SCHOOL DISTRICT OF INDIAN RIVER COUNTY

PELICAN ISLAND ELEMENTARY SCHOOL
SINGLE POINT OF ENTRY RENOVATION

1355 SCHUMANN DR., SEBASTIAN, FL 32958

School District of
Indian River County

S + A Project No. 18033

ARCHITECT

SONG + ASSOCIATES, INC.
1545 CENTREPARK DRIVE NORTH
WEST PALM BEACH, FLORIDA 33401
TEL: 561-655-2423
FAX: 561-655-1482

STRUCTURAL

ANDREW MORGAN SERVICES
513 US 1, SUITE 109
NORTH PALM BEACH, FL 33408
TEL: 561-881-8999

MEP

OCI ASSOCIATES
181 MELODY LANE, SUITE 107
FORT PIERCE, FL 34950
TEL: 772-466-1165

SCHOOL DISTRICT OF INDIAN RIVER COUNTY
BOARD MEMBERS

SHAWN FROST
DISTRICT 1

DALE SIMCHICK
DISTRICT 2

LAURA ZORC
DISTRICT 3

CHARLES SEARCY
DISTRICT 4

TIFFANY JUSTICE
DISTRICT 5

DR. MARK J. RENDELL
SUPERINTENDENT

宋
Song + Associates
Architecture ● Planning ● Interior Design

CONSTRUCTION DOCUMENTS
SEPTEMBER 19, 2018

TO THE BEST OF MY KNOWLEDGE, THESE DRAWINGS AND THE PROJECT MANUAL ARE COMPLETE AND COMPLY WITH "THE FLORIDA BUILDING CODE", THE "FLORIDA FIRE PREVENTION CODE", AND OTHER APPLICABLE CODES AND REGULATIONS. AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH FBC CH. 105 AND 633 FLORIDA STATUTES.

Seal :
STATE OF FLORIDA · PERRY DOUGLASS · AR97112 · REGISTERED ARCHITECT
Name : PERRY DOUGLASS
License # : AR 97112

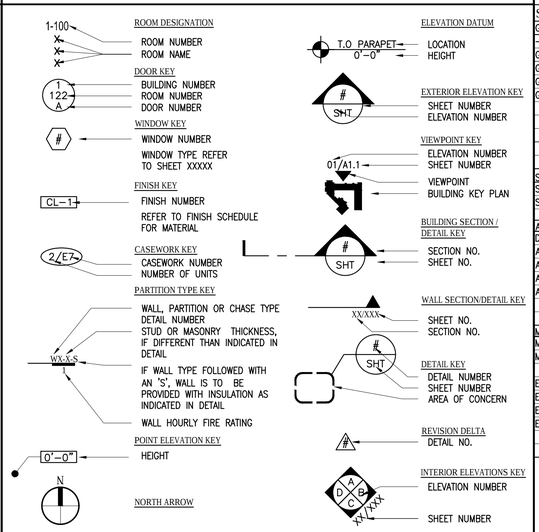
MATERIAL INDICATION

ELEVATION	SECTION	PLAN	
			EARTH FILL MATERIAL
			POROUS FILL (STONE, GRAVEL, ETC.)
			CAST IN PLACE CONCRETE
			PRECAST CONCRETE CAST STONE
			BRICK
			CONCRETE MASONRY UNIT (LARGE SCALE)
			CONCRETE MASONRY UNIT (SMALL SCALE)
			STEEL (LARGE SCALE)
			ALUMINUM (LARGE SCALE)
VARIES			STONE VENEER
			METAL (SMALL SCALE)
			ROUGH WOOD (CONTINUOUS)
			ROUGH WOOD (INTERMITTANT BLOCKING)
			WOOD (FINISHED)
			PLYWOOD (LARGE SCALE)
			PLYWOOD (SMALL SCALE)
			PARTICLE BOARD
			INSULATION (BATT)
			RIGID INSULATION (ROOF OR WALL)
			CERAMIC TILE
			PLASTER, SAND, CEMENT, GROUT, GYPSUM BOARD
			MARBLE
			GLASS

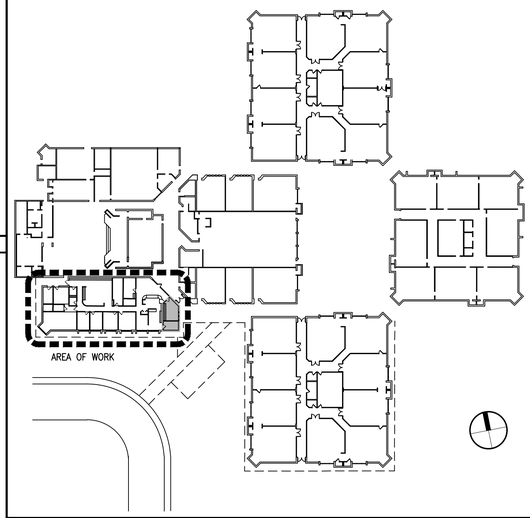
ARCHITECTURAL ABBREVIATIONS

&	AND	±	PLUS OR MINUS
∠	ANGLE	℄	PLATE OR PROPERTY LINE
℄	CENTER LINE	☐	SQUARE
ø	DIAMETER OR ROUND	C/C	CENTER TO CENTER
@	AT	#	POUND OR NUMBER
AC	AIR CONDITIONING	INT	INTERIOR
ACC	ACCESSIBLE	JB	JOIST BEARING
ACT	ACOUSTICAL CEILING TILE	JT	JOINT
AD	AREA DRAIN	MAX	MAXIMUM
ADJ	ADJUSTABLE	MIN	MINIMUM
AFF	ABOVE FINISH FLOOR	MISC	MISCELLANEOUS
A.L.	ARC LENGTH	MO	MASONRY OPENING
ALUM	ALUMINUM	MTL	METAL
BD	BOARD	NIC	NOT IN CONTRACT
BLDG	BUILDING	NO/ #	NUMBER
BLK	BLOCK	NTS	NOT TO SCALE
BM	BEAM	OH	OVERHEAD
BOB	BOTTOM OF BEAM	OC	ON CENTER
BUR	BUILT-UP ROOF	OD	OUTSIDE DIAMETER
CIP	CAST IN PLACE	OPP	OPPOSITE
CJ	CONTROL JOINT	PLAS	PLASTER
CL	CHAIN LINK	PLYWD	PLYWOOD
CLR	CLEAR	POB	POINT OF BEGINNING
CLG	CEILING	PREFAB	PREFABRICATED
CMU	CONCRETE MASONRY UNIT	PSF	POUNDS PER SQUARE FOOT
COL	COLUMN	PSI	POUNDS PER SQUARE INCH
CONC	CONCRETE	PT	PRESSURE TREATED
CONT	CONTINUOUS/CONTINUE	R	RISE
D	DEPTH	RA	RETURN AIR
DWG	DRAWING	RAD/ R	RADIUS
EA	EACH	RD	ROOF DRAIN
EC	EASED CORNER	REINF	REINFORCING
EJ	EXPANSION JOINT	REQ'D	REQUIRED
ELEV	ELEVATION/ ELEVATOR	RM	ROOM
EQ	EQUAL	SCHED	SCHEDULE
EQUIP	EQUIPMENT	SHT	SHEET
EXP	EXPANSION	SIM	SIMILAR
EWC	ELECTRIC WATER COOLER	SP	SPACE
EXT	EXTERIOR	SPEC(S)	SPECIFICATION(S)
FD	FLOOR DRAIN	STD	STANDARD
FE	FIRE EXTINGUISHER	STL	STEEL
FEC	FIRE EXTINGUISHER CABINET	SUSP	SUSPENDED
FDN	FOUNDATION	SW	SIDEWALK
FHC	FIRE HOSE CABINET	T	THICKNESS/TREAD
FIN	FINISH	TOB	TOP OF BEAM
F.F.	FINISH FLOOR	TOC	TOP OF CONCRETE
FLR	FLOOR	TOF	TOP OF FOOTING
FT	FEET / FOOT	TOI	TOP OF INSULATION
GA	GAUGE	TOM	TOP OF MASONRY
GALV	GALVANIZED	TOP	TOP OF PARAPET
GEN	GENERAL	TOS	TOP OF SLAB
GL	GLASS	TOW	TOP OF WALL
GUM	GLASS UNIT MASONRY	TYP	TYPICAL
GWB	GYPSUM WALLBOARD	UNO	UNLESS NOTED OTHERWISE
GYP	GYPSUM	VERT	VERTICAL
H/HT	HEIGHT	VCT	VINYL COMPOSITION TILE
ID	INSIDE DIAMETER	W	WIDTH
IN	INCH / INCHES	W/	WITH
INSUL	INSULATION	WD	WOOD

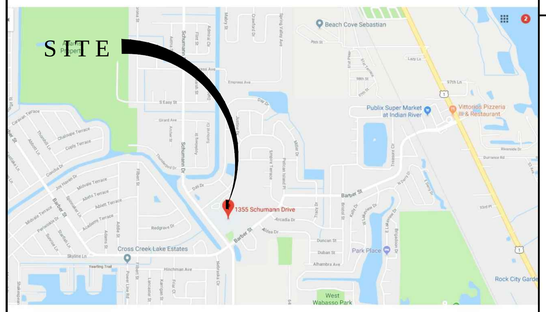
SYMBOLS AND NOTES



KEY PLAN



VICINITY MAP



SHEET INDEX

GENERAL NOTES

1. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR ANY INCONSISTENCIES.
2. ALL DIMENSIONS FOR NEW WORK ARE TO FACE OF STUDS, FACE OF CMU OR CONC. AND CENTERLINES OF COLUMNS, UNLESS OTHERWISE INDICATED. ALL DIMENSIONS TO EXISTING ARE TO FACE OF FINISH UNLESS OTHERWISE INDICATED. DIMENSIONS TAKE PRECEDENCE OVER SCALING OF DRAWINGS.
3. UPON COMPLETION OF THE WORK, PROPERTY AND ADJACENT AREAS SHALL BE LEFT CLEAN AND SATISFACTORY TO THE OWNER AND THE ARCHITECT.
4. SCHOOL CAMPUS IS OCCUPIED AND GENERAL CONTRACTOR AND SUBS SHALL TAKE ALL MEANS NECESSARY TO PROVIDE A SAFE AND SECURE CONSTRUCTION BOUNDARY/LIMIT OF CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING, PATCHING AND FITTING OF ALL WORK IN A NEAT WORKMANLIKE MANNER. PROTECT ALL ADJACENT SURFACES FROM DAMAGE. PATCH AND REPAIR ALL WORK DAMAGED DURING CONSTRUCTION TO IT'S ORIGINAL OR BETTER CONDITION. WHERE NEW WORK ADJOINS EXISTING IN THE SAME PLANE, MATCH ADJACENT FINISHES, MATERIALS, TEXTURES, SHEEN, ETC.
6. A PRE-CONSTRUCTION COORDINATION MEETING SHALL BE HELD WITH THE CONTRACTOR, OWNER AND ARCHITECT PRIOR TO THE START OF ANY DEMOLITION OR CONSTRUCTION.
7. CONTRACTOR SHALL PROVIDE A LIST OF ALL SUB-CONTRACTOR'S TO THE ARCHITECT PRIOR TO ANY DEMOLITION OR CONSTRUCTION.
8. GENERAL AND ALL SUB-CONTRACTORS, SHALL VISIT THE SITE AND PRECISELY EXAMINE THE EXISTING STRUCTURE, SURFACES, CONDITIONS AND EXTENT OF WORK INVOLVED. AFTER EXAMINATION A DEMOLITION SCHEDULE SHALL BE PREPARED AND SUBMITTED IN WRITING TO THE OWNER AND THE ARCHITECT FOR THEIR APPROVAL PRIOR TO THE COMMENCEMENT OF ANY WORK.
9. CONTRACTOR(S) ARE RESPONSIBLE FOR VERIFYING THE EXTENT OF DEMOLITION WORK PRIOR TO BIDDING, AND FOR THE COORDINATING THE EXTENT OF DEMOLITION WITH THE INSTALLATION OF NEW SYSTEMS AND FINISHES INDICATED IN THE CONTRACT DOCUMENTS. REFER TO THE NEW CONSTRUCTION DRAWINGS FOR DEMOLITION REQUIRED, BUT SHOWN ON DEMOLITION PLANS, IF APPLICABLE.
10. ALL CONTRACTOR(S) SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND MUNICIPAL ORDINANCES.
11. EXECUTE ALL DEMOLITION WORK IN AN ORDERLY AND CAREFUL MANNER WITH DUE CONSIDERATION FOR ANY EXISTING STRUCTURE. EXTREME CAUTION SHALL BE EXERCISED TO ENSURE THAT NO DAMAGE OCCURS ABSOLUTELY TO ANY OF THE EXISTING EQUIPMENT FURNITURE, OR EXISTING STRUCTURE TO REMAIN. METHODS SHALL BE IN PLACE TO PREVENT ANY DEBRIS FROM FALLING ONTO LOWER LEVELS AT ALL TIMES. WORK SHALL BE CONFINED EXCLUSIVELY WITHIN THE BUILDING BOUNDARY IDENTIFIED. DEMOLITION CONTRACTOR SHALL REPLACE OR REPAIR ANY DAMAGE TO ADJOINING SURFACES, FINISHES OR STRUCTURE CAUSED BY CONSTRUCTION OPERATIONS.(ACTIVITY)
12. ALL MATERIAL REMOVED UNDER THIS CONTRACT, WHICH IS NOT TO BE SALVAGED OR REUSED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM THE SITE. TO CONVEY MATERIALS, USE MOVABLE, COVERED, DEBRIS BOXES. DO NOT STORE/PERMIT DEBRIS TO ACCUMULATE ON SITE.
13. UPON COMPLETION OF THE WORK, ADJACENT AREAS AND THE PROPERTY SHALL BE LEFT CLEAN AND SATISFACTORY TO THE LOCAL AUTHORITIES, THE OWNER, AND THE ARCHITECT. THE SITE SHALL BE CLEANED DAILY.
14. ALL DEBRIS REMOVAL FREQUENCY AND LOCATION AND STAGING SHALL BE COORDINATED WITH OWNER.
15. CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR WORK NEXT TO THE WORK SITE.

APPLICABLE CODES

1. TO THE BEST OF MY KNOWLEDGE, THESE DRAWINGS ARE COMPLETE, AND COMPLY WITH ALL APPLICABLE CODES

2. THE DESIGN AND CONSTRUCTION OF THIS PROJECT SHALL COMPLY WITH THE FOLLOWING CODES AND STANDARDS. SHOULD THERE BE A CONFLICT BETWEEN ANY CODE REQUIREMENTS, COMPLY WITH THE REQUIREMENT THAT PROVIDES THE GREATEST DEGREE OF LIFE SAFETY.

A. FBC (FLORIDA BUILDING CODE), 6TH EDITION (2017) INCLUDING:
- A.1. FBC-BUILDING
- A.2. FBC-MECHANICAL
- A.3. FBC-PLUMBING
- A.4. FBC-FUEL GAS
- A.5. FBC-ACCESSIBILITY

B. FLORIDA FIRE PREVENTION CODE FAC 2017 INCLUDING:
- B.1. NFPA 1-2015
- B.2. NFPA 101-2015
- B.3. NFPA CODES LISTED IN FAC 69A-60.005
- B.4. 69A-58 FL FIRE SAFETY IN EDUCATIONAL FACILITIES, CURRENT EDITION

C. STATE REQUIREMENTS FOR EDUCATIONAL FACILITIES 2014
D. ASCE 7-10: AMERICAN SOCIETY OF CIVIL ENGINEERS
E. UL FIRE RESISTANCE DIRECTORY AS VERIFIED AT WWW.UL.COM
F. OSHA (OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION, USDEPARTMENT OF LABOR, CFR 29 AS CURRENTLY REVISED
G. FEMA (FEDERAL EMERGENCY MANAGEMENT AGENCY), RULES & REGULATIONS, 44 CFR, PARTS 59 & 60, REVISED OCTOBER 1995 FOR FLOOD PLAIN CRITERIA GOVERNING INSURABILITY OF FACILITIES CONSTRUCTED IN FLOOD PLAIN AREAS.
H. FLORIDA STATUTES AND STATE RULES. INCLUDING, BUT NOT LIMITED TO, CHAPTERS 1013, 240, 255, 468, 471, 481, 489, 553, 633, AND SECTION 287.055, FLORIDA STATUTES, AND VARIOUS STATE RULES AS APPLICABLE TO SPECIFIC PROJECTS.
I. NFPA 101 CHAPTER 14 NEW EDUCATIONAL FACILITIES, SECTION 14.3.2 PROTECTION FROM HAZARDS

Song + Associates

Architecture ● Planning ● Interior Design

1545 Centrepark Drive North
West Palm Beach, Florida 33401

Telephone: 561-655-2423
Fax: 561-655-1482

AA - 0003165 IB - 0001095

Seal :

STATE OF FLORIDA
PERRY DOUGLASS
AR97112
REGISTERED ARCHITECT

Name: PERRY DOUGLASS
License # : AR 97112

Consultants :

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

Date : 09/19/2018
S+A Project No : 18033
Owner Project No :
Drawn By : PD/WS
Checked By : PD

Phase :
CONSTRUCTION DOCUMENTS

Sheet Title :
INDEX, ABBREVIATIONS, GENERAL NOTES & VICINITY MAP

Sheet # :
G-101

SECTION 02 41 19 - SELECTIVE DEMOLITION

PART 1 GENERAL

1.1 RELATED DOCUMENTS:

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 1 SPECIFICATION SECTIONS, APPLY TO WORK IN THIS SECTION.

1.2 SECTION INCLUDES:

A. REQUIRED DEMOLITION OF DESIGNATED EXISTING PORTIONS OF BUILDINGS AND BUILDING ELEMENTS.
B. SALVAGE OF DESIGNATED ITEMS.

1.3 REFERENCES:

A. COMPLY WITH NFPA 1 - CHAPTER 29
B. NFPA 241 STANDARD FOR SAFEGUARDING CONSTRUCTION ALTERATION AND DEMOLITION OPERATION 2000 EDITION.
C. FLORIDA BUILDING CODE CHAPTER 33

1.4 NOTIFICATION OF OWNERS OF UTILITY LINES AND EQUIPMENT

A. NOTIFY THE OWNER OR LOCAL AUTHORITY OWNING ANY CONDUITS, WIRES, PIPES OR EQUIPMENT AFFECTED BY DEMOLITION WORK.
B. ARRANGE FOR REMOVAL OR RELOCATION OF AFFECTED ITEMS AND PAY FEES OR COSTS IN CONJUNCTION WITH REMOVAL OR RELOCATION, EXCEPT AS OTHERWISE NOTED.

1.5 PROTECTION

A. PRIOR TO STARTING ANY WORK ON SITE, PROVIDE A SAFETY PLAN TO THE OWNER FOR APPROVAL.
B. CONSTRUCTION MAY BE TAKING PLACE ON ACTIVE OCCUPIED CAMPUS. COORDINATION WITH IRCSD FACILITIES PLANNING/CONSTRUCTION DEPARTMENT AND CONSIDERATIONS FOR THE SAFETY OF STUDENTS, FACULTY, STAFF AND VISITORS SHOULD BE A HIGH PRIORITY.
C. COORDINATE THE IMPLEMENTATION OF THE SAFETY PLAN WITH THE OWNER, CAMPUS SECURITY, BUILDING REPRESENTATIVES, AND MAINTENANCE.
D. PRIOR TO STARTING DEMOLITION OPERATIONS, PROVIDE NECESSARY PROTECTION OF EXISTING SPACES AND ITEMS TO REMAIN.
E. OWNER WILL BE CONTINUOUSLY OCCUPYING AREAS OF THE BUILDING IMMEDIATELY ADJACENT TO AREAS OF SELECTIVE DEMOLITION. IF OWNER CONTINUES TO OCCUPY THE FACILITY COMPLY WITH THE FOLLOWING:
   1. CONDUCT DEMOLITION WORK IN A MANNER THAT WILL MINIMIZE NEED FOR DISRUPTION OF OWNERS NORMAL OPERATIONS.
   2. PROVIDE PROTECTIVE MEASURES AS REQUIRED TO PROVIDE FREE AND SAFE PASSAGE OF OWNER'S PERSONNEL, OCCUPANTS, AND STUDENTS, AND GENERAL PUBLIC TO AND FROM OCCUPIED PORTIONS OF THE FACILITIES.
   3. PROVIDE MINIMUM OF 72 HOURS ADVANCE NOTICE TO OWNER OF DEMOLITION ACTIVITIES THAT WILL IMPACT OWNER'S NORMAL OPERATIONS. OBTAIN SPECIFIC APPROVAL FROM OWNER FOR IMPACT.
F. OWNER ASSUMES NO RESPONSIBILITY FOR ACTUAL CONDITION OF ITEMS TO BE DEMOLISHED. CONDITIONS AT
   TIME OF COMMENCEMENT OF CONTRACT WILL BE MAINTAINED BY OWNER INSOFAR AS PRACTICAL.
G. PROTECT ANY EXPOSED EXISTING FINISH WORK THAT IS TO REMAIN DURING DEMOLITION OPERATIONS.
H. ERECT AND MAINTAIN DUST PROOF PARTITIONS, CLOSURES AND VENTILATOR SYSTEMS AS REQUIRED TO PREVENT SPREAD OF DUST OR FUMES TO OCCUPIED PORTIONS OF THE BUILDING. TAKE WHATEVER PRECAUTIONS NECESSARY TO MINIMIZE IMPACT ON OCCUPIED AREAS.
I. INSTALL SOUND MITIGATING MATERIALS WHERE EXCESSIVE NOISE MAY IMPACT OWNER AND OCCUPANTS.
   COORDINATE SOUND MITIGATION EFFORTS WITH THE OWNER.
J. CONSTRUCTION SITE SHALL BE KEPT COMPLETELY SECURED.
K. NO UNAUTHORIZED IRCSC FACULTY, STAFF OR VISITORS SHALL BE ALLOWED ON THE CONSTRUCTION SITE WITHOUT APPROVAL OF FACILITIES PLANNING.

A.

1.6 REGULATORY REQUIREMENTS

A. CONFORM TO APPLICABLE CODES FOR DEMOLITION OF STRUCTURES, SAFETY OF ADJACENT STRUCTURES, DUST CONTROL, RUNOFF AND EROSION CONTROL, AND DISPOSAL OF DEMOLISHED MATERIALS.
B. OBTAIN REQUIRED PERMITS FROM AUTHORITIES HAVING JURISDICTION.
C. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS.
D. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND HYDRANTS, WITHOUT PERMITS AND OWNER'S PERMISSION.
E. CONFORM TO APPLICABLE REGULATORY PROCEDURES WHEN DISCOVERING HAZARDOUS OR CONTAMINATED MATERIALS. CONTACT THE ARCHITECT AND OWNER IMMEDIATELY.
F. TEST SOILS AROUND BURIED TANKS FOR CONTAMINATION.
G. NO DEMOLITION WILL OCCUR AFTER ESTABLISHED HOURS WITHOUT THE WRITTEN PERMISSION OF THE OWNER.
H. OBTAIN OWNER'S APPROVAL PRIOR TO DEMOLITION/INVASIVE TESTING.

1.7 EXPLOSIVES

A. THE USE OF EXPLOSIVES IS STRICTLY PROHIBITED. PART 2 PRODUCTS -

2.01 GENERAL

A. PROVIDE ALL PRODUCTS AND MATERIALS NECESSARY TO COMPLY WITH THESE SPECIFICATIONS. PART 3 EXECUTION

3.1 PREPARATION

A. VERIFY THAT ABANDONED UTILITIES ARE PROPERLY DISCONNECTED AND CAPPED.
B. VERIFY THAT REQUIRED BARRICADES AND OTHER PROTECTIVE MEASURES ARE IN PLACE.
C. PROVIDE NECESSARY SHORING, BRACING, AND OTHER PRECAUTIONS REQUIRED TO PROPERLY SUPPORT EXISTING STRUCTURE DURING CUTTING AND DEMOLITION OPERATIONS.
D. PHOTOGRAPH EXISTING CONDITIONS OF STRUCTURE, SURFACES, EQUIPMENT AND SURROUNDING SPACES THAT
COULD BE MISCONSTRUED AS DAMAGE RESULTING FROM SELECTIVE DEMOLITION WORK; SUBMIT PHOTOGRAPHS AND WRITTEN REPORT OF EXISTING DAMAGE TO ARCHITECT PRIOR TO STARTING WORK.
   1. CONTRACTOR SHALL REPAIR DAMAGE CAUSED TO EXISTING FACILITIES AT NO COST TO OWNER UNLESS THEY CAN PROVIDE DOCUMENTATION IS INDICATING PRE-EXISTING DAMAGE.

3.2 DEMOLITION OPERATIONS

A. COMPLY WITH THE DRAWINGS AND ALTERATION PRECAUTIONS AND PROCEDURES SPECIFIED IN SECTION 01 26 00.
B. CUT AND REMOVE ELEMENTS AND EQUIPMENT AS DESIGNATED ON DRAWINGS. REMOVE ELEMENTS IN THEIR ENTIRETY UNLESS OTHERWISE INDICATED.
C. EXECUTE DEMOLITION IN A CAREFUL AND ORDERLY MANNER WITH LEAST POSSIBLE DISTURBANCE OR DAMAGE TO ADJOINING SURFACES AND STRUCTURE.
D. EXERCISE EXTREME CAUTION IN CUTTING AND DEMOLITION OF PORTIONS OF EXISTING STRUCTURE. OBTAIN APPROVAL OF ARCHITECT PRIOR TO CUTTING OR REMOVING STRUCTURAL MEMBERS FOR ANY REASON.
E. AVOID EXCESSIVE VIBRATIONS IN DEMOLITION PROCEDURES THAT MAY BE TRANSMITTED THROUGH EXISTING
   STRUCTURE AND FINISH MATERIALS.
F. IF HAZARDOUS MATERIALS ARE ENCOUNTERED DURING DEMOLITION OPERATIONS, COMPLY WITH APPLICABLE REGULATIONS, LAWS, AND ORDINANCES CONCERNING ASSESSMENT, REMOVAL, HANDLING AND PROTECTION AGAINST EXPOSURE OR ENVIRONMENTAL POLLUTION AND IMMEDIATELY CONTACT THE OWNER AND ARCHITECT.

3.3 DISPOSAL

A. MATERIALS, EQUIPMENT AND DEBRIS RESULTING FROM DEMOLITION OPERATIONS SHALL BECOME PROPERTY OF CONTRACTOR. REMOVE DEMOLITION DEBRIS AT LEAST ONCE EACH DAY IN ACCORDANCE WITH APPLICABLE CITY, STATE, AND FEDERAL LAWS.
B. COVER DEBRIS IN TRUCKS WITH APPROVED NETTING TO PREVENT SPILLAGE DURING TRANSPORTATION.

A.

C. DO NOT BURN MATERIALS.
D. DO NOT STORE DEBRIS ON SITE EXCEPT IN APPROVED CONTAINERS. REMOVE COMBUSTIBLE WASTE MATERIALS IN A MANNER APPROVED BY LOCAL FIRE DEPARTMENT.
E. REMOVE, HANDLE AND DISPOSE OF ANY HAZARDOUS WASTE AND DEBRIS IN ACCORDANCE WITH APPLICABLE CITY, STATE, AND FEDERAL LAWS.
F. TRANSPORT DEMOLITION DEBRIS TO OFF-SITE DISPOSAL AREA AND LEGALLY DISPOSE OF DEBRIS.
G. USE STREET ROUTES SPECIFICALLY DESIGNATED BY CITY OR COUNTY FOR HAULING DEBRIS.
H. WHEN POSSIBLE, DISPOSE OF MATERIAL TO RECYCLING CENTERS.

3.4 CLEANING AND REPAIR

A. LEAVE BUILDING BROOM CLEAN AND FREE OF DEBRIS, READY TO RECEIVE NEW WORK.

B. REPAIR DEMOLITION PERFORMED IN EXCESS OF THAT REQUIRED. RETURN STRUCTURES AND SURFACES TO REMAIN TO CONDITION EXISTING PRIOR TO COMMENCEMENT OF SELECTIVE DEMOLITION.

END OF SECTION 02 41 19

SECTION 03 30 00 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

A. THIS SECTION SPECIFIES CAST-IN PLACE CONCRETE, INCLUDING FORMWORK, REINFORCEMENT, CONCRETE MATERIALS, MIXTURE DESIGN, PLACEMENT PROCEDURES, AND FINISHES, FOR THE FOLLOWING:
   1. SLABS-ON-GRADE.

1.2 DEFINITIONS

A. CEMENTITIOUS MATERIALS: PORTLAND CEMENT ALONE OR IN COMBINATION WITH ONE OR MORE OF THE FOLLOWING: BLENDED HYDRAULIC CEMENT, FLY ASH AND OTHER POZZOLANS, GROUND GRANULATED BLAST- FURNACE SLAG, AND SILICA FUME; SUBJECT TO COMPLIANCE WITH REQUIREMENTS.

1.3 SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
B. DESIGN MIXTURES: FOR EACH CONCRETE MIXTURE. SUBMIT ALTERNATE DESIGN MIXTURES WHEN CHARACTERISTICS OF MATERIALS, PROJECT CONDITIONS, WEATHER, TEST RESULTS, OR OTHER CIRCUMSTANCES WARRANT ADJUSTMENTS.
C. STEEL REINFORCEMENT SHOP DRAWINGS: PLACING DRAWINGS THAT DETAIL FABRICATION, BENDING, AND PLACEMENT. INCLUDE BAR SIZES, LENGTHS, MATERIAL, GRADE, BAR SCHEDULES, STIRRUP SPACING, BENT BAR DIAGRAMS, BAR ARRANGEMENT, SPLICES AND LAPS, MECHANICAL CONNECTIONS, TIE SPACING, HOOP SPACING, AND SUPPORTS FOR CONCRETE REINFORCEMENT.
D. MATERIAL CERTIFICATES: FOR EACH OF THE FOLLOWING, SIGNED BY MANUFACTURERS:
   1. CEMENTITIOUS MATERIALS.
   2. ADMIXTURES.
   3. FORM MATERIALS AND FORM-RELEASE AGENTS.
   4. STEEL REINFORCEMENT AND ACCESSORIES.
   5. FIBER REINFORCEMENT.
   6. WATER-STOPS.
   7. CURING COMPOUNDS.
   8. BONDING AGENTS.
   9. ADHESIVES.
   10. VAPOR RETARDERS.
   11. SEMI-RIGID JOINT FILLER.
   12. JOINT-FILLER STRIPS.
   13. REPAIR MATERIALS.

1.4 QUALITY ASSURANCE

A. MANUFACTURER QUALIFICATIONS: A FIRM EXPERIENCED IN MANUFACTURING READY-MIXED CONCRETE PRODUCTS AND THAT COMPLIES WITH ASTM C 94/C 94M REQUIREMENTS FOR PRODUCTION FACILITIES AND EQUIPMENT.
   1. MANUFACTURER CERTIFIED ACCORDING TO NRMCA'S "CERTIFICATION OF READY MIXED CONCRETE PRODUCTION FACILITIES."
B. SOURCE LIMITATIONS: OBTAIN EACH TYPE OR CLASS OF CEMENTITIOUS MATERIAL OF THE SAME BRAND FROM THE SAME MANUFACTURER'S PLANT, OBTAIN AGGREGATE FROM ONE SOURCE, AND OBTAIN ADMIXTURES THROUGH ONE SOURCE FROM A SINGLE MANUFACTURER.
C. WELDING: QUALIFY PROCEDURES AND PERSONNEL ACCORDING TO AWS D1.4, "STRUCTURAL WELDING CODE-
   -REINFORCING STEEL."
D. ACI PUBLICATIONS: COMPLY WITH THE FOLLOWING UNLESS MODIFIED BY REQUIREMENTS IN THE CONTRACT DOCUMENTS:
   1. ACI 301, "SPECIFICATION FOR STRUCTURAL CONCRETE," SECTIONS 1 THROUGH 5
   2. ACI 117, "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS."
E. CONCRETE TESTING SERVICE: DESIGN BUILD CONTRACTOR WILL ENGAGE A QUALIFIED INDEPENDENT TESTING AGENCY TO PERFORM MATERIAL EVALUATION TESTS AND TO DESIGN CONCRETE MIXTURES.

1.5 DELIVERY, STORAGE, AND HANDLING

A. STEEL REINFORCEMENT: DELIVER, STORE, AND HANDLE STEEL REINFORCEMENT TO PREVENT BENDING AND DAMAGE.
B. WATER-STOPS: STORE WATER-STOPS UNDER COVER TO PROTECT FROM MOISTURE, SUNLIGHT, DIRT, OIL, AND OTHER CONTAMINANTS.

PART 2 - PRODUCTS

2.1 FORM-FACING MATERIALS

A. SMOOTH-FORMED FINISHED CONCRETE: FORM-FACING PANELS THAT WILL PROVIDE CONTINUOUS, TRUE, AND SMOOTH CONCRETE SURFACES. FURNISH IN LARGEST PRACTICABLE SIZES TO MINIMIZE NUMBER OF JOINTS.
   1. PLYWOOD, METAL, OR OTHER APPROVED PANEL MATERIALS.
B. ROUGH-FORMED FINISHED CONCRETE: PLYWOOD, LUMBER, METAL, OR ANOTHER APPROVED MATERIAL.
   PROVIDE LUMBER DRESSED ON AT LEAST TWO EDGES AND ONE SIDE FOR TIGHT FIT.
C. FORM-RELEASE AGENT: COMMERCIALLY FORMULATED FORM-RELEASE AGENT THAT WILL NOT BOND WITH, STAIN, OR ADVERSELY AFFECT CONCRETE SURFACES AND WILL NOT IMPAIR SUBSEQUENT TREATMENTS OF CONCRETE SURFACES.
   1. FORMULATE FORM-RELEASE AGENT WITH RUST INHIBITOR FOR STEEL FORM-FACING MATERIALS.
D. FORM TIES: FACTORY-FABRICATED, REMOVABLE OR SNAP-OFF METAL OR GLASS-FIBER-REINFORCED PLASTIC FORM TIES DESIGNED TO RESIST LATERAL PRESSURE OF FRESH CONCRETE ON FORMS AND TO PREVENT SPALLING OF CONCRETE ON REMOVAL.

2.2 STEEL REINFORCEMENT

A. REINFORCING BARS: ASTM A 615/A 615M, GRADE 60 (GRADE 420), DEFORMED.
B. PLAIN-STEEL WELDED WIRE REINFORCEMENT: ASTM A 185, PLAIN, FABRICATED FROM AS-DRAWN STEEL WIRE INTO FLAT SHEETS.
C. GALVANIZED-STEEL WELDED WIRE REINFORCEMENT: ASTM A 185, PLAIN, FABRICATED FROM GALVANIZED STEEL WIRE INTO FLAT SHEETS.

2.3 REINFORCEMENT ACCESSORIES

A. JOINT DOWEL BARS: ASTM A 615/A 615M, GRADE 60 (GRADE 420), PLAIN-STEEL BARS, CUT BARS TRUE TO LENGTH WITH ENDS SQUARE AND FREE OF BURRS.
B. BAR SUPPORTS: BOLSTERS, CHAIRS, SPACERS, AND OTHER DEVICES FOR SPACING, SUPPORTING, AND FASTENING REINFORCING BARS AND WELDED WIRE REINFORCEMENT IN PLACE. MANUFACTURE BAR SUPPORTS FROM STEEL WIRE, PLASTIC, OR PRECAST CONCRETE ACCORDING TO CRSI'S "MANUAL OF STANDARD PRACTICE," OF GREATER COMPRESSIVE STRENGTH THAN CONCRETE AND AS FOLLOWS:
   1. FOR CONCRETE SURFACES EXPOSED TO VIEW WHERE LEGS OF WIRE BAR SUPPORTS CONTACT FORMS, USE CRSI CLASS 1 PLASTIC-PROTECTED STEEL WIRE OR CRSI CLASS 2 STAINLESS-STEEL BAR SUPPORTS.

2.4 CONCRETE MATERIALS

A. CEMENTITIOUS MATERIAL: USE THE FOLLOWING CEMENTITIOUS MATERIALS, OF THE SAME TYPE, BRAND, AND SOURCE, THROUGHOUT PROJECT:
   1. PORTLAND CEMENT: ASTM C 150, TYPE I OR I/II
      a. FLY ASH: ASTM C 618, CLASS C.
B. NORMAL-WEIGHT AGGREGATES: ASTM C 33 COARSE AGGREGATE OR BETTER, GRADED. PROVIDE AGGREGATES FROM A SINGLE SOURCE.
   1. MAXIMUM COARSE-AGGREGATE SIZE: 1 INCH (25 MM) NOMINAL.
   2. FINE AGGREGATE: FREE OF MATERIALS WITH DELETERIOUS REACTIVITY TO ALKALI IN CEMENT.
C. WATER: ASTM C 94/C 94M.

2.5 ADMIXTURES

A. AIR-ENTRAINING ADMIXTURE: ASTM C 260.
B. CHEMICAL ADMIXTURES: PROVIDE ADMIXTURES CERTIFIED BY MANUFACTURER TO BE COMPATIBLE WITH OTHER ADMIXTURES AND THAT WILL NOT CONTRIBUTE WATER-SOLUBLE CHLORIDE IONS EXCEEDING THOSE PERMITTED IN HARDENED CONCRETE. DO NOT USE CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE.
   1. WATER-REDUCING ADMIXTURE: ASTM C 494/C 494M, TYPE A.
   2. RETARDING ADMIXTURE: ASTM C 494/C 494M, TYPE B.
   3. WATER-REDUCING AND RETARDING ADMIXTURE: ASTM C 494/C 494M, TYPE D.
   4. HIGH-RANGE, WATER-REDUCING ADMIXTURE: ASTM C 494/C 494M, TYPE F.
   5. HIGH-RANGE, WATER-REDUCING AND RETARDING ADMIXTURE: ASTM C 494/C 494M, TYPE G.
   6. PLASTICIZING AND RETARDING ADMIXTURE: ASTM C 1017/C 1017M, TYPE II.

2.6 VAPOR RETARDERS

A. PLASTIC VAPOR RETARDER: ASTM E 1745, CLASS C, OR POLYETHYLENE SHEET, ASTM D 4397, NOT LESS THAN 10 MILS (0.25 MM) THICK. INCLUDE MANUFACTURER'S RECOMMENDED ADHESIVE OR PRESSURE- SENSITIVE JOINT TAPE.

