CITY OF TAMPA

Bob Buckhorn, Mayor **CONTRACT ADMINISTRATION DEPARTMENT**

Michael W. Chucran, Director

ADDENDUM 2

DATE: February 8, 2019

Contract 18-C-00040; New Tampa Recreation Center Addition

Bidders on the above referenced project are hereby notified that the following addendum is made to the Contract Documents. BIDS TO BE SUBMITTED SHALL CONFORM TO THIS NOTICE.

Item 1: Plans: Replace the Cover and sheets A2.3, A3.1, A4.1, A5.1, A5.2, A9.1 and A9.2 with the attached revised Cover and sheets A2.3, A3.1, A4.1, A5.1, A5.2, A9.1 and A9.2.

Item 2: Add to the Specifications the attached sections: Section 083326-Overhead Coiling – Service Doors, Section 102239 – Operable Panel Partitions, and Section 133419-Metal Building

Item 3: Specifications; Section 133420- Metal Building Systems Supplemental; Part 2 – Products; 2.1A.1, Replace the first sentence with the following: Basis of design is the Kirby Building Systems.

Item 4: Replace Specification Section 075520- Modified Bituminous Sheet Roofing with the attached Section 07550 –Modified Bitumen Membrane Roofing. No other roofing system will be considered for this project in accordance with the City's standardization program.

Item 5: Specifications; Section 087100 – Door Hardware: On page 087100-8, after 3.3 Hardware Schedule, A., 1, Delete the remainder of the page beginning with "Hardware Sets".

Item 6: Specifications; Section 087100 – Door Hardware: Replace pages 087100-9 to 087100-31 with the attached pages 087100-9 to 087100-11.

All other provisions of the Contract Documents and Specifications not in conflict with this Addendum shall remain in full force and effect. Questions are to be e-mailed to Contract Administration@tampagov.net.

Jim Greiner

Jim Greiner, P.E., Contract Management Supervisor

Addition To

New Tampa Recreation Center

17302 Commerce Park Blvd.
Tampa, FL. 33647

CONTRACT NO. 18-C-40

CONSTRUCTION DOCUMENTS

11-07-18

FGA PROJECT #18015

FleischmanGarcia

ARCHITECTURE · PLANNING · INTERIOR DESIGN

SAFETY HARBOR OFFICE
195 FOURTH AVENUE NORTH
SAFETY HARBOR, FLORIDA 34695
PHONE (727) 725-8880
FAX (727) 725-3900

TAMPA OFFICE
324 HYDE PARK AVENUE, SUITE 300
TAMPA, FLORIDA 33606
PHONE (813) 251-4400
FAX (813) 251-1994

SARASOTA OFFICE
5967 CATTLEMEN LANE, SUITE 6
SARASOTA, FLORIDA 34232
PHONE (941) 342-9293
FAX (941) 342-9253

REGISTRATION NUMBER AA C000123

CIVIL ENGINEER

AURORA CIVIL ENGINEERING

610 E. MORGAN STREET
BRANDON, FL. 33510

813-643-9907

STRUCTURAL ENGINEER

MASTER CONSULTING ENGINEERS

5523 WEST CYPRESS BLVD.
SUITE 200
TAMPA, FL. 33607

813-287-3600

MECHANICAL ENGINEER

ENGINEERING PROFESSIONALS, INC.

