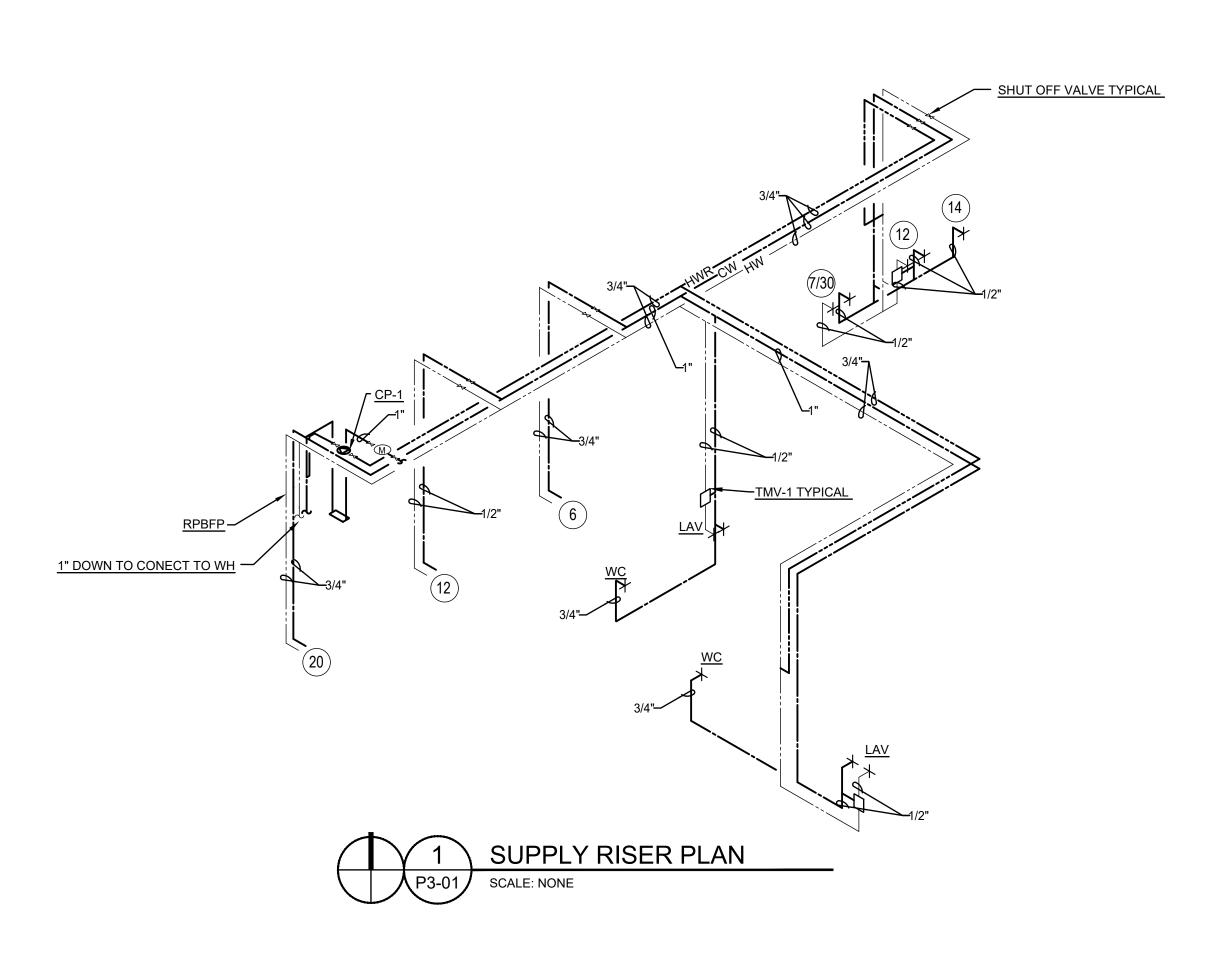
STQ-0994-0125

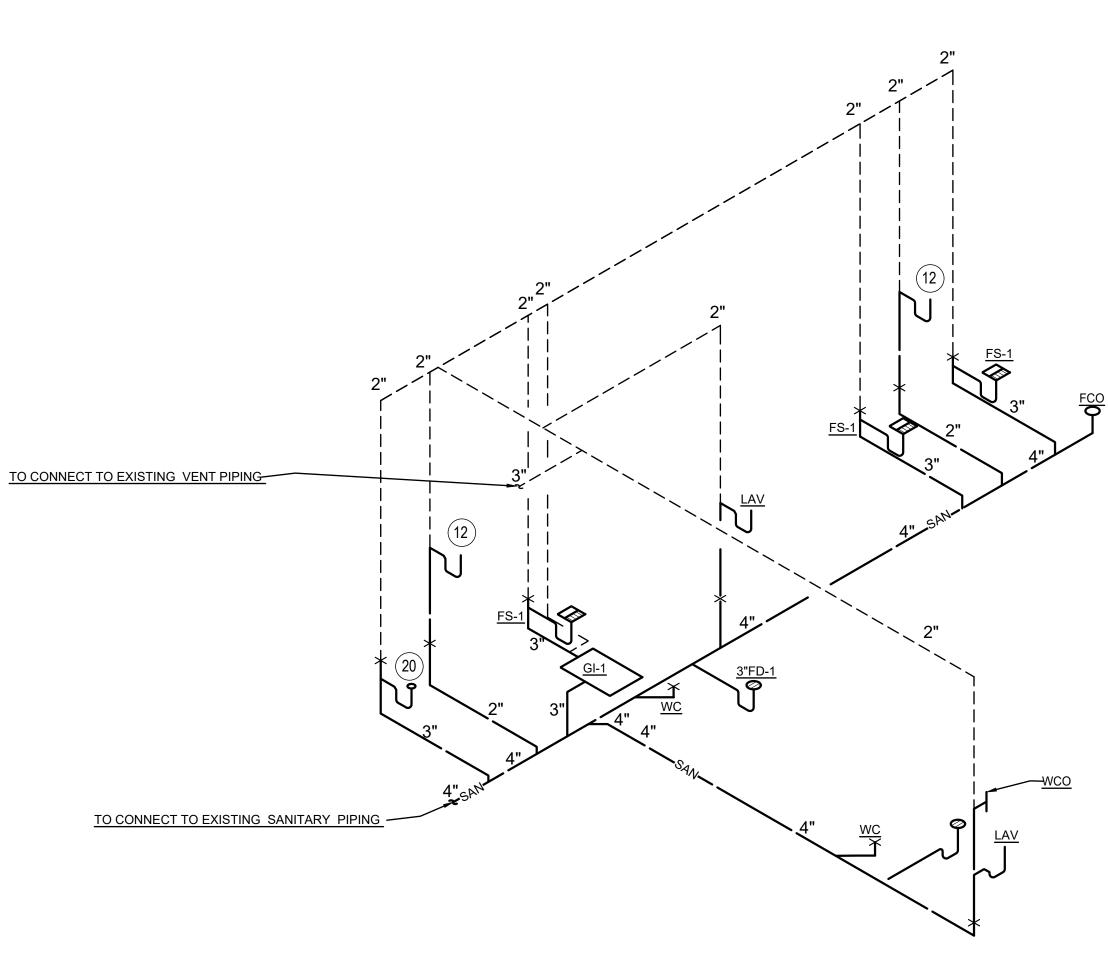
PROJECT: **PLAYA BOWLS**

20647 MACK AVE

GROSSE POINTE, MI 48236 AS INDICATED

DRAWING TITLE:



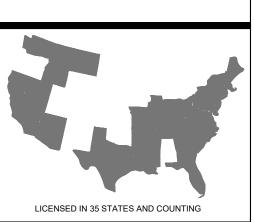




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GREGORY RALPH ARCHITECT 1924 ROUTE 22 EAST BOUND BROOK, NJ 08805 TEL: 908 356 0132 GREG@GRALPHARCHITECT.COM



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MICHIGAN

6201310434 09/30/2025 I HEARBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAW OF THE THIS STATE.

796 Merus Court T 636.349.1600 St. Louis, MO 63026 F 636.349.1730 CERTIFICATE OF AUTHORITY NO. 802229007

EXISTING CONDITIONS SCHEMATIC DESIGN DESIGN DEVELOPMENT PROGRESS PRINT

N0.	DESCRIPTION	
		_
		_
DESIGNED BY:	DRAWN BY	
CHECKED BY:	APPROVED) BY:

PLAYA BOWLS

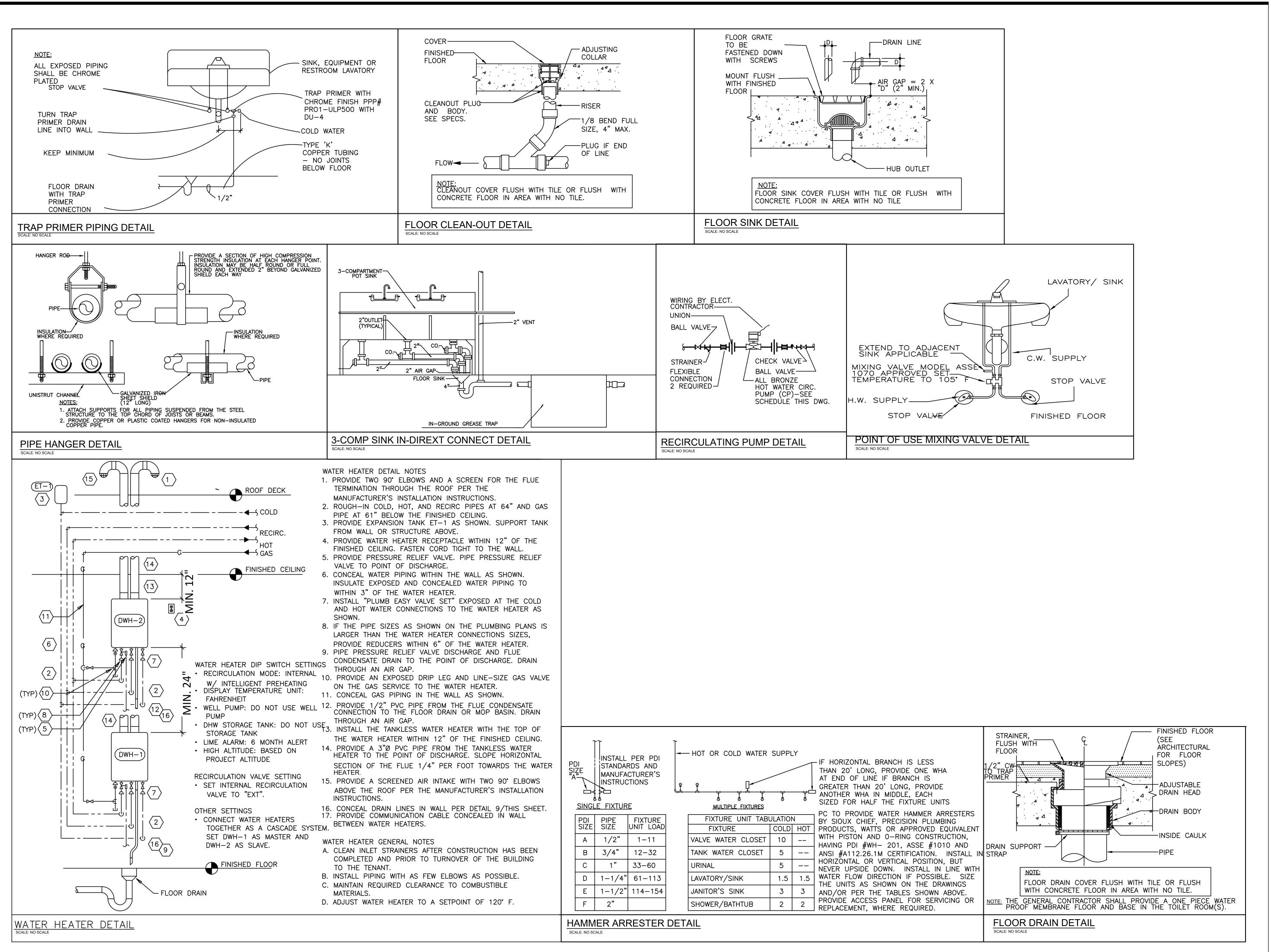
20647 MACK AVE GROSSE POINTE, MI 48236

AS INDICATED

DRAWING TITLE:

PLUMBING RISERS

P3-01



DESIGN STUDIO

GREGORY RALPH ARCHITECT 1924 ROUTE 22 EAST BOUND BROOK, NJ 08805 TEL: 908 356 0132 GREG@GRALPHARCHITECT.COM



LICENSED IN 35 STATES AND COUNTING COPYRIGHT Gregory Ralph, Architect



MICHIGAN 6201310434 I HEARBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A

Y LICENSED PROFESSIONAL ENGINEER UNDER THE

LAW OF THE THIS STATE.

