

# BULLETIN # 16

**DATE:** November 20, 2025

**TO:** Piazza Inc.  
Attn: Gus Carvajal

**CC:** Chaker Maghak, Hill Intl.,

**FROM:** Brian Dunn, AIA  
KG+D Architects, PC

**PROJECT:** Harrison Recreation & Community Center – PHASE 2  
Harrison, NY

**RE:** Revised Fire Alarm Drawings- Permit Revisions



Message:

Please see the attached revised drawings and spec section 280513 reflecting comments by the TVH Fire Department.

Cc: TVH Engineering Department  
File

Encl:

**KG+D Architects, PC**

285 Main Street, Mount Kisco, New York 10549  
914.666.5900 kgdarchitects.com

**SYMBOLS AND ABBREVIATIONS**

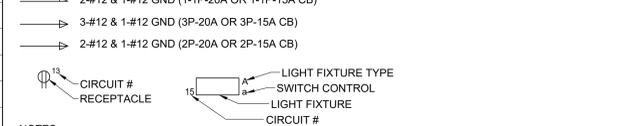
SYMBOL	ABBREVIATION	DESCRIPTION	SYMBOL	ABBREVIATION	DESCRIPTION
	-	CONDUIT AND WIRING		FACP	FIRE ALARM CONTROL PANEL
	-	CONDUIT & WIRING TO BE REMOVED UON		BPS	BOOSTER POWER SUPPLY
	-	BURIED CONDUIT		DGP	DATA GATHERING PANEL
	-	OVERHEAD CONDUCTORS		FCS	FIRE COMMAND STATION
	-	HOMERUN TO PANEL, ARROWS INDICATE # 1P		FSS	FIRE SUPPRESSION SYSTEM PANEL
	-	MULTI-POLE HOMERUN		-	FIRE ALARM RELAY
	-	ELECTRICAL EQUIPMENT AS INDICATED		EOL	END OF LINE RESISTOR
	-	ELECTRICAL EQUIPMENT TO BE REMOVED UON		-	WALL MOUNTED PUBLIC ADDRESS SPEAKER
	-	ELECTRIC METER		-	PUBLIC ADDRESS TELEPHONE
	-	JUNCTION BOX		-	CEILING MOUNTED PUBLIC ADDRESS SPEAKER
	-	FUSED DISCONNECT SWITCH		-	CEILING MOUNTED SPHERICAL TYPE LOUD SPEAKER
	-	UNFUSED DISCONNECT SWITCH		-	FIRE ALARM BELL
	-	COMBINATION MOTOR STARTER/FUSED DISC.		-	CAMERA
	-	MOTOR STARTER		-	TIME CLOCK
	-	MOTOR		-	CARD READER
	-	BATTERY PACK EMERGENCY LIGHT FIXTURE		-	DOOR ALARM
	-	EXIT LIGHT, FACES-SHADED, CHEVRON-ARROW		-	ELECTRIC DOOR STRIKE
	-	SINGLE POLE SWITCH (x - INDICATES FIXTURE BEING CONTROLLED)		-	SECURITY MOTION DETECTOR
	-	THREE WAY SWITCH (x - INDICATES FIXTURE BEING CONTROLLED)		-	KEY PAD
	-	FOUR WAY SWITCH (x - INDICATES FIXTURE BEING CONTROLLED)		-	PANIC ALARM
	-	DIMMER SWITCH (x - INDICATES FIXTURE BEING CONTROLLED)		-	SECURITY CAMERA PTZ - PAN, TILT, ZOOM
	-	MOTOR RATED TOGGLE SWITCH		-	SECURITY ALARM HORN
	-	KEY OPERATED SINGLE POLE SWITCH		-	PUSHBUTTON
	-	SPEED CONTROLLER (FBO)		-	CALL FOR AID PULL STATION
	-	WALL MOUNTED OCCUPANCY SENSOR		-	CALL FOR AID A/V DEVICE
	-	CEILING MOUNTED OCCUPANCY SENSOR		-	ELECTRIC HAND DRYER
	-	DUPLEX RECEPTACLE		EPO	EMERGENCY POWER OFF SWITCH
	-	DOUBLE DUPLEX RECEPTACLE		RASP	RESCUE ASSIST. SYSTEM MASTER STATION
	-	SPECIAL RECEPTACLE		-	REMOTE RESCUE STATION
	-	TELEPHONE OUTLET		CB	CIRCUIT BREAKER
	-	DATA OUTLET (x - INDICATES # OF JACKS, 1 JACK UON)		-	ENCLOSED CIRCUIT BREAKER
	-	COMBINATION TELEPHONE/DATA OUTLET		-	FUSED SWITCH
	-	COMBINATION DATA & TV OUTLET		GEN	GENERATOR
	-	TV OUTLET		-	GENERATOR RECEPTACLE
	-	FURNITURE SYSTEM POWER FEED		GND	GROUND AS PER LOCAL CODE
	-	FURNITURE SYSTEM COMMUNICATION FEED		-	GROUND BAR
	-	FIRE ALARM MANUAL PULL STATION		-	GROUND ROD
	-	FIRE ALARM COMBINATION AUDIO/VISUAL DEVICE (15/75 CD - STROBE)		-	TRANSFER SWITCH
	-	FIRE ALARM COMBINATION AUDIO/VISUAL DEVICE (110 CD - STROBE)		XFMR	TRANSFORMER
	-	FIRE ALARM STROBE 15/75 CD		CT	CURRENT TRANSFORMER
	-	FIRE ALARM STROBE 110 CD		-	UTILITY POLE
	-	CARBON MONOXIDE DEVICE (15/75 CD - STROBE)		WM	WATER MAIN
	-	SMOKE DETECTOR, EL - ELEVATOR LOBBY; SH - SMOKE HATCH; SC - PLENUM RATED ABOVE CEILING		B	BOILER BREAK GLASS STATION
	-	ASPIRATING SMOKE DETECTOR		NC	NORMALLY CLOSED CONTACTS
	SB	FIRE ALARM DEVICE, SB - SOUNDER BASE FOR SMOKE OR CARBON MONOXIDE DETECTOR		NO	NORMALLY OPEN CONTACTS
	-	CARBON MONOXIDE DETECTOR SB - SOUNDER BASE FOR CARBON MONOXIDE DETECTOR		CV	CONTROL VALVE
	-	BEAM SMOKE DETECTOR RECEIVER		MD	MOTORIZED DAMPER
	-	BEAM SMOKE DETECTOR TRANSMITTER		SD OR CFSD	SMOKE DAMPER
	-	DUCT MOUNTED SMOKE DETECTOR		UH	UNIT HEATER
	-	HEAT DETECTOR		RA	RESCUE ASSISTANCE
	-	CARBON MONOXIDE DETECTOR		-	DOUBLE DOOR CONTACT
	-	NATURAL GAS DETECTOR		-	DOOR CONTACT
	-	FIRE ALARM PRESSURE SWITCH		A	AMPERE(S)
	-	FIRE ALARM TAMPERS SWITCH		AC	AIR CONDITIONER
	-	FIRE ALARM WATER FLOW SWITCH		ACC	AIR CONDITIONER CONDENSER
	-	FIRE WATER TANK LOW TEMP SENSOR		AFF	ABOVE FINISHED FLOOR
	-	FIRE WATER TANK LOW WATER		AF	AMPERAGE OF FUSE
	-	FIRE WATER TANK HIGH WATER		AGL	ABOVE GRADE LEVEL
	-	DRY VALVE LOW AIR		AHU	AIR HANDLING UNIT
	-	DRY VALVE HIGH AIR		AL	ALUMINIUM
	-	FIRE ALARM WARDEN STATION		ARC	ARC FAULT INTERRUPTER
	-	FIRE ALARM DOOR RELEASE		AS	AMPERAGE OF SWITCH
	-	FIRE ALARM ANNUNCIATOR PANEL		ATS	AUTOMATIC TRANSFER SWITCH
	CM	FIRE ALARM CONTROL MODULE		AWG	AMERICAN WIRE GAUGE
	MM	FIRE ALARM MONITORING MODULE		AV	AUDIO VISUAL
				BCW	BARE COPPER WIRE
				BLDG	BUILDING
				BMS	BUILDING MANAGEMENT SYSTEM
				C	CONDUIT
				CD	CANDELA
				CKT	CIRCUIT
				CLG	CEILING
				COL	COLUMN

