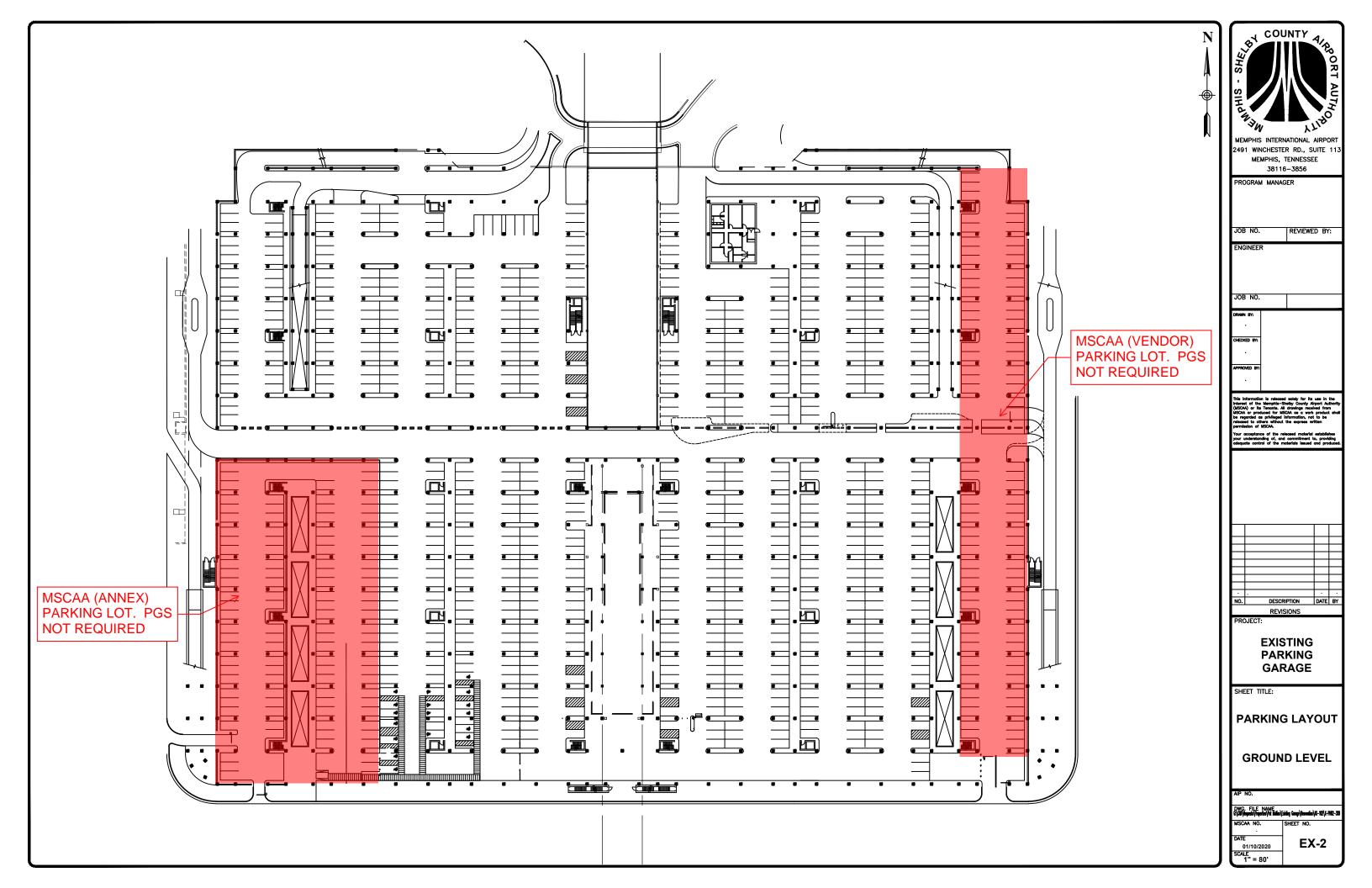
SHORT/LONG TERM GARAGE

ANNEX & VENDOR LOTS



ECONOMY GARAGE

ROOF LIGHTING PLANS & LIGHT POLE SUBMITTALS

MEMPHIS-SHELBY COUNTY AIRPORT AUTHORITY PARKING GARAGE EXPANSION & IMPROVEMENTS MEMPHIS TENNESSEE MSCAA PROJECT NO. 9905 **ISSUED FOR BID** October 12, 2009





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505 Tennessee St, Suite 101 Memphis, Tennessee 38103 Telephone: 901.261.1505 Fax: 901.261.1515 E-Mail: Info@selftucker.com

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CIVIL **ENGINEER**

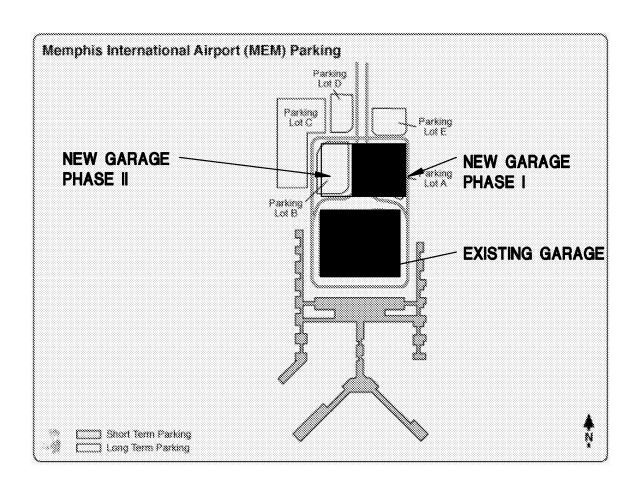


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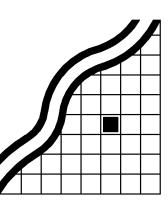


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LANDSCAPE ARCHITECTS



Ritchie Smith Associates

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DRAMING INDEX SHEET No.	NEW GARAGE	
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[EQT-201	BREAK ROOM BUILDING FLOOR PLANS-POWER/AUX. SYSTEMS
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0 IN 9	GIA	EQT-601	QTA ELECTRICAL PANEL SCHEDULES
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HQT-502 HQT-503	QTA FUELING UST DETAILS QTA FUELING UST CONCRETE PAD DETAILS	<u> </u>	
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HQT-607	QTA EQUIPMENT SCHEDULE		
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AQT-302	QTA BUILDING SECTIONS-BREAK ROOM BUILDING	FPO-101	PARKING OFFICE FLOOR PLAN-FIRE PROTECTION
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AQT-501 AQT-502	QTA PLAN DETAILS BREAK ROOM BUILDING QTA SECTION DETAILS BREAK ROOM BUILDING	┼─┤ ┝────	MECHANICAL
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AQT-504 AQT-601	QTA SECTION DETAILS WASH BUILDING QTA DOOR SCHEDULE, ROOM SCHEDULE, DOOR DETAILS	<u>+</u>	
AQT-602	QTA PARTITION TYPES, TOILET ACCESS, DOOR DETAILS, STANDARD DTLS	EPO-101	PARKING OFFICE FLOOR PLANS-ELECTRICAL

ARCHITECTURAL	
PARKING OFFICE FLOOR PLAN AND DIMENSION PLAN	
PARKING OFFICE FLOOR REFLECTED CEILING PLAN	
PARKING OFFICE EXTERIOR ELEVATIONS	
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PARKING OFFICE BUILDING & ENLARGED SECTIONS	
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ELECTRICAL GENERAL NOTES

These notes pertain to the electrical drawings and specifications except those prepared by Blymyer Engineers, Inc., unless specifically noted otherwise.

GENERAL ELECTRICAL NOTES

Conduit Penetrations of Exterior Walls:

• Where conduits penetrate exterior building walls below grade, wall shall be sleeved or core-drilled. All such conduits shall transition to rigid steel a minimum 24" from building, shall approach wall at a perpendicular angle, and shall be provided with link seals.

Structured Cabling System Work shall include:

- All cabling and devices for telephone and data in Parking Office and Break Room Building, plus for all security cameras, wireless access points, booths, gates, ticket spitters, and code blue telephones.
- All patch panels, LIVs and all associated racks and wire required management materials.
- Low voltage, DC power supplies for camera power, and repeater devices for Cat 6 cabling runs longer than 300 feet.
- Backbone cabling from existing terminal building to Parking Office Computer Room, and from Computer Room to Telecom Room in Parking Office, to wall-mounted racks in stacked electrical rooms at both end of squeelix, and to rack in Break Room Building.
- Termination and testing of all cabling provided in this work.
- All materials normally required for fully functional system, whether specifically identified in these documents or not (except Owner-provided equipment).

Owner-Provided Equipment includes: • Servers and server racks

- Switches and routers
- Patch cables
- End-use equipment (computers, telephones, etc.)

All horizontal copper cabling shall be Cat 6, plenum rated. Where used for data, cable shall be blue; where used for telephone, cable shall be gray; where used for security cameras, cable shall be white.

Security cameras, though specified herein, shall be Owner-furnished, contractor-installed.

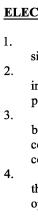
Fire Alarm

- New Garage: There is no fire alarm system specified for this project (except as indicated in Blymyer Engineers, Inc. documents). Smoke and/or heat detectors are required for Computer Room Clean Agent fire suppression system, HVAC unit shut-down, and elevator recall functions, and are individually addressed on documents for those systems, with responsible parties indicated.
- Existing Coverage: The existing garage fire alarm system components shall remain in use. The existing transformer shall be relocated????????

Demolition: Unless specifically noted otherwise, demolished electrical items are to be disposed of by the contractor.

ELECTRICAL PHASING NOTES

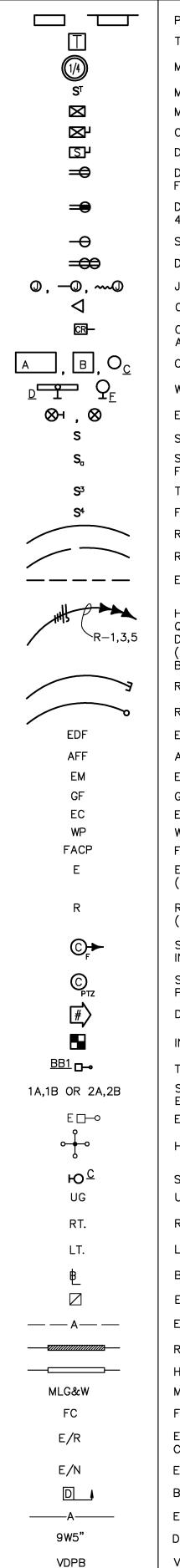
- 1. New electrical substation #8 must be installed, connected and cully functional before existing substation #8 can be demolished. Some amount of simultaneous use of these substations will be required as feeders previously served by existing substation #8 are transferred to new distribution points.
- 2. Temporary power must be provided by contractor to maintain operation of the sump pumps and lighting in the rapid transit tunnel, and the lighting in the (3) basement-level tunnels for the garage into the terminal building, during the time after demolition of existing substation #8 and before permanent power is restored to the rapid transit tunnel panels through the Pedestrian Plaza.
- 3. Existing primary power is supplied to substation #11 (in Cargo Building 2) and substation #12 (at north side of Cargo Building 4) through a duct bank which crosses the new garage site from the Inbound Road area. This primary cabling must remain in place, operational and protected while construction of the new substation #8 work progresses. Part of the duct bank in which this cable is routed may have to be exposed for the construction of new substation #8 to take place. All necessary steps shall be taken to protect this duct bank until the new substation #8 is in service.
- 4. Before demolition of the existing Exit Toll Plaza can take place, the existing power and communications cabling run overhead at the north end of the existing garage basement must be intercepted and re-routed underground, per Sheets ED-101 and EX-101. Also, the new toll plaza must be operational, with power supplied from the new garage and communications supplied from the existing parking office.



ELECTRICAL PHASING NOTES

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- Existing primary power is supplied to substation #11 (in Cargo Building 2) and substation #12 (at north side of Cargo Building 4) through a duct bank which crosses the new garage site from the Inbound Road area. This primary cabling must remain in place, operational and protected while construction of the new substation #8 work progresses. Part of the duct bank in which this cable is routed may have to be exposed for the construction of new substation #8 to take place. All necessary steps shall be taken to protect this duct bank until the new substation #8 is in service. 4. Before demolition of the existing Exit Toll Plaza can take place, the existing power and communications cabling run overhead at the north end of the existing garage basement must be intercepted and re-routed underground, per Sheets ED-101 and EX-101. Also, the new toll plaza must be operational, with power supplied from the new garage and communications supplied from the existing parking office.



PANELBOARD SURFACE MOUNTED, FLUSH MOUNTED.

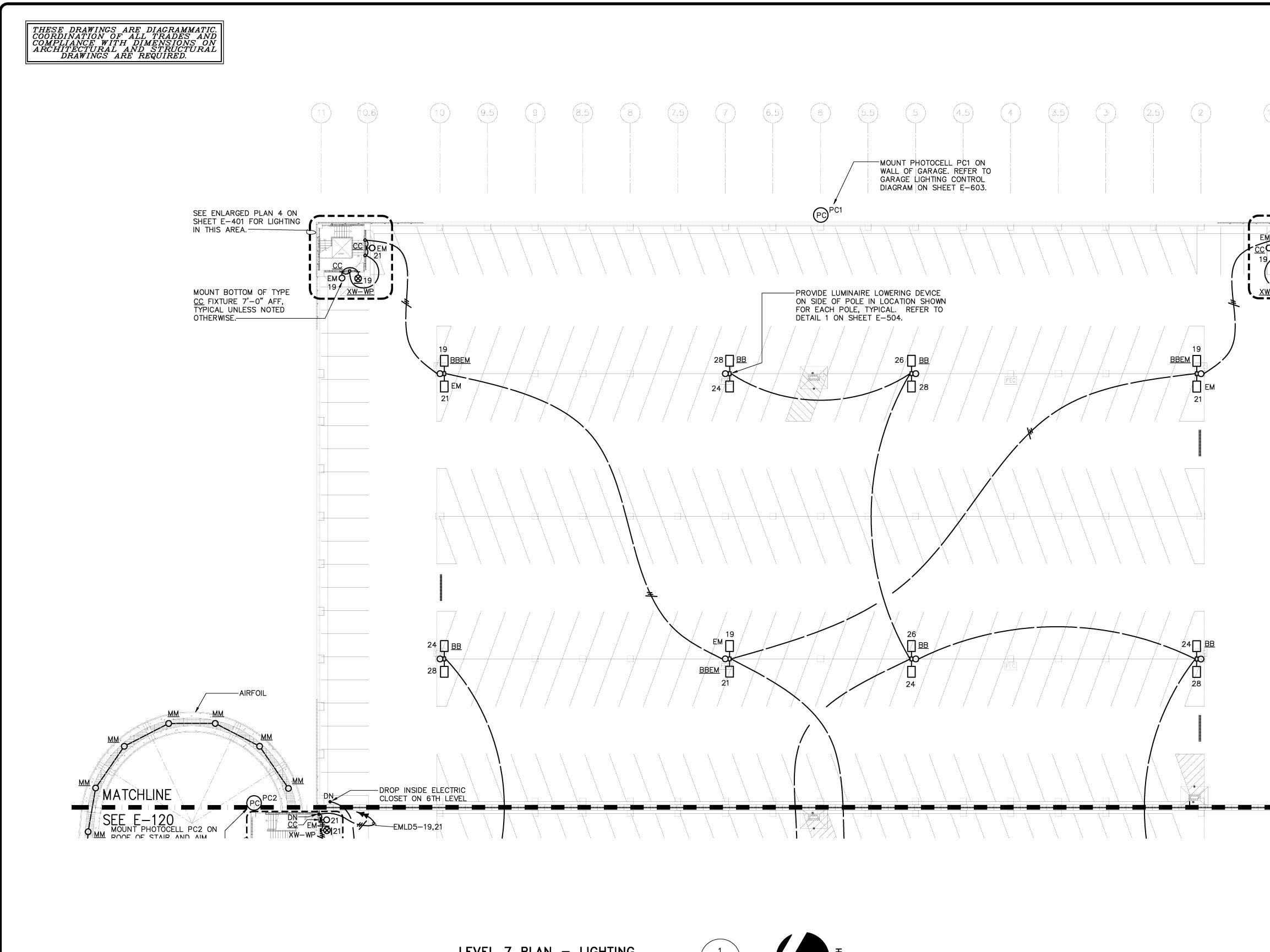
TRANSFORMER MOTOR, NUMERAL DENOTES HORSEPOWER MANUAL MOTOR STARTER MAGNETIC MOTOR STARTER COMBINATION MAGNETIC MOTOR STARTER AND DISCONNECT SWITCH DISCONNECT SWITCH DUPLEX RECEPTACLE, 15 AMP 120V, 3 POLE POLARIZED. MOUNT 15" ABOVE FINISHED FLOOR TO CENTER LINE OF LOWEST PLUG-IN POINT OR AS NOTED ON PLAN. DUPLEX RECEPTACLE, 15AMP, 120V., 3 POLE POLARIZED MOUNTED ABOVE COUNTER OR 44" ABOVE FINISHED FLOOR TO BOTTOM, OR AS NOTED ON PLAN. SINGLE RECEPTACLE, 20A, 120V DOUBLE DUPLEX RECEPTACLE, 15 AMP, 120V., 3 POLE POLARIZED JUNCTION BOX, CEILING MTD., WALL MTD., CEILING MTD. W/FLEX. CONNECTION SHOWN. COMMUNICATION/DATA OUTLET. SEE SPECS. CARD READER-JUNCTION BOX, FLUSH IN WALL WITH 3/4" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE, OR AS INDICATED CEILING MTD. LIGHTING FIXTURE, LETTER DENOTES TYPE. WALL MTD. LIGHTING FIXTURE, LETTER DENOTES TYPE. EXIT SIGN WALL MTD., CEILING MTD. SINGLE POLE SWITCH. MOUNT 48" ABOVE FINISHED FLOOR TO CENTER LINE. SINGLE POLE TOGGLE SWITCH 20 AMP, SUBSCRIPT DENOTES SWITCH CONTROLLING FIXTURES WITH MATCHING SUBSCRIPT, WHEN SO SHOWN ON PLAN. THREE WAY SWITCH FOUR WAY SWITCH RACEWAY CONCEALED IN WALL OR CEILING RACEWAY CONCEALED UNDERFLOOR/BELOW GRADE EXPOSED RACEWAY HOMERUN TO PANELBOARD, LETTERS DENOTE PANEL, NUMBER OF ARROWS INDICATE QUANTITY OF CIRCUITS, SHORT CROSSBARS DENOTE PHASE CONDUCTORS, LONG CROSSBAR DENOTES NEUTRAL. LONG CROSSBAR WITH HOOK DENOTES ISOLATED GROUND CONDUCTOR. (A TWO WIRE CIRCUIT HAS NO CROSSBARS) EQUIPMENT GROUND CONDUCTOR IS REQUIRED BUT NOT SHOWN. RACEWAY STUBBED/CAPPED RISER UP OR DOWN ELECTRIC DRINKING FOUNTAIN ABOVE FINISHED FLOOR EMERGENCY GROUND FAULT CIRCUIT INTERRUPTING EMPTY CONDUIT WEATHERPROOF FIRE ALARM CONTROL PANEL EXISTING ITEM TO REMAIN. NORMALLY USED IN COMBINATION WITH SYMBOL (EXAMPLE: \Longrightarrow_{Γ} DENOTES EXISTING RECEPTACLE TO REMAIN) REMOVE EXISTING ITEM. NORMALLY USED IN COMBINATION WITH SYMBOL (EXAMPLE: = \neq) DENOTES EXISTING RECEPTACLE TO BE REMOVED) SECURITY CAMERA, FIXED POSITION, WITH AIMING INDICATED BY ARROW, SIGNAL CABLE, IN CONDUIT, BACK TO PARKING OFFICE, AND 120 VOLT POWER FROM UPS. SECURITY CAMERA, PAN-TILT-ZOOM TYPE, WITH SIGNAL CABLE, IN CONDUIT, BACK TO PARKING OFFICE, AND 120 VOLT POWER FROM UPS. DENOTES KEYNOTE REFERENCE IN-GRADE PULL BOX, SEE DETAIL THIS SHEET. TYPE BB1 CUT-OFF LUMINAIRES WITH 400 WATT MH LAMP, MOUNTED ON 35' POLE. SHOWN NEXT TO LUMINAIRES ON PLAN DENOTES CIRCUIT NUMBER, ALTERNATING CIRCUITS EVERY OTHER FIXTURE. EXISTING ROADWAY LUMINAIRE HIGH MAST LIGHT POLE SIGN LIGHTING FIXTURE UNDER GROUND RIGHT LEFT BASE LINE EXISTING PULL BOX, FLUSH IN GROUND EXISTING UNDERGROUND ELECTRICAL FEED TO BE ABANDONED ROADWAY CONDUIT CROSSING HORIZONTAL BORING UNDER ROADWAY FOR RACEWAY. MEMPHIS LIGHT GAS AND WATER DIVISION. FOOTCANDLE EXISTING DEVICE TO BE REMOVED AND LOCATED IN SAME LOCATION AFTER GRADE CHANGE IS COMPLETE.

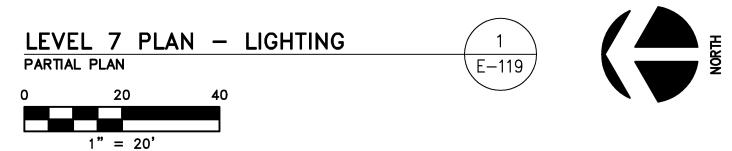
EXISTING DEVICE TO BE REMOVED AND RELOCATED IN NEW LOCATION BUS DUCT ID AND SECTION SYMBOL - SEE SHEET EXISTING CABLE, RACEWAY OR DUCT BANK TO BE ABANDONED DESCRIBES DUCT BANK CONTENTS: 9W=NINE-WAY; 5" INDICATES CONDUIT SIZE. VARIABLE-DEPTH PULL BOX.