1720 WEST CLEVELAND STREET
SUITE E
TAMPA, FL. 33606

813-251-6848

ELECTRICAL ENGINEER

GENESIS ENGINEERING GROUP

2601 CATTLEMAN ROAD
SUITE 501
SARASOTA, FL. 34232
941-444-2189

LANDSCAPE ARCHITECT

EKISTICS DESIGN STUDIO

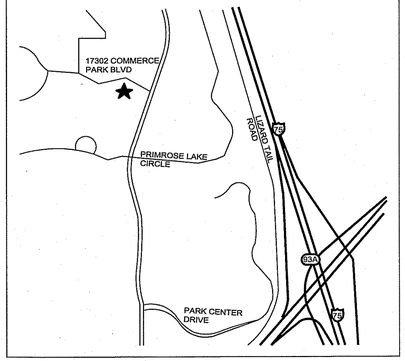
1202 WEST LINEBAUGH
TAMPA, FL. 33612

813-931-8040

TABLE OF CONTENTS

SITE LOCATION MAP

NTS

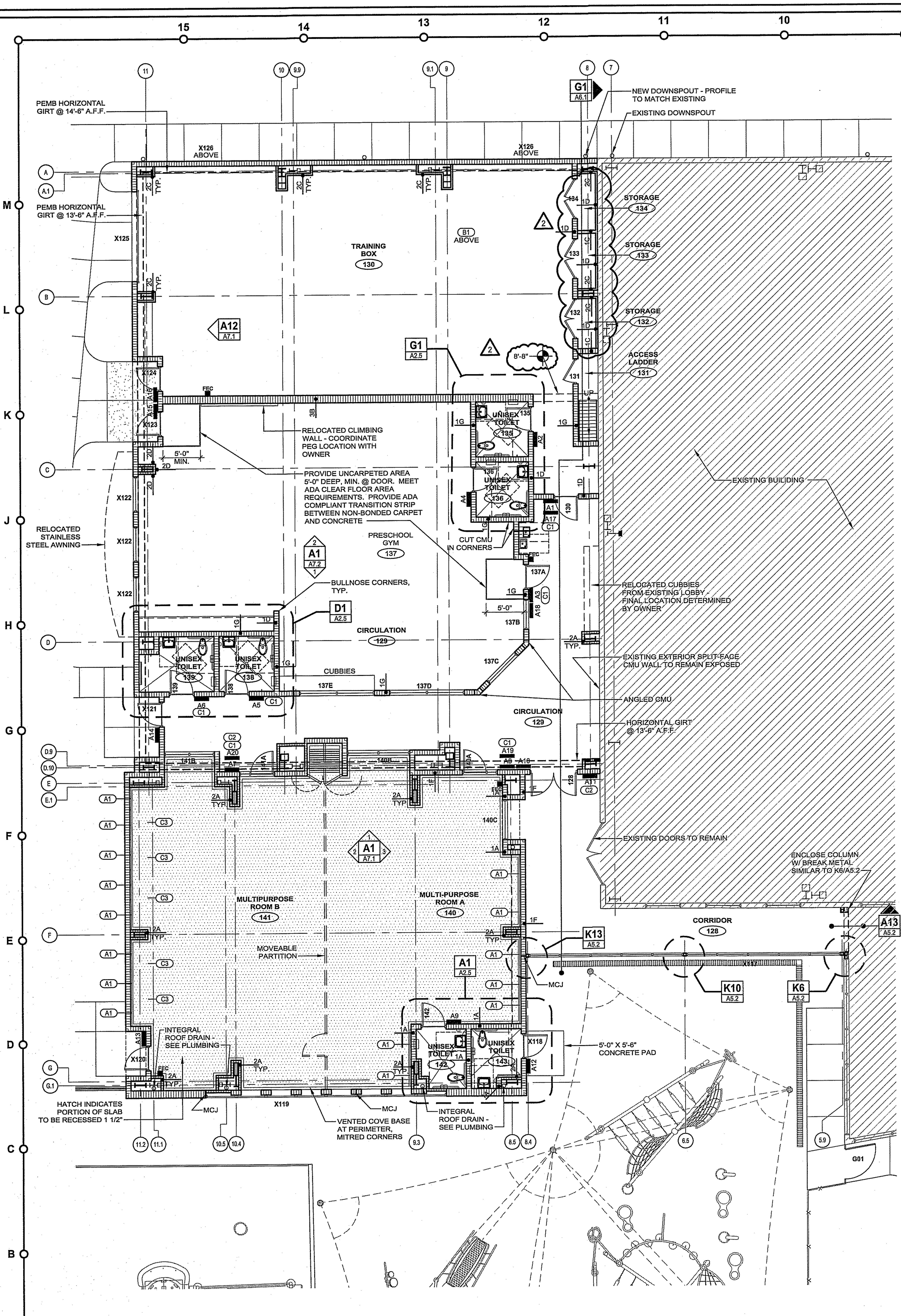


STATE OF FLORIDA
KEVIN S. SMITH
NO. 0011656
REGISTERED ARCHITECT

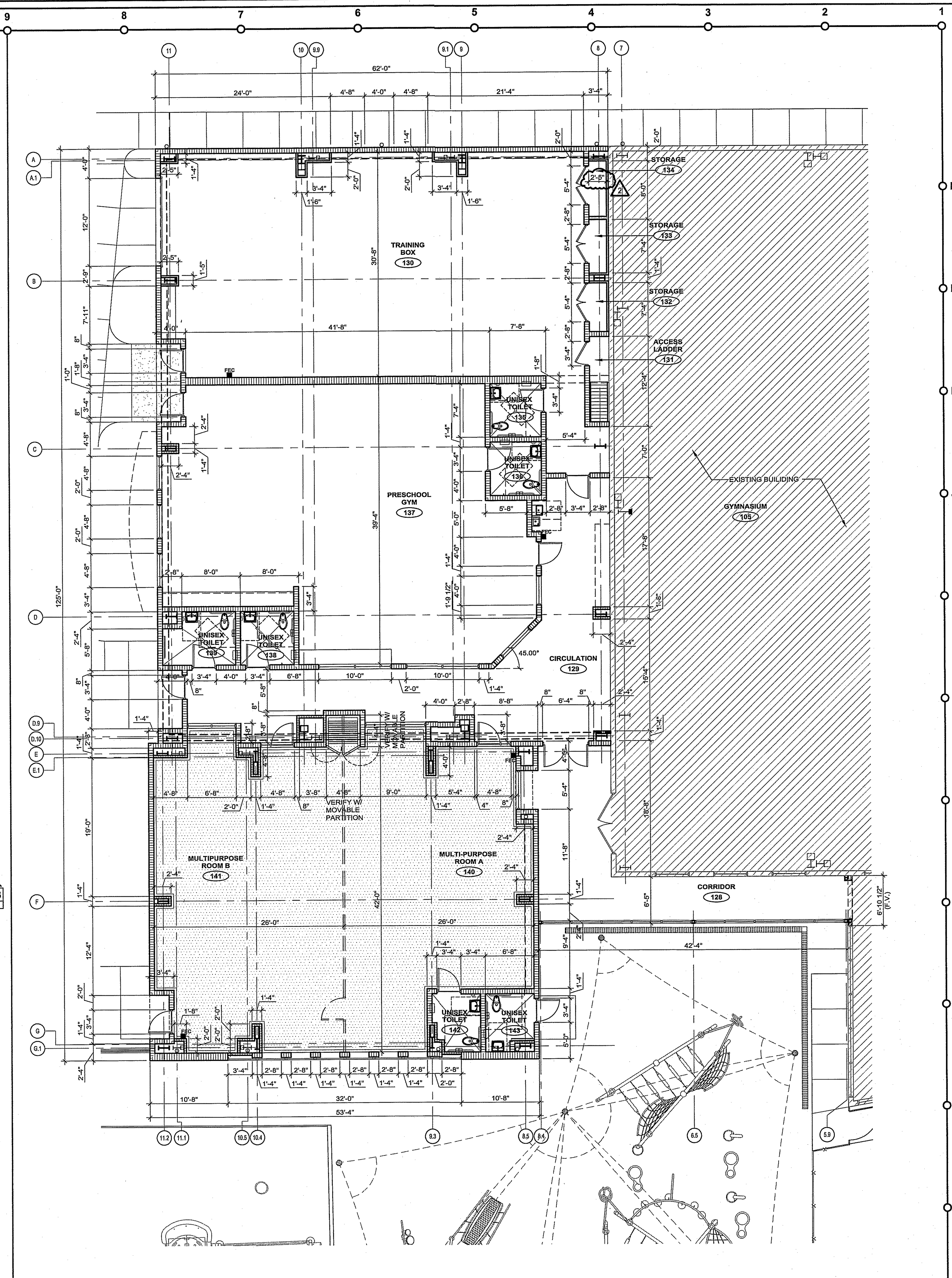
REVISIONS

1	DATE: -
2	DATE: 02-04-19
3	DATE: -
4	DATE: -

PROJ#18015 NEW TAMPA RECREATION CENTER
ADDITION
11-07-18



INFORMATION FLOOR PLAN A9 1/8"=1'



DIMENSION FLOOR PLAN A1 1/8"=1'

Fleischman Garcia
ARCHITECTURE · PLANNING · INTERIOR DESIGN

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REGISTRATION NUMBER AA C000123

NEW TAMPA RECREATION CENTER ADDITION

TAMPA, FL 33647

I CERTIFY TO THE BEST OF MY KNOWLEDGE THAT THESE DRAWINGS COMPLY W/ ALL RELEVANT BUILDING CODES

STATE OF FLORIDA · KEVIN S. SMITH · NO. 0011656 · REGISTERED ARCHITECT

FGA PROJECT NUMBER
18015

ISSUE DATE
11/07/18

REVISIONS

1	DATE: -
2	DATE: 02-04-19
3	DATE: -
4	DATE: -

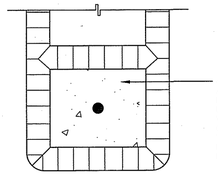
SHEET NUMBER
A2.3

LEGEND:

- (A) ITEMS FURNISHED & INSTALLED BY GC
- (B) ITEMS FURNISHED BY OWNER, INSTALLED BY GC
- (C) ITEMS FURNISHED & INSTALLED BY OWNER

MARK	DESCRIPTION
A1	4' X 7' SECTION OF MIRROR - SECTIONS CUT SMALLER AS NEEDED
B1	BATTING CAGE
B2	"AED" AUTOMATED EXTERNAL DEFIBRILLATOR
C1	HAND SANITIZER DISPENSER
C2	24" X 24" WASTE RECEPTACLE
C3	PORTABLE BALLET BARRE

FURNITURE AND/OR EQUIPMENT SCHEDULE K13 1/4"=1'



4" OR 8" BULLNOSED CMU AS SHOWN ON PLAN - DOUBLE BULLNOSE SHOWN. USE SINGLE RADIUS CMU WHERE ONLY ONE EDGE OF CMU IS EXPOSED. RADIUS TO BE CMU MFR'S STANDARD, REINFORCE & GROUT FILL PER STRUCTURAL DWGS.

TYPICAL CMU BULLNOSE DETAIL L10 3"=1'

INTERIOR WALL LEGEND:

- NEW CMU WALLS
- EXISTING WALLS TO REMAIN
- EXISTING WALLS TO BE REMOVED

EXTERIOR WALLS:

REFER TO WALL SECTIONS

THE FOLLOWING DESIGNATION, WHEN INCLUDED WITHIN NEW WALLS, GRAPHICALLY INDICATE FIRE RATED WALLS WITH RATINGS AS LISTED BELOW:

- 1 HR FIRE RATING
- 2 HR FIRE RATING
- 3 HR FIRE RATING
- 4 HR FIRE RATING OR SMOKE BARRIER

WALL LEGEND L8 N/A

A. DIMENSIONS LOCATING NEW EXTERIOR MASONRY WALLS ARE TO EXTERIOR FACE OF MASONRY SUBSTRATE.

A. DIMENSIONS LOCATING NEW EXTERIOR STUD WALLS ARE TO EXTERIOR FACE OF THE STUDS.

B. DIMENSIONS LOCATING NEW INTERIOR MASONRY WALLS ARE TO FACE OF MASONRY.

C. DIMENSIONS LOCATING NEW INTERIOR STUD WALLS ARE TO FINISHED WALL SURFACES.

D. DIMENSIONS TO EXISTING WALLS ARE TO THE FINISHED WALL SURFACES.

E. OPENINGS NOT LOCATED BY DIMENSION IN INTERIOR WALLS AND NOT ABUTTING ADJACENT WALLS ARE TO BE CENTERED ON THE WALL, UNLESS INDICATED OTHERWISE.

F. IF THE LOCATION OF ANY BUILDING ELEMENT IS NOT OBVIOUS OR CANNOT BE DETERMINED BY DIMENSION, MATHEMATICS, OR AS NOTED ABOVE, CONTACT THE ARCHITECT PRIOR TO LOCATING THE ELEMENT.

GENERAL DIMENSIONING NOTES L6 N/A

FIRST FLOOR ROOMS

RM NO.	ROOM NAME	FLOOR	BASE	WALL	CEILING	CLG HT	REMARKS
101	FOYER						
102	RECEPTION						
103	OFFICE						
104	OFFICE	VCT	RB	PNT	APC	10'-0"	
105	GYMNASIUM						
106	STORAGE						
107	TRAINING						
108	TOILET SHOWER						
109	TOILET						
110	MEN'S TOILET						
111	WOMEN'S TOILET						
112	STORAGE						
113	SNACK BAR						
120	COMMUNITY ROOM						
121	STORAGE						
122	JANITOR						
123	WOMEN'S TOILET						
123A	UNISEX TOILET						
124	MEN'S TOILET						
125	ELECTRICAL ROOM						
126	FIRE RISER						
127							
128	CORRIDOR	VCT	RB	PNT	ES/PNT	-	1,5
129	CIRCULATION	VCT	RB	PNT	APC	9'-0"	1,5
130	TRAINING BOX	IOT	RB	PNT	ES/PNT/APC	SEE RCP	2, 6
131	ACCESS LADDER	SC	NR	PNT	ES		
132	STORAGE	SC	RB	PNT	ES	8'-8"	5
133	STORAGE	SC	RB	PNT	ES	8'-8"	5
134	STORAGE	SC	RB	PNT	ES	8'-8"	5
135	UNISEX TOILET	RF	RF	~~PNT~~ EP	PNT	8'-0"	
136	UNISEX TOILET	RF	RF	~~PNT~~ EP	PNT	8'-0"	
137	PRESCHOOL GYM	IOT	RB	PNT	ES/PNT	ES	2, 3, 6
138	UNISEX TOILET	RF	RF	EP	PNT	8'-0"	
139	UNISEX TOILET	RF	RF	EP	PNT	8'-0"	
~~140~~	~~UNISEX TOILET~~	~~RF~~	~~RF~~	~~EP~~	~~PNT~~	~~8'-0"~~	
140	MULTIPURPOSE ROOM A	DF	VCB	PNT	APC	12'-0"	2, 4, 7
141	MULTIPURPOSE ROOM B	DF	VCB	PNT	APC	12'-0"	2, 4, 7
142	UNISEX TOILET	RF	RF	EP	PNT	8'-0"	
143	UNISEX TOILET	RF	RF	EP	PNT	8'-0"	

1. SEE A5/A3.1 FOR TILE PATTERN
2. CONCRETE TO BE SEALED BEFORE FLOORING IS PLACED
3. REMOVABLE CARPET BONDED FOAM, SIMILAR TO EXISTING GYM.
4. VENTED COVE BASE AS PROVIDE BY FLOOR MANUFACTURER
5. EXISTING EXTERIOR WALL THAT IS EXPOSED TO REMAIN AS IS, NO PAINT.
6. NEW EXTERIOR WALLS NOT TO BE PAINTED. CMU BANDING TO BE VISIBLE.
7. FLOORING TO BE HEAVY DUTY STUDIO DANCE FLOOR ON SSIV SUB FLOOR

LEGEND:

APC	ACOUSTIC PANEL CEILING
DF	DANCE FLOORING
EP	EPOXY PAINT
ES	EXPOSED STRUCTURE
IOT	INDOOR/OUTDOOR TURF
NR	NONE REQUIRED
PNT	PAINT
RB	RUBBER BASE
RF	RESINOUS FLOORING
RSF	RUBBER SPORTS FLOORING
SC	SEALED CONCRETE
VCB	VENTED COVE BASE
VCT	VINYL COMPOSITION TILE (MATCH EXISTING)
WD	WOOD DANCE FLOORING

GENERAL FINISH NOTES:

A. REFER TO WALL LEGEND, PLANS &/OR SECTIONS FOR FINISH SUBSTRATE.

B. WHERE 2 OR MORE FINISHES ARE SCHEDULED, SEE FLOOR PLAN, REFLECTED CEILING PLAN, OR INTERIOR ELEVATIONS FOR EXTENTS.

C. WHERE 2 OR MORE CEILING HEIGHTS ARE SCHEDULED, SEE REFLECTED CEILING PLAN.

D. ONLY FINISH NON PRE-FINISHED ITEMS.

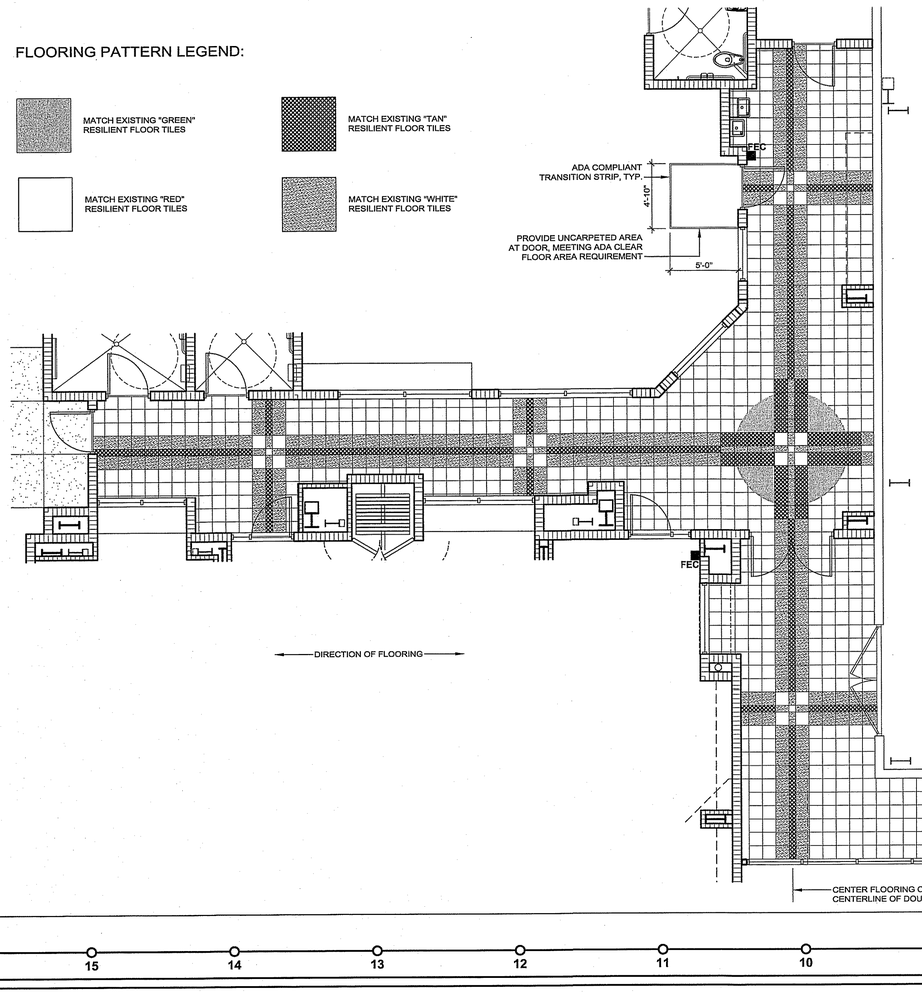
E. CEILING HEIGHTS INDICATE HEIGHT FROM FINISHED FLOOR.

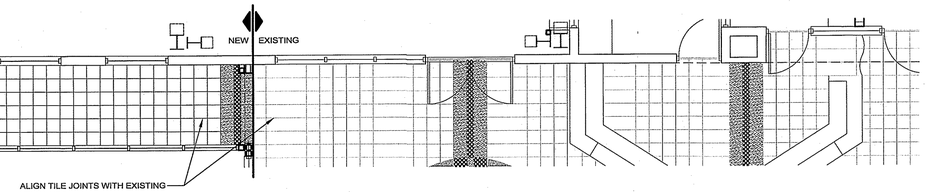
F. ALL WALLS TO BE PAINTED. PRIOR TO PAINTING EXTERIOR WALLS, ARCHITECT TO APPROVE IF WALLS ARE ACCEPTABLE. CMU BANDING TO BE LEFT EXPOSED.

ROOM FINISH SCHEDULE G1 N/A

FLOORING PATTERN LEGEND:

- MATCH EXISTING "GREEN" RESILIENT FLOOR TILES
- MATCH EXISTING "TAN" RESILIENT FLOOR TILES
- MATCH EXISTING "RED" RESILIENT FLOOR TILES
- MATCH EXISTING "WHITE" RESILIENT FLOOR TILES





FLOORING TILE PATTERN A1 3/16"=1'

WALL SCHEDULE NOTES:

A. WALLS WITHOUT WALL TAGS ARE TO BE CONSTRUCTED BASED ON WALL CODE 1A, TYPICAL.

B. THE FOLLOWING INTERIOR WALL FINISH SUBSTRATES ARE TO BE PROVIDED IN LIEU OF GYPSUM BOARD (IN LIKE THICKNESSES):
- MOISTURE RESISTANT GYPSUM BOARD ON FIXTURE SIDE OF ALL PLUMBING WALLS
- CEMENTITIOUS TILE BACKER BOARD ON SIDE OF WALLS SCHEDULED TO RECEIVE CERAMIC TILE
- ABUSE RESISTANT GYPSUM BOARD WHERE INDICATED ON FLOOR PLAN

C. REFERENCES HEREIN TO FIRE RATINGS APPLY ONLY TO WALLS GRAPHICALLY DESIGNATED IN PLAN TO BE FIRE RATED IN ACCORDANCE WITH THE "WALL LEGEND."

D. WALL TYPE INDICATED SHALL CONTINUE OVER DOOR OPENINGS AND OVER/BELOW GLAZED OPENINGS OR WINDOWS AS REQ'D. COORDINATE WITH FRAME DETAILS.

E. WALL TYPES LISTED HEREIN WITH AN STC RATING ARE CONSIDERED TO BE "ACOUSTIC WALLS."

F. STC RATINGS INDICATED HEREIN ARE DERIVED FROM THE LABORATORY TEST INDICATED IN THE "DESIGN REFERENCE" COLUMN. TEST SOURCES ARE AS FOLLOWS:

USG, SA, BBN:	UNITED STATES GYPSUM
NGC:	NATIONAL GYPSUM COMPANY
KAL:	KODARAS ACOUSTICAL LABS
TL:	ETL-SEMKO

G. CONSTRUCT ACOUSTIC WALLS TO COMPLY WITH THE FOLLOWING REQUIREMENTS:
1. FILL ALL WALL PENETRATIONS W/ BATT INSULATION AND SEAL W/ ACOUSTICAL SEALANT.
2. STAGGER ELECTRICAL BOXES A MINIMUM OF 16".
3. APPLY ACOUSTIC SEALANT AT PERIMETER OF STUD WALLS.
4. GYPSUM BOARD FASTENERS MUST NOT CONTACT MASONRY ON CMU WALLS HAVING GYP BD ON FURRING STRIPS.

WALL TYPE CODES	PLAN SECTION	DESCRIPTION	FIRE RATED WALLS RA-TING	FIRE RATED WALLS DTL	ACOUSTIC WALLS STC	ACOUSTIC WALLS DESIGN REFERENCE
1_ (TYP)		8" CMU - SEE STRUCTURAL FOR REINFORCING	N/A			
2_		4" CMU - SEE STRUCTURAL FOR REINFORCING	N/A			
3_		12" CMU - SEE STRUCTURAL FOR REINFORCING	N/A			
4		3-5/8" METAL STUDS @ 16" OC WITH 5/8" ABUSE RESISTANT GYPSUM BOARD ON EACH SIDE	N/A			
5		2-1/2" METAL STUDS @ 16" OC WITH 5/8" ABUSE RESISTANT GYPSUM BOARD ON EACH SIDE	N/A			

WALL SYMBOL CODE (SEE FLOOR PLAN):

3A
- NUMBER INDICATES WALL TYPE. SEE WALL TYPE CODES IN TABLE.
- LETTER INDICATES WALL HEIGHT. SEE WALL HEIGHT CODES.

WALL HEIGHT CODES:

_A	WALL EXTENDS TO 1 BLOCK COURSE ABOVE CEILING.
_B	WALL EXTENDS TO FULL HEIGHT OF DECK ABOVE.
_C	WALL HEIGHT IS 8'-0"
_D	WALL HEIGHT IS 9'-4"
_E	WALL HEIGHT IS 10'-4"
_F	WALL HEIGHT IS 16'-0"
_G	WALL HEIGHT IS 17'-0"

INTERIOR WALL TYPE SCHEDULE C1 N/A

FleischmanGarcia
ARCHITECTURE · PLANNING · INTERIOR DESIGN
SARITY HARBOR OFFICE
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SARITY HARBOR, FLORIDA 34695
(941) 365-3661
FAX (727) 725-3990
TAMPA OFFICE
3311 HYDE PARK STREET, SUITE 300
TAMPA, FLORIDA 33606
(813) 251-1994
FAX (813) 251-1994
SARASOTA OFFICE
3967 CATTLEMEN LAKE, SUITE E
SARASOTA, FLORIDA 34233
(941) 343-9233
FAX (941) 343-9233
REGISTRATION NUMBER AA C000133

NEW TAMPA RECREATION CENTER ADDITION

TAMPA, FL 33647

I CERTIFY TO THE BEST OF MY KNOWLEDGE THAT I HAVE DESIGNED THIS PROJECT IN COMPLIANCE WITH THE RELEVANT BUILDING CODES

STATE OF FLORIDA
KEVIN S. SMITH
NO. 0011866
REGISTERED ARCHITECT

FGA PROJECT NUMBER
18015

ISSUE DATE
11/07/18

REVISIONS
1 DATE: -
2 DATE: 02-04-19
3 DATE: -
4 DATE: -

SHEET NUMBER
A3.1

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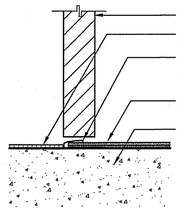
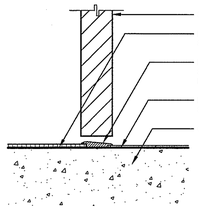
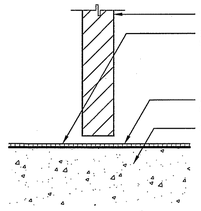


