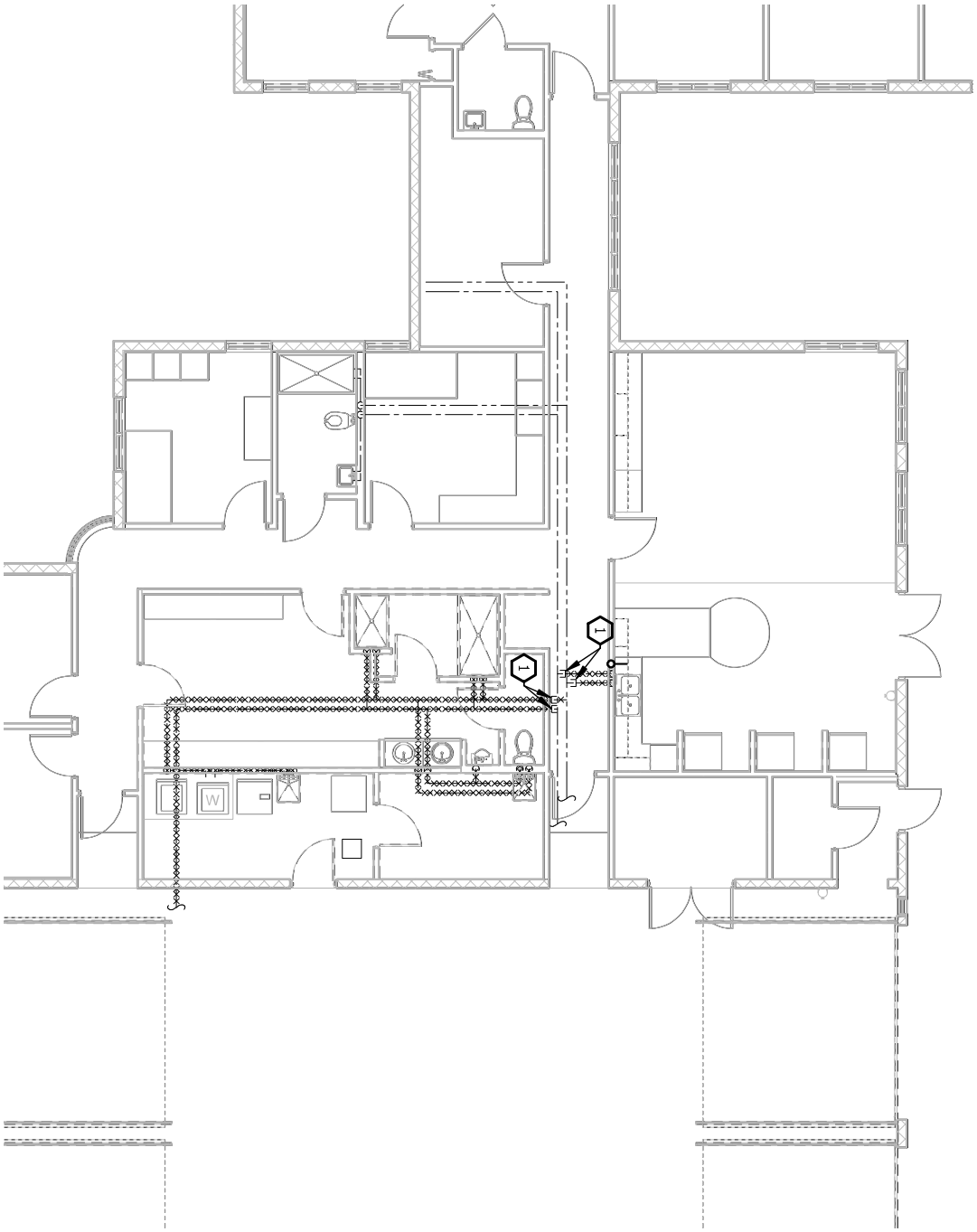

PROJECT TITLE:	TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91 5490 GULF OF MEXICO DR LONGBOAT KEY, FL 34228
ISSUED FOR:	Conformed Set 05.22.20

N

TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91

5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

SWEET | SPARKMAN ARCHITECTS

TABLE OF CONTENTS

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SITE LOCATION MAP

5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

TOWN OF LONGBOAT KEY - FIRE RESCUE STATION 91

18532 - CONFORMED SET - 05.22.20

APPLICABLE CODES

BUILDING CODE:	FLORIDA BUILDING CODE FBC 2017 WITH APPLICABLE AMENDMENTS
MECHANICAL CODE:	FBC, MECHANICAL 2017 WITH APPLICABLE AMENDMENTS
ENERGY CONSERVATION:	FBC, ENERGY CONSERVATION 2017 WITH APPLICABLE AMENDMENTS
ELECTRICAL CODE:	FBC - CHAPTER 27; NFPA 70 (N.E.C.) WITH APPLICABLE AMENDMENTS
PLUMBING CODE:	FBC, PLUMBING 2017 WITH APPLICABLE AMENDMENTS
FUEL GAS CODE:	FBC, FUEL GAS 2017 WITH APPLICABLE AMENDMENTS
ACCESSIBILITY CODE:	2017 FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION
FIRE SAFETY CODE:	FLORIDA FIRE PREVENTION CODE, 6TH EDITION WITH APPLICABLE AMENDMENTS
OTHER:	

BUILDING CATEGORIZATION & PHYSICAL PROPERTIES

OCCUPANCY CLASSIFICATION	**FLORIDA BUILDING CODE**		**FLORIDA FIRE PREVENTION CODE**	
	CHAPTER 3, SECTION 302		CHAPTER 6	
	NO CHANGE FROM EXISTING BUSINESS GROUP B, RESIDENTIAL GROUP R-2 & STORAGE GROUP S-2		--	
EXISTING BUILDING ALTERATIONS	LEVEL 2 ALTERATIONS		--	
CONSTRUCTION TYPE	CHAPTER 6		TABLE A8.2.1.2	
	TYPE II B		--	
WIND LOADS (FBC CHAPTER 16) * SEE STRUCTURAL DRAWINGS.	FBC CHAPTER 16	RISK CATEGORY TABLE 1604.5	N/A	
	165 MPH *	IV *		
BUILDING PHYSICAL PROPERTIES	CHAPTER 5 - TABLES: 504.3, 504.4, 506.2		NFPA 101, PER OCCUPANCY TYPE (CHAPTERS 12-43)	**PROVIDED**
MAXIMUM HEIGHT IN FEET	[55] FEET		--	[30] FEET ±
MAXIMUM NUMBER OF STORIES	4 STORIES		--	1 STORIES
ALLOWABLE BUILDING AREA	48,000 SQ FT PER FLOOR		N/A	9,183 SF (TOTAL BLDG)
SPRINKLER SYSTEM	YES		YES	YES

EXITING REQUIREMENTS

EXITING COMPONENT	FLORIDA BUILDING CODE	FLORIDA FIRE PREVENTION CODE NFPA 101 - LIFE SAFETY CODE	PROVIDED
COMMON PATH OF TRAVEL TO AN EXIT	100 FEET [1006.2.1]	100 FEET [ANNEX A A.7.6]	< 100 FEET
MAXIMUM DEAD END CORRIDOR	50 FEET [1020.4]	50 FEET [ANNEX A A.7.6]	< 50 FEET
MAXIMUM TRAVEL DISTANCE TO EXIT	250 FEET [1017.2]	300 FEET [ANNEX A A.7.6]	< 250 FEET
MINIMUM CORRIDOR WIDTH	44 INCHES [1020.2]	36 INCHES [7.3.4]	> 36"
MINIMUM CLEAR OPNG OF EXIT DOORS	32 INCHES [1010]	32 INCHES [7.2.1.2.3.2]	> 32"
MINIMUM STAIR WIDTH	44 INCHES [1011]	>36 INCHES	48"

OCCUPANCY LOAD AND EGRESS WIDTH CALCULATIONS

(MOST STRINGENT CODE CRITERIA LISTED AND CALCULATED BELOW)

OCCUPANCY	AREA (SF)	FBC CHP 10 - TABLE 1004.1.1 NFPA101 CHP 7 - TABLE 7.3.1.2		NON-STAIR EGRESS			STAIR EGRESS		
		AREA PER OCCUPANT (SF)	OCC. LOAD	EGRESS WIDTH PER PERSON	REQ'D EGRESS WIDTH	EGRESS WIDTH PROVIDED	EGRESS WIDTH PER PERSON	REQ'D EGRESS WIDTH	EGRESS WIDTH PROVIDED
BUSINESS (B)	4,372	100 GROSS	44	.2"	8.8"	36" MIN	.3"	N/A	N/A
RESIDENTIAL (R-2)	2,603	200 GROSS	14	.2"	2.8"	36" MIN	.3"	N/A	N/A
STORAGE (S-2)	3,208	200 GROSS	17	.2"	3.4"	36" MIN	.3"	N/A	N/A
TOTALS	9,183		**75**						

PLUMBING FIXTURE CALCULATION

FIXTURE COUNT	OCC. LOAD	RATIO PER TABLE 403.1	WC REQUIRED	WC PROVIDED	LAV REQUIRED	LAV PROVIDED	UNISEX TOILET RM	SHOWERS	DRINKING FOUNTAIN	REMARKS
OCCUPANCY GROUP [B]	22 MALE 22 FEMALE	1/25 FIRST 50 1/50 AFTER 50	1/1	1/1	1/1	1/1	---	---	---	
OCCUPANCY GROUP [R-2]	7 MALE 7 FEMALE	1/10	2	2	2	2	---	2 REQUIRED	---	
OCCUPANCY GROUP [S-2]	17 OCC	1/100	1	1	1	1	---	---	---	
TOTAL BUILDING COMBINED	**TOTAL: 75 OCC**	---	**5**	**5**	**5**	**5**	---	**3**	**1**	

CODE ANALYSIS
N.T.S

FIRE EXTINGUISHER REQUIREMENTS

FIRE EXTINGUISHER COMPONENT	FLORIDA BUILDING CODE	NFPA 10, TABLE 5.2.1 PER HAZARD OCCUPANCY	PROVIDED
MAXIMUM FLOOR AREA PER UNIT OF A	--	--	REMARK 1
MAXIMUM FLOOR AREA PER EXTINGUISHER	11,250 SQ FT	11,250 SQ FT	--
MAXIMUM TRAVEL DISTANCE	75 FEET	75 FEET	<75 FEET

REMARKS:
1. FIRE EXTINGUISHERS ARE ALL EXISTING TO REMAIN.

GENERAL NOTES

1. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO PROVIDE FOR A WATERTIGHT & WEATHERTIGHT BUILDING. THE CONTRACTOR SHALL REVIEW ALL DETAILS RELATING TO THIS INTENT AND BY BIDDING OR ENTERING INTO THIS CONSTRUCTION CONTRACT WARRANTS FOR ONE FULL YEAR THE ADEQUACY OF THESE DETAILS. SHOULD THE CONTRACTOR TAKE EXCEPTION TO THESE DETAILS, HE SHALL NOTIFY THE ARCHITECT PRIOR TO BIDDING. ANY DEVIATION FROM THIS GENERAL INTENT SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
2. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO PROVIDE FOR A PLUMB, LEVEL, AND SQUARE STRUCTURE UNLESS OTHERWISE NOTED. ANY DEVIATION FROM THIS GENERAL INTENT SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
3. THE BUILDING SHALL BE CONSTRUCTED IN FULL COMPLIANCE WITH ALL APPLICABLE CODES, ORDINANCES AND REGULATIONS AS WELL AS THE DRAWINGS AND SPECIFICATIONS. ANY CODE DEFICIENCIES IN THE DRAWINGS RECOGNIZED BY THE CONTRACTOR SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURATE PLACEMENT OF THE BUILDING ON THE SITE AND VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS. DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE BIDDING THE PROJECT OR THE COMMENCEMENT OF WORK. THE OWNER SHALL NOT BE RESPONSIBLE FOR CHANGES TO THE WORK DUE TO THE FAILURE OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS.
5. THE CONTRACTOR SHALL PROVIDE ALL PERMITS AND INSPECTIONS NECESSARY FOR THE PROPER EXECUTION OF THE WORK IN ACCORDANCE WITH APPLICABLE CODES AND GOVERNING REGULATIONS.
6. CONTRACTOR TO FURNISH AND INSTALL CONCEALED SUPPORT FRAMING (WITHIN WALLS) AS REQUIRED TO FIRMLY SECURE WALL-MOUNTED EQUIPMENT AND/OR ACCESSORIES. WOOD BLOCKING SHALL COMPLY WITH THE REQUIREMENTS OF FBC BUILDING SECTION 603 FOR COMBUSTIBLE MATERIAL IN TYPE II CONSTRUCTION.
7. WHERE AS-BUILT DRAWINGS ARE REQUIRED AND SLEEVES OR SYSTEM RACEWAYS/ PIPING PENETRATE MASONRY OR RATED WALLS, CONTRACTOR SHALL INDICATE FINAL LOCATIONS OF SLEEVES AND PENETRATIONS AS-BUILT FOR THE PROJECT RECORD.
8. CONTRACTOR SHALL PROTECT PIPES WITHIN CONCEALED WALL CAVITIES WITH NAIL/FASTENER PROTECTION (FROM POTENTIAL PUNCTURE) FROM FINISHED SIDES OF WALL.
9. THE CONTRACTOR SHALL VERIFY THE SIZES AND LOCATIONS OF ALL MECHANICAL AND ELECTRICAL EQUIPMENT PADS AND BASES, AS WELL AS POWER, WATER AND DRAIN REQUIREMENTS FOR SUCH EQUIPMENT WITH EQUIPMENT MANUFACTURER. DEVIATION OF THE AFOREMENTIONED REQUIREMENTS SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
10. MINIMUM THICKNESS OF WEATHER COATINGS SHALL BE PROVIDED UNLESS SPECIFIED THICKER PER FBC TABLE 1405.2.

DIMENSION NOTES

1. DO NOT SCALE DRAWINGS: ALL WRITTEN DIMENSIONS SHALL HAVE PREFERENCE OVER SCALE AND BE FIELD VERIFIED AND COORDINATED WITH WORK OF ALL TRADES. IF NO DIMENSIONS ARE GIVEN OR DISCREPANCIES FOUND, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT FOR CLARIFICATION BEFORE BIDDING OR COMMENCING THE WORK.
2. DIMENSIONS TO EXTERIOR MASONRY WALLS ARE TO EXTERIOR FACE OF MASONRY, TYPICAL.
3. DIMENSIONS LOCATING NEW INTERIOR MASONRY WALLS ARE TO FACE OF MASONRY, TYPICAL.
4. DIMENSIONS LOCATING NEW INTERIOR STUD WALLS ARE TO FACE OF STUD, TYPICAL. WHEN A DIMENSION IS INDICATED AS "CLEAR" OR "CLR", THIS INDICATES THE CLEAR DIMENSION THAT IS TO BE PROVIDED AFTER INSTALLATION OF ALL WALL FINISH MATERIALS.
5. OPENINGS NOT LOCATED BY DIMENSION IN INTERIOR WALLS, AND NOT ABUTTING ADJACENT WALLS ARE TO BE CENTERED ON THE WALL.
6. CENTER ANY INTERIOR OPENINGS (NOT LOCATED BY DIMENSION), THAT APPEAR TO BE CENTERED IN A WALL.
7. IF THE LOCATION OF ANY BUILDING ELEMENT IS NOT OBVIOUS OR CANNOT BE DETERMINED BY DIMENSION, MATHEMATICS, OR AS NOTED ABOVE, CONTACT THE ARCHITECT PRIOR TO LOCATING THE ELEMENT.

ABBREVIATIONS

ABV	ABOVE
AC, A/C	AIR CONDITIONING
ACT	ACOUSTIC CEILING TILE
AF	ACCESS FLOORING
AFF	ABOVE FINISHED FLOOR
ALUM	ALUMINUM
BCE	BOTTOM CHORD EXTENSION
BD	BOARD
BIT	BITUMINOUS
BOD	BOTTOM OF DECK
BOF	BOTTOM OF FOOTING
BOS	BOTTOM OF STEEL
BS	BOTH SIDES
BSE	BRICK SHELF ELEVATION
CB	COVE BASE
CEM BD	CEMENTITIOUS BACKER BOARD
C-FCI	CONTRACTOR FURNISH, CONTRACTOR INSTALL
CFM	CUBIC FEET PER MINUTE
CIP	CAST-IN-PLACE
CJ	CONTROL JOINT; CONSTRUCTION JOINT
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
CPT	CARPET
CT	CERAMIC TILE
CU	AIR CONDITIONING CONDENSER UNIT
CUH	CABINET UNIT HEATER
D	DRYER; DEEP (DEPTH)
DF	DRINKING FOUNTAIN
DW	DISHWASHER
EF	EXHAUST FAN; EACH FACE
EJ	EXPANSION JOINT
ELEC	ELECTRICAL
EP	EPOXY PAINT
ESS	EXTERIOR SOFFIT SYSTEM
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EXIST	EXISTING
EXP	EXPOSED
FAAP	FIRE ALARM ANNUCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OTHERS
FCO	FLOOR CLEAN-OUT
FD	FLOOR DRAIN
FEC	FIRE EXTINGUISHER CABINET
FF	FINISHED FLOOR; FAR FACE
FIN	FINISH
FRP	FIBERGLASS REINFORCED PLASTIC
FS	FAR SIDE
FV	FIELD VERIFY
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GDT	GYPSUM DROP-IN TILE
GV	GRAVITY VENT
GWB	GYPSUM WALL BOARD
H	HORIZONTAL; HIGH
HC	HANDICAPPED
HOR	HORIZONTAL
HM	HOLLOW METAL
HR	HOUR
HRU	HEAT RECOVERY UNIT
HT	HEIGHT
H&V	HEATING AND VENTILATING
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
IB	INTEGRAL BASE
IF	INSIDE FACE
IJ	ISOLATION JOINT
IMP	IMPACT RESISTANT
INV	INVERT
L	LONG
LAM	LAMINATED
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LP	LIGHTING PANEL; LIQUEFIED PROPANE
MDO	MEDIUM DENSITY OVERLAY
MDF	MEDIUM DENSITY FIBERBOARD
MECH	MECHANICAL
MO	MASONRY OPENING
MR	MOISTURE-RESISTANT
MTL	METAL
MUA	MAKE-UP AIR
NIC	NOT IN CONTRACT
NR	NONE REQUIRED
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	ON CENTER
OF	OUTSIDE FACE
O-FCI	OWNER FURNISH, CONTRACTOR INSTALL
O-FOI	OWNER FURNISH, OWNER INSTALL
OH	OVERHEAD
OPP	OPPOSITE
PC	POLISHED CONCRETE
PCP	PORTLAND CEMENT PLASTER
PLAM	PLASTIC LAMINATE
PLF	POUND PER LINEAR FOOT
PNT	PAINT/PAINTED
PP	POWER PANEL
PROT	PROTECT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE-TREATED; PORCELAIN TILE
PTD	PAPER TOWEL DISPENSER
PVC	POLYVINYL CHLORIDE
QT	QUARRY TILE
R	RISER; RADIUS
RB	RUBBER BASE
RBF	RUBBER FLOORING
RD	ROOF DRAIN
RE'Q'D	REQUIRED
RES	RESILIENT
RO	ROUGH OPENING
RTU	ROOF TOP UNIT (HVAC)
SC	SEALED CONCRETE
SF	SQUARE FOOT; SUPPLY FAN
SN	SANITARY NAPKIN (DISPENSER)
SS	STAINLESS STEEL
STR	STRUCTURAL
T	TREAD
TB	TACKBOARD
T&B	TOP AND BOTTOM
TO	TOP OF
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOM	TOP OF MASONRY
TOP	TOP OF PIER
TOS	TOP OF STEEL; TOP OF SLAB
TOW	TOP OF WALL
TP	TOILET PAPER (DISPENSER)
TYP	TYPICAL
UH	UNIT HEATER
ULPP	UNDER LAVATORY PIPE PROTECTION
UNO	UNLESS NOTED OTHERWISE
VB	VAPOR BARRIER
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VTR	VENT THROUGH THE ROOF
VWC	VINYL WALL COVERING
W	WIDE; WASHER
W/	WITH
WC	WATER CLOSET
WF	WIDE FLANGE
WH	WATER HEATER
W/O	WITHOUT
WOM	WALK OFF MAT
WP	WATERPROOF
WWF	WELDED WIRE FABRIC

STANDARD ABBREVIATIONS
N.T.S

SYMBOLS

BUILDING SECTION

WALL SECTION

DETAIL

EXTERIOR ELEVATION

INTERIOR ELEVATION

LEVEL LINE

DRAWING NOTE

WINDOW/LOUVER TAG

WALL TAG

SIGN TAG

DOOR TAG

ROOM NAME
ROOM NUMBER

COLUMN BUBBLE AND CENTER LINE

OPENING INDICATOR 'X': EXTERIOR
X101 NUMBERED EXTERIOR AND INTERIOR SEPARATELY IN SEQUENCE PER FLOOR

TOILET ACCESSORY TAG

DIRECTION OF SLOPED SURFACE

STANDARD SYMBOLS
N.T.S

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SWEET SPARKMAN ARCHITECTS

TODD M. SWEET
AR 0015532

PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR:
CONFORMED SET
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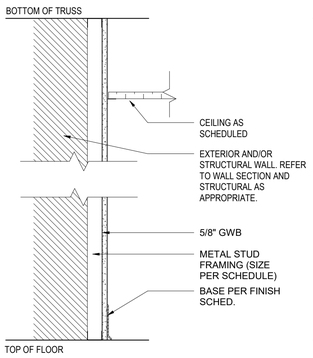
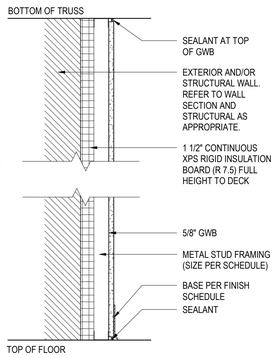


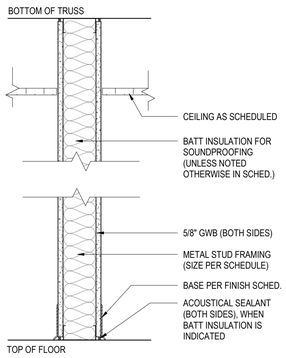
TYPE 4 - FURRING WALL - NON-INSULATED

TYPE	DESCRIPTION	HEIGHT	FIRE RATING
4A	NOT USED	N/A	N/A
4B	1-5/8" METAL STUD	6" ABV CEILING	N/A



TYPE 3 - FURRING WALL - INSULATED

TYPE	DESCRIPTION	HEIGHT	FIRE RATING
3A	1-5/8" METAL STUD	11' AFF	N/A



TYPE 1 - STUD PARTITION WALL

TYPE	DESCRIPTION	HEIGHT	FIRE RATING
1A	3-5/8" METAL STUD	11' AFF	N/A
1B	3-5/8" METAL STUD, NO BATT INSULATION	11' AFF	N/A
1D	6" METAL STUD	11' AFF	N/A

PARTITION TYPE NOTES

1. PARTITION TYPES ARE TAGGED ON THE FLOOR PLANS.
2. REFER TO WALL SECTIONS FOR EXTERIOR WALL ASSEMBLIES.
3. REFER TO "GYPSUM BOARD ASSEMBLIES" SPECIFICATION FOR FULL REQUIREMENTS FOR GYPSUM BOARD ASSEMBLIES AND NON-LOAD-BEARING STEEL FRAMING MEMBERS FOR GYPSUM BOARD ASSEMBLIES.
4. ALL STUDS AND FURRING CHANNELS ARE TO BE SPACED 16" O.C., UNLESS NOTED OTHERWISE.
5. ALL PARTITIONS SHALL EXTEND FROM FLOOR SLAB OR DECK TO THE UNDERSIDE OF THE STRUCTURAL DECK TO ACHIEVE COMPLETE CLOSURE, UNLESS NOTED OTHERWISE.
6. PARTITION TYPES DESCRIBE THE PRIMARY WALL MEMBER AND SHEATHING. REFER TO FINISH SCHEDULE FOR ALL PARTITION FINISH DESIGNATIONS.
7. PROVIDE TYPE "M-R" MOISTURE RESISTANT GYPSUM BACKING BOARD IN ALL WET AREAS, INCLUDING TOILET, LOCKER AND SHOWER ROOMS.
8. PROVIDE 1/2" CEMENT BOARD WITH WATER-RESISTANT COATING AS A SUBSTRATE FOR WALL AREAS SCHEDULED TO RECEIVE TILE.
9. CONSTRUCTION OF FIRE RATED PARTITIONS, INCLUDING TAPING AND FINISHING OF GYPSUM BOARD, SHALL BE IN ACCORDANCE WITH U.L. SYSTEM ASSEMBLY OR OTHER APPROVED ASSEMBLY TO ACHIEVE THE RATING INDICATED. PROVIDE FIRESTOPPING PER FIRESTOPPING MANUFACTURER'S RECOMMENDATIONS FOR PENETRATIONS THROUGH RATED WALLS.
10. PROVIDE SLIP JOINT CONNECTIONS AT THE TOPS OF ALL PARTITIONS WHICH INTERSECT THE STRUCTURE ABOVE. CAPABLE OF ACCOMMODATING UPWARD AND DOWNWARD VERTICAL DISPLACEMENT OF PRIMARY STRUCTURE THROUGH POSITIVE MECHANICAL ATTACHMENT TO STUD WEB. PROVIDE FIRE SAFING AT ALL SLIP JOINT CONNECTIONS IN FIRE RATED PARTITIONS.
11. PROVIDE GYPSUM BOARD CONTROL JOINTS WHERE DESIGNATED ON THE INTERIOR ELEVATIONS, AND ANYWHERE THERE IS A CONTINUOUS RUN OF GYPSUM BOARD THAT IS GREATER THAN 30 FEET IN LENGTH. CONFIRM THE LOCATION OF ADDITIONAL CONTROL JOINTS WITH THE ARCHITECT PRIOR TO INSTALLATION.
12. IN PARTITIONS WHERE BATT INSULATION FOR SOUNDPROOFING IS INDICATED, SEAL CONSTRUCTION AT PERIMETERS, BEHIND CONTROL AND EXPANSION JOINTS, OPENINGS, AND PENETRATIONS WITH A CONTINUOUS BEAD OF ACOUSTICAL SEALANT, INCLUDING A BEAD AT BOTH FACES OF THE PARTITIONS.
13. AT METAL STUD WALLS, BLOCKING IS REQUIRED AT ALL WALL MOUNTED ITEMS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING LOCATIONS:
    - A. WALL MOUNTED COUNTERS AND COUNTERTOP SUPPORTS
    - B. WALL MOUNTED ACCESSORIES AND EQUIPMENT
    - C. WALL MOUNTED DOORSTOPS
    - D. WALL MOUNTED DOOR HOLD OPEN DEVICES AND/OR CLOSURES
    - E. TOILET ROOM PARTITIONS AND ACCESSORIES
    - F. WALL MOUNTED TV / MONITORS AND BRACKETS

FIRE RESISTANCE RATING OF CONCRETE MASONRY WALLS

PER FBC BUILDING TABLE 722.3.2, THE FIRE RESISTANCE RATING OF WALLS AND PARTITIONS CONSTRUCTION OF CONCRETE MASONRY UNITS SHALL BE BASED ON THE EQUIVALENT THICKNESS OF THE MASONRY AND TYPE USED.

CALCAREOUS OR SILICEOUS GRAVEL AGGREGATE
1 HOUR RATING = 2.8" MINIMUM EQUIVALENT THICKNESS
2 HOUR RATING = 4.2" MINIMUM EQUIVALENT THICKNESS

1 PARTITION TYPES
1 1/2" = 1'-0"

FLORIDA PRODUCT APPROVAL / NOA

CATEGORY	SUBCATEGORY	MANUFACTURER / PRODUCT NUMBER	DOCUMENTATION TYPE: FLORIDA APPROVAL (FL#)	DOCUMENTATION TYPE: MIAMI-DADE NOA	REMARKS
WINDOWS	STOREFRONT	MANUF: YKK AP AMERICA SERIES: YHS 50 FI	14218.5		
	CURTAIN WALL	MANUF: YKK AP AMERICA SERIES: YHC 300 OG	13433.2		
EXTERIOR DOORS	STOREFRONT OUTSWING	MANUF: YKK AP AMERICA SERIES: 35H	16554		
	HOLLOW METAL OUTSWING	MANUF: ALLEGION SERIES: H SERIES	14022		
OVERHEAD DOORS	OVERHEAD SECTIONAL	MANUF: CLOPAY SERIES: MODEL 3718	17671		
	OVERHEAD COILING	MANUF: OVERHEAD DOOR CO SERIES: 610	15960		
		MANUF: SERIES:			

PRODUCT APPROVAL NOTES
A. INCLUSION OF A PRODUCT IN THIS SCHEDULE DOES NOT IMPLY OR PRESUME THAT THE PRODUCT LISTED WILL BE INSTALLED IN THIS PROJECT. ALTERNATE PRODUCTS COMPLYING WITH CODE REQUIREMENTS MAY BE UTILIZED UPON EVALUATION, ACCEPTANCE, AND APPROVAL BY THE BUILDING DEPARTMENT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT INFORMATION AND DOCUMENTATION THAT MAY BE REQUIRED BY THE BUILDING DEPARTMENT FOR THE ALTERNATE PRODUCT'S EVALUATION AND APPROVAL.

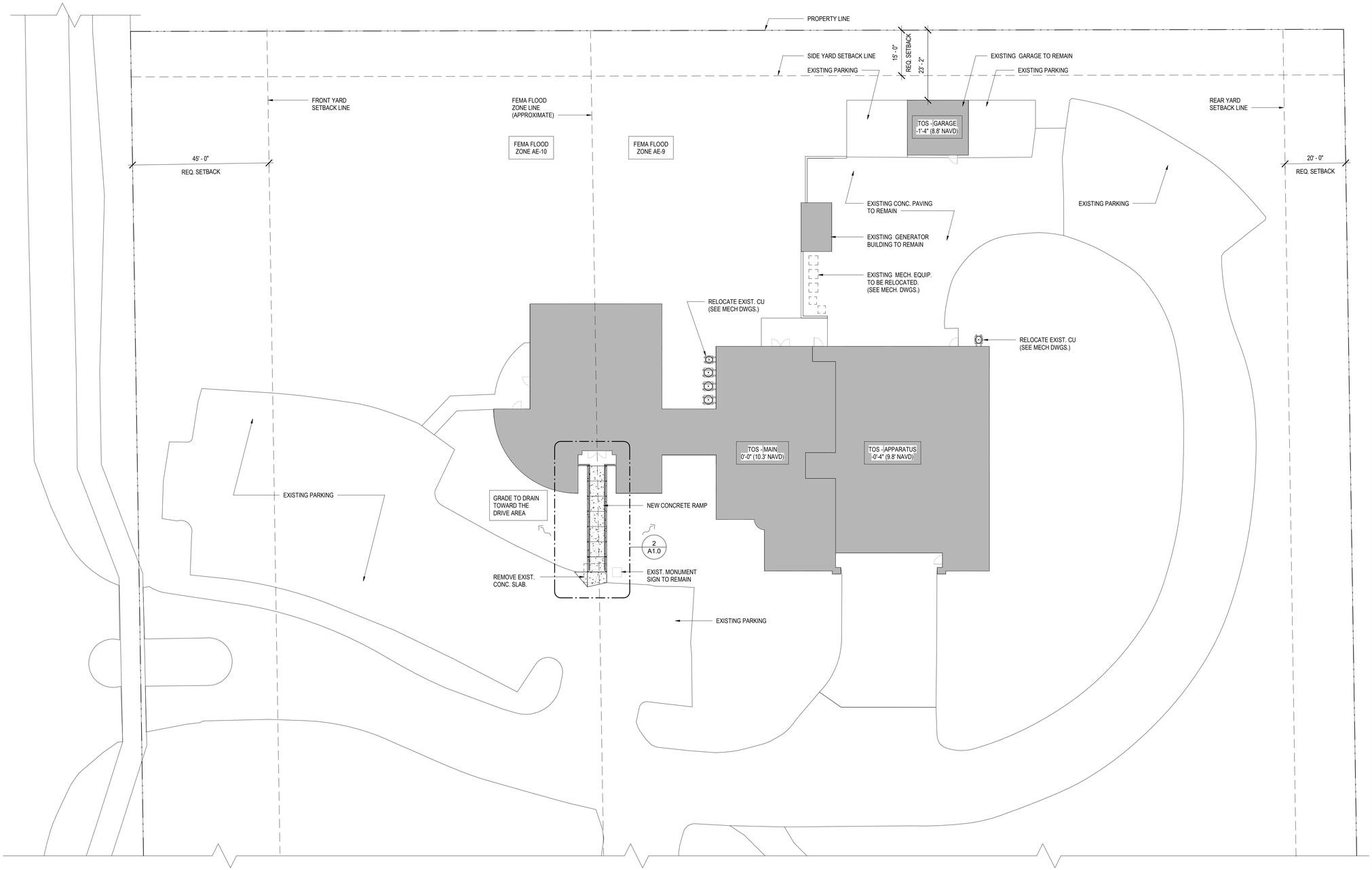
REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

SCALE:	As indicated
PROJECT MANAGER:	JLK
DRAWN BY:	JIK
A/E OF RECORD:	TMS
PROJECT NO:	18532

SHEET TITLE:
CODE ANALYSIS, NOTES & LEGENDS, PRODUCT APPROVAL

SHEET No.:
A0.1



1 SITE PLAN
1/16" = 1'-0"

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SWEET SPARKMAN ARCHITECTS

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GRAPHIC SCALE:
0" 1"

SCALE:	1/16" = 1'-0"
PROJECT MANAGER:	JLK
DRAWN BY:	JIK
A/E OF RECORD:	TMS
PROJECT NO:	18532

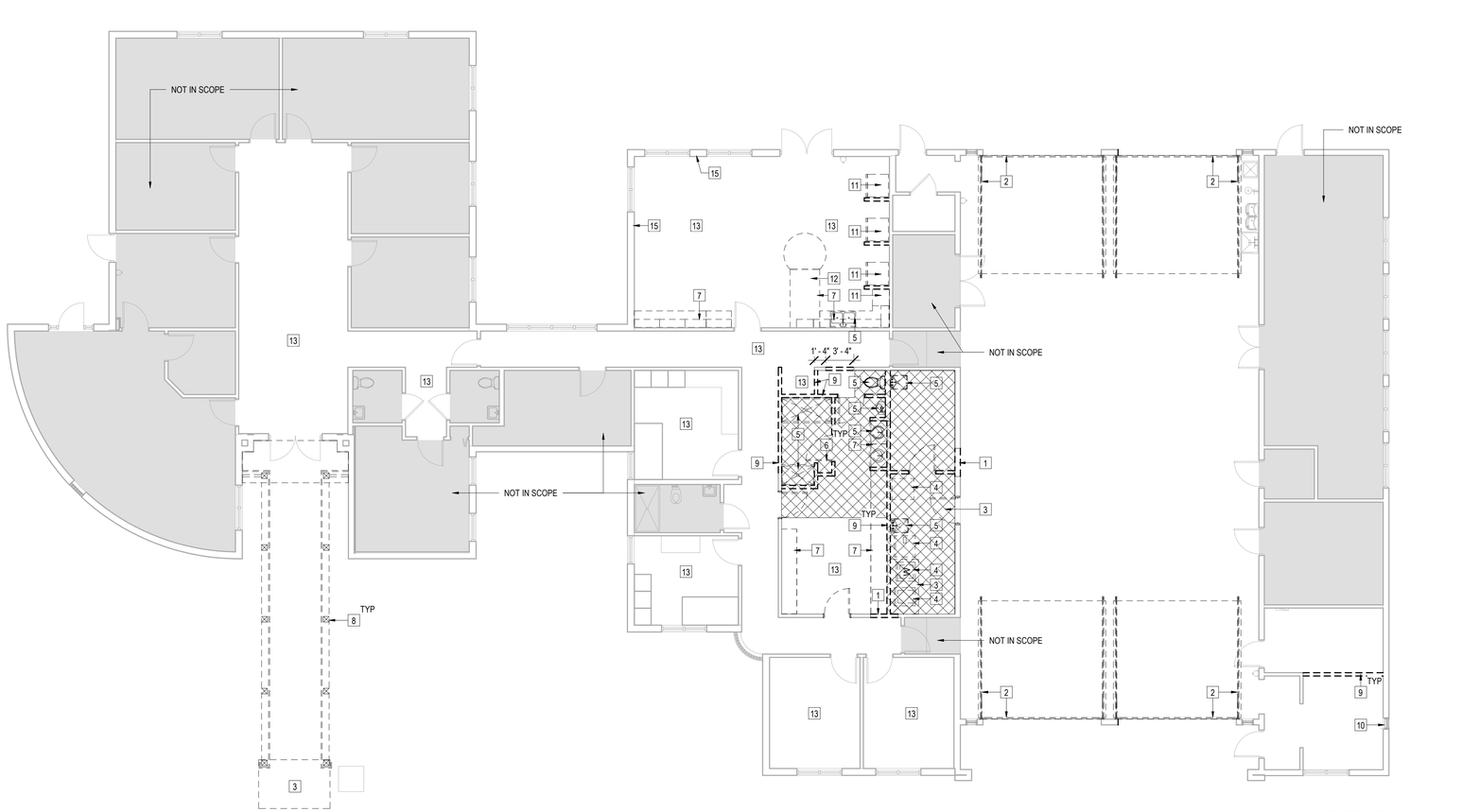
SHEET TITLE:
ARCHITECTURAL
SITE PLAN

SHEET No.:
A0.2

SHEET NOTES.

X — NUMBERED NOTES SHOWN IN DRAWINGS ON THIS SHEET APPLY ONLY TO THE NUMBERED NOTES IN THE TABLE BELOW.

1	REMOVE WALL SEGMENT FOR NEW DOOR OPENING. (COORDINATE LOCATION WITH FLOOR PLAN)
2	REMOVE OVERHEAD DOOR ASSEMBLY & DOOR OPENER. EXISTING STEEL JAMBS TO REMAIN.
3	REMOVE CONCRETE SLAB
4	REMOVE EQUIPMENT & STORE FOR REINSTALLATION
5	REMOVE PLUMBING FIXTURE
6	REMOVE SWINGING DOOR ASSEMBLY
7	REMOVE CASEWORK (COUNTERTOP, UPPER & BASE CABINETS)
8	REMOVE WOOD DECK & GUARDRAIL ASSEMBLY
9	REMOVE WALL CONSTRUCTION
10	REMOVE LOUVER ASSEMBLY
11	REMOVE KITCHEN APPLIANCE
12	REMOVE COOKTOP & DOWNDRAFT VENT SYSTEM.
13	REMOVE EXISTING FLOORING
15	REMOVE EXISTING CHAIR RAIL AND PATCH WALL AS REQUIRED



1 FIRST FLOOR DEMO PLAN
1/8" = 1'-0"

DEMOLITION WALL LEGEND

EXISTING WALLS TO REMAIN

EXISTING WALLS TO BE REMOVED

EXISTING DOOR TO BE REMOVED

2168 MAIN STREET
SARASOTA, FL 34237
T 941.952.0084
F 941.952.0201
FL AA26000857

SWEET SPARKMAN ARCHITECTS

TODD M. SWEET
AR 0015532

PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR:
CONFORMED SET
05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

SCALE:	As indicated
PROJECT MANAGER:	JLK
DRAWN BY:	JIK
A/E OF RECORD:	TMS
PROJECT NO:	18532

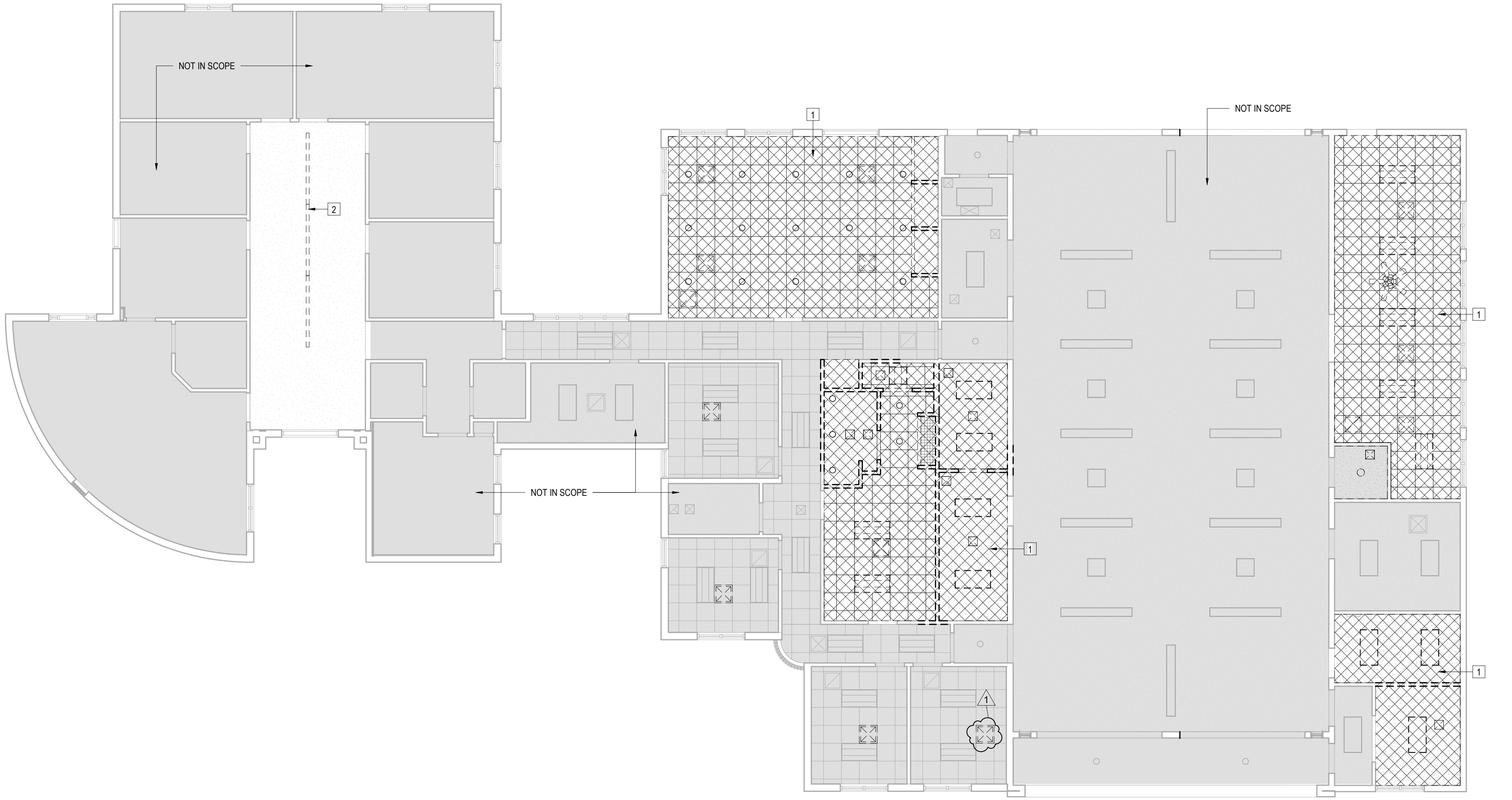
SHEET TITLE:
FIRST FLOOR DEMO PLAN

SHEET No.:
AD2.1

SHEET NOTES.

X → NUMBERED NOTES SHOWN IN DRAWINGS ON THIS SHEET APPLY ONLY TO THE NUMBERED NOTES IN THE TABLE BELOW.

1	REMOVE EXISTING CEILING, LIGHTING AND MECHANICAL DEVICES.
2	REMOVE LIGHT FIXTURE. PATCH/REPAIR CEILING FINISH AS REQUIRED.



1 FIRST FLOOR DEMO RCP
1/8" = 1'-0"

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FL AA26000857

SWEET SPARKMAN ARCHITECTS

TODD M. SWEET
AR 0015532

PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR:
CONFORMED SET
05.22.20

REV	DESCRIPTION	DATE
1	ASI 01	08.26.20

GRAPHIC SCALE:
0" 1"

SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	JLK
DRAWN BY:	JIK
A/E OF RECORD:	TMS
PROJECT NO:	18532

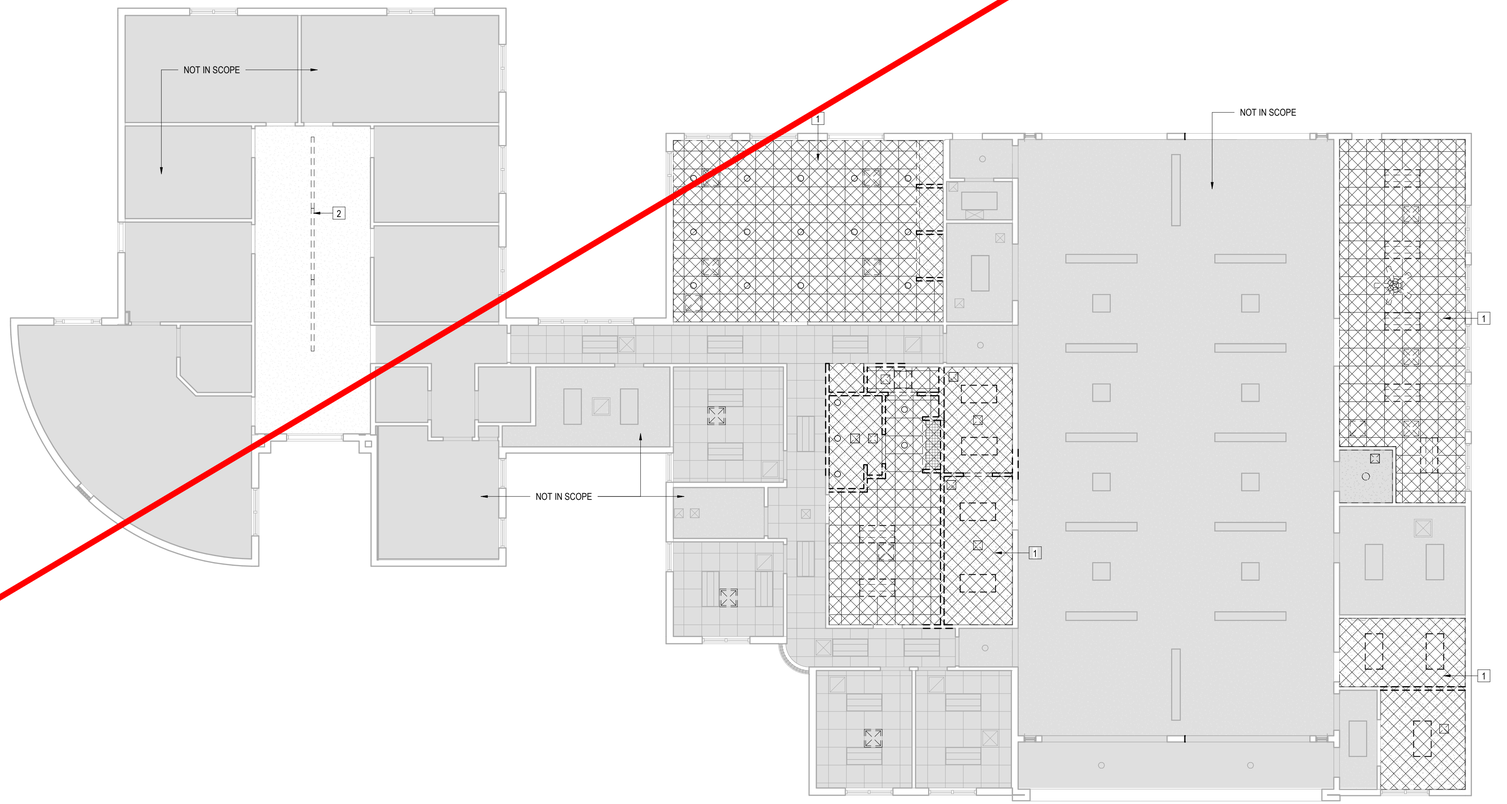
SHEET TITLE:
FIRST FLOOR DEMO RCP

SHEET No.:
AD3.1

SHEET NOTES.

X → NUMBERED NOTES SHOWN IN DRAWINGS ON THIS SHEET APPLY ONLY TO THE NUMBERED NOTES IN THE TABLE BELOW.

1	REMOVE EXISTING CEILING, LIGHTING AND MECHANICAL DEVICES.
2	REMOVE LIGHT FIXTURE. PACTH/REPAIR CEILING FINISH AS REQUIRED.



1 FIRST FLOOR DEMO RCP
1/8" = 1'-0"

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SWEET SPARKMAN ARCHITECTS

TODD M. SWEET
AR 0015532

PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR:
CONFORMED SET
05.22.20

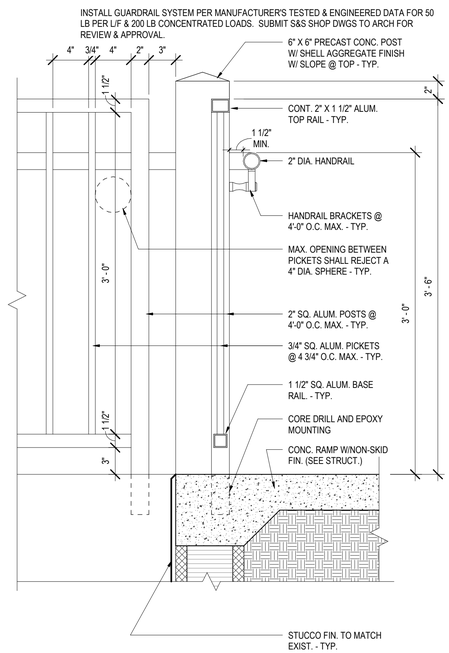
REV	DESCRIPTION	DATE

GRAPHIC SCALE:
0" 1"

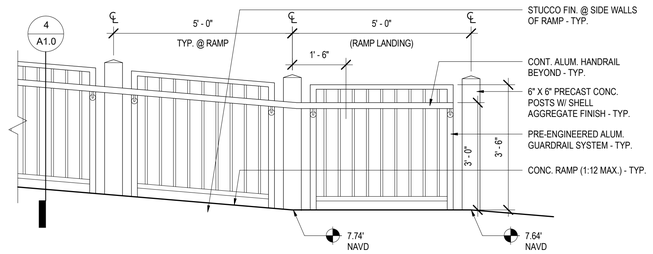
SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	JLK
DRAWN BY:	JIK
A/E OF RECORD:	TMS
PROJECT NO:	18532

SHEET TITLE:
FIRST FLOOR DEMO RCP

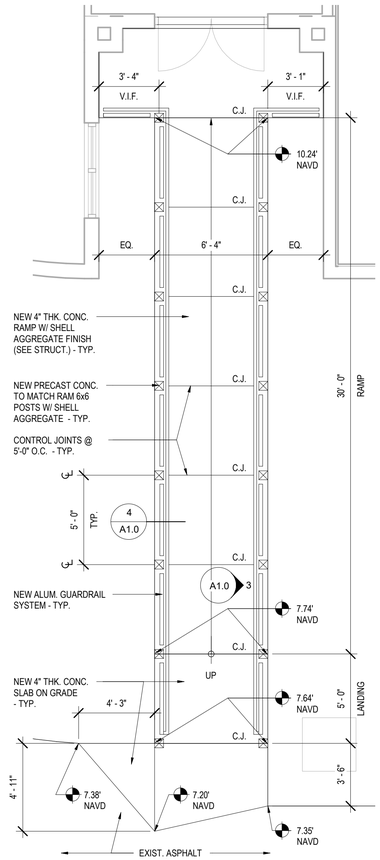
SHEET No.:
AD3.1



4 RAMP GUARDRAIL SECTION
1 1/2" = 1'-0"



3 TYP. RAMP GUARDRAIL ELEVATION
1/2" = 1'-0"



2 ENLARGED RAMP PLAN
1/4" = 1'-0"

ROOM NUMBER	ROOM NAME	
SIZE	USAGE	NUMBER OF OCCUPANTS

X-X — DESIGNATION OF OCCUPANCY GROUP PER FBC SECTION 3

XX' — GRAPHIC ILLUSTRATION OF TRAVEL DISTANCE TO EXIT FROM REMOTE POINT

EXIT SIGN

CLR WIDTH OF DOOR — 34"/170 — EXIT EGRESS CAPACITY (# OF OCCUPANTS)

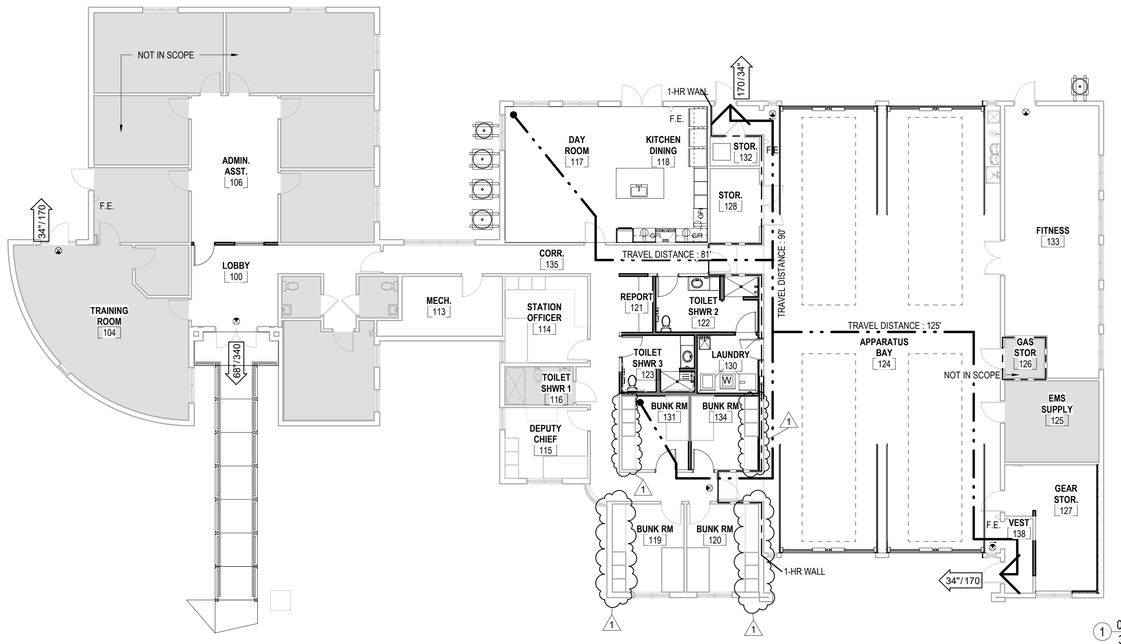
FACP — FIRE ALARM CONTROL PANEL

FIRE EXTINGUISHER

FEC — FIRE EXTINGUISHER CABINET

1-HR WALL

LIFE SAFETY LEGEND
N.T.S



1 01 - FIRST FLOOR - LIFE SAFETY
3/32" = 1'-0"

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SWEET SPARKMAN ARCHITECTS

TODD M. SWEET
AR 0013532

PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR:
CONFORMED SET
05.22.20

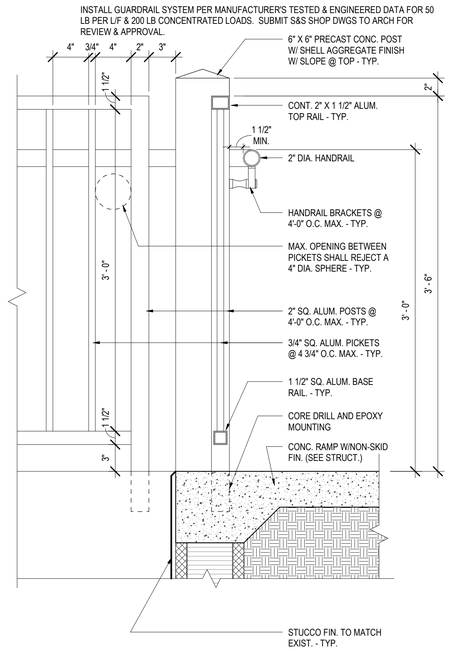
REV	DESCRIPTION	DATE
1	ASI 01	08.26.20

GRAPHIC SCALE: 0" 1"

SCALE:	As indicated
PROJECT MANAGER:	JLK
DRAWN BY:	JIK
A/E OF RECORD:	TMS
PROJECT NO:	18532

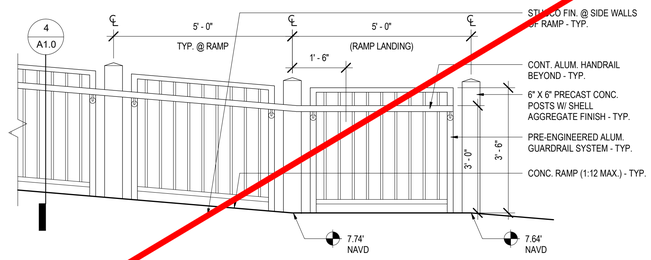
SHEET TITLE:
LIFE SAFETY PLAN, LEGENDS & SITE DETAILS

SHEET No.:
A1.0

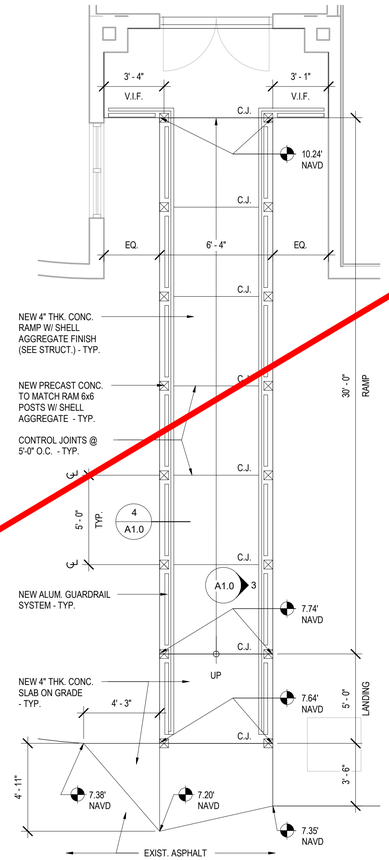


4 RAMP GUARDRAIL SECTION
1 1/2" = 1'-0"

VOID



3 TYP. RAMP GUARDRAIL ELEVATION
1/2" = 1'-0"



2 ENLARGED RAMP PLAN
1/4" = 1'-0"

ROOM NUMBER	ROOM NAME
SIZE	USAGE / NUMBER OF OCCUPANTS

X-X — DESIGNATION OF OCCUPANCY GROUP PER FBC SECTION 3

XX' — GRAPHIC ILLUSTRATION OF TRAVEL DISTANCE TO EXIT FROM REMOTE POINT

EXIT SIGN

CLR WIDTH OF DOOR — 34"/170 — EXIT EGRESS CAPACITY (# OF OCCUPANTS)

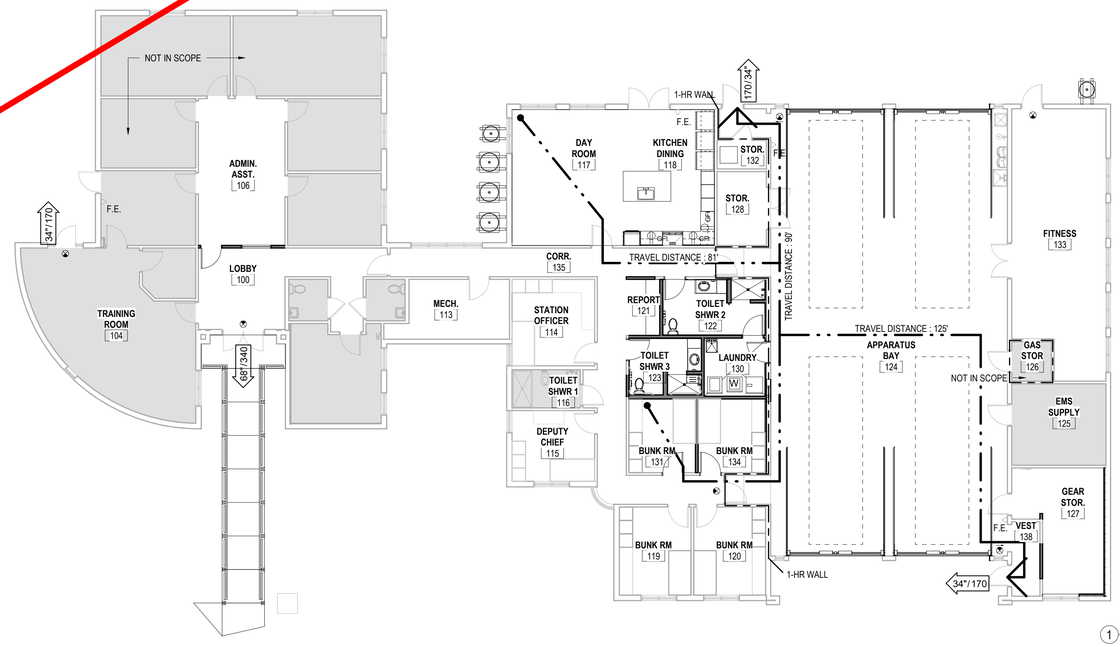
FACP — FIRE ALARM CONTROL PANEL

FIRE EXTINGUISHER

FEC — FIRE EXTINGUISHER CABINET

1-HR WALL

LIFE SAFETY LEGEND
N.T.S



1 01 - FIRST FLOOR - LIFE SAFETY
3/32" = 1'-0"

2168 MAIN STREET
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T 941.952.0084
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SWEET SPARKMAN ARCHITECTS

TODD M. SWEET
AR 0013532

PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR:
CONFORMED SET
05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

SCALE:	As indicated
PROJECT MANAGER:	JLK
DRAWN BY:	JIK
A/E OF RECORD:	TMS
PROJECT NO:	18532

SHEET TITLE:
LIFE SAFETY PLAN, LEGENDS & SITE DETAILS

SHEET No.:
A1.0

SHEET NOTES

X — NUMBERED NOTES SHOWN IN DRAWINGS ON THIS SHEET APPLY ONLY TO THE NUMBERED NOTES IN THE TABLE BELOW.

1	EXISTING CONC. SLAB TO REMAIN
2	PROPOSED RELOCATION OF EXISTING CONDENSER UNITS. SEE MECH. DWGS FOR REQ. CLEARANCES - TYP.
3	RELOCATE EXISTING BED
4	REMOVE DRYWALL FINISH; ADD SPRAY FOAM INSULATION TO WALL CAVITY (FULL HEIGHT TO UNDERSIDE OF ROOF TRUSSES); INSTALL DB3 ACOUSTICAL SOUND BARRIER, INSTALL NEW DRYWALL FINISH.
5	CMU INFILL AT LOUVER OPENING. MATCH EXIST. STUCCO FINISH.
6	ALIGN FLUSH WITH EXISTING WALL
7	NEW ICE MAKER & WATER FILTRATION SYSTEM, SEE EQUIPMENT SCHEDULE THIS SHEET
9	BUNKER GEAR STORAGE, SEE LOCKER SPECIFICATION

FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	CEILING FINISH	REMARKS
100	LOBBY	RF1	RB1	P1	EXISTING	
104	TRAINING ROOM	NIS	NIS	NIS	NIS	
106	ADMIN. ASST.	RF1	RB1	P1	EXISTING	
108	BREAK ROOM	NIS	NIS	NIS	NIS	
113	MECH.	EXISTING	EXISTING	EXISTING	EXISTING	
114	STATION OFFICER	RF1	RB1	P1	EXISTING	
115	DEPUTY CHIEF	RF1	RB1	P1	EXISTING	
116	TOILET SHWR 1	NIS	NIS	NIS	NIS	
117	DAY ROOM	RF1	RB1	P1	ACT1	
118	KITCHEN DINING	RF1	RB1	P1	ACT1/P3	
119	BUNK RM	RF1	RB1	P1	EXISTING	
120	BUNK RM	RF1	RB1	P1	EXISTING	
121	REPORT	RF1	RB1	P1	ACT1	
122	TOILET SHWR 2	T1/T2		T1/T3	P3	
122B	LIN.	T-1	WT-1	WT-1	GWB	
123	TOILET SHWR 3	T1/T2		T1/T3	P3	
123B	LIN.	T-1	WT-1	WT-1	GWB	
124	APPARATUS BAY	NA	NA	NA	P4	
125	EMS SUPPLY	NIS	NIS	NIS	NIS	
126	GAS STOR	NIS	NIS	NIS	NIS	
127	GEAR STOR.	SC	RB1	P1	ACT1	
128	STOR.	NIS	NIS	NIS	NIS	
129	ELEC.	SC	VB-1	PNT-1	ACT-1	
130	LAUNDRY	SC	RB1	P1	ACT1	
131	BUNK RM	RF1	RB1	P1	ACT1	
132	STOR.	NIS	NIS	NIS	NIS	
133	FITNESS	EXISTING	EXISTING	EXISTING	ACT1	
134	BUNK RM	RF1	RB1	P1	ACT1	
135	CORR.	RF1	RB1	P1	EXISTING	
138	VEST	SC	RB1	P1	ACT1	
139	GARAGE	NIS	NIS	NIS	NIS	
140	GARAGE	SC	VB-1	PNT-1	N/A	
141	VEST	NIS	NIS	NIS	NIS	

GENERAL FINISH NOTES:

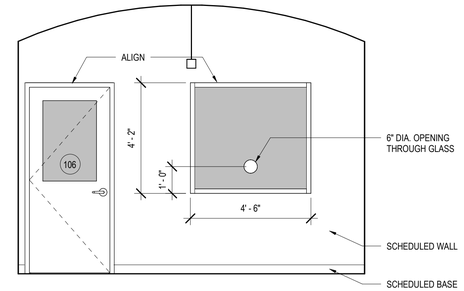
A. SAMPLES OF FINISHES SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL IN DUPLICATE PRIOR TO COMMENCEMENT OF WORK. PAINT SAMPLES FOR GYPSUM BOARD SURFACES TO BE PROVIDED ON AN A4 GYPSUM BOARD. WALLCOVERING SAMPLES TO BE A4 SIZED.
B. REFER TO WALL LEGEND, PLANS &/OR SECTIONS FOR FINISH SUBSTRATE.
C. WHERE 2 OR MORE FINISHES ARE SCHEDULED, SEE FLOOR PLAN, REFLECTED CEILING PLAN, OR INTERIOR ELEVATIONS FOR EXTENTS.
D. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS.
E. ONLY FINISH NON PRE-FINISHED ITEMS.
F. ALL GYPSUM BOARD WALL SURFACES TO BE P1, UNO.
G. ALL GYPSUM BOARD VERTICAL SOFFITS, CEILINGS AND HORIZONTAL SOFFITS TO BE P3, UNO.
H. ALL INTERNAL CLOSETS TO BE P1, UNO.
I. ALL DOOR TRIM TO BE PX, UNO.
J. DOORS + TRIM ARE TO BE SEMIGLOSS; WALLS ARE TO BE EGGSHELL; CEILINGS ARE TO BE FLAT.
K. DRYWALL FINISH TO BE LEVEL 5, SMOOTH, UNO.
L. COVE RUBBER BASE AT HARD FLOOR (CONCRETE, RESILIENT FLOOR), STRAIGHT BASE AT CARPET. STRAIGHT BASE TO BE INSTALLED PRIOR TO CARPET.
M. NO APPLIED BASE AT PTD. CMU WALLS.
N. ALIGN FACES OF JOINT TILES.
O. TILES SHOULD BE SAME DYE LOT/CALIBER.

