COMMUNICATIONS PLAN NOTES:

1. REFER TO E2.0 SHEETS FOR CIRCUIT AND ADDITIONAL INFORMATION.
2. 2" CONDUIT WITH PULLWIRE FOR OWNER FURNISHED REMOTE READER. COORDINATE LOCATION WITH OWNER.
3. 2" CONDUIT WITH PULLWIRE TO TOWER PROCESSOR FOR COMMUNICATIONS CABLE.
4. CUSTOMER SERVICE CONDUIT STUB UP LOCATION. ALL CONDUITS ROUTED TO THIS LOCATION AND BRANCH CIRCUITS, TELEPHONE AND NCR CABLES TO BE ROUTED IN CASEWORK AS REQUIRED. VERIFY NUMBER AND SIZE OF CONDUITS.
5. 1" CONDUIT WITH PULLWIRE FOR COMPUTER LOOP AND CABLE T.V. ROUTE CONDUIT TO ABOVE CEILING.
6. PROVIDE 4" CONDUIT FOR TELEPHONE SERVICE AND 2" CONDUIT FOR CABLE TV OUT TO 5' BEYOND BUILDING LINE .
7. PULL ONE CAT6 CABLE FOR EACH CASH REGISTER, ONE CAT6 CABLE FOR EACH CATALINA PRINTER, ONE CAT6 CABLE FOR EACH LANE HAWK AND ONE CAT3 CABLE FOR EACH TELEPHONE.

NOTES:
1. ALL EXPOSED WIRING TO BE IN 1" CONDUIT UNLESS OTHERWISE NOTED.
2. PULLSTRING REQUIRED IN ALL UNDERGROUND CONDUIT.
3. ALL UNDERGROUND CONDUIT TO HAVE WATER REMOVED BEFORE CABLING CONTRACTOR WORK BEGINS.

COMMUNICATIONS PLAN SYMBOLS:

- TELEPHONE/DATA OUTLET - CAT6
- TELEPHONE OUTLET - CAT6
- COMPUTER DATA OUTLET - CAT6
- CATALINA DATA OUTLET - CAT6
- REGISTER DATA OUTLET - CAT6
- JUNCTION BOX
- AP — WIRELESS AP - CAT6 CABLE TO TELEPHONE CLOSET
- POS — POINT OF SALE - (2) DATA REQUIRED
- PR — PRINTER - (2) DATA REQUIRED - BOX @+72"
- MD — MOTION DECTECTOR

(1) 1" CONDUIT WITH BOX @ +56" TO ABOVE CEILING

(1) 1" CONDUIT WITH BOX @ +84" TO DECK

(1) 1" CONDUIT WITH BOX @ +18" TO ABOVE CEILING

CLEAR ZONE TO B/O STRUCTURE NO LIGHT FIXTURES, CONDUIT, SPRINKLER PIPING, REFRIG. PIPING, HVAC DUCT WORK, CEILING FANS, SPEAKERS, OR WATER PIPING SHALL BE MOUNTED BELOW.

SEE 3/T1.1

SEE 2/T1.2

BACK COMMUNICATIONS CLOSET

(10) 2" CONDUITS TO DECK STUBBED FROM COMM. ROOM TO SALES

ELEC TO PROVIDE POWER FOR WIRELESS PHONE ACCESS POINT CONNECTION +10' A.F.F.

PROVIDE (1) 1" CONDUIT TO ROOF DECK. RUN CABLE TO BACK COMM CLOSET FOR SALES AREA PHONE

(1) 1" CONDUIT DOWN WALL TO BELOW COMM. ROOM CEILING

(1) 2" CONDUIT AT COLUMN TO ABOVE CEILING

(2) 2" CONDUITS AT DECK STUBBED FROM WINE AND SPIRITS TO SALES

(1) 2" CONDUIT STUBBED UP INTO WALL WITH JUNCTION BOX

(1) 2" CONDUIT UNDERFLOOR

14'-5"

14'-1"

(2) 1" CONDUITS UNDERFLOOR TO COUNTER FOR VOLUME CONTROL

(1) 1" CONDUIT UNDERFLOOR FOR FLAG SWITCH TO CENTER

(3) 1" CONDUITS TO ROOF DECK STUB ONE TO SALES FLOOR

VOLUME CONTROL MOUNT UNDER COUNTER

(1) 2" CONDUIT WITH BOX @ +18" STUBBED UP IN WALL TO ROOF DECK

SEE 1/T1.2

CEILING MOUNTED

MD

(1) 1" CONDUIT WITH BOX @ +18" TO ABOVE CEILING

SEE 2/T1.1

FRONT COMMUNICATIONS CLOSET

PROVIDE (2) 2" CONDUITS FROM UNDERFLOOR DUCT TO FRONT COMMUNICATIONS CLOSET FOR COMMUNICATIONS CABLING. SEE NOTE 7.

(10) 2" CONDUITS TO DECK STUBBED FROM COMM. ROOM TO SALES

EXTEND CONDUIT DOWN EXTERIOR WALL TO BELOW COMM. ROOM CEILING

(1) 2" CONDUIT UNDERFLOOR

(1) 1" CONDUIT STUBBED UP INTO WALL

(1) 2" CONDUIT STUBBED UP UNDER COUNTER

6'-0"

20'-0"

(1) 2" CONDUIT AT COLUMN TO ABOVE CEILING

RX COMMUNICATIONS RACK

(3) 2" CONDUITS FROM RX RACK RAN TO BOTTOM CHORD OF JOIST TO SALES

(3) 2" CONDUITS DOWN FACE OF WALL @ 24" ABOVE CEILING

(1) CONDUIT WITH BOX @ +12" TIE INTO DEMARC

SEE 1/T1.1

1 COMMUNICATIONS PLAN
SCALE: 3/32" = 1'-0"

REVISION	DATE BY

COMMUNICATIONS & SECURITY

LOCATION: LEES SUMMIT #2, MO

HY-VEE, INC.
5820 WESTOWN PARKWAY
WEST DES MOINES, IOWA 50266
TELEPHONE: (515) 267-2800
FAX: (515) 267-2935

Hy-Vee® EMPLOYEE OWNED

NORTH

COMMUNICATIONS PLAN

DRAWN:	DATE:
BP	OCT 2020
SCALE:	JOB NUMBER:
3/32" = 1'0"	

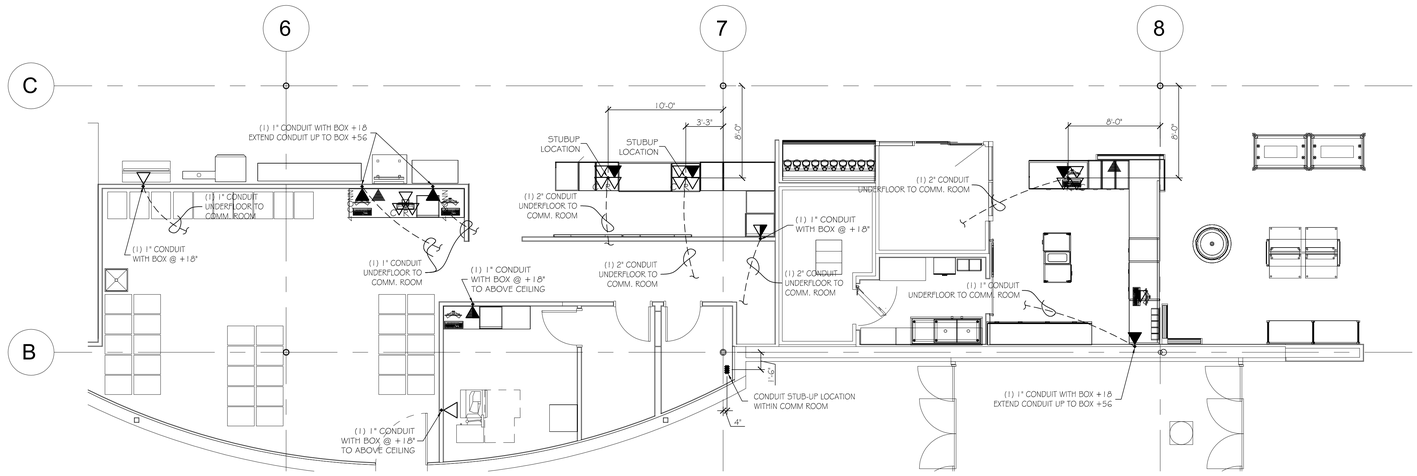
SHEET: T1.0

REVISION	DATE BY

COMMUNICATIONS PLAN SYMBOLS:

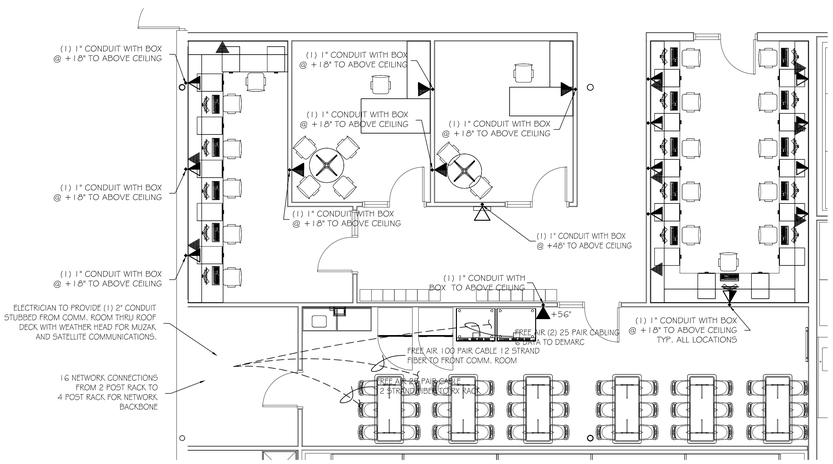
- TELEPHONE/DATA OUTLET - CAT6
- TELEPHONE OUTLET - CAT6
- COMPUTER DATA OUTLET - CAT6
- CATALINA DATA OUTLET - CAT6
- REGISTER DATA OUTLET - CAT6
- (J) JUNCTION BOX
- [AP] WIRELESS AP - CAT6 CABLE TO TELEPHONE CLOSET
- [POS] POINT OF SALE - (2) DATA REQUIRED
- [PR] PRINTER - (2) DATA REQUIRED - BOX @+72"
- [MD] MOTION DECTECTOR

NOTES:
1. ALL EXPOSED WIRING TO BE IN 1" CONDUIT UNLESS OTHERWISE NOTED.
2. PULLSTRING REQUIRED IN ALL UNDERGROUND CONDUIT.
3. ALL UNDERGROUND CONDUIT TO HAVE WATER REMOVED BEFORE CABLING CONTRACTOR WORK BEGINS.



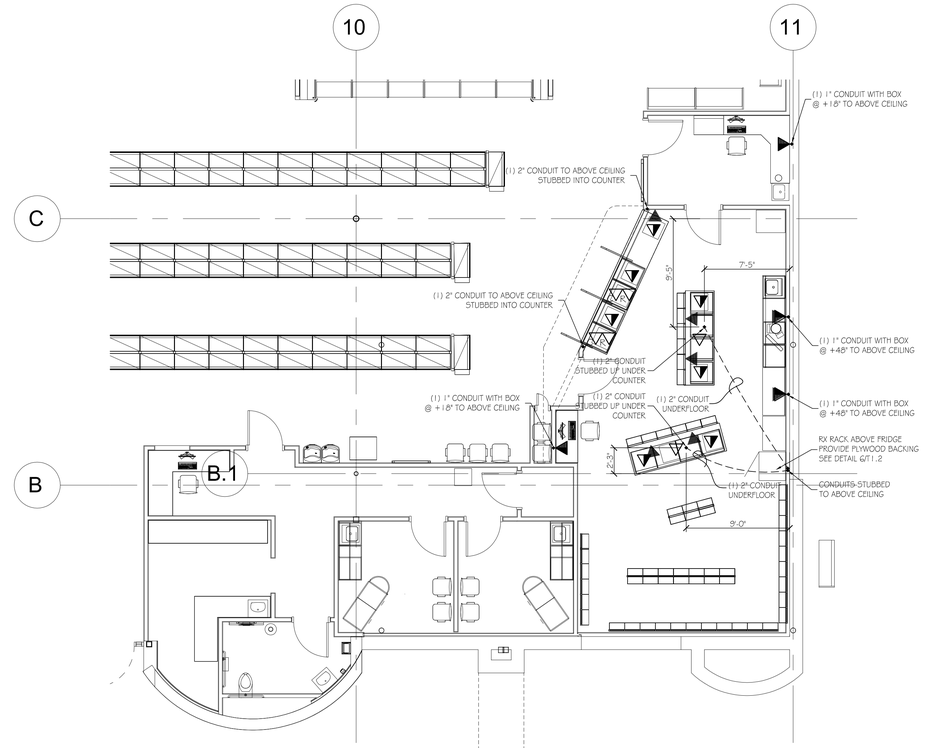
2 ENLARGED COMMUNICATIONS PLAN - CUSTOMER SERVICE/FLORAL

SCALE: 3/16" = 1'-0"



3 ENLARGED COMMUNICATIONS PLAN - OFFICE

SCALE: 3/16" = 1'-0"



1 ENLARGED COMMUNICATIONS PLAN - PHARMACY AND CLINIC

SCALE: 3/16" = 1'-0"

