Damage to Structure

date of substantial completion.

To cover loss due to fire, theft or malicious destruction in amount equal to the cost of replacement, the owner shall carry Builder's Risk insurance for the duration of the project up to the date of owner occupancy as established by the certificate issued by the Architect. The owner shall purchase liability insurance and property insurance not to duplicate the above coverage. The contactor shall verify and confirm in writing with the owner all of the above amounts.

coverage or coverage amounts as approved by the owner: Worker's Compensation: Provide amounts compliant with state statutory requirements Public Liability and Contingent Public Liability: \$1,000,000 each occurrence, \$2,000,000 aggregate Direct and Contingent Property Damage Insurance: \$1,000,000 each occurrence, \$2,000,000 aggregate. Builder's Risk Insurance.

Insurance A certificate of Insurance shall be filed with the owner prior to commencement of work and shall include the following

Warranty and Building Manual The contractor shall submit to the owner all guarantees, bonds, instructions, warranties and operation instructions, bound in a building manual. All warranties are to commence on the date of substantial completion. The manual shall include: Certificate of Substantial Completion; guarantees for Architectural, mechanical, electrical and roofing work; all applicable installation, operation and maintenance instructions; mechanical system control diagrams; inspection certificates; and a list of names and addresses of all subcontractors and suppliers. In addition, the contractor shall submit to the owner a written guarantee against defective materials or workmanship for a period of one year from the

with the adjacent property owner before beginning any work affecting his property.

Safety Standards and Protection Maintenance of safety standards shall be a special responsibility of the general contractor. It shall be the contractor's responsibility to assure that all work shall comply with current safety standards and regulations of the State of Michigan Contractors shall be responsible to maintain all railings, fences and barriers necessary for the protection of the public and workers and provide fire extinguishers as required by state and local code requirements during construction. Contractors shall protect all work and adjacent property from damage from the weather and construction process. All damage incurred shall be repaired promptly at the cost of the contractor. The general contractor shall obtain permission from the proper authorities for construction of barricades, bulkheads, etc. on public property and construct it as required by municipal regulations. The contractor shall be responsible to maintain temporary barricades along the right-of-way area and adjacent site and at all open excavations. It shall be the responsibility of the general contractor to provide, erect, maintain, and remove all scaffolding, staging, platforms, temporary runways, temporary flooring, guards, railings, fences, warning signs, lights, stairs, ladders, etc. as required by local and state codes of law for the protection of workmen and the public. The construction, inspection and maintenance of the above items shall comply with all safety codes and regulation as applicable to the project. It will be the responsibility of the general contractor to communicate

windows, entry doors and frames, and site utilities.

Shop Drawings and Samples The contractor is responsible for confirmation of all dimensions and coordination of the work with all trades. Submit shop drawings to the architect for review of the following systems: mechanical, electrical, hardware, millwork, plumbing,

drawinds.

finishing.

Existing Conditions and Inspection of the Site Before submitting his proposal, the bidder shall visit and inspect the site, examine its conditions including adjacent properties and thoroughly acquaint himself with its obstacles and advantages for performing the work. He shall also study the drawings explanatory of his contract and compare the same with the information gathered by the examination of the site, as no extra charge will be allowed him for extra work caused by his unfamiliarity with the site and the

appropriate inspections from governing authorities.

Permits and Fees The General Contractor will obtain and pay for the general building permit. All other permits and fees will be obtained and paid by the individual contractors requiring same. Contractor to schedule and coordinate with all public utilities. There shall be no reimbursable charges for utility hook up services. The contractor is responsible for calling for

complete system and installation including all necessary electrical and plumbing services and all required framing and

Owner Furnished Products The contractor shall be responsible for receiving, storing, installing and providing all necessary coordination for a

Occupancy Requirements Obtain a Certificate of Occupancy from the local building officials prior to owner occupancy. Upon occupancy, the Owner will assume responsibility for maintenance, security and custodial service.

Limit use of the premises to work in areas indicated. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the work is indicated.

DIVISION 1: GENERAL CONDITIONS Contractor Use of Site

Storage of building materials for all trades on the site will be permitted in designated areas only.

engaged in construction activities.

Heating Facilities: The use of gasoline burning space heaters, open flame, or salamander heating units is prohibited. Temporary Telephones: Provide temporary telephone service throughout the construction period for all personnel

Temporary Heat: Provide temporary heat required by construction activities for curing or drying of completed installations or for protection of installed construction from adverse effects of low temperatures or high humidity. Select safe equipment that will not have a harmful effect on completed installations or on elements being installed. Coordinate ventilation equipment to produce the ambient condition required and minimize consumption of energy.

Temporary Lighting: Provide temporary lighting with local switching.

cloths and vacuum cleaners shall be used as necessary

class of fire exposure.

heating units is prohibited. Fire Extinguishers: Provide hand carried, portable, UL rated, Class ABC dry chemical fire extinguishers for temporary spaces. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and

Heating Units: Provide temporary heating units that have been tested and labeled by UL, FM, or another recognized trade association related to the type of fuel being consumed. Select safe equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to procure the ambient

Lamps and Light Fixtures: Provide general service incandescent lamps of wattage required for adequate illumination. Provide guard cages or tempered glass enclosures where exposed to breakage. Provide exterior fixtures where exposed to moisture. Provide temporary lighting with local switching.

light for connection of power tools and equipment. Electrical Power Cords: Provide grounded extension cords. Use hard service cords where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of separate cords if single lengths will not reach areas where construction activities are in progress. Do not exceed safe length to voltage ratio.

intended Electrical Outlets: Provide properly configured, NEMA-polarized outlets to prevent insertion of 110 to 120 volt plugs into higher voltage outlets. Provide receptacle outlets equipped with ground fault circuit interrupters, reset button, and pilot

intended to be scaled for rough or finish measurements nor to serve as field shop drawings. Temporary Construction Facilities and Utilities Comply with industry standards and applicable laws and regulations of authorities having jurisdiction for installation and use of temporary facilities and services. Keep temporary services and facilities clean and neat in appearance. Do not overload facilities or permit them to interfere with progress. Take necessary fire prevention measures. Do not overload facilities or permit dangerous or unsanitary conditions or public nuisances to develop or persist on site. Provide new materials and equipment for temporary services and facilities. Provide materials and equipment suitable for use

Dimensions All contractors shall verify dimensions in the field. The general contractor, all subcontractors, and all suppliers involved with the project shall verify the dimensions on the drawings to the site required on the project. Report to the Architect at once any discrepancies from those shown on the drawings, etc., to those actually at the site. The drawings are not

Special conditions Substitutions Appropriate substitutions shall be submitted to the Architect for review. Approval of substitutions will be granted on the basis of performance, cost, appearance, and timely installation. Acceptance will not be guaranteed of substitutions not submitted and approved prior to award of contract.

Until this contract is complete and the building accepted by the owner, the contractor shall be solely responsible for and shall repair, replace or make good all loss, injury or damage to the owner's property and or adjoining property caused by or arising out of the prosecution of the work from any claim, action or cause of action.

DOCK RENOVATION 12090 HAGGERTY RD. BELLEVILLE, MI 48111

DIRECTORY	DRA
ARCHITECT	CIVIL
HOPPE DESIGN	DT
47032 McBRIDE	SUR\
BELLEVILLE, MI 48111	_
734-218-2492	STRU
	S001
APPLICANT AND OWNER VAN BUREN TOWNSHIP	0001
	ARCI
	A101
	A102
SURVEYOR	A103
ALPINE ENGINEERING 46982 WEST ROAD, SUITE 109	7100
NOVI, MI 48377	
	ELEC
	E1
	E2

condition required and minimize consumption of energy. Use of gasoline space heaters, open flame, or salamander

DIVISION 9: FINISHES The general contractor shall be responsible at all times to keep the premises clean and free from accumulation of waste materials Membrane flashing and other surface material as noted on finish schedule shall not be painted. and rubbish caused by his employees or work. At the completion of the project, remove from and about the building all the rubbish, tools, scaffolding, and surplus materials; clean all stains, dirt etc., from glass and other finished work and leave the premises ready DIVISION 15: MECHANCIAL for use. All trades for each division of work shall conduct a general clean up and remove all debris daily from his operation.

General

installing finish millwork.

Contractor to provide all dust barriers and screens as required to prevent dust from traveling to occupied areas of the building. Drop All mechanical and electrical work is to be performed in compliance to all state and local codes and regulations. Test all systems, submit all balancing reports, and make all necessary adjustments prior to occupancy. The mechanical and

equipment for keeping premises clean during and after business hours. At the completion of the job, leave the entire

Contractor to review all site and building drawings to determine the extent and items to be removed including utilities

from the site Sawcut and remove all existing concrete and masonry as shown to perform the work. Legally dispose of

off the site. Provide all shoring and underpinning to maintain the integrity of the existing and adjacent structures. The

contractor shall use extreme care in removal work and shall at all times use precautions to guard against movement or

settlement of adjacent buildings. Provide shoring, and take care to prevent any damage of materials of adjacent

buildings. This contractor shall be liable for any such movement or settlement and any damage or injury caused

All concrete work shall comply with recommended ACI standards and applicable code requirements. All concrete

placing and weather condition protection practices to comply with American Concrete Institute (ACI) standards and

encountered during excavation. Contractor shall provide all form work required footing and concrete work. Interior

concrete finishes shall be smooth trowel finish. Exterior concrete shall be a broom finish. Provide control joints and

concrete work, minimum 28 day strength of 3,000 psi. Footings, walls, foundations, structural framing, piers and

columns to have a minimum 28 day strength of 3750 psi. Exposed concrete surfaces shall be protected from rapid

recommendations. No calcium chloride antifreeze admixtures shall be permitted. All other admixtures to be approved

before use. Reinforced concrete footings will be installed for all bearing walls. Footings shall rest on undisturbed soil

having a minimum bearing capacity of 3,000 psf. The owner shall be notified immediately if adverse soil conditions are

expansion joints where shown on drawings. Strength of concrete side walks, curbs slabs sills, steps and miscellaneous

Provide all labor, materials and equipment to complete all masonry work as shown on drawings. Filling of cores, where

shown, is not to exceed two-foot lifts and shall be rodded thoroughly. The masonry contractor shall be responsible for

setting anchor bolts, masonry wall ties, hollow metal door frames, lintels, opening, bearing plates and all other built in

work. Masonry flashing will be placed at all key points of openings, and continuously around perimeter of building at

grade, with weep holes every 24 inches in full head joints. Provide all anchoring channels, anchor straps and rough

hardware as required and as shown on drawings. Galvanized horizontal joint reinforcement shall be placed as shown

on drawings in all concrete masonry. Wires shall be 9 gauge conforming to ASTM A-82. No chipped, stained, broken

or wet units are to be incorporated in the work. All walls are to be left clean and free of mortar. All cut units are to be

covered and protected at the end of each workday. Contractor to provide all weather protection required per masonry

Structural steel shall be detailed, fabricated and erected according to the "Specification for Design, Fabrication and

lintels, anchor bolts, bearing plates, steel pipe handrail and brackets, expansion bolts, etc. as shown on drawings and

Lumber will be sound, thoroughly seasoned and free from warp. Horizontal blocking will be installed at 8 foot height in

construction where required to support or secure work of all trades. Provide all wood nailers, blocking, plywood, etc.

Provide blocking in wall to support pre-manufactured wall cabinets and special counter work throughout the project.