Engineering Inc.

CERTIFICATE OF AUTHORITY NO. 802229007

St. Louis, MO 63026

EXISTING CONDITIONS SCHEMATIC DESIGN DESIGN DEVELOPMEN PROGRESS PRINT FULL RELEASE

APPROVED BY:

PLAYA BOWLS

20647 MACK AVE GROSSE POINTE, MI 48236

AS INDICATED

DETAILS

CITY OF GROSSE POINTE WOODS, MI NOTICE OF PUBLIC HEARING

Notice is hereby given that the Grosse Pointe Woods Planning Commission, under the provisions of Public Act 110 of 2006, MCL 125.3101 as amended, and Grosse Pointe Woods City Code of 2022 Chapter 50, Article 7, Section 50-7.15, will hold a Public Hearing on Tuesday, August 26, 2025 at 7:00 p.m., at City Hall in the Council Chamber/Courtroom (20025 Mack Plaza Drive, Grosse Pointe Woods, MI 48236) for the purpose of considering a special land use at 20647 Mack Avenue (Parcel ID: 40-007-01-1763-000). The subject site is zoned the C, Commercial Business District where a fast food restaurant (Playa Bowls) is a special land use. No drive-thru is permitted, dining is take-out or within the restaurant.

All interested persons are invited to attend and will be given the opportunity for public comment. The public may appear in person or be represented by counsel. Written comments will be received in the City Clerk's Office (cityclerk@gpwmi.us), up to close of business preceding the hearing. Individuals with disabilities requiring auxiliary aids or services at the meeting should contact the Grosse Pointe Woods Clerk's Office at (313) 343-2440 seven days prior to the meeting. The agenda and pertinent documents will be available at www.gpwmi.us.

For additional project information, contact the Building and Planning Department at (313) 343-2426 or e-mail: building@gpwmi.us.

Paul P. Antolin City Clerk

AFFIDAVIT OF PROPERTY OWNERS NOTIFIED

Re: 20647 Mack Avenue

State of Michigan)
) ss.
County of Wayne)

I HEREBY CERTIFY that the notice of Hearing was duly mailed First Class Mail on 08/05/2025 to the following property owners adjacent to the above property in accordance with the provisions of the 2017 City Code of Grosse Pointe Woods.

Paul P. Antolin, MiPMC City Clerk

See attached document for complete list.

City of Grosse Pointe Woods, Michigan

Notice is hereby given that the Grosse Pointe Woods Planning Commission, under the provisions of Public Act 110 of 2006, MCL 125.3101 as amended, and Grosse Pointe Woods City Code of 2022 Chapter 50, Article 7, Section 50-7.15, will hold a Public Hearing on Tuesday, August 26, 2025 at 7:00 p.m., at City Hall in the Council Chamber/Courtroom (20025 Mack Plaza Drive, Grosse Pointe Woods, MI 48236) for the purpose of considering a special land use at 20647 Mack Avenue (Parcel ID: 40-007-01-1763-000). The subject site is zoned the C, Commercial Business District where a fast food restaurant (Playa Bowls) is a special land use. No drive-thru is permitted, dining is take-out or within the restaurant.

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Paul P. Antolin City Clerk

The public may appear in person or be represented by counsel. Written comments will be received in the City Clerk's office, up to the close of business preceding the hearing. A group spokesperson is encouraged on agenda items concerning organized groups. Individuals with disabilities requiring auxiliary aids or services at the meeting should contact the Grosse Pointe Woods Clerk's Office at 313 343-2440 seven days prior to the meeting.



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MCKENNA



August 21, 2025

Planning Commission City of Grosse Pointe Woods 20025 Mack Plaza Grosse Pointe Woods, MI 48236

Subject: 20647 Mack Avenue: Special Land Use for Playa Bowls

Parcel ID: 007-01-1763-000 Special Land Use Review #1

Zoning: C, Commercial Business District

Dear Commissioners,

JK Construction, Inc. has submitted a special land use request for a fast-casual / take-out restaurant (Playa Bowls) in an existing, single-story, multi-tenant building. The restaurant unit will occupy approximately 1,224 square feet. No drive-thru is permitted, and dining is take-out or within the restaurant only.

The site is located on Mack Avenue between Vernier Road and Van Antwerp Street, and is zoned the C, Commercial Business District where take-out restaurants are a *Special Land Use. Special Land Uses* require a public hearing and consideration before the Planning Commission. A public hearing has been noticed for the August 26, 2025 Planning Commission meeting.





Recommendation

As a Special Land Use, the Planning Commission may impose reasonable standards to offset negative impacts on surrounding properties based on their findings and comments brought forth during the required public hearing.

Based upon general compliance with the City's Zoning Ordinance, it is recommended that the Special Land Use for a fast-food / take-out restaurant (Playa Bowls) at 20647 Mack Avenue be recommended to City Council, subject to the following:

- 1. The hours of operation and hours of deliveries are provided and found acceptable to the Planning Commission. Final hours of operation and deliveries must be detailed on the final site plan.
- 2. Site plan approval is granted.

This recommendation is based on the following findings:

- A. Consistency with the Master Plan. The subject site is designated as "Corridor Mixed Use" on the Future Land Use Map of the 2024 Master Plan. The proposed use aligns with the intended uses of the Corridor Mixed Use designation, which includes retail, restaurant, and personal service establishments serving nearby residents. Additionally, the current zoning district of the site (C, Commercial Business) is consistent with the Corridor Mixed Use designation.
- B. **Compatible Surrounding Land Uses.** The site is located on an existing commercial corridor. Adjacent land uses are either buffered by zoning transitions or are not expected to be negatively impacted.
- C. **No Anticipated Nuisance or Public Hazard.** The nature of the proposed business (smoothies, juices, smoothie bowls) is lower impact, with no anticipated disruptive noise, smoke, odor, glare, or vibration. The proposed use is similar in character and intensity to existing nearby commercial operations.
- D. **Support for Walkable, Mixed-Use Development.** The site is located on Mack Avenue, a commercial corridor designed to accommodate pedestrian-oriented businesses and promote a walkable environment. The reuse of an existing commercial storefront supports compact, efficient development and avoids contributing to strip-style development.
- E. **Compliance with Zoning Ordinance Intent.** The proposed restaurant use is consistent with the intent of the C, Commercial Business District to support local business development that benefits both residents and merchants.

If you have further questions, please do not hesitate to contact us.

Respectfully submitted,

McKENNA

Ashley Jankowski, AICP Associate Planner

Shley Janhowshi

Alicia Warren Associate Planner



Special Land Use Review

This project is reviewed against the Zoning Ordinance requirements and the City's Master Plan. We offer the following comments for your consideration; items that do not comply or require additional information are noted in **bold** and **underlined**.

1. HARMONY WITH MASTER PLAN (MI ZONING ENABLING ACT)

Criteria: Is the proposal consistent with the goals, policies, and future land use map of the Master Plan? Or, has the applicant demonstrated that conditions have changed significantly since the Master Plan was developed, and request is demonstrably consistent with the development trends in the area?

Findings: Complies.

The chart below details the existing land use, current zoning, and future land use designations.

The Future Land Use Map of the 2024 Master Plan designates this area as "Corridor Mixed Use". In the Master Plan, this land use classification is generally described as retail, restaurant, personal service, and office establishments which are designed for the day-to-day retail and personal service needs of nearby residents. These facilities are intended to be near residential neighborhoods with adequate buffering. The existing C. Commercial Business District corresponds to this land use classification.

The proposal complies with the future land use designation of "Corridor Mixed Use" as the use is for a smaller scale restaurant that will serve nearby residents. Additionally, this request aligns with other economic development initiatives, such as the Social District, established in 2024.

Location	Existing Land Use	Zoning Districts	Future Land Use Designation
Subject Site	Vacant	C, Commercial Business	Corridor Mixed Use
North	Retail	C, Commercial Business	Corridor Mixed Use
South	Retail	C, Commercial Business	Corridor Mixed Use
East	Public Library (across Mack Avenue)	C-F, Community Facilities	Institutional
West	Single-Unit Residential	R1-E, One-Family Residential	Single Family Medium Density

2. HAZARDOUS OR DISRUPTIVE SMOKE, FUME, GLARE, NOISE, VIBRATION OR ODOR POLLUTION (SEC. 50-4.11)

Criteria: To promote such business development insofar as it is possible and appropriate in each area, uses are prohibited [in the C Commercial District] which would create hazards, offensive and loud noises, vibration, smoke, glare, heavy truck traffic or late hours of operation.

Findings: Complies.

The restaurant will be open for quick meal services (such as smoothies, juices, and smoothie bowls) and features limited seating inside. The proposed restaurant is similar to surrounding uses, both on this



commercial block and along the greater Mack Avenue corridor. The restaurant is not expected to be hazardous or disruptive, provided the site is properly maintained.

Hours of operation are not anticipated to be a concern at this location (i.e., the Playa Bowls establishment located in downtown Ann Arbor is open daily, 9:00 AM – 9:00 PM). However, it is recommended that the hours of operation and the hours of deliveries are provided by the applicant to minimize any disruptions. Such hours of operation (and deliveries) could be conditions of approval for the Special Land Use.

3. CONSISTENCY WITH INTENT OF THE ZONING ORDINANCE (SEC. 50-3.1)

Criteria: The intent of the C, Commercial Business District is to encourage the concentration of local business areas to the mutual advantage of both the consumers and merchants and thereby promote the best use of land at certain strategic locations and avoid the continuance of encouraging marginal strip business development along major streets.

Findings: Complies.

The proposed commercial business provides a quick restaurant option to nearby residential areas. The restaurant will occupy an existing storefront along Mack Avenue, which is designed to facilitate pedestrian traffic and a mix of commercial establishments and services. The existing building is also compliant with the dimensional standards of the C, Commercial Business District.

We find that this restaurant will serve local residents, invite visitors, and encourage orderly business development along Mack Avenue.



CITY OF GROSSE POINTE WOODS

Building Department

20025 Mack Plaza, Grosse Pointe Woods, MI 48236 (313) 343-2426 – E-mail: building@gpwmi.us

SITE PLAN REVIEW & SPECIAL LAND USE

Property Owner Name: Mathew Caplan Date: 7/16/25 GPW Property Address: 20647 Mack Ave
Contractor/Applicant Name: JK (Onstruction, Inc. Celephone # 248-855-3303 Cell Phone # 248-739-0720
Contractor/Applicant Address: 7001 Orchard Lake Rd., ste. 324. W. Bloom Field, MI
E-mail: Bryane JKlonstructson/Arichigan com 48322
Il Builder's License #:
Vature of Proposed Work:
Buildout of a 1,200 s.F. take-out restarunt (Playa Bowls).
alue of Construction \$ 200,000
ection 23a of State Construction Code Act of 1972, No. 230 of the Public Acts of 1972, being Section 125.1523a of the lichigan Compiled Laws, prohibits a person from conspiring to circumvent the licensing requirements of the State relating to ersons who are to perform work on a residential building or a residential structure. Violations of Section 23a are subject to pplicant Signature: I hereby certify that the proposed work is authorized by the owner of record and that I have been outhorized by the owner of the owner of the owner of the owner of the own
to make this application as his authorized agent and we agree to conform to all applicable laws of this jurisdiction.
For Planning & Zoning Use Only Review category: Site Plan – Planning Commission Site Plan – Administration Special Land Use Use Variance Non-Use Dimensional Variance Public Hearing #
For Office Use Only
approved: Denied: Zoning Board of Approval Required #
nspector: Date://

MCKENNA



August 21, 2025

Planning Commission City of Grosse Pointe Woods 20025 Mack Plaza Grosse Pointe Woods, MI 48236

Subject: 20647 Mack Avenue: Site Plan for Playa Bowls

Parcel ID: 007-01-1763-000

Site Plan Review #1

Zoning: C, Commercial Business District

Dear Commissioners,

JK Construction, Inc. has submitted a site plan for a fast-food / take-out restaurant (Playa Bowls) in an existing, single-story, multi-tenant building. The restaurant unit will occupy approximately 1,224 square feet. No drive-thru is permitted, and dining is take-out or within the restaurant only.