COMMUNICATIONS & SECURITY

LOCATION: LEES SUMMIT #2, MO

HY-VEE, INC.
5820 WESTOWN PARKWAY
WEST DES MOINES, IOWA 50266
TELEPHONE: (515) 267-2800
FAX: (515) 267-2935

Hy-Vee® EMPLOYEE OWNED

NORTH

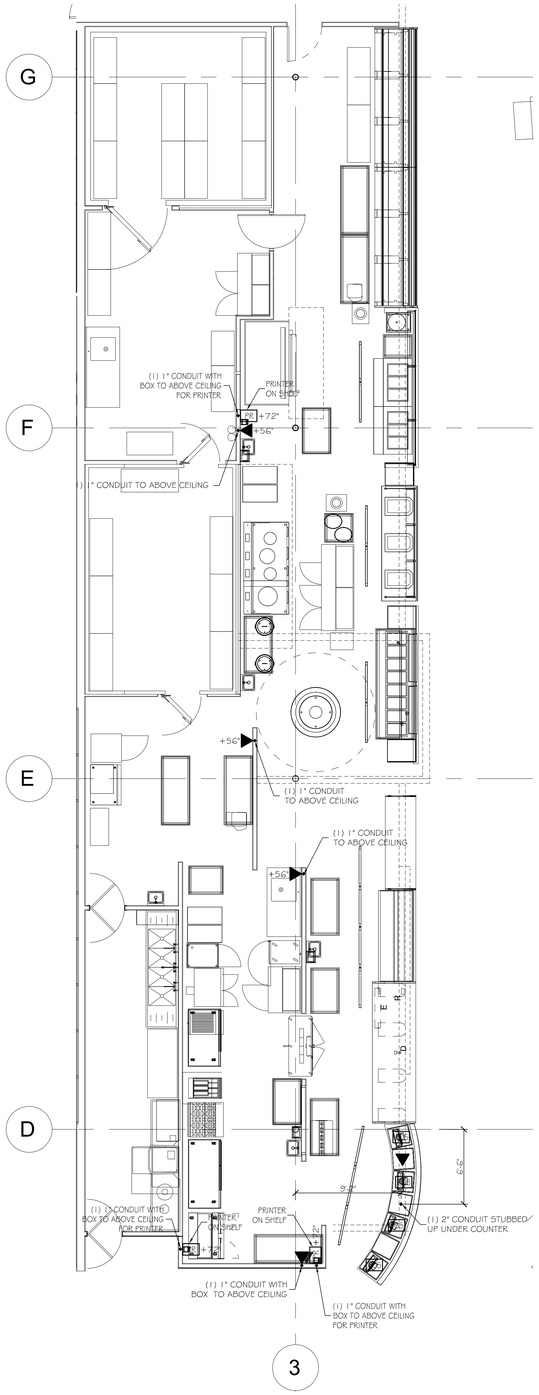
ENLARGED COMMUNICATIONS PLANS

DRAWN:	DATE:
BP	OCT 2020
SCALE:	JOB NUMBER:
SEE SHEET	

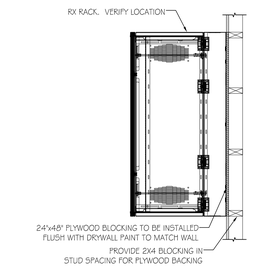
SHEET: T1.1

COMMUNICATIONS PLAN SYMBOLS:	
	TELEPHONE/DATA OUTLET - CAT6
	TELEPHONE OUTLET - CAT6
	COMPUTER DATA OUTLET - CAT6
CATALINA	CATALINA DATA OUTLET - CAT6
R	REGISTER DATA OUTLET - CAT6
J	JUNCTION BOX
AP	WIRELESS AP - CAT6 CABLE TO TELEPHONE CLOSET
POS	POINT OF SALE - (2) DATA REQUIRED
PR	PRINTER - (2) DATA REQUIRED - BOX @+72"
MD	MOTION DECTECTOR

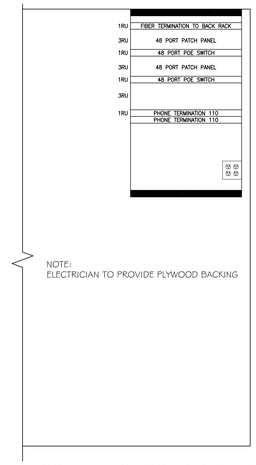
NOTES:
1. ALL EXPOSED WIRING TO BE IN 1" CONDUIT UNLESS OTHERWISE NOTED.
2. PULLSTRING REQUIRED IN ALL UNDERGROUND CONDUIT.
3. ALL UNDERGROUND CONDUIT TO HAVE WATER REMOVED BEFORE CABLING CONTRACTOR WORK BEGINS.



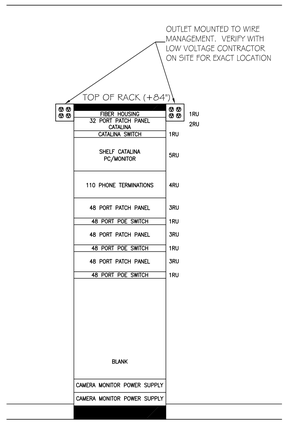
2 ENLARGED COMMUNICATIONS PLAN - KITCHEN
SCALE: 3/16" = 1'-0"



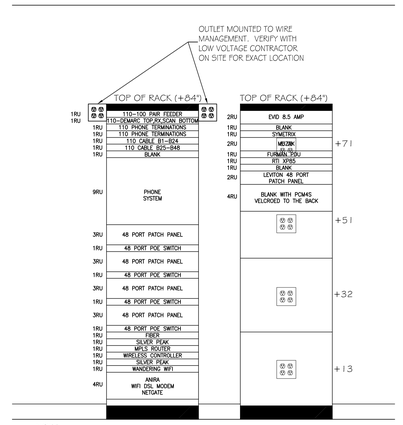
6 RX COMMUNICATIONS RACK ELEVATION
SCALE: 3/4" = 1'-0"



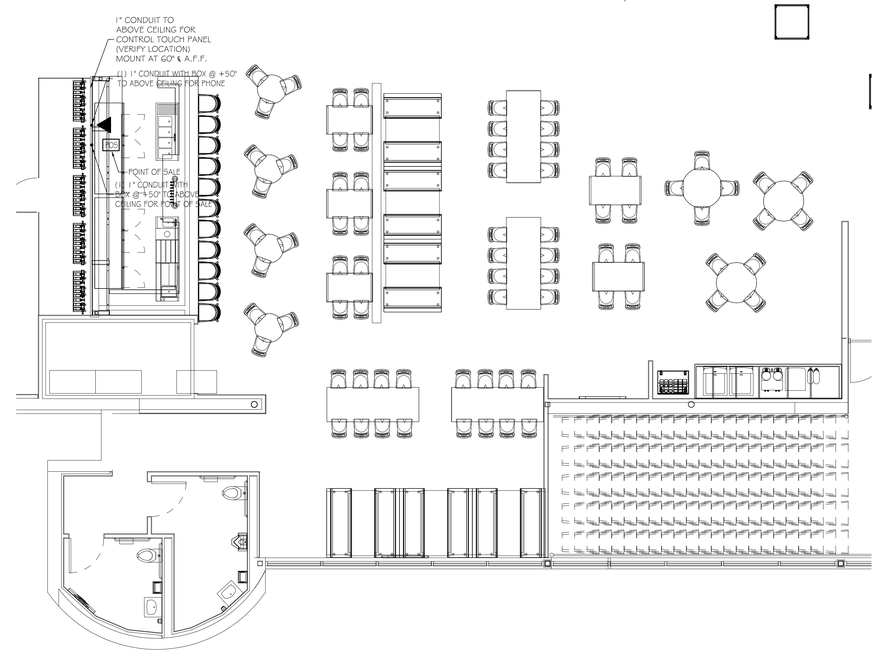
5 RX COMMUNICATIONS RACK ELEVATION
SCALE: 3/4" = 1'-0"



4 FRONT COMMUNICATIONS RACK ELEVATION
SCALE: 3/4" = 1'-0"



3 BACK COMMUNICATIONS RACK ELEVATION
SCALE: 3/4" = 1'-0"



1 ENLARGED COMMUNICATIONS PLAN - MARKET GRILLE
SCALE: 3/16" = 1'-0"

REVISION	DATE BY

COMMUNICATIONS & SECURITY

LOCATION:
LEES SUMMIT #2, MO

HY-VEE, INC.
5820 WESTOWN PARKWAY
WEST DES MOINES, IOWA 50266
TELEPHONE: (515) 267-2800
FAX: (515) 267-2935

Hy-Vee® EMPLOYEE OWNED

NORTH

ENLARGED COMMUNICATIONS PLANS AND ELEVATIONS

DRAWN:	DATE:
BP	OCT 2020
SCALE: SEE SHEET	JOB NUMBER:

SHEET: T1.2

SPEAKER PLAN SYMBOLS:

- SPEAKER - (177)
- SPEAKER - HORN TYPE - WITH VOLUME ADJUSTMENT (45)
- SPEAKER WITH VOLUME CONTROL - (45)
- SOUNDTUBE SPEAKER (8)
- ELECTRO-VOICE SPEAKER (7)
- SOUNDTUBE SPEAKER RS-3 I (0)
- SOUNDTUBE SM400I (0)
- WALL MOUNT SPEAKER (0)

BACKROOM

BAKERY

BACKROOM

MEAT

OFFICE

FOOD SERVICE

WINE & SPIRITS

DINING

RX

TAP AT 17 1/2 WATTS

TO AV COMM CLOSET

TO AV COMM CLOSET

WINE AND SPIRITS SPEAKER FEED FROM AMP TO VOLUME CONTROL AND FROM VOLUME CONTROL TO FIRST SPEAKER IN ZONE

1 SPEAKER PLAN
SCALE: 3/32" = 1'-0"

REVISION	DATE BY

COMMUNICATIONS & SECURITY

LOCATION:
LEES SUMMIT #2, MO

HY-VEE, INC.
5820 WESTOWN PARKWAY
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Hy-Vee® EMPLOYEE OWNED

NORTH

SPEAKER PLAN

DRAWN:	DATE:
BP	OCT 2020
SCALE: 3/32" = 1'-0"	JOB NUMBER:

SHEET:
T2.0

ELECTRONIC VIDEO BOARD SCHEDULE			
LOCATION	QUANITY AND SIZE	HEIGHT	MOUNTING
DSW	(1) 49" MONITOR	VARIES	WALL
DSW	(1) 49" MONITOR	VARIES	WALL
DSW	(1) 49" MONITOR	VARIES	WALL
DSW	(1) 49" MONITOR	VARIES	WALL
DSW	(1) 49" MONITOR	VARIES	WALL
DSW	(1) 49" MONITOR	VARIES	WALL
DSW	(1) 49" MONITOR	VARIES	WALL
DSW	(1) 49" MONITOR	VARIES	WALL
DSW	(1) 49" MONITOR	VARIES	WALL
DSW	(1) 49" MONITOR	VARIES	WALL

ELECTRONIC VIDEO BOARD SCHEDULE			
LOCATION	QUANITY AND SIZE	HEIGHT	MOUNTING
SUSHI	(2) 49" MONITORS	B/O MONITOR +6'-8"	POLE
MARKET GRILLE EXPRESS	(3) 49" MONITORS	B/O MONITOR +6'-8"	POLE
HICKORY HOUSE	(4) 49" MONITORS	B/O MONITOR +6'-8"	POLE
HIBACHI	(2) 49" MONITORS	B/O MONITOR +6'-8"	POLE
ASIAN	(2) 49" MONITORS	B/O MONITOR +6'-8"	POLE
MIA PIZZA	(2) 49" MONITORS	B/O MONITOR +6'-8"	POLE
BAKERY CAKE	(1) 65" MONITOR	B/O MONITOR +5'-8"	WALL - BOX +8'-0"
BAKERY BREAD	(2) 55" MONITORS	B/O MONITOR +6'-8"	WALL - BOX +8'-8"
MEAT	(1) 82" MONITOR	B/O MONITOR +5'-8"	WALL - BOX +8'-8"
SEAFOOD	(1) 65" MONITOR	B/O MONITOR +6'-8"	WALL - BOX +9'-0"
SEASONS	(1) 55" MONITOR	MONITOR ON KIOSK	WALL - BOX +18"
DIETITIAN	(1) 49" MONITOR	B/O MONITOR +4'-3"	WALL - BOX +5'-3"
GREETING CARDS	(1) 49" MONITOR	VARIES	WALL
BASIN	(1) 65" MONITOR	B/O MONITOR +5'-2"	WALL - BOX +7'-6"
CUSTOMER SERVICE	(2) 65" MONITOR	B/O MONITOR +4'-7"	WALL - BOX +6'-4"
APPAREL	(1) 82" MONITOR	B/O MONITOR +6'-2"	WALL - BOX +9'-2"

TELEVISION SCHEDULE			
LOCATION	SIZE	HEIGHT	MOUNTING
TV1	55" MONITOR	B/O MONITOR +6'-4"	WALL MOUNT - BOX +8'-4"
TV2	55" MONITOR	B/O MONITOR +6'-4"	WALL MOUNT - BOX +8'-4"
TV3	55" MONITOR	B/O MONITOR +6'-4"	WALL MOUNT - BOX +8'-4"
TV4	55" MONITOR	B/O MONITOR +6'-4"	WALL MOUNT - BOX +8'-4"
TV5	55" MONITOR	B/O MONITOR +6'-4"	WALL MOUNT - BOX +8'-4"
TV6	NOT USED		
TV7	NOT USED		
TV8	55" MONITOR	B/O MONITOR +4'-0"	WALL MOUNT - BOX +6'-0"
TV9	32" MONITOR	B/O MONITOR +4'-0"	WALL MOUNT - BOX +5'-1"

AUDIO-VIDEO PLAN SYMBOLS:

- (TV) DINING AND GRILLE
  TV - (1) COAX CABLE
  (1) CAT 6
- (M) MOTHERS ROOM AND BREAK ROOM
  TV - (1) COAX
- (T) TRAINING ROOM
  TV - (1) COAX CABLE
  (2) CAT 6
  (1) 18/2 SHIELD
- (V) MENU BOARD
  VIDEO MONITOR - (2) CAT 6
- RTI AV TOUCH PANEL - (1) CAT 6
  MOUNT AT +56" TO CENTER