ELECTRICAL LEGEND

COUNTY ARA PROVIDE A COUNTY ARA ARA ARA ARA ARA ARA ARA ARA ARA AR			
	ALKER		
813.8	388.5800 Ph. 388.5822 Fax REVIEWED BY:		
15–1800.00	GLK		
MECHANICAL/ELECTRI CONSULTING ENGINEI 3465 Popler Avenue, Suite 200 / Me Veixe: 901-482-683 / Par: 901-180-9640 JOB NO. 0720	ERS		
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MSCAA NO. 9905	SHEET NO.		
DATE OCTOBER 12, 2009	E-001		

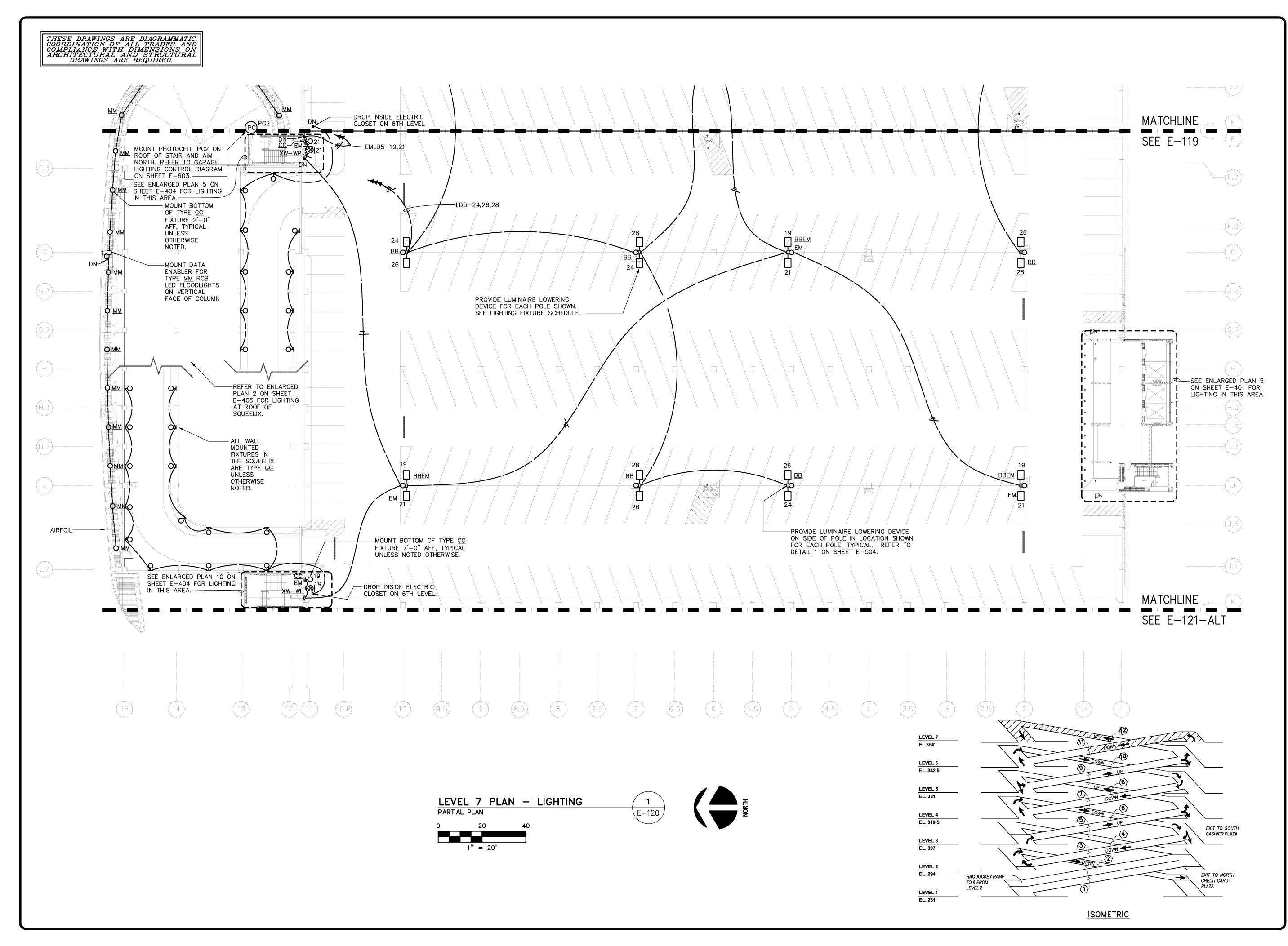
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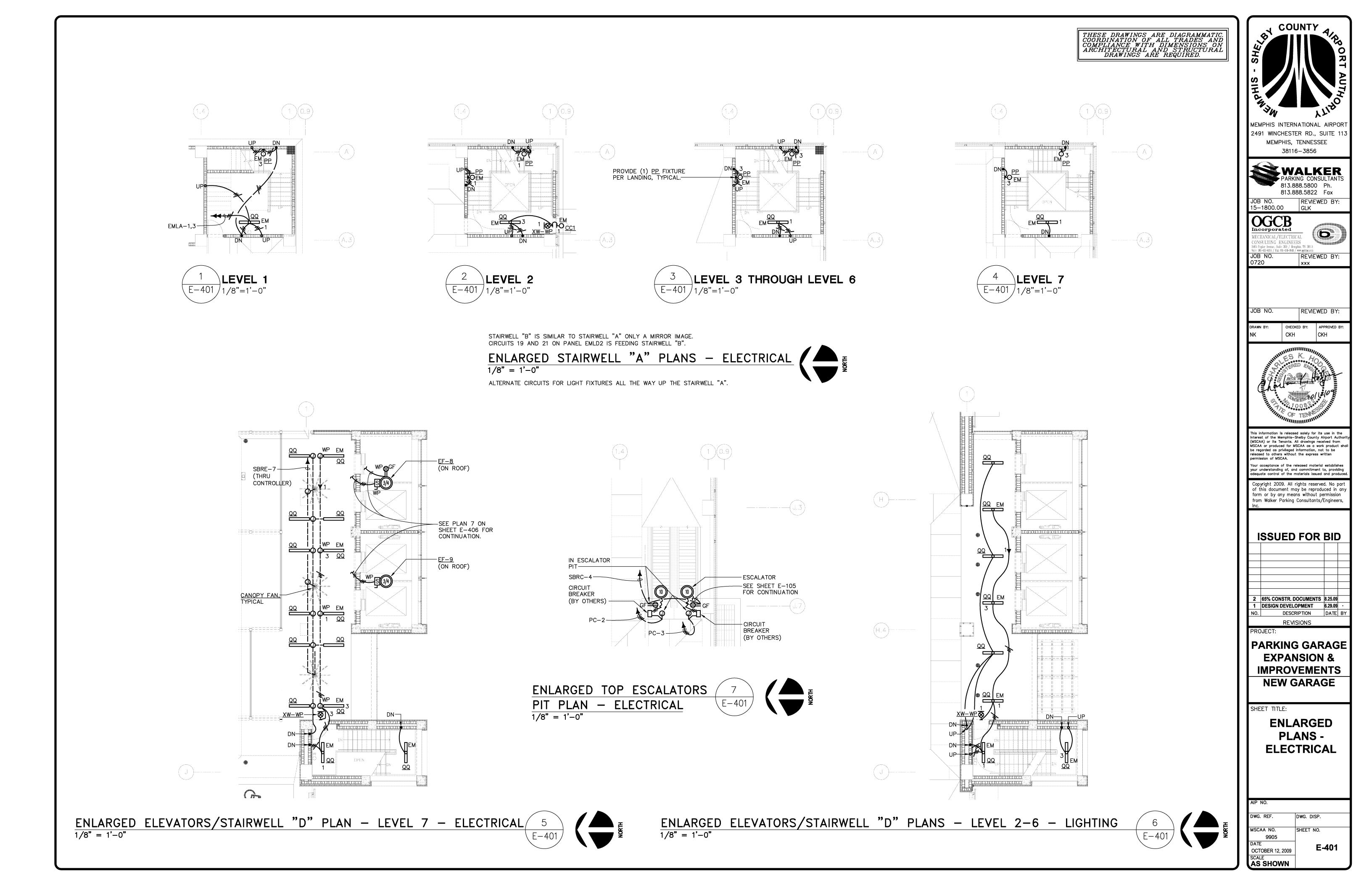


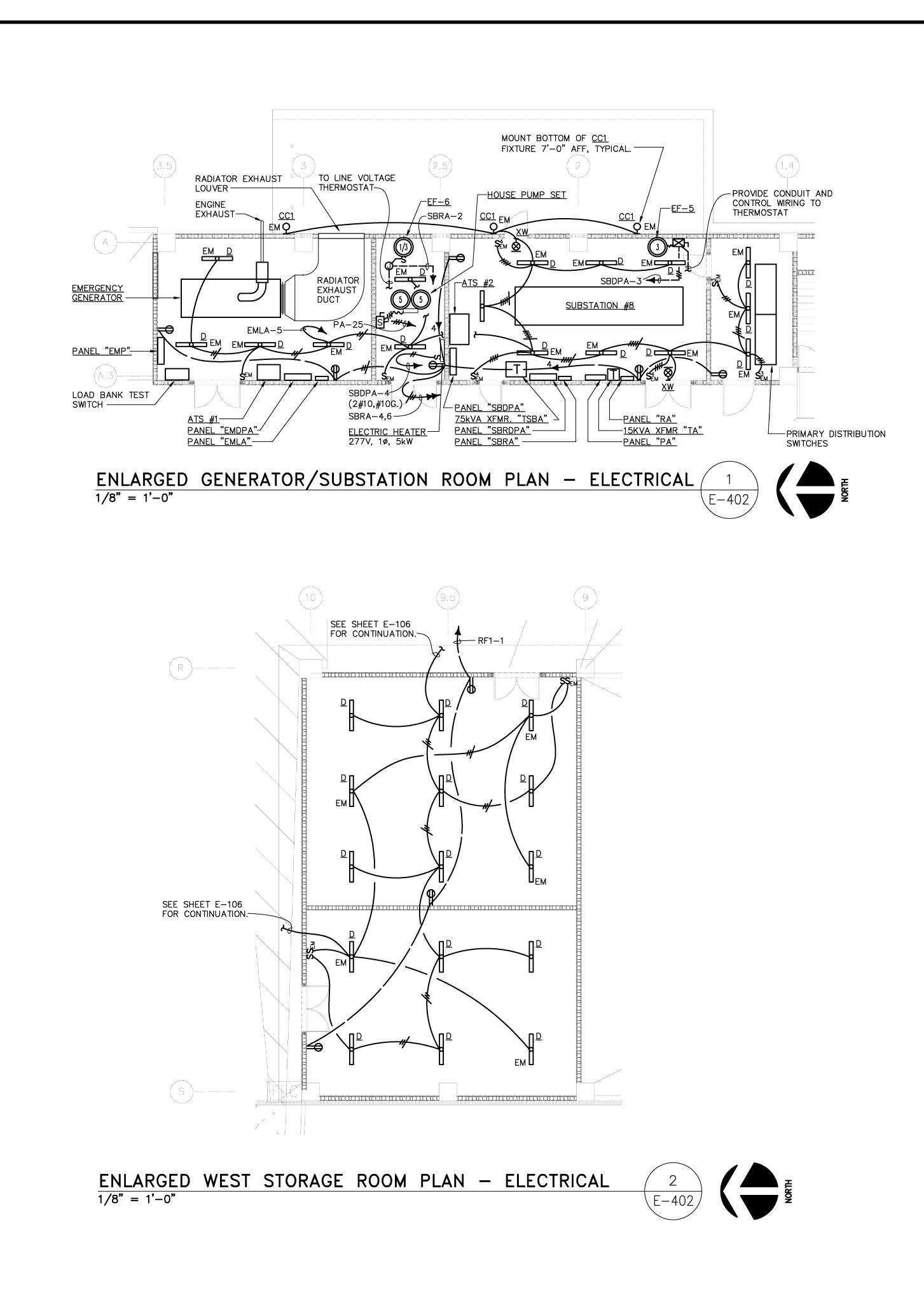
	A SEE ENLARGED PLAN 4 ON SHEET E-401 FOR LIGHTING IN THIS AREA. (A.3)
MOUNT XW-WP EXIT SIGN ON WALL, CENTERED ON DOOR, TYPICAL B B B B B B B	
	DOOR, TYPICAL
	 (B.3)
	 ——————————————————————————————————————
	C
	(C.3)
D.3	C.7)
	D
(D,7)	(D.3)
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MATCHLINE SEE E-120	

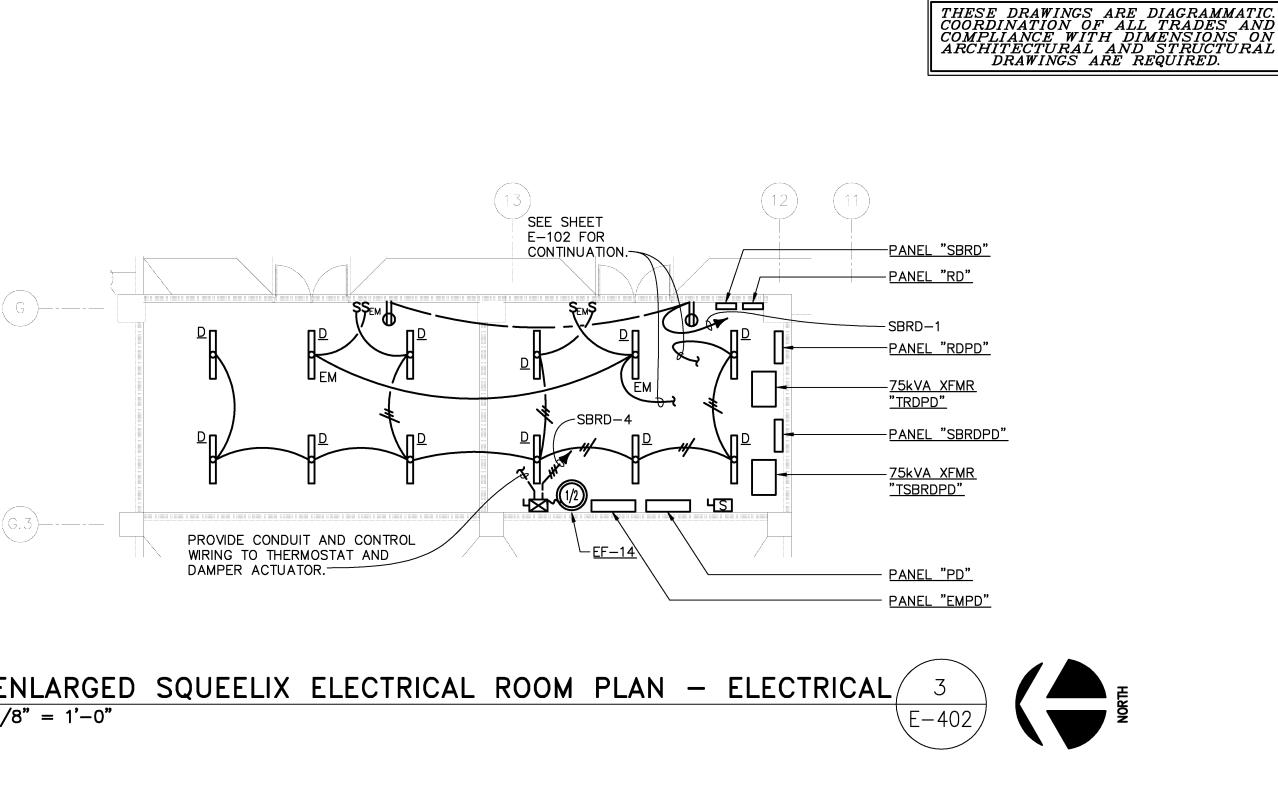
KEMPHIS INTERNATIONAL AIRPORT 2491 WINCHESTER RD., SUITE 113 MEMPHIS, TENNESSEE 38116–3856
WALKER PARKING CONSULTANTS PARKING CONSULTANTS B13.888.5800 Ph. B13.888.5802 Fax JOB NO. REVIEWED BY: B5-1800.00 REVIEWED BY: B15-1800.00 REVIEWED BY: B15-1800.00 REVIEWED BY: B15-1800.00 REVIEWED BY: B16-182-4820 / text stil-48-560 / ver ogthic.com Image: Still st
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Image: Testion development 6.29.09 NO. DESCRIPTION DATE BY REVISIONS PROJECT: PARKING GARAGE EXPANSION & IMPROVEMENTS NEW GARAGE SHEET TITLE:
AIP NO. DWG. REF. MSCAA NO. 9905 DATE CODED 40, 2000 E-119

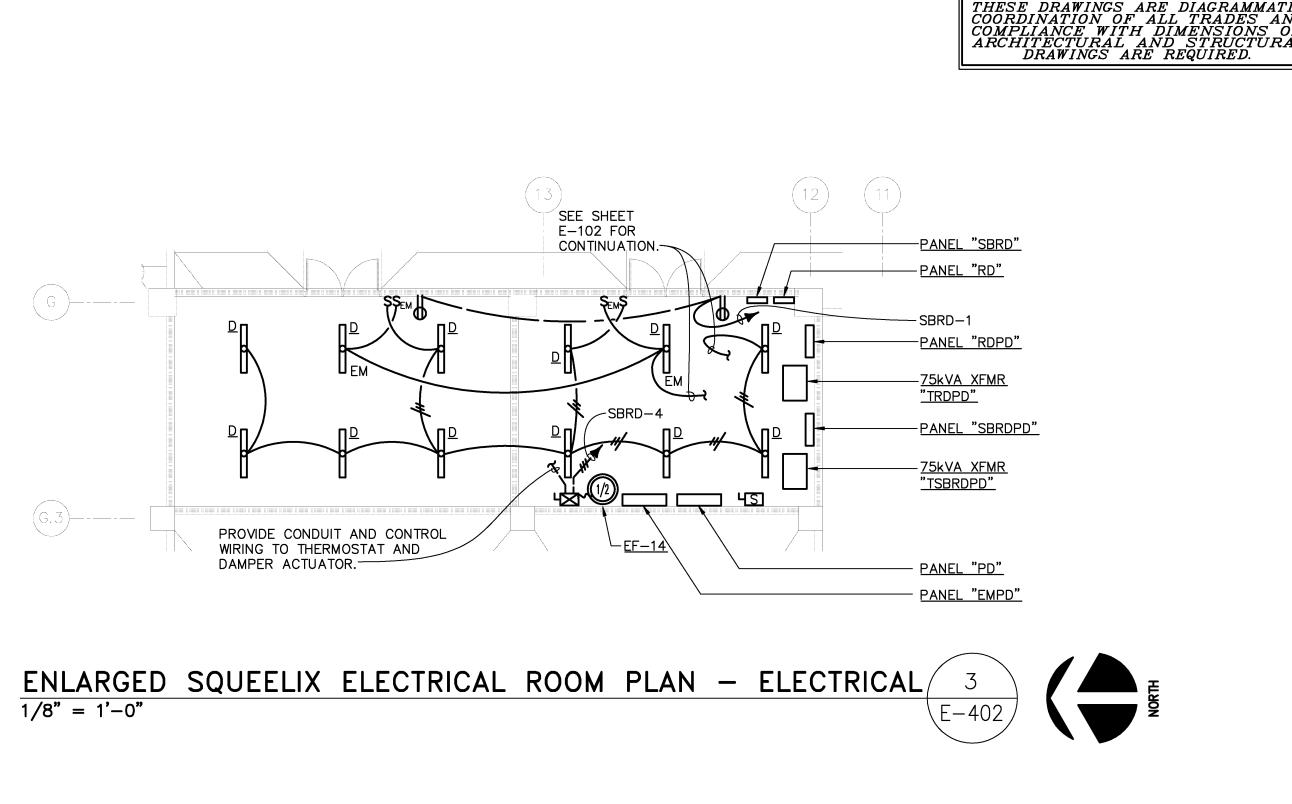


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CONSULTING ENGINE 3485 Poplar Avenue, Suite 200 / Me	MECHANICAL/ELECTRICAL CONSULTING ENGINEERS 3465 Poplar Avenue, Suite 200 / Memphis, TN 38111				
Veice: 901-482-6253 / Yax: 901-168-9640 JOB NO. 0720					
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DATE OCTOBER 12, 2009 SCALE 1" = 20'	E-120				