SYMBOL	ABBREVIATION	DESCRIPTION
	CU	COPPER
	CUH	CABINET UNIT HEATER
	DEM.	DEMOLISH AND REMOVE
	DISC	DISCONNECT
	DIM	DIMMER
	DWG	DRAWING
	ELEV	ELEVATOR
	EMT	ELECTRICAL METALLIC TUBING
	EM	EMERGENCY
	EX	EXISTING TO REMAIN
	F	FLOOR
	FBO	FURNISHED BY OTHERS
	FC	FAN COIL UNIT
	GEN	GENERATOR
	GFI	GROUND FAULT INTERRUPTER
	HP	HORSEPOWER
	HVAC	HEATING VENTILATION AIR CONDITIONING
	IG	ISOLATED GROUND
	IMC	INTERMEDIATE METAL CONDUIT
	KVA	KILO-VOLT-AMPERE
	KW	KILO-WATT
	MAX	MAXIMUM
	MCB	MAIN CIRCUIT BREAKER
	MCC	MOTOR CONTROL CENTER
	MIN	MINIMUM
	MLO	MAIN LUG ONLY
	MTS	MANUAL TRANSFER SWITCH
	NIC	NOT IN CONTRACT
	NL	NIGHT LIGHT
	NTS	NOT TO SCALE
	OH	OVERHEAD
	P	POLE
	PBO	PROVIDED BY OTHERS
	PNL	PANEL
	PT	PRESSURE TREATED
	PVC	POLY VINYL CHLORIDE
	REL.	REMOVE AND RELOCATE
	RGS	RIGID GALVANIZED STEEL
	RTU	ROOF TOP UNIT
	SCH	SCHEDULE
	SPD	SURGE PROTECTION DEVICE
	SW	SWITCH(ES)
	TELCO	TELEPHONE COMPANY
	TYP	TYPICAL
	UG	UNDERGROUND
	UON	UNLESS OTHERWISE NOTED
	UV	UNIT VENTILATOR
	VIF	VERIFY IN FIELD
	V	VOLT(S)
	WG	WIRE GUARD
	WH	WATER HEATER
	WP	WEATHERPROOF

