PLANNING & DEVELOPMENT DEPARTMENT
2 WOODWARD AVE SUITE 808, DETROIT, MI 48226

HISTORIC DISTRICT COMMISSION

CERTIFICATE OF APPROPRIATENESS

Application Number: HDC2025-00249

Effective Date: 11/18/25

Project Address: 6325 W Jefferson Ave

Issued to: Brennah Grace Donahue
6325 W Jefferson Ave
Detroit, MI 48209

Historic District: Fort Wayne

Description of Work:

Replace fence, renovate primary entrance, site improvements, replace signs per the submitted documents, drawings and cut sheets.

COA

With the Conditions that:

- Dimensioned drawings for the proposed gates at all entrances will be submitted to accurately reflect their installation methods, locations, and attachments to the existing stone piers.
  - Additional holes will not be created to hang the new gates, and
  - The drawings should show how any remaining holes that will not be reutilized will be addressed relative to the gate installations.
- Regarding masonry cleaning, the applicant's contractor will also follow the HDC Masonry Cleaning Guidelines, and a detailed scope of work as identified in the guidelines will be submitted to staff for review and approval prior to work taking place.
- There are multiple light fixtures in the application. Should the light fixtures change, the applicant will come back to staff with the changed light fixtures for approval before installation.
- The applicant will follow SHPO Standards for not installing a maintenance strip in front of the fence.

Pursuant to Section 5(10) of the Michigan Local Historic District Act, as amended, being MCL 399.205 (10) and Sections 21-2-57 and 21-2-73 of the 2019 Detroit City Code, and Detroit Historic District Commission ("DHDC") delegation of administrative authority via Resolutions 97-01, 97-02, 98-01, 20-03, 21-04, and/or 21-07, as applicable, the staff of the DHDC has reviewed the above referenced application and hereby issues a Certificate of Appropriateness ("COA") for the description of work, effective date above, as it meets the Secretary of the Interior's Standards for Rehabilitation and the district's Elements of Design

For the Commission:

Garrick Landsberg
Director of Staff, Historic District Commission

PSR: Audra 251118AD

Post this COA at the subject property until work is complete. It is important to note that approval by the DHDC does not waive the applicant's responsibility to comply with any other applicable ordinances or statutes.

Historic Fort Wayne

Memorandum of Agreement Mitigation Work Plan

Background:

A Memorandum of Agreement (MOA) between the Federal Highway Administration and the Michigan State Historic Preservation Officer (SHPO) regarding the Gordie Howe International Bridge (GHIB) (formerly the Detroit River Internation Crossing) was signed in December 2008. The MOA identified 13 mitigation measures specific to Historic Fort Wayne (HFW). This memo outlines a work plan for implementing the mitigation measures identified in the MOA.

The following outlines each mitigation measure and how it will be implemented. Coordination meetings regarding these measures were held with the City of Detroit on September 24, 2024, January 15, 2025, and February 24, 2025.

MOA Historic Fort Wayne Mitigation:

Item #1: *MDOT shall pay for an update of the existing Fort Wayne Master Plan to revisit Fort entryway options.*

Work Plan: The City of Detroit (General Services Department (GSD), Parks & Recreation, Historic Fort Wayne Office – "Fort Wayne") does not intend on updating the existing Fort Wayne Master Plan as it is currently considered a low priority. HFW is prioritizing physical projects that have impacts on landscaping and aesthetic improvements.

Item #2: *MDOT shall conduct videotape documentation and seismic monitoring of structural conditions before, during and after construction for Fort buildings and structures closest to Jefferson Avenue, the north elevation of the Start Fort, and Detroit Historical Society collections stored within the Fort property. MDOT shall implement a protocol to notify the City of Detroit of any damage that may be associated with construction-related vibration.*

Work Plan: Seismic monitoring of structural conditions before and during construction has been completed to date. The results of the monitoring will be coordinated with the Fort once the post construction monitoring is complete.

Item #3: *MDOT shall provide wayfinding signage to assist visitors in accessing the Fort and create and print brochures showing changes in access to the Fort.*

Work Plan: MDOT developed a signage plan that was reviewed and accepted by the City of Detroit. The WDBA communication team will coordinate with Fort Wayne and MDOT to prepare a

map/graphic to show changes in the access to the Fort. This map will be printed as a brochure and also posted on the Fort's website.

Item #4: *MDOT shall construct a direct local access road to and from the plaza to Campbell Street. Campbell Street shall receive pavement, landscaping and lighting improvements from the new I-75 northbound ramp south to West Jefferson Avenue to serve as a gateway to the Fort. Campbell Street will be reconstructed as a narrow boulevard from the railroad tracks to West Jefferson Avenue. MDOT will work with the City of Detroit to investigate the possibility of renaming Campbell Street to Fort Wayne Street or another, similar name that will help identify the street as an access route to the Fort.*

Work Plan: The design to improve Campbell Street including landscaping and lighting is complete and construction is ongoing. The City of Detroit does not want to rename Campbell Street.

Item #5: *MDOT shall install new pavement, landscaping and lighting along West Jefferson Avenue from West End Street to Clark Street as well as along Clark Street from its interchange with I-75 to Jefferson Avenue to provide an attractive route to Fort Wayne.*

Work Plan: The Jurisdictional Transfer Agreement between the City of Detroit and MDOT was entered into in 2017 after extensive negotiations to identify scope of work for various items that took into consideration and complied with all EIS green sheet and MOA mitigation items included the reconstruction of Jefferson Avenue from West End Street to Campbell Boulevard as well as Clark Street intersections with Fort Street and Jefferson Avenue It also included the reconstruction of the new Green Boulevard and new Campbell Boulevard. New lighting, landscaping, and multiuse path connectivity is currently under construction. These new route connections will act as the main entry way and attractive route to HFW which also provides for safe pedestrian and cyclist use. While the limits originally specified in the 2008 MOA extend beyond the Jurisdictional Transfer agreement, MDOT and the City of Detroit agree that the intent is met and the new connections provide for a more attractive and safer connection to HFW.

Item #6: *MDOT shall construct a new decorative and historically appropriate fence along the West Jefferson property line of the Fort.*

Work Plan: MDOT and HFW agreed on replacing the existing chain link fence with a new wrought iron fence that is aesthetic but also respects the historic nature of the Fort. Initial input from SHPO has been provided to the City. The City of Detroit is working with local vendors to get a quote for the fence. MDOT will transfer funds to the City of Detroit HFW office through a Memorandum of Agreement (MOA) to construct the new fence with MDOT providing the appropriate level of oversight.

Item #7: *MDOT shall construct an entryway treatment for Fort Wayne on Fort's West Jefferson Avenue frontage or on other, adjacent City-owned property to improve wayfinding and visibility as identified in the updated Historic Fort Wayne Master Plan. MDOT shall pay for the reconfiguration of those portions of existing Fort Wayne streets specifically needed to connect the new entryway.*

Work Plan: The City of Detroit HFW office does not contemplate relocating the entrance to Fort Wayne. Improvement to the existing entrance with masonry repairs and additional landscaping will be made by HFW, and MDOT will include funds to cover the work through the MOA agreement.

Item #8: *MDOT shall construct a security wall surrounding the plaza; the wall will receive a surface treatment aesthetically compatible with Historic Fort Wayne along its West Jefferson Avenue perimeter.*

Work Plan: The security wall surrounding the Port of Entry is under construction. The Jefferson barrier wall features an aesthetic treatment that pays tribute to Historic Fort Wayne's unique star fort structure. The barrier is an eight-foot-high security wall with the aesthetic treatment displayed on the public side facing West Jefferson Avenue.

Item #9: *MDOT shall landscape the 100' wide buffer area between the plaza security wall and West Jefferson Avenue, meeting Customs and Border Protection guidelines.*

Work Plan: The buffer area between the plaza security wall and West Jefferson Avenue will be landscaped including native pollinator-positive plantings. The landscaping design was developed with the barrier wall design.

Item #10: *MDOT shall work with Customs and Border Protection to encourage truck anti-idling measures on the plaza.*

Work Plan: This is ongoing. MDOT has held discussions with the Customs and Border Protection to encourage truck anti-idling measures on the plaza.

Item #11: *MDOT shall submit work plans and specifications for all of the above provisions relative to Historic Fort Wayne to the City of Detroit Recreation Department and the SHPO for review and approval.*

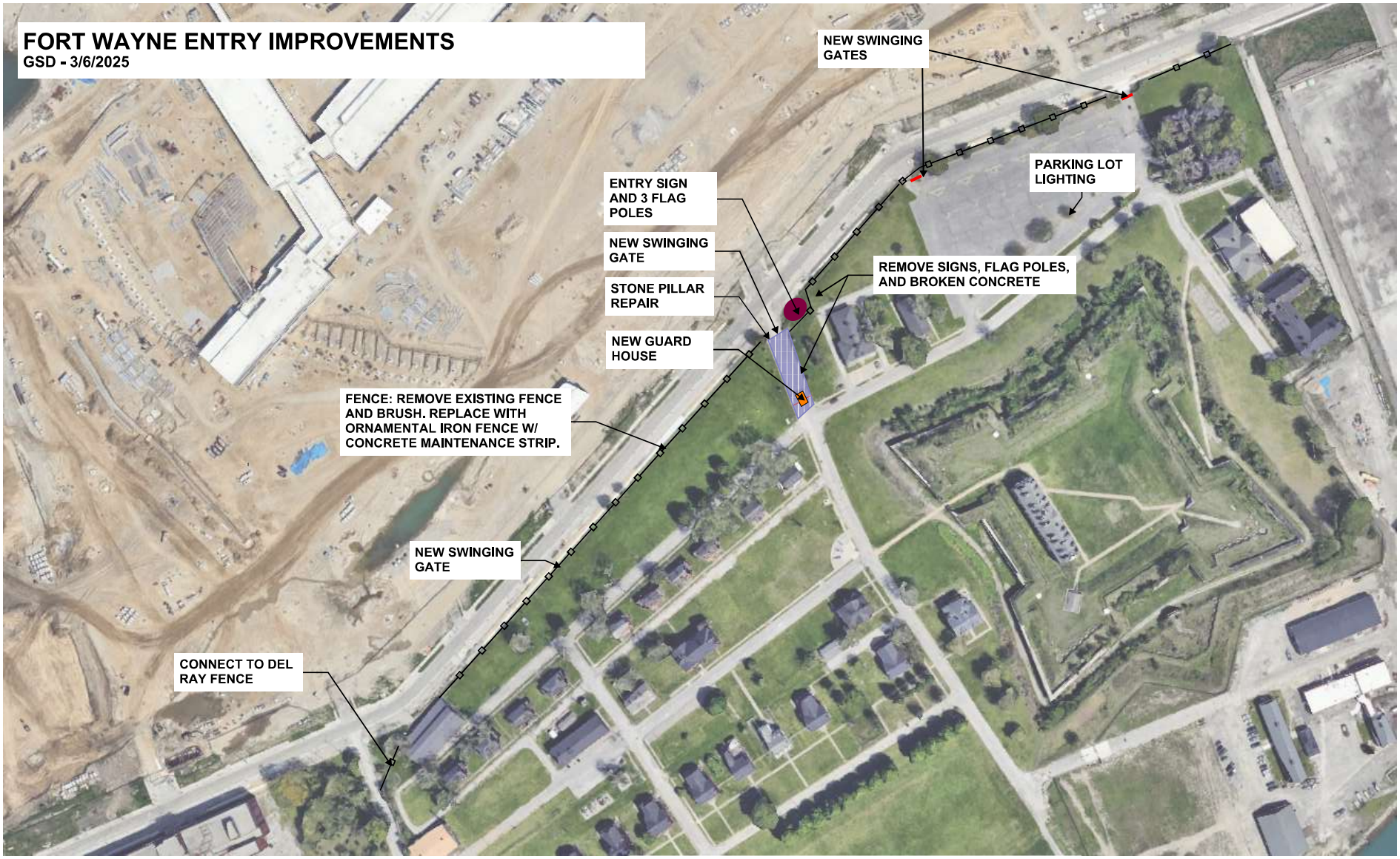
Work Plan: This is ongoing. MDOT and the City Detroit will continue to coordinate with SHPO for concurrence on items above.

Item #12: *MDOT shall work with the Fort staff and the Detroit Police Department to develop a traffic management plan for large events. MDOT shall contribute toward consultant services used to create the traffic management plan.*

Work Plan: A traffic management plan is a low priority for the City of Detroit as daily use and specific events have varying and individual traffic control needs. The wayfinding signage plans depict directional traffic flow into and out of the Fort.

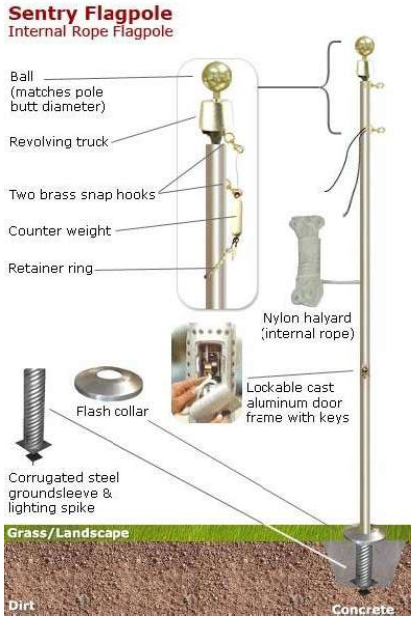
Item #13: *MDOT shall construct a surface parking lot to replace legal on-street parking that is eliminated to accommodate the plaza. The lot shall be of a design and construction similar to that used for Park and Ride lots, commonly found adjacent to Interstate Highway interchanges. MDOT and the City of Detroit shall verify the number of legal parking spaces that will be removed from service to the fort. The City of Detroit shall provide a clean site for the parking lot. The parking lot, once constructed, shall become the responsibility of the City of Detroit for any maintenance and policing.*

Work Plan: There are now over 300 additional formalized/protected parking spaces along the reconfigured West Jefferson Avenue which HFW can benefit from for excess parking. MDOT offered an existing parcel adjacent to Green Steet and the RR tracks to use as a parking lot, however, in discussion with HFW, it was rejected do to due to safety, maintenance costs, and distance reasons. The City of Detroit HFW office does not have an adjacent lot for MDOT to construct a new parking lot. The HFW office is satisfied with the additional spaces that can be utilized on West Jefferson Avenue. MDOT and the City of Detroit agree that this item can be considered closed.

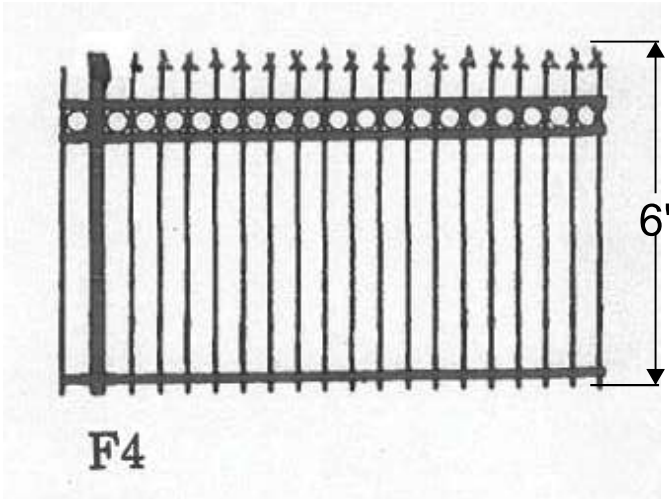

FORT WAYNE ENTRY IMPROVEMENTS
GSD - 3/6/2025
NEW SWINGING GATES
PARKING LOT LIGHTING
ENTRY SIGN AND 3 FLAG POLES
NEW SWINGING GATE
STONE PILLAR REPAIR
NEW GUARD HOUSE
REMOVE SIGNS, FLAG POLES, AND BROKEN CONCRETE
FENCE: REMOVE EXISTING FENCE AND BRUSH. REPLACE WITH ORNAMENTAL IRON FENCE W/ CONCRETE MAINTENANCE STRIP.
NEW SWINGING GATE
CONNECT TO DEL RAY FENCE

1. Lighting work at parking lot
    a. Based on discussions between GSD and MDOT
2. Fence Replacement
    a. Remove and dispose of existing fence and any vegetation
    b. Install new ornamental iron fencing along the entire Northern edge of Fort Wayne. South side of Jefferson Ave, from Campbell St. to Rademacher St. Approximately 2,600 linear feet of fencing
    c. 6', vertical picket ornamental iron fence, plain bars, with rings and cast spears. Flat capped posts. Finish: Black gloss
    d. 2' wide concrete maintenance strip installed on grade
3. Entry Gates
    a. New swinging gates at 4 locations, custom made to match fencing and fit field dimensions. All gates ornamental iron.
        i. Entrance at Brady
        ii. Parking lot – east entry
        iii. Parking lot – west entry
        iv. Jefferson Field
    b. Brick work repair as needed on existing pillars and gates.
4. New Guard House
    a. New prefabricated guard building. 6' x 10' steel structure with added brick facade. To include HVAC and electrical connections.
    b. New entry gate stop - arms
5. Entrance renovation
    a. Remove concrete and asphalt as needed to install guard house
    b. Install new curb around guard house, and edges of roadway
    c. Mill and resurface asphalt, replace concrete walkways
    d. Approximately 500 LF Curb, 12,000 SF mill and resurface asphalt, and 3,000 SF concrete walkway.
    e. Remove existing flag poles, "Historic Fort Wayne" overhead sign, and letter sign.
    f. Install 3 flag poles. Stainless steel, 30' – 35' flag pole, in ground buried.
    g. Install 6' GSD park sign

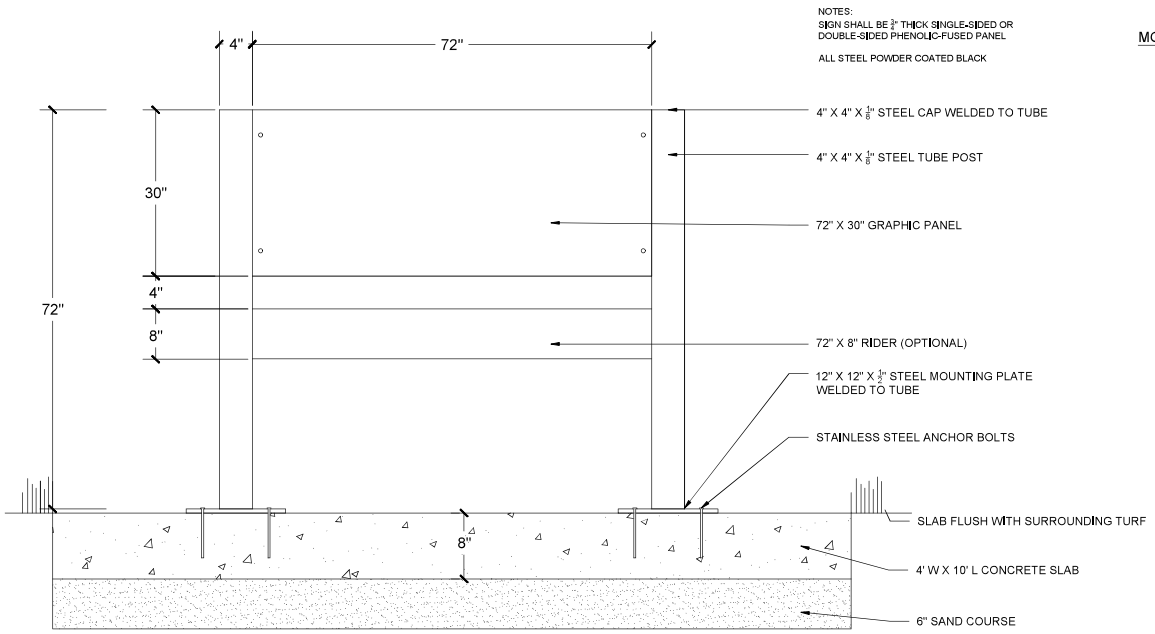
NEW GUARD SHACK



NEW FLAG POLES

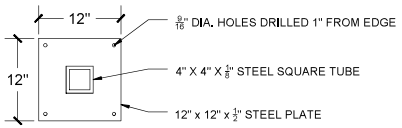


NEW FENCE - 6' ORNAMENTAL IRON WITH RINGS AND SPEARS. ON 2' WIDE CONCRETE MAINTENANCE STRIP.



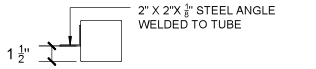
2 L5.21 6' PARK SIGN INSTALLATION
NOT TO SCALE

MOUNTING PLATE DETAIL

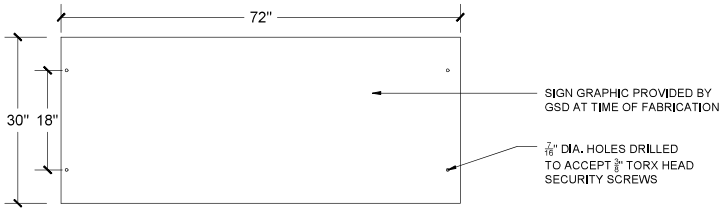


TUBE AND PLATE WELDED TOGETHER
POWER COATED BLACK

TOP VIEW - MOUNTING BRACKET



FRONT OF SIGN PANEL DETAIL



EGIS-BLN

GHIB FORT WAYNE LIGHTING & SITE IMPROVEMENTS

DETROIT, MI

30% DESIGN

APRIL, 2025

SHEET INDEX

LOCATION MAP

DLZ PROJECT NO. 1641-674700

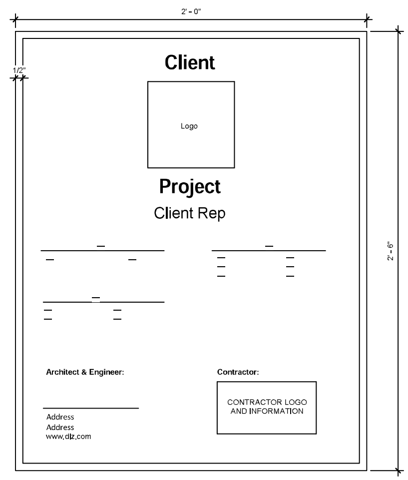
DLZ
ARCHITECTURE • ENGINEERING • PLANNING
SURVEYING • CONSTRUCTION SERVICES

ARCHITECT/ENGINEER:
DLZ Florida, LLC
NA
NA
Ph: NA
www.dlz.com

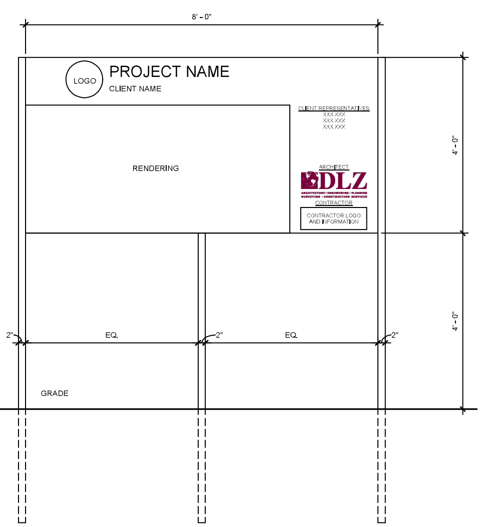
EACH SEAL APPLIES TO ITS DESIGNATED DISCIPLINE.

PRINCIPAL ARCHITECT	SITE DEVELOPMENT	CIVIL (STORM)	CIVIL (UTILITIES)	ARCHITECTURAL	STRUCTURAL	MECHANICAL	ELECTRICAL
Eric Beaujieu AIA, LEED AP	LA of Record	Civil Engineer (Drainage) of Record	Civil Engineer (SU) of Record	Architect of Record	Corey A. Van Luchene, PE, SE	Mechanical Engineer (HVAC) of Record	Jeromy Haines, PE

DEDICATION PLAQUE



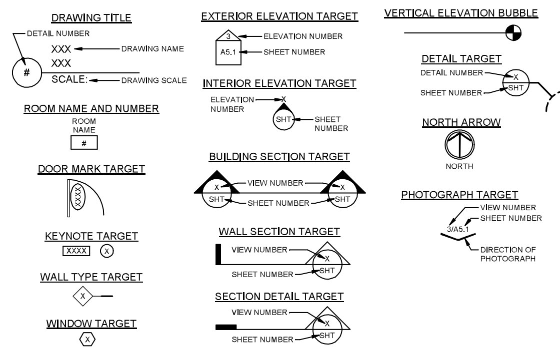
PROJECT SIGN



PROJECT SIGN MATERIALS:
SINGLE SIDED SIGN PANEL TO BE DIGITALLY PRINTED GRAPHICS AND LETTERING ON 6MM ALUMINUM COMPOSITE BOARD, SUPPORT BY THREE STANDARD 2" SQUARE TUBULAR GALVANIZED POSTS.

1. CONTRACTOR SHALL FURNISH AND INSTALL (1) PROJECT SIGN
2. SHOP DRAWING - EXAMPLE OF LOGO COLORS TO BE APPROVED FOR CONTRACTOR'S USE TO MATCH.
3. SUBMIT COLOR SIGN PROOF, TO ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
4. LETTERS SHALL BE THE COLOR "BLACK."
5. BACKGROUND SHALL BE THE COLOR "WHITE."