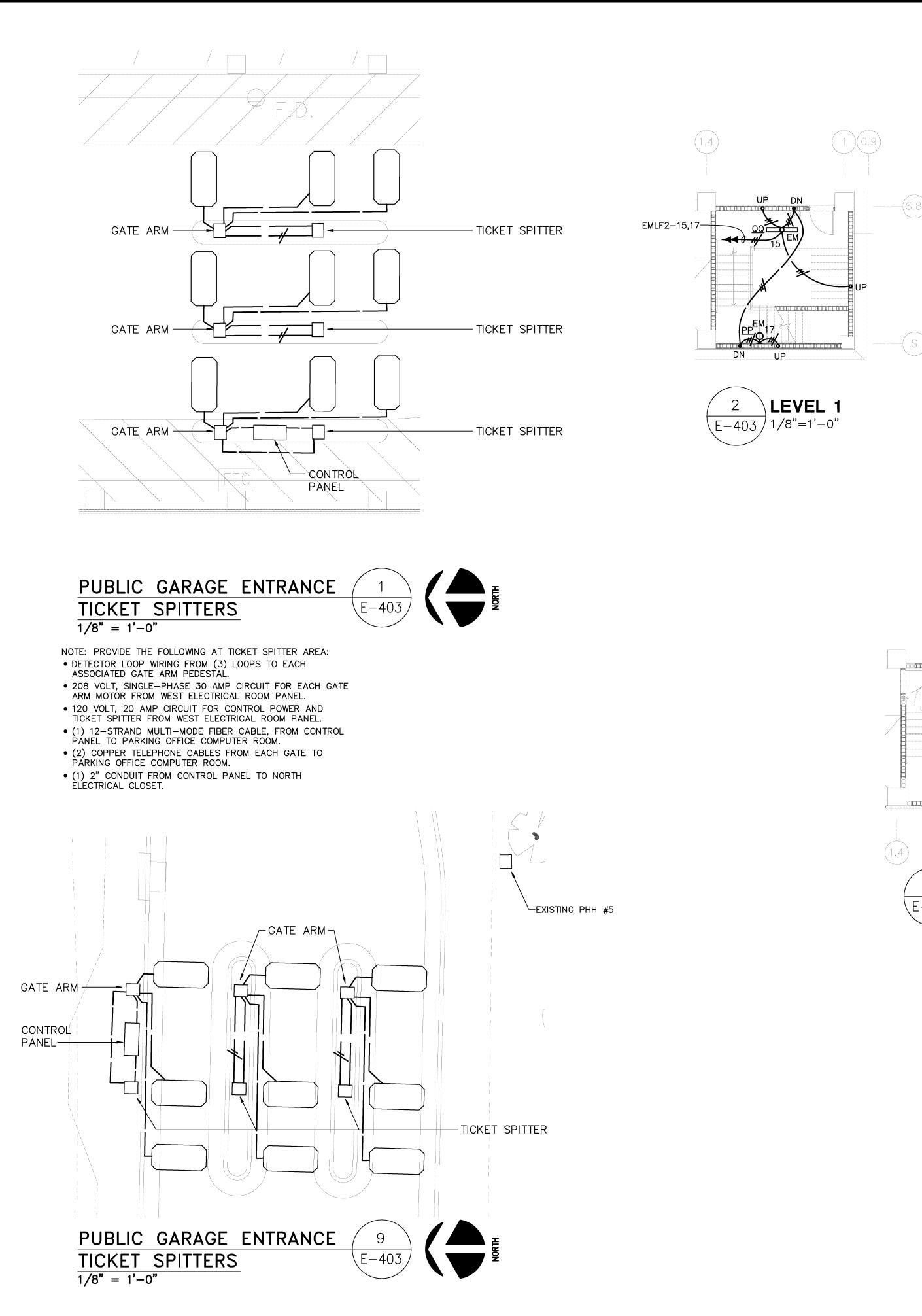


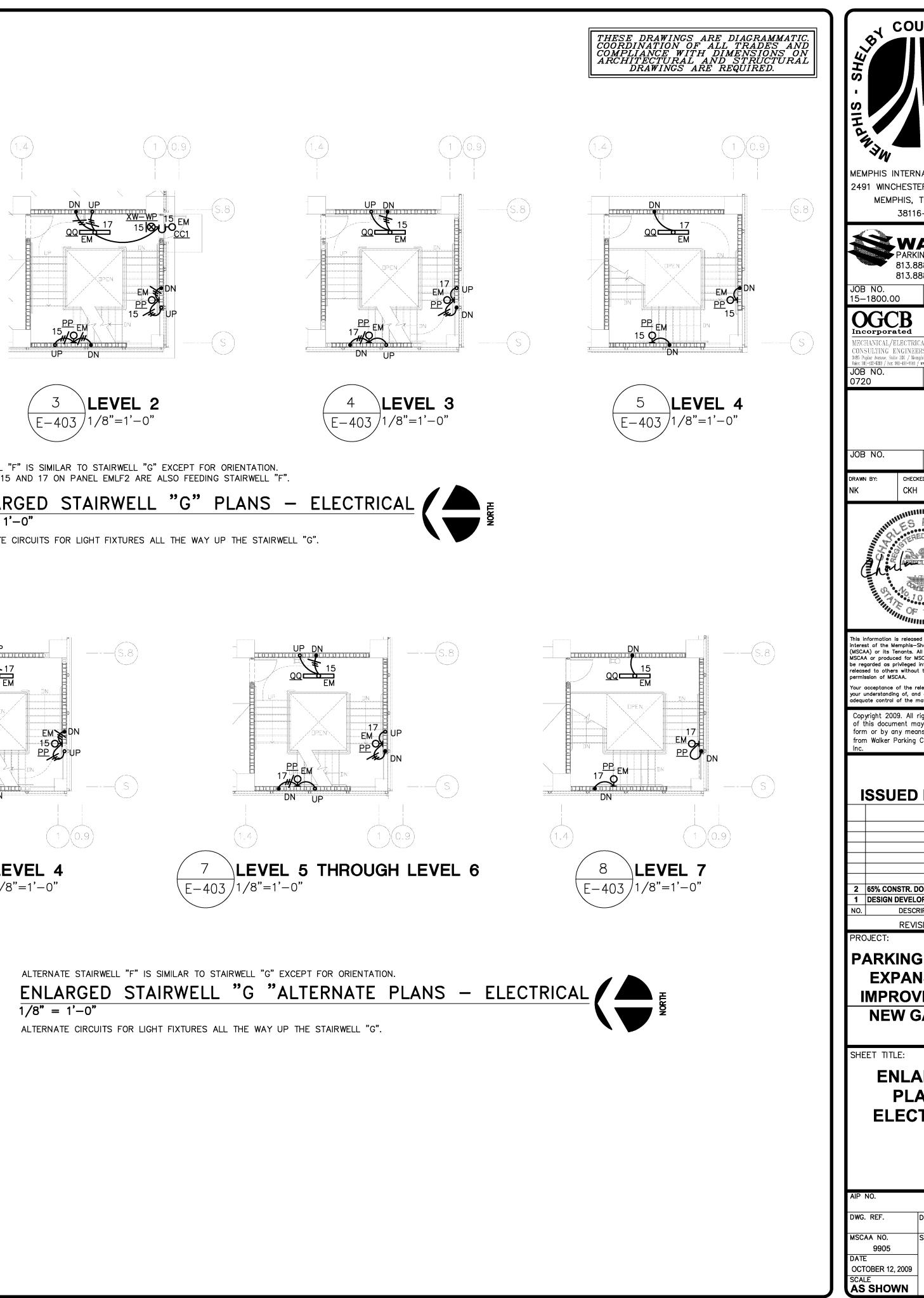


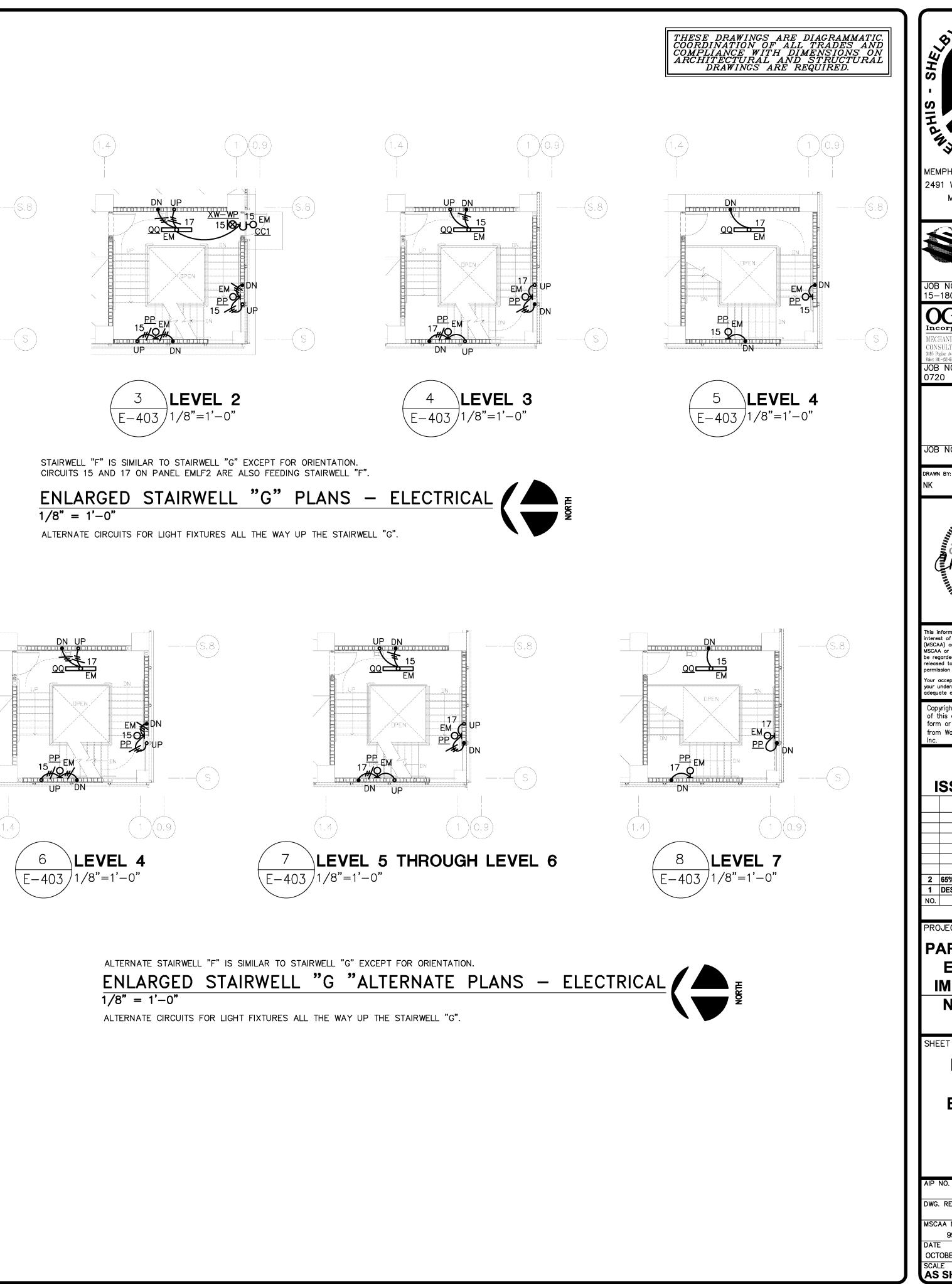




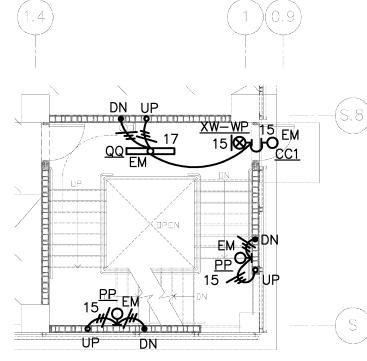
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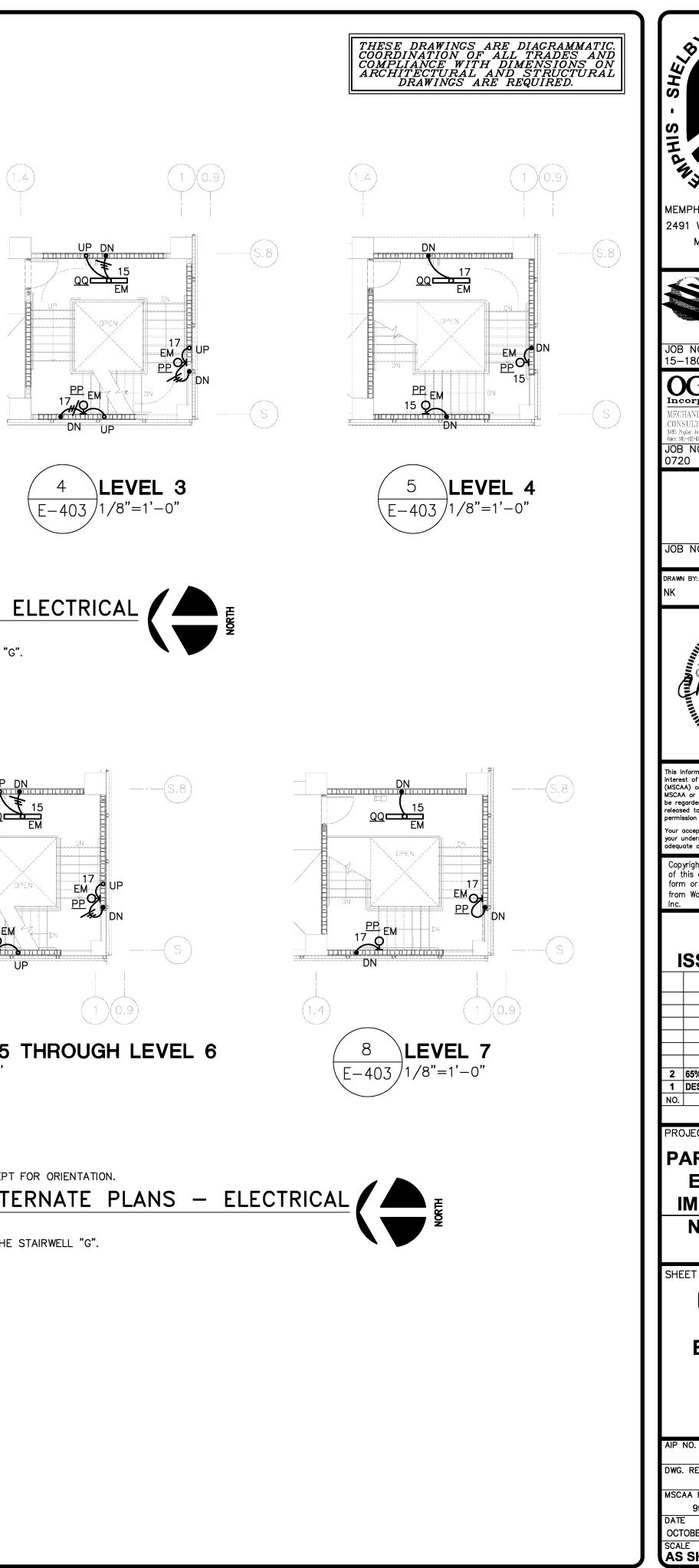




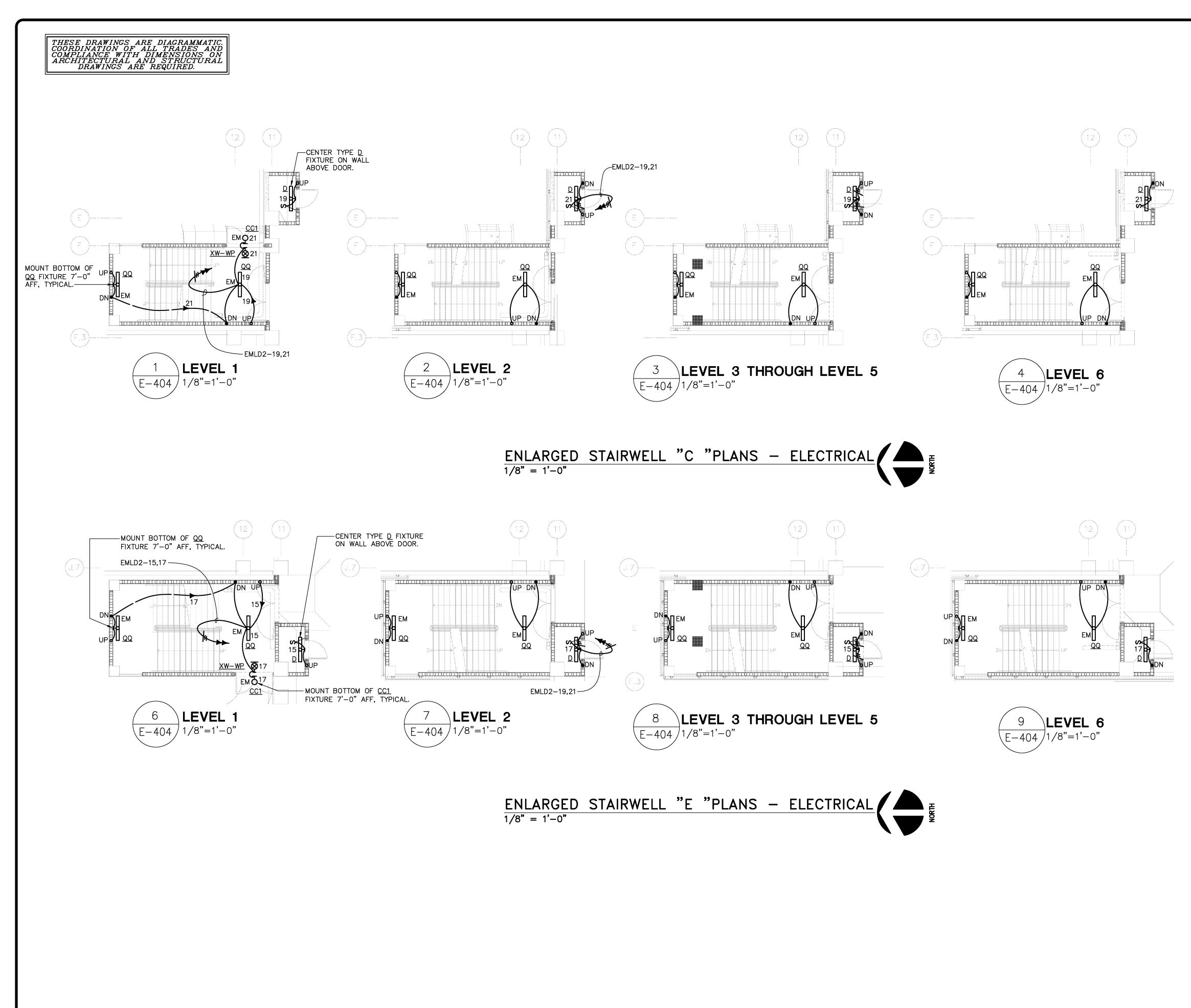


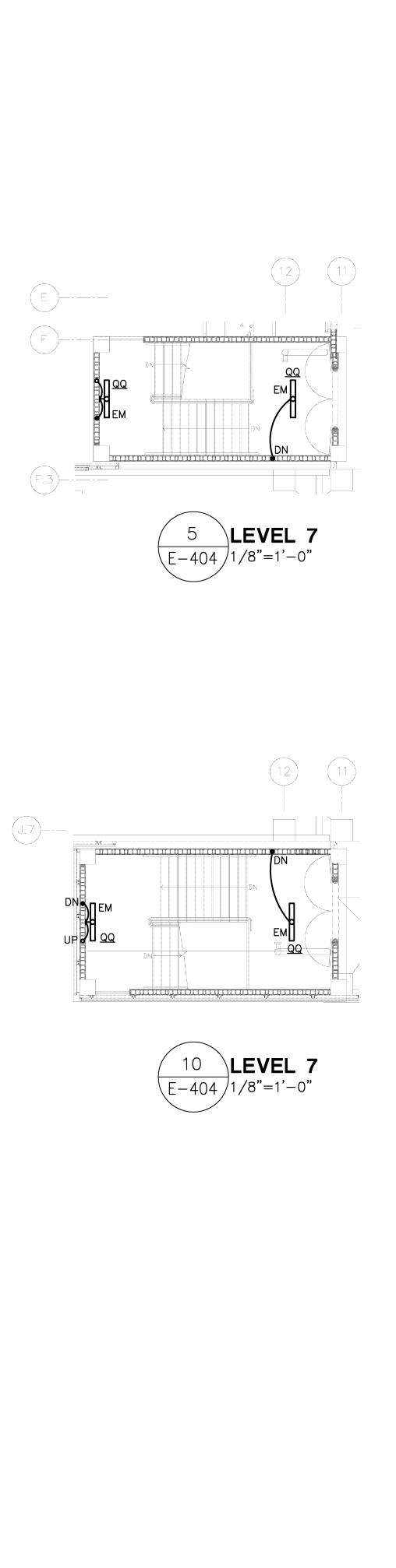




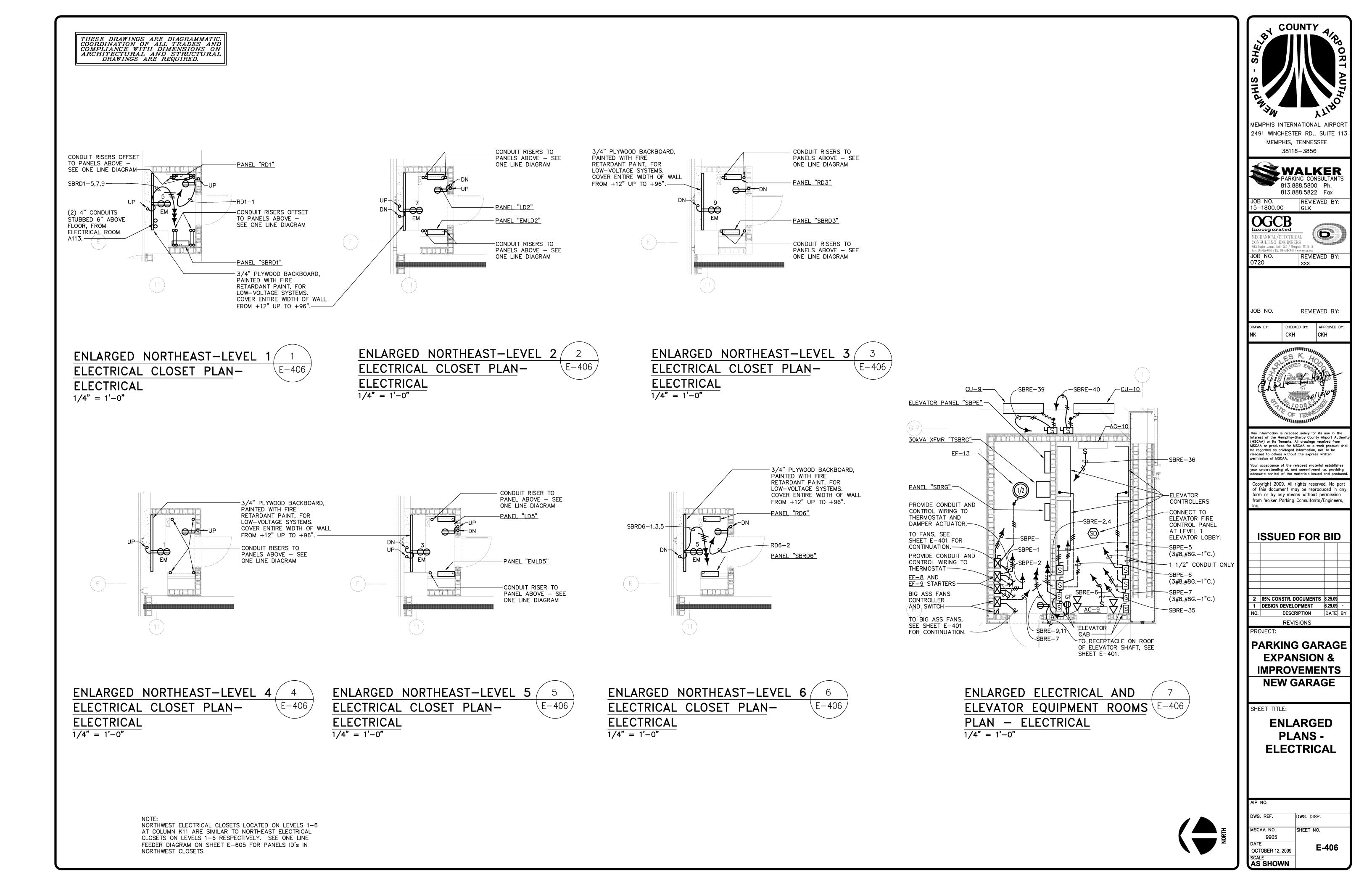


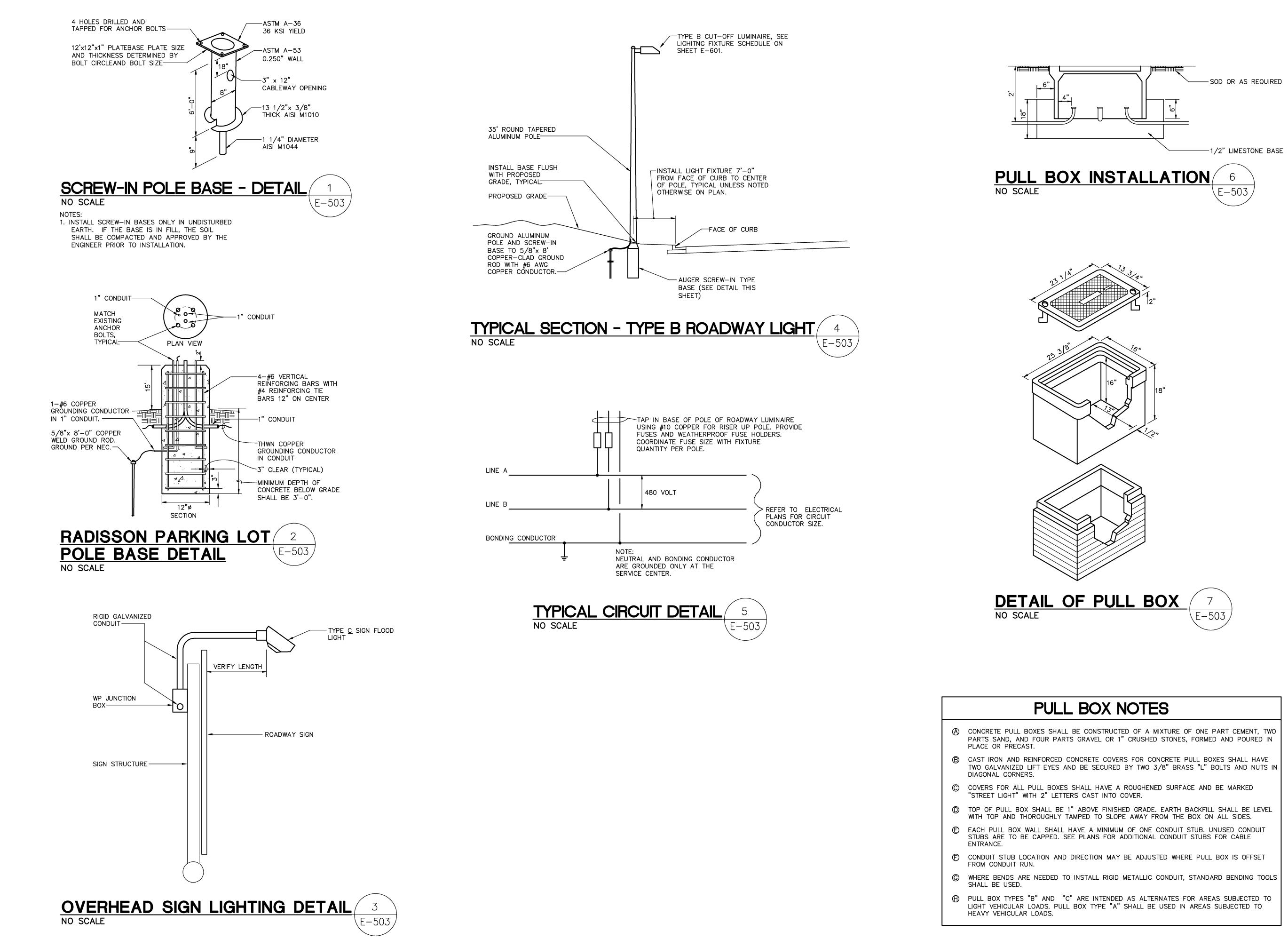
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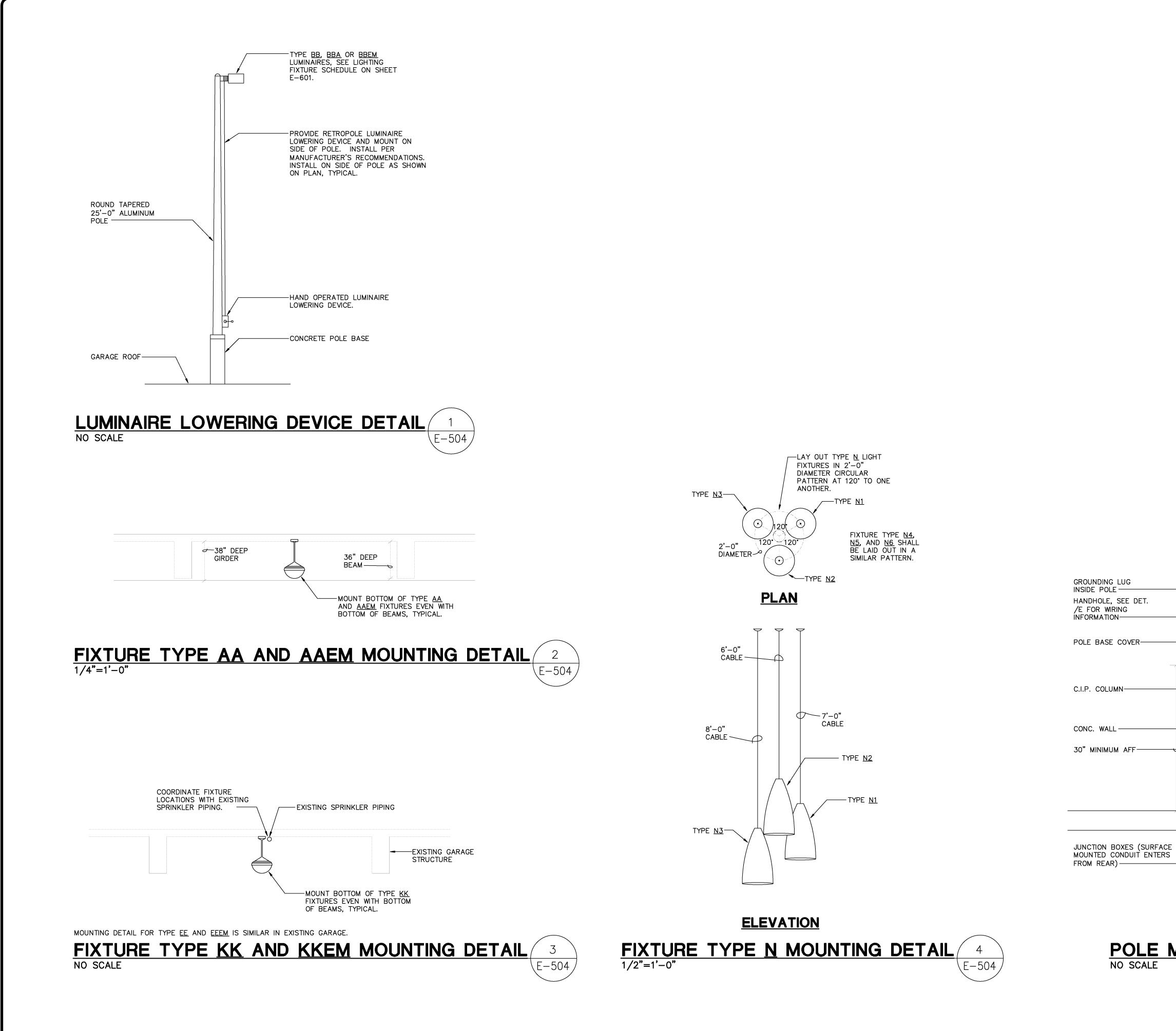
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MSCAA NO. 9905 DATE OCTOBER 12, 2009 SCALE AS SHOWN	SHEET NO. E-404	





	PULL
۵	CONCRETE PULL BOXES SHALL E PARTS SAND, AND FOUR PARTS PLACE OR PRECAST.
₿	CAST IRON AND REINFORCED CC TWO GALVANIZED LIFT EYES AND DIAGONAL CORNERS.
©	COVERS FOR ALL PULL BOXES S "STREET LIGHT" WITH 2" LETTER
Ø	TOP OF PULL BOX SHALL BE 1" WITH TOP AND THOROUGHLY TAI
Ē	EACH PULL BOX WALL SHALL HASTUBS ARE TO BE CAPPED. SEE ENTRANCE.
Ð	CONDUIT STUB LOCATION AND D FROM CONDUIT RUN.
©	WHERE BENDS ARE NEEDED TO SHALL BE USED.
⊕	PULL BOX TYPES "B" AND "C" LIGHT VEHICULAR LOADS. PULL HEAVY VEHICULAR LOADS.

