Publix SUPER MARKETS

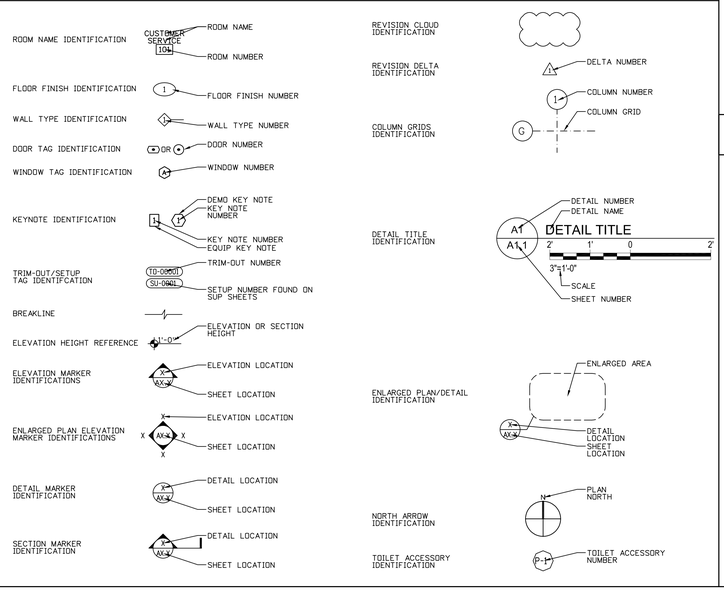
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

INTERIOR DECOR SCHEME - EVERGREEN DECOR
INTERIOR REMODEL - LEVEL 2 ALTERATION
PUBLIX STORE #0797
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER
PUBLIX PROTOTYPE 44.1P
6760 WEST GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA, 34429-9348

GENERAL ABBREVIATIONS:

ADA	AMERICANS WITH DISABILITIES ACT	FT	FOOT OR FEET	PC	PIPE COLUMN	VERT	VERTICAL
ADDT'L	ADDITIONAL	FTG	FOOTING OR FITTING	PH	PHASE	VEST	VESTIBULE
AFF	ABOVE FINISHED FLOOR	FV	FIELD VERIFY	PHYS	PHYSICAL	VIF	VERIFY IN FIELD
ALT	ALTERNATE	GA	GAUGE	PL	PLATE, PLASTIC	VT	VINYL TILE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	GAL	GALLONS	PLAM	PLASTIC LAMINATE	VTR	VENT THROUGH ROOF
APPROX	APPROXIMATELY	GALV	GALVANIZED	PLBG	PLUMBING	W/	WITH
BD	BOARD	GB	GRAB BAR	PLYWD	PLYWOOD	WC	WATER CLOSET
BLDG	BUILDING	GC	GENERAL CONTRACTOR	PMJ	PRE-MOLDED JOINT	WD	WOOD
BLKG	BLOCKING	GEN	GENERAL OR GENERATOR	PMP	PUMP	W/O	WITHOUT
BO, B/	BOTTOM OF	GWB	GYPSUM WALLBOARD	PNL	PANEL	WP	WORKING POINT
		GYP	GYPSUM	PNT	PAINT	WR	WATER RESISTANT
CJ	CONTROL JOINT	HAZ	HAZARDOUS	POS	POSITIVE OR POSITION	WT	WEIGHT
CJNT	CONSTRUCTION JOINT	HB	HOSE BIBB	PREFAB	PREFABRICATED		
CL	CENTERLINE	HDW	HARDWARE	PRESS	PRESSURE		
CLG	CEILING	HORIZ	HORIZONTAL	PTD	PAINTED		
CLO	CLOSET	HM	HOLLOW METAL	PTN	PARTITION		
CLR	CLEAR	HR	HOUR	PT	PRESSURE TREATED		
CMU	CONCRETE MASONRY UNIT	H, HT	HEIGHT	QT	QUARRY TILE		
CO	CLEAN OUT	HTR	HEATER	QTY	QUANTITY		
COL	COLUMN			QUAL	QUALITY		
CONC	CONCRETE	ID	INSIDE DIAMETER				
CONST	CONSTRUCTION	IN	INCHES	R	RADIUS		
CONT	CONTINUOUS	INFO	INFORMATION	RD	ROOF DRAIN		
CONTR	CONTRACTOR	INT	INTERIOR	REC	RECESSED		
CORR	CORRIDOR			REF	REFERENCE		
CPT	CARPET	JAN	JANITOR	REFRIG	REFRIGERATION		
CT	CERAMIC TILE	JT	JOINT	REINF	REINFORCED		
CTR	CENTER			RELOC	RELOCATE(D)		
		L	LENGTH	REP	REPRESENTATIVE		
D	DEPTH	LAB	LABEL	REQ'D	REQUIRED		
DEG	DEGREE	LAT	LATERAL	REQMT	REQUIREMENT		
DEMO	DEMOLITION	LAV(S)	LAVATORY(IES)	REV	REVISION		
DET	DETAIL	LBS	POUNDS	RM	ROOM		
DF	DRINKING FOUNTAIN	LF	LINEAR FEET	RMT	REMOTE		
DIA	DIAMETER			RO	ROUGH OPENING		
DISP	DISPENSER	LONG	LONGITUDINAL				
DN	DOWN	LG	LAMINATED GLASS				
DS	DOWNSPOUT	LP	LOW POINT				
DWG	DRAWING	LTG	LIGHTING				
		LSC	LIFE SAFETY CODE	S	SOUTH		
E	EAST			SAN	SANITARY		
EA	EACH	MAINT	MAINTENANCE	SCHED	SCHEDULE		
EF	EACH FACE	MATL	MATERIAL	SECT	SECTION		
EJ	EXPANSION JOINT	MAX	MAXIMUM	SHT	SHEET		
EL	REFERENCE ELEVATION	MECH	MECHANICAL	SIM	SIMILAR		
ELEV	ELEVATOR OR ELEVATION	MED	MEDIUM	SPEC	SPECIFICATION(S)		
EMER	EMERGENCY	MET	METAL	SQ	SQUARE		
ENCL	ENCLOSURE	MEZZ	MEZZANINE	SQ FT, SF	SQUARE FEET		
EQ	EQUAL	MFG	MANUFACTURING	SS	STAINLESS STEEL		
EQUIP	EQUIPMENT	MFR	MANUFACTURER	STD	STANDARD		
EST	ESTIMATE	MIN	MINIMUM	STL	STEEL		
ETC	ET CETERA	MISC	MISCELLANEOUS	STOR	STORAGE		
EW	EACH WAY	MO	MASONRY OPENING	STRUCT	STRUCTURE/STRUCTURAL		
EWC	ELECTRIC WATER COOLER	MT	MOUNT				
EX, EXIST	EXISTING	MTD	MOUNTED				
EXP	EXPANSION, EXPANDED	MTL	METAL	T&B	TOP AND BOTTOM		
EXT	EXTERIOR			TBD	TO BE DETERMINED		
		N	NORTH	TBL	TABLE		
FACBC	FLORIDA ACCESSIBILITY CODE BLDG CONSTRUCTION	N/A	NOT APPLICABLE	TECH	TECHNICAL		
FBC	FLORIDA BUILDING CODE	NEG	NEGATIVE	TEL	TELEPHONE		
FD	FLOOR DRAIN	NIC	NOT IN CONTRACT	TYP	TYPICAL		
FDN	FOUNDATION	NO, #	NUMBER				
FE	FIRE EXTINGUISHER	NOM	NOMINAL	UC	UNDERCOUNTER		
FEC	FIRE EXTINGUISHER CABINET	NTS	NOT TO SCALE	UL	UNDERWRITER'S LABORATORIES		
FF	FINISHED FLOOR	OC	ON CENTER	UNO	UNLESS NOTED OTHERWISE		
FH	FIRE HYDRANT	OCC	OCCUPANT	UTIL	UTILITY		
FIG	FIGURE	OD	OUTSIDE DIAMETER				
FL, FLR	FLOOR	OF	OUTSIDE FACE	VB	VAPOR BARRIER		
FQ	FACE OF	OPNG	OPENING	VCT	VINYL COMPOSITION TILE		
FRP	FIBERGLASS REINFORCED POLYESTER PANELS	OPP	OPPOSITE				
FRT	FIRE RETARDANT TREATED						

SYMBOL LEGEND:



PROJECT NOTES:

1. WHERE ALL COOLERS AND FREEZERS ARE AGAINST A WALL THERE IS MINIMUM 2" SPACE BETWEEN THE WALL AND COOLER OR FREEZER. THIS SPACE IS TO BE CLOSED WITH BREAK METAL. ALSO WHERE COOLERS ARE AGAINST COOLERS, PROVIDE AN ALUMINUM .032GA CLOSER STRIP.
2. ALL HOLES THAT ARE TO BE CUT IN THE ROOF OR PATCHES TO BE MADE ARE TO BE DONE ONLY BY THE ROOFING CONTRACTOR.
3. BASE AS SCHEDULED FOR SALES AREA IS NOT REQUIRED BEHIND CASES AND SHELVING. EXTEND BASE BEHIND ENDS OF CASES AND SHELVING TO SAME EXTENT AS WALL FINISH. SEE FLOOR PLAN AND INTERIOR ELEVATIONS.
4. ALL STUD WALLS ADJACENT TO COOLER OR FREEZER WALLS SHALL BE COVERED WITH MOISTURE RESISTANT DRYWALL TO TOP OF COOLER OR FREEZER.
5. CENTER 2X6 WOOD BLOCKING AT 3'-5" A.F.F. FOR ALL SINKS WITH BACKSPLASHES.
6. CEILING SYSTEMS: INSTALL STENCILED PANELS FOR PLUMBER'S SHUT-OFF VALVES, MOUNT PANELS IN CEILING. REFER TO PLUMBING FOR LOCATIONS.
7. IN TYPE I & II CONSTRUCTION, ALL WOOD BLOCKING AND SHEATHING SHALL BE FRT.
8.
9. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS AND AREAS ON SITE PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL REPORT ALL OBSERVED DISCREPANCIES TO THE ARCHITECT AT ONCE.
10. ALL DETAILS AND SECTIONS SHOWN ARE INTENDED TO BE TYPICAL AND SHALL BE CONSIDERED TO APPLY TO ANY SIMILAR CONDITION UNLESS A DIFFERENT DETAIL IS SHOWN.
11. THE CONTRACTOR SHALL COMPLETE THE CONSTRUCTION OF THIS FACILITY IN CONFORMANCE TO ALL APPLICABLE CODES AND ORDINANCES.
12. ALL CONSTRUCTION ACTIVITIES SHALL BE COMPLETED SUCH AS TO CAUSE A MINIMUM IMPACT UPON THE OPERATION OF THE FACILITY.
13. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
14. DO NOT SCALE DRAWINGS - VERIFY ALL CONDITIONS. NOTIFY ARCHITECT OR ENGINEER OF ANY DISCREPANCIES.
15. IT IS THE INTENT OF THE DRAWINGS THAT ALL EXPOSED SURFACES RECEIVE FINISHES AS INDICATED ON THE DRAWINGS UNLESS SPECIFICALLY NOTED OTHERWISE. ANY SURFACES WHICH DO NOT HAVE A SPECIFIC FINISH NOTE, NOR ARE NOTED TO REMAIN UNFINISHED, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND FINISHED PER THE ARCHITECT'S INSTRUCTIONS.
16. ANY VARIATIONS FROM INDICATED DIMENSION OR CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT. THE WORK IN THE AREA IN QUESTION SHALL NOT PROCEED UNTIL APPROVED BY THE ARCHITECT.
17. EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS AND MAY NOT REFLECT EXACT "AS-BUILT" CONDITIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. CONTRACTOR SHALL CAREFULLY COORDINATE NEW WORK AND DEMOLITION WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.
18. EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT THEMSELVES WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILITY OF PERFORMING THE WORK PROPERLY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED BECAUSE OF CONDITIONS THAT OCCUR DUE TO FAILURE TO FAMILIARIZE WORKERS WITH THIS KNOWLEDGE.

PROJECT DESCRIPTION:

SCOPE OF WORK:

INTERIOR REMODEL: EXISTING FACILITY IS SINGLE STORY METAL FRAME STRUCTURE WITH NON-COMBUSTIBLE CMU EXTERIOR WALLS, AND INSULATED ROOFING SYSTEM. RENOVATION OF EXISTING STRUCTURE COMPRISED OF MINOR INTERIOR WALLS, CEILINGS, FINISHES, AND EQUIPMENT. THIS REMODEL DOES NOT AFFECT THE BUILDING SIZE OR OCCUPANCY.
EXISTING RECEIVING DOCK TO BE ENCLOSED (APPROX 789 SQFT)

CONSTRUCTION TYPE:

EXISTING TYPE IIB (UNPROTECTED)
FULLY SPRINKLERED

OCCUPANCY:

GROUP M (MERCANTILE)

INTERIOR FINISH:

CLASS C (PER TABLE 803.5)
CLASS A OR B WALLS AND CEILINGS (NFPA 101, 6-5, "AUTOMATIC SPRINKLERS")

EXISTING BUILDING AREA:

GROCERY STORE: 43,842 SQ FT

APPLICABLE CODES:

2020 FLORIDA BUILDING CODE 7th EDITION EXISTING BUILDING
2020 FLORIDA BUILDING CODE 7th EDITION
2020 FLORIDA PLUMBING CODE 7th EDITION
2020 FLORIDA MECHANICAL CODE 7th EDITION
NATIONAL ELECTRICAL CODE 2017
FLORIDA FIRE PREVENTION CODE 7th EDITION
2020 FLORIDA FUEL/GAS CODE 7th EDITION
2020 FLORIDA BUILDING CODE 7th EDITION ACCESSIBILITY
2020 FLORIDA ENERGY CONSERVATION CODE 7th EDITION

JURISDICTION INFO:

JURISDICTION: CITRUS COUNTY BUILDING DIVISION
3600 W. SOVEREIGN PATH, SUITE 111
LECANTO, FLORIDA, 34461
(352) 527-5310

NUMBER OF SETS REQUIRED: DIGITAL SUBMISSION

OCCUPANT LOAD:

OCCUPANT LOAD
OCCUPANCY BY USE AREA

	USE	AREA	SF/ OCC	OCC	SUB TOTAL	TOTAL
GROUND FLOOR – FRONT AREA	SALES	30,257	30	1,009		
	OFFICE/PHARM/TELEHEALTH/FOOD PREP	6,877	200	35		
	Sub Total:				1,044	
GROUND FLOOR – BACK AREA	SHIPPING/STORAGE & COOLERS	6,708	300	23		
	Sub Total:				23	
GRAND TOTAL		43,842				1,067

EGRESS WIDTH ANALYSIS:

EGRESS WIDTH ANALYSIS

REQUIRED EXIT WIDTH (INCHES)				PROVIDED EXIT WIDTH (INCHES)					PROVIDED OCCUPANT LOAD PER OPENING			
				EXIT	INCHES				OCCUPANTS			
INCH/ OCC.	CALC	TOTAL	COMMENTS	DOOR #'S	TOTAL	PER DOOR	SUB TOTAL	TOTAL	PER DOOR	SUB TOTAL	TOTAL	COMMENTS
				101A & 101B	2	105	210		525	1050		AT FRONT DOORS
								210				
			AS PER NFPA-101 & FFPC SEC. 36.2.5.7 1/2 OF TOTAL WIDTH IS REQUIRED AT FRONT DOORS	118	1	33	33		165	165		AT SIDE DOORS
				139	1	33	33		165	165		AT SIDE DOORS
0.20	1044x0.2"	209	1044x0.2"x1/2=104					66			1380	AT TOTAL SALES AREA
				122A	1	33	33		165	165		AT STORAGE ROOM (SIDE DOOR)
				151A	1	33	33		165	165		AT STORAGE ROOM
								66			330	AT TOTAL BACK AREA
0.20	23x0.2"	5										
		213						342			1710	GRAND TOTAL

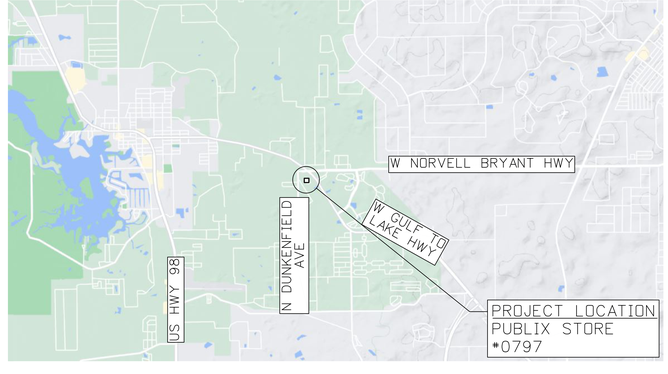
PLUMBING FIXTURE COUNT:

2020 FLORIDA BUILDING CODE - PLUMBING
SEE OCCUPANCY CALCULATIONS AND EXIT REQUIREMENTS CHART ON THIS SHEET.
EXISTING PUBLIX FLOOR COUNT: 1,067
MEN = 534
WOMEN = 534

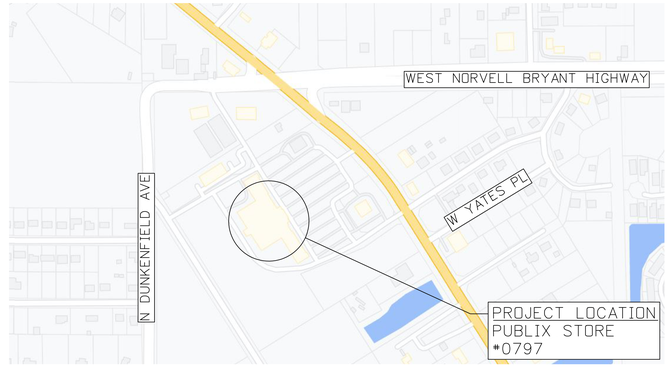
MIN NUMBER OF REQUIRED PLUMBING FIXTURES - 2020 FBC-PLUMBING 7TH EDITION (Section 403.1.1 and 403.2)

	WATER CLOSET			LAVATORIES			DRINKING FOUNTAIN	URINALS	OTHERS
	1 PER 500 SF			1 PER 750 SF			1 PER 1,000	50% REQD. TOILETS	1 SERV. SINK
	MALE	FEMALE	FAMILY	MALE	FEMALE	FAMILY			
REQUIRED	2	2	0	1	1	0	2	0	1
PROVIDED	3	6	1	4	6	1	1 (LO)	1	1

VICINITY MAP:



LOCATION MAP:



DRAWING INDEX

COVER SHEET:

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SP1.1 ARCHITECTURAL SITE PLAN

PROJECT MANUAL:

NOTE: NOT ALL PROJECT SPECIFICATIONS MAY BE APPLICABLE TO THIS REMODEL

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PM.02 PROJECT MANUAL
PM.03 PROJECT MANUAL
PM.04 PROJECT MANUAL
PM.05 PROJECT MANUAL
PM.06 PROJECT MANUAL
PM.07 PROJECT MANUAL
PM.08 PROJECT MANUAL
PM.09 PROJECT MANUAL
PM.10 PROJECT MANUAL
PM.11 PROJECT MANUAL
PM.12 PROJECT MANUAL

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D1.1 DEMOLITION PLAN
D2.1 REFLECTED CEILING DEMOLITION PLAN
EQ1.1 EQUIPMENT PLAN
A1.1 FLOOR AND FINISH PLAN
A2.1 SCHEDULES, SECTIONS AND DETAILS
A2.2 PARTITION WALL TYPES
A2.3 PARTITION WALL TYPES
A3.1 REFLECTED CEILING PLAN
A5.1 ROOF PLAN
A6.1 DEMOLITION INTERIOR ELEVATIONS
A6.2 INTERIOR ELEVATIONS
A7.1 DOCK ENCLOSURE PLAN, WALL SECTIONS AND DETAILS
A11.1 ENLARGED RESTROOM PLANS AND ELEVATIONS
A11.2 ENLARGED RESTROOM PLANS AND ELEVATIONS
A17.1 WALL SECTIONS, INTERIOR ELEVATIONS AND ENLARGED PLAN
A18.1 DETAILS

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S2.2 SECTIONS AND DETAILS
S3.1 SOFFIT PLAN
S3.2 DOCK ENCLOSURE WALL SECTIONS, DETAILS, & NOTES
S4.1 ROOF FRAMING PLAN

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PD1.1 WATER AND GAS PLUMBING DEMOLITION PLAN
PD2.1 SANITARY WASTE PLUMBING DEMOLITION PLAN
P1.1 WATER AND GAS PLUMBING RENOVATION PLAN
P2.1 SANITARY WASTE PLUMBING RENOVATION PLAN
P4.1 PLUMBING LEGEND, DETAILS, GENERAL NOTES, AND SCHEDULES

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FP2.1 FIRE PROTECTION NOTES AND DETAILS

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M1.1 HVAC RENOVATION PLAN
M2.1 HVAC DETAILS
M3.1 HVAC SCHEDULES
M4.1 HVAC HOOD SECTIONS, SCHEDULES AND DETAILS
M5.1 HVAC CONTROLS AND DETAILS

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ED2.1 ELECTRICAL POWER DEMOLITION PLAN
ED2.2 ELECTRICAL ROOF POWER DEMOLITION PLAN
E1.1 ELECTRICAL LIGHTING PLAN
E1.1A ELECTRICAL TRACKING AIMING GUIDE
E2.1 ELECTRICAL POWER PLAN
E2.2 ELECTRICAL ROOF POWER PLAN
E3.1 ELECTRICAL REFRIGERATION PLAN
E4.1 ELECTRICAL COMMUNICATION PLAN
E7.1 ELECTRICAL RISER DIAGRAM
E8.1 ELECTRICAL LUMINAIRE/SYMBOL SCHEDULES AND DETAILS
E11.1 ELECTRICAL PANEL SCHEDULES
E11.1A ELECTRICAL PANEL SCHEDULES

FIRE/BURGLAR ALARM:

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FA2.1 FIRE ALARM DIAGRAM
FA3.1 FIRE ALARM LEGEND, SCHEDULE AND DIAGRAMS
BA1.1 BURGLAR ALARM, DIAGRAM AND LEGEND

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R1.1 REFRIGERATION FLOOR PLAN
R2.1 REFRIGERATION SCHEDULE AND SPECIFICATIONS
R3.1 REFRIGERATION DETAILS
R4.1 REFRIGERATION ROOF PLAN

RELEASE TRACKER:

SUBMISSION	SHEETS ISSUED/REVISED	SUBMISSION DATE
100% CLIENT SUBMITTAL	ALL SHEETS (EXCLUDING FIRE ALARM) ISSUED	04/21/2022

FLORIDA PRODUCT APPROVAL SUBMITTAL:

OPENINGS: EXTERIOR SWING DOORS, OVERHEAD DOORS

MANUFACTURER	PRODUCT CATEGORY	APPROVAL NUMBER	PRODUCT MODEL NO. OR NAME	SERIES	GLASS TYPE/SIZE	ATTACHMENT METHOD	APPROVAL ENTITY	APPROVAL DATE
CURRIES	STEEL DOORS W/ EXIT DEVICES	FL11537.1	4'-0" x 8'-0" SINGLE OUT-SWING	707	N/A	4-1/2" x 4-1/2"	FLORIDA	12/05/17
OVERHEAD DOOR	INSULATED ROLLING STEEL DOOR	FL742.22	STORMTITE INSULATED SERVICE DOOR	625, FIP SLATE	N/A	1-1/2" LONG WALL BOLT	FLORIDA	12/12/17
SIKA	ROOFING	FL9274-R23	SIKA SARNAFIL ROOF SYSTEMS	-	N/A	RHINOBOND SYSTEM	FLORIDA	06/08/21

ARCHITECT:
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2600 MAITLAND CENTER PARKWAY
SUITE 200, MAITLAND, FLORIDA 32751
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F: (407) 661-9101
ARCHITECT OF RECORD
MARCUS J. BOYLE
FL REG* 100919

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SUITE 200, MAITLAND, FLORIDA 32751
P: (407) 661-9100
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STRUCTURAL ENGINEER OF RECORD
EDUARDO D. MARTINEZ
FL REG* 73403

MECHANICAL ENGINEER:
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2840 POLO PARKWAY, SUITE 200
MIDLOTHIAN, VA 23113
P: (804) 794-6656
F: (804) 794-8588
MECHANICAL ENGINEER OF RECORD
JOHN S. PARKER
FL REG* 63481

ELECTRICAL ENGINEER:
BRANDT ENGINEERING, INC.
2840 POLO PARKWAY, SUITE 200
MIDLOTHIAN, VA 23113
P: (804) 794-6656
F: (804) 794-8588
ELECTRICAL ENGINEER OF RECORD
R. KNOX STACY
FL REG* 63643

REFRIGERATION ENGINEER:
ARCTIC COOLING SYSTEMS
14350 CHEROKEE PL
CHINO, CA 91710
T: (909) 270-2170
REFRIGERATION ENGINEER OF RECORD
SCOTT ERCOLE
FL REG* 80226

FIRE PROTECTION ENGINEER:
G & P ENGINEERING LLC
PO BOX 196725
WINTER SPRINGS, FLORIDA 32719-6725
T: (407)476-3031
FIRE PROTECTION ENGINEER OF RECORD
FADI K. GHUMRAWI
FL REG* 67330

FIRE ALARM ENGINEER:
TRICON CONSULTING ENGINEERS
1000 N. ASHLEY DRIVE, SUITE 504
TAMPA, FLORIDA 33602
T: (813) 227-9190
F: (813) 227-9195
FIRE ALARM ENGINEER OF RECORD
DENNIS VANN
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c-p.com
Florida Corporate Certificate #AA C000526

Publix SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

CLIENT NAME

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
6760 W GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
TITLE SHEET, INDEX AND CODE SUMMARY

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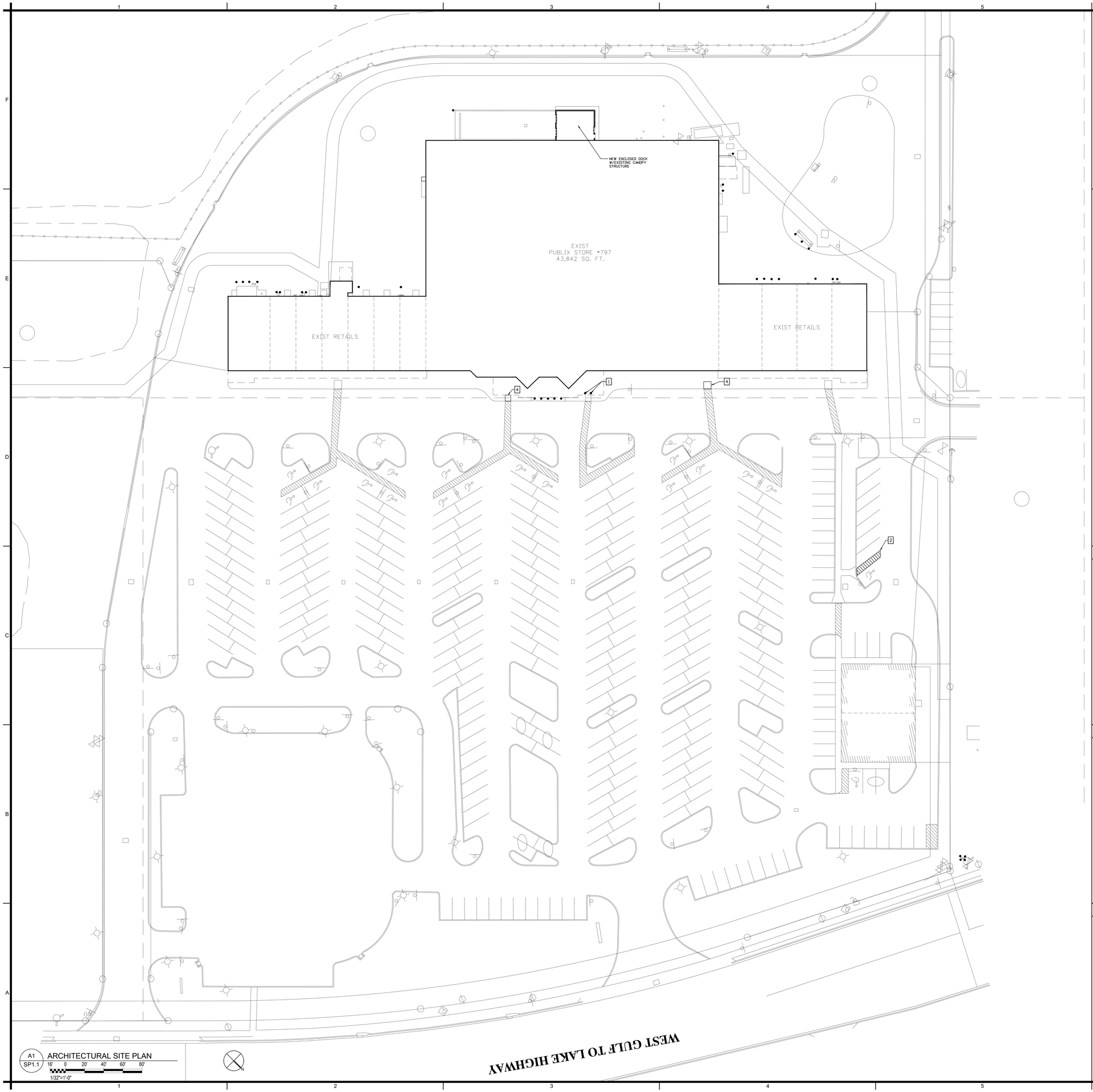
MARCUS J. BOYLE
FL# AR100919

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 2210784
DATE 04/21/2022
DRAWN
CS
CHECKED
MB

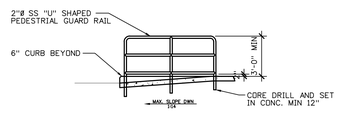
T1.1

DECOR SCHEME: EVERGREEN

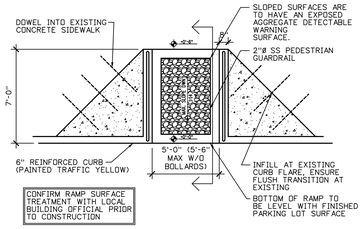


A1 / SP1.1 ARCHITECTURAL SITE PLAN
16' 0 20' 40' 60' 80'
1/32"=1'-0"

N



SECTION



CURB RAMP

D6 / SP1.1 RETURN CURB RAMP DETAIL
12" 0 1' 4' 7' 11'
1/4"=1'-0"

SITE PLAN GENERAL NOTES:

A. CONTRACTOR IS TO FIELD VERIFY ALL EXISTING CONDITIONS, CONTRACTOR SHALL PATCH AND REPAIR EXISTING CONSTRUCTION DAMAGED DURING WORK INSIDE OR OUTSIDE THE BUILDING. REPAIRS SHALL MATCH EXISTING FINISH CONDITIONS.

B. PRIOR TO RESEALING, REMOVE EXISTING ACCESSIBLE SIGNAGE AND GRAPHICS NOT REQUIRED BY THIS PLAN. EXISTING PAVEMENT STRIPING TO BE ABANDONED SHALL BE REMOVED BY APPLYING HEAT, GRINDING OR BLASTING BY WATER OR SAND-AS REQUIRED. REPAIR/PATCH ANY DAMAGED SURFACES.

C. CONFLICTS BETWEEN EXISTING CONDITIONS AND WHAT IS SHOWN ON THIS PLAN SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION IMMEDIATELY.

D. ALL PAVEMENT MARKERS, STRIPING, SIGNAGE, DIRECTIONAL ARROWS, AND OTHER TRAFFIC CONTROL DEVICES SHALL BE INSTALLED PER FDOT ROADWAY AND TRAFFIC DESIGNS STANDARDS, AND 2017 FACBC. REMOVE OBSOLETE STRIPING FROM ASPHALT BY PRESSURE WASH OR GRINDER AS REQUIRED, PRIOR TO APPLICATION OF ASPHALT EMULSION SEALER AND NEW STRIPPING. REMOVE HEAT APPLIED STRIPING BY REHEATING WITH A TORCH AND SCRAPING.

E. THIS DRAWING IS AN ADAPTATION FROM AN OWNER SUPPLIED SITE SURVEY PREPARED BY BERRYMAN & HENIGAN 1414 SQ MARTIN LUTHER KING AVENUE, OCALA, FLORIDA, 34474-3129. THIS SITE PLAN IS TO BE USED FOR REFERENCE OF NEW WORK ONLY.

F. INFORMATION SHOWN HERE IS EXISTING UNLESS SPECIFICALLY NOTED OTHERWISE. DO NOT SCALE DRAWINGS FIELD VERIFY LOCATIONS OF ALL EXISTING COMPONENTS.

SITE PLAN KEY NOTES:

1 NEW BOLLARD. REF EQ1.1 FOR ADDITIONAL INFORMATION.

2 RESTRIPE PARKING SPACE AND AISLE PER FAC. TAKING FROM ADJACENT SPACE AS REQUIRED.

3 BUILD UP LOAD AREA ASPHALT AT BOTTOM OF RAMP AND TAPER INTO ADJACENT ASPHALT AT 4% MAXIMUM SLOPE.

4 NEW CURB RAMP. REF DETAIL D6/SP1.1 FOR ADDITIONAL INFORMATION. REMOVE EXISTING CURB RAMP.

SITE PLAN LEGEND:

KEY NOTE

PROPERTY LINE

SCOPE OF PARKING LOT ASSESSMENT

ACCESSIBLE PARKING SPACE

EXISTING CURB RAMP

NEW CURB RAMP

EXISTING PAVEMENT STRIPING

NEW PAVEMENT STRIPING

CUHACI PETERSON
2600 Maitland Center Parkway
Suite #200
Maitland, FL 32751
P (407) 661-9100
F (407) 661-9101
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CLIENT NAME
Publix.
SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
8750 W GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
ARCHITECTURAL SITE PLAN

MARCUS J. BOYLE
FL# AR100919

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	2210194
DATE	04/21/2022
DRAWN	CS
CHECKED	MB

SP1.1

DECOR SCHEME: EVERGREEN

PROJECT MANUAL

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Section 00 21 13
Instructions to Bidders
V05142021

1. **General**

1.1. The Work: Publix Super Market store building located as indicated on the title block of these Drawings.

1.2. Securing Documents: Invited Bidders may obtain copies of the Proposed Contract Documents as indicated in the Invitation to Bid.

1.3. Bid Form: Bids will be received at the time and place indicated in the Invitation to Bid, and shall be on the form provided with the Invitation to Bid.

1.4. Bonds.

1.4.1. No bid security is required.

1.4.2. A Labor and Materials Payment Bond and a Performance Bond, each in the amount of the Contract Sum, are required as a Deductive Alternate.

1.5. Examination of Documents and Site of Work

1.5.1. Bidders Review of Documents: Bidder shall examine entire set of Drawings, all Sections of Specifications, and all Conditions of the Contract.

1.5.2. Note especially Supplemental Drawings and Specifications which integrate the Publix Prototype Design with the Site and all adjacent Shopping Center structures, and which may provide or modify the facade and adjacent structure. These Drawings and Specifications are part of this Contract, and are listed in the Invitation to Bid.

1.5.3. Bidders review of Construction Site: Bidder shall visit Project Site to be acquainted with surrounding territory, means of approach to Site, conditions of actual Job Site, and facilities for delivery, storage, handling and placing of materials and equipment. Bidder shall compare Drawings and Specifications with work in place in order to be fully informed of all conditions affecting execution of work. Failure to visit site or failure to examine any and all Contract Documents will not relieve successful Bidder from necessity of furnishing all materials or equipment, or performing all work, that may be required for completion in accordance with Drawings and Specifications without additional cost to Owner. Neglect of above requirements will not be accepted as reason for delay in Work.

1.6. Proof of Competence and Approval of Subcontractors

1.6.1. The successful Bidder will be required to submit to the Owner a list of proposed Subcontractors for principal portions of the Work before execution of the Contract. This list must be approved by the Owner and will become an Amendment to the Contract. The Owner may require evidence that a proposed Subcontractor has sufficient means and experience in the types of work called for to assure completion of the Contract in a satisfactory manner.

1.7. Award and Execution of Contract

1.7.1. The Contract, if awarded, will be awarded to the invited Bidder who has proposed the most appropriate price for the proposed scope of Work, subject to the Owner's and Architect's right to reject any and all Bids and to waive informality and irregularity in the Bids and in the Bidding.

1.7.2. The successful bidder will be required to execute an Agreement between the Owner and Contractor with mutually agreed upon language. Publix Super Markets, Inc. is included in the definition of "Owner" and shall be a required Cosignatory of the Owner-Contractor Agreement.

1.7.3. At or prior to delivery of the Signed Agreement, the Bidder to whom the Contract is awarded shall deliver to the Owner those Certificates of Insurance required by the Contract Documents and such Labor and Materials Payment Bonds and Performance Bonds as may be required by the Owner.

1.7.4. Certificates of Insurance and Bonds shall be approved by the Owner before the Successful Bidder may proceed with the Work. Failure to provide either in a form satisfactory to the Owner shall subject the Contractor to loss of time from the allowable Construction Period equal to the Time of Delay in furnishing the required material.

1.8. Construction Time

1.8.1. The Agreement will include a requirement that the Work be completed within a Specified Number of Days following the Date of Commencement. The Specified Number of Days will be agreed upon between the Owner and the Successful Bidder. The Date of Commencement will be defined in the Owner-Contractor Agreement (for the purpose of administration of the Owner-Contractor Agreement only) as the later of either 1) the date of the Owner-Contractor Agreement or 2) the Date of Receipt of the Building Permit.

2. **Products**

2.1. All building construction products/materials used for the Project are to be non- asbestos containing. Asbestos Containing Material (ACM) by Federal EPA and OSHA definition is any material/product that contains greater than (>) 1.0% asbestos. The following six (6) types of natural occurring asbestos mineral fibers are currently regulated under EPA and OSHA; Chrysotile, Amosite, Crocidilite, Tremolite, Anthophyllitte and Actinocite asbestos. Publix will require a notarized affidavit from the Project Construction Contractor or their representative stating that they have verified that ACM was not used or installed during the construction of the Publix structure.

3. **Execution**

Not Used

End of Section 00 21 13

Section 01 11 00
Summary of Work
V03172021

1. **General**

1.1. Work under this Agreement is the construction of a Publix Super Markets Store Building.

1.2. Related work under other contracts

1.2.1. Sitework:

- Site Grading
- Site Drainage
- Site Utilities, Paving
- Pad Preparation for this building
- Construction of other buildings within the Project.
- Other work as required for satisfactory completion of the Project.

1.2.2. On projects for which Publix Super Markets, Inc is the sole Owner, some or all of the above listed Site Work may be part of this Contract; See Bid Forms for definitive list.

1.3. Standby Generators: When a Publix Super Markets Store Building is designated to receive a standby generator, the General Contractor will be responsible for supplying the crane and operator required to unload and install said generator and related equipment.

1.4. The following items will be furnished by Publix Super Markets, Inc. and shall be set in place, installed, and connected by the proper trades under this Contract (except for connection work by Publix as noted). These items may be designated OFCI (Owner Furnished, Contractor Installed) when referenced in the Documents. Items will be delivered to the Site of Construction. Contractor is responsibility for delivered items at the time of delivery. Coordinate with Publix for delivery method and time.

1.4.1. If Additive Alternate for HVAC Equipment is not accepted: Roof-Top HVAC Equipment curbs and support rails, and HVAC Units (except final connection of control wiring by Publix whether Additive Alternate is accepted or not). In any case, where required elsewhere, radiant unit heaters are part of the Contract.

1.4.2. Pre-sloped rooftop curbs for HVAC Systems, Mechanical Centers.

1.4.3. All Supply and Exhaust Fan curbs, and all Supply and Exhaust Fans.

1.4.4. Grease Hoods and Heat Removal Hoods, designated GH- and HR- on Mechanical Drawings.

1.4.5. Hot Water Storage and Reclaim Tanks.

1.4.6. Energy Management Panels (except final connection to power and control wiring installed by Contractor will be by Publix).

1.4.7. All Utility type sinks: stainless steel freestanding one, two, three, and four compartment sinks. Plumbing brass provided by Contractor.

1.4.8. Emergency Generator and Transfer Switch with gas regulator and filter.

1.4.9. Simplex Armor Bond strip door curtain system.

1.5. The following items will be furnished, set in place, installed, and connected by Publix Super Markets, Inc. either under separate contract or by Publix personnel (except for connection work by Contractor as noted in parentheses):

1.5.1. Walk-in coolers and freezers, including installation of refrigerant lines and condensate lines to hub drains (electrical connection by Contractor).

1.5.2. Insulated composite panel ceiling systems.

1.5.3. Refrigerated Cases, including installation of refrigerant lines and condensate lines to hub drains (except electrical connection by Contractor).

1.5.4. Condensers and Compressors for Refrigerated Systems, with weatherproof housings "Weather-Pac's" or roof-top houses where indicated (except connection of power and control wiring; required flashing, pre-manufactured curbs shown, and other water/ weatherproofing by Contractor).

1.5.5. Heated food display cases (electrical connection by Contractor).

1.5.6. Bakery Ovens (gas and electrical connection , and flues and vents by Contractor - Contractor shall receive and store ovens at the site until Publix forces can install them).

1.5.7. Signs on facade and under canopy (electrical connection by Contractor).

1.5.8. Scissor Lifts, Dock Levelers, and Dock Bumpers (except associated concrete work, steel embeds and electrical connection by Contractor).

1.5.9. Trash Compactor (electrical connection by Contractor).

1.5.10. Baler (except electrical connection by Contractor).

1.5.11. Ice Machines with condensate drain connection (water supply connection and electrical connection by Contractor).

1.5.12. Gondolas (electrical wiring by Contractor).

1.5.13. Checkout Stands, including all signal wiring (electrical connection by Contractor).

1.5.14. Not Used.

1.5.15. Safes.

1.5.16. Automated Teller Machines (ATM's), communication (electrical connection by Contractor).

1.5.17. Wall Clock in Sales Area (electrical connection by Contractor).

1.5.18. Unit Insect Control Systems.

1.5.19. Portable Fire Extinguishers.

1.5.20. Towel, Soap, and Toilet Paper Dispensers.

1.5.21. Diaper-Changing Stations.

1.5.22. Music System.

1.5.23. Automatic Fire Suppression System (Ansul).

1.5.24. Trim package: Rub rails, interior railings, etc.

1.5.25. Cart Curbs and Interior Flex Post shall be provided and installed by General Contractor. See architectural plans for locations and details.

1.6. Area of horizontal runs by Trades:

- Electrical: Bottom of roof deck to 32 in. below roof deck; where exposed, immediately beneath roof deck, passing between steel joists where possible.
- Refrigeration: 32 in. to 36 in. below roof deck; where exposed, immediately below bottom chord of steel joist girders and joists.
- Fire Sprinkler: 8 in. above ceiling; where exposed, 8 in. above bottom chord of steel joist girders and joists.
- Air Conditioning: 36 in. below roof deck to 10 in. above ceiling; where exposed, hang as close under bottom chord of steel joist girders and joists as possible while leaving room for refrigeration lines.

If deviation from these areas is indicated, such deviation must be agreed upon by the Job Superintendent and/or Publix's representative.

2. **Products**

Not Used

3. **Execution**

Not Used

End of Section 01 11 00

Section 01 23 00
Alternates
V06302020

1. **General**

1.1. To enable the Owner to evaluate the cost of alternate methods of construction of. the Project, the Alternates described in this Section are required to be stated on the Bid Form submitted by each Bidder.

1.2. The cost of Labor and Material Payment Bond and Performance Bond shall be listed as an Add Alternate.

1.3. Underslab Porous Fill - in some locations the building pad or sub-grade will be constructed with material which meets the specified requirements for under-slab porous fill. In such a case the Owner may choose to omit under-slab porous fill from this Contract. State an amount which may be deducted from the Base Bid for the omission of Material, Labor, and Equipment for the installation of under-slab porous fill.

2. **Products**

Not Used

3. **Execution**

Not Used

End of Section 01 23 00

Section 01 25 00
Substitution Procedures
V022120211

1. **General**

1.1. Each Bidder obligates himself to the use of brands, makes and models, materials and apparatus named in this Project Manual and on the accompanying Drawings, unless substitute approval is obtained in the manner described herein.

1.2. All items, for which there is a specific product or brand designated, shall be supplied as specified.

1.3. After bidding: no substitutions will be considered, except in cases necessitated by strikes, bankruptcy, discontinuation of a product, etc., or where equal performance and significant cost savings will result. Requests shall be in writing and be accompanied by full descriptive data. It is assumed that the reason for substituting materials and methods is based on a cost or time savings, and that Publix will share in these benefits.

2. **Products**

Not Used

3. **Execution**

Not Used

End of Section 01 25 00

Section 01 26 00
Contract Modification Procedure
V022120211

1. **General**

1.1. Definitions: Refer to AIA Document A201.

1.1.1. The Contract for Construction (the Work) is composed of:

- Agreement (Form itself, with attachments)
- General Conditions
- Specifications
- Drawings
- Addenda

1.1.2. Change Orders modify any or all of the parts of the Contract where a change in Cost or Time is required.

1.1.3. Minor changes in the Work shall be as directed by the Owner's Representative.

1.1.4. Aligned Contractors shall be bound by provisions of their Cost Plus a Fee Contracts.

1.2. Revision Request (This is the term used to describe the process by which Publix identifies items for change):

1.2.1. Where a Revision Request has no associated cost, submit a letter stating this, or include as a no cost line item on a Change Order.

1.2.2. Where a Revision Request requires an adjustment in the Contract Sum, submit within 30 days from distribution date of Revision Request as a Change Order or a line item on a Change Order. If Change Order is not received within 30 days, it will be assumed that the Revision Request is a no cost item.

1.2.3. Where a Revision Request is included as a line item on a Change Order, include the following as back-up, broken out for each Revision Request individually.

1.2.4. Submit on forms supplied or approved by Publix.

1.2.5. Required Information:

1.2.5.1. Labor:

- Units of labor x actual rate by Categories
- % of labor burden by Categories

1.2.5.2. Material:

- Units of material x actual unit cost by Categories
- Subtotal by Categories

% Tax

1.2.5.3. Category Total (or Subcontract):

- Total Labor
- Total Material
- Subtotal X 7%
- Category Cost

1.2.5.4. Recap Categories:

- Category Cost each Category
- Total Cost of Revision Request or Change Order

2. **Products**

Not Used

3. **Execution**

Not Used

End of Section 01 26 00

Section 01 33 00
Submittal Procedures
V03172021

1. **General**

1.1. Submit all required Shop Drawings, Product Data, Samples, Concrete Design Mixes, Test Results, etc. to:

Publix Super Markets, Inc.
Attn: Facilities Design
P.O. Box 407 (3300 Publix Corporate Parkway)
Lakeland, FL 33802 (33811)

1.2. Submit Types:

1.2.1. Letters of Intent (LOI):

1.2.1.1. Use where provided by Publix. LOI's shall be filled out completely, with all options marked, and with all blanks filled in, properly signed by an authorized agent of the company concerned.

1.2.1.2. LOI shall be followed exactly in the field. Provide adequate information at the Job Site for Installers to conform to Manufacturers recommendations.

1.2.1.3. Submit only the original, signed LOI to Publix. Contractor may retain as many copies as he needs.

1.2.2. Manufacturer's Literature:

1.2.2.1. Submit where required by applicable Project Manual Section. Submit a minimum three copies for use of Owner and Contractor, additional copies as required.

1.2.2.2. Where more than one option is described, mark to indicate model or type to be used.

1.2.3. Shop Drawings:

1.2.3.1. Submit for the following:

- Concrete Reinforcing Steel
- Masonry Reinforcement
- Open Web Steel Joists
- Structural Steel
- Fire Sprinklers
- Light Fixtures and Lamps
- Under Floor Duct
- Switch Gear / Panels
- Other items of work as required

1.2.3.2. Submit in number prescribed by instruction letter issued at pre-construction meeting or, if not specified in letter or individual sections, submit three sets.

1.2.3.3. Materials Lists:

1.2.3.4. Identify all pertinent characteristics (type, model number, etc.) of materials intended for used.

1.2.3.5. Fire Sprinkler submittals only: Submit two sets with approval by Factory Mutual and local Authority having Jurisdiction. Submit sets bearing the original signature or initials of the reviewers. Include original letter from Factory Mutual detailing their review comments. These sets will not be returned.

1.2.4. Test Reports:

1.2.4.1. Where indicated, submit test reports to prove compliance of materials supplied with specifications intent.

1.2.4.2. Reports Required:

- Concrete
- Soil and other Geological Tests.
- Steel Inspection Report
- Electrical megger test report
- Others as needed.

1.2.4.3. Note the requirements stated elsewhere for the same-day submittal of test reports indicated substandard soil or concrete.

1.2.5. Samples:

1.2.5.1. Where required for selection of color, texture or other physical characteristics, submit samples of materials intended for use.

1.2.5.2. Samples shall be large enough to allow adequate evaluation.

1.2.5.3. Submit two samples minimum. One will be retained by Publix, the other will be returned to the General Contractor for use at the Job Site.

1.2.6. Samples Panels:

1.2.6.1. Where required by Publix Architect, erect on the job site where directed, a Sample Panel of major finish work.

1.2.6.2. Sample Panel shall be no larger than 4'-0" x 8'-0", but shall be large enough to indicate joint treatment, corner treatment, range of coloration, and other pertinent characteristics of the installation of materials selected.

1.2.6.3. Sample Panel will be used as the Quality Standard for the work represented. Work in place shall conform to the treatments shown by the Sample Panel.

1.3. Submittal Process:

1.3.1. Time:

1.3.1.1. Letters of Intent: Return to Publix no later than 2 weeks before commencement of work described, and no later than 60 days from project commencement.

1.3.1.2. Marginal Soil, Concrete or Other Tests that indicate substandard conditions; submit to Publix immediately.

1.3.1.3. All other submittals: Return to Publix no later than 2 weeks before commencement of work described, and no later than 60 days from project commencement.

1.3.1.4. Subcontractor prepares submittal.

1.3.1.5. If LOI is available, send original to General Contractor.

1.3.1.6. If LOI is not available, send six copies of submittals to General Contractor.

1.3.1.7. Deviations from the specifications will be considered only in the event that those products specified have become unavailable for use. Other products may be submitted only for future consideration.

1.3.2. General Contractor submittal:

1.3.2.1. If LOI is submitted, record action taken and send on to Publix.

1.3.2.2. Approve or annotate the submittals, then send on to Publix.

1.3.2.3. If disapproved, notify Subcontractor.

1.3.3. Publix Reviews submittal:

1.3.3.1. If LOI is submitted, record.

1.3.3.2. Approve or annotate submittals, keep file copy, return others to General Contractor.

1.3.3.3. If disapproved, notify General Contractor.

2. **Products**

2.1. All building construction products/materials used for the Project are to be non- asbestos containing. Asbestos Containing Material (ACM) by Federal EPA and OSHA definition is any material/product that contains greater than (>) 1.0% asbestos. The following six (6) types of natural occurring asbestos mineral fibers are currently regulated under EPA and OSHA; Chrysotile, Amosite, Crocidilite, Tremolite, Anthophyllitte and Actinocite asbestos. Publix will require a notarized affidavit from the Project Construction Contractor or their representative stating that they have verified that ACM was not used or installed during the construction of the Publix structure.

3. **Execution**

Not Used

End of Section 01 33 00

Section 01 50 00
Temporary Facilities and Controls
V02212011

1. **General**

1.1. Temporary Requirements:

1.1.1. Furnish two currently accepted type hygienic portable toilet facilities, and maintain same.

1.1.2. Provide temporary water supply (3/4").

1.1.3. Provide temporary electric service for power and lighting (208 volt, 200 amp.)

1.1.4. All temporary facilities shall be removed when their use is no longer required.

1.1.5. General Contractor shall pay operating costs of all temporary services.

1.2. Security: Provide weathertight shed(s) for all materials requiring protection from weather, with raised floors for storage of cement, lime, and similar items.

1.3. Construction Cleaning:

1.3.1. Contractors shall clean construction site daily of all rubbish and trash which might breed mosquitoes and vermin, or which is highly combustible. Trash which cannot be burned because burning is not allowed by local ordinance, or because it is not combustible, shall be removed from the site at least weekly.

1.3.2. The Contractor shall clean sweep the finished floor every day and be sure that the finished floor is undamaged by equipment or materials being stored directly on the floor. A daily check of rolling equipment shall be made for oil or battery acid leaks. The Contractor shall caution all Subcontractors about protecting the finished floor from staining materials such as oil, acid, chewing tobacco, cigarettes, coffee, soft drinks, and tire skid marks from rolling equipment.

1.3.3. Provide final clean-up of entire site and building interior and exterior, including the roof, before requesting Substantial Completion inspection.

1.4. Field Office:

1.4.1. Provide weathertight shed or trailer with raised floors with adequate space for Contractor's and architect's needs.

1.4.2. Telephone: Install in field office for duration of construction work. Provide outdoor bell or bells to permit hearing ring from any part of Construction Site.

1.4.3. Contractor shall keep min. of 3 hard hats in field office for use by authorized visitors. These hats shall be kept in a clean and presentable condition.

1.4.4. Contractor shall at all times maintain a complete set of up-to-date Contract Documents in the field office. Documents which have been superseded shall be destroyed or clearly marked.

2. **Products**

Not Used

3. **Execution**

Not Used

End of Section 01 50 00

Section 01 66 00
Product Storage and Handling Requirements
V03172021

1. **General**

1.1. Walk-In Coolers and Freezers, and associated Evaporator Coils and Rooftop Refrigeration Equipment.

1.1.1. The General Contractor shall schedule a delivery date for this equipment, which date shall not be changed later than two weeks prior to the scheduled date. The following are prerequisites to delivery:

1.1.1.1. A stabilized roadway must be completed from a public street to and around the Publix building. Roadway and track around building shall accommodate the size and type of crane required to set steel and roof-top equipment.

1.1.1.2. All interior slabs must be poured.

1.1.1.3. All portions of the building must be dried in.

1.1.1.4. The area around the building must be accessible so that a crane will be able to lift the units from the ground to their rooftop locations.

1.1.1.5. On stores which have Rooftop Machine Rooms for housing Refrigeration Equipment, the Contractor must be prepared to make machine rooms weather-proof immediately after the equipment is set in place.

1.1.1.6. If the delivery date must be changed less than two weeks prior to a scheduled delivery date, the Contractor shall bear all costs for storage, demurrage, return and reshipping, etc.

1.2. Refrigerated Cases:

1.2.1. The General Contractor shall schedule a delivery date for this equipment, which date shall not be changed later than two weeks prior to the scheduled date. The following are prerequisites to delivery:

1.2.1.1. A stabilized roadway must be completed to the rear of the Publix building.

1.2.1.2. The cases will be unloaded on the concrete pad at the rear of the store. This pad must have been poured and cured for at least three days prior to delivery of the cases.

1.2.1.3. The building shall be secure. The General Contractor shall sign for receipt of the cases and be responsible for them, except for any damage caused by Publix' installation crew or Refrigeration Contractor.

1.2.1.4. The finished floor must be completely finished, cleaned, polished, stains removed, and sealed.

1.2.1.5. The interior of the Store Sales Area must be essentially complete, including painting, ceilings, wall coverings, wall tile, canopies, etc.

1.2.1.6. The area where cases are to be located must be swept clean.

1.2.1.7. Electrical wiring must be pulled and ready for connection.

2. **Products**

Not Used

3. **Execution**

Not Used

End of Section 01 66 00

Section 01 77 00
Closeout Procedures
V02212011

1. **General**

1.1. Electric Service: Payment for electric service will become the responsibility of Publix Super Markets, Inc. at the earlier of two dates:

1.1.1. The date Publix starts up the refrigeration system permanently.

1.1.1.1. All testing and remediation of the refrigeration system shall be completed before this date.

1.1.1.2. The air conditioning system must also be started by this date; the Contractor may start the air conditioning earlier but Publix will not pay for electric service.

1.1.2. The Date of Substantial Completion as established below.

1.2. The following requirements for Substantial Completion supplement those in AIA Document A201 General Conditions of the Contract For Construction, Paragraph 9.8.

1.2.1. When Substantial Completion is near, Publix will at the request of the Contractor prepare a list of items to be completed or corrected. All items on this "Punch List" must be corrected or completed to the satisfaction of Publix' Representative, except those items which Publix may specifically allow to be deferred to Final Inspection, before the inspection for Substantial Completion will be scheduled.

1.2.2. The following items are among those that must be completed prior to inspection for Substantial Completion:

1.2.2.1. The issuance of a Certificate of Occupancy and/or a Certificate of Use by authorities having jurisdiction.

1.2.2.2. Clean the entire work and site of all trash and used material. All equipment, fixtures, glass, metal, etc. shall be cleaned, ready for use with all shipping labels, manufacturer's removable labels, etc. removed.

1.2.2.3. Make all floors ready for use by cleaning. Posting of all required operating instructions for equipment.

1.2.2.4. Posting of typewritten panel board schedules.

1.2.2.5. Labeling of all lines and controls as required.

1.2.2.6. Sitework (signage, paving, striping, site utilities, landscaping, DOT requirements, and other ancillary work) performed under this Contract or other contracts.

1.2.3. After Publix' Representative has approved the disposition of all items on the Punch List, Publix will set a date for inspection for Substantial Completion. Discrepancies noted during this inspection may be cause for withholding issuance of Certificate of Substantial Completion at the discretion of Publix' Representative. Otherwise, a Certificate of Substantial Completion will be issued promptly.

1.3. The following requirements for Final Payment supplement those in AIA Document A201 General Conditions of the Contract for Construction, Paragraph 9.10. The Contractor shall notify Publix when all deferred Punch List items have been corrected, at which time Publix will set a date for inspection for Final Payment.

1.3.1. The following items are among those which must be completed prior to the inspection for Final Payment:

1.3.1.1. Receipt by Publix of the Project Record Documents specified in Receipt by Publix of the Project Record Documents specified in Section 01 78 39.

1.3.1.2. Receipt by Publix of a Closeout Book, which shall contain the following:

- List of all Sub-Contractors, Sub-Sub-Contractors, And Suppliers.
- All required Guaranties and Warranties.
- All Operating Manuals, Service Instructions, and Parts Data.

1.4. At a time approximately one year after Substantial Completion Publix will schedule the One-Year Inspection of the Project. The Contractor shall send a representative. The Contractor shall correct any work found not to be in accordance with the requirements of the Contract Documents, as set forth in AIA Document A201 General Conditions of the Contract for Construction, Paragraph 12.2.2.

2. **Products**

Not Used

3. **Execution**

Not Used

End of Section 01 77 00

Section 01 78 39
Project Record Documents (As-Built Drawings)
V01182012

1. **General**

1.1. Summary:

1.1.1. Publix will supply a compact disc with TIFF images of the construction documents prepared by Publix Super Markets, Inc. to the General Contractor upon awarding of Bid. The General Contractor will be responsible for reproduction of hard copies to complete the requirements of this Section regarding the Job Set and Final Record Documents.

1.1.2. Throughout progress of the Work, maintain an accurate record of changes in the Contract Documents, and, upon completion of the Work, transfer the recorded changes to a set of "Final Record Documents", as described in article 1.5 below.

1.1.3. The purpose of the Final Project Record Documents is to provide accurate information regarding all aspects of the Project, both concealed and visible, so maintenance and future modification of the Work may proceed without extensive investigation of existing conditions.

1.2. Final Project Record Set Approvals:

1.2.1. Publix' Representative's approval of the status of the Final Project Record Documents may be a prerequisite to Publix' approval of requests for Progress Payments.

1.2.2. Prior to submitting Request for Inspection for Final Payment, submit the Final Project Record Documents to Publix. Final Payment will not be approved until Documents are received by Publix.

1.2.3. Deliver the original and two copies of Final Project Record Documents to Publix's representative within 30 days of owner acceptance.

1.3. Quality Assurance: Delegate responsibility for maintenance of Final Project Record Documents to one person on the Contractor's staff as approved by Publix' Representative.

1.4. Maintenance of Job Set:

1.4.1. Job Set: Designate one of the sets of Contract Document Drawings provided to the Contractor at the start of the Project as the Final Project Record Document Job Set. Immediately identify each sheet of the documents with the title "Record Documents - Job Set."

1.4.2. Thoroughly coordinate changes within the Record Documents. Make adequate entries on each sheet of Publix' prototype Project Manual, the supplemental Architectural and Engineering Drawings and Specifications, and the Civil Engineering, Landscaping, and Site Utilities Drawings.

1.4.3. Do not use the Job Set for any purpose except entry of new data and for review by Publix' Representative, until start of transfer of data to the Final Record Documents.

1.4.4. Make entries on the Job Set within 24 hours after receipt of information that a change has occurred.

1.4.5. Maintain the Job Set of Final Project Record Documents completely protected from deterioration and from loss or damage until completion of the Work and transfer of all recorded data to the Final Project Record Documents.

1.4.6. In the event of loss of recorded data, use means necessary to again secure the data to Publix' Representative's approval. Such means shall include removal and replacement of concealing materials if this is necessary in the opinion of Publix' Representative.

1.4.7. Change Data: Make change entries on drawings as follows:

1.4.7.1. Make entries in erasable colored pencil.

1.4.7.2. Call attention to each entry by drawing a "cloud" around each area affected; date all entries.

1.4.7.3. In the event of overlapping changes, use a different color for subsequent changes, so that the final construction is evident.

1.4.8. Schematic Conversion Data:

1.4.8.1. Show on the Job Set of Record Drawings, by dimension, accurate to within one inch, the location of each run of underground conduit, pipe, etc. Clearly identify each item by accurate note such as "PVC. drain", "gal. water", and the like. Clearly note the depth of each run beneath the finished floor.

1.4.8.2. Call attention to each entry by drawing a "cloud" around each area affected.

1.5. Final Project Record Documents:

1.5.1. Obtain base drawings for Final Record Documents: At a time nearing the completion of the Work, secure from the Architect at no charge to the Contractor one complete set of Contract Document Drawings.

1.5.2. Approval of recorded data prior to transfer: Following receipt of the set of base drawings of the Final Record Documents, and prior to the start of transfer of data from the Job Set to the Final Record Documents, secure the review and approval of all recorded data by Publix' Representative. Make all required revisions to the Job Set.

1.5.3. After approval, carefully transfer change data and schematic conversion data shown on the Job Set of Record Drawings to the corresponding sheets, calling attention to each entry by drawing a "cloud" around the affected area. Dates of changes are not required. Use proper media to assure longevity and clear reproduction.

2. **Products**

Not Used

3. **Execution**

Not Used

End of Section 01 78 39

Section 03 30 00
Cast-in-Place Concrete
V07012020

1. **General**

1.1. Scope of Work:

1.1.1. Furnish all materials, labor, equipment and services necessary and incidental to complete installation of concrete work indicated, implied on contractdrawings, or as specified.

1.1.2. The Contractor shall cooperate with other trades regarding installation of embedded items, and shall obtain inserts from related trades, such as plumbing, HVAC, roofing etc., and install under this section.

1.1.3. Grout fill of hollow masonry units and hollow masonry pilasters is specified under masonry.

1.2. References: the following specifications, codes and standards of current issue (hereafter referred to by acronym or alpha/numeric designation only) form a part of this specification:

1.2.1. American Concrete Institute:

1.2.1.1. ACI 117: Standard Tolerances for Concrete Construction and Materials

1.2.1.2. ACI 211.1: Recommended Practice for Selecting Proportions for Normal Weight Concrete.

1.2.1.3. ACI 221: Guide for Use of Normal Weight Aggregates in Concrete.

1.2.1.4. ACI 301: Specification for Structural Concrete for Buildings.

1.2.1.5. ACI 302: Guide for Concrete Floor and Slab Construction.

1.2.1.6. ACI 305: Hot Weather Concreting.

1.2.1.7. ACI 306: Cold Weather Concreting.

1.2.1.8. ACI 315: Details and Detailing of Concrete Reinforcement.

1.2.1.9. ACI 318 Bldg. Code Requirements for Reinforced Concrete (see other paragraphs of this Section for exceptions).

1.2.1.10. ACI 347: Recommended Practice for Concrete Form Work.

1.2.2. American Society for Testing and Materials:

1.2.2.1. ASTM A1064 Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete.

1.2.2.2. ASTM A 615: Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.

1.2.2.3. ASTM C 31: Making and Curing Concrete Test Specimens.

1.2.2.4. ASTM C 33: Specification for Concrete Aggregates.

1.2.2.5. ASTM C 39: Compressive Strength of Cylindrical Concrete Test Specimens.

1.2.2.6. ASTM C 143: Slump of Portland Cement Concrete.

1.2.2.7. ASTM C 150: Specification for Portland Cement.

1.2.2.8. ASTM C 150: Specification for Portland Cement

1.2.2.9. ASTM E 1745-97: Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs

1.2.2.10. ASTM E 154-88: Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs

1.2.2.11. ASTM E 96-95: Standard Test Methods for Water Vapor Transmission of Materials

1.2.2.12. ASTM 1643-98: Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs

1.2.3. Concrete Reinforcing Steel Institute: Manual of Standard Practice.

1.2.4. Applicable Building Code.

1.3. Submittals:

1.3.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

1.3.2. Design Mixes:

1.3.2.1. Submit written reports to Engineer of each proposed mix for each class of concrete at least 15 days prior to the start of Work. Do not begin concrete production until proposed mix designs have been reviewed by Engineer.

1.3.2.2. Reports shall include material certifications and product data for all materials proposed for use.

1.3.2.3. Separate mix designs shall be required for each admixture or combination of admixtures proposed for each class and strength of concrete reviewed by the Engineer.

1.3.2.4. Reports shall include wet and dry unit weights for each mix design.

1.3.3. Shop Drawings: Submit in accordance with Section 01340 Submittals, prepared as described by ACI 315. Show complete plans, scaled sections, and elevations; clearly indicate all openings, ledges, haunches, construction joints required, and other pertinent items. Show size, mark, and location of all reinforcing steel, bar schedules, and bending schedules.

1.3.4. Samples of materials shall be submitted if requested by the Engineer.

1.3.5. Product data for proprietary materials and items, including reinforcement and forming accessories, admixtures, patching compounds, waterstops, joint systems, curing compounds, dry-shake finish materials and others if requested by the Engineer.

1.3.6. Submit certificate from aggregate supplier, countersigned by concrete supplier verifying that all aggregates furnished for and used in concrete for this project conform to ASTM C 33.

1.3.7. Certification of conformance to requirements, and the chloride ion content of the admixture will be required from the admixture manufacturer prior to mix design review by the Engineer.

1.4. Quality Assurance - Single-Source Responsibility For Concrete Materials: Obtain concrete ingredients of uniform quality, including color for exposed concrete, from one manufacturer for each cementitious component and from one source and producer for each aggregate.

1.5. Field Quality Control:

1.5.1. Employ a Testing Laboratory experienced in testing of concrete materials to perform material evaluation tests and to submit test reports. The laboratory

NOTE: NOT ALL PROJECT SPECIFICATIONS MAY BE APPLICABLE TO THIS REMODEL

CUHACI PETERSON
2600 Maitland Center Parkway
Suite #200
Maitland, FL 32751
P (407) 661-9100
F (407) 661-9101
c-p.com
Florida Corporate Certificate #AA C000526

Publix SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
FOR OUTLOT A, LAKE HOWARD
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
PROJECT MANUAL

MARCUS J. BOYLE
FL# AR100919

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	221094
DATE	04/21/2022
DRAWN	CS
CHECKED	MB

PM.01

DECOR SCHEME: EVERGREEN

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conducting the testing must comply with the requirements of ASTM C 1077. Publix reserves the right to disallow any Testing Laboratory.

1.5.2. Sampling Fresh Concrete: ASTM C 172, except modified for slump to comply with ASTM C 94.

1.5.3. Slump: ASTM C 143; one test for each concrete load at point of discharge for all normally placed concrete, and point of placement for pumped concrete; and one for each set of compressive strength test specimens.

1.5.4. Air Contents: ASTM C 173, Volumetric Method For Light Weight Concrete; ASTM C 231 Pressure Method For Normal Weight Concrete; Take one air content test for every other concrete load at point of discharge, when the concrete mix design includes an air entraining agent. Air content tests are not required for mixes with entrapped air only.

1.5.5. Concrete Temperature: Test hourly when air temperature is 40F (4C) and below, and when 80F (27C) and above; and each time a set of compressive strength specimens is made.

1.5.6. Compressive Strength Specimen: ASTM C 31; one set of 4 standard cylinders for each compressive strength test, unless otherwise directed. Mold and store cylinders for laboratory-cured test specimens except when field-cure test specimens are required.

1.5.7. Compressive Strength Tests: ASTM C 39; one set for each 50 cubic yards or fraction thereof, of each mix design placed in any one day or for each 3,000 square feet of surface area placed; one specimen tested at seven days, two tested at 28 days, and one specimen retained in reserve for later testing if required.

1.5.8. Test results shall be reported in writing to Publix Structural Engineer, Publix Construction Department, Ready Mix Producer, and Contractor within 24 hours. Reports of compressive strength test shall contain:

1. The Publix store name and number.
2. Date of concrete placement.
3. Name of concrete testing service.
4. Mix design number and specimen numbers.
5. Design compressive strength at 28 days.
6. Location of concrete batch in structure.
7. Ambient temperature at job site.
8. Slump.
9. Air content, as noted in 1.5.4.
10. Concrete temperature.
11. Time from batching to sampling at site.
12. Any added water at the site (see 2.5.3).
13. Compressive strength and type of break for each cylinder.
14. Provide reports for 7 day and 28 day breaks.

1.5.9. Additional Tests: Coring of concrete anywhere in structure shall be done only with written approval by Publix Engineer.

1.5.10. Publix acceptance of the test reports does not in any way relieve the Contractor of his responsibility to insure the strength, slump, and quality of the in-place concrete meets the requirements of the Contract Documents.

1.6. Remediation:

1.6.1. Seven (7) day concrete strength shall not be less than 75% of the 28 day strength. Twenty eight (28) day strength shall be not less than 100% of the 28 day design strength. The concrete strength will be determined by the method described in ACI 318 Sections and the corresponding ASTM Designation (C 39).

1.6.2. Where testing reveals defective materials, remove nonconforming concrete and install new concrete in its place.

1.6.3. Perform additional tests required to verify compliance of replacement concrete.

1.7. Pre-Slab Conference: At least one week prior to the beginning of the installation of slabs on grade, the Contractor shall hold a meeting with all affected Subcontractors or Suppliers and the Hardener Manufacturer, to review the detailed requirements for the floor methods and procedures, including concrete and reinforcing placement, joint layout, placing techniques, finishing techniques, admixture usage, and curing procedures. At least one person on the finishing crew must be certified as an ACI Flatwork Finisher, or equivalent.

1.8. Inspections: Notify Publix Super Market, Inc.'s Representative 48 hours (min.) in advance of all pours so that he may

1.8.1. Observe all reinforced concrete placement unless otherwise directed by the Engineer.

1.8.2. Check size, grade, spacing, and clearances of all reinforcing and wire mesh.

1.8.3. Check lap lengths

1.8.4. See that reinforcing is clean.

1.8.5. See that forms are properly cleaned and oiled when required.

1.8.6. See that steel has been properly placed and tied.

1.8.7. See that forms for columns and beams are fully constructed, except that one (1) side of form is removed to allow for visual inspection.

1.9. Delivery, Storage, And Handling: Reinforcing steel shall be delivered to the building site, stored, and covered in a manner which will insure that no damage from moisture, dirt, grease, or any other substance will impair bond with concrete.

1.10. Existing Conditions:

1.10.1. Inspect and field verify all existing surfaces, structures, and dimensions in or adjacent to where Work is to be installed.

1.10.2. Notify the Engineer in writing, before any work is installed, of any condition in disagreement with the Contract Documents or otherwise requiring correction. Failure to make such a report will be construed as acceptance of the existing conditions and acceptance of the responsibility to provide a proper installation.

2. Products

2.1. General: All materials shall be delivered, stored and handled to prevent inclusion of foreign materials, damage by water, or breakage. Materials shall be stored and delivered in original packages.

2.2. Concrete Materials:

2.2.1. Aggregates:

2.2.1.1. Fine and coarse aggregates shall conform to the requirements of ASTM C 33, ACI 221 and ACI 301.

2.2.1.2. Coarse aggregate for normally placed concrete at foundations, pedestals, floor slabs, stem walls, steps and other locations shall meet ASTM C 33 Size No. 57 (1" to no. 4).

2.2.1.3. Coarse aggregate for pump mix shall meet ASTM Size No. 8 (3/8" to no. 8).

2.2.1.4. All aggregate for this Project shall be from one source and of uniform color throughout.

2.2.1.5. "Opaline Chert" shall not be used.

2.2.1.6. Sand shall be capable of developing 90% of the strength of standard Ottawa sand, and shall not contain more than 3% clay. The size of the sand shall be such that not less than 85% shall pass through a 1/4" sieve, not more than 30% through a 50 mesh sieve, and not more than 5% through a 100 mesh sieve. Test reports shall be furnished with design mixes indicating strength and gradation.

2.2.2. Cement

2.2.2.1. Normal Portland cement shall be type I conforming to the requirements of ASTM C 150 and shall be used for all concrete work. All cement for this project shall be from one source and of uniform color throughout unless special colors or finishes are noted.

2.2.2.2. Fly Ash, slag, or silica fume shall not be used

2.2.3. Water: Water for concrete shall be potable or comply with ASTM C 1602.

2.2.4. Reinforcement

2.2.4.1. Bars: ASTM A 615, Grade 60, unless otherwise shown on Drawings, using deformed bars for no. 3 and larger.

2.2.4.2. Reinforcement Accessories: High chairs, spacers, bolsters, etc. shall meet the requirements of CRSI.

2.2.4.3. Welded Steel Wire Fabric Reinforcement: ASTM A 185

2.2.4.4. Plate dowels for slab construction joints shall be smooth steel plate bars, ASTM A36 steel. Plate dowels shall be one of the following:

"Diamond Dowel System": 1/4" x 4 1/2" x 4 1/2", PNA Construction Technologies

"EZDowel": 1/4" x 6 1/2" x 3 1/2", McTech Group

"Speed Plate System": 1/4" x 4" x 6", Greenstreak

2.2.5. Admixtures:

2.2.5.1. No admixtures shall be incorporated in concrete unless written authorization is received from Publix' Engineer.

2.2.5.2. Prohibited Admixtures: Calcium Chloride, Thiocyanates or admixtures containing more than 0.05% chloride ions are not permitted.

2.2.5.3. Air Entraining Admixture: ASTM C 260, certified by Manufacturer to be compatible with other required admixtures.

2.2.5.3.1. Manufacturers:

- Euclid Chemical Company
- Grace Construction Products
- BASF Chemical Co.
- RussTech, Inc.
- Sika Corporation
- Cemex Admixtures

2.2.5.4. Freeze Protection Admixture: Shall conform to ASTM C494 Type E except as modified herein.

2.2.5.4.1. Admixture shall provide accelerated setting times and increased early and ultimate strengths

2.2.5.4.2. Admixture shall protect concrete from damage from freezing at concrete temperatures as low as 40 F (4 C) and ambient temperatures as low as 20 F (-7 C).

2.2.5.4.3. Manufacturers:

- Euclid Chemical Company
- Grace Construction Products
- BASF Chemical Co.
- RussTech, Inc.
- Sika Corporation
- Cemex Admixtures

2.2.5.5. Water Reducing Admixture: ASTM C494 Type A

2.2.5.5.1. Manufacturers:

- Euclid Chemical Company
- Grace Construction Products
- BASF Chemical Co.
- RussTech, Inc.
- Sika Corporation
- Cemex Admixtures

2.3. Related Materials:

2.3.1. Vapor Barrier:

2.3.1.1. Moisture/Vapor Barrier: ASTM E 1745, Class A, 15mil minimum.

"Stego 15 mil Vapor Barrier", STEGO Industries LLC

"VaporBlock 15", Raven Industries

"Perminator 15mil", W.R. Meadows

"Rhinomat-15", Interwrap, Inc.

"Husky Yellow Guard - 15mil", Poly-America

"Viper II - 15mil", Insulation Solutions

"X-treme 15 Mil", Tex-Trude

2.3.1.2. Tape for Sealing Laps: Use manufacturers' matching product or approved equal.

2.3.1.3. Mastic for Sealing Penetrations: Use manufacturers' matching product or approved equal.

2.3.2. Emery-Aggregate Dry-Shake Hardener: Blended and packaged, natural gray colored, dry shake hardener containing portland cement, aluminum oxide particles, and wetting agents or plasticizers. Acceptable manufacturers and products are:

"Colorbrite", Natural, Lambert Corporation

"Surflex E", Natural, Euclid Chemical Company

2.3.3. Penetrating Cure and Hardener Agent: When placing over slab with dry shake hardener, verify the compound is compatible. Acceptable manufacturers and products are:

"Gardseal", Lambert Corporation

"MasterKure HD 200 WB", BASF Chemical Company

2.3.4. Absorptive Cover for Curing:

- Burlap cloth made from Jute or Kenaf, complying with AASHTO M182 or absorptive Curing Blankets, that provide a water saturated environment for curing (not plastic sheets).

2.4. Proportioning and Design of Mixes:

2.4.1. Mix designs shall be proportioned in accordance with ACI 318, "Proportioning on the Basis of Field Experience and/or Trial Mixtures".

2.4.2. If trial batches are used, the mix design shall be prepared by an independent testing laboratory, and shall achieve an average compressive strength 1200 psi higher than the specified strength. This over-design shall be increased to 1400 psi when concrete strengths over 5000 are used.

2.4.3. Design mixes to provide normal weight concrete with the following properties, as indicated on the Drawings and Schedules.

2.4.3.1. Maximum W/C Ratios: 0.58 for 3000 psi, 0.44 for 4000 psi. Provide minimum of 500 lbs. portland cement per cubic yard of concrete.

2.4.4. Proportion and design mixes to result in concrete slump at point of placement as follows:

2.4.4.1. Reinforced Foundation Systems: Not less than 3 inches and not more than 5 inches.

2.4.4.2. Concrete containing high-range water-reducing admixture (superplasticizer): Not less than 9 inches and not more than 11 inches.

2.4.4.3. Other concrete: Refer to structural drawings.

2.5. Concrete Mixing:

2.5.1. Transit-mixed concrete may be used. It shall be mixed and delivered in accordance with the requirements set forth in the Standard Specifications for Ready Mixed Concretes of the ACI 304, Latest Edition.

2.5.2. Ready Mix Concrete: Comply with requirements of ASTM C 94, and as specified.

2.5.2.1. When temperature is between 85F (30C) and 90F (32C), reduce mixing and delivery time from 90 minutes to 75 minutes, and when air temperature is above 90F (32C) reduce mixing and delivery time to 60 minutes.

2.5.2.2. No concrete shall be placed when internal temperature of the concrete exceeds 90F.

2.5.3. No additional water, except when approved by the concrete ready mix supplier, shall be added to any concrete batch at the job site. Such approved additions, by the ready mix supplier representative, shall by noted on the delivery ticket, as well as on the compressive strength test reports for that specific batch.

3. Execution

3.1. Preparation

3.1.1. Inspect Prepared Pad for suitability to receive concrete slab. Where areas may be deficient, perform tests to determine suitability for concrete placement. Where extensive testing may be required, notify Publix Engineer.

3.1.2. Where concrete is poured in exposed to view locations, examine form work for suitability to produce smooth, even surfaces in finished work.

3.1.3. Ensure that cavity caps are in place to prevent concrete from filling masonry cavities where pours are over masonry walls.

3.2. Reinforcing

3.2.1. Avoid cutting or puncturing vapor retarder during reinforcement placement and supports and as herein specified.

3.2.2. Metal reinforcement, before being positioned, shall be thoroughly cleaned of all mill and rust scale, and of coatings of any character that will destroy or reduce the bond.

3.2.3. All reinforcement shall be carefully bent to the required dimensions and in accordance with the requirements of CRSI.

3.2.4. Shop form all reinforcing to dimensions required. conform to ACI 117 for forming tolerances.

3.2.5. All reinforcement shall be placed accurately in position using particular care to place the steel at its proper position in the cross section. Bars shall be held securely in place by ties and bracing in a way that will not allow displacement by tamping of the concrete. Slab reinforcing shall be supported on suitable reinforcing chairs or spacing bars.

3.2.6. Laps:

3.2.6.1. Conform To ACI 318., and as noted on drawings.

3.2.6.2. Avoid lapping bars wherever possible.

3.2.6.3. Wire Mesh: Lap adjoining pieces at least one full mesh and lace splices with wire. Offset end laps in adjacent widths to prevent continuous laps in either direction.

3.2.7. On exterior exposed work, no ties or spacers shall be permitted to remain within 3/4" of the finished surfaces. Place reinforcement to obtain at least minimum coverage for protection. Set wire ties so ends are directed into concrete, not toward surfaces.

3.2.8. Holes for ties and spacers shall be patched with an approved polymer patching mortar immediately after stripping forms.

3.2.9. Install welded wire fabric in longest practicable lengths.

3.2.10. Unless otherwise specified or called for, provide the following minimum reinforcing:

3.2.10.1. 1 #3 bar in each concrete stair nosing (except metal pan stairs).

3.3. Forms:

3.3.1. Forms shall conform to the shapes, lines, and dimensions of the member as shown in the Drawings, and shall be substantial, mortar tight, free from surface defects, and properly braced and tied together, so as to maintain position and shape. All form-work shall be in accordance with ACI 347.

3.3.2. Forms shall be closely fitted to produce smooth, clean surfaces without fins or offsets.

3.3.3. Plywood shall be oiled or lacquered before reinforcing is placed. Oil shall be non-staining mineral oil.

3.3.4. Column forms shall be secured with external yokes. Banding with steel tape is not permitted.

3.3.5. Provide openings in concrete form-work to accommodate work of other trades. Determine size and location of openings, recesses, and chases from trades providing such items. Accurately place and securely support items built into forms.

3.3.6. Thoroughly clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt or other debris just before concrete is placed. Re- tighten forms and bracing before concrete placement as required to eliminate mortar leaks and maintain proper alignment.

3.4. Installation of Vapor Barrier:

3.4.1. Level and tamp or roll aggregate, sand or tamped earth base.

3.4.2. Installation of vapor barrier shall be in accordance with manufacturer's instructions and ASTM 1643-98.

3.4.3. Unroll vapor barrier with the longest dimension parallel with the direction of the pour.

3.4.4. Lap vapor barrier over footings and seal to foundation wall.

3.4.5. Overlap joints 6 inches and seal with manufacturer's tape or approved equal.

3.4.6. Seal all penetrations (including pipes) per manufacturer's instructions.

3.4.7. No penetration of the vapor barrier is allowed except for reinforcing steel and permanent utilities.

3.4.8. Repair damaged areas by cutting patches of vapor barrier, overlapping damaged area 6 inches and taping all sides with manufacturer's tape or approved equal.

3.5. Installation of Embedded Items

3.5.1. Set and build into work anchorage devices and other embedded items required for other work that is attached to, or supported by cast-in-place concrete. Use setting drawings, diagrams, instructions and directions provided by suppliers of items to be attached.

3.6. Concrete Placement

3.6.1. Comply with ACI 304 "Recommended Practice for Measuring, Mixing, Transporting, and Placing Concrete", and as herein specified.

3.6.2. Cold Weather Placement:

3.6.2.1. Comply with ACI 306R as follows:

3.6.2.1.1. When the air temperature has fallen to or is expected to fall below 40 degrees F, uniformly heat water and aggregates before mixing to obtain a concrete mixture of not less than 50 degrees F. Obtain Publix Engineer's approval if an accelerating admixture will be used.

3.6.2.1.2. Do not place concrete on frozen ground, ice or snow.

3.6.2.1.3. Provide means for maintaining concrete temperature above 50 degrees F and in a moist condition for 7 days after placement. If an accelerating mixture is used, maintain the concrete temperature above 50 degrees F and in a moist condition for 4 days. Obtain Publix Engineer's approval for the methods proposed for heating materials and protecting concrete. All heaters shall be vented to the outside of the building.

3.6.2.1.4. After the protection period, cooling of the concrete shall be no faster than 1 degree F per hour for the first day, and 2 degrees F per hour thereafter.

3.6.3. Hot Weather Placement:

3.6.3.1. Comply with ACI 305 when mean daily temperatures are expected to exceed 80 F. Concrete shall be delivered to the forms at the coolest practicable temperature. Concrete mixes shall be specifically designed (or re-designed) for hot weather conditions.

3.6.3.2. Concrete placement will not be permitted when, weather conditions would prevent proper placement.

3.6.3.3. During hot weather, all slabs shall be cured by continuous sprinkling for a minimum of 24 hours in addition to other required curing methods.

3.6.3.4. Additional control joints may be required to control shrinkage cracking.

3.6.3.5. Cool ingredients before mixing to maintain concrete temp. at time of placement below 90 F (32 C). Mixing water may be chilled, or chopped ice may be used to control temperature provided water equivalent of ice is calculated in total amount of mixing water.

3.6.3.6. Do not add water to concrete at Job Site.

3.6.3.7. Cover reinforcing steel with water soaked burlap if it becomes too hot, so that steel temperature will not exceed the ambient air temperature immediately before concrete is placed.

3.6.3.8. Fog spray forms, reinforcing steel, and subgrade just before concrete is placed.

3.6.3.9. Use water reducing admixture when required by high temperatures, low humidity, or other adverse placing conditions, when acceptable to Engineer.

3.6.4. When concreting operations are inside enclosed space, space shall be adequately ventilated to prevent carbonation of surface of concrete. Ventilation shall be continuous until 24 hours after final pour in area.

3.6.5. Deposit concrete continuously or in layers of such thickness that no concrete will be placed on concrete which has hardened sufficiently to cause the formation of seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as herein specified. Deposit concrete to avoid segregation at its final location. deposit concrete as near as practicable to its final position. There shall be no free vertical drop greater than 8 feet.

3.6.6. Deposit concrete in forms in horizontal layers no deeper than 24 inches and in a manner to avoid inclined construction joints. Where placement consists of several layers, place each layer while preceding layer is still plastic, to avoid cold joints.

3.6.6.1. Consolidate placed concrete by mechanical vibrating equipment supplemented by hand-spading, rodding or tamping. Use equipment and procedures for consolidation of concrete in accordance with ACI 309.

3.6.6.2. Do not use vibrators to transport concrete inside forms.

3.6.6.3. Insert and withdraw vibrators vertically at uniformly spaced locations not farther than visible effectiveness of machine. Place vibrators to rapidly penetrate placed layer and at least 6 inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to set. At each insertion, limit duration of vibration time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing segregation of mix.

3.6.7. Deposit and consolidate concrete slabs in a continuous operation, within limits of construction joints, until the placing of a panel or section is completed.

3.6.7.1. Consolidate concrete during placing operations so that concrete is thoroughly worked around reinforcement and other embedded items and into corners.

3.6.7.2. Bring slab surfaces to correct level with straightedge and strike off. Use bull floats or darbies to smooth surface, free of humps or hollows. Do not disturb slab surfaces prior to beginning finishing operations.

3.6.7.3. Maintain reinforcing in proper position during concrete placement operations.

3.7. Tolerances and Alignment, General:

3.7.1. Conform to ACI 117 "Standard Specifications for Tolerances for Concrete Construction and Materials."

3.7.2. For all formed concrete work exposed to view, provide form and finish tolerances to ACI Class A requirements.

3.7.3. Floor finish tolerances as measured by placing a freestanding (unleveled) 10' straightedge anywhere on the slab and allowing it to rest upon two high spots within 72 hours after slab concrete placement. The gap at any point between the straightedge and the floor (and between the high spots) shall not exceed 3/16" (flat tolerance) but no more than 1/4" in any 20' length unless tighter tolerance is required below.

3.7.4. Variation of the linear building lines from established position in plan and related position of columns, walls and partitions:

In any bay	1/4"
In any 20' length	1/4"
Maximum for entire length	3/8"

3.7.5. Variation in the sizes and location of sleeves, floor openings, and wall openings: 1/4"

3.7.6. Variation in the thickness of slabs: 1/4"

3.7.7. Variations in footings:

In plan	1"
Eccentric misplacement	2% of width but <2"
Thickness	5% of depth but <2"

3.7.8. Variations in steps:

Flight	Rise 3/8"
	Run 3/8"
Adjacent steps	Rise 3/16"
	Run 3/16"

3.8. Concrete Curing and Protection

3.8.1. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. In hot, dry, and windy weather, protect concrete from rapid moisture loss before and during finishing operations with an evaporation- control material. Apply in accordance with manufacturer's instructions after screeding and bull floating, but before power floating and troweling.

3.9. Procedures for curing of concrete surfaces include the following:

See floor finishes below this section, for applicable locations.

3.9.1. Moisture curing procedures:

3.9.1.1. Initiate curing as soon as free water has disappeared from concrete surface after placing and finishing.

3.9.1.2. Keep concrete surface continuously moist for no less than 7 days. Temperature of water used in curing shall be within 20 F of the concrete temperature. Approved methods of wet curing include water-fog spray, sprinkling and absorptive curing blankets. No plastic sheets allowed. Place absorptive cover to provide coverage of concrete surfaces and edges, after finishing operations are complete.

3.9.2. Curing and hardening compound procedure:

3.9.2.1. Apply specified curing and hardening compound to slab surface as soon as final finishing operations are complete (within 2 hours and after surface water sheen has disappeared). Apply uniformly in continuous operation by power spray or roller in accordance with manufacturer's directions. Recoat areas subjected to heavy rainfall within 3 hours after initial application. Maintain continuity of coating and repair damage during curing period.

3.9.2.2. If applicable, verify that the curing compound not affect bonding properties of surfaces to be covered with finish materials applied directly to concrete.

3.9.3. Emery Aggregate Dry Shaker Hardener procedure:

3.9.3.1. Refer to the manufacturer's recommendations.

3.9.3.2. Two applications to slab surfaces at a combined rate of 70 lbs. per 100 s.f., or per the manufactures recommendations. Acceptable bond and density is achieved through absorption of water from fresh underlying concrete.

3.9.3.3. After bleed water of first floating operation has dissipated from surface of concrete, uniformly distribute approximately two-thirds of the required weight of the Dry-Shake material over the concrete surface. Embed by mechanical floating or by hand floating. Do not trowel first application.

3.9.3.4. Before bleed water dissipates entirely, uniformly apply most of the remaining Dry-Shake material over the concrete surface, using overlapping applications as required to achieve uniform color. Embed by floating and troweling. Minimize hard troweling to avoid burnishing the slab. Retain a small quantity of dry-shake material for touch-up work.

3.10. Interior Broom-Finished Slabs: All interior floor slabs which are depressed to receive Cement Terrazzo or Hard Tile (if using Epoxy Terrazzo, see spec 09 23 16).

3.10.1. Heavy broom finish slabs to a surface which is level within a tolerance as described above.

3.10.2. Do not use any curing, sealing, or hardener compound on this slab.

3.10.3. Only use moist curing for slabs to receive terrazzo or hard tile.

3.11. Interior Trowel-Finished Slabs: All interior floor slabs, where the concrete surface is the finished surface. (if using Polished Concrete Floor, see spec 03 31 00 for concrete mix design requirements AND spec 03 54 30 for the polished concrete finish).

3.11.1. Apply Emery-Aggregate Dry-Shake Hardener, per manufacturer's instructions.

3.11.2. Steel trowel slabs to a smooth, hard, dense, non-porous surface which is level within a tolerance as described above. Trowel slab down smooth with the tops of floor drains and even with clean-outs.

3.12. Interior Troweled-VCT Finish Slabs: All interior floor slabs, where the concrete surface is covered by vinyl tile.

3.12.1. Steel trowel slabs to a smooth, hard, dense, non-porous surface which is level within a tolerance as described above. Trowel slab down 1/8 inch below floor drains where vinyl tile occurs.

3.12.2. Only use moist curing for slabs to receive vinyl tile flooring (VCT).

3.13. Exterior Slabs:

3.13.1. Concrete sidewalks, ramps, docks, and pads shall have a cure and hardener compound. Slope sidewalks to drain away from building.

3.13.2. Ramps at front of store shall have a heavy broom finish. All other sidewalks and ramps shall have a medium broom finish. Verify sample of "heavy" and "medium" broom finishes with Publix' Representative.

3.13.3. Curbs: Poured concrete 6" x 18" with #4 bar top and bottom. Place tops of curbs exactly 8" above parking lot finished pavement. No pre-cast curbs shall be used.

3.13.4. Do not apply compounds to curbs.

3.14. Exposed Concrete Formed Surfaces

3.14.1. Imperfect surfaces where strength is not impaired may be patched with the specified polymer patching mortar if approved by the Engineer and rubbed smooth with carborundum brick.

3.14.2. Fins shall be removed and the entire concrete surface shall receive a "smooth rubbed finish" as per ACI 301.

3.14.3. All finishing shall take place immediately upon removal of the forms. Defective appearance caused by a delay in the finishing procedure will not be accepted. Rubbing the surface to cover such imperfections will not be allowed.

3.14.4. Cure formed concrete surfaces, including underside of beams, and other similar surfaces by moist curing with forms in place for full curing period or until forms are removed.

3.15. Removal of Forms

3.15.1. Form-work not supporting weight of concrete, such as sides of beams, walls, columns, and similar parts of the work, may be removed after cumulatively curing at not less than 50 F (10 C) for 24 hours after placing concrete, provided concrete is sufficiently hard that no damage will occur by form removal operations, and provided that curing and protection operations are continued.

3.15.2. Immediately after forms have been removed, all exposed tie wires and stapled ends shall be removed from the concrete surfaces to be exposed; cut ties flush with finished surfaces of all other concrete. rub smooth or cut off fins and rough places; remove all loose concrete and fill honeycombed surfaces; stone pockets; and other irregularities with cement mortar. Do not patch any surfaces until examination has been made by Publix Representative and permission given. Before Publix makes the next inspection for pouring concrete, all previously poured concrete must be pointed up.

3.16. Reuse of Forms

3.16.1. Clean and repair surfaces of forms to be reused in work. Split, frayed, delaminated, or otherwise damaged form facing material will not be acceptable for exposed surfaces. Apply new form coating compound as specified for new form-work.

3.16.2. When forms are extended for successive concrete placement, thoroughly clean surfaces, remove fins and laitance, and tighten forms to close joints. Align and secure joints to avoid offsets. Do not use "patched" forms for exposed concrete surfaces.

End of Section 03 30 00

Section 04 20 00
Unit Masonry
V01242020

1. General

1.1. Related Documents: Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2. Summary: This Section includes the following:

1.2.1. Concrete unit masonry.

1.2.2. Related Sections:

Section 03 30 00 Cast-in-Place Concrete

1.3. Submittals

1.3.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

1.3.2. Material certificates signed by manufacturer certifying that Concrete masonry units comply with UL classification requirements and block strength requirements.

1.3.3. Shop drawings for reinforcing, detailing fabrication, bending, and placement of unit masonry reinforcing bars. Comply with ACI 315 "Details and Detailing of Concrete Reinforcing", showing bar schedules, stirrup spacing, diagrams of bent bars, and arrangement of masonry reinforcement.

1.3.4. Comply with applicable provisions of Section 03 30 00 Cast-in-Pace Concrete for submittals of grout mix design, etc.

1.4. Quality Assurance

1.4.1. Unit Masonry Standard: Comply with TMS 602 "Specifications for Masonry Structures," except as otherwise indicated.

1.4.2. Single-Source Responsibility for Masonry Units: Obtain exposed masonry units of uniform texture and color, or a uniform blend within the ranges accepted for these characteristics, from one manufacturer for each different product required for each continuous surface or visually related surfaces.

1.4.3. Single-Source Responsibility for Mortar Materials: Obtain mortar ingredients of uniform quality, including color for exposed masonry, from one manufacturer for each cementitious component and from one source and producer for each aggregate.

1.4.4. Insulation: Installation shall be performed by Insulation Manufacturer's authorized Applicator. Certificate of Authorization shall be supplied upon request.

1.4.5. Insulation: Publix may retain the services of a testing organization to perform testing necessary to confirm installation conformance to standards specified.

1.5. Delivery, Storage, and Handling

1.5.1. Deliver masonry materials to project in undamaged condition.

1.5.2. Store and handle masonry units off the ground, under cover, and in a dry location to prevent their deterioration or damage due to moisture, temperature changes, contaminants, corrosion, and other causes. If units become wet, do not place until units are in an air-dried condition.

1.5.3. Store cementitious materials off the ground, under cover, and in dry location.

1.5.4. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.

1.5.5. Store masonry accessories including metal items to prevent corrosion and accumulation of dirt and oil.

1.6. Project Conditions

1.6.1. Protection of Masonry: During erection, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work. Cover partially completed masonry when construction is not in progress.

1.6.2. Extend cover a minimum of 24 inches down both sides and hold cover securely in place. Where one wythe of multi-wythe masonry walls is completed in advance of other wythes, secure cover a minimum of 24 inches down face next to unconstructed wythe and hold cover in place.

1.6.3. Do not apply uniform floor or roof loads for at least 12 hours and concentrated loads for at least 3 days after building masonry walls or columns.

1.6.4. Stain Prevention: Prevent grout, mortar, and soil from staining the face of masonry to be left exposed or painted. Remove immediately all grout, mortar, and soil that come in contact with such masonry.

1.6.5. Protect base of walls from rain-splashed mud and mortar splatter by means of coverings spread on ground and over wall surface. Protect sills, ledges, and projections from mortar droppings. Protect surfaces of window and door frames, as well as similar products with painted and integral finishes from mortar droppings.

1.6.6. Cold-Weather Construction:

1.6.6.1. Comply with referenced unit masonry standard for cold-weather construction and the following:

1.6.6.2. Do not lay masonry units that are wet or frozen. Remove masonry damaged by freezing conditions.

1.6.7. Hot-Weather Construction: Comply with referenced unit masonry standard.

2. Products

2.1. Concrete Masonry Units:

2.1.1. General: Comply with requirements indicated below applicable to each form of concrete masonry unit required.

2.1.2. Exterior Exposed Faces: Provide a sand finish suitable for painting. Contractor shall also coordinate with canopy drawings to determine if CMUs are to be painted.

2.1.3. Size: Provide concrete masonry units sized within tolerances specified in the applicable referenced ASTM specification for concrete masonry units.

2.1.3.1. Concrete Masonry Units:

Manufactured to specified dimensions of 3/8 inch less than nominal dimensions indicated on drawings.

2.1.3.2. Concrete Building Brick: As job conditions require.

2.1.4. Hollow Concrete Masonry Units: ASTM C 90, Grade N and as follows:

2.1.4.1. Unit Compressive Strength: Provide units with minimum average net area compressive strength of 1900 psi.

2.1.4.2. Weight Classification: As selected by Contractor unless otherwise indicated.

2.1.4.3. Masonry units must be minimum 2 hour rated, per equivalent thickness method.

2.2. Mortar Materials:

2.2.1. General: Comply with ASTM C 270, Property Specification for job-mixed mortar and ASTM C 1142 for ready-mixed mortar.

2.2.1.1. Limit cementitious materials in mortar to portland cement-lime.

2.2.1.2. Use Type S for all applications

2.2.2. Portland Cement: ASTM C 150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color cement as required to produce required mortar color.

2.2.3. Ready-Mixed Mortar: Cementitious materials, water, and aggregate complying with requirements specified in this article, combined with set-controlling admixtures to produce a ready-mixed mortar complying with ASTM C 1142.

2.2.4. Hydrated Lime: ASTM C 207, Type S.

2.2.5. Aggregate for Mortar: ASTM C 144

2.2.6. Water: Clean and potable.

2.3. Grout Materials for Reinforced Masonry

2.3.1. Comply with ASTM C476, "Standard Specifications for Grout for Masonry"

2.3.2. Provide coarse grout pump mix for filled cells as follows:

2.3.2.1. 3000 psi 28 day design strength. Use 500 lbs. cement minimum.

2.3.2.2. No cement replacement allowed. (No fly ash, slag, silica fume).

2.3.2.3. Aggregate size: 3/8" pea gravel (ASTM gradation 8 or 89).

2.3.2.4. Slump Limits: 8" to 10" at point of placement.

2.3.2.5. Filled cell mix must be from a ready-mix supplier, not site mixed.

2.4. Reinforcing Steel:

2.4.1. General: Provide reinforcing steel complying with requirements of referenced unit masonry standard, Section 03300 Cast-in-Place Concrete, and this article.

2.4.2. Steel Reinforcing Bars: Billet steel complying with ASTM A 615, Grade 60.

2.4.3. Deformed Reinforcing Wire: ASTM A 496.

2.4.4. Plain Welded Wire Fabric: ASTM A 185.

2.4.5. Deformed Welded Wire Fabric: ASTM A 497.

2.5. Joint Reinforcement:

2.5.1. General: Provide joint reinforcement complying with requirements of referenced unit masonry standard and this article, formed from the following:

2.5.2. Galvanized carbon steel wire, coating class as required by referenced unit masonry standard for application indicated.

2.5.3. Welded-wire units prefabricated with deformed continuous side rods and plain cross rods into straight lengths of not less than 10 feet, with prefabricated corner and tee units, and complying with requirements indicated below:

2.5.3.1. Wire Diameter for Side Rods: 0.1483 inch (9 gage).

2.5.3.2. Wire Diameter for Cross Rods: 0.1483 inch (9 gage).

2.5.4. For single-wythe masonry provide continuous ladder type rods spaced not more than 16 inches O.C. and single pair of side rods

2.5.5. Use units with adjustable 2-piece rectangular ties where horizontal joints of facing wythe do not align with those of backup and where indicated.

2.5.6. Manufacturers: Subject to compliance with requirements, provide joint reinforcement by one of the following:

Hohmann & Barnard, Inc.

Masonry Reinforcing Corp. of America.

2.6. Ties and Anchors:

2.6.1. General: Provide ties and anchors specified in subsequent articles that comply with requirements for metal and size of referenced unit masonry standard and of this article.

2.6.2. Galvanized Carbon Steel Wire: ASTM A 82, coating class as required by referenced unit masonry standard for application indicated. Wire Diameter: As indicated.

2.6.3. Galvanized Steel Sheet: ASTMA 366 (commercial quality) cold-rolled carbon steel sheet hot-dip galvanized after fabrication to comply with ASTM A 153, Class B2 (for unit lengths over 15 inches) and Class B3 (for unit lengths under 15 inches), thickness as indicated.

2.6.4. Steel Plates and Bars: ASTM A 36, hot-dip galvanized to comply with ASTM A 123 or ASTM A 153, Class B3, as applicable to size and form indicated.

2.7. Cavity Caps: Plastic or stamped metal, galvanized.

2.8. Embedded Flashing: Provide where indicated.

2.9. Miscellaneous Masonry Accessories:

2.9.1. Preformed Control Joint Gaskets: Styrene-Butadiene Rubber Compound, ASTM D 2000, Designation 2AA-805.

2.9.2. Bond Breaker Strips: Asphalt-saturated organic roofing felt complying with ASTM D 226, Type I (No. 15 asphalt felt).

2.9.3. Geotextile Fabric for Weep Holes: TenCate Mirafi 140N

3. Products

3.1. Examination:

3.1.1. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other specific conditions, and other conditions affecting performance of unit masonry.

3.1.2. Examine rough-in and built-in construction to verify actual locations of piping connections prior to installation.

3.1.3. Do not proceed until unsatisfactory conditions have been corrected.

3.2. Installation, General:

3.2.1. Comply with referenced unit masonry standard and other requirements indicated applicable to each type of installation included in Project.

3.2.2. Thickness: Build cavity and composite walls and other masonry construction to the full thickness shown. Build single-wythe walls to the actual thickness of the masonry units, using units of nominal thickness indicated.

3.2.3. Build chases and recesses as shown or required to accommodate items specified in this and other Sections of the Specifications. Provide not less than 8 inches of masonry between chase or recess and jamb of openings and between adjacent chases and recesses unless otherwise indicated.

3.2.4. Leave openings for equipment to be installed before completion of masonry work. After installation of equipment, complete masonry to match construction immediately adjacent to the opening.

3.2.5. Cut masonry units with motor-driven saws to provide clean, sharp, unchipped edges. Cut units as required to provide continuous pattern and to fit adjoining construction. Use full-size units without cutting where possible.

3.2.6. Matching Existing Masonry: Match coursing, bonding, color, and texture of new masonry with existing masonry.

3.3. Construction Tolerances: Comply with construction tolerances of referenced unit masonry standard.

3.4. Laying Masonry Walls:

3.4.1. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint widths and for accurate locating of openings, movement-type joints, returns, and offsets. Avoid the use of less-than-half-size units at corners, jambs, and where possible at other locations.

3.4.2. Lay up walls to comply with specified construction tolerances, with courses accurately spaced and coordinated with other construction.

3.4.3. Bond Pattern for Masonry: Lay masonry in running bond pattern with vertical joint in each course centered on units in courses above and below.

3.4.4. Do not use units with less that nominal 4-inch horizontal face dimensions at corners or jambs.

3.4.5.

3.11. Insulation Installation:

3.11.1. Comply with manufacturer's installation instructions. Fill all cells full height of wall.

3.11.2. If required, punch through interior face shell of block to obtain access to cells. Patch holes to match surrounding face of block so that, when painted, the patch is as inconspicuous as possible.

3.11.3. Completed installation shall be at least 98% filled.

3.12. Repairing, Pointing, and Cleaning:

3.12.1. Remove masonry units that are loose, chipped, broken, stained, or otherwise damaged. Install new units to match adjoining units in fresh mortar or grout, pointed to eliminate evidence of replacement.

3.12.2. Pointing: During the tooling of joints, enlarge any voids or holes, except weep holes, and completely fill with mortar. Point-up all joints including corners, openings, and adjacent construction to provide a neat, uniform appearance, prepared for application of sealants.

3.12.3. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:

3.12.3.1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.

3.12.3.2. Test cleaning methods on sample wall panel; leave 1/2 panel uncleaned for comparison purposes. Obtain Architect's approval of sample cleaning before proceeding with cleaning of masonry.

3.12.3.3. Protect adjacent stone and non-masonry surfaces from contact with cleaner by covering them with liquid strippable masking agent, polyethylene film, or waterproof masking tape.

3.12.3.4. Wet wall surfaces with water prior to application of cleaners; remove cleaners promptly by rinsing thoroughly with clear water.

3.12.3.5. Clean concrete masonry using dilute muriatic acid.

3.12.3.6. Protection: Provide final protection and maintain conditions, in a manner acceptable to Installer, that ensure unit masonry is without damage and deterioration at time of Substantial Completion.

End of Section 04 20 00

Section 04 21 00
Interlocking Brick Pavers
V07022019

1. General

1.1. Related Documents: Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2. Summary: This Section includes the following:

1.2.1. Interlocking Brick Pavers.

1.2.2. Related Sections:

Section 03 30 00 Cast-in-Place Concrete

Section 04 20 00 Unit Masonry

1.3. Submittals:

1.3.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

1.3.2. Submit Product Literature to prove compliance with specified requirements.

1.4. Quality Assurance

1.4.1. Use adequate numbers of skilled laborers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

1.4.2. Insulation: Publix may retain the services of a testing organization to perform testing necessary to confirm installation conformance to standards specified.

1.5. Delivery, Storage, and Handling

1.5.1. Deliver masonry materials to project in undamaged condition.

1.5.2. Store and handle Brick units off the ground, under cover, and in a dry location to prevent their deterioration or damage due to moisture, temperature changes, contamination, corrosion, and other causes. If units become wet, do not place until units are in an air-dried condition.

2. Products

2.1. Interlocking Brick Paver Units:

2.1.1. Provide interlocking Clay Pavers complying with ASTM C 902

2.1.2. 2 ¼"x4"x8" Non-beveled, flat edge paver. Unit weight: 6.5 lbs., Units/cube = 380, 84 square foot per package.

2.2. Materials

2.2.1. Aggregates: Comply with ASTM C33, washed, graded sand and natural aggregates, no expanded shale or lightweight aggregates. Mason sand not accepted

2.2.2. Joint Filler/Sweeping Sand: ASTM C144, fine aggregate masonry sand..

2.2.3. Clay pavers shall have SandLOCK joint sand stabilizer mixed in the sand before it is swept into the paver joints.

2.2.4. Filter/Separator Fabric: a) Celanese Corp. "Mirafi"; b) E. I. DuPomt de Nemours and Co. "Typar"; c) International Paper Co, "Confil"

2.2.5. Pedestrian Areas and Vehicular Traffic Areas: JDR Enterprises "J-Drain 1000" double sided drainage composite with filter fabric bonded to one side of the drainage core.

2.2.6. Expansion Joint Filler: Polyethylene closed-cell backing (min ¼" thick) with Sonolastic joint Sealant, as manufactured by BASF.

2.3. Bituminous Setting Bed for interlocking pavers shall be made from the following materials:

2.3.1. Techniseal Dribond: Advanced Dry Mudset for Concrete Overlays

2.3.1.1. Dry Application, Polymer-Modified

2.3.1.2. ASTM C579, Compressive Strength: 6,850psi

----------OR----------

2.3.2. Asphalt cement to be used on the bituminous setting bed shall conform to ASTM Designation D-3381 the viscosity grade A.C. 10 or A.C. 20.

2.3.3. The fine aggregate to be used in the bituminous setting bed shall be clean, hard sand with durable particles and free from adherent coatings, lumps of clay, alkali salts and organic matter. It shall be uniformly grades from "course" to "fine" and all passing the No. 4 sieve and meet the gradation requirements when tested in accordance with the standard of test for sieve or screen analysis of fine and course aggregates ASTM Designation C-136-81.

2.3.4. The dried fine aggregate shall be combined with hot asphalt cement, and the mix shall be heated to approximately 300 degrees F at an asphalt plant. The approximate proportion of materials shall be seven (7) percent asphalt cement and ninety-three (93) percent fine sand. Each ton shall be apportioned by weight in the approximate ratio of 145 pounds asphalt to 1,855 pounds of sand. The contractor shall determine the exact proportions to produce the best possible mixture for construction of the bituminous setting bed to meet construction requirements.

2.3.5. Neoprene-Modified Asphalt Adhesive Under Interlocking pavers:

Mastic (asphalt adhesive):	
Solids (base)	75+1%
Pounds/Gallons	8-8.5 pounds
Solvent	Varsol (over 100 F. Flash)
BASE (2% Neoprene, 10% fibers, 88% Asphalt):	
Melting Point – ASTM D-36	200 F.Min.
Penetration.77 F. 100 Gram Load five Second (.1mm)	23-27
Ductility-ASTM D-113-44 at 25 C. 5cm/per minute	125cm Min

2.4. Joint filler for interlocking clay pavers: Sand and SandLOCK joint sand stabilizer should be used.

3. Execution

3.1. SURFACE CONDITIONS:

3.1.1. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2. INSTALLATION:

3.2.1. Concrete Base Slab: A minimum of four (4) inch deep concrete slab must be constructed in accordance with state and local road specifications. To aid drainage, provide 1/2 inch diameter drainage holes, through concrete slab, spaced not more than 24-inches on center at low points of slab while it is being poured. Fill holes with fine crushed gravel and cover with filter fabric. Provide weep holes 24-inches on center at all concrete curb and wall interfaces.

3.2.2. Vehicular Traffic: If there is to be vehicular traffic over the interlocking clay pavers, prime the concrete slab with emulsified asphalt (RS-1 or CRS-1) prior to the installation of the bituminous setting bed.

3.3. Placing bituminous setting bed for interlocking pavers.

3.3.1. To install the setting bed over the concrete base, place ½" deep control bars directly over the base. Grade must be adjusted by placing plastic shims under depth control bars to proper grade. Set two bars parallel to each other approximately nine foot six inches (9'-6") apart to serve as guides for striking board (10'x2"x4"). The depth control bars must be set carefully to bring the pavers, when laid, to proper grade.

3.3.2. Place some bituminous bed between the parallel depth control bars. Pull this bed with the striking board over these bars several times. After each passage, low porous spots must be showered with fresh bituminous material to produce a smooth, firm and even setting bed. As soon as this initial panel is completed, advance the first bar to the next position, in readiness for striking the next panel. Joints in masonry walls shall be 3/8" (nom.) thick.

3.3.3. Carefully fill up any depressions that remain after removing the depth control bar and plastic shims while asphalt is still hot and before compaction.

3.3.4. The setting bed shall be rolled with a power roller to a nominal depth of ¾" while still hot. Tool head joints before tooling intersecting horizontal joints.

3.3.5. Provide Neoprene-Modified Asphalt Adhesive top layer between bituminous setting bed and Interlocking pavers.

3.3.6. The composite thickness shall be adjusted so that when the interlocking pavers are placed, the top surface of the pavers will be at the required finished grade, approximately 3/16" above the adjacent surface.

3.3.7. Note: Do not roll the setting bed when installing concrete slabs (pavers) over 12" square.

3.3.8. After the neoprene modified asphalt adhesive is applied, carefully place the pavers by hand in straight courses with hand tight joints and uniform top surface with uniform 1/16-inch side and end joints. Good alignment must be kept, and pattern shall be that shown on the plans.

3.3.9. When required, cut pavers with an approved power driven cutter to fit accurately, neatly and without damage edges.

3.3.10. Expansion Joints:

3.3.10.1. Expansion Joints are to be placed at all joints between dissimilar materials (paver / concrete curb, paver / wall, paver / concrete band). Provide polyethylene closed-cell backing (min ¼" thick) with Sonolastic joint Sealant at each joint.

End of Section 04 21 00

Section 05 12 00
Structural Steel Framing
V05202015

1. General

1.1. Scope of Work

1.1.1. Furnish all materials, labor, equipment and services necessary and incidental to complete installation of structural steel work indicated, implied on contract drawings, or as specified.

1.1.2. The Contractor shall cooperate with other trades regarding installation of associated work as needed to support HVAC units, fans, and other rooftop equipment, roof penetration frames for plumbing, and other items requiring support from the steel structure.

1.2. Qualifications:

1.2.1. Fabricator: Not less than 5 years experience in fabrication of structural steel for projects of similar scope.

1.2.2. Steel Erector: Not less than 5 years experience in the erection of structural steel structures of similar magnitude of the proposed structure.

1.3. References: The following specifications, codes and standards of current issue (hereafter referred to by acronym or alpha/numeric designation only) form a part of this specification:

1.3.1. The American Institute of Steel Construction:

1.3.1.1. AISC "Specification for the Design, Fabrication and Erection of Structural Steel for Building".

1.3.1.2. AISC "Code of Standard Practice".

1.3.1.3. "Structural Joints Using ASTM A325 or A490 Bolts", approved by the Research Council on Rivet and Bolted Structural Joint.

1.3.1.4. AISC "Code of Standard Practice for Steel Buildings and Bridges".

1.3.1.4.1. Paragraph 4.2.1 of the above code is hereby modified by the deletion of the following sentence: "This approval constitutes the Owner's acceptance of all responsibility for the design adequacy of any connections designed by the fabricator as part of his preparation of these shop drawings."

1.3.2. American Welding Society:

1.3.2.1. AWS, "Structural Welding Code"

1.3.2.2. AWS, "Welding Symbols"

1.3.2.3. AWS, "Gas Metal-Arc Welding with CO2 Shielding"

1.3.2.4. AWS, "Non-Destructive Testing Symbols"

1.3.3. American Society of Testing Materials (ASTM)

1.3.3.1. A6, "General Requirements of Delivery"

1.3.3.2. A325, H.S. Bolts

1.4. Submittals:

1.4.1. Provide Submittals in accordance with Section 01 33 00 Submittal Procedures.

1.4.2. Shop Drawings and Steel Reports: At least two weeks prior to steel fabrication, submit Shop Drawings, prepared under the supervision of a Professional Engineer, together with copies of the metallurgical test reports (mill reports), purchase orders for all steel, and other data to show compliance with specifications.

1.4.3. Indicate all shop erection details, including cuts, copes connections, holes, bolts, welds, and preparation required, such as bevels, testing and backup bars. Indicate all welds, both shop and field, by AWS "Welding Symbols", A2.0, latest edition.

2. Products

2.1. Materials:

2.1.1. All material shall be new, clean and free from scale or rust. Conform to applicable ASTM designations as described in the most current AISC specifications.

2.1.2. Steel Beams: ASTM A992, Fy=50 ksi.

2.1.3. Steel Tube Columns: HSS shall be ASTM A500, Grade B, Fy=46 ksi.

2.1.4. Round Pipe Columns: ASTM A53, Grade B, Fy=35 ksi.

2.1.5. Steel plates, channels, bars and angles: ASTM A36

2.1.6. Bolts:

2.1.6.1. Structural Bolts: ASTM A325, Type 1

2.1.6.2. "Twist-Off" Type Tension Control Bolt Assemblies: ASTM F1852 LeJeune Tension Control Bolts.

2.1.7. Arc Welding Electrodes: E70 Series.

2.1.8. Grout: Non-Metallic shrink-resistant, complying with U.S.A Corps. Of Engineers CRD-C-621 and CRD-C-588.

NS Grout, Euclid Chemical Company
Crystex, L&M Construction Chemicals
Masterflow 713, Master Builders
Five Star Grout, U.S. Grout Corp.
Propak, Protex Industries, Inc.
Construction Grout, BASF
Vibropruf No. 11, Lambert Corp.

2.1.9. Primer: Manufacturer's standard shop primer, unless otherwise noted.

3. Execution

3.1. Design and Fabrication of Structural and Miscellaneous Steel:

3.1.1. In general, AISC Specification shall be followed.

3.1.2. In general, all shop and field connections shall be bolted in accordance with the specifications of the AISC., unless otherwise indicated.

3.1.3. All connections shall be designed to develop the full strength of the beam section shear. All erection bolts shall be set up-right and left in place. Bolted connections carrying stress shall have washers under all nuts, and full grip with nuts torqued tight as required, conforming to "Specification for Structural Joints using ASTM A325 Bolts".

3.1.4. Bolts shall have full shanks extended through connecting members.

3.1.5. Shearing and clipping shall be neatly and accurately done. No column splices are permitted. No splices are permitted in beams, except for field connections indicated.

3.1.6. All bolt holes are to be accurately drilled or punched perpendicular to metal surface. The pieces forming one built member shall be straight and fit closely together, especially where open to view. In compression joints, depending on contact bearing, the surfaces shall be truly faced, so as to have even bearing after adjoining members are aligned and set up complete. Continuous members shall have positive, full connections.

3.1.7. Do not flame-cut or enlarge holes by burning.

3.1.8. Fabricate and assemble structural steel in shop to greatest extent possible.

3.2. All milled surfaces shall be protected with a coating of heavy oil or grease.

3.3. Provide all anchor bolts and plates at all steel columns of a size as shown or detailed on the structural drawings, or as required for maximum load of columns, per AISC.

3.4. Welding:

3.4.1. In general, all welding shall conform to the requirements of the Code for Arc and Gas Welding in Building Construction as prescribed by the American Welding Society as amended to date.

3.4.2. Welding shall be performed by welders currently qualified under AWS standard qualification procedures to perform the type of work required. Proof of current AWS certification of personnel shall be available at the fabrication shop and at the job site at all times.

3.5. Shop Painting: All steel work shall be thoroughly cleaned of all loose mill scale, rust, and foreign matter as directed in SSPC-SP #3 Specification for Power Tool Cleaning, and given one coat of primer. Primer shall be well worked into all joints. Prime only when surface metal is dry and grease free. Comply with Steel Structures Painting Council (SSPC)-3. Thickness of coatings shall be 2.5 mil.

3.6. Miscellaneous Steel:

3.6.1. Pipe Railings: 1-1/2" diameter Standard Pipe; all welded connections. All pipe railing shall be galvanized after fabrication.

3.6.2. Furnish and install all hangers and channels for curtain walls.

3.7. Furnish the following items for installation by proper trades.

Channel door frames;
Corner guards;
6" pipe columns for door and downspout guards;
Traffic posts.

3.8. Installation:

3.8.1. Steel Erection General: This shall include the erection of all structural steel, steel joist girders and joists, miscellaneous steel, etc. as called for on the drawings and as specified. Maintain erection tolerances of structural steel within AISC's "Code of Standard Practice for Steel Buildings and Bridges".

3.8.2. Provide temporary shores, guys, braces, and other supports during erection to keep structural steel secure, plumb, and in alignment against temporary construction loads. Remove temporary supports when permanent structural steel, connections, and bracing are in place, unless otherwise indicated.

3.8.3. Set structural steel accurately in locations and to elevations indicated and according to AISC specifications referenced in this section.

3.8.4. Base and Bearing Plate: Clean concrete and masonry bearing surfaces to remove Clean concrete and masonry bearing surfaces to remove deleterious materials and roughen surfaces prior to setting base and bearing plates. Clean bottom surface of base and bearing plates.

3.8.4.1. Set base and bearing plates for structural members on wedges, shims, or setting bolts as required.

3.8.4.2. Tighten anchor bolts after supported members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of base or bearing plate prior to packing with grout.

3.8.4.3. Pack grout solidly between bearing surfaces and plates so no voids remain. Finish exposed surfaces. Protect installed materials and allow to cure.

3.8.4.4. Comply with manufacturer's instructions for proprietary grout materials.

3.8.5. Align and adjust various members forming part of complete frame or structure before permanently fastening. Before assembly, complete bearing surfaces and other surfaces that will be in permanent contact. Perform necessary adjustments to compensate for discrepancies in elevation and alignment.

3.8.6. Level and plumb individual members of structure.

3.8.7. Install and tighten high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A-325 or A-490 bolts.

3.8.8. Weld Connections: Comply with AWS D1.1 for procedures, appearance and quality of welds, and methods used in correcting weld work.

3.8.9. Comply with AISC specifications referenced in this Section for bearing, adequacy of temporary connections, alignment, and removal of paint on surfaces adjacent to field welds.

3.8.10. Touch up weld spots and abrasions after erection with primer specified for shop priming. Surfaces shall be clean and dry before painting.

3.9. Field Quality Control:

3.9.1. No field cutting or fabrication will be permitted without written approval of Publix' structural engineer.

3.9.2. Testing Agency: Contractor shall engage an independent testing and inspection agency to perform field inspections and tests and to prepare test reports.

3.9.3. Testing Agency will conduct and interpret test and state in each report whether tested work complies with or deviates from the requirements.

3.10. Correct deficiencies in or remove and replace structural steel that inspections and test reports indicate do not comply with specified requirements.

3.11. Additional testing, at Contractor's expense, will be performed to determine compliance of corrected work with specified requirements.

3.12. Field bolted connections will be tested and inspected according to RCSC's "Specifications for Structural Joints using ASTM A 325 or A 490 Bolts".

3.12.1. For bolts indicated as "snug tight", inspect to verify that connected elements are in direct contact.

3.12.2. Inspection will be required of a random selection of ten percent of all high strength shop and field bolting. To be acceptable 95 percent of all bolts tested shall meet design tension. If the bolting fails to meet this requirement, bolts shall be reworked by the contractor and additional tests of 50 percent of all bolts shall be made until the above requirements are met.

3.12.3. Field-welded connections will be inspected by a testing laboratory who will perform visual inspections of a minimum of 100 percent of welds.

3.12.4. For field-welded connections that fail visual inspection, field-welded connections will be inspected and tested according to AWS D1.1 and the inspection procedures listed below:

3.12.4.1. Radiographic Inspection: ASTM E 94 and ASTM E 142; minimum quality level; "2-2T".

3.13. Contractor shall coordinate erection and inspections to facilitate construction.

3.14. Notify Publix three (3) days in advance of time structure will be ready for inspection.

End of Section 05 12 00

Section 05 21 00
Steel Joist Framing
V04272020

1. General

1.1. Scope of Work:

1.1.1. Steel joists and related accessories for the Publix box shall be engineered and fabricated by Nucor/Vulcraft and will be provided by Publix. Joists provided do not include retail or facade structures, except when facade drawings are on Publix title block.

1.1.2. General Contractor and Steel Fabricator to coordinate with Vulcraft shop drawings for all connections. Shop drawings will be available from Vulcraft after the store has been awarded.

1.1.3. General Contractor will be responsible for coordinating the joist delivery date with Vulcraft (contact: see below). General Contractor is also responsible for unloading delivery and covering materials at the job site. The General Contractor is responsible for all materials after delivery to the job site.

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1.1.4. The joists shall not sit on the site for more than 10 days before erection.

1.2. Submittals:

1.2.1. Submit shop drawings in accordance with Section 01 33 00 Submittal Procedures. Shop drawings shall show layout, mark, number, type, location, and spacing of joists. Include joining and anchorage details, bracing, bridging, accessories, splice and connection details, and attachments to other units of work.

1.3. Quality Assurance:

1.3.1. Manufacturer Qualifications: Engage a firm experienced in manufacturing joists similar to those indicated for this Project, and that have a record of successful in-service performance. The joist manufacturer must engage a qualified professional engineer to prepare design calculations, shop drawings and other structural data for steel joists.

1.3.2. SJI Design Standard: Comply with recommendations of SJI's "Standard Specifications Load tables and weight Tables for Steel Joists and Joist Girders", applicable to types of joists indicated.

1.3.3. Welding Standards: Comply with applicable provisions of AWS D1.3 "Structural Welding Code --Sheet Steel".

1.3.3.1. Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone recertification.

1.4. Delivery, Storage, and Handling

1.4.1. Deliver, store, and handle joists as recommended in SJI's "Specifications".

1.4.2. Protect joists from corrosion, deformation, and other damage during delivery, storage and handling.

2. Products

2.1. Materials

2.1.1. Steel: Comply with requirements of SJI's "Specifications" for chord and web section material.

2.1.2. Carbon-Steel Bolts and Threaded Fasteners: ASTM A 307, Grade A (ASTM F568, Property Class 4.6), carbonsteel, hex-headed bolts and threaded fasteners; carbon-steel nuts; and flat, unhardened steel washers.

2.1.2.1. Finish: Plain, uncoated

2.1.3. High-Strength Bolts and Nuts: ASTM A 325, Type 1, heavy hex steel structural bolts, heavy hex carbon-steel nuts, and hardened carbon-steel washers.

2.1.3.1. Finish: Plain, uncoated

2.1.4. Welding Electrodes: Comply with AWS standards.

2.1.5. Primer: Manufacturer's standard shop primer unless otherwise indicated.

2.2. Steel Joists

2.2.1. Manufacturer joists according to SJI's "Specifications", with steel angle top and bottom chord members, of joist types, end arrangements, and top chord arrangements indicated.

2.2.2. Comply with AWS requirements and procedures for shop welding, appearance, quality welds, and methods used in correcting welding work.

2.2.3. Extend top chord of joists with SJI Type S top chord extensions where indicated, complying with SJI's "Specifications" and load tables.

2.2.4. Extend bearing ends of joists with SJI Type R extended ends where indicated, complying with SJI's "Specifications" and load tables.

2.2.5. Camber K-Series steel joists according to SJI's "Specifications".

2.2.6. Equip bearing ends of joists with manufacture's standard beveled ends or sloped shoes when joist slope exceeds 1/4 inch in 12 inches (1:48).

2.3. Joist Accessories

2.3.1. Bridging: Provide bridging anchors and number of rows of horizontal or diagonal bridging of material, size, and type required by SJI's "specifications" for type of joist, chord size, spacing, and span.

2.3.2. Steel Bearing Plates with integral anchorages are specified in the Structural Section of the Publix Construction Documents.

2.3.3. Supply miscellaneous accessories, including splice plates and bolts required by the joist manufacturer to complete the joist installation.

2.4. Shop Painting

2.4.1. Apply one shop coat of primer to joist and joist accessories to be primed to provide a continuous, dry paint film thickness of not less than 1 mil (0.025mm).

3. Execution

3.1. Inspection

3.1.1. Examine supporting substrates, embedded bearing plates, and abutting structural framing, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of joists. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2. Installation:

3.2.1. Do not install joists until supporting construction is in place and secured.

3.2.2. Comply with OSHA requirements for steel joist erection.

3.2.3. Install joists and accessories plumb, square, and true to line; securely fasten to supporting construction according tom SJI's "Specifications", joist manufacturer's recommendations, the requirements of this Section, and the Structural Section of Publix Construction Documents".

3.2.3.1. Space, adjust, and align joists accurately in location before permanently fastening.

3.2.3.2. Install temporary bracing and bridging, connections, and anchors to ensure joists are stabilized during construction.

3.2.4. Field weld joists to supporting steel framework and steel bearing plates. Coordinate welding sequence and procedure with placing of joists.

3.2.4.1. Comply with AWS requirements and procedures for welding, appearance and quality of welds, and methods used in correcting welding work.

3.2.5. Bolt joists, where indicated, to supporting steel framework using carbon-steel bolts, unless otherwise indicated.

3.2.6. Install and connect bridging concurrently with joist erection, before construction loads are applied. Anchor ends of bridging lines at top and bottom chords where terminating at walls or beams.

3.3. Field Quality Control

3.3.1. No field cutting or fabrication will be permitted without written approval of Publix' structural engineer.

3.3.2. Testing Agency: A qualified independent testing agency employed and paid by contractor shall perform field quality control testing.

3.3.3. Testing agency will report test results promptly and in writing to Owner and Engineer.

3.3.4. Testing and verification procedures will be required of high strength bolted connections and fields.

3.3.5. Bolted connections will be visually inspected.

3.3.6. High-strength, field-bolted connections will be tested and verified according to procedures in RCSC's "Specifications for Structural Joints Using ASTM A 325 or ASTM A 490 Bolts".

3.3.7. Field welds will be subject to inspection requirements of Section 05120 "Structural Steel".

3.4. Repairs and Protection

3.4.1. Correct deficiencies in work that inspection and test reports have indicated are not in compliance with specified requirements provided that the correction method does not conflict with other provisions of these specifications.

3.4.2. Additional testing will be performed to determine compliance of corrected work with specified requirements.

End of Section 05 21 00

Section 05 30 00
Metal Decking
V04272020

1. General

1.1. Scope of Work:

1.1.1. Steel deck and related accessories for the Publix box shall be engineered and fabricated by Nucor/Vulcraft and will be provided by Publix. Decking provided does not include retail or facade structures, except when facade drawings are on Publix title block.

1.1.2. General Contractor and Steel Fabricator to coordinate with Vulcraft shop drawings which will be available from Vulcraft after the store has been awarded.

1.1.3. General Contractor will be responsible for coordinating the deck delivery date with Vulcraft (contact: see below). General Contractor is also responsible for unloading delivery and covering materials at the job site. The General Contractor is responsible for all materials after delivery to the job site.

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1.1.4. The deck shall not sit on the site for more than 10 days before being erected.

1.2. Submittals:

1.2.1. Conform to requirements of Section 01 33 00 Submittal Procedures.

1.2.2. Product Data: For each type of decking, accessory and mechanical fasteners (if used), submit manufacturer's specifications and other data needed to demonstrate compliance with the specified requirements.

1.2.3. Shop Drawings: Submit detailed drawings showing layout and types of deck panels, anchorage details, and conditions requiring closure panels, supplementary framing, sump pans, cant strips, cut openings, special jointing or other accessories.

1.2.4. Installation Instructions: Submit manufacturer's recommended installation procedures which, when approved by the Engineer, shall become the basis for accepting or rejecting actual installation procedures used on the work.

1.2.5. When the materials of this section are used as part of an assembly indicated on the drawings in which fire-resistive construction ratings are required, submit evidence of approval by Underwriters' Laboratories, Inc. and the local Authority having jurisdiction.

1.2.6. Insurance Certification: Assist Owner in preparation and submittal of roof installation acceptance certification as may be necessary in connection with fire and extended coverage insurance.

1.3. Quality Assurance:

1.3.1. Codes and Standards: Comply with provisions of the following codes and standards, except as otherwise shown or specified:

1.3.1.1. AISC "Specification for the Design of Light Gage Cold-Formed Steel Structural Members".

1.3.1.2. AWS "Structural Welding Code- Steel", and "Structural Welding Code-Sheetsteel".

1.3.1.3. SDI "Design Manual for Floor Decks and Roof Decks".

1.3.2. Qualifications of Field Welding: Qualify welding processes and welding operators in accordance with AWS "Standard Qualification Procedure". Also follow requirement of Division 5 Section 3.6 "Welding" of this specification.

1.3.2.1. Welded decking in place is subject to inspection and testing. Expense of removing and replacing portions of decking for testing purposes will be borne by Owner if welds are found to be unsatisfactory. Remove work found to be defective and replace with new acceptable work.

1.3.3. FM Listing: Provide metal roof deck units which have been evaluated by factory mutual system and are listed in "Factory Mutual Approval Guide" for "Class I" fire rated construction.

1.4. Manufacturer:

1.4.1. All roof decking shall be the product of a single manufacturer; all floor decking shall be the product of a single manufacturer.

1.4.2. Manufacturer shall be a member of the Steel Deck Institute.

2. Products

2.1. Roof Deck (and rooftop equipment room floor decking)

2.1.1. Provide minimum 22 gauge SDI Type "B" deck (1 1/2 in.), capable of supporting uniformly distributed live and dead load of 50 psf over 6'-0" clear span, with deflection limited to 1/240 of the span. See design documents for minimum gauge requirements.

2.1.2. Provide galvanized, top and bottom prime painted deck. Prior to painting, the galvanized steel shall be chemically cleaned and pre-treaded in accordance with prime-paint manufacturer's recommendations. Prime paint shall be water-borne, rust inhibitive, recommended by manufacturer for use over galvanized steel, compatible with specified field applied finish coats, color: gray.

2.1.2.1. Primer: Manufacturer's standard primer, unless noted otherwise.

2.1.2.2. Steel shall conform to ASTM A653, Structural Quality, G-60.

2.2. Floor Deck

2.2.1. Provide minimum 26 gauge SDI type "C" deck (9/16 inch). See design documents for additional design requirements.

2.2.2. Steel shall conform to ASTM A653, Structural Quality, G-60. Deck shall have overlapped side joints and span at least 3 supports.

3. Execution

3.1. Inspection:

3.1.1. Installer shall examine areas and conditions under which metal decking is to be installed and notify Contractor in writing of conditions detrimental to proper and timely completion of work. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to Installer.

3.2. Installation

3.2.1. General: Install deck units and accessories in accordance with Manufacturer's recommendations, current specifications and commentary of SDI, and final Shop Drawings, and as specified herein.

3.2.1.1. Place deck units on supporting steel framework and adjust to final position with ends accurately aligned and bearing on supporting members before permanently fastened. Do not stretch or contract side lap interlocks.

3.2.1.2. Place deck units flat and square, secured to adjacent framing without warp or deflection.

3.2.1.3. Provide additional reinforcement and closure pieces at openings as required for strength, continuity of decking, and support of other work.

3.2.1.4. Cutting and fitting: Cut and neatly fit deckunits and accessories around other work projecting through or adjacent to the decking, as shown.

3.3. Fastening Roof Deck Panels:

3.3.1. Fasten roof deck panels to steel supporting members by arc spot (puddle) welds of not less than 5/8" diameter. Use welding washers where recommended by deck manufacturer.

3.3.1.1. Weld Spacing: Space and locate welds as indicated in the Structural section of the Publix Construction Documents.

3.3.1.2. Side Lap and Perimeter Edge Fastening: Fasten side laps and perimeter edges of panels between supports, at intervals indicated in the Structural section of the Publix Construction Documents. Mechanically fasten with self-drilling No. 10 diameter or larger carbon steel screws, unless otherwise indicated in the Publix Construction Documents.

3.3.1.3. End Bearing: Install deck ends over supporting framing with a minimum end bearing of 1-1/2 inches, with end joints lapped 2 inches minimum, or as per SDI.

3.3.2. Comply with AWS requirements and procedures for manual shielded metal arc welding, appearance and quality of welds, and methods used in correcting welding work.

3.3.3. Mechanical fasteners may be used in lieu of welding to fasten deck. Install according to deck manufacturer's instructions. Submit fastener data for approval. If approved, Engineer will determine fastener spacing.

3.3.4. Miscellaneous Roof Deck Accessories: Install ridge and valley plates, finish strips, cover plates, end closures, and reinforcing channels according to manufacturer's recommendations. Weld to substrate to provide a complete deck installation.

3.4. Mechanical Fastening Roof Deck Panels (Alternate to Welding):

3.4.1. Powder driven and Pneumatic Fasteners: Fasteners shall have knurled shank; minimum 1/2" diameter steel washer; electroplated zinc conforming to ASTM B633, Sc.1, Type II; meet SDI design requirements; FM approval.

3.4.1.1. Acceptable Fasteners for Bar Joists (1/8" minimum thickness to 3/8" maximum thickness) include Hilti ENP2K-20-L15, X-EDN19-THQ12 HSN or X- EDNK22 THQ12 HSN

3.4.1.2. Acceptable Fastener for Structural Steel (1/4" thickness and greater) is Hilti ENPH2-21-L15

3.4.2. Use of Powder actuated Tools shall only be by a qualified operator, trained and licensed by the tool manufacturer in accordance with the manufacturer's and OSHA requirements.

3.4.3. Install fasteners to steel members as indicated below:

3.4.3.1. For ENPH2-21-L15 fasteners to secure roof deck to structural steel members using Hilti Powder Actuated tools DX-750 or DXA70R.

3.4.3.2. For ENP2K-20-L15 fasteners to secure roof deck to bar joists using Hilti Powder Actuated tools DX-750

3.4.3.3. For X-EDN19-THQ12 HSN or X-EDNK22 THQ12 HSN fasteners to secure roof deck to bar joists using Hilti Pneumatic Tool R4X12 or the Hilti Powder Actuated tools DX-36M or DX-A41SM.

3.4.3.4. The nailhead stand off shall be according to the manufacturer's recommendations and verified with an inspection gauge. The power level shall be determined by jobsite testing.

3.4.3.5. Installation of fasteners shall be in accordance to design requirements and installed by an operator trained and licensed by the manufacturer.

3.4.3.6. Powder Actuated Tools shall be low velocity, piston principle, adjustable.

3.5. Field Quality Control:

3.5.1. Testing Agency

3.5.2. A qualified independent testing agency employed and paid by the contractor will perform field quality-control testing.

3.5.3. Field welds will be subject to inspection requirements of Section 05120, "Structural Steel".

3.5.4. Deck Attachment pattern will be subject to inspection.

3.5.5. Testing agency will report test results promptly and in writing to Owner and Engineer.

3.5.6. Remove and replace work that does not comply with specified requirements.

3.5.7. Additional testing, at Contractor's expense, will be performed to determine compliance with specified requirements.

3.6. Repairs and Protection

3.6.1. Touchup Painting: Wire brush, clean and paint scarred areas, welds, and rust spots on both surfaces of installed deck panels.

3.6.2. Provide final protection and maintain conditions to ensure steel decking is without damage or deterioration at time of Substantial Completion.

End of Section 05 30 00

Section 06 00 00
Woods, Plastics and Composites
V10232018

1. General

1.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

1.2. Scope of Work: See drawings including plans, room schedules and details for materials, attachment methods, etc. Frame for all concrete beams, slabs, etc. Provide all wood furring, blocking, and trim required.

2. Products

2.1. General:

2.1.1. Blocking: Provide all wood blocking and backing as required for the proper installation of plumbing and fixtures, cabinets, miscellaneous accessories, etc. Block between studs at joints butting two pieces of plywood or other material.

2.1.2. Interior partitions: Steel studs. See Section 09 29 00 Gypsum Board.

2.2. Wood species, grading:

2.2.1. Wood for thermal breaks in slabs: #2 Southern Pine, KD19, moisture resistant pressure treated as described below.

2.2.2. Interior Exposed Wood Trim: C-Select grade SPF-S. Base shall be 1 x 4 (nom.) with45 degree sanitary cut top.

2.2.3. Other lumber: Where appearance is not a factor, Construction Grade SPF-S, KD19.

2.3. Plywood: Except as otherwise specified or provided, shall conform to requirements of American Plywood Association, Exterior Grades Group 1, Fir AC. Sheathing Grade Plywood shall be Fir or Pine, 4 ply, Exterior Glue.

2.4. Pressure Treated Wood:

2.4.1. Wood in contact with concrete or masonry, in the roofing system, as blocking for storefront openings or at other locations where necessary shall be pressure treated.

2.4.2. Provide wood pressure treated for above-ground use per AWPA Standards P5 and C2 or C9, Chromated Copper Arsenate type C ("Wolmanized", Osmose "CCA-C", Hoover "CCA", etc.), 0.25 pcf.

2.4.3. Salts retention:

2.4.3.1. Wood for thermal breaks in slabs: 0.60 lb/cuft minimum, AWPA C22.

2.4.3.2. All other locations: 0.40 lb/cuft minimum, AWPA C2.

2.5. Fire Retardant Wood Treatment:

2.5.1. All wood material shall be fire retardant treated.

2.5.2. Pressure treat wood with fire retardant material which has been tested and proven to meet AWPA Standards C20 and C27 for Type A use.

2.5.3. Kiln dry to moisture of 19% or less for lumber and 15% or less for plywood.

2.5.4. Interior exposed plywood: Treated and labeled to meet ASTM E84 Standards for Class C interior finish, kiln dried after treatment.

2.5.5. Use galvanized fasteners for fire retardant treated wood.

2.5.6. Approved treatment:

Chemical Specialties, Inc. - "D-Blaze" Hickson
Corporation - Dri-Con"
Hoover Treated Wood Products, Inc. - "Pyro-Guard"

2.6. Wood Cased Openings: Frame with nominal 2 x 4 frame, species, grade as above. Wrap with stainless steel.

2.7. Acrylic/Polyester Resin solid surfacing material:

2.7.1. Provide material and manufacturer's standard seamless joint kit. Color: Manufacturer's standard color to match Corian "Dusk."

2.7.2. Acceptable products:

Dupont

3.9. Protection: Paneling, woodwork, trim, doors, hardware, etc., shall be protected after delivery to job and after installation.

End of Section 06 00 00

Section 07 21 00
Thermal Insulation
V12012020

1. General

1.1. This Section includes the following:

Concealed building insulation (refrigerated case walls)

Underslab insulation (freezers)

1.2. Related Section include the following:

1.2.1. Section 04 20 00 Unit Masonry for insulation installed as part of unit masonry construction.

1.2.2. Section 07 51 00 Built-Up Bituminous Roofing for insulation installed as part of roofing construction.

1.3. Submittals:

1.3.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

1.3.2. No product submittals are needed.

1.4. Quality Assurance:

1.4.1. Source Limitations: Obtain each type of building insulation through one source from a single manufacturer.

1.5. Delivery, Storage and Handling:

1.5.1. Protect insulation materials from physical damage and from deterioration by moisture, soiling and other sources. Store inside and in a dry location. Comply with manufacturer's written instructions for handling, storing and protecting during installation.

1.5.2. Protect plastic insulation as follows:

1.5.2.1. Do not expose to sunlight, except to extent necessary for period of installation and concealment.

1.5.2.2. Protect against ignition at all times. Do not deliver plastic insulating materials to Project site before installation time.

1.5.2.3. Complete installation and concealment as rapidly as possible in each area of construction.

2. Products

2.1. Extruded-Polystyrene Board Insulation:

2.1.1. Refrigerated Case Wall Insulation: 1 1/2" thick.

2.1.1.1. Products:

"StyrofoamWallmate XPS Insulation", DuPont
"Foamular 250", Owens Corning
"InsulPink Z", Owens Corning
"GreenGuard Scoreboard Insulation Board", Pactiv

2.1.2. Freezer Sub-Slabs: 2" thick, 24" wide by 96" long.

2.1.2.1. Products:

"STYROFOAM FREEZERMATE", DuPont
"GreenGuard CM Insulation Board", Pactiv
"Foamular 250", Owens Corning

2.1.3. Foamed-in-Place Insulation Material:

2.1.3.1. Provide assembly R=20.

2.1.3.2. Compliant with VOC regulations.

2.1.3.3. Formaldehyde out-gassing less than 0.01 milligram per cubic meter when measured 28 days or more after installation.

2.1.3.4. Self extinguishing or non-combustible.

2.1.3.5. Products:

"Core-Fill-500", Tailored Foam, Inc. "R-501", PolyMaster, Inc. "Thermeo", Thermal Corporation of America "Core-Foam", CfiFoam, Inc.

3. Execution

3.1. Preparation:

3.1.1. Examine all substrates, with Installer present, for condition compliance prior to installation. Correct all unsatisfactory conditions before proceeding.

3.2. Installation:

3.2.1. Comply with insulation manufacturer's written instructions applicable to products and application indicated.

3.2.2. Install insulation that is undamaged, dry and unsoiled and that has not been left exposed at any time to ice, rain and snow.

3.2.3. Extend insulation in thickness indicated to envelop entire area to be insulated. Cut and fit tightly around obstructions and fill voids with insulation. Remove projections and fill voids with insulation. Remove projections that interfere with placement.

3.2.4. Add single layer of insulation units to produce thickness indicated unless multiple layers are otherwise shown or required to make up total thickness.

3.2.5. On horizontal surfaces, loosely lay insulation units according to manufacturer's written instructions. Stagger end joints and tightly abut insulation units.

