

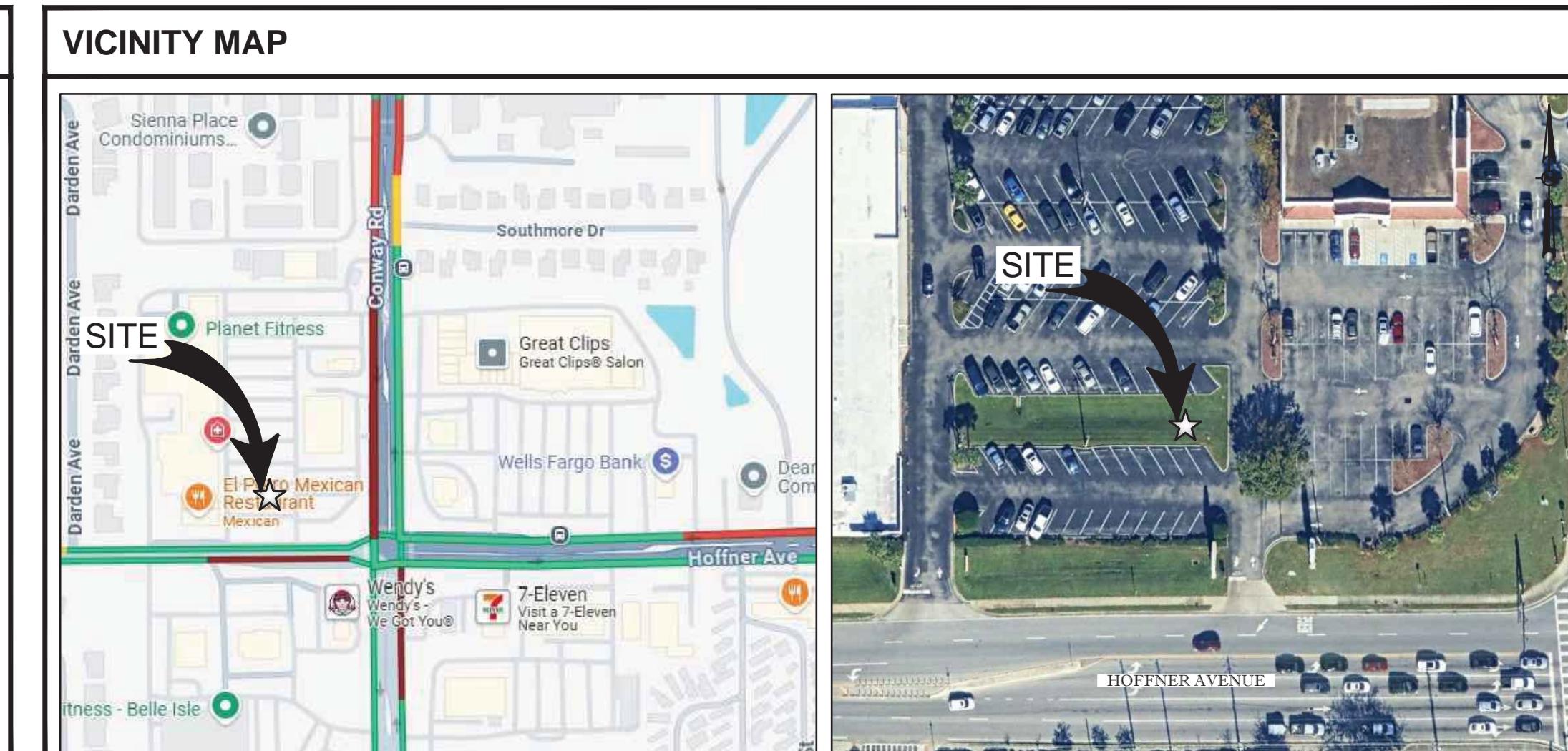
BANK OF AMERICA



CONWAY AND HOFFNER | FLW-D53 | PRE ID: 02807P4B8A4C RATM

ISSUE FOR REVIEW 3/14/2025
 ISSUE FOR CD REVIEW 8/22/2025
 ISSUE FOR CD REVIEW 9/22/2025
 FINAL CD SET 10/02/2025
 ISSUE FOR CD FINAL 10/17/2025

PROJECT TEAM	
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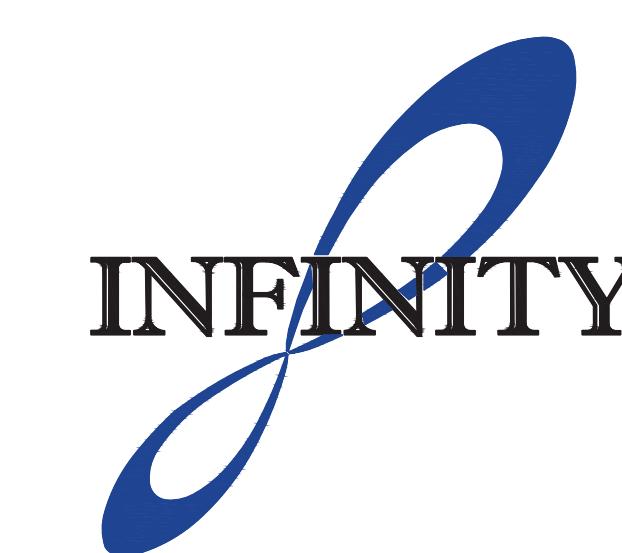


DRAWING INDEX	
SHEET NO.	SHEET TITLE
--	COVER AND SHEET INDEX
CIVIL	
C00.01	CIVIL SPECIFICATIONS
C01.00	OVERALL SITE PLAN
C01.01	DEMOLITION PLAN
C02.01	SITE PLAN
C03.01	GRADING PLAN
C04.01	DETAILS
C04.02	DETAILS
1 OF 1	SURVEY
ELECTRICAL	
E00.01	ELECTRICAL ABBREVIATIONS AND LEGENDS
E00.02	ELECTRICAL GENERAL NOTES
E00.03	ELECTRICAL SPECIFICATIONS
E01.01	ELECTRICAL SITE PLAN
E01.02	ELECTRICAL SITE PHOTOMETRIC PLAN
E02.01	ELECTRICAL RISER DIAGRAM AND PANEL SCHEDULE
E03.01	ELECTRICAL DETAILS

PROJECT INFORMATION	
PROJECT ADDRESS	5126 S CONWAY ROAD, ORLANDO, FL 32812
PIN	17-23-30-0000-00-062
PROJECT TYPE	NEW REMOTE WALK-UP ATM IN EXISTING PARKING LOT
AREA OF WORK	813 SF CONCRETE ISLAND AND ACCESSIBLE PARKING + 1319 SF PARKING LOT RE-GRADING - TOTAL DISTURBED AREA = 2132 SF
PROJECT DESCRIPTION	ADDITION OF NEW REMOTE WALK-UP ATM IN STAND-ALONE KIOSK ON NEW ISLAND, WITH VAN ACCESSIBLE PARKING SPACE AND ACCESS AISLE. THIS PROJECT WILL RESULT IN AN OVERALL NET REDUCTION OF 1 PARKING SPACE.
PROJECT OCCUPANCY TYPE	BUSINESS

PARCEL ID: 17-23-30-0000-00-062

PLANS PREPARED BY:



INFINITY
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GROUP, LLC

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 IEG JOB NO. 10-1523.00



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PARKING CALCULATION	
ZONING:	SHOPPING CENTER
BUILDING GFA:	80,797 SF (EXISTING)
PARKING REQUIRED:	1 SPACE PER 200 SF OF G.F.A. 80,797 SF x (1 / 200 SF) = 404 SPACES
PARKING PROVIDED:	
STANDARD PARKING	EXISTING CONDITION 311 SPACES ACCESSIBLE PARKING 8 SPACES TOTAL 319 SPACES
PARKING SPACE SIZE:	309 SPACES 9 SPACES 318 SPACES 9' x 19' MINIMUM



Know what's below.
Call before you dig.

GENERAL NOTE

ALL CONSTRUCTION SHALL BE EXECUTED AS SHOWN ON THESE PLANS. ANY REVISIONS AND/OR DEVIATIONS MUST BE APPROVED BY THE ENGINEER OF RECORD AND MAY RESULT IN ADDITIONAL PERMITTING EFFORTS THROUGH THE RELATED PERMITTING AGENCY. THE CONTRACTOR SHALL ACKNOWLEDGE THAT REVISIONS AND/OR DEVIATIONS MAY RESULT IN ADDITIONAL PERMITTING REQUIREMENTS AND POSSIBLY AFFECT SCHEDULING OF WORK.

UNLESS OTHERWISE NOTED ON PLANS, OR WITHIN THE PROJECT SPECIFICATIONS, ALL MATERIALS AND CONSTRUCTION ARE TO BE IN ACCORDANCE WITH DESIGN AND CONSTRUCTION STANDARDS OF THE PERMITTING AGENCY HAVING JURISDICTION; THE LOCALLY ADOPTED BUILDING CODE; AND ALL APPLICABLE LOCAL AND STATE CODES AND ORDINANCES.

PERMITS MAY BE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR IS TO ACKNOWLEDGE AND SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR WORK IN THE PUBLIC RIGHT-OF-WAY.

THIS PARCEL OF LAND MAY BE SUBJECT TO ANY AND ALL RECORDED (AND POSSIBLY UNRECORDED) EASEMENTS, RESTRICTIONS, AND COVENANTS.

PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES FOR VERIFICATION OF UTILITIES WITHIN THE LIMITS OF CONSTRUCTION. CALL AREA ONE CALL SYSTEM 48 HOURS PRIOR TO ANY EXCAVATION.

THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IN A TIMELY MANNER.

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS AND BENCHMARKS FROM DISTURBANCE. SURVEY MONUMENTS DISTURBED BY CONSTRUCTION ARE TO BE REPLACED AND ADJUSTED VIA A LAND SURVEYOR REGISTERED IN THE STATE FOR WHICH THE PROJECT IS LOCATED.

THE CONTRACTOR SHALL COORDINATE WORK EFFORTS WITH THE OWNER TO MINIMIZE TRAFFIC INTERFERENCE AND OPERATIONS OF THE FACILITIES.

NO BLASTING OR BURNING IS ALLOWED ON THE PROJECT, UNLESS OTHERWISE DIRECTED OR NOTED BY THE ENGINEER.

IT IS NOT EXPECTED THAT HAZARDOUS MATERIALS WILL BE ENCOUNTERED. HOWEVER IF MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB; IMMEDIATELY NOTIFY ENGINEER AND OWNER. HAZARDOUS MATERIALS WILL BE REMOVED BY OWNER UNDER A SEPARATE CONTRACT.

REGULATORY STANDARDS AND REQUIREMENTS

COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.

COMPLY WITH ANSI A10.6, "SAFETY REQUIREMENTS FOR CONSTRUCTION AND DEMOLITION."

COMPLY WITH NFPA 241, "SAFEGUARDING CONSTRUCTION, ALTERATION AND DEMOLITION OPERATIONS."

DEMOLITION AND CLEARING

DEMOLITION AND CLEARING OPERATIONS SHALL CONFORM TO APPLICABLE REGULATIONS RELATING TO ENVIRONMENTAL REQUIREMENTS, DISPOSAL OF DEBRIS, BURNING OF DEBRIS ON SITE, AND USE OF HERBICIDES.

DEMOLITION WASTE SHALL BE DISPOSED OF IN A LEGAL MANNER. REMOVED DEMOLITION WASTE MATERIALS FROM PROJECT SITE AND DISPOSE OF WASTE IN AN EPA-APPROVED LANDFILL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION. DO NOT BURY OR BURN DEMOLITION WASTE ON-SITE.

HISTORIC ITEMS, RELICS, ANTIQUES, AND SIMILAR OBJECTS, INCLUDING, BUT NOT LIMITED TO CORNERSTONES AND THEIR CONTENTS, COMMEMORATIVE PLAQUES AND TABLETS, AND OTHER ITEMS OF INTEREST OF VALUE TO OWNER THAT MAY BE UNCOVERED DURING DEMOLITION REMAIN THE PROPERTY OF THE OWNER.

ARRANGE DEMOLITION SCHEDULE SO AS NOT TO INTERFERE WITH OWNER'S ON-SITE OPERATIONS OR OPERATIONS OF ADJACENT OCCUPIED BUILDINGS.

CONDUCT BUILDING DEMOLITION AND DEBRIS REMOVAL OPERATIONS TO ENJOY MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKWAYS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, WALKWAYS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND AUTHORITIES HAVING JURISDICTION.

AUTHORITY FOR PERFORMING SITE CLEARING INDICATED ON PROPERTY ADJOINING OWNER'S PROPERTY MUST BE OBTAINED BY OWNER PRIOR TO COMMENCEMENT OF CLEARING. DO NOT PROCEED WITH WORK ON ADJOINING PROPERTY UNTIL DIRECTED BY ENGINEER.

PRIOR TO COMMENCEMENT OF DEMOLITION OPERATIONS:

a. VERIFY THAT HAZARDOUS MATERIALS, IF PRESENT, HAVE BEEN REMEDIATED.

b. REVIEW PROJECT RECORD DRAWINGS OF EXISTING BUILDING AND EXISTING SITE IMPROVEMENTS.

c. INVENTORY AND RECORD THE CONDITION OF ITEMS TO BE REMOVED AND SALVAGED. TAKE DIGITAL PHOTOGRAPHS OR VIDEO OF PROJECT SITE AND SURROUNDING PROPERTIES, INCLUDING EXISTING ITEMS TO REMAIN DURING CONSTRUCTION OPERATIONS, RECORD CONDITIONS THAT MIGHT BE MISCONSTRUED AS DAMAGE CAUSED BY SALVAGE OPERATIONS.

d. CLEAN, PACK, IDENTIFY, AND TRANSPORT SALVAGED ITEMS TO STORAGE AREA DESIGNATED BY OWNER.

e. REMOVE REFRIGERANT FROM THE MECHANICAL EQUIPMENT ACCORDING TO 40 CFR 82 AND REGULATIONS OF AUTHORITIES HAVING JURISDICTION.

f. COORDINATE AND ADDITIONAL REQUIREMENTS FOR DEMOLITION OR RELOCATING MECHANICAL AND ELECTRICAL ITEMS WITH OWNER AND OTHER AUTHORITIES HAVING JURISDICTION.

g. ASSURE THAT ANY REQUIRED INITIAL EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED AND IN WORKING ORDER.

h. LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP-OFF EXISTING UTILITIES SERVING BUILDINGS AND STRUCTURES TO BE DEMOLISHED. CUT AND REMOVE PIPE OR CONDUIT A MINIMUM OF 24 INCHES BELOW GRADE, CAP, VALVE, PLUG AND SEAL REMAINING PORTION OF PIPE OR CONDUIT.

i. DO NOT START DEMOLITION WORK UNTIL UTILITY DISCONNECTION AND SEALING HAVE BEEN COMPLETED AND VERIFIED IN WRITING.

PRIOR TO COMMENCEMENT OF SITE CLEARING OPERATIONS, VERIFY THE FOLLOWING:

a. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND IN WORKING ORDER.

b. UTILITY LOCATOR SERVICE HAS DETERMINED AND FLAGGED THE LOCATION OF UNDERGROUND UTILITIES.

c. EXISTING SITE IMPROVEMENTS AND UTILITIES TO REMAIN HAVE BEEN PROTECTED.

d. BENCHMARKS AND SURVEY CONTROL POINTS HAVE BEEN PROTECTED FROM DISTURBANCE.

e. TREES AND VEGETATION TO REMAIN (OR TO BE RELOCATED) HAVE BEEN LOCATED AND CLEARLY FLAGGED IN ACCORDANCE WITH TREE PROTECTION AND TRIMMING REQUIREMENTS.

f. COORDINATE UTILITY DEMOLITION AND ABANDONMENT WITH UTILITY COMPANY OR AUTHORITY HAVING JURISDICTION.

g. IN THE EVENT BUILDINGS IMMEDIATELY ADJACENT TO THE DEMOLITION AREA WILL BE OCCUPIED, CONDUCT SITE DEMOLITION SO OPERATIONS OF OCCUPIED

BUILDINGS WILL NOT BE DISRUPTED. MAINTAIN ACCESS TO AND FROM EXISTING WALKWAYS, EXITS, AND OTHER FACILITIES USED BY OCCUPANTS OF ADJACENT BUILDINGS.

11. PROTECT EXISTING FACILITIES AND ADJACENT WALKWAYS, LOADING DOCKS, BUILDING ENTRIES, AND OTHER BUILDING FACILITIES DURING DEMOLITION OPERATIONS. MAINTAIN EXITS FROM EXISTING BUILDINGS.

12. ERECT TEMPORARY PROTECTION, SUCH AS WALKS, FENCES, RAILINGS, CANOPIES, AND COVERED PASSAGEWAYS, AS NECESSARY, AND AS REQUIRED BY AUTHORITIES HAVING JURISDICTION. REMOVE TEMPORARY BARRIERS AND PROTECTIONS WHERE HAZARDS NO LONGER EXIST. WHERE OPEN EXCAVATIONS OR OTHER HAZARDOUS CONDITIONS REMAIN, LEAVE TEMPORARY BARRIERS AND PROTECTIONS IN PLACE.

13. PROTECT EXISTING UTILITIES FROM DAMAGE DURING DEMOLITION OPERATIONS. MAINTAIN OPERATION OF UTILITY SERVICES TO REMAIN. PROVIDE AT LEAST 72 HOURS' NOTICE TO OCCUPANTS OF AFFECTED BUILDINGS IF SHUTDOWN OF SERVICE IS REQUIRED.

14. IF REMOVAL, RELOCATION, OR ABANDONMENT OF UTILITY SERVICES WILL AFFECT ADJACENT OCCUPIED BUILDINGS, MAINTAIN CONTINUITY OF SERVICE BY BYPASSING UTILITIES AND STRUCTURES TO BE DEMOLISHED. TEMPORARY BYPASS SERVICES SHOULD BE PROVIDED IN ACCORDANCE WITH UTILITY COMPANY OR AUTHORITIES HAVING JURISDICTION.

15. TEMPORARY SHORING: PROVIDE AND MAINTAIN INTERIOR AND EXTERIOR SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND PREVENT UNEXPECTED MOVEMENT OR COLLAPSE OF EXISTING IMPROVEMENTS BEING DEMOLISHED. ALL SHORING OPERATIONS SHALL BE DESIGNED BY A LICENSED PROFESSIONAL AND INSTALLED PER OSHA REQUIREMENTS.

16. DEMOLITION OF STRUCTURAL FRAMING MEMBERS SHALL PROCEED SYSTEMATICALLY, FROM HIGHER TO LOWER LEVEL. COMPLETE BUILDING DEMOLITION OPERATIONS ABOVE EACH FLOOR OR TIER BEFORE DISTURBING SUPPORTING MEMBERS ON THE NEXT LOWER LEVEL. REMOVE DEBRIS FROM ELEVATED PORTIONS OF THE BUILDING BY CHUTE, HOIST, OR OTHER DEVICE THAT WILL CONVEY DEBRIS TO GRADE LEVEL IN A CONTROLLED DESCENT.

17. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS CAUSED BY BUILDING DEMOLITION OPERATIONS. REMOVE ADJACENT AREAS TO CONDITION EXISTING BEFORE BUILDING DEMOLITION OPERATIONS BEGAN.

18. CLEARING AND GRUBBING:

a. REMOVE OBSTRUCTIONS, TREES, SHRUBS, GRASS, AND OTHER VEGETATION TO PERMIT INSTALLATION OF NEW CONSTRUCTION. DO NOT REMOVE TREES, SHRUBS, AND OTHER VEGETATION IDENTIFIED TO REMAIN OR TO BE RELOCATED.

b. REMOVE ROOTS AND BRANCHES OF TREES INDICATED TO REMAIN IN A CLEAN AND CAREFUL MANNER AND ONLY WHERE SUCH ROOTS AND BRANCHES OBSTRUCT INSTALLATION OF NEW CONSTRUCTION.

c. CLEAR UNDERGROWTH AND DEADWOOD WITHOUT DISTURBING SUBSOIL. GRIND STUMPS AND REMOVE ROOTS, OBSTRUCTIONS, AND DEBRIS EXTENDING TO A DEPTH BELOW EXPOSED SUBGRADE AS FOLLOWS:

• FOOTINGS, SLABS ON GROUND AND BOTTOM SLABS OF STRUCTURES: 36 INCHES.

• ROADS AND PAVEMENT AREAS: 18 INCHES.

• AREAS TO BE FILLED: 12 INCHES.

e. USE ONLY HAND METHODS FOR GRUBBING WITHIN TREE PROTECTION ZONES.

f. CHIP REMOVED TREE BRANCHES AND DISPOSE OF OFF-SITE.

g. UNLESS FURTHER EXCAVATION OF EARTHWORK IS INDICATED, FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIAL. PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING A LOOSE LENGTH OF 8 INCHES, AND COMPACT EACH LAYER TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.

19. TOPSOIL STRIPPING:

a. REMOVE SOD AND GRASS BEFORE STRIPPING TOPSOIL.

b. STRIP TOPSOIL TO WHATEVER DEPTHS ARE ENCOUNTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS. REMOVE SUBSOIL AND NON-SOIL MATERIALS FROM TOPSOIL, INCLUDING TRASH, DEBRIS, WEEDS, ROOTS, AND OTHER WASTE MATERIALS.

c. STOCKPILE MATERIALS AWAY FROM USE AREA AND WATER FEATURES. STOCKPILE MATERIALS, MATERIALS AWAY FROM USE AREA AND WATER FEATURES, COVER TO PREVENT WINDBLOWN DUST. LIMIT HEIGHT OF TOPSOIL STOCKPILE TO 72 INCHES. DO NOT STOCKPILE TOPSOIL WITHIN TREE PROTECTION ZONES. STOCKPILE SURPLUS TOPSOIL TO ALLOW FOR READING DEEPER TOPSOIL.

20. SITE IMPROVEMENTS:

a. REMOVE EXISTING ABOVE- AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION. REMOVE SLABS, PAVING, CURBS, GUTTERS, AND AGGREGATE BASE AS INDICATED.

b. UNLESS EXISTING FULL-DEPTH JOINTS COINCIDE WITH LINE OF DEMOLITION, NEATLY SAW-CUT LENGTH OF EXISTING PAVEMENT TO REMAIN BEFORE REMOVING EXISTING PAVEMENT. SAWCUT ALL FACES VERTICALLY.

c. PAINT CUT ENDS OF STEEL REINFORCEMENT IN CONCRETE TO REMAIN TO PREVENT CORROSION.

21. DISPOSAL:

a. REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTIONS, DEMOLISHED MATERIALS, AND WASTE MATERIALS, INCLUDING TRASH AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.

b. REMOVE AND TRANSPORT DEBRIS AND RUBBISH IN A MANNER THAT WILL PREVENT SPILLAGE ON STREETS OR ADJACENT AREAS. CLEAN UP SPILLAGE FROM STREETS AND ADJACENT AREAS.

c. COMPLY WITH FEDERAL, STATE AND LOCAL HAULING AND DISPOSAL REGULATIONS.

d. SEPARATE RECYCLABLE MATERIALS PRODUCED DURING SITE CLEARING FROM OTHER NON-RECYCLABLE STORE OR STOCKPILE WITHOUT INTERMINGLING WITH OTHER MATERIALS AND TRANSPORT THEM TO RECYCLING FACILITIES.