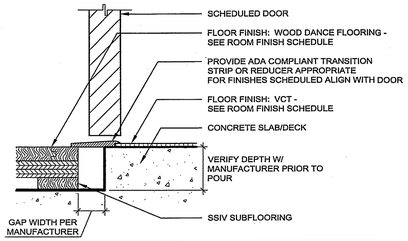
THRESHOLD DETAIL L14 3"=1'



THRESHOLD DETAIL L11 3"=1'



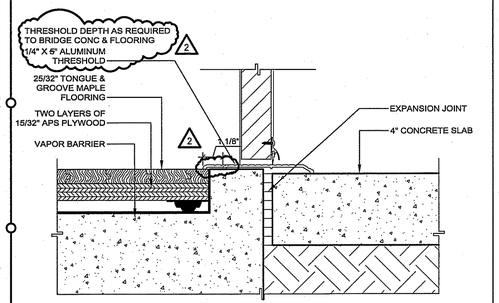
THRESHOLD DETAIL L8 3"=1'



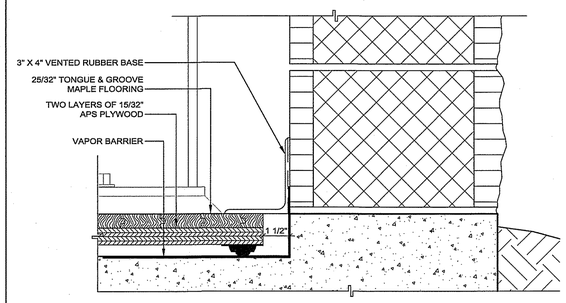
THRESHOLD DETAIL L5 3"=1'

MARK	MIN TH	DESCRIPTION
1	9/16" MIN.	LAMINATED IMPACT GLASS, REFLECTIVE (VS 3-20)
7	1/4" MIN.	CLEAR TEMPERED GLASS

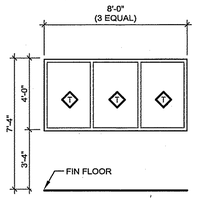
GLAZING SCHEDULE M1 N/A



DANCE FLOOR THRESHOLD AT EXTERIOR DETAIL J13 3"=1'



ATHLETIC FLOOR EDGE DETAIL J9 3"=1'



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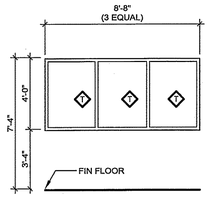

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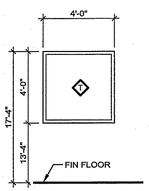

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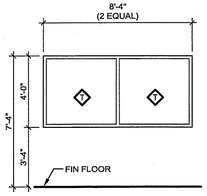

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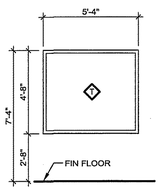

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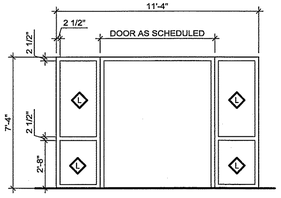

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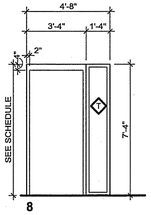

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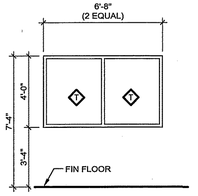

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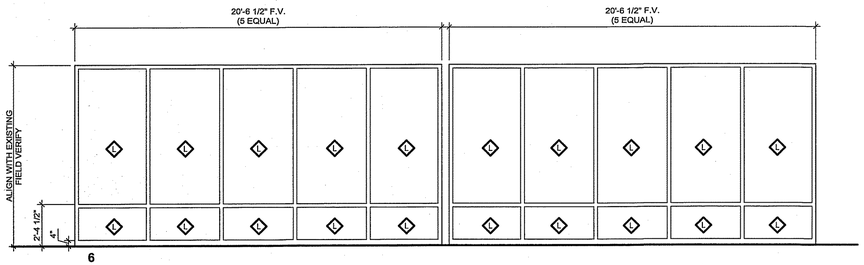

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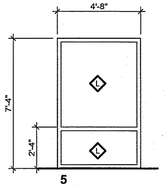

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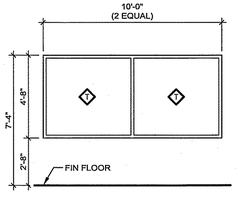

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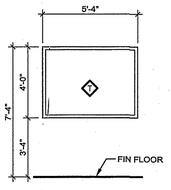

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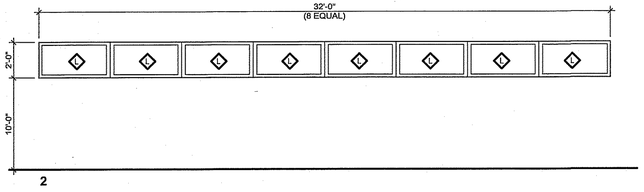

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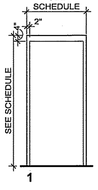

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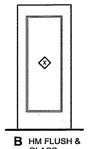
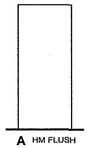
FRAME TYPES A9 NTS

D OVERHEAD COILING DOOR



B HM FLUSH & GLASS

C ALUM FLUSH & GLASS



A HM FLUSH

DOOR TYPES A5 NTS

FIRST FLOOR EXTERIOR OPENINGS

OPNG NO	FIRE RATING	HDW	DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	FRAME TYPE	FRAME MAT'L	FRAME JAMB	FRAME HEAD	FRAME SILL	FRAME MUL	FRAME THR	REMARKS
X104			C	PR. 3'-0"	7'-0"	9	ALUM						DOOR 120 AT EXISTING COMMUNITY ROOM 120 ON SHEET A2.2
X117						6	ALUM	K13 A5.2	K6 A5.2	A1 A5.2	A7 A4.2		
X118			A	3'-0"	7'-0"	1	HM	A1 A4.2	A1 A4.2	D1 A4.2			DOOR TO HAVE DRIP EDGE
X119						2	ALUM	K10 A4.2	K10 A4.2	K10 A4.2	D10 A4.2		
X120			A	3'-0"	7'-0"	1	HM	A1 A4.2	A1 A4.2	D1 A4.2			
X121			A	3'-0"	7'-0"	1	HM	A1 A4.2	A1 A4.2	D1 A4.2			
X122						5	ALUM	G7 A4.2	G7 A4.2	K7 A4.2	A7 A4.2		
X123			A	3'-0"	7'-0"	1	HM	A1 A4.2	A1 A4.2	D1 A4.2			
X124			A	3'-0"	7'-0"	1	HM	A1 A4.2	A1 A4.2	D1 A4.2			
X125			D	12'-0"	9'-4"								
X126						12	ALUM						SEE MANUFACTURER'S STANDARD DETAILS FOR OPENINGS IN PEMB
X201A			A	PR. 3'-0"	7'-0"	1	HM						DOOR TO HAVE DRIP EDGE
X201B			A	3'-0"	7'-0"	1	HM						DOOR TO HAVE DRIP EDGE
G01													2
G02													2, 3
G03													
G04													4

FIRST FLOOR INTERIOR OPENINGS

OPNG NO	FIRE RATING	HDW	DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	FRAME TYPE	FRAME MAT'L	FRAME JAMB	FRAME HEAD	FRAME SILL	FRAME MUL	FRAME THR	REMARKS
104A						13	HM	G4 A4.2	G4 A4.2	D4 A4.2	A4 A4.2	K4 A4.2	
104B						14	HM	G4 A4.2	G4 A4.2	D4 A4.2	A4 A4.2	K4 A4.2	
128			B	PR. 3'-0"	7'-0"	1	HM	G1 A4.2	G1 A4.2	K1 A4.2			
130			B	3'-0"	7'-0"	1	HM	G1 A4.2	G1 A4.2	K1 A4.2			
131			A	3'-0"	7'-0"	1	HM	G1 A4.2	G1 A4.2	K1 A4.2			
132			A	PR. 2'-6"	7'-0"	1	HM	G1 A4.2	G1 A4.2	K1 A4.2			
133			A	PR. 2'-6"	7'-0"	1	HM	G1 A4.2	G1 A4.2	K1 A4.2			
134			A	PR. 2'-6"	7'-0"	1	HM	G1 A4.2	G1 A4.2	K1 A4.2			
135			A	3'-0"	7'-0"	1	HM	G1 A4.2	G1 A4.2	K1 A4.2			
136			A	3'-0"	7'-0"	1	HM	G1 A4.2	G1 A4.2	K1 A4.2		L14 A4.1	
137A			B	3'-0"	7'-0"	1	HM	G1 A4.2	G1 A4.2	K1 A4.2		L14 A4.1	
137B						10	HM	G4 A4.2	G4 A4.2	D4 A4.2	A4 A4.2		1
137C						10	HM	G4 A4.2	G4 A4.2	D4 A4.2	A4 A4.2		1
137D						4	HM	G4 A4.2	G4 A4.2	D4 A4.2	A4 A4.2	K4 A4.2	1
137E						4	HM	G4 A4.2	G4 A4.2	D4 A4.2	A4 A4.2	K4 A4.2	1
138			A	3'-0"	7'-0"	1	HM	G1 A4.2	G1 A4.2	K1 A4.2		L11 A4.1	
139			A	3'-0"	7'-0"	1	HM	G1 A4.2	G1 A4.2	K1 A4.2		L11 A4.1	
140A			B	3'-0"	7'-0"	8	HM	G1 A4.2	G4 A4.2	K1 A4.2		L5 A4.1	
140B						11	HM	G4 A4.2	G4 A4.2	D4 A4.2	A4 A4.2	K4 A4.2	1
140C						3	HM	G4 A4.2	G4 A4.2	D4 A4.2	A4 A4.2		1
141A			B	3'-0"	7'-0"	8	HM	G1 A4.2	G4 A4.2	K1 A4.2		L5 A4.1	
141B						7	HM	G4 A4.2	G4 A4.2	D4 A4.2	A4 A4.2	K4 A4.2	1
142			A	3'-0"	7'-0"	1	HM	G1 A4.2	G1 A4.2	K1 A4.2			