3.2.6. Apply insulation units to substrates by method indicated, complying with manufacturer's written instructions. If no specific method is indicated, bond units to substrate with adhesive or use mechanical anchorage to provide permanent placement and support of units.

End of Section 07 21 00

Section 07 21 29
Sprayed Polyurethane Insulation
V01122021

1. General

1.1. This Section includes the following:

Sprayed Polyurethane Foam Insulation

1.2. Related Sections include the following:

1.2.1. Section 07 21 00 Thermal insulation

1.2.2. Section 09 29 00 Gypsum Board

1.3. References:

1.3.1. ASTM C 518: Standard test method for Steady-State Thermal Transmission properties by means of the heat flow meter apparatus.

1.3.2. ASTM E 84: Standard test method for surface burning characteristics of building materials

1.3.3. ASTM 96: Standard test method for water vapor transmission of materials.

1.3.4. ASTM 283: Standard test method for determining rate of air leakage though exterior windows, curtain walls and doors under specified pressure differences across the specimen.

1.3.5. ASTM 1621: Standard test method for apparent density of rigid regular plastic.

1.3.6. ASTM 1622: Standard test method for apparent density of rigid regular plastics.

1.3.7. ASTM 119: Compliant with Standard test method for fire test of building construction and materials.

1.3.8. NFPA 285: Compliant with Standard method of test for the evaluation of flammability characteristics of exterior non-load-bearing wall assemblies containing combustible components using the intermediate-scale, multistory test apparatus.

1.4. Submittals:

1.4.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

1.4.2. Product Data must include manufactures data sheets including storage, handling installation methods.

1.5. Quality Assurance:

1.5.1. Installations: Spray Polyurethane foam installer shall be certified to use the spray foam selected by manufacturer or other agency.

1.5.2. Installer shall provide the equipment required by the manufacturer for proper installation.

1.6. Delivery, Storage and Handling:

1.6.1. Storage for Chemicals should be between 65 and 80 degrees for proper processing through the spray equipment. Do not allow product to freeze.

1.6.2. Protect insulation materials from physical damage and from deterioration by moisture, soiling and other sources. Store inside and in a dry location. Comply with manufacturer's written instructions for handling, storing and protecting during installation.

1.6.2.1. Do not expose to sunlight, except to extent necessary for period of installation and concealment.

1.6.2.2. Protect against ignition at all times. Do not deliver plastic insulating materials to Project site before installation time.

1.6.2.3. Complete installation and concealment as rapidly as possible in each area of construction.

1.7. Physical Properties:

1.7.2.1. R-Value (ASTM C 518):

6.5 at 1 inch
13 at 2 inches
19 at 3 inches
22 at 3.5 inches

1.7.2.2. Flammability at 4 inches (ASTM E 84):

Flame Spread Index:<25 Smoke Development: <450

1.7.2.3. Water Vapor Transmission (ASTM 96):

0.9 perm per 1.5 Inch

1.7.2.4. Air Permanence (ASTM 283):

< 0.02 L s1 m1

2. Products

2.1. Spray Foam Polyurethane Insulation

2.1.2.1. Products:

"BAYSEAL CCX, Bayer

"Proseal LE", Icynene

"Touch 'N Seal", Dap Products
"HEATLOK SOY", Demilec
"BASF" Spraylite 178

3. Execution

3.1. Examination:

3.1.1. Examine all substrates, with Installer present, for condition compliance prior to installation. Correct all unsatisfactory conditions before proceeding.

3.2. Installation:

3.2.1. Comply with insulation manufacturer's written instructions applicable to products and application indicated.

3.2.2. Proceed with spray polyurethane foam application only after substrate construction, substrate penetration work, and related welding and other hot work has been completed.

3.2.3. Apply insulation units to substrates by method indicated, complying with manufacturer's written instructions.

End of Section 07 21 29

Section 07 51 00
Bituminous Built-Up Roofing
V03092021

1. General

1.1. This Section includes the following:

Built-Up Roofing
Roofing Insulation

1.2. Related Sections include the following:

1.2.1. Section 07 60 00 Flashing and Sheet Metal.

1.2.2. Section 07 72 33 Roof Hatches.

1.3. System Description:

1.3.1. Wind Resistance:

1.3.1.1. Comply with the requirements of the Authority Having Jurisdiction.

1.3.1.2. Publix's Minimum Requirement: Factory Mutual "Class 1-90" wind resistance.

1.3.1.3. Comply with all of the requirements for a Factory Mutual approved installation, including but not limited to all Loss Prevention data sheets for roofing and/or the wind uplift pressures as calculated per ASCE 7-10 which ever is the more stringent.

1.3.2. Fire Performance:

1.3.2.1. Minimum Requirement: Underwriters Laboratories "Class C".

1.3.2.2. For stores located in a Fire District provide Underwriters Laboratories "Class A".

1.3.3. Materials used shall be listed in the latest edition of the Factory Mutual Approval Guide. Categories are:

Membrane Materials
Insulation
Insulation Fasteners
Stress Plates
Steel Deck
Other materials where applicable

1.4. Submittals:

1.4.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures. This is to indicate Installer's understanding of the specified roofing systems, and the qualifications required of the Roofer.

1.4.2. Materials on Site: Provide documents stating that materials comply with requirements, including certificates and delivery logs for bulk materials, and record on field testing for softening point, flash point, etc, and other quality control testing as required.

1.5. Quality Assurance:

1.5.1. Installer (Roofer):

1.5.1.1. A single Installer (Roofer) shall perform the work of this Section, the extent of which is described above. Roofer shall be a Firm specializing in Built-Up Roofing System work for at least 5 years, and be capable of showing successful installations similar to the work required for this project.

1.5.1.2. The Installer shall be one who is approved by GAF/U.S. Intec as an Installer qualified to perform work eligible for the Manufacturer's Fifteen Year No Dollar Limit Warranty.

1.5.1.3. The Installer shall be one of the Roofing Contractors approved by the Publix roofing steering team at the time of bidding. Contact the regional Publix construction manager for the current approved list.

1.5.1.4. Provide primary products, including each type of Roofing Sheet (Felt), Bitumen, Insulation, and Vapor Flow Retarder (if any) produced or privately labeled by the same single Manufacturer.

1.5.1.5. Provide secondary products which are acceptable to Manufacturer of primary products.

1.5.2. Inspections:

1.5.2.1. Publix Construction Field Supervisors will visit the Site periodically.

1.5.2.2. Notify ASR Associates ten days before anticipated roof start.

1.5.2.3. ASR's inspectors shall make a minimum of three inspections per job. ASR's representative has full authority to stop roofing work if conditions are not in conformance with manufacturer's requirements.

1.5.3. Warranty:

1.5.3.1. All work shall be accomplished in a manner to be eligible for Manufacturer's Fifteen Year No-Dollar-Limit Warranty coverage.

1.5.3.2. While Manufacturer's Twenty Year-No-Dollar Limit Warranty is not usually required, it may be for some projects. The owner/developer must express their intent to obtain the roof warranty prior to the pre- roofing conference.

1.6. Product Handling:

1.6.1. General: Handle and store roofing system products in a manner which will ensure no possibility of significant moisture pick-up. Store in a dry, well ventilated, water- proof place. Do not leave unprotected materials on roof overnight. Store rolls of felt and other sheet goods on end.

1.6.2. When materials are stored outside, they shall be placed on platforms that are raised off the ground or roof deck, and they shall be covered with waterproof coverings. Coverings that are "breathable" (such as canvas) are preferred.

1.6.3. Roofing materials shall be delivered to the Job Site just prior to roof installation when possible or stored in closed vans.

1.6.4. Roofing bitumen may be stored unprotected on the ground. However, moisture and dirt shall be removed from roofing bitumen before heating.

1.6.5. Roof Loading: Do not store materials on roof decks, nor position roofing installation equipment on roof decks, in concentrations exceeding design live loading.

1.7. Job Conditions:

1.7.1. Pre-Roofing Conference:

1.7.1.1. Approximately five working days prior to installation of Roofing System, meet at Project Site with Installer (Roofer), installers of substrate construction (decks)and other work adjoining roof system including penetrating work and roof-top units and representatives of other trades directly concerned with performance of roofing system, including Publix Representative.

1.7.1.2. Review requirements (Contract Documents), Submittals, status of coordinating work, availability of materials and installation facilities, proposed installation schedule, requirements for inspections and testing or certifications, proposed installation procedures. record discussion including agreement or disagreement on matters of significance.

1.7.1.3. Discuss roofing system protection requirements for construction period extending beyond roofing installation.

1.7.1.4. Furnish minutes of meeting to each participant.

1.7.2. Weather Conditions: Proceed with roofing system installation only when existing and forecasted weather conditions are favorable and will allow work to proceed in accordance with requirements and recommendations of manufacturers of primary roofing system materials.

1.8. Testing By Publix Representative:

1.8.1. After Substantial Completion, the Publix Consultant will conduct testing to determine watertightness of all roofing assemblies. If, in the opinion of the Consultant, the moisture content of an assembly is too high, the Contractor shall remove and replace all affected materials, and take all steps necessary to make the assembly watertight.

1.8.2. Test when ambient humidity is less than 90%. Assembly shall contain less than 8% moisture by weight.

2. Products

2.1. Roof Insulation:

2.1.1. Main Roof: Insulation shall be 4" Energy Guard Polyisocyanurate roof insulation (2 layers, staggered pattern). Exception: Stores in Climate Zone 2 and Higher shall receive minimum 5" Energy Guard polyisocyanurate roof insulation (up to 6" roof insulation may be required due to building's orientation and/or climate zone).

2.1.2. Open Dock Canopy and Riser Room: Insulation shall be 1.5" Energy Guard polyisocyanurate roof insulation.

2.2. Roof insulation fasteners shall be Drill-Tec #14 pre-assembled fasteners with 3" metal stress plates. Length must be sufficient to penetrate top flute of metal deck by 3/4".

2.3. Built-Up Roof Membrane materials:

2.3.1. Roof membrane (over steel deck): The following are the approved roofing membranes – Eliminator, 3 Ply, Type IV (ASTM D-2178) felts, white/light gray mineral-surfaced Polyester reinforced SBS modified bitumen Cap Sheet fully mopped with steep asphalt.

GAF/U.S. Intec Spec #PRF - PP5TP - RI or, for locations requiring a fire rated cap sheet, #190 FR - PP5TP - RI.

2.3.2. For non-coastal areas outside Florida roof membrane (over steel deck): The following are the approved roofing membranes – Eliminator, 1 Ply, ASTM D6163, Type I, Grade S SBS Modified Base Sheet, white/light mineral-surfaced Polyester reinforced SBS modified bitumen Cap Sheet fully mopped with steep asphalt.

GAF Spec #I-1-1-20/PRF or, for locations requiring a fire rated cap sheet, #I-1-1-20/MGFR.

2.3.3. There are no exceptions or substitutions for approved membrane or specifications.

2.3.4. Bitumen: Steep asphalt complying with ASTM D-312-78, Type IV.

2.3.5. Base Flashing Adhesive: Matrix 201.

2.3.6. Base Flashing (Granular-Surfaced Modified Bitumen): Specified Cap Sheet

2.3.7. Asphaltic Concrete Primer: Comply with ASTM D-41-78 on all exposed masory surfaces above roof line.

2.3.8. Preformed Edge Strips: Rigid asphalt impregnated organic fiber insulation or molded perlite insulation, molded to form 3 1/2" x 3 1/2" x 45 degree polyisocyanurate cant strips and tapered edge strips as shown to receive roofing ply-sheet courses and lift edges above main roofing surface.

2.3.9. Lead Flashing: 2 1/2 lb. to 4 lb. sheet of common pig lead.

2.3.10. Sealants: One part gun grade urethane sealant, ASTM C920, Type S, Grade NS, Class 25, Use A:

Bostik "Chem-Calk" 900
Pecora "Dynatrol I"
Sonolastic NP-1

2.3.11. Liquid Membrane Flashing System: GAF "Major Seal"

3. Execution

3.1. Inspection of Substrate:

3.1.1. Examine substrate surfaces to receive built-up roofing system and associated work and conditions under which roofing will be installed. Do not proceed with roofing until unsatisfactory conditions have been corrected in a manner acceptable to Roofer.

3.1.2. Verify that flatness and fastening of metal roof decks comply with the following:

3.1.2.1. Deck fastening in strict adherence to fastening patterns indicated in the Contract Documents.

3.1.2.2. Top Flanges: No concavity or convexity in excess of 1/16" across any 3 adjacent flanges.

3.1.2.3. Side Laps: Properly nested and mechanically fastened.

3.1.2.4. End Laps: Minimum 2" laps located over and fastened to supports.

3.2. General Installation Requirements:

3.2.1. Sequencing of work:

3.2.1.1. Coordinate the installation of all blocking and grounds required for installation of roofing system. Insure that proper thickness of solid material is in place for use.

3.2.1.2. Where wall finishes are to be installed after the installation of roofing or sheet metal materials, insure that proper measures are taken to provide solid support at all edges. (Example: when plaster or EIFS finish is to be applied after installation of coping cap.)

3.2.1.3. Install insulation layers when steel deck installation has progressed to a point which will allow uninterrupted roofing operations.

3.2.1.4. Dry-in the building with ply-sheet assembly using temporary water cut- offs as necessary. Provide temporary details at curbs, in-place penetrations, parapets, roof edges, and other locations where water intrusion may be expected.

3.2.1.5. Install all sheet metal edge trim, flashings, copings, etc. before installation of cap sheet. Strip in immediately.

3.2.1.6. Repair damage to in-place ply-sheet assembly as necessary as soon after installation of sheet metal work as possible. Clean thoroughly. Notify manufacturer for pre-cap sheet inspection.

3.2.1.7. Install cap sheet over repaired ply-sheet assembly as soon as possible. Use torches or other means of assuring totally dry surface at time of application.

3.2.1.8. Maximum elapsed time of bare ply-sheet assembly exposure allowed is 30 days. Where it is anticipated that cap-sheet installation will be delayed more than 30 days, apply glaze coat.

3.2.1.9. All modified bitumen flashing shall be terminated with its associated two piece counter flashing immediately after installation.

3.2.2. Cooperate with inspection and test agencies engaged or required to perform services in connection with built-up roofing system installation.

3.2.3. Protect other work from spillage of built-up roofing materials, and prevent liquid materials from entering or clogging drains and conductors. Replace/restore other work damaged by installation of built-up roofing system work.

3.2.4. Insurance/Code Compliance:

3.2.4.1. Install built-up roofing system for (and test where required to show) compliance with governing regulations and with the requirements of Part 1 of this Section.

3.2.4.2. Provide all connectors, fasteners, anchor straps, and other items required to conform to insurance requirements of wind-load zone where project is located.

3.2.4.3. Secure curbs and other owner supplied items which penetrate the roof membrane to the structure to resist forces required of the rest of the system.

3.2.5. Coordinate the installation of insulation, roofing sheets, flashings, stripping, coatings and surfacing, so that insulation and felts are not exposed to precipitation nor exposed overnight.

3.2.6. Provide cut-offs at end of each day's work, to cover exposed felts and insulation with a course of coated felt with joints and edges sealed with roofing cement. Remove cut-offs immediately before resuming work.

3.2.7. Asphalt Bitumen Heating: Heat and apply bitumen in accordance with Equiviscous Temperature Method ("EVT Method") as recommended by NRCA Do not raise temperature above minimum normal fluid-holding temperature necessary to attain EVT (+25 f or +14 c, at point of application) more than one hour prior to time of application. Discard bitumen which has been held at temperature exceeding Finished Blowing Temperature (FBT) for a period exceeding 3 hours. Determine flash point, finished blowing temperature and EVT of bitumen, either by information from bitumen producer or by suitable tests, and determine maximum fire-safe handling temperature and do not exceed that temperature in heating bitumen; but in no case heat bitumen to a temperature higher than 25 f (14 c) below flash point.

3.2.8. Bitumen Mopping Weights: For interply mopping, and for other mopping except as otherwise indicated, apply bitumen at an average rate of not less than 20 lbs. (+25% on a total job average basis) per roof square.

3.2.9. Glaze Coat (When required for delayed cap-sheet installation longer than 30 days): Over ply-sheet assembly, apply glaze coat at a rate of 10-12 lbs. per roof square.

3.2.10. Substrate Joint Penetrations: Do not allow bitumen to penetrate substrate joints Substrate Joint Penetrations: Do not allow bitumen to penetrate substrate joints.

3.2.11. At end of each days roofing installation, protect exposed edge of incomplete work, including ply sheets and insulation.

3.3. Insulation Installation:

3.3.1. General: Comply with insulation manufacturers' instructions and recommendations for the handling, installation, and bonding to substrate of insulation.

3.3.2. Do not apply hot materials to, or rest hot containers on insulation at temperatures above those recommended by insulation manufacturers.

3.3.3. Cut to fit tightly and neatly around all obstructions and roof penetrations.

3.3.4. Lay no more insulation in one day than can be covered with roofing that same day.

3.3.5. Use tapered insulation to provide crickets on the up-roof side of all curbs over 2'-0" wide.

3.3.6. FM 1-90 Assemblies: The foam insulation panels shall be mechanically attached to metal deck, through the gypsum board(if present), with Factory Mutual and U.L. approved fasteners, with its joints staggered. Subsequent layer(s), if required, shall be fully set, with their joints staggered, in hot asphalt at a nominal rate of no less than 30 lbs. per 100 sq ft. unless governing codes or regulations require total mechanical attachment. Attachment shall be in accordance with U.L., FM., and manufacturers recommendations.

3.3.7. FM 1-90 Assemblies: The foam insulation panels shall be mechanically attached to metal deck, through the gypsum board(if present), with Factory Mutual and U.L. approved fasteners, with its joints staggered. Subsequent layer(s), if required, shall be fully set, with their joints staggered, in hot asphalt at a nominal rate of no less than 30 lbs. per 100 sq ft. unless governing codes or regulations require total mechanical attachment. Attachment shall be in accordance with U.L., FM., and manufacturers recommendations.

3.4. Roof Membrane Installation:

3.4.1. Shingling of Plies: Except as otherwise indicated, install membrane with ply sheets shingled uniformly to achieve required number of plies of membrane throughout. Shingle in proper direction to shed water on each area of roofing.

3.4.2. Broom in each ply as directed by manufacturer. Use broom approved by manufacturer.

3.4.3. Cant Strips/Tapered Edge Strips: Except as otherwise shown, install preformed 45 deg. insulation cant strips at junctures of BUR membrane with vertical surface. Provide preformed tapered edge strips at areas shown on drawings as needed to divert water.

3.4.4. Inter-Ply Sheets: Provide the number and type(s) of ply sheets (felts) indicated, lapped (shingled) amount as required to form a continuous, uniform membrane with bitumen moppings between sheets so that ply sheet does not touch ply sheet. Extend built-up roofing membrane to 2" (nominal) above top edge of cant strip and terminate.

3.4.5. All edge metal shall be installed before installation of Cap Sheet. Backwater laps are not allowed.

3.4.6. Install cap sheet in strict compliance with manufacturer's instructions.

3.4.6.1. At head laps, cut tee joints 45 degrees. Round exposed corners.

3.4.6.2. Provide additional layer of cap sheet at doors of mechanical equipment rooms and at roof hatches.

3.4.7. Membrane Flashings:

3.4.7.1. Provide 2 ply base flashing at all angle changes consisting of 1 ply of ASTM D-2178 Type IV glass felt set in hot mopping of Type IV asphalt followed by 1 ply of SBS cap sheet (same material as roofing cap sheet) set in a continuous troweling of Matrix 201. Similar to U.S. Intec detail SBS5. Corners are to be flashed per details SBS 11 and SBS 12 (formerly Flex3).

3.4.7.2. At horizontal metal flanges, i.e. Gravel Guard MB, electrical and mechanical metal flanges, metal is to be primed with a D-41 primer and set in a full bed Matrix 201. Metal flanges are to be flashed the same day they are installed with 1 ply of Intec/Flex Smooth, 6" wider than the flange being flashed, set in a continuous troweling of Matrix 201.

3.4.8. At all locations where "bleed-out" of asphalt is present, apply mineral granules which match the granules of the cap sheet to achieve 100% hiding of the asphalt. Apply granules while asphalt is warm enough to allow solid embedment.

3.4.9. Allow for expansion of running metal flashing and edge trim which adjoins roofing.

3.4.10. Counter Flashings: Counter flashings, cap flashings, expansion joints and similar work shall be coordinated with built-up roofing work.

3.4.11. Seams: Rivet and solder all joints in gutters. Other joints shall be formed for back splice plates as required. Seal with urethane sealant.

3.5. Protection of Roofing:

3.5.1. Upon completion of roofing work (including associated work) Installer shall advise Contractor of recommended procedures for surveillance and protection of roofing during remainder of construction period.

3.5.2. Installer shall repair or replace (as required) deteriorated or defective work found at time of Final Inspection. Installer shall be engaged by Contractor to repair damages to roofing which occurred subsequent to roofing installation and prior to Final Inspection. Repair or replace the roofing and associated work to a condition free of damage and deterioration at time of Substantial Completion.

3.6. Cleaning:

3.6.1. Remove bituminous markings from finished surfaces in areas where finished surfaces are soiled by bitumen or any other source of soiling caused by work of this Section. Consult Manufacturer for recommended cleaning methods and materials and conform to their advice.

3.6.2. Remove finished materials which cannot successfully be cleaned, and replace with new materials at no expense to owner.

End of Section 07 51 00

Section 07 60 00
Flashing and Sheet Metal
V02212011

1. General

1.1. Scope: This Section includes all Sheet Metal Work, e.g. overflow scuppers, gutter, downspouts, gravel stop, parapet coping cap and counter flashing.

1.2. Related Sections include the following:

1.2.1. Section 07 51 00 Bituminous Built-Up Roofing.

1.2.2. Section 07 72 33 Roof Hatches.

1.3. All penetration seals are part of the Work of this Section with the following exceptions:

1.3.1. All air conditioning and ventilation ducts, hood and duct covers is work of other Sections; flashing and penetration waterproofing is work of this Section.

1.3.2. All flashings for penetrations through roof membrane, insulation, flashing or other items making up the roof assembly are work of this Section.

1.3.3. All curbs for HVAC equipment, fans, vents, and fresh air intakes will be furnished by Publix and installed by the contractor installing this equipment.

1.3.4. Install all lead flashing under this Section. Supply lead flashing under this Section or other Section as appropriate for job conditions. Cooperate with all trades.

1.3.5. Equipment Houses located on the roof: All curbs and structural connections will be provided and set with the houses. Houses will be equipped with receivers for roofing work. Provide flashing and other measures to render the installations watertight.

1.4. Painting: All PVC vent penetrations will require painting for UV protection.

1.5. Submittals:

1.5.1. Letter of Intent (LOI): Information for this Section will be submitted as part of the LOI for Section 07 51 00 Bituminous Built-Up Roofing.

1.5.2. Shop drawings of flashing details will accompany the submittal package for Section 07 51 00 Bituminous Built-Up Roofing.

1.5.3. Materials on Site: Provide documents stating that materials comply with requirements, including certificates and delivery logs for bulk materials, and record on field testing for softening point, flash point, EVT, and other quality control testing as required.

1.6. Quality Assurance:

1.6.1. Installer (Roofer):

1.6.1.1. All Work of this Section shall be by the approved Installer of Section 07 51 00 Bituminous Built-Up Roofing.

1.6.1.2. Provide products which are acceptable to Manufacturer of primary products.

1.7. Product Handling:

1.7.1. When materials are stored outside, they shall be placed on platforms that are raised off the ground or roof deck, and they shall be covered with waterproof coverings. Coverings that are "breathable" (such as canvas) are preferred.

1.7.2. Roofing materials shall be delivered to the Job Site just prior to roof installation when possible or stored in closed vans.

1.7.3. Roof Loading: Do not store materials on roof decks, nor position roofing installation equipment on roof decks, in concentrations exceeding design live loading.

2. Products

2.1. Sheet Metal:

2.1.1. In general, all sheet metal items shall be fabricated from stainless steel. Use prefinished sheet metal only where required to match other work (facade) in the Center.

2.1.2. Stainless Steel:

2.1.2.1. Fabricate from stainless steel sheet conforming to ASTM A666, Type 302 or 304; annealed, 1/16 hard, or 1/8 hard.

2.1.2.2. Use gauge indicated below or as permitted by SMACNA gauge recommendations.

2.1.2.3. Finish: No. 2B "bright" cold rolled finish.

2.1.3. Sheet Metal Accessory Materials:

2.1.3.1. Where available, use pre-assembled, pre-flashed accessories for all roof penetrations, gravel stops, gutters, and support assemblies.

2.1.3.2. Acceptable manufacturer:

M-Weld Division of GAF/U.S. Intec.

2.1.3.3. Accessories:

2.1.3.3.1. Edge Metal: Gravelguard MB with preformed outside and inside corners.

2.1.3.3.2. VTR flashing, Antenna Support flashing: 6" adjustable M- Vent with stainless steel draw-band.

2.1.3.3.3. Flues: Manufacturer's UL compliant insulated double wall flue flashing.

2.1.3.3.4. Penetration Seals: Chemlink "Chemcurb" polyester with 1 part pourable sealer.

2.1.4. Aluminum Wall Panels:

2.1.4.1. Provide prefinished 9/16" thick .021ga. "Fabrib" Aluminum wall panel as manufactured by Fabral.

2.1.4.2. Fasten Aluminum wall panels to 18 GA. 7/8" hat channels w/ #12 screws @ 8" O.C. horizontal and 24" O.C. vertical.

2.1.5. Solder for Sheet Metal: Except as otherwise indicated or recommended by metal Manufacturer, provide -50/50 tin/lead type (ASTM-B32) for tinning and soldering joints.

2.1.6. Fasteners: Same metal as flashing/sheet metal or other non-corrosive metal as recommended by Manufacturer.

2.1.7. Minimum Stainless Steel sheet thickness:

Downspouts	24 GA.
Guttering	20 GA.
FM Roll Over Hangers	10 GA.
Gutter Space Brackets	14 GA.
Gravel Stop	24 GA.
Counter Flashing	24 GA.
Rain collars	24 GA.
Parapet Copings (<16" girth	24 GA.
Parapet Copings (16" girth and above)	22 GA.
Other Sheet metal items: Comply with SMACNA recommendations.	

2.2. Fabrication of Sheet Metal Accessories:

2.2.1. SMACNA and NRCA Details: Conform work with details shown and with "Architectural Sheet Metal Manual" by SMACNA. Comply with installation details of "Roofing and Waterproofing Manual" by NRCA.

2.2.2. Prefabricated units as indicated or provide standard manufactured units complying with requirements; fabricate from sheet metal indicated.

2.2.3. Provide 4" wide flanges for setting on built-up roofing membrane with concealment by composition stripping.

2.2.4. Guttering and downspouts on exterior sized as shown on drawings. Support gutters at maximum 36" O.C. and downspouts at five (5) feet on center. All joints, end caps and/or miters shall be riveted and soldered. NO CAULKING PERMITTED.

2.2.5. Penetration seals for refrigeration penetrations per detail. Verify pipe sizes prior to fabrication. Penetration seals for electrical penetrations shall have conduit soldered to base of pan. Use water-tight couplings.

2.3. Paint: The following paints will be needed for all PVC penetrations.

2.3.1. Primer: Sherwin Williams PrepRite ProBlock Latex Sealer.

2.3.2. Finish: Sherwin Williams SuperPaint Exterior Latex Satin (white).

3. Execution

3.1. General Installation Requirements:

3.1.1. Sequencing of work:

3.1.1.1. Install all sheet metal edge trim, flashings, copings, etc. before installation of cap sheet. Strip in immediately.

3.1.2. Coordinate the installation of insulation, roofing sheets, flashings, stripping, coatings, and surfacing, so that insulation and felts are not exposed to precipitation nor exposed overnight.

3.1.3. Provide rain collars at all pitch pans, where round stock is used as roof penetration, and other locations where needed. Use stainless draw bands to form mechanical seal with collar and pipe.

3.2. Painting: Paint all exposed PVC vents (after flashing and boots are in place) with one coat of specified sealer and two coats of specified finish.

3.3. Cleaning:

3.3.1. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.

3.3.2. Clean and neutralize flux materials. Clean off excess solder and sealants.

3.3.3. Remove temporary protective coverings and strippable films, if any, as sheet metal flashing and trim are installed. Upon completion of installation, clean finished surfaces, including removing unused fasteners, metal filings, pop rivet seams and pieces of flashing. Maintain in a clean condition during construction. Replace sheet metal flashing and trim that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

End of Section 07 60 00

Section 07 72 33
Roof Hatches
V06152021

1. General

1.1. Scope: This Section includes information pertaining to roof hatches.

1.2. Related sections include the following:

1.2.1. Section 07 51 00 Bituminous Built-Up Roofing.

1.2.2. Section 07 60 00 Flashing and Sheet Metal.

1.3. Submittals:

1.3.1. Letter Of Intent (LOI): Indicate product selection on LOI for Section 07 51 00 Bituminous Built-Up Roofing.

1.4. Quality Assurance:

1.4.1. Installer (Roofer):

1.4.1.1. Installer shall be same as approved for Work of Section 07 51 00 Bituminous Built-Up Roofing.

1.5. Delivery, Handling and Storage:

1.5.1. Pack, handle, and ship properly labeled in heavy-duty packaging to prevent damage.

2. Products

2.1. Roof Hatch: Provide aluminum roof hatch with safety pole:

2.1.1. Bilco #S-50 Aluminum Roof Hatch.

2.1.2. Badcock-Davis Model BRHPA36x30S1T. For high velocity wind zones use model BRHZA36x30S1T.

3. Execution

3.1. Installation:

3.1.1. Install according to manufacturer's written instructions. Install to resist exposure to weather without failing, rattling and leaking.

3.1.2. Safety pole with finish LU-1 should be installed to far right or far left side of opening. Do not install safety pole centered with ladder as approved.

3.1.3. Check roof hatch for proper operation. Adjust operating mechanism as required. Clean and lubricate joints and hardware.

3.2. Touch-up:

3.3.4. Touch up factory-primed surfaces with compatible primer ready for field painting in accordance with Section 09 91 00 Paints.

End of Section 07 72 33

Section 07 81 00
Spray – Applied Fire Resistive Materials
V03242020

1. General

1.1. Related documents:

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

1.2. Summary:

1.2.1. Section includes Sprayed-Applied Fire-Resistive Materials (SFRMs).

1.3. Pre-installation Meetings:

1.3.1. Pre-installation Conference: Conduct conference at Project site.

1.3.1.1. Review products, design ratings, restrained and unrestrained conditions, densities, thicknesses, bond strengths, and other performance requirements.

1.4. Action Submittals:

1.4.1. Product Data: For each type of product.

1.4.2. Shop Drawings: Framing plans, schedules, or both, indicating the following:

1.4.2.1. Extent of fireproofing for each construction and fire-resistance rating.

1.4.2.2. Applicable fire-resistance design designations of a qualified testing and inspecting agency acceptable to authorities having jurisdiction.

1.4.2.3. Minimum fireproofing thicknesses needed to achieve required fire-resistance rating of each structural component and assembly.

1.4.2.4. Treatment of fireproofing after application.

1.4.3. Informational SUBMITTALS:

1.4.3.1. Qualification Data: For Installer and testing agency.

1.4.3.2. Product Certificates: For each type of fireproofing.

1.4.3.3. Evaluation Reports: For fireproofing, from third party.

1.4.3.4. Preconstruction Test Reports: For fireproofing.

1.4.3.5. Field quality-control reports.

1.5. Quality Assurance:

1.5.1. Installer Qualifications: A firm or individual certified, licensed, or otherwise qualified by fireproofing manufacturer as experienced and with sufficient trained staff to install manufacturer's products according to specified requirements.

1.5.2. It is recommended that industry guidelines as noted in National Fireproofing Contractors Association (NFCA) 100 – Standard Practice for the Application of Spray-Applied Fire Resistive Materials (SFRMs) be maintained on the project site.

1.6. Pre-construction Testing:

1.6.1. Pre-construction Testing Service: Owner will engage a qualified testing agency to perform Pre-construction testing on fireproofing.

1.6.1.1. Provide test specimens and assemblies representative of proposed materials and construction.

1.6.2. Pre-construction Adhesion and Compatibility Testing: Test for compliance with requirements for specified performance and test methods.

1.6.2.1. Bond Strength: Test for cohesive and adhesive strength according to ASTM E 736. Provide bond strength indicated in referenced fire-resistance design, but not less than minimum specified in Part 2.

1.6.2.2. Density: Test for density according to ASTM E 605. Provide density indicated in referenced fire-resistance design, but not less than minimum specified in Part 2.

1.6.2.3. Verify that manufacturer, through its own laboratory testing or field experience, attests that primers or coatings are compatible with fireproofing.

1.6.2.4. Schedule sufficient time for testing and analyzing results to prevent delaying the Work.

1.6.2.5. For materials failing tests, obtain applied-fireproofing manufacturer's written instructions for corrective measures including the use of specially formulated bonding agents or primers.

1.7. Field Conditions:

1.7.1. Environmental Limitations: Do not apply fireproofing when ambient or substrate temperature is 40 deg F 4.4 deg C or lower unless temporary protection and heat are provided to maintain temperature at or above this level for 24 hours prior to, during, and for 24 hours after product application.

1.7.2. Ventilation: Ventilate building spaces during and after application of fireproofing, providing a minimum 4 complete air exchanges per hour and according to manufacturer's written instructions until Spray-Applied Fire Resistive Materials are dried and cured. Use natural means or, if they are inadequate, forced-air circulation until fireproofing dries thoroughly.

2. Products

2.1. Materials, General:

2.1.1. Assemblies: Provide fireproofing, including auxiliary materials, according to requirements of each fire-resistance design and manufacturer's written instructions.

2.1.2. Source Limitations: Obtain fireproofing from single source.

2.1.3. Fire-Resistance Design: Indicated on drawings, tested according to

ASTM E 119/UL 263 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

2.1.3.1. Steel members are to be considered unrestrained unless specifically noted otherwise.

2.1.4. VOC Content: Products shall comply with VOC content limits of authorities having jurisdiction.

2.1.5. Asbestos: Provide products containing no detectable asbestos.

2.2. Spray-applied Fire Resistive Materials:

2.2.1. SFRM: Manufacturer's standard, factory-mixed, lightweight, dry formulation, complying with indicated fire-resistance design and mixed with water at Project site to form a slurry or mortar before conveyance and application or conveyed in a dry state and mixed with atomized water at place of application.

2.2.2. Products: Subject to compliance with requirements, provide one of the following:

2.2.2.1.

2.3.7.1. Product: Subject to compliance with requirements, provide CAFCO® BOND-SEAL or CAFCO® BOND-SEAL Type X" by Isolatek International.

2.3.8. Topcoat: If required, a topcoat suitable for application over applied fireproofing; of type recommended by fireproofing manufacturer.

3. Execution

3.1. Examination:

3.1.1. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for substrates and other conditions affecting performance of the Work and according to each fire-resistance design. Verify compliance with the following:

3.1.1.1. Substrates are free of dirt, oil, grease, release agents, rolling compounds, mill scale, loose scale, incompatible primers, paints, and encapsulants, or other foreign substances capable of impairing bond of fireproofing with substrates under conditions of normal use or fire exposure.

3.1.1.2. Clips, hangers, supports, sleeves and other attachments to the substrate are to be placed by others prior to the application of the fireproofing materials.

3.1.1.3. The installation of ducts, piping, conduit or other suspended equipment shall not take place until the application of the fireproofing is complete in an area.

3.1.2. Fire protection shall not be applied to steel floor decks prior to the completion of concrete work on that deck.

3.1.3. The application of fireproofing to the underside of roof deck shall not commence until the roof is completely installed and tight, all penthouses are complete, all mechanical units have been placed, and construction roof traffic has ceased. When roof traffic is anticipated, as in the case of periodic maintenance, roofing pavers shall be installed as a walkway to distribute loads.

3.1.4. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.

3.1.5. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2. Preparation:

3.2.1. Cover other work subject to damage from fallout or overspray of fireproofing materials during application.

3.2.2. Clean substrates of substances that could impair bond of fireproofing.

3.2.3. For applications visible on completion of Project, repair substrates to remove surface imperfections that could affect uniformity of texture and thickness in finished surface of fireproofing. Remove minor projections and fill voids that would telegraph through fire-resistive products after application.

3.3. Application:

3.3.1. Construct fireproofing assemblies that are identical to fire-resistance design indicated and products as specified, tested, and substantiated by test reports for thickness, primers, sealers, topcoats, finishing, and other materials and procedures affecting fireproofing work.

3.3.2. Comply with fireproofing manufacturer's written instructions for mixing materials, application procedures, and types of equipment used to mix, convey, and apply fireproofing as applicable to particular conditions of installation and as required to achieve fire-resistance ratings indicated.

3.3.3. Coordinate application of fireproofing with other construction to minimize need to cut or remove firepro0fing.

3.3.3.1. Do not begin applying fireproofing until clips, hangers, supports, sleeves, and other items penetrating fireproofing are in place.

3.3.3.2. Defer installing ducts, piping, and other items that would interfere with applying fireproofing until application of fireproofing is completed.

3.3.4. Metal Decks:

3.3.4.1. Do not apply fireproofing to underside of metal deck substrates until concrete topping, if any, has been completed.

3.3.4.2. Do not apply fireproofing to underside of metal roof deck until roofing has been completed; prohibit roof traffic during application and drying of fireproofing.

3.3.4.3. When roof traffic is anticipated, as in the case of periodic maintenance, roofing pavers shall be installed as a walkway to distribute loads.

3.3.5. Install auxiliary materials as required, as detailed, and according to fire-resistance design and fireproofing manufacturer's written recommendations for conditions of exposure and intended use. For auxiliary materials, use attachment and anchorage devices of type recommended in writing by fireproofing manufacturer.

3.3.6. Spray apply fireproofing to maximum extent possible. Following the spraying operation in each area, complete the coverage by trowel application or other placement method recommended in writing by fireproofing manufacturer.

3.3.7. Extend fireproofing in full thickness over entire area of each substrate to be protected.

3.3.8. Install body of fireproofing in a single course unless otherwise recommended in writing by fireproofing manufacturer.

3.3.9. For applications over encapsulant materials, including lockdown (post-removal) encapsulants, apply fireproofing that differs in color from that of encapsulant over which it is applied.

3.3.10. Where sealers are used, apply products that are tinted to differentiate them from fireproofing over which they are applied.

3.3.11. Provide a uniform finish complying with description indicated for each type of fireproofing material and matching finish approved for required mockups.

3.3.12. Cure fireproofing according to fireproofing manufacturer's written recommendations.

3.3.13. Do not install enclosing or concealing construction until after fireproofing has been applied, inspected, and tested and corrections have been made to deficient applications.

3.3.14. Finishes: Where indicated, apply fireproofing to produce the following finishes:

3.3.15. Manufacturer's Standard Finishes: Finish according to manufacturer's written instructions for each finish selected.

3.3.16. Spray-Textured Finish: Finish left as spray-applied with no further treatment.

3.4. Field Quality Control:

3.4.1. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:

3.4.1.1. Test and inspect as required by the IBC, 1704.10.

3.4.1.2. For reference, utilize AWCI - Inspection Procedure for Field-Applied Sprayed Fire-Resistive Materials, Technical Manual 12-A; an annotated guide.

3.4.2. Test and inspect completed work in successive stages. Do not proceed with application of fireproofing for the next area until test results for previously completed applications of fireproofing show compliance with requirements.

Tested values must equal or exceed values as specified and as indicated and required for approved fire-resistance design.

3.4.3. Application will be considered defective if it does not pass tests and inspections.

3.4.3.1. Remove and replace fireproofing that does not pass tests and inspections, and retest.

3.4.3.2. Apply additional fireproofing, per manufacturer's written instructions, where test results indicate insufficient thickness, and retest.

3.4.4. Prepare test and inspection reports.

3.5. Cleaning, Protecting, And Repairing:

3.5.1. Cleaning: Immediately after completing spraying operations in each containable area of project, remove material overspray and fallout from surfaces of other construction and clean exposed surfaces to remove evidence of soiling.

3.5.2. Protect fireproofing, according to advice of manufacturer and installer, from damage resulting from construction operations or other causes, so fireproofing will be without damage or deterioration at time of Substantial Completion.

3.5.3. As installation of other construction proceeds, inspect fireproofing and repair damaged areas and fireproofing removed due to work of other trades.

3.5.4. Repair fireproofing damaged by other work before concealing it with other construction.

3.5.5. Repair fireproofing by reapplying it using same method as original installation or using manufacturer's recommended trowel-applied or hand applied product.

3.5.5.1. Product: Subject to compliance with requirements, provide CAFCO® FIBER-PATCH by Isolatek International.

End of Section 07 81 00

Section 07 92 00
Joint Sealants
V12012020

1. General

1.1. Scope: This Section covers sealants for use in all locations except glazing.

1.2. Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

1.3. Quality Assurance - Sealant Compatibility and Adhesion Testing: Use sealant manufacturer's standard test methods to determine whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.

2. Products

2.1. Materials, General:

2.1.1. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.

2.1.2. Colors of Exposed Joint Sealants: Match color of materials being joined if possible. Where not possible, use color selected to provide an unobtrusive finished surface.

2.2. Elastomeric Joint Sealants:

2.2.1. Use single-component urethane sealants. If unusual conditions or type of work to be accomplished makes the use of multi-component sealants desirable, contact Publix Architect.

2.2.2. Elastomeric Sealants, General: ASTM C 920.

2.2.3. Sealants for Contact with Food: Comply with 21 CFR 177.2600.

2.2.4. Single-Component Nonsag Urethane Sealant (gun-grade):

2.2.4.1. Products:

Bostik Inc.; Chem-Calk 500.
Tremco; Dymonic FC Pecora Corporation; Dynatrol I.
Polymeric Systems, Inc.; PSI-901.
Sherwin-Williams; LOXON H1 Sealant

2.2.4.2. Type and Grade: S (single component) and NS (nonsag):

2.2.4.3. Class: 25.

2.2.4.4. Exposure: Use T (traffic) or NT (nontraffic).

2.2.4.5. Substrates: Uses M, A, and, as applicable to joint substrates indicated, O.

2.2.5. Single-Component Pourable Urethane Sealant:

2.2.5.1. Products:

Bostik Inc.; Chem-Calk 950.
Mameco International; Vulkem 455 SL.
Pecora Corporation; NR-201.
Polymeric Systems, Inc.; Flexiprene PSI-951.
Sherwin-Williams; LOXON SL1 Sealant

2.2.5.2. Type and Grade: S (single component) and P (pourable).

2.2.5.3. Class: 25.

2.2.5.4. Exposure: Use T (traffic) and NT (nontraffic).

2.2.5.5. Substrates: Uses M, A, and, as applicable to joint substrates indicated, O.

2.3. Latex Joint Sealants: ASTM C 834. Use where sealant will be painted, and only where joint movement cannot occur.

2.3.1. Products:

Bostik Inc.; Chem-Calk 600.
Mameco International; Vulkem 455 SL.
Pecora Corporation; AC-20.
Polymeric Systems, Inc.; PSI-701.
Sherwin-Williams; Powerhouse 1100A Sealant

2.4. Joint-Sealant Backing:

2.4.1. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

2.4.2. Cylindrical Sealant Backings: ASTM C 1330, of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance. Type: O (open-cell material), or B (bicellular material with a surface skin).

2.4.3. Elastomeric Tubing Sealant Backings: Neoprene, butyl, EPDM, or silicone tubing complying with ASTM D 1056, nonabsorbent to water and gas, and capable of remaining resilient at temperatures down to minus 26 F (minus 32 C). Provide products with low compression set and of size and shape to provide a secondary seal, to control sealant depth, and otherwise contribute to optimum sealant performance.

2.4.4. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.

2.5. Miscellaneous Materials:

2.5.1. Primer: Material recommended by joint sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

2.5.2. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants with joint substrates.

2.5.3. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

3. Execution

3.1. Installation:

3.1.1. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants.

3.1.1.1. Remove foreign material from joint substrates that could interfere with adhesion of joint sealant.

3.1.1.2. Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil-free compressed air.

3.1.1.3. Remove laitance and form-release agents from concrete.

3.1.1.4. Clean nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues could interfere with adhesion of joint sealants.

3.1.2. Joint Priming: Prime joint substrates where recommended in writing by joint sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

3.1.3. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.1.4. Sealant Installation: Comply with recommendation in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

3.1.5. Install sealant backings to support sealants during application and at position required to produce optimum sealant movement capability.

3.1.5.1. Do not leave gaps between ends of sealant backings.

3.1.5.2. Do not stretch, twist, puncture, or tear sealant backings.

3.1.5.3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.

3.1.6. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and back of joints.

3.1.7. Place sealants so they directly contact and fully wet joint substrates.

3.1.7.1. Completely fill recesses provided for each joint configuration.

3.1.7.2. Produce uniform, cross-sectional shapes and depths that allow optimum sealant movement capability.

3.1.8. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants to form smooth, uniform beads, to eliminate air pockets, and to ensure contact and adhesion of sealant with side of joint.

3.1.8.1. Remove excess sealants from surfaces adjacent to joint.

3.1.8.2. Use tooling agents that are approved by sealant manufacturer and that do not discolor sealants or adjacent surfaces.

3.1.8.3. Joint Configuration: Concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated.

End of Section 07 92 00

Section 08 11 00
Metal Doors and Frames
V12202016

1. General

1.1. Description of the Work: This Section covers all Steel Doors and Frames, including fabrication and erection.

1.2. Submittal: Completed LOI, list of materials proposed for use, manufacturer's specifications, shop drawings as required to describe intended assemblies, and other pertinent details of proposed installation. Where required in Florida, submit appropriate Miami-Dade County Notice of Approval (NOA).

1.3. Quality Assurance: Provide products of one manufacturer throughout the Project. Comply with ANSI/SDI 100 for manufacture and installation. Comply with NFPA 80 for manufacture and installation of fire rated assemblies.

1.4. Manufacturer's recommendations for storage, handling, and protection shall be followed exactly. Do not remove sill spreaders on welded frames until frames are installed.

1.5. NO SUBSTITUTIONS WILL BE ALLOWED.

2. Products

2.1. Steel Doors and Frames:

2.1.1. Typical Doors: Provide doors having 18 GA. steel face sheets for interior applications, 16 or 14 GA. galvanized for exterior applications. Prime paint all surfaces.

2.1.2. Exterior applications must have a Polyurethane Core Insulation with a minimum R factor of 4.75.

2.1.3. Metal Frames:

2.1.3.1. Provide 16 GA. frames in sizes and styles shown on the drawings, all welded, galvanized for exterior applications, with minimum three anchors per jamb of the type required for wall construction. Prime paint all surfaces.

2.1.3.2. Prepare frames to receive hardware as described by ANSI/SDI 100. Reinforce hinge, latch, and deadbolt locations as required.

2.1.3.3. Provide for deadbolt installation at jamb for upper leaf of dutch door at Pharmacy.

2.2. Labeled Assemblies:

2.2.1. Fire Doors: Comply with requirements above. Additionally, use tested and approved fire resistant core. Attach a permanent label showing compliance with the required label.

2.2.2. Frames: Comply with requirements above.

2.3. Accessories: Provide three silencers per door; at masonry walls, provide 26 GA. mortar boxes to protect hardware cutouts. Louvers shall be sight-proof type, 14 GA. steel, prime painted, galvanized at exterior. Glazing stops shall be 20 GA. flush type, prime painted, galvanized at exterior.

2.4. Manufacturers:

Ceco
Curries

3. Execution

3.1. Frame Installation: Set frames plumb, level and true. Use wall anchors appropriate for each type of enclosing wall.

3.2. Door Installation: Hang doors to provide smooth operation with tight closure. Install glazing and silencers after doors and frames receive final paint application.

3.3. Fire Rated Assemblies: Set frames and hang doors in compliance with NFPA 80.

End of Section 08 11 00

Section 08 14 00
Wood Doors
V03172017

1. General

1.1. Description of the Work: This Section covers all wood doors and wood doors with plastic laminate faces, including fabrication and erection.

1.2. Submittals: Completed LOI, list of materials proposed for use, manufacturer's specifications, shop drawings as required to describe intended assemblies, and other pertinent details of proposed installation.

1.3. Quality Assurance: Provide products of one manufacturer throughout the project. Comply with AW1 1300 for manufacturer and installation.

1.4. Manufacturer's recommendations for storage, handling, and protection shall be followed exactly.

1.5. NO SUBSTITUTIONS WILL BE ALLOWED.

2. Products

2.1. Wood Doors: Provide wood doors with particle board core complying with ANSI A208. ILD2, paint grade.

2.2. Factory prep all doors to receive hardware specified.

2.3. Viewlites: All viewlites shall be clear, 1/4" tempered glass, unless otherwise specified. measuring 6" x 30" or 18" x 58" (See door elevations).

2.4. Veneer: Provide all interior wood doors with .125 inch thick decorative high-pressure laminate both sides. See door schedule for laminate colors.

2.5. Accessories: Provide three silencers per door. Louvers shall be sight-proof type fabricated from 14 GA. steel, prime painted. Glazing stops and frames shall be 20 GA. steel, prime painted.

2.6. Manufacturers:

VT Industries
Doormerica
Marshfield

3. Execution

3.1. Door Installation: Hang doors to provide smooth operation with tight closure. Install glazing and silencers after doors and frames receive final paint application.

End of Section 08 14 00

Section 08 17 05
Side Folding Grilles
V03262020

1. General

1.1. Summary:

1.1.1. Section Includes: Manual side-folding aluminum security grilles with storage pocket.

1.2. Submittals:

1.2.1. Reference Section 01 33 00 Submittal Procedures; submit following items:

1.2.1.1. Product Data: Include published data and specific data prepared for this project.

1.2.1.2. Shop Drawings: Include detailed plans, elevations, required clearances and accessories.

1.2.1.3. Installation instructions.

1.2.1.4. Quality Assurance Requirements:

1.2.1.4.1. Manufacturer qualifications.

1.2.1.4.2. Installer qualifications.

1.2.1.4.3. Certificates.

1.3. Quality Assurance:

1.3.1. Manufacturer Qualifications: Minimum of three years experience in the fabrication and installation of Side Folding Security Grilles.

1.3.2. Installer Qualifications: Authorized representative of the manufacturer.

1.3.3. Certificate stating that materials and finishes comply with specifications.

1.3.4. Single Source Responsibility: Provide Grilles, storage pocket, track and related primary components from one manufacturer for each type of Grille. Provide secondary components from source acceptable to manufacturer of primary components.

1.3.5. Pre-Installation Conference: Schedule and convene a pre-installation conference just prior to commencement of field operations to establish procedures to maintain optimum working conditions and to coordinate this work with related and adjacent work.

1.4. Delivery, Storage and Handling

1.4.1. Reference Section 01 66 00 Product Storage and Handling Requirements.

1.4.2. Deliver materials in labeled protective packages. Store and handle in compliance with manufacturer's instructions.

2. Products

2.1. Manufacturers:

Dynamic Closures

Telephone: 1-800-663-4599; Fax: 1-800-205-6665

E-mail: info@DynamicClosures.com

2.2. Models and Materials:

2.2.1. Models: EZ Paravent (Dynamic Closures).

2.2.2. Curtain:

2.2.2.1. Panels: 4.25 inches (108mm) wide with 2 inch (51mm) high bottom and top plates, truss-like aluminum, with full height aluminum panels perforated with .1875 inch (5mm) holes spaced .25 inches (6mm) on center; 51 percent viewable area. Panels connected with single-piece vertical .6125 x .5 inch (16mm) x (13mm) aluminum hinges. Curtain secured to pocket, no end post required..

2.2.2.2. Curtain shall be fully assembled and installed in pocket by respective manufacturer.

2.2.3. Curtain height: Reference Drawings.

2.2.4. Finish-Exposed Aluminum Parts Clear Anodized;

2.2.5. Locking Posts: Reference Manufacturer's installation drawing. Maximum straight line spacing of dropbolts is 10 feet (3048mm) on full height doors, 6ft (1829mm) on counter doors and 1 per curve. All lock mechanisms shall face to the outside of the pharmacy.

2.2.6. Locks: The lock type on gate shall be SFIC (Small Format Interchangeable Core) for all locking post.

2.2.7. Locks shall be positioned no be higher than 74" from the Finished Floor (not counter).

2.2.8. Locks shall be bi-parting with cylinder lock and shootbolt. see manufacturer for details

2.2.9. Overhead Track: Extruded aluminum, of size specified by manufacturer, with continuous extruded profile seamed together by alignment bars and track pins. Track to be secured to a header that will carry weight of complete curtain. The wall channel shall be fastened to the opposite wall properly block and constructed by others. Header that supports the track is constructed by others.

2.2.10. Pocket: Welded 1/2" tubular steel frame that is 6" exterior suitable for commercial construction of 6" stud walls. Interior clear opening width of 5" by height of curtain required. Pocket is adjustable to be raised or lowered up to an inch. Front corner angles flags to cover pocket opening with Piano Hinges. Angles also accept 1/2" or 5/8" sheetrock.

2.2.11. Operation:

2.2.11.1. Manual pull operation.

2.2.11.2. Provide attached pull straps on grilles over 9'0" (2745 mm) in height and all counter height grilles.

3. Execution

3.1. Examination:

3.1.1. Examine supports and other conditions under which Grilles are to be installed.

3.1.2. Coordinate with responsible entity to correct unsatisfactory conditions and do not proceed with installation until conditions are corrected.

3.2. Installation:

3.2.1. Follow manufacturer's installation instructions and approved shop drawings.

3.3. Adjusting and Cleaning:

3.3.1. Test operation of Grille and adjust as necessary to provide smooth and proper operation.

3.3.2. Clean exposed surfaces using manufacturers recommended cleanser.

3.4. Demonstration:

3.4.1. Instruct Owner's personnel in proper operating and maintenance procedures.

End of Section 08 17 05

Section 08 33 00
Rolling Security Shutters
V09092021

1. General

1.1. Summary

1.1.1. Section includes main customer exterior automated entry/exit doors (including front façade windows between entry/exit doors, if existing) overhead Roll-Up security shutter.

1.1.2. If prototype is based on a C20 variation and the pharmacy has roll down shutters – then it also applies to the pharmacy.

1.2. Submittals

1.2.1. Product Data: Submit manufacturer's product data for all specified components, including specifications, finish information and installation instructions.

1.2.2. Shop Drawings: Submit scaled shop drawings showing layout, sized and types, product materials, components and accessories, fabrication data, wiring diagrams for motor driven operators, finish, rough-in dimensions, anchorage with installation requirements and location details.

1.2.3. Samples: Manufacturer's standard array of colors for selection by Architect.

1.2.4. Quality Assurance Submittals:

1.2.4.1. Test Reports: Engineer raised seal test reports showing compliance with specified requirements.

1.2.4.2. Certificates: Engineer certification that design criteria meets specified requirements.

1.2.4.3. Operating and Maintenance Instructions: Submit detailed maintenance requirements and operating instructions.

1.2.4.4. Warranty: Submit specified warranty documents.

1.3. Quality Assurance

1.3.1. Manufacturer's Qualifications: Obtain rolling shutters through one source from a single manufacturer with a minimum of 20 years' experience in manufacturing products comparable to those specified in this section.

1.3.2. Install Qualifications:

1.3.2.1. Use only manufacturer's factory trained installers or qualified installers approved by shutter manufacturer.

1.3.3. Regulatory Requirement:

1.3.3.1. Comply with all local and governing code requirements.

1.3.3.2. Pre-Installation Conference: Conduct a pre-installation meeting to verify project installation and coordination requirements, and field conditions. Tele-conference is acceptable.

1.3.3.3. Electrical Certifications: ANSI approved and labeled UL325 as a complete shutter system, Individual testing of components will not acceptable in lieu of system.

1.4. Delivery, Storage and Handling

1.4.1. Deliver components in manufacturer's original, unopened, undamaged containers with identification labels intact. Store components protected from harmful weather conditions and damage from other construction activity.

1.5. Project Conditions

1.5.1. Field Measurements: Record actual measurements of opening before fabrication. Show recorded measurement on As-Built drawings.

1.6. Warranty

1.6.1. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by an authorized company official.

1.6.1.1. Warranty Period: One-year parts and labor, not including scaffolding, lifts, or other means to reach the inaccessible areas.

1.6.1.2. Motors and motor control systems: Manufacturer's standard non-depreciating five-year warranty.

2. Products

2.1. Manufacturer

2.1.1. QMI

Contact: QMI National Accounts for all inclusive quote – (800) 446-2500 / ProjectSupport@qmiusa.com
Contact: Julie Perez, National Accounts Sales Director – jperez@qmiusa.com / (630) 945-8907
1661 Glenlake Avenue
Itasca, Illinois 60143 USA

2.1.2. Roll up security shutters are to be furnished and installed by QMI Security Solutions. General Contractor to contact QMI for National Account pricing: (800) 446-2500 / ProjectSupport@qmiusa.com or jperez@qmiusa.com

2.2. Other Acceptable Manufacturer's

2.2.1. Substitutions: Not Permitted.

2.2.2. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.3. Material

2.3.1. Shutter Components:

2.3.1.1. Slat Type:

2.3.1.1.1. Aluminum Single Wall Slats: Extruded aluminum, 6063-T5 allow. Solid slats with non-slip hinge. Slip hinges with slotted light slits shall not be permitted due to strength compromise.

2.3.1.1.1.1. End Retention: Both ends of each slat to contain #8-18 thread 410 stainless steel, Dacromet 320 coated, screws with a 3/16" shoulder bushing and ½" diameter head.

2.3.1.1.1.2. Finger pull slat model AL-FP-A-1 integrated with curtain at 32" A.F.F. (with push up/pull down operation only).

2.3.1.1.1.3. Slat perforations for vision: P51

2.3.1.1.2. Bottom Base or Locking Slat: Extruded aluminum, 6063-T6 alloy. Lock bar operation into mortised side rails at bottom of each side rail. Polypropylene felt or rubber gasket at underside of bottom lock slat.

2.3.1.3. Key lock (lock Publix compatible-Medeco) base slat with key engaging teel slides. Key lock on side as listed below:

2.3.1.3.1. Pharmacy locations – store sales side

2.3.1.3.2. Store main entry/exit locations – exterior side

2.3.1.4. Thumb turn lock as listed:

2.3.1.4.1. Pharmacy locations – none

2.3.1.4.2. Store main entry/exit locations- interior store side

2.3.1.4.3. Front Façade windows when present – interior store side

2.3.1.5. Cylinder lock heavy duty base slat (with or without) thumb turn opposite key (centered at sliding double doors or off-center at double swing style doors) engaging steel slides.

2.3.1.6. Operation: Manual

2.3.1.6.1. Manual operator type:

2.3.1.6.1.1. Manual pushup/pull down operation with internal drive tub torsion spring lift-assist manufactured to have a maximum 35 lbs raise or lower effort.

2.3.1.7. 48-inch stainless steel pole, one per shutter.

2.3.1.8. Pair of L-shape 6" close assist push handles on bottom bar on the store sales side.

2.3.1.8.1. Pharmacy (when applicable) L-shape push handles to have a hole to receive the pull pole from the sales floor side.

2.3.1.9. End Caps: Die-cast Aluminum square profile. Color to match slats.

2.3.1.10. Box Cover (hood): Roll formed aluminum; .036-inch thickness, 3105-H14 alloy. Two-piece assembly-profile to match end caps. Color to match slats.

2.3.1.10.1. Shape: shall be square

2.3.1.10.2. Size: all shutters for project shall be contained in an (6", 6.5", 7", 8", 10" or 12") sized box housing.

2.3.1.11. Track Guide/Side Rails: AL7, aluminum extrusion, 6063-T5, lined with insulation woven polypropylene runners. Color to match slats. Provide manufacturer's standard Security 3-3/8"x1" retained and spring stop rail for manual push up/pull down.

2.3.1.12. Mounting: Surface/Face

2.3.1.12.1. Face mount QMI track section to QMI 2"x3" minimum tubes, to sides of opening into building structure. No shutter shall be mounted to window or door frames.

2.3.1.12.2. Build-out required at door openings to clear door hardware.

2.3.1.12.3. Build-out required and mounted to building structure at trapped openings (site specific) for jamb mount. No build-out shall be attached to window frames.

2.3.1.13. Drive Tube: Manufacturer selected base on shutter specific load calculations from either 60mm octagon steel, 70mm octagon steel, 4" aluminum round, or 5" aluminum round.

2.4. Shop Finish

2.4.1. Side Frame and Track: Clear anodized finish.

2.4.2. Color: Clear anodized finish

2.4.3. Anodized finish: 201-R1 Clear Acid Etch (15 min Velo).

2.5. Application & Design

2.5.1. Codes: Installed shutters shall meet the required building compliance and documentation per section 1.2 Submittals per locations.

2.5.1.1. Florida Building Code (FBC) complaint or International Building Code (IBC) complaint as applicable.

3. Execution

3.1. Examination

3.1.1. Verify conditions of substrates to determine if acceptable for shutter installation in accordance with manufacturer's instructions. Correct all unsatisfactory conditions prior to commencing shutter installations.

3.2. Installation

3.2.1. Install track and all shutter components to comply with project shop drawings and manufacturer's installation product approvals.

3.2.2. After installation, lubricate, test and adjust shutters to operate properly and free from distortion.

3.3. Cleaning

3.3.1. Clean installed components in accordance with manufacturer's instructions prior to Owner's acceptance. Properly remove from the site all debris remaining from this installation.

3.3.2. Inadequate surface cleaning will result n corrosion formation & potential structural damage.

3.4. Protection

3.4.1. Comply with manufacturer recommendations and protect completed shutter installation from damage during remain construction so as not to void warranty.

End of Section 08 33 00

Section 08 33 23
Overhead Coiling Doors
V07212017

1. General

1.1. Summary: The basis of the coiling doors specification will be as manufactured by the Cookson Company, Phoenix, Arizona. Alternate manufacturers will be accepted as listed below.

1.2. This Section includes information normally found in Section 08 33 13 Coiling Counter Doors.

1.3. Quality Assurance: Exterior coiling insulated service doors shall be designed to withstand at least a (20) twenty pounds per square foot wind load. Windlocks shall be installed on every slat of doors over 14'-1" wide. Doors must comply with local wind load requirements.

1.4. Submittals:

1.4.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

1.4.2. List of materials proposed for use.

1.4.3. Manufacturer's specifications.

1.4.4. Miami-Dade County Notice of Acceptance (NOA) letter as required.

1.4.5. Shop drawings as required to describe intended assemblies, door schedule, and other pertinent details of proposed installation.

2. Products

2.1. Overhead Coiling Doors:

2.1.1. The door curtain shall be constructed of interconnected strip steel slats conforming to ASTM A-653. The slats shall be a minimum of 22 gauge exterior and interior and will be separated by 13/16" rigid insulation. Insulation shall not produce a flame spread greater than 25 and smoke generation greater than 50. Insulation will provide no less than a R-value of 6.0.

2.1.1.1. The finish of the door curtain shall consist of the following.

2.1.1.1.1. Hot dipped galvanized G-90 coating consistent with ASTM A-525.

2.1.1.1.2. Bonderized coating for prime coat adhesion.

2.1.1.1.3. Corrosion inhibiting primer- .2 mils per side.

2.1.1.1.4. Thermo- setting polyester top coat with a minimum thickness of .6 mils each side.

2.1.1.1.5. Special Requirement - Coastal Areas: Where exterior mounted coiling doors are required at the automatic entrance doors, paint all exposed metal surfaces, matching the primary facade color. See Section 09 91 00 – Paints regarding requirements for painting exposed exterior metal surfaces.

2.1.1.2. The bottom bar shall consist of two 1/8" angles mechanically joined together with a 1" diameter vinyl covered foam edge astragal continuous along the bottom. The finish on the bottom bar shall be one coat of rust inhibiting prime paint.

2.1.1.3. Guides shall consist of steel angles bolted together to form a channel for the curtain to travel. Vinyl snap-on weatherstripping shall be furnished continuously along the exterior leg of each guide. Guide angles shall be coated with one coat of rust inhibiting prime paint.

2.1.1.4. The brackets shall be of steel not less than 1/4" thick and finished with one coat of rust inhibiting prime paint.

2.1.1.5. The hood shall be fabricated from 24 gauge galvanized steel and shall be formed to fit the curvature of the brackets. The hood shall be corrugated every 1" along the curvature for the entire length of the hood. The hood shall contain a waterproof canvas baffle to control air infiltration and shall be gasket-ed at the wall to prevent pest infiltration.

2.1.1.5.1. Special Requirement - Coastal Areas: Where exterior mounted coiling doors are required at the automatic entrance doors, the hood will be rectangular in form. Hood must also be fabricated to enclose all gears and mechanisms.

2.1.1.5.2. Special Requirement - Coastal Areas: Where exterior mounted coiling doors are required at the automatic entrance doors, The rolling door shall be made of 22 gauge interlocking slats, Non-Insulated. The door must by be operated by a Removable Hand Crank. NO CHAIN OPERATION is allowed.

2.1.2. Manufacturers:

Cookson, Model FCWI Cornell Iron Works
Overhead Door Corporation, Model 625
Raynor DuraCoil STANDARD
South Florida Rolling Doors, Inc., Model 903

2.2. Push-Up Counter Doors (Remodels only):

2.2.1. The door curtain shall be constructed of interconnected .040 or .050 extruded aluminum No. 8 (1- 5/16" high by 3/8" deep) slats. The curtain shall receive a clear anodized finish.

2.2.1.1. The bottom bar shall be constructed of tubular extruded aluminum measuring 1-5/16" deep by 2- 1/4" high with a double vinyl astragal on the bottom edge. The bottom bar shall receive a clear anodized finish.

2.2.1.2. The guides shall be constructed of extruded aluminum and measure 1-3/4" square. Each side of the channel portion capturing the curtain shall contain wool pile weatherstripping. The guides shall receive a clear anodized finish.

2.2.1.3. The brackets shall be constructed of 3/16" thick die cast aluminum.

2.2.1.4. The barrel shall be steel tubing of not less that 4" in diameter. Oil tempered torsion springs shall be capable of correctly counter balancing the width of the curtain. The barrel shall be designed to limit the maximum deflection to .03" per foot of opening width. The barrel shall receive one(1) coat of bronze rust inhibiting prime paint.

2.2.1.5. The hood shall be fabricated from .040 aluminum and shall be formed to fit the square brackets. The hood shall receive a clear anodized finish.

2.2.2. Manufacturers:

Cookson, Model CDS-1
Cornell Iron Works
Overhead Door Corporation, Model 652
Raynor, DuraShutter SELECT Metro
Door, Metro-Guard
Dynamic Enclosures, Model Lift-Ready Rolling Grilles "Ventana"

2.2.3. Operation:

2.2.3.1. Chain operated Overhead Coiling doors shall open and close with a maximum of 30 pounds of effort utilizing an endless chain and cast iron reduction gears.

2.2.3.2. Push-up operated doors shall open and close with a maximum of 30 pounds of effort utilizing finger lifts in the bottom bar.

2.2.4. Locking mechanism:

2.2.4.1. The Overhead Coiling door chain shall be secured by means of a chain lock.

2.2.4.2. Special Requirement - Coastal Areas: Hand crank operated doors shall have standard slide bolt locking mechanisms on coil side of door that can be secured by padlocks.

2.2.4.3. The push-up door shall be secured by means of a concealed sliding bolt deadlock in the bottom bar operated by a cylinder lock. Cylinder lock must be re-keyable.

2.2.5. Vision Panel: In doors not required to meet missile impact resistance, provide vision slats 12"wide x 6 slats high. Bottom of vision panel should start at approximately 5' A.F.F.

3. Execution

3.1. Installation: All Coiling Insulated and Push-up Counter doors shall be installed by a manufacturer's authorized installer and will be in accordance with manufacturer's instructions and standards.

3.2. Warranty: All Coiling Insulated and Push-up Counter doors shall be warranted against defects in workmanship and materials for a period of one year from the time of installation.

End of Section 08 33 23

Section 08 38 80
Traffic Doors
V03262020

1. General

1.1. Description of Work: This section covers all Traffic Doors, including fabrication and erection.

1.2. Manufacturer's recommendations for storage, handling and protection shall be followed exactly.

1.3. Warranty:

1.3.1. Provide Manufacturer's standard 1 year limited warranty for Traffic Doors and all related parts.

1.3.2. All other warranties and bonds are to be in accordance with Section 01 77 00 Closeout Procedures.

2. Products

2.1. Acceptable Manufacturers:

2.1.1. Traffic Door Manufacturers: Subject to compliance with requirements, provide products of the following:

Chase Industries Inc./Senneca Holdings

National Account Contact: Kay Blair Email:kblair@seneca.com

Office (269) 492-3934

Fax (800) 245-7045

National Sales Rep: Chris Jacobs

Office:(770) 773-0313

2.2. Traffic Doors

2.2.1. Doors shall be Durulite "Standard" traffic doors constructed with the outer skin of monolithically formed, rotationally molded, cross linked high density 1/ 8"polyethylene and a textured finish. Door panel thickness shall be 1 7/8".

2.2.2. Dock doors shall be Durulite "Industrial" traffic doors 90x180 with heavy duty hinges SAE J429 G8 ¼-20 bolt. Constructed with the outer skin of monolithically formed, rotationally molded, cross linked high density 1/ 4"polyethylene and a textured finish

2.2.3. Insulation core material shall be a high density, foamed-in-place, rigid CFC-Free urethane insulation. Material shall be foamed-in-place and provide an R-value of 10.83.

2.2.4. Polyethylene tear drop bumpers shall be 36 inches high and factory installed on both sides of each leaf using stainless steel panel inserts and fasteners. Color: Black.

2.2.5. Provide 11" industrial lower hinge guards.

2.3. Traffic Door Hardware

2.3.1. Provide Manufacturer's standard gravity return V-

1.2. Wind loading: Conform to the requirements of the local authority having jurisdiction.

1.3. Warranties:

1.3.1. Insulating Glass Panels: Manufacturer's standard ten year warranty against all defects.

1.3.2. Automatic Entrances: Two years manufacturer's warranty on parts and labor from the installation date.

1.4. Submittals:

1.4.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

1.4.2. Shop Drawings:

1.4.2.1. Submit Shop Drawings in sufficient detail to show fabrication, installation, anchorage, and interface of the work of this Section with the Work adjacent.

1.4.2.2. In Jurisdictions where Notice of Acceptance (NOA) is required (as described in section 2.1.2): Submit Shop Drawings signed and sealed by an Engineer registered in the State of Florida certifying that all requirements of county regulations are met by design proposed.

1.4.2.3. All Automatic Door entrances must be compliant with ANSI/BHMA 156.10 Accessibility Standards.

2. Products

2.1. Automatic Entrance Doors:

2.1.1. Interior Standard Package: Besam (Assa Abloy) SL 500 Series auto-slide automatic sliding entrances. Where Applicable, Interior Door Package shall include Transom w/ 1/4" tempered glass.

2.1.2. Exterior Package: Besam(Assa Abloy) SL 500 Resilience R104 "Hurricane" with lockguard for exterior applications ONLY. This condition is applicable to all Publix store locations.

2.1.3. Slide Action: Provide Bi-Parting, Bi-Passing, or Telescoping action as shown on the Drawings.

2.1.4. Finish: Clear anodized aluminum.

2.1.5. Coordinate glazing, electrical, control wiring, etc. with other trades as required.

2.1.6. Glazing for automatic doors and sidelights.

2.1.6.1. In areas listed as High Velocity Wind Zones, provide laminated glass complying with ASTM C-1172, Kind LA.

2.1.6.1.1. Provide evidence of project jurisdiction product approval.

2.1.6.1.2. Glass: 7/16" or 9/16" Laminated Impact glass, outer lites 1/4" annealed float glass, quality Q3, laminated on both sides of inner plastic layer, in sizes as required.

2.1.6.2. When the store is not located in a High Velocity Wind Zone, use 1/4" clear tempered float glass, ASTM C-1036, quality Q3.

2.1.6.3. Transom panels shall be of the same type of glazing as used in the automatic doors.

2.1.6.4. Interior Glazing: 1/4" clear tempered float glass, ASTM C-1036, quality Q3.

2.2. Sealants for Glazing:

2.2.1. Where sealants are used in conjunction with glazing systems, use only those recommended by the manufacturer of the glazing system.

2.2.2. Under no circumstances shall wet sealants be introduced into glazing systems to provide primary weatherproofing or waterproofing.

2.2.3. Where sealants for perimeters of glazing systems abut other materials, use sealants as described in Section 07 92 00 Joint Sealants.

3. Execution

3.1. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2. Coordinate as required with other trades to assure proper provision in the work of those trades for interface with the work of this Section.

3.3. All tracks for the interior entrance doors must be installed to the concrete slab prior to the beginning of terrazzo installation. Use adequate shimming to ensure top of track is at finish floor level (slab is depressed approximately 5/8").

3.4. Make measurements as required in the field to assure proper fit.

3.5. All aluminum sash shall be cut to fit, filed and installed to provide hairline fit at joints, with smooth continuity of line and accurate relation of planes and angles. Exposed caulking shall not be used.

3.6. Prepare for, receive, and install the finish hardware furnished under Section 08 71 00 Door Hardware.

3.7. Glazing and Setting:

3.7.1. Sash shall be clean and dry before glazing. Do not glaze in damp or dusty weather or when temperature is lower than 40 degrees Fahrenheit.

3.7.2. Improperly set glass or glass which does not fully meet requirements of its grade will not be accepted and must be replaced to satisfaction of Architect without cost to Owner.

3.8. Cleaning and acceptance: upon completion of project: Replace all cracked, stained or broken glass at no cost to Owner. Remove all traces of paint and etc., and thoroughly clean all sash before final acceptance of Project.

End of Section 08 42 29

Section 08 43 13
Aluminum – Framed Storefronts
V04182018

1. General

1.1. This Section contains information normally found in Section 08 81 00 Glass Glazing.

1.2. Wind loading: Conform to the requirements of the local authority having jurisdiction.

1.3. Warranties: Insulating Glass Panels: Manufacturer's standard ten year warranty against all defects.

1.4. Submittal:

1.4.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

1.4.2. Shop Drawings:

1.4.2.1. Submit Shop Drawings in sufficient detail to show fabrication, installation, anchorage, and interface of the work of this Section with the Work adjacent.

2. Products

2.1. Aluminum Framing:

2.1.1. Sizes and designs as shown on Drawings. Include all sash, corner caps, and covers, wind reinforcement, and all other components required for a secure, watertight installation.

2.1.2. Interior and Exterior finish shall be clear anodized aluminum, AA-M12-C12- A31.

2.1.3. Approved Manufacturers:

Kawneer
Vistawall
U.S. Aluminum
Trulite PPG Tubelite YKK
American Products, Inc (API)

2.2. Manufacturer's labels, showing strength and quality, are required on all glass, and are not to be removed until inspected and approved by Publix' Representative. All glass shall conform to Fed Spec DD-6-451A. Tempered glass shall be so marked, permanently, in an inconspicuous location on the panel.

2.3. Exterior Glazing:

2.3.1. Laminated glazing: 9/16" missile impact to be used for shell glazing and Publix-designed facade glazing (developer-designed facade glazing exempt) in the following locations or as required in the drawings.

2.3.1.1. Florida: Entire state. Must meet assembly requirements as stated in approved Miami-Dade Notice of Acceptance (NOA) and Florida Product Approval.

2.3.1.2. Georgia: 10 miles within the coast line.

2.3.1.3. South Carolina:10 miles within the coast line.

2.3.1.4. Alabama: 10 miles within the coast line.

2.3.1.5. North Carolina: 10 miles within the coast line.

2.3.1.6. Virginia: 10 miles within the coast line.

2.3.2. Approved Products:

Safety Plus-II, Glasslam NGI
Saf-Glas, Impact Security Products, Inc.
StormGard, Viracon
StormGlass, Oldcastle
PPG

2.3.3. Elsewhere, provide sealed insulating panels composed of two lites 1/4" clear tempered float glass, in sizes as described on Drawings and verified in field.

2.3.3.1. Glass: ASTM C-1036, quality Q3.

2.3.3.2. Sealed Panels: ASTM E-774, Class B.

2.3.4. Exterior Storefront Door (where applicable). The Following items are to be Included with the door and provided by the Store front door provider.

1 ea. Door Closer
1 ea. Door Pull
1 ea. Push Bar
1 ea. Thumb Turn

2.4. Interior Glazing: 1/4" clear tempered float glass, ASTM C-1036, quality Q3, in sizes as required.

2.5. Sealants for Glazing:

2.5.1. Where sealants are used in conjunction with glazing systems, use only those recommended by the manufacturer of the glazing system.

2.5.2. Under no circumstances shall wet sealants be introduced into glazing systems to provide primary weatherproofing or waterproofing.

2.5.3. Where sealants for perimeters of glazing systems abut other materials, use sealants as described in Section 07 92 00 Joint Sealants.

3. Execution

3.1. Examine the areas and conditions under which work of this Section will be performed Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2. Coordinate as required with other trades to assure proper provision in the work of those trades for interface with the work of this Section.

3.3. Make measurements as required in the field to assure proper fit.

3.4. All aluminum sash shall be cut to fit, filed, and installed to provide hairline fit at joints, with smooth continuity of line and accurate relation of planes and angles. Exposed caulking shall not be used.

3.5. Glazing and Setting:

3.5.1. Sash shall be clean and dry before glazing. Do not glaze in damp or dusty weather or when temperature is lower than 40 degrees Fahrenheit.

3.5.2. Coordinate with others to see that sufficient blocking is rigidly in place and that finish material will fit sill covers, jambs, etc. Install store front sash securely and neatly and caulk fully to produce watertight area. Anchor division bars to stool framing and wood ground above.

3.5.3. Improperly set glass or glass which does not fully meet requirements of its grade will not be accepted and must be replaced to satisfaction of Architect without cost to Owner.

3.6. Cleaning and acceptance: upon completion of project: Replace all cracked, stained or broken glass at no cost to Owner. Remove all traces of paint and etc., and thoroughly clean all sash before final acceptance of Project.

End of Section 08 43 13

Section 08 56 59
Service and Teller Window Units
V01262018

1. General

1.1. This Section contains information pertaining to the pharmacy vision and transaction window and the cafe service window when they occur as indicated on the Construction Drawings.

1.2. Wind loading: Conform to the requirements of the local authority having jurisdiction.

1.3. Submittals:

1.3.1. Shop Drawings:

1.3.1.1. Submit Shop Drawings in sufficient detail to show installation, anchorage, and interface of the work of this Section with the Work adjacent.

1.3.1.2. Stores located in Florida and coastal counties (see Article 1.4 of this Section): Submit Shop Drawings signed and sealed by an Engineer registered in the State of Florida certifying that all requirements of county regulations are met by design proposed.

1.3.1.3. Product Certificates: Signed by product manufacturer, indicating level of ballistics resistance provided.

1.4. High Velocity Wind Zones: This condition is applicable in the following locations or as required in the drawings.

1.4.1. Florida: Entire state. Must meet assembly requirements as stated in approved Miami-Dade County Notice of Acceptance (NOA).

1.4.2. Georgia: 10 miles within the coast.

1.4.3. South Carolina: 10 miles within the coast.

1.4.4. Alabama: 10 miles within the coast.

1.4.5. North Carolina: 10 miles within the coast.

1.4.6. Virginia: 10 miles within the coast.

1.4.7. Installer Qualifications: An authorized representative of vision and transaction window manufacturer for installation and maintenance of units required for Project.

1.5. Storage and handling: Store crated vision and transaction window on raised blocks to prevent moisture damage.

1.6. Field Measurements: Verify vision and transaction window openings by field measurements before fabrication. Coordinate wall construction to ensure that actual opening dimensions correspond to established dimensions provided by Manufacturer.

1.7. Warranty:

1.7.1. Manufacturer's standard form in which manufacturer agrees to repair or replace components of the vision and transaction window that fail in materials or workmanship within specified warranty period. Failures include, but are not limited to, the following:

1.7.1.1. Structural failures including deflections exceeding 1/8 inch.

1.7.1.2. Failure of welds.

1.7.1.3. Excessive air leakage.

1.7.1.4. Fault operation of transaction drawer.

1.7.1.5. Deterioration of metals, metal finishes and other materials beyond normal weathering and use.

1.7.2. Warranty period:

1.7.2.1. Transaction Drawer: Two years from date of Substantial Completion.

1.7.2.2. Vision Window: Five years from date of Substantial Completion.

1.7.2.3. Other items: One year from date of Substantial Completion.

2. Products

2.1. The vision window and transaction drawer at the Pharmacy will be supplied by the following company:

E.F. Bavis and Associates, Inc.
Terry Roberts, Director - Marketing and Sales
Telephone: (513) 677-0500 Ext. 106
Fax: (513) 677-0552
E-mail: tar@bavis.com

2.1.1. Vision Window:

60" Basic Trimless Window
-OR-
HVHZ 60" Trimless Window (High Velocity Wind Zones as described in section 1.4)

2.1.2. Transaction Drawer:

Basic Drawer 2
-OR-
Manual Drawer with Flush Audio Panel (High Velocity Wind Zones)

2.1.2.1. Heater: Order 115 VAC heater in stores located in the States of Tennessee, North Carolina and Virginia.

2.1.2.2. Ballistics Resistance: Same as vision window.

2.2. Wireless Annunciator System:

2.2.1. Receiver:

Wireless 1000 RC-10, Optex

2.2.2. Outdoor Sensor Transmitter:

Wireless 1000 TD-10, Optex

2.3. Cafe Window (where shown on plans):

2.4. Sealants: SC4030, Quikserv Corp:

2.4.1. Under no circumstances shall wet sealants be introduced into glazing systems to provide primary weatherproofing or waterproofing.

2.4.2. Where sealants for perimeters of glazing systems abut other materials, use sealants as described in Section 07 92 00 Joint Sealants.

3. Execution

3.1. Examine the areas and conditions under which work of this Section will be performed Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2. Coordinate as required with other trades to assure proper provision in the work of those trades for interface with the work of this Section.

3.3. Make measurements as required in the field to assure proper fit.

3.4. Wireless Annunciator System: The installer of the window and transaction drawer will be responsible for the installation of this equipment.

3.4.1. Outdoor Sensor Transmitter: Mount to pharmacy canopy so as to be protected from direct exposure to weather. The sensor should be set so as to notify of an automobile's approach to the transaction window.

3.4.2. Receiver: Mount on wall next to vision window. Outlet for power provided by electrical work.

3.5. Transaction Drawer Heater: Use the same outlet as the chime box for the wireless annunciator system.

3.6. Sealants: Seal frame perimeter with sealant to provide weathertight construction, unless otherwise indicated.

3.7. Field Quality Control:

3.7.1. Coordinate with manufacturer representative to inspect and verify compliance of installed products with requirements.

3.7.2. Remove and replace work where inspections indicated that work does not comply with specified requirements.

3.7.3. Perform additional inspections to determine compliance of replaced or additional work.

3.8. Adjusting:

3.8.1. Adjust transaction drawers to provide a tight fit at contact points for smooth operation and secure enclosure.

3.9. Cleaning: Clean surfaces promptly after installation of vision window and transaction drawer. Exercise care to avoid damaging the finish. Remove excess glazing and sealing compounds, dirt and other substances.

3.9.1. Clean glass promptly after installation using cleaners recommended by manufacturer. DO NOT USE RAZORS TO CLEAN GLASS.

3.9.2. Follow manufacturer's instructions regarding lubrication of transaction drawer hardware.

3.10. Demonstration:

3.10.1. Engage a factory-authorized service representative to train Publix maintenance personnel to adjust, operate and maintain the vision window, transaction drawer and wireless annunciator system.

End of Section 08 56 59

Section 08 71 00
Door Hardware
V05142021

1. General

1.1. Submittals:

1.1.1. Hardware Schedule: Submit a complete Schedule of hardware using the format of this Specification, indicating type, number, location and finish of each item. Include Manufacturer's name and model description, fastening devices and complete keying schedule. Reference Architect's door designation.

1.1.2. Provide a cross-reference between door numbers and hardware headings.

1.1.3. Templates: Furnish templates and approved schedule to each related manufacturer of equipment which require same for the fabrication of their material.

1.1.4. NO SUBSTITUTIONS WILL BE ALLOWED.

1.2. Quality Assurance

1.2.1. Provide hardware in compliance with the local building code requirements. Also comply with NFPA101 Life Safety Code and ANSI A117.1 where applicable.

1.2.2. Provide hardware for fire rated openings in accordance with NFPA 80, (Fire Doors and Windows) and NFPA 105 (Smoke And Draft Control Door Assemblies).

1.3. Delivery Storage and Handling

1.3.1. Deliver hardware to Project Site in manufacturer's protective packaging, all items are to be marked to indicate door opening number, hardware schedule number or other identifying marks.

1.3.2. Store hardware in secure lock-up area, dry and lighted.

1.4. Warranty

1.4.1. Warrant door closers against failure due to defective materials and workmanship for a period of five (5) years beginning at date of Substantial Completion. Closers judged defective during this period shall be replaced or repaired at no cost to the Owner.

1.4.2. Warrant exit devices against failure due to defects in material or workmanship for a period of three (3) years.

1.4.3. All other warranties and bonds are to be in accordance with Section 01700 - Contract Close-Out.

2. Products

2.1. Finish:

2.1.1. Finish, unless otherwise indicated, shall be US26D. (Brushed Chrome)

2.1.2. Door closers shall be spray-painted for finish to match adjacent hardware.

2.2. Cylinders: Acceptable Manufacturer: Sargent or Schlage

2.3. Lock Company.

2.3.1. REMODEL ONLY: Any replacement cylinders should be of the same manufacturer of the predominant existing cylinders that are in the store. The general contractor or subcontractor must verify this information with the Publix Facilities Construction Representative.

2.3.2. Cylinders shall be keyed alike. No master keying or construction master keying is required.

2.3.3. Provide six keys.

2.4. Hinges:

2.4.1. Acceptable Manufacturers:

McKinney Hager
Double-acting spring hinges: Bommer Industries, Inc.

2.4.2. Hinges shall be the types, materials, sizes, and finishes indicated in finish hardware schedule.

2.5. Locksets, Passage Sets, Cylinders:

2.5.1. Acceptable Manufacturer: Sargent Lock Co.

2.5.2. Lockset and passage set series and design shall be "D" Series (Heavy Duty), Rhodes Lever Design.

2.5.3. Cylinders shall be mortise or rim, six pin type complete with cam and/or tail piece for exit devices.

2.6. Exit Devices with Alarm Kits:

2.6.1. Acceptable Manufacturer: Detex.

2.6.2. Acceptable Manufacturer (non-alarmed): Sargent.

2.6.3. Exit devices shall be listed by Underwriter's Laboratories, Inc. for accident hazard. Exit devices for use on fire-rated opening shall bear factory installed UL markings that indicate a three (3) hour fire rating.

2.6.4. All exit devices shall be non-handed. Touch pad shall extend a minimum of 3/4 of the door width and shall be a minimum of 2-1/16" in height. Latchbolts shall have a self-lubricating coating to reduce wear. Plated or plastic coated latchbolts are not acceptable.

2.7. Surface Mounted Door Closers:

2.7.1. Acceptable Manufacturers and Products:
Sargent: 1431

2.7.2. All surface closers shall be of one manufacturer. The closers shall be non-handed and non-sized, hydraulically controlled with full rack and pinion operation. They shall have adjustments for backcheck, general speed, and latch speed. Closers shall meet an opening force below 5 lbs. to meet barrier free requirements.

2.7.3. Where a closer requires a 'PS' (stop arm) label, the door will be limited to 90° opening at interior doors and 100° at exterior doors.

2.7.4. Provide mounting plates as required, sex nuts and bolts for application to hollow metal doors, and thru bolts for application to wood doors. Stops, Holders, Bolts, Viewers, and Miscellaneous:

2.8. Stops, Holders, Bolts, Viewers, and Miscellaneous:

2.8.1. Acceptable Manufacturers:

Sargent
McKinney
Rockwood

2.8.2. Types as indicated in Hardware Schedule.

2.8.3. Flush bolts shall be 1" x 6-3/4" brass, rectangular front, lengths indicated, with 3/4" throw. Furnish bottom strike and top strike plates. Bolts and accessories for use on fire-rated doors shall be Underwriters' Laboratories listed.

2.9. Flat Goods:

2.9.1. Acceptable Manufacturers:

Rockwood
Don-Jo (latch protectors only)

2.10. Thresholds, Sweeps and Weather-Strip

2.10.1. Provide extra heavy duty vermin strip, 3" height, with stainless steel or aluminum receiver for neoprene sweep.

2.10.2. Acceptable Manufacturers:

Pemko
McKinney

2.11. Any products that do not have a manufacturer listing are non-proprietary.

3. Execution

3.1. Preliminary

3.1.1. Store in temporary bins. Tag, index, and file all keys temporarily during construction.

3.1.2. Check all hardware upon arrival on Job Site against approved Finish Hardware Schedule. Check function of hardware for job use under site conditions and interferences. Notify Architect if discrepancies occur.

3.2. Installation

3.2.1. Install hardware to doors as listed in the door schedule. Comply with "Recommended Locations for Builders Hardware for Custom Steel Doors and Frames" as published by the Door and Hardware Institute. Application shall be by skilled workmen, who work with proper equipment, and shall be in accord with the manufacturer's instructions, fit to work of others accurately, applied securely, and adjusted properly. Hardware let into work of others shall be neatly done from template and shall fit perfectly. Exercise care not to damage work of others.

3.2.2. Install finish hardware to template. Cut and fit substrate to avoid substrate damage or weakening. Cover cut-outs with hardware item. Mortise work to correct location and size without gouging, splintering, or causing irregularities in exposed finished work.

3.2.3. Where cutting and fitting is required on substrates to be painted or similarly finished, install, fit, and adjust hardware prior to finishing, and then remove and place in original packaging. Reinstall hardware after finishing operation is completed.

3.2.4. Attach thresholds with flathead screws into embedded receivers, symmetrical with the center of door opening. On case thresholds where cast-on anchors are used, apply utilizing an epoxy grout mixture.

3.2.5. Attach door closers to door whether wood or metal, with sex nut and bolt assemblies. Where closers have stop function, install closer to stop the door before striking obstructions.

3.3. Finishing:

3.3.1. All latch protectors to be painted with same paint as exterior doors.

3.4. Cleaning and Adjusting

3.4.1. At the time of hardware installation, adjust each hardware item to perform function intended. Lubricate moving parts with lubricant acceptable to hardware manufacturer to remove dust and stains.

3.4.2. Prior to Substantial Completion, readjust and re-lubricate hardware. Repair or replace defective materials. Clean hardware as recommended by manufacturer to remove dust and stains.

3.5. Fastenings

3.5.1. All exposed screws shall be phillips head, finished to match item and sized to suit job requirements.

3.5.2. Surface applied items such as closers and overhead holders shall be applied with sex nut and bolt assemblies.

3.6. Operation and Adjustment

3.6.1. Adjust all installed items for proper operation without binding or excessive play.

3.6.2. Closers and other door operating hardware shall be adjusted to comply with requirements of local codes and in accordance with performance requirements of ADA and other handicap regulations.

3.7. Completion

3.7.1. After installation, all templates, installation instructions, as-builts and other pertinent information shall placed in a properly identified binder. this binder and all special tools are to be turned over to the Owner's Representative at final acceptance of the Project.

3.7.2. After final acceptance, the hardware supplier shall instruct the Owner's designated personnel in the proper operation, adjustment and maintenance of hardware and finishes.

3.8. Hardware Schedule

3.8.1. All door-specific options are noted in the door schedule.

3.8.2. Group A-1A:

Exit (Panic Bar, Exit Only), with Alarm, Closer W/H.O.; Doors from Stock Rooms and Elec. Equip. Rooms to Exterior (Except labeled doors; see B-1)

3 ea. Hinges	BB1279 or TA2714 4.5 X 4.5 NRP X USP
1 ea. Alarmed Exit Device	FV40 EA 628
0 Cylinder for Alarm	(Furnished and Installed By Publix)
1 ea. Latch Protector	MLP 211 SL
1 ea. Closer W/Stop, H.O.	1431 PS TB
1 ea. One Way Viewer	622 X CRM
1 ea. Threshold	2005 AV
1 Set Weather-Strip	S88D
1 ea. Door Sweep	Pemko 57AV
1 ea. Rainguard	346C (for Riser Room)

3.8.3. Group A-1B:

Double Door Exit (Panic Bar, Exit Only), with Alarm, Closer W/H.O.; Doors from Stock Rooms to Exterior

8 ea. Hinges	Hager BB1191 4.5 X 4.5 NRP US32D
2 ea. Surface Bolts	Sargent # 988
1 ea. Surface Vertical Rod Device	Sargent HC4-8710 (No Trim, Exit Only)
1 ea. Closer Door 1 ea. Bottom Latch Guard	Norton 7500H on Pull side of Active Rockwood BFLG12
1 ea. Rod Guard	Rockwood BFRC24
1 ea. One Way Viewer	Rockwood # 622
1 ea. Saddle Threshold	Pemko 271A-72"
2 ea. Door Sweep	Pemko 57AV-36"
1 ea. Perimeter Gasket	Pemko S88D
1 Set Astragal W/S	Pemko 303AS-96"
1 Detex Wall Mounter Alarm with door Contacts EAX-2500SK	

3.8.4. Group B-1A:

Exit Door (Panic Bar, Exit Only), with Alarm, Closer (but without H.O. because door is B-Label, 60-min., or is a direct exit from Sales Area)

3 ea. Hinges	BB1279 or TA2714 4.5 X 4.5 NRP X USP
1 ea. Alarmed Exit Device	FV40 EA 628
0 Cylinder for Alarm	(Furnished and Installed by Publix)
1 ea. Closer W/Stop, W/O H.O.	1431 PS TB
1 ea. Latch Protector	MLP 211 SL
1 ea. Locking Astragal	Pemko 3572
1 ea. Door Sweep	Pemko 57AV
1 ea. Threshold	2005 AV
1 Set Weather-Strip	S88D
1 ea. One Way Viewer	622 X CRM

3.8.5. Group B-1B:

Double Door Exit (Panic Bar, Exit Only), with Alarm, Closer (but without H.O. because door is B-Label, 60-min., or is a direct exit from Sales Area)

6 ea. Hinges	BB1279 4.5 x 4.5 NRP USP
1 ea. Mullion	Yale M200FWS 7'
1 ea. Alarmed Exit Device	FV40 EA 628
2 ea. Closer	1431 PS En
1 ea. Threshold	Pemko 2005AV x 72"
2 ea. Door Sweep	Pemko 57AV x 36"
2 ea. W/S Gasket	Pemko S88D x 17'
1 set – Astragal Weather strip	Pemko 303AS x 84"
1 ea. Door Viewer	Rockwood #622 US26D

3.8.6. Group B-2:

Exit Access Door (Panic Bar), no Alarm, into Rated Corridor, W/ Closer

3 ea. Hinges	BB1279 X 4.5 X 4.5
1 ea. Exit Device W/Lever Out	12-8813 F ETL X 32D
1 ea. Closer	1431 UO TB
1 ea. Smoke Seal	S88D
1 ea. Door Stop	409 or 443 as required

3.8.7. Group B-3:

Doors into Rated Corridor, Electromagnetic Hold-open, Panic Bar on one side for impact resistance, Swing-Clear Hinges

3 ea. Hinges	BB1262 X 4.5 (Swing Clear)
1 ea. Exit Device W/Lever Out	AL-12-8813 F ETL X 32D
1 ea. Closer	1431 UO TB
1 ea. Electromagnetic Holder	997 X AL X 24 VOLT

3.8.8. Group C-1:

Exit Door (Panic Bar), no Alarm, from Rated Enclosure which has no other traffic, W/Closer (occurs only in Remodels and New Stores which require an added rated Exit Corridor due to adjacent buildings)

3 ea. Hinges	TA2714 4.5 X 4.5 NRP X USP
1 ea. Exit Device ea. Closer, W/Stop, W/O H.O.	12-8813 F X 32D 1 1431 PS TB
1 ea. Door Sweep	Pemko 57AV
1 ea. Threshold	2005 AV
1 Set Weather-Strip	S88D

3.8.9. Group C-2:

Exit Access Door (Panic Bar), with Alarm, into Rated Enclosure which has no other traffic, W/B-Label & Closer (Occurs only in Remodels and New Stores which require an added rated Exit Corridor due to adjacent buildings)

3 ea. Hinges	BB1279 X 4.5 X 4.5
1 ea. Exit Device W/Lever Out	FV40 EA 628
0 Cylinder for Alarm	(Furnished & Installed by Publix)
1 ea. Latch Protector	MLP 211 SL
1 ea. Closer, W/O Stop, W/O H.O.	1431 UO TB
1 ea. Door Stop	409 or 443 as required

3.8.10. Group D:

Lockset, can be disabled from inside: Offices, Bookkeeping Conference/ Training Rooms, Storage Rooms:

3 ea. Hinges	1279 X 4.5 X 4.5
1 ea. Entrance Lockset	28 10G05 LL
1 ea. Door Stop	409 or 443 as required
3 ea. Silencers	608

3.8.11. Group D-1:

Lockset, can be disabled from inside: Single toilets:

3 ea. Hinges	BB1279 X 4.5 X 4.5
1 ea. Entrance Lockset	10G44 LL
1 ea. Door Stop	409 or 443 as required
1 ea. Closer	1431 UO TB
3 ea. Silencers	608

3.8.12. Group E:

Lockset, can be disabled from inside, with Closer: Doors from Sales Area to Customer Service and Office Area and Door(s) from Elec. Equip. Room to Interior, Single Toilet Restrooms

3 ea. Hinges	BB1279 X 4.5 X 4.5
1 ea. Entrance Lockset	10G05 LL
1 ea. Closer	1431 UO TB
1 ea. Door Stop	409 or 443 as required
3 ea. Silencers	608

3.8.13. Group F-1:

Lockset, key-operated only: (Single) Equipment Closet Doors

3 ea. Hinges	1279 X 4.5 X 4.5
1 ea. Storeroom Lockset	10G04 LL
1 ea. Door Stop	409 or 443 as required
3 ea. Silencers	608

3.8.14. Group F-2:

Lockset, key-operated only: Pairs of Equipment Closet Doors

6 ea. Hinges	1279 X 4.5 X 4.5
1 ea. Storeroom Lockset	10G04 LL
2 ea. Door Stops	409 or 443 as required
1 pair Flush Bolts	555 X 12"
1 ea. Dust Proof Strike	570
2 ea. Silencers	608

3.8.15. Group G:

Lockset, key-operated only, with Closer: Cash Room

3 ea. Hinges	BB1279 X 4.5 X 4.5
1 ea. Storeroom Lockset	10G04 LL
1 ea. Closer	1431 UO TB
1 ea. Door Stop	409 or 443 as required
1 ea. Large Door Viewer ea. Silencers	DS2000 by Door Scope, Silver Finish 3 608

3.8.16. Group H:

Office Set: Half Door at Pharmacy

3 ea. Hinges	1279 X 4.5 X 4.5
1 ea. Lockset	10G04 LL
2 ea. Folding Brackets ea. Door Stop	EB-303/EP TB (Sugatsune America) 1 409 or 443 as required
2 ea. Silencers	608

3.8.17. Group J:

Passage Set: Non-Locking Storage & Equipment, Passage Doors

3 ea. Hinges	1279 X 4.5 X 4.5 X 26D
1 ea. Passage Set	10U15
1 ea. Door Stop	409 or 443 as required
3 ea. Silencers	608

3.8.18. Group K:

Restrooms, Passage Door in Office Area

3 ea. Hinges	BB1279 X 4.5 X 4.5
1 ea. Push Plate	70 C 4 X 16 X 32D
1 ea. Door Pull	107X 70 C 4 X 16 X 32D
1 ea. Closer	1431 UO TB
1 ea. Kick Plate	K1062 8 X 34, US32D
1 ea. Door Stop	409 or 443 as required
3 ea. Silencers	608

3.8.19. Group L-1:

Vertical Lift Dock Doors

2 ea. Padlocks (1 Daylock, 1 Nightlock) 758C-4

3.8.20. Group L-2:

Roof Hatch, Equipment Cages, Trash Compactor

1 ea. Padlock 758C-4

3.8.21. Group L-3:

Vertical Lift DSD Doors

Interior facing cylinder lock at bottom rail of both jambs

3.8.22. Group M:

Roof Top Equipment Rooms

2 ea. Hinges	1270 X 4.5 X 4.5 X USP X NRP
1 ea. Deadlock	484 X 26
1 ea. Doorpull	8102-6S 32D
1 ea. Stop & H.O.	GJ9OM X 26D

3.8.23. Group N:

Front Doors, Exterior Café Doors (Storefront)

Use standard mortise or rimset cylinders supplied with store front doors as construction temporaries. Permanent cylinders furnished & installed by Publix. All other hardware by door manufacturer.

3.8.24. Group P:

Pharmacy Rolling Grille

Prepare for Schlage Mortise Cylinder, Cylinder furnished and installed by Publix.

3.8.25. Group Q:

Return Air Chase Access Doors by Milcor or Nystrom

Prepare for Schlage Mortise Cylinder, Cylinder furnished and installed by Publix.

3.8.26. Group R:

Exterior Storage or Mechanical Rooms

6 ea. Hinges	BB 1191 or TA2314 4.5 x 4.5 NRP x USP
1 ea. Lockset	10G04 LL *
1 ea. Surface Bolts	988
2 ea. Overhead Holder	598H
1 set Weatherstrip	S88D LAR
1 ea. Threshold	2005 AS LAR
2 ea. Meeting Stile Astragal	303 AS

In Florida provide the following: 1 EA Storeroom Deadbolt Lock 8251 LNP

3.8.27. Group S:

Lockset, can be disabled from inside, with Closer: Doors from Clinical Room or Office to Interior of Pharmacy

1 ea. Hinges	BB1279 X 4.5 X 4.5
1 ea. Entrance Lockset 1 ea. Closer	Simplex L1000 Pushbutton Model L102X 1431 UO TB
1 ea. Door Stop	409 or 443 as required
3 ea. Silencers	608

3.8.28. Group T:

Restrooms with Wall Partitions (where applicable)

3 ea. Hinges	TA2714 4.5 X 4.5 NRP X USP
1 ea. Deadbolt	B571 626
1 ea. Push Plate	70A US32D CFTT
1 ea. Closer	1431 UO TB (ADA Stall Only)
1 ea. Door Pull	132-RKW Mtg-Type 2 US32D
1 ea. Door Stop	1513 CP

3.8.29. Group U:

Store front Door to the Exterior.

The Following items are to be Included with the door and provided by the Store front door provider:

1 ea. Door Closer
1 ea. Door Pull
1 ea. Push Bar
1 ea. Thumb Turn

3.8.30. Group V:

Exit Access Door (Panic Bar), with Alarm & Closer Electrical room to the Exterior.

4 each Hinges	T4A3386 (5" x 4 ½") 32D x NRP
1 each Alarmed Exit Device	FV40 EA 628
1 each Closer	1431 CPS TB EN
1 each Gasketing	S88D
1 each Threshold	2005AT x LAR AL

End of Section 08 71 00

Section 09 24 00
Portland Cement Plastering
V01062015

1. General

1.1. Submittals:

1.1.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

2. Products

2.1. Metal Lath and Accessories:

2.1.1. 1 Lath: Self furring, expanded diamond mesh copper alloy steel, at 3.4 pounds per square yard, galvanized.

2.1.2. Channels: Cold rolled steel 1/2", 3/4" and 1-1/2" channels.

2.1.3. Expansion Joints: No. 15 expansion joints, zinc plated steel with 5/8" grounds.

2.1.4. Hanging Wires: Minimum #8 gauge for 1 1/2" channels and #16 gauge for tying3/4" channels, all galvanized, annealed steel wire. However, when suspending more than four (4) foot drop, use 3/16" pencil rods for hanging. hangers at maximum 4'0" O.C. for hanging 1 1/2" channels.

2.2. Vent Screed: Aluminum or zinc plated steel, factory fabricated to lines and radius required, with 7/8" grounds.

2.3. Plastering Materials:

2.3.1. Portland Cement: ASTM C-150, Type I, produced by approved manufacturer.

2.3.2. Lime: ASTM C206, Type S, pressure hydrated dolomitic lime, not less than 92% hydration.

2.3.3. Aggregate: ASTM C35 plastering sand.

2.3.4. Water: Clean, fresh, potable.

2.4. Sealer: Bonsal sealer or other as approved by Publix Architect.

2.5. Finish Coat:

2.5.1. Use plaster designed to receive exterior latex paint. Texture as indicated by the façade elevations.

2.5.2. Approved Manufacturers:

Dryvit
Sto
Finestone
Finestone

3. Execution

3.1. Types of Applications:

3.1.1. PC Plaster on exterior masonry shall be two coat work, thickness as shown on drawings, or if not shown, finish to 1/2" thickness, consisting of a combination scratch and brown coat, and a finish coat.

3.1.2. PC Plaster on metal lath shall be three coat work, thickness as shown on drawings, or if not shown 7/8" thickness, scratch coat, brown coat, and finish coat.

3.2. Mixing and Proportions (Parts by Volume):

3.2.1. Scratch Coat:

One part portland cement
Three parts sand
One fourth part lime

3.2.2. Brown Coat:

One part portland cement
Three parts sand
One fourth part lime

3.2.3. Finish Coat:

Manufacturer's recommended proportions.

3.3. Application:

3.3.1. Protect all finished surfaces from damage and droppings, thoroughly clean all items so damaged, and leave premises free from dirt and debris caused by the work.

3.3.2. Cooperate with work of other trades. Reinforce hangers for light fixture installation.

3.3.3. Install expansion joints in sidewalk ceiling at each column line. Install no corner beads on exterior.

3.3.4. Where PC Plaster is applied over concrete masonry, clean surfaces before application.

3.3.5. Use grounds and temporary screeds to form clean straight lines with even

2.2.3.3. Manufacturers:

Georgia-Pacific Corp. National Gypsum Co.

Temple-Inland Forest Products Corp. US Gypsum Co.

2.2.4. Cementitious Tile Backer Board: ASTM C 1178. Use in all areas that receive wall tile.

2.2.5. Manufacturers:

US Gypsum Co., DUROCK Cement Board James Hardie Co., HARDIBACKER 500

Custom Building Products, Wonderboard National Gypsum Co., PermaBase Cement Board

2.2.6. Accessories:

2.2.6.1. Joint Reinforcing Tape shall be perforated or sparked. Joint compound shall be ready mixed.

2.2.6.2. Corner Beads, Casing Beads and Trim shall be galvanized steel.

2.2.7. Drywall Ceiling Suspension System: Provide pre-engineered system consisting of cold-rolled steel members conforming to ASTM C635. Provide fire-rated assemblies when applicable.

2.2.7.1. Products:

"Drywall Suspension System",

USG "Drywall Grid System",

Armstrong "Drywall Grid System 640/660", Chicago Metallic

2.2.8. Steel Studs:

2.2.8.1. Galvanized screwable channel type studs of specified size, complying with ASTM C645, 20 gauge minimum (33 mil), at all interior locations.

2.2.8.2. Manufacturer:

Marino\Ware-Div.Ware Industries Dietrich Industries

Clark Steel Framing Systems Telling Industries

Allsteel & Gypsum Products Steel Con

2.2.8.3. Form from steel ASTM A653, Grade A, with a minimum yield of 33,000 psi.

2.2.9. Drywall Screws: ASTM C645.

2.3. Backing for drywall at outside curve applications: A-C INT-APA with exterior glue, 1/8" thickness.

3. Execution

3.1. Ceiling:

3.1.1. Install wall track level at specified ceiling height around entire perimeter.

3.1.2. Furring runners shall be directly suspended and leveled on 48" centers by not less than 12 gauge galvanized steel wire spaced not more than 48" on center along the main runner. (for special module sizes follow same procedures with on center spacing of runners adjusted to tee width.)

3.1.3. Furring tees shall be spaced 16" on center along the main runners.

3.1.4. Fit furring runner and tee ends into the wall track at all perimeters.

3.1.5. Drywall panels shall be screw attached at 8" intervals to all furring runners, tees, and wall track with the long dimension paralleling the furring runners in all possible instances. Deflection of components not to exceed 1/360 of the span.

3.1.6. In areas where fixtures or other accessories are placed in or on the grid components, 12 gauge hanger wires are to be suspended at each corner of the fixture or accessory to distribute the load evenly.

3.2. Walls:

3.2.1. Steel Studs: 16" on center.

3.2.2. Panels shall be screwed to steel studs with bugle head dry wall screws of length as recommended by manufacturer.

3.2.3. Where applicable, insulate walls around Meat Cutting, Packaging Room, Employee Lounge, Manager's Office, Rest Rooms and as indicated on Drawings with 3 1-2" batt insulation.

3.2.4. Axially loaded studs shall be installed in a manner which will assure that ends of the studs are positioned against the inside track web, prior to stud and track attachment.

3.2.5. Studs shall be plumbed, aligned and securely attached to the flanges or webs of both upper and lower tracks.

3.2.6. Jack studs or cripples shall be installed above window and door heads, at free standing stair rails, and elsewhere to furnish support, and shall be securely attached to supporting members.

3.2.7. Wall stud bridging shall be attached in a manner to prevent stud rotation. Bridging rows shall be spaced according to the following schedule: walls up to 10' 0" height: one row at mid-height; walls exceeding 10'-0": bridging rows spaced not to exceed 5'-0" on-center.

3.2.8. Provide 7/8"" 20 gauge galvanized steel drywall furring channels vertically at 16" O.C. for all paneled walls on masonry and others as required.

3.2.9. For all walls that surround floors that will receive portland cement terrazzo, leave out the first 4 feet of gypsum board (from finish floor) until terrazzo installation is complete.

3.3. Walls and Ceilings:

3.3.1. Steel stud framing components may be pre-assembled into panels prior to erecting. Prefabricated panels shall be square with components attached in a manner as to prevent racking.

3.3.2. All framing components shall be set squarely for attachment to perpendicular members, or as required for an angular fit against abutting members. Members shall be held positively in place until properly fastened.

3.3.3. A uniformly thin layer of joint compound shall be applied over joints to a width of approximately 4" wide. Center tape over joint and imbed into compound leaving sufficient joint compound under tape to provide proper bond. Ceiling and wall angles and inside corner angles shall be reinforced with tape folded to conform to the angle and imbedded in the compound.

3.3.4. Sand between coats.

3.3.5. After compound is thoroughly dry, the tape shall be covered with another coat of joint compound spread over the tape and 3" each side of tape, and feathered out at edge. After thoroughly dry, apply another coat with slight, uniform crown over the joint. this coat shall be smooth with edges feathered approximately 3" beyond preceding coat.

3.3.6. Coat corners, and nail or screw heads additionally as per manufacturers specifications.

3.3.7. Install J-mold at ceiling and wall juncture where required.

3.3.8. Entire areas shall be installed neatly and ready to receive finish as scheduled. All studs shall have drywall to the top of the plate for fire and rodent protection.

3.3.9. Prior to installation, provide representative sample of "Knock-down" finish to the Publix Construction Representative.

3.3.10. Control Joints: In ceiling, install expandable control joints as recommended by manufacturer, at maximum 40' on center.

3.4. Moisture Resistant Gypsum Board:

3.4.1. Use at locations indicated in the room finish schedule.

3.4.2. Use behind all refrigerated cases to a height of 4'-0 1/2". start at 1/2" above finished floor.

3.4.3. Install adjacent to all walk-in coolers and freezers. Height: above the top of the unit.

3.4.4. Use at other locations as required.

3.5. Curved Suspended Walls:

3.5.1. Outside curves 10'-0" radius or less: Form curve with metal studs 8"' O.C. beginning 2'-0" into straight portion of wall. Thoroughly soak and apply two layers 1/8" plywood to metal studs allowing first layer to dry before application of second. Apply 1/4" drywall to plywood substrate with drywall adhesive, long dimension horizontal. Wet drywall as necessary to obtain smooth curve with no flats.

3.5.2. Outside curves radius greater than 10'-0": Form curve with metal studs 8" O.C. beginning 2'-0" into straight portion of wall. Apply 1/2" drywall to metal studs with drywall adhesive, long dimension horizontal. Wet drywall as necessary to obtain smooth curve with no flats.

3.6. Inside curves radius greater than 10'-0": Form curve with metal studs 1'-0" oc beginning 2'-0" into straight portion of wall. Apply 1/2" drywall to metal studs with drywall adhesive, long dimension horizontal. Wet drywall as necessary to obtain smooth curve with no flats.

End of Section 09 29 00

Section 09 30 00
Tiling
V12012020

1. General

1.1. This Section also contains information normally found in Section 04 40 00 Stone Assemblies pertaining to marble and granite sills.

1.2. Submittals:

1.2.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

1.2.2. Product Literature for all items selected in LOI are required with Submission.

1.3. Warranties: All tile work shall be guaranteed for workmanship for a period of two (2) years. Any work found to be defective during that time shall be replaced at no cost to the Owner.

2. Products

2.1. Ceramic Tile Walls and Wainscots: Manufacturer, series, finish, color, and size as indicated on interior finish elevations.

2.1.1. For Sienna environmental package ONLY: Supplemental tile patterns are available at http://corporate.publix.com/business/design-and-construction

2.1.2. For Evergreen environmental package; Tile patterns are within the construction drawings.

2.1.3. Ceramic Tile Setting and Grouting Compounds: Select either Laticrete or Mapei or Custom Products for all applications (use of the three approved products as a combination is not allowed)

2.1.4. Laticrete Products:

2.1.4.1. Laticrete 252 Silver Thinset Adhesive (Quarry Tile Floors)

2.1.4.2. Laticrete Spectra Lock 2000 IG Grout (Quarry Tile Floors)

2.1.4.3. Laticrete 4XLT Mortar (Adhesive for Wall larger tile)

2.1.4.4. Laticrete 252 Silver Thinset (Adhesive for Wall nominal tile)

2.1.4.5. Laticrete Permacolor Series Grout (Walls)

2.1.5. Mapei Products

2.1.5.1. Ultraflex 1 Thinset Adhesive (Quarry Tile Floors)

2.1.5.2. Keraposy IEG Grout (Quarry Tile Floors)

2.1.5.3. Ultraflex LFT Adhesive (for all walls tiles)

2.1.5.4. Ultracolor Plus FA (Walls)

2.1.6. Custom Products

2.1.6.1. VersaBond Thinset Adhesive (Quarry Tile Floors)

2.1.6.2. CEG-IG Grout (Quarry Tile Floors)

2.1.6.3. ProLite LFT Adhesive (for all wall tiles)

2.1.6.4. Prisma Ultimate Performance Grout (Walls)

2.1.7. Grout Colors: See Tile Pattern Book.

2.2. Grout Release Agent:

Aqua Mix Grout Release, Aqua Mix

2.3. Sealants: One or two part urethane. Use type designed for application intended, color as selected by Architect.

2.4. Where the floor slab is elevated above ground select from the following waterproof membrane products:

2.4.1. Laticrete Product:

2.4.1.1. Laticrete Hydro Barrier

2.4.2. Mapei Products:

2.4.2.1. Mapelastic Aquadefense

2.4.2.2. Mapelastic 315

2.4.3. Custom Product:

2.4.3.1. RedGard Waterproofing Membrane

2.5. Mop Sink Grout:

2.5.1. Key Resin Company

2.5.1.1. Novolac Key Resin #630

3. Execution

3.1. General: All applicators and field personnel shall be fully trained and familiar with manufacturers' application procedures.

3.2. After installation of all the application below the contractor shall clean all surfaces with STONETECH KLENZALL by Laticrete or ULTRA CARE by Mapei, Aqua Mix CONCENTRATED STONE and TILE CLEANER by Custom Building Products Apply Heavy Duty application and follow all manufacturer's instruction.

3.3. Quarry Tile and Base:

3.3.1. Lay tile in a straight joint pattern, each direction, with a 1/4" joint. Align floor and base joints. See room finish schedule and finish elevations for locations of quarry tile base.

3.3.2. Apply grout release agent per manufacturer's instructions prior to installing grout.

3.3.3. Grout shall be level with the surface of the tile, with no sharp edges of the tile showing.

3.3.4. Cut quarry tile as required to provide a 1/4" control joint directly above slab construction joints. Prime sides of joint width. Seal control joint with polyurethane sealant to 1/4" depth, backed with closed-cell foam.

3.3.5. Slope all tile to drains, as shown on Drawings. Set all tile flush with tops of floor drains and adjacent finished floors.

3.3.6. Tile should be Water-Tested and approved by Publix for positive drainage after installation. Ensure that base has a solid grout bed where it makes contact with the wall, and that there are no void areas behind tile and at transition with floor.

3.4. Marble or Granite Sills:

3.4.1. Set by experienced granite craftsmen who have a minimum of three (3) years experience in the trade, and in accordance with the Marble Institute of America (M.I.A.) Installation Procedures Manual.

3.4.2. Seal Joints with appropriate sealant.

3.4.3. Coordinate and cooperate with store front sash installer.

3.5. Ceramic Wall Tile on Masonry Substrate:

3.5.1. Thin-set with mortar and un-sanded grout, both in accordance with manufacturer's specifications and recommendations.

3.5.2. Set flush with adjacent base; lay in a straight joint pattern each direction, with a joint width of 1/16" or as established by manufacturer's sheet.

3.5.3. Grout shall be level with the surface of the tile, with no sharp edges of the tile showing.

3.6. Ceramic Tile on Backer Board:

3.6.1. Set tile on backer board with mortar, grout with unsanded cement grout, both in accordance with manufacturer's specifications and recommendations.

3.6.2. For backer board refer to gypsum board specifications 09 29 00.

3.6.3. Set flush with adjacent base; lay in a straight joint pattern each direction, with a joint width of 1/16" or as established by manufacturer's tile sheet.

3.6.4. Grout shall be level with the surface of the tile, with no sharp edges of the tile showing.

3.7. Exterior Ceramic Tile: If this project is to receive exterior tile set on a vertical surface (see Contract Documents by others for store Facade), the tile, setting method, pattern, and grout shall be approved in writing by Publix' Architect.

End of Section 09 30 00

Section 09 50 00
Ceilings
V05142021

1. General

1.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures. No product samples or cut sheets will be required.

1.2. Custom Colors: Where custom colors of ceiling panels are specified, it is assumed that the quantity required for use will exceed the amount of material needed for a stock run by panel manufacturer. If this condition is not met, and there is an up-charge for custom colors, notify Publix Architect.

2. Products

2.1. Suspension Systems:

2.1.1. Where ceiling panels are used:15/16" exposed double-web tee conforming to ASTM C635 Intermediate-Duty classification standards. Cross-tees shall also comply with Intermediate-Duty (12 lb/lf) standards, and shall have stab-type stepped (i.e. overriding) ends.

2.1.2. Wall molding shall be angle with 7/8" legs. System color shall be flat white.

2.1.3. Acceptable Systems:

Armstrong Prelude 15/16" exposed tee system, stab-end cross tees.
Chicago Metallic Corp. "1260 Aluminum cap 15/16"stab-end cross tees.
USG Interiors, Inc. Donn DXLA aluminum stab-end cross tees.

2.2. Grid System:

2.2.1. Ceiling tile/open-cell sub-system (REMODELS ONLY):

2.2.1.1. Sub-system description: 6'x 6' composed of main tees and cross tees described above.

2.2.1.2. All subsystem components are a part of the Contract with the exception of the drop-on T-rail which supports the perimeter of each 6'x 6' sub-system.

2.2.1.3. Tee Grid for ceiling tiles and mesh panels within 6'x6' panels: As above, Color: White.

2.2.1.4. Ceiling tiles: Vinyl faced gypsum panels as described below.

2.2.1.5. Edge Trim: 8"' high x 9/16" legs, with connectors for grid system capable of receiving intersecting tees at any angle, and splice plates to form flush butt joints where edge trim ends meet. Splice plates shall provide tight friction fit or be secured with set screws. Paint all surfaces custom color as selected by Publix Architect.

Acceptable Systems:
Compasso System, USG Interior
Axiom Classic System, Armstrong
Suspended Perimeter Trim System, Chicago Metallic
Contura, Gordon Architectural Aluminum Specialties, Inc.

2.2.2. Armstrong Cirrus Second Look III 514 (GREENWISE POURS AREA ONLY)

2.2.2.1. Standard white panels 24"x48"x3/4" ceiling grid. Has scoring that creates (nominal) 6" x 48" linear planks with beveled tegular 15/16".

2.3. Acoustical Tile:

2.3.1. Acoustical Tile (Sales Area) shall be either 24"x 24"x 5/8" or 24"x 48"x 5/8"' (per drawings), square cut edge, white color in one of the following products:

Armstrong Fine Fissured RH90.
Certainteed Hytone Vantage 10.
U.S.G.Interiors, Inc. Radar.

2.3.2. Vinyl-Faced Gypsum Panels (Food Preparation Areas - Bakery, Deli, and Meat including associated storage and scullieries) 24"x 24"x 1/2" or 24"x 48"x 1/2" (per drawings) with 2-mil stipple-pattern embossed white vinyl laminated to one side, surface burning characteristics - class A, as follows:

Armstrong Clean Room VL
Capaul Corp. Vinylrock Gypsum Ceiling Panels
Certainteed Vinyltone Gypsum Protectone
Gold Bond Building Products Gridstone
USG Interiors, Inc. Sheetrock Millenia "Climaplus"

2.4. Acoustic Insulation: The entire area above the ceiling in the Manager's Office, and the public and employees' Rest Rooms shall be insulated with 6" glass fiber insulation.

2.5. Openwork Systems, Utility Grid, and Finishing:

2.5.1. Shop Fabrication, General:

2.5.1.1. Perform shop fabrication to the greatest extent possible.

2.5.1.2. Design of systems shall allow all welding operations to be completed in the fabrication shop.

2.5.1.3. Design of systems shall allow installation of utility runs in a manner which provides a neat, finished appearance.

2.5.2. Shop Painting:

2.5.2.1. Apply manufacturer's standard baked-on enamel to all surfaces, custom color as selected by Publix Architect.

2.5.2.2. Coat all accessories such as splice plates, etc. to match edge trim color.

2.5.2.3. Wrap or pack all painted items to protect them from scratching or other damage during shipment. Provide temporary protection for painted surfaces (i.e. peel-off film) to be removed only after all work adjacent to trim is in place.

3. Execution

3.1. Suspension System:

3.1.1. The exposed grid system shall be installed in accordance with ASTM C636. Deflection of any component shall not exceed 1/360 of the span. Suspension systems shall be installed level and square by methods according to manufacturer's specification and firmly braced to hold position and to carry weight of fixtures. Refer to Drawings.

3.1.2. Perimeter angle molding shall be installed at the specified ceiling height at the intersection of the suspended ceiling and all vertical surfaces.

3.1.3. Cooperate with other trades as required for fixture installation to see that proper support and spacing is obtained.

3.1.4. Provide two #10 safety wires per metal halide, fluorescent fixture and LEDs, attached to joists at proper location as coordinated with electrical contractor. (Electrical Contractor shall attach to fixture.).

3.2. Lay-In Panels:

3.2.1. Acoustical tile shall be installed under temperature and humidity conditions closely approximating those which will exist when the building is occupied.

3.2.2. Application shall not begin until all roofing work has been completed and building completely enclosed.

3.2.3. All windows and doors shall be in place and glazed. Plastering and concrete work shall be completed and allowed to dry before the installation of acoustical tile.

3.2.4. Board shall be carefully fitted around diffusers and other ceiling outlets and fixtures. Cooperate with sprinkler, mechanical and electrical contractors to coordinate work.

3.3. Field Painting:

3.3.1. Above the Openwork Grid, where color of panels is other than white, spray paint grid to match panel color before panels are installed. Use line of edge trim of the Openwork System to determine limits of painting.

3.3.2. In the area where white panels straddle the line of the Openwork System, paint area of panel inside the Openwork System to match factory-colored panels.

End of Section 09 50 00

Section 09 65 19
Resilient Tile Flooring
V02212011

1. General

1.1. This Section also contains information normally found in Section 09 65 13 Resilient Base & Accessories.

1.2. Submittals:

1.2.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

2. Products

2.1. Vinyl Composition Tile (VCT): Manufacturer, series, and color as indicated on Drawings.

2.2. Vinyl Treads and Risers: Roppe Tile. See drawings for color and series.

2.3. Vinyl Base:

2.3.1. Walls: Provide 6" x 1/8" gauge, long toe wall base, with all outside corners preformed. Long toe should be at least 1".

2.3.2. Cabinet Base: Provide 4" x 1/8" gauge coved base, with all outside corners preformed.

2.3.3. Adhesive: manufacturer's wall base adhesive.

2.3.4. Acceptable Manufacturers:

Armstrong
Burke Flooring Products
Flexco Johnsonite Mucklan-burg-Duncan Mannington

2.4. Reducer strips: 4" vinyl straight base, color to match primary color of adjacent VCT.

2.5. Epoxy Adhesive: Armstrong S-230 two-part epoxy or equal as recommended by tile manufacturer and approved by Publix.

2.6. All other applications: Mapei G19 Low VOC Urethane or equal as recommended by tile manufacturer and approved by Publix.

2.7. Accessories and miscellaneous items: Provide all accessory items required for a complete installation.

3. Execution

3.1. Pre-Installation:

3.1.1. Inspect substrate to determine satisfactory conditions. A satisfactory substrate surface is defined as one that is smooth and free from cracks, holes, ridges, coatings preventing adhesive bond, and other defects impairing performance or appearance.

3.1.2. Do not proceed with resilient flooring work until substrate surfaces are satisfactory.

3.2. Vinyl Composition Tile: set with epoxy adhesive in restrooms (and where occurs in remodels, within 4'-0" of all refrigerated cases and coolers). Elsewhere use non-epoxy adhesive as specified. Alternate tile pattern direction.

3.3. Vinyl Base: Vinyl base in sales area is required only on exposed walls, i.e. on walls which do not have cases in front of them. Extend base one foot behind cases. Wall shelving requires base behind for full length. Use manufacturer's recommended adhesive.

End of Section 09 65 19

Section 09 66 13
Portland Cement Terrazzo Flooring
V12202016

1. General

1.1. Portland Cement Terrazzo shall be Priced as an assigned allowance. Please contact the project assigned Construction Manager to find the current allowance.

1.2. Applicators: Applications will be assigned by Publix Construction and shall be a certified member of the National Terrazzo and Mosaic Association.

1.3. Applicators: Applicator shall be a certified member of the National Terrazzo and Mosaic Association.

1.4. Job Conditions:

1.4.1. Do not begin application until roofing operations have been completed.

1.4.2. Substrate: Applicator shall verify slab meets standards of slab quality as specified; if it does not then he shall notify Publix Construction Representative before work is started.

1.4.3. Application of terrazzo shall constitute evidence of acceptance of slab by applicator.

1.4.4. Power to support Terrazzo operations will not be available on site. Applicator must provide necessary generator support to enable terrazzo operations.

1.4.5. General Contractor shall provide sufficient water, temporary heat and light, to facilitate terrazzo installation. Ambient temperatures in the area to receive terrazzo at less than 50 degree Fahrenheit.

1.4.6. Protection of installed work shall begin immediately upon completion of each part. Do not allow materials which can mar or stain to come into contact with floor. Protect floor from wheeled traffic and other activities which might cause permanent damage. General Contractor shall not permit the changing of equipment batteries on the finished floor and all lifts must have proper "diapers" and the tires and tires must be inspected daily to ensure they remain free of dirt and/or debris or other abrasive materials such as screws, nails, etc.

1.4.7. CLEAN FLOOR DAILY. After terrazzo installation is complete, floors shall be cleaned daily with automatic cleaning machine that causes no abrasion or scratches.

1.5. Submittals: Submit an LOI and manufacturer's literature in accordance with Section 0133 00 Submittal Procedures.

1.6. Ordering:

1.6.1. The divider and expansion strips specified are special-order items and require a 4-6 week lead time. Alternate cold-formed rolled strips will not be accepted due to poor schedule management.

1.6.2. The Terrazzo Sealer and Terrazzo Finish products will be ordered directly from Diversey Inc.

1.7. Warranty: All terrazzo work shall be guaranteed against defects in material and workmanship for a period of two years. Work found to be defective during that time will be replaced at no cost to the Owner. A written warranty shall be provided.

2. Products

2.1. Materials:

2.1.1. Portland Cement: ASTM C 150

2.1.1.1. Color: White.

2.1.2. Strips:

2.1.2.1. Divider Strips: Extruded 5/8" x 5/8" x 1/8" OR 1/4" zinc "L" strips. See floor finish plan for location of shapes.

2.1.2.1.1. Model #TLZ5818P (1/8")

2.1.2.1.2. Model #TLZ5814P (1/4")

National Metal Shapes
Russell Day, National Sales Manager
(800) 837-9559

2.1.2.2. Setting Agent: Laticrete #211 w/ #4237 Additive, or Laticrete #254 (no additive needed)

2.1.3. Marble Chip Matrix: Comply with NTMA's "Terrazzo Specifications and Design Guide" and manufacturer's written instructions for matrix and aggregate proportions and mixing.

2.1.3.1. Choose from the following matrices according to availability:

100% Wild Rose
90% New White Rose, 10% Georgia White
100% White Rose
100% Confederate Rose
KCI/CC-PB3

2.1.3.2. All chips are to be 50% #1 and 50% #2 sizing.

2.1.3.3. Abrasion and impact resistance when testing in accordance with ASTM C 131-89 shall not exceed 40% loss.

2.1.3.4. Twenty-four hour absorption rate shall not exceed 0.75%.

2.1.3.5. Chips shall not contain deleterious or foreign matter.

2.1.3.6. Dust content shall be less than 1% by weight.

2.1.4. Floor Sealer: See Article 1.4 of this Section for ordering instructions.

"Plaza TM/MC, by Diversey

2.1.5. Floor Cleaner:

"Prominence", by Diversey

3. Execution

3.1. Inspection:

3.1.1. Examine areas to receive terrazzo for defects that would affect proper execution of terrazzo work.

3.1.2. Route out any stress cracks discovered in slab and fill with roadwares's concrete Mender or equivalent polymer concrete product submitted and approved by Publix. Concrete slab shall be level with a maximum variation from level of 1/4" in 10 feet.

3.2. Installation:

3.2.1. Terrazzo shall not begin until concrete sub-floor has cured for a minimum of 28 days and all defects have been corrected by others.

3.2.2. Protection must be provided for all metal framing, wall tracks, pre-fabricated cooler panels, installed drywall and all adjacent flooring and wall surfaces.

3.2.3. All Terrazzo shall be mixed at a ratio of two bags of marble chips (200 lbs.) to one 94 lb. bag of white cement with sufficient potable water to produce a workable mix.

3.2.4. Follow manufacturer's mixing instructions for the setting agent product. DO NOT DILUTE THE PRODUCT AFTER MIXING.

3.2.5. Strips:

3.2.5.1. All saw cuts and construction joints shall be filled with setting agent prior to strip installation.

3.2.5.2. Set in a full bed of setting agent. NO MECHANICAL FASTENING, HOT GLUES OR CONSTRUCTION ADHESIVES SHALL BE USED TO ADHERE STRIPS TO SLAB.

3.2.5.2.1. Cover exposed horizontal flange surface as well with setting agent. Setting agent shall be screeded so that at least 1/2" thickness of terrazzo will be maintained.

3.2.5.2.2. While agent is still in plastic state, sprinkle with fine marble chips.

3.2.5.3. Set strips as indicated on finish plan. All strips in a section must be placed prior to pouring of terrazzo.

3.2.5.4. All intersections of strips must be mitered. See construction drawings for detail.

3.2.5.5. The filling of the construction joint divider strips with flexible epoxy filler is not included in the scope of the work.

3.2.5.6. Contractor shall examine strips to ensure proper strips are being used. Any damaged or loose strips will be replaced.

3.2.6. Saturate concrete sub-floor with water.

3.2.7. Prime sub-floor with pure white neat cement and pour topping over wet primer.

3.2.8. Pour terrazzo topping to a minimum 5/8"' coating insuring all mix is above the terrazzo strip level.

3.2.9. Seed surface with a blend of #1 and #2 chips only of same color and percentages as in base coat. (Use of white chips and base coat with coloring achieved in finished coat will not be accepted.)

3.2.10. Compact wet topping with terrazzo rollers per NTMA specifications until excess cement and water has been extracted.

3.2.11. Trowel to a uniform surface to expose lines of dividing strips.

3.3. Curing:

3.3.1. Keep terrazzo continuously moist and free of traffic during the curing period. Cure by covering with water, wet sand or polyethylene sheeting (6 mil).

3.3.2. Cure for either for 96 hours or until topping develops sufficient strength to prevent lifting or pulling of terrazzo chips during grinding, whichever is longer.

3.4. Finishing:

3.4.1. Grind with 30 grit Diamond until all strips and marble chips are uniformly exposed. Follow with 80 grit grinding.

3.4.2. After rough grinding, clean and rinse floor with potable water. After excess water is removed, grout floor with identical Portland cement as in the matrix to fill voids. After the grout has attained its initial set, the surface shall be cured for a minimum of 72 hours or until other heavy traffic work on the Project has been completed. All slurry generated by terrazzo operations shall be properly disposed off-site by applicator.

3.4.3. Continue grinding process with 100 grit resin diamond pad. Flood mop and wet vacuum all slurry from surface, between these grinds, ensuring all previous grit latency and particulate matter is removed. Continue grinding is successive stages until 400 grit finish is obtained on all terrazzo surfaces.

3.4.4. Grout voids with Laticrete #211or "Atlas" Rezlab A-3000.

3.4.5. Optional as required apply 200 Grit Grind Silicate Densifier per manufacturer's Instructions after 200 Grit Grind:

"H&C" Clear Liquid Hardener & Densifier
"Ameripolish 3D HSL" Densifier
"Consolidek LS/CS" Blended Silicate/Hardenner

3.4.6. Inspect entire surface for consistent appearance with no abrasion scratches from previous grits. Readdress any areas not matching 400 grit finish before continuing.

3.4.7. Terrazzo finish shall show a minimum of 70% marble aggregate finish, and be consistent with marble chip throughout the entire surface area, even under cases, carpeting and against walls.

3.4.8. Floor mop and wet vacuum to ensure no presence of particulate matter or other trades' dirt or oils.

3.4.9. Final polish surface with white polishing pad.

3.4.10. Thoroughly scrub and agitate entire surface with appropriate cleaning agent. Wet vacuum scrub surface to ensure complete removal of all chemicals.

3.4.11. Once entire surface is dry (24 hours minimum), and prior to installation of refrigerated cases, apply a minimum two coats of Terrazzo Sealer per manufacturer's instructions.

3.4.12. Publix' representative must perform a final inspection and accept the work as complete after permanent lighting has been installed and is operational.

3.4.13. Allow a minimum of 24 hours before use or open traffic and 48 hours to heavy traffic.

3.4.14. Two more coats of Terrazzo Finish will be applied by Publix's Floor Care Contractor just prior to the Project's Grand Opening.

3.5. Maintenance:

3.5.1. General Contractor shall limit number of entrance ways into the store sales floor and all access points shall have 10 foot walk off mats and all exposed terrazzo not planned to be covered with refrigerated cases, Gondolas or shall be covered and fully protected until substantial completion.

3.5.2. Contractor is responsible to protect terrazzo floor from damage and to ensure floor is cleaned daily up until completion. No food or drinks (other than water), tobacco shall be allowed in store after terrazzo is installed and general contractor shall not allow material which can mar or stain to come into contact with floor.

End of Section 09 66 13

Section 09 66 23.16
Epoxy-Resin Terrazzo Flooring
V02072013

1. General

1.1. Section includes:

1.1.1. Thin-set epoxy-resin terrazzo flooring, including preparation of substrates.

1.2. Related sections:

1.2.1. Section 03 30 00 Cast-in-Place Concrete.

1.3. Quality Assurance:

1.3.1. Installer Qualifications:

1.3.1.1. Installer shall be a contractor member of the NTMA and perform all work in accordance with NTMA standards.

1.3.1.2. Installer shall have at least five (5) years of satisfactory experience in installation of epoxy-resin terrazzo. Installer must be able to provide evidence of experience during the last five (5) years of at least five (5) projects comparable in scope and complexity to at least 50% of the total square footage of the Work for this Project.

1.3.2. Pre-Installation Conference: Conduct conference at Project site between General Contractor, Publix construction representative and installer. Review methods and procedures related to terrazzo, including, but not limited to, the following:

1.3.2.1. Inspect and discuss installation procedures, joint details, jobsite conditions, substrate specification, vapor barrier details and coordination with other trades.

1.3.2.2. Review and finalize construction schedule and verify availability of materials, installer's personnel, equipment and facilities needed to make progress and avoid delays.

1.3.2.3. Review dust control procedures.

1.3.2.4. Review plans for concrete curing and site drying to enable timely achievement of suitable slab moisture conditions.

1.3.2.5. Review moisture testing and slab cracks to determine if isolation and moisture treatment shall be required and installed to the manufacturers recommended installation procedure. Publix representative must approve the isolation moisture treatment scope of work.

1.3.3. Standards:

1.3.3.1. Comply with NTMA's "Terrazzo Specifications and Design Guide" and with written recommendations for epoxy-resin terrazzo unless more stringent requirements are specified in this Section.

1.4. Submittals:

1.4.1. Letter of Intent (LOI): Submit LOI indicating system to be used for the Work described in this Section. All information must be indicated completely and accurately.

1.4.2. Certifications:

1.4.2.1. Installer shall submit proof of Contractor membership in NTMA.

1.4.3. Samples: Provide 12x12 sample of each matrix blend.

1.5. Project Conditions:

1.5.1. Slab condition:

1.5.1.1. Maintain ambient room and floor temperature at 60 degrees Fahrenheit or above for a period extending 72 hours before, during and after floor installation.

1.5.1.2. Concrete to receive epoxy-resin terrazzo shall have cured for at least 28 days and be free of all curing compounds (unless moisture vapor primer incorporated into the system).

1.5.1.3. An efficient vapor barrier (15 mil minimum, with no recycled material included) must be provided under the slab. Vapor barrier shall NOT be punctured. See Section 2.3.1 Vapor Barrier.

1.5.1.4. Concrete subfloor shall be level with a maximum variation from level to 1/4" in 10 feet. Any irregularity of the surface requiring patching and/or leveling shall be done using material approved by the manufacturer.

1.5.1.5. Prior to and during each day of installation, the terrazzo contractor shall verify that the dew point is at least 5 degrees Fahrenheit less than the slab and air temperature.

1.5.1.6. No curing agents are to be used in areas to receive terrazzo.

1.5.1.7. Concrete floor shall receive a light steel trowel finish.

1.5.1.8. No pressure washing slab prior to installation of epoxy terrazzo.

1.5.1.9. Mechanical abrasion: shot blast floor prior to installation.

1.6. Delivery, Storage and Handling:

1.6.1. All materials shall be delivered to the site of the Project in original manufacturer's sealed containers including type of material, batch numbers, date of manufacture and pertinent labels intact and legible.

1.6.2. Store materials in a dry, protected area at a temperature between 60 and 80 degrees Fahrenheit.

1.6.3. Follow all manufacturer's specific instructions and prudent safety practices for storage handling.

2. Products

2.1. Manufacturers: Select from one of the following epoxy-resin terrazzo systems for installation.

Key Epoxy Terrazzo", Key Resin Company with moisture primer and 40 mils full coverage flexible epoxy membrane.

Terroxy Resin Systems Epoxy Matrix", T&M Supply with moisture primer and 40 mils full coverage flexible epoxy membrane

Morricite by Master Terrazzo with moisture primer and 40 mils full coverage flexible membrane.

*Provide deduct alternate for up to 5% fiberglass reinforced 40 mil flexible epoxy membrane over cracks only in lieu of full coverage.

2.2. Related Terrazzo Materials:

2.2.1. Mix: Comply with NTMA's "Terrazzo Specifications and Design Guide" and manufacturer's written instructions for matrix and aggregate proportions and mixing.

2.2.1.1. Formulas for project containing two mixes. See construction drawings for placement.

2.2.1.1.1. Epoxy-resin: 100% color to match ®Sherwin Williams 7029 Agreeable Gray

2.2.1.1.2. Aggregates: Georgia White

25% Georgia White #0
25% Georgia White #2
50% Georgia White #1

2.2.1.1.3. Epoxy-resin: 100% color to match Sherwin Williams 7019 Gauntlet Gray

2.2.1.1.4. Aggregates: Georgia White

25% Georgia White #0
25% Georgia White #2
50% Georgia White #1

2.2.1.2. All chips are to be 50% #1 and 50% #2 sizing.

2.2.1.3. Abrasion and impact resistance when testing in accordance with ASTM C 131-89 shall not exceed 40% loss.

2.2.1.4. Twenty-four hour absorption rate shall not exceed 0.75%.

2.2.1.5. Chips shall not contain deleterious or foreign matter.

2.2.1.6. Dust content shall be less than 1% by weight.

2.3. Strip Materials:

2.3.1. Divider Strips: Extruded 3/8"' x 1/8"' zinc "L" strips.

Model #TLZ3818, National Metal Shapes Russell Day, National Sales Manager (800) 837-9559

2.3.2. Construction Joint Strips: Same material as divider strips; separate strips positioned back to back with minimum 1/8"-1/4" width between. Fill gap between strips with elastomeric joint filler. Match color to divider strips.

2.3.3. Setting Agent:

2.3.3.1. Use 100% solids epoxy resin adhesive.

2.4. The divider and expansion strips specified are special-order items and require a 4-6 week lead time. Alternate cold-formed rolled strips will not be accepted due to poor schedule management.

2.5. Flexible Reinforcing Membrane: Use products recommended by manufacturer of selected resin-epoxy terrazzo system.

2.6. Cleaning Agent:

2.6.1. Neutral cleaner with pH factor between 7 and 10.

2.6.2. Use manufacturer's recommended cleaner whenever possible.

2.7. Patching and Fill Material: Use products recommended by manufacturer of selected resin-epoxy terrazzo system.

2.7.1. The use of silicate-based densifiers is NOT permitted.

3. Execution

3.1. Concrete Slab Preparations: The General Contractor, with terrazzo installer present, must inspect the concrete slab receiving terrazzo for defects and deviations beyond allowable tolerances before beginning terrazzo installation. Proceed with installation only after all unsatisfactory conditions have been corrected.

3.1.1. The slab must be free of laitance, glaze, efflorescence, curing compounds, form-release agents, dust, dirt, grease, oil and other contaminants incompatible with epoxy-resin terrazzo.

3.1.2. Verify concrete slab is visibly dry and free of moisture in accordance with ASTM F2170.

3.1.3. Prepare concrete slab mechanically by vacuum shot blasting. Surface preparation results should achieve a CSP3-CSP-5 profile according to International Concrete Repair Institute Guideline No. 03732.

3.1.4. Apply manufacturer moisture vapor treatment (full coverage) in compliance with specified coverage rates, allow to cure for the manufacturer specified time. Then apply manufacturer specific primer, and allow to cure for the manufacturer specified time.

3.1.5. Repair cracks in concrete after shot blasting by filling with hard epoxy resin flush with the concrete (fill multiple times if required to fill flush with the concrete)

3.1.6. Apply 40 mil of flexible epoxy membrane 16"' wide and a minimum of 8"' on each side of the crack. After the flexible membrane has set, apply a minimum 9"' wide fiberglass mesh by the resin manufacturer ON TOP of the cured flex membrane and hold in place with a coat of hard epoxy. Flexible membrane shall also be provided as full coverage.

3.2. Provide permanent lighting or, if permanent lighting is not available, simulate permanent lighting conditions during installation.

3.3. Protect other work from dust generated by grinding operations. Control dust to prevent air pollution and comply with environmental protection regulations.

3.4. Erect and maintain temporary enclosures and other suitable methods to limit dust migration and to ensure adequate ambient temperatures and ventilation conditions during installation.

3.5. Epoxy Terrazzo Installation:

3.5.1. Thickness: 3/8"'.

3.5.2. Primer: Apply according to system manufacturer's instructions.

3.5.3.

1.1.1. The work shall consist of the substrate, the furnishing and the application of a Methyl Methacrylate (MMA) based self-leveling seamless flooring system with decorative chips. This system shall include a 6 inch cove and non-skid aggregate in specified areas.

1.1.2. Provide system in compliance with requirements of United States Department of Agriculture (USDA), Food and Drug Administration (FDA), and local Health Department.

1.1.3. The system shall have the color, texture and thickness specified by the Owner. It shall be applied to the prepared areas(s) as defined in the plans strictly in accordance with the Manufacturer's recommendations.

1.2. Job Conditions:

1.2.1. Do not begin application until roofing operations have been completed, ceiling and ducts painted and FRP panels and wall tile installed.