(1) 1" CONDUIT WITH BOX TO DECK
(2) CAT 6 PULLED FROM BAKERY MENU BOARD TO COMM. CLOSET
(2) CAT 6 PULLED FROM CHARCUTERIE MONITOR TO COMM. CLOSET
(2) CAT 6 PULLED FROM MEAT MENU BOARD TO COMM. CLOSET
(1) 1" CONDUIT WITH BOX TO ABOVE CEILING
TV9
TV8
BACK COMMUNICATIONS CLOSET
(4) CAT 6 PULLED FROM MIA PIZZA MENU BOARDS TO COMM. CLOSET
(4) CAT 6 PULLED FROM ASIAN MENU BOARDS TO COMM. CLOSET
(4) CAT 6 PULLED FROM HIBACHI MENU BOARDS TO COMM. CLOSET
(6) CAT 6 PULLED FROM HICKORY HOUSE MENU BOARDS TO COMM. CLOSET
(6) CAT 6 PULLED FROM MGE MENU BOARDS TO COMM. CLOSET
(4) CAT 6 PULLED FROM SUSHI MENU BOARDS TO COMM. CLOSET
(1) 1" CONDUIT WITH BOX TO ABOVE CEILING
1 8/2 SHIELD TO TV1
TV1 TV2 TV3 TV4 TV5
(2) CAT 6 PULLED FROM GREETING CARDS MONITOR TO COMM. CLOSET
(2) CAT 6 PULLED FROM APPAREL MONITOR TO COMM. CLOSET
RX COMMUNICATIONS RACK
(24) CAT 6 PULLED FROM DSW DIGITAL WALL TO COMM. CLOSET
(2) CAT 6 PULLED FROM BASIN MONITOR TO COMM. CLOSET
(2) CAT 6 PULLED FROM DIETITIAN MONITOR TO COMM. CLOSET
FRONT COMMUNICATIONS CLOSET
(2) CAT 6 PULLED FROM SEASONS MONITOR TO COMM. CLOSET
(2) CAT 6 PULLED FROM CUSTOMER SERVICE MONITORS TO COMM. CLOSET
UP
UP

1 AUDIO/VIDEO PLAN
SCALE: 3/32" = 1'-0"

REVISION	DATE BY

COMMUNICATIONS & SECURITY

LOCATION:
LEES SUMMIT #2, MO

HY-VEE, INC.
5820 WESTOWN PARKWAY
WEST DES MOINES, IOWA 50266
TELEPHONE: (515) 267-2800
FAX: (515) 267-2935

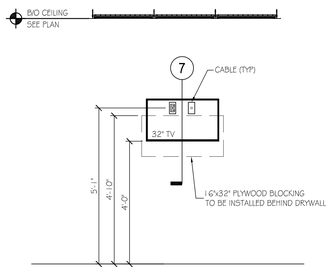
Hy-Vee® EMPLOYEE OWNED

NORTH

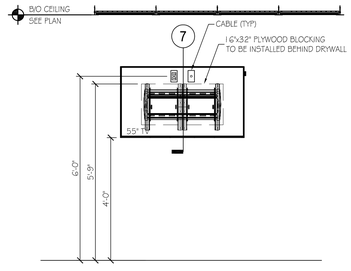
AUDIO/VIDEO PLAN

DRAWN:	DATE:
BP	OCT 2020
SCALE:	JOB NUMBER:
3/32" = 1'0"	

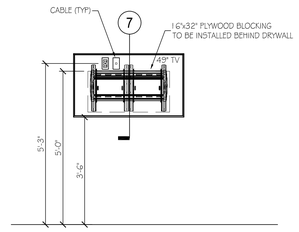
SHEET:
T3.0



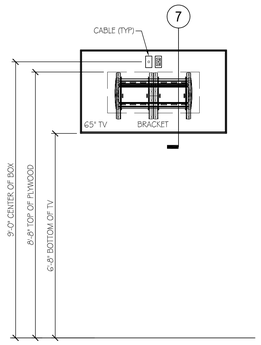
1 MOTHERS ROOM TELEVISION ELEVATION
SCALE: 1/2" = 1'-0"



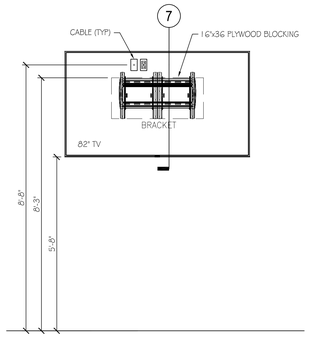
2 BREAKROOM TELEVISION ELEVATION
SCALE: 1/2" = 1'-0"



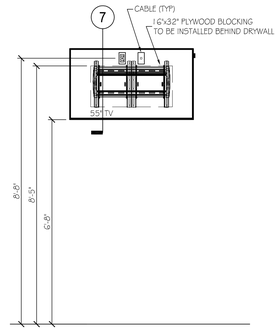
3 DIETITIAN MONITOR ELEVATION
SCALE: 1/2" = 1'-0"



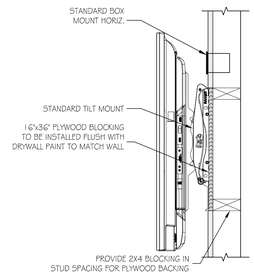
4 SEAFOOD TELEVISION ELEVATION
SCALE: 1/2" = 1'-0"



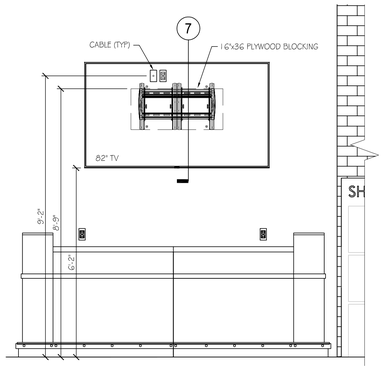
5 MEAT TELEVISION ELEVATION
SCALE: 1/2" = 1'-0"



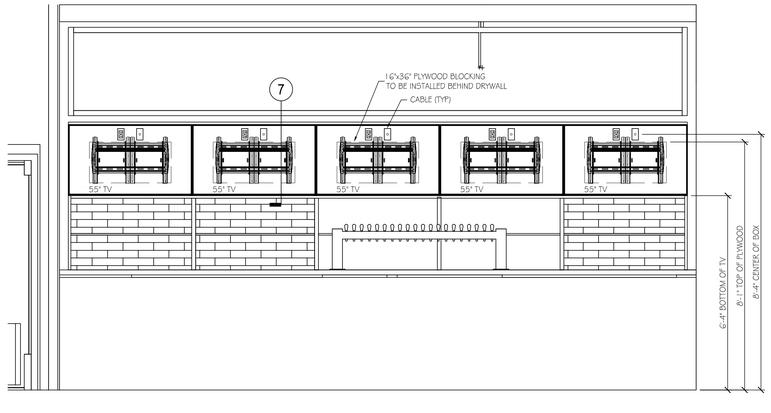
6 TYP. 55" DINING TELEVISION ELEV
SCALE: 1/2" = 1'-0"



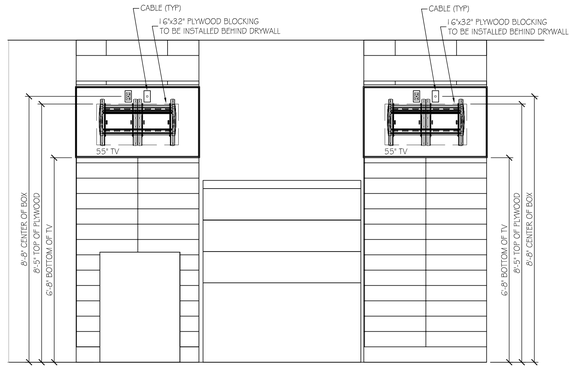
7 TYPICAL TELEVISION SECTION
SCALE: 1 1/2" = 1'-0"



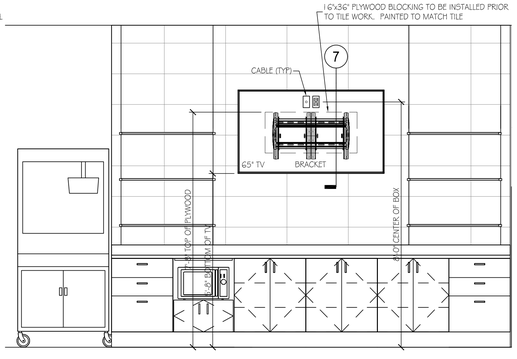
8 APPAREL TELEVISION ELEVATION
SCALE: 1/2" = 1'-0"



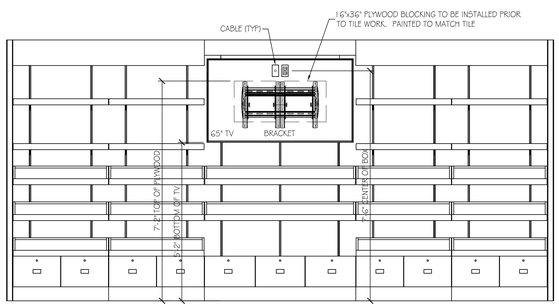
9 BAR WALL ELEVATION
SCALE: 1/2" = 1'-0"



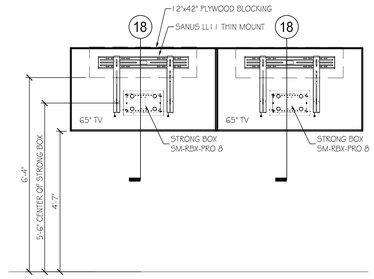
10 BAKERY BREAD WALL ELEVATION
SCALE: 1/2" = 1'-0"



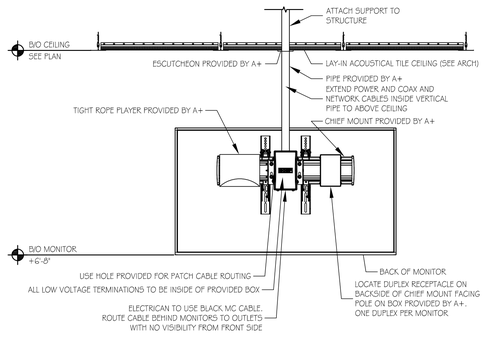
11 BAKERY CAKE WALL ELEVATION
SCALE: 1/2" = 1'-0"



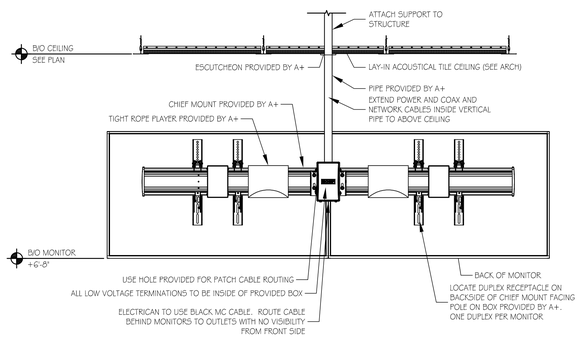
12 BASIN TELEVISION ELEVATION
SCALE: 1/2" = 1'-0"



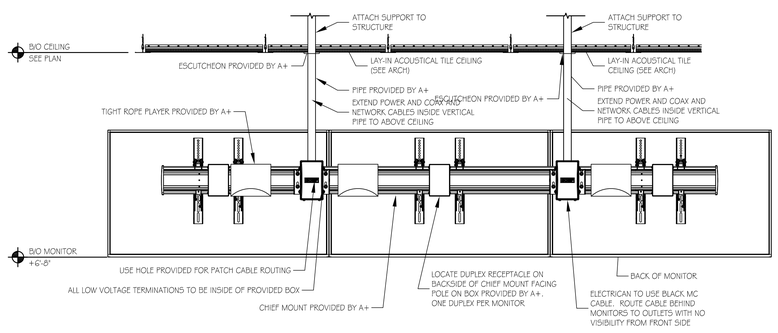
13 CUSTOMER SERVICE TELEVISION ELEVATION
SCALE: 1/2" = 1'-0"



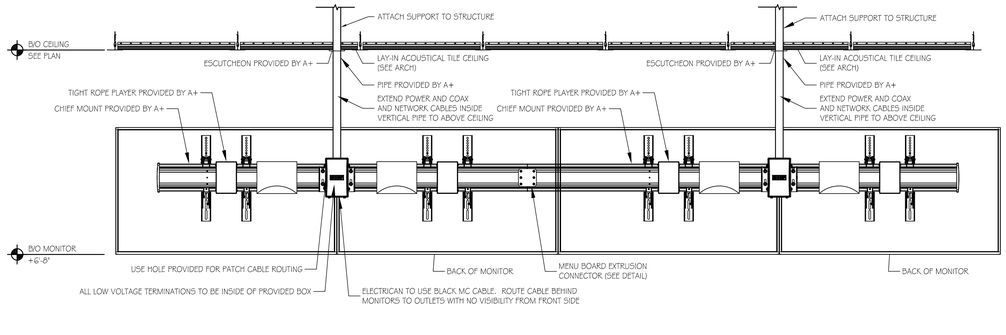
14 49" POLE MOUNTED MENU MONITOR DETAIL (1 MONITOR)
SCALE: 1" = 1'-0"



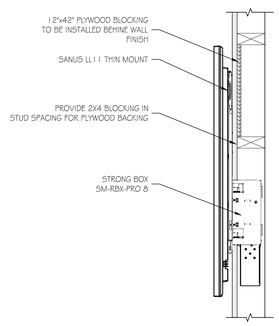
15 49" POLE MOUNTED MENU MONITOR DETAIL (2 MONITORS)
SCALE: 1" = 1'-0"



16 49" POLE MOUNTED MENU MONITOR DETAIL (3 MONITORS)
SCALE: 1" = 1'-0"



17 49" POLE MOUNTED MENU MONITOR DETAIL (4 MONITORS)
SCALE: 1" = 1'-0"



18 CUSTOMER SERVICE SECTION
SCALE: 1 1/2" = 1'-0"

REVISION	DATE BY

COMMUNICATIONS & SECURITY

LOCATION:
LEES SUMMIT #2, MO

HY-VEE, INC.
5820 WESTOWN PARKWAY
WEST DES MOINES, IOWA 50266
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Hy-Vee® EMPLOYEE OWNED

NORTH

AUDIO/VIDEO
ELEVATIONS
AND DETAILS

DRAWN:	DATE:
BP	OCT 2020
SCALE:	JOB NUMBER:
SEE SHEET	

SHEET:
T3.1

3/4 INCH CONDUIT TO BE SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR BETWEEN FIRE ALARM NOTIFICATION IN THE RESTROOM AREAS AND STUBBED OUT ABOVE CEILING FOR EASY ACCESS.