SCHEDULE NOTES:

A. DOOR THICKNESS = 1 3/4", TYPICAL
B. WOOD DOORS ARE SOLID CORE, TYPICAL
C. REFER TO "PA" DRAWINGS FOR FURTHER INFORMATION ON WIND SPEED DESIGN CRITERIA.
D. DIMENSIONS VERTICALLY LOCATING GLAZED OPENINGS ARE FROM FINISH SUBSTRATE.
E. WHEN FINISH ELEVATIONS ON OPPOSITE SIDES OF A DOOR ARE DIFFERENT, FRAME SHALL EXTEND PAST THE HIGHER FLOOR ELEVATION TO THE LOWER FLOOR ELEVATION.
F. FRAME AND LOUVER PROFILES ARE INTENDED TO BE GENERIC, NOT REPRESENT A PARTICULAR MANUFACTURER OR PRODUCT
G. SEE NOTE #11 ON SHEET A2.1

SCHEDULE REMARKS:

1. WINDOWS TO HAVE ONE-WAY MIRROR/REFLECTIVE FILM APPLIED. REFLECTIVE SIDE TO FACE ROOM ALLOWING OBSCURED VIEWING FROM CIRCULATION.
2. G01 & G02 TO HAVE MINIMUM 32" CLEAR PASSAGE AND MATCH EXISTING FENCE. GATES TO HAVE PANIC HARDWARE.
3. EXISTING GATE FROM BACK RELOCATED.
4. CHAIN LINK GATES TO MATCH ENCLOSURE.

OPENING SCHEDULE A1 N/A

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REGISTERED FIRM NUMBER AA C000123

NEW TAMPA RECREATION CENTER ADDITION

TAMPA, FL 33647

STATE OF FLORIDA
KEVIN S. SMITH
NO. 0011656
REGISTERED ARCHITECT

FGA PROJECT NUMBER
18015

ISSUE DATE
11/07/18

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1 DATE: -
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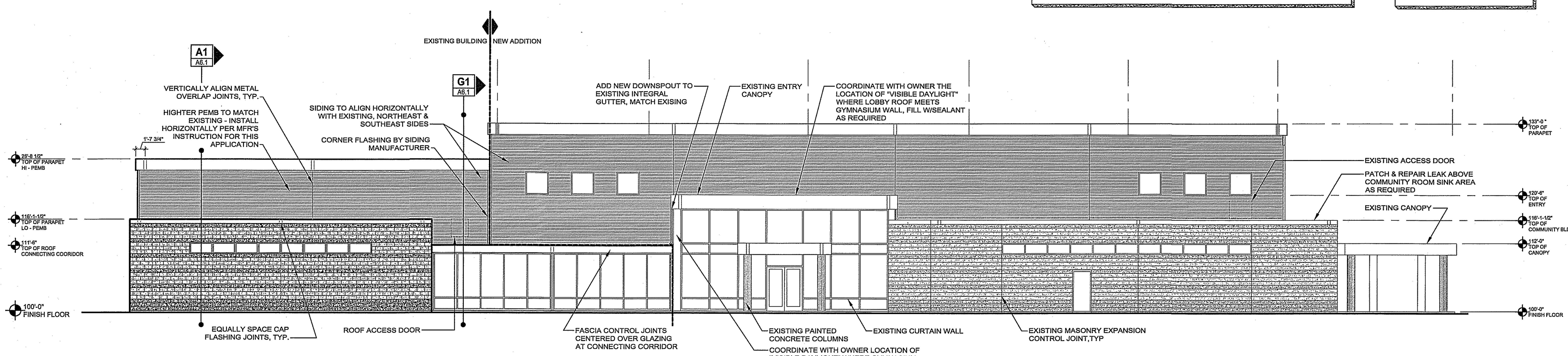
3 DATE: -
4 DATE: -

SHEET NUMBER
A4.1

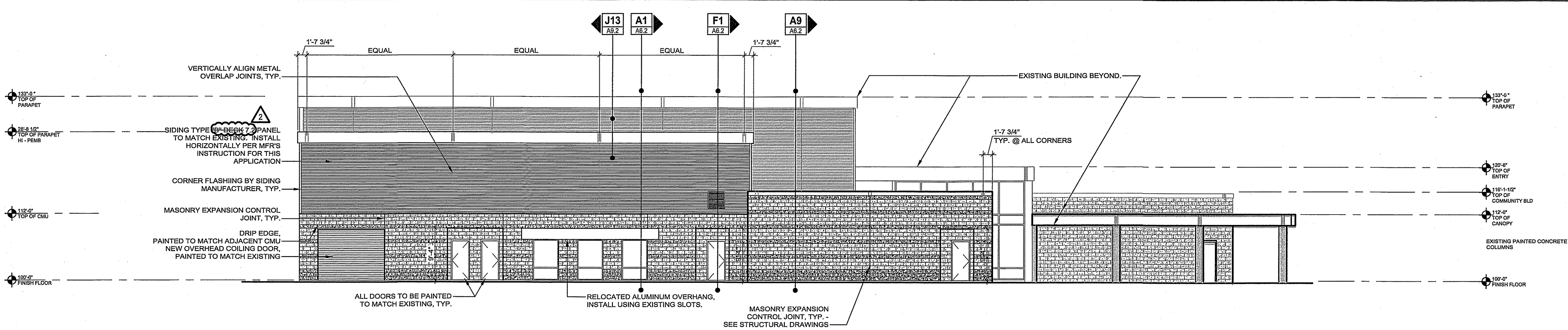
02-05-19 Duane Wright P:\2018\18015\18015_NTRC addition\Drawings\SHEETS\18015_A4.1-3.dwg

NOTE:
ENTIRE BUILDING, EXISTING AND NEW ADDITION, TO HAVE WATER-PROOFING APPLIED.

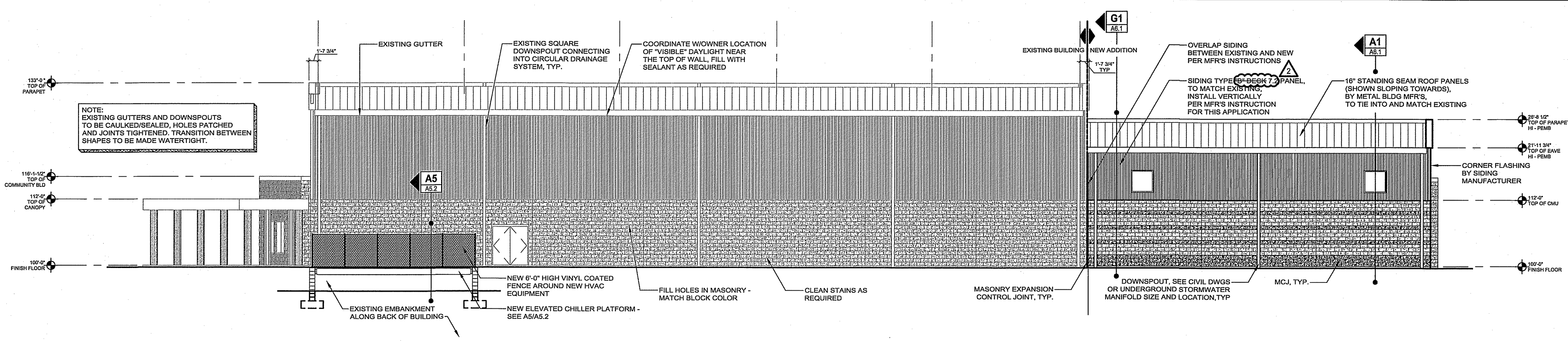
NOTE:
100'-0" = GEOGRAPHICAL NAVD 43.32



NORTHEAST (FRONT / ENTRANCE) ELEVATION J1 3/32"=1



SOUTHEAST (SIDE / COMMERCE PARK BLVD) ELEVATION E1 3/32"=1



SOUTHWEST (BACK) ELEVATION A1 3/32"=1

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NEW TAMPA RECREATION CENTER ADDITION
TAMPA, FL 33647

I CERTIFY TO THE BEST OF MY KNOWLEDGE THAT THESE DRAWINGS COMPLY W/ ALL RELEVANT BUILDING CODES

STATE OF FLORIDA · KEVIN S. SMITH · NO. 0011656 · REGISTERED ARCHITECT

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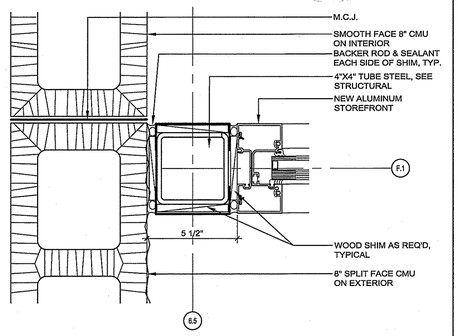
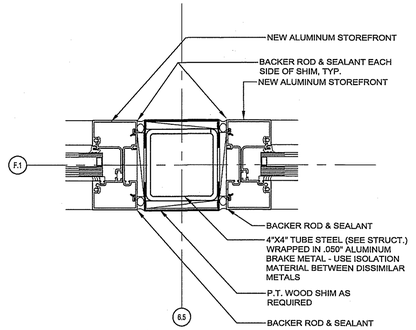


ENLARGED PLAN DETAIL K13 3"=1'