1.2.2. Floor drains are to be set 3/16 inch above finish concrete slab elevation.

1.2.3. Application may proceed when substrate temperatures are between 40° F and 95° F, providing the substrate temperature is above the dew point. Outside of this range, the Manufacturer shall be consulted. Application will proceed when the vapor/moisture emission rate from the slab is less than and not higher than 316/1000 ft² over 24 hours. The test method is ASTME 1869-98 "Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride."

1.2.4. The Applicator shall ensure that adequate ventilation for the work area. This shall include the use of fans and smooth bore tubing and closure of the work area. The ventilation is to be installed as to create a negative pressure in the work area, defined as removing air from the area and not blowing air into the area.

1.2.5. The Applicator shall be supplied with adequate lighting equal to the final lighting level during the preparation and installation of the system.

1.2.6. All open flames and spark-producing equipment shall be removed from the work area prior to commencement of application.

1.2.7. "No Smoking" signs shall be posted at the entrances to the work area.

1.2.8. Protection of installed work shall begin immediately upon completion of each part. Do not allow material which can mar or stain to come into contact with the floor. Protect floor from wheeled traffic and other activities which might cause permanent damage.

1.2.9. Clean floor daily.

1.2.10. The Applicator shall be provided with adequate disposal facilities for non- hazardous waste generated during installation of the system.

1.3. Tests: Perform flooring manufacturer's standard bond test.

1.4. Quality:

1.4.1. Manufacturer:

1.4.1.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

1.4.1.2. The Manufacturer shall have a minimum of 10 years experience in the production, sales and technical support of industrial flooring and related materials.

1.4.1.3. Material Manufacturer shall be approved by Publix.

1.4.1.4. A qualified material manufacturer representative shall be present during installation of system.

1.4.2. Applicator:

1.4.2.1. The applicator shall be approved by Publix Architect and the flooring manufacturer.

1.4.2.2. The Applicator shall have been trained by the flooring system Manufacturer in all phases of surface preparation and application of the product specified.

1.4.2.3. Applicator shall have 5 years experience in use of required equipment and application of specified flooring system. Submit proof of experience in work of similar scope.

1.4.2.4. Publix reserves the right to refuse any applicator with or without cause.

1.4.2.5. Approved MMA applicators:

Balmar Corp., Conyers, GA
Dura Bond Company, Miami, FL
Federal Technical Services, Marietta, GA
Nightengale Resurfacing, Palm Beach Garden, FL
Piedmont Industrial Coatings, Piedmont, SC
Surface Systems, Greer, SC
Fluid Floors, Inc., Marietta, GA

1.4.3. Personnel:

1.4.3.1. Employ an experienced superintendent trained by the system manufacturer to oversee all operation.

1.4.3.2. Work shall not proceed without adequate supervision present at all times.

1.4.3.3. Utilize workers with skills in proportion to complexity of tasks required.

1.4.3.4. Publix reserves the right to reject personnel with or without cause.

1.4.4. Quality Standards:

1.4.4.1. Work will be judged by Publix in comparison to work of similar types.

1.4.4.2. Substandard construction as judged by Publix Representative or Flooring System Manufacturer's Representative will not be accepted.

1.4.4.3. Comply with Manufacturer's installation guidelines for Publix.

1.4.4.4. Neatness Counts. Make all joints with proper care to insure that tight connections are made without excess material, well bonded to substrate.

1.4.4.5. Publix reserves the right to refuse any applicator with or without cause.

1.4.5. Warranty:

1.4.5.1. All seamless MMA flooring and wall base work against defects in material and workmanship for a period of two years. Work found to be defective during that time shall be replaced at no cost to the Owner. A written warranty shall be provided.

2. Products

2.1. Approved Manufacturers:

2.1.1. Duraflex, Inc.

95 Goodwin Street — Phone: (860) 528-9838
East Hartford, CT 06108 — Fax: (860) 528-2802

2.1.2. Specialty Resin Systems

Waterbury, CT.

2.1.3. Res-Tek, Inc.

2000-F Cobb International Blvd. — Phone: (770) 427-4034
Kennesaw, GA 30152 — Fax: (770) 427-4037

2.2. Materials: Methyl Methacrylate (MMA) Acrylic Reactive Resin System components.

2.2.1. The primer shall be 100% reactive, MMA-based, two-component resin capable of full cure in 45 minutes at 68° F and equal to Dur-A-Flex, Inc. Cryl-A-Prime P-101.

2.2.2. The topping shall consist of 100% reactive, acrylic-based, two-component resin capable of full cure in less than one hour at 68° F and equal to Dur-A-Flex, Inc. Cryl-A-Glaze G-201.

2.2.3. A filler component consisting of graded silica sands and other inert fillers equal to Dur-A-Flex, Inc. SL Filler Blend.

2.2.4. The topcoat shall be a 100% reactive, MMA-based, two-component resin capable of full cure in less than one hour at 68° F and equal to Dur-A-Flex, Inc. Cryl-A-Top T-301.

2.2.5. The non-moving control joints shall be filled with a 100% reactive MMA-based, two-component resin mixed with approved clean, dry aggregate blend capable of full cure in less than one hour at 68° F and equal to Dur-A-Flex, Inc. Cryl-A- Glaze G-202 and SL Filler Blend.

2.2.6. The cove shall be a 100% reactive MMA-based, two-component resin mix with approved clean, dry aggregate capable of full cure in less than one hour at 68° F and equal to Dur-A-Flex, Inc. Cryl-A-Cove.

2.2.7. The decorative chips shall be of the 1/4 inch size and be composed of the Publix Special Blend Color and equal to Dur-A-Flex, Inc. 1/4 inch Decorative Chips.

2.2.8. Flake broadcast system – "Publix Gray" system:

Self-leveling topping, color white.
18% Eggshell White
3.5% Silver Grey
54% Khaki
3.5% Grey
3.5% Light Grey
3.5% Winter Grey
14% Battleship Grey

2.2.9. Flake broadcast system – "Publix Beige" system:

Self-leveling topping, color white.
20% Fawn Beige
14% Eggshell White
3% Silver Grey
43% Khaki
3% Grey
3% Light Grey
3% Winter Grey
11% Battleship Grey

2.2.10. The anti-slip aggregate shall be size #30 white aluminum oxide.

2.3. Delivery and Storage:

2.3.1. All components of the system shall be delivered to the site in the Manufacturer's packaging, clearly identified with the product type and batch number.

2.3.2. The Applicator shall provide a storage area for all components. The area shall be cool, dry, out of direct sunlight and in accordance with the Manufacturer's recommendations and relevant health and safety regulations.

2.3.3. Copies of Material Safety Data Sheets (MSDS) for all components shall be kept on site for review by the Engineer or other personnel.

3. Execution

3.1. The Applicator and General Contractor shall agree upon a schedule for coordination between traces working in the area which is to receive the system.

3.2. Preparation:

3.2.1. Protect all work in place by draping or masking as required. Provide protection for all adjacent surfaces.

3.2.2. New concrete shall have cured a minimum of 28 days in accordance with ACI-308.

3.2.3. Sealants and curing agents are not to be used.

3.2.4. New and existing concrete surfaces shall be free of oil, grease, curing compounds, loose particles, moss, algae growth, laitance, friable matter, dirt and bituminous products.

3.2.5. The substrate shall be sounded and all spalls repaired prior to placement of the prime coat. Spalls shall be repaired with compatible rapid cure concrete patch materials (Cryl-A-Tex or equal) per the Architect's and Manufacturer's recommendations.

3.2.6. Cracks that appear as a result of concrete shrinkage are to be repaired in one of the following methods dependent on the width of the crack.

3.2.6.1. Hairline cracks, equal to or less than 1/16 inch in width: Vacuum cracks, as they must be clean, dry and free of dust and dirt. Pour properly mixed MMA primer, such as Cryl-A-Prime P-10 or equal, into crack and keep applying until crack is totally filled. This may require 2 or 3 applications.

3.2.6.2. Cracks greater than 1/16 inch are to be routed out to a width of 1/4 inch using a proper crack chasing tool and vacuum to remove all dust. Prime the crack with MMA primer. The crack is to be filled with a 100% reactive MMA-based, two-component resin mixed with approved clean, dry aggregate blend capable of a full cure in less than one hour at 68° F and equal to Dur-A-Flex, Inc. Cryl-A-Glaze G-202 and SL Filler Blend.

3.2.7. There shall be no visible moisture present on the surface at the time of application of the system. Compressed, oil-free air and/or a light passing of a propane torch may be used to dry the substrate.

3.2.8. When the perimeter of the substrate to be coated is not adjacent to a wall or curb, a minimum 1/4 inch key cut shall be made to properly seat the system, providing a smooth transition between areas. This detail cut shall also apply to drain perimeters and expansion joint edges.

3.2.9. Concrete surfaces on grade shall be constructed with a vapor barrier to protect against the effects of vapor transmission and possible delamination of the system.

3.3. Mechanical surface preparation:

3.3.1. Shot blast all surfaces to receive a flooring system with a mobile steelshot, dust recycling machine (Blastrac or equal).

3.3.2. Surfaces inaccessible to the mobile shot blast machines shall be mechanically abraded to the same degree of cleanliness, soundness and profile using diamond grinders, needle guns, bush hammers or other suitable equipment.

3.3.3. All surface and embedded accumulations of paint, toppings, hardened concrete layers, laitance, power trowel finishes, and other similar surface characteristics shall be completely removed leaving a bare concrete surface having a profile similar to 40 grit sandpaper and exposing the upper fascia of concrete aggregate.

3.3.4. Random tests for adequate bond strength shall be conducted on the substrate, in accordance with the Manufacturer's recommendations, at a minimum frequency of three tests per 10,000 ft². Smaller areas shall receive a minimum of three tests.

3.3.5. Based on the test results, additional substrate preparation may be required before proceeding with the installation of the system.

3.4. Application:

3.4.1. The system shall be applied in six distinct steps as listed below:

Substrate preparation
Priming
Filling of control joints
Cove installation
Topping/overlay application with decorative chips
Topcoat application and anti-slip aggregate where applicable

3.4.2. Immediately prior to the application of any component of the system, the surface shall be dry and any remaining dust or loose particles shall be removed using a vacuum or clean, dry, oil-free air.

3.4.3. The handling, mixing and addition of components shall be performed in a safe manner to achieve the desired results in accordance with the Manufacturer's recommendations.

3.4.4. The primer shall consist of one coat with an overall coverage rate of 80-110 ft²/ gal by brush or roller application.

3.4.4.1. Porous concrete may require a second coat of primer should the first coat be absorbed.

3.4.5. Control Joints: The properly mixed material is to be poured into the control joint and finished off flush with the adjacent floor.

3.4.6. Cove:

3.4.6.1. A 3/16 inch zinc-coated metal cove strip is to be used as the top termination strip.

3.4.6.2. The cove is to be applied using a proper radius cove tool.

3.4.6.3. After the cove has cured, a pigmented coat of Cryl-A-Glaze G-201 or equal shall be brushed or rolled onto the cove and broadcast to excess with decorative chips.

3.4.6.4. After the cove has fully cured, coat with two coats of topcoat, making sure to apply over the top of the zinc strip to completely seal the back of the strip.

3.4.6.5. Backerboard (1/4 inch plexiglass or 1/2 inch cement board) may be required with non-compatible materials for proper bond. The top of the backerboard shall be cut at an 45° angle to create a beveled edge for the cove base. Grind back cove surface to ensure proper bonding.

3.4.7. Topping:

3.4.7.1. The topping shall be applied as a self-leveling system as specified by the Architect. The topping shall be applied in one lift with a nominal thickness of 1/8 inch.

3.4.7.2. The topping shall be comprised of two components: 1) a resin and filler; 2) a hardener powder that is to be added in accordance with the Manufacturer's recommendations.

3.4.7.3. Immediately upon raking and/or troweling into place, the topping shall be degassed with a porcupine roller. Broadcast the 1/4 inch Chips (Publix Blend) on the surface of fresh material at a rate of 0.1 lb/ft². After cure, remove excess chips by blowing, sweeping and/or vacuuming. Brush floor with specified brush. Do not reuse swept chips.

3.4.8. Topcoat:

3.4.8.1. The topcoat shall consist of two coats.

3.4.8.1.1. The first topcoat shall be applied at the rate of 80 ft²/gallon. Where required, the anti-skid aggregate (aluminum oxide, #30 grit) shall be applied at a rate of 2.0 lb/100 ft² into the first topcoat.

3.4.8.1.2. The first topcoat will be allowed to cure then sanded with #36 grit paper to give the desired finish texture. This is not done in areas that require anti-slip aggregate.

3.4.8.1.3. Cure 45-60 minutes between coats.

3.4.8.1.4. The second topcoat is applied at 90-110 ft²/gallon.

3.4.9. Thickness:

3.4.9.1. Total system thickness shall equal approximately 3/16 inch.

3.4.10. Cleaning and Protection: Take necessary steps to keep work in place clean and free from damage by ongoing construction activity. Repair defects as required, using flooring system manufacturer's recommended procedures.

3.5. Final Cleaning:

3.5.1. The retail area is to be scrubbed and rinsed as close as possible (night before) to the store opening. The work is to be done with automatic scrubbers such as Tennant walk behind automatic scrubber.

3.5.1.1. A sodium hydroxide base cleaner mixed at a ratio of 10 parts clean water to 1 part soap is to be used. Have clean brushes and pads installed. At a slow speed dispense soap onto floor with the vacuum squeegee feature not operating.

3.5.1.2. Allow soap solution to sit for 20 minutes. Re-scrub and vacuum.

3.5.1.3. Rinse with a second machine and a solution of 30 parts water to 1 part vinegar. Dispense rinsing solution and vacuum immediately.

3.5.1.4. Polish area with high speed buffer and pads.

End of Section 09 67 23

Section 09 68 00
Carpet
V09112020

1. General

1.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

1.2. Warranties:

1.2.1. Carpet Type I: Manufacturer's standard 3 year pro-rated warranty.

1.2.2. Carpet Type II: Manufacturer's standard wear/colorfastness 10 year warranty.

1.2.3. Carpet Type III: Manufacturer's standard 3 year pro-rated warranty.

1.2.4. Installation: 1 year labor and material against all defects.

2. Products

2.1. Carpet Type I:

Manufacturer/Distributor: Interface

Contact: Shane Steed

Phone: (800) 634-6032

Series: Express Grey

Color: 185507

Size 50cm X 50cm, Quarter Turn Installation

2.2. Carpet Type II: Not Used

2.3. Carpet Type III:

Manufacturer/Distributor: Charles van Gelder.
Contact: Greg Griffin.
Phone: (864) 527-3148 or (864) 430-3997
Series: Dominator.
Color: Mid-Grey.
Back: Moisture dissipating secondary back, with anti-microbial agent: lifetime application

2.4. Transition Strips (use over existing vinyl tile, terrazzo, or concrete, and where carpet is used over new terrazzo):

2.4.1. Aluminum Base: Extrusion designed to be fastened to floor with a channel to receive transition strip.

2.4.2. Transition Strip: Use at pharmacy where carpet tile transitions to terrazzo.

Manufacturer: Roppe (Available through Charles Van Gelder)
Series: 174-V1P100

3. Execution

3.1. General: All applicators and field personnel shall be fully trained and familiar with manufacturers' application procedures.

3.2. Tile Installation:

3.2.1. Design layout of tiles so that the edges abutting walls, equipment, etc. are formed with pieces large enough to prevent them being easily dislodged. At transition strips, provide first course of whole tiles abutting strip.

3.2.2. Install tile in a "diamond pattern".

3.2.3. Fit around all cases and other permanently installed fixtures. Trim tiles for tight installation.

3.3. Roll Goods:

3.3.1. Design layout to minimize seams; where spaces are less than the width of the roll, provide seamless installation.

3.3.2. Glue down directly to slab, following carpet manufacturer's recommendations.

End of Section 09 68 00

Section 09 91 00
Paints
V03092020

1. General

1.1. Submit LOI in accordance with Section 01 33 00 Submittal Procedures. No samples or product cut sheets will be required prior to pre-painting conference (see Article 4.1 below).

1.2. Factory and shop applied painting: Apply as specified in sections governing the item required.

1.3. Field Painting:

1.3.1. Generally, paint all visible surfaces of all items both interior and exterior, and where needed for protection of materials from moisture damage.

1.3.2. Apply single coat of primer or wall paint on surfaces subject to accumulation of dust and dirt; that is, door tops and other places where appearance is not critical.

1.3.3. Where there is no indication for specific selections, match color and gloss of adjacent finishes, using coatings of the type recommended by the coating manufacturer in writing and approved by the owner

1.3.4. Interior and exterior materials:

Concrete

Portland cement plaster Masonry

Woodwork (includes back-priming all wood siding, and interiors of millwork).

Gypsum wallboard

Steel and other ferrous metals including galvanized steel.

1.3.5. Specifically excluded from field painting:

Where concealed by ceiling: Structural steel, steel joist girders and joists, metal roof deck, and interior electrical and mechanical work

Concrete walks; if remodeling work requires reconditioning of previously painted walks notify Architect.

1.3.6. Materials and equipment not to be painted.

Items of equipment furnished with complete factory finish, except for items specified to be given a finish coat under this Section.

Non-ferrous metals, except for items specified and/or indicated to be painted.

Prefinished sheet metal.

Finished hardware, excepting hardware that is factory primed. Electrical panels.

1.3.7. Surfaces not to be painted shall be left completely free of droppings, overspray and other accidentally applied materials resulting from painting work.

1.4. Paint Materials:

1.4.1. Deliver all paint, varnishes, enamels, lacquers, stains and similar materials in the original containers with the seals unbroken and labels intact and with the manufacturer's instructions printed thereon.

1.4.2. Paint shall arrive on the job color-mixed except for tinting of undercoats and thinning. All thinning and tinting materials shall be as recommended by the manufacturer for the particular material to be thinned or tinted.

1.4.3. All mixed colors shall match the color selection made by the Architect. Verify prior to application of the coating.

1.5. Storage of Materials:

1.5.1. Store all materials used on the job in a single place designated by the General Superintendent or Architect.

1.5.2. Keep storage areas clean and free of debris. Take special care to remove all items which present danger of fire daily.

1.5.3. Do not store materials in walk-in coolers and freezers.

1.6. Inspection of Surfaces:

1.6.1. Examine surfaces carefully before starting. Note defects which are not reparable by ordinary means and notify Architect and General Contractor in writing. Work shall not proceed until such damages are corrected.

1.6.2. Commencement of work in a specific area will be construed as acceptance of the substrate.

1.7. Job Conditions:

1.7.1. Before painting is started in any area, broom clean and remove dust.

1.7.2. Until paint is fully dry, broom cleaning will not be allowed; use commercial vacuum cleaning equipment.

1.7.3. Provide adequate illumination for judging colors and finish quality in areas where painting operations are proceeding.

1.7.4. Cooperation with other trades: Schedule painting work with other trades. Do not proceed until all affected work is in place, and, where required, protected from painting operations.

2. Products

2.1. Manufacturer:

2.1.1. Only Sherwin Williams products will be accepted. If a product is needed which is not produced by Sherwin Williams, notify Publix Architect.

2.1.2. SW will be used to designate Sherwin Williams throughout this Section.

2.1.3. Publix's intent is to utilize products that are low in Volatile Organic Compounds (VOC). Where possible, product selection has been made to achieve this. Substitution of older type materials which contain solvents will not be allowed unless specifically directed by Publix's Architect.

3. Execution

3.1. Workmanship, General:

3.1.1. Only skilled mechanics shall be employed. Apply by brush and roller and/or spray. Spray painting will be back rolled.

3.1.2. Protect work in place at all times, and protect all adjacent work and materials by suitable means.

3.1.3. In remodeling operations, where electrical panels were previously painted, paint to match surrounding wall.

3.1.4. All materials shall be applied under adequate illumination. Evenly spread and smoothly flow on to avoid runs, sags, holidays, brush marks, air bubbles and excessive roller stipple.

3.1.5. Provide complete coverage and hide. Where color, stain, or undercoats show through final coat of paint, the surface shall be covered by additional coats until the paint film is of uniform finish, color, appearance and coverage.

3.1.6. All coats shall be adequately dry in compliance with manufacturer's recommendations before applying succeeding coats.

3.1.7. Wood surfaces to be stained shall appear uniform in shading with color variations caused only by the natural wood grain.

3.2. Preparation of Surfaces:

3.2.1. Surfaces shall be clean, dry and adequately protected from dampness.

3.2.2. Surface shall be free of foreign materials which will adversely affect adhesion or appearance of applied coating.

3.2.3. Mildew shall be removed and the surface treated in accordance with the coating manufacturers recommendations.

3.2.4. Wood:

3.2.4.1. Sand to smooth and even surface, then dust off.

3.2.4.2. Apply pigmented shellac to all knots, pitch and resinous sapwood prior to application of specified primer coats.

3.2.4.3. After priming coat has dried, putty or spackle all nail holes, cracks, open joints and other defects. Putty shall be colored to match primer, if putty is not compatible with finish, spot prime patched areas.

3.2.5. Drywall: Fill all minor irregularities with spackling paste and sand to a smooth level surface. Exercise care to avoid raising nap of paper.

3.2.6. Concrete, Masonry and Stucco

3.2.6.1. Patch large openings and holes and finish flush with adjacent surface. After priming, fill remaining small holes with prepared patching material.

3.2.6.2. Remove form oil from poured-in-place concrete with form oil solvent, or other operations as required for complete removal.

3.2.6.3. Do not paint until surfaces have cured for 28 days and are dry.

3.2.7. Ferrous metal surfaces

3.2.7.1. Remove dirt, dust and surface contaminants. Clean per SSPC-1 and use Simple Green and water solution, wipe dry with clean cloths.

3.2.7.2. Remove rust, mill scale and defective paint down to sound surfaces or bare metal using scraper, sandpaper or wire brush as necessary.

3.2.7.3. Touch up all bare metal and damaged shop coats with specified shop coat primer.

3.2.8. Galvanized metal surfaces: Remove dirt and grease with non-hydrocarbon cleaner (e.g. "Simple Green" reduced to no more than 30:1 with water, 4 oz. Simple Green to 1 gallon water.) Use a low pressure sprayer to apply cleaning solution, wait a few minutes (not more than 20) before rinsing, if rinsing is not practical, then wipe with a damp cloth followed by wiping with a clean dry cloth. (If time allows, air dry may be substituted.)

3.2.9. Aluminum Hill House (Only when required by jurisdiction to be painted):

3.2.9.1. Primer B66A00050-DTM Bonding primer Off White

3.2.9.2. Two (2) Coats: B66W00351-Sher-Cryl HPA High Performance Acrylic Semi-Gloss Coating

3.2.10. Existing surfaces to be repainted (when and where applicable)

3.2.10.1. Where existing work is cut, patched, or added to, all new surfaces shall be painted or touched up to match existing work as closely as possible.

3.2.10.2. Existing work, where scheduled for repainting or where damaged by work of this Contract, shall be repaired and scraped or sanded to provide good adhesion for paint. Paint to match similar new work or existing work as appropriate.

3.2.10.3. Fiberglass Reinforced Paneling (FRP) (Remodels only):

3.2.10.3.1. Sand with 80-100 grit sandpaper.

3.2.10.3.2. Clean with Formula 409 All-Purpose Cleaner

3.2.10.4. Ceramic Tile in Walls (Remodels Only) Epoxy System (water base)

High Gloss Finish:

Primer: SW Extreme Bond Primer, B51W1150

1st Coat: Pro Industrial Water Based Epoxy Gloss, B73-300/B73V300
2nd Coat Pro Industrial Water Based Epoxy Gloss, B73-300/B73V300
(5.0-19.0 mils Wet, 2.0-4.0 mils Dry)

3.3. Workmanship for Exterior Painting

3.3.1. Follow manufacturer's recommendations for job conditions and surface preparation.

3.3.2. Do not proceed with painting work when the surface temperature is below 50 degrees F (unless low temperature paint is being used. See 4.2.1.1)., while the surface is damp, or during rainy or frosty weather. Avoid painting surfaces while they are exposed to hot sun.

3.3.3. Exterior doors shall have tops, bottoms, and side edges finished the same as the exterior faces of these doors.

3.4. Workmanship for Interior Painting

3.4.1. Enamel or varnish finish applied to wood or metal shall be sanded with fine sandpaper and then cleaned between coats to produce an even surface.

3.4.2. Interior doors shall be sealed on the tops and bottoms with the prime coat only. Side edges of interior doors shall be finished as faces of these doors.

3.4.3. All closet interiors shall be finished the same as adjoining rooms, unless otherwise specified.

3.5. Testing:

3.5.1. Perform all tests in inconspicuous locations.

3.5.2. Submit all test results to Publix representative and Sherwin Williams representative.

3.5.3. Adhesion Testing:

3.5.3.1. If testing waterborne acrylics, building must be conditioned prior to performing the test.

3.5.3.2. Perform ASTM D3359 Standard Test Methods for Measuring Adhesion by Tape Test.

3.5.3.2.1. Test Method A should be used.

3.5.3.2.2. Results should be 3A or better.

3.5.4. Mil testing:

3.5.4.1. Drywall and block walls: Use wet film thickness gauge.

3.5.4.2. Any other substrates: Dry film thickness gauge.

3.6. Caulking

3.6.1. Caulk between exposed masonry and steel frames. Caulk as required to close all mortar joints.

3.6.2. Joints and spaces to be caulked shall be clean and dry. Leave surfaces neat and clean. Caulk before final painting.

3.7. Clean-Up:

3.7.1. Upon completion of the work, remove all paint and varnish spots from floors, glass and other surfaces.

3.7.2. Remove from the premises all rubbish and accumulated debris.

3.7.3. Leave work in clean, orderly and acceptable condition.

4. Schedules

4.1. Pre-painting Conference:

4.1.1. Five business days prior to start of ceiling painting meet at project site with Representative from General Contractor, Painting Contractor, SW and Publix Supermarkets.

4.1.2. Review requirements (contract documents), submittals, status of coordinating work, availability of materials, proposed schedule, requirements for inspections, proposed application procedures, surface preparation, record discussion, including agreement or disagreement on matters of significance.

4.1.3. Furnish minutes of meeting to each participant

4.2. Exterior Paint Schedule:

4.2.1. Concrete Masonry (CMU) - Cinder or Concrete Block (For all Publix standardized facades and all Publix exposed exterior block walls)

1st Coat - SW Loxon Block Surfacer - Waterborne - LX01W200 16mils wet,8 mils dry

2nd and 3rd Coats - SW Loxon XP Waterproofing System-LX11W50 Series 14-18 mils wet; 6.4-8.3 mils dry per coat

4.2.1.1. Color: Outside color as selected by Shopping Center Architect and approved by Publix' Architect.

4.2.1.2. Where store receives rear or side exterior portland cement plaster: See Section 09220 - Lath and Portland Cement Plaster, color as selected by Shopping Center Architect and approved by Publix' Architect.

4.2.2. Exterior Ferrous Metal (not aluminum or shop painted):

1st Coat - Pro-Cryl Universal Water Based Primer B66-1300 Series 5-10 mils wet, 2-4 mils dry

2nd and 3rd Coats - SW Pro Industrial DTM Semi-gloss - Waterborne - B66W1150 Series

Color as indicated, or if not indicated, as selected by Publix Architect.

4.2.3. Exterior Doors and Jambs:

1st Coat - Pro-Cryl Universal Water Based Primer B66-1300 Series 5-10 mils wet, 2-4 mils dry

2nd and 3rd Coats - SW Pro Industrial DTM Semi-gloss - Waterborne - B66W1150 Series

6.0-10.0 mils Wet, 2.5-4.0 mils Dry

Outside color as selected by Shopping Center Architect and approved by Publix' Architect; inside color as specified in interior paint paragraphs.

4.3. Interior Paint Schedule:

4.3.1. Publix pantone custom color paint to be provided as shown and noted on plans and finish schedule. Type of paint follows interior paint schedule for types of surfaces applied to. The color format is as follows;

4.3.2. Concrete-Poured in Place, Pre-Cast (Ceiling)

Primer-SW Loxon Block Surfacer-Waterborne- LX01W200. 16 mils wet, 8 mils dry

2nd and 3rd Coats- SW Waterbone Acrylic Dry Fall Flat B42T1 7.0-11.0 mils wet dry

4.3.3. Pre-Cast Concrete Double "T" Structural Roof/Ceiling Assembly & Galvanized Metal Brackets (for stores that are designated as "Uniques" ONLY)

1st Coat: Pro Industrial Waterborne Acrylic Dryfall, Eg-Shel, B42W82

2nd Coat: Pro Industrial Waterborne Acrylic Dryfall Eg-Shel, B42W82 Series

4.3.4. Concrete Masonry (Back Rooms and Stair Wells)

1st Coat - SW Loxon Block Surfacer - Waterborne - LX01W200.

16 mils wet, 8 mils dry

2nd and 3rd Coats - SW ProMar 400 Zero VOC Interior Latex Semi-Gloss, B31-4600 Series4 mils wet, 1.3 mils dry per coat

4.3.5. Concrete Masonry (Sales Area)

1st Coat - SW Loxon Block Surfacer - Waterborne - LX01W200.

16 mils wet, 8 mils dry

2nd and 3rd Coats - SW ProMar 400 Zero VOC Flat, B30W4600 Series

4 mils wet, 1.2 mils dry per coat

(Provide Semi-gloss finish from finished floor to 8' A.F.F. at all walls

Publix Green Flat	PMS 363C	ProMar 400 Zero VOC FLAT B30W4653-16	Single Gallon	
Colorant - CCE	Oz	32	64	128
R4 New Red	-	6	-	-
L1 Blue	2	48	-	-
Y1 Yellow	8	20	-	-

Publix Green Flat	PMS 363C	ProMar 400 Zero VOC FLAT B30W4653-20	Single Gallon	
Colorant - CCE	Oz	32	64	128
R4 New Red	-	30	-	-
L1 Blue	16	48	-	-
Y1 Yellow	42	36	-	-

Publix Green Semi-Gloss	PMS 363C	ProMar 400 Zero VOC FLAT B30W4653-16	Single Gallon	
Colorant - CCE	Oz	32	64	128
B1 Black	-	11	-	1
L1 Blue	2	49	-	1
Y1 Yellow	8	3	1	-

facing the sales area.).

4.3.6. Concrete Masonry with Epoxy where indicated

1st Coat - Loxon Block Surfacer - Waterborne - LX01W200.

16 mils wet, 8 mils dry

2nd and 3rd Coats - Pro Industrial Water based Epoxy Gloss, B73-300/B73V300 (5.0-10.0 mis Wet, 2.0-4.0 mils Dry)

Gypsum Wallboard (Sales Area):

1st Coat - SW ProMar 200 Zero VOC Interior Latex Primer, B28W02600 4 mils wet, 1.1 mils dry

2nd and 3rd Coats - SW ProMar Zero VOC Interior Latex Flat, B30-4600 Series 4 mils wet, 1.2 mils dry per coat

(Provide Semi-gloss finish from finished floor to 8' A.F.F. at all walls facing the sales area.).

4.3.7. Gypsum Wallboard in Back-rooms:

1st Coat - SW ProMar 200 Latex primer, B28W2600 4 mils wet, 1.1 mils dry

2nd and 3rd Coats: SW ProMar 400 Semi-Gloss, B31W4600 Series mils .4 mils wet, 1.1 mils dry per coat

4.3.8. Customer Service, Front Offices, Cash Room, General Office and Manager's Offices, Restroom Ceilings (where indicated as painted):

1st Coat - SW ProMar 200 Latex Primer, B28W2600 4 mils wet, 1.1 mils dry.

2nd and 3rd Coats - 2nd and 3rd Coats - SW ProMar 400 Zero VOC Interior Latex Semi-Gloss, B31-4600 Series

4 mils wet, 1.3 mils dry per coat

4.3.9. Gypsum Wallboard behind Refrigerated Cases

One Coat - SW ProMar 200 Latex Primer, B28W2600 4 mils wet, 1.3 mils dry

4.3.10. Plywood, Wood Shelving, Wood Base (Wainscot in back rooms):

1st Coat - Multi-Purpose Primer B51-450

4 mils wet, 1.4 mils dry

2nd and 3rd Coats - SW ProMar 400 Zero VOC Interior Latex Semi-Gloss, B31-4600 Series

4 mils wet, 1.3 mils dry per coat

4.3.11. FRP (Remodels only)

1st Coat - SW Extreme Bond Primer, B51W1150 4 mils wet, 2 mils dry

2nd & 3rd Coats - SW Pro Industrial Water based Epoxy Gloss, B73-300/B73V300

(5.0-10.0 mils Wet, 2.0-4.0 mils dry)

4.3.12. Plenum Areas (In Bakery, around hoods, oven & supply or exhaust curtain walls where other finish is not indicated.)

1st Coat - ProMar 200 Latex Primer, B28W2600 4 mils wet, 1.1 mils dry

2nd and 3rd Coats - 2nd and 3rd Coats - SW ProMar 400 Zero VOC Interior Latex Semi-Gloss, B31-4600 Series

4 mils wet, 1.3 mils dry per coat

4.3.13. Interior Exposed Metal (Brush application - all metals except as allowed in spray applications listed below.) :

1st Coat - Kem Kromik Universal Metal Primer - Solvent based - B50WZ1.

6.0-8.0 mils wet, 3.0-4.0 mils dry

2nd and 3rd Coats - SW SuperPaint Interior Latex Semi-Gloss - A88 series

4.0 mils wet, 1.6 mils dry per coat Color: To match adjacent wall.

4.3.14. Interior Exposed Metal: Structural steel and primed metal deck; electrical work; fittings, and other work; fire sprinkler piping; plumbing and gas piping; hangers, and other supports; other exposed items which are not factory finished):

Step 1. Spot Prime for Rusted Areas: To be used on weld joints and rust areas: SW Kem Kromik Universal Metal Primer, B50 Series (use as needed)

1st Coat: SW Super Save Lite Dry Fall, B48W61 Flat (tint up to 2 oz of B1 Black colorant per gallon (Primer Shade P2)

(6-6.5 mils wet, 3-3.5 mils dry)

2nd and 3rd Coats: SW Waterbone Acrylic Dry Fall B42T1 Clear Tint Base (flat) (See plans for colors)

(7-11 mils wet, 3-4.5 mils dry)

4.3.15. Interior Galvanized Metal: Ductwork, adjacent hangers and supports, refrigeration pans and misc. galvanized metal. (Spray application allowed over 13 ft. AFF only: Protect galvanized surfaces from alkyd coatings. See previous section for method of cleaning galvanized surfaces.):

1st Coat - SW DTM Acrylic Primer Finish B66W1 5-10 mils wet, 2.5- 5 mils dry

2nd and 3rd Coats- 2nd and 3rd Coats - SW ProMar 200 Zero VOC Interior Latex Semi-Gloss, B31-2600 Series

4 mils wet, 1.5 mils dry per coat See drawings for color selection.

--- OR / ALSO REMODELS ---

4.3.16. Interior Exposed Metal: Structural steel and primed metal deck; electrical work; fittings, and other work; fire sprinkler piping; plumbing and gas piping; hangers, and other supports; other exposed items which are not factory finished):

Spot Prime (all unprimed ferrous metal, field welds and rusted areas) - SW Pro Industrial Pro-Cryl Metal Primer B66-1300 Series

5-10 mils wet, 1.9-3.8 mils dry

1st and 2nd Coats - SW Pro Industrial Multi-Surface Acrylic Eg-Shel, B66-1560 Series

3.75-5.0 mils wet, 1.5-2.0 mils dry per coat

4.3.17. Interior Galvanized Metal: Ductwork, adjacent hangers and supports, refrigeration pans and misc. galvanized metal. (Spray application allowed over 13 ft. AFF only: Protect galvanized surfaces from alkyd coatings. See previous section for method of cleaning galvanized surfaces.):

1st Coat - SW Pro Industrial Multi-Surface Acrylic Eg-Shel, B66-1560 Series

3.75-5.0 mils wet, 1.5-2.0 mils dry per coat

2nd Coat- SW Pro Industrial Multi-Surface Acrylic Eg-Shel, B66-1560

Series

3.75-5.0 mils wet, 1.5-2.0 mils dry per coat

4.3.18. Refrigeration Pipe Insulation

1st Coat - SW Pro Industrial DTM Semi Gloss- Waterborne-B66W1150 Series, 6.0-10.0 mils Wet, 2.5-4.0 mils dry

2nd Coat - SW Pro Industrial DTM Semi Gloss- Waterborne-B66W1150 Series, 6.0-10.0 mils Wet, 2.5-4.0 mils dry

4.3.19. Glycol Refrigeration Piping (light colored final coat)

1st Coat - Tint to P1 SW Extreme Bond Primer, B51W1150

6.5 mils wet, 1 mils dry

2nd Coat - SW Pro Industrial DTM Semi Gloss- Waterborne-B66W1150 Series, 6.0-10.0 mils Wet, 2.5-4.0 mils dry

4.3.20. Glycol Refrigeration Piping (dark colored final coat)

1st Coat - Tint to P3 SW Extreme Bond Primer, B51W1150

6.5 mils wet, 1 mils dry

2nd Coat - SW Pro Industrial DTM Semi Gloss- Waterborne-B66W1150 Series, 6.0-10.0 mils Wet, 2.5-4.0 mils dry

4.3.21. Fillers:

Paintable caulking - SW Loxon S1 Smooth Polyurethane Sealant
Spackling compound - SW C-50.

All caulking and spackling shall be done after prime

2.1.4. Grab Bars: 1 1/2" diameter satin finish stainless steel; one 36 inch at the rear and one 42 inch to the side of each handicapped toilet. Where ANSI 117.1 is applicable add one 24" Vertical Bar (Check Plans for locations). Bradley, ASI or Bobrick.(Bradex 812)

2.1.5. Coat Hook : Bradley 233, ASI or Bobrick. (Model 917)

2.1.6. Baby Changing Station: Safe Strap Co. "Diaper-Depot Changing station," Model # 4304 - White. Furnished and installed by Publix.

2.1.7. Paper Towel Dispenser: Kimberly Clark Model 09302. Furnished and installed by Publix.

2.1.8. Seat Cover Dispenser: Kimberly Clark Model 09526. Furnished and installed by Publix.

2.1.9. Sanitary Napkin Receptacle: Rubbermaid Model 6140-00; in women's or family restrooms only. Furnished and installed by Publix.

2.1.10. Toilet Tissue Dispenser: Kimberly Clark Model 09566. Furnished and installed by Publix.

2.1.11. Trash Receptacle: "Slim Jim Top", Furnished by Publix.

2.1.12. Electric Hand Dryer-ASI Model 0160-Std. White. (Alternate for remodels only)

3. Execution

3.1. Installation: Install all toilet accessories securely to walls indicated. Provide and install all required wall reinforcements and blocking as necessary to install accessories. Grab bars shall be mounted to reinforced walls to withstand a point load of 350 pounds at any point.

End of Section 10 28 13

Section 11 13 00
Loading Dock Equipment
V04162013

1. General

Not Used

2. Products

2.1. Dock Seals:

2.1.1. Provide dock seals at all docks that utilize an exterior door for direct access into trucks (51.x, 60.x prototypes).

2.1.2. Seals shall be Vestil Manufacturing Company, Model D-150-B-P, to accommodate door height - 102", door width - 84", manufacturer's standard construction, squared verticals, all wood pressure treated, 36 oz. vinyl reinforced base material, 18 oz. full height armor pleats, mounting brackets and hardware, and all other items to provide a complete serviceable installation.

3. Execution

3.1. Installation: Install all loading dock equipment securely to walls indicated. Follow manufacturer's instructions in all respects.

End of Section 11 13 00

NOTE: NOT ALL PROJECT SPECIFICATIONS MAY BE APPLICABLE TO THIS REMODEL

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CLIENT NAME
Publix SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
FOR MORE INFO, LAKE HARNEY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
PROJECT MANUAL

MARCUS J. BOYLE
FL# AR100919

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 2210764
DATE 04/21/2022
DRAWN CS
CHECKED MB

PM.09

DECOR SCHEME: EVERGREEN

Section 22 40 00

Plumbing
V01022020

1. General

1.1. Summary

1.1.1 Provide all materials and equipment and perform all labor required to install plumbing complete as indicated, as required by code, and as specified herein. All sizes, etc. are Public minimum and if local code requirements are higher, the work shall be bid and installed accordingly.

1.1.1.1 Obtain and pay for all permits, bonds, inspection.

1.1.1.2 Provide 2-1/2" water service line, with water meter and 2-1/2" backflow preventer.

1.1.1.3 Provide hot and cold water mains and distribution piping, all overhead and concealed except main water supply into building and where indicated on the Drawings. No PVC pipe allowed above floor slab, (except plumbing waste piping, unless not code approved).

1.1.1.4 Provide a system of soil and waste drains, vents, and connections to all sewer, and water mains and all fixtures.

1.1.1.5 Plumbing Fixtures: Provide and adjust, except as herein specified.

1.1.1.6 Provide Grease Interceptors as specified and as required by local codes.

1.1.1.7 Provide all piping hanging and hangers.

1.1.1.8 Provide gas piping and all indirect drains required for equipment furnished in other sections, and by Owner, except provide indicated drains (floor drains, hub drains, floor sinks, etc.) for refrigerated cases, walk-in coolers, and freezers.

1.1.1.9 Provide rough-in plumbing for fixtures indicated as furnished by Publix or others, and make required connections. Include uncrating equipment, moving into place, and installing complete.

1.1.1.10 Coordinate plumbing work with all other trades including Refrigeration Contractor's work.

1.1.1.11 Provide all other materials and services required for a complete working installation described in Contract Documents.

1.1.2 All apparatus shall be installed at exact height and locations as shown on the Architectural Drawings, or if not shown, at heights and locations determined by applicable codes and laws.

1.1.3 Perform all excavation and backfill required for services, and for all plumbing and work inside and outside the building. Cutting of curbs, walks, concrete and paving required for excavation shall be done by appropriate trade.

1.1.4 All store cases, coolers, and freezers will be furnished and set in place by Publix. The Refrigeration Contractor shall make all condensate water connections required to Plumbing Contractors stub ups. Check equipment drawings against Drawings in order to verify exact locations. Provide gas piping as indicated.

1.2. Definitions: Explanation and Precedence of Documents:

1.2.1 For purposes of clarity and legibility, Plumbing Drawings are essentially diagrammatic and, although size and location of equipment are drawn to scale wherever possible, Contractor shall make use of all Contract Documents.

1.2.2 The Drawings indicate size, connection points and routes of pipe. It is not intended, however, that all offsets, rises and drops are shown. Install piping as required to fit structure, avoid obstructions, and retain clearance, headroom, openings and passageways.

1.2.3 Carefully examine all existing conditions, existing piping and premises and compare the Drawings with the existing conditions. Submittal of bid indicates that the Contractor has examined the site and Drawings and has included all required work in his bid. No allowances will be made for any error resulting from Contractor's failure to visit Job Sites and to review Drawings.

1.2.4 Conflicts, discrepancies, interferences and omissions in documents shall be brought to the attention of the Publix Engineer for clarification prior to commencement of work.

1.3. Submittals:

1.3.1 Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

1.3.2 Within 30 days of Contract Commencement (Authorization to Proceed), submit for Publix' Architect's approval:

- Fixtures and trim with cuts including rough-in dimensions.
- Equipment (water heaters, expansion tanks, other items)
- Drains and cleanouts (floor and wall)
- Valves, stops, hose bibbs
- Miscellaneous
- Roof flashing
- Hangers and Seismic Bracing
- Piping, piping diagrams
- Other items required to complete the Work

1.3.3 Submit two (2) identical bound copies of all items. Arrange categories in order listed above.

1.3.4 All cuts for the above shall have rough-in dimensions, connection sizes, and any special installation requirements. In addition, furnish motor horsepower voltage and phase for all equipment.

1.3.5 Project Record Drawings: Comply with Section 01 78 39.

1.3.6 Do not order materials or proceed with work untill all submittals have been reviewed, and approved.

1.3.7 Confirm electrical and other requirements with other contractors.

1.4. Quality:

1.4.1 Subcontractor:

1.4.1.1 The Plumbing Subcontractor shall be a reputable firm regularly engaged in this type of work, employing skilled workmen, and with proper equipment.

1.4.1.2 Upon request Subcontractor shall show evidence of at least two similar jobs, of comparable size and character, installed and operating within the previous two years prior to bid opening.

1.4.1.3 Publix reserves the right to refuse any Subcontractor with or without disclosing cause.

1.4.2 Personnel:

1.4.2.1 Employ an experienced Superintendent to oversee all operation.

1.4.2.2 Work shall not proceed without adequate supervision present at all times.

1.4.2.3 Work shall be accomplished by workers certified in their trade as masters, journeymen, and apprentices in accordance with regulations of the governing authority or customary practice. Utilize workers with skills in proportion to complexity of tasks required.

1.4.2.4 Publix reserves the right to refuse assignment of workers to Publix work with or without disclosing cause.

1.4.3 Quality Standards

1.4.3.1 Work shall be accomplished to ensure leak-proof installation.

1.4.3.2 Work will be judged by Publix in comparison to work of similar types. Substandard construction as judged by Publix Representative will not be accepted.

1.4.3.3 Neatness counts. Make all joints, connections, unions, etc. with proper care to insure that tight connections are made without excess material, well secured to supports.

1.4.3.4 Install piping with runs straight, accurately formed radiuses at bends, and adequate supports.

1.4.4 Regulations: Comply with applicable provisions of the following codes (latest version adopted by governing agencies):

- State Sanitary Code
- Local Building Code
- ASME Code for Unfired Pressure Vessels
- International Plumbing & Gas Code
- Florida State Plumbing & Gas Code
- Georgia State Plumbing & Gas Code
- North Carolina State Plumbing & Gas Code
- OSHA - for construction
- Other applicable laws and regulations.

1.4.5 Coordination: Work shall be accomplished along with the work of other trades. Cooperate with others to benefit the job as a whole.

1.4.6 Participate in the Pre-Construction Conference.

1.5. Sequencing:

1.5.1 Notify General Contractor, or any others, of all required chases, sleeves and openings required so that the work can be accomplished without delay. Provide necessary sleeves, etc., to be installed. Otherwise, Plumber shall pay for appropriate trades to perform cutting and patching.

1.5.2 Joists, girders, beams, columns or reinforcing steel shall not be cut.

1.5.3 Where construction necessitates the routing of piping through structural members, framing or under footings, permission to make such installation shall first be obtained from the Publix Field Representative

1.6. Temporary Operation:

1.6.1 The Owner may require operation of parts or all of the installation prior to Final Acceptance.

1.6.2 Cost of utilities for such operation shall be paid by the Contractor. This operation does not constitute acceptance of the Contractor's work.

1.6.3 All gas and water used for construction shall be paid for by the General Contractor. Furnish and install all temporary water piping required for construction purposes and remove piping when use is no longer required. Restore site and piping to original conditions.

1.7. The Owner reserves the right to make emergency repairs as required to keep equipment in operation without voiding the Contractor's guarantee nor relieving the Contractor of his responsibilities during the guarantee period.

1.8. Operating Instructions and Service Manual:

1.8.1 Provide two (2) neatly bound copies of maintenance and instructions book, parts lists pertaining to all equipment furnished.

1.8.2 Each section shall be indexed and include parts lists, instruction books, suppliers' phone numbers and addresses, and individual equipment guarantees all in separate sections.

1.8.3 Representatives of the Owner shall be instructed by the Contractor as to complete care and operation of the plumbing system. Inform the Architect in writing as to the persons who received the instructions and the date that this was done.

1.9. Polypropylene Piping and Products Warranty:

1.9.1 Manufacturer shall warranty pipe and fittings for 10 years to be free of defects in materials or workmanship.

1.9.2 Warranty shall cover labor and material costs of repairing and/or replacing defective materials and repairing any incidental damage caused by failure of the piping system due to defects in materials or workmanship.

2. Products:

2.1. Materials:

2.1.1 All materials shall be new, full weight, of the best quality with the same brand or manufacturer used for each class of materials or equipment. All similar materials such as valves, pumps, boilers, fixtures, shall be of the same type and manufacturer unless otherwise designated.

2.1.2 All plumbing fixtures shall be "first quality" as defined and set forth in Commercial Standard CS 20-36 As Promulgated By The U.S. Department of Commerce.

2.2. Fixtures

2.2.1 Provide vitreous white china fixtures (unless otherwise noted).

2.2.2 Support wall-mounted fixtures w/ manufacturer approved carriers.

2.2.3 American Standard product designations have been used for consistency. Equivalent fixtures by Crane, Kohler, Zum, Sloan, or Toto may be accepted.

2.2.4 Install all owner furnished fixtures and provide all the necessary components as required for a complete Installation.

. Equipment

2.3.1 Grease Interceptor: Rectangular, pre-cast concrete, all in accordance with state and local codes. Two cast iron traffic tops with traffic cast iron clean-outs are required. Tanks and lids shall be designed for an H-20 traffic load. Tanks shall be reinforced with welded wire mesh and steel bars. Compressive strength of concrete shall be a minimum of 5500 PSI at 28 days. Provide additives or coatings to protect tank interiors to minimum PH of 3.

2.3.2 Drains, Clean-outs: As scheduled. Approved manufacturers:

- JR Smith
- Zurn

. Pipe and Fittings:

2.4.1 Hot and cold water piping:

2.4.1.1 ASTM B88 type "L" seamless copper tubing. Main service type "K" with red lion seal ecte coating, or approved equal.

2.4.1.2 Fittings: Wrought copper solder fittings, solder with silvaloy, streamline 122, phos-copper or approved equal no-lead solder.

2.4.1.3 Alternate: Copper press fittings shall conform to the material and sizinge requirements of ASME B16.18 or ASME B16.22. O-rings for copper press fittings shall be EPDM. Approved Manufacturers:

- Viega

2.4.2 Gas Piping: Shall be schedule 40-A-120 black steel pipe with black banded malleable iron fittings, pipe shall be welded. Grounding by Electrical Contractor.

2.4.2.1 Indoors: ASTM A53 steel pipe, schedule 40, black forged steel weld fittings.

2.4.2.2 Outdoors: ASTM A53 steel pipe, schedule 40, mill galvanized, fittings as required.

2.4.3 Plastic Gas Piping: Used underground only. Shall conform to the requirements of ASTM D2513 for medium-density polyethylene pipe and tubing. Fittings shall comply with the requirements of ASTM D2683 for socket type, ASTM D3261 for butt fusion and ASTM F1055 for electrofusion. Pipe shall be yellow and marked in accordance with ASTM D2513.

2.4.4 Soil, Waste, Vent Pipe:

2.4.4.1 PVC DWV pipe (where allowed by codes): PVC schedule 40 solid wall pipe and PVC DWV fittings used in sanitary drain, waste, and vent (DWV) and storm drainage applications. Pipe shall be IPS conforming to ASTM D1785 and ASTM D2665. Fittings shall conform to ASTM D2665. Solvent cement shall conform to ASTM D2564.

2.4.4.2 ABS DWV pipe (where allowed by codes): Unplasticized, ASTM D2661, Type I, Grade 1, solvent cement joints, DWV fittings, schedule 40 unless indicated otherwise on the Drawings, all elbows shall be long sweep type. Use only where indicated on the drawings.

2.4.4.3 Cast Iron Pipe: Coated service weight cast iron soil pipe using coated service weight cast iron fittings.

2.4.4.4 Vent Piping Option: All vent piping above grade may be copper DWV, with copper drainage fittings, solder as for hot and cold water.

2.4.5 Provide field fabricated DWV copper or cast brass traps with an integral clean out at bottom of traps for stainless steel utility sinks, except those which discharge to a floor sink.

2.5. Valves, Stops, Specialties

2.5.1 Materials: Valves 3" and smaller shall be bronze with threaded or soldered ends. Furnish unions adjacent to all screwed central valves and at all connections to equipment. Valves shall be made in the USA. All water service valves, stops and specialties shall be lead free.

2.5.2 Approved Manufacturers:

- Apollo
- Hammond/Milwaukee
- Mueller
- Nibco
- Watts
- Wilkins

2.5.3 Gate Valves: 1/4"-3", bronze body, solid bronze wedge, rising stem, union bonnet, 300 psi non-shock CWP, MSS-80.

2.5.3.1 Basis of design: Nibco T-S-111-LF

2.5.4 Check Valves:

2.5.4.1 Swing Check Valves: 1/4"-2", bronze body, horizontal swing, Y-pattern renewable seat and PTFE disc, 200 psi non-shock CWP, MSS-SP-80.

2.5.4.1.1 Basis of design: Nibco T-S-413-Y-LF

2.5.4.2 Lift Check Valves: 1/2"-2", bronze body, inline lift, PTFE discs, stainless steel spring, MSS-SP-80.

2.5.4.2.1 Basis of design: Nibco T-S-480-Y-LF

2.5.5 Ball Valves: 1/4"-2", two piece bronze body, full port, bronze trim, chrome plated brass ball, blow out proof stem, 600 psi non-shock CWP, MSS-SP-110.

2.5.5.1 Basis of design: Nibco T-S-585-66-LF

2.5.6 Gas Valves: 1/4"-3", two piece bronze body, full port, bronze trim, chrome plated brass ball, blow out proof stem, 600 psi non-shock CWP, MSS-SP-110, ASME B16.33.

2.5.6.1 Basis of design: Nibco T-585-70-UL (1/4"-1")

2.5.6.2 T-580-70-UL (1-1/4"-3")

2.5.7 Mechanical Gas Valve with Remote Pull: ASCO Automatic Switch Co., Model as indicated on Drawings.

2.5.8 Mixing Valves: Anti-scald, thermostatic point of use. Bronze body, locking control, integral check valves, ASSE 1070 approved.

2.5.8.1 Approved Manufacturers:

- Apollo
- Bradley
- Lawler
- Powers
- Watts
- Wilkins
- Zurn

2.5.9 Interior Hose Bibbs and Stops

2.5.9.1 Stops: Quarter turn, angle ball stop valve, all brass construction. Brasscraft, McGuire, Eastman

2.5.9.2 Interior Hose Bibbs:

- Chicago #387 Brass 3/4" R.C.P.W/Watts No. 8HC Vacuum Breaker, or T&S Brass B-0737-POL.

2.5.10 Exterior Hose Bibbs and Hydrants:

2.5.10.1 Description: All shall have integral vacuum breakers and an integral stop valve. If an integral stop valve is not available, provide an in-line gate valve.

2.5.10.2 Approved Manufacturers:

- Acorn
- J.R. Smith
- Zum.

2.5.11 Flush Valves:

2.5.11.1 Description: Cast brass or bronze body with corrosion-resistant internal components; non-hold open, control stop with check valve; vacuum breaker and copper or brass tubing; polished, chrome-plated finish on exterior parts; vandal-resistant stop cap; ADA compliant handle.

2.5.11.2 Manufacturers:

- Toto
- Sloan - Sloan
- Zurn - Z6000AV

2.5.12 Faucets:

2.5.12.1 Description: Cast brass body with corrosion-resistant internal components; polished, chrome-plated finish.

2.5.12.2 Manufacturers:

- Chicago Faucet
- T & S Brass
- Sloan-Bravvs EPX-250-500 (lavatories only)

2.5.13 Drain Valves

2.5.13.0.1 Description: Cast brass body stainless steel ball dual teflon seals, vandal resistant stainless steel strainer. 1/4" turn lever handle.

2.5.13.0.2 Manufacturers:

- Drain King

2.5.14 Hand Sinks:

2.5.14.1 Description: Wall hanging; 18 gauge, 304 stainless steel, polished finish, basin with radius corners; back for faucet; integral side support panels, approximate size - 17"x16"x5" with 2-3/16" drain outlet.

2.5.14.2 Manufacturers:

- Elkay
- Just
- Amtekco

2.5.15 Storage Water Heaters:

2.5.15.1 Electric: Where indicated to be contractor provided tanks shall be glass-lined steel, 2" foam insulation and enamel finish on metal outer jacket. Electric heating elements shall be low or medium density, screw in type, ceramic terminal blocks, heavy duty contactors and internal power circuit fusing. Element operation shall be linear sequencing. Corrosion resistant drain valve, replaceable anode rod.

2.5.15.2 Gas: Where indicated to the contractor provided tanks shall be glass-lined steel, 2" foam insulation and enamel finish on metal outer jacket. Sealed combustion chamber with helical heat exchanger, integral intelligent control panel. Corrosion resistant drain valve, replaceable anode rod.

2.5.15.3 Approved Manufacturers:

- AO Smith/State
- Rheem Ruud

2.6. Miscellaneous:

2.6.1 Faucet (Janitor Room): Sink faucet with top brace, 9" - 10" rigid spout with bucket hook vacuum breaker and integral stops, at 36" above floor.

- T&S Brass
- Chicago Faucet

2.6.2 Vacuum Breakers, Backflow Preventers, Dual Check Valves: Bronze body, lead free threaded connections for 2" NPS and smaller. Shall be installed on all fixtures where required.

- Apollo
- Watts
- Wilkins

2.6.3 Unions: Malleable iron ground joint equivalent and similar to Crane 519, up to and including 2 inch. Over 2 inch shall be cast iron flanged with a Garlock 7022 Gasket.

2.6.4 Reducing and Regulation: Water, air, gas; Watts or approved equal, model as indicated on the Drawings.

2.6.5 A shut off valve shall be placed near the building on the water main. It shall be placed in a box or tile pipe and have a removable plate cover of cast iron, equal to McKinley Iron Works, Fort Worth, Texas; Type MH14, for 8000# loading.

2.7. Pipe Insulation

2.7.1 Rigid fiberglass pipe insulation:

2.7.1.1 Heavy density molded insulation from inorganic glass fibers bonded with a thermosetting resin; jacketed with a reinforced, wrinkle-resistant, all-service vapor retarder facing and a factory-supplied longitudinal double-pressure adhesive closure system. Use factory butt strips to complete joints. Thermal conductivity ['k' Factor (BTU-inch/ ft²-hr-°F) at 75°F mean] shall be 0.23 maximum.

2.7.1.2 Manufacturers:

- Owens-Corning
- Johns Manville
- CertainTeed

2.7.2 Flexible polyethylene polyolefin pipe insulation:

2.7.2.1 Unicellular polyethylene thermal plastic, preformed pipe insulation; white color, 25/50 rated, pre-slit with factory-applied adhesive on both surfaces. Use factory adhesive for gluing butt joints. Thermal conductivity ['k' Factor (BTU-inch/ft²-hr-°F) at 75°F mean] shall be 0.27 maximum.

2.7.2.2 Manufacturers:

- Armacell
- Nomaco

2.7.3 Insulation thickness:

2.7.3.1 For domestic hot water:

Diameter'	Thickness
<= 1"	0.5"
>= 1 1/4"	1.0"

2.8. Pipe Hangers and Supports:

2.8.1 Piping shall be held firmly in place by adjustable galvanized carbon steel band or clevis hangers which comply with MSS-SP-69. Hangers shall be located adjacent to fittings, at each offset or change of direction, at ends of branches over 5 feet long, at riser pipes, and along piping where necessary to prevent sags, bends or vibrations.

2.8.2 Band Hangers: Steel and PVC piping equal to Empire fig. 310G. Copper and PPR piping equal to Empire fig. 310CTI.

2.8.3 Clevis Hangers: Steel and PVC piping equal to Empire fig. 110EG. Copper and PPR piping equal to Empire fig. 110CTI.

2.8.4 Stainless steel pipe straps and hangers shall be used for all exposed piping and underslab piping where structural slabs are provided.

2.8.5 Pipe straps shall be heavy gauge galvanized iron factory fabricated to fit against supporting surface when installed. Makeshift devices are not acceptable. No plumbing tape is allowed. Use insulation shields at each pipe hanger and support.

2.8.6 The maximum spacing between hangers or supports measured along the piping shall be as listed below:

	Steel		Copper		PVC/ Polypropylene	
	H	V	H	V	H	V
1/2" and 3/4"	12 ft.	15 ft.	6 ft.	10 ft.	4.0 ft.	10 ft.
1" and 1-1/4"	12 ft.	15 ft.	6ft.	10 ft.	4.0 ft.	10 ft.
1-1/2", 2" & 2-1/2"	12 ft.	15 ft.	10 ft.	10 ft.	4.0 ft.	10 ft.
3"	12 ft.	15 ft.	10 ft.	10 ft.	4.0 ft.	10 ft.
4"	12 ft.	15 ft.	10 ft.	10 ft.	4.0 ft.	10 ft.
6"	12 ft.	15 ft.	10 ft.	10 ft.	4.0 ft.	10 ft.

2.9. Roof flashings: All vent and roof drains shall be flashed by Roofing Contractor with lead flashing furnished by the Plumbing Contractor. Flashing shall turn down 2" into vent pipes.

2.10. Isolating Couplings: Provide dielectric protection for gas and water main risers inside building. Isolate connections of copper and steel pipe with cathodic isolating unions. Acceptable Manufacturers:

- EPCO
- W & K Dielectric
- F.H. Maloney

2.11. Polypropylene Pipe and Piping Products (PPR):

2.11.1 Polypropylene pipe and fittings shall be manufactured from a P-R resin meeting the short-term properties and long-term strength requirements meeting the short-term properties and long-term strength requirements of ASTM F 2389. The pipe shall contain no rework or recycled materials except that generated in the manufacturer's own plant from resin of the same specification from the same raw material. All pipe shall be made in a three layer extrusion process. Domestic hot water and heating piping shall contain a fiber layer (fiber) to restrict thermal expansion. All piping shall comply with the rated pressure requirements of ASTM F 2389. All pipe shall be certified by NSF International as complying with NSF 14, NSF 61, and ASTM F 2389 or CSA B137.11. Valves with brass components shall be manufactured in accordance with the manufacturer's specifications and shall be certified by NSF International as complying with NSF 61.

2.11.2 Polypropylene hot water piping shall be insulated as required to meet the equivalent insulation rating indicated for copper piping systems.

2.11.3 Acceptable Manufacturer:

- Aquatherm Greenpipe, Aquatherm, Inc.
- Aquatherm Faser, Aquatherm, Inc.

3. Execution

3.1. Examination:

3.1.1 Verify all field dimensions and locations of equipment and fixtures within the layout as established by the General Contractor to insure close, neat fit, with other trades work.

3.1.2 Examine all work of others. Notify Architect in writing if any conditions exist which will prevent satisfactory installation of materials or equipment. Start of work without notification indicates acceptance of work in place.

3.2. Excavation:

3.2.1 Perform excavation for trenches under slab and outside building lines as required for installation. Excavate true to lines and grades shown to achieve adequate fall on drain lines and as needed for refrigeration drainage.

3.2.2 Bell holes shall be dug to allow soil pipe to be fully supported.

3.2.3 Rock shall be excavated 3 inches below the laying depth, and the trench shall be backfilled with sand 3 inches deep.

3.2.4 Over-excavation shall be added in 12 inch lifts (max) and mechanically compacted. Flooding or puddling not permitted.

3.2.5 All piping which will be under walks, planters, arcades, parking lots, concrete or asphalt shall be mechanically compacted in 12 inch lifts (max).

3.3. Interface with Site Utilities:

3.3.1 Coordinate with other work. Connect to site supplies and storm drain at 5'-0" demising line.

3.3.2 Provide waste connection to site sewer at 5'-0" demising line. Provide grease-bearing waste connection to grease trap and from grease trap to waste line located as shown on the Drawings or otherwise indicated.

3.4. Pipe Installation:

3.4.1 Install horizontal sanitary and drain piping, to a uniform grade of not less than 1/ 8" per foot, unless otherwise noted.

3.4.2 Openings in pipes, drains, fitting, apparatus and equipment shall be kept covered or plugged to prevent accumulating obstructions in the piping.

3.4.3 Run piping free of traps, sags, bends or other defects. grade and valve for complete drainage and control of the system.

3.4.4 All waste, vent and water lines shall be concealed, and all water lines shall be overhead.

3.4.5 Maintain headroom and keep passageways clean. offset to maintain the required clearance and conform with architectural and structural features of building. Run parallel and straight with adjacent walls or ceilings to present a uniform appearance. Group long runs together. Run concealed in finished rooms.

3.4.6 All rough-ins shall be set exactly to measurements furnished by manufacturer. Batteries of fixtures shall have rough outlets set in straight lines at equal spacing.

3.4.7 Flush out all lines to insure that they are clear of obstructions prior to the setting of refrigerated cases. If lines are not clear and a case is set, the Plumbing Contractor shall be responsible for the removal and re-set cost.

3.4.8 Water piping shall not be embedded in concrete nor concealed within the floor slab within the building. unless shown on drawings). Isolate copper piping from concrete with tar paper or PVC sleeve.

3.4.9 All piping shall be installed to prevent unusual noise from the flow of water under normal conditions. Install pipe isolaters at ring hangers consisting of a metal sheath with end flanges assuring positive retention in the ring hangers. Separate cold lines from hot lines by 6".

3.4.10 Provide dirt pockets on low point of vertical gas piping. Install full pipe size drip pockets at low point in change of grade.

3.4.11 For refrigeration case drains, stub up a 3" line 1" above floor; no hub required.

3.5. Pipe, joints, fittings, and connection-installation

3.5.1 Cast Iron Soil Pipe: Pack tight with first quality oakum to within 1 inch of end hub. Fill remaining space with one pouring of molten lead and caulk tight; or make-up with neoprene gaskets.

3.5.2 Screwed Piping: Make up with pipe dope, applied only to male thread. Remake leaky joints with new material without use of thread cement or caulking. Paint exposed threads of all pipe with asphaltic paint.

3.5.3 Copper Tubing:

3.5.3.1 Solder with 95-5 (no-lead solder) and a noncorrosive flux. Thoroughly clean inside and outside surfaces with sandpaper or wire brush before assembly. Defective joints shall be dismantled, cleaned, and resoldered. Do not use acid Solder.

3.5.3.2 Press Connections: Copper press fittings shall be made in accordance with the manufacturer's installation instructions. The tubing shall be fully inserted into the fitting and the tubing marked at the shoulder of the fitting. The fitting alignment shall be checked against the mark on the tubing to assure that the tubing is fully engaged (inserted) in the fitting. The joints shall be pressed using the tool approved by the manufacturer.

3.5.4 Copper, brass pipe and chromed, polished or painted connections from fixtures shall show no tool marks.

3.5.5 PVC Joints: Clean socket and pipe ends with cleaner recommended by cement manufacturer. Liberally apply solvent cement to both socket and pipe ends. Make up joint firmly.

3.5.6 Gas Piping:

3.5.6.1 Black iron schedule 40, welded except at equipment connections. Certified welding is required.

3.5.6.2 At each piece of equipment, provide shut-off valve, union, drip leg (minimum 4 times pipe diameter, capped) and flexible pipe connection.

3.5.7 Springing, bending or forcing of pipe will not be allowed. Use fittings for all offsets or changes in alignment of piping. Center bubs so cast iron will lay straight without pinched joints.

3.5.8 Street elbows, bushings, and long screw fittings will not be allowed on metal pipe.

3.5.9 Cleanly cut pipe and tubing and remove burrs to full diameter of pipe. Excessive reaming will not be permitted. Remove metal particles from ends of pipe and clear each section of foreign material before assembling.

3.5.10 Cut pipe threads to full depth of die and screw up tight to fully engage thread in fitting. Threads to comply with ASA No B 2.1, and be cut with clean sharp dies.

3.5.11 Clean outs: Clean outs shall be placed as shown on Drawings, or max. 50' o.c., at bases of stacks, at major changes in direction, and at the ends of all lines that have 2 or more openings going into that line, or as required by code. Clean outs shall be as indicated on Drawings. If PVC is used include hub adaptor.

3.5.12 Provide shut-off valves in access panels to allow shut down of area of fixtures where indicated on Drawings.

3.5.13 Provide shock absorbers with isolating gate or ball valves as indicated on the Drawings. Mount in the vertical position as recommended by the manufacturer.

3.5.14 The inside of all pipes shall be clean, reamed smooth with no burrs, fins or other obstructions. All drains including trap under utility sinks shall be copper with soldered joints. No pipe shall be run exposed, unless approved by Publix Representative.

3.6. Polypropylene Piping System:

3.6.1 Install listed pipe materials and joining methods below in the following applications:

3.6.1.1 Underground: Service entrance piping shall be Type K copper with the transition to Polypropylene (PP-R) no less than 1 ft. A.F.F.

3.6.1.2 Aboveground: Polypropylene (PP-R) piping in SDR 6, 7.5 or 11 based on the required minimum pressure rating and use temperature.

3.6.2 Fusion Welding of Joints:

3.6.2.1 Install fittings and joints using socket-fusion, electro fusion or butt-fusion as applicable of the fitting type. All fusion-well joints shall be made in accordance with the pipe and fitting manufacturer's specifications and product standards.

3.6.2.2 Fusion-weld tooling, welding machines and electro fusion devices shall be as specified by the pipe and fittings manufacturer.

3.6.2.3 Prior to joining, the pipe and fittings shall be prepared in accordance with ASTM F 2389 and the manufacturer's specifications.

3.6.2.4 Joint preparation, setting and alignment, fusion process, cooling times and working pressure shall be in accordance with the pipe and fitting manufacturer's specifications.

3.7. Pipe Insulation

3.7.1 Sealed at all joints and seams with adhesive in accordance with insulation manufacturer's recommendations. Pipe supports shall be on the outside of the insulation with 6" minimum length saddles of galvanized sheet metal.

3.7.2 Fiberglass seams shall be sealed with factory furnished self sealing lap and butt joints in accordance with manufacturer's recommendation.

3.7.3 Polyolefin seams shall be sealed with factory-furnished, self-adhering, pressure sensitive seams. Butt joints shall also be glued with factory-furnished adhesive.

3.8. Fixture Installation

3.8.1 Stub out to the exact location of the fixtures. All stubs shall be set symmetrically with fixture.

3.8.2 Install fixtures and trim supplied by Publix or others. Connect to plumbing as required. Finish out and trim fixtures as needed for complete installation.

3.8.3 Caulking: All plumbing fixtures shall be bedded and caulked along joint at walls, and other intersecting surfaces with butyl-caulking compound, counter tops and brass shall be caulked with "plumbers putty".

3.8.4 Backing shall be of 2 x 6 pressure treated wood flush with stud face and extending to next stud beyond fixture on each side. Secure as required.

3.9. Inspection:

3.9.1 The Work shall be installed under the inspection and with the approval of Publix' Authorized Representative.

3.9.2 Notify the Publix' Representative two days in advance of backfilling, enclosing, or covering all plumbing lines so that we may inspect installation.

3.9.3 Do not cover or enclose plumbing until inspection is made and installation is aceeptable. Correct deficiencies in installation as directed by Publix' Representative.

3.10. Tests and Adjustments

3.10.1 All soil, waste, and vent piping shall be filled with water to the highest point in each system with all air removed. The lines shall be flushed by removing the test plug. Piping may be tested in sections providing that all portions to be concealed shall be subjected to not less than a 10 ft. head for 24 hours with no leaks. Standpipe installed for head test shall be 2 in. minimum diameter.

3.10.2 Sewer piping shall be filled with water to it's highest point.

3.10.3 Verify that all drain lines have been flushed and are clear of debris prior to completion of Work.

3.10.4 Water piping shall be flushed out, tested at 100 psi and shall be left under pressure of supply main for the balance of the construction period.

3.10.5 Plumbing fixtures shall be filled with water and checked for leaks or retarded flow.

3.10.6 All flush valves, loose key stops, valves and similar equipment shall be adjusted and balanced to provide for the proper operation of the various systems.

3.10.7 Each piece of plumbing equipment and the entire plumbing system shall be adjusted and readjusted as required to insure proper functioning and shall be left in first class operating condition.

3.10.8 Gas piping, shall be tested at 15 psi air pressure for 24 hours, in excess of the requirements of NFPA 54.

3.11. Disinfection:

3.11.1 Purge system of all deleterious material before proceeding with disinfection.

3.11.2 Comply with local health department regulations.

3.11.3 Flush with clean, potable water until water runs clear.

3.11.4 Fill system with with chlorine solution containing at least 50 ppm of chlorine. Allow to stand for at least 24 hours.

3.11.5 Purge system of chlorine solution before putting into service.

3.12. Inspection

3.12.1 Notify Inspector as required by local authority when all work is completely installed and tested leak-tight.

3.12.2 Do not conceal piping or fixtures until approval has been obtained from inspector.

3.13. Cleaning Equipment and Premises:

3.13.1 Thoroughly clean all parts of fixtures and equipment. exposed parts which are to be painted shall be thoroughly cleaned of foreign matter with grease, oil, soldering flux, etc. removed.

3.13.2 Exposed metal work shall be carefully brushed down with steel brushes to remove rust and other spots and touched up with primer.

End of Section 22 40 00

Note:

Not all project specifications may be applicable to this remodel.

End of section

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SHEET TITLE
PROJECT MANUAL

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Section 23 05 93

Testing, Adjusting and Balancing of Mechanical Systems

V01032020

1. General

1.1. Summary

1.1.1. All work done under this section shall adhere to the concept of total system balance defined in ASHRAE. This concept states that one source shall be responsible for the complete testing, adjusting and balancing of all applicable HVAC systems, such that reputable results are obtained, and the design intent of the engineer and the functional requirements of the owner are met.

1.1.2 The independent testing and balancing agency shall, to the extent made possible by the installation and performance constraints of the project specific HVAC systems, systematically test the performance of all HVAC equipment under field conditions to verify conformance to project specifications, drawings and documents. The testing, adjusting and balancing process shall include: (1) the testing & balancing of all HVAC air and water distribution systems; (2) the adjustment of total systems to attempt and provide specified design quantities; (3) electrical measurement; (4) establishing the quantitative performance of all HVAC equipment; (5) verifying that HVAC system automatic controls are functional.

1.1.3 For purposes of consistency and clarification for all parties involved with HVAC testing, adjusting and balancing, the following designations and abbreviations will be used throughout these specifications.

1.1.3.0.1 AABC = Associated Air Balance Council

1.1.3.0.2 ASHRAE = American Society of Heating, Refrigerating, and Air Conditioning Engineers

1.1.3.0.3 BAS = Building Automation Systems

1.1.3.0.4 CM = Construction Manager, general contractor or prime contractor

1.1.3.0.5 DALT = Duct Air Leakage Tests

1.1.3.0.6 DP = Design Professional

1.1.3.0.7 EC = Electrical Contractor

1.1.3.0.8 ES = Equipment Supplier

1.1.3.0.9 MC = Mechanical Contractor

1.1.3.0.10 NEBB = National Environmental Balancing Bureau

1.1.3.0.11 Owner = Owner or owner's designated representative

1.1.3.0.12 SMACNA = Sheet Metal and Air Conditioning Contractors' National Association

1.1.3.0.13 TAB = Testing and Balancing, or independent testing and balancing agency

1.1.3.0.14 TBE = AABC or NEBB certified Test and Balance Engineer

1.2. General Requirements

1.2.1 The TAB contract shall be procured and administered directly by the owner with Test and Balance Contractor.

1.2.2 The owner or his designated representative shall be copied directly on all TAB agency generated deficiency lists and HVAC equipment/system test results. No statements or verbiage found elsewhere in the Division 23 mechanical specifications, or in the project general conditions, shall be construed as preventing the owner from receiving a direct copy of any TAB agency generated deficiency list or test result.

1.2.3 The HVAC System Testing, Adjusting and Balancing section of the Division 23 mechanical specifications, Section 23 05 93, has been provided to other contractors primarily for information, reference and coordination. Other contractors are to take note of their responsibilities summarized in Section 23 05 93, and to be prepared to comply with the applicable requirements noted therein.

1.2.4 Responsibilities of other contractors which are delineated herein include, but are not necessarily limited to the following:

1.2.4.1 Responding in a timely manner to submitted TAB agency deficiency lists.

1.2.4.2 Changing applicable fan/motor sheaves and belts per TAB agency recommendations.

1.2.4.3 Identifying manual volume damper (MVD) locations, maintaining access and verifying proper vapor barrier tight insulation to all MVD quadrant handles.

1.2.4.4 Ensuring that all applicable control interlocks are in place and functional.

1.2.5 Total System Balance shall be performed by a TAB agency certified by the Associated Air Balance Council (AABC) or National Environmental Balancing Bureau (NEBB) and approved by the owner. All work performed by this shall be done by qualified technicians under the direct supervision of an AABC certified TBE, and under the proper supervision of a registered professional engineer, permanently employed and registered in the state work is performed by the TAB agency. All manpower will be permanently employed by the TAB firm and NO subcontractors to the TAB agency will be allowed.

1.3. Scopes

1.3.1 Work and services to be provided by the TAB agency shall include furnishing all technical support personnel and all materials, test equipment, man-access equipment, and field labor required to completely test, adjust and balance all air, fluid, mechanical, electrical and BAS controls (local controls and instruments only) associated with all heating, ventilating, air conditioning and building process exhaust systems.

1.3.2 The following specific services are included in the Work & Services described in paragraph 1.3.1 above:

1.3.2.1 Air System Balance

1.3.2.1.1 Outside Air Systems

1.3.2.1.2 Supply Air Systems

1.3.2.1.3 Return Air Systems

1.3.2.1.4 Exhaust Air Systems

1.3.2.2 Hydronic System Balance (where applicable)

1.3.2.2.1 Chilled Water Systems

1.3.2.2.2 Condenser Water Systems

1.3.2.2.3 Heating Hot Water Systems

1.3.2.2.4 Glycol-Water Systems (Heat Reclaim)

1.3.2.3 Control Systems Verification

1.3.2.4 Special Systems

1.3.2.4.1 Kitchen Hood Testing

1.3.2.5 System Performance Verification

1.3.2.6 Renovation Projects - Preconstruction airflow and water flow (heat reclaim) measurements and appropriate testing of existing HVAC systems where indicated in the design documents.

1.4. References

1.4.1 AABC

1.4.1.1 2016 NATIONAL STANDARDS FOR TESTING AND BALANCING HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS, 7th edition

1.4.1.2 AABC TEST AND BALANCE PROCEDURES

1.4.2 NEBB

1.4.2.1 Procedural Standard for Testing Adjusting and Balancing of Environment Systems 2019, 9th edition

1.4.3 2019 ASHRAE HANDBOOK, HVAC APPLICATIONS, Testing, Adjusting and Balancing

1.4.4 SMACNA, HVAC AIR DUCT LEAKAGE TEST MANUAL, 2012, 2nd edition

1.5. Quality Assurance

1.5.1 Regulatory Requirements

1.5.1.1 Workmanship, materials and installation shall comply with all state and local codes including, but not limited to the following:

1.5.1.1.1 Applicable State Building Code

1.5.1.1.2 ASHRAE Standard 62.1 - Latest Edition: Ventilation for Acceptable Indoor Air Quality

1.5.1.1.3 ANSI/ASHRAE 111 - Latest Edition Testing, Adjusting, and Balancing of Building HVAC Systems.

1.5.1.1.4 National Electrical Code - Latest Edition

1.5.1.1.5 National Fire Codes (NFPA) - Latest Edition

1.5.1.1.6 OSHA General Industry Standards

1.5.1.2 Nothing in the contract documents shall be construed to permit work not conforming to these codes or ordinances. Should conflicts arise between standards, the more stringent standard shall apply.

1.5.2 All testing, adjusting and balancing procedures shall be in strict accordance with the following reference standards.

1.5.3 AABC

1.5.3.1 2016 NATIONAL STANDARDS FOR TESTING AND BALANCING HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS, 7th edition

1.5.3.2 AABC TEST AND BALANCE PROCEDURES

1.5.4 NEBB

1.5.4.1 Procedural Standard for Testing Adjusting and Balancing of Environment Systems 2019, 9th edition

1.6. Tab Agency Qualifications

1.6.1 The TAB agency shall be an AABC or a NEBB member in good standing.

1.6.2 All work shall be performed in accordance with the AABC procedures and standards itemized in paragraph 1.05B, and under the project supervision of a registered professional engineer permanently employed by the TAB agency. An AABC or NEBB certified TBE shall be responsible for all field supervision and certification of the total work of this section.

1.6.3 All Technicians shall have received training by the equipment manufacturers in the operations and procedure for testing and balancing the equipment.

1.7. Contract Documents

1.7.1 The owner or owner's designated representative shall furnish the TAB agency with plans, specifications and submittals as soon after the project contract award date as possible. These documents will be reviewed by the TAB agency for discrepancies or irregularities that would hinder TAB services or jeopardize optimum system performance.

1.7.2 The owner or his designated representative shall execute a test and balance agreement as soon as possible after the construction contract has been awarded to allow the TAB agency ample time to schedule this work in cooperation with other trades involved and to comply with the contract completion date.

1.8. Notification And Scheduling

1.8.1 The schedule for testing and balancing the HVAC systems shall be established by the Owner, or his designated representative, in coordination with the TAB agency on a critical path network.

1.8.2 The TAB agency is responsible for initiating this continuing coordination to determine schedule for final TAB services.

1.8.3 It will be necessary for the TAB agency to perform its services in close coordination with the CM, MC, EC, and BAS contractor, with all scheduling and deficiencies reported through the Owner, or his designated representative.

1.8.4 Before testing and balancing commences, the TAB agency shall receive notification in writing from the refrigeration coordinator that the systems are operational, complete and ready for balancing. Included with this notification shall be completed and signed HVAC equipment start-up check lists.

1.8.5 A completed system means more than just the physical installation. The CM, MC, EC, and BAS contractor shall certify that all prime movers, fans, pumps, dampers, refrigeration machines, boilers, etc., are installed in good working order, and that full load performance has been preliminarily tested.

1.8.6 The CM, MC, and BAS Contractor shall certify to the refrigeration coordinator in writing that all equipment has been checked, started and adjusted by the manufacturer and operated for the specified period of time.

1.9. Coordination With Other Trades

1.9.1 As a minimum to bring the HVAC systems into a state of readiness for testing, adjusting and balancing, the Mechanical Contractor (MC) shall perform the following:

1.9.1.1 Air Distribution Systems

1.9.1.1.1 All required DALT procedures on all applicable duct systems have been performed, all duct work sealed as required and applicable retesting completed.

1.9.1.1.2 Ensure that all splitters (only to be used for Gross distribution of flow, not balancing), volume, smoke and fire dampers are properly located and functional. Dampers serving requirements of smoke, minimum and maximum outside, return, relief and exhaust air shall provide tight closure and full opening, with a smooth and free operation.

1.9.1.1.3 Verify that all supply, return, exhaust and transfer grilles, registers, diffusers and high pressure terminal units are installed and operational.

1.9.1.1.4 All manual volume dampers (MVDs) are in the open position and readily accessible.

1.9.1.1.5 The MVD handles must be supplied with a stand-off bracket and locking quadrant.

1.9.1.1.6 Ensure that air handling systems, units and associated equipment such as heating and cooling coils, filter sections, access doors, etc. are blanked-off and/or sealed to eliminate excessive bypass or leakage of air.

1.9.1.1.7 Ensure that all fans (supply, return, relief and exhaust) are operating and free of vibration. All fans and drives shall be checked for proper fan rotation and belt tension. Overload protection shall be of proper size and rating. A record of motor current and voltage shall be made to verify that the motors do not exceed nameplate rating.

1.9.1.1.8 Make any necessary changes to the sheaves, belts and dampers, as required by the TAB agency, at no additional cost to Owner.

1.9.1.1.9 Install clean filters prior to testing.

1.9.1.2 Water Circulating Systems (where applicable)

1.9.1.2.1 Check all pumps to verify pump alignment and rotation.

1.9.1.2.2 Ensure that systems are clean, with the proper strainer screens installed for normal operation.

1.9.1.2.3 Check all pump motors for current and voltage, to ensure that motors do not exceed nameplate rating.

1.9.1.2.4 Provide overload protection of proper size and rating.

1.9.1.2.5 Ensure that all water circulating systems shall be clean, full of water and free of air, that expansion tanks are set for proper water level, and that all air vents are installed at high points of systems and are operating.

1.9.1.2.6 Check and set operating temperature of heat exchangers to design requirements.

1.9.2 The BAS contractor shall perform the following minimum pre-TAB items:

1.9.2.1 Verify that all control components are installed in accordance with project requirements and are functional, including all electrical interlocks, damper sequences, air and water resets and fire and freeze stat resets.

1.9.2.2 Verify that all controlling instruments are calibrated and set for design operating conditions.

1.9.2.3 Calibrate room thermostats/ temperature probes and dew point sensors after installation and before the thermostat control verification tests are performed.

1.9.2.4 The BAS contractor shall allow sufficient time in the project to provide assistance and instruction to the TAB agency in the proper use and setting of control components such as, but not limited to, computers, static pressure controllers, or any other devices that may need set points changed so that the testing and balancing work can be performed.

1.9.2.5 The TAB agency will then verify by-pass operation and field set all boxes by comparing actual tested airflow and correcting the minimum and maximum settings.

1.9.3 The Owner, or his designated representative, the CM, the MC, the BAS contractor and the equipment suppliers of the HVAC equipment shall all cooperate with the TAB agency to provide all maintenance during the design and proper application of the system components. In addition, they shall furnish all labor and materials required to eliminate any system deficiencies and shall be on site during the Test and Balance process.

2. Products

2.1. General

2.1.1 The TAB agency shall be responsible for providing all instrumentation, ductwork test ports and plugs, testing equipment and all other accessories and man access equipment necessary for accomplishing total system balance of all systems.

2.1.2 Service tools or special devices required to manipulate HVAC system control devices or control modes shall be loaned to the TAB agency by the BAS contractor until testing of all HVAC controls has been completed.

2.1.3 The accurate calibration of all field instrumentation to be used by the TAB agency is extremely important. Instrumentation shall be of first quality and accurately calibrated within (12 months prior to start of total system balance)

2.1.4 Whenever possible, the same instrument should be used for the entire job. If more than one instrument is used, a check shall be made to verify that the variation in instrument readings does not exceed +/- 0.5%.

3. Execution

3.1. Procedures

3.1.1 Please note that the TAB Agency is contracted to perform a once through test and balance (TAB) (i.e. in a single mobilization). If deficiencies are identified that prohibit the TAB Agency from completing a TAB test, then the deficiencies will be noted within the final report and submitted to the owner. It will be the financial responsibility of the offending contractor to resolve any outstanding deficiencies and the cost of any TAB retesting will be back charged by Publix to the General Contractor. It is the intent of Publix to resolve all outstanding deficiencies prior to releasing final payment. Please note that a deficiency which impacts the operation of the HVAC equipment or overall store comfort will require a retest. Non-impacting deficiencies may be resolved via photo and/or written documentation.

3.1.2 Preconstruction Design Documents Check & Review

3.1.2.1 Review the project documents and contractor submittals for their effect on the test and balance process and overall performance of the HVAC systems.

3.1.2.2 Review building pressurization to verify that make-up air and exhaust air quantities balance out in conformance with specified design facility pressurization requirements.

3.1.2.3 Review location and type of manual volume dampers (MVD) in the air distribution system, and verify that all MVDs are accessible.

3.1.2.4 Review inlet conditions to air terminals, air valves and HVAC equipment.

3.1.2.5 Review location of pressure sensors in the air and water distribution systems.

3.1.2.6 Review automatic control systems as they affect the test and balance procedure.

3.1.3 Air System Test & Balance Procedures

3.1.3.1 FAN SPEEDS - test and adjust fan RPM to achieve design CFM requirements. 0% to +5%

3.1.3.2 CURRENT & VOLTAGE - measure and record motor current and voltage.

3.1.3.3 PITOT TUBE TRAVERSE - perform a Pitot tube traverse of main supply and return ducts to obtain total CFM. If a Pitot tube traverse is not practical, the summation of the outlets or inlets may be used. An explanation of why a traverse was not made must appear on the appropriate data sheet.

3.1.3.4 OUTSIDE AIR - test and adjust system minimum outside air by Pitot tube traverse. If a Pitot tube traverse is not practical, the percentage of outside air may be determined by calculations from the return air, outside air and mixed air temperature. Make allowances for heat of compression and motor heat where applicable.

3.1.3.5 STATIC PRESSURE - test and record system static pressures, including suction and discharge static pressure profile of each fan. For Main HVAC units, traverse all cooling coils (note wet or dry) and record static pressures.

3.1.3.6 AIR TEMPERATURE - take wet bulb and dry bulb air temperatures on the entering and leaving side of each cooling coil. Dry bulb temperatures shall be taken on the entering and leaving side of each heating coil and re-heat coil.

3.1.3.7 At least one zone balancing damper shall be completely open.

3.1.3.8 MAIN DUCTS - adjust main ducts to within design CFM requirements. Multi-diffuser branch ducts shall have at least one outlet or inlet volume damper completely open.

3.1.3.9 BRANCH DUCTS - adjust branch ducts to within design CFM requirements. Multi-diffuser branch ducts shall have at least one outlet or inlet volume damper completely open.

3.1.3.10 TOLERANCE - test and balance each diffuser, grille and register to within +/- 10% of design requirement or ceilings above 15 feet and +/- 5% for ceilings below 15ft.

3.1.3.11 IDENTIFICATION - identify the location and area of each grille, diffuser, register and terminal box. This information shall be recorded on air outlet data sheets.

3.1.3.12 DESCRIPTION - record the size and type of each diffuser, grille and register on air outlet data sheets.

3.1.3.13 VARIABLE AIR VOLUME SYSTEMS - shall be field set and balanced according to the specific type of VAV system supplied and method of controlling air flow. The following requirements shall be met:

3.1.3.13.1 Verify that inlet ducts have sufficient straight runs as indicated in the details before VAV boxes or that straightenens have been provided and the VAV box manufacturer's control system is compatible with the building control system.

3.1.3.13.2 Determine the maximum and minimum CFM for the boxes used and verify that the operating conditions fall within the design operating range.

3.1.3.13.3 Check static pressures and volume flows and adjust to proper values as necessary. Test and report total airflow under maximum and minimum settings.

3.1.3.13.4 Set outlets to design flow with VAV box on maximum setting and then set minimum set point

3.1.3.14 TERMINAL BOXES - field set volume regulators on all terminal boxes to meet design maximum and minimum CFM requirements. All associated temperature controls shall be checked for proper operation and calibration.

3.1.3.15 MINIMIZING DRAFTS - adjust all diffusers, grilles and registers to minimize drafts in all areas.

3.1.3.16 EXHAUST FANS - measure exhaust fan static pressure, total CFM, make-up air and fan RPM. Measure motor operating voltage and amperage.

3.1.3.16.1 Verify exhaust fan static pressures, total CFM, make-up air and fan RPM. Verify exhaust fan total air flow via Pitot tube traverse wherever possible.

3.1.3.16.2 Measure motor operating voltage and amperage.

3.1.3.16.3 Balance of kitchen hoods. The airflow shall be set to design average velocity + hood area. After flows are set, measure hood face velocities with a Shortridge Velgrid per manufacturers recommendations.

3.1.3.16.4 Record the specified against the actual supplied horsepower and electrical characteristics of all motors.

3.1.4 Hydronic System Test and Balance Procedures (where applicable)

3.1.4.1 WATER TREATMENT - examine the system in operation to determine if the water has been treated and cleaned. If it has not, request that the mechanical contractor clean and treat the water.

3.1.4.2 AIR VENTS - check all air vents at the high points of the water system and determine if they are installed and operating.

3.1.4.3 VALVES - set all balancing valves and automatic temperature control valves to the full open position for balancing. Three-way valves; the rated pressure drop shall first be adjusted with the three-way set so that all water flows through the coil. The bypass shall then be adjusted to equal the drop of each coil and equal pressure drop between supply and return connections is obtained, with the three-way valve set to bypass the coil.

3.1.4.4 PUMPS - adjust chilled water, hot water and condenser water pump to meet design GPM requirements. Check pumps for proper operation. Pumps shall be free of vibration and cavitations. Measure and record operating pressure (PSI) current, and voltage. Plot shut-off head and operating head on field generated pump performance curve.

3.1.4.5 CENTRAL PLANT - adjust water flow from the central plant if applicable.

3.1.4.6 TOLERANCES - proceed to balance all chilled water and hot water coils to within +/- 5% of design GPM requirements.

3.1.4.7 MARKING - mark all settings and record all data after completing the flow readings and coil adjustments.

3.1.4.8 PRIMARY/SECONDARY PUMPING SYSTEM - if a primary-secondary pumping system is employed, the TAB agency shall ensure that a proper balance is obtained between primary and secondary loops and that sufficient flow is maintained in the secondary loop at all times.

3.1.5 Control Systems Verification

3.1.5.1 Verify that all control devices are properly connected.

3.1.5.2 Verify that all dampers, valves and other controlled devices are operated by the intended controller.

3.1.5.3 Verify that all dampers and valves are in the position indicated by the controller (open, closed, or modulating).

3.1.5.4 Verify the integrity of valves and dampers in terms of tightness of close-off and full-open positions.

3.1.5.5 Check that all valves are properly installed in the piping system in relation to direction of flow and location.

3.1.5.6 Check the calibration of all controllers.

3.1.5.7 Verify the proper application of all normally open and normally closed valves.

3.1.5.8 Check the location of all thermostats/temperature sensors and humidity/ dew point sensors for potential erratic operation from outside influences such as drafts, drafts or cold walls.

3.1.5.9 Check the locations of all sensors to determine whether their position will allow them to sense only the intended temperatures or pressures of the media. Control contractor will relocate as deemed necessary by the TAB agency.

3.1.5.10 Check the sequence of operation that any control mode is in accordance with approved shop drawings. Verify that only minimum simultaneous heating and cooling occurs. Observe that heating cannot take place until the cooling zone of valve is completely closed.

3.1.5.11 Verify that all controller set points meet the design intent.

3.1.5.12 Check all dampers for free travel.

3.1.5.13 Verify the operation of all interlock systems.

3.1.5.14 Perform all system verification to assure the safety of the system and its components.

3.1.6 Cooler Tower/Fluid Cooler Testing (if applicable)

3.1.6.1 Test temperature of cold water leaving the cooling tower (LWT).

3.1.6.2 Test temperature of hot water entering cooling tower (EWT)

3.1.6.3 Test wet bulb temperature of air entering the cooling tower (EWB).

3.1.6.4 Test dry bulb temperature of air entering the cooling tower (EDB).

3.1.6.5 Test temperature of the make-up water entering the tower (Tmu)

3.1.6.6 Test flow rate of the make-up water entering the tower (GPMat).

3.1.6.7 Test flow rate of water recirculating through the cooling tower (GPMct).

3.1.6.8 Test flow rate of the blowdown (bleed) discharged from the tower (GPMb).

3.1.6.9 Test power input to the fan motor(s) (kw).

3.1.6.10 Test P-trap dischargre pressure (P).

3.1.7 System Performance Verification

3.1.7.1 Publix' Commissioning Authority will verify the repeatability of the TAB report. If random tests indicate a measured flow deviation of 10% or more from that recorded in the Certified TAB Report listings at 10% or more of the selected recheck stations, the report will be rejected. All systems shall then be readjusted and tested, new data recorded, new Certified Report submitted, and new inspection tests made, all at no additional cost to Owner.

3.2. Record & Report Data

3.2.1 The TAB report shall be complete with logs, data and records as required herein. All logs, data and records shall be typed on white bond paper and bound. The report shall be certified accurate and complete by the TAB agency's certified TBE, and signed by the TAB agency's registered professional engineer.

3.2.2 One (1) hardcopy and one (1) electronic PDF version of the TAB report are required and shall be submitted to the Owner or the Owner's designated representative

3.2.3 The report shall contain the following general data in a format selected by the TAB agency

3.2.3.1 Project number

3.2.3.2 Contract Number

3.2.3.3 Project title

3.2.3.4 Project location

3.2.3.5 Project architect

3.2.3.6 Project mechanical engineer

3.2.3.7 Test and balance agency

3.2.3.8 Test and Balance Engineer

3.2.3.9 General Contractor

3.2.3.10 Mechanical subcontractor

3.2.3.11 Date tests were performed

3.2.3.12 Certification

3.2.4 The TAB report shall be recorded on report forms conforming to the recommended forms in AABC National Standards. At a minimum, the report shall include:

3.2.4.1 Preface: any abnormalities of problems encountered, and any remaining outstanding deficiencies.

3.2.4.2 Instrumentation List: the list of instruments including type, model, manufacturer, serial number.

3.2.4.3 List of formulas used on test form

3.2.4.4 System Identification: in each report, the VAV boxes, zones, supply, return, and exhaust openings, and traverse points shall be numbered and/or lettered to correspond to the numbers and letters used on the report data sheets.

3.2.4.5 Store pressurization summary sheet indicating design versus final CFMs

3.2.4.6 Measured supply air summary sheet indicating total CFMs of each AHU and AC, equate and document total tested tonnage of installed HVAC equipment

3.2.4.7 Air Handling Equipment

3.2.4.7.1 Manufacturer, model number and serial number.

3.2.4.7.2 All design data.

3.2.4.7.3 Total actual CFM by traverse if practical, if not practical, the sum of the outlets may be used, or a combination of each of these procedures. For specific systems, such as ones with diversity, see the AABC

3.2.4.7.4 Complete Static Pressure Profile across all filter and coils

3.2.4.7.5 Return air, bypass air, and outside air minimum and maximum specified CFM.

3.2.4.7.6 Actual operating current, voltage and brake horsepower of each fan motor.

3.2.4.7.7 Final RPM of each fan (High Speed & Low Speed)

3.2.4.7.8 Fan and motor sheave manufacturer, model, size, number of grooves and center distance. Belt size and quantity.

3.2.4.7.9 For direct drive fans note VFD cycles and RPM for the maximum and minimum CFM settings

3.2.4.7.10 Static pressure controls' final operating set points.

3.2.4.7.11 Entering air temperature (EAT) / Leaving air temperature (LAT) (DB & WB) °F

3.2.4.7.12 Cooling coil temperature test

3.2.4.7.13 Heating coil temperature test for gas heat / amps & voltage for electric heat

3.2.4.7.14 Heat reclaim coil test (where applicable) GPM, EWT, LWT

3.2.4.7.15 Actual Ambient Data at the time of testing

3.2.4.7.16 Room DB/WB (°F)

3.2.4.7.17 Entering and leaving enthalpy (BTU/#)

3.2.4.7.18 Total enthalpy (BTU/#)

3.2.4.7.19 Total BTUH

3.2.4.7.20 Duct traverses as necessary

3.2.4.8 Supply / Return / Exhaust Air Distribution for each system

3.2.4.8.1 Area served

3.2.4.8.2 Specified grille (i.e. neck size, run-out, Ak)

3.2.4.8.3 Specified design (Velocity and CFM)

3.2.4.8.4 Preliminary field test (Velocity and CFM)

3.2.4.8.5 Final field test (Velocity and CFM)

3.2.4.8.6 % of design

3.2.4.9 Mini Split Air Conditioning Systems

3.2.4.9.1 Manufacturer; model number and serial number.

3.2.4.9.2 All design data.

3.2.4.9.3 Heating Volts/phase

3.2.4.9.4 Heating Amps

3.2.4.9.5 Cooling and Heating field performance data

3.2.4.10 Kitchen Hoods

3.2.4.10.1 Manufacturer, model number and serial number.

3.2.4.10.2 All design data.

3.2.4.10.3 Area and equipment served

3.2.4.10.4 Exhaust

i. Filter size
ii. Average velocity (FPM)
iii. Conversion factor
iv. Calculated CFM
v. Total Airflow & calculated % of design

3.2.4.10.5 Supply

i. Test face velocities and balance accordingly
ii. Total airflow & calculated % of design

3.2.4.10.6 Verify and mark the outside air damper actuator's maximum setting & performance verify the minimum settings for AC unit(s) dampers that are associated with the hood system.

3.2.4.11 Exhaust and Make-up Air fans

3.2.4.11.1 Manufacturer, model number and serial number.

3.2.4.11.2 All design data

3.2.4.11.3 Area and equipment served

3.2.4.11.4 Static Pressure (Design and tested)

3.2.4.11.5 Fan RPM (Design and tested)

3.2.4.11.6 Tested amperage

3.2.4.11.7 Tested Voltage

3.2.4.11.8 Heater size, rating, setting

3.2.4.11.9 Fan and motor sheave manufacturer, model, size, number of grooves and center distance.

3.2.4.11.10 Belt size and quantity.

3.2.4.11.11 Final tested CFM

3.2.4.11.12 Maximum & minimum VFD frequency, if applicable

3.2.4.12 VAVs

3.2.4.12.1 Manufacturer, model number.

3.2.4.12.2 All design data.

3.2.4.12.3 Area and equipment served

3.2.4.12.4 Field test minimum CFM

3.2.4.12.5 Field test maximum CFM

3.2.4.13 ERVs (Supply and Exhaust)

3.2.4.13.1 Manufacturer, model number and serial number.

3.2.4.13.2 All design data.

3.2.4.13.3 Area and equipment served

3.2.4.13.4 Test amperage

3.2.4.13.5 Test voltage and phase

3.2.4.13.6 Heater data, size, rating, setting

3.2.4.13.7 Static Pressure entering the wheel (in wg)

3.2.4.13.8 Fan Suction (in wg)

3.2.4.13.9 Pressure drop across the filter and the wheel (in wg)

3.2.4.14 Cooling Tower/Fluid Cooler (If Applicable)

3.2.4.14.1 Observations of cooling water data summary sheet.

3.2.4.14.2 A sketch of the cooling tower installation showing tower orientation, principal dimensions, location of temperature and flow rate measurement points, and notation of any building obstructions, or other equipment in the immediate vicinity of the tower.

3.2.4.14.3 Copies of completed test data sheets.

3.2.4.14.4 A copy of test calculations, including performance curves and cross plots.

3.2.4.14.5 Observations re compliance with Test Code limitations and uniformity of test conditions. Include comments on any suggested changes to the tower such conditions. Include comments on any suggested changes to the tower such as increasing fan speed or blade pitch to obtain rated brake horsepower

End of Section 23 05 93

NOTE:

Not all project specifications may be applicable to this remodel.

End of section

Section 23 70 00

Central HVAC Equipment

V01032020

1. General

1.1. Summary

1.1.1 Provide all materials and equipment and perform all labor required to install HVAC systems complete as indicated, as required by code, and as specified herein. All sizes, etc. are Publix minimum and if local code requirements are higher, the work shall be bid and installed accordingly.

1.1.1.1 Obtain and pay for all permits, bonds, inspection.

1.1.1.2 Provide roof top and split HVAC systems or install systems provided by Publix as described below.

1.1.1.3 All A/C curbs shall be set for drying-in by Roofer.

1.1.1.4 All roof mounted fans will be furnished by Publix and installed by HVAC Contractor. Curbs will be furnished by Publix for installation by Roofer.

1.1.1.5 Provide hurricane brackets and other supports required to secure units to structure for wind and seismic conditions.

Seismic: Seismic hazard level as designated by Authority Having Jurisdiction.

Hurricane: FM 1-90 or higher if designated by Authority Having Jurisdiction.

1.1.1.6 Provide dome metal duct systems as indicated on Drawings and described in Specifications.

1.1.1.7 Provide exhaust ducts between the cooking hoods and the roof mounted exhaust fans.

1.1.1.8 Provide double-wall metal gas vents.

1.1.1.9 Provide all other materials and services required for installation described in Contract Documents.

1.1.2 HVAC Equipment:

1.1.2.1 Publix will provide equipment delivered to the site of Construction. Coordinate delivery schedule with construction progress. Provide all labor, equipment, materials, and services required for installation and satisfactory completion of HVAC work.

1.1.2.2 In addition to above, provide equipment, delivery, required staging and storage, and all other services required to complete the Work.

1.1.3 Coordinate work with work of others. Notify concerned parties before proceeding with work that will affect them.

1.2. Definitions: Explanation and precedence of Documents:

1.2.1 For purposes of clarity and legibility, HVAC drawings are essentially diagrammatic and, although size and location of equipment are drawn to scale wherever possible, Contractor shall make use of all Contract Documents.

1.2.2 Although the locations of the equipment and ductwork may be shown on the Drawings in certain positions, the Contractor shall be guided by the architectural details and conditions existing at the job, correlating this work with that of others.

1.2.3 The Drawings indicate size, connection points and routes of ducts and equipment. It is not intended, however, that all offsets, rises and drops are shown. Install all items as required to fit structure, avoid obstructions, and maintain clearances, headroom, openings and passageways.

1.2.4 Remodels. Carefully examine all existing conditions, existing work in place and premises and compare the Drawings with the existing conditions. Submittal of bid indicates that the Contractor has examined the Site and Drawings and has included all required work in his bid. No allowances will be made for error resulting from Contractor's failure to visit job sites and to review the Drawings.

1.2.5 Conflicts, discrepancies, interferences and omissions in Documents shall be brought to the attention of the Publix Engineer for clarification prior to commencement of work.

1.3. Submittals:

1.3.1 Submit LOIs in accordance with Section 01 33 00 Submittal Procedures.

1.3.2 Within 30 days of Contract Commencement (Authorization to Proceed), submit the following shop drawings and cut sheets for Publix Engineer's approval:

Cooling Equipment

Air Handling Equipment

Heating Equipment

Air Distribution

Valves, Gauges, Specialties, Thermometers, Misc.

Insulation

Round and Oval Duct - submittals and shop drawings

Hangers & Seismic Bracing

All submittal data shall have rough-in dimensions, connection sizes, and capacity data installation requirements, certified performance data and horsepower, voltage and phase for all equipment.

Equipment, fixtures and trim with cuts including rough-in dimensions.

Other items required to complete the work

1.3.3 Submit PDFs online through Publix Landmark.

1.3.4 Literature for the above shall have rough-in dimensions, connection sizes, and special installation requirements.

1.3.5 Equipment Record Drawings. Comply with Section 01 78 39.

1.3.6 Do not order materials or proceed with work until all submittals have been reviewed, and approved.

1.3.7 Confirm electrical and other requirements with other contractors.

1.4. Quality:

1.4.1 Subcontractor:

1.4.1.1 The HVAC Subcontractor shall be a reputable firm regularly engaged in this type of work, employing skilled workmen, and with proper equipment.

1.4.1.2 Upon request Subcontractor shall show evidence of at least two similar jobs, of comparable size and character, installed and operating within the previous two years prior to Bid Opening.

1.4.1.3 Publix reserves the right to refuse any Subcontractor with or without cause.

1.4.2 Personnel:

1.4.2.1 Employ an experienced Superintendent to oversee all operation.

1.4.2.2 Work shall not proceed without adequate supervision present at all times.

1.4.2.3 Work shall be accomplished by workers certified in their trade as mandated by contractors licensing regulations in accordance with regulations of the governing authority or customary practice. Utilize workers with skills in proportion to complexity of tasks required.

1.4.2.4 Publix reserves the right to reject personnel with or without cause.

1.4.3 Quality standards: Work will be judged in comparison to work of similar types. Substandard construction as judged by Publix Representative will not be accepted.

1.4.4 Regulations: Comply with applicable provisions of the following codes (latest version adopted by governing agencies):

Local Building Code

ASME Code for Unfired Pressure Vessels

International Mechanical & Energy Codes

Florida State Mechanical & Energy Codes

Georgia State Mechanical & Energy Codes

North Carolina State Mechanical & Energy Codes

OSHA - for construction

1.4.5 Coordination: Work shall be accomplished along with the work of other trades. Corporate with others to benefit the job as a whole.

1.4.6 Participate in the pre-construction conference

1.5. Sequencing:

1.5.1 Notify General Contractor, or any others, of all chases, sleeves and openings required so that the work can be accomplished without delay. Provide necessary sleeves, etc., to be installed. Otherwise, HVAC Sub-Contractor shall pay for appropriate trades to perform cutting and patching.

1.5.2 Joists, girders, beams, columns or reinforcing steel shall not be cut.

1.5.3 Where construction necessitates the routing of ducts or piping through structural members, or framing, permission to make such installation shall first be obtained from the Publix Field Representative

1.6. Temporary Operation: The Owner may require operation of part or all of the installation prior to Final Acceptance.

1.7. After acceptance of the Work, the Owner reserves the right to make emergency repairs as required to keep equipment in operation without voiding the Contractor's guarantee nor relieving the Contractor of his responsibilities during the guarantee period.

1.8. Operating Instructions and Service Manual:

1.8.1 Provide two (2) neatly bound copies of maintenance and instructions book, parts lists pertaining to all equipment furnished.

1.8.2 Each section shall be indexed and include parts lists, instruction books, suppliers' phone numbers and addresses, and individual equipment guarantees all in separate sections.

1.8.3 Representatives of the Owner shall be instructed by the Contractor as to complete care and operation of the HVAC system. Inform the Architect in writing as to the persons who received the instructions and the date that this was done.

1.9. Warranty:

1.9.1 Units shall have a manufacturer's standard one-year warranty against all defects.

1.9.2 Provide industry standard five-year compressor replacement warranty.

2. Products

2.1. General: All equipment and materials shall be furnished in strict accordance with the equipment schedule and specifications requirements. See Section 01 11 00 - Summary of Work to determine responsibilities regarding supplying and installing of equipment.

2.2. Nameplates

2.2.1 Nameplates shall not be painted.

2.2.2 All switches, starters, and major pieces of equipment shall be identified with black plastic nameplates with engraved white letters.

2.3. Packaged Rooftop Air Conditioners: Self-contained, factory assembled and wired unit. Consists of cabinet compressor(s), evaporator fan, evaporator coil(s), air filters, air cooled condenser, fully charged with refrigerant and oil, and controls. Owner furnished, contractor installed unless noted otherwise.

2.4. Power Ventilators. Direct or belt-drive centrifugal fans consisting of housing, wheel, fan, shaft, bearings, motor and disconnect switch drive assembly, curb base and accessories. Owner furnished, contractor installed unless noted otherwise.

2.5. Controls:

2.5.1 An Environmental Control Panel will be furnished and installed by Publix to control all AC units. Conduit, line voltage circuits, interlocks, etc., shall be furnished and installed by the Contractor, as shown on drawings.

2.6. Filter Media: Full two inch thick dual density polyester material.

2.7. Air Distribution

2.7.1 General:

2.7.1.1 All air distribution shall be supplied by manufacturers whose testing procedures are in accordance with ASHRAE Standard 70.

2.7.1.2 Furnish and install, unless otherwise noted, all grilles, registers, and outlets at the location and of the type and size shown on the Drawings. Install foam rubber gaskets behind flanges of all grilles and registers to prevent leakage and streaking. Adjust air volumes and set deflection in accordance with Drawings.

2.7.1.3 Approved manufacturers:

Airguide

Anemostat

Bailey and Tuttle

Lindab

Krueger

Metal Industries

Nailor Industries

Price

Titus

Other manufacturers as approved by Publix Engineer.

2.7.2. Return Air Grilles and Registers:

2.7.2.1 Return air grilles, outlets, registers and door grilles shall be of etched aluminum with acrylic finish and as indicated.

2.7.2.2 All grilles shall be suitable for smooth surface mounting. Coordinate installation door grilles with door installation.

2.7.2.3 Where indicated, provide opposed blade dampers.

2.7.3. Supply Registers and Diffusers:

2.7.3.1 All supply outlets shall be aluminum (or aluminized steel where required when part of rated roof-ceiling assembly) and products of a single manufacturer.

2.7.3.2 Provide steel grilles and fire dampers, radiation dampers as indic

Section 26 00 00

Electrical
V04012021

1. General

1.1. Summary

1.1.1 Comply with requirements of Sections 01 11 00, 01 33 00, 01 50 00, 01 77 00, 01 78 39.

1.1.2 Provide all materials and equipment and perform all labor required to install electrical systems complete as indicated, as required by code, and as specified herein.

1.1.3 Obtain and pay for all permits, bonds, inspection. Coordinate inspections with work as it progresses.

1.1.3.1 Provide services necessary to coordinate work with work of others. Notify concerned parties before proceeding with work that will affect them.

1.1.3.2 Provide electric service to connect with site utilities at a point outside the building as shown on the Drawings.

1.1.3.3 Coordinate with Utilities all requirements for utility transformer and Metering. Furnish and install all utility requirements for electrical service (i.e. transformer pad, CT compartment, meter base and pedestal)

1.1.3.4 Furnish and install all panel-boards, and contactors at the locations shown on the Drawings and specified herein.

1.1.3.5 All spare, empty conduit and junction boxes to have pull string.

1.1.3.6 Furnish and install all conduit and conductors between the load side of the feeder breakers to the branch panels.

1.1.3.7 Furnish and install all branch circuits between the panel-boards and the final terminal as shown on the Drawings and specified herein.

1.1.3.8 Furnish and install all secondary service between the power company transformer to the main switch as indicated on the Drawings.

1.1.3.9 Receive, install and make final electrical connections to all lighting fixtures as shown on the Drawings and specified herein.

1.1.3.10 Furnish and install conduit and boxes only for the public address system and telephone outlets.

1.1.3.11 Make electrical connections to the electric door operators as shown on the Drawings and specified herein.

1.1.3.12 Make all electrical connections to equipment supplied by Publix. Electrical Contractor to verify all manufacturer equipment requirements prior to connection. Any conflicts or deviation in design to be brought to the attention of the Engineer.

1.1.3.13 Make all electrical connections to refrigerated display cases and walk-in boxes as shown on the Drawings and specified herein.

1.1.3.14 Make all electrical connections between the main switchboard and the refrigeration compressors and condensing equipment as shown on the Drawings and specified herein.

1.1.3.15 Furnish and install all motor starters, disconnect devices, conduit and conductors for control and power wiring.

1.1.3.16 Make all electrical connections between the main switchboard and the air conditioning compressors, air handling units, package units and strip heaters as shown on the Drawings and specified herein.

1.1.3.17 Make all electrical connections between the machine rooms mounted refrigeration equipment and the refrigerated display cases, walk-in freezers and coolers as shown on the Drawings and specified herein.

1.1.3.18 Furnish and install all conduit and conductors to totally electrically connect all controls as specified herein.

1.1.3.19 Furnish and install all electrical work required for the dry chemical fire extinguisher system in the grease exhaust hoods. in compliance with NFPA Bulletins #17, #96, and with local codes.

1.1.3.20 Furnish and install all electrical wiring devices as shown on the Drawings and specified herein.

1.1.3.21 Furnish and install all conduit, conductors, disconnect devices and flexible metal conduit to completely wire all supply and exhaust fans as shown on the Drawings and specified herein.

1.1.3.22 The Electrical Contractor is fully responsible and liable for damaged and lost materials furnished by Publix. It shall be required that he sign for the materials supplied by Publix.

1.1.3.23 Panels for A/C and refrigeration mechanical systems, as furnished pre-wired internally by others, shall be mounted and connected by the Electrical Contractor. Refer to Drawings and Specifications for air conditioning.

1.1.3.24 Furnish and install all electrical service and controls for fans installed by others.

1.1.3.25 Furnish and install power wiring to each HVAC unit including the safety disconnect switch and other required electrical devices to make the unit operational as shown on the Drawings and specified herein.

1.1.3.26 Install Optional Standby generator and Nexgear transfer switch complete, as furnished by Publix.

1.1.3.27 Install conduit boxes with pull string for fire alarm and burglar alarm system, as furnished by Publix per note on Electrical Drawings.

1.1.3.28 Install and connect air conditioning control panel, energy management system, supplied by Publix.

1.1.3.29 Install conduit, conductors and make connections to "Publix" sign, and all other side signs and under-canopy signs (signs supplied and installed by Sign Contractor).

1.1.3.30 Security and fire alarm systems or combined system: the Electrical Contractor shall supply and install conduit, boxes, and pull strings as shown on Drawings. Power supply, station controls and complete final hook-up by Fire Alarm ContractorSecurity Alarm Contractor as noted on Drawings (as hired as sub-contractor to the Electrical Contractor). The Electrical Contractor may or may not be the Fire Alarm Contractor/ Security Alarm Contractor based on their licensure.

1.1.3.31 Install emergency generator and automatic transfer switches complete as furnished by Publix.

1.1.3.32 Furnish and install all light fixtures and lamps as shown on the drawings and specified herein.

1.1.4 Related Work by Other Contractors:

1.1.4.1 Setting and roofing in of all curbs and pitch pockets by Roofing Contractor. (setting of A/C curb only shall be by A/C Contractor)

1.1.4.2 Setting of water heaters, ovens, kitchen equipment, gondolas, cash equipment, facade signs and other miscellaneous equipment by others. Final electrical connection by Electrical Contractor.

1.1.4.3 Kitchen Hood Fire Protection System by Others.

1.1.5 Publix reserves the right to furnish some items of electrical equipment to the Electrical Contractor. If this is done the ElectricalContractor shall install the equipment and deduct the cost of the equipment from his contract. Cost adjustment will be made by Change Order.

1.1.6 All apparatus shall be installed at exact height and locations as shown on the Drawings, or if not shown, at heights and locations determined by applicable codes and laws.

1.1.7 Perform all excavation and backfill required for services, and for all conduit and work inside and outside the building. Cutting of curbs, walks, concrete and paving required for excavation shall be done by appropriate trade.

1.1.8 All store eases, coolers, and freezers will be furnished and set in place by Publix. Check Equipment Drawings against Drawings in order to verify exact locations.

1.2. Definitions: Explanation and Preedence of Documents:

1.2.1 For purposes of clarity and legibility, Electrical Drawings are essentially diagrammatic and, although size and location of equipment are drawn to scale wherever possible, Electrical Contractor shall make use of all Contract Documents.

1.2.2 The Drawings indicate size, connection points and routes of conduit and equipment. It is not intended, however, that all offsets, rises and drops are shown. Install all items as required to fit structure, avoid obstructions, and retain clearance, headroom, openings and passageways.

1.2.3 Remodels: Carefully examine all existing conditions, existing work in place and premises and compare the drawings with the existing conditions. Submittal of bid indicates that the Electrical Contractor has examined the Site and Drawings and has included all required work in his bid. No allowances will be made for any error resulting from Contractor's failure to visit Job Sites and to review Drawings/Documents.

1.2.4 Conflicts, discrepancies, interferences and omissions in Documents shall be brought to the attention of the Engineer for clarification prior to commencement of Work.

1.3. Submittals:

1.3.1 Submit LOI in accordance with Section 01 33 00 Submittal Procedures.

1.3.2 Within 30 days of Contract Commencement (Authorization to Proceed), submit for Publix Engineer's approval:

1.3.2.1 List of materials intended for use in the Project.

1.3.2.2 Manufacturer's catalogue cuts of materials intended for use in the Project. LOI's not acceptable.

1.3.2.3 Submittals to include: Switchgear, breakers, panel boards, starters, disconnects, relays, walkerduct, wire channel system, conduit, wire, boxes, wiring devices, receptacles, switches and light fixtures.

1.3.2.4 Copies of licenses of key personnel if requested by Publix.

1.3.2.5 Samples of materials if requested by Publix.

1.3.2.6 Other items required to complete the Work

1.3.3 Submit three identical bound copies of all items. Arrange categories in order listed above.

1.3.4 All cuts for the above shall have rough-in dimensions, connection sizes, and any special installation requirements. In addition, furnish motor horsepower voltage and phase for all equipment.

1.3.5 Close Out Documents:

1.3.5.1 Comply with applicable provisions of Section 01 78 39 Project Record Documents.

1.3.5.2 Provide a complete set of manufacturer's warranties and warranty certificates.

1.3.5.3 A copy of the final approval from the local building department.

1.4. Quality:

1.4.1 Subcontractor:

1.4.1.1 The Electrical Subcontractor shall be a reputable firm regularly engaged in this type of work, employing skilled workmen, and with proper equipment.

1.4.1.2 Upon request Subcontractor shall show evidence of at least two similar jobs, of comparable size and character, installed and operating within the previous two years prior to bid opening.

1.4.1.3 Publix reserves the right to refuse any Subcontractor with or without cause.

1.4.2 Personnel:

1.4.2.1 Employ an experienced superintendent to oversee all operation.

1.4.2.2 Work shall not proceed without adequate supervision present at all times.

1.4.2.3 Work shall be accomplished by workers certified in their trade as masters, journeymen, and apprentices in accordance with regulations of the governing authority or customary practice. Utilize workers with skills in proportion to complexity of tasks required.

1.4.2.4 Publix reserves the right to reject personnel with or without cause.

1.4.3 Quality Standards

1.4.3.1 Work shall be accomplished to ensure safety to all personnel during installation and after occupancy.

1.4.3.2 Work will be judged by Publix in comparison to work of similar types. Substandard construction as judged by Publix Representative will not be accepted.

1.4.3.3 Neatness counts. Make all joints, connections, unions, etc. with proper care to insure that tight connections are made without excess material,

1.4.3.4 Install conduit with runs straight, accurately formed radiuses at bends, and adequate supports.

1.4.4 Regulations: Comply with applicable provisions of the following codes (latest version adopted by governing agencies):

National Fire Protection Association (NFPA)
National Electrical Code
Local Utility Code
Local Building Code
Safety Code for Mechanical Refrigeration.
Conform to governing codes, ordinances and regulations of city, county and state having jurisdiction. Where local codes are not applicable, conform to National Electric Code/State Electric Code where Project is located.
OSHA - for construction

1.4.5 Test the entire system. The solid neutral wire shall be tested for thorough grounding and all hot wiring shall be tested for shorts and grounding.

1.4.6 Participate in the Pre-Construction Conference.

1.4.7 Substitutions: Comply with Section 01 25 00 Product Options and Substitutions. In general, substitutions are not allowed.

1.5. Sequencing:

1.5.1 Notify General Contractor, or any others, of all required chases, sleeves and openings required so that the work can be accomplished without delay. Provide necessary sleeves, etc., to be installed. Otherwise, Electrical Sub-Contractor shall pay for appropriate trades to perform cutting and patching.

1.5.2 Joists, girders, beams, columns or reinforcing steel shall not be cut.

1.5.3 Where construction necessitates the routing of conduit through structural members, framing or under or through footings, permission to make such installation shall first be obtained from the Structural Engineer.

1.6. Temporary Operation:

1.6.1 The Owner may require operation of parts or all of the installation prior to Final Acceptance.

1.6.2 Cost of utilities for such operation shall be paid by the Contractor. This operation does not constitute acceptance of the Contractor's Work.

1.6.3 All electricity used for construction shall be paid for by the General Contractor. Furnish and install temporary electrical connection and meter for construction purposes. Remove temporary service when use is no longer required. Clean up and landscape as required.

1.7. Emergency Repairs: The Owner reserves the right to make emergency repairs as required to keep equipment in operation without voiding the Contractor's guarantee nor relieving the Contractor of his responsibilities during the guarantee period.

1.8. Operating Instructions and Service Manual:

1.8.1 Provide two (2) neatly bound copies of maintenance and instructions book, parts lists pertaining to all equipment furnished.

1.8.2 Each section shall be indexed and include parts lists, instruction books, suppliers' phone numbers and addresses, and individual equipment guarantees all in separate sections.

1.8.3 Representatives of the Owner shall be instructed by the Contractor as to complete care and operation of the electrical system. Inform the Engineer in writing as to the persons who received the instructions and the date that this was done.

2. Products:

2.1. Materials:

2.1.1 All materials shall be new, of the best quality.

2.1.2 All similar materials such as switches, panelboards, starters, contactors, fuses, circuit breakers, junction boxes, and other classes of equipment shall be of the same type and manufacturer.

2.1.3 All equipment and materials shall be furnished in strict accordance with the equipment schedule and Specification requirements.

2.2. Panelboards

2.2.1 The panelboards shall be dead-front, totally enclosed, with locking doors, with quick-lab ambient corrected bolt-in type circuit breakers in one, two or three pole common trip units as noted on the Drawings, UL approved. The panelboards shall be 3 phase, 4 wire, solid neutral, ground bus, voltage and number of poles as noted on the Drawings. Panelboards shall have copper bussing. The circuits shall be connected to individual poles of the panel exactly as shown on the Drawings, and the panel shall be provided with a typewritten directory.

2.2.2 All panels shall be factory assembled.

2.2.3 Ground fault circuit interrupters shall be provided on each circuit as required by the NEC or where specified on the Drawings.

2.2.4 Provide all panels sized as noted on the Drawings or as required.

2.2.5 Circuit breakers supplying High Intensity Discharge (HID) shall be equipped with HID compensated breakers.

2.2.6 Equipment ground bus and neutral bus to be copper with screw type lugs.

2.2.7 All panels noted on drawings with isolated ground circuits shall have a copper isolated ground bus in addition to equipment ground bus.

2.2.8 Acceptable Manufacturers:

G.E
Square - D
ITE Div. of Siemens-Allis

2.3. Service and Switchboard

2.3.1 Secondary service entrance shall be as indicated on the Drawings. and shall be:

2.3.1.1 Pad mounted transformer

2.3.1.2 Coordinate Publix drawings with site electrical drawings. Conflicts are to be brought to the Engineer for clarification/resolution.

2.3.2 Verify method of service with local utility company and obtain written approval from Publix Representative before commencement of work.

2.3.3 Obtain all utility requirements for commercial service installation. Electrical Contractor must provide all requirements of the utility for a complete and operational system.

2.3.4 System shall be grounded in conformance with NEC. and as shown on Drawings.

2.3.5 All switchgear and panels shall be sized as noted on the Drawings or as required.

G.E.
Square - D
ITE Div. of Siemens-Allis,

2.4. Main Switchboard

2.4.1 General: Furnish and install the service entrance distribution switchboard as herein specified and shown on the Drawings.

2.4.2 The switchboard shall meet Underwriters' Laboratories enclosure requirements and be furnished with an Underwriters' Laboratories label

2.4.3 Construction: Square D Busstack construction or approved equal.

2.4.4 Enclosure Construction

2.4.4.1 The switchboard framework shall consist of steel channels welded or bolted to the frame to rigidly support the entire shipping section for moving on rollers and floor mounting. The framework is to be formed, code gauge steel, rigidly welded and bolted together to support all cover plates, bussing and component devices during shipment and installation.

2.4.4.2 Each switchboard section shall have an open bottom and individual removable top plate for installation and termination of conduit. top and bottom Conduit areas are to be clearly shown and dimensioned on the Shop Drawings. Switchboards are to be front access only. The wireway front covers are to be hinged to permit access to the branch switch load side terminals without removing the covers. All enclosure plates shall be screw removable and small enough for easy handling by one man. The paint finish shall be gray enamel over a rust-inhibiting phosphate primer.

2.4.5 Bussing:

2.4.5.1 The switchboard bussing shall be plated and of sufficient cross-sectional area to continuously conduct amperage as indicated on Drawings with a maximum average temperature rise of 50 degrees c. above an ambient temperature of 25 degrees c.

2.4.5.2 The buss shall be aluminum with 100% neutral with an integrated equipment rating of 100,000 amps (sym) A.I.C. at 240V, 65,000 amps (sym) A.I.C. at 480V.

2.4.5.3 The buss shall extend the full length of the available feeder area.

2.4.6 Withstand Rating:

2.4.6.1 The switchboard, as a complete unit, shall be given a single withstand short circuit current rating by the manufacturer. The withstand short circuit current rating shall certify that all equipment is capable of withstanding the stress of a fault equal to the interrupting rating of the least overcurrent protective device contained therein. Such rating shall be established by actual tests by the manufacturer on equipment constructed similarly to the subject switchboard This test data shall be available and shall be furnished to the Engineer, if requested, with or before the submittal of Approval Drawings.

2.4.6.2 The complete unit shall have interrupting rating of not less than 100,000 amps rms symmetrical at 240 volts,65000 amps RMS symmetrical at 480V.

2.4.6.3 All devices in the switchboard to be fully rated. Series rating is unacceptable.

2.4.7 Main Switch (Two-step stored energy electronic trip molded case circuit breaker):

2.4.7.1 Individually fixed mounted through contact type, equipped with an electric trip device for remote shunt trip operation.

2.4.7.2 Circuit breakers shall have power terminals to accommodate either cable or bolted buss connections.

2.4.7.3 Circuit protective devices shall be two-step stored energy type circuit breaker, UL listed for 100% continuous current when applied in QED switchboards. Sensor ampere ratings shall be as shown on the drawings or as otherwise indicated.

2.4.7.4 Provide a fixed instantaneous (High Level Selective Override) circuit on breaker(s). The circuit shall have a defeatable instantaneous adjustment to allow the breaker to remain closed for up to 30 cycles during overcurrents below the rms symmetrical short in withstand ratings. The circuit shall trip instantaneously when current levels exceed applicable withstand ratings.

2.4.7.5 Circuit breakers shall be factory sealed and shall have a date code on its face. Poles shall be labeled with respective phase designs.

2.4.7.6 Breaker faceplate shall indicate rated ampacity. Breaker faceplate shall indicate UL and IEC certification standards with applicable voltage systems and corresponding AIC ratings.

2.4.7.7 Each circuit breaker shall be equipped with a push-to-trip button to operate the trip mechanism mechanically.

2.4.7.8 Provide local control push buttons to OPEN and CLOSE circuit breaker. Color coded visual indication of contact position (OPEN or CLOSED) shall be provided on the front of the breaker. Provide for local manual charging following CLOSE operation, with color coded visual indicating of charging status. Visual indicator shall indicate CHARGED only when closing springs are completely charged.

2.4.8 The main switch shall be as manufactured by Square "D" or equal as approved by Publix Engineer 100% rated at specified amps - no substitutes.

2.4.9 Bus Duct: (When Used)

2.4.9.1 Service entrance bus duct shall be amps as shown on Drawings, 3 phase, full neutral, suitable for 120/208 volts service, inside-outside location.

2.4.9.2 The bus duct shall be complete with all necessary elbows, transformer taps, fire stops, wall flange for fittings and supports to provide a satisfactory installation as indicated on the Drawings.

2.4.9.3 The bus duct shall be of the same manufacturer as the main switchboard.

2.4.9.4 The bus duct shall have the same interrupting rating as the main switchboard.

2.4.9.5 Support for bus duct by General Contractor.

2.4.10 Fusible Switches:

2.4.10.1 The fusible switches shall be quick-make, quick-break and suitable for use on the services described by the size shown on the associated Drawings. The units shall be listed and approved by Underwriters' Laboratories for heavy duty entrance use and where applicable, shall be dual horsepower rated for both standard one-time or dual-element fuses. The fusible switches shall be group mounted in panel-type construction. Each switch shall be equipped with Class 'R' rejection type fuse clips per Bussman or Littlefuse KTN-R, Class "R" type.

2.4.10.2 Each switch is to be enclosed in a separate steel enclosure. The enclosure shall employ a hinged cover for access to the fuses which shall be interlocked with the operating handle to prevent opening the cover when the switch is in the on position. This interlock shall be constructed so that it can be released with a standard electrician's tool for testing fuses without interrupting service. The units shall have padlocking provisions in the off position and the operating handle position shall give positive switch position indication, i.e. horizontal off, diagonal on. Switches shall pass industry standard 12T with standability tests and fuse race tests as described elsewhere in the Specifications.

2.4.10.3 All fusing as manufactured by Bussman or Littlefuse; dual-element and current limiting as shown on the Drawings.

2.5. Contactors

2.5.1 Contactors shall be manufactured by Square 'D', Siemens, or General Electric; or others as approved by Publix in writing specifically for this project.

2.5.2 Contactors shall be designed to carry the full rated current on a continuous basis.

2.5.3 Contactors shall be electrically operated, mechanically held, and suitable for remote operation. The mechanically held contactors shall be supplied with coil clearing contacts which disconnect the magnet coil when operated to eliminate any AC magnetic hum.

2.5.4 Contactors shall be as sized as shown on the Drawings and be installed in a NEMA 1 enclosure.

2.6. Wire and Cable

2.6.1 All wires shall be THHN/THWN copper unless otherwise noted. No wire shall be smaller than #12 AWG except control wire. No aluminum wire will be permitted, unless otherwise noted.

2.6.2 Except as noted, no conductors smaller than #12 AWG shall be used. #10 AWG shall be used on runs of over 100 ft unless otherwise noted.

2.6.3 In no case shall the number of conductors installed in conduits exceed the maximum fill allowed by the NEC. Should this occur on the Drawings, the Electrical Contractor shall inform the Engineer before installation. Conductors shall not be installed beneath the heating equipment foundations.

2.6.4 Control wire for the air conditioning and refrigeration equipment shall be type THHN stranded and no smaller than #14 or where indicated on Drawings.

2.6.5 Pull boxes are allowed only when required by code. Wire must be in one unspliced run to all secondary panel feeders, and in one unspliced run to all air conditioning and refrigeration units.

2.6.6 Install all phase conductors, neutral conductor, and ground conductor from panel board to the equipment connection junction box. If the neutral conductor is not needed it shall be taped and identified in the J.B. for future use.

2.7. Conduits and Raceways

2.7.1 PVC: Schedule 40 conduit may be used under floor slab. Riser shall be heavy wall hot dipped galvanized steel.

2.7.2 No PVC shall be installed above floor slab.

2.7.3 GRC 90's shall be used on all runs over 50'.

2.7.4 Underfloor Duct:

2.7.4.1 Shall be "Walkerduct" (no substitutes) as manufactured by Walker/ Textron Company, Parkersburg, West Virginia. Install complete service fittings, blanking plates, junction boxes, covers, etc., with threaded fittings. Use standard No. 2 and No. 4 duct with #2-24 x 2 x 2 or #2-12 x 2 x 2 inserts as shown on Drawings; adapters #1126a-3/4", for cable. Install Walker Duct junction boxes with brass tops recessed to receive terrazzo/methyl methacrylate. Verify locations of duct with Drawings.

2.7.4.2 Top of cut insert shall be 3/4" below finish floor line.

2.7.5 Raceways concealed in wall or ceiling spaces shall be standard weight hot dipped galvanized EMT with compression couplings or as specified below.

2.7.6 All "L"S" used to turn up through concrete slabs shall be thick wall galvanized conduit & couplings.

2.8. Time Switches

2.8.1 Provide time switches as manufactured by Intermatic (no substitutes)

2.8.2 Time switches shall be DPST, 40 amperes, 120 volt, AC motor and astronomic dial, spring-wound carry-over.

2.8.3 Time clocks shall be labeled.

2.9. Outlet Boxes, Fittings, and Connectors

2.9.1 Unless hereinafter specifically noted or shown on the Drawings, the minimum size of branch circuit outlet boxes for concealed work shall be 4"x4"x1 1/2" for square boxes and 4"x1 1/2" for octagon boxes.

2.9.2 Boxes shall be provided with plaster covers of sufficient depth to bring the face of the outlet substantially flush with the finished wall or ceiling. The box shall not project beyond the finished wall or ceiling line.

2.9.3 Outlets in concrete block, or other hollow masonry walls:

2.9.3.1 Openings in concrete block walls for outlets shall be cut to exact size with a masonry saw.

2.9.3.2 Switch and receptacle mounting heights, as specified or noted may be adjusted so that the bottom of the outlet box may rest on the top of the wall block at the nearest mortar joint

2.9.3.3 All unused outlets shall be provided with blank covers.

2.9.4 Where conduits 1" or larger enter outlet boxes, the boxes shall be 4 11/16"x4 - 1/16"x2 1/4" minimum. Boxes shall be of ample size to provide conductor spaces as required by the National Electric Code.

2.9.5 "Handy", utility or sectional boxes will not be permitted in masonry walls.

2.9.6 When more than one switch or device is shown ganged at any location a one-piece box of suitable size shall be installed.

2.9.7 Outlet boxes intended for the installation of lighting fixtures shall be equipped with 3/8" "No-Bolt" or equal fixture studs.

2.9.8 Unless otherwise noted, all switches, receptacles and devices shown on the exterior of building walls shall be installed in flush mounted boxes provided with weatherproof gaskets.

2.9.9 All conduit fittings (condulets) shall be of the cast metal threaded hub type, Crouse-Hinds, or Appleton.

2.9.10 All rigid conduits entering panels, cabinets, outlet boxes, etc., shall be provided with locknuts on both sides of such devices driven tight so as to maintain positive electrical and mechanical continuity throughout the conduit system. Insulated bushings shall be installed on the inside of the termination

2.9.11 Threadless couplings shall not be used for rigid conduit.

2.9.12 All EMT couplings and box connectors shall be of the set screw or compression type. Compression type shall be used in all coolers/freezers, or in outdoor applications. Cast connectors or couplings will be refused.

2.9.13 All flex conduit shall be steel w/steel fittings, and shall extend a maximum of 10 ft. unless approved by Publix.

2.9.14 All receptacles labeled GFI on drawings to be supplied as GFI receptacles. Feed through series GFI circuit is unacceptable.

2.9.15 All receptacles labeled IG (isolated ground) shall be IG listed and shall get a separate (from other equipment ground) green with yellow stripe isolated ground conductor. All isolated ground circuits to include equipment ground conductor.

2.9.16 All conduits to have an equipment ground conductor in addition to conductors shown on drawings.

2.10. Junction Boxes: Wiring shall be neatly arranged, bundled and laced in proper groups.

2.11. Pull Boxes

2.11.1 Pull boxes shall be installed in conduit system where needed whether or not they are shown on the Drawings.

2.11.2 Boxes shall be constructed of code gauge galvanized steel with screw covers.

2.12. Safety Switches

2.12.1 The basis of design and quality standards is Square - D.
2.12.2 All units shall be of the same manufacturer.

2.12.3 Safety switches shall be fusible, solid neutral, 277 volt, quick-make and quick-break with visible blades, single throw, general duty, of size and fusing as shown on the Drawings, or required for application. switches mounted out of doors shall be weatherproof, heavy duty type with protective barrier over hot lugs.

2.12.4 Exterior units shall be in rain tight enclosure. (NEMA 3R)

2.13. Wall Switches

2.13.1 Switches shall be flush mounted, quiet tumbler type, 250 volts, 20 amp. rated.

2.13.2 Wall plates shall be smooth, 302 stainless steel, one piece as indicated on the Drawings.

2.13.3 Switches shall be installed on the "strike" side of the door swing.

2.13.4 Switches shown near doors shall be not less than two inches and not more than twelve (12) inches from the trim.

2.14. Receptacles

2.14.1 All units shall be totally enclosed composition with side and rear connections. All units shall be equipped with ears and have a rating as listed below. All devices shall be Hubbel, Pass and Seymour or Leviton. See symbol schedule on construction drawings.

2.14.2 Duplex convenience outlets with grounded shall be 20 amp, 125 volt parallel slot, "U"-shaped ground, heavy duty "I" rated.

2.14.3 120/208 volt, 3 wire receptacles with ground shall be single 3 wire polarized receptacles with grounding terminal.

2.14.4 Weatherproof receptacles shall be duplex, 20 amp, 125 volt parallel slot receptacle with "U" shaped grounding slot in flush, weatherproof box with gasketed cover and self closing, spring door.

2.14.5 Floor outlets shall be 20 amp, 125 volts single or duplex parallel slot receptacles with "U" shaped grounding slot as called for, located as shown on the Drawings. Provide slotted brass flush cap for sealing when not in use.

2.14.6 All device cover plates shall be smooth 302 stainless steel, one piece.

2.15. Lighting Fixtures

2.15.1 All lighting fixtures shall be furnished by electrical contractor and installed by appropriate trade. In-line fuses shall be included with all fluorescent, LED fixtures.

2.15.2 In areas of suspended ceilings two safety wires per fixture will be supplied and hung by the suspended ceiling Subcontractor; the Electrical Subcontractor shall tie fixtures in areas of suspended ceilings with two (2) #10 wire up to the roof joists per fixture.

2.16. Electric Door Openers: Electric door openers shall be furnished and installed by others but wired with two (2) 115 volt, 20 amp, 3 wire circuits to control box at the top of the door.

2.17. Intercom/Music/Paging System

2.17.1 The Contractor shall supply and install sound outlets, conduit and junction boxes with equipment as shown on the Drawings (including architectural ceiling grid plan).

2.17.2 The outlet boxes shall be standard boxes provided with blank covers.

2.17.3 The conduit shall be not less than 1/2".

2.18. Telephone Outlets:

2.18.1 Provide outlets as located on Drawings,

2.18.2 See Drawings for location and size of conduit runs.

2.18.3 Provide stainless steel outlet boxes and cover plates.

2.18.4 Locate telephone control box inside telephone equipment room.

2.18.5 Provide outlets for wall phones at indicated locations.

2.19. Standby Electric-Emergency Generator and Transfer Switch

2.19.1 Emergency generator and automatic load transfer switch will be furnished by Publix and shall be set in place and connected by the contractor.

2.20. Grounding

2.20.1 All wiring system shall be grounded in accordance with article 250 of the NEC. All items of electrical equipment not connected directly and mechanically to the conduit system shall be connected thereto with a jumper of suitable size. All breaks in the continuity of the conduit system shall be bridged with a jumper of the proper size between the next adjacent outlet or junction boxes regardless of the information on the drawings.

2.20.2 All conduit runs shall include an equipment ground conductor appropriately sized for the associated circuits.

2.20.3 Due care must be taken as not to interchange circuit neutrals, as over heating of the panel board may occur.

2.20.4 A green THHN/THWN insulated stranded 12 AWG conductor shall run unbroken from the system ground through the conduit system to the ground connections at all receptacles, switches and lights. Appliance outlets shall be in accordance with NEC. Table 250-95.

2.20.5 Isolated ground, as required in the drawings, shall be a green THHN/THWN insulated stranded 12 AWG (min.) with yellow tracer line along the entire length.

2.21. Tests

2.21.1 The Electrical Contractor shall test all wiring and equipment for grounds, continuity and proper operation.

2.21.2 The Electrical Contractor shall demonstrate by use of a 500 volt megger, the insulation resistance of any circuit or group of circuits as noted in the plans. Parallel conductor uniformity of resistance shall also be verified.

2.21.3 Where such tests indicate the possibility of faulty insulation, the Electrical Contractor shall locate the point or points of such faulty insulation and shall pull out the faulty conductor or conductors, replace same with new and demonstrate the elimination of faults.

2.21.4 Cables shall be considered defective if they do not pass test and inspections and shall be replaced at no cost to the Owner.

3. Execution

3.1. General:

3.1.1 Temporary Electric Service: Install and maintain 120/240 volt, 1 phase, 3 wire, 200 amp temporary service. power Consumption cost only paid by Contractor. Installation shall comply with OSHA; NEC; and all local requirements.

3.1.2 The locations of the outlets, switches and convenience outlets shall be approximately as shown on the drawings and as specified, but exact locations shall be as directed by Publix Field Representative. The running of all circuits, switch legs and conduits is purely diagrammatic. Do not scale from Drawings.

3.1.3 Rigging and hoisting that is incidental to the electrical portion of the Work shall be performed by the Electrical Contractor. This shall include the hoisting of equipment supplied by both the Electrical Contractor and Publix that are installed by the Electrical Contractor.

3.1.4 Coordinate this work with other trades so that interference between the trades can be avoided.

3.1.5 All channels, angles and other members for the installation and support of the electrical equipment shall be furnished and installed by the Electrical Contractor.

3.1.6 The attachment of boxes, conduit, hangers, etc. shall be by machine screws or through bolts on steel, expansion bolts in concrete and masonry, and wood screws in wood. Wood composition plugs shall not be used.

3.1.7 Panelboards shall not be used as raceway or have splicing performed therein.

3.2. Excavation and Backfilling:

3.2.1 Do all excavating required to install any underground conduit and after the same are in place and tested and approved. Thoroughly tamp earth around conduits and remove earth from premises as directed.

3.2.2 Underground conduit must be covered by a minimum of three (3) inches of underslab fill.

3.3. Conduit, Raceways, Etc.

3.3.1 All metallic non-current carrying components and enclosures of the electrical wiring system are to be bonded and grounded.

3.3.2 Furnish all necessary fittings and supports to make the raceways or busways fit the building structure and equipment. Raceway size shown or called for are minimum. The Electrical Contractor shall verify all raceway sizes with the dimensions of the particular cable to be installed.

3.3.3 All exposed raceways and conduit shall be neatly installed perpendicular or parallel to walls and floors. No exposed conduit is allowed in sales area or work rooms (except where required in exposed structure areas of stores without ceilings.)

3.3.4 All raceways shall be supported by approved types of galvanized wall brackets, ceiling trapeze hangers, pipe hangers or pipe straps. Perforated metal strap or tie wire shall not be used for any conduit or raceway.

3.3.5 All conduit located above ceilings shall be EMT or ERC, and must be installed within the area provided for on Drawings.

3.3.6 Areas for work of various trades: Conform to locations as defined in Section 01 11 00 Summary of Work.

3.3.7 All conduit located underground may be PVC Schedule 40, except service entrance which may be concrete encased PVC schedule 40 or heavy wall rigid conduit, or weather proof buss duct as shown. Underground conduit lengths greater than 50' shall include GRC 90.

3.3.8 All job cut threads shall be given a coat of rust-inhibitive paint.

3.3.9 Caulk where conduit passes through walls, providing approved fire-stopping system where required. Caulk where conduit passes through walk-in freezers and coolers. All cutting in block work must be done with carborundum saw; no chisel or hammer work will be accepted.

3.4. Circuit Identification: Label all panels by approved means to identify circuits. Install equipment in cans, as per Drawings. Mark all panels, time clocks, starters, contactors, disconnect devices and main panels on the outside with riveted or approved attached plastic laminated labels 1" minimum high w/ 3/4" minimum letters of contrasting colors. All circuits shall be identified by typed lettering of contrasting color to tags & covered w/approved plastic cover.