The site is located on Mack Avenue between Vernier Road and Van Antwerp Street, and is zoned the C, Commercial Business District where take-out restaurants are a *Special Land Use. Special Land Uses* require a public hearing and consideration before the Planning Commission – please find our Special Land Use review under separate cover.





Recommendation

Based upon general compliance with the City's Zoning Ordinance, it is recommended that the Site Plan for a fast-food / take-out restaurant (Playa Bowls) at 20647 Mack Avenue be approved, subject to the following conditions:

- 1. Special Land Use approval is granted by the Planning Commission and City Council (including any conditions of that approval).
- 2. A 12 ft. by 50 ft. loading zone must be provided and detailed on a revised site plan.
- 3. Details on the dumpster, including its location and screening, must be provided on a revised site plan. If not enclosed and screened, the property owner / tenant may be responsible for screening improvements.

If you have further questions, please do not hesitate to contact us.

Respectfully submitted,

McKENNA

Ashley Jankowski, AICP Associate Planner

Ishley Janhowski

Alicia Warren Associate Planner



Site Plan Review

We have reviewed the proposal in conformance to the City's Ordinances and offer the following comments. Items that do not comply or require additional information are underlined.

1. ZONING DESIGNATIONS

The chart below details the existing land use, current zoning, and future land use designations:

Location	Existing Land Use	Zoning Districts	Future Land Use Designation
Subject Site	Vacant	C, Commercial Business	Corridor Mixed Use
North	Retail	C, Commercial Business	Corridor Mixed Use
South	Retail	C, Commercial Business	Corridor Mixed Use
East	Public Library (across Mack Avenue)	C-F, Community Facilities	Institutional
West	Single-Unit Residential	R1-E, One-Family Residential	Single Family Medium Density

Findings: Can comply; contingent on Special Land Use approval. Please find our Special Land Use review under separate cover. The findings in that report detail the following:

- Consistency with the Master Plan. The subject site is designated as "Corridor Mixed Use" on the Future Land Use Map of the 2024 Master Plan. The proposed use aligns with the intended uses of the Corridor Mixed Use designation, which includes retail, restaurant, and personal service establishments serving nearby residents. Additionally, the current zoning district of the site (C, Commercial Business) is consistent with the Corridor Mixed Use designation.
- Compatible with Surrounding Land Uses. The site is located on an existing commercial corridor.
 Adjacent land uses are either buffered by zoning transitions or are not expected to be negatively impacted.

2. DIMENSIONAL REQUIREMENTS

Findings: Complies. The table below and on the following page details the required dimensional standards and those that are proposed; compliance is met.

Standard Type	Requirement Details	Required	Existing / Proposed Conditions	Notes
Min. Front Setback (East)	In the Commercial Business District, no front yard is permitted where the property use is for the purposes specified in section 50-4.9 Retail businesses.	0 ft.	0 ft.	Complies



Standard Type	Requirement Details	Required	Existing / Proposed Conditions	Notes
Min. Side Setback (North / South)	In the Commercial Business District, no side yard is required on the street side of corner lots.	0 ft.	0 ft.	Complies
Min. Rear Setback (West)	In the Commercial Business District, rear yards are not required along interior rear lot lines for buildings or parts of buildings not used as dwellings, if all walls abutting or facing such lot lines are of fire-proof construction and wholly without windows or other openings.	0 ft.	0 ft.	Complies
Max. Building Height	2 stories, 28 ft.	2 stories, 28 ft.	1 story, ~20 ft.	Complies

3. ARCHITECTURE AND BUILDING DESIGN (SEC. 50-5.18)

The Zoning Ordinance's design standards are intended to promote a coordinated and complimentary use of design elements that result in a theme-oriented, harmonious appearance and image for commercial and high intensity residential areas. Per Section 50-5.18, "New construction, renovations, remodeling, or exterior building alterations in the C, Commercial Business District shall be in conformance with approved design standards."

Findings: N/A. No changes to the exterior façades of the building are proposed as part of this application.

4. PARKING AND LOADING (SEC. 50-5.3)

Per Section 50-5.3(H), establishments for the sale and consumption of beverages, food, or refreshments require "one off-street parking space for each employee on the premises during peak shift." The maximum number of employees during peak shift is four employees, however a typical shift consists of two- to three-employees.

Building Square Footage	Number of Off- Street Parking Spaces Required	Number of Off- Street Parking Spaces Provided	Number of Parking Spaces within 500 ft.	Total Parking Spaces Available (on- and off- site) within 500 ft.
N/A	4 parking spaces	2 parking spaces (behind the building)	7 parking spaces directly along the block (Mack Avenue)	9 parking spaces (just on this block, additional within 500-ft.)

Findings: Can Comply. Per Ordinance 907 and Section 50-5.3 (Off-Street Parking Requirements), "the off-street parking facilities required for all other uses shall be located on the lot or on property in the city within 500 feet of the permitted use requiring such off-street parking". Within 500 feet of the property, the site exceeds the required 4 off-street parking spaces.



The two rear parking spaces can also comply with the minimum required dimensions of 9 feet by 19 feet.

However, a 12 ft. by 50 ft. loading zone must also be provided on the site. The loading zone can utilize the rear alley or be a shared loading space (in conjunction with other tenants in the building) but its location and dimensions must be provided. Information on the location of the loading zone must be detailed on a revised site plan.

5. LANDSCAPING (SEC. 50-6.1)

The Ordinance requires that site design shall provide reasonable visual and sound privacy for dwelling units located within the project and adjacent to the project. Fences, walks, barriers, and landscaping shall be used, as appropriate, for the protection and enhancement of property and the privacy of its occupants.

Findings: N/A. No additional landscaping or screening is proposed at this time.

6. SIGNS

Chapter 32 of the City's Code of Ordinances details signage requirements.

Findings: N/A. No signage is proposed at this time. Any future exterior signage must be submitted under separate cover for administrative review and approval.

7. LIGHTING

The Ordinance requires that exterior lighting be designed so that it is shielded from adjacent properties and so that it does not impede the vision of traffic along adjacent streets.

Findings: N/A. No changes to the exterior site lighting is proposed at this time. Any future exterior lighting must be submitted under separate cover for review.

8. TRASH RECEPTACLES

The Ordinance requires that trash receptacles be screened with quality materials that complement the site and adjacent properties.

Findings: Undetermined. It is unclear whether the applicant will use an existing dumpster that may be shared by the tenants on this block. Details on the dumpster, including its location and screening, must be provided on a revised site plan. If not enclosed, the property owner / tenant may be responsible for screening improvements.



GROSSE POINTE WOODS

20025 MACK PLAZA GROSSE POINTE WOODS, MI 48236 PHONE: 313-343-2426 – Email: building@gpwmi.us

SIGN PERMIT APPLICATION

ZONING COMPLIANCE INCLUDES Signs, awning, and banners. **NOTE**: This list is not all-inclusive. If you have any questions, please call the Building Department @ 313-343-2426.

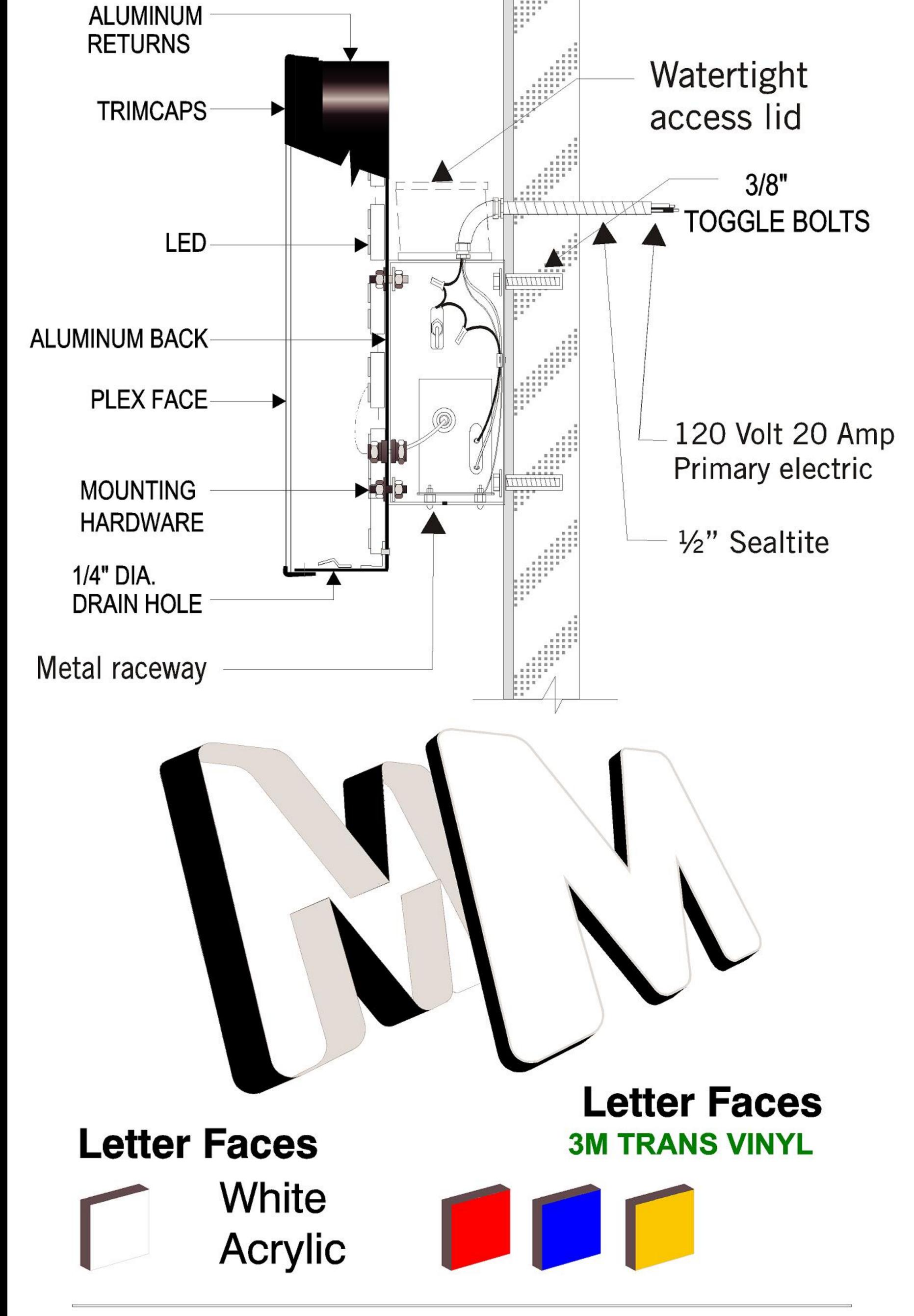
All signs shall be installed per chapter 32 (signs) of the City of Grosse Pointe Woods Code of Ordinance. *NOTE: Property Owner's approval signature is required. Separate permits required for each sign.