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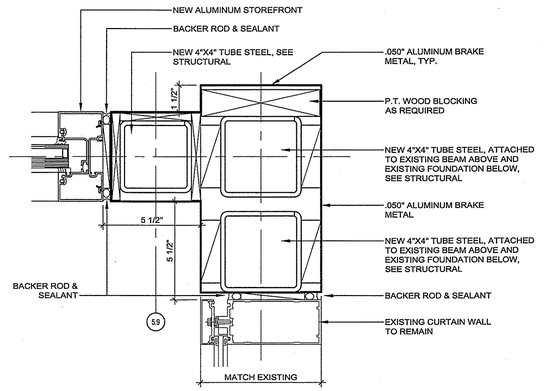
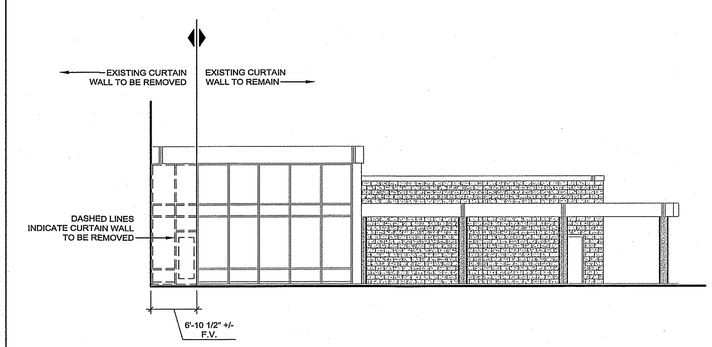
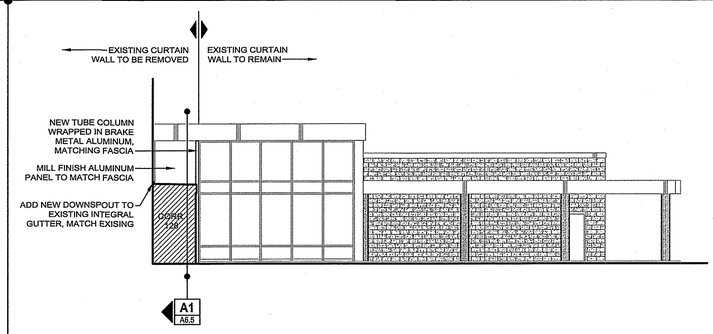


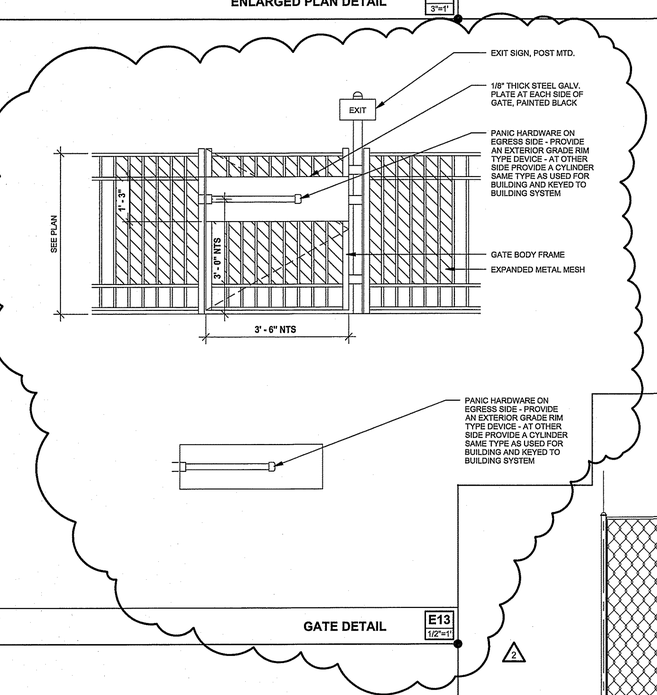
ENLARGED PLAN DETAIL K6 3"=1'



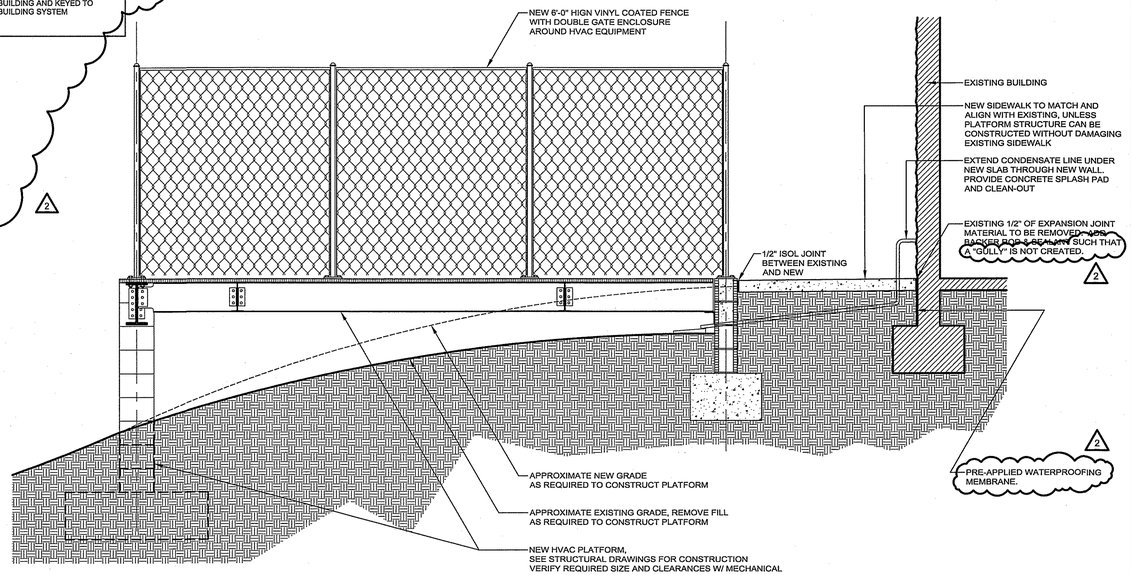
PARTIAL EXTERIOR ELEVATION - DEMOLITION K1 3/32"=1'



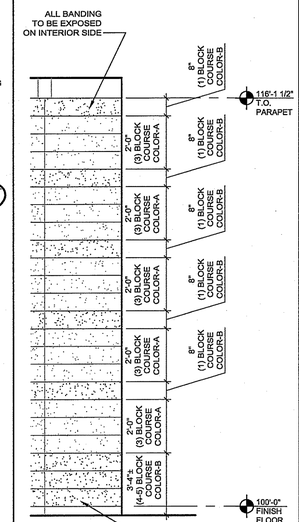
PARTIAL EXTERIOR ELEVATION G1 3/32"=1'



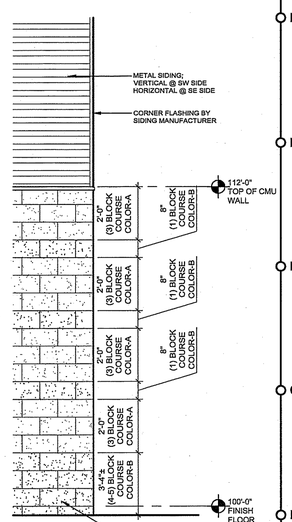
GATE DETAIL E13 1/2"=1'



HVAC PLATFORM SECTION A5 1/2"=1'



@ LOW PEMB



@ HIGH PEMB

WALL COLOR COURSING DETAIL A3 3/8"=1'

WALL COLOR COURSING DETAIL A1 38"=1'

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NEW TAMPA RECREATION CENTER ADDITION

TAMPA, FL 33647

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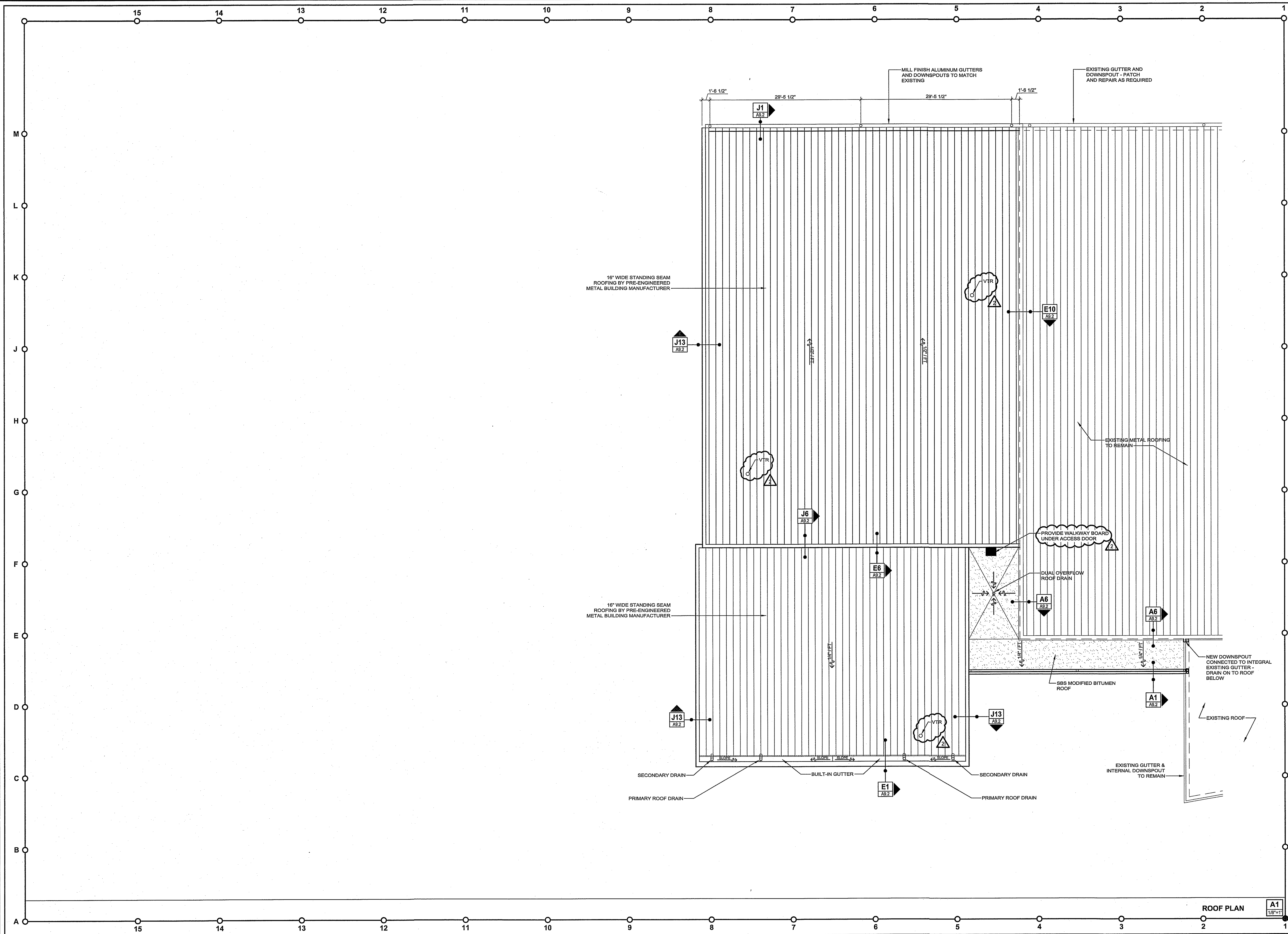
02-05-19