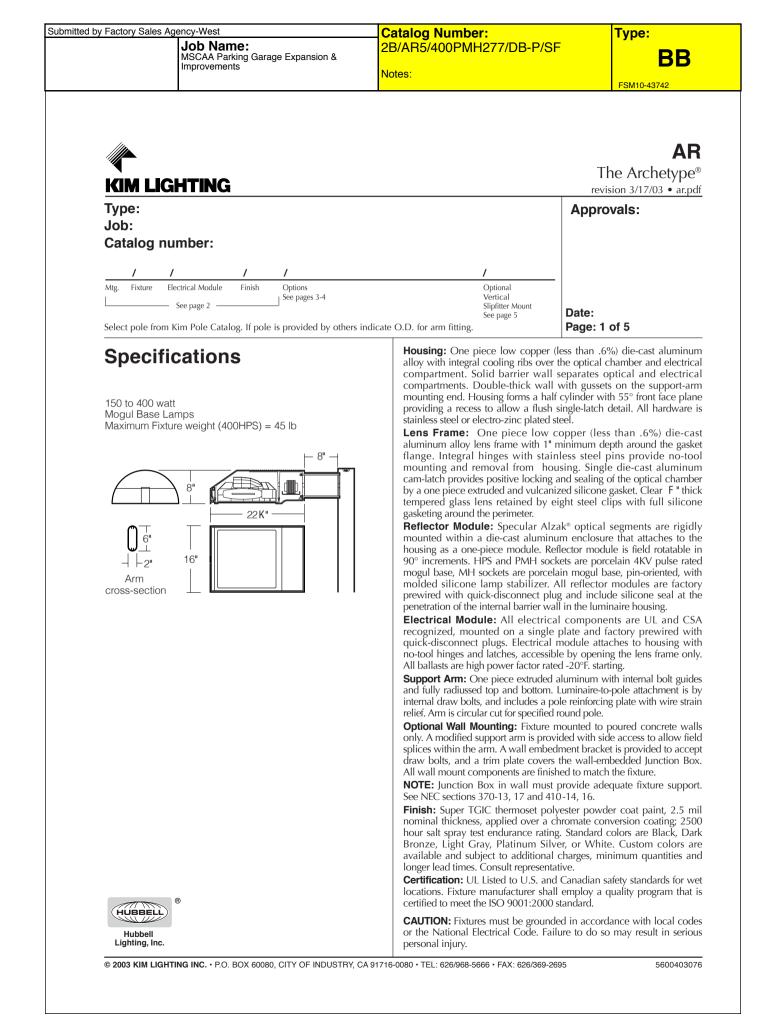
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		8	ECTRICAL GINEERS 90 / Memphis, TN 38111 458-969 / vvs.ogebine.com REVIEWED BY:
		JOB NO. Drawn by:	REVIEWED BY: CHECKED BY: CKH CKH
	 LIGHT POLE EXTEND CONDUITS ABOVE BASE PLATE OF POLE. PAINT NUTS & BOLTS TO PREVENT RUSTING. LEVEL W/ BOTTOM LEVELING NUTS & SHIMS. GROUT 	interest of the Mem (MSCAA) or its Tend MSCAA or produced be regarded as privi released to others w permission of MSCA. Your acceptance of your understanding adequate control of Copyright 2009. of this document form or by any	released solely for its use in the hphis-Shelby County Airport Authority ants. All drawings received from for MSCAA as a work product shall lieged information, not to be without the express written A. the released material establishes of, and commitment to, providing the materials issued and produced. All rights reserved. No part nt may be reproduced in any means without permission rking Consultants/Engineers,
	W/ NON-SHRINK NON-METALLIC GROUT. PROVIDE 1/2" DIAMETER PATH FOR WATER TO EXIT FROM POLE THROUGH GROUT ON ONE SIDE OF THE POLE. 		
	IN COLUMN BY GENERAL CONTR. — PROVIDE (1) 1" CONDUIT FOR LOW VOLTAGE CABLING FOR CCTV CAMERAS, TYPICAL AT ALL POLES WITH CAMERAS. — CONDUITS PROVIDED BY ELECTRICAL CONTRACTOR ENCASED IN COLUMN BY GENERAL CONTRACTOR	1 DESIGN DE NO. D F PROJECT:	TR. DOCUMENTS 8.25.09 EVELOPMENT 6.29.09 · DESCRIPTION DATE BY REVISIONS
	CONDUIT FOR POLE LIGHT POWER WIRING	EXP	ANSION & OVEMENTS
	#4/0 CU. BONDING WIRE TO GROUND ROD	ELE	CTRICAL ETAILS
MOUNTING D	DETAIL 5 E-504	AIP NO. DWG. REF. MSCAA NO. 9905 DATE OCTOBER 12, 20 SCALE NO SCALE	



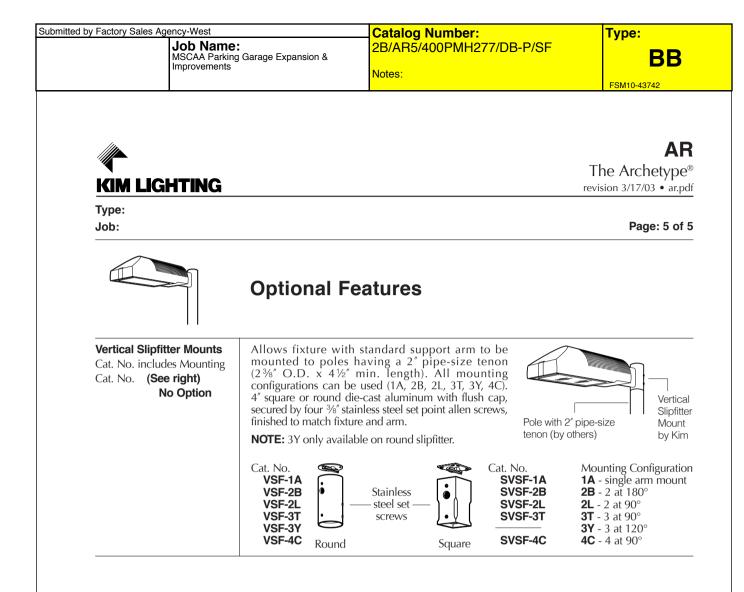
Factory Sales Agency-West Job N MSCAA F Improven	ame: Parking Garage Expansio	on & 2B/A	alog Number: AR5/400PMH277/	/DB-P/SF	Type: B
		Notes	s:		FSM10-43742
				7	The Archet
KIM LIGHTIN	G				vision 3/17/03 •
Type: Job:					Page: 2
	Standa	ard Featu	res		
Mounting	Plan View:			••	Wall N
3Y configuration is availator round poles only.	able		▏▔▆▁▕▇▞▌		₽₮₽₽
	EPA: Cat. No.:	1.2 2.4 1A 2B	2.0 3.2 2L 3T		3.9 n/a 4C 1
Fixture					
Cat. No. designates fix and light distribution.	ture Flat Lens	\neg			
See the Kim Site/Road Optical Systems Catalog	way Line Divit	tion: Type	II Type III	Type IV	Typ
detailed information		Full Cu	toff Full Cuto	Forward Thr ff Full Cutof	
application.	Cat. No.:	AR		AR4	4
Electrical Module HPS = High Pressure	Cat. Nos. for	Electrical Modules 150HPS120	available: 250HPS120	400HPS120	175MH12
Sodium MH = Metal Halide		150HPS208 150HPS240	250HPS208 250HPS240	400HPS208 400HPS240	175MH20 175MH24
PMH = Pulse Start Metal Halide		150HPS277 150HPS347	250HPS277 250HPS347	400HPS277 400HPS347	175MH27 175MH34
		150HPS480	250HPS480	400HPS480	175MH48
	Lamp	E-23½, Clear	E-18, Clear	E-18, Clear	BT-28 or ED-28, Clea
	Socket	Mogul Base	Mogul Base	Mogul Base	Mogul Base Pin-Oriented
Lamp Lamp Line	ANSI Ballast Type	S-55	S-50	S-51	M-57
WattsTypeVolts400HPS277		250MH120 250MH208	400MH120 400MH208	250PMH120 250PMH208	400PMH 400PMH
		250MH240 250MH277	400MH240 400MH277	250PMH240 250PMH277	400PMH 400PMH
		250MH347 250MH480	400MH347 400MH480	250PMH347 250PMH480	400PMH 400PMH
	Lamp	BT-28 or ED-28, Clear	ED-28, Clear	ED-28, Clear	ED-28, Clea
	Socket	Mogul Base Pin-Oriented	Mogul Base	Mogul Base	Mogul Base
	ANSI Ballast Type		Pin-Oriented M-59	M-138	M-135
Finish		ack Dark Bro	nze Light Gray P	latinum Silver Whit	te Custom
Super TGIC powder of paint over a chrom	coat Cat. No.:	BL-P DB-P	LG-P	PS-P W	Н-Р СС-Р
conversion coating.	¹ Custom colo	ors subject to addi	itional charges, minin color description:	num quantities and	extended lead t

Single Fuse

	ncy-West Job Name: MSCAA Parking Gar	age Expansion &	<mark>Catalog N</mark> 2B/AR5/4	lumber: 00PMH277/	DB-P/SF	Тур	Туре:	
	Improvements		Notes:			FSM	10-43742	
KIM LIGH	ITING					The A revision 3		
Type: Job:							Page:	
		Optional F	eatures					
Wall Mounting Cat. No. 1W Select from <i>N</i> page 2.	lounting on all bi	ixture mounted to nodified support arm low field splices wi racket (WEB) is pro- im plate covers the vall mount componer	is provided wit thin the arm. A vided to accept d wall-embedded J	h side access wall embedme raw bolts, and unction Box. A	to nt a All re.		4 J"	
						nount using wall at - J-box in wa		
Photocell Rece Cat. No. A- No	25 th 0 Option (b tv 0	xture supplied with the electrical compar- ty others). For all mu- vo or three fixtures, perate the others. For equire one fixture v 00 watt) require two	tment for NEMA Iltiple-fixture pole , one fixture has pur fixtures (250 v with a receptacl	a base photoco mountings wi a receptacle watt or less) al e. Four fixtur	ell th to so		— Rece	
	N	lounting (see page 2)		∗ ■- 1A, 1W	* ••• s 2B	s S		
		 Fixture with Photo slave unit(s) 	cell Receptacle	* s 2L	s s s 3T, 3Y	s s s s	s	
	Ā	llowable wattage pe	r fixture:	150-4		150-250W		
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Polycarbonate Cat. No. LS No	Option Continue	xture supplied with a V stabilized conve placing the standar aximum. May be ocations where ambi peration will not exc	x polycarbonate, d tempered glass used with 4001 ent air temperatu	fully gaskete lens. 250 wa HPS in outdo	d, att or			
	b	AUTION: Use only e high. Useful life is unlight and metal ha	limited by UV di	is anticipated scoloration fro	to m	Polyca	l bonate L	

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/ Factory Sales Agency-West Job Nar MSCAA Pau Improvemen	rking Garage Expansion &	<mark>Catalog Number:</mark> 2B/AR5/400PMH277/DB Notes:	-P/SF	BB
KIM LIGHTING	i		The Arc revision 3/17,	<i>,</i> ,
Type: Job:			Pa	ge: 4 o
	Optional F	Features		
Houseside Shield Cat. No. (See right) No Option	flat glass lens are a louvers that pass str light, and a blacken reduce houseside re convex glass lens aluminum shield tha houseside light, and the reflector to redu clear lamps only, as Cat. No. HS Recomm lamps. N	V only). Fixtures with the standard available with stamped aluminum reetside light and block houseside ed panel added to the reflector to effections. Fixtures with the optional s are available with a formed at passes streetside light and blocks d a black anodized panel added to toce houseside reflections. Use with coated lamps reduce effectiveness.	for flat lens for conv polycarb y. Effectiveness is reduced utions.	for coat
Tamper-Resistant Latch Cat. No. TL No Option	stainless steel flat unauthorized openin NOTE: Required on	tch is provided with a captive 10-32 t socket-head screw to prevent ng. Ily for vandal protection in locations we reached by unauthorized persons.	Tamper-Resistant Lato	ch
Horizontal Slipfitter Mour Cat. No. HSF No Option	allows fixture to b davit-arm with 2" p Cast aluminum cla anti-rotation lock. electrical compartn standard support arr	nounting arm with a slipfitter which be mounted to a horizontal pole ipe-size mounting end (2%" O.D.). amp-type slipfitter with set screw Bolts to housing from inside the nent using mounting holes for the m. Davit-arm must be field drilled at n to insure against fixture rotation. xture.	Davit-arm with 2' fixture mount (by oth Horizontal Slipfitter Mount by Kim	
Special Options for Street Lighting Cat. No. (See right)	85AMP, 600V box the housing inside t #14-4 wire. Facto quick-disconnect pl TB No Option Air Filter: Allows chamber, filtering a Multi-layer disc a	or field wire connections.) clamp terminal block mounted to the electrical compartment. Accepts ory prewired to electrical module lug. for ventilation through the optical all air particles above 500 microns. issembly mounted on solid wall mpartment and latch cavity.	Ter	minal Blo





Catalog Number: DS210-700A250-DB

Notes:

Type:

FSM10-43742

BB

STRUCTURES

Product Specifications DS210, DS220

ANCHOR BOLTS

Anchor Bolts are fabricated from carbon steel bar conforming to AASHTO M314 Grade-55 or ASTM F1554 Grade-55. Bolts have an "L" bend on one end and are galvanized a minimum of 12 inches on the threaded end. Four anchor bolts are provided per pole. Each anchor bolt is furnished with two hex nuts and two flat washers.

ANCHOR BASE

The anchor base (base plate) is fabricated from structural quality hot rolled carbon steel plate conforming to ASTM A36. The base plate telescopes the pole shaft and is circumferentially welded top and bottom. Please refer to the charted bolt circles and detail drawings to determine the type of hole or slot accommodation made for the anchor bolt.

POLE SHAFT

The pole shaft conforms to ASTM A595 Grade-A and is supplied in 11 gauge (0.1196"), 7 gauge (0.1793") 5 gauge (0.2092") or 3 gauge (0.2391") thickness. The pole can be either onepiece or two piece construction, with a full length longitudinal high frequency electric resistance weld. The DS210 series is round in cross-section having a uniform taper of approximately 0.14 inches per foot of length. The DS220 series shaft is square in cross section having flat sides, radiused corners and a uniform taper of approximately 0.11 inches per foot of length.

HANDHOLE

The reinforcing handhole rim consists of either a nominal 3" x 5" rectangular shaped tubing or 4" x 6.5" oval shaped pipe material. The 3" x 5" handhole is provided with a steel attachment bar, steel cover, and one round head machine screw. The 4" x 6.5" handhole includes two tabs for mounting a steel cover with hex head attachment screws. Both handhole types are welded in the pole shaft and are located 1'-6" above the base.

ELECTRICAL GROUND

A nut holder is provided near the handhole and includes a .5"-13UNC hex head bolt and nut.

NUT COVERS (OPTIONAL)

Nut covers for anchor bolts are zinc die cast. Each cover is fastened to the shaft by a 0.25" stainless steel, self-tapping, hex head screw. Nut covers are a standard component for the DS210 series and are NOT available for the DS220 series.

FULL BASE COVER (STANDARD)

The optional full base cover is fabricated from ABS plastic. Valmont reserves the right to provide a steel assembly on some applications depending upon the finish requirement and/or pole shaft base diameter. Both steel and plastic covers are a two-piece assembly secured together with two fasteners. A full base cover is a standard component on the DS220 series.

POLE TOP TENON (STANDARD)

Pole top tenons are fabricated from structural quality hot rolled carbon steel with a guaranteed minimum yield strength of 30,000 psi. A pole top plate and tenon of weldable grade hot rolled commercial quality carbon steel is circumferentially welded to the top of the pole shaft. This plate provides an internal weather resistant wiring raceway into the pole top tenon. Standard sizes are either 2.38" O.D. x 4" long (P2) or 4" O.D. x 6" long (P4) steel tubing. See page 1 for other available sizes.

POLE TOP CAP

A removable cap is available as an option to be used in conjunction with drilled shafts for direct luminaire arm attachment.

STANDARD FINISH

Standard finishes available are galvanize, prime coat (powder), and finish coat (powder). For information regarding the scope and application of these coatings please refer to page 5.

FASTENING HARDWARE

All structural fasteners are galvanized high strength carbon steel. All fasteners are galvanized or zinc plated carbon steel or stainless steel.

DESIGN

The standards shown in this section are designed to withstand dead loads and theoretical dynamic loads developed by variable wind speeds, as charted, with an appropriate gust factor under the following conditions:

The luminaire(s) and/or mounting bracket(s) center of gravity, or centroid, is assumed to be located a maximum of 2'-6" above the pole top. For purposes of design, effective projected area (EPA) is considered to be the product of the actual projected area and the drag coefficient.

The listed weights include luminaire(s) and/or mounting bracket(s) and are based on a weight to EPA ratio of 25 pounds per square foot.

The wind velocities are based on 10 mph increments from 80 mph through 100 mph (reference wind map). Standards to be located in areas of known abnormal conditions require special consideration. For example: coastal areas, airports, and areas of special winds such as the Chinook type along the eastern slope of the Rocky Mountains.

Standards are designed for ground mounted applications. Standards mounted on structures, such as bridges and buildings, also necessitate special consideration requiring Valmont's recommendation.

Height correction factors and drag coefficients are applied to the entire structure. An appropriate safety factor is maintained based on the minimum yield strength of the material incorporated in the standard. Secondary moments are considered on all designs.

Maximum weight and EPA values for DS220 products are determined by analyzing stress from two wind directions as shown. Due to the increased area and reduced section properties, stress levels across the points generally control the allowable loads.

Valmont Industries, Inc. reserves the right to install various, engineer approved, material hanging accommodations to facilitate the manufacturing process. If this method is not acceptable, Valmont Industries, Inc. must be notified by the customer prior to manufacturing.



Job Name: MSCAA Parking Garage Expansion & Improvements

Catalog Number: DS210-700A250-DB

Notes:

Type:

BB FSM10-43742

DS210 Round Tapered

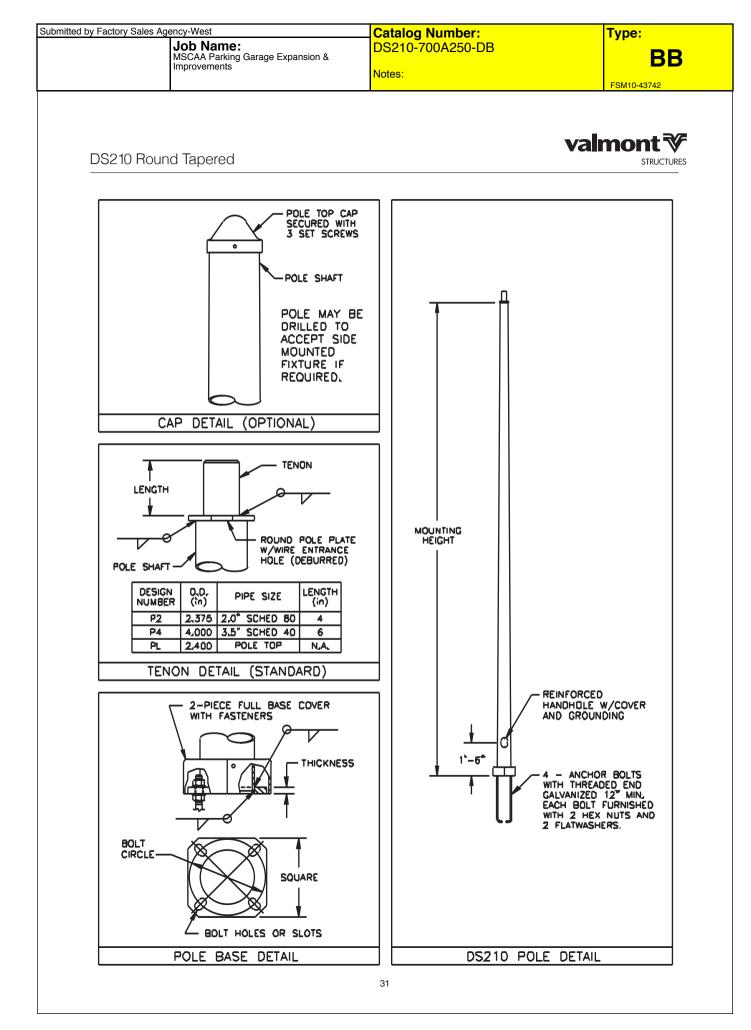
valmont∛ STRUCTURE

Nominal		Sha	aft				Pol	e Base		Anchor Bolts		1PH 8 Gust		MPH 3 Gust		MPH 3 Gust
Mounting Height (ft)	Designation Number	Base O.D. (in)	Top O.D. (in)	Wall Thk. (ga)	Struct. Weight (lbs)	Bolt 0 Dia. (in)	Circle ± (in)	Square (in)	Thk. (in)	Dia. x Lngth. x Hk. (in)	Max. EPA (ft²)	Max. Weight (lbs)	Max. EPA (ft ²)	Max. Weight (lbs)	Max. EPA (ft ²)	Max. Weight (lbs)
20	**590A200-P2	5.9	3.1	11	140	9.0	.5	10.00	0.88	1.00 x 36 x 4	19.3	482	15.1	377	12.2	305
	650A200-P2	6.5	3.7	11	160	9.5	.5	10.50	0.88	1.00 x 36 x 4	24.2	605	19.3	482	15.6	390
25	**590A250-PL	5.9	2.4	11	155	9.0	.5	10.00	0.88	1.00 x 36 x 4	12.5	312	9.9	247	8.0	200
	700A250-P2	7.0	3.5	11	200	10.0	.5	10.88	0.88	1.00 x 36 x 4	20.3	507	16.2	405	13.1	327
	700E250-P2	7.0	3.5	7	280	10.0	.5	10.88	1.00	1.00 x 36 x 4	30.5	760	24.0	625	19.8	495
30	660A300-PL	6.6	2.4	11	200	9.5	.5	10.50	0.88	1.00 x 36 x 4	11.7	292	9.3	232	7.5	187
	800A300-P2	8.0	3.8	11	265	11.0	.5	11.50	0.88	1.00 x 36 x 4	18.9	473	14.9	373	12.0	300
	800E300-P2	8.0	3.8	7	380	11.0	.5	11.50	1.25	1.25 x 42 x 6	33.5	838	27.0	675	22.0	550
35	730A350-PL	7.3	2.4	11	250	10.5	.5	11.25	0.88	1.00 x 36 x 4	11.2	280	8.9	222	7.1	177
	850A350-P2	8.5	3.6	11	315	11.5	.5	12.00	1.00	1.00 x 36 x 4	18.9	472	15.1	377	12.2	305
	950A350-P2	9.5	4.6	11	370	13.0	.5	13.00	1.00	1.00 x 36 x 4	23.2	580	18.2	455	14.5	363
39	782A389-PL	7.8	2.4	11	285	11.0	.5	11.50	0.88	1.00 x 36 x 4	10.7	267	8.5	212	6.6	165
	900A389-P2	9.0	3.6	11	355	12.5	.5	12.38	1.00	1.00 x 36 x 4	17.2	430	13.5	338	10.8	270
	900E389-P2	9.0	3.6	7	515	12.5	.5	12.38	1.25	1.25 x 42 x 6	28.5	715	23.0	575	19.0	475
45	T00A450-P2	10.0	3.7	11	450	13.5	.5	14.00	1.00	1.00 x 36 x 4	17.4	435	13.5	338	10.6	265
	T00E450-P2	10.0	3.7	7	650	13.5	.5	14.00	1.25	1.25 x 42 x 6	28.5	715	23.0	575	19.0	475
	E00E450-P4	11.0	4.7	7	780	15.0	.5	16.50	1.50	1.25 x 42 x 6	35.7	893	28.0	700	22.3	558
50	T00A500-P2 T00E500-P2 E00E500-P4 H00E500-P4 H00J500-P4	10.0 10.0 11.0 13.0 13.0	3.0 3.0 4.0 6.0 6.0	11 7 7 7 3	475 680 812 1020 1335	13.5 13.5 15.0 17.0 17.5	.5 .5 N/A N/A	14.00 14.00 16.50 18.00 18.50	1.00 1.25 1.50 1.50 1.75	1.00 x 36 x 4 1.25 x 42 x 6 1.25 x 42 x 6 1.50 x 54 x 6 1.75 x 84 x 6	13.2 20.5 29.9 50.4 69.2	330 512 748 1260 1730	10.6 16.5 23.5 39.7 55.0	265 412 588 992 1375	8.3 13.6 18.6 31.4 44.2	208 340 465 785 1105
55	E00E550-P4	11.0	3.5	7&11	890	15.0	.5	16.50	1.50	1.25 x 42 x 6	21.6	540	17.7	442	14.7	367
	W00E550-P4	12.0	4.5	7&11	975	16.0	N/A	17.00	1.50	1.50 x 54 x 6	32.2	805	25.9	647	21.1	527
	W504550-P4	12.5	5.2	5&7	1225	16.5	N/A	17.50	1.50	1.50 x 54 x 6	43.8	1095	35.0	875	28.6	715
60	W00E600-P4	12.0	4.0	7&7	1060	16.0	N/A	17.00	1.50	1.50 x 54 x 6	25.9	647	20.7	517	16.8	420
	H00E600-P4	13.0	4.8	7&11	1075	17.0	N/A	18.00	1.50	1.50 x 54 x 6	30.1	752	24.5	612	20.2	505
	W504600-P4	12.5	4.5	5&7	1275	16.5	N/A	17.50	1.50	1.50 x 54 x 6	34.0	850	27.6	690	22.6	565
65	H00E650-P4	13.0	4.3	7&7	1200	17.0	N/A	18.00	1.50	1.50 x 54 x 6	27.3	682	22.0	550	17.9	447
	H004650-P4	13.0	4.3	5&7	1400	17.0	N/A	18.00	1.50	1.50 x 54 x 6	30.8	770	24.8	620	20.4	510
70	H00E700-P4	13.0	3.6	7&7	1270	17.0	N/A	18.00	1.50	1.50 x 54 x 6	20.6	515	16.7	417	13.7	342
	H004700-P4	13.0	3.6	5&7	1440	17.0	N/A	18.00	1.50	1.50 x 54 x 6	23.6	590	19.2	480	15.8	395

DS210 NOTES:

1. **3" x 5" nominal handhole - all others 4" x 6.5" nominal.