FINISH SCHEDULE REMARKS:

1. NA

FINISH LEGEND

ITEM	MATERIAL	MANUFACTURER	ITEM DESCRIPTION	COLOR	REMARKS
ACT1	ACOUSTIC CEILING TILE	USG	2'X2' MARS W/FLB EDGE; IDENTITEE DXI GRID SYSTEM; SHADOW MOLDING AT PERIMETER	WHITE	
P1	PAINT	SHERWIN WILLIAMS	GENERAL PAINT	SW7064 PASSIVE	
P2	PAINT	SHERWIN WILLIAMS	DOOR + FRAME PAINT	SW7674 PEPPERCORN	
P3	PAINT	SHERWIN WILLIAMS	CEILING PAINT	SW7007 CEILING BRIGHT WHITE	
P4	PAINT	SHERWIN WILLIAMS	EXTERIOR CEILING PAINT	MATCH BEHR PPF-27 PORCH CEILING	
PL1	PLASTIC LAMINATE	FORMICA	SCULPTED LAMINATE	927-SP FOLKSTONE	
PL2	PLASTIC LAMINATE	WILSONART	PREMIUM LAMINATE; LINEARITY FINISH; AEON SCRATCH RESISTANT	4941K-18 COSMIC STRANDZ	
PL3	PLASTIC LAMINATE	WILSONART	STANDARD LAMINATE; MATTE FINISH	D92-60 DOVE GREY	
PL4	PLASTIC LAMINATE	FORMICA	STANDARD LAMINATE; MATTE FINISH	845-58 SPECTRUM RED	
RB1	RESILIENT BASE	JOHNSONITE	TRADITIONAL 4"H	20 CHARCOAL WG	
RF1	RESILIENT FLOORING	SHAW CONTRACT	24x24 COMPOUND 2.5 4074V; ASHLAR INSTALLATION	77518 ELEVATE	
SC	SEALED CONCRETE				
SS1	SOLID SURFACE	WILSONART	QUARTZ	Q1009 GREY LAKE	
SS2	SOLID SURFACE	WILSONART	QUARTZ	Q4011 ARASHI	
T1	TILE	EMSER TILE	12"X24" BLUE EMOTION GLAZED BODY MATCH PORCELAIN; GROUT COLOR TBD	LIGHT MATTE	
T2	TILE	EMSER TILE	2"X2" MOSAIC BLUE EMOTION GLAZED BODY MATCH PORCELAIN; GROUT COLOR TBD	LIGHT MATTE	
T3	TILE	UNITED STATE CERAMIC TILE	3"x6" COLOR COLLECTION CERAMIC WALL TILE; GROUT COLOR TBD	RED PEPPER	



2 LOBBY ELEVATION
3/8" = 1'-0"

ITEM	DESCRIPTION	BY
REF	REFRIGERATOR : 26 CU.FT. FRENCH DOORS FREEZER DRAWER	CFCI
ICE	ICE MACHINE : HOSHIZAKI AMERICA, INC. CUBER: KML-351-MAH (AIR COOLED) BIN: B-250	CFCI
DW	DISHWASHER : TOP CONTROL BUILT-IN TALL TUB DISHWASHER W/ FAN DRY, 51 DBA	CFCI
MW	MICROWAVE : 1.6 CU. FT. COUNTERTOP MICROWAVE W/ 1,200 - WATT COOKING POWER	CFCI
OVN	DOUBLE OVEN : 30" DOUBLE ELECTRIC WALL OVEN, SELF-CLEANING WITH CONVECTION AND EASY CLEAN	CFCI
GR	GAS RANGE : 36" ALL GAS PROFESSIONAL RANGE, FRONT CONTROLS	CFCI
HD	HOOD : SEE INTERIOR ELEVATION AND MECHANICAL ENGINEERS SPECIFICATIONS FOR HOOD REQUIREMENTS	CFCI
CM	COFFEE MAKER : CUISINART 12-CUP PROGRAMMABLE BLACK DRIP COFFEE MAKER W/ AUTOMATIC SHUT-OFF AND HOT WATER SIDE FEATURE	CFCI

OFOI: OWNER FURNISH, OWNER INSTALL
OFCI: OWNER FURNISH, CONTRACTOR INSTALL
CFCI: CONTRACTOR FURNISH, CONTRACTOR INSTALL

ALL FIXTURES ABOVE ARE BASIS OF DESIGN. ALL MAJOR KITCHEN APPLIANCES TO BE FROM THE SAME PRODUCT LINE. FIXTURES TO BE STAINLESS STEEL FINGERPROOF RESISTANT.

EQUIPMENT SCHEDULE
3/16" = 1'-0"

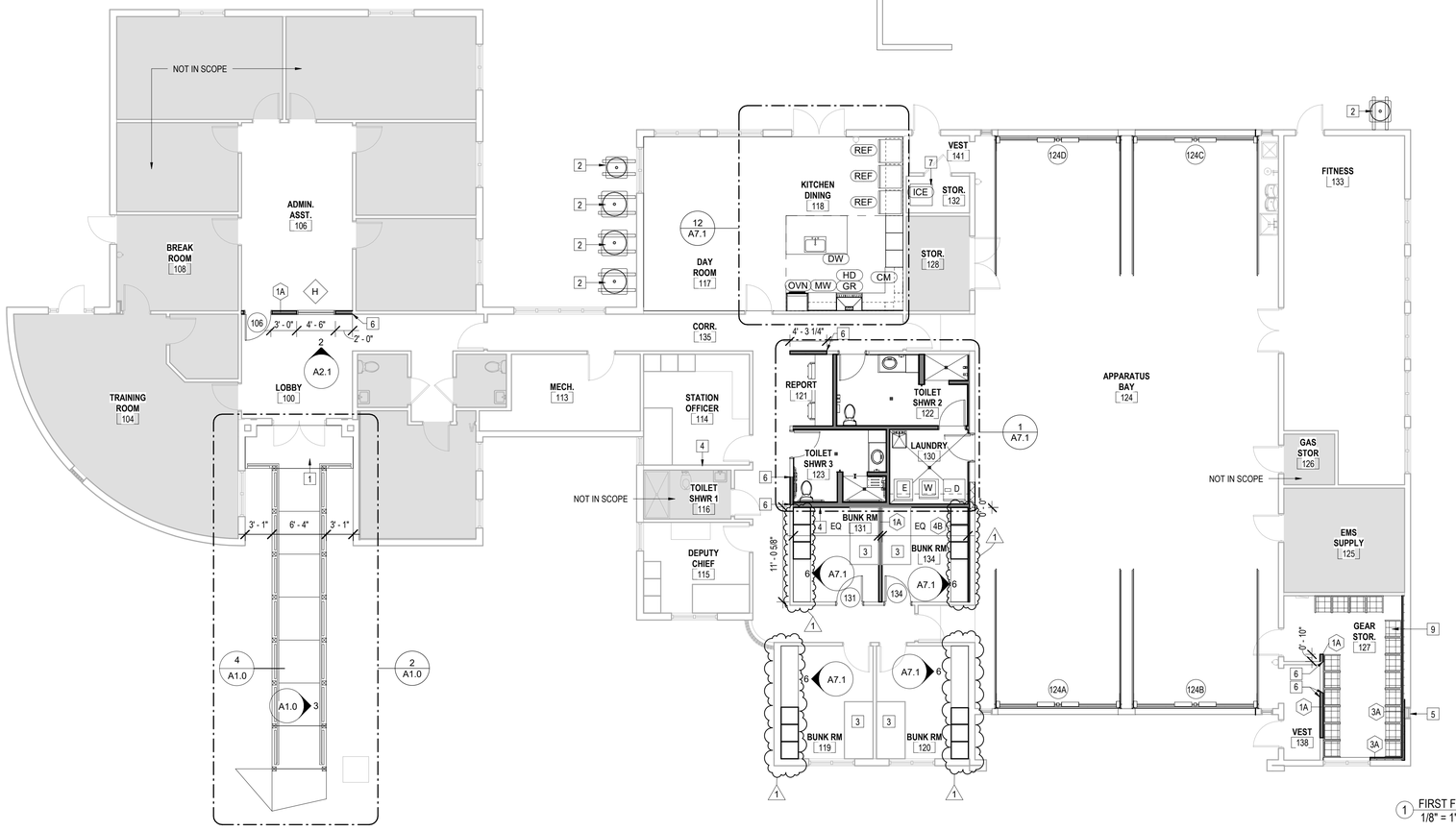
WALL LEGEND

X.X — REFER TO **A0.2** FOR INTERIOR PARTITION TYPES. REFER TO WALL SECTIONS FOR EXTERIOR WALL ASSEMBLIES.

EXISTING WALLS.

NEW CMU WALLS. FURRING/FACING CONDITIONS MAY VARY BY TYPE

NEW STUD WALLS. FACING CONDITIONS MAY VARY BY TYPE



1 FIRST FLOOR PLAN (PROPOSED)
1/8" = 1'-0"

2168 MAIN STREET
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SWEET SPARKMAN ARCHITECTS

TODD M. SWEET
AR 0015532

PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR:
CONFORMED SET
05.22.20

REV	DESCRIPTION	DATE
1	ASI 01	08.26.20

GRAPHIC SCALE: 0" 1"

SCALE:	As indicated
PROJECT MANAGER:	JLK
DRAWN BY:	JIK
A/E OF RECORD:	TMS
PROJECT NO:	18532

SHEET TITLE:
FIRST FLOOR PLANS & LEGENDS

SHEET No.:
A2.1

SHEET NOTES

X — NUMBERED NOTES SHOWN IN DRAWINGS ON THIS SHEET APPLY ONLY TO THE NUMBERED NOTES IN THE TABLE BELOW.

1	EXISTING CONC. SLAB TO REMAIN
2	PROPOSED RELOCATION OF EXISTING CONDENSER UNITS. SEE MECH. DWGS FOR REQ. CLEARANCES - TYP.
3	RELOCATE EXISTING BED
4	REMOVE DRYWALL FINISH; ADD SPRAY FOAM INSULATION TO WALL CAVITY (FULL HEIGHT TO UNDERSIDE OF ROOF TRUSSES); INSTALL DB3 ACOUSTICAL SOUND BARRIER, INSTALL NEW DRYWALL FINISH.
5	CMU INFILL AT LOUVER OPENING. MATCH EXIST. STUCCO FINISH.
6	ALIGN FLUSH WITH EXISTING WALL
7	NEW ICE MAKER & WATER FILTRATION SYSTEM, SEE EQUIPMENT SCHEDULE THIS SHEET
9	BUNKER GEAR STORAGE, SEE LOCKER SPECIFICATION

FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	CEILING FINISH	REMARKS
100	LOBBY	RF1	RB1	P1	EXISTING	
104	TRAINING ROOM	NIS	NIS	NIS	NIS	
106	ADMIN. ASST.	RF1	RB1	P1	EXISTING	
108	BREAK ROOM	NIS	NIS	NIS	NIS	
113	MECH.	EXISTING	EXISTING	EXISTING	EXISTING	
114	STATION OFFICER	RF1	RB1	P1	EXISTING	
115	DEPUTY CHIEF	RF1	RB1	P1	EXISTING	
116	TOILET SHWR 1	NIS	NIS	NIS	NIS	
117	DAY ROOM	RF1	RB1	P1	ACT1	
118	KITCHEN DINING	RF1	RB1	P1	ACT1/P3	
119	BUNK RM	RF1	RB1	P1	EXISTING	
120	BUNK RM	RF1	RB1	P1	EXISTING	
121	REPORT	RF1	RB1	P1	ACT1	
122	TOILET SHWR 2	T1/T2		T1/T3	P3	
122B	LIN.	T-1	WT-1	WT-1	GWB	
123	TOILET SHWR 3	T1/T2		T1/T3	P3	
123B	LIN.	T-1	WT-1	WT-1	GWB	
124	APPARATUS BAY	NA	NA	NA	P4	
125	EMS SUPPLY	NIS	NIS	NIS	NIS	
126	GAS STOR	NIS	NIS	NIS	NIS	
127	GEAR STOR.	SC	RB1	P1	ACT1	
128	STOR.	NIS	NIS	NIS	NIS	
129	ELEC.	SC	VB-1	PNT-1	ACT-1	
130	LAUNDRY	SC	RB1	P1	ACT1	
131	BUNK RM	RF1	RB1	P1	ACT1	
132	STOR.	NIS	NIS	NIS	NIS	
133	FITNESS	EXISTING	EXISTING	EXISTING	ACT1	
134	BUNK RM	RF1	RB1	P1	ACT1	
135	CORR.	RF1	RB1	P1	EXISTING	
138	VEST	SC	RB1	P1	ACT1	
139	GARAGE	NIS	NIS	NIS	NIS	
140	GARAGE	SC	VB-1	PNT-1	N/A	
141	VEST	NIS	NIS	NIS	NIS	

GENERAL FINISH NOTES:

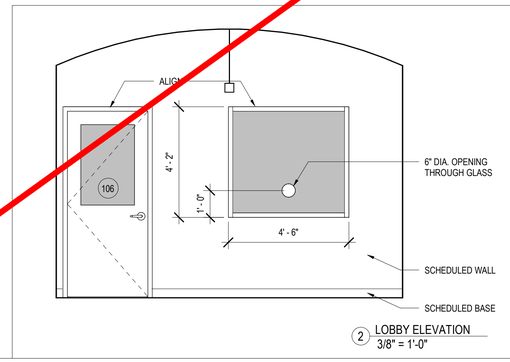
A. SAMPLES OF FINISHES SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL IN DUPLICATE PRIOR TO COMMENCEMENT OF WORK. PAINT SAMPLES FOR GYPSUM BOARD SURFACES TO BE PROVIDED ON AN A4 GYPSUM BOARD. WALLCOVERING SAMPLES TO BE A4 SIZED.
B. REFER TO WALL LEGEND, PLANS &/OR SECTIONS FOR FINISH SUBSTRATE.
C. WHERE 2 OR MORE FINISHES ARE SCHEDULED, SEE FLOOR PLAN, REFLECTED CEILING PLAN, OR INTERIOR ELEVATIONS FOR EXTENTS.
D. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS.
E. ONLY FINISH NON PRE-FINISHED ITEMS.
F. ALL GYPSUM BOARD WALL SURFACES TO BE P1, UNO.
G. ALL GYPSUM BOARD VERTICAL SOFFITS, CEILINGS AND HORIZONTAL SOFFITS TO BE P3, UNO.
H. ALL INTERNAL CLOSETS TO BE P1, UNO.
I. ALL DOOR TRIM TO BE PX, UNO.
J. DOORS + TRIM ARE TO BE SEMIGLOSS; WALLS ARE TO BE EGGSHELL; CEILINGS ARE TO BE FLAT.
K. DRYWALL FINISH TO BE LEVEL 5, SMOOTH, UNO.
L. COVE RUBBER BASE AT HARD FLOOR (CONCRETE, RESILIENT FLOOR), STRAIGHT BASE AT CARPET. STRAIGHT BASE TO BE INSTALLED PRIOR TO CARPET.
M. NO APPLIED BASE AT PTD. CMU WALLS.
N. ALIGN FACES OF JOINT TILES.
O. TILES SHOULD BE SAME DYE LOT/CALIBER.

FINISH SCHEDULE REMARKS:

1. NA

FINISH LEGEND

ITEM	MATERIAL	MANUFACTURER	ITEM DESCRIPTION	COLOR	REMARKS
ACT1	ACOUSTIC CEILING TILE	USG	2'X2' MARS W/FLB EDGE; IDENTITEE DXI GRID SYSTEM; SHADOW MOLDING AT PERIMETER	WHITE	
P1	PAINT	SHERWIN WILLIAMS	GENERAL PAINT	SW7064 PASSIVE	
P2	PAINT	SHERWIN WILLIAMS	DOOR + FRAME PAINT	SW7674 PEPPERCORN	
P3	PAINT	SHERWIN WILLIAMS	CEILING PAINT	SW7007 CEILING BRIGHT WHITE	
P4	PAINT	SHERWIN WILLIAMS	EXTERIOR CEILING PAINT	MATCH BEHR PPF-27 PORCH CEILING	
PL1	PLASTIC LAMINATE	FORMICA	SCULPTED LAMINATE	927-SP FOLKSTONE	
PL2	PLASTIC LAMINATE	WILSONART	PREMIUM LAMINATE; LINEARITY FINISH; AEON SCRATCH RESISTANT	4941K-18 COSMIC STRANDZ	
PL3	PLASTIC LAMINATE	WILSONART	STANDARD LAMINATE; MATTE FINISH	D92-60 DOVE GREY	
PL4	PLASTIC LAMINATE	FORMICA	STANDARD LAMINATE; MATTE FINISH	845-58 SPECTRUM RED	
RB1	RESILIENT BASE	JOHNSONITE	TRADITIONAL 4"H	20 CHARCOAL WG	
RF1	RESILIENT FLOORING	SHAW CONTRACT	24x24 COMPOUND 2.5 4074V; ASHLAR INSTALLATION	77518 ELEVATE	
SC	SEALED CONCRETE				
SS1	SOLID SURFACE	WILSONART	QUARTZ	Q1009 GREY LAKE	
SS2	SOLID SURFACE	WILSONART	QUARTZ	Q4011 ARASHI	
T1	TILE	EMSER TILE	12"X24" BLUE EMOTION GLAZED BODY MATCH PORCELAIN; GROUT COLOR TBD	LIGHT MATTE	
T2	TILE	EMSER TILE	2"X2" MOSAIC BLUE EMOTION GLAZED BODY MATCH PORCELAIN; GROUT COLOR TBD	LIGHT MATTE	
T3	TILE	UNITED STATE CERAMIC TILE	3"x6" COLOR COLLECTION CERAMIC WALL TILE; GROUT COLOR TBD	RED PEPPER	



2 LOBBY ELEVATION
3/8" = 1'-0"

ITEM	DESCRIPTION	BY
REF	REFRIGERATOR : 26 CU.FT. FRENCH DOORS FREEZER DRAWER	CFCI
ICE	ICE MACHINE : HOSHIZAKI AMERICA, INC. CUBER: KML-351-MAH (AIR COOLED) BIN: B-250	CFCI
DW	DISHWASHER : TOP CONTROL BUILT-IN TALL TUB DISHWASHER W/ FAN DRY, 51 DBA	CFCI
MW	MICROWAVE : 1.6 CU. FT. COUNTERTOP MICROWAVE W/ 1,200 - WATT COOKING POWER	CFCI
OVN	DOUBLE OVEN : 30" DOUBLE ELECTRIC WALL OVEN, SELF-CLEANING WITH CONVECTION AND EASY CLEAN	CFCI
GR	GAS RANGE : 36" ALL GAS PROFESSIONAL RANGE, FRONT CONTROLS	CFCI
HD	HOOD : SEE INTERIOR ELEVATION AND MECHANICAL ENGINEERS SPECIFICATIONS FOR HOOD REQUIREMENTS	CFCI
CM	COFFEE MAKER : CUISINART 12-CUP PROGRAMMABLE BLACK DRIP COFFEE MAKER W/ AUTOMATIC SHUT-OFF AND HOT WATER SIDE FEATURE	CFCI

OFOI: OWNER FURNISH, OWNER INSTALL
OFCI: OWNER FURNISH, CONTRACTOR INSTALL
CFCI: CONTRACTOR FURNISH, CONTRACTOR INSTALL

ALL FIXTURES ABOVE ARE BASIS OF DESIGN. ALL MAJOR KITCHEN APPLIANCES TO BE FROM THE SAME PRODUCT LINE. FIXTURES TO BE STAINLESS STEEL FINGERPROOF RESISTANT.

EQUIPMENT SCHEDULE
3/16" = 1'-0"

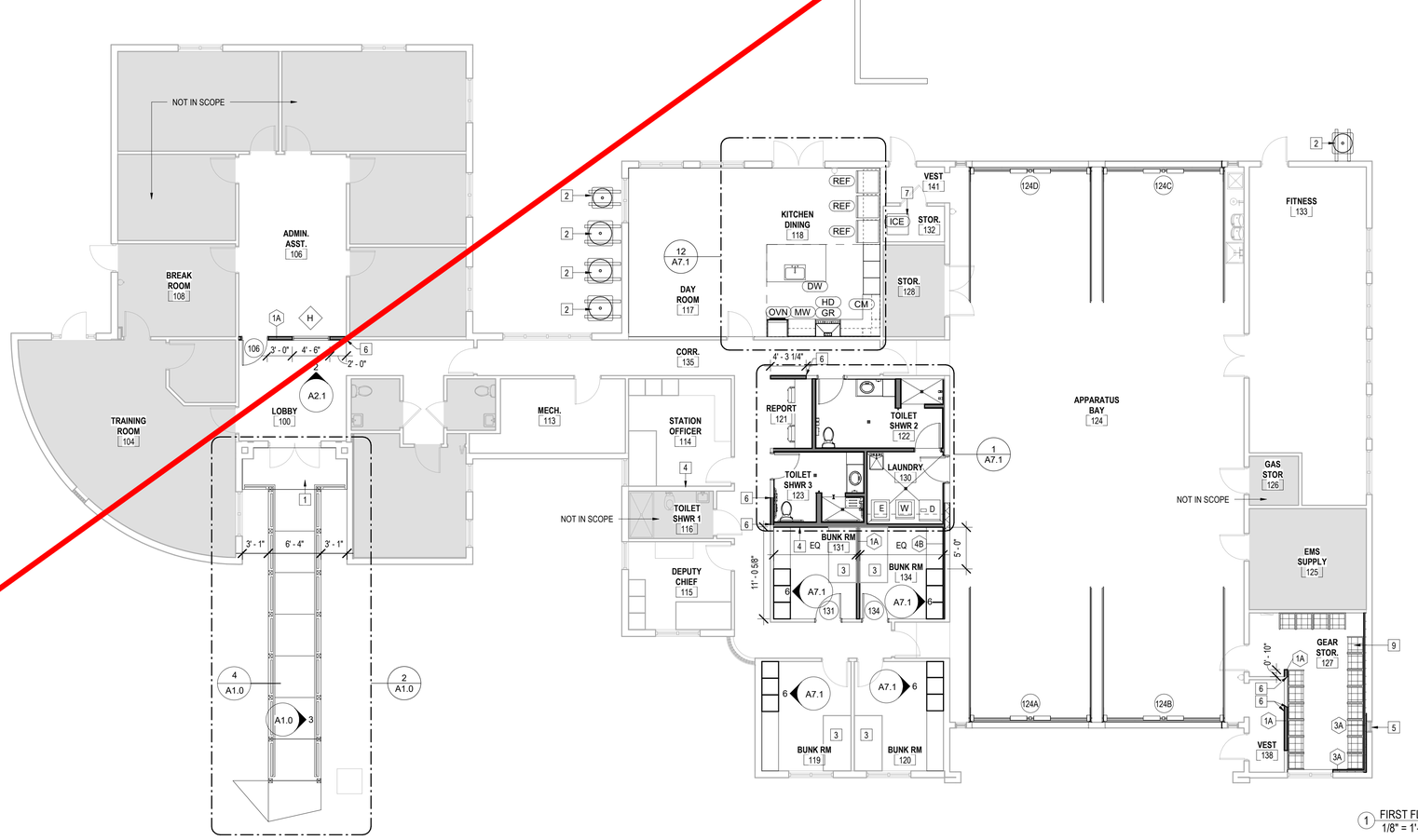
WALL LEGEND

XX REFER TO **A0.2** FOR INTERIOR PARTITION TYPES.
REFER TO WALL SECTIONS FOR EXTERIOR WALL ASSEMBLIES.

EXISTING WALLS.

NEW CMU WALLS. FURRING/FACING CONDITIONS MAY VARY BY TYPE

NEW STUD WALLS. FACING CONDITIONS MAY VARY BY TYPE



1 FIRST FLOOR PLAN (PROPOSED)
1/8" = 1'-0"

VOID

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SWEET SPARKMAN ARCHITECTS

TODD M. SWEET
AR 0015532

PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR:
CONFORMED SET
05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

SCALE:	As indicated
PROJECT MANAGER:	JLK
DRAWN BY:	JIK
A/E OF RECORD:	TMS
PROJECT NO:	18532

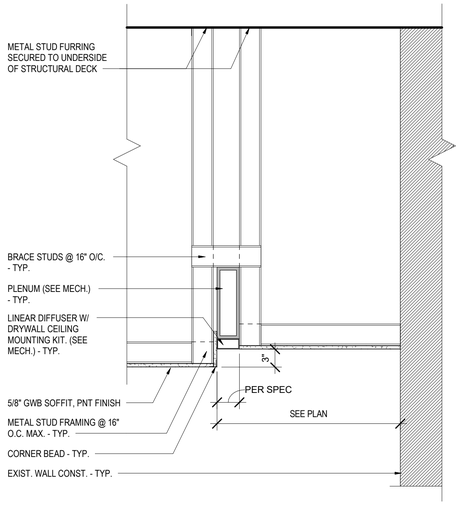
SHEET TITLE:
FIRST FLOOR PLANS & LEGENDS

SHEET No.:
A2.1

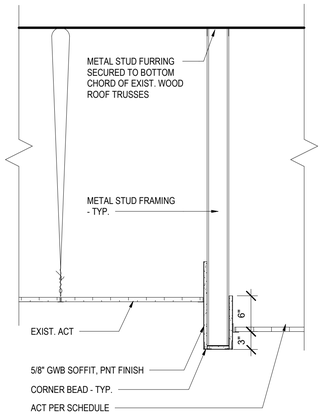
SHEET NOTES

X — NUMBERED NOTES SHOWN IN DRAWINGS ON THIS SHEET APPLY ONLY TO THE NUMBERED NOTES IN THE TABLE BELOW.

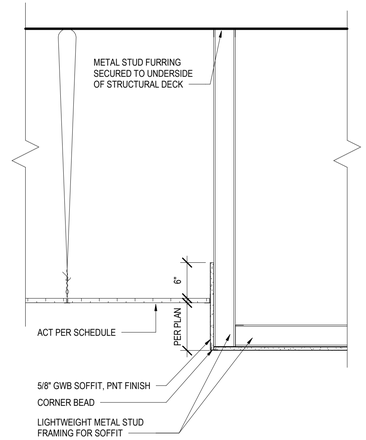
1	1-HR FIRE RATED CEILING



4 SOFFIT DETAIL AT LINEAR DIFFUSER
1" = 1'-0"



3 SOFFIT TRANSITION DETAIL 2
1" = 1'-0"



2 SOFFIT TRANSITION DETAIL 1
1" = 1'-0"

CEILING FAN

ACOUSTICAL PANEL CEILING

MOISTURE RESISTANT GYPSUM BOARD CEILING

2' X 2' FLUORESCENT LIGHT FIXTURE

2' X 4' FLUORESCENT LIGHT FIXTURE

SUSPENDED LIGHT FIXTURE

EXHAUST FAN

MECHANICAL SUPPLY DIFFUSER

MECHANICAL RETURN DIFFUSER

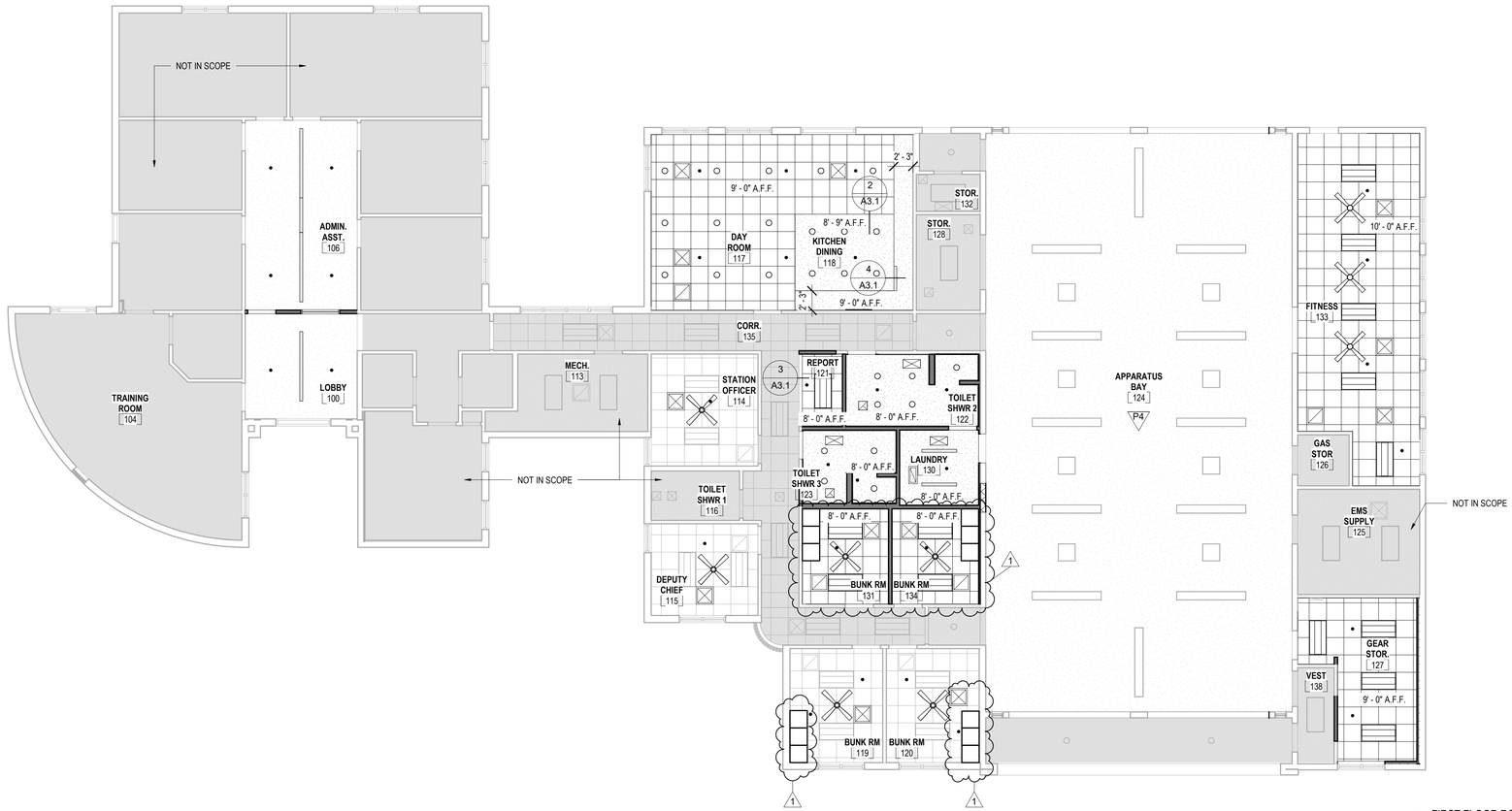
EXIT SIGN

SPRINKLER

RECESSED LIGHT

CEILING FINISH

REFLECTED CEILING LEGEND
N.T.S



1 FIRST FLOOR RCP
1/8" = 1'-0"

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SWEET SPARKMAN ARCHITECTS

TODD M. SWEET
AR 0015532

PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR:
CONFORMED SET
05.22.20

REV	DESCRIPTION	DATE
1	ASI 01	08.26.20

GRAPHIC SCALE:
0" 1"

SCALE:	As indicated
PROJECT MANAGER:	JLK
DRAWN BY:	JIK
A/E OF RECORD:	TMS
PROJECT NO:	18532

SHEET TITLE:
REFLECTED CEILING PLAN & DETAILS

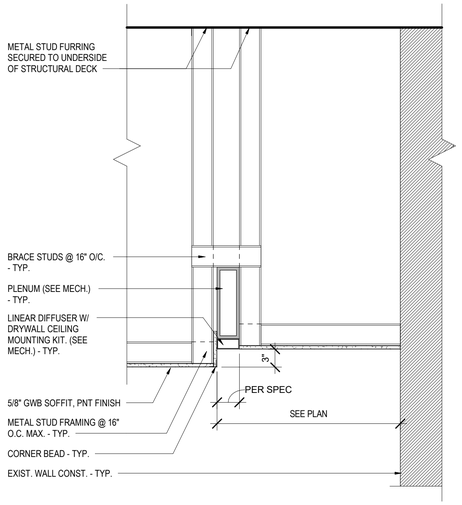
SHEET No.:
A3.1

SHEET NOTES

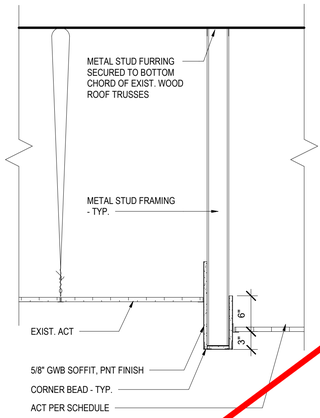
X — NUMBERED NOTES SHOWN IN DRAWINGS ON THIS SHEET APPLY ONLY TO THE NUMBERED NOTES IN THE TABLE BELOW.

1	1-HR FIRE RATED CEILING

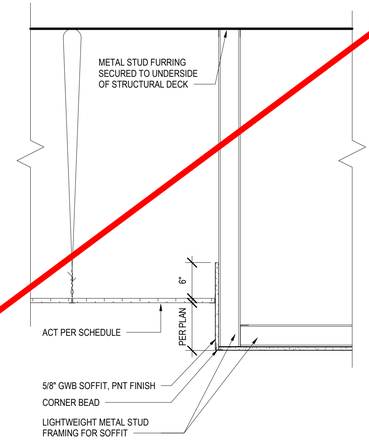
VOID



4 SOFFIT DETAIL AT LINEAR DIFFUSER
1" = 1'-0"



3 SOFFIT TRANSITION DETAIL 2
1" = 1'-0"



2 SOFFIT TRANSITION DETAIL 1
1" = 1'-0"

CEILING FAN

ACOUSTICAL PANEL CEILING

MOISTURE RESISTANT GYPSUM BOARD CEILING

2' X 2' FLUORESCENT LIGHT FIXTURE

2' X 4' FLUORESCENT LIGHT FIXTURE

SUSPENDED LIGHT FIXTURE

EXHAUST FAN

MECHANICAL SUPPLY DIFFUSER

MECHANICAL RETURN DIFFUSER

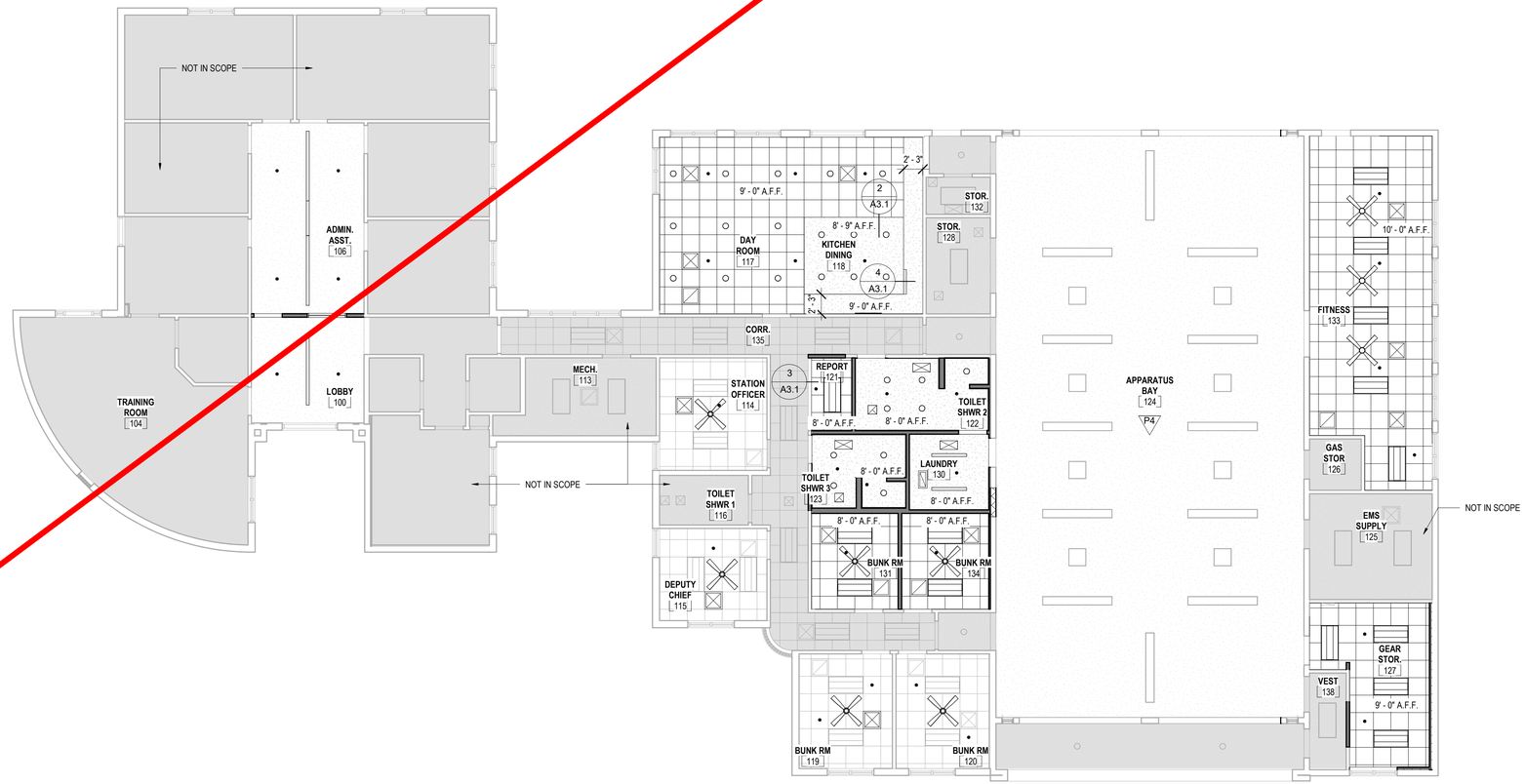
EXIT SIGN

SPRINKLER

RECESSED LIGHT

CEILING FINISH

REFLECTED CEILING LEGEND
N.T.S



1 FIRST FLOOR RCP
1/8" = 1'-0"

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TODD M. SWEET
AR 0015532

PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR:
CONFORMED SET
05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

SCALE:	As indicated
PROJECT MANAGER:	JLK
DRAWN BY:	JIK
A/E OF RECORD:	TMS
PROJECT NO:	18532

SHEET TITLE:
REFLECTED CEILING PLAN & DETAILS

SHEET No.:
A3.1

DOOR SCHEDULE

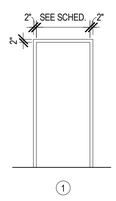
DOOR NUMBER	INT/EXT	TYPE	DOOR WIDTH	DOOR HEIGHT	DOOR MATERIAL	DOOR FINISH	FIRE RATING	HARDWARE	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	REMARKS
106	INT	B	3' - 0"	7' - 0"	SCWD	PNT	-	05	1	HM	PNT	
122A	INT	A	3' - 0"	7' - 0"	SCWD	PNT	-	06	1	HM	PNT	
122B	INT	A	3' - 0"	7' - 0"	SCWD	PNT	-	06	1	HM	PNT	
123A	INT	A	3' - 0"	7' - 0"	SCWD	PNT	-	06	1	HM	PNT	
124A	EXT	E	14' - 0"	14' - 0"	STEEL	GALV	-	08		STEEL	GALV	1
124B	EXT	E	14' - 0"	14' - 0"	STEEL	GALV	-	08		STEEL	GALV	1
124C	EXT	E	14' - 0"	14' - 0"	STEEL	GALV	-	08		STEEL	GALV	1
124D	EXT	E	14' - 0"	14' - 0"	STEEL	GALV	-	08		STEEL	GALV	1
130	INT	A	3' - 0"	7' - 0"	HM	PNT	1-HR	07	1	HM	PNT	
131	INT	A	3' - 0"	7' - 0"	SCWD	PNT	-	06	1	HM	PNT	
134	INT	A	3' - 0"	7' - 0"	SCWD	PNT	-	06	1	HM	PNT	

GENERAL DOOR NOTES:

A. ALL HM AND WOOD DOORS ARE 1-3/4" THICKNESS UNLESS NOTED OTHERWISE.
B. SEE TYPICAL FRAME ELEVATION BELOW. STOREFRONT AND GLAZING SYSTEM FRAMES DEPTHS ARE BY MANUFACTURER.
C. REFER TO GLAZING SPECIFICATION FOR GLASS TYPES IN INTERIOR & EXTERIOR DOORS.

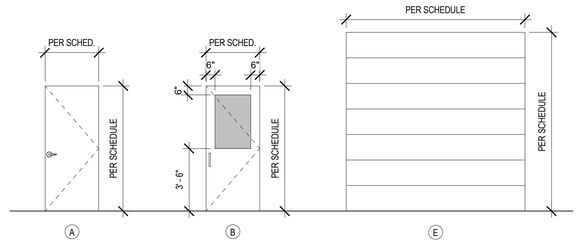
DOOR SCHEDULE REMARKS:

1. EXIST. MASONRY OPENING, FIELD VERIFY.



1

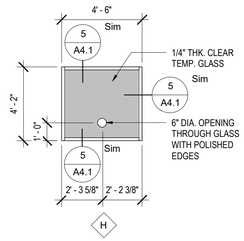
FRAME TYPES
N.T.S



A FLUSH
B HALF LITE

E OH SECTIONAL DOOR

DOOR TYPES
N.T.S



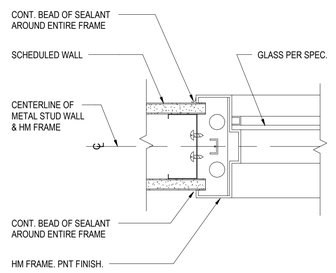
H
HOLLOW METAL INTERIOR WINDOW

GENERAL WINDOW NOTES:

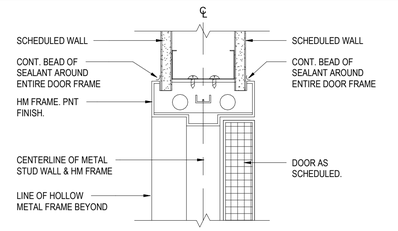
A. SEE SPECIFICATION FOR GLAZING.

WINDOW SCHEDULE REMARKS:

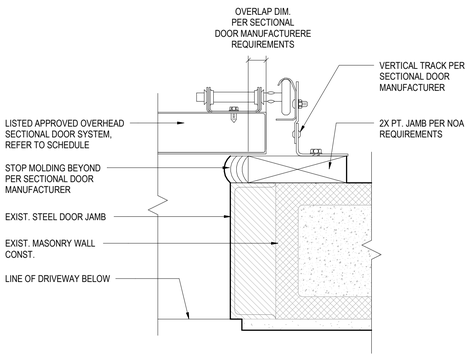
1. CONTRACTOR TO VERIFY ALL EXISTING WINDOW OPENINGS IN FIELD.
2. CONTRACTOR TO SUBMIT SIGNED & SEALED SHOP DRAWINGS TO ARCHITECT FOR REVIEW & APPROVAL.



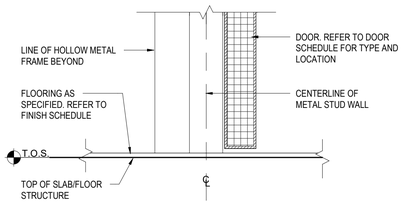
5 HM INTERIOR WINDOW HEAD, JAMB & SILL
3" = 1'-0"



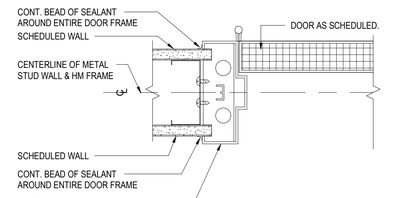
4 HM INTERIOR DOOR HEAD
3" = 1'-0"



2 OVER HEAD SECTIONAL DOOR JAMB DETAIL
3" = 1'-0"



3 INTERIOR HM DOOR SILL DETAIL
3" = 1'-0"



1 HM INTERIOR DOOR JAMB
3" = 1'-0"

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SWEET SPARKMAN ARCHITECTS

TODD M. SWEET
AR 0015532

PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR:
CONFORMED SET
05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE:
0" 1"

SCALE:	As indicated
PROJECT MANAGER:	JLK
DRAWN BY:	JIK
A/E OF RECORD:	TMS
PROJECT NO:	18532

SHEET TITLE:
SCHEDULES, LEGENDS & DETAILS

SHEET No.:
A4.1

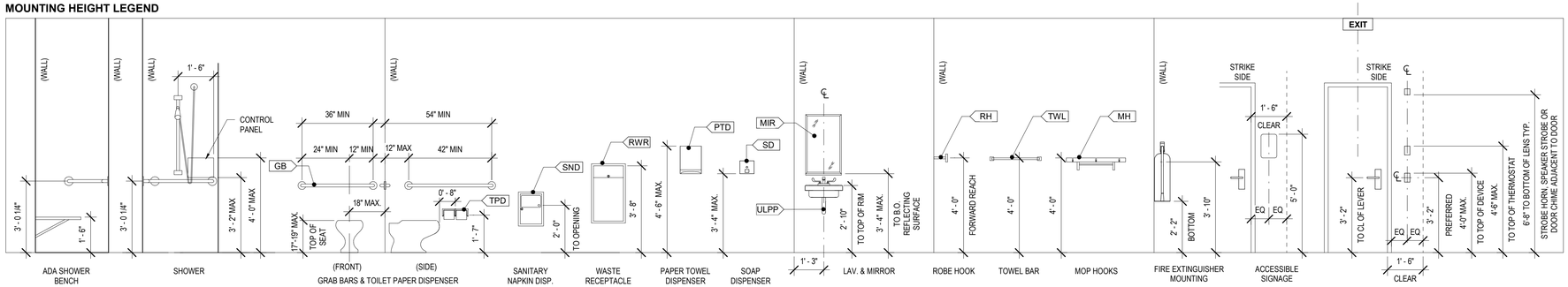
ITEM	DESCRIPTION	MOUNTING HEIGHT	BY
GB	GRAB BAR	SEE ACC. MOUNTING HEIGHT LEGEND	C-FCI
RWR	RECESSED WASTE RECEPTACLE	SEE ACC. MOUNTING HEIGHT LEGEND	C-FCI
MIR	MIRROR	SEE ACC. MOUNTING HEIGHT LEGEND	C-FCI
PTD	PAPER TOWEL DISPENSER	SEE ACC. MOUNTING HEIGHT LEGEND	C-FCI
SD	SOAP DISPENSER	SEE ACC. MOUNTING HEIGHT LEGEND	C-FCI
SND	SANITARY NAPKIN DISPOSAL	SEE ACC. MOUNTING HEIGHT LEGEND	C-FCI
TPD	TOILET PAPER DISPENSER	SEE ACC. MOUNTING HEIGHT LEGEND	C-FCI
ULPP	UNDER LAVATORY PIPE PROTECTION	SEE ACC. MOUNTING HEIGHT LEGEND	C-FCI
RH	ROBE HOOK	SEE ACC. MOUNTING HEIGHT LEGEND	C-FCI
HTD	HAND TOWEL DISPENSER	SEE ACC. MOUNTING HEIGHT LEGEND	C-FCI

NOTES:
1. CONTRACTOR TO FURNISH AND INSTALL CONCEALED WOOD BLOCKING (WITHIN WALLS) AS REQUIRED TO FIRMLY SECURE WALL-MOUNTED EQUIPMENT AND/OR ACCESSORIES. ALL WOOD BLOCKING IN CONTACT WITH MASONRY IS TO BE PRESSURE TREATED.
2. REMOVE EXISTING PAPER TOWEL DISPENSERS FROM RESTROOMS/SHOWER ROOMS NOT IN SCOPE AMD REPLACE WITH NEW. COORDINATE REMOVAL AND REPLACEMENT WITH ARCHITECT.

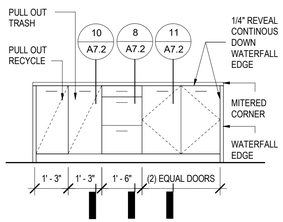
C-FCI: CONTRACTOR FURNISH, CONTRACTOR INSTALL
O-FCI: OWNER FURNISH, CONTRACTOR INSTALL
O-FOI: OWNER FURNISH, OWNER INSTALL

ACCESSORIES SCHEDULE
N.T.S

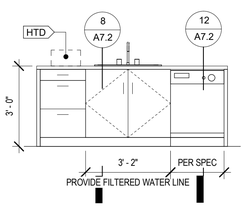
MOUNTING HEIGHT LEGEND



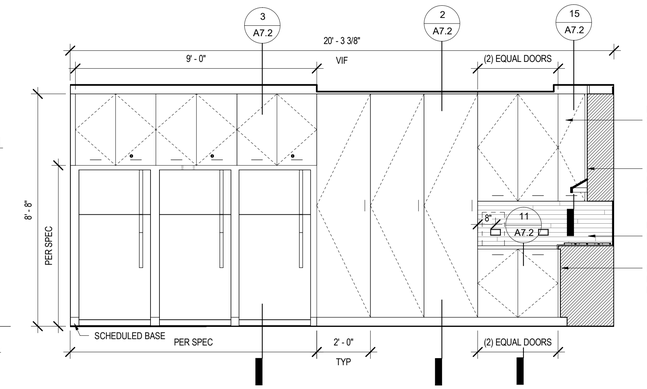
17 KITCHEN/ DINING ISLAND ELEVATION
3/8" = 1'-0"



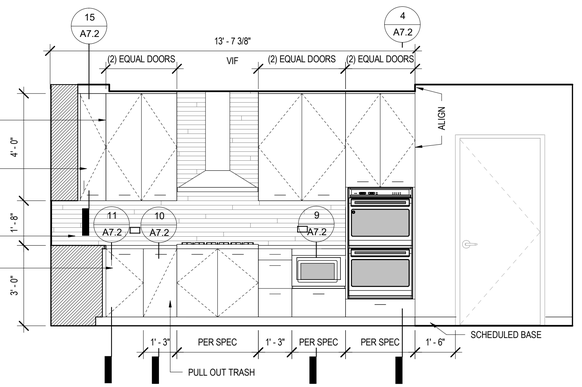
16 KITCHEN/ DINING ISLAND ELEVATION
3/8" = 1'-0"



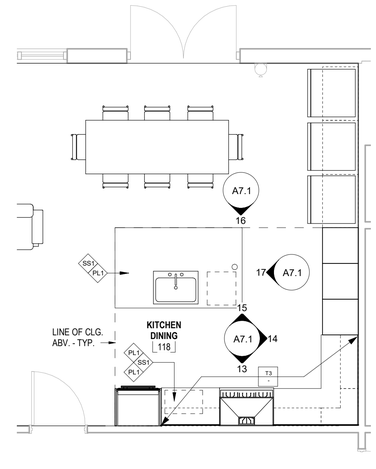
15 KITCHEN/ DINING ISLAND ELEVATION
3/8" = 1'-0"



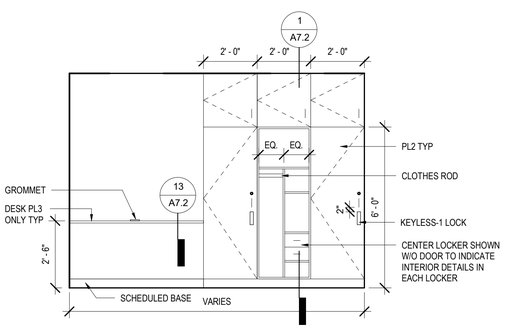
14 KITCHEN/ DINING ELEVATION
3/8" = 1'-0"



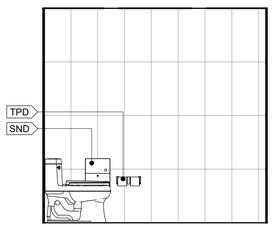
13 KITCHEN/ DINING ELEVATION
3/8" = 1'-0"



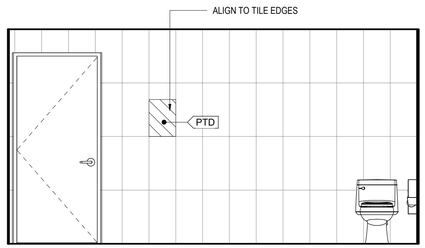
12 ENLARGED KITCHEN PLAN
1/4" = 1'-0"



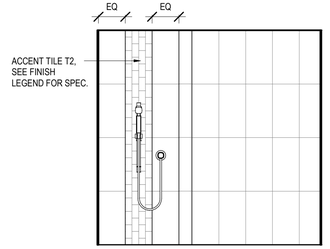
11 TOILET SHOWER 2 ELEVATION
3/8" = 1'-0"



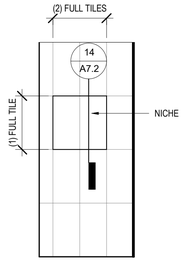
10 TOILET SHOWER 2 ELEVATION
3/8" = 1'-0"



9 TOILET SHOWER 2 ELEVATION
3/8" = 1'-0"



8 TOILET SHOWER 2 ELEVATION
3/8" = 1'-0"

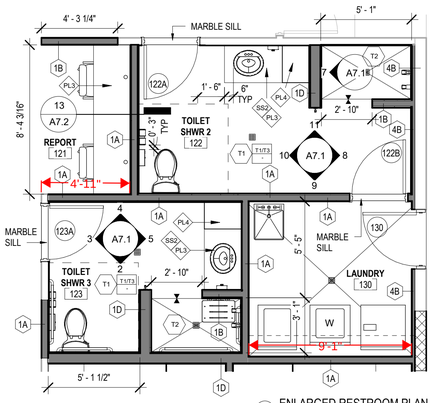


7 TYP SHOWER NICHE
3/8" = 1'-0"

FINISH SYMBOLS

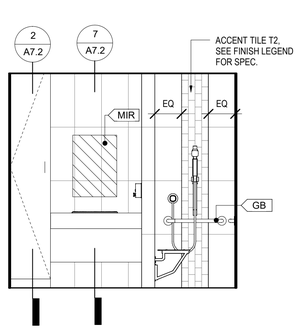
- FLOOR FINISH
- CASEWORK FINISH
- WALL FINISH
- BASE FINISH
- FLOORING TRANSITION

STANDARD SYMBOLS
N.T.S

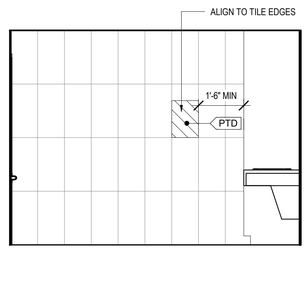


1 ENLARGED RESTROOM PLAN
1/4" = 1'-0"

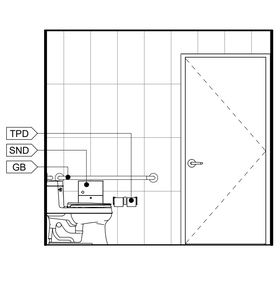
6 TYP BUNK ROOM LOCKERS
3/8" = 1'-0"



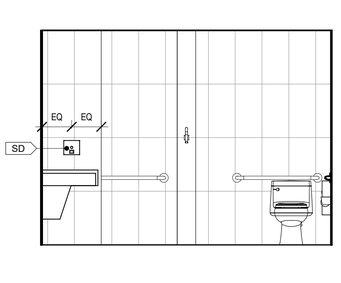
5 TOILET SHOWER 3 ELEVATION
3/8" = 1'-0"



4 TOILET SHOWER 3 ELEVATION
3/8" = 1'-0"



3 TOILET SHOWER 3 ELEVATION
3/8" = 1'-0"



2 TOILET SHOWER 3 ELEVATION
3/8" = 1'-0"

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SWEET SPARKMAN ARCHITECTS

TODD M. SWEET
AR 0015532

PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR:
CONFORMED SET
05.22.20

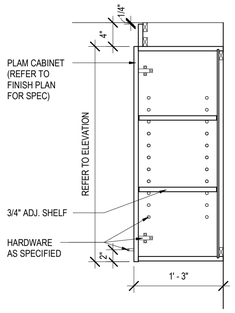
REV	DESCRIPTION	DATE

GRAPHIC SCALE:
0" 1"

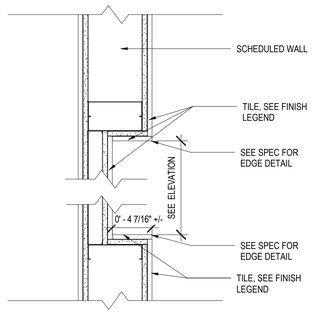
SCALE:	As indicated
PROJECT MANAGER:	JLK
DRAWN BY:	JIK
A/E OF RECORD:	TMS
PROJECT NO:	18532

SHEET TITLE:
ENLARGED PLANS AND INTERIOR ELEVATIONS

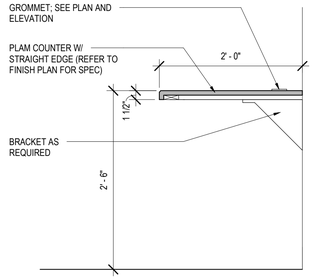
SHEET No.:
A7.1



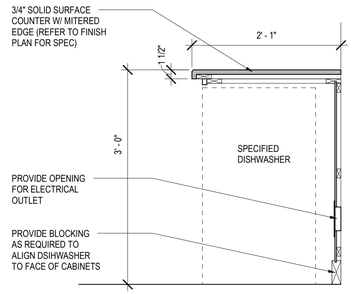
15 CASEWORK DETAIL - UPPER CABINET
1" = 1'-0"



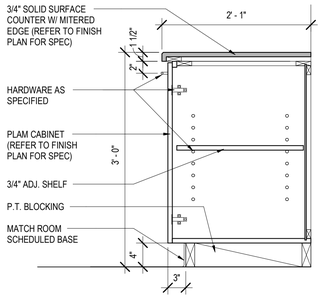
14 TYP SHOWER NICHE DETAIL
1 1/2" = 1'-0"



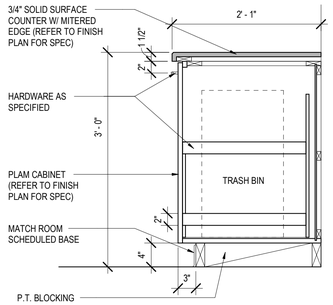
13 CASEWORK DETAIL - DESK
1" = 1'-0"



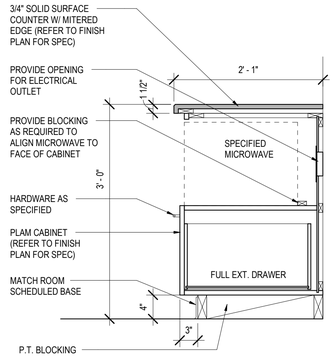
12 CASEWORK DETAIL - DISHWASHER
1" = 1'-0"



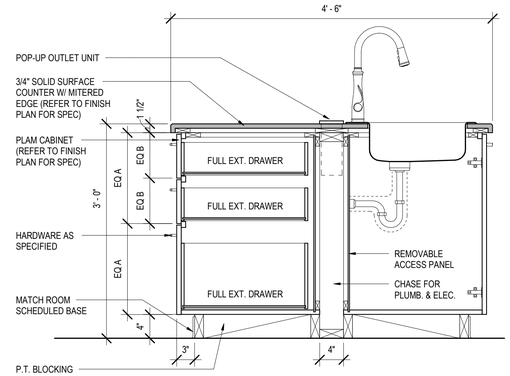
11 CASEWORK DETAIL - LOWER CABINET
1" = 1'-0"



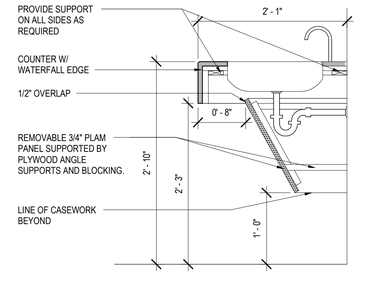
10 CASEWORK DETAIL - PULL OUT TRASH
1" = 1'-0"



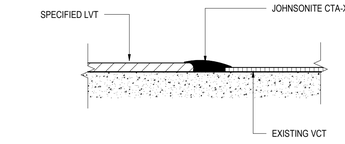
9 CASEWORK DETAIL - MICROWAVE CABINET
1" = 1'-0"



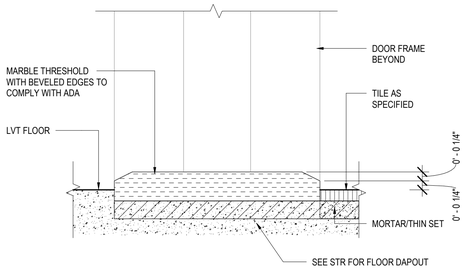
8 CASEWORK DETAIL - ISLAND W/ SINK
1" = 1'-0"



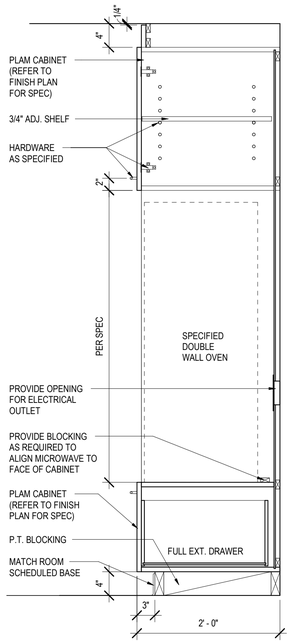
7 CASEWORK DETAIL - ADA SINK
1" = 1'-0"



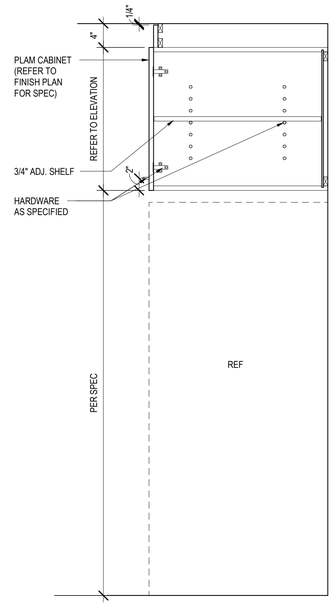
6 FLOOR TRANSITION - LVT TO VCT
6" = 1'-0"



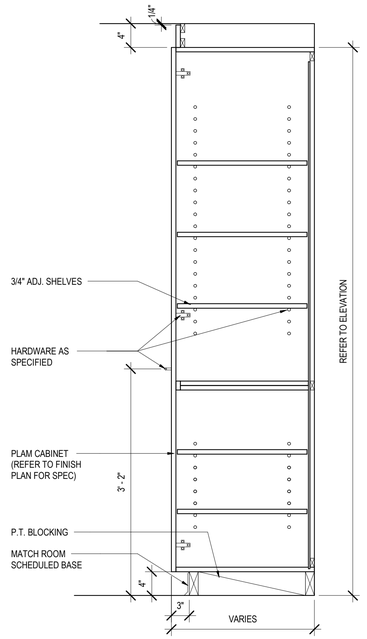
5 FLOOR TRANSITION-MARBLE SILL
6" = 1'-0"



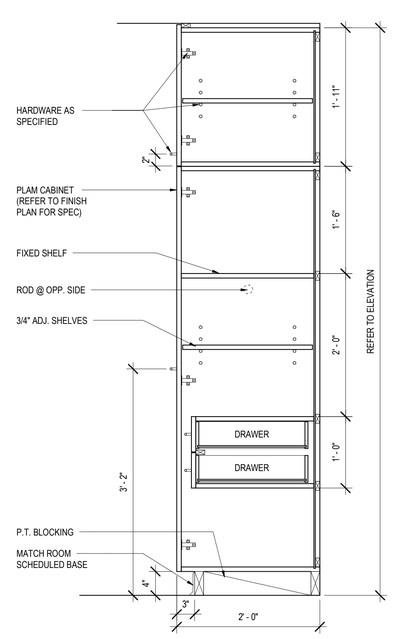
4 CASEWORK DETAIL - DOUBLE WALL OVEN
1" = 1'-0"



3 CASEWORK DETAIL - REFRIGERATOR
1" = 1'-0"



2 CASEWORK DETAIL - TALL CABINET
1" = 1'-0"



1 CASEWORK DETAIL - BUNK RM STORAGE
1" = 1'-0"

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FL AA26000857

SWEET SPARKMAN ARCHITECTS

TODD W. SWEET
AR 0015532

PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR:
CONFORMED SET
05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

SCALE:	As indicated
PROJECT MANAGER:	JLK
DRAWN BY:	JIK
A/E OF RECORD:	TMS
PROJECT NO:	18532

SHEET TITLE:
CASEWORK DETAILS

SHEET No.:
A7.2

STRUCTURAL NOTES

GENERAL NOTES:

STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.

ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK. DO NOT SCALE DRAWINGS.

THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO INSURE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS.

ELECTRONIC VERSIONS OF THE STRUCTURAL DRAWINGS ARE THE SOLE, COPYRIGHTED PROPERTY OF SNELL ENGINEERING AND ARE NOT TO BE USED OR TRANSFERRED WITHOUT THE EXPRESS, WRITTEN PERMISSION OF SNELL ENGINEERING.

EXISTING STRUCTURE:

INFORMATION SHOWN FOR THE EXISTING STRUCTURE ON THESE DRAWINGS WAS TAKEN FROM THE DRAWINGS THAT WERE

PREPARED FOR:	TOWN OF LONGBOAT KEY
PREPARED BY:	SNELL ENGINEERING CONSULTANTS, INC.
ENTITLED:	NORTH FIRE STATION, LONGBOAT KEY, FL
DATED:	12/7/1995

WORK SHOWN ON THESE PLANS ASSUMES THAT THE ORIGINAL CONSTRUCTION WAS PERFORMED IN ACCORDANCE WITH THE ABOVE INDICATED ORIGINAL DRAWINGS INCLUDING (BUT NOT LIMITED TO) DIMENSIONS, ELEVATIONS, MEMBER SIZES, MATERIALS, DETAILS, ETC. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE CONDITIONS RELATING TO THE EXISTING STRUCTURE AND TO NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR CONFLICTS.