GENERAL NOTES (CONT'D)	
7.)	CIRCUIT NUMBERS ARE FOR INFORMATION PURPOSES ONLY. ACTUAL CIRCUIT NUMBERS SHALL BE DETERMINED IN THE FIELD.
8.)	WHERE GFI RECEPTACLES ARE CIRCUITED WITH GENERAL CONVENIENCE RECEPTACLES, THE GFI RECEPTACLE SHALL BE THE LAST DEVICE ON THE CIRCUIT.
9.)	INSTALL CONDUIT EXPANSION FITTINGS AT ALL LOCATIONS WHERE CONDUITS CROSS BUILDING OR STRUCTURE EXPANSION JOINTS.
10.)	CEILING MOUNTED RECEPTACLES SHALL BE MOUNTED FLUSH TO CEILING.
11.)	UNLESS OTHERWISE NOTED, DISCONNECT SWITCHES, STARTERS, HOAS AND MOTOR RATED TOGGLE SWITCHES FOR MECHANICAL PUMPS, CABINET AND UNIT HEATERS, RETURN FANS, ROOF FANS, VAV BOXES, COMPRESSORS, FAN COIL UNITS, AIR HANDLERS AND CONDENSERS SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR. COORDINATE ALL WORK WITH THE MECHANICAL CONTRACTOR.
12.)	DISCONNECT SWITCHES FOR MOTORIZED DAMPERS, CFSD/SD AND VAV BOXES SUPPLIED BY MECHANICAL CONTRACTOR AND INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR. SWITCHES NOT SHOWN ON PLANS.
13.)	INCLUDE IN BASE BID THE FOLLOWING 1P-20A CIRCUITS ON EACH LEVEL (150' LENGTH EACH) FOR HVAC SYSTEM CONTROL PANELS. EXACT LOCATION OF CONTROL PANELS SHALL BE COORDINATED WITH DIVISION 23 IN THE FIELD. CIRCUITS SHALL ORIGINATE FROM THE FOLLOWING PANELBOARDS:  PARKING - PSPA-45 FIRST FLOOR - PS1A-25, PN1A-27 SECOND FLOOR - PS2A-57
DEFINITION OF TERMS	
1.)	WHEREVER IN THE CONTRACT DOCUMENTS THE WORD "CLIENT" IS USED, IT MUST BE UNDERSTOOD THAT "THE TOWN OF HARRISON, NY" IS INTENDED.
2.)	WHEREVER IN THE CONTRACT DOCUMENTS THE WORD "ARCHITECT" IS USED, IT MUST BE UNDERSTOOD THAT "KG&D ARCHITECTS, P.C." IS INTENDED.
3.)	WHEREVER IN THE CONTRACT DOCUMENTS THE WORD "ENGINEER" IS USED, IT MUST BE UNDERSTOOD THAT "OLA CONSULTING ENGINEERS" IS INTENDED.
4.)	WHEREVER IN THE CONTRACT DOCUMENTS THE WORDS "ELECTRICAL UTILITY" OR "POWER COMPANY" ARE USED, IT MUST BE UNDERSTOOD THAT "CON EDISON" IS INTENDED.
5.)	WHEREVER IN THE CONTRACT DOCUMENTS THE WORDS "TELEPHONE UTILITY" OR "TELCO" ARE USED, IT MUST BE UNDERSTOOD THAT "OPTIMUM" IS INTENDED.
6.)	"WORK" MUST BE DEEMED TO CONSIST OF ALL LABOR AND OPERATIONS, TRANSPORTATION, HOISTING, MATERIALS, TOOLS, EQUIPMENT, SERVICES, INSPECTIONS, INVESTIGATIONS, COORDINATION AND SUPERVISION REQUIRED AND / OR REASONABLY NECESSARY TO PRODUCE THE CONSTRUCTION REQUIRED BY THE CONTRACT DOCUMENTS.
7.)	"FURNISH" MEANS THE DESIGN, FABRICATION, PURCHASE AND DELIVERY TO THE JOB SITE.
8.)	"INSTALL OR INSTALLATION" MEANS THE ACT OF PHYSICALLY PLACING, APPLYING, SETTING, ERECTING, ANCHORING, SECURING, ETC., CONSTRUCTION MATERIALS, EQUIPMENT, FURNISHINGS, APPLIANCES, AND SIMILAR ITEMS SPECIFIED AND FURNISHED AT THE JOB SITE. INSTALLATION OF SPECIFIED ITEMS MUST BE COMPLETE IN ALL RESPECTS.
9.)	"PROVIDE" MEANS TO FURNISH AND INSTALL CONSTRUCTION MATERIAL, EQUIPMENT, ETC. AS DEFINED ABOVE.
10.)	THE FOLLOWING ARE DEFINITIONS OF SHOP DRAWING STAMP ACTIONS:  A.) "NO EXCEPTIONS TAKEN" MEANS THAT THE SHOP DRAWING IS CORRECT AS TO PERFORMANCE, CAPACITY, ETC. AND SUBSTANTIAL CONFORMANCE TO THE CONTRACT DRAWINGS AND SPECIFICATIONS. FABRICATION AND/OR PURCHASE MAY COMMENCE.  B.) "MAKE CORRECTIONS NOTED" MEANS THAT THE SHOP DRAWING IS CORRECT AS TO PERFORMANCE, CAPACITY, ETC. AND SUBSTANTIAL CONFORMANCE TO THE CONTRACT DRAWINGS AND SPECIFICATIONS, SUBJECT TO AND IN COMPLIANCE WITH THE ANNOTATIONS AND/OR CORRECTIONS INDICATED ON THE SHOP DRAWING. FABRICATION AND/OR PURCHASE MAY COMMENCE.  C.) "AMEND AND RESUBMIT" MEANS THAT THE COMMENTS AND/OR CORRECTION ARE SO EXTENSIVE AND IMPORTANT THAT THE REVIEWER WANTS TO SEE HOW THE COMMENTS AND/OR CORRECTIONS ARE RESOLVED PRIOR TO RELEASE FOR FABRICATION AND/OR PURCHASE. FABRICATIONS AND/OR PURCHASE MAY NOT COMMENCE.  D.) "REJECTED" MEANS THAT THE SHOP DRAWING DOES NOT COMPLY OR CONFORM TO THE CONTRACT DRAWINGS AND/OR SPECIFICATIONS. FABRICATION AND/OR PURCHASE MAY NOT COMMENCE.
TRENCHING NOTES	
1.	CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES THAT ARE NOT PART OF N.Y. STATE "CODE 753" PRIOR TO DIGGING.
2.	ALL EXCAVATING IN THE AREA OF THE EXISTING UNDERGROUND EQUIPMENT, PIPES AND CONDUITS SHALL BE PERFORMED BY HAND.
3.	ANY AREA/PLANTS OR LANDSCAPING OR PAVEMENTS DISTURBED DURING THE EXCAVATION SHALL BE RESTORED OR REPLACED TO MATCH EXISTING CONDITIONS BY THE CONTRACTOR AT NO COST TO THE OWNER.
4.	ANY EXISTING BURIED CONDUITS, DRAINAGE, SPRINKLER PIPING, ETC. THAT IS DISTURBED AND/OR DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.
5.	THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA, EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATIONS INDICATED. IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY OR MAY NOT BE SHOWN; AND IT SHALL BE HIS RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK. 48 HOURS BEFORE YOU DIG, DRILL OR BLAST, CALL 1-800-962-7962.
LOW VOLTAGE SYSTEMS NOTES	
1.)	THIS CONTRACTOR IS RESPONSIBLE FOR ALL RACEWAYS AND WIRING ASSOCIATED WITH LOW VOLTAGE SYSTEMS. THE LOW VOLTAGE SYSTEMS INCLUDE, BUT ARE NOT LIMITED TO, AUDIO/VISUAL, ACCESS CONTROL, CCTV, INTRUDER ALARM, DATA AND COMMUNICATION SYSTEMS. THIS CONTRACTOR SHALL REFER TO THE "AVV" AND "SE" SERIES DRAWINGS AND DETAILS FOR QUANTITIES, SIZES AND SPECIFICATION OF RACEWAYS AND WIRING. THIS CONTRACTOR SHALL PROVIDE DATA RACKS AND PATCH PANELS FOR TERMINATING SYSTEM WIRING. TEST AND LABEL EACH END OF WIRING.
2.)	HEAD-END SWITCHES, SENSORS AND SYSTEM COMPONENTS SHALL BE BY OTHERS.
3.)	ALL LADDER RACKS, TROUGHS AND ASSOCIATED COMPONENTS WITHIN IT AND AV ROOMS ROOMS ARE BY THIS CONTRACTOR, AS DETAILED IN THE "AVV" AND "SE" SERIES DRAWINGS.
4.)	FOR EACH WALL MOUNTED LOW VOLTAGE SYSTEM OUTLET, PROVIDE A 1900 JUNCTION BOX WITH AN EXTENDER COLLAR AND 1 INCH CONDUIT WITH DRAGLINE 6 INCHES ABOVE ACCESSIBLE CEILING FOR INSTALLATION OF CABLE BY THIS CONTRACTOR. JUNCTION BOXES SHALL BE RECESSED WITHIN THE NEW BUILDING CONSTRUCTION, COORDINATE WITH GENERAL CONSTRUCTION CONTRACTOR.
5.)	THIS CONTRACTOR SHALL WIRE CAT6 CABLE TO EACH COMMUNICATION POINT SHOWN, SEE PLAN FOR QUANTITIES. TERMINATIONS AT DATA POINT AND PATCH PANEL BY THIS CONTRACTOR, RJ45 JACKS AND COVER PLATES TO BE PROVIDED BY THIS CONTRACTOR. TEST AND LABEL EACH END OF CAT6 CABLE.
6.)	FIBER OPTIC WIRING BETWEEN DATA ROOM 111 AND DATA ROOM 205A IS BY THIS CONTRACTOR. PROVIDE A PLENUM RATED MULTI-MODE 12 STRAND FIBER OPTIC CABLE TERMINATED WITH LC CONNECTORS.
GENERAL NOTES	
1.)	ALL WORK SHOWN IS NEW UNLESS OTHERWISE NOTED (UON) EXISTING TO REMAIN (EX.).
2.)	THE DRAWINGS ARE TO BE CONSIDERED SCHEMATIC ONLY AND DO NOT NECESSARILY SHOW THE EXACT LOCATIONS AND DETAILS OF THE WORK TO BE INSTALLED.
3.)	THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND PAYING ALL FEES ASSOCIATED WITH THIS WORK INCLUDING FILING WITH THE UTILITY COMPANY (AS REQUIRED), AND WITH LOCAL AUTHORITY HAVING JURISDICTION.
4.)	ALL WORK INVOLVING THE ELECTRIC SERVICE SHALL BE COORDINATED AND APPROVED BY THE UTILITY COMPANY.
5.)	ALL CONDUCTORS SHALL BE COPPER UON "ON DRAWINGS".
6.)	ELECTRONIC FILES OF THE MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION DRAWINGS ARE AVAILABLE TO THE CONTRACTOR. THE ENGINEER MAY GRANT THE CONTRACTOR A LIMITED LICENSE TO MAKE A DERIVATIVE WORK OF THE DATABASE FOR THE PURPOSE OF SHOP DRAWINGS, SUBMITTALS AND AS-BUILT DRAWINGS. UPON REQUEST, THE ENGINEER SHALL PROVIDE A RELEASE FORM THAT MUST BE SIGNED AND RETURNED BY THE CONTRACTOR PRIOR TO RELEASE OF THE ELECTRONIC FILES.