Structure weight is a nominal value which includes the pole shaft and base plate only.
 Designs showing two shaft gauges indicates structure is provided as a two-piece, field assembled, unit. Heavier gauge is the bottom section.
 Maximum weight and EPA values are based on top mounted luminaires and/or brackets having a centroid 2'-6" above the nominal mounting height.



Job Name: MSCAA Parking Garage Expansion & Improvements

Catalog Number: LUMINAIRE LOWERING DEVICE (2 FIXTURES) DARK BRONZE Notes:

FSM10-43742

BB

Type:

retropole The future of area lighting

fetropole is a conversion kit for your new or existing pole lights. **retropole** enables the user to greatly reduce or eliminate his reliance on aerial lift equipment and expensive maintenance services.

fetropole comes standard in bronze and is ideal for virtually any 15-30 foot single luminaire light pole (square, round, or tapered) and can easily be upgraded to a 35-foot pole with extension rails. Optional 2-head adapters can be specified for only 180-degree configurations.

General Ratings

Weight 100lbs MAX Length Electrical 30 ft MAX 480V/15A MAX

Safety

Removable handle, variable mounting height, and lockable enclosure ensure tamper resistance. Inside the carriage, a tension sensing fall brake prevents fixture from moving in the unlikely event of vandalism or vehicular damage.

Materials

Head rail and all rail sections are 100% 6063-T5 Aluminum Prime Canadian Billet. Free of fillers or recycled products, 6063 aluminum has a very high silicone content and is extremely resistant to corrosion.

All steel components are galvanized and powder coated for additional corrosion resistance. Standard Carriage uses nylon or teflon pads for smooth lubrication-free operation.

1/8", 1700lb lifting cables and hardware packs are zinc/steel and can be upgraded to stainless steel for all installations within 50 miles of a salt water coast.

Electrical

Electrical contacts are rated 480V and 15A. Our contacts are composed of 85% nickel and 15% silver which makes them extremely durable and corrosion resistant. The contacts are UL Listed and manufactured for **retropole** by Meltric, Inc.

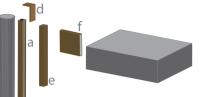
osion
ac-
LISTED

Electrical/lighting work is inherently dangerous. Please follow all applicable OSHA guidelines when installing or operating **retropole** or any other electrical or lighting device.

Existing pole condition is imperative for structural integrity. Pole should be at least 7 gauge steel and visually inspected by a qualified person for rust, physical damage or any other condition that could affect structural integrity.

All modifications should be done to the existing pole and light head. Any modifications to the **retropole** could affect the structural integrity. For installations in 100MPH+ zones, consult with your structural engineer before installing **retropole** or any other product onto your pole that could potentially alter its wind ratings.

PATENT-PENDING



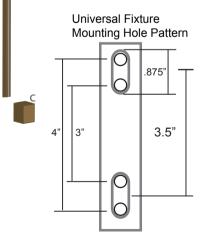
Existing Equipment-Gray retropole Conversion Kit-Bronze

h

retropole Conversion Kits come in sections, making it easy to handle and ship. All of the components and all hardware are packed neatly into our 48"x12"x8" box shipped directly to your facility or jobsite.

С	omponent	L	W	Н	
			Inches		lbs
а	Head Unit	12	2.75	2.5	2.15
b	Rail Sec.	46.5	2.5	2.25	4
С	Drive Mech	5.25	5.75	8.4	8
d	Сар	4	2.5	2.5	.2
е	Carriage	12	1.5	2.4	4.5
f	Arm	1	4	5	.8

retropoles universal design work with all pole geometries and most light heads. The bolt pattern shown below allows flexibility in mounting. **retropole** will bolt to any fixture with bolt distances from 3" to 4" without modifications.



retropole, llc

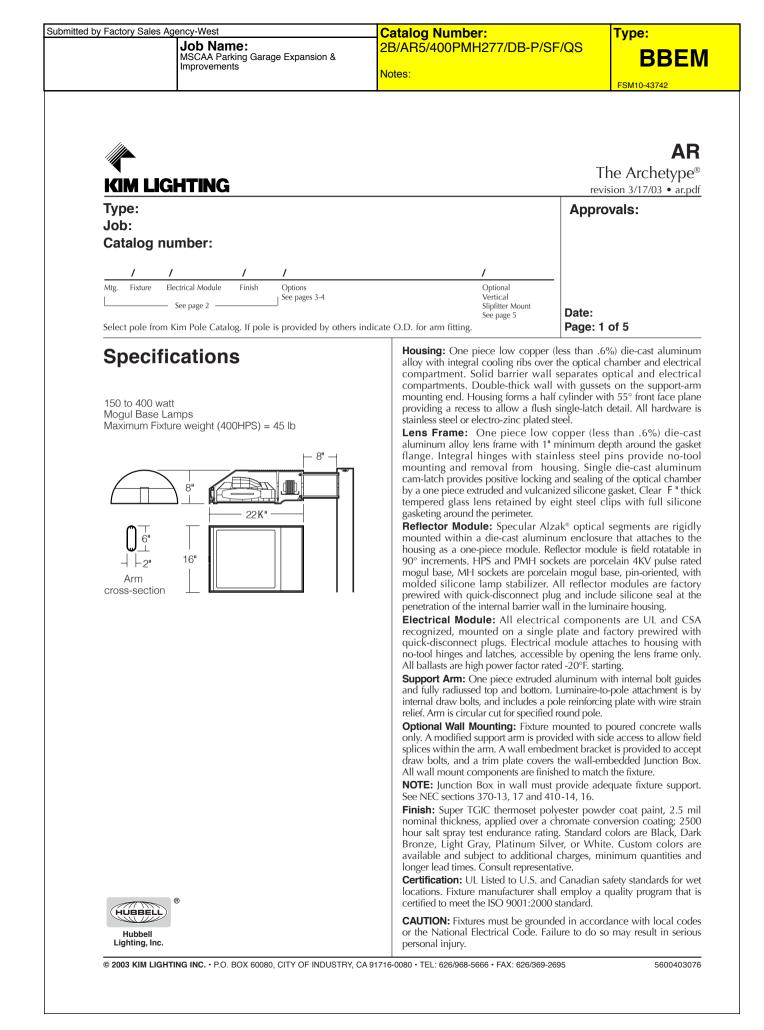
16135 Preston Rd #302 Dallas, TX 75248 www.retropole.com

Corporate 972-987-1642

fax	972-987-1659
New York	212-699-0759
Chicago	312-665-0080
Los Angeles	213-908-0823

In keeping with our commitment to continuous improvement in safety and quality, **retropole**, **Ik** reserves the right to change any specifications contained herein without prior notice.

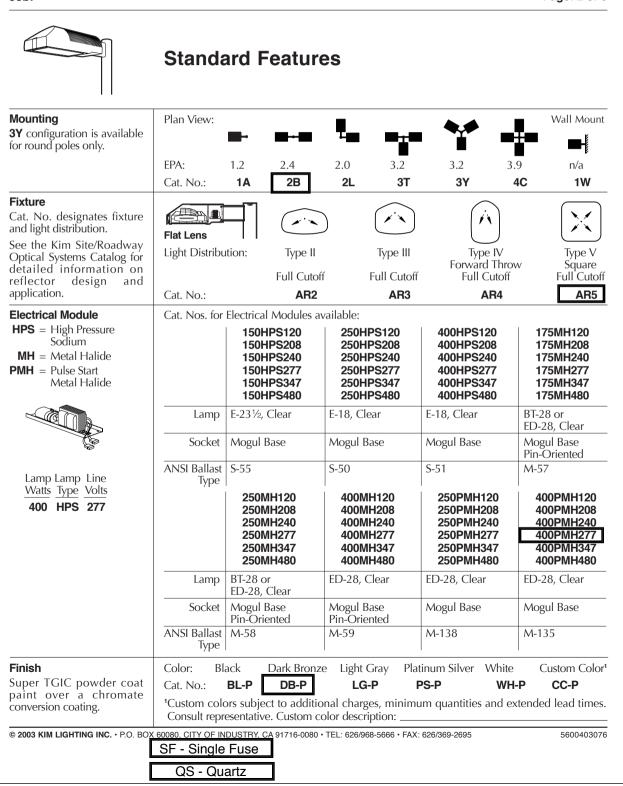
This document contains the proprietary information of **retropole**, **Ik** and any use of this information requires the written approval of **retropole**, **Ik**.



itted by Factory Sales A	Agency-West Job Name: MSCAA Parking Garage Expansion & Improvements	Catalog Number: 2B/AR5/400PMH277/DB-P/SF/QS Notes:	Type: BBEN FSM10-43742

Type: Job:

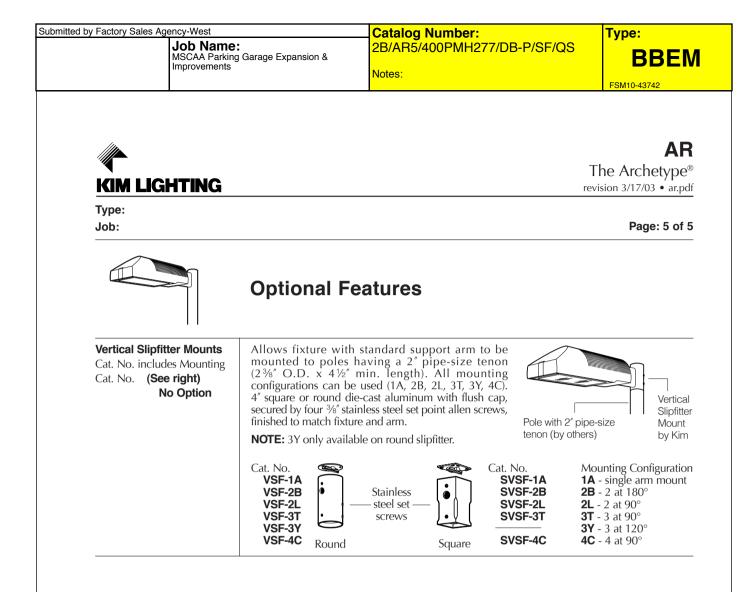
Page: 2 of 5



Factory Sales Ag	ency-West Job Name		Catalog N				vpe:
	MSCAA Parking	Garage Expansion &	2B/AR5/4	00PMH277	UB-P/SF/	20	BB
	Improvements		Notes:			FS	M10-43742
KIM LIG	HTING						Arche ¹ 3/17/03
Type: Job:							Page:
		Optional F	eatures				
Wall Mounting Cat. No. 1W Select from <i>N</i> page 2 .		Fixture mounted to modified support arm allow field splices wi bracket (WEB) is pro trim plate covers the wall mount componer	n is provided wit thin the arm. A vided to accept c wall-embedded	h side access wall embedme Iraw bolts, and unction Box.	to ent I a All re.	2	
						hount using wa ket - J-box in w	
	eptacle -25 o Option	Fixture supplied with the electrical compar (by others). For all mu two or three fixtures, operate the others. For require one fixture v (400 watt) require two	rtment for NEMA Iltiple-fixture pole , one fixture has pur fixtures (250 with a receptacl	A base photoc e mountings w a receptacle watt or less) a e. Four fixtu	ell ith to so		— Rece
		Mounting (see page 2)		* - 1A, 1W	* ••• s	s	
		* – Fixture with Photo S – slave unit(s)		rA, rw	S 3T, 3Y	s and the second	s s
		Allowable wattage pe	er fixture:	150-4	400W	150-250	W 40
	Lens GL o Option	The F " thick clear co the standard flat gla presence and provi uniformity where po effectiveness of house	ss lens. Provides ides a subtle i le spacing is ex	s increaseḋ le mprovement	ens in	2 K" Conv	vex Glass L
Polycarbonate Cat. No. L N		Fixture supplied with a UV stabilized conver- replacing the standar maximum. May be locations where ambi operation will not exc	x polycarbonate d tempered glas used with 4001 ient air temperatu ceed 85°F.	, fully gaskete s lens. 250 w HPS in outdo ire during fixtu	ed, att oor ire		
		CAUTION: Use only be high. Useful life is sunlight and metal ha	limited by UV di	is anticipated	io om	Polyc	arbonate l

5600403076

y Factory Sales Agency-West Job Nam MSCAA Park Improvement:	ing Garage Expansion &	Catalog Number: 2B/AR5/400PMH277/DB-P/SF Notes:	BBEN
KIM LIGHTING			FSM10-43742 AR The Archetype [®] revision 3/17/03 • ar.pdf
Job:			Page: 4 of 5
	Optional F	eatures	
Houseside Shield Cat. No. (See right) No Option	flat glass lens are av louvers that pass stre light, and a blackene reduce houseside ref convex glass lens aluminum shield that houseside light, and the reflector to reduc clear lamps only, as of Cat. No. HS Recomm lamps. N	ended for use with clear lamps only. Effections with distributions with all fixtures with convex glass lens.	
Tamper-Resistant Latch Cat. No. TL No Option	stainless steel flat unauthorized openin NOTE: Required onl	y for vandal protection in locations e reached by unauthorized persons.	Tamper-Resistant Latch
Horizontal Slipfitter Mount Cat. No. HSF No Option	allows fixture to be davit-arm with 2" pij Cast aluminum clai anti-rotation lock. I electrical compartm standard support arm	ounting arm with a slipfitter which e mounted to a horizontal pole pe-size mounting end (2%" O.D.). mp-type slipfitter with set screw Bolts to housing from inside the ent using mounting holes for the n. Davit-arm must be field drilled at to insure against fixture rotation. ture.	Davit-arm with 2" pipe-size fixture mount (by others) Horizontal Slipfitter Mount by Kim
Special Options for Street Lighting Cat. No. (See right)	85AMP, 600V box the housing inside th #14-4 wire. Factor quick-disconnect plu TB No Option Air Filter: Allows f chamber, filtering al Multi-layer disc as	field wire connections.) clamp terminal block mounted to ne electrical compartment. Accepts y prewired to electrical module Jg. For ventilation through the optical I air particles above 500 microns. seembly mounted on solid wall Air F npartment and latch cavity.	Terminal Block





Catalog Number: DS210-700A250-DB

Notes:



Product Specifications DS210, DS220



ANCHOR BOLTS

Anchor Bolts are fabricated from carbon steel bar conforming to AASHTO M314 Grade-55 or ASTM F1554 Grade-55. Bolts have an "L" bend on one end and are galvanized a minimum of 12 inches on the threaded end. Four anchor bolts are provided per pole. Each anchor bolt is furnished with two hex nuts and two flat washers.

ANCHOR BASE

The anchor base (base plate) is fabricated from structural quality hot rolled carbon steel plate conforming to ASTM A36. The base plate telescopes the pole shaft and is circumferentially welded top and bottom. Please refer to the charted bolt circles and detail drawings to determine the type of hole or slot accommodation made for the anchor bolt.

POLE SHAFT

The pole shaft conforms to ASTM A595 Grade-A and is supplied in 11 gauge (0.1196"), 7 gauge (0.1793") 5 gauge (0.2092") or 3 gauge (0.2391") thickness. The pole can be either onepiece or two piece construction, with a full length longitudinal high frequency electric resistance weld. The DS210 series is round in cross-section having a uniform taper of approximately 0.14 inches per foot of length. The DS220 series shaft is square in cross section having flat sides, radiused corners and a uniform taper of approximately 0.11 inches per foot of length.

HANDHOLE

The reinforcing handhole rim consists of either a nominal 3" x 5" rectangular shaped tubing or 4" x 6.5" oval shaped pipe material. The 3" x 5" handhole is provided with a steel attachment bar, steel cover, and one round head machine screw. The 4" x 6.5" handhole includes two tabs for mounting a steel cover with hex head attachment screws. Both handhole types are welded in the pole shaft and are located 1'-6" above the base.

ELECTRICAL GROUND

A nut holder is provided near the handhole and includes a .5"-13UNC hex head bolt and nut.

NUT COVERS (OPTIONAL)

Nut covers for anchor bolts are zinc die cast. Each cover is fastened to the shaft by a 0.25" stainless steel, self-tapping, hex head screw. Nut covers are a standard component for the DS210 series and are NOT available for the DS220 series.

FULL BASE COVER (STANDARD)

The optional full base cover is fabricated from ABS plastic. Valmont reserves the right to provide a steel assembly on some applications depending upon the finish requirement and/or pole shaft base diameter. Both steel and plastic covers are a two-piece assembly secured together with two fasteners. A full base cover is a standard component on the DS220 series.

POLE TOP TENON (STANDARD)

Pole top tenons are fabricated from structural quality hot rolled carbon steel with a guaranteed minimum yield strength of 30,000 psi. A pole top plate and tenon of weldable grade hot rolled commercial quality carbon steel is circumferentially welded to the top of the pole shaft. This plate provides an internal weather resistant wiring raceway into the pole top tenon. Standard sizes are either 2.38" O.D. x 4" long (P2) or 4" O.D. x 6" long (P4) steel tubing. See page 1 for other available sizes.

POLE TOP CAP

A removable cap is available as an option to be used in conjunction with drilled shafts for direct luminaire arm attachment.

STANDARD FINISH

Standard finishes available are galvanize, prime coat (powder), and finish coat (powder). For information regarding the scope and application of these coatings please refer to page 5.

FASTENING HARDWARE

All structural fasteners are galvanized high strength carbon steel. All fasteners are galvanized or zinc plated carbon steel or stainless steel.

DESIGN

The standards shown in this section are designed to withstand dead loads and theoretical dynamic loads developed by variable wind speeds, as charted, with an appropriate gust factor under the following conditions:

The luminaire(s) and/or mounting bracket(s) center of gravity, or centroid, is assumed to be located a maximum of 2'-6" above the pole top. For purposes of design, effective projected area (EPA) is considered to be the product of the actual projected area and the drag coefficient.

The listed weights include luminaire(s) and/or mounting bracket(s) and are based on a weight to EPA ratio of 25 pounds per square foot.

The wind velocities are based on 10 mph increments from 80 mph through 100 mph (reference wind map). Standards to be located in areas of known abnormal conditions require special consideration. For example: coastal areas, airports, and areas of special winds such as the Chinook type along the eastern slope of the Rocky Mountains.