FIELD VERIFY LOCATION OF FDC AND MOUNT EXTERIOR NOTIFICATION APPLIANCE 7'-1.0 FEET ABOVE FDC.

TO FACP

FROM MEZZ

FROM NAC POWER SUPPLY 1

TO BACK ROOM

RTU-2 RTU-5 RTU-6 RTU-11 RTU-12 RTU-13 RTU-14

POLLING LOOP-027 DONUT FRYER

POLLING LOOP-028 ANSUL PIZZA OVEN HOOD

POLLING LOOP-029 ANSUL ASIAN HOOD

POLLING LOOP-030 ANSUL GRILL HOOD

POLLING LOOP-031 ANSUL KITCHEN HOOD

POLLING LOOP-032 ANSUL ROTISSERIE HOOD

ECP-003 OFFICE FIRE KEYPAD

ECP-001 SOUTH ENTRY FIRE KEYPAD

ECP-004 NORTH ENTRY KEYPAD

POLLING LOOP-024 SOUTH ENTRY PULL STATION

POLLING LOOP-023 NORTH ENTRY PULL STATION

POLLING LOOP-025 PRNT COMM CLST SMK DET

POLLING LOOP-033 NAC PWR SUP 4 TROUBLE

POLLING LOOP-034 NAC PWR SUP 4 AC LOSS

POLLING LOOP-040 ECP-003 RTU ZONE EXP 1
POLLING LOOP-048 RTU ZONE EXP 2
POLLING LOOP-020 FACP SMOKE DET
227-001 FACP CELL COMMUNICATOR
24V AUX PWR SUP-AUX-001 ECP-005
FDC HORN/STROBE CONTROL
24V AUX PWR SUP
BELL 1-001 BELL 1-002 BELL 1-003 BELL 1-004
203-001 203-002 203-003 203-004
NAC PWR SUP 1 NAC PWR SUP 2 NAC PWR SUP 3 NAC PWR SUP 4

RTU ZONE EXPANDERS, FACP CELL COMMUNICATOR, NAC POWER SUPPLIES, 24 VOLT POWER SUPPLY, 4-20MCP, RELAY SMOKE DETECTOR ARE ALL LOCATED IN THE SOUTH COMMUNICATION CLOSET WHERE THE FACP IS LOCATED.

1 FIRE PLAN
SCALE: 3/32" = 1'-0"

2 MEZZANINE FIRE PLAN
SCALE: 3/32" = 1'-0"

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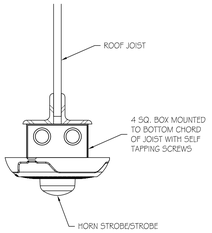
Hy-Vee® EMPLOYEE OWNED

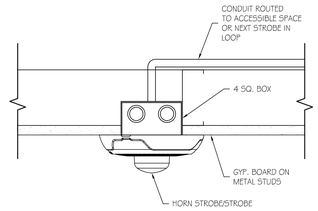
NORTH

FIRE PLAN

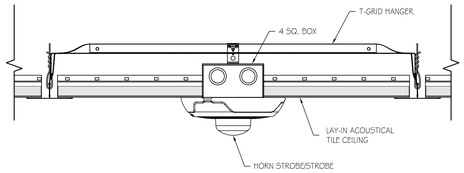
DRAWN:	DATE:
BP	OCT 2020
SCALE:	JOB NUMBER:
3/32" = 1'0"	
SHEET:	
T4.0	



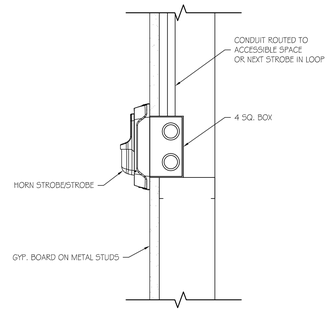
1 STROBE INSTALLATION - TO STRUCTURE
SCALE: 3" = 1'-0"



2 STROBE INSTALLATION - GYP. BD MOUNT
SCALE: 3" = 1'-0"



3 STROBE INSTALLATION - ACOUSTICAL CEILING MOUNT
SCALE: 3" = 1'-0"



4 STROBE INSTALLATION - GYP. BD WALL MOUNT
SCALE: 3" = 1'-0"

SMOKE DETECTOR COORDINATION SCHEDULE

UNIT TAG	AREA SERVED	SUPPLY AIRFLOW (CFM)	AIR SMOKE DETECTION (YES/NO)	REQUIRED DUCT MOUNTED SMOKE DETECTOR LOCATIONS	SMOKE DETECTORS	TRADE RESPONSIBILITY WIRING	TRADE RESPONSIBILITY CONTROLS
RTU-1	SOUTH SALES	17,000		RETURN	MC	SEE SCOPE OF WORK.	OV
RTU-2	NORTH SALES	17,000		RETURN	MC	SEE SCOPE OF WORK.	OV
RTU-3 (EXISTING)	DINING	3,400		RETURN	MC	SEE SCOPE OF WORK.	OV
RTU-4 (EXISTING)	EXIT VESTIBULE	3,500		RETURN	MC	SEE SCOPE OF WORK.	OV
RTU-5 (EXISTING)	ENTRY VESTIBULE	3,500		RETURN	MC	SEE SCOPE OF WORK.	OV
RTU-6	PHARMACY	1,800		RETURN	MC	SEE SCOPE OF WORK.	OV
RTU-7 (EXISTING)	PHARMACY	2,640		NONE			
RTU-8 (EXISTING)	FROZEN	2,400		RETURN	MC	SEE SCOPE OF WORK.	OV
RTU-9	KITCHEN	3,200		RETURN	MC	SEE SCOPE OF WORK.	OV
RTU-10	OFFICES	1,950		RETURN	MC	SEE SCOPE OF WORK.	OV
RTU-11	AOUCUSTOMER SERVICE	3,200		RETURN	MC	SEE SCOPE OF WORK.	OV
RTU-12	WINE & SPIRITS	3,200		RETURN	MC	SEE SCOPE OF WORK.	OV

CODE REQUIREMENTS:

1. NFPA 90.6.42 -SMOKE DETECTORS LISTED FOR USE IN AIR DISTRIBUTION SYSTEM SHALL BE LOCATED DOWNSTREAM OF THE AIR FILTERS AND AHEAD OF ANY BRANCH CONNECTIONS IN AIR SUPPLY SYSTEMS HAVING A CAPACITY GREATER THAN 2000 CFM.
2. 2015 IMC.606.2.1 - SMOKE DETECTORS SHALL BE INSTALLED IN RETURN AIR SYSTEMS WITH A DESIGN CAPACITY GREATER THAN 2000 CFM, IN THE RETURN AIR DUCT OR PLENUM UPSTREAM OF ANY FILTERS, OR OTHER AIR CONNECTIONS.
3. NFPA 90 AND IMC EXCEPTION - SMOKE DETECTORS ARE NOT REQUIRED IN THE RETURN AIR SYSTEM WHERE ALL PORTIONS OF THE BUILDING SERVED BY THE AIR DISTRIBUTION SYSTEM ARE PROTECTED BY AREA SMOKE DETECTORS CONNECTED TO A FIRE ALARM SYSTEM.
4. NFPA 90 AND IMC CONTROLS - WHERE AN APPROVED FIRE ALARM SYSTEM IS INSTALLED IN BUILDING, THE SMOKE DETECTORS SHALL BE CONNECTED TO THE FIRE ALARM SYSTEM.
5. NFPA 90 AND IMC CONTROLS - UPON ACTIVATION, THE SMOKE DETECTORS SHALL SHUT DOWN ALL OPERATIONAL CAPABILITIES OF THE AIR DISTRIBUTION SYSTEM AND SHALL ACTIVATE A VISIBLE AND AUDIBLE SIGNAL AT A CONSTANT ATTENDED OR APPROVED LOCATION.

TRADE RESPONSIBILITY LEGEND:

EC = ELECTRICAL CONTRACTOR

OV = OWNERS VENDOR

FAC = FACTORY PROVIDED

FC = FIRE ALARM CONTRACTOR

MC = MECHANICAL CONTRACTOR

TRADE RESPONSIBILITY NOTES:

1. THIS LISTING IN NO WAY SUMMARIZES THE SCOPE OF WORK REQUIRED TO BE PERFORMED BY THE CONTRACTORS.
2. FOR OWNER VENDOR FURNISHED ITEMS THE INSTALLING CONTRACTOR MAY ALSO BE REQUIRED TO RECEIVE, INVENTORY, PROTECT, STORE AND ASSEMBLE THE EQUIPMENT.
3. SEE THE SPECIFICATIONS, DRAWINGS AND MANUFACTURERS INSTALLATION RECOMMENDATION FOR COMPLETE DETAILED INSTALLATION REQUIREMENTS.
4. PROVIDE MEANS TO FURNISH AND INSTALL.
5. LOW VOLTAGE CABLE MATERIAL IS PROVIDED BY THE CONTROLS CONTRACTOR AND INSTALLED BY EC.

SYSTEM OUTLINE

CONTRACTOR SHALL FURNISH AND INSTALL A COMPLETE FIRE ALARM SYSTEM IN ACCORDANCE WITH NFPA 72. THE INTERNATIONAL FIRE CODE CODE, AND LOCAL AND STATE REQUIREMENTS. THE SYSTEM SHOWN INCLUDES A FIRE ALARM PANEL, REMOTE ANNUNCIATOR AND OTHER PROVISIONS FOR CONNECTION TO A NOTIFICATION SERVICE FROM THE ALARM SYSTEM. THE SYSTEM SHALL HAVE THE BUILDING DEVICES UNIQUELY ADDRESSABLE. THE REFERENCING OF ZONES OR GROUPS ARE PRIMARILY FOR THE OWNER AND DESIGNERS BENEFIT TO ASSURE COMMUNICATION WITH THE CONTRACTOR AND AUTHORITIES HAVING JURISDICTION (AHJ) SHOULD DESIGN OR OPERATIONAL QUESTIONS ARISE. THE OWNER REQUIRES THE EQUIPMENT BE FROM A SINGLE MANUFACTURER THAT HAS LOCAL (WITHIN 50 MILE RADIUS) TECHNICAL SUPPORT AND STOCKED REPLACEMENT PARTS. MANUFACTURERS ALLOWED INCLUDE: FIRELITE 9200 ULDS, OR AS APPROVED BY OWNER. A WARRANTY OF ONE (1) YEAR PARTS AND LABOR STARTING FROM THE DATE OF THE STORE OPENING OR AS AGREED UPON WITH THE OWNER IS THE CONTRACTOR'S RESPONSIBILITY. CONTRACTOR SHALL ALSO PROVIDE TWO TRAINING PERIODS IN HOW TO RUN THE CONTROL PANEL; ONE FOR A DAY SHIFT AND ONE FOR A NIGHT SHIFT.

DESIGN CONSTRAINTS

THE SYSTEM SHALL HAVE THE FOLLOWING DESIGN CONSTRAINTS, FUNCTIONS, ACCESSORIES AND/OR REQUIREMENTS AS FOLLOWS:

1. THE DESIGNER'S SCHEMATIC REFERS TO ZONES AND/OR GROUPS TO USE IN COMMUNICATION AND FOR 'DRILLED DOWN' TO ADDRESSABLE UNITS IN THE DESIGN AS FOLLOWS:
   - LIFE SAFETY PULL STATIONS AND SMOKE DETECTORS
   - FIRE SPRINKLER TAMPERS AND FLOW SWITCHES
   - DUCT SMOKE DETECTORS FOR THE HVAC SYSTEM AND UNITS
   - FIRE HOOD PROTECTION SYSTEMS (BAKERY, CHINESE, KITCHEN)
2. FIRE ALARM 'CONTROL CENTER' SHALL BE LOCATED IN THE CORRIDOR OF THE OFFICE AREA. THE REMOTE ANNUNCIATOR SHOULD BE LOCATED IN THE FRONT VESTIBULE IN AN AREA COORDINATED WITH THE AUTHORITY HAVING JURISDICTION FOR ITS FINAL PLACEMENT. A REMOTE ANNUNCIATOR SHALL BE LOCATED IN THE CORRIDOR OF THE OFFICE AREA.
3. THE 'CONTROL CENTER' EITHER NEEDS TO PROVIDE FOR ELECTRIC TERMINATION AND RESTART FOR RESET OF DUCT SMOKE DETECTORS OR DESIGN MUST ACCOMMODATE DUCT SMOKE RESETS IMMEDIATELY ADJACENT TO THE 'CONTROL CENTER' PANEL.
4. THIS FIRE ALARM COMMUNICATIONS PLAN INDICATES DESIGN INTENT BUT NOT NECESSARILY EXACT LAYOUT. THE FINAL DESIGN IS THE CONTRACTOR'S RESPONSIBILITY TO BE COORDINATED AND APPROVED BY THE AUTHORITY HAVING JURISDICTION.
5. A DESIGN SYSTEM MUST ACCOMMODATE A MINIMUM OF 15% EXPANSION POTENTIAL FOR THE SYSTEM INITIALLY INSTALLED. EXAMPLE: IF THERE ARE 85 UNIQUE, ADDRESSABLE STATIONS, THE BASE SYSTEM SHOULD ACCOMMODATE 100 ADDRESSES FOR ADDITIONAL WIRING TO EXISTING CONNECTOR POINTS AND FAIRLY SIMPLE REPROGRAMMING OF THOSE ADDITIONAL STATIONS.
7. COORDINATE ALL SALES FLOOR FIRE ALARM HORNS/STROBES WITH DECOR PLAN AS TO NOT INTERFERE WITH ANY SIGNAGE.