2.7 CURING MATERIALS

A. EVAPORATION RETARDER: WATERBORNE, MONOMOLECULAR FILM FORMING, MANUFACTURED FOR APPLICATION TO FRESH CONCRETE.
B. ABSORPTIVE COVER: AASHTO M 182, CLASS 2, BURLAP CLOTH MADE FROM JUTE OR KENAF, WEIGHING APPROXIMATELY 9 OZ./SQ. YD. (305 G/SQ. M) WHEN DRY.
C. MOISTURE-RETAINING COVER: ASTM C 171, POLYETHYLENE FILM OR WHITE BURLAP-POLYETHYLENE SHEET.
D. WATER: POTABLE.
E. CLEAR, WATERBORNE, MEMBRANE-FORMING CURING COMPOUND: ASTM C 309, TYPE 1, CLASS B, NON-DISSIPATING, CERTIFIED BY CURING COMPOUND MANUFACTURER TO NOT INTERFERE WITH BONDING OF FLOOR COVERING.

2.8 RELATED MATERIALS

A. EXPANSION- AND ISOLATION-JOINT-FILLER STRIPS: HIGH-R EXPANSION/INSULATION FILLER.
B. BONDING AGENT: ASTM C 1059, TYPE II, NON-REDISPERSIBLE, ACRYLIC EMULSION OR STYRENE BUTADIENE.
C. DOVETAIL ANCHOR SLOTS: HOT-DIP GALVANIZED STEEL SHEET, NOT LESS THAN 0.0336 INCH (0.85 MM) THICK, WITH BENT TAB ANCHORS. TEMPORARILY FILL OR COVER FACE OPENING OF SLOTS TO PREVENT INTRUSION OF CONCRETE OR DEBRIS.

2.9 CONCRETE MIXTURES, GENERAL

A. PREPARE DESIGN MIXTURES FOR EACH TYPE AND STRENGTH OF CONCRETE, PROPORTIONED ON THE BASIS OF LABORATORY TRIAL MIXTURE OR FIELD TEST DATA, OR BOTH, ACCORDING TO ACI 301.
   1. USE A QUALIFIED INDEPENDENT TESTING AGENCY FOR PREPARING AND REPORTING PROPOSED MIXTURE DESIGNS BASED ON LABORATORY TRIAL MIXTURES.
B. CEMENTITIOUS MATERIALS: LIMIT PERCENTAGE, BY WEIGHT, OF CEMENTITIOUS MATERIALS OTHER THAN PORTLAND CEMENT IN CONCRETE AS FOLLOWS:
   1. FLY ASH: 25 PERCENT.
   2. COMBINED FLY ASH AND POZZOLAN: 25 PERCENT.
C. LIMIT WATER-SOLUBLE, CHLORIDE-ION CONTENT IN HARDENED CONCRETE TO 0.06 PERCENT BY WEIGHT OF CEMENT.
D. ADMIXTURES: USE ADMIXTURES ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
   1. USE WATER-REDUCING OR PLASTICIZING ADMIXTURE IN CONCRETE, AS REQUIRED, FOR PLACEMENT AND WORKABILITY.
   2. USE WATER-REDUCING AND RETARDING ADMIXTURE WHEN REQUIRED BY HIGH TEMPERATURES, LOW HUMIDITY, OR OTHER ADVERSE PLACEMENT CONDITIONS.
   3. USE WATER-REDUCING ADMIXTURE IN PUMPED CONCRETE, CONCRETE FOR HEAVY-USE INDUSTRIAL SLABS AND PARKING STRUCTURE SLABS, CONCRETE REQUIRED TO BE WATERTIGHT, AND CONCRETE WITH A WATER-CEMENTITIOUS MATERIALS RATIO BELOW 0.50.

2.10 CONCRETE MIXTURES FOR BUILDING ELEMENTS

A. COMPLY WITH ACI 301 REQUIREMENTS FOR CONCRETE MIXTURES.
B. PREPARE DESIGN MIXES, PROPORTIONED ACCORDING TO ACI 301, FOR NORMAL-WEIGHT CONCRETE DETERMINED BY EITHER LABORATORY TRIAL MIX OR FIELD TEST DATA BASES, AS FOLLOWS:
   1. COMPRESSIVE STRENGTH (28 DAYS): 3000 PSI (20.7 MPA), 4000 PSI (27.6 MPA), REFER TO STRUCTURAL DRAWINGS FOR LOCATION OF REQUIRED STRENGTH AND MAXIMUM W/C RATIO WHERE SPECIFIED.
   2. SLUMP: 4 INCHES (100 MM).
      a. SLUMP LIMIT FOR CONCRETE CONTAINING HIGH-RANGE WATER-REDUCING ADMIXTURE: NOT MORE THAN 8 INCHES (200 MM) AFTER ADDING ADMIXTURE TO PLANT- OR SITE-VERIFIED, 2- TO 3-INCH (50- TO 75-MM) SLUMP.
C. ADD AIR-ENTRAINING ADMIXTURE AT MANUFACTURER'S PRESCRIBED RATE TO RESULT IN CONCRETE AT POINT OF PLACEMENT HAVING AN AIR CONTENT OF 2.5 TO 4.5 PERCENT.
   1. AIR CONTENT OF TROWEL-FINISHED INTERIOR CONCRETE FLOORS SHALL NOT EXCEED 3.0 PERCENT.

2.11 FABRICATING REINFORCEMENT

A. FABRICATE STEEL REINFORCEMENT ACCORDING TO CRSI'S "MANUAL OF STANDARD PRACTICE."

2.12 CONCRETE MIXING

A. READY-MIXED CONCRETE:MEASURE, BATCH, MIX, AND DELIVER CONCRETE ACCORDING TO ASTM C 94/C 94M, AND FURNISH BATCH TICKET INFORMATION.
   1. WHEN AIR TEMPERATURE IS BETWEEN 85 AND 90 DEG F (30 AND 32 DEG C), REDUCE MIXING AND DELIVERY TIME FROM 1-1/2 HOURS TO 75 MINUTES; WHEN AIR TEMPERATURE IS ABOVE 90 DEG F (32 DEG C), REDUCE MIXING AND DELIVERY TIME TO 60 MINUTES.
   2. PROVIDE BATCH TICKET FOR EACH BATCH DISCHARGED AND USED IN THE WORK, INDICATING PROJECT IDENTIFICATION NAME AND NUMBER, DATE, MIXTURE TYPE, MIXTURE TIME, QUANTITY, AND AMOUNT OF WATER ADDED. RECORD APPROXIMATE LOCATION OF FINAL DEPOSIT IN STRUCTURE.

PART 3 - EXECUTION

3.1 FORMWORK

A. DESIGN, ERECT, SHORE, BRACE, AND MAINTAIN FORMWORK, ACCORDING TO ACI 301, TO SUPPORT VERTICAL, LATERAL, STATIC, AND DYNAMIC LOADS, AND CONSTRUCTION LOADS THAT MIGHT BE APPLIED, UNTIL STRUCTURE CAN SUPPORT SUCH LOADS.
B. CONSTRUCT FORMWORK SO CONCRETE MEMBERS AND STRUCTURES ARE OF SIZE, SHAPE, ALIGNMENT, ELEVATION, AND POSITION INDICATED, WITHIN TOLERANCE LIMITS OF ACI 117.
C. LIMIT CONCRETE SURFACE IRREGULARITIES, DESIGNATED BY ACI 347R AS ABRUPT OR GRADUAL, AS FOLLOWS:
   1. CLASS A, 1/8 INCH (3.2 MM) FOR SMOOTH-FORMED FINISHED SURFACES.
   2. CLASS C, 1/2 INCH (13 MM) FOR ROUGH-FORMED FINISHED SURFACES.
D. CONSTRUCT FORMS TIGHT ENOUGH TO PREVENT LOSS OF CONCRETE MORTAR.
E. FABRICATE FORMS FOR EASY REMOVAL WITHOUT HAMMERING OR PRYING AGAINST CONCRETE SURFACES.
   PROVIDE CRUSH OR WRECKING PLATES WHERE STRIPPING MAY DAMAGE CAST CONCRETE SURFACES. PROVIDE TOP FORMS FOR INCLINED SURFACES STEEPER THAN 1.5 HORIZONTAL TO 1 VERTICAL.
   1. INSTALL KEYWAYS, REGLETS, RECESSES, AND THE LIKE, FOR EASY REMOVAL.
   2. DO NOT USE RUST-STAINED STEEL FORM-FACING MATERIAL.
F. SET EDGE FORMS, BULKHEADS, AND INTERMEDIATE SCREED STRIPS FOR SLABS TO ACHIEVE REQUIRED ELEVATIONS AND SLOPES IN FINISHED CONCRETE SURFACES. PROVIDE AND SECURE UNITS TO SUPPORT SCREED STRIPS; USE STRIKE-OFF TEMPLATES OR COMPACTING-TYPE SCREEDS.
G. PROVIDE TEMPORARY OPENINGS FOR CLEANOUTS AND INSPECTION PORTS WHERE INTERIOR AREA OF FORMWORK IS INACCESSIBLE. CLOSE OPENINGS WITH PANELS TIGHTLY FITTED TO FORMS AND SECURELY BRACED TO PREVENT LOSS OF CONCRETE MORTAR. LOCATE TEMPORARY OPENINGS IN FORMS AT INCONSPICUOUS LOCATIONS.
H. DO NOT CHAMFER EXTERIOR CORNERS AND EDGES OF PERMANENTLY EXPOSED CONCRETE.
I. FORM OPENINGS, CHASES, OFFSETS, SINK-AGES, KEYWAYS, REGLETS, BLOCKING, SCREEDS, AND BULKHEADS REQUIRED IN THE WORK. DETERMINE SIZES AND LOCATIONS FROM TRADES PROVIDING SUCH ITEMS.
J. CLEAN FORMS AND ADJACENT SURFACES TO RECEIVE CONCRETE. REMOVE CHIPS, WOOD, SAWDUST, DIRT, AND OTHER DEBRIS JUST BEFORE PLACING CONCRETE.
K. RETIGHTEN FORMS AND BRACING BEFORE PLACING CONCRETE, AS REQUIRED, TO PREVENT MORTAR LEAKS AND MAINTAIN PROPER ALIGNMENT.
L. COAT CONTACT SURFACES OF FORMS WITH FORM-RELEASE AGENT, ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, BEFORE PLACING REINFORCEMENT.

3.2 REMOVING AND REUSING FORMS

A. GENERAL: FORMWORK FOR SIDES OF BEAMS, WALLS, COLUMNS, AND SIMILAR PARTS OF THE WORK THAT DOES NOT SUPPORT WEIGHT OF CONCRETE MAY BE REMOVED AFTER CUMULATIVELY CURING AT NOT LESS THAN 50 DEG F (10 DEG C) FOR 24 HOURS AFTER PLACING CONCRETE, IF CONCRETE IS HARD ENOUGH TO NOT BE DAMAGED BY FORM-REMOVAL OPERATIONS AND CURING AND PROTECTION OPERATIONS ARE MAINTAINED.
   1. LEAVE FORMWORK FOR BEAM SOFFITS, JOISTS, SLABS, AND OTHER STRUCTURAL ELEMENTS THAT SUPPORTS WEIGHT OF CONCRETE IN PLACE UNTIL CONCRETE HAS ACHIEVED AT LEAST 70 PERCENT OF ITS 28-DAY DESIGN COMPRESSIVE STRENGTH.
   2. REMOVE FORMS ONLY IF SHORES HAVE BEEN ARRANGED TO PERMIT REMOVAL OF FORMS WITHOUT LOOSENING OR DISTURBING SHORES.
B. CLEAN AND REPAIR SURFACES OF FORMS TO BE REUSED IN THE WORK. SPLIT, FRAYED, DELAMINATED, OR OTHERWISE DAMAGED FORM-FACING MATERIAL WILL NOT BE ACCEPTABLE FOR EXPOSED SURFACES. APPLY NEW FORM-RELEASE AGENT.
C. WHEN FORMS ARE REUSED, CLEAN SURFACES, REMOVE FINS AND LAITANCE, AND TIGHTEN TO CLOSE JOINTS.
   ALIGN AND SECURE JOINTS TO AVOID OFFSETS.DO NOT USE PATCHED FORMS FOR EXPOSED CONCRETE SURFACES UNLESS APPROVED BY ARCHITECT.

3.3 VAPOR RETARDERS

A. PLASTIC VAPOR RETARDERS: PLACE, PROTECT, AND REPAIR VAPOR RETARDERS ACCORDING TO ASTM E 1643 AND MANUFACTURER'S WRITTEN INSTRUCTIONS.

   1. LAP JOINTS 6 INCHES (150 MM) AND SEAL WITH MANUFACTURERS RECOMMENDED TAPE.

3.4 STEEL REINFORCEMENT

A. GENERAL: COMPLY WITH CRSI'S "MANUAL OF STANDARD PRACTICE" FOR PLACING REINFORCEMENT.
   1. DO NOT CUT OR PUNCTURE VAPOR RETARDER. REPAIR DAMAGE AND RESEAL VAPOR RETARDER BEFORE PLACING CONCRETE.
B. CLEAN REINFORCEMENT OF LOOSE RUST AND MILL SCALE, EARTH, ICE, AND OTHER FOREIGN MATERIALS THAT WOULD REDUCE BOND TO CONCRETE.
C. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT AGAINST DISPLACEMENT. LOCATE AND SUPPORT REINFORCEMENT WITH BAR SUPPORTS TO MAINTAIN MINIMUM CONCRETE COVER. DO NOT TACK WELD CROSSING REINFORCING BARS.
D. SET WIRE TIES WITH ENDS DIRECTED INTO CONCRETE, NOT TOWARD EXPOSED CONCRETE SURFACES.

宋
Song + Associates
Architecture ● Planning ● Interior Design
1545 Centrepark Drive North
West Palm Beach, Florida 33401
Telephone: 561-655-2423
Fax: 561-655-1482
AA - 0003165 IB - 0001095

Seal :

STATE OF FLORIDA
PERRY DOUGLASS
AR97112
REGISTERED ARCHITECT

Name: PERRY DOUGLASS
License # : AR 97112

Consultants :

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

Date : 09/19/2018
S+A Project No : 18033
Owner Project No :
Drawn By : PD/WS
Checked By : PD
Phase :
CONSTRUCTION DOCUMENTS

Sheet Title :

SPECIFICATIONS

Sheet # :

G-102

E. INSTALL WELDED WIRE REINFORCEMENT IN LONGEST PRACTICABLE LENGTHS ON BAR SUPPORTS SPACED TO MINIMIZE SAGGING. LAP EDGES AND ENDS OF ADJOINING SHEETS AT LEAST ONE MESH SPACING. OFFSET LAPS OF ADJOINING SHEET WIDTHS TO PREVENT CONTINUOUS LAPS IN EITHER DIRECTION. LACE OVERLAPS WITH WIRE.

3.5 JOINTS

A. GENERAL: CONSTRUCT JOINTS TRUE TO LINE WITH FACES PERPENDICULAR TO SURFACE PLANE OF CONCRETE.

B. CONSTRUCTION JOINTS: INSTALL SO STRENGTH AND APPEARANCE OF CONCRETE ARE NOT IMPAIRED, AT LOCATIONS INDICATED OR AS APPROVED BY ARCHITECT.
1. PLACE JOINTS PERPENDICULAR TO MAIN REINFORCEMENT. CONTINUE REINFORCEMENT ACROSS CONSTRUCTION JOINTS, UNLESS OTHERWISE INDICATED. DO NOT CONTINUE REINFORCEMENT THROUGH SIDES OF STRIP PLACEMENTS OF FLOORS AND SLABS.
2. FORM KEYED JOINTS AS INDICATED. EMBED KEYS AT LEAST 1-1/2 INCHES (38 MM) INTO CONCRETE.
3. LOCATE JOINTS FOR BEAMS, SLABS, JOISTS, AND GIRDERS IN THE MIDDLE THIRD OF SPANS. OFFSET JOINTS IN GIRDERS A MINIMUM DISTANCE OF TWICE THE BEAM WIDTH FROM A BEAM-GIRDER INTERSECTION.
4. LOCATE HORIZONTAL JOINTS IN WALLS AND COLUMNS AT UNDERSIDE OF FLOORS, SLABS, BEAMS, AND GIRDERS AND AT THE TOP OF FOOTINGS OR FLOOR SLABS.
5. USE EPOXY-BONDING ADHESIVE AT LOCATIONS WHERE FRESH CONCRETE IS PLACED AGAINST HARDENED OR PARTIALLY HARDENED CONCRETE SURFACES.

C. CONTRACTION JOINTS IN SLABS-ON-GRADE: FORM WEAKENED-PLANE CONTRACTION JOINTS, SECTIONING CONCRETE INTO AREAS AS INDICATED. CONSTRUCT CONTRACTION JOINTS FOR A DEPTH EQUAL TO AT LEAST ONE- FOURTH OF CONCRETE THICKNESS AS FOLLOWS:
1. SAWED JOINTS: FORM CONTRACTION JOINTS WITH POWER SAWS EQUIPPED WITH SHATTERPROOF ABRASIVE OR DIAMOND-RIMMED BLADES. CUT 1/8-INCH- (3.2-MM-) WIDE JOINTS INTO CONCRETE WHEN CUTTING ACTION WILL NOT TEAR, ABRADE, OR OTHERWISE DAMAGE SURFACE AND BEFORE CONCRETE DEVELOPS RANDOM CONTRACTION CRACKS.

3.6 CONCRETE PLACEMENT

A. BEFORE PLACING CONCRETE, VERIFY THAT INSTALLATION OF FORMWORK, REINFORCEMENT, AND EMBEDDED ITEMS IS COMPLETE AND THAT REQUIRED INSPECTIONS HAVE BEEN PERFORMED.

B. DO NOT ADD WATER TO CONCRETE DURING DELIVERY, AT PROJECT SITE, OR DURING PLACEMENT UNLESS APPROVED BY ARCHITECT.

C. DEPOSIT CONCRETE CONTINUOUSLY IN ONE LAYER OR IN HORIZONTAL LAYERS OF SUCH THICKNESS THAT NO NEW CONCRETE WILL BE PLACED ON CONCRETE THAT HAS HARDENED ENOUGH TO CAUSE SEAMS OR PLANES OF WEAKNESS. IF A SECTION CANNOT BE PLACED CONTINUOUSLY, PROVIDE CONSTRUCTION JOINTS AS INDICATED.

D. HOT-WEATHER PLACEMENT: COMPLY WITH ACI 301 AND AS FOLLOWS:
1. MAINTAIN CONCRETE TEMPERATURE BELOW 90 DEG F (32 DEG C) AT TIME OF PLACEMENT. CHILLED MIXING WATER OR CHOPPED ICE MAY BE USED TO CONTROL TEMPERATURE, PROVIDED WATER EQUIVALENT OF ICE IS CALCULATED TO TOTAL AMOUNT OF MIXING WATER.

3.7 FINISHING FORMED SURFACES

A. RUBBED FINISH: APPLY THE FOLLOWING TO SMOOTH-FORMED FINISHED AS-CAST CONCRETE:
1. SMOOTH-RUBBED FINISH: NOT LATER THAN ONE DAY AFTER FORM REMOVAL, MOISTEN CONCRETE SURFACES AND RUB WITH CARBORUNDUM BRICK OR ANOTHER ABRASIVE UNTIL PRODUCING A UNIFORM COLOR AND TEXTURE. DO NOT APPLY CEMENT GROUT OTHER THAN THAT CREATED BY THE RUBBING PROCESS.

B. RELATED UNFORMED SURFACES: AT TOPS OF WALLS, HORIZONTAL OFFSETS, AND SIMILAR UNFORMED SURFACES ADJACENT TO FORMED SURFACES, STRIKE OFF SMOOTH AND FINISH WITH A TEXTURE MATCHING ADJACENT FORMED SURFACES. CONTINUE FINAL SURFACE TREATMENT OF FORMED SURFACES UNIFORMLY ACROSS ADJACENT UNFORMED SURFACES, UNLESS OTHERWISE INDICATED.

3.8 FINISHING FLOORS AND SLABS

A. GENERAL: COMPLY WITH ACI 302.1R RECOMMENDATIONS FOR SCREEDING, RE-STRAIGHTENING, AND FINISHING OPERATIONS FOR CONCRETE SURFACES. DO NOT WET CONCRETE SURFACES.

B. BROOM FINISH: APPLY A BROOM FINISH TO EXTERIOR CONCRETE PLATFORMS, STEPS, AND RAMPS, AND ELSEWHERE AS INDICATED.
1. IMMEDIATELY AFTER FLOAT FINISHING, SLIGHTLY ROUGHEN TRAFFICKED SURFACE BY BROOMING WITH FIBER-BRISTLE BROOM PERPENDICULAR TO MAIN TRAFFIC ROUTE. COORDINATE REQUIRED FINAL FINISH WITH ARCHITECT BEFORE APPLICATION.

3.9 MISCELLANEOUS CONCRETE ITEMS

A. FILLING IN: FILL IN HOLES AND OPENINGS LEFT IN CONCRETE STRUCTURES, UNLESS OTHERWISE INDICATED, AFTER WORK OF OTHER TRADES IS IN PLACE. MIX, PLACE, AND CURE CONCRETE, AS SPECIFIED, TO BLEND WITH IN- PLACE CONSTRUCTION. PROVIDE OTHER MISCELLANEOUS CONCRETE FILLING INDICATED OR REQUIRED TO COMPLETE THE WORK.

3.10 CONCRETE PROTECTING AND CURING

A. GENERAL: PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. COMPLY WITH ACI 306.1 FOR COLD-WEATHER PROTECTION AND ACI 301 FOR HOT-WEATHER PROTECTION DURING CURING.

B. EVAPORATION RETARDER: APPLY EVAPORATION RETARDER TO UNFORMED CONCRETE SURFACES IF HOT, DRY, OR WINDY CONDITIONS CAUSE MOISTURE LOSS APPROACHING 0.2 LB/SQ. FT. X H (1 KG/SQ. M X H) BEFORE AND DURING FINISHING OPERATIONS. APPLY ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AFTER PLACING, SCREEDING, AND BULL FLOATING OR DARBYING CONCRETE, BUT BEFORE FLOAT FINISHING.

C. FORMED SURFACES: CURE FORMED CONCRETE SURFACES, INCLUDING UNDERSIDE OF BEAMS, SUPPORTED SLABS, AND OTHER SIMILAR SURFACES. IF FORMS REMAIN DURING CURING PERIOD, MOIST CURE AFTER LOOSENING FORMS. IF REMOVING FORMS BEFORE END OF CURING PERIOD, CONTINUE CURING FOR THE REMAINDER OF THE CURING PERIOD.

D. UNFORMED SURFACES: BEGIN CURING IMMEDIATELY AFTER FINISHING CONCRETE. CURE UNFORMED SURFACES, INCLUDING FLOORS AND SLABS, CONCRETE FLOOR TOPPINGS, AND OTHER SURFACES.

E. CURE CONCRETE ACCORDING TO ACI 308.1.

3.11 JOINT FILLING

A. PREPARE, CLEAN, AND INSTALL JOINT FILLER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
1. DEFER JOINT FILLING UNTIL CONCRETE HAS AGED AT LEAST ONE MONTH(S). DO NOT FILL JOINTS UNTIL CONSTRUCTION TRAFFIC HAS PERMANENTLY CEASED.

B. REMOVE DIRT, DEBRIS, SAW CUTTINGS, CURING COMPOUNDS, AND SEALERS FROM JOINTS; LEAVE CONTACT FACES OF JOINT CLEAN AND DRY.

C. INSTALL SEMI-RIGID JOINT FILLER FULL DEPTH IN SAW-CUT JOINTS AND AT LEAST 2 INCHES (50 MM) DEEP IN FORMED JOINTS. OVERFILL JOINT AND TRIM JOINT FILLER FLUSH WITH TOP OF JOINT AFTER HARDENING.

3.12 CONCRETE SURFACE REPAIRS

A. DEFECTIVE CONCRETE: REPAIR AND PATCH DEFECTIVE AREAS WHEN APPROVED BY ARCHITECT. REMOVE AND REPLACE CONCRETE THAT CANNOT BE REPAIRED AND PATCHED TO ARCHITECT'S APPROVAL.

B. PATCHING MORTAR: MIX DRY-PACK PATCHING MORTAR, CONSISTING OF ONE PART PORTLAND CEMENT TO TWO AND ONE-HALF PARTS FINE AGGREGATE PASSING A NO. 16 (1.18-MM) SIEVE, USING ONLY ENOUGH WATER FOR HANDLING AND PLACING.

C. REPAIRING FORMED SURFACES: SURFACE DEFECTS INCLUDE COLOR AND TEXTURE IRREGULARITIES, CRACKS, SPALLS, AIR BUBBLES, HONEYCOMBS, ROCK POCKETS, FINS AND OTHER PROJECTIONS ON THE SURFACE, AND STAINS AND OTHER DISCOLORATIONS THAT CANNOT BE REMOVED BY CLEANING.
1. IMMEDIATELY AFTER FORM REMOVAL, CUT OUT HONEYCOMBS, ROCK POCKETS, AND VOIDS MORE THAN 1/2 INCH (13 MM) IN ANY DIMENSION IN SOLID CONCRETE, BUT NOT LESS THAN 1 INCH (25 MM) IN DEPTH. MAKE EDGES OF CUTS PERPENDICULAR TO CONCRETE SURFACE. CLEAN, DAMPEN WITH WATER, AND BRUSH-COAT HOLES AND VOIDS WITH BONDING AGENT. FILL AND COMPACT WITH PATCHING MORTAR BEFORE BONDING AGENT HAS DRIED. FILL FORM-TIE VOIDS WITH PATCHING MORTAR OR CONE PLUGS SECURED IN PLACE WITH BONDING AGENT.
2. REPAIR DEFECTS ON SURFACES EXPOSED TO VIEW BY BLENDING WHITE PORTLAND CEMENT AND STANDARD PORTLAND CEMENT SO THAT, WHEN DRY, PATCHING MORTAR WILL MATCH SURROUNDING COLOR. PATCH A TEST AREA AT INCONSPICUOUS LOCATIONS TO VERIFY MIXTURE AND COLOR MATCH BEFORE PROCEEDING WITH PATCHING. COMPACT MORTAR IN PLACE AND STRIKE OFF SLIGHTLY HIGHER THAN SURROUNDING SURFACE.
3. REPAIR DEFECTS ON CONCEALED FORMED SURFACES THAT AFFECT CONCRETE'S DURABILITY AND STRUCTURAL PERFORMANCE AS DETERMINED BY ARCHITECT.

D. REPAIRING UNFORMED SURFACES: TEST UNFORMED SURFACES, SUCH AS FLOORS AND SLABS, FOR FINISH AND VERIFY SURFACE TOLERANCES SPECIFIED FOR EACH SURFACE. CORRECT LOW AND HIGH AREAS. TEST SURFACES SLOPED TO DRAIN FOR TRUENESS OF SLOPE AND SMOOTHNESS; USE A SLOPED TEMPLATE.
1. REPAIR FINISHED SURFACES CONTAINING DEFECTS. SURFACE DEFECTS INCLUDE SPALLS, POP-OUTS, HONEYCOMBS, ROCK POCKETS, CRAZING AND CRACKS IN EXCESS OF 0.01 INCH (0.25 MM) WIDE OR THAT PENETRATE TO REINFORCEMENT OR COMPLETELY THROUGH UNREINFORCED SECTIONS REGARDLESS OF WIDTH, AND OTHER OBJECTIONABLE CONDITIONS.
2. AFTER CONCRETE HAS CURED AT LEAST 14 DAYS, CORRECT HIGH AREAS BY GRINDING.
3. CORRECT LOCALIZED LOW AREAS DURING OR IMMEDIATELY AFTER COMPLETING SURFACE FINISHING OPERATIONS BY CUTTING OUT LOW AREAS AND REPLACING WITH PATCHING MORTAR. FINISH REPAIRED AREAS TO BLEND INTO ADJACENT CONCRETE.
4. CORRECT OTHER LOW AREAS SCHEDULED TO RECEIVE FLOOR COVERINGS WITH A REPAIR UNDERLAYMENT.

PREPARE, MIX, AND APPLY REPAIR UNDERLAYMENT AND PRIMER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS TO PRODUCE A SMOOTH, UNIFORM, PLANE, AND LEVEL SURFACE. FEATHER EDGES TO MATCH ADJACENT FLOOR ELEVATIONS.

5. CORRECT OTHER LOW AREAS SCHEDULED TO REMAIN EXPOSED WITH A REPAIR TOPPING. CUT OUT LOW AREAS TO ENSURE A MINIMUM REPAIR TOPPING DEPTH OF 1/4 INCH (6 MM) TO MATCH ADJACENT FLOOR ELEVATIONS. PREPARE, MIX, AND APPLY REPAIR TOPPING AND PRIMER ACCORDING TO

MANUFACTURER'S WRITTEN INSTRUCTIONS TO PRODUCE A SMOOTH, UNIFORM, PLANE, AND LEVEL SURFACE.

6. REPAIR DEFECTIVE AREAS, EXCEPT RANDOM CRACKS AND SINGLE HOLES 1 INCH (25 MM) OR LESS IN DIAMETER, BY CUTTING OUT AND REPLACING WITH FRESH CONCRETE. REMOVE DEFECTIVE AREAS WITH

CLEAN, SQUARE CUTS AND EXPOSE STEEL REINFORCEMENT WITH AT LEAST A 3/4-INCH (19-MM) CLEARANCE ALL AROUND. DAMPEN CONCRETE SURFACES IN CONTACT WITH PATCHING CONCRETE AND APPLY BONDING AGENT. MIX PATCHING CONCRETE OF SAME MATERIALS AND MIXTURE AS ORIGINAL CONCRETE EXCEPT WITHOUT COARSE AGGREGATE. PLACE, COMPACT, AND FINISH BLENDING WITH ADJACENT FINISHED CONCRETE. CURE IN SAME MANNER AS ADJACENT CONCRETE.

7. REPAIR RANDOM CRACKS AND SINGLE HOLES 1 INCH (25 MM) OR LESS IN DIAMETER WITH PATCHING

mortar. GROOVE TOP OF CRACKS AND CUT OUT HOLES TO SOUND CONCRETE AND CLEAN OFF DUST, DIRT, AND LOOSE PARTICLES. DAMPEN CLEANED CONCRETE SURFACES AND APPLY BONDING AGENT. PLACE PATCHING MORTAR BEFORE BONDING AGENT HAS DRIED. COMPACT PATCHING MORTAR AND FINISH TO MATCH ADJACENT CONCRETE. KEEP PATCHED AREA CONTINUOUSLY MOIST FOR AT LEAST 72 HOURS.

E. PERFORM STRUCTURAL REPAIRS OF CONCRETE, SUBJECT TO ARCHITECT'S APPROVAL, USING EPOXY ADHESIVE AND PATCHING MORTAR.

F. REPAIR MATERIALS AND INSTALLATION NOT SPECIFIED ABOVE MAY BE USED, SUBJECT TO ARCHITECT'S APPROVAL.

3.13 FIELD QUALITY CONTROL

A. TESTING AND INSPECTING: DESIGN BUILD CONTRACTOR WILL ENGAGE A QUALIFIED TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND PREPARE TEST REPORTS.

B. CONCRETE TESTS: TESTING OF COMPOSITE SAMPLES OF FRESH CONCRETE OBTAINED ACCORDING TO ASTM C 172 SHALL BE PERFORMED ACCORDING TO THE FOLLOWING REQUIREMENTS:
1. TESTING FREQUENCY: OBTAIN ONE COMPOSITE SAMPLE FOR EACH DAY'S POUR OF EACH CONCRETE MIXTURE EXCEEDING 5 CU. YD. (4 CU. M), BUT LESS THAN 25 CU. YD. (19 CU. M), PLUS ONE SET FOR EACH ADDITIONAL 50 CU. YD. (38 CU. M) OR FRACTION THEREOF.
   a. WHEN FREQUENCY OF TESTING WILL PROVIDE FEWER THAN FIVE COMPRESSIVE-STRENGTH TESTS FOR EACH CONCRETE MIXTURE, TESTING SHALL BE CONDUCTED FROM AT LEAST FIVE RANDOMLY SELECTED BATCHES OR FROM EACH BATCH IF FEWER THAN FIVE ARE USED.
2. SLUMP: ASTM C 143/C 143M; ONE TEST AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIXTURE. PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE.
3. CONCRETE TEMPERATURE: ASTM C 1064/C 1064M; ONE TEST HOURLY WHEN AIR TEMPERATURE IS 80 DEG F (27 DEG C) AND ABOVE, AND ONE TEST FOR EACH COMPOSITE SAMPLE.
4. COMPRESSION TEST SPECIMENS: ASTM C 31/C 31M.
   a. CAST AND LABORATORY CURE TWO SETS OF TWO STANDARD CYLINDER SPECIMENS FOR EACH COMPOSITE SAMPLE.
5. COMPRESSIVE-STRENGTH TESTS: ASTM C 39/C 39M; TEST ONE SET OF TWO LABORATORY-CURED SPECIMENS AT 7 DAYS AND ONE SET OF TWO SPECIMENS AT 28 DAYS.
   a. TEST ONE SET OF TWO FIELD-CURED SPECIMENS AT 7 DAYS AND ONE SET OF TWO SPECIMENS AT 28 DAYS.
   b. A COMPRESSIVE-STRENGTH TEST SHALL BE THE AVERAGE COMPRESSIVE STRENGTH FROM A SET OF TWO SPECIMENS OBTAINED FROM SAME COMPOSITE SAMPLE AND TESTED AT AGE INDICATED.
6. STRENGTH OF EACH CONCRETE MIXTURE WILL BE SATISFACTORY IF EVERY AVERAGE OF ANY THREE CONSECUTIVE COMPRESSIVE-STRENGTH TESTS EQUALS OR EXCEEDS SPECIFIED COMPRESSIVE STRENGTH AND NO COMPRESSIVE-STRENGTH TEST VALUE FALLS BELOW SPECIFIED COMPRESSIVE STRENGTH BY MORE THAN 500 PSI (3.4 MPA).
7. TEST RESULTS SHALL BE REPORTED IN WRITING TO ARCHITECT, CONCRETE MANUFACTURER, AND CONTRACTOR WITHIN 48 HOURS OF TESTING. REPORTS OF COMPRESSIVE-STRENGTH TESTS SHALL CONTAIN

PROJECT IDENTIFICATION NAME AND NUMBER, DATE OF CONCRETE PLACEMENT, NAME OF CONCRETE

TESTING AND INSPECTING AGENCY, LOCATION OF CONCRETE BATCH IN WORK, DESIGN COMPRESSIVE STRENGTH AT 28 DAYS, CONCRETE MIXTURE PROPORTIONS AND MATERIALS, COMPRESSIVE BREAKING STRENGTH, AND TYPE OF BREAK FOR BOTH 7- AND 28-DAY TESTS.

8. NONDESTRUCTIVE TESTING: IMPACT HAMMER, SONOSCOPE, OR OTHER NONDESTRUCTIVE DEVICE MAY BE PERMITTED BY ARCHITECT BUT WILL NOT BE USED AS SOLE BASIS FOR APPROVAL OR REJECTION OF CONCRETE.
9. ADDITIONAL TESTS: TESTING AND INSPECTING AGENCY SHALL MAKE ADDITIONAL TESTS OF CONCRETE WHEN TEST RESULTS INDICATE THAT SLUMP, AIR ENTRAINMENT, COMPRESSIVE STRENGTHS, OR OTHER REQUIREMENTS HAVE NOT BEEN MET, AS DIRECTED BY ARCHITECT. TESTING AND INSPECTING AGENCY MAY CONDUCT TESTS TO DETERMINE ADEQUACY OF CONCRETE BY CORED CYLINDERS COMPLYING WITH ASTM C 42/C 42M OR BY OTHER METHODS AS DIRECTED BY ARCHITECT.
10. ADDITIONAL TESTING AND INSPECTING, AT CONTRACTOR'S EXPENSE, WILL BE PERFORMED TO DETERMINE COMPLIANCE OF REPLACED OR ADDITIONAL WORK WITH SPECIFIED REQUIREMENTS.
11. CORRECT DEFICIENCIES IN THE WORK THAT TEST REPORTS AND INSPECTIONS INDICATE DOS NOT COMPLY WITH THE CONTRACT DOCUMENTS.

C. MEASURE FLOOR AND SLAB FLATNESS AND LEVELNESS ACCORDING TO ASTM E 1155 (ASTM E 1155M) WITHIN 48 HOURS OF FINISHING.

END OF SECTION 03 30 00

SECTION 08 41 13 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 01 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.

1.2 SUMMARY

A. SECTION INCLUDES:
1. EXTERIOR MANUAL-SWING ENTRANCE DOORS.

1.3 DEFINITIONS

A. ADA/ABA ACCESSIBILITY GUIDELINES: U.S. ARCHITECTURAL & TRANSPORTATION BARRIERS COMPLIANCE BOARD'S "AMERICANS WITH DISABILITY ACT (ADA) AND ARCHITECTURAL BARRIERS ACT (ABA) ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

1.4 PERFORMANCE REQUIREMENTS

A. GENERAL PERFORMANCE: ALUMINUM-FRAMED SYSTEMS SHALL WITHSTAND THE EFFECTS OF THE FOLLOWING PERFORMANCE REQUIREMENTS WITHOUT EXCEEDING PERFORMANCE CRITERIA OR FAILURE DUE TO DEFECTIVE MANUFACTURE, FABRICATION, INSTALLATION, OR OTHER DEFECTS IN CONSTRUCTION:
1. MOVEMENTS OF SUPPORTING STRUCTURE INDICATED ON DRAWINGS INCLUDING, BUT NOT LIMITED TO, STORY DRIFT AND DEFLECTION FROM UNIFORMLY DISTRIBUTED AND CONCENTRATED LIVE LOADS.
2. DIMENSIONAL TOLERANCES OF BUILDING FRAME AND OTHER ADJACENT CONSTRUCTION.
3. FAILURE INCLUDES THE FOLLOWING:
   a. DEFLECTION EXCEEDING SPECIFIED LIMITS.
   b. THERMAL STRESSES TRANSFERRING TO BUILDING STRUCTURE.
   c. FRAMING MEMBERS TRANSFERRING STRESSES, INCLUDING THOSE CAUSED BY THERMAL AND STRUCTURAL MOVEMENTS TO GLAZING.
   d. GLAZING-TO-GLAZING CONTACT.
   e. NOISE OR VIBRATION CREATED BY WIND AND BY THERMAL AND STRUCTURAL MOVEMENTS.
   f. LOOSENING OR WEAKENING OF FASTENERS, ATTACHMENTS, AND OTHER COMPONENTS.
   g. SEALANT FAILURE.
   h. FAILURE OF OPERATING UNITS.