**NOTES:**  
1.) ALL SYMBOLS AND ABBREVIATIONS MAY NOT BE APPLICABLE FOR THIS PROJECT.  
2.) SEE LIGHTING FIXTURE SCHEDULE FOR LIGHT FIXTURE SYMBOLS.

**TYPICAL BRANCH CIRCUIT WIRING LEGEND**



**NOTES:**  
1.) EACH 120V AND 277V CIRCUIT SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR. SHARED NEUTRAL HOMERUNS ARE NOT PERMITTED.  
2.) CONDUCTORS SHALL BE INCREASED FOR VOLTAGE DROP AND DERATING AS PER APPLICABLE ELECTRICAL CODE. FOR CIRCUITS THAT ARE BETWEEN 100' AND 150' IN LENGTH, PHASE AND NEUTRAL CONDUCTORS SHALL BE #10 AWG. FOR CIRCUITS THAT ARE BETWEEN 150' AND 225' IN LENGTH, PHASE AND NEUTRAL CONDUCTORS SHALL BE #8 AWG. FOR LENGTHS GREATER THAN 225' IN LENGTH, VERIFY CONDUCTOR SIZES WITH ENGINEER.

**HARRISON RECREATION & COMMUNITY CENTER**  
New Construction - Phase 2  
Town / Village of Harrison  
270 Harrison Avenue  
Harrison, NY 10528

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**KG+D ARCHITECTS, PC**  
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646-949-4110  
newyorkcity@olace.com  
olace.com

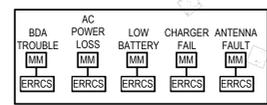
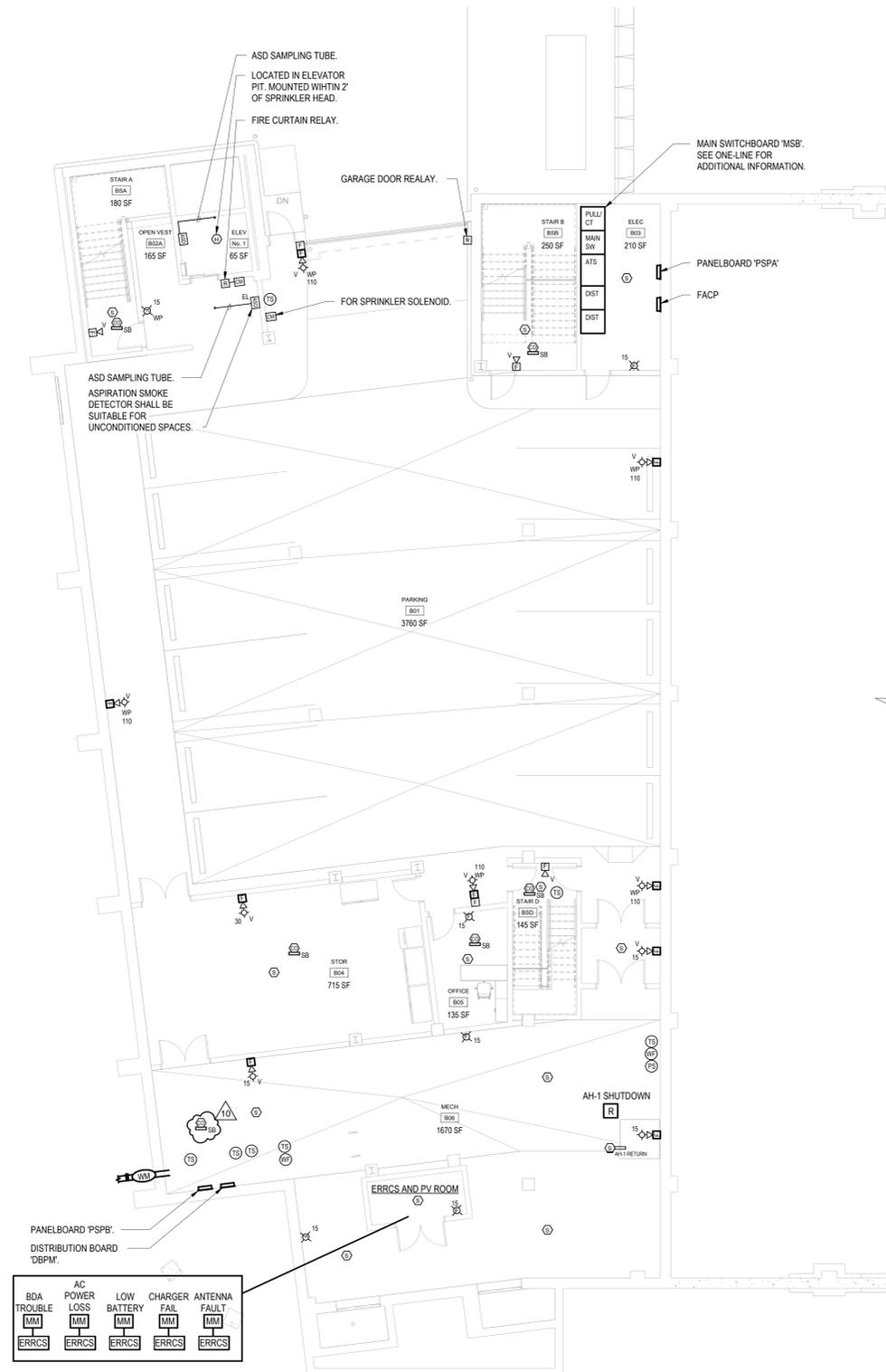
**CONSTRUCTION DOCUMENTS**