SYMBOLS



GENERAL NOTES

A. CONTRACTOR IS RESPONSIBLE TO CONFORM WITH APPLICABLE FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS INCLUDING APPLICABLE ORDINANCES AND REFERENCED STANDARDS.

B. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO SUBMITTING A BID OR BEGINNING ANY WORK. CONDITIONS FOUND TO BE IN VARIANCE FROM THE INFORMATION IN THE DRAWINGS OR PROJECT MANUAL SHALL BE SUBMITTED TO THE ARCHITECT IN WRITING FOR CLARIFICATION.

C. KEYNOTES ARE MEANT AS A GENERAL GUIDE FOR TYPICAL LOCATIONS. CONTRACTOR TO PERFORM FULL EXTENT OF WORK REQUIRED TO ACCOMPLISH DESIGN INTENT. THE ABSENCE OF A KEYNOTE DOES NOT ABSOLVE THE CONTRACTOR FROM PROVIDING THE FEATURE GRAPHICALLY INDICATED ON THE DRAWINGS.

D. SPECIFIC WORK ITEMS SHALL BE COORDINATED AND INTERFACED WITH ALL OTHER TRADES TO ALLOW FOR NEW CONSTRUCTION AND COMPLETE INSTALLATION AS REQUIRED TO ACCOMPLISH DESIGN INTENT.

E. REFER TO DRAWINGS OF EACH TRADE OR DISCIPLINE FOR ADDITIONAL GENERAL NOTES AND INFORMATION, INCLUDING CIVIL/SITE DEVELOPMENT, ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION AND ELECTRICAL.

F. CONTRACTOR IS RESPONSIBLE FOR ALL WORK IDENTIFIED ON ALL DRAWINGS AND INFORMATION IN THE PROJECT MANUAL, AS A COMPLETE PROJECT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE SPECIFIC SCOPE OF WORK FOR ANY SUBCONTRACTORS FOR THIS PROJECT.

G. FIELD VERIFY ACTUAL LOCATIONS OF EXISTING UNDERGROUND UTILITIES, STRUCTURES, WATER LINES, STORM AND SANITARY LINES, GAS LINES, ELECTRICAL CONDUIT, AND OTHER UNDERGROUND UTILITIES PRIOR TO PERFORMING EARTHWORK, EXCAVATION, OR UTILITY WORK. ENGAGE THE SERVICES OF A PRIVATE UTILITY LOCATE COMPANY IF NECESSARY TO COMPLETELY LOCATE EXISTING UNDERGROUND UTILITIES AND STRUCTURES.

H. LOCATION OF ALL TEMPORARY FACILITIES SHALL BE COORDINATED WITH OWNER AND ARCHITECT PRIOR TO MOBILIZATION ON-SITE, INCLUDING BUT NOT LIMITED TO TEMPORARY STAGING AREA, MATERIAL STORAGE AREA, ACCESS DRIVE(S), PARKING AREA, TOPSOIL STOCKPILE AREA, WASTE DISPOSAL AREA, FIELD OFFICES AND TEMPORARY FACILITIES, JOB SIGN, AND TEMPORARY FENCING.

I. CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL MISCELLANEOUS BLOCKING REQUIRED FOR INSTALLATION OF ALL BUILDING COMPONENTS, INCLUDING BUT NOT LIMITED TO FURNISHINGS, FIXTURES, EQUIPMENT, HARDWARE, BRACKETS, AND OWNER-PROVIDED EQUIPMENT. CONTRACTOR SHALL COORDINATE SPECIFIC REQUIREMENTS ASSOCIATED WITH EACH TRADE AND WITH OWNER'S REPRESENTATIVE.

J. CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL MISCELLANEOUS WOOD AND METAL TRIM, FLASHING, CLIP ANGLES, ANCHORS, SUPPORTS, AND CLOSURE TRIM REQUIRED TO PROVIDE A COMPLETE, UNIFORM, AND WEATHERTIGHT ASSEMBLY AS REQUIRED TO ACCOMPLISH THE DESIGN INTENT.

K. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS. CONTRACTOR SHALL PROVIDE AND INSTALL ALL ACCESSORY COMPONENTS AS REQUIRED TO FULLY COMPLY WITH MANUFACTURER'S RECOMMENDATIONS.

L. CONTRACTOR SHALL PROVIDE ACCESS DOORS IN ALL WALLS AND CEILINGS WHERE SERVICE OR ADJUSTMENT TO MECHANICAL, PLUMBING, FIRE PROTECTION OR ELECTRICAL ITEMS MAY BE REQUIRED. ACCESS DOORS SHALL BE OF AN APPROPRIATE SIZE REQUIRED FOR EACH APPLICATION. WHERE APPLICABLE, ACCESS DOORS SHALL MATCH THE FIRE RATING OF THE WALL ASSEMBLY.

M. WHERE DISCREPANCIES EXIST IN THE CONTRACT DOCUMENTS INCLUDING DISCREPANCIES BETWEEN DRAWINGS AND PROJECT MANUAL, CONTRACTOR SHALL REQUEST CLARIFICATION IN WRITING FROM ARCHITECT. THE CONTRACTOR SHALL NOT ASSUME ANY ITEM TAKES PRECEDENCE OVER THE OTHER. ANY ACTION THE CONTRACTOR MAKES PRIOR TO NOTIFICATION IN WRITING SHALL BE SOLELY AT THE CONTRACTOR'S RISK.

N. CONTRACTOR SHALL SEAL ALL PENETRATIONS IN EXTERIOR WALL AND ROOF ASSEMBLIES WITH APPROPRIATE JOINT SEALANT(S) AND FLASHING(S) TO MAINTAIN A WEATHERTIGHT AND AIRTIGHT BUILDING ENVELOPE. ALL JOINTS AND PENETRATIONS SHALL BE SEALED, GASKETED, OR WEATHER-STRIPPED TO MINIMIZE AIR LEAKAGE, INCLUDING THE FOLLOWING:
1. JOINTS AROUND FENESTRATION AND DOOR FRAMES.
2. JUNCTIONS BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AT BUILDING CORNERS, BETWEEN WALLS AND FLOORS OR ROOFS, AND BETWEEN WALLS AND ROOF OR WALL PANELS.
3. OPENINGS AT PENETRATIONS OF UTILITY SERVICES THROUGH ROOFS, WALLS, AND FLOORS.
4. JOINTS, SEAMS, AND PENETRATIONS OF VAPOR RETARDERS.
5. ALL OTHER OPENINGS IN THE BUILDING ENVELOPE.

O. COORDINATE WITH OTHER CONSTRUCTION ACTIVITIES AND CONSTRUCTION SEQUENCING WITH OTHER PROJECT(S) AND WORK BEING PERFORMED CONCURRENTLY ON-SITE.

P. BUILDING ELEVATION 100'-0" EQUALS SITE ELEVATION _____.

Q. CONTRACTOR TO PROTECT ALL ITEMS WITHIN THE CONSTRUCTION LIMITS (INCLUDING SITE ELEMENTS) THAT ARE DESIGNATED TO REMAIN; ITEMS DAMAGED AS A RESULT OF WORK PERFORMED UNDER THIS CONTRACT SHALL BE REPAIRED OR REPLACED TO ORIGINAL CONDITION.

R. ALL PENETRATIONS AND JOINTS IN FIRE-RATED WALL ASSEMBLIES AND FLOOR/CEILING ASSEMBLIES SHALL BE SEALED WITH THE FIRESTOPPING SYSTEM OR FIRE-RESISTIVE JOINT SYSTEM WHICH IS THE MOST APPROPRIATE FOR THE SPECIFIC APPLICATION BASED ON THE TYPE OF ASSEMBLY AND TYPE OF PENETRATING ELEMENT. SYSTEMS SHALL BE U.L.-LISTED FOR EACH APPLICATION.

S. ALL VERTICAL FENESTRATION (OPERABLE AND FIXED GLAZED ASSEMBLIES) SHALL BE LABELED BY THE MANUFACTURER WITH U-FACTOR, SHGC RATING, SAFETY RATING, AND FIRE-RESISTANCE RATING, WHERE APPLICABLE. WINDOWS AND DOORS SHALL BE CERTIFIED AS MEETING AIR LEAKAGE REQUIREMENTS PER NFRC 400.

T. THESE DRAWINGS SHALL NOT BE SCALED TO OBTAIN DIMENSIONS. IF THE DIMENSIONS CANNOT BE DETERMINED BY THE INFORMATION GIVEN, CONTRACTOR SHALL REQUEST CLARIFICATION FROM THE ARCHITECT. ALL DIMENSIONS ARE TO FACE OF STUD, FACE OF CMU, OR FACE OF CONCRETE, UNLESS NOTED OTHERWISE. CEILING HEIGHT DIMENSIONS ARE FROM FINISHED FLOOR TO FACE OF FINISHED CEILING MATERIALS, UNLESS NOTED OTHERWISE.

U. CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL NECESSARY DEWATERING ACTIVITIES AS PART OF THE BASE BID AMOUNT.

ABBREVIATIONS

ABBREVIATIONS:

A.B.	ANCHOR BOLT
A/C	AIR CONDITIONING
A.D.	AREA DRAIN
ADD.	ADDENDUM
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFT	ATHLETIC FLOOR TILE
AP	ACCESS PANEL
APC	ACOUSTICAL PANEL CEILING
A/V	AUDIO VISUAL
ADMIN.	ADMINISTRATION
AGGR.	AGGREGATE
ALT.	ALTERNATE
ALUM	ALUMINUM
APPROX	APPROXIMATE
ARCH.	ARCHITECT (ARCHITECTURAL)
ASPH.	ASPHALT
ASSOC.	ASSOCIATE
AVG	AVERAGE
B/	BOTTOM
BB	BOND BEAM
B.F.	BARRIER FREE
BFP	BACK FLOW PREVENTER
BL	BUILDING LINE
BM	BENCH MARK
BTU	BRITISH THERMAL UNIT
B/U	BUILT UP
BD	BOARD
BTWN	BETWEEN
BLDG	BUILDING
BM	BEAM
BR	BULLET RESISTANT
BRG	BEARING
BRZ	BRONZE
BSMT	BASEMENT
C.	CONDUIT
CAB.	CABINET
C.B.	CATCH BASIN
CB.	CORNER BAR
C.C.	CENTER TO CENTER
CEM.	CEMENT
CER.	CERAMIC
CFM	CUBIC FEET PER MINUTE
CG	CORNER GUARD
C.I.	CAST IRON
C.I.P.	CAST-IN-PLACE
CIR.	CIRCLE OR CIRCULAR
CJ	CONTROL JOINT
CL	CENTERLINE
C.L.	CONSTRUCTION LINE
CLG.	CEILING
CLOS.	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COMP.	COMPACTED
CONC.	CONCRETE
COND.	CONDENSATE
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
COORD.	COORDINATE
CORR.	CORRIDOR
CORG.	CORRUGATED
CPT	CARPETING
CSJ	CONSTRUCTION JOINT
CTB	CERAMIC TILE BASE
CTF	CERAMIC TILE FLOOR
CTW	CERAMIC TILE WALL
CTR	CENTER OR CENTERING
CU	CUBIC
CW	COLD WATER
D.	DEEP
DF	DRINKING FOUNTAIN
DL	DEAD LOAD
DS	DOWN SPOUT
DBL	DOUBLE
DEG.	DEGREE
DEMO	DEMOLISH (ED)
DEPT.	DEPARTMENT
DIA	DIAMETER
DIM.	DIMENSION
DR	DOOR
DWG	DRAWING
DTL	DETAIL
E.	EAST
EA	EXHAUST AIR
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EIFS	EXT. INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
EMER.	EMERGENCY
E.PAN.	ELECTRICAL PANEL
E.W.	EACH WAY
EWC	ELECTRIC WATER COOLER
EL.	ELEVATION
ELEC.	ELECTRICAL OR ELECTRIC
ELEV.	ELEVATOR
ENG.	ENGINEER OR ENGINEERING
EQ	EQUAL
EQUIP.	EQUIPMENT
ETC.	ET CETERA
EXIST.	EXISTING
EXP	EXPOSED STRUCTURE
EXP.	EXPANSION
EXT.	EXTERIOR
FACP	FIRE ALARM CONTROL PANEL
FAI	FRESH AIR INTAKE
F.C.	FURNACE
FD	FOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FHC	FIRE HOSE CABINET
FM	FLOOR MOUNTED
FR	FIN RADIATION
F.S.	FOOD SERVICE
FV	FIELD VERIFY
FWC	FABRIC WALL COVERING
FIN.	FINISH
FLR	FLOOR
FT	FOOT OR FEET
FTG	FOOTING
GA	GAUGE
GC	GENERAL CONTRACTOR
GRV	GRAVITY ROOF VENTILATOR
GL.	GLASS
GND.	GROUND
GR.	GRADE
GWB	GYPSUM WALL BOARD
H.	HIGH
H.B.	HOSE BIBB
HM	HOLLOW METAL
HOA	HAND-OFF-AUTOMATIC
HVAC	HEATING VENTILATING & AIR-CONDITIONING
HW	HOT WATER
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
HDWD.	HARDWOOD
HDWR.	HARDWARE
HT.(HGT.)	HEIGHT
HDP	HIGH DENSITY PARTICALE BOARD
HORIZ.	HORIZONTAL
HR.	HOUR
HYD.	HYDRAULIC
ID	INSIDE DIAMETER
I.F.	INSIDE FACE
IR	INSIDE RADIUS
IN.	INCH
INFO.	INFORMATION
INSUL	INSULATION
INT.	INTERIOR
INV.	INVERT
JAN.	JANITOR OR JANITORIAL
J.B.	JUNCTION BOX
JCT.	JUNCTION
JT.	JOINT
K.D.	KILN-DRIED
KIT.	KITCHEN
KO	KNOCKOUT
KP.	KICK PLATE
L.	LEFT
LAM.	LAMINATED
LAV.	LAVATORY
LBS.	POUNDS
LG.	LARGE
LGTH	LENGTH
LH	LEFT HAND
LFT.(LF.)	LINEAR FEET
LHR	LEFT HAND REVERSE
L.L.	LIVE LOAD
L.O.A.	LENGTH OVER ALL
LIN.	LINEAR
LTG.	LIGHTING
MDP	MAIN DISTRIBUTION PANEL
MATL.	MATERIAL
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MEMB.	MEMBRANE
MEZZ.	MEZZANINE
MFR	MANUFACTURER
MH	MAN HOLE
MIN	MINIMUM
MISC.	MISCELLANEOUS
MIX.	MIXTURE
MK	MARK
MO	MASONRY OPENING
MSRY.	MASONRY
MTD	MOUNTED
MTL	METAL
MTG.	MOUNTING
N.	NORTH
NA(N/A)	NOT APPLICABLE
NIC	NOT IN CONTRACT
NF	NEAR FACE
N.O.P.	NOT OTHERWISE PROVIDED
NO.	NUMBER
NOM.	NOMINAL
NTS	NOT TO SCALE
OA.	OVERALL
OA	OUTSIDE AIR
OAI	OUTSIDE AIR INTAKE
OC	ON CENTER
OD	OUTSIDE DIAMETER
O. TO O.	OUT TO OUT
OF	OUTSIDE FACE
OR	OUTSIDE RADIUS
OL.	OVERLOAD
OFC.	OFFICE
OH	OVERHEAD
OPNG.	OPENING
OPP.	OPPOSITE
OR.	OUTSIDE RADIUS
ORIG.	ORIGINAL
OZ	OUNCE
P.A.	PIPE ANCHOR
P.C.	PLUMBING CONTRACTOR
P.D.	PRESSURE DROP
PJF	PRE MOLDED JOINT FILLER
PRV	PRESSURE REDUCING VALVE
PASS.	PASSENGER
PAT.	PATTERN
PERP.	PERPENDICULAR
PF	PRE-FINISHED
PLAM	PLASTIC LAMINATE
PLAS.	PLASTIC
PLBG.	PLUMBING
PLY	PLYWOOD
PNEU.	PNEUMATIC
PNL	PANEL
PREFAB	PREFABRICATED
PROJ.	PROJECT
PT	PAINT
P.CONC.	PRECAST CONCRETE SLAB
PTN.	PARTITION
PV.	PAVERS
PVC	POLYVINYL CHLORIDE
QCV	QUICK COUPLER VALVE
QT	QUARRY TILE
QUAL.	QUALITY
QTY.	QUANTITY
R.	RIGHT
RAD.	RADIUS
RA	RETURN AIR
RB	RUBBER BASE
RBR	RUBBER
RD.	ROAD
RD	ROOF DRAIN
REC.	RECESSED
REF	REFRIGERATOR
REV.	REVISION
REM.	REMOVABLE
RH	RIGHT HAND
RHR	RIGHT HAND REVERSE
RCP	REINFORCED CONCRETE PIPE
RE:	REFER TO:
RECPT	RECEPTACLE
RECT.	RECTANGLE OR RECTANGULAR
REINF	REINFORCE (D) (ING) (MENT)
REQD.	REQUIRED
REV.	REVERSE
RFG.	ROOFING
RH	RIGHT HAND
RHR	RIGHT HAND REVERSE
RLG.	RAILING
RM	ROOM
R.R.	RAIL ROAD
RT.	RIGHT
ROW (R/W)	RIGHT OF WAY
RVS.	REVERSE
RWC	MAIN WATER COLLECTOR
RWL	RAIN WATER LEADER
SA	SUPPLY AIR
SC	SEALED CONCRETE
SFS	STORE FRONT SYSTEM
SPS	STAND PIPE
S.	SOUTH
SS	STAINLESS STEEL
S. TO S.	STUD TO STUD
SHM	SECURITY HOLLOW METAL
SV	SHEET VINYL
SAN	SANITARY
SCHED	SCHEDULE
SECT	SECTION
SEW	SEWER
SHT	SHEET
SHWR	SHOWER
SIM.	SIMILAR
S.O.	SECTIONAL OVERHEAD
SPECS	SPECIFICATIONS
SPKR	SPEAKER
SQ.	SQUARE
ST	STEEL
STD	STANDARD
STOR.	STORAGE
STRUCT	STRUCTURAL
SUSP.	SUSPENDED
SW	SWITCH
T	TEMPERED
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
T/C	TOP CURB
TCC	TEMP. CONTROL CONTRACTOR
TCP	TEMP. CONTROL PANEL
TP	TEPID WATER
TWC	TEPID WATER CONTROLLER
TBB	TILE BACKER BOARD
TEL.	TELEPHONE
TEMP.	TEMPERATURE
TERR	TERRAZZO
THRU	THROUGH
TLT	TOILET
TOL.	TOLERANCE
TYP	TYPICAL
U	HEAT TRANSFER COEFFICIENT
UFD	UNDER FLOOR DUCT
UL	UNDERWRITER'S LABORATORIES
UNO	UNLESS NOTED OTHERWISE
UV	UNIT VENTILATOR
UR	URINAL
UTIL.	UTILITY
VYL	VINYL
VAP.	VAPOR
VAR.	VARIES
VCB	VINYL COVE BASE
VCP	VITRIFIED CLAY PIPE
VCT	VINYL COMPOSITION TILE
VERT.	VERTICAL
VEST.	VESTIBULE
VENT.	VENTILATE
VIF	VERIFY IN FIELD
VOL.	VOLUME
VP	VENT PIPE
VS	VENT STACK
VWC	VINYL WALL COVERING
W.	WEST
WC	WATER CLOSET
WD	WOOD
WF	WASH FOUNTAIN
W.H.	WALL HUNG
WH	WATER HEATER
WI	WROUGHT IRON
WP	WORKING POINT
WL	WIND LOAD
WM	WALK OFF MAT
WS	WORK SINK
WWF	WELDED WIRE FABRIC
WT.	WEIGHT
XFMR	TRANSFORMER
XFR	TRANSFER
YD	YARD
YCO	YARD CLEAN OUT
°	DEGREE
±	PLUS OR MINUS
Ø	DIAMTER
	CENTERLINE
P	PLATE
&	AND
x	BY
@	AT
#	NUMBER
W/	WITH

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DLZ Florida, LLC

NO.	REVISION	DATE

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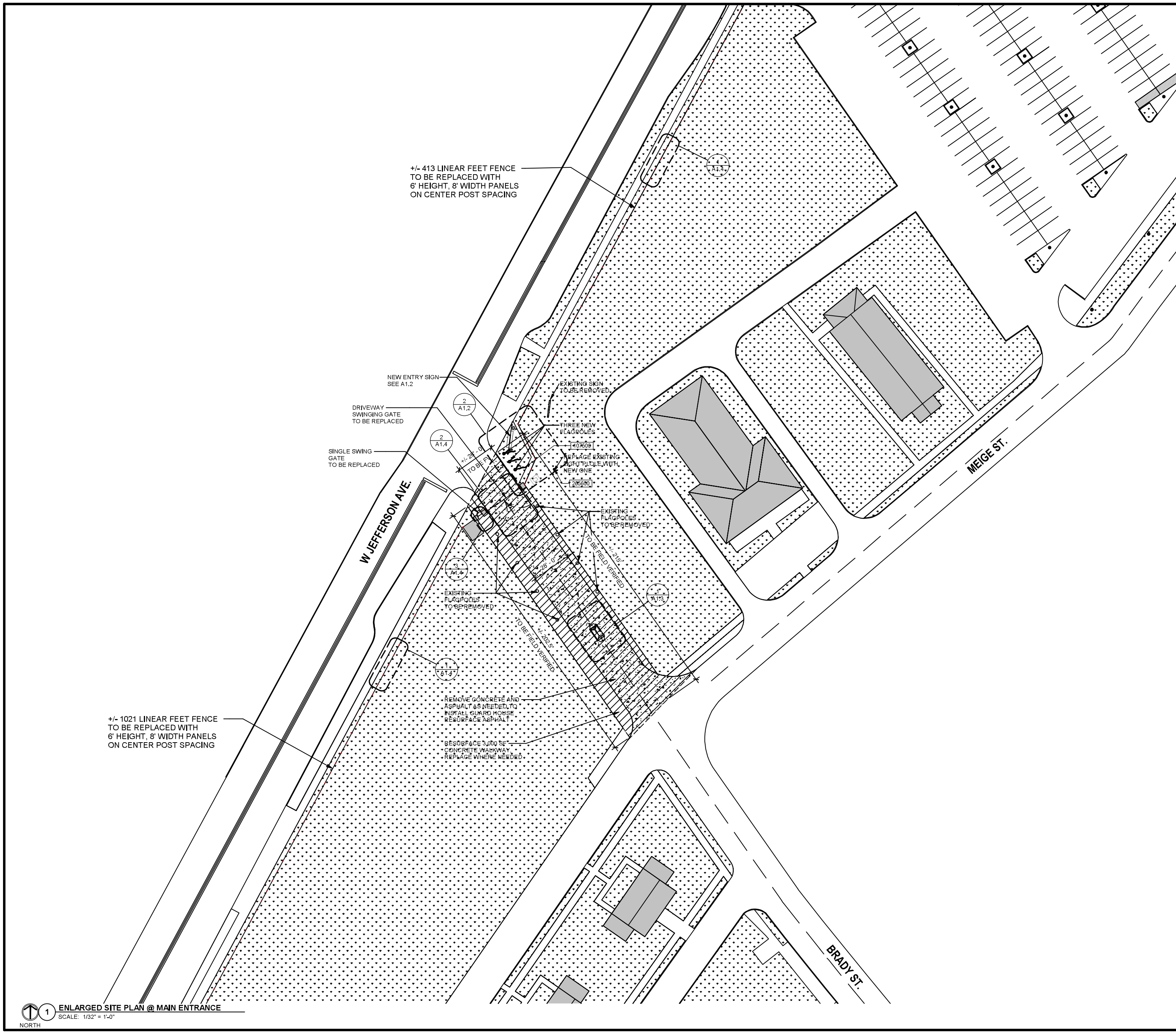
DESIGNED: Designer
APPR'VD: Approver
DATE: APRIL 2025
PROJECT NUMBER
1641-674700

EGIS-BLN
GHIB FORT WAYNE LIGHTING & SITE IMPROVEMENTS
DETROIT MI

GENERAL NOTES AND INFORMATION

DRAWING NUMBER
G1.1
GENERAL



GENERAL NOTES:

A. REFER TO G SERIES DRAWINGS FOR ADDITIONAL GENERAL NOTES AND INFORMATION.

B. REFER TO DRAWINGS OF ALL OTHER DISCIPLINES FOR ADDITIONAL REMOVALS AND SELECTIVE DEMOLITION ACTIVITIES.

C. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO SELECTIVE DEMOLITION ACTIVITIES.

D. CONTRACTOR SHALL REMOVE EXISTING ASBESTOS-CONTAINING MATERIALS (ACM) WITHIN THE BUILDING. REFER TO ENVIRONMENTAL SERIES DRAWINGS FOR ADDITIONAL INFORMATION.