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Job Name: MSCAA Parking Garage Expansion & Improvements

Catalog Number: DS210-700A250-DB

Type:

Notes:

FSM10-43742

DS210 Round Tapered

valmont∛

STRUCTURE

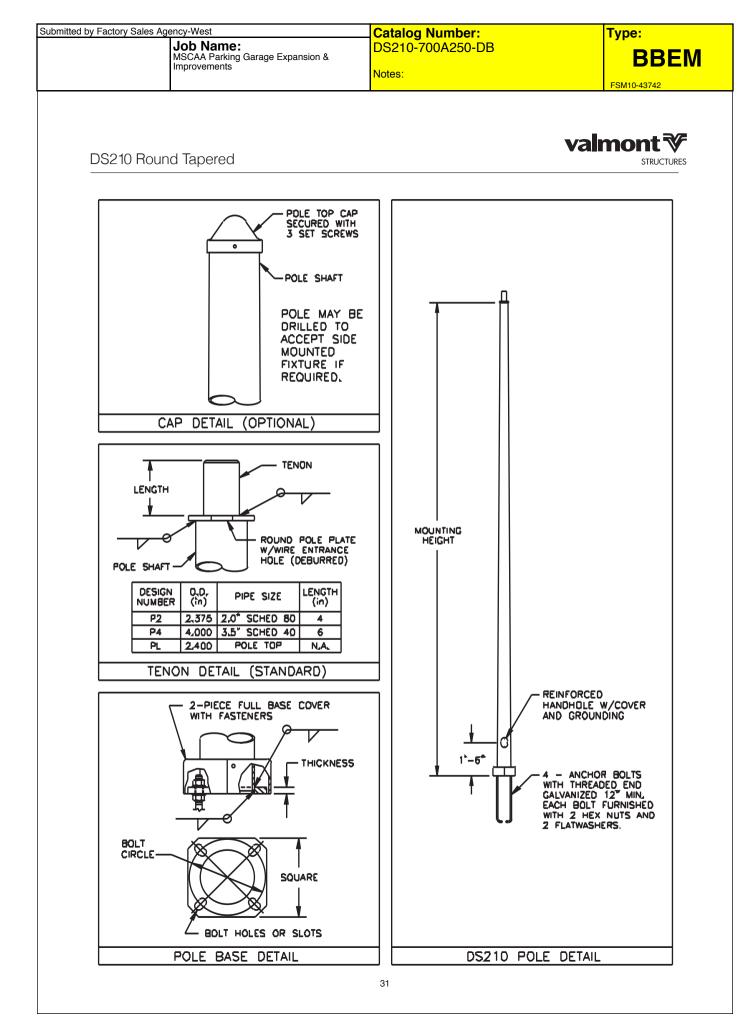
BBEM

Nominal Shaft			Pole Base		Anchor Bolts	80MPH w/1.3 Gust		90MPH w/1.3 Gust		100MPH w/1.3 Gust						
Mounting Height (ft)	Designation Number	Base O.D. (in)	Top O.D. (in)	Wall Thk. (ga)	Struct. Weight (lbs)	Bolt (Dia. (in)	Circle ± (in)	Square (in)	Thk. (in)	Dia. x Lngth. x Hk. (in)	Max. EPA (ft²)	Max. Weight (lbs)	Max. EPA (ft ²)	Max. Weight (lbs)	Max. EPA (ft ²)	Max. Weight (lbs)
20	**590A200-P2	5.9	3.1	11	140	9.0	.5	10.00	0.88	1.00 x 36 x 4	19.3	482	15.1	377	12.2	305
	650A200-P2	6.5	3.7	11	160	9.5	.5	10.50	0.88	1.00 x 36 x 4	24.2	605	19.3	482	15.6	390
25	**590A250-PL	5.9	2.4	11	155	9.0	.5	10.00	0.88	1.00 x 36 x 4	12.5	312	9.9	247	8.0	200
	700A250-P2	7.0	3.5	11	200	10.0	.5	10.88	0.88	1.00 x 36 x 4	20.3	507	16.2	405	13.1	327
	700E250-P2	7.0	3.5	7	280	10.0	.5	10.88	1.00	1.00 x 36 x 4	30.5	760	24.0	625	19.8	495
30	660A300-PL	6.6	2.4	11	200	9.5	.5	10.50	0.88	1.00 x 36 x 4	11.7	292	9.3	232	7.5	187
	800A300-P2	8.0	3.8	11	265	11.0	.5	11.50	0.88	1.00 x 36 x 4	18.9	473	14.9	373	12.0	300
	800E300-P2	8.0	3.8	7	380	11.0	.5	11.50	1.25	1.25 x 42 x 6	33.5	838	27.0	675	22.0	550
35	730A350-PL	7.3	2.4	11	250	10.5	.5	11.25	0.88	1.00 x 36 x 4	11.2	280	8.9	222	7.1	177
	850A350-P2	8.5	3.6	11	315	11.5	.5	12.00	1.00	1.00 x 36 x 4	18.9	472	15.1	377	12.2	305
	950A350-P2	9.5	4.6	11	370	13.0	.5	13.00	1.00	1.00 x 36 x 4	23.2	580	18.2	455	14.5	363
39	782A389-PL	7.8	2.4	11	285	11.0	.5	11.50	0.88	1.00 x 36 x 4	10.7	267	8.5	212	6.6	165
	900A389-P2	9.0	3.6	11	355	12.5	.5	12.38	1.00	1.00 x 36 x 4	17.2	430	13.5	338	10.8	270
	900E389-P2	9.0	3.6	7	515	12.5	.5	12.38	1.25	1.25 x 42 x 6	28.5	715	23.0	575	19.0	475
45	T00A450-P2	10.0	3.7	11	450	13.5	.5	14.00	1.00	1.00 x 36 x 4	17.4	435	13.5	338	10.6	265
	T00E450-P2	10.0	3.7	7	650	13.5	.5	14.00	1.25	1.25 x 42 x 6	28.5	715	23.0	575	19.0	475
	E00E450-P4	11.0	4.7	7	780	15.0	.5	16.50	1.50	1.25 x 42 x 6	35.7	893	28.0	700	22.3	558
50	T00A500-P2 T00E500-P2 E00E500-P4 H00E500-P4 H00J500-P4	10.0 10.0 11.0 13.0 13.0	3.0 3.0 4.0 6.0 6.0	11 7 7 7 3	475 680 812 1020 1335	13.5 13.5 15.0 17.0 17.5	.5 .5 N/A N/A	14.00 14.00 16.50 18.00 18.50	1.00 1.25 1.50 1.50 1.75	1.00 x 36 x 4 1.25 x 42 x 6 1.25 x 42 x 6 1.50 x 54 x 6 1.75 x 84 x 6	13.2 20.5 29.9 50.4 69.2	330 512 748 1260 1730	10.6 16.5 23.5 39.7 55.0	265 412 588 992 1375	8.3 13.6 18.6 31.4 44.2	208 340 465 785 1105
55	E00E550-P4	11.0	3.5	7&11	890	15.0	.5	16.50	1.50	1.25 x 42 x 6	21.6	540	17.7	442	14.7	367
	W00E550-P4	12.0	4.5	7&11	975	16.0	N/A	17.00	1.50	1.50 x 54 x 6	32.2	805	25.9	647	21.1	527
	W504550-P4	12.5	5.2	5&7	1225	16.5	N/A	17.50	1.50	1.50 x 54 x 6	43.8	1095	35.0	875	28.6	715
60	W00E600-P4	12.0	4.0	7&7	1060	16.0	N/A	17.00	1.50	1.50 x 54 x 6	25.9	647	20.7	517	16.8	420
	H00E600-P4	13.0	4.8	7&11	1075	17.0	N/A	18.00	1.50	1.50 x 54 x 6	30.1	752	24.5	612	20.2	505
	W504600-P4	12.5	4.5	5&7	1275	16.5	N/A	17.50	1.50	1.50 x 54 x 6	34.0	850	27.6	690	22.6	565
65	H00E650-P4	13.0	4.3	7&7	1200	17.0	N/A	18.00	1.50	1.50 x 54 x 6	27.3	682	22.0	550	17.9	447
	H004650-P4	13.0	4.3	5&7	1400	17.0	N/A	18.00	1.50	1.50 x 54 x 6	30.8	770	24.8	620	20.4	510
70	H00E700-P4	13.0	3.6	7&7	1270	17.0	N/A	18.00	1.50	1.50 x 54 x 6	20.6	515	16.7	417	13.7	342
	H004700-P4	13.0	3.6	5&7	1440	17.0	N/A	18.00	1.50	1.50 x 54 x 6	23.6	590	19.2	480	15.8	395

DS210 NOTES:

1. **3" x 5" nominal handhole - all others 4" x 6.5" nominal.

Structure weight is a nominal value which includes the pole shaft and base plate only.
 Designs showing two shaft gauges indicates structure is provided as a two-piece, field assembled, unit. Heavier gauge is the bottom section.
 Maximum weight and EPA values are based on top mounted luminaires and/or brackets having a centroid 2'-6" above the nominal mounting height.



Job Name: MSCAA Parking Garage Expansion & Improvements

Catalog Number: LUMINAIRE LOWERING DEVICE (2 FIXTURES) DARK BRONZE Notes:

FSM10-43742

BBFM

Type:



fetropole is a conversion kit for your new or existing pole lights. **retropole** enables the user to greatly reduce or eliminate his reliance on aerial lift equipment and expensive maintenance services.

fetropole comes standard in bronze and is ideal for virtually any 15-30 foot single luminaire light pole (square, round, or tapered) and can easily be upgraded to a 35-foot pole with extension rails. Optional 2-head adapters can be specified for only 180-degree configurations.

General Ratings

Weight 100lbs MAX Length Electrical 30 ft MAX 480V/15A MAX

Safety

Removable handle, variable mounting height, and lockable enclosure ensure tamper resistance. Inside the carriage, a tension sensing fall brake prevents fixture from moving in the unlikely event of vandalism or vehicular damage.

Materials

Head rail and all rail sections are 100% 6063-T5 Aluminum Prime Canadian Billet. Free of fillers or recycled products, 6063 aluminum has a very high silicone content and is extremely resistant to corrosion.

All steel components are galvanized and powder coated for additional corrosion resistance. Standard Carriage uses nylon or teflon pads for smooth lubrication-free operation.

1/8", 1700lb lifting cables and hardware packs are zinc/steel and can be upgraded to stainless steel for all installations within 50 miles of a salt water coast.

Electrical

Electrical contacts are rated 480V and 15A. Our contacts are composed of 85% nickel and 15% silver which makes them extremely durable and corrosion resistant. The contacts are UL Listed and manufactured for **retropole** by Meltric, Inc.

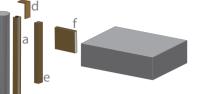
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LISTED

Electrical/lighting work is inherently dangerous. Please follow all applicable OSHA guidelines when installing or operating **retropole** or any other electrical or lighting device.

Existing pole condition is imperative for structural integrity. Pole should be at least 7 gauge steel and visually inspected by a qualified person for rust, physical damage or any other condition that could affect structural integrity.

All modifications should be done to the existing pole and light head. Any modifications to the **retropole** could affect the structural integrity. For installations in 100MPH+ zones, consult with your structural engineer before installing **retropole** or any other product onto your pole that could potentially alter its wind ratings.

PATENT-PENDING



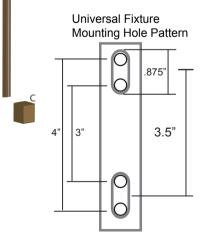
Existing Equipment-Gray retropole Conversion Kit-Bronze

h

retropole Conversion Kits come in sections, making it easy to handle and ship. All of the components and all hardware are packed neatly into our 48"x12"x8" box shipped directly to your facility or jobsite.

С	omponent	L	W	Н	lha
					lbs
а	Head Unit	12	2.75	2.5	2.15
b	Rail Sec.	46.5	2.5	2.25	4
С	Drive Mech	5.25	5.75	8.4	8
d	Сар	4	2.5	2.5	.2
е	Carriage	12	1.5	2.4	4.5
f	Arm	1	4	5	.8

retropoles universal design work with all pole geometries and most light heads. The bolt pattern shown below allows flexibility in mounting. **retropole** will bolt to any fixture with bolt distances from 3" to 4" without modifications.



retropole, llc

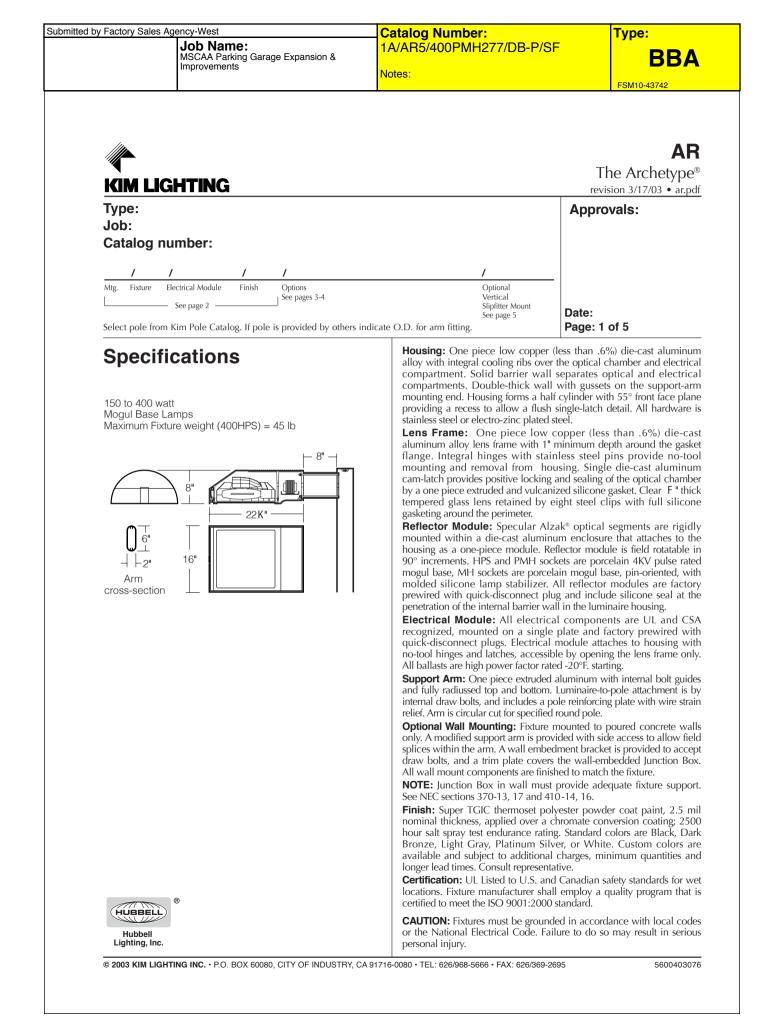
16135 Preston Rd #302 Dallas, TX 75248 www.retropole.com

Corporate 972-987-1642

fax	972-987-1659
New York	212-699-0759
Chicago	312-665-0080
Los Angeles	213-908-0823

In keeping with our commitment to continuous improvement in safety and quality, **retropole**, **Ik** reserves the right to change any specifications contained herein without prior notice.

This document contains the proprietary information of **retropole**, **Ik** and any use of this information requires the written approval of **retropole**, **Ik**.



by Factory Sales Agency-West Job Name MSCAA Parking Improvements	Garage Expansion &	Catalog Number: 1A/AR5/400PMH277/DB-P/SF Notes:	Type: BBA FSM10-43742
KIM LIGHTING			AR The Archetype® revision 3/17/03 • ar.pd
Type: Job: 			Page: 2 of s
	Standard I	Features	
Mounting 3Y configuration is available	Plan View:		Wall Mount

2B

Type II

Full Cutoff

AR2

2.0

2L

3.2

Type III

Full Cutoff

250HPS120

250HPS208

250HPS240

250HPS277

250HPS347

250HPS480

E-18, Clear

Mogul Base

400MH120

S-50

AR3

3T

3.2

3Y

À

Type IV

Forward Throw

Full Cutoff

400HPS120

400HPS208

400HPS240

400HPS277

400HPS347

400HPS480

250PMH120

E-18, Clear

Mogul Base

S-51

AR4

3.9

4C

n/a

1W

Type V

Square

Full Cutoff

175MH120

175MH208

175MH240

175MH277

175MH347

175MH480

BT-28 or ED-28, Clear

M-57

Mogul Base

Pin-Oriented

400PMH120

400PMH208

400PMH240 400PMH277

400PMH347

400PMH480

AR5

EPA: 2.4

1A

Cat. Nos. for Electrical Modules available:

150HPS120

150HPS208

150HPS240

150HPS277

150HPS347

150HPS480

Lamp E-23 K, Clear

S-55

Mogul Base

250MH120

Cat. No.:

Flat Lens

Cat. No.:

Light Distribution:

Socket

Туре

ANSI Ballast

Fixture Cat. No. designates fixture

and light distribution. See the Kim Site/Roadway Optical Systems Catalog for detailed information on reflector design and application. **Electrical Module**

HPS = High Pressure Sodium

MH = Metal Halide **PMH** = Pulse Start Metal Halide

Lamp Lamp Line Watts Type Volts 400 HPS 277

Finish

250MH208 400MH208 250PMH208 250MH240 400MH240 250PMH240 250MH277 400MH277 250PMH277 250PMH347 250MH347 400MH347 250MH480 400MH480 250PMH480 BT-28 or ED-28, Clear ED-28, Clear ED-28, Clear Lamp ED-28, Clear Mogul Base Mogul Base Socket Mogul Base Mogul Base Pin-Oriented Pin-Oriented **ANSI Ballast** M-58 M-59 M-138 M-135 Туре Black Dark Bronze Light Gray Platinum Silver White Color: Super TGIC powder coat BL-P DB-P LG-P PS-P WH-P Cat. No.: paint over a chromate ¹Custom colors subject to additional charges, minimum quantities and extended lead times. conversion coating.

Consult representative. Custom color description: © 2003 KIM LIGHTING INC. • P.O. BOX 60080, CITY OF INDUSTRY, CA 91716-0080 • TEL: 626/968-5666 • FAX: 626/369-2695

5600403076

Custom Color¹

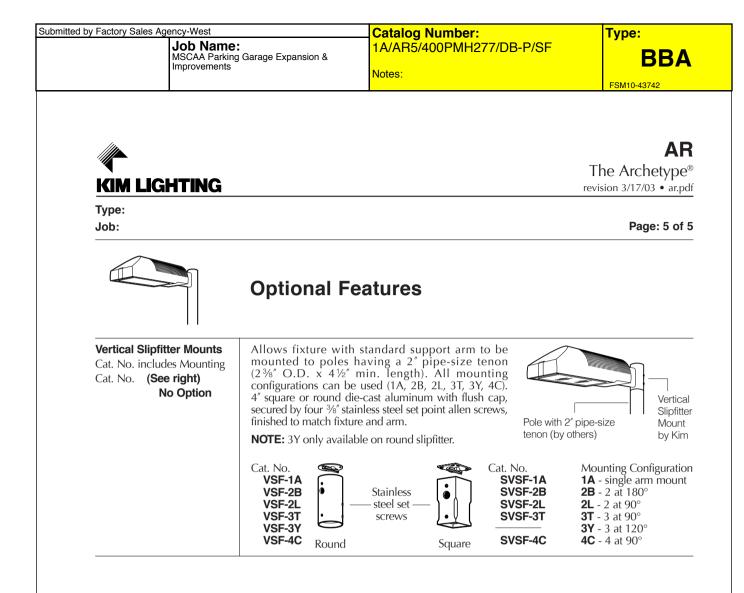
CC-P

SF - Single Fuse

Factory Sales Age	Job Name MSCAA Parking	Garage Expansion &	<mark>Catalog N</mark> 1A/AR5/4	lumber: 00PMH277/	DB-P/SF	Тур	e: B
	Improvements		Notes:			FSM	10-43742
KIM LIGI	HTING					The A revision 3	
Type: Job:							Page
		Optional F	eatures				
Wall Mounting Cat. No. 1W Select from <i>N</i> page 2 .		Fixture mounted to modified support arm allow field splices wi bracket (WEB) is pro- trim plate covers the wall mount componer	is provided wit thin the arm. A vided to accept d wall-embedded J	h side access wall embedme raw bolts, and unction Box. A	to nt a All re.	2 1 1 1 1 1 1 1 1 1 1	4J"
						nount using wall ket - J-box in wa	
	eptacle 25 o Option	Fixture supplied with the electrical compar (by others). For all mu two or three fixtures, operate the others. For require one fixture v (400 watt) require two	tment for NEMA Iltiple-fixture pole , one fixture has pur fixtures (250 v with a receptacl	base photoce mountings wi a receptacle watt or less) al e. Four fixtur	ell th to so		— Red
		Mounting (see page 2)		∗ ■→ 1A, 1W	* s 2B	s S	
		* – Fixture with Photo S – slave unit(s)	cell Receptacle	* s 2L	s s 3T, 3Y	s	S
		Allowable wattage pe	r fixture:	150-4		150-250W	4
	Lens GL o Option	The F " thick clear co the standard flat gla presence and provi uniformity where po effectiveness of house	ss lens. Provides des a subtle in le spacing is ex	increased le nprovement	ns in	2K"	× Glass
Polycarbonate Cat. No. LS No		Fixture supplied with a UV stabilized conve replacing the standar maximum. May be locations where ambi operation will not exc	x polycarbonate, d tempered glass used with 4001 ent air temperatu	fully gaskete lens. 250 wa HPS in outdo	d, att or		
		CAUTION: Use only be high. Useful life is sunlight and metal ha	limited by UV di	is anticipated scoloration fro	to m	Polycar	I bonate

5600403076

v Factory Sales Agency-West Job Name MSCAA Parkii Improvements	ng Garage Expansion &	Catalog Number: 1A/AR5/400PMH277/DB-I Notes:	P/SF Type: BB/ FSM10-43742
KIM LIGHTING			AI The Archetype revision 3/17/03 • ar.p
Type: Job:			Page: 4 of
	Optional F	eatures	
Houseside Shield Cat. No. (See right) No Option	flat glass lens are a louvers that pass str light, and a blacken reduce houseside rei convex glass lens aluminum shield tha houseside light, and the reflector to redu clear lamps only, as Cat. No. HS Recomm lamps. N	/ only). Fixtures with the standard vailable with stamped aluminum reetside light and block houseside ed panel added to the reflector to flections. Fixtures with the optional is are available with a formed at passes streetside light and blocks a black anodized panel added to ce houseside reflections. Use with coated lamps reduce effectiveness.	ions.
Tamper-Resistant Latch Cat. No. TL No Option	stainless steel flat unauthorized openir NOTE: Required on	ch is provided with a captive 10-32 socket-head screw to prevent ng. Iy for vandal protection in locations e reached by unauthorized persons.	Tamper-Resistant Latch
Horizontal Slipfitter Mount Cat. No. HSF No Option	allows fixture to b davit-arm with 2" pi Cast aluminum cla anti-rotation lock. electrical compartm standard support arm	nounting arm with a slipfitter which be mounted to a horizontal pole ipe-size mounting end $(2\%" O.D.)$. imp-type slipfitter with set screw Bolts to housing from inside the nent using mounting holes for the n. Davit-arm must be field drilled at n to insure against fixture rotation. sture.	Davit-arm with 2" pipe-si fixture mount (by others)
Special Options for Street Lighting Cat. No. (See right)	85AMP, 600V box the housing inside t #14-4 wire. Factor quick-disconnect pl TB No Option Air Filter: Allows chamber, filtering a Multi-layer disc as	r field wire connections.) clamp terminal block mounted to he electrical compartment. Accepts ry prewired to electrical module ug. for ventilation through the optical ll air particles above 500 microns. ssembly mounted on solid wall mpartment and latch cavity.	Terminal Blo



Submitted by Factory Sales Agency-West

Job Name:
MSCAA Parking Garage Expansion &
Improvements

Catalog Number: DS210-700A250-DB

Notes:

BBA

Type:

Product Specifications DS210, DS220

ANCHOR BOLTS

Anchor Bolts are fabricated from carbon steel bar conforming to AASHTO M314 Grade-55 or ASTM F1554 Grade-55. Bolts have an "L" bend on one end and are galvanized a minimum of 12 inches on the threaded end. Four anchor bolts are provided per pole. Each anchor bolt is furnished with two hex nuts and two flat washers.

ANCHOR BASE

The anchor base (base plate) is fabricated from structural quality hot rolled carbon steel plate conforming to ASTM A36. The base plate telescopes the pole shaft and is circumferentially welded top and bottom. Please refer to the charted bolt circles and detail drawings to determine the type of hole or slot accommodation made for the anchor bolt.

POLE SHAFT

The pole shaft conforms to ASTM A595 Grade-A and is supplied in 11 gauge (0.1196"), 7 gauge (0.1793") 5 gauge (0.2092") or 3 gauge (0.2391") thickness. The pole can be either onepiece or two piece construction, with a full length longitudinal high frequency electric resistance weld. The DS210 series is round in cross-section having a uniform taper of approximately 0.14 inches per foot of length. The DS220 series shaft is square in cross section having flat sides, radiused corners and a uniform taper of approximately 0.11 inches per foot of length.

HANDHOLE

The reinforcing handhole rim consists of either a nominal 3" x 5" rectangular shaped tubing or 4" x 6.5" oval shaped pipe material. The 3" x 5" handhole is provided with a steel attachment bar, steel cover, and one round head machine screw. The 4" x 6.5" handhole includes two tabs for mounting a steel cover with hex head attachment screws. Both handhole types are welded in the pole shaft and are located 1'-6" above the base.

ELECTRICAL GROUND

A nut holder is provided near the handhole and includes a .5"-13UNC hex head bolt and nut.

NUT COVERS (OPTIONAL)

Nut covers for anchor bolts are zinc die cast. Each cover is fastened to the shaft by a 0.25" stainless steel, self-tapping, hex head screw. Nut covers are a standard component for the DS210 series and are NOT available for the DS220 series.

FULL BASE COVER (STANDARD)

The optional full base cover is fabricated from ABS plastic. Valmont reserves the right to provide a steel assembly on some applications depending upon the finish requirement and/or pole shaft base diameter. Both steel and plastic covers are a two-piece assembly secured together with two fasteners. A full base cover is a standard component on the DS220 series.

POLE TOP TENON (STANDARD)

Pole top tenons are fabricated from structural quality hot rolled carbon steel with a guaranteed minimum yield strength of 30,000 psi. A pole top plate and tenon of weldable grade hot rolled commercial quality carbon steel is circumferentially welded to the top of the pole shaft. This plate provides an internal weather resistant wiring raceway into the pole top tenon. Standard sizes are either 2.38" O.D. x 4" long (P2) or 4" O.D. x 6" long (P4) steel tubing. See page 1 for other available sizes.

POLE TOP CAP

A removable cap is available as an option to be used in conjunction with drilled shafts for direct luminaire arm attachment.

STANDARD FINISH

Standard finishes available are galvanize, prime coat (powder), and finish coat (powder). For information regarding the scope and application of these coatings please refer to page 5.

FASTENING HARDWARE

All structural fasteners are galvanized high strength carbon steel. All fasteners are galvanized or zinc plated carbon steel or stainless steel.

DESIGN

The standards shown in this section are designed to withstand dead loads and theoretical dynamic loads developed by variable wind speeds, as charted, with an appropriate gust factor under the following conditions:

The luminaire(s) and/or mounting bracket(s) center of gravity, or centroid, is assumed to be located a maximum of 2'-6" above the pole top. For purposes of design, effective projected area (EPA) is considered to be the product of the actual projected area and the drag coefficient.

The listed weights include luminaire(s) and/or mounting bracket(s) and are based on a weight to EPA ratio of 25 pounds per square foot.