Provide ply clips at all open spans where required. Provide all rough hardware required for complete installation,

interior and exterior where shown on drawings or otherwise required, Install wood blocking as required to support wall.

including though bolts, plates, washers, nuts, joist hangers, etc., as noted on drawings or required. Provide and install

interior wood trim, window stools, and miscellaneous shelves as shown on drawings. Install trim plumb and level with

to be as selected by owner. Handrails at stairs shall be hardwood for stain finishes and supported on brackets to

miter cut corners throughout. Staples are not permitted. Fill all nail holes in exposed work prior to finishing. All finishes

withstand loads required by codes. General millwork shall be prefinished. Custom built counter tops shall be provided

as part of kitchen cabinets. Verify all dimensions in the fields with the reviewed shop drawings before manufacturing or

walls over 8 feet. Firestop concealed spaces where required by codes. Provide wood bucks throughout the

as required for a complete job. Provide all runners, bridging, bracing and fastening a shown and per manufacturers

Erection of Structural Steel for Building" by the American Institute of Steel Construction, latest edition. Provide all

cut to a clean, true edge with a masonry saw. All masonry materials, stockpiles and top of unfinished walls to be

institute recommendations. Contractor to provide all temporary bracing and shoring required.

and services to be removed. All items not requested to be salvaged and turned over to the owner shall be removed

site clean and free of any deleterious materials of any kind.

DIVISON 2: DEMOTLITION

thereby or resulting thereby.

drying from wind, rain and sun.

DIVISION 4: MASONRY

DIVISION 5: METALS

recommendations.

DIVISION 6: CARPENTRY

DIVISION 3: CONCRETE

Demolition

electrical contractors shall coordinate and cooperate with the local utility companies and shall be responsible for acquiring all necessary permits and connections. The minimum temperature at 24" above finished floor shall be 68 degrees Fahrenheit.

DIVISON 16: ELECTRICAL AND TELEPHONE

General The contractor shall submit complete and detailed drawings indicating the proposed circuiting system, service distribution, control panels, meters, materials and procedures. Systems to be identifiable and accessible; requiring labeling, conduit and panel identification, full instrumentation, and access panel. The bid shall include an outline description of the proposed system. The electrical contractor shall consult the plans thoroughly to become familiar with the construction. The contractor shall visit the site and inventory the electrical items to be terminated, relocated, installed and the conditions that exist. The contractor shall connect all owner supplied equipment as shown on the drawings and per approved shop drawings. The electrical contractor is to provide all conduit, raceways, outlets, switches, boxes and disconnects required for new work. All electrical work shall conform to the National Electrical Code and to all other state and local ordinances. Grounding of equipment shall be according to NEC Article 250. Comply with required construction standards of the local utility company. Wire for general interior and exterior use, sizes No. 10AWG and smaller, single conductor, annealed copper, NEC type XHHW or THHN/THWN rated 75 degrees C, 600 volts. Cabinets shall be flush mounting type as indicated with minimum 20 inch box NEMA 1. Provide gutter space to accommodate size of cable used in accordance with NEC. Equip the panel with hinged door and flush type combination catch and lock. The electrical contractor shall provide and install all of the light fixtures shown on the lighting plan or as provided by the owner. Conform work to applicable electrical and barrier free codes.

AWING INDEX

TITLE SHEET

RVEY TOPOGRAPHIC SURVEY (FOR REFERENCE ONLY)

UCTURAL STRUCTURAL NOTES

CHITECTURAL

PARTIAL SITE PLAN, ELEVATIONS AND DETAILS PARTIAL SITE PLAN AND DETAILS

PARTIAL SITE PLAN AND DETAILS

CTRICAL

ELECTRICAL ELECTRICAL

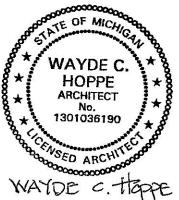


RENCH

REVISIONS

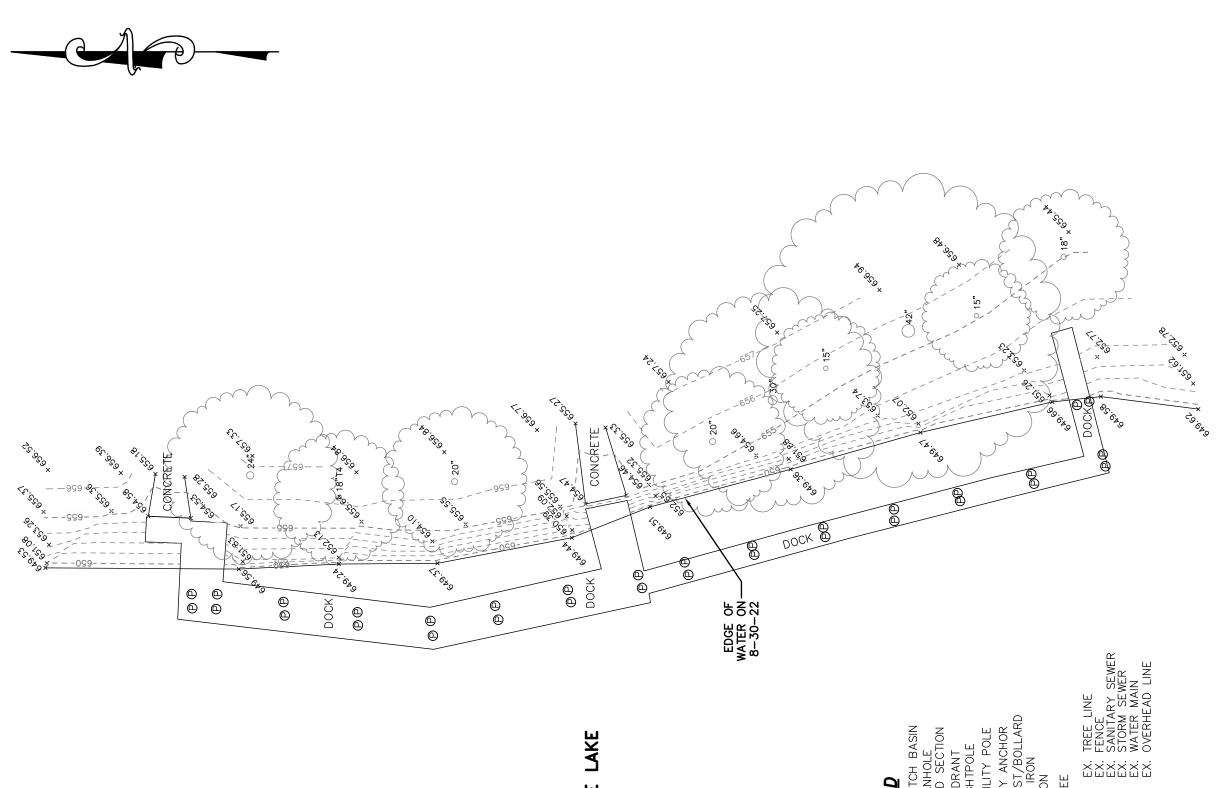
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PROJECT: 2216 DATE: 10.30.22 DRAWN: WCH CHECKED: WCH





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 EX. CATCH BASIN
 EX. CATCH BASIN
 EX. MANHOLE
 EX. END SECTION
 EX. HYDRANT
 EX. UGHTPOLE
 EX. UTILITY POLE
 EX. CUT ANCHOR
 EX. COND IRON
 SET IRON
 EX. TREE LEGEND

-/

DATE: 9/1/2022 DRAWN BY: TTP DRAWN BY: TTP CHECKED BY: CLM 0 10 20 FBK: CHE: CHE: CHE: SCALE 21-323
IENT: DAVENPORT BROTHERS CONSTRUCTION PARTIAL TOPOGRAPHIC SURVEY SECTION: 24 SECTION: 24 VAN BUREN TOWNSHIP WAYNE COUNTY MICHIGAN
COMMERCIAL SITE PLANNING SITE ENGINEERING INDUSTRIAL & MULTI-UNIT LAND SURVEYING CONSTRUCTION LAYOUT (248) 926–3701 (BUS) (248) 926–3765 (FAX) WWW.ALPINE-INC.NET
SURVEYING ALTA SURVEYS BOUNDARY SURVEYS TOPOGRAPHIC SURVEYS PARCEL SPLITS 46892 WEST ROAD SUITE 109 NOVI, MICHIGAN 48377 RS
RESIDENTIAL SUBDIVISIONS SURVEYING ALTA SURVEYS SITE CONDOMINUM MULTI-FAMILY PLOT PLANS BOUDBARY SURVEYS MULTI-FAMILY PLOT PLANS DOPOGRAPHIC SURVEYS CONSTRUCTION LAYOUT PARCEL SPLITS CONSTRUCTION LAYOUT 46892 WEST ROAD SUITE 109 SUITE 109 SUITE 109 SUITE 109 COML ENGINEERS & LAND SURVEYORS NOVI, MICHIGAN 48377

REVISED

DESCRIPTION	MANUFACTURER	MO DEL	STYLE	FINISH	COLOR	STANDARDS/ RESPONSIBILITY	COMMENTS	SUBMITTAL
			• •	DIVI SI	0 N 3		<u>.</u>	. 00
				DIVI SI	ON 4		•	<u> </u>
			:;	DIVI SI	0 N 5		<u>.</u>	<u> </u>
					_			
STRUCTURAL STEEL		Fy= 50 KSI			N/A	ASTM A <mark>36</mark> ; A992	HOLES TO B E DRILLED NOT BURNED	×
WSHAPES		Fy= 50 KSI			N/A	ASTM A992		XX
CHANNELS, ANGLES, PLATES		Fy= 36 KSI			N/A	ASTM A36		
HSS RECTANGULAR, SQUARE		Fy= 46 KSI TYPE B			N/A	ASTM A500		×
BOLTS: STRUCTURAL					N/A	ASTM A-325-N HIGH STR EN GTH: F 1554	3/4" UNO; PROVIDE WASHERS BENEATH TURNED ELEMENTS	X
NUTS					N/A	ASTM A563	BENEATH TURNED ELEMENTS	-
BOLT WASHERS						ASTM F-438; A-36	HARDENED; HOT DIPPED GALVANIZED	
STEEL LINTELS			G 60		BYOWNER		ALL EXTERIOR LINTELS TO BE GALVANIZED AND PAINTED. INTERIOR LINTELS TO BE PAINTED.	×
STEEL BARS,		Fy= 33 KSI	G 60		N/A	A 36/36M		+
SHAPES, CLIPS			-					
STEEL SHEET		TYPE 1 HIGH	G 60 E-70		N/A N/A	A 653/653M AWS D 1.1		
ELECTRODES		STRENGTH				AWS DIT SPECIFICATIONS; ASTM 233		
GALVAN IZIN G REPAIR		SSPC PAINT			RED	Prine Linn de altar	1	1
PAINT		20 DOD-P- 21035						
			1	DIVI SI	ONG	I		<u> </u>
1							1	-
TREATED LIMBER; BELOW GRADE					N/A	AWPA UC4A	80% RETENTION; AMONIA FREE	
TREATED LIMBER; ABOVE GRADE					N/A	AWPA UC3B	80% RETENTION; AMONIA FREE	
TREATED LUMBER S HARDWARE	IMPSON	G-185			N/A		HOT DIPPED GALVANIZED OR STAINLESS STEEL	Х
TREATED LUMBER IN CONTACT WITH CONC						AWPAC2	80% RETENTION; AMONIA FREE	
BOLTS FOR WOOD CONSTRUCTION		SAE GRADE 2 OR 5						
I JOISTS AND LVLS		Fb= 2600 PSI, Fv= 285 PSI UN O						X
WOOD PRESERVATIVE					N/A	•	ACA FOR DOUGLAS FIR OR CCA FOR SOUTHER PINE	1
COMPOSITE T DECKING BOARDS	REX				COLOR SELECTION BY OWNER			×

IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE SHORING AND BRACING DURING CONSTRUCTION TO ACCOUNT FOR ALL FORCES, INCLUDING BUT NOT LIMITED TO FORCES FROM GRAVITY, EARTH, WIND AND UNBALANCED FORCES DUE TO CONSTRUCTION SEQUENCES.