E. EXISTING TO REMAIN ITEMS SHALL BE PROTECTED THROUGHOUT.

F. THE DURATION OF THE PROJECT. IF ANY EXISTING ITEM IS DAMAGED DURING CONSTRUCTION, IT SHALL BE REPLACED OR RESTORED TO ITS ORIGINAL CONDITION.

G. CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL TEMPORARY SHORING AND BRACING REQUIRED TO COMPLETE THE WORK.

H. CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED, INCLUDING ASSOCIATED REPAIR AND FINISHING TO MATCH ADJACENT SURFACES.

I. REMOVE ALL ABANDONED EQUIPMENT, DUCTWORK, PLUMBING, ELECTRICAL, DATA, AND COMMUNICATIONS LINES, DEVICES, AND EQUIPMENT. EXPOSED UTILITIES SHALL BE IDENTIFIED, CAPPED, AND LABELED.

J. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY ENVIRONMENTAL CONTROL MEASURES INCLUDING APPLICABLE AIR QUALITY CONTROL MEASURES, DUST CONTROL, EROSION CONTROL, AND OTHER MEASURES REQUIRED FOR PROTECTION OF OCCUPANTS AND PROPERTY DURING SELECTIVE DEMOLITION AND CONSTRUCTION ACTIVITIES.

K. CONTRACTOR IS SOLELY RESPONSIBLE FOR COORDINATING CONTRACT DOCUMENTS WITH FIELD CONDITIONS AND WITH WORK REQUIRED FOR EACH TRADE.

L. EXISTING CONCRETE SLAB-ON-GRADE SHALL BE SAWCUT AND REMOVED AS REQUIRED TO COMPLETE UNDERGROUND PIPING WORK. REPLACE CONCRETE SLAB-ON-GRADE AND FINISH TO MATCH ADJACENT CONSTRUCTION. ALL CONCRETE REMOVAL AND REPLACEMENT BEYOND THAT SHOWN IS INCIDENTAL TO THE WORK AND SHALL BE INCLUDED IN THE CONTRACTOR'S BID AS REQUIRED TO COMPLETE THE PROJECT.

M. BUILDING TO REMAIN PARTIALLY OCCUPIED DURING CONSTRUCTION. SEQUENCE ALL DEMOLITION ACTIVITIES ACCORDINGLY TO MINIMIZE DISRUPTION OF BUILDING OCCUPANTS. REFER TO PHASING PLANS.

N. CONTRACTOR SHALL COORDINATE DEMOLITION ACTIVITIES WITH NEW WORK TO VERIFY DIMENSIONS AND EXTENT OF REMOVALS PRIOR TO BEGINNING WORK.

NOTE: REFER TO PRESERVATION BRIEFS AND PROJECT SPECIFICATION FOR MORE INFORMATION ON HOW TO REPAIR HISTORIC STONE PILLAR AND BRICK WORK.

A. WALL PREPARATION RESTORATION TO BE CONSISTENT WITH U.S. DEPARTMENT OF INTERIOR PRESERVATION BRIEFS ON " CLEANING AND WATER-REPELLENT TREATMENTS FOR HISTORIC MASONRY" AND "REPOINTING MORTAR JOINTS FOR HISTORIC MASONRY BUILDINGS"

B. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.

C. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS.

D. REMOVE AND REPOINT ALL FAILED MASONRY MORTAR JOINTS.

E. REMOVE SURFACE RUST AND LOOSE PAINT FROM EXISTING STEEL LINTELS AND RE-PAINT THE STEEL LINTELS.

F. MASONRY SHALL BE RE-TUCK POINTED AS NECESSARY TO STOP AIR AND WATER INFILTRATION.

G. PROVIDE ALL REQUIRED PROJECT DOCUMENTATION, INCLUDING BUT NOT LIMITED TO SUBMITTALS, SHOP DRAWINGS, PRODUCT DATA, SAMPLES, TEST REPORTS, INSPECTION REPORTS, DAILY REPORTS, SCHEDULE UPDATES, PROJECT PHOTOGRAPHS, O&M MANUALS, WARRANTIES, AS-BUILTS, AND OTHER REQUIRED DOCUMENTATION. ALL DOCUMENTS TO BE PROVIDED IN A TIMELY MANNER.

H. PROVIDE ALL REQUIRED FIELD SUPERVISION, QUALITY CONTROL, AND SAFETY PERSONNEL AS REQUIRED. FULL TIME SUPERVISION MUST ALWAYS BE PROVIDED WHEN WORK IS BEING PERFORMED ON-SITE.

I. PATCH AND REPAIR ALL EXISTING WALL, FLOOR AND CEILING CONSTRUCTION DAMAGED BY CONSTRUCTION ACTIVITIES TO MATCH EXISTING ADJACENT FINISH SURFACES.

J. T. REPLACE ALL WINDOW SEALS TO ERA CORRECT MATERIALS.

K. RESTORE WEIGHTS AND COUNTER BALANCE SYSTEM.

L. CONTRACTOR TO TAKE ALL NECESSARY PRECAUTIONS IN HANDELING OF ANY MATERIAL REQUIRING ABATEMENT, SEE SPECIFICATIONS.

KEYNOTES

107500 GROUND-SET FLAGPOLES

265600 EXTERIOR LIGHTING, LIGHTING POLES AND STANDARDS

LEGEND:

- EXISTING TO BE REMOVED
- EXISTING CONCRETE & ASPHALT TO BE REMOVED
- EXISTING TO REMAIN

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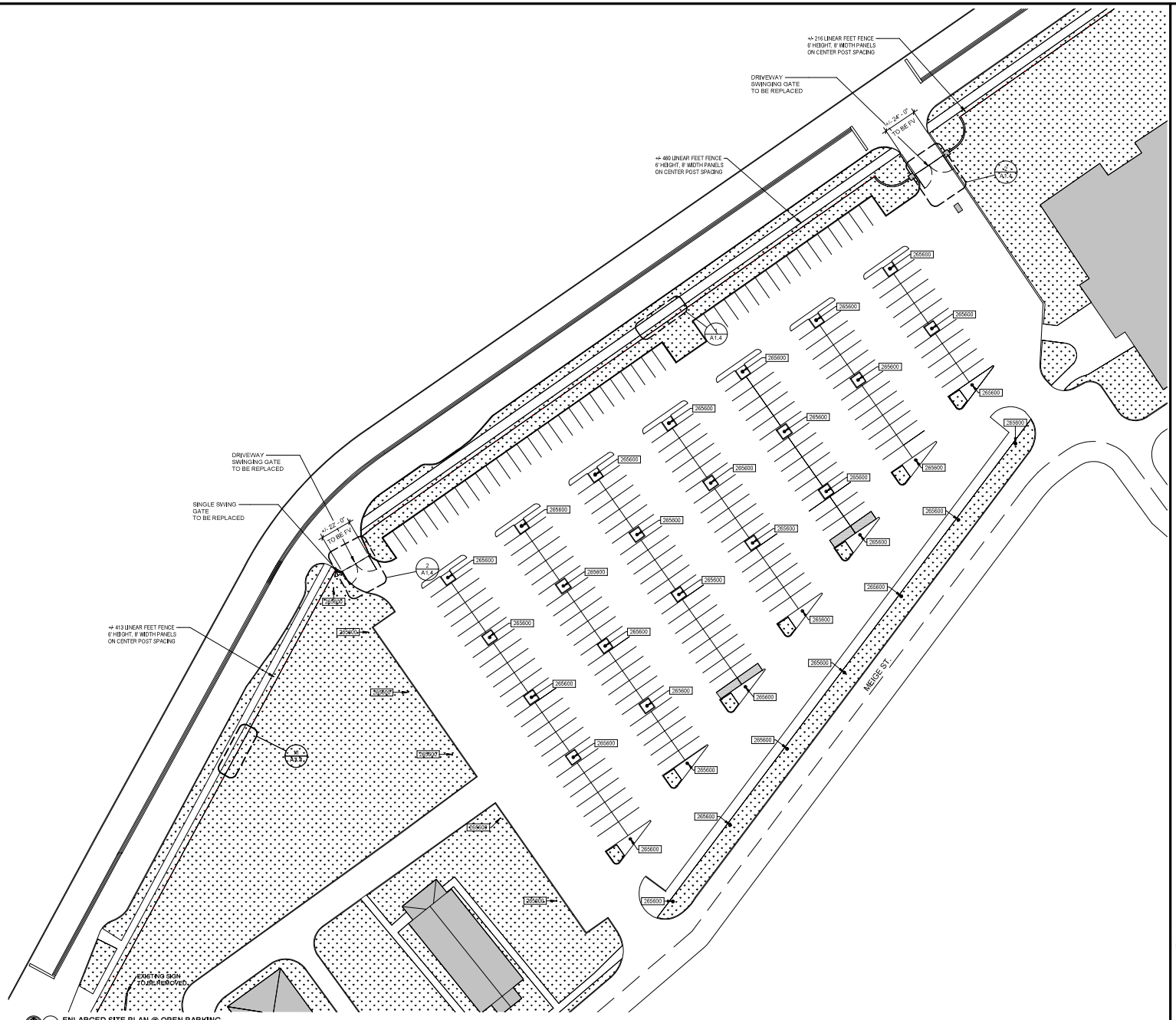
DETROIT MI
EGIS-BLN
GHIB FORT WAYNE LIGHTING & SITE IMPROVEMENTS
ENLARGED SITE PLAN @ MAIN ENTRANCE

DRAWING NUMBER
A1.0
ARCHITECTURE



1 ENLARGED SITE PLAN @ OPEN PARKING
SCALE: 1/32" = 1'-0"

GENERAL NOTES:

A. REFER TO G SERIES DRAWINGS FOR ADDITIONAL GENERAL NOTES AND INFORMATION.

B. REFER TO DRAWINGS OF ALL OTHER DISCIPLINES FOR ADDITIONAL REMOVALS AND SELECTIVE DEMOLITION ACTIVITIES.

C. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO SELECTIVE DEMOLITION ACTIVITIES.

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E. EXISTING TO REMAIN ITEMS SHALL BE PROTECTED THROUGHOUT.

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K. RESTORE WEIGHTS AND COUNTER BALANCE SYSTEM.

L. CONTRACTOR TO TAKE ALL NECESSARY PRECAUTIONS IN HANDELING OF ANY MATERIAL REQUIRING ABATEMENT. SEE SPECIFICATIONS.

KEYNOTES

265600 EXTERIOR LIGHTING, LIGHTING POLES AND STANDARDS

LEGEND:

EXISTING TO BE REMOVED

EXISTING CONCRETE & ASPHALT TO BE REMOVED

EXISTING TO REMAIN

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DLZ Florida, LLC

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DESIGNED: Designer
APPR'D: Approver
DATE: APRIL, 2025
PROJECT NUMBER: 1641-674700

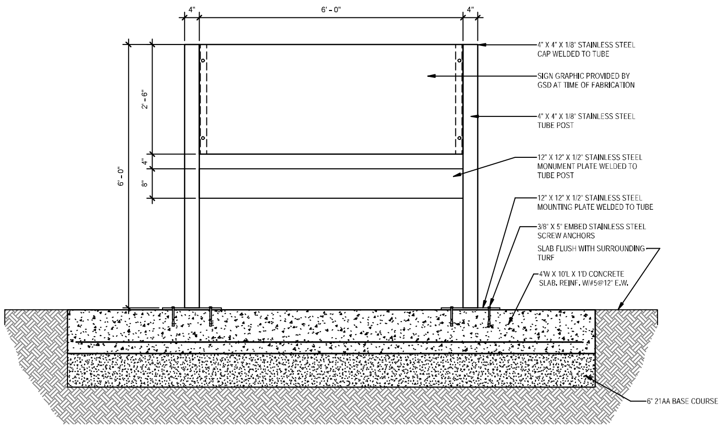
DETROIT

EGIS-BLN
GHB FORT WAYNE LIGHTING & SITE IMPROVEMENTS

ENLARGED SITE PLAN @ OPEN PARKING

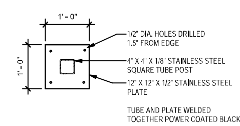
DRAWING NUMBER: A1.1

ARCHITECTURE

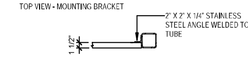


1 **NEW SIGN DETAIL**
SCALE: 3/4" = 1'-0"

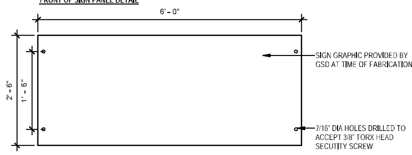
MOUNTING PLATE DETAIL



TOP VIEW - MOUNTING BRACKET

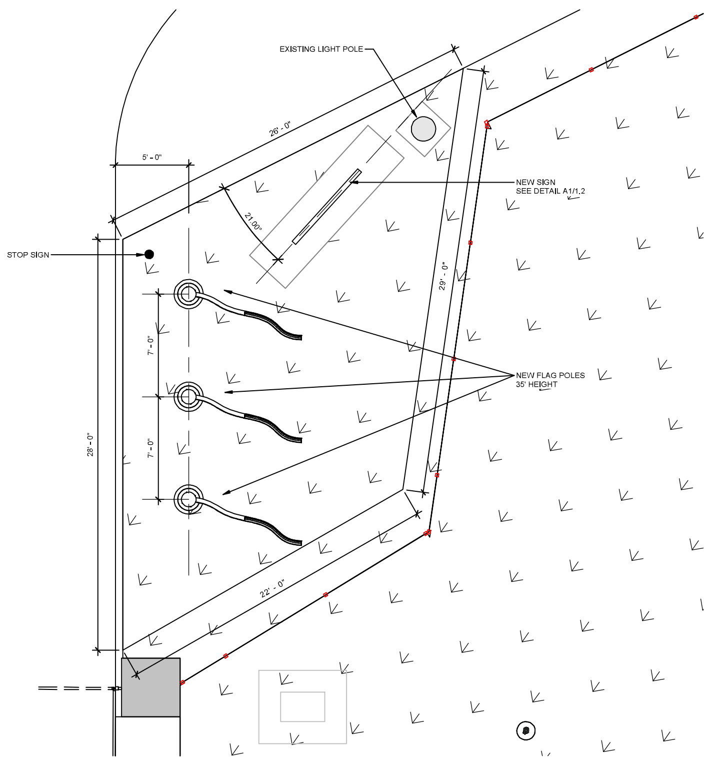


FRONT OF SIGN PANEL DETAIL

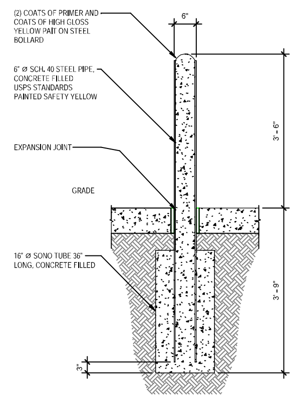


GENERAL NOTES:

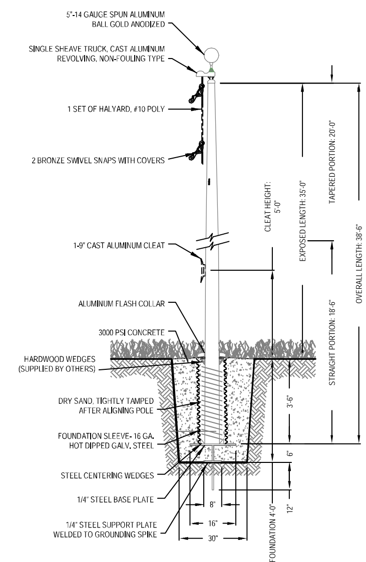
A. REFER TO G1.1 FOR ADDITIONAL GENERAL NOTES AND INFORMATION.



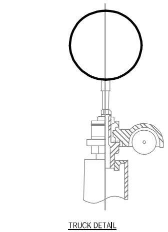
2 **ENLARGED SITE PLAN @ MAIN ENTRANCE**
SCALE: 1/4" = 1'-0"



3 **BOLLARD DETAIL**
SCALE: 3/4" = 1'-0"



ELEVATION VIEW



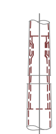
TRUCK DETAIL

ALUMINUM BODY STAINLESS STEEL BALL BEARINGS
ALUMINUM SHEAVE CAST ALUMINUM SPINDLE

ALL SHAFTS WITH OVERALL LENGTH OF MORE THAN 38'-6" ARE SHIPPED IN TWO SECTIONS.

EACH SECTION MATCHED MARKED FOR FIELD ASSEMBLY.
EXPOSED PORTION OF JAM SLEEVE MUST BE WELL LUBRICATED PRIOR TO ASSEMBLY.

1-1/2" MAXIMUM SHOP GAP ALLOWED FOR FIELD FITTING (RAM FOR TIGHT JOINT)



SHAFT DETAIL

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION TO BE SELECTED BY OWNER

4 **FLAG POLE DETAIL**
SCALE: 3/4" = 1'-0"

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DATE: APRIL, 2025
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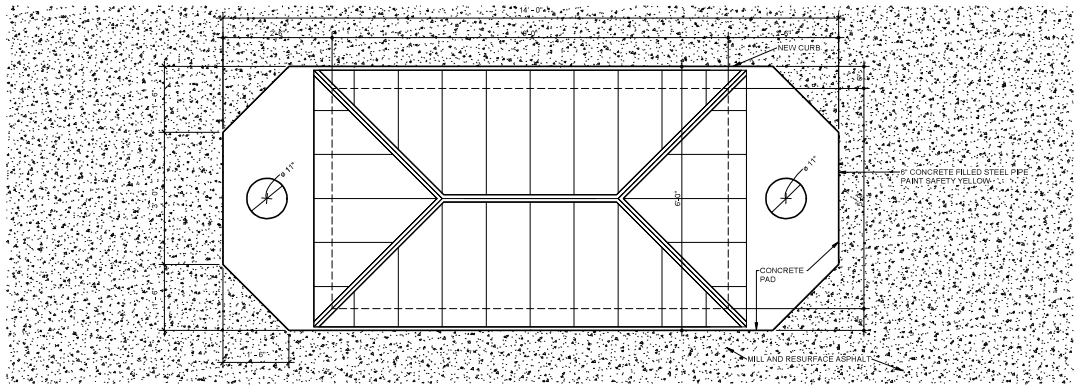
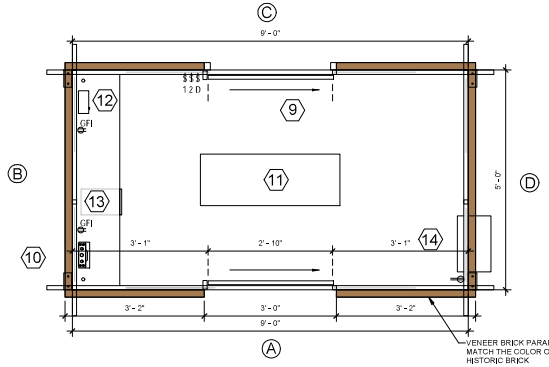
MI
DETROIT
EGIS-BLN
GHIB FORT WAYNE LIGHTING & SITE IMPROVEMENTS
SITE PLAN DETAILS

DRAWING NUMBER
A1.2
ARCHITECTURE



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

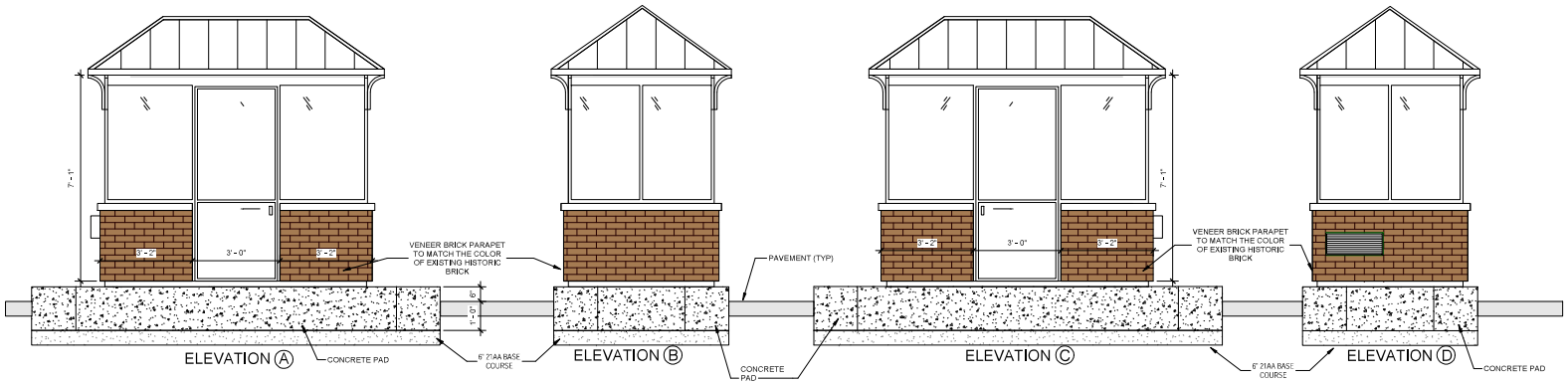


2 GUARD HOUSE FLOOR PLAN
SCALE: 3/4" = 1'-0"

LEGEND:

- (9) - DOOR
- (10) - ELECTRICAL
- (11) - LIGHTING (DUAL BULB, FLUORESCENT STRIP LIGHTS)
- (12) - HEAT (LOCATION OPTIONAL)
- (13) - COUNTER
- (14) - A/C (LOCATION OPTIONAL)
- (15) - ARCHES (OPTIONAL)

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. CUSTOM MATCHING COLORS & SIGNAGE AVAILABLE.
4. SEE PICTURE # 1 IN AUSTIN MOHAWK BROCHURE.



3 GUARD HOUSE ELEVATIONS
SCALE: 1/2" = 1'-0"

GENERAL NOTES:

A. REFER TO G1.1 FOR ADDITIONAL GENERAL NOTES AND INFORMATION.

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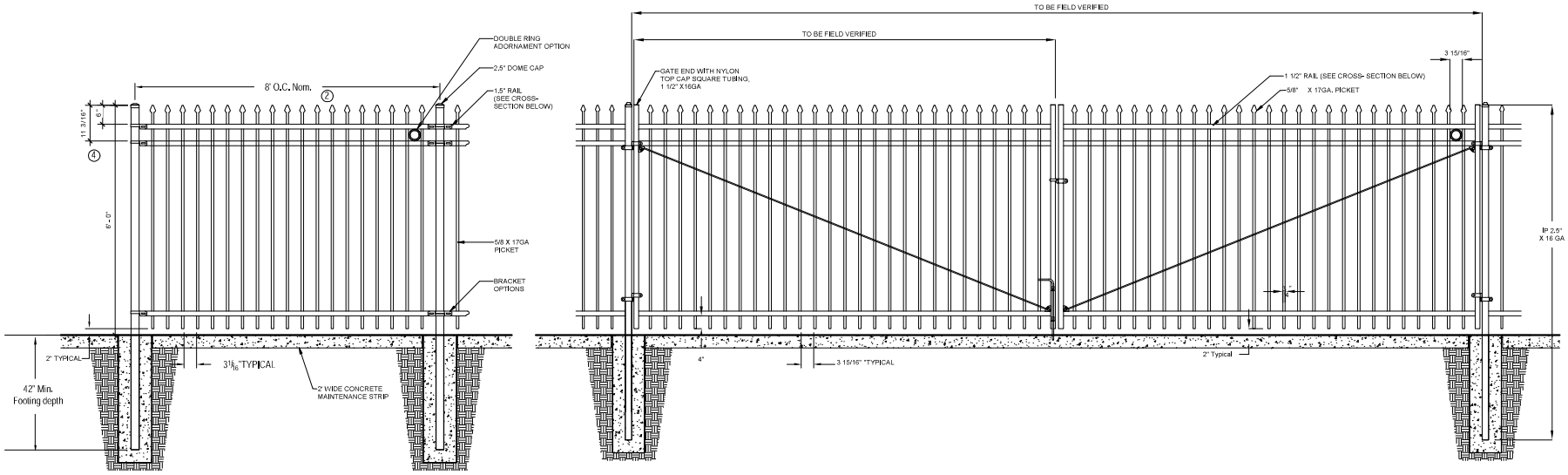
DETROIT
EGIS-BLN
GHB FORT WAYNE LIGHTING & SITE IMPROVEMENTS
SITE PLAN DETAILS

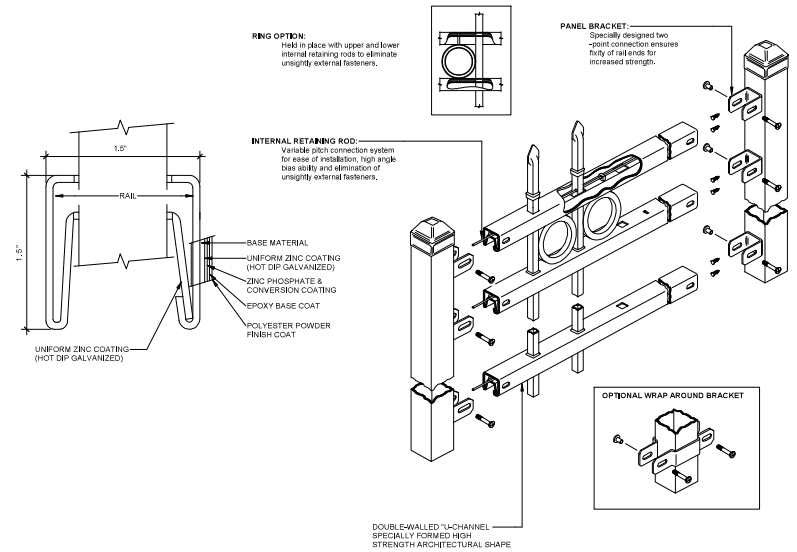
DRAWING NUMBER: A1.3
ARCHITECTURE

GENERAL NOTES:

A. REFER TO G1.1 FOR ADDITIONAL GENERAL NOTES AND INFORMATION.

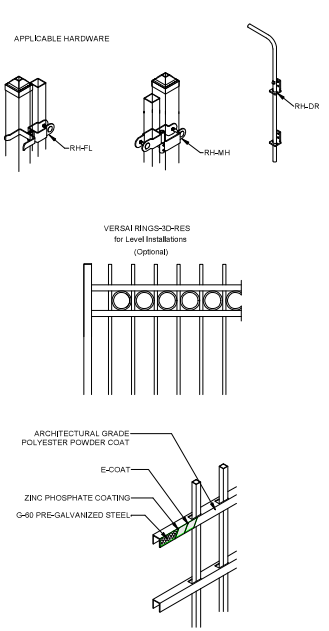


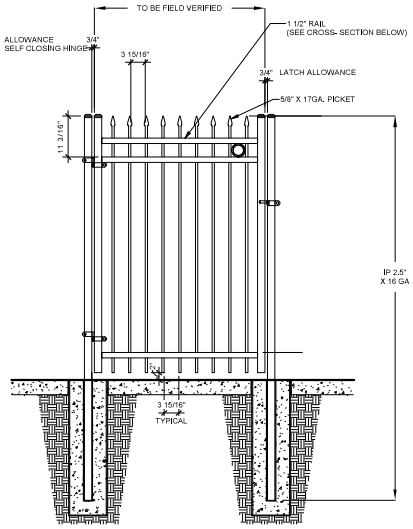
2 ORNAMENTAL DRIVEWAY SWINGING GATE
SCALE: 3/4" = 1'-0"



NOTES:
1.) Post size depends on fence height and wind loads.
2.) Panels also available for 6' on center post spacing
3.) Additional heights available on request
4.) Third rail optional (Required with rings. See Detail).