The wind velocities are based on 10 mph increments from 80 mph through 100 mph (reference wind map). Standards to be located in areas of known abnormal conditions require special consideration. For example: coastal areas, airports, and areas of special winds such as the Chinook type along the eastern slope of the Rocky Mountains.

Standards are designed for ground mounted applications. Standards mounted on structures, such as bridges and buildings, also necessitate special consideration requiring Valmont's recommendation.

Height correction factors and drag coefficients are applied to the entire structure. An appropriate safety factor is maintained based on the minimum yield strength of the material incorporated in the standard. Secondary moments are considered on all designs.

Maximum weight and EPA values for DS220 products are determined by analyzing stress from two wind directions as shown. Due to the increased area and reduced section properties, stress levels across the points generally control the allowable loads.

Valmont Industries, Inc. reserves the right to install various, engineer approved, material hanging accommodations to facilitate the manufacturing process. If this method is not acceptable, Valmont Industries, Inc. must be notified by the customer prior to manufacturing.



Submitted by Factory Sales Agency-West

Job Name: MSCAA Parking Garage Expansion & Improvements

Catalog Number: DS210-700A250-DB

Type:

Notes:

FSM10-43742

BBA

DS210 Round Tapered

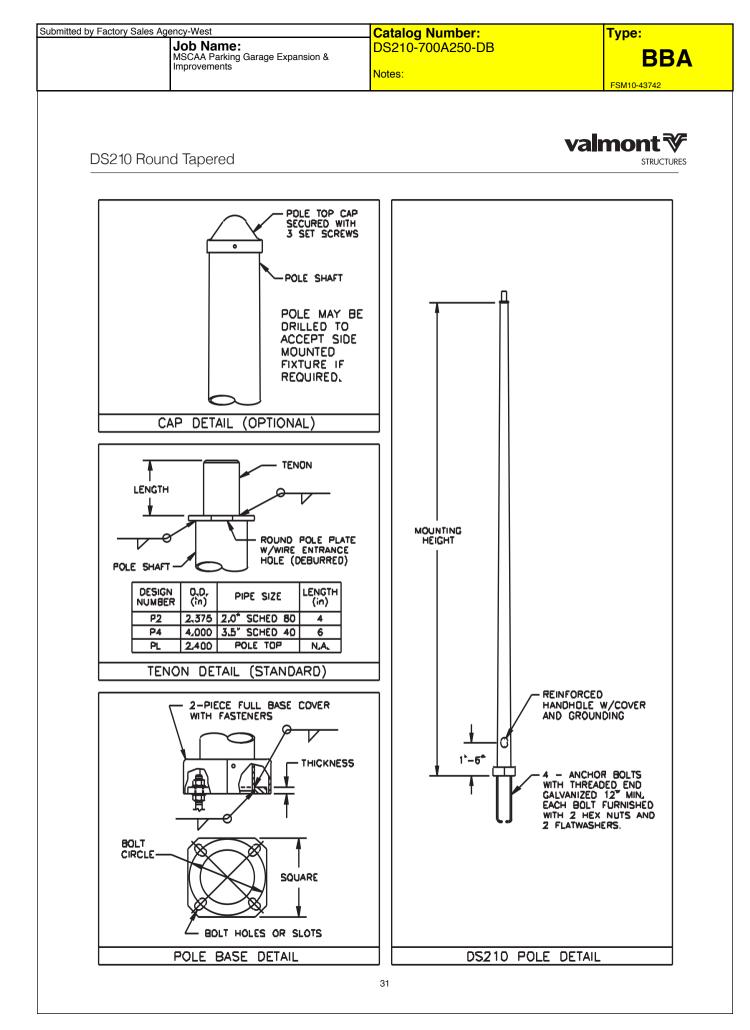
valmont∛ STRUCTURE

Nominal		Sha	aft				Pol	e Base		Anchor Bolts		/IPH 3 Gust		MPH 3 Gust		MPH 3 Gust
Mounting Height (ft)	Designation Number	Base O.D. (in)	Top O.D. (in)	Wall Thk. (ga)	Struct. Weight (lbs)	Bolt 0 Dia. (in)	Circle ± (in)	Square (in)	Thk. (in)	Dia. x Lngth. x Hk. (in)	Max. EPA (ft²)	Max. Weight (lbs)	Max. EPA (ft²)	Max. Weight (lbs)	Max. EPA (ft ²)	Max. Weight (lbs)
20	**590A200-P2	5.9	3.1	11	140	9.0	.5	10.00	0.88	1.00 x 36 x 4	19.3	482	15.1	377	12.2	305
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	700E250-P2	7.0	3.5	7	280	10.0	.5	10.88	1.00	1.00 x 36 x 4	30.5	760	24.0	625	19.8	495
30	660A300-PL	6.6	2.4	11	200	9.5	.5	10.50	0.88	1.00 x 36 x 4	11.7	292	9.3	232	7.5	187
	800A300-P2	8.0	3.8	11	265	11.0	.5	11.50	0.88	1.00 x 36 x 4	18.9	473	14.9	373	12.0	300
	800E300-P2	8.0	3.8	7	380	11.0	.5	11.50	1.25	1.25 x 42 x 6	33.5	838	27.0	675	22.0	550
35	730A350-PL	7.3	2.4	11	250	10.5	.5	11.25	0.88	1.00 x 36 x 4	11.2	280	8.9	222	7.1	177
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	950A350-P2	9.5	4.6	11	370	13.0	.5	13.00	1.00	1.00 x 36 x 4	23.2	580	18.2	455	14.5	363
39	782A389-PL	7.8	2.4	11	285	11.0	.5	11.50	0.88	1.00 x 36 x 4	10.7	267	8.5	212	6.6	165
	900A389-P2	9.0	3.6	11	355	12.5	.5	12.38	1.00	1.00 x 36 x 4	17.2	430	13.5	338	10.8	270
	900E389-P2	9.0	3.6	7	515	12.5	.5	12.38	1.25	1.25 x 42 x 6	28.5	715	23.0	575	19.0	475
45	T00A450-P2	10.0	3.7	11	450	13.5	.5	14.00	1.00	1.00 x 36 x 4	17.4	435	13.5	338	10.6	265
	T00E450-P2	10.0	3.7	7	650	13.5	.5	14.00	1.25	1.25 x 42 x 6	28.5	715	23.0	575	19.0	475
	E00E450-P4	11.0	4.7	7	780	15.0	.5	16.50	1.50	1.25 x 42 x 6	35.7	893	28.0	700	22.3	558
50	T00A500-P2 T00E500-P2 E00E500-P4 H00E500-P4 H00J500-P4	10.0 10.0 11.0 13.0 13.0	3.0 3.0 4.0 6.0 6.0	11 7 7 7 3	475 680 812 1020 1335	13.5 13.5 15.0 17.0 17.5	.5 .5 N/A N/A	14.00 14.00 16.50 18.00 18.50	1.00 1.25 1.50 1.50 1.75	1.00 x 36 x 4 1.25 x 42 x 6 1.25 x 42 x 6 1.50 x 54 x 6 1.75 x 84 x 6	13.2 20.5 29.9 50.4 69.2	330 512 748 1260 1730	10.6 16.5 23.5 39.7 55.0	265 412 588 992 1375	8.3 13.6 18.6 31.4 44.2	208 340 465 785 1105
55	E00E550-P4	11.0	3.5	7&11	890	15.0	.5	16.50	1.50	1.25 x 42 x 6	21.6	540	17.7	442	14.7	367
	W00E550-P4	12.0	4.5	7&11	975	16.0	N/A	17.00	1.50	1.50 x 54 x 6	32.2	805	25.9	647	21.1	527
	W504550-P4	12.5	5.2	5&7	1225	16.5	N/A	17.50	1.50	1.50 x 54 x 6	43.8	1095	35.0	875	28.6	715
60	W00E600-P4	12.0	4.0	7&7	1060	16.0	N/A	17.00	1.50	1.50 x 54 x 6	25.9	647	20.7	517	16.8	420
	H00E600-P4	13.0	4.8	7&11	1075	17.0	N/A	18.00	1.50	1.50 x 54 x 6	30.1	752	24.5	612	20.2	505
	W504600-P4	12.5	4.5	5&7	1275	16.5	N/A	17.50	1.50	1.50 x 54 x 6	34.0	850	27.6	690	22.6	565
65	H00E650-P4	13.0	4.3	7&7	1200	17.0	N/A	18.00	1.50	1.50 x 54 x 6	27.3	682	22.0	550	17.9	447
	H004650-P4	13.0	4.3	5&7	1400	17.0	N/A	18.00	1.50	1.50 x 54 x 6	30.8	770	24.8	620	20.4	510
70	H00E700-P4	13.0	3.6	7&7	1270	17.0	N/A	18.00	1.50	1.50 x 54 x 6	20.6	515	16.7	417	13.7	342
	H004700-P4	13.0	3.6	5&7	1440	17.0	N/A	18.00	1.50	1.50 x 54 x 6	23.6	590	19.2	480	15.8	395

DS210 NOTES:

1. **3" x 5" nominal handhole - all others 4" x 6.5" nominal.

Structure weight is a nominal value which includes the pole shaft and base plate only.
 Designs showing two shaft gauges indicates structure is provided as a two-piece, field assembled, unit. Heavier gauge is the bottom section.
 Maximum weight and EPA values are based on top mounted luminaires and/or brackets having a centroid 2'-6" above the nominal mounting height.



Submitted by Factory Sales Agency-West

Job Name: MSCAA Parking Garage Expansion & Improvements

Catalog Number: LUMINAIRE LOWERING DEVICE (1 FIXTURE) DARK BRONZE Notes:

FSM10-43742

BBA

Type:



fetropole is a conversion kit for your new or existing pole lights. **retropole** enables the user to greatly reduce or eliminate his reliance on aerial lift equipment and expensive maintenance services.

fetropole comes standard in bronze and is ideal for virtually any 15-30 foot single luminaire light pole (square, round, or tapered) and can easily be upgraded to a 35-foot pole with extension rails. Optional 2-head adapters can be specified for only 180-degree configurations.

General Ratings

Weight 100lbs MAX Length Electrical 30 ft MAX 480V/15A MAX

Safety

Removable handle, variable mounting height, and lockable enclosure ensure tamper resistance. Inside the carriage, a tension sensing fall brake prevents fixture from moving in the unlikely event of vandalism or vehicular damage.

Materials

Head rail and all rail sections are 100% 6063-T5 Aluminum Prime Canadian Billet. Free of fillers or recycled products, 6063 aluminum has a very high silicone content and is extremely resistant to corrosion.

All steel components are galvanized and powder coated for additional corrosion resistance. Standard Carriage uses nylon or teflon pads for smooth lubrication-free operation.

1/8", 1700lb lifting cables and hardware packs are zinc/steel and can be upgraded to stainless steel for all installations within 50 miles of a salt water coast.

Electrical

Electrical contacts are rated 480V and 15A. Our contacts are composed of 85% nickel and 15% silver which makes them extremely durable and corrosion resistant. The contacts are UL Listed and manufactured for **retropole** by Meltric, Inc.

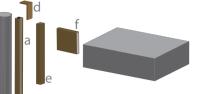
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ac-
~~ <i>(</i> 11,)
CU CU
LISTED

Electrical/lighting work is inherently dangerous. Please follow all applicable OSHA guidelines when installing or operating **retropole** or any other electrical or lighting device.

Existing pole condition is imperative for structural integrity. Pole should be at least 7 gauge steel and visually inspected by a qualified person for rust, physical damage or any other condition that could affect structural integrity.

All modifications should be done to the existing pole and light head. Any modifications to the **retropole** could affect the structural integrity. For installations in 100MPH+ zones, consult with your structural engineer before installing **retropole** or any other product onto your pole that could potentially alter its wind ratings.

PATENT-PENDING



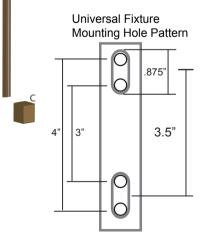
Existing Equipment-Gray retropole Conversion Kit-Bronze

h

retropole Conversion Kits come in sections, making it easy to handle and ship. All of the components and all hardware are packed neatly into our 48"x12"x8" box shipped directly to your facility or jobsite.

С	omponent	L	W	Н	lha
					lbs
а	Head Unit	12	2.75	2.5	2.15
b	Rail Sec.	46.5	2.5	2.25	4
С	Drive Mech	5.25	5.75	8.4	8
d	Сар	4	2.5	2.5	.2
е	Carriage	12	1.5	2.4	4.5
f	Arm	1	4	5	.8

retropoles universal design work with all pole geometries and most light heads. The bolt pattern shown below allows flexibility in mounting. **retropole** will bolt to any fixture with bolt distances from 3" to 4" without modifications.



retropole, llc

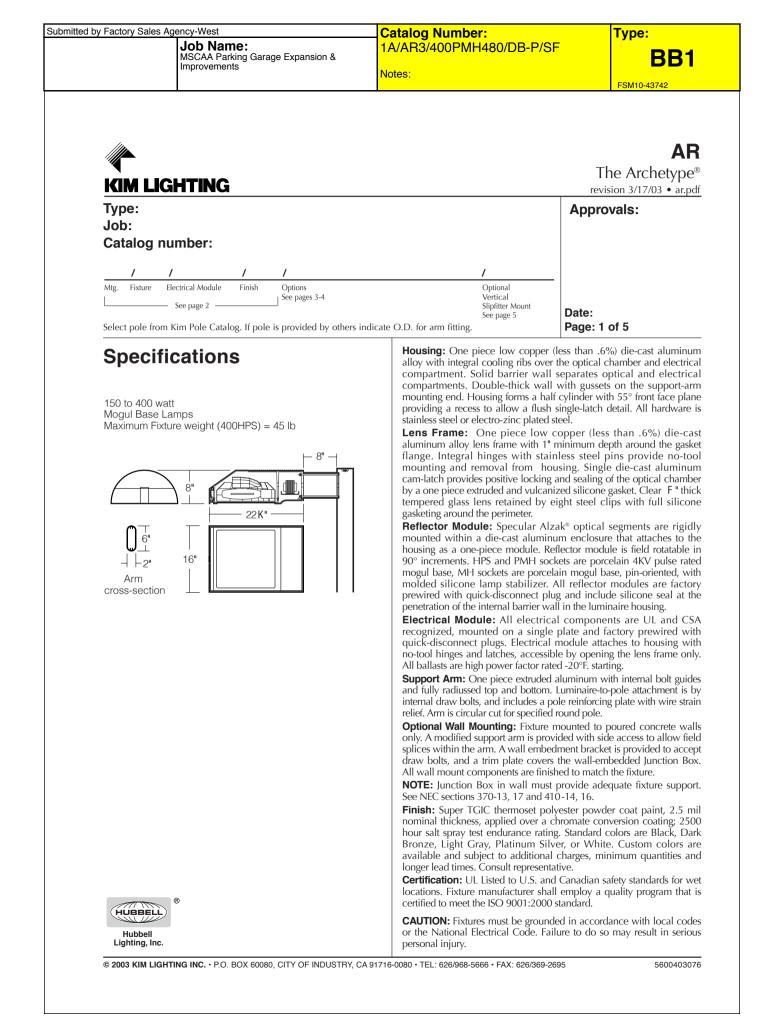
16135 Preston Rd #302 Dallas, TX 75248 www.retropole.com

Corporate 972-987-1642

fax	972-987-1659
New York	212-699-0759
Chicago	312-665-0080
Los Angeles	213-908-0823

In keeping with our commitment to continuous improvement in safety and quality, **retropole**, **Ik** reserves the right to change any specifications contained herein without prior notice.

This document contains the proprietary information of **retropole**, **Ik** and any use of this information requires the written approval of **retropole**, **Ik**.



Factory Sales Agency-West		Catalog Nur	nber:	Ту	pe:
Job Na MSCAA P	ame: Parking Garage Expansion &		PMH480/DB-P/SF	-	BB1
Improvem	ients	Notes:			וסס
I				1.0	M10-43742
					Α
KIM LIGHTIN	G				Archetyp 3/17/03 • ar.j
Туре:				TEVISION	5/1//05 • al.
Job:					Page: 2 of
	Standard I	- eatures			
	Standard I	-eatures			
Mounting	Plan View:	Features			Wall Mou
Mounting 3Y configuration is availated for round poles only.	Plan View:	eatures	• ; • •	▶ ∎∄∎	Wall Mou
3Y configuration is availa	Plan View:	Eeatures	3.2 3.2	3.9	■K
3Y configuration is availa	Plan View:	∎-a ⁸ ∎	3.2 3.2 3T 3Y	3.9 4C	╹ ■╢
3Y configuration is availa	able Plan View: EPA: 1.2 Cat. No.: 1A	2.4 2.0			n/a
3Y configuration is availat for round poles only. Fixture Cat. No. designates fixt	Plan View: EPA: 1.2 Cat. No.: 1A Flat Lens	2.4 2.0	3T 3Y	4C	n/a

Cat. Nos. for Electrical Modules available: 150HPS120

150HPS208

150HPS240

150HPS277

150HPS347

150HPS480

Lamp E-23¹/₂, Clear

Socket | Mogul Base

AR2

250HPS120

250HPS208

250HPS240

250HPS277

250HPS347

250HPS480

E-18, Clear

Mogul Base

AR3

400HPS120

400HPS208

400HPS240

400HPS277

400HPS347

400HPS480

E-18, Clear

Mogul Base

AR4

AR5

175MH120

175MH208

175MH240

175MH277

175MH347

175MH480

400PMH120 400PMH208 400PMH240 400PMH277 400PMH347 400PMH480

BT-28 or

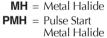
ED-28, Clear

Mogul Base

Electrical Module
application.
reflector design and
detailed information on
Optical Systems Catalog for
see the Kill Site/Koauway

Cat. No.:

HPS =	High Pressure Sodium



Lamp	Lamp	Line	
Watts	Type	Volts	
400	HPS	277	

Ŷ				0	Pin-Oriented
Lamp Lamp Line	ANSI Ballast Type	S-55	S-50	S-51	M-57
WattsTypeVolts400HPS277		250MH120 250MH208 250MH240 250MH277 250MH347 250MH347	400MH120 400MH208 400MH240 400MH277 400MH347 400MH480	250PMH120 250PMH208 250PMH240 250PMH277 250PMH347 250PMH480	400PMH1 400PMH2 400PMH2 400PMH2 400PMH3 400PMH3
	Lamp	BT-28 or ED-28, Clear	ED-28, Clear	ED-28, Clear	ED-28, Clear
	Socket	Mogul Base Pin-Oriented	Mogul Base Pin-Oriented	Mogul Base	Mogul Base
	ANSI Ballast Type	M-58	M-59	M-138	M-135
Finish	Color: Bl	ack <u>Dark Bron</u> z	e Light Gray F	Platinum Silver White	Custom C
Super TGIC powder coat paint over a chromate	Cat. No.:	BL-P DB-P	LG-P	PS-P WH	
conversion coating.	¹ Custom colo	ors subject to additic	onal charges, mini	mum quantities and e	xtended lead ti

¹Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _

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5600403076

Custom Color¹

SF - Single Fuse

Ň	cy-West ob Name: ISCAA Parking Garage Expansion & nprovements	Catalog Nu 1A/AR3/400 Notes:	mber: PMH480/DB-P/SF	Type:
	TING			FSM10-43742 The Archel revision 3/17/03
Type: Job:				Page:
	Optiona	I Features		
Wall Mounting Cat. No. 1W Select from Mc page 2.	unting on modified suppor allow field splice bracket (WEB) i trim plate covers	d to poured concrete w t arm is provided with s es within the arm. A wa s provided to accept draw s the wall-embedded Jun ponents are finished to ma	side access to Il embedment w bolts, and a iction Box. All atch the fixture.	5 F
Photocell Recep Cat. No. A-2 No	5 The electrical co (by others). For a two or three fix operate the othe require one fixt	with a fully gasketed rec impartment for NEMA b ill multiple-fixture pole m tures, one fixture has a rs. Four fixtures (250 wa ture with a receptacle. e two fixtures with recept	eptacle above pase photocell nountings with receptacle to tt or less) also Four fixtures	ket - J-box in wall (by othe
	Mounting (see pa * – Fixture with F S – slave unit(s) Allowable wattage	Photocell Receptacle	* * * * * * * * * * * * * * * * * * *	4C 4C
Convex Glass L Cat. No. CGI No	The F " thick cle the standard fla Option presence and uniformity wher	ear convex tempered glass t glass lens. Provides in provides a subtle imp e pole spacing is extre nouseside shielding.	s lens replaces ncreased lens provement in	2K"Convex Glass L
Polycarbonate L Cat. No. LS No	ens Dption Fixture supplied UV stabilized of replacing the sta maximum. May locations where operation will no CAUTION: Use	with a one piece vacuum convex polycarbonate, fr andard tempered glass le be used with 400HP ambient air temperature ot exceed 85°F. only when vandalism is life is limited by UV disco	ully gasketed, ens. 250 watt 'S in outdoor during fixture anticipated to	Convex Glass L

5600403076

V Factory Sales Agency-West Job Name MSCAA Parking Improvements	: g Garage Expansion &	Catalog Number: 1A/AR3/400PMH480/DE Notes:	B-P/SF	ype: BB
			The	A Archetyp n 3/17/03 • ar.
Type: Job:				Page: 4 o
	Optional F	Features		
Houseside Shield Cat. No. (See right) No Option	flat glass lens are a louvers that pass str light, and a blacken reduce houseside ref convex glass lens aluminum shield tha houseside light, and the reflector to redu- clear lamps only, as Cat. No. HS Recomm lamps. N	/ only). Fixtures with the standard vailable with stamped aluminum reetside light and block houseside ed panel added to the reflector to flections. Fixtures with the optional s are available with a formed at passes streetside light and blocks a black anodized panel added to ce houseside reflections. Use with coated lamps reduce effectiveness.	po y. Effectiveness is rec outions.	
Tamper-Resistant Latch Cat. No. TL No Option	Standard die-cast lat stainless steel flat unauthorized openir NOTE: Required on	ch is provided with a captive 10-32 socket-head screw to prevent	Tamper-Resista	nt Latch
Horizontal Slipfitter Mount Cat. No. HSF No Option	allows fixture to b davit-arm with 2" pi Cast aluminum cla anti-rotation lock. electrical compartm standard support arm	nounting arm with a slipfitter which be mounted to a horizontal pole ipe-size mounting end $(2\%'' \text{ O.D.})$. imp-type slipfitter with set screw Bolts to housing from inside the nent using mounting holes for the n. Davit-arm must be field drilled at n to insure against fixture rotation. dure.	Davit-arm v fixture mount	
Special Options for Street Lighting Cat. No. (See right)	85AMP, 600V box the housing inside ti #14-4 wire. Factor quick-disconnect pl TB No Option Air Filter: Allows chamber, filtering a Multi-layer disc as	r field wire connections.) clamp terminal block mounted to he electrical compartment. Accepts ry prewired to electrical module ug. for ventilation through the optical II air particles above 500 microns. ssembly mounted on solid wall mpartment and latch cavity.	Air Filter	Terminal Bl

r Factory Sales Agency-West Job Name MSCAA Parking Improvements	Garage Expansion &	Catalog Numbe 1A/AR3/400PMH Notes:		Type: BB1 FSM10-43742
KIM LIGHTING				AR The Archetype [®] revision 3/17/03 • ar.pd
Job:				Page: 5 of 5
	Optional F	eatures		
Vertical Slipfitter Mounts Cat. No. includes Mounting Cat. No. (See right) No Option	mounted to poles (2 ³ / ₈ " O.D. x 4 ¹ / ₂ " configurations can b 4" square or round c secured by four ³ / ₈ " st finished to match fixtu	h standard support arr having a 2" pipe-size min. length). All mo e used (1A, 2B, 2L, 3T, lie-cast aluminum with fl ainless steel set point aller ure and arm. able on round slipfitter.	e tenon ounting 3Y, 4C). ush cap, n screws,	Vertical Slipfitte 2" pipe-size Mount others) by Kim
	Cat. No. VSF-1A VSF-2B VSF-2L VSF-3T VSF-3Y VSF-4C Round	Stainless — steel set — screws Square	Cat. No. SVSF-1A SVSF-2B SVSF-2L SVSF-3T SVSF-4C	Mounting Configuration 1A - single arm mount 2B - 2 at 180° 2L - 2 at 90° 3T - 3 at 90° 3Y - 3 at 120° 4C - 4 at 90°

 Submitted by Factory Sales Agency-West
 C

 Job Name:
 MSCAA Parking Garage Expansion & Improvements

Catalog Number: DS210-850A350-D1(KIM AR)-DB-LAB Notes: Туре:

FSM10-43742

BB1

Product Specifications DS210, DS220

ANCHOR BOLTS

Anchor Bolts are fabricated from carbon steel bar conforming to AASHTO M314 Grade-55 or ASTM F1554 Grade-55. Bolts have an "L" bend on one end and are galvanized a minimum of 12 inches on the threaded end. Four anchor bolts are provided per pole. Each anchor bolt is furnished with two hex nuts and two flat washers.