B. DELEGATED DESIGN: DESIGN ALUMINUM-FRAMED SYSTEMS, INCLUDING COMPREHENSIVE ENGINEERING ANALYSIS BY A QUALIFIED PROFESSIONAL ENGINEER, USING PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA INDICATED.

C. STRUCTURAL LOADS:
1. WIND LOADS:
   a. BASIC WIND SPEED: 90 MPH (40 M/S).
   b. IMPORTANCE FACTOR: II.
   c. EXPOSURE CATEGORY: B.

D. DEFLECTION OF FRAMING MEMBERS:
1. DEFLECTION NORMAL TO WALL PLANE: LIMITED TO EDGE OF GLASS IN A DIRECTION PERPENDICULAR TO GLASS PLANE SHALL NOT EXCEED L/175 OF THE GLASS EDGE LENGTH FOR EACH INDIVIDUAL GLAZING LITE OR AN AMOUNT THAT RESTRICTS EDGE DEFLECTION OF INDIVIDUAL GLAZING LITES TO 3/4 INCH (19 MM), WHICHEVER IS LESS.
2. DEFLECTION PARALLEL TO GLAZING PLANE: LIMITED TO L/360 OF CLEAR SPAN OR 1/8 INCH (3.2 MM), WHICHEVER IS SMALLER.

E. STRUCTURAL-TEST PERFORMANCE: PROVIDE ALUMINUM-FRAMED SYSTEMS TESTED ACCORDING TO ASTM E 330 AS FOLLOWS:
1. WHEN TESTED AT POSITIVE AND NEGATIVE WIND-LOAD DESIGN PRESSURES, SYSTEMS DO NOT EVIDENCE DEFLECTION EXCEEDING SPECIFIED LIMITS.
2. WHEN TESTED AT 150 PERCENT OF POSITIVE AND NEGATIVE WIND-LOAD DESIGN PRESSURES, SYSTEMS, INCLUDING ANCHORAGE, DO NOT EVIDENCE MATERIAL FAILURES, STRUCTURAL DISTRESS, AND PERMANENT DEFORMATION OF MAIN FRAMING MEMBERS EXCEEDING 0.2 PERCENT OF SPAN.
3. TEST DURATIONS: AS REQUIRED BY DESIGN WIND VELOCITY, BUT NOT FEWER THAN 10 SECONDS.

F. WINDBORNE-DEBRIS-IMPACT-RESISTANCE PERFORMANCE: PROVIDE ALUMINUM-FRAMED SYSTEMS THAT PASS MISSILE-IMPACT AND CYCLIC-PRESSURE TESTS WHEN TESTED ACCORDING TO ASCE-7 AND TESTING INFORMATION IN ASTM E 1996.
1. LARGE-MISSILE IMPACT: FOR ALUMINUM-FRAMED SYSTEMS LOCATED WITHIN 30 FEET (9.1 M) OF GRADE.
2. SMALL-MISSILE IMPACT: FOR ALUMINUM-FRAMED SYSTEMS LOCATED MORE THAN 30 FEET (9.1 M) ABOVE GRADE.

G. AIR INFILTRATION: PROVIDE ALUMINUM-FRAMED SYSTEMS WITH MAXIMUM AIR LEAKAGE THROUGH FIXED GLAZING AND FRAMING AREAS OF 0.06 CFM/SQ. FT. (0.03 L/S PER SQ. M) OF FIXED WALL AREA WHEN TESTED ACCORDING TO ASTM E 283 AT A MINIMUM STATIC-AIR-PRESSURE DIFFERENCE OF 1.57 LBF/SQ. FT. (75 PA).

H. WATER PENETRATION UNDER STATIC PRESSURE: PROVIDE ALUMINUM-FRAMED SYSTEMS THAT DO NOT EVIDENCE WATER PENETRATION THROUGH FIXED GLAZING AND FRAMING AREAS WHEN TESTED ACCORDING TO ASTM E 331 AT A MINIMUM STATIC-AIR-PRESSURE DIFFERENCE OF 20 PERCENT OF POSITIVE WIND-LOAD DESIGN PRESSURE, BUT NOT LESS THAN 6.24 LBF/SQ. FT. (300 PA).

I. WATER PENETRATION UNDER DYNAMIC PRESSURE: PROVIDE ALUMINUM-FRAMED SYSTEMS THAT DO NOT EVIDENCE WATER LEAKAGE THROUGH FIXED GLAZING AND FRAMING AREAS WHEN TESTED ACCORDING TO AAMA 501.1 UNDER DYNAMIC PRESSURE EQUAL TO 20 PERCENT OF POSITIVE WIND-LOAD DESIGN PRESSURE, BUT NOT LESS THAN 6.24 LBF/SQ. FT. (300 PA).
1. MAXIMUM WATER LEAKAGE: NO UNCONTROLLED WATER PENETRATING ALUMINUM-FRAMED SYSTEMS OR WATER APPEARING ON SYSTEMS' NORMALLY EXPOSED INTERIOR SURFACES FROM SOURCES OTHER THAN CONDENSATION. WATER LEAKAGE DOES NOT INCLUDE WATER CONTROLLED BY FLASHING AND GUTTERS THAT IS DRAINED TO EXTERIOR AND WATER THAT CANNOT DAMAGE ADJACENT MATERIALS OR FINISHES.

J. THERMAL MOVEMENTS: PROVIDE ALUMINUM-FRAMED SYSTEMS THAT ALLOW FOR THERMAL MOVEMENTS RESULTING FROM THE FOLLOWING MAXIMUM CHANGE (RANGE) IN AMBIENT AND SURFACE TEMPERATURES. BASE ENGINEERING CALCULATION ON SURFACE TEMPERATURES OF MATERIALS DUE TO BOTH SOLAR HEAT GAIN AND NIGHTTIME-SKY HEAT LOSS.
1. TEMPERATURE CHANGE (RANGE): 120 DEG F (67 DEG C), AMBIENT; 180 DEG F (100 DEG C), MATERIAL SURFACES.
2. TEST PERFORMANCE: NO BUCKLING; STRESS ON GLASS; SEALANT FAILURE; EXCESS STRESS ON FRAMING, ANCHORS, AND FASTENERS; OR REDUCTION OF PERFORMANCE WHEN TESTED ACCORDING TO AAMA 501.5.
   a. HIGH EXTERIOR AMBIENT-AIR TEMPERATURE: THAT WHICH PRODUCES AN EXTERIOR METAL- SURFACE TEMPERATURE OF 180 DEG F (82 DEG C).
   b. LOW EXTERIOR AMBIENT-AIR TEMPERATURE: 0 DEG F (MINUS 18 DEG C).
3. INTERIOR AMBIENT-AIR TEMPERATURE: 75 DEG F (24 DEG C).

K. CONDENSATION RESISTANCE: PROVIDE ALUMINUM-FRAMED SYSTEMS WITH FIXED GLAZING AND FRAMING AREAS HAVING CONDENSATION-RESISTANCE FACTOR (CRF) OF NOT LESS THAN 45 WHEN TESTED ACCORDING TO AAMA 1503.

L. THERMAL CONDUCTANCE: PROVIDE ALUMINUM-FRAMED SYSTEMS WITH FIXED GLAZING AND FRAMING AREAS HAVING AN AVERAGE U-FACTOR OF NOT MORE THAN 0.57 BTU/SQ. FT. X H X DEG F (3.23 W/SQ. M X K) WHEN TESTED ACCORDING TO AAMA 1503.

M. SOUND TRANSMISSION: PROVIDE ALUMINUM-FRAMED SYSTEMS WITH FIXED GLAZING AND FRAMING AREAS HAVING THE FOLLOWING SOUND-TRANSMISSION CHARACTERISTICS:
1. SOUND TRANSMISSION CLASS (STC): MINIMUM 35 STC WHEN TESTED FOR LABORATORY SOUND TRANSMISSION LOSS ACCORDING TO ASTM E 90 AND DETERMINED BY ASTM E 413.
2. OUTDOOR-INDOOR TRANSMISSION CLASS (OITC): MINIMUM 34 OITC WHEN TESTED FOR LABORATORY SOUND TRANSMISSION LOSS ACCORDING TO ASTM E 90 AND DETERMINED BY ASTM E 1332.

N. STRUCTURAL SEALANT: CAPABLE OF WITHSTANDING TENSILE AND SHEAR STRESSES IMPOSED BY ALUMINUM-FRAMED SYSTEMS WITHOUT FAILING ADHESIVELY OR COHESIVELY. WHEN TESTED FOR PRECONSTRUCTION ADHESION AND COMPATIBILITY, COHESIVE FAILURE OF SEALANT SHALL OCCUR BEFORE ADHESIVE FAILURE.
1. ADHESIVE FAILURE OCCURS WHEN SEALANT PULLS AWAY FROM SUBSTRATE CLEANLY, LEAVING NO SEALANT MATERIAL BEHIND.
2. COHESIVE FAILURE OCCURS WHEN SEALANT BREAKS OR TEARS WITHIN ITSELF BUT DOES NOT SEPARATE FROM EACH SUBSTRATE BECAUSE SEALANT-TO-SUBSTRATE BOND STRENGTH EXCEEDS SEALANT'S INTERNAL STRENGTH.

O. STRUCTURAL-SEALANT JOINTS: DESIGNED TO PRODUCE TENSILE OR SHEAR STRESS OF LESS THAN 20 PSI (138 KPA).

1.5 ACTION SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED. INCLUDE CONSTRUCTION DETAILS, MATERIAL DESCRIPTIONS, DIMENSIONS OF INDIVIDUAL COMPONENTS AND PROFILES, AND FINISHES FOR ALUMINUM- FRAMED SYSTEMS.

B. SHOP DRAWINGS: FOR ALUMINUM-FRAMED SYSTEMS. INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.
1. INCLUDE DETAILS OF PROVISIONS FOR SYSTEM EXPANSION AND CONTRACTION AND FOR DRAINAGE OF MOISTURE IN THE SYSTEM TO THE EXTERIOR.
2. FOR ENTRANCE DOORS, INCLUDE HARDWARE SCHEDULE AND INDICATE OPERATING HARDWARE TYPES, FUNCTIONS, QUANTITIES, AND LOCATIONS.

D. SAMPLES FOR INITIAL SELECTION: FOR UNITS WITH FACTORY-APPLIED COLOR FINISHES.

E. SAMPLES FOR VERIFICATION: FOR EACH TYPE OF EXPOSED FINISH REQUIRED, IN MANUFACTURER'S STANDARD SIZES.

F. FABRICATION SAMPLE: OF EACH VERTICAL-TO-HORIZONTAL INTERSECTION OF ALUMINUM-FRAMED SYSTEMS, MADE FROM 12-INCH (300-MM) LENGTHS OF FULL-SIZE COMPONENTS AND SHOWING DETAILS OF THE FOLLOWING:
1. JOINERY, INCLUDING CONCEALED WELDS.
2. ANCHORAGE.
3. EXPANSION PROVISIONS.
4. GLAZING.
5. FLASHING AND DRAINAGE.

G. OTHER ACTION SUBMITTALS:
1. ENTRANCE DOOR HARDWARE SCHEDULE: PREPARED BY OR UNDER THE SUPERVISION OF SUPPLIER, DETAILING FABRICATION AND ASSEMBLY OF ENTRANCE DOOR HARDWARE, AS WELL AS PROCEDURES AND DIAGRAMS. COORDINATE FINAL ENTRANCE DOOR HARDWARE SCHEDULE WITH DOORS, FRAMES, AND RELATED WORK TO ENSURE PROPER SIZE, THICKNESS, HAND, FUNCTION, AND FINISH OF ENTRANCE DOOR HARDWARE.

H. DELEGATED-DESIGN SUBMITTAL: FOR ALUMINUM-FRAMED SYSTEMS INDICATED TO COMPLY WITH PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.
1. DETAIL FABRICATION AND ASSEMBLY OF ALUMINUM-FRAMED SYSTEMS.
2. INCLUDE DESIGN CALCULATIONS.

1.6 INFORMATIONAL SUBMITTALS

A. QUALIFICATION DATA: FOR QUALIFIED INSTALLER AND TESTING AGENCY.

B. SEISMIC QUALIFICATION CERTIFICATES: FOR ALUMINUM-FRAMED SYSTEMS, ACCESSORIES, AND COMPONENTS, FROM MANUFACTURER.
1. BASIS FOR CERTIFICATION: INDICATE WHETHER WITHSTAND CERTIFICATION IS BASED ON ACTUAL TEST OF ASSEMBLED COMPONENTS OR ON CALCULATION.

C. WELDING CERTIFICATES.

D. PRECONSTRUCTION TEST REPORTS: FOR SEALANT.

E. PRODUCT TEST REPORTS: BASED ON EVALUATION OF COMPREHENSIVE TESTS PERFORMED BY A QUALIFIED TESTING AGENCY, FOR ALUMINUM-FRAMED SYSTEMS, INDICATING COMPLIANCE WITH PERFORMANCE REQUIREMENTS.

F. SOURCE QUALITY-CONTROL REPORTS.

G. QUALITY-CONTROL PROGRAM FOR STRUCTURAL-SEALANT-GLAZED SYSTEM: INCLUDE REPORTS.

H. FIELD QUALITY-CONTROL REPORTS.

I. WARRANTIES: SAMPLE OF SPECIAL WARRANTIES.

1.7 CLOSEOUT SUBMITTALS

A. MAINTENANCE DATA: FOR ALUMINUM-FRAMED SYSTEMS TO INCLUDE IN MAINTENANCE MANUALS.

1.8 QUALITY ASSURANCE

A. INSTALLER QUALIFICATIONS: MANUFACTURER'S AUTHORIZED REPRESENTATIVE WHO IS TRAINED AND APPROVED FOR INSTALLATION OF UNITS REQUIRED FOR THIS PROJECT.

B. TESTING AGENCY QUALIFICATIONS: QUALIFIED ACCORDING TO ASTM E 699 FOR TESTING INDICATED.

C. ENGINEERING RESPONSIBILITY: PREPARE DATA FOR ALUMINUM-FRAMED SYSTEMS, INCLUDING SHOP DRAWINGS, BASED ON TESTING AND ENGINEERING ANALYSIS OF MANUFACTURER'S STANDARD UNITS IN SYSTEMS SIMILAR TO THOSE INDICATED FOR THIS PROJECT.

D. QUALITY-CONTROL PROGRAM FOR STRUCTURAL-SEALANT-GLAZED SYSTEM: DEVELOP QUALITY CONTROL PROGRAM SPECIFICALLY FOR PROJECT. DOCUMENT QUALITY-CONTROL PROCEDURES AND VERIFY RESULTS FOR ALUMINUM-FRAMED SYSTEMS. COMPLY WITH ASTM C 1401 RECOMMENDATIONS INCLUDING, BUT NOT LIMITED TO, SYSTEM MATERIAL-QUALIFICATION PROCEDURES, PRECONSTRUCTION SEALANT-TESTING PROGRAM, PROCEDURES FOR SYSTEM FABRICATION AND INSTALLATION, AND INTERVALS OF REVIEWS AND CHECKS.

E. PRODUCT OPTIONS: INFORMATION ON DRAWINGS AND IN SPECIFICATIONS ESTABLISHES REQUIREMENTS FOR SYSTEMS' AESTHETIC EFFECTS AND PERFORMANCE CHARACTERISTICS. AESTHETIC EFFECTS ARE INDICATED BY DIMENSIONS, ARRANGEMENTS, ALIGNMENT, AND PROFILES OF COMPONENTS AND ASSEMBLIES AS THEY RELATE TO SIGHTLINES, TO ONE ANOTHER, AND TO ADJOINING CONSTRUCTION. PERFORMANCE CHARACTERISTICS ARE INDICATED BY CRITERIA SUBJECT TO VERIFICATION BY ONE OR MORE METHODS INCLUDING PRECONSTRUCTION TESTING, FIELD TESTING, AND IN-SERVICE PERFORMANCE.
1. DO NOT REVISE INTENDED AESTHETIC EFFECTS, AS JUDGED SOLELY BY ARCHITECT, EXCEPT WITH ARCHITECT'S APPROVAL. IF REVISIONS ARE PROPOSED, SUBMIT COMPREHENSIVE EXPLANATORY DATA TO ARCHITECT FOR REVIEW.

F. PRECONSTRUCTION SEALANT TESTING: FOR STRUCTURAL-SEALANT-GLAZED SYSTEMS, PERFORM SEALANT MANUFACTURER'S STANDARD TESTS FOR COMPATIBILITY WITH AND ADHESION OF EACH MATERIAL THAT WILL COME IN CONTACT WITH SEALANTS AND EACH CONDITION REQUIRED BY ALUMINUM-FRAMED SYSTEMS.
1. TEST A MINIMUM FIVE SAMPLES EACH OF METAL, GLAZING, AND OTHER MATERIAL.
2. PREPARE SAMPLES USING TECHNIQUES AND PRIMERS REQUIRED FOR INSTALLED SYSTEMS.
3. FOR MATERIALS THAT FAIL TESTS, DETERMINE CORRECTIVE MEASURES NECESSARY TO PREPARE EACH MATERIAL TO ENSURE COMPATIBILITY WITH AND ADHESION OF SEALANTS INCLUDING, BUT NOT LIMITED TO, SPECIALLY FORMULATED PRIMERS. AFTER PERFORMING THESE CORRECTIVE MEASURES ON THE MINIMUM NUMBER OF SAMPLES REQUIRED FOR EACH MATERIAL, RETEST MATERIALS.

G. ACCESSIBLE ENTRANCES: COMPLY WITH APPLICABLE PROVISIONS IN THE U.S. ARCHITECTURAL & TRANSPORTATION BARRIERS COMPLIANCE BOARD'S ADA-ABA ACCESSIBILITY GUIDELINES AND ICC/ANSI A117.1.

H. SOURCE LIMITATIONS FOR ALUMINUM-FRAMED SYSTEMS: OBTAIN FROM SINGLE SOURCE FROM SINGLE MANUFACTURER.

I. STRUCTURAL-SEALANT GLAZING: COMPLY WITH ASTM C 1401, "GUIDE FOR STRUCTURAL SEALANT GLAZING" FOR DESIGN AND INSTALLATION OF STRUCTURAL-SEALANT-GLAZED SYSTEMS.

J. STRUCTURAL-SEALANT JOINTS: DESIGN REVIEWED AND APPROVED BY STRUCTURAL-SEALANT MANUFACTURER.

K. WELDING QUALIFICATIONS: QUALIFY PROCEDURES AND PERSONNEL ACCORDING TO AWS D1.2, "STRUCTURAL WELDING CODE - ALUMINUM."

L. MOCKUPS: BUILD MOCKUPS TO VERIFY SELECTIONS MADE UNDER SAMPLE SUBMITTALS AND TO DEMONSTRATE AESTHETIC EFFECTS AND SET QUALITY STANDARDS FOR FABRICATION AND INSTALLATION.
1. BUILD MOCKUP OF TYPICAL WALL AREA AS SHOWN ON DRAWINGS.
2. FIELD TESTING SHALL BE PERFORMED ON MOCKUPS ACCORDING TO REQUIREMENTS IN "FIELD QUALITY CONTROL" ARTICLE.
3. APPROVAL OF MOCKUPS DOES NOT CONSTITUTE APPROVAL OF DEVIATIONS FROM THE CONTRACT DOCUMENTS CONTAINED IN MOCKUPS UNLESS ARCHITECT SPECIFICALLY APPROVES SUCH DEVIATIONS IN WRITING.
4. APPROVED MOCKUPS MAY BECOME PART OF THE COMPLETED WORK IF UNDISTURBED AT TIME OF SUBSTANTIAL COMPLETION.

宋
Song + Associates
Architecture ● Planning ● Interior Design
1545 Centrepark Drive North
West Palm Beach, Florida 33401
Telephone: 561-655-2423
Fax: 561-655-1482
AA - 0003165 IB - 0001095

Seal : STATE OF FLORIDA — PERRY DOUGLASS — AR97112 — REGISTERED ARCHITECT

Name: PERRY DOUGLASS
License # : AR 97112

Consultants :

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

Date : 09/19/2018
S+A Project No : 18033
Owner Project No :
Drawn By : PD/WS
Checked By : PD

Phase :
CONSTRUCTION DOCUMENTS

Sheet Title :
SPECIFICATIONS

Sheet # :
G-103

M. PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE.

1.9 PROJECT CONDITIONS

A. FIELD MEASUREMENTS: VERIFY ACTUAL LOCATIONS OF STRUCTURAL SUPPORTS FOR ALUMINUM-FRAMED SYSTEMS BY FIELD MEASUREMENTS BEFORE FABRICATION AND INDICATE MEASUREMENTS ON SHOP DRAWINGS.

1.10 WARRANTY

A. SPECIAL WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS OF ALUMINUM-FRAMED SYSTEMS THAT DO NOT COMPLY WITH REQUIREMENTS OR THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.
   1. FAILURES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
      a. STRUCTURAL FAILURES INCLUDING, BUT NOT LIMITED TO, EXCESSIVE DEFLECTION.
      b. NOISE OR VIBRATION CAUSED BY THERMAL MOVEMENTS.
      c. DETERIORATION OF METALS, METAL FINISHES, AND OTHER MATERIALS BEYOND NORMAL WEATHERING.
      d. ADHESIVE OR COHESIVE SEALANT FAILURES.
      e. WATER LEAKAGE THROUGH FIXED GLAZING AND FRAMING AREAS.
      f. FAILURE OF OPERATING COMPONENTS.
   2. WARRANTY PERIOD: FIVE YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

B. SPECIAL FINISH WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS ON WHICH FINISHES DO NOT COMPLY WITH REQUIREMENTS OR THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD. WARRANTY DOES NOT INCLUDE NORMAL WEATHERING.
   1. WARRANTY PERIOD: FIVE YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

1.11 MAINTENANCE SERVICE

A. ENTRANCE DOOR HARDWARE:
   1. MAINTENANCE TOOLS AND INSTRUCTIONS: FURNISH A COMPLETE SET OF SPECIALIZED TOOLS AND MAINTENANCE INSTRUCTIONS AS NEEDED FOR OWNER'S CONTINUED ADJUSTMENT, MAINTENANCE, AND REMOVAL AND REPLACEMENT OF ENTRANCE DOOR HARDWARE.
   2. INITIAL MAINTENANCE SERVICE: BEGINNING AT SUBSTANTIAL COMPLETION, PROVIDE 12 MONTHS' FULL MAINTENANCE BY SKILLED EMPLOYEES OF ENTRANCE DOOR HARDWARE INSTALLER. INCLUDE QUARTERLY PREVENTIVE MAINTENANCE, REPAIR OR REPLACEMENT OF WORN OR DEFECTIVE COMPONENTS, LUBRICATION, CLEANING, AND ADJUSTING AS REQUIRED FOR PROPER ENTRANCE DOOR HARDWARE OPERATION AT RATED SPEED AND CAPACITY. PROVIDE PARTS AND SUPPLIES THE SAME AS THOSE USED IN THE MANUFACTURE AND INSTALLATION OF ORIGINAL EQUIPMENT.

B. STRUCTURAL-SEALANT-GLAZED SYSTEMS:
   1. INITIAL MAINTENANCE SERVICE: BEGINNING AT SUBSTANTIAL COMPLETION, PROVIDE 12 MONTHS' FULL MAINTENANCE BY SKILLED EMPLOYEES OF STRUCTURAL-SEALANT-GLAZED SYSTEM INSTALLER. INCLUDE QUARTERLY PREVENTIVE MAINTENANCE, REPAIR OR REPLACEMENT TO ENSURE LONG-TERM PERFORMANCE AND DURABILITY OF STRUCTURAL-SEALANT-GLAZED SYSTEM AS REQUIRED FOR PROPER ENTRANCE DOOR HARDWARE OPERATION AT RATED SPEED AND CAPACITY. PROVIDE PARTS AND SUPPLIES THE SAME AS THOSE USED IN THE MANUFACTURE AND INSTALLATION OF ORIGINAL SYSTEM.
   2. CONTINUING MAINTENANCE PROPOSAL: FROM INSTALLER TO OWNER, IN THE FORM OF A STANDARD YEARLY (OR OTHER PERIOD) MAINTENANCE AGREEMENT, STARTING ON DATE INITIAL MAINTENANCE SERVICE IS CONCLUDED. STATE SERVICES, OBLIGATIONS, CONDITIONS, AND TERMS FOR AGREEMENT PERIOD AND FOR FUTURE RENEWAL OPTIONS.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, AVAILABLE MANUFACTURERS OFFERING PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
   1. ARCADIA, INC.
   2. ARCH ALUMINUM & GLASS CO., INC.
   3. CMI ARCHITECTURALCOMMERCIAL ARCHITECTURAL PRODUCTS, INC.
   4. EFCO CORPORATION.
   5. KAWNEER NORTH AMERICA; AN ALCOA COMPANY.
   6. LEED HIMMEL INDUSTRIES, INC.
   7. PITTCO ARCHITECTURAL METALS, INC.
   8. TRACO.
   9. TUBELITE.
   10. UNITED STATES ALUMINUM.
   11. VISTAWALL ARCHITECTURAL PRODUCTS; THE VISTAWALL GROUP; A BLUESCOPE STEEL COMPANY.
   12. YKK AP AMERICA INC.

2.2 MATERIALS

A. ALUMINUM: ALLOY AND TEMPER RECOMMENDED BY MANUFACTURER FOR TYPE OF USE AND FINISH INDICATED.
   1. SHEET AND PLATE: ASTM B 209 (ASTM B 209M).
   2. EXTRUDED BARS, RODS, PROFILES, AND TUBES: ASTM B 221 (ASTM B 221M).
   3. EXTRUDED STRUCTURAL PIPE AND TUBES: ASTM B 429.
   4. STRUCTURAL PROFILES: ASTM B 308/B 308M.
   5. WELDING RODS AND BARE ELECTRODES: AWS A5.10/A5.10M.

B. STEEL REINFORCEMENT: MANUFACTURER'S STANDARD ZINC-RICH, CORROSION-RESISTANT PRIMER, COMPLYING WITH SSPC-PS GUIDE NO. 12.00; APPLIED IMMEDIATELY AFTER SURFACE PREPARATION AND PRETREATMENT. SELECT SURFACE PREPARATION METHODS ACCORDING TO RECOMMENDATIONS IN SSPC- SP COM AND PREPARE SURFACES ACCORDING TO APPLICABLE SSPC STANDARD.
   1. STRUCTURAL SHAPES, PLATES, AND BARS: ASTM A 36/A 36M.
   2. COLD-ROLLED SHEET AND STRIP: ASTM A 1008/A 1008M.
   3. HOT-ROLLED SHEET AND STRIP: ASTM A 1011/A 1011M.

2.3 FRAMING SYSTEMS

A. FRAMING MEMBERS: MANUFACTURER'S STANDARD EXTRUDED-ALUMINUM FRAMING MEMBERS OF THICKNESS REQUIRED AND REINFORCED AS REQUIRED TO SUPPORT IMPOSED LOADS.
   1. CONSTRUCTION: THERMALLY IMPROVED.
   2. GLAZING SYSTEM: RETAINED MECHANICALLY WITH GASKETS ON FOUR SIDES.
   3. GLAZING PLANE: FRONT.

B. BRACKETS AND REINFORCEMENTS: MANUFACTURER'S STANDARD HIGH-STRENGTH ALUMINUM WITH NONSTAINING, NONFERROUS SHIMS FOR ALIGNING SYSTEM COMPONENTS.

C. FASTENERS AND ACCESSORIES: MANUFACTURER'S STANDARD CORROSION-RESISTANT, NONSTAINING, NONBLEEDING FASTENERS AND ACCESSORIES COMPATIBLE WITH ADJACENT MATERIALS.
   1. USE SELF-LOCKING DEVICES WHERE FASTENERS ARE SUBJECT TO LOOSENING OR TURNING OUT FROM THERMAL AND STRUCTURAL MOVEMENTS, WIND LOADS, OR VIBRATION.
   2. REINFORCE MEMBERS AS REQUIRED TO RECEIVE FASTENER THREADS.
   3. USE EXPOSED FASTENERS WITH COUNTERSUNK PHILLIPS SCREW HEADS, FINISHED TO MATCH FRAMING SYSTEM , FABRICATED FROM STAINLESS STEEL.

D. CONCRETE AND MASONRY INSERTS: HOT-DIP GALVANIZED CAST-IRON, MALLEABLE-IRON, OR STEEL INSERTS, COMPLYING WITH ASTM A 123/A 123M OR ASTM A 153/A 153M.

E. CONCEALED FLASHING: MANUFACTURER'S STANDARD CORROSION-RESISTANT, NONSTAINING, NONBLEEDING FLASHING COMPATIBLE WITH ADJACENT MATERIALS.

F. FRAMING SYSTEM GASKETS AND SEALANTS: MANUFACTURER'S STANDARD, RECOMMENDED BY MANUFACTURER FOR JOINT TYPE.
   1. SEALANTS USED INSIDE THE WEATHERPROOFING SYSTEM SHALL HAVE A VOC CONTENT OF 250 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).
   2. SEALANTS USED INSIDE THE WEATHERPROOFING SYSTEM SHALL COMPLY WITH THE TESTING AND PRODUCT REQUIREMENTS OF THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES' "STANDARD PRACTICE FOR THE TESTING OF VOLATILE ORGANIC EMISSIONS FROM VARIOUS SOURCES USING SMALL-SCALE ENVIRONMENTAL CHAMBERS."

2.4 GLAZING SYSTEMS

A. GLAZING: AS SPECIFIED IN SECTION 088000 "GLAZING."

B. GLAZING GASKETS: MANUFACTURER'S STANDARD COMPRESSION TYPES; REPLACEABLE, MOLDED OR EXTRUDED, OF PROFILE AND HARDNESS REQUIRED TO MAINTAIN WATERTIGHT SEAL.

C. SPACERS AND SETTING BLOCKS: MANUFACTURER'S STANDARD ELASTOMERIC TYPE.

D. BOND-BREAKER TAPE: MANUFACTURER'S STANDARD TFE-FLUOROCARBON OR POLYETHYLENE MATERIAL TO WHICH SEALANTS WILL NOT DEVELOP ADHESION.

E. GLAZING SEALANTS: FOR STRUCTURAL-SEALANT-GLAZED SYSTEMS, AS RECOMMENDED BY MANUFACTURER FOR JOINT TYPE, AND AS FOLLOWS:
   1. STRUCTURAL SEALANT: ASTM C 1184, SINGLE-COMPONENT NEUTRAL-CURING SILICONE FORMULATION THAT IS COMPATIBLE WITH SYSTEM COMPONENTS WITH WHICH IT COMES IN CONTACT, SPECIFICALLY FORMULATED AND TESTED FOR USE AS STRUCTURAL SEALANT AND APPROVED BY A STRUCTURAL-SEALANT MANUFACTURER FOR USE IN ALUMINUM-FRAMED SYSTEMS INDICATED.
      a. SEALANTS USED INSIDE THE WEATHERPROOFING SYSTEM SHALL HAVE A VOC CONTENT OF 100 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).
      b. SEALANTS USED INSIDE THE WEATHERPROOFING SYSTEM SHALL COMPLY WITH THE TESTING AND PRODUCT REQUIREMENTS OF THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES' "STANDARD PRACTICE FOR THE TESTING OF VOLATILE ORGANIC EMISSIONS FROM VARIOUS SOURCES USING SMALL-SCALE ENVIRONMENTAL CHAMBERS."
      c. COLOR: BLACK.
   2. WEATHERSEAL SEALANT: ASTM C 920 FOR TYPE S, GRADE NS, CLASS 25, USES NT, G, A, AND O; SINGLE-COMPONENT NEUTRAL-CURING FORMULATION THAT IS COMPATIBLE WITH STRUCTURAL SEALANT AND OTHER SYSTEM COMPONENTS WITH WHICH IT COMES IN CONTACT; RECOMMENDED BY STRUCTURAL-SEALANT, WEATHERSEAL-SEALANT, AND ALUMINUM-FRAMED-SYSTEM MANUFACTURERS FOR THIS USE.
      a. SEALANTS USED INSIDE THE WEATHERPROOFING SYSTEM SHALL HAVE A VOC CONTENT OF 250 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).
      b. SEALANTS USED INSIDE THE WEATHERPROOFING SYSTEM SHALL COMPLY WITH THE TESTING AND PRODUCT REQUIREMENTS OF THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES' "STANDARD PRACTICE FOR THE TESTING OF VOLATILE ORGANIC EMISSIONS FROM VARIOUS SOURCES USING SMALL-SCALE ENVIRONMENTAL CHAMBERS."
      c. COLOR: MATCHING STRUCTURAL SEALANT.

2.5 ENTRANCE DOOR SYSTEMS

A. ENTRANCE DOORS: MANUFACTURER'S STANDARD GLAZED ENTRANCE DOORS FOR MANUAL-SWING OPERATION.
   1. DOOR CONSTRUCTION: 1-3/4-INCH (44.5-MM) OVERALL THICKNESS, WITH MINIMUM 0.125-INCH- (3.2-MM) THICK, EXTRUDED-ALUMINUM TUBULAR RAIL AND STILE MEMBERS. MECHANICALLY FASTEN CORNERS WITH REINFORCING BRACKETS THAT ARE DEEPLY PENETRATED AND FILLET WELDED OR THAT INCORPORATE CONCEALED TIE RODS.
      a. THERMAL CONSTRUCTION: HIGH-PERFORMANCE PLASTIC CONNECTORS SEPARATE ALUMINUM MEMBERS EXPOSED TO THE EXTERIOR FROM MEMBERS EXPOSED TO THE INTERIOR.
   2. DOOR DESIGN: MEDIUM STILE; 3-1/2-INCH (88.9-MM) NOMINAL WIDTH.
      a. ACCESSIBLE DOORS: SMOOTH SURFACED FOR WIDTH OF DOOR IN AREA WITHIN 10 INCHES (255 MM) ABOVE FLOOR OR GROUND PLANE.
   3. GLAZING STOPS AND GASKETS: BEVELED, SNAP-ON, EXTRUDED-ALUMINUM STOPS AND PREFORMED GASKETS.
      a. PROVIDE NONREMOVABLE GLAZING STOPS ON OUTSIDE OF DOOR.

B. ENTRANCE DOOR HARDWARE: AS SPECIFIED IN SECTION 087100 "DOOR HARDWARE."

2.6 ENTRANCE DOOR HARDWARE

A. GENERAL: PROVIDE ENTRANCE DOOR HARDWARE FOR EACH ENTRANCE DOOR TO COMPLY WITH REQUIREMENTS IN THIS SECTION.
   1. ENTRANCE DOOR HARDWARE SETS: PROVIDE QUANTITY, ITEM, SIZE, FINISH OR COLOR INDICATED, AND PRODUCTS COMPLYING WITH BHMA STANDARD REFERENCED.
   2. SEQUENCE OF OPERATION: PROVIDE ELECTRIFIED DOOR HARDWARE FUNCTION, SEQUENCE OF OPERATION, AND INTERFACE WITH OTHER BUILDING CONTROL SYSTEMS INDICATED.
   3. OPENING-FORCE REQUIREMENTS:
      a. EGRESS DOORS: NOT MORE THAN 15 LBF (67 N) TO RELEASE THE LATCH AND NOT MORE THAN 30 LBF (133 N)TO SET THE DOOR IN MOTION AND NOT MORE THAN 15 LBF (67 N) TO OPEN THE DOOR TO ITS MINIMUM REQUIRED WIDTH.
      b. ACCESSIBLE INTERIOR DOORS: NOT MORE THAN 5 LBF (22.2 N) TO FULLY OPEN DOOR.

B. DESIGNATIONS: REQUIREMENTS FOR DESIGN, GRADE, FUNCTION, FINISH, SIZE, AND OTHER DISTINCTIVE QUALITIES OF EACH TYPE OF ENTRANCE DOOR HARDWARE ARE INDICATED IN "ENTRANCE DOOR HARDWARE SETS" ARTICLE. PRODUCTS ARE IDENTIFIED BY USING ENTRANCE DOOR HARDWARE DESIGNATIONS AS FOLLOWS:
   1. NAMED MANUFACTURERS' PRODUCTS: MANUFACTURER AND PRODUCT DESIGNATION ARE LISTED FOR EACH DOOR HARDWARE TYPE REQUIRED FOR THE PURPOSE OF ESTABLISHING MINIMUM REQUIREMENTS. MANUFACTURERS' NAMES ARE ABBREVIATED IN "ENTRANCE DOOR HARDWARE SETS" ARTICLE.
   2. REFERENCES TO BHMA STANDARDS: PROVIDE PRODUCTS COMPLYING WITH THESE STANDARDS AND REQUIREMENTS FOR DESCRIPTION, QUALITY, AND FUNCTION.

C. OPENING-FORCE REQUIREMENTS:
   1. DELAYED-EGRESS LOCKS: LOCK RELEASES WITHIN 15 SECONDS AFTER APPLYING A FORCE OF NOT MORE THAN 15 LBF (67 N) FOR NOT MORE THAN 3 SECONDS.
   2. LATCHES AND EXIT DEVICES: NOT MORE THAN 15 LBF (67 N) REQUIRED TO RELEASE LATCH.

D. PIVOT HINGES: BHMA A156.4, GRADE 1.
   1. OFFSET-PIVOT HINGES: PROVIDE TOP, BOTTOM, AND INTERMEDIATE OFFSET PIVOTS AT EACH DOOR LEAF.

E. BUTT HINGES: BHMA A156.1, GRADE 1, RADIUS CORNER.
   1. NONREMOVABLE PINS: PROVIDE SET SCREW IN HINGE BARREL THAT, WHEN TIGHTENED INTO A GROOVE IN HINGE PIN, PREVENTS REMOVAL OF PIN WHILE ENTRANCE DOOR IS CLOSED.
   2. EXTERIOR HINGES: STAINLESS STEEL, WITH STAINLESS-STEEL PIN.
   3. QUANTITIES:
      a. FOR DOORS UP TO 87 INCHES (2210 MM) HIGH, PROVIDE 3 HINGES PER LEAF.
      b. FOR DOORS MORE THAN 87 AND UP TO 120 INCHES (2210 AND UP TO 3048 MM) HIGH, PROVIDE 4 HINGES PER LEAF.