No.	Date	Issue
10	10/29/2025	PERMIT REVISIONS
9	10/03/2025	PERMIT REVISIONS
8	12/03/2024	ISSUED FOR CONSTRUCTION
7	10/09/2024	CONFORMED SET
4	06/05/2024	ISSUE FOR BID
3	01/16/2024	ISSUED FOR PERMIT
2	06/01/2020	DESIGN DEVELOPMENT
1	03/31/2020	50% DESIGN DEVELOPMENT

**Professional Seal**

**ELECTRICAL SYMBOLS, NOTES & ABBREVIATIONS**

Job No. NKGD0207.00 Date 02/25/2025  
Scale AS NOTED Drawn / Checked JJ / MLDS  
Sheet Number **E-001**



**1 FIRE ALARM PARKING FLOOR PLAN**  
SCALE: 1/8" = 1'-0"  
NORTH

NOTES:  
1.) PROVIDE ASPIRATING SMOKE DETECTOR WITH FILTER BOX FOR SAMPLING TUBE.

Key Plan

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No.	Date	Issue
10	10/29/2025	PERMIT COMMENTS
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8	04/10/2025	PERMIT REVISIONS
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3	01/16/2024	ISSUED FOR PERMIT
2	06/01/2020	DESIGN DEVELOPMENT
1	03/31/2020	50% DESIGN DEVELOPMENT

**FIRE ALARM  
PARKING FLOOR  
PLAN**

Job No.	Date
NKGD0207.00	02/21/20
Scale	Drawn / Checked
AS NOTED	VB / ML

Sheet Number  
**E-401**

**HARRISON  
RECREATION &  
COMMUNITY  
CENTER**

New Construction - Phase 2  
Town / Village of Harrison  
270 Harrison Avenue  
Harrison, NY 10528

**KG+D** listen  
imagine  
build  
**KG+D ARCHITECTS, PC**  
285 MAIN STREET • MOUNT KISCO, NEW YORK 10549  
P.914.666.5900 KGARCHITECTS.COM

**OLA Consulting Engineers**  
50 Broadway,  
Hawthorne, NY 10532  
914.747.2800  
8 West 38th Street,  
Suite 501  
New York, NY 10018  
646.849.4110  
olace.com

**CONSTRUCTION DOCUMENTS**

Key Plan

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10	10/29/2025	PERMIT COMMENTS
9	10/03/2025	PERMIT REVISIONS
8	04/10/2025	PERMIT REVISIONS
7	10/09/2024	CONFIRMED SET
4	06/05/2024	ISSUED FOR BID
3	01/16/2024	ISSUED FOR PERMIT
2	06/01/2020	DESIGN DEVELOPMENT
1	03/31/2020	50% DESIGN DEVELOPMENT

No. Date Issue

**FIRE ALARM FIRST  
FLOOR PLAN**

Job No. NKG0207.00 Date 02/21/20  
Scale AS NOTED Drawn / Checked VB / ML  
Sheet Number

**E-402**

CEILING IN GYM IS DOUBLE HEIGHT. SEE DRAWING E-403 FOR CEILING FIRE ALARM DEVICE LAYOUT.  
SMOKE DETECTORS LOCATED UNDER TRACK MEZZANINE LEVEL ABOVE. TYP. SEE DRAWING E-403 FOR TRACK FIRE ALARM DEVICES.

COORDINATE ACCESS CONTROL DEVICES TO BE INTEGRATED INTO FIRE ALARM SYSTEM WITH ACCESS CONTROL VENDOR.

FIRE CURTAIN RELAY.

CO DETECTORS LOCATED UNDER TRACK MEZZANINE LEVEL ABOVE. TYP.

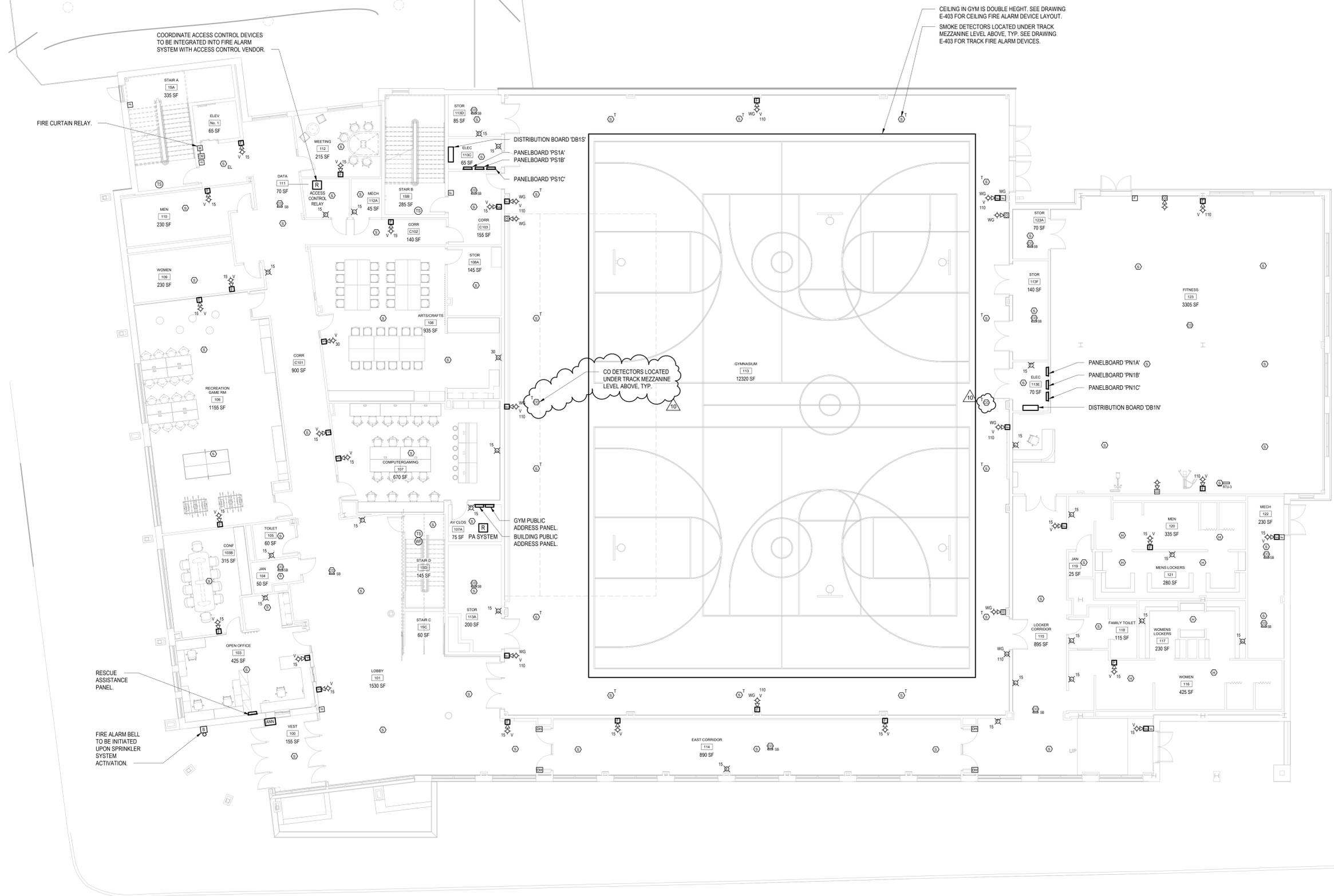
RESCUE ASSISTANCE PANEL.  
FIRE ALARM BELL TO BE INITIATED UPON SPRINKLER SYSTEM ACTIVATION.