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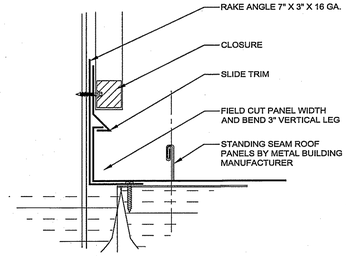
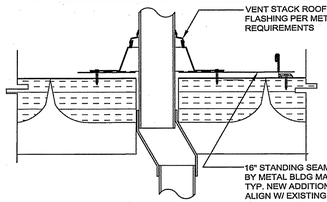


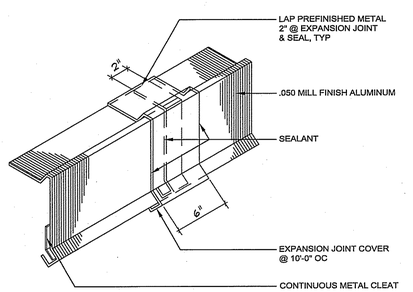
FLASHING DETAIL

K13 — 3=1"



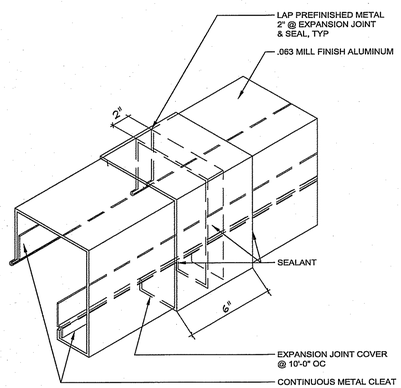
PIPE PENETRATION FLASHING

H13 — 1 1/2"=1'



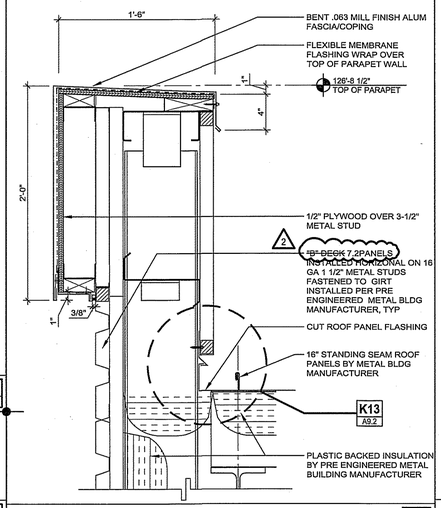
EDGE FLASHING JOINT

E13 — 1 1/2"=1'



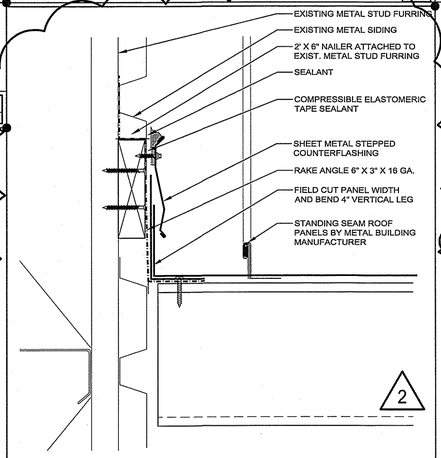
CAP FLASHING JOINT

A13 — 1 1/2"=1'



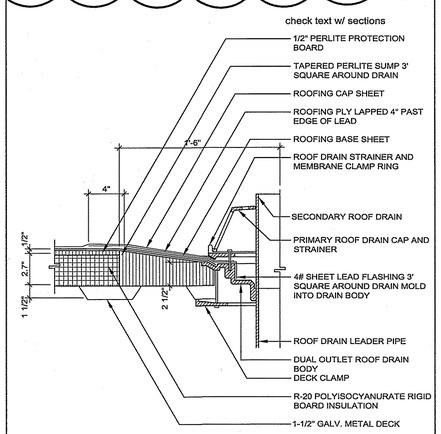
ROOF PARAPET FLASHING

J13 — 1/2"=1'



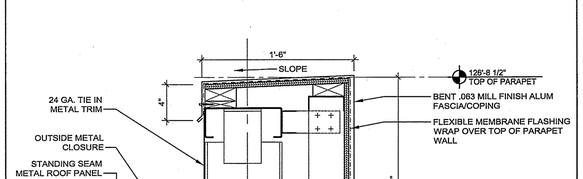
FLASHING DETAIL

E10 — 3=1"



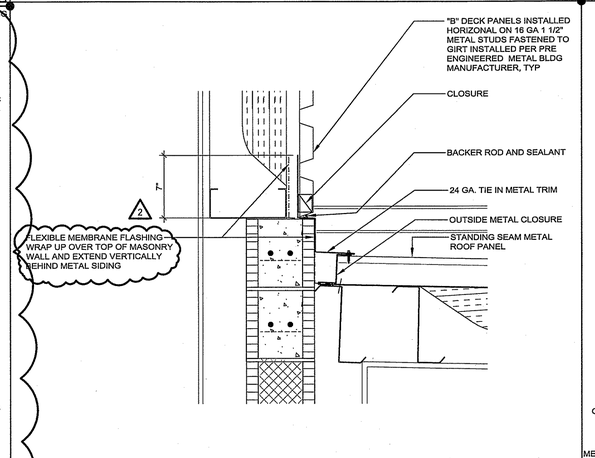
ROOF / OVERFLOW DRAIN

A10 — 1 1/2"=1'



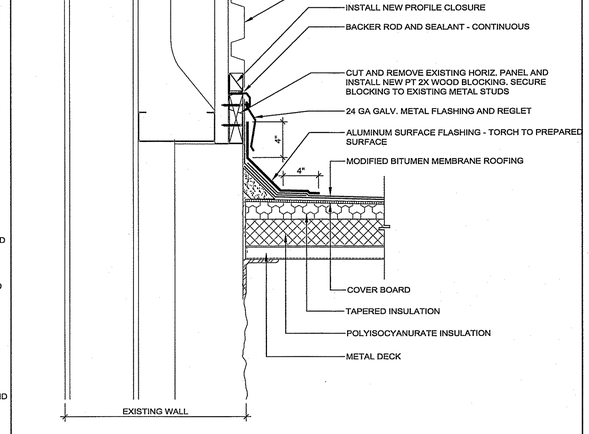
FASCIA DETAIL

J6 — 1 1/2"=1'



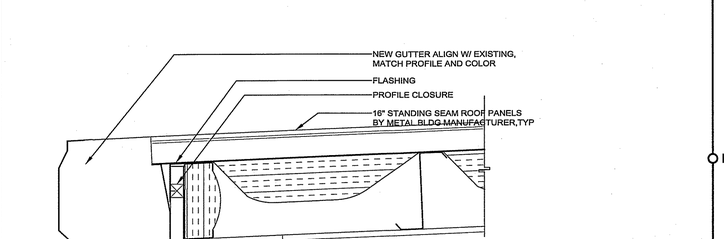
LOW ROOF FLASHING DETAIL

E6 — 1 1/2"=1'



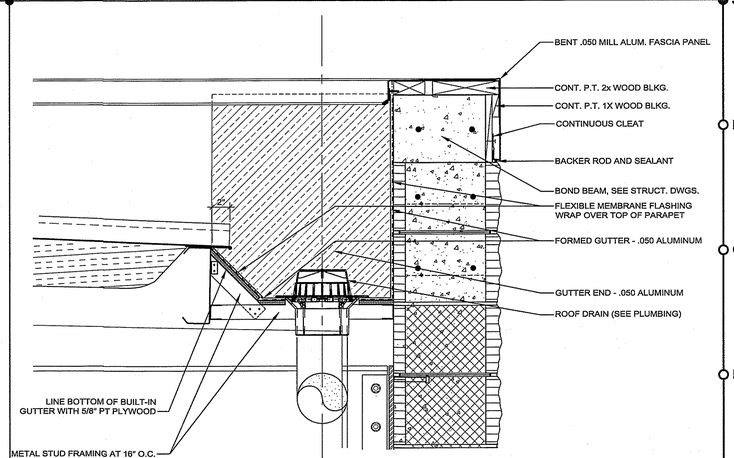
ROOF / WALL FLASHING

A6 — 1 1/2"=1'



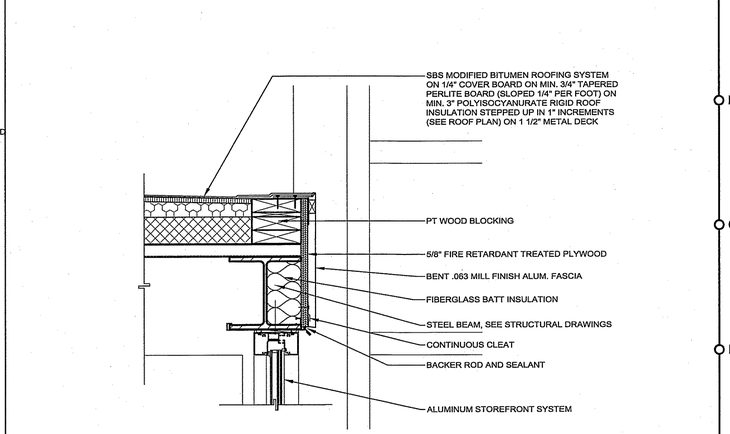
EAVE / GUTTER DETAIL

J1 — 1 1/2"=1'



BUILT-IN GUTTER DETAIL

E1 — 1 1/2"=1'



FASCIA DETAIL

A1 — 1 1/2"=1'

Fleischmann Garcia
ARCHITECTURE • PLANNING • INTERIOR DESIGN
SARASOTA OFFICE
597 CUTTY SARK DRIVE
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TAMPA OFFICE SUITE 300
3341 W. CYPRESS STREET
TAMPA, FLORIDA 33607
PH (813) 251-1994
FAX (813) 251-1994
REGISTRATION NUMBER AA C000313

NEW TAMPA RECREATION CENTER ADDITION

TAMPA, FL 33647

I CERTIFY TO THE BEST OF MY KNOWLEDGE THAT THESE DRAWINGS COMPLY WITH THE RELEVANT BUILDING CODES

STATE OF FLORIDA
KEVIN S. SMITH
NO. 0011656
REGISTERED ARCHITECT

FGA PROJECT NUMBER
18015

ISSUE DATE
11/07/18

REVISIONS

1	DATE:	-
2	DATE:	02-04-19
3	DATE:	-
4	DATE:	-

SHEET NUMBER
A9.2

02-05-19

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SECTION 083326 – OVERHEAD COILING SERVICE DOORS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Overhead coiling insulated doors.