3.4.1 All receptacles shall be labeled with panel and circuit information by approved means.

3.5. All panelBoards shall include a typed directory of all associated loads. Refrigeration circuits shall be labeled with associated refrigeration system number.

3.6. Installation of Items Supplied by Others:

3.6.1 All store fixtures and equipment, including shelf gondolas and check out stands, will be furnished and set in place by Publix, or others, and this Contractor shall make all required electrical connections. Verify items and their locations with Publix's Representative.

3.6.2 Meat and Deli Department equipment will all be with plug-in connectors. Do not wire direct. (unless directed by Publix's Representative).

3.6.3 All wiring and mounting shall be in cooperation with and under the direction of the Publix's Representative.

3.6.4 Make connection to electric water heaters as furnished by Publix.

3.7. Control of Outlets:

3.7.1 Branch lighting circuits controlled at panels by a switch shall be located at the Manager's Office, unless indicated otherwise.

3.7.2 Convenience outlets shall have no intermediate control between panels and outlets unless noted on the drawings.

3.8. Connection of Conductors: All joints between conductors shall be connected with approved pressure type, connectors and insulated with scotch 33 tape and friction tape, if insulation is not provided in pressure type connector used.

3.9. Sleeves at Fire Retardant Lumber: If fire treated lumber is required by local codes and ordinances, the Electrical Contractor shall provide PVC fitting boxes and piping that penetrate the fire resistant lumber. If the PVC components are not approved by local code, other approved methods must be used to protect against the salt in the fire resistant lumber.

3.10. Final Inspection: All of the following items must be completed prior to final inspection. No exceptions will be made and no final payment will be made until all items are completed.

3.10.1 Thoroughly clean all parts of the apparatus and equipment. Exposed parts which are to be painted shall be thoroughly cleaned of cement, plaster, and other material and all oil and grease spots shall be removed repaint or touch up as required to make look like new. Such surfaces shall be carefully wiped and all cracks and corners scraped out.

3.10.2 Exposed metal work shall be carefully brushed down with steel brushes to remove rust and other spots and touched up with primer.

End of Section 26 00 00

NOTE: THIS DOCUMENT MAY HAVE BEEN ELECTRONICALLY TRANSMITTED. IF UNSIGNED, IT CANNOT BE FILED FOR PUBLIC RECORD. PUBLIC RECORD FILINGS REQUIRE SIGNED AND SEALED DOCUMENTS.

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8790 GULF HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE: PROJECT MANUAL

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	2210194
DATE	04/21/2022
DRAWN	ET
CHECKED	RKS

PM.12

DECOR SCHEME: EVERGREEN

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LIFE SAFETY GENERAL NOTES:

A. REFER TO ENGINEERING SHEETS FOR COMPLETE INFORMATION REGARDING EXITING AND FIRE RELATED DEVICES (SMOKE DETECTORS, MANUAL PULL STATIONS AND AUDIO AND VISUAL FIRE ALARM SIGNALIZATION DEVICES).

B. REFER TO ELECTRICAL DRAWINGS FOR EMERGENCY LIGHTING AND LOCATIONS

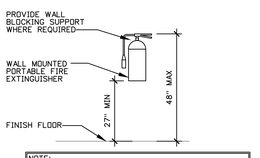
C. THIS IS NOT A FLOOR PLAN, THIS LIFE SAFETY PLAN IS TO SHOW REQUIRED EGRESS, RATINGS AND LIFE SAFETY EQUIPMENT ONLY.

D. REFER TO ENGINEERING DRAWINGS AND SPECIFICATIONS FOR EQUIPMENT INFORMATION AND LOCATIONS.

E. REFER TO ARCHITECTURAL SHEET T1.1 FOR CONSTRUCTION AND CODE INFORMATION.

F. FIRE EXTINGUISHERS SHALL BE CLASS ABC EXCEPT WHERE NOTED OTHERWISE (@ KITCHEN COOKING LINE, CLASS K, AS INDICATED). TOP OF FIRE EXTINGUISHERS SHALL BE INSTALLED AT TYP 48" AFF (TOP MAX. 5' AFF AND BOTTOM MIN 4" AFF).

G. REFER TO SHEET T1.1 FOR OCCUPANT LOAD AND EGRESS ANALYSIS CHART.



NOTE:
ONE PORTABLE FIRE EXTINGUISHER WITH MINIMUM RATING OF 2A 10BC SHALL BE PROVIDED AND SHALL BE MOUNTED 48" AFF TO TOP OF HANDLE, NOT TO EXCEED 75' TRAVEL DISTANCE, NEAR EXITS, AND SHALL BE CURRENTLY DATED AND TAGGED BY A LICENSED FIRE EQUIPMENT COMPANY.

E6 / LS1.1 WALL MOUNTED FIRE EXTINGUISHER DETAIL

1/2"=1'-0"

LIFE SAFETY PLAN LEGEND:

	EXIT SIGN, SEE ELECTRICAL.
2A 10BC	TYPE "2A 10BC" EXTINGUISHERS.
K2	TYPE "K" FIRE EXTINGUISHERS. FOUND IN KITCHEN AREAS
	PATH/DIRECTION OF EGRESS
	EXISTING 4 HR RATED WALL

A1 / LS1.1 LIFE SAFETY PLAN

1/8"=1'-0"

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CLIENT NAME
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LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
6700 W GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
LIFE SAFETY PLAN

REV	RELEASE
	100% SUBMITTAL: 21 APR 2022

PROJECT NO.	2210764
DATE	04/21/2022
DRAWN	CS
CHECKED	MB

LS1.1

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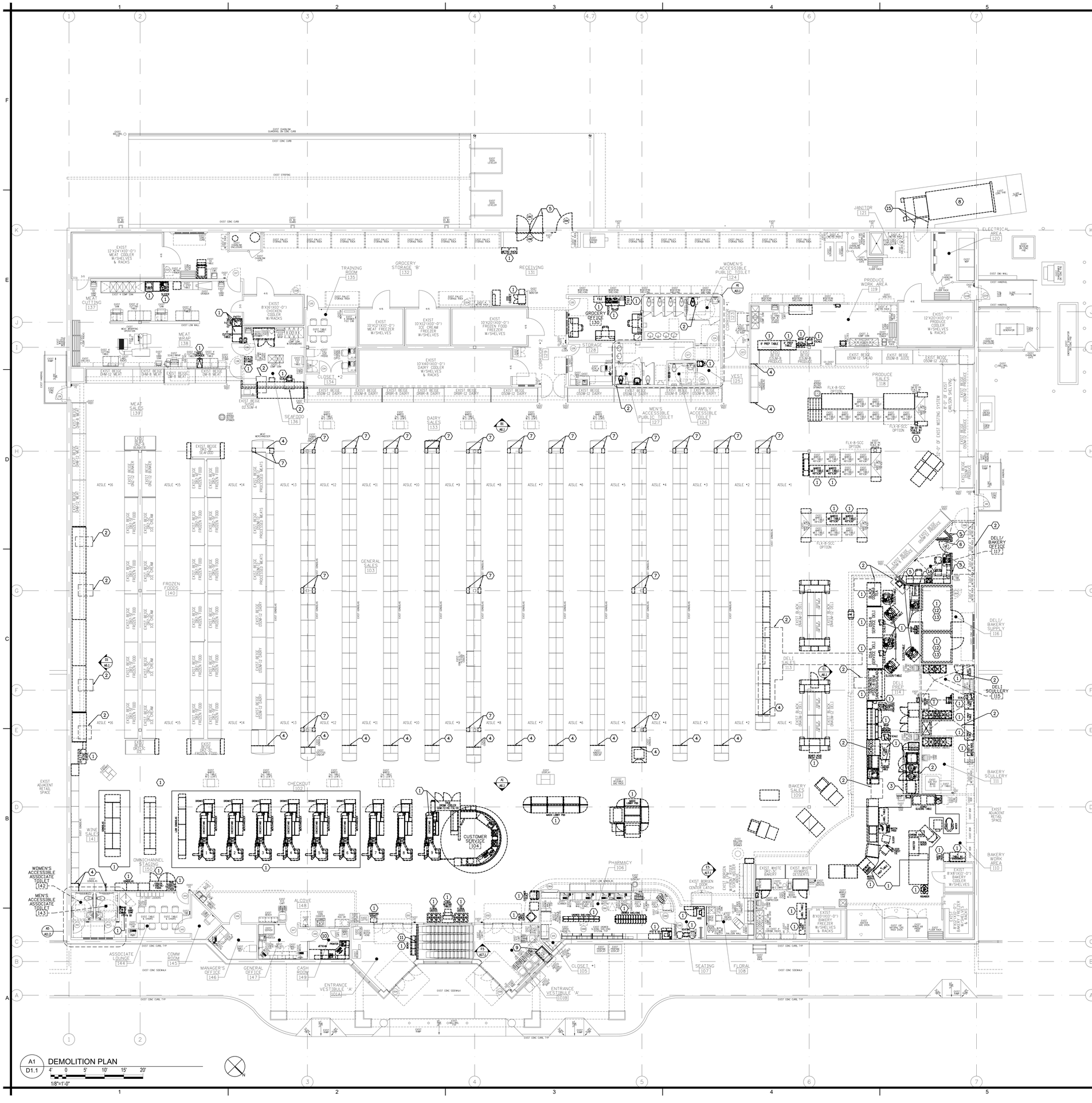

A1 D1.1 DEMOLITION PLAN

4' 0 5' 10' 15' 20'

1/8"=1'-0"

N

DEMOLITION PLAN GENERAL NOTES:

A. DEMOLITION INCLUDES BUT IS NOT LIMITED TO ITEMS SHOWN DASHED.

B. THE CONTRACTOR SHALL FIELD VERIFY THE EXTENT OF DEMOLITION.

C. GENERAL CONTRACTOR TO VERIFY ALL CONDITIONS PRIOR TO DEMOLITION. DISCREPANCIES BETWEEN DESIGN AND EXISTING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.

D. CARE SHALL BE TAKEN DURING DEMOLITION SO AS TO NOT DAMAGE OR ALTER ANY EXISTING STRUCTURAL MEMBERS OTHER THAN THOSE DESCRIBED IN THESE DOCUMENTS. THE PUBLIX REPRESENTATIVE SHALL BE NOTIFIED IMMEDIATELY IF ANY DAMAGE OCCURS, OR IS DISCLOSED DURING DEMOLITION. CARE SHALL BE TAKEN TO INSURE SUPPORT IS PROVIDED WHEREVER DEMOLITION IS PERFORMED.

E. SALVAGED MATERIAL OF VALUE IS PUBLIX OWNED, COORDINATE WITH PUBLIX REPRESENTATIVE.

F. REFER TO ENGINEERING PLANS FOR EXTENT OF MECHANICAL, ELECTRICAL, PLUMBING & STRUCTURAL DEMOLITION.

G. G.C. TO PROTECT SLAB FROM DAMAGE IN AREAS TO REMAIN. REFER TO SHEET S2.1 FOR SLAB REMOVAL COORDINATION.

H. ALL OBJECTS LOCATED IN PATH OF ENTRANCE VESTIBULE EMERGENCY BREAKAWAY DOORS SHALL BE REMOVED BY STORE ASSOCIATE TO ALLOW FOR ACCESS CLEARANCES.

DEMOLITION PLAN KEY NOTES:

1. EQUIPMENT TO BE RELOCATED.
2. DASH LINE INDICATES SLAB WORK. REF TO STRUCTURAL SHEET FOR ADDITIONAL INFORMATION.
3. REMOVE HOOD, RELATED DUCTWORK AND OTHER COMPONENTS.
4. REMOVE END PANEL FROM EXIST GONDOLA BACK.
5. REMOVE PORTION OF WALL AS SHOWN.
6. REMOVE DOOR(S) AND FRAME.
7. REMOVE ALL SHADOW/COLUMN BOXES AS SHOWN.
8. REMOVE EXISTING COMPACTOR. PREP FOR NEW COMPACTOR. REF ELECTRICAL FOR ADDITIONAL INFORMATION.
9. REMOVE EXISTING ATM BASE.
10. LABELED ITEMS IN CASH OFFICE SHALL BE RELOCATED AS SHOWN ON EQ1.1.
11. REMOVE LOW WALL.
12. REMOVE COOLER/FREEZER IN ITS ENTIRETY. REF ALL DISCIPLINE DWGS FOR ADDITIONAL INFORMATION.
13. GC TO COORDINATE WITH PUBLIX THE REMOVAL/RELOCATION OF FREEZER/COOLER ITEMS.
14. REMOVE PORTION OF WALL FINISH AND SUBSTRATE AS INDICATED. REF A1.1 FOR ADDITIONAL INFORMATION.
15. REUSE/REPLACE EXISTING CHUTE AS REQUIRED FOR NEW COMPACTOR.

DEMOLITION FINISH NOTES:

ENTRANCE VESTIBULES/PHARMACY:

1. REMOVE CARPET FLOOR FINISH DOWN TO SLAB.
2. REMOVE VINYL WALL BASE.

CENTRAL SALES:

1. REMOVE VINYL WALL BASE.

DEPARTMENT WORK AREAS (WHERE INDICATED ON PLANS):

1. REMOVE FLOOR FINISH DOWN TO SLAB.
2. REMOVE WALL BASE.

DEMOLITION PLAN LEGEND:

	ITEMS TO BE REMOVED, UNLESS NOTED OTHERWISE
	EXISTING WALL TO BE REMOVED
	EXISTING ITEMS TO REMAIN, PROTECT FROM DAMAGE
	REMOVE SLAB, REF: STRUCTURAL AND PLUMBING LOCATION

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CLIENT NAME

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
FEW MILE LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
DEMOLITION PLAN

STATE OF FLORIDA — MARCUS JAMES BOYLE — AR100919 — REGISTERED ARCHITECT
MARCUS J. BOYLE
FL# AR100919

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 2310764
DATE 04/21/2022
DRAWN CS
CHECKED MB

D1.1

DECOR SCHEME: EVERGREEN

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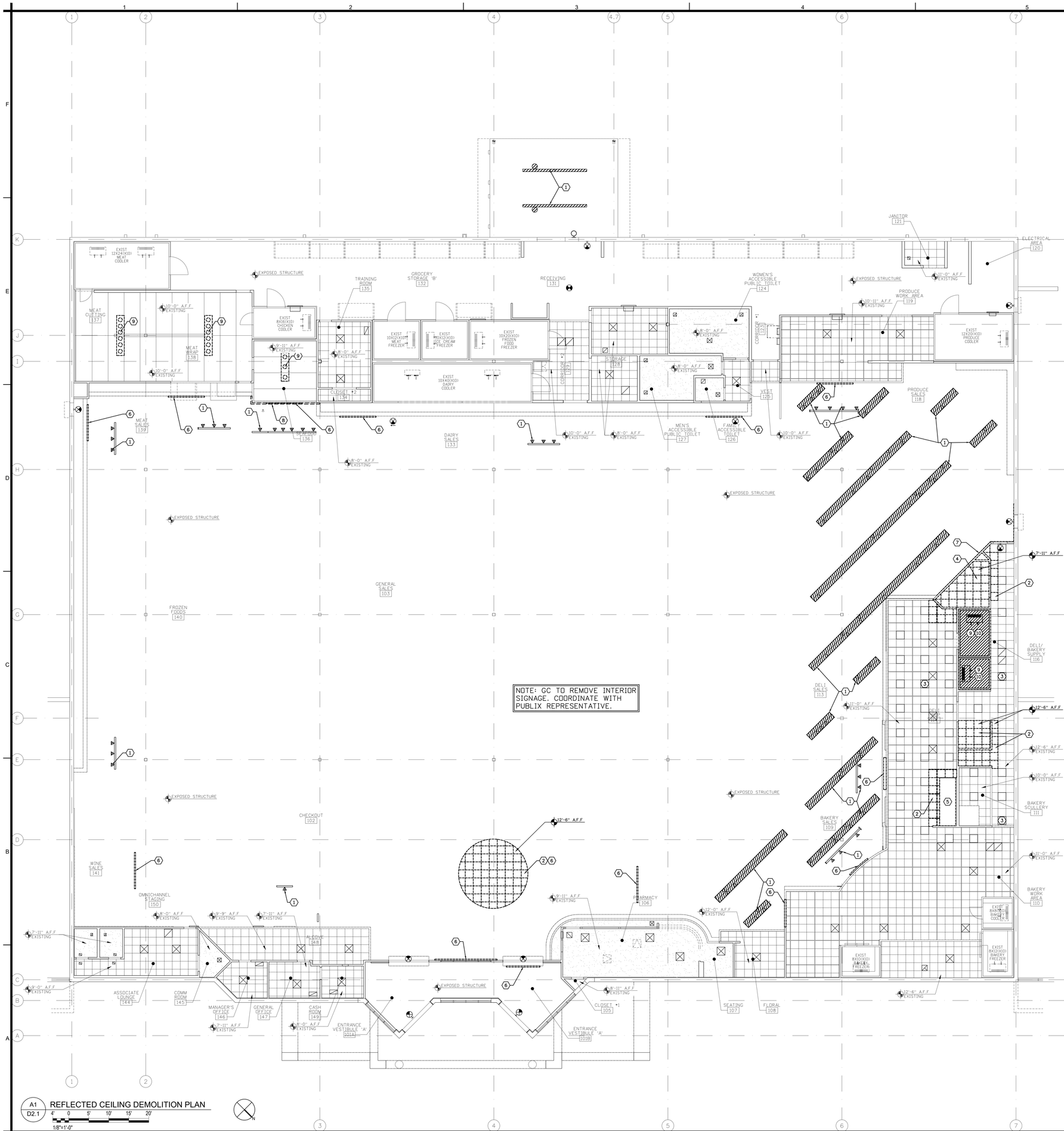

A1 / D2.1 REFLECTED CEILING DEMOLITION PLAN

1/8"=1'-0"

DEMOLITION REFLECTED CEILING PLAN GENERAL NOTES:

A. DEMOLITION INCLUDES BUT IS NOT LIMITED TO ITEMS SHOWN DASHED.

B. THE CONTRACTOR SHALL FIELD VERIFY THE EXTENT OF DEMOLITION.

C. GENERAL CONTRACTOR TO VERIFY ALL CONDITIONS PRIOR TO DEMOLITION. DISCREPANCIES BETWEEN DESIGN AND EXISTING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.

D. CARE SHALL BE TAKEN DURING DEMOLITION SO AS TO NOT DAMAGE OR ALTER ANY EXISTING STRUCTURAL MEMBERS OTHER THAN THOSE DESCRIBED IN THESE DOCUMENTS. THE PUBLIX REPRESENTATIVE SHALL BE NOTIFIED IMMEDIATELY IF ANY DAMAGE OCCURS, OR IS DISCLOSED DURING DEMOLITION. CARE SHALL BE TAKEN TO INSURE SUPPORT IS PROVIDED WHEREVER DEMOLITION IS PERFORMED.

E. SALVAGED MATERIAL OF VALUE IS PUBLIX OWNED, COORDINATE WITH PUBLIX REPRESENTATIVE

F. REFER TO ENGINEERING PLANS FOR EXTENT OF MECHANICAL, ELECTRICAL, PLUMBING & STRUCTURAL DEMOLITION.

DEMOLITION REFLECTED CEILING KEY NOTES:

1. REMOVE EXISTING LIGHTS, SPRINKLERS AND DIFFUSERS. REF: MECH, ELECTRICAL AND FIRE PROTECTION FOR ADDITIONAL INFORMATION.
2. REMOVE ACOUSTICAL CEILING TILE AND GRID AS INDICATED.
3. EXISTING LIGHT FIXTURE SHOWN FOR REFERENCE ONLY.
4. REMOVE PORTION OF CEILING SYSTEM IN PREPARATION OF NEW ROOM.
5. REMOVE EXISTING GREASE/HEAT HOOD. REF MECHANICAL FOR ADDITIONAL INFORMATION.
6. SIGNAGE TO BE REMOVED, PREP FOR NEW SIGNAGE SEE A6.2.
7. REMOVE GYPSUM BAND. REF A6.2 FOR FINISHES.
8. REMOVE PORTION OF SOFFIT AS INDICATED. REF A3.1 FOR ADDITIONAL INFORMATION.
9. REMOVE EXISTING EVAPORATOR COILS. REF REFRIGERATION FOR ADDITIONAL INFORMATION.
10. REMOVE COOLER/FREEZER IN ITS ENTIRETY. REF ALL DISCIPLINE DWGS FOR ADDITIONAL INFORMATION.

DEMOLITION REFLECTED CEILING LEGEND:

	EXISTING LIGHT FIXTURES
	DEMO LIGHT FIXTURES SEE ELECTRICAL
	EXIST SPRINKLERS
	DEMO SPRINKLERS
	EXISTING CEILING MOUNTED EXIT LIGHTING SEE ELECTRICAL
	DEMO CEILING MOUNTED EXIT LIGHTING SEE ELECTRICAL
	EXIST WALL MOUNTED EXIT LIGHTING SEE ELECTRICAL
	DEMO WALL MOUNTED EXIT LIGHTING SEE ELECTRICAL
	EXIST REFRIGERATION COIL
	DEMO REFRIGERATION COIL
	EXISTING GYP BOARD CEILING
	DEMO GYP BOARD CEILING
	EXISTING LAY-IN CEILING SYSTEM
	DEMO LAY-IN CEILING SYSTEM
	EXIST SOFFITS
	DEMO SOFFITS

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CLIENT NAME
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PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
6790 W GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

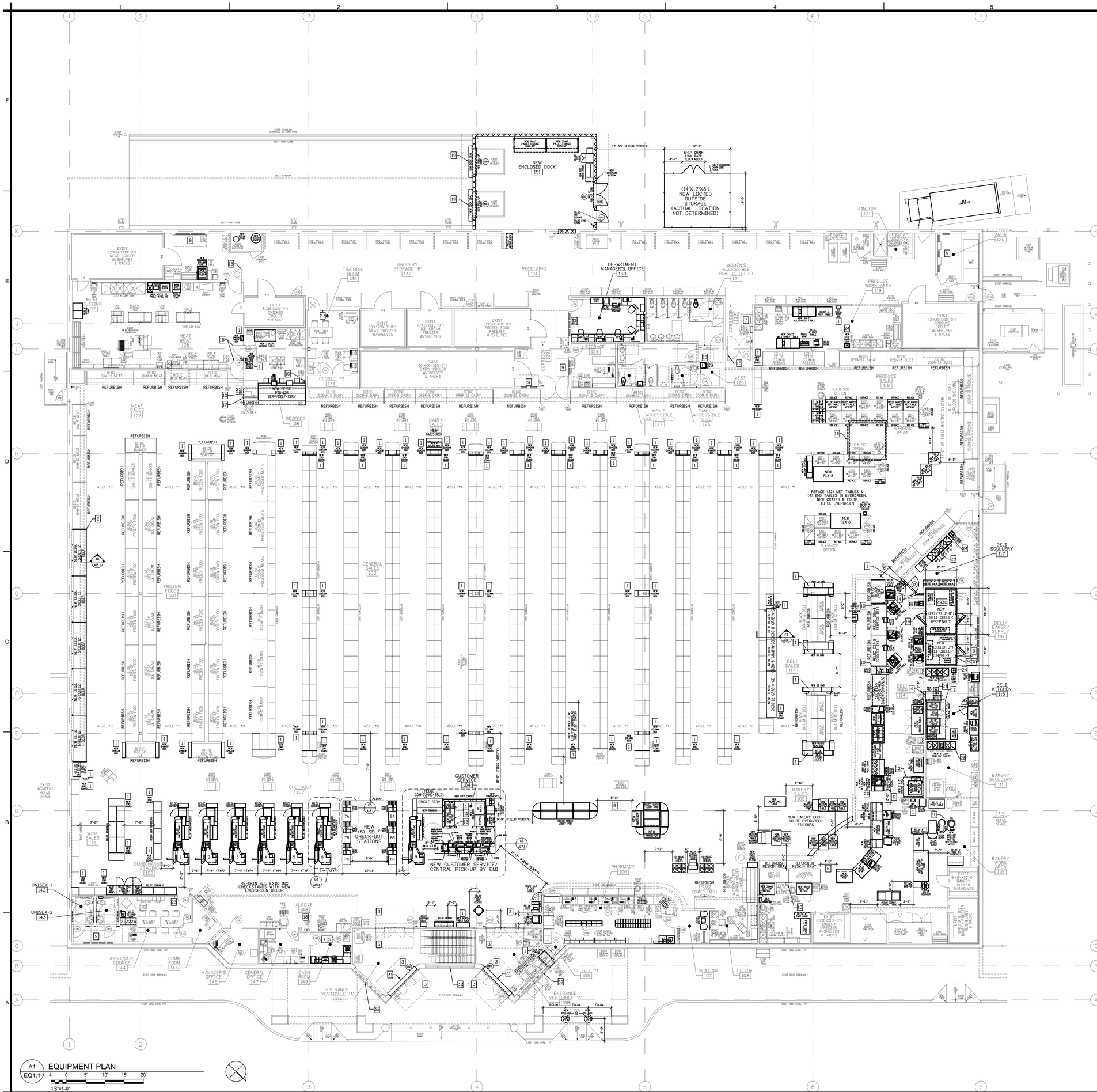
SHEET TITLE
REFLECTED CEILING DEMOLITION PLAN

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	2210794
DATE	04/21/2022
DRAWN	CS
CHECKED	MB

D2.1

DECOR SCHEME: EVERGREEN



A1 EQUIPMENT PLAN
EQ1.1
4' 0 5' 10' 15' 20'
1/8"=1'-0"

EQUIPMENT PLAN GENERAL NOTES:

A. EXIT PATH SHALL BE MAINTAINED TO EXIT DOORS CLEAR FLOOR SPACE. IN ADDITION, REAR CORRIDORS SHALL MAINTAIN A 44" WIDE EGRESS PATH.

B. STOCK STACKING LIMITS SHALL BE OBSERVED.

C. ELECTRICAL PANELS SHALL MAINTAIN A 30"W X 36"D X 78"H CLEAR FLOOR SPACE, AND ELECTRICAL ROOM SHALL BE FREE OF STORED ITEMS.

D. FOR NEW MILLWORK, REF SUP PLANS PROVIDED BY PUBLIX.

E. PROVIDE METAL CLOSURE AT TOP, SIDES, AND BOTTOM OF CASES AS REQUIRED FOR THE FUNCTION OF R/A CIRCULATION AND/OR SEALING DAIRY COOLER OPENING, BY REFRIGERATION CONTRACTOR.

F. CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS, DIMENSIONS AND ELEVATIONS IN THE FIELD AND REPORT ANY DISCREPANCIES AND/OR OMISSIONS WHICH WOULD INTERFERE WITH SATISFACTORY COMPLETION OF THE WORK.

G. CONTRACTOR SHALL COORDINATE LOCATION OF ACCESSIBLE SIGNAGE, DISPENSERS, AND AMENITIES WITH PUBLIX REPRESENTATIVE IN THE FIELD. ITEMS NOT SHOWN ON THIS PLAN OR ADDED IN THE FIELD MUST COMPLY W/ FBC.

H. PUBLIX TO PROVIDE SPLASHGUARD, IF NOT EXISTING, AT SIDE(S) OF HANDSINK WHERE HANDSINK IS WITHIN 12" OF SINK, FOOD PREP OR COOKING EQUIPMENT.

I. ALL COUPON DISPLAYS SHALL BE MOUNTED BETWEEN 24" AFF AND 48" AFF AND WITHIN A 10" SIDE REACH OR BETWEEN 34" AND 46" AND WITHIN 24" SIDE REACH.

J. RELOCATE ALL PLASTIC BAG DISPENSERS AND PAPER TOWEL DISPENSERS THAT ARE NOT LOCATED 48" AFF MAX AND 10" OF AISLE OR NOT LOCATED BETWEEN 34" AND 46" AFF AND WITHIN 24" OF AISLE TO WITHIN THESE COMPLIANT RANGES.

K. ALARM SYSTEM (BY OTHERS) SHALL HAVE AUDIO/VISUAL SIGNAL ALARMS IN COMPLIANCE W/ FBC.

L. RELOCATE TO A HEIGHT OF 27" MAX AFF, ALL PLASTIC DISPLAY BRACKETS LOCATED BETWEEN 27" AND 80" AFF, THAT PROJECT INTO AISLE MORE THAN 4" PAST WIDEST SHELF OF GONDOLA. RELOCATE HANGING DISPLAYS TO PROVIDE A NEW MIN CLEARANCE OF 80" AFF.

M. ALL CREDIT CARD MACHINES SHALL BE MOUNTED WITH VIEW SCREEN AND CONTROLS MAX 48" AFF, IN A VERTICAL OR SLANTED POSITION.

N. REMOUNT TIME CLOCK AT OR BELOW 48" A.F.F.

O. ALL HOT WATER SUPPLY AND WASTE PIPES UNDER EXISTING SINKS IN RESTROOMS SHALL BE INSULATED.

P. ALL LIGHT SWITCHES TO BE LOCATED NO HIGHER THAN 48" A.F.F.

Q. ADJUST DOOR CLOSERS TO REQUIRE 5LBS OR LESS PUSH PULL FORCE AND A MINIMUM OF 5 SECONDS FOR THE DOOR TO CLOSE FROM 90° OPEN TO 12° FROM THE STRIKE.

R. MAINTAIN 30"X48" CLEAR FLOOR SPACE IN FRONT OF ALL LIGHT SWITCHES AS INDICATED.

S. MAINTAIN 48"X36" CLEAR FLOOR SPACE IN FRONT OF ALL EMERGENCY EXITS.

T. MAINTAIN A 10" SIDE REACH CLEARANCE AT ALL FIRE ALARM PULL BOXES.

U. MAINTAIN 30"X48" CLEAR FLOOR SPACE IN FRONT OF TIME CLOCKS.

V. MAINTAIN A 18"X18" CLEAR FLOOR SPACE IN FRONT OF EXIT SIGNS.

EQUIPMENT PLAN KEY NOTES:

1. NEW MILLWORK BY PUBLIX. REF SUP PLANS PROVIDED BY PUBLIX.
2. NEW CASE TRIM TO MATCH EXIST/ADJACENT CASE TRIM.
3. MAINTAIN 5'-0" CLEAR FLOOR SPACE IN FRONT OF ENTRANCE/EXIT VESTIBULE BREAKAWAY DOORS AS INDICATED.
4. NEW WALLS. REF SHEET A1.1, A2.2 AND A2.3 FOR ADDITIONAL INFORMATION.
5. NEW COUNTERTOP BY PUBLIX.
6. MAINTAIN AISLES 36" CLEAR ACCESSIBLE PATH.
7. NEW HATCH LIFTING ASSEMBLY. REF DETAIL A1/A18.1 FOR ADDITIONAL INFORMATION.
8. NEW BOLLARDS, REF: DETAIL A3/A18.1 FOR ADDITIONAL INFORMATION. NOTE: NOT ALL MAY APPLY.
9. MAINTAIN 3'-0" CLEARANCE IN FRONT OF ELECTRICAL PANELS.
10. NEW FALSE COLUMN. REF REFRIGERATION DRAWINGS.
11. WALL PANELS PROVIDED BY EMI, BOLTED IN PLACE ON SITE.
12. NEW GREASE/HEAT HOOD. REF MECHANICAL FOR MORE INFORMATION.
13. PUBLIX TO PROVIDE OVERHEAD SIGN W/ INTERNATIONAL WHEELCHAIR SYMBOL AND MESSAGE "ASSISTANCE IS AVAILABLE UPON REQUEST. REF SIGN "P" ON SHEET A11.1
14. RELOCATE POWER POLES. REF TO ELECTRICAL DRAWINGS.
15. REPLACE DOOR BUMPER WITH A NEW TALLER (36") STYLE BUMPER AT DURUS DOORS.
16. NEW PRODUCE SIGNAGE, REF A3.1 FOR EXTENT OF WORK.
17. NEW SOFFIT, REF A3.1 FOR EXTENT OF WORK.
18. RESKIN AED TO (EL-8).
19. NEW DOCK SEALS SHALL BE FURNISHED AND INSTALLED BY G.C. MFCR BY CHALFONT SERIES 100, MODEL 130, 40 OZ BLACK VINYL WITH FULL LENGTH YELLOW GUIDE STRIPE.
20. NEW ADA MOAB BEVERAGE CENTER. GC TO CONFIRM WITH PUBLIX REPRESENTATIVE.
21. RELOCATE PTD AND SD TO HAVE OPERABLE CONTROLS NO HIGHER THAN 44" A.F.F.
22. RELOCATE SSTL HANDSINK TO BE NO HIGHER THAN 34" A.F.F.
23. REMOUNT LIGHT SWITCH TO BE NO HIGHER THAN 48" A.F.F.
24. NEW HANDSINK. REF DETAIL D2/A18.1. REF PLUMBING DWGS FOR ADDITIONAL INFORMATION.
25. RELOCATED BAG DISPENSER/UTENSILS. REF GENERAL NOTE ON THIS SHEET FOR MOUNTING INSTRUCTIONS.
26. PROVIDE INSULATION UNDER SINK. REF GENERAL NOTE ON THIS SHEET FOR INSTRUCTIONS.
27. RELOCATE LO EDF. REF DETAIL A2/A11.2.
28. NEW STAINLESS STEEL 1, 2, 3, OR 4 COMPARTMENT SINK.
29. PROVIDE AND INSTALL FREEZER/COOLER UNITS BY COOLER MANUFACTURER. MATCH EXISTING FINISH. REF ALL DISCIPLINES FOR ADDITIONAL INFORMATION.
30. G.C TO COORDINATE WITH PUBLIX THE REMOVAL/RELOCATION OF FREEZER/COOLER ITEMS.
31. NEW QMI SHUTTERS. REF SPEC FOR ADDITIONAL INFORMATION.
32. INSTALL SOLAR GARD ARMORCOAT 8MIL CLR SAFETY AND SECURITY WINDOW FILM WITH A 1/2" WIDE WET GLAZE ATTACHMENT SYSTEM (DOW CORNING 995 STRUCTURAL SILICONE SEALANT) ON ALL WINDOWS NOTED. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

EQUIPMENT PLAN LEGEND:

	NEW CMU WALL
	NEW STUD WALLS WITHOUT SOUND BATT INSULATION.

PUBLIX DESIGNER: DAMARIS ROCKSTROH

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CLIENT NAME

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
RENOVATION WITH NEW SHELL
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
EQUIPMENT PLAN

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	
221094	
DATE	
04/21/2022	
DRAWN	CHECKED
NAME	MB

EQ1.1

DECOR SCHEME: EVERGREEN

STATE OF FLORIDA — MARCUS JAMES BOYLE — AR100919 — REGISTERED ARCHITECT
MARCUS J. BOYLE
FL# AR100919

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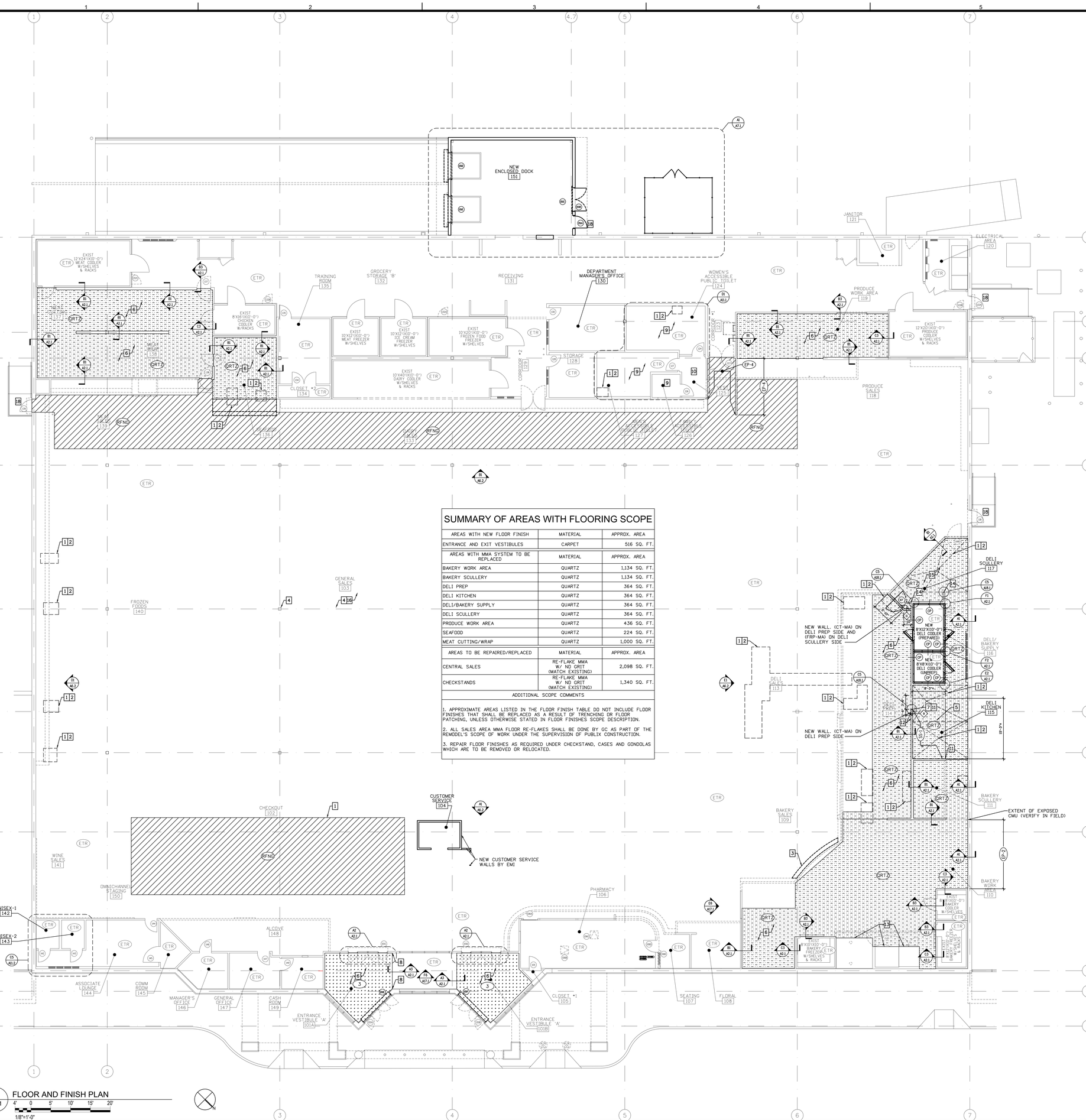

SUMMARY OF AREAS WITH FLOORING SCOPE

AREAS WITH NEW FLOOR FINISH	MATERIAL	APPROX. AREA
ENTRANCE AND EXIT VESTIBULES	CARPET	516 SQ. FT.
AREAS WITH MMA SYSTEM TO BE REPLACED	**MATERIAL**	**APPROX. AREA**
BAKERY WORK AREA	QUARTZ	1,134 SQ. FT.
BAKERY SCULLERY	QUARTZ	1,134 SQ. FT.
DELI PREP	QUARTZ	364 SQ. FT.
DELI KITCHEN	QUARTZ	364 SQ. FT.
DELI/BAKERY SUPPLY	QUARTZ	364 SQ. FT.
DELI SCULLERY	QUARTZ	364 SQ. FT.
PRODUCE WORK AREA	QUARTZ	436 SQ. FT.
SEAFOOD	QUARTZ	224 SQ. FT.
MEAT CUTTING/WRAP	QUARTZ	1,000 SQ. FT.
AREAS TO BE REPAIRED/REPLACED	**MATERIAL**	**APPROX. AREA**
CENTRAL SALES	RE-FLAKE MMA W/ NO GRIT (MATCH EXISTING)	2,098 SQ. FT.
CHECKSTANDS	RE-FLAKE MMA W/ NO GRIT (MATCH EXISTING)	1,340 SQ. FT.

ADDITIONAL SCOPE COMMENTS

1. APPROXIMATE AREAS LISTED IN THE FLOOR FINISH TABLE DO NOT INCLUDE FLOOR FINISHES THAT SHALL BE REPLACED AS A RESULT OF TRENCHING OR FLOOR PATCHING, UNLESS OTHERWISE STATED IN FLOOR FINISHES SCOPE DESCRIPTION.

2. ALL SALES AREA MMA FLOOR RE-FLAKES SHALL BE DONE BY GC AS PART OF THE REMODEL'S SCOPE OF WORK UNDER THE SUPERVISION OF PUBLIX CONSTRUCTION.

3. REPAIR FLOOR FINISHES AS REQUIRED UNDER CHECKSTAND, CASES AND GONDOLAS WHICH ARE TO BE REMOVED OR RELOCATED.

A1 / A1.1 FLOOR AND FINISH PLAN

1/8"=1'-0"

FLOOR & FINISH PLAN GENERAL NOTES:

A. GENERAL CONTRACTOR SHALL COORDINATE SEQUENCING OF TOILET REMODEL WORK WITH STORE MANAGEMENT TO MAINTAIN ACCESS TO AN ADA ACCESSIBLE TOILET FOR BOTH MEN AND WOMEN AT ALL TIMES.

B. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE SUBMITTING A BID. CONTRACTOR SHALL PATCH AND REPAIR EXISTING CONSTRUCTION DAMAGED DURING WORK INSIDE OR OUTSIDE THE BUILDING. REPAIRS SHALL MATCH EXISTING FINISH CONDITIONS.

C. ALL STUD WALLS WITH REFRIGERATED CASES BACKED UP TO THEM SHALL BE COVERED ON THAT SIDE WITH TILE BACKER BOARD UP TO ELEV 4'-0" ABOVE FINISH FLOOR. HOLD 1/2" OFF FINISH FLOOR.

D. PROVIDE ABC TYPE "2A" RATED FIRE EXTINGUISHER FOR EVERY 3000 SQ FT OF AREA, MAXIMUM 75' TRAVEL DISTANCE IN ACCORDANCE WITH NFPA-10. TOP OF EXTINGUISHER TO BE PLACED NOT TO EXCEED 4'-0" ABOVE FINISH FLOOR.

E. ALL DIMENSIONS ARE TO FINISH FACE UNO.

F. PUBLIX SHALL PROVIDE AN INDEPENDENT PROFESSIONAL ASBESTOS SURVEY AND CONTRACTING FOR ANY REMEDIAL WORK FOR REMODELING. GENERAL CONTRACTOR TO COORDINATE WITH PUBLIX FIELD REP.

G. BEFORE REMOVING EXISTING REFRIGERATED CASES, VERIFY HANGING SUPPORT OF EXISTING SOFFITS. IF HANGERS ARE NOT EXISTING AND SOFFITS ARE TO BE RE-USED, CONFIRM W/ PUBLIX REPRESENTATIVE PRIOR TO PROCEEDING.

H. LOCATIONS SHOWN FOR CORNER PROTECTION AND WALL ARMOR ARE REQUESTED BY OWNER. CONTRACTOR TO VERIFY EXISTING PRIOR TO PRICING.

I. CONTRACTOR TO REMOVE AND REINSTALL EXISTING FIXTURES AND EQUIPMENT TO ACCOMODATE INSTALLATION OF NEW FINISHES. REF FINISH SCHEDULE.

J. CONTRACTOR SHALL PROVIDE 5/8" PLYWOOD BACKING FOR WALLS THAT ARE TO RECEIVE WALL HUNG CABINETS/FIXTURES IN TOILETS, OFFICES, CASH ROOM, PHARMACY AND GENERAL OFFICE. FIELD CONFIRM ADDT'L LOCATIONS WITH PUBLIX FIELD REP.

K. CONTRACTOR SHALL CUT AND PATCH SLABS AS NECESSARY TO ACCOMMODATE NEW PLUMBING WORK. REF PLUMBING AND STRUCT.

L. THE CONTRACTOR SHALL VERIFY ALL EXISTING EXIT DOOR THRESHOLDS AND FLOOR LEVEL CHANGES FOR COMPLIANCE WITH FBC 1010.1.5. WHERE CONDITIONS ALLOW, THE CONTRACTOR SHALL RECTIFY FLOOR LEVEL VARIANCES GREATER THAN 1/2", BUT LESS THAN 1", BY GRINDING THE INTERIOR FLOOR SURFACE TO WITHIN 1/2" MAXIMUM VARIANCE, WITH THE SLOPE OF THE TRANSITION NO GREATER THAN 1:2. RAISED THRESHOLDS GREATER THAN 1/2" IN HEIGHT, THRESHOLDS WITH BEVELED SURFACES SLOPING MORE THAN 1:2, AND THRESHOLDS WITH ABRUPT LEVEL CHANGES GREATER THAN 1/4" SHALL BE REPLACED WITH ACCESSIBLE THRESHOLDS OR REMOVED. FLOOR FINISHES SHALL BE RETURNED TO LIKE NEW CONDITION. IN INSTANCES WHERE NON-COMPLIANT CONDITIONS CANNOT BE ADEQUATELY RECTIFIED WITHOUT DOOR MODIFICATIONS OR INCREASING THE POTENTIAL FOR WATER AND PEST INFILTRATION, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT.

M. CONTRACTOR IS TO POLISH EXISTING SS COLUMN WRAPS. VERIFY QUANTITY W/ PUBLIX OR SITE FIELD REPRESENTATIVE.

N. ALL COLUMNS IN GROCERY SALES TO BE PAINTED EP-4 ABOVE HEIGHT OF STAINLESS STEEL FINISH UNO. REF SCHEDULE ON SHEET A2.1 FOR FINISH DESCRIPTION.

O. PATCH AND REPAIR FINISH FLOOR AND WALLS AS REQUIRED TO MATCH EXISTING FINISHES WHERE WALLS ARE TO BE REMOVED, NEW WALLS CONSTRUCTED, OR EQUIPMENT REMOVED/RELOCATED.

P. ALL HOLES IN EXISTING CONCRETE AND TERRAZZO TO BE EPOXY FILLED BEFORE INSTALLATION OF NEW VINYL COMPOSITION TILE.

Q. EXTEND WALL FINISH AND BASE 1'-0" BEHIND CASES AND SHELVING IN SALES AREA.

R. ALL WALL AND COLUMN FINISHES TO BE CLASS A.

S. GENERAL CONTRACTOR SHALL REMOVE ALL EXISTING DECOR AND GRAPHICS FROM PERIMETER GENERAL SALES AREA AND PREPARE ALL SURFACES FOR PAINTING AS REQUIRED TO RECEIVE NEW DECOR. PUBLIX SHALL PAINT ALL INTERIOR (NEW AND EXISTING) SURFACES NOTED TO BE PAINTED, AS PER SPECIFICATIONS OR TO MATCH EXISTING.

T. SHEATHE ALL GALVANIZED COOLERS/FREEZERS WITH MATCHING FRP AT LOCATIONS INDICATED ON PLAN. REMOVE ALL EXISTING WALL ARMOR, PROTRUDING BOLTS, ETC., AND DIRECT-GLUE FRP TO COOLER/FREEZER PANELS. PROVIDE 'J'-MOULD TRIM A MINIMUM OF 6" AROUND THE DOOR OPENING TO ALLOW OPERATION OF DOOR.

U. PROVIDE "J" MOULD FOR FRP PANELS AT CEILING LINE, AND LOCATE PANEL MOULDING AT UNDERSIDE OF CEILING TO ALLOW FOR FRP PANEL EXPANSION. DO NOT TIE CEILING TO FRP PANELS.

V. ALL EXISTING FINISHES, MATERIALS, ETC., THAT REMAIN ARE TO BE REPAIRED AS REQUIRED.

W. SEE SHEETS A6.2 FOR ADDITIONAL INFORMATION, FINISH DESCRIPTIONS AND WALL/SOFFIT FINISHES AT DEPT SALES, CHECKOUT AND CUSTOMER SERVICE. WALL FINISHES SHOWN ON THIS SHEET ARE FOR CLARIFICATION OF FINISHES AT SPECIFIC LOCATIONS ONLY. IF CONFLICT EXISTS, CONTACT ARCHITECT FOR CLARIFICATION.

X. REFERENCE SHEET A2.1 FOR FLOOR FINISH TRANSITIONS.

Y. ALL FERROUS AND NON-FERROUS METALS, INCLUDING ARMOR-FLEX, ARE TO BE PREPARED AND PRIMED WITH DTM BONDING PRIMER AND THEN PAINTED WITH APPLICABLE ADJACENT COLOR.

Z. CONTACT MARLITE TO OBTAIN CURRENT ORDER FORM FOR PUBLIX NATIONAL ACCOUNT AT 330-364-7561 MARLITE SMARTSEAM SYMMETRIC FRP, TRIMS, SEALANTS/ADHESIVES. FOLLOW RECOMMENDED INSTALLATION INSTRUCTIONS FROM MARLITE. ITEM #'S: 207830 AND 207831 WITH FINISH S5916.

FLOOR & FINISH PLAN KEY NOTES:

1. PATCH AND REPAIR FLOOR TO MATCH EXISTING FLOOR FINISH, AS NECESSARY.
2. DASH LINE INDICATES SLAB WORK. REF TO STRUCTURAL SHEET FOR ADDITIONAL INFORMATION.
3. NEW SOFFIT, REF A3.1 FOR EXTENT OF WORK.
4. CENTER COLUMNS TO BE PAINTED (EP-4).
5. RE-TOPCOAT USING MMA WITH QUARTZ 1/4" THICK AT THE FRYER AREA, 3' BEYOND HOOD. ENSURE FLUSH TRANSITION.
6. REMOVE EXISTING VINYL BAND AND CLEAN AS REQUIRED. IF COLORED TILE IS UNDER VINYL, APPLY WHITE VINYL ON TILE.
7. EXTEND WALL AS REQUIRED TO ATTACHED NEW HOOD.
8. EXTEND CART WALL ARMOR AND PATCH/REPAIR WALL AS REQUIRED.
9. PAINT PUBLIC RESTROOMS (EP-4) ABOVE FINISHED TILE.
10. PAINT RESTROOM VESTIBULE (EP-4) OVER EXISTING FRP.
11. GC TO CONFIRM (SS-1) FINISH EXTENDS PAST HOOD 18" MINIMUM.
12. ALIGN EXISTING GYP BOARD WITH NEW GYP BOARD FINISH.
13. EXTEND NEW FLOOR FINISH AS REQUIRED TO MEET NEW EQUIPMENT.
14. PATCH FLOOR AND/OR WALL FINISHES WHERE WALL IS TO BE REMOVED.
15. (FRP-MA) ON ALL EXISTING WALLS IN NEW DELI SCULLERY. PAINT TO MATCH EXISTING.
16. ALL EXPOSED VINYL BASE TO REPLACED WITH (EB-2).
17. PROVIDE AND INSTALL FREEZER/COOLER UNITS BY COOLER MANUFACTURER. MATCH EXISTING FINISH. REF ALL DISCIPLINES FOR ADDITIONAL INFORMATION.
18. INSTALL STAINLESS STEEL ASTRAGAL (PEMKO 3572) AT SIDE AND REAR EGRESS DOORS.

FLOOR & FINISH PLAN LEGENDS:

	NEW FLOOR FINISH PATCHING AND TRENCHING TO MATCH EXISTING.
	NEW SEAMLESS MMA RESIN SYSTEM
	NEW CARPET
	NEW VCT
	NEW TILE
	NEW QUARTZ
ETR	FINISH FLOOR EXISTING TO REMAIN
RFG	REFLAKE MMA WITH GRIT
RFNG	REFLAKE MMA - NO GRIT
RTNG	RE-TOPCOAT MMA - NO GRIT
RTG	RE-TOPCOAT MMA WITH GRIT
QRTZ	QUARTZ
1	VCT - 12"x12"x1/8" ARMSTRONG IMPERIAL TEXTURE CLASSIC WHITE
2	CARPET TYPE I
3	CARPET TYPE III
EF-	FLOOR TILE FINISH. REF A6.2 FOR FINISH LEGEND
	DENOTES WALL TYPES SEE SHEET A2.2 AND A2.3
CP	COOLER WALL PANEL
FP	FREEZER WALL PANEL
DR	DENOTES DOOR NUMBER. SEE SCHEDULE ON SHEET A2.1
	EXIST SOFFITS
	NEW SOFFITS

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CLIENT NAME
Publix. SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
6700 GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
FLOOR AND FINISH PLAN

STATE OF FLORIDA — MARCUS JAMES BOYLE — AR100919 — REGISTERED ARCHITECT
MARCUS J. BOYLE
FL# AR100919

REV	RELEASE
	100% SUBMITTAL 21 APR 2022

PROJECT NO.	2210764
DATE	04/21/2022
DRAWN	CS
CHECKED	MB

A1.1

DECOR SCHEME: EVERGREEN

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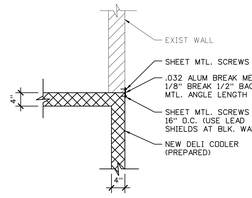
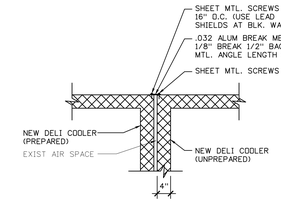


F1 A2.1 COOLER TO WALL CLOSURE DETAIL

12" 6" 0 1' 2' 3"

3/4"=1'-0"

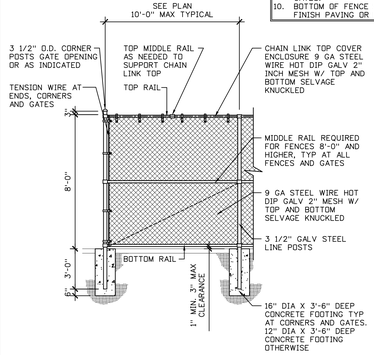


F2 A2.1 COOLER TO COOLER CLOSURE DETAIL

12" 6" 0 1' 2' 3"

3/4"=1'-0"

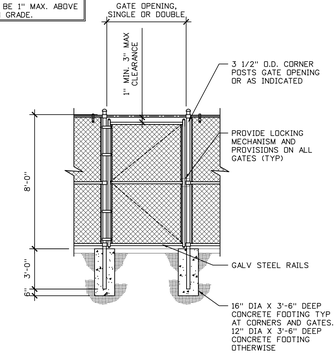
GENERAL NOTES:
1. TERMINAL AND LINE POSTS SHALL BE 3" O.D. AND .095" IN THICKNESS.
2. FABRIC SHALL BE 12 1/2" GAGE MINIMUM.
3. FABRIC TIES SHALL BE THE SAME GAGE AS THE FABRIC.
4. FABRIC TIE SPACING ON THE TOP RAIL: FIVE TIES BETWEEN POSTS, EVENLY SPACED.
5. FABRIC TIE SPACING ON THE LINE POSTS: ONE LESS THAN HEIGHT OF THE FENCE IN FEET, EVENLY SPACED.
6. EITHER TOP RAIL OR TOP TENSION WIRE SHALL BE USED.
7. BRACES MUST BE USED AT TERMINAL POSTS IF TOP TENSION WIRE IS USED INSTEAD OF TOP RAIL.
8. GATES TO HAVE MITERED AND WELDED CORNERS.
9. FENCE STARTER AT ENDS, CORNERS AND GATES.
10. BOTTOM OF FENCE SHALL BE 1" MAX. ABOVE FINISH PAVING OR FINISH GRADE.

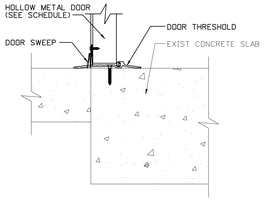


E3 A2.1 CHAIN LINK FENCE DETAIL

12" 0 1' 4' 7' 11'

1/4"=1'-0"

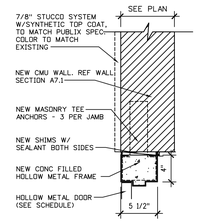




F5 A2.1 EXTERIOR HOLLOW METAL DOOR SILL DETAIL

6" 3" 0 6"

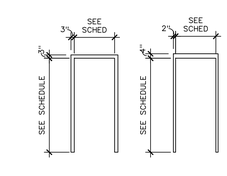
3"=1'-0"



F6 A2.1 EXTERIOR IN CMU HOLLOW METAL HEAD FRAME DETAIL

12" 6" 0 1'

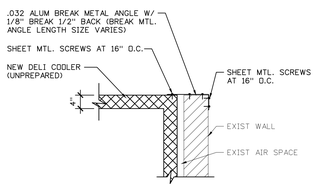
1 1/2"=1'-0"



E1 A2.1 FRAME ELEVATIONS

12" 0 1' 4' 7' 11'

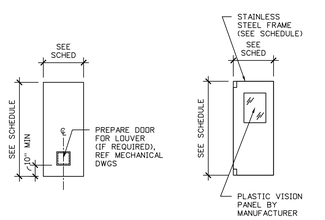
1/4"=1'-0"



E2 A2.1 COOLER TO WALL CLOSURE DETAIL

12" 6" 0 1' 2' 3"

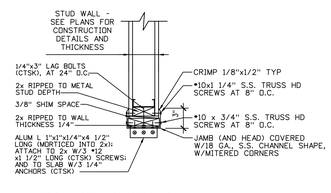
3/4"=1'-0"



D1 A2.1 DOOR ELEVATIONS

12" 0 1' 4' 7' 11'

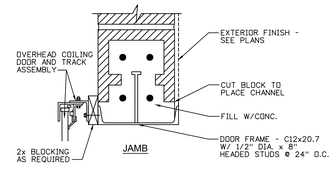
1/4"=1'-0"

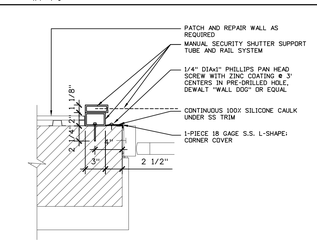


D3 A2.1 DBL-ACTING CASED DOOR OPENING DETAIL

12" 6" 0 1'

1 1/2"=1'-0"

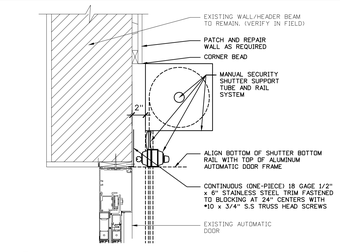




C1 A2.1 AUTOMATIC DOOR JAMB

12" 6" 0 1'

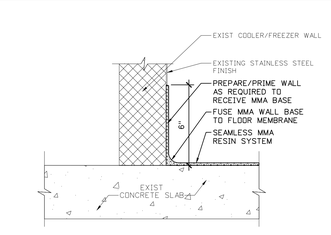
1 1/2"=1'-0"



C2 A2.1 ENTRANCE/EXIT DOOR HEADER DETAIL

12" 6" 0 1'

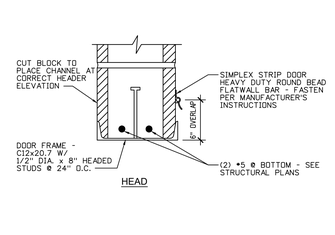
1 1/2"=1'-0"



C3 A2.1 SEAMLESS MMA RESIN SYSTEM BASE AT COOLER/FREEZER WALL

6" 3" 0 6"

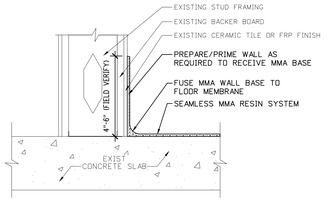
3"=1'-0"



C4 A2.1 OVERHEAD COILING DOOR HEAD AND JAMB DETAIL

12" 6" 0 1'

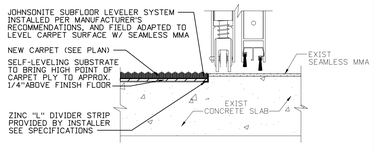
1 1/2"=1'-0"



B1 A2.1 SEAMLESS MMA RESIN SYSTEM BASE AT STUD WALL

6" 3" 0 6"

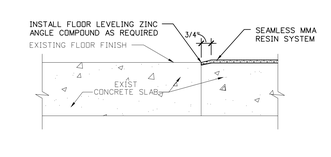
3"=1'-0"



B2 A2.1 SEAMLESS MMA RESIN SYSTEM TO CARPET TILE AT AUTOMATIC DOORS

6" 3" 0 6"

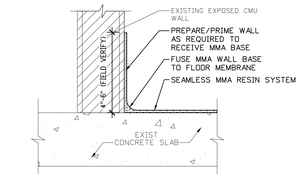
3"=1'-0"



B3 A2.1 CONCRETE/TERRAZZO TO SEAMLESS MMA TRANSITION

6" 3" 0 6"

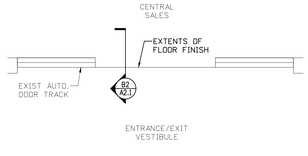
3"=1'-0"



A1 A2.1 SEAMLESS MMA RESIN SYSTEM BASE AT CMU WALL

6" 3" 0 6"

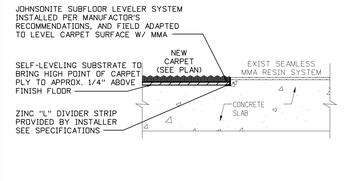
3"=1'-0"



A2 A2.1 FINISH DETAIL AT INTERIOR AUTOMATIC DOOR

6" 3" 0 6"

3"=1'-0"



A3 A2.1 CARPET TO SEAMLESS MMA TRANSITION

6" 3" 0 6"

3"=1'-0"

ROOM FINISH SCHEDULE

MARK	ROOM NAME	FLOOR	BASE	WALLS	CEILING	COMMENTS
101A	EXIT VESTIBULE	CARPET	-	REMOVE COLOR VINYL BAND	-	SEE A1.1 FOR ADDITIONAL INFORMATION
101B	ENTRANCE VESTIBULE	CARPET	-	REMOVE COLOR VINYL BAND	-	SEE A1.1 FOR ADDITIONAL INFORMATION
103	CENTRAL SALES	RE-FLAKE MMA W/ NO GRIT	VINYL	PAINT	-	SEE A1.1 & A6.2 FOR ADDITIONAL INFORMATION
106	PHARMACY	-	VINYL	PAINT	PAINT	SEE A1.1 & A6.2 FOR ADDITIONAL INFORMATION
110	BAKERY WORK AREA	MMA QUARTZ	MMA QUARTZ	REMOVE COLOR VINYL BAND	-	SEE A1.1 & A6.2 FOR ADDITIONAL INFORMATION
111	BAKERY SCULLERY	MMA QUARTZ	MMA QUARTZ	-	-	SEE A1.1 FOR ADDITIONAL INFORMATION
114	DELI PREP	MMA QUARTZ	MMA QUARTZ	NEW WALLS AT DELI PREP SIDE (CT-MA)	-	SEE A1.1 & A6.2 FOR ADDITIONAL INFORMATION
115	DELI KITCHEN	MMA QUARTZ	MMA QUARTZ	NEW WALL AT DELI KITCHEN SIDE (SS-1) FOR NEW HOOD. (FRP-MA) AS REQUIRED FOR REMAINING AREA OF WALL	-	SEE A1.1 FOR ADDITIONAL INFORMATION
116	DELI/BAKERY SUPPLY	MMA QUARTZ	MMA QUARTZ	-	-	SEE A1.1 FOR ADDITIONAL INFORMATION
117	DELI SCULLERY	MMA QUARTZ	MMA QUARTZ	NEW WALL AT DELI SCULLERY SIDE (FRP-MA). (FRP-MA) ON EXISTING WALLS. PAINT TO MATCH EXISTING	-	SEE A1.1 FOR ADDITIONAL INFORMATION
119	PRODUCE WORK AREA	MMA QUARTZ	MMA QUARTZ	REMOVE COLOR VINYL BAND	-	SEE A1.1 & A6.2 FOR ADDITIONAL INFORMATION
124	WOMEN'S ACCESSIBLE PUBLIC TOILET	-	-	PAINT ABOVE TILE	-	SEE A1.1 FOR ADDITIONAL INFORMATION
125	VESTIBULE	-	-	PAINT	-	SEE A1.1 FOR ADDITIONAL INFORMATION
126	FAMILY ACCESSIBLE TOILET	-	-	PAINT ABOVE TILE	-	SEE A1.1 FOR ADDITIONAL INFORMATION
127	MEN'S ACCESSIBLE PUBLIC TOILET	-	-	PAINT ABOVE TILE	-	SEE A1.1 FOR ADDITIONAL INFORMATION
136	SEAFOOD	MMA QUARTZ	MMA QUARTZ	REMOVE COLOR VINYL BAND	-	SEE A1.1 & A6.2 FOR ADDITIONAL INFORMATION
137	MEAT CUTTING	MMA QUARTZ	MMA QUARTZ	REMOVE COLOR VINYL BAND	-	SEE A1.1 & A6.2 FOR ADDITIONAL INFORMATION
138	MEAT WRAP	MMA QUARTZ	MMA QUARTZ	REMOVE COLOR VINYL BAND	-	SEE A1.1 & A6.2 FOR ADDITIONAL INFORMATION
151	ENCLOSED DOCK	PATCH AND REPAIR AS REQUIRED	-	PAINT	-	SEE A1.1 & A7.1 FOR ADDITIONAL INFORMATION

DOOR SCHEDULE

MARK	DOORS PER FRAME	WIDTH	HEIGHT	DOOR THICK	DOOR ELEVATION	ROOM NAME	DOOR DESCRIPTION	FRAME ELEVATION	FRAME HEAD	FRAME JAMB SECTION	FRAME MATERIAL	DOOR HARDWARE	MARK	DOOR GRILLE	COMMENTS
101E	1	12'-0"	7'-8"	-	F	VESTIBULE	OVERHEAD SECURITY SHUTTER	-	C2/A2.1	C1/A2.1	ALUMINUM	-	101E	-	FIELD VERIFY WIDTH AND HEIGHT OPENING FOR SHUTTERS. ROLLING SECURITY SHUTTER BY QMI - MANUALLY OPERATED FINISH: CLEAR ANODIZED SLAT TYPE: AL7-E SLAT STYLE: PUNCH 51
101F	1	12'-0"	7'-8"	-	F	VESTIBULE	OVERHEAD SECURITY SHUTTER	-	C2/A2.1	C1/A2.1	ALUMINUM	-	101F	-	FIELD VERIFY WIDTH AND HEIGHT OPENING FOR SHUTTERS. ROLLING SECURITY SHUTTER BY QMI - MANUALLY OPERATED FINISH: CLEAR ANODIZED SLAT TYPE: AL7-E SLAT STYLE: PUNCH 51
117	1	3'-0"	7'-0"	-	B	DELI PREP	DOUBLE ACTING TRAFFIC DOORS	B	D3/A2.1	D3/A2.1	STAINLESS	-	117	-	DOOR COLOR: MATCH EXISTING. NEW TALL BUMPERS
151A	1	3'-0"	7'-0"	1 3/4"	A	ENCLOSED DOCK	HOLLOW METAL DOOR	C	F6/A2.1	F6/A2.1 (SIM)	HOLLOW METAL	B-1A	151A	-	NEW ENCLOSED DOCK. PREP FOR DOOR VIEWER 60 MINUTE RATING DOOR SILL: F5/A2.1
151B	2	6'-0"	8'-8"	1 7/8"	C	ENCLOSED DOCK	DOUBLE ACTING TRAFFIC DOORS	B	D3/A2.1	D3/A2.1	STAINLESS	-	151B	-	NEW ENCLOSED DOCK. DOOR COLOR: METALLIC GRAY PROVIDE (90X180) ADJUSTABLE SPRING ASSIST. INSTALL PER MANUFACTURERS SPECIFICATIONS
151C	1	6'-0"	8'-8"	2"	F	ENCLOSED DOCK	OVERHEAD COILING DOOR	-	C4/A2.1	C4/A2.1	12" CHANNEL	L-1	151C	-	NEW ENCLOSED DOCK.
151D	1	7'-0"	8'-8"	2"	F	ENCLOSED DOCK	OVERHEAD COILING DOOR	-	C4/A2.1	C4/A2.1	12" CHANNEL	L-1	151D	-	NEW ENCLOSED DOCK.
151E	1	7'-0"	8'-8"	2"	F	ENCLOSED DOCK	OVERHEAD COILING DOOR	-	C4/A2.1	C4/A2.1	12" CHANNEL	L-1	151E	-	NEW ENCLOSED DOCK.

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3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME: PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
4700 BUILDING AT LAKE MICHIGAN
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE: SCHEDULES, SECTIONS AND DETAILS

STATE OF FLORIDA
MARCUS JAMES BOYLE
AR100919
REGISTERED ARCHITECT
MARCUS J. BOYLE
FL# AR100919

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 210194
DATE 04/21/2022
DRAWN CS
CHECKED MB

A2.1

DECOR SCHEME: EVERGREEN

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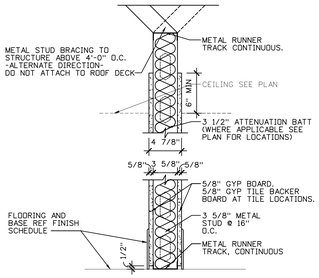

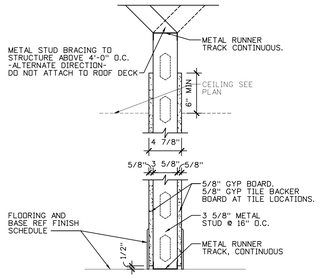

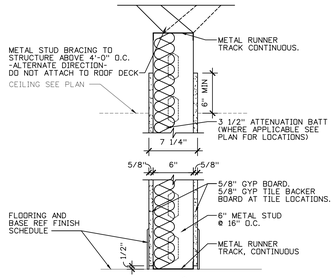

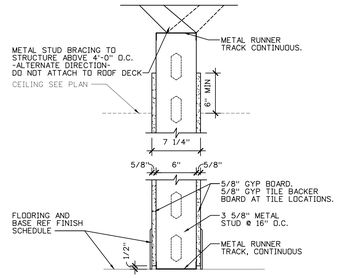

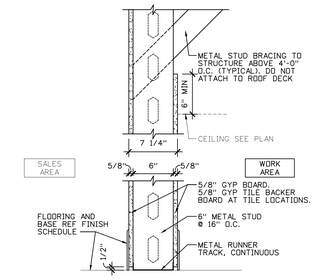

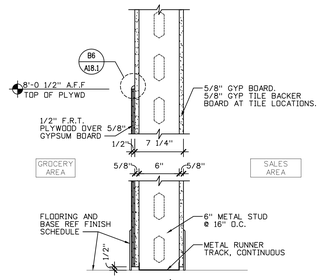

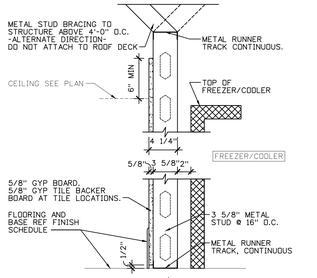

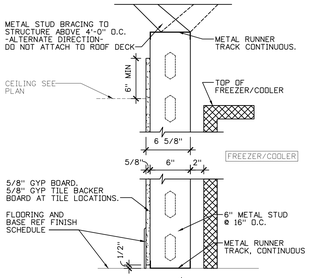

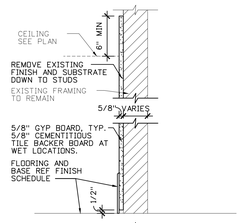

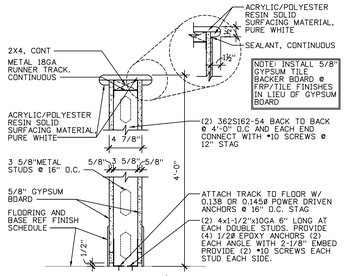

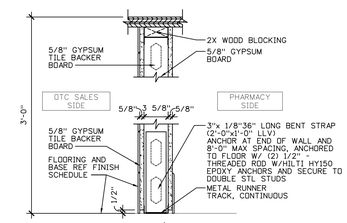

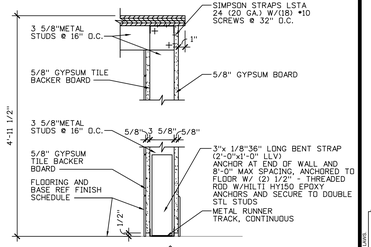

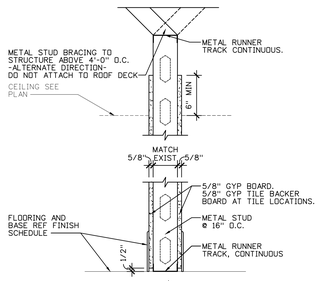

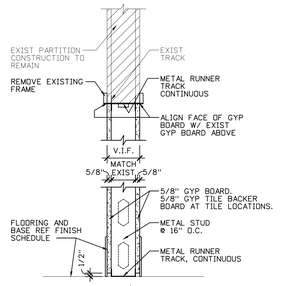

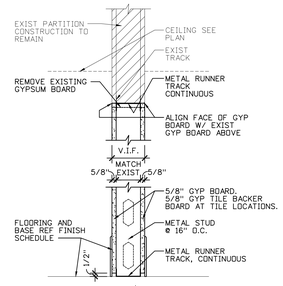

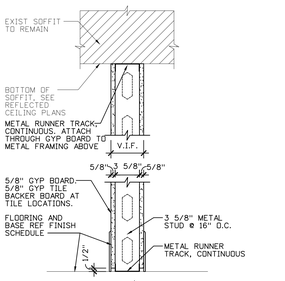

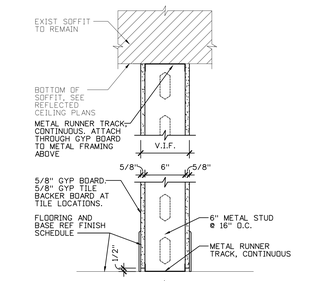

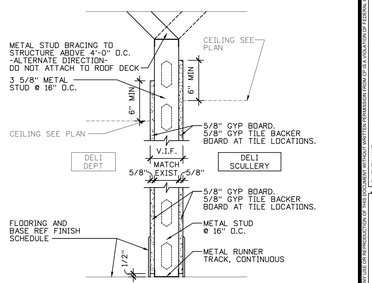

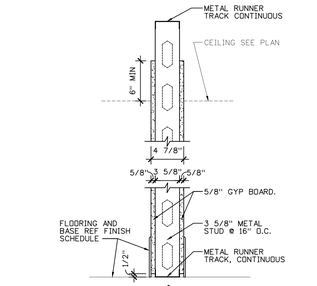

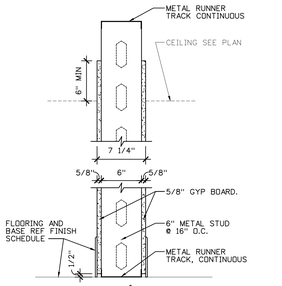

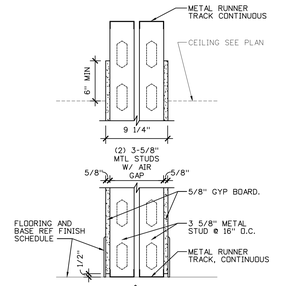

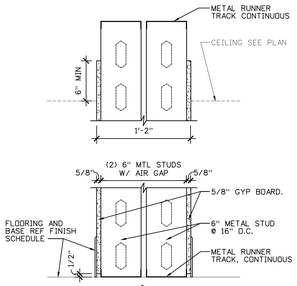

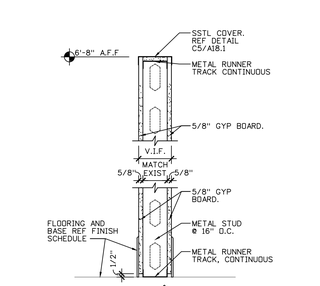

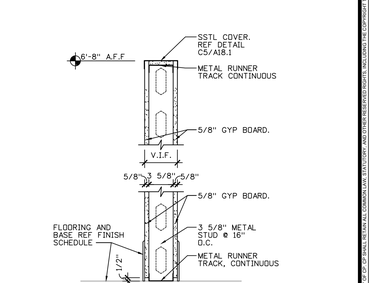

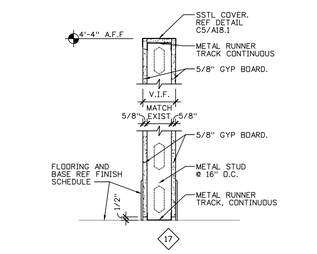

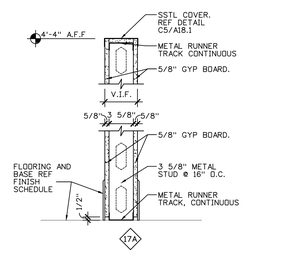

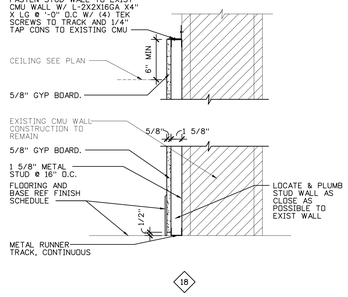

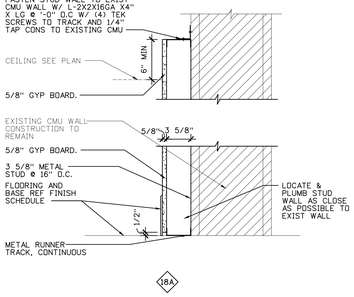

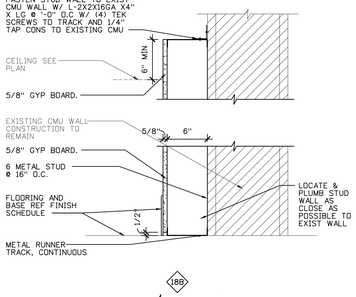

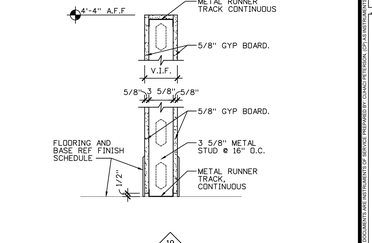

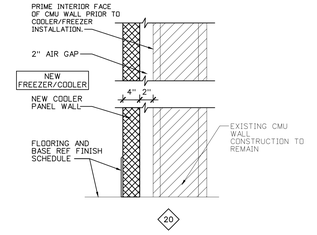

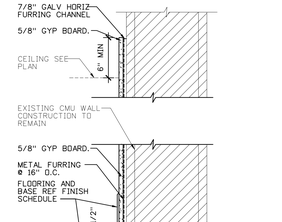

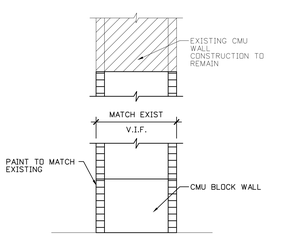

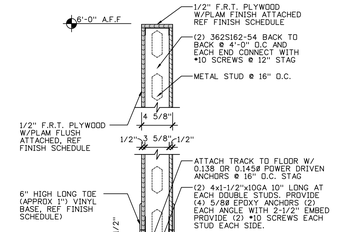

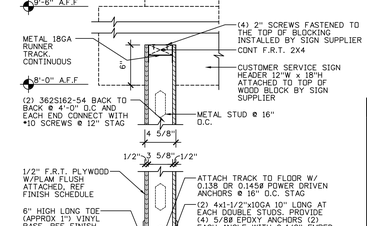

A1 / A2.2 PARTITION TYPES

12" 6" 0 1'

1 1/2"=1'-0"

GENERAL WALL PARTITION NOTES:

1. NOT ALL PARTITION TYPES SHOWN MAY BE APPLICABLE TO THIS REMODEL.
2. WET LOCATIONS: TOILET ROOMS, SCULLERIES, JANITOR ROOM, DELI SALES, DELI PREP AND KITCHEN, MEAT CUTTING/WRAP, SEAFOOD, PRODUCE WORK ROOM, BAKERY WORK AND KITCHEN.
3. IN TYPE I & II CONSTRUCTION, ALL WOOD BLOCKING AND SHEATHING SHALL BE F.R.T..
4. ALL STUD WALLS WITH REFRIGERATED CASES BACKED UP TO THEM SHALL BE COVERED ON THAT SIDE WITH TILE BACKER BOARD UP TO ELEV 4'-0 1/2" ABOVE FINISH FLOOR. HOLD 1/2" FINISH FLOOR.
5. ALL LIGHT GAUGE STUDS TO BE 20GA. PROVIDE DIAGONAL BRACING FOR 3-5/8" STUDS THAT EXCEED 15'. PROVIDE DIAGONAL BRACING FOR 6" STUDS THAT EXCEED 22'. ALL BRACING TO BE 4'-0" O.C. SEE STRUCTURAL DRAWING FOR DETAILS.
6. SSTL CORNER TRIM TYPICAL AT CORNER WALL, END OR TOP. SEE DETAIL C5/A18.1.

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CLIENT NAME
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LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
NEC OF CRYSTAL LAKE DRIVE & HIGHWAY 19
CRYSTAL RIVER, FLORIDA 34429-9348

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	DRAWN
221094	CS
DATE	CHECKED
04/21/2022	MB

SHEET TITLE
PARTITION WALL TYPES

A2.2

DECOR SCHEME: EVERGREEN

MARCUS J. BOYLE
FL# AR100919

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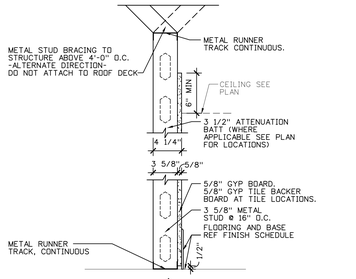

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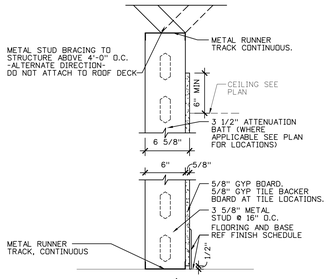

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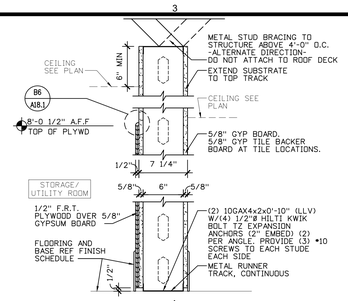

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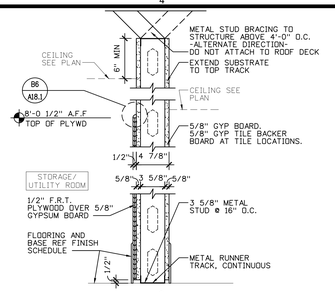

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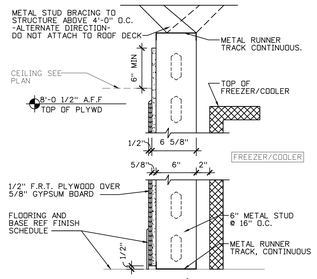

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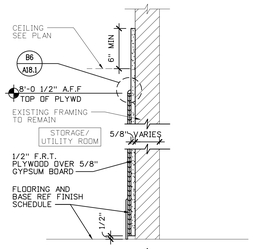

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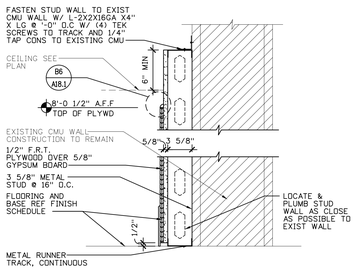

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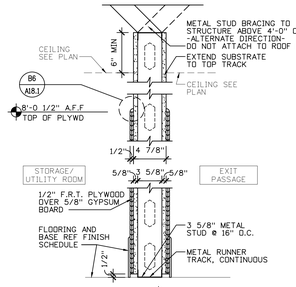

31

GENERAL WALL PARTITION NOTES:

1. NOT ALL PARTITION TYPES SHOWN MAY BE APPLICABLE TO THIS REMODEL.
2. WET LOCATIONS: TOILET ROOMS, SCULLERIES, JANITOR ROOM, DELI SALES, DELI PREP AND KITCHEN, MEAT CUTTING/WRAP, SEAFOOD, PRODUCE WORK ROOM, BAKERY WORK AND KITCHEN.
3. IN TYPE I & II CONSTRUCTION, ALL WOOD BLOCKING AND SHEATHING SHALL BE F.R.T..
4. ALL STUD WALLS WITH REFRIGERATED CASES BACKED UP TO THEM SHALL BE COVERED ON THAT SIDE WITH TILE BACKER BOARD UP TO ELEV 4'-0 1/2" ABOVE FINISH FLOOR. HOLD 1/2" FINISH FLOOR.
5. ALL LIGHT GAUGE STUDS TO BE 20GA. PROVIDE DIAGONAL BRACING FOR 3-5/8" STUDS THAT EXCEED 15'. PROVIDE DIAGONAL BRACING FOR 6" STUDS THAT EXCEED 22'. ALL BRACING TO BE 4'-0" O.C. SEE STRUCTURAL DRAWING FOR DETAILS.
6. SSTL CORNER TRIM TYPICAL AT CORNER WALL, END OR TOP. SEE DETAIL C5/A18.1.

A1 / A2.3 PARTITION TYPES

12" 6" 0 1'

1 1/2"=1'-0"

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CLIENT NAME
Publix.
SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
FORMERLY PUBLIX AT LAKE HIGHLAND
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
PARTITION WALL TYPES

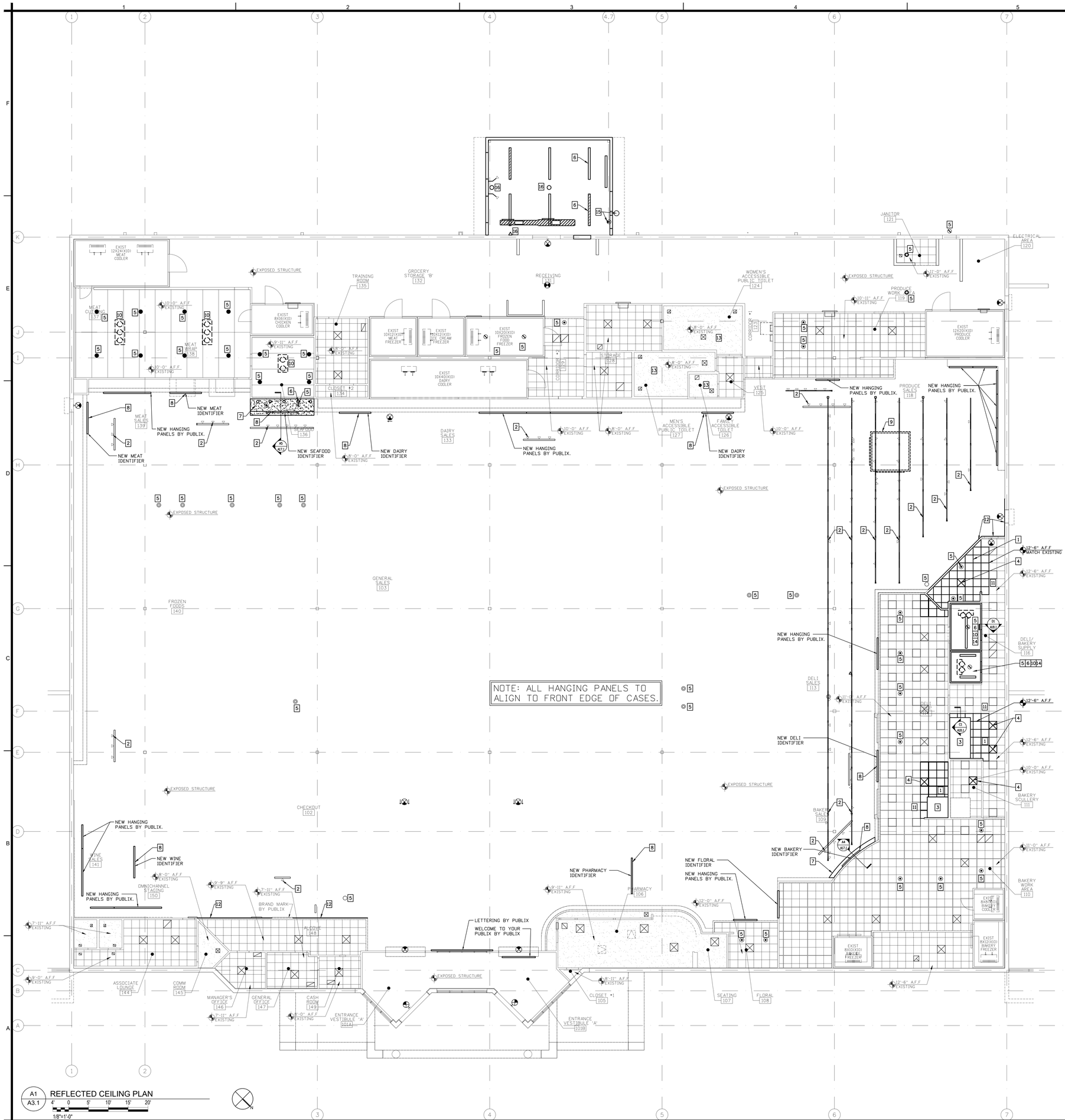
MARCUS J. BOYLE
FL# AR100919

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 221019.4
DATE 04/21/2022
DRAWN CS
CHECKED MB

A2.3

DECOR SCHEME: EVERGREEN



REFLECTED CEILING PLAN GENERAL NOTES:

A. ALL NEW CEILING TO BE CLASS "A"

B. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

C. GC TO PROVIDE AND INSTALL TWO #10 SAFETY WIRES PER ALL NEW AND IMPROPERLY SUPPORTED EXISTING HALIDE AND FLUORESCENT FIXTURES. ATTACH TO JOIST AT PROPER LOCATION AS COORDINATED WITH ELECTRICAL CONTRACTOR. (ELECTRICAL SHALL ATTACH TO FIXTURE).

D. PROVIDE 9" X 9" METAL ACCESS PANEL(S) AS REQUIRED IN RESTROOM GYPSUM BOARDS CEILINGS FOR VALVE ACCESS (VIF). REF SPECS.

E. WHERE CEILING HEIGHTS CHANGE, PROVIDE BULKHEAD AS REQUIRED.

F. EXAMINE EXISTING REFRIGERATION CHASES FOR POSSIBLE REUSE.

G. EXISTING DUCTWORK, DIFFUSERS, LIGHTS AND SPRINLER HEADS SHOWN FOR REFERENCE ONLY NOT INCLUDED IN SCOPE OF WORK.

H. ALL LAY-IN CEILING MUST BE INSTALLED PER IBC LOCAL SEISMIC CATEGORY REQUIREMENTS.

I. ALL FOOD PREPARATION AREAS GET IN VINYL FACED CEILING TILE. SEE PLAN A2.1 ROOM FINISHES SCHEDULE.

REFLECTED CEILING PLAN KEY NOTES:

1 INSTALL NEW PORTION OF CEILING SYSTEM AS INDICATED.

2 NEW TRACK LIGHTING. REF ELECTRICAL FOR ADDITIONAL INFORMATION.

3 NEW GREASE HOOD. REF MECHANICAL FOR ADDITIONAL INFORMATION.

4 NEW DIFFUSER. REF MECHANICAL FOR ADDITIONAL INFORMATION.

5 NEW OR RELOCATED FIRE SPRINKLER AS SHOWN. REF FIRE PROTECTION FOR ADDITIONAL INFORMATION.

6 NEW LIGHT FIXTURE. REF ELECTRICAL FOR ADDITIONAL INFORMATION.

7 INSTALL NEW SOFFIT SYSTEM AS INDICATED.

8 NEW SOFFIT-SIGN SUPPLIED AND INSTALLED BY PUBLIX.

9 NEW 10'X10' HANGING PRODUCE SIGNAGE BY PUBLIX. BOTTOM OF FIXTURE MOUNTED AT 10'-6" A.F.F. EXACT LOCATIONS TO BE VERIFIED IN FIELD.

10 NEW EVAP COILS. REF REFRIGERATION FOR ADDITIONAL INFORMATION.

11 REMOVE AND REPLACE CEILING SYSTEM AS REQUIRED FOR NEW WORK SCOPE.

12 (1) LAYER OF 5/8" GYP BOARD. REF A6.2 FOR ADDITIONAL INFORMATION.

13 PAINT EXISTING RESTROOM GYP CEILING (EP-2).

14 NEW COOLER CEILING. REF DETAIL C3/A18.1.

15 INSTALL (2) MOOD SPEAKERS FOR RECEIVING DOCK AND VOLUME CONTROL. RUN VOLUME CONTROL BACK TO EXISTING HEADEND. CONSULT WITH MOOD REPRESENTATIVE ON SITE IN CHARGE OF MOOD INSTALLATION.

16 NEW ILLUMINATED EXIT SIGNS/LIGHTS. REF ELECTRICAL DWGS FOR ADDITIONAL INFORMATION.

REFLECTED CEILING PLAN LEGEND:

	EXISTING LIGHT FIXTURES
	NEW OR RELOC LIGHT FIXTURES SEE ELECTRICAL
	EXIST SPRINKLERS
	NEW SPRINKLERS
	EXISTING CEILING MOUNTED EXIT LIGHTING SEE ELECTRICAL
	NEW OR RELOC CEILING MOUNTED EXIT LIGHTING SEE ELECTRICAL
	EXIST WALL MOUNTED EXIT LIGHTING SEE ELECTRICAL
	NEW OR RELOC WALL MOUNTED EXIT LIGHTING SEE ELECTRICAL
	EXIST REFRIGERATION COIL
	NEW REFRIGERATION COIL
	EXISTING GYP BOARD CEILING
	NEW GYP BOARD CEILING
	EXISTING LAY-IN CEILING SYSTEM
	NEW LAY-IN CEILING SYSTEM
	EXIST SOFFITS
	NEW SOFFITS

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CLIENT NAME
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PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
FRONTAGE OF LAKE HWY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
REFLECTED CEILING PLAN

REV RELEASE
100% SUBMITTAL - 21 APR 2022

PROJECT NO. 221094
DATE 04/21/2022
DRAWN CS
CHECKED MB

STATE OF FLORIDA
MARCUS JAMES BOYLE
AR100919
REGISTERED ARCHITECT
MARCUS J. BOYLE
FL# AR100919

A3.1

DECOR SCHEME: EVERGREEN

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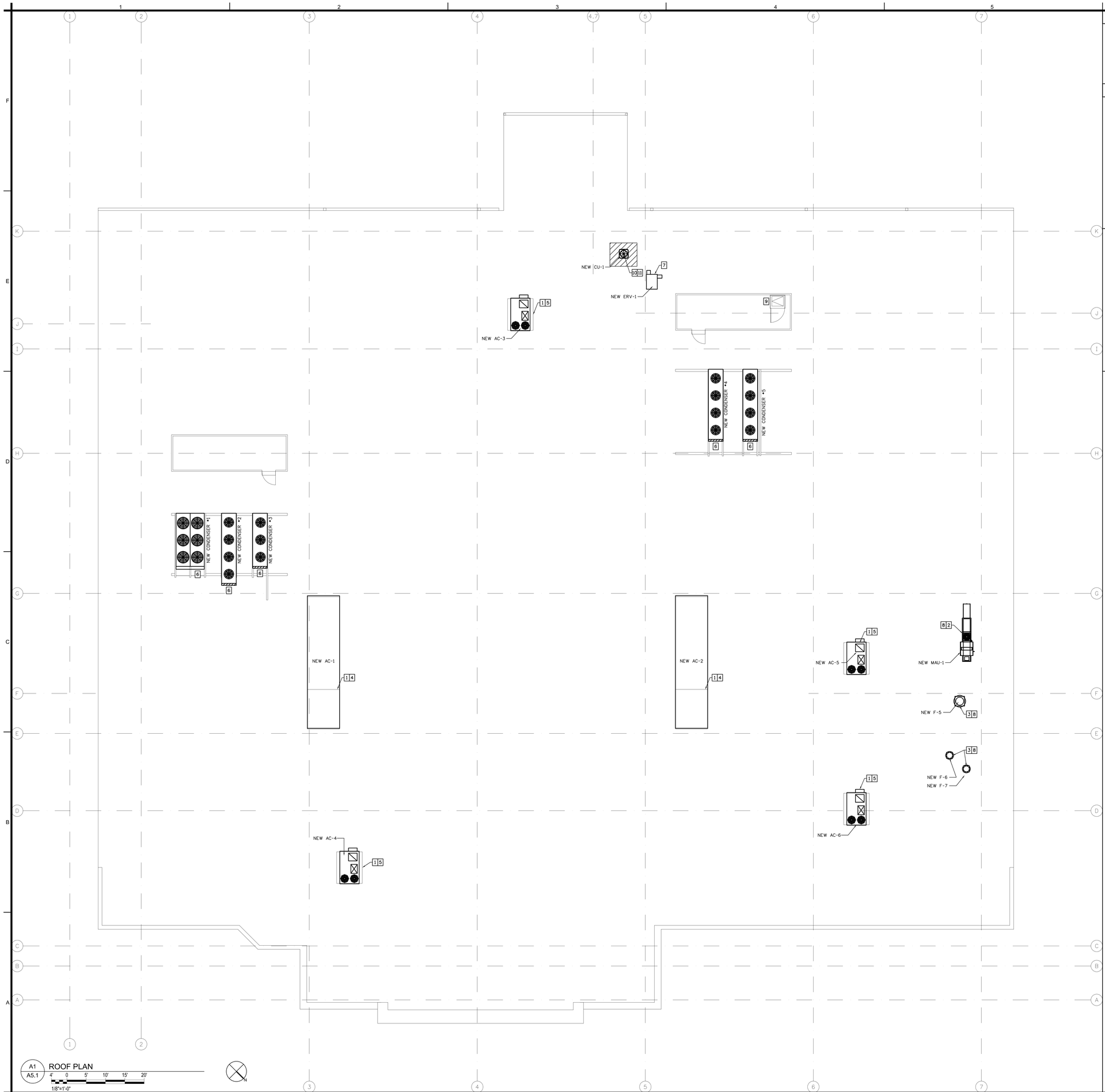


A1 / A5.1 ROOF PLAN
4' 0 5' 10' 15' 20'
1/8"=1'-0"

ROOF PLAN GENERAL NOTES:

A. INFORMATION SHOWN IN HERE IS EXISTING UNLESS SPECIFICALLY NOTED OTHERWISE. FIELD VERIFY LOCATION OF ALL EXISTING COMPONENTS.

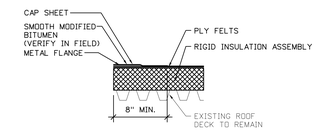
B. COORDINATE WITH HVAC, PLUMBING, REFRIGERATION AND STRUCTURAL DRAWINGS FOR EXACT LOCATION OF EQUIPMENT.

C. CONTRACTOR TO PATCH ROOFING SYSTEM AS NECESSARY TO MATCH EXISTING. REF: STRUCTURAL FOR ADDITIONAL INFORMATION.

D. CONTRACTOR SHALL INSTALL CRICKETS TO DIVERT WATER AT NEW EQUIPMENT.

ROOF PLAN KEY NOTES:

1. EXISTING CURB AND CRICKET.
2. NEW MAKE-UP AIR FAN TO BE INSTALLED ON ROOF WITH A NEW CURB. REF MECHANICAL/STRUCTURAL FOR ADDITIONAL INFORMATION.
3. NEW MOUNTED EXHAUST FAN WITH NEW ROOF CURB. REF MECHANICAL/STRUCTURAL FOR ADDITIONAL INFORMATION.
4. NEW MOUNTED AC UNIT (AC-1 & AC-2) ON EXISTING CURB. REF MECHANICAL/STRUCTURAL FOR ADDITIONAL INFORMATION.
5. NEW MOUNTED AC UNIT (AC-3, AC-4, AC-5 & AC-6) ON EXISTING CURB W/ CURB ADAPTER. REF MECHANICAL/STRUCTURAL FOR ADDITIONAL INFORMATION.
6. NEW REFRIGERATION UNIT. REF REFRIGERATION FOR ADDITIONAL INFORMATION.
7. NEW ERV. REF MECHANICAL/STRUCTURAL FOR ADDITIONAL INFORMATION.
8. FLASH IN NEW ROOFING.
9. NEW HATCH LIFTING ASSEMBLY. REF DETAIL D6/A18.1 FOR ADDITIONAL INFORMATION.
10. FLASH IN NEW ROOFING. REF DETAIL E6/A5.1 FOR ADDITIONAL INFORMATION.
11. NEW MOUNTED CONDENSER UNIT WITH NEW ROOF CURB. REF MECHANICAL/STRUCTURAL FOR ADDITIONAL INFORMATION.



E6 / A5.1 STRIP-IN DETAIL
12" 6" 0 1'
1 1/2"=1'-0"

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CLIENT NAME
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LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
ETONIA TRAIL TO LAKE ELLENOR DRIVE
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
ROOF PLAN

MARCUS J. BOYLE
FL# AR100919

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	221094
DATE	04/21/2022
DRAWN	CS
CHECKED	MB

A5.1

DECOR SCHEME: EVERGREEN

DEMOLITION ELEVATION GENERAL NOTES:

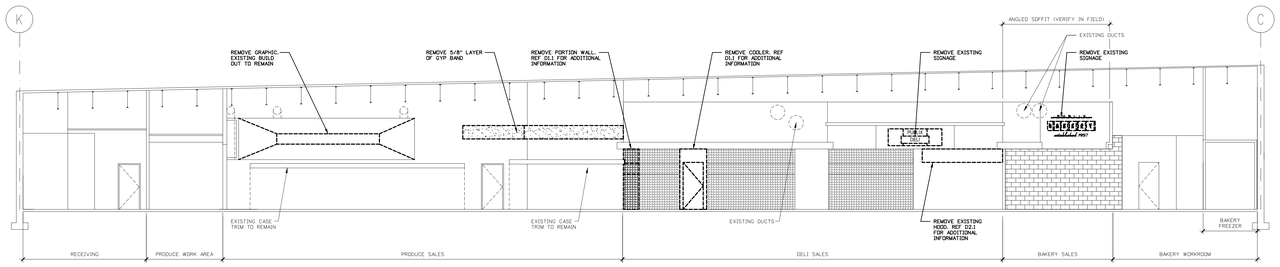
A. DEMOLITION INCLUDES BUT IS NOT LIMITED TO ITEMS SHOWN DASHED.

B. THE CONTRACTOR SHALL FIELD VERIFY THE EXTENT OF DEMOLITION.

C. GENERAL CONTRACTOR TO VERIFY ALL CONDITIONS PRIOR TO DEMOLITION. DISCREPANCIES BETWEEN DESIGN AND EXISTING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.

D. CARE SHALL BE TAKEN DURING DEMOLITION SO AS TO NOT DAMAGE OR ALTER ANY EXISTING STRUCTURAL MEMBERS OTHER THAN THOSE DESCRIBED IN THESE DOCUMENTS. THE PUBLIX REPRESENTATIVE SHALL BE NOTIFIED IMMEDIATELY IF ANY DAMAGE OCCURS, OR IS DISCLOSED DURING DEMOLITION. CARE SHALL BE TAKEN TO INSURE SUPPORT IS PROVIDED WHEREVER DEMOLITION IS PERFORMED.

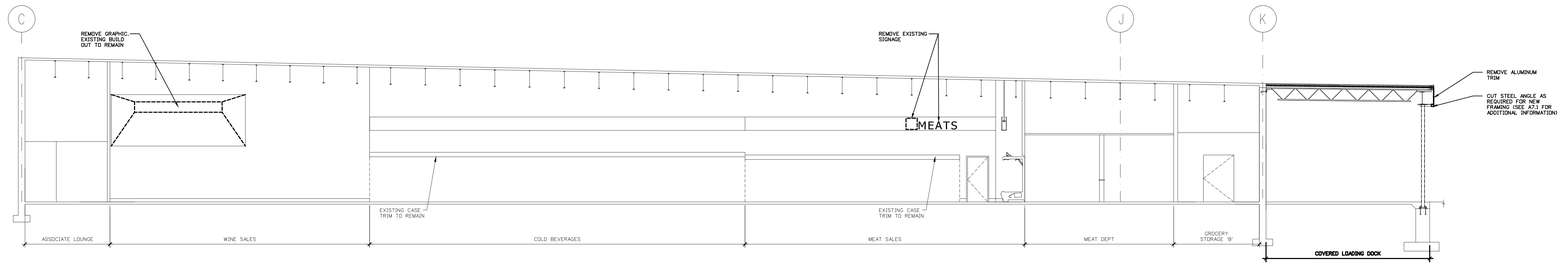
E. EXISTING PAINT NOT SHOWN. REF A6.2 FOR EXISTING AND NEW FINISHES



E1 / A6.1 DEMOLITION INTERIOR ELEVATION

4' 0 5' 10' 15' 20'

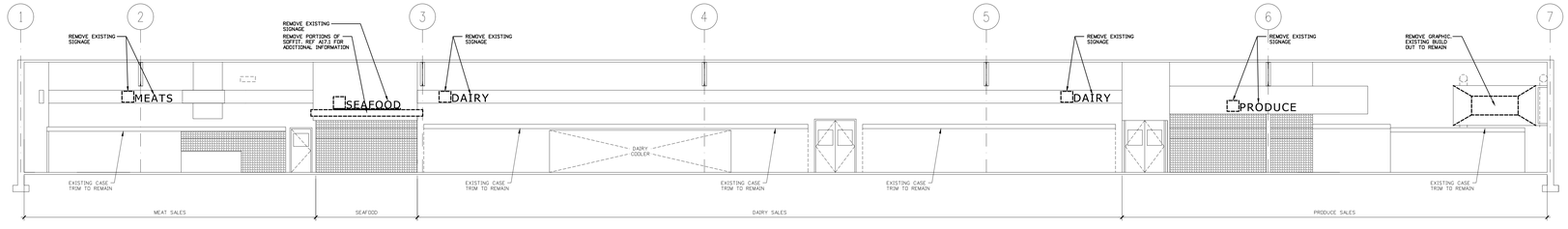
1/8"=1'-0"



D1 / A6.1 DEMOLITION INTERIOR ELEVATION

4' 0 5' 10' 15' 20'

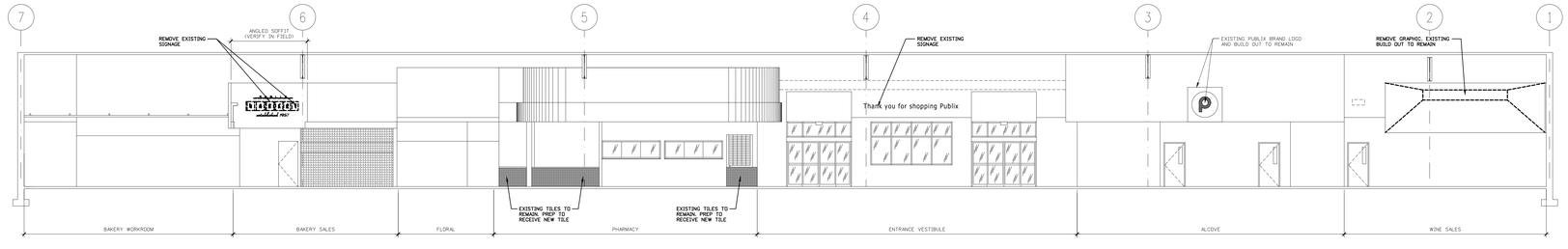
1/8"=1'-0"



B1 / A6.1 DEMOLITION INTERIOR ELEVATION

4' 0 5' 10' 15' 20'

1/8"=1'-0"



A1 / A6.1 DEMOLITION INTERIOR ELEVATION

4' 0 5' 10' 15' 20'

1/8"=1'-0"

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LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
(FORMERLY AT LAKE MONROE)
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
DEMOLITION INTERIOR ELEVATIONS

MARCUS J. BOYLE
FL# AR100919

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	221094
DATE	04/21/2022
DRAWN	CS
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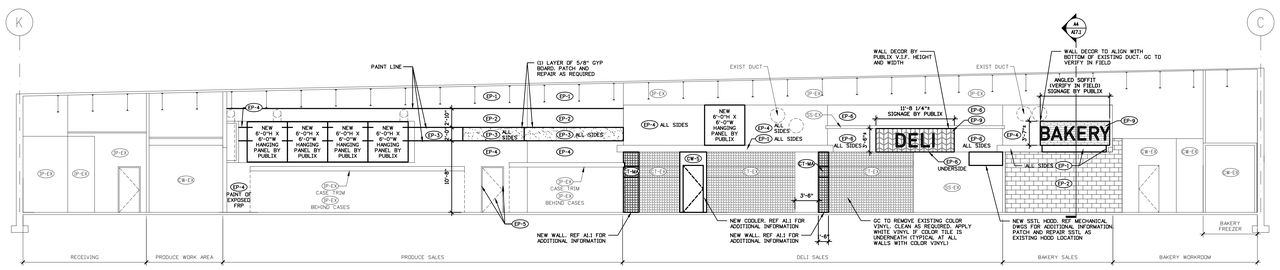
A6.1

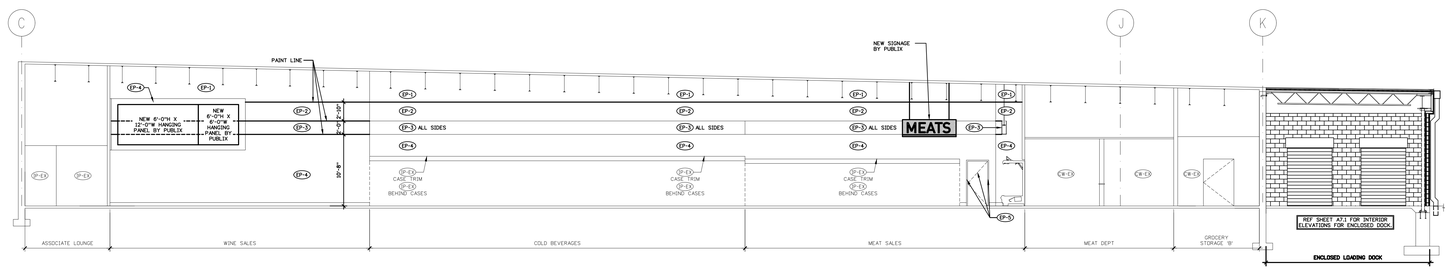
DECOR SCHEME: EVERGREEN



E1 A6.2 INTERIOR ELEVATION

4' 0 5' 10' 15' 20'

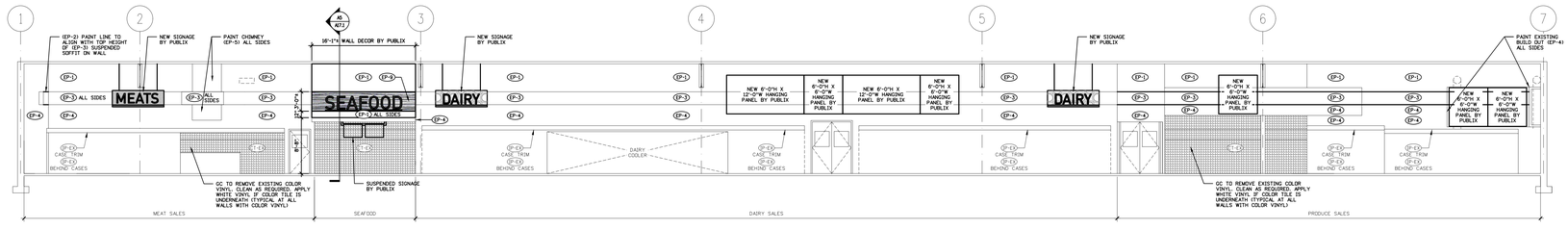
1/8"=1'-0"



D1 A6.2 INTERIOR ELEVATION

4' 0 5' 10' 15' 20'

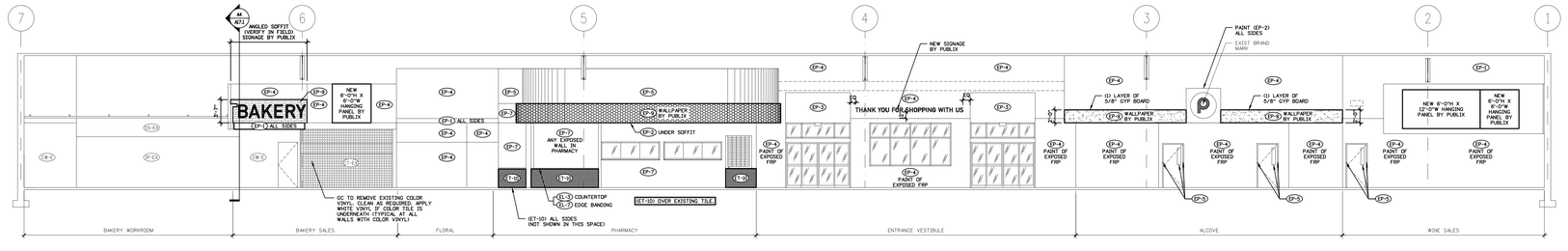
1/8"=1'-0"



B1 A6.2 INTERIOR ELEVATION

4' 0 5' 10' 15' 20'

1/8"=1'-0"



A1 A6.2 INTERIOR ELEVATION

4' 0 5' 10' 15' 20'

1/8"=1'-0"

FINISHES AND COLORS LEGEND: (EVERGREEN)

NOTE: NOT ALL COLORS OR FINISHES MAY BE USED ON THIS REMODEL

FINISH CODE	FINISH TYPE	DESCRIPTION	MANUFACTURER
EP-1	PAINT	SW 7020 BLACK FOX	SHERWIN WILLIAMS
EP-2	PAINT	SW 7005 PURE WHITE	SHERWIN WILLIAMS
EP-3	PAINT	CUSTOM MATCH PMS 363C (GREEN)	SHERWIN WILLIAMS
EP-4	PAINT	SW 7029 AGREEABLE GRAY	SHERWIN WILLIAMS
EP-5	PAINT	SW 7019 GAUNTLET GRAY	SHERWIN WILLIAMS
EP-6	PAINT	SW 7031 MEGA GREIGE	SHERWIN WILLIAMS
EP-7	PAINT	SW 6470 WATERSCAPE	SHERWIN WILLIAMS
EP-8	PAINT	OPEN	-
EP-9	PAINT	SW ALKYD PRIMER	SHERWIN WILLIAMS
EP-10	PAINT	SW 7067 CITYSCAPE	SHERWIN WILLIAMS
EP-11	PAINT	SW 6254 LAZY GRAY	SHERWIN WILLIAMS
EP-12	PAINT	SW 7069 IRON ORE	SHERWIN WILLIAMS
EP-13	PAINT	OPEN	-
IP-MA	PAINT	MATCH EXISTING ADJACENT INTERIOR COLOR	SHERWIN WILLIAMS
IP-EX	PAINT	EXISTING INTERIOR PAINT COLOR TO REMAIN	SHERWIN WILLIAMS
ET-1	CERAMIC TILE	VICENZA DESIGN, GRIGIO 2 - 12X24 & BULLNOSE W/LATICRETE 45 RAVEN	CERAMIC TECHNICS
ET-2	CERAMIC TILE	VICENZA DESIGN, GRIGIO 3 - 12X24 W/LATICRETE 45 RAVEN	CERAMIC TECHNICS
ET-3	CERAMIC TILE	VICENZA DESIGN, GRIGIO 4 - 12X24 W/LATICRETE 45 RAVEN	CERAMIC TECHNICS
ET-4	CERAMIC TILE	CUSTOM MATCH 363C (GREEN) W/LATICRETE 45 RAVEN	CERAMIC TECHNICS
ET-5	CERAMIC TILE	MOSA MURALS, ANTHRACITE 30100, 30110, 30130 - 6X6, 6X12 W/LATICRETE 45 RAVEN	CERAMIC TECHNICS
ET-6	CERAMIC TILE	MOSA MURALS, LIGHT COOL GREY 30010, 30030, 30050 - 6X6, 6X12 W/LATICRETE 90 LIGHT PEWTER	CERAMIC TECHNICS
ET-7	CERAMIC TILE	OPEN	-
ET-8	CERAMIC TILE	BARI METALWORKS, ALLOY 12X24 W/LATICRETE 45 RAVEN	CERAMIC TECHNICS
ET-9	CERAMIC TILE	MARCA CORONA PHASE, DARK 12X24 W/LATICRETE 45 RAVEN	CERAMIC TECHNICS
ET-10	CERAMIC TILE	GLAMOUR GLASS CUSTOM HEX MOSAIC W/LATICRETE 44 BRIGHT WHITE	CERAMIC TECHNICS
CT-MA	CERAMIC TILE	NEW CERAMIC TILE TO MATCH EXISTING	CERAMIC TECHNICS
CT-EX	CERAMIC TILE	EXISTING CERAMIC TILE TO REMAIN	CERAMIC TECHNICS
EF-1	QUARRY TILE	QUARRY OT01 ABRASIVE, DIABLO RED 6X6, 5X6 COVE BASE	DALTILE
EF-2	QUARRY TILE	QUARRY OT11 ABRASIVE, CHOCOLATE 6X6, 5X6 COVE BASE	DALTILE
EF-3	QUARRY TILE	QUARRY OT11 SMOOTH, CHOCOLATE 8X8, 5X8 COVE BASE	DALTILE
EF-4	PORCELAIN	BARI US METALWORKS, ALLOY - 12X12	CERAMIC TECHNICS
EF-5	VINYL COMPOSITION TILE	VCT STRIATIONS BBT, DIAMOND 10 TWILIGHT Z3603 12" X 24"	ARMSTRONG
EL-1	PLASTIC LAMINATE	7975K-12 "RAW CHESTNUT"	WILSONART
EL-2	PLASTIC LAMINATE	8210K-28 "PORTICO TEAK"	WILSONART
EL-3	PLASTIC LAMINATE	4947-38 "RAW COTTON"	WILSONART
EL-4	PLASTIC LAMINATE	8203K-28 "SILVER OAK PLY"	WILSONART
EL-5	PLASTIC LAMINATE	7964K-12 "SKYLINE WALNUT"	WILSONART
EL-6	PLASTIC LAMINATE	8212K-12 "PHANTUM ECRU"	WILSONART
EL-7	PLASTIC LAMINATE	K09859 BRUSHED ALUMINUM E.B.	CANPLAST
EL-8	PLASTIC LAMINATE	7939-18 "BLOND ECHO"	WILSONART
EL-9	PLASTIC LAMINATE	CHAMELEON WALL PROTECTION "410 BRUSHED SILVER"	ACROVYN
EL-10	PLASTIC LAMINATE	4888-38 "RUSTIC SLATE"	WILSONART
EL-11	PLASTIC LAMINATE	8221-38 "SAP WALNUT"	WILSONART
PL-MA	PLASTIC LAMINATE	NEW PLASTIC LAMINATE TO MATCH EXISTING	-
PL-EX	PLASTIC LAMINATE	PLASTIC LAMINATE FINISH TO REMAIN	-
ESS-1	SOLID SURFACE	EVEREST	CORIAN
ESS-2	SOLID SURFACE	ARROWROOT	CORIAN
ESS-3	SOLID SURFACE	RAIN CLOUD	CORIAN
EB-1	VINYL BASE	4" ARMSTRONG 61 GRAPHITE GRAY 4" ROPPE 193 BLACK BROWN 4" JOHNSONITE BURNT UMBER	-
EB-2	VINYL BASE	6" ARMSTRONG 61 GRAPHITE GRAY 6" ROPPE 193 BLACK BROWN 6" JOHNSONITE BURNT UMBER	-
MB-1	MMA	NEW 6"MMA BASE	-
SS-B	STAINLESS STEEL	STAINLESS STEEL BASE - 6" COVED	-
NB-MA	BASE	NEW BASE TO MATCH EXISTING ADJACENT	-
WB-1	WOOD BASE	WOOD BASE - 4" (MEDIUM GRAY)	-
FRP-1	FIBERGLASS REINFORCED PLASTIC	"SMARTSEAM SYMMETRIX CUSTOM" - ITEM #207830 & #207831 - FINISH SS916 WHITE/BLACK SUBWAY	MARLITE
FRP-1A	FIBERGLASS REINFORCED PLASTIC	"SMARTSEAM SYMMETRIX CUSTOM" - ITEM #210957 & #210958 - FINISH SS978 PUBLIX GREN SUBWAY	MARLITE
FRP-2	FIBERGLASS REINFORCED PLASTIC	SEQUENTIA "STRUCTOGLAS FRFR" - "WHITE" MARLITE "STANDARD FRP" - "WHITE" GLASTEEL "GLASLINER FRP" - "BRIGHT WHITE" CRANE COMPOSITES (KEMLITE) "FIRE-X GLASBORD"- "WHITE"	KEMLITE
FRP-3	FIBERGLASS REINFORCED PLASTIC	SEQUENTIA "STRUCTOGLAS FRFR" - "GRAY" MARLITE "STANDARD FRP" - "LIGHT GRAY" GLASTEEL "GLASLINER FRP" - "LIGHT GRAY" CRANE COMPOSITES (KEMLITE) "FIRE-X GLASBORD"- "PEARL GRAY"	KEMLITE
FRP-MA	FIBERGLASS REINFORCED PLASTIC	NEW FRP PANELS TO MATCH EXISTING	-
FRP-EX	FIBERGLASS REINFORCED PLASTIC	EXISTING FRP PANELS TO REMAIN	KEMLITE
CW-N	COOLER WALL/FREEZER PANEL	EMBOSSED NATURAL FINISH	-
CW-S	COOLER WALL/FREEZER PANEL	STAINLESS STEEL FINISH	-
CW-W	COOLER WALL/FREEZER PANEL	EMBOSSED WHITE FINISH	-
CW-EX	COOLER WALL/FREEZER PANEL	EXISTING TO REMAIN	-
SS-1	STAINLESS STEEL	STAINLESS STEEL	-
SS-EX	STAINLESS STEEL	EXISTING STAINLESS STEEL FINISH TO REMAIN	-
GL-1	METAL FINISHES	GALVANIZED STEEL	-
TSP-1	-	TOILET PARTITIONS: SCRANTON "LINEN" OR GLOBAL "CREAM" OR MILLS/BRADLEY "LINEN" AMPCO "MOCHA".	-
TSP-2	-	TOILET PARTITIONS: SCRANTON "STAINLESS-H" OR GLOBAL "METALLIC SILVER 9511" OR AMPCO "STAINLESS 847-148 H"	-
WD-1	TONGUE AND GROVE PLANKING	1/2" THICK BY 4" WIDE, V - JOINT LONGLEAF SOUTHERN PINE, S4S FINISH - MINWAX WOOD FINISH "GOLDEN PECAN 245"	-
WC-EX	-	EXISTING WALL COVERING TO REMAIN	-
AM-1	ACCENT MATERIAL	PROVIDED BY PUBLIX, SEE PUBLIX REPRESENTATIVE FOR MORE INFORMATION	-
FROST	FROSTED GLASS DECORATIVE FILM	CIELO	3M FASARA GLASS FINISHES
PP-1	PAINTED PLYWOOD	SW 6254 LAZY GRAY	SHERWIN WILLIAMS
WF-1	WINDOW FILM	SOLYX SX-C373 ACID ETCH STRIPED HORIZONTAL BANDS	
WV-	SERVICE DEPARTMENT WALL VINYL (PROVIDED AND INSTALLED BY GC) (WV-MT) (WV-SF) (WV-PR) (WV-BK) (WV-DL) (WV-VE)		
WS-1	WINDOW SHADE	M SCREEN 8505: CHARCOAL/CHARCOAL (030030): 5% OPENNESS, TRAD. RIB WEAVE, 95% UV BLOCKAGE, MANUAL PULLEY SYSTEM, STANDARD ROLL, 4" ALUM. FASCIA TO MATCH MULLIONS, INTERNAL HEMBAR, S.S. CHAIN W/ CHILD SAFETY TENSION DEVICE. FINISHES TO MATCH MULLIONS, TYP.	MERMET

INTERIOR ELEVATION GENERAL NOTES:

A. NOT ALL COLORS OR FINISHES MAY BE USED ON THIS REMODEL.

B. INTERIOR PAINTS FOR SALES AREA WALL SURFACES ABOVE 8'-0" ARE TO BE "FLAT FINISH"; ALL OTHER SURFACES TO BE SEMI-GLOSS SATIN FINISH.

C. REFRIGERATION LINES, ELECTRICAL CONDUIT, DUCTS AND COLUMNS TO MATCH ADJACENT WALL SURFACE. WHEN MORE THAN ONE COLOR IS USED ON WALL, MATCH COLOR CHANGES AT EXACT SAME HEIGHTS.

D. ALL WALL AND COLUMN FINISHES TO BE CLASS A.

E. GENERAL CONTRACTOR SHALL PREPARE ALL SURFACES FOR PAINTING OR AS REQUIRED TO RECEIVE NEW DECOR. PUBLIX SHALL PAINT ALL INTERIOR (NEW AND EXISTING) SURFACES NOTED TO BE PAINTED, AS PER SPECIFICATIONS OR TO MATCH EXISTING.

F. ALL COLUMNS IN GROCERY SALES TO BE PAINTED (EP-4) ABOVE HEIGHT OF STAINLESS STEEL FINISH UNO.

G. ALL SIGNAGE SHOWN AND PROPOSED FREE STANDING LETTERS ARE TO BE PROVIDED BY PUBLIX. SEE SEPARATE PUBLIX SIGNAGE DRAWINGS.

H. PAINT EXISTING WOOD/HM DOOR AND/OR FRAME TO MATCH ADJACENT WALL FINISH.

I. CONTRACTOR IS TO POLISH EXISTING SS COLUMN WRAPS. VERIFY QUANTITY W/ PUBLIX ON-SITE FIELD REPRESENTATIVE.

J. CONTRACTOR IS RESPONSIBLE FOR REMOVING, DISPOSING AND RENDERING OLD SIGNAGE AS UNUSABLE WHEN PLACING IT IN TRASH RECEPTACLES. SEE PUBLIX REPRESENTATIVE.

K. REMOVE EXISTING BASE AS REQUIRED TO INSTALL NEW FINISH. INSTALL NEW BASE AFTER PAINTING WALL.

L. PROVIDE SKIM COAT (LEVEL 5 FINISH) ON SURFACES TO RECEIVE GRAPHIC SIGN BY PUBLIX.

M. PAINT ALL SUPPLY AND RETURN GRILLES TO MATCH WALL COLOR AND PAINT TYPE. PREP SURFACE AS REQUIRED TO RECEIVE NEW PAINT.

N. THE PAINT INDICATED FOR THE FACE OF BUMP-OUTS, BANDS AND SOFFITS SHALL WRAP ALL SIDES AND BOTTOM, UNO.

O. NEW AND EXISTING WOOD TRIM OVER FREE STANDING CASES TO BE PAINTED AS INDICATED. DO NOT PAINT PREFINISHED METAL TRIM.

P. PAINT THE TOP AND FRONT EDGE OF THE SIDEWALK CURB TRAFFIC YELLOW ALONG THE FULL WIDTH OF THE STORE. ALSO REPAINT TRUCK BACKUP LINES.

Q. ALL SURFACES BEHIND CASES, WALK-IN COOLER, OR FREEZERS SHALL JUST RECEIVE PRIMER OR BLOCK FILLER. ALL EXPOSED SURFACES ABOVE THE CASES, WALK-IN COOLER, OR FREEZERS SHALL ALSO RECEIVE THE FINISH COAT OF PAINT.

R. EXISTING PAINT ABOVE JOIST TO REMAIN (TYP) (IP-EX)

S. ALL AREAS VIEWABLE OR IN CUSTOMER AREAS TO BE PAINTED (EP-4).

T. ALL EXISTING VINYL TO BE REPLACED WITH (EB-2) WHERE BASE IS VISIBLE BY CUSTOMER.

U. ALL HOLLOW METAL DOOR FRAMES TO BE PAINTED (EP-5).

DECOR SCHEME - EVERGREEN

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CLIENT NAME

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
6700 N LECANTO HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
INTERIOR ELEVATIONS

MARCUS J. BOYLE
FL# AR100919

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	211094
DATE	04/21/2022
DRAWN	CS
CHECKED	MB

A6.2

DECOR SCHEME: EVERGREEN

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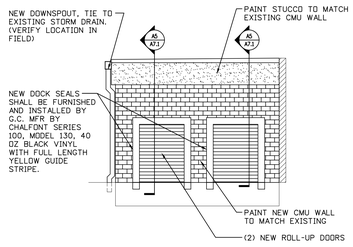
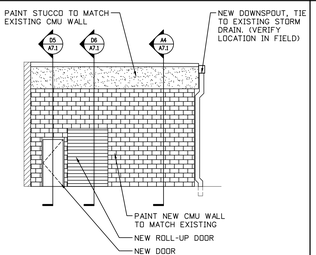


D1 EXTERIOR ELEVATION - DOCK ENCLOSURE
A7.1 4' 0 5' 10' 15' 20'
1/8"=1'-0"



D2 EXTERIOR ELEVATION - DOCK ENCLOSURE
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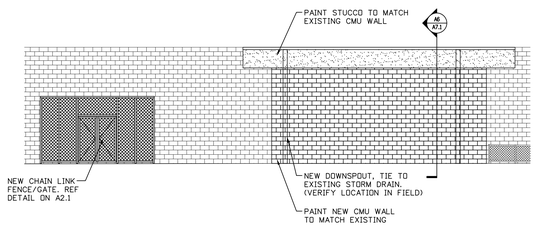
1/8"=1'-0"



D3 EXTERIOR ELEVATION - DOCK ENCLOSURE
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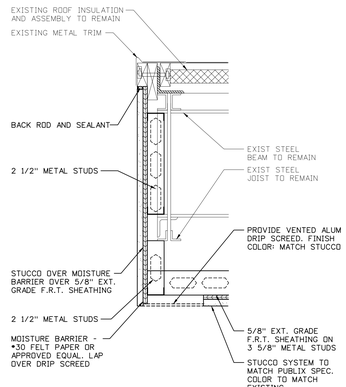
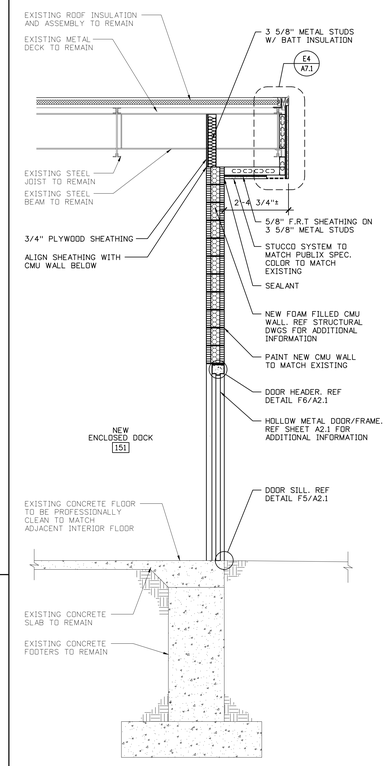
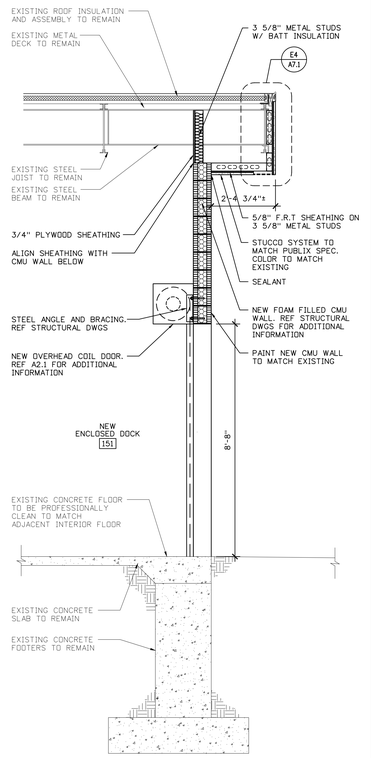


E4 DOCK CANOPY EDGE DETAIL
A7.1 12" 6" 0 1'
1 1/2"=1'-0"

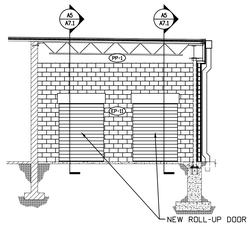


D5 WALL SECTION AT DOCK ENCLOSURE
A7.1 12" 0 1' 2' 3' 4' 5'
1/2"=1'-0"



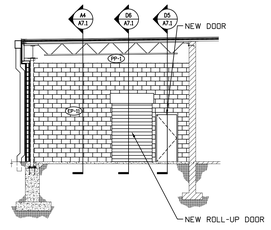
D6 WALL SECTION AT DOCK ENCLOSURE
A7.1 12" 0 1' 2' 3' 4' 5'
1/2"=1'-0"

NOTE! SEE A6.2 FOR FINISH LEGEND.



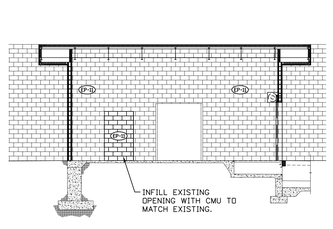
C1 INTERIOR ELEVATION - DOCK ENCLOSURE
A7.1 4' 0 5' 10' 15' 20'
1/8"=1'-0"

NOTE! SEE A6.2 FOR FINISH LEGEND.

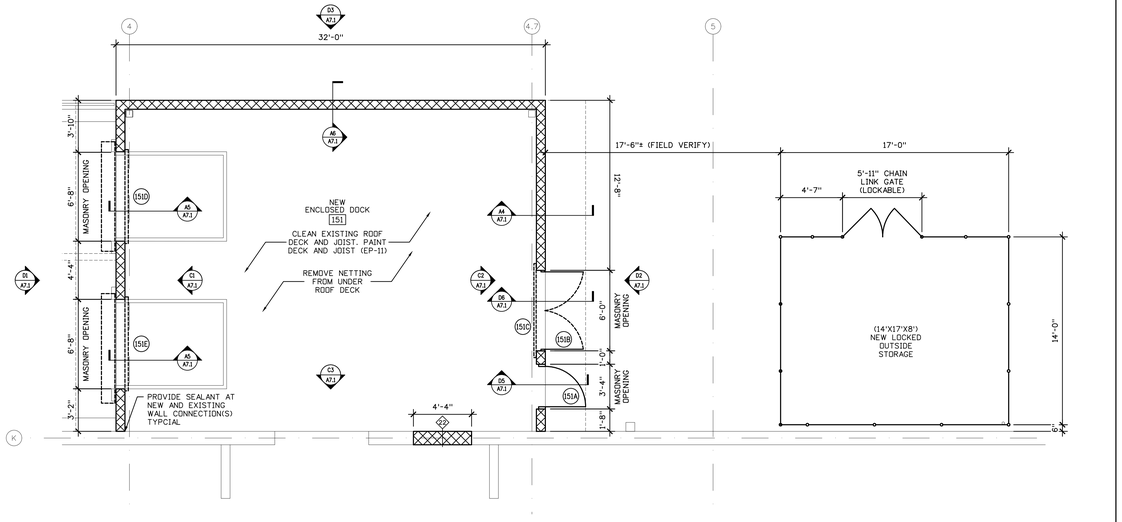


C2 INTERIOR ELEVATION - DOCK ENCLOSURE
A7.1 4' 0 5' 10' 15' 20'
1/8"=1'-0"

NOTE! SEE A6.2 FOR FINISH LEGEND.



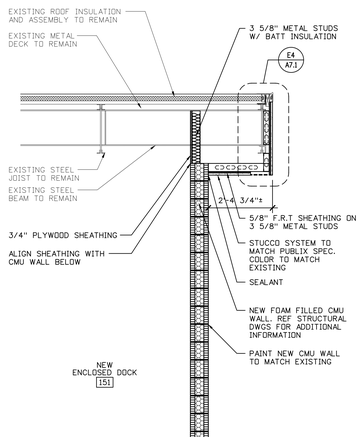
C3 INTERIOR ELEVATION - DOCK ENCLOSURE
A7.1 4' 0 5' 10' 15' 20'
1/8"=1'-0"



A1 ENLARGED FLOOR AND FINISH PLAN - DOCK ENCLOSURE
A7.1 12" 0 1' 4' 7' 11'
1/4"=1'-0"

FLOOR & FINISH PLAN LEGENDS:

	NEW CMU WALL



A4 WALL SECTION AT DOCK ENCLOSURE
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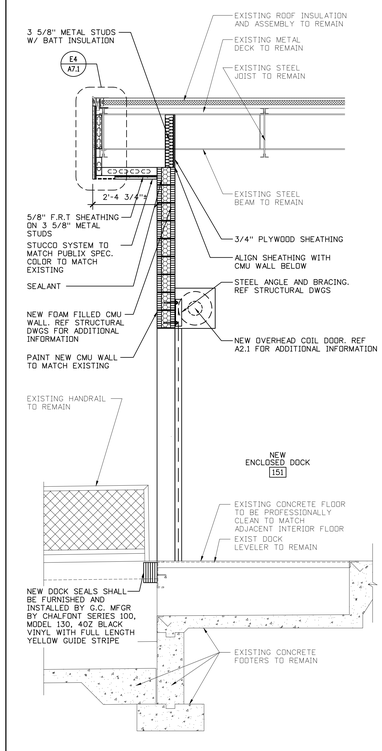
1/2"=1'-0"



A5 WALL SECTION AT DOCK ENCLOSURE
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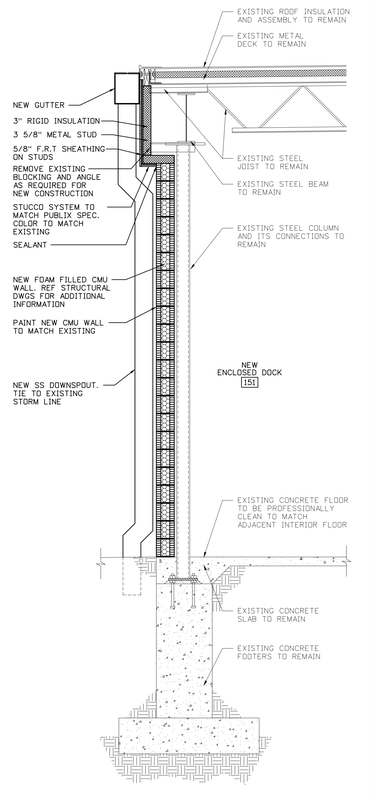
1/2"=1'-0"



A6 WALL SECTION AT DOCK ENCLOSURE
A7.1 12" 0 1' 2' 3' 4' 5'
1/2"=1'-0"

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PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
8750 CRYSTAL RIVER HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
DOCK ENCLOSURE PLAN, WALL SECTIONS AND DETAILS

STATE OF FLORIDA — MARCUS JAMES BOYLE — AR100919 — REGISTERED ARCHITECT
MARCUS J. BOYLE
FL# AR100919

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	2210194
DATE	04/21/2022
DRAWN	SS
CHECKED	MB

A7.1

DECOR SCHEME: EVERGREEN

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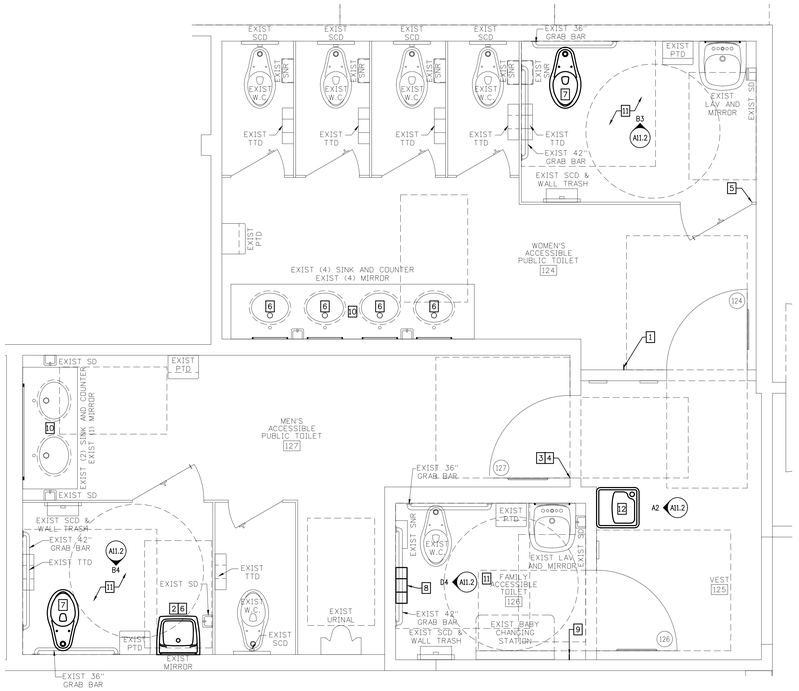
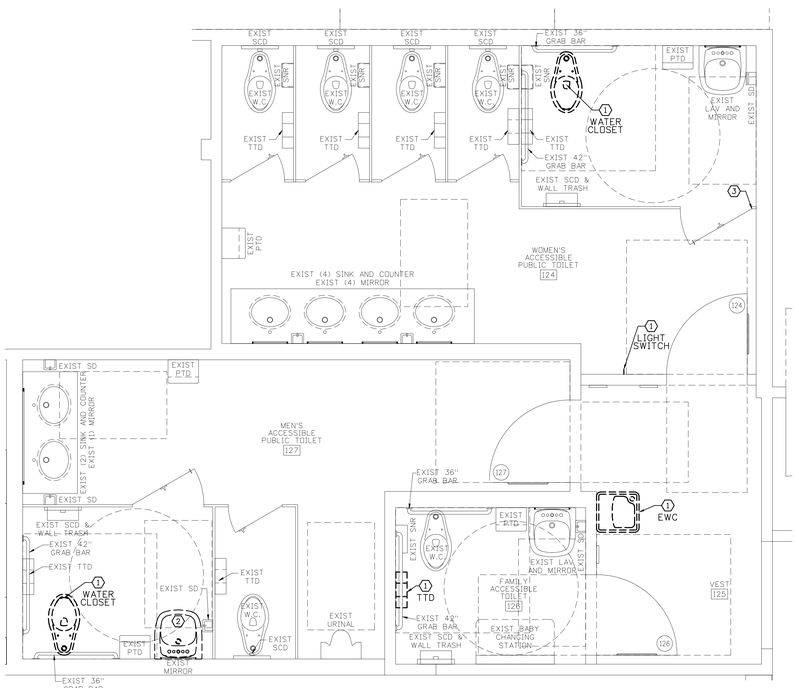


D1 / A11.1 ACCESSIBLE PUBLIC RESTROOM ENLARGED PLAN

12" 0 1' 2' 3' 4' 5'

1/2"=1'-0"



A1 / A11.1 ACCESSIBLE PUBLIC RESTROOM ENLARGED DEMOLITION PLAN

12" 0 1' 2' 3' 4' 5'

1/2"=1'-0"

PUBLIC RESTROOM FLOOR PLAN GENERAL NOTES

A. DOTTED CIRCLE OR 'T' DENOTES REQUIRED 5'-0" DIAMETER TURNING CIRCLE OR THREE POINT TURN AREA AND DOTTED RECTANGLE DENOTES CLEAR FLOOR SPACE FOR ACCESSIBLE FIXTURES.

B. ALL EQUIPMENT SHOWN IS EXISTING, UNLESS NOTED OTHERWISE ON PLAN.

C. PATCH AND REPAIR FINISH FLOOR AND WALLS AS REQUIRED TO MATCH EXISTING FINISHES WHERE WALLS/EQUIPMENT/FIXTURES ARE TO BE REMOVED/RELOCATED, OR NEW WALLS CONSTRUCTED.

PUBLIC RESTROOM FLOOR PLAN KEY NOTES:

1. REMOUNT LIGHT SWITCH NO GREATER THAN 48" AFF.
2. PROVIDE NEW SINK. REF PLUMBING FOR ADDITIONAL INFORMATION.
3. ADJUST DOOR CLOSER FOR REQUIRED 5 SECOND MINIMUM FOR DOOR TO CLOSE FROM 90° TO OPEN TO 12° FROM THE STRIKE.
4. ADJUST DOOR CLOSER FOR REQUIRED 5LBS OR LESS PUSH/PULL FORCE.
5. ADJUST OR PROVIDE NEW SELF CLOSING HARDWARE.
6. INSULATE WATER SUPPLY AND WATER PIPES UNDER EXISTING SINKS IN RESTROOMS.
7. RELOCATE WATER CLOSET. REF PLUMBING FOR ADDITIONAL INFORMATION.
8. RELOCATE TTD TO HAVE CONTROLS NO HIGHER THAN 12"-15" ABOVE GRAB BAR AND NO HIGHER THAN 48" A.F.F.
9. PROVIDE NEW COAT HOOK NO HIGHER THAN 48" A.F.F.
10. POLISH/BUFF OUT EXISTING COUNTERTOP AND SINK.
11. REMOVE EXISTING TRASH (TR/TR1) OUT OF ACCESSIBLE STALL/SPACE. RELOCATE TO RESTROOM COMMON IF NONE ARE PROVIDED.
12. RELOCATE EDF. REF PLUMBING FOR ADDITIONAL INFORMATION.