1 ORNAMENTAL IRON FENCE W/ CONCRETE MAINTENANCE STRIP
SCALE: 3/4" = 1'-0"





NOTES:
1. GATE SHOWN WITH OUR CLOSING STANDARD HARDWARE.
2. OTHER GATE HARDWARE COULD CHANGE LATCH AND HINGE CLEARANCE.
3. ALL HARDWARE SHIPPED LOOSE AND FIELD INSTALLED.

3 ORNAMENTAL IRON SWING GATE
SCALE: 3/4" = 1'-0"

DLZ
ARCHITECTURE • ENGINEERING • PLANNING
SURVEYING • CONSTRUCTION SERVICES
DLZ Florida, LLC

NO.	REVISION	DATE

DRAWN: Author | CHK'D: Checker
DESIGNED: Designer
APPROVED: Approver
DATE: APRIL 2025
PROJECT NUMBER: 1641-674700

DETROIT

EGIS-BLN
GHB FORT WAYNE LIGHTING & SITE IMPROVEMENTS

SITE PLAN DETAILS

DRAWING NUMBER: A1.4

ARCHITECTURE

BRICK WORK REPAIR AND CLEANING AS NEEDED ON EXISTING PILLARS AND GATES.

Brick cleaning is a component of a historic masonry renovation project, the National Preservation Briefs provide critical guidance to ensure that the cleaning process supports, rather than detracts from, the building's historic integrity. Here's a breakdown of key considerations:

Integration into the Renovation Plan:

- Comprehensive Evaluation:

Cleaning should never be an isolated action. It must be part of a holistic renovation plan that addresses all aspects of the masonry's condition, including mortar joints, structural stability, and existing damage.

The cleaning process itself can reveal hidden deterioration, making a pre-cleaning assessment essential.

- Compatibility:

Any cleaning methods or materials used must be compatible with the existing brick and mortar. This is especially important in renovations, where new materials may be introduced.

The NPS emphasizes that cleaning should not compromise the long-term durability of the masonry.

- Preserving Historic Fabric:

Renovations often involve alterations. The cleaning process should be carefully managed to avoid inadvertently removing or damaging historic fabric.

The goal is to enhance the building's appearance while retaining its historic character.

1 PRESERVATION BRIEFS

Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings

Robert C. Mack, AIA
Anne Grimmer

U.S. Department of the Interior
National Park Service
Cultural Resources
Heritage Preservation Services

Inappropriate cleaning and coating treatments are a major cause of damage to historic masonry buildings. While either or both treatments may be appropriate in some cases, they can be very destructive to historic masonry if they are not selected carefully. Historic masonry, as considered here, includes stone, brick, architectural terra cotta, cast stone, concrete, and stucco surfaces. It is often damaged because cleaning is equated with improvement. Cleaning may sometimes be followed by the application of a water-repellent coating. However, unless proper procedures are carried out under the guidance and supervision of an architectural conservator, they may result in irreversible damage to the historic resource.

The purpose of this Brief is to provide information on the safety of cleaning methods and materials that are available for use on the *exterior* of historic masonry buildings, and to provide guidance in selecting the most appropriate method or combination of methods. The difference between water-repellent coatings and waterproof coatings is explained, and the purpose of each, the suitability of their application to historic masonry buildings, and the possible consequences of their inappropriate use are discussed.

The Brief is intended to help develop sensitivity to the qualities of historic masonry that makes it so special, and to assist historic building owners and property managers in working cooperatively with architects, architectural conservators and contractors (Fig. 1). Although specifically intended for historic buildings, the information is applicable to all masonry buildings. This publication updates and expands *Preservation Brief 1: The Cleaning and Waterproof Coating of Masonry Buildings*. The Brief is not meant to be a cleaning manual or a guide for preparing specifications. Rather, it provides general information to raise awareness of the many factors involved in selecting cleaning and water-repellent treatments for historic masonry buildings.

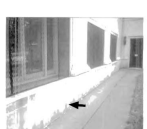


Figure 2. Biological growth as shown on this marble foundation can usually be removed using a low-pressure water wash, possibly with a non-ionic detergent added to it, and scrubbing with a natural or synthetic bristle brush.

Preparing for a Cleaning Project

Reasons for cleaning. First, it is important to determine whether it is appropriate to clean the masonry. The objective of cleaning a historic masonry building must be considered carefully before arriving at a decision to clean. There are several major reasons for cleaning a historic masonry building: **improve the appearance of the building** by removing unattractive dirt or soiling materials, or non-original paint; **remove graffiti**; **remove heavy deposits** of encrusting soiling materials that may be damaging the masonry; or **provide a clean surface** to accurately match repointing mortars or patching compounds, or to conduct a condition survey of the masonry.

Identify what is to be removed. The general nature and source of dirt or soiling material on a building must be identified to remove it in the gentlest means possible – that is, the gentlest means that will do the job adequately. Soot and smoke, for example, require a different cleaning agent to remove than oil stains or metallic stains. Other common cleaning problems include biological growth such as mold or mildew, and organic matter such as the stealth lichen masonry dye removal of rust (Fig. 2).

Consider the historic appearance of the building. If the proposed cleaning is to remove paint, it is important in each case to learn whether or not unpainted masonry is historically appropriate. And, it is necessary to consider whether paint removal may be likely to result in damage to underlying unpainted material. Was the building ever painted to protect soft brick or to conceal deteriorating stone? Or, was unpainted masonry simply fashionable

Figure 3. This small red iron pipe has created a red brick mark that does not match the original brick. This may explain why the building was painted. Test cleaning should be carried out to remove the paint and reveal the underlying brick. Photo: Anne Grimmer.

Understanding the Building Materials

The construction of the building must be considered when developing a cleaning program because inappropriate cleaning can have a deleterious effect on the masonry as well as on other building materials. The masonry material or materials must be correctly identified. It is sometimes difficult to distinguish between stone and concrete, for example; certain sandstones can be easily confused with limestones. Or, what appears to be natural stone may not be stone at all, but cast stone or concrete. Historically cast stone and architectural terra cotta were frequently used in combination with natural stone, especially for trim elements or on upper stories of a building where, from a distance, these substitute materials looked like real stone (Fig. 4). Other features on historic buildings that appear to be stone, such as decorative cornices, entablatures and window hoods, may not even be masonry, but metal.

Identify prior treatments. Previous treatments of the building and its surroundings should be researched and building maintenance records should be obtained, if available. Sometimes if streaked or spotty areas do not seem to get cleaner following an initial cleaning, closer inspection and analysis may be warranted. The discoloration may turn out not to be dirt but the remnant of a water-repellent coating applied long ago which has darkened the surface of the masonry over time (Fig. 5). Successful removal may require testing several cleaning methods before finding the one that is most effective for the coating. Complete removal may not always be possible. Repairs may have been stained to match a dirty building, and cleaning may make these differences apparent. Dirty salts used near the building that have dissolved can migrate into the masonry. Cleaning may draw the salts to the surface, where they will appear as efflorescence (a powdery, white substance), which may require a second treatment to be removed. Allowances for dealing with such unknown factors, any of which can be a potential problem, should be included when investigating cleaning methods and materials. Just as more than one kind of masonry on a historic building may necessitate multiple cleaning approaches, unknown conditions that are encountered may also require additional cleaning treatments.

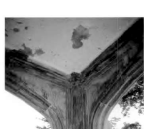


Figure 4. Trend-setter building can be very effective for cleaning limestone and marble as it shows here at St Gertle Collegiate Church in New York City. In this case, a hydro-steer water wash using a multi-nozzled wand was followed by a hand water rinse. Photo: Diane S. Kaiser Wise, Jeremy Wise Associates, Inc., N.Y., N.Y.

Figure 5. Repainted water washing did not remove the cleaning inside the window recess, which is still discolored by the coating that was determined to be a water-repellent coating that had been applied many years earlier. An alkaline cleaner may be effective in removing it.

Choose the appropriate cleaner. The importance of testing cleaning methods and materials cannot be over emphasized. Applying the wrong cleaning agent to historic masonry can have disastrous results. Acidic cleaners can be extremely damaging to acid-sensitive stones, such as marble and limestone, resulting in etching and dissolution of these stones. Even the use of water alone can be damaging to many sandstones and bricks with water. Abrasive methods like blasting with grit, and the use oligrinders and sanding discs, all of which mechanically remove the dirt, soiling material or paint (and, usually, some of the masonry surface). Abrasive cleaning is also often followed with a water rinse. Laser cleaning, although not discussed here in detail, is another technique that is used sometimes in conservation to clean small areas of historic masonry. It is not appropriate for many historic buildings, as it is expensive and generally not practical for most historic masonry cleaning projects.

Although it may seem contrary to common sense, masonry cleaning projects should be carried out starting at the bottom and proceeding to the top of the building always keeping all surfaces wet below the area being cleaned. The rationale for this approach is based on the principle that dirty water or cleaning effluent dripping from cleaning in progress above will leave streaks on a dirty surface but will not streak a clean surface as long as it is kept wet and rinsed frequently.

Water Cleaning

Water cleaning methods are generally the *gentlest means possible*, and they can be used safely to remove dirt from masonry surfaces in many cases. The effectiveness of some kinds of water-based methods – soaking, pressure water washing; water washing supplemented with non-ionic detergent; and steam, or hot-pressurized water cleaning. Once water cleaning has been completed, it is often necessary to follow up with a water rinse to wash off the loosened soiling material from the masonry.

Soaking. Prolonged spraying or misting with water is particularly effective for cleaning limestone and marble. It is also a good method for removing heavy accumulations of non-sulfate crusts or efflorescence that tend to form in protected areas of a building not regularly washed by rain. Soaking can be accomplished by placing a soaker hose or pipe with non-ferrous fittings hung from moveable scaffolding, or a soring stage thatcontinuously mists the surface of the masonry with a very fine spray (Fig. 6). A timed on-off spray is another approach to using this cleaning technique. After one area has been cleaned, the apparatus is moove on to another. Soaking is often used in combination with water washing and is also followed by a fluid water rinse. Soaking is a very slow method – it maytake several days or a week – but it is a very gentle method to use on historic masonry.

Water Washing. Washing with low-pressure or medium-pressure water is probably one if the most commonly used methods for removing dirt or soiling materials resulting from historic masonry buildings(Fig. 7). Starting with a very low pressure (300 psi or below), even using a garden hose, and progressing, as needed is slightly higher pressure –generally no higher than 500-600 psi – the gentlest necessaryed way to begin. Scrubbing with natural bristle or synthetic bristle brushes –never metal which can damage the suface and leave metal particles that can stain the masonry—can help in cleaning, and the masonry that are especially dirty.

Water-Washing with Detergent. Non-ionic detergents –which are not the same as soaps –are synthetic organic compounds that are especially effective in removing oily soil. (Examples of some of the numerous proprietary nonionic detergents include Igepal br GAF, Tergitol by Union Carbide and Triton by Rohm & Haas.) Thus, the addition of a non-ionic detergent, or surfactant, to a low or medium pressure water wash can be a useful aid in the cleaning.

**Water-leaving surfactants may not be appropriate to use on some built-up roofing membranes, because they may cause deterioration of the membrane or an oil stain or adhesive which are very soluble in water.*

Figure 6. Typical water washing set-up for cleaning a historic masonry building. The building has limestone architectural classification in the upper stories, and brick in the lower stories. The water washing apparatus is being used to clean the limestone capitals, and facilities may removed. Note how these deposits have been removed from the right side of the cornice which was already been cleaned.

Figure 8. The foundation of this brick building is limestone, but the limestone trim above is architectural terra-cotta intended to simulate stone.

Cleaning Methods and Materials

Masonry cleaning methods generally are divided into three major groups: water, chemical, and abrasive. Water washing softens the dirt or soiling material and rinses the deposits from the masonry surface. *Chemical cleaners* react with dirt, soiling material or paint to effect their removal, after which the cleaning effluent is rinsed off the masonry surface with water. Abrasive methods include blasting with grit, and the use oligrinders and sanding discs, all of which mechanically remove the dirt, soiling material or paint (and, usually, some of the masonry surface). Abrasive cleaning is also often followed with a water rinse. Laser cleaning, although not discussed here in detail, is another technique that is used sometimes in conservation to clean small areas of historic masonry. It is not appropriate for many historic buildings, as it is expensive and generally not practical for most historic masonry cleaning projects.

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Figure 9. Cleaning with high-pressure water following chemical cleaning has left a horizontal line of abrasion across the bricks on this water-bearing iron base.

Figure 10. Chemical removal of paint from this brick building has removed that the correct and window heads are noted rather than masonry.

Figure 11. A pavilion is being used to remove salts from the limestone facing of the Old Post Office and Courthouse, now the Historic Pennsylvania Visitor Center, Philadelphia, Pa.

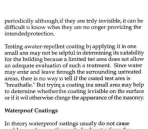

Figure 12. Left: A comparison of the limestone surface of a 1920s office building before and after "cleaning" with a proprietary abrasive paste using fine glass powder clearly shows the effectiveness of this method. But this is an abrasive technique and thus "cleaned" by removing part of the masonry surface with the dirt. Because it is abrasive, it is generally not recommended for large-scale cleaning projects. Right: Limestone is not the only masonry material that can be damaged by abrasive cleaning methods. Although not all the deposit was removed, this area was determined to be an acceptable level of cleanliness for the project.

Figure 13. Sometimes it may be preferable to paint over a thick asphalt coating rather than try to remove it, because it can be difficult to remove dark stains on the granite arche bases. Photo: Sianne C. Park, FAIA.

Figure 14. Chemical cleaners are used to remove paint from historic masonry. Paint removers based on dichloride have been banned for consumer use, but they may be used by professionals. Paint removers based on formic or caustic potash are also available. Application of the cleaner may be by brush, as shown here, or by spraying followed by a thorough water wash (Fig. 14).

Figure 15. The whitish deposits left on this brick by a chemical paint remover may be due to the cleaner's reacting with the masonry, or to chemical lodg ed in the surface but may be responsible to remain.

Figure 16 (a): The limestone base was heavily stained by runoff from the bronze statue above. (b) A poultice consisting of copper sulfate, ammonium nitrate and ammonia mixed with fuller's earth was applied to the base and covered with plastic sheeting to keep it from drying too fast. (c) After the poultice was removed, the stain was greatly reduced, but not entirely removed. The poultice residue was removed carefully from the cornice with wooden scrapers and fine stone set. Overall with water. Photos: John Duggan.

Figure 17. Graffiti and stains, which have penetrated into the masonry, often are best removed by using a poultice. A poultice consists of an absorbent material or clay powder (such as kaolin or fuller's earth, or even shredded paper or paper towels), mixed with a liquid (solvent or other material) to form a paste which is applied to the stain (Figs. 16-17). The paste is left in place for a period of time to allow the stain to clean some materials. Non-ionic surfactants are commonly used for cleaning nonvcentral bronze statuare, and skilled conservators clean delicate masonry objects and finely detailed, carved stone features with vey small, micro-abrasive units using aluminum oxide.

Figure 18. The glazed bricks in the ruins of the pir are covered by a sulphated crust that was being damaged by the undulating movement of the rocks caused by weathering.

Abrasive Blasting. Blasting with abrasive grit or another abrasive material is the most frequently used abrasive method. Sandblasting is most commonly associated with abrasive cleaning. Finely-ground silica or other powdered glass beads, ground garnet, powdered walnut and other ground nut shells, grain hulls, aluminum oxide, plastic particles and even tiny pieces of sponge, are just a few of the other materials that have been used for abrasive cleaning. Although abrasive blasting is not an appropriate cleaning method for most historic masonry, it can be used to clean some materials. Brick, for example, is a material that are commonly used for cleaning nvcentral bronze statuare, and skilled conservators clean delicate masonry objects and finely detailed, carved stone features with vey small, micro-abrasive units using aluminum oxide.

Figure 19. A comparison of waikmaped bricks surrounding the electrical conduit with two red r the brick plain bricks illustrates the gentleness of the sand-blasted by sandblasting.

A number of current approaches to abrasive slanting mli on materials that are not usually used for abrasive blasting method. Sandblasting is most commonly associated with abrasive cleaning. Finely-ground silica or other powdered glass beads, ground garnet, powdered walnut and other ground nut shells, grain hulls, aluminum oxide, plastic particles and even tiny pieces of sponge, are just a few of the other materials that have been used for abrasive cleaning. Although abrasive slanting is not an appropriate cleaning method for most historic masonry, it can be used to clean some materials. Brick, for example, is a material that are commonly used for cleaning nvcentral bronze statuare, and skilled conservators clean delicate masonry objects and finely detailed, carved stone features with vey small, micro-abrasive units using aluminum oxide.

Figure 20. The anti-graffiti or barrier coating on this column is very effective and will be barrier to any of a historic masonry building. The coating has simulated as to be aged and which streaks would arise of bare concrete where the coating was incompletely applied.

Figure 21. The clear coating applied to this limestone molding has failed and is falling off some of the stone surface as it peals. Note: Frances Gale.

Figure 22. Although the application of a water-repellent coating can usually be recommended on either of these buildings, the coating on the brick building (above), is not visible and has not changed the appearance of the brick. But the coating on the brick columns (below) has a high gloss that is incompatible with the historic character of the masonry.

Figure 23. A ceramatic pressure and shields substitutes (non-penetrating barrier) coating, white-Masonry Coating is underway on the granite exterior of the U.S. Treasury Building, Washington, D.C.

Figure 24. The anti-graffiti or barrier coating on this column is very effective and will be barrier to any of a historic masonry building. The coating has simulated as to be aged and which streaks would arise of bare concrete where the coating was incompletely applied.

Polticing to Remove Stains and Graffiti

Abrasive and Mechanical Cleaning

Generally, abrasive cleaning methods are not appropriate for historic masonry buildings. Abrasive cleaning methods are just that–abrasive. Grit blasting, grinders, and sanding discs all operate by abrading (or dirt or paint off the surface of the masonry, rather than reacting with the dirt and the masonry which is how water and chemical methods work. Since the abrasive do not differentiate between the dirt and the masonry, they can also remove the outer surface of the masonry at the same time, and result in permanently damaging the masonry. Brick, architectural terra cotta, soft stone, detailed carvings, and polished surfaces are especially susceptible to physical and abrasive damage from cleaning (Fig. 18). Even the hardest stones can be damaged by abrasive cleaning. A smooth, glazed surface which can be removed by abrasive blasting or grinding (Figs. 18-19). Abrasively-cleaned masonry is damaged aesthetically as well as physically, and it has a rough, pitted texture which holds dirt, and the roughness will make future cleaning more difficult. Abrasive cleaning processes can also increase the likelihood of subsurface cracking of the masonry. Abrasion of carved details can create a rounding of sharp corners and other loss of delicate features, while abrasion of polished surfaces removes the polished finish of stone.

Figure 25. Left: Graffiti and other stains are sometimes removed by using a poultice. Here, a poultice is being applied to the stone facing of the Treasury Building in Washington, D.C. Right: The poultice is covered with plastic sheeting to keep it from drying too fast. Photo: Anne Grimmer.

Alkaline cleaners can stain sandstones that contain a ferrous compound. Before using an alkaline cleaner on sandstone it is always important to test it, since it can be difficult to know whether a particular sandstone may contain a ferrous compound. Some alkaline cleaners, such as **sodium hydroxide (caustic soda or lye)** and **ammonium bifluoride**, can severely damage glass. Alkaline cleaners containing ammonia and, in most cases, should not be used on historic masonry. Although alkaline cleaners will not etch a masonry surface as acids can, they are caustic and can burn the surface. In addition, alkaline cleaners can deposit potentially damaging salts in the masonry which can be difficult to rinse thoroughly.

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Figure 27. Instead of correcting the roof drainage problems, an electromicrotesting was applied to the strong sur-sound limestone cornice. Architectural coating holds moisture in the masonry because it does not "breathe" and does not allow liquid moisture to escape. If the coating is applied unevenly, it will streak the masonry as rain runs down it and run off as shown in this example, thus pulling pieces of the masonry with it. Photo: National Park Service Files.

Figure 28. Water-repellent coating is applied to this limestone building by brushing on the material. Spraying is another application method.

When a Water-Repellent Coating May be Appropriate

There are some instances where a water-repellent coating may be considered appropriate to use on a historic masonry building. Sandstone, brick, and stucco from the 19th- and early-19th centuriesmay have become so porous that paint will not adhere to the surface, and the surface may have deterioration or discoloration. Or, a masonry building has been neglectedfor a long period of time, necessary repairs may be required in order to make it watertight. If, following a reasonable period of time after the building has been made watertight and has been dried completely, moisture appears ctually to be penetrating through the repointed and repaired masonry walls, then the application of a water-repellent coating may be considered in selected areas only. This decision should be made in consultation with an architectural conservator. And, if such a treatment is undertaken, it should not be applied to the entire surface of the building.

Anti-graffiti or barrier coatings are another type of clear coating—although varrier coatings can also be pigmented that may be applied to exterior masonry, but they are not formulated primarily as water repellents. The purpose of these coatings is tomake it harder for graffiti to stick to a masonry surface and, thus, easier to clean. But, like water-repellent coatings, in most cases the application of anti-graffiti coatings is generally not recommended for historic masonry buildings. These coatings are often very shiny which can greatly alter the appearance of a historic masonry surface (Fig. 20). Some anti-graffiti coatings can become a costly way to make masonry retain dirt more than uncoated masonry. Generally, however, vatergrout coatings, which include elastomeric paints, **should almost never be applied above grade to historic masonry buildings.**

Selected Reading

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The original *version of Preservation brief 1: The Cleaning and Waterproof Coating of Masonry Buildings* was written by Robert C. Mack AIA. It incorporated the Preservation Tech Note which it essyablished in 1979.

The following historic preservation specialists provided technical advice during the writing of this Brief: Sharon C. Park, AIA, National Center for Preservation Technology and Training; Jo Ellen Hensley, Gary Scheiber, John Snoke and Aubrey T. Tepper, National Park Service; Frances Gale, Historic Preservation Services Program, National Park Service, Washington, D.C., and Kay D'Onofrio, Heritage Preservation Services Program, National Park Service, Washington, D.C.

This publication was prepared pursuant to the National Historic Preservation Act of 1966, asamended, which directs the Secretary of the Interior to develop and make available information concerning historic properties. Comments on the usefulness of this publication may be directed to the Chief, Technical Preservation Services Branch, Heritage Preservation Services Program, National Park Service, 1849 C Street, N.W., NCRC2280, Washington, D.C. 20240 (www.cr.nps.gov/hps). Laser cleaning is not discussed in this publication because it is not appropriate for most historic masonry buildings. This publication is recopyrighted and can be reproduced without permission. Named procedures for credit to the authors and the National Park Service are appreciated.