F. CONTINUOUS-GEAR HINGES: MANUFACTURER'S STANDARD WITH STAINLESS-STEEL BEARINGS BETWEEN KNUCKLES, FABRICATED TO FULL HEIGHT OF DOOR AND FRAME.

G. MORTISE AUXILIARY LOCKS: BHMA A156.5, GRADE 1.

H. MANUAL FLUSH BOLTS: BHMA A156.16, GRADE 1.

I. AUTOMATIC AND SELF-LATCHING FLUSH BOLTS: BHMA A156.3, GRADE 1.

J. PANIC EXIT DEVICES:
   J.1. PROVIDE VON DUPRIN 99 RIM DEVICE.
   J.2. BHMA A156.3, GRADE 1, LISTED AND LABELED BY A TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, FOR PANIC PROTECTION, BASED ON TESTING ACCORDING TO UL 305.

K. CYLINDERS: BHMA A156.5, GRADE 1.
   1. PROVIDE CORBIN RUSSWIN 6-PIN.
   2. KEYING: MASTER KEY SYSTEM. PERMANENTLY INSCRIBE EACH KEY WITH A VISUAL KEY CONTROL NUMBER AND INCLUDE NOTATION "DO NOT DUPLICATE".

L. STRIKES: PROVIDE STRIKE WITH BLACK-PLASTIC DUST BOX FOR EACH LATCH OR LOCK BOLT; FABRICATED FOR ALUMINUM FRAMING.

M. OPERATING TRIM: BHMA A156.6.

N. CLOSERS: BHMA A156.4, GRADE 1, WITH ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION, SIZED AS REQUIRED BY DOOR SIZE, EXPOSURE TO WEATHER, AND ANTICIPATED FREQUENCY OF USE; ADJUSTABLE TO MEET FIELD CONDITIONS AND REQUIREMENTS FOR OPENING FORCE.

O. SURFACE-MOUNTED HOLDERS: BHMA A156.16, GRADE 1.

P. DOOR STOPS: BHMA A156.16, GRADE 1, FLOOR OR WALL MOUNTED, AS APPROPRIATE FOR DOOR LOCATION INDICATED, WITH INTEGRAL RUBBER BUMPER.

Q. WEATHER STRIPPING: MANUFACTURER'S STANDARD REPLACEABLE COMPONENTS.
   1. COMPRESSION TYPE: MADE OF ASTM D 2000, MOLDED NEOPRENE, OR ASTM D 2287, MOLDED PVC.
   2. SLIDING TYPE: AAMA 701, MADE OF WOOL, POLYPROPYLENE, OR NYLON WOVEN PILE WITH NYLON- FABRIC OR ALUMINUM-STRIP BACKING.

R. WEATHER SWEEPS: MANUFACTURER'S STANDARD EXTERIOR-DOOR BOTTOM SWEEP WITH CONCEALED FASTENERS ON MOUNTING STRIP.

S. SILENCERS: BHMA A156.16, GRADE 1.

T. THRESHOLDS: BHMA A156.21, RAISED THRESHOLDS BEVELED WITH A SLOPE OF NOT MORE THAN 1:2, WITH MAXIMUM HEIGHT OF 1/2 INCH (13 MM).

U. FINGER GUARDS: MANUFACTURER'S STANDARD COLLAPSIBLE NEOPRENE OR PVC GASKET ANCHORED TO FRAME HINGE-JAMB AT CENTER-PIVOTED DOORS.

2.7 ACCESSORY MATERIALS

A. JOINT SEALANTS: FOR INSTALLATION AT PERIMETER OF ALUMINUM-FRAMED SYSTEMS, AS SPECIFIED IN SECTION 079200 "JOINT SEALANTS."
   1. SEALANTS USED INSIDE THE WEATHERPROOFING SYSTEM SHALL HAVE A VOC CONTENT OF 250 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).
   2. SEALANTS USED INSIDE THE WEATHERPROOFING SYSTEM SHALL COMPLY WITH THE TESTING AND PRODUCT REQUIREMENTS OF THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES' "STANDARD PRACTICE FOR THE TESTING OF VOLATILE ORGANIC EMISSIONS FROM VARIOUS SOURCES USING SMALL-SCALE ENVIRONMENTAL CHAMBERS."

B. BITUMINOUS PAINT: COLD-APPLIED, ASPHALT-MASTIC PAINT COMPLYING WITH SSPC-PAINT 12 REQUIREMENTS EXCEPT CONTAINING NO ASBESTOS; FORMULATED FOR 30-MIL (0.762-MM) THICKNESS PER COAT.

2.8 FABRICATION

A. FORM OR EXTRUDE ALUMINUM SHAPES BEFORE FINISHING.

B. WELD IN CONCEALED LOCATIONS TO GREATEST EXTENT POSSIBLE TO MINIMIZE DISTORTION OR DISCOLORATION OF FINISH. REMOVE WELD SPATTER AND WELDING OXIDES FROM EXPOSED SURFACES BY DESCALING OR GRINDING.

C. FRAMING MEMBERS, GENERAL: FABRICATE COMPONENTS THAT, WHEN ASSEMBLED, HAVE THE FOLLOWING CHARACTERISTICS:
   1. PROFILES THAT ARE SHARP, STRAIGHT, AND FREE OF DEFECTS OR DEFORMATIONS.
   2. ACCURATELY FITTED JOINTS WITH ENDS COPED OR MITERED.
   3. MEANS TO DRAIN WATER PASSING JOINTS, CONDENSATION WITHIN FRAMING MEMBERS, AND MOISTURE MIGRATING WITHIN THE SYSTEM TO EXTERIOR.
   4. PHYSICAL AND THERMAL ISOLATION OF GLAZING FROM FRAMING MEMBERS.
   5. ACCOMMODATIONS FOR THERMAL AND MECHANICAL MOVEMENTS OF GLAZING AND FRAMING TO MAINTAIN REQUIRED GLAZING EDGE CLEARANCES.
   6. PROVISIONS FOR FIELD REPLACEMENT OF GLAZING FROM INTERIOR.
   7. FASTENERS, ANCHORS, AND CONNECTION DEVICES THAT ARE CONCEALED FROM VIEW TO GREATEST EXTENT POSSIBLE.

D. MECHANICALLY GLAZED FRAMING MEMBERS: FABRICATE FOR FLUSH GLAZING WITHOUT PROJECTING STOPS.

E. STRUCTURAL-SEALANT-GLAZED FRAMING MEMBERS: INCLUDE ACCOMMODATIONS FOR USING TEMPORARY SUPPORT DEVICE TO RETAIN GLAZING IN PLACE WHILE STRUCTURAL SEALANT CURES.

F. STOREFRONT FRAMING: FABRICATE COMPONENTS FOR ASSEMBLY USING HEAD-AND-SILL-RECEPTOR SYSTEM WITH SHEAR BLOCKS AT INTERMEDIATE HORIZONTAL MEMBERS.

G. ENTRANCE DOOR FRAMES: REINFORCE AS REQUIRED TO SUPPORT LOADS IMPOSED BY DOOR OPERATION AND FOR INSTALLING ENTRANCE DOOR HARDWARE.
   1. AT EXTERIOR DOORS, PROVIDE COMPRESSION WEATHER STRIPPING AT FIXED STOPS.
   2. AT INTERIOR DOORS, PROVIDE SILENCERS AT STOPS TO PREVENT METAL-TO-METAL CONTACT. INSTALL THREE SILENCERS ON STRIKE JAMB OF SINGLE-DOOR FRAMES AND TWO SILENCERS ON HEAD OF FRAMES FOR PAIRS OF DOORS.

H. ENTRANCE DOORS: REINFORCE DOORS AS REQUIRED FOR INSTALLING ENTRANCE DOOR HARDWARE.
   1. AT PAIRS OF EXTERIOR DOORS, PROVIDE SLIDING-TYPE WEATHER STRIPPING RETAINED IN ADJUSTABLE STRIP AND MORTISED INTO DOOR EDGE.
   2. AT EXTERIOR DOORS, PROVIDE WEATHER SWEEPS APPLIED TO DOOR BOTTOMS.

I. ENTRANCE DOOR HARDWARE INSTALLATION: FACTORY INSTALL ENTRANCE DOOR HARDWARE TO THE GREATEST EXTENT POSSIBLE. CUT, DRILL, AND TAP FOR FACTORY-INSTALLED ENTRANCE DOOR HARDWARE BEFORE APPLYING FINISHES.

J. AFTER FABRICATION, CLEARLY MARK COMPONENTS TO IDENTIFY THEIR LOCATIONS IN PROJECT ACCORDING TO SHOP DRAWINGS.

2.9 ALUMINUM FINISHES

A. COLOR ANODIC FINISH: AAMA 611, AA-M12C22A42/A44, CLASS I, 0.018 MM OR THICKER.
   1. COLOR: AS SELECTED BY ARCHITECT FROM FULL RANGE OF INDUSTRY COLORS AND COLOR DENSITIES.

2.10 SOURCE QUALITY CONTROL

A. TESTING AGENCY: ENGAGE A QUALIFIED TESTING AGENCY TO EVALUATE STRUCTURAL-SEALANT-GLAZED SYSTEMS.

B. STRUCTURAL-SEALANT-GLAZED SYSTEMS: PERFORM QUALITY-CONTROL PROCEDURES COMPLYING WITH ASTM C 1401 RECOMMENDATIONS, INCLUDING, BUT NOT LIMITED TO, SYSTEM MATERIAL-QUALIFICATION PROCEDURES, SEALANT TESTING, AND SYSTEM FABRICATION REVIEWS AND CHECKS.

C. STRUCTURAL-SEALANT-GLAZED SYSTEM WILL BE CONSIDERED DEFECTIVE IF IT DOES NOT PASS TESTS AND INSPECTIONS.

D. PREPARE TEST AND INSPECTION REPORTS.

PART 3 - EXECUTION

3.1 EXAMINATION

A. EXAMINE AREAS AND CONDITIONS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK.

B. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

3.2 INSTALLATION

A. GENERAL:
   1. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
   2. DO NOT INSTALL DAMAGED COMPONENTS.
   3. FIT JOINTS TO PRODUCE HAIRLINE JOINTS FREE OF BURRS AND DISTORTION.
   4. RIGIDLY SECURE NONMOVEMENT JOINTS.
   5. INSTALL ANCHORS WITH SEPARATORS AND ISOLATORS TO PREVENT METAL CORROSION AND ELECTROLYTIC DETERIORATION.
   6. SEAL JOINTS WATERTIGHT UNLESS OTHERWISE INDICATED.

B. METAL PROTECTION:
   1. WHERE ALUMINUM WILL CONTACT DISSIMILAR METALS, PROTECT AGAINST GALVANIC ACTION BY PAINTING CONTACT SURFACES WITH PRIMER OR APPLYING SEALANT OR TAPE, OR BY INSTALLING NONCONDUCTIVE SPACERS AS RECOMMENDED BY MANUFACTURER FOR THIS PURPOSE.
   2. WHERE ALUMINUM WILL CONTACT CONCRETE OR MASONRY, PROTECT AGAINST CORROSION BY PAINTING CONTACT SURFACES WITH BITUMINOUS PAINT.

C. INSTALL COMPONENTS TO DRAIN WATER PASSING JOINTS, CONDENSATION OCCURRING WITHIN FRAMING MEMBERS, AND MOISTURE MIGRATING WITHIN THE SYSTEM TO EXTERIOR.

D. SET CONTINUOUS SILL MEMBERS AND FLASHING IN FULL SEALANT BED AS SPECIFIED IN SECTION 079200 "JOINT SEALANTS" TO PRODUCE WEATHERTIGHT INSTALLATION.

E. INSTALL COMPONENTS PLUMB AND TRUE IN ALIGNMENT WITH ESTABLISHED LINES AND GRADES, AND WITHOUT WARP OR RACK.

F. INSTALL GLAZING AS SPECIFIED IN SECTION 088000 "GLAZING."
   1. STRUCTURAL-SEALANT GLAZING:
      a. PREPARE SURFACES THAT WILL CONTACT STRUCTURAL SEALANT ACCORDING TO SEALANT MANUFACTURER'S WRITTEN INSTRUCTIONS TO ENSURE COMPATIBILITY AND ADHESION. PREPARATION INCLUDES, BUT IS NOT LIMITED TO, CLEANING AND PRIMING SURFACES.
      b. INSTALL WEATHERSEAL SEALANT ACCORDING TO SECTION 079200 "JOINT SEALANTS" AND ACCORDING TO SEALANT MANUFACTURER'S WRITTEN INSTRUCTIONS TO PRODUCE WEATHERPROOF JOINTS. INSTALL JOINT FILLER BEHIND SEALANT AS RECOMMENDED BY SEALANT MANUFACTURER.

G. ENTRANCE DOORS: INSTALL DOORS TO PRODUCE SMOOTH OPERATION AND TIGHT FIT AT CONTACT POINTS.
   1. EXTERIOR DOORS: INSTALL TO PRODUCE WEATHERTIGHT ENCLOSURE AND TIGHT FIT AT WEATHER STRIPPING.
   2. FIELD-INSTALLED ENTRANCE DOOR HARDWARE: INSTALL SURFACE-MOUNTED ENTRANCE DOOR HARDWARE ACCORDING TO ENTRANCE DOOR HARDWARE MANUFACTURERS' WRITTEN INSTRUCTIONS USING CONCEALED FASTENERS TO GREATEST EXTENT POSSIBLE.

H. INSTALL PERIMETER JOINT SEALANTS AS SPECIFIED IN SECTION 079200 "JOINT SEALANTS" TO PRODUCE WEATHERTIGHT INSTALLATION.

3.3 ERECTION TOLERANCES

A. INSTALL ALUMINUM-FRAMED SYSTEMS TO COMPLY WITH THE FOLLOWING MAXIMUM ERECTION TOLERANCES:
   1. LOCATION AND PLANE: LIMIT VARIATION FROM TRUE LOCATION AND PLANE TO 1/8 INCH IN 12 FEET (3 MM IN 3.7 M); 1/4 INCH (6 MM) OVER TOTAL LENGTH.
   2. ALIGNMENT:
      a. WHERE SURFACES ABUT IN LINE, LIMIT OFFSET FROM TRUE ALIGNMENT TO 1/16 INCH (1.5 MM).
      b. WHERE SURFACES MEET AT CORNERS, LIMIT OFFSET FROM TRUE ALIGNMENT TO 1/32 INCH (0.8 MM).

B. DIAGONAL MEASUREMENTS: LIMIT DIFFERENCE BETWEEN DIAGONAL MEASUREMENTS TO 1/8 INCH (3 MM).

3.4 FIELD QUALITY CONTROL

A. TESTING AGENCY: ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS.

B. TESTING SERVICES: TESTING AND INSPECTING OF REPRESENTATIVE AREAS TO DETERMINE COMPLIANCE OF INSTALLED SYSTEMS WITH SPECIFIED REQUIREMENTS SHALL TAKE PLACE AS FOLLOWS AND IN SUCCESSIVE PHASES AS INDICATED ON DRAWINGS. DO NOT PROCEED WITH INSTALLATION OF THE NEXT AREA UNTIL TEST RESULTS FOR PREVIOUSLY COMPLETED AREAS SHOW COMPLIANCE WITH REQUIREMENTS.
   1. STRUCTURAL-SEALANT COMPATIBILITY AND ADHESION: STRUCTURAL SEALANT SHALL BE TESTED ACCORDING TO RECOMMENDATIONS IN ASTM C 1401.
      a. DESTRUCTIVE TEST METHOD A, "HAND PULL TAB (DESTRUCTIVE)," IN ASTM C 1401, APPENDIX X2, SHALL BE USED.
         1) A MINIMUM OF TWO AREAS ON EACH BUILDING FACE SHALL BE TESTED.
         2) REPAIR INSTALLATION AREAS DAMAGED BY TESTING.
   2. STRUCTURAL-SEALANT GLAZING INSPECTION: AFTER INSTALLATION OF ALUMINUM-FRAMED SYSTEMS IS COMPLETE, STRUCTURAL-SEALANT GLAZING SHALL BE INSPECTED AND EVALUATED ACCORDING TO RECOMMENDATIONS IN ASTM C 1401.
   3. AIR INFILTRATION: AREAS SHALL BE TESTED FOR AIR LEAKAGE OF 1.5 TIMES THE RATE SPECIFIED FOR LABORATORY TESTING UNDER "PERFORMANCE REQUIREMENTS" ARTICLE, BUT NOT MORE THAN 0.09 CFM/SQ. FT. (0.03 L/S PER SQ. M) OF FIXED WALL AREA WHEN TESTED ACCORDING TO ASTM E 783 AT A MINIMUM STATIC-AIR-PRESSURE DIFFERENCE OF 1.57 LBF/SQ. FT. (75 PA).
   4. WATER PENETRATION: AREAS SHALL BE TESTED ACCORDING TO ASTM E 1105 AT A MINIMUM UNIFORM AND CYCLIC STATIC-AIR-PRESSURE DIFFERENCE OF 0.67 TIMES THE STATIC-AIR-PRESSURE DIFFERENCE SPECIFIED FOR LABORATORY TESTING UNDER "PERFORMANCE REQUIREMENTS" ARTICLE, BUT NOT LESS THAN 4.18 LBF/SQ. FT. (200 PA), AND SHALL NOT EVIDENCE WATER PENETRATION.
   5. WATER SPRAY TEST: BEFORE INSTALLATION OF INTERIOR FINISHES HAS BEGUN, A MINIMUM AREA OF 75 FEET (23 M) BY 1 STORY OF ALUMINUM-FRAMED SYSTEMS DESIGNATED BY ARCHITECT SHALL BE TESTED ACCORDING TO AAMA 501.2 AND SHALL NOT EVIDENCE WATER PENETRATION.

C. REPAIR OR REMOVE WORK IF TEST RESULTS AND INSPECTIONS INDICATE THAT IT DOES NOT COMPLY WITH SPECIFIED REQUIREMENTS.

D. ADDITIONAL TESTING AND INSPECTING, AT CONTRACTOR'S EXPENSE, WILL BE PERFORMED TO DETERMINE COMPLIANCE OF REPLACED OR ADDITIONAL WORK WITH SPECIFIED REQUIREMENTS.

E. ALUMINUM-FRAMED ASSEMBLIES WILL BE CONSIDERED DEFECTIVE IF THEY DO NOT PASS TESTS AND INSPECTIONS.

F. PREPARE TEST AND INSPECTION REPORTS.

3.5 ADJUSTING

A. ADJUST OPERATING ENTRANCE DOOR HARDWARE TO FUNCTION SMOOTHLY AS RECOMMENDED BY MANUFACTURER.
   1. FOR ENTRANCE DOORS ACCESSIBLE TO PEOPLE WITH DISABILITIES, ADJUST CLOSERS TO PROVIDE A 3- SECOND CLOSER SWEEP PERIOD FOR DOORS TO MOVE FROM A 70-DEGREE OPEN POSITION TO 3 INCHES (75 MM) FROM THE LATCH, MEASURED TO THE LEADING DOOR EDGE.

3.6 ENTRANCE DOOR HARDWARE SETS

DOOR HARDWARE:
   a. (2) PAIRS OF MORTISE BUT HINGES PER LEAF. BALL BEARING 4 1/2” X 4” BRASS US26D FINISH
   b. (1) ADAMS RITE MS1850 THREE POINT HOOK-BOLT LOCK ON ACTIVE LEAF OR SINGLE DOOR (1) ADAMS RITE TWO POINT LOCK ON INACTIVE LEAF.
   c. CORBIN RUSSWIN 6-PIN MASTER RING KEYING SYSTEMS CYLINDER
   d. VON DUPRIN 99 RIM PANIC DEVICE.
   e. LCN 4040 SURFACE MOUNTED CLOSER (HOLD OPEN OPTIONAL).
   f. INCLUDE ANY ADDITIONAL ITEMS NECESSARY FOR A COMPLETE WORKING SYSTEM AS SPECIFIED.
   g. PROVIDE ADDITIONAL REQUIREMENTS AND SEQUENCE OF OPERATION IN ENTRANCE DOOR HARDWARE SET ABOVE FOR ELECTRIFIED ENTRANCE DOOR HARDWARE. COORDINATE W/ VILLAGE OF WELLINGTON.

END OF SECTION 084113

宋
Song + Associates
Architecture ● Planning ● Interior Design
1545 Centrepark Drive North
West Palm Beach, Florida 33401
Telephone: 561-655-2423
Fax: 561-655-1482
AA - 0003165 IB - 0001095
Seal : STATE OF FLORIDA — PERRY DOUGLASS — AR97112 — REGISTERED ARCHITECT
Name: PERRY DOUGLASS
License # : AR 97112
Consultants :

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

Date : 09/19/2018
S+A Project No : 18033
Owner Project No :
Drawn By : PD/WS
Checked By : PD

Phase : CONSTRUCTION DOCUMENTS

Sheet Title : SPECIFICATIONS

Sheet # : G-104

GENERAL STRUCTURAL NOTES

GENERAL

1. The Structural Drawings shall be read in conjunction with the other Contract Documents which include, but are not limited to, Architectural, Site, Civil, Electrical and Mechanical Drawings, and the Specifications. Report any discrepancies between Contract Documents to the Architect before proceeding.
2. These general notes are to be read in conjunction with the notes on other structural drawings.
3. All work shall be in accordance with the 2017 Florida Building Code, FBC.
   All referenced standards and codes shall be as listed in the Florida Building Code 2017.
4. The structure has been designed for the in-service loads only. The methods, procedures, and sequences of construction are the responsibility of the Contractor. The Contractor shall provide and maintain all temporary systems to ensure the integrity of the structure at all stages of construction. All work shall be performed without damage to adjacent existing work.
5. Refer items on the structural drawings requiring clarifications to the Architect and Structural Engineer. Do NOT use scaled dimensions. In case of a discrepancy between dimensions and/or details on the contract documents, relating to new or existing construction, please notify the Architect and Engineer before proceeding.
6. Cover no work until the appropriate inspection has been completed.

COORDINATION WITH OTHER TRADES

1. Where new work is to be fitted to old work, the Contractor shall check all dimensions and conditions in the field, and report any errors or discrepancies to the Structural Engineer prior to the fabrication and erection of any new members. The contractor has the responsibility for the correctness and fit of the new parts to the old part.
2. The Contractor shall coordinate and check all dimensions relating to architectural finishes, structural framing, mechanical openings, equipment, etc. The Structural Engineer and Architect shall be notified of any discrepancies before proceeding with work in any area under question.

REINFORCING STEEL

1. Reinforcing bar detailing, fabricating, and placing shall conform to the latest edition of the following standards: Specifications for Structural Concrete for Buildings (ACI 301), ACI Detailing Manual (SP66) The latest editions of Concrete Reinforcing Steel Institute's Reinforcing Bar Detailing and Placing Reinforcing Bars may also be used.
2. Reinforcing steel shall be deformed bars of new billet steel conforming to ASTM A615 and shall have a minimum yield strength of 60,000 psi.
3. Provide specified bar chairs and spacers as required to maintain concrete protection specified.
4. Reinforcement bars shall not be tack welded, welded, heated or cut unless indicated on the contract documents or approved by the Structural Engineer. Reinforcing steel shall not be field bent.
5. Welded wire fabric shall be smooth wire fabric conforming to ASTM A185 unless otherwise noted. Welded wire fabric in slabs on grade shall be placed 2 inches down from the top of the slab unless otherwise noted.
6. Lap to reinforcing bars shall be 48x bar diameter typically.

STRUCTURAL STEEL

1. Structural steel detailing, fabrication and erection shall conform to the AISC Specification for the Design, Fabrication and Erection of Structural Steel for Buildings – Load & Resistance Factor Design, latest edition.
2. Steel members shall conform to the following ASTM Standards:
   Structural steel rolled shapes WF shapes ASTM A992, M and S ASTM A572 Grade 50.
   Steel plates ASTM A36
   Structural tube steel HSS Rectangular and square ASTM A500, GRADE C (Fy=50 ksi).
   Round ASTM A500, GRADE C (Fy=46 ksi).
3. Structural steel SHALL be shop-painted with a rust inhibiting primer.
4. All field and shop connections to have 3/16 inch continuous fillet welds, unless noted as bolted connections. Welding procedures shall conform to the latest edition of the American Welding Society's (AWS) Structural Welding Codes: For Structural Steel ANSI/AWS D1.1; for Sheet Steel ANSI/AWS D1.3; for Reinforcing Steel ANSI/AWS D1.4.
5. Welded connections using ASTM A992 steel as a base metal shall be made with E70XX Low Hydrogen electrodes. Unless otherwise noted, other welded connections may be made with regular E70XX electrodes.

MASONRY

1. Structural masonry has been designed in accordance with the ACI Building Code Requirements for Masonry Structures (ACI 530/ASCE 5.
2. Concrete masonry construction shall conform to the ACI Specification for Masonry Structures (ACI 530.1/ASCE 6).
3. Concrete masonry construction shall have a minimum compressive strength (f'm) of 1900 psi at 28 days. Mortar shall be type S for interior non-load bearing walls. For all load bearing walls, mortar shall be type M or S proportioned in accordance with ASTM C270, with a 28 day compressive strength of 2150 psi minimum. Portland cement-lime without air entrainment shall be used in the mortar mix.
4. Masonry grout shall be a high slump mix having a minimum 28 day compressive strength of 2500 psi. Grout to conform to ASTM C-476. Concrete shall not be used in lieu of masonry grout.
5. Lap splices in reinforcing bars to be 48x bar diameter. See typical reinforced cmu wall detail.
6. Provide hot-dipped, 9 gauge min., ladder type horizontal joint reinforcement at 16" o.c. vertically unless otherwise noted.
7. Masonry reinforcement shall extend from footing to tie, or bond, beam at top of wall, or roof support.
8. Concrete masonry shall be laid in a running bond pattern.

COLD FORMED STEEL

1. Cold formed (light gauge) steel members shall be detailed and fabricated in accordance with the AISC Specification for the Design of Cold formed Steel Structural Members, latest edition.
2. Splicing of axially loaded members is not permitted. Studs and accessories shall conform to the requirements of ASTM A-653, minimum yield stress 33 ksi, and shall be designed by manufacturer/supplier.
3. Studs shall be braced in accordance with the manufacturer's specifications but not less than at four foot centers vertically.

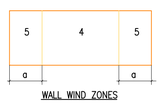
WIND LOAD PER FBC 2017 AND ASCE 7-10:
ULTIMATE WIND SPEED = 170 MPH (132 MPH ASD)
RISK CATEGORY III/V WIND EXPOSURE CATEGORY "C"
ENCLOSED BUILDING INTERNAL PRESSURE COEFFICIENT = +/- 0.18
WIND DIRECTIONALITY FACTOR Kd = 0.85

MEAN ROOF HEIGHT 15 FT		ROOF SLOPE < 7 DEGREES				
VELOCITY PRESSURE = 53.5 PSF			TRIBUTARY AREA (SQ. FT.)			
AREA	ZONE		10	20	50	100
MAIN ROOF	1,2&3	PRESSURE psf	26	25	23	20
	1	SUCTION psf	-63	-63	-61	-58
	2	SUCTION psf	-106	-102	-89	-69
	3	SUCTION psf	-159	-149	-119	-69
OVERHANG	2	SUCTION psf	-101	-100	-98	-95
	3	SUCTION psf	-159	-148	-112	-52

TABLE 1: GROSS ROOF CLADDING ULTIMATE WIND LOADS

ZONE	AREA	10 SF	50 SF
4&5	PRESSURE psf	35	34
4	SUCTION psf	-38	-37
5	SUCTION psf	-46	-45

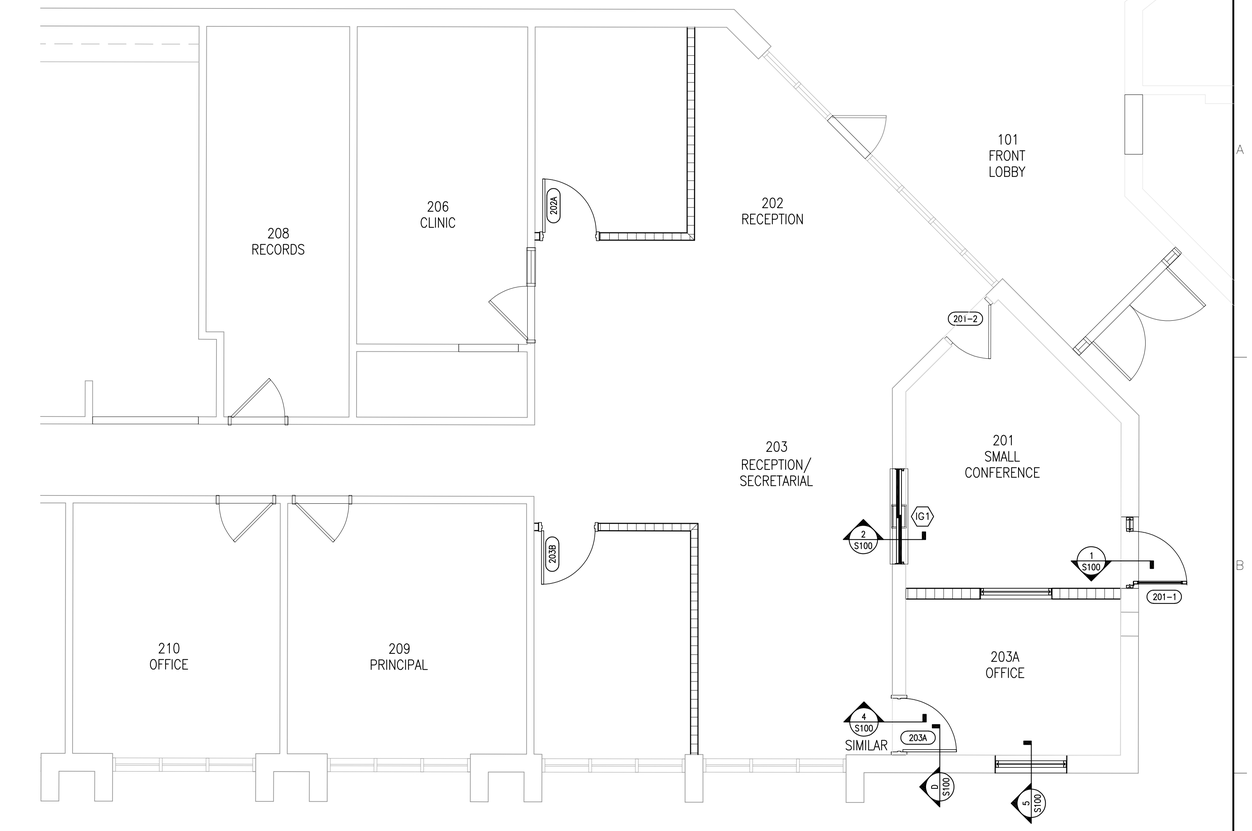
TABLE 2: SERVICE WIND PRESSURES ON WALLS/OPENINGS



WALL WIND ZONES

STANDARD ABBREVIATIONS

A.B.	Anchor Bolt
ADJ.	Adjacent
ARCH.	Architect
B. (Bot)	Bottom
BEW	Bottom Each Way
BCX	Bottom Chord Extension
BLL	Bottom Lower Layer
BUL	Bottom Upper Layer
BLDG	Building
BM	Beam
BP	Base Plate
C/C	Center to Center
CFW	Continuous Fillet Weld
DIAG.	Diagonal
DIA.	Diameter
D. FIR	Douglas Fir
DIM	Dimension
DJ	Double Joist
DWG	Drawing
DWL	Dowel
EA.	Each
EE	Each End
EF	Each Face
EJ	Expansion Joint
EW	Each Way
EWB	Each Way Bottom
EWT	Each Way Top
EL. ELEV	Elevation
ELECT	Electrical
E-W	East-West
EQ	Equal
EXIST	Existing
EXT	External
FF	Far Face
FDN	Foundation
FFL	Finished structural floor level
FIN	Finished
FL	Floor
FTG	Footing
FMC	Full Moment Connection
GA	Gauge
GALV	Galvanized
GT	Girder Truss
HORI	Horizontal
HD	Holding Down (anchors)
HT	Hip/Valley truss
INT	Interior
JB	Joist bearing elevation
JT	Joint
JST	Joist
JST GRD	Joist Girder
KIPS	Kilopounds, Kips
KLF	Kilopounds per foot
L	Angle (e.g. L4x4x1/4)
LBS	Pounds
LG	Long
LLV	Long Leg Vertical
LLH	Long Leg Horizontal
LONG	Longitudinal
MAX	Maximum
MECH	Mechanical
MEZZ	Mezzanine
MIN	Minimum
MISC	Miscellaneous
MOM	Moment
MC	Moment Connection
MSL	Mean Sea Level
N-S	North-South
NTS	Not to Scale
NO.	Number
NW	Normal weight
O/C	On Center (C/C)
O.D.	Outside Diameter
PL.	Plate
PC	Precast
PROJ	Projection
PSI	Pounds per square inch
PSF	Pounds per square foot
PLF	Pounds per linear foot
RC	Reinforced concrete
REINF	Reinforcement (steel)
REQ'D	Required
REV	Revision
RHS	Rectangular Hollow Steel Section
SDF	Step Down Footing
SPEC	Specification
SHS	Square Hollow Steel Section
ST	Steel
STD	Standard
SQ	Square
STRUCT	Structural
SJ	Sawn (Control) Joint
SP	Southern Pine
T	Top
TB	Truss Bearing elevation
TLL	Top Lower Level
TML	Top Middle Level
TUL	Top Upper Level
TEMP	Temperature
TYP	Typical
TRANS	Transverse
TS	Tube steel section
TJ	Tie Joist
TOB	Top of Beam
TOD	Top of Deck
TOS	Top of Steel
TOW	Top of wall
U/S	Underside
UNO	Unless noted otherwise
VERT	Vertical
W	Wide Flange (beam)
WWF	Welded Wire Fabric
WWR	Welded Wire Rebar/Reinforcing



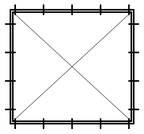
PARTIAL FLOOR PLAN

01
1/4"=1'-0"

N

FASTENERS FOR DOOR OPENING
1" X P.T. BUCK W/ 1/4"ø
X 1 1/2" CONC. EMBEDMENT
TAPCON W/ 1"ø WASHER AT
12" O.C., START 3" FROM CORNERS.

BUCKS TO BE FASTENED HORIZONTALLY AND VERTICALLY TO CONCRETE WALLS.
G.C. TO COORDINATE OPENING DIMENSIONS AND BUCK FASTENING DETAIL WITH PRODUCT APPROVALS.



A MINIMUM WINDOW/ DOOR BUCK FASTENERS TO REINFORCED CONCRETE WALLS
NTS

Song + Associates
Architecture ● Planning ● Interior Design
1545 Centrepark Drive North
West Palm Beach, Florida 33401
Telephone: 561-655-2423
Fax: 561-655-1482
AA - 0003165 IB - 0001095
Seal :
Name: ANDREW MORGAN
License # : PE 57171
Consultants :

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

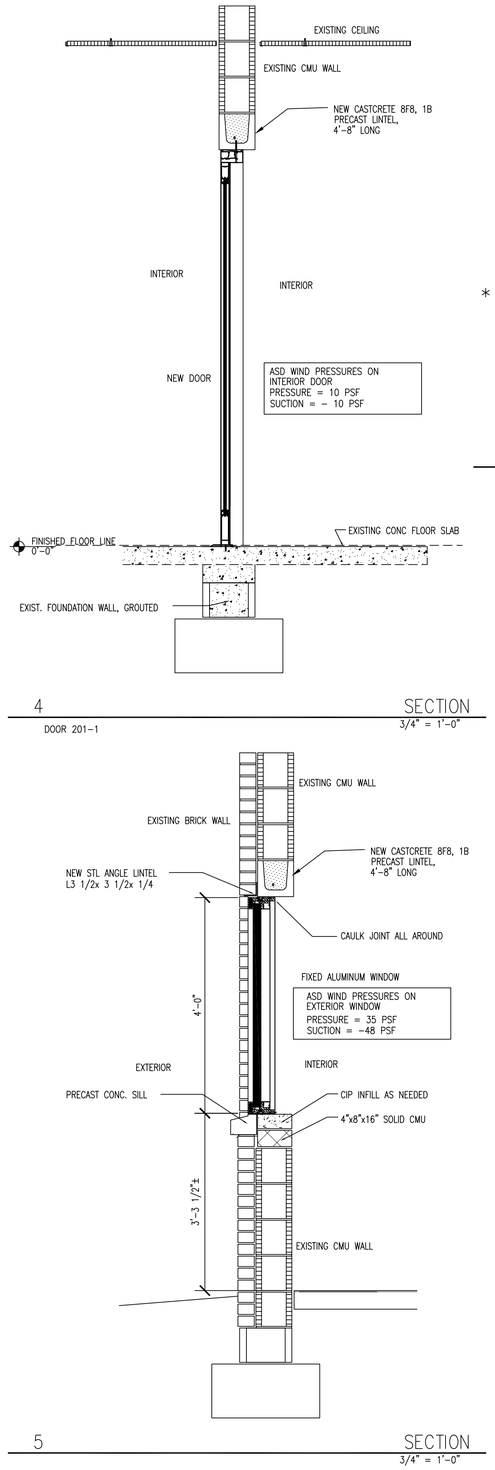
PELICAN ISLAND ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

Date : 09/14/2018
S+A Project No : 18033
Owner Project No :
Drawn By : AM
Checked By : AM
Phase :
90% CONSTRUCTION DOCUMENTS

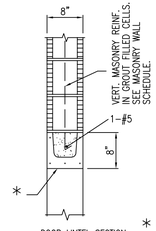
Sheet Title :
STRUCTURAL NOTES

Sheet # :
S-001



4 SECTION
3/4" = 1'-0"
DOOR 201-1

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



DOOR LINTEL SECTION

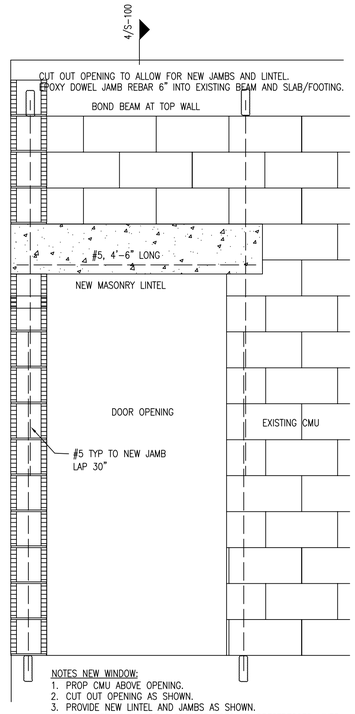
LINTEL SCHEDULE				
PLAN MARK	MAXIMUM OPENING WIDTH FT	CASTCRETE LINTEL DETAILS	ACTUAL LOADS PLF	ALLOWABLE LOADS PLF
L1	3'-4"	8F8, 1B	1100 -636	2189 G -1207 U
L2	5'-4"	8F8, 1B	1100 -636	1238 G -835 U

1238 G: 1238 PLF VERTICAL GRAVITY LOAD
-835 U: 835 PLF UPLIFT LOAD

* PRECAST CONCRETE LINTEL AS MANUFACTURED BY CAST-CRETE, OR APPROVED EQUAL. WITH 8" BEARING EACH END. ENDS TO HAVE 5 1/2" LONG x 4" WIDE NOTCH TO ACCOMODATE VERTICAL REINFORCING AND GROUTING.