22. BACKFILL:

a. THE CONTRACTOR SHALL PLACE AND COMPACT BACKFILL IN EXCAVATIONS PROMPTLY, BUT NOT BEFORE COMPLETING THE FOLLOWING:

a. CONSTRUCTION BELOW FINISH GRADE INCLUDING, WHERE APPLICABLE, SUBDRAINAGE, DAMP PROOFING, WATERPROOFING, AND PERIMETER INSULATION.

b. SURVEYING LOCATIONS OF UNDERGROUND UTILITIES FOR RECORD DRAWINGS.

c. TESTING AND INSPECTING UNDERGROUND UTILITIES.

d. REMOVING CONCRETE FORMWORK.

e. REMOVING TRASH AND DEBRIS.

f. REMOVING TEMPORARY SHORING AND BRACING, AND SHEETING.

g. INSTALLING PERMANENT OR TEMPORARY HORIZONTAL BRACING ON HORIZONTALLY SUPPORTED WALLS.

COMPACTATION OF SOIL BACKFILLS AND FILLS:

1. CONTRACTOR SHALL PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8-INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4-INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMERS.

2. KEEP TREE PROTECTION ZONES FREE OF WEEDS AND TRASH.

3. DO NOT STORE CONSTRUCTION MATERIALS, DEBRIS, OR EXCAVATED MATERIAL INSIDE TREE PROTECTION ZONE; OR PERMIT VEHICLES OR FOOT TRAFFIC WITHIN TREE PROTECTION ZONE, OR ALLOW FIRES WITHIN TREE PROTECTION ZONE.

4. PROTECT TREE ROOT SYSTEMS FROM THE FOLLOWING:

a. DAMAGE CAUSED BY RUNOFF OR SPILLAGE OF NOXIOUS MATERIALS WHILE MIXING, PLACING, OR STORING CONSTRUCTION MATERIALS.

b. DAMAGE CAUSED BY PONDING, ERODING, OR EXCESSIVE WETTING FROM DEWATERING OPERATIONS.

5. UNLESS OTHERWISE INDICATED, DO NOT EXCAVATE WITHIN TREE PROTECTION ZONES, WHERE EXCAVATION FOR NEW CONSTRUCTION IS UNAVOIDABLE, HAND CLEAR AND EXCAVATE TO MINIMIZE DAMAGE TO ROOT SYSTEMS.

6. WHERE UTILITY TRENCHES ARE UNAVOIDABLE WITHIN TREE PROTECTION ZONES, TUNNEL UNDER OR AROUND ROOTS BY DRILLING, AUGER BORING, PIPE JACKING, OR DIGGING BY HAND. DO NOT CUT MAIN LATERAL ROOTS OR TAPROOTS.

7. PROMPTLY REPAIR TREES DAMAGED BY CONSTRUCTION OPERATIONS WITHIN 24 HOURS. TREAT DAMAGED TRUNKS, LIMBS, AND ROOTS ACCORDING TO

ARBORIST'S WRITTEN INSTRUCTIONS.

8. TREE PRUNING: PRUNE TREES ACCORDING TO ANSI A300 (PART 1), TREE, SHRUB, AND OTHER WOODY PLANT MAINTENANCE - STANDARD PRACTICES (PRUNING).

ONE-HALF (1/2) INCH WHEN TESTED WITH A 10-FOOT STRAIGHTEDGE.

3. SUBBASE AND BASE COURSES:

a. PLACE SUBBASE AND BASE COURSE ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE.

b. PLACE SUBBASE AND BASE COURSE 6 INCHES OR LESS IN COMPACTED THICKNESS IN A SINGLE LAYER.

c. PLACE SUBBASE AND BASE COURSE EXCEEDING 6 INCHES IN COMPACTED THICKNESS IN LAYERS OF EQUAL THICKNESS, WITH NO COMPACTED LAYER MORE THAN 6 INCHES THICK OR LESS THAN 3 INCHES.

4. COMPACT SUBBASE AND BASE COURSE AT OPTIMUM MOISTURE CONTENT TO REQUIRED GRADES, LINES, CROSS SECTIONS, AND THICKNESS ACCORDING TO ASTM D 698 OR ASTM D 1557, AS INDICATED ON THE DRAWING DETAILS.

FIELD QUALITY CONTROL:

1. PRIOR TO COMMENCEMENT OF ANY CLEARING AND EXCAVATION WITHIN A WORK AREA, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND IN WORKING ORDER.

2. PERFORM WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE AND FEDERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT.

3. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL FEATURES TO PREVENT AND CONTROL SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION AREAS AND ENTERING EXISTING STORMWATER FACILITIES AND SURFACE WATERS. ADDITIONAL MEASURES BEYOND THOSE SHOWN WITHIN THESE PLANS MAY BE NECESSARY DURING CONSTRUCTION, INCLUDING TEMPORARY VEGETATION MEASURES AND INSTALLATION OF OTHER SILT TRAPPING MEASURES.

4. THE CONTRACTOR IS REQUIRED TO ADJUST THE EROSION AND SEDIMENT CONTROLS AS NECESSARY AND AS SHOWN ON THE DRAWINGS. ADD ADDITIONAL CONTROL MEASURES AS REQUIRED TO INSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND SEDIMENT CONTROL REQUIREMENTS.

5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL FEATURES TO PREVENT AND CONTROL SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION AREAS AND ENTERING EXISTING STORMWATER FACILITIES AND SURFACE WATERS. ADDITIONAL MEASURES BEYOND THOSE SHOWN WITHIN THESE PLANS MAY BE NECESSARY DURING CONSTRUCTION, INCLUDING TEMPORARY VEGETATION MEASURES AND INSTALLATION OF OTHER SILT TRAPPING MEASURES.

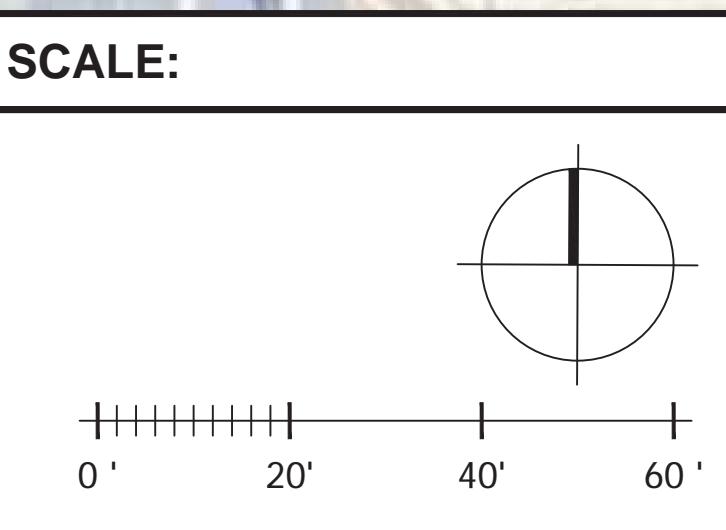
6. THE CONTRACTOR



HOFFNER AVENUE (CR 506)



CONWAY ROAD (STATE ROAD 15)



OVERALL SITE PLAN

SCALE
AS NOTED

OVERALL SITE PLAN

Project Name and Address

CONWAY AND HOFFNER - RATM
5126 S CONWAY ROAD
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Sheet Title

Sheet

Project No.
10-1523.00
Drawn By
Reviewed By

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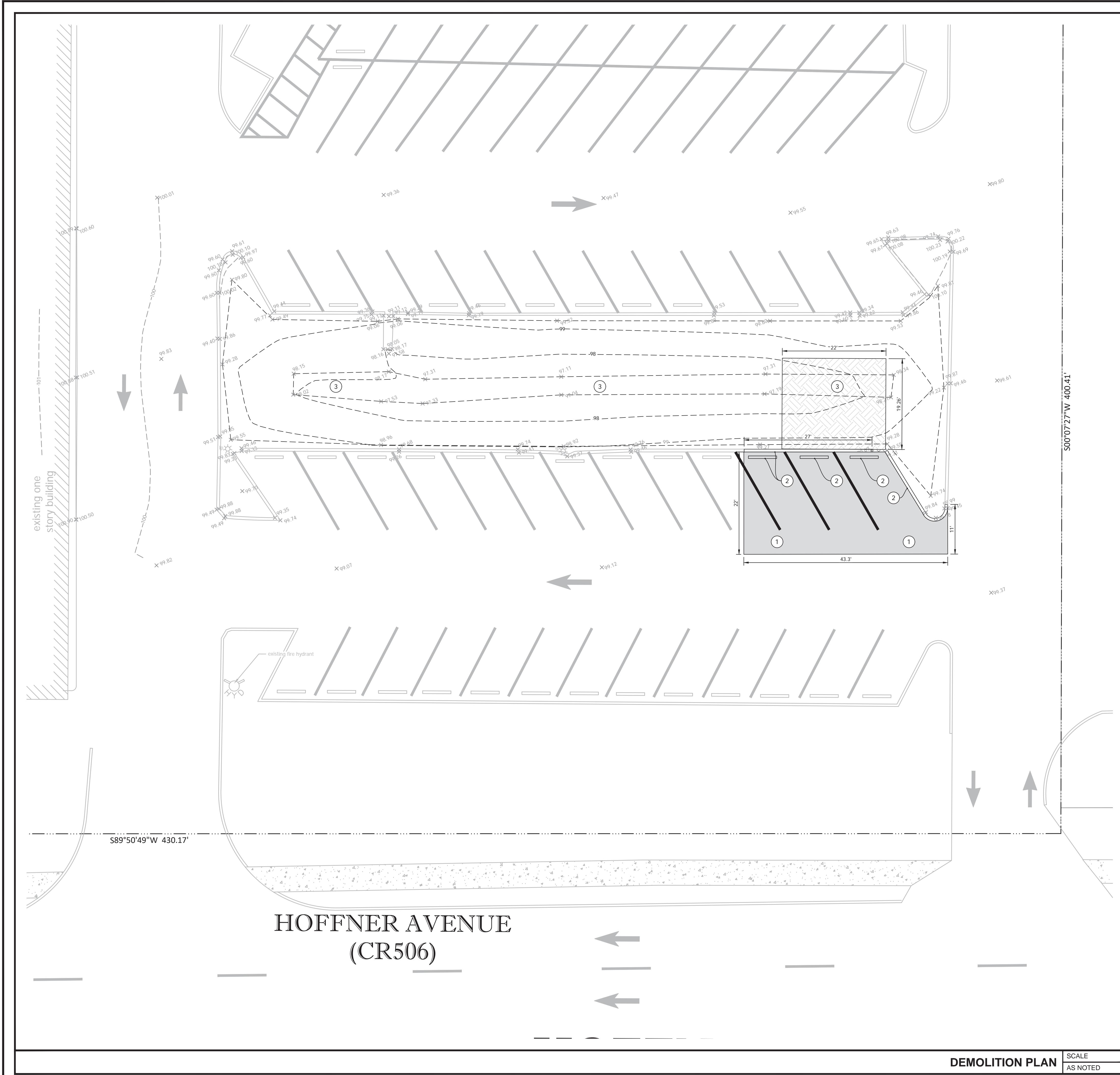
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Date: 2023.1.20 09:13:35 -06'00'
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DATE

This item has been electronically
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on the date and/or time stamp shown using a
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FAC 61G15-23.004

1	ISSUE FOR CD REVIEW
2	ISSUE FOR CD REVIEW
3	ISSUE FOR CD REVIEW
4	ISSUE FOR CD FINAL
5	REVISIONS

10/17/2025
08/22/2025
03/14/2025
Date



LEGEND:	
— · · —	PROPERTY LINE
	EXISTING CONCRETE PAVEMENT TO REMAIN
	EXISTING ASPHALT PAVEMENT TO BE REMOVED
	EXISTING LANDSCAPE TO BE REMOVED
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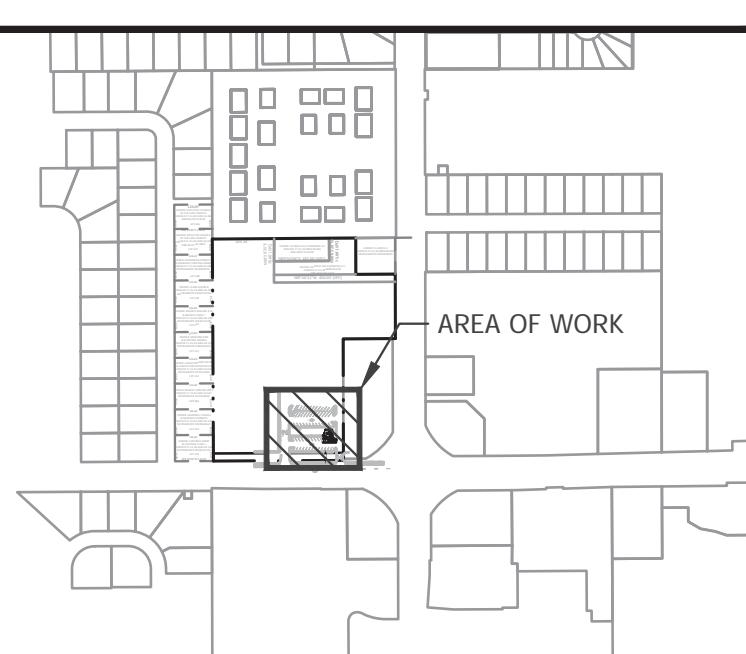
DEMOLITION NOTES:

1. THE CONTRACTOR SHALL CHECK PLANS AND FIELD CONDITIONS FOR CONFLICTS AND DISCREPANCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNER'S ENGINEER OF ANY CONFLICT BEFORE PERFORMING ANY WORK IN THE AFFECTED AREA.
2. ALL EXISTING IMPROVEMENTS ARE TO REMAIN UNLESS OTHERWISE NOTED.
3. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES WITHIN AREA OF WORK TO BE PERFORMED PRIOR TO DEMOLITION AND WILL BE RESPONSIBLE FOR THE DAMAGE OF ANY ON-SITE OR OFF-SITE UTILITIES THAT ARE NOT A PART OF THIS PROJECT OR ARE NOT IDENTIFIED TO BE REMOVED.
4. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR.
5. DURING THE CONSTRUCTION AND/OR MAINTENANCE OF THIS PROJECT, THE CONTRACTOR SHALL COMPLY WITH REGULATIONS. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF ITS PERSONNEL. LABOR SAFETY REGULATIONS SHALL BE AS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF LABOR.
6. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.

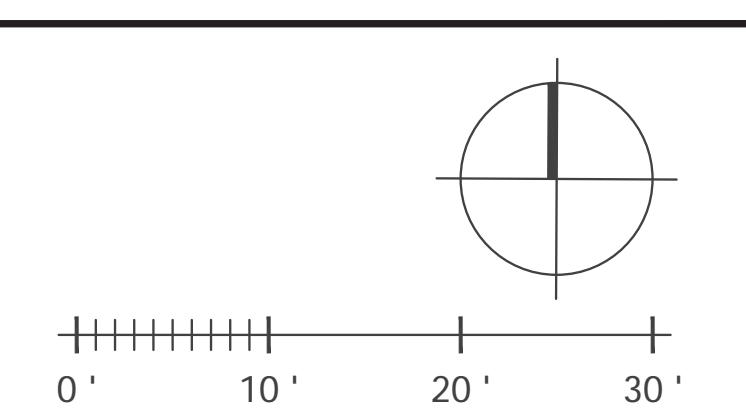
KEYED NOTES:

- 1 EXISTING ASPHALT PAVEMENT TO BE SAWCUT AND REMOVED
- 2 EXISTING CURB AND WHEEL STOP (TYPICAL OF 3) TO BE REMOVED
- 3 EXISTING RUNOFF AREA SLOPES TO BE RE-GRADED. EXISTING VOLUME 3,092 CF. SEE GRADING PLAN

KEY PLAN:



SCALE:



No.	Revision/Issue	Date
4	ISSUE FOR CD FINAL	10/17/2025
3	ISSUE FOR CD REVIEW	09/22/2025
2	ISSUE FOR CD REVIEW	08/22/2025
1	ISSUE FOR REVIEW	03/14/2025



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FL Cert. of Auth. No. 27889



DATE

object Name and Address	<u>CONWAY AND HOFFNER - RATM</u>	meet Title
	5126 S CONWAY ROAD ORLANDO, FL 32812	DEMOLITION PLAN

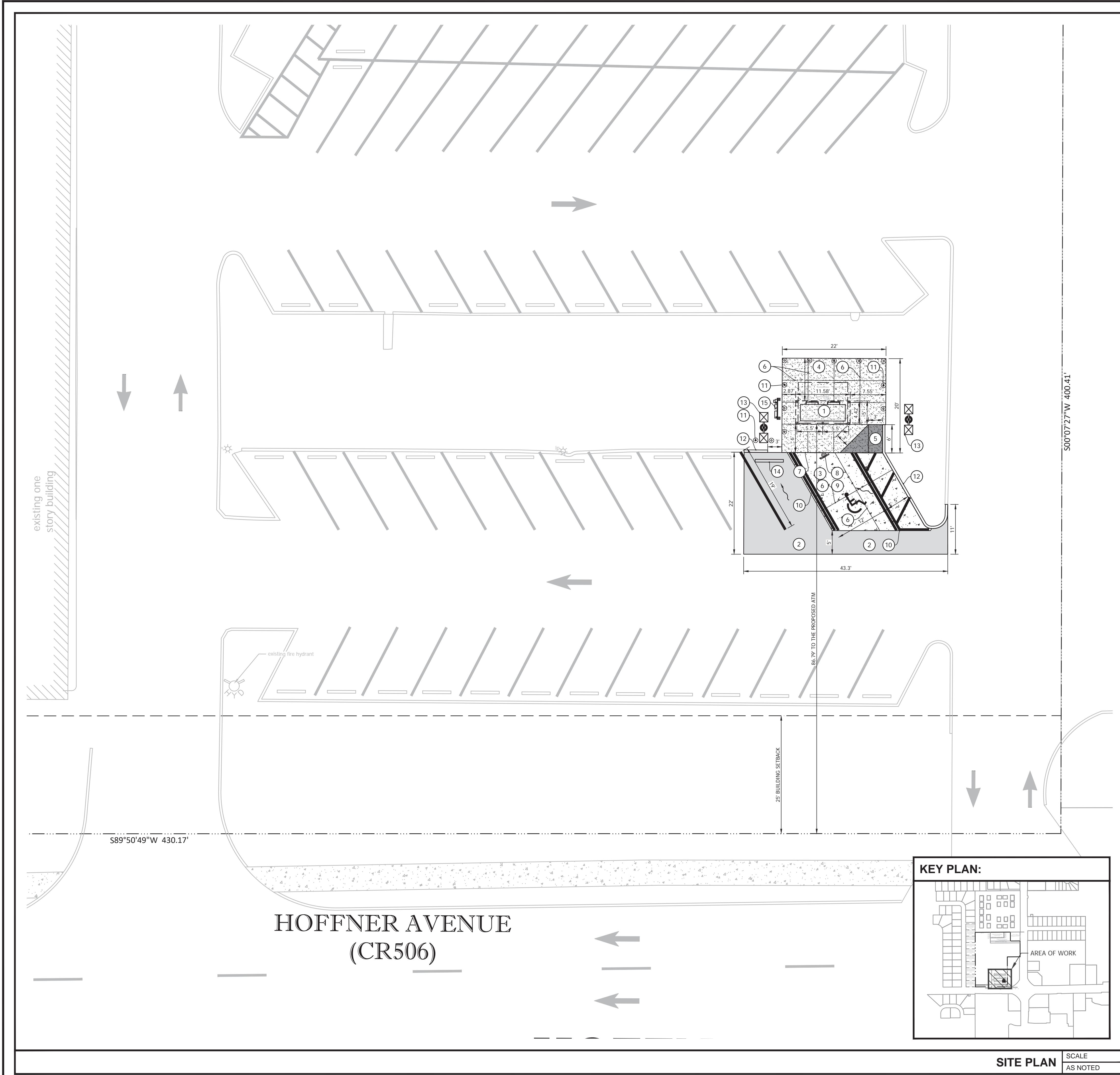
Object Name and Address

DEMOCRATIC PLURALISM

Meet Title

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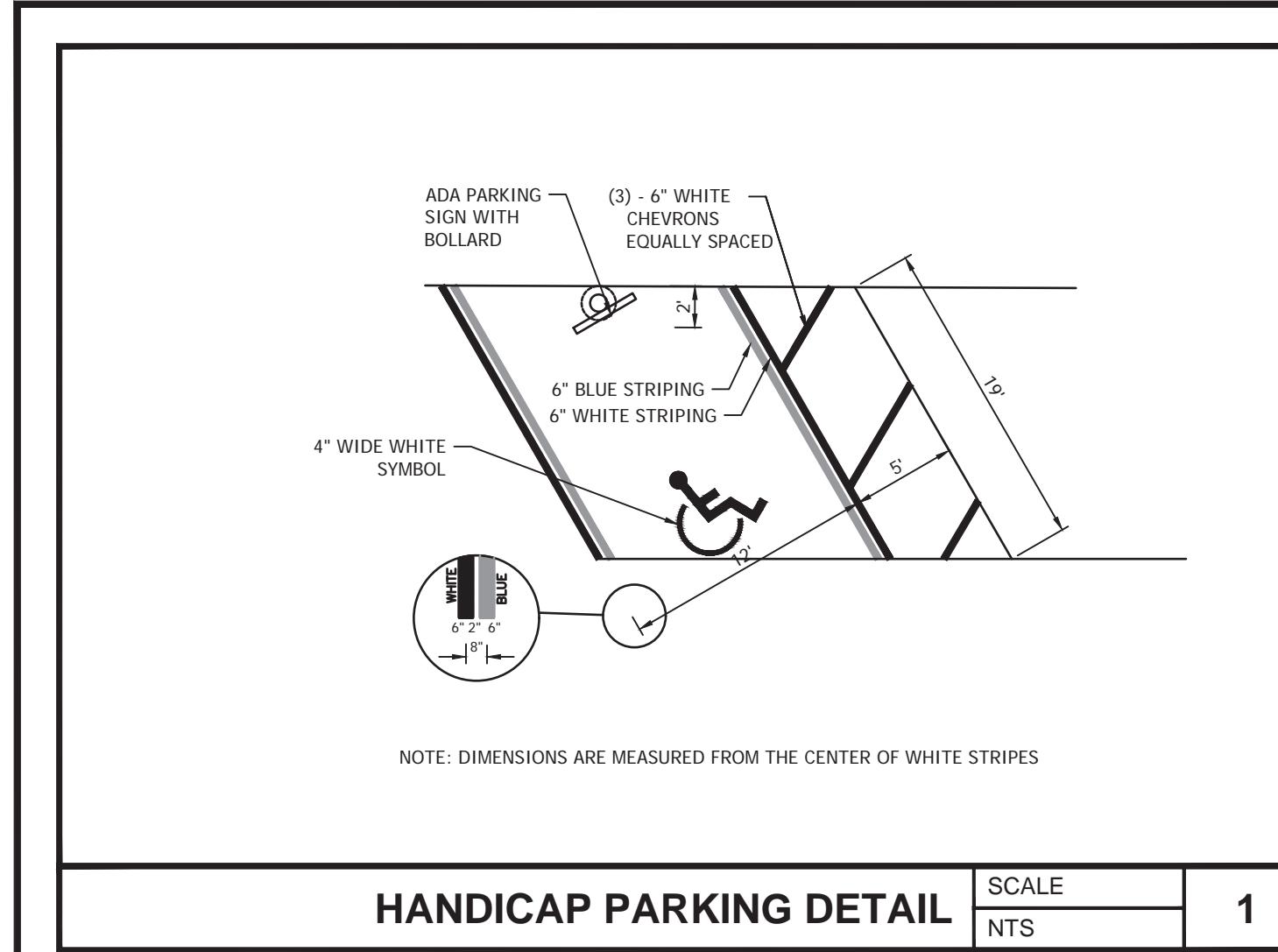