Local laws: Chemical cleaning of the finished architectureforms may require approval by federal, State, or local authorities. Contact the National Building Museum, to learn more projects. Photo Christine Storey.

Photographs used to illustrate this brief were taken by Anne Grimmer unless otherwise credited.

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DRAWING NUMBER A1.5
ARCHITECTURE
DETROIT
EGIS-BLN
GHB FORT WAYNE LIGHTING & SITE IMPROVEMENTS
CLEANING AND WATER-REPELLENT TREATMENTS FOR HISTORIC MASONRY AT THE EXISTING PILLARS AND GATES

BRICK WORK REPAIR AND CLEANING AS NEEDED ON EXISTING PILLARS AND GATES.

Brickwork repair in a historic masonry renovation has the following **Key Preservation Principles**:

- Understanding Historic Fabric:

Renovation projects often involve alterations, making it paramount to understand the original materials and construction techniques. The NPS stresses the importance of thorough documentation and analysis.

This knowledge informs repair decisions, ensuring compatibility and preserving the building's historic integrity.

- Prioritizing Repair Over Replacement:

Replacement should only be considered as a last resort. This philosophy minimizes the loss of original materials and craftsmanship.

- Material Compatibility:

A critical aspect of historic masonry repair is using materials that are compatible with the original brick and mortar. The NPS emphasizes that using mortar that is too strong can damage historic brick. Therefore, careful selection of mortar that matches the original in composition and strength is very important.

- Proper Repair Techniques:

Repointing: Careful removal of deteriorated mortar and proper application of new, compatible mortar.

Brick replacement: When replacement is necessary, matching the original brick in size, color, texture, and composition.

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A1.6	EGIS-BLN	DESIGNED: Designer			
	GHIB FORT WAYNE LIGHTING & SITE IMPROVEMENTS	APPRV'D: Approver			
	REPOINTING MORTAR JOINTS FOR HISTORIC MASONRY OF THE EXISTING PILLARS AND GATES	DATE: APRIL, 2025			
ARCHITECTURE		PROJECT NUMBER 1641-674700			

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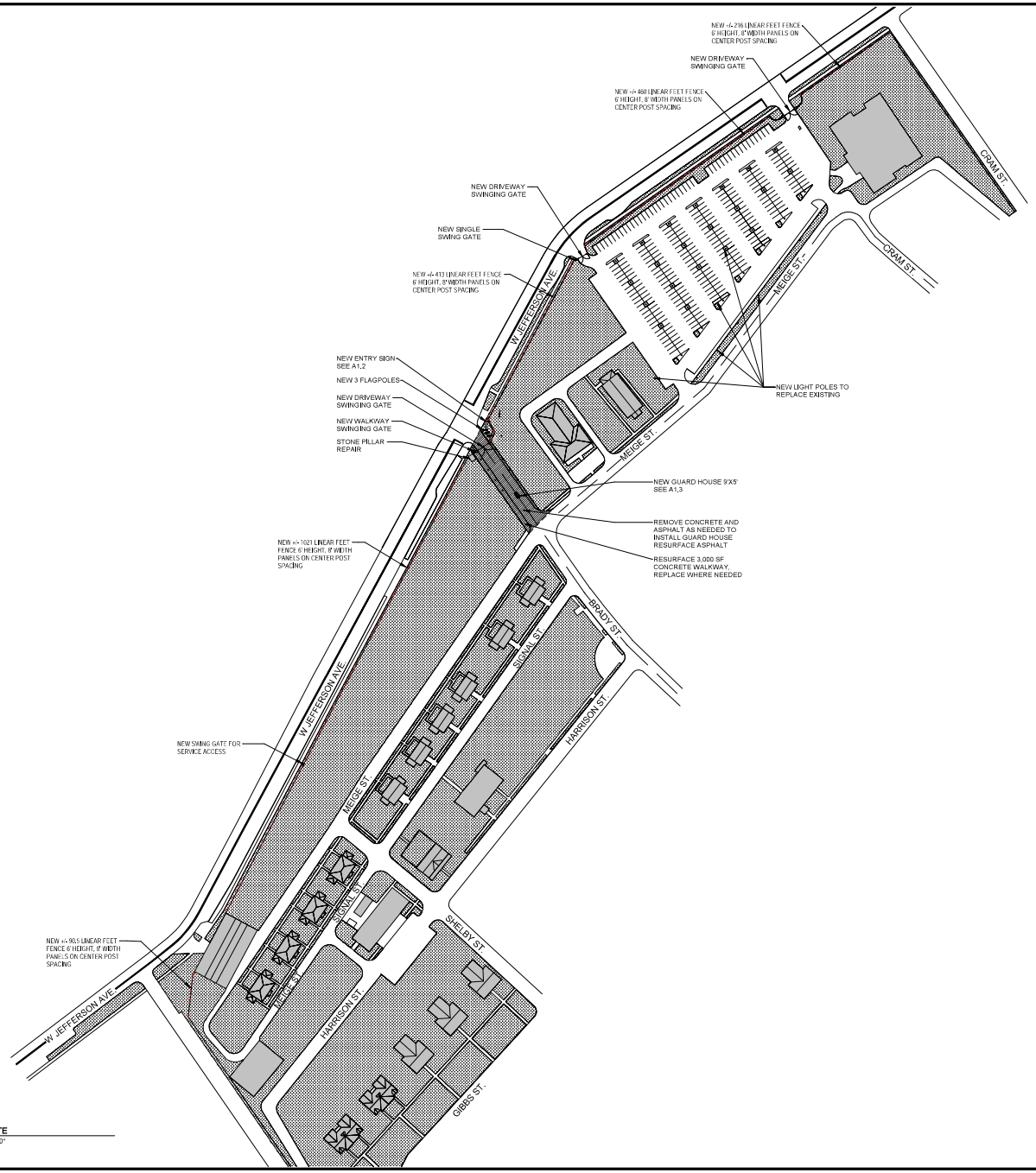

1 OVERALL SITE
SCALE: 1" = 100'-0"
NORTH

GENERAL NOTES:

A. REFER TO G SERIES DRAWINGS FOR ADDITIONAL GENERAL NOTES AND INFORMATION.

B. REFER TO DRAWINGS OF ALL OTHER DISCIPLINES FOR ADDITIONAL REMOVALS AND SELECTIVE DEMOLITION ACTIVITIES.

C. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO SELECTIVE DEMOLITION ACTIVITIES.

D. CONTRACTOR SHALL REMOVE EXISTING ASBESTOS-CONTAINING MATERIALS (ACM) WITHIN THE BUILDING. REFER TO ENVIRONMENTAL SERIES DRAWINGS FOR ADDITIONAL INFORMATION.

E. EXISTING TO REMAIN ITEMS SHALL BE PROTECTED THROUGHOUT.

F. THE DURATION OF THE PROJECT. IF ANY EXISTING ITEM IS DAMAGED DURING CONSTRUCTION, IT SHALL BE REPLACED OR RESTORED TO ITS ORIGINAL CONDITION.

G. CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL TEMPORARY SHORING AND BRACING REQUIRED TO COMPLETE THE WORK.

H. CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED, INCLUDING ASSOCIATED REPAIR AND FINISHING TO MATCH ADJACENT SURFACES.

I. REMOVE ALL ABANDONED EQUIPMENT, DUCTWORK, PLUMBING, ELECTRICAL, DATA, AND COMMUNICATIONS LINES, DEVICES, AND EQUIPMENT, EXPOSED UTILITIES SHALL BE IDENTIFIED, CAPPED, AND LABELED.

J. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY ENVIRONMENTAL CONTROL MEASURES INCLUDING APPLICABLE AIR QUALITY CONTROL MEASURES, DUST CONTROL, EROSION CONTROL, AND OTHER MEASURES REQUIRED FOR PROTECTION OF OCCUPANTS AND PROPERTY DURING SELECTIVE DEMOLITION AND CONSTRUCTION ACTIVITIES.

K. CONTRACTOR IS SOLELY RESPONSIBLE FOR COORDINATING CONTRACT DOCUMENTS WITH FIELD CONDITIONS AND WITH WORK REQUIRED FOR EACH TRADE.

L. EXISTING CONCRETE SLAB-ON-GRADE SHALL BE SAWCUT AND REMOVED AS REQUIRED TO COMPLETE UNDERGROUND PIPING WORK. REPLACE CONCRETE SLAB-ON-GRADE AND FINISH TO MATCH ADJACENT CONSTRUCTION. ALL CONCRETE REMOVAL AND REPLACEMENT BEYOND THAT SHOWN IS INCIDENTAL TO THE WORK AND SHALL BE INCLUDED IN THE CONTRACTOR'S BID AS REQUIRED TO COMPLETE THE PROJECT.

M. BUILDING TO REMAIN PARTIALLY OCCUPIED DURING CONSTRUCTION, SEQUENCE ALL DEMOLITION ACTIVITIES ACCORDINGLY TO MINIMIZE DISRUPTION OF BUILDING OCCUPANTS. REFER TO PHASING PLANS.

N. CONTRACTOR SHALL COORDINATE DEMOLITION ACTIVITIES WITH NEW WORK TO VERIFY DIMENSIONS AND EXTENT OF REMOVALS PRIOR TO BEGINNING WORK.

NOTE: REFER TO PRESERVATION BRIEFS AND PROJECT SPECIFICATION FOR MORE INFORMATION ON HOW TO REPAIR HISTORIC STONE PILLAR AND BRICK WORK.

A. WALL PREPARATION RESTORATION TO BE CONSISTENT WITH U.S. DEPARTMENT OF INTERIOR PRESERVATION BRIEFS ON ' CLEANING AND WATER-REPELLENT TREATMENTS FOR HISTORIC MASONRY' AND 'REPOINTING MORTAR JOINTS FOR HISTORIC MASONRY BUILDINGS'

B. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.

C. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS.

D. REMOVE AND REPOINT ALL FAILED MASONRY MORTAR JOINTS.

E. REMOVE SURFACE RUST AND LOOSE PAINT FROM EXISTING STEEL LINTELS AND RE-PAINT THE STEEL LINTELS.

F. MASONRY SHALL BE RE-TUCK POINTED AS NECESSARY TO STOP AIR AND WATER INFILTRATION.

G. PROVIDE ALL REQUIRED PROJECT DOCUMENTATION, INCLUDING BUT NOT LIMITED TO SUBMITTALS, SHOP DRAWINGS, PRODUCT DATA, SAMPLES, TEST REPORTS, INSPECTION REPORTS, DAILY REPORTS, SCHEDULE UPDATES, PROJECT PHOTOGRAPHS, O&M MANUALS, WARRANTIES, AS-BUILTS, AND OTHER REQUIRED DOCUMENTATION. ALL DOCUMENTS TO BE PROVIDED IN A TIMELY MANNER.

H. PROVIDE ALL REQUIRED FIELD SUPERVISION, QUALITY CONTROL, AND SAFETY PERSONNEL AS REQUIRED. FULL TIME SUPERVISION MUST ALWAYS BE PROVIDED WHEN WORK IS BEING PERFORMED ON-SITE.

I. PATCH AND REPAIR ALL EXISTING WALL, FLOOR AND CEILING CONSTRUCTION DAMAGED BY CONSTRUCTION ACTIVITIES TO MATCH EXISTING ADJACENT FINISH SURFACES.

J. T, REPLACE ALL WINDOW SEALS TO ERA CORRECT MATERIALS,

K. RESTORE WEIGHTS AND COUNTER BALANCE SYSTEM.

L. CONTRACTOR TO TAKE ALL NECESSARY PRECAUTIONS IN HANDELING OF ANY MATERIAL REQUIRING ABATEMENT. SEE SPECIFICATIONS.

LEGEND:

EXISTING TO BE REMOVED

EXISTING CONCRETE & ASPHALT TO BE REMOVED

EXISTING TO REMAIN

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DETROIT

EGIS-BLN
GHB FORT WAYNE LIGHTING & SITE IMPROVEMENTS

OVERALL SITE PLAN

DRAWING NUMBER: A1

ARCHITECTURE

ELECTRICAL SYMBOLS:

Symbol	Description
VV USB WP GFCI	DUPLEX RECEPTACLE, 125V, 20A. INSTALL DEVICE WITH BOTTOM AT +16" A.F.F., U.O.N. ASTERISK INDICATES VANDALPROOF STYLE RECEPTACLE FACEPLATE. VV=VIDEO VISITATION / IPAD CHARGING STATION, OUTLET TO BE LOCATED BEHIND MONITOR, VERIFY EXACT HEIGHT AND LOCATION BEFORE ROUGH-IN., USB = 125V, 20A, USB CHARGING DUPLEX RECETPACLE. WP = WEATHERPROOF "WHILE-IN-USE" ENCLOSURE. GFCI = GROUND FAULT CIRCUIT INTERRUPTING TYPE DEVICE. U.O.N., COORDINATE EXACT LOCATION BEFORE ROUGH-IN.
WP	GROUND FAULT CIRCUIT INTERRUPTING TYPE RECEPTACLE, 125V, 20A. INSTALL DEVICE WITH BOTTOM AT +16" A.F.F. U.O.N WP = WEATHERPROOF "WHILE IN USE" ENCLOSURE.
	GROUND FAULT CIRCUIT INTERRUPTING QUAD RECEPTACLE, 125V, 20A. INSTALL DEVICE WITH BOTTOM AT +16" A.F.F. U.O.N. COORDINATE EXACT LOCATION BEFORE ROUGH-IN.
	DUPLEX RECEPTACLE, 125V, 20A. INSTALL DEVICE WITH TOP AT +40" A.F.F., U.O.N.
	DUPLEX RECEPTACLE ON UNINTERRUPTIBLE POWER SUPPLY CIRCUIT, 125V, 20A. INSTALL DEVICE WITH BOTTOM AT +16", A.F.F., U.O.N. RECEPTACLE TO BE COLOR "ORANGE".
	DUPLEX RECEPTACLE ON UNINTERRUPTIBLE POWER SUPPLY CIRCUIT, 125V, 20A. INSTALL DEVICE WITH TOP AT +40" A.F.F., U.O.N. RECEPTACLE TO BE COLOR "ORANGE".
	DUPLEX RECEPTACLE CEILING MOUNTED 125V, 20A. REFER TO SPECIFICATIONS AND DRAWINGS FOR FURTHER DETAILS.
	DUPLEX RECEPTACLE CEILING MOUNTED ON UNINTERRUPTIBLE POWER SUPPLY CIRCUIT 125V, 20A. REFER TO SPECIFICATIONS AND DRAWINGS FOR FURTHER DETAILS. RECEPTACLE TO BE COLOR "ORANGE".
	DUPLEX RECEPTACLE FLOOR BOX 125V, 20A. REFER TO SPECIFICATIONS AND DRAWINGS FOR DETAILED ELECTRICAL REQUIREMENTS.
	QUAD RECEPTACLE, 125V, 20A. INSTALL DEVICE WITH BOTTOM AT +16" A.F.F., U.O.N.
	QUAD RECEPTACLE, 125V, 20A. INSTALL DEVICE WITH TOP AT +40" A.F.F., U.O.N.
	QUAD RECEPTACLE ON UNINTERRUPTIBLE POWER SUPPLY CIRCUIT, 125V, 20A. INSTALL DEVICE WITH BOTTOM AT +16" A.F.F., U.O.N. RECEPTACLE TO BE COLOR "ORANGE".
	QUAD RECEPTACLE ON UNINTERRUPTIBLE POWER SUPPLY CIRCUIT, 125V, 20A. INSTALL DEVICE WITH TOP AT +40" A.F.F., U.O.N. RECEPTACLE TO BE COLOR "ORANGE".
	SPECIAL RECEPTACLE, REFER TO MANUFACTURER REQUIREMENTS. INSTALL DEVICE WITH BOTTOM AT +16" A.F.F., U.O.N.
	SPECIAL RECEPTACLE ON UNINTERRUPTIBLE POWER SUPPLY CIRCUIT, REFER TO MANUFACTURER REQUIREMENTS. INSTALL DEVICE WITH BOTTOM AT +16" A.F.F., U.O.N. RECEPTACLE TO BE COLOR "ORANGE".
J J J	JUNCTION BOX.
R	RELAY.
a $ WP	TOGGLE SWITCH, 120/277V, 1-POLE, 20A. WP=WEATHERPROOF ENCLOSURE, "a" INDICATES SWITCH LEG.
$ 3a	TOGGLE SWITCH, THREE WAY TYPE, 120/277V, 20A, "a" INDICATES SWITCH LEG.
$ 4a	TOGGLE SWITCH, FOUR WAY TYPE, 120/277V, 20A, "a" INDICATES SWITCH LEG.
$ Da	DIMMABLE SWITCH, 120/277V, 20A, "a" INDICATES SWITCH LEG.
a OC WG OR OC a WG	DUAL TECHNOLOGY OCCUPANCY SENSOR, CEILING OR WALL MOUNT COVERAGE OF SENSOR DEPENDENT ON ROOM SIZE, "a" INDICATES SWITCH LEG, "WG" INDICATES WIRE GUARD INCLUDED. POWER PACKS NOT SHOWN - FIELD LOCATE AND RECORD ON RECORD DRAWINGS.
a OC	PIR HIGH BAY OCCUPANCY SENSOR. PROVIDE POWER PACK(S) AS REQUIRED PER MANUFACTURER'S RECOMMENDATION, "a" INDICATES SWITCH LEG.
J C W	4" SQUARE BOX WITH SINGLE GANG ADAPTER FOR MOUNTING EMERGENCY POWER CONTROL MODULE. MOUNT WHERE INDICATED ON PLANS. PROVIDE PERMANENT LABEL ON MODULE FACEPLATE INDICATING ROOM/AREA(S) WHERE CONTROLLED LIGHTS ARE LOCATED. "C" INDICATES DEVICE FLUSH MOUNTED IN CEILING, "W" INDICATES DEVICE FLUSH MOUNTED IN WALL. COORDINATE EXACT LOCAITON WITH OWNER BEFORE ROUGH-IN.
	DISTRIBUTION PANELBOARD, SEE SCHEDULE FOR DETAILED REQUIREMENTS.
	PANELBOARD, SEE SCHEDULE FOR DETAILED REQUIREMENTS.
	NON-FUSED DISCONNECT SWITCH, SEE DRAWINGS FOR DETAILED REQUIREMENTS.
	FUSED DISCONNECT SWITCH, SEE DRAWINGS FOR DETAILED REQUIREMENTS.
	NON-COMBINATION STARTER, SEE DRAWINGS FOR DETAILED REQUIREMENTS.
	COMBINATION STARTER/DISCONNECT, SEE DRAWINGS FOR DETAILED REQUIREMENTS.
	VARIABLE FREQUENCY DRIVE, SEE DRAWINGS FOR DETAILED REQUIREMENTS.
	VARIABLE FREQUENCY DRIVE AND DISCONNECT COMBINATION, SEE DRAWINGS FOR DETAILED REQUIREMENTS.
3	NON-COMBINATION MAGNETIC MOTOR STARTER NUMBER INDICATES NEMA RATING, SIZE 1 U.O.N.
	MOTOR.
FD	SMOKE DAMPER. CONNECT TO LEGALLY REQURIED 120VAC BRANCH CIRCUIT. DAMPER SHALL OPEN UPON ENERGIZATINO (OR FAIL CLOSED UPON DE-ENERGIZED). POWER TO SMOKE DAMPER(S) ASSOCIATE WITH AHU SHALL BE CONTROLLED BY THE FIRE ALARM CONTROL PANEL. UPON DUCT DETECTOR SMOKE DETECTION AT AHU, ASSOCIATED DAMPER(S) SHALL CLOSE (BE DE-ENERGIZED), **REFER TO DETAIL #___, ON DRAWING E___ FOR SMOKE DAMPER WIRING DETAIL. REFER TO DRAWING E___ AND E___** FOR LOCATION OF AHU(S) REQUIREING DUCT SMOKE DETECTOR(S)
P	PULLBOX
F 135°	ADDRESSABLE FIRE ALARM HEAT DETECTOR, CEILING MOUNT COMBINATION RATE-OF-RISE (15° PER MINUTE) AND/OR FIXED (135°) AS NOTED IN SPECIFICATION 284621.11
S P	ADDRESSABLE FIRE ALARM PHOTOELECTRIC SMOKE DETECTOR. CEILING MOUNT. **REFER TO DETAIL #__, DRAWING E__.**
S P	ADDRESSABLE FIRE ALARM PHOTOELECTRIC SMOKE DETECTOR. WALL MOUNT ON RECESSED DEVICE BOX. **REFER TO DETAIL #__, DRAWING E__.**
S D	FIRE ALARM DUCT MOUNTED SMOKE DETECTOR, HOUSING , AND SAMPLING TUBE ON RETURN SIDE. INTERLOCK WITH DAMPER/FAN MOTOR CONTROL TO SHUTDOWN UNIT UPON DETECTION. PROVIDE AND WIRE AN ILLUMINATED REMOTE TEST SWTICH INTERLOCKED TO THE EQUIPMENT; **REFER TO DETAIL #__, DRAWING E__**, LOCATION SHALL BE READILY ACCESSIBLE TO FIREMAN FOR SMOKE MANAGEMENT CONTROL.
RTS	ILLUMINATED REMOTE TEST SWITCH INTERLOCKED TO SHUTDOWN AIR HANDLING EQUIPMENT. AS "SIMULATED TEST" OF DUCT SMOKE DETECTOR ACTIVATION AND AHU SHUTDOWN BY IAM INTERLOCK. LOCATION SHALL BE READILY ACCESSIBLE FOR FIREMEN FOR SMOKE MANAGEMENT CONTROL.
F WP	FIRE ALARM HORN WITH VISUAL STROBE. WP = WEATHERPROOF STYLE DEVICE.
F S	FIRE ALARM VISUAL STROBE ANNUNCIATOR.
F	FIRE ALARM MANUAL PULL STATION.
	FIRE ALARM HOLD OPEN DEVICE.
FAAP	REMOTE FIRE ALARM ANNUNCIATOR PANEL.
FACP	FIRE ALARM CONTROL PANEL.
BF	FIRE ALARM MONITOR POINT, BACKFLOW PREVENTOR/PRESSURE INDICATING SWITCH.
TS	FIRE ALARM MONITOR POINT, TAMPER SWITCH.
FS	FIRE ALARM MONITOR POINT, FLOW SWITCH.
IAM	FIRE ALARM INTERMEDATE ADDRESSABLE MODULE.
GAA	GENERATOR ALARM ANNUNCIATOR PANEL.
	OVERHEAD DOOR SAFETY INTERLOCKS. REFER TO SPECIFICATION 083613 FOR MORE INFORMATION.
	LOCAL KEYED OPEN-STOP-CLOSE OVERHEAD DOOR CONTROL STATION. REFER TO SPECIFICATION 083613 FOR MORE INFORMATION.
	2'-0" GROUND BUS BAR. **REFER TO DETAIL #__, DRAWING E__.**
	COMBINATION TELEPHONE/DATA 2-PORT OUTLET SINGLE GANG. FOR EACH DEVICE 1-DATA/1-TELEPHONE JACK WITHIN THAT RECEPTACLE. INSTALL WITHIN A 4" x 4" EXTRA DEEP BOX. PROVIDE (2) CAT.6 CABLES U.O.N. INSTALL DEVICE WITH BOTTOM AT +16" AFF., U.O.N.
	CAT. 6 DATA OUTLET SINGLE GANG. INSTALL DEVICE AT +18" AFF., U.O.N. PROVIDE (1) CAT.6 CABLE U.O.N.
USB	COMBINATION TELEPHONE/DATA 2-PORT OUTLET SINGLE GANG. FOR EACH DEVICE 1-DATA/1-TELEPHONE JACK WITHIN THAT RECEPTACLE. INSTALL WITHIN A 4" x 4" EXTRA DEEP BOX. PROVIDE (2) CAT.6 CABLES U.O.N. INSTALL DEVICE WITH BOTTOM AT +16" AFF., U.O.N. USB INDICATES ONE CAT 6 CABLE/JACK TO BE REPLACED WITH ONE USB CABLE/JACK.
TV	COMBINATION TELEVISION/DATA 2-PORT OUTLET SINGLE GANG. FOR EACH DEVICE 1-DATA/1-TELEVISION JACK WITHIN THAT RECEPTACLE. INSTALL WITHIN A 4" x 4" EXTRA DEEP BOX. PROVIDE (1) CAT.6 CABLE AND (1) COAX CABLE. INSTALL DEVICE AT +84" AFF., U.O.N
HD	(1) HDMI INTERFACE OUTLET. PROVIDE 2-GANG BOX WITH ADAPTER RING FOR SINGLE GANG PLATE AND 1-1/4" EMT UP ABOVE CEILING AND STUBBED OUT WITH BUSHING. INSTALL DEVICE AT HEIGHT INDICATED ONPLANS. FURNISH AND INSTALL PRE-TERMINATED HDMI CABLE BETWEEN INTERFACES AS INDICATED ON PLANS. INSTALL DEVICE WITH BOTTOM AT +16" AFF., U.O.N
POTS	PLAIN OLD TELEPHONE SYSTEM OUTLET. PROVIDE (1) CAT 6 CABLE WITH (1) RJ11 JACK. INSTALL DEVICE WITH BOTTOM AT +16" AFF., U.O.N
	CONDUIT CONCEALED IN GROUND OR FLOOR.
	CONDUIT TURN UP AND TURN DOWN RESPECTIVELY.
F/SD	FIRE AND SMOKE DAMPER. **REFER TO DETAIL #__, ON SHEET E__.**
TV	POWER, DATA, COAX OUTLET FOR TV.
A L1# a	LIGHT FIXTURE. "A" INDICATES FIXTURE TYPE. "a" INDICATES SWITCH LEG. "L1#" INDICATES CIRUIT NUMBER FIXTURE IS CONNECTED TO. **REFER TO LIGHT FIXTURES SCHEDULE ON DRAWING E__.**
A L1# a	LIGHT FIXTURES WITH HALF SOLID SHADING INDICATES FIXTURE IS USED FOR EMERGENCY EGRESS LIGHTING. "A" INDICATES FIXTURE TYPE N.L. = NIGHT LIGHT, CONTINUOUS OPERATION, NON-CONTROLLED. EM = FIXTURE SUPPLIED WITH EMERGENCY POWER CONTROL MODULE, CONTROLLED. **REFER TO LIGHT FIXTURE SCHEDULE ON DRAWING E__.**
S	CEILING MOUNTED PUBLIC ADDRESS SPEAKER, TIED TO TELEPHONE PAGING SYSTEM
S W	WALL MOUNTED PUBLIC ADDRESS SPEAKER, TIED TO TELEPHONE PAGING SYSTEM
PC	PHOTOCELL
WAP	WIRELESS ACCESS POINT (WAP). PROVIDE TWO (2) CAT 6 CABLES.
	BRANCH CIRCUIT HOME-RUN SYMBOLOGY: SEMI CIRCLE INDICATES GROUND CONDUCTOR LONG LINE INDICATES NEUTRAL CONDUCTOR(S) SHORT LINE INDICATES PHASE CONDUCTOR(S)