EXISTING STRUCTURE LOADING:

THE GARAGE ADDITION INCREASES THE LATERAL-FORCE STORY SHEAR. THE EXISTING BUILDING CAN RESIST THE ADDITIONAL LATERAL-FORCE STORY SHEAR. THE GARAGE ADDITION INCREASES THE VERTICAL LOADING ON THE EXISTING STRUCTURE. THE ELEMENTS IN THE EXISTING STRUCTURE THAT ARE SUPPORTING THE GARAGE ADDITION TRUSSES CAN RESIST THE ADDITIONAL VERTICAL LOADING.

DESIGN LOADS:

THE STRUCTURAL SYSTEM FOR THIS BUILDING HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 6TH EDITION (2017) AND THE FLORIDA BUILDING CODE-EXISTING 6TH EDITION (2017). THE FOLLOWING SUPERIMPOSED LOADINGS HAVE BEEN UTILIZED:

ROOF:

LIVE LOAD	-	20 PSF.
DEAD LOAD	-	30 PSF.
DEAD LOAD	-	7 PSF. (AVAILABLE TO RESIST UPLIFT)

WIND:

ASCE 7-16

ULTIMATE WIND SPEED	-	165 MPH
ALLOWABLE WIND SPEED	-	128 MPH

EXPOSURE D
ENCLOSED STRUCTURE
RISK FACTOR IV

SHOP DRAWING REVIEW:

SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT OF THE CONTRACT DOCUMENTS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY COMPLIANCE WITH THE CONTRACT DOCUMENTS AS TO QUANTITY, LENGTH, ELEVATIONS, DIMENSIONS, ETC.

ALL SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE ARCHITECT/ENGINEER. DRAWINGS SUBMITTED WITHOUT REVIEW NOTATION WILL BE RETURNED UNCHECKED. EVERY EFFORT WILL BE MADE TO RETURN THE SHOP DRAWINGS WITHIN TEN BUSINESS DAYS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT THE SHOP DRAWINGS ALLOWING FOR AN ADEQUATE REVIEW PERIOD.

ONE SET OF PRINTS WILL BE RETAINED BY THE ENGINEER AND ONE BY THE ARCHITECT, THE CONTRACTOR SHALL RECEIVE THE REMAINING PRINTS FOR SUBMITTAL TO THE BUILDING DEPARTMENT AND AS REQUIRED FOR DISTRIBUTION.

IN ALL INSTANCES THE CONTRACT DOCUMENTS WILL GOVERN OVER THE SHOP DRAWINGS UNLESS OTHERWISE SPECIFIED IN A REQUEST FOR INFORMATION (RFI) OR SIMILAR DOCUMENTATION BY THE ENGINEER. EVERY EFFORT WILL BE MADE TO RETURN THE RFIS WITHIN TWO BUSINESS DAYS. SUBMITTALS SHALL CLEARLY IDENTIFY THE SPECIFIC PROJECT, APPLICABLE CODES AND DESIGN CRITERIA, AND DETAILING OF ALL COMPONENTS NECESSARY TO ENSURE PROPER INSTALLATION OF THE COMPONENTS AND SYSTEM.

SHOP DRAWINGS SHOULD BE SUBMITTED FOR ALL COMPONENTS OF THE STRUCTURAL FRAMING SYSTEM, AS REQUIRED BY THE ARCHITECT, AND AS NOTED ELSEWHERE IN THESE NOTES, INCLUDING, BUT NOT LIMITED TO:
CONCRETE MIX DESIGNS
MASONRY BLOCK
MASONRY BLOCK ACCESSORIES
MASONRY REINFORCING
CONCRETE REINFORCEMENT
PRE-ENGINEERED WOOD TRUSSES
PRECAST CONCRETE COMPONENTS
ANY ALTERNATE MATERIAL/PRODUCT SUBSTITUTIONS

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL TRADES AND CONSULTANTS, CROSS REFERENCE THEIR DRAWINGS WITH THE OVERALL DESIGN, AND PROVIDE TO EACH A COMPLETE SET OF DRAWINGS AND SUBMITTALS TO INSURE COMPATIBILITY OF CONSTRUCTION PER DESIGN INTENT.

FOUNDATIONS:

ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 2,000 PSF ON COMPACTED FILL OR NATIVE SOIL. BEFORE CONSTRUCTION COMMENCES, SOIL BEARING CAPACITY SHALL BE VERIFIED BY A SUBSURFACE INVESTIGATION FOR THE NEW GARAGE ADDITION, AS WELL AS FIELD AND LABORATORY TESTS PERFORMED BY A CERTIFIED TESTING LABORATORY, WHOSE REPORT SHALL INCLUDE ANALYSIS AND RECOMMENDATIONS FOR SITE PREPARATION IN ORDER TO BEAR THE FOUNDATION LOADS. ABOVE REPORT SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW BEFORE FOUNDATION CONSTRUCTION BEGINS.

REINFORCING STEEL:

SHALL BE ASTM A615 GRADE 60 DEFORMED BARS, FREE FROM OIL, SCALE AND RUST AND PLACED IN ACCORDANCE WITH THE TYPICAL BENDING DIAGRAM AND PLACING DETAILS OF ACI STANDARDS AND SPECIFICATIONS. SECURE APPROVAL OF SHOP DRAWINGS PRIOR TO COMMENCING FABRICATION.

WELDED WIRE FABRIC:

TO CONFORM TO ASTM A-185, FREE FROM OIL, SCALE AND RUST AND PLACED IN ACCORDANCE WITH THE TYPICAL PLACING DETAILS OF ACI STANDARDS AND SPECIFICATIONS. MINIMUM LAP SHALL BE ONE SPACE PLUS TWO INCHES.

CONCRETE:

SHALL BE PER AN APPROVED MIX DESIGN PROPORTIONED TO ACHIEVE A STRENGTH AT 28 DAYS AS LISTED BELOW WITH A PLASTIC AND WORKABLE MIX:

3000 PSI FOR FOUNDATIONS AND SLABS ON GRADE.
4000 PSI FOR ALL OTHER STRUCTURAL CONCRETE.

CONCRETE SHALL BE PLACED AND CURED ACCORDING TO ALL STANDARDS AND SPECIFICATIONS.

NOTIFY ENGINEER OF RECORD WITHIN 48 HOURS OF ALL CONCRETE POURS VIA EMAIL OR WRITTEN CORRESPONDENCE.

SUBMIT PROPOSED MIX DESIGN WITH RECENT FIELD CYLINDER OR LAB TESTS FOR REVIEW PRIOR TO USE. MIX SHALL BE UNIQUELY IDENTIFIED BY MIX NUMBER OR OTHER POSITIVE IDENTIFICATION. MIX SHALL MEET THE REQUIREMENTS OF ASTM C33 FOR COARSE AGGREGATE. FOR ALL FLATWORK, AT LEAST 75% OF LARGE AGGREGATE SHALL CONSIST OF #57 STONE. CONCRETE SHALL COMPLY WITH ALL THE REQUIREMENTS OF ASTM STANDARD C94 FOR MEASURING, MIXING, TRANSPORTING, ETC. CONCRETE TICKETS SHALL BE TIME STAMPED WHEN CONCRETE IS BATCHED.

THE MAXIMUM TIME ALLOWED FROM THE TIME THE MIXING WATER IS ADDED UNTIL IT IS DEPOSITED IN ITS FINAL POSITION SHALL NOT EXCEED ONE AND ONE HALF (1-1/2) HOURS. IF FOR ANY REASON THERE IS A LONGER DELAY THAN THAT STATED ABOVE, THE CONCRETE SHALL BE DISCARDED. IT SHALL BE THE RESPONSIBILITY OF THE TESTING LAB TO NOTIFY THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR OF ANY NONCOMPLIANCE WITH THE ABOVE. ALL SLABS SHALL BE CURED USING A DISSIPATING CURING COMPOUND MEETING ASTM STANDARD C309 TYPE 1-D AND SHALL HAVE A FUGITIVE DYE. THE COMPOUND SHALL BE PLACED AS SOON AS THE FINISHING IS COMPLETED OR AS SOON AS THE WATER HAS LEFT THE UNFINISHED CONCRETE. ALL SCUFFED OR BROKEN AREAS IN THE CURING MEMBRANE SHALL BE RECOATED DAILY. CALCIUM CHLORIDES SHALL NOT BE UTILIZED; OTHER ADMIXTURES MAY BE USED ONLY WITH THE APPROVAL OF THE ENGINEER.

ALL CONCRETE MIX DESIGNS SHALL INCLUDE A WRITTEN DESCRIPTION INDICATING WHERE EACH PARTICULAR MIX IS TO BE PLACED WITHIN THE STRUCTURE.

GENERAL CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD A MINIMUM OF 48 HOURS PRIOR PLACEMENT OF ANY STRUCTURAL CONCRETE.

ALL CONCRETE DESIGN MIX SUBMITTALS SHALL INCLUDE TESTED, STATISTICAL BACK-UP DATA AS PER CHAPTER 5 OF ACI 318-14.

WATER/CEMENT RATIO FOR CONCRETE AT EXTERIOR BALCONIES SHALL NOT EXCEED 0.40 BY WEIGHT AND HAVE 5,000PSI MINIMUM COMPRESSIVE STRENGTH.

UNLESS NOTED OTHERWISE ON PLANS, THE FOLLOWING CONCRETE CLEAR COVER SHALL BE PROVIDED FOR ALL NON-PRESTRESSED CONCRETE REINFORCEMENT PER ACI 318:

CONCRETE CAST AGAINST EARTH:	ALL BARS	-	3"
CONCRETE EXPOSED TO EARTH (FORMED FACE):	ALL BARS	-	2"
CONCRETE EXPOSED TO WEATHER:	#6 BARS AND GREATER	-	2"
	#5 BARS AND SMALLER	-	1 1/2"
WHERE NOT EXPOSED TO EARTH OR WEATHER:			
SLABS, WALLS, AND JOISTS:	#14 & #18 BARS	-	1 1/2"
	#11 BARS AND SMALLER	-	3/4"
BEAMS AND COLUMNS:	ALL BARS	-	1 1/2"

SEE ACI 318 FOR ADDITIONAL REQUIREMENTS AND MORE INFORMATION.

CONCRETE TESTING: AN INDEPENDENT TESTING LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON CAST IN PLACE CONCRETE:

A) ASTM C143 - "STANDARD TEST METHOD FOR SLUMP OF PORTLAND CEMENT CONCRETE." MAXIMUM SLUMP SHALL BE 4-6 INCHES, PRIOR TO ADDING A SUPER PLASTICIZER.
B) ASTM C39 - "STANDARD TEST METHOD FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS." A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CLASS, FOR EVERY 50 CUBIC YARDS (OR FRACTION THEREOF), PLACED PER DAY. REQUIRED CYLINDER(S) QUANTITIES AND TEST AGE AS FOLLOWS:
1 AT 7 DAYS
2 AT 28 DAYS

ONE ADDITIONAL RESERVE CYLINDER TO BE TESTED UNDER THE DIRECTION OF THE ENGINEER, IF REQUIRED. IF 28 DAY STRENGTH IS ACHIEVED, THE ADDITIONAL CYLINDER(S) MAY BE DISCARDED.

POUR STRUCTURAL CONCRETE WITHIN THE FOLLOWING TOLERANCES:

VARIATION FROM PLUMB:	1/4" IN 10'-0"
VARIATION FROM LEVEL IN TOPS OF PILASTERS:	1/8" IN 10'-0"
VARIATION FOOTINGS:	
PLAN DIMENSIONS:	+2", - 1/2"
THICKNESS:	- 0"

CHEMICAL ANCHORS:

SHALL BE AN EQUAL TWO PART EPOXY POLYMER INJECTION SYSTEM, SUCH AS SIMPSON SET-XP "STRUCTURAL ANCHORING ADHESIVE", HILTI HIT-HY 150 MAX-SD OR ENGINEER APPROVED SUBSTITUTION, INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS. INSTALLERS SHALL BE TRAINED BY THE MANUFACTURER'S REPRESENTATIVE. BRUSH AND BLOW OUT ALL HOLES.

MASONRY WALLS:

MASONRY UNITS SHALL MEET ASTM C-90 FOR HOLLOW LOAD BEARING TYPE MASONRY WITH UNIT STRENGTH OF 2000 PSI ON THE NET AREA (F'M = 2000 PSI). MORTAR SHALL BE TYPE "M" OR "S" AND MEET ASTM C-270. GROUT SHALL BE 3000 PSI MINIMUM COMPRESSIVE STRENGTH AND MEET ASTM C-476. PROVIDE HOOKED DOWELS IN FOOTINGS FOR ALL VERTICAL REINFORCING ABOVE. LAP SPLICES 48 BAR DIAMETERS.

BLOCK CELLS AS SHOWN ON PLANS SHALL BE GROUT FILLED WITH VERTICAL REINFORCING BARS. SEE PLAN NOTES FOR BAR SIZE AND SPACING. DOWELS SHALL BE USED TO PROVIDE CONTINUITY INTO THE STRUCTURE ABOVE AND/OR BELOW, UNLESS NOTED OTHERWISE. USE METAL LATH, MORTAR, OR SPECIAL UNITS TO CONFINE CONCRETE AND GROUT TO AREA REQUIRED. CELLS TO BE GROUT FILLED SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR, UNOBSTRUCTED, CONTINUOUS VERTICAL GROUT SPACE.

PROVIDE 9 GAUGE GALVANIZED HORIZONTAL JOINT REINFORCING (DUR-O-WALL OR ENGINEER APPROVED SUBSTITUTION) AT ALTERNATE BLOCK COURSES, BEGINNING 8" ABOVE FOOTINGS AND FLOOR LEVELS. MASONRY WALLS ABOVE OPENINGS SHALL BE REINFORCED AT THE SAME SPACING AS THE WALL WITH DOWELS HOOKED INTO THE BEAM OR LINTEL ABOVE THE OPENING.

GROUT LIFT: AN INCREMENT OF GROUT HEIGHT WITHIN A TOTAL GROUT POUR.
GROUT POUR: THE TOTAL HEIGHT OF MASONRY TO BE GROUTED PRIOR TO ERECTION OF ADDITIONAL MASONRY. A GROUT POUR CONSISTS OF ONE OR MORE GROUT LIFTS. GROUT POURS SHALL SET FOR A MINIMUM OF 4 HOURS BEFORE ANY ADDITIONAL GROUT PLACEMENT.

GROUT SHALL HAVE A SLUMP BETWEEN 8 AND 11 INCHES, EXCEPT SELF-CONSOLIDATING GROUT. JOB-SITE PROPORTIONING OF SELF-CONSOLIDATING GROUT IS NOT PERMITTED.

MASONRY GROUTING REQUIREMENTS:
1. FIELD-MIXED GROUT SHALL BE PLACED WITHIN 1-1/2 HOURS FROM INTRODUCING WATER INTO THE MIXTURE AND BEFORE INITIAL SET.
2. GROUT SLUMP REQUIREMENTS:
3. FOR GROUT SLUMP BETWEEN 8 AND 10 INCHES, THE MAXIMUM GROUT LIFT HEIGHT IS 5 FEET.
4. FOR GROUT SLUMP BETWEEN 10 AND 11 INCHES, THE MAXIMUM GROUT LIFT HEIGHT IS 12.67 FEET.
5. FOR SELF-CONSOLIDATING GROUT, THE GROUT LIFT HEIGHT SHALL NOT EXCEED THE GROUT POUR HEIGHT (24 FEET MAX.).

GROUT LIFT HEIGHTS EXCEEDING 5 FEET SHALL MEET THE FOLLOWING REQUIREMENTS:
1. MASONRY MORTAR HAS CURED FOR AT LEAST 4 HOURS.
2. GROUT SLUMP IS BETWEEN 10 AND 11 INCHES.
3. NO INTERMEDIATE BOND BEAMS ARE PLACED BETWEEN THE TOP AND BOTTOM OF THE GROUT LIFT HEIGHT.
4. EACH GROUT LIFT SHALL BE CONSOLIDATED BY MECHANICAL VIBRATION AT THE TIME OF PLACEMENT. CONSOLIDATION IS NOT REQUIRED FOR SELF-CONSOLIDATING GROUT.
5. EACH GROUT LIFT SHALL BE RECONSOLIDATED BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED, AND BEFORE ADDING THE SUBSEQUENT GROUT LIFT. RECONSOLIDATION IS NOT REQUIRED FOR SELF-CONSOLIDATING GROUT.
6. THE TIME BETWEEN PLACING GROUT LIFTS SHALL NOT EXCEED 1 HOUR.
7. THE MAXIMUM POUR HEIGHT IS 24 FEET.
8. A GROUT KEY SHALL BE PROVIDED AT THE TOP OF EACH GROUT LIFT AND GROUT POUR. GROUT KEYS SHOULD BE FORMED BY TERMINATING THE GROUT 1-1/2 INCHES BELOW A MORTAR JOINT.

MASONRY WALLS MARKED AS "LOAD-BEARING" ARE DESIGNED TO CARRY GRAVITY FLOOR LOADS AND MUST BE CONSTRUCTED TO SUPPORT THE FLOOR SYSTEM, CONCURRENTLY WITH ALL OTHER LOAD-BEARING CONCRETE AND STEEL COLUMNS.

MASONRY WALLS MARKED AS "INFILL" ARE NOT DESIGNED TO CARRY GRAVITY FLOOR LOADS AND MUST BE CONSTRUCTED AFTER THE FLOOR SYSTEM, WITH ALL LOAD-BEARING COMPONENTS, HAVE BEEN INSTALLED AND THE FLOOR SYSTEM UNSHORED.

AT SILLS OF MASONRY OPENINGS IN LOAD-BEARING MASONRY WALLS, PROVIDE AN 8" KNOCKOUT COURSE, GROUTED SOLID AND REINFORCED WITH 1 #5 CONTINUOUS HORIZONTAL BAR, TYPICAL UNLESS NOTED OTHERWISE ON PLAN OR DETAILS.

TIE BEAMS:

BEAMS WITH THE PREFIX "TB" SHALL BE OF CONCRETE POURED AFTER THE BLOCK WALLS BELOW ARE IN PLACE. REINFORCING SHALL BE CONTINUOUS THROUGH TIE BEAMS WITH MINIMUM LAP SPLICES OF 48 BAR DIAMETERS AND BENT BARS AT CORNERS. USE METAL LATH, MORTAR, OR SPECIAL UNITS TO CONFINE CONCRETE TO AREA REQUIRED, IN ACCORDANCE WITH ACI 530.1, SECTION 4.3.3.3 (SOLID METAL OR FELT CAVITY CAPS ARE PROHIBITED).

LINTELS:

MASONRY OPENINGS LESS THAN 4 FEET SHALL BE SPANNED WITH AN 8" SPAN RATED PRECAST/PRESTRESSED CONCRETE LINTEL. ALL PRECAST LINTELS SHALL BEAR A MINIMUM OF 8" AT EACH END ON A GROUT FILLED CELL.

WOOD:

STRUCTURAL WOOD COMPONENTS (BEAMS, JOISTS, RAFTERS, ETC.) SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE FIBER STRESSES FOR NO. 2 SOUTHERN PINE CONFORMING TO NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION WITH 2015 NDS SUPPLEMENT, AS FOLLOWS:

SHEAR		FV	=	175 PSI.
BENDING	2X6	FB	=	1,000 PSI.
BENDING	2X8	FB	=	925 PSI.
BENDING	2X10	FB	=	800 PSI.
BENDING	2X12	FB	=	750 PSI.

WOOD IN CONTACT WITH CONCRETE OR MASONRY, AND AT OTHER LOCATIONS AS SHOWN ON STRUCTURAL DRAWINGS, SHALL BE PROTECTED OR PRESSURE TREATED IN ACCORDANCE WITH AITC-109. MEMBER SIZES SHOWN ARE NOMINAL UNLESS NOTED OTHERWISE.

ALL NAILS SHOWN ON PLANS ASSUME COMMON WIRE NAILS UNLESS SPECIFICALLY NOTED ON DRAWINGS.

ENGINEERED WOOD TRUSS SYSTEMS SHALL BE DESIGNED BY SUPPLIER'S SPECIALTY ENGINEER TO CONFIGURATION AND LOAD-CARRYING CAPACITY SHOWN ON DRAWINGS AND SPECIFICATIONS. ALL INDIVIDUAL TRUSS MEMBERS, TRUSS PLATE CONNECTIONS, TRUSS-TO-TRUSS CONNECTIONS, COMMON TRUSSES AND GIRDER TRUSSES SHALL BE DESIGNED FOR COMPONENT AND CLADDING WIND LOADING, EXCEPT THOSE TRUSSES EXCEEDING 700 SQUARE FEET IN TRIBUTARY AREA. ALTERNATE TRUSS LAYOUTS ARE ACCEPTABLE ONLY AS A CHANGE ORDER WHICH WILL INCLUDE ENGINEERING CHARGES FOR REDESIGN OF THE STRUCTURE BY THE ENGINEER OF RECORD. SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS SHALL SHOW AND SPECIFY ALL CONNECTOR TYPES UTILIZED WITHIN TRUSSES, AS WELL AS CONNECTORS UTILIZED IN ALL OTHER CONNECTIONS AND ATTACHMENTS BETWEEN TRUSSES OR COMPONENTS SUPPLIED AS PART OF THE ENGINEERED TRUSS SYSTEM. AN ERECTION DRAWING SHALL BE INCLUDED, IDENTIFYING ALL TRUSS SYSTEM COMPONENTS, AS WELL AS ALL PERMANENT BRACING REQUIRED FOR TRUSS DESIGN.

"FLOOR TRUSSES" AND "4X2 TRUSSES" REFER TO TRUSSES WITH THE TOP AND BOTTOM CHORDS ORIENTED WITH THE STRONG AXIS HORIZONTAL (I.E. ON THE FLAT). "ROOF TRUSSES" AND "2X4 TRUSSES" REFER TO TRUSSES WITH THE TOP AND BOTTOM CHORDS ORIENTED WITH THE STRONG AXIS VERTICAL.

ENGINEERED SHOP DRAWINGS SHALL BEAR THE SIGNATURE AND IMPRESSED SEAL OF A FLORIDA REGISTERED PROFESSIONAL ENGINEER AS THE SPECIALTY ENGINEER. PLUMBING, ELECTRICAL, AND MECHANICAL DRAWINGS SHALL BE COORDINATED WITH THE TRUSS LAYOUT TO ENSURE THAT THERE ARE NO CONFLICTS WITH DUCTS, RECESSED FIXTURES, PLUMBING PIPES, TRAPS, HOODS, CEILING STEPS/SLOPES, ETC. TRUSS LAYOUT SHALL BE MODIFIED AND/OR TRUSS CHASES SHALL BE ADDED TO AVOID CONFLICTS. TRUSS SPACING SHALL NOT EXCEED MAXIMUM NOTED IN PLAN NOTES, U.N.O.

THE FOLLOWING LOAD DURATION FACTORS SHALL BE USED:

DEAD LOAD	0.90
DEAD LOAD + FLOOR LIVE LOAD	1.00
DEAD LOAD + ROOF LIVE LOAD	1.25
DEAD LOAD + WIND LOAD	1.60

THE SUPERIMPOSED DEAD LOAD, AS SPECIFIED IN THE DESIGN LOADS SECTION ABOVE, INCLUDES THE OVERALL WEIGHT OF THE FIRE SPRINKLER SYSTEM PIPES. THE GENERAL CONTRACTOR SHALL PROVIDE THE TRUSS MANUFACTURER WITH THE LOCATIONS OF THE PIPE SUPPORTS AND THE LOADS FROM ALL SPRINKLER LINES GREATER THAN 2" DIAMETER.

PLYWOOD ROOF, FLOOR, AND WALL SHEATHING ARE DESIGNED AS DIAPHRAGMS AND SHALL COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 23 OF THE FLORIDA BUILDING CODE AND SHALL BE FASTENED IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF TABLES 2306.2.1 OR 2306.3, UNLESS SHOWN OTHERWISE. PLYWOOD SHALL BE INSTALLED WITH THE STRENGTH AXIS OF EACH PANEL PERPENDICULAR TO THE SUPPORTS IN ALL CASES. PLYWOOD ROOF PANELS SHALL BE INSTALLED AS SHOWN IN CASES 1 THROUGH 4 IN TABLE 2306.2.1 (CONT.). BLOCKING SHALL BE PROVIDED BETWEEN ALL WOOD ROOF FRAMING MEMBERS AT ALL RIDGES AND VALLEYS FOR FULL PLYWOOD EDGE SUPPORT.

WOOD FRAMING CONNECTORS:

ALL CONNECTORS SHALL BE GALVANIZED. CONNECTOR MODEL NUMBERS SHOWN ARE STRONG-TIE CONNECTORS AS MANUFACTURED BY SIMPSON STRONG-TIE CO., 5956 W. LAS POSITAS BLVD., P.O. BOX 10789, PLEASANTON, CA 94588, 800-999-5099, WWW.STRONGTIE.COM. SUBSTITUTIONS ARE ACCEPTABLE WITH THE APPROVAL OF THE STRUCTURAL ENGINEER. UNLESS SHOWN OTHERWISE, INSTALL THE *LARGEST* FASTENER SIZE AND *MAXIMUM* NUMBER OF FASTENERS SHOWN IN LATEST SIMPSON CATALOG. WHERE SDS SCREWS ARE SPECIFIED IN THE SIMPSON CATALOG, SDS SCREWS MUST BE USED UNLESS EXPRESSLY SHOWN IN THE DRAWINGS OTHERWISE.

ALL COLUMN BASE AND HOLD-DOWN CONNECTORS (HDU, HTT, LTT, ETC.) FOR STRUCTURAL COMPOSITE LUMBER (PSL, LVL, LSL, ETC.) SHALL BE INSTALLED IN THE WIDE FACE OF THE COLUMN, AND NOT THE NARROW FACE. THE NARROW FACE IS THE SURFACE THAT SHOWS THE VERTICAL THIN EDGES OF THE STRUCTURAL COMPOSITE LUMBER LAYERS.

ABBREVIATIONS

MARK	DESCRIPTION
#	POUND(S)
&	AND
DIA	DIAMETER
ARCH	ARCHITECTURAL
B OR BOT	BOTTOM
B/ OR B.O.	BOTTOM OF
BP	BASEPLATE
CANT	CANTILEVER
CJ	CONTROL JOINT
CLR	CLEAR
CONT	CONTINUOUS
EA	EACH
EE	EACH END
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
EMBED	EMBEDMENT
EOR	(STRUCTURAL) ENGINEER OF RECORD
EOS	EDGE OF SLAB
EQ	EQUAL
EW	EACH WAY
EXIST	EXISTING
F'C	28 DAY COMPRESSIVE STRENGTH
FFE	FINISHED FLOOR ELEVATION
FRT	FIRE RETARDANT TREATED
FTG	FOOTING
GC	GENERAL CONTRACTOR
GA	GAUGE
GALV	GALVANIZED
H OR HORIZ	HORIZONTAL
HSS	HOLLOW STRUCTURAL STEEL
KJ	CONSTRUCTION JOINT
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LW	LONG WAY
MAX	MAXIMUM
MIN	MINIMUM
NAVD	NORTH AMERICAN VERTICAL DATUM
NGVD	NATIONAL GEODETIC VERTICAL DATUM
NIC	NOT IN CONTRACT
OC	ON CENTER
OH OR OPP. HAND	OPPOSITE HAND
PLF	POUNDS PER LINEAR FOOT
PROJ	PROJECTION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
REF	REFERENCE
REINF	REINFORCING
REQ'D	REQUIRED
RTF	RIPPED TO FIT
SIM	SIMILAR
SS	STAINLESS STEEL
STD	STANDARD
SW	SHORT WAY/SHEARWALL
T	TOP
T.O. OR T/	TOP OF
TEMP	TEMPERATURE
THR	THREADED
THRU	THROUGH
TRANS	TRANSVERSE
TYP	TYPICAL
V OR VERT	VERTICAL
W/	WITH
WD	WOOD
WP	WORKING POINT
WWF	WELDED WIRE FABRIC

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SWEET SPARKMAN ARCHITECTS

5/19/2020
ENGINEER OF RECORD
Cordell S. Van Nostrand
FL P.E. # 67580
C.A. # 31580

PROJECT TITLE: TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

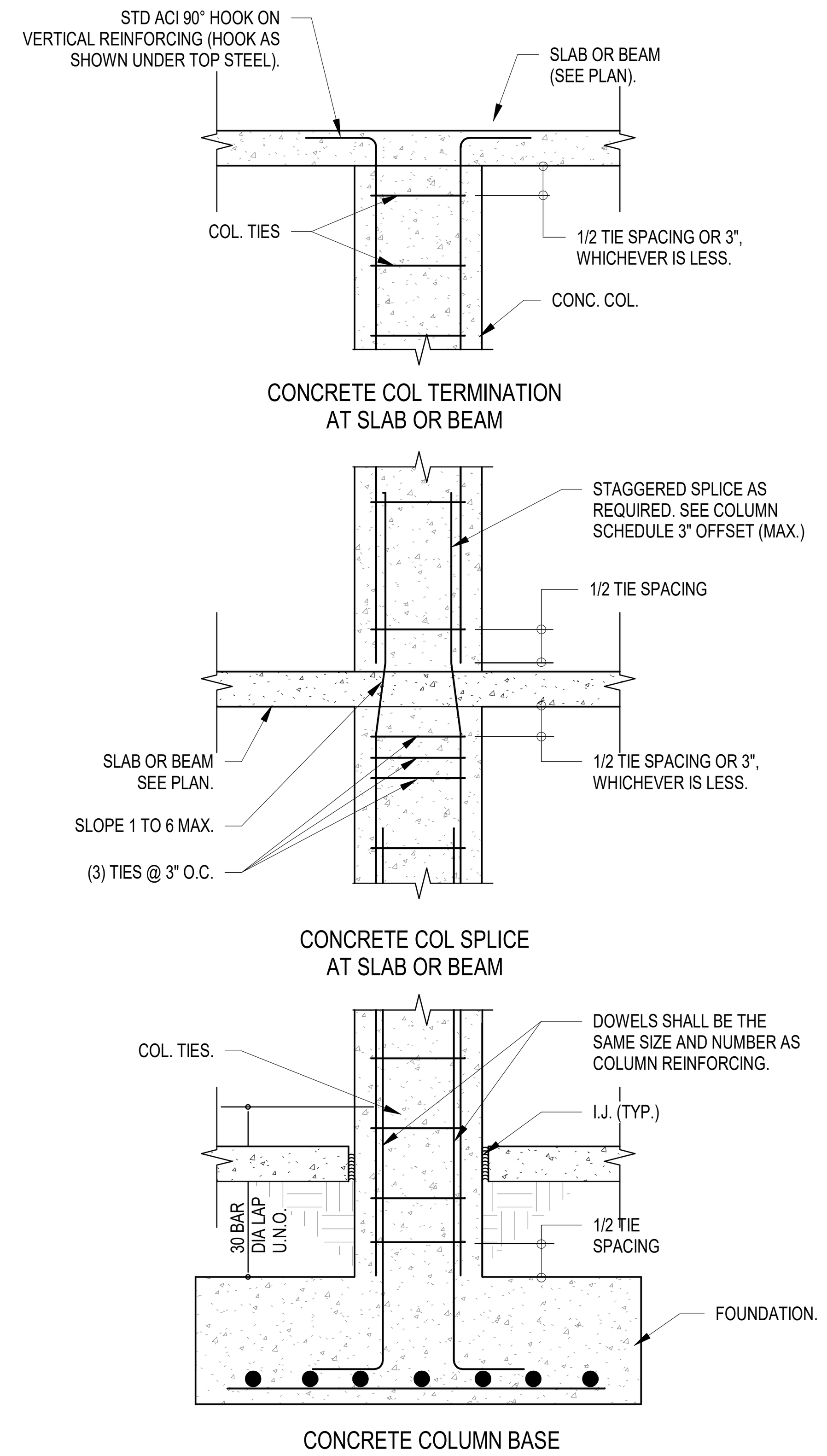
ISSUED FOR: CONFORMED SET
05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

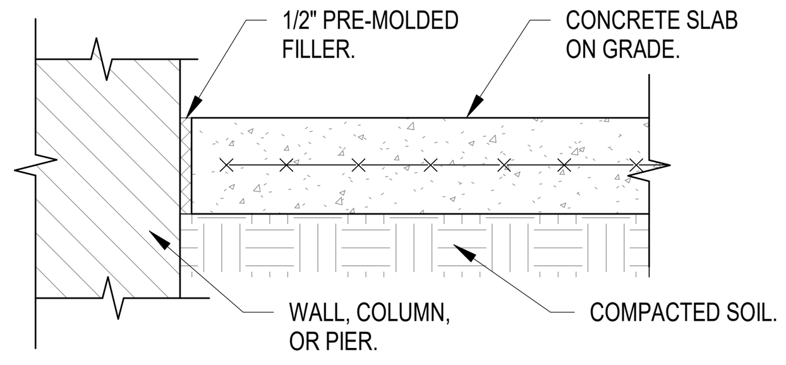
SCALE: As indicated
PROJECT MANAGER:
DRAWN BY:
A/E OF RECORD:
PROJECT NO: SNELL 19096
SHEET TITLE: STRUCTURAL NOTES

SHEET No.: S-1

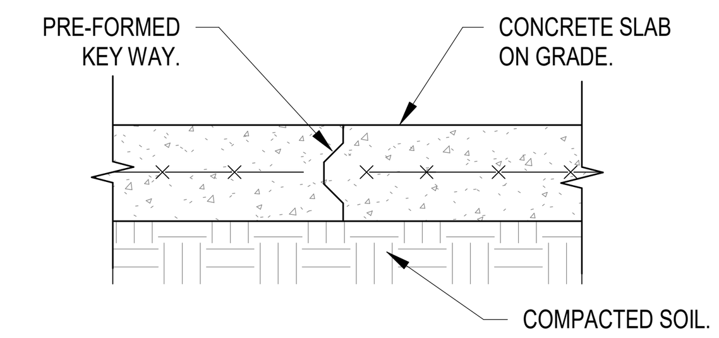


TYPICAL COLUMN REINFORCEMENT DETAIL

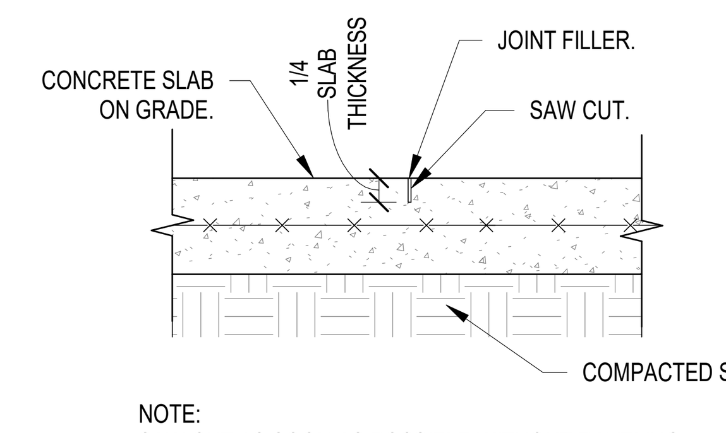
SCALE: NTS



ISOLATION JOINT (IJ)

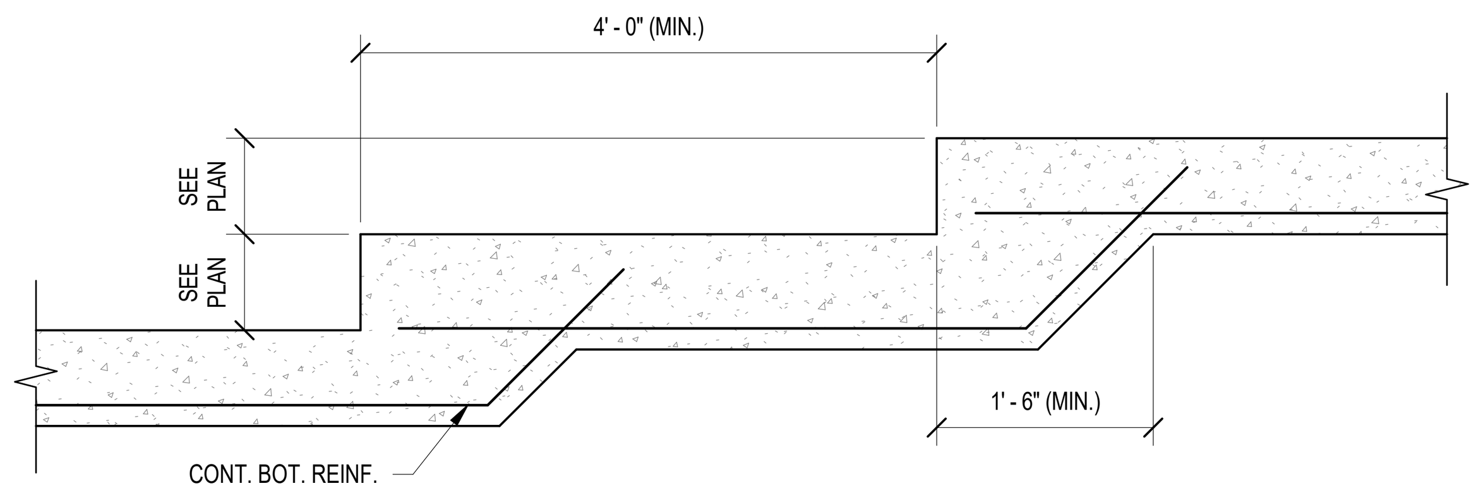


CONSTRUCTION JOINT (KJ)



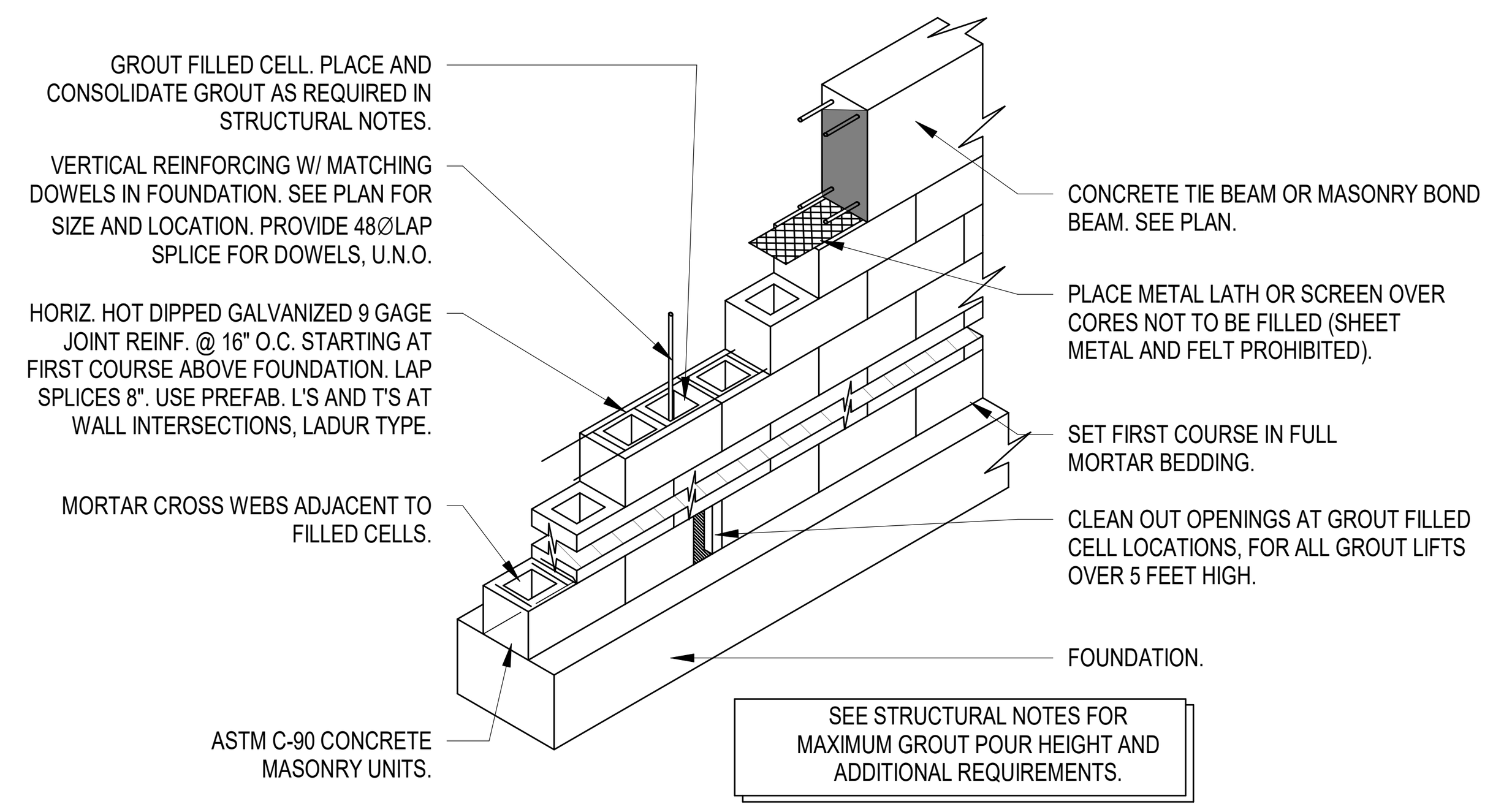
NOTE:
SAW CUT AS SOON AS POSSIBLE WITHOUT RAVELING CONCRETE (4 TO 16 HOURS AFTER POURING CONCRETE).

CONTROL JOINT (CJ)



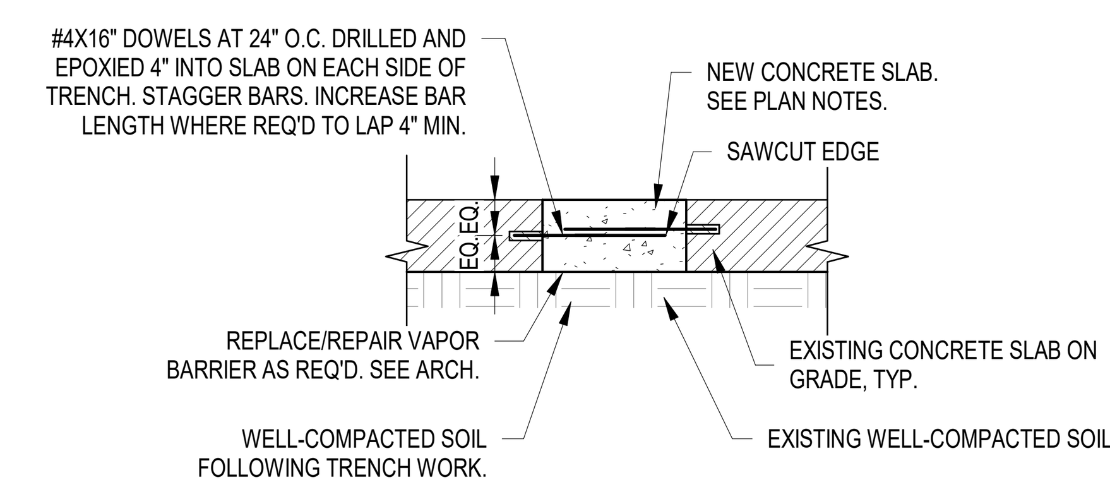
8" STEP FOOTING DETAIL

SCALE: NTS



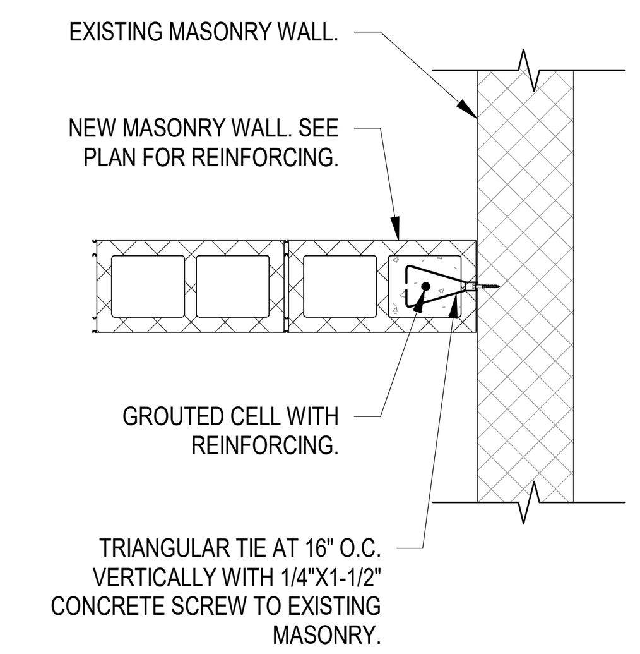
TYPICAL MASONRY WALL CONSTRUCTION

SCALE: NTS

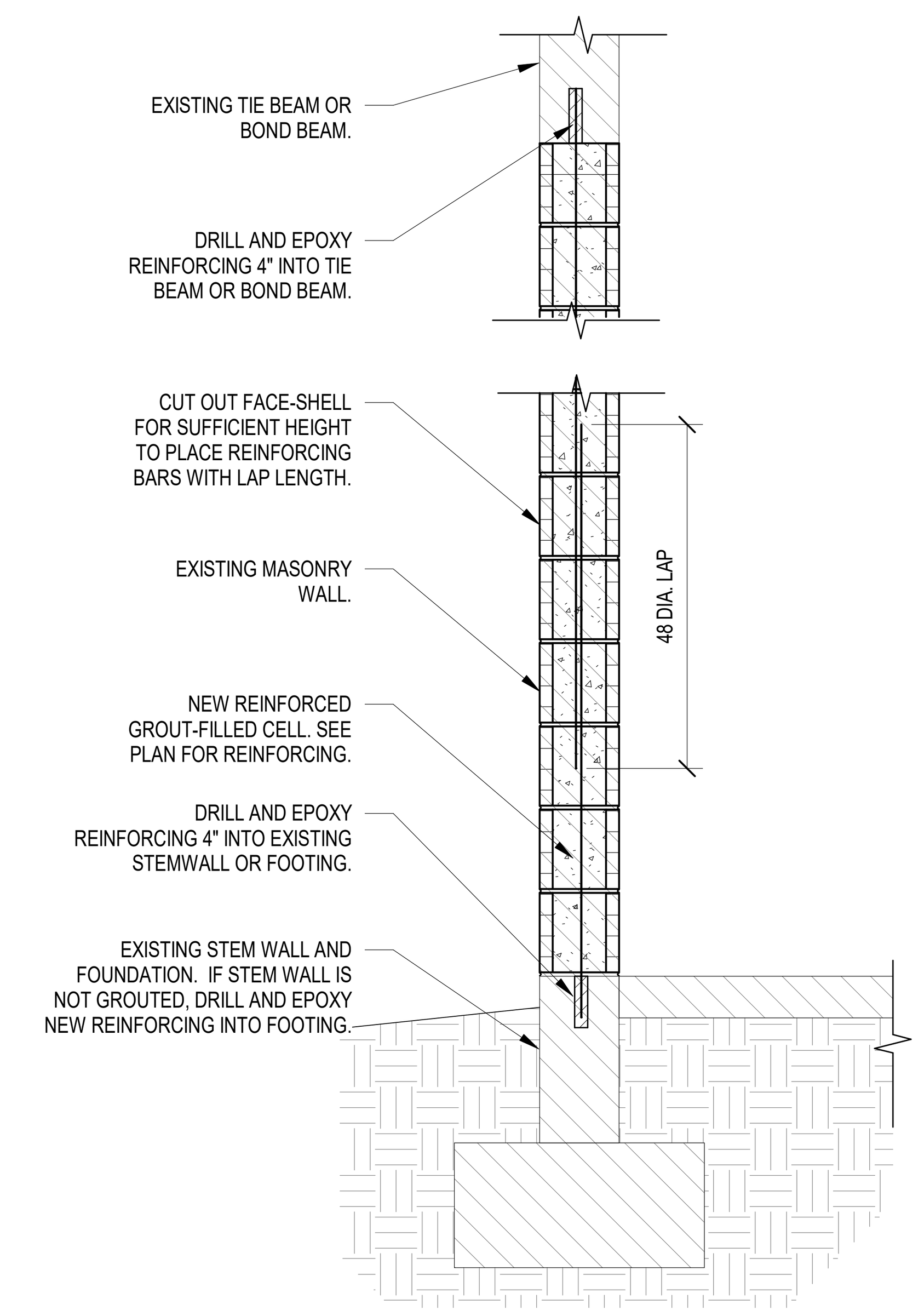


TRENCH REPAIR DETAIL

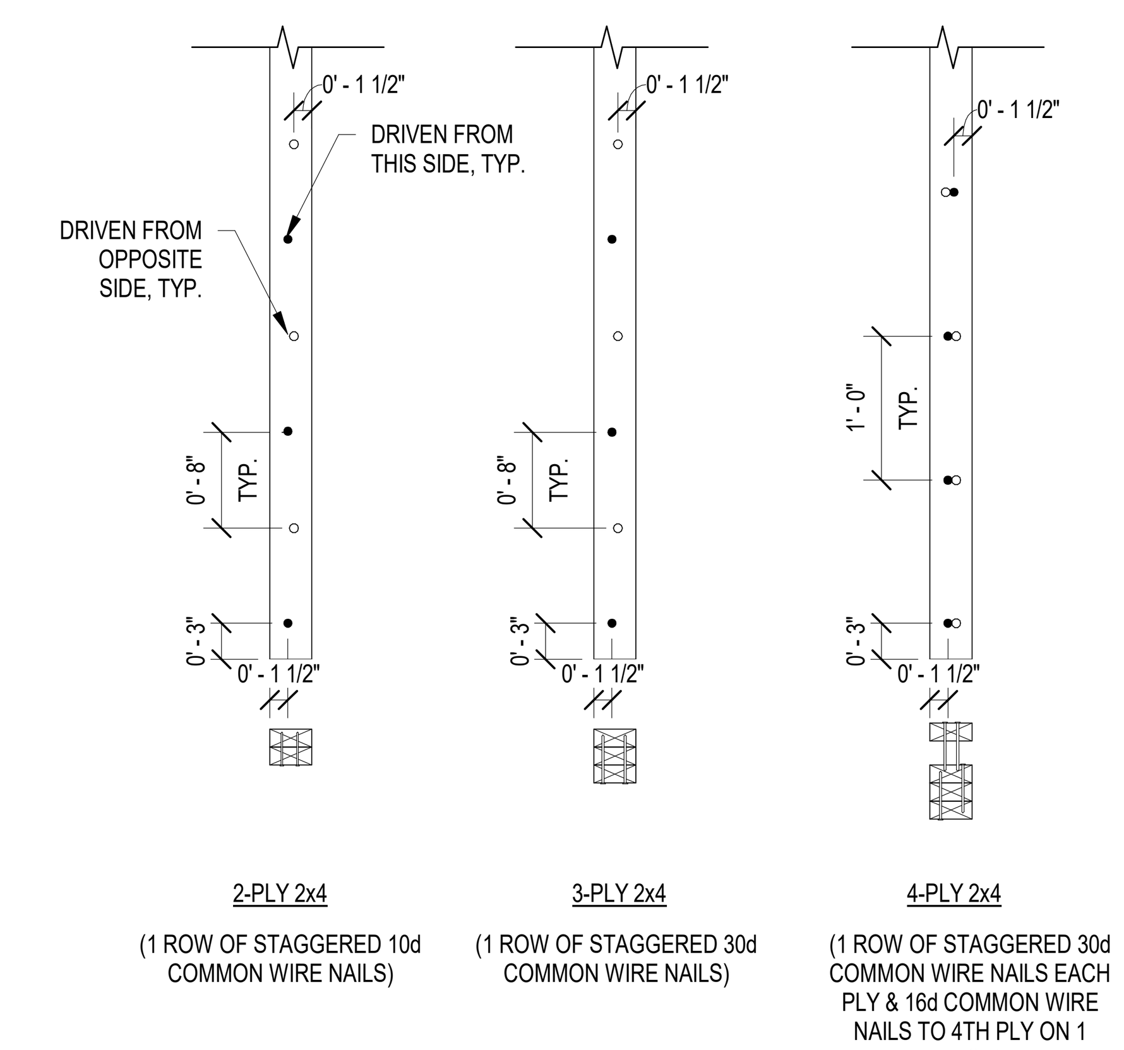
SCALE: N.T.S.



NEW TO EXISTING WALL CONNECTION



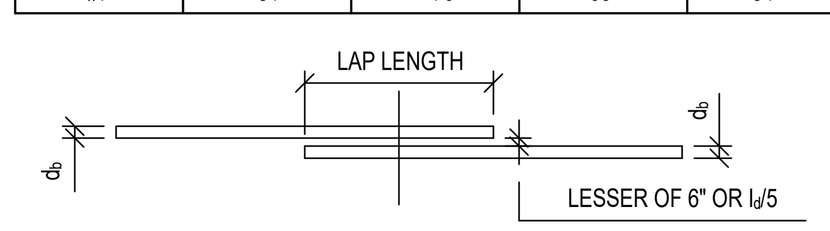
NEW REINFORCING OF EXISTING MASONRY WALL DETAIL



BUILT UP WOOD STUD COLUMN SECTIONS

SCALE: NTS

BAR SIZE	TENSION (CLASS 'B') LAP SPLICE LENGTH				COMPRESSION LAP / SPLICE LENGTH
	TOP BARS		OTHER BARS		ALL BARS
	3000 PSI	4000 PSI	3000 PSI	4000 PSI	ALL CONCRETE WITH $f'_c{}^3$ 3000 psi
#3	28	24	22	19	12
#4	37	32	29	25	15
#5	47	40	36	31	19
#6	56	48	43	37	23
#7	81	70	63	54	27



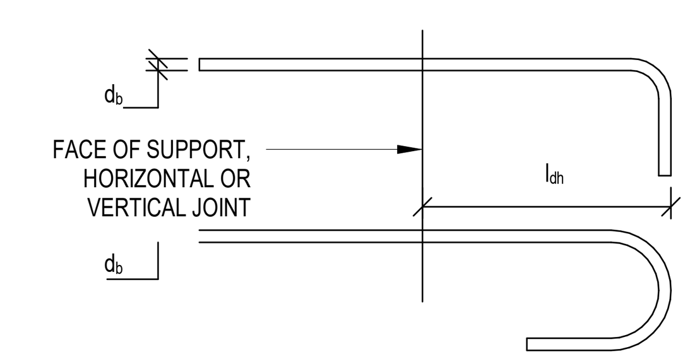
NOTES:

1. REFER TO "HOOKED REINFORCEMENT TENSION DEVELOPMENT LENGTH SCHEDULE" WHEN THE STRAIGHT DEVELOPMENT LENGTH IN TENSION CANNOT BE ACCOMMODATED IN THE CONCRETE SECTION.
2. ALWAYS USE TENSION LAP SPLICE LENGTH VALUES, UNLESS THE PLANS OR DETAILS NOTE OTHERWISE.
3. TABULATED DEVELOPMENT AND LAP SPLICE LENGTHS ARE BASED ON REINFORCING STEEL YIELD STRENGTH Fy=60 KSI, NORMAL WEIGHT CONCRETE, AND CLASS B LAPS.
4. TOP BARS ARE DEFINED AS HORIZONTAL BARS WITH MORE THAN 12 INCHES OF FRESH CONCRETE CAST IN THE MEMBER BELOW THE DEVELOPMENT LENGTH OR SPLICE. TOP BAR FACTOR DOES NOT APPLY TO BARS IN WALLS.
5. WHEN DIFFERENT BAR DIAMETERS ARE SPLICED, USE SMALLER BAR LAP SPLICE LENGTH.
6. ALL TABULATED VALUES ARE MINIMUM LENGTH, IN CASE OF CONFLICT WITH PLANS, SECTIONS, OR DETAILS USE LONGER LENGTH.
7. d/b = BAR DIAMETER
8. l/d = DEVELOPMENT, LAP OR SPLICE LENGTH.
9. ADJUST TABULATED LENGTH BY THE FOLLOWING FACTORS WHERE APPLICABLE. NOTE THAT FACTORS ARE CUMULATIVE (E.G. 1.30x1.50 = 1.95)
   - A. LIGHT WEIGHT CONCRETE: 1.30
   - B. 3 OR LESS BUNDLED BARS: 1.20
   - C. 4 OR MORE BUNDLED BARS: 1.33
   - D. CLEAR SPACING LESS THAN 2d/b AND CLEAR COVER LESS THAN d/b 1.50
   - E. CLASS A LAP SPLICE 0.77
   - F. EPOXY COATED BARS 1.50
10. WELDED AND/OR MECHANICAL SPLICES MAY BE USED AT THE GENERAL CONTRACTOR'S OPTION PROVIDED THAT THE SPLICE IS CAPABLE OF DEVELOPING AT LEAST 125% OF THE YIELD STRENGTH OF THE LARGER BAR IN TENSION. WHERE WELDED AND/OR MECHANICAL SPLICES ARE TO BE USED, THE GENERAL CONTRACTOR SHALL SUBMIT FULL DATA OF THE PROPOSED MATERIAL, PROCEDURES, AND INSTALLATION INSTRUCTIONS TO THE ENGINEER FOR REVIEW AS A SHOP DRAWING SUBMISSION.
11. USE MECHANICAL COUPLERS FOR #14 AND LARGER BARS.
12. LAP SPLICES IN CONCRETE MASONRY SHALL BE AS SPECIFIED IN STRUCTURAL NOTES.

TYP. STRAIGHT REINFORCEMENT DEVELOPMENT AND SPLICE LENGTH SCHEDULE

SCALE: NTS

BAR SIZE	HOOKED TENSION DEVELOPMENT LENGTH (l_{dh}) INCHES	
	3000 PSI	4000 PSI
#3	9	7
#4	11	10
#5	14	12
#6	17	15
#7	19	17
#8	22	19

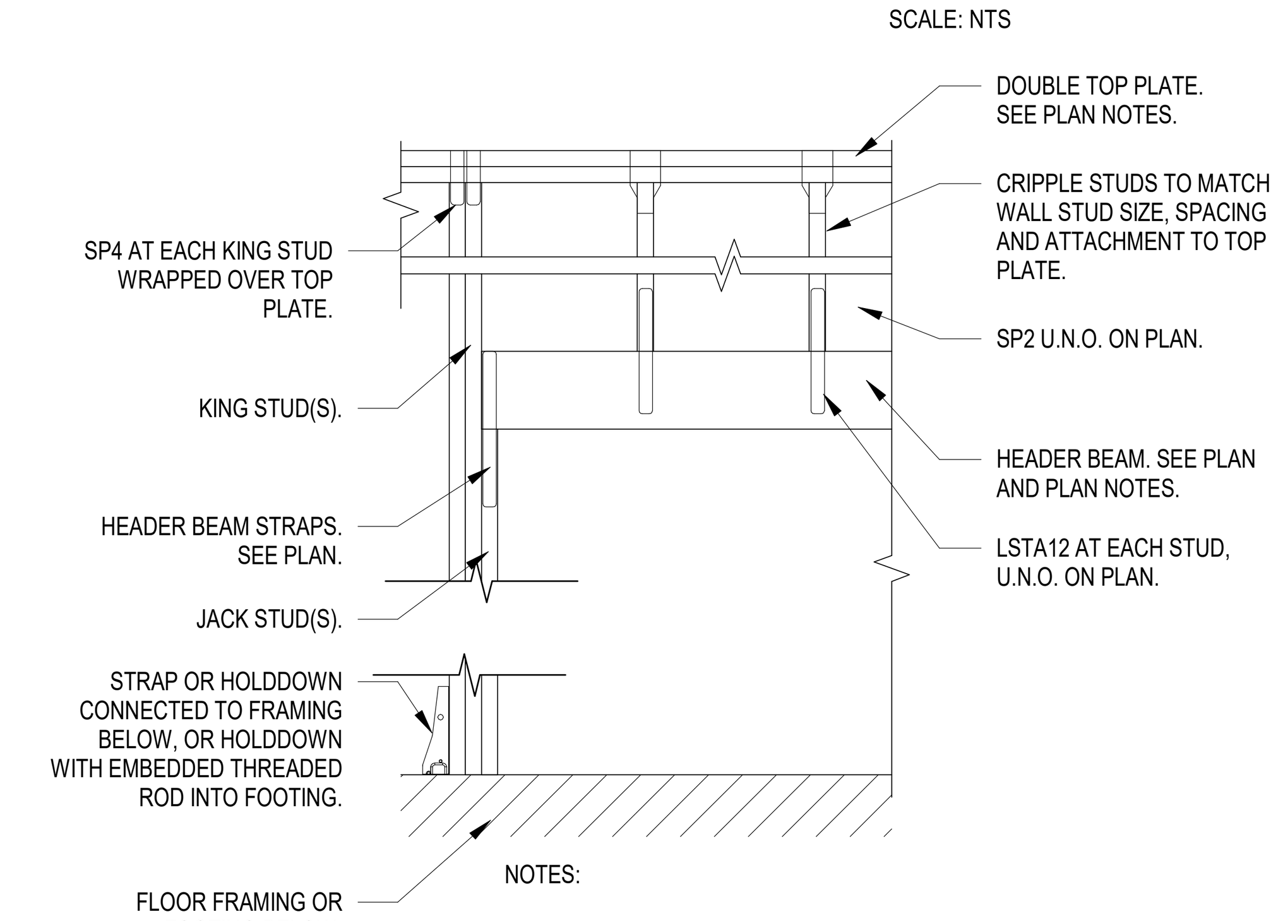


NOTES:

1. SEE TYPICAL TIE AND STIRRUP HOOKS DETAIL FOR ADDITIONAL INFORMATION.
2. TABULATED DEVELOPMENT LENGTH ARE BASED ON REINFORCING STEEL YIELD STRENGTH F/y = 60 KSI AND NORMAL WEIGHT CONCRETE.
3. ALL TABULATED VALUES ARE MINIMUM LENGTHS. IN CASE OF CONFLICT WITH THE PLANS, SECTIONS, OR DETAILS, USE THE LONGER LENGTH.
4. d_b = BAR DIAMETER
5. l_{dh} = DEVELOPMENT LENGTH
6. ADJUST TABULATED LENGTHS BY THE FOLLOWING FACTORS WHERE APPLICABLE. NOTE THAT THE FACTORS ARE CUMULATIVE.
   - A. REINFORCING BAR STRENGTH OTHER THAN 60 KSI: (F_y/60 KSI)
   - B. LIGHT WEIGHT CONCRETE: 1.30
   - C. EPOXY COATED BARS 1.20

TYP. HOOKED REINFORCEMENT TENSION DEVELOPMENT LENGTH SCHEDULE

SCALE: NTS



NOTES:

1. PLYWOOD SHEATHING, IF APPLICABLE, IS NOT SHOWN FOR CLARITY.
2. A MINIMUM OF (1)JACK AND (1)KING STUD ARE REQUIRED AT ALL OPENINGS, UNLESS NOTED OTHERWISE ON PLAN.
3. WHERE MULTIPLE JAMB STUDS ARE SPECIFIED EACH JAMB STUD IS TO BE STRAPPED ACCORDING TO PLAN NOTES.

TYPICAL STUD WALL OPENING DETAIL

SCALE: NTS

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5/19/2020
ENGINEER OF RECORD
Cordell S. Van Nostrand
FL P.E. # 67580
C.A. # 31580

PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR: CONFORMED SET 05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

SCALE: 3/4" = 1'-0"
PROJECT MANAGER:
DRAWN BY:
A/E OF RECORD:
PROJECT NO: SNELL 19096
SHEET TITLE: TYPICAL DETAILS
SHEET No.: S-2

PLAN LEGEND

- INDICATES A NEW OPENING IN AN 8" LOAD BEARING MASONRY WALL. GROUT FILL EACH JAMB BELOW NEW BEARING ANGLE. PROVIDE A NEW FILLED CELL ADJACENT TO THE GROUTED JAMB, WITH 1#5 BAR; SEE NEW REINFORCING OF EXISTING MASONRY WALL DETAIL ON S-2.
- INDICATES AN 8" INFILL MASONRY WALL. PROVIDE ATTACHMENT TO EXISTING MASONRY WALL AS SHOWN IN THE NEW TO EXISTING WALL CONNECTION DETAIL ON S-2.
- INDICATES A 2X4 SO. PINE #2 WOOD WALL WITH STUDS AT 16" O.C. MAX. EACH STUD IN WALL TO HAVE AN SP1 TO SINGLE BOTTOM PLATE AND SP2 TO DOUBLE-TOP PLATE. PROVIDE HORIZONTAL BLOCKING AT 4'-0" O.C. MAX. ATTACH BOTTOM PLATE TO SLAB WITH ½"⌀ SIMPSON TITEN HD AT 24" O.C.

FOUNDATION SCHEDULE - MAIN

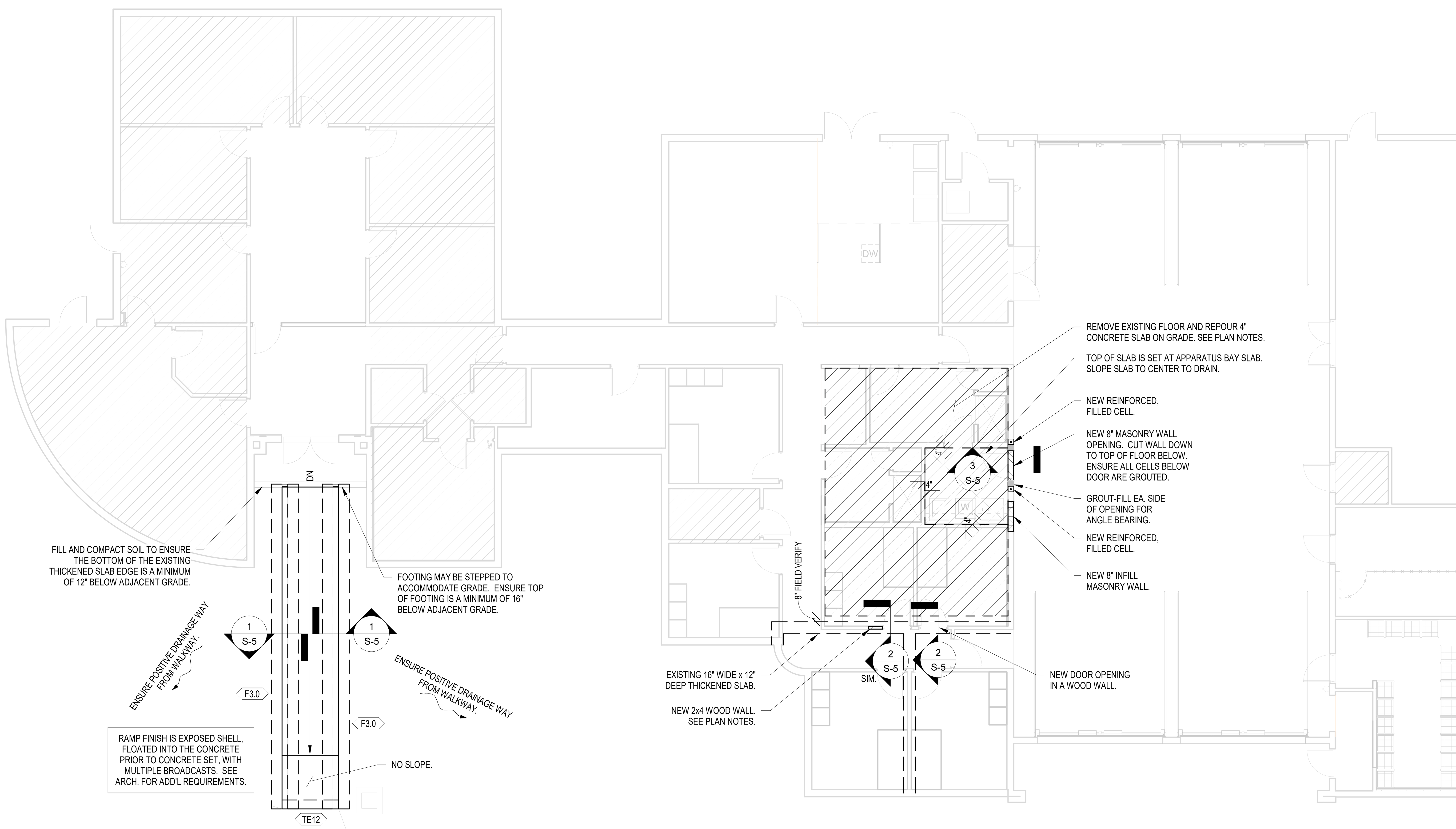
MARK	WIDTH	LENGTH	DEPTH	REINFORCING	REMARKS
F3.0	3' - 0"	CONT. "	1' - 0"	3#5 BOT. CONT.	
TE12	1' - 0"	CONT.	1' - 4"	2#5 BOT. CONT.	