CONWAY AND HOFFNER - RATM		5126 S CONWAY ROAD		ORLANDO, FL 32812	
Project Name and Address		Sheet Title		SITE PLAN	
Project No. 10-1523.00		Sheet		C02.01	
Drawn By					
Reviewed By					
10/17/2025		08/22/2025		08/22/2025	
ISSUE FOR CD REVIEW		ISSUE FOR CD REVIEW		ISSUE FOR REVIEW	
4		3		1	
No.		Revision		Date	

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BANK OF AMERICA

NISIT SAPPAKHAO, P.E.
FL REG. NO. 64085
Digitally signed by Nisit Sappakhao
Date: 2025.11.20 09:13:58
Location: US, FL, Tampa
Organization: infinity Engineering Group
LLC, cni:Nisit Sappakhao,
email:nisit@iegroup.net
Date: 2025.11.20 09:13:58
Location: US, FL, Tampa
Adobe Acrobat DC version: 2015.006.20922
This item has been electronically signed and sealed by Nisit Sappakhao, PE on the date and/or time stamp shown using a digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified by a 3rd Party Certificate Authority on any electronic copy.
FAC 61G15-23.004



POWER SYMBOLS:

NOTE: A COMPLETE LIST OF RECEPTACLE SYMBOLS IS SHOWN FOR THE DUPLEX RECEPTACLE ONLY. OTHER RECEPTACLE SYMBOLS WILL FOLLOW THE SAME SHADING CONVENTION AS THE DUPLEX RECEPTACLE, UNO.	
CENTER HATCH: ISOLATED GROUND RECEPTACLE OUTER HATCH: GFCI RECEPTACLE RIGHT HATCH: CONTROLLED RECEPTACLE	
D = DUAL SWITCHED H = HALF SWITCHED TR = TAMPER RESISTANT U = USB OUTLET WP = WEATHERPROOF WR = WEATHER RESISTANT	

LIGHTING SYMBOLS:

NOTE: REFER TO LIGHTING FIXTURE SCHEDULE FOR FIXTURE TYPES AND SENSOR SCHEDULE FOR SENSOR TYPES. REFER TO PLAN DRAWINGS FOR ADDITIONAL SYMBOLS.	
A: CAPITAL LETTER ADJACENT TO FIXTURE = TYPE	
a: LOWERCASE LETTER = SWITCHING GROUP	
EM: EMERGENCY LIGHTING IS DESIGNATED BY AN "EM" ADJACENT TO THE FIXTURE AND/OR A "HALF SHADED" OR "FULL SHADED" FIXTURE SYMBOL	
NL: NIGHT LIGHTING (UNSWITCHED FIXTURE)	
a.b.c... = SWITCHING GROUP	
BLANK = SINGLE POLE	
2 = DOUBLE POLE	
3 = THREE-WAY	
4 = FOUR-WAY	
D = DIMMER SWITCH	
K = SINGLE POLE KEY OPERATED	
M = MOTOR RATED	
MA = MAINTAINED CONTACT	
MO = MOMENTARY CONTACT	
P = SINGLE POLE W/ PILOT LIGHT	
P2 = DOUBLE POLE W/ PILOT LIGHT	
RC = REMOTE CONTROL	
T = TIMER OPERATED SWITCH	
WP = WEATHERPROOF	
WR = WEATHER RESISTANT	

SPECIAL SYSTEMS SYMBOLS:

NOTE: UNLESS NOTED OTHERWISE, PROVIDE OVERSIZED JUNCTION BOX AND 1" EMPTY CONDUIT WITH PLASTIC INSULATING BUSHINGS AND PULL STRING STUBBED MIN. 6" INTO ACCESSIBLE CEILING SPACE. COORDINATE WITH LV CONTRACTOR FOR FINAL REQUIREMENTS.	
TELEPHONE BACKBOARD (TBB)	
INTERCOM OUTLET	

RACEWAY SYMBOLS:

→	HOMERUN CIRCUIT TO PANELBOARD
— LV —	LOW VOLTAGE CABLE
— — —	CONDUIT BURIED
— — —	CONDUIT CONCEALED
— — —	CONDUIT EXPOSED
— — —	FLEXIBLE CONDUIT
— — —	CONDUIT UP
— — —	CONDUIT DOWN
— — —	CONDUIT SEAL-OFF
— — —	CONDUIT BODY
— — —	CONDUIT EL BODY
— — —	CONDUIT CAP
— — —	CONDUIT SLEEVE WITH BUSHINGS
[PB]	PULL BOX
[HH]	HAND HOLE

CODES IN EFFECT(FL):

ALL WORK SHALL BE IN STRICT ACCORDANCE WITH:

- NATIONAL ELECTRICAL CODE - 2020
- FLORIDA BUILDING CODE - 2023 (8TH EDITION)
- FLORIDA BUILDING CODE - 2023 (8TH EDITION) ENERGY CONSERV

The following lines are excerpts from the Florida Statutes and are shown on this drawing for informational purposes only:

FLORIDA STATUTES

**2019 FLORIDA STATUTES
TITLE XXXVIII. BANKS AND BANKING
CHAPTER 655. FINANCIAL INSTITUTIONS GENERALLY**

655.960 Definitions; ss. 655.960-655.965. --

As used in this section and ss. 655.961-655.965, unless the context otherwise requires:

- (1) "Access area" means any paved walkway or sidewalk which is within 50 feet of any automated teller machine. The term does not include any street or highway open to the use of the public, as defined in s. 316.003(83)(a) or (b), including any adjacent sidewalk, as defined in s. 316.003.
- (2) "Access device" has the same meaning as set forth in Federal Reserve Board Regulation E, 12 C.F.R. part 205, promulgated pursuant to the Electronic Fund Transfer Act, 15 U.S.C. ss. 1601 et seq.
- (3) "Automated teller machine" means any electronic information processing device located in this state which accepts or dispenses cash in connection with a credit, deposit, checking, or convenience account. The term does not include devices used solely to facilitate check guarantees or check authorizations or which are used in connection with the acceptance or dispensing of cash on a person-to-person basis, such as by a store cashier.
- (4) "Candlefoot power" means the light intensity of candles on a horizontal plane at 36 inches above ground level and 5 feet in front of the area to be measured.
- (5) "Control," with respect to an access area or defined parking area, means to have the present legal authority to determine how, when, and by whom such area is to be used, and how such area is to be maintained, lighted, and landscaped. If an operator leases an access area or defined parking area as lessee, such lease shall not be considered to have control for the purposes of ss. 655.960-655.965.
- (6) "Customer" means a natural person to whom an access device has been issued for personal, family, or household use.
- (7) "Defined parking area" means that portion of any parking area open for customer parking which is contiguous to an access area with respect to an automated teller machine, is regularly, principally, and lawfully used for parking by users of the automated teller machine while conducting automated teller machine transactions during the hours of darkness, and is owned or leased by the operator of the automated teller machine or owned or controlled by the party leasing the automated teller machine site to the operator. The term does not include any parking area which is not open or regularly used for parking by users of the automated teller machine who are conducting automated teller machine transactions during the hours of darkness. A parking area is not open if it is physically closed to access or if conspicuous signs indicate that it is closed. If a multiple level parking area satisfies the conditions of this subsection and would therefore otherwise be a defined parking area, only the single parking level deemed by the operator of the automated teller machine to be the most directly accessible to the users of the automated teller machine shall be considered a parking area.
- (8) "Financial institution office" means a main office or principal office, as defined in s. 655.005, and a branch or branch office as defined in s. 658.12(4).
- (9) "Hours of darkness" means the period that commences 30 minutes after sunset and ends 30 minutes before sunrise.
- (10) "Operator" means any financial institution, as defined in s. 655.005, other business entity, or any person who controls the use or operation by a customer or other member of the general public of an automated teller machine. An operator controls the use or operation of an automated teller machine for the purposes of ss. 655.960-655.965 if such person or entity has the present legal authority to determine when and by whom the automated teller machine may be used and operated and how it is to be maintained in compliance with the provisions of ss. 655.960-655.965. An operator does not include any person or entity which is not a financial institution, if the primary function of such person or entity is to provide data processing services for automated teller machine transactions or to provide for the exchange, transfer, or dissemination of electronic funds transfer data.
- (11) Terms which are defined in the financial institution codes, unless the context otherwise requires, have the meanings ascribed to them therein for purposes of ss. 655.960-655.965.

655.962 Lighting; mirrors; landscaping. --

- (1) Each operator, or other person responsible for an automated teller machine pursuant to ss. 655.960-655.965, shall provide lighting during the hours of darkness with respect to an open and operating automated teller machine and any defined parking area, access area, and the exterior of an enclosed automated teller machine installation, as follows:
 - (a) There shall be a minimum of 10 candlefoot power at the face of the automated teller machine and extending in an unobstructed direction outward 5 feet.
 - (b) There shall be a minimum of 2 candlefoot power within 50 feet in all unobstructed directions from the face of the automated teller machine. If the automated teller machine is located within 10 feet of the corner of the building and the automated teller machine is generally accessible from the adjacent side, there shall be a minimum of 2 candlefoot power along the first 40 unobstructed feet of the adjacent side of the building.
 - (c) There shall be a minimum of 2 candlefoot power in that portion of the defined parking area within 60 feet of the automated teller machine.
- (2) The operator shall provide reflective mirrors or surfaces at each automated teller machine which provide the customer with a rear view while the customer is engaged in using the automated teller machine.
- (3) The operator, or other person responsible pursuant to ss. 655.960-655.965 for an automated teller machine, shall ensure that the height of any landscaping, vegetation, or other physical obstructions in the area required to be lighted pursuant to subsection (1) for any open and operating automated teller machine shall not exceed 3 feet, except that trees trimmed to a height of 10 feet and whose diameters are less than 2 feet and manmade physical obstructions required by statute, law, code, ordinance, or other governmental regulation shall not be affected by this subsection.

655.964 Application. --

- (1) The provisions of ss. 655.961 and 655.962 do not apply to any automated teller machine which is:
 - (a) Located inside of a building, unless it is a freestanding installation which exists for the sole purpose of providing an enclosure for the automated teller machine.
 - (b) Located inside a building, except to the extent a transaction can be conducted from outside the building.
 - (c) Located in any area, including any access area, building, enclosed space, or parking area which is not controlled by the operator.
- (2) The provisions of ss. 655.960-655.965 shall not be construed to create any duty, responsibility, or obligation for any person or entity whose primary function is to provide for the exchange, transfer, or dissemination of electronic funds transfer data and is not otherwise a financial institution, as defined in s. 655.005, or an operator.

655.965 Preemption; prohibition. --

Except as expressly provided, the provisions of this section and ss. 655.960-655.964 supersede and preempt all rules, regulations, codes, or ordinances of any city, county, municipality, or other political subdivision of this state, and of any local agency regarding customer safety at automated teller machines located in this state.

GENERAL NOTES:

1. PRE-BID SITE VISIT: CONTRACTOR PROPOSING TO UNDERTAKE WORK UNDER THIS DIVISION SHALL VISIT THE SITE OF THE WORK AND FULLY INFORM THEMSELVES OF ALL CONDITIONS THAT EFFECT THE WORK AND COST THEREOF AND EXAMINE THE DRAWINGS AS RELATED TO THE SITE CONDITIONS. BIDDERS WHO DO NOT VISIT THE SITE MAY BE UNILATERALLY NOT PERMITTED TO SUBMIT A BID IF THE OWNER SO DESIGNATES.
2. BID TERMS AND CONDITIONS: THE ELECTRICAL CONTRACTOR SHALL OBTAIN A FULL SET OF PLANS AND SPECIFICATIONS FROM THE GENERAL CONTRACTOR PRIOR TO BID. CONSIDERATION WILL NOT BE GRANTED FOR ANY ALLEGED MISUNDERSTANDINGS OR THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF PROPOSAL SHALL CONVEY FULL AGREEMENT TO THE ITEMS AND CONDITIONS INDICATED IN THE PLANS AND SPECIFICATIONS. ANY DISCREPANCIES OR OMISSIONS FOUND IN THE CONTRACT DOCUMENTS OR DUE AS TO THE INTENT THEREOF, SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT IN WRITING TO OBTAIN CLARIFICATION FROM THE ENGINEER AND/OR OWNER'S REPRESENTATIVE PRIOR TO SUBMITTING PROPOSAL FOR WORK. WHERE CLARIFICATION CANNOT BE PROVIDED PRIOR TO BID, THE CONTRACTOR SHALL ASSUME THE MORE EXPENSIVE METHOD FOR THE BID. WITHOUT FORMAL AUTHORIZATION, THE ARCHITECT AND OWNER RESERVE THE RIGHT TO REQUIRE THE MORE RESTRICTIVE SPECIFICATION.
3. EXCLUSIONS: MATERIAL AND LABOR EXCLUDED BY THE ELECTRICAL CONTRACTOR SHALL NOT RELIEVE THE GENERAL CONTRACTOR FROM PROVIDING SAME.
4. COMPLETE SYSTEM: FURNISH ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, SUPERINTENDENTS AND SERVICES REQUIRED TO CONSTRUCT, INSTALL, AND MODIFY THE ELECTRICAL SYSTEM AS HEREIN SPECIFIED AND SHOWN ON THESE DRAWINGS FOR A COMPLETE AND FULLY OPERATIONAL SYSTEM. COORDINATE WORK TO BE PERFORMED OR INSTALLED BY OTHERS AFFECTING THE ELECTRICAL WORK, AND FURNISH AND INSTALL ALL NECESSARY STEEL SHAPES, BLOCKING, ANCHORS, SLEEVES, HANGERS, ETC. FOR ATTACHING OR CONNECTING ELECTRICAL WORK TO RELATED WORK OF OTHER TRADES. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN OR NOT INDICATED IN THE DRAWINGS, WHICH ARE NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION, SHALL BE PROVIDED WITHOUT ADDITIONAL EXPENSE TO THE OWNER. DRAWINGS AND SPECIFICATIONS DO NOT UNDERTAKE TO INDICATE EVERY ITEM OF MATERIAL, EQUIPMENT, OR LABOR REQUIRED TO PRODUCE A COMPLETE AND PROPERLY OPERATING INSTALLATION.
5. PERMITS: OBTAIN ALL NECESSARY PERMITS, LICENSES, AND INSPECTIONS AS REQUIRED BY ANY OF THE FOREGOING AUTHORITIES AND PAY FOR ALL OTHER COSTS IN CONNECTION WITH THE WORK.
6. INSPECTIONS: CONTRACTOR SHALL NOT CONCEAL ANY WORK UNTIL INSPECTED AND APPROVED BY ELECTRICAL INSPECTOR AND/OR ARCHITECT/ENGINEER.
7. REGULATIONS: ALL ELECTRICAL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE LATEST ADOPTED NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL BUILDING CODES, RULES, REGULATIONS AND AUTHORITIES HAVING JURISDICTION.
8. WORKMANSHIP: ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER ACCORDING WITH APPLICABLE NECA STANDARDS SUBJECT TO THE APPROVAL OF THE OWNER OR OWNER'S AUTHORIZED REPRESENTATIVE. RACEWAY, FIXTURES, AND WIRING DEVICES SHALL BE PROPERLY ALIGNED, LEVELLED, PLUMBED AND SUPPORTED. RACEWAY SHALL BE GROUPED AND INSTALLED IN RUNS WHICH ARE PARALLEL AND PERPENDICULAR WITH BUILDING LINES.
9. COORDINATION: PRIOR TO COMMENCEMENT OF WORK, EXAMINE ALL CONSTRUCTION DRAWINGS AND SPECIFICATIONS AND COORDINATE WITH ALL OTHER TRADES INCLUDING GENERAL CONTRACTOR, MECHANICAL CONTRACTOR, LOW VOLTAGE CONTRACTOR, AND SECURITY CONTRACTOR IN ORDER TO BECOME FAMILIAR WITH ALL ASPECTS OF THE DESIGN AFFECTING THE ELECTRICAL WORK AND TO CONFIRM SITE SPECIFIC INSTALLATION REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS AND EQUIPMENT CUT SHEETS FOR EQUIPMENT POWER/CONTROL REQUIREMENTS, CONNECTIONS, WIRING DEVICE TYPE, MOUNTING HEIGHTS, MEANS OF ATTACHMENT, AND LOCATIONS OF ALL NEW EQUIPMENT AND ELECTRICAL DEVICES. FIELD VERIFY EXACT NAMEPLATE DATA ON ALL EQUIPMENT FURNISHED UNDER OTHER DIVISIONS AND/OR BY THE OWNER PRIOR TO THE INSTALLATION OF ELECTRICAL WORK AND MAKE ANY ADJUSTMENTS TO OUTLETS, CONDUITS, WIRE, AND/OR CIRCUIT BREAKER/FUSE RATINGS AS REQUIRED TO MATCH EQUIPMENT ACTUALLY FURNISHED.
10. EQUIPMENT, AND DEVICE, LOCATIONS: LOCATIONS ON THE ELECTRICAL PLANS ARE APPROXIMATELY EXACT LOCATIONS SHALL BE DETERMINED FROM ARCHITECTURAL PLANS, SECTIONS, AND ELEVATIONS. FINAL LOCATION OF EQUIPMENT AND DEVICES TO BE COORDINATED WITH ARCHITECT, OWNER, AND/OR OWNER'S REPRESENTATIVE. VERIFY STUB-UP LOCATION FOR ALL UNDER SLAB CONDUITS PRIOR TO CONDUIT CUT.
11. UTILITIES: UTILITY COORDINATION INFORMATION SHOWN ON THE DRAWINGS SHALL BE CONSIDERED PRELIMINARY, COORDINATE WITH LOCAL POWER COMPANY AND TELCO (TELEPHONE/CABLE/INTERNET) PROVIDERS FOR SERVICE REQUIREMENTS AND VERIFY FINAL POINT OF CONNECTION PRIOR TO MOBILIZATION IN THE FIELD. NOTIFY UTILITIES OF COMMENCEMENT OF WORK AND MAKE ALL ARRANGEMENTS FOR TEMPORARY AND PERMANENT SERVICES. PROVIDE ALL EQUIPMENT, MATERIAL, AND LABOR TO MEET UTILITY REQUIREMENTS. INCLUDE ALL ASSOCIATED COSTS TO SET-UP AND COORDINATE TEMPORARY AND PERMANENT ELECTRIC AND TELCO SERVICES IN BID. ALL MATERIALS MUST BE APPROVED BY THE LOCAL UTILITY. IF REQUIRED, THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT SYSTEMS FOR UTILITY MEDIUM VOLTAGE FROM UTILITY PRIMARY TO POINT OF INTERCEPTION AT EDGE OF PROPERTY LINE.
12. TEMPORARY POWER: PROVIDE TEMPORARY SERVICE FOR LIGHTING, POWER EQUIPMENT (DRILLS, SAWS, ETC.), AND CONTRACTOR MOBILIZED WORK TRAILERS. VERIFY TEMPORARY SERVICE REQUIREMENTS WITH GENERAL CONTRACTOR. TEMPORARY LIGHTING AND POWER SHALL MEET OSHA REQUIREMENTS AND LOCAL CODE.
13. INTERRUPTION OF SERVICE: COORDINATE ALL WORK REQUIRING INTERRUPTION OF SERVICE (POWER, SECURITY, DATA, FIRE ALARM, ETC.) WITH ALL AFFECTED PARTIES, INCLUDING BUT NOT LIMITED TO GENERAL CONTRACTOR, BUILDING OWNER AND/OR LANDLORD, TENANTS, AND OWNER AND/OR OWNER'S REPRESENTATIVE AND OBTAIN WRITTEN PERMISSION FROM SAID PARTIES AT LEAST 48 HOURS PRIOR TO SHUT DOWN. PROVIDE NOTICE TO ALL OTHER TRADES OF ALL SCHEDULED INTERRUPTIONS. ALL OUTAGES OR INTERRUPTIONS SHALL BE KEPT TO MINIMUM DURATION. PROVIDE TEMPORARY SERVICE DURING OUTAGE WHEN REQUIRED BY AFFECTED PARTIES. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE PERSONNEL FOR FIRE AND SECURITY WATCH DURING OUTAGES TO FIRE AND SECURITY SYSTEMS.
14. PRODUCTS: ALL ELECTRICAL MATERIALS SHALL BE NEW EXCEPT WHERE SPECIFICALLY NOTED AS EXISTING TO BE REUSED. MATERIAL AND METHODS OF INSTALLATION SHALL CONFORM TO THE STANDARDS OF UNDERWRITERS LABORATORIES, INC. (UL), ANSI, NFPA, ADA, AND ALL OTHER APPLICABLE LOCAL ORDINANCES. DEFECTIVE EQUIPMENT AND/OR EQUIPMENT DAMAGED DURING INSTALLATION AND/OR TESTING SHALL BE REPLACED OR REPAIRED IN A MANNER MEETING THE APPROVAL OF THE ARCHITECT AND THE ENGINEER. PROPOSED EQUIPMENT SHALL BE NRTL LISTED, LABELED, OR APPROVED.
15. SHOP DRAWINGS AND SUBMITTALS: SUBMIT MANUFACTURER'S STANDARD PRODUCT INFORMATION, PERFORMANCE SPECIFICATIONS, ELECTRICAL RATINGS, PHYSICAL DIMENSIONS, AND OTHER INFORMATION NECESSARY FOR ENGINEER TO ENSURE COMPLIANCE WITH SPECIFICATIONS. SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO ORDERING AND INSTALLING ANY EQUIPMENT. SUBMITTALS AND SHOP DRAWINGS SHALL CLEARLY INDICATE ITEMS TO BE REVIEWED BY HIGHLIGHTING, AND ITEMS NOT TO BE REVIEWED SHALL BE CROSSED OUT. SUBMITTALS WITHOUT HIGHLIGHTING AND CROSSED OUT ITEMS SHALL NOT BE REVIEWED. ALL SUBMITTALS MUST BE RECEIVED BY THE ENGINEER WITHIN 30 DAYS OF CONTRACT AWARD TO THE GENERAL CONTRACTOR. NO EXCEPTIONS. EQUIPMENT ORDERED OR INSTALLED WITHOUT A FAVORABLY REVIEWED SUBMITTAL IS DONE AT THE CONTRACTOR'S OWN RISK.
16. VALUE ENGINEERING SUBMITTALS: VALUE ENGINEERING SUBMITTALS SHALL BE LABELED AS SUCH AND INDICATE A 'DEDUCT' OR CREDIT BACK TO THE OWNER. VE SUBMITTALS NOT CLEARLY LABELED OR NOT43 INCLUDING A DEDUCT SHALL BE REJECTED.
17. SUBSTITUTION AND ALTERATIONS: THERE SHALL BE NO DEVIATION FROM THE REQUIREMENTS HEREIN WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ALL COSTS INCURRED RESULTING FROM SUBSTITUTION OF EQUIPMENT AS WELL AS THE PERFORMANCE AND SPACE REQUIREMENTS OF SUCH EQUIPMENT.
18. SUBSTITUTIONS AND ALTERATIONS OF OTHER DISCIPLINE'S EQUIPMENT: SUBSTITUTED AND ALTERED EQUIPMENT BY OTHER DISCIPLINES SHALL INCLUDE ALL MATERIAL AND LABOR COSTS FOR ELECTRICAL CONTRACTOR TO PROVIDE COMPLETE AND FULLY FUNCTIONAL SYSTEMS TO ACCOMMODATE THESE SUBSTITUTED AND ALTERED EQUIPMENT. THESE ADDITIONAL ELECTRICAL COSTS MUST BE ABSORBED BY THE OTHER DISCIPLINE'S CONTRACTOR IN ORDER FOR THE SUBSTITUTED OR ALTERED GEAR TO BE ACCEPTED.
19. FAULT CURRENT PROTECTION: ALL EQUIPMENT SHORT CIRCUIT CURRENT RATINGS (SCCR) AND OVERCURRENT PROTECTIVE DEVICE AMPERE INTERRUPTING CAPACITY (AIC) RATINGS SHALL BE GREATER THAN THE AVAILABLE FAULT CURRENT AT EACH RESPECTIVE PIECE OF EQUIPMENT. COORDINATE EQUIPMENT SCCR AND OVERCURRENT PROTECTIVE DEVICE AIC RATINGS WITH POWER COMPANY, OBTAIN THE AVAILABLE FAULT CURRENT AT TRANSFORMER SECONDARY FROM THE POWER COMPANY AND PROVIDE PROPOSED EQUIPMENT SCCR AND OVERCURRENT PROTECTIVE DEVICE AIC RATINGS FOR ENGINEER APPROVAL. OVERCURRENT PROTECTIVE DEVICES AIC RATINGS SHALL BE FULLY RATED WITH A MINIMUM 10% MARGIN BETWEEN THE CALCULATED FAULT LEVEL AND THE SPECIFIED SHORT CIRCUIT RATING OF THE EQUIPMENT UNO ON PLANS.
20. VOLTAGE DROP: WIRE SIZES SPECIFIED IN THESE PLANS ARE MINIMUM WIRE SIZES. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR INCREASING WIRE SIZES BASED ON ACTUAL CIRCUIT LENGTH TO MAINTAIN VOLTAGE DROP AT A MAXIMUM OF 3% FOR BRANCH CIRCUITS AND 2% FOR FEEDERS. THE CUMULATIVE VOLTAGE DROP FROM THE SOURCE TO THE END DEVICE SHALL NOT EXCEED 5% OF NOMINAL SYSTEM VOLTAGE.
21. WIRING: ALL CONDUCTORS CARRYING 50 VOLTS OR MORE SHALL BE MINIMUM #12 AWG, CU, UNO. PROVIDE DUAL RATED TYPE THHN/THWN FOR ABOVE GROUND AND TYPE XHHW FOR BELOW GROUND, COORDINATE INSULATION TYPES WITH ENVIRONMENTAL CONDITIONS, NEC REQUIREMENTS, AND CONDUIT FILL REQUIREMENTS. CONDUCTORS #12 AND #10 SHALL BE SOLID, CONDUCTORS #8 AND LARGER SHALL BE STRANDED. ALL CONDUCTOR SIZES ARE BASED ON COPPER WITH 60°C INSULATION FOR CIRCUITS RATED 100A OR LESS AND 75°C FOR CIRCUITS RATED MORE THAN 100A.
22. LOW VOLTAGE WIRING: LOW VOLTAGE WIRING FOR SPECIAL SYSTEMS IS PERMITTED TO BE FREE-WIRED ONLY ABOVE ACCESSIBLE CEILINGS AND BELOW RAISED FLOOR SYSTEMS, UNFREED-WIRED CABLE SHALL BE UL LISTED, PLENUM RATED. LOW VOLTAGE WIRING IN OPEN CEILINGS, HARD CEILINGS, WALLS, PASSING THROUGH ADJACENT TENANT SPACES, OR ROUTED UNDERGROUND OR BELOW SLAB SHALL BE INSTALLED IN CONDUIT. LOW VOLTAGE WIRING IS NOT SHOWN ON PLANS, UNLESS SPECIFICALLY CALLED OUT.
23. COLOR CODING: FOR EXISTING WIRING SYSTEMS, COLOR CODING SHALL FOLLOW EXISTING SITE REQUIREMENTS. FOR NEW INSTALLATIONS OR WHERE EXISTING INSTALLATIONS DO NOT HAVE A COLOR CODING CONVENTION, THE FOLLOWING SYSTEMS OF COLOR CODING SHALL BE STRICTLY ADHERED TO AND FOLLOWED THROUGHOUT:

CONDUCTOR	480Y/277V, 3-PH	208Y/120V, 3-PH	240D/120V, 3-PH	240/120V, 1-PH
PHASE A:	BROWN	BLACK	BLACK	BLACK
PHASE B:	ORANGE	RED	ORANGE	RED
PHASE C:	YELLOW	BLUE	BLUE	—
NEUTRAL:	GRAY	WHITE	WHITE	WHITE
EQUIPMENT GROUND:	GREEN	GREEN	GREEN	GREEN
ISOLATED GROUND:	—	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW

 SHARED CIRCUIT NEUTRALS: SHARED CIRCUIT NEUTRALS SHALL NOT BE USED UNLESS INDICATED OTHERWISE ON PANEL SCHEDULE. WHERE USED, CIRCUIT BREAKER HANDLE TIES SHALL BE PROVIDED TO DISCONNECT POWER TO EACH PHASE CONDUCTOR OF THE SHARED NEUTRAL CIRCUIT.
24. GROUNDS: ALL CIRCUITS SHALL BE PROVIDED WITH AN INSULATED GREEN COPPER EQUIPMENT GROUND CONDUCTOR SIZED PER NEC. THE EQUIPMENT GROUND CONDUCTOR SHALL BE INCREASED IN SIZE BY EQUAL PROPORTION TO THE PHASE CONDUCTORS WHENEVER THE PHASE CONDUCTORS HAVE BEEN UPSIZED TO MAINTAIN ACCEPTABLE VOLTAGE DROP LEVELS. EQUIPMENT GROUNDS SHALL BE BONDED TO ALL EQUIPMENT AND DEVICES. USE OF METALLIC CONDUIT SHALL NOT TAKE THE PLACE OF AN EQUIPMENT GROUND CONDUCTOR.
25. CONDUIT: ALL WIRING SHALL BE INSTALLED IN CONDUIT, MINIMUM 1/2" FOR INDOOR AND 3/4" FOR OUTDOOR AND UNDER SLAB. EMT IS ACCEPTABLE WITH COMPRESSION FITTINGS ONLY. ALL HOMERUNS SHALL BE HARD PIPED. MC IS ACCEPTABLE FOR FIXTURE WHIPS ONLY. ALL CONDUIT AND WIRING SHALL BE CONCEALED IN FLOORS, WALLS, AND/OR CEILINGS UNLESS SPECIFICALLY NOTED OTHERWISE. CHANNEL EXISTING WALLS WHERE REQUIRED. WHERE CONDUITS ARE UNABLE TO BE CONCEALED, HARD PIPED CONDUIT SHALL BE USED AND PAINTED TO MATCH ADJOINING SURFACE.
26. UNDERGROUND CONDUITS: MINIMUM BURIAL DEPTH SHALL BE 24" TO TOP OF CONDUIT. PROVIDE DETECTABLE WARNING TAPE WHERE REQUIRED BY AHJ OR CODE.
27. ROUTING: FOR CLARITY, CONDUIT ROUTING SHOWN IS SYMBOLIC AND DIAGRAMMATIC. INSTALL CONDUIT TO FIT ACTUAL FIELD CONDITIONS.
28. OPEN CEILINGS: IN AREAS WITHOUT CEILINGS OR WHERE ANY CONDUITS, CONDUCTORS, FEEDERS, OR LOW VOLTAGE CABLING IS VISIBLE, ALL WIRING SHALL BE HARD PIPED IN CONDUIT. BX, AC, AND MC CABLE OR FLEX CONDUIT ARE NOT PERMITTED. CONDUITS SHALL BE ROUTED TIGHT TO DECK EITHER PARALLEL OR PERPENDICULAR TO BUILDING LINES, GROUPED ALONG STRUCTURAL MEMBERS, AND DROP AT POINT OF CONNECTION. MAINTAIN 1-1/2" CLEARANCE FROM ROOF DECK PER NEC 300.4(E), WHERE EXPOSED TO VIEW, ALL MATERIALS (CONDUIT, JUNCTION BOXES, ETC.) SHALL BE INSTALLED IN AN ORDERLY FASHION AND SHALL BE CLEAN, FREE FROM ALL VISIBLE MARKINGS, AND PAINTED TO MATCH ADJOINING SURFACE. JUNCTION BOXES SHALL HAVE CIRCUIT NUMBERS WRITTEN ON THE INSIDE OF THE JUNCTION BOX COVER.
29. PENETRATIONS: CONTRACTOR SHALL INSPECT AREA OF WORK AND PERFORM GROUND PENETRATING RADAR (GPR) SCAN OR X-RAY ALL PROPOSED PENETRATIONS PRIOR TO WORK TO DETERMINE EXACT LOCATIONS OF STRUCTURAL REINFORCEMENT OR EMBEDDED SYSTEMS. COORDINATE FLOOR AND WALL PENETRATIONS WITH STRUCTURAL ENGINEER. ALL PENETRATIONS SHALL BE SEALED BY APPROVED MEANS TO PREVENT ENERGY LOSS AND MOISTURE AND RODENT INTRUSION.
30. FIRE-RATED PENETRATIONS: ALL PENETRATIONS THROUGH FIRE-RATED SLABS AND/OR PARTITIONS SHALL BE SEALED WITH A UL LISTED FIRE-RATED ASSEMBLY OF EQUAL OR GREATER RATING THAN THAT OF THE EXISTING SLAB OR PARTITION.
31. TRENCHING: FIELD VERIFY UNDERGROUND UTILITIES PRIOR TO TRENCHING. ALL PROPOSED EXCAVATION IN THE VICINITY OF EXISTING UTILITIES, PIPING SYSTEMS, OR SIMILAR SHALL BE HAND EXCAVATED. HAND EXCAVATE IN THE VICINITY OF EXISTING TREES WHERE TRENCHING MAY DAMAGE TREE ROOT SYSTEM.
32. SLEEVES: SLEEVES AND SLEEVE SEALS SHALL BE PROVIDED AT PENETRATIONS OF WALL ASSEMBLIES. SUPPORTS: ALL CONDUIT AND CABLING SHALL BE PROPERLY SUPPORTED AS REQUIRED BY CODE.
33. REPAIRS: THE CONTRACTOR SHALL REPAIR ALL WALL, CEILING, FLOOR, OR ROOF OPENINGS WHICH ARE CREATED BY DEMOLITION OR PENETRATION. THE REPAIRS SHALL BE WITH MATERIAL AND FINISHES TO MATCH EXISTING ADJACENT UNDISTURBED FINISHED SURFACES.
34. IDENTIFICATION: ALL ELECTRICAL DISTRIBUTION EQUIPMENT, TRANSFORMERS, PANELBOARDS, AND OTHER ENCLOSED EQUIPMENT SHALL BE IDENTIFIED AS INDICATED IN THE CONTRACT DOCUMENTS. SAID IDENTIFICATION SHALL CONSIST OF PERMANENTLY ATTACHED ENGRAVED LAMINATED PLASTIC NAMEPLATES. EACH BRANCH CIRCUIT OVERCURRENT PROTECTION DEVICE SHALL BE IDENTIFIED BY CIRCUIT NUMBER AND SCHEDULED. INSIDE PANEL DOOR WITH A TYPEWRITTEN CIRCUIT DIRECTORY. EACH BRANCH CIRCUIT SPLICE OR TERMINATION SHALL BE IDENTIFIED BY PANEL AND CIRCUIT DESIGNATION SHOWN ON THE JUNCTION OR OUTLET BOX, OR UPON INDIVIDUAL WIRES IN CASES WHERE MORE THAN ONE OF EACH PHASE CONDUCTOR OCCUR. RECEPTECLES AND SWITCH COVER PLATES SHALL BE LABELED WITH PANEL AND CIRCUIT DESIGNATION USING TYPEWRITTEN CHARACTERS OF CONTRASTING COLOR (BLACK OR WHITE) ON CLEAR ADHESIVE BACKED LABELS OR FACTORY ENGRAVED COVER PLATES.
35. PANEL CLEARANCE: MAINTAIN ALL WORKING SPACE AND DEDICATED EQUIPMENT SPACE CLEARANCES AS REQUIRED BY ARTICLE 110 OF THE NEC. GENERAL CONTRACTOR SHALL COORDINATE BETWEEN TRADES SO THAT NO FOREIGN SYSTEMS ARE LOCATED IN THE DEDICATED EQUIPMENT SPACE. THE GENERAL CONTRACTOR SHALL ABSORB THE COST TO RELOCATE THE FOREIGN SYSTEMS.
36. WIRING DEVICES: WIRING DEVICES AND COVER PLATES SHALL BE DECORA STYLE OF COLORS SELECTED BY THE ARCHITECT OR INTERIOR DESIGNER. GANG ADJACENT DEVICES WITH A SINGLE ONE-PIECE COVER PLATE, UNO. FOR REMODELS, ALL DEVICES AND COVER PLATES WITHIN THE CONTRACT AREA SHALL BE REPLACED WITH NEW DECORA STYLE DEVICES AND COVER PLATES, UNO.
37. CLEANING: UPON COMPLETION OF WORK, THE CONTRACTOR SHALL THOROUGHLY CLEAN THE CONTRACT AREA AND ALL OTHER AREAS USED FOR STORAGE, STAGING, ETC. ALL EQUIPMENT AND DEVICES SHALL BE CLEANED AND POLISHED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. SOAP AND WATER CLEANING OR OTHER METHODS THAT LEAVE A FILM SHALL BE CORRECTED UPON REQUEST BY THE ENGINEER OR ARCHITECT.
38. TESTING: THE CONTRACTOR SHALL TEST ALL EQUIPMENT INSTALLED UNDER THIS CONTRACT AND DEMONSTRATE TO THE OWNER ITS PROPER OPERATION. AT THE TIME OF FINAL INSPECTION AND TESTS, ALL CONNECTIONS AT PANELBOARDS, CONTROL PANELS, DEVICES, AND EQUIPMENT AND ALL SPLICES MUST BE COMPLETED. EACH BRANCH CIRCUIT AND ITS RESPECTIVE CONNECTED EQUIPMENT MUST TEST FREE OF SHORT CIRCUITS.
39. TRAINING: OWNER AND/OR OWNER'S REPRESENTATIVE SHALL BE TRAINED ON THE USE OF ANY NEW ELECTRICAL EQUIPMENT AND LIGHTING CONTROLS PRIOR TO FINAL ACCEPTANCE.
40. FINAL ACCEPTANCE: AT THE END OF CONSTRUCTION, A FINAL WALK-THROUGH SHALL BE PERFORMED. ALL DEFICIENCIES IDENTIFIED DURING FINAL INSPECTION SHALL BE CORRECTED.
41. CERTIFICATES OF APPROVAL: ALL CERTIFICATES OF APPROVAL SHALL BE IN DUPLICATE, DELIVERED TO THE ARCHITECT, AND BECOME THE PROPERTY OF THE OWNER.
42. PROJECT RECORD DOCUMENTS: THE ELECTRICAL CONTRACTOR SHALL MAINTAIN AT THE SITE, FOR THE OWNER, ONE COPY OF ALL DRAWINGS, ADDENDA, APPROVED SHOP DRAWINGS, REVISIONS AND OTHER MODIFICATIONS IN GOOD ORDER AND MARKED TO RECORD ALL CHANGES MADE DURING CONSTRUCTION. THE SET OF DRAWINGS

ELECTRICAL SPECIFICATIONS

GENERAL REQUIREMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS
A. The general provisions of the contract including General and Special Conditions and General Requirements shall apply to all work under this Section.

1.02 REQUIREMENTS OF REGULATORY AGENCIES AND STANDARDS
A. Equipment, fixtures, material and installation shall conform to the requirements of the local Building Department, the serving utility companies, the National Electrical Code, National Electrical Safety Code, Life Safety Code, Occupational Safety and Health Act, and applicable national, state and local codes, ordinances and regulations.
B. All equipment shall be equal to or exceed the minimum requirements of NEMA, IEEE, and UL.
C. Should any change in Drawings or Specifications be required to comply with governmental regulations, the Contractor shall notify Architect/Engineer prior to execution of the Work. The work shall be carried out according to the requirements of such code in accordance with the instruction of the Architect/Engineer and at no additional cost to the Owner.
D. The provisions of Standards, Codes, Laws, Ordinances, etc., shall be considered minimum requirements. In case of conflict between their published requirements, the Owner's Representative shall determine which is to be followed and his decision shall be binding. Specific requirements of this specification or the drawings, which exceed the published requirements, shall take precedence over them.

1.03 FEES
A. All local fees, permits, and services of inspection authorities shall be obtained and paid for by the Contractor. The Contractor shall cooperate fully with local companies with respect to their services. Contractor shall include in his bid any costs to be incurred relative to power service (primary and/or secondary) and telephone service.

1.04 SCOPE OF WORK
A. This division of the specifications covers the electrical systems of the project. It includes work performed by the electrical trades as well as trades not normally considered as electrical trades.
B. Provide all incidentals, equipment, appliances, services, hoisting, scaffolding, supports, tools, supervision, labor, consumable items, fees, licenses, etc., necessary to provide complete systems. Perform start-up and checkout on each item and system to provide fully operable systems.
C. Examine and compare the Electrical Drawings with these specifications, and report any discrepancies between them to the Architect/Engineer and obtain from him written instructions for changes necessary in the work. At time of bid the most stringent requirements must be included in the bid.
D. Examine and compare the Electrical Drawings and Specifications with the Drawings and Specifications of other trades, and report any discrepancies between them to the Architect/Engineer and obtain from him written instructions for changes necessary in the work. At time of bid, the most stringent requirements must be included in said bid.
E. It is the intent of the Drawings and Specifications to provide a complete workable system ready for the Owner's operation. Any item not specifically shown on the Drawings or called for in the Specifications, but normally required to conform with the intent, are to be considered a part of the Contract.
F. All materials furnished by the Contractor shall be new and unused (temporary lighting and power products are excluded) and free from defects. All materials used shall bear the Underwriter's Laboratory, Inc. label provided a standard has been established for the material in question.
H. Except for conduit, conduit fittings, outlet boxes, wire and cable, all items of equipment or material shall be the product of one manufacturer throughout the entire project. Multiple manufacturers will not be permitted.

1.05 REFERENCES
A. Utilize the following abbreviations and definitions for discernment within the Drawings and Specifications.
1. Abbreviations
a) NEC National Electrical Code.
b) OSHA Occupational Safety and Health Act.
c) ANSI American National Standards Institute.
d) NFPA National Fire Protection Association.
e) IEEE American Standards Association.
f) IEC International Electrotechnical Commission.
g) NEMA National Electrical Manufacturers Association.
h) UL Underwriters' Laboratories, Inc.
i) IES Illuminating Engineering Society.
j) IECIA Insulated Cable Engineers Association.
k) ASTM American Society of Testing Materials.
l) ETL Electrical Testing Laboratories, Inc.
m) CBM Certified Ballast Manufacturers.
n) EIA Electronic Industries Association.
o) LED Light Emitting Diode.
p) OEM Original Equipment Manufacturer.

1.06 DEFINITIONS
A. "PROVIDE" means to supply, purchase, transport, place, erect, connect, test, and turn over to Owner, complete and ready for regular operation, the particular Work referred to.
B. "INSTALL" means to join, unite, fasten, link, attach, set up, or otherwise connect together before testing and turning over to Owner, complete and ready for regular operation, the particular Work referred to.
C. "FURNISH" means to supply all materials, labor, equipment, testing apparatus, controls, tests, accessories, and all other items customarily required for the proper and complete application for the particular Work referred to.
D. "WIRING" means the inclusion of all raceways, fittings, conductors, connectors, tape, junction and outlet boxes, connections, splices, and all other items necessary and/or required in connection with such Work.
E. "CONDUIT" means the inclusion of all fittings, hangers, supports, sleeves, etc.
F. "AS DIRECTED" means as directed by the Architect/Engineer, or his representative.
G. "CONCEALED" means embedded in masonry or other construction, installed behind wall furring or within double partitions, or installed above hung ceilings.

1.07 COORDINATION OF THE WORK
A. Certain materials will be provided by other trades. Examine the Contract Documents to ascertain these requirements.
B. Carefully check space requirements with other trades and the physical confines of the area to insure that all material can be installed in the spaces allotted thereto including finished suspended ceilings and the spaces within the existing building. Make modifications thereto as required and approved.
C. Transmit to other trades all information required for work to be provided under their respective Sections in ample time for installation.
D. Wherever work interconnects with work of other trades, coordinate with other trades to insure that all trades have the information necessary so that they may properly install all necessary connections and equipment. Identify all items of work that require access so that the ceiling trade will know where to install access doors and panels.
E. Coordinate, project and schedule work with other trades in accordance with the coordinated sequence.
F. The Drawings show only the general lines of raceways and approximate location of outlets. Any significant changes in location of outlet, cabinet, etc., necessary in order to meet field conditions shall be brought to the immediate attention of the Architect/Engineer and receive his approval before such alterations are made. All such modifications shall be made without additional cost to the Owner.
G. Obtain from the Architect/Engineer in the field the location of such outlets or equipment not definitely located on the Drawings.
H. Circuit "tags" in the form of arrows are used where shown to indicate the home run of raceways to electrical distribution points. These tags show the circuits in each home run and the panel designation. Show the actual circuits numbers on the finished record drawings and on panel directory card. Where circuiting is not indicated, Electrical Subcontractor must provide required circuiting in accordance with the loading indicated on the drawings and/or as directed.
I. Adjust location of conduits, panel equipment, pull boxes, fixtures, etc., to accommodate the work to prevent interferences, both anticipated and encountered. Determine the exact route and location of each raceway prior to fabrication.
1. Right-of-Way:
a) Lines that pitch have the right-of-way over those that do not pitch. For example: steam, condensate, and plumbing drains normally have right-of-way. Lines whose elevations cannot be changed to have right-of-way over lines whose elevations can be changed.
b) Make offsets, transitions and changes in direction in raceways as required to maintain proper headroom in pitch of sloping lines whether or not indicated on the Drawings.
J. Wherever the work is of sufficient complexity, prepare additional Detail Drawings to scale similar to that of the bidding Drawings, prepared on tracing medium of the same size as Contract Drawings. With these layouts, coordinate the work with the work of other trades. Such detailed work to be clearly identified on the Drawings as to the area to which it applies. Submit for review Drawings clearly showing the work and its relation to the work of other trades before commencing shop fabrication or erection in the field.
K. Coordinate with the local Electric Utility Company and the local Telephone Company as to their requirements for service connections and provide all necessary materials, labor and testing.
L. Coordinate with contractors for work under other Divisions of this specification for all work necessary to accomplish this contractor's work.