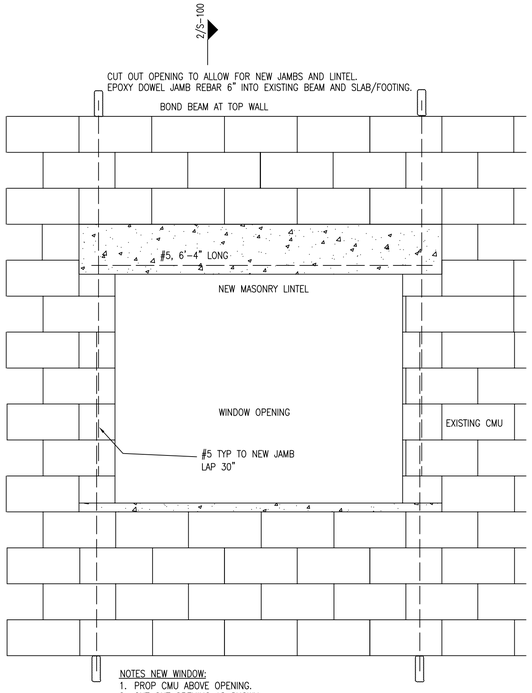
NOTES:
1. GROUT SOLID ALL MASONRY UNITS AS SHOWN.
2.
3. CMU SHALL BE 8" NORMAL WEIGHT LAID IN RUNNING BOND.
4. SHORE LINTEL UNTIL CONCRETE CURES (7 DAY MIN)

C CONCRETE MASONRY LINTEL DETAILS
NTS



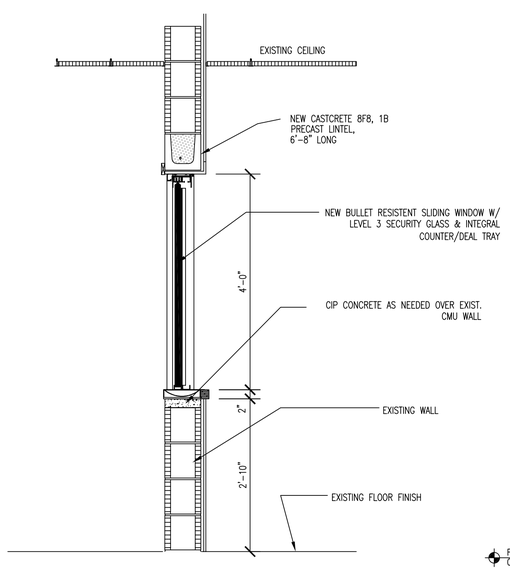
NOTES NEW WINDOW:
1. PROP CMU ABOVE OPENING.
2. CUT OUT OPENING AS SHOWN.
3. PROVIDE NEW LINTEL AND JAMBS AS SHOWN.
4. NEW LINTEL SHALL BE CASTCRETE PRECAST, PRESTRESSED LINTEL.

D NEW DOOR OPENING IN EXISTING WALL DETAIL
NTS
DOOR 203A

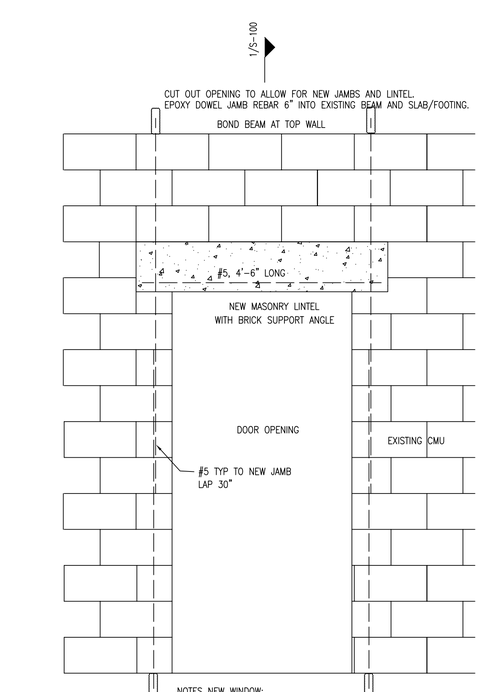


NOTES NEW WINDOW:
1. PROP CMU ABOVE OPENING.
2. CUT OUT OPENING AS SHOWN.
3. PROVIDE NEW LINTEL AND JAMBS AS SHOWN.
4. NEW LINTEL SHALL BE CASTCRETE PRECAST, PRESTRESSED LINTEL.

B NEW OPENING IN EXISTING WALL DETAIL
NTS

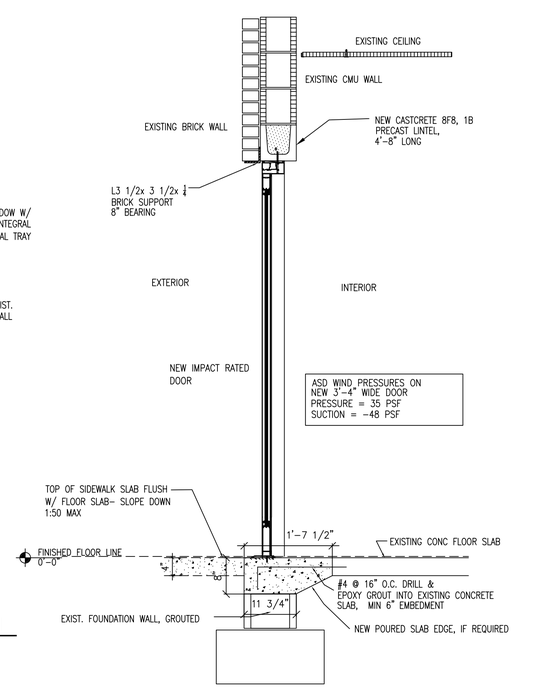


2 SECTION
3/4" = 1'-0"



NOTES NEW WINDOW:
1. PROP CMU ABOVE OPENING.
2. CUT OUT OPENING AS SHOWN.
3. PROVIDE NEW LINTEL AND JAMBS AS SHOWN.
4. NEW LINTEL SHALL BE CASTCRETE PRECAST, PRESTRESSED LINTEL.

A NEW DOOR OPENING IN EXISTING WALL DETAIL
NTS



1 SECTION
3/4" = 1'-0"
DOOR 201-1

Song + Associates

Architecture● Planning ● Interior Design

1545 Centrepark Drive North
West Palm Beach, Florida 33401

Telephone: 561-655-2423
Fax: 561-655-1482

AA - 0003165 IB - 0001095

Seal :

Name: ANDREW MORGAN
License # : PE 57171

Consultants :

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

Date : 09/14/2018
S+A Project No : 18033
Owner Project No :
Drawn By : AM
Checked By : AM

Phase :
90% CONSTRUCTION DOCUMENTS

Sheet Title :

STRUCTURAL DETAILS

Sheet # :

S-100

DEMOLITION GENERAL NOTES

A. GENERAL AND ALL SUB-CONTRACTORS, SHALL VISIT THE SITE AND PRECISELY EXAMINE THE EXISTING STRUCTURE, SURFACES, CONDITIONS AND EXTENT OF WORK INVOLVED. AFTER EXAMINATION A DEMOLITION SCHEDULE SHALL BE PREPARED AND SUBMITTED IN WRITING TO THE OWNER AND THE ARCHITECT FOR THEIR APPROVAL PRIOR TO THE COMMENCEMENT OF ANY WORK.

B. CONTRACTOR(S) ARE RESPONSIBLE FOR VERIFYING THE EXTENT OF DEMOLITION WORK PRIOR TO BIDDING, AND FOR THE COORDINATING THE EXTENT OF DEMOLITION WITH THE INSTALLATION OF NEW SYSTEMS AND FINISHES INDICATED IN THE CONTRACT DOCUMENTS. REFER TO THE NEW CONSTRUCTION DRAWINGS FOR DEMOLITION REQUIRED, BUT SHOWN ON DEMOLITION PLANS.

C. ALL CONTRACTOR(S) SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND MUNICIPAL ORDINANCES.

D. EXECUTE ALL DEMOLITION WORK IN AN ORDERLY AND CAREFUL MANNER WITH DUE CONSIDERATION FOR ANY EXISTING STRUCTURE. EXTREME CAUTION SHALL BE EXERCISED TO ENSURE THAT NO DAMAGE OCCURS ABSOLUTELY TO ANY OF THE EXISTING EQUIPMENT FURNITURE, OR EXISTING STRUCTURE TO REMAIN. WORK SHALL BE CONFINED EXCLUSIVELY WITHIN THE BUILDING BOUNDARY IDENTIFIED. DEMOLITION CONTRACTOR SHALL REPLACE OR REPAIR ANY DAMAGE TO ADJOINING SURFACES, FINISHES OR STRUCTURE CAUSED BY CONSTRUCTION OPERATIONS.(ACTIVITY)

E. ANY EXISTING ACTIVE UTILITY SERVICE LINES, INDICATED OR NOT, SHALL BE PROTECTED FROM DEMOLITION OR DAMAGE. DISCONNECT ANY ELECTRIC, TELEPHONE, GAS, WATER, OR OTHER UTILITY LINES SERVICING THE STRUCTURE ACCORDING TO THE EXISTING RULES & REGULATIONS OF THE AUTHORITIES HAVING JURISDICTION. PRIOR TO DISCONNECTING ANY UTILITY SERVICE LINE, NOTIFY OWNER AND COORDINATE THE TIME WITH THE OWNER'S SCHEDULE.

F. "FLOORING" DENOTES FLOOR COVERING MATERIALS, INCLUDING ADHESIVES, DOWN TO, BUT EXCLUSIVE OF FLOOR SLABS, STRUCTURAL SLABS, AND STRUCTURAL SYSTEMS, UNLESS NOTED OTHER WISE.

G. WALLS TO BE REMOVED SHALL BE REMOVED TO A POINT 2" MINIMUM BELOW THE EXISTING FLOOR SLAB UNLESS SETTING ON THE SLAB OR AS SPECIFICALLY NOTED. PATCH WITH NEW CONCRETE TO BE FLUSH WITH THE EXISTING FLOOR SLAB.

H. ALL MATERIAL REMOVED UNDER THIS CONTRACT, WHICH IS NOT TO BE SALVAGED OR REUSED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM THE SITE. TO CONVEY MATERIALS, USE MOVABLE, COVERED, DEBRIS BOXES. DO NOT STORE/PERMIT DEBRIS TO ACCUMULATE ON SITE.

I. WHERE PORTIONS OF THE EXISTING STRUCTURE ARE TO BE REMOVED, PROVIDE BRACING AS REQUIRED TO PROPERLY SUPPORT THE REMAINING STRUCTURE UNTIL THE NEW CONSTRUCTION HAS BEEN INSTALLED AND ADEQUATELY BRACED.

J. ANY MATERIALS SPECIFIED TO BE REUSED BY THE OWNER SHALL BE CAREFULLY REMOVED, PROTECTED & STORED AT THE OWNER'S DIRECTION.

K. AFTER THE DEMOLITION OF MATERIALS, THE RESULTING EXPOSED SURFACES SHALL BE SMOOTH AND FLUSH AND TO BLEND SEAMLESSLY WITH THE EXISTING CONDITIONS. PATCH, REPAIR, AND REPLACE SURFACES AS REQUIRED.

L. UPON COMPLETION OF DEMOLITION WORK, ADJACENT AREAS AND THE PROPERTY SHALL BE LEFT CLEAN AND SATISFACTORY TO THE LOCAL AUTHORITIES, THE OWNER, AND THE ARCHITECT. IN ADDITION TO DAILY CLEANING OF THE SITE.

M. GENERAL CONTRACTOR SHALL VERIFY THE EXISTING UNDER SLAB ELECTRICAL AND OTHER UTILITY SERVICE IN AREAS OF SLAB DEMOLITION. VERIFICATION METHODS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR WHO SHALL COORDINATE WITH THE OWNER IF ANY UTILITY SERVICES FOUND TO BE IN CONFLICT. GENERAL CONTRACTOR SHALL COORDINATE UTILITY SERVICE SHUT DOWN WITH THE OWNER PRIOR TO DEMOLITION.

N. AREA DESIGNATED AS OWNER-OCCUPIED DURING CONSTRUCTION PERIOD SHALL HAVE ALL BUILDING SERVICES MAINTAINED WITHOUT INTERRUPTION EXCEPT AS REQUIRED FOR CONSTRUCTION AND WITH PRIOR APPROVAL BY THE OWNER. SCHEDULE SUCH DOWN TIME WITH OWNER 72 HOURS IN ADVANCE.

O. BUILDING EXIT ACCESS, AND ALL LIFE SAFETY DEVICES SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE AREA DESIGNATED AS OWNER-OCCUPIED DURING THE CONSTRUCTION PERIOD.

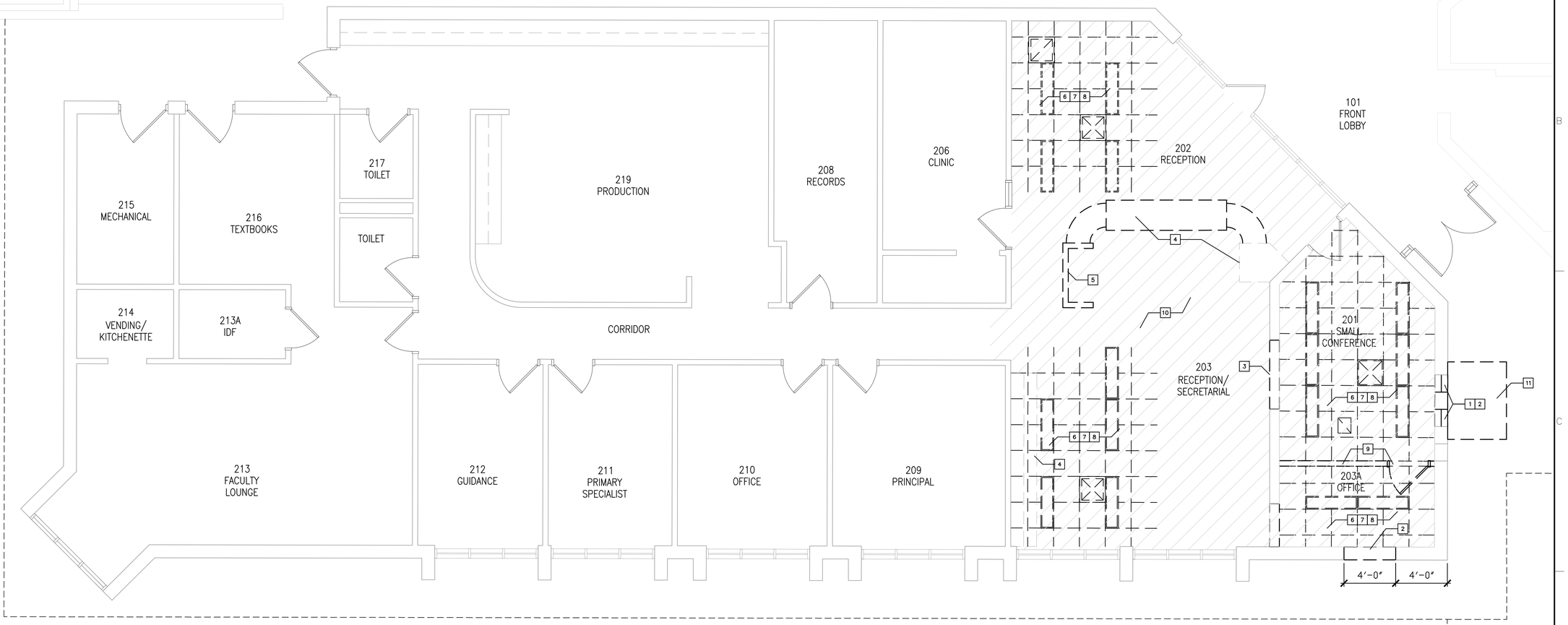
P. "COMPLETELY" DENOTES TOTAL REMOVAL OF ALL ITEMS INDICATED FOR DEMOLITION, INCLUDING BUT NOT LIMITED TO DOORS, FRAMES, WINDOWS, MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS.

Q. REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DWGS FOR ADDITIONAL DEMOLITION NOTES.

R. NO REMOVAL OF HAZARDOUS MATERIALS IS ANTICIPATED, AND IS NOT INCLUDED IN SCOPE OF WORK. IN THE EVENT THAT ANY SUSPICIOUS MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION, IMMEDIATELY NOTIFY THE DISTRICT.

DEMOLITION CODED NOTES

1. REMOVE ALUMINUM WINDOW AND BRICK VENEER CMU WALL TO PREPARE OPENING FOR NEW STOREFRONT ENTRY SYSTEM
2. COMPLETELY REMOVE EXISTING BRICK VENEER/CMU WALL TO ACCOMMODATE NEW DOOR OR WINDOW OPENING/STRUCTURAL LINTEL
3. COMPLETELY REMOVE EXISTING CMU WALL TO ACCOMMODATE NEW TRANSACTION WINDOW OPENING/STRUCTURAL LINTEL
4. COMPLETELY REMOVE EXISTING CASEWORK/COUNTERTOPS. TERMINATE EXISTING INTERNAL ELECTRIC/DATA WIRING PER ELECTRICAL DRAWINGS/NOTES.
5. COMPLETELY REMOVE EXISTING GWB/FRAMED SHELF NOOK. TERMINATE EXISTING INTERNAL ELECTRIC/DATA WIRING PER ELECTRICAL DRAWINGS/NOTES. RELOCATE ALARM PANEL PER ELECTRICAL DRAWINGS AND AED BOX AS DIRECTED BY OWNER.
6. COMPLETELY REMOVE EXISTING LIGHT FIXTURES @ AREAS OF NEW WORK. SALVAGE FIXTURES AND TURN OVER TO SCHOOL DISTRICT.
7. COMPLETELY REMOVE EXISTING DIFFUSERS @ AREAS OF NEW WORK. SALVAGE FIXTURES AND TURN OVER TO SCHOOL DISTRICT.
8. COMPLETELY REMOVE EXISTING ACT AND GRID. MAINTAIN AREAS TO REMAIN TO THE EXTENT POSSIBLE TO PROVIDE UNIFORM TIE INTO NEW WORK.
9. COMPLETELY REMOVE EXISTING STUD WALL, DOOR, AND FRAME
10. COMPLETELY REMOVE EXISTING FLOORING TO SLAB
11. NEATLY SAWCUT EXISTING SIDEWALK AS NEEDED TO PERFORM NEW WORK. UTILIZE EXISTING CONTROL JOINTS TO THE EXTENT POSSIBLE.



DEMOLITION FLOOR PLAN | 01 | 1/4"=1'-0" | N

Song + Associates

Architecture ● Planning ● Interior Design

1545 Centrepark Drive North
West Palm Beach, Florida 33401

Telephone: 561-655-2423
Fax: 561-655-1482

AA - 0003165 IB - 0001095

Seal :

STATE OF FLORIDA · PERRY DOUGLASS · AR97112 · REGISTERED ARCHITECT

Name: PERRY DOUGLASS

License # : AR 97112

Consultants :

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

Date : 09/19/2018

S+A Project No : 18033

Owner Project No :

Drawn By : PD/WS

Checked By : PD

Phase :
CONSTRUCTION DOCUMENTS

Sheet Title :

DEMOLITION FLOOR PLAN

Sheet # :

D-101

FLOOR PLAN LEGEND

EXISTING STRUCTURE

EXISTING

NEW CONCRETE SIDEWALK

NEW DRYWALL / STUD PARTITION

NEW VINYL FLOORING TILE TO MATCH EXISTING

NORTH ARROW

N

ROOM TAG

1-100
X ROOM NUMBER
X ROOM NAME
X

DOOR TAG

DOOR NUMBER
ROOM NUMBER
BUILDING NUMBER

NOTE: REFER WINDOW SCHEDULE

PARTITION TAG

P.XX PARTITION TYPE NUMBER

POINT ELEVATION TAG

DESCRIPTION
DESCRIPTION
0'-0" DESCRIPTION OF OBJECT HEIGHT

WINDOW TAG

X EXISTING WINDOW

DETAIL TAG

DETAIL NUMBER
SHT SHEET NUMBER

BUILDING SECTION TAG

SECTION NUMBER
SHEET NUMBER

EXTERIOR ELEVATION TAG

1 ELEVATION NUMBER
101 SHEET NUMBER

REVISION TAG

X REVISION NUMBER

GENERAL NOTES:

1. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR ANY INCONSISTENCIES.
2. ALL DIMENSIONS FOR NEW WORK ARE TO FACE OF FINISH AND CENTERLINES OF COLUMNS, UNLESS OTHERWISE INDICATED. ALL DIMENSIONS TO EXISTING ARE TO FACE OF FINISH UNLESS OTHERWISE INDICATED. DIMENSIONS TAKE PRECEDENCE OVER SCALING OF DRAWINGS.
3. PROVIDE ALL REQUIRED BLOCKING AS NEEDED FOR BUILT IN CASEWORK, EQUIPMENT SUPPORTS, TOILET ACCESSORIES, ETC. COORDINATE WITH ALL TRADES AS REQUIRED. PROVIDE G-185 COATING FOR PT WOOD ANCHORS.
4. VERIFY SIZES OF ALL OWNER PROVIDED EQUIPMENT AND COORDINATE ALL OPENINGS, CLEARANCES, ELECTRICAL AND MECHANICAL REQUIREMENTS WITH THE OWNER PRIOR TO INSTALLATION.
5. UPON COMPLETION OF THE WORK, PROPERTY AND ADJACENT AREAS SHALL BE LEFT CLEAN AND SATISFACTORY TO THE OWNER AND THE ARCHITECT.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING, PATCHING AND FITTING OF ALL WORK IN A NEAT WORKMANLIKE MANNER. PROTECT ALL ADJACENT SURFACES FROM DAMAGE. PATCH AND REPAIR ALL WORK DAMAGED DURING CONSTRUCTION TO IT'S ORIGINAL OR BETTER CONDITION. WHERE NEW WORK ADJOINS EXISTING IN THE SAME PLANE, MATCH ADJACENT FINISHES, MATERIALS, TEXTURES, SHEEN, ETC.
7. AT AREAS OF FLOOR SLAB REPLACEMENT (DUE TO DEMOLITION), PROVIDE VAPOR BARRIER SHEET, BACKFILL TRENCH, COMPACT AND REPLACE SLAB TO MATCH EXISTING ADJACENT IN ELEVATION, FINISH AND REINFORCEMENT.

GENERAL PARTITION NOTES :

WALL TAG DESIGNATION IS INTENDED TO INDICATE WALL TYPE ALONG AN ENTIRE WALL PLANE AND/OR SURFACE ALONG THE FULL LENGTH OF A SPACE OR CORRIDOR INCLUDING ASSOCIATED ALCOVES AND NICHES, UNLESS INDICATED OTHERWISE.

AT NEW ASSEMBLIES, WALL BOARD AND SURFACE FINISH MATERIAL SHALL EXTEND TO STRUCTURE ABOVE, UNLESS NOTED OTHERWISE.

REFER TO FINISH SCHEDULE FOR TYPE OF WALL FINISH TO BE UTILIZED AT PARTICULAR LOCATIONS. EXTEND FINISHES 4" ABOVE CEILING.

IF A CEILING IS NOT REQUIRED IN A SPACE, CONTRACTOR SHALL CONTINUE WALL AND FINISH TO DECK ABOVE.

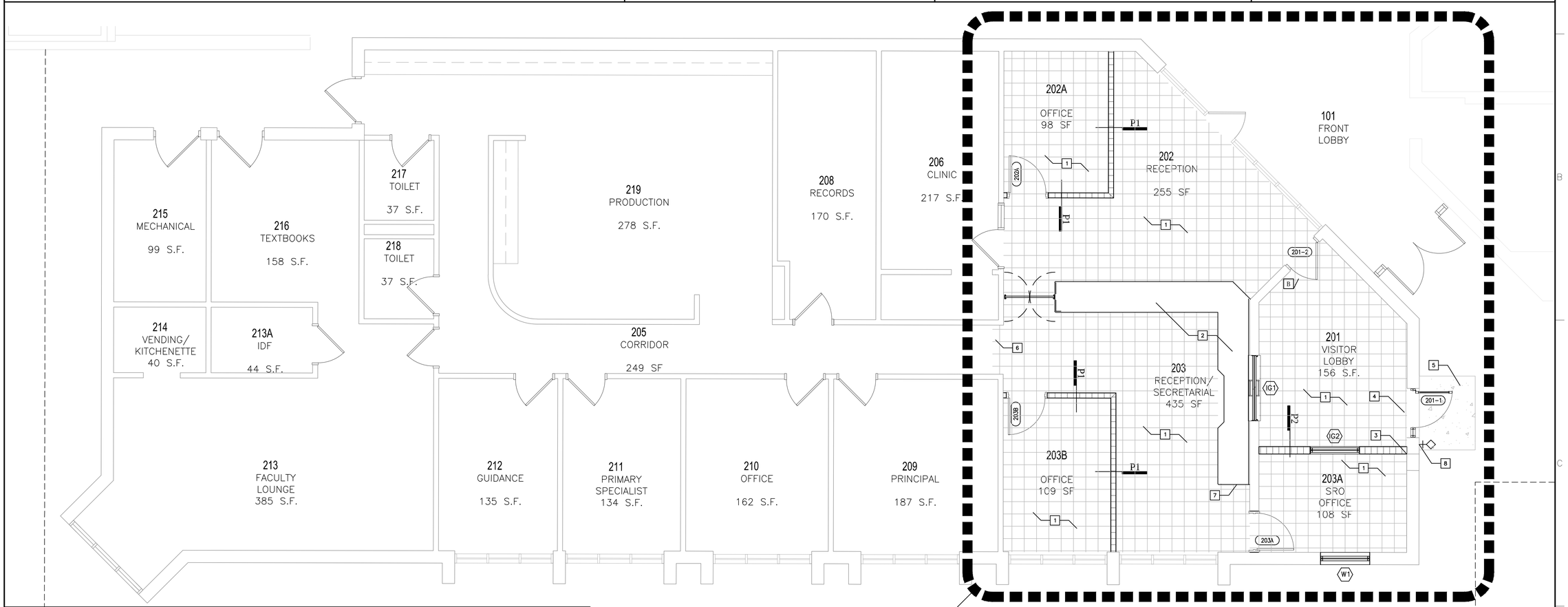
ALL FURRING INDICATED SHALL MATCH DEPTH OF ADJACENT EXISTING U.N.O.

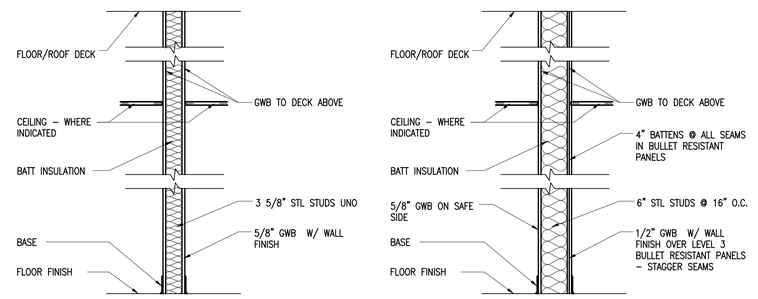
MAXIMUM STUD SPACING & MIN. STUD GAUGE SHALL PROVIDE A MAXIMUM DEFLECTION OF L/240 UNDER A MINIMUM 5 PSF LATERAL LOAD, UNLESS OTHERWISE INDICATED

SET FLOOR TRACKS IN TWO CONTINUOUS BEADS OF ACOUSTICAL SEALANT (TYP)

CODED NOTES

1. PROVIDE NEW TILE FLOORING AND BASE TO MATCH EXISTING THROUGHOUT. EXISTING BASE MAY BE MAINTAINED SHOULD IT BE DEEMED FEASIBLE.
2. REFER TO A-211 FOR NEW CASEWORK DIMENSIONS AND DETAILS..
3. FACE OF NEW WALL TO ALIGN W/ EXIST. WINDOW JAMB.
4. INFILL INTERIOR SLAB WHERE MASONRY WALL WAS REMOVED FOR DOOR OPENING. REFER TO SECTION 2/A-211.
5. INFILL EXTERIOR SIDEWALK AS NEEDED. FEATHER INTO NEW THRESHOLD TO SLOPE AWAY FROM BUILDING @ 1:50 MAX. REFER TO SECTION 2/A-211.
6. MAINTAIN ALIGNMENT OF NEW TILE JOINTS WITH EXISTING.
7. PROVIDE FULL ENCLOSURE END PANELS TO MATCH CASEWORK (TYP.)
8. PROVIDE ALUMINUM VISITOR SIGNAGE ABOVE INTERCOM PER DETAIL THIS PAGE





P1 P2

PARTITION TYPES | 02 | 3/4"=1'-0"

VISITOR ENTRANCE SIGNAGE

PARTIAL FLOOR PLAN | 01 | 1/4"=1'-0"

N

Song + Associates

Architecture ● Planning ● Interior Design

1545 Centrepark Drive North
West Palm Beach, Florida 33401

Telephone: 561-655-2423
Fax: 561-655-1482

AA - 0003165 IB - 0001095

Seal :

STATE OF FLORIDA
PERRY DOUGLASS
AR97112
REGISTERED ARCHITECT

Name: PERRY DOUGLASS

License # : AR 97112

Consultants :

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

Date : 09/19/2018

S+A Project No : 18033

Owner Project No :

Drawn By : PD/WS

Checked By : PD

Phase :
CONSTRUCTION DOCUMENTS

Sheet Title :

FLOOR PLAN

Sheet # :

A-101

REFLECTED CEILING LEGEND

ROOM TAG
1-100
X
X
X
ROOM NUMBER
ROOM NAME

DETAIL TAG
#
SHT
DETAIL NUMBER
SHEET NUMBER

DETAIL SECTION TAG
XX/XXX
SHEET NUMBER
DETAIL NUMBER

CEILING HEIGHT TAG
0'-0"
CEILING HEIGHT (AS MEASURED FROM FINISHED FLOOR)

2' X 2' LAY IN ACOUSTICAL CEILING TILE
2' X 4' LAY IN ACOUSTICAL CEILING TILE
GWB CEILING SOFFIT / BULKHEAD
STUCCO CEILING / SOFFIT
EXPOSED STRUCTURE
PLASTER/ VENEER PLASTER
WASHABLE ACOUSTICAL CEILING TILES

2x2 LAY-IN FIXTURE
2x2 LAY-IN FIXTURE – EMERGENCY
2x4 LAY-IN FIXTURE
2x4 LAY-IN FIXTURE – EMERGENCY
RECESSED FIXTURE
RECESSED FIXTURE – EMERGENCY
1X4 SURFACE MOUNTED FIXTURE
1X4 SURFACE MOUNTED FIXTURE – EMERGENCY
SURFACE MOUNTED FIXTURE
SURFACE MOUNTED FIXTURE – EMERGENCY
SUSPENDED FIXTURE
SUSPENDED FIXTURE – EMERGENCY
SUSPENDED PENDANT FIXTURE
SUSPENDED PENDANT FIXTURE – EMERGENCY

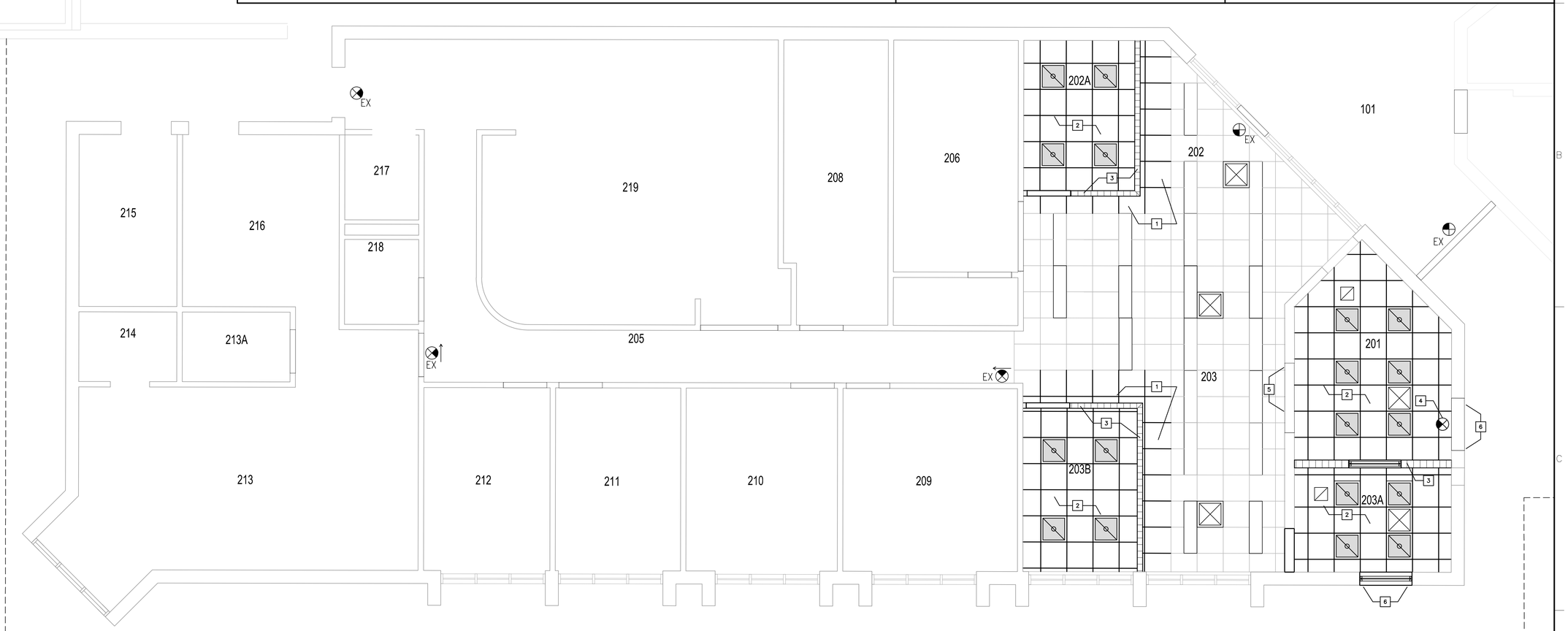
RETURN AIR GRILLE
SUPPLY AIR GRILLE
EXHAUST GRILLE
SD SMOKE DETECTOR
HD HEAT DETECTOR
SPRINKLER
IP CEILING PROJECTOR
SOUND DIFFUSER
LIGHTED EXIT SIGN – SINGLE FACED DARKENED AREA INDICATES FACE OF SIGN VIEWED
LIGHTED EXIT SIGN – DOUBLE FACED DARKENED AREA INDICATES FACE OF SIGN VIEWED
LIGHTED DIRECTIONAL EXIT SIGN – SINGLE FACED ARROW INDICATES DIRECTION(S) TO EXIT
LIGHTED DIRECTIONAL EXIT SIGN – DOUBLE FACED ARROW INDICATES DIRECTION(S) TO EXIT
EX EXISTING EXIT SIGN TO REMAIN

GENERAL NOTES:

1. ALL FIXTURES AND DEVICES SHALL BE INSTALLED ON THE CENTERLINE OF CEILING TILE OR SPACE UNLESS OTHERWISE NOTED.
2. ALL SOFFITS SHALL ALIGN WITH WALLS OR CORNERS AT ALL LOCATIONS WHERE SOFFITS MEET WALLS OR CORNERS AS TO PROVIDE A FLUSH FINISH.
3. TAPE AND FINISH ALL INSIDE JOINTS.
4. PROVIDE CORNER BEADS FOR ALL OUTSIDE JOINTS.
5. CONTRACTOR TO COORDINATE ALL DISCIPLINES TO ENSURE ALL DUCTWORK, EQUIPMENT, FIXTURES, PIPES, CONDUITS, SUSPENSION AND ACOUSTIC SYSTEMS NECESSARY TO MAINTAIN CEILING ELEVATIONS.
6. CONTRACTOR TO COORDINATE ALL DUCT LOCATIONS W. OTHER TRADES. ARCHITECT TO REVIEW AND HAVE FINAL APPROVAL FOR ALL EXPOSED CEILING SURFACES.
7. ALL EXTERIOR STUCCO CEILING FRAMING TO BE PROVIDED IN SHOP DRAWINGS BY SPECIFIED STRUCTURAL ENGINEER.