1

**FIRE ALARM FIRST FLOOR PLAN**

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





## SECTION 280513 - CONDUCTORS AND CABLES FOR ELECTRONIC SAFETY AND SECURITY

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. 50/125-micrometer, multimode optical-fiber cabling.
  - 2. Fire alarm wire and cable.
  - 3. Identification products.

#### 1.3 DEFINITIONS

- A. EMI: Electromagnetic interference.
- B. IDC: Insulation displacement connector.
- C. Low Voltage: As defined in NFPA 70 for circuits and equipment operating at less than 50 V or for remote-control and signaling power-limited circuits.
- D. Open Cabling: Passing telecommunications cabling through open space (e.g., between the studs of a wall cavity).
- E. RCDD: Registered Communications Distribution Designer.

#### 1.4 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate layout and installation of electronic safety and security cabling with Owner's telecommunications and LAN equipment and service suppliers.
- B. Coordinate telecommunications outlet/connector locations with location of power receptacles at each work area.

#### 1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1. Installation data for optical-fiber cables as specified in TIA 569-C-1.

B. Shop Drawings:

1. System Labeling Schedules: Electronic copy of labeling schedules, in software and format selected by Owner.
2. System Labeling Schedules: Electronic copy of labeling schedules that are part of the cabling and asset identification system of the software.
3. Cabling administration drawings and printouts.
4. Wiring diagrams to show typical wiring schematics, including the following:
  - a. Cross-connects.
  - b. Patch panels.
  - c. Patch cords.
5. Cross-connects and patch panels. Detail mounting assemblies, and show elevations and physical relationship between the installed components.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified layout technician, installation supervisor, and field inspector.
- B. Source quality-control reports.
- C. Field quality-control reports.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Test cables upon receipt at Project site.
  1. Test optical-fiber cable to determine the continuity of the strand, end to end. Use optical-fiber flashlight or optical loss test set.
  2. Test optical-fiber cable on reels. Use an optical time domain reflectometer to verify the cable length, and locate cable defects, splices, and connector; include the loss value of each. Retain test data and include the record in maintenance data.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
  1. Flame-Spread Index: 25 or less.
  2. Smoke-Developed Index: 50 or less.

- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

## 2.2 BACKBOARDS

- A. Backboards: Plywood, fire-retardant treated, 3/4 by 48 by 96 inches. Comply with requirements for plywood backing panels in Section 061000 "Rough Carpentry."

## 2.3 OPTICAL-FIBER CABLE

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

1. AMP NETCONNECT; a TE Connectivity Ltd. company.
2. Belden Inc.
3. Berk-Tek Leviton; a Nexans/Leviton alliance.
4. CommScope, Inc.
5. Corning Cable Systems.
6. Draka Cableteq USA; a Prysmian Group company.
7. General Cable Technologies Corporation.
8. Mohawk; a division of Belden Networking, Inc.
9. Superior Essex Inc.
10. West Penn Wire.

- B. Description: Multimode, 50/125-micrometer, 24-fiber, nonconductive, tight buffer, optical-fiber cable.

1. Comply with ICEA S-83-596 for mechanical properties.
2. Comply with TIA-568-C.3 for performance specifications.
3. Comply with TIA-492AAAB for detailed specifications.
4. Listed and labeled by an NRTL acceptable to authorities having jurisdiction as complying with UL 444, UL 1651, and NFPA 70 for the following types:
  - a. General Purpose, Nonconductive: Type OFN or Type OFNG, or Type OFNR, Type OFNP.
  - b. Plenum Rated, Nonconductive: Type OFNP, complying with NFPA 262.
  - c. Riser Rated, Nonconductive: Type OFNR or Type OFNP, complying with UL 1666.
5. Conductive cable shall be aluminum armored type.
6. Maximum Attenuation: 3.50 db/km at 850 nm; 1.5 db/km at 1300 nm.
7. Minimum Modal Bandwidth: 160 MHz-km at 850 nm; 500 MHz-km at 1300 nm.

- C. Jacket:

1. Jacket Color: Aqua for 50/125-micrometer cable.

2. Cable cordage jacket, fiber, unit, and group color shall be according to TIA-598-C.
3. Imprinted with fiber count, fiber type, and aggregate length at regular intervals not to exceed 40 inches.