1.08 EXAMINATION OF SITE
A. Prior to the submitting of bids, the Contractor shall visit the site of the job and shall familiarize himself with all conditions affecting the proposed installation and shall make provisions as to the cost thereof. Failure to comply with the intent of this paragraph will in no way relieve the contractor of performing all necessary work shown on the Drawings.

1.09 PROGRESS OF WORK

A. The Contractor shall order the progress of his work to conform to the progress of the work of other trades and shall complete the entire installation as soon as the conditions of the building will permit. Any cost resulting from the defective or ill-timed work performed under this section shall be borne by the Contractor.

1.10 DELIVERY, STORAGE, AND HANDLING

A. Ship and store all products and materials in a manner that will protect them from damage, weather and entry of debris. If items are damaged, do not install, but take immediate steps to obtain replacement or repair. Any such repairs shall be subject to review and acceptance of the Architect/Engineer.
B. Deliver materials in manufacturer's unopened container fully identified with manufacturer's name, trade name, type, class, grade, size and color.
C. Store materials suitably sheltered from the elements, but readily accessible for inspection by the Architect/Engineer until installed. Store all items subject to moisture damage in dry, heated spaces.

1.11 EQUIPMENT ACCESSORIES

A. Provide supports, hangers and auxiliary structural members required for support of the work.
B. Furnish and set all sleeves for passage of raceways through structural, masonry and concrete walls of floors and elsewhere as will be required for the proper protection of each raceway passing through building surfaces.
C. Wall mounted equipment may be directly secured to wall by means of steel bolts. Maintain at least 1" air space between equipment and supporting wall. Groups or arrays of equipment may be mounted on adequately sized steel angles, channels, or bars. Prefabricated steel channels providing a high degree of mounting flexibility, such as those manufactured by Kindorf, Glob-Strut and Unistrut, may be used for mounting arrays of equipment.

1.12 OPERATIONS AND MAINTENANCE MANUALS

A. General: Provide operations & maintenance (O&M) manuals in accordance with the Contract Documents.
1. Provide two (2) copies of each manual.
2. Manuals shall be 8-1/2 inches X 11 inches in hard cover 3-ring loose-leaf binders.
3. Manuals shall be complete and in Owner's hands prior to turning building over to Owner and at least 10 days prior to instruction to operating personnel.
B. Provide manufacturer's literature as regularly published by the respective manufacturers for proper preventative and comprehensive maintenance.
C. Provide O&M manuals including but not limited to the following.
1. Alphabetical list of all system components, with the name, address, and 24-hour phone number of the company responsible for servicing each item during the first year of operation.
2. Operating instructions for complete system including:
a) Normal starting, operating, and shut-down.
b) Emergency procedures for fire or failure of major equipment.
c) Summer and winter special procedures, if any.
d) Day and night special procedures, if any.
3. Maintenance instruction including:
a) Proper lubricants and lubricating instructions for each piece of equipment, and date when lubricated.
b) Necessary cleaning, replacement and/or adjustment schedule.
4. Manufacturer's data for each piece of equipment including:
a) Installation instructions.
b) Drawings and specifications.
c) Parts list, including recommended items to be stocked.
d) Complete wiring diagrams.
e) Marked or changed prints locating all concealed parts and all variations from the original system design.
f) Test and inspection certificates.
D. Refer to individual specification sections for additional O&M requirements.

1.13 RECORD DOCUMENTS

A. During construction, keep an accurate record of all deviations between the work as shown on Drawings and that which is actually installed. Keep this record set of prints at the job site for review by the Architect/Engineer.
B. Upon completion of the installation and acceptance by the owner, transfer all record drawing information to one neat and legible set of prints. Then deliver them to the Architect/Engineer for transmittal to the Owner.
C. Provide in each main electrical switchboard room a framed copy under glass of the appropriate Single Line Riser Diagram as reviewed by the electrical engineer. Media shall be a high quality presentation type paper. Blueprints or other media which fade shall not be used.

1.14 GUARANTEE

A. Guarantee all material and workmanship for a period of one (1) year from date of final acceptance by the Owner, except that where guarantees or warranties for longer terms are specified herein, such longer term to apply. Within 24 hours after notification, correct any deficiencies that occur during the guarantee period at no additional cost to the Owner, all to the satisfaction of the Owner and Architect/Engineer. Obtain similar guarantees from subcontractors, manufacturers, suppliers and subtrade specialists.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Applicable equipment and materials shall be listed by Underwriters' Laboratories and Manufactured in accordance with ASME, NEMA, ANSI or IEEE standards, and as approved by local authorities having jurisdiction as mentioned in Division 1.
B. If products and materials are specified or indicated on the Drawings for a specific item or system, use those products or materials. If products and materials are not listed in either of the above, use first class products and materials, subject to approval of Shop Drawings where Shop Drawings are required or as approved in writing where Shop Drawings are not required.
C. All equipment capacities, etc., are listed for job site operating conditions. All equipment sensitive to altitudes or ambient temperatures to be derated and method of derating shown on Shop Drawings. Where operating conditions shown differ from the laboratory test conditions, the equipment to be derated and the method of derating shown on Shop Drawings.

2.02 SUBSTITUTION OF MATERIALS OR EQUIPMENT

A. All requests for substitution of materials or equipment shall be made in writing by the Contractor. The request must be in the Engineers office not less than 10 days prior to the bid date. Samples of proposed substitute materials or equipment shall be submitted to the Engineer for review whenever they are requested. Bids shall be based only upon the specified materials and equipment, or substitutes that have received written acceptance from the Engineer prior to the bid.
B. Wherever the words "approved" or "approved" are used in regard to manufactured specialties, or wherever it is desired to substitute a different make or type of apparatus for that specified, submit all information pertinent to the adequacy and adaptability of the proposed apparatus, and secure Architect/Engineer's acceptance before apparatus is ordered.
C. Wherever quantities or a definite make and size of apparatus is specified, the make and size of apparatus which is proposed must conform substantially (in regard to the operating results) to that specified or implied. Same shall apply to important dimensions relating to operation of apparatus in coordination with the rest of the system, or to properly fitting it into available space conditions. Any substitution of equipment or apparatus shall include all necessary revisions, as required to complete the installation.
D. Acceptance of substitutions, for equipment specified herein, will not be given merely upon submission of manufacturer's name and will be given only after receipt of complete and satisfactory performance data covering the complete range of operating conditions in tabular and graphical form. Furnish complete and satisfactory information relative to equipment dimensions, weight, etc. Acceptance of all equipment specified or shown on the Drawings, or substitutions submitted for that specified or shown on the Drawings, will be granted if such equipment, in the opinion of the Architect/Engineer, conforms to the performance requirements, space conditions, weight requirements and quality requirements. Any additional construction and design costs incurred as a result of any accepted substitution shall be borne by the Contractor. The opinion and judgement of the Architect/Engineer shall be final, conclusive, and binding.

2.03 SHOP DRAWINGS

A. Prepare and submit detailed Shop Drawings for materials, systems, and equipment as listed herein, including locations and sizes of all openings in floor decks, walls, and floors.
B. The Work described in any Shop Drawing submission shall be carefully checked for all clearances (including those required for maintenance and servicing), field conditions, maintenance of architectural conditions, and proper coordination with all trades on the job. Each submitted Shop Drawing shall include a certification that all related job conditions have been checked and that no conflict exists.
C. All drawings shall be submitted sufficiently in advance of field requirements to allow ample time for checking and resubmittal as may be required. All submittals shall be complete and contain all required and detailed information.
D. Acceptance of any submitted data or Shop Drawings for material, equipment, apparatus, devices, arrangements, and layout shall not relieve Contractor from responsibility of furnishing same of proper dimensions and weight, capacities, sizes, quantity, quality and installation details, to efficiently perform the requirements and intent of the Contract. Such acceptance shall not relieve Contractor from responsibility for errors, omissions, or inadequacies of any sort on submitted data or Shop Drawings.
E. Each Shop Drawing shall contain the following information.
1. Provide general information on each copy of the submittal.
a) Project title.
b) Reference to the applicable drawing and specification article.
c) Contractor and supplier identification, addresses and telephone numbers.
d) Submittal Date.
2. Certification that the contractor has reviewed the submittal.
3. Refer to individual specification sections for additional information requirements.
F. Shop Drawing submittals shall be provided for each specific material, system, or equipment as identified herein.
1. As a minimum, make submittals on the following items:
a) Raceways, conduit & wire

b) Wiring devices and plates c) Switchboards d) Transformers e) Panelboards f) Fuses g) Disconnect switches h) Motor control centers i) Motor controllers, starters, and contactors j) Lighting fixtures, lamps k) Instrumentation, metering equipment l) Special systems - fire alarm, security, CCTV, intercom, etc.

2. Refer to individual specification sections for additional submittal requirements.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Follow manufacturer's instructions for installing, connecting, and adjusting all equipment. Provide one copy of such instructions to the Architect/Engineer before installing any equipment. Provide a copy of such instructions at the equipment during any work on the equipment. Provide all special supports, connections, wiring, accessories, etc.
C. Use mechanics skilled in their trade for all work.
D. Keep all items protected before and after installation. Clean up all debris.
E. Before commencing Work, examine all adjoining, underlying, etc., Work on which this Work is in any way dependent for perfect workmanship and report any condition which prevents performance of first class work. Become thoroughly familiar with actual existing conditions to which connections must be made or which must be changed or altered.

3.02 PREMIUM TIME WORK

A. The following Work shall be performed at night or weekend other than holiday weekends as directed and coordinated with the Owner.
1. All tie-in, cut-over and modifications to the existing electrical system and other existing system requiring tie-ins or modifications shall be arranged and scheduled with the Owner to be done at a time as to maintain continuity of the service and not interfere with normal building operations.

3.03 EXCAVATION, TRENCHING AND BACKFILL

A. Provide excavation for the Work. Excavate all material encountered, to the depths indicated on the drawings or required. Remove from the site, excavated materials not required or suitable for backfill. Provide grading, as may be necessary, to prevent surface water from flowing into trenches or other excavations. Remove any water accumulating therein. Provide sheeting and shoring as may be necessary for the protection of the Work and for the safety of personnel.
B. Provide trenches of widths necessary for the proper execution of the Work. Grade bottom of the trenches accurately to provide uniform bearing and support the Work on undisturbed soil at every point along its entire length. Except where rock is encountered, do not excavate below the depths indicated. Where rock excavations are required, excavate rock to a minimum overdepth of four (4") inches below the trench depths indicated on the Drawings or required. Backfill overdepths in the rock excavation and unauthorized overdepths with loose granular, moist earth, thoroughly machine tamped, to a compaction level of at least 95 percent to standard protector density or 75 percent relative density or as specified by the Architect. Whenever unstable soil that is incapable of properly supporting the Work, as determined by Architect/Engineer, is encountered in the bottom of the trench, remove soil to a depth required and backfill the trench to the proper grade with coarse sand, fine gravel, or other suitable material.
C. Excavate trenches for utilities to a depth that will provide the following minimum depths of cover from existing grade or from indicated finished grade, whichever is lower, unless otherwise specifically shown.
1. Primary electric service: four (4) feet (minimum)
2. Secondary electric service: two (2) feet (minimum)
3. Telephone service: two (2) feet (minimum)

D. Trenches shall not be placed within ten (10) feet of foundation or soil surfaces which must resist horizontal forces.
E. Do not backfill trenches until all required tests have been performed and the installation observed by the Engineer. Comply with the requirements of other sections of these specifications. Backfill shall consist of non-expansive soil with limited porosity. Deposit in six (6") inch layers and thoroughly and carefully tamp until the Work has a cover of not less than one (1) foot. Backfill and tamp remainder of trench at twelve (12") inch intervals until complete. Uniformly grade the finished surface. Backfill and tamp with compaction at least equal to the surrounding area.

3.04 CUTTING, PATCHING AND REPAIRING

A. The work shall be carefully laid out in advance. Where cutting, channelling, chasing or drilling of floors, walls, partitions, ceilings or other surfaces is necessary for the proper installation, support or anchorage of raceway, outlets or other equipment, the work shall be carefully done. Any damage to the building, piping, equipment or defaced finish plaster, woodwork, metalwork, etc. shall be repaired by skilled mechanics of the trades involved at no additional cost to the Owner.
B. Where conduits, mounting channels, outlet, junction, or pull boxes are mounted on a painted surface, or a surface to be painted, they shall be painted to match the surface. Whenever support channels are cut, the bare metal shall be cold galvanized.

3.05 DEMOLITION AND CONTINUANCE OF EXISTING SERVICES

A. All existing electrical services not specifically indicated to be removed or altered shall remain as they presently exist.
B. Should any existing services interfere with new construction, the Contractor shall (after obtaining written approval from the Architect/Engineer) alter or reroute such existing equipment to facilitate new construction.
C. Under no circumstances shall existing services be terminated or altered unless deemed necessary by the Architect/Engineer or specified herein; also, prior to altering any existing situation, the Contractor shall notify the Owner in writing giving two (2) weeks advance notice of planned alteration.
D. It shall be solely the Contractor's responsibility to guarantee continuity of present facilities (with respect to damage or alteration due to new construction) and any unauthorized alteration to existing equipment shall be corrected by the Contractor to the Architect/Engineer's satisfaction at the Contractor's expense.

3.06 CLEANING UP

A. Contractor shall take care to avoid accumulation of debris, boxes, crates, etc., resulting from the installation of his work. Contractor shall remove from the premises the following each day all debris, boxes, etc., and keep the premises clean.
B. Contractor shall clean up all fixtures and equipment at the completion of the project.
C. All switchboards, panelboards, wireways, trench ducts, cabinets and enclosures shall be thoroughly vacuumed clean prior to energizing equipment and at the completion of the project. Equipment shall be opened for observation by the Architect/Engineer as required.

3.07 WATERPROOFING

A. Avoid, if possible, the penetration of any waterproof membranes such as roofs, machine room floors, basement walls, and the like. If such penetration is necessary, perform it prior to the waterproofing and furnish all sleeves or pitch-pockets required. Advise the Architect/Engineer and obtain written permission before penetrating any waterproof membrane, even where such penetration is shown on the Drawings.
B. If Contractor penetrates any walls or surfaces after they have been waterproofed, he shall restore the waterproof integrity of that surface as directed by the Architect/Engineer at his own expense.

3.08 SUPPORTS

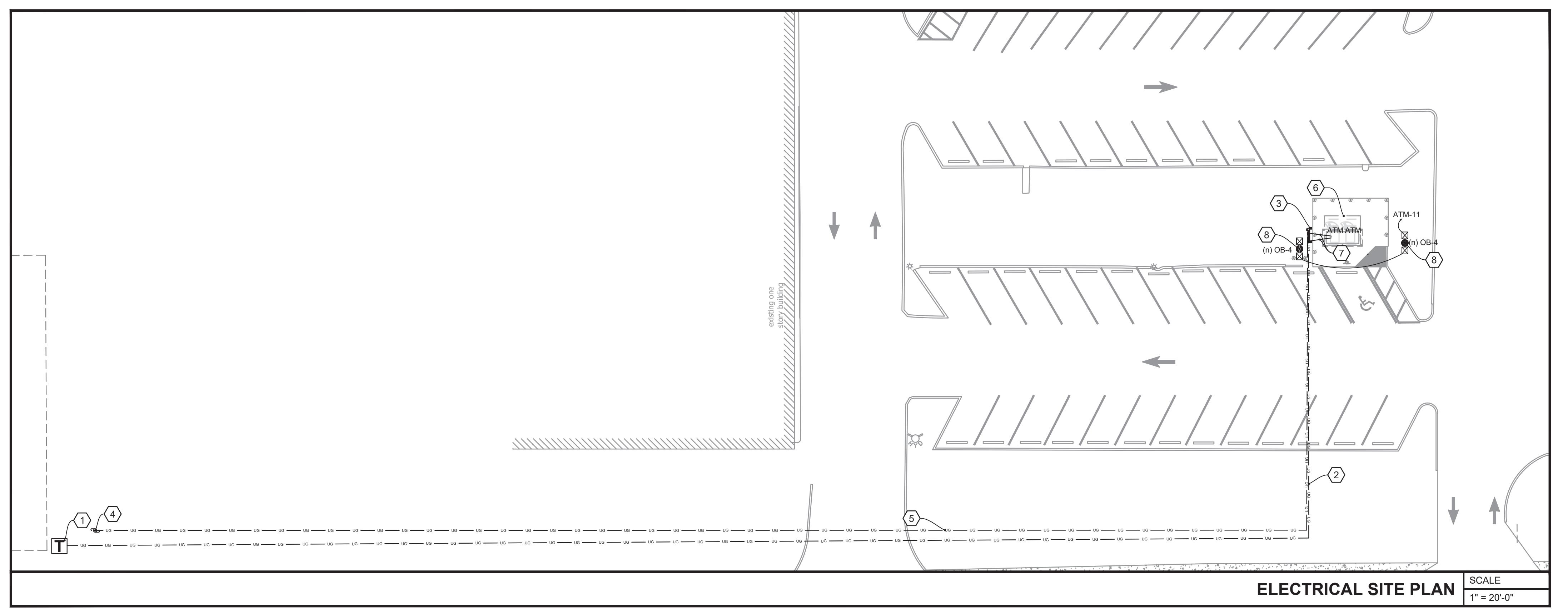
A. Support work in accordance with the best industry practice and the following.
B. Include supporting frames or racks extending from building structure for work indicated as being supported from walls where the walls are incapable of supporting the weight. In particular, provide such frames or racks in electric closets.
C. Include supporting frames or racks for equipment intended for vertical surface mounting, which is required in a free standing position.
D. Supporting frames or racks shall be of standard angle, standard channel or specialty support system steel members. They shall be rigidly bolted or welded together and adequately braced to form a substantial structure. Racks shall be of ample size to assure a workmanlike arrangement of all equipment mounted on them.
E. Nothing, (including outlet, pull and junction boxes and fixtures), shall depend on electric conduits, raceways, or cables for support, except that threaded hub type fittings having a gross volume not in excess of 100 cubic inches may be supported from heavy wall conduit, where the conduit is securely supported from the structure within five inches of the fitting on two opposite sides.
F. Nothing shall rest on, or depend for support on, suspended ceilings media (tiles, lath, plaster, as well as splines, runners, bars and the like in the plane of the ceiling).
G. Provide required supports and hangers for conduit, equipment, etc., so that loading will not exceed allowable loadings of structure.

3.09 FASTENINGS

A. Fasten electric work to building structure in accordance with the best industry practice and the following.
B. Floor or pad mounted equipment shall not be held in place solely by its own dead weight. Include anchor fastening in all cases.
C. For items which are shown as being ceiling mounted at locations where fastening to the building construction element above is not possible, provide suitable auxiliary channel or angle iron bridging, tying to the building structural elements.

3.10 TESTING EQUIPMENT AND MATERIALS

A. The Contractor shall provide all testing instruments, equipment and all materials, connections, labor, etc., required to perform tests.
B. Test all circuits, fixtures, equipment



ELECTRICAL SITE PLAN

SCALE

1" = 20'-0"

KEYED NOTES (SITE PLAN):	
①	EXISTING ELECTRIC UTILITY XFMR (POLE-MOUNTED): POLE-MOUNTED TRANSFORMER. COORDINATE WITH POWER CO. FOR SPECIFIC REQUIREMENTS, SCOPE OF SUPPLY, AND FINAL CONNECTIONS.
②	SERVICE LATERAL (UG): COORDINATE WITH GENERAL CONTRACTOR FOR ROUTING CONDUIT TO SERVICE EQUIPMENT ON FREE-STANDING SERVICE RACK. REFER TO ELECTRICAL RISER DIAGRAM FOR ADDITIONAL INFORMATION.
③	FREE-STANDING SERVICE RACK: PROVIDE AN EQUIPMENT RACK FOR MOUNTING ELECTRIC UTILITY METER, MAIN DISCONNECT, AND TELCO D-MARC CABINET. REFER TO RISER DIAGRAM FOR EQUIPMENT RATINGS AND INTERCONNECTIONS. REFER TO SERVICE RACK DETAIL FOR CONSTRUCTION REQUIREMENTS.
④	TELCO SERVICE POINT: COORDINATE WITH TELCO PROVIDER FOR SERVICE REQUIREMENTS, EXACT ROUTING, AND LOCATION OF SERVICE POINT.
⑤	TELCO SERVICE CONDUITS: PROVIDE (2) 2" CONDUITS W/ MULE TAPE FROM TELCO SERVICE POINT AT RIGHT OF WAY TO D-MARC ONE EQUIPMENT CABINET. STUB-UP* AT SERVICE POINT AND PROVIDE TEMPORARY CAP.
⑥	REMOTE ATM KIOSK: KIOSK BUILDING FACTORY WIRED WITH "ATM" PANEL AND INTERNAL BRANCH CIRCUITS AND FIELD INSTALLED ATM. ROUTE POWER, DATA, AND SECURITY CONDUITS TO KIOSK BUILDING. REFER TO VENDOR DRAWINGS FOR ADDITIONAL INFORMATION.
⑦	ATM - WALK-UP: ROUTE CONDUIT AND WIRING FOR ATM POWER TO ELECTRICAL PANEL AND LV CONDUITS TO EQUIPMENT CABINET. REFER TO "WALK-UP ATM DETAIL" ON SHEET E03.01 FOR ADDITIONAL INFORMATION.
⑧	SITE POLE LIGHT: REFER TO LIGHTING SCHEDULE AND POLE BASE DETAIL FOR ADDITIONAL REQUIREMENTS.