SITE ELECTRICAL SYMBOLS:

Symbol	Description
---- BHV ----	DIRECT BURIED CONDUIT FOR HIGH VOLTAGE CABLE (CABLE BY ELECTRIC UTILITY)
---- BC ----	DIRECT BURIED CONDUIT FOR COMMUNICATIONS CABLES
---- BE ----	DIRECT BURIED CONDUIT FOR ELECTRICAL POWER CABLES
---- BFO ----	DIRECT BURIED CONDUIT FOR SECURITY FIBER OPTIC CABLES
---- G -----	DIRECT BURIED BARE COPPER GROUNDING ELECTRODE CABLE
	ELECTRICAL HANDHOLE 'HH-EX' INDICATES ELECTRICAL HANDHOLE #X 'HH-CX' INDICATES COMMUNICATION HANDHOLE #X
	3/4" DIAMETER X 10'-0" COPPER CLAD GROUNDING ELECTRODE GROUNDING ROD WITH EXOTHERMIC WELD CABLE CONNECTION

ONE-LINE DIAGRAM SYMBOLS:

Symbol	Description
PANEL 200 AMP 120/208V 3∅, 4W MLO	MAIN LUG ONLY PANELBOARD. "PANEL" INDICATES PANEL DESIGNATION. "120/208" INDICATES PANEL OPERATING VOLTAGE. "3∅, 4W" INDICATES PHASE AND WIRE. "200A 3P" INDICATES 3 POLE MAIN LUGS AND BUS RATED FOR 200A.
PANEL 200 AMP 120/208V 3∅, 4W MCB	MAIN CIRCUIT BREAKER PANELBOARD. "PANEL" INDICATES PANEL DESIGNATION. "120/208" INDICATES PANEL OPERATING VOLTAGE. "3∅, 4W" INDICATES PHASE AND WIRE. "200A 3P" INDICATES 3 POLE MAIN LUGS AND BUS RATED FOR 200A.
200 / 200	FUSED SWITCH. TOP NUMBER INDICATES SWITCH RATING IN AMPERES. BOTTOM NUMBER INDICATES FUSE RATING IN AMPERES.
200AT 200AF 80% RATED LSIG SS	THERMAL MAGNETIC CIRCUIT BREAKER. TOP NUMBER INDICATES TRIP RATING IN AMPERES. BOTTOM NUMBER INDICATES FRAME RATING IN AMPERES. "80% RATED" INDICATES BREAKER RATING. "LSIG" INDICATES BREAKER WITH ADJUSTABLE LONG TIME, SHORT TIME, INSTANTANEOUS, AND GROUND FAULT TRIP SETTINGS. "SS" INDICATES SOLID STATE, 3-POLE, U.O.N.
	BUS BAR.
	FEEDER CIRCUIT.
20	MOTOR WITH HORSEPOWER INDICATED.
208V 30KVA 208/120 K13	TRANSFORMER. PRIMARY VOLTAGE, SECONDARY VOLTAGE, RATING IN KVA AS INDICATED. K FACTOR AS INDICATED.
	GROUND.
100A	NON-FUSED DISCONNECT SWITCH. NUMBER INDICATES RATING IN AMPERES.
	ENCLOSURE OUTLINE.
100	CABLE/CONDUIT NUMBER.
N E L	AUTOMATIC TRANSFER SWITCH
SB	SWITCHBOARD

ABBREVIATIONS:

A.F	AMPERE FUSE	MFR.	MANUFACTURER
A.F.C.	ABOVE FINISHED COUNTER	MOCP	MAXIMUM OVERCURRENT PROTECTION
A.F.F.	ABOVE FINISHED FLOOR	MTS.	MANUAL TRANSFER SWITCH
A.F.G.	ABOVE FINISHED GRADE	MUTOA	MULTI-USER TELECOMMUNICATIONS OUTLET ASSEMBLY
BE	BURIED ELECTRIC		
B.F.G.	BELOW FINISH GRADE	NEC	NATIONAL ELECTRICAL CODE
BFO	BURIED FIBER OPTIC	NL	NON-SWITCHED NIGHT LIGHT
BT	BURIED TELEPHONE	NTRL.	NEUTRAL
C.	CONDUIT	NTS	NOT TO SCALE
CAT	CATEGORY	OCP	OVERCURRENT PROTECTIVE DEVICE
DED.	DEDICATED	OL.	OVERLOADS
DFA	DROP FROM ABOVE	P	POLE
DIV.	DIVISION	POTS	PLAIN OLD TELEPHONE SYSTEM
D.S	DISCONNECT SWITCH	∅	PHASE
E.T.R.	EXISTING TO REMAIN	RCPT.	RECEPTACLE
E	EXISTING	RECEPT.	RECEPTACLE
EC	ELECTRICAL CONTRACTOR	RM.	ROOM
(F)	FUTURE	SE	SERVICE ENTRANCE
FAAP	FIRE ALARM ANNUNCIATOR PANEL	SP.	SPARE
FACP	FIRE ALARM CONTROL PANEL	SPEC	SPECIFICATIONS
G.	GROUND	SS	SOLID STATE (ELECTRONIC) BREAKER
GFI	GROUND FAULT INTERRUPT	SSOL	SOLID STATE OVERLOADS
GRND	GROUND	ST	SAFETY TYPE
H.O.A.	HAND OFF AUTOMATIC	SW.	SWITCH
H.L.O.A.	HIGH LOW OFF AUTOMATIC	T.B.I.	TO BE INSTALLED
HNDLR	HANDLER	TBR	TO BE REMOVED
IDF	INTERMEDIATE DISTRIBUTION FRAME	TWSH.	TWISTED SHIELDED
LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND	TYP.	TYPICAL
		U.O.N.	UNLESS OTHERWISE NOTED
LTG.	LIGHTING	V.F.D.	VARIABLE FREQUENCY DRIVE
MC	MECHANICAL CONTRACTOR	W	WATT
MCA	MINIMUM CIRCUIT AMPACITY	WG	WIRE GUARD
MCB	MAIN CIRCUIT BREAKER	WAP	WIRELESS ACCESS POINT
MDF	MAIN DISTRIBUTION FRAME	WP	WEATHERPROOF

GENERAL NOTES:

A. DRAWINGS ARE DIAGRAMMATIC. ALL DIMENSIONS SHOWN ARE APPROXIMATE. ALL LOCATIONS SHALL BE FIELD VERIFIED.

B. ALL WORK SHALL BE IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE LATEST EDITION ADOPTED BY MICHIGAN, THE MICHIGAN ELECTRICAL CODE AMENDMENTS, LOCAL/MUNICIPAL CODES, AND THE AUTHORITY HAVING JURISDICTION.

C. ALL CONNECTIONS TO EQUIPMENT SUBJECT TO MOVEMENT OR VIBRATION SHALL BE LIQUID TIGHT FLEXIBLE METAL CONDUIT, NOT LESS THAN 12" IN LENGTH, NOR GREATER THAN 36" IN LENGTH.

D. ALL PENETRATIONS THROUGH FIRE RATED WALLS SHALL BE SEALED WITH THE APPROPRIATE FIRE STOPPING MATERIAL TO MAINTAIN WALL FIRE RATING. SEE ARCHITECTURAL DRAWING #A-051 FOR FIRE RATED WALL LOCATIONS.

E. SEE MECHANICAL AND PLUMBING SCHEDULES FOR MECHANICAL EQUIPMENT RATINGS AND SIZES.

F. ALL POWER AND LIGHTING CIRCUITS SHALL BE MINIMUM (2)#12, AND (1) #12 G, IN 3/4" CONDUIT UNLESS OTHERWISE NOTED. ALL BRANCH CIRCUIT WITH 20A AND BELOW BREAKER(S) SHALL USE THE FOLLOWING MINIMUM CABLE SIZE TO ACCOMMODATE VOLTAGE DROP UNLESS OTHER WISE NOTED: LESS THAN 85'-0": #12 AWG; 85'-0" TO 140'-0": #10 AWG; 140'-0" TO 225'-0": #8 AWG.

G. ALL CONTROL WIRING SHALL BE NOT LESS THAN (2) #14, (1) #14G, 3/4"C, UON.

H. ALL CABLES INSTALLED IN AIR HANDLING PLENUMS SHALL BE PLENUM RATED CABLE.

I. HOME RUNS SHALL NOT BE COMBINED IN A RACEWAY UNLESS SHOWN ON THE CONTRACT DRAWINGS. SINGLE PHASE BRANCH CIRCUIT HOME RUNS MAY BE COMBINED AT THE CONTRACTOR'S DISCRETION NOT GREATER THAN (3) PHASE CONDUCTORS, (3) NEUTRAL CONDUCTORS, AND REQUIRED GROUNDING CONDUCTOR(S). CONTRACTOR MUST INCREASE WIRE SIZE AND DERATE CONDUCTOR CAPACITY ACCORDING TO NEC.

J. EACH SINGLE PHASE BRANCH CIRCUIT CONDUCTOR SHALL HAVE A DEDICATED NEUTRAL BACK TO THE PANELBOARD.

K. SUPPORTING WIRE FOR THE SUSPENDED CEILING GRID SHALL NOT BE USED AS RACEWAY SUPPORT.

L. DISCONNECT SWITCH RATINGS SHALL BE AS INDICATED ON THE DRAWINGS.

M. MAJOR FEEDERS FROM THE SWITCHBOARD TO PANELBOARDS, TRANSFORMERS, MOTORS AND OTHER LARGE EQUIPMENT ARE NOT SHOWN ON THE FLOOR PLAN DRAWINGS. THESE FEEDERS ARE INCLUDED WITHIN THE SCOPE OF THE ELECTRICAL WORK AND ARE SHOWN ON THE ONE-LINE DIAGRAMS.

N. ALL FIRE ALARM CABLING SHALL BE RED, PLENUM RATED, AND INSTALLED IN FACTORY PAINTED "RED" CONDUIT. ALL ASSOCIATED JUNCTION/PULL BOXES SHALL BE FACTORY PAINTED "RED".

O. HVAC CONTROL WIRING FURNISHED AND INSTALLED BY OTHERS. PROVIDE POWER TO EACH TEMPERATURE CONTROL PANEL AS SHOWN.

P. INDOOR CONTROL EQUIPMENT ENCLOSURES SHALL BE NEMA 1 RATED U.O.N. ALL EXTERIOR ENCLOSURES SHALL BE NEMA 3R UNLESS OTHERWISE NOTED. ALL ENCLOSURES LOCATED IN KITCHEN SHALL BE NEMA 4X STAINLESS STEEL UNLESS OTHERWISE NOTED.

Q. ALL CONDUITS CROSSING EXPANSION JOINTS SHALL BE INSTALLED WITH EXPANSION FITTINGS, UNLESS THE CONDUIT IS BELOW SLAB IN THE COMPACTED GRANULAR FILL. EXPANSION FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE NEC AND MANUFACTURER'S WRITTEN RECOMMENDATIONS. REFER TO STRUCTURAL DRAWINGS FOR EXPANSION JOINT LOCATIONS.

R. THE CONTRACTOR SHALL COORDINATE RECEPTACLE HEIGHTS AND LOCATIONS WITH THE CASEWORK SHOP DRAWINGS TO DETERMINE EXACT LOCATIONS AND HEIGHTS FOR OUTLET INSTALLATION.

S. CONTROL WIRING FOR HVAC EQUIPMENT FURNISHED AND INSTALLED BY OTHERS. PROVIDE POWER AS INDICATED ON PLANS.

T. TO REDUCE NOISE BETWEEN WALLS, CONTRACTOR SHALL:

   a. AVOID INSTALLING POWER RECEPTACLES OR DATA OUTLETS LOCATED BACK TO BACK.

   b. WHERE OUTLETS ARE REQUIRED TO BE LOCATED BACK TO BACK CONTRACTOR SHALL PROVIDE SOUNDPROOFING MATERIAL BETWEEN JUNCTION BOXES.

U. THE WORD "PROVIDE" IS TO BE DEFINED AS "FURNISH AND INSTALL."

V. ALL ELECTRICAL DEVICES IN RECREATION ROOMS TO BE PROVIDED WITH WIREGUARD UNLESS INSTALLED IN CUSTOM BOX.

W. COORDINATE VIDEO VISITATION POWER REQUIREMENTS WITH OWNER'S VIDEO VISITATION VENDOR BEFORE ROUGH-IN. FURNISH AND INSTALL POWER AS REQUIRED. PROVIDE DEVICES, BOXES, RACEWAYS, CABLING, SUPPORTS, DISCONNECTS, STARTERS, ETC AS REQUIRED.

X. THE TRADE CONTRACTOR SHALL COORDINATE LOCATIONS OF ALL PENETRATIONS WITH STRUCTURAL DRAWING REQUIREMENTS. ADDITIONALLY, THE TRADE CONTRACTOR SHALL COORDINATE ALL PENETRATIONS REQUIRED THROUGH PRECAST CONCRETE UNITS WITH THE PRECAST CONCRETE MANUFACTURER TO PRODUCE A SHOP DRAWING SUBMITTAL NOTING ALL PENETRATIONS AND THEIR SIZES. TRADE CONTRACTOR AND PRECAST MANUFACTURER SHALL PROVIDE DOCUMENTATION WITH SHOP DRAWING SUBMITTAL INDICATING THAT ALL TRADES HAVE SIGNED OFF ON ALL AFOREMENTIONED COORDINATION.

Y. ALL DEVICES SURFACE MOUNTED ON BOTTOM OF PRECAST SHALL BE SUPPLIED FROM ABOVE. NO EXPOSED CONDUITS OR WIREMOLD SHALL BE USED ON BOTTOM OF PRECAST.

Z. ADJUST DEVICE BOX MOUNTING HEIGHT TO TOP OR BOTTOM OF BLOCK COURSING AS NEEDED SO BOXES DO NOT CROSS A MORTAR JOINT.

AA. SECURITY CAULKING/SEALANT SHALL BE INSTALLED IN CREVICES IN ALL DETENTION SPACES (I.E. AROUND DEVICE PLATES, LIGHTING FIXTURES, ETC.). REFER TO SPECIFICATION 079200 FOR DETAILED REQUIREMENTS.

AB. TORX HEAD SCREWS WITH A CENTER PIN SHALL BE INSTALLED IN ALL DETENTION SPACES (I.E. DEVICE FACEPLATES, LIGHTING FIXTURE ACCESS PLATES, ETC.). REFER TO SPECIFICATION 050553 FOR DETAILED REQUIREMENTS.

AC. CONDUITS SHALL NOT BE ROUTED IN OR THROUGH THE PRECAST HOLLOWCORE CEILING. COORDINATE WITH PRECAST VENDOR TO DETERMINE DROP-IN ANCHOR LOCATIONS FOR MOUNTING OF RACEWAYS OR OTHER ELECTRICAL ITEMS UNDERNEATH THE PRECAST HOLLOWCORE CEILING. REFER TO DRAWING S-500, DETAIL #7.

AD. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATED WALLS AND CEILINGS. INSTALL FIRESTOP AT PENETRATIONS. INSTALL FIRE RATED PUTTY AROUND BOXES INSTALLED IN FIRE RATED WALLS AND OFFSET BACK TO BACK BOXES. REFER TO SPECIFICATION SECTION 078443 "JOINT FIRESTOPPING" FOR DETAILS FIRESTOP REQUIREMENTS.

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DLZ Florida, LLC

NO.	REVISION	DATE

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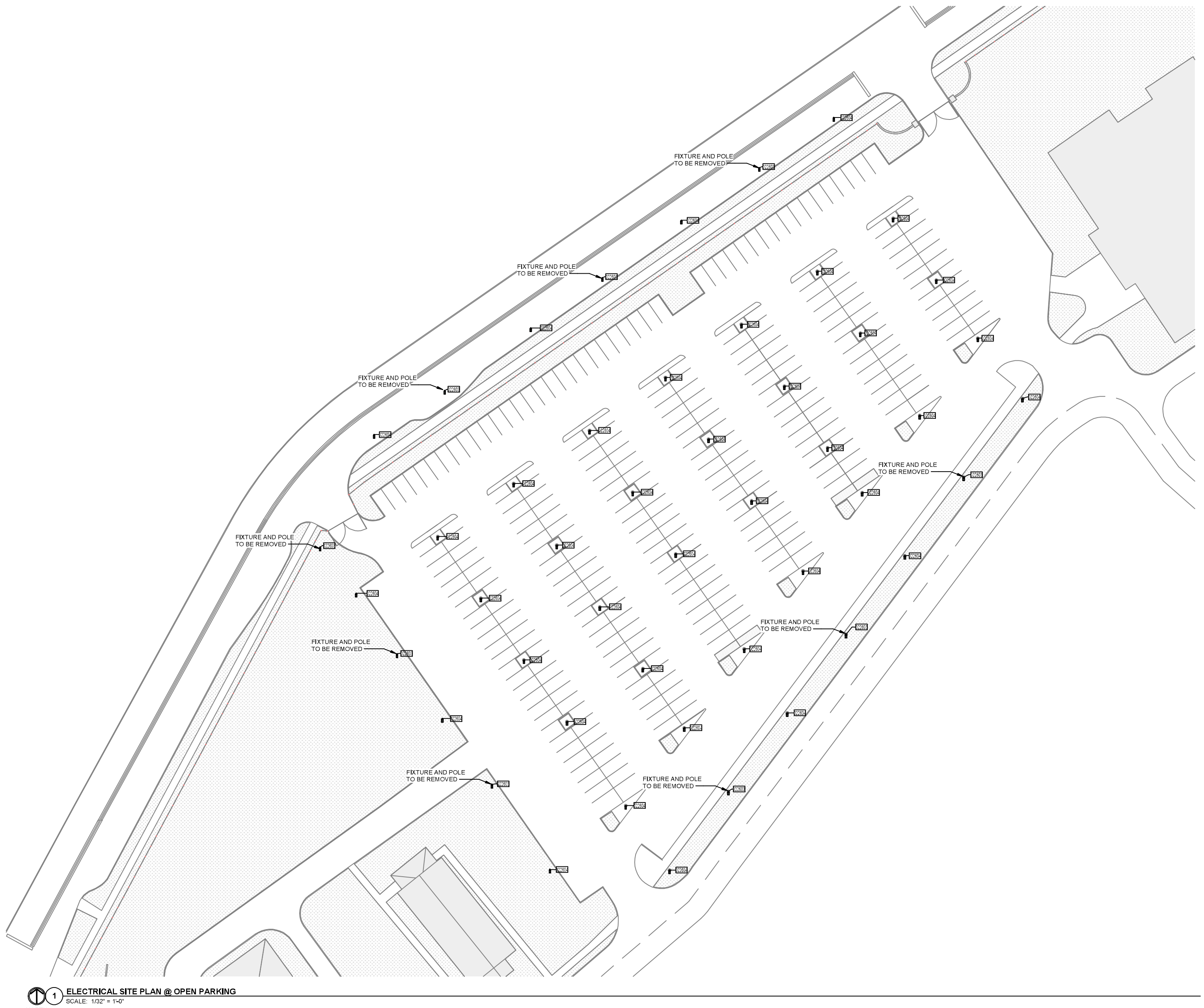
DESIGNED: Designer
APPRV'D: Approver
DATE: MONTH XX, XXXX
PROJECT NUMBER
1641-674700

DETROIT MI

EGIS-BLN
GHIB FORT WAYNE LIGHTING & SITE IMPROVEMENTS

GENERAL INFORMATION

DRAWING NUMBER
E0.1
ELECTRICAL



1 **ELECTRICAL SITE PLAN @ OPEN PARKING**
SCALE: 1/32" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEETS G1.1 AND E0.1 FOR ADDITIONAL GENERAL NOTES AND INFORMATION.

B. DASHED LINES INDICATE EXISTING ELECTRICAL EQUIPMENT TO BE REMOVED. REMOVE ASSOCIATED ELECTRICAL ITEMS (E.G. CABLE, CONDUIT, SUPPORTS, DISCONNECTS, ETC.) COMPLETE BACK TO POWER AND/OR SIGNAL SOURCE OR TO NEAREST REMAINING DEVICE(S) U.O.N.

C. SHADED LINES INDICATE EXISTING ELECTRICAL ITEMS TO REMAIN.

D. E.R. = EXISTING DEVICE TO REMAIN.

E. T.B.R. = EXISTING DEVICE TO BE REMOVED.

F. ALL EXISTING LIGHTING, POWER, SYSTEMS DEVICES / EQUIPMENT TO REMAIN UNLESS OTHERWISE NOTED.

G. NOT ALL KEYNOTES ARE USED ON EVERY SHEET.

H. REMOVE EXISTING SYSTEMS, MATERIALS, AND EQUIPMENT WHICH ARE MADE OBSOLETE OR WHICH INTERFERE WITH THE CONSTRUCTION OF THE PROJECT.

   a. REINSTALL ANY SUCH SYSTEMS, MATERIALS, AND EQUIPMENT WHICH ARE REQUIRED TO COMPLETE THE PROJECT.

I. WHERE EXISTING EQUIPMENT OR MATERIALS ARE REMOVED OR CHANGED, ALL BRANCH CONDUITS, WHICH NO LONGER ARE IN SERVICE, SHALL BE REMOVED AS DIRECTED BY THE ARCHITECT. IF, IN THE COURSE OF THE WORK, OUTLETS ARE COVERED UP OR OTHERWISE RENDERED INACCESSIBLE, ALL WIRING TO SAME SHALL BE REMOVED TO THE SOURCE. IF A CIRCUIT THAT MUST REMAIN IN SERVICE IS INTERRUPTED, IT SHALL BE RECONNECTED BY THE MOST INCONSPICUOUS MEANS SO AS TO REMAIN OPERATIONAL, WITH SAME CAPACITY AS BEFORE. ALL BUILDING SURFACES DAMAGED, AND OPENING LEFT BY REMOVAL OF BOXES, PIPING, OR THEIR EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR. ALL HOLES LEFT IN JUNCTION BOXES, SWITCHES, PANELS, ETC. SHALL BE CLOSED.

J. WHERE NEW OPENINGS ARE CUT AND CONCEALED CONDUITS, ETC. ARE ENCOUNTERED, THEY SHALL BE REMOVED OR RELOCATED AS REQUIRED. CONDUIT SHALL BE REMOVED TO THE POINT WHERE THE FINISH SURFACES CAN BE PATCHED ADEQUATELY SO THAT NO EVIDENCE OF THE FORMER INSTALLATION REMAINS.

K. REFER TO ARCHITECTURAL DRAWINGS WHICH SHOW THE TOTAL DEMOLITION IN SPECIFIC AREAS. E.C. SHALL COORDINATE IN THIS DEMOLITION TO ENSURE THAT POWER IS OFF AND THAT ELECTRICAL EQUIPMENT THAT MUST REMAIN IS PROPERLY PROTECTED.

L. ALL REUSABLE DEVICES, FIXTURES, AND EQUIPMENT SHALL BE SALVAGED, SHALL BECOME THE PROPERTY OF THE OWNER, AND SHALL BE STORED BY THE CONTRACTOR IN A ROOM TO BE DESIGNATED BY THE OWNER. ALL OTHER REMOVED ITEMS AND DEBRIS SHALL BE CLEARED FROM THE PREMISES DAILY.