THE STRUCTURAL INTEGRITY OF THE BUILDING SHOWN ON THESE PLANS IS DEPENDENT UPON COMPLETION ACCORDING TO PLANS AND SPECIFICATIONS. STRUCTURAL MEMBERS ARE NOT SELF BRACING AND SHALL BE SHORED AND/OR BRACED BY THE CONTRACTOR AS NECESSARY UNTIL STABILIZED BY VIRTUE OF COMPLETED CONNECTIONS.

FIELD MEASURE AND VERIFY ALL DIMENSIONS AND ELEVATIONS BEFORE FABRICATION. FOUNDATIONS

ALL FOOTINGS SHALL BEAR ON UNDISTURBED SOIL, HAVING A MINIMUM SAFE BEARING CAPACITY. THE TESTING AND INSPECTION AGENCY SHALL VERIFY SOIL BEARING CAPACITY AT EACH FOOTING PRIOR TO INSTALLATION OF FOOTING. NOTIFY ENGINEER OF ANY VARIATION FROM ANTICIPATED BEARING CAPACITY FOR APPROPRIATE RE-DESIGN OR LOWERING OF FOOTING.

THE BOTTOMS OF ALL EXTERIOR FOOTINGS SHALL BE 3'-6" MINIMUM BELOW FINISHED GRADE. IF THE BUILDING WILL BE UNDER CONSTRUCTION DURING FREEZING WEATHER, ALL INTERIOR FOUNDATIONS SHALL BE DEPRESSED 3'-6" BELOW CONSTRUCTION GRADE FOR FROST PROTECTION. IF SUCH ADDITIONAL FOOTING DEPTH WILL CAUSE UNDERMINING OF ADJACENT EXISTING FOOTINGS OR STRUCTURES, PROVIDE APPROPRIATE SHORING, BRACING OR UNDERPINNING AS REQUIRED OR LEAVE FOOTING ELEVATION AS DESIGNED AND PROVIDE CONTINUED PROTECTION AND HEAT TO PREVENT FORMATION OF FROST BELOW FOOTING AND ADJACENT TO FOOTING.

THE CONTRACTOR SHALL SAFEGUARD AND PROTECT ALL EXCAVATIONS AND ADJACENT STRUCTURES, PAVEMENTS, AND UTILITIES. ALL EXCAVATIONS SHALL BE KEPT FREE OF WATER. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL SHORING, BRACING, AND DEWATERING THAT IS REQUIRED TO PROPERLY CONSTRUCT THE FOUNDATIONS AND PROTECT ADJACENT STRUCTURES, PAVEMENTS AND UTILITIES.

PRETREAT EXCAVATIONS WITH TERMITICIDE AND INSPECT EXCAVATIONS PRIOR TO POURING CONCRETE. TEMPORARY BRACING MUST BE PROVIDED TO RESIST ALL LATERAL FORCES UNTIL STRUCTURAL SYSTEM IS SELF SUPPORTING.

CONCRETE SLABS PLUMBING AND ELECTRICAL CONTRACTORS ARE TO PROVIDE ALL REQUIRED UNDERSLAB WORK PRIOR TO POURING THE FLOOR SLAB. INSPECT ALL REINFORCING BEFORE POURING CONCRETE.

SLOPE SLABS TO FLOOR DRAINS. VERIFY DEPRESSIONS AND FLOOR FINISHES.

SHALL BE CENTERED IN SLAB. GRANULAR BASE TO BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY UNDER ALL SLABS ON GRADE.

- REINFORCING MINIMUM CONCRETE COVERING SHALL BE:
- 3" FOOTING BOTTOM
- 2" DECK SLAB TO TOP 1 J" DECK SLAB TO BOTTOM INTERIOR FACES OF WALLS AND SLABS NOT EXPOSED TO WEATHER
- INTERIOR SLABS

MASONRY WALLS ARE TO BE ADEQUATELY BRACED DURING CONSTRUCTION. SEE "STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION" BY THE COUNCIL FOR MASONRY WALL BRACING AND ALSO NCMA TEK 304B "BRACING CONCRETE MASONRY WALLS DURING CONSTRUCTION" FOR RECOMMENDATIONS REGARDING BRACING.

PLACE LADDER TYPE HORIZONTAL JOINT REINFORCING WITH PREFORMED LAPPED CORNER REINFORCING. THE DISCONTINUOUS ENDS OF ALL MASONRY WALLS SHALL BE SOLIDLY GROUTED A MINIMUM OF 8" OR ONE BLOCK CELL AND REINFORCED FOR THEIR FULL HEIGHT WITH ONE #5 BAR UNO.

AT GROUTED CELLS LIFTS OF GROUT SHALL BE KEYED 4" INTO THE COURSE OF MASONRY BELOW. ALL CMU BOND BEAMS TO HAVE (2) #4 BARS CONTINUOUS. PROVIDE (2) #4 L BARS AT EVERY CORNER LAPPED 3'-O" WITH CONTINUOUS. BARS.

VERTICAL CONTROL JOINTS IN CMU WALLS TO HAVE A MINIMUM 3/3" GAP AND SHALL BE LOCATED BY THE ARCHITECT, BUT NOT MOVE THAN 20**'**-0" OC.

BRICK TIES SHALL BE GALVANIZED ADJUSTABLE 2-PIECE WIRE TIES OF NOT LESS THAN 9 GAGE AND SHALL BE SPACED AT 16" OC VERTICALLY AND HORIZONTALLY

WHERE MASONRY MEETS STRUCTURAL MEMBERS SUBJECT TO VERTICAL DEFLECTION, PROVIDE ALLOWANCE FOR VERITICAL MOVEMENT OF L/240 OF STRUCTURAL MEMBER.

BOND BEAM REINFORCING TO BE CONTINUOUS ACROSS CONTROL JOINTS. PROVIDE A 24" LAP AT FOUNDATION DOWELS.

AIR TEMPERATURE AT TIME OF MASONRY INSTALLATION SHALL BE 40<T<90 DEGREES F. METAL DECK

UNLESS OTHERWISE NOTED, ALL METAL DECK HAS BEEN DESIGNED TO BE CONTINUOUS OVER 3 SPANS MINIMUM AND SHALL BEAR AT LEAST 2" ON STEEL SUPPORTS. FOR ONE OR TWO SPAN CONDITIONS, THE CONTRACTOR SHALL PROVIDE SHORING AS REQUIRED OR FURNISH HIGHER GAGE DECK AS REQUIRED TO SUPPORT ALL THE APPLICABLE LOADS. CONTRACTOR SHALL SUBMIT ALTERNATE FOR APPROVAL.

PROVIDE REINFORCING CHANNELS, STANDARD CLOSURES, CANT STRIPS, SUMP PANS, FINISH STRIPS, POUR STOPS, AND OTHER ACCESSORIES AS REQUIRED FOR PROPERLY FINISHED JOB, EVEN IF NOT SPECIFICALLY SHOWN ON THE DRAWINGS. PROVIDE BEARING ANGLES WELDED TO COLUMNS TO SUPPORT METAL DECKS AS REQUIRED.

FASTEN STEEL DECK UNITS TO STRUCTURAL SUPPORTS USING HEX WASHER HEAD TEK SCREWS OR ARC SPOT WELDS ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND IN CONFORMANCE WITH THE STEEL DECK INSTITUTES SPECIFICATION SECTION 4.4.

PROVIDE 🖥 CONCRETE COVER MINIMUM FROM TOP OF SLAB TO SLAB REINFORCING AND LAP ALL STEEL FABRIC SPLICES 6" MIN. REINFORCING

COLUMNS, BEAMS AND FORMED SURFACES IN DIRECT CONTACT WITH SOIL OR EXPOSED TO THE WEATHER, EXCEPT SLABS.

ARC SPOT WELDS (PUDDLE WELDS) TO SUPPORTS SHALL HAVE A DIAMETER OF 5%" MINIMUM OR AN ELONGATED WELD OF AND ¾" MINIMUM LENGTH. WELD METAL SHALL PENETRATE ALL LAYERS OF DECK MATERIAL AT END LAPS AND HAVE ADEC SUPPORTING MEMBERS. WELDING SHALL BE DONE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY STANDARD "SF WELDING SHEET STEEL IN STRUCTURES" AWS D1.3.

UNITS SHALL BE FASTENED TO THE STEEL SUPPORTS AT THE END OF THE UNITS AND AT INTERMEDIATE SUPPORTS AND SUPPORTS AT THE SIDE BOUNDARIES BY ${f i}$ " DIAMETER PUDDLE WELDS AT 12" OC. SHEAR STUDS WELDED THROUGH DECK I PLACE OF $\frac{3}{4}$ " DIAMETER PUDDLE WELDS.

THE SIDE LAPS OF ADJACENT UNITS SHALL BE FASTENED BETWEEN SUPPORTS BY BUTTON PUNCHING AT 24" OC UNO. STRUCTURAL STEEL

UNLESS OTHERWISE NOTED, ALL BEAMS AND LINTELS BEARING ON MASONRY SHALL HAVE A MINIMUM BEARING LENGTH OF A MINIMUM OF TWO BLOCK COURSES AT 32" LONG OF SOLID MASONRY UNDER THE BEARING SURFACE.

WHERE STEEL CONNECTIONS ARE NOT FULLY DETAILED ON THE DESIGN DRAWINGS (WITH ALL REQUIREMENTS FOR BOLTS, PL DIMENSIONS, ETC SHOWN) CONNECTIONS SHALL BE DESIGNED BY THE STEEL CONTRACTOR UNDER THE SUPERVISION OF A STATE THAT HAS JURISDICTION OVER THE PROJECT.

WHERE TYPICAL OR INCOMPLETE CONNECTIONS ARE SHOWN ON THE DESIGN DRAWINGS. THOSE DETAILS SHALL BE USED AS CONNECTION DESIGN TO BE COMPLETED BY THE CONTRACTOR. ALTERNATE CONNECTIONS DESIGNED BY THE STEEL CONTRA PROVIDED IF REQUIRED DESIGN FORCES CANNOT BE ACHIEVED BY THE TYPICAL OR EXAMPLE CONNECTION, OR IF AUTHORIZ DETAIL IS PROVIDED BY THE DESIGN ENGINEER.

WHERE CONNECTION FORCES ARE INDICATED ON THE DRAWINGS, PROVIDE CONNECTIONS DESIGNED TO RESIST THE FORCE WHERE CONNECTION FORCES ARE NOT INDICATED ON THE DRAWINGS. PROVIDE CONNECTIONS DESIGNED TO RESIST FORCES FOR SHEAR CONNECTIONS IN NON-COMPOSITE MEMBERS, DESIGN CONNECTIONS TO RESIST 50% OF THE TOTAL ALLOWABLE IN THE TABLES IN PART 3 OF THE AISC MANUAL OF STEEL CONSTRUCTION. FOR SHEAR CONNECTIONS IN COMPOSITE MEMBERS, DESIGN CONNECTIONS TO RESIST 75% OF THE TOTAL ALLOWABLE UNIFO THE TABLES IN PART 3 OF THE AISC MANUAL OF STEEL CONSTRUCTION.