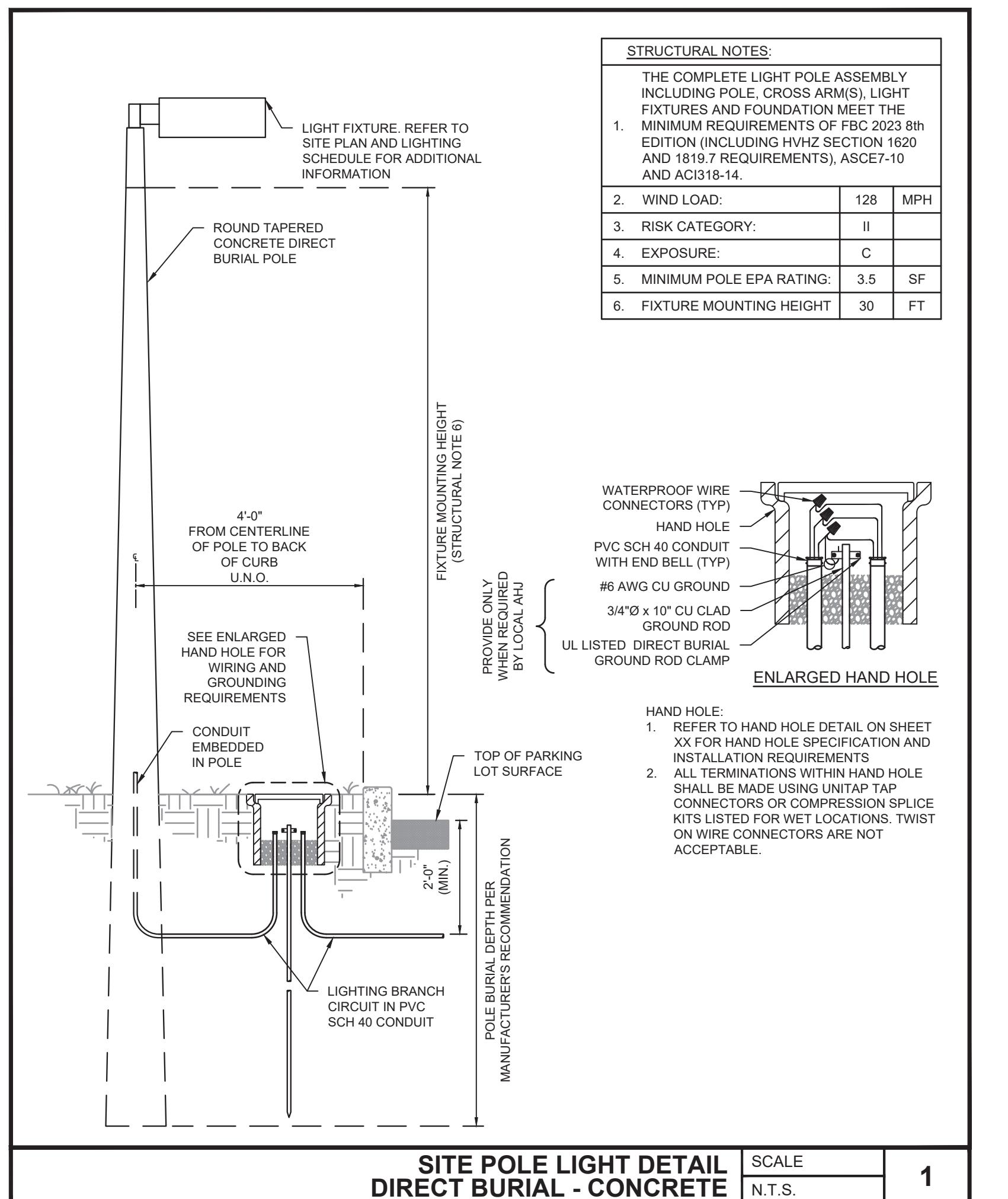
LIGHTING FIXTURE SCHEDULE (EXTERIOR)

LABEL	DESCRIPTION	LIGHT FIXTURE		MOUNTING	QTY. OF LAMPS	VOLTS	WATTS
		MFG.	MODEL NUMBER				
OB-4	POLE MOUNTED LED AREA LUMINAIRE, TYPE IV EXTRA LARGE, 50,000 LUMEN PACKAGE WITH CAST ALUMINUM HOUSING AND BRONZE FINISH. UL LISTED FOR WET LOCATIONS. MOUNT AT 180 DEGREES	CREE LIGHTING	OSQ-X-C-50L-40K7-UL-NM-BZ; OSQ-ML-C-DA-BZ	POLE MOUNT, SEE DRAWING FOR ORIENTATION, 30FT POLE HEIGHT	LED	120-277	300

GENERAL NOTES:

A. BOA HAS ENTERED INTO NATIONAL AGREEMENT WITH SHEALY ELECTRICAL WHOLESALERS, INC. (BORDER STATES ELECTRIC) AND WIEDENBACH BROWN, TO FURNISH LIGHTING FIXTURES. FOR INFORMATION REGARDING PRICING, PURCHASING, ORDERING, SHIPPING, AND DELIVERY COORDINATION CONTACT THE BORDER STATES BOA TEAM: BOA@BORDERSTATES.COM. NO SUBSTITUTIONS WILL BE ALLOWED, AND CONTRACTOR MUST SUBMIT 1 SET OF APPROVED FIXTURE CUT SHEETS FOR EACH PROJECT.

B. REFER TO ELECTRICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS WHICH MAY NOT NECESSARILY BE REFLECTED IN CATALOG NUMBER AND/OR DESCRIPTION IN THIS SCHEDULE



SITE POLE LIGHT DETAIL
DIRECT BURIAL - CONCRETE

SCALE

N.T.S.

1

SHEET NOTES:

1. COORDINATE ALL SITE CONDUIT ROUTINGS WITH GENERAL CONTRACTOR.
2. REFER TO CIVIL PLANS FOR FINAL LOCATION AND ELECTRICAL REQUIREMENTS OF ALL SIGNAGE, UTILITY CONNECTION POINTS, AND SITE UTILITIES/EQUIPMENT SUCH AS LIFT STATIONS, IRRIGATION PUMPS/CONTROLLERS, HOT BOXES, ETC.
3. ALL UNDERGROUND WIRING SHALL BE LOCATED WITHIN 12" OF BACK OF CURB IN ALL LOCATIONS.
4. BACKFILL, TAMP, AND RESURFACE ALL EXISTING PAVEMENT/ASPHALT AND RESTORE ALL EXISTING LANDSCAPING DISTURBED AS A RESULT OF TRENCHING AND/OR DIRECTIONAL BORING TO ITS ORIGINAL CONDITION.

LANDSCAPING REQUIREMENTS:

1. COORDINATE ALL LANDSCAPE TRIMMING/PRUNING REQUIREMENTS WITH LANDSCAPE CONTRACTOR AND PROPERTY OWNER.
2. ALL LANDSCAPE TRIMMING/PRUNING SHALL BE PERFORMED BY A LICENSED LANDSCAPE CONTRACTOR. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS AND APPROVALS FROM LOCAL MUNICIPALITY PRIOR TO START OF WORK.
3. VEGETATION DENSITY AND HEIGHT SHOULD BE MAINTAINED SO THAT IT PRECLUDES CONCEALMENT OF INDIVIDUALS. SINCE POTENTIAL CONCEALMENT DIFFERS GREATLY AMONG THE VARIOUS TYPES OF VEGETATION, THE FOLLOWING SHOULD BE USED NOT AS AN ABSOLUTE, BUT AS A GUIDELINE:
 - SHRUBBERY SHALL BE MAINTAINED AT OR AROUND TWENTY-FOUR (24) INCHES IF LOCATED WITHIN TEN (10) FEET OF DESIGNATED ASSOCIATE ENTRANCES/EXITS, AFTER-HOUR DEPOSITORYS OR ATMs.
 - SHRUBBERY, EXCEPT TREES, SHALL BE MAINTAINED AT OR AROUND THIRTY-SIX (36) INCHES IF LOCATED MORE THAN TEN (10) FEET BUT LESS THAN FIFTY (50) FEET FROM DESIGNATED ASSOCIATE ENTRANCES AND EXITS, AFTER-HOUR DEPOSITORYS OR ATMs.
 - MATURE TREES WITHIN FIFTY (50) FEET OF DESIGNATED ASSOCIATE ENTRANCES/EXITS, AFTER-HOUR DEPOSITORYS OR ATMs SHALL BE MAINTAINED SO THAT AT LEAST SIX (6) FEET OF SPACE EXISTS BETWEEN THE GROUND AND THE LOWEST LIMBS.
 - 4. TREES MUST BE TRIMMED AWAY FROM LIGHT FIXTURES TO ENSURE THAT THE LEAVES OR BRANCHES DO NOT MASK THE LIGHTING.

NEW WORK LEGEND:

DISCONNECT AND REMOVE/RELOCATE EXISTING DEVICES, FIXTURES, AND EQUIPMENT TO ACCOMMODATE THE PROPOSED DESIGN INTENT. REFER TO THE FULL SET OF DEMOLITION AND PROPOSED PLANS FROM ALL TRADES FOR ADDITIONAL NOTES AND REQUIREMENTS. ALL DEVICES, FIXTURES, AND EQUIPMENT SHOWN ON THE PROPOSED ELECTRICAL PLANS ARE NEW UNLESS NOTED OTHERWISE WITH THE BELOW DESIGNATIONS.

- (n) SUBSCRIPT DENOTES NEW.
- (er) SUBSCRIPT DENOTES EXISTING DEVICE/FIXTURE TO BE REPLACED IN SAME LOCATION AS EXISTING. DISCONNECT AND REMOVE EXISTING SITE POLE LIGHT. RECONNECT NEW DEVICE/FIXTURE TO NEW CIRCUIT. WIRING DEVICES SHALL BE REPLACED WITH NEW DEVICES AND COVER PLATES TO MATCH NEW WORK. LIGHT FIXTURES SHALL BE REPLACED WITH NEW FIXTURES PER LIGHTING FIXTURE SCHEDULE.
- DASHED LINES INDICATE EXISTING TO BE REMOVED, EXISTING TO BE RELOCATED, OR EXISTING TO BE REPLACED ON DEMOLITION PLAN.
- DARK LINES INDICATE NEW, EXISTING TO BE RELOCATED, OR EXISTING TO BE REPLACED ON PROPOSED PLAN.
- LIGHT LINES INDICATE EXISTING TO REMAIN.
- GRAY SHADDED AREAS INDICATE "NOT IN CONTRACT (N.I.C.)" AREAS. MAINTAIN CONTINUITY OF EXISTING SERVICES.



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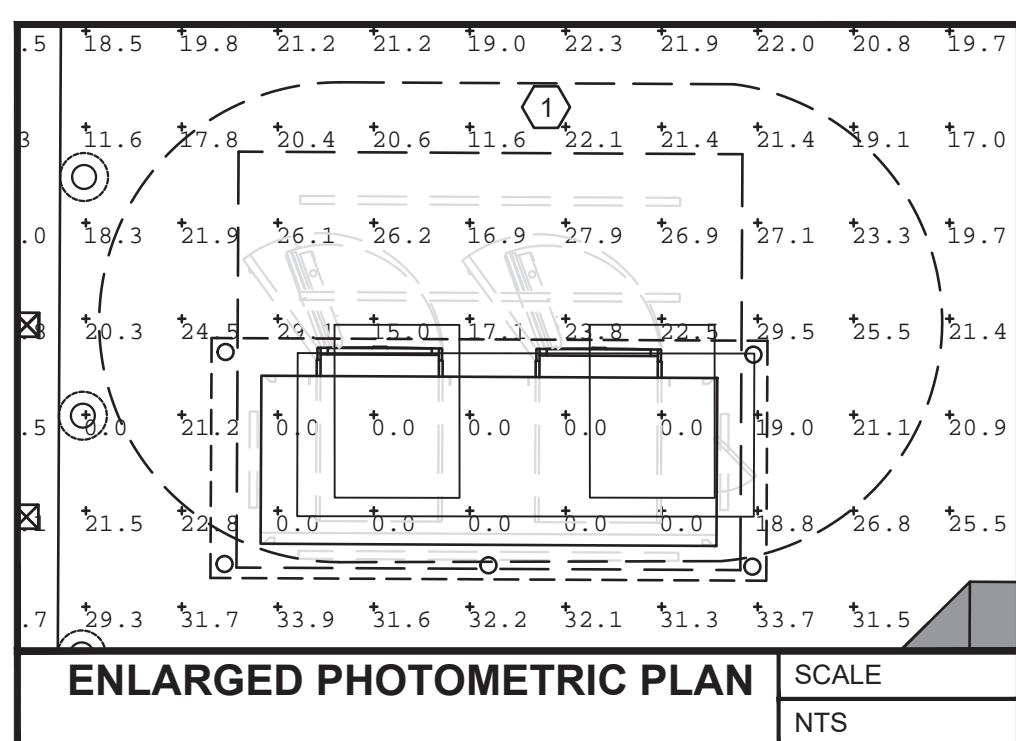
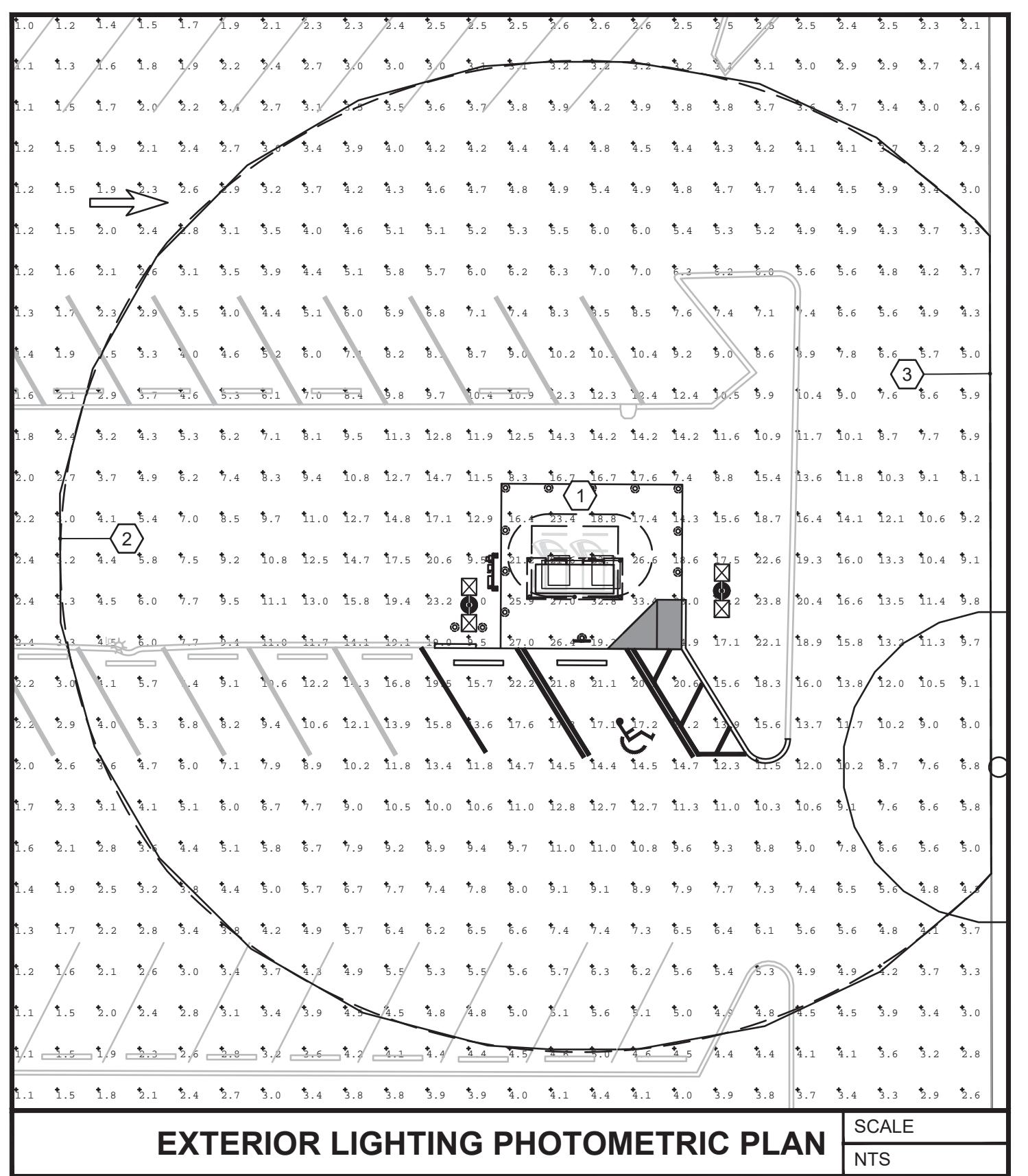


ANDREW MOHR, P.E.
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* STATE OF FLORIDA PROFESSIONAL ENGINEER
* NO. 73077
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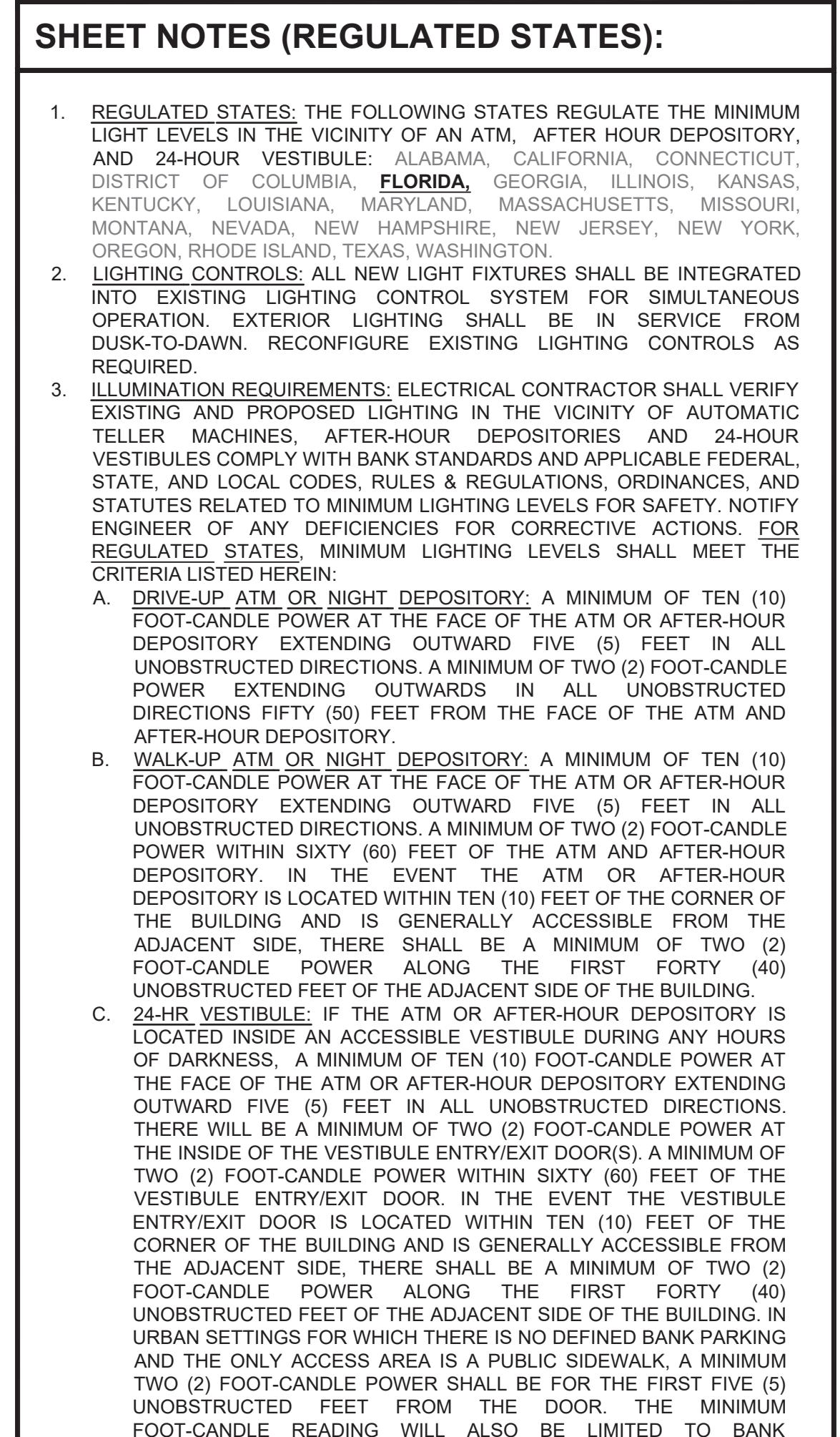
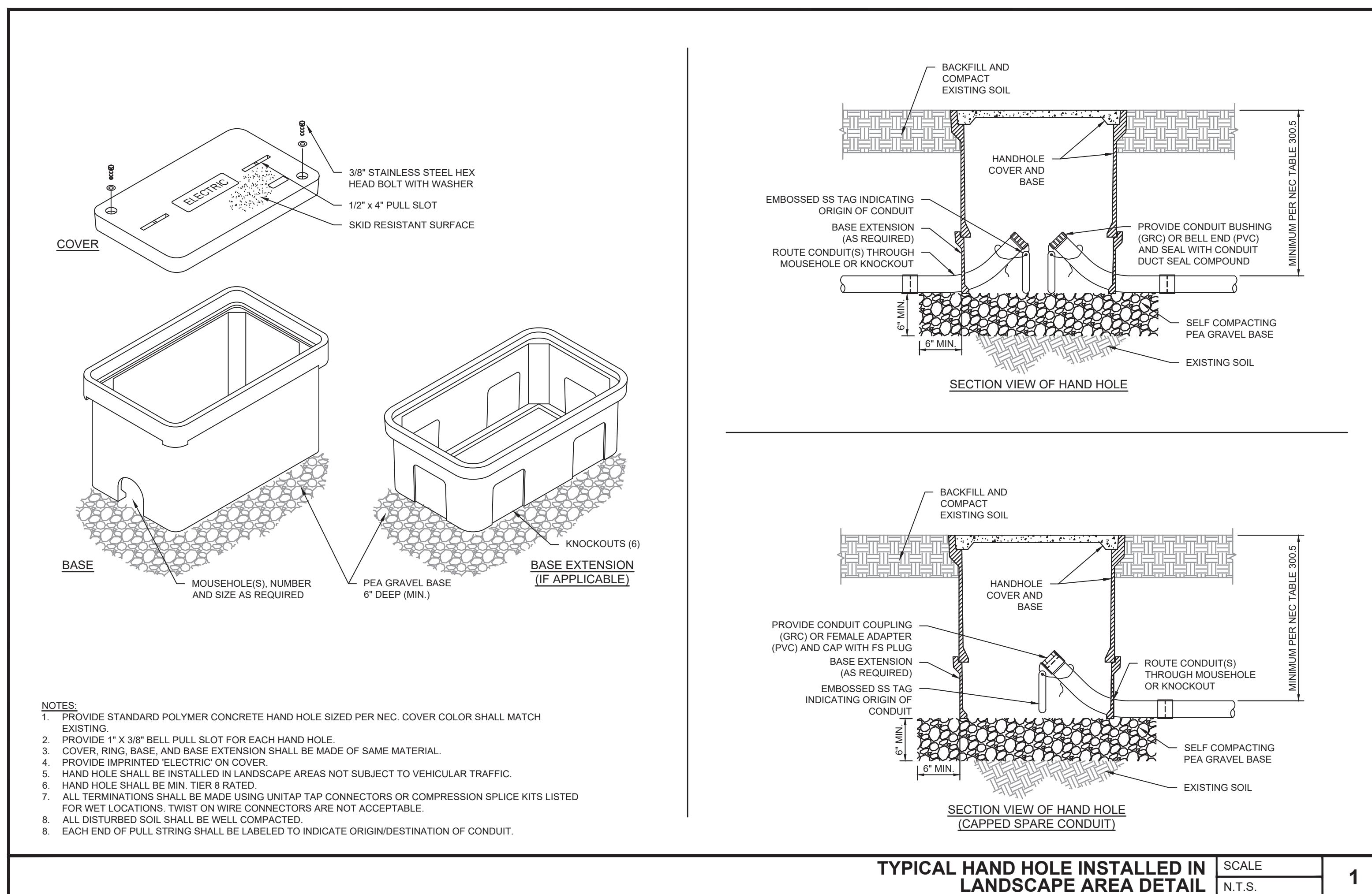
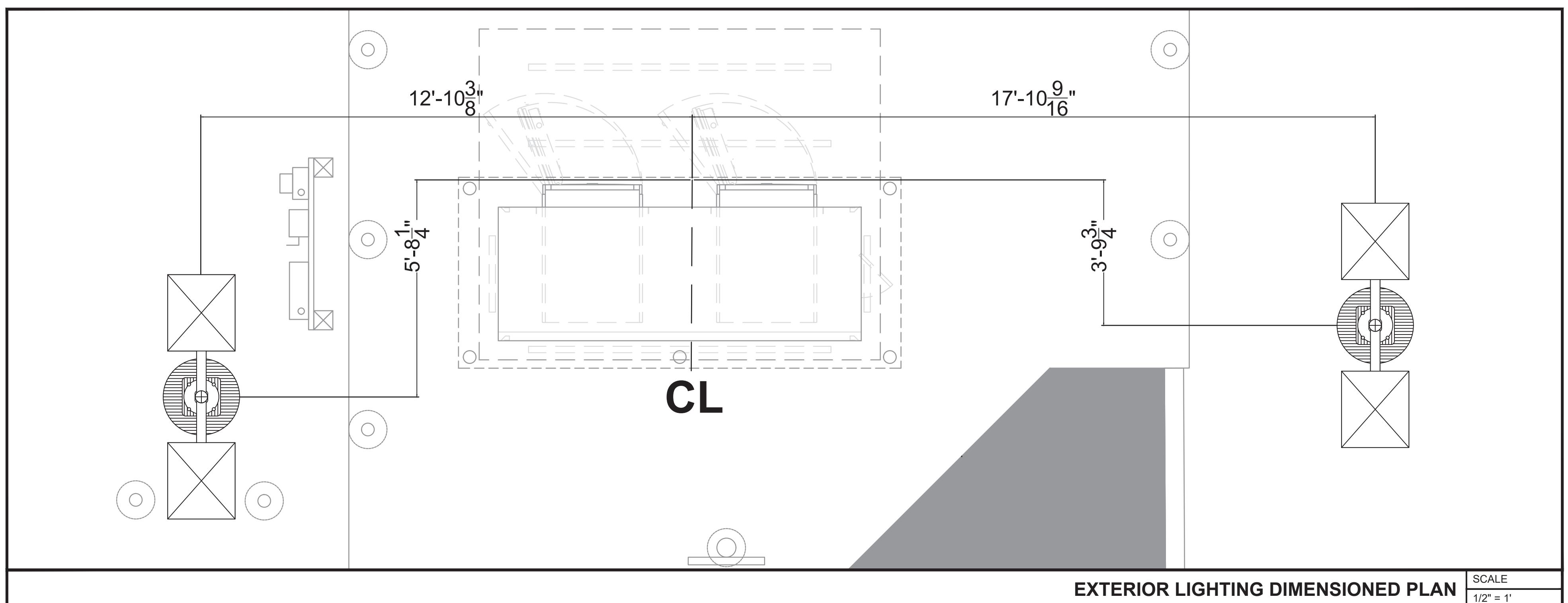
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ORLANDO, FL 32812
ELECTRICAL SITE
AND DIMENSIONED
PLAN