ANCHOR BASE

The anchor base (base plate) is fabricated from structural quality hot rolled carbon steel plate conforming to ASTM A36. The base plate telescopes the pole shaft and is circumferentially welded top and bottom. Please refer to the charted bolt circles and detail drawings to determine the type of hole or slot accommodation made for the anchor bolt.

POLE SHAFT

The pole shaft conforms to ASTM A595 Grade-A and is supplied in 11 gauge (0.1196"), 7 gauge (0.1793") 5 gauge (0.2092") or 3 gauge (0.2391") thickness. The pole can be either onepiece or two piece construction, with a full length longitudinal high frequency electric resistance weld. The DS210 series is round in cross-section having a uniform taper of approximately 0.14 inches per foot of length. The DS220 series shaft is square in cross section having flat sides, radiused corners and a uniform taper of approximately 0.11 inches per foot of length.

HANDHOLE

The reinforcing handhole rim consists of either a nominal 3" x 5" rectangular shaped tubing or 4" x 6.5" oval shaped pipe material. The 3" x 5" handhole is provided with a steel attachment bar, steel cover, and one round head machine screw. The 4" x 6.5" handhole includes two tabs for mounting a steel cover with hex head attachment screws. Both handhole types are welded in the pole shaft and are located 1'-6" above the base.

ELECTRICAL GROUND

A nut holder is provided near the handhole and includes a .5"-13UNC hex head bolt and nut.

NUT COVERS (OPTIONAL)

Nut covers for anchor bolts are zinc die cast. Each cover is fastened to the shaft by a 0.25" stainless steel, self-tapping, hex head screw. Nut covers are a standard component for the DS210 series and are NOT available for the DS220 series.

FULL BASE COVER (STANDARD)

The optional full base cover is fabricated from ABS plastic. Valmont reserves the right to provide a steel assembly on some applications depending upon the finish requirement and/or pole shaft base diameter. Both steel and plastic covers are a two-piece assembly secured together with two fasteners. A full base cover is a standard component on the DS220 series.

POLE TOP TENON (STANDARD)

Pole top tenons are fabricated from structural quality hot rolled carbon steel with a guaranteed minimum yield strength of 30,000 psi. A pole top plate and tenon of weldable grade hot rolled commercial quality carbon steel is circumferentially welded to the top of the pole shaft. This plate provides an internal weather resistant wiring raceway into the pole top tenon. Standard sizes are either 2.38" O.D. x 4" long (P2) or 4" O.D. x 6" long (P4) steel tubing. See page 1 for other available sizes.

POLE TOP CAP

A removable cap is available as an option to be used in conjunction with drilled shafts for direct luminaire arm attachment.

STANDARD FINISH

Standard finishes available are galvanize, prime coat (powder), and finish coat (powder). For information regarding the scope and application of these coatings please refer to page 5.

FASTENING HARDWARE

All structural fasteners are galvanized high strength carbon steel. All fasteners are galvanized or zinc plated carbon steel or stainless steel.

DESIGN

The standards shown in this section are designed to withstand dead loads and theoretical dynamic loads developed by variable wind speeds, as charted, with an appropriate gust factor under the following conditions:

The luminaire(s) and/or mounting bracket(s) center of gravity, or centroid, is assumed to be located a maximum of 2'-6" above the pole top. For purposes of design, effective projected area (EPA) is considered to be the product of the actual projected area and the drag coefficient.

The listed weights include luminaire(s) and/or mounting bracket(s) and are based on a weight to EPA ratio of 25 pounds per square foot.

The wind velocities are based on 10 mph increments from 80 mph through 100 mph (reference wind map). Standards to be located in areas of known abnormal conditions require special consideration. For example: coastal areas, airports, and areas of special winds such as the Chinook type along the eastern slope of the Rocky Mountains.

Standards are designed for ground mounted applications. Standards mounted on structures, such as bridges and buildings, also necessitate special consideration requiring Valmont's recommendation.

Height correction factors and drag coefficients are applied to the entire structure. An appropriate safety factor is maintained based on the minimum yield strength of the material incorporated in the standard. Secondary moments are considered on all designs.

Maximum weight and EPA values for DS220 products are determined by analyzing stress from two wind directions as shown. Due to the increased area and reduced section properties, stress levels across the points generally control the allowable loads.

Valmont Industries, Inc. reserves the right to install various, engineer approved, material hanging accommodations to facilitate the manufacturing process. If this method is not acceptable, Valmont Industries, Inc. must be notified by the customer prior to manufacturing. Submitted by Factory Sales Agency-West

Job Name: MSCAA Parking Garage Expansion & Improvements

Catalog Number: DS210-850A350-D1(KIM AR)-DB-LAB Notes:



Type:

FSM10-43742

DS210 Round Tapered

valmont∛ STRUCTURE

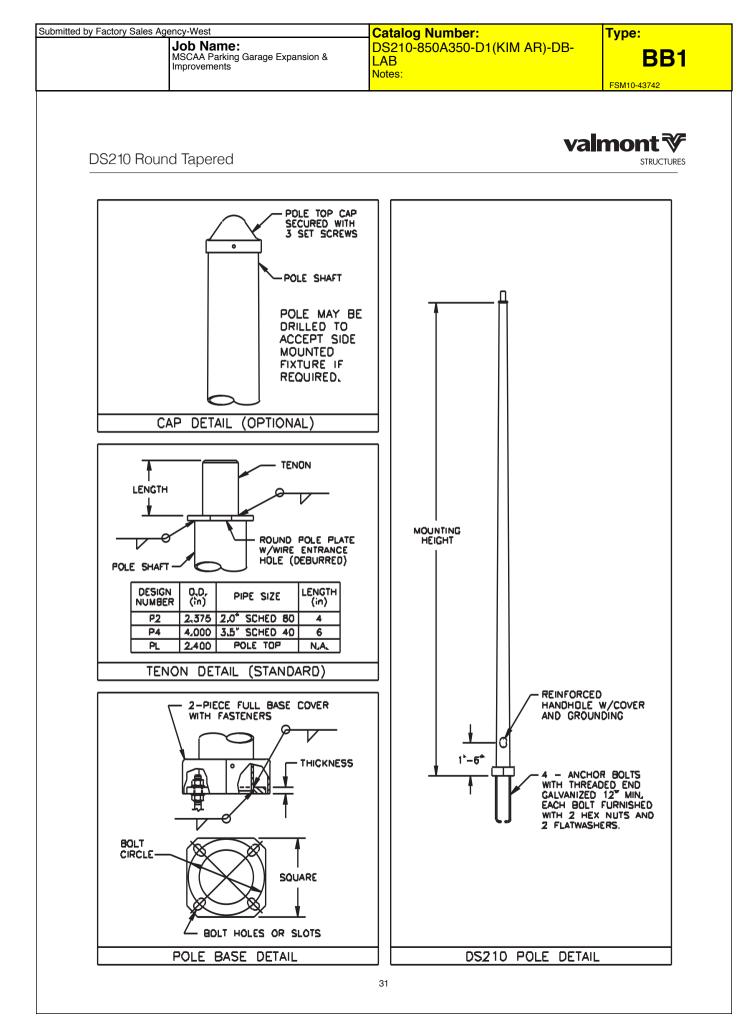
Nominal		Sh	aft				Pol	e Base		Anchor Bolts	80N w/1.3	IPH Gust		MPH 3 Gust		MPH 3 Gust
Mounting Height (ft)	Designation Number	Base O.D. (in)	Top O.D. (in)	Wall Thk. (ga)	Struct. Weight (lbs)	Bolt (Dia. (in)	Circle ± (in)	Square (in)	Thk. (in)	Dia. x Lngth. x Hk. (in)	Max. EPA (ft ²)	Max. Weight (lbs)	Max. EPA (ft ²)	Max. Weight (lbs)	Max. EPA (ft ²)	Max. Weight (lbs)
20	**590A200-P2	5.9	3.1	11	140	9.0	.5	10.00	0.88	1.00 x 36 x 4	19.3	482	15.1	377	12.2	305
	650A200-P2	6.5	3.7	11	160	9.5	.5	10.50	0.88	1.00 x 36 x 4	24.2	605	19.3	482	15.6	390
25	**590A250-PL	5.9	2.4	11	155	9.0	.5	10.00	0.88	1.00 x 36 x 4	12.5	312	9.9	247	8.0	200
	700A250-P2	7.0	3.5	11	200	10.0	.5	10.88	0.88	1.00 x 36 x 4	20.3	507	16.2	405	13.1	327
	700E250-P2	7.0	3.5	7	280	10.0	.5	10.88	1.00	1.00 x 36 x 4	30.5	760	24.0	625	19.8	495
30	660A300-PL	6.6	2.4	11	200	9.5	.5	10.50	0.88	1.00 x 36 x 4	11.7	292	9.3	232	7.5	187
	800A300-P2	8.0	3.8	11	265	11.0	.5	11.50	0.88	1.00 x 36 x 4	18.9	473	14.9	373	12.0	300
	800E300-P2	8.0	3.8	7	380	11.0	.5	11.50	1.25	1.25 x 42 x 6	33.5	838	27.0	675	22.0	550
35	730A350-PL	7.3	2.4	11	250	10.5	.5	11.25	0.88	1.00 x 36 x 4	11.2	280	8.9	222	7.1	177
	850A350-P2	8.5	3.6	11	315	11.5	.5	12.00	1.00	1.00 x 36 x 4	18.9	472	15.1	377	12.2	305
	950A350-P2	9.5	4.6	11	370	13.0	.5	13.00	1.00	1.00 x 36 x 4	23.2	580	18.2	455	14.5	363
39	782A389-PL	7.8	2.4	11	285	11.0	.5	11.50	0.88	1.00 x 36 x 4	10.7	267	8.5	212	6.6	165
	900A389-P2	9.0	3.6	11	355	12.5	.5	12.38	1.00	1.00 x 36 x 4	17.2	430	13.5	338	10.8	270
	900E389-P2	9.0	3.6	7	515	12.5	.5	12.38	1.25	1.25 x 42 x 6	28.5	715	23.0	575	19.0	475
45	T00A450-P2	10.0	3.7	11	450	13.5	.5	14.00	1.00	1.00 x 36 x 4	17.4	435	13.5	338	10.6	265
	T00E450-P2	10.0	3.7	7	650	13.5	.5	14.00	1.25	1.25 x 42 x 6	28.5	715	23.0	575	19.0	475
	E00E450-P4	11.0	4.7	7	780	15.0	.5	16.50	1.50	1.25 x 42 x 6	35.7	893	28.0	700	22.3	558
50	T00A500-P2 T00E500-P2 E00E500-P4 H00E500-P4 H00J500-P4	10.0 10.0 11.0 13.0 13.0	3.0 3.0 4.0 6.0 6.0	11 7 7 7 3	475 680 812 1020 1335	13.5 13.5 15.0 17.0 17.5	.5 .5 N/A N/A	14.00 14.00 16.50 18.00 18.50	1.00 1.25 1.50 1.50 1.75	1.00 x 36 x 4 1.25 x 42 x 6 1.25 x 42 x 6 1.50 x 54 x 6 1.75 x 84 x 6	13.2 20.5 29.9 50.4 69.2	330 512 748 1260 1730	10.6 16.5 23.5 39.7 55.0	265 412 588 992 1375	8.3 13.6 18.6 31.4 44.2	208 340 465 785 1105
55	E00E550-P4	11.0	3.5	7 & 11	890	15.0	.5	16.50	1.50	1.25 x 42 x 6	21.6	540	17.7	442	14.7	367
	W00E550-P4	12.0	4.5	7 & 11	975	16.0	N/A	17.00	1.50	1.50 x 54 x 6	32.2	805	25.9	647	21.1	527
	W504550-P4	12.5	5.2	5 & 7	1225	16.5	N/A	17.50	1.50	1.50 x 54 x 6	43.8	1095	35.0	875	28.6	715
60	W00E600-P4	12.0	4.0	7&7	1060	16.0	N/A	17.00	1.50	1.50 x 54 x 6	25.9	647	20.7	517	16.8	420
	H00E600-P4	13.0	4.8	7&11	1075	17.0	N/A	18.00	1.50	1.50 x 54 x 6	30.1	752	24.5	612	20.2	505
	W504600-P4	12.5	4.5	5&7	1275	16.5	N/A	17.50	1.50	1.50 x 54 x 6	34.0	850	27.6	690	22.6	565
65	H00E650-P4	13.0	4.3	7&7	1200	17.0	N/A	18.00	1.50	1.50 x 54 x 6	27.3	682	22.0	550	17.9	447
	H004650-P4	13.0	4.3	5&7	1400	17.0	N/A	18.00	1.50	1.50 x 54 x 6	30.8	770	24.8	620	20.4	510
70	H00E700-P4	13.0	3.6	7&7	1270	17.0	N/A	18.00	1.50	1.50 x 54 x 6	20.6	515	16.7	417	13.7	342
	H004700-P4	13.0	3.6	5&7	1440	17.0	N/A	18.00	1.50	1.50 x 54 x 6	23.6	590	19.2	480	15.8	395

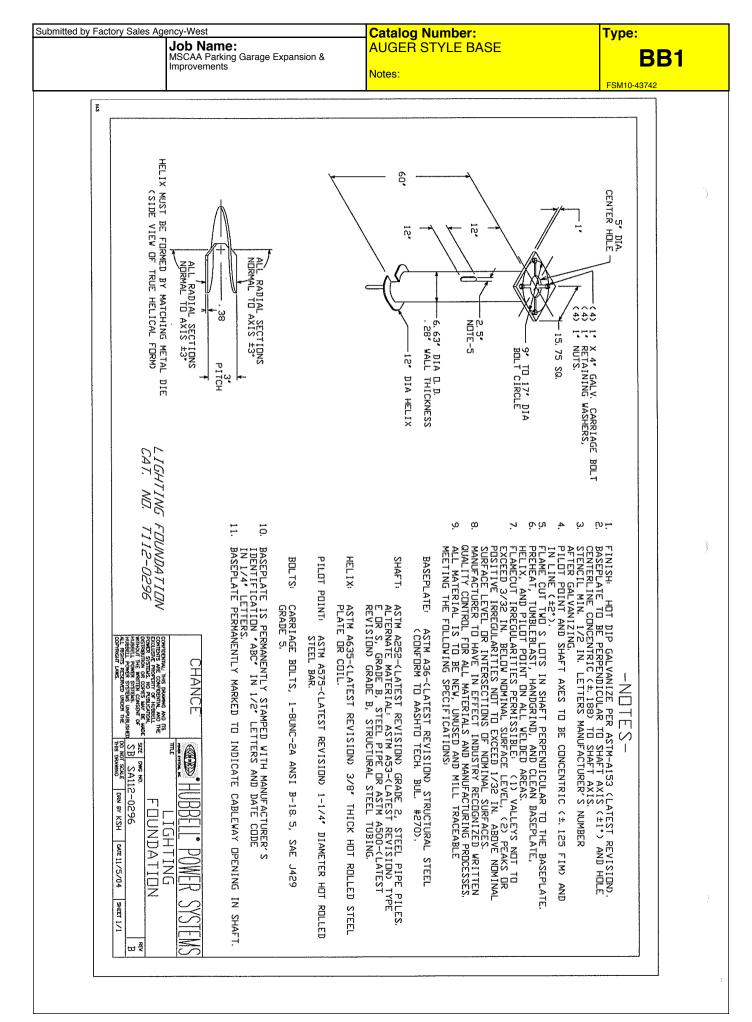
DS210 NOTES:

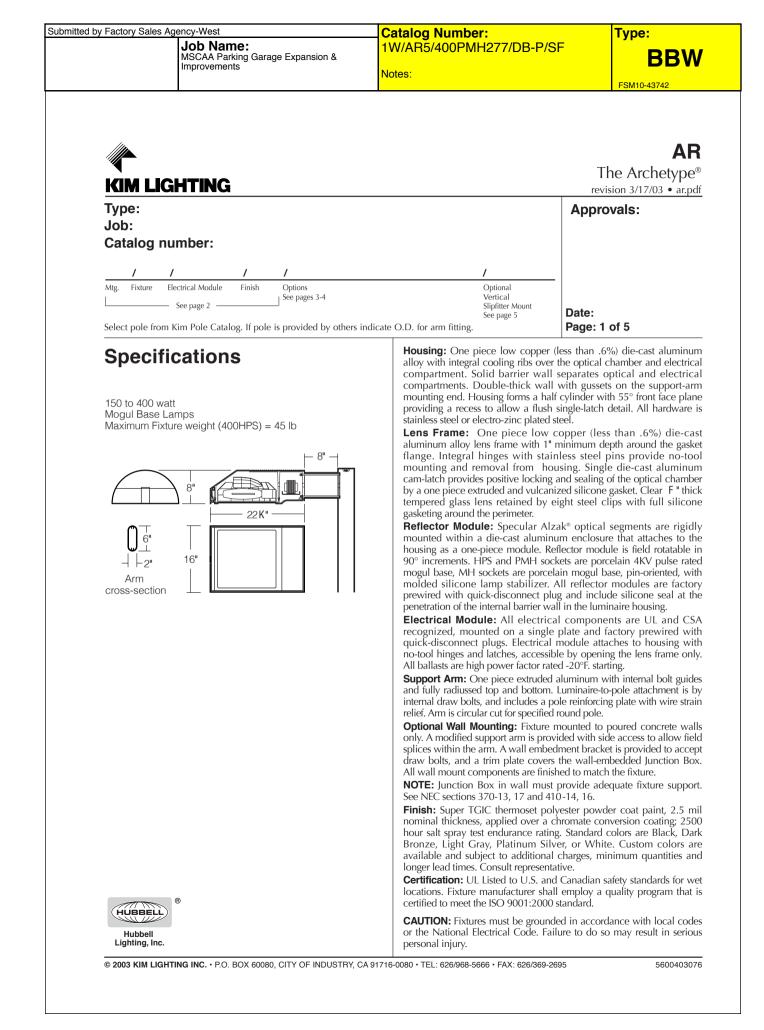
1. **3" x 5" nominal handhole - all others 4" x 6.5" nominal.

2. Structure weight is a nominal value which includes the pole shaft and base plate only.

Designs showing two shaft gauges indicates structure is provided as a two-piece, field assembled, unit. Heavier gauge is the bottom section.
 Maximum weight and EPA values are based on top mounted luminaires and/or brackets having a centroid 2'-6" above the nominal mounting height.



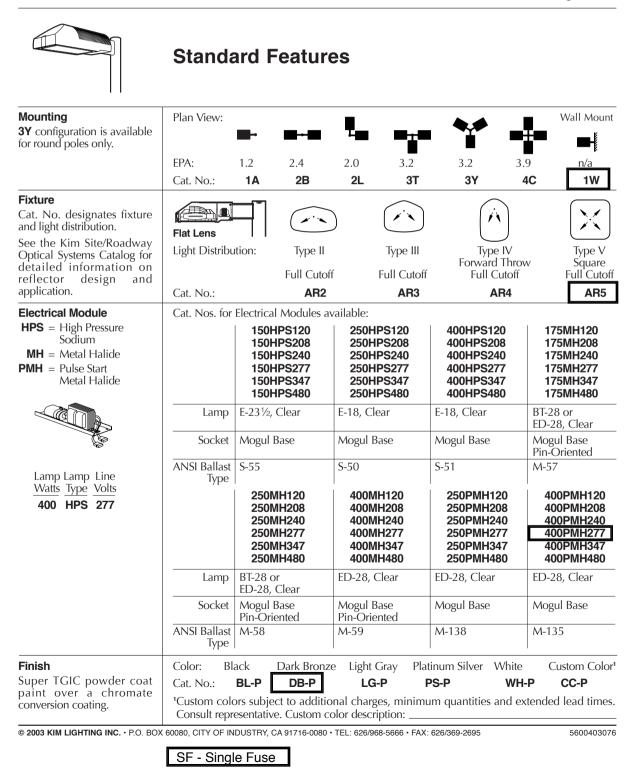




ted by Factory Sales		Catalog Number:	Туре:
	Job Name: MSCAA Parking Garage Expansion &	1W/AR5/400PMH277/DB-P/SF	BBW
	Improvements	Notes:	
			FSM10-43742
	GHTING		The Archetype revision 3/17/03 • ar.pd

Job:

Page: 2 of 5



		Garage Expansion &	<mark>Catalog N</mark> 1W/AR5/4	00PMH277	/DB-P/SF	Тур	BE
	Improvements		Notes:			FSM1	0-43742
KIM LIG	HTING					The A revision 3,	
Type: Job:							Page:
		Optional F	eatures				
Wall Mountin Cat. No. 1W Select from 1 page 2.	-	Fixture mounted to modified support arm allow field splices wi bracket (WEB) is pro trim plate covers the wall mount componer	is provided wit thin the arm. A vided to accept d wall-embedded J	h side access t wall embedmer raw bolts, and unction Box. A	o nt a II	5 F -	4J" 10
	ceptacle A-25 Io Option	Fixture supplied with the electrical compar- (by others). For all mu- two or three fixtures operate the others. For require one fixture of (400 watt) require two	rtment for NEMA Iltiple-fixture pole , one fixture has pur fixtures (250 v with a receptacl	base photoce mountings wit a receptacle t watt or less) als e. Four fixture	re II h o	et - J-box in wal	– Rece
		Mounting (see page 2) * – Fixture with Photo S – slave unit(s)	cell Receptacle	* • • • • • • • • • • • • • • • • • • •	*	s s s s s s s s s s s s s s s s s s s	S
	s Lens CGL Io Option	Allowable wattage pe The F " thick clear co the standard flat gla presence and provi uniformity where po effectiveness of house	nvex tempered g ss lens. Provides ides a subtle in le spacing is ex	increased ler nprovement i	es 1s 2 n	2K" Convex	40
	e Lens .S lo Option	Fixture supplied with a UV stabilized convereplacing the standar maximum. May be locations where ambio operation will not exc CAUTION: Use only	x polycarbonate, d tempered glass used with 4001 ient air temperatu xeed 85°F.	fully gasketed lens. 250 wa HPS in outdoo re during fixtur	d, tt or ee		bonate L

5600403076

/ Factory Sales Agency-West Job Name: MSCAA Parking Improvements	Garage Expansion &	Catalog Number: 1W/AR5/400PMH277/DE Notes:		BBV 0-43742
KIM LIGHTING			The A	Al rchetype 17/03 • ar.p
Type: Job:			I	Page: 4 of
	Optional F	eatures		
Houseside Shield Cat. No. (See right) No Option	flat glass lens are a louvers that pass stri light, and a blacken reduce houseside ref convex glass lens aluminum shield tha houseside light, and the reflector to reduc clear lamps only, as Cat. No. HS Recomm lamps. N	Yonly). Fixtures with the standard vailable with stamped aluminum eetside light and block houseside ed panel added to the reflector to dections. Fixtures with the optional a are available with a formed t passes streetside light and blocks a black anodized panel added to ce houseside reflections. Use with coated lamps reduce effectiveness.	polyca 7. Effectiveness is reduce utions.	
Tamper-Resistant Latch Cat. No. TL No Option	stainless steel flat unauthorized openir NOTE: Required onl	ch is provided with a captive 10-32 socket-head screw to prevent ng. ly for vandal protection in locations e reached by unauthorized persons.	Tamper-Resistant La	atch
Horizontal Slipfitter Mount Cat. No. HSF No Option	allows fixture to b davit-arm with 2" pi Cast aluminum cla anti-rotation lock. electrical compartm standard support arm	pounting arm with a slipfitter which e mounted to a horizontal pole pe-size mounting end $(2\%'' \text{ O.D.})$. mp-type slipfitter with set screw Bolts to housing from inside the nent using mounting holes for the n. Davit-arm must be field drilled at to insure against fixture rotation. ture.	Davit-arm with fixture mount (by Horizontal Slipfitter Mount by Kim	others)
Special Options for Street Lighting Cat. No. (See right)	85AMP, 600V box the housing inside tl #14-4 wire. Factor quick-disconnect plu TB No Option Air Filter: Allows t chamber, filtering al Multi-layer disc as	field wire connections.) clamp terminal block mounted to he electrical compartment. Accepts y prewired to electrical module ug. for ventilation through the optical II air particles above 500 microns. ssembly mounted on solid wall npartment and latch cavity.	Air Filter	Terminal Bloc