## 2.4 OPTICAL-FIBER CABLE HARDWARE

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
1. 3M.
  2. ADC.
  3. American Technology Systems Industries, Inc.
  4. AMP NETCONNECT; a TE Connectivity Ltd. company.
  5. Belden Inc.
  6. Berk-Tek Leviton; a Nexans/Leviton alliance.
  7. Corning Cable Systems.
  8. Hubbell Incorporated.
  9. Leviton Manufacturing Co., Inc.
  10. Molex Premise Networks.
  11. West Penn Wire.
- B. Cross-Connects and Patch Panels: Modular panels housing multiple-numbered, duplex cable connectors.
1. Number of Connectors per Field: One for each fiber of cable or cables assigned to field, plus spares and blank positions adequate to suit specified expansion criteria.
- C. Patch Cords: Factory-made, dual-fiber cables in 36-inch lengths.
- D. Cable Connecting Hardware: Comply with the Fiber Optic Connector Intermateability Standard (FOCIS) specifications of TIA-604-2-B, TIA-604-3-B, and TIA-604-12. Comply with TIA-568-C.3.
1. Quick-connect, simplex and duplex, Type SC, Type ST, Type LC or Type MT-RJ connectors. Insertion loss not more than 0.75 db.
  2. Type SFF connectors may be used in termination racks, panels, and equipment packages.

## 2.5 FIRE ALARM WIRE AND CABLE

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
1. Allied Wire & Cable Inc.

2. CommScope, Inc.
3. Comtran Corporation.
4. Draka Cableteq USA; a Prysmian Group company.
5. Genesis Cable Products; Honeywell International, Inc.
6. Rockbestos-Suprenant Cable Corp.
7. Superior Essex Inc.
8. West Penn Wire.

B. General Wire and Cable Requirements: NRTL listed and labeled as complying with NFPA 70, Article 760.

C. Signaling Line Circuits: Twisted pair, not less than 16 AWG.

1. Cable shall be New York City Certified, twisted pair with copper conductors and rated for up to 150 deg C.

D. Non-Power-Limited Circuits: New York City Certified, solid-copper conductors with 600-V rated, 150 deg C, color-coded insulation.

1. Line-Voltage Circuits: No. 12 AWG, minimum, in pathway.

## 2.6 IDENTIFICATION PRODUCTS

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

1. Brady Corporation.
2. HellermannTyton.
3. Kroy LLC.
4. Panduit Corp.

B. Comply with TIA-606-B and UL 969 for a system of labeling materials, including label stocks, laminating adhesives, and inks used by label printers.

C. Comply with requirements in Section 260553 "Identification for Electrical Systems."

## 2.7 SOURCE QUALITY CONTROL

A. Factory test optical-fiber cables on reels according to TIA-568-C.1.

B. Factory test multimode optical fiber cables according to TIA-526.14-B and TIA-568-C.3.

C. Cable will be considered defective if it does not pass tests and inspections.

D. Prepare test and inspection reports.

## PART 3 - EXECUTION

### 3.1 INSTALLATION OF HANGERS AND SUPPORTS

- A. Comply with requirements in Section 260529 "Hangers and Supports for Electrical Systems" for installation of supports for cables.

### 3.2 WIRING METHOD

- A. Install wiring in metal pathways and wireways.
  - 1. Minimum conduit size shall be 3/4 inch. Control and data-transmission wiring shall not share conduits with other building wiring systems.
- B. Install cable, concealed in accessible ceilings, walls, and floors when possible.
- C. Wiring on Racks and within Enclosures:
  - 1. Bundle, lace, and train conductors to terminal points with no excess and without exceeding manufacturer's limitations on bending radii, but not less than radii specified in BICSI ITSIM's "Cabling Termination Practices" chapter. Cable ties shall not be excessively tightened such that the transmission characteristics of the cable are altered.
  - 2. Install lacing bars and distribution spools.
  - 3. Separate power-limited and non-power-limited conductors as recommended in writing by manufacturer.
  - 4. Install conductors parallel with or at right angles to sides and back of enclosure.
  - 5. Connect conductors associated with intrusion system that are terminated, spliced, or interrupted in any enclosure onto terminal blocks.
  - 6. Mark each terminal according to system's wiring diagrams.
  - 7. Make all connections with approved crimp-on terminal spade lugs, pressure-type terminal blocks, or plug connectors.

### 3.3 INSTALLATION OF CONDUCTORS AND CABLES

- A. Comply with NECA 1 and NFPA 70.
- B. Conductors: Size according to system manufacturer's written instructions unless otherwise indicated.
- C. Do not install conductors and cables that are wet, moisture damaged, or mold damaged.
- D. Install UTP, optical-fiber, and coaxial cables and connecting materials after spaces are complete and dry, and HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.

E. General Requirements for Cabling:

1. Comply with TIA-568-C.1.
2. Comply with BICSI ITSIM, Ch. 6, "Cable Termination Practices."
3. Terminate all conductors; no cable shall contain unterminated elements. Make terminations only at indicated outlets, terminals, and cross-connect and patch panels. Leave a minimum of 6 inches of slack at outlet terminations and coil loosely into box after termination on outlet fitting.
4. Cables may not be spliced. Secure and support cables at intervals not exceeding 30 inches and not more than 6 inches from cabinets, boxes, fittings, outlets, racks, frames, and terminals.
5. Maintain minimum cable bending radius during installation and termination of cables.
6. Do not install bruised, kinked, scored, deformed, or abraded cable. Do not splice cable between termination, tap, or junction points. Remove and discard cable if damaged during installation and replace it with new cable.
7. Cold-Weather Installation: Bring cable to room temperature before dereeling. Heat lamps shall not be used for heating.
8. Pulling Cable: Comply with BICSI ITSIM, Ch. 4, "Pulling Cable." Monitor cable pull tensions. Do not exceed manufacturer's rated cable-pulling tension.
9. Riser Cable: Riser cable support intervals shall be in accordance with manufacturer's recommendations.
10. Comply with Section 280544 "Sleeves and Sleeve Seals for Electronic Safety and Security Pathways and Cabling."

F. Optical-Fiber Cable Installation:

1. Comply with TIA-568-C.3.
2. Cable shall be terminated on connecting hardware that is rack or cabinet mounted.

G. Open-Cable Installation:

1. Install cabling with horizontal and vertical cable guides in telecommunication spaces with terminating hardware and interconnection equipment.
2. Suspend copper cable not in a wireway or pathway a minimum of 8 inches above ceilings by cable supports not more than 60 inches apart. Cable supports shall be fastened to structural members or floor slabs in accordance with Section 260529 "Hangers and Supports for Electrical Systems."
3. Cable shall not be run in contact with pipes, ducts, or other potentially damaging items. Cables shall not be run through structural members or use structural members, pipes, ducts, or equipment as a support.

H. Separation from EMI Sources:

1. Comply with BICSI TDMM and TIA-569-C recommendations for separating unshielded copper voice and data communication cable from potential EMI sources, including electrical power lines and equipment.