SUPERVISORY DESIGN CONSTRAINTS

FIRE ALARM CONTRACTOR WILL PROVIDE ALL PROGRAMMING, TESTING, AND COMMISSIONING TO SATISFY THE LOCAL AUTHORITY HAVING JURISDICTION OR HY-VEE REQUIREMENTS AS SET FORTH HEREIN, WHICHEVER IS MORE RESTRICTIVE. FOR ALL HVAC UNITS AND THEIR ASSOCIATED SMOKE DETECTORS, THE FIRE ALARM CONTRACTOR SHALL TEST FOR CONTROL PANEL IDENTIFICATION, ALARM, AND TROUBLE SIGNALS, AND UNIT SHUT DOWN. IF THE HVAC UNIT DOES NOT SHUT DOWN, FIRE ALARM CONTRACTOR SHALL NOTIFY GENERAL CONTRACTOR AND HVAC/SHEET METAL CONTRACTOR TO REMEDY AND RESOLVE THE UNIT SHUT DOWN REQUIREMENT. THE FIRE ALARM SYSTEM NEEDS TO RESET THE HVAC UNITS AT THE RESET LOCATION NOTED ON THE DRAWINGS. FIRE ALARM CONTRACTOR SHOULD VERIFY THAT THE REMOTE RESET UNIT TEST MODE FUNCTION OPERATES CORRECTLY PRIOR TO ANY AHJ INSPECTION. A COPY OF THE FIRE MARSHAL OR FIRE INSPECTORS SIGN OFF OF THE FIRE SYSTEM MUST BE INCLUDED IN THE GENERAL CONTRACTORS WARRANTY MANUAL.

IMPLEMENTATION

1. CONTRACTOR SHALL COORDINATE SPECIFIC IMPLEMENTATION DESIGN MODIFICATIONS FOR DEVICE PLACEMENT WITH RESPECT TO ARCHITECTURAL ELEVATIONS. ANY MODIFIED PLACEMENT MUST BE DISCUSSED WITH THE OWNER PRIOR TO ANY INSTALLATION ACTIVITY TO ASSURE PLACEMENT LOCATION DOES NOT IMPEDE THE OWNERS USE OF THAT AREA.

2. VERIFY WITH THE AUTHORITY HAVING JURISDICTION BEFORE PERFORMING ANY OF THE FOLLOWING FIRE ALARM WORK IDENTIFY OWNER'S DESIRED "CONTROL CENTER" LOCATION IN OFFICE AREA
COORDINATE REMOTE ANNUNCIATOR PANEL LOCATION AT AHJ'S DIRECTION (TO BE CREDITED BACK TO THE OWNER IF NOT REQUIRED.)
ACKNOWLEDGEMENT OF ADDRESSABLE SYSTEM HIERARCHY WITH RESPECT TO THE OWNER'S ZONES/GROUPINGS SO ADDRESSABLE PROGRAMMING CAN BE AGREED UPON THAT FIRE ALARM SYSTEM CAN BE USED FOR NON-LIFE SAFETY TROUBLES LIKE REFRIGERATION OR DOOR ALARMS SUPERVISORY ALERTS PROVIDED THE SYSTEM IS PROGRAMMED SO NO AUTHORITIES ARE NOTIFIED FOR NON-LIFE SAFETY TROUBLES.

HVAC SCOPE OF WORK

1. DUCT SMOKE DETECTORS SHALL BE FURNISHED AND INSTALLED IN DUCT BY MECHANICAL CONTRACTOR. SEE SCHEDULE ON DRAWING.

2. DUCT SMOKE DETECTORS THAT MUST BE FIELD MOUNTED ON CUSTOM ROOFTOP UNITS (USUALLY RTU-1 AND 2), WILL BE SUPPLIED AND INSTALLED BY THE SHEET METAL CONTRACTOR. SHEET METAL CONTRACTOR IS TO USE SYSTEM SENSOR NUMBER D4120.

3. SYSTEM SENSOR MODEL NUMBER D4120 IS COMPRISED OF TWO COMPONENTS.
1) SYSTEM SENSOR MODEL NUMBER DP4120 IS A CONTROL MODULE. 2) SYSTEM SENSOR MODEL NUMBER D45 IS THE SMOKE DETECTOR.

4. SHEET METAL CONTRACTOR OR ANY PARTY PERFORMING WORK FOR SHEET METAL CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECT PLACEMENT.

5. RTU SMOKE DETECTION SHALL FALL INTO ONE OF THE TWO FOLLOWING SCENARIOS:
   A) RTU'S WHICH REQUIRE BOTH SUPPLY AND RETURN SMOKE DETECTORS (>2000 CFM) SHALL RECEIVE TWO DUCT SMOKE DETECTORS (D45) WHICH ARE APPROPRIATELY WIRED TO A CENTRAL, SEPARATE CONTROL MODULE (DP4120). THE CONTROL MODULE (DP4120) SHALL BE PLACED IN A LOCATION SUCH THAT FIRE ALARM CONTRACTOR CAN ACCESS CONTROL MODULE IN A REASONABLE MANNER.

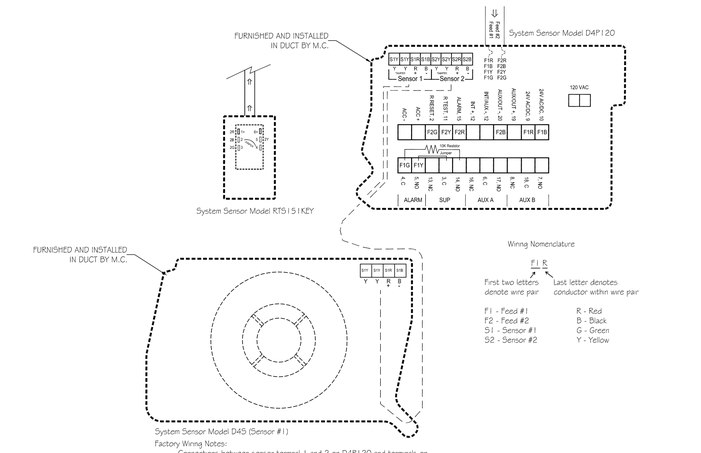
   B) RTU'S WHICH REQUIRE ONLY RETURN SIDE SMOKE DETECTION (<2000 CFM) SHALL RECEIVE ONE SMOKE DETECTOR/CONTROL MODULE COMBO (D4120). IF DETECTOR PLACEMENT REQUIRES SEPARATION OF THE COMBINATION (D4120) INTO ITS TWO COMPONENTS, DP4120 (CONTROL MODULE) AND D45 (SMOKE DETECTOR), IN ORDER TO HAVE THE CONTROL MODULE BE ACCESSIBLE FOLLOWING INSTALLATION, THEN THIS SHALL BE DONE.

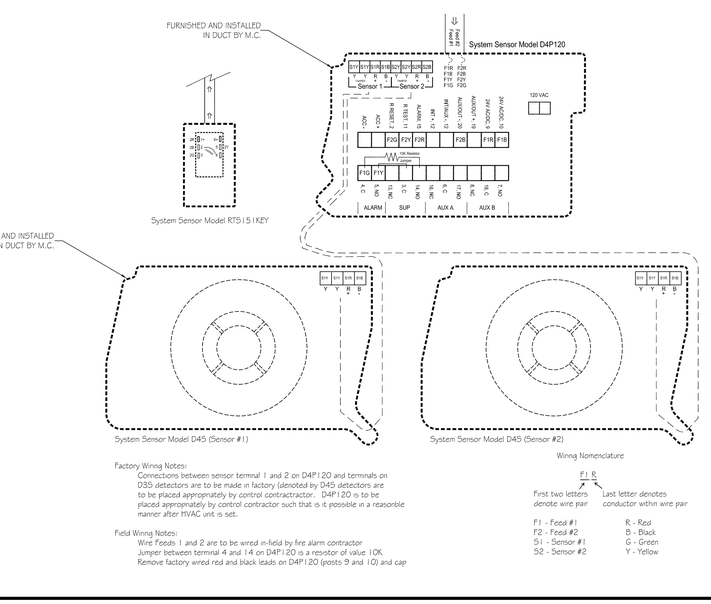
6. FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER WIRING OF THE DUCT DETECTOR CONTROL MODULES. THIS INCLUDES ANY WIRING BETWEEN THE FIRE ALARM CONTROL PANEL AND THE DUCT DETECTOR CONTROL MODULE AND ANY WIRING BETWEEN THE DUCT DETECTOR TEST/RESET SWITCH AND THE DUCT DETECTOR CONTROL MODULE.

7. CONTROL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY WIRING BETWEEN DUCT DETECTOR CONTROL MODULES AND DUCT SMOKE DETECTORS.

8. FIRE ALARM CONTRACTOR SHALL FURNISH, INSTALL, AND WIRE ALL REMOTE RESET STATIONS.

9. CONTROL CONTRACTOR IS REQUIRED TO ASSURE THE HVAC UNIT WILL SHUT DOWN IN THE EVENT OF A SMOKE DETECTOR TRIP.





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COMMUNICATIONS & SECURITY

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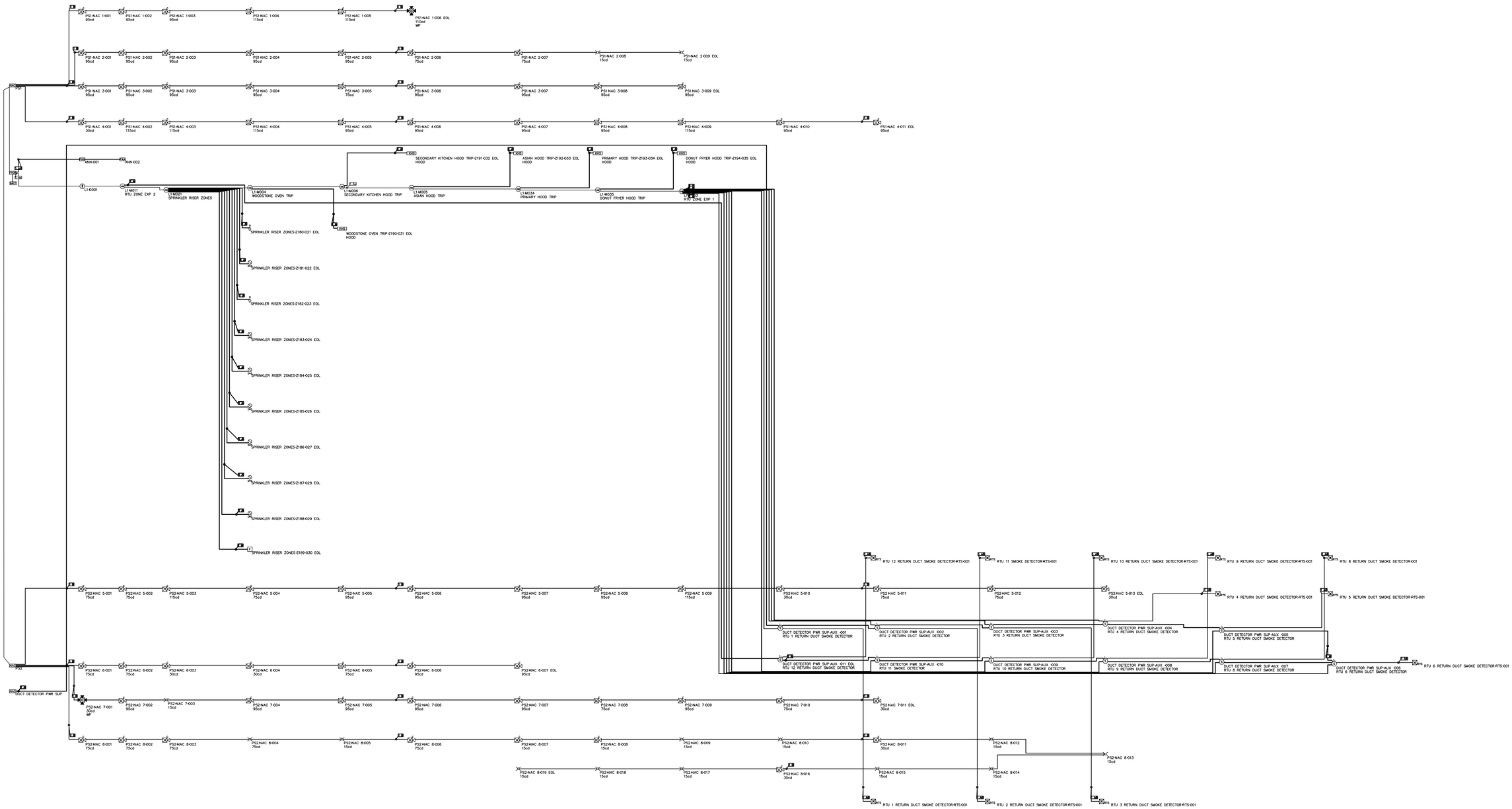
HyVee® EMPLOYEE OWNED

NORTH

FIRE PLAN SCHEDULES NOTES AND DETAILS

DRAWN:	DATE:
BP	OCT 2020
SCALE: SEE SHEET	JOB NUMBER:

SHEET: T4.1



1 FIRE ALARM RISER DIAGRAM
SCALE: NTS

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FIRE ALARM
RISER DIAGRAM

DRAWN:	DATE:
ALW	OCT 2020
SCALE:	JOB NUMBER:
NTS	

SHEET:
T4.2

BATTERY CALCULATION

SECONDARY POWER SOURCE REQUIREMENTS

					STANDBY CURRENT (AMPS)		SECONDARY ALARM CURRENT (AMPS)	
PANEL COMPONENTS		QTY	PART NO	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL
		1	ES−200X MAIN BOARD	Intelligent Addressable FACP with Communicator−MAIN BOARD	1 x 0.141	= 0.141	1 x 0.257	= 0.257
CIRCUIT	SYMBOL	QTY	PART NO	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)
ANN	FAA	2	ANN−80	80−Character LCD Annunciator	2 x 0.045	= 0.09	2 x 0.16	= 0.32
		1	CELL−MOD	Cellular Communicator	1 x 0.055	= 0.055	1 x 0.100	= 0.100
REMOTE SYNC		1		Remote Sync to Notification Power Supplies	1 x 0.02	= 0.02	1 x 0.0217	= 0.0217
L1	AIM	5	FMM−101	Addressable Mini Monitor Module	5 x 0.0003	= 0.0015	5 x 0.0003	= 0.0015
		1	SD355(A)/B210LP	DETECTOR, SMOKE, ADDRESSABLE PHOTO W/STANDARD BASE	1 x 0.0003	= 0.0003	1 x 0.0065	= 0.0065
	AIM	3	XP10−M	Ten Input Monitor Module	3 x 0.003	= 0.009	3 x 0.003	= 0.009
					TOTAL STANDBY (A)	0.3168	TOTAL ALARM (A)	0.694
					REQUIRED STANDBY TIME = 24.00 HOURS			
					REQUIRED ALARM TIME = 5 MINUTES			
SECONDARY STANDBY LOAD				0.316	x 24.00		= 7.603 AH	
SECONDARY ALARM LOAD				0.694	x 0.0833		= 0.0578 AH	
STANDBY AND ALARM LOAD SUBTOTAL					7.66 AH			
DERATING FACTOR					x 1.20			
SECONDARY LOAD REQUIREMENTS (AMP HOURS)					9.19 AH			
PROVIDE (2) 12V 12AH BATTERIES @ 24VDC								