FOR MOMENT CONNECTIONS, DESIGN CONNECTIONS TO RESIST 100% OF MOMENT CAPACITY OF THE MEMBER. ALL FULLY TENSIONED A490 BOLTS SHALL HAVE WASHERS BENEATH BOTH NUT AND HEAD. PROVIDE TEMPLATES TO LOCAT BASE PLATES.

SHOP AND FIELD CONNECTIONS SHALL BE MADE BY WELDING OR HIGH STRENGTH BOLTING. BOLTED CONNECTIONS SHALL CO A325-X USING LOAD INDICATOR WASHERS (LIW) OR LOAD INDICATOR BOLTS (LIB). BEAM CONNECTIONS SHALL PROVIDE SHE SUPPORT A REACTION R EQUAL TO HALF THE SHEAR CAPACITY OF BEAM. USE 🖥 DIA BOLTS, E70XX 🤾 WELD AND 🖧 ANG

ALL WELDING SHALL BE PERFORMED USING THE ELECTRIC ARC METHOD IN ACCORDANCE WITH THE LATEST REVISION OF TH ELECTRODES CONFORMING TO AWS A5.1 OR A5.5 SHALL BE USED FOR SHIELDED METAL ARC METHOD AND FX7-ECXX ELEC TO AWS F5.17 FOR SUBMERGED ARC METHOD.

ALL WELDS SHALL BE PROVIDED AS SHOWN IN THE STRUCTURAL DETAILS UNLESS THICKER WELD IS REQUIRED DUE TO MA WHERE WELD IN NOT DETAILED, WELD SHALL BE DESIGNED BY A LICENSED ENGINEER RETAINED BY THE CONTRACTOR TO M CAPACITY REQUIREMENTS LISTED ABOVE. WELD SIZES SHALL BE INCREASED AS NEEDED TO MEET THE FOLLOWING MINIMUM REQUIREMENTS BASED ON THE SMALLER MATERIAL THICKNESS OF THE PIECES OF STEEL BEING WELDED TOGETHER:

MATERIAL THICKNESS MIM FILLET WELD SIZE (PROVIDE LARGER WELD IF REQUIRED FOR STRESS) ¼" AND UNDER OVER ¼" TO ½" OVER ½" TO ¾" over ¾"

IF PENETRATIONS THROUGH WEBS OF STEEL BEAMS WILL BE REQUIRED, CONTRACTOR TO NOTIFY ENGINEER OF RECORD. SEE ARCHITECTURAL DRAWINGS FOR MISCELLANEOUS AND NON-STRUCTURAL STEEL.

STEEL JOISTS PROVIDE AND INSTALL BRIDGING IN ACCORDANCE WITH STEEL JOISTS INSTITUTE STANDARDS. ALL ENDS OF BRIDGING LINES TERMINATING AT MASONRY WALLS SHALL BE ANCHORED THERETO IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE BRIDGING DOES NOT TERMINATE AT A MASONRY WALL, THE FIRST AND SECOND BAYS FROM THE END OF THE BRIDGING IS TO BE DIAGONAL X-BRIDGING. MANUFACTURER TO PROVIDE ADDITIONAL BRIDGING AS REQUIRED TO SATISFY SJI UPLIFT REQUIREMENTS.

WHERE STEEL JOISTS SUPPORT MOVEABLE PARTITIONS, JOIST MANUFACTURER SHALL DESIGN JOIST FOR A MAXIMUM LIVE/SNOW LOAD DEFLECTION OF THE SMALLER OF $\frac{1}{2}$ " AND L/360.

JOIST MANUFACTURER SHALL LIMIT JOIST DEFLECTION DUE TO LIVE/SNOW LOAD TO L/360.

THE ENDS OF STEEL JOIST SHALL BEAR A MINIMUM DISTANCE OF 2½ INCHES OVER STEEL SUPPORTS AND 4 INCHES OVER ALL OTHER SUPPORTS. THE ENDS SHALL BE FASTENED BY BOLTING AND OR WELDING. ERECTION OF JOISTS AND JOIST BRIDCING SHALL CONFORM TO ALL REQUIREMENTS OF OSHA AND JOIST MANUFACTURER.

WOOD FRAMING ALL LUMBER IN CONTACT WITH MASONRY OR STEEL TO BE PRESERVATIVE TREATED.

ALL FLUSH FRAMED CONNECTIONS ARE TO MADE USING JOIST HANGERS DESIGNED FOR THE SPECIFIC CONDITION UNLESS OTHER CONNECTIONS ARE PROVIDED.

SHOP DRAWINGS SHALL BE PROVIDED FOR ALL ENGINEERED WOOD MATERIAL INDICATING PRODUCTS, DETAILS, CONNECTIONS AND ACCESSORIES AS REQUIRED BY THE MANUFACTURE TO MEET PROJECT LOADING REQUIREMENTS.

OBSERVE ALL CODE REQUIREMENTS FOR BRIDGING, BORING, AND NOTCHING OF STUDS AND JOISTS. FOR BRIDGING, BORING AND NOTCHING OF ENGINEERED WOOD PRODUCTS OBSERVE ALL MANUFACTURER REQUIREMENTS. BRIDGING SHALL BE PROVIDED FOR ALL ROOF RAFTERS.

ALL ROOF RAFTERS ARE TO BE 24" ON CENTER UNLESS OTHERWISE NOTED.

ROOF DESIGN NOTES: A. VERTICAL WEB MEMBERS FOR ALL GABLE END TRUSSES SHALL BE DESIGNED TO RESIST A HORIZONTAL WIND LOAD RESULTING FROM THE DESIGNED WIND SPEED WITHOUT EXCEEDING THE DEFLECTION LIMIT OF L/600 OF THEIR RESPECTIVE VERTICAL SPANS.

BRIDGING FOR BOTTOM CHORDS SHALL BE DESIGNED TO DISTRIBUTE THE HORIZONTAL WIND LOAD PROPOSED ON THE COMPLETE BUILDING TO THE SHEAR WALLS AND SHALL BE DESIGNED FOR A TOTAL IMPOSED WIND LOAD ON BUILDING INCLUDING WINDWARD AND LEEWARD PRESSURE FROM THE DESIGNED WIND SPEEDS.

¾" MINIMUM WIDTH	LOA	DS	AND
PECIFICATION FOR			
		0	DESIG
TO THE STEEL	TABLE 1604.5		OCCUP
MAY BE USED IN			
			WIND
	FIGURE 1609.3.1	V	BASIC
	SECTION 1609.4.3		EXPOS
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$77\frac{1}{2}$ and shall have			ADJUS
			SNOW
PLATES, WELDS,	FIGURE 1608.2	Pg	GROUN
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ATERIAL THICKNESSES. MEET CONNECTION			NCMA ⁻
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LOA	DS	AND REFERENCES	
	[DESIGN LOADS	
BLE 1604.5		OCCUPANCY CATEGORY	
		WIND	
GURE 1609.3.1	V	BASIC WIND SPEED (MPH)	115
CTION 1609.4.3		EXPOSURE CATEGORY	В
	lw	IMPORTANCE FACTOR	1
		ADJUSTMENT FACTOR	1.12
		SNOW	
URE 1608.2	Pg	GROUND SNOW (PSF)	25.00
JOINE 1000.2	ls		1.00
	Ce	EXPOSURE FACTOR	1.00
	Ct	THERMAL FACTOR	1.00
	01		1.00
		ROOF DEAD LOAD (PSF)	20.00
		CEILING DEAD LOAD (PSF)	20.00
		(, ,	5.00
		LOAD (PSF)	FO
		25 + 20 + 5 =	50
		REFERENCES	
			2010
		ASCE-7	2010
NCRETE		ACI 301	
		ACI 318 BUILDING CODE	2010
		REQUIREMENTS FOR REINFORCED	
		ACI SP 66	0014
			2011
			0040
SONRY		ACI 530/ASCE 5	2013
		ACI 530.1/ASCE 6	
		NCMA TEK 3-4B " BRACING CONCRETE	2005
		MASONRY WALLS DURING	
01			
ICK			
		CONSTRUCTION" AISC "SPECIFICATION FOR	4070
EEL		STRUCTURAL STEEL BUILDINGS"	13TH EDITION
LDING		AMERICAN WELDING SOCIETY AWS	2015
			0045
EEL JOISTS		STEEL JOISTS INSTITUTE "STANDARD	2015
		SPECIFICATION"	
TAL DECK		STEEK DECK INSTITUTE	1987
DOD		"NATIONAL DESIGN SPECIFICATION	2015
		FOR WOOD CONSTRUCTION"	
		ANSI/AF&PANDS	
		TO BE PROVIDED BY DEVELOPER	

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WAYDE HOPPE ARCHITECT 13010361

WAYDE C. HAPPE



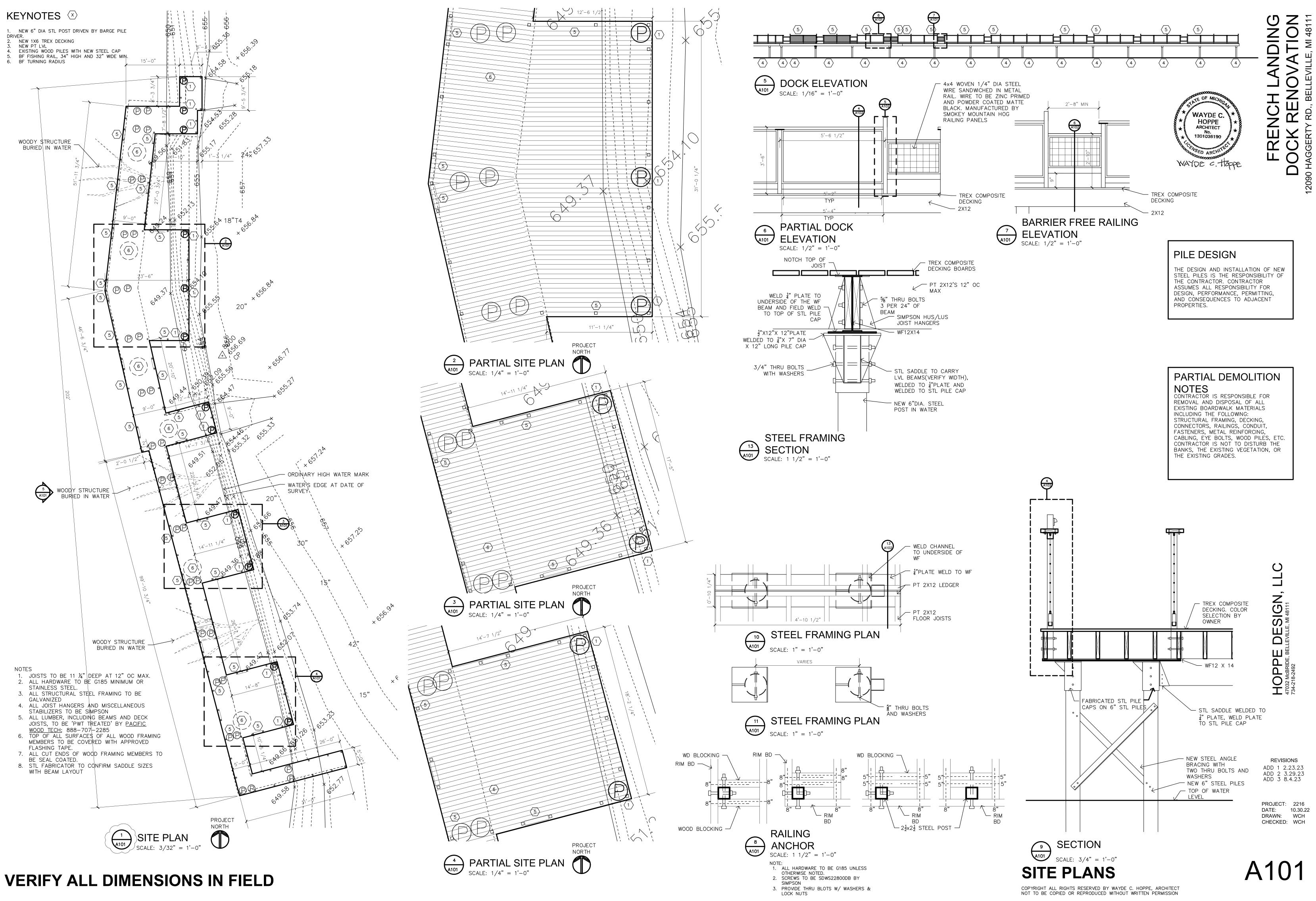
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REVISIONS

