

PROJECT NAME:

SCHOOL DISTRICT PALM BEACH COUNTY BUILDING DEPARTMENT PLAN REVIEW CHECKLIST -- ELECTRICAL

3661 Interstate Park Road North Riviera BEACH, FLORIDA 33404 TEL (561) 383-2093 FAX (561) 882-1978 https://www.palmbeachschools.org/domain/388

DATE

PROJECT NUM	BER: REVIEWER	REVIEWER	
of projects submitte	necklist is to act as a tool for the District Plan Reviewers to review construction ed for permitting by the Building Department. Architects and Engineers at to prepare construction plans and specifications for District projects.		
	es in the checklist are Florida Building Code (FBC), National Electric Coostrict Master Specification (DMS), National Fire Prevention Association Code (FS).		
	Phase I – Schematic Design		
OK, Comment, or N/A	Item	Code Reference	
	Site Plan showing the location of a main electrical room, generator room, and power company transformer.	District Requirement	
	Narrative the of electrical power system.	District Requirement	
	Phase II –Design Development		
OK, Comment, or N/A	Item	Code Reference	
	Typical classroom(s) lighting and power layout.	District Requirement	
	The layout of main electrical and generator rooms.	District Requirement	
	Service riser diagram schematics.	District Requirement	
	Request for any major deviations from the DDC and DMS.	District Requirement	
ELECTRICAL-	"Phase III" Plans (Final Construction Documents)		
	General		
OK, Comment, or N/A	Item	Code Reference	
	Plans are signed and sealed	471, 481 FS	
	All documentation submitted	District Requirement	
	The ind represents what is submitted	District Requirement	
	Plans match the specifications	District Requirement	
	Plans comply with the District Design Criteria	District Requirement	

Site Plan		
OK, Comment, or N/A	Item	Code Reference
	Site lighting and required lighting photometric	District Criteria
	Pole light detail	District Criteria
	Sign circuit and conduit for controls	District Requirement
	Lift Station	District Requirement
	Sports lighting	District Criteria
	Location of junction boxes in and near playfields	District Requirement
	Systems conduits and pull boxes for future portables	District Requirement
	EMS control for irrigation pump	District Requirement
	Telephone service entrance	District Requirement
	School sign power and controls requirements	District Requirement
	Card access and security systems junction boxes, power outlets for gates	District Requirement
	Conduit for future cable TV	District Requirement
	Intercom and security systems at the gates	District Requirement
	Location of main switchgear and generator	District Requirement
	Location of fire alarm control panel	District Requirement
	Location of lightning prediction (detection) system antenna and horn/strobe	District Requirement

Lighting Plans		
OK, Comment, or N/A	Item	Code Reference
	Emergency lighting	101 NFPA, 453 FBC
	Emergency lighting relay	District Criteria
	Lighting dimmers/switches, vacancy sensors for classrooms	District Criteria
	Lighting switches for corridors and student restrooms	District Criteria
	Normal lighting for classrooms	District Criteria
	Exterior lighting: Normal and emergency	453 FBC, 101 NFPA, District Criteria
	Exterior lighting controls	District Criteria
	Canopy and connector walkway lights	453 FBC
	Stage lighting	District Requirement
	CCTV room lighting	Ed. Specs
	Theatrical lighting	District Requirement
	Elevator pit, machine room, and car lighting	620 NEC
	EHPA lighting requirements	453 FBC
	Lighting Controls: Occupancy/Vacancy sensors, EMS	FBC, Energy Cons.
	Emergency lighting photometric for classrooms, corridor, media center, cafeteria, Gym	District Requirement
	Normal lighting photometric for classrooms, corridor, media center, cafeteria, and Gym.	District Requirement

Power Plans		
OK, Comment, or N/A	Item	Code Reference
	Receptacles in classrooms	District Criteria
	Receptacles in the media center	District Criteria
	Computer receptacles in classrooms	District Criteria
	Computer receptacles in the media center	District Criteria
	Receptacles for Electric Water Coolers	District Criteria
	Receptacles in corridors	District Criteria

Receptacles in administrative spaces	District Criteria
Receptacles for other equipment	Ed Specs
Tamper-proof receptacles	District Criteria
Littirecentacies	210.8 NEC, District
-	Criteria, FBC
1 8 3	453 FBC
Equipment wiring	300 NEC
HVAC system equipment wiring	300 NEC
Disconnect switches within the sight of motors and appliances	430, 422 NEC
Floor-mounted outlets in the kitchen have while-in-use water-proof covers	406.8 NEC
Computer receptacles are supplied from separate panels	District Criteria
EHPA power requirements	453 FBC
Kiln Outlets controls wiring diagram	District Criteria