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Sheet
E01.01



CALCULATION SUMMARY AT 3FT AFF

Label	Calc Type	Units	Avg	Max	Min	Avg/Min	Max/Min
5 FT RADIUS	Illuminance	Fc	28.99	44.90	17.00	1.71	2.64
60 FT RADIUS	Illuminance	Fc	10.01	44.90	2.20	4.55	20.41



SHEET NOTES (REGULATED STATES):

1. **REGULATED STATES:** THE FOLLOWING STATES REGULATE THE MINIMUM LIGHT LEVELS IN THE VICINITY OF AN ATM, AFTER HOUR DEPOSITORY, AND 24-HOUR VESTIBULE: ALABAMA, CALIFORNIA, CONNECTICUT, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, ILLINOIS, KANSAS, KENTUCKY, LOUISIANA, MARYLAND, MASSACHUSETTS, MISSOURI, MONTANA, NEVADA, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, OREGON, RHODE ISLAND, TEXAS, WASHINGTON.
2. **LIGHTING CONTROLS:** ALL NEW LIGHT FIXTURES SHALL BE INTEGRATED INTO EXISTING LIGHTING CONTROL SYSTEM FOR SIMULTANEOUS OPERATION. EXTERIOR LIGHTING SHALL BE IN SERVICE FROM DUSK-TO-DAWN. RECONFIGURE EXISTING LIGHTING CONTROLS AS REQUIRED.
3. **ILLUMINATION REQUIREMENTS:** ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING AND PROPOSED LIGHTING IN THE VICINITY OF AUTOMATIC TELLER MACHINES, AFTER-HOUR DEPOSITORYS AND 24-HOUR VESTIBULES COMPLY WITH BANK STANDARDS AND APPLICABLE FEDERAL, STATE, AND LOCAL CODES, RULES & REGULATIONS, ORDINANCES, AND STATUTES RELATED TO MINIMUM LIGHTING LEVELS FOR SAFETY. NOTIFY ENGINEER OF ANY DEFICIENCIES FOR CORRECTIVE ACTIONS. FOR REGULATED STATES, MINIMUM LIGHTING LEVELS SHALL MEET THE CRITERIA LISTED HEREIN.
 - A. **DRIVE-UP ATM OR NIGHT DEPOSITORY:** A MINIMUM OF TEN (10) FOOT-CANDLE POWER AT THE FACE OF THE ATM OR AFTER-HOUR DEPOSITORY EXTENDING OUTWARD FIVE (5) FEET IN ALL UNOBSTRUCTED DIRECTIONS. A MINIMUM OF TWO (2) FOOT-CANDLE POWER EXTENDING OUTWARDS IN ALL UNOBSTRUCTED DIRECTIONS FIFTY (50) FEET FROM THE FACE OF THE ATM AND AFTER-HOUR DEPOSITORY.
 - B. **WALK-UP ATM OR NIGHT DEPOSITORY:** A MINIMUM OF TEN (10) FOOT-CANDLE POWER AT THE FACE OF THE ATM OR AFTER-HOUR DEPOSITORY EXTENDING OUTWARD FIVE (5) FEET IN ALL UNOBSTRUCTED DIRECTIONS. A MINIMUM OF TWO (2) FOOT-CANDLE POWER WITHIN SIXTY (60) FEET OF THE ATM AND AFTER-HOUR DEPOSITORY IN THE EVENT THE ATM OR AFTER-HOUR DEPOSITORY IS LOCATED WITHIN TEN (10) FEET OF THE CORNER OF THE BUILDING AND IS GENERALLY ACCESSIBLE FROM THE ADJACENT SIDE, THERE SHALL BE A MINIMUM OF TWO (2) FOOT-CANDLE POWER ALONG THE FIRST FORTY (40) UNOBSTRUCTED FEET OF THE ADJACENT SIDE OF THE BUILDING.
 - C. **24-HR VESTIBULE:** IF THE ATM OR AFTER-HOUR DEPOSITORY IS LOCATED INSIDE AN ACCESSIBLE VESTIBULE DURING ANY HOURS OF DARKNESS, A MINIMUM OF TEN (10) FOOT-CANDLE POWER AT THE FACE OF THE ATM OR AFTER-HOUR DEPOSITORY EXTENDING OUTWARD FIVE (5) FEET IN ALL UNOBSTRUCTED DIRECTIONS. THERE WILL BE A MINIMUM OF TWO (2) FOOT-CANDLE POWER AT THE INSIDE OF THE VESTIBULE ENTRY/EXIT DOORS. A MINIMUM OF TWO (2) FOOT-CANDLE POWER WITHIN SIXTY (60) FEET OF THE VESTIBULE ENTRY/EXIT DOOR. IN THE EVENT THE VESTIBULE ENTRY/EXIT DOOR IS LOCATED WITHIN TEN (10) FEET OF THE CORNER OF THE BUILDING AND IS GENERALLY ACCESSIBLE FROM THE ADJACENT SIDE, THERE SHALL BE A MINIMUM OF TWO (2) FOOT-CANDLE POWER ALONG THE FIRST FORTY (40) UNOBSTRUCTED FEET OF THE ADJACENT SIDE OF THE BUILDING. IN URBAN SETTINGS FOR WHICH THERE IS NO DEFINED BANK PARKING AND THE ONLY ACCESS AREA IS A PUBLIC SIDEWALK, A MINIMUM TWO (2) FOOT-CANDLE POWER SHALL BE FOR THE FIRST FIVE (5) UNOBSTRUCTED FEET FROM THE DOOR, THE MINIMUM FOOT-CANDLE READING WILL ALSO BE LIMITED TO BANK CONTROLLED PROPERTY LINES.
 - D. **ASSOCIATE ENTRANCE/EXIT:** A MINIMUM OF TWO (2) FOOT-CANDLE POWER IN THE IMMEDIATE AREA OF THE DESIGNATED ASSOCIATE ENTRANCE/EXIT TO THE FACILITY.
 - E. **MEASURING PLANE:** ALL LIGHTING MEASUREMENTS ARE TO BE TAKEN AT 36 INCHES ABOVE THE GROUND ON A HORIZONTAL PLANE, UNLESS OTHERWISE SPECIFIED BY STATE LAW OR REGULATION.
 - F. **OTHER STANDARDS:** THE MINIMUM STANDARD SHALL APPLY UNLESS: (I) A GREATER STANDARD IS REQUIRED BY AN APPLICABLE LAW FOR A PARTICULAR FACILITY LOCATION; OR (II) UNLESS THE MINIMUM STANDARD WOULD VIOLATE LIGHTING RESTRICTIONS IN AN APPLICABLE LAW FOR A PARTICULAR FACILITY LOCATION. IN EITHER INSTANCE, THE MINIMUM STANDARD WOULD YIELD TO SUCH APPLICABLE LAW.

4	ISSUE FOR CD REVIEW	09/22/2025
3	ISSUE FOR CD REVIEW	08/22/2025
2	ISSUE FOR REVIEW	03/14/2025
1	ISSUE FOR REVIEW	Date

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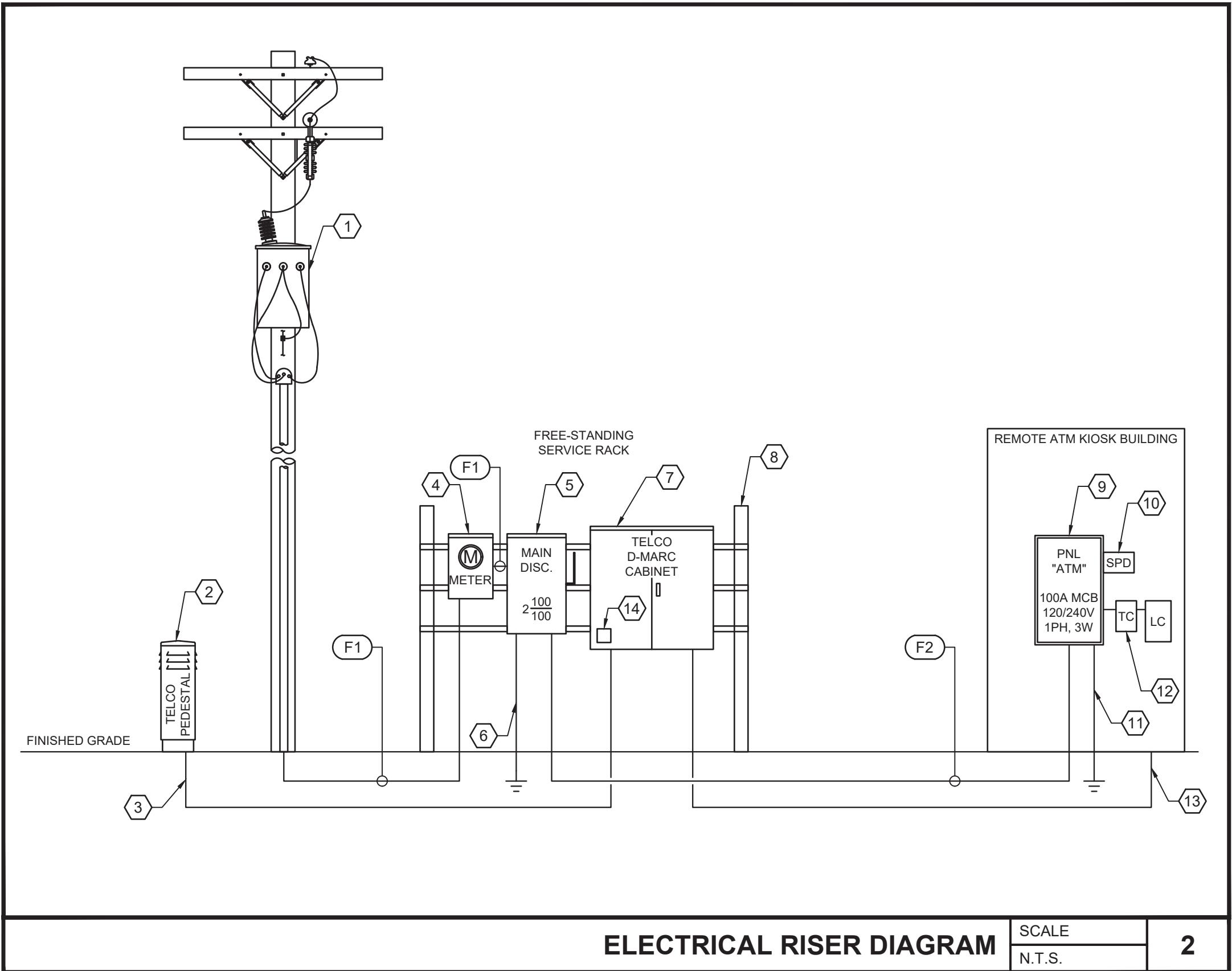
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ORLANDO, FL 32812
Sheet Title
ELECTRICAL SITE
PHOTOMETRICS AND
DIMENSIONED PLAN

Project No.
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CS
Reviewed By
AM
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E01.02



ELECTRICAL RISER DIAGRAM

SCALE	2
N.T.S.	

KEYED NOTES:

- F1 100A SERVICE: (3) #2/0 SERVICE ENTRANCE CONDUCTORS IN A 2" C.
- F2 100A FEEDER: (3) #1 & #8 GND IN A 2" C.
- 1 ELECTRIC UTILITY XFMR: PROPOSED UTILITY TRANSFORMER. COORDINATE WITH POWER CO. FOR SPECIFIC REQUIREMENTS, SCOPE OF SUPPLY, AND FINAL CONNECTIONS.
- 2 TELCO SERVICE POINT: COORDINATE WITH TELCO PROVIDER FOR SERVICE REQUIREMENTS, EXACT ROUTING, AND LOCATION OF SERVICE POINT.
- 3 TELCO SERVICE CONDUITS: ROUTE CONDUIT(S) FROM TELCO SERVICE POINT TO D-MARC CABINET ON FREE-STANDING SERVICE RACK. REFER TO ELECTRICAL SITE PLAN FOR ROUTING AND CONDUIT REQUIREMENTS.
- 4 ELECTRIC UTILITY METER: PROVIDE 600V, 125A, 1PH, 3W SELF-CONTAINED METER CAN AND SOCKET. COORDINATE WITH POWER COMPANY FOR APPROVED MODELS.
- 5 SERVICE DISCONNECT: PROVIDE 240V, 100A, 2-POLE SERVICE ENTRANCE RATED GENERAL DUTY FUSIBLE DISCONNECT WITH (2) 100A FUSES AND (2) SPARE 100A FUSES. FUSES SHALL BE SELECTED TO PROVIDE 100kA SERIES RATING FOR PANEL "ATM" IN KIOSK. DISCONNECT SHALL HAVE PROVISIONS FOR LOCKING IN THE "ON" POSITION. GC TO PROVIDE BANK OF AMERICA STANDARD LOCK, MASTER LOCK PROSERIES WEATHER TOUGH SHROUDED PADLOCK #6521.
- 6 SERVICE RACK GROUNDING SYSTEM: PROVIDE #4 AWG CU STRANDED, GREEN INSULATED GROUNDING ELECTRODE CONDUCTOR IN 3/4"C. SEE GROUNDING DETAIL FOR CONNECTIONS.
- 7 TELCO D-MARC CABINET: NEMA-3R TELEPHONE CABINET WITH PAD-LOCKABLE REMOVABLE HINGED DOOR(s), DOOR STOP KIT, PRINT POCKET, INTERSYSTEM GROUND BAR, AND 3/4" FIRE-RATED PLYWOOD BACKBOARD; HOFFMAN ATC SERIES OR EQUAL. COORDINATE SELECTION WITH OWNER AND TELCO PROVIDER.
- 8 FREE-STANDING OUTDOOR ELECTRICAL SERVICE RACK: PROVIDE CONCRETE POSTS, UNISTRUT, AND ALL NECESSARY HARDWARE, SUPPORTS, AND FASTENING MATERIAL FOR MOUNTING ELECTRICAL/TELCO EQUIPMENT ON RACK. SEE SERVICE RACK INSTALLATION DETAIL.
- 9 KIOSK ELECTRICAL PANEL: 100A, 120/240V, 1PH, 3W, 12CKT LOADCENTER W/ 2P/100A MAIN CIRCUIT BREAKER; EATON TYPE BR 10kAIC. LOADCENTER IS PROVIDED AND FACTORY INSTALLED BY KIOSK MANUFACTURER. REFER TO PANEL SCHEDULE AND VENDOR DRAWINGS FOR ADDITIONAL INFORMATION. SERIES RATE WITH UPSTREAM FUSIBLE DISCONNECT. MODIFY CIRCUITS AS REQUIRED TO MATCH PANEL SCHEDULE.
- 10 SURGE PROTECTION: PROVIDE SURGE PROTECTION DEVICE. REFER TO SPD PANELBOARD INSTALLATION DETAIL FOR ADDITIONAL INFORMATION.
- 11 ATM KIOSK (SEPARATE STRUCTURE) GROUNDING SYSTEM: PROVIDE #4 AWG CU STRANDED, GREEN INSULATED GROUNDING ELECTRODE CONDUCTOR IN 3/4"C. SEE GROUNDING DETAIL FOR CONNECTIONS.
- 12 LIGHTING CONTROLS: TIME-CLOCK PROVIDED AND FACTORY INSTALLED BY KIOSK MANUFACTURER. PROGRAM TIME-CLOCK FOR DUSK-TO-DAWN OPERATION OF ALL SITE LIGHTING.
- 13 ATM DATA CONDUITS: REFER TO "REMOTE ATM KIOSK FIELD CONDUIT ROUGH-IN REQUIREMENTS" DETAIL FOR LOW VOLTAGE CONDUITS FROM TELCO D-MARC CABINET TO ATM KIOSK.
- 14 TELCO D-MARC QUAD: PROVIDE 20A, 125V QUAD IG, WR/GFCI RECEPTACLE AND INSTALL ON PLYWOOD BACKBOARD WITHIN TELCO D-MARC CABINET, HUBBELL PART NO. GFTWRST20WIG OR EQUAL. CONNECT TO CIRCUIT ATM-7.

1-PHASE VOLTAGE DROP CALCULATION

$$VD_{LL} = 2 \times \frac{\Omega/L}{|sets|} \times L \times A$$

240	V_{LL} = System Voltage (line-to-line) (V)
4.5	VD_{LL} = Voltage drop (line-to-line) (ΔV)
1	sets = Number of Parallel Sets
0.100	Ω/L = Effective Impedance (Ze) per unit of length (kft)
450	L = One way length of circuit (ft)
50	A = Load Current (A)
#2/0, CU	Conductor size (AWG or kcmil)
PVC	Conduit type

1.) Effective impedance based on values from NEC Ch. 9, Table 9.