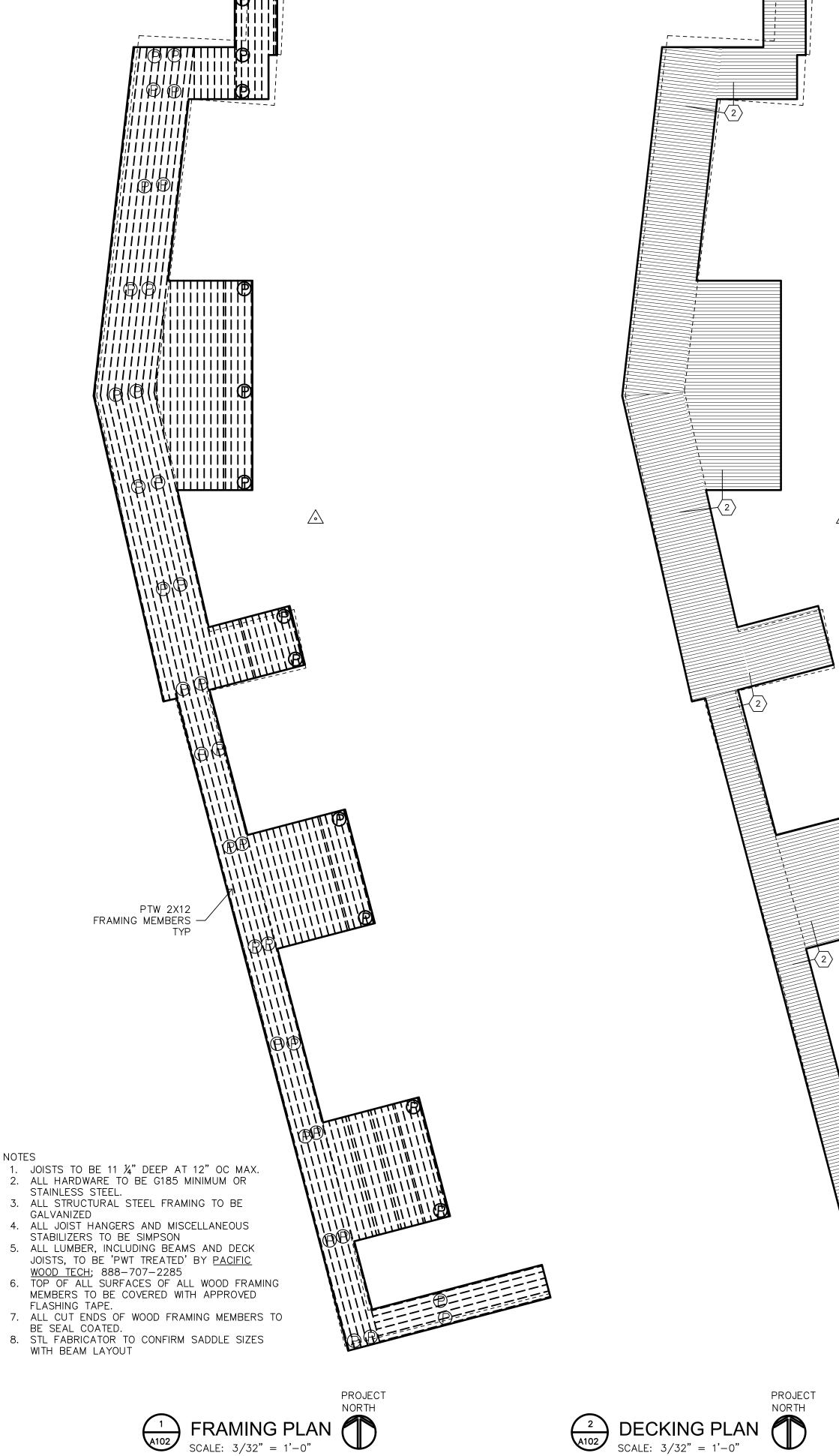
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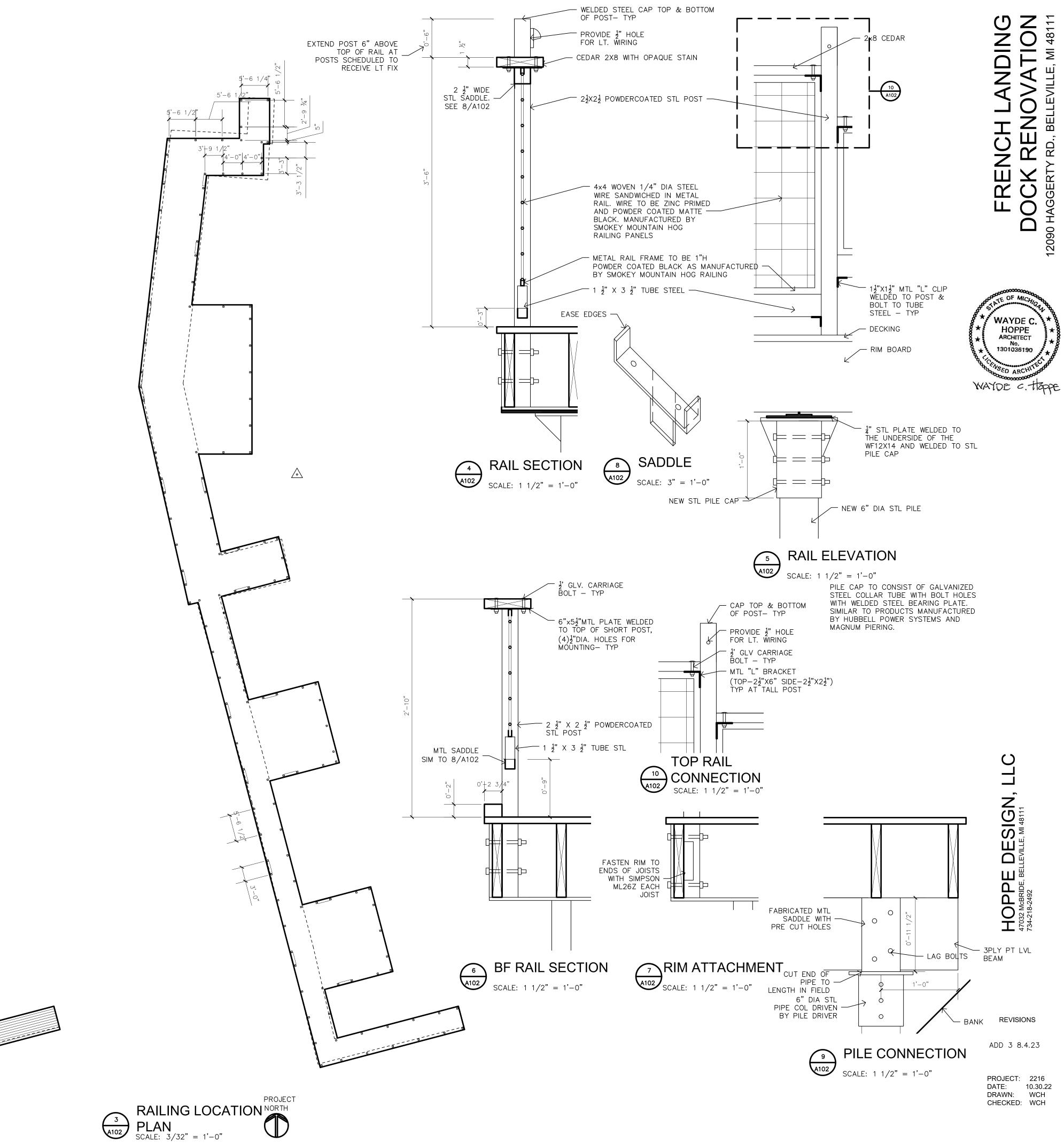


KEYNOTES 🐼

 NEW 6 DIA STL POST DRIVEN BY BARGE PILE DRIVER.
 NEW 1X6 TREX DECKING
 NEW PT LVL



VERIFY ALL DIMENSIONS IN FIELD



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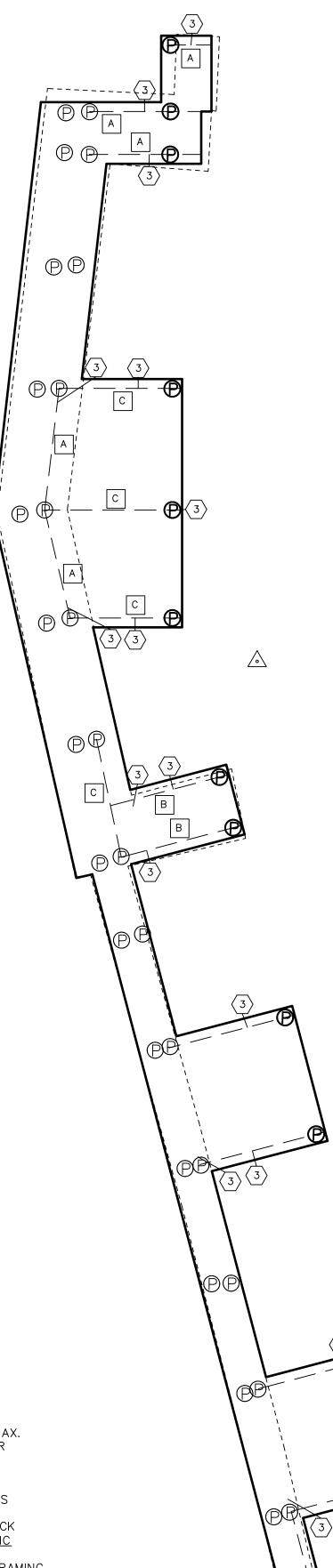
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SITE PLANS