Systems Plans

OK, Comment, or N/A	Item	Code Reference
	Conduit system for EMS	District Criteria
	Locations of fire alarm horn/speakers and strobe lights	NFPA 72
	Mounting heights of fire alarm horn/speakers and strobe lights	NFPA 72
	Distance between fire alarm strobe lights	NFPA 72
	Fire sprinkler standpipes tamper switches are monitored by the fire alarm panel	NFPA 72
	Duct smoke detectors	NFPA 90
	Fire alarm strobe light within 15 feet of the end of the corridor	NFPA 72
	Fire alarm pull stations within 5 feet of main exit doors (Non-sprinklered buildings)	NFPA 72
	200 feet travel distance to reach a fire alarm pull station (Non-sprinklered buildings)	NFPA 72
	Mounting height of fire alarm pull station	District Requirement
	Fine clams will stations in annihilated	NFPA 72, District
	Fire alarm pull stations in sprinklered	Requirements
	Exterior mounted fire alarm horns/speakers	District Requirement
	Remote indicator switches for duct smoke detectors	Design Criteria
	Heat detectors in non-sprinklered buildings	FBC 453, NFPA 101
	Smoke detectors	NFPA 72, NFPA 101
	Smoke detectors near fire alarm control panel and NAC panels	NFPA 72
	Location of intercom console	District Requirement
	Locations of intercom administrative display telephones	District Requirement
	Intercom speakers and call buttons	District Requirement
	Check sizes of electrical systems rooms	District Requirement
	Communications outlets	District Requirement
	Security sensor locations	District Requirement
	Elevator power on the optional source of the generator	District Requirement
	Elevator shunt trip	Elevator Code
	Heat and smoke detector in elevator machine room (when required)	Elevator Code
	Elevator recall	Elevator Code
	Lighting in elevator lobby	Elevator Code
	Heat and smoke detector in elevator shaft	Elevator Code
	Smoke detector in the elevator lobby	Elevator Code
	Telephone outlet in the elevator machine room	Elevator Code
	Gas solenoid valves in science rooms	453 FBC
	Gas solenoid valves for buildings	453 FBC

Check School Police requirements	District Requirement
Where code allows either a smoke detector or heat detector, use a heat detector	District Requirement
Heat detectors in concealed spaces	453 FBC
Heat detector in portables	4A-58
Hurricane shelter requirements	FBC 453
Smart TV Displays power requirements	District Requirement
Location of fire alarm annunciator panel and fire alarm control panel	FBC 453
Emergency power for systems	District Requirement
Testing for wireless communications and requirements for BDA system, NFPA 1225 requirements	District Requirement

OK, Comment, or N/A	Item	Code Reference
	Emergency Lighting	700 NEC
	Exit signs	700 NEC
	Fire alarm system	700 NEC
	Intercom System	700 NEC
	Elevator car lights	Elevator Code
	Fire Pump	695 NEC
	BDA or DAS system power	NFPA 1225
	No other loads shall be connected to the life safety panels	700 NEC

Optional/Equipment Branch Loads

OK, Comment, or	Item	Code Reference
N/A	item	Code Reference
	Security system	District Criteria
	Main telephone and data system, data rooms A/C systems	District Criteria
	Card access system	District Criteria
	Video surveillance system	District Criteria
	Cooler/Freezer	District Criteria
	Receptacles for EHPA	453 FBC
	EMCS Control Panels	453 FBC
	All mechanical equipment required for EHPA	453 FBC
	Other receptacles as noted in DDC	District Criteria

Electrical Room(s) Details

OK, Comment, or N/A	Item	Code Reference
	Clearances for panels, transformers, disconnect switches	110.26 NEC
	Dedicated zones for panels	110.26 NEC
	Emergency generator working clearance	110 NFPA
	The main electrical room must have two exit/entrance doors	110.26 NEC
	The main electrical room must have one (1) door opening to the exterior	District Criteria

Electrical Riser Diagrams

OK, Comment, or N/A	Item	Code Reference
	Primary conduits for power company transformer	FP&L

Main distribution panel grounding system	250-50 NEC
Fault current for the main distribution panel	110.9 NEC
Feeder sizes	Table 310-16 NEC
Equipment grounding conductor sizes	Table 250-122 NEC
Step down transformer grounding	250-30 NEC
Bonding jumper sizes	250-28 NEC
Arc Flash compliance and labeling (new construction)	District Requirements
Emergency generator KW rating	700 NEC
Automatic transfer switches	District Criteria
Emergency generator annunciator panel, emergency shut-off switch	110 NFPA
K-rated transformers are provided for nonlinear loads	District Criteria
Panels with nonlinear loads have 200%, neutral conductors	District Criteria
Conduit from EMS to power metering device	District Requirement
Systems conduits for future portables	District Requirement
EMS conduit for irrigation pump controller	District Requirement
EMS conduit to the telephone room	District Requirement
Check sizes of systems terminal cabinets	District Requirement
Conduits to gates	District Requirement
 Telephone conduit to the elevator machine room	District Requirement
Two 4-inch telephone conduits to AT&T manhole	AT&T Requirement

Panel Schedules				
OK, Comment, or N/A	Item	Code Reference		
	Panels ratings: voltage, ampere, phase	240 NEC		
	Panels AIC rating	110.9 NEC		
	Panels main circuit breaker/main lugs	225, 230, 408 NEC		
	Panel loads	210 NEC		
	Branch circuits wiring sizes	300 NEC		
	Panels' spare capacity	District Criteria, 453 FBC		
	Main switchboard load calculation	220 NEC		

	Other Schedules and Details	
OK, Comment, or N/A	Item	Code Reference
	Transformer schedules	District Criteria
	Disconnect switch schedules	District Criteria
	Motor starter schedules	District Criteria
	Wiring diagrams and details	District Criteria
	Lighting contactor schedules	District Criteria

Specifications				
OK, Comment, or N/A	Item	Code Reference		
	The proposed changes matches the District Master Specs (DMS)	District Requirement		
	Specifications match the plans	District Criteria		
	Specifications are signed and sealed	471, 481 FS		