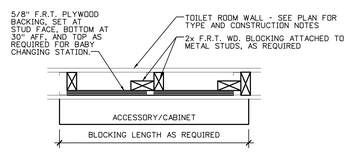
PUBLIC RESTROOM FLOOR PLAN LEGEND:

	DENOTES WALLS THAT REQUIRE INSULATION

PUBLIC RESTROOM DEMOLITION PLAN KEY NOTES:

1. ITEMS TO BE RELOCATED/REMOUNTED.
2. REMOVE EXISTING PLUMBING FIXTURE. REF PLUMBING FOR ADDITIONAL INFORMATION.
3. REMOVE PARTITION DOOR HARDWARE. SAVE PARTITION DOOR FOR REINSTALLATION.

NOTE:
AT OTHER AREAS PROVIDE AND INSTALL 5/8" F.R.T. PLYWOOD OR 20 GAUGE STEEL PLATE WELDED TO STUDS MIN. 12" IN HEIGHT BY LENGTH AS REQUIRED. COORDINATE LOCATIONS AND MOUNTING HEIGHTS AS PER DIMENSIONS ON THIS SHEET.



B4 / A11.1 TYPICAL REINFORCING DETAIL

12" 6" 0 1' 2' 3'

3/4"=1'-0"

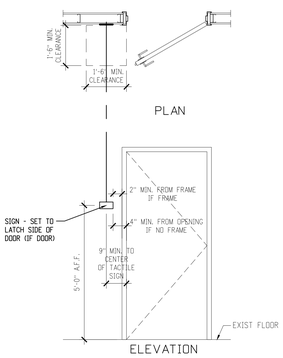
PUBLIC RESTROOM DEMOLITION PLAN LEGEND

	EXISTING FIXTURE TO REMAIN
	ITEM TO BE REMOVED

TOILET ACCESSORY LEGEND

NOTE: ITEMS IN THIS LEGEND MAY NOT OCCUR DURING THIS REMODEL. REFERENCE PLAN/ELEVATIONS FOR ITEMS THAT APPLY

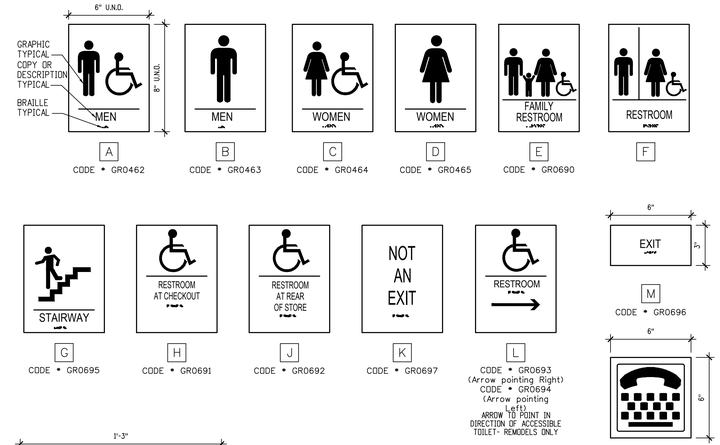
FIXTURE	DESCRIPTION
P-1	WATER CLOSET - SEE PLUMBING SCHEDULE
P-2	WATER CLOSET - ADA COMPLIANT, SEE PLUMBING SCHEDULE
P-3	URINAL - ADA COMPLIANT, SEE PLUMBING SCHEDULE
P-4	WALL HUNG LAVATORY ADA COMPLIANT - SEE PLUMBING SCHEDULE
P-4A	WALL HUNG LAVATORY ADA COMPLIANT - SEE PLUMBING SCHEDULE
P-5	LAVATORY - GLACIER WHITE CORIAN MODEL 810 W/ INTEGRATED MATTERHORN VANITY TOP W/ BACK SPLASH SEE DETAILS FOR ADDITIONAL INFORMATION. REFER TO PLUMBING PLANS FOR ADDITIONAL PLUMBING FIXTURES.
P-18	WATER HI/LO COOLER - ADA COMPLIANT, SEE PLUMBING SCHEDULE
P-19	WATER SINGLE COOLER - ADA COMPLIANT, SEE PLUMBING SCHEDULE
FVA	FLUSH VALVE ASSEMBLY - SEE PLUMBING SPECIFICATIONS
ACCESSORIES	DESCRIPTION
CH	COAT HOOK - SEE SPECIFICATIONS
MR	MR1 - MIRROR - 16" X 36" W/ S.S. FRAME - SEE SPECIFICATIONS MR2 - MIRROR - 18" X 42" - SEE SPECIFICATIONS (MOUNT ON INSIDE OF RESTROOM DOOR OR WHERE INDICATED ON THE PLAN) MR3 - MIRROR - 48" X 36" W/ S.S. FRAME - SEE SPECIFICATIONS
R	R36 - GRAB BAR - 36" S.S. - SEE SPECIFICATIONS R42 - GRAB BAR - 42" S.S. - SEE SPECIFICATIONS
DHD	ELECTRIC HAND DRYER - ASI MODEL 0160 STD. WHITE (ALTERNATE FOR REMODELS ONLY)
TSP	TSP1 - ALL TOILET PARTITIONS TO BE: SCRANTON "LINEN" OR GLOBAL "CREAM" OR WILLS/BRADLEY "LINEN" OR AMPCO "MOCHA" TSP2 - TOILET PARTITIONS - TO BE COLOR WHITE TSP3 - TOILET PARTITIONS - TO BE STAINLESS STEEL
ACCESSORIES	DESCRIPTION (FURNISHED/INSTALLED BY PUBLIX)
BCS	BABY CHANGING STATION
PTD	PAPER TOWEL DISPENSER - KIMBERLY CLARK
SCD	SEAT COVER DISPENSER - KIMBERLY CLARK
SD	SOAP DISPENSER - KIMBERLY CLARK
SNR	SANITARY NAPKIN RECEPTACLE - RUBBERMAID MODEL 6140-00 (IN WOMEN'S OR UNISEX RESTROOMS ONLY)
TTD	TOILET TISSUE DISPENSER - KIMBERLY CLARK
TR	TR1 - TRASH RECEPTACLE (RUBBERMAID - PRODUCT NO. 48754) (BELOW VANITY IF APPLICABLE) TR2 - CIRCULAR WASTE CHUTE - SEE SPECIFICATIONS TR3 - TRASH RECEPTACLE (SLIM JIM TOP)

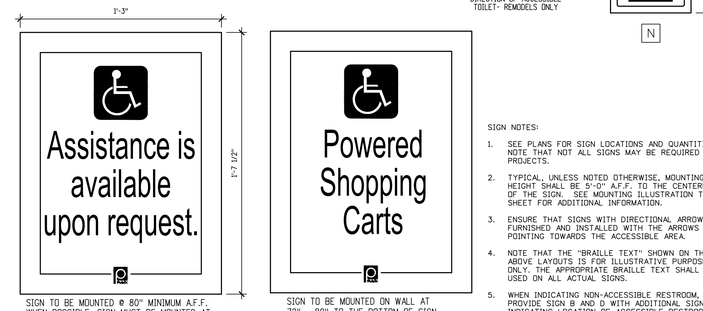


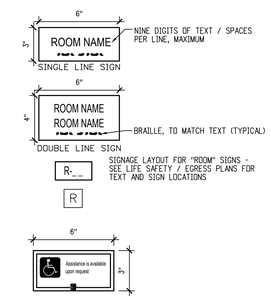
E6 / A11.1 SIGN MOUNTING ILLUSTRATION

12" 0 1' 2' 3' 4' 5'

1/2"=1'-0"







SIGN NOTES:

1. SEE PLANS FOR SIGN LOCATIONS AND QUANTITIES. NOTE THAT NOT ALL SIGNS MAY BE REQUIRED ON ALL PROJECTS.
2. TYPICAL, UNLESS NOTED OTHERWISE, MOUNTING HEIGHT SHALL BE 5'-0" A.F.F. TO THE CENTERLINE OF THE SIGN. SEE MOUNTING ILLUSTRATION THIS SHEET FOR ADDITIONAL INFORMATION.
3. ENSURE THAT SIGNS WITH DIRECTIONAL ARROWS ARE FURNISHED AND INSTALLED WITH THE ARROWS POINTING TOWARDS THE ACCESSIBLE AREA.
4. NOTE THAT THE "BRAILLE TEXT" SHOWN ON THE ABOVE LAYOUTS IS FOR ILLUSTRATIVE PURPOSES ONLY. THE APPROPRIATE BRAILLE TEXT SHALL BE USED ON ALL ACTUAL SIGNS.
5. WHEN INDICATING NON-ACCESSIBLE RESTROOM, PROVIDE SIGN B AND D WITH ADDITIONAL SIGN INDICATING LOCATION OF ACCESSIBLE RESTROOM, "FOR REMODEL ONLY."
6. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE SO THAT A CLEAR FLOOR SPACE OF 18 INCHES (455 MM) MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING (SEE SIGN MOUNTING ILLUSTRATION). WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF THE DOOR, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT VERTICAL SURFACE.
7. ALL THE ADA SIGNS NOTED WILL BE SUPPLIED AND INSTALLED BY PUBLIX. THE CODE NUMBERS FURNISHED ARE FOR CONSTRUCTION ASSOCIATES TO ORDER FROM PRINTING SERVICES. THE OTHERS ARE INVENTORIED IN FACILITY SERVICES AND INSTALLED BY THEIR TEAMS.

SIGN SPECIFICATION:

ALL SIGNS SUPPLIED AND INSTALLED BY PUBLIX.

PANEL: 1/8" THK. ACRYLIC PANEL, BACKGROUND COLOR TO BE BRIGHT BLUE. SIZE AND LAYOUT AS DETAILED HEREON.

COPY: 3/4" WHITE, RAISED (NOT LESS THAN 1/32"), ADA COMPLIANT LETTERING, PERMANENTLY MOUNTED TO FACE PANEL.

GRAPHICS: WHITE, RAISED (NOT LESS THAN 1/32"), ADA COMPLIANT, UNIVERSAL SYMBOLS, PERMANENTLY MOUNTED TO FACE PANEL.

BRAILLE: IMBED, GRADE 2, WITH A DOT DIAMETER OF 0.059 INCHES, IN BACKGROUND FACE PANEL.

MOUNTING: SECURE SIGN TO WALL W/ VERY HIGH BOND, DOUBLE SIDED TAPE.

NOTES:

SOME OF THESE DIMENSIONS HAVE TOLERANCES BUILT INTO THEM THAT ARE MORE STRINGENT THAN WHAT IS REQUIRED BY ADA.

THESE TOLERANCES HAVE BEEN ADOPTED BY PUBLIX FOR BETTER CUSTOMER CONVENIENCE AND TO ALLOW FOR CONSTRUCTION TOLERANCES.

A5 / A11.1 ADA SIGNAGE

6" 3" 0 6"

3"=1'-0"

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CLIENT NAME
Publix.
SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
6790 N LECANTO HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
ENLARGED RESTROOM PLANS AND ELEVATIONS

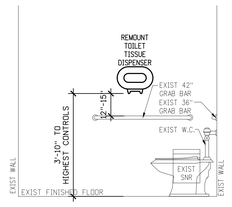
MARCUS J. BOYLE
FL# AR100919

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO 2310704
DATE 04/21/2022
DRAWN CS
CHECKED MB

A11.1

DECOR SCHEME: EVERGREEN



D4 A11.2 — ACCESSIBLE FIXTURE MOUNTING HEIGHTS

12" 0 1' 2' 3' 4' 5'

1/2"=1'-0"

ASSOCIATE RESTROOM FLOOR PLAN GENERAL NOTES

A. DOTTED CIRCLE OR 'T' DENOTES REQUIRED 5'-0" DIAMETER TURNING CIRCLE OR THREE POINT TURN AREA AND DOTTED RECTANGLE DENOTES CLEAR FLOOR SPACE FOR ACCESSIBLE FIXTURES.

B. ALL EQUIPMENT SHOWN IS EXISTING, UNLESS NOTED OTHERWISE ON PLAN.

C. PATCH AND REPAIR FINISH FLOOR AND WALLS AS REQUIRED TO MATCH EXISTING FINISHES WHERE WALLS/EQUIPMENT/FIXTURES ARE TO BE REMOVED/RELOCATED, OR NEW WALLS CONSTRUCTED.

ASSOCIATE RESTROOM FLOOR PLAN KEY NOTES:

[1] PROVIDE NEW COAT HOOK NO HIGHER THAN 48" A.F.F.

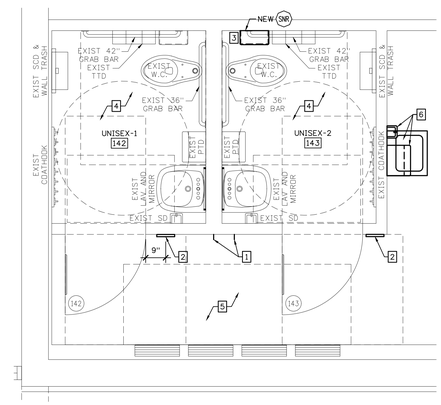
[2] PUBLIX TO PROVIDE TACTILE BRAILLE SIGN ON WALL OR DOOR. REF DETAIL "F" ON A11.1.

[3] NEW SANITARY NAPKIN RECEPTACLE. REF TOILET ACCESSORY LEGEND ON A11.1.

[4] REMOVE EXISTING TRASH (TR/TR1) OUT OF ACCESSIBLE STALL/SPACE.

[5] AREA TO BE FREE OF STORAGE ITEMS TO ALLOW ACCESSIBILITY TO THE RESTROOMS AND EGRESS.

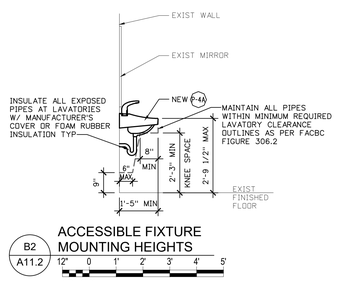
[6] RELOCATED SSTL SINK. REF EQ1.1 SHEET FOR ADDITIONAL INFORMATION.



C5 A11.2 — ACCESSIBLE ASSOCIATE RESTROOM ENLARGED PLAN

12" 0 1' 2' 3' 4' 5'

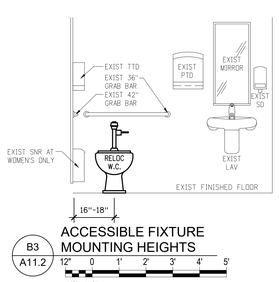
1/2"=1'-0"



B2 A11.2 — ACCESSIBLE FIXTURE MOUNTING HEIGHTS

12" 0 1' 2' 3' 4' 5'

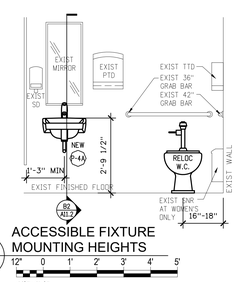
1/2"=1'-0"



B3 A11.2 — ACCESSIBLE FIXTURE MOUNTING HEIGHTS

12" 0 1' 2' 3' 4' 5'

1/2"=1'-0"



B4 A11.2 — ACCESSIBLE FIXTURE MOUNTING HEIGHTS

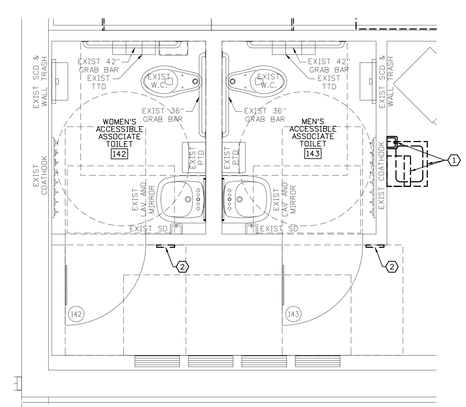
12" 0 1' 2' 3' 4' 5'

1/2"=1'-0"

ASSOCIATE RESTROOM DEMOLITION PLAN KEY NOTES:

(1) ITEMS BEING REMOVED/RELOCATED. REF D1.1 AND EQ1.1 FOR ADDITIONAL INFORMATION.

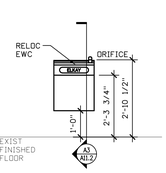
(2) REMOVE RESTROOM SIGNAGE.



A5 A11.2 — ACCESSIBLE ASSOCIATE RESTROOM ENLARGED DEMOLITION PLAN

12" 0 1' 2' 3' 4' 5'

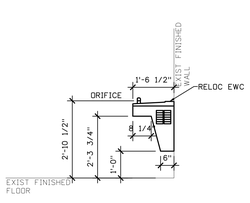
1/2"=1'-0"



A2 A11.2 — ELECTRIC WATER COOLER - FRONT ELEV

12" 0 1' 2' 3' 4' 5'

1/2"=1'-0"



A3 A11.2 — ELECTRIC WATER COOLER - SIDE ELEV

12" 0 1' 2' 3' 4' 5'

1/2"=1'-0"

ASSOCIATE RESTROOM DEMOLITION PLAN LEGEND

	EXISTING FIXTURE TO REMAIN
	ITEM TO BE REMOVED

CUHACI PETERSON
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LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
FORMERLY PUBLIX AT LAKE HIGHLAND
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
ENLARGED RESTROOM PLANS AND ELEVATIONS

MARCUS J. BOYLE
FL# AR100919

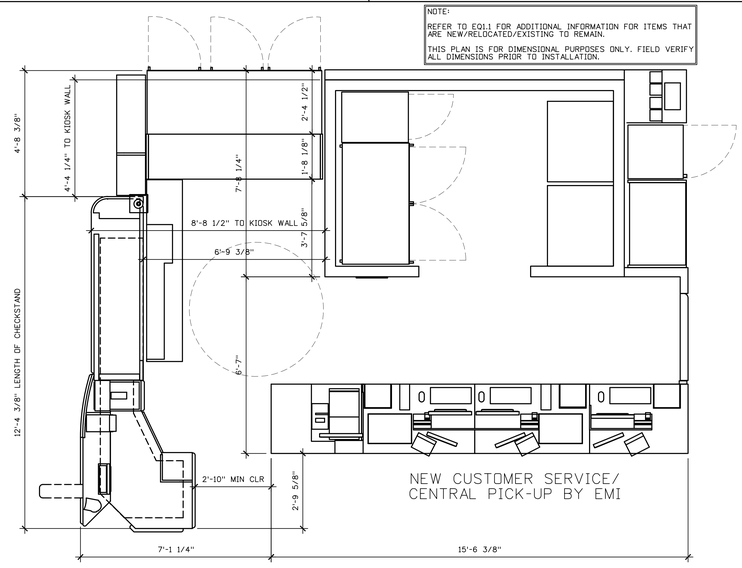
REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	221094
DATE	04/21/2022
DRAWN	CS
CHECKED	MB

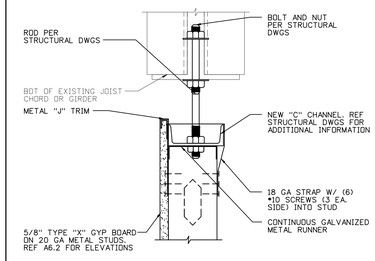
A11.2

DECOR SCHEME: EVERGREEN

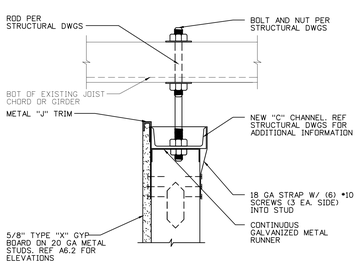
C2 A17.1 WALL TO METAL DECK
6" 3" 0 6"
3"=1'-0"



C3 A17.1 ENLARGED DIMENSION PLAN - NEW CUSTOMER SERVICE/CENTRAL PICKUP
12" 0 1' 2' 3' 4' 5'
1/2"=1'-0"

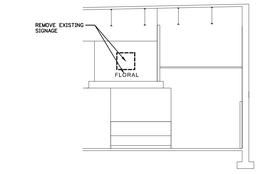


PARALLEL TO ROOF JOISTS

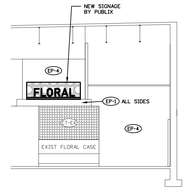


PERPENDICULAR TO ROOF JOISTS

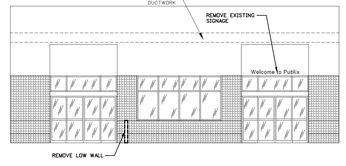
C5 A17.1 SUSPENDED WALL SUPPORT DETAILS
6" 3" 0 6"
3"=1'-0"



E5 A17.1 INTERIOR ELEVATION - FLORAL
4' 0 5' 10' 15' 20'
1/8"=1'-0"

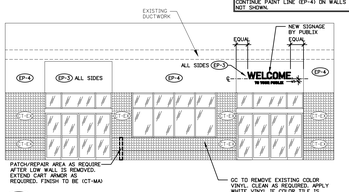


E6 A17.1 INTERIOR ELEVATION - FLORAL
4' 0 5' 10' 15' 20'
1/8"=1'-0"



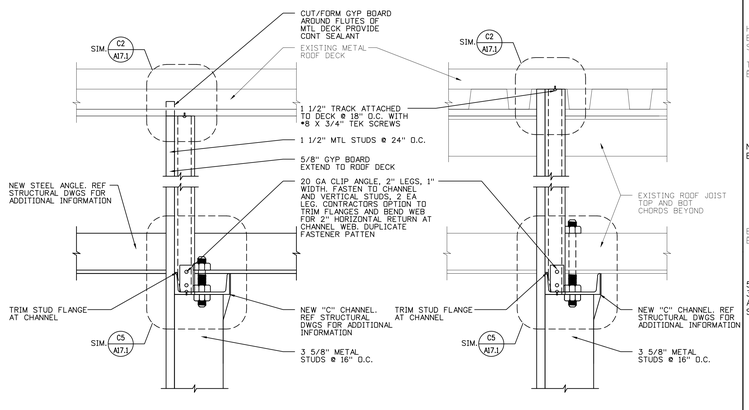
F5 A17.1 VESTIBULE ELEVATION
4' 0 5' 10' 15' 20'
1/8"=1'-0"

NOTES:
GC TO REMOVE EXISTING SIGNAGE PRIOR TO INSTALLATION OF NEW SIGNAGE.
GC TO VERIFY AREA FOR ITEMS NOT SHOWN ON PLAN PRIOR TO NEW SIGNAGE INSTALL.
GC TO REMOVE EXISTING SIENNA WALL GRAPHICS.
CONTINUE PAINT LINE (EP-4) ON WALLS NOT SHOWN.



F6 A17.1 VESTIBULE ELEVATION
4' 0 5' 10' 15' 20'
1/8"=1'-0"

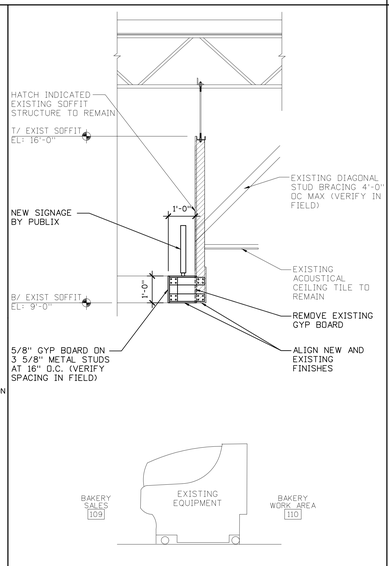
NOTES:
GC TO REMOVE EXISTING SIGNAGE PRIOR TO INSTALLATION OF NEW SIGNAGE.
GC TO VERIFY AREA FOR ITEMS NOT SHOWN ON PLAN PRIOR TO NEW SIGNAGE INSTALL.
GC TO REMOVE EXISTING SIENNA WALL GRAPHICS.
CONTINUE PAINT LINE (EP-4) ON WALLS NOT SHOWN.



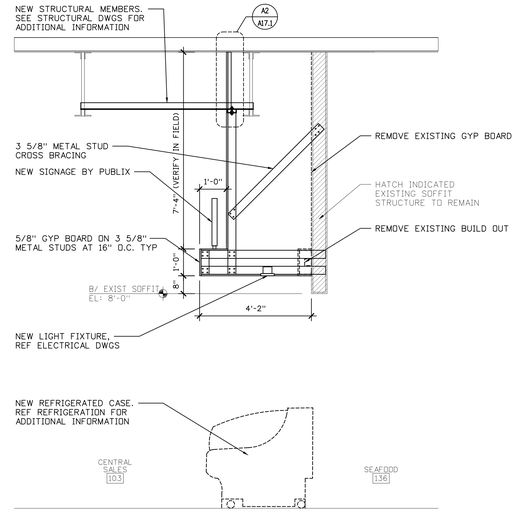
PARALLEL TO ROOF JOISTS

PERPENDICULAR TO ROOF JOISTS

A2 A17.1 SOFFIT CLOSURE DETAIL
6" 3" 0 6"
3"=1'-0"



A4 A17.1 WALL SECTION AT BAKERY
12" 0 1' 2' 3' 4' 5'
1/2"=1'-0"



A5 A17.1 WALL SECTION AT SEAFOOD
12" 0 1' 2' 3' 4' 5'
1/2"=1'-0"

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PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
FROM WEST TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
WALL SECTIONS, INTERIOR ELEVATIONS AND ENLARGED PLAN

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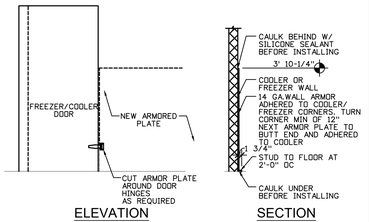
MARCUS J. BOYLE
FL# AR100919

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 2210784
DATE 04/21/2022
DRAWN CS
CHECKED MB

A17.1

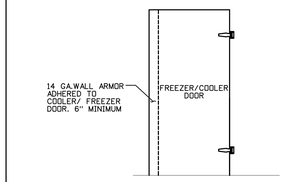
DECOR SCHEME: EVERGREEN



E1 A18.1 COOLER WALL ARMOR DETAIL AT RECEIVING STORAGE

12" 0 1' 2' 3' 4' 5'

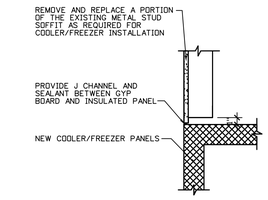
1/2"=1'-0"



E2 A18.1 COOLER WALL ARMOR DETAIL AT DOOR

12" 0 1' 2' 3' 4' 5'

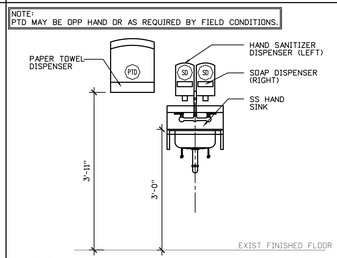
1/2"=1'-0"



D1 A18.1 COOLER/FREEZER SOFFIT DETAIL

12" 6" 0 1'

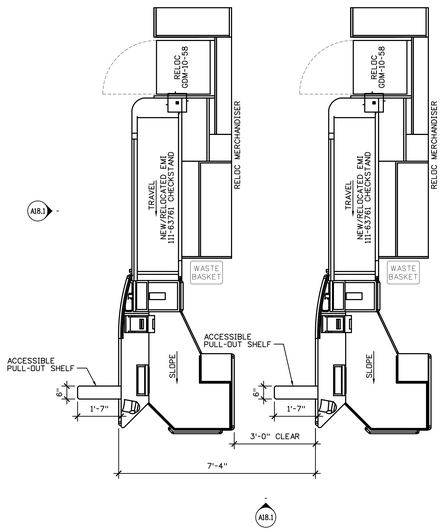
1 1/2"=1'-0"



D2 A18.1 TYPICAL SS HANDSINK

12" 6" 0 1' 2' 3'

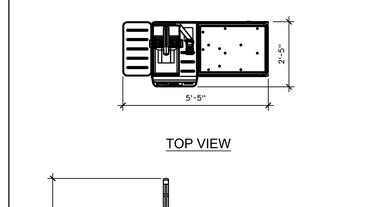
3/4"=1'-0"



D3 A18.1 ADA COMPLIANT - STAND CHECK-OUT STAND

12" 0 1' 2' 3' 4' 5'

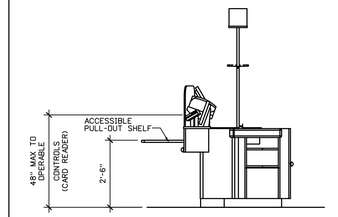
1/2"=1'-0"



E5 A18.1 SELF-CHECKOUT STAND DETAIL

12" 0 1' 2' 3' 4' 5'

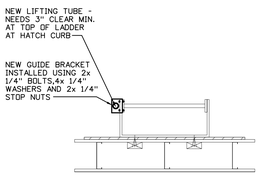
1/2"=1'-0"



D5 A18.1 ACCESSIBLE CHECKSTAND ELEVATION

12" 0 1' 2' 3' 4' 5'

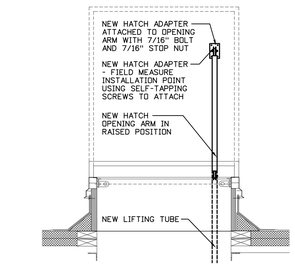
1/2"=1'-0"

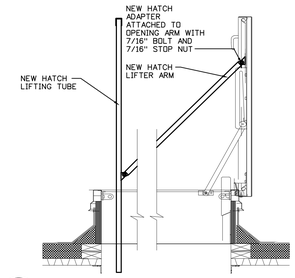


F6 A18.1 ROOF LADDER ACCESS DETAIL

12" 6" 0 1' 2'

1"=1'-0"

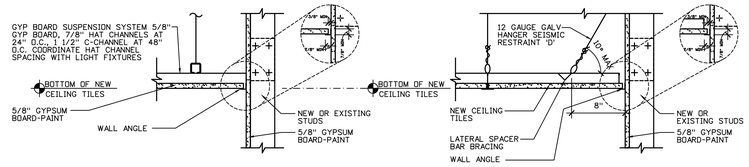




D6 A18.1 ROOF HATCH SECTION W/ BSP

12" 0 1' 2' 3' 4' 5'

1/2"=1'-0"



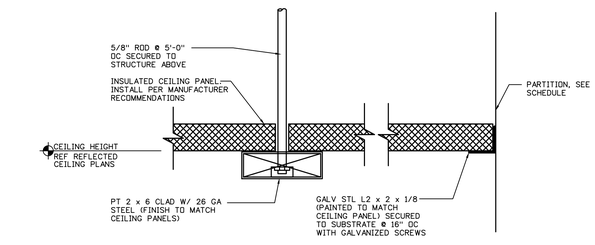
NOTES:

1. OTHER CONNECTIONS MAY BE USED WHERE INFORMATION IS PROVIDED BY THE MANUFACTURER.
2. HANGER WIRES SHALL BE SECURED WITH 3 TIGHT TURNS. BRACING WIRES SHALL BE SECURED WITH 4 TIGHT TURNS

C1 A18.1 CEILING SUPPORT DETAIL

12" 6" 0 1'

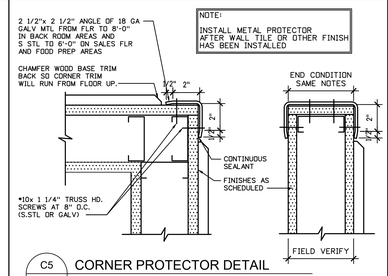
1 1/2"=1'-0"



C3 A18.1 COOLER CEILING DETAIL

12" 6" 0 1'

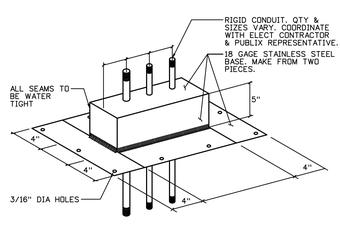
1 1/2"=1'-0"



C5 A18.1 CORNER PROTECTOR DETAIL

2' 1' 0 2'

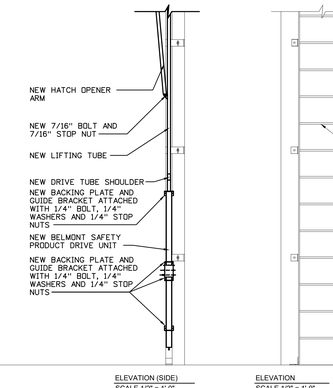
3"=1'-0"



C6 A18.1 SMALL PIPE PENETRATION SEAL

12" 6" 0 1'

1 1/2"=1'-0"



NOTE:
HATCH LIFT SYSTEM ORDERED BY G.C.

WWW.BELMONTSAFETYPRODUCTS.COM
MODEL #BSP 1.0

A1 A18.1 LADDER ELEVATIONS

12" 0 1' 2' 3' 4' 5'

1/2"=1'-0"

GENERAL NOTES:

1. ALL STRUCTURAL CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.
2. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A615 WITH SUPPLEMENT, GRADE 60: MAXIMUM WORKING STRESS OF 24,000 PSI.

GROUND CONDITIONS:

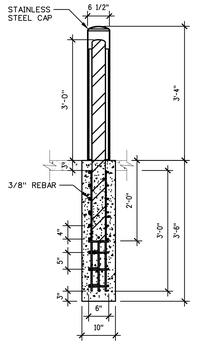
3. THE CONCRETE IS 3000 PSI MINIMUM UNCONFINED COMPRESSIVE STRENGTH, WITH ONE LAYER OF #3(#3/8") REBAR SPACED AT 12" EACH WAY, WITH 1-1/4" COVER AT BOTTOM. REBAR NOT SHOWN HERE.
4. THE BASE IS TYPE A GRADE 1 CRUSHED LIMESTONE ROAD BASE, COMPACTED TO 90% OF STANDARD PROCTOR DENSITY.

GROUND CONDITIONS (CONT):

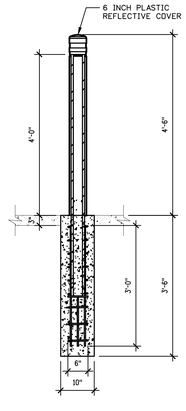
5. THE WASHED SAND SHALL BE CLASSIFIED AS SP-POORLY GRADED SAND & BE COMPACTED TO A DENSITY OF NOT LESS THAN 90% MAXIMUM DRY DENSITY IN ACCORDANCE WITH AASHTO METHOD OF TEST T099.

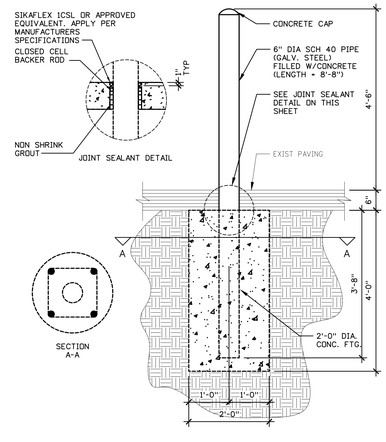
CONTRACTORS NOTE:

6. BOLLARDS SUPPLIED AND INSTALLED BY MCCUE PRIOR TO SIDEWALK BEING POURED. NO SUBSTITUTIONS. CONTACT MCCUE AND PUBLIX TO RECEIVE PUBLIX NATIONAL ACCOUNT PRICING FOR MATERIALS AND INSTALLATION.



CUSTOMER AREA
MCCUE CRASHGORE BOLLARD REQUIRED AT ENTRY/EXIT AND CUSTOMER SEATING AREAS PLACE @ 5'-6" OC



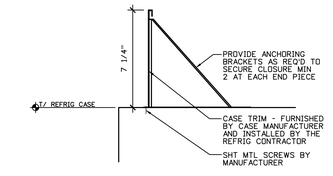


UTILITY AREA
ACCEPTABLE DETAILS FOR BOLLARDS PROTECTING EQUIPMENT AND BUILDING COMPONENTS PLACE AS NEEDED

A3 A18.1 BOLLARD DETAILS

12" 6" 0 1' 2' 3'

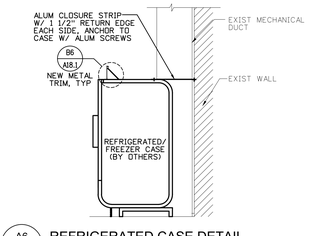
3/4"=1'-0"



B6 A18.1 METAL CASE TRIM

2' 1' 0 2'

3"=1'-0"



A6 A18.1 REFRIGERATED CASE DETAIL

2' 1' 0 2'

3"=1'-0"

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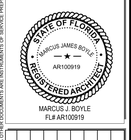
F (407) 661-9101
c-p.com
Florida Corporate Certificate #AA C000526

CLIENT NAME
Publix. SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
NEC HIGHWAY 19 & CRYSTAL SPRINGS WAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
DETAILS



MARCUS J. BOYLE
FL# AR100919

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	DATE	DRAWN	CHECKED
211014	04/21/2022	CS	MB

A18.1

DECOR SCHEME: EVERGREEN

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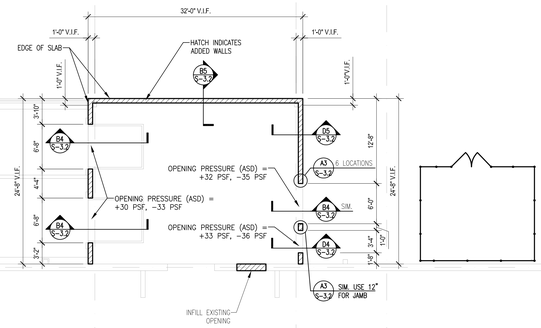
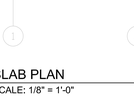
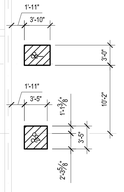
THIS STRUCTURE IS DESIGNED AS A STABLE UNIT AFTER ALL COMPONENT PARTS ARE IN PLACE. THE ERECTOR SHALL PROVIDE ALL NECESSARY SHORING AND BRACING, AS REQUIRED, TO INSURE STABILITY DURING ERECTION.







STRUCTURAL SLAB PLAN NOTES

A. ALL ELEVATIONS SHOWN ON THIS SHEET ARE BASED ON FINISHED FLOOR AT 0'-0" (U.N.O.)

B. COORDINATE SLAB PENETRATIONS WITH LOCATIONS SHOWN ON PLUMBING AND ELECTRICAL PLANS.

C. TRENCHING SHOWN ON THIS SHEET REPRESENTS NEW PLUMBING OR ELECTRICAL LINES OR FIXTURE TO BE INSTALLED. REPLACE/REMOVE SLAB PER DETAILS ON SHEET S2.2 C.C. TO COORDINATE EXACT EXTENT OF SLAB REPLACEMENT/REMOVAL. USE SAW TO CUT SLAB AND DO NOT DAMAGE EXISTING WALLS, COLUMN OR FOOTING WHICH ARE TOO REMAIN.

D. ALL ANGLED SLAB CUTS TO BE CUT AT 45 DEGREES.

E. FOR EXISTING DRAIN AREAS: G.C. TO REPLACE AND RESLOPE SLAB AS REQUIRED WHERE PROPOSED SLAB CUTS AS SHOWN ON PLAN CONFLICT WITH EXISTING SLOPED SLAB. REF. STRUCTURAL AS-BUILTS BY PUBLIX DATED 01-02-2001 REV 1 (RR#2001-001) AND ASSOCIATED REMODELS.

STRUCTURAL SLAB PLAN LEGEND

INDICATES NEW CONCRETE SLAB AT TRENCHING AREAS.

INDICATES TOP OF EXISTING FINISH FLOORS IS AT (0'-0"), UNLESS NOTED OTHERWISE.

INDICATES NEW CONCRETE SLAB AT TRENCHING AREAS. SLOPE SLAB TO DRAIN WHERE SHOWN.

DOCK STRUCTURAL SLAB/FTG. PLAN NOTES

A. TOP OF SLAB-ON-GRADE IS AT GROUND FLOOR DATUM ELEVATION +0'-0", UNLESS OTHERWISE NOTED.

B. TOP OF NEW FOOTING ELEVATION TO MATCH ADJACENT EXISTING WALL FOOTING ELEVATION, EXCEPT AS NOTED (T.O.F.) ON PLAN.

C. REF. GENERAL NOTES ON S2.2 FOR CONCRETE MATERIAL PROPERTIES INFORMATION.

D. REF. GENERAL NOTES ON S2.2 FOR CONCRETE REINFORCEMENT MATERIAL PROPERTIES AND SHOP DRAWING SUBMITTAL REQUIREMENTS.

E. REF. GENERAL NOTES ON S2.2 FOR SOIL BEARING PRESSURE INFORMATION. REPORT ANY VARIATIONS TO THE ENGINEER BEFORE PROCEEDING.

F. SOIL AT THE UNDERSIDE OF FOOTINGS SHOULD BE INSPECTED AND APPROVED BY THE GEOTECHNICAL CONSULTANT PRIOR TO THE POURING OF FOOTINGS.

G. REFER TO THE GEOTECHNICAL NOTES AND TYPICAL DETAILS FOR MORE INFORMATION.

A1 S2.1 SLAB PLAN
SCALE: 1/8" = 1'-0"

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CLIENT NAME
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LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
ESQUINA AL LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
SLAB PLAN

EDUARDO DANIEL MARTINEZ LICENSE No. 73403 STATE OF FLORIDA PROFESSIONAL ENGINEER
06-16-2022
EDUARDO D. MARTINEZ
FL# 73403

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 221094
DATE 04/21/2022
DRAWN RG
CHECKED EM

S2.1

DECOR SCHEME: EVERGREEN

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GENERAL NOTES

DESIGN LOADS

SOIL BEARING PRESSURE (USED FOR DESIGN)	2000 PSF
ROOF LIVE LOAD	30 PSF
ROOF DEAD LOAD	20 PSF
CONCRETE STRENGTH (28-DAY)	3000 PSI
STRUCTURAL STEEL BEAMS	ASTM A992
STEEL SHAPES, EXCEPT BEAMS	ASTM A36
REINFORCING STEEL	ASTM A-615, GR. 60
MASONRY DESIGN STRENGTH	F'M = 1500 PSI

WIND PRESSURES, PER ASCE 7-16:

EXPOSURE CATEGORY	"C"
WIND SPEED, Vult (Vasd)	134 MPH (104)
RISK CATEGORY	CATEGORY II
INTERNAL PRESSURE COEFFICENTS (ENCLOSED BLDG)	+0.18/-0.18

SEISMIC CRITERIA:

SPECTRAL RESPONSE ACCELERATIONS	
Sds	N/A
Sd1	N/A
R (BUILDING FRAME SYSTEM W/ ORD. REINF. MAS. SHEARWALLS)	N/A
SUBSURFACE SITE CLASS	N/A
RISK CATEGORY	N/A
SEISMIC DESIGN CATEGORY	N/A
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE
DESIGN BASE SHEAR	N/A

GROUND SNOW LOAD — 0 PSF

SOIL BEARING PRESSURE = ---- PSF AS PER SUBSURFACE INVESTIGATION BY NOT PROVIDED, DATED N/A

THIS STRUCTURE HAS BEEN DESIGNED TO COMPLY WITH LATEST EDITION OF THE FBC 2020.

CONSTRUCTION SAFETY

1. THESE DRAWINGS DO NOT INCLUDE PROVISIONS TO SATISFY SAFETY REQUIREMENTS. CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING SAFETY DURING CONSTRUCTION, AND FOR CONFORMANCE TO ALL APPLICABLE OSHA STANDARDS. JOBSITE VISITS BY ENGINEER/PUBLIX REP. SHALL NOT CONSTITUTE APPROVAL, AWARENESS OR LIABILITY FOR ANY HAZARDOUS CONDITIONS.
2. DO NOT OVERLOAD ONE SEGMENT OR SPAN OF A BEAM CONTINUOUS OVER SEVERAL SUPPORTS. BEAMS SHOULD BE LOADED AS GRADUALLY AND EVENLY AS POSSIBLE UNTIL THE FULL LOAD IS IN PLACE.
3. ERECTION SEQUENCE SHALL BE DETERMINED BY THE CONTRACTOR, AND SHALL NOT CAUSE OVERSTRESS OR EXCESSIVE DEFORMATION OF STRUCTURAL MEMBERS.
4. NO PROVISION HAS BEEN MADE IN THE STRUCTURAL DESIGN FOR TEMPORARY CONDITIONS OCCURING DURING CONSTRUCTION, UNLESS NOTED SPECIFICALLY ON THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SHORING AND BRACING REQUIRED TO RESIST STRESSES OR INSTABILITY OCCURING FROM ANY CAUSE DURING CONSTRUCTION. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR SUCH MEASURES.
5. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES.

DRAWINGS AND SPECIFICATIONS

1. DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS NOT GIVEN.
2. THE CONTRACTOR SHALL PERFORM NO PORTION OF THE WORK AT ANY TIME WITHOUT CONTRACT DOCUMENTS OR, WHERE REQUIRED, APPROVED SHOP DRAWINGS.
3. THESE GENERAL STRUCTURAL NOTES ARE INTENDED TO EMPHASIZE CERTAIN INFORMATION MORE COMPLETELY DISCUSSED IN THE PROJECT SPECIFICATIONS (PM SHEETS). THE CONTRACTOR SHOULD BE FAMILIAR WITH THE REQUIREMENTS AS STATED IN THE SPECIFICATIONS.

FOUNDATIONS

1. FOUNDATION DESIGNED FOR THE SOIL BEARING PRESSURE AS DESCRIBED IN THE DESIGN CRITERIA. IF CONDITIONS AT THE SITE DO NOT PROVIDE THIS MINIMUM VALUE, NOTIFY PUBLIX STRUCTURAL ENGINEER IMMEDIATELY.
2. FOUNDATION SIZES SHALL NOT BE REDUCED FOR ANY REASON, EVEN IF HIGHER SOIL BEARING VALUES ARE ACHIEVED.
3. TOP OF ALL FOOTINGS TO BE A MINIMUM OF 24" BELOW FINISHED FLOOR.
4. PUBLIX REQUIRES THAT MAXIMUM TOTAL SOIL SETTLEMENTS NOT EXCEED 1" AND MAXIMUM DIFFERENTIAL SOIL SETTLEMENTS NOT EXCEED 1/2".
5. PUBLIX REQUIRES SOIL COMPACTION OF 95% OF MODIFIED PROCTOR OR 98% OF STANDARD PROCTOR. REFER TO GEOTECHNICAL REPORT FOR MORE INFORMATION.

REINFORCED CONCRETE

1. CONCRETE MATERIALS, MIXING AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH GOOD ENGINEERING PRACTICES AND SHALL CONFORM TO THE LATEST EDITIONS OF ACI 301, ACI 318 AND ASTM C-94.
2. REINFORCING STEEL SHALL CONFORM TO ASTM A615; YIELD STRENGTH = 60 KSI, MINIMUM.
3. CONTRACTOR SHALL SUBMIT REINFORCEMENT SHOP DRAWINGS FOR REVIEW PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL PROVIDE CONCRETE MIX DESIGNS FOR REVIEW PRIOR TO POURING. PUBLIX MIX DESIGN REQUIREMENTS: NO CEMENT REPLACEMENT(I.E. FLY ASH), 500 LBS. MIN CEMENT MAX. W/C RATIOS: 0.58 FOR 3000 PSI. ALL CONCRETE SHALL BE 3000 PSI.
5. CONTRACTOR SHALL PROVIDE COPIES OF ALL STRUCTURAL CONCRETE COMPRESSIVE STRENGTH TEST RESULTS TO THE ENGINEER OF RECORD FOR REVIEW. ALSO, CONTRACTOR TO HAVE COPIES OF CONCRETE TEST REPORTS AVAILABLE ON SITE.
6. FOR READY-MIX CONCRETE, THE MAXIMUM TIME PERMITTED BETWEEN BATCHING AND DEPOSITING IN THE FORMS IS 90 MINUTES. CONCRETE EXCEEDING THE ABOVE SHALL BE REJECTED.
7. THE ADDITION OF WATER AT THE SITE TO INCREASE CONCRETE SLUMP SHALL NOT BE ALLOWED AND SHALL BE JUST CAUSE FOR REJECTION OF THAT BATCH OF CONCRETE.
8. MINIMUM CONCRETE COVER TO REINFORCING STEEL, UNLESS NOTED OTHERWISE ON DRAWINGS: CAST AGAINST EARTH = 3"
   EXPOSED TO EARTH OR WEATHER = FOR #5 OR LESS USE 1 1/2", ALL OTHERS 2"
   BEAMS AND COLUMNS = 1 1/2"
9. ALL REINFORCEMENT SHALL BE SECURELY HELD IN PLACE BY STANDARD ACCESSORIES DURING CONCRETE PLACEMENT.
10. PROVIDE THE FOLLOWING MINIMUM LAP SPLICES: #4=29", #5=36", #6=43", #7=63", #8=72", FOR ALL REINFORCING BARS, UNLESS NOTED OTHERWISE. DO NOT SPLICE TIE BEAM REINFORCEMENT OVER OPENINGS. DO NOT SPLICE FOOTING REINFORCEMENT UNDER OPENINGS.
11. IN WALL FOOTINGS, CONCRETE BEAMS AND BOND BEAMS,PROVIDE BENT BARS AT CORNERS AND INTERSECTIONS OF THE SAME NUMBER AND SIZE AS THE STRAIGHT BARS.

CONCRETE MASONRY UNITS

1. CONCRETE MASONRY UNITS SHALL BE HOLLOW UNIT MASONRY IN ACCORDANCE WITH ASTM C90 AND SHALL HAVE A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 1900 PSI.
2. IN ACCORDANCE WITH ACI 530, THE 1900 PSI BLOCK IN COMBINATION WITH TYPE M OR S MORTAR (1800 PSI, MIN.) PROVIDE A DESIGN COMPRESSIVE STRENGTH OF F'M = 1500 PSI.
3. FILLED CELL GROUT IS NOT TO BE MIXED ON-SITE, BUT MUST COME FROM A READY MIX SUPPLIER.
4. A MIX DESIGN FOR THE FILLED CELL GROUT MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
5. COMPRESSIVE STRENGTH TESTS MUST BE CONDUCTED FOR FILLED CELL GROUT.
6. HOOK VERTICAL BARS INTO FOOTING, AND EXTEND INTO AND HOOK IN TOP OF WALL BOND BEAM. PROVIDE STANDARD ACI 90 DEGREE HOOK AT DISCONTINUOUS END OF VERTICAL BARS. (10" MIN. HOOK LENGTH). LAP VERTICAL REINFORCEMENT PER MASONRY LIFT DETAIL.
7. EXPANSION BOLTS AND/OR SLEEVE ANCHORS ARE NOT ALLOWED IN PUBLIX WALLS.
8. ALL EXTERIOR MASONRY WALLS TO BE FILLED FULL HEIGHT WITH APPROVED MASONRY WALL INSULATION ABOVE FINISHED FLOOR.

STRUCTURAL STEEL

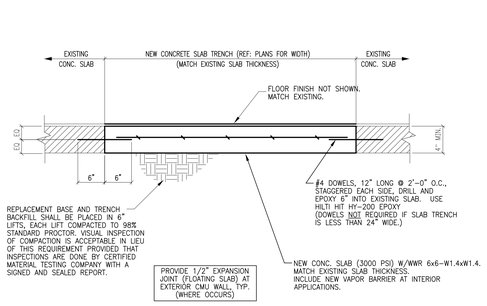
1. HOT-ROLLED STEEL BEAMS SHALL BE ASTM A992 (50 KSI). PLATES, BARS, CHANNELS, RODS AND ANGLES SHALL CONFORM TO ASTM A36.
2. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554, GR36(MIN.) AND MUST BE MECHANICALLY BENT, NOT TEMPERED OR HEATED. HIGH STRENGTH BOLTS SHALL BE ASTM A325.
3. STEEL PIPE SHALL CONFORM TO ASTM A53, GRADE B, Fy=35 KSI.
4. HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A500 GRADE B (Fy=46 KSI).
5. ALL WELDS SHALL BE MADE WITH E70 LOW HYDROGEN ELECTRODES, BY QUALIFIED WELDERS AS PER AMERICAN WELDING SOCIETY REQUIREMENTS (AWS D1.1). SUBMIT WELDERS CERTIFICATES FOR WELDERS EMPLOYED ON THE PROJECT, VERIFYING AWS QUALIFICATIONS WITHIN THE PREVIOUS 12 MONTHS. ALSO, ONE OF THESE CERTIFICATIONS MUST BE AVAILABLE AT THE JOB SITE.
6. ALL BOLTS SHALL BE HIGH-STRENGTH ASTM A325, 3/4IN. DIA., UNLESS NOTED OTHERWISE. BOLTED CONNECTIONS SHALL BE SNUG-TIGHT (1/3 TURN AFTER SEATED), U.N.O.
7. CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING, SHORING AND GUYING OF THE FRAMING AGAINST WIND, CONSTRUCTION LOADS OR OTHER TEMPORARY FORCES UNTIL SUCH PROTECTION IS NO LONGER REQUIRED FOR THE SAFE SUPPORT OF THE STRUCTURE.
8. RETURN ALL WELDS AT CORNERS TWICE THE NOMINAL WELD SIZE MINIMUM.
9. FRAMING CONNECTIONS SHALL BE AISC TYPE 2 DOUBLE-ANGLE BOLTED CONNECTIONS, U.N.O. SELECT CONNECTIONS TO SUPPORT ONE-HALF THE TOTAL UNIFORM LOAD CAPACITY SHOWN IN THE UNIFORM LOAD TABLES, PART 3 OF THE AISC MANUAL (13th ed.), FOR THE SPAN AND GRADE OF STEEL SPECIFIED.
10. NO HOLES, OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS, SHALL BE PERMITTED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
11. WELDS, NOT OTHERWISE DESIGNATED, SHALL BE 1/4IN. MINIMUM FILLET.
12. SEE ARCHITECTURAL ELEVATIONS, SECTIONS AND DETAILS FOR MISCELLANEOUS STEEL.
13. ALL HEADED STUD ANCHORS (ASTM A108) AND ANCHOR BOLTS TO HAVE A MIN. 8" EMBEDMENT, U.N.O.
14. CONTRACTOR SHALL ENGAGE AN INDEPENDENT TESTING LABORATORY AND INSPECTION AGENCY TO PERFORM STEEL ERECTION INSPECTIONS AND TESTING. COPIES OF ALL STEEL INSPECTION REPORTS SHALL BE SENT TO THE ENGINEER OF RECORD AND PUBLIX CONSTRUCTION.
15. CONTRACTOR SHALL COMPLY WITH ERECTION TOLERANCES AS STATED IN THE AISC CODE OF STANDARD PRACTICE, AISC 303-05.

LIGHT GAUGE FRAMING

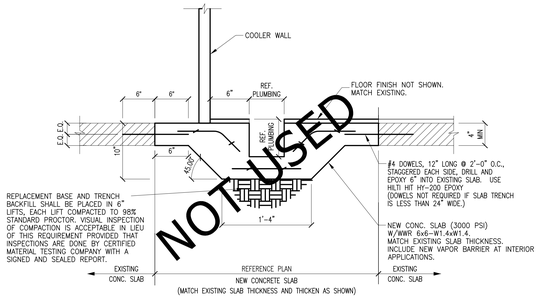
1. ALL LIGHT GAUGE STEEL FRAMING SHALL CONFORM TO THE "SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STRUCTURAL STEEL MEMBERS," AISI."
2. ALL STUDS SHALL BE EQUAL TO A MINIMUM OF 6-INCH 54 MIL THICK, U.O.N. FOR EXTERIOR APPLICATIONS
3. ALL STUDS SHALL BE "C" SHAPE, U.O.N.
4. MATERIALS, U.O.N.:

54, 68 AND 97 MIL STUDS	50 KSI
27, 33, AND 43 GA. STUDS	33 KSI
RUNNERS AND ACCESSORIES	33 KSI

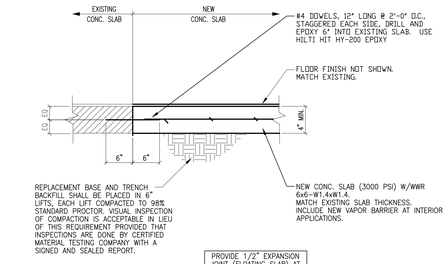
5. PROVIDE MANUFACTUERS STANDARD STEEL RUNNERS, BRIDGING, BLOCKING, LINTELS, CLIP ANGLES, BRACING, REINFORCEMENTS, FASTENERS, ETC. AS REQUIRED TO PROVIDE A COMPLETE STEEL FRAMING SYSTEM CAPABLE OF ACCOMMODATING THE LOADS PRESENTED IN THE CONSTRUCTION DOCUMENTS.
6. ALL PARTS AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A G-60 GALVANIZED COATING MEETING THE REQUIREMENTS OF ASTM A525 / ASTM A653.
7. ALL CONNECTIONS SHALL BE (4) #10-12 TEK SCREWS AS A MINIMUM, U.O.N. OR AS REQUIRED BY MANUFACTURER AND APPROVED BY STRUCTURAL ENGINEER.
8. INSTALL METAL FRAMING IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND/OR SPECIFICATIONS.
9. SPLICES IN STUDS SHALL NOT BE PERMITTED.
10. ALL PROPOSED ALTERNATE CONNECTION CLIPS SHALL BE SUBMITTED TO BUILDING ENGINEER FOR REVIEW. SUBMITTAL SHALL INCLUDE APPLICABLE LOAD TABLES FOR CLIPS.
11. ALL LIGHT GAUGE STEEL FRAMING SHALL CONFORM TO ASTM C645 AND SHALL BE 33 KSI MINIMUM YIELD STRENGTH.
12. ALL STUD MATERIALS SHALL BE 20 GAUGE (33 MIL) OR AS NOTED ON PLANS.
13. ALL NON-COMPOSITE (1 SIDE DRYWALL) INTERIOR PARTITION WALLS SHALL HAVE HORIZONTAL BRIDGING AT 4'-0" O.C. BETWEEN LATERAL SUPPORTS. BRIDGING ALSO REQUIRED ABOVE 2 SIDED DRYWALL THAT STOPS SHORT OF THE DECK.
14. CONNECTION TYPES (U.O.N.):
    A. STUD TO RUNNER TRACK: (1)#10-12 TEK SCREW EACH LEG. (2 TOTAL)
    B. BOTTOM RUNNER TRACK TO SLAB: (2) 3/16" x 1 1/2" CONCRETE SCREWS (TAPCONS) AT EACH STUD AND (1) OF SAME SPACED BETWEEN THE STUDS.
    C. TOP RUNNER TRACK TO STEEL CHANNELS: 0.145" DIA x 1/2" SHANK PAF's (HILTI X-EDN) @ 8" O.C.,STAGGERED. (ALSO REFER TO HANGING SOFFIT DETAILS ON S-3).
    D. TOP RUNNER TRACK RUNNING PERPENDICULAR TO JOISTS (WALL BEARING ON SLAB): (4) #10-12 SCREWS (OR HILTI X-EDN) TO BOTTOM CHORD OF EACH JOIST.
    E. TOP RUNNER TRACK TO STEEL DECK: (2) #10-12 TEK SCREWS @ EACH STUD LOCATION AND (1) OF SAME SPACED BETWEEN THE STUDS.
    F. KICKER/BRACE STUD TO VERTICAL STUD: (4) #10-12 TEK SCREWS.
    G. KICKER/BRACE STUD TO STEEL JOIST: 18 GAGE CLIP, WITH (4) #10-12 TEK SCREWS TO BRACE AND (4) #12-10 TEK SCREWS TO STEEL JOIST BOTTOM CHORD.
15. REFER TO ARCHITECTURAL PLANS AND WALL SECTIONS FOR STUD WALL LOCATIONS AND CONFIGURATIONS.



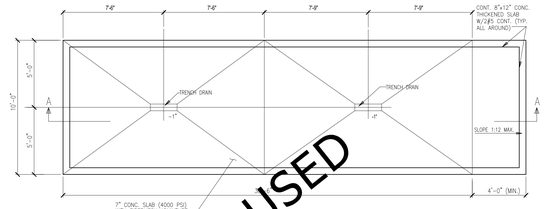
E2 / S2.2 SLAB PATCHING DETAIL
SCALE: NONE



E4 / S2.2 TRENCH DRAIN DETAIL
SCALE: NONE



E5 / S2.2 SLAB PATCHING DETAIL
SCALE: NONE



NOT USED

COMPACTOR SLAB FOUNDATION PLAN
SCALE: NONE

FIBERMESH SHALL BE 100% VIRGIN POLYPROPYLENE, FIBRILLATED FIBERS, MANUFACTURED FOR USE AS CONCRETE SECONDARY REINFORCEMENT (ASTM C-1116). DOSAGE OF FIBERGLASS ADMIXTURE PER CUBIC YARD OF CONCRETE IS 1.5 LBS (1.5 LBS). THE TYPICAL FIBER LENGTH IS ¾ TO ¾ INCHES.

SECTION A-A
SCALE: NONE

C2 / S2.2 TRASH COMPACTOR FOUNDATION PLAN AND SECTIONS
SCALE: NONE

NOT USED

C5 / S2.2 SLAB PATCHING DETAIL
SCALE: NONE

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2600 Maitland Center Parkway
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Maitland, FL 32751
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Florida Corporate Certificate #AA C000526

CLIENT NAME
Publix SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
6700 GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
SECTIONS & DETAILS

XX-XX-2022
EDUARDO D. MARTINEZ
FL# 73403

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	2210764
DATE	04/21/2022
DRAWN	JS/TAO
CHECKED	EBK

S2.2

DECOR SCHEME: EVERGREEN

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STRUCTURAL ROOF FRAMING PLAN NOTES

A. G.C. TO VERIFY EXISTING CONDITIONS AND FRAMING LAYOUT AS SHOWN ON THIS PLAN PRIOR TO FABRICATION/CONSTRUCTION.

STRUCTURAL SOFFIT PLAN NOTES

A. REFERENCE GENERAL NOTES ON S2.2 FOR ADDITIONAL LIGHT GAUGE INFORMATION AND A17.1 FOR SOFFIT PROFILES. IF REQUIRED, SOFFITS MAY BE HUNG AS DETAILED IN A6/S3.1 AND C6/S3.1. G.C. TO VERIFY EXISTING CONDITIONS AND FRAMING LAYOUT PRIOR TO FABRICATION/CONSTRUCTION.

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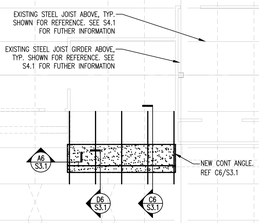
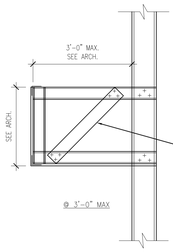
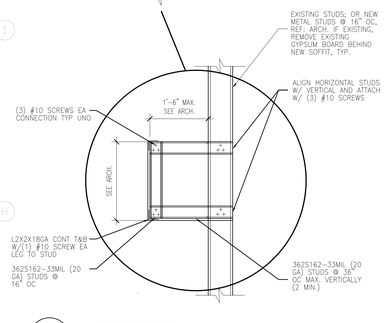
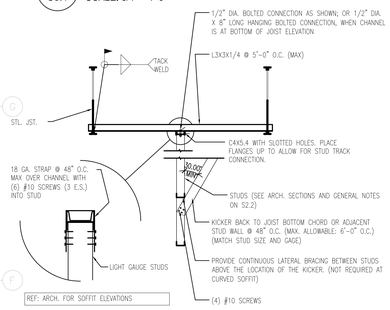
REFERENCE S4.1 FOR DOCK FRAMING INFORMATION



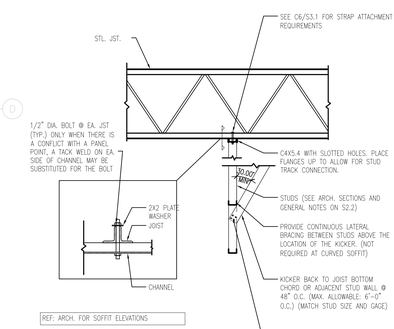




D6 / S3.1 **SOFFIT SECTION**
SCALE: 3/4" = 1'-0"



C6 / S3.1 **SOFFIT DETAIL (PARALLEL TO ROOF JOISTS)**
SCALE: 1/4" = 1'-0"



A6 / S3.1 **SOFFIT DETAIL (PERP. TO ROOF JOISTS)**
SCALE: 1/4" = 1'-0"

A1 / S3.1 **SOFFIT PLAN**
SCALE: 1/8" = 1'-0"

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PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
6760 W GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
SOFFIT PLAN

CLIENT NAME
publix SUPER MARKETS
PUBLIX CORPORATE PARKWAY
3300 LAKELAND, FL 33811-3311

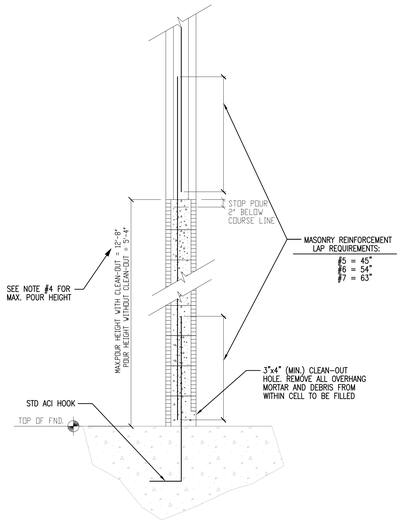
XX-XX-2022
EDUARDO D. MARTINEZ
FL# 73403

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	221074
DATE	04/21/2022
DRAWN	FAD
CHECKED	EM

S3.1

DECOR SCHEME: EVERGREEN



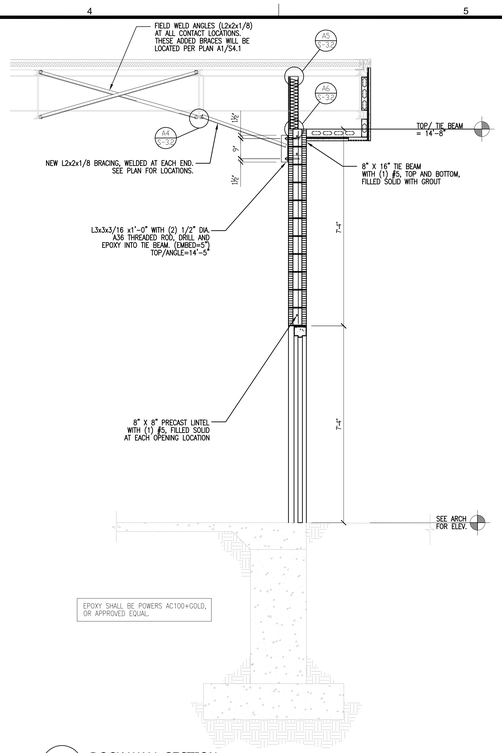
NOTES:
1. SEE PLANS, SECTIONS AND NOTES FOR LOCATION(S) OF FILLED CELLS AND FOR REINFORCING.

2. CONCRETE FOR FILLED CELLS SHALL BE COARSE GROUT PER ASTM C476, WITH THE FOLLOWING REQUIREMENTS:
   STRENGTH = 3000 PSI @ 28 DAYS (NO FLY ASH ALLOWED)
   AGGREGATE SIZE: ⅜" (PEA GRAVEL)
   SLUMP = 9" +/- 1"
   SUBMIT MIX DESIGN FOR REVIEW BY THE ENGINEER.
   DO NOT USE THE SAME MIX DESIGN AS FOR OTHER CAST-IN-PLACE CONCRETE.

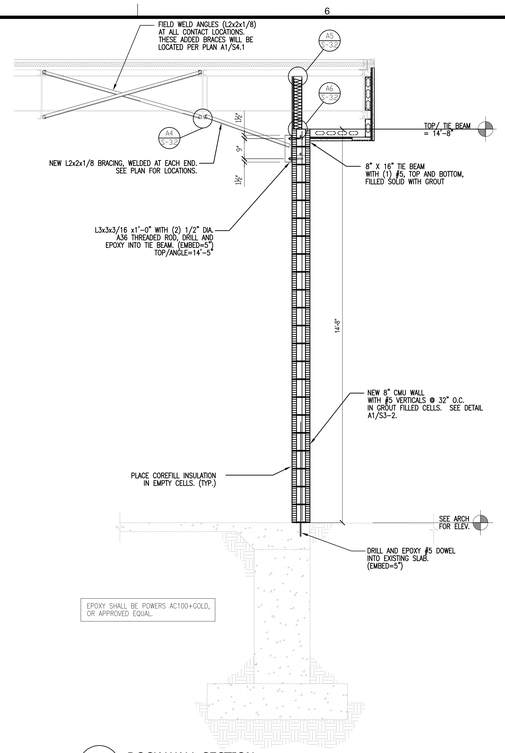
3. ALLOW MORTAR TO SET AT LEAST 4 HOURS BEFORE GROUTING.

4. RULES FOR USING MAX POUR HEIGHT:
   A. WHEN USING MAX. POUR HEIGHT, DO NOT DROP GROUT THE FULL HEIGHT. USE A HOSE INSERTED INTO THE CELL TO LIMIT THE DROP HEIGHT.
   B. DO NOT USE MAXIMUM POUR HEIGHT IF THE POUR INCLUDES HORIZONTAL BOND BEAMS/CIP BEAMS. THEN, THE POUR IS LIMITED TO THE BOTTOM OF THE BOND BEAM/CIP BEAM.
   C. ONLY USE MAX. POUR HEIGHT WHERE CLEAN-OUTS CAN BE HIDDEN FROM INTERIOR AND EXTERIOR VIEW (I.E. BELOW GRADE OR EXTERIOR FINISH.)

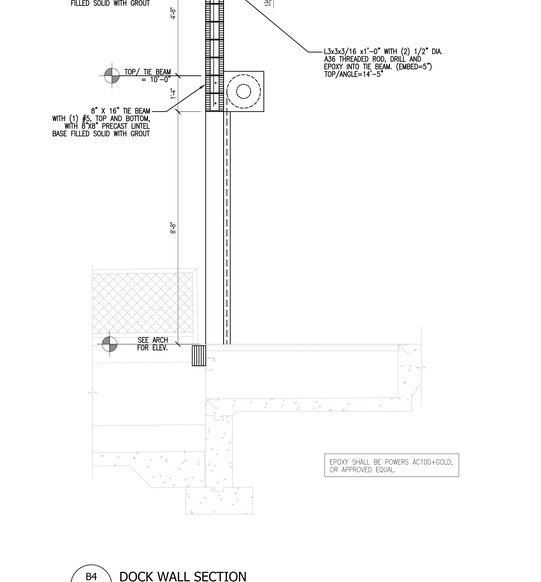
D2 / S-3.2 — MASONRY LIFT DETAIL
SCALE: 1/2" = 1'-0"
12" 0 1' 2' 3' 4' 5'
1/2"=1'-0"



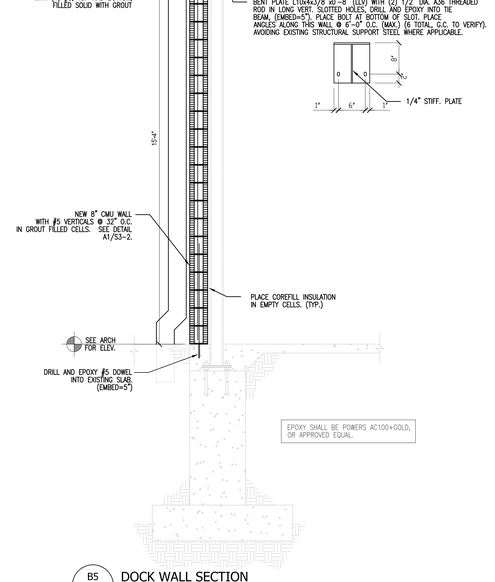
D4 / S-3.2 — DOCK WALL SECTION
SCALE: 1/2" = 1'-0"
12" 0 1' 2' 3' 4' 5'
1/2"=1'-0"



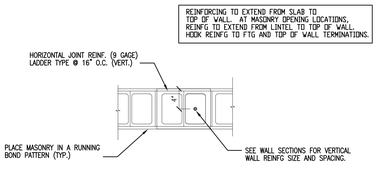
D5 / S-3.2 — DOCK WALL SECTION
SCALE: 1/2" = 1'-0"
12" 0 1' 2' 3' 4' 5'
1/2"=1'-0"



B4 / S-3.2 — DOCK WALL SECTION
SCALE: 1/2" = 1'-0"
12" 0 1' 2' 3' 4' 5'
1/2"=1'-0"



B5 / S-3.2 — DOCK WALL SECTION
SCALE: 1/2" = 1'-0"
12" 0 1' 2' 3' 4' 5'
1/2"=1'-0"



A1 / S-3.2 — TYPICAL WALL DETAIL
SCALE: 1/2" = 1'-0"
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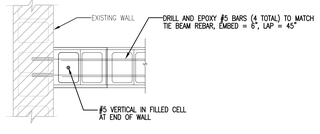
1/2"=1'-0"



A2 / S-3.2 — INTERSECTING WALL DETAIL
SCALE: 1/2" = 1'-0"
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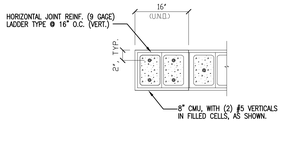
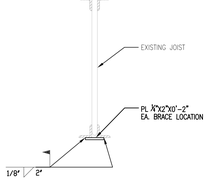
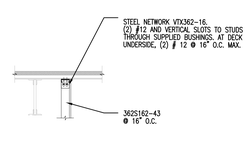
1/2"=1'-0"



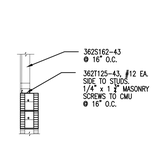
A3 / S-3.2 — MASONRY OPENING AT DOCK
SCALE: 1/2" = 1'-0"
12" 0 1' 2' 3' 4' 5'
1/2"=1'-0"



A4 / S-3.2 — JOIST REINFORCING DETAIL
SCALE: 1/2" = 1'-0"
12" 0 1' 2' 3' 4' 5'
1/2"=1'-0"



A5 / S-3.2 — TRACK-TO-DECK DETAIL
SCALE: 1/2" = 1'-0"
12" 0 1' 2' 3' 4' 5'
1/2"=1'-0"



A6 / S-3.2 — TRACK-TO-CMU DETAIL
SCALE: 1/2" = 1'-0"
12" 0 1' 2' 3' 4' 5'
1/2"=1'-0"

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CLIENT NAME
Publix SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
EAST SIDE OF U.S. HIGHWAY 19
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
DOCK ENCLOSURE WALL SECTIONS, DETAILS, & NOTES

REV	RELEASE
1	100% SUBMITTAL- 21-APR-2022

PROJECT NO.	DATE	DRAWN	CHECKED
2210764	04/21/2022	NG	EM

XX-XX-2022
EDUARDO D. MARTINEZ
FL# 73403

S-3.2

DECOR SCHEME: EVERGREEN

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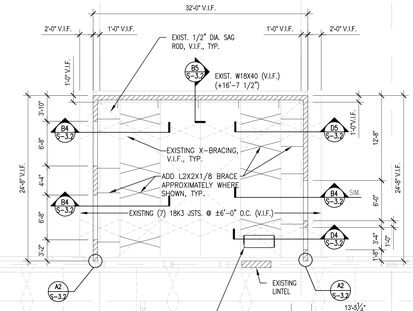
THIS STRUCTURE IS DESIGNED AS A STABLE UNIT AFTER ALL COMPONENT PARTS ARE IN PLACE. THE ERECTOR SHALL PROVIDE ALL NECESSARY SHORING AND BRACING, AS REQUIRED, TO INSURE STABILITY DURING ERECTION.



A1 / S4.1 ROOF FRAMING PLAN
SCALE: 1/8" = 1'-0"

STRUCTURAL ROOF FRAMING PLAN NOTES

A. G.C. TO VERIFY EXISTING CONDITIONS AND FRAMING LAYOUT AS SHOWN ON THIS PLAN PRIOR TO FABRICATION/CONSTRUCTION.

DOCK STRUCTURAL FRAMING PLAN GENERAL NOTES

A. ELEVATIONS GIVEN ON PLAN OR SECTIONS ARE REFERENCED TO FINISH FLOOR DATUM ELEVATION.

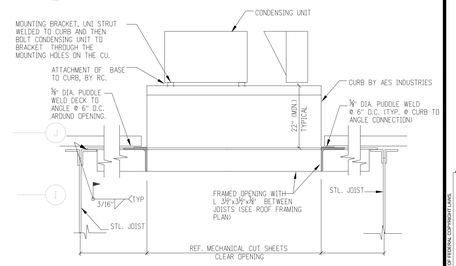
B. REF. GENERAL NOTES ON S2.2 FOR CONCRETE MATERIAL PROPERTIES INFORMATION.

C. REF. GENERAL NOTES ON S2.2 FOR CONCRETE REINFORCEMENT MATERIAL PROPERTIES AND SHOP DRAWING SUBMITTAL REQUIREMENTS.

D. FOR EXACT LOCATION OF MECHANICAL EQUIPMENT AND OPENING, SEE MECHANICAL DRAWINGS.

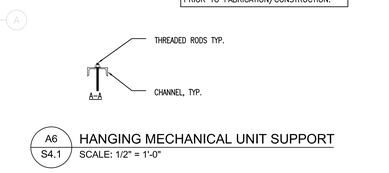
E. APPROVAL MUST BE OBTAINED FROM THE ENGINEER OF RECORD FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS.

E. REFER TO GENERAL NOTES AND TYPICAL DETAILS FOR MORE INFORMATION.

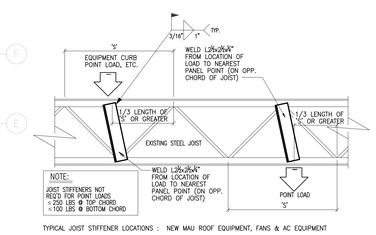


D6 / S4.1 REMOTE CONDENSING UNIT CURB
SCALE: 1/8" = 1'-0"

NOTE:
IF NEW FAN TO USE EXISTING FRAMING/ROOF PENETRATION, G.C. TO VERIFY EXISTING FRAMING CONDITIONS MATCH THIS DETAIL PRIOR TO FABRICATION/CONSTRUCTION. IF NOT, G.C. TO NOTIFY EOR.

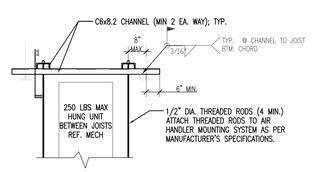


C6 / S4.1 ROOF OPENING DETAIL FOR FANS AND VENTS
SCALE: 1/8" = 1'-0"



TYPICAL JOIST STIFFENER LOCATIONS : NEW MAU ROOF EQUIPMENT, FANS & AC EQUIPMENT

B6 / S4.1 TYP. JOIST STIFFENER DETAIL
SCALE: 1/8" = 1'-0"



NOTE:
G.C. TO VERIFY EXISTING CONDITIONS AND FRAMING LAYOUT AS SHOWN ON THIS DETAIL AND FRAMING PLAN ON A1/S4.1 PRIOR TO FABRICATION/CONSTRUCTION.

A6 / S4.1 HANGING MECHANICAL UNIT SUPPORT
SCALE: 1/2" = 1'-0"

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2600 Maitland Center Parkway
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CLIENT NAME
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3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
6760 W. FL-44 HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
ROOF FRAMING PLAN

EDUARDO D. MARTINEZ
LICENSE No. 73403
STATE OF FLORIDA
PROFESSIONAL ENGINEER
06-16-2022
EDUARDO D. MARTINEZ
FL# 73403

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	2210764
DATE	04/21/2022
DRAWN	RG
CHECKED	EM

S4.1

DECOR SCHEME: EVERGREEN

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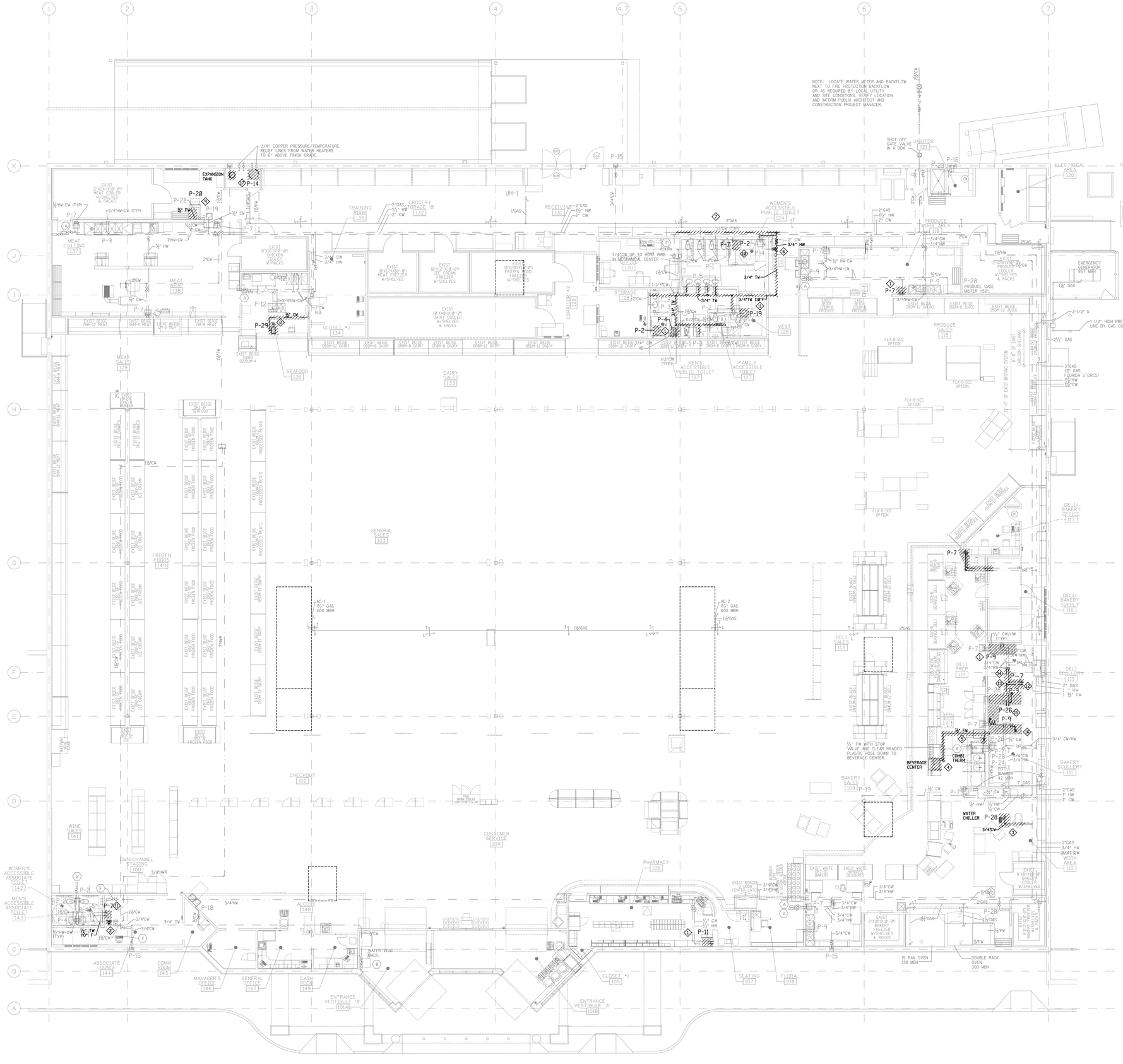
GENERAL PLUMBING DEMOLITION NOTES:

- ALL REMOVED WATER LINES SHALL BE CAPPED AND STUB-OUT CONCEALED BELOW FLOOR, IN WALL OR ABOVE CEILING.
- COORDINATE REPAIR OF ALL FLOOR SLAB AND FLOOR FINISHES IN AREA WHERE EXISTING WATER PIPING IS BEING REMOVED/REPLACED WITH C.C. PER ARCHITECTS RECOMMENDATIONS.
- ALL REMOVED FIXTURES, VALVES, BRASS, ETC. SHALL REMAIN THE PROPERTY OF PUBLIX AND SHALL BE TURNED OVER TO THEIR REPRESENTATIVES FOR FURTHER DIRECTIVE.
- FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK AND COORDINATE ANY CONFLICTS WITH OWNER/ARCHITECT/ENGINEER.
- P.C. TO COORDINATE WITH G.C. TO REMOVE AND STORE EXISTING SINKS IN CONDITION PRIOR TO REMOVAL AND STORE IN SAFE LOCATION IN AREAS REQUIRING FIXTURES TO BE REMOVED IN ORDER TO ALLOW REQUIRED FLOOR/WALL WORK. REMOVE WATER SUPPLIES ON REMOVED SINKS BACK TO WALL.
- WHERE MMA IN RESTROOMS IS BEING REFLAKED, RESURFACED, OR REPAIRED CONTRACTOR TO REMOVE EXISTING TOILETS IN CONDITION PRIOR TO REMOVAL AND REINSTALL AFTER FLOORING IS COMPLETED AS REQUIRED.

DRAWING NOTES-PLUMBING

1. REMOVE AND DUMP NOTED PLUMBING FIXTURE AND ALL ASSOCIATED HW/CW PIPING ABOVE FLOOR BACK TO WALL.
2. REMOVE THERMOSTATIC MIXING VALVE INCLUDING ALL ASSOCIATED HW/TW PIPING TO POINTS INDICATED MAXIMUM OF 1' ABOVE CEILING. REMOVE AND DUMP CW AT MIXING VALVE AND CAP CW AT MAIN.
3. REMOVE AND DUMP FILTER SYSTEM, BACKFLOW VALVE, QUICK CONNECT, CW FLEXIBLE TUBING UP TO CEILING. REMOVE AND DUMP CW PIPING TO POINT INDICATED AND CAP AS INDICATED.
4. REMOVE FW FLEXIBLE TUBING, SHUT OFF VALVE AS FW PIPING TO CEILING SERVING BEVERAGE CENTER TO POINT INDICATED.
5. REMOVE AND DUMP FILTERED WATER AND NON FILTERED WATER PIPING SERVING COMBI-THERM TO POINT INDICATED AT BAR JOIST.
6. REMOVE THERMOSTATIC MIXING VALVE INCLUDING ALL ASSOCIATED HW/CW/TW PIPING TO POINT INDICATED, MAXIMUM 1' ABOVE CEILING, CAP CW AT MAIN BRANCH AS INDICATED.
7. REMOVE AND DUMP HW PIPING AT BAR JOIST TO POINT INDICATED.
8. REMOVE AND DUMP HOSE REEL AT CEILING. REMOVE AND DUMP CW PIPING TO POINT INDICATED.
9. REMOVE AND DUMP ICE MACHINE AND ALL ASSOCIATED FW PIPING ABOVE FLOOR BACK TO WALL.
10. REMOVE AND STORE WATER CLOSET IN CONDITION PRIOR TO REMOVAL. REMOVE AND DUMP ALL CW PIPING ABOVE FLOOR BACK TO WALL AS REQUIRED TO RELOCATE WATER CLOSET.
11. REMOVE AND STORE PLUMBING FIXTURE IN CONDITION PRIOR TO REMOVAL. REMOVE AND DUMP ALL CW PIPING ABOVE FLOOR BACK TO WALL AS REQUIRED TO RELOCATE PLUMBING FIXTURE.
12. REMOVE AND DUMP NOTED PLUMBING FIXTURE AND ALL ASSOCIATED HW/CW PIPING ABOVE FLOOR BACK TO WITHIN WALL.
13. REMOVE AND DUMP NOTED PREP SINK AND ALL ASSOCIATED HW/CW PIPING INCLUDING HOSE BIBB BACK TO WITHIN WALL.
14. REMOVE AND DUMP NOTED HW/CW PIPING AT BAR JOIST TO POINT INDICATED AND CAP.
15. REMOVE AND DUMP NOTED MOP SINK AND ALL ASSOCIATED HW/CW PIPING AND HOSE BIBB ABOVE FLOOR BACK TO WITHIN WALL AND CAP.
16. REMOVE AND DUMP NOTED PREP SINK AND ALL ASSOCIATED HW/CW PIPING INCLUDING HOSE BIBB BACK TO WALL.
17. REMOVE AND DUMP WATER HEATER AND EXPANSION TANK. REMOVE AND DUMP ALL HW/CW/GAS PIPING AS REQUIRED TO INSTALL NEW WATER HEATERS AND EXPANSION TANK.



1 PD1.1 WATER AND GAS PLUMBING DEMOLITION PLAN

SCALE: 1/8"=1'-0" (0, 2', 4', 8', 16')

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PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
EAST OF US-19 ALT. & NORTH OF E. LAKE HIGHLAND DR.
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
WATER AND GAS PLUMBING DEMOLITION PLAN

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 2210764
DATE 04/21/2022
DRAWN STEE MABAMAY
CHECKED SMP

PD1.1

DECOR SCHEME: EVERGREEN

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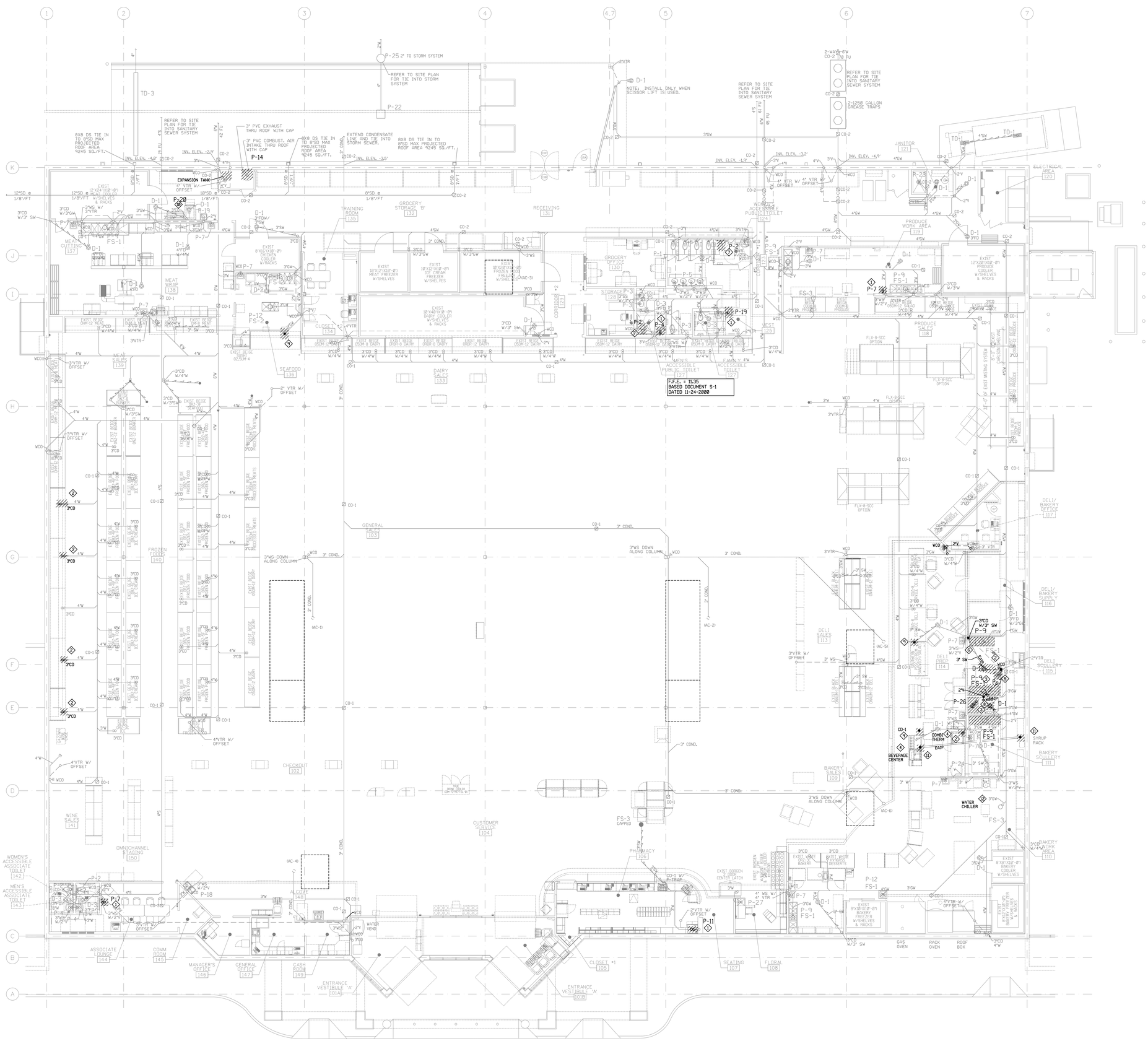
GENERAL PLUMBING DEMOLITION NOTES:

- ALL REMOVED WASTE LINES SHALL BE CAPPED AND STUB-OUT CONCEALED BELOW FLOOR, IN WALL OR ABOVE CEILING IN ACCORDANCE WITH LOCAL CODE/AUTHORITY.
- COORDINATE REPAIR OF ALL FLOOR SLAB AND FLOOR FINISHES IN AREA WHERE EXISTING PIPING, FLOOR DRAINS, FLOOR SINK AND FLOOR CLEAN-OUTS AND FIXTURES, ARE BEING REMOVED/REPLACED WITH G.C.
- ALL REMOVED FIXTURES, VALVES, BRASS, ETC. SHALL REMAIN THE PROPERTY OF PUBLIX AND SHALL BE TURNED OVER TO THEIR REPRESENTATIVES FOR FURTHER DIRECTIVE.
- ALL VENT LINES NO LONGER IN USE SHALL BE CAPPED AND STUB-UPS CONCEALED BELOW FLOOR, IN WALL OR ABOVE CEILING IN ACCORDANCE WITH LOCAL CODE/AUTHORITY.
- FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK AND COORDINATE ANY CONFLICTS WITH OWNER/ARCHITECT/ENGINEER
- IN AREAS REQUIRING FIXTURES TO BE REMOVED IN ORDER TO ALLOW REQUIRED FLOOR WORK, REMOVE AND DUMP ALL INDIRECT WASTE PIPING ABOVE FLOOR SERVING REMOVED/RELOCATED SINKS/OVENS). EXISTING FS/CO TO REMAIN. REMOVE AND DUMP ASSOCIATED WASTE PIPING ABOVE FLOOR BACK TO WALL OR WITHIN WALL SERVING REMOVED/RELOCATED FIXTURES.
- WHERE MMA IN RESTROOMS IS BEING REFLAKED, RESURFACED, OR REPAIRED CONTRACTOR TO REMOVE EXISTING TOILETS IN CONDITION PRIOR TO REMOVAL AND REINSTALL AFTER FLOORING IS COMPLETED AS REQUIRED.

DRAWING NOTES-PLUMBING

1. REMOVE AND DUMP TRAP AND ALL ASSOCIATED WASTE PIPING ABOVE FLOOR SERVING REMOVED FIXTURE BACK TO WALL.
2. REMOVE CASE/HUB/FLOOR DRAIN/FLOOR SINK/TRENCH DRAIN/TRAP AND ASSOCIATED WASTE PIPING TO POINT INDICATED BELOW SLAB.
3. REMOVE CASE/HUB/FLOOR DRAIN/FLOOR SINK/TRENCH DRAIN/TRAP AND ASSOCIATED WASTE PIPING TO POINT INDICATED BELOW SLAB AND CAP.
4. REMOVE AND DUMP INDIRECT WASTE PIPING SERVING BEVERAGE CENTER/COMBI THERM IN IT'S ENTIRETY.
5. REMOVE AND DUMP TRAP AND ALL ASSOCIATED WASTE PIPING ABOVE FLOOR SERVING REMOVED FIXTURE BACK TO WITHIN WALL. REMOVE AND DUMP WASTE/VENT STACK TO BELOW FLOOR AND CAP. REMOVE AND DUMP VENT PIPING ABOVE CEILING TO POINT INDICATED AND CAP. EXISTING CONNECTIONS AND VTR TO REMAIN.
6. REMOVE CASE/HUB/FLOOR DRAIN/FLOOR SINK/TRENCH DRAIN/TRAP AND ASSOCIATED WASTE PIPING TO POINT INDICATED BELOW SLAB AND CAP. INACTIVE PIPING BELOW SLAB TO BE ABANDONED IN PLACE.
7. REMOVE AND DUMP TOILET FLANGE AND ASSOCIATED PIPING AS REQUIRED TO RELOCATE WATER CLOSET.
8. REMOVE AND DUMP WASTE/VENT STACK AND ASSOCIATED WCO TO BELOW FLOOR AND CAP. REMOVE AND DUMP VENT PIPING ABOVE CEILING TO POINT INDICATED AND CAP.
9. REMOVE AND DUMP WASTE/GREASE WASTE PIPING TO POINT BELOW FLOOR AND CAP FOR FUTURE USE.
10. REMOVE AND DUMP INDIRECT WASTE PIPING SERVING ICE MACHINE IN IT'S ENTIRETY.
11. REMOVE AND DUMP SYRUP CHASE TO POINT BELOW FLOOR AND CAP. EXISTING SYRUP CHASE BELOW FLOOR TO BE ABANDONED IN PLACE.
12. REMOVE AND DUMP INDIRECT WASTE PIPING SERVING WATER CHILLER IN IT'S ENTIRETY.
13. REMOVE AND DUMP INTAKE AND EXHAUST FLUE AS REQUIRED TO INSTALL NEW WATER HEATER.



1 PD2.1 SANITARY WASTE PLUMBING DEMOLITION PLAN

SCALE: 0 2' 4' 8' 16' — 1/8"=1'-0"

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PROJECT NAME: PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
NEW PUBLIX AT LAKE HIGHLAND
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE: SANITARY WASTE PLUMBING DEMOLITION PLAN

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO: 2210764
DATE: 04/21/2022
DRAWN: STEVE MABANAY
CHECKED: DMP

PD02

DECOR SCHEME: EVERGREEN

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PLUMBING NOTES

FURNISH STOPS ON ALL WATER SUPPLIES: CHROME PLATE ESCUTCHEONS AT ALL OPENINGS IN WALL OR FLOOR.

ALL NEW WATER LINES TO BE OVERHEAD, CONCEALED, OR RUN IN JOIST AREA.

WHEREVER POSSIBLE LOCATE NEW HW AND CW VALVES IN SAME ACCESS HOLE.

UTILITY SINKS: WASTE ROUGH IN AT 8" ABOVE FINISHED FLOOR. HOT AND COLD WATER ROUGH IN 12" ABOVE FINISHED FLOOR. SEE SINK DETAILS ON DRAWINGS. ALL RISERS FROM STOP AND SINK FITTINGS TO BE 1/2" HARD COPPER.

WATER LINE CONNECTIONS TO ALL APPLIANCES SHALL HAVE UNIONS AND SHUT-OFF VALVES.

PLUMBING CONTRACTOR SHALL IDENTIFY THE LOCATION OF NEW VALVES ABOVE TILED CEILINGS WITH A "STENCILED ON" SIGN SEE DETAIL 4/P4.1.

DOMESTIC WATER SYSTEM DESIGN IS BASED ON EXISTING PRESSURE OF 65 PSI.

MATERIALS EXPOSED IN PLENUMS SHALL BE NON-COMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM 84.

ALL SHUTOFF VALVES SHALL BE ACCESSIBLE.

ALL EXISTING INFORMATION NOTED ON PLANS BASED ON EXISTING DOCUMENTS DATED 06-20-2016 AND VISUAL SITE INSPECTION.

STORE TO REMAIN OPEN DURING CONSTRUCTION. CONTRACTOR TO COORDINATE WORK WITH G.C. AND STORE TO ALLOW AREAS OF WORK AND STORE TO REMAIN OPEN.

P.C. TO COORDINATE WITH G.C. TO REINSTALL EXISTING FIXTURES WHERE REMOVED FOR FLOOR AND OR WALL WORK. PROVIDE NEW WATER SUPPLIES AS REQUIRED.

WHERE MMA IN RESTROOMS IS BEING REFLAXED, RESURFACED, OR REPAIRED CONTRACTOR TO REINSTALL TOILETS AFTER FLOORING IS COMPLETED AS REQUIRED.

ALL CW AND HW PIPE CONNECTIONS FROM MAIN DISTRIBUTION LINES TO LAVATORIES, HAND SINKS, AND WORK SINKS SHALL NOT EXCEED 25 FT IN LENGTH.

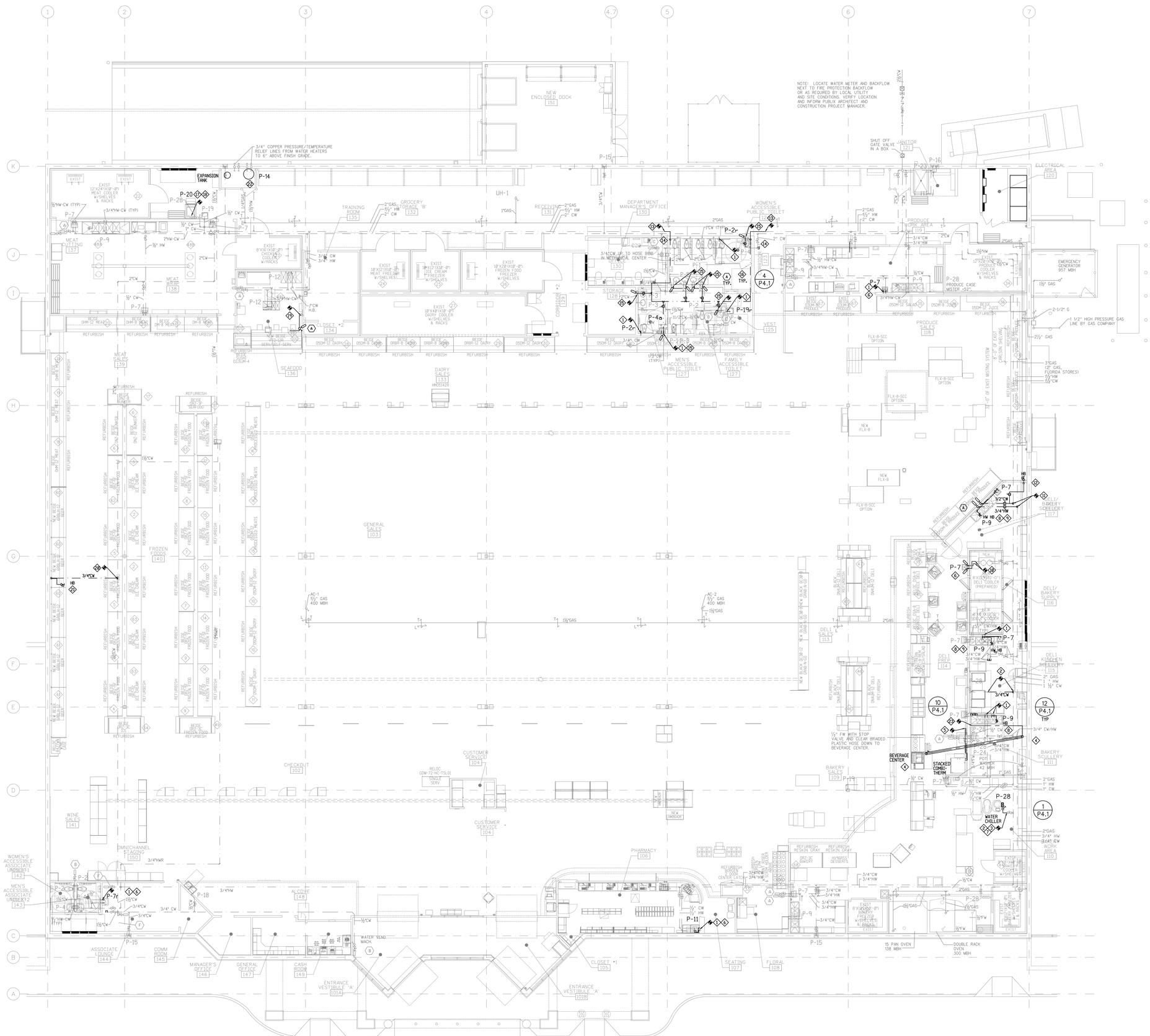
FOR STORES NORTH OF MACON, GA. ALL CW AND FW COPPER PIPING TO BE INSULATED WITH "ARMACELL OR APPROVED EQUAL."

ALL HW, TW, & HWR PIPING SHALL BE INSULATED WITH 1" OF FIBERGLASS WITH A VAPOR BARRIER JACKET.

DRAWING NOTES-PLUMBING

1. CONNECT NEW/RELOCATED FIXTURES TO EXISTING WATER SUPPLY CONNECTIONS WHERE FIXTURES WERE REMOVED. PROVIDE NEW SUPPLIES AND STOPS/BALL VALVES ON SINKS.
2. CONNECT 1/2" CW PIPING TO EXISTING CW PIPING AT BAR JOIST.
3. DROP 3/4" CW DOWN TO WATER CHILLER. PROVIDE ISOLATION VALVE AND WATTS *LF7R PRIOR TO CONNECTION. HOSE CONNECTION WITH STAINLESS STEEL BALL VALVE AND QUICK DISCONNECT WITH 1/2" KUR-TEC HOSE.
4. ROUTE 1/2" FW PIPING, BUNDLED WITH SYRUP TUBING, IN NEW 6" PVC CHASE ABOVE CEILING AND CONNECT TO NEW BEVERAGE CENTER AS REQUIRED.
5. CONNECT 3/4" FW/CW PIPING TO EXISTING 3/4" FW/CW ON WALL TO STACKED COMBI-THERM WITH ISOLATION VALVE AND WATTS *LF7R BACKFLOW PREVENTER. MAKE FINAL CONNECTION TO COMBI-THERM AS REQUIRED.
6. ZURN THERMOSTATIC MIXING VALVE WITH INTEGRAL CHECKS, MODEL ZW3870XLT LOCATED BELOW SINK. SEE THERMOSTATIC MIXING VALVE DETAIL 6/P4.1.
7. WATER LINE CONNECTIONS TO ALL APPLIANCES SHALL HAVE UNIONS, SHUT-OFF VALVES, QUICK DISCONNECT AND SWIVEL FITTINGS.
8. 3/4" HW HOSE BIBB MOUNTED ON LEG OF SINK WITH WATTS *LF7R BACKFLOW PREVENTER. SEE PLUMB END SINK ELEVATION DETAIL.
9. 1/2" HW/CW PIPING RUN TIGHT TO WALL TO SERVE HAND SINK. SUPPORT PIPING WITH STANDOFF PIPE SUPPORTS AS REQUIRED.
10. CONNECT 1/2" HW/CW PIPING TO EXISTING HW/CW PIPING ABOVE CEILING. PIPE DOWN IN WALL TO SERVE HAND SINK AS REQUIRED.
11. CONNECT 3/4" HW/CW PIPING TO EXISTING HW/CW PIPING AT BAR JOIST.
12. ROUTE 3/4"CW DOWN ON WITH STOP VALVE AND WATTS *LF7R BACKFLOW PREVENTER TO SERVE HB MOUNTED AT 90"AFF.
13. CONNECT 1-1/2" HW PIPING INTO EXISTING 1-1/2" HW AT BAR JOIST AS INDICATED.
14. DROP/RISE HW TO WITHIN 1' OF CEILING.
15. CONNECT NEW 1/2" HW TO EXISTING 1/2" HW 12" MAXIMUM ABOVE CEILING AND PIPE TO EXISTING/NEW P-4/P-5 AS INDICATED.
16. LOCATE SHUT-OFF VALVES WITHIN 1' ABOVE LAY-IN CEILING AND PROVIDE ACCESS DOOR IN NON LAY-IN TILE CEILING.
17. STOP VALVE AND WATTS *LF7R BACKFLOW PREVENTER.
18. CONNECT 1/2" FW TO EXISTING 1/2" FW PIPING TO AT FILTER AND MAKE FINAL CONNECTION TO ICE MAKER(P-20) AS REQUIRED.
19. CONNECT NEW 1/2" CW PIPING TO EXISTING 1/2" CW PIPING ABOVE CEILING. DROP 1/2" CW PIPING DOWN ON WALL BUNDLE WITH REFRIGERATION IF APPLICABLE. PROVIDE ISOLATION VALVE, WATTS *LF7R ASSE 1024 BACKFLOW PREVENTER AND RUN BELOW CASE AND MAKE FINAL CONNECTION TO PTD CASE MISTING SYSTEM AS REQUIRED.
20. CONNECT NEW 3/4" CW PIPING INTO EXISTING CW PIPING AT BAR JOIST.
21. 3/4"CW DOWN ON WALL TO REFRIGERATED CASE HB CONNECTION. BUNDLE WITH REFRIGERATION IF APPLICABLE. REFER TO DETAIL 9/P4.1.
22. CONNECT NEW HW/CW/GAS PIPING TO NEW WATER HEATER AS REQUIRED.
23. CONNECT NEW 1/2" FW PIPING TO EXISTING FW PIPING AS INDICATED.

WATER HAMMER ARRESTOR SCHEDULE		
PIPE SIZE	FIXTURE UNITS	PDI
1/2"	1-11	A
3/4"	12-32	B
1"	33-60	C
1 1/4"	61-113	D
1 1/2"	114-154	E
2"	155-330	F
WATER HAMMER ARRESTORS SHALL BE PRECISION PLUMBING PRODUCTS MODEL * SC-500A THRU SC-2000F OR APPROVED EQUAL		
USE MODEL CPVC-500 FOR BAKERY OVEN/PROOF BOX		

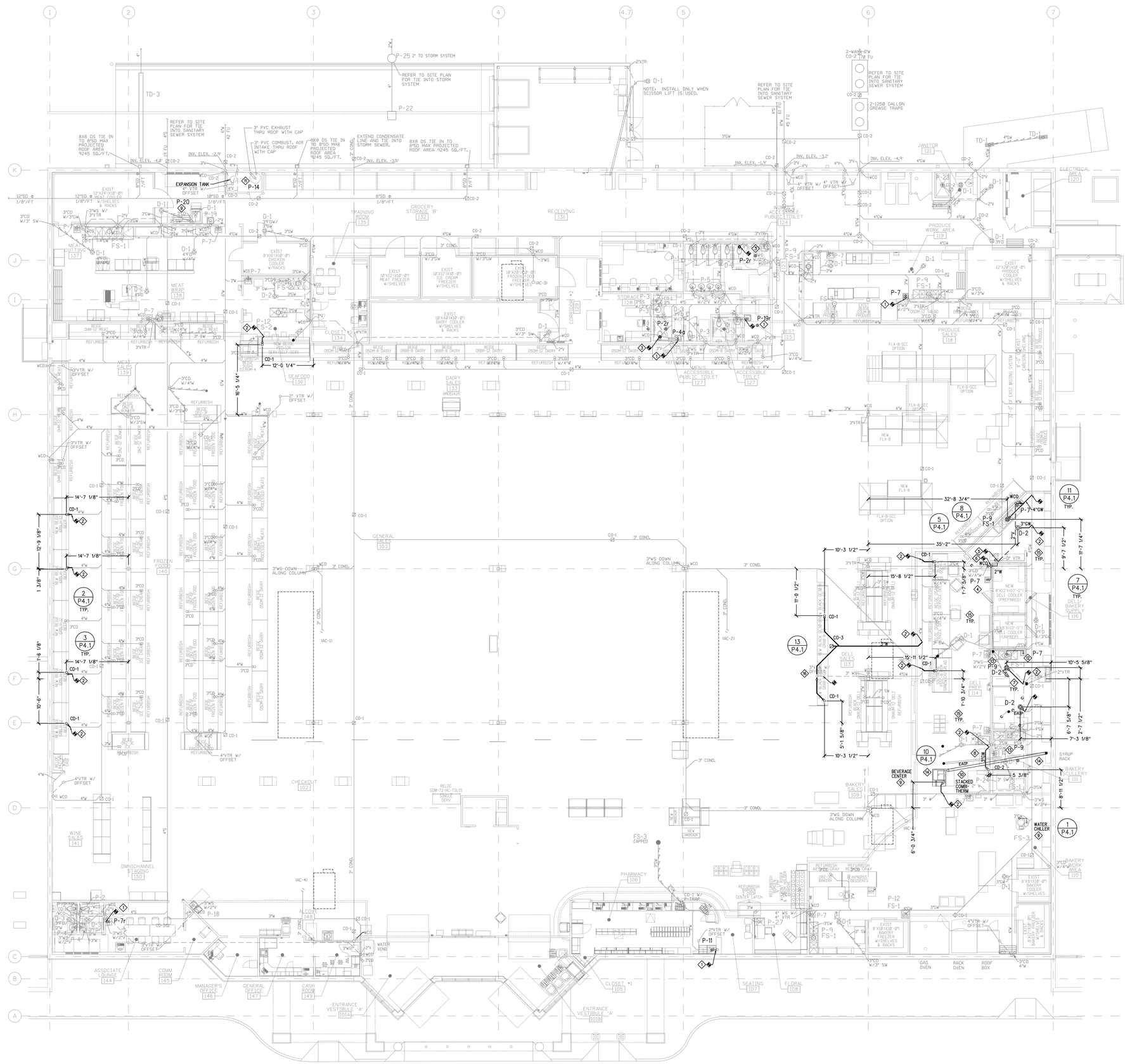

NOTE: LOCATE WATER METER AND BACKFLOW NEXT TO FIRE PROTECTION BACKFLOW OR AS REQUIRED BY LOCAL UTILITY AND SITE CONDITIONS. VERIFY LOCATION AND INFORM PUBLIX ARCHITECT AND CONSTRUCTION PROJECT MANAGER.
3/4" COPPER PRESSURE/TEMPERATURE RELIEF LINES FROM WATER HEATERS TO 6" ABOVE FINISH GRADE.
EXPANSION TANK
NEW ENCLOSED DOCK 151
SHUT OFF GATE VALVE IN A BOX
JANITOR 121
ELECTRICAL AREA 120
TRAINING ROOM 135
GROCERY STORAGE "B" 132
RECEIVING 131
DEPARTMENT MANAGER'S OFFICE 130
WOMEN'S ACCESSIBLE PUBLIC TOILET 127
PRODUCE WORK AREA 119
MEAT CUTTING 137
MEAT SALES 139
SEAFOOD 136
DAIRY SALES 133
FROZEN FOODS 140
GENERAL SALES 103
STORAGE 128
MEN'S ACCESSIBLE PUBLIC TOILET 127
FAMILY ACCESSIBLE TOILET 127
VEST 125
PRODUCE SALES 118
EMERGENCY GENERATOR 957 MBH
DELI/ BAKERY SUPV 116
DELI SALES 113
DELI PREP 114
DELI KITCHEN SCULLERY 115
BAKERY SCULLERY 111
BAKERY SALES 109
WORK AREA 110
BEVERAGE CENTER
STACKED COMBI-THERM
WATER CHILLER
CHECKOUT 102
CUSTOMER SERVICE 104
WINE SALES 141
OMNICHANNEL STAGING 150
WOMEN'S ACCESSIBLE ASSOCIATE UNISEX 142
MEN'S ACCESSIBLE ASSOCIATE UNISEX 143
ASSOCIATE LOUNGE 144
COMM ROOM 145
MANAGER'S OFFICE 146
GENERAL OFFICE 147
ALCOVE 148
CASH ROOM 149
ENTRANCE VESTIBULE "A" 101A
ENTRANCE VESTIBULE "A" 101B
PHARMACY 106
SEATING 107
FLORAL 108
CLOSET 105
15 PAN OVEN 138 MBH
DOUBLE RACK OVEN 300 MBH
NEW FLX-8
FLX-8-SCC OPTION
EXIST 8'X15'X10'-0" DELI COOLER (PREPARED)
EXIST 8'X15'X10'-0" BAKERY FREEZER W/SHELVES & RACKS
EXIST 8'X15'X10'-0" BAKERY COOLER W/SHELVES & RACKS
EXIST 8'X10'X10'-0" CHICKEN COOLER W/RACKS
EXIST 12'X24'X10'-0" MEAT COOLER W/SHELVES & RACKS
EXIST 18'X12'X10'-0" MEAT FREEZER W/SHELVES
EXIST 18'X12'X10'-0" ICE CREAM FREEZER W/SHELVES
EXIST 18'X40'X10'-0" DAIRY COOLER W/SHELVES & RACKS
EXIST 18'X20'X10'-0" FROZEN FOOD FREEZER W/SHELVES
EXIST 12'X30'X10'-0" PRODUCE COOLER W/SHELVES & RACKS
EXIST 8'X30'X10'-0" BAKERY COOLER W/SHELVES & RACKS
NEW 8'X15'X10'-0" DELI COOLER (PREPARED)
NEW 8'X15'X10'-0" BAKERY FREEZER W/SHELVES & RACKS
EXIST 8'X30'X10'-0" BAKERY COOLER W/SHELVES & RACKS
NEW FROZEN FOOD REFURBISH
NEW DAIRY REFURBISH
NEW PRODUCE REFURBISH
NEW DELI REFURBISH
NEW BAKERY REFURBISH
NEW MEAT REFURBISH
NEW SEAFOOD REFURBISH
REFURBISH
AC-1 1" GAS 400 MBH
AC-2 1" GAS 400 MBH
UH-1
WATER VEND. MACH.
CUSTOMER SERVICE 104
RELOC CDM-72-HC-TSL01 SNACK SERV
NEW UNDERCO
P-1 P-2 P-2r P-3 P-4 P-4a P-5 P-7 P-7f P-9 P-11 P-12 P-14 P-15 P-16 P-18 P-19 P-20 P-23 P-24 P-28
2"GAS
1"GAS
2-1/2" G
1 1/2" HIGH PRESSURE GAS LINE BY GAS COMPANY
2-1/2" GAS
3"GAS (2" GAS, FLORIDA STORES)
6" OF EXIST MEETING SYSTEM
8"-9" OF EXIST LARGEN SPECLING
3/4"CW
3/4"HW
1/2"CW
1/2"HW
2"CW
2"HW
1"CW
1"HW
3/4"HWR
3/4"CWR
1/2"CWR
1/2"HWR
1/2" FW WITH STOP VALVE AND CLEAR BRAIDED PLASTIC HOSE DOWN TO BEVERAGE CENTER.
1/2" CW WITH STOP VALVE AND CLEAR BRAIDED PLASTIC HOSE DOWN TO WATER CHILLER.
1/2" GAS
1" GAS
1-1/2" GAS
1-1/4" GAS
1-1/2" GAS
2" GAS
2"GAS
3/4" HW
3/4"CW
1/2"CW
1/2"HW
1" CW
1" HW
1/2" CW
1/2" HW
3/4" CW/HW
3/4"CW
3/4"HW
1/2"CW
1/2"HW
1/2"GAS
1"GAS
1-1/2"GAS
1-1/4"GAS
2"GAS
3/4" HW
3/4"CW
1/2"CW
1/2"HW
1" CW
1" HW
1/2" CW
1/2" HW
3/4" CW/HW
3/4"CW
3/4"HW
1/2"CW
1/2"HW
2"GAS
3/4" HW
3/4"CW
1/2"CW
1/2"HW
2"CW
2"HW
1"CW
1"HW
3/4"HWR
3/4"CWR
1/2"CWR
1/2"HWR
1/2" FW WITH STOP VALVE AND CLEAR BRAIDED PLASTIC HOSE DOWN TO BEVERAGE CENTER.
1/2" CW WITH STOP VALVE AND CLEAR BRAIDED PLASTIC HOSE DOWN TO WATER CHILLER.
1/2" GAS
1" GAS
1-1/2" GAS
1-1/4" GAS
1-1/2" GAS
2" GAS
2"GAS
3/4" HW
3/4"CW
1/2"CW
1/2"HW
1" CW
1" HW
1/2" CW
1/2" HW
3/4" CW/HW
3/4"CW
3/4"HW
1/2"CW
1/2"HW
1/2"GAS
1"GAS
1-1/2"GAS
1-1/4"GAS

SPECIAL NOTE

- ALL NEW PLUMBING SOIL-WASTE LINES SHALL HAVE A STARTING INVERT OF (-) 1'-0" BELOW FINISHED FLOOR WHERE POSSIBLE; COORDINATE THROUGH PUBLIX REPRESENTATIVE TO INSURE LOWEST POSSIBLE INVERTS FOR FUTURE REMODELING.
- WHERE NEW FLOOR SINKS ARE NOT ALLOWED BY CODE, SUBSTITUTE WITH FLOOR DRAINS, SEE DRAIN SCHEDULE WHERE APPLICABLE.
- IF NEW VTR'S ARE WITHIN 10' FROM ANY O.A. INTAKE, EXTEND TWO FEET HIGHER OR RELOCATE.
- ALL EXISTING INFORMATION NOTED ON PLANS BASED ON EXISTING DOCUMENTS, DATED ON xx-xx-xxxx AND VISUAL SITE INSPECTION.
- STORE TO REMAIN OPEN DURING CONSTRUCTION. CONTRACTOR TO COORDINATE WORK WITH G.C. AND STORE TO ALLOW AREAS OF WORK AND STORE TO REMAIN OPEN.
- UTILITY SINKS: WASTE ROUGH IN AT 8" ABOVE FINISHED FLOOR. HOT AND COLD WATER ROUGH IN 12" ABOVE FINISHED FLOOR. SEE SINK DETAILS ON DRAWINGS. ALL RISERS FROM STOP AND SINK FITTINGS TO BE 1/2" HARD COPPER.
- NEW MATERIALS EXPOSED IN PLENUMS SHALL BE NON-COMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM 84.
- IN AREAS REQUIRING FIXTURES TO BE REMOVED AND REINSTALLED IN ORDER TO ALLOW REQUIRED FLOOR WORK, PIPE NEW INDIRECT WASTE PIPING ABOVE FLOOR TO EXISTING/NEW FLOOR SINK AS REQUIRED.
- WHERE MMA IN RESTROOMS/DEPARTMENTS BEING REFLAKED, RESURFACED, OR REPAINED CONTRACTOR TO REINSTALL TOILETS AFTER FLOORING IS COMPLETED AS REQUIRED.
- PREP SINKS WITH GATE TYPE VALVES SHALL BE REMOVED AND REPLACED WITH BALL TYPE BY FISHER DRAIN KING #65676.
- P.C. TO COORDINATE WITH G.C. AND HAVE SANITARY/GREASE/WASTE PIPING BELOW SLAB SCOPED AND JET CLEANED AT TIME OF COMPLETION OF PROJECT.

DRAWING NOTES-PLUMBING ◇

1. CONNECT NEW FIXTURES TO EXISTING WASTE CONNECTIONS WHERE FIXTURES WERE REMOVED. PROVIDE NEW TRAPS ON SINKS. CONNECT TRAP PRIMERS WHERE APPLICABLE.
2. CONNECT NEW 3" WASTE/GREASE PIPING TO EXISTING WASTE/GREASE WASTE PIPING BELOW FLOOR AS INDICATED.
3. PROVIDE NEW WAX RING AND CONNECT FIXTURE TO EXISTING WASTE CONNECTIONS WHERE FIXTURES WERE REMOVED. MODIFY WASTE AS REQUIRED.
4. RUN 2" WASTE ARM IN WALL TO WASTE VENT STACK AS INDICATED.
5. CONNECT NEW 2" VENT INTO EXISTING VTR AT BAR JOIST AS INDICATED.
6. 2" WASTE/VENT STACK CONNECT TO EXISTING GREASE WASTE PIPING BELOW FLOOR AS INDICATED.
7. ALL FLOOR DRAINS CONNECT TO 3" WASTE UNLESS OTHERWISE NOTED.
8. THIS SECTION OF PIPE SHALL BE CIP OR COPPER.
9. PIPE NEW WASTE INDIRECT FROM WATER CHILLER/BEVERAGE CENTER AND ICE MAKER TO NEW/EXISTING FLOOR SINK.
10. PIPE NEW COPPER WASTE INDIRECT FROM COMBI THERM SINK TO NEW/EXISTING FLOOR SINK AS REQUIRED.
11. CONNECT WATER HEATER TO EXISTING INTAKE AND EXHAUST PIPING AS REQUIRED.
12. PIPE COPPER INDIRECT WASTE FROM NEW HAND SINK ALONG WALL TO EXISTING FLOOR SINK AS REQUIRED.
13. PIPE COPPER INDIRECT WASTE FROM NEW PREP SINK TO EXISTING FLOOR SINK AS REQUIRED.
14. 6" PVC SYRUP CHASE ABOVE CEILING TO NEW BEVERAGE CENTER WITH LONG RADIUS ELBOWS. COORDINATE LOCATION OF DROP WITH ALL TRADES.
15. G.C. TO COORDINATE WITH P.C. AND HAVE SANITARY, GREASE AND WASTE PIPING SCOPED AND JET CLEANED AT THE COMPLETION OF REMODEL.
16. ROUTE 2" VENT PIPING UP BETWEEN CASE AND GONDOLA AND CONNECT TO EXISTING VENT AT BAR JOIST AS REQUIRED. COORDINATE VENT PIPING WITH REFRIGERATION CHASE AND BUNDLE TOGETHER WHERE POSSIBLE.



1 P2.1 SANITARY WASTE PLUMBING RENOVATION PLAN

SCALE: 1/8"=1'-0" (0 2' 4' 8' 16')

NOTE: THIS DOCUMENT MAY HAVE BEEN ELECTRONICALLY TRANSMITTED. IF UNSIGNED, IT CANNOT BE FILED FOR PUBLIC RECORD. PUBLIC RECORD FILINGS REQUIRE SIGNED AND SEALED DOCUMENTS.

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LICENSE #63481,
EXPIRATION DATE: 2/28/2023

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CLIENT NAME
Publix.
SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
FORMERLY OLD LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
SANITARY WASTE PLUMBING RENOVATION PLAN

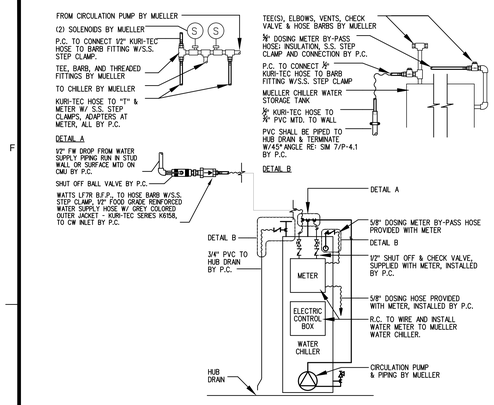
REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	2210704
DATE	04/21/2022
DRAWN	STS/ES/HRA/MAY
CHECKED	DMP

P2.1

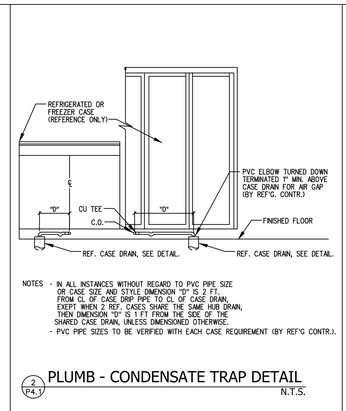
DECOR SCHEME: EVERGREEN

6/16/2022 9:37:58 AM



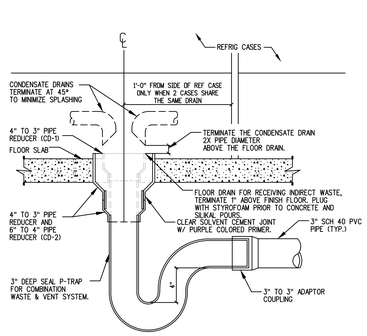
1 P4.1 PLUMB - BAKERY CHILLED WATER SYSTEM
N.T.S.

NOTE:
P.C. - PLUMBING CONTRACTOR
R.C. - REFRIGERATION CONTRACTOR
CW - COLD WATER
CHW - CHILLED WATER



NOTES - IN ALL INSTANCES WITHOUT REGARD TO PVC PIPE SIZE OR CASE SIZE AND STYLE DIMENSION "D" IS 2 FT., FROM CL OF CASE DRIP PIPE TO CL OF CASE DRAIN, EXCEPT WHEN 2 REF. CASES SHARE THE SAME HUB DRAIN, THEN DIMENSION "D" IS 1 FT FROM THE SIDE OF THE SHARED CASE DRAIN, UNLESS DIMENSIONED OTHERWISE.
- PVC PIPE SIZES TO BE VERIFIED WITH EACH CASE REQUIREMENT (BY REF'G CONTR.).

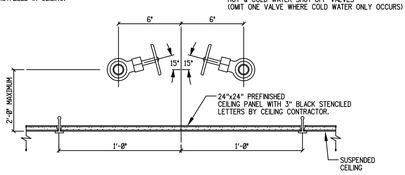
2 P4.1 PLUMB - CONDENSATE TRAP DETAIL
N.T.S.



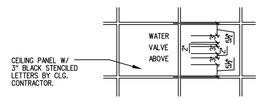
3 P4.1 PLUMB - REFRIGERATED CASE DRAIN DETAIL
N.T.S.

NOTE : FOR GYP BOARD CEILING REFERENCE ANGLES OF VALVES AS INDICATED FOR INSTALLATION. ACCESS PANEL TO BE INSTALLED IN CEILING.

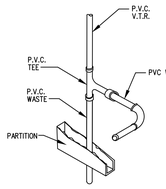
BOTH VALVES CENTERED ON CEILING TILE IN OPPOSITE DIRECTIONS. COORDINATE LOCATIONS WITH CEILING CONTRACTORS.
HOT & COLD WATER SHUT-OFF VALVES (OMIT ONE VALVE WHERE COLD WATER ONLY OCCURS)



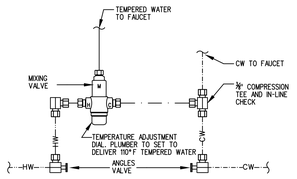
CEILING SHUT-OFF VALVE DETAIL



4 P4.1 PLUMB - PLAN OF CLG. PANEL AT WATER VALVES
N.T.S.

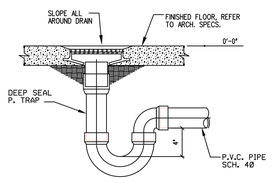


PLUMB - TYPICAL WASTE ARM DETAIL
5 P4.1
N.T.S.

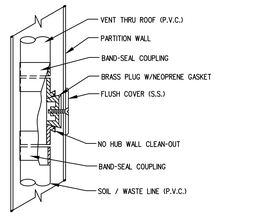


ZURN ZW3870XLT, MIXING VALVE WITH THERMOSTATIC LIMIT STOP & INTEGRAL CHECKS, LOCATED BELOW SINK. ASSE 1070 LISTED.

PLUMB - BELOW SINK THERMOSTATIC MIXING VALVE DETAIL
6 P4.1
N.T.S.

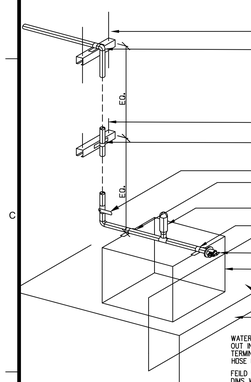


7 P4.1 PLUMB - FLOOR DRAIN DETAIL
SCALE: N.T.S

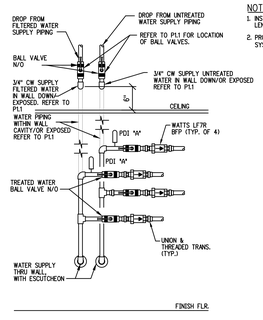


NOTE: W.C.O. AT S.S. SINKS TO BE 54" A.F.F. UNLESS NOTED OTHERWISE

8 P4.1 PLUMB - WALL CLEANOUT DETAIL
N.T.S.

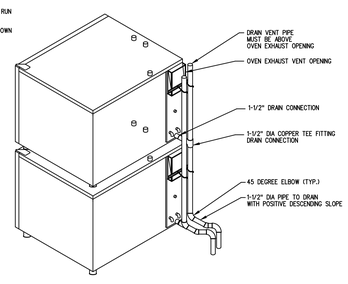


9 P4.1 PLUMB - REF. CASE HOSE BIBB DTL
N.T.S.

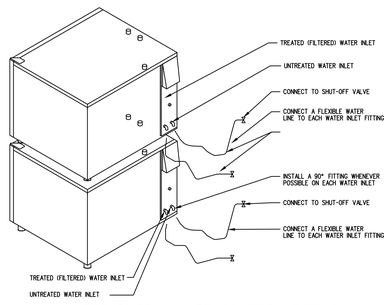


NOTES:
1. INSTALLATION KITS HAVE A MAXIMUM RUN LENGTH OF 4-1/2 FT.
2. PROVIDE WITH INTERLOCKING COOL DOWN SYSTEM FROM MANUFACTURER

NOTES:
1. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR APPLIANCE CONNECTORS

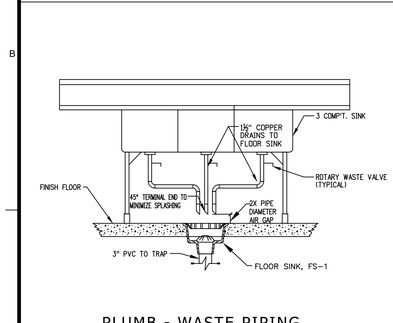


DRAINAGE INSTALLATION DETAIL
N.T.S.



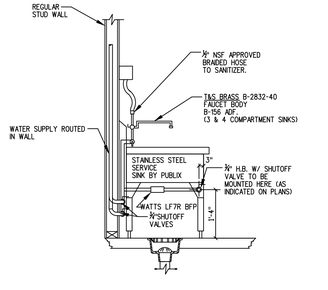
WATER SUPPLY INSTALLATION DETAIL
N.T.S.

10 P4.1 PLUMB - COMBI-THERM STACKED OVENS
N.T.S.

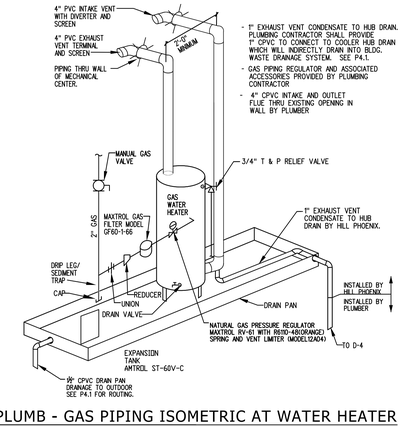


PLUMB - WASTE PIPING FOOD PREPARATION DETAIL
11 P4.1 SCALE: N.T.S

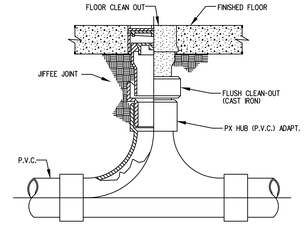
NOTES:
SINK WASTE PIPING DETAIL APPLIES TO ONE, TWO, THREE, AND FOUR COMPARTMENT SINK.



12 P4.1 PLUMB - SINK END ELEVATION
N.T.S.



12 P4.1 PLUMB - GAS PIPING ISOMETRIC AT WATER HEATER
N.T.S.



13 P4.1 FLUSH CLEAN OUT DETAIL
N.T.S.

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	AMERICAN STANDARD OR AS NOTED DESCRIPTION	SERVICE CONNECTIONS TRAP/DRAIN CONNECTION	CW	HW	ELEC. VOLT./PHASE	SUPPLIED BY:	REMARKS
P-2r	RELOCATED WC - WATERCLOSET (H.C.)		4"	1"	---	---	EXISTING HARDWARE	FLOOR MTD
P-4a	LAV - LAVATORY	K-1722-0 KOHLER/FAUCET-SLOAN EFX-200-FS-SM-CP-1.5GPM-IR-FCT. (CODE NUMBER 3324240) SSL, HOLE DECK MTD, BATPWR, HANDS FREE W/1.5 GPM AERATOR, CHICAGO 327-X GRID STRAINER, ZURN Z1027WATER SAVER TRAP PRIMER, COPPER RISER STOPS.	1-1/4"	1/2"	1/2"	-------	SINK & HARDWARE BY PLUMBER.	ZURN ZW3870XLT MIXING VALVE SET AT 110° PROVIDE TRAP WRAP BY TRUBRO OR EQUAL TO INCLUDE COVERAGE OF SUPPLIES, STOPS, AND PRIMER TUBE WHERE APPLICABLE
P-7	HAND-SINK	MODEL: ELKAY CHS1716LRS4 18 GA. TYPE 304 S.S. 16-3/4x15½"2 FAUCET: WALL/BACKSPLASH MOUNT, 4" C/C, W/4" WRIST ACTION HANDLES, SWIVEL GOOSENECK W/1.0 GPM AERATOR T&S BRASS B-2459 OR CHICAGO *W4W-GN2AE35-317ABCP OR FISHER DRAIN: ELKAY LK-8, 17 GA C.P.C.B. P-TRAP W/C.O., ANGLE STOPS.	1-1/2"	1/2"	1/2"	--------	PLUMBER	-WALL MTD. -MIXING VALVE: ZURN ZW3870XLT REFER TO DETAIL 6/P4.1
P-7r	RELOCATED HAND-SINK	EXISTING PROVIDE ZURN ZW3870XLT MIXING VALVE W/THERMO LIMIT STOP,COPPER RISER STOPS, 17 GA C.P.C.B. P-TRAP W/C.O.,	½"	½"	½"	----	EXISTING HARDWARE (FAUCETS,DRAINS, ETC.)	34" TO RIM P.C. TO PROVIDE NEW VALVES AND INSTALL
P-9	KS - SINK	MODEL: STAINLESS STEEL SINK, FURNISHED BY PUBLIX AND INSTALLED BY PLUMBER. W/2.2 GPM AERATOR FAUCET: WALL MOUNT BASE FAUCET ASSEMBLY, 8" C/C, REFER TO DETAILS ON P-4.1. T&S BRASS: 002832-40 W/ B156ADF OR CHICAGO *540 LDL12ABCP OR FISHER *2200-CV WITH 2901-12 ADF DRAIN: FISHER DrainKing WASTE VALVE *55676 W/VR FLAT STRAINER. THERE SHALL BE NO ALTERNATES TO FISHER DRAIN VALVE.	1-1/2"	1/2"	1/2"	--------	SINK BY PUBLIX HARDWARE (FAUCETS,DRAINS, ETC.) BY PLUMBER	-FLOOR & WALL MTD. -SEE APPROPRIATE SINK DETAILS AND/ OR ELEVATION
P-11	S - SINK	MODEL: ELKAY BCR-15-2-S.S. SELF RIMMING - 10x 10x 6 S.S. SINK, FAUCET: DECK MOUNT, 4" C/C, W/12" RIGID GOOSENECK SPOUT, 4" WRIST HANDLES, ANGLE STOPS, W/1.0 GPM AERATOR T&S BRASS B-892 OR CHICAGO *895-317ABCP OR FISHER *92290 DRAIN: ELKAY LK-36 PVC TRAP,	1-1/2"	1/2"	1/2"	-----	PLUMBER	-CAB. MTD. -MIXING VALVE: ZURN ZW3870XLT REFER TO DETAIL-16 DRAWING P4.1
P-14	GWH - GAS WATER HEATER NATURAL/PROPANE	AO SMITH BTH-300(A). CYCLONE 119 GAL. STORAGE 300 MBH NAT. GAS OR PROP. 349 GPH RECOVERY @ 100° RISE T. 96+ THERMAL EFF. MIN. TPR VALVE, UL LISTED. 4" CPVC INTAKE AND OUTLET FLUE THRU ROOF	3/4"	1-1/2"	1-1/2"	120/1	PUBLIX/ HILL PHOENIX	-SEE WATER HEATER DETAIL FOR PIPING & EXPANSION TANK
P-19r	RELOCATED EDF - ELEC. DKG. FTN.	EXISTING RELOCATED PLUMBER TO PROVIDE PVC TRAP AND COPPER RISER STOPS.	¾"	½"	-----	120/1	TRAP AND SUPPLIES BY PLUMBER	WALL MTD
P-20	LM. ICE MACH.	ICE MACH. BY PUBLIX ROUGH-IN & HOOK UP BY PLUMBER WITH STOP VALVE	---	FILTERED ½" WATER	-----	-------	PUBLIX	-FLOOR & WALL MTD.

PLUMBING NOTES (APPLY TO ALL SHEETS):

1. VERIFY ALL DIMENSIONS. VERIFY DIMENSIONS OF PUBLIC REST ROOM LAVATORY FAUCETS SPREAD BEFORE ORDERING NEW FAUCETS.
2. MINIMUM SLOPE FOR SOIL & WASTE LINES SHALL BE:
   2" OR SMALLER: ¼" PER FOOT
   3" OR LARGER: ⅛" PER FOOT
3. COORDINATE WORK WITH ARCHITECTURAL, STRUCTURAL, AND ELECTRICAL DRAWINGS.
4. PROVIDE TRAP SEAL TO ALL NEW HUB DRAINS AND FLOOR DRAINS NOT RECEIVING CONDENSATE.
5. CONCRETE REPAIRS SHALL MEET MINIMUM OF STRUCTURAL/ARCHITECTS APPROVAL.
6. PROVIDE UNIONS AND STOP VALVES FOR ALL NEW WATER CONNECTIONS.
7. COORDINATE ALL DIMENSIONS WITH GENERAL CONTRACTOR FOR LOCATION OF EQUIPMENT, FIXTURE OPENINGS AND DRAINS.
8. CONTRACTOR SHALL REMOVE ALL SUPPORTING FACILITIES NO LONGER NEEDED OR MADE OBSOLETE BY NEW EQUIPMENT AND MATERIALS BEING FURNISHED UNDER THIS CONTRACT.
9. UNLESS OTHERWISE NOTED ALL MATERIALS AND EQUIPMENT SHOWN OR SPECIFIED TO BE REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE HANDED OVER TO THE OWNER IN ITS ORIGINAL CONDITION FOR FURTHER DIRECTIVE.
10. CONTRACTOR SHALL DO ANY AND ALL CUTTING AND PATCHING REQUIRED FOR THIS SCOPE OF WORK RESTORING ALL SURFACES TO THEIR ORIGINAL CONDITION. COORDINATE WITH GENERAL CONTRACTOR.
11. ALTERATIONS TO ANY STRUCTURAL MEMBER, EITHER STEEL, CONCRETE OR WOOD, SHALL REQUIRE THE APPROVAL OF THE ARCHITECT/ENGINEER.
12. CONTRACTOR SHALL VISIT SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS, AND VERIFY EXACT LOCATION, QUANTITY AND SIZE OF ALL EQUIPMENT, AND PIPES BEFORE SUBMITTING HIS BID.
13. WATER SUPPLY PIPING WHICH IS CUT OR MODIFIED SHALL BE INSTALLED FOR CONTINUOUS FLOW WITHOUT DEAD-ENDS.
14. SIZES FOR EXISTING PIPING ARE SHOWN FOR REFERENCE ONLY.
15. ALL EXISTING PLUMBING PIPING AND FIXTURES SHALL REMAIN UNLESS NOTED OTHERWISE.
16. NEW FIXTURES SHALL BE CONNECTED TO EXISTING AND/OR NEW DRAINS AND PIPING. PROVIDE NEW PIPING AS REQUIRED TO MEET CODE.
17. FURNISH STOPS ON ALL WATER SUPPLIES: CHROME PLATE ESCUTCHEONS AT ALL OPENINGS IN WALLS, OR FLOOR AND SUPPLY CHROME HOLE COVER.
18. TOP OF NEW HORIZONTAL UNDERGROUND DRAIN PIPE SHALL BE A MINIMUM OF TWELVE (12") INCHES BELOW FLOOR SLAB WHERE POSSIBLE.
19. WHERE PIPES ARE DISCONNECTED FOR THE RELOCATION OR ADDITION OF EQUIPMENT, THEY SHALL BE RECONNECTED AND MADE FULLY OPERATIONAL.
20. CHECK FINAL ARCHITECTURAL PLANS BEFORE ROUGHING-IN WATER, SOIL, AND WASTE LINES.
21. ALL NEW FLOOR DRAINS SHALL HAVE 4" DEEP SEAL TRAPS OR TRAP PRIMERS AS REQUIRED BY LOCAL CODE.
22. ALL NEW VTRS IN OUTSIDE WALLS SHALL HAVE OFFSET TOWARDS THE CENTER OF THE BUILDING 36" FOR BETTER FLASHING AND ROOFING INSTALLATION.
23. CONTRACTOR SHALL PROVIDE NEW TO EXISTING CONNECTIONS WITHIN 10'-0" OF LOCATION SHOWN AT NO ADDITIONAL COST TO OWNER.