PANEL DUCT DETECTOR PWR SUP (AL300) BATTERY CALCULATION

SECONDARY POWER SOURCE REQUIREMENTS

					STANDBY CURRENT (AMPS)		SECONDARY ALARM CURRENT (AMPS)	
PANEL COMPONENTS		QTY	PART NO	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL
		1	AL300 Main Board	Fire Alarm Aux Power Supply Main Board	1 x 0.00	= 0.00	1 x 0.069	= 0.069
CIRCUIT	SYMBOL	QTY	PART NO	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)
DUCT DETECTOR PWR SUP•AUX		11	D4120	4−Wire Photoelectric Duct Smoke Detector	11 x 0.021	= 0.231	11 x 0.00	= 0.00
					TOTAL STANDBY (A)	0.231	TOTAL ALARM (A)	0.069
					REQUIRED STANDBY TIME = 24.00 HOURS			
					REQUIRED ALARM TIME = 5 MINUTES			
SECONDARY STANDBY LOAD				0.231	x 24.00		= 5.544 AH	
SECONDARY ALARM LOAD				0.069	x 0.0833		= 0.0057 AH	
STANDBY AND ALARM LOAD SUBTOTAL					5.5497 AH			
DERATING FACTOR					x 1.20			
SECONDARY LOAD REQUIREMENTS (AMP HOURS)					6.6597 AH			
PROVIDE (2) 12V 7AH BATTERIES @ 24VDC								

PANEL PS1 (FCPS−24S8) BATTERY CALCULATION

SECONDARY POWER SOURCE REQUIREMENTS

					STANDBY CURRENT (AMPS)		SECONDARY ALARM CURRENT (AMPS)	
PANEL COMPONENTS		QTY	PART NO	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL
		1	FCPS−24S8 Main Board	Fire Alarm Power Supply Main Board	1 x 0.091	= 0.091	1 x 0.145	= 0.145
CIRCUIT	SYMBOL	QTY	PART NO	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)
PS1•NAC 1	WP	1	PC2WK	2−Wire Horn/Strobe ceiling/outdoor white 110cd	1 x 0.00	= 0.00	1 x 0.221	= 0.221
		3	PC2WL	2−Wire, Horn Strobe, White 95cd	3 x 0.00	= 0.00	3 x 0.165	= 0.495
		2	PC2WL	2−Wire, Horn Strobe, White 115cd	2 x 0.00	= 0.00	2 x 0.187	= 0.374
PS1•NAC 2		2	PC2WL	2−Wire, Horn Strobe, White 75cd	2 x 0.00	= 0.00	2 x 0.143	= 0.286
		5	PC2WL	2−Wire, Horn Strobe, White 95cd	5 x 0.00	= 0.00	5 x 0.165	= 0.825
		2	SCWL	Ceiling Strobe white 15cd	2 x 0.00	= 0.00	2 x 0.066	= 0.132
PS1•NAC 3		1	PC2WL	2−Wire, Horn Strobe, White 75cd	1 x 0.00	= 0.00	1 x 0.143	= 0.143
		8	PC2WL	2−Wire, Horn Strobe, White 95cd	8 x 0.00	= 0.00	8 x 0.165	= 1.32
PS1•NAC 4		1	PC2WL	2−Wire, Horn Strobe, White 30cd	1 x 0.00	= 0.00	1 x 0.09	= 0.09
		6	PC2WL	2−Wire, Horn Strobe, White 95cd	6 x 0.00	= 0.00	6 x 0.165	= 0.99
		4	PC2WL	2−Wire, Horn Strobe, White 115cd	4 x 0.00	= 0.00	4 x 0.187	= 0.748
					TOTAL STANDBY (A)	0.091	TOTAL ALARM (A)	5.769
					REQUIRED STANDBY TIME = 24.00 HOURS			
					REQUIRED ALARM TIME = 5 MINUTES			
SECONDARY STANDBY LOAD				0.091	x 24.00		= 2.184 AH	
SECONDARY ALARM LOAD				5.769	x 0.0833		= 0.4807 AH	
STANDBY AND ALARM LOAD SUBTOTAL					2.6647 AH			
DERATING FACTOR					x 1.20			
SECONDARY LOAD REQUIREMENTS (AMP HOURS)					3.1977 AH			
PROVIDE (2) 12V 7AH BATTERIES @ 24VDC								

PANEL PS2 (FCPS−24S8) BATTERY CALCULATION

SECONDARY POWER SOURCE REQUIREMENTS

					STANDBY CURRENT (AMPS)		SECONDARY ALARM CURRENT (AMPS)	
PANEL COMPONENTS		QTY	PART NO	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL
		1	FCPS−24S8 Main Board	Fire Alarm Power Supply Main Board	1 x 0.091	= 0.091	1 x 0.145	= 0.145
CIRCUIT	SYMBOL	QTY	PART NO	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)
PS2•NAC 5		2	PC2WL	2−Wire, Horn Strobe, White 30cd	2 x 0.00	= 0.00	2 x 0.09	= 0.18
		5	PC2WL	2−Wire, Horn Strobe, White 75cd	5 x 0.00	= 0.00	5 x 0.143	= 0.715
		4	PC2WL	2−Wire, Horn Strobe, White 95cd	4 x 0.00	= 0.00	4 x 0.165	= 0.66
		2	PC2WL	2−Wire, Horn Strobe, White 115cd	2 x 0.00	= 0.00	2 x 0.187	= 0.374
PS2•NAC 6		2	PC2WL	2−Wire, Horn Strobe, White 30cd	2 x 0.00	= 0.00	2 x 0.09	= 0.18
		3	PC2WL	2−Wire, Horn Strobe, White 75cd	3 x 0.00	= 0.00	3 x 0.143	= 0.429
		2	PC2WL	2−Wire, Horn Strobe, White 95cd	2 x 0.00	= 0.00	2 x 0.165	= 0.33
PS2•NAC 7	WP	1	PC2WK	2−Wire Horn/Strobe ceiling/outdoor white 30cd	1 x 0.00	= 0.00	1 x 0.116	= 0.116
		1	PC2WL	2−Wire, Horn Strobe, White 30cd	1 x 0.00	= 0.00	1 x 0.09	= 0.09
		2	PC2WL	2−Wire, Horn Strobe, White 75cd	2 x 0.00	= 0.00	2 x 0.143	= 0.286
		6	PC2WL	2−Wire, Horn Strobe, White 95cd	6 x 0.00	= 0.00	6 x 0.165	= 0.99
PS2•NAC 8		2	PC2WL	2−Wire, Horn Strobe, White 15cd	2 x 0.00	= 0.00	2 x 0.071	= 0.142
		2	PC2WL	2−Wire, Horn Strobe, White 30cd	2 x 0.00	= 0.00	2 x 0.09	= 0.18
		4	PC2WL	2−Wire, Horn Strobe, White 75cd	4 x 0.00	= 0.00	4 x 0.143	= 0.572
		10	SCWL	Ceiling Strobe white 15cd	10 x 0.00	= 0.00	10 x 0.066	= 0.66
		1	SCWL	Ceiling Strobe white 30cd	1 x 0.00	= 0.00	1 x 0.094	= 0.094
					TOTAL STANDBY (A)	0.091	TOTAL ALARM (A)	6.143
					REQUIRED STANDBY TIME = 24.00 HOURS			
					REQUIRED ALARM TIME = 5 MINUTES			
SECONDARY STANDBY LOAD				0.091	x 24.00		= 2.184 AH	
SECONDARY ALARM LOAD				6.143	x 0.0833		= 0.5119 AH	
STANDBY AND ALARM LOAD SUBTOTAL					2.6959 AH			
DERATING FACTOR					x 1.20			
SECONDARY LOAD REQUIREMENTS (AMP HOURS)					3.2351 AH			
PROVIDE (2) 12V 7AH BATTERIES @ 24VDC								

SPRING LAKE PARK HY-VEE FIRE ALARM SEQUENCE OF OPERATION MATRIX

SYSTEM OUTPUTS: CONTROL UNIT ANNUNCIATION (columns 1–6); NOTIFICATION (columns 7–10); FIRE SAFETY CONTROL (columns 11–21)

1. DISPLAY ALARM ON ANNUNCIATOR
2. ACTIVATE AUDIBLE ALARM AT ANNUNCIATOR
3. DISPLAY SUPERVISORY SIGNAL AT ANNUNCIATOR
4. ACTIVATE SOUND AT ANNUNCIATOR FOR THE SUPERVISORY SIGNAL
5. DISPLAY TROUBLE SIGNAL AT ANNUNCIATOR
6. ACTIVATE SOUND AT THE ANNUNCIATOR FOR THE TROUBLE SIGNAL
7. ACTIVATE INTERIOR NOTIFICATION APPLIANCES
8. TRANSMIT ALARM SIGNAL TO CENTRAL STATION
9. TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION
10. TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION
11. RTU 1 FAN SHUT DOWN
12. RTU 2 FAN SHUT DOWN
13. RTU 3 FAN SHUT DOWN
14. RTU 4 FAN SHUT DOWN
15. RTU 5 FAN SHUT DOWN
16. RTU 6 FAN SHUT DOWN
17. RTU 8 FAN SHUT DOWN
18. RTU 9 FAN SHUT DOWN
19. RTU 10 FAN SHUT DOWN
20. RTU 11 FAN SHUT DOWN
21. RTU 12 FAN SHUT DOWN

SYSTEM INPUTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
FACP SMOKE DETECTOR	■	■					■	■														
SPINKLER RISER PULL STATION	■	■					■	■														
WOOD STONE OVEN HOOD	■	■					■	■														
SECONDARY KITCHEN HOOD	■	■					■	■														
ASIAN HOOD	■	■					■	■														
PRIMARY KITCHEN HOOD	■	■					■	■														
DONUT FRYER HOOD	■	■					■	■														
SPINKLER RISER PULL STATION	■	■					■	■														
SPINKLER WATER FLOWS	■	■					■	■														
SPRINKLER TAMPERS			■	■					■													
RTU 1 RETURN DUCT SMOKE DETECTOR			■	■					■		■											
RTU 2 RETURN DUCT SMOKE DETECTOR			■	■					■			■										
RTU 3 RETURN DUCT SMOKE DETECTOR			■	■					■				■									
RTU 4 RETURN DUCT SMOKE DETECTOR			■	■					■					■								
RTU 5 RETURN DUCT SMOKE DETECTOR			■	■					■						■							
RTU 6 RETURN DUCT SMOKE DETECTOR			■	■					■							■						
RTU 8 RETURN DUCT SMOKE DETECTOR			■	■					■								■					
RTU 9 RETURN DUCT SMOKE DETECTOR			■	■					■									■				
RTU 10 RETURN DUCT SMOKE DETECTOR			■	■					■										■			
RTU 11 RETURN DUCT SMOKE DETECTOR			■	■					■											■		
RTU 12 RETURN DUCT SMOKE DETECTOR			■	■					■												■	
FACP LOW BATTERY					■	■				■												
FACP AC LOSS					■	■				■												
COMMUNICATOR TROUBLE					■	■				■												

DEVICE LEGEND

DEVICE SYMBOL	QTY.	MANUFACTURER	PART NO.	DESCRIPTION
WP	2	SYSTEM SENSOR	PC2WK	2−WIRE HORN/STROBE CEILING/OUTDOOR WHITE
FACP	1	FIRELITE	ES−200X	INTELLIGENT ADDRESSABLE FACP WITH COMMUNICATOR
RTS	11	SYSTEM SENSOR	RTS151KEY	REMOTE TEST STATION W/ SWITCH, ALARM & POWER LEDS, KEY RESET
NAC	2	FIRELITE	FCPS−24S8	8−AMP, 24−VOLT POWER SUPPLY
NAC	1	ALTRONIX	AL300	3 AMP, 24−VOLT POWER SUPPLY
FAA	2	FIRELITE	ANN−80	80−CHARACTER LCD ANNUNCIATOR
DACT	2	FIRELITE	CELL−MOD	WIRELESS COMMERCIAL FIRE ALARM COMMUNICATOR
	1	FIRELITE	SD355(A)/B210 LP	DETECTOR, SMOKE, ADDRESSABLE PHOTO W/STANDARD BASE
F	1	FIRELITE	MANUAL PULL	BG−12L MANUAL PULL STATION
	11	SYSTEM SENSOR	D4120	4−WIRE PHOTOELECTRIC DUCT SMOKE DETECTOR INSTALLED AND PROVIDED BY OTHERS
AIM	3	FIRELITE	XP10−M	TEN INPUT MONITOR MODULE
AIM	5	FIRELITE	MMF−301	ADDRESSABLE MINI MONITOR MODULE
KHS HOOD	5	INSTALLED BY OTHERS	HOOD SYSTEM MONITOR	CONTACT DEVICE PROVIDED AND INSTALLED BY OTHERS
	14	SYSTEM SENSOR	SCWL	CEILING STROBE WHITE
	69	SYSTEM SENSOR	PC2WL	2−WIRE, HORN STROBE, WHITE
	2	INSTALLED BY OTHERS	WATERFLOW SWITCH	CONTACT DEVICE
	7	INSTALLED BY OTHERS	TAMPER SWITCH	TAMPER SWITCH