%VD = Percent voltage drop (%) **1.88%**

Operating Voltage at the end of the cable run	235.50	V
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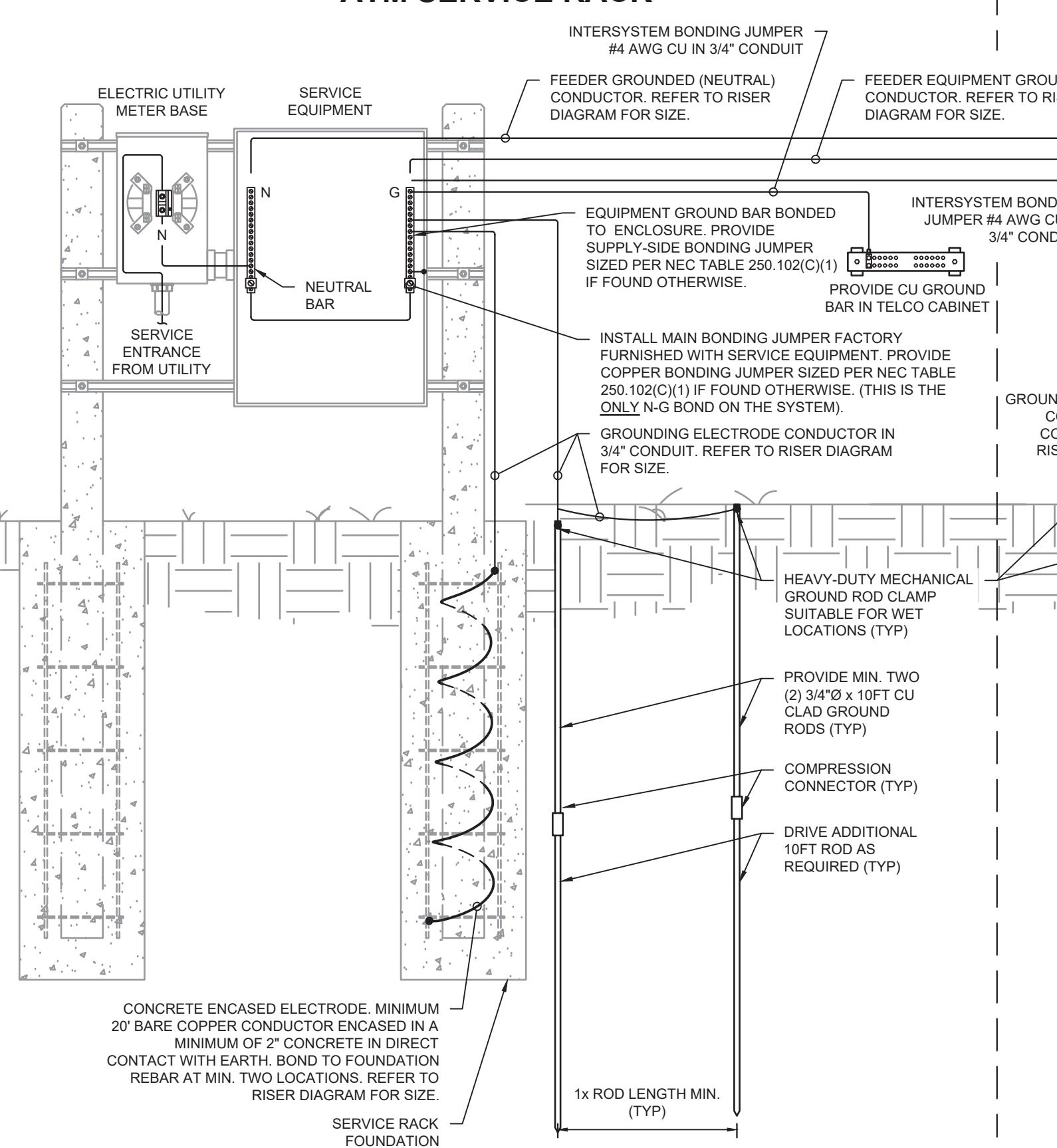
SERVICE VOLTAGE DROP CALCULATION FROM UTILITY XFRM TO ATM PANEL

ELBOARD: ATM		FAULT CURRENT: AIC RATING: 100000 SERIES RATED												PROVIDE EQUIPMENT GROUND BUS PROVIDE ISOLATED GROUND BUS					
PS: 100A		E/TYPE: 100A MCB																	
E/TYPE: 100A MCB		SERVES: ATM KIOSK																	
PHASE: 240/120V, 1PH, 3W		MOUNTING: SURFACE												ENCLOSURE: NEMA 3R					
N: 1		LOCATION: ATM KIOSK																	

PANELBOARD "ATM" PANEL SCHEDULE

PANELBOARD ATM PANEL SCHEDULE

ATM SERVICE RACK



ATM KIOSK (TYPICAL)

PANELBOARD NOTES:

1. PROVIDE PANELBOARD AS SPECIFIED ON ELECTRICAL PANEL SCHEDULES AND RISER DIAGRAM.
2. CONTRACTOR SHALL ENSURE ALL NEC WORKING SPACE AND DEDICATED EQUIPMENT SPACE CLEARANCES ARE PROVIDED PER NEC 110. IF FIELD CONDITIONS DO NOT ALLOW FOR ADEQUATE CLEARANCE AT THE LOCATION SHOWN ON THE PLANS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATE LOCATION FOR REVIEW AND APPROVAL BY ENGINEER PRIOR TO ROUGH-IN OF PANEL.
3. FIELD COORDINATE INSTALLATION WITH OTHER TRADES TO ENSURE NO FOREIGN SYSTEMS ARE LOCATED WITHIN THE DEDICATED EQUIPMENT SPACE OF THE ELECTRICAL EQUIPMENT.
4. ALL BUSING SHALL BE COPPER.
5. BOLT-ON BREAKERS ONLY.
6. PROVIDE DOOR-IN-DOOR TRIM.
7. PROVIDE TYPEWRITTEN CIRCUIT DIRECTORY CARD.
8. ALL PANELBOARDS SHALL BE SUPPLIED FROM THE SAME MANUFACTURER.
9. IN EXISTING INSTALLATIONS, NEW CIRCUIT BREAKERS SHALL MATCH EXISTING IN TYPE AND AIC RATING, UNO.
10. LOAD TYPES IN DESCRIPTION AS FOLLOWS:

BOLD TEXT	NEW LOAD, WIRE, CONDUIT, CIRCUIT BREAKER (AS APPLICABLE)
GRAY TEXT	EXISTING LOAD, WIRE, CONDUIT, CIRCUIT BREAKER (AS APPLICABLE) TO REMAIN
(OLD X#)	RELOCATED CIRCUIT FROM OLD PANEL 'X', CIRCUIT '#'
CLG	COOLING
EWH	ELECTRIC WATER HEATER
HTG	HEATING
KIT	KITCHEN
LTG	LIGHTING
MISC	MISCELLANEOUS
MTR	MOTOR
REC	RECEPTACLE
REF	REFRIGERATION
11. CIRCUIT BREAKER TYPE ABBREVIATIONS ARE AS FOLLOWS:

AFCI	ARC-FAULT CIRCUIT INTERRUPTER
F/RED	RED MARKING, L/ON HARDWARE, & "FIRE ALARM CIRCUIT"
GFCI	GROUND-FAULT CIRCUIT INTERRUPTER
GFPE	30 mA EQUIPMENT GROUND FAULT PROTECTION
HT2	HANDLE TIE FOR SHARED NEUTRAL CIRCUIT (2 POLE)
HT3	HANDLE TIE FOR SHARED NEUTRAL CIRCUIT (3 POLE)
L/ON	LOCKABLE "LOCK ON" HANDLE HARDWARE
L/OFF	LOCKABLE "LOCK OFF" HANDLE HARDWARE
TAN	TANDEM
SHNT	SHUNT TRIP
SWD	SWITCH DUTY RATED
SWN	SWITCHED NEUTRAL
12. CIRCUIT BREAKER FURNISHED AS FOLLOWS:

ETR	EXISTING TO REMAIN
FW	FACTORY WIRED
NEW	NEW TO MATCH EXISTING
REM	REMOVE EXISTING AND PROVIDE NEW
13. LOAD FUNCTION AS FOLLOWS:

CONT	CIRCUIT CONTROLLED BY CONTACTOR
HOOD	CIRCUIT CONTROLLED BY HOOD FIRE SUPPRESSION SYSTEM
T/C	CIRCUIT CONTROLLED BY TIME CLOCK
PHO	CIRCUIT CONTROLLED BY PHOTOCELL
LCP	CIRCUIT CONTROLLED BY LIGHTING CONTROL PANEL
L/C	CIRCUIT CONTROLLED BY LIGHTING CONTACTOR

ANDREW MOHR, P.E.
FL REG. NO. 73077

ANDREW MOHR
LICENSE
No 73077
★ ★
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Digitally signed by Andrew Mohr
DN: c=US, st=Florida, l=Tampa,
o=Infinity Engineering Group
LLC, cn=Andrew Mohr,
email=andrew.mohr@iegroup.net
Date: 2025.11.20 09:16:48 -06'00
Adobe Acrobat DC version:
2015.006.30527

DATE

CONWAY AND HOFFNER - RATM

5126 S CONWAY ROAD
ORLANDO, FL 32812

**ELECTRICAL RISER
DIAGRAM AND PANEL
SCHEDULE**

Project Name and Address
CONWAY A
5126
OR
ELE
DIAG

Project No. 10-1523.00	Sheet
Drawn By CS	E02.01
Reviewed By AM	

GENERAL NOTES:

- All work shall conform to the minimum standards of the International Building Code, 2012 edition and any other regulatory agencies that have authority over any portion of the work.
- The structure has been designed to the criteria noted in the "Structural Load Limitations" table on this sheet. If the local building department criteria exceeds that shown, a licensed engineer shall be retained to redesign the structure as required.
- All omissions or conflicts between the various elements of the working drawings and/or specifications shall be brought to the attention of the Architect/Engineer before proceeding with any work so involved.
- Contractor must check all dimensions, framing conditions, and site conditions before starting work.
- Architect/Engineer shall be notified immediately of any discrepancies or possible deficiencies.
- A detail, section, elevation, etc. reference may be indicated only once on a structural construction drawing, but is to be like and similar construction conditions.
- No modification shall be made to any structural member without the approval of the Architect/Engineer. This also applies to any openings for plumbing, electrical and mechanical trades.
- Nothing contained within the contract documents shall relieve the general contractor and the subcontractors of:
 - the responsibility to determine any aspect of how the work is to be performed.
 - dealing with matters of safety of personnel
 - safety of property.
 - superintending of the work.
- The contractor shall be responsible for all excavation procedures and protection of adjacent property, structures, utilities, etc. in accordance with all national, state and local ordinances.
- Special inspection, in accordance with the International Building Code or as required by the construction documents, shall be performed by a qualified inspector from an approved agency. Reports shall be issued to the Architect/Engineer and the Building Department at the completion of each type of work stating whether the work was performed in conformance with the approved plans and specifications. See inspection schedules for specific requirements.

FOUNDATIONS:

- Minimum allowable soils pressure = 1500 psf

STRUCTURAL STEEL:

- All fabrication and erection shall conform to the latest edition of the AISC Manual of Steel Construction.
- A Certified Welder approved by the local Building Department in accordance with AWS, Structural Welding Code D1.1, shall perform all welding.
- Square and rectangular hollow structural sections (HSS) shall be ASTM A500 Grade B (46 ksi).
- Miscellaneous structural steel such as plates, angles and channels shall conform to ASTM A36.
- All welding electrodes shall conform to ASTM E70XX. The minimum fillet weld size shall be 3/16".
- Bolted connections are to be of high-strength ASTM F1554, Grade (36, 55, 105). A minimum of two bolts is required for all beam connections. Minimum required connection capacity is 8 kips unless noted otherwise.
- All structural steel shall be shop coated with an approved rust inhibitor primer.
- No holes other than those specifically detailed shall be allowed through structural steel members. No cutting or burning of structural steel shall be permitted without written consent from the Architect/Engineer.
- Post installed anchor bolts shall be Simpson Titen HD heavy duty screw anchors.

ALUMINUM:

- Aluminum shall be 3003-H14 Alloy.
- F_u = 19 ksi, F_{ly} = 16 ksi, F_{cy} = 13 ksi, F_{su} = 12 ksi, F_{sy} = 9 ksi, F_c = 10,100 ksi

CONCRETE:

- Minimum f'c = 3000 psi
- Maximum aggregate size = 1"
- Slump limits 3"-5"
- Cement Type I/II
- Air content 5%-8% with air entrainment admixture required at all sites except those that do not have temperatures below freezing at any point of the year.
- Prepare concrete mix designs using either laboratory trial batch or field experience methods as specified in ACI 301. If trial batch method is used, use an independent testing facility acceptable to Engineer for Preparing and reporting of proposed mix designs.
- Portland Cement shall conform to ASTM C150, Type III. Aggregate for lightweight concrete shall conform to all requirements and test of ASTM C330. Concrete mixing operations, etc., shall conform to ASTM C94 and ACI 304.
- Water-reducing admixtures shall conform to ASTM C494, and be used in strict accordance with the manufacturer's recommendations. An air-entraining agent conforming to the ASTM C260 shall be used in all concrete mixes for work which is exposed to weather.
- Pipes may pass through structural concrete in sleeves, but shall not be embedded therein.
- All concrete shall be consolidated by vibration, spading, rodding, or forking so that concrete is thoroughly worked around the reinforcement and embedded items and into corners of forms without segregation of materials.

REINFORCING STEEL:

- Reinforcing steel shall conform to ASTM A615, Grade 60.
- All reinforcing bar bends shall be made cold with a bar bender at the ACI 318 specified minimum radius.
- Detail bars in accordance with the latest editions of the ACI Detailing Manual and ACI Building Code Requirements for Structural Concrete.
- Provide all accessories necessary to support reinforcing at positions shown on the plan.

SPECIAL INSPECTION STATEMENT

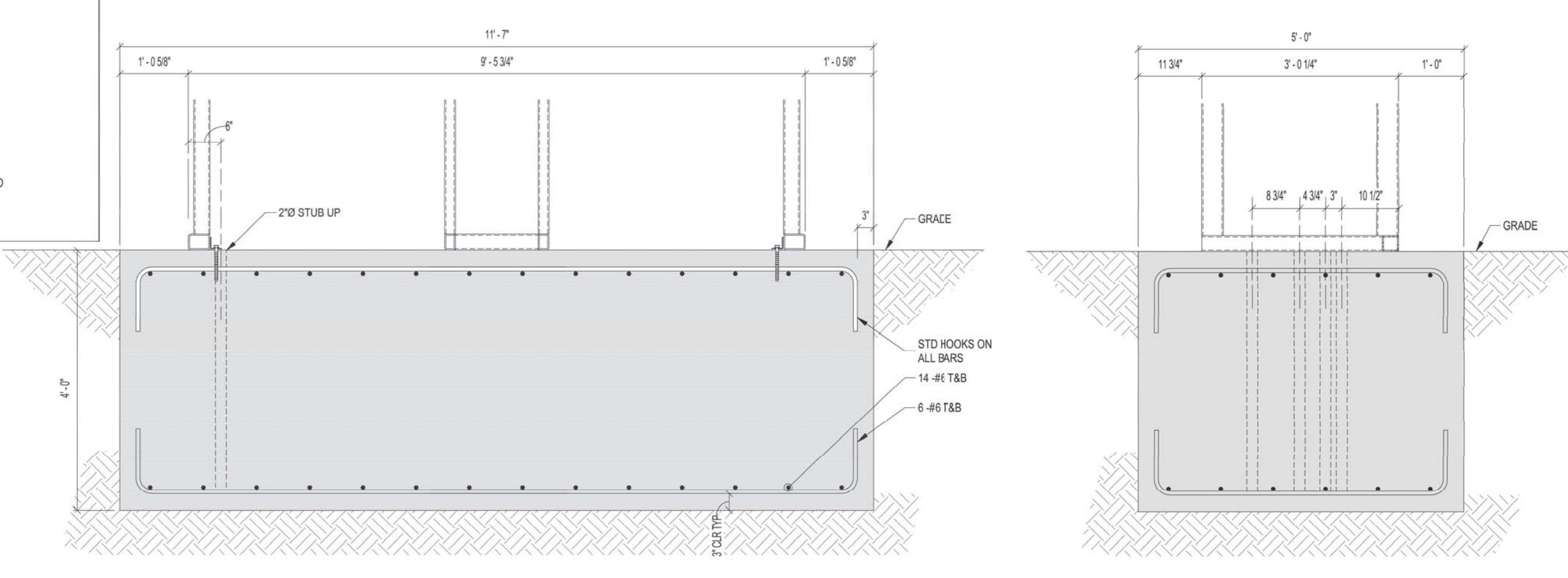
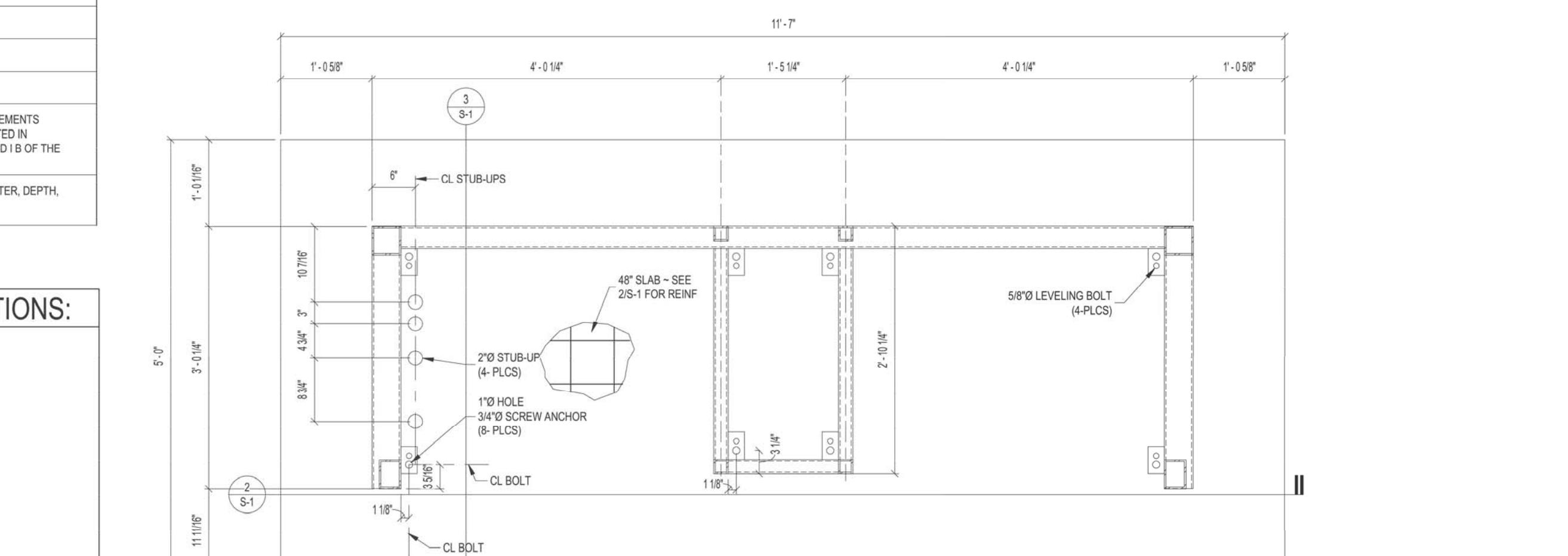
REQUIRED SPECIAL INSPECTIONS	
MATERIAL	IBC TABLE
STEEL	TABLE 1704.3
CONCRETE	TABLE 1704.4
SOILS	TABLE 1704.7
ALUMINUM	ALL WELDING OPERATIONS OF ALUMINUM ELEMENTS SHALL BE PERIODICALLY SPECIALLY INSPECTED IN ACCORDANCE WITH AA-ASM-35, PARTS 1A AND 1B OF THE ALUMINUM DESIGN MANUAL AND AWS D1.2
POST INSTALLED ANCHORS	PERIODIC INSPECTION REQUIRED FOR DIAMETER, DEPTH, CLEANLINESS AND INSTALLATION

STRUCTURAL LOAD LIMITATIONS:

FLOOR LIVE LOAD:
A. 120psf
ROOF LIVE LOAD:
A. 40psf
ROOF SNOW LOAD:
A. Pg = 50psf
B. D = 1.2
C. Ce = 1.2
D. Is = 1.0
E. Ct = 1.0
WIND LOAD:
A. 180 MPH
B. II
C. 0.6
D. G0g = 0.18
E. Pv = 8.3psf
F. Pr = 170psf
G. THIS BUILDING IS NOT DESIGNED FOR PLACEMENT ON THE UPPER HALF OF A HILL OR ESCARPMENT EXCEEDING 15 FEET IN HEIGHT

SEISMIC LOAD:
A. I
B. II
C. I.K
D. C
E. SIMPLIFIED
F. S4
G. S41 = 0.19
H. V = 1000ft
I.R = 3
FLOOR LOAD:
THE FACTORY BUILD PORTION OF THIS BUILDING IS NOT DESIGNED TO BE PLACED BELOW A BASE FLOOD ELEVATION WHEN LOCATED IN A FLOOD HAZARD AREA

SEISMIC USE GROUP:
A. I
B. II
C. SITE CLASS
D. C
E. SEISMIC FORCE RESISTING SYSTEM
F. SEISMIC DESIGN CATEGORY
G. ANALYSIS PROCEDURE
H. SPECTRAL RESPONSE COEFFICIENT
I. DESIGN BASE SHEAR
J. RESPONSE MODIFICATION COEFFICIENT

**Program/Customer:****BANK OF AMERICA**

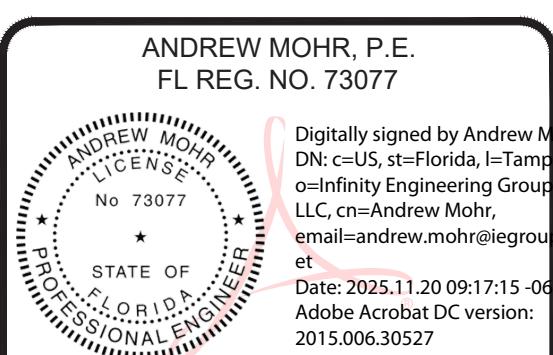
Interior/Exterior:	EXTERIOR
Sign Type:	EXTERIOR KIOSK
Engineer:	S. SWABE
Windspeed:	115 MPH / IBC 2018
Illumination:	ILLUMINATED
Voltage:	120/277
SCALE:	AS NOTED



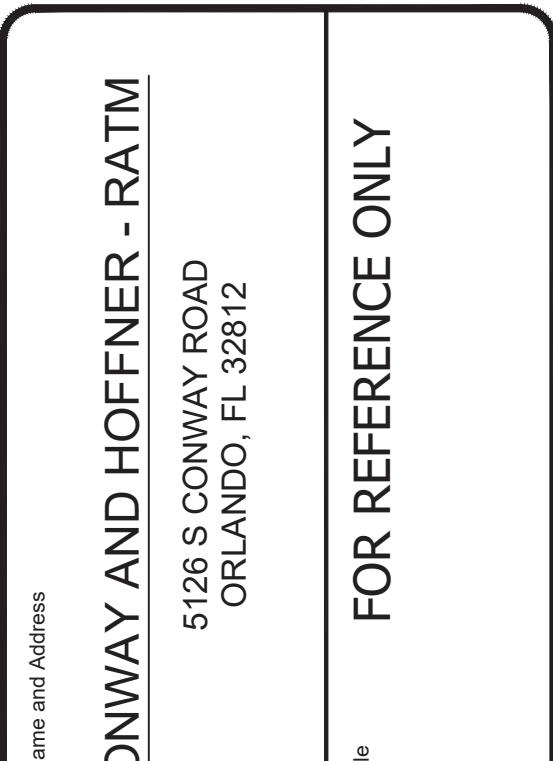
DESCRIPTION: DBL D430V KIOSK EXTND.CANOPY NG 3.0
Part Number: FRAME-R-EXT-WU-DBL-KIO-D430V-EC
ANSI SHEET DRAWING: COBLC032422

1 SHEET 34 OF 41

REVISIONS	REV. ECR NUMBER	REV CHANGE	DATE	DRAFTER
	A 97617	INITIAL RELEASE	10.13.2025	BF
	B 97617	UPDATED TITLEBLOCK PN# & DESCRIPTION	10.16.2025	BF



ANDREW MOHR, P.E.
FL REG. NO. 73077
Digitally signed by Andrew Mohr, PE on 09/17/2015, using Infra-Red Engineering Group LLC cert. (Andrew Mohr, PE), email: andrew.mohr@iegrou.net, Date: 2025.1.20 09:17:15 -05'00, Adobe Acrobat DC version: 2015.006.30527
This item has been electronically signed and sealed by Andrew Mohr, PE on the date and/or time stamp shown using a digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified by a 3rd Party Certificate Authority on any electronic copy. FAC 61G15-23.004



Project No. 10-1523.00
Drawn By CS
Reviewed By AM
Sheet E04.01
Date 03/14/2025
10/17/2025
09/22/2025
08/22/2025
03/14/2025
Date