FLOOR DRAINS, CLEAN OUTS, ETC. SCHEDULE

MARK	DESCRIPTION	SMITH	ZURN	PLASTIC ODDITIES PVC / ABS	COMMENTS
CD-1	4" CASE DRAIN, US PLASTICS 4X3 PVC REDUCER, CHARLOTTE 706-X P-TRAP	---	---	---	SEE REFRIGERATED CASE DETAIL
CD-2	6" CASE DRAIN, US PLASTICS 6X4 AND 4X3 REDUCERS, CHARLOTTE 706-X P-TRAP	---	---	---	SEE REFRIGERATED CASE DETAIL
CO-3	FLOOR CLEAN OUT, NICKEL BRONZE VENEER, HEAVY DUTY COVER OR STAINLESS STEEL, SEAMLESS QUARTZ FLOOR AREAS	4031-NB	ZN-1400-HD OR ZS-1400-HD		SEE FLUSH CLEANOUT DETAIL
D-2	12" DIA. FLOOR DRAIN, NICKEL BRONZE GRATE, PERFORATED SEDIMENT BUCKET, FOOD PREPARATION, OUTLET VARIES	2233 C03-NB-SSB-P	ZN-541-P-S-Y		PERFORATED SEDIMENT BUCKET W/S.S. MESH LINER
FS-1	14" SQ. FLOOR SINK, PVC ⅞ GRATE SECONDARY STRAINER	305-H03-12-14	FD-2370-DS-H-Y	RBH-300 H	ZURN: 14 X 14 FLR. SINK.
WCO	WALL CLEAN OUT, CAST IRON TEE, W/ BRONZE PLUG, S.S. COVER	4531	Z-1446-BP	---	SEE WALL CLEANOUT DETAIL

PLUMBING LEGEND

	EXISTING SANITARY PIPING	EXISTING CAPPED HD *	EXISTING CAPPED DRAIN
	EXISTING TO BE REMOVED	CD	EXISTING CONDENSATE DRAIN
	EXISTING VENT PIPING	⊢	WALL CLEAN-OUT
	EXISTING COLD WATER PIPING	A/C	ABOVE CEILING
	EXISTING HOT WATER PIPING	BFP	BACKFLOW PREVENTER
	EXISTING HOT WATER RETURN PIPING	CD-X	CONDENSATE DRAIN
	EXISTING CHILLED WATER PIPING	CW	COLD WATER
	EXISTING GAS PIPING	CWV	COMBINATION WASTE VENT
S/W/GW	SOIL/WASTE/GREASE WASTE PIPING	D-X	NEW FLOOR DRAIN
CWV	COMBINATION WASTE VENT	FCW	FILTERED CHILLED WATER
CVS	CIRCUIT VENT SYSTEM	FS	EXISTING FLOOR SINK
COND	CONDENSATE PIPING	FS-X	NEW FLOOR SINK
V	VENT PIPING	G.C.	GENERAL CONTRACTOR
CW	COLD WATER PIPING	GW	GREASE WASTE
HW	HOT WATER PIPING	HB	HOSE BIBB
HWR	HOT WATER RETURN	HD	EXISTING HUB DRAIN
	POINT OF CONNECTION, NEW TO EXISTING	HW	HOT WATER
CO-X	CLEANOUT-EXISTING	TP	TRAP PRIMER
CO-X	CLEANOUT-NEW	V	VENT
FS-X	FLOOR SINK	W	WASTE LINE
PDI "A"	WATER HAMMER ARRESTOR	WCO	WALL CLEAN-OUT
	BALL VALVE	AFF.	ABOVE FINISHED FLOOR
	UNION	AFG.	ABOVE FINISHED GRADE
	PIPE CAP	BFF.	BELOW FINISHED FLOOR
	FLOW ARROW	BFG.	BELOW FINISHED GRADE
	FILTER SYSTEM	P.C.	PLUMBING CONTRACTOR
	IN LINE CHECK	E.C.	ELECTRICAL CONTRACTOR
	BALANCING VALVE	EAP	EXISTING ABANDONED IN PLACE
	WYE STRAINER		

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CLIENT NAME: Publix SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME:
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
RETAIL / MEDICAL / RESIDENTIAL
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE:
PLUMBING LEGEND, DETAILS, GENERAL NOTES, AND SCHEDULES

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	2210194
DATE	04/21/2022
DRAWN	STDE MABARAY
CHECKED	CMED

P4.1

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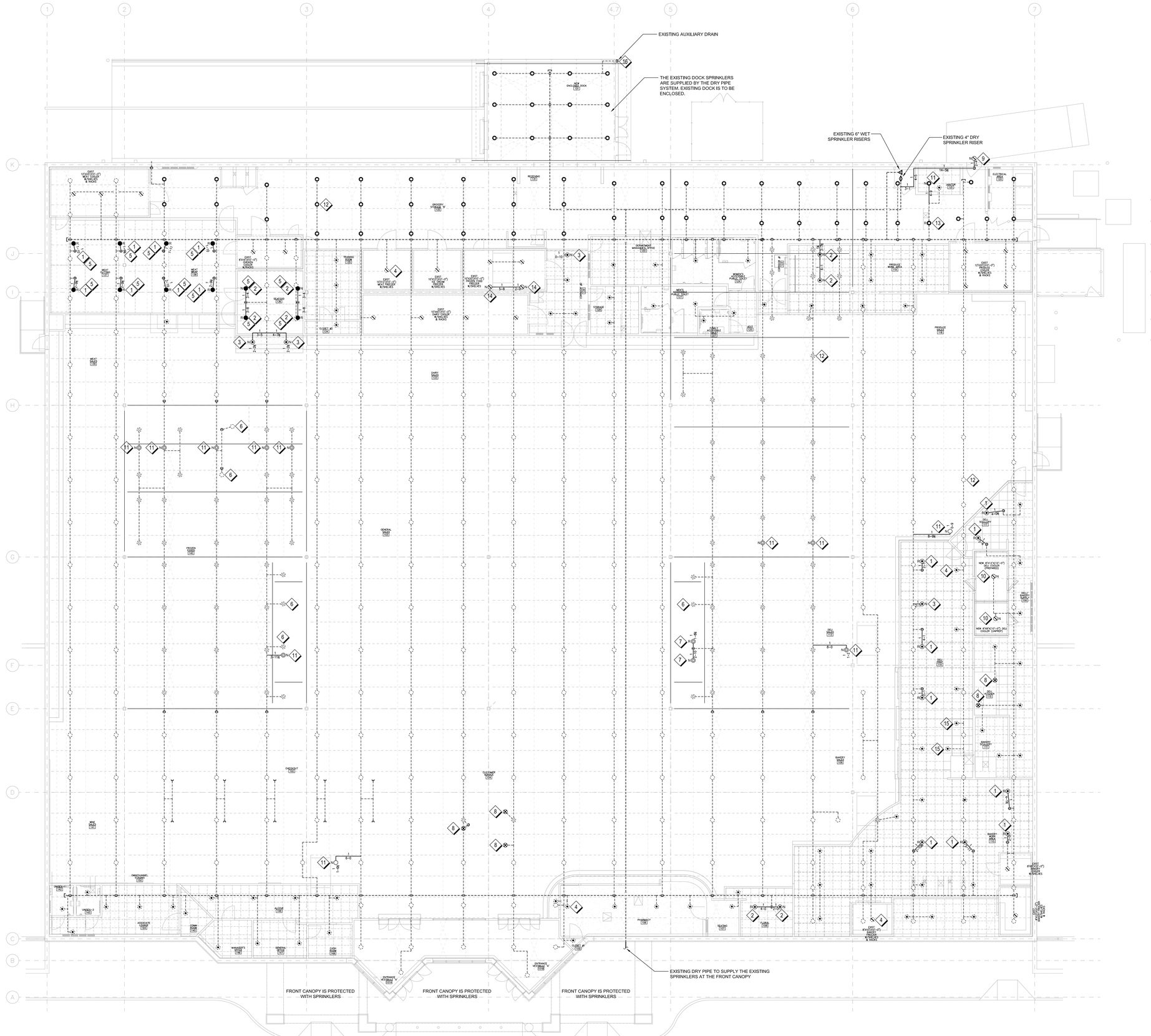

SHEET NOTES

1. EXISTING SPRINKLERS IN THE AREA EXCEED 130sf SPACING PER NFPA REQUIREMENTS. THEREFORE, RELOCATE THE EXISTING PENDENT SPRINKLER AS SHOWN. REPLACE THE EXISTING SPRINKLER WITH A NEW SPRINKLER TO MATCH EXISTING.
2. EXISTING SPRINKLERS IN THE AREA EXCEED 130sf SPACING PER NFPA REQUIREMENTS. THEREFORE, RELOCATE THE EXISTING PENDENT SPRINKLER AS SHOWN. REPLACE THE EXISTING SPRINKLER WITH A NEW SPRINKLER TO MATCH EXISTING. ALSO ADD A NEW PENDENT SPRINKLER AS SHOWN.
3. EXISTING SPRINKLERS IN THE AREA EXCEED 130sf SPACING PER NFPA REQUIREMENTS. THEREFORE, INSTALL A MECHANICAL TEE ONTO THE EXISTING BRANCH LINE/CROSS MAIN AND ADD NEW PENDENT SPRINKLERS AS SHOWN.
4. REPLACE OR FIX LOOSE OR MISSING ESCUTCHEON.
5. MEAT AND SEAFOOD WORKROOMS: REPLACE SPRINKLERS AND ESCUTCHEONS IN THESE AREAS TO WHITE POLYESTER COATED SPRINKLERS. THERE HAVE BEEN ISSUES WITH THE CHROME SPRINKLERS AND ESCUTCHEONS RUSTING OVER TIME. 2-PIECE DEEP ESCUTCHEONS MAY BE NEEDED IN THESE AREAS DUE TO OBSTRUCTIONS AT THE CEILINGS.
6. THE EXISTING UPRIGHT SPRINKLERS EXCEED THE MAXIMUM DISTANCE BELOW THE ROOF OR THE BOTTOMS OF THE MECHANICAL UNITS. RAISE SPRINKLERS AS NEEDED TO MEET NFPA 13.
7. EXISTING SPRINKLERS IN THE AREA EXCEED 130sf SPACING PER NFPA REQUIREMENTS. THEREFORE, RELOCATE THE EXISTING UPRIGHT SPRINKLER AS SHOWN. REPLACE THE EXISTING SPRINKLER WITH A NEW SPRINKLER TO MATCH EXISTING. ALSO ADD A NEW UPRIGHT SPRINKLER AS SHOWN.
8. REMOVE THE EXISTING PENDENT SPRINKLERS AND DROPS. PLUG OUTLETS AT THE ROOF LEVEL PIPING.
9. INSTALL A NEW PENDENT SPRINKLER W/HEAD GUARD IN THE WASTE CHUTE HOPPER AS REQUIRED BY NFPA 13.
10. THE EXISTING FREEZER/COOLER IS BEING REPLACED. REMOVE THE EXISTING DRY PENDENT SPRINKLER TO ACCOMMODATE THE NEW FREEZER/COOLER INSTALLATION. INSTALL A NEW DRY PENDENT SPRINKLER THAT MATCHES THE SAME CHARACTERISTICS. COORDINATE WITH NEW LIGHTS AND EVAPORATOR COIL UNIT LOCATION.
11. EXISTING SPRINKLERS IN THE AREA EXCEED 130sf SPACING PER NFPA REQUIREMENTS. THEREFORE, INSTALL A MECHANICAL TEE ONTO THE EXISTING BRANCH LINE/CROSS MAIN AND ADD NEW UPRIGHT SPRINKLERS AS SHOWN.
12. REMOVE THE PAINTERS TAPE/BAG FROM THE EXISTING UPRIGHT SPRINKLER. REPLACE SPRINKLER IF DAMAGED.
13. EXISTING SPRINKLERS IN THE AREA EXCEED 130sf SPACING PER NFPA REQUIREMENTS. THEREFORE, RELOCATE THE EXISTING UPRIGHT SPRINKLER AS SHOWN. REPLACE THE EXISTING SPRINKLER WITH A NEW SPRINKLER TO MATCH EXISTING.
14. EXISTING SPRINKLERS IN THE AREA EXCEED 130sf SPACING PER NFPA REQUIREMENTS. THEREFORE, INSTALL A MECHANICAL TEE ONTO THE EXISTING BRANCH LINE/CROSS MAIN AND ADD NEW DRY PENDENT SPRINKLERS AS SHOWN.
15. A NEW CEILING IS BEING INSTALLED. REMOVE THE EXISTING SPRINKLER DROP BEING CAREFUL NOT TO DAMAGE THE SPRINKLER HEAD. CUT BACK THE SPRINKLER DROP IF NECESSARY AND RE-INSTALL ONCE THE NEW CEILING IS INSTALLED. COORDINATE WITH CEILING INSTALLER.
16. RELOCATE THE EXISTING INSPECTOR'S TEST CONNECTION AS NEEDED TO ACCOMMODATE THE NEW WALL.

GENERAL NOTE:

- NEW SPRINKLERS SHALL MATCH THE CHARACTERISTICS OF THE EXISTING SPRINKLERS IN THE AREA THEY ARE INSTALLED.
- CLEAN ALL EXISTING SPRINKLERS FREE FROM DUST BUILD-UP WHERE NEEDED.
- PATCH OR FILL ANY HOLES IN THE FREEZER OR COOLER CEILINGS WITH APPROVED INSULATION WHERE SPRINKLERS ARE BEING RELOCATED OR ADDED.
- NOT ALL PIPE WAS FIELD VERIFIED DURING THE SITE VISIT. THE FIRE SPRINKLER CONTRACTOR SHALL VERIFY PIPE IN FIELD DURING THEIR SITE VISIT.
- COORDINATE WITH ALL CEILING FIXTURES, LIGHTS AND EVAPORATOR COILS.
- THE FIRE SPRINKLER CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS UPON COMPLETION OF WORK. SUBMIT AS-BUILT DRAWINGS TO PUBLIX, ARCHITECT AND ENGINEER OF RECORD.

1 FP1.1 FIRE PROTECTION PLAN
SCALE: 1/8" = 1'-0"

GRAPHIC SCALE
4' 0 5' 10' 15' 20'
1/8"=1'-0"

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PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
FRONT OUTLOT & LAKE HOSPITAL
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
FIRE PROTECTION FLOOR PLAN

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 221094
DATE 04/21/2022
DRAWN MP
CHECKED PC

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DECOR SCHEME: EVERGREEN

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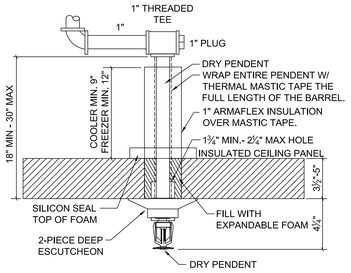
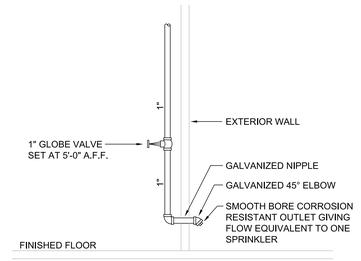
FIRE PROTECTION ENGINEERS



VIKING OR RELIABLE DRY PENDENTS ONLY

DRY PENDENT INSTALLATION DETAIL NTS 8

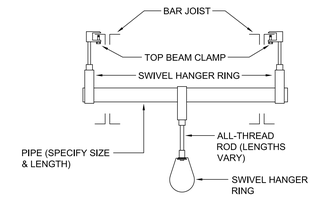


EXISTING INSPECTOR'S TEST CONNECTION NTS 4

FIRE PROTECTION SPRINKLER LEGEND

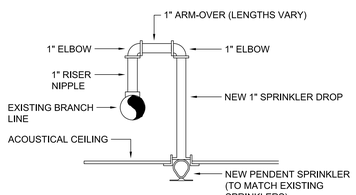
SYMBOL	DESCRIPTION
	EXISTING PENDENT SPRINKLER TO REMAIN
	EXISTING DRY PENDENT SPRINKLER TO REMAIN
	EXISTING UPRIGHT SPRINKLER TO REMAIN
	EXISTING UPRIGHT SPRINKLER ON SPRIG-UP TO REMAIN
	EXISTING SIDEWALL SPRINKLER TO REMAIN
	EXISTING UPRIGHT SPRINKLER TO REMAIN
	NEW UPRIGHT SPRINKLER (ON SPRIG-UP IF NECESSARY)
	NEW PENDENT SPRINKLER
	RELOCATED PENDENT SPRINKLER
	NEW DRY PENDENT SPRINKLER (VIKING)
	EXISTING SPRINKLER PIPE TO REMAIN
	NEW SPRINKLER PIPE
	EXISTING WET SPRINKLER RISER
	EXISTING DRY SPRINKLER RISER
	EXISTING FIRE DEPARTMENT CONNECTION
	PLUGGED OUTLET
	PLUGGED OUTLET

LEGEND NTS 7



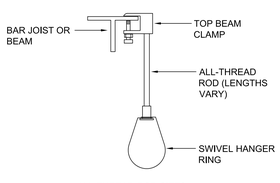
TRAPEZE HANGER DETAIL NTS 3

NOTE: SCHEDULE 40 THREADABLE PIPE TO BE USED



THIS DETAIL IS TO REPLACE EXISTING SPRINKLER HEADS WITH NEW SPRINKLER HEADS AT NEW LOCATION.

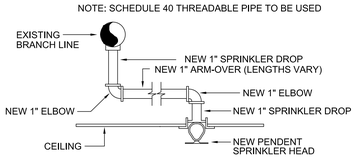
PENDENT SPRINKLER RELOCATION DETAIL NTS 6



ALL-THREAD ROD SIZES
FOR PIPE UP TO 4" IN DIAMETER, ⅜" ROD TO BE USED
FOR 6" & 8" DIAMETER PIPE, ½" ROD TO BE USED

BAR JOIST/BEAM HANGER DETAIL NTS 2

NOTE: SCHEDULE 40 THREADABLE PIPE TO BE USED

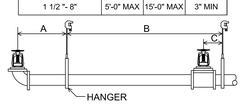


THIS DETAIL IS TO REPLACE EXISTING SPRINKLER HEADS WITH NEW SPRINKLER HEADS AT NEW LOCATION.

PENDENT SPRINKLER RELOCATION DETAIL NTS 5

STEEL PIPE HANGER LOCATION DETAIL

PIPE SIZE	A	B	C
1"	3'-0" MAX	12'-0" MAX	3" MIN
1 1/4 "	4'-0" MAX	12'-0" MAX	3" MIN
1 1/2 "- 8"	5'-0" MAX	15'-0" MAX	3" MIN



THE UNSUPPORTED LENGTH BETWEEN THE END SPRINKLER AND THE LAST HANGER ON THE LINE SHALL NOT EXCEED 36" FOR 1" PIPE, 48" FOR 1¼" PIPE AND 60" FOR 1½" PIPE OR LARGER, THE CUMULATIVE HORIZONTAL LENGTH OF AN UNSUPPORTED ARMOVER TO A SPRINKLER, SPRINKLER DROP, OR SPRIG-UP SHALL NOT EXCEED 24".

UNSUPPORTED LENGTH WITH MAXIMUM PRESSURE EXCEEDING 100 PSI AND A BRANCH LINE ABOVE A CEILING SUPPLYING SPRINKLERS IN A PENDENT POSITION BELOW THE CEILING. WHEN THE MAXIMUM STATIC OR FLOWING PRESSURE, WHICHEVER IS GREATER AT THE SPRINKLER, APPLIED OTHER THAN THROUGH THE FIRE DEPARTMENT CONNECTION, EXCEEDS 100 PSI AND A BRANCH LINE ABOVE A CEILING SUPPLIES SPRINKLERS IN A PENDENT POSITION BELOW THE CEILING, THE HANGER ASSEMBLY SUPPORTING THE PIPE SUPPLYING AN END SPRINKLER IN A PENDENT POSITION SHALL BE OF A TYPE THAT PREVENTS UPWARD MOVEMENT OF THE PIPE, WHERE THE MAXIMUM STATIC OR FLOWING PRESSURE, WHICHEVER IS GREATER AT THE SPRINKLER, APPLIED OTHER THAN THROUGH THE FIRE DEPARTMENT CONNECTION, EXCEEDS 100 PSI AND A BRANCH LINE ABOVE A CEILING SUPPLIES SPRINKLERS IN A PENDENT POSITION BELOW THE CEILING, THE CUMULATIVE HORIZONTAL LENGTH OF AN UNSUPPORTED ARMOVER TO A SPRINKLER OR SPRINKLER DROP SHALL NOT EXCEED 12 IN. FOR STEEL PIPE.

PIPE HANGER SCHEDULE NTS 1

FIRE PROTECTION NOTES

1. FIRE PROTECTION DESIGN IS FOR PUBLIX 0797 "PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER", CRYSTAL RIVER, FL.

2. THE FOLLOWING ARE APPLICABLE STANDARDS:
FLORIDA FIRE PREVENTION CODE SEVENTH EDITION (2020).
NFPA 13, 2016 EDITION, INSTALLATION OF SPRINKLER SYSTEMS.

3. THIS EXISTING SINGLE STORY CONCRETE BLOCK BUILDING, WITH STEEL FRAMING, SUPPORTS GROCERY MERCANTILE OPERATIONS. THE BUILDING IS OPEN CONSTRUCTION AND HAS A LAY-IN ACOUSTICAL TILES AND GYPSUM BOARD CEILINGS. SEE ARCHITECTURAL DRAWINGS FOR SECTIONS, HEIGHTS, ETC. THE BUILDING IS PROTECTED BY A WET-PIPE SPRINKLER SYSTEM WITH DRY PENDENT DROPS TO COLD SECTIONS.

4. OCCUPANCY:
SALES/WORK/CANOPY - ORDINARY HAZARD GROUP 2 AT AN INCREASED DENSITY AS REQUIRED BY PUBLIX.
STORAGE/RECEIVING - ORDINARY HAZARD GROUP 2 AT AN INCREASED DENSITY AS REQUIRED BY PUBLIX.
OFFICE - LIGHT HAZARD.

5. WHERE HYDRAULIC CALCULATIONS ARE REQUIRED, USE THE FOLLOWING PUBLIX DENSITY AND AREA REQUIREMENTS:

SALES/WORK/ CANOPY AREAS:	0.18 gpm/sq.ft. OVER THE MOST REMOTE 2,500sq.ft. MAX 130sq.ft. PER SPRINKLER.
STORAGE/RECEIVING AREAS:	0.25 gpm/sq.ft. OVER THE MOST REMOTE 3,000sq.ft. WITH NO IN-RACK SPRINKLERS AND A MAXIMUM STORAGE HEIGHT OF 12'-0". MAX 100sq.ft. PER SPRINKLER.
FREEZER/COOLER	SAME AS STORAGE/RECEIVING AREAS, EXCEPT DRY TYPE PENDENT SPRINKLER HEADS ARE USED.

6. ALL MATERIALS, FABRICATION AND INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA 13, 2010 EDITION, PUBLIX STANDARDS, AND THE AUTHORITY HAVING JURISDICTION.

7. ALL PIPING 1" THROUGH 2" SHALL BE SCHEDULE 40 STEEL PIPE. ALL PIPING 2½" THROUGH 6" SHALL BE SCHEDULE 10 STEEL PIPE OR HEAVIER. WET PIPING SHALL BE BLACK STEEL. WHERE APPLICABLE.

8. LOCATION OF HORIZONTAL SPRINKLER PIPING RUNS SHALL MATCH EXISTING LOCATIONS.

9. FIRE SPRINKLER CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS BEFORE ANY BIDDING, FABRICATION AND INSTALLATION HAS BEGUN.

10. FIRE SPRINKLER CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES THAT MAY COME INTO CONFLICT BEFORE ANY INSTALLATION.

11. FIRE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY SPRINKLER HEADS AND DROPS AS NECESSARY FOR DEMOLITION OF ANY KIND.

12. FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALL DIMENSIONS.

13. FIRE SPRINKLER CONTRACTOR SHALL VERIFY PLENUM SPACES FOR EXISTING SPRINKLERS. PLENUM SPACES DURING SITE SURVEY WERE INACCESSIBLE.

14. THE FOLLOWING ARE ACCEPTABLE SPRINKLER HEAD MATERIAL MANUFACTURERS:
RELIABLE
TYCO
VICTAULIC
VIKING

15. SPRINKLER SYSTEMS, INCLUDING ALL ASSOCIATED FIRE PROTECTION SIGNALS, SHALL BE SUPERVISED BY AN APPROVED CENTRAL, PROPRIETARY, AUXILIARY, OR REMOTE STATION SYSTEM IN ACCORDANCE WITH NFPA.

16. ALL PENETRATIONS THROUGH RATED WALLS TO BE PATCHED AS NECESSARY.

17. ALL FIRE SPRINKLER COMPONENTS ARE TO BE RATED FOR THE MAXIMUM SYSTEM WORKING PRESSURE TO WHICH THEY ARE EXPOSED IN ACCORDANCE WITH NFPA 13, 2016 EDITION, SECTION 6.1.3.

18. ALL FIRE SPRINKLER COMPONENTS SHALL BE U.L. LISTED AND F.M. APPROVED.

19. FIRE SPRINKLER HEADS AND/OR ESCUTCHEONS THAT HAVE CORRODED SHALL BE REPLACED WITH NEW TO MATCH EXISTING.

20. PROVIDE AND INSTALL NEW SPRINKLERS TO MATCH EXISTING.

21. ALL NEW SPRINKLER PIPING IS TO BE THE SAME SIZE AND TYPE AS EXISTING PIPING.

22. PATCH AND REPAIR ANY EXISTING WALL OR SOFFIT WHERE A SPRINKLER IS EITHER BEING RELOCATED OR REMOVED. THE WALL OR SOFFIT SHALL BE PATCHED AND REPAIRED TO MATCH THE EXISTING CONDITIONS.

23. NFPA 13, 2016 SECTION 22.15.2.4.1 ALL CHUTE-FED COMPACTORS SHALL HAVE AN AUTOMATIC SPRINKLER WITH A MINIMUM 1⁄2 IN. ORIFICE INSTALLED IN THE HOPPER OF THE COMPACTOR. SECTION 22.15.2.4.2 SPRINKLERS SHALL BE ORDINARY TEMPERATURE-RATED SPRINKLERS.

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6760 W. FLORAL ST. & LAKE ALTHAUS
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
FIRE PROTECTION NOTES AND DETAILS

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	DATE	DRAWN	CHECKED
2210784	04/21/2022	MP	PD

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FIRE PROTECTION ENGINEERS

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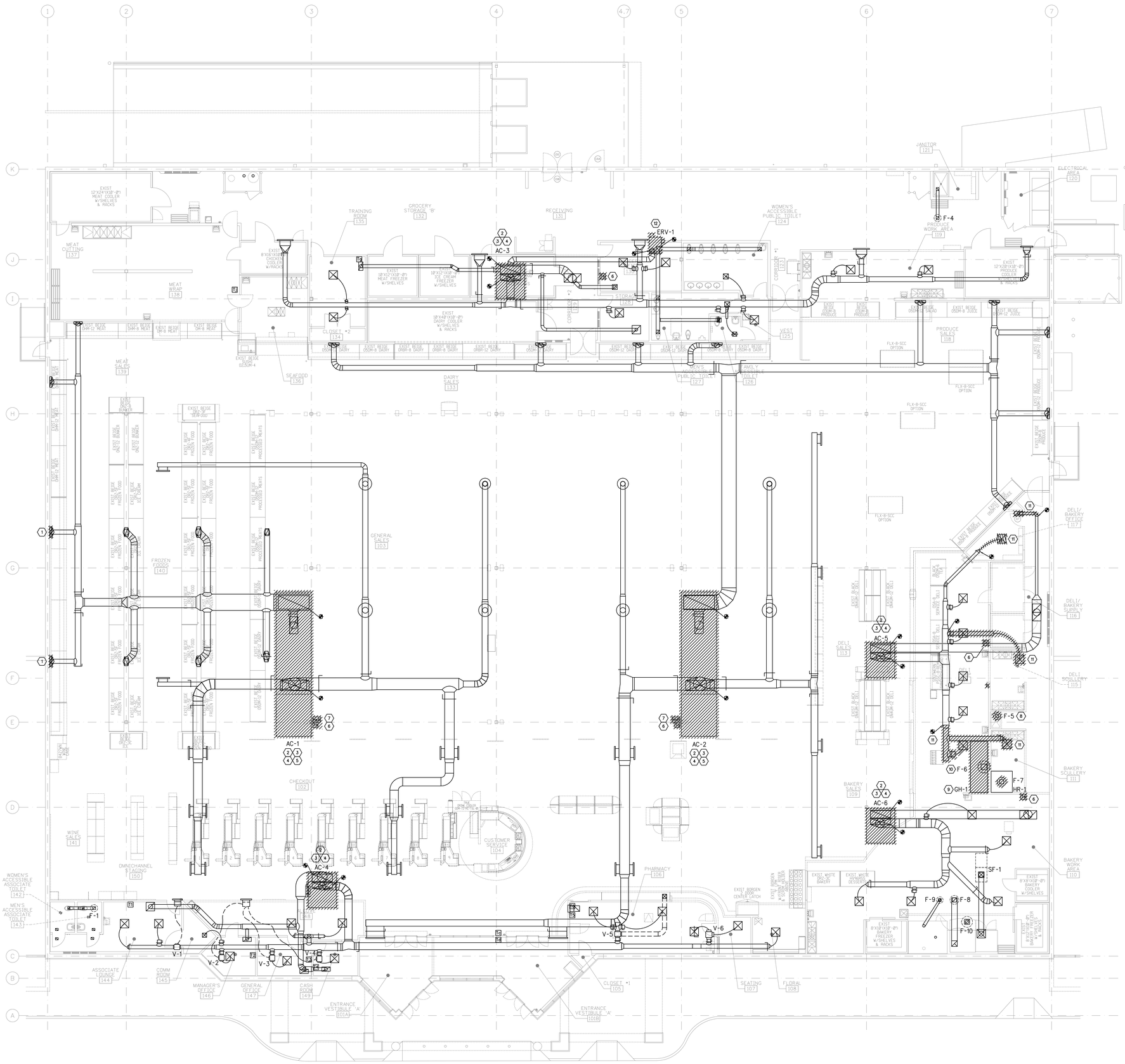

LEGEND

INDICATES EXISTING WORK TO BE REMOVED

INDICATES EXTENT OF DEMOLITION WORK

DEMOLITION NOTES:

1. REFRIGERATED CASE TO BE REMOVED. DISCONNECT RETURN AIR DROP FROM CASE. DUCT SHALL RECONNECT TO NEW CASE. SEE RENOVATION PLAN M1.1.
2. ROOF TOP UNIT TO BE REMOVED. ROOF CURB AND DUCT SYSTEM SHALL REMAIN TO BE REUSED. CONTRACTOR SHALL BE RESPONSIBLE FOR RECLAMATION AND DISPOSAL OF ALL REFRIGERANT PER LOCAL AND NATIONAL LAWS/CODES. SEE RENOVATION PLAN M1.1 FOR NEW WORK.
3. SMOKE DETECTORS TO BE REMOVED AND REPLACED. SEE RENOVATION PLAN M1.1.
4. CONTRACTOR SHALL DISCONNECT EMS FROM ROOF TOP UNIT BEING REMOVED.
5. REFRIGERATION CONTRACTOR SHALL BE RESPONSIBLE FOR DISCONNECTING EXISTING HEAT RECLAIM CIRCUITS.
6. TEMPERATURE SENSOR TO BE REMOVED AND REPLACED. SEE RENOVATION PLAN M1.1.
7. HUMIDITY SENSOR TO BE REMOVED AND REPLACED. SEE RENOVATION PLAN M1.1.
8. ROOF MOUNTED EXHAUST FAN IS TO BE REMOVED FROM ROOF. REMOVE FAN, DUCTWORK, AND ALL ASSOCIATED APPURTENANCES. CURB SHALL REMAIN TO BE CAPPED AND SEALED. SEE RENOVATION PLAN M1.1.
9. GREASE HOOD GH-1 IS TO BE REMOVED. REMOVE HOOD, ANSUL PULL STATION, ALSUL PIPING, AND ALL ASSOCIATED APPURTENANCES. COORDINATE WITH OTHER DISCIPLINES AS REQUIRED FOR REMOVAL.
10. ROOF MOUNTED EXHAUST FAN TO BE REMOVED. CURB, DUCTWORK AND ALL ASSOCIATED APPURTENANCES SHALL BE REMOVED. ROOF PENETRATION SHALL BE MODIFIED AS REQUIRED TO BE REUSED. SEE RENOVATION PLAN M1.1.
11. AIR DEVICE(S) AND CONNECTING DUCTWORK SHOWN HATCHED TO BE REMOVED. SEE RENOVATION PLAN M1.1 FOR NEW WORK.
12. ROOF MOUNTED ERV-1 TO BE REMOVED AND REPLACED. EXISTING CURB SHALL REMAIN TO BE REUSED WITH NEW EQUIPMENT. SEE RENOVATION PLAN M1.1.

1 HVAC DEMOLITION PLAN
MD1.1 SCALE: 1/8"=1'-0" (0, 2', 4', 8', 16')

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JOHN S. PARKER - MECHANICAL
LICENSE #63481,
EXPIRATION DATE: 2/28/2023

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CLIENT NAME
Publix.
SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
8750 W. GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
HVAC DEMOLITION PLAN

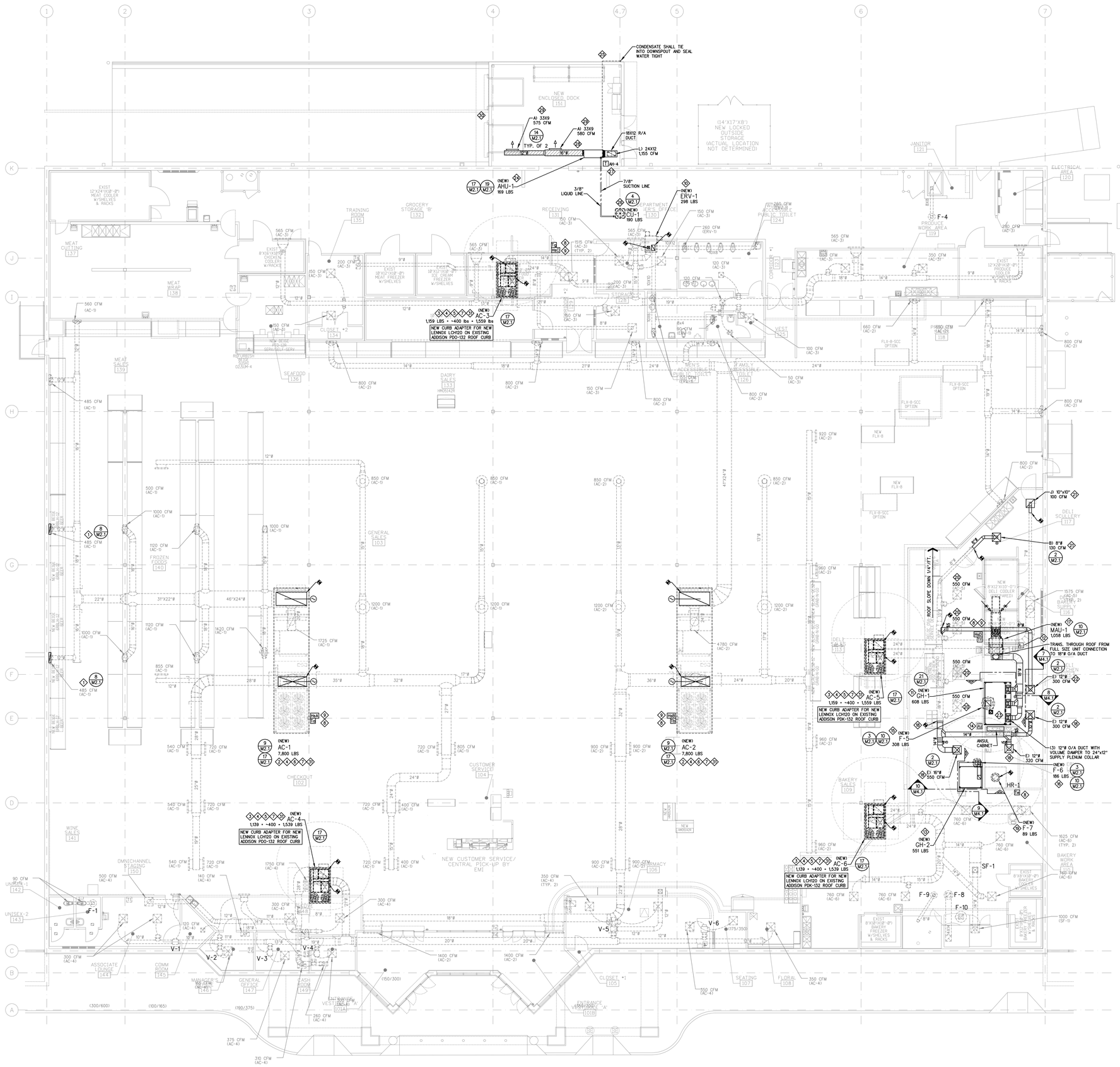
REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 2210764
DATE 04/21/2022
DRAWN Jenna W. Hill
CHECKED John S. Parker

MD1.1

DECOR SCHEME: EVERGREEN

6/16/2022 8:51:14 AM



LEGEND

- 1-WAY DIFFUSER, ARROW INDICATES AIR-FLOW DIRECTION
- 2-WAY DIFFUSER, ARROWS INDICATE AIR FLOW DIRECTION
- 3-WAY DIFFUSER, ARROWS INDICATE AIR FLOW DIRECTION
- 4-WAY DIFFUSER, AIR FLOW IN ALL DIRECTIONS
- INDICATES 12X12 DOOR GRILLE
- INDICATES CONDENSATE DRAIN. REFER TO DETAIL ON M2.1 AND PLUMBING DRAWINGS.
- INDICATES SMOKE DETECTOR
- CONNECT NEW TO EXISTING
- (V.I.F.) VERIFY IN FIELD

RENOVATION NOTES:

1. RECONNECT RETURN AIR DROP TO NEW REFRIGERATED CASES. SEE DETAIL 8, SHEET M2.1 FOR CASE CONNECTION DETAILS.
2. NEW ROOFTOP UNITS AC-1 AND AC-2 TO BE INSTALLED ON EXISTING CURB. UNITS SHALL BE SUPPLIED BY PUBLIX AND RECEIVED, RIGGED, AND INSTALLED BY MECHANICAL CONTRACTOR. PROVIDE AND INSTALL NEW CONDENSATE TRAP AND CONNECT/ROUTE BACK TO EXISTING CONDENSATE DRAIN.
3. NEW ROOF TOP UNITS AC-3, 4, 5 AND 6 SHALL BE INSTALLED ON EXISTING CURB USING CURB ADAPTER. UNITS SHALL BE SUPPLIED BY PUBLIX AND RECEIVED, RIGGED, AND INSTALLED BY MECHANICAL CONTRACTOR. PROVIDE AND INSTALL NEW CONDENSATE TRAP AND CONNECT/ROUTE BACK TO EXISTING CONDENSATE DRAIN.
4. CONTRACTOR SHALL RECONNECT EMS CONDUCTORS TO NEW RTU CONTROL BOARD.
5. REFER TO NEW EMS DRAWINGS FOR NEW PRODIGY CONTROLLER.
6. REFRIGERATION CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING NEW RTU TO EXISTING HEAT RECLAIM CIRCUITS. SEE SCHEDULE ON M3.1 FOR HEAT RECLAIM CAPACITIES.
7. PROVIDE AND INSTALL NEW DUCT MOUNTED SMOKE DETECTOR. COORDINATE EXACT LOCATION AND QUANTITY WITH FIRE ALARM DRAWINGS.
8. NEW TEMPERATURE SENSOR TO BE INSTALLED.
9. NEW HUMIDITY SENSOR TO BE INSTALLED.
10. NEW ERV UNIT TO BE INSTALLED ON EXISTING CURB REUSING EXISTING DUCT SYSTEM. UNIT SHALL BE SUPPLIED BY PUBLIX AND RECEIVED, RIGGED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
11. NEW GREASE HOOD GH-1 WITH WALL MOUNTED ANSUL CABINET TO BE INSTALLED IN DELI KITCHEN. SEE HOOD DETAILS AND SECTIONS ON SHEET M4.1.
12. PROVIDE AND INSTALL NEW ANSUL PULL STATION FOR NEW GREASE HOOD GH-1. PULL STATION SHALL BE LABELED "FIRE EXTINGUISHER - GH-1". LOCATION SHALL BE APPROVED BY FIRE CODE OFFICIAL.
13. NEW GREASE HOOD GH-2 WITH HOOD MOUNTED CONTROL/ANSUL CABINET TO BE INSTALLED IN DELI SEE HOOD DETAILS AND SECTIONS ON SHEET M4.1.
14. PROVIDE AND INSTALL NEW ANSUL PULL STATION FOR NEW GREASE HOOD GH-2. PULL STATION SHALL BE LABELED "FIRE EXTINGUISHER - GH-2". LOCATION SHALL BE APPROVED BY FIRE CODE OFFICIAL.
15. NEW ROOF MOUNTED EXHAUST FAN F-5 TO BE INSTALLED WITH NEW ROOF CURB AND DUCTWORK DOWN TO GH-1. SEE SECTIONS ON SHEET M4.1 FOR DUCT ROUTING AND SIZE.
16. NEW ROOF MOUNTED EXHAUST FAN F-6 TO BE INSTALLED WITH NEW ROOF CURB AND DUCTWORK DOWN TO GH-2. EXISTING ROOF PENETRATION SHALL BE REUSED AND MODIFIED AS REQUIRED. SEE SECTIONS ON SHEET M4.1 FOR DUCT ROUTING AND SIZE.
17. NEW MAKE-UP AIR FAN, MAU-1 TO BE INSTALLED ON ROOF WITH NEW ROOF CURB. VERIFY OUTSIDE AIR INTAKE MAINTAINS AT MINIMUM 10'-0" CLEARANCE BETWEEN ALL SOURCES OF EXHAUST. SEE PLAN FOR DUCT ROUTING.
18. PROVIDE AND INSTALL NEW SUPPLY AIR DUCT AND ROUTE AS SHOWN. NEW DUCTWORK SHALL CONNECT TO EXISTING AIR DEVICE PRIOR TO NEW AIR DEVICES.
19. PROVIDE AND INSTALL NEW ROOF MOUNTED EXHAUST FAN UTILIZING EXISTING CURB WITH NEW CURB ADAPTER. VERIFY EXISTING DUCT SYSTEM IS RECONNECTED.
20. RE-BALANCE TO NEW AIRFLOW LISTED.
21. INSTALL NEW CEILING MOUNTED AIR DEVICE AS SHOWN. PROVIDE NEW DUCTWORK AS INDICATED AND CONNECT TO EXISTING DUCT. BALANCE AS INDICATED.
22. INSTALL NEW AIR DEVICE IN LOCATION SHOWN ON PLAN. PROVIDE NEW DUCTWORK CONNECTING BETWEEN NEW AIR DEVICE AND EXISTING DUCT. SEE PLAN FOR DUCT SIZE.
23. CAP AND SEAL EXISTING ROOF PENETRATION WITH CURB CAP. SEE DETAIL 1, SHEET M3.1 FOR CURB CAP DETAIL.
24. NEW SPLIT SYSTEM AIR HANDLER AHU-1 TO BE INSTALLED TO SERVE NEW ENCLOSED DOCK. AIR HANDLER SHALL BE MOUNTED USING SPRING ISOLATORS SUSPENDED TIGHT TO THE UNDERSIDE OF JOISTS.
25. ROUTE CONDENSATE AS INDICATED SLOPING 1/8" PER FOOT AND PIPE TO EXISTING DOWNSPOUT. INSULATE CONDENSATE PIPING WITH 1" THICK UNICELLULAR POLYETHYLENE THERMAL PLASTIC, PREFORMED PIPE INSULATION MANUFACTURED BY ARMACELL OR NOMACO.
26. CONDENSING UNIT CU-1 SHALL MOUNT ON MAIN ROOF WITH NEW AES CAPPED CURB. ROUTE REFRIGERANT PIPING FROM AIR HANDLER AHU-1 TO CONDENSING UNIT CU-1 PER MANUFACTURERS RECOMMENDATIONS AND INSULATE WITH ARMATOUGH VINYL WRAP. SEE REFRIGERATION SPECIFICATIONS FOR FURTHER INFORMATION.
27. PROVIDE AND INSTALL NEW THERMOSTAT FOR NEW AIR HANDLER SERVING ENCLOSED DOCK.
28. DUAL WALL DUCT. (SHOWN HATCHED) DUCT SHALL ROUTE TIGHT TO BOTTOM OF STRUCTURE.
29. SIDEWALL REGISTER SHALL BE SET TO THROW AIR PARALLEL WITH THE FLOOR.
30. LOADING DOCK IS NATURALLY VENTILATED THROUGH SHIPPING AND RECEIVING BAY DOORS.
31. DUCT CLEANING SHALL BE COMPLETED BY PUBLIX HVAC MAINTENANCE CONTRACTOR. GENERAL CONTRACTOR SHALL COORDINATE DUCT CLEANING PROCESS DURING REMODEL PROJECT. CONTACT PUBLIX FACILITY SERVICE MANAGER WITHIN THE DIVISION FOR SCHEDULING.

1 M1.1 HVAC RENOVATION PLAN

SCALE: 0 2' 4' 8' 16' — 1/8"=1'-0"

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JOHN S. PARKER - MECHANICAL
LICENSE #63481.
EXPIRATION DATE: 2/28/2023

CLIENT NAME: Publix. SUPER MARKETS 3300 PUBLIX CORPORATE PARKWAY LAKELAND, FL 33811-3311

PROJECT NAME: PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
6790 W GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-5348

SHEET TITLE: HVAC RENOVATION PLAN

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO: 2210764
DATE: 04/21/2022
DRAWN: Jenna W. Hall
CHECKED: Jack S. Parker

M1.1

DECOR SCHEME: EVERGREEN

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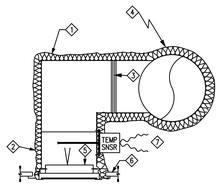
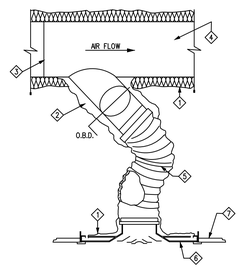


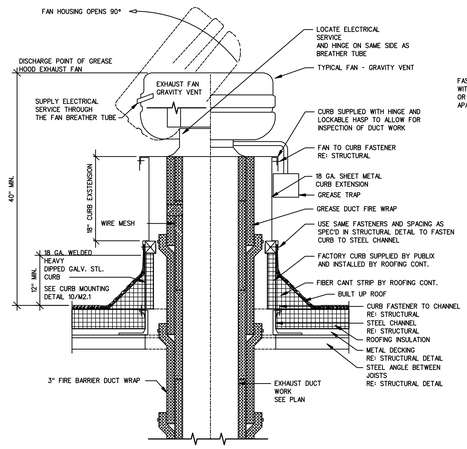
1 M2.1 RETURN AIR REGISTER DETAIL
N.T.S.

1. FOIL BACK FIBERGLAS INSULATION... WRAP COMPLETELY AROUND TRUNK DUCT DROP AND GRILLE AS SHOWN... TAPE AND STAPLE PER SPECS AND DUCT WRAPPING DETAIL
2. SEAL ALL SEAMS AROUND CONNECTION WITH GLASS-FAB AND MASTIC
3. SEAL ALL DUCT JOINTS AND SEAMS AS PER WRAPPING DETAIL... PAINT SMOOTH AND FILL ALL PIN HOLES ON ALL CONNECTIONS
4. ALL DUCTS SHALL BE SUPPORTED IN AN APPROVED MANNER... REFER TO TABLE AND DETAIL
5. FOUR (4) #8X1/2" SHEET METAL DRILL SCREWS AS MANUFACTURED BY DURO-DYNE 8M CODE NUMBER 1400-4 OR APPROVED EQUAL... TYPICAL EACH POINT OF CONNECTION
6. LAY-IN CEILING AND GRID
7. 4" CPC TEMP SENSOR, FURNISHED BY PUBLIX, INSTALLED BY MECHANICAL CONTRACTOR



2 M2.1 LAY-IN DIFFUSER DETAIL
N.T.S.

1. FOIL BACK FIBERGLAS INSULATION... WRAP COMPLETELY AROUND TRUNK DUCT DROP AND GRILLE AS SHOWN... TAPE AND STAPLE PER SPECS AND DUCT WRAPPING DETAIL
2. SEAL ALL SEAMS AROUND CONNECTION WITH GLASS-FAB AND MASTIC
3. SEAL ALL DUCT JOINTS AND SEAMS AS PER WRAPPING DETAIL... PAINT SMOOTH AND FILL ALL PIN HOLES ON ALL CONNECTIONS
4. ALL DUCTS SHALL BE SUPPORTED IN AN APPROVED MANNER... REFER TO TABLE AND DETAIL
5. FLEXIBLE DUCT, THERMOFIN A-300, ALUMINUM LINER WITH VAPOR BARRIER OVER FACTORYINSULATION
6. LAY-IN TYPE CEILING DIFFUSER
7. LAY-IN CEILING AND GRID



3 M2.1 TYPICAL GREASE FAN MOUNTING DETAIL
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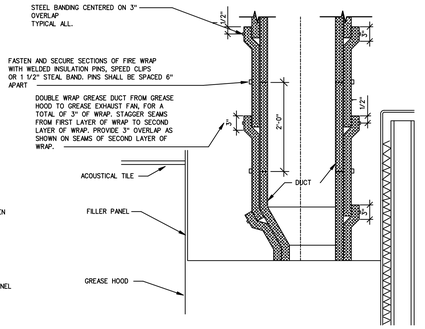

GREASE DUCT FIRE PROOFING
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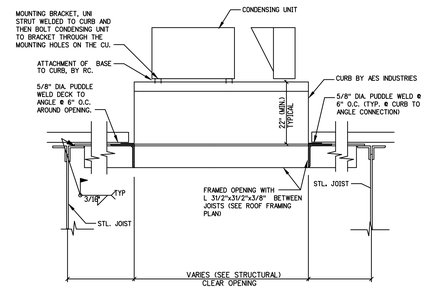

4 M2.1 REMOTE CONDENSING UNIT CURB
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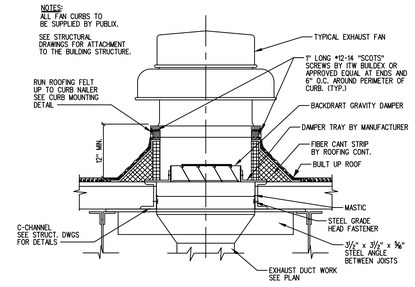

5 M2.1 TYPICAL FAN MOUNTING DETAIL
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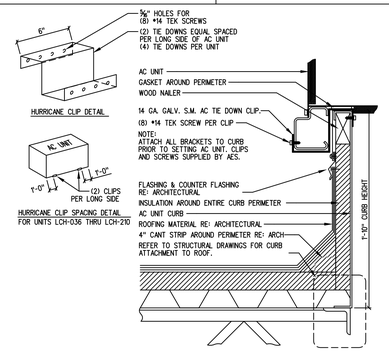

6 M2.1 AC UNIT & CURB INSTALLATION DETAIL
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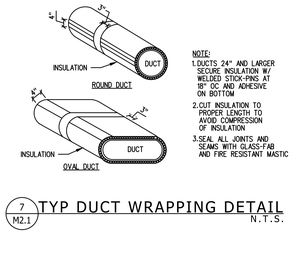

7 M2.1 TYP DUCT WRAPPING DETAIL
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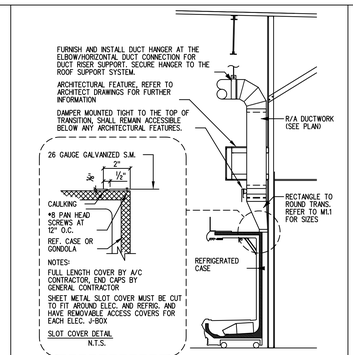

8 M2.1 SECTION AT REF'G. CASES
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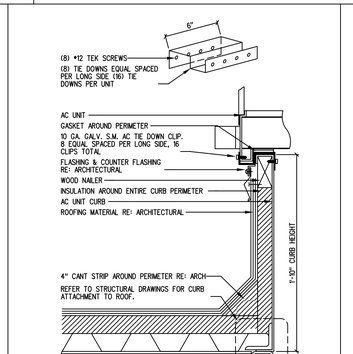

9 M2.1 AC-1 AC UNIT & CURB INSTALL DETAIL
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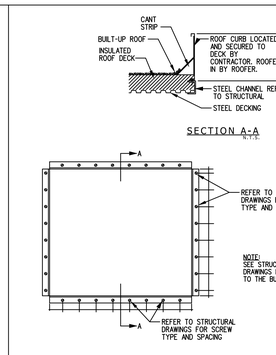

10 M2.1 FAN CURB MOUNTING DETAIL
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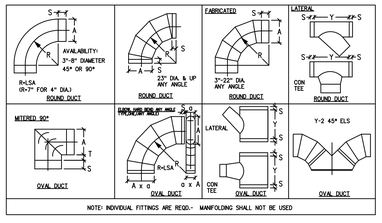

11 M2.1 TYPICAL DUCT FITTING
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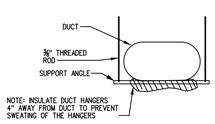
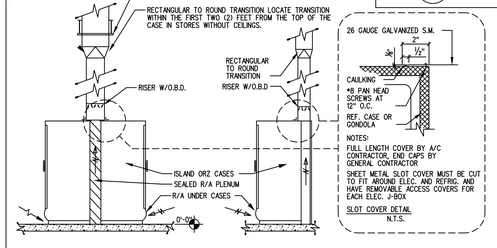


12 M2.1 HANGERS FOR OVAL DUCT
N.T.S.

DUCT WIDTH	SUPPORTS
TO 23"	10' CENTERS (1 X 1 X 1/8 L)
23 1/2" TO 28 1/2"	10' CENTERS (1 X 1 X 1/8 L)
27" TO 34 1/2"	10' CENTERS (1 X 1 X 1/8 L)
35" TO 40"	6' CENTERS (1 X 1 X 1/8 L)
40 1/2" TO 45"	5' CENTERS (1 1/4 X 1 1/4 X 1/8 L)
45 1/2" TO 52"	4 1/2' CENTERS (1 1/2 X 1 1/2 X 1/8 L)
52 1/2" TO 60"	4' CENTERS (1 1/2 X 1 1/2 X 1/8 L)
61" AND UP	4'2" CENTERS (2 X 2 X 1/8 L)



13 M2.1 SECTION AT ISLAND CASES
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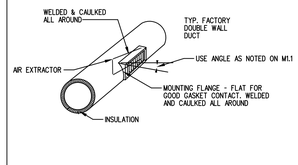
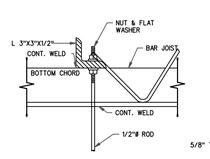
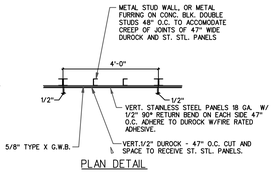


14 M2.1 DRUM / REGISTER DETAIL
N.T.S.



HOOD HANGERS



PLAN DETAIL

DUCT DIAMETER	ROUND HANGERS	STRAP HANGERS	MAXIMUM SPACING	No. OF HANGER
UP THRU 18"	8 GAUGE WIRE	1" x 22 GAUGE	12'-0"	1
19" THRU 24"	1/4" ALL TREAD ROD	1" x 22 GAUGE	12'-0"	1
25" THRU 36"	3/8" ALL TREAD ROD	1" x 20 GAUGE	12'-0"	1
37" THRU 50"	(2) 3/8" ALL TREAD ROD	(2) 1" x 20 GAUGE	12'-0"	2
51" THRU 60"	(2) 3/8" ALL TREAD ROD	(2) 1" x 18 GAUGE	12'-0"	2
61" THRU 84"	(2) 3/8" ALL TREAD ROD	(2) 1" x 16 GAUGE	12'-0"	2

(1) ALL HANGERS MUST BE SECURELY ATTACHED TO A STRUCTURAL MEMBER AND NOT TO THE ROOF DECK.

(2) WIRE, RODS, AND STRAPS SHOULD BE MADE FROM GALVANIZED STEEL.

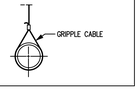
(3) THIS TABLE ASSUMES CONVENTIONAL WALL THICKNESS AND JOINTS PLUS ONE LB/SQ FT INSULATION. SEE SMACNA'S DUCT CONSTRUCTION STANDARDS IF HEAVIER DUCTS ARE TO BE INSTALLED.

DUCT DIAMETER	GRIPPLE HANGER SIZE	WIRE DIAMETER (IN.)	MAXIMUM SPACING
UP THRU 12"	#2	5/64"	10'-0"
14" THRU 24"	#3	1/8"	10'-0"
26" THRU 48"	#4	3/16"	10'-0"

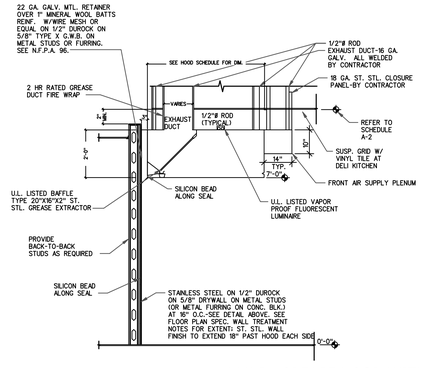
(1) ALL HANGERS MUST BE SECURELY ATTACHED TO A STRUCTURAL MEMBER AND NOT TO THE ROOF DECK.

(2) CABLE SHALL BE MADE FROM AISI 316 ZINC GALVANIZED STEEL.

(3) THIS TABLE ASSUMES CONVENTIONAL WALL THICKNESS AND JOINTS PLUS ONE LB/SQ FT INSULATION. SEE SMACNA'S DUCT CONSTRUCTION STANDARDS IF HEAVIER DUCTS ARE TO BE INSTALLED.



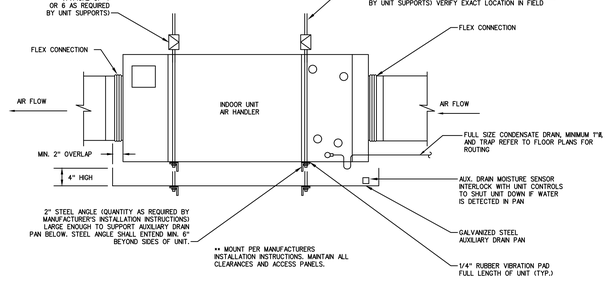
15 M2.1 HANGERS FOR ROUND DUCT
N.T.S.



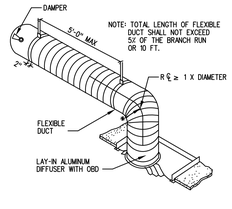
21 M2.1 HVAC - GREASE HOOD WITH FRONT SUPPLY PLENUM
SCALE: 1/2" = 1'-0"

SPECIAL GREASE HOOD NOTES

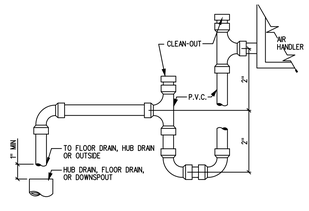
1. HOOD FURNISHED BY PUBLIX, INSTALLED BY CONTRACTOR.
2. ENTIRE HOOD TO BE 18 GA. STAINLESS STEEL, 430, KOOL LINE FINISH.
3. HOOD TO HAVE FIRE EXTINGUISHER SYSTEM AS SPECIFIED WITH DEEP FRYER PROTECTION. HOOD AND EXTINGUISHER SYSTEM SHALL BE IN COMPLIANCE WITH N.F.P.A. BULLETINS NO. 17A & NO. 96 AND U.L.-300.
4. HOOD MUST BE HUNG LEVEL FOR PROPER GREASE DRAINAGE.
5. HOOD AND DUCT SHALL BE WELDED CONSTRUCTION WITH LIQUID TIGHT CONTINUOUS EXTERNAL WELD.
6. DUCT TO BE 1'-6" CLEAR OF ANY COMBUSTIBLE MATERIALS.
7. ALL SHEET METAL EDGES AND WELDS TO BE GROUND SMOOTH SO HOOD CAN BE CLEANED THOROUGHLY AND SAFELY.
8. PROVIDE S.S. NO. 430, 18 GA. SKIRT AROUND DUCT FROM HOOD TO FINISH CEILING FOR BAKERY
9. STAINLESS STEEL WALL FINISH TO BE 48" SHEET W/EDGES TURNED 1/2" TO WRAP 1/2" DUROCK BOARD CUT TO 46 1/2" WIDE. EXTEND PANELS FROM TOP OF BASE TO HOOD AND TO CEILING AT SIDES OF HOOD.



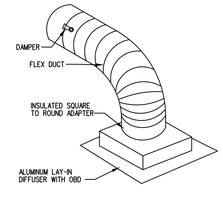
19 M2.1 AIR HANDLER MOUNTING DETAIL
N.T.S.



16 M2.1 LAY-IN DIFFUSER FLEXIBLE DUCT DETAIL
N.T.S.



17 M2.1 TYPICAL CONDENSATE DRAIN
N.T.S.



18 M2.1 LAY-IN DIFFUSER
N.T.S.

* NOTE: NOT ALL DETAILS MAY BE APPLICABLE TO THIS REMODEL *

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JOHN S. PARKER - MECHANICAL
LICENSE #63481,
EXPIRATION DATE: 2/28/2023

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CLIENT NAME
Publix.
SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
FM#0797 CLIFF HOUSE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
HVAC DETAILS

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 2210764
DATE 04/21/2022
DRAWN Jenna W. Hall
CHECKED John S. Parker

M2.1

DECOR SCHEME: EVERGREEN

4/18/2022 11:44:29 AM

AC-1 SCHEDULE (REF.# P11659-01)

ITEM	UNITS	NUMBER
UNIT DESIGNATION	-	AC-1
LOCATION	-	SALES FLOOR
MANUFACTURER	-	SEASONS 4
MODEL NUMBER	*	LAD40-4HLK34-0404-ES050-13RG
WEIGHT	POUNDS	9,200
UNIT EER	-	11.0
DESIGN DATA	-	-
SUMMER OA DB / WB / Ws	F / F	93.7 / 77.3
SUPPLY AIR VOLUME	CFM	13,000
OUTSIDE AIR VOLUME (MIN / MAX)	CFM	2,600
RETURN AIR VOLUME	CFM	10,400
SUPPLY AIR FAN	-	-
FAN SPEED	RPM	1,170
EXT. STATIC PRESSURE	IN. W.C.	1.20
TOTAL STATIC PRESSURE	IN. W.C.	2.96
POWER	HP	10
BRAKE HORSE POWER	BHP	8.5
NUMBER / SIZE	* / DIA	1 / 30"
FAN TYPE	-	AF SWSI PLENUM
MOTOR DRIVE	-	DIRECT DRIVE W/VFD
CONDENSER FAN	-	-
NUMBER OF FANS	*	6
FAN SPEED	RPM	1,140
POWER	HP	1.0
FAN SIZE	DIA	30"
FAN TYPE / CLASS	-	PROPELLER
COOLING SYSTEM 1 - OUTDOOR AIR	-	-
TOTAL CAPACITY	BTUH	254,975
SENSIBLE CAPACITY	BTUH	131,812
CONDITION AIR	CFM	2,600
COIL CIRCUITS	*	1
FACE AREA	SQ. FT	7.9
ROWS / FPI	*/ */IN.	8 / 10
EAT DB / WB	F / F	93.7 / 77.3
LAT DB / WB	F / F	47.7 / 47.2
AIR PRESSURE DROP	IN. WC.	0.41
COOLING SYSTEM 2 - RETURN AR	-	-
TOTAL CAPACITY	BTUH	230,661
SENSIBLE CAPACITY	BTUH	179,333
CONDITION AIR VOLUME	CFM	8,000
BYPASS AIR VOLUME	CFM	2,400
COIL CIRCUITS	*	1
FACE AREA	SQ. FT.	17.5
ROWS / FPI	* / */IN.	8 / 10
EAT DB / WB	F / F	68.7 / 58.7
LAT DB / WB	F / F	48.2 / 47.7
AIR PRESSURE DROP	IN. WC.	0.61
H.G.R. - STAGE 1 O/A & STAGE 2 R/A	-	-
REHEAT CAPACITY	BTUH	296,137
CONDITIONED AIR VOLUME	CFM	8,700
COIL BYPASS AIR	CFM	4,300
COIL CIRCUITS	*	2
FACE AREA	SQ. FT.	16.5
ROWS / FPI	* / */IN	2 / 10
EAT DB / WB	F / F	53.5 / 50.6
LAT DB / WB	F / F	84.7 / 62.7
AIR PRESSURE DROP	IN. WC.	0.14

ITEM - CONT'D.	UNITS - CONT'D.	NUMBER - CONT'D.
CONDENSER	-	-
COIL CIRCUITS	*	2
FACE AREA	SQ. FT.	75.2
ROWS / FPI	* / */IN	4 / 12
DESIGN AMBIENT TEMPERATURE	F	95.0
SYSTEM 1 COMPRESSOR - OUTSIDE AIR	-	-
QUANTITY	*	2
POWER	HP	10.0
MFGR / TYPE	-	COPELAND / SCROLL
MODEL	*	ZPD120KCE / ZP120KCE
SYSTEM 2 COMPRESSORS - RETURN AIR	-	-
QUANTITY	*	2
POWER	HP	8.5
MFGR / TYPE	-	COPELAND / SCROLL
MODEL	*	ZP104KCE
O/A FILTERS	-	-
MODEL	*	-
TYPE	-	2" PLEATED - MERV-8
NUMBER / SIZE	* / INxIN	5 / 16X20
FACE VELOCITY	FPM	234
HEAT	-	-
TYPE	-	ELECTRIC
INPUT CAPACITY	kW	50.0
CONDITIONED AIR	CFM	13,000
DELTA T	°F	12.2
STAGING	-	4
HEAT RECLAIM COIL	-	-
HEAT RECLAIM AVAILABLE	MBH	SEE AC HEATING SCHED.
TOTAL COIL CAPACITY	MBH	175,200
CONDITION AIR VOLUME	CFM	2,400
BYPASS AIR VOLUME	CFM	10,600
COIL CIRCUITS	*	1
FACE AREA	SQ. FT.	8.2
ROWS / FPI	* / */IN.	4 / 10
AIR PRESSURE DROP	IN. WC.	0.14
PIPING CONNECTION	IN / IN	1 5/8" / 1 5/8"
ELECTRICAL REQUIREMENTS	-	-
UNIT POWER	VOLTS / PH / HZ	208 / 3 / 60
CONTROL CIRCUIT POWER	VOLTS / PH / HZ	120 / 1 / 60
FULL LOAD AMPS	-	-
SUPPLY FAN	AMPS	28.3
CONDENSER FAN	AMPS	4.2 EA x 6 = 25.2
SYSTEM 1 DEHUMIDIFICATION	AMPS	33.3
SYSTEM 1 DEHUMIDIFICATION (TDM)	AMPS	33.3
SYSTEM 2 RETURN AIR	AMPS	28.2 EA x 2 = 56.4
CONTROL TRANSFORMER AMPS	AMPS	7.2
ELECTRIC HEATER	AMPS	138.8
UNIT FLA	AMPS	183.7
UNIT MCA	AMPS	192
UNIT MOCP	AMPS	225

NOTES:

1. CONTROL WIRING IS FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL DRAWINGS FOR DETAIL.
2. THERMOSTATS, HUMIDISTATS AND OTHER EXTERNAL CONTROLS ARE PROVIDED BY PUBLIX AND INSTALLED BY ELECTRICAL CONTRACTOR.
3. AC-1 TO BE PROVIDED WITH AN EMERSON BX CONTROLLER AND SHOULD BE INSTALLED FIRST. AC-2 AND 3 SHALL BE NETWORKED FROM AC-1 VIA 2C23SHLD BELDEN CABLE. SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION.

AC-2 SCHEDULE (REF.# P11659-02)

ITEM	UNITS	NUMBER
UNIT DESIGNATION	-	AC-2
LOCATION	-	SALES FLOOR
MANUFACTURER	-	SEASONS 4
MODEL NUMBER	*	LAD40-4HLK34-0434-ES055-14RG
WEIGHT	POUNDS	9,500
UNIT EER	-	11.2
DESIGN DATA	-	-
SUMMER OA DB / WB / Ws	F / F	93.7 / 77.3
SUPPLY AIR VOLUME	CFM	14,300
OUTSIDE AIR VOLUME (MIN / MAX)	CFM	2,600
RETURN AIR VOLUME	CFM	11,700
SUPPLY AIR FAN	-	-
FAN SPEED	RPM	1,131
EXT. STATIC PRESSURE	IN. W.C.	1.20
TOTAL STATIC PRESSURE	IN. W.C.	2.96
POWER	HP	15
BRAKE HORSE POWER	BHP	9.53
NUMBER / SIZE	* / DIA	1 / 33"
FAN TYPE	-	AF SWSI PLENUM
MOTOR DRIVE	-	DIRECT DRIVE W/VFD
CONDENSER FAN	-	-
NUMBER OF FANS	*	6
FAN SPEED	RPM	1,140
POWER	HP	1.0
FAN SIZE	DIA	30"
FAN TYPE / CLASS	-	PROPELLER
COOLING SYSTEM 1 - OUTDOOR AIR	-	-
TOTAL CAPACITY	BTUH	254,692
SENSIBLE CAPACITY	BTUH	131,682
CONDITIONED AIR	CFM	2,600
COIL CIRCUITS	*	1
FACE AREA	SQ. FT	7.9
ROWS / FPI	*/ */IN.	8 / 10
EAT DB / WB	F / F	93.7 / 77.3
LAT DB / WB	F / F	47.8 / 47.3
AIR PRESSURE DROP	IN. WC.	0.41
COOLING SYSTEM 2 - RETURN AR	-	-
TOTAL CAPACITY	BTUH	268,387
SENSIBLE CAPACITY	BTUH	210,466
CONDITION AIR VOLUME	CFM	9,500
COIL BYPASS AIR	CFM	2,200
COIL CIRCUITS	*	1
FACE AREA	SQ. FT.	20.8
ROWS / FPI	* / */IN.	8 / 10
EAT DB / WB	F / F	68.7 / 58.7
LAT DB / WB	F / F	48.5 / 48.0
AIR PRESSURE DROP	IN. WC.	0.60
H.G.R. - STAGE 1 O/A & STAGE 2 R/A	-	-
REHEAT CAPACITY	BTUH	322,382
CONDITIONED AIR VOLUME	CFM	9,050
COIL BYPASS AIR	CFM	5,250
COIL CIRCUITS	*	2
FACE AREA	SQ. FT.	17.7
ROWS / FPI	* / */IN	2 / 10
EAT DB / WB	F / F	53.1 / 50.4
LAT DB / WB	F / F	85.8 / 63.1
AIR PRESSURE DROP	IN. WC.	0.13

ITEM - CONT'D.	UNITS - CONT'D.	NUMBER - CONT'D.
CONDENSER	-	-
COIL CIRCUITS	*	2
FACE AREA	SQ. FT.	79.2
ROWS / FPI	* / */IN	4 / 12
DESIGN AMBIENT TEMPERATURE	F	95.0
SYSTEM 1 COMPRESSOR - OUTSIDE AIR	-	-
QUANTITY	*	2
POWER	HP	10.0
MFGR / TYPE	-	COPELAND / SCROLL
MODEL	*	ZPD120KCE / ZP120KCE
SYSTEM 2 COMPRESSORS - RETURN AIR	-	-
QUANTITY	*	2
POWER	HP	10.0
MFGR / TYPE	-	COPELAND / SCROLL
MODEL	*	ZP123CE
O/A FILTERS	-	-
MODEL	*	-
TYPE	-	2" PLEATED - MERV-8
NUMBER / SIZE	* / INxIN	5 / 16X20
FACE VELOCITY	FPM	234
R/A FILTERS	-	-
TYPE	-	2" PLEATED - MERV-8
NUMBER / SIZE	* / INxIN	3/16x20, 9/16x25
FACE VELOCITY	FPM	369
HEAT	-	-
TYPE	-	ELECTRIC
INPUT CAPACITY	kW	55.0
CONDITIONED AIR	CFM	14,300
DELTA T	°F	12.2
STAGING	-	4
HEAT RECLAIM COIL	-	-
HEAT RECLAIM AVAILABLE	MBH	SEE AC HEATING SCHED.
TOTAL COIL CAPACITY	MBH	257,000
CONDITION AIR VOLUME	CFM	3,350
BYPASS AIR VOLUME	CFM	10,950
COIL CIRCUITS	*	2
FACE AREA	SQ. FT.	12.0
ROWS / FPI	* / */IN.	4 / 10
AIR PRESSURE DROP	IN. WC.	0.13
PIPING CONNECTION	IN / IN	1 5/8" / 1 5/8"
ELECTRICAL REQUIREMENTS	-	-
UNIT POWER	VOLTS / PH / HZ	208 / 3 / 60
CONTROL CIRCUIT POWER	VOLTS / PH / HZ	120 / 1 / 60
FULL LOAD AMPS	-	-
SUPPLY FAN	AMPS	42.0
CONDENSER FAN	AMPS	4.2 EA x 6 = 25.2
SYSTEM 1 DEHUMIDIFICATION	AMPS	33.3
SYSTEM 1 DEHUMIDIFICATION (TDM)	AMPS	33.3
SYSTEM 2 RETURN AIR	AMPS	34.0 EA x 2 = 68.0
CONTROL TRANSFORMER AMPS	AMPS	7.2
ELECTRIC HEATER	AMPS	152.7
UNIT FLA	AMPS	209.0
UNIT MCA	AMPS	220
UNIT MOCP	AMPS	250

EXISTING FAN SCHEDULE

UNIT	MANUF.	MODEL	HP	RPM	CFM	EXT. STA.	WHEEL DIAM.	VOLTAGE	COMMENTS	LOCATION
F-1	GREENHECK	G-70-D	1/30	1319	180	.25	7	120/60/1	EXISTING	EMPLOYEE RESTROOM
F-4	GREENHECK	G-70-D	1/30	1319	180	.25	7	120/60/1	EXISTING	JANITOR
F-5	FAN TO BE REMOVED FROM ROOF									
F-6	FAN TO BE REMOVED FROM ROOF									
F-7	FAN TO BE REMOVED AND REPLACED. SEE NEW FAN SCHEDULE, SHEET M4.1									
F-8	GREENHECK	G-100-B	1/6	919	500	.25	10	120/60/1	EXISTING	OVEN SOFFIT
F-9	GREENHECK	-	-	-	750	-	-	120/60/1	EXISTING	BAKERY OVEN-1B
F-10	GREENHECK	CUE-121-VG	1/2	1,266	1,000	0.7	-	120/60/1	EXISTING	BAKERY OVEN
SF-1	GREENHECK	KSFB-109-H15	1/2	1,725	1,000	0.25	-	120/60/1	EXISTING	BAKERY OVEN
ERV-1	ERV TO BE REMOVED AND REPLACED. CURB TO BE REUSED. SEE SCHEDULE, THIS SHEET									

SUPPLIED BY PUBLIX AND INSTALLED BY HVAC CONTRACTOR.
(1) UP BLAST (2) BIRD SCREEN (3) BELT DRIVE (4) DIRECT DRIVE (5) FACTORY WIRED DISC. S.W. (6) CURB (7) GRAVITY DPR (8) ROOF MTD.
(9) SPECIAL ASSEMBLY CURB (10) GREASE BOX (11) SAFETY GUARD (12) UL 762 LISTED (13) HIGH EFFICIENCY MOTOR (14) PERMANENT I.D. TAG W/ COMPLETE SPECS.
(15) WALL CAP (16) SPEED CONTROL-MTD & WIRED AT FACTORY (17) PROVIDE CURB WITH HINGE AND LOCKING HASP (18) DUCTED HEAT RECOVERY VENTILATOR.
(19) 2" PLEATED FILTERS (20) 18.0 MCA

EXISTING FAN CURB SCHEDULE

MARK	DESCRIPTION	CURB OUTSIDE DIMENSION	FRAME OPENING
F-1	EMPLOYEE REST ROOM	1'-3½"X1'-3½"	1'-2½"X1'-2½"
F-4	JANITOR	1'-3½" X 1'-3½"	1'-2½" X 1'-2½"
F-5	CURB TO BE CAPPED AND SEALED. SEE DETAIL 1, THIS SHEET.		1'-2½" X 1'-2½"
F-6	CURB TO BE REMOVED AND ROOF OPENING REUSED SEE NEW FAN CURB SCHEDULE, SHEET M4.1		2'-3½" X 2'-3½"
F-7	SCULLERY - CURB REUSED WITH CURB ADAPTER	1'-5½" X 1'-5½"	1'-4½" X 1'-4½"
F-8	BAKERY OVEN SOFFIT	1'-5½" X 1'-5½"	1'-4½" X 1'-4½"
F-9	BAKERY OVEN-1B	-	-
F-10	BAKERY OVEN	1'-5½" X 1'-5½"	1'-4½" X 1'-4½"
SF-1	BAKERY OVEN SOFFIT	2'-2" X 2'-1"	2'-1" X 2'-10"
ERV-1	PUBLIC RESTROOMS	3'-8" X 2'-8"	3'-7" X 2'-7"

PRE-FAB ROOF CURBS SUPPLIED BY PUBLIX & INSTALLED BY ROOFING CONTRACTOR

EXISTING HOOD SCHEDULE - 18 GAGE STAINLESS STEEL

MARK	GREENHECK MODEL	SIZE L X W X H	EXHAUST CFM	EXHAUST S.P.	EXHAUST DUCT	MAKE UP AIR CFM	MAKE UP AIR S.P.	MAKE UP AIR DUCT	UL CLASS F.	NO. FLAME/GARD FILTERS	LIGHTS	HOOD TYPE	MOUNT	FURNISHED BY	INSTALLED BY	LOCATION	REMARKS
GH-1	HOOD TO BE REMOVED																
HR-1	GC-5.00-S	5'-0" X 5'-0" X 3'-0"	750	.5	12X12	---	---	---	NO		NO	HEAT	WALL	PUBLIX	A/C CONT'R.	SCULLERY	F-7

• U.L. 1046 LISTED

EXISTING VARIABLE VOLUME BOX SCHEDULE

MARK	METAL-AIRE 400BP / 500 BP	CFM	MINIMUM CFM.	NOM. ST. PRESS.IN.
V-1	408	500	200	0.008
V-2	406	200	100	0.03
V-3	406	350	150	0.105
V-4	406	300	150	0.08
V-5	408	500	200	0.03
V-6	512	350	175	0.1

• SUPPLY ALL UNITS WITH 24VAC ACTUATORS POWER IS FROM EMS.
• BOXES SUPPLIED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
• BOXES SHALL BE MOUNTED WITHIN 2 FEET OF CEILING.
• ALL VAV MOTORS SHALL BE EQUIPPED WITH KMC MODEL MEP-5001 18 DEGREE/MINUTE ACTUATOR

ASHRAE 62-1989 COMPLIANCE

MARK/ UNIT	NET OCCUPIABLE AREA SQ. FT.	PEOPLE/ 1000 SQ. FT	CFM/ PERSON	REQUIRED O/A CFM	ACTUAL O/A CFM
AC-1	16,981	8	15	2,038	2,600
AC-2	12,191	8	15	1,463	2,600
AC-3	6,110	8	15	733	800
AC-4	2,363	8	15	284	500
AC-6	1,844	8	15	222	250
AC-6	1,844	8	15	222	250
TOTAL O/A PROVIDED					7,000 CFM

EXISTING UNIT/SPACE HEATER SCHEDULE

MARK	MANUFACTURER/ MODEL	INPUT	OUTPUT	THERMAL EFFICIENCY	FLUE DIAMETER	VOLTAGE	MISCELLANEOUS
UH-1	STERLING GVF-45	45.0 MBH	36.45 MBH	81 %	4"	120/60/1	½" NPT GAS
SH-1	MARKEL F-3424	4.0 KW	4.0 KW	---	N/A	208/60/1	2, 3, 6, 7
SH-2	MARKEL F-3424	4.0 KW	4.0 KW	---	N/A	208/60/1	2, 3, 6, 7

1. SUSPEND FROM TOP CHORD OF BAR JOISTS.
2. PROVIDE LINE VOLTAGE THERMOSTAT.
3. DISCONNECT SWITCH BY ELECTRICAL CONTRACTOR.
4. EXHAUST FLUE BY HVAC CONTRACTOR.
5. GAS PIPING BY PLUMBING CONTRACTOR.
6. INSTALLED IN ATLANTA AND JACKSONVILLE DIVISIONS ONLY.
7. WALL RECESSED.

AIR CONDITIONING NOTES

1) WORK THIS DRAWING WITH DRAWINGS MD1.1 THROUGH M5.1.
2) COORDINATE DIMENSIONS WITH GENERAL CONTRACTOR FOR LOCATION OF EQUIPMENT, OPENINGS, CONCRETE BASES, ETC.
3) COORDINATE HANGING OF OUTLETS AND EQUIPMENT WITH ACOUSTICAL TILE ELECTRICAL, FIRE PROTECTION, AND PLUMBING CONTRACTORS.
4) DUCT SIZES INDICATED ARE FOR FREE AREA, ELBOWS SHALL BE A MINIMUM OF 1.0 CENTER LINE RADIUS. SEAL ALL JOINTS AND SEAMS AS INDICATED ON THE DETAILS.
5) CEILING DIFFUSERS, REGISTERS, GRILLES, ETC. ARE BASED ON METALAIRE MODELS OR AS INDICATED - SEE SCHEDULE.
6) ALL DUCT WORK IS SINGLE WALL GALVANIZED SHEET METAL EXCEPT WHERE INDICATED.
7) ALL CONCEALED DUCT WORK IS INSULATED AS FOLLOWS DUCT INSULATION 1.0" LB. DENSITY, R-6.06 AT A THICKNESS OF:
   (A) SUPPLY AIR (S/A) 2"
   (B) RETURN AIR (R/A) 2"
8) A/C SUPPLIER SHALL CHANGE ALL FILTERS EACH 60 DAYS FOR THE FIRST YEAR'S OPERATION.
9) SMOKE DETECTORS SHALL BE FIRELITE D355PL. DETECTORS SHALL BE MOUNTED IN THE SUPPLY AND RETURN DUCTS WITH THE SENSING PROBES EXTENDING THE LENGTH OF THE LONGEST DUCT DIMENSION. THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE FIRE ALARM CONTRACTOR THE REQUIRED NUMBER OF SMOKE DETECTORS AND THE LENGTH OF THE SAMPLING TUBES FOR EACH DETECTOR. DETECTORS IN THE RETURN AIR STREAM SHALL BE MOUNTED PRIOR TO MIXING WITH OUTSIDE AIR. SEE ELECTRICAL DRAWINGS FOR LOCATIONS OF REMOTE TEST BUTTONS. DETECTOR SHALL BE:
   (A.) SUPPLIED BY FIRE ALARM CONTRACTOR.
   (B.) INSTALLED BY MECHANICAL CONTRACTOR.
   (C.) WIRED BY FIRE ALARM CONTRACTOR.
   (D.) POWERED BY FIRE ALARM CONTROL PANEL.
10) HURRICANE BRACKETS FOR A/C EQUIPMENT ARE PROVIDED WITH THE CURBS MANUFACTURED BY AES INDUSTRIES INC AND INSTALLED BY THE CONTRACTOR.
11) SEISMIC BRACING (WHERE REQUIRED) ALL HVAC DUCTWORK SHALL BE PROVIDED WITH SEISMIC RESTRAINTS IN ACCORDANCE WITH SEISMIC HAZARD LEVEL "SHL-B" OF THE ANSI/SMACNA SEISMIC RESTRAINT MANUAL GUIDELINES FOR MECHANICAL SYSTEMS DATED 1991, AS PUBLISHED BY THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION, INC. AND IN ACCORDANCE WITH THE LOCAL CODES.
12) THE MECHANICAL CONTRACTOR SHALL SUBMIT AT A MINIMUM (3) SETS OF SIGNED AND SEALED PUBLIX HVAC CONTRACT DRAWINGS (M-SHEETS) AND (3) SETS OF AN APPROVED CAPTIVEAIRE GREASE HOOD CONSTRUCTION / ANSUL FIRE PROTECTION SHOP DRAWINGS TO THE AUTHORITY HAVING JURISDICTION FOR PERMITTING UNDER A SEPARATE PERMIT AT THE APPROPRIATE TIME.
13) THE GENERAL CONTRACTOR SHALL ENSURE ALL HVAC SYSTEM COMPONENTS ARE OPERATIONAL WITH ALL AIR DISTRIBUTION SYSTEM VOLUME DAMPERS SET IN THE FULL OPEN POSITION PRIOR TO INITIATING TEST AND BALANCE AS PER PUBLIX'S NEW STORE PRE-CONSTRUCTION JOB MANUAL.

AIR CONDITIONING LEGEND

GR.	GRILLE
D.G.	DOOR GRILLE-OPENING TO BE CUT BY G.C.
C.G.	CEILING GRILLE
REG.	REGISTER
C.R.	CEILING REGISTER
C.D.	CEILING DIFFUSER
O.A.	OUTSIDE AIR
R.A.	RETURN AIR
S.A.	SUPPLY AIR
CFM	CUBIC FEET PER MINUTE
FPM	FEET PER MINUTE
S.D.	SPLITTER DAMPER
O.B.D.	OPPOSED BLADE DAMPER
R.O.	RANGE OFF--TITUS MODEL AG-45
(S)	SMOKE DETECTOR
R.D.	RADIATION DAMPER--UL LISTED
F.D.	FIRE DAMPER--UL LISTED 1½HR.
V.D.	VOLUME DAMPER
R.H.	RADIANT HEATER
S.H.	SPACE HEATER
D.H.	DUCT HEATER
F.D.	FIRE DAMPER
U.O.N.	UNLESS OTHERWISE NOTED

AREAS OF HORIZONTAL RUNS BY TRADE

ELECTRICAL: BOTTOM OF ROOF DECK TO 32 IN. BELOW ROOF DECK; WHERE EXPOSED IN 45.5 PROTOTYPE, IMMEDIATELY BENEATH ROOF DECK, PASSING BETWEEN STEEL JOISTS AND DECK WHERE POSSIBLE.

REFRIGERATION: 32 IN. TO 36 IN. BELOW ROOF DECK; WHERE EXPOSED IN 45.5 PROTOTYPE, IMMEDIATELY BELOW BOTTOM CHORD OF STEEL JOIST GIRDERS AND JOISTS.

FIRE SPRINKLER: 8 IN. ABOVE CEILING; WHERE EXPOSED IN 45.5 PROTOTYPE, 8 IN ABOVE BOTTOM CHORD OF STEEL GIRDER JOISTS AND JOISTS.

AIR CONDITIONING: 36 IN. BELOW ROOF DECK TO 10 IN. ABOVE CEILING; WHERE EXPOSED IN 45.5 PROTOTYPE, HANG AS CLOSE UNDER BOTTOM CHORD OF STEEL JOIST GIRDERS AND JOISTS AS POSSIBLE WHILE LEAVING ROOM FOR REFRIGERATION LINES.

IF DEVIATION FROM THESE AREAS IS INDICATED, SUCH DEVIATION MUST BE AGREED UPON BY JOB SUPERINTENDENT AND PUBLIX REPRESENTATIVE.

44.1 SYSTEM AIR BALANCE

AC UNITS O/A	7,000 CFM
+ MAKE-UP AIR	+ 1,000 CFM
- TOTAL EXHAUST	- 5,835 CFM
NET POSITIVE	= + 1,165 CFM

TEXT LEGEND

TEXT STYLE	DESCRIPTION
TEXT STYLE	EXISTING EQUIPMENT TO REMAIN
TEXT STYLE	NEW OR EXISTING EQUIPMENT TO BE MODIFIED

NEW AIR CONDITIONING EQUIPMENT SCHEDULE

UNIT	EXISTING MANUF. & MODEL NO.	NEW MANUF. & MODEL NO.	LOCATION TYPE	CFM	O/A CFM	EXT. S.P. IN. H20	TOTAL S.P. IN. H20	E.A.T. F DB/WB	TOTAL MBH	SENS. MBH	L.A.T. EVAP F DB/WB	TOTAL MBH	SENS. MBH	L.A.T. SUB F DB/WB	L.A.T. EVAP F DB/WB	BLOWER REQ. HP	BLOWER NOM. HP	BLOWER RLA/FLA	COMPRESSOR * COMP	COMPRESSOR RLA	CONDENSER * FANS	CONDENSER RLA / FLA	UNIT VOLTAGE	UNIT MCA	UNIT MOCP	UNIT EER	UNIT IEER (SEER)	UNIT REFRIG.	UNIT WEIGHT	MISC. NOTES
AC-3	ADDISON PDO-132	LENNOX LCH120H4	GROCERY STORAGE ROOF TOP	4,380	800	1.10	1.48	75.8 / 62.5	119.6	91.6	53.8 / 52.7	-	-	-	-	2.98	3.0	/ 10.6 A	2	32.0 A	2	/ 4.8 A	208/3/60	92	100	12.2	13.2	R-410A	1,159	1,2,3,4,5,6,7
AC-4	ADDISON PDO-132	LENNOX LCH120H4	FRONT OFFICES ROOF TOP	3,560	600	1.0	1.21	77.3 / 65.8	119.7	80.3	55.6 / 54.3	-	-	-	-	1.91	2.0	/ 7.5 A	2	32.0 A	2	/ 4.8 A	208/3/60	88	90	12.2	13.2	R-410A	1,139	1,2,3,4,5,6
AC-5	ADDISON PDK-132	LENNOX LCH120H4	DELI ROOFTOP	3,800	550	1.0	1.28	77.7 / 67.0	123.1	78.7	57.7 / 56.3	-	-	-	-	2.17	3.0	/ 10.6 A	2	32.0 A	2	/ 4.8 A	208/3/60	92	100	12.2	13.2	R-410A	1,159	1,2,3,4,5,6,7
AC-6	ADDISON PDK-132	LENNOX LCH120H4	BAKERY ROOFTOP	3,800	550	1.0	1.23	77.7 / 66.1	121.7	83.5	56.5 / 55.3	-	-	-	-	2.12	3.0	/ 10.6 A	2	32.0 A	2	/ 4.8 A	208/3/60	92	100	12.2	13.2	R-410A	1,139	1,2,3,4,5,6

NOTES:
1. SHALL HAVE MULTIPLE COMPRESSORS.
2. WIRE SIZE FOR ALL LENNOX UNITS SHALL BE SUITABLE FOR AT LEAST 167° F.
3. PROVIDE CURB ADAPTER. CURB ADAPTERS ARE MANUFACTURED BY AES INDUSTRIES INC., FURNISHED BY PUBLIX AND INSTALLED BY THE MECHANICAL CONTRACTOR.
4. DISCONNECT AND STARTER FURNISHED BY AC EQUIPMENT SUPPLIER.
5. PROVIDE RTU WITH A CONDENSATE DRAIN PAN OVERFLOW SWITCH WHICH WILL SECURE THE UNIT WHEN CONDENSATE WATER LEVEL RISES ABOVE SETPOINT (AS DETERMINED BY MANUFACTURER). UNIT SHALL ALERT THE EMS OF THE HIGH WATER LEVEL.
6. PROVIDE UNIT WITH A MOTORIZED OUTSIDE AIR DAMPER WITH 24 VOLT ACTUATOR.
7. UNIT SHALL INCLUDE LENNOX'S HUMIDITY CONTROL OPTION (HUMIDITROL UNIT). INCLUDE MANUFACTURER'S HUMIDISTAT WITH UNIT. UNIT SUPPLIED BY PUBLIX.

NEW AC-3 HEATING SCHEDULE

UNIT	REQUIRED MBH *	ELEC. HEATER KW/ STAGES/VOLTAGE RATE	EAT	LAT	POWER V/PH/HZ	REMARKS
AC-3	-	30.0 / 1 / 240	68.7	85.0	208/3/60	1
AC-4	-	30.0 / 1 / 240	67.9	87.9	208/3/60	1
AC-5	-	30.0 / 1 / 240	65.3	84.0	208/3/60	1
AC-6	-	30.0 / 1 / 240	65.3	84.0	208/3/60	1

NOTES:
1. SINGLE POINT ELECTRIC SERVICE FOR FAN AND HEATER.

NEW AC-1 & 2 HEATING SCHEDULE

UNIT	CIRCUIT DESIGNATION	REFRIGERANT USED	AVAILABLE HEAT RECLAIM MBH	ELECTRIC HEAT KW/STAGES/RATED VOLTAGE	POWER V/PH/HZ
AC-1	*1	R-449A	175.2	50/4/240	208/3/60
AC-2	*4	R-449A	125.7	55/4/240	208/3/60
	*5	R-449A	131.3	-	-

NEW AIR DISTRIBUTION SCHEDULE

MARK	USE	TYPE	MANUFACTURER	MODEL	MATERIAL	FINISH	MOUNTING	CONNECTION	NOTES	COMMENTS
A	SUPPLY	DUCT REGISTER	LINDAB	RGS-3	STEEL	SATIN SILVER	DUCT	HARD	-	ADJUSTABLE DAMPER
B	SUPPLY	SQ. PLAQUE	METALAIRE	5750-6-AS	ALUMINUMIZED STEEL	WHITE	LAY-IN	FLEX	3	W/OBD
C	SUPPLY	SQ. PLAQUE	METALAIRE	5750-6-AS	ALUMINUMIZED STEEL	WHITE	SURFACE	FLEX	3	W/OBD, TBPF, 12x12 MODULE
D	SUPPLY	SQ. PLAQUE	METALAIRE	5750-6-AS	ALUMINUMIZED STEEL	WHITE	SURFACE	FLEX	3	W/OBD, TBPF, 24x24 MODULE
E	SUPPLY	PERF. DIFFUSER	METALAIRE	7500R-6-AL	ALUMINUM	WHITE	LAY-IN	FLEX W/ TRANSITION	-	W/OBD
F	SUPPLY	WALL REGISTER	METALAIRE	H4004-1	ALUMINUM	WHITE	WALL	HARD	2	SQ. TO ROUND TRANS.
G	SUPPLY	WALL REGISTER	METALAIRE	H4004D-1	ALUMINUM	WHITE	WALL	HARD	2	W/OBD, SQ. TO ROUND TRANS.
H	SUPPLY	LINEAR SLOT	METALAIRE	6675-12-1	ALUMINUM	WHITE	SURFACE	FLEX	-	W/BPI-12-1 & SIDE INLET
I	RETURN	LOUVERED GRILLE	METALAIRE	RH-6	ALUMINUM	WHITE	LAY-IN	HARD	1	W/OBD
J	RETURN	SQ. PLAQUE	METALAIRE	5750-6-AS	ALUMINUMIZED STEEL	WHITE	LAY-IN	FLEX	-	W/OBD, 24x24 MODULE
K	RETURN	SQ. PLAQUE	METALAIRE	5750-6-AS	ALUMINUMIZED STEEL	WHITE	SURFACE	FLEX	-	W/OBD, TBPF, 24x24 MODULE
L	RETURN	LOUVERED HINGED GRILLE	METALAIRE	RH-H-1	ALUMINUM	WHITE	SURFACE	HARD	1	W/OBD
M	RETURN	LOUVERED FILTERED GRILLE	METALAIRE	RHF-6-GS	ALUMINUM	WHITE	LAY-IN	HARD	-	PROVIDE WITH 1" FILTER, SQ.

NEW HOOD SCHEDULE - CAPTIVE ARE

MARK	MANUFACT.	MODEL *	HOOD DIMENSIONS LENGTH	WIDTH	HEIGHT	EXHAUST MAXIMUM AIR FLOW	MINIMUM AIR FLOW	HOOD SP DROP in-wg	EXHAUST RISER COLLAR	AIR FLOW	MAKE-UP AIR MAX AIR FLOW	MIN AIR FLOW	PSP SP DROP	HOOD ACCESSORIES NRTL CLASS	# OF FILTERS	FILTER SIZE HxW	FILTER EFF.	# OF LIGHTS	TYPE LUMINAIRE	FURNISHED BY	INSTALLED BY	LOCATION	COMMENTS
GH-1	CAPTIVEARE	6624 ND-2-PSP-F	10'-0"	5'-0"	2'-0"	2,500	-	-0.81	15"x15"	2,500	1,800	-	0.16	1	6	7'-8" x 1'-4"	85%	6	RECESSED ROUND	PUBLIX	MECH CONTR	DELI	-
GH-2	CAPTIVEARE	6624 ND-2	5'-0"	5'-6"	2'-0"	1,150	-	-0.56	10"x11"	1,150	-	-	-	1	3	7'-8" x 1'-4"	85%	3	RECESSED ROUND	PUBLIX	MECH CONTR	DELI	-

SUPPLIED BY PUBLIX AND INSTALLED BY HVAC CONTRACTOR.

1. KITCHEN HOOD GH-1 IS AN EXHAUST AND MAKE UP AIR MODEL. MAKE UP AIR COMES FROM FRONT AIR PLENUM SUPPLY AND THE ADJACENT SPACES. GH-2 IS AN EXHAUST ONLY MODEL. THE ADJACENT SPACES SUPPLIES EXCESS AIR INTRODUCED VIA THE AIR CONDITIONING UNITS.
2. GH-1 AND 2 HOODS SHALL HAVE STAINLESS STELL BACK SPLASH PANEL. EXTENDING FULL LENGTH TO THE FLOOR AND 18" BEYOND THE END OF THE HOOD (BOTH SIDES).
3. GREASE HOOD FIRE SUPRESSION SYSTEM IS UL-300 PRE-ENGINEERED. PIPING IS FACTORY INSTALLED. FINAL DROPS AND NOZZLES ARE FIELD INSTALLED BY CERTIFIED TECHNICIANS.
4. FIRE SUPPRESSION SYSTEM IS INTERLOCKED WITH THE FIRE ALARM SYSTEM TO SHUT DOWN POWER TO THE APPLIANCES, AIR CONDITIONING UNITS AND MAKE UP AIR FAN.
5. PROVIDE HIGH EFFICIENCY ALUMINUM FILTERS (CAPTRITE SOLO) FOR GH-1 AND 2.
6. PROVIDE (6) RECESSED ROUND LUMINAIRES FOR GH-1. PROVIDE (3) RECESSED ROUND LUMINAIRES FOR GH-2.
7. PROVIDE WALL MOUNTED CABINET FOR GH-1 ANSUL SYSTEM.
8. GH-1 AND 2 GREASE HOOD SYSTEMS SHALL BE MANAGED VIA THE CAPTIVEARE HOOD CONTROLLER. SEE CAPTIVEARE'S SHOP DRAWINGS FOR INTELLI-HOOD CONTROL SYSTEMS INSTALLATION DETAILS.
9. PROVIDE A REMOTE MOUNTED CONTROLLER. PROVIDE VFD FOR MAU-1 CONTROLLER SHALL PROVIDE A 0-10V SIGNAL TO VARY F-S VARIABLE SPEED MOTOR.
10. FURNISH GH-1 WITH A MINI SKIRT ON THE RIGHT END. FURNISH GH-2 WITH A MINI SKIRT ON THE LEFT END.
11. THE FIRE SUPPRESSION SYSTEMS ARE BASED ON AN OVERLAP COVERAGE DESIGN.
12. GREASE HOOD FIRE PROTECTION SYSTEMS SHALL COMLPY WITH THE REQUIREMENTS OF NFPA 96, 2008 EDITION, "FIRE PROTECTION SYSTEMS OF COMMERCIAL COOKING OPERATIONS"

NEW MAKE-UP AIR UNIT SCHEDULE - CAPTIVE ARE

MARK	MANUF.	MODEL *	SUPPLY AIR MIN CFM	MAX CFM	EXT SP IN-WG	FAN HP	FAN BHP	RPM	ELECTRIC HEATER INPUT kW	O/A TEMP	S/A TEMP	POWER VOLT	PH	Hz	UNIT MCA	MOCP	CONDENSER MCA	MOCP	COOLING COIL ENT. DB TEMP	ENT. WB TEMP	LEAVING DB TEMP	LEAVING WB TEMP	TOTAL CAPACITY	SENS. CAPACITY	LATENT CAPACITY	SONES	WEIGHT LBS	LOCATION
MAU-1	CAPTIVEARE	A1-E.252-150-MPU	1,100	1,800	0.50	1.5	1.09	1,913	25	37.7°F	82.7°F	208	3	60	107.3	110.0	14.5	20.0	92.0° F	75.0° F	79.5° F	69.7° F	36.0 MBH	23.6 MBH	12.4 MBH	18.7	1,058	DELI

NOTES:
1. TEMPERED MAKE-UP AIR UNIT (MAU) WILL PRE-HEAT CONSTANT VOLUME MAKE-UP AIR TO DELI GREASE HOOD GH-1.
2. FURNISH MAU WITH A DOUBLE WALL INSULATED HEATER MODULE AND DOWNBLAST DISCHARGE BLOWER MODULE.
3. MAU WITH INTEGRAL NEMA 3R DISCONNECT SWITCH FURNISHED BY PUBLIX AND INSTALLED BY MECHANICAL CONTRACTOR.
4. MAU SHALL BE FURNISHED WITH THE FOLLOWING FEATURES
   - UNIT MOUNTED CONTROLLER
   - INLET DAMPER
   - INLET DA / DP TEMPERATURE SENSOR
   - DISCHARGE DB TEMPERATURE SENSOR
   - AIRFLOW PROVING SWITCH
   - PERMANENT ID TAG WITH COMPLETE SPECS.
   - UL LISTED HIGH EFFICIENCY MOTOR
   - ROOF CURB: REFER TO ROOF CURB SCHEDULE
   - WEATHER HOOD W/ 2" ALUMINUM MESH FILTERS
5. WIRING DISCONNECT (IF NECESSARY) AND FINAL TERMINATION TO THE MAU IS FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR
6. THE MAU PROVIDES HEATED OR UNHEATED SUPPLEMENTAL AIR TO THE GREASE HOOD SYSTEM DEPENDING UPON THE TEMPERATURE OF THE OUTSIDE AIR (OA). MAU SHALL INCORPORATE THE FOLLOWING HEATING CONTROL SEQUENCE
7. HIGH WIND RATED (+30 / -130 PSF)
   FLORIDA PRODUCT APPROVAL #12316.6
   MIAMI-DADE NOA: 19-0717.09
- MAU IS ACTIVATED WHENEVER THE BUILDING IS IN THE OCCUPIED MODE AND THE GREASE FAN IS ACTIVATED.
- AN ELECTRIC ELEMENT PROVIDES HEATED AIR WHENEVER THE UNIT'S OA TEMPERATURE SENSOR DETECTS AN OA DB TEMPERATURE OF 50°F ± 1°F (ADJUSTABLE).
- AT ACTIVATION TEMPERATURE (50°F ± 1°F) THE UNIT'S CONTROLLER SHALL DELAY ENABLING THE ELECTRIC ELEMENT UNTIL THE BLOWER'S AIRFLOW SENSING SWITCH PROVIDES A POSITIVE INDICATION OF AIRFLOW. ONCE THE ELEMENT IS ENABLED THE DISCHARGE AIR TEMPERATURE SENSOR SHALL PROVIDE THE CONTROLLER WITH AN ERROR SIGNAL TO MODULATE THE ELEMENT SO AS TO MAINTAIN A SA TEMPERATURE OF 55°F ± 1°F.
- THE AIRFLOW SWITCH AND/OR THE FAN INTERLOCK RELAY SHALL SECURE THE ELECTRIC ELEMENT IF THE AIRFLOW IS INTERRUPTED OR THE BLOWER FAILS.
- THE UNIT'S HEATING CIRCUIT SHALL SECURE WHENEVER THE OA DB TEMP IS ABOVE 56°F.

NEW FAN SCHEDULE - CAPTIVE ARE

UNIT	MANUF.	MODEL	BHP	HP	RPM	CFM	EXT. STA.	SONES	VOLTAGE		LOCATION
F-5	CAPTIVE ARE	DU180HFA	1.13	2.0	1,167	2,500	1.3	14.6	208/60/3	1 3 4 5 6 7 8 9	HOOD GH-1
F-6	CAPTIVE ARE	DU85HFA	0.37	0.75	1,268	1,150	1.2	11	115/60/1	1 3 4 5 6 7 8 9	HOOD GH-2
F-7	CAPTIVE ARE	DU33HFA	0.17	0.33	1,412	750	0.375	13.3	115/60/1	2 10	DELI SCULLERY

SUPPLIED BY PUBLIX AND INSTALLED BY HVAC CONTRACTOR.

NOTES:

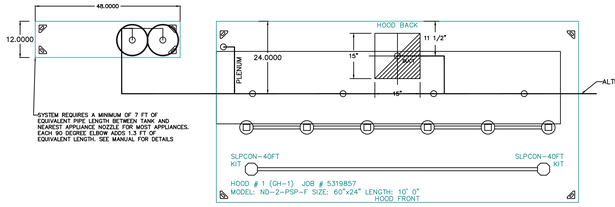
STANDARD FEATURES:
1. SWITCH- NEMA-3R, TOGGLE, FACTORY MOUNTED AND WIRED JUNCTION BOX.
2. GALVANIZED BIRD SCREEN
3. HIGH WIND RATED (+/- 150 PSF RATING) DU/DR: FLORIDA PRODUCT APPROVAL #FL12316.1 MIAMI-DADE NOA #19-0717.09
4. PROVIDE WITH SPEED CONTROLLER EXCEPT FOR FANS CONTROLLED BY VARIABLE HOOD EXHAUST CONTROL SYSTEM.
5. EACH FAN SHALL HAVE PERMANENT ID TAG WITH COMPLETE SPECIFICATIONS.
6. UNIT WARRANTY: 1 YEAR

OPTIONS:
1. UL/cUL 762 LISTED
2. UL/cUL 705 LISTED
3. HINGE BRACKET KIT
4. CONTROLLED BY VARIABLE HOOD EXHAUST CONTROL SYSTEM. PROVIDE WITH 0 TO 10 VDC INPUT
5. CLEAN OUT PORT
6. GREASE TRAP WITH DRAIN CONNECTION
7. ROOF CURB. SEE FAN CURB SCHEDULE
8. HIGH TEMPERATURE CURB SEAL RATED FOR CONTINUOUS DUTY AT 200°
9. FURNISH AND INSTALL NON-VENTED CURB EXTENSION
10. PROVIDE WITH CURB ADAPTER IN ORDER TO REUSE EXISTING CURB

NEW CURB SCHEDULE

MARK	MANUF.	CURB MODEL	CURB SIZE WIDTH/LENGTH	HEIGHT	CURB FRAME OPENING	WEIGHT (LBS)
F-5	CAPTIVE ARE	CURB-DU180 W/18" EXT.	26.5"W x 26.5"L	18" H	2'-0½" x 2'-0½"	116
F-6	CAPTIVE ARE	CURB-DU85 W/18" EXT.	23.0"W x 23.0"L	18" H	1'-9" x 1'-9"	88
MAU-1	CAPTIVE ARE	CURB-A1-D.500-150-MPU	21"W X 131"L	20"H	1'-7" x 10'-9"	114

PRE-FAB ROOF CURBS SUPPLIED BY PUBLIX & INSTALLED BY ROOFING CONTRACTOR.



NOTES
- FIELD PIPE DROPS AS SHOWN
  PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
- OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION.
- IF APPLICABLE, EXTENDED PRE-PIPED DROPS ARE SHIPPED LOOSE.
- FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.

- APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.

- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS.

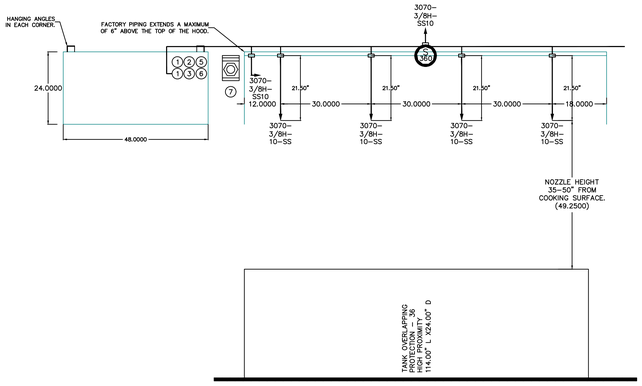
JOB #: 5319857.
JOB NAME: PUBLIX - 0797 - REMODEL - CRYSTAL RIVER, FL.

SYSTEM SIZE: TANK-SP-2-WC TOTAL FP REQUIRED: 24.
HOOD = 1 10' 0.00" LONG x 60" WIDE x 24" HIGH.
RISER = 1 SIZE: 15" x 15".
HOOD = 1 METAL BLOW-OFF CAPS INCLUDED.

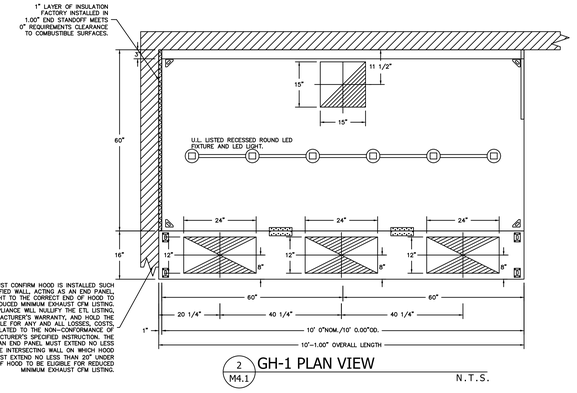
- HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.
- MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

LEGEND – FIRE CABINET TANK SYSTEM

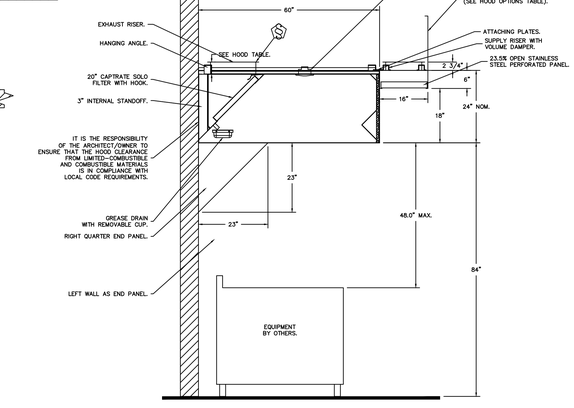
1 4 GALLON TANK.
2 PRIMARY ACTUATOR RELEASE.
3 SECONDARY ACTUATOR RELEASE.
4 PRESSURE SUPERVISION SWITCH.
5 PRIMARY HOSE ASSEMBLY.
6 SECONDARY HOSE ASSEMBLY.
7 REMOTE MANUAL ACTUATION DEVICE.



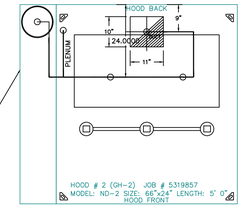
1 M4.1 GH-1 FP & ANSUL DETAIL N.T.S.

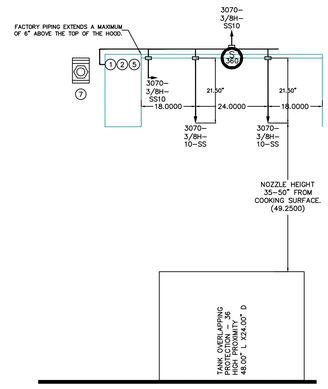


2 M4.1 GH-1 PLAN VIEW N.T.S.



3 M4.1 GH-1 SECTION VIEW N.T.S.





4 M4.1 GH-2 FP & ANSUL DETAIL N.T.S.

NOTES
- FIELD PIPE DROPS AS SHOWN
  PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
- OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION.
- IF APPLICABLE, EXTENDED PRE-PIPED DROPS ARE SHIPPED LOOSE.
- FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.

- APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.

- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS.

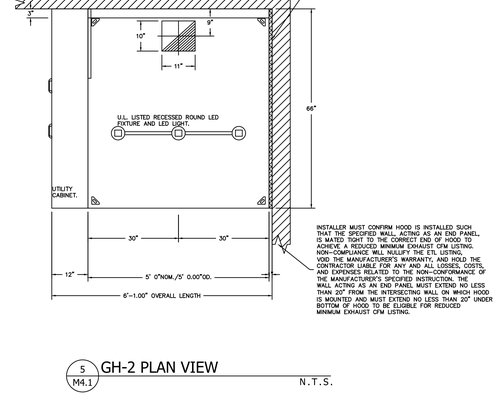
JOB #: 5319857.
JOB NAME: PUBLIX - 0797 - REMODEL - CRYSTAL RIVER, FL.

SYSTEM SIZE: TANK-SP-1 TOTAL FP REQUIRED: 16.
HOOD = 2 5' 0.00" LONG x 66" WIDE x 24" HIGH.
RISER = 1 SIZE: 10" x 11".
HOOD = 2 METAL BLOW-OFF CAPS INCLUDED.

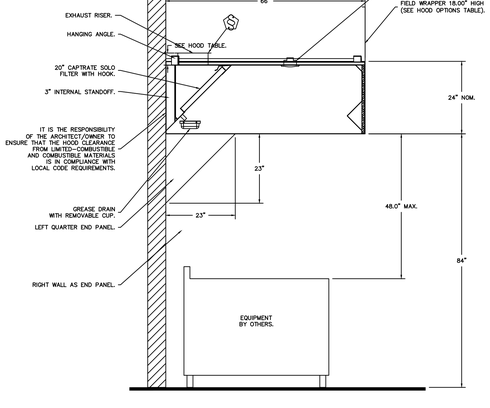
- HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.
- MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

LEGEND – FIRE CABINET TANK SYSTEM

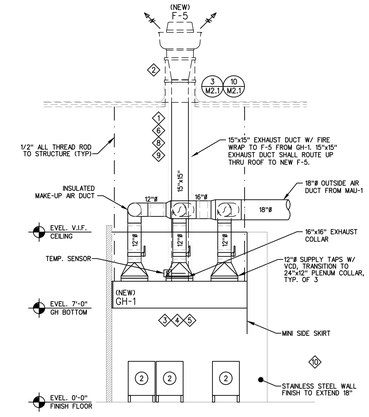
1 4 GALLON TANK.
2 PRIMARY ACTUATOR RELEASE.
3 SECONDARY ACTUATOR RELEASE.
4 PRESSURE SUPERVISION SWITCH.
5 PRIMARY HOSE ASSEMBLY.
6 SECONDARY HOSE ASSEMBLY.
7 REMOTE MANUAL ACTUATION DEVICE.



5 M4.1 GH-2 PLAN VIEW N.T.S.

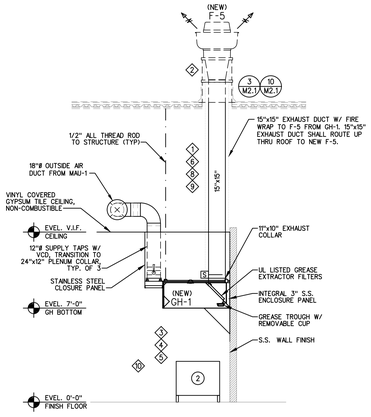


6 M4.1 GH-2 SECTION VIEW N.T.S.



7 M4.1 FRONT VIEW OF HOOD GH-1

SCALE: 0 1' 2' 4' 8' 1/4"=1'-0"



8 M4.1 GH-1 HOOD SECTION

SCALE: 0 1' 2' 4' 8' 1/4"=1'-0"

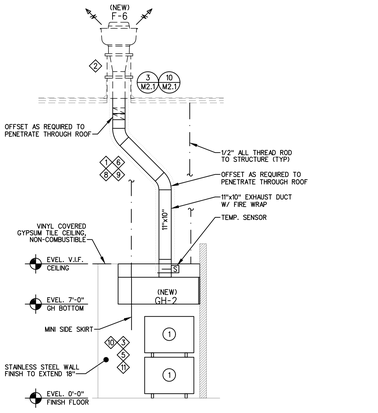
DRAWING NOTES

1. ALL EXHAUST DUCT SHALL BE 16 GAGE GALVANIZED STEEL, ALL WELDED WITH FLANGE AT THE TOP.
2. 18" HIGH CURB EXTENSION.
3. ALL FIRE SUPPRESSION SYSTEM IS FACTORY PRE-PIPED. FINAL CONNECTION IS BY THE LOCAL ANSUL REPRESENTATIVE. THE SYSTEM IS PRE-ENGINEERED TO COMPLY WITH UL-300 AND THE REQUIREMENTS OF NFPA 17A.
4. GH-1 IS AN EXHAUST AND MAKE UP AIR HOOD. MAKE UP AIR IS FROM SF-1 AND IS DUCTED TO SUPPLY AIR PLENUM MOUNTED ON FRONT OF HOOD.
5. ALL A/C EQUIPMENT AND HOOD EXHAUST FANS ARE INTERLOCKED WITH THE FIRE ALARM SYSTEM TO SHUT DOWN THE A/C EQUIPMENT AND RUN THE EXHAUST FANS IF THE ALARM IS ACTIVATED IN THE HOOD.
6. ACCESS DOORS SHALL BE PROVIDED AT ALL OFFSETS AND ALL CHANGES OF DIRECTIONS. ACCESS DOORS SHALL BE UL LISTED FOR 1500°F MINIMUM.
7. GH-1: AIR VELOCITY IN 15"x15" GREASE DUCT= 2500 CFM X 144 SQ.IN./SQ.FT. / (15 X 15) = 1600 FT/ MIN
8. ALL PENETRATIONS OF GREASE HOOD OR DUCT SHALL HAVE LIQUID TIGHT WELDS OR LISTED SEALS.
9. WRAP DUCT WITH A FIRE RESISTANT INORGANIC BLANKET ENCAPSULATED WITH SCRIM-REINFORCED FOIL. ASSEMBLE FIRE WRAP TO ACHIEVE ZERO CLEARANCE TO COMBUSTIBLES AT ALL CEILING AND ROOF PENETRATIONS. PROVIDE 3M FIRE BARRIER 150A OR VESIVIX1 PYROSCAT DUCT WRAP GREASE DUCT FIRE PROTECTION SYSTEMS OR APPROVED EQUAL.
10. SEE SHEET M1.1 FOR GH-1 AND GH-2 PULL STATION LOCATIONS.
11. GH-2 IS AN EXHAUST ONLY GREASE HOOD. MAKE UP AIR IS FROM ADJACENT SPACES AND IS INTRODUCED VIA THE FRESH AIR INTAKES FOR THE A/C EQUIPMENT.
12. GH-2: AIR VELOCITY IN 11 X 10 GREASE DUCT, 1,150 CFM X 144 SQ.IN./SQ.FT. / (11 X 10) = 1,505 FT/ MIN

EQUIPMENT SCHEDULE

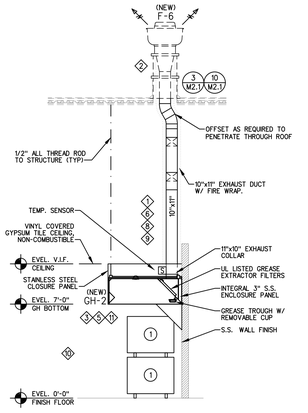
ALL COOKING EQUIPMENT SHALL BE LISTED BY AN APPROVED TESTING AGENCY

1. COMBITHERM: ALTO SHAM CTP7-20E
2. FRYER: CHESTER FRIED GEF-720



9 M4.1 FRONT VIEW OF HOOD GH-2

SCALE: 0 1' 2' 4' 8' 1/4"=1'-0"



10 M4.1 GH-2 HOOD SECTION

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PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
6760 N. LECANTO HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	2210764
DATE	04/21/2022
DRAWN	Jamie W. Hall
CHECKED	John S. Parker

SHEET TITLE
HVAC HOOD SECTIONS, SCHEDULES AND DETAILS

M4.1

DECOR SCHEME: EVERGREEN

4/18/2022 11:48:05 AM

PREFERRED CONTROL STRATEGY FOR
Seasons-4 DUAL PATH EQUIPMENT
Publix #0797
P11659
Bradenton, FL
Rooftop Replacement
Electric Heat
(Two Circuit System)
By Michael Gore - 2-15-2022

Special information to CPC programmer:
- **Lockout cooling compressors below 40F outdoor air temperature**
- **Digital scrolls are subject to a control strategy that limits the Digital compressor's minimum capacity to:**
  - **30 percent if BOTH compressors are operating AND**
- **67 percent if only ONE compressor (Digital) is operating**

REQUIRED CPC INPUT/OUTPUT BOARDS:
(2) 16AI/8RO/4AO Board

Digital Outputs (CPC)
(total 10 outputs)

DIGITAL OUTPUT 1 (Board 1 Output 1)
Main Supply Blower (on/off): Continuous operation

Main supply blower has a VFD that will modulate:
- To 13,000 cfm during Occupied Mode or upon a call for Cooling, Dehumidification, or Heating during Unoccupied Mode.
- To 9,880 cfm (adjustable) during Unoccupied Mode.

DIGITAL OUTPUT 2 (Board 1 Output 2)
Cool #1 (on/off):
Activate on Compressor #1A when
- *Store air temperature* rises above Store Drybulb SetPoint FOR COOLING **OR**,
- *Store air dewpoint* rises above Store Dewpoint Setpoint **OR,**
- *Outside air dewpoint* rises above Outside Air Dewpoint Setpoint

Shut off Compressor #1A when
- *Store air temperature* falls below Store Drybulb SetPoint FOR COOLING **AND**, *Store air dewpoint* falls below Store Dewpoint Setpoint **AND**,
- *Outside air dewpoint* falls below Outside Air Dewpoint Setpoint.

OR
- Energize OFF Compressor 1A if any furnace is energized ON
- Energize OFF Compressor 1A during a drain pan alarm

EXTRA SPECIAL Note: Compressor#1A is a Copeland Digital Scroll compressor and its capacity will be controlled to a meet a variable coil #1A Leaving Air Temperature (L.A.T.) SETPOINT based on the store dewpoint:

The L.A.T. SETPOINT is range between 47F and 55F.

The L.A.T. SETPOINT will trend towards 47 F if the store dewpoint is above store dewpoint setpoint.

The L.A.T. SETPOINT will trend towards 55 F if the store dewpoint is below store dewpoint setpoint

The Digital Scroll compressor #1A requires a demand signal from (eg. using AO#1.1.) 1.44 to 5.40 DC based on a PID loop comparing cooling coil #1 leaving air temperature (eg. Physical AI 1.05) to cooling coil #1 leaving air temperature setpoint. At 1.44 VDC, the compressor will operate at its minimum capacity (approx. 10%). At 5.0 VDC, the compressor will operate at 100% capacity. Below 1.44 VDC, the compressor will shut off. The compressor can operate down to 10% (1.44 VDC), but the range of operation must be limited to a minimum higher than 1.44 VDC for protection of the system.

For cooling circuits with TANDEM compressors there will be two minimums: if one of two compressors only is operating the minimum setting will be 67% (5.7 VDC), if both compressors are operating the minimum setting is 10% (2.3 VDC). Therefore, the range of operation programmed in the DDC controller is either 2.3 VDC to 5.0 VDC or 5.7 DC to 5.40 DC depending if one or both compressors are operating.

- Note 1. Compressor#1A is the lead compressor in a tandem set.
- Note 2. If Digital compressor #1A is on AND the second of the tandem set (compressor #1B) is OFF then the minimum capacity will be 67%. If both compressors are operating then the minimum capacity will be 30%.

DIGITAL OUTPUT 3 (Board 1 Output 3)
Cool #1B (on/off):
Activate on Compressor #1B ***IF*** the cooling coil #1 leaving air temperature is above L.A.T. SETPOINT #1 or #2 plus 1.0°F ***AND*** *the AO#1 for Digital Compressor is at maximum voltage (5.0V) FOR A DURATION OF 3 MINUTES.*

Energize off Compressor #1B if the cooling coil #1 leaving air temperature drops below L.A.T. SETPOINT #1 or #2 minus 2.0°F ***AND*** *the AO#1 for Digital Compressor is at minimum voltage (2.2) FOR A DURATION OF 3 MINUTES* ***AND*** *compressor #1 (output 4) must be off for three (3) minutes.*
OR
Energize OFF Compressor #1B if Compressor #1 energizes OFF
OR
Energize OFF Compressor #1B if any furnace is energized ON
Energize OFF Compressor #1B during a drain pan alarm

Note: compressor #1B is the second compressor in the tandem set.

DIGITAL OUTPUT 4 (Board 1 Output 5)
Cool #2 (on/off):
Activate on Compressor #3 when
- *Store air temperature* rises above Store Drybulb SetPoint FOR COOLING has been "true" for (9) minutes

OR
- Store *air dew point* rises above Store Dewpoint Setpoint has been "true" for (9) minutes.

Energize off Compressor #3 when *store air temperature* falls below Store Drybulb SetPoint FOR COOLING **AND** Store *air dewpoint* falls below Store Dewpoint Setpoint.
OR
Energize OFF Compressor 2 if any furnace is energized ON.
Energize OFF Compressor 2 during a drain pan alarm

Note: compressor circuit#2 is the tandem return air coil circuit.

DIGITAL OUTPUT 5 (Board 1 Output 6)
Night Setback Damper
Activate night setback damper actuator to a closed damper position during Occupied Mode.
Activate night setback damper actuator to an open damper position during Unoccupied Mode.

DIGITAL OUTPUT 6 (Board 2 Output 1)
Aux Heater- 1 (on/off):
Activate on auxiliary heater stage #1 when *store temperature* falls below Store Drybulb SetPoint FOR AUX HEATER.

Shut off auxiliary heater stage #1 when store temperature rises above Store Drybulb SetPoint FOR AUX HEATER.

DIGITAL OUTPUT 7 (Board 2 Output 2)
Aux Heater- Stage 2 (on/off):
Activate on auxiliary heater stage #2 when *store temperature* falls below Store Drybulb SetPoint minus 1/2F (-0.5F) FOR AUX HEATER.

Shut off auxiliary heater stage #2 when store temperature rises above Store Drybulb SetPoint minus 1/2F (-0.5F) FOR AUX HEATER.

DIGITAL OUTPUT 8 (Board 2 Output 3)
Aux Heater- Stage 3 (on/off):
Activate on auxiliary heater stage #3 when *store temperature* falls below Store Drybulb SetPoint minus 1F (-1.0F) FOR AUX HEATER.

Shut off auxiliary heater stage #3 when store temperature rises above Store Drybulb SetPoint minus 1F (-1.0F) FOR AUX HEATER.

DIGITAL OUTPUT 9 (Board 2 Output 4)
Aux Heater- Stage 4 (on/off):
Activate on auxiliary heater stage #4 when *store temperature* falls below Store Drybulb SetPoint minus 1 1/2F (-1.5F) FOR AUX HEATER.

Shut off auxiliary heater stage #4 when store temperature rises above Store Drybulb SetPoint minus 1 1/2F (-1.5F) FOR AUX HEATER.

DIGITAL OUTPUT 10 (Board 2 Output 5)
Hot Gas Reheat Circuit #1 (on/off):
Activate on hot gas reheat when *store temperature* falls below Store Drybulb SetPoint FOR HOT GAS REHEAT.

Shut off hot gas reheat when store temperature rises above Store Drybulb SetPoint FOR HOT GAS REHEAT.

DIGITAL OUTPUT 11 (Board 2 Output 6)
Hot Gas Reheat Circuit #2 (on/off):
Activate on hot gas reheat when *store temperature* falls below Store Drybulb SetPoint FOR HOT GAS REHEAT.

Shut off hot gas reheat when store temperature rises above Store Drybulb SetPoint FOR HOT GAS REHEAT.

Analog Outputs (CPC)
(total 3 Analog outputs)

ANALOG OUTPUT 1.1
DIGITAL SCROLL COPELAND COMPRESSOR
Modulate digital compressor circuit #1A with this **1-5 VDC** output.
- See sequence for output #2 (compressor #1A).
- Lower limit of lead compressor (1A) to be 67% if lag compressor (1B) is OFF.
- Lower limit of lead compressor (1A) to be 30% if lag compressor (1B) is ON.

ANALOG OUTPUT 1.3
VFD OUTPUT
Modulate VFD with this 0-10 **VDC** output
VFD to modulate between 7.6VDC (76%, 9,880cfm, adjustable) and 10VDC (100%, 13,000cfm)

ANALOG OUTPUT 2.2
MODULATING OA DAMPER ACTUATORS
Activate OA damper to close during unoccupied mode.
Activate OA damper to open during occupied mode. The position is based upon the input from the Potentiometer Maximum Position.

Burnoff
Once a month, shut all cooling stages off and bring all stages of heat on for fifteen (15) minutes for each stage. To burn dust off the heat exchangers.

Inputs (CPC) *(total 13 analog inputs)*

1. [1.01]: Store air temperature sensor
2. [1.02]: Store air dewpoint sensor
3. [1.03]: Supply Air drybulb temperature sensor
4. [1.04]: Return Air drybulb temperature sensor
5. [1.05]: Coil #1 Leaving Air Drybulb Temperature Sensor
6. [1.06]: Coil #2 Leaving Air Drybulb Temperature Sensor
7. [1.09]: Outside air temperature sensor
8. [1.15]: Outside air dewpoint sensor
9. [2.01]: OA damper feedback
10. [2.03]: Potentiometer Maximum Position for OA Damper 0-20K ohms
11. [2.12]: Hot Gas Reheat Coil #1 Leaving Air Drybulb Temperature Sensor
12. [2.13]: Hot Gas Reheat Coil #2 Leaving Air Drybulb Temperature Sensor
13. [2.14]: Heat reclaim coil Leaving Air #1 Drybulb Temperature Sensor

Inputs (CPC) *(total 10 digital inputs)*

1. [1.10]: FAN PROOF input - from airflow relay
2. [1.11]: Clogged Filter status
3. [1.12]: Blower Overload status
4. [1.13]: Drain Pan Float Switch status
5. [1.14]: Compressors High Discharge Pressure switch status
6. [2.04]: VFD in manual bypass
7. [2.05]: Compressor proof 1A
8. [2.06]: Compressor proof 1B
9. [2.07]: Compressor proof 2A
10. [2.08]: Compressor proof 2B

ALARMS

Loss of Airflow
Alert Operator by monitoring Digital Input 1.10
- (open means failure)

High Head Pressure
Alert Operator by monitoring Digital Input 1.14
- (closure means failure)

NOTICES

Clogged Filter either OA or RA filter bank
Alert Operator by monitoring Digital Input 1.11
- (closure means failure)

Main Blower Motor Overload
Alert Operator by monitoring Digital Input 1.12
- (closure means failure)

Blocked Drain Pan
Alert Operator by monitoring Digital Input 1.13
- (closure means failure)

Compressor Proofs
Alert Operator by monitoring Digital Inputs #2.05, 2.06,2.07, and comparing with desired corresponding Digital Outputs 1.02, 1.03, and 1.05.
- No closure after five (5) minutes means failure
- Closure after five (5) minutes of no call means failure
- Note: 2.08 compressor 2B is for the tandem compressor for the return. It is not monitored for failure. This compressor is operated by an internal pressure switch.

Summary of Setpoints (all adjustable):
1. **Store Drybulb Setpoint FOR COOLING - 74F**
2. **Store Dewpoint Setpoint - 52F**
3. **Outside Air Dewpoint Setpoint - 52F**
4. **Store Drybulb Setpoint for REHEAT - 71F**
5. **Store Drybulb Setpoint for AUX HEAT - 69F**

SAFETIES (no alert required)

Freezestats (by Johnson Controls A421):
Cooling is disabled if the coil leaving temperature drops below 36°FDB (adjustable) by freezestat. Cooling will reactivate once the freezestat downstream of evaporator coil is satisfied by a 10F degree temp rise (46F) coil leaving condition.
Note: there will be a five (5) minute anti-short-cycle time delay initiated upon compressor shut down.

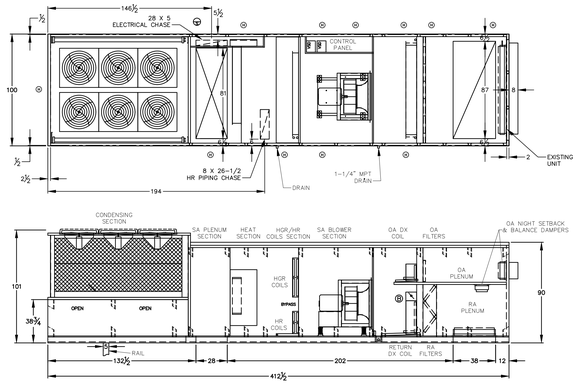
Freezestat can only be initiated during a call for the COOLING. Care must be taken not to initiate a freezestat sequence if weather conditions may cause an air temperature of less than 36F at the coil temperature sensors.

- Shut Down (initiate pumpdown) Compressor #1/1A if Cooling coil#1 Leaving Air Temperature drops below 36F.
- Shut Down (initiate pumpdown) Compressor #2 if Cooling coil#2 Leaving Air Temperature drops below 36F.

Mechanical / Hardwired Safeties
- Phase Monitor - Auto Reset
- Compressor High Pressure Switches - Manually reset (this causes an alarm to CPC)
- Compressor Low Pressure Switches - Auto Reset
- Copeland Motor Protector - Auto Reset
- Blower Motor Overload - Manual Reset (this causes an alarm to CPC)
- S.A. and R.A. smoke detectors - Manual reset
- Anti Short Cycle Time delays for compressors (5 minutes) - Auto Reset
- Electric Heat Module with High Limit - Manual Reset

Condenser Fans VFD Control Strategy (ABB/Kele) (six fans to be controlled)

There is a separate controller and VFD to control the condenser fans. The discharge pressure is controlled by a VFD controlling all the condenser fans at once. The VFD will control the pressure to 375 psig (adj). It will raise and lower the condenser fan speed as necessary to maintain the proper pressure. The minimum frequency the VFD will allow the fans to go is 10Hz.



LEGEND
- (H) HINGED ACCESS DOOR
- (L) LIFT-OFF ACCESS DOOR
- (B) BALANCING DAMPER

NOTE 1: O.A./E.A. LOUVERS, FURNACE VENT CAPS, ETC. MAY REQUIRE FIELD INSTALLATION.
NOTE 2: WIDTH SHOWN IS FOR UNIT BASE. ADD APPROX 5" TO ACCOUNT FOR HANDLES, FLANGES, DRAINS, ETC.
NOT TO SCALE

REV #	BY	DATE	DESCRIPTION
0	MM	2/15/2022	ORIGINAL ISSUE

DIMENSIONAL DATA
PUBLIX #797
CRYSTAL RIVER, FL
AC-1 & AC-2

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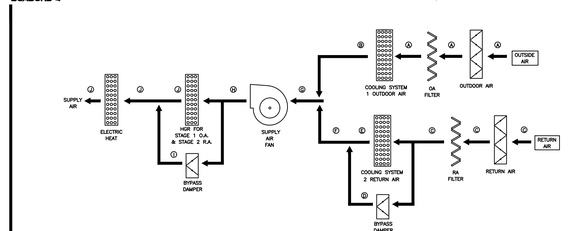
SEASONS-4

Dual Path Flow Diagram
PUBLIX #797 - AC-1 CRYSTAL RIVER, FL



	A	B	C	D	E	F	G	H	I	J	
CFM	2,600	2,600	10,400	2,400	8,000	10,400	13,000	13,000	4,300	13,000	ACFM
DB(°F)	93.7	47.7	68.7	68.7	48.2	52.8	51.8	53.5	53.5	53.5	DEFF
WB(°F)	77.3	47.2	58.7	58.7	47.7	50.4	49.8	50.6	50.6	50.6	WBFF

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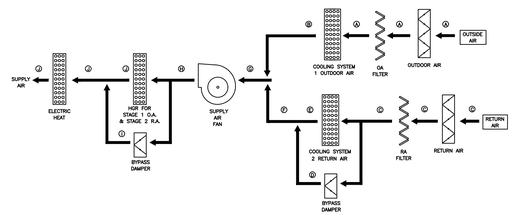
SEASONS-4

Dual Path Flow Diagram
PUBLIX #797 - AC-2 CRYSTAL RIVER, FL



	A	B	C	D	E	F	G	H	I	J	
CFM	2,600	2,600	11,700	2,200	9,500	11,700	14,300	14,300	5,250	14,300	ACFM
DB(°F)	93.7	47.8	68.7	68.7	48.5	52.2	51.4	53.1	53.1	53.1	DEFF
WB(°F)	77.3	47.3	58.7	58.7	48.0	50.1	49.6	50.4	50.4	50.4	WBFF

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PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
8700 W. GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
HVAC CONTROLS AND DETAILS

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	DATE	DRAWN	CHECKED
221094	04/21/2022	Jaime W. Hall	John S. Parker

M5.1

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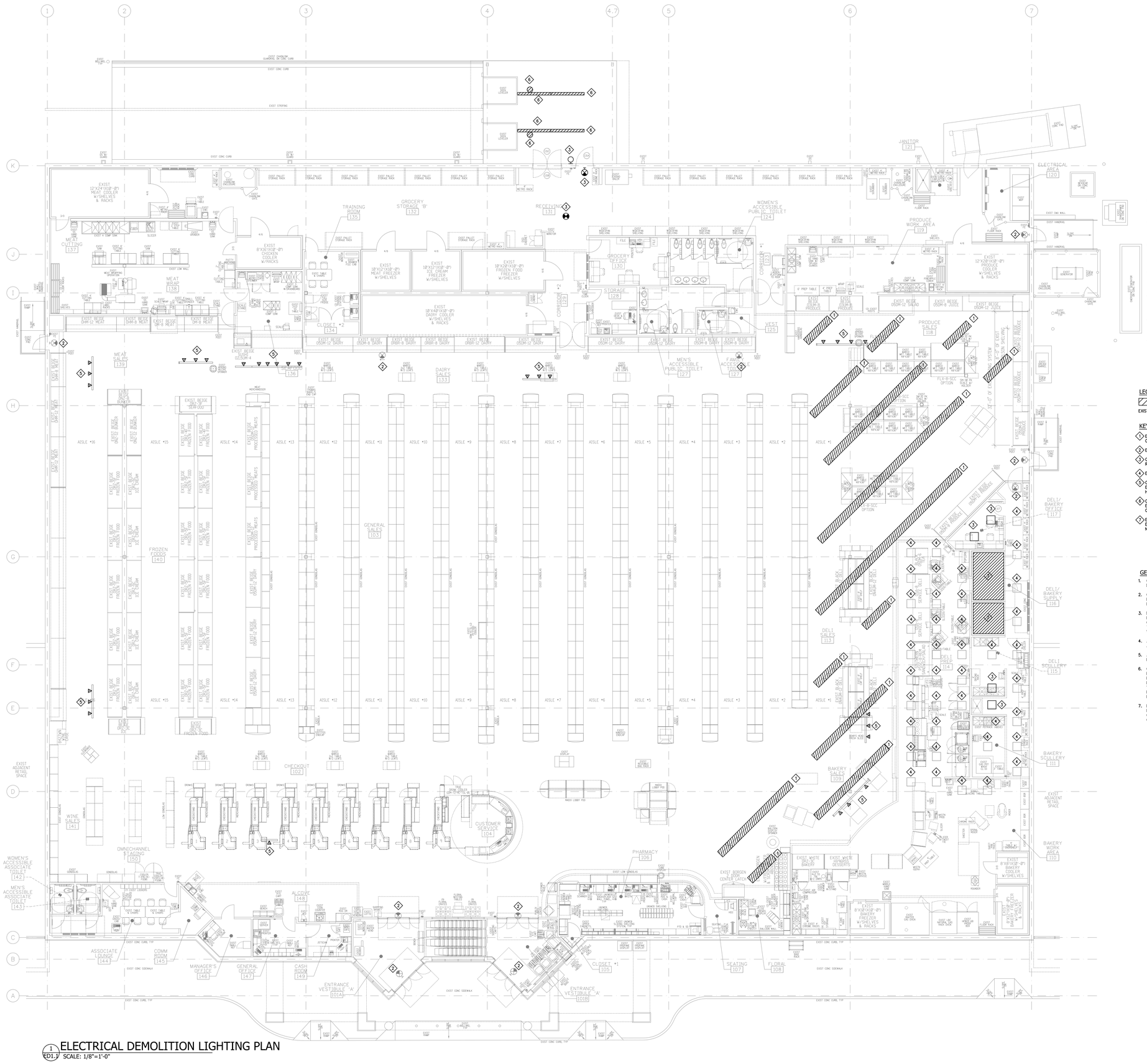

1 ELECTRICAL DEMOLITION LIGHTING PLAN

ED1.1 SCALE: 1/8"=1'-0"

0 2' 4' 8' 16'

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

LEGEND

ITEMS TO BE DEMOLISHED.

EXISTING CONDITIONS SHOWN GRAYSCALE FOR REFERENCE ONLY.

KEYED NOTES

1. EXISTING TRACK TO BE DEMOLISHED. EXISTING CIRCUIT AND CONDUIT TO BE REMOVED BACK TO SOURCE.
2. EXISTING EXIT LIGHT SHOWN FOR REFERENCE ONLY.
3. CONTRACTOR TO DISCONNECT EXISTING LIGHT FIXTURES FOR RELOCATION. REFER TO DWG E1.1 FOR NEW FIXTURE LOCATION.
4. EXISTING LIGHT FIXTURE SHOWN FOR REFERENCE ONLY.
5. CONTRACTOR TO DISCONNECT EXISTING TRACK HEADS FOR REMOVAL. EXISTING TRACK TO REMAIN FOR INSTALLATION OF NEW TRACK HEADS. REFER TO DWG E1.1 FOR ADDITIONAL INFORMATION.
6. CONTRACTOR TO DISCONNECT EXISTING FIXTURE FOR REMOVAL. EXISTING CIRCUITS TO BE RETAINED/REWORKED FOR INSTALLATION OF NEW FIXTURES.
7. EXISTING FREEZER/COOLER LIGHT FIXTURES TO BE DEMOLISHED. EXISTING CIRCUIT TO BE RETAINED/RELOCATE FOR INSTALLATION OF NEW FREEZER/COOLER LIGHT FIXTURE.

GENERAL NOTES

1. CONTRACTOR SHALL MAKE PRELIMINARY SITE VISIT AND VERIFY THE MAGNITUDE AND SCOPE OF THE PROJECT BEFORE BIDDING.
2. CONTRACTOR SHALL DISCONNECT AND REMOVE ALL ELECTRICAL EQUIPMENT, DEVICES, PANELBOARDS, AND LIGHTING FIXTURES AS INDICATED.
3. MANY EXISTING CIRCUIT/HOMERUNS SHALL BE REROUTED TO BREAKERS AND/OR PANELS. CONTRACTOR SHALL VERIFY CIRCUITING. CONTRACTOR TO VERIFY THE EXTENT OF SCOPE FOR THIS WORK WITH PUBLIX REPRESENTATIVE AND A CHANGE ORDER WILL BE ISSUED AS REQUIRED FOR THIS WORK.
4. ALL EQUIPMENT REMOVED SHALL NOT BE REUSED WITHOUT WRITTEN APPROVAL FROM PUBLIX REPRESENTATIVE.
5. ALL EQUIPMENT REMOVED SHALL BE TURNED OVER TO PUBLIX REPRESENTATIVE AND SHALL REMAIN PROPERTY OF THE OWNER.
6. CONTRACTOR SHALL VERIFY LAMP BALLAST TYPE FOR EXISTING TO REMAIN LIGHT FIXTURES. T-12 LAMPS AND BALLAST SHALL BE REPLACED WITH NEW T-8 LAMPS AND ELECTRONIC BALLAST AS REQUIRED THROUGHOUT THE STORE AND ROOF. CONTRACTOR TO VERIFY THE EXTENT OF SCOPE FOR THIS WORK WITH PUBLIX REPRESENTATIVE AND A CHANGED ORDER WILL BE ISSUED AS REQUIRED FOR THIS WORK.
7. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO IDENTIFY AND VERIFY ALL CIRCUITS ON SITE AND TO MAKE CHANGES ACCORDING TO THE ARCHITECTURAL DEMOLITION SCOPE OF WORK.