KEYNOTES 🐼

1. NEW 6 DIA STL POST DRIVEN BY BARGE PILE DRIVER. 2. NEW 1X6 TREX DECKING 3. NEW PT LVL



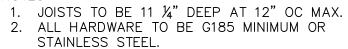


5 A103

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PROJECT NORTH

 $\begin{array}{c}
1\\
\text{A103}
\end{array}$ BEAM LAYOUT $\begin{array}{c}
\text{SCALE: } 3/32^{"} = 1'-0"
\end{array}$



- STAINLESS STEEL. 3. ALL STRUCTURAL STEEL FRAMING TO BE

NOTES

- 4. ALL JOIST HANGERS AND MISCELLANEOUS STABILIZERS TO BE SIMPSON
- 5. ALL LUMBER, INCLUDING BEAMS AND DECK
- JOISTS, TO BE 'PWT TREATED' BY <u>PACIFIC</u> <u>WOOD TECH</u>; 888–707–2285 6. TOP OF ALL SURFACES OF ALL WOOD FRAMING MEMBERS TO BE COVERED WITH APPROVED
- FLASHING TAPE.
- 7. ALL CUT ENDS OF WOOD FRAMING MEMBERS TO
- BE SEAL COATED. 8. STL FABRICATOR TO CONFIRM SADDLE SIZES WITH BEAM LAYOUT

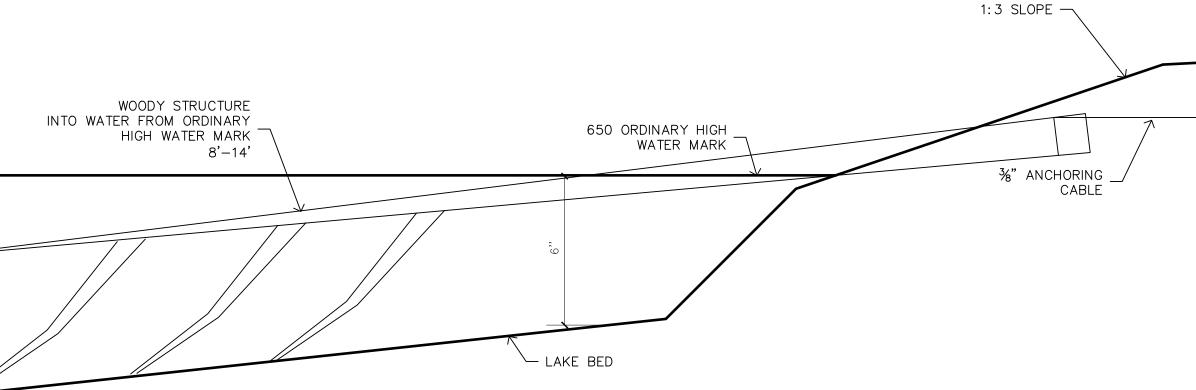


VERIFY ALL DIMENSIONS IN FIELD

- FLOOR JOIST - MULTI PLY LVL - MTL SADDLE - STL PILE CAP - STEEL PILE

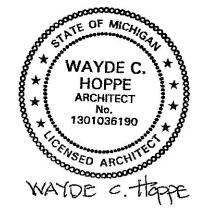
DECK SECTION

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

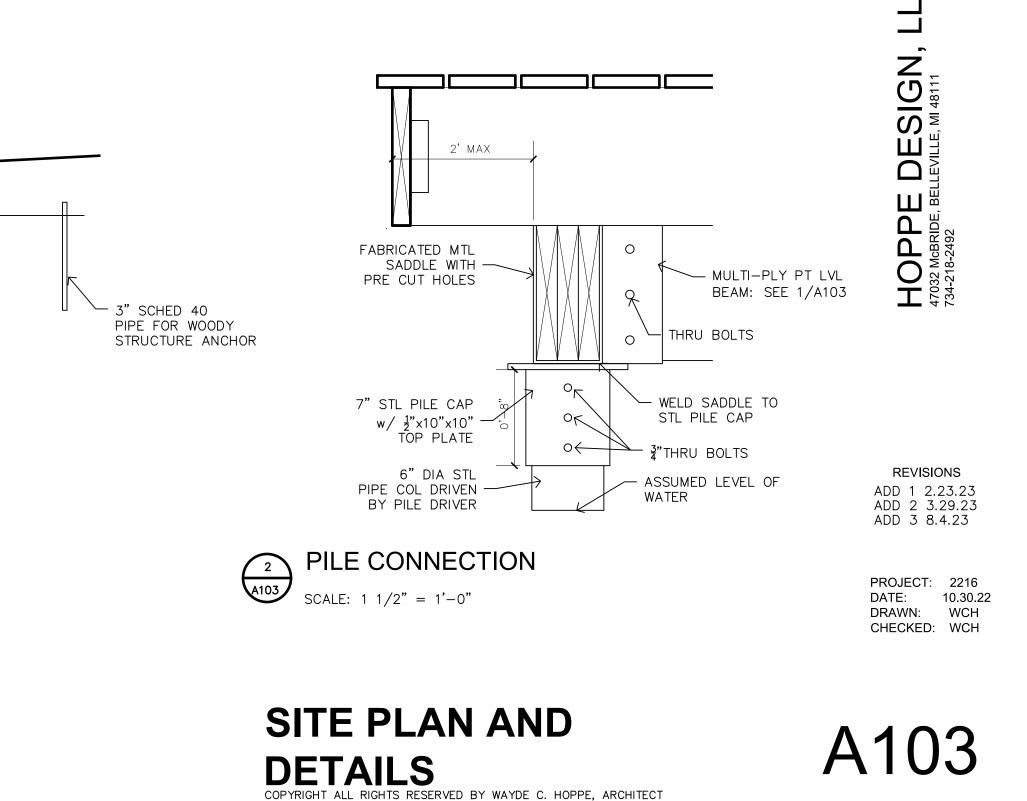


WOODY STRUCTURE AT WATERS EDGE SCALE: 3/16" = 1'-0"

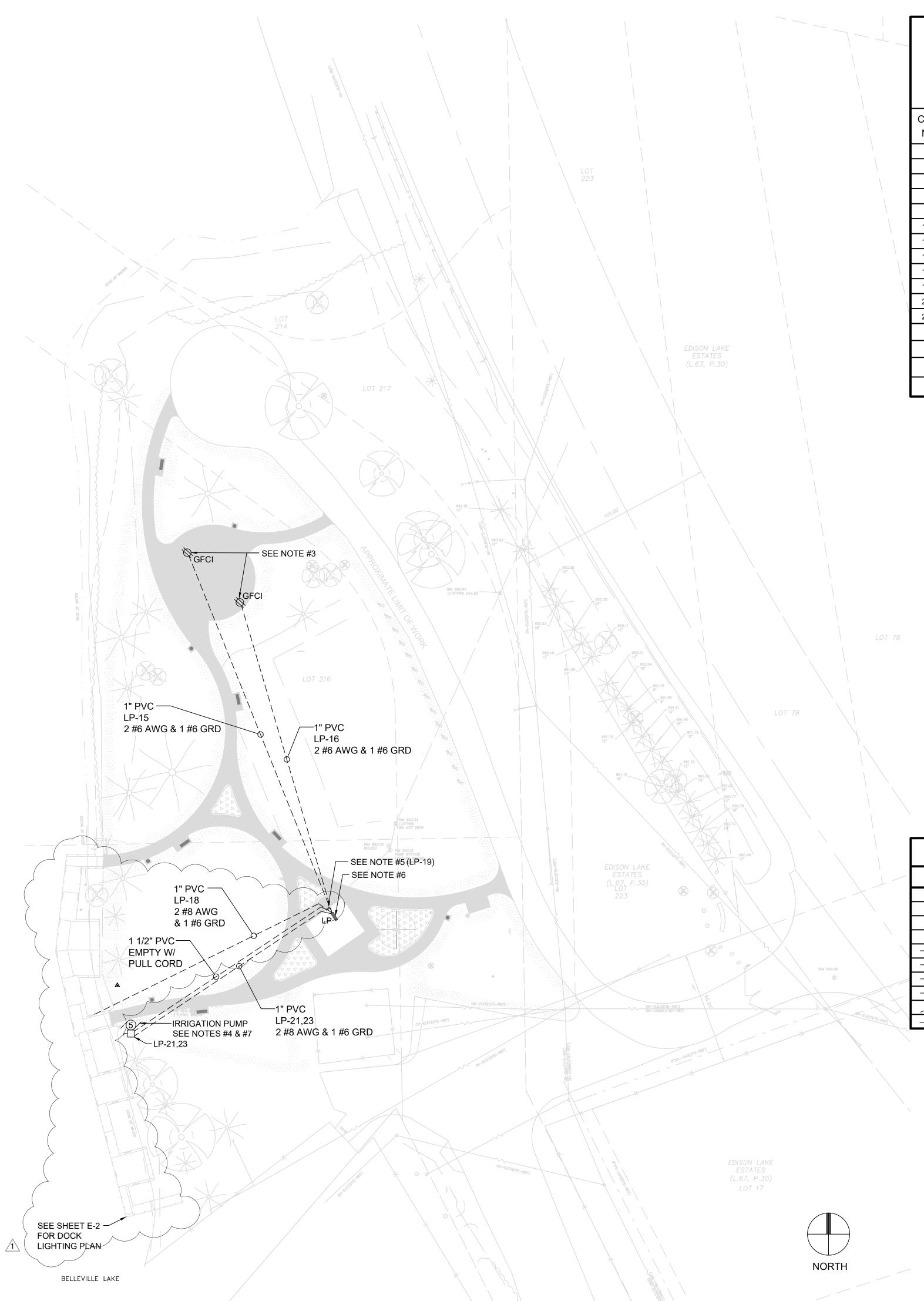
- DECKING - SIMPSON CONNECTOR - RIM BOARD