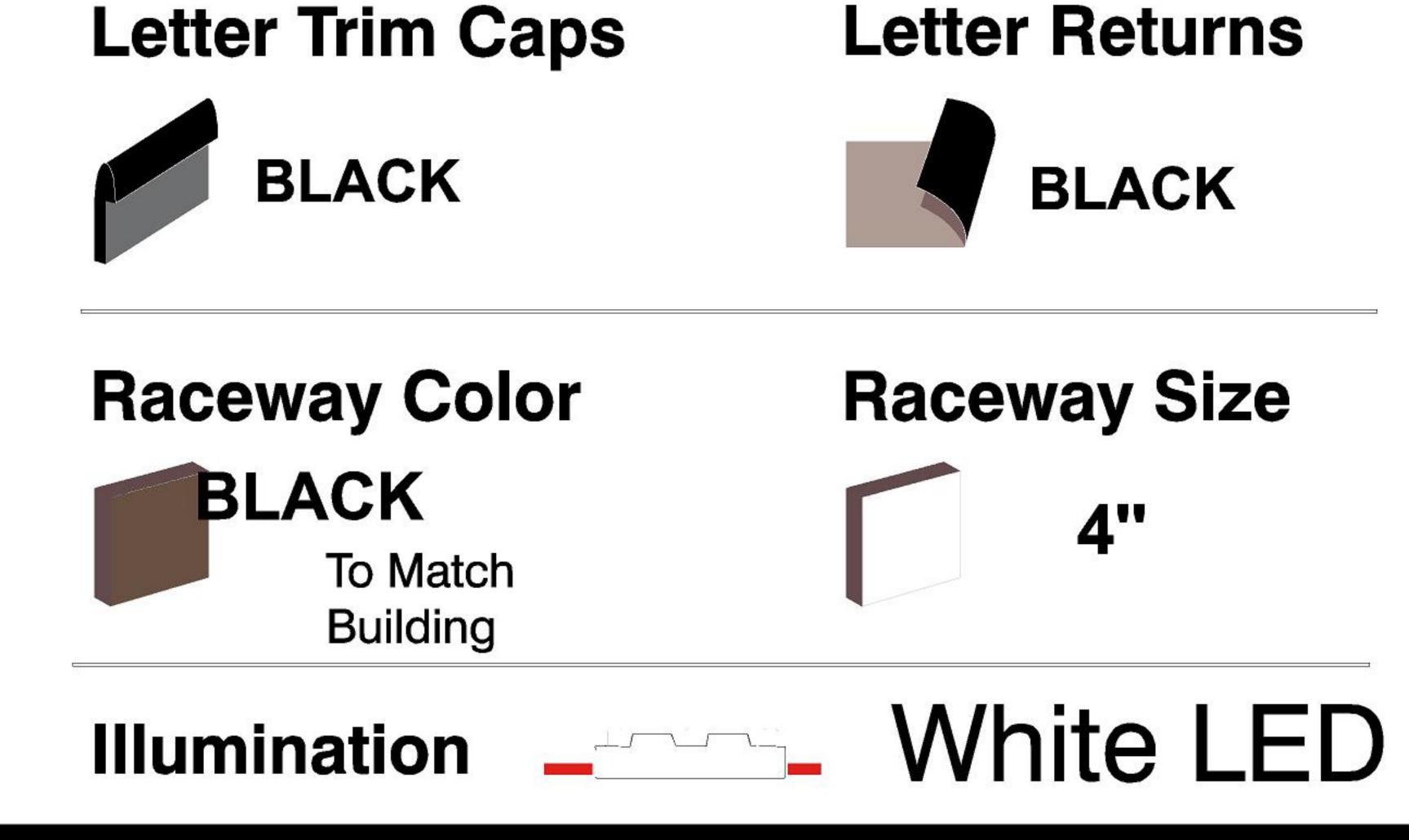
sign.	
GPW Business Information:	
BUILDING ADDRESS: 19815 U	niteB Mack Ave
BUSINESS NAME: Mynd the	ya
BUSINESS OWNER'S NAME: Wrick	olas Mishel
PHONE:E-MAIL:	
* <u>PROPERTY</u> OWNER'S APPROVAL:	111
Frank Arcori	
Property Owner NAME (please print)	Property Owner SIGNATURE
Sign Company Information:	•
NAME/CONTACT: Abdallah Ghou	U Sign Pros
PHONE: 313 403-1800 E-MAIL: M	isignpos@gmail.com
CONTACT NAME: Abdallah Chow	
ADDRESS: 1088 Southfield R	
LICENSE #: LIC 2022 -01079	EXP DATE: 12/31/ 2025

Sign Description:						
TYPE: Led Channelletter Sign						
BUILDING WIDTH: 1, 1 SIGN DIMENSIONS: 3'X \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \						
MATERIAL IN FACE OF SIGN: A C 14 \ C						
color combinations: white 8 Tile.						
SINGLE FACE [] DOUBLE FACE [] FONT STYLE:						
ILLUMINATION: INTERIOR EXTERIOR *Illuminated sign needs separate electrical permit.						
NUMBER OF MESSAGE UNITS: FONT HEIGHT:						
Applicant's Name & Signature: Abdall ah Chal Welle						
Office Use Only						
Received by: Date:						
APPROVED BY: Date: Date:						
Variance Application Fee - \$150~ please see Section #32-32 Appeals						