Panel PS1

Total Used Current: (All Circuits)	5.5740A

Point−To−Point Voltage Drop Calculation for Panel PS1 Circuit NAC 1

Starting Calculation Voltage: 20.4000v Minimum Operational Voltage: 16.0000v
Total Circuit Current: 1.0900A Total Distance: 695.0000'
Voltage Drop: 3.6393v End Of Line Voltage: 16.7607v
Percent Drop: 17.84 % Wire GA=#14 AWG
Distance measured using drawn segment lengths with 10.00 % additional length calculated

Device Label	Part No.	Description	Device Current	Distance From Previous Device	Voltage At Device	Voltage Drop From Source	Voltage Drop Percent
PS1•NAC 1•001	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	375.0000'	17.8903v	2.5097v	12.30 %
PS1•NAC 1•002	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	55.0000'	17.5779v	2.8221v	13.83 %
PS1•NAC 1•003	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	55.0000'	17.3213v	3.0788v	15.09 %
PS1•NAC 1•004	PC2WL	2−Wire, Horn Strobe, White 115cd	0.1870A	90.0000'	16.9925v	3.4075v	16.70 %
PS1•NAC 1•005	PC2WL	2−Wire, Horn Strobe, White 115cd	0.1870A	60.0000'	16.8421v	3.5579v	17.44 %
PS1•NAC 1•006 EOL	PC2WK	2−Wire Horn/Strobe ceiling/outdoor white 110cd	0.2210A	60.0000'	16.7607v	3.6393v	17.84 %

Point−To−Point Voltage Drop Calculation for Panel PS1 Circuit NAC 2

Starting Calculation Voltage: 20.4000v Minimum Operational Voltage: 16.0000v
Total Circuit Current: 1.1930A Total Distance: 595.0000'
Voltage Drop: 3.4043v End Of Line Voltage: 16.9957v
Percent Drop: 16.69 % Wire GA=#14 AWG
Distance measured using drawn segment lengths with 10.00 % additional length calculated

Device Label	Part No.	Description	Device Current	Distance From Previous Device	Voltage At Device	Voltage Drop From Source	Voltage Drop Percent
PS1•NAC 2•001	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	335.0000'	17.9461v	2.4539v	12.03 %
PS1•NAC 2•002	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	17.6621v	2.7379v	13.42 %
PS1•NAC 2•003	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	17.4236v	2.9764v	14.59 %
PS1•NAC 2•004	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	17.2308v	3.1692v	15.54 %
PS1•NAC 2•005	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	35.0000'	17.1162v	3.2838v	16.10 %
PS1•NAC 2•006	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	30.0000'	17.0485v	3.3516v	16.43 %
PS1•NAC 2•007	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	30.0000'	17.0070v	3.3930v	16.63 %
PS1•NAC 2•008	SCWL	Strobe, White 15cd	0.0410A	15.0000'	16.9995v	3.4005v	16.67 %
PS1•NAC 2•009 EOL	SCWL	Strobe, White 15cd	0.0410A	15.0000'	16.9957v	3.4043v	16.69 %

Point−To−Point Voltage Drop Calculation for Panel PS1 Circuit NAC 3

Starting Calculation Voltage: 20.4000v Minimum Operational Voltage: 16.0000v
Total Circuit Current: 1.4630A Total Distance: 570.0000'
Voltage Drop: 3.4557v End Of Line Voltage: 16.9443v
Percent Drop: 16.94 % Wire GA=#14 AWG
Distance measured using drawn segment lengths with 10.00 % additional length calculated

Device Label	Part No.	Description	Device Current	Distance From Previous Device	Voltage At Device	Voltage Drop From Source	Voltage Drop Percent
PS1•NAC 3•001	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	195.0000'	18.6484v	1.7517v	8.59 %
PS1•NAC 3•002	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	18.2897v	2.1103v	10.34 %
PS1•NAC 3•003	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	17.9767v	2.4233v	11.88 %
PS1•NAC 3•004	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	17.7092v	2.6908v	13.19 %
PS1•NAC 3•005	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	75.0000'	17.3394v	3.0606v	15.00 %
PS1•NAC 3•006	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	30.0000'	17.2179v	3.1821v	15.60 %
PS1•NAC 3•007	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	17.0811v	3.3189v	16.27 %
PS1•NAC 3•008	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	16.9899v	3.4101v	16.72 %
PS1•NAC 3•009 EOL	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	16.9443v	3.4557v	16.94 %

Point−To−Point Voltage Drop Calculation for Panel PS1 Circuit NAC 4

Starting Calculation Voltage: 20.4000v Minimum Operational Voltage: 16.0000v
Total Circuit Current: 1.8280A Total Distance: 545.0000'
Voltage Drop: 3.6054v End Of Line Voltage: 16.7946v
Percent Drop: 17.67 % Wire GA=#14 AWG
Distance measured using drawn segment lengths with 10.00 % additional length calculated

Device Label	Part No.	Description	Device Current	Distance From Previous Device	Voltage At Device	Voltage Drop From Source	Voltage Drop Percent
PS1•NAC 4•001	PC2WL	2−Wire, Horn Strobe, White 30cd	0.0900A	95.0000'	19.3337v	1.0663v	5.23 %
PS1•NAC 4•002	PC2WL	2−Wire, Horn Strobe, White 115cd	0.1870A	40.0000'	18.9069v	1.4931v	7.32 %
PS1•NAC 4•003	PC2WL	2−Wire, Horn Strobe, White 115cd	0.1870A	45.0000'	18.4783v	1.9217v	9.42 %
PS1•NAC 4•004	PC2WL	2−Wire, Horn Strobe, White 115cd	0.1870A	45.0000'	18.1015v	2.2985v	11.27 %
PS1•NAC 4•005	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	17.7763v	2.6237v	12.86 %
PS1•NAC 4•006	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	17.4966v	2.9034v	14.23 %
PS1•NAC 4•007	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	17.2626v	3.1374v	15.38 %
PS1•NAC 4•008	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	17.0742v	3.3258v	16.30 %
PS1•NAC 4•009	PC2WL	2−Wire, Horn Strobe, White 115cd	0.1870A	45.0000'	16.9313v	3.4687v	17.00 %
PS1•NAC 4•010	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	40.0000'	16.8503v	3.5497v	17.40 %
PS1•NAC 4•011 EOL	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	55.0000'	16.7946v	3.6054v	17.67 %

Panel PS2

Total Used Current: (All Circuits)	5.8060A

Point−To−Point Voltage Drop Calculation for Panel PS2 Circuit NAC 5

Starting Calculation Voltage: 20.4000v Minimum Operational Voltage: 16.0000v
Total Circuit Current: 1.9290A Total Distance: 429.9973'
Voltage Drop: 2.8899v End Of Line Voltage: 17.5101v
Percent Drop: 14.17 % Wire GA=#14 AWG
Distance measured using drawn segment lengths with 10.00 % additional length calculated

Device Label	Part No.	Description	Device Current	Distance From Previous Device	Voltage At Device	Voltage Drop From Source	Voltage Drop Percent
PS2•NAC 5•001	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	53.3250'	19.7684v	0.6316v	3.10 %
PS2•NAC 5•002	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	41.9943'	19.3079v	1.0921v	5.35 %
PS2•NAC 5•003	PC2WL	2−Wire, Horn Strobe, White 115cd	0.1870A	30.0908'	19.0043v	1.3957v	6.84 %
PS2•NAC 5•004	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	25.0275'	18.7806v	1.6194v	7.94 %
PS2•NAC 5•005	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	32.8283'	18.5159v	1.8841v	9.24 %
PS2•NAC 5•006	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	38.9997'	18.2411v	2.1589v	10.58 %
PS2•NAC 5•007	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	34.0839'	18.0353v	2.3647v	11.59 %
PS2•NAC 5•008	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	42.3367'	17.8227v	2.5773v	12.63 %
PS2•NAC 5•009	PC2WL	2−Wire, Horn Strobe, White 115cd	0.1870A	30.7111'	17.6996v	2.7004v	13.24 %
PS2•NAC 5•010	PC2WL	2−Wire, Horn Strobe, White 30cd	0.0900A	26.3635'	17.6241v	2.7759v	13.61 %
PS2•NAC 5•011	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	37.5601'	17.5374v	2.8626v	14.03 %
PS2•NAC 5•012	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	8.0191'	17.5259v	2.8741v	14.09 %
PS2•NAC 5•013 EOL	PC2WL	2−Wire, Horn Strobe, White 30cd	0.0900A	28.6572'	17.5101v	2.8899v	14.17 %

Point−To−Point Voltage Drop Calculation for Panel PS2 Circuit NAC 6

Starting Calculation Voltage: 20.4000v Minimum Operational Voltage: 16.0000v
Total Circuit Current: 0.9390A Total Distance: 345.0000'
Voltage Drop: 1.4047v End Of Line Voltage: 18.9953v
Percent Drop: 6.89 % Wire GA=#14 AWG
Distance measured using drawn segment lengths with 10.00 % additional length calculated

Device Label	Part No.	Description	Device Current	Distance From Previous Device	Voltage At Device	Voltage Drop From Source	Voltage Drop Percent
PS2•NAC 6•001	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	140.0000'	19.5928v	0.8072v	3.96 %
PS2•NAC 6•002	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	35.0000'	19.4218v	0.9782v	4.80 %
PS2•NAC 6•003	PC2WL	2−Wire, Horn Strobe, White 30cd	0.0900A	25.0000'	19.3215v	1.0785v	5.29 %
PS2•NAC 6•004	PC2WL	2−Wire, Horn Strobe, White 30cd	0.0900A	30.0000'	19.2178v	1.1822v	5.79 %
PS2•NAC 6•005	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	40.0000'	19.1017v	1.2983v	6.36 %
PS2•NAC 6•006	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	30.0000'	19.0409v	1.3591v	6.66 %
PS2•NAC 6•007 EOL	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	18.9953v	1.4047v	6.89 %

Point−To−Point Voltage Drop Calculation for Panel PS2 Circuit NAC 7

Starting Calculation Voltage: 20.4000v Minimum Operational Voltage: 16.0000v
Total Circuit Current: 1.5230A Total Distance: 589.6721'
Voltage Drop: 3.5322v End Of Line Voltage: 16.8678v
Percent Drop: 17.31 % Wire GA=#14 AWG
Distance measured using drawn segment lengths with 10.00 % additional length calculated

Device Label	Part No.	Description	Device Current	Distance From Previous Device	Voltage At Device	Voltage Drop From Source	Voltage Drop Percent
PS2•NAC 7•001	PC2WK	2−Wire Horn/Strobe ceiling/outdoor white 30cd	0.1160A	150.0000'	18.9973v	1.4027v	6.88 %
PS2•NAC 7•002	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	18.6086v	1.7914v	8.78 %
PS2•NAC 7•003	SCWL	Strobe, White 15cd	0.0410A	39.6721'	18.3060v	2.0940v	10.26 %
PS2•NAC 7•004	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	17.9742v	2.4258v	11.89 %
PS2•NAC 7•005	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	50.0000'	17.6561v	2.7439v	13.45 %
PS2•NAC 7•006	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	17.4155v	2.9845v	14.63 %
PS2•NAC 7•007	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	45.0000'	17.2204v	3.1796v	15.59 %
PS2•NAC 7•008	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	45.0000'	17.0709v	3.3291v	16.32 %
PS2•NAC 7•009	PC2WL	2−Wire, Horn Strobe, White 95cd	0.1650A	50.0000'	16.9488v	3.4512v	16.92 %
PS2•NAC 7•010	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	45.0000'	16.8844v	3.5156v	17.23 %
PS2•NAC 7•011 EOL	PC2WL	2−Wire, Horn Strobe, White 30cd	0.0900A	30.0000'	16.8678v	3.5322v	17.31 %

Point−To−Point Voltage Drop Calculation for Panel PS2 Circuit NAC 8

Starting Calculation Voltage: 20.4000v Minimum Operational Voltage: 16.0000v
Total Circuit Current: 1.4150A Total Distance: 395.0000'
Voltage Drop: 1.7539v End Of Line Voltage: 18.6461v
Percent Drop: 8.60 % Wire GA=#14 AWG
Distance measured using drawn segment lengths with 10.00 % additional length calculated

Device Label	Part No.	Description	Device Current	Distance From Previous Device	Voltage At Device	Voltage Drop From Source	Voltage Drop Percent
PS2•NAC 8•001	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	35.0000'	20.0959v	0.3041v	1.49 %
PS2•NAC 8•002	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	40.0000'	19.7835v	0.6165v	3.02 %
PS2•NAC 8•003	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	25.0000'	19.6102v	0.7898v	3.87 %
PS2•NAC 8•004	SCWL	Strobe, White 75cd	0.1110A	20.0000'	19.4891v	0.9109v	4.47 %
PS2•NAC 8•005	SCWL	Strobe, White 15cd	0.0410A	35.0000'	19.3011v	1.0989v	5.39 %
PS2•NAC 8•006	PC2WL	2−Wire, Horn Strobe, White 75cd	0.1430A	25.0000'	19.1731v	1.2269v	6.01 %
PS2•NAC 8•007	PC2WL	2−Wire, Horn Strobe, White 15cd	0.0710A	35.0000'	19.0246v	1.3754v	6.74 %
PS2•NAC 8•008	PC2WL	2−Wire, Horn Strobe, White 15cd	0.0710A	25.0000'	18.9294v	1.4706v	7.21 %
PS2•NAC 8•009	SCWL	Strobe, White 15cd	0.0410A	20.0000'	18.8620v	1.5380v	7.54 %
PS2•NAC 8•010	SCWL	Strobe, White 15cd	0.0410A	15.0000'	18.8152v	1.5848v	7.77 %
PS2•NAC 8•011	PC2WL	2−Wire, Horn Strobe, White 30cd	0.0900A	10.0000'	18.7865v	1.6135v	7.91 %
PS2•NAC 8•012	SCWL	Strobe, White 15cd	0.0410A	10.0000'	18.7634v	1.6366v	8.02 %
PS2•NAC 8•013	SCWL	Strobe, White 15cd	0.0410A	15.0000'	18.7324v	1.6676v	8.17 %
PS2•NAC 8•014	SCWL	Strobe, White 15cd	0.0410A	15.0000'	18.7053v	1.6947v	8.31 %
PS2•NAC 8•015	SCWL	Strobe, White 15cd	0.0410A	15.0000'	18.6819v	1.7181v	8.42 %
PS2•NAC 8•016	PC2WL	2−Wire, Horn Strobe, White 30cd	0.0900A	10.0000'	18.6688v	1.7312v	8.49 %
PS2•NAC 8•017	SCWL	Strobe, White 15cd	0.0410A	15.0000'	18.6575v	1.7425v	8.54 %
PS2•NAC 8•018	SCWL	Strobe, White 15cd	0.0410A	15.0000'	18.6499v	1.7501v	8.58 %
PS2•NAC 8•019 EOL	SCWL	Strobe, White 15cd	0.0410A	15.0000'	18.6461v	1.7539v	8.60 %