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LICENSE #63643,
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6760 U.S. HIGHWAY 19
CRYSTAL RIVER, FLORIDA 34428-9348

SHEET TITLE
ELECTRICAL DEMOLITION LIGHTING PLAN

REV	RELEASE
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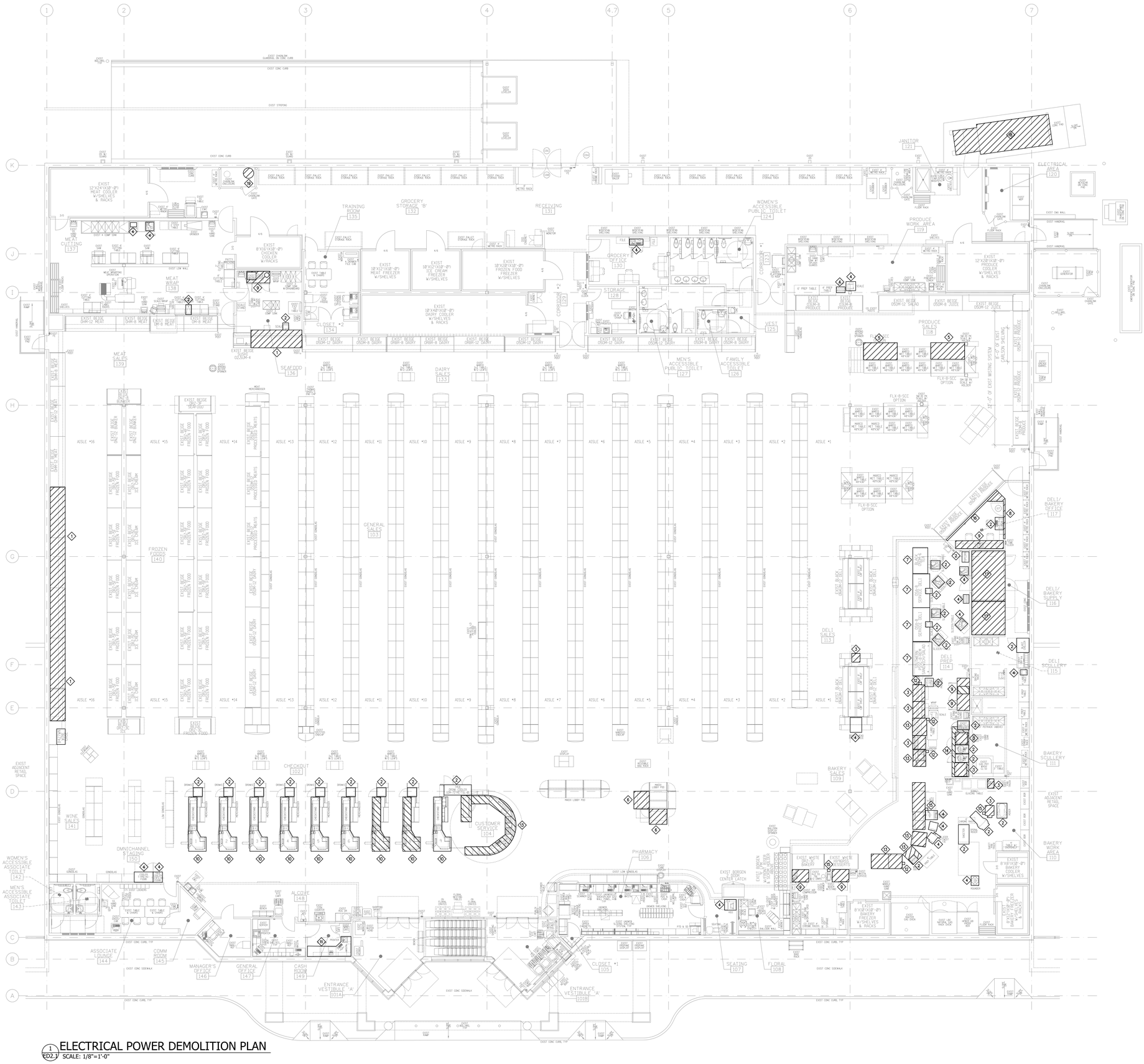

ELECTRICAL POWER DEMOLITION PLAN

ED2.1 SCALE: 1/8"=1'-0"

0 2' 4' 8' 16'

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

LEGEND

ITEMS TO BE DEMOLISHED.

KEYED NOTES

1. DISCONNECT REFRIGERATED CASE FOR REMOVAL. EXTEND/REWORK EXISTING CIRCUITS AND MODIFY RACEWAY AS REQUIRED TO CONNECT NEW CASE(S) TO EXISTING CIRCUITS. REFER TO DWG. E3.1 FOR ADDITIONAL INFORMATION.
2. DISCONNECT EQUIPMENT FOR RELOCATION. RELOCATE EXISTING CIRCUIT AND MODIFY CONDUIT AS REQUIRED. REFER TO DWG. E2.1 FOR ADDITIONAL INFORMATION.
3. DISCONNECT EQUIPMENT FOR REMOVAL. EXISTING CIRCUIT TO BE REMOVED BACK TO SOURCE.
4. DISCONNECT EQUIPMENT FOR RELOCATION. EXISTING RECEPTACLE TO REMAIN FOR FUTURE USE.
5. DISCONNECT REFRIGERATED CASE FOR REMOVAL. EXISTING LITE LAB POWER DOWN TO BE REMOVED.
6. DISCONNECT EQUIPMENT FOR REMOVAL, EXISTING CORD REEL AND CIRCUIT TO BE RELOCATED TO NEW EQUIPMENT LOCATION.
7. DISCONNECT REFRIGERATED CASE FOR RELOCATION EXISTING CIRCUIT TO BE RETAINED/REWORKED FOR INSTALLATION OF NEW REFRIGERATED CASE.
8. DISCONNECT RECEPTACLES AND DATA OUTLETS FROM DEMOLISHED WALL. EXISTING CIRCUITS ARE TO BE REMOVED BACK TO SOURCE.
9. DISCONNECT EQUIPMENT FOR REMOVAL. EXISTING RECEPTACLE TO REMAIN FOR FUTURE USE.
10. DISCONNECT CHECKSTAND FOR REMOVAL. EXISTING CIRCUITS ARE TO BE RELOCATED FOR INSTALLATION OF NEW CHECKSTANDS.
11. DISCONNECT EQUIPMENT AS REQUIRED FOR NEW MILLWORK, EXISTING RECEPTACLES TO REMAIN.
12. EXISTING POWER POLE TO BE REPLACED. REFER TO DWG. E2.1 FOR NEW POWER POLE LOCATION.
13. DISCONNECT EQUIPMENT FOR REMOVAL. EXISTING CIRCUITS ARE TO BE RELOCATED TO NEW EQUIPMENT LOCATION.
14. DISCONNECT GREASE HOOD FOR MECHANICAL CONTRACTOR'S REMOVAL. EXISTING CONTROLS TO BE REMOVED BACK TO SOURCE.
15. EXISTING POWER POLE TO BE REPLACED. CONTRACTOR TO RELOCATE EXISTING RECEPTACLES AND CIRCUITS TO NEW POWER POLE.
16. CONTRACTOR TO REMOVE ALL ELECTRICAL DEVICES FROM WALL. EXISTING CIRCUITS TO BE REMOVED BACK TO SOURCE.
17. CONTRACTOR TO DISCONNECT FREEZER/COOLER FOR REMOVAL. EXISTING CIRCUITS ARE TO BE RETAINED FOR INSTALLATION OF NEW FREEZER/COOLER.
18. CONTRACTOR TO DISCONNECT COMPACTOR FOR REMOVAL. EXISTING CIRCUITS ARE TO BE RETAINED FOR INSTALLATION OF NEW COMPACTOR.
19. CONTRACTOR TO DISCONNECT WATER HEATER FOR PLUMBING CONTRACTORS REMOVAL. EXISTING CIRCUITS ARE TO BE RETAINED FOR INSTALLATION OF NEW WATER HEATER.

GENERAL NOTES

1. CONTRACTOR SHALL MAKE PRELIMINARY SITE VISIT AND VERIFY THE MAGNITUDE AND SCOPE OF THE PROJECT BEFORE BIDDING.
2. CONTRACTOR SHALL DISCONNECT AND REMOVE ALL ELECTRICAL EQUIPMENT, DEVICES, PANELBOARDS, AND LIGHTING FIXTURES AS INDICATED.
3. MANY EXISTING CIRCUIT/HOMERUNS SHALL BE REROUTED TO BREAKERS AND/OR PANELS. CONTRACTOR SHALL VERIFY CIRCUITING. CONTRACTOR TO VERIFY THE EXTENT OF SCOPE FOR THIS WORK WITH PUBLIX REPRESENTATIVE AND A CHANGE ORDER WILL BE ISSUED AS REQUIRED FOR THIS WORK.
4. ALL EQUIPMENT REMOVED SHALL NOT BE REUSED WITHOUT WRITTEN APPROVAL FROM PUBLIX REPRESENTATIVE.
5. ALL EQUIPMENT REMOVED SHALL BE TURNED OVER TO PUBLIX REPRESENTATIVE AND SHALL REMAIN PROPERTY OF THE OWNER.
6. CONTRACTOR SHALL VERIFY LAMP BALLAST TYPE FOR EXISTING TO REMAIN LIGHT FIXTURES. T-12 LAMPS AND BALLAST SHALL BE REPLACED WITH NEW T-8 LAMPS AND ELECTRONIC BALLAST AS REQUIRED THROUGHOUT THE STORE AND ROOF. CONTRACTOR TO VERIFY THE EXTENT OF SCOPE FOR THIS WORK WITH PUBLIX REPRESENTATIVE AND A CHANGED ORDER WILL BE ISSUED AS REQUIRED FOR THIS WORK.
7. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO IDENTIFY AND VERIFY ALL CIRCUITS ON SITE AND TO MAKE CHANGES ACCORDING TO THE ARCHITECTURAL DEMOLITION SCOPE OF WORK.

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PROJECT NAME
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CRYSTAL RIVER, FLORIDA 34429-9348

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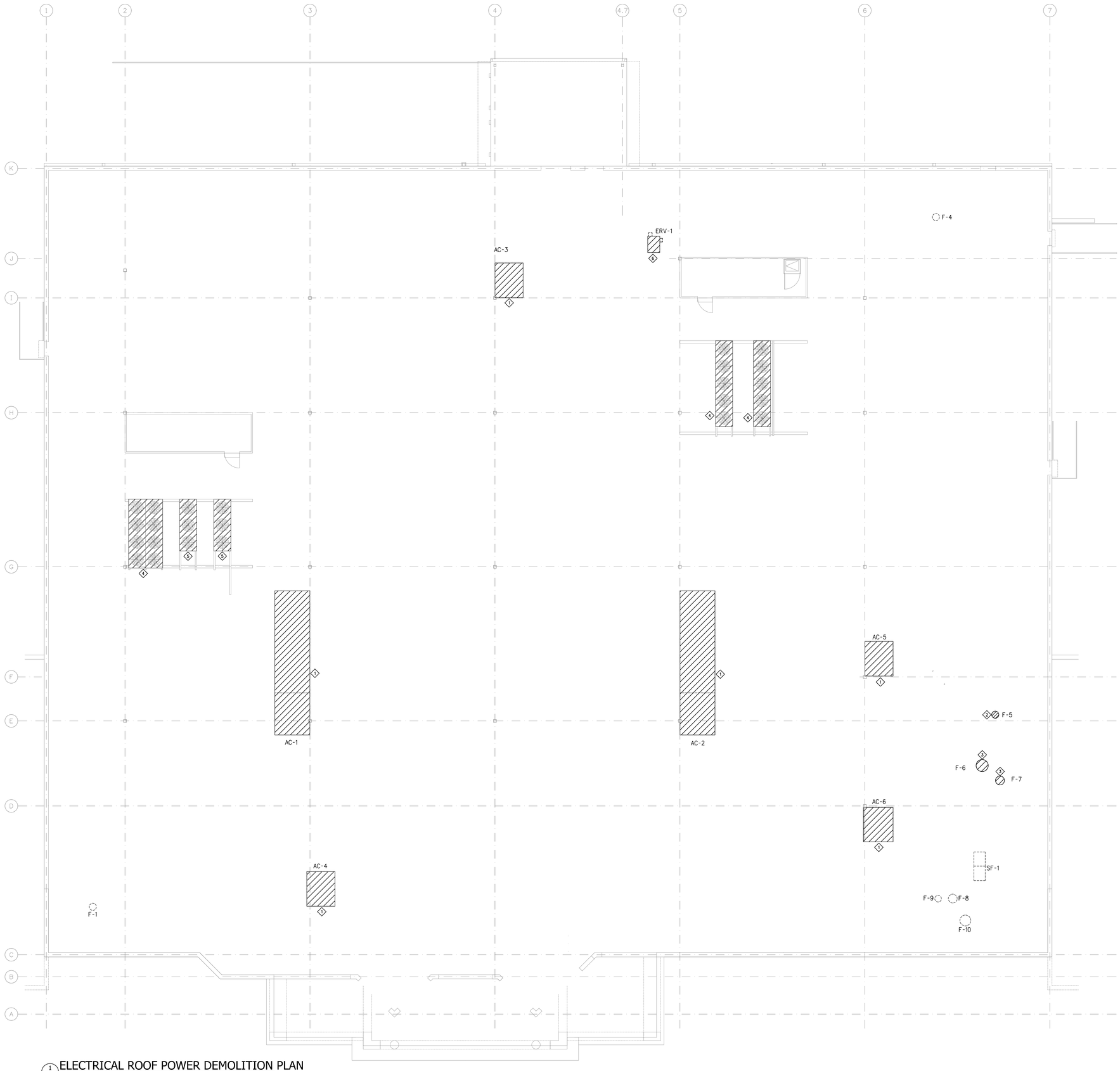

LEGEND

ITEMS TO BE DEMOLISHED.

KEYED NOTES

1. CONTRACTOR TO DISCONNECT AC UNIT FOR MECHANICAL CONTRACTORS REMOVAL. EXISTING CIRCUITS ARE TO BE RETAINED/REWORKED FOR INSTALLATION OF NEW AC UNIT. EXISTING RECEPTACLE AND CIRCUIT TO BE RELOCATED TO NEW AC UNIT.
2. CONTRACTOR TO DISCONNECT FAN FOR MECHANICAL CONTRACTORS REMOVAL. EXISTING CIRCUIT TO BE REMOVED BACK TO SOURCE.
3. CONTRACTOR TO DISCONNECT FAN FOR MECHANICAL CONTRACTORS REMOVAL. EXISTING CIRCUIT TO BE RETAINED/REWORKED FOR INSTALLATION OF NEW EXHAUST FAN.
4. CONTRACTOR TO DISCONNECT CONDENSER FOR REFRIGERATION CONTRACTORS REMOVAL. EXISTING CIRCUIT AND RACEWAY TO BE RETAINED FOR INSTALLATION OF NEW CONDENSING UNIT.
5. CONTRACTOR TO DISCONNECT CONDENSER FOR REFRIGERATION CONTRACTORS REMOVAL. EXISTING CIRCUIT AND RACEWAY TO BE REMOVED BACK TO SOURCE.
6. CONTRACTOR TO DISCONNECT ERV UNIT FOR MECHANICAL CONTRACTORS REMOVAL. EXISTING CIRCUIT TO BE RETAINED/REWORKED FOR INSTALLATION OF NEW ERV UNIT.

1 ED2.2 ELECTRICAL ROOF POWER DEMOLITION PLAN
SCALE: 1/8"=1'-0"

0 2' 4' 8' 16'
SCALE: 1/8" = 1'-0"

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CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
ELECTRICAL ROOF POWER DEMOLITION PLAN

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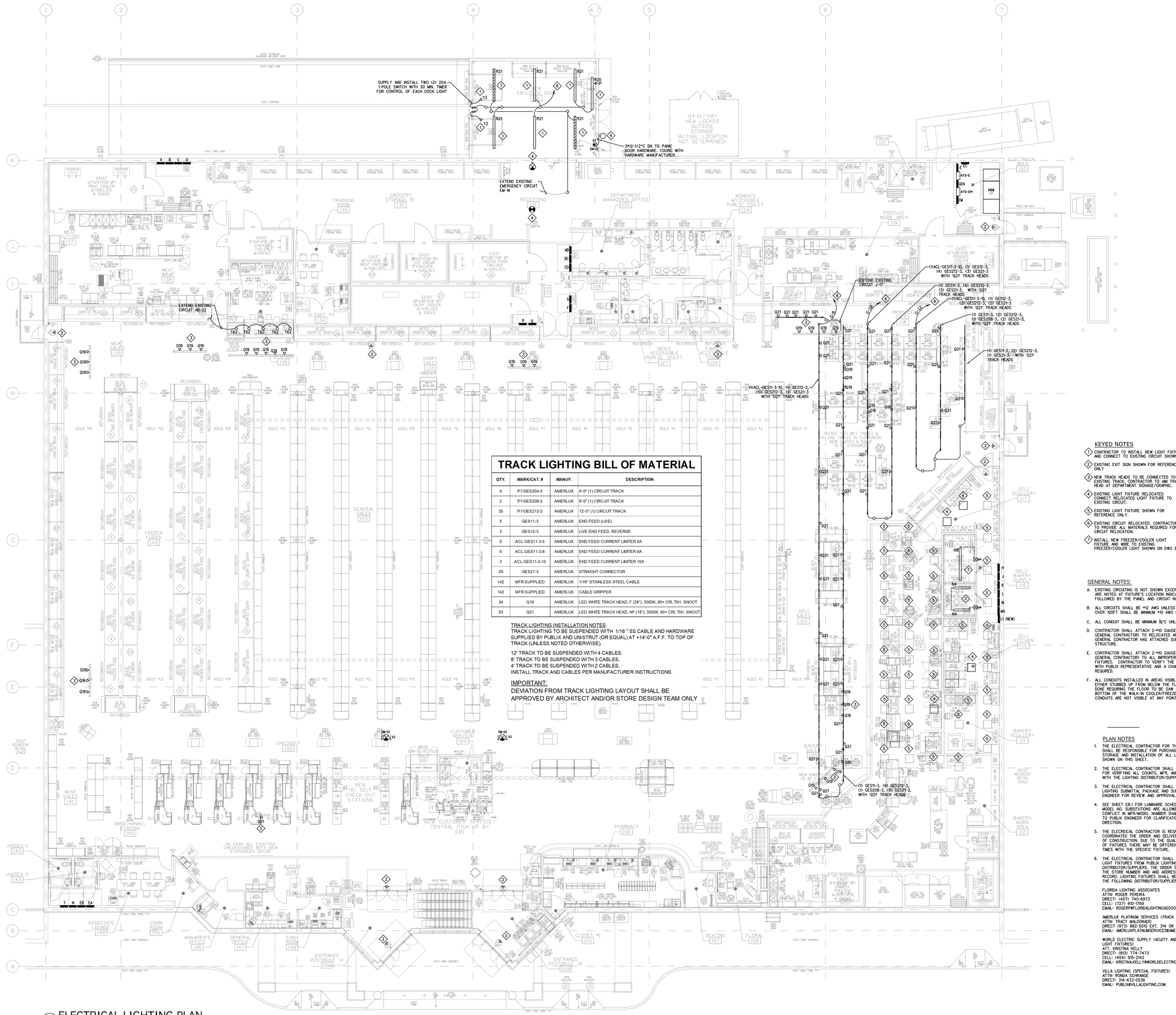
SUPPLY AND INSTALL TWO (2) 20A 1-POLE SWITCH WITH 30 MIN. TIMER FOR CONTROL OF EACH DOCK LIGHT
3#12-1/2"C DN TO PANIC DOOR HARDWARE. COORD WITH HARDWARE MANUFACTURER.
EXTEND EXISTING EMERGENCY CIRCUIT EM-16
EXTEND EXISTING CIRCUIT AB-22
EXTEND EXISTING CIRCUIT J-17
(14'X17'X8') NEW LOCKED OUTSIDE STORAGE (ACTUAL LOCATION NOT DETERMINED)
(11)ACL-GES11-3-10, (1) GES12-3, (4) GES212-3, (3) GES21-3 WITH 'Q27' TRACK HEADS
(1) GES11-3, (4) GES212-3, (3) GES21-3, WITH 'Q27' TRACK HEADS
(11)ACL-GES11-3-10, (1) GES12-3, (3)GES212-3, (2) GES21-3 WITH 'Q27' TRACK HEADS
(1) GES11-3, (2) GES212-3, (1) GES208-3, (1) GES21-3 WITH 'Q27' TRACK HEADS
(1) GES11-3, (2) GES212-3, (1) GES21-3, WITH 'Q27' TRACK HEADS
(1) GES11-3, (9) GES212-3, (1) GES208-3, (9) GES21-3, WITH 'Q27' TRACK HEADS
(11)ACL-GES11-3-10, (1) GES12-3, (10) GES212-3, (9) GES21-3 WITH 'Q27' TRACK HEADS
EXIST 12'X24'X10'-8") MEAT COOLER W/SHELVES & RACKS
EXIST 8'X16'X10'-8") CROSSOVER COOLER W/RACKS
EXIST 12'X12'X10'-8") MEAT FREEZER W/SHELVES
EXIST 18'X12'X10'-8") ICE CREAM FREEZER W/SHELVES
EXIST 10'X24'X10'-8") FROZEN FOOD FREEZER W/SHELVES
EXIST 10'X24'X10'-8") DAIRY COOLER W/ SHELVES & RACKS
EXIST 12'X28'X10'-8") PRODUCE COOLER W/RACKS
TRAINING ROOM 135
GROCERY STORAGE 'B' 132
RECEIVING 131
DEPARTMENT MANAGER'S OFFICE 130
WOMEN'S ACCESSIBLE PUBLIC TOILET 124
JANITOR 121
ELECTRICAL AREA 120
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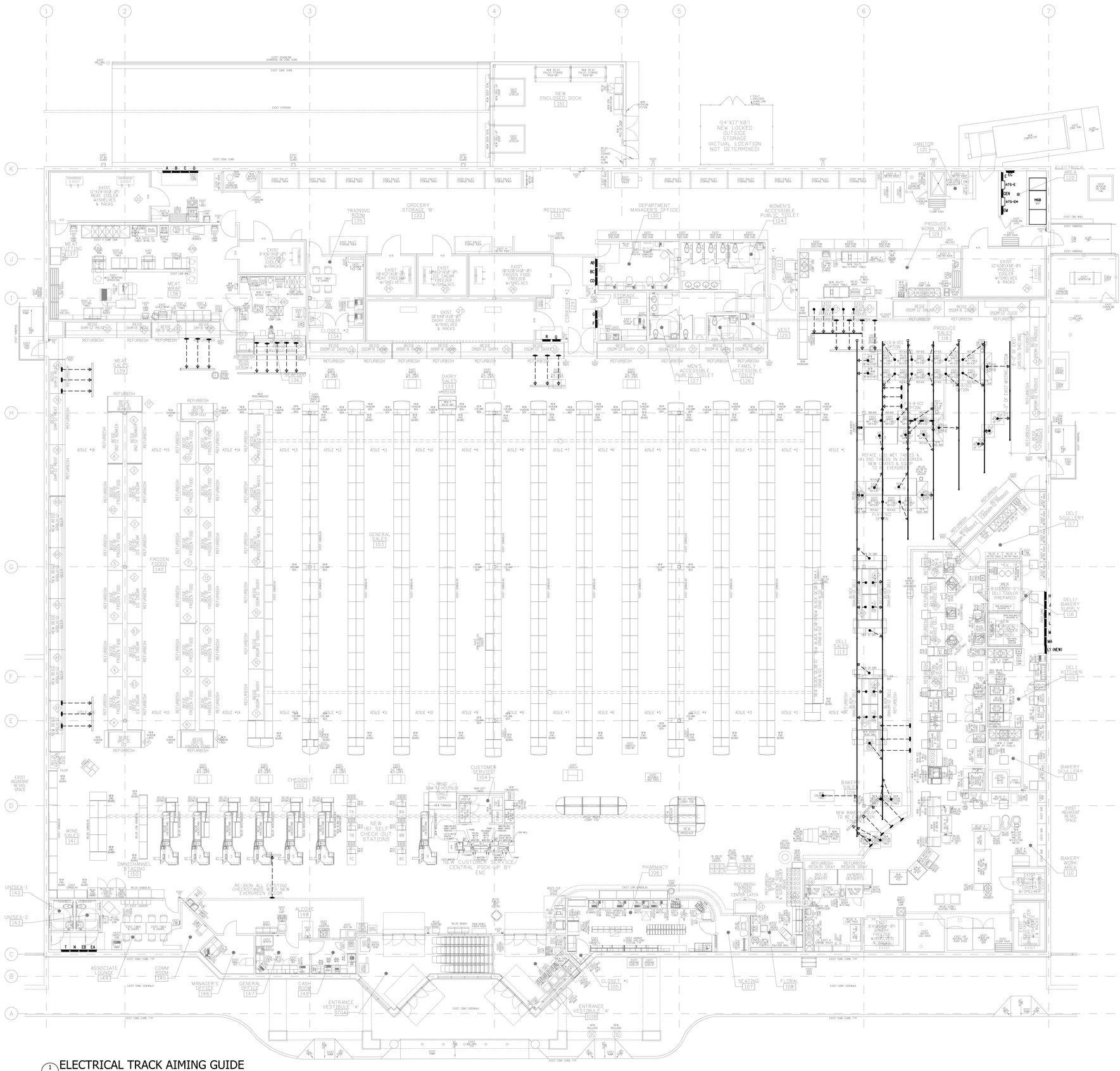
CHECKOUT 102
CUSTOMER SERVICE/ CENTRAL PICK-UP BY EMI
(6) SCLF CHECK-OUT STATIONS
WINE SALES 141
OMNICHANNEL STAGING 150
UNISEX-1 142
UNISEX-2 143
ASSOCIATE LOUNGE 144
COMM ROOM 145
MANAGER'S OFFICE 146
GENERAL OFFICE 147
CASH ROOM 149
ENTRANCE VESTIBULE 'A' 104A
ENTRANCE VESTIBULE 'A' 101B
PHARMACY 106
SEATING 107
FLORAL 108
CLOSET *1
ALCOVE 148
RE-SKIN ALL EXISTING CHECKSTANDS WITH NEW EVERGREEN DECOR
REFURBISH BESKIN GRAY
REFURBISH BESKIN GRAY HYBRID DESERTS
REFACE (E) MET TABLES & (14) END TABLES IN EVERGREEN. NEW SLATES & EDGE TO MATCH EVERGREEN
NEW FLR
NEW DBL-SIDED CENTER LATCH
NEW 30-42 PALLET SLIDE BACK DR
NEW 30-42 PALLET SLIDE BACK DR
NEW VESTIBULE ENCLOSURE DOOR
NEW 10'-0" MULTI PREP TABLE
NEW 20-0" MULTI PREP TABLE
NEW 8'-0" MULTI PREP TABLE
NEW 12'-0" MULTI PREP TABLE
NEW 16'-0" MULTI PREP TABLE
NEW 20'-0" MULTI PREP TABLE
NEW 24'-0" MULTI PREP TABLE
NEW 30'-0" MULTI PREP TABLE
NEW DBL-SIDED MULTI PREP TABLE
NEW 8'-0" MULTI PREP TABLE
NEW 10



1 ELECTRICAL TRACK AIMING GUIDE

E1.1a SCALE: 1/8"=1'-0"

0 2' 4' 8' 16'

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

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PROJECT NAME
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6500 BLUE LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
ELECTRICAL TRACK AIMING GUIDE

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 2310704
DATE 04/21/2022
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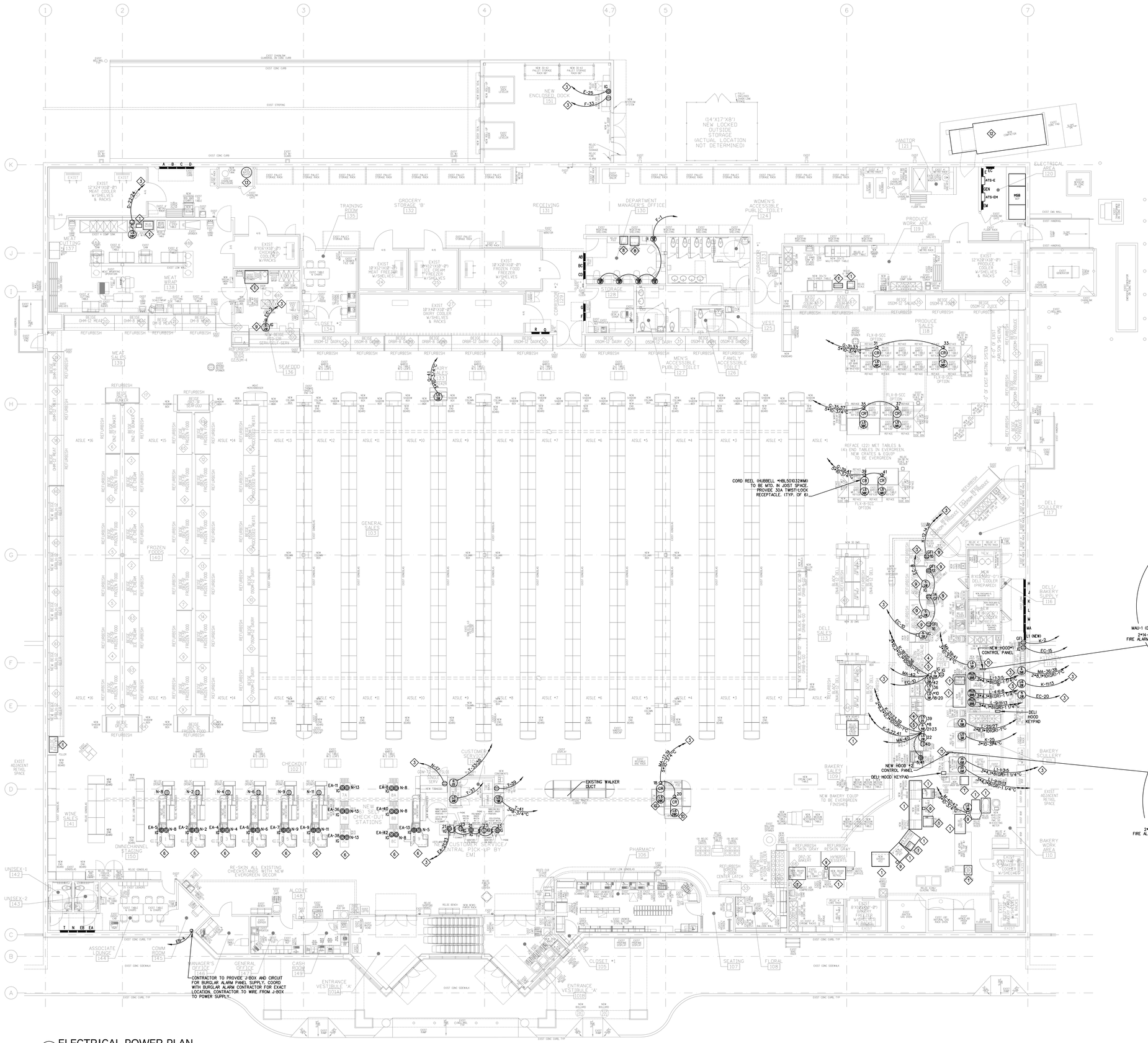

KEYED NOTES

1. CONNECT NEW/RELOCATED EQUIPMENT TO EXISTING RECEPTACLE.
2. EXISTING POWER POLES TO REMAIN.
3. EXISTING CIRCUIT RELOCATED. PROVIDE ALL REQUIRED WIRE, CONDUIT, FITTINGS, ETC. REQUIRED FOR RELOCATION.
4. FOR POWER POLE INSTALLATION REQUIREMENTS, REFER TO DWG., E8.1.
5. CONTRACTOR TO INSTALL NEW POWER POLE. INSTALL JUNCTION BOX AT TOP OF POWER POLE LOCATED ABOVE CEILING. COORDINATE WITH PUBLIX REPRESENTATIVE FOR LOCATION PRIOR TO ROUGH-IN.
6. CONNECT NEW CHECKSTAND TO EXISTING/RELOCATED CIRCUIT/RECEPTACLE. CONTRACTOR TO INSTALL WALKER DUCT INSERT AS REQUIRED FOR NEW CHECKSTAND INSTALLATION.
7. MOUNT RECEPTACLE TO BACK OF REFRIGERATED CASE, SEE DETAIL 2 DWG. E8.1
8. CONNECT EQUIPMENT TO EXISTING RECEPTACLES AFTER MILLWORK IS COMPLETE.
9. CONTRACTOR TO INSTALL NEW POWER POLE AND RELOCATE EXISTING RECEPTACLES AND CIRCUITS TO NEW POWER POLE. INSTALL JUNCTION BOX AT TOP OF POWER POLE LOCATED ABOVE CEILING. COORDINATE WITH PUBLIX REPRESENTATIVE FOR LOCATION PRIOR TO ROUGH-IN.
10. CONTRACTOR TO RELOCATE EXISTING CORD REEL AND CIRCUIT TO NEW EQUIPMENT LOCATION.
11. NEW HOOD CONTROL PANEL. SEE WIRING DIAGRAM DWG E2.2
12. CONTRACTOR TO CONNECT NEW COMPACTOR TO EXISTING POWER AND CONTROL CIRCUITS.
13. CONTRACTOR TO CONNECT NEW WATER HEATER TO EXISTING CIRCUIT.

GENERAL NOTES

A. ALL INSTALLED CIRCUITS REQUIRE AN EQUIPMENT GROUND CONDUCTOR REGARDLESS OF WIRE COUNT SHOWN ON DRAWING.

B. ISOLATED GROUND CIRCUITS ARE TO BE IN ADDITION TO EQUIPMENT GROUND CONDUCTOR AND SHALL BE CONNECTED TO AN ISOLATED GROUND BUS IN ITS RESPECTIVE PANEL.

C. DELI/BAKERY/SEAFOOD POWER POLES LOCATIONS MAY CHANGE DUE TO CASE LINE-UP CHANGES MADE BY OWNER. THE ELECTRICAL CONTRACTOR TO VERIFY EXACT ELECTRICAL POWER POLE LOCATIONS WITH PUBLIX REPRESENTATIVE PRIOR TO ROUGH-IN.

D. ELECTRICAL CONTRACTOR'S INSTALLATION TO MEET ALL APPLICABLE CODES AND THE VERSION OF THE NATIONAL ELECTRICAL CODE ADOPTED BY THE JURISDICTION HAVING AUTHORITY.

E. CONTRACTOR TO PROVIDE BREAKER HANDLE TIES FOR ALL CIRCUITS UTILIZING SHARED NEUTRAL TO COMPLY WITH NFPA 70 SECTION 210.4.

F. SHUNT TRIP AND LOCKOUT SWITCHES TO BE MOUNTED AT 66" A.F.F.. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH AUTHORITY HAVING JURISDICTION. PROVIDE SIGNAGE STATING EMERGENCY SHUTOFF.

G. ALL CONDUITS INSTALLED IN AREAS VISIBLE TO THE CUSTOMERS SHALL BE EITHER STUBBED UP FROM BELOW THE FLOOR WHEN OTHER WORK IS BEING DONE REQUIRING THE FLOOR TO BE SAW CUT, OR ROUTED ALONG THE BOTTOM OF THE WALK-IN COOLER/FREEZER EXTERIOR WALL 6" AFF SO CONDUITS ARE NOT VISIBLE AT ANY POINT TO THE CUSTOMER.

1 E2.1 ELECTRICAL POWER PLAN
SCALE: 1/8"=1'-0"
0 2" 4' 8' 16'
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PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
FORMERLY KNOWN AS
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
ELECTRICAL POWER PLAN

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

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E2.1

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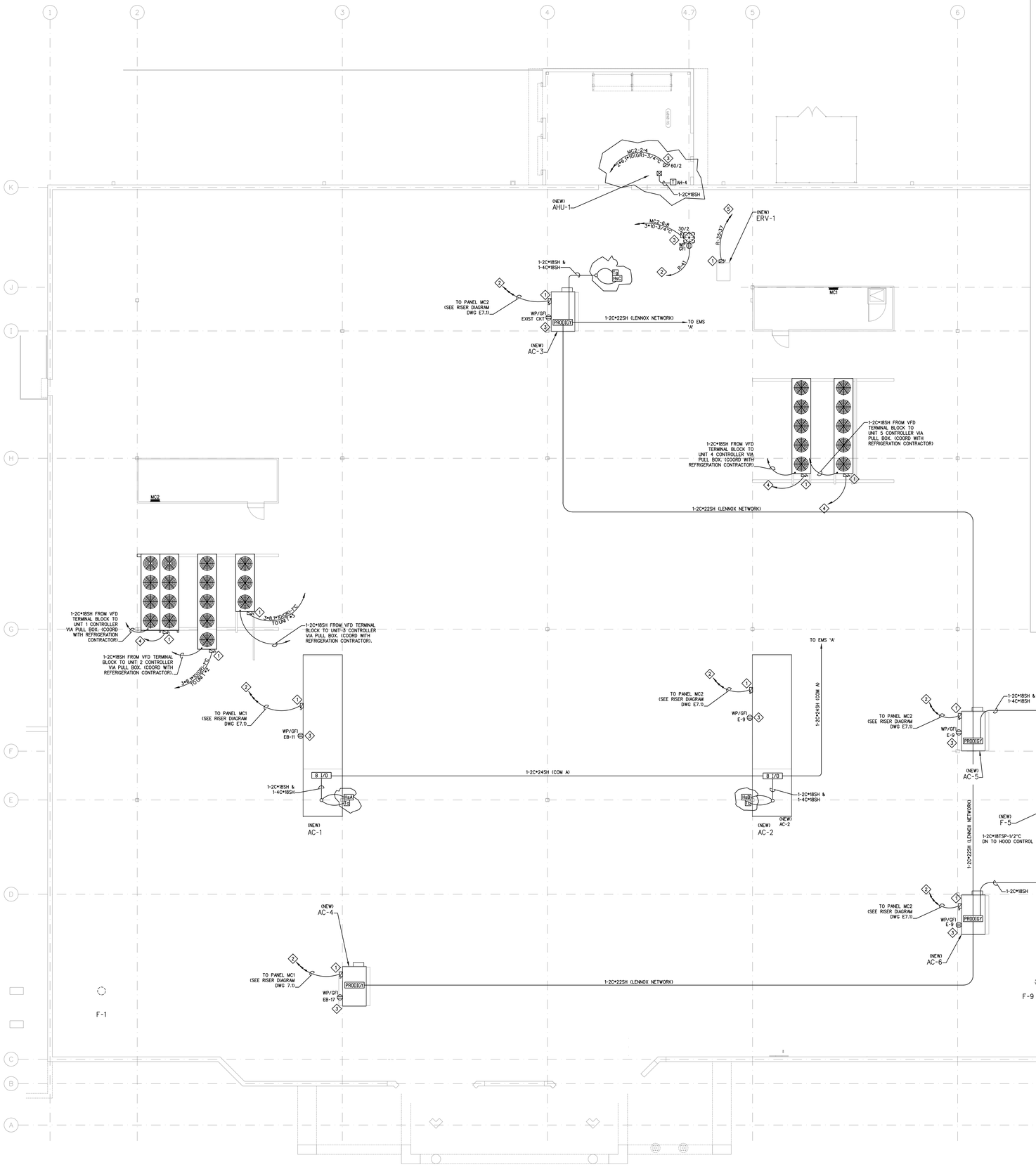
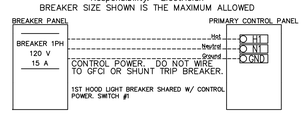


1 E2.2 ELECTRICAL ROOF POWER PLAN

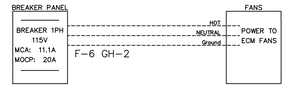
SCALE: 1/8"=1'-0"

SCALE: 0 2' 4' 8' 16' — 1/8" = 1'-0"

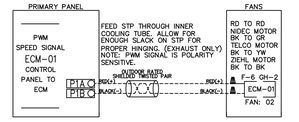
BREAKER PANEL TO PRIMARY CONTROL PANEL
Responsibility: Electrician
BREAKER SIZE SHOWN IS THE MAXIMUM ALLOWED



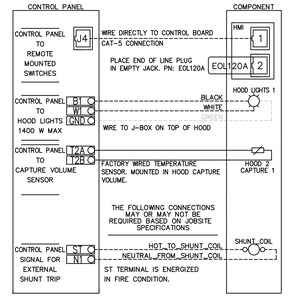
BREAKER PANEL TO FANS
Responsibility: Electrician



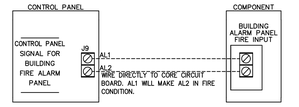
CONTROL PANEL TO FANS
Responsibility: Electrician



CONTROL PANEL TO ACCESSORY ITEMS
Responsibility: Electrician

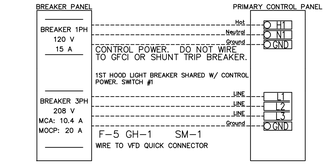


CONTROL PANEL TO FIRE SYSTEM
Responsibility: ALARM CONTRACTOR



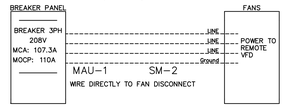
3 E2.2 GREASE HOOD #2 WIRING DIAGRAM

NTS

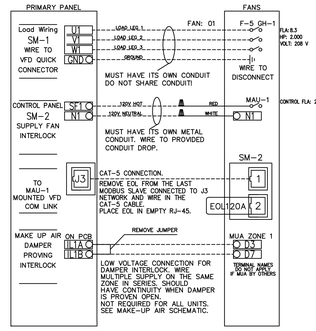


BREAKER PANEL TO PRIMARY CONTROL PANEL
Responsibility: Electrician
BREAKER SIZE SHOWN IS THE MAXIMUM ALLOWED

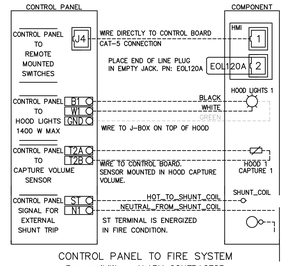
BREAKER PANEL TO FANS
Responsibility: Electrician



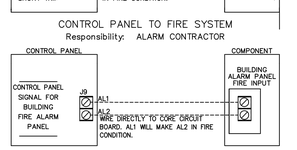
CONTROL PANEL TO FANS
Responsibility: Electrician



CONTROL PANEL TO ACCESSORY ITEMS
Responsibility: Electrician



CONTROL PANEL TO FIRE SYSTEM
Responsibility: ALARM CONTRACTOR



2 E2.2 GREASE HOOD #1 WIRING DIAGRAM

NTS

KEYED NOTES

1. DISCONNECT SUPPLIED BY EQUIPMENT MANUFACTURER.
2. EXISTING CIRCUIT RELOCATED.
3. CONTRACTOR TO REMOUNT RECEPTACLE AND CIRCUIT TO AC UNIT AFTER UNIT INSTALLATION. CONTRACTOR TO PROVIDE AND INSTALL ALL MATERIALS REQUIRED FOR RECEPTACLE INSTALLATION.
4. CONTRACTOR TO REUSE EXISTING CONDUCTORS AND CONDUIT FOR INSTALLATION OF NEW CONDENSING UNIT.
5. CONTRACTOR TO REUSE EXISTING CONDUCTORS AND CONDUIT FOR INSTALLATION OF NEW ERV UNIT.

GENERAL NOTES

1. CONTRACTOR SHALL MAKE PRELIMINARY SITE VISIT AND VERIFY THE MAGNITUDE AND SCOPE OF THE PROJECT BEFORE BIDDING.
2. CONTRACTOR SHALL DISCONNECT AND REMOVE ALL ELECTRICAL EQUIPMENT, DEVICES, PANELBOARDS, AND LIGHTING FIXTURES AS INDICATED.
3. MANY EXISTING CIRCUIT/HOMERUNS SHALL BE REROUTED TO BREAKERS AND/OR PANELS. CONTRACTOR SHALL VERIFY CIRCUITING. CONTRACTOR TO VERIFY THE EXTENT OF SCOPE FOR THIS WORK WITH PUBLIX REPRESENTATIVE AND A CHANGE ORDER WILL BE ISSUED AS REQUIRED FOR THIS WORK.
4. ALL EQUIPMENT REMOVED SHALL NOT BE REUSED WITHOUT WRITTEN APPROVAL FROM PUBLIX REPRESENTATIVE.
5. ALL EQUIPMENT REMOVED SHALL BE TURNED OVER TO PUBLIX REPRESENTATIVE AND SHALL REMAIN PROPERTY OF THE OWNER.
6. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO IDENTIFY AND VERIFY ALL CIRCUITS ON SITE AND TO MAKE CHANGES ACCORDING TO THE ARCHITECTURAL DEMOLITION SCOPE OF WORK.

NOTE:
USE 90 DEGREE STEEL LIQUID TIGHT FITTINGS ON ALL ROOF TOP PENETRATIONS.

NOTE:
COORDINATE ALL ELECTRICAL CONNECTIONS TO MECHANICAL CENTERS WITH MANUFACTURER REPRESENTATIVES PRIOR TO ROUGH-IN

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LICENSE #63643
EXPIRATION DATE: 2/28/2023

CLIENT NAME: Publix. SUPER MARKETS
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LAKELAND, FL 33811-3311

PROJECT NAME: PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
PUBLIX AT CRYSTAL SPRINGS
NEWCASTLE TRAIL & US HIGHWAY 19
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE: ELECTRICAL ROOF POWER PLAN

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	DATE	DRAWN	CHECKED
2210784	04/21/2022	ET	MS

E2.2

DECOR SCHEME: EVERGREEN

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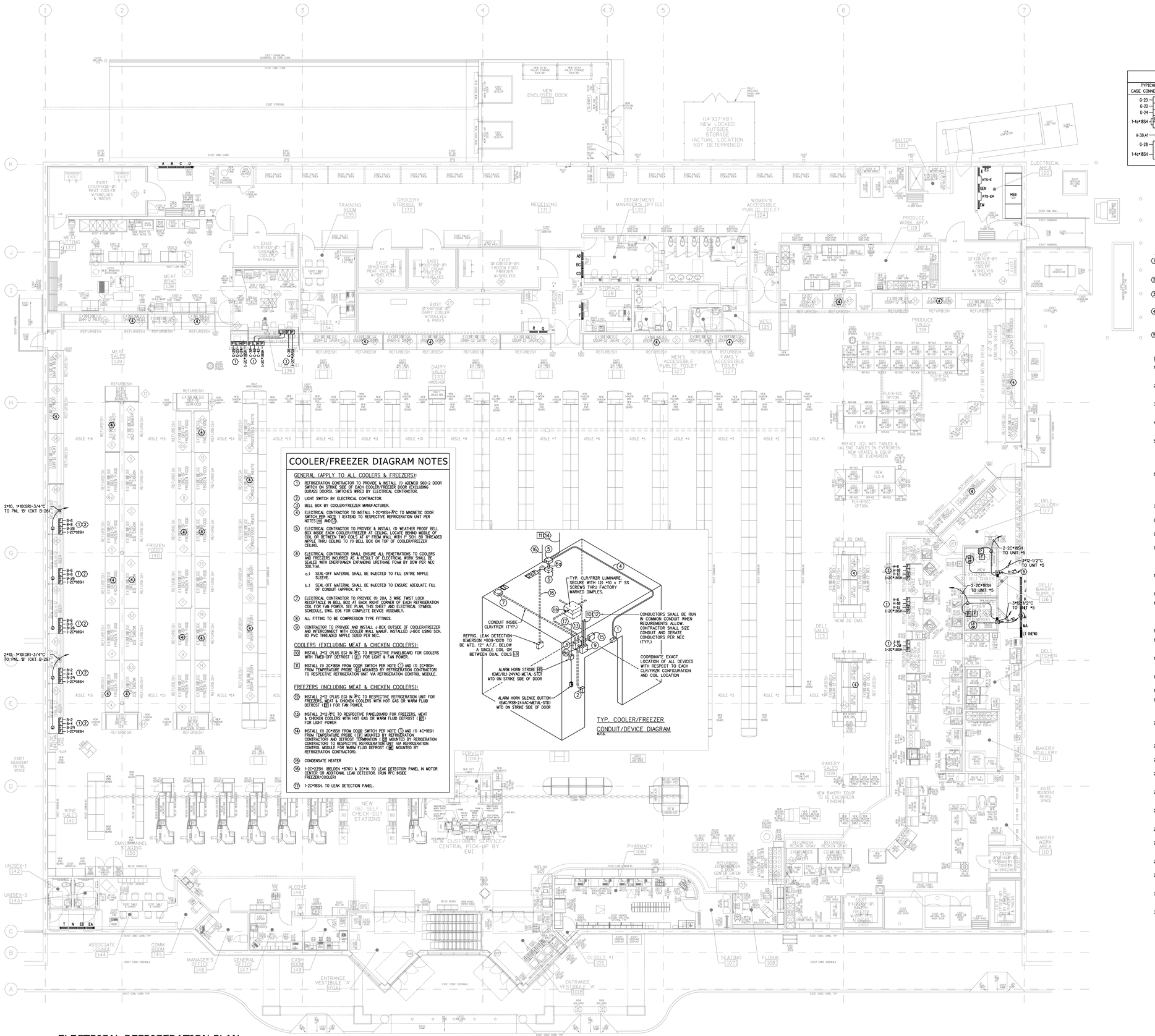

TYP. COOLER/FREEZER CONDUIT/DEVICE DIAGRAM
N.T.S.

TYPICAL CASE SYMBOLOGY

TYPICAL CASE CONNECTION		DESCRIPTION
G-20	F	INDICATES CASE FAN TO BE FED FROM PANEL G CKT. 20
G-22	L	INDICATES CASE LIGHTS TO BE FED FROM PANEL G CKT. 22
G-24	H	INDICATES CASE HEATERS TO BE FED FROM PANEL G CKT. 24
1-4C*18SH-J	DT / P	(R/G) INDICATES MULTI-CONDUCTOR CONTROL CABLE FOR DEFROST (B/W) TERMINATION (DT) AND PROBE (P) FROM MOTOR CENTER.
H-39,41	D	ELECTRIC DEFROST
G-28	C, C, S	INDICATES CASE CONTROL BOARD FED FROM PANEL G CKT. 28
1-4C*18SH	S	INDICATES MULTI-CONDUCTOR CONTROL CABLE

KEYED NOTES

1. REWORK EXISTING CIRCUIT(S) FOR INSTALLATION OF NEW REFRIGERATED CASE. CONTRACTOR SHALL PROVIDE ALL REQUIRED MATERIALS NECESSARY FOR NEW CASE INSTALLATION.
2. CONTRACTOR SHALL INSTALL NEW CIRCUIT AND ALL REQUIRED MATERIALS FOR INSTALLATION OF NEW REFRIGERATED CASE.
3. CONTRACTOR TO MOUNT LEAK DETECTION ALARM HORN SILENCE BUTTON (EMC/RSB-24VAC-METAL-STD). MOUNTED ON STRIKE SIDE OF DOOR AT 54" A.F.F. SEE ALARM WIRING DIAGRAM ON DWG E3.1.
4. CONTRACTOR TO VERIFY TEMPERATURE PROBES WERE INSTALLED IN LAST REMODEL. CONTRACTOR TO INSTALL NEW TEMPERATURE PROBE AND 2C*18SH PROBE CABLE FROM CASE TO APPLICABLE UNIT AND TERMINATE AT UNIT CONTROLLER AS NECESSARY.
5. REWORK EXISTING CIRCUITS FOR NEW COOLER/FREEZER INSTALLATION.

REFRIGERATION NOTES

1. ALL BRANCH CIRCUITS, PROBES, DEFROST TERMINATOR CONDUCTORS ARE TO BE RUN IN THE TOE RACE WAY OF SYSTEM 45, 46, 119, 150, 151, & 201.
2. ALL BRANCH CIRCUITS, PROBES AND DEFROST TERMINATION OF ALL REMAINING CASES TO BE CONNECTED TO THE ELECTRICAL JUNCTION BOX OF THE CASE.
3. ALL BRANCH CIRCUITS, PROBES AND DEFROST TERMINATION FOR OR2 AND OS0 CASES ARE TO BE CONNECTED TO THE CONDUIT SYSTEM ON TOP OF CASES.
4. ALL WALK-IN FREEZERS TO HAVE SOLENOID VALVE INSTALLED BY REFRIGERATION CONTRACTOR AND WIRED BY ELECTRICAL CONTRACTOR.
5. ALL WALK-IN FREEZERS AND COOLERS TO HAVE A DOOR SWITCH (◉) TO SHUT DOWN COIL. SWITCHES ARE TO BE FURNISHED AND INSTALLED BY REFRIGERATION CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. COORDINATE WITH PUBLIX'S REPRESENTATIVE FOR WIRING, ALSO SEE DETAIL ON THIS DRAWING.
6. PROVIDE 1-2C*18SH FROM EACH PROBE AND 1-2C*18SH FROM EACH DEFROST TERMINATION TERMINAL IN CASE (SHOWN AS ◉ AND THIS SHEET) TO RESPECTIVE REFRIG. UNIT CONTROL CABINET. THESE CONDUCTORS CAN BE GROUPED TOGETHER. DO NOT CUT OR SPLICE CONDUCTORS, CLEARLY IDENTIFY BOTH ENDS OF CONDUCTORS, BY SYSTEM NUMBERS.
7. ALL APPROVED SHIELDED CABLE SUPPLIED AND INSTALLED BY CONTRACTOR.
8. ALL CASES SHALL HAVE CONDUCTORS IN A FLEXIBLE CONDUIT FROM CASE TO CONDUIT JB ON TOP OF THE CASE.
9. ON ALL MULTI-CASE SYSTEMS THE DEFROST TERMINATION (DT) ARE TO BE WIRED IN SERIES USING 2C*18SH R/G CONDUCTORS.
10. IN ALL WALK-IN COOLERS AND FREEZERS PROVIDE A HUBBELL RECEPTACLE, MALE PLUG, BOOT, WEATHERPROOF COVER PLATE AND CORD FOR EACH COIL AS SHOWN ON THE DRAWINGS. SEE SYMBOL SCHEDULE ON DWG. E8.1 FOR COMPLETE DEVICE ASSEMBLY.
11. ALL WIRING TO REFRIGERATED CASES, WALK-IN COOLER, AND FREEZERS SHALL BE TYPE THHN STRANDED COPPER: SIZES AS INDICATED.
12. VOID
13. EXTEND ALL TEMP. PROBES ON CPC TO J-BOX ON TOP OF COOLERS AND FREEZERS INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR. ELECTRICIAN SEE DETAIL (THIS SHEET) FOR LOCATION OF J-BOX, BEHIND COILS TOP SIDE OF COOLER OR FREEZER.
14. NOT USED
15. CONTRACTOR TO INSTALL ONE (1) #12 (GREEN) CONDUCTOR TO EACH LINE UP OF CASES, FREEZERS AND COOLER CASES (FOR BONDING).
16. CONTRACTOR TO MAKE ALL FLEX. CONDUIT TO THE REFRIGERATION EQUIPMENT WITH THE SHORTEST APPROPRIATE LENGTH OF FLEXIBLE CONNECTIONS.
17. PROVIDE KEY TYPE SWITCH TO CONTROL FANS AND SOLENOIDS IN UNIT COOLERS (UC).
18. NOT USED.
19. ELEC. CONTRACTOR TO CLEARLY LABEL EACH CASE SHOWING THE PANELBOARD AND CIRCUIT NUMBER SERVING THE CASE. LABELS WILL BE SUPPLIED BY HILL- MARKED AND INSTALLED BY CONTRACTOR.
20. PENETRATIONS THROUGH COOLER WALLS OR WALLS AND CEILING SHALL BE SLEEVED WITH CONDUITS AND PROPERLY BUSHED. ALL RACEWAYS AND SLEEVES SHALL BE FILLED WITH AN APPROVED MATERIAL PER NEC 300.7(A).
21. ALL PENETRATIONS THROUGH FIRE RATED PARTITIONS TO BE COMPLETED IN ACCORDANCE WITH U.L. APPROVED INSTALLATIONS.
22. ALL LOW VOLTAGE WIRING FROM THE WALK-IN COOLERS AND FREEZERS MUST BE SLEEVED IN CONDUIT UP TO BAR JOIST.
23. ALL MULTIPLE CONDUCTORS IN CONDUIT HAVE BEEN DERATED AS PER N.E.C. TABLE 310-15(b)(2)(a), ANY DEVIATION BY CONTRACTOR MUST REMAIN IN ACCORDANCE WITH THIS TABLE.
24. ELECTRICAL CONTRACTOR TO INCLUDE EQUIPMENT GROUND CONDUCTOR IN ALL CONDUITS CONTAINING POWER CIRCUITS (ie., FAN, LIGHT, HEAT CIRCUITS).
25. INSTALL EXPOSED CABLES PARALLEL AND PERPENDICULAR TO SURFACES OR EXPOSED STRUCTURAL MEMBERS AND FOLLOW SURFACE CONTOURS WHERE POSSIBLE.
26. MAKE SPLICES, TAPS, AND TERMINATION ONLY AT INDICATED OUTLETS, TERMINALS AND STRIPS.
27. SECURE AND SUPPORT EXPOSED CABLES AT INTERVALS NOT EXCEEDING 30" AND NOT MORE THAN 6" FROM CABINETS, BOXES, FITTINGS AND TERMINALS.
28. CONTRACTOR SHALL FREE WIRE LOW VOLTAGE CABLES ONLY UPON COMPLETION OF PAINTING IN THE INSTALLATION AREA.
29. ELECTRICAL CONTRACTOR SHALL LABEL EACH END OF ALL LOW VOLTAGE CONDUCTORS INSTALLED BY ELECTRICAL CONTRACTOR INCLUDING CONDUCTORS TERMINATED BY OTHERS.
30. ALL CONTROL CONDUCTORS RUN ON TOP OF CASES, COOLERS AND FREEZERS SHALL BE IN CONDUIT (FLEX. CONDUIT TO BE 24" MAX.).
31. NO LOW VOLTAGE CONDUCTORS, CABLES, WIRES, ETC. PERMITTED TO BE INSTALLED BETWEEN TOP OF JOIST AND ROOF DECK.

COOLER/FREEZER DIAGRAM NOTES

GENERAL (APPLY TO ALL COOLERS & FREEZERS):

1. REFRIGERATION CONTRACTOR TO PROVIDE & INSTALL (1) ADEMCO 960-2 DOOR SWITCH ON STRIKE SIDE OF EACH COOLER/FREEZER DOOR (EXCLUDING DURASS DOORS). SWITCHES WIRED BY ELECTRICAL CONTRACTOR.
2. LIGHT SWITCH BY ELECTRICAL CONTRACTOR.
3. BELL BOX BY COOLER/FREEZER MANUFACTURER.
4. ELECTRICAL CONTRACTOR TO INSTALL 1-2C*18SH-JPC TO MAGNETIC DOOR SWITCH PER NOTE 1 (EXTEND TO RESPECTIVE REFRIGERATION UNIT PER NOTES [D] AND [S]).
5. ELECTRICAL CONTRACTOR TO PROVIDE & INSTALL (1) WEATHER PROOF BELL BOX INSIDE EACH COOLER/FREEZER AT CEILING. LOCATE BEHIND MIDDLE OF COIL OR BETWEEN TWO COILS AT 6" FROM WALL WITH 1" SCH. 80 THREADED NIPPLE THRU CEILING TO (1) BELL BOX ON TOP OF COOLER/FREEZER CEILING.
6. ELECTRICAL CONTRACTOR SHALL ENSURE ALL PENETRATIONS TO COOLERS AND FREEZERS INCURRED AS A RESULT OF ELECTRICAL WORK SHALL BE SEALED WITH ENERFOAM24 EXPANDING URETHANE FOAM BY DOW PER NEC 300.7(A).
   a.) SEAL-OFF MATERIAL SHALL BE INJECTED TO FILL ENTIRE NIPPLE SLEEVE.
   b.) SEAL-OFF MATERIAL SHALL BE INJECTED TO ENSURE ADEQUATE FILL OF CONDUIT (APPROX. 6"±).
7. ELECTRICAL CONTRACTOR TO PROVIDE (1) 20A, 3 WIRE TWIST LOCK RECEPTACLE IN BELL BOX AT BACK RIGHT CORNER OF EACH REFRIGERATION COIL FOR FAN POWER. SEE PLAN, THIS SHEET AND ELECTRICAL SYMBOL SCHEDULE, DWG. E08 FOR COMPLETE DEVICE ASSEMBLY.
8. ALL FITTING TO BE COMPRESSION TYPE FITTINGS.
9. CONTRACTOR TO PROVIDE AND INSTALL J-BOX OUTSIDE OF COOLER/FREEZER AND INTERCONNECT WITH COOLER WALL MANUF. INSTALLED J-BOX USING SCH. 80 PVC THREADED NIPPLE SIZED PER NEC.

COOLERS (EXCLUDING MEAT & CHICKEN COOLERS):

10. INSTALL 3*12 (PLUS EG) IN ¾"C TO RESPECTIVE PANELBOARD FOR COOLERS WITH TIMED-OFF DEFROST (T) FOR LIGHT & FAN POWER.
11. INSTALL (1) 2C*18SH FROM DOOR SWITCH PER NOTE 1 AND (1) 2C*18SH FROM TEMPERATURE PROBE (P) MOUNTED BY REFRIGERATION CONTRACTOR) AND DEFROST TERMINATION (DT) MOUNTED BY REFRIGERATION CONTRACTOR) TO RESPECTIVE REFRIGERATION UNIT VIA REFRIGERATION CONTROL MODULE.

FREEZERS (INCLUDING MEAT & CHICKEN COOLERS):

12. INSTALL 2*12 (PLUS EG) IN ¾"C TO RESPECTIVE REFRIGERATION UNIT FOR FREEZERS, MEAT & CHICKEN COOLERS WITH HOT GAS OR WARM FLUID DEFROST (T) FOR FAN POWER.
13. INSTALL 3*12 ¾"C TO RESPECTIVE PANELBOARD FOR FREEZERS, MEAT & CHICKEN COOLERS WITH HOT GAS OR WARM FLUID DEFROST (T) FOR LIGHT POWER
14. INSTALL (1) 2C*18SH FROM DOOR SWITCH PER NOTE 1 AND (1) 4C*18SH FROM TEMPERATURE PROBE (P) MOUNTED BY REFRIGERATION CONTRACTOR) AND DEFROST TERMINATION (DT) MOUNTED BY REFRIGERATION CONTRACTOR) TO RESPECTIVE REFRIGERATION UNIT VIA REFRIGERATION CONTROL MODULE FOR WARM FLUID DEFROST (H) MOUNTED BY REFRIGERATION CONTRACTOR).
15. CONDENSATE HEATER
16. 1-2C*22SH (BELDEN *8760) & 2C*18 TO LEAK DETECTION PANEL IN MOTOR CENTER OR ADDITIONAL LEAK DETECTOR IRON ¾"C INSIDE FREEZER/COOLER)
17. 1-2C*18SH. TO LEAK DETECTION PANEL.

1 E3.1 ELECTRICAL REFRIGERATION PLAN
SCALE: 1/8"=1'-0"

0 2' 4' 8' 16'
SCALE: 1/8" = 1'-0"

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LICENSE #63643,
EXPIRATION DATE: 2/28/2023

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PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
(FORMERLY PUBLIX AT LAKE HUNTER)
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
ELECTRICAL REFRIGERATION PLAN

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	DATE	DRAWN	CHECKED
2210704	04/21/2022	BT	RKS

E3.1

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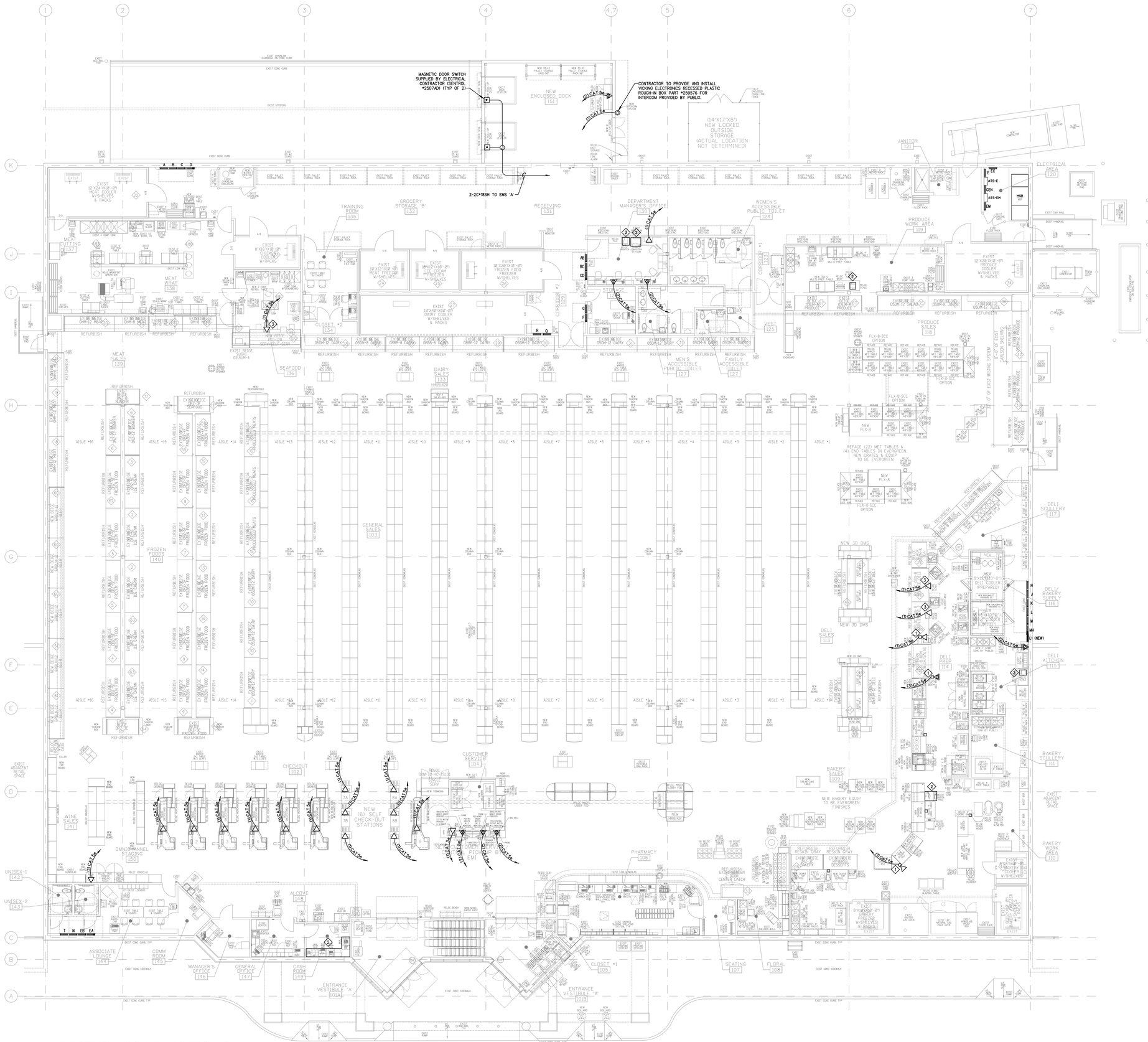

TELECOMM LEGEND

- TELEPHONE ONLY
- TELEPHONE ONLY
- TELEPHONE ONLY
- TELEPHONE ONLY
- TELEPHONE W/STAINLESS STEEL COVER PLATE
- 1 PORT DATA OUTLET
- 2 PORT DATA OUTLET
- 3 PORT DATA OUTLET
- 4 PORT DATA OUTLET
- 6 PORT DATA OUTLET
- 1 PORT VOICE AND DATA COMBINATION OUTLET
- 2 PORT VOICE AND DATA COMBINATION OUTLET
- 3 PORT VOICE AND DATA COMBINATION OUTLET
- 4 PORT VOICE AND DATA COMBINATION OUTLET
- 6 PORT VOICE AND DATA COMBINATION OUTLET

GENERAL INSTALLATION NOTES

1. ALL OUTLET BOXES SHOWN ON THIS PLAN SHALL HAVE A ¾" CONDUIT STUB UP WITH PULL STRING AND BUSHINGS TO THE ACCESSIBLE CEILING OR TO THE JOIST SPACE.
2. WHERE DATA OUTLET AND PHONE OUTLET ARE COMBINED PROVIDE ¾"C STUB UP WITH PULL STRING AND BUSHINGS.
3. ALL CABLES PENETRATIONS THROUGH WALLS OR CEILINGS SHALL BE SLEEVED WITH CONDUIT WITH BUSHINGS ON BOTH ENDS.
4. ALL EMPTY CONDUITS SHALL HAVE A PULL STRING.
5. EXPOSED CABLES SHALL BE INSTALLED PARALLEL AND PERPENDICULAR TO SURFACES OR EXPOSED MEMBERS AND FOLLOW SURFACE CONTOUR WHERE POSSIBLE. ANY CABLE NOT INSTALLED ALONG THE CONTOURS OF THE STRUCTURE SHALL BE ENCASED IN CONDUIT WITH BUSHINGS AND PROPERLY SUPPORTED PER CODE.
6. CABLES SHALL BE SECURED AND SUPPORTED AT INTERVALS NOT EXCEEDING 30" AND NOT MORE THAN 6" FROM CABINETS, BOXES, FITTINGS AND TERMINATIONS.
7. CONTRACTOR SHALL FREEWIRE LOW VOLTAGE CABLES ONLY UPON COMPLETION OF PAINTING IN THE INSTALLATION AREA.
8. ALL DATA CABLES ARE TO BE ROUTED TO NEAREST COMM CABINET.
9. ALL TELEPHONE CABLES ARE TO BE ROUTED TO THE TELEPHONE BOARD.

KEYED NOTES

1. MOUNT DATA OUTLET TO NEW/RELOCATED POWER POLE.
2. CONNECT RELOCATED EQUIPMENT TO EXISTING DATA OUTLET.
3. MOUNT DATA OUTLET TO REAR OF REFRIGERATED CASE

1 / E4.1 ELECTRICAL COMMUNICATION PLAN

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0 2' 4' 8' 16'

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

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LICENSE #63643
EXPIRATION DATE: 2/28/2023

THE CONCEPTS AND DESIGNS SHOWN IN THESE PLANS, INCLUDING BUT NOT LIMITED TO, THE ARRANGEMENT OF ROOMS, THE DISPOSITION OF FORMS, AXES AND PROPORTIONS, AND THE CHOICE AND ARRANGEMENT OF SPACES AND FEATURES, ARE THE EXCLUSIVE PROPERTY OF PUBLIX SUPER MARKETS, INC. AND MAY NOT BE USED IN WHOLE OR IN PART FOR ANY PROJECT OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY HAVE BEEN PREPARED BY OR FOR PUBLIX SUPER MARKETS, INC. ANY REPRODUCTION OF THESE PLANS, INCLUDING BUT NOT LIMITED TO, THE CONCEPTS AND DESIGNS SHOWN IN THESE PLANS, INCLUDING BUT NOT LIMITED TO, THE ARRANGEMENT OF ROOMS, THE DISPOSITION OF FORMS, AXES AND PROPORTIONS, AND THE CHOICE AND ARRANGEMENT OF SPACES AND FEATURES, ARE THE EXCLUSIVE PROPERTY OF PUBLIX SUPER MARKETS, INC. AND MAY NOT BE USED IN WHOLE OR IN PART FOR ANY PROJECT OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY HAVE BEEN PREPARED BY OR FOR PUBLIX SUPER MARKETS, INC. ANY REPRODUCTION OF THESE PLANS, INCLUDING BUT NOT LIMITED TO, THE CONCEPTS AND DESIGNS SHOWN IN THESE PLANS, INCLUDING BUT NOT LIMITED TO, THE ARRANGEMENT OF ROOMS, THE DISPOSITION OF FORMS, AXES AND PROPORTIONS, AND THE CHOICE AND ARRANGEMENT OF SPACES AND FEATURES, ARE THE EXCLUSIVE PROPERTY OF PUBLIX SUPER MARKETS, INC. AND MAY NOT BE USED IN WHOLE OR IN PART FOR ANY PROJECT OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY HAVE BEEN PREPARED BY OR FOR PUBLIX SUPER MARKETS, INC. ANY REPRODUCTION OF THESE PLANS,

CLIENT NAME
Publix.
SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
ROUTE 19 & LAKE LILLIAN
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
ELECTRICAL COMMUNICATION PLAN

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	221094
DATE	04/21/2022
DRAWN	ET
CHECKED	MG

E4.1

DECOR SCHEME: EVERGREEN

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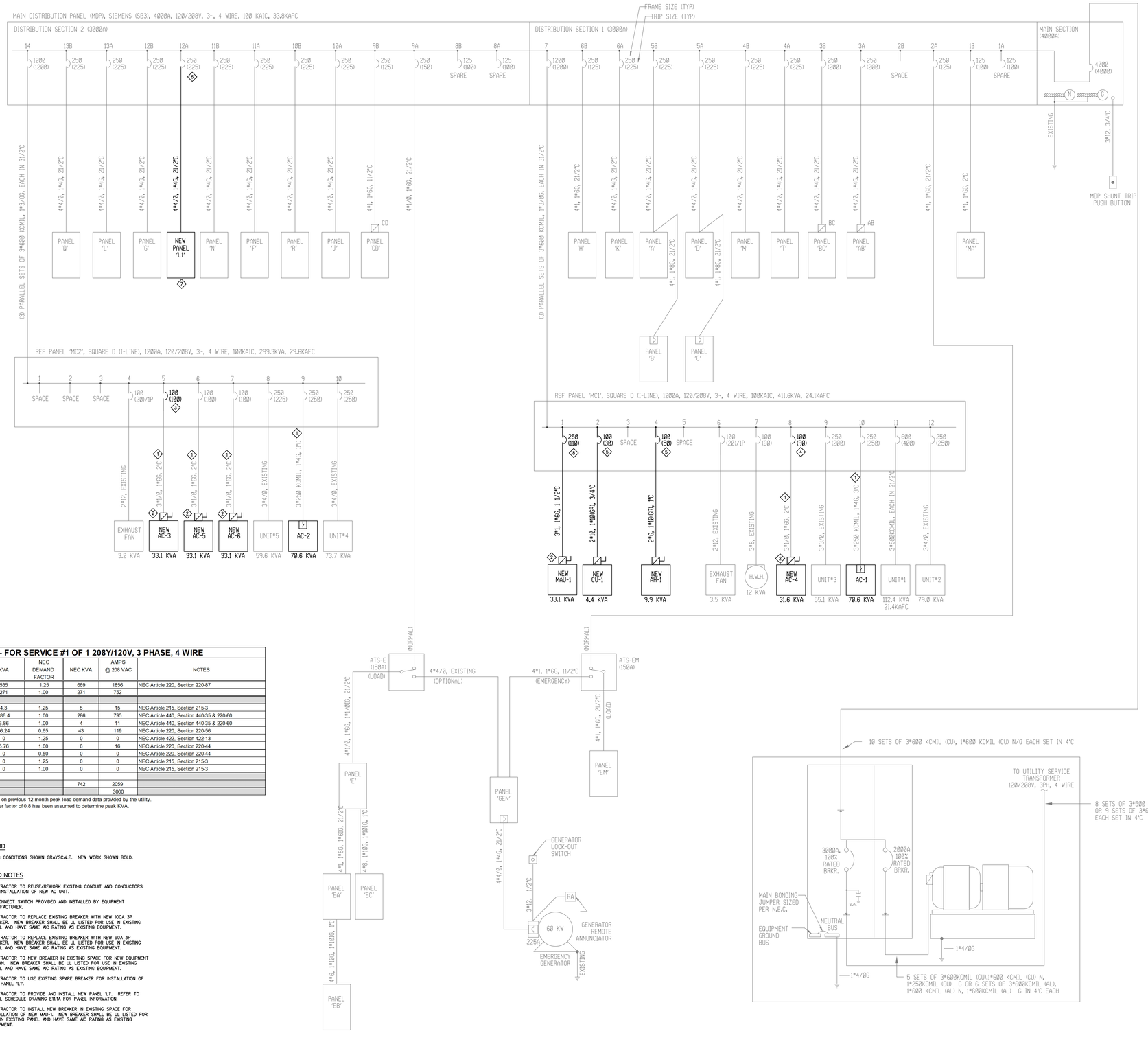

LOAD ANALYSIS - FOR SERVICE #1 OF 1 208Y/120V, 3 PHASE, 4 WIRE					
LOAD	KVA	NEC DEMAND FACTOR	NEC KVA	AMPS @ 208 VAC	NOTES
EXISTING PEAK LOAD*	535	1.25	669	1856	NEC Article 220, Section 220-87
DELETED LOAD	271	1.00	271	752	
ADDED LOAD					
LIGHTING - Continuous	4.3	1.25	5	15	NEC Article 215, Section 215-3
HVAC EQUIPMENT	286.4	1.00	286	795	NEC Article 440, Section 440-35 & 220-60
PRODUCT REFRIGERATION	3.86	1.00	4	11	NEC Article 440, Section 440-35 & 220-60
KITCHEN EQUIPMENT	66.24	0.65	43	119	NEC Article 220, Section 220-56
WATER HEATERS	0	1.25	0	0	NEC Article 422, Section 422-13
RECEPTACLES - 1ST 10 KVA	5.76	1.00	6	16	NEC Article 220, Section 220-44
RECEPTACLES -REMAINING	0	0.50	0	0	NEC Article 220, Section 220-44
OTHER - Continuous	0	1.25	0	0	NEC Article 215, Section 215-3
OTHER - Non-Continuous	0	1.00	0	0	NEC Article 215, Section 215-3.
TOTAL LOAD			742	2059	
SERVICE EQUIP. RATING - AMPS				3000	

PEAK DEMAND = 428KW
POWER FACTOR = 0.8
PEAK DEMAND = 428/0.8 = 535 KVA

*Based on previous 12 month peak load demand data provided by the utility.
A power factor of 0.8 has been assumed to determine peak KVA.

LEGEND

EXISTING CONDITIONS SHOWN GRAYSCALE. NEW WORK SHOWN BOLD.

KEYED NOTES

1. CONTRACTOR TO REUSE/REWORK EXISTING CONDUIT AND CONDUCTORS FOR INSTALLATION OF NEW AC UNIT.
2. DISCONNECT SWITCH PROVIDED AND INSTALLED BY EQUIPMENT MANUFACTURER.
3. CONTRACTOR TO REPLACE EXISTING BREAKER WITH NEW 100A 3P BREAKER. NEW BREAKER SHALL BE UL LISTED FOR USE IN EXISTING PANEL AND HAVE SAME AIC RATING AS EXISTING EQUIPMENT.
4. CONTRACTOR TO REPLACE EXISTING BREAKER WITH NEW 90A 3P BREAKER. NEW BREAKER SHALL BE UL LISTED FOR USE IN EXISTING PANEL AND HAVE SAME AIC RATING AS EXISTING EQUIPMENT.
5. CONTRACTOR TO NEW BREAKER IN EXISTING SPACE FOR NEW EQUIPMENT SHOWN. NEW BREAKER SHALL BE UL LISTED FOR USE IN EXISTING PANEL AND HAVE SAME AIC RATING AS EXISTING EQUIPMENT.
6. CONTRACTOR TO USE EXISTING SPARE BREAKER FOR INSTALLATION OF NEW PANEL 'LI'.
7. CONTRACTOR TO PROVIDE AND INSTALL NEW PANEL 'LI'. REFER TO PANEL SCHEDULE DRAWING E7LIA FOR PANEL INFORMATION.
8. CONTRACTOR TO INSTALL NEW BREAKER IN EXISTING SPACE FOR INSTALLATION OF NEW MAU-1. NEW BREAKER SHALL BE UL LISTED FOR USE IN EXISTING PANEL AND HAVE SAME AIC RATING AS EXISTING EQUIPMENT.

1 E7.1 ELECTRICAL RISER DIAGRAM
NTS

NOTE: THIS DOCUMENT MAY HAVE BEEN ELECTRONICALLY TRANSMITTED. IF UNSIGNED, IT CANNOT BE FILED FOR PUBLIC RECORD. PUBLIC RECORD FILINGS REQUIRE SIGNED AND SEALED DOCUMENTS.

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R. KNOX STACY - ELECTRICAL
LICENSE #63643,
EXPIRATION DATE: 2/28/2023

CLIENT NAME
Publix.
SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
6760 W. FAIRFIELD HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
ELECTRICAL RISER DIAGRAM

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	DATE	DRAWN	CHECKED
2210764	04/21/2022	BT	RB

E7.1

DECOR SCHEME: EVERGREEN

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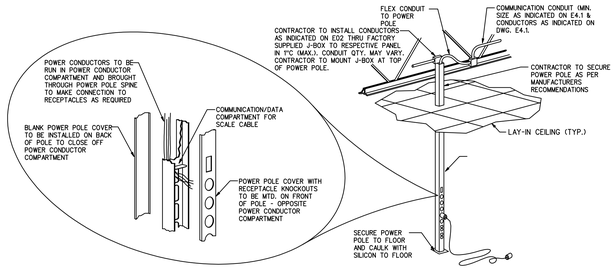
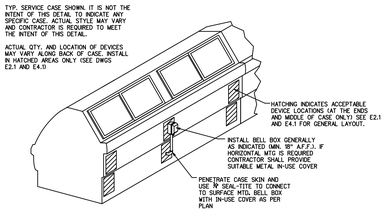
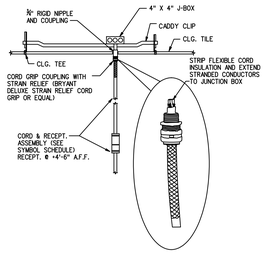


RELOCATED POWER POLE

1 E8.1 TYP. POWER POLE INSTALLATION
SCALE: NO SCALE



2 E8.1 TYP. CASE MTD. RECEPT./DATA OUTLET
NO SCALE



3 E8.1 TYP. PENDANT HUNG RECEPTACLE
NO SCALE

ELECTRICAL SYMBOL SCHEDULE

SYMBOL	MANUFACTURER	CAT. NO.	DESCRIPTION	MOUNTING
$	HUBBELL	1221-I/SS1	SWITCH, 20 AMP SINGLE POLE "T" RATED	+48" (WITHIN 10" OF DOOR)
$2	HUBBELL	1222-I/SS1	SWITCH, 20 AMP DPST "T" RATED	+48" (WITHIN 10" OF DOOR)
$3	HUBBELL	1223-I/SS1	SWITCH, 20 AMP THREE WAY "T" RATED	+48" (WITHIN 10" OF DOOR)
$M	HUBBELL	TO SUIT APPLICATION	SWITCH, MOTOR RATED TO SUIT APPLICATION (20 A. MIN.)	AS REQUIRED
$P	LEGRAND	P&S 1251-I	SWITCH, 20A, 1 POLE / 3 POSITION, MOMENTARY CONTACT	+48" (WITHIN 10" OF DOOR)
$P	HUBBELL	HBL1221-PL/SS1	SWITCH WITH PILOT LIGHT	100" A.F.F. OR AS NOTED
$P	HUBBELL	HBL1221-PL/SS1	SWITCH WITH PILOT LIGHT - FOR FAN CONTROL ADJUST SENSITIVITY FOR OPTIMAL OPERATION. ADJUST TIME DELAY FOR 10 MINUTE OPERATION.	48" (WITHIN 10" OF DOOR)
$T	HUBBELL	LHMTS-W	WITH MP POWER PACKS (MP-120A) AS REQUIRED.	MT. AT BOTTOM OF BAR JOIST.
(1)	HUBBELL	5362-I/SS8	20 AMP 3W DUPLEX RECEPTACLE	18" / 48" A.F.F. OR AS NOTED
(1)GFI	HUBBELL	GFTR20-I/WP26M	20 AMP GFCI DUPLEX RECEPT. WEATHERPROOF	18" / 48" A.F.F. OR AS NOTED
(1)O	HUBBELL	CR5352-I/SS8	20 AMP 3W I.G. RECEPT.(ORANGE)	18" / 48" A.F.F. OR AS NOTED
(1)R	HUBBELL	5362R/SS8	20 AMP RED DUPLEX RECEPT. (NON-I.G.)	18" / 48" A.F.F. OR AS NOTED
(2)	HUBBELL	2-5362-I/SS82	2-20 AMP 3W DUPLEX RECEPT.	18" / 48" A.F.F. OR AS NOTED
(2)O	HUBBELL	2-CR5352-IG/SS82	TWO (2) 20A 3W I.G. RECEPT. (ORANGE)	18" / 48" A.F.F. OR AS NOTED
(2)R	HUBBELL	2-5362R/SS82	2-20 AMP 3W RED DUPLEX RECEPT. (NON-I.G.)	18" / 48" A.F.F. OR AS NOTED
(3)	HUBBELL	IG5261/HBL5266C/SS7	15 AMP 3W 125V STRAIGHT BLADE (ORANGE) (IG)	48" A.F.F. OR AS NOTED
(3)	HUBBELL	SEE NOTE BELOW	15 AMP 3W 120V STRAIGHT BLADE (CORD & PLUG) (IG)	HUNG FROM CEILING
(3)	HUBBELL	HBL5369C/6' STO CORD	20 AMP 3W 120V STRAIGHT BLADE (CORD & PLUG)	6' OF 3*12 STO CORD
(3)	STEEL CITY	600/P-60DR	20 AMP 3W 125V DUPLEX RECEPTACLE	FLOOR
(3)	HUBBELL	HBL9308/HBL9309/SS720	30 AMP 3W 125V STRAIGHT BLADE WITH S.S. COVER	48" A.F.F. OR AS NOTED
(3)	HUBBELL	HBL5581/HBL5666CA/HBL6017/HBL7423WO	15 AMP 3W 250V STRAIGHT BLADE	48" A.F.F. OR AS NOTED
(3)	HUBBELL	HBL5461/HBL5466CA/HBL6017/HBL7423WO	20 AMP 3W 250V STRAIGHT BLADE	48" A.F.F. OR AS NOTED
(3)	HUBBELL	HBL9330/HBL9331/SS723L	30 AMP 3W 250V STRAIGHT BLADE	48" A.F.F. OR AS NOTED
(3)	HUBBELL	HBL9367/HBL9368/SS703	50 AMP 3W 250V STRAIGHT BLADE	AS NOTED
(3)	HUBBELL	HBL8410/HBL8411C/SS7	20 AMP 4W 125/250V STRAIGHT BLADE	48" A.F.F. OR AS NOTED
(3)	HUBBELL	HBL9430A/HBL9432C/SS701	30 AMP 4W 125/250V STRAIGHT BLADE	10' OF 4*10 STO CORD
(3)	HUBBELL	HBL9450A/HBL9452C/SS701	50 AMP 4W 125/250V STRAIGHT BLADE	48" A.F.F. OR AS NOTED
(3)	HUBBELL	HBL8430A/HBL8432C/SS703	30 AMP 4W 3Ø 250V STRAIGHT BLADE	48" A.F.F. OR AS NOTED
(3)	HUBBELL	HBL8450A/HBL8452C/SS701	50 AMP 4W 3Ø 250V STRAIGHT BLADE	48" A.F.F. OR AS NOTED
(3)	HUBBELL	HBL8460A/HBL8462C/SS701	60 AMP 4W 3Ø 250V STRAIGHT BLADE	6' OF 4*6 STO CORD
(M)	HUBBELL	SEE NOTE BELOW	20 AMP 3W 125V TWIST LOCK (IG) (CORD & PLUG)	HUNG FROM CEILING
(M)	HUBBELL	HBL2310	20 AMP 3W 125V TWIST LOCK	POWER POLE
(M)	HUBBELL	SEE NOTE BELOW	20 AMP 3W 125V TWIST LOCK (CORD & PLUG)	HUNG FROM CEILING
(M)	HUBBELL	HBL2610/HBL2611/SS720	30 AMP 3W 125V TWIST LOCK W/S.S COVER	48" A.F.F. OR AS NOTED
(M)	HUBBELL	SEE NOTE BELOW	30 AMP 3W 125V TWIST LOCK (CORD & PLUG)	HUNG FORM CEILING
(M)	HUBBELL	SEE NOTE BELOW	20 AMP 3W 125/250V TWIST LOCK (CORD & PLUG)	HUNG FROM CEILING
(M)	HUBBELL	HBL2320/HBL2321/HBL6031/HBL7425WOA	20 AMP 3W 250V TWIST LOCK	6' OF 3*12 STO CORD
(M)	HUBBELL	HBL2620/HBL2621/SS720	30 AMP 3W 250V TWIST LOCK	6' OF 3*10 STO CORD (+48" A.F.F.)
(M)	HUBBELL	SEE NOTE BELOW	30 AMP 3W 250V TWIST LOCK	HUNG FROM CEILING
(M)	HUBBELL	SEE NOTE BELOW	50 AMP 3W 250V TWIST LOCK	HUNG FROM CEILING
(M)	HUBBELL	HBL2410/HBL2411/SS720	20 AMP 4W 125/250V TWIST LOCK	6' OF 4*12 STO CORD
(M)	HUBBELL	SEE NOTE BELOW	20 AMP 4W 125/250V TWIST LOCK	HUNG FROM CEILING
(M)	HUBBELL	HBL2710/HBL2711	30 AMP 4W 125/250V TWIST LOCK	10' OF 4*10 STO CORD
(M)	HUBBELL	HBL27CM13/HBL27CM11	30 AMP 4W 125/250V TWIST LOCK	10' OF 4*10 STO CORD
(M)	HUBBELL	HBL2420/HBL2421/SS720	20 AMP 4W 3↕ 250V TWIST LOCK	48" A.F.F. OR AS NOTED
(M)	HUBBELL	SEE NOTE BELOW	20 AMP 4W 3↕ 250V TWIST LOCK	HUNG FROM CEILING
(M)	HUBBELL	HBL2720/HBL2721/HBL7425WOA	30 AMP 4W 3↕ 250V TWIST LOCK	6' OF 4*10 STO CORD
(M)	HUBBELL	SEE NOTE BELOW	30 AMP 4W 3↕ 250V TWIST LOCK	HUNG FROM CEILING
(M)	HUBBELL	SEE NOTE BELOW	50 AMP 4W 3↕ 250V TWIST LOCK	HUNG FROM CEILING
(M)	HUBBELL	SEE NOTE BELOW	20 AMP 5W 3↕ 250V TWIST LOCK	HUNG FROM CEILING
(M)	HUBBELL	SEE NOTE BELOW	30 AMP 5W 3↕ 250V TWIST LOCK	HUNG FROM CEILING
(M)	HUBBELL	SEE NOTE BELOW	60 AMP 5W 3↕ 250V TWIST LOCK	HUNG FROM CEILING
(M)	HUBBELL	SEE NOTE BELOW	100 AMP 5W 3↕ 250V TWIST LOCK	48" A.F.F. OR AS NOTED
J	HUBBELL	OUTLET BOX/93181	JUNCTION BOX	18" A.F.F. OR AS NOTED
EF		EXHAUST OR SUPPLY FAN, INSTALLED BY OTHERS, WIRED BY ELECTRICAL CONTRACTOR		
M		MOTOR - HP SIZES AS INDICATED		
MS		MOTOR STARTER/FIELD CONNECTION - SEE SPECIFICATIONS		
FU		FUSED DISCONNECT SWITCH SIZED FOR APPLICATION		
EP		ELECTRICAL PANEL		
RS	RS	REFRIGERATION SYSTEM NUMBER		
F		REFRIG. CASE FAN TERMINAL BOX CONNECTION		
L		REFRIG. CASE LIGHT TERMINAL BOX CONNECTION		
H		REFRIG. CASE ANTI-SWEAT TERMINAL BOX CONNECTION		
P		REFRIG. CASE PROBE TERMINAL BOX CONNECTION		
D		REFRIG. CASE DEFROST TERMINATION TERMINAL BOX CONNECTION		
S		REFRIG. SYSTEM SOLENOID		
P		REFRIG. SYSTEM PROBE TERMINAL BOX CONNECTION (FIELD INSTALLED)		
HuA	HuC	E.M.S. CONTROL HUMIDISTAT - SUPPLIED BY PUBLIX, INSTALLED BY CONTRACTOR		AT ELEV. 8'-2" TO CENTER
TA	TJ	E.M.S. CONTROL THERMOSTAT - SUPPLIED BY PUBLIX, INSTALLED BY CONTRACTOR		AS NOTED
BV		BAFFLE SPKR. w/VOLUME CONTROL OUTLET AND ℄C TO CEILING SPACE		84" OR AS NOTED
B		BAFFLE SPKR. OUTLET WITH ℄C TO CEILING SPACE		96" OR AS NOTED
CB		COOLER BAFFLE SPKR. OUTLET WITH ℄C TO CEILING SPACE		96" OR AS NOTED
V		VOLUME CONTROL J-BOX WITH ℄C TO CEILING SPACE		48" OR AS NOTED
TC		TIME CLOCK J-BOX WITH ℄C TO CEILING SPACE		40" OR AS NOTED

NOTE: LEVITON AND PASS & SEYMOUR (P&S) ARE APPROVED EQUALS

	20A-3W-125V	20A-3W-250 V	20A-4W-125/250V	20A-4W-3↕-250V	30A-3W-125V	30A-4W-250V	
RECEPTACLE	HBL2310	HBL2320	HBL2410	HBL2420	HBL2810	HBL2720	RECEPTACLE
CORD (GRAY)	12/3 STO	12/3 STO	12/4 STO	12/4 STO	10/3 STO	10/4 STO	CORD (GRAY)
COVER (BLACK)	HBL6032	HBL6032	HBL6036	HBL6036	HBL6032	HBL6036	COVER (BLACK)
CONNECTOR BODY	HBL2313	HBL2323	HBL2413	HBL2423	HBL2813	HBL2723	CONNECTOR BODY
PLUG	HBL2311	HBL2321	HBL2411	HBL2421	HBL2821	HBL2721	PLUG
COVER - BLACK)	HBL6031	HBL6031	HBL6035	HBL6035	HBL6031	HBL6035	COVER - BLACK)

BOOT COVERS NOT REQUIRED ON RECEPTACLE SIDE OF EQUIPMENT EXCEPT FOR SEAFOOD AND MEAT

	30A-3W-125/250V	15A-3W-120V	50A-4W-600V	50A-3W-250V	60A-5W-250V	100A-5W	
RECEPTACLE	HBL2620	IG4770	HBL3769	HBL3771	(NONE)	HBL5100RSW	RECEPTACLE
CORD (GRAY)	10/3 STO	12/3 STO	8/4 STO	8/3 STO	6/3 SO	6/4 G, W, OR PPE W/EG (90°C)	CORD (GRAY)
COVER (BLACK)	HBL6032	HBL6024	HBL7717C	HBL7717C	(NONE)	(NONE)	COVER (BLACK)
CONNECTOR BODY	HBL2623	HBL4729C	HBL3764C	HBL3762C	HBL5820SW (PAINT BLACK)	(NONE)	CONNECTOR BODY
PLUG	HBL2621	HBL4720C	HBL3765C	HBL3763C	HBL5820PSW (PAINT BLACK)	A5100P9 (1 REQ'D)	PLUG
COVER - BLACK)	HBL6031	HBL6023	HBL7718C	HBL7718C	(NONE)	(NONE)	COVER - BLACK)

	20A-5W-125/250V	30A-5W-125/250V	15A-3W-120V
RECEPTACLE	HBL2510	HBL2810	IG5261
CORD (GRAY)	12/5 STO	10/5 STO	12/3 STO
COVER (BLACK)	HBL6036	HBL6036	HBL6024
CONNECTOR BODY	HBL2513	HBL2813	HBL5269C
PLUG	HBL2511	HBL2811	HBL5266C
COVER - BLACK)	HBL6035	HBL6035	HBL6023

GENERAL ELECTRICAL NOTES

1. WALK-IN FREEZERS AND COOLERS
   PROVIDE AND INSTALL A SUITABLE LENGTH OF S.T.O. CORD FROM EACH PRE-WIRED JUNCTION BOX OF EVAPORATOR COIL, TO POWER RECEPTACLE CORD TO BE EQUIPPED WITH A HUBBLE #7310 CAP AND SUITABLE FOR CONNECTION TO A #7310 RECEPTACLE.
2. ENTRANCE DOORS
   (A) CONNECT 115 VOLT CIRCUIT TO DOOR HEADER CONNECT PER DOOR MANUFACTURERS INSTRUCTIONS.
   (B) CONCEAL CONDUIT IN DOOR FRAME.
3. CONTROLS
   (A) CONTRACTOR TO PROVIDE AND INSTALL ALL CONDUIT AND CONDUCTORS FROM THERMOSTATS, FIRESTAT, HUMIDSTAT AS SHOWN ON DRAWINGS.
   (B) CONTRACTOR TO MAKE FINAL CONNECTIONS OF CONDUCTORS.
4. CEILING
   CONTRACTOR TO REFER TO REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES, AIR CONDITIONING DIFFUSERS, SPRINKLER SYSTEM, ETC.
5. FACADE SIGN
   (A) SIGN CONTRACTOR TO BRING LEADS THRU FACADE WALL FOR CONNECTION BY ELECTRICIAN.
   (B) ELECTRICAL CONTRACTOR TO PROVIDE JUNCTION BOX FOR EACH LETTER AND CONNECT TO PANEL "S".
6. ALL DEVICE COVER PLATES TO BE 305 STAINLESS STEEL.
7. NO ALUMINUM CONDUIT OR CONDUCTORS WILL BE ACCEPTED. MINIMUM CONDUCTOR & CONDUIT TO BE 3#12-¾"C WITH GROUNDING CONDUCTOR. MINIMUM UNDERGROUND OR UNDERSLAB CONDUIT TO BE ¾".
8. ALL LIGHTING FIXTURES AND LAMPS SHALL BE FURNISHED BY PUBLIX AND INSTALLED AND WIRED BY CONTRACTOR.
9. ALL SUPPLY AND EXHAUST FANS TO BE FURNISHED AND INSTALLED BY OTHERS WIRED AND CONNECTED BY ELECTRICAL CONTRACTOR.
10. FIRE ALARM
    (A) INSTALL ALL CONDUIT AND OUTLET BOXES AS SHOWN ON DRAWING.
    (B) ALL FIRE ALARM EQUIPMENT WILL BE FURNISHED, INSTALLED AND CONNECTED BY FIRE ALARM CONTRACTOR.
    (C) FIRE ALARM SYSTEM SHALL MEET ALL LOCAL REQUIREMENTS, NFPA NO. 72, AND ADA.
11. EMERGENCY GENERATOR
    (A) CONTRACTOR TO INSTALL AND CONNECT 60KW GENERATOR AND TRANSFER SWITCHES AS FURNISHED BY PUBLIX.
    (B) GENERATOR WILL BE A 60KW NATURAL OR L.P. GAS DRIVEN GENERATOR 120/208 VOLT 3 PHASE 4 WIRE OUTPUT, SEE SPECIFICATIONS.
    (C) GENERATOR AND TRANSFER SWITCH ARE TO BE INSTALLED IN LOCATION AS SHOWN ON DRAWINGS AND TO MEET ALL LOCAL AND NATIONAL CODES.
12. DO NOT USE MACHINE ROOM ROOF STRUCTURE FOR SUPPORTING OF ANY ELECTRICAL EQUIPMENT, SUCH AS CONDUIT OR LIGHTING FIXTURES, USE UNI-STRUT WELDED TO OR CONNECTED TO BEAMS.
13. CONTRACTOR TO PROVIDE PULL CORD IN ALL EMPTY CONDUITS, (ELECTRICAL, TELEPHONE, COMMUNICATIONS, ETC.) FOR FUTURE USE. TERMINATE CORD WITH SUITABLE SIZE WASHER TO PREVENT SLIPPAGE AND PROVIDE BLANK COVERS FOR ALL BOXES NOT USED. ALL CONDUITS TO HAVE BUSHINGS TO PREVENT CABLING DAMAGE.
14. ALL CONDUIT ROUTING SHOWN SOLID TO BE FED CONCEALED ABOVE CEILING. ALL CONDUIT ROUTING SHOWN WITH DASH LINES TO BE CONCEALED WITHIN WALLS OR 12" (MIN.) BENEATH SLAB.
15. ALL CIRCUITS TO INCLUDE EQUIPMENT GROUND CONDUCTOR SIZED PER ARTICLE 250 OF 2011 NFPA 70, (ISOLATED GROUND (IG) CONDUCTOR (WHERE REQUIRED). TO BE GREEN WITH YELLOW STRIP.
16. ALL RECEPTACLES DESIGNATED WP (FOR USE IN WET/DAMP LOCATIONS) SHALL BE OF WEATHER-RESISTANT TYPE PER NEC 406.9(A) & 406.9(B)(1).

AREAS OF HORIZONTAL RUNS BY TRADES

ELECTRICAL: TOP OF STEEL GIRDER AND JOIST TO 32 IN. BELOW TOP OF STEEL: WHERE EXPOSED IN THIS PROTOTYPE, IMMEDIATELY BENEATH TOP OF JOIST MEMBER AND PASSING BETWEEN STEEL JOIST WEBBING. (THE INSTALLATION SHALL BE IN COMPLIANCE WITH NEC 300.4(E))

REFRIGERATION: 32 IN. TO 36 IN. BELOW TOP OF STEEL GIRDER OR JOIST: WHERE EXPOSED IN THIS PROTOTYPE, IMMEDIATELY BELOW BOTTOM CHORD OF STEEL JOIST GIRDERS AND JOISTS.

FIRE SPRINKLER: 8 IN. ABOVE CEILING: WHERE EXPOSED IN THIS PROTOTYPE, 8 IN ABOVE BOTTOM CHORD OF STEEL GIRDER JOISTS AND JOISTS.

AIR CONDITIONING: 36 IN. BELOW ROOF DECK TO 10 IN. ABOVE CEILING: WHERE EXPOSED IN THIS PROTOTYPE, HANG AS CLOSE UNDER BOTTOM CHORD OF STEEL JOIST GIRDERS AND JOISTS AS POSSIBLE WHILE LEAVING ROOM FOR REFRIGERATION LINES.

IF DEVIATION FROM THESE AREAS IS INDICATED, SUCH DEVIATION MUST BE AGREED UPON BY JOB SUPERINTENDENT AND PUBLIX REPRESENTATIVE.

LUMINAIRE SCHEDULE

QTY.	MARK	LUMINAIRE WATTAGE	MANUF.	CATALOG NUMBER	DESCRIPTION	MOUNTING	POWER SUPPLY QTY.	POWER SUPPLY TYPE	UL WET LISTED
2	N4	31	LITHONIA	FEM L48 4000LM IMAFD MD 120/277 GZ10 35K 80CRI SPD SF	4' FEM, 3500K, 4000LM, MOUNTING BRACKET	SURFACE	1	LED DRIVER	X
1	N8	65	LITHONIA	FEM L96 9000LM IMAFD MD 120/ 277 GZ10 35K 80CRI SPD SF	8' FEM, 3500K, 9000LM, MOUNTING BRACKET	SURFACE	2	LED DRIVER	X
SEE DWG. E1.1	P1		AMERLUX	GES3 SERIES TRACK	SINGLE CIRCUIT TRACK - WHITE (4', 8', & 12' LENGTHS - SEE PLAN FOR QTY.)	TRACK @ 14'-0"			
SEE DWG. E1.1	Q19	15	AMERLUX	SPEQ-S-A17-15-WT-TN1-120-FL-309-SN-WT	LED WHITE TRACK HEAD, F (28"), 3000K, 90+ CRI, TN1, SNOOT	TRACK MTD.	1	LED DRIVER	
SEE DWG. E1.1	Q21	48	AMERLUX	SPEQ-L-A17-48-WT-TN1-120-NFL-309-SN-WT	LED WHITE TRACK HEAD, NF (18"), 3000K, 90+ CRI, TN1, SNOOT	TRACK MTD.	1	LED DRIVER	
1	R20	39	LITHONIA	CLX L96 6000LM SEF RDL 120/277 GZ10 35K 80CRI GLR SPD WH NMPX RFD284745	8' CLX, 3500K, 6000LM, LENSED	SURFACE	2	LED DRIVER	
6	R21	67	LITHONIA	CLX L96 8000LM SEF RDL 120/277 GZ10 35K 80CRI GLR SPD WH NMPX RFD284746	8' CLX, 3500K, 10000LM, LENSED	SURFACE	2	LED DRIVER	
5	T62	18.5	JUNO / SORAA	IC22-28W-WH TRIM-SP38-14-36D-830-H1	6" RECESSED CAN, WHITE OPEN TRIM, SORAA LED LAMP	RECESSED	1	LED DRIVER	
3	X3	0.7	LITHONIA	LQM S W 3 R 120/277 M6	LED EXIT FIXTURE	SURFACE	1	LED DRIVER	
2	Y2	18.5	LITHONIA / SORAA	DSA60150HDWB / SP30L-18-25D-830-03	DOCK LIGHT, 60° FOLDING ARM, SORAA LED LAMP	WALL BRACKET +96"	1	LED DRIVER	

INDICATES FIXTURES CONNECTED TO EMERGENCY CIRCUITS

NOTES:
1. ALL SUSPENDED FIXTURES (INCLUDING BUT NOT LIMITED TO LAY-IN TYPE) TO BE SECURED WITH AIRCRAFT CABLE IN EXPOSED AREAS AND CEILING WIRE IN CONCEALED AREAS.
2. CONTRACTOR SHALL USE #12 GAGE MIN. OR MANUFACTURER SUPPLIED/APPROVED CABLE OR WIRE.
3. ALL 'N' & 'NN' TYPE FIXTURES TO BE INSTALLED WITH 1/4-20 BOLTS THROUGH COMPOSITE CEILING.
4. ALL 'E' TYPE FIXTURES TO BE INSTALLED WITH THROUGH BOLTS.

NOTE: THIS DOCUMENT MAY HAVE BEEN ELECTRONICALLY TRANSMITTED. IF UNSIGNED, IT CANNOT BE FILED FOR PUBLIC RECORD. PUBLIC RECORD FILINGS REQUIRE SIGNED AND SEALED DOCUMENTS.

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LICENSE #63643,
EXPIRATION DATE: 2/28/2023

CLIENT NAME: Publix. SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME: PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
FORMERLY PUBLIX AT LAKE HIGHLAND
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE: ELECTRICAL LUMINAIRE/SYMBOL SCHEDULES AND DETAILS

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 2210764
DATE 04/21/2022
DRAWN BT
CHECKED RG

E8.1

DECOR SCHEME: EVERGREEN

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4/18/2022 2:17:27 PM

PANEL AB

LOCATION: CORRIDOR #2 | SERVES: LIGHTING | MOUNT: FLUSH
PNL VOLTAGE: 120/208, 3P, 4W | PNL AIC (RMS): 10,000 A | PANEL TYPE: S1 | MAIN LUG ONLY: 250 A | BUS: 250 A
BOLT- IN BREAKERS | FULL SOLID NEUTRAL BUS | GROUND BUS

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	BKR P	BKR TRIP	CONNECTED VA A	CONNECTED VA B	CONNECTED VA C	BKR TRIP	BKR P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
	A	1	SALES AREA LIGHTS	1	20	590								
	A	3	SALES AREA LIGHTS	2	20		590		20	1	SPARE	2		
-	-	5					1380	590	20	2	SALES AREA LIGHTS	4	A	
	A	7	SALES AREA LIGHTS	2	20	1380		1380	-	-		6	-	
-	-	9				1380	1380		20	1	SALES AREA LIGHTS	8	A	
		11	SPARE	1	20		1380	590	20	2	SALES AREA LIGHTS	10	A	
	A	13	SALES AREA LIGHTS	2	20	1380		1380	-	-		12	-	
-	-	15				1380	1380		20	2	SALES AREA LIGHTS	14	A	
	A	17	CHECKOUT LIGHTING	2	20		1380	1380	-	-		16	-	
-	-	19				1380		220	20	1	CHECKOUT LIGHTING	18	A	
		21	SPARE	1	20	220			20	1	CHECKOUT LIGHTING	20	A	
	A	23	WALLWASH LIGHTING	1	20		600	360	20	1	WALL WASH LIGHTING	22	A	
11	A	25	NEON LIGHTS	2	20	600			20	1	SPARE	24		
11		27					600		20	1	SPARE	26		
		29	SPARE	1	20				20	1	SPARE	28		
		31	SPACE					720	20	1	OPTIONAL AREA LIGHTING	30	A	11
		33				540			20	1	OPTIONAL AREA LIGHTING	32	A	11
		35									SPACE	34		
		37										36		
		39										38		
		41										40		
												42		

CONNECTED VA: 8850 | 8690 | 6030 | DEMAND FACTOR: 1.25
TOTAL CONNECTED VA: 23570 AMPS: 65 | TOTAL DEMAND AMPS: 82

LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A LIGHTING	23570	1.25	29463
B AIR CONDITIONING	0	1.00	0
C REFRIGERATION	0	1.00	0
D KITCHEN	0	1.00	0
E MISC. EQUIPMENT	0	1.00	0
F RECPTS (1st 10 KW)	0	1.00	0
(Remaining Recpt.s)	0	0.50	0
TOTAL DEMAND VA:	23570	1.25	29463

PANEL BC

LOCATION: CORRIDOR #2 | SERVES: LIGHTING | MOUNT: FLUSH
PNL VOLTAGE: 120/208, 3P, 4W | PNL AIC (RMS): 10,000 A | PANEL TYPE: S 3 | MAIN LUG ONLY: 225 A | BUS: 250 A
BOLT- IN BREAKERS | FULL SOLID NEUTRAL BUS | GROUND BUS

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	BKR P	BKR TRIP	CONNECTED VA A	CONNECTED VA B	CONNECTED VA C	BKR TRIP	BKR P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
		1	SPARE	2	20									
		3	SPARE	-	-						SPACE	2		
		5	SPARE	1	20						SPACE	4		
		7	SPACE				1380	20	2		SALES AREA LIGHTING	6	A	
		9	SPACE	2	20	1380			-	-	SALES AREA LIGHTING	8	A	
		11	SPACE	-	-		1380		20	2	SALES AREA LIGHTING	10	A	
		13	SPACE	2	20			1380	-	-	SALES AREA LIGHTING	12	A	
		15	SPACE	-	-	1380			20	2	SALES AREA LIGHTING	14	A	
	A	17	PRODUCE SOFFIT LIGHTING	1	20		1380	210	-	-	SALES AREA LIGHTING	16	A	
		19	SPACE					1200	20	1	HBC/MA/GRACK LIGHTING	18	A	
		21	SPACE	1	20						SPACE	20		
		23	SPACE	2	20						SPACE	22		
		25	SPACE	-	-			480	20	1	CUST SERVICE LIGHTING	24	A	
		27	SPACE	1	20						SPACE	26		
		29	SPACE				1920		20	1	HBC/MAB	28	A	
		31	SPACE								SPACE	30		
		33	SPACE								SPACE	32		
		35	SPACE								SPACE	34		
		37	SPACE								SPACE	36		
		39	SPACE								SPACE	38		
		41	SPACE								SPACE	40		
											SPACE	42		

CONNECTED VA: 2760 | 4680 | 4650 | DEMAND FACTOR: 1.25
TOTAL CONNECTED VA: 12090 AMPS: 34 | TOTAL DEMAND AMPS: 42

LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A LIGHTING	12090	1.25	15113
B AIR CONDITIONING	0	1.00	0
C REFRIGERATION	0	1.00	0
D KITCHEN	0	1.00	0
E MISC. EQUIPMENT	0	1.00	0
F RECPTS (1st 10 KW)	0	1.00	0
(Remaining Recpt.s)	0	0.50	0
TOTAL DEMAND VA:	12090	1.25	15113

PANEL CD

LOCATION: CORRIDOR # 2 | SERVES: LIGHTING | MOUNT: FLUSH
PNL VOLTAGE: 120/208, 3P, 4W | PNL AIC (RMS): 10,000 A | PANEL TYPE: S 3 | MAIN LUG ONLY: 225 A | BUS: 250A
BOLT- IN BREAKERS | FULL SOLID NEUTRAL BUS | GROUND BUS

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	BKR P	BKR TRIP	CONNECTED VA A	CONNECTED VA B	CONNECTED VA C	BKR TRIP	BKR P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
		1	SPARE	1	20									
		3	SPARE	1	20	1380			20	2	SALES AREA LIGHTS	2	A	
A	S	5	SALES AREA LIGHTS	2	20		1380	590	-	-		4	A	
A		7		-	-	1380			20	1	SPARE	6	A	
A		9	SALES AREA LIGHTS	2	20	1380	1380		20	2	SALES AREA LIGHTS	8	A	
A		11		-	-	1380	1380	-	-			10	A	
A		13	SALES AREA LIGHTS	2	20	1380			20	1	SPARE	12	A	
A		15		-	-	920	1380		20	2	SALES AREA LIGHTS	14	A	
A		17	SALES AREA LIGHTS	2	20	1380	1380	-	-			16	A	
A		19		-	-	1380		1180	20	2	VESTIBULE LIGHTS	18	A	
		21	SPARE	-	-	1180						20	A	
		23	SPARE	1	20		70		20	1	FANS F1 F2	22	E	
		25	SPACE					1500	20	1	CUSTOMER SERVICE LIGHTS	24	A	
		27	SPACE								SPACE	26		
		29	SPACE								SPACE	28		
											SPACE	30		

CONNECTED VA: 9000 | 6970 | 6030 | DEMAND FACTOR: 1.25
TOTAL CONNECTED VA: 22000 AMPS: 61 | TOTAL DEMAND AMPS: 76

LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A LIGHTING	21930	1.25	27413
B AIR CONDITIONING	0	1.00	0
C REFRIGERATION	0	1.00	0
D KITCHEN	0	1.00	0
E MISC. EQUIPMENT	70	1.00	70
F RECPTS (1st 10 KW)	0	1.00	0
(Remaining Recpt.s)	0	0.50	0
TOTAL DEMAND VA:	22000	1.25	27483

PANEL A

LOCATION: REAR CORRIDOR | SERVES: FROZEN FOOD | MOUNT: SURFACE
PNL VOLTAGE: 120/208, 3P, 4W | PNL AIC (RMS): 22,000 A | PANEL TYPE: S 1 | MAIN LUG ONLY: 250A | BUS: 250A
BOLT- IN BREAKERS | FULL SOLID NEUTRAL BUS | GROUND BUS

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	BKR P	BKR TRIP	CONNECTED VA A	CONNECTED VA B	CONNECTED VA C	BKR TRIP	BKR P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
	E	1	FROZEN FOOD 4 F	1	15	180								
	C	3	FROZEN FOOD 4A H	1	20	180	1030		15	1	F FROZEN FOOD CASE 5	2	C	
	C	5	FROZEN FOOD 4B H	1	20		1030	1030	20	1	H FROZEN FOOD CASE 5A	4	C	
	C	7	FROZEN FOOD 4 L	1	20	220		1030	20	1	L FROZEN FOOD CASE 5B	6	C	
	F	9	CASE RECPTACLE	1	20	220	360		20	1	L FROZEN FOOD CASE 5	8	A	
	F	11	CASE RECPTACLE	1	20		180	540	15	1	F ICE CREAM CASE 2	10	C	
	C	13	ICE CREAM CASE 63 F	1	15	180		1030	20	1	H ICE CREAM CASE 2B	12	C	
	C	15	ICE CREAM CASE 63B H	1	20	1030	1030		20	1	H ICE CREAM CASE 2A	14	C	
	C	17	ICE CREAM CASE 63A H	1	20		220	1030	20	1	L ICE CREAM CASE 2	16	A	
	C	19	ICE CREAM CASE	1	20	220		180	20	1	F FROZEN FOOD CASE 9	18	C	
	C	21	FROZEN FOOD CASE 14 F	1	15	1030	180		20	1	H FROZEN FOOD CASE 9A	20	C	
	-	23	H	1	20		1030	1030	20	1	H FROZEN FOOD CASE 9B	22	C	
	-	25	H	1	20	1030		220	20	1	L FROZEN FOOD CASE 9	24	A	
	-	27	L	1	20	1030	220		20	1	L FROZEN FOOD CASE 62	26	A	
	C	29	FROZEN FOOD CASE 13 L	1	20		300	220	15	1	F	28	C	
	-	31	H	1	20	1030		110	20	1	H	30	-	
	-	33	F	1	15	140	180		15	1	F FROZEN FOOD CASE 6	32	C	
	-	35	H	1	20		650	1030	20	1	H	34	-	
	C	37	FROZEN FOOD CASE 12 L	1	20	100		1230	20	1	SELF CONTAINED ICE STORAGE	36	C	
	-	39	H	1	15	90	1030		15	1	F ICE CREAM CASE 3	38	C	
	-	41	F	1	20		1030	90	20	1	H	40	-	
								110	20	1	L	42	A	

CONNECTED VA: 6680 | 8470 | 8880 | DEMAND FACTOR: 1.02
TOTAL CONNECTED VA: 24030 AMPS: 67 | TOTAL DEMAND AMPS: 68

LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A LIGHTING	1800	1.25	2250
B AIR CONDITIONING	0	1.00	0
C REFRIGERATION	21330	1.00	21330
D KITCHEN	0	1.00	0
E MISC. EQUIPMENT	0	1.00	0
F RECPTS (1st 10 KW)	900	1.00	900
(Remaining Recpt.s)	0	0.50	0
TOTAL DEMAND VA:	24030	1.02	24480

PANEL B

LOCATION: REAR CORRIDOR | SERVES: FROZEN FOOD | MOUNT: SURFACE
PNL VOLTAGE: 120/208, 3P, 4W | PNL AIC (RMS): 22,000 A | PANEL TYPE: S 1 | MCB 100A | BUS: 250A
BOLT- IN BREAKERS | FULL SOLID NEUTRAL BUS | GROUND BUS

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	BKR P	BKR TRIP	CONNECTED VA A	CONNECTED VA B	CONNECTED VA C	BKR TRIP	BKR P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
	C	1	ICE CREAM CASE 1 F	1	15	60								
	A	3	ICE CREAM CASE 1 L	1	20	220	70		15	1	F BEVERAGE CASE 61	2	C	
	C	5	ICE CREAM CASE 1 H	1	20		340	590	20	1	L BEVERAGE CASE 61	4	C	
	C	7	FROZEN FOOD CASE 65 F	1	15	150	220		15	1	F BEVERAGE CASE 60	6	C	
	A	9	FROZEN FOOD CASE 65 L	1	20	340	180		20	1	L BEVERAGE CASE 60	8	A	
	C	11	FROZEN FOOD CASE 65 H	1	20		330	1530	20	1	L MEAT CASE 19	10	A	11
	A	13	FROZEN FOOD CASE 8 L	1	20	110		700	20	1	H MEAT CASE 19	12	C	
	C	15	FROZEN FOOD CASE 8 H	1	20	160	940		15	1	F MEAT CASE 19	14	C	
	C	17	FROZEN FOOD CASE 8 F	1	15	40	90	15	15	1	F MEAT CASE 21	16	C	
	C	19	MEAT CASE 20 F	1	15	160		60	20	1	H MEAT CASE 21	18	C	
	C	21	MEAT CASE 20 H	1	20	330	700		20	1	L MEAT CASE 21	20	A	
11	A	23	MEAT CASE 20 L	1	20		110	330	15	1	F BEVERAGE CASE 15	22	C	
	C	25	BEVERAGE CASE 16 F	1	20	220		170	20	1	L BEVERAGE CASE 15	24	A	
	A	27	BEVERAGE CASE 16 L	1	20		340		20	1	SPARE	26		
		29	SPACE				50	15	15	1	F MEAT CASE 17	28	C	
	F	31	BEVERAGE CASE RECEPTACLE	1	20	360		230	20	1	H MEAT CASE 17	30	C	
	F	33	BEVERAGE CASE RECEPTACLE	1	20	590	540		20	1	H FROZEN FOOD ISL CASE 117	32	C	
	F	35	BEVERAGE CASE RECEPTACLE	1	20		70	360	20	1	L FROZEN FOOD ISL CASE 117	34	A	
	C	37	FROZEN FOOD CASE 7 H	1	20	1880		60	15	1	F FROZEN FOOD ISL CASE 117	36	C	
	C	39	FROZEN FOOD CASE 7 F	1	15	420	190		20	1	L MEAT CASE 18	38	A	
	A	41	FROZEN FOOD CASE 7 L	1	20		90	220	20	1	H MEAT CASE 18	40	C	
							50	20	20	1	L MEAT CASE 18	42	C	11

CONNECTED VA: 5000 | 3990 | 4610 | DEMAND FACTOR: 1.06
TOTAL CONNECTED VA: 13600 AMPS: 38 | TOTAL DEMAND AMPS: 40

LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A LIGHTING	3250	1.25	4063
B AIR CONDITIONING	0	1.00	0
C REFRIGERATION	9090	1.00	9090
D KITCHEN	0	1.00	0
E MISC. EQUIPMENT	0	1.00	0
F RECPTS (1st 10 KW)	1260	1.00	1260
(Remaining Recpt.s)	0	0.50	0
TOTAL DEMAND VA:	13600	1.06	14413

PANEL C

LOCATION: REAR CORRIDOR | SERVES: FROZEN FOOD | MOUNT: SURFACE
PNL VOLTAGE: 120/208, 3P, 4W | PNL AIC (RMS): 22,000 A | PANEL TYPE: S 1 | MCB 100A | BUS: 250A
BOLT- IN BREAKERS | FULL SOLID NEUTRAL BUS | GROUND BUS

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	BKR P	BKR TRIP	CONNECTED VA A	CONNECTED VA B	CONNECTED VA C	BKR TRIP	BKR P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
	A	1	MEAT ROOM LIGHTS	1	20	1040						22		
	A	3	MEAT ROOM LIGHTS	1	20	1250	840		20	1	L MEAT COOLER	24	A	
	A	5	DAIRY CASE 28 L	1	20		700	280	20	1	DOCK LIGHTING	26	A	
	C	7	DAIRY CASE 28 F	1	15	200		230	15	1	L DAIRY CASE	28	A	
	C	9	DAIRY CASE 30 F	1	20	180	110		20	1	F DAIRY CASE	29	B	
	A	11	DAIRY CASE 30 L	1	20		1330	170	20	1	H DAIRY CASE 31	10	C	
	C	13	DAIRY CASE 32 F	1	15	170		340	20	1	L DAIRY CASE 31	12	A	
	C	15	DAIRY CASE 32 F	1	20	220			15	1	F DAIRY CASE 24	14	C	
	A	17	FROZEN FOOD FREEZER 26 L	1	20		620	630	20	1	L MEAT FREEZER 24	16	A	
	A	19	DAIRY COOLER 27 L	1	20	830		1130	15	2	F VC 48B	18	C	
	C	21	DAIRY COOLER 27 F	2	15	1130	420		-	-	48B	20	C	
	-	23		-	-		10	420	20	1	L SUSHI CASE	120	22	A
	C	25	IVC 48C F	2	15	280		20	20	1	H SUSHI CASE	120	24	C
	C	27	48C F	-	-	20	280		15	1	F SUSHI CASE	120	26	C
	A	29	FRZN CHICKEN COOLER	23	L	1	20	620	620	20	1	L HC FREEZER	25	28	A
	C	31	FROZEN FOOD CASE	49	F	1	15	60	220	15	1	F PROC MEAT CASE	10	30	C
	A	33	FROZEN FOOD CASE	49	L	1	20	340	70	20	1	L PROC MEAT CASE	10	32	A
	C	35	FROZEN FOOD CASE	49	H	1	20	220	590	15	1	F PROC MEAT CASE	11	34	C
	C	37	IVC/CASE	64	H	1	20	640	170	20	1	L PROC MEAT CASE	11	36	A
	A	39	IVC/CASE	64	L	1	20	230	70	15	1	F SEAFOOD CASE	99&100	38	C
	C	41	IVC/CASE	64	F	1	15	170	180	20	1	L SEAFOOD CASE	99&101	40	A
								50	20	1	H SEAFOOD CASE	99&102	42	C

CONNECTED VA: 6590 | 5680 | 5190 | DEMAND FACTOR: 1.13
TOTAL CONNECTED VA: 17460 AMPS: 49 | TOTAL DEMAND AMPS: 55

LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A LIGHTING	9000	1.25	11250
B AIR CONDITIONING	0	1.00	0
C REFRIGERATION	8460	1.00	8460
D KITCHEN	0	1.00	0
E MISC. EQUIPMENT	0	1.00	0
F RECPTS (1st 10 KW)	0	1.00	0
(Remaining Recpt.s)	0	0.50	0
TOTAL DEMAND VA:	17460	1.13	19710

PANEL D

LOCATION: REAR CORRIDOR | SERVES: MEAT/SEAFOOD | MOUNT: SURFACE
PNL VOLTAGE: 120/208, 3P, 4W | PNL AIC (RMS): 42,000 A | PANEL TYPE: S 1 | MAIN LUG ONLY: 225 A | BUS: 225 A
BOLT- IN BREAKERS | FULL SOLID NEUTRAL BUS | GROUND BUS

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	BKR P	BKR TRIP	CONNECTED VA A	CONNECTED VA B	CONNECTED VA C	BKR TRIP	BKR P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
E		1	MEAT SAW1	3	20	710								
-		3		-	-	710	710		20	3	MEAT SAW2	2	D	
-		5		-	-		710	710	-	-		4	-	
-		7	SPARE	1	20			710	-	-		6	-	
-		9	SPARE	1	20				20	1	SPARE	8		
E		11	EDF	1	20		1000				SPACE	10		
F		13	TRAINING ROOM RECEPT	1	20	900		1920	20	1	MEAT RECPTACLE	12	F	
D		15	LARGE GRINDER	3	30	180	2500		20	1	MEAT RECPTACLE	14	F	
-		17		-	-		180	2500	20	1	MEAT RECPTACLE	16	F	
-		19		-	-	2500		600	20	1	MEAT ROOM GFI	18	F	
F		21	MEAT RECPT (BY PHONE)	1	20		1920	360	20	1	ICE MAKER	20	C	
D		23	MEAT HAND WRAPPER	1	20		920	720	20	2	SMALL GRINDER	22	D	9
D		25	MEAT SLICER	1	20	660		920	-	-		24	-	9
D		27	MEAT CUBER	1	20	360	910		20	1	STORAGE RECEPTACLE	26	F	
D		29	MEAT SLICER	1	20		180	660	20	1	RECEPTACLE (CUBER/SLICER)	28	F	
D		31	SEAFOOD MICROWAVE	2	30	1300			20	1	SPARE	30		
-		33		-	-		1300		20	1	SPARE	32		6
D		35	SEAFOOD WRAPPER	1	20			180	20	1	SPARE	34		6
D		37	SEAFOOD WRAPPER	1	20	180			20	1	SPARE	36		6
F		39	SEAFOOD RECPT	1	20		180		20	1	SPARE	38		6
D		41	2-DOOR REFRIGERATOR	1	20		400	1200	20	1	GAS WATER HEATER CONTROLS	40	E	
						190	20	1			SPACE	42		

CONNECTED VA: 9420 | 8350 | 11120 | DEMAND FACTOR: 0.77
TOTAL CONNECTED VA: 28890 AMPS: 80 | TOTAL DEMAND AMPS: 62

LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A LIGHTING	0	1.25	0
B AIR CONDITIONING	0	1.00	0
C REFRIGERATION	1920	1.00	1920
D KITCHEN	18580	0.65	12077
E MISC. EQUIPMENT	3530	1.00	3530
F RECPTS (1st 10 KW)	4860	1.00	4860
(Remaining Recpt.s)	0	0.50	0
TOTAL DEMAND VA:	28890	0.77	22387

PANEL E

LOCATION: ELECTRICAL ROOM | SERVES: STANDBY | MOUNT: SURFACE
PNL VOLTAGE: 120/208, 3P, 4W | PNL AIC (RMS): 22,000 A | PANEL TYPE: SI | MAIN LUG ONLY: 175 A | BUS: 250 A
BOLT- IN BREAKERS | FULL SOLID NEUTRAL BUS | GROUND & I.G. BUS

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	BKR P	BKR TRIP	CONNECTED VA A	CONNECTED VA B	CONNECTED VA C	BKR TRIP	BKR P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
	E	1	FIRE ALARM	1	20		360							
	E	3	EMS PANEL (DELI)	1	20			400		20	1 SPARE	2		
11	A	5	PROCUCE LIGHTING	1	20			786	600	20	1 BAKERY/DELI LIGHTING	4	A	
		7	SPACE								SPACE	6		
	F	9	AC-2 RECEPTACLE	1	20		360				SPACE	8		
		11	SPACE								SPACE	10		
		13									SPACE	12		
		15					360			20	1 MOTOR CENTER RECEPTACLE	14	F	
		17						230		20	1 MOTOR CENTER LIGHTING	16	A	
	E	19	FIRE ALARM	1	20	360					SPACE	18		
	E	21	EMS "A"	1	20		360	180		20	1 WALL-E STACKER CHARGER	20	F	
	E	23	EMS "A"	1	20	600	180	20	1		MAINT. COMPRESSOR	22	E	
9	F	25	DSD RECEPTACLE	1	20	360					SPACE	24		
		27	SPACE								SPACE	26		
		29								30	1 SPARE	28		
		31								30	1 SPARE	30		
		33								30	1 SPARE	32		
		35						790		20	1 SUMP PUMP	34	E	
		37	PANEL "EC"	3	40	1600					SPACE	36		
		39		-	-	5800	3510		80	3	PANEL "EA"	38		
		41		-	-		6550	2100	-	-		40		
								7520	-	-		42		

CONNECTED VA: 9200 | 13406 | 10400 | DEMAND FACTOR: 0.95
TOTAL CONNECTED VA: 33006 AMPS: 92 | TOTAL DEMAND AMPS: 87

LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A LIGHTING	2566	1.25	3208
B AIR CONDITIONING	0	1.00	0
C REFRIGERATION	0	1.00	0
D KITCHEN	0	1.00	0
E MISC. EQUIPMENT	15840	1.00	15840
F RECPTS (1st 10 KW)	10000	1.00	10000
(Remaining Recpt.s)	4600	0.50	2300
TOTAL DEMAND VA:	33006	0.95	31348

PANEL EA

LOCATION: EMPLOYEE LOUNGE | SERVES: FRONT END | MOUNT: FLUSH
PNL VOLTAGE: 120/208, 3P, 4W | PNL AIC (RMS): 10,000 A | PANEL TYPE: S1 | MAIN LUG ONLY: 125 A | BUS: 125 A
BOLT- IN BREAKERS | FULL SOLID NEUTRAL BUS | GROUND & I.G. BUS

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	BKR P	BKR TRIP	CONNECTED VA A	CONNECTED VA B	CONNECTED VA C	BKR TRIP	BKR P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
	F	1	WALKER DUCT	1	20	100								
11	E	3	WALKER DUCT	1	20	180	100		20	1	CHECKOUT #2	2	F	9
9	F	5	CHECKOUT #1	1	20		180	180	20	1	CHECKOUT #3	4	F	9
9	F	7	CHECKOUT #5	1	20	180		180	20	1	CHECKOUT #4	6	F	9
9	F	9	CHECKOUT #6	1	20	360	180		20	1	SELF CHECKOUT #8A	8	F	9
9	F	11	SELF CHECKOUT #7A	1	20		100	360	20	1	WALKERDUCT	10	E	11
9	F	13	CHECKOUT #9	1	20	180		180	20	1	JOB APP KIOSK	12	F	
11	E	15	WALKER DUCT	1	20	180	100		20	1	DSD RECEPTACLE	14	F	
		17	SPACE				600		20	1	NEW RACK	16	E	
	E	19	EMPLOYMENT KIOSK	1	20	180		2000	30	1	NEW RACK	18	E	
9	F	21	CUST SERVICE CHECKOUT	1	20	360	360		20	1	ALTERNATE CONTROLLER	20	F	
9	F	23	CUST SERVICE CHECKOUT	1	20		360	360	20	1	PEOPLE PLANNER	22	F	
	F	25	MANAGER OFFICE RECPT	1	20	180		360	20	1	COMPUTER TERMINAL	24	F	
	F	27	BREAKROOM MICROWAVE	1	20	360	800		20	1	MASTER CONTROLLER	26	F	
	F	29	PUBLIC CCTV MONITOR	1	20		360	360	20	1	ATM	28	E	
		31	SURGE SUPPRESSOR	3	40			360	20	1	CCTV RECPT	30	F	
		33		-	-	360			20	1	CCTV RECPT	32	F	
		35		-	-		360		20	1	CCTV TRANSFORMER	34	F	
		37	PANEL "EB"	3	40	2820		360	20	1	SELF CHECKOUT #7B	36	F	5

PANEL H

LOCATION: DELI/BAKERY CORR
SERVES: SERVING CASE
MOUNT: SURFACE

PNL VOLTAGE: 120/208, 3P, 4W
PNL AIC (RMS): 14,000 A
PANEL TYPE: S1
MAIN LUG ONLY: 250 A BUS: 250A

BOLT- IN BREAKERS
FULL SOLID NEUTRAL BUS
GROUND BUS
FEED THRU LUGS

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	P	BKR TRP	CONNECTED VA A	B	C	BKR TRP	P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
		1	SPACE											
	C	3	PRODUCE CASE 35 F	1	15	200	110		15	1	F JUICE CASE 38	2	C	
	A	5	PRODUCE CASE 35 L	1	20		280	170	20	1	L JUICE CASE 38	4	A	
	A	7	PRODUCE CASE 36 L	1	20	280					SPACE	6		
	C	9	PRODUCE CASE 36 F	1	15	250	200		15	1	F DELI COUNTER 40	8	C	
	A	11	DELI CASE 39 L	1	20		440	90	20	1	L DELI COUNTER 40	10	A	
	C	13	DELI CASE 39 F	1	15	60		230	20	1	H DELI COUNTER 40	12	C	
	C	15	DELI CASE 39 H	1	20	30	90		15	1	F FLORAL CASE 33	14	C	
	C	17	BAKERY FREEZER 45 L1	39 H	1	15		30	270	20	1	F FLORAL CASE 66	16	C
	C	19	FRZN BAKERY CASE 68 F	1	20	40		180	20	1	CASE RECPTACLE	18	F	
	A	21	FRZN BAKERY CASE 68 L	1	20	270	50		15	1	L BAKERY COOLER 44	20	A	
	C	23	FRZN BAKERY CASE 68 H	1	20		310	410	15	2	F PRODUCE COOLER 34	22	C	
	C	25	DELI COOLER 41 F	2	15	210	310	-	-	F		24	C	
	A	27	DELI COOLER 41 F	-	-	540	210		20	1	L PRODUCE COOLER 34	26	A	
	A	29	DELI COOLER 41 L	1	20	210	270	15	2	F DELI COOLER 42		28	C	
	A	31	BAKERY FREEZER 43 L	1	20	270	210	-	-	F		42	C	
	C	33	BAKERY COOLER 44 F	2	15	270	210		20	1	L DELI COOLER 42	32	A	
	-	35		44 F	-	-		310	210	15	1	F SALAD CASE 37	34	C
	C	37	DELI SLANC H-20	47 H	1	20	90		450	20	1	L SALAD CASE 37	36	A
	C	39	DELI SLANC H-17	47 F	1	20	1884	190		20	1	BOARS HEAD TWIST LOCK	38	E 11
	A	41	DELI SLAND	47 L	1	20		156	130	15	1	BOARS HEAD OUTLET	40	E 11
									130	20	1 L DELI ISLAND	46	42	A
			CONNECTED VA:			4394	2796	3060			DEMAND FACTOR: 1.09			
			TOTAL CONNECTED VA: 10250			AMPS: 28					TOTAL DEMAND AMPS: 31			

	LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A	LIGHTING	3640	1.25	4550
B	AIR CONDITIONING	0	1.00	0
C	REFRIGERATION	4390	1.00	4390
D	KITCHEN	0	0.90	0
E	MISC. EQUIPMENT	2040	1.00	2040
F	RECPTS (1st 10 KW)	180	1.00	180
	(Remaining Recpt.s)	0	0.50	0
	TOTAL DEMAND VA:	10250	1.09	11160

PANEL J

LOCATION: DELI/CORRIDOR
SERVES: DELI/BAKERY
MOUNT: SURFACE

PNL VOLTAGE: 120/208, 3P, 4W
PNL AIC (RMS): 42,000 A
PANEL TYPE: S1
MAIN LUG ONLY: 250 A BUS: 250A

BOLT- IN BREAKERS
FULL SOLID NEUTRAL BUS
GROUND BUS

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	P	BKR TRP	CONNECTED VA A	B	C	BKR TRP	P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
6		1	SPARE	1	40									
6		3	SPARE	1	40				60	1	SPARE	2		6
6		5	SPARE	1	40				60	1	SPARE	4		6
6		7	SPARE	1	40				60	1	SPARE	6		6
6		9	SPARE	1	40				60	1	SPARE	8		6
6		11	SPARE	1	40				60	1	SPARE	10		6
6		13	SPARE	1	40				60	1	SPARE	12		6
6		15	SPARE	1	40				60	1	SPARE	14		6
	A	17	PRODUCE SIGNAGE LIGHTING	1	20			60	60	1	SPARE	16		6
	A	19	DELI & BAKERY SIGNAGE LIGHTING	1	20	110		260	15	1	F SANDWICH CASE 121	18	C	
		21	SPACE			90			20	1	L SANDWICH CASE 121	20	C	
		23									SPACE	22		
		25										24		
		27										26		
		29										28		
		31										30		
		33										32		
		35										34		
		37										36		
		39										38		
		41										40		
												42		
			CONNECTED VA:			200	0	320			DEMAND FACTOR: 1.08			
			TOTAL CONNECTED VA: 520			AMPS: 1					TOTAL DEMAND AMPS: 2			

	LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A	LIGHTING	170	1.25	213
B	AIR CONDITIONING	0	1.00	0
C	REFRIGERATION	350	1.00	350
D	KITCHEN	0	0.65	0
E	MISC. EQUIPMENT	0	1.00	0
F	RECPTS (1st 10 KW)	0	1.00	0
	(Remaining Recpt.s)	0	0.50	0
	TOTAL DEMAND VA:	520	1.08	563

PANEL K

LOCATION: DELI/BAKERY CORR
SERVES: DELI
MOUNT: SURFACE

PNL VOLTAGE: 120/208, 3P, 4W
PNL AIC (RMS): 10,000 A
PANEL TYPE: S1
MAIN LUG ONLY: 250 A BUS: 250A

BOLT- IN BREAKERS
FULL SOLID NEUTRAL BUS
GROUND BUS

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	P	BKR TRP	CONNECTED VA A	B	C	BKR TRP	P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
	A	1	LIGHTING	1	20	1920								
11	C	3	03UMA-4 CASE	1	20	180	1548		20	1	DELI APMG	2	F	9
9	F	5	DELI BEVERAGE CENTER	1	20		840	360	20	1	DELI/BAKERY OFFICE RECPT	4	F	
	F	7	RECEPTACLE	1	20	180		540	20	1	RECEPTACLE	6	F	
	F	9	RECEPTACLE	1	20	540	180		20	1	RECEPTACLE	8	F	
	D	11	BLAST CHILLER	2	20		1200	1670	20	1	3-DOOR REFRIGATOR	10	E	
		13				1670		660	20	1	DELI SLICER	12	D	9
	A	15	DELI LIGHTING	1	20	660	840		20	1	DELI SLICER	14	D	9
	A	17	DELI LIGHTING	1	20		660	840	20	1	DELI SLICER	16	D	9
	A	19	DELI LIGHTING	1	20	840		1822	30	2	DELI HOT CASE (DPBHP60WD) <G>	18	D	2
3	D	21	DELI HOT CASE (GHSS476HRD) <G>	2	40	1822	2695					20	L	2
3	-	23		-	-	-	1200	2695	20	1	DELI SOUP BAR <G>	22	E	3
9	D	25	POPCORN MACHINE <G>	1	30	2400		5980	60	3	POT WASHER	24	D	
	A	27	BAKERY LIGHTING	1	20	5980	1050					26	-	
	A	29	BAKERY LIGHTING	1	20		5980	1050	-	-		28	-	
	A	31	BAKERY LIGHTING	1	20	1050		190	20	1	SHUNT TRIP	30	E	
	F	33	RECEPTACLE	1	20	790	800		20	3	DELI HOOD FAN F-5	32	E	9
	F	35	RECEPTACLE	1	20		790	360	-	-		34	-	9
	E	37	FANS F-6,7 & 8	1	20	1180		790	-	-		36	-	9
3	D	39	DELI HOT CASE (GHSS476HRD) <G>	1	15	47	46		15	1	DELI HOT CASE (DPBHP60WD)	38	D	3
2	C	41	BEVERAGE CENTER ICE M/C	1	20		240	1132	20	1	DELI INSECT-O-CUTER	40	E	
								1920	20	1	DELI CORRIDOR LTNG	42	A	
			CONNECTED VA:			19259	18069	20009			DEMAND FACTOR: 0.83			
			TOTAL CONNECTED VA: 57337			AMPS: 159					TOTAL DEMAND AMPS: 132			

<G> PROVIDE GFCI BREAKER

	LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A	LIGHTING	9510	1.25	11888
B	AIR CONDITIONING	0	1.00	0
C	REFRIGERATION	2680	1.00	2680
D	KITCHEN	34787	0.65	22612
E	MISC. EQUIPMENT	6380	1.00	6380
F	RECPTS (1st 10 KW)	3980	1.00	3980
	(Remaining Recpt.s)	0	0.50	0
	TOTAL DEMAND VA:	57337	0.83	47539

PANEL L

LOCATION: DELI CORR
SERVES: DELI/COOKING
MOUNT: SURFACE

PNL VOLTAGE: 120/208, 3P, 4W
PNL AIC (RMS): 10,000 A
PANEL TYPE: S1
MCB 225A <1> BUS: 250A

BOLT- IN BREAKERS
FULL SOLID NEUTRAL BUS
GROUND BUS
120 VOLT SHUNT TRIP

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	P	BKR TRP	CONNECTED VA A	B	C	BKR TRP	P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
7,13	D	1	CHESTER FRYER (MGF-72)	3	80	6960								
7,13	-	3		-	-		6960		-	-	SHUNT TRIP	2	-	7,13
7,13	-	5		-	-			6960	80	3	CHESTER FRYER (MGF-72)	4	D	7,13
7,13	D	7	SHUNT TRIP	-	-		6960		-	-		6	-	7,13
3,13	-	9	NEW FRYER	3	80	6960	6960		-	-		8	-	7,13
3,13	-	11		-	-			6960			SPACE	10	-	
3,13	D	13		-	-	6960					SPACE	12	-	
3,13	-	15	SHUNT TRIP	-	-				20	1	SPARE	14	-	6
		17	SPACE	-	-				20	1	SPARE	16		6
		19	SPACE	-	-				20	1	SPARE	18		6
6		21	SPARE	2	30				20	1	SPARE	20		6
6		23		-	-				20	1	SPARE	22		6
7	D	25	HEAT & HOLD <G>	2	40	3006			20	1	SPARE	24		6
7	-	27		-	-		3006		30	1	SPARE	26		6
		29	SPACE						30	1	SPARE	28		6
									20	1	SPARE	30		6
			CONNECTED VA:			23886	23886	20880			DEMAND FACTOR: 0.65			
			TOTAL CONNECTED VA: 68652			AMPS: 191					TOTAL DEMAND AMPS: 124			

<G> PROVIDE GFCI BREAKER

	LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A	LIGHTING	0	1.25	0
B	AIR CONDITIONING	0	1.00	0
C	REFRIGERATION	0	1.00	0
D	KITCHEN	68652	0.65	44624
E	MISC. EQUIPMENT	0	1.00	0
F	RECPTS (1st 10 KW)	0	1.00	0
	(Remaining Recpt.s)	0	0.50	0
	TOTAL DEMAND VA:	68652	0.65	44624

<1> SHUNT TRIP MAIN BREAKER UPON ACTION OF HOOD ANSUL SYSTEM

<2> SHUNT TRIP BRANCH BREAKERS NOTED UPON ACTUALATION OF GFI SENSOR

PANEL NEW L1

LOCATION: DELI/CORRIDOR
SERVES: DELI
MOUNT: FLUSH

PNL VOLTAGE: 120/208, 3P, 4W
PNL AIC (RMS): 22,000 A
PANEL TYPE: NQOD
MAIN BREAKER: 225 <1> BUS: 225 A

BOLT- IN BREAKERS
FULL SOLID NEUTRAL BUS
GROUND BUS
SHUNT TRIP MAIN

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	P	BKR TRP	CONNECTED VA A	B	C	BKR TRP	P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
	D	1	COMBI OVEN (CTP7-20E) <2>	3	60	6400								
	-	3		-	-		6400				SPACE ONLY	2		
	-	5		-	-			6400				4		
	-	7	SHUNT TRIP	-	-							6		
	D	9	COMBI OVEN (CTP7-20E) <2>	3	60		6400					8		
	-	11		-	-			6400				10		
	-	13		-	-	6400						12		
	-	15	SHUNT TRIP	-	-							14		
	-	17	SPACE ONLY									16		
		19										18		
		21										20		
		23										22		
		25										24		
		27										26		
		29										28		
		31										30		
		33										32		
		35										34		
		37										36		
		39										38		
		41										40		
												42		
			CONNECTED VA:			12800	12800	12800			DEMAND FACTOR: 0.65			
			TOTAL CONNECTED VA: 38400			AMPS: 107					TOTAL DEMAND AMPS: 69			

	LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A	LIGHTING	0	1.25	0
B	AIR CONDITIONING	0	1.00	0
C	REFRIGERATION	0	1.00	0
D	KITCHEN	38400	0.65	24960
E	MISC. EQUIPMENT	0	1.00	0
F	RECPTS (1st 10 KW)	0	1.00	0
	(Remaining Recpt.s)	0	0.50	0
	TOTAL DEMAND VA:	38400	0.65	24960

<1> SHUNT TRIP MAIN BREAKER UPON ACTION OF HOOD ANSUL SYSTEM

<2> SHUNT TRIP BRANCH BREAKERS NOTED UPON ACTUALATION OF GFI SENSOR

PANEL M

LOCATION: DELI CORR
SERVES: DELI
MOUNT: SURFACE

PNL VOLTAGE: 120/208, 3P, 4W
PNL AIC (RMS): 14,000 A
PANEL TYPE: S1
MAIN LUG ONLY: 250 A BUS: 250A

BOLT- IN BREAKERS
FULL SOLID NEUTRAL BUS
GROUND BUS
120 VOLT SHUNT TRIP

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	P	BKR TRP	CONNECTED VA A	B	C	BKR TRP	P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
		1	SPACE											
6		3	SHUNT TRIP	1	20						SPACE	2		
6		5	SPARE	3	50							4		
6		7										6		
6		9		-	-	540			20	1	RECEPTACLE	8	F	
9	D	11	ROUNDER	3	20		1470	1200	20	1	BAKERY FAN SF-1	10	E	
9	-	13		-	-	1200		1000	20	1	EDF	12	E	
9	-	15		-	-	540	1200		20	1	RECEPTACLE	14	F	
9	D	17	KEMPER SPIRAL MIXER	3	50		1230	2960	30	3	MIXER	16	D	9
9	-	19		-	-	2960		1230	-	-		18	-	9
9	-	21		-	-	1230	2960					20	-	9
6		23	SPARE	3	30		960		20	3	CUTLER OVEN	22	D	
6		25		-	-			960	-	-		24	-	
6		27		-	-	960			-	-		26	-	
	D	29	BAKERY RACK OVEN	3	20		4440	530	60	3	BAKERY PROOF BOX	28	D	
	-	31		-	-	530		4440	-	-		30	-	
	-	33		-	-	4440	530		-	-		32	-	
	E	35	BAKERY OVEN CONTROLS F-10	1	20		1200	1570	20	1	BAKERY PROOF BOX CONTROLS	34	E	
	E	37	CUTLER OVEN CONTROLS	1	20	720		500	20	1	DELI HOOD CONTROLPANEL	36	E	9
	D	39	WATER CHILLER	1	20	360	30		20	1	PROOF BOX WATER SOFTENER	38	E	
	E	41	EDF	1	20		990	1000	30	2	WATER CHILLER	40	D	3
								990	-	-		42	-	3
			CONNECTED VA:			13480	15010	16380			DEMAND FACTOR: 0.72			
			TOTAL CONNECTED VA: 44870			AMPS: 125					TOTAL DEMAND AMPS: 90			

	LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A	LIGHTING	0	1.25	0
B	AIR CONDITIONING	0	1.00	0
C	REFRIGERATION	0	1.00	0
D	KITCHEN	35970	0.65	23381
E	MISC. EQUIPMENT	7820	1.00	7820
F	RECPTS (1st 10 KW)	1080	1.00	1080
	(Remaining Recpt.s)	0	0.50	0
	TOTAL DEMAND VA:	44870	0.72	32281

PANEL MA

LOCATION: DELI CORRIDOR
SERVES: BAKERY
MOUNT: SURFACE

PNL VOLTAGE: 120/208, 3P, 4W
PNL AIC (RMS): 10,000 A
PANEL TYPE: S1
MAIN LUG ONLY: 125A BUS: 225 A

BOLT- IN BREAKERS
FULL SOLID NEUTRAL BUS
GROUND BUS

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	P	BKR TRP	CONNECTED VA A	B	C	BKR TRP	P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
	E	1	DELI 4X4	1	20	1500								
		3	SPARE	1	20	80			20	1	BAKERY DISPLAY	2	F	7,9
9	F	5	SPARE	1	20		80		20	1	BAKERY DISPLAY	4	F	7,9
	D	7	BAKERY MIXER	1	20	700		1170	20	1	BAKERY DISPLAY	6	F	7,9
	D	9	BAKERY REFRIGERATOR (MARBLE TOP)	1	20		1200		20	1	SPARE	8		
	D	11	BAKERY REFRIGERATOR (MARBLE TOP)	1	20		180	1200	20	1	RECEPTACLE	10	F	
	E	13	BAKERY BC 48	1	20	200		1220	20	1	BREAD SLICER	12	D	
7,9	D	15	SHEETER	1	20		1180		20	1	SPARE	14		
7,9	F	17	CORD REEL SEASONAL DISPLAY	1	20		180	1200	20	1	BAKERY CEILING MTD RECPT	16	F	
7,9	F	19	CORD REEL SEASONAL DISPLAY	1	20	1800		170	20	1	SHS2436	18	F	7,9
	D	21	GLAZE TABLE BUG LIGHT S-300	1	20	60	410		20	1	BAKERY SHS 60	20	F	7,9
11	E	23	EXISTING	3	20			1500			SPACE	22		
11	-	25		-	-	1500		2500	30	2	BAKERY CAKE CASE	24	C	11
11	-	27		-	-	2500	1500		-	-		26	-	11
11	F	29	CORD REEL SEASONAL DISPLAY	1	20		2500	3550	30	2	BAKERY CAKE CASE	28	C	11
		31	SPACE					2500	-	-		30	-	11
		33	SPACE								SPACE	32		
11	F	35	CORD REEL SEASONAL DISPLAY	1	20			1550			SPACE	34		
		37	SPACE								SPACE	36		
		39	SPACE								SPACE	38		
		41	SPACE			1000			20	1	DELI WRAPPER <G>	40	D	5
							1920	20	1		DELI HOT CASE (GHS355H) <G>	42	D	5
			CONNECTED VA:			8340	8230	16480			DEMAND FACTOR: 1.00			
			TOTAL CONNECTED VA: 33050			AMPS: 92					TOTAL DEMAND AMPS: 92			

<G> PROVIDE GFCI BREAKER

	LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A	LIGHTING	0	1.25	0
B	AIR CONDITIONING	0	1.00	0
C	REFRIGERATION	10000	1.00	10000
D	KITCHEN	8830	1.00	8830
E	MISC. EQUIPMENT	6200	1.00	6200
F	RECPTS (1st 10 KW)	8020	1.00	8020
	(Remaining Recpt.s)	0	0.50	0
	TOTAL DEMAND VA:	33050	1.00	33050

PANEL N

LOCATION: EMPLOYEE LOUNGE
SERVES: FRONT END
MOUNT: FLUSH

PNL VOLTAGE: 120/208, 3P, 4W
PNL AIC (RMS): 10,000 A
PANEL TYPE: S1
MAIN LUG ONLY: 250 A BUS: 250 A

BOLT- IN BREAKERS
FULL SOLID NEUTRAL BUS
GROUND BUS

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	P	BKR TRP	CONNECTED VA A	B	C	BKR TRP	P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
	A	1	LOUNGE LTG	1	20									
		3	SPARE	1	20	850			20	1	CHECKOUT #2 & MERCH	2	F	9
9	F	5	CHECKOUT #1 & MERCH	1	20		850	850	20	1	CHECKOUT #3 & MERCH	4	F	9
		7	SPARE	1	20			850	20	1	CHECKOUT #4 & MERCH	6	F	9
9	F	9	CHECKOUT #5 & MERCH	1	20	850	850		20	1	SELF CHECKOUT #8A,B & C	8	F	9
9	F	11	CHECKOUT #6 & MERCH	1	20		180	850	20	1	PHARMACY RECPT	10	F	
9	F	13	SELF CHECKOUT #7A,B & C	1	20	850		720	20	1	PLUGMOLD WREMOLD	12	F	
9	F	15	CHECKOUT #9	1	20	1620	360		20	1	PLUGMOLD WREMOLD	14	F	
9	E	17	GDM-72 COOLER	1	20		1620	1440	20	1	PLUGMOLD WREMOLD	16	F	
	E	19	COFFEE MAKER	1	20	1000		640	20	1	PHARMACY LIGHTING	18	A	
	E	21	COKE MACHINE	1	20	1920	1000		20	1	AQUA VEND	20	E	
	E	23	ELECTRIC WATER COOLER	1	20			180	1000	20	1	BP MACHINE (HIGI)	22	F
	F	25	MANAGER OFFICE RECEPT	1	20	360		1920	20	1	EXISTING	24	E	
	F	27	MANAGER OFFICE RECEPT	1	20	540	540		20	1	RCPT	26	F	
	F	29	SERVICE RECPT ABOVE CEILING	1	20		540	1920	20	1	RCPT	28	F	
	F	31	OFFICE RECPT	1	20	720		1200	20	1	H/C/CART CHARGER	30	E	
	F	33	OFFICE RECPT	1	20	1000	720		20	1	COKE MACHINE	32	E	
	F	35	OFFICE RECPT	1	20		180	720	20	1	COMMON AREA FLR RECPT	34	F	
	F	37	ATM/OUTSIDE RECPT	1	20	720		1000	20	1	INSTACART COOLERS	36	E	
		39	SPARE	1	20	1000			20	1	INSTACART COOLERS	38	E	
	F	41	PHARMACY RECPT	1	20		1000	180	30	1	INSTACART COOLERS	40	E	
								180	20	1	INSTACART POS	42	F	
			CONNECTED VA:			11790	8020	13470			DEMAND FACTOR: 0.88			
			TOTAL CONNECTED VA: 33280			AMPS: 92					TOTAL DEMAND AMPS: 81			

	LOAD TYPE (LT)	CONNECTED	FACTOR	DEMAND
A	LIGHTING	1000	1.25	1250
B	AIR CONDITIONING	0	1.00	0
C	REFRIGERATION	0	1.00	0
D	KITCHEN	0	0.65	0
E	MISC. EQUIPMENT	13480	1.00	13480
F	RECPTS (1st 10 KW)	10000	1.00	10000
	(Remaining Recpt.s)	8800	0.50	4400
	TOTAL DEMAND VA:	33280	0.88	29130

PANEL Q

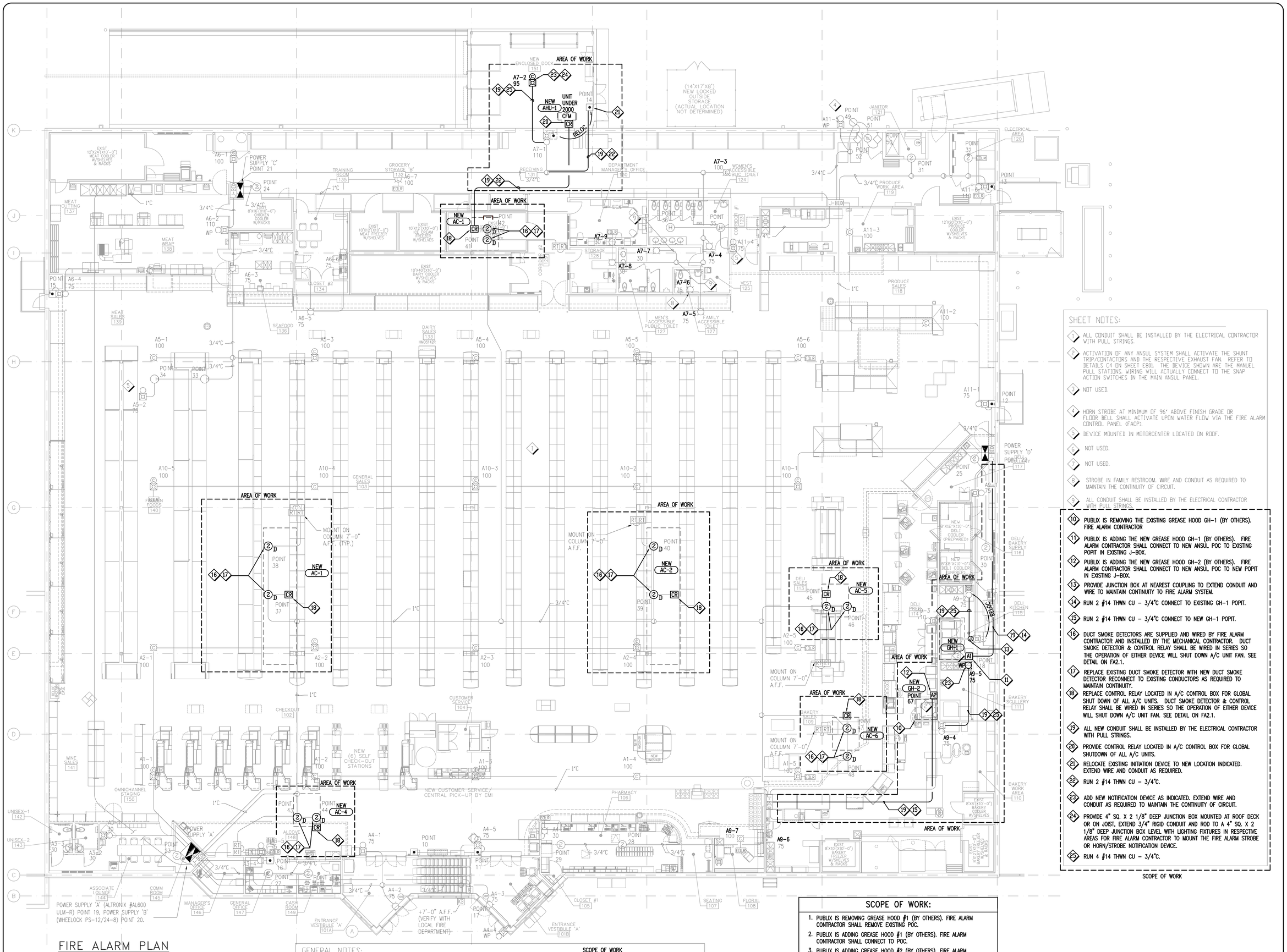
LOCATION: CORRIDOR #2
SERVES: STORE FRONT
MOUNT: FLUSH

PNL VOLTAGE: 120/208, 3P, 4W
PNL AIC (RMS): 10,000 A
PANEL TYPE: S1
MAIN LUG ONLY: 225 A BUS: 225 A

BOLT- IN BREAKERS
FULL SOLID NEUTRAL BUS
GROUND BUS
FEED THRU LUGS

CKT NOTE	LT	CKT NO	EQUIPMENT SERVED	P	BKR TRP	CONNECTED VA A	B	C	BKR TRP	P	EQUIPMENT SERVED	CKT NO	LT	CKT NOTE
	A	1	GONDOLA LIGHTING	1	20	1200								
	A	3	GONDOLA LIGHTING	1	20	1200	1200		20	1	GONDOLA LIGHTING	2	A	
	A	5	GONDOLA LIGHTING	1	20		1200	1200	20	1	GONDOLA LIGHTING	4	A	
	F	7	GONDOLA RECEPTACLE	1	20	900		1200	20	1	GONDOLA LIGHTING	6	A	
	F	9	GONDOLA RECEPTACLE	1	20		720		30	2	SPARE	8		
	F	11	GONDOLA RECEPTACLE	1	20			270	20	1	F FLORAL CASE	66	16	C
	E	13	END CAP REFRIG	2	30	1730		1730	30	2	END CAP REFRIG	12	E	
	-	15	END CAP REFRIG	-	-	1730	1730		-	-	END CAP REFRIG	14	-	
	E	17	END CAP REFRIG	2	30		1730	1730	30	2	END CAP REFRIG	16	E	
	-	19	END CAP REFRIG	-	-	1730		1730	-	-	END CAP REFRIG	18	-	
	E	21	END CAP REFRIG	2	30	960	1730		20	1	IN-LINE REFRIG CONTROLS	20	E	
	-	23	END CAP REFRIG	-	-		990	1730	30	2	IN-LINE REFRIG UNIT	22	E	
	E	25	IN-LINE REFRIG CONTROLS	1	20	960		990	-	-	IN-LINE REFRIG UNIT	24	-	
	E	27	IN-LINE REFRIG UNIT	2	20	960	990		20	1	IN-LINE REFRIG CONTROLS	26	E	
	-	29	IN-LINE REFRIG UNIT	-	-		990	990	20	2	IN-LINE REFRIG UNIT	28	E	
	E	31	IN-LINE REFRIG CONTROLS	1	20	960		990	-	-	IN-LINE REFRIG UNIT	30	-	
	E	33	IN-LINE REFRIG UNIT	2	20

FIRE ALARM PLAN



SHEET NOTES:

1. ALL CONDUIT SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR WITH PULL STRINGS.
2. ACTIVATION OF ANY ANSUL SYSTEM SHALL ACTIVATE THE SHUNT TRIP/CONTACTORS AND THE RESPECTIVE EXHAUST FAN. REFER TO DETAILS C4 ON SHEET E801. THE DEVICE SHOWN ARE THE MANUEL PULL STATIONS. WIRING WILL ACTUALLY CONNECT TO THE SNAP ACTION SWITCHES IN THE MAIN ANSUL PANEL.
3. NOT USED.
4. HORN STROBE AT MINIMUM OF 96" ABOVE FINISH GRADE OR FLOOR BELL SHALL ACTIVATE UPON WATER FLOW VIA THE FIRE ALARM CONTROL PANEL (FACP).
5. DEVICE MOUNTED IN MOTORCENTER LOCATED ON ROOF.
6. NOT USED.
7. NOT USED.
8. STROBE IN FAMILY RESTROOM. WIRE AND CONDUIT AS REQUIRED TO MAINTAIN THE CONTINUITY OF CIRCUIT.
9. ALL CONDUIT SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR WITH PULL STRINGS.
10. PUBLIX IS REMOVING THE EXISTING GREASE HOOD GH-1 (BY OTHERS). FIRE ALARM CONTRACTOR
11. PUBLIX IS ADDING THE NEW GREASE HOOD GH-1 (BY OTHERS). FIRE ALARM CONTRACTOR SHALL CONNECT TO NEW ANSUL POC TO EXISTING POPIT IN EXISTING J-BOX.
12. PUBLIX IS ADDING THE NEW GREASE HOOD GH-2 (BY OTHERS). FIRE ALARM CONTRACTOR SHALL CONNECT TO NEW ANSUL POC TO NEW POPIT IN EXISTING J-BOX.
13. PROVIDE JUNCTION BOX AT NEAREST COUPLING TO EXTEND CONDUIT AND WIRE TO MAINTAIN CONTINUITY TO FIRE ALARM SYSTEM.
14. RUN 2 #14 THWN CU – 3/4"C CONNECT TO EXISTING GH-1 POPIT.
15. RUN 2 #14 THWN CU – 3/4"C CONNECT TO NEW GH-1 POPIT.
16. DUCT SMOKE DETECTORS ARE SUPPLIED AND WIRED BY FIRE ALARM CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTRACTOR. DUCT SMOKE DETECTOR & CONTROL RELAY SHALL BE WIRED IN SERIES SO THE OPERATION OF EITHER DEVICE WILL SHUT DOWN A/C UNIT FAN. SEE DETAIL ON FA2.1.
17. REPLACE EXISTING DUCT SMOKE DETECTOR WITH NEW DUCT SMOKE DETECTOR RECONNECT TO EXISTING CONDUCTORS AS REQUIRED TO MAINTAIN CONTINUITY.
18. REPLACE CONTROL RELAY LOCATED IN A/C CONTROL BOX FOR GLOBAL SHUT DOWN OF ALL A/C UNITS. DUCT SMOKE DETECTOR & CONTROL RELAY SHALL BE WIRED IN SERIES SO THE OPERATION OF EITHER DEVICE WILL SHUT DOWN A/C UNIT FAN. SEE DETAIL ON FA2.1.
19. ALL NEW CONDUIT SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR WITH PULL STRINGS.
20. PROVIDE CONTROL RELAY LOCATED IN A/C CONTROL BOX FOR GLOBAL SHUTDOWN OF ALL A/C UNITS.
21. RELOCATE EXISTING INITIATION DEVICE TO NEW LOCATION INDICATED. EXTEND WIRE AND CONDUIT AS REQUIRED.
22. RUN 2 #14 THWN CU – 3/4"C.
23. ADD NEW NOTIFICATION DEVICE AS INDICATED. EXTEND WIRE AND CONDUIT AS REQUIRED TO MAINTAIN THE CONTINUITY OF CIRCUIT.
24. PROVIDE 4" SQ. X 2 1/8" DEEP JUNCTION BOX MOUNTED AT ROOF DECK OR ON JOIST, EXTEND 3/4" RIGID CONDUIT AND ROD TO A 4" SQ. X 2 1/8" DEEP JUNCTION BOX LEVEL WITH LIGHTING FIXTURES IN RESPECTIVE AREAS FOR FIRE ALARM CONTRACTOR TO MOUNT THE FIRE ALARM STROBE OR HORN/STROBE NOTIFICATION DEVICE.
25. RUN 4 #14 THWN CU – 3/4"C.