FOUNDATION SCHEDULE NOTES:

1. ENSURE TOP OF FOOTINGS ARE SET 12" MIN. BELOW ADJACENT FINISHED GRADE.

FOUNDATION PLAN NOTES:

1. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS. SEE ARCHITECTURAL AND MEP FOR ADDITIONAL INFORMATION.
2. SEE ARCHITECTURAL DRAWINGS FOR ALL SLOPES, DROPS AND DRAIN LOCATIONS IN FLOOR SLAB. MAINTAIN 4" MINIMUM SLAB DEPTH. THICKEN SLAB TO 8" WITHIN 4" OF ALL SLAB STEPS; MAINTAIN 4" MINIMUM SLAB DEPTH ELSEWHERE.
3. ELEVATIONS SHOWN ARE RELATIVE TO THE INTERIOR GROUND FLOOR SLAB SURFACE SET AT 0'-0" (REF.). TOP OF INTERIOR GROUND FLOOR SLAB IS SET AT 10.3' N.A.V.D.
4. TOF INDICATES TOP OF FOOTING ELEVATION. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED PLUMBING PENETRATIONS THROUGH STEM-WALLS AND ELEVATIONS. NO PENETRATIONS ARE PERMITTED THROUGH FOOTINGS. FOOTINGS MAY STEP AS SHOWN IN THE TYPICAL DETAIL ON S-2. NOTIFY ENGINEER OF STEP LOCATIONS BEFORE PROCEEDING WITH WORK.
5. GROUND FLOOR SHALL BE 4" CONCRETE SLAB-ON-GRADE, U.N.O. REINFORCE W/ 6X6 W1.4XW1.4 W.W.F. AT MID-DEPTH.



MAIN BUILDING FOUNDATION AND GROUND
1/8" = 1'-0"

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FL AA26000857

5/19/2020
ENGINEER OF RECORD
Cordell S. Van Nostrand
FL P.E. #67580
C.A. # 31580

N

PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR: CONFORMED SET 05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

SCALE: As indicated

PROJECT MANAGER:

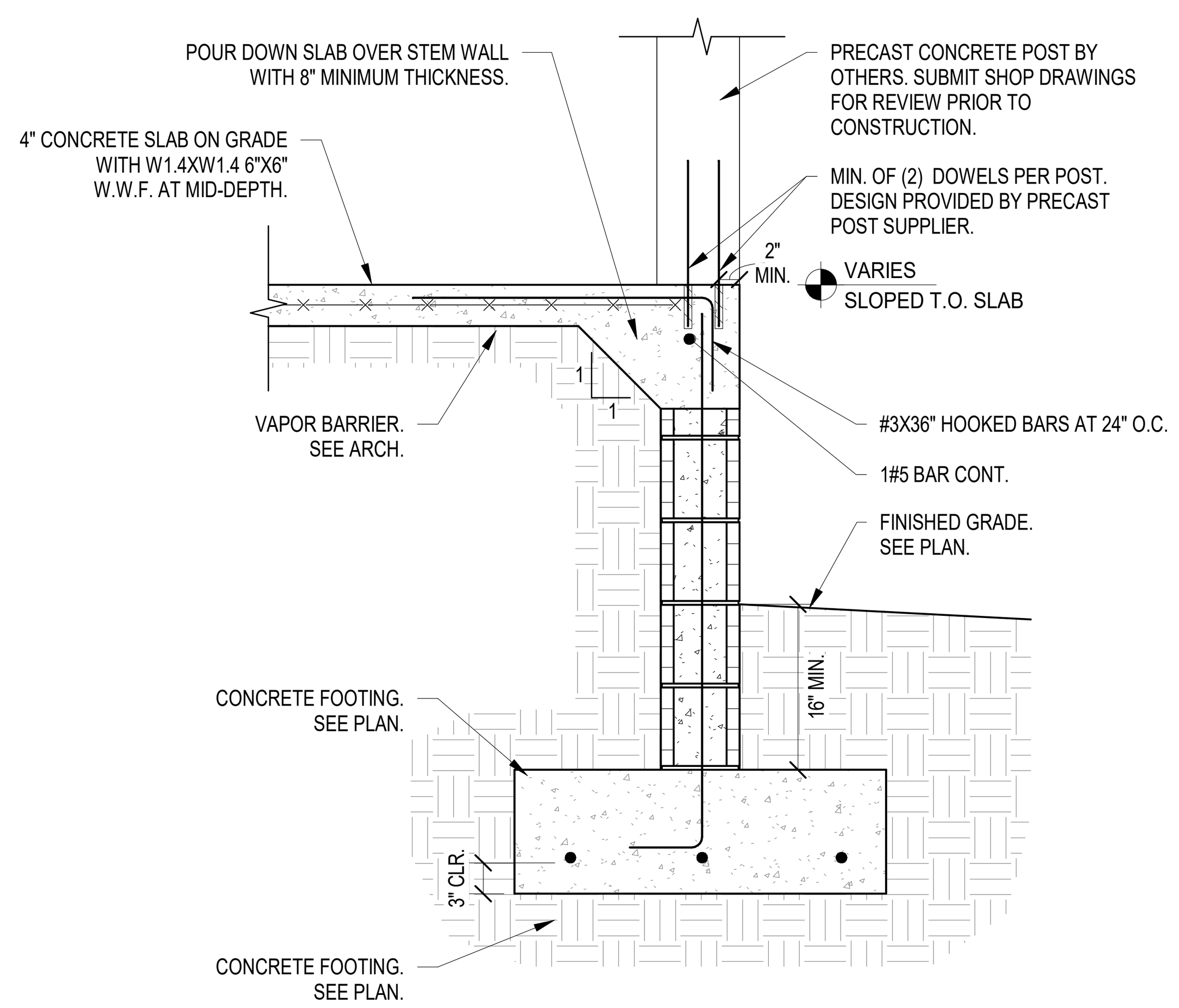
DRAWN BY:

A/E OF RECORD:

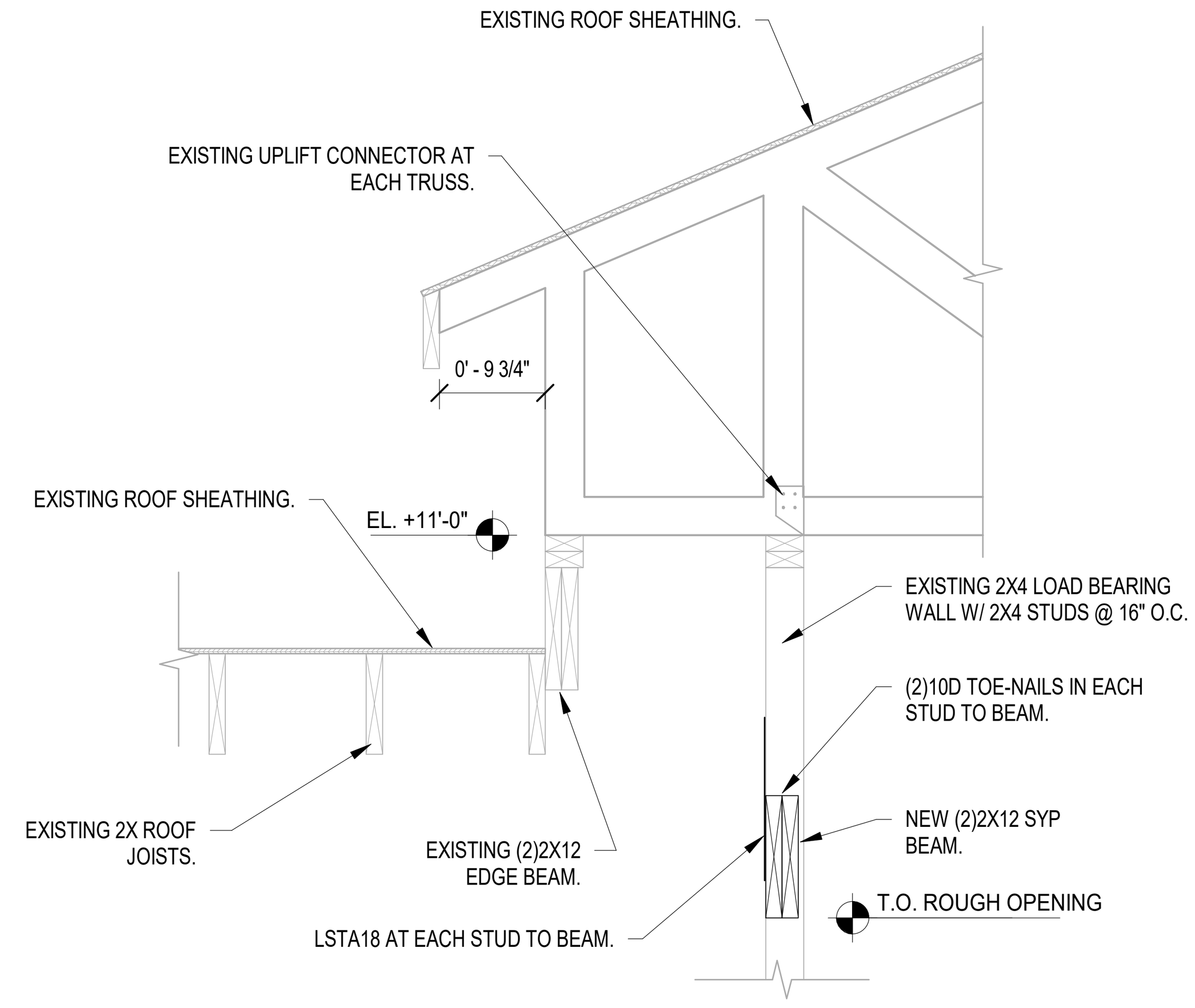
PROJECT NO: SNELL 19096

SHEET TITLE: FOUNDATION PLAN

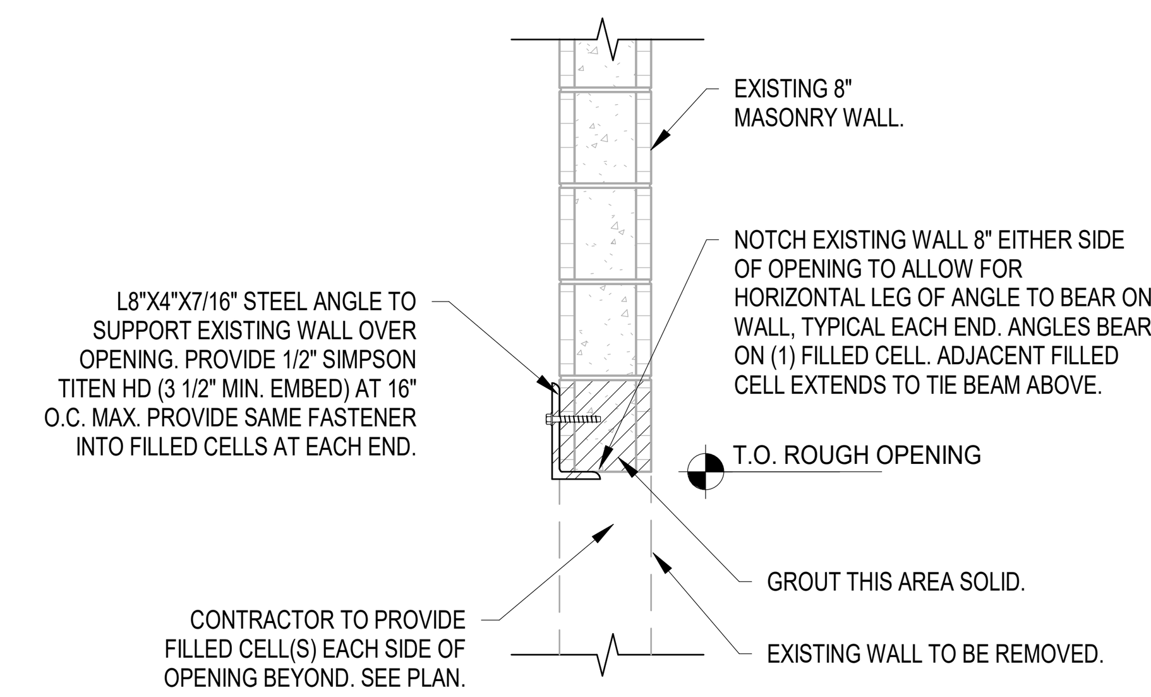
SHEET No.: S-3



1 S-5 SECTION 3/4" = 1'-0"



2 S-5 SECTION 3/4" = 1'-0"



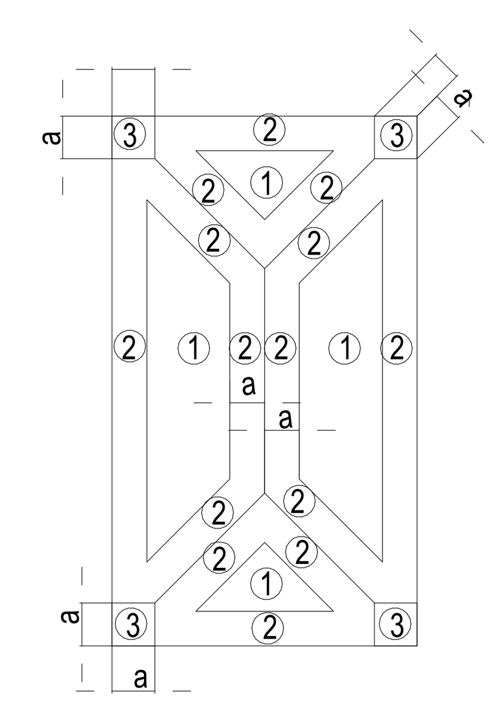
3 S-5 SECTION 3/4" = 1'-0"

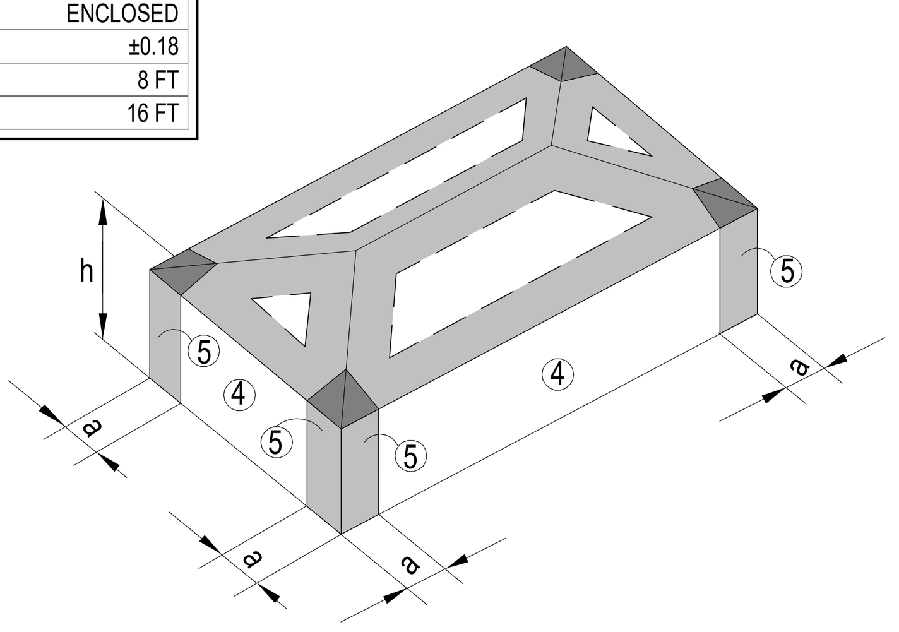
WIND LOAD SCHEDULE

SCHEDULE OF COMPONENTS AND CLADDING LOADS				
ZONE	ZONE DESCRIPTION	TRIBUTARY AREA (SF)	(+ PSF)	(- PSF)
1	ROOF INTERIOR ZONE	LESS THAN 20	35.0	62.9
		20 - 100	31.1	54.9
		MORE THAN 100	19.1	39.0
2	ROOF, EDGE ZONE	LESS THAN 20	35.0	86.8
		20 - 100	31.1	78.8
		MORE THAN 100	19.1	54.9
	ROOF, OVERHANG, EDGE ZONE	LESS THAN 20		106.7
		20 - 100		98.7
		MORE THAN 100		90.8
3	ROOF, CORNER ZONE	LESS THAN 20	35.0	86.8
		20 - 100	31.1	78.8
		MORE THAN 100	19.1	54.9
	ROOF, OVERHANG CORNER ZONE	LESS THAN 20	-	130.6
		20 - 100	-	106.7
		MORE THAN 100	-	90.8
4	WALL, INTERIOR ZONE	LESS THAN 20	47.0	51.0
		20 - 50	45.0	49.0
		50 - 100	42.2	46.2
		MORE THAN 100	39.8	45.0
5	WALL, EDGE ZONE	LESS THAN 20	47.0	62.9
		20 - 50	45.0	58.9
		50 - 100	42.2	52.9
		MORE THAN 100	39.8	49.0

NOTE: WIND PRESSURES SHOWN ARE BASED ON Vasd

CODE =	ASCE 7-16
ULTIMATE WIND SPEED Vult =	165 MPH
ALLOWABLE WIND SPEED Vasd =	128 MPH
RISK CATEGORY =	IV
EXPOSURE =	D
ENCLOSURE CLASSIFICATION =	ENCLOSED
INTERNAL PRESSURE COEFFICIENT (GCpi) =	±0.18
a =	8 FT
2a =	16 FT





HIP ROOF (27 °< Θ ≤ 45 °)

SCALE: N.T.S.

Interior Zones ZONE 1 - ROOF ZONE 4 - WALL
End Zones ZONE 2 - ROOF ZONE 5 - WALL
Corner Zones ZONE 3 - ROOF

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5/19/2020
ENGINEER OF RECORD
Cordell S. Van Nostrand
FL P.E. # 67580
C.A. # 31580

PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
5490 GULF OF MEXICO DRIVE
LONGBOAT KEY, FLORIDA 34228

ISSUED FOR: CONFORMED SET 05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

SCALE: As indicated

PROJECT MANAGER:

DRAWN BY:

A/E OF RECORD:

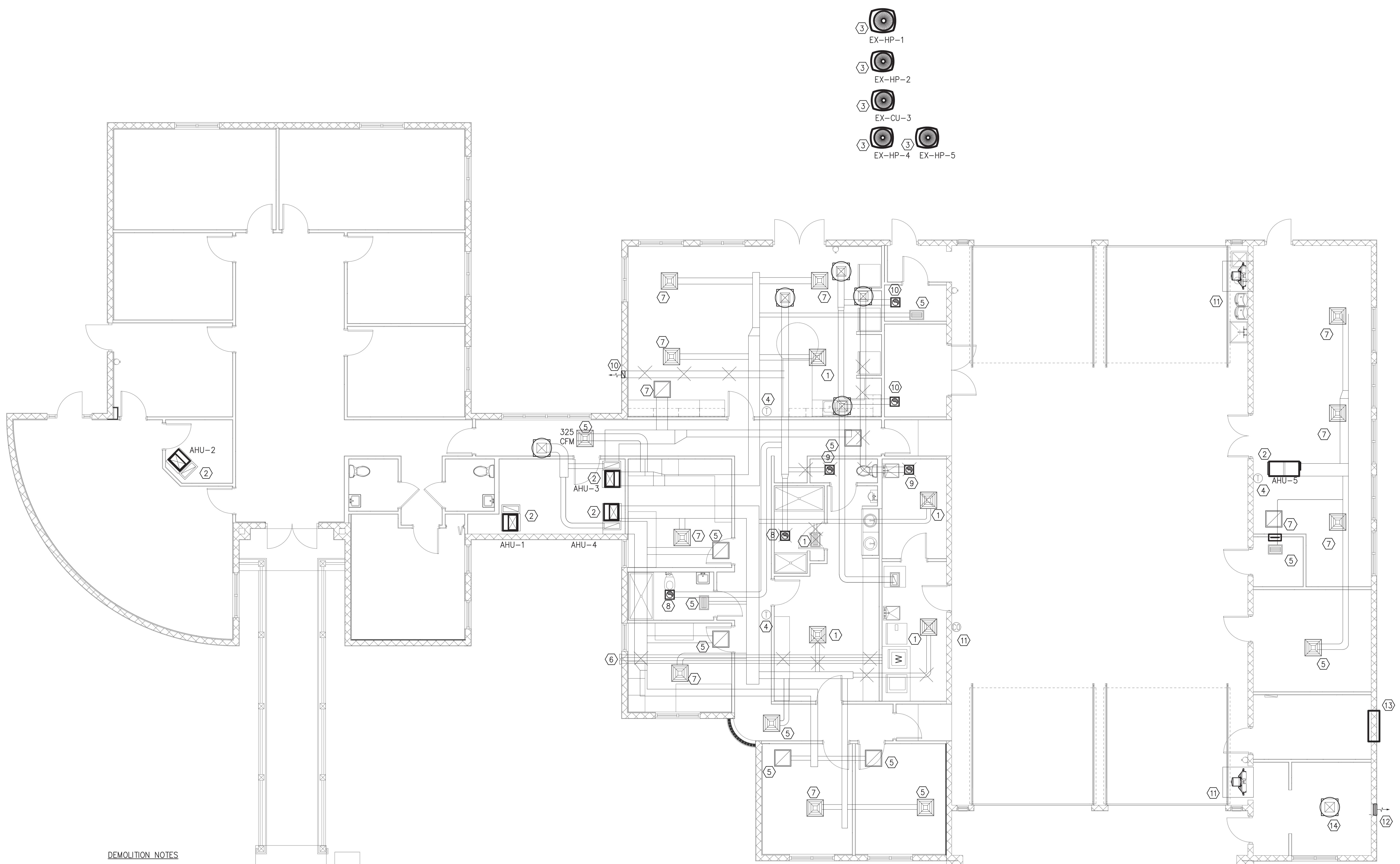
PROJECT NO: SNELL 19096

SHEET TITLE:

SECTIONS

SHEET No.:

S-5



DEMOLITION NOTES

THE DEMOLITION PROCEDURES SHALL PROVIDE FOR SAFE CONDUCT OF THE WORK, PROTECTION OF PERSONNEL, CAREFUL REMOVAL, AND DISPOSAL OF MATERIALS AS INDICATED. THE PROCEDURES ALSO INCLUDE PROTECTION OF PROPERTY TO REMAIN UNDISTURBED, COORDINATION WITH OTHER WORK IN PROGRESS AND TIMELY DISCONNECTION OF UTILITY SERVICES.

EXISTING WORK SHALL NOT BE CUT, DRILLED, ALTERED, REMOVED, OR TEMPORARILY REMOVED FOR THE INSTALLATION REQUIRED TO PERFORM CONSTRUCTION ACTIVITIES OF MECHANICAL AND ELECTRICAL WORK AND OTHER CONSTRUCTION UNDER THE CONTRACT WITHOUT AUTHORIZATION OF THE OWNER. STRUCTURAL MEMBERS OF CONCRETE OR STRUCTURAL STEEL SHALL NOT BE ALTERED WITHOUT AUTHORIZATION OF THE OWNER.

CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKWAYS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.

REMOVE AND LEGALLY DISPOSE OF ITEMS EXCEPT THOSE INDICATED TO BE REINSTALLED, SALVAGED, OR TO REMAIN THE OWNER'S PROPERTY.

EXISTING TO REMAIN: PROTECT CONSTRUCTION INDICATED TO REMAIN AGAINST DAMAGE AND SOILING DURING DEMOLITION. WHEN PERMITTED BY THE ARCHITECT, ITEMS MAY BE REMOVED TO A SUITABLE, PROTECTED STORAGE LOCATION DURING DEMOLITION AND THEN CLEANED AND REINSTALLED IN THEIR ORIGINAL LOCATIONS.

EXCEPT FOR ITEMS OR MATERIALS INDICATED TO BE REUSED, SALVAGED, OR OTHERWISE INDICATED TO REMAIN THE OWNER'S PROPERTY, DEMOLISHED MATERIALS SHALL BECOME THE CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM THE SITE WITH FURTHER DISPOSITION AT THE CONTRACTOR'S OPTION. NATIONAL CODES. CONTRACTOR MUST CERTIFY TO OWNER THAT THE MATERIAL HAS BEEN LEGALLY DISPOSED OF IN WRITTEN FORM.

DEMOLITION NOTES

1. EXISTING AIR DEVICE TO BE DEMOLISHED. ITEMS TO BE DEMOLISHED INCLUDE ASSOCIATED DUCTWORK AND HANGERS.
2. EXISTING AIR HANDLING UNIT TO BE DEMOLISHED AND REPLACED. REFER TO NEW A/C SCHEDULE ON MECHANICAL SHEET M2.0.
3. EXISTING CONDENSING UNIT TO BE DEMOLISHED AND REPLACED. REFER TO NEW LOCATIONS INDICATED ON SHEET M1.1.. REFER TO NEW A/C SCHEDULE ON MECHANICAL SHEET M2.0.
4. EXISTING THERMOSTAT TO REMAIN.
5. EXISTING AIR DEVICE TO REMAIN.
6. EXISTING DRYER EXHAUST DUCTWORK TO BE ABANDONED, BACKFILLED AND CAPPED AT BOTH ENDS.
7. EXISTING AIR DEVICE TO BE REUSED AND RELOCATED. REFER TO MECHANICAL SHEET M1.1 FOR LOCATION.
8. EXISTING EXHAUST FAN TO REMAIN.
9. EXISTING EXHAUST FAN TO BE DEMOLISHED.
10. EXISTING DOWNFLOW KITCHEN HOOD DUCTWORK TO BE ABANDONED, BACKFILLED AND CAPPED AT BOTH ENDS.
11. EXISTING APPARATUS BAY EXHAUST FANS AND CONTROLS TO REMAIN. CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE.
12. EXISTING LOUVER TO BE DEMOLISHED. EXISTING WALL TO BE INFILLED.
13. EXISTING PTAC TO BE DEMOLISHED. EXISTING WALL TO BE INFILLED.
14. EXISTING ROOF MOUNTED EXHAUST FAN TO BE DEMOLISHED.

1 MECHANICAL DEMOLITION PLAN
1/8" = 1'-0"

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Cert. of Authorization# CA31201
Mechanical Electrical Plumbing Fire Protection

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FL AA26000857

PROJECT TITLE: TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR: Conformed Set
05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	CRB
DRAWN BY:	MJE
A/E OF RECORD:	CRB
PROJECT NO:	19-522

SHEET TITLE:
MECHANICAL DEMOLITION PLAN

SHEET No.:
M1.0

CONSTRUCTION NOTES

1. RELOCATED AND NEW CONDENSERS TO BE SECURED TO NEW EQUIPMENT RACKS. RACKS AS MANUFACTURED BY RECTORSEAL MODEL WBB500HR OR EQUAL.
2. REFRIGERANT LINES ROUTED THROUGH BREAK METAL CHASE.
3. NEW SUPPLY GRILLES. EXTEND AND CONNECT NEW BRANCH DUCT TO EXISTING MAIN. BALANCE PER PLAN REQUIREMENTS.
4. NEW RETURN GRILLS. EXTEND AND CONNECT NEW BRANCH DUCT TO EXISTING MAIN. BALANCE PER PLAN REQUIREMENTS.
5. NEW EXHAUST FAN. EXTEND AND CONNECT NEW EXHAUST DUCT TO EXISTING EXHAUST.
6. EXISTING AIR DEVICE TO REMAIN. BALANCE PER PLAN REQUIREMENTS.
7. EXISTING AIR DEVICE TO BE RELOCATED. EXTEND AND CONNECT EXISTING FLEXIBLE DUCT FULL CONNECTION SIZE TO EXISTING GRILLE AS REQUIRED PER THE NEW REFLECTED CEILING PLAN.
8. NEW KITCHEN HOOD EXHAUST TO BE DUCTED TO EXISTING EXHAUST MAIN DUCT TERMINATING AT ROOFCAP. SIZE PER MANUFACTURER REQUIREMENTS.
9. EXISTING EXHAUST FAN TO REMAIN.
10. 4" DRYER EXHAUST DUCT UP TO ROOFJACK WITH BACKDRAFT DAMPER.
11. EXTEND AND CONNECT 3/4"ø CONDENSATE TO RETAINAGE AREA.
12. EXISTING AIR HANDLING UNIT TO REMAIN.
13. EXTEND AND CONNECT 3/4"ø CONDENSATE TO RETAINAGE AREA.
14. EXISTING AIR DEVICE TO BE RELOCATED. EXTEND EXISTING DUCTWORK AS NECESSARY. BALANCE PER PLAN REQUIREMENTS. (1)

1 MECHANICAL PLAN
1/8" = 1'-0"

This set has been digitally signed and sealed by Christopher R. Baker, PE on August 26, 2020 using a Digital Signature. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

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Cert. of Authorization# CA31201

Mechanical Electrical Plumbing Fire Protection

DocuSigned by: Christopher Baker
8/26/2020

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PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR: Conformed Set 05.22.20

REV	DESCRIPTION	DATE
1	ASI 01	08.26.20

GRAPHIC SCALE: 0" 1"

SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	CRB
DRAWN BY:	MJE
A/E OF RECORD:	CRB
PROJECT NO:	19-522

SHEET TITLE: MECHANICAL PLAN

SHEET No.: M1.1

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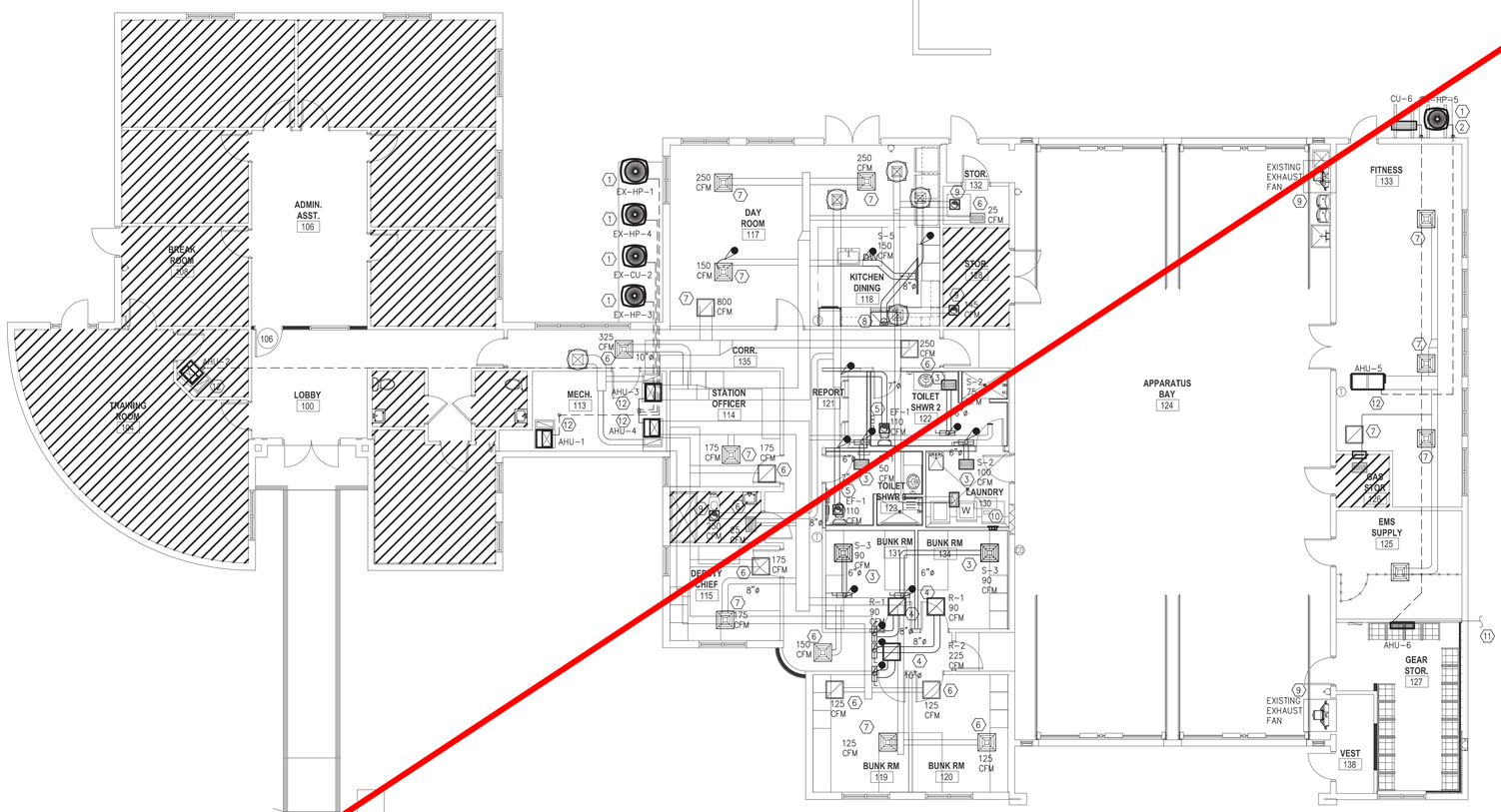

CONSTRUCTION NOTES

1. RELOCATED AND NEW CONDENSERS TO BE SECURED TO NEW EQUIPMENT RACKS. RACKS AS MANUFACTURED BY RECTORSEAL MODEL WBB50HR OR EQUAL.
2. REFRIGERANT LINES ROUTED THROUGH BREAK METAL CHASE.
3. NEW SUPPLY GRILLES. EXTEND AND CONNECT NEW BRANCH DUCT TO EXISTING MAIN. BALANCE PER PLAN REQUIREMENTS.
4. NEW RETURN GRILLS. EXTEND AND CONNECT NEW BRANCH DUCT TO EXISTING MAIN. BALANCE PER PLAN REQUIREMENTS.
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8. NEW KITCHEN HOOD EXHAUST TO BE DUCTED TO EXISTING EXHAUST MAIN DUCT TERMINATING AT ROOFCAP. SIZE PER MANUFACTURER REQUIREMENTS.
9. EXISTING EXHAUST FAN TO REMAIN.
10. 4" DRYER EXHAUST DUCT UP TO ROOFJACK WITH BACKDRAFT DAMPER.
11. EXTEND AND CONNECT 3/4"ø CONDENSATE TO RETAINAGE AREA.
12. EXISTING AIR HANDLING UNIT TO REMAIN.
13. EXTEND AND CONNECT 3/4"ø CONDENSATE TO RETAINAGE AREA.

1 MECHANICAL PLAN
1/8" = 1'-0"

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Mechanical | Electrical | Plumbing | Fire Protection

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SWEET | SPARKMAN ARCHITECTS

PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR:
Conformed Set
05.22.20

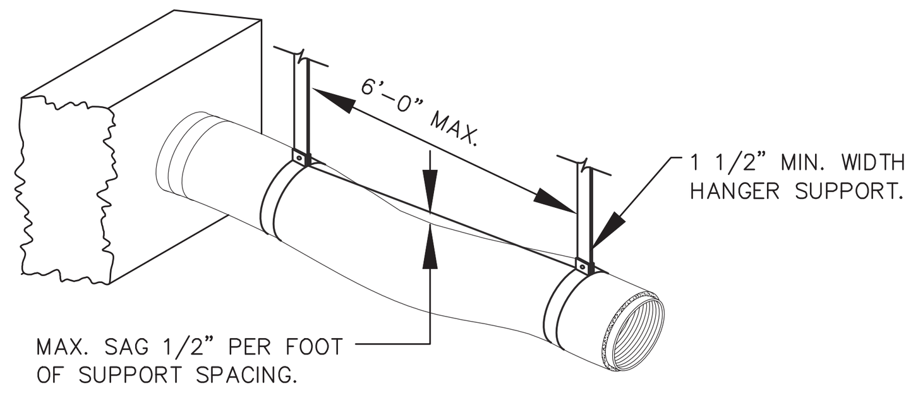
REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

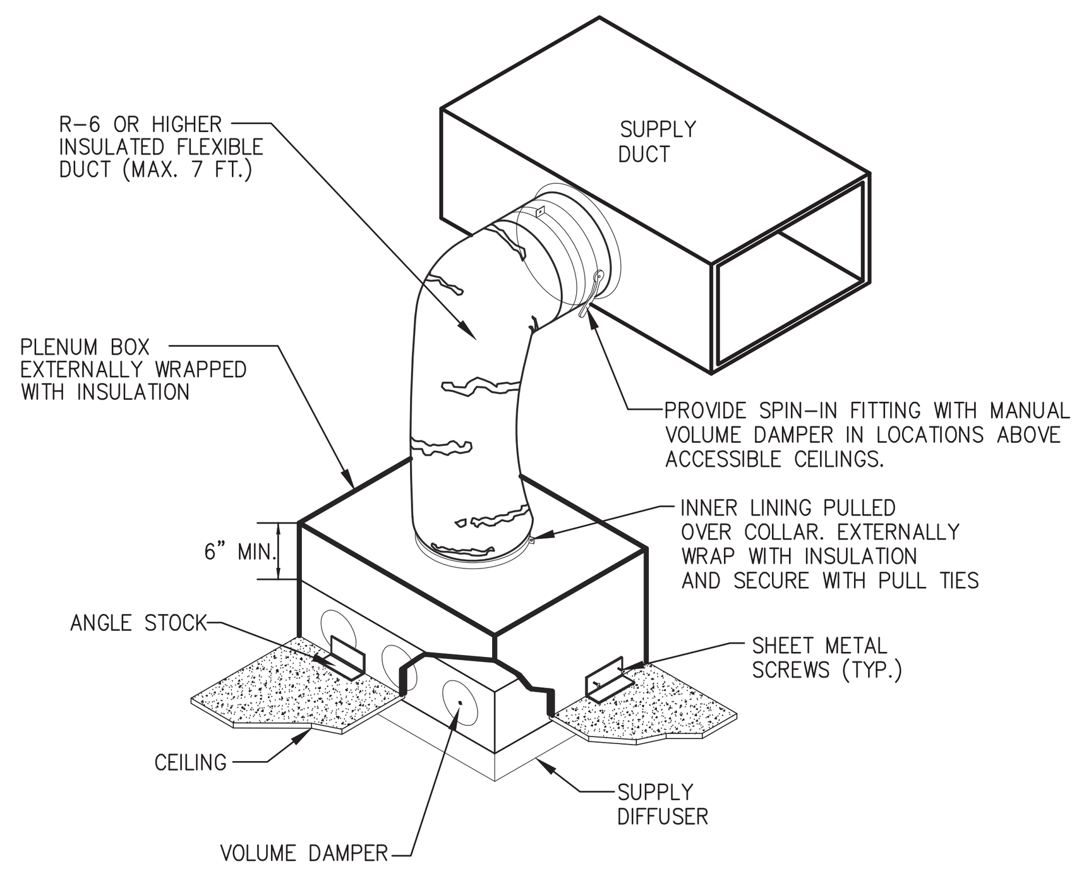
SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	CRB
DRAWN BY:	MJE
A/E OF RECORD:	CRB
PROJECT NO:	19-522

SHEET TITLE:
MECHANICAL PLAN

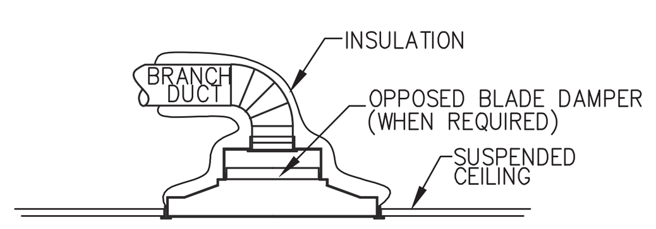
SHEET No.:
M1.1



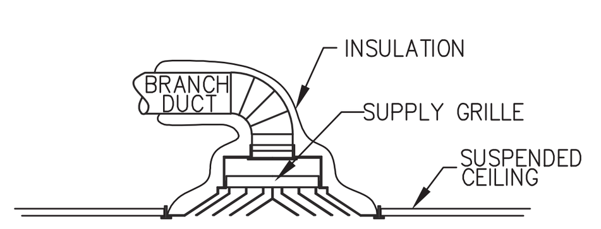
FLEXIBLE DUCT HANGER DETAIL
SCALE: NONE



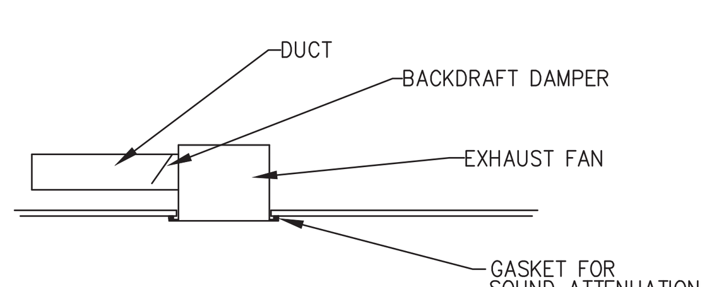
DUCTWORK CONNECTION TO SUPPLY DIFFUSER
SCALE: NONE



RETURN GRILLE DETAIL
SCALE: NONE



SUPPLY GRILLE DETAIL
SCALE: NONE



EXHAUST FAN DETAIL
SCALE: NONE

NEW A/C SCHEDULE

UNIT	MAN'R	MODEL	MBTUH TOT/SEN.	CFM	SEER	VOLT/PH	HEAT(kw)	AHU FAN HP	MCA / C/B	ENTERING AIR TEMP.	LEAVING AIR TEMP.	EXT. STATIC	O. A. CFM	REMARKS
AHU-1	TRANE	TEM6A0D60	---	1900	---	208/1	7.2KW	.75	52/60	80/67	59/57	.5	275	2
AHU-2	TRANE	TEM6A0C36	---	900	---	208/1	5.76KW	.5	40/40	80/67	56/56	.25	275	2
AHU-3	TRANE	TEM6A0C36	---	1150	---	208/1	5.76KW	.5	40/40	80/67	56/55	.3	100	2
AHU-4	TRANE	TEM6A0C42	---	1180	---	208/1	5.76KW	.5	40/40	80/67	56/55	.35	125	2
AHU-5	TRANE	TEM6A0B30	---	1000	---	208/1	---	.33	4/15	80/67	58/57	.25	150	2
HP-1	TRANE	4TWR7060	55,000	---	15	208/1	52,500	---	37/60	92	---	---	---	1,2
HP-2	TRANE	4TWR5036	36,000	---	15	208/1	33,000	---	18/30	92	---	---	---	1,2
HP-3	TRANE	4TWR5036	36,000	---	15	208/1	33,000	---	18/30	92	---	---	---	1,2
HP-4	TRANE	4TWR5042	41,000	---	15	208/1	38,000	---	22/35	92	---	---	---	1,2
HP-5	TRANE	4TWR5030	30,000	---	15.25	208/1	27,800	---	18/30	92	---	---	---	1,2

ACCESSORIES:
1. R-410A REFRIGERANT.
2. CONTRACTOR SHALL COORDINATE WITH DIVISION 26 CONTRACTOR FOR ELECTRICAL REQUIREMENTS.

A/C SCHEDULE

UNIT	MAN'R	MODEL	MBTUH TOT/SEN.	CFM	SEER	VOLT/PH	HEAT(kw)	AHU FAN HP	MCA / C/B	ENTERING AIR TEMP.	LEAVING AIR TEMP.	EXT. STATIC	O. A. CFM	REMARKS
AHU-6	MITSUBISHI	MSZ-GL09NA	---	300	---	208/1	---	.76AMPS	1/15	80/67	59/57	---	---	2,3
CU-6	MITSUBISHI	MUZ-GL09NA	9,000	---	24	208/1	15,900	---	9/15	92	---	---	---	1,2

ACCESSORIES:
1. R-410A REFRIGERANT.
2. CONTRACTOR SHALL COORDINATE WITH DIVISION 26 CONTRACTOR FOR ELECTRICAL REQUIREMENTS.
3. AHU POWERED FROM OUTDOOR CONDENSING UNIT.

FAN SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER	CATALOG #	CFM	EX.S.P.	VOLT/Ø/HZ	AMP/WATTS	FAN SPEED / SONES	NOTES
EF-1	CEILING	GREENHECK	SP-A110	110	0.15	120/1	17	932/0.3	1,2

NOTES:
1. SPEED CONTROLLER
2. BACKDRAFT DAMPER

AIR DEVICE SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER	CATALOG #	C.F.M.	NECK SIZE	REMARKS
S-1	1-WAY	TITUS	250-AA	50	8 X 6	1
S-2	1-WAY	TITUS	250-AA	75-100	12 X 6	1
S-3	4-WAY	TITUS	TDCA-AA	90-130	9 X 9	1
S-4	4-WAY	TITUS	TDCA-AA	220	12 X 12	1
S-5	LINEAR	TITUS	FL-10	180	8"ø	2
R-1	RECTANGULAR	TITUS	350FL	90	10 X 10	1
R-2	RECTANGULAR	TITUS	350FL	225	14 X 14	1

NOTES:
1. OPPOSING BLADE DAMPER
2. 4' LONG 1.0" SLOT - 1 SLOT DIFFUSER WITH HIGH THROW PATTERN AND FIELD FABRICATED PLENUM.

HVAC - NOTES

1. DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. DRAWINGS ARE NOT TO BE SCALED. THE DRAWINGS AND DETAILS SHALL BE EXAMINED FOR EXACT LOCATION OF FIXTURES AND EQUIPMENT. ANYTHING MENTIONED IN THE SPECIFICATION WILL BE INTERPRETED AS BEING IN BOTH. ANY CONFLICT SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER OR ENGINEER BEFORE PROCEEDING WITH THE WORK.

2. THE HVAC CONTRACTOR SHALL FURNISH ALL EQUIPMENT, MATERIAL, LABOR, ETC. NECESSARY TO PROVIDE A COMPLETE, WORKABLE AND CODE APPROVED AIR CONDITIONING SYSTEM. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS, LOCAL, STATE AND NATIONAL CODES.

3. THE HVAC CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS AND PAY ALL GOVERNMENT FEES, SALES TAXES AND OTHER COSTS IN CONNECTION WITH HIS WORK; FILE ALL NECESSARY APPROVALS OF ALL GOVERNMENTAL DEPARTMENTS HAVING JURISDICTION; OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION FOR HIS WORK; AND DELIVER TO THE OWNER THE SAME CERTIFICATES BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR THE WORK.

4. THE HVAC CONTRACTOR SHALL GIVE FULL COOPERATION TO OTHER TRADES AND SHALL FURNISH IN WRITING TO THE ARCHITECT, ANY INFORMATION NECESSARY TO PERMIT THE WORK OF ALL TRADES TO BE INSTALLED SATISFACTORILY AND WITH THE LEAST POSSIBLE INTERFERENCE OR DELAY.

5. THE CONTRACTOR SHALL EXAMINE THE DUCTWORK ROUTING ON THESE PLANS WITH RESPECT TO THE FINAL STRUCTURAL TRUSS ARRANGEMENT. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS INDICATING THE FINAL DUCT ROUTING FOR REVIEW BY THE ARCHITECT AND ENGINEER PRIOR TO INSTALLING ANY MATERIAL ON THIS PROJECT. THIS MAY REQUIRE DUCTWORK ROUTING WITHIN STRUCTURAL TRUSS SPACE AND SHALL BE COORDINATED WITH FINAL STRUCTURAL ARRANGEMENT. THE SHOP DRAWING SHALL BE OF THE SAME SCALE AS THE ORIGINAL CONTRACT DOCUMENT. FINAL DUCT ROUTING SHALL BE PROVIDED WITHOUT ADDITIONAL COST TO THE PROJECT.

6. CLEARANCES AROUND APPLIANCES TO ELEMENTS OF PERMANENT CONSTRUCTION, INCLUDING OTHER INSTALLED EQUIPMENT AND APPLIANCES, SHALL BE SUFFICIENT TO ALLOW INSPECTION, SERVICE, REPAIR OR REPLACEMENT WITHOUT REMOVING SUCH ELEMENTS OF PERMANENT CONSTRUCTION.

7. MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER OPERATION AND CONSISTENT WITH GOOD WORKMANSHIP, SHALL BE INCLUDED IN THE ESTIMATE, THE SAME AS IF SHOWN ON DRAWINGS.

8. ALL DUCTWORK IS TO BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH SMACNA MANUALS AND THE FOLLOWING SCHEDULE:

A. RECTANGULAR DUCTS - GALVANIZED SHEET METAL WITH EXTERNAL DUCT WRAP. SEE RECTANGULAR DUCT SCHEDULE FOR DUCT GAGE. ALL DUCTS WITH 24 INCH WIDTH OR GREATER SHALL HAVE MECHANICAL FASTENERS AT A MAXIMUM OF 18 INCH CENTERS. DUCTBOARD SUCH AS 'SUPERDUCT' AS MANUFACTURED BY JOHNS MANVILLE, INTERNALLY LINED FIBERBOARD MAY BE SUBMITTED AS AN ALTERNATE. THE DUCTBOARD JOINTS SHALL BE TAPED AND MASTICED.

B. RIGID ROUND DUCTS - GALVANIZED SHEET METAL WITH EXTERNAL INSULATION.

C. FLEXIBLE ROUND DUCTS - FLEXIBLE, WIRE REINFORCED DUCT WITH EXTERNAL INSULATION WITH VAPOR BARRIER AND FOIL FACED. FLEX MUST BE STRETCHED TO REMOVE ACCORDION EFFECT. FLEX DUCT LENGTH SHALL NOT EXCEED 7' LENGTH.

D. EXHAUST AIR DUCT - INSULATED IN UNCONDITIONED SPACES WITH EXTERNAL DUCT WRAP. UP TO 7", FLEXIBLE ALUMINUM, ALL LARGER SHALL BE GALVANIZED SHEET METAL.

9. MINIMUM INSULATION RESISTANCE FOR DUCTWORK SHALL BE AS FOLLOWS:

A. CONDITIONED SPACES - R-4.2
B. UNCONDITIONED SPACES - R-6.0
C. ATTICS - R-8.0

10. ALL DUCT SIZES INDICATE "FREE AREA" DIMENSIONS, ALL TAKE-OFFS AND DIVIDED FLOWS SHALL HAVE VOLUME DAMPERS. PROVIDE SPIN-IN COLLARS WITH INTEGRAL SCOOPS AND DAMPERS FOR ALL BRANCH TAKE- OFFS. PROVIDE TURNING VANES FOR ALL ELBOWS AND SPLITTERS.

11. FURNISH AND INSTALL ALL GRILLES, DIFFUSERS AND REGISTERS OF THE TYPE AND AT THE LOCATIONS SHOWN ON THE PLANS. ALL GRILLES, DIFFUSERS, LOUVERS, ETC. SHALL BE EXTRUDED ALUMINUM WITH BAKED WHITE ENAMEL FINISH. SPONGE RUBBER GASKETS SHALL BE INSTALLED BEHIND FLANGES OF ALL GRILLES, DIFFUSERS AND REGISTERS TO PREVENT LEAKAGE AND STREAKING. ALL GRILLES, DIFFUSERS, REGISTERS, ETC. SHALL BE INSTALLED IN ACCORDANCE WITH FACTORY DETAILS.

12. FACTORY MADE OPPOSED BLADE DAMPERS WITH FRONT ACCESSIBLE OPERATOR AND DUCT RING SHALL BE FURNISHED FOR EACH NEW DIFFUSER.

13. PROVIDE FLEXIBLE CONNECTORS WHERE METAL DUCTWORK CONNECTS TO FANS OR AIR HANDLERS.

14. WHERE IT IS POSSIBLE TO SEE THROUGH DIFFUSERS, GRILLES OR REGISTERS TO DUCTWORK, LIGHT COLORED INSULATION OR PLENUMS, THE INTERIOR DUCTWORK OR PLENUM SHALL BE PAINTED FLAT BLACK.

15. THE REFRIGERANT LINES SHALL BE SIZED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. REFRIGERANT LINE INSULATION SHALL BE 1" MINIMUM IN UNCONDITIONED ATTIC AREAS. COVER INSULATION AT BUILDING EXTERIOR WITH UV RESISTANT COATING. INSTALL INSULATION SECTIONS WITH COMPRESSION GLUE AT BUTT JOINTS.

16. THE HVAC CONTRACTOR IS RESPONSIBLE FOR ALL CONTROLS AND CONTROL WIRING. SEE SEQUENCE OF OPERATION.

17. ALL AIR HANDLERS TO HAVE SLOPED DRAIN PANS.

18. THE HVAC CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL CONDENSATE PIPING. CONDENSATE PIPING SHALL BE CONSTRUCTED OF PVC PIPING.

19. WORK SHALL INCLUDE TESTING AND BALANCING OF THE HVAC SYSTEM INCLUDING KITCHEN HOOD(S) IF APPLICABLE. THE CONTRACTOR SHALL SUBMIT COPIES OF TEST AND BALANCE REPORTS SHOWING RESULTS OF BALANCING OF AIR QUANTITIES TO PLAN REQUIREMENTS. MAKE ALL ADJUSTMENTS REQUIRED TO PROVIDE ±10% DESIGN AIR FLOW.

20. WORK SHALL INCLUDE STARTUP OF ALL SYSTEMS, FURNISHING OF OPERATING AND MAINTENANCE INSTRUCTIONS, WALK THROUGH WITH MAINTENANCE CREW, AND ONE YEAR GUARANTEE, COMMENCING ON DATE OF ACCEPTANCE BY OWNER.

21. THE VENTILATION RATE PROCEDURE OF FLORIDA BUILDING CODE-MECHANICAL 2017 HAS BEEN USED TO DETERMINE THE AMOUNT OF OUTSIDE AIR FOR THIS SPACE. ANY CHANGE IN SPACE USE, CONTAMINANTS, OR OPERATION MAY REQUIRE A REEVALUATION OF THE DESIGN AND IMPLEMENTATION OF NEEDED CHANGES.

22. THERMOSTATS, HUMIDISTATS AND CO2 SENSORS SHALL BE MOUNTED AT 48" ABOVE THE FLOOR.

23. EACH CONDITIONED SPACE SHALL BE PROVIDED WITH A MEANS OF RETURNING AIR TO THE AHU AS INDICATED ON THIS PLAN. WHERE NOT SHOWN, ACCEPTABLE METHODS INCLUDE:

A. RETURN TRANSFER DUCT SHALL BE 1 1/2 TIMES THE CROSS SECTIONAL AREA OF THE SUPPLY DUCT ENTERING THE ROOM.
B. TRANSFER GRILLES SHALL USE 50 SQUARE INCHES (OF GRILLE AREA) TO 100 CFM (OF SUPPLY AIR) FOR SIZING THROUGH THE WALL TRANSFER GRILLES.
C. BOTH A. AND B. SHALL USE UNDERCUT ENTRY DOORS (MIN 1")

24. ALL EQUIPMENT EXTERIOR TO THE BUILDING SHALL BE SECURED TO WITHSTAND 160MPH WINDS.

25. MECHANICAL EQUIPMENT IDENTIFICATION: PROVIDE ENGRAVED PLASTIC LAMINATE SIGN, PLASTIC EQUIPMENT MARKER, OR STENCILED SIGNS FOR THE FOLLOWING EQUIPMENT AND OPERATIONAL DEVICES, FREE HAND LETTERING SHALL NOT BE ACCEPTED.

A. AIR HANDLERS, CONDENSERS AND SIMILAR MOTOR DRIVEN UNITS

LETTERING SIZE SHALL BE 1" HEIGHT (MINIMUM) AS NEEDED FOR PROPER IDENTIFICATION TEXT FOR EQUIPMENT IDENTIFICATION SIGNS SHALL INCLUDE, UNIT NAME AND NUMBER AS PROVIDED ON THE CONTRACT DRAWINGS (IE: AHU-1, CU-1, HEX-1 ETC.). IF NOT IDENTIFIED BY THE MANUFACTURER, THE CONTRACTOR SHALL PROVIDE A SIGN TO INDICATE THE LOCATION OF FILTER ACCESS ON AHU'S.

1 MECHANICAL NOTES, DETAILS AND SCHEDULES
SCALE: NONE

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PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR: Conformed Set 05.22.20

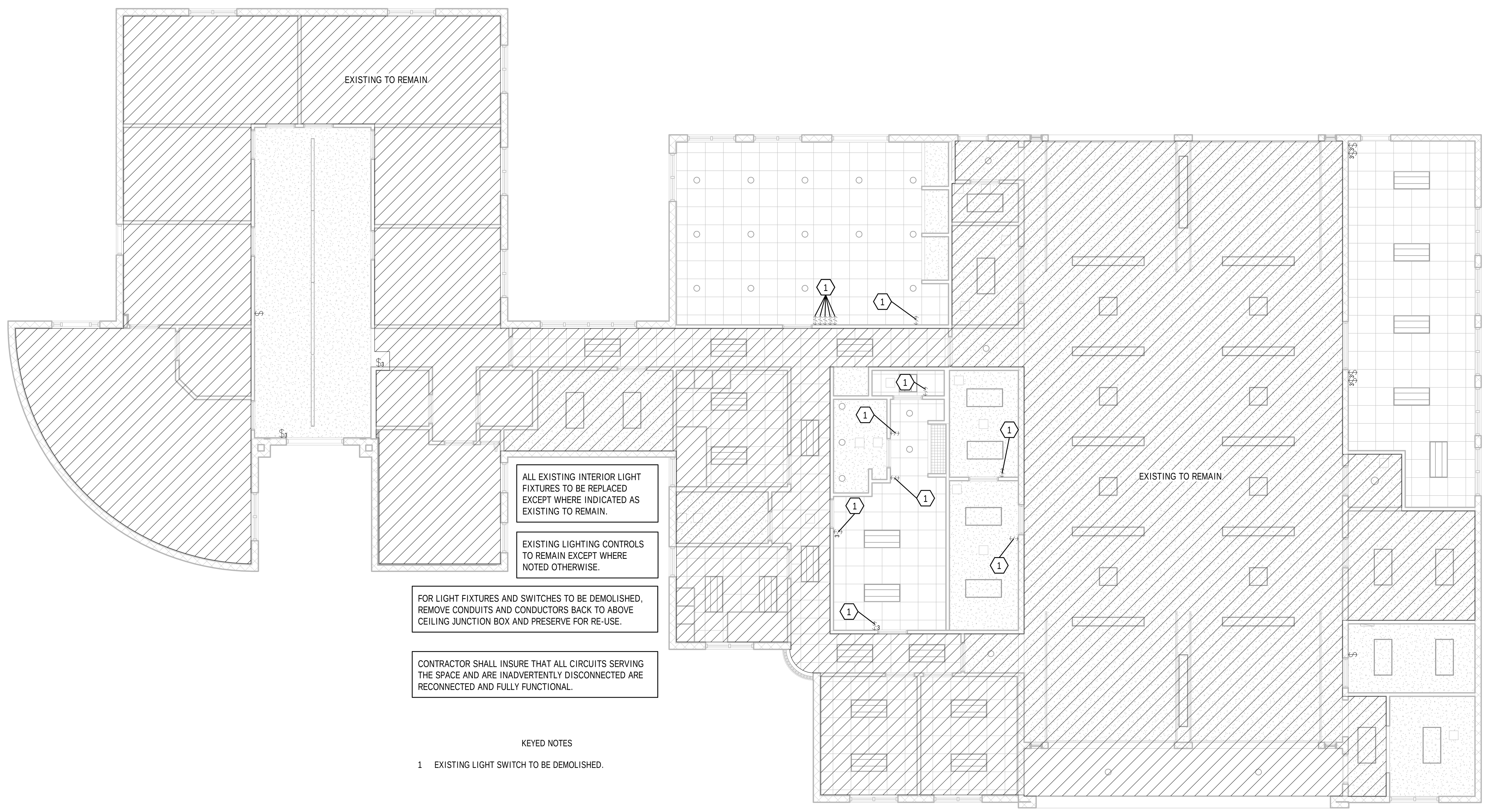
REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	CRB
DRAWN BY:	MJE
A/E OF RECORD:	CRB
PROJECT NO:	19-522

SHEET TITLE:
MECHANICAL NOTES, DETAILS AND SCHEDULES

SHEET No.:
M2.0



ALL EXISTING INTERIOR LIGHT FIXTURES TO BE REPLACED EXCEPT WHERE INDICATED AS EXISTING TO REMAIN.

EXISTING LIGHTING CONTROLS TO REMAIN EXCEPT WHERE NOTED OTHERWISE.

FOR LIGHT FIXTURES AND SWITCHES TO BE DEMOLISHED, REMOVE CONDUITS AND CONDUCTORS BACK TO ABOVE CEILING JUNCTION BOX AND PRESERVE FOR RE-USE.

CONTRACTOR SHALL INSURE THAT ALL CIRCUITS SERVING THE SPACE AND ARE INADVERTENTLY DISCONNECTED ARE RECONNECTED AND FULLY FUNCTIONAL.

KEYED NOTES

1 EXISTING LIGHT SWITCH TO BE DEMOLISHED.

DEMOLITION NOTES

THE DEMOLITION PROCEDURES SHALL PROVIDE FOR SAFE CONDUCT OF THE WORK, PROTECTION OF PERSONNEL, CAREFUL REMOVAL, AND DISPOSAL OF MATERIALS AS INDICATED. THE PROCEDURES ALSO INCLUDE PROTECTION OF PROPERTY TO REMAIN UNDISTURBED, COORDINATION WITH OTHER WORK IN PROGRESS AND TIMELY DISCONNECTION OF UTILITY SERVICES.

EXISTING EQUIPMENT WHICH IS TO BE REMOVED, SHALL REMAIN PROPERTY OF OWNER AND BE STORED OR REMOVED BY CONTRACTOR AS DIRECTED BY OWNER. REMOVE ALL MATERIAL REJECTED BY THE OWNER FROM THE WORK SITE AND DISPOSE OF IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND NATIONAL CODES. CONTRACTOR MUST CERTIFY TO OWNER THAT THE MATERIAL HAS BEEN LEGALLY DISPOSED OF IN WRITTEN FORM.

EXISTING WORK SHALL NOT BE CUT, DRILLED, ALTERED, REMOVED, OR TEMPORARILY REMOVED FOR THE INSTALLATION REQUIRED TO PERFORM CONSTRUCTION ACTIVITIES OF MECHANICAL AND ELECTRICAL WORK AND OTHER CONSTRUCTION UNDER THE CONTRACT WITHOUT AUTHORIZATION OF THE OWNER. STRUCTURAL MEMBERS OF CONCRETE OR STRUCTURAL STEEL SHALL NOT BE ALTERED WITHOUT AUTHORIZATION OF THE OWNER.

CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKWAYS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.

REMOVE AND LEGALLY DISPOSE OF ITEMS EXCEPT THOSE INDICATED TO BE REINSTALLED, SALVAGED, OR TO REMAIN THE OWNER'S PROPERTY.

COMPLY WITH GOVERNING EPA NOTIFICATION REGULATIONS BEFORE STARTING DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION. LOCATE, IDENTIFY, SHUT OFF, DISCONNECT, AND SEAL OR CAP & LOCK OFF AND TAG ANY/ALL UTILITY SERVICES SERVING STRUCTURES TO BE DEMOLISHED. CONTRACTOR SHALL LOCATE.

PROVIDE TEMPORARY SERVICES DURING THE INTERRUPTION TO EXISTING UTILITIES TO REMAIN, AS ACCEPTABLE TO OWNER AND TO GOVERNING AUTHORITIES. COORDINATE WITH OWNER'S REPRESENTATIVE.

REMOVE AND REINSTALL: REMOVE ITEMS INDICATED - CLEAN, SERVICE, AND OTHERWISE PREPARE FOR REUSE - STORE AND PROTECT AGAINST DAMAGE. REINSTALL ITEMS IN LOCATIONS INDICATED.

EXISTING TO REMAIN: PROTECT CONSTRUCTION INDICATED TO REMAIN AGAINST DAMAGE AND SOILING DURING DEMOLITION. WHEN PERMITTED BY THE ARCHITECT, ITEMS MAY BE REMOVED TO A SUITABLE, PROTECTED STORAGE LOCATION DURING DEMOLITION AND THEN CLEANED AND REINSTALLED IN THEIR ORIGINAL LOCATIONS.

EXCEPT FOR ITEMS OR MATERIALS INDICATED TO BE REUSED, SALVAGED, OR OTHERWISE INDICATED TO REMAIN THE OWNER'S PROPERTY, DEMOLISHED MATERIALS SHALL BECOME THE CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM THE SITE WITH FURTHER DISPOSITION AT THE CONTRACTOR'S OPTION.

SCOPE OF WORK

1. THE SCOPE OF THIS PROJECT INCLUDES THE DEMOLITION OR REPLACEMENT OF EXISTING AND ADDITION OF NEW LIGHT FIXTURES AND DEVICES AS INDICATED. THE MATERIAL TO BE DEMOLISHED OR RELOCATED INCLUDES ASSOCIATED BRANCH CIRCUITS, CONDUITS, ETC., FOR PORTION OF ELECTRICAL SYSTEM IN PRESENT LOCATION AS IMPLIED BY THE NATURE OF THE WORK TO BE REMOVED OR RELOCATED.