KEYNOTES

022603	LIGHTING FIXTURE, POLE, AND POLE BASE TO BE REMOVED. REPLACE WITH HANDHOLE, REWORK CONDUIT AND RECONNECT CONDUCTORS TO MAINTAIN CONTINUITY OF CIRCUIT.
022604	REMOVE FIXTURE, POLE, AND POLE BASE IN PREPARATION FOR NEW DIRECT BURY LIGHT POLE IN SAME PLACE. MAINTAIN WIRING FOR NEW POLE. REWORK EXISTING CONDUIT AS REQUIRED FOR NEW POLE.

SCALE: 1/8" = 1'-0"
0 4'-0" 8'-0" 16'-0"

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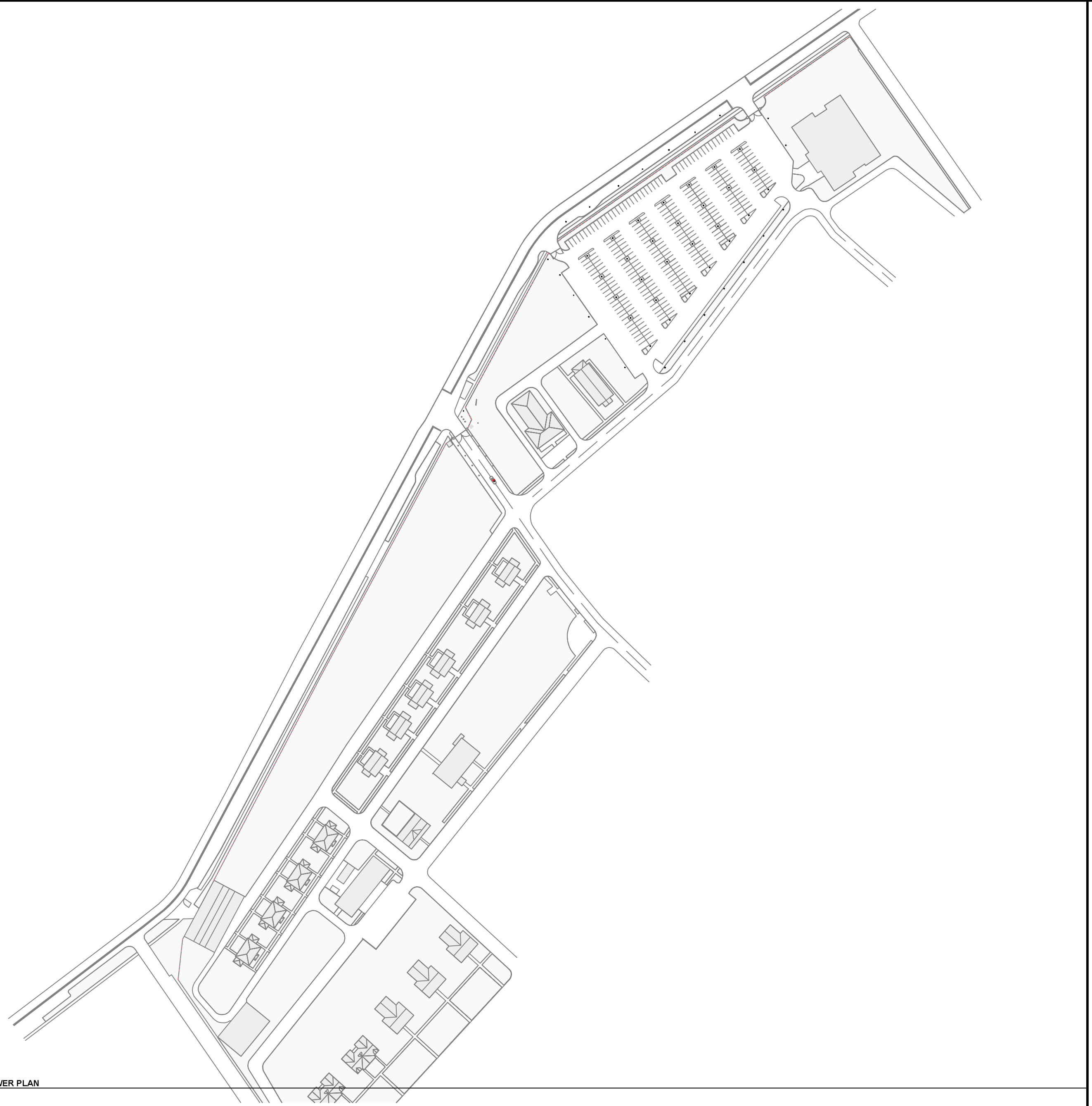
PROJECT NUMBER
1641-674700

MI
DETROIT
EGIS-BLN
GHIB FORT WAYNE LIGHTING & SITE IMPROVEMENTS
SITE LIGHTING REMOVAL PLAN

DRAWING NUMBER
ED3.1
ELECTRICAL



FIRST FLOOR POWER PLAN

SCALE: 1" = 100'-0"

NORTH

GENERAL NOTES

A. REFER TO SHEETS G1.1 AND E0.1 FOR ADDITIONAL GENERAL NOTES AND INFORMATION.

B. FIELD VERIFY POWER SOURCE FOR EXTERIOR LIGHTING.

KEYNOTES

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PROJECT NUMBER
1641-674700

DETROIT MI

EGIS-BLN

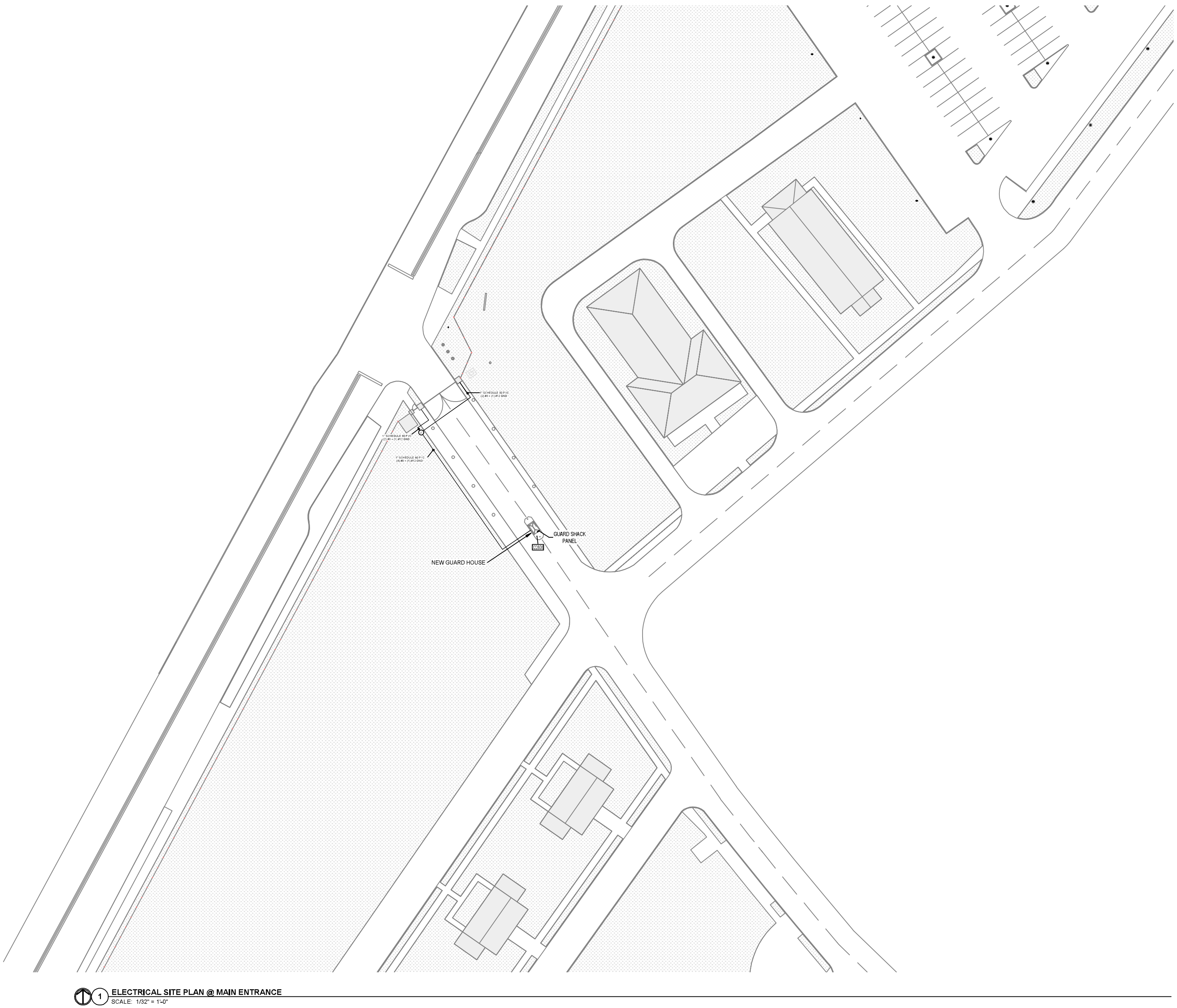
GHIB FORT WAYNE LIGHTING & SITE IMPROVEMENTS

ELECTRICAL SITE PLAN

DRAWING NUMBER

E1.0

ELECTRICAL



ELECTRICAL SITE PLAN @ MAIN ENTRANCE
SCALE: 1/32" = 1'-0"
NORTH

GENERAL NOTES

A. REFER TO SHEETS G1.1 AND E0.1 FOR ADDITIONAL GENERAL NOTES AND INFORMATION.

B. FIELD VERIFY POWER SOURCE FOR EXTERIOR LIGHTING.

KEYNOTES

022606 UTILIZE EXISTING CONDUIT AND FEEDERS TO SUPPLY NEW GUARDHOUSE PANEL.

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PROJECT NUMBER
1641-674700

DETROIT MI
EGIS-BLN
GHIB FORT WAYNE LIGHTING & SITE IMPROVEMENTS
ELECTRICAL SITE PLAN ENLARGED

DRAWING NUMBER
E1.1
ELECTRICAL

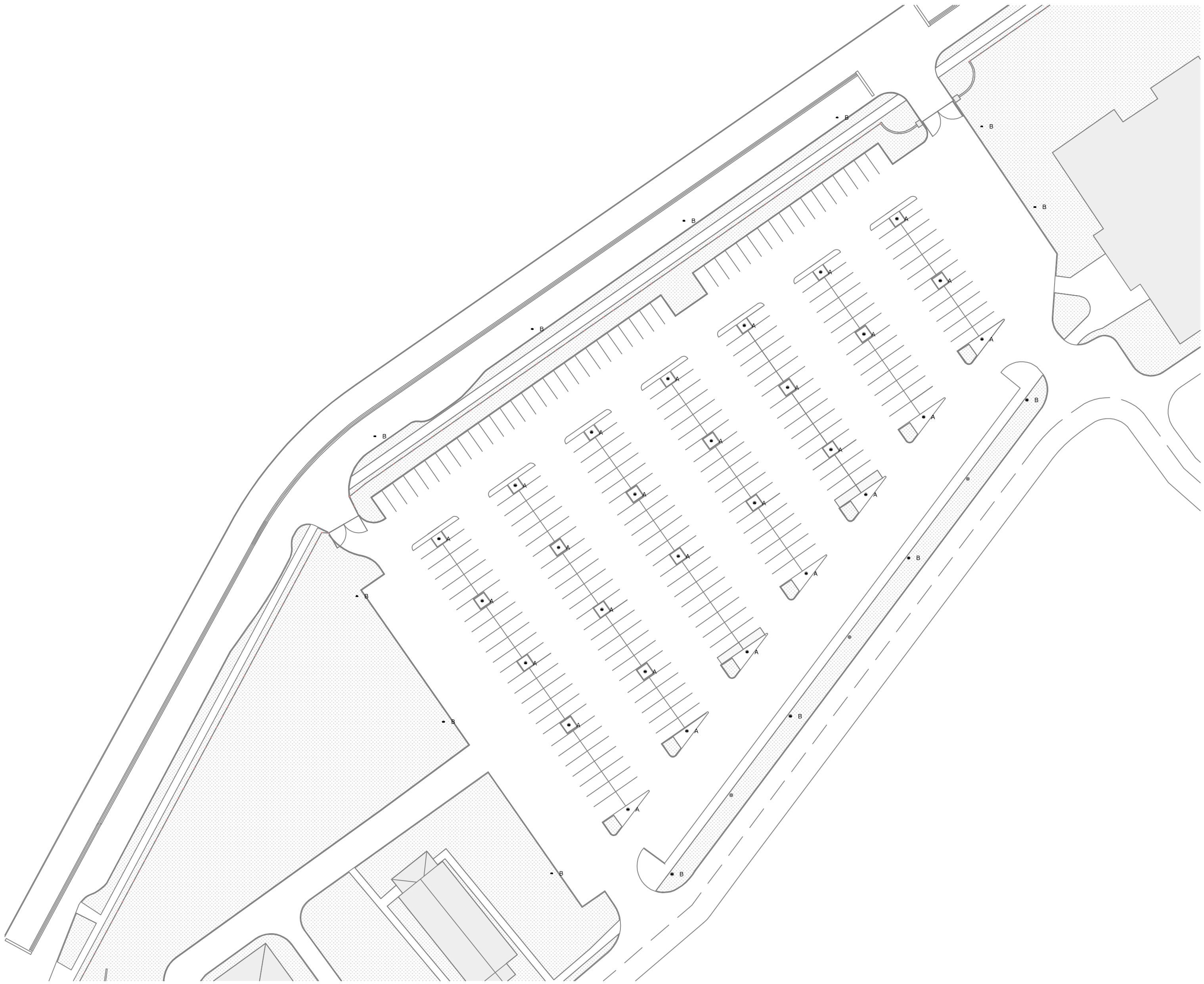
Autodesk Docs://1641-6470-00 GHIB Site Improvements/1641-6470-00 GHIB Site Improvements_ELEC.rvt
4/25/2023 1:05:03 PM

GENERAL NOTES

A. REFER TO SHEETS G1.1 AND E0.1 FOR ADDITIONAL GENERAL NOTES AND INFORMATION.

B. FIELD VERIFY POWER SOURCE FOR EXTERIOR LIGHTING.

KEYNOTES



1 ELECTRICAL SITE PLAN @ OPEN PARKING
SCALE: 1/32" = 1'-0"
NORTH

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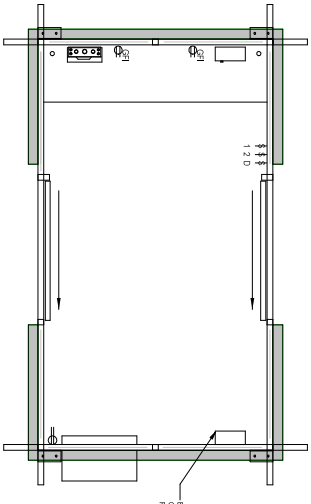
DESIGNED: Designer	
APPR'VD: Approver	
DATE: MONTH XX, XXXX	
PROJECT NUMBER	1641-674700
MI	DETROIT
EGIS-BLN	
GHIB FORT WAYNE LIGHTING & SITE IMPROVEMENTS	
ELECTRICAL SITE PLAN ENLARGED @ OPEN PARKING	
DRAWING NUMBER	E1.2
ELECTRICAL	

1 GUARD HOUSE ELECTRICAL PLAN
SCALE: 1" = 1'-0"



NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. GUARD SHACK WIRED WITH ELECTRICAL DEVICES BY VENDOR.

DRAWING NUMBER: E1.3	DETROIT MI	DRAWN: Author CHK'D: Chkd	NO.	REVISION	DATE
	EGIS-BLN	DESIGNED: Designer			
	GHIB FORT WAYNE LIGHTING & SITE IMPROVEMENTS	APPRV'D: Approver			
	GUARD HOUSE ELECTRICAL PLAN	DATE: MONTH XX, XXXX			
ELECTRICAL		PROJECT NUMBER 1641-674700			

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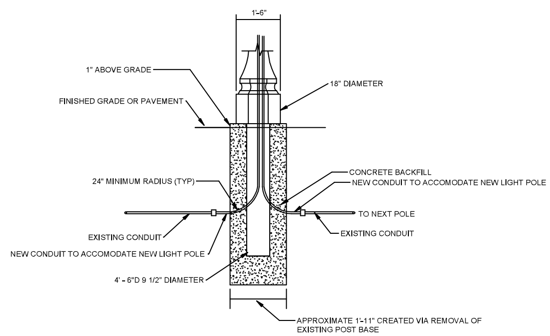
GENERAL NOTES

A. REFER TO SHEETS G1.1 AND E0.1 FOR ADDITIONAL GENERAL NOTES AND INFORMATION.

B. FIELD VERIFY POWER SOURCE FOR EXTERIOR LIGHTING.



NORTH **1 LIGHT POLE CONCRETE FOUNDATION DETAIL**
SCALE: 1/2" = 1'-0"

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NO.	REVISION	DATE

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DESIGNED: Designer
APPR'VD: Approver
DATE: MONTH XX, XXXX
PROJECT NUMBER
1641-674700

DETROIT MI
EGIS-BLN
GHIB FORT WAYNE LIGHTING & SITE IMPROVEMENTS
DETAILS - 1

DRAWING NUMBER
E5.1
ELECTRICAL

GENERAL NOTES

A. REFER TO SHEETS G1.1 AND E0.1 FOR ADDITIONAL GENERAL NOTES AND INFORMATION.

B. FIELD VERIFY POWER SOURCE FOR EXTERIOR LIGHTING.

LIGHTING FIXTURE SCHEDULE

TYPE	LAMP	WATTAGE	VOLTS	DESCRIPTION	MANUFACTURER 1	TYPE COMMENTS
A	LED	97 W	MVOLT	POLE MOUNTED ARCHITECTURAL AREA LIGHT, DIECAST ALUMINUM HOUSING, ACRYLIC LENS	EVOLVE #EPAM 01 12 A 40 1H A	MOUNT ON WALL WITH BOTTOM AT +12'-0" AFG UNLESS OTHERWISE NOTED.
B	LED	97 W	MVOLT	POLE MOUNTED ARCHITECTURAL AREA LIGHT, DIECAST ALUMINUM HOUSING, ACRYLIC LENS	EVOLVE #EPAM 01 12 B 40 1H A	MOUNT ON WALL WITH BOTTOM AT +12'-0" AFG UNLESS OTHERWISE NOTED.

NOTE: CONTRACTOR TO VERIFY VOLTAGE OF EXISTING LIGHT POLE CIRCUIT

Branch Panel: GUARD SHA...

Location:
Supply From:
Mounting: Surface
Enclosure: 1

Volts: 120/240 Single
Phases: 1
Wires: 3

A.I.C. Rating: 10kA
Mains Type: MLO
Mains Rating: 125 A
MCB Rating: 0 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1											2
3											4
5											6
7											8
9											10
11											12
			Total Load:	0 VA		0 VA					
			Total Amps:	0 A		0 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
				Total Conn. Load:	0 VA
				Total Est. Demand:	0 VA
				Total Conn. Current:	0 A
				Total Est. Demand Current:	0 A

Notes:

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DATE: MONTH XX, XXXX
PROJECT NUMBER
1641-674700

MI
DETROIT
EGIS-BLN
GHIB FORT WAYNE LIGHTING & SITE IMPROVEMENTS
SCHEDULES

DRAWING NUMBER
E6.1
ELECTRICAL

EVOLVE

EPAM Americana
LED Post Top Lighting

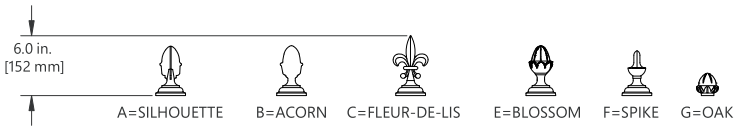
CUSTOMER NAME _____

PROJECT NAME _____

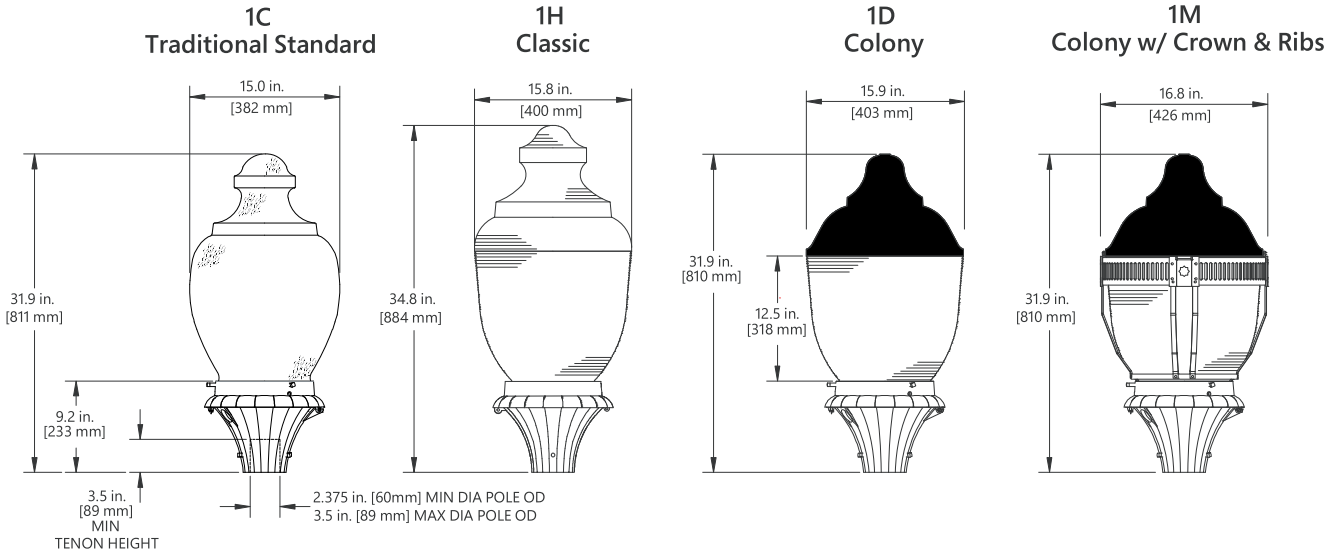
DATE _____ TYPE _____

CATALOG NUMBER _____

FINIAL



GLOBE



Weight

- < 20 lbs (9.07 kgs)

Suggested Mounting Height

- 8-16 ft. (2.5-5 M)

Effective Projected Area

- 1.4 sq ft max (0.13 sq M max)

Mounting

- Post top mounting for 2.375 in. (60mm) MIN – 3.5 in. (89mm) MAX diameter by 3.5-inch MIN vertical tenon secured with three square head set screws

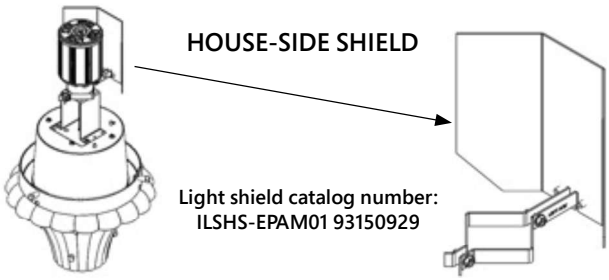
Available Finials if ordered separately

MATERIAL DESCRIPTION	COLOR*	MATERIAL
FNLBL-ACN	BLACK	126817
FNLBL-BLS	BLACK	126819
FNLBL-FDL	BLACK	126812
FNLBL-OAK	BLACK	170102
FNLBL-SIL	BLACK	126816
FNLBL-SPK	BLACK	126818

*Contact Factory for different finial colors

Accessories

SAP NUMBER	PART NUMBER	DESCRIPTION
93029237	PED-MV-LED-7	ANSI C136.41 Dimming PE, 120-277V
28299	PECOTL	Standard 120-277V
73251	SCCL-PECTL	Shorting Cap



EVOLVE

CUSTOMER NAME _____

PROJECT NAME _____

DATE _____ TYPE _____

CATALOG NUMBER _____

EPAM Americana

LED Post Top Lighting

The **Evolve®** LED Americana Post Top offers energy efficiency and quality of light in a classic, Acorn look and style.