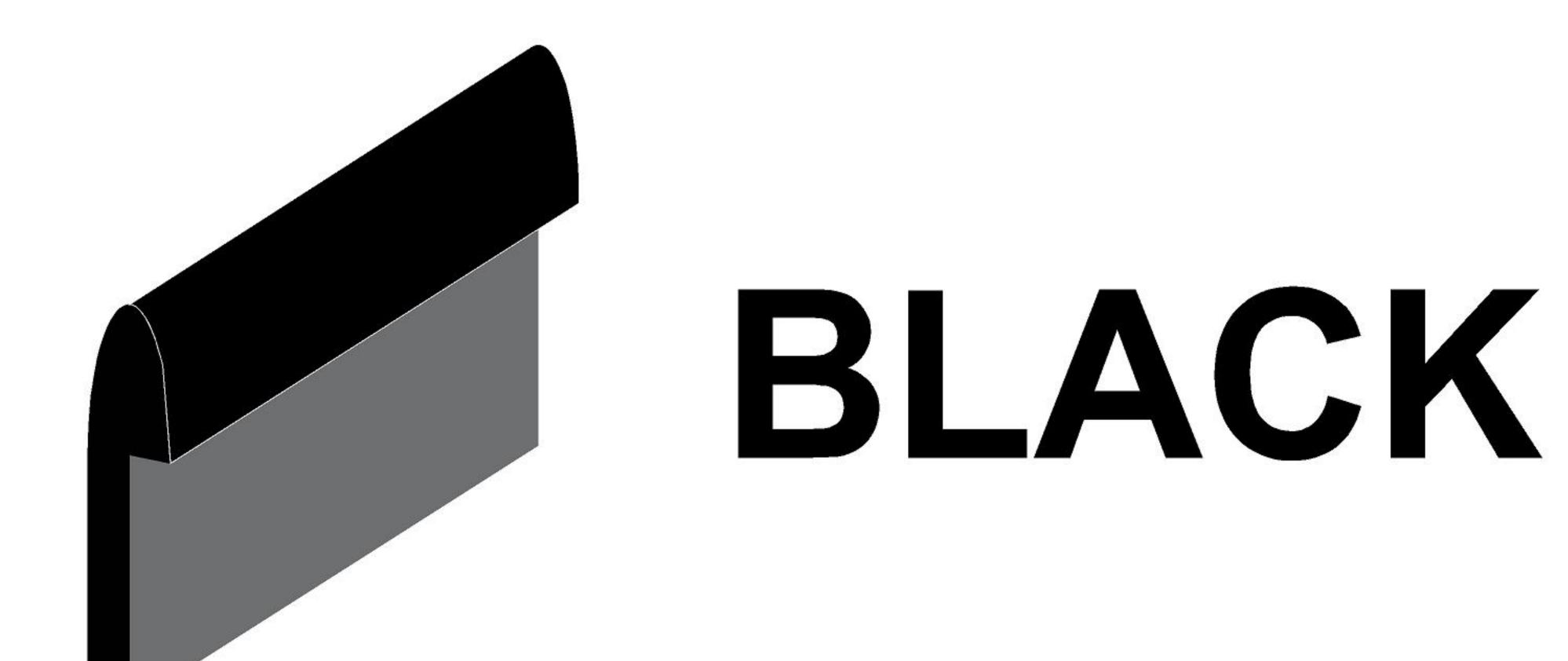


CHANNEL LETTERS ON RACEWAY

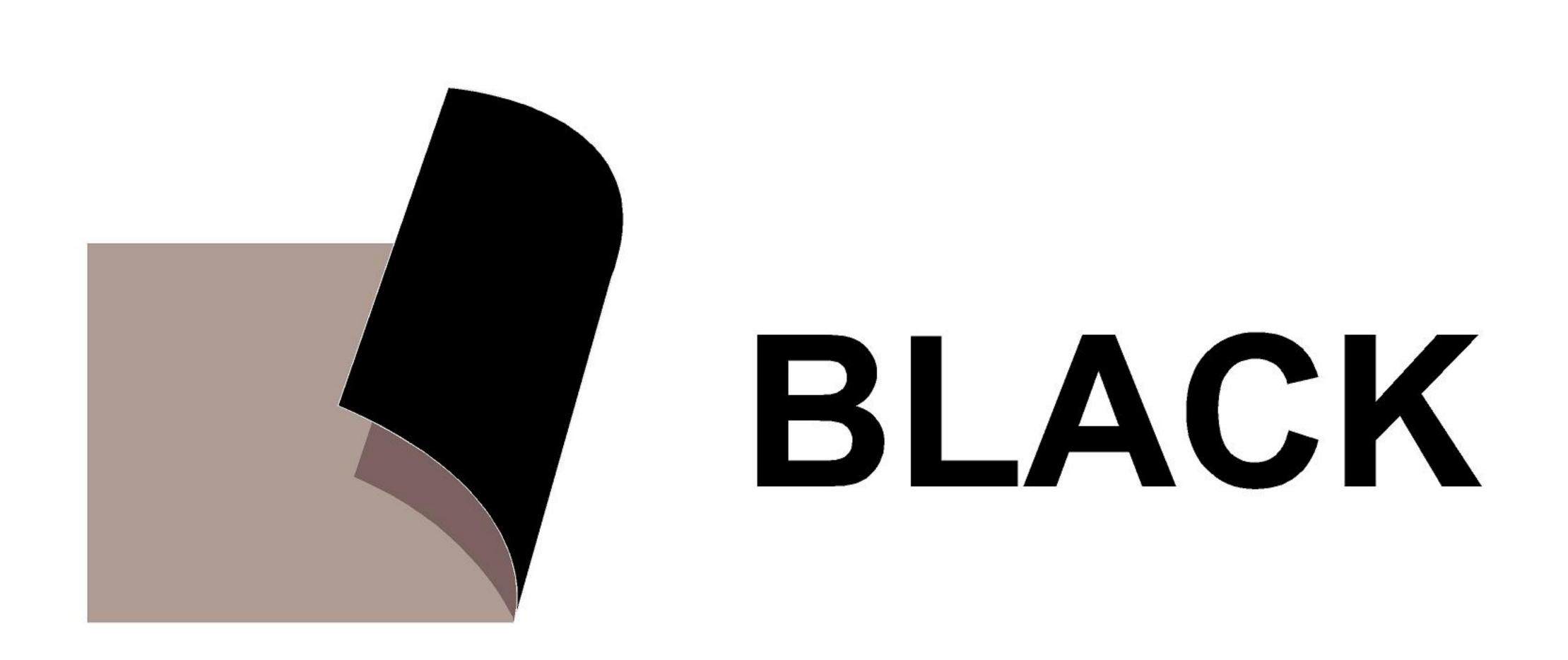




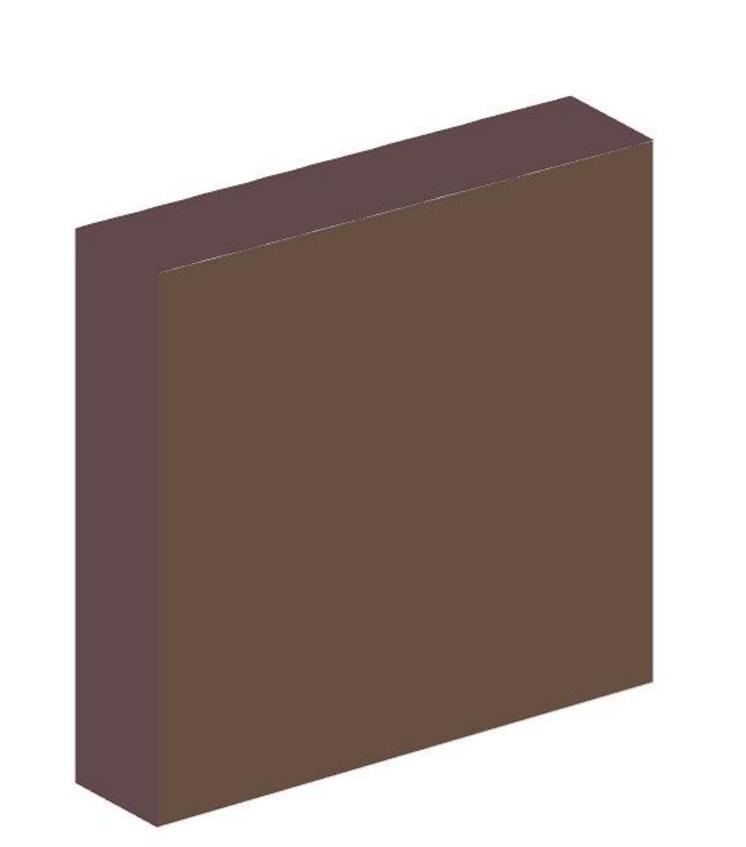
Letter Trim Caps



Letter Returns



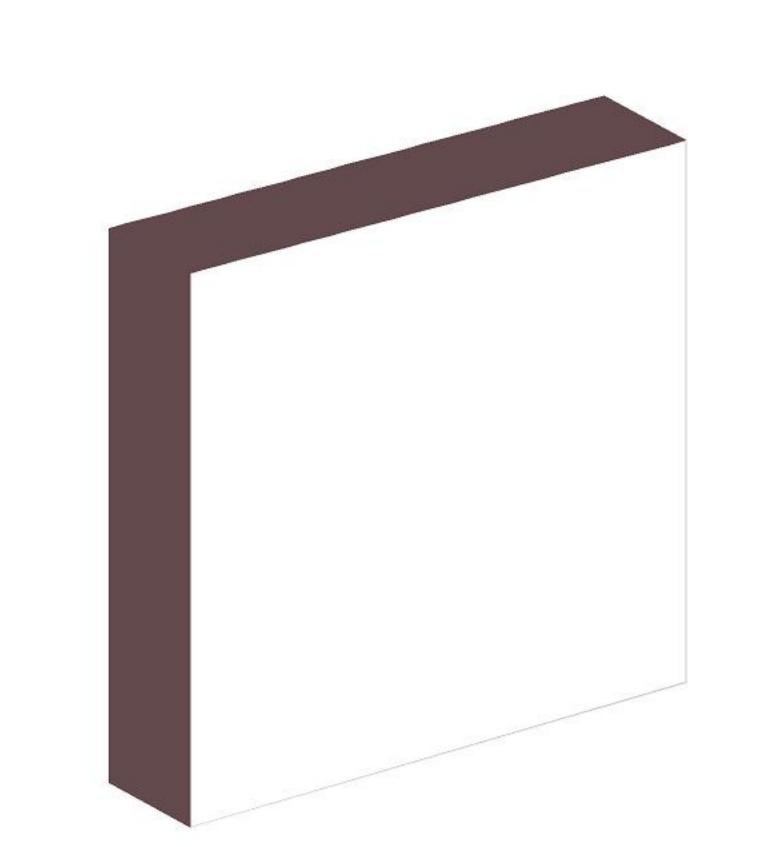
Raceway Color



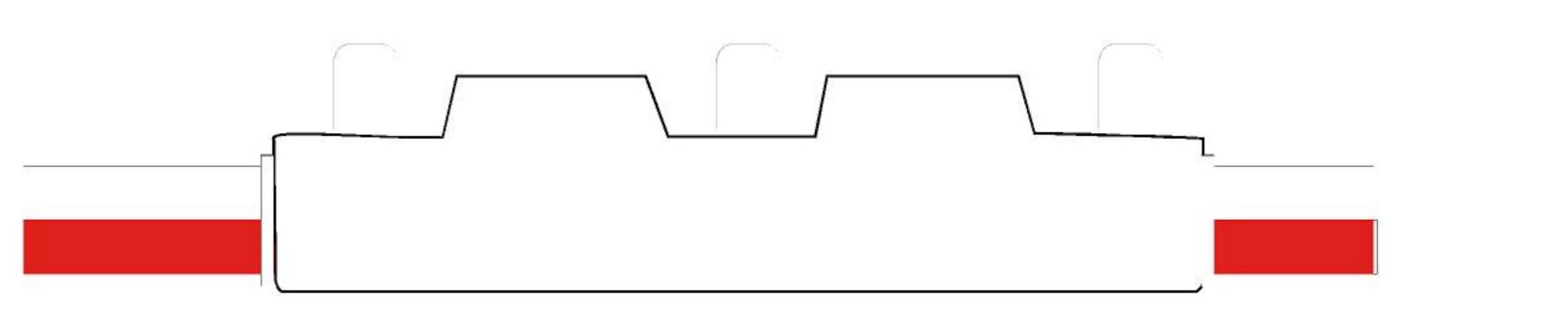
BLACK

To Match Building

Raceway Size



Illumination



Mhite LED

CHANNEL LETTERS ON RA TRIMCAPS LED **GGLE BOLTS** ALUMINUM BACK PLEX FACE MOUNTING HARDWARE 1/4" DIA. " Sealtite Metal raceway Letter



19815 Mack Ave Grosse Pointe Woods, MI 48236 (UNITE B)

117" span



Brushed Aluminum pan formed sign with push through acrylic letters/logo



14'

Building is 44' wide. Sign is 42 sq. ft.



MCKENNA



Sign Review

TO: Building Department, City of Grosse Woods

FROM: Planning Department SUBJECT: Myndthera: Review #2

19815 Mack AvenueZONING: C, Commercial Business District

DATE: August 19, 2025

RECOMMENDATION:		Approved as Presented
		Conditionally / Partially Approved
		Denied
		Additional Information / Revised Plans Necessary
NOTES:	two wa maximu exempt building As a m the enti	plicant is proposing one wall sign on a multitenant building that already includes II signs for a pre-existing business. The proposed sign would exceed the um number of signs allowed per building. Generally, multitenant buildings will be ted from the maximum number of sign restrictions providing a 'master'/overall g plan is applied for and approved by the Planning Commission. ultitenant building, the applicant has submitted a master sign plan which identifies rances to separate businesses in the building and the proposed/current location
	Approv	s, in order for the Planning Commission to consider approval of additional signs. val of the proposed wall sign is recommended, provided the Planning ission finds the sign consistent with the sign plan for the overall enant building. The wall sign complies with all other sign standards of the Code.

This application will be considered at the August 26, 2025, Planning Commission

meeting.



SIGN SUMMARY

Myndthera (19815 Mack Avenue, Unit B) proposes one wall sign on the side elevation of the building, facing an interior parking lot.

SECTION 32-1: SIGN PURPOSE & OBJECTIVES

The signage generally complies with the following objectives:

- 1. Protect the aesthetic quality of the city.
- 2. Protect the general public from damage and injury caused by the distractions, hazards and obstructions caused by excessive signage.
- 3. Preserve the value of property by ensuring the compatibility of signage with surrounding land uses.
- 4. Keep signs within a reasonable scale with respect to the buildings to which they relate.
- 5. Prevent off-premises signs from conflicting with business, residential and public land uses.
- 6. Prevent the placement of signs in a manner which will conceal or obscure other signs or adjacent businesses.
- 7. Keep the number of signs and sign messages at the level reasonably necessary to identify a business and its products.
- 8. Prevent hazards due to collapse, fire, collision, decay or abandonment of signage.
- 9. Provide signage that will harmonize with the building upon which it is placed and the adjoining properties.

SECTION 32-11(D): MISCELLANEOUS PROVISIONS

 Wall signs shall be constructed of noncombustible material, except that approved combustible materials or approved combustible plastics may be used as provided in this Code, and wood may be used for moldings and purely ornamental features.

Findings:

Complies; the sign lettering will be constructed of acrylic and transparent vinyl, and the raceway will be aluminum.

2. Wall signs shall not project beyond an established building line or a street property line, or into alleys.

Findings:

Complies.

3. No wall sign shall be attached to a building in such manner so as to obstruct any door, window, fire escape or ventilating system.

Findings:

Complies.

4. Wall signs shall not be erected to extend above the top of a wall or beyond the ends of the wall to which they are attached.

Findings:

Complies.



5. No wall sign shall be more than 8-inches thick.

Findings:

Complies; the sign only extends 4-inches from the face of the building.

6. No wall signs shall be attached to any parapet wall.

Findings:

Complies.

7. No wall sign may be painted onto any building wall.

Findings:

Complies.

SECTION 32-13: WALL SIGNS

1. Where wall signs are placed to cover transom windows, the glass in such transoms must be removed and a steel frame in the form of steel studs covered on both sides with metal lath and cement plaster must be provided before the wall sign is erected. In filing applications for the erection of such signs over transoms, it will be necessary that complete detailed sketches be included showing compliance with all these requirements before a permit can be granted. All wall signs to be placed on mansard facades are to be constructed of individual characters, on a raceway or applied directly to the facade.

Findings:

This standard is not applicable to this application.

2. All applications for the erection of a wall sign shall show the location of the sign, details of the building to which the sign is to be attached, the size, color and appearance of the sign and all necessary details for fabrication and erection of such sign and any other requirements as detailed on the application.

Findings:

Complies.

3. Regarding the maximum sign area and height, the following applies:

Front Façade Wall Sign					Side Façade Wall Sign	Rear Façade Wall Sign
Linear Feet of Building Frontage	<40 feet	41 – 60 feet	61+ feet		Any	Any
Max. Sign Area	30 square feet	42 square feet	48 square feet		12 square feet	9 square feet
Max. Sign Height	3 feet (36-inches)				3 feet	3 feet
Proposed Sign(s)	*29.5 square feet 34.5-inches in height	n/a	n/a		n/a	n/a

^{*}This sign is placed on the side façade, above the entry for the business on the interior lot.

Findings:

Complies. The proposed area of the side façade wall sign is 11.6 square feet, with a height of 12-inches.



SECTION 32-10: MESSAGE UNITS

A message unit is a word, an abbreviation, a number containing up to ten digits, a symbol, a geometric shape or a person's or firm's initials containing up to 11 letters. Punctuation marks are not counted in computing the number of message units.

The total of all signs on a property shall not contain in excess of a total of ten message units, except as otherwise provided.

Findings:

Complies; the sign features six message units: "MyndThera", one cloud shape, and four dotted lines.

SECTION 32-29: DESIGN OF LETTERING & SIGN FACES

1. Lettering. A list of approved and prohibited lettering styles will be maintained by the building official as approved by the planning commission resolution. Signs shall be comprised of not more than two styles of lettering. There shall be no more than three sizes of lettering per sign.

Findings:

Complies, the wall sign has two styles of proposed lettering, and two sizes of proposed lettering.

2. Colors. A maximum of three complimentary, muted colors or shades of colors may be used for a sign. A list of approved colors is maintained by the building official, as approved by the Planning Commission.

Findings:

Complies, the sign is composed of three complimentary colors: black, teal, and grey lettering.

SECTION 32-6 AND 32-7: ILLUMINATION

1. All internally illuminated signs shall be constructed so as to produce or emit a subdued lighting effect. Backlighted individual letters are permitted. Interior illuminated signs shall be constructed so that the background face of such sign is opaque or nearly opaque so as to allow the illumination of only letters, numbers, or logos on the display surface so that minimal light passes through the background.

Findings:

The plans indicate that the letters shall be internally illuminated with white LED lights. The plans provided show 120 Volt, 20 Amp fixtures. The design of the sign uses channel letters and the lighting is proposed to illuminate only the letters. Complies.

2. The display surface of signs permitted under the provisions of this chapter facing Mack Avenue may be illuminated by externally mounted incandescent lights directed to shine upon the display surface and shielded from shining at other than the display surface. Such incandescent lighting shall not exceed 150 watts for every 20 square feet of display surface illuminated.

Findings:

N/A.