2. DEMOLITION SHALL BE PERFORMED IN ACCORDANCE WITH DEMOLITION NOTES, AND ALL NEW WORK SHALL CONFORM TO THE REQUIREMENTS OF DIVISION 26 OF THE BUILDING CONSTRUCTION DOCUMENTS.

1 ELECTRICAL LIGHTING DEMOLITION PLAN
1/8" = 1'-0"

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N

PROJECT TITLE: TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR: Conformed Set
05.22.20

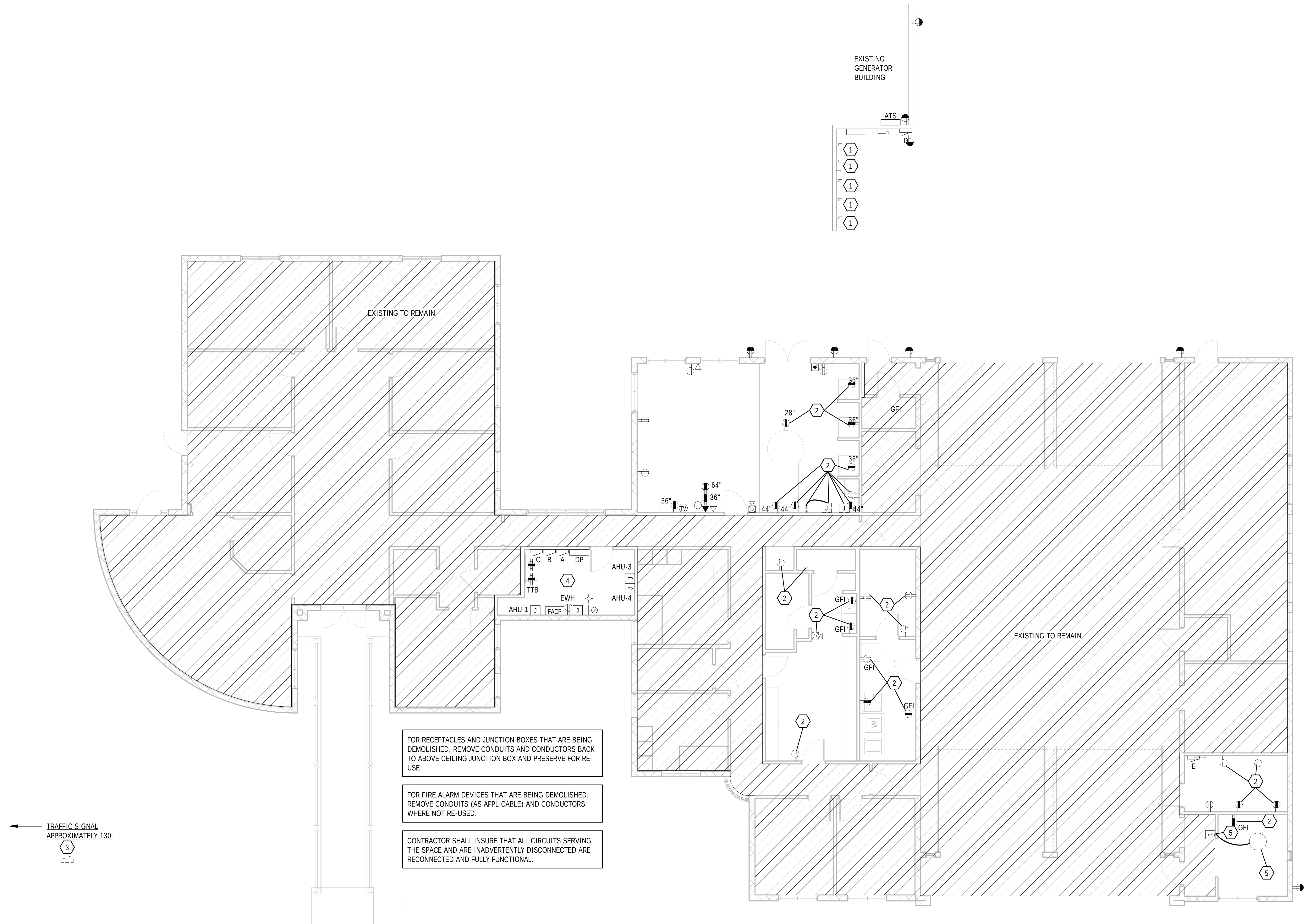
REV	DESCRIPTION	DATE

GRAPHIC SCALE:
0" 1"

SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	CRB
DRAWN BY:	JDS
A/E OF RECORD:	JDS
PROJECT NO:	19-522

SHEET TITLE:
ELECTRICAL LIGHTING DEMOLITION PLAN

SHEET No.:
E1.0



FOR RECEPTACLES AND JUNCTION BOXES THAT ARE BEING DEMOLISHED, REMOVE CONDUITS AND CONDUCTORS BACK TO ABOVE CEILING JUNCTION BOX AND PRESERVE FOR RE-USE.

FOR FIRE ALARM DEVICES THAT ARE BEING DEMOLISHED, REMOVE CONDUITS (AS APPLICABLE) AND CONDUCTORS WHERE NOT RE-USED.

CONTRACTOR SHALL INSURE THAT ALL CIRCUITS SERVING THE SPACE AND ARE INADVERTENTLY DISCONNECTED ARE RECONNECTED AND FULLY FUNCTIONAL.

KEYED NOTES

1 EXISTING MECHANICAL EQUIPMENT TO BE REPLACED AND RELOCATED. DEMOLISH EXISTING DISCONNECTS AND PROVIDE NEW NEMA 3R DISCONNECTS AND NEW BRANCH CIRCUIT. REFER TO SHEET E1.3 INDICATING NEW LOCATIONS. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO START OF WORK.
2 EXISTING DEVICE TO BE DEMOLISHED.
3 EXISTING TRAFFIC SIGNAL/ILLUMINATED STREET SIGN POWER FEED TO BE DICONNECTED FROM EXISTING SOURCE AND RE-FED POWER FROM FIRE STATION. UNDERGROUND PORTION OF NEW FEEDER SHALL BE ENCASED IN A MINIMUM OF 2" CONCRETE. PROVIDE NEW 2-CIRCUIT NEMA 3R LOADCENTER AND NEW PHOTOCELL FOR ILLUMINATED STREET SIGNS. REMOVE ANY UNUSED PORTION OF THE ELECTRICAL SYSTEM.
4 ALL ELECTRICAL DISTRIBUTION EQUIPMENT IS EXISTING TO REMAIN.
5 EXISTING EXHAUST FAN AND ASSOCIATED SWITCH TO BE DEMOLISHED.

1 ELECTRICAL POWER DEMOLITION PLAN
1/8" = 1'-0"

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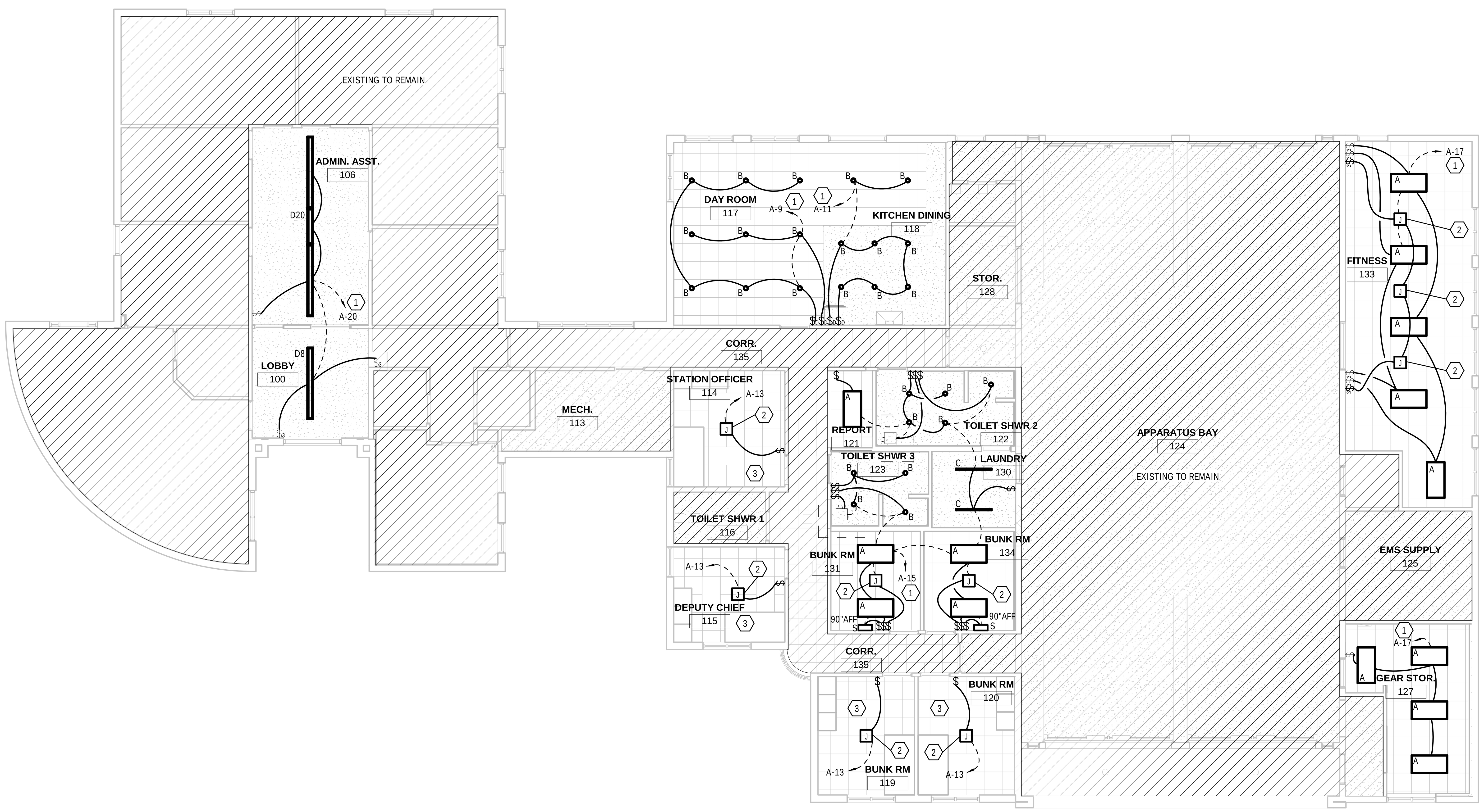
SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	CRB
DRAWN BY:	JDS
A/E OF RECORD:	JDS
PROJECT NO:	19-522

SHEET TITLE:
ELECTRICAL POWER DEMOLITION PLAN

SHEET No.:
E1.1



KEYED NOTES

1 RECONNECT TO EXISTING LIGHTING CIRCUIT SERVING THIS AREA. FIELD VERIFY EXISTING CIRCUIT PRIOR TO START OF WORK.

2 PROVIDE FAN RATED JUNCTION BOX. PROVIDE FAN EQUAL TO KICHLER BOWEN 52" WITH BRUSHED NICKEL FINISH. COORDINATE FAN SELECTION WITH ARCHITECT AND SWITCHING REQUIREMENTS WITH MANUFACTURER PRIOR TO ORDERING. COORDINATE FAN LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.

3 EXISTING LIGHTS AND SWITCHING TO REMAIN. SCOPE FOR THIS ROOM ONLY INCLUDES ADDITION OF CEILING FAN.

1 ELECTRICAL LIGHTING PLAN
1/8" = 1'-0"

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PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
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ISSUED FOR: Conformed Set 05.22.20

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PROJECT MANAGER:	CRB
DRAWN BY:	JDS
A/E OF RECORD:	JDS
PROJECT NO:	19-522

SHEET TITLE:
ELECTRICAL LIGHTING PLAN

SHEET No.:
E1.2

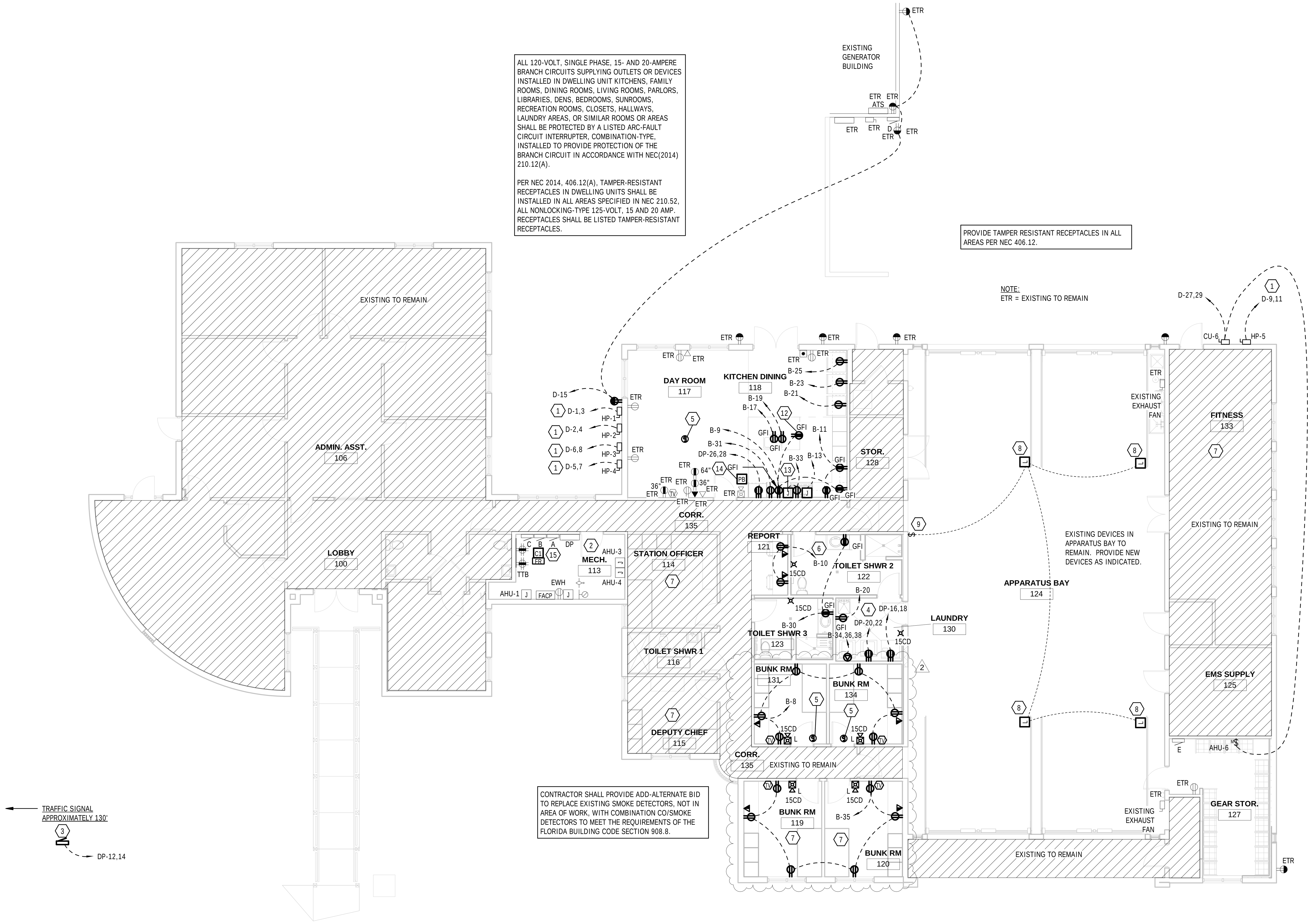
ALL 120-VOLT, SINGLE PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT IN ACCORDANCE WITH NEC(2014) 210.12(A).

PER NEC 2014, 406.12(A), TAMPER-RESISTANT RECEPTACLES IN DWELLING UNITS SHALL BE INSTALLED IN ALL AREAS SPECIFIED IN NEC 210.52, ALL NONLOCKING-TYPE 125-VOLT, 15 AND 20 AMP. RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.

PROVIDE TAMPER RESISTANT RECEPTACLES IN ALL AREAS PER NEC 406.12.

NOTE:
ETR = EXISTING TO REMAIN

CONTRACTOR SHALL PROVIDE ADD-ALTERNATE BID TO REPLACE EXISTING SMOKE DETECTORS, NOT IN AREA OF WORK, WITH COMBINATION CO/SMOKE DETECTORS TO MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE SECTION 908.8.



KEYED NOTES

1. REPLACED AND RELOCATED MECHANICAL EQUIPMENT. PROVIDE NEW NEMA 3R DISCONNECT AND NEW BRANCH CIRCUIT.
2. ALL ELECTRICAL DISTRIBUTION EQUIPMENT IS EXISTING TO REMAIN.
3. EXISTING TRAFFIC SIGNAL/ILLUMINATED STREET SIGN POWER FEED TO BE DISCONNECTED FROM EXISTING SOURCE AND RE-FED POWER FROM FIRE STATION. UNDERGROUND PORTION OF NEW FEEDER SHALL BE ENCASED IN A MINIMUM OF 2" CONCRETE. PROVIDE NEW 2-CIRCUIT NEMA 3R LOADCENTER AND NEW PHOTOCELL FOR ILLUMINATED STREET SIGNS. REMOVE ANY UNUSED PORTION OF THE ELECTRICAL SYSTEM.
4. COORDINATE FINAL LOCATIONS AND SPECIFICATIONS OF LAUNDRY EQUIPMENT WITH OWNER/ARCHITECT PRIOR TO ROUGH-IN.
5. PROVIDE COMBINATION CO/SMOKE DETECTOR.
6. CONNECT TO EXISTING BUNK ROOM CORRIDOR RECEPTACLE CIRCUIT. FIELD VERIFY EXISTING CIRCUIT PRIOR TO ROUGH-IN.
7. EXISTING SMOKE DETECTORS IN THIS ROOM SHALL BE RELOCATED A MINIMUM OF 36" FROM NEW CEILING FAN AND NEW, RELOCATED, OR EXISTING HVAC GRILLE. PROVIDE ADDITIONAL SENSORS TO MAINTAIN COVERAGE AS NECESSARY.
8. NEW LIMIT SWITCH FOR EXISTING EXHAUST FAN CONTROL.
9. NEW MANUAL OVERRIDE SWITCH. CONNECT TO EXISTING CONTROL SYSTEM.
10. NOT USED.
11. NOT USED.
12. COUNTERTOP RECEPTACLE EQUAL TO HUBBELL RCT220 WITH HARDWIRED CONNECTION. VERIFY FINAL LOCATION WIH ARCHITECT.
13. J-BOX FOR CONNECTION TO RANGE GAS SOLENOID VALVE. REFER TO CONTACTOR CONTROL DETAIL ON SHEET E2.1.
14. MECHANICALLY HELD, NORMALLY CLOSED EMERGENCY POWER OFF SWITCH FOR KITCHEN EQUIPMENT. REFER TO CONTACTOR CONTROL DETAIL ON SHEET E2.1.
15. CONTACTOR AND FIRE ALARM RELAY FOR EMERGENCY CONTROL OF KITCHEN EQUIPMENT. REFER TO CONTACTOR SCHEDULE ON SHEET E2.1.

(1) ELECTRICAL POWER PLAN
1/8" = 1'-0"

This set has been digitally signed and sealed by Jon D. Shepard, PE on August 26, 2020 using a Digital Signature. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

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DocuSigned by: Jon Shepard
8/26/2020

JON DANIEL SHEPARD, No. 71536, STATE OF FLORIDA, PROFESSIONAL ENGINEER — 08-26-2020

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PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR: Conformed Set 05.22.20

REV	DESCRIPTION	DATE
2	ASI 01	08.26.20
1	Conformed Set	05.22.20

GRAPHIC SCALE: 0" 1"

SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	CRB
DRAWN BY:	JDS
A/E OF RECORD:	JDS
PROJECT NO:	19-522

SHEET TITLE: ELECTRICAL POWER PLAN

SHEET No.: E1.3

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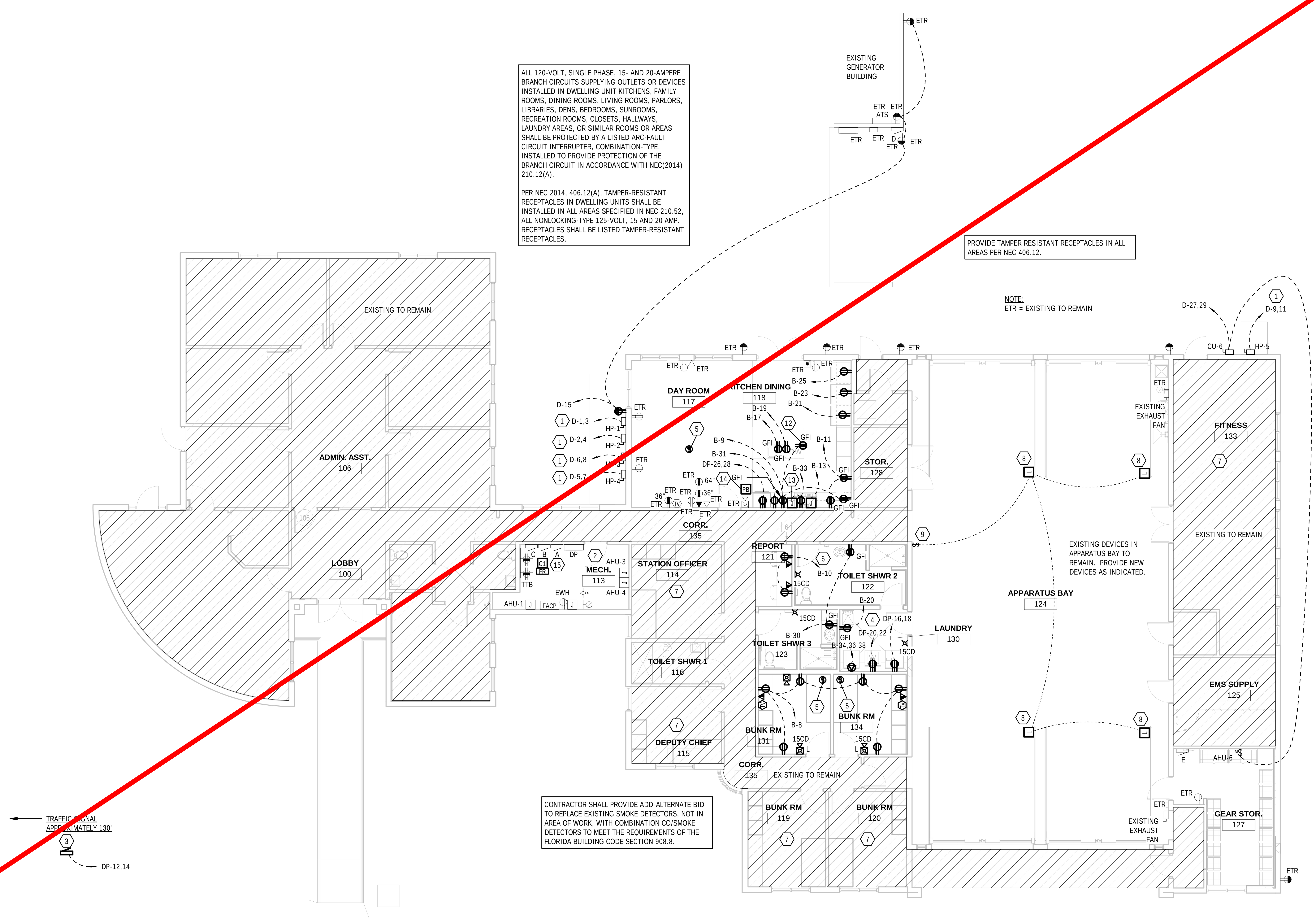

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CONTRACTOR SHALL PROVIDE ADD-ALTERNATE BID TO REPLACE EXISTING SMOKE DETECTORS, NOT IN AREA OF WORK, WITH COMBINATION CO/SMOKE DETECTORS TO MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE SECTION 908.8.

KEYED NOTES

1. REPLACED AND RELOCATED MECHANICAL EQUIPMENT. PROVIDE NEW NEMA 3R DISCONNECT AND NEW BRANCH CIRCUIT.
2. ALL ELECTRICAL DISTRIBUTION EQUIPMENT IS EXISTING TO REMAIN.
3. EXISTING TRAFFIC SIGNAL/ILLUMINATED STREET SIGN POWER FEED TO BE DICONNECTED FROM EXISTING SOURCE AND RE-FED POWER FROM FIRE STATION. UNDERGROUND PORTION OF NEW FEEDER SHALL BE ENCASED IN A MINIMUM OF 2" CONCRETE. PROVIDE NEW 2-CIRCUIT NEMA 3R LOADCENTER AND NEW PHOTOCELL FOR ILLUMINATED STREET SIGNS. REMOVE ANY UNUSED PORTION OF THE ELECTRICAL SYSTEM.
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12. COUNTERTOP RECEPTACLE EQUAL TO HUBBELL RCT220 WITH HARDWIRED CONNECTION. VERIFY FINAL LOCATION WIH ARCHITECT.
13. J-BOX FOR CONNECTION TO RANGE GAS SOLENOID VALVE. REFER TO CONTACTOR CONTROL DETAIL ON SHEET E2.1.
14. MECHANICALLY HELD, NORMALLY CLOSED EMERGENCY POWER OFF SWITCH FOR KITCHEN EQUIPMENT. REFER TO CONTACTOR CONTROL DETAIL ON SHEET E2.1.
15. CONTACTOR AND FIRE ALARM RELAY FOR EMERGENCY CONTROL OF KITCHEN EQUIPMENT. REFER TO CONTACTOR CONTROL DETAIL AND CONTACTOR SCHEDULE ON SHEET E2.1.

1 ELECTRICAL POWER PLAN
1/8" = 1'-0"

Quest Design Group, Inc.
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Sarasota, Fl 34234
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Cert. of Authorization# CA31201
Mechanical Electrical Plumbing Fire Protection

SWEET SPARKMAN ARCHITECTS
2168 MAIN STREET
SARASOTA, FL 34237
FL AA26000857

PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR: Conformed Set 05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	CRB
DRAWN BY:	JDS
A/E OF RECORD:	JDS
PROJECT NO:	19-522

SHEET TITLE: ELECTRICAL POWER PLAN

SHEET No.: E1.3

ELECTRICAL IDENTIFICATION NOTES

PRODUCTS AND MATERIALS
ALL LABELS SHALL BE PERMANENT AND MACHINE-PRODUCED. HANDWRITTEN LABELS SHALL NOT BE ACCEPTABLE, UNLESS OTHERWISE INDICATED.

CONDUCTOR/CABLING LABELS: ALL CONDUCTOR/CABLING LABELS SHALL BE CONSTRUCTED OF TRANSPARENT VINYL OR VINYL CLOTH, SELF-LAMINATING TAPE. FLAG-TYPE LABELS SHALL NOT BE ACCEPTABLE. LABELS SHALL BE SIZED TO ACCOMMODATE THAT CIRCUMFERENCE OF THE CONDUCTOR/CABLE.

CONDUCTOR/CABLING IDENTIFICATION TAPE: CONDUCTOR/CABLING IDENTIFICATION TAPE SHALL BE SCOTCH # 35 VINYL ELECTRICAL TAPE, COLORED IN ACCORDANCE WITH THE SYSTEM VOLTAGE AND TYPE OF CONDUCTOR.

NAMEPLATES: NAMEPLATES SHALL BE PHENOLIC, ENGRAVED TYPE. EMBOSSED TAPE SHALL NOT BE ACCEPTABLE. NORMAL SYSTEMS SHALL UTILIZE WHITE LETTERS ON A BLACK BACKGROUND. EMERGENCY SYSTEMS SHALL UTILIZE WHITE LETTERS ON A RED BACKGROUND. LEGALLY-REQUIRED STANDBY SYSTEMS SHALL UTILIZE WHITE LETTERS ON A BLUE BACKGROUND. OPTIONAL STANDBY SYSTEMS SHALL UTILIZE WHITE LETTERS ON A YELLOW BACKGROUND.

ADHESIVE LABELS: ADHESIVE LABELS SHALL NOT BE ACCEPTABLE, EXCEPT FOR THE IDENTIFICATION OF CONDUCTORS/CABLING, DEVICE FACEPLATES, AND JUNCTION BOXES SIZED 8" SQ. OR SMALLER.

GENERAL
WHERE MULTIPLE SYSTEM VOLTAGES (E.G. 480/277V, 208/120V, ETC.) ARE UTILIZED IN THE SAME BUILDING, ALL DISCONNECT SWITCHES, JUNCTION BOXES, PANELBOARDS, SWITCHBOARDS, TRANSFORMERS, AND MISCELLANEOUS EQUIPMENT SHALL BE LABELED TO INDICATE THE SYSTEM VOLTAGE, IN ADDITION TO THE REQUIREMENTS LISTED BELOW.

CLEAN ALL MOUNTING SURFACES PRIOR TO AFFIXING LABELS. UTILIZE THE LABEL MANUFACTURER'S RECOMMENDED CLEANING AGENT. INSTALL LABELS NEATLY AND FIRMLY AND IN ACCORDANCE WITH THE LABEL MANUFACTURER'S RECOMMENDATIONS.

AFFIX NAMEPLATES TO EQUIPMENT UTILIZING SCREWS, RIVETS, OR OTHER MATERIALS APPROVED BY THE MANUFACTURER.

PROVIDE A PLACARD AT EACH SERVICE DISCONNECT WITH THE WORDS "SERVICE DISCONNECT." LOCATE ABOVE THE MAIN DISCONNECT SWITCH OR CIRCUIT BREAKER.

JUNCTION BOX AND PULL BOX IDENTIFICATION
JUNCTION BOXES AND PULL BOXES SHALL BE IDENTIFIED UTILIZING SPRAY-PAINTED COVERS AS FOLLOWS:

SECONDARY POWER - 480Y/277V	BROWN
SECONDARY POWER - 208Y/120V, 240/120V	WHITE
EMERGENCY SYSTEM - LIFE SAFETY BRANCH (NEC 700) - 480Y/277V	BROWN/RED
EMERGENCY SYSTEM - LIFE SAFETY BRANCH (NEC 700) - 208Y/120V	WHITE/RED
LEGALLY REQUIRED STANDBY SYSTEM (NEC 701) - 480Y/277V	BROWN/BLUE
LEGALLY REQUIRED STANDBY SYSTEM (NEC 701) - 208Y/120V	WHITE/BLUE
OPTIONAL STANDBY SYSTEM (NEC 702) - 480Y/277V	BROWN/YELLOW
OPTIONAL STANDBY SYSTEM (NEC 702) - 208Y/120V	WHITE/YELLOW
FIRE ALARM	RED
TEMPERATURE CONTROL	GREEN
DOOR CONTROL AND DOOR MONITORING SYSTEM	ORANGE
SOUND AND INTERCOM SYSTEMS	GRAY
VIDEO SURVEILLANCE SYSTEM/MATV	YELLOW
DATA	BLUE JUNCTION

BOXES AND PULL BOXES FOR POWER CONDUCTORS SHALL BE LABELED WITH CIRCUIT NUMBERS AND SOURCE PANELBOARD DESIGNATIONS. JUNCTION BOXES AND PULL BOXES FOR OTHER SYSTEMS SHALL BE IDENTIFIED IN ACCORDANCE WITH THE SHOP DRAWINGS FOR THEIR RESPECTIVE SYSTEMS.

EXPOSED JUNCTION BOXES EXCEEDING A SIZE OF 8" SQ. SHALL BE IDENTIFIED WITH PHENOLIC, ENGRAVED PLACARDS. LETTERING HEIGHT SHALL BE A MINIMUM OF 1/2". IDENTIFY THE SYSTEM SOURCE(S) AND LOAD(S) SERVED.

EXPOSED JUNCTION BOXES 8" SQ. AND SMALLER SHALL BE IDENTIFIED WITH ADHESIVE LABELS.

JUNCTION BOXES INSTALLED ABOVE AN ACCESSIBLE CEILING SHALL BE PERMITTED TO BE IDENTIFIED VIA PERMANENT MARKER. LETTERING SHALL BE NEAT AND LEGIBLE.

COMMUNICATIONS CONDUIT LABELING
ALL CONDUITS INSTALLED BETWEEN ELECTRICAL AND/OR INFORMATION TECHNOLOGY (I.T.) ROOMS SHALL BE LABELED IN ACCORDANCE WITH ANSI/TIA/EIA-606. BOTH TERMINATION POINTS OF THE CONDUITS SHALL BE IDENTIFIED.

ALL LABELS SHALL BE MACHINE-PRODUCED. HANDWRITTEN LABELS SHALL NOT BE ACCEPTABLE.

THE LABEL SHALL INDICATE THE LOCATION OF THE TERMINATION POINT OF THE CONDUIT AND A UNIQUE IDENTIFICATION NUMBER.

POWER AND LOW-VOLTAGE CONDUCTOR/CABLE IDENTIFICATION
PROVIDE CONDUCTOR/CABLE LABELS ON EACH CONDUCTOR IN PANELBOARD GUTTERS, JUNCTION BOXES, PULL BOXES, AND OUTLET BOXES AT LOAD CONNECTIONS. IDENTIFY THE BRANCH CIRCUIT OR FEEDER NUMBER FOR ALL POWER AND LIGHTING BRANCH CIRCUITS. FOR LOW-VOLTAGE SYSTEMS, INDICATE THE WIRE NUMBER IN ACCORDANCE WITH SHOP DRAWINGS.

ALL CONDUCTORS/CABLING SHALL BE LABELED WITHIN 2 TO 4 INCHES OF TERMINATION. EACH END OF A CONDUCTOR/CABLE SHALL BE LABELED IMMEDIATELY UPON TERMINATION.

WIRING DEVICE IDENTIFICATION
WALL SWITCHES, RECEPTACLES, OCCUPANCY SENSORS, DEVICE PLATES, BOX COVERS, POKE-THROUGH FITTINGS, ACCESS FLOOR BOXES, PHOTOCELLS, AND TIME CLOCKS SHALL BE IDENTIFIED WITH CIRCUIT NUMBERS AND SOURCE. IN EXPOSED SPACES, IDENTIFICATION SHALL BE MADE INSIDE OF DEVICE COVERS. USE MACHINE-PRODUCED ADHESIVE LABELS OR PERMANENT MARKER. HANDWRITTEN LABELS SHALL BE NEAT AND LEGIBLE.

NAMEPLATES FOR ELECTRICAL EQUIPMENT
PROVIDE NAMEPLATES OF THE MINIMUM LETTER HEIGHT AS LISTED BELOW.

DISTRIBUTION PANELBOARDS, SUBPANELS, AND SWITCHBOARDS: 1 INCH NAME PLATE MIN. IDENTIFY THE SYSTEM VOLTAGE, SOURCE, AND LOCATION OF THE SOURCE. FOR 240V/3PH SYSTEMS: PROVIDE PANELBOARD IDENTIFICATION AS REQUIRED BY 2014 NEC SECTION 408.3; PANELS SHALL BE MARKED "CAUTION B PHASE HAS 208 VOLTS TO GROUND" WITH PHENOLIC ENGRAVED LABEL.

ENCLOSED CIRCUIT BREAKERS AND DISCONNECT SWITCHES: 1/2 INCH NAME PLATE MIN. IDENTIFY THE SOURCE CIRCUIT, LOAD SERVED, AND LOCATION.

TRANSFORMERS: 1 INCH NAME PLATE MIN. IDENTIFY PRIMARY AND SECONDARY VOLTAGES, PRIMARY SOURCE AND LOCATION, SECONDARY LOAD AND LOCATION.

PANELBOARD/SWITCHBOARD DIRECTORIES
SHALL BE TYPEWRITTEN AND COVERED WITH CLEAR PLASTIC WITH METAL FRAMING.

ELECTRICAL COMMISIONING

BUILDING COMMISSIONING
GENERAL REQUIREMENTS:

THE 2017 FLORIDA BUILDING CODE - "ENERGY CONSERVATION" PROVIDES THE REQUIREMENTS FOR COMMERCIAL BUILDING EFFICIENCY. THE CODE DEFINES THE ENERGY EFFICIENCY REQUIREMENTS FOR THE ELECTRICAL POWER AND LIGHTING SYSTEM, TOTAL BUILDING PERFORMANCE, AND COMMISSIONING. THIS CODE CHAPTER REQUIRES A CERTAIN SET OF ACTIVITIES AND PROCESSES TO BE ADMINISTERED AND DOCUMENTED IN ACCORDANCE WITH DEFINED STANDARDS. THIS SPECIFICATION IS THE OWNER'S MEANS OF VERIFYING THAT THE PLANNING, DESIGN, CONSTRUCTION AND OPERATION OF ELECTRICAL SYSTEMS ACHIEVE THEIR GOALS AND DELIVER A HIGH QUALITY BUILDING WITH MAXIMUM ASSET VALUES.

COMMISSIONING OF THE BUILDING ELECTRICAL POWER AND LIGHTING SYSTEMS AS PER SECTION 408 SHALL BE AS DEFINED HEREIN. PRIOR TO PASSING THE FINAL ELECTRICAL INSPECTION, THE CONTRACTOR SHALL PROVIDE EVIDENCE OF SYSTEM COMMISSIONING AND COMPLETION IN ACCORDANCE WITH THE PROVISIONS OF THIS SECTION CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET THE DOCUMENTED PERFORMANCE CRITERIA OF SECTION C405 AND SUBMIT TO THE REGISTERED DESIGN PROFESSIONAL (ENGINEER OF RECORD) FOR APPROVAL, AND TO THE BUILDING OWNER WITHIN 90 DAYS FROM THE DATE OF RECEIPT OF THE CERTIFICATION OF OCCUPANCY.

ELECTRICAL SYSTEMS TO BE COMMISSIONED INCLUDE:
ALL AUTOMATIC CONTROLS FOR INTERIOR AND EXTERIOR LIGHTING/ELECTRICAL SYSTEMS SHALL BE SUBJECT TO THESE REQUIREMENTS.

SCOPE:
FUNCTIONAL TESTING PRIOR TO PASSING FINAL INSPECTION, THE REGISTERED DESIGN PROFESSIONAL SHALL PROVIDE
EVIDENCE THAT THE LIGHTING CONTROL SYSTEMS HAVE BEEN TESTED TO ENSURE THAT CONTROL AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURE'S INSTRUCTIONS. FUNCTIONAL TESTING SHALL BE IN ACCORDANCE WITH SECTIONS C408.3.1.1 THRU C408.3.1.3 FOR THE APPLICABLE CONTROL TYPE.

THE PROJECT GENERAL CONTRACTOR SHALL HIRE A FIRM QUALIFIED IN THE TESTING OF LIGHTING AND ELECTRICAL SYSTEM PERFORMANCE FUNCTIONALITY OF THE SYSTEMS LISTED IN THIS SPECIFICATION. THE TESTING FIRM SHALL DETERMINE THE EXTENT AND SCOPE OF THE SYSTEMS REQUIRING COMMISSIONING NEEDED ON A PROJECT BASIS.

ALL TEST DATA SHALL BE PROVIDED TO THE REGISTERED DESIGN PROFESSIONAL FOR FINAL REVIEW AND APPROVAL PRIOR TO THE FINAL INSPECTION AND WALK THROUGH OF THE ARCHITECTURAL AND/OR ENGINEERING TEAM.

A FUNCTIONAL PERFORMANCE TEST SHALL BE CONDUCTED TO DEMONSTRATE THE INSTALLATION AND OPERATION OF COMPONENTS, SYSTEMS, AND SYSTEM-TO-SYSTEM INTERFACING RELATIONSHIPS IN ACCORDANCE WITH APPROVED PLANS AND SPECIFICATIONS SUCH THAT OPERATION, FUNCTION, AND MAINTENANCE SERVICEABILITY FOR EACH OF THE COMMISSIONED SYSTEMS IS CONFIRMED. TESTING SHALL INCLUDE ALL MODES AND SEQUENCE OF OPERATION, INCLUDING UNDER FULL-LOAD, PART-LOAD AND THE FOLLOWING EMERGENCY CONDITIONS:
1. ALL MODES AS DESCRIBED IN THE SEQUENCE OF OPERATION OR MANUFACTURES OPERATING INSTRUCTIONS
2. REDUNDANT OR AUTOMATIC BACK-UP MODE
3. PERFORMANCE OF LIGHTING OVERRIDE
4. MODE OF OPERATION UPON A LOSS OF POWER AND RESTORATION OF POWER.

THE GENERAL CONTRACTOR SHALL:
1. INCORPORATE COMMISSIONING ACTIVITIES INTO THE CONSTRUCTION SCHEDULE.
2. FACILITATE COOPERATION OF SUB-CONTRACTORS IN COMMISSIONING WORK.
3. PROVIDE SUB-CONTRACTOR ASSISTANCE IN OPERATING EQUIPMENT TO BE COMMISSIONED.
4. INSURE EQUIPMENT START-UP IS COMPLETE PRIOR TO BEGINNING THE COMMISSIONING PROCESS.
5. WORK WITH SUB-CONTRACTORS IN DEVELOPING A TRAINING SCHEDULE AND PLAN FOR APPROVAL BY THE OWNER.
6. VERIFY THE PRE-FUNCTIONAL CHECKLISTS ARE COMPLETED PRIOR TO SYSTEM TESTING.
7. VERIFY THE EQUIPMENT START-UP AND CONTROLS VERIFICATIONS ARE COMPLETE.
8. INSURE RESOLUTION OF NON-COMPLIANT AND DEFICIENT CONSTRUCTION RELATED ITEMS IDENTIFIED BY THE COMMISSIONING TEAM.
9. ASSIST IN WARRANTY REVIEW OF SYSTEM AND EQUIPMENT PERFORMANCE.

THE SUB-CONTRACTORS SHALL:
1. PREPARE OWNER TRAINING PLAN FOR INSTALLED EQUIPMENT AND CONTROLS.
2. PROVIDE NECESSARY PERSONNEL TO ASSIST THE ELECTRICAL TESTING AGENT IN HIS RESPONSIBILITIES AS DESCRIBED LATER IN THIS SPECIFICATION.
3. PREPARE AND SCHEDULE EQUIPMENT START-UP WITH THE GENERAL CONTRACTOR AND ELECTRICAL TESTING AGENT.
4. EXECUTE ALL REQUIRED EQUIPMENT AND SYSTEM TESTING AS MANDATED BY 2017 FLORIDA BUILDING CODE, PROJECT PLANS AND SPECIFICATIONS.
5. ENSURE INSTALLATION WORK IS COMPLETE AND IN COMPLIANCE WITH THE CONTRACT DOCUMENTS AND READY FOR FUNCTION PERFORMANCE TESTING.
6. PROVIDE CERTIFIED AND CALIBRATED INSTRUMENTATION REQUIRED TO TAKE MEASUREMENTS OF SYSTEM AND EQUIPMENT PERFORMANCE DURING THE FUNCTIONAL PERFORMANCE TESTING.
7. PREPARE CLOSEOUT DOCUMENTS INCLUDING BUT NOT LIMITED TO:
    a. AS-BUILT DRAWINGS
    b. WARRANTIES.
    c. OPERATIONAL AND MAINTENANCE MANUALS FOR INSTALLED EQUIPMENT.
    d. DELIVERY OF ANY SPARE PARTS REQUIRED BY THE PROJECT SPECIFICATION.

THE CODE OFFICIAL SHALL BE PERMITTED TO REQUIRE THAT A COPY OF THE FINAL COMMISSIONING REPORT BE MADE AVAILABLE FOR HIS/HER REVIEW.

CONSTRUCTION DOCUMENTS SHALL INCLUDE THE LOCATION ON EACH PIECE OF EQUIPMENT.

AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED AND INCLUDE ALL OF THE FOLLOWING:
1. SUBMITTAL DATA STATING EQUIPMENT SIZE AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE.
2. MANUFACTURER'S OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE, EXCEPT EQUIPMENT NOT FURNISHED AS PART OF THE PROJECT. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED.

A REPORT OF TEST PROCEDURES AND RESULTS IDENTIFIED AS “FINAL COMMISSIONING REPORT” SHALL BE DELIVERED TO THE BUILDING OWNER AND SHALL INCLUDE:
1. RESULTS OF FUNCTIONAL PERFORMANCE TESTS.
2. DISPOSITION OF DEFICIENCIES FOUND DURING TESTING, INCLUDING DETAILS OF CORRECTIVE MEASURES USED OR PROPOSED.
3. FUNCTIONAL PERFORMANCE TEST PROCEDURES USED DURING THE COMMISSIONING PROCESS INCLUDING MEASURABLE CRITERIA FOR TEST ACCEPTANCE, PROVIDED HEREIN FOR REPEATABILITY.

CONTROLS FOR AUTOMATIC LIGHTING SYSTEMS SHALL COMPLY AS FOLLOWS:
1. TESTING SHALL ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. AN APPROVED THIRD PARTY INDEPENDENT FROM THE DESIGN OR CONSTRUCTION OF THE PROJECT SHALL BE RESPONSIBLE FOR THE FUNCTIONAL TESTING AND SHALL PROVIDE DOCUMENTATION TO THE OWNER, REGISTERED DESIGN PROFESSIONAL AND CODE OFFICIAL CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET THE PROVISIONS OF SECTION C405. WHERE OCCUPANT SENSORS, TIME SWITCHES, PROGRAMMABLE SCHEDULE CONTROLS, PHOTOSENSORS OR DAYLIGHTING CONTROLS ARE INSTALLED, THE FOLLOWING PROCEDURES SHALL BE PERFORMED:
    a. CONFIRM THAT THE PLACEMENT, SENSITIVITY AND TIME-OUT ADJUSTMENTS FOR OCCUPANT SENSORS YIELD ACCEPTABLE PERFORMANCE AS PER FBC-C408.3.
    b. CONFIRM THAT THE TIME SWITCHES AND PROGRAMMABLE SCHEDULE CONTROLS ARE PROGRAMMED TO TURN THE LIGHTS OFF AS PER THE OWNER SCHEDULE AND FBC-C408.3.1.2.
    c. CONFIRM THAT THE PLACEMENT AND SENSITIVITY ADJUSTMENTS FOR PHOTOSENSOR CONTROLS REDUCE ELECTRIC LIGHT BASED ON THE AMOUNT OF USABLE DAYLIGHT IN THE SPACE AS SPECIFIED AND PER C408.3.

ELECTRICAL NOTES AND SPECIFICATIONS:

1. DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. DRAWINGS ARE NOT TO BE SCALED. THE DRAWINGS AND DETAILS WILL BE EXAMINED FOR EXACT LOCATION OF FIXTURES AND EQUIPMENT. ANYTHING MENTIONED IN THE SPECIFICATION AND NOT SHOWN ON THE DRAWINGS, OR SHOWN ON THE DRAWINGS BUT NOT IN THE SPECIFICATIONS WILL BE INTERPRETED AS BEING IN BOTH. CONFLICTS WILL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER OR ENGINEER BEFORE PROCEEDING WITH THE WORK.

2. THE ELECTRICAL CONTRACTOR TO FURNISH ALL EQUIPMENT, MATERIAL, LABOR, ETC. NECESSARY TO PROVIDE A COMPLETE, WORKABLE AND CODE APPROVED ELECTRICAL POWER DISTRIBUTION SYSTEM. ALL WORK TO BE DONE IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS, LOCAL, STATE AND NATIONAL CODES.

3. THE ELECTRICAL CONTRACTOR WILL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS AND PAY ALL GOVERNMENT FEES, SALES TAXES AND OTHER COSTS IN CONNECTION WITH HIS WORK, FILE ALL NECESSARY APPROVALS OF ALL GOVERNMENTAL DEPARTMENTS HAVING JURISDICTION, OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION FOR HIS WORK, AND DELIVER TO THE GENERAL CONTRACTOR THE SAME CERTIFICATES BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR THE WORK.

4. THE ELECTRICAL CONTRACTOR (E.C.) WILL GIVE FULL COOPERATION TO OTHER TRADES AND WILL FURNISH IN WRITING TO THE GENERAL CONTRACTOR, ANY INFORMATION NECESSARY TO PERMIT THE WORK OF ALL TRADES TO BE INSTALLED SATISFACTORILY AND WITH THE LEAST POSSIBLE INTERFERENCE OR DELAY. THE E.C. MUST COORDINATE ALL CONDUIT RUNS AND EQUIPMENT MOUNTING LOCATIONS WITH OTHER TRADES PRIOR TO ROUGH-IN.

5. THE ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL ELECTRICAL DEVICES AS SHOWN, VERIFYING ALL MOUNTING HEIGHTS AND EXACT LOCATIONS OF ALL WALL-MOUNTED ELECTRICAL DEVICES WITH GENERAL CONTRACTOR PRIOR TO ROUGH-IN. IN THE EVENT OF A CODE CONFLICT, THE CONTRACTOR WILL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO COMMENCING THE WORK.

6. ALL SPARE CONDUITS TO BE INSTALLED FOR FUTURE USE WILL BE CAPPED WITH PULL WIRE INSTALLED. UNDERGROUND SPARE CONDUITS WILL BE STUBBED UP 12" A.F.F. WHERE INDICATED AND CAPPED WITH PULL WIRE. ALL CAPPED CONDUIT WILL BE LABELED WITH ITS PURPOSE.

7. THE ELECTRICAL CONTRACTOR WILL PROVIDE A COMPLETE GROUNDING SYSTEM PER APPLICABLE SECTIONS OF THE N.E.C. BOND SERVICE ENTRANCE GROUND TO BUILDING STEEL, METAL WATER MAINS, MADE ELECTRODES, ETC. AS NECESSARY.

8. ALL ELECTRICAL DISTRIBUTION EQUIPMENT TO HAVE ONLY COPPER BUSING. ALL EXTERIOR ELECTRICAL EQUIPMENT TO BE RAIN-PROOF TYPE NEMA 3R. ALL DISCONNECTS TO BE GENERAL DUTY TYPE. ALL EXTERIOR DISCONNECTS TO BE RAIN-PROOF TYPE NEMA 3R. ALL CIRCUIT BREAKERS TO BE 20A MINIMUM OR AS SHOWN ON THE PANEL SCHEDULES.

9. ALL DISCONNECTS SHALL BE HEAVY DUTY TYPE AND INSTALLED AS REQUIRED FOR CONDENSING AND AIR HANDLING UNITS, EXHAUST FANS, KITCHEN EQUIPMENT, WATER HEATERS, ETC. SUPPLIED BY MECHANICAL, PLUMBING AND FOOD SERVICE CONTRACTOR(S). SUPPLY AND INSTALL ALL REQUIRED CONDUIT AND DEVICE BOXES FOR HVAC TEMPERATURE CONTROLS.

10. ELECTRICAL CONTRACTOR TO SUPPLY ALL REQUIRED DISCONNECTS AND WIRE ALL EXHAUST FANS, AIR HANDLER UNITS, CONDENSING UNITS, SMOKE DAMPERS, ETC. PROVIDED BY THE MECHANICAL E.C. WILL VERIFY NAMEPLATE RATINGS OF ALL MECHANICAL EQUIPMENT PRIOR TO ROUGH-IN. E.C. TO PROVIDE DISCONNECTS AND CIRCUIT BREAKERS PER NAMEPLATE RATING. THE E.C. SHALL PROVIDE ALL HARDWARE(CONTROL RELAYS, LOW VOLTAGE TRANSFORMER POWER SUPPLIES, & ENCLOSURES) FOR THE PROPER OPERATION OF MECH. UNITS, EXHAUST FANS & SMOKE DAMPERS PER THE "SEQUENCE OF OPERATIONS" AS DETAILED ON THE MECHANICAL PLANS. THE E.C. WILL NOTIFY THE ARCHITECT/ENGINEER OF ANY CHANGES REQUIRED TO CIRCUITING PRIOR TO COMMENCING THE WORK.

11. ALL INTERIOR POWER/LIGHTING CIRCUITS TO BE 2-#12, 1-#12 G. IN MINIMUM 1/2" C. W/MAXIMUM 30% FILL, UNLESS SHOWN OTHERWISE ON THE PLANS. INTERIOR HOME RUNS TO BE A MINIMUM OF 3/4" C. W/MAXIMUM 40% FILL. ALL EXTERIOR LIGHTING CIRCUITS TO BE A MINIMUM OF 2-#10 W/#10G TO THE FIRST JUNCTION BOX OR LIGHT FIXTURE AND 2-#12 W/#10G TO THE REMAINING FIXTURES OR AS INDICATED ON PLANS. ALL UNDERGROUND CONDUIT TO BE A MINIMUM OF 1". TYPE MC CABLE HAVING STRANDED COPPER CONDUCTORS SHALL BE ACCEPTABLE FOR BRANCH CIRCUITS IN CONDITIONED SPACES ONLY. ALL FEEDER CONDUCTORS SHALL BE COPPER WITH TYPE THHN INSULATION. TYPE XHHW-2 OR THWN-2 SHALL BE USED FOR CONDUCTORS INSTALLED IN WET AND DAMP LOCATIONS. SPECIFIC EQUIPMENT CIRCUITS (HVAC, PUMPS, WATER HEATERS, ETC.) SHALL BE AS REQUIRED PER NAMEPLATE RATING(S).

12. THE ELECTRICAL CONTRACTOR SHALL PROPERLY AND PERMANENTLY IDENTIFY ALL BOXES, ENCLOSURES, ETC. FOR EMERGENCY CIRCUITS IN ACCORDANCE WITH NEC 700.10. LABEL ALL PANEL CIRCUITS TO IDENTIFY UNIT EQUIPMENT CONNECTED IN ACCORDANCE WITH NEC 700.12(F).

13. ELECTRICAL CONTRACTOR WILL CONTACT LOCAL ELECTRICAL UTILITY AND COORDINATE EXACT LOCATION OF ELECTRICAL SERVICE SOURCE. THE CONTRACTOR SHALL COORDINATE SHORT CIRCUIT RATING (A.I.C.) WITH UTILITY PRIOR TO BID AND PROVIDE THE APPROPRIATE SHORT CIRCUIT RATINGS FOR ALL ELECTRICAL EQUIPMENT. COORDINATE USE OF HAND HOLE / UTILITY POLE / PAD MOUNT TRANSFORMER PRIOR TO BID AND/OR ROUGH-IN.

14. MINOR DETAILS, NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER OPERATION AND CONSISTENT WITH GOOD WORKMANSHIP, WILL BE INCLUDED IN THE ESTIMATE, THE SAME AS IF SHOWN ON DRAWINGS.

15. PROVIDE CONDUIT STUBS, BACK BOXES AND PULL STRINGS ETC. FOR ALL LOW VOLTAGE SYSTEMS PROVIDED BY OTHERS TO DEVICES LOCATED IN ALL SPACES. PROVIDE SEPARATE PERMITS FOR ALL LOW VOLTAGE SYSTEMS.

16. ALL MATERIALS FURNISHED AND ALL WORK INSTALLED UNDER THIS SECTION SHALL COMPLY WITH THE FOLLOWING:
    - LIFE SAFETY CODE NFPA 101-2015
    - APPLICABLE NFPA FIRE CODES
    - APPLICABLE STATE AND LOCAL CODES
    - NATIONAL BUREAU OF FIRE UNDERWRITERS
    - ACCESSIBILITY FOR THE HANDICAPPED ANSI A117
    - AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES
    - FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS ACCESSIBILITY REQUIREMENTS MANUAL
    - NATIONAL ELECTRICAL CODE NFPA 70-2014
    - THE SERVING UTILITY COMPANIES
    - FLORIDA BUILDING CODE 2017, SIXTH EDITION
    - FLORIDA BUILDING CODE - ENERGY CONSERVATION 2017
    - FLORIDA BUILDING CODE - MECHANICAL 2017
    - FLORIDA BUILDING CODE - PLUMBING 2017

17. ALL ELECTRICAL SYSTEM COMPONENTS AND INSTALLATIONS SHALL BE WARRANTED TO BE FREE OF DEFECTS (MATERIALS AND LABOR) FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM RECEIPT OF CERTIFICATE OF OCCUPANCY. THE CONTRACTOR SHALL PROVIDE FOR OWNER'S OPTION A MAINTENANCE CONTRACT AND/OR AN EXTENDED WARRANTY

18. CONTRACTOR TO PROVIDE MANUFACTURER CERTIFICATION, WITH SHOP DRAWING SUBMITTALS, THAT POLE ASSEMBLY WITH SPECIFIED HEADS AND ALL SPECIFIED OPTIONS MEETS WIND LOAD REQUIREMENTS PER 2017 FLORIDA BUILDING CODE FIGURE 1609.3. ELECTRICAL CONTRACTOR TO SUBMIT MANUFACTURER RECOMMENDED CHANGES FOR A CODE COMPLYING INSTALLATION TO OWNER/ENGINEER FOR APPROVAL. ADDITIONALLY, CONTRACTOR SHALL PROVIDE CERTIFICATION THAT POLE MOUNTING METHOD; I.E., DIRECT BURY/ANCHOR BASE MEETS THE ABOVE REQUIREMENTS. POLE MOUNTING CERTIFICATION SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.

19. ELEVATOR SIZE IS BASED ON A XX HORSEPOWER MOTOR. ELECTRICAL CONTRACTOR WILL VERIFY WITH ELEVATOR MANUFACTURER FOR EXACT SIZE OF ELEVATOR PRIOR TO BID. E.C. TO PROVIDE CIRCUIT BREAKER AND DISCONNECT SIZES RECOMMENDED BY ELEVATOR SHOP DRAWINGS. THE ELEVATOR CIRCUIT BREAKER WILL BE SHUNT-TRIP. E.C. WILL NOTIFY ARCHITECT/ENGINEER OF MOTOR SIZE CHANGES PRIOR TO COMMENCING THE WORK.

20. PROVIDE LIGHTNING PROTECTION IN ACCORDANCE WITH SPECIFICATION SECTION 264114. LIGHTNING SYSTEM GROUND SYSTEM SHALL BE BONDED TO THE BUILDING GROUNDING ELECTRODE SYSTEM IN ACCORDANCE WITH NEC 250.106.

21. ELECTRICAL CONTRACTOR TO PROVIDE AS-BUILT DOCUMENTS, OPERATION MANUALS, MAINTENANCE MANUALS TO THE OWNER WITHIN 30 DAYS OF ACCEPTANCE OF SYSTEMS AS PER FBC C405.6.4.2.

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
$	SINGLE POLE SWITCH, MOUNT 48" AFF U.O.N.
$3, $4	THREE-WAY/FOUR-WAY SWITCH RESPECTIVELY, MOUNT 48" AFF U.O.N.
$M	MOTOR-RATED SWITCH, SINGLE/DOUBLE POLE AS INDICATED ON PLANS
$D	SLIDE DIMMER W/PRESET ON/OFF SWITCH, MATCH DIMMER RATING WITH ASSOCIATED LOAD, MOUNT 48" AFF U.O.N.
$T	SPRINGWOUND TIMER SWITCH, INTERMATIC "F"-SERIES, MOUNT 48" AFF U.O.N.
$OC	WALL SWITCH OCCUPANCY SENSOR (DUAL), LEGRAND "RW3U600" (24'W X 25'L), MOUNT 48" AFF U.O.N.
$OC3	WALL SWITCH OCCUPANCY SENSOR 3-WAY (DUAL), LEGRAND "RW3U600" (24'W X 25'L), MOUNT 48" AFF U.O.N.
$OC4	WALL SWITCH OCCUPANCY SENSOR 4-WAY (DUAL), LEGRAND "RW3U600" (24'W X 25'L), MOUNT 48" AFF U.O.N.
$VC	WALL SWITCH VACANCY SENSOR (DUAL), LEGRAND "RW3U600" (24'W X 25'L), MOUNT 48" AFF U.O.N.
$VC3	WALL SWITCH VACANCY SENSOR 3-WAY (DUAL), LEGRAND "RW3U600" (24'W X 25'L), MOUNT 48" AFF U.O.N.
$VC4	WALL SWITCH VACANCY SENSOR 4-WAY (DUAL), LEGRAND "RW3U600" (24'W X 25'L), MOUNT 48" AFF U.O.N.
$DV	WALL SWITCH DIMMING VACANCY SENSOR (DUAL), LEGRAND "DW-311", MOUNT 48" AFF U.O.N.
OC1	CEILING MOUNT OCCUPANCY SENSOR (120-277V), LEGRAND "DT-355" (360 DEG 25'W), MOUNT 8' AFF U.O.N.
$K	KEY SWITCH, MOUNT 48" AFF U.O.N.
$C	COMBINATION FAN SPEED CONTROL & FAN LIGHT SWITCH, MOUNT 48" U.O.N.
Φ	SIMPLEX RECEPTACLE, MOUNT 18'' AFF U.O.N.
Φ	DUPLEX RECEPTACLE, MOUNT 18" AFF U.O.N.
Φ	DUPLEX RECEPTACLE, MOUNT 42" AFF (48" AFF IN TOILETS/UTILITY CLOSETS) U.O.N.
Φ	SWITCHED SPLIT-WIRE DUPLEX RECEPTACLE, MOUNT 18" AFF U.O.N.
▣	FLOOR MOUNTED DUPLEX RECEPTACLE. REFER TO PLANS FOR SIZE & CONFIGURATION.
▣	FLOOR MOUNTED SWITCHED SPLIT-WIRE DUPLEX RECEPTACLE. REFER TO PLANS FOR SIZE & CONFIGURATION.
⊕	QUADRAPLEX RECEPTACLE, MOUNT 18" AFF U.O.N.
⊕	QUADRAPLEX RECEPTACLE, MOUNT 42" AFF U.O.N.
⊕	SWITCHED SPLIT-WIRE QUADRAPLEX RECEPTACLE, MOUNT 18" AFF U.O.N.
⊞	FLOOR MOUNTED QUADRAPLEX RECEPTACLE. REFER TO PLANS FOR SIZE & CONFIGURATION.
⊞	FLOOR MOUNTED SWITCHED SPLIT-WIRE QUADRAPLEX RECEPTACLE. REFER TO PLANS FOR SIZE & CONFIGURATION.
Φ	1Ø, 208/240-VOLT RECEPTACLE, MOUNT 18" AFF U.O.N.
⊽	SPECIAL PURPOSE RECEPTACLE, MOUNT 18" AFF U.O.N.
Φ	BUILDING EXTERIOR/ROOF-MOUNTED WEATHER-RESISTANT DUPLEX RECEPTACLE, MOUNT 18" AFF U.O.N. DEVICE SHALL INCLUDE WEATHERPROOF BACK-BOX WITH DIE-CAST, WEATHERPROOF IN-USE LOCKING COVER - INTERMATIC WP3110MXD. RECEPTACLE SHALL BE G.F.I. PROTECTED EITHER AT THE RECEPTACLE OR FROM THE CIRCUIT BREAKER IN THE PANELBOARD SERVING CKT. IF TOTAL BRANCH CIRCUIT ONE-WAY LENGTH IS GREATER THAN 200', UTILIZE GFCI RECEPTACLES IN PLACE OF GFCI BREAKER (PER MANUFACTURER RECOMMENDATIONS).
RCR	RECEPTACLE CONTROL RELAY
▽	TELEPHONE OUTLET - MOUNT 18" AFF U.O.N., 4" SQ. J-BOX w/1-GANG PLASTER RING, 1"C TO ACCESSIBLE CEILING. PROVIDE PULLSTRING.
▽	DATA OUTLET - MOUNT 18" AFF U.O.N., 4" SQ. J-BOX w/1-GANG PLASTER RING, 1"C TO ACCESSIBLE CEILING. PROVIDE PULLSTRING.
▽	TELECOM OUTLET(DATA/TELEPHONE) - MOUNT 18" AFF U.O.N., 4" SQ. J-BOX w/1-GANG PLASTER RING, 1"C TO ACCESSIBLE CEILING. PROVIDE PULLSTRING.
▽ ⊽	FLOOR/CEILING-MOUNTED TELECOM OUTLET. REFER TO PLANS FOR BOX TYPE, CONDUIT SIZE/QUANTITY & CONFIGURATION.
TV	CABLE TELEVISION OUTLET - MOUNT 18" AFF U.O.N., 4" SQ. J-BOX w/1-GANG PLASTER RING, 1"C TO ACCESS. CLG. PROVIDE PULLSTRING.
TTB	TTB (TELEPHONE TERMINAL BOARD) MARINE PLYWOOD BACKBOARD 3/4"x4'x4' PAINTED W/FIRE RETARDANT GRAY PAINT. PROVIDE (2) 4" CONDUITS TO PROPERTY LINE. COORDINATE FINAL CONDUIT SIZES AND LOCATIONS W/UTILITY. PROVIDE SOLID COPPER GROUND BAR WITH INSULATED STAND-OFFS.
J	JUNCTION BOX(4"X4"X2"), MOUNT 18" AFF U.O.N.
LC	LIGHTING CONTROLLER
TC	TIMECLOCK WITH INTEGRAL MANUAL OVERRIDE USE INTERMATIC ET90000 SERIES OR EQUAL.
PTD	POWER TRANSFER DEVICE/RELAY.
PC	STEM AND SWIVEL MOUNT PHOTOCELL USE INTERMATIC SERIES K4221C FOR 120V AND K4223C FOR 277V OR EQUAL.
▭	ELECTRICAL PANELBOARD (SURFACE OR FLUSH-MOUNTED AS SHOWN). REFER TO SCHEDULES/RISER FOR INFO.
⊟	ENCLOSED CIRCUIT BREAKER. PROVIDE WEATHERPROOF ENCLOSURE FOR EXTERIOR APPLICATIONS. VERIFY SIZE W/EQUIP. NAMEPLATE RATING.
▭	HP RATED SWITCH AS DISC. PROVIDE WEATHERPROOF ENCLOSURE FOR EXTERIOR APPLICATIONS. VERIFY SIZE W/EQUIP. NAMEPLATE RATING.
⊠	HP RATED COMBINATION MOTOR STARTER DISC. PROVIDE WP ENCLOSURE FOR EXT. APPS. VERIFY SIZE W/EQUIP. NAMEPLATE RATING.
⊠	HP RATED MOTOR STARTER. PROVIDE WP ENCLOSURE FOR EXT. APPS. VERIFY SIZE W/EQUIP. NAMEPLATE RATING.
T	TRANSFORMER
- - ▷	HOMERUN TO PANEL NOTED (DASHED LINE INDICATES CIRCUIT)
⌒	SWITCHLEG (SOLID LINE) INDICATING A GROUP OF LIGHTS OPERATED BY A COMMON SWITCH
⌒	LOW-VOLTAGE (DOUBLE-DASHED LINE)
AFF/AFG	ABOVE FINISHED FLOOR / ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
CU	CONDENSING UNIT
EF	EXHAUST FAN
GFI	GROUND FAULT INTERRUPTER
ETR	EXISTING TO REMAIN.
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
LC	LOCKING COVER
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
TR	TAMPER RESISTANT
UON	UNLESS OTHERWISE NOTED
WP	WEATHER PROOF
SS	SINGLE/MULTI-STATION, NON-SYSTEM TYPE, RESIDENTIAL STYLE, LINE-POWERED, COMBINATION CARBON MONOXIDE/SMOKE DETECTOR WITH BATTERY BACKUP. ACTIVATION SHALL SOUND ALL DEVICES WITHIN EACH UNIT. CONNECT TO NEAREST ARC-FAULT PROTECTED CIRCUIT WITHIN UNIT. MAINTAIN A MINIMUM DISTANCE OF 3'-0" FROM ALL CEILING-MOUNTED HVAC SUPPLY/RETURN REGISTERS, 3'-0" FROM THE OUTER EDGE OF PADDLE FAN BLADES, AND 10'-0" FROM ALL WALL-MOUNTED HVAC SUPPLY/RETURN REGISTERS.
⏏	EMERGENCY GENERATOR SHUTOFF PUSH-BUTTON
⊠	EXIT SIGN - FACES AS REQUIRED - WITH BATTERY BACKUP
⊠⊠⊠⊠	EXIT SIGN W/DIRECTION ARROW - FACES AS REQUIRED - WITH BATTERY BACKUP
EM	EMERGENCY LIGHT FIXTURE WITH BATTERY BACKUP (CONNECT TO LINE SIDE OF NEAREST SWITCH SERVING THAT AREA OR ON THE LINE SIDE OF LIGHTING CONTROL PANEL THAT CONTROLS THE LIGHTING CIRCUIT IN THAT AREA).
▷	EMERGENCY LIGHT REMOTE HEAD.
X Y	"X"= HP" Y"= PHASE

NOTES:
1. ELECTRICAL CONTRACTOR SHALL VERIFY EXACT LOCATIONS & MOUNTING HEIGHTS OF ALL ELECTRICAL DEVICES WITH OWNER/ARCHITECT BEFORE ROUGH-IN. MOUNTING HEIGHTS ARE MEASURED TO CENTER OF BOX.
2. ALL RECEPTACLES & SWITCHES SHALL BE ARCH/DECORA TYPE WITH MATCHING FACE PLATES. COOR. FINAL COLOR WITH ARCH. PRIOR TO ORDERING
3. ALL SYMBOLS AND ABBREVIATIONS DO NOT NECESSARILY APPEAR ON THIS PROJECT.
4. MANUFACTURERS SHOWN IN THIS LEGEND ARE "BASIS OF DESIGN" AND "OR EQUAL" DEVICES MAY BE SUBMITTED FOR APPROVAL.