CODED NOTES:

1. INSERT NEW GRID MATCHING EXISTING TO EXTEND TO NEW WALLS. PROVIDE EDGE ANGLE ALONG FACE OF WALL
2. PROVIDE NEW ACT AND GRID SYSTEM THROUGHOUT THIS AREA.
3. NEW WALLS TO EXTEND TO DECK ABOVE
4. NEW ILLUMINATED EXIT SIGNAGE
5. PATCH/REPAIR ANY CEILING DAMAGED DURING INSTALLATION OF NEW TRANSACTION WINDOW
6. PATCH/REPAIR ANY EXTERIOR STUCCO SOFFIT DAMAGED DURING INSTALLATION OF NEW OPENING



PARTIAL FLOOR PLAN | 01 | 1/4"=1'-0"

N

Song + Associates

Architecture ● Planning ● Interior Design

1545 Centrepark Drive North
West Palm Beach, Florida 33401

Telephone: 561-655-2423
Fax: 561-655-1482

AA - 0003165 IB - 0001095

Seal :
STATE OF FLORIDA
PERRY DOUGLASS
AR97112
REGISTERED ARCHITECT

Name: PERRY DOUGLASS
License # : AR 97112

Consultants :

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

Date : 09/19/2018
S+A Project No : 18033
Owner Project No :
Drawn By : PD/WS
Checked By : PD

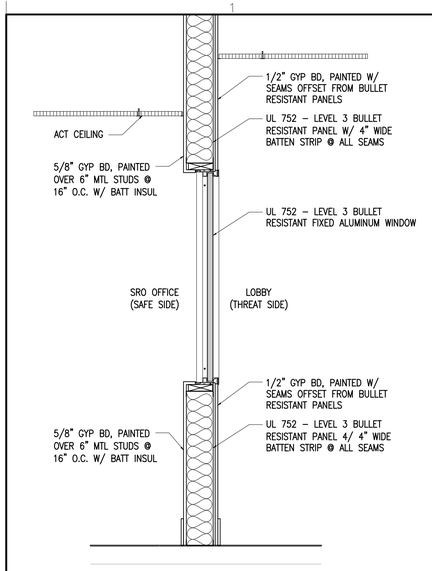
Phase :
CONSTRUCTION DOCUMENTS

Sheet Title :

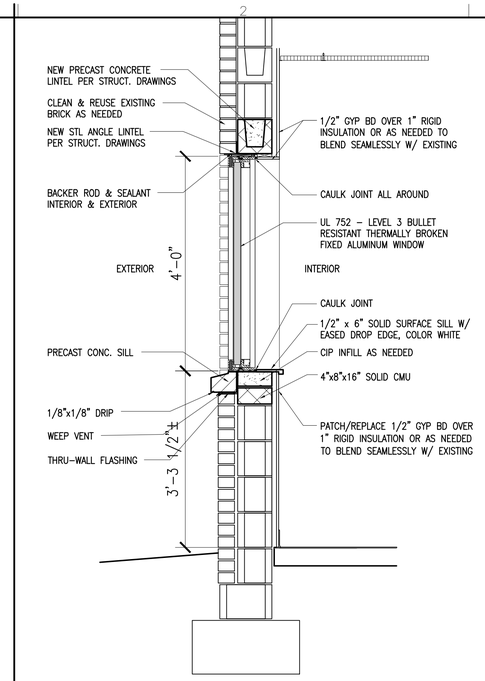
REFLECTED CEILING PLAN

Sheet # :

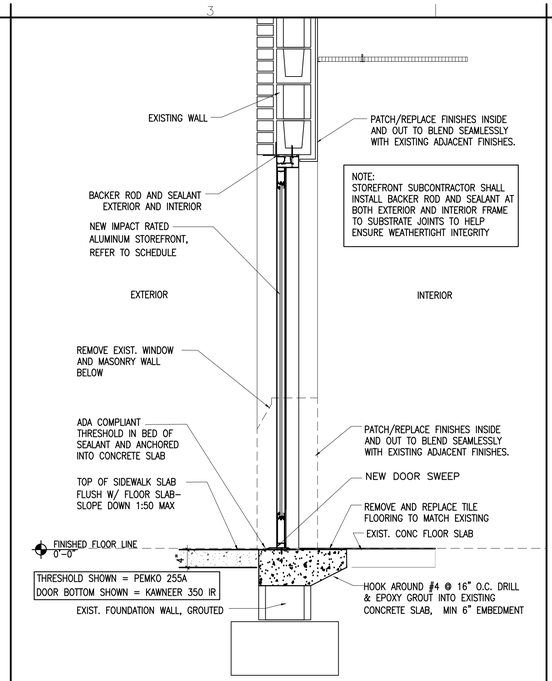
A-121



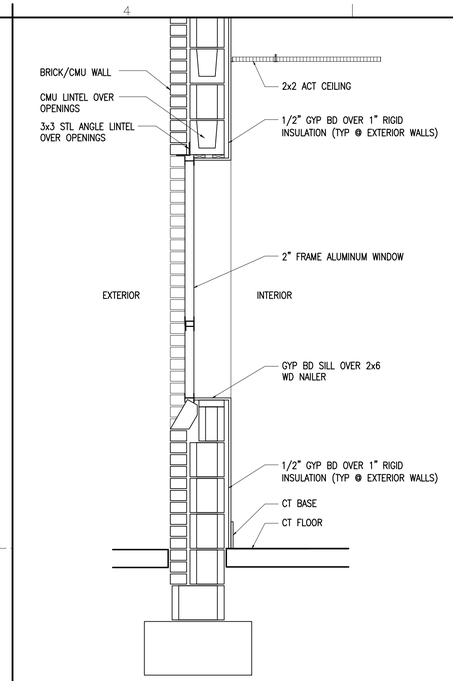
WALL SECTION	04
INTERIOR WALL/WINDOW @ SRO OFFICE	3/4"=1'–0"



WALL SECTION	03
EXTERIOR WINDOW @ SRO OFFICE	3/4"=1'–0"



WALL SECTION	02
NEW ALUMINUM ENTRANCE DOOR	3/4"=1'–0"



EXISTING WALL SECTION	01
FOR REFERENCE	3/4"=1'–0"

CASEWORK GENERAL NOTES

A. SOLID SURFACE BASIS OF DESIGN: CORIAN BY DUPONT. COLOR: GLACIER WHITE

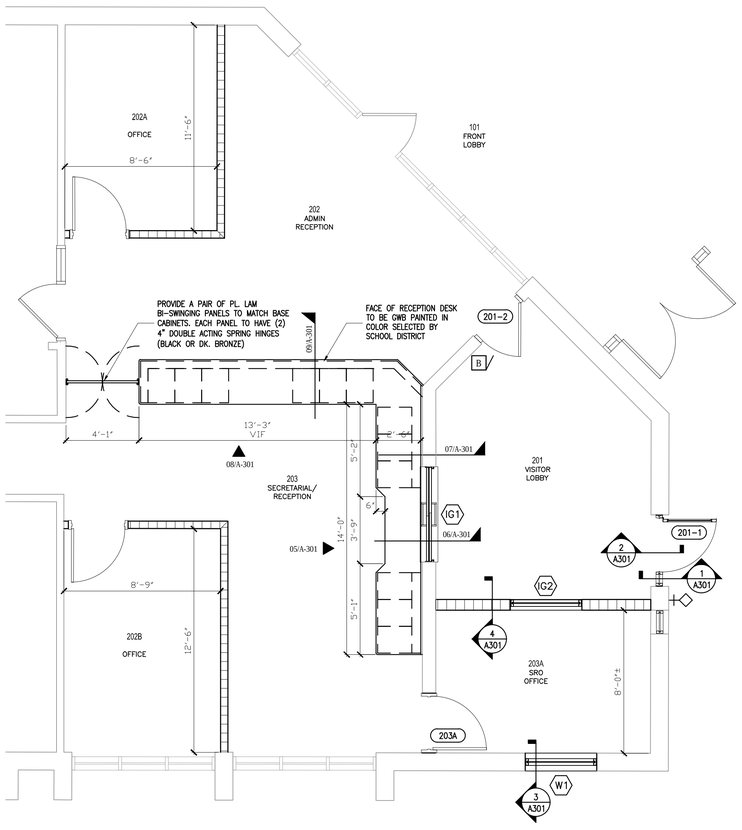
B. CABINET DOORS AND DRAWERS TO BE SLAB STYLE PROFILE TO MATCH EXISTING. GC TO PROVIDE COLOR SAMPLES FROM PRODUCT LINE SELECTED FOR OWNER TO SELECT.

C. PULLS: SOLID ALUMINUM OR STAINLESS–STEEL WIRE PULLS, FASTENED FROM BACK WITH TWO SCREWS. FOR SLIDING DOORS, PROVIDE RECESSED STAINLESS STEEL FLUSH PULLS. PROVIDE TWO PULLS FOR DRAWERS MORE THAN 24 INCHES WIDE. PULL DESIGN SHALL COMPLY WITH AMERICANS WITH DISABILITY ACT (ADA).

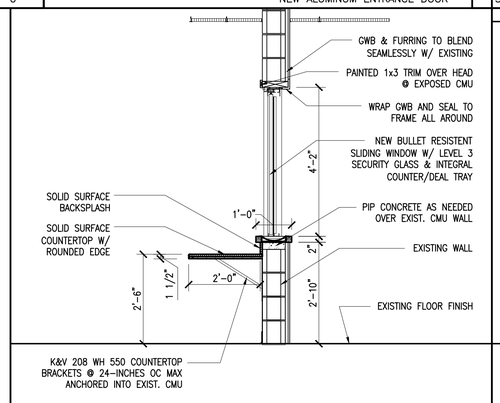
D. PULLS: SOLID ALUMINUM OR STAINLESS–STEEL WIRE PULLS, FASTENED FROM BACK WITH TWO SCREWS. FOR SLIDING DOORS, PROVIDE RECESSED STAINLESS STEEL FLUSH PULLS. PROVIDE TWO PULLS FOR DRAWERS MORE THAN 24 INCHES WIDE. PULL DESIGN SHALL COMPLY WITH AMERICANS WITH DISABILITY ACT (ADA).

E. CONCEALED HINGES: BLUM 120 W/ PLATE CLIP–ON SELF CLOSING

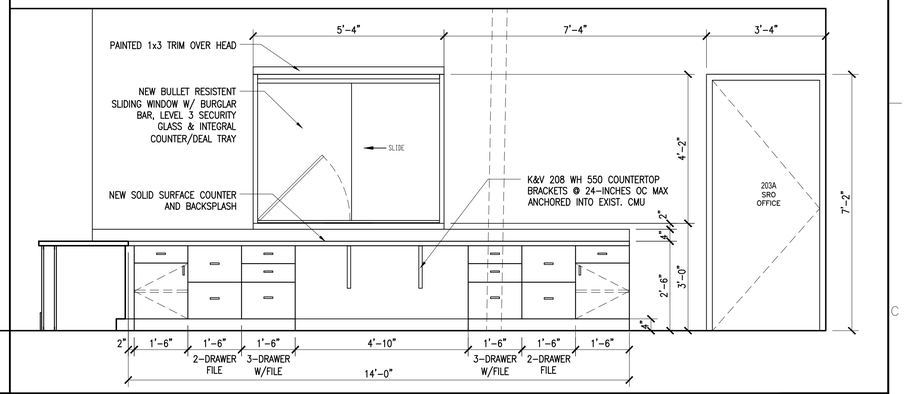
F. DRAWER SLIDES: KV 100LB CAPACITY FULL EXTENSION



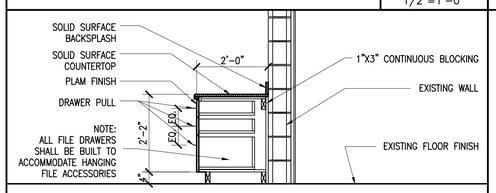
ANNOTATED PLAN	10
	1/4"=1'–0"



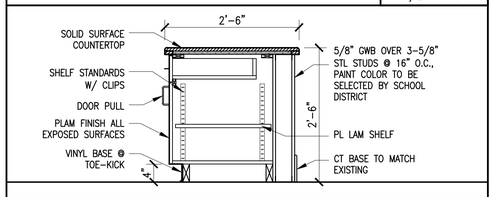
CASEWORK SECTION	06
	1/2"=1'–0"



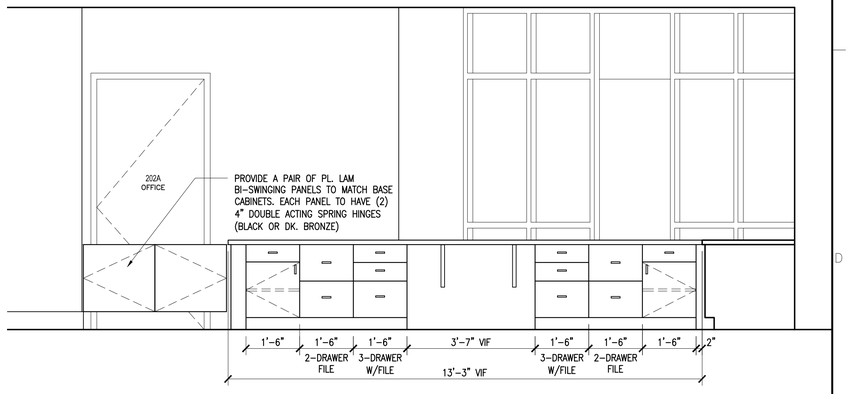
CASEWORK ELEVATION	05
	1/2"=1'–0"



CASEWORK SECTION	07
	1/2"=1'–0"



CASEWORK SECTION	09
	3/4"=1'–0"



CASEWORK ELEVATION	08
	1/2"=1'–0"

Song + Associates

Architecture ● Planning ● Interior Design

1545 Centrepark Drive North
West Palm Beach, Florida 33401

Telephone: 561-655-2423
Fax: 561-655-1482

AA - 0003165 IB - 0001095

Seal :

STATE OF FLORIDA
PERRY DOUGLASS
AR97112
REGISTERED ARCHITECT

Name: PERRY DOUGLASS
License # : AR 97112

Consultants :

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

Date : 09/19/2018
S+A Project No : 18033
Owner Project No :
Drawn By : PD/WS
Checked By : PD
Phase : CONSTRUCTION DOCUMENTS

Sheet Title :

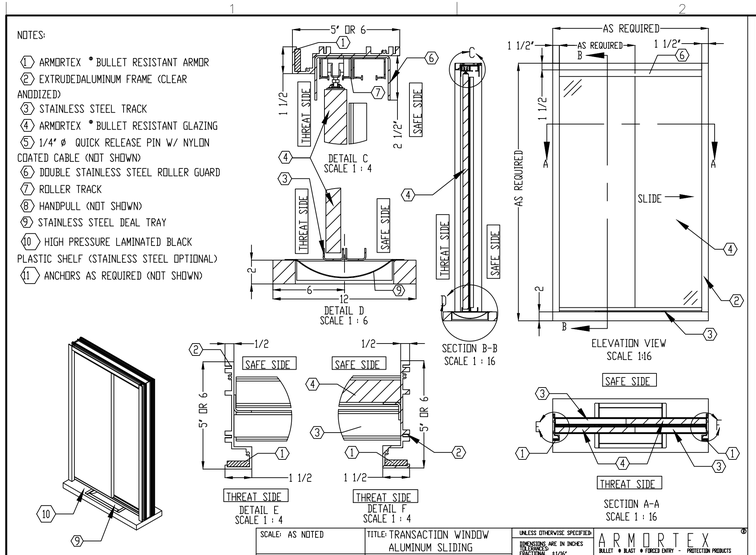
WALL SECTIONS AND DETAILS

Sheet # :

A-301

NOTES:

1. ARMORTEX ® BULLET RESISTANT ARMOR
2. EXTRUDEDALUMINUM FRAME (CLEAR ANODIZED)
3. STAINLESS STEEL TRACK
4. ARMORTEX ® BULLET RESISTANT GLAZING
5. 1/4" ø QUICK RELEASE PIN W/ NYLON COATED CABLE (NOT SHOWN)
6. DOUBLE STAINLESS STEEL ROLLER GUARD
7. ROLLER TRACK
8. HANDPULL (NOT SHOWN)
9. STAINLESS STEEL DEAL TRAY
10. HIGH PRESSURE LAMINATED BLACK PLASTIC SHELF (STAINLESS STEEL OPTIONAL)
11. ANCHORS AS REQUIRED (NOT SHOWN)

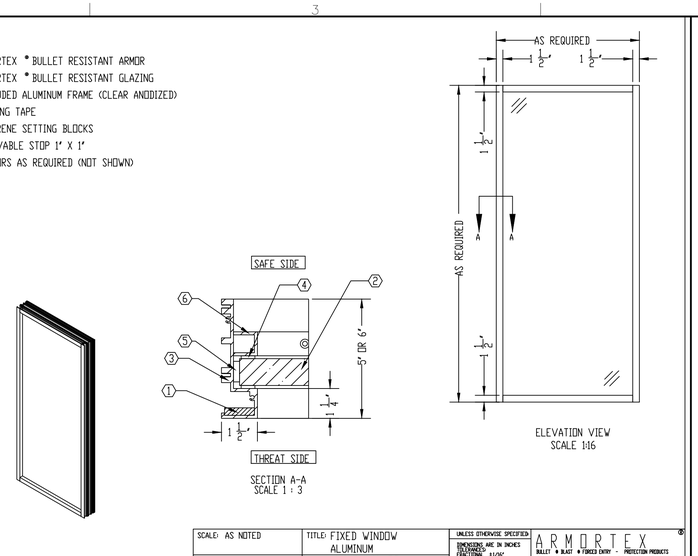


SCALE: AS NOTED	TITLE: TRANSACTION WINDOW ALUMINUM SLIDING	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES FRACTIONAL ±1/64" ANGULAR: ±2° TWO PLACE DECIMAL ± .05 THREE PLACE DECIMAL ± .005	ARMORTEX BULLET ® BLAST ® FORCED ENTRY - PROTECTION PRODUCTS 5926 CORRIDOR PKWY SCHERTZ, TX 78154 TEL: 210-661-8266 800-880-8266 FAX: 210-661-8388 www.armortex.com
DATE: 06-24-2015	MODEL: WI-TW-AL-SW		
DRAWN BY: M. FREEMAN	SHEET NUMBER: 1 OF 1		

IG1

NOTES:

1. ARMORTEX ® BULLET RESISTANT ARMOR
2. ARMORTEX ® BULLET RESISTANT GLAZING
3. EXTRUDED ALUMINUM FRAME (CLEAR ANODIZED)
4. GLAZING TAPE
5. NEOPRENE SETTING BLOCKS
6. REMOVABLE STOP 1" X 1"
7. ANCHORS AS REQUIRED (NOT SHOWN)

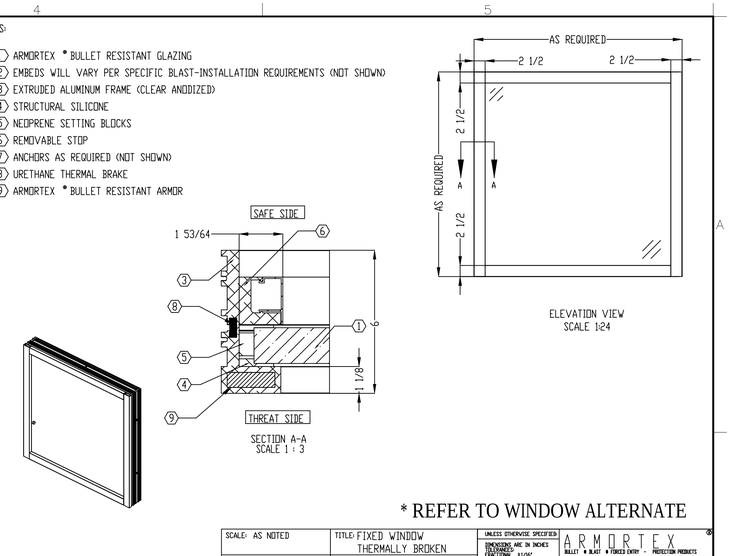


SCALE: AS NOTED	TITLE: FIXED WINDOW ALUMINUM	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES FRACTIONAL ±1/64" ANGULAR: ±2° TWO PLACE DECIMAL ± .05 THREE PLACE DECIMAL ± .005	ARMORTEX BULLET ® BLAST ® FORCED ENTRY - PROTECTION PRODUCTS 5926 CORRIDOR PKWY SCHERTZ, TX 78154 TEL: 210-661-8266 800-880-8266 FAX: 210-661-8388 www.armortex.com
DATE: 06-18-2015	MODEL: WI-FW-AL-RS		
DRAWN BY: M. FREEMAN	SHEET NUMBER: 1 OF 1		

IG2

NOTES:

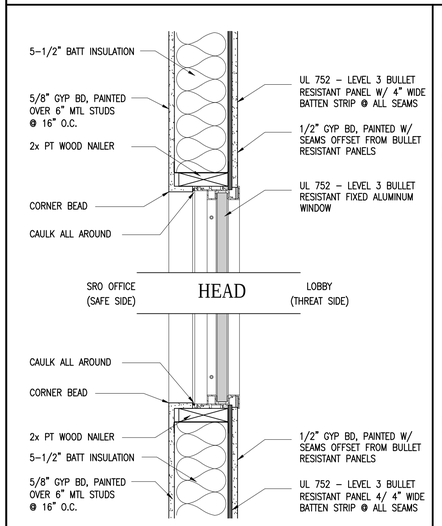
1. ARMORTEX ® BULLET RESISTANT GLAZING
2. EMBEDS WILL VARY PER SPECIFIC BLAST-INSTALLATION REQUIREMENTS (NOT SHOWN)
3. EXTRUDED ALUMINUM FRAME (CLEAR ANODIZED)
4. STRUCTURAL SILICONE
5. NEOPRENE SETTING BLOCKS
6. REMOVABLE STOP
7. ANCHORS AS REQUIRED (NOT SHOWN)
8. URETHANE THERMAL BRAKE
9. ARMORTEX ® BULLET RESISTANT ARMOR

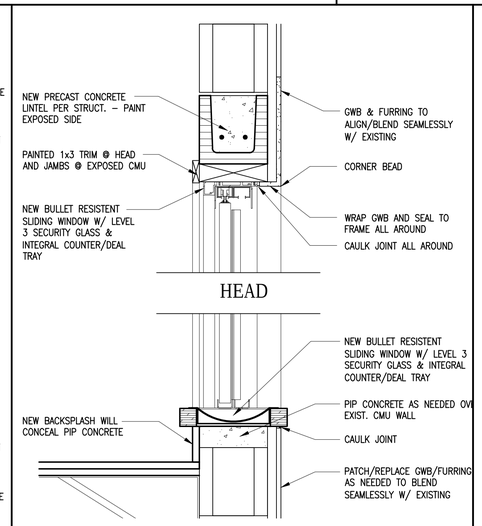


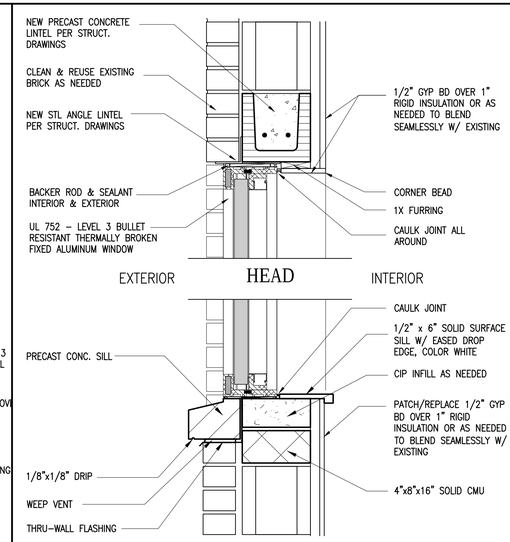
* REFER TO WINDOW ALTERNATE

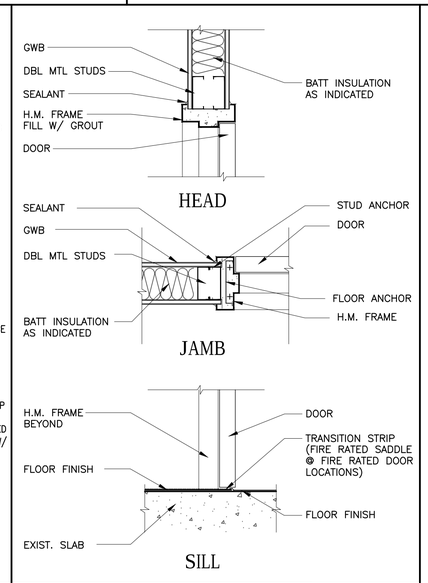
SCALE: AS NOTED	TITLE: FIXED WINDOW THERMALLY BROKEN	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES FRACTIONAL ±1/64" ANGULAR: ±2° TWO PLACE DECIMAL ± .05 THREE PLACE DECIMAL ± .005	ARMORTEX BULLET ® BLAST ® FORCED ENTRY - PROTECTION PRODUCTS 5926 CORRIDOR PKWY SCHERTZ, TX 78154 TEL: 210-661-8266 800-880-8266 FAX: 210-661-8388 www.armortex.com
DATE: 06-22-2015	NOTE: WI-FW-AL-TB		
DRAWN BY: M. FREEMAN	SHEET NUMBER: 1 OF 1		

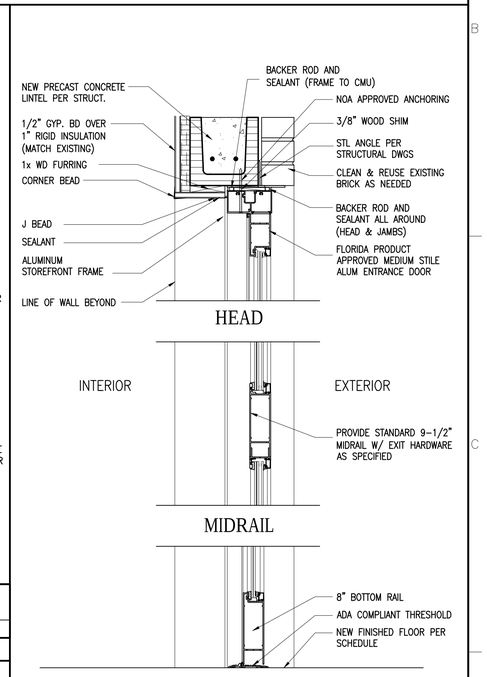
W1



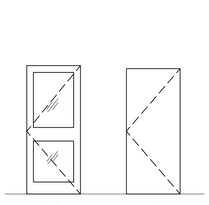


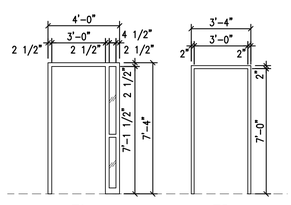


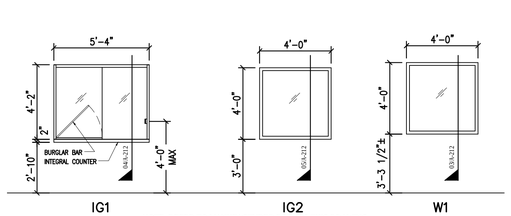




INTERIOR WINDOW DETAILS	05	TRANSACTION WINDOW DETAILS	04
SRO OFFICE – WINDOW TYPE IG2	1-1/2"=1'-0"	WINDOW TYPE IG1	1-1/2"=1'-0"
EXTERIOR WINDOW DETAILS	03	HM DOOR FRAME DETAILS	02
SRO OFFICE – WINDOW TYPE W1	1-1/2"=1'-0"		1-1/2"=1'-0"
ALUMINUM ENTRANCE DETAILS	01		
	1-1/2"=1'-0"		







NOTE: REFER TO MANUFACTURER DETAILS THIS DRAWING

DOOR & WINDOW SCHEDULE

BUILDING NO. 1 / FLOOR NO. 1 / BUILDING NAME

DOOR	DOORS			FRAMES			DETAILS			FIRE RATING	HDWR GROUP	GLAZING	STC RATING	REMARKS
	SIZE	MAT	TYPE	SIZE	MAT	TYPE	HEAD	JAMB	SILL					
201-1	3070	AL	FG		AL	F1	REFER TO SECTION DETAILS 01/A-212				01			1, 2, 3, 4
201-2	3070	EXST	EXST		EXST	EXST					02			3
202A	3070	WD	D1		HM	F2	REFER TO SECTION DETAILS 02/A-212				03			
203A	3070	WD	D1		HM	F2	REFER TO SECTION DETAILS 02/A-212				03			
203B	3070	EXST	EXST		EXST	EXST					03			

REMARKS

1. ½" TEMPERED GLASS, IMPACT RESISTANT.
2. PANIC HARDWARE TO BE PROVIDED
3. WIRE FOR REMOTE DOOR RELEASE
4. PROVIDE AIPHONE JO-DVF FLUSH MOUNT VIDEO INTERCOM W/ INTEGRAL ELECTRONIC DOOR LOCK @ 48" AFF. KEYPAD MONITOR TO BE LOCATED AT RECEPTION DESK.

NOTE: EXAMPLE DOOR SIZE DESIGNATION:
3870 = 3'-8" WIDE X 7'-0" HIGH DOOR LEAF SIZE

WINDOW ALTERNATE

ALT. A-1: FOR WINDOW TYPE W-1, PROVIDE PRICING TO PROVIDE CLEAR ANODIZED THERMALLY BROKEN ALUMINUM FRAME WINDOW, YKK AP SERIES YCW 700 OR APPROVED EQUIVALENT, WITH LARGE MISSILE IMPACT RESISTANT GLAZING IN LIEU OF BULLET RESISTANT SYSTEM SPECIFIED.

GLAZING:

1. THICKNESS: 0.060" (MINIMUM), BUT NOT LESS THAN REQUIRED TO MEET IMPACT REQUIREMENTS.
2. CLEAR INTERLAYER BETWEEN TWO 1/4" HEAT-STRENGTHENED GLASS, CLEAR INBOARD, CLEAR OUTBOARD

HARDWARE SCHEDULE

Hardware Group No. 01 — For use on mark/door #(s): 201-1

Qty	Description	Catalog Number	Finish	Mfr
3EA	HW HINGE	3CB1HW 4.5 X 4.5 NRP	630	IVE
1EA	POWER TRANSFER	EPT10 CON	689	VON
1EA	ELEC PANIC HARDWARE	QEL-98-NL-CON	626	VON
1EA	MORTISE CYLINDER	1000	626	C-R
1EA	RIM CYLINDER	3000	626	C-R
1EA	SURF. AUTO OPERATOR	9542 LONG2 MS	ANCLR	LCN
1EA	KEYSWITCH	8310-806K	BLK	LCN
2EA	ACTUATOR, WALL MOUNT	8310-856	630	LCN
1EA	THRESHOLD	654-MSLA-10	A	ZER
1EA	WIRE HARNESS	CON-12P		VON
1EA	WIRE HARNESS	CON-6P		VON
1EA	PUSHBUTTON	621AL	629	SCE
1EA	POWER SUPPLY	PS904 900-4RL	LGR	VON

Balance of Door Hardware to be supplied by Aluminum Door Supplier 084100 verify door function before installation – wiring diagram by hardware supplier

Hardware Group No. 02 — For use on mark/door #(s): 201-2

Qty	Description	Catalog Number	Finish	Mfr
3EA	HINGE	3CB1 4.5 X 4.5	652	IVE
1EA	CLASSROOM	CL3352 NZD	626	C-R
1EA	SURFACE CLOSER	4040XP	689	LCN
1EA	KICK PLATE	B400 10" X 2" LDW B-CS	630	IVE
1EA	WALL STOP	WS406/407CCV	630	IVE
3EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 03 — For use on mark/door #(s): 202A, 203A, 203B

Qty	Description	Catalog Number	Finish	Mfr
3EA	HINGE	3PB1 4.5 X 4.5	652	IVE
1EA	CLASSROOM	CL3355 NZD	626	C-R
1EA	WALL STOP	WS406/407CCV	630	IVE
3EA	SILENCER	SR64	GRY	IVE

Song + Associates

Architecture ● Planning ● Interior Design

1545 Centrepark Drive North
West Palm Beach, Florida 33401

Telephone: 561-655-2423
Fax: 561-655-1482

AA - 0003165 IB - 0001095

Seal :

STATE OF FLORIDA — PERRY DOUGLASS — AR97112 — REGISTERED ARCHITECT

Name: PERRY DOUGLASS

License # : AR 97112

Consultants :

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

Date : 09/19/2018
S+A Project No : 18033
Owner Project No :
Drawn By : PD/WS
Checked By : PD
Phase :
CONSTRUCTION DOCUMENTS

Sheet Title :

DOOR / WINDOW SCHEDULE AND DETAILS

Sheet # :

A-601

SPECIFICATIONS

15010 MECHANICAL REQUIREMENTS:

DO ALL WORK IN COMPLIANCE WITH ALL APPLICABLE CODES, LAWS AND ORDINANCES, THE STANDARD BUILDING CODE AND THE REGULATIONS OF THE LOCAL UTILITY COMPANIES. OBTAIN AND PAY FOR ANY AND ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES OF INSPECTIONS.

COOPERATE WITH OTHER TRADES AND CONTRACTORS AT JOB. PERFORM WORK IN SUCH MANNER AND AT SUCH TIMES AS NOT TO DELAY WORK OF OTHER TRADES.

OBTAIN MANUFACTURER'S DATA ON ALL EQUIPMENT, THE DIMENSIONS OF WHICH MAY AFFECT INSTALLATION. USE THIS DATA TO COORDINATE PROPER SERVICE CHARACTERISTICS, ENTRY LOCATIONS, ETC., AND TO INSURE MINIMUM CLEARANCES ARE MAINTAINED.

WORKMAN SHALL BE EXPERIENCED IN THEIR RESPECTIVE TRADE. WORKMANSHIP OF INSTALLED WORK SHALL BE FIRST CLASS AND WILL BE SO JUDGED. SUBSTANDARD WORK SHALL BE REMOVED AND REPLACED AT CONTRACTOR'S EXPENSE.

CONTRACTOR SHALL AND DOES HEREBY WARRANT ALL MATERIALS AND EQUIPMENT FURNISHED UNDER THIS SECTION TO BE FREE FROM DEFECTS AND TO FUNCTION OR OPERATE SATISFACTORILY FOR ONE YEAR AFTER FINAL ACCEPTANCE OF THE WORK, AND THAT ANY ITEMS NOT MEETING THIS REQUIREMENT WILL BE MADE GOOD BY HIM WITHOUT ANY COST TO THE OWNER.

PROVIDE ONLY NEW, STANDARD FIRST-GRADE MATERIALS THROUGHOUT, CONFORMING TO STANDARDS ESTABLISHED BY UNDERWRITER LABORATORIES INC., ANS SO MARKED AND LABELED, TOGETHER WITH MANUFACTURER'S BRAND OR TRADEMARK. ALL LIKE ITEMS SHALL BE OF ONE MANUFACTURER.

ALL WORK SHALL BE EXECUTED IN A MANNER THAT SHALL PRESENT A NEAT APPEARANCE UPON COMPLETION. CARE SHALL BE EXERCISED THAT ALL ITEMS ARE PLUMB, STRAIGHT AND LEVEL.

UPON COMPLETION OF WORK, ALL SYSTEMS SHALL BE TESTED, AND SHALL BE SHOWN TO BE IN PERFECT WORKING CONDITION IN ACCORDANCE WITH THE INTENT OF THE DRAWINGS.

ANY WALLS, CEILINGS, EQUIPMENT, ETC., DAMAGED BY THE CONTRACTOR IN CONSTRUCTION OF THIS PROJECT SHALL BE REPAIRED, RESTORED AND/OR REPLACED BY THE CONTRACTOR TO ITS ORIGINAL CONDITION, OR TO PERFORM ITS INTENDED FUNCTION, AT NO ADDITIONAL COST TO OWNER.

15891 DUCTWORK:

ALL DUCTWORK MATERIALS AND INSTALLATION SHALL CONFORM TO APPLICABLE STATE, COUNTY AND LOCAL CODES. DUCTWORK SHALL BE ALL NEW AND IN GOOD CONDITION.

DUCT DIMENSIONS NOTED ARE INSIDE DIMENSIONS AND DO NOT INCLUDE INSULATION OR LINER.

DUCTWORK SHALL BE INSTALLED TO AVOID CONFLICT WITH OTHER TRADES. ANY OFFSETS REQUIRED SHALL BE INSTALLED AT NO ADDITIONAL COST.

FABRICATE DUCTOWRK FROM SHEET METAL. DUCT SHALL BE INSULATED WITH 2-1/2" DUCT WRAP INSULATION. DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA LOW PRESSURE DUCTWORK STANDARDS.

15990 TEST AND BALANCE:

CONTRACTOR SHALL BE CERTIFIED BY NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB) OR BY ASSOCIATED AIR BALANCE COUNCIL (AABC).

TEST AND BALANCE ALL AIR SYSTEMS IN ACCORDANCE WITH AABC AND/OR NEBB REQUIREMENTS. ALL EQUIPMENT USED FOR TESTING SHALL BE IN PROPER WORKING ORDER.

THE CONTRACTOR SHALL REGULATE AND ADJUST ALL SPLITTERS, DEFLECTORS AND DAMPERS SO THAT THE INLET OR OUTLET SHALL DELIVER OR REMOVE THE REQUIRED NUMBER OF CUBIC FEET OF AIR PER MINUTE (CFM) AT THE RESPECTIVE OPENINGS.

ALL TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE CONSTRUCTION SUPERINTENDENT, OR HIS REPRESENTATIVE.

THE CONTRACTOR SHALL FURNISH ALL INSTRUMENTS, TESTING EQUIPMENT AND PERSONNEL THAT MAY BE REQUIRED FOR THE TESTS.

15991 VIBRATION AND NOISE:

PROVIDE VIBRATION ISOLATORS AND ACOUSTIC INSULATION AS REQUIRED TO ELIMINATE ANY OBJECTIONABLE NOISE OR VIBRATION.