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NO. TRIP POLES FEED A Ø B Ø FEED POLES TRIP NO. 1 20 1 EXTERIOR LIGHTING 0.9 0.6 — — EXT. RCPT. GFCI 1 20 2 3 20 1 EXT. FAN — — 0.5 0.4 HAND DRYER 1 20 4 5 20 1 EXH. FAN — — 0.5 0.4 HAND DRYER 1 20 4 5 20 1 EXH. FAN 0.5 0.2 — — RECPT GFCI 1 20 6 7 20 1 LIGHTING … … 0.8 0.4 RECPT GFCI 1 20 10 11 20 1 LIGHTING … … 0.2 0.2 RECPT GFCI 1 20 10 11 20 1 LIGHTING … … 0.2 …												
NO. TRIP POLES FEED AØ BØ FEED POLES TRIP NO. 1 20 1 EXTERIOR LIGHTING 0.9 0.6 — — EXT. RCPT. GFCI 1 20 2 3 20 1 EXH. FAN — — 0.5 0.4 HAND DRYER 1 20 4 5 20 1 EXH. FAN 0.5 0.2 — — REOPT GFCI 1 20 4 7 20 1 LIGHTING — — 0.8 0.4 REOPT GFCI 1 20 1 9 20 1 LIGHTING 0.8 0.4 — — HAND DRYER 1 20 10 11 20 1 LIGHTING 0.8 0.4 — — HAND DRYER 1 20 10 13 20 1 SPARE . 0.2 . PAVILION RECEPTA	VOLTAGE AND PHASE120/208V, 1Ø, 3WPANEL BUS SIZE100 AMPMAIN TYPE100A MCB & SNPANEL MOUNTINGSURFACE								EXISTING PAN	ELB	OAF	RD
3 20 1 EXH. FAN — 0.5 0.4 HAND DRYER 1 20 4 5 20 1 EXH. FAN 0.5 0.2 — — RECPT GFCI 1 20 6 7 20 1 LIGHTING — — 0.8 0.4 RECPT GFCI 1 20 8 9 20 1 LIGHTING 0.8 0.4 — — HAND DRYER 1 20 10 11 20 1 LIGHTING 0.8 0.4 — — HAND DRYER 1 20 10 11 20 1 LIGHTING 0.8 0.4 — — HAND DRYER 1 20 10 11 20 1 LIGHTING 0.2 0.2 0.2 RECPT GFCI 1 20 12 13 20 1 SPARE 1.5 — WTR HEATER 1 20 14 15 20 1 SPARE 0.2 — DOCK WA			_	FEED	A			Ø	FEED	_		CKT. NO.
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15 20 1 PAVILION RECEPTACLE 2 2 PAVILION RECEPTAGLE 1 20 16 17 20 1 SPARE 0.2 DOCK WALKWAY LIGHTING 1 20 18 19 20 1 IRRIGATION CONTROLLER 2 SPARE 1 20 20 21 60 2 5HP IRRIGATION PUMP 2.9 SPARE 1 20 22 23 60 SPARE 1 20 24 TOTAL KW / PHASE 8.0 6.0 SPARE 1 20 24 TOTAL AMPS / PHASE 66.7 50.0 1 23. 2 <td< td=""><td>11</td><td>20</td><td>1</td><td>LIGHTING</td><td>—</td><td></td><td>0.2</td><td>0.2</td><td>RECPT GFCI</td><td>1</td><td>20</td><td>12</td></td<>	11	20	1	LIGHTING	—		0.2	0.2	RECPT GFCI	1	20	12
17 20 1 SPARE . 0.2	13	20	1	SPARE		1.5			WTR HEATER	1	20	14
19 20 1 IRRIGATION CONTROLLER 2 SPARE 1 20 20 21 60 2 5HP IRRIGATION PUMP 2.9 SPARE 1 20 22 23 60 2.9 2.9 SPACE-ONLY 24 TOTAL KW / PHASE 8.0 6.0 1. VERIFY EXISTING SPARE BREAKER QUANTITIES FOR CIRCUITS 15, 16, 18, 19, 21 & 23. TOTAL AMPS / PHASE 66.7 50.0 1. VERIFY EXISTING SPARE BREAKER QUANTITIES FOR CIRCUITS 15, 16, 18, 19, 21 & 23. TOTAL KW 14.0 14.0 14.0 14.0 14.0	15	20	1	PAVILION RECEPTACLE			.2	.2	PAVILION RECEPTACLE		20	16
21 60 2 5HP IRRIGATION PUMP 2.9 SPARE 1 20 22 23 60 2.9 2.9 SPACE-ONLY - 24 TOTAL KW / PHASE 8.0 6.0 1. VERIFY EXISTING SPARE BREAKER QUANTITIES FOR CIRCUITS 15, 16, 18, 19, 21 & 23. TOTAL AMPS / PHASE 66.7 50.0 1. VERIFY EXISTING SPARE BREAKER QUANTITIES FOR CIRCUITS 15, 16, 18, 19, 21 & 23. TOTAL KW 14.0 14.0 14.0 14.0	17	20	1	SPARE		0.2			DOCK WALKWAY LIGHTING	1	20	18
23 60 2.9 . SPACE-ONLY 24 TOTAL KW / PHASE 8.0 6.0 1. VERIFY EXISTING SPARE BREAKER QUANTITIES FOR CIRCUITS 15, 16, 18, 19, 21 & 23. TOTAL AMPS / PHASE 66.7 50.0 1. VERIFY EXISTING SPARE BREAKER QUANTITIES FOR CIRCUITS 15, 16, 18, 19, 21 & 23. TOTAL KW 14.0 14.0 14.0 PROVIDE NEW 208V 60A 2P BRANCH CIRCUIT BREAKER IN EXISTING SPACE FOR NEW IRRIGATION PUMP.	19	20	1	IRRIGATION CONTROLLER			_2		SPARE	1	20	20
TOTAL KW / PHASE 8.0 6.0 1. VERIFY EXISTING SPARE BREAKER QUANTITIES FOR CIRCUITS 15, 16, 18, 19, 21 & 23. TOTAL AMPS / PHASE 66.7 50.0 1. VERIFY EXISTING SPARE BREAKER QUANTITIES FOR CIRCUITS 15, 16, 18, 19, 21 & 23. TOTAL KW 14.0 14.0 2. PROVIDE NEW 208V 60A 2P BRANCH CIRCUIT BREAKER IN EXISTING SPACE FOR NEW IRRIGATION PUMP. TOTAL AMPS 14.0 14.0 14.0 14.0 14.0	21	60	2	5HP IRRIGATION PUMP	2.9				SPARE	1	20	22 🕹
TOTAL AMPS / PHASE 66.7 50.0 TOTAL KW 14.0 CIRCUITS 15, 16, 18, 19, 21 & 23. TOTAL AMPS 14.0 IN EXISTING SPACE FOR NEW IRRIGATION PUMP.	23	60		W.			2.9		SPACE ONLY		-	24
TOTAL AMPS / PHASE 66.7 50.0 TOTAL KW 14.0 2. TOTAL AMPS 14.0 IN EXISTING SPACE FOR NEW IRRIGATION PUMP.	TOTAL KW / PHASE			8.0 6.0			.0	1. VERIFY EXISTING SPARE BREAKER QUANTITIES FOR				
TOTAL KW 14.0 IN EXISTING SPACE FOR NEW IRRIGATION PUMP.	TOTAL AMPS / PHASE			66.7 50.0			0.0	CIRCUITS 15, 16, 18, 19, 21 & 2	23.			
TOTAL AMPS 66.7 1 3. BREAKER FOR CIRCUIT 18 TO BE GFPE TYPE.	TOTAL KW			14.0								
		TOTAL	AMPS		66.7 /1 3. BREAKER FOR CIRCUIT 18 TO BE GFPE TYPE.			E TYPE.				

ELECTRICAL NOTES:

- #1- CONDUIT ROUTING AS SHOWN ON LAYOUT IS DIAGRAMMATIC AND TO BE USED AS A GUIDE ONLY. COORDINATE INSTALLATIONS WITH FIELD CONDITIONS AND EXISTING UNDERGROUND UTILITIES. PROVIDE CONDUIT SLEEVES UNDER SIDEWALKS.
- #2- ALL INSTALLATIONS SHALL CONFORM WITH THE REQUIREMENTS OF THE 2017 NATIONAL ELECTRICAL CODE AND ALL STATE AND LOCAL CODES.
- #3- PROVIDE A 20A 125V WEATHER RESISTANT (WR) GROUND FAULT CIRCUIT INTERRUPTER (GFCI) RECEPTACLE IN AN EXTRA DUTY, IN-USE WEATHERPROOF COVER. MOUNT RECEPTACLE TO PAVILION POST. COORDINATE EXACT LOCATION WITH VENDOR DURING INSTALLATION. BRANCH CIRCUIT CONDUCTORS TO BE 2 #6 AWG & 1 #6 GRD IN 3/4" PVC. PROVIDE WEATHERPROOF JUNCTION BOX AND COMPRESSION SPLICE FOR TRANSITION TO #12 AWG CONDUCTORS AT RECEPTACLE.
- #4- 5HP IRRIGATION PUMP LOCATION. PROVIDE A 250V 60A 2P NEMA-3R FUSED DISCONNECT WITH (2) FRN-R-45A FUSES. PROVIDE FINAL CONNECTION TO EQUIPMENT. BRANCH CIRCUIT TO BE 2 #8 & 1 #10 GRD IN 1" PVC.
- #5- PROVIDE A 20A 120V BRANCH CIRCUIT FOR IRRIGATION CONTROLLER LOCATED IN JANITOR'S CLOSET. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH IRRIGATION VENDOR.
- #6- EXISTING PANEL LOCATED IN UTILITY CLOSET. ALL UNDERGROUND BRANCH CIRCUITS SHOWN SHALL PENETRATE WALL BELOW FLOOR AND TURN UP INSIDE JANITOR'S CLOSET. A 4" SLEEVED PENETRATION BELOW FLOOR IS TO BE PROVIDED BY OTHERS. COORDINATE INSTALLATION WITH THE GENERAL CONTRACTOR.
- #7- PROVIDE AN EMPTY 1 1/2" PVC CONDUIT WITH PULL CORDS FROM IRRIGATION PUMP TO IRRIGATION CONTROLLER.
- #8- THIS DRAWING IS INTENDED TO BE USED AS A GUIDE AND IS DIAGRAMMATIC TO REPRESENT THE INTENT OF THE PROPOSED MODIFICATIONS. ADDITIONAL MODIFICATIONS MAY BE REQUIRED TO EXISTING ELECTRICAL INSTALLATIONS.
- #9- NEW BRANCH BREAKER FOR DOCK WALKWAY LIGHTING TO BE GFPE. SET LET-THRU CURRENT AT 30mA. COORDINATE BREAKER WITH GFCI RECEPTACLES FOR LIGHTING TRANSFORMERS.
- #10- PROVIDE TIMECLOCK AND PHOTOCELL FOR CONTROL OF DOCK WALKWAY LIGHTING BRANCH CIRCUIT. MOUNT PHOTOCELL ON EXISTING BUILDING AND TIMECLOCK IN EXISTING ELECTRICAL ROOM.

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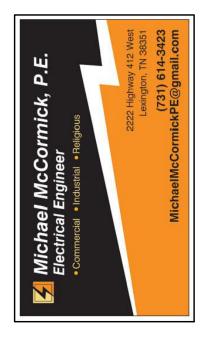
SYMBOL DESCRIPTION □ SAFETY DISCONNECT SWITCH. NF (NON-FUSED) □ DUPLEX 20A 125V RECEPTACLE. INSTALL @ 1'-6" A.F.F. IN FINISHED AREAS. ○ MOTOR CONNECTION (NUMBER IN CENTER INDICATES HORSEPOWER) □ 'L' PANEL. 120/208V. 1Ø, 3W LOW VOLTAGE LIGHTING AND POWER DISTRIBUTION PANEL. □ + □ RACEWAY WITH CONDUCTORS RUN CONCEALED IN FLOOR SLAB, IN WALLS OR IN EARTH. □ + RACEWAY WITH CONDUCTORS RUN EXPOSED, PARALLEL / RIGHT ANGLES TO STRUCTUR □ T RACEWAY FOR TELEPHONE CABLES INSTALLED BY TELEPHONE COMPANY. □ + BARE GROUND CONDUCTOR UNDERGROUND. SIZE AS NOTED ON PLANS. □ + INSULATED GREEN GROUND CONDUCTOR. SAME SIZE AS PHASE WIRE UNLESS NOTED.	SYMBOL SCHEDULE							
Image: Construction of the second	SYMBOL	DESCRIPTION						
MOTOR CONNECTION (NUMBER IN CENTER INDICATES HORSEPOWER) 'L' PANEL. 120/208V. 1Ø, 3W LOW VOLTAGE LIGHTING AND POWER DISTRIBUTION PANEL. -++ RACEWAY WITH CONDUCTORS RUN CONCEALED IN FLOOR SLAB, IN WALLS OR IN EARTH. -++ RACEWAY WITH CONDUCTORS RUN EXPOSED, PARALLEL / RIGHT ANGLES TO STRUCTUR + RACEWAY FOR TELEPHONE CABLES INSTALLED BY TELEPHONE COMPANY. + BARE GROUND CONDUCTOR UNDERGROUND. SIZE AS NOTED ON PLANS. -++ RACEWAY WITH CONDUCTORS RUN CONCEALED ABOVE CEILING OR IN WALLS		SAFETY DISCONNECT SWITCH. NF (NON-FUSED)						
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	• • • • • • • • • • • • • • • • • • •	INSULATED GREEN GROUND CONDUCTOR. SAME SIZE AS PHASE WIRE UNLESS NOTED.						