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CONTRACTOR TO VERIFY ALL DETAILS, DIMENSIONS, AND FIELD CONDITIONS BEFORE PROCEEDING WITH CONSTRUCTION. WHERE NOT CLEARLY SHOWN OBTAIN EXACT INFORMATION FROM ENGINEER. DO NOT SCALE DRAWINGS. USE ONLY MOST RECENTLY DATED DRAWINGS. NOTIFY ENGINEER OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK. ENGINEER RESERVES THE RIGHT TO MAKE CHANGES AS REQUIRED DUE TO JOB CONDITIONS. ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION NOT CARRIED OUT IN ACCORDANCE WITH CONSTRUCTION DOCUMENTS. THESE PLANS SHALL NOT BE REPRODUCED OR COPIED IN PART OR WHOLE WITHOUT EXPRESSED WRITTEN PERMISSION FROM QUEST DESIGN GROUP © COPYRIGHT 2016.

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE BUILDING CODES AND THE APPLICABLE MINIMUM FIRE SAFETY STANDARDS AS DETERMINED IN ACCORDANCE WITH CHAPTERS 553 AND 633, FLORIDA STATUTES AND LOCAL ORDINANCES.

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PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR:
Conformed Set
05.22.20

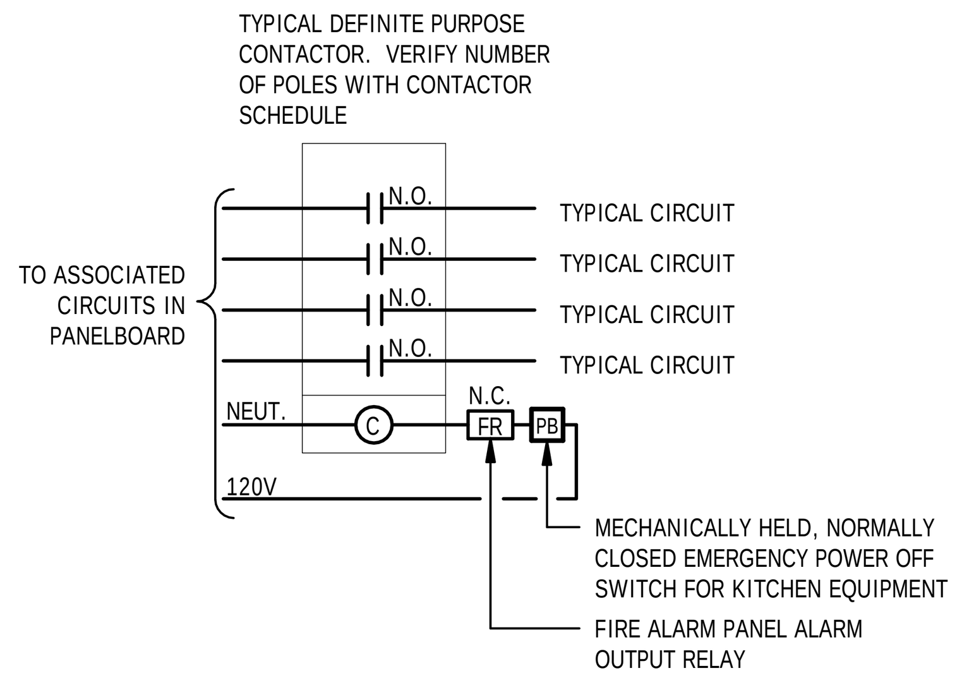
REV	DESCRIPTION	DATE

GRAPHIC SCALE:

SCALE: 1/8" = 1'-0"
PROJECT MANAGER: CRB
DRAWN BY: JDS
A/E OF RECORD: JDS
PROJECT NO: 19-522

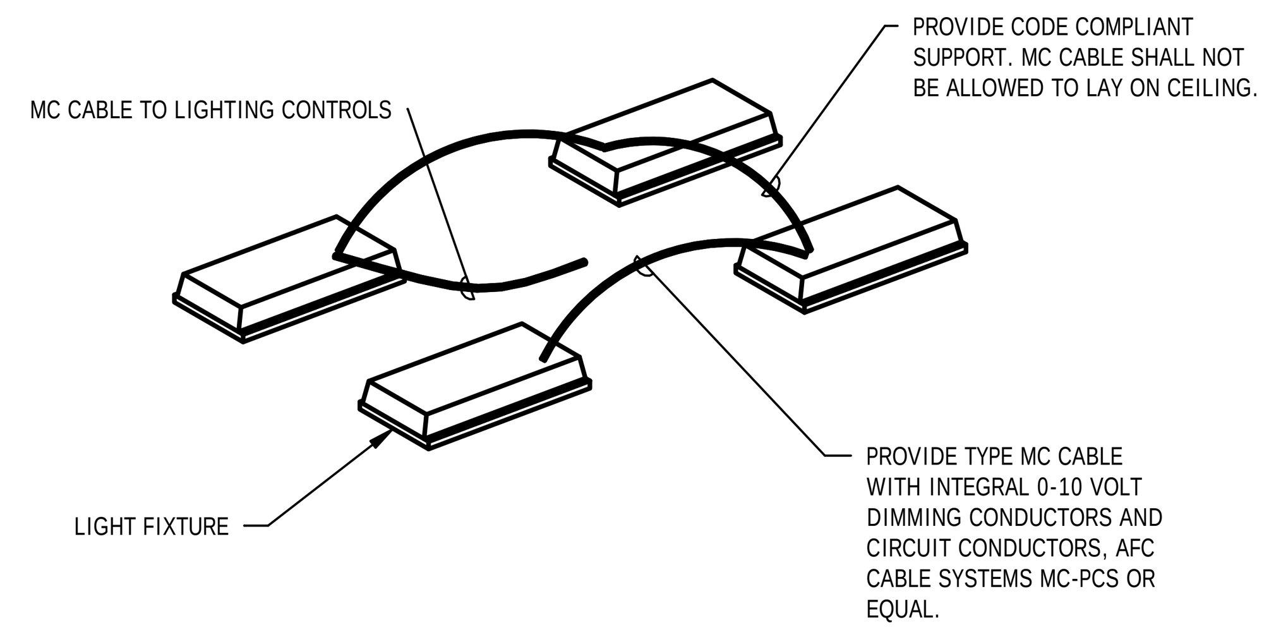
SHEET TITLE:
ELECTRICAL NOTES AND LEGEND

SHEET No.:
E2.0

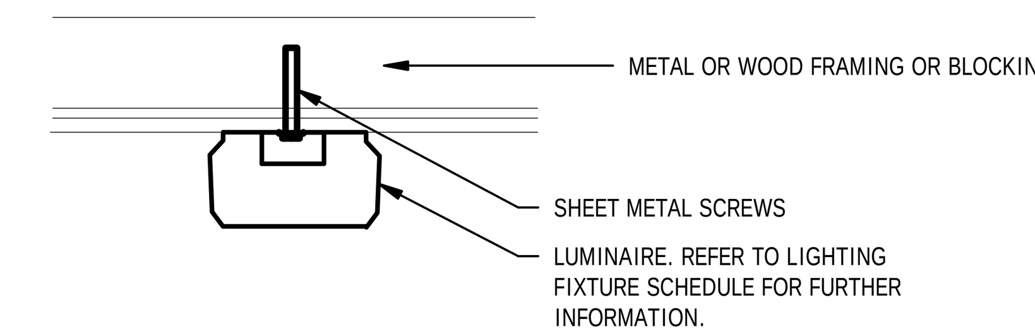


CONTACTOR CONTROL DETAIL
SCALE: NONE

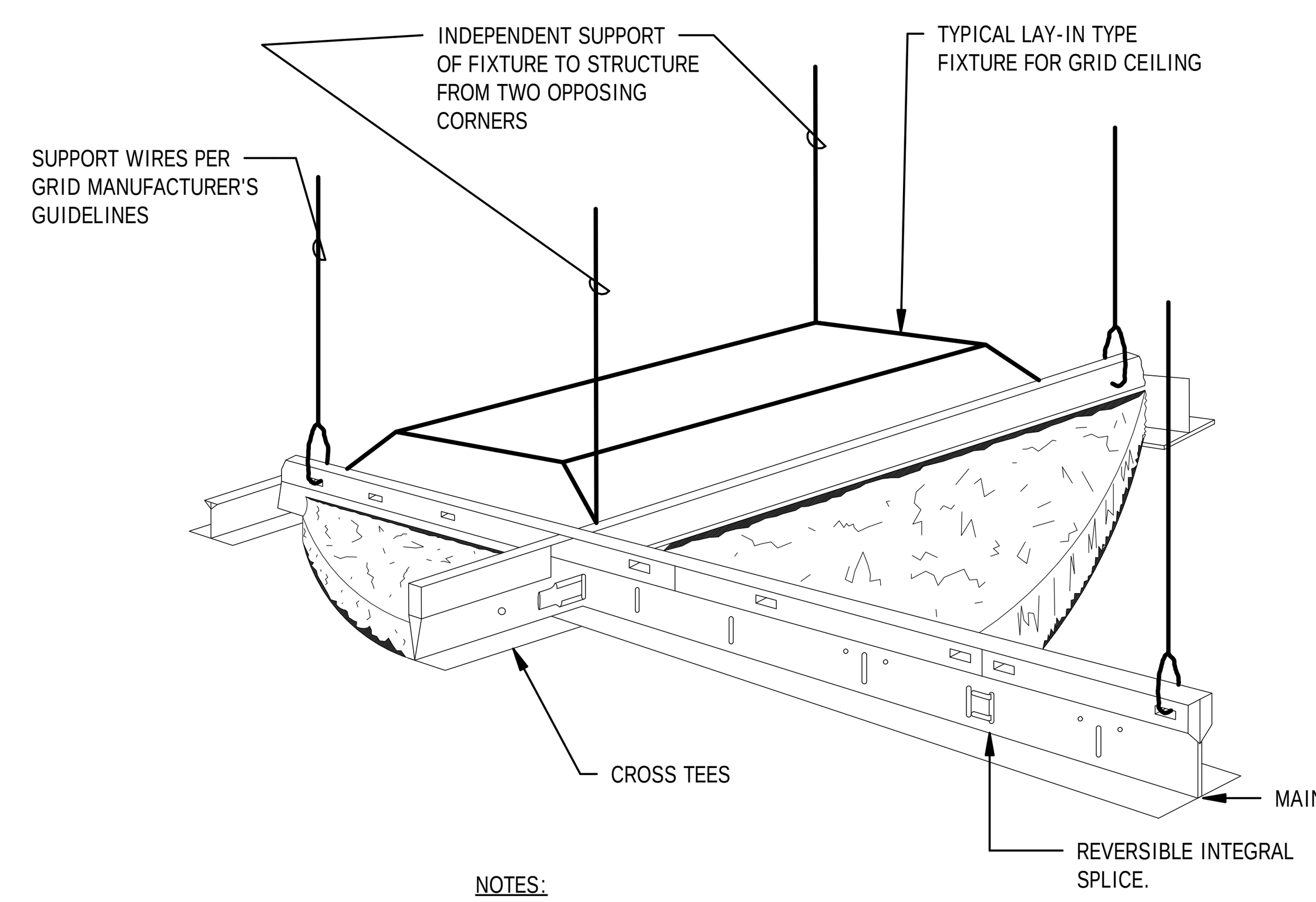
"C1" CONTACTOR CONTROL SCHEDULE			
POLE DESIGNATION	AREAS CONTROLLED	CONTROL TYPE	CIRCUIT BREAKERS
#1	RANGE POWER AND GAS SOLENOID VALVE	F/A RELAY/POWER OFF SWITCH	B-33
#2	OVEN	F/A RELAY/POWER OFF SWITCH	DP-26,28
#3	MICROWAVE	F/A RELAY/POWER OFF SWITCH	B-31
#4	KITCHEN COUNTER RECEPTACLE	F/A RELAY/POWER OFF SWITCH	B-9
#5	KITCHEN COUNTER RECEPTACLE	F/A RELAY/POWER OFF SWITCH	B-11
#6	DISPOSAL	F/A RELAY/POWER OFF SWITCH	B-17
#7	SPACE	---	---
#8	SPACE	---	---



TYPICAL RECESSED LIGHTING FIXTURE WIRING TAP DETAIL
SCALE: NONE

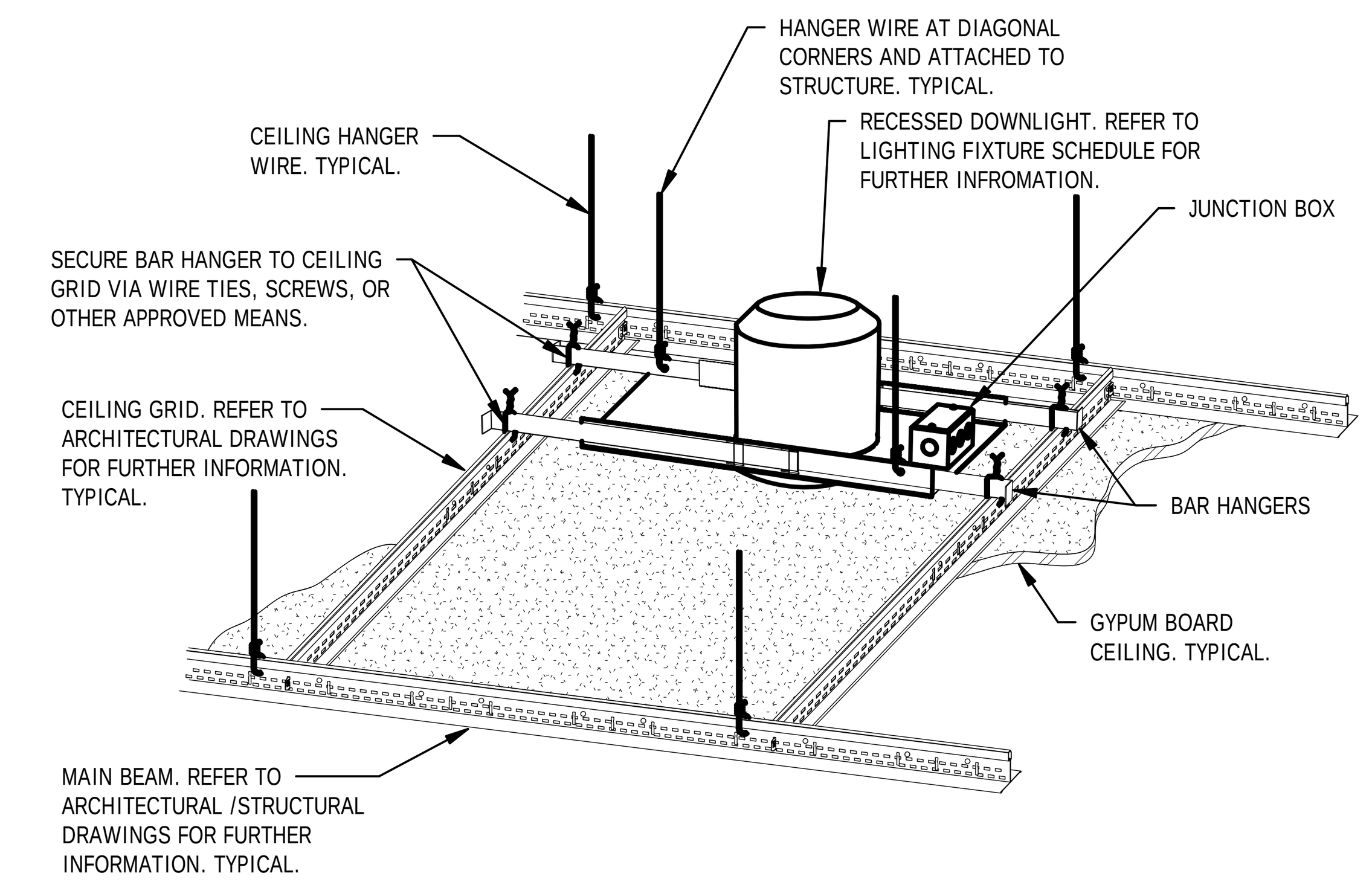


SURFACE-MOUNTED STRIP DETAIL
SCALE: NONE



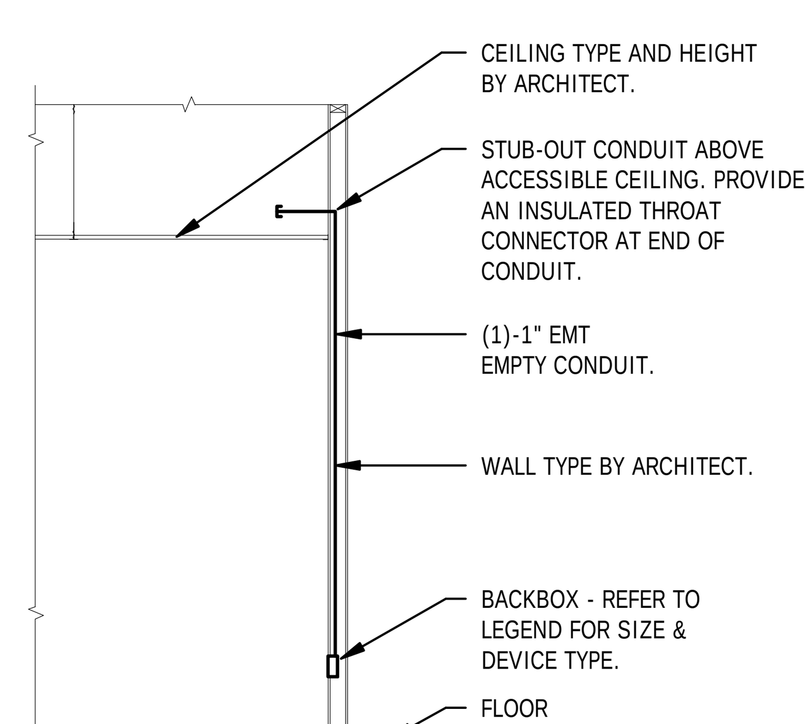
NOTES:
1. FIXTURE SUPPORTS SHALL BE IN ACCORDANCE WITH N.E.C.
2. INDEPENDENT SUPPORT TO THE STRUCTURE

LUMINAIRE MOUNTING - ACOUSTICAL TILE CEILING
SCALE: NONE



NOTES:
1. FIXTURE SUPPORTS SHALL BE IN ACCORDANCE WITH N.E.C.
2. PROVIDE INDEPENDENT SUPPORTS TO THE STRUCTURE AS REQUIRED BY LOCAL ORDINANCES.
3. FIXTURES RECESSED IN FIRE-RATED ASSESMBLIES SHALL BE PROVIDED WITH LISTED, PREFABRICATED, FIRE-RATED ENCLOSURES. SITE-FABRICATED ENCLOSURES SHALL NOT BE AN ACCEPTABLE METHOD OF MAINTAINING THE RATING OF THE CEILING ASSEMBLY.

DOWNLIGHT IN GYPSUM BOARD CEILING
SCALE: NONE



TYPICAL TELEPHONE/DATA OUTLET DETAIL
SCALE: NONE

①② LIGHTING FIXTURE SCHEDULE						
LTR	MANUFACTURER	CATALOG NUMBER	LAMP	MOUNTING	DESCRIPTION	WATTAGE
A	LITHONIA	2GTL 4 48L GZ10 LP840	LED	GRID	2' X 4' GRID MOUNTED	36W
B	JUNO	LDN6 40/15 LO6AR LSS MVOLT EZ10	LED	RECESSED	6" RECESSED CAN	21W
C	LITHONIA	ZL1N L48 5000LM FST MVOLT 40K 80CRI WH	LED	SURFACE	4' LENSED STRIP LIGHT	34W
D8	LITHONIA	GRD LLP 8FT MSL8 80CRI 40K ID1000LMF 80/20 MIN10 ZT 120 SCT F2/24A C110	LED	SUSPENDED	8' SUSPENDED LINEAR	64W
D20	LITHONIA	GRD LLP 20FT MSL8 80CRI 40K ID1000LMF 80/20 MIN10 ZT 120 SCT F2/24A C110	LED	SUSPENDED	20' SUSPENDED LINEAR	160W
S	LEVITON	STPE-3000K-FO	LED	RECESSED	RECESSED NIGHT LIGHT FIXTURE	2W

① SUBSTITUTIONS WILL NOT BE PERMITTED WITHOUT APPROVAL FROM THE ENGINEER, FOURTEEN (14) DAYS PRIOR TO BID DATE.
② VERIFY LIGHTING FIXTURE COLOR/FINISH WITH ARCHITECT PRIOR TO ORDERING.

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FL AA26000857

PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR: Conformed Set 05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE:

SCALE: 1/8" = 1'-0"
PROJECT MANAGER: CRB
DRAWN BY: JDS
A/E OF RECORD: JDS
PROJECT NO: 19-522

SHEET TITLE: ELECTRICAL DETAILS AND SCHEDULES

SHEET No.: E2.1

BRANCH CIRCUIT WIRING SCHEDULE

C/B SIZE	WIRE	CONDUIT	REMARKS
SINGLE POLE (1P)			
20a.	2-#12, 1-#12G.	3/4"	1Ø,2W
25a.	2-#10, 1-#10G.	3/4"	1Ø,2W
30a.	2-#10, 1-#10G.	3/4"	1Ø,2W
35a.	2-#8, 1-#10G.	3/4"	1Ø,2W
40a.	2-#8, 1-#10G.	3/4"	1Ø,2W
45a.	2-#8, 1-#10G.	3/4"	1Ø,2W
50a.	2-#8, 1-#10G.	3/4"	1Ø,2W
60a.	2-#6, 1-#10G.	3/4"	1Ø,2W
TWO POLE (2P)			
20a.	2-#12, 1-#12G.	3/4"	1Ø,2W
25a.	2-#10, 1-#10G.	3/4"	1Ø,2W
30a.	2-#10, 1-#10G.	3/4"	1Ø,2W
40a.	2-#8, 1-#10G.	1"	1Ø,2W
45a.	2-#8, 1-#10G.	1"	1Ø,2W
50a.	2-#8, 1-#10G.	1"	1Ø,2W
60a.	2-#6, 1-#10G.	1"	1Ø,2W
70a.	2-#4, 1-#8G.	1 1/4"	1Ø,2W
80a.	2-#4, 1-#8G.	1 1/4"	1Ø,2W
90a.	2-#3, 1-#8G.	1 1/4"	1Ø,2W
100a.	2-#3, 1-#8G.	1 1/4"	1Ø,2W
THREE POLE (3P)			
20a.	3-#12, 1-#12G.	3/4"	3Ø, 3W
25a.	3-#10, 1-#10G.	3/4"	3Ø, 3W
30a.	3-#10, 1-#10G.	3/4"	3Ø, 3W
30a.	3-#10, 1-#10N, 1-#10G.	3/4"	3Ø, 4W
35a.	3-#8, 1-#10G.	1"	3Ø, 3W
35a.	3-#8, 1-#8, 1-#10G.	1"	3Ø, 4W
40a.	3-#8, 1-#10G.	1"	3Ø, 3W
40a.	3-#8, 1-#8N, 1-#10G.	1"	3Ø, 4W
45a.	3-#8, 1-#10G.	1"	3Ø, 3W
45a.	3-#8, 1-#8N, 1-10G.	1"	3Ø, 4W
50a.	3-#8, 1-#10G.	1"	3Ø, 3W
50a.	3-#8, 1-#8N, 1-10G.	1"	3Ø, 4W
60a.	3-#6, 1-#10G.	1"	3Ø, 3W
60a.	3-#6, 1-#6N, 1-#10G.	1 1/4"	3Ø, 4W
100a.	3-#3, 1-#3N, 1-#8G.	1 1/2"	3Ø, 4W
125a.	3-#1, 1-#1N, 1-#6G.	2"	3Ø, 4W
150a.	3-#1/0, 1-#1/0N, 1-#6G.	2"	3Ø, 4W
175a.	3-#2/0, 1-#2/0N, 1-#6G.	2'	3Ø, 4W
200a.	3-#3/0, 1-#3/0N, 1-#6G.	2 1/2"	3Ø, 4W

NOTE: VOLTAGE DROP: THE CONDUCTORS FOR FEEDERS AND BRANCH CIRCUITS COMBINED SHALL BE SIZED FOR A MAXIMUM OF 5 PERCENT VOLTAGE DROP TOTAL, IN ACCORDANCE WITH THE FBC, SECTION C405.6.3. CALCULATIONS SHALL BE COMPLETED BY THE ELECTRICAL CONTRACTOR BASED ON ACTUAL FIELD INSTALLATIONS AND DISTANCES PRIOR TO ROUGH-IN.

BRANCH CIRCUIT WIRING SCHEDULE

C/B SIZE	WIRE	CONDUIT	REMARKS
SINGLE POLE (1P)			
20a.	2-#12, 1-#12G.	3/4"	1Ø,2W
25a.	2-#10, 1-#10G.	3/4"	1Ø,2W
30a.	2-#10, 1-#10G.	3/4"	1Ø,2W
35a.	2-#8, 1-#10G.	3/4"	1Ø,2W
40a.	2-#8, 1-#10G.	3/4"	1Ø,2W
45a.	2-#8, 1-#10G.	3/4"	1Ø,2W
50a.	2-#8, 1-#10G.	3/4"	1Ø,2W
60a.	2-#6, 1-#10G.	3/4"	1Ø,2W
TWO POLE (2P)			
20a.	2-#12, 1-#12G.	3/4"	1Ø,2W
25a.	2-#10, 1-#10G.	3/4"	1Ø,2W
30a.	2-#10, 1-#10G.	3/4"	1Ø,2W
40a.	2-#8, 1-#10G.	1"	1Ø,2W
45a.	2-#8, 1-#10G.	1"	1Ø,2W
50a.	2-#8, 1-#10G.	1"	1Ø,2W
60a.	2-#6, 1-#10G.	1"	1Ø,2W
70a.	2-#4, 1-#8G.	1 1/4"	1Ø,2W
80a.	2-#4, 1-#8G.	1 1/4"	1Ø,2W
90a.	2-#3, 1-#8G.	1 1/4"	1Ø,2W
100a.	2-#3, 1-#8G.	1 1/4"	1Ø,2W

THREE POLE (3P)	WIRE	CONDUIT	REMARKS
20a.	3-#12, 1-#12G.	3/4"	3Ø, 3W
25a.	3-#10, 1-#10G.	3/4"	3Ø, 3W
30a.	3-#10, 1-#10G.	3/4"	3Ø, 3W
30a.	3-#10, 1-#10N, 1-#10G.	3/4"	3Ø, 4W
35a.	3-#8, 1-#10G.	1"	3Ø, 3W
35a.	3-#8, 1-#8, 1-#10G.	1"	3Ø, 4W
40a.	3-#8, 1-#10G.	1"	3Ø, 3W
40a.	3-#8, 1-#8N, 1-#10G.	1"	3Ø, 4W
45a.	3-#8, 1-#10G.	1"	3Ø, 3W
45a.	3-#8, 1-#8N, 1-10G.	1"	3Ø, 4W
50a.	3-#8, 1-#10G.	1"	3Ø, 3W
50a.	3-#8, 1-#8N, 1-10G.	1"	3Ø, 4W
60a.	3-#6, 1-#10G.	1"	3Ø, 3W
60a.	3-#6, 1-#6N, 1-#10G.	1 1/4"	3Ø, 4W
100a.	3-#3, 1-#3N, 1-#8G.	1 1/2"	3Ø, 4W
125a.	3-#1, 1-#1N, 1-#6G.	2"	3Ø, 4W
150a.	3-#1/0, 1-#1/0N, 1-#6G.	2"	3Ø, 4W
175a.	3-#2/0, 1-#2/0N, 1-#6G.	2'	3Ø, 4W
200a.	3-#3/0, 1-#3/0N, 1-#6G.	2 1/2"	3Ø, 4W

NOTE: VOLTAGE DROP: THE CONDUCTORS FOR FEEDERS AND BRANCH CIRCUITS COMBINED SHALL BE SIZED FOR A MAXIMUM OF 5 PERCENT VOLTAGE DROP TOTAL, IN ACCORDANCE WITH THE FBC, SECTION C405.6.3. CALCULATIONS SHALL BE COMPLETED BY THE ELECTRICAL CONTRACTOR BASED ON ACTUAL FIELD INSTALLATIONS AND DISTANCES PRIOR TO ROUGH-IN.

COPPER CONDUCTOR AND CONDUIT SCHEDULE

O.C.P.D.** AMPERE RATING	SYMBOL*	4 WIRE WITH GROUND (3P W/ NEUTRAL)	O.C.P.D.** AMPERE RATING	SYMBOL*	4 WIRE WITH GROUND (3P W/ NEUTRAL)
20A	B20	4-#12, #12G. IN 3/4"C.	225A	B225	4-#4/0, #4G. IN 3"C.
25A	B25	4-#10, #10G. IN 3/4"C.	250A	B250	4-#250MCM, #4G. IN 3"C.
30A	B30	4-#10, #10G. IN 3/4"C.	300A	B300	4-#350MCM, #4G. IN 3 1/2"C.
35A	B35	4-#8, #10G. IN 1"C.	350A	B350	4-#400MCM, #3G. IN 3 1/2"C.
40A	B40	4-#8, #10G. IN 1"C.	400A	B400	4-#500MCM, #3G IN 4"C.
45A	B45	4-#8, #10G. IN 1"C.	450A	B450	2 SETS: 4-#4/0, #2G. EACH IN 2 1/2"C.
50A	B50	4-#8, #10G. IN 1"C.	500A	B500	2 SETS: 4-#250MCM, #2G. EACH IN 3"C.
60A	B60	4-#6, #10G. IN 1 1/4"C.	600A	B600	2 SETS: 4-#350MCM, #1G. EACH IN 3"C.
70A	B70	4-#4, #8G. IN 1 1/4"C.	700A	B700	2 SETS: 4-#400MCM, #1/0G. EACH IN 3 1/2"C.
80A	B80	4-#4, #8G. IN 1 1/4"C.	800A	B800	2 SETS: 4-#500MCM, #1/0G. EACH IN 4"C.
90A	B90	4-#3, #8G. IN 1 1/2"C.	1000A	B1000	3 SETS: 4-#400MCM, #2/0G. EACH IN 3 1/2"C.
100A	B100	4-#3, #8G. IN 1 1/2"C.	1200A	B1200	4 SETS: 4-#350MCM, #3/0G. EACH IN 3 1/2"C.
110A	B110	4-#2, #6G. IN 1 1/2"C.	1600A	B1600	5 SETS: 4-#400MCM, #4/0G. EACH IN 3 1/2"C.
125A	B125	4-#1, #6G. IN 2"C.	2000A	B2000	6 SETS: 4-#400MCM, #250MCM G. EACH IN 3 1/2"C.
150A	B150	4-#1/0, #6G. IN 2"C.	2200A	B2200	6 SETS: 4-#500MCM, #350MCM G. EACH IN 4"C.
175A	B175	4-#2/0, #6G. IN 2 1/2"C.	2500A	B2500	7 SETS: 4-#500MCM, #350MCM G. EACH IN 4"C.
200A	B200	4-#3/0, #6G. IN 2 1/2"C.	3000A	B3000	8 SETS: 4-#500MCM, #400MCM G. EACH IN 4"C.

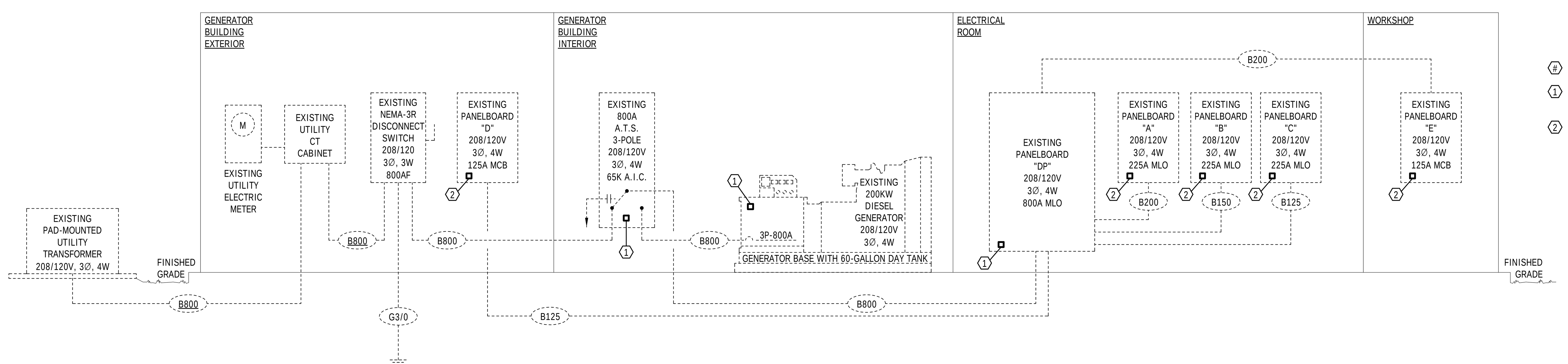
G1/0	1-#1/0 G IN 1"C.	G2/0	1-#2/0 G IN 1"C.	G3/0	1-#3/0 G IN 1"C.

* UNDERLINED TEXT WITHIN A SYMBOL INDICATES NO GROUND WIRE FOR SVC. FEEDER OR NO NEUTRAL FOR MOTOR LOAD.

** OVER CURRENT PROTECTIVE DEVICE

NOTES:

1. FOR SINGLE PHASE CIRCUITS, INCREASE WIRE ONE SIZE FOR EACH 100' OF CIRCUIT LENGTH. FOR THREE PHASE CIRCUITS, INCREASE WIRE ONE SIZE FOR EACH 200' OF CIRCUIT LENGTH. (ADJUST CONDUIT AS REQ'D).
2. VOLTAGE DROP: THE CONDUCTORS FOR FEEDERS AND BRANCH CIRCUITS COMBINED SHALL BE SIZED FOR A MAXIMUM OF 5 PERCENT VOLTAGE DROP TOTAL, IN ACCORDANCE WITH THE FLORIDA BUILDING CODE - ENERGY CONSERVATION, SECTION C405.6.3. CALCULATIONS SHALL BE COMPLETED BY THE ELECTRICAL CONTRACTOR BASED ON ACTUAL FIELD INSTALLATIONS AND DISTANCES PRIOR TO ROUGH-IN.
3. ALL UNDERGROUND AND ROOFTOP CONDUCTORS TO BE 90° C CONDUCTORS, TYPE XHHW-2 OR THWN-2. ALLOWABLE AMPACITY PER 75°C COLUMN, NEC 70 (2014) TABLE 310.15(B)(16).
4. ALL CONDUCTORS SHALL BE COPPER WITH TYPE THHN INSULATION UNLESS OTHERWISE NOTED.



EXISTING ELECTRICAL RISER DIAGRAM

SCALE: NONE

ALL ELECTRICAL DISTRIBUTION EQUIPMENT IS EXISTING TO REMAIN

KEYED NOTES - ELECTRICAL RISER DIAGRAM:

1. PROVIDE NEW SURGE PROTECTIVE DEVICE: PQ PROTECTION "PQM200" (OR APPROVED EQUAL)
2. PROVIDE NEW SURGE PROTECTIVE DEVICE: PQ PROTECTION "PQC100" (OR APPROVED EQUAL)

Quest Design Group, Inc.
1859 Northgate Blvd.
Sarasota, Fl 34234
941.351.9996
www.questdg.com
QDG ENGINEERING CONNECTIONS
Cert. of Authorization# CA31201
Mechanical Electrical Plumbing Fire Protection

SWEET SPARKMAN ARCHITECTS
2168 MAIN STREET
SARASOTA, FL 34237
T 941.952.0084
F 941.952.0201
FL AA26000857

PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR: Conformed Set 05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE:

SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	CRB
DRAWN BY:	JDS
A/E OF RECORD:	JDS
PROJECT NO:	19-522

SHEET TITLE: ELECTRICAL RISER AND CALCULATIONS

SHEET No.: E2.2

Panelboard: DP

Location: MECH. 113 | **Supply From:** | **Mounting:** SURFACE | **Enclosure:** NEMA 1
Volts: 120/208 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 65000 | **Mains Type:** MLO | **Mains Rating:** 800 A | **MCB Rating:** N/A

Notes:

CKT	Load Name	Trip	Pole	A		B		C		Pole	Trip	Load Name	CKT
1	WATER HEATER	50 A	3	5.00	0.00					2	50 A	SPARE	2
3	--	--	--			5.00	0.00			--	--	--	4
5	--	--	--					5.00	0.00	--	--	SPACE	6
7	AHU-3	40 A	2	3.33	4.33					2	60 A	AHU-1	8
9	--	--	--			3.33	4.33			--	--	--	10
11	AHU-2	40 A	2					3.33	1.00	2	35 A	TRAFFIC SIGNAL POWER	12
13	--	--	--	3.33	1.00					--	--	--	14
15	SPARE	25 A	2			0.00	2.20			2	30 A	CLOTHES DRYER	16
17	--	--	--					0.00	2.20	--	--	--	18
19	OVEN	25 A	2	1.50	1.35					2	20 A	COMMERCIAL WASHER	20
21	--	--	--			1.50	1.35			--	--	--	22
23	SPACE	--	--					0.00	0.00	--	--	SPACE	24
25	"	--	--	0.00	4.00					2	50 A	OVEN	26
27	"	--	--			0.00	4.00			--	--	--	28
29	PANEL A	200 A	3					14.60	10.15	3	200 A	PANEL E	30
31	--	--	--	12.03	8.77					--	--	--	32
33	--	--	--			14.89	10.55			--	--	--	34
35	PANEL B	150 A	3					9.77	10.40	3	125 A	PANEL D	36
37	--	--	--	7.21	9.73					--	--	--	38
39	--	--	--			11.14	7.63			--	--	--	40
41	PANEL C	125 A	3					6.96	0.00	3	30 A	SURGE PROTECTIVE DEVICE	42
43	--	--	--	7.30	0.00					--	--	--	44
45	--	--	--			5.58	0.00			--	--	--	46
			Total Load:	68.87		71.49		63.41		kVA			
			Total Amps:	580.92		602.74		528.45		AMPS			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	49588 VA	100.00%	49588 VA		
Lighting	20473 VA	125.00%	25591 VA	**Total Conn. Load:**	203.77 kVA
Motor	20137 VA	100.00%	20137 VA	**Total Est. Demand:**	183.64 kVA
Power	52831 VA	100.00%	52831 VA	**Total Conn.:**	565.62 A
Receptacle	60495 VA	58.27%	35248 VA	**Total Est. Demand:**	509.75 A
Computer	250 VA	100.00%	250 VA		

Notes:

Panelboard: A

Location: MECH. 113 | **Supply From:** DP | **Mounting:** SURFACE | **Enclosure:** NEMA 1
Volts: 120/208 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 22000 | **Mains Type:** MLO | **Mains Rating:** 225 A | **MCB Rating:** N/A

Notes:

CKT	Load Name	Trip	Pole	A		B		C		Pole	Trip	Load Name	CKT
1	PARKING LOT EAST	20 A	2	0.72	0.69					2	20 A	LTG.-APRONS	2
3	--	--	--			0.72	0.69			--	--	--	4
5	PARKING LOT WEST	20 A	2					0.96	4.00	2	50 A	RANGE	6
7	--	--	--	0.96	4.00					--	--	--	8
9	LTG.-DAYROOM	20 A	1			0.19	0.71			1	20 A	LTG.-BUILDING EXTERIOR	10
11	LTG.-DAYROOM	20 A	1					0.17	0.00	1	20 A	SPARE	12
13	LTG.-CORR./QUARTERS	20 A	1	1.83	1.32					1	20 A	LTG.-APP. BAY FLUOR.	14
15	LTG.-LOCKER/LAUNDRY	20 A	1			0.97	1.92			1	20 A	LTG.-APP. BAY M.H.	16
17	LTG.-FITNESS/STORAGE	20 A	1					0.82	1.92	1	20 A	LTG.-APP. BAY M.H.	18
19	LTG.-TRAINING/ADMIN.	20 A	1	1.40	1.09					1	20 A	LTG.-ADMIN. ASST.	20
21	INC LTG.-TRNG/ADMIN/TREAT	20 A	1			0.90	0.50			1	20 A	EXIT	22
23	SPARE	20 A	1					0.00	1.59	1	20 A	LTG.-ADMIN.	24
25	SPARE	20 A	1	0.00	0.50					1	20 A	ELECTRIC EYE	26
27	AIR COMPRESSOR	40 A	3			2.10	3.33			2	40 A	AHU-4	28
29	--	--	--					2.10	3.33	--	--	--	30
31	--	--	--	2.10	0.00					--	--	SPACE	32
33	SPACE	--	--			0.00	0.00			--	--	"	34
35	"	--	--					0.00	0.00	--	--	"	36
37	"	--	--	0.00	0.00					3	30 A	SURGE PROTECTIVE DEVICE	38
39	"	--	--			0.00	0.00			--	--	--	40
41	"	--	--					0.00	0.00	--	--	--	42
			Total Load:	14.60		12.03		14.89		kVA			
			Total Amps:	125.01		100.22		127.36		AMPS			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	6656 VA	100.00%	6656 VA		
Lighting	19785 VA	125.00%	24731 VA	**Total Conn. Load:**	41.52 kVA
Motor	6400 VA	100.00%	6400 VA	**Total Est. Demand:**	46.46 kVA
Power	8675 VA	100.00%	8675 VA	**Total Conn.:**	115.24 A
				Total Est. Demand:	128.97 A

Notes:

Panelboard: B

Location: MECH. 113 | **Supply From:** DP | **Mounting:** SURFACE | **Enclosure:** NEMA 1
Volts: 120/208 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 22000 | **Mains Type:** MLO | **Mains Rating:** 225 A | **MCB Rating:** N/A

Notes:

CKT	Load Name	Trip	Pole	A		B		C		Pole	Trip	Load Name	CKT
1	IRRIGATION WELL PUMP	20 A	3	1.32	0.36					1	20 A	RECEPTACLES BREAKROOM	2
3	--	--	--			1.32	0.36			1	20 A	COUNTER BREAKROOM	4
5	--	--	--					1.32	1.26	1	20 A	HALLWAY	6
7	IRRIGATION CONTROLLER	20 A	1	0.25	1.08					1	20 A	BUNK ROOM RECEPTACLES	8
9	KITCHEN COUNTER RECEPTACLES	20 A	1			0.54	0.36			1	20 A	REPORT RECEPTACLES	10
11	KITCHEN COUNTER RECEPTACLES	20 A	1					0.36	1.40	1	20 A	MICROWAVE	12
13	RANGE HOOD	20 A	1	0.48	0.72					1	20 A	DISPOSAL BREAKROOM	14
15	FAN-TREATMENT ROOM	20 A	1			0.25	1.20			1	20 A	DISHWASHER	16
17	DISPOSAL	20 A	1					1.20	1.20	1	20 A	REFRIGERATOR	18
19	DISHAWASHER	20 A	1	1.50	0.18					1	20 A	LAUNDRY RECEPTACLE	20
21	REFRIGERATOR	20 A	1			0.60	0.36			1	20 A	RECEPS-STOR.	22
23	REFRIGERATOR	20 A	1					0.60	0.38	1	20 A	EX. FAN STOR.	24
25	REFRIGERATOR	20 A	1	0.60	1.18					1	20 A	WASHER	26
27	EWC	20 A	1			0.50	0.54			1	20 A	RECEPS-LOBBY	28
29	RECEPS-CORR./MECH	20 A	1					1.08	0.36	1	20 A	BATHROOM RECEPTACLES	30
31	MICROWAVE	20 A	1	1.20	0.00					1	20 A	SPARE	32
33	GAS RANGE AND SOLENOID VALVE	20 A	1			0.28	0.90			3	20 A	COMMERCIAL WASHER	34
35	BUNK ROOM 119 & 120 RECEPTACLES	20 A	1					1.08	0.90	--	--	--	36
37	SURGE PROTECTIVE DEVICE	30 A	3	0.00	0.90					--	--	--	38
39	--	--	--			0.00	0.00			--	--	SPACE	40
41	--	--	--					0.00	0.00	--	--	"	42
			Total Load:	9.77		7.21		11.14		kVA			
			Total Amps:	84.65		60.08		96.07		AMPS			

3

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	4585 VA	100.00%	4585 VA		
Power	1080 VA	100.00%	1080 VA	**Total Conn. Load:**	28.11 kVA
Receptacle	22195 VA	72.53%	16098 VA	**Total Est. Demand:**	22.01 kVA
Computer	250 VA	100.00%	250 VA	**Total Conn.:**	78.03 A
				Total Est. Demand:	61.10 A

Notes:

Panelboard: C

Location: MECH. 113 | **Supply From:** DP | **Mounting:** SURFACE | **Enclosure:** NEMA 1
Volts: 120/208 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 22000 | **Mains Type:** MLO | **Mains Rating:** 225 A | **MCB Rating:** N/A

Notes:

CKT	Load Name	Trip	Pole	A		B		C		Pole	Trip	Load Name	CKT
1	IG COMP RECEPS-CHIEFS	20 A	1	0.72	0.72					1	20 A	IG COMP RECEPS-TRAINING	2
3	RECEPS-FIRE CHIEF	20 A	1			0.90	0.90			1	20 A	RECEPS-AUTO SPEC/FM	4
5	RECEPS-DEP CHIEFS	20 A	1					0.90	0.54	1	20 A	DAY ROOM UNDERCOUNTER	6
7	IG COMP RECEPS-OFFICES	20 A	1	0.72	0.54					1	20 A	RECEPS-TREATMENT	8
9	TELEPHONE BACKBOARD	20 A	1			0.50	0.54			1	20 A	RECEPS-TREATMENT	10
11	RECEPS-ADMIN ASST/FM	20 A	1					0.90	0.36	1	20 A	IG COMP RECEPS-TREAT/SOQ	12
13	IG COMP RECEPS-ADMIN ASST	20 A	1	0.36	0.90					1	20 A	RECEPS-SOQ	14
15	COPIER	20 A	1			0.90	1.26			1	20 A	RECEPS-TRAINING	16
17	RECEPS-DAY ROOM	20 A	1					0.36	0.72	1	20 A	RECEPS-DCQ	18
19	RECEPS-DAY ROOM	20 A	1	0.90	0.90					1	20 A	RECEPS-BUNK ROOMS	20
21	PA SYSTEM	20 A	1			0.50	0.90			1	20 A	RECEPS-BUNK ROOMS	22
23	IG-ADMIN. ASST. RADIO	20 A	1					0.70	1.10	1	20 A	CHARGERS	24
25	FACP	20 A	1	0.50	0.70					1	20 A	IG-DAY RM TABLE RADIO	26
27	SPARE	20 A	1			0.00	0.90			1	20 A	RECEPS-SOQ	28
29	SPACE	--	--					0.00	0.00	1	20 A	SPARE	30
31	"	--	--	0.00	0.00					--	--	SPACE	32
33	"...	--	--			0.00	0.00			--	--	"	34
35	"	--	--					0.00	0.00	--	--	"	36
37	"	--	--	0.00	0.00					3	30 A	SURGE PROTECTIVE DEVICE	38
39	"	--	--			0.00	0.00			--	--	--	40
41	"	--	--					0.00	0.00	--	--	--	42
			Total Load:	6.96		7.30		5.58		kVA			
			Total Amps:	59.77		62.60		46.50		AMPS			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Receptacle	19840 VA	75.20%	14920 VA		
				Total Conn. Load:	19.84 kVA
				Total Est. Demand:	14.92 kVA
				Total Conn.:	55.07 A
				Total Est. Demand:	41.41 A

Notes:

Panelboard: D

Location: | **Supply From:** DP | **Mounting:** SURFACE | **Enclosure:** NEMA 1
Volts: 120/208 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 22000 | **Mains Type:** MCB | **Mains Rating:** 125 A | **MCB Rating:** 125 A

Notes:

CKT	Load Name	Trip	Pole	A		B		C		Pole	Trip	Load Name	CKT
1	HP-1	60 A	2	3.08	1.50					2	30 A	HP-2	2
3	--	--	--			3.08	1.50			--	--	--	4
5	HP-4	35 A	2					1.83	1.50	2	30 A	HP-3	6
7	--	--	--	1.83	1.50					--	--	--	8
9	HP-5	30 A	2			1.50	1.08			1	20 A	RECEPS/LTG.-VEHICLE STOR.	10
11	--	--	--					1.50	0.12	1	20 A	LIGHTING-GENERATOR RM.	12
13	SPARE	20 A	1	0.00	0.50					1	20 A	GEN. FUEL TANK PUMP	14
15	RECEPS-GENERATOR BLDG.	20 A	1			0.72	0.54			1	20 A	RECEPTACLES	16
17	GENERATOR BATTERY CHARGER	20 A	1					0.50	0.54	1	20 A	GARAGE RECEPTACLES	18
19	GENERATOR BLOCK HEATER	20 A	1	1.00	0.00					--	--	SPACE	20
21	OUTBUILDING LIGHTS	20 A	1			0.57	0.00			--	--	"	22
23	EXISTING LOAD	20 A	1					0.90	0.00	--	--	"	24
25	BATTERY CHARGER	20 A	1	1.00	0.00					3	30 A	SURGE PROTECTIVE DEVICE	26
27	CU-6/AHU-6	15 A	2			0.75	0.00			--	--	--	28
29	--	--	--					0.75	0.00	--	--	--	30
			Total Load:	10.40		9.73		7.63		kVA			
			Total Amps:	89.39		83.77		63.62		AMPS			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	20301 VA	100.00%	20301 VA		
Lighting	688 VA	125.00%	860 VA	**Total Conn. Load:**	27.77 kVA
Motor	500 VA	100.00%	500 VA	**Total Est. Demand:**	27.94 kVA
Power	1500 VA	100.00%	1500 VA	**Total Conn.:**	77.08 A
Receptacle	4780 VA	100.00%	4780 VA	**Total Est. Demand:**	77.56 A

Notes:

Panelboard: E

Location: GEAR STOR. 127 | **Supply From:** DP | **Mounting:** SURFACE | **Enclosure:** NEMA 1
Volts: 120/208 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 22000 | **Mains Type:** MLO | **Mains Rating:** 225 A | **MCB Rating:** N/A

Notes:

CKT	Load Name	Trip	Pole	A		B		C		Pole	Trip	Load Name	CKT
1	RECEPS-APP. BAY	20 A	1	0.72	0.00					--	--	SPACE	2
3	RECEPS-APP. BAY	20 A	1			0.54	0.36			1	20 A	CORD REEL-APP. BAY	4
5	RECEPS-APP. BAY	20 A	1					0.72	0.36	1	20 A	CORD REEL-APP. BAY	6
7	RECEPS-APP. BAY	20 A	1	0.54	0.00					--	--	SPACE	8
9	ICE MACHINE	20 A	1			1.20	0.72			1	20 A	RECEPS-FITNESS	10
11	SPACE	--	--					0.00	0.54	1	20 A	RECEPS-FITNESS	12
13	OVERHEAD DOOR OPERATOR	20 A	1	0.96	0.54					1	20 A	RECEPS-EMS STORAGE	14
15	OVERHEAD DOOR OPERATOR	20 A	1			0.96	0.54			1	20 A	RECEPS-WORKSHOP	16
17	OVERHEAD DOOR OPERATOR	20 A	1					0.96	0.36	1	20 A	RECEPS-WORKSHOP	18
19	OVERHEAD DOOR OPERATOR	20 A	1	0.96	0.00					--	--	SPACE	20
21	SURGE PROTECTIVE DEVICE	30 A	3			0.00	0.00			--	--	"	22
23	--	--	--					0.00	4.00	2	50 A	PORTABLE WELDER	24
25	--	--	--	0.00	4.00					--	--	--	26
27	SPACE	--	--			0.00	0.00			--	--	SPACE	28
29	AIR COMPRESSOR	35 A	3					2.10	0.00	--	--	"	30
31	--	--	--	2.10	0.00					--	--	"	32
33	--	--	--			2.10	1.18			1	20 A	APP. BAY EXHAUST FAN	34
35	AHU-5	15 A	2					0.33	1.18	1	20 A	APP. BAY EXHAUST FAN	36
37	--	--	--	0.33	0.00					--	--	SPACE	38
39	SPACE	--	--			0.00	1.18			1	20 A	FUEL SYSTEM	40
41	"	--	--					0.00	0.00	--	--	SPACE 40 SHUNT-TRIP	42
			Total Load:	10.15		8.77		10.55		kVA			
			Total Amps:	86.38		73.10		89.68		AMPS			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	666 VA	100.00%	666 VA		
Motor	8652 VA	100.00%	8652 VA	**Total Conn. Load:**	29.47 kVA
Power	9176 VA	100.00%	9176 VA	**Total Est. Demand:**	28.98 kVA
Receptacle	10980 VA	95.54%	10490 VA	**Total Conn.:**	81.81 A
				Total Est. Demand:	80.45 A

Notes:

DP	A	B
	D	E

Quest Design Group, Inc.
1859 Northgate Blvd.
Sarasota, Fl 34234
941.351.9996
www.questdg.com
Cert. of Authorization# CA31201
Mechanical Electrical Plumbing Fire Protection

DocuSigned by:
Jon Shepard
AB6666A0810145F...
8/26/2020

This set has been digitally signed and sealed by Jon D. Shepard, PE on August 26, 2020 using a Digital Signature. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

JON DANIEL SHEPARD ★ LICENSE No. 71536 ★ STATE OF FLORIDA ★ PROFESSIONAL ENGINEER
08-26-2020
Jon D. Shepard

SWEET SPARKMAN ARCHITECTS
2168 MAIN STREET
SARASOTA, FL 34237
T 941.952.0084
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FL AA26000857

PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR: Conformed Set 05.22.20

REV	DESCRIPTION	DATE
3	ASI 01	08.26.20
2	Conformed Set	05.22.20
1	Addendum 01	03.24.20

GRAPHIC SCALE:

SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	CRB
DRAWN BY:	JDS
A/E OF RECORD:	JDS
PROJECT NO:	19-522

SHEET TITLE:
ELECTRICAL PANELBOARD SCHEDULES

SHEET No.: E2.3

Panelboard: DP

Location: MECH. 113
Supply From:
Mounting: SURFACE
Enclosure: NEMA 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 65000
Mains Type: MLO
Mains Rating: 800 A
MCB Rating: N/A

Notes:

CKT	Load Name	Trip	Pole	A		B		C		Pole	Trip	Load Name	CKT
1	WATER HEATER	50 A	3	5.00	0.00					2	50 A	SPARE	2
3	--	--	--			5.00	0.00			--	--	--	4
5	--	--	--					5.00	0.00	--	--	SPACE	6
7	AHU-3	40 A	2	3.33	4.33					2	60 A	AHU-1	8
9	--	--	--			3.33	4.33			--	--	--	10
11	AHU-2	40 A	2					3.33	1.00	2	35 A	TRAFFIC SIGNAL POWER	12
13	--	--	--	3.33	1.00					--	--	--	14
15	SPARE	25 A	2			0.00	2.20			2	30 A	CLOTHES DRYER	16
17	--	--	--					0.00	2.20	--	--	--	18
19	OVEN	25 A	2	1.50	1.35					2	20 A	COMMERCIAL WASHER	20
21	--	--	--			1.50	1.35			--	--	--	22
23	SPACE	--	--					0.00	0.00	--	--	SPACE	24
25	"	--	--	0.00	4.00					2	50 A	OVEN	26
27	"	--	--			0.00	4.00			--	--	--	28
29	PANEL A	200 A	3					14.60	10.15	3	200 A	PANEL E	30
31	--	--	--	12.03	8.77					--	--	--	32
33	--	--	--			14.89	10.55			--	--	--	34
35	PANEL B	150 A	3					9.77	10.40	3	125 A	PANEL D	36
37	--	--	--	7.21	9.73					--	--	--	38
39	--	--	--			10.06	7.63			--	--	--	40
41	PANEL C	125 A	3					6.96	0.00	3	30 A	SURGE PROTECTIVE DEVICE	42
43	--	--	--	7.30	0.00					--	--	--	44
45	--	--	--			5.58	0.00			--	--	--	46
			Total Load:	68.87		70.41		63.41		kVA			
			Total Amps:	580.92		593.74		528.45		AMPS			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	49588 VA	100.00%	49588 VA		
Lighting	20473 VA	125.00%	25591 VA	Total Conn. Load:	202.69 kVA
Motor	20137 VA	100.00%	20137 VA	Total Est. Demand:	183.10 kVA
Power	52831 VA	100.00%	52831 VA	Total Conn.:	562.62 A
Receptacle	59415 VA	58.42%	34708 VA	Total Est. Demand:	508.25 A
Computer	250 VA	100.00%	250 VA		

Notes:

Panelboard: A

Location: MECH. 113
Supply From: DP
Mounting: SURFACE
Enclosure: NEMA 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22000
Mains Type: MLO
Mains Rating: 225 A
MCB Rating: N/A

Notes:

CKT	Load Name	Trip	Pole	A		B		C		Pole	Trip	Load Name	CKT
1	PARKING LOT EAST	20 A	2	0.72	0.69					2	20 A	LTG.-APRONS	2
3	--	--	--			0.72	0.69			--	--	--	4
5	PARKING LOT WEST	20 A	2					0.96	4.00	2	50 A	RANGE	6
7	--	--	--	0.96	4.00					--	--	--	8
9	LTG.-DAYROOM	20 A	1			0.19	0.71			1	20 A	LTG.-BUILDING EXTERIOR	10
11	LTG.-DAYROOM	20 A	1					0.17	0.00	1	20 A	SPARE	12
13	LTG.-CORR./QUARTERS	20 A	1	1.83	1.32					1	20 A	LTG.-APP. BAY FLUOR.	14
15	LTG.-LOCKER/LAUNDRY	20 A	1			0.97	1.92			1	20 A	LTG.-APP. BAY M.H.	16
17	LTG.-FITNESS/STORAGE	20 A	1					0.82	1.92	1	20 A	LTG.-APP. BAY M.H.	18
19	LTG.-TRAINING/ADMIN.	20 A	1	1.40	1.09					1	20 A	LTG.-ADMIN. ASST.	20
21	INC LTG.-TRNG/ADMIN/TREAT	20 A	1			0.90	0.50			1	20 A	EXIT	22
23	SPARE	20 A	1					0.00	1.59	1	20 A	LTG.-ADMIN.	24
25	SPARE	20 A	1	0.00	0.50					1	20 A	ELECTRIC EYE	26
27	AIR COMPRESSOR	40 A	3			2.10	3.33			2	40 A	AHU-4	28
29	--	--	--					2.10	3.33	--	--	--	30
31	--	--	--	2.10	0.00					--	--	SPACE	32
33	SPACE	--	--			0.00	0.00			--	--	"	34
35	"	--	--					0.00	0.00	--	--	"	36
37	"	--	--	0.00	0.00					3	30 A	SURGE PROTECTIVE DEVICE	38
39	"	--	--			0.00	0.00			--	--	--	40
41	"	--	--					0.00	0.00	--	--	--	42
			Total Load:	14.60		12.03		14.89		kVA			
			Total Amps:	125.01		100.22		127.36		AMPS			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	6656 VA	100.00%	6656 VA		
Lighting	19785 VA	125.00%	24731 VA	Total Conn. Load:	41.52 kVA
Motor	6400 VA	100.00%	6400 VA	Total Est. Demand:	46.46 kVA
Power	8675 VA	100.00%	8675 VA	Total Conn.:	115.24 A
				Total Est. Demand:	128.97 A

Notes:

Panelboard: B

Location: MECH. 113
Supply From: DP
Mounting: SURFACE
Enclosure: NEMA 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22000
Mains Type: MLO
Mains Rating: 225 A
MCB Rating: N/A

Notes:

CKT	Load Name	Trip	Pole	A		B		C		Pole	Trip	Load Name	CKT
1	IRRIGATION WELL PUMP	20 A	3	1.32	0.36					1	20 A	RECEPTACLES BREAKROOM	2
3	--	--	--			1.32	0.36			1	20 A	COUNTER BREAKROOM	4
5	--	--	--					1.32	1.26	1	20 A	HALLWAY	6
7	IRRIGATION CONTROLLER	20 A	1	0.25	1.08					1	20 A	BUNK ROOM RECEPTACLES	8
9	KITCHEN COUNTER RECEPTACLES	20 A	1			0.54	0.36			1	20 A	REPORT RECEPTACLES	10
11	KITCHEN COUNTER RECEPTACLES	20 A	1					0.36	1.40	1	20 A	MICROWAVE	12
13	RANGE HOOD	20 A	1	0.48	0.72					1	20 A	DISPOSAL BREAKROOM	14
15	FAN-TREATMENT ROOM	20 A	1			0.25	1.20			1	20 A	DISHWASHER	16
17	DISPOSAL	20 A	1					[illegible]	1.20	1	20 A	REFRIGERATOR	18
19	DISHAWASHER	20 A	1	1.50	0.18					1	20 A	LAUNDRY RECEPTACLE	20
21	REFRIGERATOR	20 A	1			0.60	[illegible]			1	20 A	RECEPS-STOR.	22
23	REFRIGERATOR	20 A	1					0.60	0.38	1	20 A	EX. FAN STOR.	24
25	REFRIGERATOR	20 A	1	0.60	1.18					1	20 A	WASHER	26
27	EWC	20 A	1			0.50	0.54			1	20 A	RECEPS-LOBBY	28
29	RECEPS-CORR./MECH	20 A	1					1.08	0.36	1	20 A	BATHROOM RECEPTACLES	30
31	MICROWAVE	20 A	1	1.20	0.00					1	20 A	SPARE	32
33	GAS RANGE AND SOLENOID VALVE	20 A	1			0.28	0.90			3	20 A	COMMERCIAL WASHER	34
35	SPACE	--	--					0.00	0.90	--	--	--	36
37	SURGE PROTECTIVE DEVICE	30 A	3	0.00	0.90					--	--	--	38
39	--	--	--			0.00	0.00			--	--	SPACE	40
41	--	--	--					0.00	0.00	--	--	"	42
			Total Load:	9.77		7.21		10.06		kVA			
			Total Amps:	84.65		60.08		87.07		AMPS			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	4585 VA	100.00%	4585 VA		
Power	1080 VA	100.00%	1080 VA	Total Conn. Load:	27.03 kVA
Receptacle	21115 VA	73.68%	15558 VA	Total Est. Demand:	21.47 kVA
Computer	250 VA	100.00%	250 VA	Total Conn.:	75.03 A
				Total Est. Demand:	59.60 A

Notes:

Panelboard: C

Location: MECH. 113
Supply From: DP
Mounting: SURFACE
Enclosure: NEMA 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22000
Mains Type: MLO
Mains Rating: 225 A
MCB Rating: N/A

Notes:

CKT	Load Name	Trip	Pole	A		B		C		Pole	Trip	Load Name	CKT
1	IG COMP RECEPS-CHIEFS	20 A	1	0.72	0.72					1	20 A	IG COMP RECEPS-TRAINING	2
3	RECEPS-FIRE CHIEF	20 A	1			0.90	0.90			1	20 A	RECEPS-AUTO SPEC/FM	4
5	RECEPS-DEP CHIEFS	20 A	1					0.90	0.54	1	20 A	DAY ROOM UNDERCOUNTER	6
7	IG COMP RECEPS-OFFICES	20 A	1	0.72	0.54					1	20 A	RECEPS-TREATMENT	8
9	TELEPHONE BACKBOARD	20 A	1			0.50	0.54			1	20 A	RECEPS-TREATMENT	10
11	RECEPS-ADMIN ASST/FM	20 A	1					0.90	0.36	1	20 A	IG COMP RECEPS-TREAT/SOQ	12
13	IG COMP RECEPS-ADMIN ASST	20 A	1	0.36	0.90					1	20 A	RECEPS-SOQ	14
15	COPIER	20 A	1			0.90	1.26			1	20 A	RECEPS-TRAINING	16
17	RECEPS-DAY ROOM	20 A	1					0.36	0.72	1	20 A	RECEPS-DCQ	18
19	RECEPS-DAY ROOM	20 A	1	0.90	0.90					1	20 A	RECEPS-BUNK ROOMS	20
21	PA SYSTEM	20 A	1			0.50	0.90			1	20 A	RECEPS-BUNK ROOMS	22
23	IG-ADMIN. ASST. RADIO	20 A	1					0.70	1.10	1	20 A	CHARGERS	24
25	FACP	20 A	1	0.50	0.70					1	20 A	IG-DAY RM TABLE RADIO	26
27	SPARE	20 A	1			0.00	0.90			1	20 A	RECEPS-SOQ	28
29	SPACE	--	--					0.00	0.00	1	20 A	SPARE	30
31	"	--	--	0.00	0.00					--	--	SPACE	32
33	"...	--	--			0.00	0.00			--	--	"	34
35	"	--	--					0.00	0.00	--	--	"	36
37	"	--	--	0.00	0.00					3	30 A	SURGE PROTECTIVE DEVICE	38
39	"	--	--			0.00	0.00			--	--	--	40
41	"	--	--					0.00	0.00	--	--	--	42
			Total Load:	6.96		7.30		5.58		kVA			
			Total Amps:	59.77		62.60		46.50		AMPS			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Receptacle	19840 VA	75.20%	14920 VA		
				Total Conn. Load:	19.84 kVA
				Total Est. Demand:	14.92 kVA
				Total Conn.:	55.07 A
				Total Est. Demand:	41.41 A