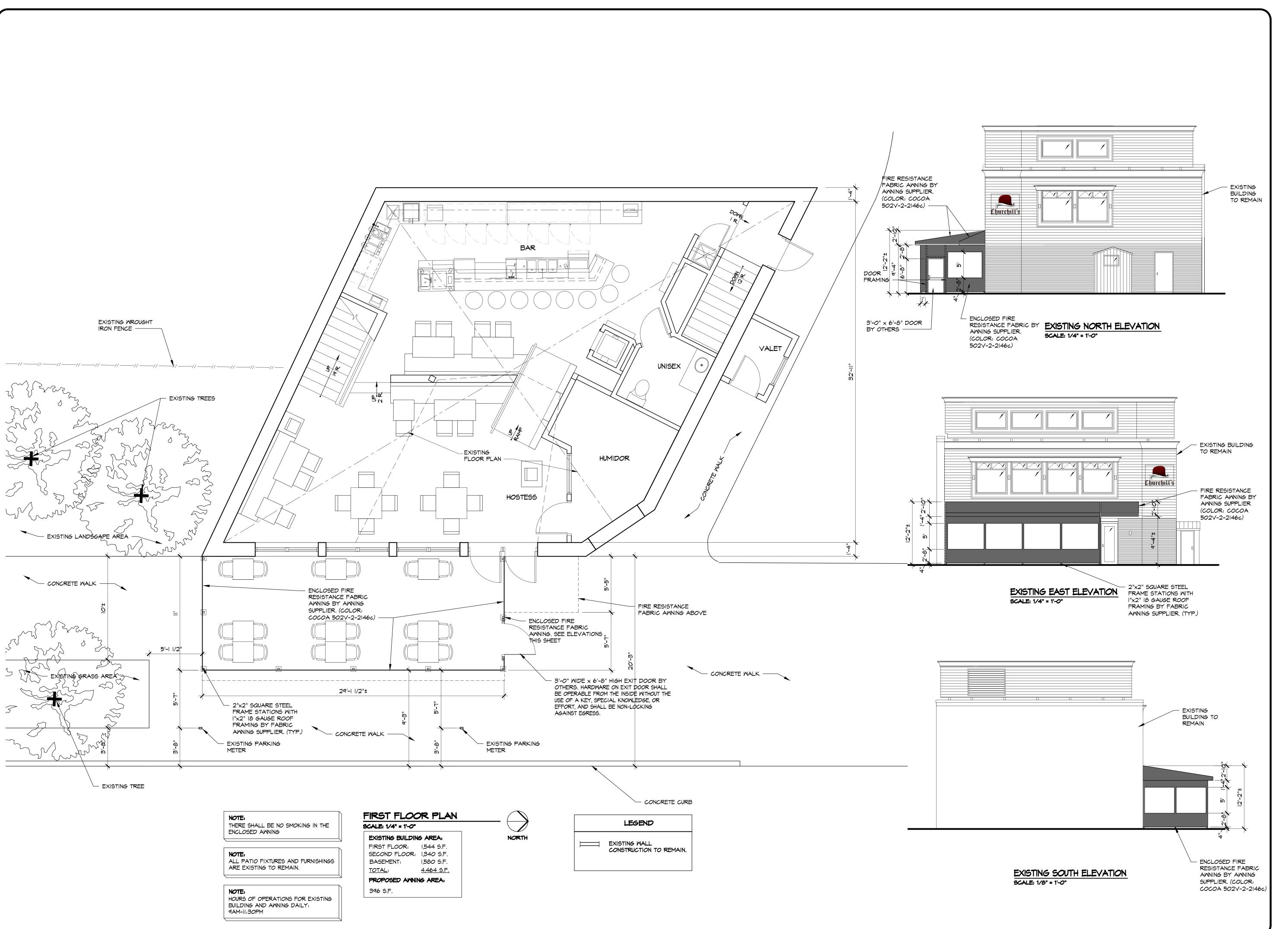
CITY OF GROSSE POINTE WOODS

Building Department

20025 Mack Plaza, Grosse Pointe Woods, MI 48236 (313) 343-2426 – E-mail: building@gpwmi.us

SITE PLAN REVIEW & SPECIAL LAND USE

COMMERCIAL – Zoned As – Please Check One: C – Commercial Business () RO-1 – Restricted Office () P-1 – Vehicular Parking () CF – Community Facilities () C-2 – High Intensity City Ctr					
Property Owner Name: CHURCHIUS CIGAR BAR Date: 7/30/2025					
GPW Property Address: 19271 MACK AVE					
Telephone #: Work Home/Cell: 248 - 939 - 2020					
Contractor/Applicant Name: GUMMA GROOP (JOHN)					
Telephone # 248 865 5555 Cell Phone # 148 - 640 - 500/					
Contractor/Applicant Address: 7419 MIDNOPEUT RD, SUITEY, WEST BLODAFIELD,					
E-mail: JOHN @ GUMMA GROUP, NET 4832					
MI Builder's License #: MI Driver's License #:					
Nature of Proposed Work:					
Value of Construction \$ \(\begin{align*} \int \text{Dioo} \cdot \text{T} \\ Section 23a of State Construction Code Act of 1972, No. 230 of the Public Acts of 1972, being Section 125.1523a of the Michigan Compiled Laws, prohibits a person from conspiring to circumvent the licensing requirements of the State relating to persons who are to perform work on a residential building or a residential structure. Violations of Section 23a are subject to civil fines. Applicant Signature: I hereby certify that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and we agree to conform to all applicable laws of this jurisdiction.					
For Planning & Zoning Use Only					
Review category: Site Plan – Planning Commission Special Land Use Public Hearing # Site Plan – Administration Non-Use Dimensional Variance Public Hearing #					
For Office Use Only					
Approved: Denied: Zoning Board of Approval Required #					
Inspector: Date:/					





www.GUMMAGROUP.net

7419 Middlebelt Rd. Suite 4 West Bloomfield, MI 48322 (248) 865-5555 Fax (248) 865-5015

Project:

Churchill's

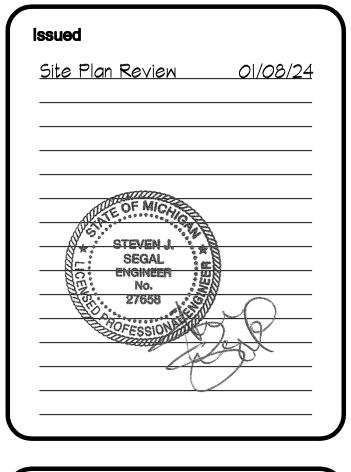
Cigar Bar

PATIO AWNING

19271 Mack Avenue Grosse Pointe Woods, MI 48236

Designed	<u>JG</u>
Drawn	LA
Approved	<u>55 P.E.</u>
Scale	AS NOTED

Notes	
All drawings and writ	tten material appearing herein
constitute original an	d unpublished work of Gumma Group
and may not be dupl	icated, used or disclosed without the
written consent of G	umma Group.
De not evel deside	
	gs. Use given dimensions only. If
not shown, verify co	<u>rrect dimensions with Gumma Group.</u>
Contractor shall che	ck and verify all dimensions and
conditions at job site	•



Sheet Title and Number

Floor Plan / Elevations

A-1

MCKENNA



August 21, 2025

Planning Commission City of Grosse Pointe Woods 20025 Mack Plaza Grosse Pointe Woods, MI 48236

Subject: 19271 Mack Avenue: Site Plan for Churchill's Cigar Bar

Parcel ID: 015-99-0007-000 Site Plan Review #1 (in 2025)

Zoning: C-2, High Intensity City Center District

Dear Commissioners,

Blair Belluomo of Belle Isle Awning (on behalf of Churchill's Cigar Bar) proposes to construct a screened-in awning and welded frame around the existing outdoor patio area for year-around outdoor dining (total of 396 square feet). The enclosed dining space and patio awning protrudes into the County right-of-way along Mack Avenue. The site is zoned the C-2, High Intensity City Center District.

A similar Site Plan for this patio enclosure was previously submitted and reviewed by the Planning Commission on January 23, 2024. At that meeting, the Site Plan was tabled due to a series of missing information, including lighting, ventilation removable sides, secondary exits, and other items. Since the last review of the Site Plan, the Zoning Ordinance has been amended to allow for Outdoor Café Permits (Ordinance No. 913).





Recommendation

Based on the number of outstanding / undetermined items with the City's Zoning Ordinance, we recommend the Planning Commission use the August 26th meeting to provide direction to the applicant on the proposed 5-foot pedestrian walkway and review the proposed building materials.

Following that discussion, it is recommended that the Planning Commission table the site plan for 19271 Mack Avenue, for up to 6-months.

The following outstanding items must be addressed on a revised site plan:

- 1. Inclusion of the adjacent landscaping, trees, and parking meters in the public right-of-way as required in outdoor café permit applications, to ensure there is adequate ADA compliant space on the sidewalk. The site plan must also provide information on the existing square footage of the building.
- 2. Confirmation of when the enclosed awning will be operational.
- 3. Notes added to a revised site plan, as underlined in this report.
- 4. Additional information regarding current parking counts and the number of employees on the peak shift.
- 5. Documentation from Wayne County regarding final approval for encroachment into the Mack Avenue right-of-way.
- 6. Documentation from the Public Safety Department, confirming adequate ventilation in the enclosed dining area given the nature of the business.

If you have further questions, please do not hesitate to contact us.

Respectfully submitted,

McKENNA

Ashley Jankowski, AICP Associate Planner

Libbey Janhowski

Alicia Warren Associate Planner

X Wormen



Site Plan Review

Upon review of the proposed site plan compared to the applicable ordinance standards, we offer the following comments for your consideration. This review is limited in scope to the applicants' request for an outdoor café space.

Items that do not comply or require additional information are underlined.

1. ZONING DESIGNATIONS

Findings: Can Comply. Per Section 50-6.5.A.2, the proposed permanent outdoor dining area is classified as an outdoor café, which is only allowed in the C and C-2 Districts; the proposed enclosure is a permitted use in the district.

The request for an awning enclosure also requires Building Official approval, and permission from Wayne County for encroachment into the Mack Avenue right-of-way. While conditional approval from Wayne County has been granted, documentation of final Wayne County approval must be provided.

2. DIMENSIONAL REQUIREMENTS

Findings: Undetermined. The total area (footprint) for the outdoor seating area is approximately 396 square feet (36' x 11'). However, the awning extends slightly beyond the enclosed seating area.

There is no direct access to the outdoor dining area from the public sidewalk. Customers must enter the building to access the outdoor dining area. There is an emergency exit door inside the patio (that only opens from the inside).

The Ordinance requires a minimum sidewalk clearance of 4 feet in width. This is provided; however, due to the landscaping on the adjacent property, it appears that there is a sharp 90-degree turn that may impede sidewalk use. The Ordinance stipulates "Use may not create a hazard, obstruct motor vehicles or unduly impede sidewalk use." The approximately 5-foot sidewalk complies with ADA accessibility minimums; however, the narrow 90-degree turn may cause mobility and accessibility challenges. The Planning Commission must determine if the layout of this corner is sufficient in maintaining the health, safety, or general welfare of pedestrians, or if the distance should be increased.

The applicant must also detail the surrounding landscaping, trees, parking meters, and any other surrounding features, as required in the application for the outdoor café permit (Section 60-6.5). This is necessary to determine if there is sufficient unobstructed space in the public right-of-way.

3. ARCHITECTURE AND BUILDING DESIGN (SEC. 50-373)

Findings: Undetermined. The proposed awning and enclosure are constructed with welded steel and fire-resistant awnings. The design and materials appear to be consistent with the abutting building. The awning will be the color "cocoa", which is consistent with the neutral colors of the building.



The applicant verbally expressed an interest to use the awning and patio year-round, rather than only during the colder months (November 2 – April 30); however, this must be confirmed and so noted on the site plan.

Per Section 50-6.1(G)(7), the applicant must also bring samples of the proposed building materials to the Planning Commission meeting for review and final approval.

Lastly, we defer to Public Safety to confirm adequate ventilation in the enclosed dining area given the nature of the business.



4. PARKING AND LOADING (SEC. 50-5.3)

Findings: Undetermined. Per Section 50-5.3(H), establishments with on-site consumption of food and beverages require one off-street parking space for each 200 square feet of gross floor area, plus one for each employee during the peak shift.

While the outdoor dining area is already in use (seasonally), the off-street parking requirements must be reevaluated and additional information, including current parking counts and the number of employees on the peak shift, must be provided by the applicant on a revised site plan.

5. OUTDOOR PATIO AREAS

Per Section 50-4.16, outdoor patio areas for the sale and service of food and beverages must also meet the following standards:

A. The permit issued shall be personal to the permittee and shall be transferable only with the written approval of the city administrator.

Findings: Complies.

B. The city may require the temporary removal of outdoor cafes by the permittee when street, sidewalk or utility repairs necessitate such action or when it is necessary to clear or repair sidewalks. The permittee shall be responsible for removing all outdoor cafe fixtures at least two days prior to the date identified in writing by the city. The permittee shall not be entitled to any refund for such removal. The city shall not be responsible for any costs associated with the removal or the return and installation of any outdoor cafe fixtures.