2. Separation between open communication cables or cables in nonmetallic pathways and unshielded power conductors and electrical equipment shall be as follows:
  - a. Electrical Equipment Rating Less Than 2 kVA: A minimum of 5 inches.
  - b. Electrical Equipment Rating between 2 and 5 kVA: A minimum of 12 inches.
  - c. Electrical Equipment Rating More Than 5 kVA: A minimum of 24 inches.
3. Separation between communication cables in grounded metallic pathways and unshielded power lines or electrical equipment shall be as follows:
  - a. Electrical Equipment Rating Less Than 2 kVA: A minimum of 2-1/2 inches.
  - b. Electrical Equipment Rating between 2 and 5 kVA: A minimum of 6 inches.
  - c. Electrical Equipment Rating More Than 5 kVA: A minimum of 12 inches.
4. Separation between cables in grounded metallic pathways and power lines and electrical equipment located in grounded metallic conduits or enclosures shall be as follows:
  - a. Electrical Equipment Rating Less Than 2 kVA: No requirement.
  - b. Electrical Equipment Rating between 2 and 5 kVA: A minimum of 3 inches.
  - c. Electrical Equipment Rating More Than 5 kVA: A minimum of 6 inches.
5. Separation between Cables and Electrical Motors and Transformers, 5 kVA or hp and Larger: A minimum of 48 inches.
6. Separation between Cables and Fluorescent Fixtures: A minimum of 5 inches.

### 3.4 FIRE ALARM WIRING INSTALLATION

- A. Comply with NECA 1 and NFPA 72.
- B. Wiring Method:
  1. Install plenum cable in environmental air spaces, including plenum ceilings. Plenum rated cable is permitted to be used throughout the building.
  2. Cables and pathways used for fire alarm circuits, and equipment control wiring associated with the fire alarm system, may not contain any other wire or cable.
  3. Fire-Rated Cables: Use of two-hour, fire-rated fire alarm cables, NFPA 70, Types MI and CI, is permitted.
  4. Signaling Line Circuits: Power-limited fire alarm cables shall not be installed in the same cable or pathway as signaling line circuits.
- C. Wiring within Enclosures: Separate power-limited and non-power-limited conductors as recommended by manufacturer. Install conductors parallel with or at right angles to sides and back of the enclosure. Bundle, lace, and train conductors to terminal points with no excess. Connect conductors that are terminated, spliced, or interrupted in any enclosure associated with the fire alarm system to terminal blocks. Mark each terminal

according to the system's wiring diagrams. Make all connections with approved crimp-on terminal spade lugs, pressure-type terminal blocks, or plug connectors.

- D. Cable Taps: Use numbered terminal strips in junction, pull, and outlet boxes, cabinets, or equipment enclosures where circuit connections are made.
- E. Color Coding: Color code fire alarm conductors differently from the normal building power wiring. Use one color code for alarm circuit wiring and another for supervisory circuits. Color code audible alarm-indicating circuits differently from alarm-initiating circuits. Use different colors for visible alarm-indicating devices. Paint fire alarm system junction boxes and covers red.
- F. Risers: Install at least two vertical cable risers to serve the fire alarm system. Separate risers in close proximity to each other with a minimum one-hour-rated wall, so the loss of one riser does not prevent the receipt or transmission of signals from other floors or zones.
- G. Wiring to Remote Alarm Transmitting Device: 1-inch conduit between the fire alarm control panel and the transmitter. Install number of conductors and electrical supervision for connecting wiring as needed to suit monitoring function.

### 3.5 POWER AND CONTROL-CIRCUIT CONDUCTORS

- A. 120-V Power Wiring: Install according to Section 260519 "Low-Voltage Electrical Power Conductors and Cables" unless otherwise indicated.
- B. Minimum Conductor Sizes:
  - 1. Class 1 remote-control and signal circuits, No. 14 AWG.
  - 2. Class 2 low-energy, remote-control and signal circuits, No. 16 AWG.
  - 3. Class 3 low-energy, remote-control, alarm and signal circuits, No. 12 AWG.

### 3.6 CONNECTIONS

- A. Comply with requirements in Section 283111 "Digital, Addressable Fire-Alarm System" for connecting, terminating, and identifying wires and cables.

### 3.7 FIRESTOPPING

- A. Comply with requirements in Section 078413 "Penetration Firestopping."
- B. Comply with TIA-569-C, "Firestopping" Annex A.
- C. Comply with BICSI TDMM, "Firestopping Systems" Article.

### 3.8 GROUNDING

- A. For communication wiring, comply with J-STD-607-A and with BICSI TDMM's "Grounding, Bonding, and Electrical Protection" chapter.
- B. For low-voltage wiring and cabling, comply with requirements in Section 280526 "Grounding and Bonding for Electronic Safety and Security."

### 3.9 IDENTIFICATION

- A. Identify system components, wiring, and cabling complying with TIA-606-B. Comply with requirements for identification specified in Section 260553 "Identification for Electrical Systems."

### 3.10 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.
- B. Perform the following tests and inspections with the assistance of a factory-authorized service representative:
  - 1. Visually inspect UTP and optical-fiber cable jacket materials for NRTL certification markings. Inspect cabling terminations to confirm color coding for pin assignments, and inspect cabling connections to confirm compliance with TIA-568-C.1.
  - 2. Visually inspect cable placement, cable termination, grounding and bonding, equipment and patch cords, and labeling of all components.
  - 3. Test UTP cabling for DC loop resistance, shorts, opens, intermittent faults, and polarity between conductors. Test operation of shorting bars in connection blocks. Test cables after termination but not cross connection.
    - a. Test instruments shall comply with or exceed applicable requirements in TIA-568-C.2. Perform tests with a tester that complies with performance requirements in "Test Instruments (Normative)" Annex, complying with measurement accuracy specified in "Measurement Accuracy (Informative)" Annex. Use only test cords and adapters that are qualified by test equipment manufacturer for channel or link test configuration.
  - 4. Optical-Fiber Cable Tests:
    - a. Test instruments shall comply with or exceed applicable requirements in TIA-568-C.1. Use only test cords and adapters that are qualified by test equipment manufacturer for channel or link test configuration.
    - b. Link End-to-End Attenuation Tests:

- 1) Multimode Link Measurements: Test at 850 or 1300 nm in one direction according to TIA-526-14-B, Method B, One Reference Jumper.
  - 2) Attenuation test results for links shall be less than 2.0 db. Attenuation test results shall be less than that calculated according to equation in TIA-568-C.1.
- C. Document data for each measurement. Print data for submittals in a summary report that is formatted using Table 10.1 in BICSI TDMM as a guide, or transfer the data from the instrument to the computer, save as text files, print, and submit.
- D. End-to-end cabling will be considered defective if it does not pass tests and inspections.
- E. Prepare test and inspection reports.

END OF SECTION 280513