Notes:

Panelboard: D

Location:
Supply From: DP
Mounting: SURFACE
Enclosure: NEMA 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22000
Mains Type: MCB
Mains Rating: 125 A
MCB Rating: 125 A

Notes:

CKT	Load Name	Trip	Pole	A		B		C		Pole	Trip	Load Name	CKT
1	HP-1	60 A	2	3.08	1.50					2	30 A	HP-2	2
3	--	--	--			3.08	1.50			--	--	--	4
5	HP-4	35 A	2					1.83	1.50	2	30 A	HP-3	6
7	--	--	--	1.83	1.50					--	--	--	8
9	HP-5	30 A	2			1.50	1.08			1	20 A	RECEPS/LTG.-VEHICLE STOR.	10
11	--	--	--					1.50	0.12	1	20 A	LIGHTING-GENERATOR RM.	12
13	SPARE	20 A	1	0.00	0.50					1	20 A	GEN. FUEL TANK PUMP	14
15	RECEPS-GENERATOR BLDG.	20 A	1			0.72	0.54			1	20 A	RECEPTACLES	16
17	GENERATOR BATTERY CHARGER	20 A	1					0.50	0.54	1	20 A	GARAGE RECEPTACLES	18
19	GENERATOR BLOCK HEATER	20 A	1	1.00	0.00					--	--	SPACE	20
21	OUTBUILDING LIGHTS	20 A	1			0.57	0.00			--	--	"	22
23	EXISTING LOAD	20 A	1					0.90	0.00	--	--	"	24
25	BATTERY CHARGER	20 A	1	1.00	0.00					3	30 A	SURGE PROTECTIVE DEVICE	26
27	CU-6/AHU-6	15 A	2			0.75	0.00			--	--	--	28
29	--	--	--					0.75	0.00	--	--	--	30
			Total Load:	10.40		9.73		7.63		kVA			
			Total Amps:	89.39		83.77		63.62		AMPS			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	20301 VA	100.00%	20301 VA		
Lighting	688 VA	125.00%	860 VA	Total Conn. Load:	27.77 kVA
Motor	500 VA	100.00%	500 VA	Total Est. Demand:	27.94 kVA
Power	1500 VA	100.00%	1500 VA	Total Conn.:	77.08 A
Receptacle	4780 VA	100.00%	4780 VA	Total Est. Demand:	77.56 A

Notes:

Panelboard: E

Location: GEAR STOR. 127
Supply From: DP
Mounting: SURFACE
Enclosure: NEMA 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22000
Mains Type: MLO
Mains Rating: 225 A
MCB Rating: N/A

Notes:

CKT	Load Name	Trip	Pole	A		B		C		Pole	Trip	Load Name	CKT
1	RECEPS-APP. BAY	20 A	1	0.72	0.00					--	--	SPACE	2
3	RECEPS-APP. BAY	20 A	1			0.54	0.36			1	20 A	CORD REEL-APP. BAY	4
5	RECEPS-APP. BAY	20 A	1					0.72	0.36	1	20 A	CORD REEL-APP. BAY	6
7	RECEPS-APP. BAY	20 A	1	0.54	0.00					--	--	SPACE	8
9	ICE MACHINE	20 A	1			1.20	0.72			1	20 A	RECEPS-FITNESS	10
11	SPACE	--	--					0.00	0.54	1	20 A	RECEPS-FITNESS	12
13	OVERHEAD DOOR OPERATOR	20 A	1	0.96	0.54					1	20 A	RECEPS-EMS STORAGE	14
15	OVERHEAD DOOR OPERATOR	20 A	1			0.96	0.54			1	20 A	RECEPS-WORKSHOP	16
17	OVERHEAD DOOR OPERATOR	20 A	1					0.96	0.36	1	20 A	RECEPS-WORKSHOP	18
19	OVERHEAD DOOR OPERATOR	20 A	1	0.96	0.00					--	--	SPACE	20
21	SURGE PROTECTIVE DEVICE	30 A	3			0.00	0.00			--	--	"	22
23	--	--	--					0.00	4.00	2	50 A	PORTABLE WELDER	24
25	--	--	--	0.00	4.00					--	--	--	26
27	SPACE	--	--			0.00	0.00			--	--	SPACE	28
29	AIR COMPRESSOR	35 A	3					2.10	0.00	--	--	"	30
31	--	--	--	2.10	0.00					--	--	"	32
33	--	--	--			2.10	1.18			1	20 A	APP. BAY EXHAUST FAN	34
35	AHU-5	15 A	2					0.33	1.18	1	20 A	APP. BAY EXHAUST FAN	36
37	--	--	--	0.33	0.00					--	--	SPACE	38
39	SPACE	--	--			0.00	1.18			1	20 A	FUEL SYSTEM	40
41	"	--	--					0.00	0.00	--	--	SPACE 40 SHUNT-TRIP	42
			Total Load:	10.15		8.77		10.55		kVA			
			Total Amps:	86.38		73.10		89.68		AMPS			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	666 VA	100.00%	666 VA		
Motor	8652 VA	100.00%	8652 VA	Total Conn. Load:	29.47 kVA
Power	9176 VA	100.00%	9176 VA	Total Est. Demand:	28.98 kVA
Receptacle	10980 VA	95.54%	10490 VA	Total Conn.:	81.81 A
				Total Est. Demand:	80.45 A

Notes:

VOID

DP	A	B
	D	E

Quest Design Group, Inc.
1859 Northgate Blvd.
Sarasota, Fl 34234
941.351.9996
www.questdg.com

QDG ENGINEERING CONNECTIONS
Cert. of Authorization# CA31201

Mechanical Electrical Plumbing Fire Protection

SWEET SPARKMAN ARCHITECTS
2168 MAIN STREET
SARASOTA, FL 34237
T 941.952.0084
F 941.952.0201
FL AA26000857

PROJECT TITLE: TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR: Conformed Set
05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE:

SCALE: 1/8" = 1'-0"
PROJECT MANAGER: CRB
DRAWN BY: JDS
A/E OF RECORD: JDS
PROJECT NO: 19-522

SHEET TITLE:
ELECTRICAL PANELBOARD SCHEDULES

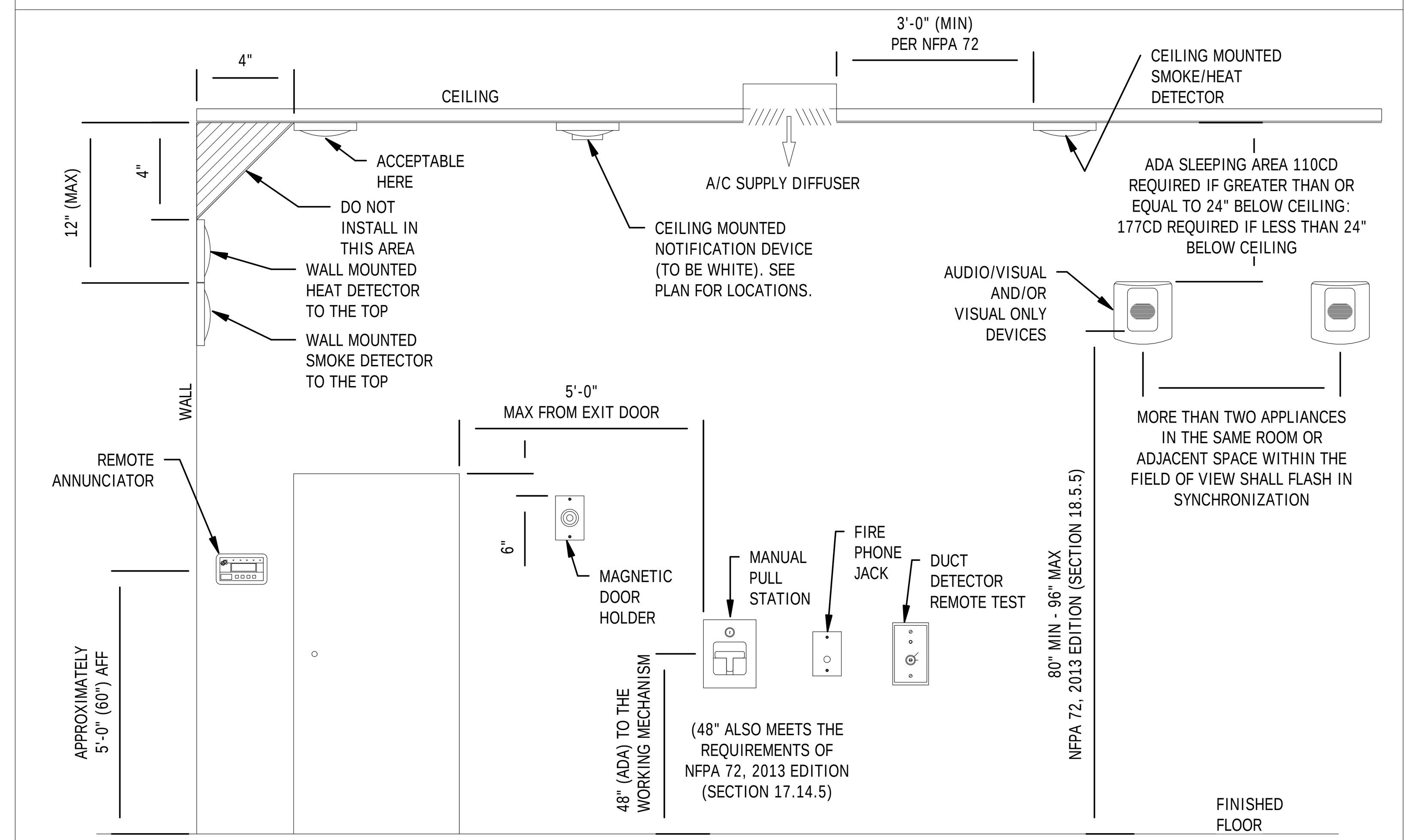
SHEET No.: E2.3

LOW VOLTAGE LEGEND

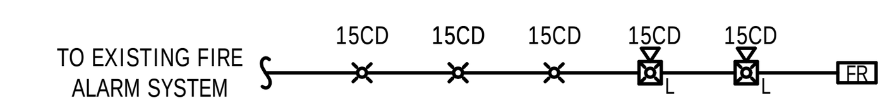
SYMBOL	DESCRIPTION
AFF/AFG	ABOVE FINISHED FLOOR / ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
ETR	EXISTING TO REMAIN.
NIC	NOT IN CONTRACT
TR	TAMPER RESISTANT
UON	UNLESS OTHERWISE NOTED
WP	WEATHER PROOF
NAC	NOTIFICATION APPLIANCE CIRCUIT
SLC	SIGNALING LINE CIRCUIT CLASS B (ADDRESSABLE LOOP)
SLC (A)	SIGNALING LINE CIRCUIT CLASS A (ADDRESSABLE LOOP)
IDC	INITIATING DEVICE CIRCUIT (CONVENTIONAL LOOP)
CD	CANDELA RATING
W	WALL MOUNTED DEVICE
C	CEILING MOUNTED DEVICE
	CCTV CAMERA, CEILING-MOUNTED "C" OR WALL-MOUNTED "W" AS INDICATED
SC	SECURITY CONTACT DOOR/WINDOW ECT.
ML	MAGNETIC LOCK
DSL	DOOR STRIKE LOCK
PR	PROX READER
PDR	PROX READER LIGHTED EXIT PUSH BUTTON FOR DOOR RELEASE.
PB	PANIC BUTTON
R	SECURITY SYSTEM RELAY
KP	SECURITY SYSTEM KEYPAD
DR	EXIT PUSH BUTTON FOR DOOR RELEASE.
	HANDICAP EXIT PUSH PLATE DOOR OPENER.
	SIREN
	SECURITY SYSTEM MOTION DETECTOR
	MOTION DETECTOR FOR DOOR RELEASE
SEC	SECURITY CONTROL PANEL.
	TELEPHONE OUTLET - MOUNT 18" AFF U.O.N., 4" SQ. J-BOX w/1-GANG PLASTER RING, 1"C TO ACCESSIBLE CEILING. PROVIDE PULLSTRING.
	DATA OUTLET - MOUNT 18" AFF U.O.N., 4" SQ. J-BOX w/1-GANG PLASTER RING, 1"C TO ACCESSIBLE CEILING. PROVIDE PULLSTRING.
	TELECOM OUTLET(DATA/TELEPHONE) - MOUNT 18" AFF U.O.N., 4" SQ. J-BOX w/1-GANG PLASTER RING, 1"C TO ACCESSIBLE CEILING. PROVIDE PULLSTRING.
	FLOOR/CEILING-MOUNTED TELECOM OUTLET. REFER TO PLANS FOR BOX TYPE, CONDUIT SIZE/QUANTITY & CONFIGURATION.
	HDMI CABLE OUTLET, PROVIDE 4" SQ. J-BOX w/1-GANG PLASTER RING AND COVER PLATE.
	CABLE TELEVISION OUTLET - MOUNT 18" AFF U.O.N., 4" SQ. J-BOX w/1-GANG PLASTER RING, 1"C TO ACCESS. CLG. PROVIDE PULLSTRING.
TTB	TTB (TELEPHONE TERMINAL BOARD) MARINE PLYWOOD BACKBOARD 3/4"x4'x4' PAINTED W/FIRE RETARDANT GRAY PAINT. PROVIDE (2)4" CONDUITS TO PROPERTY LINE. COORDINATE FINAL CONDUIT SIZES AND LOCATIONS W/UTILITY. PROVIDE SOLID COPPER GROUND BAR WITH INSULATED STAND-OFFS.
J	JUNCTION BOX
	FIRE ALARM PULL STATION, MOUNT 48" AFF U.O.N.
	HEAT DETECTOR (THERMAL DETECTOR)
	SYSTEM TYPE, ADDRESSABLE SMOKE DETECTOR FOR FIRE ALARM &/OR SMOKE CONTROL. MAINTAIN A MINIMUM DISTANCE OF 3'-0" FROM ALL CEILING-MOUNTED HVAC SUPPLY/RETURN REGISTERS.
	PHOTOELECTRIC TYPE SMOKE DETECTOR MOUNTED IN HVAC DUCT FOR MECHANICAL UNIT SHUT DOWN AND/OR SMOKE DAMPER OPERATION, COORDINATE FINAL LOCATION AND QUANTITY WITH MECHANICAL PLANS AND MECHANICAL CONTRACTOR.
RTS	DUCT DETECTOR REMOTE TEST SWITCH.
	ELECTRIC HORN, MOUNT 90" A.F.F. OR 6" BELOW THE CEILING, WHICHEVER IS LOWER.
	LOW FREQUENCY ALARM APPLIANCE, 520 HZ MOUNT BETWEEN 80" AND 96" AFF.
	COMBINATION LOW FREQUENCY/STROBE ALARM APPLIANCE, 520 HZ MOUNT AS PER ADA REQUIREMENTS.
	STROBE LIGHT, MOUNT BETWEEN 80" AND 96" AFF. FINAL MOUNTING HEIGHT W/ARCH.
	COMBINATION FIRE ALARM HORN/STROBE, MOUNT BETWEEN 80" AND 96" AFF. COORDINATE FINAL MOUNTING HEIGHT WITH ARCHITECT.
	STROBE LIGHT, CEILING MOUNT.
	COMBINATION FIRE ALARM HORN/STROBE, CEILING MOUNT.
	VOICE EVACUATION SPEAKER, MOUNT 90" A.F.F. OR 6" BELOW THE CEILING, WHICHEVER IS LOWER. CONTRACTOR SHALL ADJUST TAPS IN FIELD FOR AUDIBILITY/INTELLIGIBILITY.
	VOICE EVACUATION SPEAKER/STROBE MOUNT 90" A.F.F. OR 6" BELOW THE CEILING, WHICHEVER IS LOWER. CONTRACTOR SHALL ADJUST TAPS IN THE FIELD FOR AUDIBILITY/INTELLIGIBILITY.
	VOICE EVACUATION SPEAKER, CEILING MOUNT, CONTRACTOR SHALL ADJUST TAPS IN FIELD FOR AUDIBILITY/INTELLIGIBILITY.
	VOICE EVACUATION SPEAKER/STROBE CEILING MOUNT, CONTRACTOR SHALL ADJUST TAPS IN THE FIELD FOR AUDIBILITY/INTELLIGIBILITY.
	DOOR HOLDER
	FLOW SWITCH
	TAMPER SWITCH
	FIRE ALARM MONITORING MODULE.
FR	FIRE ALARM CONTROL RELAY. LOCATE WITHIN 3'-0" OF CONTROLLED EQUIPMENT.
LIM	FIRE ALARM LINE ISOLATION MODULE, USED IN CLASS A CIRCUITS ONLY.
SPD	SURGE PROTECTION DEVICE, INCLUDE GROUNDING AS PER MANUFACTURERS INSTRUCTIONS.
TS	FIRE ALARM TELEPHONE STATION.
FACP	FIRE ALARM CONTROL PANEL.
BPS	FIRE ALARM BOOSTER POWER SUPPLY.
FACS	FIRE ALARM COMMAND SYSTEM.
AMP	VOICE EVAC AMPLIFIER PANEL.
ANN	FIRE ALARM ANNUNCIATOR. PROVIDE FLUSH MOUNTING TRIM FOR DEVICE RECESS MOUNTING.
DACT	DIGITAL ALARM COMMUNICATION TRANSMITTER
FATC	FIRE ALARM TERMINAL CABINET.
KNOX	KNOX BOX
EOL	END-OF-LINE RESISTOR.
ARP	AREA OF RESCUE POWER SUPPLY.
ARB	AREA OF RESCUE PHONE BASE.
RCB	AREA OF RESCUE CALL BOX.
AOR	AREA OF RESCUE DIRECTIONAL SIGNAGE.

NOTES:
1. LOW VOLTAGE/ELECTRICAL CONTRACTOR SHALL VERIFY EXACT LOCATIONS & MOUNTING HEIGHTS OF ALL LOW VOLTAGE DEVICES WITH OWNER/ARCHITECT BEFORE ROUGH-IN.
2. ALL SYMBOLS AND ABBREVIATIONS DO NOT NECESSARILY APPEAR ON THIS PROJECT.

FIRE ALARM DEVICE MOUNTING GUIDE

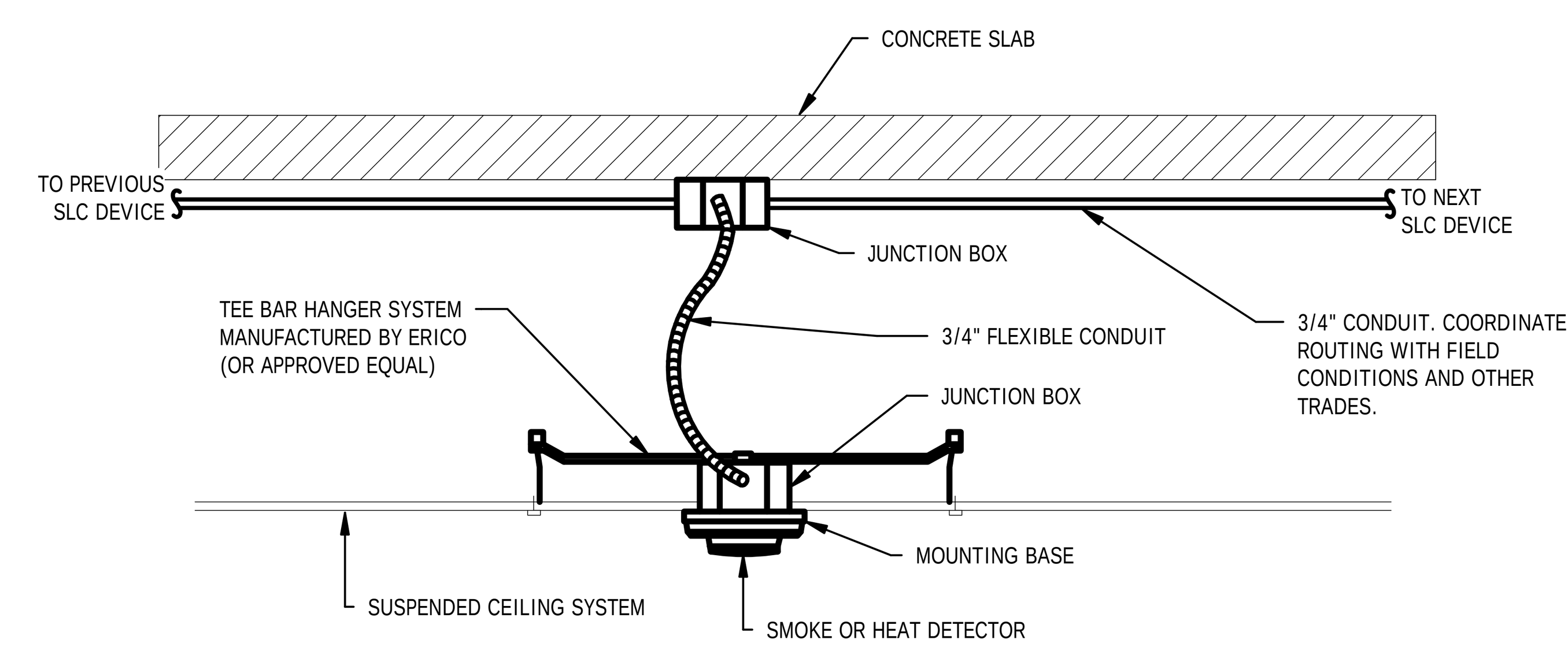


NOTE	IMPORTANT NOTE
CHECK WITH MANUFACTURER'S INSTALLATION SHEET FOR THE EXACT ROUGH-IN HEIGHTS, LOCATION OF BACK BOXES, AND WIRING REQUIREMENTS.	NOT ALL DEVICES SHOWN ON THIS DETAIL APPLY TO THIS PROJECT. SEE THE PLAN VIEW LAYOUT OF THE FIRE ALARM SYSTEM TO VERIFY WHICH DEVICES APPLY, AND WHICH DO NOT.



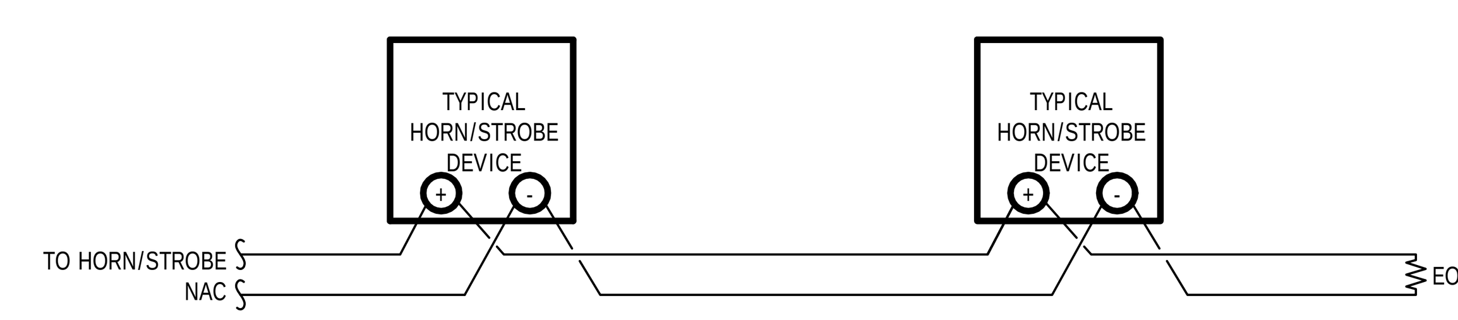
FIRE ALARM RISER DIAGRAM

SCALE: NONE



SMOKE/HEAT DETECTOR MOUNTED ON SUSPENDED CEILING SYSTEM

SCALE: NONE



HORN/STROBE WIRING DIAGRAM (CLASS B)

SCALE: NONE

EXISTING FIRE ALARM SYSTEM NOTES:

1. FIRE ALARM SYSTEM IS AN EXISTING CONVENTIONAL FIRE ALARM SYSTEM
2. ALL CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS BUT IN NO CASE SMALLER THAN 14 AWG FOR NOTIFICATION APPLIANCE CIRCUITS AND 18 AWG FOR SIGNALING LINE CIRCUITS.
3. ALL FIRE CONDUCTORS CONCEALED IN WALLS SHALL BE IN MINIMUM 1/2" CONDUIT (CONDUITS SHALL NOT EXCEED 30% FILL) TIE WRAP ALL EXPOSED FIRE ALARM WIRES TIGHT TO CEILING.
4. ALL VISUAL ALARMS SHALL BE RATED PER NFPA 72, 101, AND ANSI A117.1.4.26 AND ADA REQUIREMENTS. AUDIBLE AND VISUAL DEVICES FOR FIRE ALARM SHALL COMPLY WITH THE FLORIDA ACCESSIBILITY CODE. FIRE ALARM SYSTEM SHALL BE AS REQUIRED PER FLORIDA BUILDING CODE 2017, NFPA 101-2015, NFPA 72-2013, AND LOCAL CODES.
5. ALL NOTIFICATION APPLIANCE CIRCUITS SHALL BE CLASS B AND ALL SIGNALING LINE CIRCUITS SHALL BE CLASS B STYLE 4, UNLESS OTHERWISE INDICATED.
6. ALL FIRE ALARM WIRING TO BE SOLID COPPER CONDUCTOR OF THE MINIMUM SIZE RECOMMENDED BY THE FIRE ALARM SYSTEM MANUFACTURER AND INSTALLED IN CONDUIT WHERE CONCEALED OR ABOVE STORAGE SPACES. ALL WIRING TO BE COLOR COORDINATED AND PROPERLY IDENTIFIED. INSTALLATION WILL BE BY A STATE LICENSED AND APPROVED INSTALLER AND COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES.
7. ALL FIRE ALARM COMPONENTS SHALL BE COMPATIBLE AND SHALL BE UL LISTED FOR FIRE ALARM SERVICE.
8. VERIFY ALL REQUIREMENTS WITH LOCAL AUTHORITY HAVING JURISDICTION (AHJ).
9. FIRE ALARM AND FIRE SPRINKLER CONTRACTORS SHALL OBTAIN SEPARATE PERMITS.
10. BATTERY CALCULATIONS SHALL BE PROVIDED WITH EQUIPMENT SUBMITTALS AND PERMIT DOCUMENTS AS REQUIRED.
11. FIRE ALARM PLANS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF THE FIRE ALARM SYSTEM AND MEETS REQUIREMENTS IN ACCORDANCE WITH FLORIDA ADMINISTRATIVE CODE 61G15-32.008 AND 33.006. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS IN ACCORDANCE WITH ALL APPLICABLE CODES THAT SHALL INCLUDE, BUT NOT BE LIMITED TO, POINT TO POINT WIRING DIAGRAM, WIRE SIZES, BATTERY CALCULATIONS, EQUIPMENT SUBMITTALS AND INSTALLATION DETAILS. IT SHALL ALSO BE THE RESPONSIBILITY OF SAID CONTRACTOR TO PROVIDE DOCUMENTS AS REQUIRED FOR THE FIRE ALARM PERMIT. CONTRACTOR SHALL PROVIDE ADDITIONAL ITEMS AS REQUIRED FOR A COMPLETE AND CODE COMPLYING INSTALLATION BASED ON THE LOCAL REQUIREMENTS AND THE AHJ.
12. FIRE ALARM CONTRACTOR SHALL SUPPLY TO THE OWNER AND OWNERS OPERATING PERSONNEL TRAINING AS REQUIRED FOR THE PROPER OPERATION AND MAINTENANCE OF THEIR FIRE ALARM SYSTEM. PROVIDE MANUALS, SYSTEM DOCUMENTATION AND A COPY OF THE PROGRAMMING/PASSWORD WITHIN 30 DAYS OF ACCEPTANCE OF THE FIRE ALARM SYSTEM TO THE OWNER.
13. FIRE ALARM CONTRACTOR SHALL COORDINATE THE FINAL LOCATIONS & QUANTITY OF ALL FIRE ALARM DEVICES AS PER CODE REQUIREMENTS.
14. PROVIDE FIRE ALARM PANEL WITH ADEQUATE SPARE CAPACITY FOR FUTURE DEVICE CONNECTIONS IN FINAL BUILD-OUT BASED UPON LISTED OCCUPANCY AND SQUARE FOOTAGE.
15. A VOICE EVAC. SYSTEM WITH THE APPROVAL OF THE AHJ MAY BE USED AS A MASS NOTIFICATION SYSTEM AS PER NFPA 72 2013.
16. COORDINATE THE EXACT LOCATIONS AND QUANTITY OF THE FIRE ALARM DEVICES WITH THE FLOOR PLANS.
17. FIRE ALARM SYSTEM TESTING SHALL BE AS PER NFPA 72 CHAPTER 14 REQUIREMENTS.
18. FIRE ALARM SYSTEM TO PROVIDE A GENERAL EVACUATION SIGNAL.
19. FIRE ALARM SYSTEM IS TO BE REMOTE MONITORED.

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Mechanical Electrical Plumbing Fire Protection

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PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR: Conformed Set 05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE:

SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	CRB
DRAWN BY:	JDS
A/E OF RECORD:	JDS
PROJECT NO:	19-522

SHEET TITLE:

FIRE ALARM NOTES, DETAILS, AND RISER

SHEET No.:

E2.4

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DEMOLITION NOTES

THE DEMOLITION PROCEDURES SHALL PROVIDE FOR SAFE CONDUCT OF THE WORK, PROTECTION OF PERSONNEL, CAREFUL REMOVAL, AND DISPOSAL OF MATERIALS AS INDICATED. THE PROCEDURES ALSO INCLUDE PROTECTION OF PROPERTY TO REMAIN UNDISTURBED. COORDINATION WITH OTHER WORK IN PROGRESS AND TIMELY DISCONNECTION OF UTILITY SERVICES.

EXISTING WORK SHALL NOT BE CUT, DRILLED, ALTERED, REMOVED, OR TEMPORARILY REMOVED FOR THE INSTALLATINO REQUIRED TO PERFORM CONSTRUCTION ACTIVITIES OF MECHANICAL AND ELECTRICAL WORK AND OTHER CONSTRUCTION UNDER THE CONTRACT WITHOUT AUTHORIZATION OF THE OWNER. STRUCTURAL MEMBERS OF CONCRETE OR STRUCTURAL STEEL SHALL NOT BE ALTERED WITHOUT AUTHORIZATION OF THE OWNER.

CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROAD, STREETS, WALKWAYS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.

REMOVE AND LEGALLY DISPOSE OF ITEMS EXCEPT THOSE INDICATED TO BE REINSTALLED, SALVAGED, OR TO REMAIN THE OWNER'S PROPERTY.

COMPLY WITH GOVERNING EPA NOTIFICATION REGULATIONS BEFORE STARTING DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.

PROVIDE TEMPORARY SERVICES DURING THE INTERRUPTION TO EXISTING UTILITIES TO REMAIN, AS ACCEPTABLE TO OWNER AND TO GOVERNING AUTHORITIES. COORDINATE WITH OWNER'S REPRESENTATIVE.

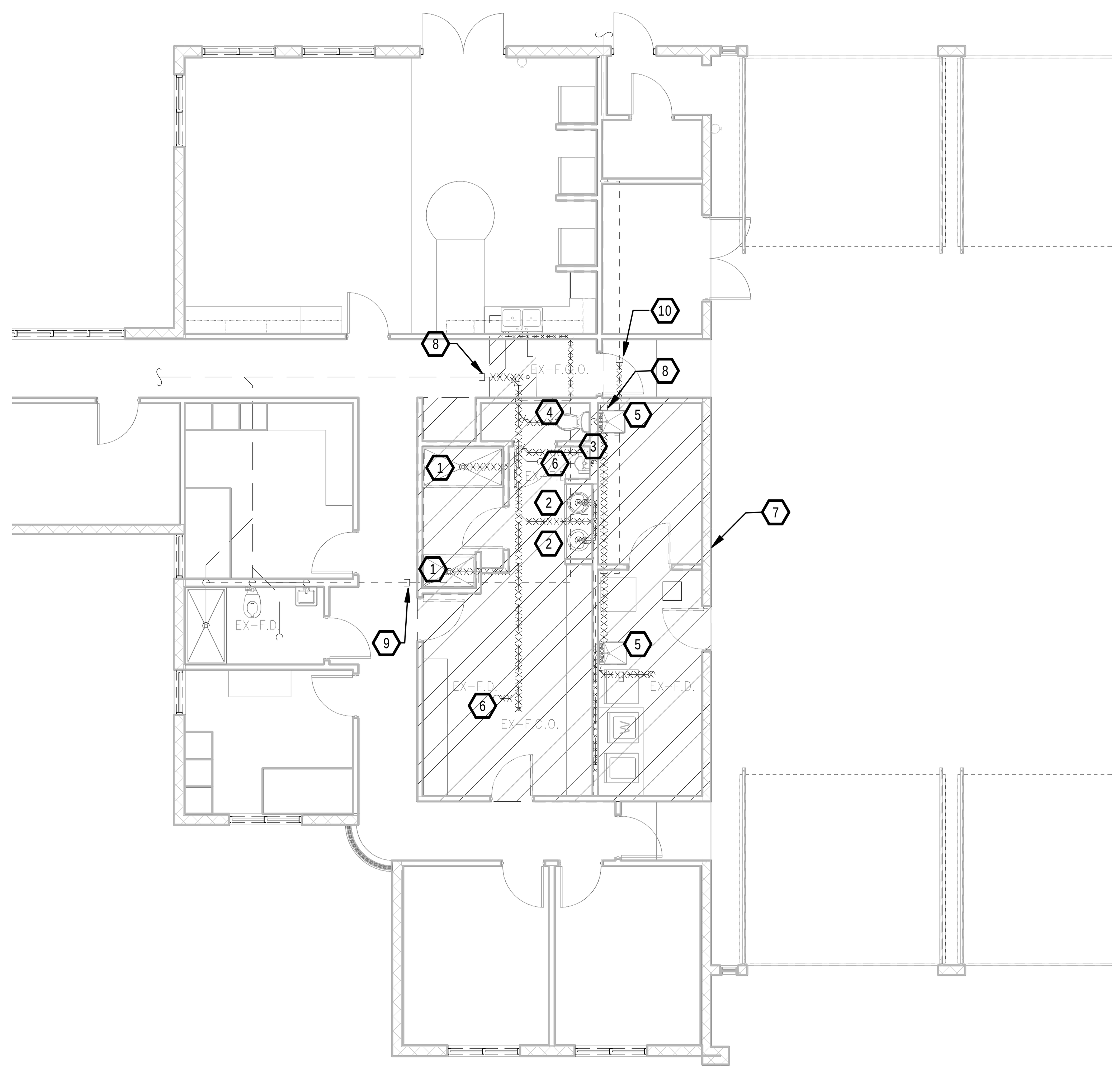
REMOVE AND REINSTALL: REMOVE ITEMS INDICATED - CLEAN, SERVICE, AND OTHERWISE PREPARE FOR REUSE - STORE AND PROTECT AGAINS DAMAGE. REINSTALL ITEMS IN LOCATIONS INDICATED.

EXISTING TO REMAIN: PROTECT CONSTRUCTION INDICATED TO REMAIN AGAINST DAMAGE AND SOILING DURING DEMOLITION. WHEN PERMITTED BY THE ARCHITECT, ITEMS MAY BE REMOVED TO A SUITABLE, PROTECTED STORAGE LOCATION DURING DEMOLITION AND THEN CLEANED AND REINSTALLED IN THEIR ORIGINAL LOCATIONS.

EXCEPT FOR ITEMS OR MATERIALS INDICATED TO BE REUSED, SALVAGED, OR OTHERWISE INDICATED TO REMAIN THE OWNER'S PROPERTY, DEMOLISHED MATERIALS SHALL BECOME THE CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM THE SITE WITH FURTHER DISPOSITION AT THE CONTRACTOR'S OPTION.

SCOPE FO WORK - PLUMBING

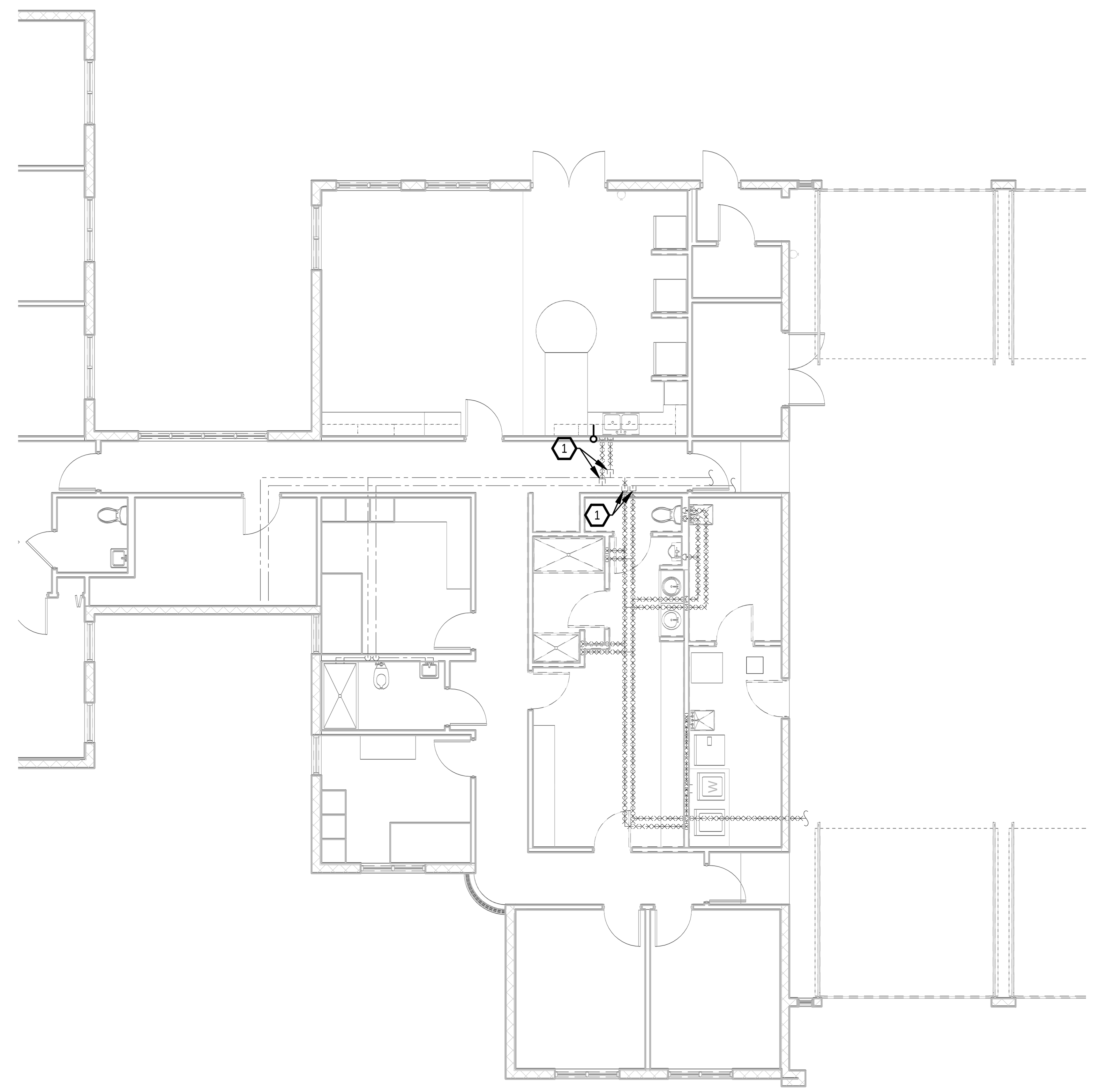
1. CONTRACTOR SHALL PROVIDE DEMOLITION IN ACCORDANCE WITH ARCHITECTURAL DRAWINGS.
2. THE SCOPE OF THIS PROJECT INCLUDES THE DEMOLITION OF EXISTING, AND THE ADDITION OF NEW PLUMBING FIXTURES AS INDCATED. THE MATERIAL TO BE DEMOLISHED INCLUDES ASSOCIATED PIPING, VALVES, FITTINGS, HANGERS, AND SUPPORTS, FOR PORTION OF PLUMBING SYSTEM IN PRESENT LOCATION AS IMPLIED BY THE NATURE OF THE WORK TO BE REMOVED.
3. A COMPLETE DOMESTIC WATER AND SANITARY SEWER PRESSURE TEST WILL BE WITHIN THE SCOPE OF THIS PROJECT. THE PRESSURE TEST SHALL BE CONDUCTED AS INDICATED BY THE REQUIREMENTS OF THE PLUMBING GENERAL NOTES ON SHEET P-1.2
4. SAW CUTTING AND PATCHING SHALL BE INCLUDED IN THE SCOPE OF THIS PROJECT, TO ALLOW FOR THE CONNECTION OF UNDERGROUND SERVICES TO NEW OR RELOCATED FIXTURES, AS INDICATED.



PLUMBING KEYED NOTES:

1. REMOVE EXISTING SHOWER VALVE AND TRIM AND DISPOSE OF IN A SAFE MANNER.
2. REMOVE EXISTING LAVATORY AND DISPOSE OF IN A SAFE MANNER.
3. REMOVE EXISTING URINAL AND DISPOSE OF IN A SAFE MANNER.
4. REMOVE EXISTING WATER CLOSET AND DISPOSE OF IN A SAFE MANNER.
5. REMOVE EXISTING UTILITY SINK AND DISPOSE OF IN A SAFE MANNER.
6. REMOVE EXISTING FLOOR DRAIN AND DISPOSE OF IN A SAFE MANNER.
7. SAW CUT EXISTING FLOOR SLAB AS REQUIRED TO PROVIDE NEW PLUMBING.
8. CAP EXISTING SANITARY AND PREPARE FOR NEW CONNECTION. FIELD VERIFY SIZE, LOCATION, AND INVERT ELEVATION.
9. CAP EXISTING VENT AND PREPARE FOR NEW CONNECTION.
10. CAP EXISTING VENT.

1 EX-SANITARY WASTE AND VENT
1/8" = 1'-0"



PLUMBING KEYED NOTES:

1. CAP EXISTING 1-1/2"CW & 1"HW AND PREPARE FOR NEW CONNECTION. FIELD VERIFY SIZE AND LOCATION PRIOR TO START OF WORK.

3 EX-DOMESTIC WATER
1/8" = 1'-0"

PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
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ISSUED FOR: Conformed Set 05.22.20

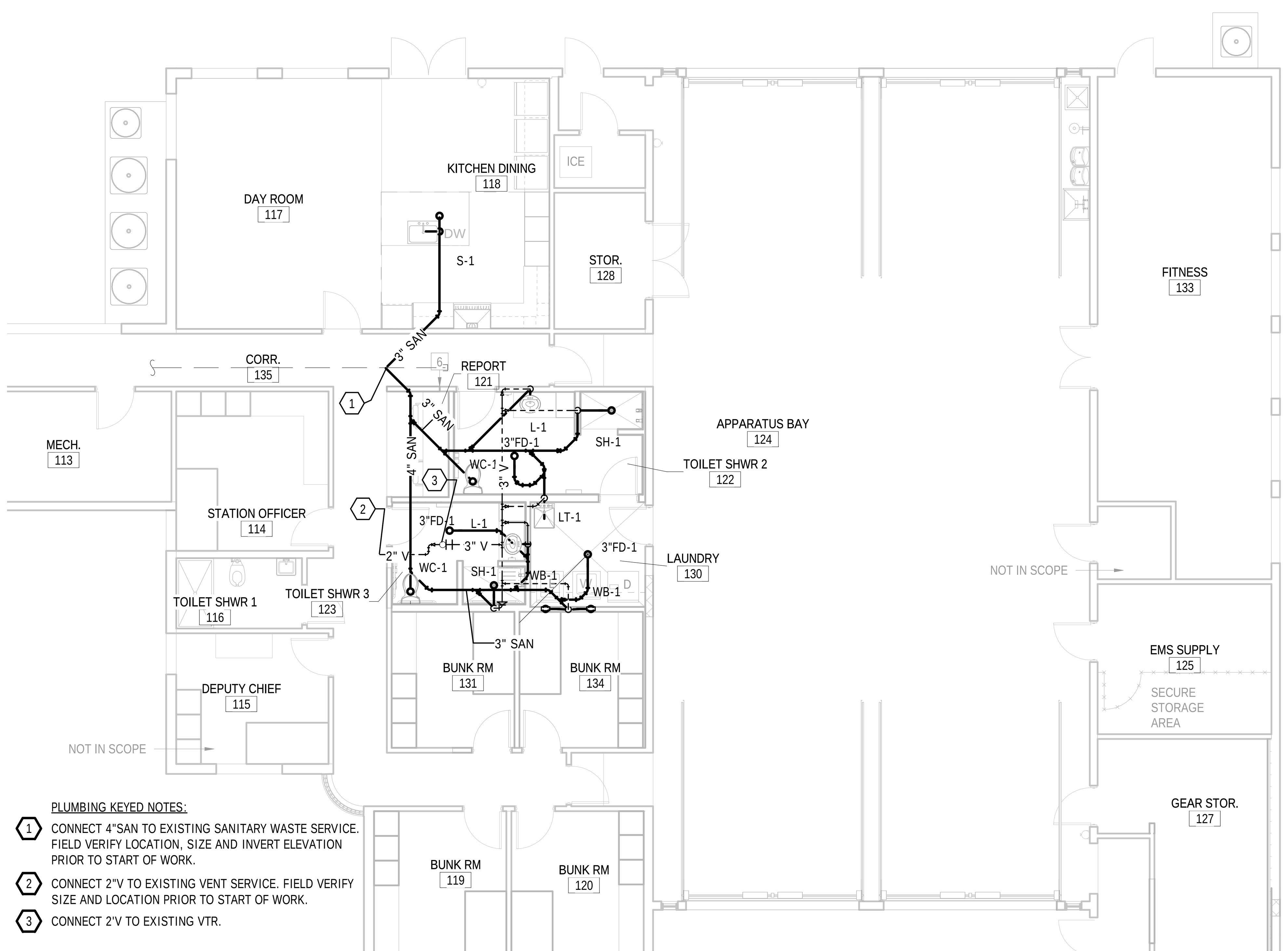
REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	CRB
DRAWN BY:	Author
A/E OF RECORD:	Checker
PROJECT NO:	19-522

SHEET TITLE: EX - PLUMBING PLANS

SHEET No.: P1.0



PLUMBING KEYED NOTES:

1. CONNECT 4"SAN TO EXISTING SANITARY WASTE SERVICE. FIELD VERIFY LOCATION, SIZE AND INVERT ELEVATION PRIOR TO START OF WORK.
2. CONNECT 2"V TO EXISTING VENT SERVICE. FIELD VERIFY SIZE AND LOCATION PRIOR TO START OF WORK.
3. CONNECT 2'V TO EXISTING VTR.

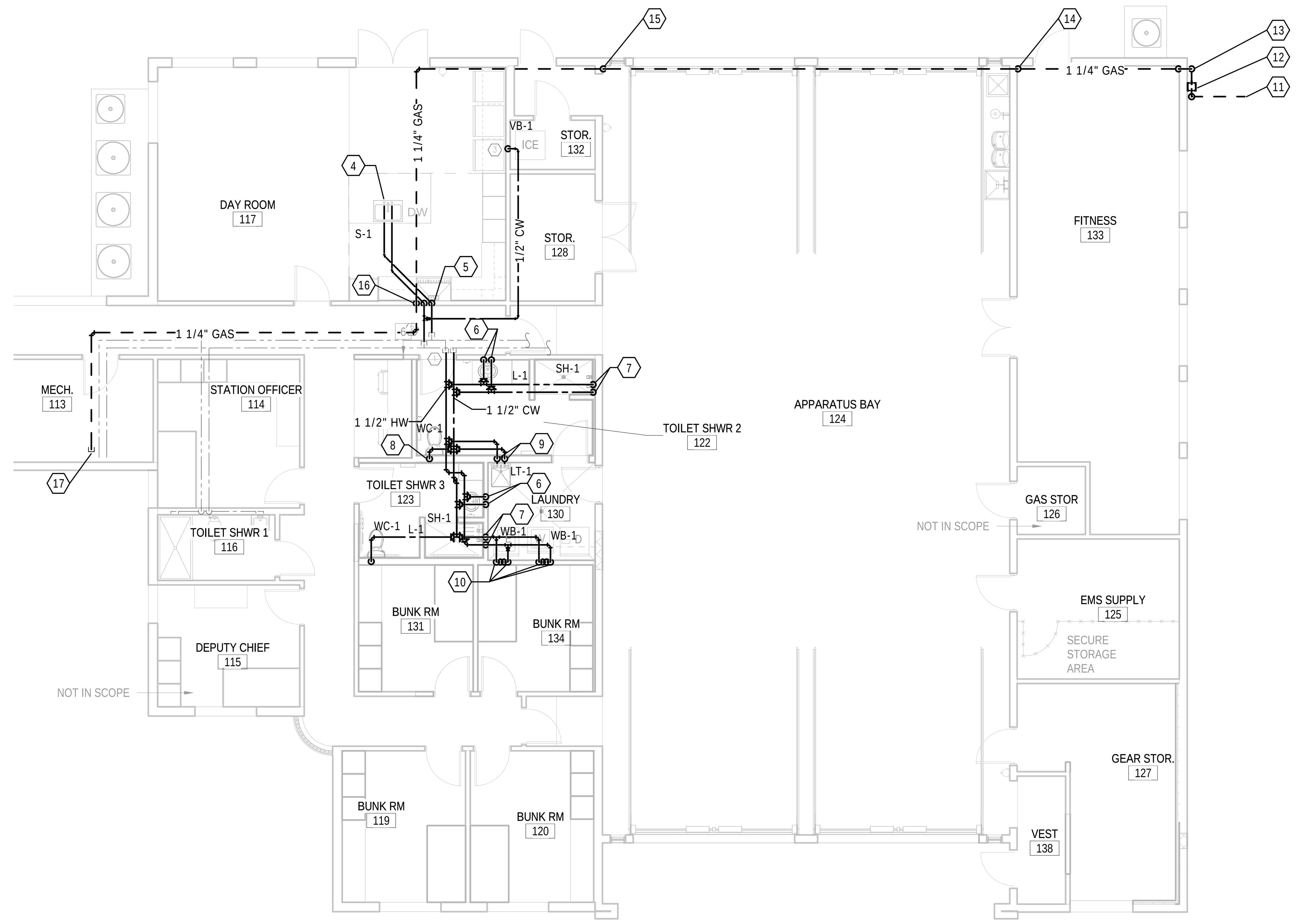
(1) SANITARY WASTE AND VENT
1/8" = 1'-0"

EXISTING - DRAINAGE FIXTURE UNIT SCHEDULE

QUANTITY	FIXTURE TYPE	D.F.U.	MIN. TRAP SIZE (IN.)	TOTAL DFU.
1	DISHWASHING MACHINE, DOMESTIC	2	1 1/2"	2
2	DRINKING FOUNTAIN	0.5	1 1/4"	1
2	FLOOR DRAINS	2	2"	4
1	KITCHEN SINK, DOMESTIC	2	1 1/2"	2
3	LAUNDRY TRAY (1 OR 2 COMPARTMENTS)	2	1 1/2"	6
5	LAVATORY	1	1 1/4"	5
3	SHOWER	2	2"	6
1	URINAL, 1 GALLON PER FLUSH OR LESS	2	2"	2
4	WATER CLOSET, PUBLIC INSTALLATION (LESS THAN 1.6GPF)	4	3"	16
1	SERVICE SINK	5	3"	5
	TOTAL DRAINAGE FIXTURE UNITS FOR BUILDING	=		49
	MIN DRAIN SIZE BEYOND FOOTER	=	**4 INCH**	
	MAIN DRAIN SLOPE	=	1/8	IN/FT
	BUILDING DRAIN SIZE:	=	**4 INCH**	
	MIN DRAIN SIZE BY TRAP CONNECTION	=	**3 INCH**	
	MULTIPLE BUILDING DRAIN SERVICES MAY BE REQUIRED.			

NEW - DRAINAGE FIXTURE UNIT SCHEDULE

QUANTITY	FIXTURE TYPE	D.F.U.	MIN. TRAP SIZE (IN.)	TOTAL DFU.
1	DISHWASHING MACHINE, DOMESTIC	2	1 1/2"	2
2	DRINKING FOUNTAIN	0.5	1 1/4"	1
3	FLOOR DRAINS	2	2"	6
1	KITCHEN SINK, DOMESTIC	2	1 1/2"	2
2	LAUNDRY TRAY (1 OR 2 COMPARTMENTS)	2	1 1/2"	4
5	LAVATORY	1	1 1/4"	5
3	SHOWER	2	2"	6
5	WATER CLOSET, PUBLIC INSTALLATION (LESS THAN 1.6GPF)	4	3"	20
1	SERVICE SINK	5	3"	5
	TOTAL DRAINAGE FIXTURE UNITS FOR BUILDING	=		51
	MIN DRAIN SIZE BEYOND FOOTER	=	**4 INCH**	
	MAIN DRAIN SLOPE	=	1/8	IN/FT
	BUILDING DRAIN SIZE:	=	**4 INCH**	
	MIN DRAIN SIZE BY TRAP CONNECTION	=	**3 INCH**	
	MULTIPLE BUILDING DRAIN SERVICES MAY BE REQUIRED.			



PLUMBING KEYED NOTES:

1. EXTEND AND CONNECT 1-1/2"CW & 1-1/2"HW TO EXISTING DOMESTIC WATER SERVICES. FIELD VERIFY SIZE AND LOCATION OF EXISTING SERVICES PRIOR TO START OF WORK.
2. EXTEND AND CONNECT 3/4"CW & 1/2"HW TO EXISTING DOMESTIC WATER SERVICES. FIELD VERIFY SIZE AND LOCATION OF EXISTING SERVICES PRIOR TO START OF WORK.
3. 1/2"CW DOWN WITHIN WALL CAVITY TO SERVICE: (1) VB-1
4. 1/2"CW & HW STUB-UP FROM UNDERGROUND TO SERVICE: (1) S-1
5. 1/2"CW & HW DOWN WITHIN WALL CAVITY TO UNDERGROUND.
6. 1/2"CW & HW DOWN WITHIN WALL CAVITY TO SERVICE: (1) L-1
7. 1/2"CW & HW DOWN WITHIN WALL CAVITY TO SERVICE: (1) SH-1
8. 1/2"CW & HW DOWN WITHIN WALL CAVITY TO SERVICE: (1) WC-1
9. 3/4"CW & HW DOWN WITHIN WALL CAVITY TO SERVICE: (1) LT-1
10. 3/4"CW & HW DOWN WITHIN WALL CAVITY TO SERVICE: (1) WB-1
11. GAS LINE TO BE SIZED AND INSTALLED BY GAS UTILITIES COMPANY.
12. GAS METER AND GAS REGULATOR WITH SHUT-OFF VALVE. FIELD VERIFY FINAL LOCATION WITH OWNER. SET TO 14" W.C. MAX. VENT TO EXTERIOR.
13. 1-1/4"GAS RISE TO CEILING SPACE. AND ROUTE IN CEILING SPACE OF FITNESS ROOM #133
14. 1-1/4"GAS RISE TO CEILING SPACE APPARATUS BAY ROOM #124.
15. 1-1/4"GAS DOWN FROM CEILING SPACE OF APPARATUS BAY TO CEILING SPACE OF STORAGE ROOM #132.
16. 3/4"GAS DOWN FROM CEILING SPACE WITHIN WALL CAVITY TO SERVICE: (1) GAS COOK TOP. PROVIDE 2-WAY NORMALLY OPEN OPERATION ASCO RED HAT GAS SHUT-OFF VALVE 8214 SERIES OR EQUAL. PLUMBER TO COORDINATE WIRING WITH ELECTRICAL CONTRACTOR.
17. CAP 1-1/4"GAS FOR FUTURE USE.

(2) DOMESTIC WATER PLAN
1/8" = 1'-0"

EXISTING WATER FIXTURE UNITS SCHEDULE

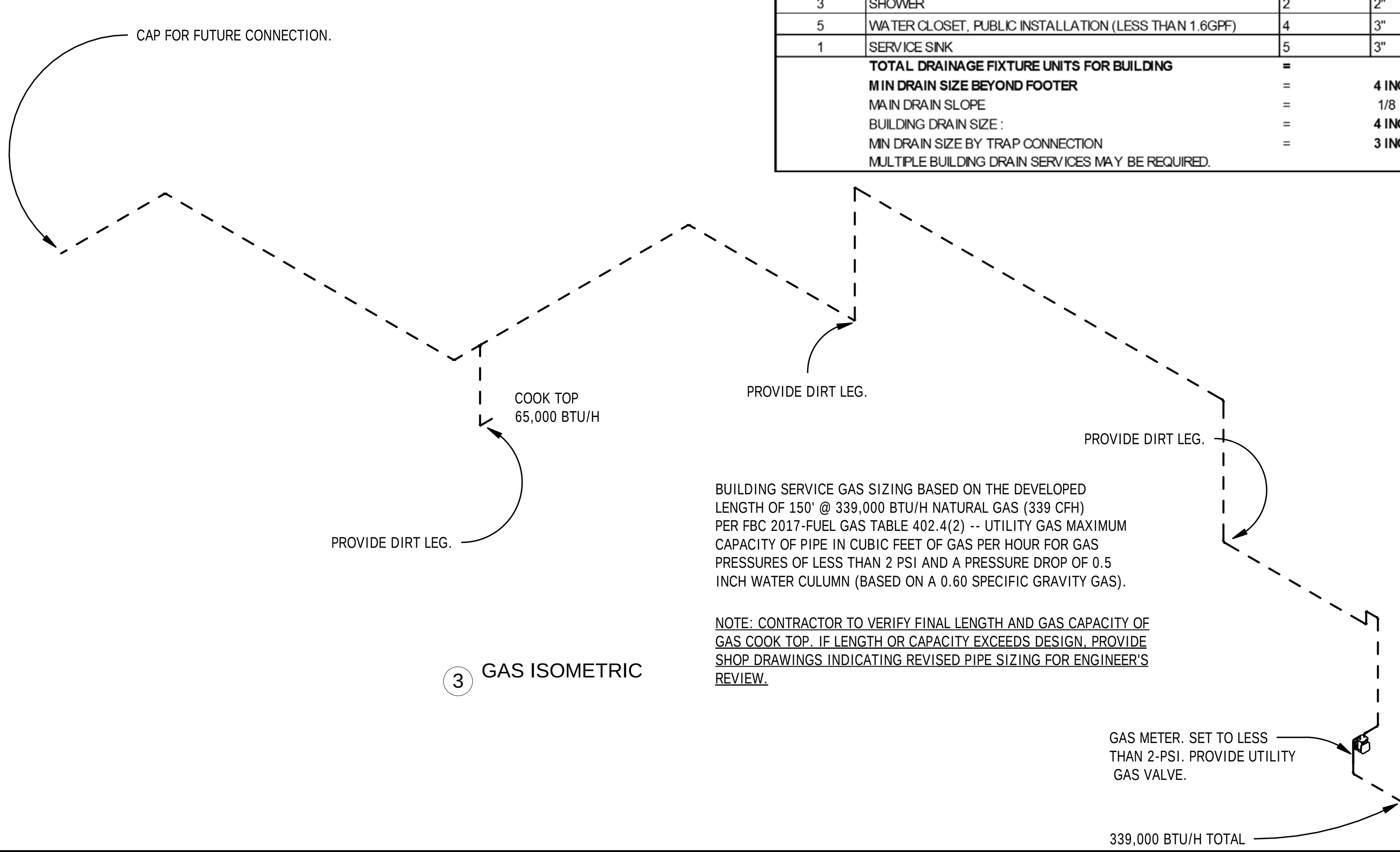
QUANTITY	FIXTURE	OCCUPANCY	SUPPLY CONTROL	COLD	COLD TOTAL	HOT	HOT TOTAL	TOTAL	COMBINED
3	VALVE BOX	PRIVATE / RESIDENTIAL	FAUCET	0.25	0.75	0.0	0	0.25	0.75
1	EMERGENCY EYE WASH	PUBLIC	FAUCET	3.0	3	3.0	3	4.0	4
1	DISHWASHER	PRIVATE	AUTOMATIC	0	0	1.4	1.4	1.4	1.4
2	DRINKING FOUNTAIN	OFFICES, ETC.	3/8" VALVE	0.25	0.5	0.0	0	0.25	0.5
1	KITCHEN SINK	PRIVATE / RESIDENTIAL	FAUCET	1.0	1	1.0	1	1.4	1.4
3	LAUNDRY TUB/TRAYS (1 TO 3)	PRIVATE / RESIDENTIAL	FAUCET	1.0	3	1.0	3	1.4	4.2
3	LAVATORY	PRIVATE / RESIDENTIAL	FAUCET	0.5	1.5	0.5	1.5	0.7	2.1
2	LAVATORY	PUBLIC	FAUCET	1.5	3	1.5	3	2.0	4
1	SERVICE SINK	OFFICES, ETC.	FAUCET	2.25	2.25	2.25	2.25	3.0	3
3	SHOWER HEAD	PRIVATE / RESIDENTIAL	MIXING VALVE	1.0	3	1.0	3	1.4	4.2
1	URINAL	PUBLIC	3/4" FLUSHOMETER VALVE	5.0	5	0.0	0	5.0	5
2	WASHING MACHINE (8 LBS.)	PRIVATE	AUTOMATIC	1.0	2	1.0	2	1.4	2.8
1	WATER CLOSET	PUBLIC	FLUSHOMETER VALVE	10.0	10	0.0	0	10.0	10
3	WATER CLOSET	PUBLIC OR PRIVATE	FLUSHOMETER TANK	2.0	6	0.0	0	2.0	6
				CW TOTAL	41	HW TOTAL	20.15	WATER TOTAL	49.35

FLUSH TANK WATER SUPPLY DEMAND: 29.1 GALLONS PER MINUTE
MINIMUM WATER SERVICE SIZE: 1" DIAMETER PIPING VELOCITY= 10.68 F.P.S.
RECOMMENDED SERVICE SIZE 1-1/2"

NEW WATER FIXTURE UNITS SCHEDULE

QUANTITY	FIXTURE	OCCUPANCY	SUPPLY CONTROL	COLD	COLD TOTAL	HOT	HOT TOTAL	TOTAL	COMBINED
1	VALVE BOX	PRIVATE / RESIDENTIAL	FAUCET	0.25	0.25	0.0	0	0.25	0.25
1	DISHWASHER	PRIVATE	AUTOMATIC	0	0	1.4	1.4	1.4	1.4
2	DRINKING FOUNTAIN	OFFICES, ETC.	3/8" VALVE	0.25	0.5	0.0	0	0.25	0.5
1	KITCHEN SINK	PRIVATE / RESIDENTIAL	FAUCET	1.0	1	1.0	1	1.4	1.4
2	LAUNDRY TUB/TRAYS (1 TO 3)	PRIVATE / RESIDENTIAL	FAUCET	1.0	2	1.0	2	1.4	2.8
3	LAVATORY	PRIVATE / RESIDENTIAL	FAUCET	0.5	1.5	0.5	1.5	0.7	2.1
2	LAVATORY	PUBLIC	FAUCET	1.5	3	1.5	3	2.0	4
1	SERVICE SINK	OFFICES, ETC.	FAUCET	2.25	2.25	2.25	2.25	3.0	3
3	SHOWER HEAD	PRIVATE / RESIDENTIAL	MIXING VALVE	1.0	3	1.0	3	1.4	4.2
2	WASHING MACHINE (8 LBS.)	PRIVATE	AUTOMATIC	1.0	2	1.0	2	1.4	2.8
1	WATER CLOSET	PUBLIC	FLUSHOMETER VALVE	10.0	10	0.0	0	10.0	10
4	WATER CLOSET	PUBLIC OR PRIVATE	FLUSHOMETER TANK	2.0	8	0.0	0	2.0	8
				CW TOTAL	33.5	HW TOTAL	16.15	WATER TOTAL	40.45

FLUSH TANK WATER SUPPLY DEMAND: 27.7 GALLONS PER MINUTE
MINIMUM WATER SERVICE SIZE: 1" DIAMETER PIPING VELOCITY= 10.166 F.P.S.
RECOMMENDED SERVICE SIZE 1-1/4"



BUILDING SERVICE GAS SIZING BASED ON THE DEVELOPED LENGTH OF 150' @ 339,000 BTU/H NATURAL GAS (339 CFH) PER FBC 2017-FUEL GAS TABLE 402.4(2) -- UTILITY GAS MAXIMUM CAPACITY OF PIPE IN CUBIC FEET OF GAS PER HOUR FOR GAS PRESSURES OF LESS THAN 2 PSI AND A PRESSURE DROP OF 0.5 INCH WATER CULUMN (BASED ON A 0.60 SPECIFIC GRAVITY GAS).

NOTE: CONTRACTOR TO VERIFY FINAL LENGTH AND GAS CAPACITY OF GAS COOK TOP. IF LENGTH OR CAPACITY EXCEEDS DESIGN, PROVIDE SHOP DRAWINGS INDICATING REVISED PIPE SIZING FOR ENGINEER'S REVIEW.