1 FIRE ALARM SCHEDULES
SCALE: NTS

REVISION | DATE BY

COMMUNICATIONS & SECURITY

LOCATION:
LEES SUMMIT #2, MO

HY-VEE, INC.
5820 WESTOWN PARKWAY
WEST DES MOINES, IOWA 50266
TELEPHONE: (515) 267-2800
FAX: (515) 267-2935

Hy-Vee® EMPLOYEE OWNED

NORTH

FIRE ALARM SCHEDULES

DRAWN:	DATE:
ALW	OCT 2020
SCALE: NTS	JOB NUMBER:

SHEET:
T4.3

BACK COMMUNICATIONS CLOSET

21" VENDOR FIELD
VERIFY MOUNTING HEIGHT

10" MONITOR VISUAL
ACCESS BEFORE
MONITOR INSTALL

CURBSIDE
VERIFY LOCATION

FRONT COMMUNICATIONS CLOSET

VERIFY LOCATION WITH
BABY FORMULA

RX COMMUNICATIONS RACK

UP

UP

1 CAMERA PLAN
SCALE: 3/32" = 1'-0"

NOTES:
1. 2 - GANG DEEP BOX MOUNTED TO BOTTOM OF JOISTS. (TYP. FOR SALES AREA CAMERAS.)
2. ALL CONDUIT TO BE 1" UNLESS OTHERWISE NOTED.

CAMERA SYSTEM CABLING REQUIRMENTS

- SURVEILLANCE CAMERA - CAT6 CABLE
- TV MONITOR - RG6 CABLE
  1/4 CABLE
  CAT6 CABLE
- 360° CAMERA - CAT6 CABLE
- 180° CAMERA - CAT6 CABLE
- HS HEIGHT STRIP CAMERA

REVISION	DATE BY

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Hy-Vee®
EMPLOYEE OWNED

NORTH

CAMERA PLAN

DRAWN:	DATE:
BP	OCT 2020
SCALE:	JOB NUMBER:
3/32" = 1'0"	

SHEET:
T5.0

RISER 1

PARTITION 1	PARTITION 2	PARTITION 3	PARTITION 4	PARTITION 5	PARTITION 6	PARTITION 7	PARTITION 8
PHARMACY SECURITY	BUILDING SECURITY	SOUTH SALES TO EXTERIOR	RECEIVING TO EXTERIOR	BACKROOM TO EXTERIOR 3 LOCATIONS	NORTH SALES TO EXTERIOR	AOL TO EXTERIOR	WINE & SPIRITS EXIT DOOR

HONEYWELL VISTA 128BPT BURG ALARM CONTROL PANEL

8 PARTITION SYSTEM

-LOCATED IN COMM CLOSET
-120V 20AMP DEDICATED CIRCUIT
-IGSM COMMUICATOR

-SEE AS BUILTS (COMM CLOSET) FOR EQUIPMENT ENCLOSURE LAYOUT

SECURITY SYSTEM CABLING REQUIRMENTS

CA	ACCESS DOOR TO INCLUDE CARD READER - 18/6 SHIELD CABLE REQUEST TO EXIT MOTION - 22/6 CABLE DOOR CONTACTOR - BLUE BROWN CONDUCTORS ON REX MOTION CABLE ELECTRIC DOOR STRIKE - 18/4 CABLE
DA	SECURITY LOCAL DOOR ALARM 1 DOOR CONTACT - RED BLACK CONDUCTORS ON SIREN CABLE 1 SIREN - 18/4 CABLE 1 KEYPAD - 18/6 CABLE
CR	ACCESS CONTROL CARD READER - 18/6 SHIELD CABLE
REX	ACCESS CONTROL REQUEST TO EXIT MOTION - 22/6 CABLE
MD	MOTION DETECTOR - 22/4 CABLE
SMD	SECURITY MOTION DETECTOR - 22/6 CABLE
ICOM	INTERCOM - CAT 6 CABLE
SE	SECURITY EQUIPMENT ENCLOSURE (11x15x4)
CM	CEILING MOUNTED SECURITY MOTION DETECTOR - 22/4 CABLE
EDH	ELECTRIC DOOR HARDWARE - 18/4 CABLE
DC	DOOR CONTACTOR - 22/4 CABLE
KP	KEYPAD - 22/6 CABLE @ +60" CENTERLINE A.F.F.
GB	GLASS BREAK - 22/4 CABLE
SS	SECURITY SIREN - 18/2 CABLE

BACK COMMUNICATIONS CLOSET

FRONT COMMUNICATIONS CLOSET

RX COMMUNICATIONS RACK

FIRE/SECURITY PANEL PROVIDE 4'x8' SHEET OF PLYWOOD FLOOR TO CEILING

MOUNT ENTRY ALERT SOUNDER TO WALL @ +10'-0"

DELAYED EGRESS MAG-LOCK

(1) CONDUIT TO B/O JOISTS

(1) 3/4" CONDUIT UNDERFLOOR TO COUNTER

ENTRY ALERT SHUNT SWITCH

CONDUIT STUB TO ROOF DECK

CONDUIT STUB TO ABOVE CEILING

SEE 1/T6.1

1 SECURITY PLAN
SCALE: 3/32" = 1'-0"

REVISION	DATE BY

COMMUNICATIONS & SECURITY

LOCATION:
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HY-VEE, INC.
5820 WESTOWN PARKWAY
WEST DES MOINES, IOWA 50266
TELEPHONE: (515) 267-2800
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Hy-Vee® EMPLOYEE OWNED

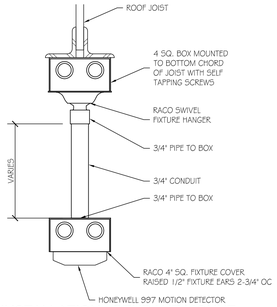
NORTH

SECURITY PLAN

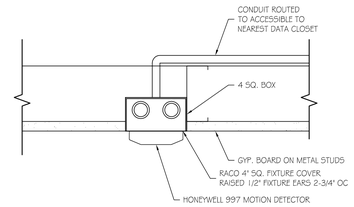
DRAWN:	DATE:
BP	OCT 2020
SCALE: 3/32" = 1'0"	JOB NUMBER:

SHEET:

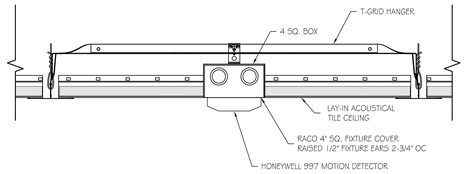
T6.0



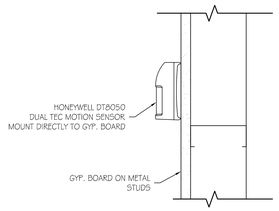
11 MOTION INSTALLATION - PENDANT MOUNT
SCALE: 3" = 1'-0"



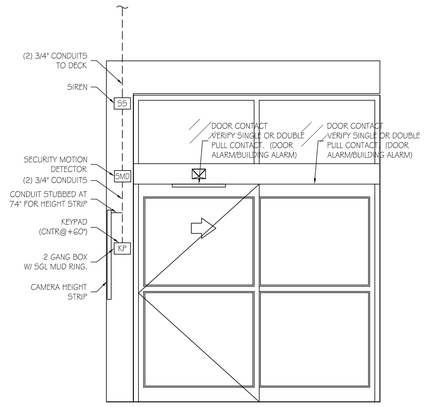
10 MOTION INSTALLATION - GYP. BD MOUNT
SCALE: 3" = 1'-0"



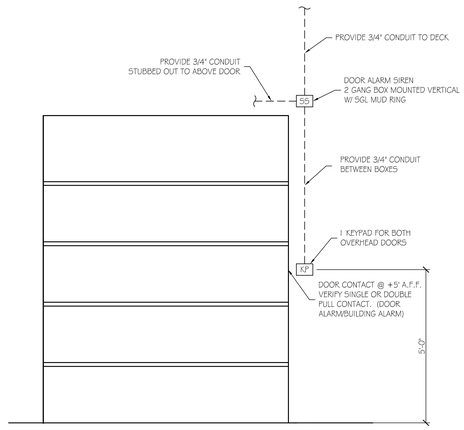
9 MOTION INSTALLATION - ACOUSTICAL CEILING MOUNT
SCALE: 3" = 1'-0"



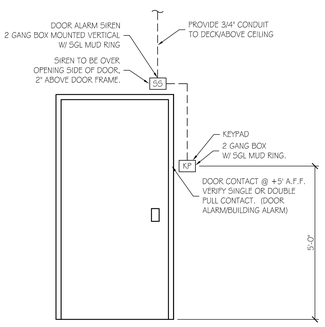
8 MOTION INSTALLATION - GYP. BD WALL MOUNT
SCALE: 3" = 1'-0"



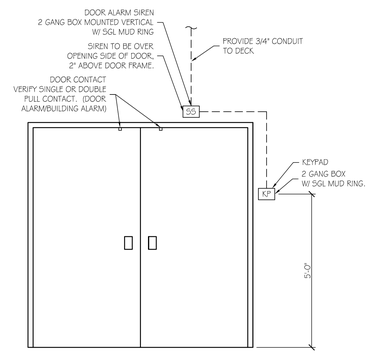
7 DOOR SECURITY DOOR ELEVATION - W&S
SCALE: 1/2" = 1'-0"



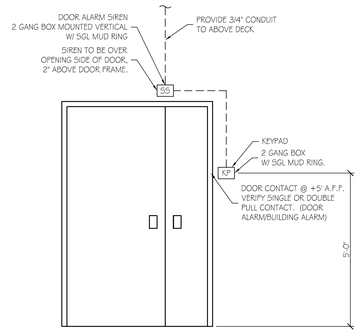
6 DOOR SECURITY DOOR ELEVATION - OVERHEAD DOOR
SCALE: 1/2" = 1'-0"



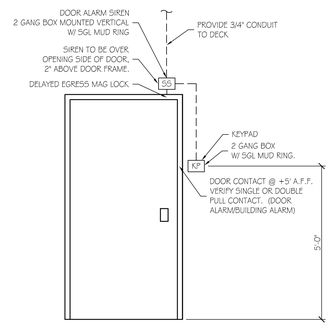
5 DOOR SECURITY DOOR ELEVATION - SINGLE DOOR
SCALE: 1/2" = 1'-0"



4 DOOR SECURITY DOOR ELEVATION - DOUBLE DOOR
SCALE: 1/2" = 1'-0"

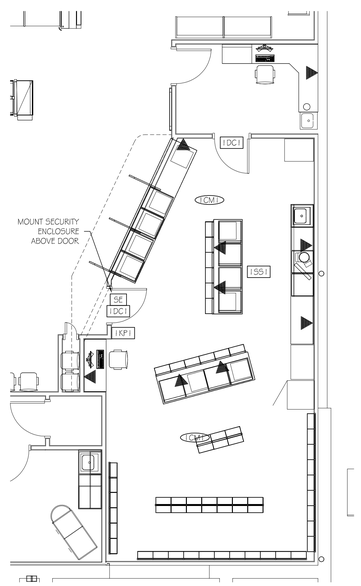


3 DOOR SECURITY DOOR ELEVATION - DOUBLE DOOR
SCALE: 1/2" = 1'-0"



2 DOOR SECURITY DOOR ELEVATION - SINGLE DOOR W&S
SCALE: 1/2" = 1'-0"

SECURITY SYSTEM CABLING REQUIRMENTS	
CA	ACCESS DOOR TO INCLUDE CARD READER - 18/6 SHIELD CABLE REQUEST TO EXIT MOTION - 22/6 CABLE DOOR CONTACTOR - BLUE BROWN CONDUCTORS ON REX MOTION CABLE ELECTRIC DOOR STRIKE - 18/4 CABLE
DA	SECURITY LOCAL DOOR ALARM 1 DOOR CONTACT - RED BLACK CONDUCTORS ON SIREN CABLE 1 SIREN - 18/4 CABLE 1 KEYPAD - 18/6 CABLE
CR	ACCESS CONTROL CARD READER - 18/6 SHIELD CABLE
REX	ACCESS CONTROL REQUEST TO EXIT MOTION - 22/6 CABLE
MD	MOTION DETECTOR - 22/4 CABLE
SMD	SECURITY MOTION DETECTOR - 22/6 CABLE
ICOM	INTERCOM - CAT 6 CABLE
SE	SECURITY EQUIPMENT ENCLOSURE (11x15x4)
CM	CEILING MOUNTED SECURITY MOTION DETECTOR - 22/4 CABLE
EDH	ELECTRIC DOOR HARDWARE - 18/4 CABLE
DC	DOOR CONTACTOR - 22/4 CABLE
KP	KEYPAD - 22/6 CABLE @ +60" CENTERLINE A.F.F.
GB	GLASS BREAK - 22/4 CABLE
55	SECURITY SIREN - 18/2 CABLE



1 ENLARGED PHARMACY SECURITY PLAN
SCALE: 3/16" = 1'-0"

REVISION	DATE BY

COMMUNICATIONS & SECURITY

LOCATION:
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Hy-Vee® EMPLOYEE OWNED

NORTH

PARTIAL SECURITY PLAN AND DETAILS

DRAWN:	DATE:
BP	OCT 2020
SCALE:	JOB NUMBER:
SEE SHEET	

SHEET:

T6.1