GENERAL RENOVATION NOTES:

1. THE CONTRACTOR SHALL VISIT AND CAREFULLY EXAMINE THOSE PORTIONS OF THE BUILDING AND SITE AFFECTED BY THIS WORK BEFORE SUBMITTING PROPOSALS, SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT EXECUTION OF THE WORK. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED. IT IS TO BE UNDERSTOOD THAT UNFORESEEN CONDITIONS PROBABLY EXIST AND NEW WORK MAY NOT BE FIELD LOCATED EXACTLY AS SHOWN ON THE DRAWINGS. COOPERATION WITH OTHER TRADES IN EQUIPMENT ROUTING AS DETERMINED DURING CONSTRUCTION AND AS DIRECTED BY THE ARCHITECT/ENGINEER MAY BE NECESSARY AND IT IS INTENDED THAT SUCH DEVIATIONS SHALL BE CONSIDERED AS PART OF THIS CONTRACT. IT IS ALSO UNDERSTOOD THAT THE PLANS ARE NOT COMPLETELY TO SCALE. THIS CONTRACTOR IS TO FIELD VERIFY DIMENSIONS OF ALL SITE UTILITIES, ETC., PRIOR TO BID AND INCLUDE ANY DEVIATIONS IN THE CONTRACT.
2. ALL DEVICES AND EQUIPMENT NOT SHOWN AND IN AREAS OUTSIDE OF REMODELING SHALL REMAIN ACTIVE UNLESS OTHERWISE NOTED. INSTALL AS REQUIRED TO MAINTAIN CONTINUITY TO EXISTING DEVICES AND EQUIPMENT THAT REMAIN.
3. ALL PIPING SHALL BE CONCEALED, CONCEAL ALL PIPING ABOVE CEILING OR IN NEW WALLS. ALL PIPING SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO THE BUILDING WALLS/CEILINGS, ETC.
4. ALL EQUIPMENT AND MATERIAL REMOVED AND NOT REUSED SHALL BE TURNED OVER TO THE OWNER OR AT THE OWNERS REQUEST DISPOSED OF BY THE CONTRACTOR.
5. ALL GRILLES, VAV BOXES, HVAC EQUIPMENT, ETC. THAT ARE REMOVED SHALL BE REMOVED AS DIRECTED BY THE OWNER, AND CEILING OR WALL SHALL BE PATCHED TO MATCH EXISTING OR NEW FINISH. ALL PATCHES OR CEILING PLATES SHALL BE PATCHED OR PAINTED AS DIRECTED BY ARCHITECT.
6. ALL EXISTING HVAC EQUIPMENT IS NOT SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PRIOR TO BID, AND INCLUDE IN HIS BID THE REMOVAL OF ALL EQUIPMENT, PIPING AND DUCT WORK, ETC. THAT IS NOT BEING REUSED BACK TO ITS SOURCE.
7. READ SPECIFICATIONS ON THIS PAGE.
8. ALL CONCRETE, WALL PATCHING, CEILING REPAIR, AND OTHER GENERAL WORK REQUIRED FOR INSTALLING HVAC SYSTEMS AND TO REPAIR TO "LIKE NEW CONDITION" TO BE PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR. (COORDINATE WITH GENERAL CONTRACTOR).
9. PROVIDE AND INSTALL ANY ADDITIONAL HANGERS/SUPPORTS REQUIRED TO ACCOMMODATE ANY EQUIPMENT OR DUCTWORK RELOCATION.
10. ALL NEW AIR DISTRIBUTION DEVICES SHALL MATCH THE EXISTING. NEW AIR DISTRIBUTION DEVICE SIZES ARE INDICATED ON THE PLANS.
11. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION AND SIZE OF ALL EXISTING DUCTS BEING CONNECTED TO, MODIFIED OR EXTENDED. PROVIDE ALL DUCT MATERIAL AND LABOR REQUIRED TO ACCOMMODATE LOCATIONS OF ALL EQUIPMENT AND AIR DISTRIBUTION DEVICES SHOWN.
12. ALL NEW AND EXISTING DUCT PENETRATIONS ARE REQUIRED TO BE PROPERLY SEALED TO PREVENT THE PASSAGE OF SMOKE. COORDINATE ANY DUCT OR PARTITION OFFSETS OR ADJUSTMENTS REQUIRED TO ACCOMMODATE THE NEW RATING REQUIREMENTS BASED ON EXISTING CONDITIONS.

GENERAL NOTES:

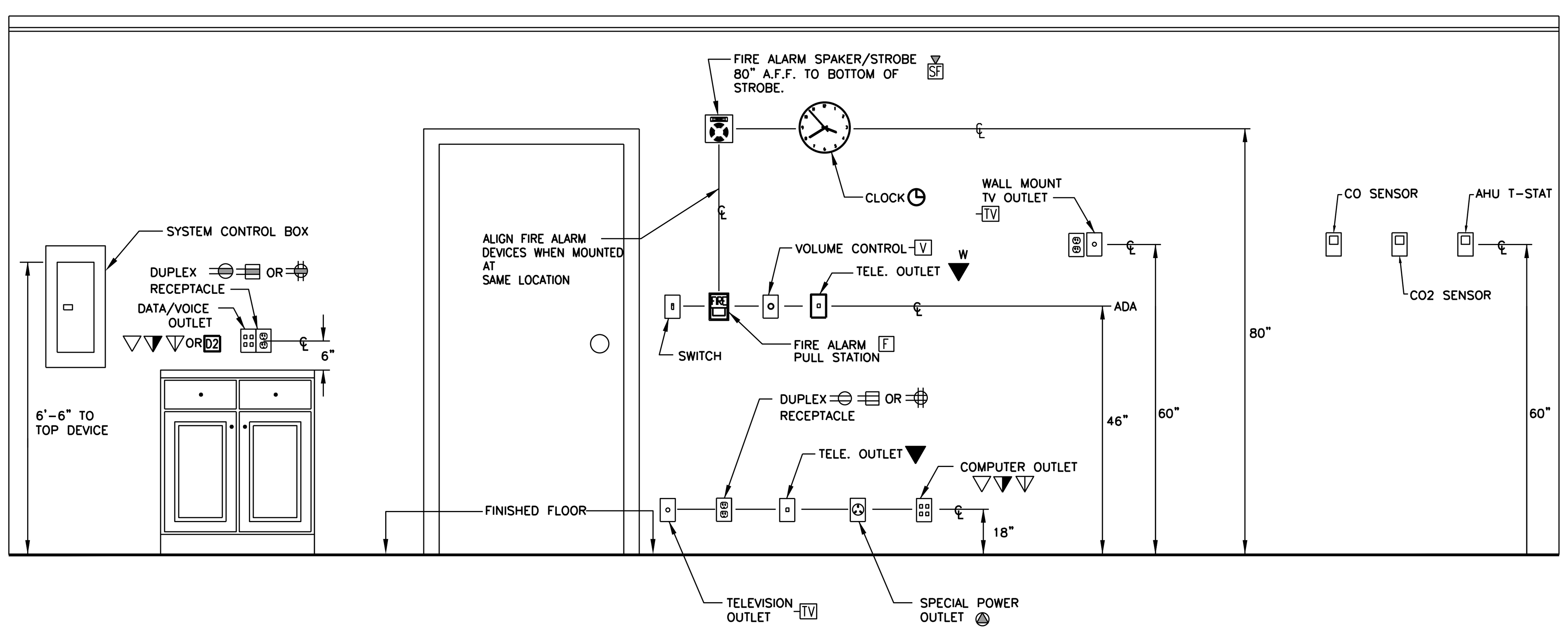
1. COORDINATE LOCATION OF ALL CEILING MOUNTED AIR DISTRIBUTION DEVICES WITH ARCHITECTURAL REFLECTED CEILING PLAN AND WORK OF ALL OTHER TRADES.
2. ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. VERIFY ALL REQUIREMENTS WITH EQUIPMENT SUPPLIED.
3. ALL EXTERIOR MECHANICAL EQUIPMENT AND THEIR FRAMES, APPURTENANCES, COMPONENTS, SUPPORTS AND ANCHORING DEVICES SHALL BE ANCHORED TO RESIST THE FORCES DUE TO WIND PRESSURE AS NOTED IN FLORIDA BUILDING CODE. COORDINATE WIND LOAD CRITERIA WITH STRUCTURAL AND ARCHITECTURAL DRAWINGS.
4. FLEXIBLE DUCT CONNECTORS AND RIGID DUCT RUNOUTS SERVING SINGLE DIFFUSER SHALL BE THE SAME SIZE AS DIFFUSER NECK.
5. ALL EQUIPMENT HOUSINGS AND COMPONENTS INSTALLED OUTDOORS OR WITHIN UNCONDITIONED VENTILATED SPACES THAT ARE EXPOSED TO THE ELEMENTS SHALL BE SUITABLE FOR SEACOAST APPLICATION. ANY APPLIED CORROSION RESISTANT MATERIALS SHALL BE FACTORY APPLIED.
6. PAINT INTERNAL DUCTWORK VISIBLE THROUGH DIFFUSERS, GRILLE OR LOUVER FACE FLAT BLACK.
7. DUCTWORK LAYOUTS INDICATED ON PLANS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO BE USED AS DUCT FABRICATION DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION EFFORTS BETWEEN TRADES AS OUTLINED IN THE SPECIFICATIONS.
8. EVERY PIECE OF MECHANICAL EQUIPMENT SHALL BE PROVIDED WITH AN ENGRAVED NAMEPLATE WITH 1" LETTERS INDICATING EQUIPMENT DESIGNATION. ANY EQUIPMENT INSTALLED WHERE CONCEALED ABOVE CEILING SHALL BE NOTED WITH CLEAR ADHESIVE LABEL AT NEAREST T-GRID OR ON ACCESS PANEL.
9. EVERY THERMOSTAT SHALL BE PROVIDED WITH AN ENGRAVED NAMEPLATE WITH 1/4" LETTERS INDICATING EQUIPMENT ASSOCIATION.
10. ALL DOORS TO INDIVIDUAL TOILETS AND JANITOR CLOSETS ARE TO BE UNDERCUT MINIMUM 1/2". REFER TO ARCHITECTURAL DOOR SCHEDULE.
11. ALL MANUAL DAMPERS SHALL BE TAGGED WITH A MINIMUM 12" LONG PIECE OF FLUORESCENT TAPE TO AID IN VISIBILITY.
12. MOUNT SPACE TEMPERATURE OR OTHER SENSORS AT 60" A.F.F. TO THE CENTER IN PUBLIC AREAS. MOUNT SPACE TEMPERATURE OR OTHER SENSORS AT 48" A.F.F. TO THE CENTER FOR ALL OTHER AREAS. COORDINATE STYLE AND LOCATION WITH A/E/O PRIOR TO PURCHASE.
13. ALL WALL MOUNTED SENSORS LOCATED IN PUBLIC SPACES SHALL BE PROVIDED WITH A LOCKABLE COVER. COVER SHALL BE TAMPER RESISTANT AND VENTED TO ALLOW FOR PROPER OPERATION. COORDINATE STYLE WITH A/E/O PRIOR TO PURCHASE.
14. ALL PIECES OF MECHANICAL EQUIPMENT REQUIRING ACCESS LOCATED ABOVE HARD CEILINGS SHALL BE PROVIDED WITH ACCESS PANELS SIZED PER DRAWINGS AND/OR MANUFACTURER'S RECOMMENDATIONS, WHICHEVER IS LARGER. COORDINATE STYLE/COLOR/LOCATIONS OF PANEL WITH A/E/O.
15. ANY REFRIGERANT PIPING RUN UNDER A CONCRETE SLAB OR IN AN ENCLOSED PUBLIC STAIRWELL SHALL BE INSTALLED IN A PIPE DUCT, EITHER APPROVED METAL OR APPROVED PVC.
16. THE TESTING, ADJUSTING, AND BALANCING (TAB) OF EQUIPMENT AND ALL AIR SYSTEMS SHALL BE DONE BY AN INDEPENDENT TAB CONTRACTOR IN COORDINATION WITH THE CX AGENT ON THE PROJECT. THE TAB CONTRACTOR SHALL BE EMPLOYED DIRECTLY BY THE GENERAL CONTRACTOR WHO SHALL BE SOLELY RESPONSIBLE FOR ITS PERFORMANCE AND THE TIMELY SCHEDULE OF IT OPERATION AND COMPLETION.
17. OA INTAKES SHALL BE A MINIMUM OF 10 FEET HORIZONTAL DISTANCE FROM ANY VENTS.
18. PROVIDE WITH 1/4" - 1/2' CORROSION-RESISTANT SCREENS ON ALL OUTDOOR AIR EXHAUST & INTAKE OPENINGS. EXCEPTION: CLOTHES DRYER EXHAUST.
19. ALL HVAC ASSOCIATED WIRING SHALL BE ROUTED IN CONDUIT. ANY EXPOSED CONDUIT SHALL BE ROUTED IN A CLEAN INCONSPICUOUS MANNER. CONDUIT SHALL BE PRIMED AND PAINTED TO MATCH ADJACENT SURFACE. CONDUIT LOCATED WITHIN RETURN AIR PLENUMS WILL BE PERMITTED TO BE PLENUM RATED.
20. FLEXIBLE DUCTWORK CAN ONLY BE RUN A MAXIMUM OF 6-FT FROM THE CEILING DEVICE. REMAINING LENGTH WILL NEED TO BE RIGID RUN OUT STYLE OF DUCTWORK.
21. MECHANICAL CONTRACTOR SHALL LIST IN WRITING TO THE BUILDING OWNER ALL ITEMS THAT ARE FOUND TO BE INOPERABLE, DAMAGED, OR BEYOND REPAIR. PROVIDE WITH LINE ITEM COST FOR REPAIR OR REPLACEMENT. CONTRACTOR SHALL NOT PROCEED WITH REPAIRS/REPLACEMENT UNTIL RECEIVING IN WRITING DIRECTION FROM THE BUILDING OWNER.
22. ANY PROPOSED MECHANICAL WORK MUST COMPLY WITH THE FULL REQUIREMENTS OF THE FBC 2017.
23. ALL EXISTING DUCTWORK THAT IS SHOWN TO REMAIN SHALL BE INSPECTED BY THE CONTRACTOR FOR AIR LEAKS, DAMAGED INSULATION, AND CONFIRM THAT EXISTING FLEXIBLE DUCT CONNECTIONS ARE PROPERLY SECURED.
24. ANY EXISTING/NEW DUCTWORK THAT IS SHOWN PENETRATING THROUGH ANY NEW/EXISTING FIRE RATED ASSEMBLY WILL BE REQUIRED TO HAVE PROVIDED DAMPERS COMPLYING WITH THE UL LISTED CONSTRUCTION MEMBER.
25. AREAS SHOWN AS BEING RETURN AIR PLENUMS SHALL HAVE ONLY PLENUM RATED MATERIALS LOCATED WITHIN SPACE. CONTRACTOR TO COORDINATE LOCATION WITH OTHER TRADES. IF COMBUSTIBLE MATERIALS ARE PRESENT THAN MEANS OF PROPER PROTECTION SHALL BE APPLIED IN COMPLIANCE WITH CODE.
26. PROVIDE HINGED/LOCKABLE CEILING ACCESS DOORS FOR ALL EQUIPMENT, DAMPERS, FANS, VALVES, ETC. LOCATED ABOVE HARD CEILINGS (NON-ACT). THE ACCESS DOORS SHALL BE SIZED FOR THE COMPLETE ACCESS(INCLUDING REMOVAL) OF EACH ITEM ABOVE THE CEILING.

H.V.A.C. LEGEND

SYMBOL	DESCRIPTION
☒	SUPPLY DIFFUSER
	SUPPLY PLAQUE DIFFUSER
	RETURN AND/OR TRANSFER AIR GRILLE
☒	EXHAUST AIR GRILLE
X/X	RIGID DUCTWORK (WIDTH/DEPTH)
	ELBOW WITH TURNING VANES
	MANUAL SPLITTER DAMPER
	FLEXIBLE DUCT WITH SPIN-IN FITTING AND MANUAL VOLUME DAMPER
	MANUAL VOLUME DAMPER
FD ●——	FIRE DAMPER
BDD ●——	BACKDRAFT DAMPER
MVD ●——	MOTORIZED VOLUME DAMPER
SD ●——	SMOKE DAMPER
SD	DUCT MOUNTED SMOKE DETECTOR
S CO	CARBON MONOXIDE SENSOR (MOUNT @36" A.F.F.)
S CO2	CARBON DIOXIDE SENSOR (MOUNT @60" A.F.F.)
T	THERMOSTAT
— CD —	CONDENSATE DRAIN LINE
	PVC CONDUIT
	POINT OF DISCONNECTION
	POINT OF CONNECTION

TEST AND BALANCE NOTES:

1. ALL OF THE EXISTING AIR DISTRIBUTION SYSTEMS ARE BEING REUSED WITH PORTIONS OF THE DUCTWORK, VAV TERMINALS, ETC. BEING RENOVATED. THE TEST AND BALANCE CONTRACTOR SHALL OBTAIN A SET OF THE ORIGINAL BUILDING DESIGN DRAWINGS FOR USE IN BALANCING THE SYSTEM. IF EXISTING PLANS ARE NOT AVAILABLE CONTRACTOR SHALL PERFORM A CURRENT TEST AND BALANCE PRIOR TO DEMOLITION, IN THE AREAS THAT ARE BEING RENOVATED, TO DETERMINE EXISTING CONDITIONS IN ORDER TO ASSIST IN NEW BALANCING THAT WILL BE REQUIRED BY CONTRACT DOCUMENTS.
2. UNLESS NOTED OTHERWISE, IT IS THE INTENTION OF THE DESIGN TO MAINTAIN ALL EXISTING AIRFLOWS THROUGH EXISTING AIR DISTRIBUTION DEVICES THAT ARE NOT EFFECTED BY THE RENOVATION.
3. ADJUST TOTAL SYSTEM AIRFLOWS AS REQUIRED TO ACHIEVE THE NEW AIRFLOWS FOR THE RENOVATED AREAS OF THE PLANS.
4. MAIN DUCTS ENTERING AND LEAVING THE RENOVATED AREAS CAN BE VERIFIED TO MAKE SURE TOTAL DESIGN FLOWS TO/FROM AREAS OUTSIDE OF RENOVATION ARE MAINTAINED. IT IS NOT REQUIRED TO BALANCE ALL EXISTING AIR DISTRIBUTION DEVICES OUTSIDE OF THE RENOVATION UNLESS REQUIRED TO BALANCE NEW TOTAL SYSTEM FLOWS.
5. ALL CONTROL SYSTEMS SHALL BE TESTED AND VERIFIED FOR OPERATION WITH EXISTING BUILDING AUTOMATION SYSTEM. REPAIR AND/OR REPLACE UNITS AS NEEDED IN ORDER TO PROVIDE A FULLY FUNCTIONAL SYSTEM UPON COMPLETION. ANY REQUIRED ACCESSORIES THAT MIGHT BE NEEDED SHALL BE PART OF THE RENOVATION BID CONTRACT.



NOTE

ALL DIMENSIONS ARE INDUSTRY RECOMMENDATIONS AND ARE OFFERED AS GUIDELINES. SEE DRAWINGS AND DETAILS FOR SPECIFIC DEVICE AND LOCATION MOUNTING HEIGHTS. FIELD CONDITIONS MAY REQUIRE ADJUSTMENTS DETERMINED BY THE THE CONTRACTOR ON SITE. APPROVAL OF ANY SUCH ADJUSTMENTS SHALL BE OBTAINED FROM A/E/O PRIOR TO INSTALLATION. WHERE DEVICES ARE WITHIN 6" PROXIMITY, THEY SHALL BE COORDINATED TO BE MOUNTED VERTICALLY ALIGNED. NOT ALL DEVICES ABOVE ARE REQUIRED. REFER TO PLANS.

1 TYPICAL SYSTEMS OUTLET MOUNTING HEIGHT
no scale

宋
Song + Associates
Architecture ● Planning ● Interior Design
1545 Centrepark Drive North
West Palm Beach, Florida 33401
Telephone: 561-655-2423
Fax: 561-655-1482
AA - 0003165 IB - 0001095

JASON L. SMITH, P.E.
600 S. ORLANDO AVE., SUITE #100
MAITLAND, FL 32751
FL. REG. NO.: PE57743

OCI ASSOCIATES, INC.
CONSULTING ENGINEERS
Ft. Pierce • West Palm Beach • Ft. Myers • Tampa • Washington D.C.
Orlando
600 South Orlando Ave.
Maitland, FL 32751
Phone: (407) 332-5110 Fax: (407) 332-7704
www.ociassociates.com
CERTIFICATE OF AUTHORIZATION #6261

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND
ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

Date : 09/19/2018
S+A Project No : 18033
Owner Project No :
Drawn By : VR
Checked By : JLS

Phase :
CONSTRUCTION DOCUMENTS

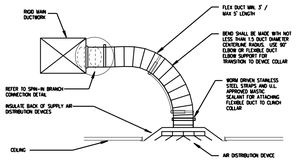
Sheet Title :

GENERAL NOTES - H.V.A.C.

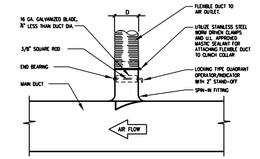
Sheet # :

M-100

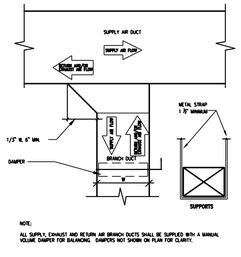
PRINT DATE:9/24/2018 4:15 PM SAVE DATE:7/18/2018 4:13 PM FILE LOCATION:J:\18 JOBS\18084 - IRSD PELICAN ISLAND ES SINGLE PT ENTRY\DWGS\18084M-100.DWG



1 M-201 **DIFFUSER AND FLEX DUCT DETAIL** NTS

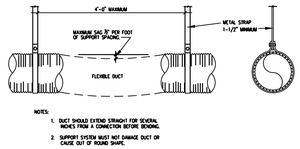


2 M-201 **SPIN-IN BRANCH CONNECTION TO SINGLE AIR OUTLET** NTS



NOTE:
ALL SUPPLY, EXHAUST AND RETURN AIR BRANCH DUCTS SHALL BE SUPPLIED WITH A MANUAL VOLUME DAMPER FOR BALANCING. DAMPERS NOT SHOWN ON PLAN FOR CLARITY.

4 M-201 **DAMPER AT DUCT BRANCH** NTS



NOTES:
1. DUCT SHOULD EXTEND STRAIGHT FOR SEVERAL INCHES FROM A CONNECTION BEFORE BENDING.
2. SUPPORT SYSTEM MUST NOT DAMAGE DUCT OR CAUSE OUT OF ROUND SHAPE.

5 M-201 **FLEX DUCT SUPPORT** NTS

H.V.A.C. LEGEND

- SUPPLY DIFFUSER
- RETURN AIR GRILLE
- EXHAUST AIR GRILLE
- X/X — RIGID DUCTWORK (WIDTH/DEPTH)
- ELBOW WITH TURNING VANES
- FLEXIBLE DUCT WITH SPIN-IN FITTING AND MANUAL VOLUME DAMPER
- MANUAL VOLUME DAMPER
- (SD) DUCT MOUNTED SMOKE DETECTOR
- (T) THERMOSTAT
- UC — DOOR UNDERCUT
- POINT OF DISCONNECTION
- POINT OF CONNECTION

H.V.A.C. KEYNOTES [X]:

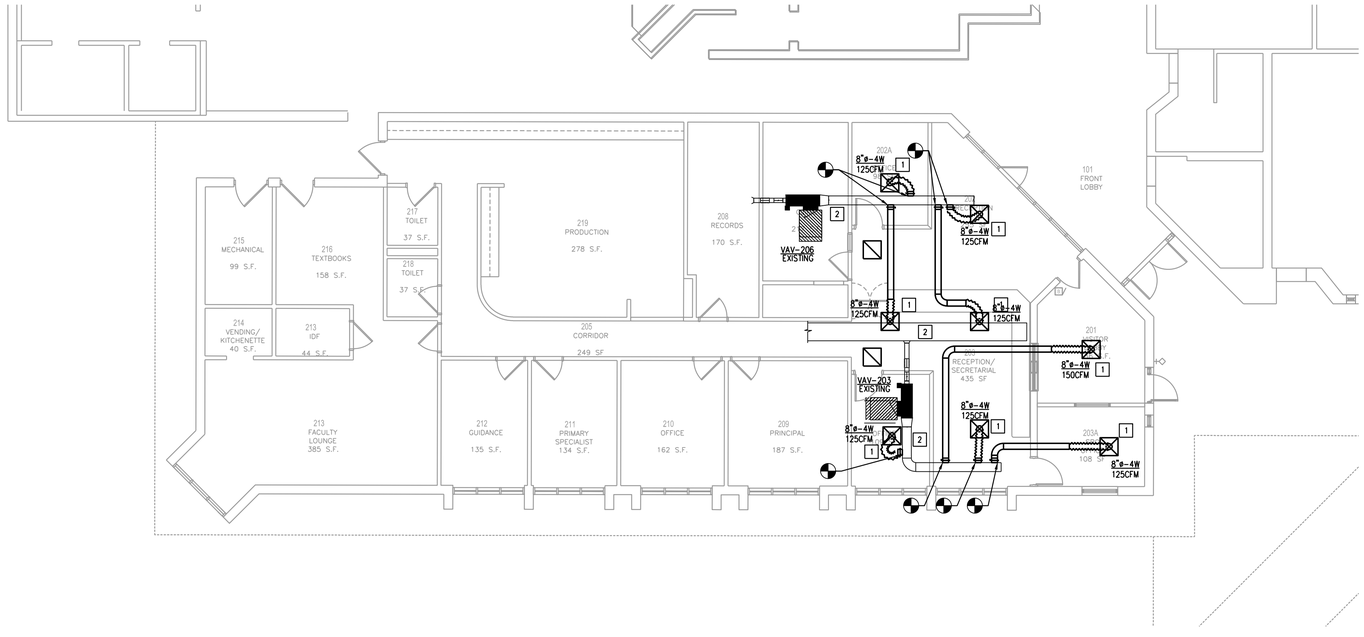
1. MATCH DIFFUSER TYPE AND COLOR TO EXISTING.
2. EXISTING DUCT TO REMAIN.

TEST AND BALANCE NOTES:

1. ALL OF THE EXISTING AIR DISTRIBUTION SYSTEMS ARE BEING REUSED WITH PORTIONS OF THE DUCTWORK, VAV TERMINALS, ETC. BEING RENOVATED. THE TEST AND BALANCE CONTRACTOR SHALL OBTAIN A SET OF THE ORIGINAL BUILDING DESIGN DRAWINGS FOR USE IN BALANCING THE SYSTEM.
2. UNLESS NOTED OTHERWISE, IT IS THE INTENTION OF THE DESIGN TO MAINTAIN ALL EXISTING AIRFLOWS THROUGH EXISTING AIR DISTRIBUTION DEVICES THAT ARE NOT EFFECTED BY THE RENOVATION.
3. ADJUST TOTAL SYSTEM AIRFLOWS AS REQUIRED TO ACHIEVE THE NEW AIRFLOWS FOR THE RENOVATED AREAS OF THE PLANS.
4. MAIN DUCTS ENTERING AND LEAVING THE RENOVATED AREAS CAN BE VERIFIED TO MAKE SURE TOTAL DESIGN FLOWS TO/FROM AREAS OUTSIDE OF RENOVATION ARE MAINTAINED. IT IS NOT REQUIRED TO BALANCE ALL EXISTING AIR DISTRIBUTION DEVICES OUTSIDE OF THE RENOVATION UNLESS REQUIRED TO BALANCE NEW TOTAL SYSTEM FLOWS.

GENERAL RENOVATION NOTES:

1. THE CONTRACTOR SHALL VISIT AND CAREFULLY EXAMINE THOSE PORTIONS OF THE BUILDING AND SITE AFFECTED BY THIS WORK BEFORE SUBMITTING PROPOSAL SO AS TO BECOME FAMILIAR WITH EXISTING WORK. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE BY DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED. IT IS TO BE UNDERSTOOD THAT UNFORESEEN CONDITIONS PROBABLY EXIST AND NEW WORK MAY NOT BE FIELD LOCATED EXACTLY AS SHOWN ON THE DRAWINGS. COOPERATION WITH OTHER TRADES IN EQUIPMENT ROUTING AS DETERMINED DURING CONSTRUCTION AND AS DIRECTED BY THE ARCHITECT/ENGINEER MAY BE NECESSARY AND IT IS INTENDED THAT SUCH DEVIATIONS SHALL BE CONSIDERED AS PART OF THIS CONTRACT. IT IS ALSO UNDERSTOOD THAT THE PLANS ARE NOT COMPLETELY TO SCALE. THIS CONTRACTOR IS TO FIELD VERIFY DIMENSIONS OF ALL EXISTING CONDITIONS, PRIOR TO BID AND INCLUDE ANY DEVIATIONS IN THE CONTRACT.
2. ALL DEVICES AND EQUIPMENT NOT SHOWN AND IN AREAS OUTSIDE OF REMODELING SHALL REMAIN ACTIVE UNLESS OTHERWISE NOTED. INSTALL AS REQUIRED TO MAINTAIN CONTINUITY TO EXISTING DEVICES AND EQUIPMENT THAT REMAIN.
3. ALL PIPING AND DUCTS SHALL BE CONCEALED ABOVE CEILINGS WHERE APPLICABLE. ALL PIPING SHALL BE INSTALLED PARALLEL AND PERPENDICULAR TO THE BUILDING WALLS.
4. ALL EQUIPMENT AND MATERIAL REMOVED AND NOT REUSED SHALL BE TURNED OVER TO THE OWNER OR AT THE OWNERS REQUEST DISPOSED OF BY THE CONTRACTOR.
5. ALL GRILLES, VAV BOXES, HVAC EQUIPMENT, ETC. THAT ARE REMOVED SHALL BE REMOVED AS DIRECTED BY THE OWNER, AND CEILING OR WALL SHALL BE PATCHED TO MATCH EXISTING OR NEW FINISH. ALL PATCHES OR CEILING PLATES SHALL BE PATCHED OR PAINTED AS DIRECTED BY ARCHITECT.
6. ALL EXISTING HVAC EQUIPMENT IS NOT SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PRIOR TO BID, AND INCLUDE IN HIS BID THE REMOVAL OF ALL EQUIPMENT, PIPING AND DUCT WORK, ETC. THAT IS NOT BEING REUSED BACK TO ITS SOURCE.
7. READ SPECIFICATIONS.
8. ALL CONCRETE, WALL PATCHING, CEILING REPAIR, AND OTHER GENERAL WORK REQUIRED FOR INSTALLING HVAC SYSTEMS AND TO REPAIR TO "LIKE NEW CONDITION" TO BE PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR. (COORDINATE WITH GENERAL CONTRACTOR).
9. PROVIDE AND INSTALL ANY ADDITIONAL HANGERS/SUPPORTS REQUIRED TO ACCOMMODATE ANY EQUIPMENT OR DUCTWORK RELOCATION.
10. IT IS THE INTENTION OF THE RENOVATION DESIGN TO REUSE THE EXISTING CONTROLS IN THEIR ENTIRETY. ALL EXISTING SENSORS, ACTUATORS AND EQUIPMENT IS TO BE RELOCATED / REUSED. ANY EXISTING CONTROL COMPONENTS THAT ARE EITHER MALFUNCTIONING OR ARE DAMAGED DURING THE RENOVATION SHALL BE REPLACED WITH NEW AND TIED INTO THE EXISTING SYSTEM. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONTROL SYSTEM PRIOR TO THE BID.



FLOOR PLAN - H.V.A.C. | 02 | 1/8"=1'-0"

Song + Associates
Architecture ● Planning ● Interior Design
1545 Centrepark Drive North
West Palm Beach, Florida 33401
Telephone: 561-655-2423
Fax: 561-655-1482
AA - 0003165 IB - 0001095

JASON L. SMITH, P.E.
600 S. ORLANDO AVE., SUITE #100
MAITLAND, FL 32751
FL. REG. NO.: PE57743

OCI ASSOCIATES, INC.
CONSULTING ENGINEERS
Ft. Pierce • West Palm Beach • Ft. Myers • Tampa • Washington D.C., Orlando
800 South Orlando Ave.
Maitland, FL 32751
Phone: (407) 333-5110 Fax: (407) 333-7704
www.ociassociates.com
CERTIFICATE OF AUTHORIZATION #6261

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

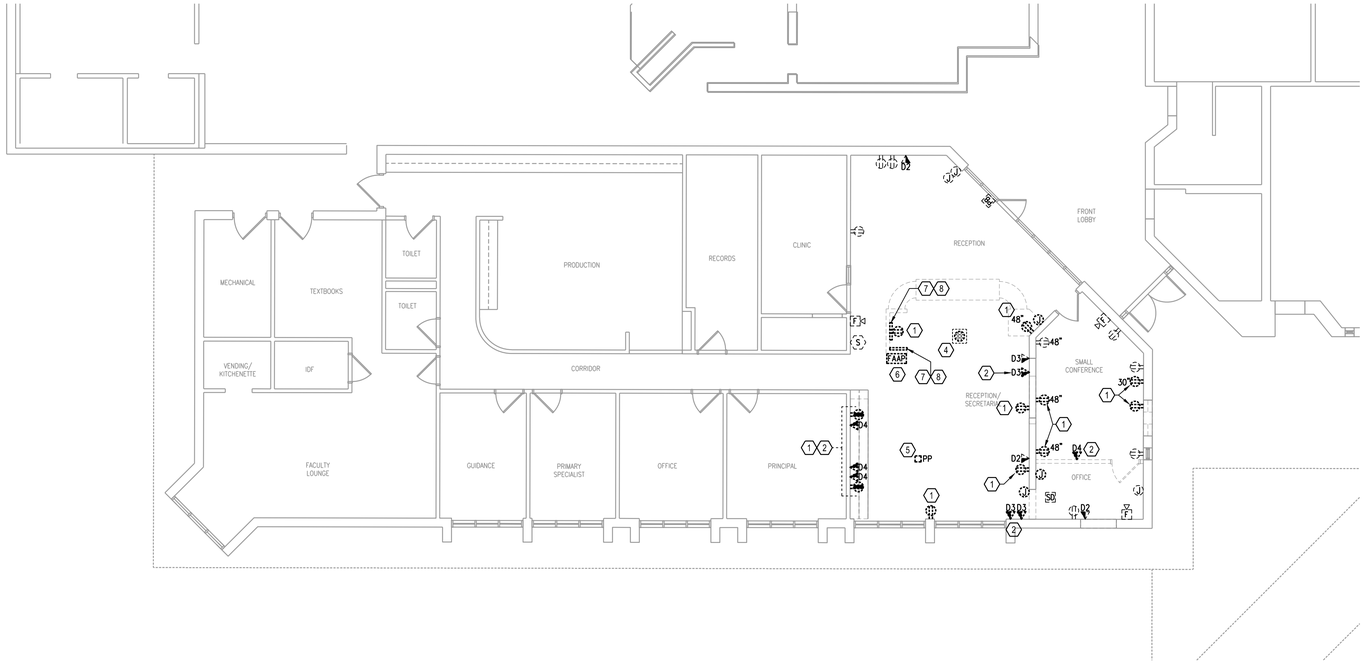
Date : 09/19/2018
S+A Project No : 18033
Owner Project No :
Drawn By : VR
Checked By : JLS

Phase :
CONSTRUCTION DOCUMENTS

Sheet Title :
FLOOR PLAN - H.V.A.C.

Sheet # :
M-201

PRINT DATE:9/24/2018 4:15 PM SAVE DATE:7/18/2018 4:13 PM FILE LOCATION:J:\18 JOBS\18064 - RSD PELICAN ISLAND ES SINGLE PT ENTRY\DWGS\18064M-201.DWG



GENERAL DEMOLITION NOTES:

1. THE CONTRACTOR SHALL VISIT AND CAREFULLY EXAMINE THOSE PORTIONS OF THE BUILDING AND SITE AFFECTED BY THIS WORK BEFORE SUBMITTING PROPOSAL SO AS TO BECOME FAMILIAR WITH EXISTING WORK. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE BY DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED. IT IS TO BE UNDERSTOOD THAT UNFORESEEN CONDITIONS PROBABLY EXIST AND NEW WORK MAY NOT BE FIELD LOCATED EXACTLY AS SHOWN ON THE DRAWINGS. COOPERATION WITH OTHER TRADES IN EQUIPMENT ROUTING AS DETERMINED DURING CONSTRUCTION AND AS DIRECTED BY THE ARCHITECT/ENGINEER MAY BE NECESSARY AND IT IS INTENDED THAT SUCH DEVIATIONS SHALL BE CONSIDERED AS PART OF THIS CONTRACT. IT IS ALSO UNDERSTOOD THAT THE PLANS ARE NOT COMPLETELY TO SCALE. THIS CONTRACTOR IS TO FIELD VERIFY DIMENSIONS OF ALL EXISTING CONDITIONS, PRIOR TO BID AND INCLUDE ANY DEVIATIONS IN THE CONTRACT.
2. ALL DEVICES AND EQUIPMENT NOT SHOWN AND IN AREAS OUTSIDE OF REMODELING SHALL REMAIN ACTIVE UNLESS OTHERWISE NOTED. INSTALL AS REQUIRED TO MAINTAIN CONTINUITY TO EXISTING DEVICES AND EQUIPMENT THAT REMAIN.
3. ALL EQUIPMENT AND MATERIAL REMOVED AND NOT REUSED SHALL BE TURNED OVER TO THE OWNER OR AT THE OWNERS REQUEST DISPOSED OF BY THE CONTRACTOR.
4. ALL EXISTING ELECTRICAL EQUIPMENT IS NOT SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PRIOR TO BID, AND INCLUDE IN HIS BID THE REMOVAL OF ALL EQUIPMENT, CONDUIT/WIRING ETC. THAT IS NOT BEING REUSED BACK TO ITS SOURCE.