THIS IS A STANDARD SYMBOLS SCHEDULE. ALL SYMBOLS SHOWN ON THIS SCHEDULE MAY NOT APPEAR IN THIS SET OF DRAWINGS. NOTE:

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REVISIONS ADD DOCK LIGHTING

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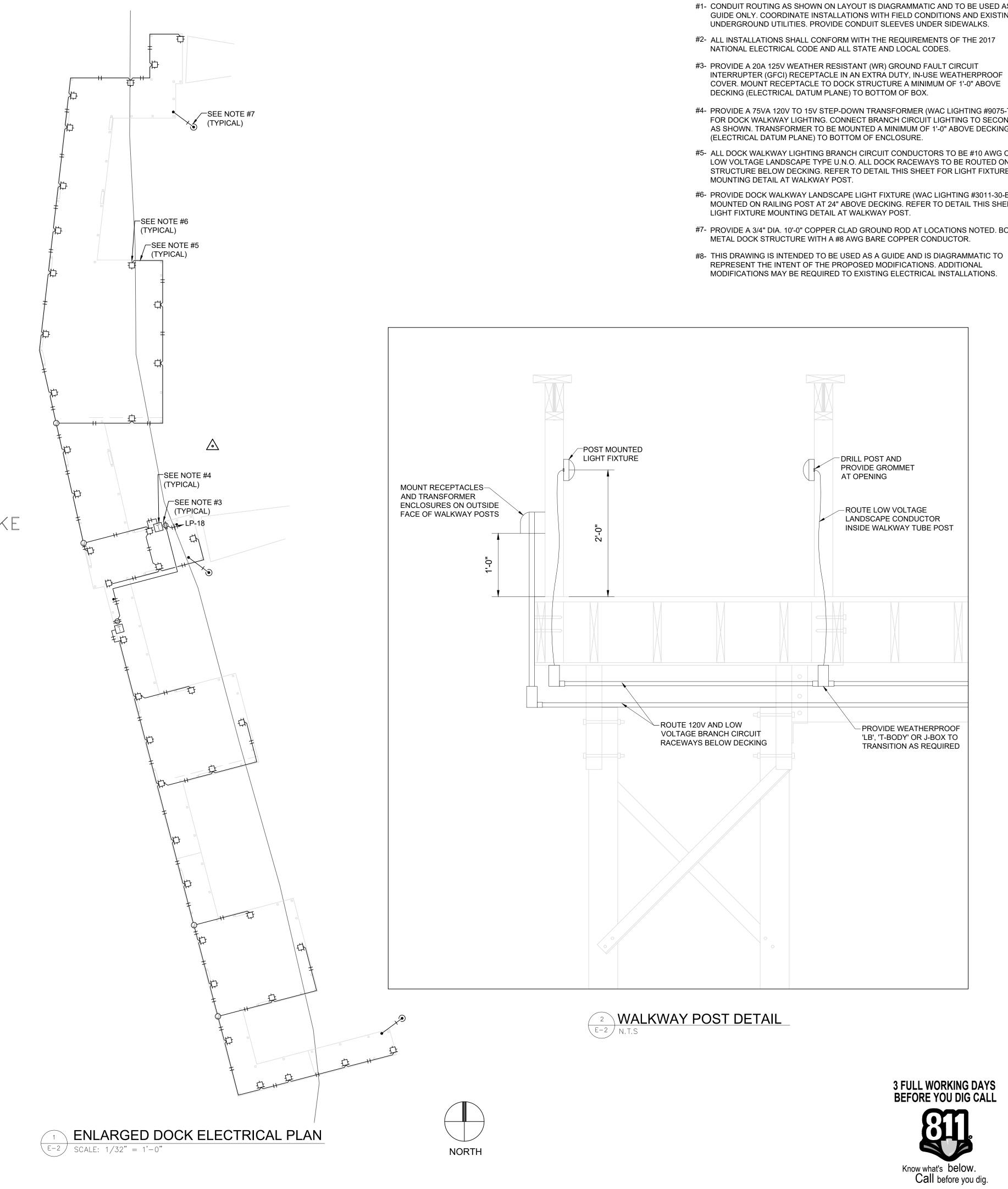
\wedge CHEDULE SCRIPTION JSED) 0 1'-6" A.F.F. IN FINISHED AREAS. NDICATES HORSEPOWER) LIGHTING AND POWER DISTRIBUTION PANEL. EALED IN FLOOR SLAB, IN WALLS OR IN EARTH. ED, PARALLEL / RIGHT ANGLES TO STRUCTURE LLED BY TELEPHONE COMPANY.



ELECTRICAL SPECIFICATIONS:

- #1- METALLIC CONDUIT SYSTEMS TO BE RIGID GALVANIZED STEEL WHERE EXPOSED TO WEATHER (BUILDING EXTERIOR) OR MECHANICAL DAMAGE. ALL OTHER CAN BE "EMT" W/ STEEL SET SCREW FITTINGS. TYPE "MC" CABLE CAN BE USED WHERE CONCEALED IN WALLS OR ABOVE TOTALLY ENCLOSED CEILINGS. PROPER FITTINGS MUST BE USED THROUGHOUT.
- #2- NONMETALLIC CONDUITS BURIED BELOW GRADE ON THE BUILDING EXTERIORS AND LOCATED IN OR BELOW CONCRETE SLABS SHALL BE SCHEDULE 40 RIGID "PVC". ELBOWS AND ANY CONDUIT LOCATED ABOVE FINISHED CONCRETE SHALL BE "RGS".
- #3- CONDUCTORS TO BE STRANDED ANNEALED 98% CONDUCTIVITY COPPER W/ TYPE "THHN/THWN" 75°C INSULATION. MINIMUM SIZE POWER AND LIGHTING SYSTEM CONDUCTORS TO BE #12 AWG.
- #4- PROVIDE INSULATED GROUND CONDUCTOR IN ALL FEEDERS AND BRANCH CIRCUITS AS SHOWN. SIZE PER ARTICLE 250 OF THE "NEC" WHERE NOT SHOWN ON THE DRAWINGS. PROVIDE GROUND CONDUCTORS W/ GREEN INSULATION WHEN AVAILABLE. ALL OTHER GROUND CONDUCTORS SHALL BE TAPED AT EACH END PER CODE.
- #5- RECEPTACLES TO BE 20AMP 125VOLT DUPLEX GROUNDING TYPE IN GRAY COLOR W/ MATCHING COVERS OF NYLON CONSTRUCTION. SPECIAL RECEPTACLES SHALL BE AS CALLED FOR ON THE DRAWINGS.
- #6- BOXES FOR RECEPTACLES, SWITCHES, OTHER DEVICES OR PULL OR JUNCTION BOXES TO MAKE CONDUIT SYSTEMS COMPLETE SHALL BE STAMPED STEEL W/ PROPER COVERS. JUNCTION AND PULL BOXES SHALL BE SIZE IN ACCORDANCE W/ THE "NEC". EXTERIOR BOXES SHALL BE TYPE "FD" CAST TYPE W/ PROPER COVERS. WEATHER PROOF COVERS FOR EXTERIOR RECEPTACLES SHALL BE "IN-USE" TYPE (TAY-MAC OR EQUAL).
- #7- RECEPTACLES, SWITCHES AND OTHER DEVICES SHALL BE HUBBELL OR AN APPROVED EQUAL.
- #8- ALL ELECTRICAL EQUIPMENT, DEVICES AND MATERIALS SHALL BE AS CALLED FOR OR AN APPROVED EQUAL COMPLETE W/ "U.L." LISTING AND LABELS.
- #9- ALL ELECTRICAL MATERIALS AND WORK SHALL BE DONE IN ACCORDANCE W/ THE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.
- #10- UPON AWARD OF CONTRACT PROVIDE 6 BOUND COPIES OF EQUIPMENT SUBMITTALS INCLUDING CUT SHEETS ON ALL LUMINAIRES, SWITCHGEAR, PANELBOARDS, DEVICES, BOXES, CONDUIT, CONDUCTORS AND ANY MISC. ELECTRICAL ITEMS FOR REVIEW BY THE ENGINEER.
- #11- ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE YEAR AFTER ACCEPTANCE OF THE BUILDING BY THE OWNER.
- #12- CONTRACTOR SHALL INCREASE THE SIZE OF BRANCH CIRCUIT CONDUCTORS FOR LOADS THAT ARE GREATER THAN 75' FROM THE PANEL AT LEAST ONE SIZE AND SHALL INCREASE THE GROUNDING CONDUCTOR SIZE PROPORTIONALLY.
- #13- MINIMIMUM SIZE CONDUCTOR FOR ALL FEEDER AND BRANCH CIRCUITS TO BE #10 AWG UNLESS NOTED OTHERWISE.

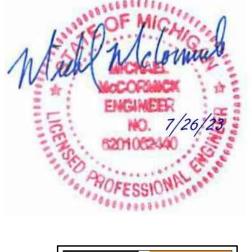
BELLEVILLE LAKE



ELECTRICAL NOTES:

- #1- CONDUIT ROUTING AS SHOWN ON LAYOUT IS DIAGRAMMATIC AND TO BE USED AS A GUIDE ONLY. COORDINATE INSTALLATIONS WITH FIELD CONDITIONS AND EXISTING
- INTERRUPTER (GFCI) RECEPTACLE IN AN EXTRA DUTY, IN-USE WEATHERPROOF COVER. MOUNT RECEPTACLE TO DOCK STRUCTURE A MINIMUM OF 1'-0" ABOVE
- #4- PROVIDE A 75VA 120V TO 15V STEP-DOWN TRANSFORMER (WAC LIGHTING #9075-TRN-SS) FOR DOCK WALKWAY LIGHTING. CONNECT BRANCH CIRCUIT LIGHTING TO SECONDARY AS SHOWN. TRANSFORMER TO BE MOUNTED A MINIMUM OF 1'-0" ABOVE DECKING
- #5- ALL DOCK WALKWAY LIGHTING BRANCH CIRCUIT CONDUCTORS TO BE #10 AWG COPPER LOW VOLTAGE LANDSCAPE TYPE U.N.O. ALL DOCK RACEWAYS TO BE ROUTED ON STRUCTURE BELOW DECKING. REFER TO DETAIL THIS SHEET FOR LIGHT FIXTURE
- #6- PROVIDE DOCK WALKWAY LANDSCAPE LIGHT FIXTURE (WAC LIGHTING #3011-30-BK) MOUNTED ON RAILING POST AT 24" ABOVE DECKING. REFER TO DETAIL THIS SHEET FOR
- #7- PROVIDE A 3/4" DIA. 10'-0" COPPER CLAD GROUND ROD AT LOCATIONS NOTED. BOND TO
- MODIFICATIONS MAY BE REQUIRED TO EXISTING ELECTRICAL INSTALLATIONS.









REVISIONS ADD DOCK LIGHTING