Findings: Complies.



- C. The use shall be specifically limited to the outdoor cafe area shown in the application. **Findings: Complies.**
- D. The permittee shall ensure that the outdoor cafe does not interfere with or limit the free unobstructed passage of sidewalk users in the approved pedestrian path. In the event the cafe utilizes a portion of the sidewalk, then the seating must be adjacent to the building.

 Findings: Undetermined (see #2 above).
- E. Tables, chairs, umbrellas, awnings and any other fixtures used in connection with an outdoor cafe shall be maintained with a clean and attractive appearance and shall be in good repair at all times.

 Findings: Can comply; a note to this effect must be added to a revised site plan.
- F. No tables, chairs or any other fixtures used in connection with an outdoor cafe shall be attached, chained or in any manner affixed to any tree, post or sign.

 Findings: Can comply; a note to this effect must be added to a revised site plan.
- G. No additional outdoor seating authorized herein shall be used for calculating eating requirements pertaining to the location of, applications for, or issuance of a liquor license for any establishment, nor shall the additional seats be used to claim any exemption from any other requirements of any city, county or state codes, ordinances and/or laws.

 Findings: Complies.
- H. The opening and closing hours of the outdoor cafe shall not extend beyond the hours of operation for the business establishment holding the outdoor cafe permit and shall not extend later than 2:00 a.m. Findings: Complies (hours of operation are 9:00 AM 11:30 PM).
- 1. The use shall not unduly impact nearby residential or commercial properties. Findings: Complies.
- J. The permittee is responsible for repair of any damage to the sidewalk caused by the outdoor cafe. Findings: Can comply; a note to this effect must be added to a revised site plan.
- K. No signs shall be permitted within the outdoor cafe area. Findings: Complies (no signs are proposed).
- Permittee shall meet all other city, Wayne County and state regulations, laws or ordinances, and requirements before a permit is issued.
 Findings: Can comply; Wayne County documentation of final approval for the right-of-way encroachment must be provided.
- M. For applications involving alcohol sales: No permit will be issued until LCC approval is provided. Findings: Can comply; documentation of LCC approval must be provided.



- N. No music, television or similar entertainment is allowed within the outdoor cafe area. **Findings: N/A.**
- O. In the event the application involves use of the right-of-way between the sidewalk and the curb, the city shall require improvement of that area by construction of an approved surface such as brick pavers, exposed aggregate, stamped concrete, tiles or other decorative hard surface subject to Wayne County approval. Asphalt and standard concrete are not considered approved surfaces.

 Findings: Can comply; Wayne County documentation of final approval for the right-of-way encroachment must be provided.
- P. Except as otherwise provided in subsection F, the permittee shall have until November 8th to remove all objects relating to the outdoor cafe, except any existing decorative hard surface. **Findings: N/A.**

MY NAILS INTERIOR RENOVATION

19483 MACK AVE. GROSSE POINTE WOODS, MI 48236

BUILDING CODES & DESIGN STANDARDS:

PROJECT LOCATION: PORT HURON, 2021 MICHIGAN MECHANICAL CODE 2021 MICHIGAN PLUMBING CODE 2023 MICHIGAN PART & ELECTRICAL CODE

2015 MICHIGAN UNIFORM ENERGY CODE-COMMERCIAL

2015 INTERNATIONAL PROPERTY MAINTENANCE CODE 2015 MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS ALTERATION LEVEL 2, W/ REFERENCES TO MICHIGAN BUILDING CODE

THIS PROJECT INVOLVES AN INTERIOR RENOVATION OF AN EXISTING VACANT STORE FOR THE NEW TENANT NAILS REVIVE. THE WORK WILL INCLUDE ARCHITECTURAL, MECHANICAL & ELECTRICAL ENGINEERING FOR THE PROPOSED LAYOUT.

TITLE SHEET, LOCATION, DEMOLITION, & FLOOR PLANS

REFLECTED CEILING PLAN & DETAILS

DOOR SCHEDULE, DETAILS & BARRIER FREE MOUNTING HEIGHTS MECHANICAL LEGENDS, SYMBOLS, SHEET INDEX & DEMOLITION PLAN

OVERALL PLUMBING FLOOR PLAN

OVERALL HVAC & ROOF PLAN MECHANICAL SCHEDULES

MECHANICAL DETAILS MECHANICAL SPECIFICATIONS

ELECTRICAL RISER DIAGRAM, GENERAL NOTES, & SCHEDULES

ELECTRICAL FLOOR PLANS- DEMOLITION, POWER & LIGHTING

BUILDING DATA:

TENANT AREA: 2,506S.F. GROSS AREA (EXCLUDING EXTERIOR & DEMISING WALL THICKNESS)

CONSTRUCTION TYPE: TYPE IV B USE GROUP: B BUSINESS

MAXIMUM TRAVEL DISTANCE 200'

NON-SPRINKLED

OCCUPANCY CALCULATION: (BY RATIO)

BUSINESS (1 PER 100 S.F. GROSS) 2,506S.F. \times 80%=2,004.8/100=20.03=20 OCCUPANTS ACTUAL 100% FULL SEATING @ PEDICURE & MANICURE TABLES 48 OCCUPANTS TWO BARRIER FREE TOILET ROOMS

EGRESS OCCUPANT LOADS:

TOTAL NUMBER OF OCCUPANTS (BY RATIO): 48 EGRESS

WIDTH/OCCUPANT (1005.1 IBC): 0.2 EGRESS WIDTH REQUIRED: NO. OF OCCUPANTS X EGRESS WIDTH

18 × Ø.2"= 9.6" EGRESS WIDTH PROVIDED: 72"

NUMBER OF EXITS REQUIRED (TIØ21,1 IBC): 1

NUMBER OF EXITS PROVIDED: 2

GENERAL NOTES:

I. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR THE WORK NOTED HERE IN. COORDINATE ALL DRAWINGS/NEW WORK & NOTIFY ARCHITECT/ OWNER OF ANY DISCREPANCIES IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR TAKING FULL RESPONSIBILITY & LIABILITY FOR SAID DISCREPANCIES.

. ALL DIMENSIONS ARE SHOWN FROM FINISH FACE TO FINISH FACE OF PARTITION UNLESS OTHERWISE NOTED. 3. WALL THICKNESS ARE NOMINAL NOT ACTUAL DIMENSIONS. SEE WALL SCHEDULE FOR ACTUAL DIMENSIONS. 4. ALL WOOD, INCLUDING BLOCKING, USED SHALL BE FIRE RETARDANT TREATED.

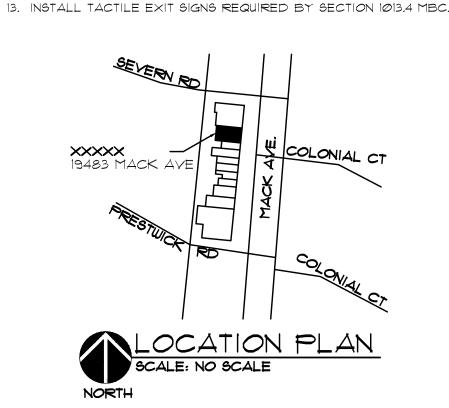
5. ALL WORK SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, COUNTY CODE REGULATIONS, & O.S.H.A. 6. PROVIDE POSITIVE SLOPE TO ALL FLOOR DRAINS WHILE KEEPING FLOOR

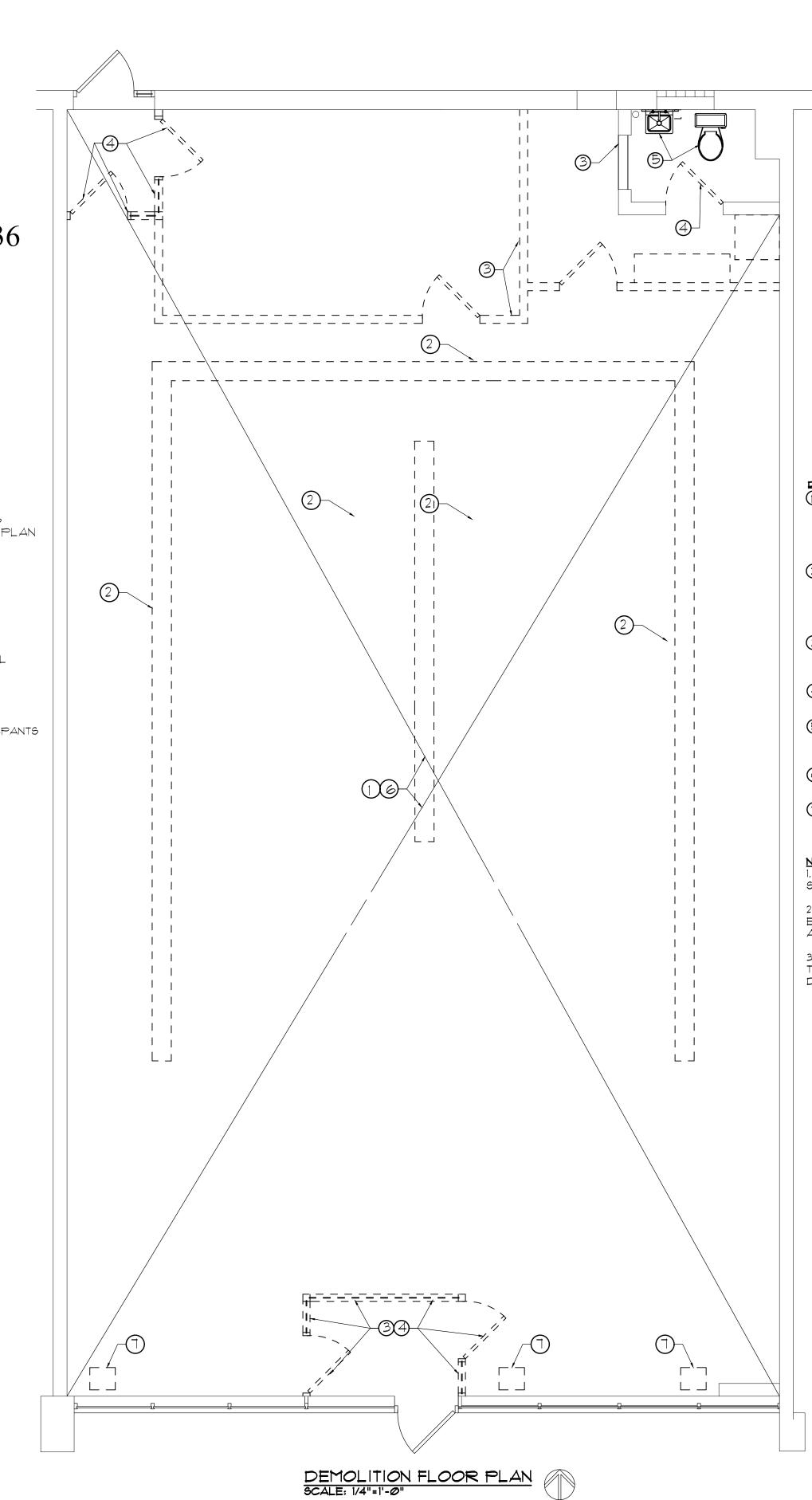
LEVEL @ WALL BASE CONDITION. . REINFORCE WALL & PROVIDE BLOCKING AS REQUIRED TO SUPPORT WALL CABINETS & COUNTERTOPS.

8. COORDINATE W/ OWNER'S SUPPLIED EQUIPMENT FOR INSTALLATION REQUIREMENTS / LOCATIONS OF FLOOR / WALL/ CEILING MOUNTED ITEMS: TV'S, SPEAKERS ETC. 9. CONTRACTOR SHALL CONDUIT A ROUGH ELECTRICAL INSPECTION W/ OWNER, PRIOR TO ENCLOSING WALLS, FOR THE PURPOSE OF CONFIRMING ALL J-BOX

LOCATIONS FOR POWER, DATA, SWITCH, THERMOSTAT, ETC. 10. ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE FIRE CONTRACTOR SHALL COORDINATE ALL OWNER SUPPLIED ITEMS FOR THE

CONTRACTOR TO INSTALL 12. MECHANICAL CONTRACTOR TO CONNECT VENT LINES, WATER SUPPLY \$ SANITARY TO EXISTING STUBS.