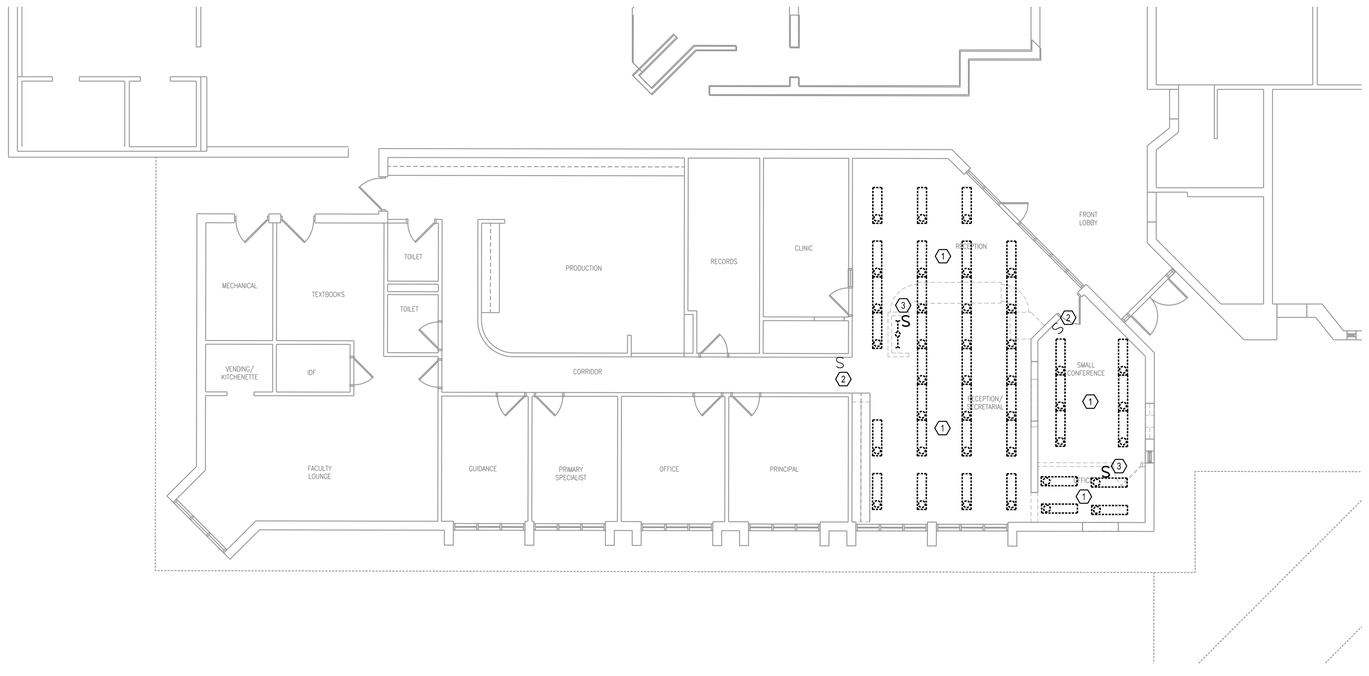
DEMO KEYNOTES (X):

1. REMOVE RECEPTACLE(S). RETAIN CIRCUITRY IN NEMA 1 JUNCTION BOX IN ACCESSIBLE CEILING FOR USE IN NEW WORK.
2. REMOVE DATA DEVICE(S) FROM WALLS BEING DEMOLISHED. RETAIN DATA DROPS TO BE USED IN NEW WORK SHOW ON E201
3. REMOVE DATA WIRES FROM THIS LOCATION AND RELOCATE TO NEW WORK SHOWN IN E201. BLANK UNUSED BOX
4. REMOVE EXISTING FLOOR RECEPTACLE. REMOVE WIRE BACK TO CLOSET JUNCTION POINT. FILL FLOOR BOX OPENING WITH CONCRETE AND FINISH FLUSH WITH EXISTING FLOOR.
5. REMOVE EXISTING POWER POLE. REMOVE ALL ASSOCIATED CONDUIT AND WIRE BACK TO ACCESSIBLE CEILING AND RETAIN CIRCUITRY IN NEMA 1 JUNCTION BOX FOR REUSE IN NEW WORK.
6. EXISTING FIRE ALARM ANNUNCIATOR PANEL TO BE RELOCATED. PROVIDE ALL NECESSARY ADDITIONAL CONDUIT, WIRE BOXES, ETC. REFER TO NEW WORK SHOWN ON E201.
7. CONTRACTOR TO REMOVE ALL CONDUCTORS AND CIRCUITS FROM EXISTING JUNCTION BOXES TO BE REMOVED. CONDUITS CAN BE TERMINATED IN FLOOR BOXES BELOW GRADE.
8. EXISTING JUNCTION BOXES TO BE REMOVED FROM KNEEWALL.

DEMO FLOOR PLAN - POWER

01

1/8"=1'-0"



DEMO KEYNOTES (X):

1. REMOVE ALL EXISTING LIGHTING SHOWN IN THIS AREA BACK TO FIXTURE CLOSEST TO SOURCE AND RETAIN IN NEMA 1 JUNCTION BOX IN ACCESSIBLE CEILING FOR REUSE IN NEW WORK.
2. EXISTING SWITCH(ES) TO REMAIN.
3. REMOVE EXISTING SWITCH, BACK BOX AND CONDUIT STUB INTO CEILING IN ITS ENTIRETY.

DEMO FLOOR PLAN - LIGHTING

02

1/8"=1'-0"

Song + Associates

Architecture ● Planning ● Interior Design

1545 Centrepark Drive North
West Palm Beach, Florida 33401

Telephone: 561-655-2423
Fax: 561-655-1482

AA - 0003165 IB - 0001095

KYRIAKOS G. LIATSOS
600 S. ORLANDO AVE., SUITE 100
MAITLAND, FL 32751
FL. REG. NO.: PE66402

OCI ASSOCIATES, INC.
Consulting Engineers
Ft. Pierce • West Palm Beach • Ft. Myers • Tampa • Washington D.C., Orlando
600 S. South Orlando Ave.
Maitland, FL 32751
Phone: (407) 333-5110 Fax: (407) 333-7704
www.ociassociates.com
CERTIFICATE OF AUTHORIZATION #6261

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

Date : 09/19/2018
S+A Project No : 18033
Owner Project No :
Drawn By : JB
Checked By : KGL

Phase :
CONSTRUCTION DOCUMENTS

Sheet Title :
DEMOLITION FLOOR PLAN - ELECTRICAL

Sheet # :
ED-201

PRINT DATE:9/24/2018 4:15 PM SAVE DATE:7/18/2018 1:53 PM FILE LOCATION:N:\18 JOBS\18084 - RSD PELICAN ISLAND ES SINGLE PT ENTRY\DWGS\18084ED-201.DWG

MASTER ELECTRICAL SYMBOLS LEGEND

NOTE: THESE ARE STANDARD SYMBOLS AND ALL MAY NOT APPEAR ON THE PROJECT DRAWINGS. REFER TO SPECIFICATIONS FOR MOUNTING HEIGHTS.

LIGHTING

NOTE:
(EM) DENOTES FIXTURE WITH BATTERY BALLAST

- FLUORESCENT FIXTURE – CEILING MOUNTED
- FLUORESCENT FIXTURE – CEILING MOUNTED, LIFE SAFETY BRANCH
- HID, FLUORESCENT OR INCANDESCENT FIXTURE – RECESSED
- UNIVERSAL MOUNTING EXIT LIGHTS, SINGLE AND DOUBLE FACED, ARROWS AS SHOWN ON FLOOR PLANS
- WALL MOUNTED EXIT LIGHTS, SINGLE FACED

SWITCHES

- $S_{a,b}$ LOWER CASE SUBSCRIPTS INDICATE OUTLET CONTROLLED
- S SINGLE POLE SWITCH (UNLESS NOTED BY SUBSCRIPT)
  - * (2) DOUBLE POLE
  - (3) WAY
  - (4) WAY
  - (D) DIMMER SWITCH (1500W UNLESS NOTED)
  - (T) SINGLE PHASE MOTOR STARTING SWITCH
  - (OS) OCCUPANCY SENSOR
  - (P) MULTI-BUTTON LIGHTING CONTROL PANEL
- OS OCCUPANCY SENSOR, LOW VOLTAGE – CEILING MOUNTED. OC SENSOR SHALL
- DS DAYLIGHT SENSOR, LOW VOLTAGE – CEILING MOUNTED

CONDUIT AND WIRE

- CONDUIT CONCEALED IN WALLS OR ABOVE CEILINGS
- CONDUIT CONCEALED UNDERGROUND OR IN SLAB
- CONDUIT HOMERUN – CONDUCTORS ARE #12 AWG CU UNLESS OTHERWISE INDICATED. (SEE SPECIFICATIONS FOR DERATING OF CONDUCTORS BASED ON CIRCUIT LENGTH AND CONDUCTORS IN A CONDUIT)
- CONDUIT EXPOSED ON WALLS OR CEILINGS
- EXISTING CONDUIT
- CONDUIT TURNED UP OR DOWN IN WALL

RECEPTACLES

- DUPLEX RECEPTACLE
  - * (G) DUPLEX GFCI RECEPTACLE
  - (IG) DUPLEX ISOLATED GROUND RECEPTACLE.
  - (EWC) ELECTRIC WATER COOLER, COORDINATE LOCATION WITH PLUMBING INSTALLER. LOCATE GFCI RECEPTACLE CENTERED UP UNDER COOLER.
  - (WPG) DUPLEX GFCI RECEPTACLE, WEATHERPROOF COVER
- DUPLEX RECEPTACLE, MOUNT 4" ABOVE COUNTER OR BACKSPLASH. MAXIMUM 48" TO CENTER.
- QUADRAPLEX RECEPTACLE IN TWO GANG BOX COVER.
- DUPLEX RECEPTACLE IN FLOOR BOX.
- QUADRAPLEX RECEPTACLE, MOUNT 4" ABOVE COUNTER OR BACKSPLASH. MAXIMUM 48" TO CENTER.

FIRE ALARM SYSTEM

NOTE:
(D) DENOTES DUCT MOUNTED
(C) DENOTES CEILING MOUNTED
(F) DENOTES FLUSH WALL MOUNTED
(UF) DENOTES UNDER FLOOR ACCESS
(WP) DENOTES WEATHERPROTECTED

- SD SMOKE DETECTOR – PHOTO
- F SIGNALING HORN
  - * (V) WITH VISUAL SIGNAL (STROBE, 75CD UNLESS NOTED)

INTERCOM SYSTEM

- IC INTERCOM CEILING SPEAKER
- IC INTERCOM SYSTEM RACEWAY
- ICP INTERCOM EQUIPMENT PANEL

SECURITY SYSTEM

- SECURITY VIDEO CAMERA
  - * (C) CEILING MOUNTED
  - (W) WALL MOUNTED
  - (PT) PAN AND TILT TYPE
  - (WP) WEATHERPROOF

TECHNOLOGY

- TECHNOLOGY OUTLET, FLUSH WALL MTD. 18" OC AFF UNLESS OTHERWISE NOTED
  NOTE: ALL FACEPLATES SHALL HAVE 6 SPACES FOR TERMINATION MODULES.
  (#)* PROVIDE COVERPLATE WITH NUMBER OF PORTS AS SHOWN.

ABBREVIATIONS:

A	AMPERES
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AL	ALUMINUM
ANNUN	ANNUNCIATOR
ARCH	ARCHITECT
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BFG	BELOW FINISHED GRADE
BLDG	BUILDING
C	CONDUIT
CAT	CATALOG
CKT	CIRCUIT
CU	COPPER
C/B	CIRCUIT BREAKER
C/T	CURRENT TRANSFORMERS
△	DELTA
DWG	DRAWING
FT	FEET
G	GROUND
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPT
IG	ISOLATED GROUND
KVA	KILOVOLT – AMPERES
KW	KILOWATTS
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCM	THOUSAND CIRCULAR MILS
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
NEC	NATIONAL ELECTRICAL CODE
NC	NORMALLY CLOSED
NL	NIGHT LIGHT CIRCUIT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
NIC	NOT IN CONTRACT
ø	PHASE
POS	POINT OF SALE
PVC	POLYVINYL CHLORIDE
P/T	POTENCIAL TRANSFORMER
R	RECESSED
SCR	SHORT CIRCUIT RATING
SURF	SURFACE
TEL	TELEPHONE
UG	UNDERGROUND
UNIV	UNIVERSAL
UNO	UNLESS NOTED OTHERWISE
V	VOLTS
W	WATTS
WP	WEATHERPROOF
WPG	WEATHERPROOF WITH GROUND FAULT INTERRUPT
XFMER	TRANSFORMER
Y	WYE

GENERAL NOTES:

1. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR A COMPLETE AND PROPERLY OPERATING ELECTRICAL SYSTEM WHETHER INDICATED OR NOT.
2. CODES AND STANDARDS: ALL ELECTRICAL WORK SHALL BE IN STRICT COMPLIANCE WITH OSHA REQUIREMENTS, THE 2008 NATIONAL ELECTRICAL CODE, THE FLORIDA ELECTRICAL CODE AND POWER COMPANY REQUIREMENTS AND STANDARDS. ALL MATERIALS SHALL BE NEW AND FREE FROM DEFECTS, AND SHALL BEAR THE UNDERWRITER'S LABEL FOR ITS INTENDED USE AND PURPOSE.
3. CONTRACTOR SHALL THOROUGHLY INVESTIGATE SITE BEFORE BIDDING. NO CHANGES WILL BE ALLOWED IN CONTRACT PRICE FOR WORK REQUIRED TO COMPLY WITH EXISTING CONDITIONS.
4. WORKMANSHIP SHALL MEET N.E.C.A. GUIDELINES AND NEC 110.12.
5. IF, THROUGH ERRORS OR OMISSIONS, THE INTENT OF THE ARCHITECT OR ENGINEER, WITH REGARD TO ANY DETAIL, IS NOT CLEAR, OR IS CAPABLE OF MORE THAN ONE INTERPRETATION, SUCH MATTERS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER IN WRITING BEFORE THE SUBMISSION OF BIDS, AND THE ARCHITECT OR ENGINEER SHALL MAKE THE NECESSARY CORRECTION OR EXPLANATION IN A WRITTEN FORMAL RESPONSE. OTHERWISE, NO EXTRA CHARGE WILL BE ALLOWED FOR THE WORK OR MATERIAL WHICH THE ARCHITECT OR ENGINEER MAY REQUIRE, PROVIDED THAT IT COMES WITHIN A REASONABLE INTERPRETATION OF THE DRAWINGS, SPECIFICATIONS, AND OVERALL INTENT OF THE CONTRACT DOCUMENTS.
6. THE PLANS AND SPECIFICATIONS ARE INTENDED AS A GENERAL DESCRIPTION OF THE WORK TO BE PERFORMED. ALL ITEMS NOT SPECIFICALLY MENTIONED OR SHOWN, BUT NECESSARY FOR THE COMPLETION OF THE INSTALLATION, SHALL BE FURNISHED AND INSTALLED AS PART OF THIS CONTRACT, BY THE SUB-CONTRACTOR. THIS SUB-CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE MECHANICAL, ARCHITECTURAL, PLUMBING, STRUCTURAL, AND ELECTRICAL PLANS PRIOR TO SUBMITTING HIS FINAL BID. NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO THE CONTRACTOR'S FAILURE TO FAMILIARIZE HIMSELF WITH THE PLANS AND HAVE ALL ITEMS OF WORK CLEARLY UNDERSTOOD AND ITEMIZED IN HIS BID PROPOSAL.
7. WHERE CONDUIT IS REQUIRED BELOW GRADE, IT SHALL BE SCHEDULE 40 PVC. PROVIDE NYLON PULL CORDS IN ALL EMPTY CONDUITS. SIZE CONDUIT PER N.E.C. FOR ENCLOSED WIRING.
8. WHERE CONDUIT IS REQUIRED WITHIN THE BUILDING, IT SHALL BE:
   1. WHERE EXPOSED TO PHYSICAL DAMAGE, RIGID OR INTERMEDIATE METAL CONDUIT.
   2. WHERE CONCEALED IN STRUCTURE OR CONCEALED BY FINISHES, EMT SHALL BE UTILIZED EXCEPT WHERE RIGID NONMETALLIC CONDUIT IS PERMITTED BY LOCAL AUTHORITY.
9. FITTING SHALL BE APPROVED AND U.L. LISTED FOR THE RACEWAY UTILIZED.
10. ALL CONDUCTORS SHALL BE COPPER (#12 MIN.), THHN/THWN INSULATION. COMPLY WITH ALL N.E.C. ARTICLES. ALL CONDUCTORS SHALL BE NEW, FREE FROM KINKS AND OTHER DEFECTS AFTER INSTALLATION HAS BEEN MADE.
11. PROVIDE ALL SUPPORTS FOR ELECTRICAL MATERIAL AND EQUIPMENT.
12. ALL PLATE FINISHES SHALL BE AS DESIGNATED BY OCPS.
13. PROVIDE COMMERCIAL GRADE 20 AMP, 2 POLE, 3 WIRE, GROUNDING TYPE DEVICES WITH BACK AND SIDE WIRING CAPABILITY, SUITABLE FOR SPLIT CIRCUIT OPERATION.
14. GROUND FAULT INTERRUPTER: PROVIDE "SPECIFICATION GRADE" DUPLEX RECEPTACLES, GROUND FAULT CIRCUIT INTERRUPTERS (GFI), FEED-THRU TYPE, CAPABLE OF PROTECTING CONNECTED DOWNSTREAM RECEPTACLES ON SINGLE CIRCUIT, GROUNDING TYPE UL RATED CLASS A, 20 AMPERES RATING, 120 VOLTS, WITH SOLID STATE GROUND FAULT SENSING AND SIGNALING, 5 MILLIAMPERES GROUND FAULT TRIP LEVEL; AND EQUIP WITH LOCAL TEST/RESET BUTTONS.
15. SHALL BE HEAVY DUTY SAFETY SWITCHES WITH 100,000A SHORT CIRCUIT RATING, AND SHALL BE LISTED IN ACCORDANCE WITH U.L. 98. THE COVER SHALL BE INTERLOCKED SO THAT THE DOOR CANNOT BE OPENED WITH THE HANDLE IN THE "ON" POSITION, EXCEPT BY THE INTENTIONAL OPERATION OF A CONCEALED RELEASE (DEFEATER) MECHANISM. PROVIDE FUSIBLE SWITCH FOR A/C UNITS AS PER U.L. LISTING AND LOCAL CODE REQUIREMENTS. PROVIDE DUAL ELEMENT, TIME DELAY FUSES IN ALL FUSIBLE SWITCHES.
16. A SEPARATE GROUNDING CONDUCTOR, SIZED IN ACCORDANCE WITH N.E.C. ARTICLE 250-122 SHALL BE PROVIDED IN THE CONDUIT WITH THE CIRCUIT CONDUCTORS FOR ALL LIGHTING, POWER AND FEEDER CIRCUITS.
17. ALL ELECTRICAL EQUIPMENT ENCLOSURES AND CONDUCTOR ENCLOSURES SHALL BE GROUNDED.
18. THE CONTRACTOR SHALL INSTALL HIS WORK TO JOB CONDITIONS AND MAKE SUCH CHANGES AS REQUIRED AND PERMITTED BY THE ARCHITECT, SUCH AS MOVING HIS WORK TO CLEAR BEAMS, JOISTS, AND ADJUSTING OTHER APPARATUS TO AVOID INTERFERENCES WITH WINDOWS AND OPENINGS; OR RAISING OR LOWERING HIS WORK TO PERMIT THE PASSING OF DUCTWORK OR THE WORK OF OTHER TRADES; ALL AS REQUIRED OR AS JOB CONDITIONS DICTATE, WITHOUT ANY ADDITIONAL COSTS TO THE OWNER OR THE CONTRACT PRICE.
19. EXAMINE AREAS AND CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED AND PRODUCTS ARE TO BE INSTALLED AND NOTIFY ARCHITECT IN WRITING OF CONDITIONS DETRIMENTAL TO PROPER AND TIMELY COMPLETION OF THE WORK. DO NOT PROCEED WITH THE WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN A MANNER ACCEPTABLE TO THE INSTALLER.
20. DO NOT ALLOW OR CAUSE ANY OF THE WORK OF THIS DIVISION, OR CAUSE OTHER DIVISIONS OF WORK TO BE COVERED UP, OR ENCLOSED, UNTIL IT HAS BEEN INSPECTED, TESTED AND APPROVED BY THE ARCHITECT AND BY ALL OTHER AUTHORITIES HAVING JURISDICTION.
21. ALL SWITCHES, OUTLETS, COVER PLATES, SIGNS, LIGHTING FIXTURES, AND ANY AND ALL OTHER ELECTRICAL EQUIPMENT PROVIDED SHALL BE THOROUGHLY CLEANED OF ALL DIRT, OIL, CONCRETE, ETC. ANY DENTS, SCRATCHES OR OTHER VISIBLE BLEMISHES SHALL BE CORRECTED AND THE APPEARANCE AND CORROSION RESISTANCE OF THE EQUIPMENT MADE "LIKE NEW", TO THE SATISFACTION OF THE ARCHITECT/ENGINEER.
22. PERFORM ALL ADJUSTMENTS NECESSARY TO ENSURE PROPER SYSTEM OPERATION IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS.
23. PROVIDE 120V RECEPTACLE CIRCUIT CONTROLS PER 2017 FBC ENERGY SECTION 405.6.1 & ASHRAE 90.1-2013 8.4.2 IN ALL PRIVATE OFFICES, CONFERENCE ROOMS, PRINTING/COPYING ROOMS, BREAKROOMS, CLASSROOMS, AND INDIVIDUAL WORKSTATIONS. RECEPTACLES DESIGNATED "CR" INDICATES A CONTROLLED RECEPTACLE. THESE RECEPTACLES SHALL BE PERMANENTLY MARKED TO DIFFERENTIATE THEM FROM UNCONTROLLED RECEPTACLES.
24. PROVIDE 120V RECEPTACLE CIRCUIT CONTROLS PER 2017 FBC ENERGY SECTION 405.6.1 & ASHRAE 90.1-2013 8.4.2 IN ALL PRIVATE OFFICES, CONFERENCE ROOMS, PRINTING/COPYING ROOMS, BREAKROOMS, CLASSROOMS, AND INDIVIDUAL WORKSTATIONS. RECEPTACLES DESIGNATED "CR" INDICATES A CONTROLLED RECEPTACLE. THESE RECEPTACLES SHALL BE PERMANENTLY MARKED TO DIFFERENTIATE THEM FROM UNCONTROLLED RECEPTACLES.

Applicable Codes and Standards :

FLORIDA BUILDING CODE, 2017 EDITION
ADA
FLORIDA BUILDING CODE, MECHANICAL 2017 EDITION
FLORIDA BUILDING CODE, PLUMBING 2017 EDITION
FLORIDA FIRE PREVENTION CODE, 5TH EDITION
FLORIDA BUILDING CODE, 2017 EDITION CHAPTER 13 – FLORIDA ENERGY EFFICIENCY FOR BUILDING CONSTRUCTION
NATIONAL FIRE PROTECTION ASSOCIATES (NFPA) STANDARDS
NFPA 70, 2014 EDITION
NFPA 72, 2014 EDITION

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	TOTAL	LAMPS			VOLTAGE	MOUNTING	
A	2X2 LED LAY-IN FLAT PANEL FIXTURE, 0-10 V DIMMING	32	–	32	LED	120/277	RECESSED	FIDELUX # FFP22-32-40K-UNV-D
B	1X4 LED LAY-IN FLAT PANEL FIXTURE, 0-10 V DIMMING	32	–	32	LED	120/277	RECESSED	FIDELUX # FFP14-32-40K-UNV-D
X1	EXIT LIGHT, SINGLE FACE, RED LETTERS	–	–	12	LED	120/277	SURFACE	COMPASS# CER

LIGHITNG FIXTURE SCHEDULE NOTES:

1. CONTRACTOR SHALL CAREFULLY COORDINATE THE LIGHTING FIXTURE TRIM TYPES WITH THE TYPE OF CEILING WHERE LIGHTING FIXTURES ARE TO BE INSTALLED MODIFY FIXTURE CATALOG NUMBER FROM THAT SHOWN ABOVE TO THAT REQUIRED TO COORDINATE WITH CEILING TYPE/CONSTRUCTION.
2. ALL BALLASTED FIXTURES TO HAVE IN-LINE FUSE AND FUSE HOLDER.

1 E-001 GENERAL NOTES AND LEGEND - ELECTRICAL
SCALE: AS NOTED

Song + Associates
Architecture ● Planning ● Interior Design
1545 Centrepark Drive North
West Palm Beach, Florida 33401
Telephone: 561-655-2423
Fax: 561-655-1482
AA - 0003165 IB - 0001095

KYRIAKOS G. LIATSOS
600 S. ORLANDO AVE., SUITE 100
MAITLAND, FL 32751
FL. REG. NO.: PE66402

OCI ASSOCIATES, INC.
CONSULTING ENGINEERS
FL Pierce ▪ West Palm Beach ▪ FL Myers ▪ Tampa ▪ Washington D.C.
Orlando
600 South Orlando Ave.
Maitland, FL 32751
Phone: (407) 333-5110 Fax: (407) 333-7704
www.ociassociates.com
CERTIFICATE OF AUTHORIZATION #0261

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

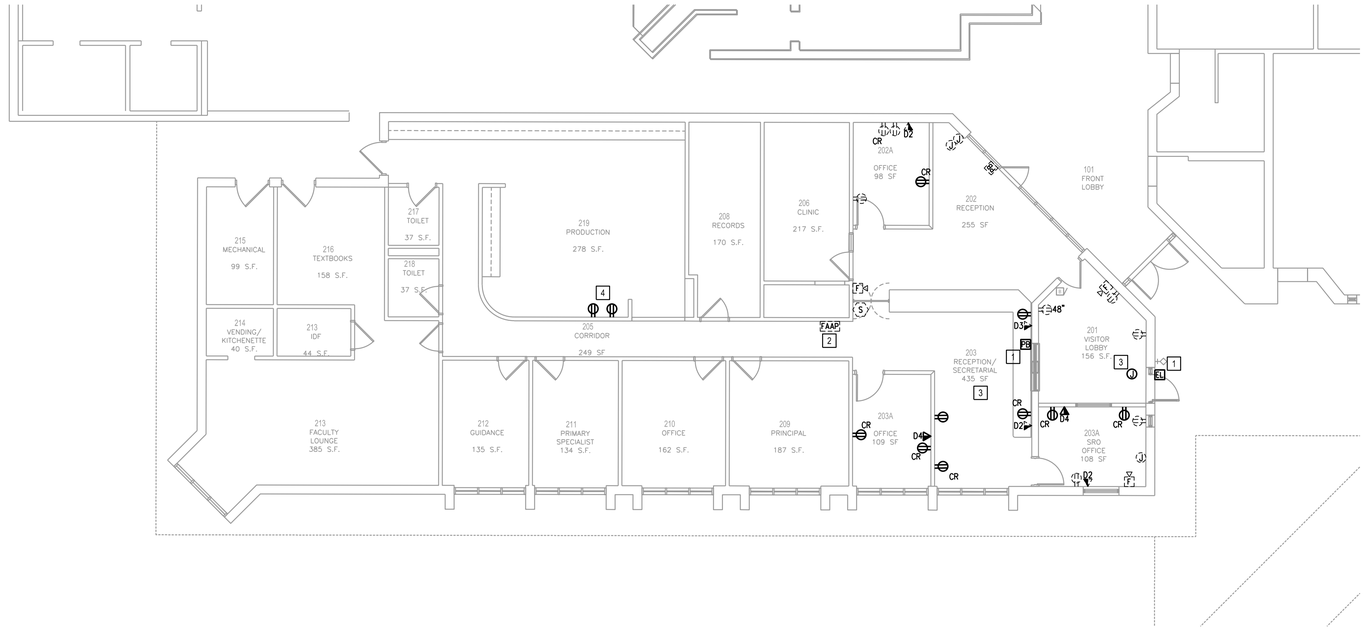
Date : 09/19/2018
S+A Project No : 18033
Owner Project No :
Drawn By : JB
Checked By : KGL

Phase :
CONSTRUCTION DOCUMENTS

Sheet Title :
GENERAL NOTES - ELECTRICAL

Sheet # :
E-100

PRINT DATE:9/24/2018 4:15 PM SAVE DATE:7/18/2018 2:13 PM FILE LOCATION:C:\18 JOBS\18004 - IRSD PELICAN ISLAND ES SINGLE PT ENTRY\DWGS\18004E-100.DWG



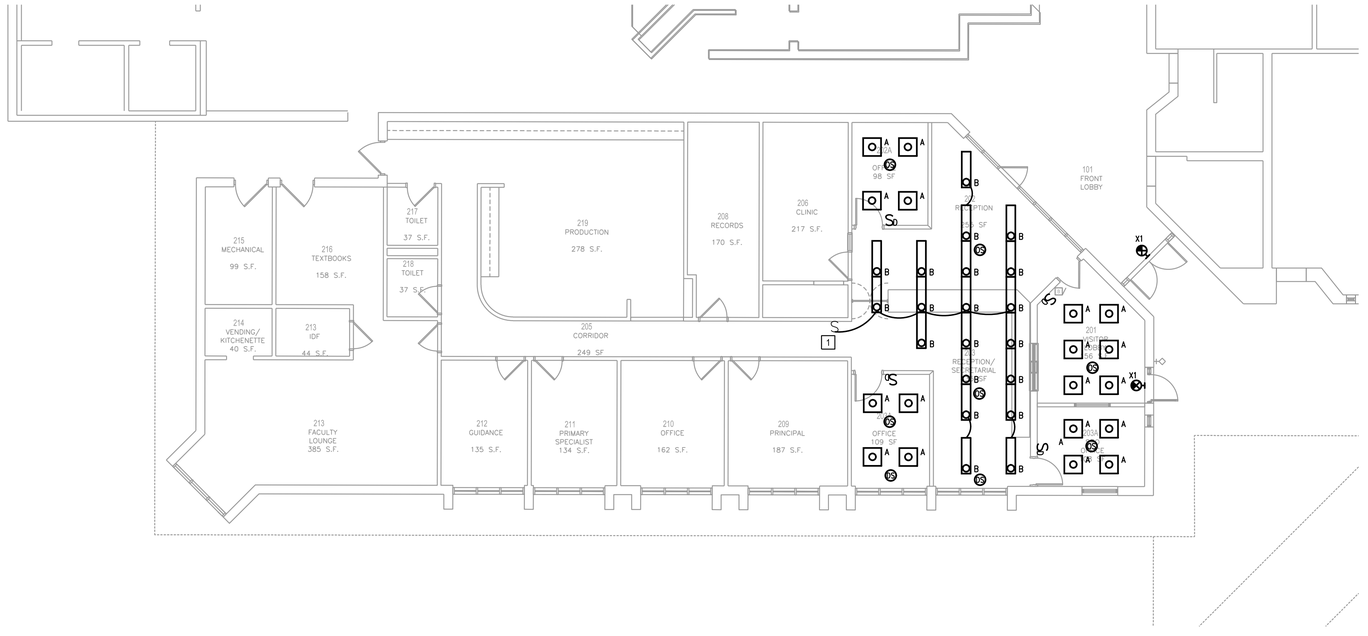
GENERAL POWER NOTES:

1. ALL RACEWAYS AND CABLE SHALL BE BE CONCEALED UNLESS NOTED OR APPROVED IN WRITING BY OWNER AND/OR ENGINEER. ALL CONDUIT ROUTING SHOWN IS DIAGRAMMATICAL AND MAY NOT REPRESENT BEST POSSIBLE ROUTE.
2. DASHED-IN OCCUPANCY SENSORS SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL UTILIZE SAME OCCUPANCY SENSOR SHOWN ON THE LIGHTING PLANS FOR AUTOMATIC RECEPTACLE CONTROL. REFER TO DETAIL 10 ON ELECTRICAL SHEET E5.03 FOR MORE INFORMATION. TYPICAL ALL LOCATIONS THIS SHEET.

POWER KEYNOTES [X]:

1. PROVIDE AIRPHONE HANDS FREE VIDEO INTERCOM, JOS-IMD MASTER CONTROL STATION AND JOS-DUF VIDEO DOOR STATION. PROVIDE (1) 2 CONDUCTOR CABLE AS REQUIRED BETWEEN 2 UNITS.
2. FIRE ALARM ANNUNCIATOR RELOCATED. SEE DEMO DRAWINGS FOR DETAILS.
3. PROVIDE POWER TO ELECTRIC DOOR LOCK. PUSH BUTTON AT DESK TO OPEN LOCK.
4. PROVIDE POWER DROPS FOR COPIERS.

FLOOR PLAN - POWER | 01 | 1/8"=1'-0"



GENERAL LIGHTING NOTES:

1. ALL LIGHT SWITCHES SHALL BE 277V RATED UNLESS OTHERWISE NOTED.
2. COORDINATE EXACT LOCATION OF EACH LIGHT FIXTURE WITH MECHANICAL PIPING, CONDUIT, HVAC GILLES, ETC. FIELD ADJUST ANY LIGHT TO AVOID CONFLICT.
3. EXIT LIGHTS SHALL BE MOUNTED WITH BOTTOM OF FIXTURE AT 6" ABOVE DOOR HEADER IN ALL AREAS THAT PERMIT THIS PLACEMENT. ALL OTHERS MAY BE CEILING MOUNTED. CONNECT EXIT LIGHTS TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHING AND CONTROLS.
4. MULTIPLE LIGHT SWITCHES, AT THE SAME LOCATION, SHALL BE GANGED TOGETHER UNDER ONE COVER PLATE. DIMMER SWITCHES SHALL BE INSTALLED IMMEDIATELY BELOW SWITCH LOCATIONS.
5. POWER PACK FOR OCCUPANCY SENSORS ARE NOT INDICATED ON PLANS. ELECTRICAL CONTRACTOR SHALL PROVIDE POWER PACKS PER OCCUPANCY SENSOR MANUFACTURER'S RECOMMENDATIONS.

LIGHITNG KEYNOTES [X]:

1. CONNECT ALL NEW LIGHTING IN RECEPTION/SECRETARIAL AREA TO EXISTING SWITCH.

FLOOR PLAN - LIGHTING | 02 | 1/8"=1'-0"

Song + Associates

Architecture ● Planning ● Interior Design

1545 Centrepark Drive North
West Palm Beach, Florida 33401
Telephone: 561-655-2423
Fax: 561-655-1482

AA - 0003165 IB - 0001095

KYRIAKOS G. LIATSOS
600 S. ORLANDO AVE., SUITE 100
MAITLAND, FL 32751
FL. REG. NO.: PE66402

OCI ASSOCIATES, INC.
CONSULTING ENGINEERS
FL Pierce • West Palm Beach • FL Myers • Tampa • Washington D.C., Orlando
600 South Orlando Ave.
Maitland, FL 32751
Phone: (407) 333-5110 Fax: (407) 333-7704
www.ociassociates.com
CERTIFICATE OF AUTHORIZATION #0261

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

Date : 09/19/2018
S+A Project No : 18033
Owner Project No :
Drawn By : JB
Checked By : KGL

Phase :
CONSTRUCTION DOCUMENTS

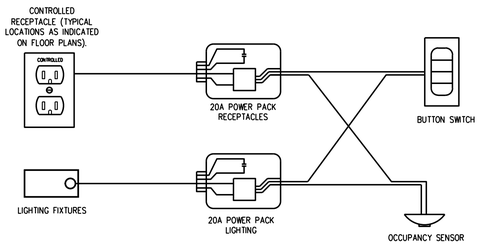
Sheet Title :

FLOOR PLAN - ELECTRICAL

Sheet # :

E-201

PRINT DATE:9/24/2018 4:15 PM SAVE DATE:9/24/2018 3:15 PM FILE LOCATION:C:\18 JOBS\18084 - #SD PELICAN ISLAND ES SINGLE PT ENTRY\DWGS\18084E-201.DWG

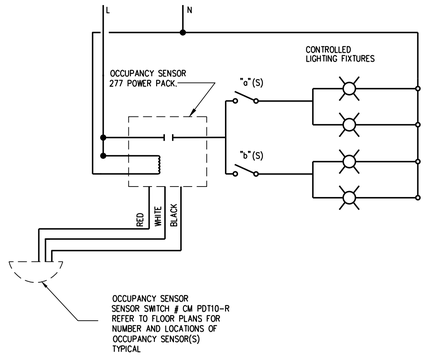


TYPICAL RECEPTACLE CONTROL WIRING DIAGRAM

1 / E-501

N.T.S.

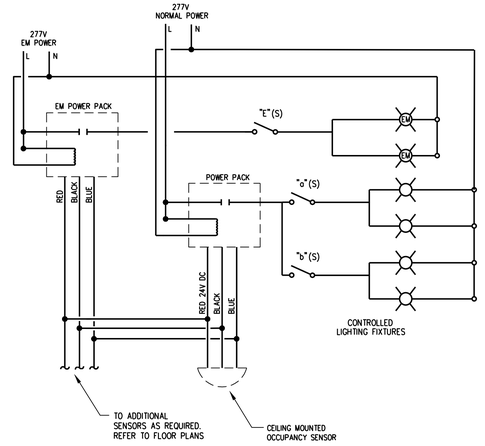
NOTE:
RECEPTACLE AUTOMATIC SHUTOFF CONTROLS DIAGRAM IS CONCEPTUAL AND DOES NOT LIST ALL REQUIRED COMPONENTS. BASIS OF DESIGN IS LEVITON IRC, WATTSTOPPER, SENSORSWITCH, OR APPROVED EQUAL. LIGHTING & RECEPTACLE CONTROLS SYSTEM SHALL BE COMPLIANT WITH ASHRAE 90.1 REQUIREMENTS. CONTRACTOR SHALL SUBMIT LIGHTING CONTROL MANUFACTURER SHOP DRAWINGS SHOWING ALL NECESSARY COMPONENTS FOR COMPLIANCE WITH SHUTOFF CONTROLS REQUIREMENTS.



TYPICAL "OS" RELAY DIAGRAM

1 / E5.05

N.T.S.



TYPICAL "OS" RELAY DIAGRAM

1 / E8-1

N.T.S.

Song + Associates

Architecture ● Planning ● Interior Design

1545 Centrepark Drive North
West Palm Beach, Florida 33401

Telephone: 561-655-2423
Fax: 561-655-1482

AA - 0003165 IB - 0001095

KYRIAKOS G. LIATSOS
600 S. ORLANDO AVE., SUITE 100
MAITLAND, FL 32751
FL. REG. NO.: PE66402

OCI ASSOCIATES, INC.
CONSULTING ENGINEERS
FL Pierce • West Palm Beach • FL Myers • Tampa • Washington D.C.
Orlando
600 South Orlando Ave.
Maitland, FL 32751
Phone: (407) 333-5110 Fax: (407) 333-7704
www.ociassociates.com
CERTIFICATE OF AUTHORIZATION #6261

THE SCHOOL DISTRICT OF INDIAN RIVER COUNTY
OFFICE OF FACILITIES & CONSTRUCTION

School District of Indian River County

SINGLE POINT OF ENTRY RENOVATION

PELICAN ISLAND
ELEMENTARY SCHOOL
1355 SCHUMANN DR.
SEBASTIAN, FL 32958

Revisions :

Date : 09/19/2018
S+A Project No : 18033
Owner Project No :
Drawn By : JB
Checked By : KGL

Phase :
CONSTRUCTION DOCUMENTS

Sheet Title :

DETAILS - ELECTRICAL

Sheet # :

E-501

PRINT DATE:9/24/2018 4:15 PM SAVE DATE:7/18/2018 4:14 PM FILE LOCATION:X:\18 JOBS\18084 - IRSD PELICAN ISLAND ES SINGLE PT ENTRY\DWGS\18084E-501.DWG