Construction

Housing:	Diecast aluminum housing.
Lens:	Acrylic or Polycarbonate Globe
Paint:	Corrosion resistant polyester powder paint, minimum 2.0 mil thickness Standard = Black, Dark Bronze RAL & custom colors available
Weight:	< 20 lbs (9.07 kgs)

Optical System

Lumens:	1,900 – 12,600
Distribution:	Symmetric Asymmetric
Efficacy:	74-155 LPW
CCT:	3000K, 4000K
CRI:	≥70

Electrical

Input Voltage:	120-277V
Input Frequency:	50/60Hz
Power Factor:	≥ 90% at rated watts*
Total Harmonic Distortion:	≤ 20% at rated watts

*PF >0.88 for 1C and 1H globes at 02 Lumen Output above 240V

Surge Protection*

Standard	Optional
☐ 10kV/5kA	☐ Secondary 10kV/5kA (R Option) ☐ Secondary 20kV/10kA (T Option)

*Per ANSI C136.2-2015

Warranty

☐ 5 Year (Standard) ☐ 10 Year (Optional)

Luminaire Ambient Temperature Factor (LATF)

Ambient Temp (°C)	Initial Flux Factor	Ambient Temp (°C)	Initial Flux Factor
10	1.02	30	0.99
20	1.01	40	0.98
25	1.00	50	0.97

Operating Temperature

Globe	Min Ambient Temp (°C)	Max Ambient Temp (°C)	Lumen Output
1C & 1H	-40° -40°	50° 40°	02 to 10 12
1D	-40° -40°	50° 45°	02 to 08 10
1M	-40° -40°	50° 45°	02 to 06 07

Ratings

Vibration:	1.5G per ANSI C136.41-2010
LM-79:	Testing in accordance with IES Standards
Environmental:	Complies with the material restrictions of RoHS

Controls

Dimming:	Standard - 0-10V ☐ Optional - DALI (Option U) ☐
Sensors:	Photo Electric Sensors (PE) available

Applications

- Local Roadways
- Parks and Pathways
- Antique Streetscapes
- University and Business Campuses

Not all product variations listed on this page are DLC qualified. Visit www.designlights.org/search to confirm qualifications.

EVOLVE

EPAM Americana

LED Post Top Lighting

CUSTOMER NAME ____________________

PROJECT NAME ____________________

DATE ____________ TYPE ____________

CATALOG NUMBER ____________________

Ordering Information

EPAM 01

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

PROD. ID	GEN	VOLTAGE	LUMEN OUTPUT[4]	DISTRIBUTION	CCT	CONTROLS	GLOBE	GLOBE MATERIAL	FINIAL READY	FINIAL	COLOR	OPTIONS
E = Evolve	01	0 = 120-277V[3]	02	A = Symmetric	30 = 3000K	1 = None	1C = Traditional Standard	A = Acrylic	F = Finial Ready[2]	A = Silhouette	BLCK = Black	F = Fusing
P = Post Top		1 = 120V	04	B = Asymmetric[10]	40 = 4000K	A = ANSI C136.41 7-Pin Receptacle (in Base)	1H = Classic	P = Polycarbonate[6]	X = No Finial Hole or Stud[1]	B = Acorn	DKBZ = Dark Bronze	R = Secondary 10kV/5kA SPD
AM = Americana		2 = 208V	06			D = ANSI C136.41 7-Pin Receptacle (in Base) w/ Shorting Cap	1D = Colony	F = Frosted Acrylic[6, 7]		C = Fleur-De-Lis	XXXX = RAL Color	T = Secondary Elevated Surge (20kV/10kA)
		3 = 240V	08			E = ANSI C136.41 7-Pin Receptacle (in Base) w/ non-Dimming PE	1M = Colony w/ Crown & Ribs			E = Blossom		U = DALI Programmable
		4 = 277V	10							F = Spike		V1 = Field Adjustable Module[5]
			12							G = Oak		XXX = Special Options
										X = None		

[1] If globe finial is not desired, choose FINIAL READY = X and FINIAL = X. If FINIAL READY = X, a finial cannot be added later

[2] A Finial is not required to complete order and can be added later

[3] Not Available with Fusing

[4] Globe Choice affects total lumen output. See Spec Table for additional information.

[5] Not available with DALI "U" option

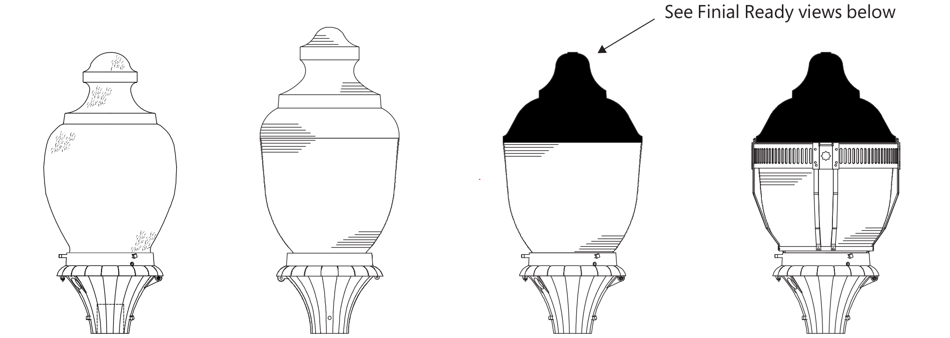
[6] Only available with 1C Globe

[7] Only available without Finial (Finial Ready = X)

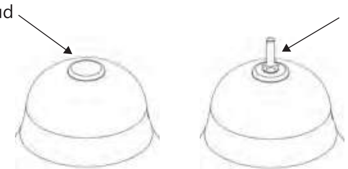
[8] Lumen offering 07 is only available with the 1M Globe

[9] Review the Spec Tables for combination of Lumen Output, Distribution, Globe and Globe Material

[10] Not available with 1C Globe



1C Traditional Standard | 1H Classic | 1D Colony | 1M Colony w/Crown & Ribs



Finial Ready = X | Finial Ready = F

Not all product variations listed on this page are DLC qualified. Visit www.designlights.org/search to confirm qualifications.

CUSTOMER NAME _____
PROJECT NAME _____
DATE _____ TYPE _____
CATALOG NUMBER _____

LUMEN OUTPUT	DIST. CODE	GLOBE	GLOBE MATERIAL	TYPICAL INITIAL LUMENS		TYPICAL SYSTEM WATTAGE	BUG RATINGS		TM-21-11 LXX (≥10k) @ HOURS		
				4000K	3000K	120-277V	4000K	3000K	25,000 HR	50,000 HR	60,000 HR
02	A Symmetric	1C Traditional Standard	A Acrylic	2300	2200	16	B1-U4-G2	B1-U4-G2	L96	L95	L94
04				4500	4400	29	B1-U5-G3	B1-U5-G3	L96	L95	L94
06				6600	6400	44	B2-U5-G3	B2-U5-G3	L95	L93	L92
08				8500	8200	59	B2-U5-G4	B2-U5-G3	L94	L91	L90
10				10600	10300	77	B3-U5-G4	B3-U5-G4	L92	L88	L86
12				12600	12200	97	B3-U5-G5	B3-U5-G4	L87	L78	L75
02	A Symmetric	1C Traditional Standard	P Polycarbonate	2200	2100	16	B1-U4-G2	B1-U4-G2	L96	L95	L94
04				4300	4200	29	B1-U5-G3	B1-U5-G3	L96	L95	L94
06				6300	6100	44	B2-U5-G3	B2-U5-G3	L95	L93	L92
08				8200	7900	59	B2-U5-G4	B2-U5-G4	L94	L91	L90
10				10200	9900	77	B3-U5-G4	B3-U5-G4	L92	L88	L86
12				12100	11700	97	B3-U5-G5	B3-U5-G4	L87	L78	L75
02	A Symmetric	1H Classic	A Acrylic	2200	2200	16	B1-U4-G1	B1-U4-G1	L96	L95	L94
04				4500	4300	29	B2-U5-G2	B2-U5-G2	L96	L95	L94
06				6500	6300	44	B2-U5-G2	B2-U5-G2	L95	L93	L92
08				8400	8200	59	B3-U5-G2	B3-U5-G2	L94	L91	L90
10				10500	10200	77	B3-U5-G3	B3-U5-G3	L92	L88	L86
12				12400	12100	97	B3-U5-G3	B3-U5-G3	L87	L78	L75
02	B Asymmetric	1H Classic	A Acrylic	2200	2100	16	B1-U4-G1	B1-U4-G1	L96	L95	L94
04				4400	4300	29	B1-U5-G2	B1-U5-G2	L96	L95	L94
06				6400	6200	44	B1-U5-G3	B1-U5-G3	L95	L93	L92
08				8300	8000	59	B2-U5-G3	B2-U5-G3	L94	L91	L90
10				10300	10000	77	B2-U5-G3	B2-U5-G3	L92	L88	L86
12				12300	11900	97	B2-U5-G3	B2-U5-G3	L87	L78	L75

For additional information on EPAM IES files, please refer to LED.com

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CUSTOMER NAME _____
PROJECT NAME _____
DATE _____ TYPE _____
CATALOG NUMBER _____

LUMEN OUTPUT	DIST. CODE	GLOBE	GLOBE MATERIAL	TYPICAL INITIAL LUMENS		TYPICAL SYSTEM WATTAGE	BUG RATINGS		TM-21-11 LXX (≥10k) @ HOURS		
				4000K	3000K	120-277V	4000K	3000K	25,000 HR	50,000 HR	60,000 HR
02	A Symmetric	1D Colony*	A Acrylic	2800	2700	23	B2-U3-G1	B2-U3-G1	L96	L94	L93
04				4600	4500	37	B2-U3-G2	B2-U3-G2	L96	L94	L93
06				6100	5900	50	B3-U4-G2	B3-U4-G2	L94	L91	L90
08				7800	7600	66	B3-U4-G3	B3-U4-G3	L92	L88	L87
10				9500	9200	86	B3-U5-G3	B3-U4-G3	L87	L79	L76
02	B Asymmetric	1D Colony*	A Acrylic	2800	2700	23	B1-U3-G2	B1-U3-G2	L96	L94	L93
04				4600	4500	37	B2-U3-G3	B2-U3-G3	L96	L94	L93
06				6100	5900	50	B2-U4-G3	B2-U4-G3	L94	L91	L90
08				7800	7600	66	B2-U4-G3	B2-U4-G3	L92	L88	L87
10				9500	9200	86	B3-U4-G3	B3-U4-G3	L87	L79	L76
02	A Symmetric	1M Colony w/ Crown & Ribs	A Acrylic	1900	1900	23	B1-U3-G1	B1-U3-G1	L96	L94	L93
04				4200	4100	50	B2-U3-G1	B1-U3-G2	L94	L91	L90
06				6100	5900	77	B3-U3-G2	B2-U3-G2	L90	L84	L81
07				6600	6400	86	B3-U3-G2	B3-U3-G2	L87	L79	L76
02	B Asymmetric	1M Colony w/ Crown & Ribs	A Acrylic	1900	1900	23	B1-U3-G1	B1-U3-G1	L96	L94	L93
04				4200	4100	50	B1-U3-G2	B1-U3-G2	L94	L91	L90
06				6100	5900	77	B2-U3-G3	B2-U3-G2	L90	L84	L81
07				6600	6400	86	B2-U3-G3	B2-U3-G3	L87	L79	L76

For additional information on EPAM IES files, please refer to LED.com

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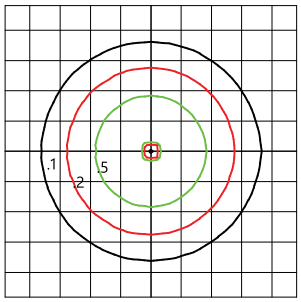
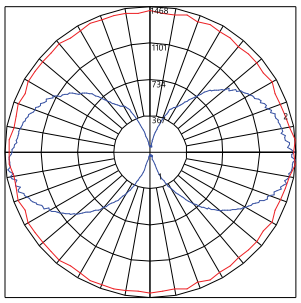
CUSTOMER NAME _____
PROJECT NAME _____
DATE _____ TYPE _____
CATALOG NUMBER _____

EPAM
Symmetric

12,600 Lumens
4000K
EPAM01_12A40–1CA___.IES



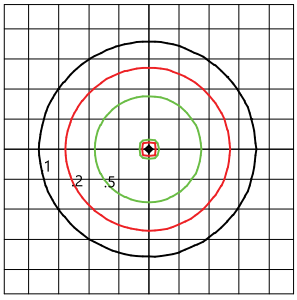


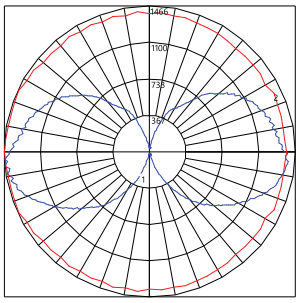
- Mounting Height at 16'
- Initial Footcandle at Grade

— Vertical plane at max Cd horiz. angle 5°
— Horizontal cone at max Cd vert. angle 87°

EPAM
Symmetric

12,100 Lumens
4000K
EPAM01_12A40–1CP___.IES



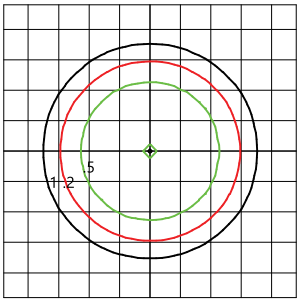


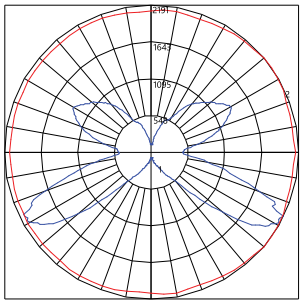
- Mounting Height at 16'
- Initial Footcandle at Grade

— Vertical plane at max Cd horiz. angle 180°
— Horizontal cone at max Cd vert. angle84°

EPAM
Symmetric

12,400 Lumens
4000K
EPAM01_12A40–1HA___.IES



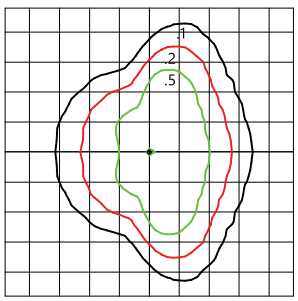


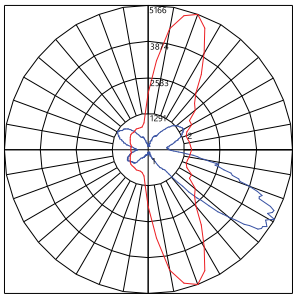
- Mounting Height at 16'
- Initial Footcandle at Grade

— Vertical plane at max Cd horiz. angle 40°
— Horizontal cone at max Cd vert. angle 64°

EPAM
Asymmetric

12,300 Lumens
4000K
EPAM01_12B40–1HB___.IES





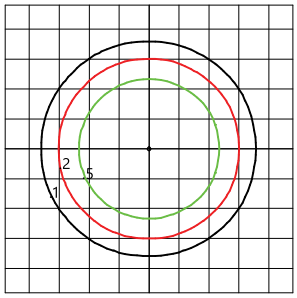
- Mounting Height at 16'
- Initial Footcandle at Grade

— Vertical plane at max Cd horiz. angle 70°
— Horizontal cone at max Cd vert. angle 61°

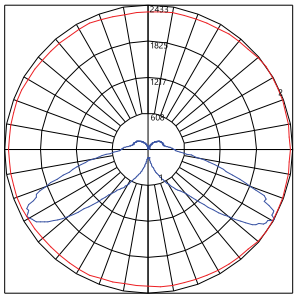
CUSTOMER NAME _____
PROJECT NAME _____
DATE _____ TYPE _____
CATALOG NUMBER _____

EPAM
Symmetric

9,500 Lumens
4000K
EPAM01_10A40–1DA___.IES



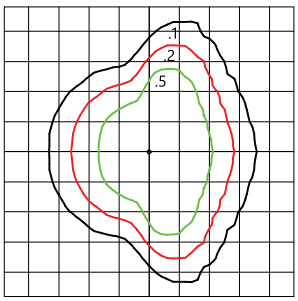
• Mounting Height at 16'
• Initial Footcandle at Grade



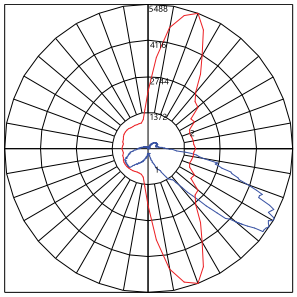
— Vertical plane at max Cd horiz. angle 61°
— Horizontal cone at max Cd vert. angle 35°

EPAM
Asymmetric

9,500 Lumens
4000K
EPAM01_10B40–1DB___.IES



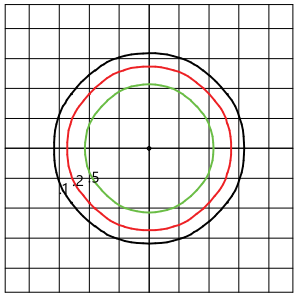
• Mounting Height at 16'
• Initial Footcandle at Grade



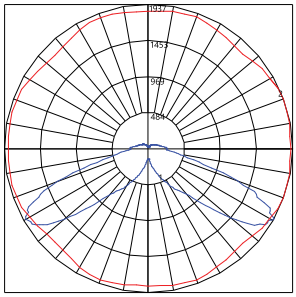
— Vertical plane at max Cd horiz. angle 70°
— Horizontal cone at max Cd vert. angle 61°

EPAM
Symmetric

6,600 Lumens
4000K
EPAM01_07A40–1MA___.IES



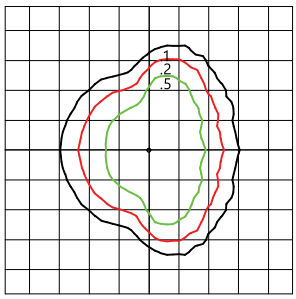
• Mounting Height at 16'
• Initial Footcandle at Grade



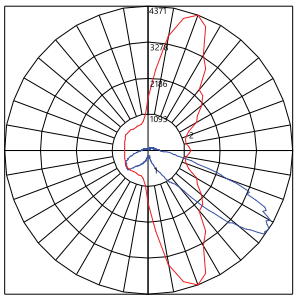
— Vertical plane at max Cd horiz. angle 61°
— Horizontal cone at max Cd vert. angle 20°

EPAM
Asymmetric

6,600 Lumens
4000K
EPAM01_07B40–1MB___.IES



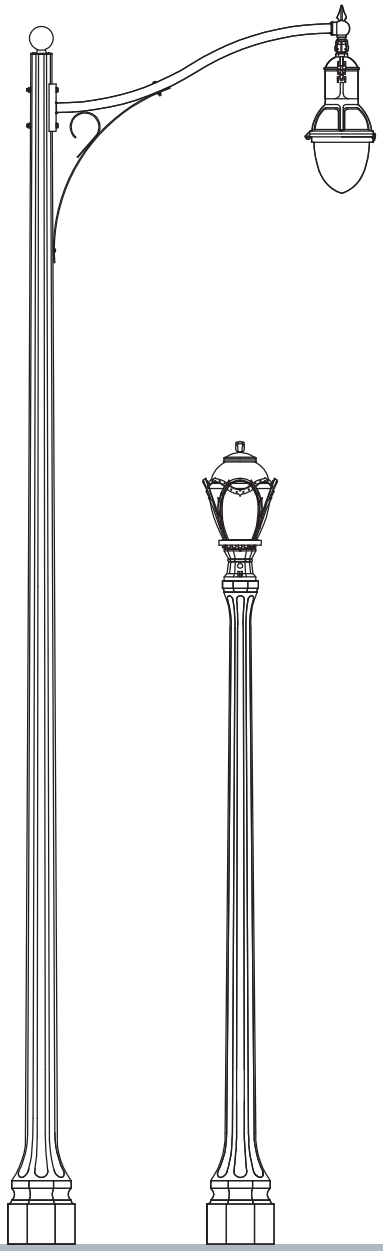
• Mounting Height at 16'
• Initial Footcandle at Grade



— Vertical plane at max Cd horiz. angle 70°
— Horizontal cone at max Cd vert. angle 57°

THE TALISMAN

With roots firmly established in the 20's and 30's the Talisman is an elegant version of several classic originals. In essence it is an 8 fluted version of the octagonal Belmont with the same graceful lines and proportions; the perfect choice to satisfy the tastes of many. It is available in heights from 5' to 32.5' as well as a lighted and nonlighted bollard.



Specification Details*

Description	Catalog Number	"A" Pole Height Above Grade	"D" Tip Dimension	"E" Flare	"B" Direct Burial Length & "F" Dia.	Pole Weight Direct Burial	Pole Weight Base Plate
Talisman Flared Top 11'	KT105	11'	9"	18"	4' 6" x 9 1/2"	1200 lbs	1000 lbs
Talisman Non Flared Top 12'	KT12	12' 0"	5 1/2"	18"	4' 6" x 9 1/2"	1300 lbs	1100 lbs
Talisman Flared Top 14'	KT14	13' 11"	9"	18"	4' 6" x 9 1/2"	1370 lbs	1170 lbs
Talisman Non Flared Top 20'	KTH20	20' 0"	5 3/4"	18"	5' 0" x 9 1/2"	1600 lbs	1400 lbs
Talisman Non Flared Top 25'	KTH25	25' 0"	5 3/8"	18"	5' 0" x 9 1/2"	1800 lbs	1600 lbs
Talisman Non Flared Top 20'	KTT20	20' 0"	7 3/8"	21"	5' 0" x 12"	2270 lbs	2000 lbs
Talisman Non Flared Top 25'	KTT25	25' 0"	6 1/2"	21"	5' 0" x 12"	2470 lbs	2200 lbs
Talisman Non Flared Top 30'	KTT30	30' 0"	5 7/8"	21"	5' 0" x 12"	2630 lbs	2360 lbs
Talisman Non Flared Top 33'	KTT32.5	32' 6"	5 1/2"	21"	6' 0" x 12"	2720 lbs	2450 lbs

* Bollard specification details can be found on our website

How to Catalog for Talisman Concrete Pole

Pole Style
KT
KTH
KTT

Finish
E – Etched Finish

Footing Details
DB – Direct Buried
FBP – Flush Baseplate
SBP – Stub Baseplate

Coating
NA – Non Acrylic
A – Acrylic
AG – Anti Graffiti Coating***

KT14 | 14' | E | E53 | DB | 140 30/30 | GFI | AG

Height
5' - 32' 6"

Color**
10 – Midnight Lace
11 – Eclipse Black
30 – Salt & Pepper
40 – Pearl Gray
90 – Saluki bronze
E53 Detroit Green

Tenon (Post Top Mount)
Specify Tenon Size

For example 140 30/30 = 2 7/8" OD & 3" long

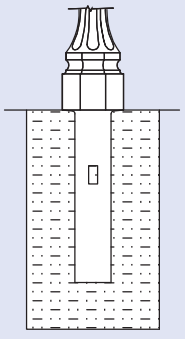
Options*
DR – Duplex Receptacle
GFI – Ground Fault Duplex Receptacle
SR – 1 Outlet
LRN – Ladder Rest
BPC – Base Plate Cover
AB – Anchor Bolts
BA – Banner Arms
FH – Flag Holders

* Consult website for full listings. ** See decor colors on page 2 for full selection of colors.
***Anti Graffiti Coating is extra, consult factory for more details.

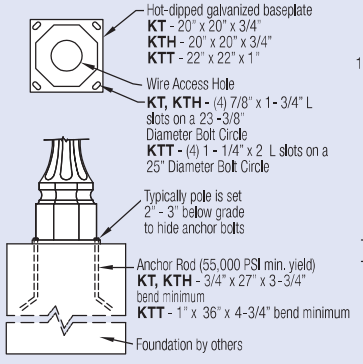
Footing Details

Direct Buried
(Simple and Cost Effective)

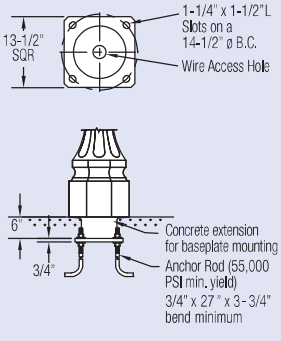
1. Auger the setting hole.
2. Set pole in hole and plumb straight.
3. Backfill* with required backfill tamping every 4" to 6".



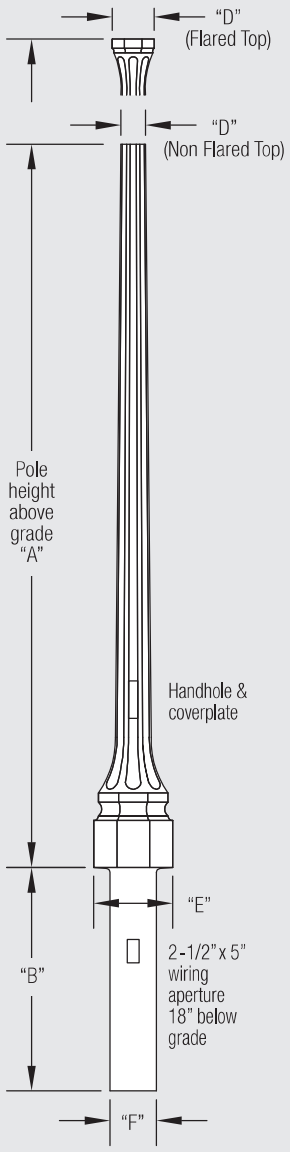
Baseplate Option 1: FBP

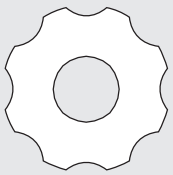


Baseplate Option 2: SBP

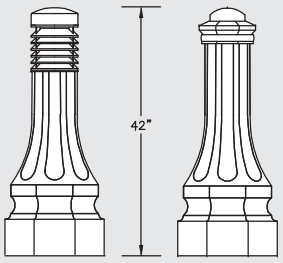


*Generally the excavated material can be used for backfill, in some situations better backfill may be required.





Typical Pole Cross Section



Lighted Bollard Nonlighted Bollard