SCOPE OF WORK

SCOPE OF WORK:

1. PUBLIX IS REMOVING GREASE HOOD #1 (BY OTHERS). FIRE ALARM CONTRACTOR SHALL REMOVE EXISTING POC.
2. PUBLIX IS ADDING GREASE HOOD #1 (BY OTHERS). FIRE ALARM CONTRACTOR SHALL CONNECT TO POC.
3. PUBLIX IS ADDING GREASE HOOD #2 (BY OTHERS). FIRE ALARM CONTRACTOR SHALL CONNECT TO POC.
4. RELOCATE EXISTING PULL STATION TO NEW LOCATION IN NEW ENCLOSED DOCK.
5. ADD ONE NEW CEILING HORN/STROBE IN NEW ENCLOSED DOCK AREA.
6. REPLACE TWELVE EXISTING DUCT SMOKE DETECTORS WITH TWELVE NEW DUCT SMOKE DETECTORS FOR NEW AC-1 – AC-6.
7. REPLACE SIX EXISTING CONTROL RELAYS WITH SIX NEW CONTROL RELAYS FOR NEW AC-1 – AC-6.
8. RELOCATE HORN/STROBE IN DELI KITCHEN.
9. ADD ONE NEW STROBE IN BAKERY SCULLERY.
10. ADD CONTROL RELAY FOR NEW AH-1 LOCATED IN ENCLOSED DOCK AREA.

GENERAL NOTES:

A. REFER TO SHEET FA-2 FOR THE FIRE ALARM/BURLARY LEGEND.
B. COORDINATE ALL WALL MOUNTED DEVICES WITH THE OTHER TRADES.
C. RETURN ANY EXISTING FIRE ALARM/SECURITY EQUIPMENT NOT USED TO PUBLIX.
D. NOTIFICATION APPLIANCES MAY BE MOUNTED AT 96" AFF IF NECESSARY TO CLEAR SHELVING.
E. ALL CONDUIT SHALL BE 1/2" UNLESS OTHERWISE NOTED.
F. MOUNT CEILING NOTIFICATION DEVICES 20' A.F.F. OR ON CEILING WHICHEVER IS LOWER.
G. LOCATE POPITS IN NEAREST 12"x12"x18" MAIN J-BOX. REFER TO FIRE ALARM LEGEND ON DRAWING FA-2 FOR MOUNTING HEIGHT.

SCOPE OF WORK

H. NEW WORK FOR FIRE ALARM DESIGN & INSTALLATION SHALL MEET THE FOLLOWING CODES:
   1. FLORIDA FIRE PREVENTION CODE (FFPC) 2020, 7th EDITION.
   2. FLORIDA BUILDING CODE (FBC) 7th EDITION 2020.
   3. NFPA 1, 2018 EDITION, "FIRE CODE".
   4. NFPA 101, 2018 EDITION, "LIFE SAFETY CODE".
   5. NFPA 72, 2016 EDITION, "NATIONAL FIRE ALARM CODE".
   6. NFPA 70, 2017 EDITION, "NATIONAL ELECTRICAL CODE".
I. ALL NEW CONDUIT IS 3/4" UNLESS OTHERWISE NOTED.
J. DEVICES AND CONDUIT SHOWN LIGHTER ARE EXISTING TO REMAIN.
K. DEVICES AND CONDUIT SHOWN DASHED ARE EXISTING TO BE REMOVED AND REINSTALLED OR RELOCATED.

PLAN KEY

———	NEW
———	EXISTING TO REMAIN
- - -	EXISTING TO BE REMOVED AND REINSTALLED OR RELOCATED

NORTH
GRAPHIC SCALE
–8' 0 8' 16'
SCALE: 1/8" = 1'-0"

REVISION

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CRYSTAL SPRINGS SHOPPING CENTER
6760 WEST GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429

FIRE ALARM PLAN

DENNIS VANN
FL. PE. #57620

APPROVED BY:RS
DESIGNED BY:DEV
DRAWN BY: IF
DATE: 06/17/22
PROTOTYPE NA
SHEET NO.
FA1.1

\\SERVER2\Projects\Projects-2001\1-25\17019030\1\Remodel (06-17-22)\Tricon\017030FA-1RM(3).dwg

FIRE ALARM LEGEND

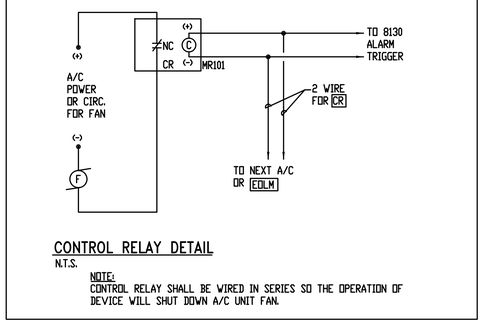
SYMBOL	DEVICES	SUPPLIED BY	INSTALLED BY	FINAL CONNECTION BY
J-BOX	JUNCTION BOX 12" x 12" x 18" MOUNTED @ 12 FT. AFF OR 1'-0" BELOW CEILING	ELECTRICAL	ELECTRICAL	ELECTRICAL
	FIRE ALARM PANEL - SEE NOTE 10 ON SHEET FA-3	PUBLIX	ELECTRICAL	F.A.M.R.
	24 VDC 8A POWER SUPPLY, 2-7AH BATTERIES WHEELOCK PS-12/24-8 EXCEPT FOR POWER SUPPLY 'A' WHICH SHALL BE AN ALTRONICS #AL600ULM-R WITH 2-BT1240 BATT. = 40AH.	PUBLIX	ELECTRICAL	F.A.M.R.
	FIRE ALARM MANUAL PULL STATION INSTALLED 4" SQ. W/SINGLE GANG PLASTER RING BOX 48" A.F.F.- ADT #BG-10	PUBLIX	F.A.M.R.	F.A.M.R.
	FIRE ALARM HORN-STROBE-'RED' CEILING MOUNTED HORN/STROBE INSTALLED IN 4" SQ. 2 1/8" DEEP BOX. WHEELOCK AS-24100C-FW	PUBLIX	F.A.M.R.	F.A.M.R.
	FIRE ALARM STROBE-'RED'. CEILING MOUNTED INSTALLED IN 4" SQ. 2 1/8" DEEP BOX. WHEELOCK RSS-24100C-FW	PUBLIX	F.A.M.R.	F.A.M.R.
	FIRE ALARM HORN-STROBE-'RED' WALL MOUNTED HORN/STROBE INSTALLED IN 4" SQ. 2 1/8" DEEP BOX AT 80" A.F.F. WHEELOCK AS-24MCW-FW SET CANDELA RATING AS INDICATED ON PLAN	PUBLIX	F.A.M.R.	F.A.M.R.
	FIRE ALARM STROBE-'RED'. WALL MOUNTED INSTALLED IN 4" SQ. 2 1/8" DEEP BOX AT 80" A.F.F. WHEELOCK RSS-24MCW-FW SET CANDELA RATING AS INDICATED ON PLAN.	PUBLIX	F.A.M.R.	F.A.M.R.
WP	FIRE ALARM HORN-STROBE-'RED' EXTERIOR WALL MOUNTED HORN/STROBE INSTALLED IN 4" SQ. 2 1/8" DEEP BOX AT 80" A.F.F. WHEELOCK ASWP2475W-FR	PUBLIX	F.A.M.R.	F.A.M.R.
	FLOW SWITCH (NOTE: SHALL BE CONNECTED BY FLEXIBLE CONDUIT FROM 4" SQ. BOX)	SPRINKLER	SPRINKLER	F.A.M.R.
	TAMPER SWITCH (NOTE: SHALL BE CONNECTED BY FLEXIBLE CONDUIT FROM 4" SQ. BOX)	SPRINKLER	SPRINKLER	F.A.M.R.
H	CEILING MOUNTED RATE OF RISE & FIXED HEAT DETECTOR INSTALLED IN A 4" SQ. 2 1/8 " DEEP BOX. ADT #475285	PUBLIX	F.A.M.R.	F.A.M.R.
2	CEILING MOUNTED 4 WIRE PHOTO ELECTRIC DETECTOR INSTALLED IN 4" SQ. 2 1/8 " DEEP BOX. ESL 449CT	PUBLIX	F.A.M.R.	F.A.M.R.
2 D	DUCT SMOKE DETECTOR - CONNECT BY FLEXIBLE CONDUIT FROM 4" SQ. BOX (NOTE: VERIFY SIZE OF SAMPLING TUBE) SYSTEM SENSOR DH400AC/DCP	PUBLIX	MECHANICAL	F.A.M.R.
RT	REMOTE TEST BUTTON- MOUNTED IN 4" J.B. & SINGLE GANG PLASTER RING (7'-0" A.F.F.) SYSTEM SENSOR #RTS 451	PUBLIX	F.A.M.R.	F.A.M.R.
CR	CONTROL RELAY MR. #101/T TO BE WITHIN 3' OF CONTROLLER, FOR SHUT DOWN OF AC UNIT.	PUBLIX	F.A.M.R.	F.A.M.R.
A1	ANSUL SWITCH CAT #32222 DUAL CONTACTS	BY OTHERS	MECHANICAL	F.A.M.R.
KB	KNOX BOX, AS REQUIRED BY THE LOCAL FIRE AUTHORITY	PUBLIX	F.A.M.R.	F.A.M.R.
K	REMOTE FIRE ALARM ANNUNCIATOR, RADIONICS D1257R	PUBLIX	F.A.M.R.	F.A.M.R.
EOLR	END OF LINE RESISTOR	PUBLIX	F.A.M.R.	F.A.M.R.
EOLM	ESL 204-12/24 SMOKE POWER SUPERVISION MODULE	PUBLIX	F.A.M.R.	F.A.M.R.
POINT	POPIT ADDRESSABLE POINT, RADIONICS D9127	PUBLIX	F.A.M.R.	F.A.M.R.
	EXIT SIGN	PUBLIX	ELECTRICAL	ELECTRICAL
	FIRE ALARM STROBE-'RED'. WALL MOUNTED INSTALLED IN 4" SQ. 2 1/8" DEEP BOX AT 80" A.F.F. WHEELOCK #STR SET CANDELA RATING AS INDICATED ON PLAN	PUBLIX	F.A.M.R.	F.A.M.R.
H	FIRE ALARM HORN-STROBE-'RED' CEILING MOUNTED HORN/STROBE INSTALLED IN 4" SQ. 2 1/8" DEEP BOX. WHEELOCK #HSRC SET CANDELA RATING AS INDICATED ON PLAN (SET AUDIBLE TO 95 dBA)	F.A. CONT.	F.A. CONT.	F.A. CONT.
WP	FIRE ALARM WP STROBE-'RED'. WALL MOUNTED INSTALLED IN 4" SQ. 2 1/8" DEEP BOX AT 80" A.F.F. WHEELOCK #RSSWP-2475W-FW. SET CANDELA RATING AS INDICATED ON PLAN.	F.A. CONT.	F.A. CONT.	F.A. CONT.
2 D	DUCT SMOKE DETECTOR - CONNECT BY FLEXIBLE CONDUIT FROM 4" SQ. BOX (NOTE: VERIFY SIZE OF SAMPLING TUBE) SYSTEM SENSOR D4120	F.A. CONT.	MECHANICAL	F.A. CONT.
CR	CONTROL RELAY MR. #101/T TO BE WITHIN 3' OF CONTROLLER, FOR SHUT DOWN OF AC UNIT.	F.A. CONT.	F.A. CONT.	F.A. CONT.
A6	ANSUL SWITCH CAT #32222 DUAL CONTACTS, CONNECT TO NEW POPIT	BY OTHERS	MECHANICAL	F.A.M.R.

SCOPE OF WORK

FIRE ALARM WIRE SCHEDULE

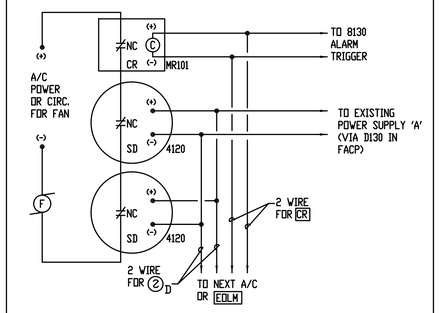
COLOR	TYPE	DESCRIPTION
RED	14AWG STRANDED THHN CU	HORN/STROBE CIRCUITS
BLACK	14AWG STRANDED THHN CU	HORN/STROBE CIRCUITS
BROWN	14AWG STRANDED THHN CU	SMOKE & DUCT POWER
WHITE	14AWG STRANDED THHN CU	SMOKE & DUCT POWER
YELLOW	14AWG STRANDED THHN CU	DET. INITIATING CIRCUITS, WF, TS
BLUE	14AWG STRANDED THHN CU	DET. INITIATING CIRCUITS, WF, TS
VIOLET	14AWG STRANDED THHN CU	PULL STATION INIT. CIRC., WF, TS
GREEN	14AWG STRANDED THHN CU	PULL STATION INIT. CIRC., WF, TS
--	18/4 TWISTED PAIR	TEST SWITCHES AND KEYPADS
--	18/2 SHIELDED TWISTED PAIR	POPIT DATA, DOOR HOLDERS, RELEASE CIRCUITS, P/S TRIGGER

SCOPE OF WORK



CONTROL RELAY DETAIL
N.T.S.

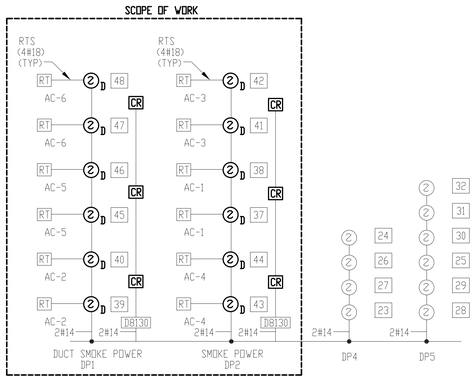
NOTE:
CONTROL RELAY SHALL BE WIRED IN SERIES SO THE OPERATION OF DEVICE WILL SHUT DOWN A/C UNIT FAN.



NEW DUCT SMOKE DETECTOR AND CONTROL RELAY DETAIL
N.T.S.

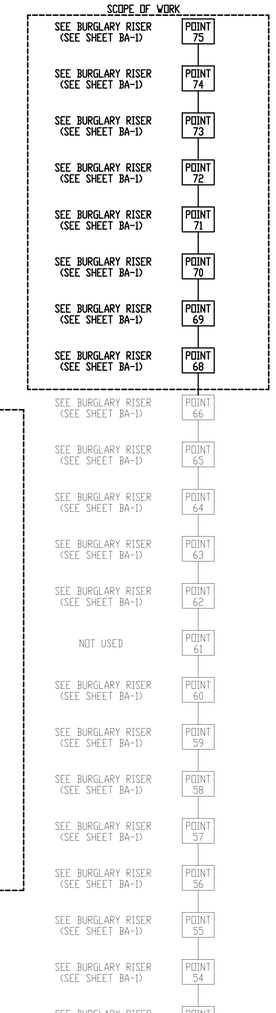
NOTE:
DUCT SMOKE DETECTOR & CONTROL RELAY SHALL BE WIRED IN SERIES SO THE OPERATION OF EITHER DEVICE WILL SHUT DOWN A/C UNIT FAN.

SCOPE OF WORK



FIRE ALARM NOTIFICATION APPLIANCE DIAGRAM FOR POWER SUPPLY 'A'
(ALTRONIC #AL600 ULM-R IN A FIRELITE BB-5S BOX)

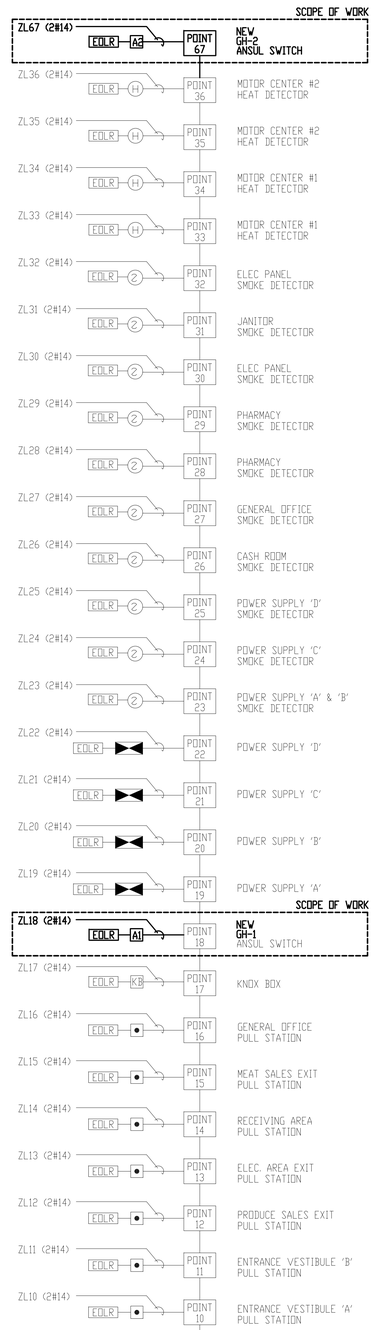
SCOPE OF WORK



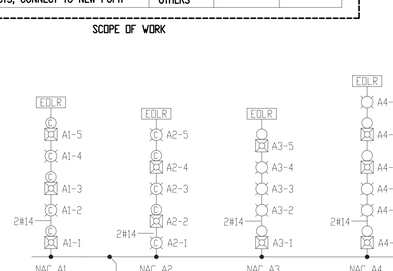
FIRE ALARM INITIATING APPLIANCE DIAGRAM
N.T.S.

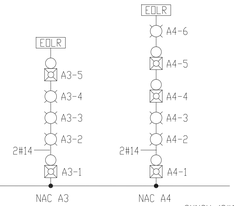
PLAN KEY	
———	NEW
———	EXISTING TO REMAIN
- - -	EXISTING TO BE REMOVED AND REINSTALLED OR RELOCATED

SCOPE OF WORK



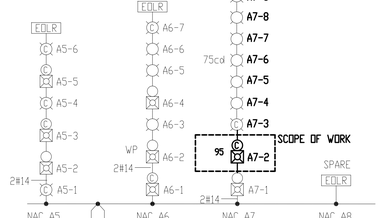
SCOPE OF WORK





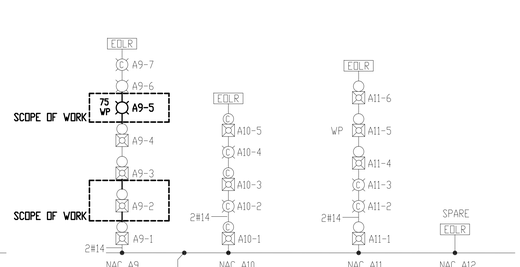
SYNCH (2#14)

FIRE ALARM NOTIFICATION APPLIANCE DIAGRAM FOR POWER SUPPLY 'B'



SYNCH (2#14)

FIRE ALARM NOTIFICATION APPLIANCE DIAGRAM FOR POWER SUPPLY 'C'



FIRE ALARM NOTIFICATION APPLIANCE DIAGRAM FOR POWER SUPPLY 'D'

REVISION

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6760 WEST GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429

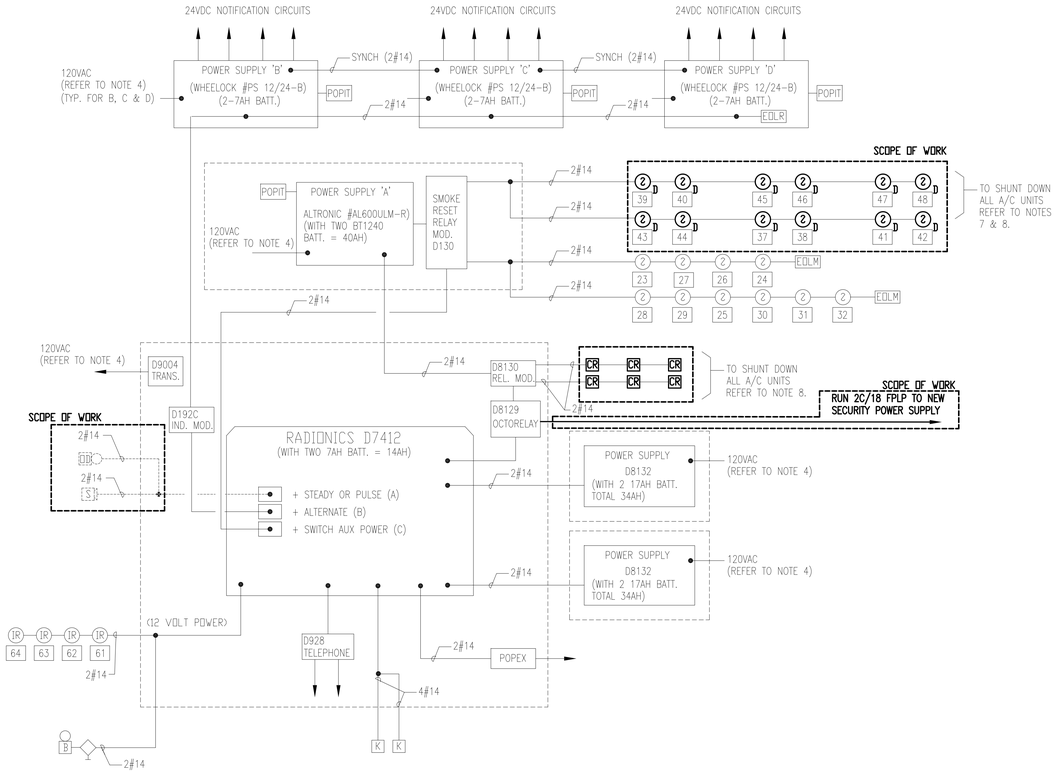
FIRE ALARM LEGEND SCHEDULE AND DIAGRAMS

DENNIS VANN
FL. PE. #57620

APPROVED BY:	RS
DESIGNED BY:	DEV
DRAWN BY:	EAK
DATE:	06/20/22
PROTOTYPE	NA

SHEET NO.
FA2.1

\\SERVER2\Projects\Projects-2001\1-25\17010030\1Remodel (06-17-22)\Tricon\010039A-2RM(3).dwg



ALARM PANEL DETAIL
N.T.S.

NOTES:

1. ALL FIRE COMPONENTS SHALL BE COMPATIBLE, U.L. LISTED FOR FIRE ALARM USED AND LABELED.
2. F.A.M.R. FIRE ALARM MANUFACTURE REPRESENTATIVE.
3. ALL CONDUIT AND JUNCTION BOXES TO ALL DEVICES SHOWN SHALL BE SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR WITH PULL STRINGS. FAMR SHALL SUPPLY AND PULL ALL FIRE ALARM AND SECURITY SYSTEM CONDUCTORS.
4. FIRE ALARM CONTROL PANEL POWER AND ALL POWER SUPPLIES SHALL BE CONNECTED TO DEDICATED, LOCKED AND LABELED 20 AMP BREAKER. PAINT HANDLE RED.
5. FLOW SWITCH ACTIVATES HORN/STROBES, BELLS AND CENTRAL STATION ALARM. TAMPER SWITCH ACTIVATES SUPERVISORY INDICATION AT FIRE ALARM PANEL AND CENTRAL STATION.
6. SMOKE DETECTORS SHALL BE MOUNTED MINIMUM OF 3 FT. FROM AIR SUPPLY VENT AND LIGHTING FIXTURE, AND NOT DIRECTLY IN AIR FLOW.
7. DUCT SMOKE DETECTORS REPORT BACK AS SUPERVISORY ZONES (NOT FIRE ALARM ZONES).
8. AUXILIARY RELAY IN DUCT SMOKE DETECTORS AND CONTROL RELAY ARE CONNECTED IN SERIES, SO ACTION OF EITHER DEVICE WILL SHUNT DOWN A/C UNITS.
9. LOCATE POPIT AT EACH POWER SUPPLY, SO IT WILL INDICATE WHICH POWER SUPPLY HAS A PROBLEM.
10. RADIONICS #D7412 12 VDC FIRE ALARM PANEL COMPLETE WITH 82AH BATTERY, (2)D8132 BATTERY CHARGERS, D8125 PIPEX, (3)D1640 TRANSFORMER, (3)D8004 TRANSFORMER ENCLOSURE, (2)D126 BATTERY 7AH (EACH), (4)D1218 BATTERY 17AH (EACH), (2) D161 CORDS, D928 PHONE SWITCH, (3)D8109 ENCLOSURE, D122 HARNESS, D192C BELL CIRCUIT AND SUPERVISOR, (2)D136 RELAYS, AND OTHER ITEMS AS REQUIRED FOR A COMPLETE ASSEMBLY.

PROGRAM FOR SUPERVISED OUTPUT

NAC RELAY A	PROGRAM FOR CONTINUOUS ON ANY BURGLAR ALARM
NAC RELAY B	PROGRAM FOR CONTINUOUS ON ANY FIRE ALARM – SILENCEABLE
NAC RELAY C	PROGRAM FOR VERIFICATION/RESET POWER MODE – TRIGGERS D130
OCTORELAY	PROGRAM FOR CONTINUOUS ON ANY FIRE ALARM – NONSILENCEABLE

SCOPE OF WORK

NOTE:
BATTERY CALCULATION BELOW REPRESENTS EXISTING FIRE LOADS AND NEW LOADS (BOLD) ADDED TO THE SYSTEM.
BOLD TEXT REPRESENTS NEW LOADS AND REVISED TOTALS.

BATTERY CALCULATION

FIRE ALARM CONTROL PANEL

DEVICE	NUMBER OF DEVICES	AC POWER ON NORMAL CURRENT EACH	AC POWER ON NORMAL CURRENT TOTAL	AC POWER OFF MINIMUM CURRENT EACH	AC POWER OFF MINIMUM CURRENT TOTAL	IN ALARM MAXIMUM CURRENT EACH	IN ALARM MAXIMUM CURRENT TOTAL
PANEL	1	0.350	0.350	0.350	0.350	0.500	0.500
BELL CIRCUIT SUPERVISION	1	0.015	0.015	0.026	0.026	0.050	0.050
BELL	1	0	0	0	0	0.060	0.060
COMMAND CENTER (GENERAL)	1	0.104	0.104	0.106	0.106	0.206	0.206
COMMAND CENTER FIRE	1	0.104	0.104	0.106	0.106	0.206	0.206
POPEX MODULE	1	0.048	0.048	0.048	0.048	0.048	0.048
POPIT MODULE	65	0.0005	0.032	0.0005	0.032	0.0008	0.052
POPIT MODULE ADDED	**8**	**0.0005**	**0.0040**	**0.0005**	**0.0040**	**0.0008**	**0.0050**
OCTO RELAY (+0.025 X NUM. OF RELAYS)	1	0.020	0.020	0.020	0.020	0.020	0.070
RELEASE MODULE	1	0.005	0.005	0.005	0.005	0.054	0.054
SMOKE RELEASE MODULE	1	0.050	0.050	0.050	0.050	0.050	0.050
TELEPHONE MODULE	1	0.014	0.014	0.014	0.014	0.045	0.045
MOTION DETECTOR	4	0.012	0.048	0.012	0.048	0.015	0.060
MOTION DETECTOR ADDED	**2**	**0.012**	**0.024**	**0.012**	**0.024**	**0.015**	**0.030**
INTERIOR SOUNDER	1	0	0	0	0	0.012	0.012
EXTERIOR SOUNDER	1	0	0	0	0	0.100	0.100
TOTAL NORMAL, MINIMUM AND MAXIMUM CURRENT IN AMPS			**0.8175**		**0.8325**		**1.5478**

TOTAL MINIMUM CURRENT (AMPS)	**0.8325**		
STANDBY TIME (24 OR 60)	60		
TOTAL MINIMUM CURRENT X STANDBY TIME	**49.95**		
TOTAL MAXIMUM ALARM CURRENT (AMPS)			**1.5478**
ALARM TIME IN HOURS (5MIN. = 0.084HRS.)			0.084
TOTAL ALARM CURRENT X ALARM TIME			**0.130**
TOTAL			**50.080**
20% CONTINGENCY			**10.016**
TOTAL BATTERY BACKUP REQUIRED			**60.096**
TOTAL BATTERY BACKUP PROVIDED			82AH

SCOPE OF WORK

NOTE:
BATTERY CALCULATION BELOW REPRESENTS EXISTING FIRE LOADS AND NEW LOADS (BOLD) ADDED TO THE SYSTEM.
BOLD TEXT REPRESENTS NEW LOADS AND REVISED TOTALS.

BATTERY CALCULATION

POWER SUPPLY 'A'

DEVICE	NUMBER OF DEVICES	CURRENT PER DEVICE ALARM	CURRENT PER DEVICE SUPV.	TOTAL CURRENT ALARM	TOTAL CURRENT SUPV.
PANEL	1	0.030	0.030	0.030	0.030
SMOKE DETECTOR(S)	10	0.015	0.001	0.150	0.010
EOL RELAY(S)	2	0.028	0.028	0.056	0.056
DUCT SMOKE DETECTOR(S)	12	0.070	0.015	0.840	0.180
REMOTE LED(S)	12	0.0075	0	0.090	0
DUCT SMOKE DETECTOR(S) REMOVED	**–12**	**0.070**	**0.015**	**–0840**	**–0.180**
DUCT SMOKE DETECTOR(S) ADDED	**12**	**0.070**	**0.015**	**0.840**	**0.180**
AC/DOOR RELAY(S)	6	0	0.015	0	0.090
AC/DOOR RELAY(S) REMOVED	**–6**	**0**	**0.015**	**0**	**–0.090**
AC/DOOR RELAY(S) ADDED	**7**	**0**	**0.015**	**0**	**0.105**
TOTAL ALARM & SUPERVISOR CURRENT IN AMPS				**1.166**	**0.381**

TOTAL SUPERVISORY CURRENT (AMPS)		**0.381**
STANDBY TIME (24 OR 60)		60
TOTAL SUPERVISORY CURRENT X STANDBY TIME		**22.860**
TOTAL ALARM CURRENT (AMPS)	**1.166**	
ALARM TIME IN HOURS (5MIN. = 0.084HRS.)	0.084	
TOTAL ALARM CURRENT X ALARM TIME	**0.098**	
TOTAL		**22.958**
20% CONTINGENCY		**4.591**
TOTAL AMPERE HOURS REQUIRED		**27.549**
TOTAL BATTERY BACKUP PROVIDED		40AH

TYPICAL VOLTAGE DROP CALCULATION FOR NOTIFICATION APPLIANCE CIRCUITS

NOTIFICATION APPLIANCE CIRCUIT (NAC) DO NOT EXCEED 1.5AMPS TOTAL LOAD (EACH CIRCUIT) AND DO NOT EXCEED 350' IN TOTAL LENGTH (EACH CIRCUIT).

MAXIMUM LOAD = 1.5AMPS

MAXIMUM LENGTH = 350 FEET

FROM NEC TABLE #8, WIRE #14 = 3.26 OHMS/1000 FEET

PER NEC HANDBOOK ARTICLE 215

$$\text{VOLTAGE DROP} = \frac{(2)(350)(3.26)(1.5)}{1{,}000}$$

VOLTAGE DROP = 3.42 VOLTS

$$\frac{3.42\text{V}}{24\text{V}}\ (100) = 14.25\%\ \text{VOLTAGE DROP*}$$

* MEETS NFPA 1–5.5.1(1) REQUIREMENTS

SCOPE OF WORK

NOTE:
BATTERY CALCULATION BELOW REPRESENTS EXISTING FIRE LOADS AND NEW LOADS (BOLD) ADDED TO THE SYSTEM.
BOLD TEXT REPRESENTS NEW LOADS AND REVISED TOTALS.

BATTERY CALCULATION

POWER SUPPLY 'B'

DEVICE	NUMBER OF DEVICES	CURRENT PER DEVICE ALARM	CURRENT PER DEVICE SUPV.	TOTAL CURRENT ALARM	TOTAL CURRENT SUPV.
WALL HORN	0	0.027	0	0.000	0
WALL HORN/STROBE 30cd	1	0.105	0	0.105	0
WALL HORN/STROBE 75cd	4	0.157	0	0.628	0
WALL HORN/STROBE 110cd	0	0.207	0	0.000	0
WALL STROBE 30cd	4	0.081	0	0.324	0
WALL STROBE 75cd	2	0.128	0	0.256	0
WALL STROBE 110cd	0	0.166	0	0.000	0
CEILING HORN/STROBE 100cd	5	0.258	0	1.290	0
CEILING STROBE 100cd	5	0.238	0	1.190	0
TOTAL ALARM & SUPERVISOR CURRENT IN AMPS				3.793	0

TOTAL SUPERVISORY CURRENT (AMPS)		0
STANDBY TIME (24 OR 60)		60
TOTAL SUPERVISORY CURRENT X STANDBY TIME		0
TOTAL ALARM CURRENT (AMPS)	3.793	
ALARM TIME IN HOURS (5MIN. = 0.084HRS.)	0.084	
TOTAL ALARM CURRENT X ALARM TIME	0.319	
TOTAL AMPERE HOURS REQUIRED		0.319
TOTAL BATTERY BACKUP PROVIDED		7AH

SCOPE OF WORK

NOTE:
BATTERY CALCULATION BELOW REPRESENTS EXISTING FIRE LOADS AND NEW LOADS (BOLD) ADDED TO THE SYSTEM.
BOLD TEXT REPRESENTS NEW LOADS AND REVISED TOTALS.

BATTERY CALCULATION

POWER SUPPLY 'C'

DEVICE	NUMBER OF DEVICES	CURRENT PER DEVICE ALARM	CURRENT PER DEVICE SUPV.	TOTAL CURRENT ALARM	TOTAL CURRENT SUPV.
PANEL	1	0	0.075	0	0.075
WP HORN/STROBE 75cd	1	0.126	0	0.126	0
WALL HORN/STROBE 30cd	0	0.105	0	0.000	0
WALL HORN/STROBE 75cd	2	0.157	0	0.314	0
WALL HORN/STROBE 110cd	1	0.207	0	0.207	0
WALL STROBE 30cd	2	0.081	0	0.162	0
WALL STROBE 75cd	6	0.128	0	0.768	0
WALL WP STROBE 75cd (RSSWP) ADDED	**1**	**0.138**	**0**	**0.138**	**0**
WALL STROBE 75cd (STR)	1	0.135	0	0.135	0
WALL STROBE 110cd	0	0.166	0	0.000	0
CEILING HORN/STROBE 100cd	3	0.258	0	0.774	0
CEILING STROBE 100cd	5	0.238	0	1.190	0
TOTAL ALARM & SUPERVISOR CURRENT IN AMPS				**3.814**	0.075

TOTAL SUPERVISORY CURRENT (AMPS)		0.075
STANDBY TIME (24 OR 60)		60
TOTAL SUPERVISORY CURRENT X STANDBY TIME		4.500
TOTAL ALARM CURRENT (AMPS)	**3.814**	
ALARM TIME IN HOURS (5MIN. = 0.084HRS.)	0.084	
TOTAL ALARM CURRENT X ALARM TIME	**0.320**	
TOTAL		**4.820**
20% CONTINGENCY		**0.964**
TOTAL AMPERE HOURS REQUIRED		**5.784**
TOTAL BATTERY BACKUP PROVIDED		7AH

SCOPE OF WORK

NOTE:
BATTERY CALCULATION BELOW REPRESENTS EXISTING FIRE LOADS AND NEW LOADS (BOLD) ADDED TO THE SYSTEM.
BOLD TEXT REPRESENTS NEW LOADS AND REVISED TOTALS.

BATTERY CALCULATION

POWER SUPPLY 'D'

DEVICE	NUMBER OF DEVICES	CURRENT PER DEVICE ALARM	CURRENT PER DEVICE SUPV.	TOTAL CURRENT ALARM	TOTAL CURRENT SUPV.
PANEL	1	0.0	0.075	.0	0.075
WP HORN/STROBE 75cd	1	0.126	0	.0126	0
WALL HORN/STROBE 30cd	0	0.105	0	0.000	0
WALL HORN/STROBE 75cd	5	0.157	0	0.785	0
WALL HORN/STROBE 110cd	2	0.207	0	0.414	0
WALL STROBE 30cd	0	0.081	0	0.000	0
WALL STROBE 75cd	1	0.128	0	0.128	0
WALL STROBE 110cd	0	0.166	0	0.000	0
CEILING HORN/STROBE 100cd	3	0.258	0	0.774	0
CEILING HORN/STROBE 95cd ADDED	**1**	**0.163**	**0**	**0.163**	**0**
CEILING STROBE 100cd	5	0.238	0	1.190	0
TOTAL ALARM & SUPERVISOR CURRENT IN AMPS				**3.580**	0

TOTAL SUPERVISORY CURRENT (AMPS)		0.075
STANDBY TIME (24 OR 60)		60
TOTAL SUPERVISORY CURRENT X STANDBY TIME		4.50
TOTAL ALARM CURRENT (AMPS)	**3.580**	
ALARM TIME IN HOURS (5MIN. = 0.084HRS.)	0.084	
TOTAL ALARM CURRENT X ALARM TIME	**0.300**	
TOTAL		**4.800**
20% CONTINGENCY		**0.960**
TOTAL AMPERE HOURS REQUIRED		**5.760**
TOTAL BATTERY BACKUP PROVIDED		7AH

PLAN KEY	
———	NEW
———	EXISTING TO REMAIN
- - - -	EXISTING TO BE REMOVED AND REINSTALLED OR RELOCATED

REVISION

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CRYSTAL RIVER, FLORIDA 34429

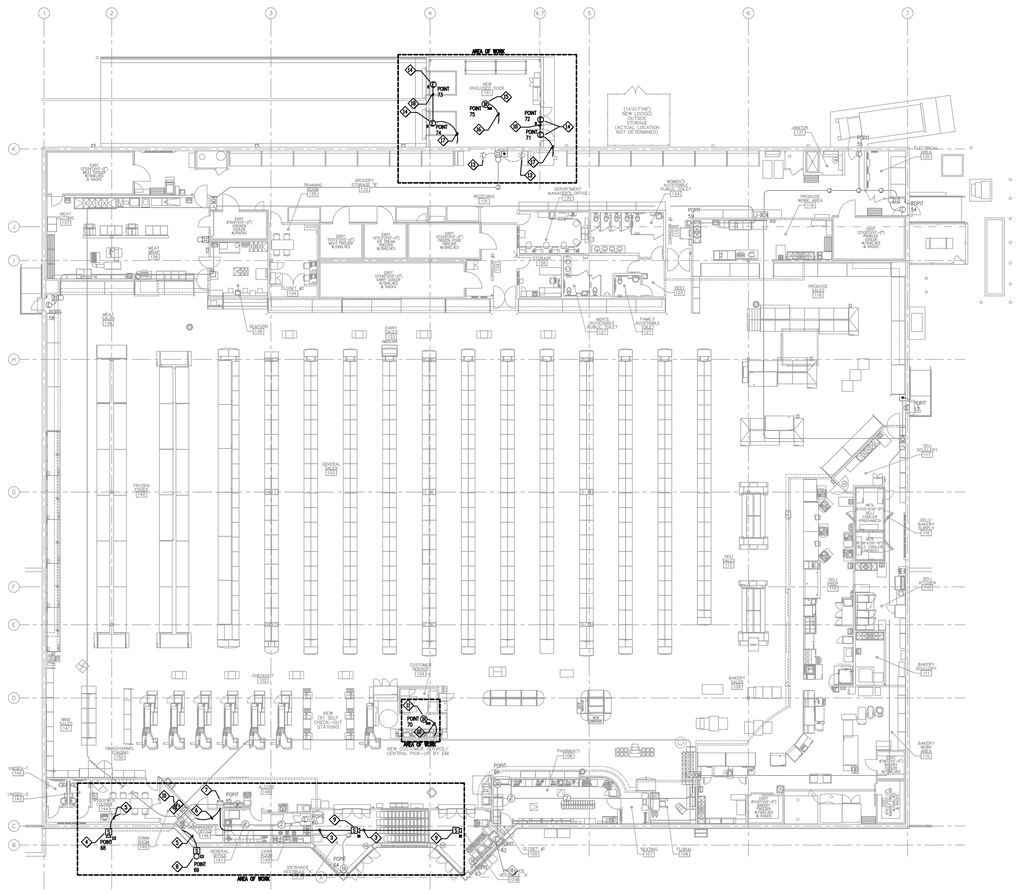
FIRE ALARM PANEL DETAIL AND CALCULATIONS

DENNIS VANN
FL. PE. #57620

APPROVED BY:RS
DESIGNED BY:DEV
DRAWN BY: EAK
DATE: 06/20/22
PROTOTYPE NA

SHEET NO.
FA3.1

\\SERVER2\Projects\Projects-2001\1-25\1701003011Remodel (06-17-22)\Tricon\01003FA-3RN(3).dwg


AREA OF WORK
POINT 73
POINT 75
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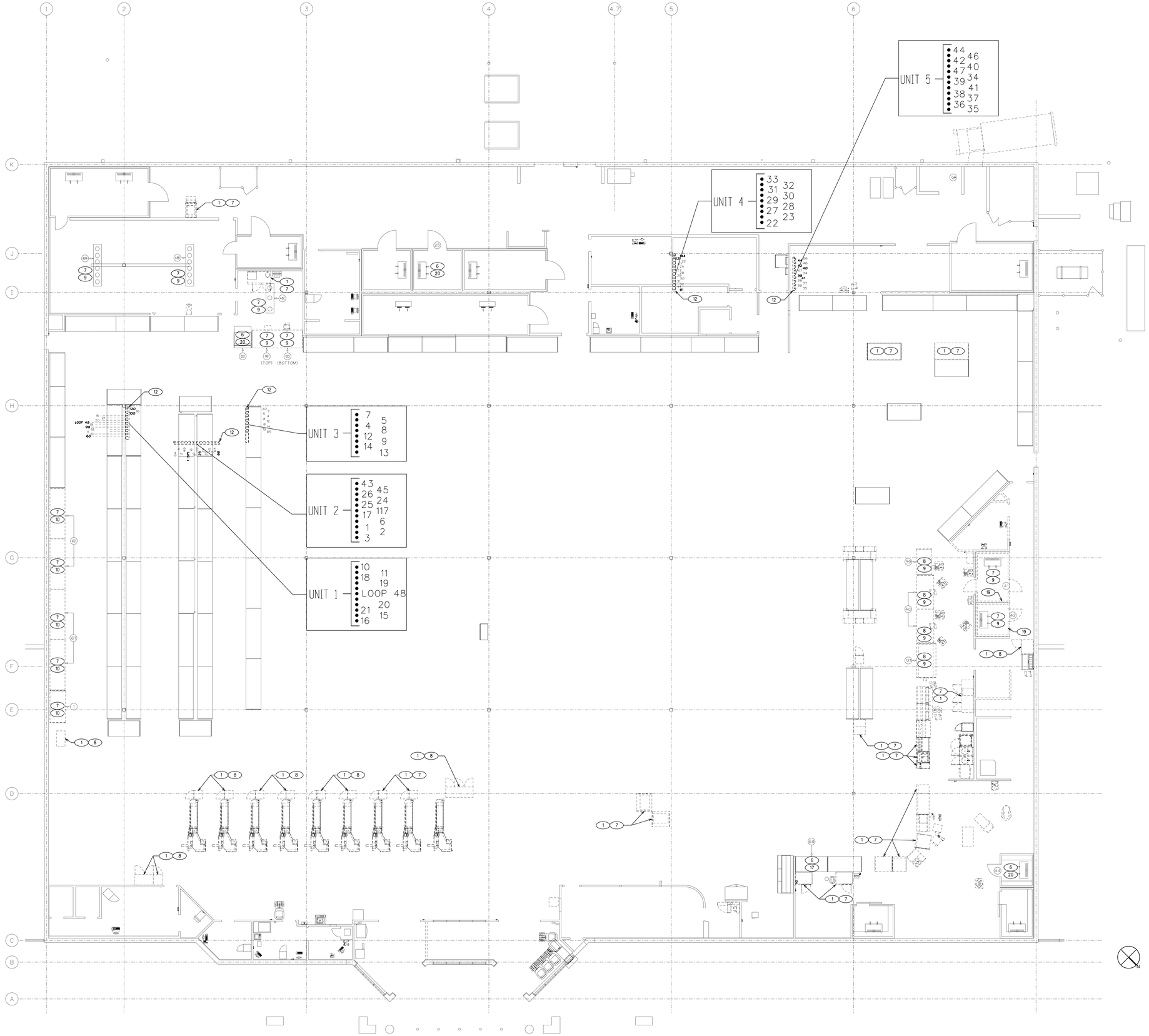
POINT 6
POINT 5
POINT 4
POINT 3
POINT 2
POINT 1
(FUTURE) NEW LOCKER ROOM & STORAGE (ACTUAL LOCATION NOT DETERMINED)
NEW ENCLOSED DOCK
NEW CHECK-OUT STATIONS
NEW CENTRAL PICK-UP BY 556
NEW SERVICE DELI & PREPARED FOODS
NEW SERVICE DELI & PREPARED FOODS
NEW CUSTOMER SERVICE
NEW EXTERIOR SOUNDER
NEW EXTERIOR STROBE/SOUNDER
NEW SECURITY POWER SUPPLY
NEW ENCLOSED DOCK
NEW ENCLOSED DOCK
NEW ENCLOSED DOCK



SHEET NOTES:

1. SELF CONTAINED UNIT, REFRIGERATION NOT REQUIRED.
2. EXISTING REFRIGERATION PIT SHALL REMAIN.
3. EXISTING REFRIGERATION PIT SHALL BE ABANDONED IN PLACE.
4. EXISTING REFRIGERATION PIT SHALL BE ABANDONED, CAPPED, AND PATCHED.
5. EXISTING MARKET EVAPORATOR SHALL REMAIN.
6. CASE/COIL SHALL REMAIN FOR REUSE.
7. CASE/COIL TO BE REMOVED.
8. CASE TO BE RELOCATED.
9. PIPING SHALL REMAIN FOR REUSE.
10. REMOVE ALL PIPING FROM CASE/COIL BACK TO UNIT MANIFOLD, INCLUDING PIPING IN PIT AND BELOW GRADE CHASE.
11. REMOVE PIPING FROM CASE BACK TO MAIN BRANCH AND CAP AT THAT LOCATION
12. SYSTEM PIPING DROPS FROM ROOFTOP MECHANICAL ROOM/CENTER, SEE SHEET R4.1FOR CONTINUATION.
13. SYSTEM PIPING DROPS FROM ROOFTOP PARATEMP, SEE SHEET R4.1FOR CONTINUATION.
14. SYSTEM PIPING DROPS FROM ROOFTOP INDIVIDUAL UNIT, SEE SHEET R4.1FOR CONTINUATION.
15. EXISTING WATER HEATER AND HEAT RECLAIM TANKS ON MEZZANNE.
16. EXISTING CASE RETURN DUCT RISER.
17. REMOVE SUCTION PIPING FROM CASE/COIL BACK TO UNIT MANIFOLD, INCLUDING PIPING IN PIT AND BELOW GRADE CHASE.
18. DEMO PIPING FOR CASE TO BE REMOVED/DEMOED. PIPING FOR REMAINING CASES OF SYSTEM TO REMAIN OR BE MODIFIED AS NOTED IN THE SCHEDULE.
19. WALK-IN BOX TO BE REMOVED.
20. RISER TO BE REMOVED AND REPLACED.
21. DEMO PIPING TO A POINT WHERE THEY CAN BE EXTENDED TO THE NEW LOCATION.
22. WALK-IN DOOR TO BE REMOVED FOR REPLACEMENT.

GENERAL NOTES:

A. ALL PIPE REMOVAL INDICATED ON DEMOLITION PLAN SHALL BE PERFORMED BY REFRIGERATION INSTALLATION CONTRACTOR.

B. ALL PIT CAPPING AND PATCHING INDICATED ON DEMOLITION PLAN SHALL BE PERFORMED BY GENERAL CONTRACTOR.

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R2.1	REFRIGERATION SCHEDULE
R2.2	REFRIGERATION SPECIFICATIONS
R3.1	REFRIGERATION DETAILS
R4.1	REFRIGERATION ROOF PLAN

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CLIENT NAME
Publix SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
6590 W GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9346

SHEET TITLE
REFRIGERATION DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 2210764
DATE: 04/21/2022
DRAWN
CHECKED

R1.0

DECOR SCHEME: EVERGREEN

DATE:	FEBRUARY 14, 2022
DRAWN BY:	JAN SITU
ENGINEER:	ROLAND JASMIN
DATE ISSUED:	02-21-2022

ARCTIC COOLING SYSTEMS
14350 CHEROKEE PL.
CHINO, CA 91710
Phone: 909-270-2111
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HEAT RECLAIM SCHEDULE

EXISTING - BEFORE PROJECT					AFTER PROJECT				
REFRIG. UNIT	USAGE	THR, MBH	HEAT RECLAIM EST. MBH	REFRIGERANT USED	USAGE	THR, MBH	HEAT RECLAIM EST. MBH	REFRIGERANT USED	NOTES
1	AC-1	670.7	234.7	R-22	AC-1	500.6	175.2	R-449A	2,4
2	WHR	164.2	82.1	R-22	WHR	224.3	112.2	R-449A	3
3	WHR	210.9	73.8	R-22	WHR	191.0	95.5	R-449A	2,3
4	AC-2	378.6	132.5	R-22	AC-2	359.1	125.7	R-449A	3,4
5	AC-2	332.8	116.5	R-22	AC-2	375.1	131.3	R-449A	2,3,4

NOTES:
1 - COMPRESSOR REPLACED
2 - COMPRESSOR REMOVED/VALVED-OFF
3 - CHANGE IN SUCTION TEMPERATURE
4 - CHANGE IN CONDENSING TEMPERATURE

LEAK DETECTION SYSTEM SEQUENCE OF OPERATIONS

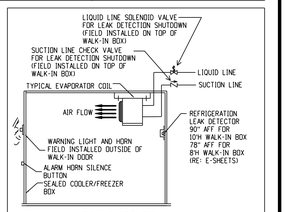
THE SYSTEM IS BASED ON A CPC MRLDS 250 LEAK DETECTOR SYSTEM. THE SYSTEM PROVIDES CONTINUOUS MONITORING OF REFRIGERANT GAS LEVELS IN SEPARATE TEST ZONES.

THE ON-BOARD ANALYZER WILL TRIGGER AN ALARM IF ANY OF THE ZONES CONTAIN REFRIGERANT LEVELS HIGHER THAN THOSE SPECIFIED BY PUBLIX.

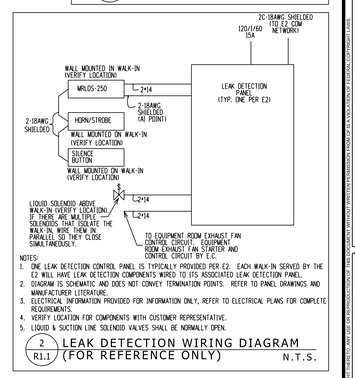
THE MRLDS-250 IS CONNECTED TO THE CPC LEAK DETECTION SYSTEM LOCATED WITHIN THE MECHANICAL ROOM.

THE SYSTEM WILL BE PROGRAMMED FOR THREE TYPES OF ALARMS:
LEAK (SMALL - 100 PPM)
SPILL (MEDIUM - 300 PPM)
EVACUATION (LARGE - 500 PPM)

WALK-IN BOXES	MECHANICAL CENTER
AN ALARM OF 100 PPM OR LESS WILL TRIGGER NOTICE ON EMS PANEL	AN ALARM OF 100 PPM OR LESS WILL TRIGGER THE ROOM EXHAUST FANS TO TURN ON
AN ALARM OF 300 PPM WILL TRIGGER LIGHT AND HORN	AN ALARM OF 300 PPM WILL TRIGGER LIGHT AND HORN
AN ALARM OF 500 PPM WILL TRIGGER LIQUID LINE SOLENOIDS, SHUT DOWN OF REFRIGERANT TO CIRCUIT.	AN ALARM OF 500 PPM WILL SHUT OFF POWER TO THE REFRIGERATION RACKS



1 R1.1 HORN/STROBE AND SENSOR LOCATION N.T.S.



NOTES:
1. ONE LEAK DETECTION CONTROL PANEL IS TYPICALLY PROVIDED PER E2. EACH WALK-IN SERVED BY THE E2 WILL HAVE LEAK DETECTION COMPONENTS WIRED TO ITS ASSOCIATED LEAK DETECTION PANEL.
2. DIAGRAM IS SCHEMATIC AND DOES NOT CONVEY TERMINATION POINTS. REFER TO PANEL DRAWINGS AND MANUFACTURER LITERATURE.
3. ELECTRICAL INFORMATION PROVIDED FOR INFORMATION ONLY, REFER TO ELECTRICAL PLANS FOR COMPLETE REQUIREMENTS.
4. VERIFY LOCATION FOR COMPONENTS WITH CUSTOMER REPRESENTATIVE.
5. LIQUID & SUCTION LINE SOLENOID VALVES SHALL BE NORMALLY OPEN.

2 R1.1 LEAK DETECTION WIRING DIAGRAM (FOR REFERENCE ONLY) N.T.S.

LEGEND

- NEW REFRIGERATION LINE
- NEW SYSTEM
- ALTERED EXISTING SYSTEM
- EXISTING SYSTEM
- (SC) SELF-CONTAINED CASE
- (M) ICE MACHINE
- (HS) NEW HORN/STROBE SUPPLIED BY PUBLIX, INSTALLED & WIRED BY ELECTRICAL CONTRACTOR.
- (LD) NEW REFRIGERATION MRLDS LEAK DETECTOR BY PUBLIX, INSTALLED & WIRED BY ELECTRICAL CONTRACTOR.
- (WP) NEW WEATHER PROOF (WITH SPLASH GUARD)

PERMISSIBLE REFRIGERANT QUANTITY PER ASHRAE 34

BUILDING AREA: 43,842 SQ. FT.
AVERAGE BUILDING HEIGHT: 23 FT.
BUILDING VOLUME: 1,008,366 CU. FT.

REFRIGERANT TYPE	REFRIGERANT CLASSIFICATION	REFRIGERANT PER 1000 CU FT OCCUPIED SPACE	TYPE OF SYSTEMS	PROBABILITY OF SYSTEMS
R449A	A1	23.0	DIRECT	HIGH

REFRIGERANT TYPE	REFRIGERANT ALLOWANCE	REFRIGERANT TOTAL QUANTITY	REFRIGERANT IN LARGEST RACK
R449A	23,192 LBS	2,250 LBS	450 LBS

NOTES:

REMOTE CASE: REFRIGERATION CONTRACTORS SHALL DISCONNECT PIPING AND REMOVE OR RELOCATED CASE(S) TO NEW LOCATION

SELF-CONTAINED CASE: REFRIGERATION CONTRACTORS TO REMOVE AND OR MOVE TO NEW LOCATION.

DRAIN PAN NOTE:

FOR ALL OVERHEAD REFRIGERATION PIPING ABOVE FOOT PATH AREA OF SALES FLOOR, THE REFRIGERATION INSTALLATION CONTRACTOR SHALL PROVIDE AND INSTALL DRAIN PAN(S) AS PER TYPICAL DETAIL 7 ON SHEET R3.1.

REFRIGERATION AND PLUMBING CONTRACTORS SHALL COORDINATE REFRIGERATION DROPS AND VENT PIPES TO RUN BUNDLED TOGETHER.

OVERHEAD PIPING NOTE:

REFRIGERATION INSTALLATION CONTRACTOR TO RUN NEW OVERHEAD LINES ALONG EXISTING PIPING WHERE FEASIBLE.

HEAT RECLAIM NOTE:

EXISTING AIR HEAT RECLAIM AND WATER HEAT RECLAIM TO REMAIN.

DATE:	FEBRUARY 14, 2022
DRAWN BY:	JAN SITU
ENGINEER:	ROLAND JASMIN
DATE ISSUED:	06-13-2022

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PROJECT NAME: PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
6590 W GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE: REFRIGERATION FLOOR PLAN
SCALE: 1/8" = 1'-0"

SCOTT T. ERCOLE LICENSE No 80226 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Scott T. Ercole
Reason: This document has been electronically signed and sealed by Scott T. Ercole, P.E. using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 2210764
DATE 04/21/2022
DRAWN
CHECKED

R1.1

DECOR SCHEME: EVERGREEN

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1 REFRIGERATION SPECIFICATIONS GENERAL

1.1 DEFINITION OF TERMS

1.1.1 "CONTRACTOR" SHALL MEAN THE REFRIGERATION INSTALLATION CONTRACTOR.

1.1.2 "OWNER" IS PUBLIX SUPER MARKETS, INC.

1.1.3 "MANUFACTURER" SHALL MEAN THE COMPANY OR COMPANIES WHICH WILL SUPPLY VARIOUS EQUIPMENT SUCH AS MECHANICAL CENTERS, CASES, WEATHERPACS, COILS, CONDENSERS, ETC.

1.1.4 "REFRIGERATION INSTALLATION" SHALL MEAN THE NECESSARY LABOR AND ALL PARTS AND ACCESSORIES NECESSARY TO COMPLETE THE WORK OUTLINED IN THIS SPECIFICATION.

1.2 SCOPE OF WORK

1.2.1 THE SPECIFICATIONS ARE INTENDED TO COVER THE INSTALLATION OF MECHANICAL CENTERS, CONDENSERS, COILS, CASES, CONDENSING UNITS AND ALL OTHER FITTINGS, DEVICES AND ACCESSORIES REQUIRED TO COMPLETE THE REFRIGERATION SYSTEMS AS SHOWN OR CALLED FOR ON THE REFRIGERATION PLANS AND SCHEDULES.

1.2.2 THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE COMPLETE PIPING INSTALLATION OF ALL SPLIT A/C SYSTEMS.

1.2.3 THE OMISSION FROM THESE SPECIFICATIONS OR FROM THE REFRIGERATION PLANS AND SCHEDULES OF EXPRESS REFERENCE TO ANY PARTS NECESSARY FOR THE COMPLETE INSTALLATIONS IS NOT TO BE CONSTRUED AS RELEASING THE CONTRACTOR FROM THE RESPONSIBILITY FOR FURNISHING SUCH PARTS.

1.2.4 FOR DETAILS OF INSTALLATION REFER TO THE REFRIGERATION PLAN, REFRIGERATION SCHEDULE, EQUIPMENT/FLOOR PLAN, PLUMBING PLAN, ELECTRICAL PLAN, AIR CONDITIONING PLAN, MANUFACTURER'S INSTALLATION INSTRUCTIONS AND TO APPLICABLE CODES AND ORDINANCES.

1.3 FEES, PERMITS, LICENSES AND INSURANCE

1.3.1 ALL NECESSARY PERMITS AND LICENSES INCIDENT TO THE WORK AND REQUIRED BY LOCAL ORDINANCE SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT COMPLIANCE WITH ALL LOCAL BUILDING CODES AND ORDINANCES.

1.4 THE FOLLOWING ITEMS WILL BE FURNISHED BY OWNER AND SET IN PLACE, INSTALLED AND CONNECTED BY THE CONTRACTOR (EXCEPT FOR ELECTRICAL CONNECTIONS WHICH SHALL BE MADE BY THE ELECTRICAL CONTRACTOR ON THE JOB). THESE ITEMS MAY BE DESIGNATED (OFCI) OWNER FURNISHED, CONTRACTOR INSTALLED) WHEN REFERENCED IN THE DOCUMENTS:
PRE-MANUFACTURED MECHANICAL CENTERS
REFRIGERATED DISPLAY CASES
SELF-CONTAINED REFRIGERATED EQUIPMENT (CASES & ICE MACHINES)
EVAPORATOR COILS
REMOTE CONDENSERS
MEAT CUTTING ROOM AND SEAFOOD PREP CEILINGS IN REMODELS

1.5 ALL WALK-IN COOLERS, FREEZERS AND SHELVING WILL BE FURNISHED, SET IN PLACE AND INSTALLED BY OWNER AND CONNECTED BY CONTRACTOR (EXCEPT FOR ELECTRICAL CONNECTIONS WHICH WILL BE MADE BY THE ELECTRICAL CONTRACTOR).

1.6 THE REFRIGERATION SYSTEM SHALL BE INSTALLED BY THE CONTRACTOR AS PER THE "R" SHEETS. THESE PLANS ARE USED AS A REFERENCE GUIDE AND ANY DEVIATIONS TO IMPROVE A SITUATION SHALL BE BY WRITTEN OR VERBAL APPROVAL FROM THE PUBLIX REFRIGERATION COORDINATOR OR REFRIGERATION SUPERVISOR BEFORE IMPLEMENTATION OF THE CHANGE.

1.7 MATERIAL APPROVAL

1.7.1 THE CONTRACTOR SHALL PROVIDE PRODUCT SPECIFICATIONS FOR MATERIALS THAT ARE DIFFERENT FROM THE PUBLIX APPROVED MATERIALS. SPECIFICATIONS SHALL BE SUBMITTED TO THE PUBLIX REFRIGERATION COORDINATOR OR DESIGN DEPARTMENT FOR APPROVAL.

1.8 QUALITY ASSURANCE

1.8.1 SHALL COMPLY WITH ASHRAE 15 "SAFETY CODE FOR REFRIGERATION SYSTEMS"
THE INTERNATIONAL MECHANICAL CODE AND FLORIDA MECHANICAL CODE CHAPTERS ON REFRIGERATION, AND ASME B 31.5 "REFRIGERATION PIPING AND HEAT TRANSFER COMPONENTS"

1.9 SCHEDULING

1.9.1 THE CONTRACTOR SHALL ATTEND ALL COORDINATION MEETINGS WITH THE GENERAL CONTRACTOR OF THE JOB.

1.9.2 THE GENERAL CONTRACTOR WILL SET THE PROJECT TIMELINE AND THE CONTRACTOR SHALL FOLLOW AND COORDINATE THE REFRIGERATION INSTALL WITH THE GENERAL CONTRACTOR TO ENSURE THE JOB IS COMPLETED ON TIME.

1.9.3 CONTRACTOR SHALL ADHERE TO ALL RULES AND SCHEDULING OF THE GENERAL CONTRACTOR. IF ANY CONFLICTS, INTERFERENCE OR DISCREPANCIES COME TO THE ATTENTION OF THE CONTRACTOR, HE SHALL NOTIFY THE DIVISIONAL FACILITY SERVICE REFRIGERATION COORDINATOR IMMEDIATELY BEFORE PROCEEDING ANY FURTHER WITH THE INSTALLATION.

1.9.4 REFRIGERATION INSTALLING TEAM AND PUBLIX REFRIGERATION COORDINATORS SHALL HAVE A PRE-JOB MEETING WHICH SHALL INCLUDE THE FOLLOWING AGENDA ITEMS:
REVIEW PLANS AND SPECIFICATIONS
COORDINATE INSTALL SCHEDULE WITH THE GENERAL PROJECT
JOB SITE SAFETY
QUALITY OF THE INSTALLATION
ROOF AWARENESS
FLOOR CARE
EQUIPMENT CARE
COMMON OMISSIONS
PUNCH LIST PROCESS
EVACUATION AND START-UP PROCESS
VARIOUS INSTALLATION METHODS
QUESTION AND ANSWERS

1.10 DELIVERY, STORAGE AND HANDLING

1.10.1 THE CONTRACTOR:
SHALL ACCEPT DELIVERY AND UNLOAD ALL OWNER FURNISHED CONTRACTOR INSTALLED EQUIPMENT AND MATERIAL.

SHALL INSPECT EQUIPMENT AND REPORT ALL SHORTAGES OF PARTS UPON DELIVERY IN WRITING AND SUBMIT TO THE PUBLIX FACILITY SERVICE REFRIGERATION COORDINATOR.

SHALL REPORT ALL DAMAGED EQUIPMENT RECEIVED FROM MANUFACTURER IN WRITING AND SUBMIT TO THE FACILITY SERVICE REFRIGERATION COORDINATOR. FAILURE TO FOLLOW THIS PROCESS MAY RESULT IN THE DAMAGE BEING THE CONTRACTOR'S RESPONSIBILITY.

SHALL MANAGE ALL PARTS THAT BELONG TO THE RELATED REFRIGERATION EQUIPMENT THROUGHOUT THE LIFE OF THE INSTALLATION OF THE JOB.

SHALL PROVIDE ONSITE SECURED STORAGE SUCH AS LOCKING TRAILER FOR TOOLS, EQUIPMENT AND MATERIALS NEEDED TO INSTALL THE REFRIGERATION EQUIPMENT. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR THE JOBSITE SECURITY.

COPPER TUBING AND FITTINGS SHALL BE SHIPPED AND HANDLED TO PROTECT AGAINST DAMAGE, ON THE JOB SITE IT SHALL BE PROTECTED AGAINST DAMAGE, MOISTURE, AND DIRT.

1.11 PROJECT/SITE CONDITIONS

1.11.1 THE CONTRACTOR SHALL INSTALL ALL REFRIGERATD EQUIPMENT IN STRICT COMPLIANCE WITH THE LOCAL BUILDING CODES AND ORDINANCES.

1.12 WARRANTY

1.12.1 THE CONTRACTOR:
SHALL CHARGE REFRIGERATION RACKS TO A LEVEL OF 10% AT FULL OPERATION BEFORE WARRANTY WILL BEGIN. SEE 3.8.3 FOR CHARGING INSTRUCTIONS.

SHALL REPLACE ALL REFRIGERANT LOST IN THE FIRST FULL YEAR OF THE WARRANTY.

SHALL PROVIDE EMERGENCY SERVICE AND MAINTENANCE AS DEFINED BY THE PUBLIX SERVICE AGREEMENT DURING THE WARRANTY PERIOD.

SHALL WARRANTY THE INSTALLATION FROM THE DATE THE STORE OPENS FOR BUSINESS, FOR ONE FULL CALENDAR YEAR.

SHALL NOT REPAIR OR REPLACE ANY EQUIPMENT THAT IS RECEIVED DAMAGED FROM THE MANUFACTURER WITHOUT THE MANUFACTURERS' REPRESENTATIVES' APPROVAL.

1.12.2 THERE SHALL BE A WARRANTY WALK THROUGH WHICH WILL INCLUDE THE CONTRACTOR, MANUFACTURER'S REPRESENTATIVE AND A PUBLIX REFRIGERATION COORDINATOR, 15 DAYS SUBSEQUENT TO THE WARRENTY EXPIRING.

1.12.3 WARRANTY SHALL NOT EXPIRE UNTIL ALL ITEMS ON WARRANTY WALK THRU ARE COMPLETED.

2 PRODUCTS

2.1 PIPING AND FITTINGS

2.1.1 FOR NON R744 (CO2) REFRIGERATION SYSTEMS, SPLIT SYSTEM DX AIR CONDITIONING, AND DX HEAT RECLAIM PIPING, THE PIPING SHALL BE SEAMLESS DRAWN COPPER TUBE, ASTM B280 TYPE ACR, MANUFACTURED IN THE USA.

FOR R744 (CO2) REFRIGERATION SYSTEMS, PIPING (INCLUDING FITTINGS) FOR REFRIGERATED FIXTURES SHALL BE MUELLER INDUSTRIES TYPE L (NO SUBSTITUTIONS ARE PERMITTED WITHOUT WRITTEN APPROVAL FROM HILLPHOENIX) WITH A MAXIMUM SIZE OF 2-3/8".

2.1.2 SECONDARY CHILLED GLYCOL AND HYDRONIC HEATING SYSTEM PIPING SHALL BE SEAMLESS DRAWN COPPER TUBE, ASTM B280 TYPE ACR, MANUFACTURED IN THE USA.

2.1.3 APPROVED MANUFACTURERS:
MUELLER INDUSTRIES
CERRO FLOW PRODUCTS

2.1.4 FITTINGS SHALL BE WROUGHT COPPER, ASTM B16.22, MANUFACTURED IN THE USA.

2.1.5 COPPER AND COPPER ALLOY PRESS FITTINGS ARE APPROVED FOR SECONDARY CHILLED GLYCOL PIPING SYSTEMS. FITTINGS SHALL CONFORM TO MATERIAL REQUIREMENTS OF ASME B16.18 OR ASME B16.22 AND PERFORMANCE CRITERIA OF IAPMO PS 117. SEALING ELEMENTS FOR PRESS FITTINGS SHALL BE EPDM. SEALING ELEMENTS SHALL BE FACTORY INSTALLED BY FITTING MANUFACTURER.

2.1.6 APPROVED MANUFACTURERS FOR PRESS FITTINGS :
VEGA

2.1.7 T-DRILL PULLED FITTINGS ARE APPROVED.

2.2 BRAZING AND SOLDERING ALLOYS

2.2.1 BRAZED COPPER JOINTS SHALL BE BRAZED WITH AN ALLOY NOT LESS THAN 15% SILVER CONTENT. ALLOYS SHALL MEET ANSI/AWS A5.8. (DX PIPING)

2.2.2 COPPER JOINTS BRAZED TO BRASS OR STEEL SHALL BE MADE WITH A BRAZING ALLOY WITH A MINIMUM SILVER CONTENT OF 45%. (DX PIPING)

2.2.3 SOLDERED COPPER JOINTS SHALL BE WITH AN ALLOY NOT LESS THAN 5% SILVER CONTENT. SOLDERED FILLER METALS SHALL BE ASTM B 32, LEAD FREE ALLOYS. PROVIDE WATER SOLUBLE FLUX MEETING ASTM B 813. (SECONDARY CHILLED GLYCOL PIPING)

2.2.4 THE FOLLOWING MANUFACTURERS ARE APPROVED:
SILFOS
SILVALOY (WOLVERINE JOINING TECHNOLOGIES)
HARRIS PRODUCTS GROUP

2.3 PRESS FITTINGS FOR SECONDARY CHILLED GLYCOL PIPING

2.3.1 JOINTS SHALL BE PRESSED USING ONLY THE FITTINGS AND TOOLS OF THE APPROVED MANUFACTURER.

2.4 VALVES

2.4.1 SUPERIOR VALVES ARE THE APPROVED BRAND FOR ALL REFRIGERATION VALVES USED DURING NEW CONSTRUCTION, REMODELS AND/OR RETROFITS.

2.4.2 APPROVED ALTERNATE MANUFACTURERS:
HENRY VALVES.
MUELLER
SPORLAN

2.5 REFRIGERATION PIPE INSULATION SHALL BE AS FOLLOWS:

2.5.1 INSULATION SHALL BE A FLEXIBLE, CLOSED CELL ELASTOMERIC PIPE INSULATION: FORMALDEHYDE FREE, LOW VOC'S, FIBER FREE, DUST FREE AND RESISTS MOLD AND MILDEW. THE INSULATION SHALL CONFORM TO ASTM C 534 GRADE 1, TYPE I, 25/50 FLAME SPREAD & SMOKE DEVELOPED INDEX.

2.5.2 APPROVED MANUFACTURERS:
ARMACELL - AP ARMAFLEX W - BASIS OF DESIGN
AEROCELL -
K-FLEX - INSUL-TUBE

2.5.3 REFRIGERATION PIPING INSULATION THICKNESS REQUIREMENTS:
LOW TEMPERATURE (LT) SUCTION LINES USE 1 1/2"
SUB COOLED LIQUID LINES USE 1"
MEDIUM TEMPERATURE (MT) SUCTION LINES USE 1 1/2"
HIGH TEMPERATURE (HT) SUCTION LINES USE 1 1/2"
REFRIGERANT HEAT RECLAIM LINES USE 1"

2.5.4 ALL EVAPORATOR DRAINS SHALL BE INSULATED WITH 1/2" THICK INSULATION FROM COIL TO DRAIN

2.5.5 INSULATION EXPOSED TO SALES AREA FOR PIPING TO ISLAND CASES SHALL NOT HAVE DUCT TAPE. ALL JOINTS TO BE GLUED USING THE MANUFACTURES ADHESIVE. ADHESIVE EQUAL TO ARMAFLEX 520.

2.5.6 INSULATION TO BE EXPOSED TO OUTDOOR CONDITIONS SHALL BE WRAPPED WITH ARMAFUFF PLUS II PIPE COVERING LAMINATE BY ARMACELL.
ALTERNATE TO LAMINATE WRAP: K-FLEX CLAD AL TUBE.

2.5.7 ROINSULATION OF PIPING IN REMODELS SHALL MATCH THE THICNESS OF THE EXISTING PIPING INSULATION.

2.6 SECONDARY CHILLED GLYCOL PIPE INSULATION SHALL BE AS FOLLOWS:

2.6.1 INSULATION SHALL BE RIGID CLOSED CELL CELLULAR GLASS PIPE INSULATION: INORGANIC, CFC AND HCFC FREE, INCOMBUSTIBLE, MOISTURE AND VERMIN RESISTANT. THE INSULATION SHALL CONFORM TO ASTM C-552.

2.6.2 THE FOLLOWING ARE APPROVED MANUFACTURERS: PITTSBURG CORNING - FOAMGLAS

2.6.3 MEDIUM TEMPERATURE SECONDARY CHILLED GLYCOL REFRIGERATION SUPPLY AND RETURN LINE INSULATION THICKNESS REQUIREMENTS:
FOR PIPE SIZES 3/4"-1-1/2" USE 1 1/2"
FOR PIPE SIZES 2"-6" USE 2"

2.6.4 INSULATION SHALL BE PROTECTED BY A FIELD APPLIED JACKET & VAPOR BARRIER.

2.7 ALL REFRIGERATED DISPLAY CASES AND CONDENSING UNITS SHALL BE OWNER FURNISHED, CONTRACTOR INSTALLED.

2.8 ALL BAKERY DISPLAY CASES SHALL BE OWNER FURNISHED, CONTRACTOR INSTALLED.

2.9 ALL WALK-IN COOLERS, FREEZERS AND REFRIGERATED PREP ROOMS SHALL BE OWNER FURNISHED, OWNER INSTALLED ON NEW STORES AND OWNER FURNISHED, CONTRACTOR INSTALLED ON REMODELS.

2.10 ALL EVAPORATORS AND CONDENSERS SHALL BE OWNER FURNISHED, CONTRACTOR INSTALLED.

2.11 REFRIGERANT & SECONDARY CHILLED GLYCOL

2.11.1 REFRIGERANT, OIL, PROPYLENE GLYCOL, AND DISTILLED WATER SHALL BE PER THE REFRIGERATION LEGENDS AND MANUFACTURERS IN THE USA. DELIVERED TO THE SITE AND STORED IN SEALED CONTAINERS. AS STANDARD, PROPYLENE GLYCOL SHALL INCLUDE A BLUE DYE.

2.11.2 PUBLIX SHALL PROVIDE ALL REFRIGERANT AND PROPYLENE GLYCOL NECESSARY FOR A COMPLETE REFRIGERATION INSTALLATION IN NEW STORES AND REMODELS WITH NEW REFRIGERATION RACKS.

2.11.3 PUBLIX SHALL PROVIDE ALL REFRIGERANT AND GLYCOL NECESSARY FOR A COMPLETE A/C SPLIT INSTALLATION IN NEW STORES AND REMODELS.

2.11.4 REFRIGERATION CONTRACTOR SHALL PROVIDE ALL REFRIGERANT NECESSARY FOR A COMPLETE INSTALLATION IN REMODELS WHEN EXISTING EQUIPMENT IS REUSED.

2.12 MATERIALS FURNISHED BY THE REFRIGERATION CONTRACTOR
REFRIGERATION GRADE COPPER PIPE FOR ALL PIPE RUNS (TYPE ACR UNLESS OTHERWISE NOTED)
POLYPROPYLENE PIPE SADDLES - WHITE - INSULGUARD OR COOPER B-LINE - SNAP'N SHIELD
PIPE INSULATION INCLUDING GLUES
COPPER FITTINGS (LONG RADIUS TYPE)
PIPE HANGERS - (3 1/2" 14 GA UNISTRUT,) 1/2" SUPERSTRUT) GALVANIZED
3/8" THREADED RODS FOR PIPE HANGERS
ALL VALVES THAT ARE NOT INCLUDED IN THE MANUFACTURED EQUIPMENT (EXAMPLE RECLAIM VALVES)
PVC PIPE FOR CASE DRAIN CONNECTIONS, FITTINGS AND GLUE
1/16" THICK VINYL TILE CUT 3"X3" FOR SHIMS UNDER CASE
HARDWARE
WELDING SUPPLIES
DRIP PANS
CAULK
NITROGEN
DRAIN MATERIAL
ALL OTHER MATERIALS TO COMPLETE THE INSTALLATION
CONTROL PARTS FOR WALK-INS TO INCLUDE
ALL TEMPERATURE SENSORS: RETURN AIR (BOX TEMP)
DEFROST TERMINATION, AND PREP AREA WALL MOUNT SENSORS
INCLUDING ALL ACCESSORIES TO COMPLETE THE INSTALLATION

3 EXECUTION

3.1 PROTECTION OF ROOF

3.1.1 CONTRACTOR SHALL PROTECT THE ROOF FROM DAMAGE, PUNCTURES, CUTTING, BURNING, AND OIL SPILLS BY PLACING A 2" THICK FOAM BOARD WITH 1/2" PLYWOOD ON TOP OF FOAM, UNDER ALL EQUIPMENT SUCH AS TANKS, PUMPS, WELDERS, TEMPORARY REFRIGERATION RACKS AND OTHER EQUIPMENT THAT IS NEEDED TO INSTALL THE REFRIGERATION UNITS.

3.1.2 CONTRACTOR SHALL PROVIDE TRAINING AND INSTRUCTION TO THE INSTALLATION CREW ON PROPER CARE OF THE ROOF.

3.1.3 CONTRACTOR SHALL MAKE EVERY EFFORT TO DISTRIBUTE THE WEIGHT OF TEMPORARY EQUIPMENT, TOOLS, AND REFRIGERANT TANKS TO AVOID CONCENTRATED LOADS ON THE ROOF.

3.1.4 FAILURE TO PROTECT THE ROOF FROM DAMAGE CAUSED BY THE CONTRACTORS EQUIPMENT, TOOLS AND OTHER TRADE RELATED TASKS, MAY RESULT IN THE CONTRACTOR REPLACING THE ROOF AT THEIR EXPENSE.

3.2 INSTALLATION OF REFRIGERATION EQUIPMENT

3.2.1 SETTING CASES

3.2.1.1 CASES SHALL BE SET STRAIGHT, LEVEL AND PLUMB. USE ONLY 1/16" THICK VINYL TILE SHIMS CUT TO 3"X3" SQUARES.

3.2.1.2 CASES SHALL NOT BE SLID ON FLOOR WHILE BEING SET. CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT THE FLOOR FROM DAMAGE, STAINS, CHIPS, ETC DURING CASE SETTING

3.2.1.3 CASES SHALL BE SET AND SEALED WITH BUTYL SEALANT ONLY AND LOCKED TOGETHER WHEN SET IN PLACE.

3.2.1.4 ALL DOLLIES AND PRY BARS SHALL HAVE RUBBER WHEELS WHEN BEING USED TO SET CASES ON SALES FLOOR.

3.2.2 SETTING UNIT COOLERS AND MARKET COILS

3.2.2.1 FOLLOW MANUFACTURER'S MOUNTING INSTRUCTIONS AND DRAWING DETAILS.

3.2.2.2 MOUNT COILS LEVEL AND FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR PLACEMENT AND CLEARANCE.

3.3 INSTALLATION OF PIPING

3.3.1 REFRIGERATION PIPING

3.3.1.1 INSTALL PIPING FREE OF SAGS, BENDS, AND KINKS.

3.3.1.2 PIPING SHALL NOT HAVE ANY 45 DEGREE ANGLES. ALL LINES MUST BE RUN AT RIGHT ANGLES OR PARALLEL TO BUILDLING WALLS. DIAGONAL RUNS ARE PROHIBITED UNLESS SPECIFICALLY INDICATED OTHERWISE.

3.3.1.3 INSTALL PIPING TO ALLOW FOR SERVICE AND MAINTENANCE.

3.3.1.4 HORIZONTAL SUCTION LINES SHALL SLOPE 1/2" PER 10 FEET, TOWARD THE COMPRESSOR OR FOLLOW THE SLOPE OF THE ROOF.

3.3.1.5 HEAT RECLAIM PIPE SIZES ARE SHOWN ON THE REFRIGERATION SCHEDULE AND PLAN. LINES SHALL BE INSTALLED BY THE REFRIGERATION CONTRACTOR AND SHALL RUN WITH THE SLOPE OF THE ROOF OR SLOPED BACK TO THE COMPRESSOR RACK.

3.3.1.6 CONDENSER PIPING SHALL BE SLEEVED WITH PVC AT HANGERS AND CLAMPED.

3.3.1.7 PIPING SIZES SHALL BE SHOWN ON THE REFRIGERATION SHEETS. WHERE (2) TWO OR MORE COILS ARE CONNECTED TO ONE SYSTEM, THE SUCTION LINE MAY BE REDUCED BY ONE SIZE WHEN CONNECTING THE COILS.

3.3.2 SECONDARY CHILLED GLYCOL AND HYDRONIC HEATING SYSTEM PIPING

3.3.2.1 INSTALL PIPING FREE OF SAGS, BENDS, AND KINKS. ALLOWANCE FOR THERMAL EXPANSION AND CONTRACTION SHALL BE PROVIDED.

3.3.2.2 PIPING SIZES SHALL BE SHOWN ON THE REFRIGERATION SHEETS. PROVIDE ISOLATION VALVES AND INSTALL VALVE STATIONS AS INDICATED ON THE DRAWINGS.

3.3.2.3 PIPING SHALL NOT HAVE ANY 45 DEGREE ANGLES. ALL LINES MUST BE RUN AT RIGHT ANGLES OR PARALLEL TO BUILDLING WALLS. DIAGONAL RUNS ARE PROHIBITED UNLESS SPECIFICALLY INDICATED OTHERWISE.

3.3.2.4 PIPE SIZES ARE SHOWN ON THE REFRIGERATION SCHEDULE AND PLAN. LINES SHALL BE INSTALLED BY THE REFRIGERATION CONTRACTOR AND SHALL RUN WITH THE SLOPE OF THE ROOF OR SLOPED BACK TO THE MACHINE ROOM OR PARALLEL TO THE ROOF JOISTS.

3.3.3 REFRIGERATION PIPING JOINING PROCEDURES

3.3.3.1 ALL PIPING SHALL BE CUT SQUARE TO THE TUBE.

3.3.3.2 ALL PIPING SHALL BE REAMED AND DE-BURRED BEFORE MAKING THE FINAL JOINT.

3.3.3.3 PIPES SHALL NOT BE CLEANED WITH SANDPAPER OR STEEL WOOL. PIPES SHALL ONLY BE CLEANED WITH THE PROPER CLOTH SUCH AS EMORY CLOTH OR EQUAL THAT IS DESIGNED FOR THAT PURPOSE.

3.3.3.4 TO ELIMINATE THE FORMATION OF COPPER OXIDE ON THE INSIDE OF THE TUBING, ALL AIR SHALL BE FLUSHED FROM THE LINES AND COMPONENTS BEFORE BRAZING AND A SLOW STREAM (2 CUBIC FEET PER HOUR) OF DRY NITROGEN MUST BE PASSED THROUGH THE TUBING WHILE BRAZING.

3.3.3.5 SYSTEM SHALL BE FLUSHED WITH NITROGEN STARTING FROM THE RACK ON CONDENSING UNIT END OF PIPE TOWARD THE COIL OR EVAPORATOR, BEFORE MAKING THE FINAL CONNECTION.

3.3.3.6 ANY PIPE FITTINGS, VALVES OR OTHER COMPONENTS BURNED OR EXPOSED TO EXCESSIVE HEAT SHALL BE REMOVED AND REPLACED.

3.3.3.7 PIPING INSTALLED WITHOUT NITROGEN FLOW SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. PUBLIX MAY TEST CUT (2) TWO SAMPLES PER RACK.

3.3.4 SECONDARY CHILLED GLYCOL AND HYDRONIC HEATING SYSTEM PIPING JOINING PROCEDURES

3.3.4.1 ALL PIPING SHALL BE CUT SQUARE TO THE TUBE.

3.3.4.2 ALL PIPING SHALL BE REAMED AND DE-BURRED BEFORE SOLDERING THE FINAL JOINT.

3.3.4.3 PIPES SHALL NOT BE CLEANED WITH SANDPAPER OR STEEL WOOL. PIPES SHALL ONLY BE CLEANED WITH THE PROPER CLOTH SUCH AS EMORY CLOTH OR EQUAL THAT IS DESIGNED FOR THAT PURPOSE.

3.3.4.4 SOLDER WITH 95-5 NO-LEAD SOLDER AND WATER SOLUABLE FLUX. DEFECTIVE JOINTS SHALL BE DISMANTLED, CLEANED AND RESOLDERED.
ALTERNATE: BRAZE WITH SILVER SOLDER.

3.3.4.5 ANY PIPE FITTINGS, VALVES OR OTHER COMPONENTS BURNED OR EXPOSED TO EXCESSIVE HEAT SHALL BE REMOVED AND REPLACED.

3.3.4.6 PRESS CONNECTIONS: COPPER AND COPPER ALLOY PRESS CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. THE TUBING SHALL BE FULLY INSERTED INTO THE FITTING AND THE TUBING MARKED AT THE SHOULDER OF THE FITTING. THE FITTING ALIGNMENT SHALL BE CHECKED AGAINST THE MARK ON THE TUBING TO ASSURE THE TUBING IS FULLY ENGAGED IN THE FITTING. THE JOINTS SHALL BE PRESSED USING THE TOOLS APPROVED BY THE MANUFACTURER.

3.3.5 HANGERS AND SUPPORTS

3.3.5.1 ALL HORIZONTAL PIPE RUNS SHALL BE SUPPORTED AT 5' INTERVALS EXCEPT AT COMPRESSOR. DX PIPING SHALL BE SUPPORTED BY APPROVED PIPE SADDLES.

3.3.5.2 ALL VERTICAL RISERS SHALL BE SUPPORTED AT 32' INTERVALS.

3.3.5.3 NO OTHER TRADE SHALL HANG, ATTACH, WELD OR LIE ON THE REFRIGERATION HANGERS.

3.3.5.4 ALL HANGER SUPPORTS SHALL HAVE NUTS ON BOTH BOTTOM AND TOP SIDE OF STRUT MATERIAL

3.3.5.5 HANGERS SHALL ATTACH TO THE STRUCTURE AT THE TOP CHORD OF BAR JOISTS.

3.4 INSTALLATION OF PIPING INSULATION

3.4.1 REFRIGERATION PIPE INSULATION

3.4.1.1 ALL REFRIGERATION LINES SHALL BE INSULATED FROM EVAPORATOR TO SUCTION MANIFOLD.

3.4.1.2 ALL HEAT RECLAIM LINES SHALL BE INSULATED FROM HEAT RECLAIM COIL TO RACK.

3.4.1.3 ALL INSULATION TO BE GLUED PER MANUFACTURERS RECOMMENDED INSTALLATION PROCEDURE. AVOID STRETCHING OF PIPE INSULATION.

3.4.1.4 FOLLOW MANUFACTURERS SPECIFICATIONS FOR APPLYING PROTECTIVE LAMINATE FOR ALL INSULATION EXPOSED TO SUNLIGHT.

3.4.1.5 REFRIGERANT PIPE SHALL BE SEALED WHILE SPRUNG ON INSULATION TO PREVENT FOREIGN MATTER FROM ENTERING THE TUBE.

3.4.1.6 INSULATION IS TO BE SLID ONTO PIPE; LONGITUDINAL SLITTING OF THE INSULATION IS NOT ALLOWED EXCEPT ON MITERED SECTIONS. INSULATION SHALL BE PUSHED ONTO PIPE, NOT PULLED.

3.4.1.7 INSULATION SHALL BE MITERED, PRE-ADHERED AND LONGITUDINALLY SLIT INSIDE THROAT TO FIT OVER ALL P-TRAPS, TEES AND 90° ELBOWS.

3.4.1.8 ALL BUTT JOINTS AND MITERED SEAMS SHALL BE ADHERED WITH FULL COVERAGE OF ADHESIVE ON BOTH SURFACES. INSULATION SHALL NOT BE STRETCHED WHEN ADHERING.

3.4.1.9 INSULATION MUST BE INSTALLED IN AN ADEQUATELY VENTILATED AREA. IT MAY BE NECESSARY TO INCREASE INSULATION THICKNESS IF ADEQUATE VENTILATION IS NOT PRESENT, DO NOT CROWD THE INSULATION, ALLOW FOR ADEQUATE AIR MOVEMENT.

3.4.1.10 AT THE BEGINNING, AT EVERY 12 TO 18 FEET, AND AT THE ENDS OF PIPING RUNS, THE INSULATION SHALL BE MARKED INDIRECTLY TO THE COPPER USING A 2" STRIP OF ADHESIVE. INSULATION SHOULD NOT BE ADHERED TO THE PIPE AT THE EXTREME LOW POINTS IN ANY OF THE PIPING RUN.

3.4.2 SECONDARY CHILLED GLYCOL SYSTEM PIPE INSULATION

3.4.2.1 ALL LINES SHALL BE INSULATED FROM THE COILS TO THE PUMP STATION FLANGES.

3.4.2.2 ALL HEAT RECLAIM LINES SHALL BE INSULATED FROM HEAT RECLAIM COIL TO THE PUMP STATION FLANGES.

3.4.2.3 CLEAN AND DRY SURFACES TO RECEIVE INSULATION. REMOVE MATERIALS THAT WILL ADVERSELY AFFECT INSULATION APPLICATION.

3.4.2.4 APPLY INSULATION WITH THE LEAST NUMBER OF JOINTS PRACTICAL. APPLY INSULATION WITH TIGHT SEAMS AND END JOINTS. BOND SEAMS AND JOINTS WITH MANUFACTURER RECOMMENDED ADHESIVE.

3.4.2.5 AT INSULATION TERMINATIONS SEAL ENDS WITH A MANUFACTURER RECOMMENDED COMPOUND TO MAINTAIN VAPOR BARRIER.

3.5 DRAINS

3.5.1 ALL CASE DRAINS SHALL BE INSTALLED BY CONTRACTOR.

3.5.2 CASE DRAINS SHALL BE SCHEDULE 40 PVC AND SHALL HAVE A RUNNING TRAP WHICH IS SUPPLIED BY CASE MANUFACTURER.

3.5.3 ALL WALK-IN COOLERS, FREEZERS AND MARKET COIL DRAINS AND TRAPS SHALL BE 3/4" COPPER PIPE, INSTALLED AND INSULATED BY THE CONTRACTOR.

3.6 LUBRICATION

3.6.1 BEFORE ANY MOTORS AND/OR COMPRESSORS ARE TO BE OPERATED, THE LUBRICATION SHALL BE CHECKED ON OIL OR GREASE ADDED IF NECESSARY.

3.6.2 THE SYSTEM OIL LEVEL SHALL BE ADJUSTED TO THE FACTORY'S RECOMMENDATIONS.

3.7 PRESSURE TESTING THE SYSTEM

3.7.1 CONTRACTOR SHALL NOTIFY THE FACILITY SERVICE REPRESENTATIVE 24 HOURS IN ADVANCE WHEN OR MORE SYSTEMS WILL BE READY TO TEST.

3.7.2 THE FOLLOWING IS THE APPROVED PRESSURE TEST PROCEDURE UPON COMPLETION OF THE REFRIGERATION CONNECTIONS:

3.7.2.1 SET ALL VALVES IN OPEN POSITION

3.7.2.2 ALL JOINTS SHALL BE CAREFULLY TESTED FOR LEAKS WITH A HALIDE TORCH OR AN ELECTRONIC LEAK DETECTOR.

3.7.2.3 LEAKS SHALL BE MARKED AND REPAIRED. UPON COMPLETION OF REPAIR, REPEAT PRESSURE TEST AND NOTIFY FACILITY SERVICE REPRESENTATIVE FOR APPROVAL.

3.7.3.4 ALL REFRIGERATION PIPING, CONDENSING UNITS, CONDENSERS AND REHEAT COILS, AFTER COMPLETION OF INSTALLATION, SHALL BE PRESSURIZED WITH A MIXTURE OF REFRIGERANT AND NITROGEN TO 175 LB OF PRESSURE PER SQ. INCH, LEAK CHECKED AND MAINTAINED UNDER THAT PRESSURE FOR AT LEAST A 24 HOUR PERIOD BEFORE EVACUATION PROCESS SHALL BEGIN.

3.7.3 THE FOLLOWING IS THE APPROVED PRESSURE TEST PROCEDURE UPON COMPLETION OF THE SECONDARY CHILLED GLYCOL CONNECTIONS.

3.7.3.1 LEAVE JOINTS UNINSULATED AND EXPOSED FOR EXAMINATION DURING TEST.

3.7.3.2 FLUSH SECONDARY CHILLED GLYCOL AND HYDRONIC HEATING LINES WITH CLEAN WATER, THEN REMOVE AND CLEAN OR REPLACE STRAINERS OR SCREENS.

3.7.3.3 ISOLATE EQUIPMENT FROM PIPING DURING PRESSURE TEST.

3.7.3.4 WHILE FILLING SYSTEM USE VENTS AT HIGH POINTS TO RELEASE AIR.

3.7.3.5 PRESSURE TEST TO 1.5 TIMES THE SYSTEM WORKING PRESSURE.

3.7.3.6 LEAKS SHALL BE MARKED AND REPAIRED. UPON COMPLETION OF REPAIR, REPEAT PRESSURE TEST AND NOTIFY FACILITY SERVICE REPRESENTATIVE FOR APPROVAL.

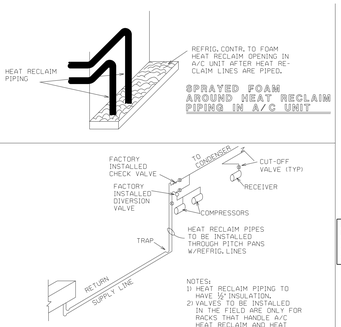
3.7.3.7 DRAIN AND PROCEDE TO 3.9.2

3.8 EVACUATION

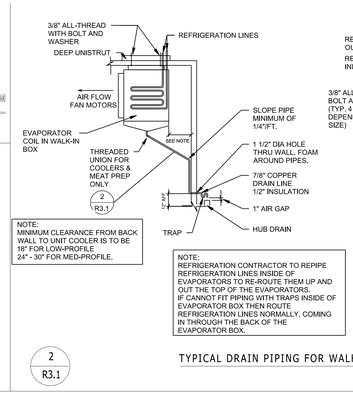
3.8.1 ALL REFRIGERATION SYSTEMS (EXCEPT GLYCOL SYSTEMS) SHALL BE EVACUATED WITH AN APPROVED MANUFACTURED VACUUM PUMP WITH A MINIMUM PUMP DISPLACEMENT OF 8 CFM.

3.8.2 ALL SYSTEMS SHALL BE EVACUATED (3) THREE TIMES. THE FIRST (2) TWO EVACUATIONS TO 500 MICRONS ABSOLUTE PRESSURE. THE FINAL EVACUATION SHALL BE BROUGHT DOWN TO 200 MICRONS ABSOLUTE PRESSURE.

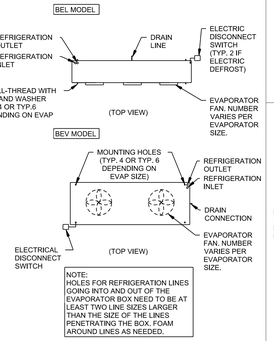
3.8.3 THE FIRST (2) TWO EVAC

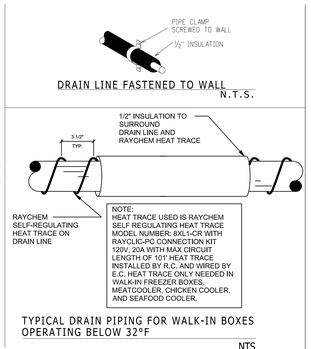


1 R3.1 HEAT RECLAIM PIPING DIAGRAM NTS



2 R3.1 TYPICAL DRAIN PIPING FOR WALK-IN BOXES NTS





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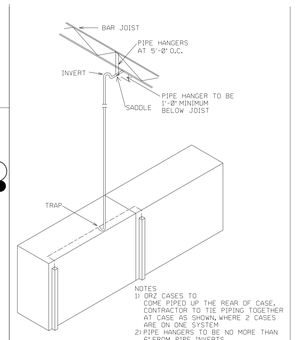
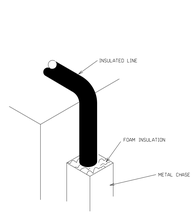
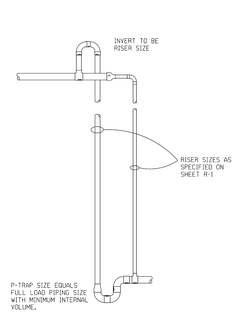


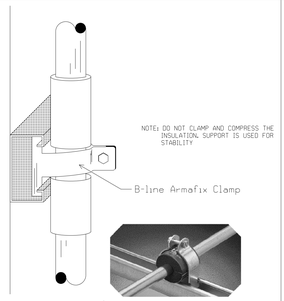
3 R3.1 CONVENTIONAL PIPING DIAGRAM FOR MULTI-DECK CASES NTS



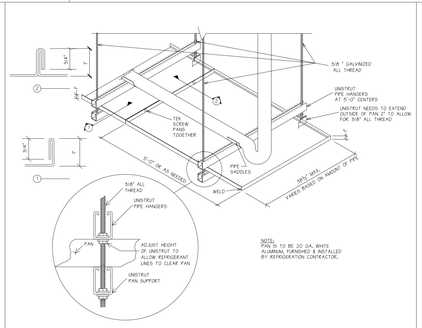
4 R3.1 FOAM INSULATION AT BACK OF CASE NTS



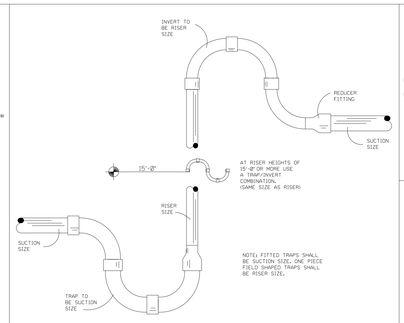
5 R3.1 DOUBLE RISER DIAGRAM NTS



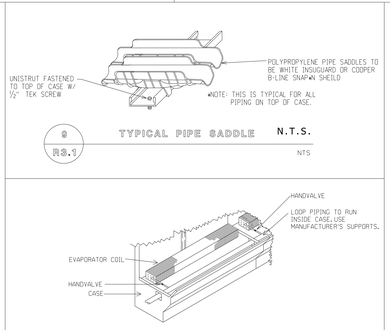
6 R3.1 TYPICAL VERTICAL WALL CLAMP DETAIL NTS



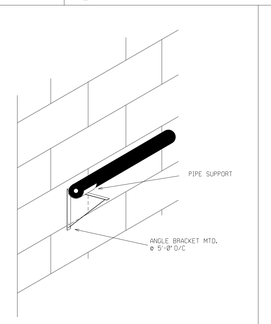
7 R3.1 PIPE HANGER/PAN DETAIL NTS



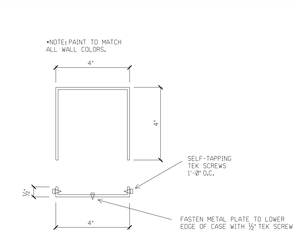
8 R3.1 TYPICAL TRAP AND INVERT NTS



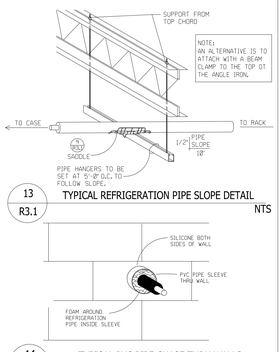
10 R3.1 PRODUCE WALL CASE LOOP PIPING NTS



11 R3.1 WALL MOUNTED PIPE SUPPORT NTS

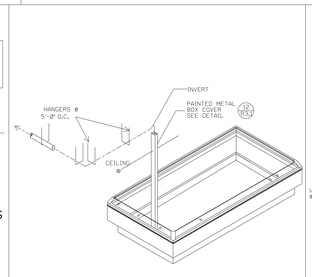


12 R3.1 PAINTED METAL BOX COVER (BY G.C.) NTS

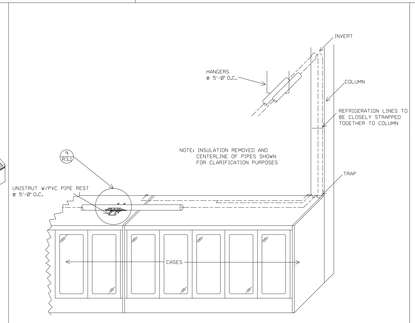


13 R3.1 TYPICAL REFRIGERATION PIPE SLOPE DETAIL NTS

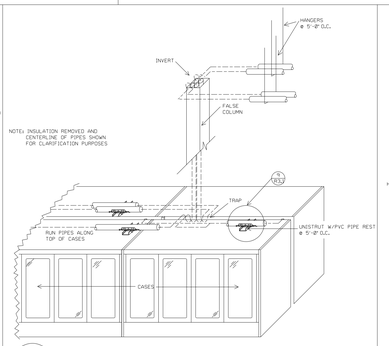
14 R3.1 TYPICAL PVC PIPE CHASE THRU WALLS NTS



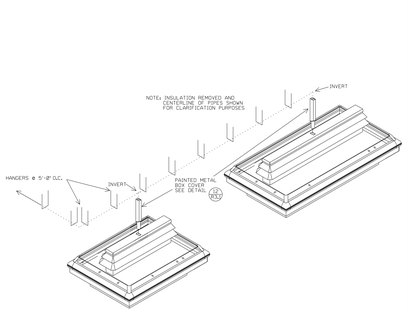
15 R3.1 TYPICAL OIZ/ONIZ CASE DETAIL NTS



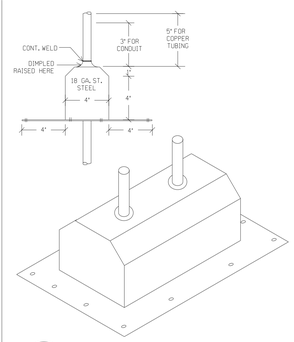
16 R3.1 TYPICAL FROZEN FOOD CASE DETAIL W/ COLUMN NTS



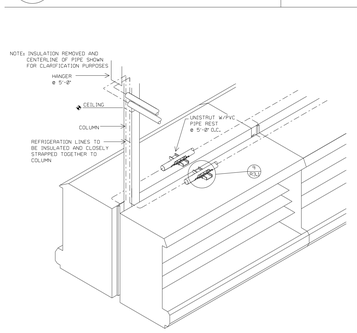
17 R3.1 TYPICAL FROZEN FOOD CASE DETAIL NTS



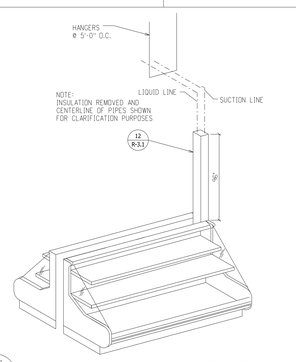
18 R3.1 TYPICAL ISLAND MEAT, DELI AND PRODUCE CASES NTS



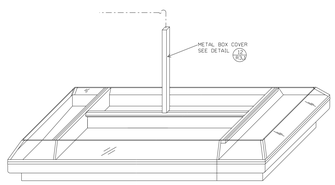
19 R3.1 TYPICAL PIPING PITCH POCKET NTS



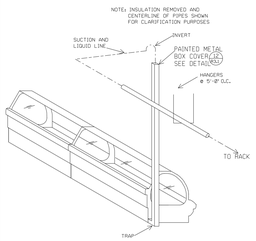
20 R3.1 TYPICAL DAIRY, JUICE OR SPECIAL MEAT CASE DETAIL W/ COLUMN (FOR HYDRONIC) NTS



21 R3.1 TYPICAL DELI ISLAND CASE DETAIL NTS

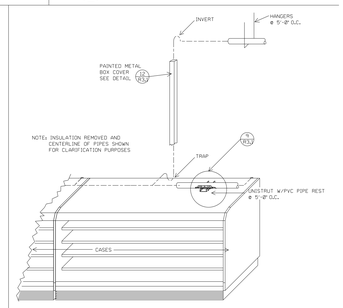


22 R3.1 TYPICAL ISLAND LOW TEMP CASE DETAIL NTS



23 R3.1 TYPICAL DELI CASE DETAIL NTS

24 R3.1 NOT USED NTS



25 R3.1 TYPICAL DAIRY, JUICE OR SPECIAL MEAT CASE DETAIL NTS

CUHACI PETERSON
2600 Maitland Center Parkway
Suite #200
Maitland, FL 32751
P (407) 661-9100
F (407) 661-9101
o-p.com
Florida Corporate Certificate #AA C000526

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CLIENT NAME
Publix SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
FORMERLY KNOWN AS PUBLIX AT LAKE HIGHLAND
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
REFRIGERATION DETAILS
NOT TO SCALE

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

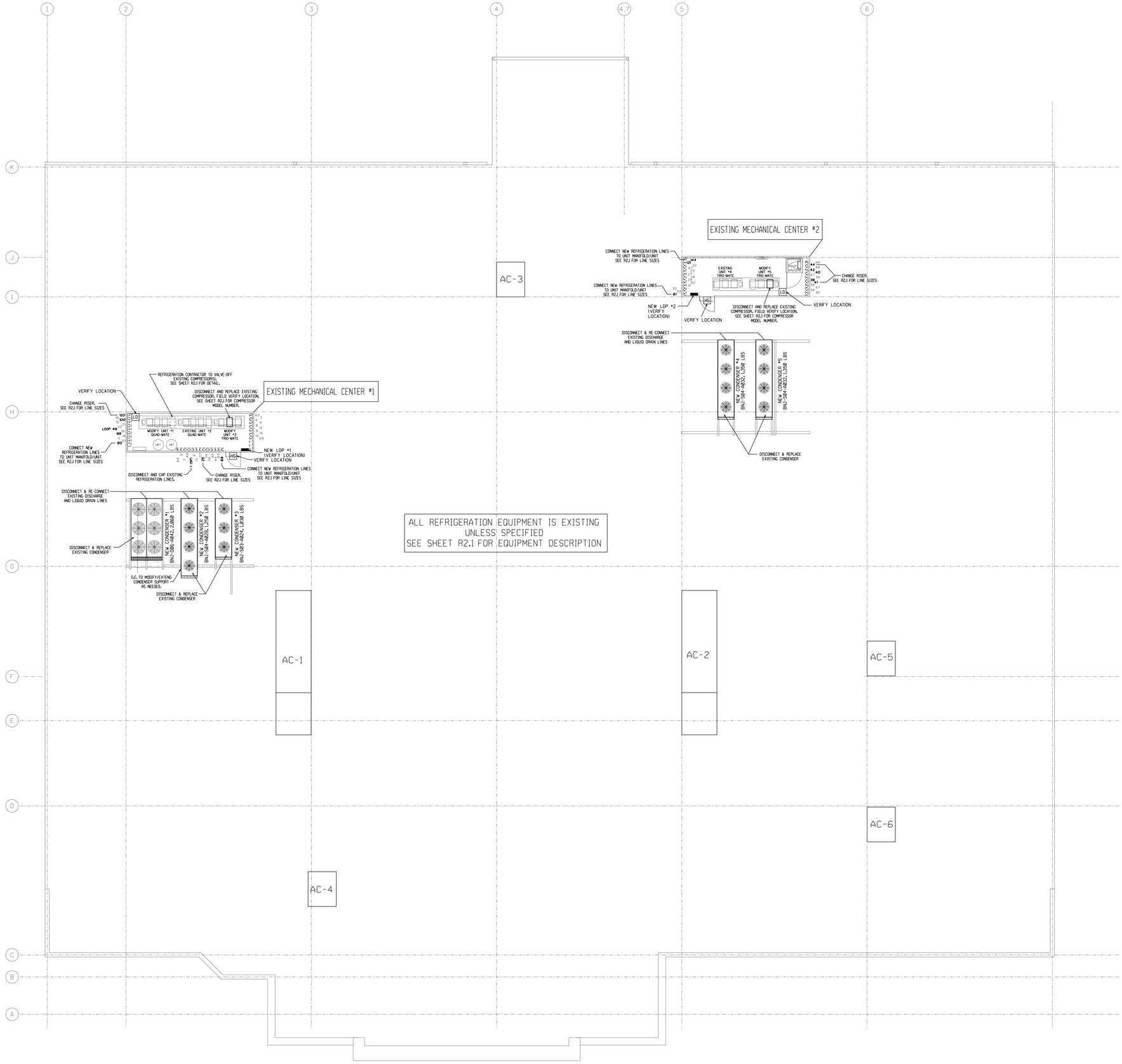
PROJECT NO. 2210784
DATE 04/21/2022
DRAWN
CHECKED

R3.1

DECOR SCHEME: EVERGREEN

DATE: FEBRUARY 14, 2022
DRAWN BY: JAN SITU
ENGINEER: ROLAND JASMIN
DATE ISSUED: 02-22-2022

ARCTIC COOLING SYSTEMS
14350 CHEROKEE PL.
CHINO, CA 91710
Phone: 909-270-2111
CA# 34402



LEAK DETECTION SYSTEM SEQUENCE OF OPERATIONS

THE SYSTEM IS BASED ON A CPC MRLDS 250 LEAK DETECTOR SYSTEM. THE SYSTEM PROVIDES CONTINUOUS MONITORING OF REFRIGERANT GAS LEVELS IN SEPARATE TEST ZONES.

THE ON-BOARD ANALYZER WILL TRIGGER AN ALARM IF ANY OF THE ZONES CONTAIN REFRIGERANT LEVELS HIGHER THAN THOSE SPECIFIED BY PUBLIX.

THE MRLDS-250 IS CONNECTED TO THE CPC LEAK DETECTION SYSTEM LOCATED WITHIN THE MECHANICAL ROOM.

THE SYSTEM WILL BE PROGRAMMED FOR THREE TYPES OF ALARMS:
LEAK (SMALL - 100 PPM)
SPILL (MEDIUM - 300 PPM)
EVACUATION (LARGE - 500 PPM)

WALK-IN BOXES	MECHANICAL CENTER
AN ALARM OF 100 PPM OR LESS WILL TRIGGER NOTICE ON EMS PANEL	AN ALARM OF 100 PPM OR LESS WILL TRIGGER THE ROOM EXHAUST FANS TO TURN ON
AN ALARM OF 300 PPM WILL TRIGGER LIGHT AND HORN	AN ALARM OF 300 PPM WILL TRIGGER LIGHT AND HORN
AN ALARM OF 500 PPM WILL TRIGGER LIQUID LINE SOLENOIDS, SHUT DOWN OF REFRIGERANT TO CIRCUIT.	AN ALARM OF 500 PPM WILL SHUT OFF POWER TO THE REFRIGERATION RACKS

LEGEND

HS	NEW HORN/STROBE SUPPLIED BY PUBLIX, INSTALLED & WIRED BY ELECTRICAL CONTRACTOR. SEE DETAIL SHEET E4a.
LD	NEW REFRIGERATION MRLDS LEAK DETECTOR BY PUBLIX, INSTALLED & WIRED BY ELECTRICAL CONTRACTOR.

DATE: FEBRUARY 14, 2022
DRAWN BY: JIAN SITU
ENGINEER: ROLAND JASMIN
DATE ISSUED: 02-21-2022

ARCTIC COOLING SYSTEMS
14350 CHEROKEE PL.
CHINO, CA 91710
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CLIENT NAME
Publix SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

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PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
6590 W GULF TO LAKE HIGHWAY
CRYSTAL RIVER, FLORIDA 34429-9346

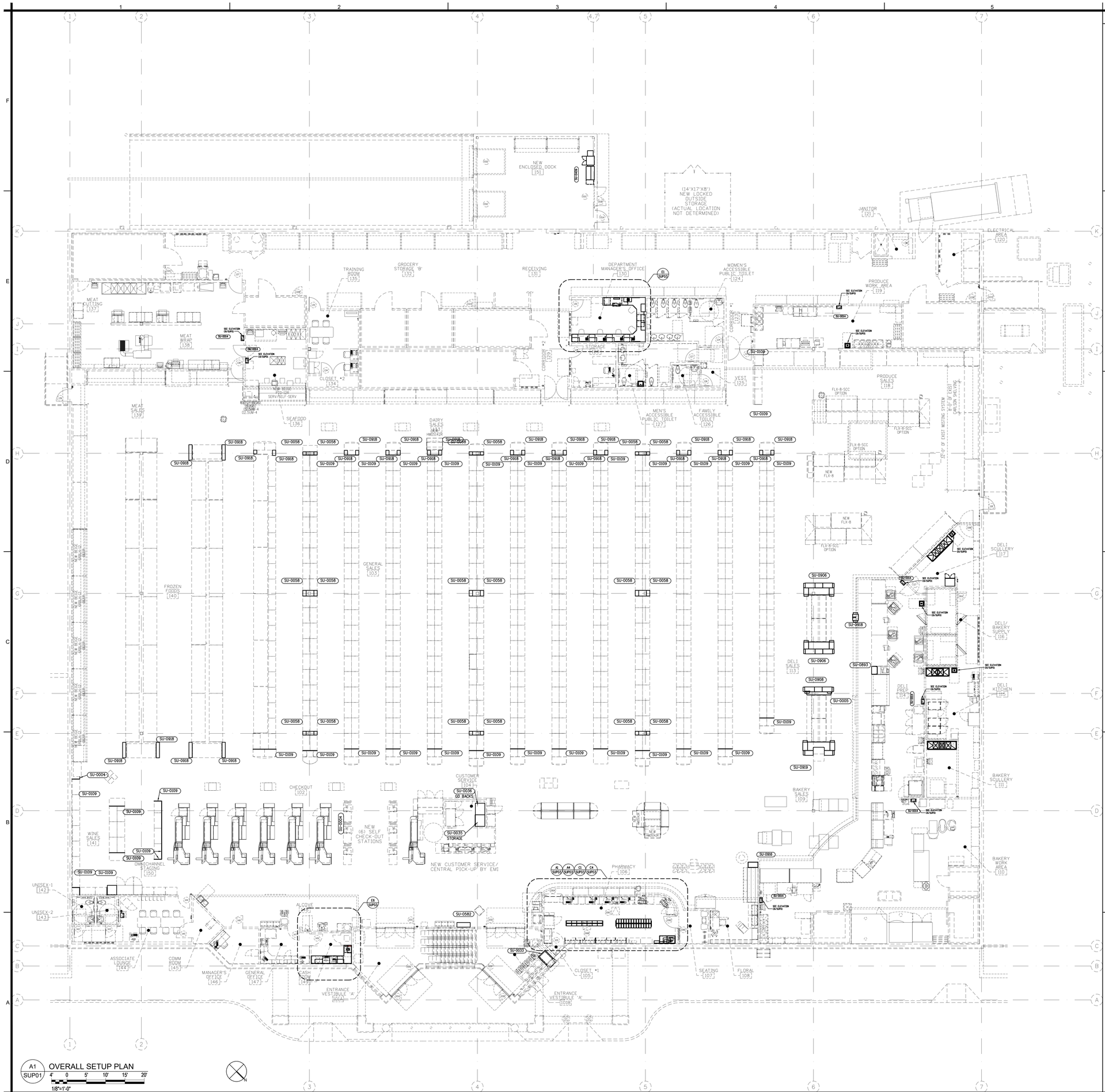
SHEET TITLE
REFRIGERATION ROOF PLAN
SCALE: 1" = 10'

REV	RELEASE
1	100% SUBMITTAL - 21 APR 2022

PROJECT NO. 2210764
DATE 04/21/2022
DRAWN
CHECKED

R4.1

DECOR SCHEME: EVERGREEN


MEAT CUTTING 137
MEAT WRAP 138
MEAT SALES 139
SEAFOOD 136
TRAINING ROOM 135
GROCERY STORAGE 'B' 132
RECEIVING 131
DEPARTMENT MANAGER'S OFFICE 130
WOMEN'S ACCESSIBLE PUBLIC TOILET 124
MEN'S ACCESSIBLE PUBLIC TOILET 127
FAMILY ACCESSIBLE TOILET 126
STORAGE 133
CLOSET 134
CORRIDOR 128
VEST 125
JANITOR 121
ELECTRICAL 120
PRODUCE WORK AREA 119
PRODUCE SALES 118
NEW ENCLOSED DOCK 101
(14'X17'X8') NEW LOCKED OUTSIDE STORAGE (ACTUAL LOCATION NOT DETERMINED)
DAIRY SALES 104
GENERAL SALES 103
FROZEN FOODS 140
CHECKOUT 102
NEW SELF CHECK-OUT STATIONS
CUSTOMER SERVICE DESK
GO BACKS
STORAGE
NEW CUSTOMER SERVICE/ CENTRAL PICK-UP BY EM
WINE SALES 141
OMNICHANNEL STAGING 150
UNISEX-1 142
UNISEX-2 143
ASSOCIATE LOUNGE 144
COMM ROOM 145
MANAGER'S OFFICE 146
GENERAL OFFICE 147
CASH 148
ENTRANCE VESTIBULE 'A' 101A
ENTRANCE VESTIBULE 'A' 101B
ALCOVE
PHARMACY 106
CLOSET 105
SEATING 107
FLORAL 108
DELI SCULLERY 117
DELI/ BAKERY SUPPLY 116
DELI SALES 113
DELI PREP 114
DELI KITCHEN 115
BAKERY SCULLERY 111
BAKERY SALES 109
BAKERY WORK AREA 110
FLX-8-SCC OPTION
NEW FLX-8
20'-0" OF EXIST MISTING SYSTEM
CARLSON SHELVING
SU-0109
SU-0918
SU-0058
SU-0906
SU-0893
SU-0908
SU-0005
SU-0919
SU-0004
SU-0582
SU-0033
SU-0035
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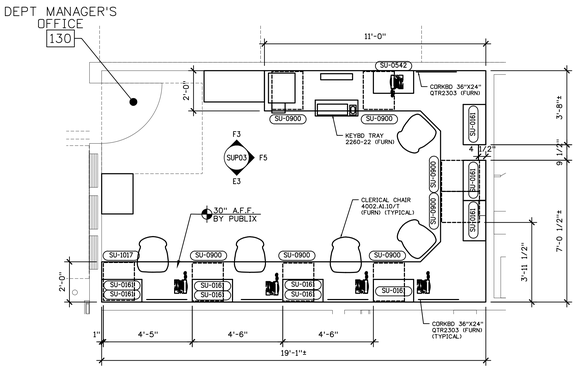
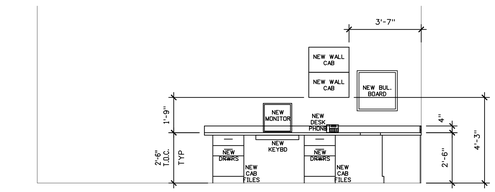


E1 SUP03 ENLARGED DEPT MANAGER'S OFFICE

12" 0 1' 2' 3' 4' 5' 6' 7"

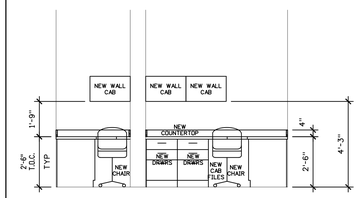
3/8"=1'-0"



F3 SUP03 ENLARGED DEPT MANAGER'S OFFICE ELEVATION

12" 0 1' 2' 3' 4' 5' 6' 7"

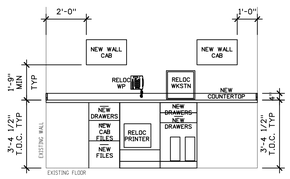
3/8"=1'-0"



F5 SUP03 ENLARGED DEPT MANAGER'S OFFICE ELEVATION

12" 0 1' 2' 3' 4' 5' 6' 7"

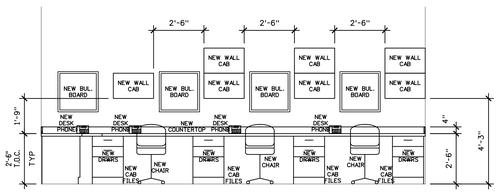
3/8"=1'-0"



F6 SUP03 ENLARGED CASH ROOM ELEVATION

12" 0 1' 2' 3' 4' 5' 6' 7"

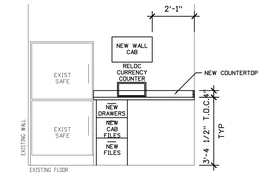
3/8"=1'-0"



E3 SUP03 ENLARGED DEPT MANAGER'S OFFICE ELEVATION

12" 0 1' 2' 3' 4' 5' 6' 7"

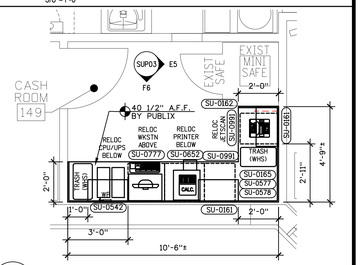
3/8"=1'-0"



E5 SUP03 ENLARGED CASH ROOM ELEVATION

12" 0 1' 2' 3' 4' 5' 6' 7"

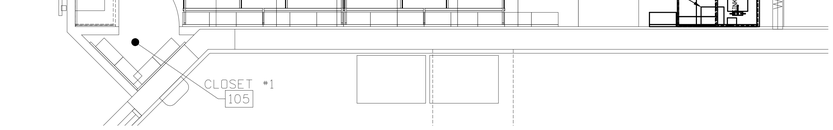
3/8"=1'-0"



E6 SUP03 ENLARGED CASH ROOM

12" 0 1' 2' 3' 4' 5' 6' 7"

3/8"=1'-0"



C1 SUP03 ENLARGED PHARMACY SET-UP PLAN

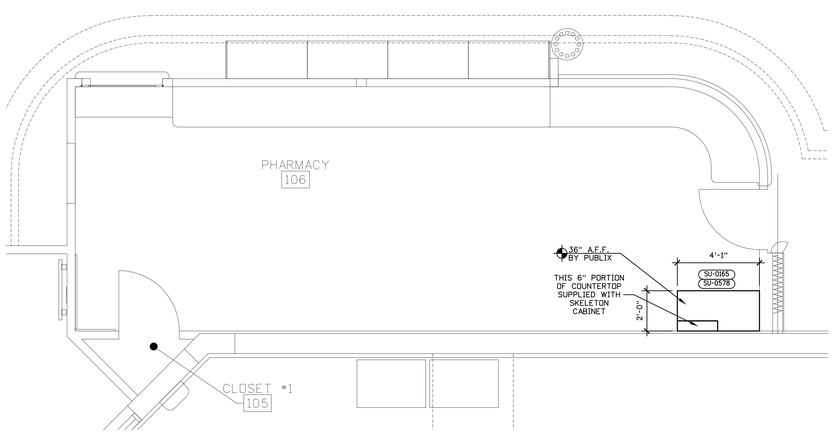
12" 0 1' 2' 3' 4' 5' 6' 7"

3/8"=1'-0"

C4 SUP03 ENLARGED PHARMACY UPPER CABINET LAYOUT

12" 0 1' 2' 3' 4' 5' 6' 7"

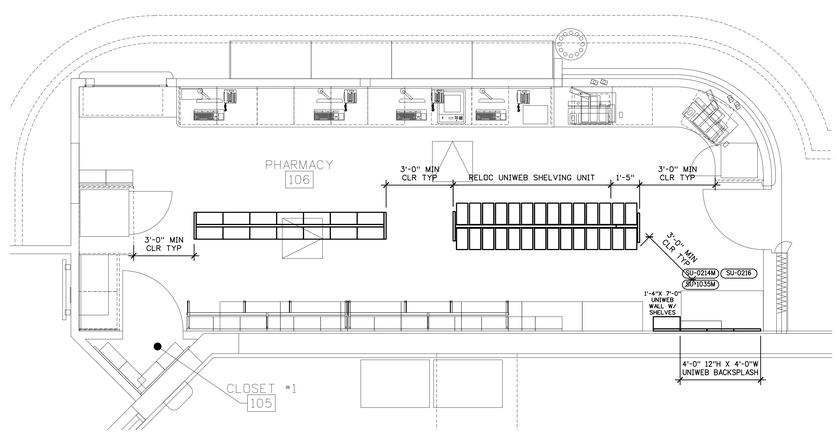
3/8"=1'-0"



A1 SUP03 ENLARGED PHARMACY COUNTERTOP LAYOUT

12" 0 1' 2' 3' 4' 5' 6' 7"

3/8"=1'-0"



A4 SUP03 ENLARGED PHARMACY UNIWEB PANEL LAYOUT

12" 0 1' 2' 3' 4' 5' 6' 7"

3/8"=1'-0"

CUHACI PETERSON
2600 Maitland Center Parkway
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Maitland, FL 32751
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Florida Corporate Certificate #AA C000526

CLIENT NAME
Publix.
SUPER MARKETS
3300 PUBLIX CORPORATE PARKWAY
LAKELAND, FL 33811-3311

PROJECT NAME
PUBLIX AT CRYSTAL SPRINGS SHOPPING CENTER #0797
(FORMERLY PUBLIX AT LAKE HIGHWAY)
CRYSTAL RIVER, FLORIDA 34429-9348

SHEET TITLE
OFFICES SETUP PLAN AND DETAILS

REV	RELEASE
	100% SUBMITTAL - 21 APR 2022

PROJECT NO.	221094
DATE	04/21/2022
DRAWN	CS
CHECKED	MD

SUP03

DECOR SCHEME: EVERGREEN

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