DEMOLITION NOTES: () CEILING GRID & TILES, DIFFUSERS, RETURNS, EMERGENCY LIGHT & STRIP LIGHT FIXTURES TO BE REMOVED.

2 SAW-CUT, REMOVE & REPLACE CONCRETE SLAB AS REQUIRED FOR PLUMBING INSTALLATION. (SEE MECHANICAL DWGS.)

3 REMOVE GYP. BD. & METAL STUD PARTITIONS, INDICATED

4 DOOR & DOOR FRAME TO BE REMOVED.

5 PLUMBING FIXTURES TO BE REMOVED. (SEE MECHANICAL DWGS.)

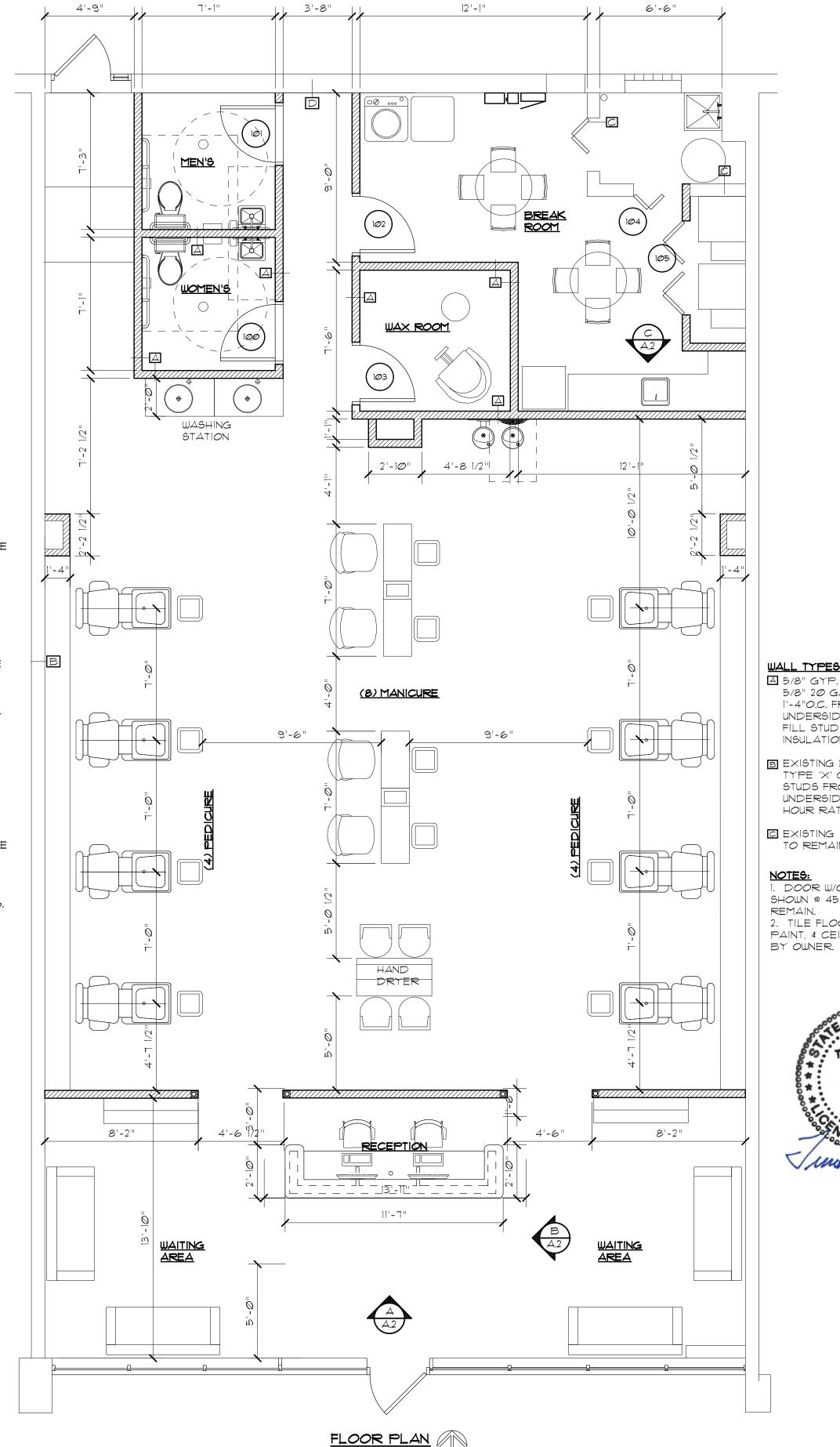
©CARPET & FLOOR COVERING TO BE REMOVED.

TRETURN AIR DUCTS TO BE REMOVED (SEE MECHANICAL DWGS.)

VERIFY W/ OWNER ITEMS TO BE SALVAGED.

2. REFER TO MECHANICAL \$ ELECTRICAL DWGS. FOR ADDITIONAL DEMOLITION NOTES.

3. PATCH & REPAIR SURFACES TO REMAIN DAMAGED DURING DEMOLITION.



A 5/8" GYP. BD. ON EACH SIDE 3 5/8" 20 GA. METAL STUDS @ 1'-4"O.C. FROM FINISH FLOOR TO UNDERSIDE OF CEILING GRID. FILL STUD CAVITY W/ BATT INSULATION TYP. (SEE 1/A.2) B EXISTING DEMISING WALL-5/8" TYPE 'X' GYP. BD. ON 6" META. STUDS FROM FINISH FLOOR TO UNDERSIDE OF ROOF DECK (1

HOUR RATED) C EXISTING INTERIOR PARTITION TO REMAIN.

DOOR W/O DOOR TAGS \$ SHOWN @ 45° ARE EXISTING TO REMAIN. TILE FLOORING, BASE, WALL PAINT, & CEILING GRID FINISHES



ISSUED:

T.J.F. T.J.F. T.J.F.

DO NOT SCALE PRINTS - USE FIGURED DIMENSIONS ONLY T2024094

MY NAILS GROOSE POINTE

MCKENNA



July 14, 2025

Planning Commission City of Grosse Pointe Woods 20025 Mack Plaza Grosse Pointe Woods, MI 48236

Subject: 19483 Mack Avenue: My Nails Salon Site Plan for Interior Renovations

Parcel ID: 015-01-0041-000

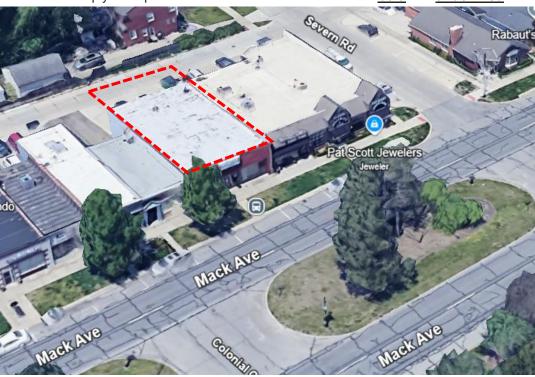
Site Plan Review #2

Zoning: C, Commercial Business District

Dear Commissioners,

We have reviewed the above re-application for interior renovations of an existing, unoccupied commercial building to a nail studio: *My Nails Salon*. Since the May 27th Planning Commission meeting, the applicant has submitted a revised site plan for an interior build-out of the vacant retail (lease) space at 19483 Mack Avenue. The renovation of the 2,506 square foot building includes a new reception space, manicure and pedicure areas, a private waxing room, two restrooms, and an employee break room.

We have reviewed the proposal in conformance to the City's Ordinances and offer the following comments. Items that do not comply or require additional information are noted in **bold** and **underlined**.





Recommendation

Based upon full compliance with the City's Zoning Ordinance, we recommend site plan approval for the interior renovations at My Nails Salon, 19483 Mack Avenue, without conditions.

If you have further questions, please do not hesitate to contact us.

Respectfully submitted,

McKENNA

Ashley Jankowski, AICP Associate Planner

Ishley Janhowshi

Alicia Warren Associate Planner

X Warren



Site Plan Review

1. ZONING DESIGNATIONS

The subject site, 19483 Mack Avenue, is located within the C, Commercial Business District. Personal service establishments are considered a permitted, by right use within the district.

Findings: Complies.

2. PARKING AND LOADING (SEC. 50-5.3)

The Ordinance provides that for "Beauty parlors, or related businesses" three spaces are necessary for each of the first two beauty or barber chairs, and 1.5 spaces for each additional chair.

As this is an existing structure and the total floor area is not proposed to increase, the off-street parking must only conform to at least 50% of the requirements listed above.

Further, per Ordinance 907 and Section 50-5.3 (Off-Street Parking Requirements), "the off-street parking facilities required for all other uses shall be located on the lot or on property in the city within 500 feet of the permitted use requiring such off-street parking".

Four off-street parking spaces are provided at the rear of the building for employees, accessed by the alley. The table below details a breakdown of the number of parking spaces required for the proposed renovations.

Off-Street Parking Required:

Proposed Number of Chairs	Number of Off-Street	Number of Off-Street	Number of On-Street Parking		
	Parking Spaces Provided	Parking Spaces Required	Spaces within 500 ft.		
16 chairs + 1 wax space = 17 total	4 spaces (rear of building)	25.5 chairs @ 50% = 12.75 = total of 13 spaces required	45+ parking spaces (including 15 spaces along Mack Avenue on this side of the block)		

Findings: Complies. On the site, and within 500 feet of the property, the required 13 off-street parking spaces have been exceeded. A total of four parking spaces are available behind the proposed business, and over 45 parking spaces are available within 500 feet of the business. In considering the context of the site, with both the provided off-street and on-street parking, there is conclusive evidence that the City's Zoning Ordinance standards for parking are met by the applicant.



3. LANDSCAPING (SEC. 50-6.1)

The Ordinance requires that site design shall provide reasonable visual and sound privacy for dwelling units located within the project and adjacent to the project. Fences, walks, barriers, and landscaping shall be used, as appropriate, for the protection and enhancement of property and the privacy of its occupants.

Findings: *N/A*. There is existing landscaping on site along the public right-of-way (Mack Avenue) which enhances the site and a 6-foot fence is located at the rear of the alley. The applicant is not proposing any additional landscaping.

4. SIGNS

Chapter 32 of the City's Code of Ordinance details signage requirements.

Findings: *N/A.* No signage is proposed at this time. Any future exterior signage must be submitted under separate cover for administrative review and approval.

5. LIGHTING

The Ordinance requires that exterior lighting be designed so that it is shielded from adjacent properties and so that it does not impede the vision of traffic along adjacent streets.

Findings: N/A. No new lighting on the exterior of the building is proposed as part of this application.



CITY OF GROSSE POINTE WOODS BUILDING DEPARTMENT REPORT

TO: PLANNING COMMISSION

FROM: JEREMY COLLINS, BUILDING OFFICIAL

DATE: JULY 2025 & AUGUST 2025

SUBJECT: BUILDING DEPARTMENT REPORT

20507 Mack Ave - Arthur Murray Dance Studio. A Conditional Certificate of Occupancy has been issued with stipulations for concrete repair at the rear of the building.

19487 Mack Ave – New Business – Jeff Evans, owner/baker, will be opening up a new bakery in the old Hillside Hearth bakery location. No name for the business yet. An initial Certificate of Occupancy inspection was completed on August 25th, 2025.

Building Projects

19299 Mack Ave. – Toothworks – An application was received to install a new standby generator at this location. Permit has been issued.

20331 Mack Ave. – Nino Salvaggio Market Café – A permit extension application has been received and interior demolition work is set to begin shortly.

19700 Mack Ave. – Bank of America. The project is nearing completion with all rough inspections completed. Awaiting scheduling of final inspections.

20139 Mack Ave. – The "Edmund T. Ahee Jewelers" is still progressing towards completion. The showroom area has been approved for occupancy.

20195 Mack Ave. – Lola's Tacos Bar – Rough building and trades inspections have been completed and approved. Sign permits have been approved and issued.

20710 Mack Ave. – The Daily Jam – Kitchen exhaust hood and fire suppression inspections have been scheduled. Final inspections have been scheduled.

21003 Mack Ave. Little Nest Coffee Roasters- Sign permits issued. Building plans have been approved and permits issued. A mechanical permit has been issued. Waiting on plumbing and electric permit applications.