(3) GAS ISOMETRIC

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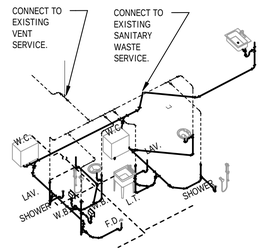
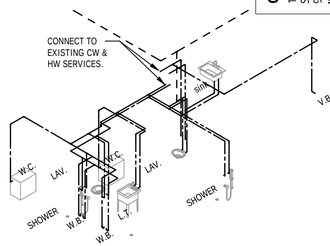
DRAWN BY:	Author
A/E OF RECORD:	Checker
PROJECT NO:	19-522

SHEET TITLE: PLUMBING PLANS

SHEET No.: P1.1





PLUMBING SPECIFICATIONS

1. GENERAL

DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. DRAWINGS ARE NOT TO BE SCALED. THE ARCHITECTURAL DRAWINGS AND DETAILS SHALL BE EXAMINED FOR EXACT LOCATION OF FIXTURES AND EQUIPMENT. ANY CONFLICT SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER BEFORE PROCEEDING WITH THE WORK. PLUMBING CONTRACTOR SHALL FURNISH ALL EQUIPMENT, MATERIAL, LABOR, ETC. NECESSARY TO PROVIDE A COMPLETE, WORKABLE AND CODE APPROVED PLUMBING SYSTEM. PLUMBING CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS AND PAY ALL GOVERNMENT FEES, SALES TAXES AND OTHER COSTS IN CONNECTION WITH HIS WORK; FILE ALL NECESSARY APPROVALS OF ALL GOVERNMENTAL DEPARTMENTS HAVING JURISDICTION; OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION FOR HIS WORK; AND DELIVER TO THE ARCHITECT THE SAME CERTIFICATES BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR THE WORK. PLUMBING CONTRACTOR SHALL COORDINATE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR THE WORK. PLUMBING CONTRACTOR SHALL COORDINATE CLEARANCES.

2. SHOP DRAWINGS

THE SUBCONTRACTOR SHALL SUBMIT, TO THE ARCHITECT, SIX (6) COPIES OF DETAILED SHOP DRAWINGS OF ALL EQUIPMENT AND ALL MATERIAL REQUIRED TO COMPLETE THE PROJECT. MATERIALS OR PRODUCTS SPECIFIED HEREIN AND/OR INDICATED ON DRAWINGS BY TRADE NAME, MANUFACTURER'S NAME, OR CATALOG NUMBER SHALL BE PROVIDED AS SPECIFIED. SUBMITTALS ARE REQUIRED FOR ALL MATERIAL AND EQUIPMENT WHICH THE CONTRACTOR PROPOSES TO FURNISH. SHOP DRAWINGS MUST BE REVIEWED BY THE ARCHITECT PRIOR TO ORDERING AND INSTALLING EQUIPMENT. DATA SHALL BE COMPILED IN A BOUND, BROCHURE FORM AND ALL SUBMITTED AT ONE TIME.

SHOP DRAWINGS OR CUT SHEETS REQUIRED INCLUDE, PLUMBING FIXTURES AND WATER HEATERS. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS, LOCAL, STATE AND, NATIONAL CODES.

3. PRODUCTS

PROVIDE FACTORY FABRICATED FIXTURES OF TYPE, STYLE, AND MATERIAL INDICATED ON THE PLANS. FOR EACH FIXTURE PROVIDE FIXTURE MANUFACTURER'S STANDARD TRIM, CARRIERS, SEATS, AND VALVES AS RECOMMENDED BY THE MANUFACTURER. ALL FIXTURES AND TRIMS OF THE SAME TYPE SHALL BE FURNISHED BY A SINGLE MANUFACTURER. WHERE TYPE IS NOT OTHERWISE INDICATED, PROVIDE FIXTURES COMPLYING WITH GOVERNING REGULATIONS. PROVIDE MANUFACTURER'S STANDARD EXPOSED FIXTURE BOLT CAPS FINISHED TO MATCH FIXTURE FINISH. UNLESS OTHERWISE NOTED, VALVES AND SPECIALTY ITEMS ARE TO BE RATED AT 125 PSIG. DEVICES AND VALVES 2-1/2" AND SMALLER ARE TO HAVE SOLDERED OR SCREWED CONNECTIONS AND THOSE 3" AND LARGER ARE TO HAVE FLANGED CONNECTIONS. GATE VALVES TO BE NIBCO MODEL #T-113 OR #S-113 ALL BRONZE. FIXTURES ARE TO BE OF "1ST QUALITY". ALL EXPOSED METAL PARTS OF FIXTURES SHALL BE POLISHED CHROME.

4. MISCELLANEOUS

PROVIDE MANUAL SHUTOFF VALVES AND CONNECTING STEM PIPES TO PERMIT SERVICING OF PLUMBING FIXTURES WITHOUT SHUT-DOWN OF SUPPLY PIPING SYSTEM. PROVIDE REMOVABLE P-TRAPS WHERE DRAINS ARE INDICATED FOR DIRECT CONNECTION TO DRAINAGE SYSTEM. PROVIDE AERATORS OF TYPES APPROVED BY HEALTH DEPARTMENT HAVING JURISDICTION. PROVIDE DIELECTRIC UNIONS OR FITTINGS WHENEVER FERROUS AND NON-FERROUS PIPES ARE JOINED. PROVIDE AIR CHAMBERS/WATER HAMMER ARRESTORS ON HOT AND COLD WATER LINES AS REQUIRED. AIR CHAMBERS SHALL BE FULL LINE SIZE IN DIAMETER AND EQUIVALENT TO 20 PIPE DIAMETERS, BUT NOT LESS THAN 12" IN LENGTH. PROVIDE ACCESS DOORS WHERE NECESSARY TO SERVICE SEALS, VALVES, TRAPS, CLEAN OUTS, AIR CHAMBERS/WATER HAMMER ARRESTORS, ETC. EXACT FLOOR DRAIN LOCATION SHALL BE COORDINATED WITH ARCHITECT PRIOR TO ROUGH-IN.

5. WORKING DRAWINGS

THE CONTRACTOR SHALL KEEP ACCURATE RECORDS OF ACTUAL CONSTRUCTION INCLUDING DEVICE LOCATIONS IF DIFFERENT FROM THE PLANS. WORKING DRAWINGS SHALL BE KEPT AT THE JOB SITE AND MADE AVAILABLE TO THE ENGINEER OR AUTHORITY HAVING JURISDICTION UPON REQUEST. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A REPRODUCIBLE SET OF PLANS OF THE COMPLETE PLUMBING SYSTEMS AS INSTALLED (AS-BUILT DRAWINGS). THE SCALE ON THESE AS-BUILT DRAWINGS SHALL BE NO SMALLER THAN THE SCALE USED ON THE ORIGINAL PLANS. AS-BUILT DRAWINGS SHALL BE PROFESSIONALLY DRAWN USING GOOD DRAFTING TECHNIQUES OR AUTOCAD. UPON COMPLETION OF THE JOB, THE CONTRACTOR SHALL SUPPLY ACAD QUALITY AS-BUILT DRAWINGS SHOWING ANY DEVIATION FROM THE ORIGINAL DRAWINGS. THESE DRAWINGS SHALL INDICATE DIMENSIONS OF BURIED UTILITY LINES FROM BUILDING WALLS.

6. TESTING

FINAL TESTS SHALL BE MADE ONLY AFTER THE ARCHITECT IS SATISFIED THAT ALL WORK HAS BEEN COMPLETED, INCLUDING REVIEW FOR DAMAGE TO FINISH. REMOVE CRACKED OR DENTED UNITS. ALL PIPING INSTALLED ON THE PROJECT, UNLESS SPECIFICALLY SHOWN OTHERWISE, SHALL BE HYDRAULICALLY TESTED AS SPECIFIED HEREIN. THE PLUMBING CONTRACTOR SHALL PROVIDE ALL EQUIPMENT REQUIRED TO MAKE THE TESTS SPECIFIED AS FOLLOWS:

A. DURATION OF TESTS: ALL TESTS SHALL APPLY FULL TEST PRESSURE TO THE PIPING FOR A MINIMUM OF 24 HOURS OR AS REQUIRED BY CODE.
B. PRESSURE OF TESTS: WATER PIPING SHALL BE HYDRO-TESTED AT 150% OF THE NORMAL WORKING PRESSURE (100 PSI MINIMUM). TEST SANITARY WASTE AND VENT PIPING BY A 10' WATER COLUMN FOR TWENTY FOUR (24) HOURS OR AS REQUIRED BY THE BUILDING DEPARTMENT.
C. INABILITY TO HOLD PRESSURE: WHEN THE TEST PRESSURE HAS FALLEN OVER 5% DURING THE 24 HOURS TEST PERIOD, THE POINT OF LEAKAGE SHALL BE FOUND, REPAIRED AND THE TEST REPEATED. THIS PROCEDURE SHALL BE FOLLOWED UNTIL THE PIPING SYSTEM HAS BEEN PROVEN TIGHT.

AFTER THE TESTS ARE COMPLETED AND BEFORE THE SYSTEM IS PUT IN OPERATION THE ENTIRE WATER PIPE SYSTEM SHALL BE FILLED WITH A SOLUTION CONTAINING NOT LESS THAN 50 PARTS PER MILLION OF AVAILABLE CHLORINE AND ALLOWED TO STAND 6 HOURS BEFORE FLUSHING. DURING THIS PERIOD A PRESSURE OF NOT LESS THAN 40 PSI SHALL BE MAINTAINED ON THE SYSTEM AND ALL VALVES SHALL BE OPENED AND CLOSED SEVERAL TIMES. AFTER DISINFECTING, A SAMPLE SHALL BE DRAWN AND TESTED BY THE LOCAL HEALTH DEPARTMENT AND A LETTER CERTIFYING THE ADEQUACY OF THE WATER FOR HUMAN CONSUMPTION SHALL BE SENT TO THE ENGINEER FOR APPROVAL. SHOULD THE SAMPLE NOT PASS THE HEALTH DEPARTMENT TEST, THEN THE SYSTEM SHALL BE DRAINED AND DISINFECTED UNTIL THE WATER PASSES INSPECTION BY THE HEALTH DEPARTMENT.

7. FINAL ACCEPTANCE

AFTER TESTING A FINAL REVIEW SHALL BE MADE BY THE ARCHITECT AND OTHER AUTHORIZED PERSONS WITH THE PLUMBING CONTRACTOR. FINAL ACCEPTANCE OF THE PROJECT SHALL NOT PREJUDICE THE OWNER'S RIGHT TO REQUIRE REPLACEMENT AND/OR REPAIR OF ANY DEFECTIVE WORK OR MATERIALS.

8. WARRANTY

ALL PARTS, MATERIAL, EQUIPMENT AND LABOR FURNISHED UNDER THIS SECTION OF THE SPECIFICATIONS SHALL BEAR A ONE (1) YEAR WARRANTY FROM DATE OF FINAL ACCEPTANCE. ALL WORK PERFORMED UNDER THIS WARRANTY SHALL BE AT NO COST TO THE OWNER, THE PLUMBING CONTRACTOR SHALL PROVIDE ALL OF THE ABOVE WARRANTY REQUIREMENTS IN A WRITTEN STATEMENT ALONG WITH EQUIPMENT MANUFACTURER'S WARRANTIES.

9. ERRORS AND OMISSIONS:

ANY AND ALL OBVIOUS ERRORS AND/OR OMISSIONS IN THE PLANS, SPECIFICATIONS, AND CONTRACT DOCUMENTS SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT OR ENGINEER AT LEAST FOURTEEN (14) DAYS PRIOR TO THE BID DATE. IF PROPER NOTIFICATION IS NOT RECEIVED, NO ADDITIONS TO THE CONTRACT AMOUNT WILL BE AUTHORIZED FOR THIS WORK. IN THE EVENT THERE IS A CONFLICT IN THE PLANS AND MORE THAN ONE SYSTEM IS AUTHORIZED FOR THIS WORK. IN THE EVENT THERE IS A CONFLICT IN THE PLANS AND MORE THAN ONE SYSTEM IS DESCRIBED, SPECIFIED OR OTHERWISE INDICATED, THE OWNER RESERVES THE RIGHT TO SELECT WHICH SYSTEM SHALL BE INSTALLED. IN THE EVENT A SYSTEM IS IDENTIFIED BY DESCRIPTION OR PERFORMANCE ONLY, THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS WITH PRODUCT SUBMITTALS INDICATING THE COMPLETE WORKING ARRANGEMENT OF THE PROPOSED INSTALLATION FOR REVIEW BY THE OWNER. THE OWNER RESERVES THE RIGHT TO REJECT ANY AND ALL COMPONENTS OR OPERATING SEQUENCES.
END OF PLUMBING SPECIFICATIONS

PLUMBING GENERAL NOTES:

1. DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. DRAWINGS ARE NOT TO BE SCALED. THE ARCHITECTURAL DRAWINGS AND DETAILS SHALL BE EXAMINED FOR EXACT LOCATION OF FIXTURES AND EQUIPMENT. SYSTEMS SHALL INCLUDE ALL APPURTENANCES AS REQUIRED TO ACHIEVE THE OPERATING CONDITIONS AS SHOWN AND SPECIFIED AND SHALL RESULT IN A SUPERIOR INSTALLATION. INFORMATION CONTAINED ON THE DRAWINGS BUT NOT IN THE SPECIFICATIONS OR IN THE SPECIFICATIONS BUT NOT ON THE DRAWINGS ARE INTENDED TO BE IN BOTH. MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED BUT NECESSARY FOR PROPER OPERATION AND CONSISTENT WITH GOOD WORKMANSHIP WILL BE INCLUDED IN THE ESTIMATE, THE SAME AS IF SHOWN ON THE DRAWINGS. ANY CONFLICT SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER BEFORE PROCEEDING WITH THE WORK.

2. THE PLUMBING CONTRACTOR SHALL FURNISH ALL EQUIPMENT, MATERIAL, LABOR, ETC. NECESSARY TO PROVIDE A COMPLETE, WORKABLE AND CODE APPROVED PLUMBING SYSTEM. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS, LOCAL, STATE AND NATIONAL CODES.

3. THE PLUMBING CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS AND PAY ALL GOVERNMENT FEES, SALES TAXES AND OTHER COSTS IN CONNECTION WITH HIS WORK; FILE ALL NECESSARY APPROVALS OF ALL GOVERNMENTAL DEPARTMENTS HAVING JURISDICTION; OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION FOR HIS WORK; AND DELIVER TO THE ARCHITECT THE SAME CERTIFICATES BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR THE WORK.

4. ALL WORK SHALL BE GUARANTEED, BOTH MATERIAL AND INSTALLATION, FOR A PERIOD OF ONE YEAR FROM ACCEPTANCE BY OWNER.

5. FURNISH SIX (6) COPIES OF SHOP DRAWINGS OF EQUIPMENT OR FIXTURES FOR APPROVAL PRIOR TO PURCHASING.

6. CONTRACTOR SHALL KEEP A RECORD OF THE LOCATIONS OF ALL CONCEALED WORK AND UPON COMPLETION OF THE JOB, SHALL SUPPLY ACAD QUALITY AS-BUILT DRAWINGS SHOWING ANY DEVIATION FROM THE ORIGINAL DRAWINGS. THESE DRAWINGS SHALL INDICATE DIMENSIONS OF BURIED UTILITY LINES FROM BUILDING WALLS.

7. THE PLUMBING CONTRACTOR SHALL COORDINATE WITH ALL TRADES FOR PIPE ROUTING AND INSTALLATION OF EQUIPMENT AND SYSTEMS TO PROVIDE FOR REQUIRED CLEARANCES.

8. ALL OPENINGS THROUGH FIRE RATED WALLS OR FLOORS SHALL BE SEALED WITH A U.L. LISTED PENETRATION AND SHALL MAINTAIN THE FIRE RATED INTEGRITY OF THE WALL OR FLOOR. THE CONTRACTOR SHALL VERIFY FIRE RATINGS WITH ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION.

9. PIPE PASSING THROUGH PIT WALLS, BUILDING WALLS, AND BUILDING FLOORS BELOW GRADE SHALL BE PROVIDED WITH SLEEVES OF STANDARD WEIGHT GALVANIZED STEEL PIPE. THE ANNULAR SPACES BETWEEN PIPE AND SLEEVES SHALL BE SEALED WITH LINK SEAL HYDROSTATIC PIPE WALL SEAL. SLEEVES SHALL BE SIZED AS FOLLOWS:

3" PIPE - 6" ID SLEEVE
4" PIPE - 8" ID SLEEVE
6" PIPE - 10" ID SLEEVE
8" PIPE - 12" ID SLEEVE
10" PIPE - 12" ID SLEEVE

10. BREAKAGE AND CORROSION: PIPES PASSING UNDER OR THROUGH WALLS SHALL BE PROTECTED FROM BREAKAGE. PIPES PASSING THROUGH CONCRETE OR CINDER WALLS AND FLOORS OR OTHER CORROSIVE MATERIAL SHALL BE PROTECTED AGAINST EXTERNAL CORROSION BY A PROTECTIVE SHEATHING OR WRAPPING OR OTHER MEANS THAT WILL WITHSTAND ANY REACTION FROM LIME AND ACID OF CONCRETE, CINDER OR OTHER CORROSIVE MATERIAL. SHEATHING OR WRAPPING SHALL ALLOW FOR EXPANSION AND CONTRACTION OF PIPING TO PREVENT ANY RUBBING ACTION. MINIMUM WALL THICKNESS OF MATERIAL IS TO BE 0.025 INCH.

11. PROVIDE WALL CARRIERS FOR ALL WALL HUNG PLUMBING FIXTURES. ALL WALL HUNG PLUMBING FIXTURES SHALL BE CAPABLE OF SUPPORTING A 250 POUND VERTICAL LOAD.

12. THE PLUMBING CONTRACTOR SHALL VERIFY SIZE AND LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCING WITH THE WORK.

13. CONTRACTOR SHALL EXTEND AS NECESSARY AND CONNECT BUILDING DRAIN AND POTABLE WATER LINES TO EXISTING SERVICE LINES AT LOCATION ON SITE OR IN BUILDING AS REQUIRED. VERIFY EXACT LOCATION AND INVERT ELEVATION OF SERVICE CONNECTIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF THE DISTANCE TO SITE SERVICES EXCEED TEN (10) LINEAR FEET FROM THE BUILDING.

14. OFFER REMOVED MATERIAL TO THE OWNER. REMOVE ALL MATERIAL REJECTED BY THE OWNER FROM THE WORK SITE AND DISPOSE OF IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND NATIONAL CODES. CONTRACTOR MUST CERTIFY TO OWNER THAT THE MATERIAL HAS BEEN LEGALLY DISPOSED OF.

POTABLE WATER PIPING:

16. ABOVE GROUND WATER PIPING SHALL BE TYPE "L" COPPER WITH WROUGHT COPPER FITTINGS AND 95-5 SOLDERED JOINTS.

17. INTERIOR ABOVE AND BELOW GROUND WATER PIPING SHALL BE (CPVC) CHLORINATE POLYVINYL CHLORIDE PLASTIC PIPE AND TUBING (ASTM D-2846) FLOWGUARD OR EQUIVALENT WITH APPROVED CPVC SOLVENT WELDED FITTINGS. CPVC WATER PIPING SHALL NOT BE RUN IN RETURN AIR PLENUM OR FIRE RATED ASSEMBLIES UNLESS ALLOWED BY LOCAL JURISDICTION.

18. EXTERIOR BUILDING SERVICE SHALL BE SCHEDULE 40 PVC (ASTM D-1785) WITH APPROVED PVC SOLVENT WELDED FITTINGS.

19. INTERIOR ABOVE AND BELOW GRADE HIGH TEMPERATURE HOT WATER (140°F OR GREATER) PIPING SHALL BE TYPE "L" HARD DRAWN COPPER TUBE WITH COPPER FITTINGS AND 95-5 SOLDERED JOINTS.

21. THE BACKFLOW PREVENTOR AND THE WATER METER ARE EXISTING TO REMAIN.

23. PROVIDE WATER HAMMER ARRESTORS ON HOT AND COLD WATER LINES ON ALL QUICK CLOSING DEVICES PER CHAPTER 6 OF FLORIDA BUILDING CODE PLUMBING.

24. PROVIDE VACUUM BREAKERS AS REQUIRED BY CODE.

25. TEST ALL WATER PIPING AT 100 PSIG FOR TWENTY-FOUR (24) HOURS OR AS REQUIRED BY CODE.

26. STERILIZE ALL WATER PIPING IN ACCORDANCE WITH HEALTH DEPARTMENT REGULATIONS AND AMERICAN WATER WORKS SPECIFICATIONS.

27. SUPPORT ALL WATER PIPING WITH PIPE HANGERS BY GRINNELL OR EQUAL.

28. PROVIDE RISER CLAMPS AT EACH FLOOR FOR ALL VERTICAL PIPING INCLUDING SANITARY DRAINS, VENTS, AND WATER LINES. INSTALL RISERS SO AS TO ALLOW VERTICAL MOVEMENT OF PIPING, ANCHORING PIPES AT THE BASE OF ALL RISERS.

29. PROVIDE ACCESS DOORS WHERE NECESSARY TO SERVICE SEALS, VALVES, TRAPS, CLEAN-OUTS, AIR CHAMBERS/WATER HAMMER ARRESTORS, ETC. ALL ACCESS DOORS IN TOILET ROOMS SHALL BE STAINLESS STEEL.

30. PROVIDE DIELECTRIC UNIONS OR FITTINGS WHENEVER FERROUS AND NON-FERROUS PIPES ARE JOINED.

31. INSULATE HOT WATER PIPING WITH 1 INCH ARMSTRONG AP ARMAFLEX UP TO AND INCLUDING 1 1/4-INCH DIAMETER. SECURE WITH ADHESIVE.

32. INSULATE HOT WATER PIPING OVER 1 1/4-INCH WITH 1 INCH THICK FIBERGLASS PIPE COVERING FINISHED WITH WHITE MASTIC. FITTINGS SHALL BE INSULATED WITH MITERED PIPE COVERING FINISHED WITH WHITE MASTIC OR PVC FITTING COVERS.

33. HANDICAPPED LAVATORIES: INSULATE WATER SUPPLIES AND WASTE PIPING REQUIRING ADA CONFORMANCE, WITH LAV-GUARD KITS, BY TRUEBRO OR EQUAL.

34. THIS SYSTEM WAS DESIGNED TO 50 PSI STATIC PRESSURE WITH RESIDUAL PRESSURE OF 20 PSI AT 1000 GPM FROM THE NEAREST FIRE HYDRANT. THESE CONDITIONS SHALL BE VERIFIED BY THE PLUMBING CONTRACTOR PRIOR TO PROCEEDING WITH THE INSTALLATION. NOTIFY THE ENGINEER IMMEDIATELY IF FLOW AND PRESSURES OBTAINED ARE BELOW THOSE CONTAINED IN THIS PARAGRAPH.

SANITARY WASTE AND VENT PIPING

36. SANITARY WASTE AND VENT PIPING SHALL BE SCHEDULE 40 PVC (ASTM D-2665) WITH APPROVED PVC SOLVENT WELDED FITTINGS. COMPLY WITH 2017 FLORIDA BUILDING CODE. PVC PIPING SHALL NOT BE RUN IN RETURN AIR PLENUM OR FIRE RATED ASSEMBLIES.

37. SANITARY WASTE AND VENT PIPING SHALL BE SERVICE WEIGHT CAST IRON, NO-HUB WITH STAINLESS STEEL CLAMPS AND SHIELDS WITH NEOPRENE SEALING SLEEVES.

38. ALL SOIL AND WASTE PIPING, 2-1/2" AND SMALLER, SHALL BE SLOPED AT 1/4" PER FOOT. LARGER WASTE PIPING SHALL BE SLOPED AT 1/8" PER FOOT.

39. TEST SANITARY WASTE AND VENT PIPING BY A 10' WATER COLUMN FOR TWENTY-FOUR (24) HOURS OR AS REQUIRED BY THE BUILDING DEPARTMENT.

42. FLOOR DRAINS TO HAVE 4-INCH DEEP SEAL TRAPS. EXACT DRAIN LOCATION SHALL BE COORDINATED WITH ARCHITECT PRIOR TO ROUGH IN.

43. FLOOR SINKS TO HAVE 4-INCH DEEP SEAL TRAPS. EXACT DRAIN LOCATION SHALL BE COORDINATED WITH ARCHITECT PRIOR TO ROUGH IN.

44. PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS AND HUB DRAINS THAT ARE NOT CONTINUOUSLY WASHED BY AN APPLIANCE OR FIXTURE.

MISCELLANEOUS

78. THE POOL SUPPLIER SHALL ONLY USE CARTRIDGE FILTERS. BACKWASH TYPE FILTERS ARE NOT ALLOWED.

79. POOL WATER SHALL BE DECHLORINATED PRIOR TO DISCHARGE INTO THE MAIN POOL DRAIN. CONTRACT THE LOCAL POOL SUPPLY COMPANY FOR MEANS AND METHODS OF THE DECHLORINATION PROCESS.

80. TRASH CHUTES:
81. PLUMBING CONTRACTOR SHALL PROVIDE A 3/4 INCH WATER LINE TO TRASH CHUTE FOR CONNECTION TO TRASH FLUSHING SPRAY HEAD ABOVE HIGHEST INTAKE. PLUMBING CONTRACTOR SHALL COORDINATE WITH OWNER AND TRASH CHUTE INSTALLER FOR ALL PLUMBING SERVICES REQUIRED FOR TRASH CHUTE OPERATION.

82. PROVIDE AND INSTALL SHUT OFF VALVES AND SECTIONAL VALVES AS REQUIRED BY APPLICABLE FLORIDA BUILDING CODES AND PLUMBING SPECIFICATION SECTIONS.

83. PIPE ROUTING IS SHOWN DIAGRAMMATICALLY AND DOES NOT SHOW ALL OFFSETS, DROPS, AND RISES OF RUNS. THE CONTRACTOR SHALL ALLOW IN HIS PRICE FOR ROUTING OF PIPE TO AVOID OBSTRUCTIONS. COORDINATION WITH UTILITY SERVICES, INCLUDING THOSE OF OTHER TRADES IS REQUIRED. MAINTAIN HEADROOM AND SPACE LOCATIONS.

84. INSTALL WORK AS TO BE READILY ACCESSIBLE FOR OPERATION, MAINTENANCE, AND REPAIR. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ACCOMPLISH THIS, BUT CHANGES WHICH INVOLVE EXTRA COST SHALL NOT BE MADE WITHOUT APPROVAL.

85. ALL MATERIALS AND EQUIPMENT TO BE NEW UNLESS OTHERWISE NOTED AND SHALL BE IN ACCORDANCE WITH BUILDING STANDARDS. ALL MATERIALS AND EQUIPMENT ON SITE SHALL BE PROPERLY STORED SUCH THAT IT IS PROTECTED FROM DAMAGE AND EXPOSURE.

86. THE FINAL ACCEPTANCE WILL BE MADE AFTER THE CONTRACTOR HAS ADJUSTED HIS EQUIPMENT, TESTED THE VARIOUS SYSTEMS, DEMONSTRATED THAT IT FULFILLS THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS, HAS FURNISHED ALL THE REQUIRED CERTIFICATIONS OF INSPECTION AND APPROVAL, AND SUBMITTED ALL THE NECESSARY CLOSE-OUT DOCUMENTS.

87. UPON COMPLETION AND ACCEPTANCE OF WORK, CONTRACTOR SHALL FURNISH WRITTEN INSTRUCTIONS AND EQUIPMENT MANUALS AND DEMONSTRATE TO THE OWNER THE PROPER OPERATION AND MAINTENANCE OF ALL EQUIPMENT AND APPARATUS FURNISHED UNDER THIS CONTRACT. THESE INSTRUCTIONS SHALL BE TYPED ON 8-1/2 IN. X 11 IN. PAPER AND BOUND IN THREE RING BINDERS WITH CLEAR ACETATE COVERS. CONTRACTOR SHALL GIVE THREE COPIES OF THE INSTRUCTIONS TO THE OWNER AND ONE COPY TO THE ENGINEER. THE INSTRUCTION BOOKLET SHALL BEAR THE NAME, ADDRESS, AND TELEPHONE NUMBER OF THE GENERAL CONTRACTOR, PLUMBING CONTRACTOR, ARCHITECT, AND ENGINEER. REPRODUCIBLE "AS-BUILT" DRAWINGS SHALL BE PROVIDED INDICATING THE AS INSTALLED CONDITIONS OF THE WORK. "AS-BUILT" DRAWINGS SHALL BE PROVIDED TO THE ARCHITECT AFTER COMPLETION OF THE INSTALLATION.

88. ALL VALVES AND SPECIALTY ITEMS MAY NOT BE SHOWN IN EVERY INSTANCE ON THE DRAWINGS, BUT ARE TO BE PROVIDED WHETHER SHOWN OR NOT WHEN NECESSARY FOR PROPER OPERATION AND MAINTENANCE OF THE SYSTEM.

UNLESS OTHERWISE NOTED, VALVES AND SPECIALTY ITEMS ARE TO BE RATED AT 125 PSIG. DEVICES AND VALVES 2-1/2" AND SMALLER ARE TO HAVE SOLDERED OR SCREWED CONNECTION AND 3" AND LARGER ARE TO HAVE FLANGED CONNECTIONS.

REFER TO SPECIFICATIONS FOR APPROVED VALVE MANUFACTURERS.

89. CONCEAL ALL PIPING IN BUILDING CONSTRUCTION OR UNDERGROUND. INSTALL SUCH PIPING IN TIME SO AS NOT TO CAUSE DELAY TO WORK OF OTHER TRADES AND TO ALLOW AMPLE TIME FOR TESTS AND APPROVAL; DO NOT COVER BEFORE APPROVAL IS OBTAINED.

90. KEEP FIXTURE BRANCHES CONCEALED TO POINTS ABOVE FLOOR CLOSE TO FIXTURES; EXPOSE ONLY AS MUCH AS NECESSARY FOR FINAL CONNECTIONS.

91. WHERE FURRED SPACES ARE INDICATED, KEEP PIPES AS CLOSE TO STRUCTURAL MEMBERS AS POSSIBLE SO AS TO REQUIRE MINIMUM FURRINGS.

92. THE PLUMBING CONTRACTOR SHALL PROVIDE ESCUTCHEONS AT EACH POINT WHERE AN UNINSULATED PIPE, CONDUIT, OR TUBING PASSES THROUGH A FINISHED SURFACE. ESCUTCHEONS WILL NOT GENERALLY BE REQUIRED FOR INSULATED PIPE AND CONDUIT OR TUBING PASSING THROUGH EQUIPMENT ROOM WALLS UNLESS, IN THE OPINION OF THE ENGINEER, THE INSTALLATION OF SUCH PIPE, CONDUIT, OR TUBING HAS NOT BEEN INSTALLED IN A NEAT AND ACCEPTABLE. ESCUTCHEONS SHALL BE CONSTRUCTED OF CHROME -PLATED BRASS UNLESS SPECIFICALLY APPROVED OTHERWISE BY THE ARCHITECT. EACH ESCUTCHEON SHALL FIT FLUSH WITH THE WALL OR FLOOR AND SHALL FIT SNUGLY AROUND THE PIPE.

PLUMBING FIXTURE & CONNECTION SCHEDULE

MARK	FIXTURE, MODEL #, DESCRIPTION	ROUGH-IN			
		WASTE	VENT	CW	HW
FD-1	FLOOR DRAIN, ZURN MODEL #Z415-S: 6"X6" SQUARE STRAINER WITH SECURED HEEL PROOF MEDIUM DUTY GRATE. ARCHITECT TO SELECT STRAINER FINISH. PROVIDE TRAP SEAL DEVICE EQUAL TO ZURN MODEL #Z1072.	3"	2"	---	---
L-1	LAVATORY, UNDERCOUNTER MOUNTED, AMERICAN STANDARD "OVALYN" MODEL #9482.000: 19-1/4" X 15-3/4" BARRIER FREE WITH REAR OVERFLOW AND SINGLE CENTER FAUCET HOLE. FAUCET, KRAUS MODEL #KBF-1401 SPOT FREE STAINLESS STEEL FINISH. PROVIDE OFFSET GRID DRAIN, TRU-BRO LAVGUARD INSULATION, P-TRAP, STOPS AND SUPPLIES.	2"	2"	1/2"	1/2"
S-1	SINGLE COMPARTMENT UNDERMOUNT STAINLESS STEEL SINK, KRAUS PRO MODEL #KHU100-30 STAINLESS STEEL 18" X 30" X 10" DEEP. 16 GAUGE T304 STAINLESS STEEL WITH STAIN FINISH, BASKET MODEL #BST-1. PROVIDE MOEN "GENTA" MODEL #7882SRS SINGLE-HANDLE PULL-DOWN SPRAYER KITCHEN FAUCET. IN-SINK ERATOR BADGER 5 MODEL OR EQUAL, 1/2-HP FOOD WASTE DISPOSER WITH DISHWASHER CONNECTION. PROVIDE MOEN MODEL #3942SRS SOAP DISPENSER.	2"	2"	1/2"	1/2"
SH-1	SHOWER SYSTEM - BARRIER FREE, AMERICAN STANDARD "SPECTRA VERSA" MODEL #9038834 AND PRESSURE BALANCING SHOWER VALVE MODEL #RU101SS WITH SCREWDRIVER STOPS AND "STUDIO S COLLECTION" MODEL #T105.500.002 VALVE ONLY TRIM KIT WITH LEVER HANDLE. 1.5 GPM HAND HELD SHOWER WITH WALL HOOK, 60" HOSE, WALL SUPPLY ELBOW, AND VACUUM BREAKER. DRAIN: ZURN MODEL Z415-S WITH 6"X6" SQUARE STRAINER, ARCHITECT TO SELECT STRAINER FINISH.	2"	2"	1/2"	1/2"
VB-1	VALVE BOX WATER TITE MODEL #9701 QUATER TURN BALL, LEAD FREE BRASS, PROVIDE WITH WALL BOX, FRAME, VALVE AND WATER HAMMER ARRESTER.	---	---	1/2"	---
WB-1	CLOTHES WASHER BOX OATEY MODEL #38970 OFFSET DRAIN WITH 1/4" TURN MIP VALVE AND MOUNTED WATER HAMMER ARRESTOR, SNAP-ON FACEPLATE FRAME. 2"DRAIN. PROVIDE P-TRAP.	2"	2"	3/4"	3/4"
WC-1	WATER CLOSET, FLOOR MOUNTED FLUSH TANK - BARRIER FREE, KOHLER "HIGHLINE CLASSIC COMFORT HEIGHT" MODEL #K-3658: TWO-PIECE ELONGATED BOWL, 12-INCH ROUGH-IN, 16-1/2" RIM HEIGHT, AND 1.28 GALLON FLUSH. TOILET SEAT, KOHLER MODEL #K-4664 WITH COVER. CP STOP AND SUPPLY.	3"	2"	1/2"	---

NOTES:
1. INSTALL ALL EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS AND DIAGRAMS.
2. ADA ACCESSIBLE WATER CLOSETS SHALL BE INSTALLED WITH FLUSHING CONTROLS LOCATED ON THE WIDE SIDE ACCESSBILE FLOOR SPACE WITH RESTROOOM(S) OR STALL(S).
3. ALL FIXTURES SHALL MEET ADA AND LOCAL CODES.
4. INSTALL BACKING AND SUPPORTS AS REQUIRED TO PROPERLY ANCHOR ALL FIXTURES AND ACCESSORIES.
5. PLUMBING FIXTURE SUPPORTS AND CARRIERS SHALL BE EQUAL TO ZURN, WATTS, JOSAM, WADE AND J.R. SMITH.
6. SUPPLY PIPING AND FITTING FOR ALL FIXTURES SHALL BE INSTALLED SO AS TO PREVENT BACKFLOW.
7. ALL FIXTURES SHALL BE PROVIDED WITH ACCESSIBLE SHUT OFF VALVES AT COLD AND HOT WATER PIPING CONNECTIONS.
8. PROVIDE INSULATION FOR ALL PIPING IN EXTERIOR WALLS.
9. ALL PLUMBING FIXTURES SHALL BE COORDINATED AND APPROVED BY ARCHITECT PRIOR TO PURCHASE.
10. PLUMBING FIXTURES/EQUIPMENT SUBSTITUTIONS ALLOWED ONLY THOUGH APPROVAL OF ENGINEER.
11. PROVIDE BRASS CRAFT OR EQUAL SUPPLY STOPS ON ALL NON-FLUSH VALVE FIXTURES.
12. PROVIDE FLOOR DRAIN AND ROOF DRAIN STRAINERS WITH FREE SPACE AREA PER CURRENT BUILDING CODE AND MANUFACTURER'S INSTRUCTIONS.
13. HOT WATER TO ALL LAVATORIES AND HAND SINKS SHALL NOT EXCEED 110 DEGREES.
14. COORDINATE ADA HEIGHT REQUIREMENTS WITH ARCHITECT DRAWINGS.
15. ALL LAVATORIES, HAND SINKS, BATH AND SHOWER VALVES SHALL BE PROVIDED WITH APPROVED AUTOMATIC SAFETY WATER MIXING DEVICE AND PRESSURE BALANCE.
16. PROVIDE CHROME PLATED SUPPLIES ON ALL LAVATORIES AND SINKS WHICH ARE EXPOSED TO VIEW. AT CONTRACTOR'S OPTION SUPPLIES CONCEALED FROM VIEW MAY BE TYPE "L" SOFT DRAWN COPPER. "PX" AND POLYBUTHYLENE ARE NOT APPROVED.
17. PROVIDE PVC TRAPS ON ALL FIXTURES CONCEALED FROM VIEW REQUIRING P-TRAPS. THIN WALL "MASTER P-TRAPS" OR SIMILAR PVC TRAPS ARE NOT APPROVED.

PPP SIZING CHART		
FIXTURE UNITS	SIZE (THREAD)	PART NUMBER
1-11	1/2"	652-A
12-32	3/4"	653-B
33-60	1"	654-C
61-113	1 1/4"	655-D
114-154	1 1/2"	656-E
155-330	2"	657-F

NOTES:
1. PROVIDE A WATER HAMMER ARRESTOR ON EACH HOT WATER AND COLD WATER DROP.
2. ARRESTORS SHOULD ALWAYS BE INSTALLED SO THAT THERE IS AN UNOBSTRUCTED SHOCK PATH TO THE ARRESTOR.
3. ARRESTORS SHOULD ALWAYS BE PLACED AS NEAR TO THE SOURCE OF SHOCK AS POSSIBLE.

WATER HAMMER ARRESTOR DETAIL
SCALE: NONE

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. MAKE TRAP PRIMING PIPE SAME SIZE AS EZE-PRIME FITTINGS. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION PROCEDURE. TRAP PRIMER CONNECTION FROM COUNTERTOP MOUNTED SINK OR LAVATORY IS SIMILAR. VERIFY PROPER OPERATION WHEN INSTALLED.

LAVATORY CARRIER AND FLOOR DRAIN TRAP PRIMER DETAIL
SCALE: NONE

FLOOR DRAIN WITH TRAP PRIMER DETAIL
SCALE: NONE

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CONTRACTOR TO VERIFY ALL DETAILS, DIMENSIONS, AND FIELD CONDITIONS BEFORE PROCEEDING WITH CONSTRUCTION. WHERE NOT CLEARLY SHOWN OBTAIN EXACT INFORMATION FROM ENGINEER. DO NOT SCALE DRAWINGS. USE ONLY MOST RECENTLY DATED DRAWINGS. NOTIFY ENGINEER OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK. ENGINEER RESERVES THE RIGHT TO MAKE CHANGES AS REQUIRED DUE TO JOB CONDITIONS. ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION NOT CARRIED OUT IN ACCORDANCE WITH CONSTRUCTION DOCUMENTS. THESE PLANS SHALL NOT BE REPRODUCED OR COPIED IN PART OR WHOLE WITHOUT EXPRESSED WRITTEN PERMISSION FROM QUEST DESIGN GROUP © COPYRIGHT 2016.

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE BUILDING CODES AND THE APPLICABLE MINIMUM FIRE SAFETY STANDARDS AS DETERMINED IN ACCORDANCE WITH CHAPTERS 553, AND 633, FLORIDA STATUTES AND LOCAL ORDINANCES.

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PROJECT TITLE:
TOWN OF LONGBOAT KEY
FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR:
Conformed Set
05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE:
0" 1"

SCALE: 1/8" = 1'-0"
PROJECT MANAGER: CRB
DRAWN BY: JDS
A/E OF RECORD: JDS
PROJECT NO: 19-522

SHEET TITLE:
PLUMBING NOTES AND DETAILS

SHEET No.:
P1.2

1 FIRE PROTCTION PLAN - EXISTING
1/8" = 1'-0"

PIPING NOTES

1. ALL ABOVE GROUND PIPING LESS THAN 1½" SHALL BE SCHEDULE 40 BLACK WITH CAST THREADED FITTINGS.
2. ALL ABOVE GROUND PIPING 2" AND LARGER SHALL BE SCHEDULE 10 BLACK STEEL WITH VICTAULIC FITTINGS.

HANGER SPACING TABLE

MAXIMUM DISTANCE BETWEEN HANGERS IN ACCORDANCE TO NFPA 13 TABLE 9.2.2.1

PIPE SIZE	1"	1¼"	1½"	2"	2½"	3"	4"	6"	8"
STEEL PIPE EXCEPT THREADED LIGHTWALL	12'-0"	12'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15-0"	15'-0"	15'-0"
THREADED LIGHTWALL	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"			
CPVC	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"				

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" FOR STEEL PIPE AND 6" FOR COPPER OR CPVC TUBE.

FIRE PROTECTION LEGEND

ABV.	DESCRIPTION	SYMBOL	ABV.	DESCRIPTION
AFF	ABOVE FINISH FLOOR			FIRE SPRINKLER BRANCH LINE
AP	ACCESS PANEL			EXISTING FIRE SPRINKLER BRANCH LINE
CPVC	CHLORINATED POLYVINYL CHLORIDE			FIRE SPRINKLER MAIN LINE
DN	DOWN			EXISTING FIRE SPRINKLER MAIN LINE
EXIST	EXISTING			EXISTING PUBLIC WATER MAIN
°F	DEGREE FAHRENHEIT			UNDER GROUND FIRE WATER MAIN LINE
GPH	GALLONS PER HOUR	#		HYDRAULIC CALCULATION NODE POINT
GPM	GALLONS PER MINUTE			MAIN SYSTEM RISER (PLAN VIEW)
KW	KILOWATT			O. S. & Y GATE VALVE WITH TAMPER SWITCH
LBS	POUNDS			SWING CHECK VALVE
NC	NORMALLY CLOSED			TEST AND DRAIN WITH GAUGE
NO	NORMALLY OPEN			PIPE RISE OR DROP
OD	OUTSIDE DIAMETER			PIPE RISE OR DROP (ELBOW)
PRV	PRESSURE REDUCING VALVE			BRANCH - BOTTOM CONNECTION
PSI	POUNDS PER SQUARE INCH			BRANCH - TOP CONNECTION
PVC	POLYVINYL CHLORIDE PIPE			
SF	SQUARE FEET			
U.G.	UNDER GROUND			
VEL	VELOCITY			
NIC	NOT IN CONTRACT			

NOTE: ALL SYMBOLS AND ABBREVIATIONS DO NOT NECESSARILY APPLY TO THIS PROJECT

SPRINKLER HEAD LEGEND

SYM	NAME	METAL	TEMP	K	NPT	ORIF	MFG.	MODEL#	ESCUT	CONN.
	CONCEALED PENDENT	WHITE	155	5.60	1/2"	---	TYCO	RFII	CONCEALED	Thread
	HIGH TEMPERATURE PENDENT	CHROME	286	5.60	1/2"	---	TYCO	TY-FRB	RECESSED	Thread
	UPRIGHT	BRASS	155	5.60	1/2"	---	TYCO	TY-FRB	RECESSED	Thread
	DRY PENDENT	CHROME	135	5.60	1"	---	TYCO	DS-1	RECESSED	Thread
	SIDEWALL	BRASS	200	5.60	1/2"	1/2"	TYCO	DS-1	NONE	Thread
	EXISTING PENDENT									

*PROVIDE INTERMEDIATE TEMPERATURE RATING SPRINKLER HEADS IN UNCONDITIONED SPACES PER NFPA 13 REQUIREMENTS.

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PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR: Conformed Set 05.22.20

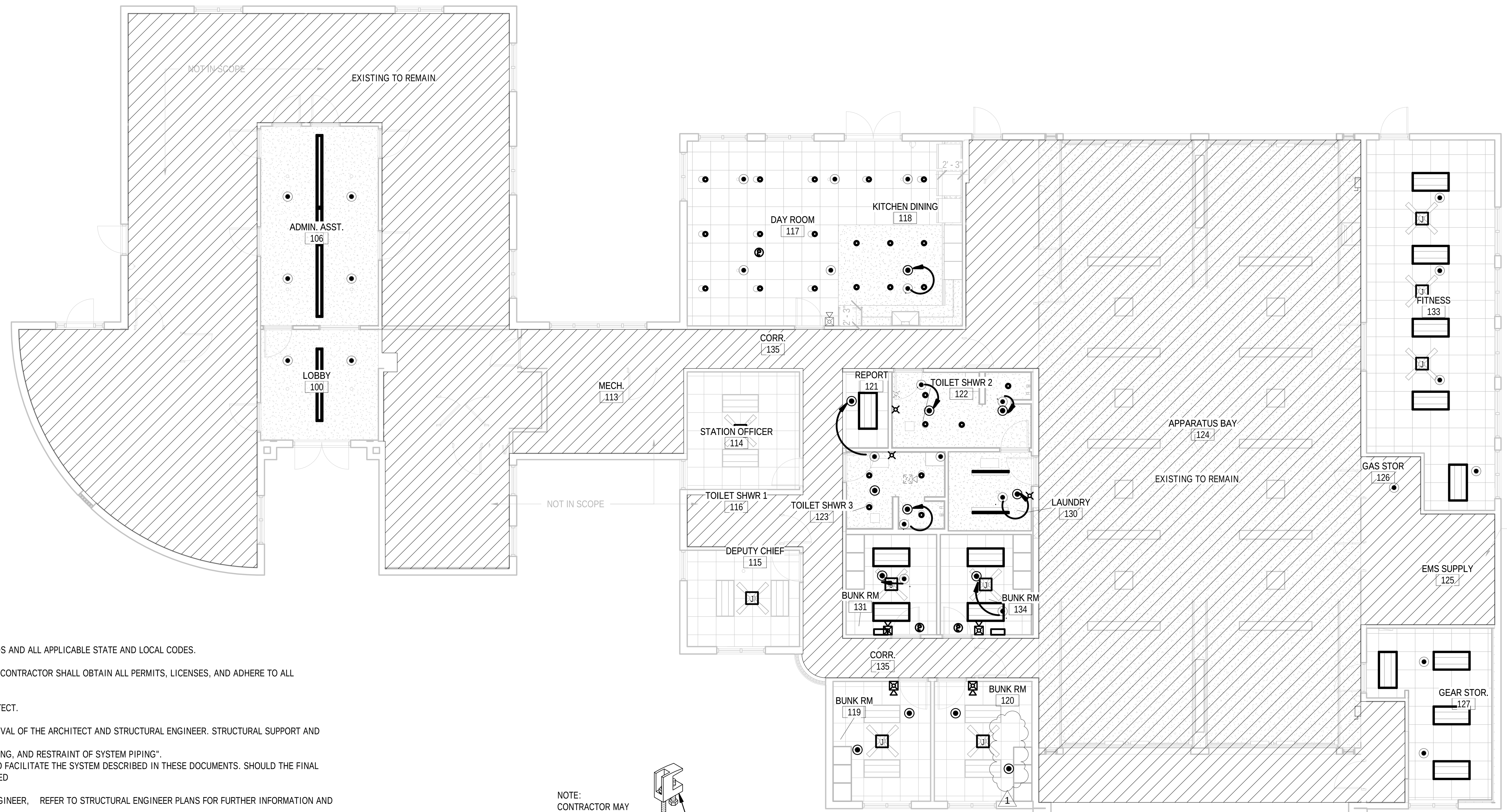
REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	CRB
DRAWN BY:	Author
A/E OF RECORD:	Checker
PROJECT NO:	19-522

SHEET TITLE:
FIRE PROTECTION PLAN - DEMO

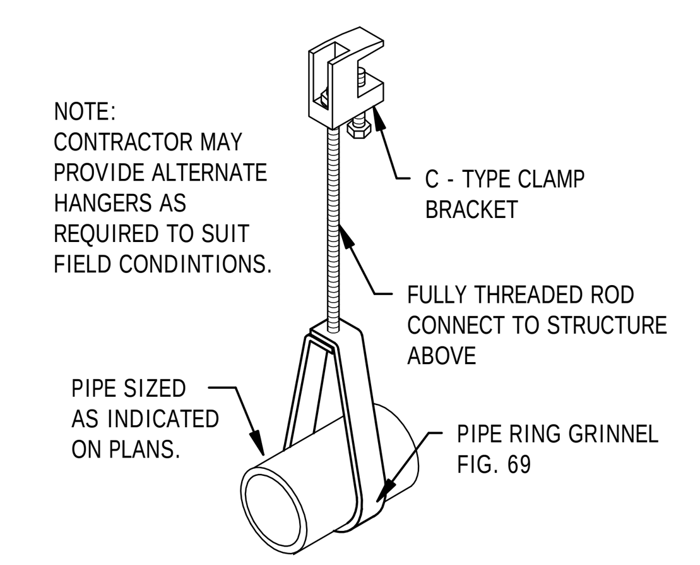
SHEET No.:
FP1.0



1 FIRE PROTECTON PLAN
1/8" = 1'-0"

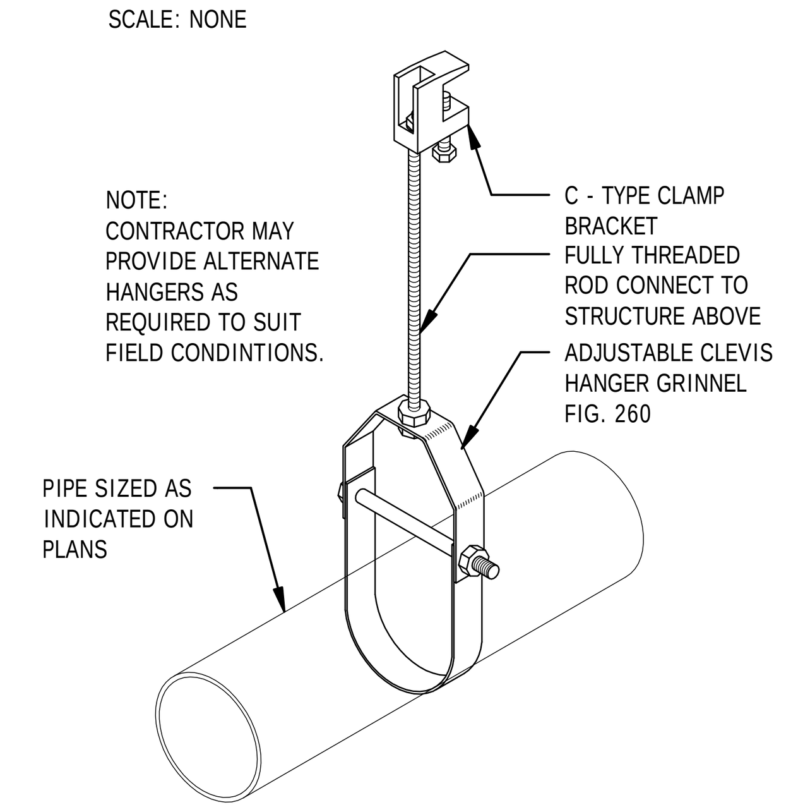
FIRE SPRINKLER NOTES

1. ALL THESE NOTES MAY NOT APPLY.
2. FIRE PROTECTION SYSTEM TO COMPLY WITH N.F.P.A. 13 (2013 EDITION), LOCAL FIRE MARSHALL STANDARDS AND ALL APPLICABLE STATE AND LOCAL CODES.
3. FIRE SPRINKLER CONTRACTOR SHALL OBTAIN SEPARATE PERMIT FROM ANY OTHER TRADE. FIRE SPRINKLER CONTRACTOR SHALL OBTAIN ALL PERMITS, LICENSES, AND ADHERE TO ALL GOVERNMENT REQUIREMENTS.
4. OBTAIN FINAL INSPECTION AND APPROVAL BY LOCAL FIRE MARSHALL, BUILDING DEPARTMENT, AND ARCHITECT.
5. CUTTING OF STRUCTURAL AND/OR ARCHITECTURAL MEMBERS TO BE DONE ONLY WITH THE WRITTEN APPROVAL OF THE ARCHITECT AND STRUCTURAL ENGINEER. STRUCTURAL SUPPORT AND STRUCTURAL OPENING:
   A. PIPING STRUCTURAL SUPPORT SHALL BE IN ACCORDANCE WITH NFPA 13 CH. 9 "HANGING, BRACING, AND RESTRAINT OF SYSTEM PIPING".
   B. IT IS NOT ANTICIPATED THAT ANY ENGINEERED STRUCTURAL OPENINGS ARE TO BE REQUIRED TO FACILITATE THE SYSTEM DESCRIBED IN THESE DOCUMENTS. SHOULD THE FINAL SYSTEM LAYOUT DOCUMENTS REQUIRE ANY ENGINEERED OPENINGS THEY SHALL BE COORDINATED THROUGH THE ARCHITECT AT THAT TIME.
   C. PIPING STRUCTURAL SUPPORT AND OPENINGS HAVE BEEN COORDINATED WITH STRUCTURAL ENGINEER, REFER TO STRUCTURAL ENGINEER PLANS FOR FURTHER INFORMATION AND INSTRUCTIONS.
6. THE EXISTING STRUCTURE SHALL NOT BE CUT, DRILLED, ALTERED, REMOVED, OR TEMPORARILY REMOVED WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT AND/ OR STRUCTURAL ENGINEER FOR THE INSTALLATION REQUIRED TO PERFORM CONSTRUCTION ACTIVITIES OF MECHANICAL, PLUMBING, AND ELECTRICAL WORK, AND OTHER CONSTRUCTION UNDER THE CONTRACT.
7. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING DESCRIPTIONS AND HEIGHTS (SPRINKLERS SHALL BE LOCATED IN CENTER OF TILES), AND DETECTORS. REFLECTED CEILING PLANS SHALL DICTATE LOCATIONS UNLESS OTHERWISE PROHIBITED BY N.F.P.A. 13.
8. FIRE STOP ALL PENETRATIONS OF SMOKE/FIRE WALLS, CEILINGS, FLOORS, ROOFS, ETC., FLASH AND COUNTERFLASH ROOF PENETRATIONS.
9. PROVIDE ACCESS PANELS TO VALVES ABOVE NON-ACCESSIBLE CEILINGS AND CHASES.
10. SPRINKLER LOCATIONS ARE TO BE COORDINATED WITH ARCHITECT'S. REFLECTED CEILING PLANS AND OTHER TRADES (DIFFUSERS, LIGHTING FIXTURES, CEILING SYSTEMS AND STRUCTURAL SYSTEM).
11. SPRINKLERS THAT ARE WITHIN 24" OF ANY MECHANICAL GRILLE OR WITHIN 6" OF ANY LIGHT FIXTURE SHALL BE INTERMEDIATE TEMPERATURE RATED. NOTIFY ARCHITECT/ ENGINEER IN WRITING OF ANY DISCREPANCIES.
12. METHODS OF HANGING PIPES, HEADERS AND BRANCHES SHALL BE IN ACCORDANCE WITH N.F.P.A. 13.
13. AUTOMATIC SPRINKLER TEMPERATURE RATINGS WITH FUSIBLE ELEMENTS TO BE IN ACCORDANCE WITH N.F.P.A. 13. ALL FIRE SPRINKLERS TO BE 155 F(ORDINARY TEMP.). IN CONDITIONED AREAS. 200 F (INTERMEDIATE TEMP.). IN NON-CONDITIONED AREAS AND SHALL BE IN ACCORDANCE WITH NFPA 13 CHAPTER 8 "INSTALLATION REQUIREMENT" - 8.3.2.5
14. SPRINKLERS SHALL COVER THE ENTIRE AREA OF THE ROOM INCLUDING ALCOVES. SPRAY SHALL NOT BE BLOCKED BY WALLS, PARTITIONS OR PRIVACY CURTAINS.
15. ALL SPRINKLERS MOUNTED IN CEILING SHALL BE LOCATED A MINIMUM OF 4-INCHES AWAY FROM ANY WALLS, CEILING HEIGHT CHANGES OR ANY OTHER VERTICAL INTERSECTING SURFACE.
16. PIPE SHALL BE REAMED AND CLEANED BEFORE ASSEMBLY.
17. MAINTAIN A MINIMUM OF 18-INCHES FROM THE BOTTOM OF THE SPRINKLER DEFLECTOR TO THE TOP OF STORAGE/ FILE STORAGE.
18. PROVIDE SPRINKLER SYSTEM(S) WITH FLUSHING CONNECTION(S).
19. PROVIDE SPRINKLERS ABOVE AND BELOW EXPOSED DUCTWORK 4-FEET OR WIDER.
20. MINOR DETAILS, NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER OPERATION AND CONSISTENT WITH GOOD WORKMANSHIP, WILL BE INCLUDED IN THE ESTIMATE, THE SAME AS IF SHOWN ON DRAWINGS.
21. OFFER REMOVED MATERIAL TO THE OWNER. REMOVE ALL MATERIAL REJECTED BY THE OWNER FROM THE WORK SITE AND DISPOSE OF IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND NATIONAL CODES. CONTRACTOR MUST CERTIFY TO OWNER THAT THE MATERIAL HAS BEEN LEGALLY DISPOSED OF.
22. ALL SPRINKLERS INDICATED ON DRAWINGS PREPARED BY ENGINEER OF RECORD FOR THE FIRE SPRINKLER SYSTEM ARE FOR COORDINATION PURPOSES ONLY. CONTRACTOR SHALL VERIFY COVERAGE AND ADD SPRINKLERS AS REQUIRED. CONTRACTOR SHALL PROVIDE FULL SPRINKLER PROTECTION IN ATTICS CONSTRUCTED WITH COMBUSTIBLE MATERIALS WHERE ROOF PLYWOOD OR STRUCTURAL MEMBERS, INDICATED ON STRUCTURAL PLANS OR AS-BUILT IN THE FIELD, OBSTRUCT SPRINKLER SPRAY PATTERNS.
23. THIS IS A MODIFICATION TO AN EXISTING FIRE SPRINKLER SYSTEM. THIS AREA IS NOT THE HMD THEREFORE NO HYDRAULIC CALCULATIONS ARE REQUIRED.
24. THIS TENANT COMPLETION HAS BEEN DESIGNED FOR A LIGHT HAZARD OCCUPANCY FOR DINNING AREAS AND ORDINARY HAZARD GROUP1 FOR THE KITCHEN AREA, AUTOMATIC WET TYPE SYSTEM. THE MINIMUM DENSITY SHALL BE 0.10 FOR DINNING AREA AND 0.15 FOR KITCHEN AND SPRINKLER SPACING SHALL BE AS DESCRIBED BY NFPA 13 FOR LIGHT AND ORDINARY HAZARD OCCUPANCIES.



TYPICAL HANGER FOR 2 1/2" AND SMALLER PIPE

SCALE: NONE



TYPICAL HANGER FOR 3" AND LARGER PIPE

SCALE: NONE

SCOPE OF WORK - FIRE PROTECTION

1. CONSTRACTOR SHALL PROVIDE DEMOLITION IN ACCORDANCE WITH ARCHITECTURAL DRAWINGS.
2. THE REPLACEMENT OF ALL VISIBLE EXISTING PENDENT AND HORIZONTAL SIDEWALL SPRINKLERS AND ASSOCIATED ESCUTCHEONS WITH NEW SPRINKLERS OF EQUAL K-FACTOR, TEMPERATURE AND RESPONSE RATINS OF THE EXISTING. CONTRACTOR SHALL FIELD VERIFY THE FINAL NUMBER OF VISIBLE EXISTING SPRINKLERS TO BE REPLACE PRIOR TO BIDDING.
3. THE SCOPE OF THIS PROJECT INCLUDES THE RELOCATION OF EXISTING AND ADDITION OF NEW FIRE SPRINKLER HEADS AS INDICATED. THE MATERIAL TO BE DEMOLISHED INCLUDES EXISTING SPRINKLER HEADS, ASSOCIATED PIPING, VALVES, FITTINGS, HANGERS, AND SUPPORTS, FOR PORTION OF FIRE PROTECTION SYSTEM IN PRESENT LOCATION AS IMPLIED BY THE NATURE OF THE WORK TO BE REMOVED.
4. A COMPLETE PRESSURE TEST WILL BE WITHIN THE SCOPE OF THIS PROJECT. THE PRESSURE TEST SHALL BE CONDUCTED AS INDICATED BY THE REQUIREMENTS OF NFPA 13.

This set has been digitally signed and sealed by Jon D. Shepard, PE on August 26, 2020 using a Digital Signature. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

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DocuSigned by: Jon Shepard
8/26/2020

JON DANIEL SHEPARD, LICENSE No. 71536, STATE OF FLORIDA, PROFESSIONAL ENGINEER, 08-26-2020

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PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR: Conformed Set 05.22.20

REV	DESCRIPTION	DATE
1	ASI 01	08.26.20

GRAPHIC SCALE: 0" 1"

SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	CRB
DRAWN BY:	Author
A/E OF RECORD:	Checker
PROJECT NO:	19-522

SHEET TITLE: FIRE PROTECTION PLAN

SHEET No.: FP1.1

VOID

1 FIRE PROTECTON PLAN
1/8" = 1'-0"

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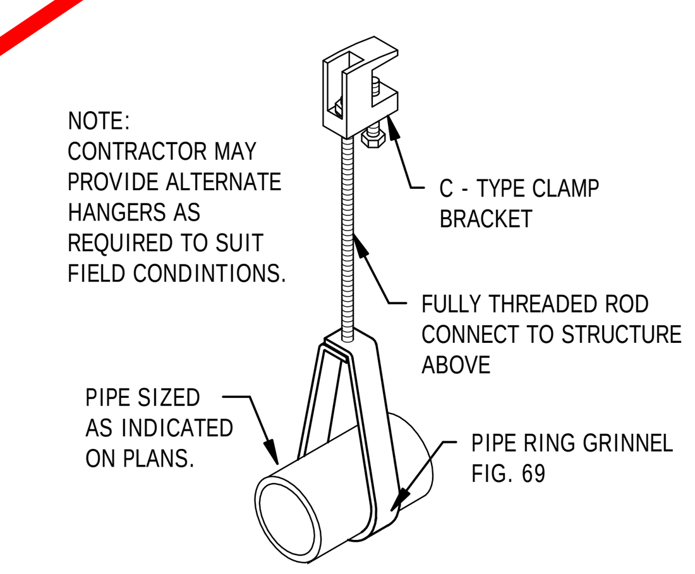
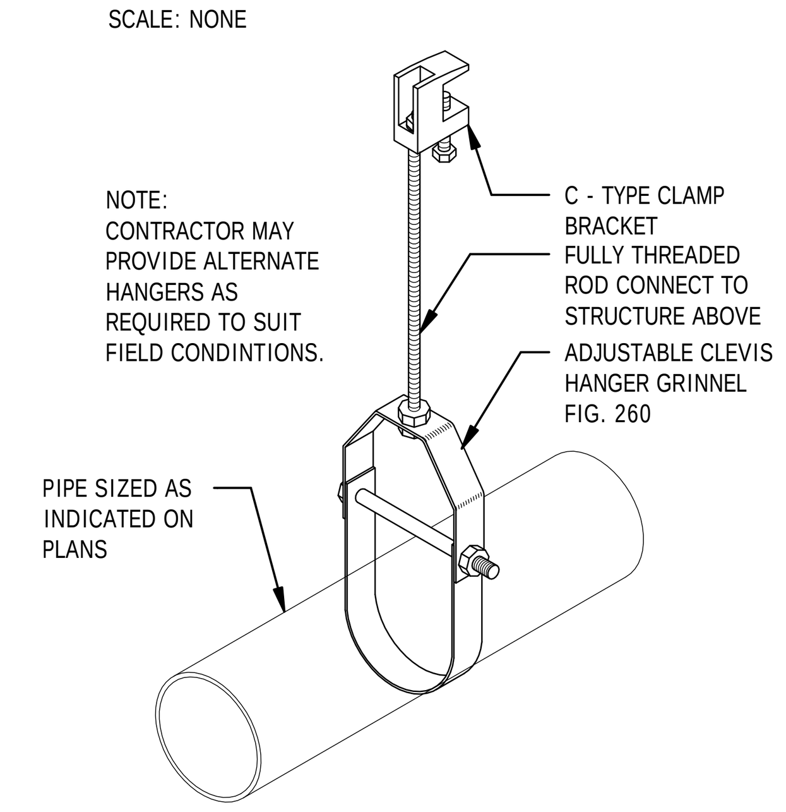


TYPICAL HANGER FOR
2 1/2" AND SMALLER PIPE
SCALE: NONE



TYPICAL HANGER FOR
3" AND LARGER PIPE
SCALE: NONE

SCOPE OF WORK - FIRE PROTECTION

1. CONSTRACTOR SHALL PROVIDE DEMOLITION IN ACCORDANCE WITH ARCHITECTURAL DRAWINGS.
2. THE REPLACEMENT OF ALL VISIBLE EXISTING PENDENT AND HORIZONTAL SIDEWALL SPRINKLERS AND ASSOCIATED ESCUTCHEONS WITH NEW SPRINKLERS OF EQUAL K-FACTOR, TEMPERATURE AND RESPONSE RATINS OF THE EXISTING. CONTRACTOR SHALL FIELD VERIFY THE FINAL NUMBER OF VISIBLE EXISTING SPRINKLERS TO BE REPLACE PRIOR TO BIDDING.
3. THE SCOPE OF THIS PROJECT INCLUDES THE RELOCATION OF EXISTING AND ADDITION OF NEW FIRE SPRINKLER HEADS AS INDICATED. THE MATERIAL TO BE DEMOLISHED INCLUDES EXISTING SPRINKLER HEADS, ASSOCIATED PIPING, VALVES, FITTINGS, HANGERS, AND SUPPORTS, FOR PORTION OF FIRE PROTECTION SYSTEM IN PRESENT LOCATION AS IMPLIED BY THE NATURE OF THE WORK TO BE REMOVED.
4. A COMPLETE PRESSURE TEST WILL BE WITHIN THE SCOPE OF THIS PROJECT. THE PRESSURE TEST SHALL BE CONDUCTED AS INDICATED BY THE REQUIREMENTS OF NFPA 13.

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PROJECT TITLE: TOWN OF LONGBOAT KEY FIRE RESCUE STATION 91
5490 GULF OF MEXICO DR
LONGBOAT KEY, FL 34228

ISSUED FOR: Conformed Set 05.22.20

REV	DESCRIPTION	DATE

GRAPHIC SCALE: 0" 1"

SCALE:	1/8" = 1'-0"
PROJECT MANAGER:	CRB
DRAWN BY:	Author
A/E OF RECORD:	Checker
PROJECT NO:	19-522

SHEET TITLE: FIRE PROTECTION PLAN

SHEET No.: FP1.1