1.2 RELATED SECTIONS

A. Section 05500 - Metal Fabrications: Support framing and framed opening.

B. Section 08710 - Door Hardware: Product Requirements for cylinder core and keys.

C. Section 09900 - Painting: Field applied finish.

1.3 REFERENCES

A. NFRC 102 - Test Procedure for Measuring the Steady-State Thermal Transmittance of Fenestration Systems.

B. ASTM E 90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Element.

C. ASTM E 330 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.

D. ASTM A 653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

E. ASTM A 666 - Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.

F. ASTM A 924 - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.

G. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.

1.4 DESIGN / PERFORMANCE REQUIREMENTS

A. Overhead coiling insulated doors:
   1. Wind Loads: Design door assembly to comply with wind load requirements indicated on project Structural Drawings without damage to door or assembly components in conformance with ASTM E 330.
   2. Operation: Design door assembly, including operator, to operate for not less than 20,000 cycles.

B. Single-Source Responsibility: Provide doors, tracks, motors, and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.

1.5 SUBMITTALS

A. Submit under provisions of Section 013300.

B. Product Data: Manufacturer's data sheets on each product to be used, including:
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Details of construction and fabrication.
   4. Installation instructions.

C. Shop Drawings: Include detailed plans, elevations, details of framing members, anchoring methods, required clearances, hardware, and accessories. Include relationship with adjacent construction.

D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.

E. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) long, representing actual product, color, and patterns.

F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

G. Operation and Maintenance Data: Submit lubrication requirements and frequency, and periodic adjustments required.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in performing Work of this section with a minimum of five year’s experience in the fabrication and installation of security closures.

B. Installer Qualifications: Installer Qualifications: Company specializing in performing Work of this section with minimum three years and approved by manufacturer.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.

C. Store materials in a dry, warm, ventilated weathertight location.

1.8 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.9 COORDINATION

A. Coordinate Work with other operations and installation of adjacent materials to avoid damage to installed materials.

1.10 WARRANTY

A. Warranty: Manufacturer’s limited door and operator system, except the counterbalance spring and finish, to be free from defects in materials and workmanship for 3 years or 20,000 cycles, whichever occurs first.

B. Warranty: Manufacturer’s limited door system warranty for 2 years for all parts and components.

C. PowderGuard Finish
1. PowderGuard Premium Applied to curtain, guides, bottom bar, headplates: Manufacturer’s limited Premium Finish warranty for 2 years.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Overhead Door Corp., basis of design.

B. Requests for substitutions will be considered in accordance with provisions of Section 012300.

2.2 INSULATED OVERHEAD COILING SERVICE DOORS

A. Overhead Coiling Stormtite Insulated Service Doors: Overhead Door Corporation Model 625.
   1. Curtain: Interlocking roll-formed slats as specified following. Endlocks shall be attached to each end of alternate slats to prevent lateral movement.
      a. Flat profile type F-265i for doors up to 40 feet (12.19 m) wide.
      b. Front slat fabricated of:
         1) 24 gauge galvanized steel.
      c. Back slat fabricated of:
         1) 24 gauge galvanized steel.
      d. Slat cavity filled with CFC-free foamed-in-place, polyurethane insulation.
         1) R-Value: 7.7, U-Value: 0.13.
   2. Performance:
      a. Through Curtain Sound Rating: Sound Rating: STC-28 (STC-30+ with HZ noise generator) as per ASTM E 90.
      b. Installed System Sound Rating: STC-21 as per ASTM E 90.
      c. U-factor: 0.91 NFRC test report, maximum U-factor of no higher than 1.00.
      d. Air Infiltration: Meets ASHRAE 90.1 & IECC 2012/2015 C402.4.3 Air leakage <1.00 cfm/ft2.
   3. Slats and Hood Finish:
      a. Galvanized Steel: Slats and hood galvanized in accordance with ASTM A 653 and receive rust-inhibitive, roll coating process, including 0.2 mils thick baked-on prime paint, and 0.6 mils thick baked-on polyester top coat.
         1) Powder Coat:
            (a) PowderGuard Max powder coat, color as selected by Architect.
         2) Non-galvanized exposed ferrous surfaces shall receive one coat of rust-inhibitive primer.
   4. Weather seals:
      a. Vinyl bottom seal, exterior curtain side guide and internal hood seals
      b. Interior guide weather seal.
      c. Lintel weather seal.
      d. Air Infiltration Package, IECC 2012/2015 listed; product to meet C402.4.3 2012 Air leakage <1.00 cfm/ft2.
         1) Air infiltration perimeter seal package includes: guide cover, guide cap, dual brush exterior guide seal, 4 inch finned lintel brush seal and vinyl bottom seal.
   5. Bottom Bar:
      a. Two galvanized steel angles minimum thickness 1/8 inch (3 mm) bolted back to back to reinforce curtain in the guides.
   6. Guides: Three structural steel angles.

7. Brackets:
   a. Galvanized steel to support counterbalance, curtain and hood.
8. Finish; Bottom Bar, Guides, Headplate and Brackets:
   a. Finish: PowderGuard Zinc base coat, gray with PowderGuard Premium powder coat color as selected by the Architect.
9. Counterbalance: Helical torsion spring type housed in a steel tube or pipe barrel, supporting the curtain with deflection limited to 0.03 inch per foot of span. Counterbalance is adjustable by means of an adjusting tension wheel.
10. Hood: Provide with internal hood baffle weather seal.
    a. 24 gauge galvanized steel with intermediate supports as required.
11. Manual Operation:
    a. Chain hoist.
12. Wind load Design:
    a. FBC certification FL# ___.
13. Locking:
    a. Chain keeper locks for chain hoist operation.
14. Wall Mounting Condition:
    a. Face-of-wall mounting.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify opening sizes, tolerances and conditions are acceptable.

B. Examine conditions of substrates, supports, and other conditions under which this work is to be performed.

C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.

C. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.

D. Fit and align assembly including hardware; level and plumb, to provide smooth operation.

E. Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 079200.

F. Install perimeter trim and closures.

G. Instruct Owner’s personnel in proper operating procedures and maintenance schedule.

3.4 ADJUSTING

A. Test for proper operation and adjust as necessary to provide proper operation without binding or distortion.

B. Adjust hardware and operating assemblies for smooth and noiseless operation.

3.5 CLEANING

A. Clean curtain and components using non-abrasive materials and methods recommended by manufacturer.

B. Remove labels and visible markings.

C. Touch-up, repair or replace damaged products before Substantial Completion.

3.6 PROTECTION

A. Protect installed products until completion of project.

END OF SECTION

SECTION 102239 - OPERABLE PANEL PARTITIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Manually operated, paired panel operation.

B. Related Sections: The following Sections contain requirements that relate to this Section:

1. Metal framing and supports are specified in Division 5 Section "Metal Fabrications."

2. Section 09260 "Gypsum Board Assemblies" sound barrier construction above the ceiling at track.

1.3 SYSTEM PERFORMANCE REQUIREMENTS

A. Acoustical Performance: Provide operable panel partitions tested by a qualified independent testing agency for the following acoustic properties according to following test method:

1. Sound Transmission Requirements: Operable panel partition assembly tested in a full-scale opening (168 by 108 inches) for laboratory sound transmission loss performance according to ASTM E 90, determined by ASTM E 413 and rated for an STC plus or minus 1 as specified herein.

1.4 SUBMITTALS

A. General: Submit the following according to the Conditions of the Contract and Division 1 Specification Sections.

B. Product data on physical characteristics, durability, and surface-burning characteristics for each type of operable panel partition and accessory specified.

C. Shop drawings showing location and extent of operable panel partitions. Include plans, elevations, large-scale details of anchorages, and accessory items. Indicate unit conditions at openings, location and installation requirements for hardware, and direction of travel.

SECTION 133419 – METAL BUILDING

SYSTEMS PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the contract, including General and Supplementary Conditions and Division 1 Specifications sections apply to work specified in this section.

1.02 DESCRIPTION OF WORK

A. Extent of pre-engineered buildings work is shown on drawings. The finished product shall be a weather-tight structure.

B. Building Type - The pre-engineered building shown is a singles story, single span, rigid- frame type metal building of nominal length, width, eave height and roof pitch indicated. Exterior walls are covered with field assembled insulated metal wall panels.

C. Manufacturer's standard components may be used, providing components, accessories, and complete structure conform to Architectural design appearance shown and to specified requirements.

D. Concrete floor and foundations and installation of anchor bolts are specified in Division-3. E. Interior Partitions and Finishes are specified in other Divisions.

1.03 QUALITY

ASSURANCE A.

Design Criteria

B. Structural Framing - Design primary and secondary structural members and exterior covering materials for applicable loads and combinations of loads in accordance with the Metal Building Manufacturer's Association's (MBMA) "Design Practices Manual".

C. Coordinate building frame with Mechanical Engineer for opening sizes and locations, and hung loads. Maximum deflection of roof or wall span: 1/180.

D. Structural Steel - For the design of structural steel members, comply with the requirements of the American Institute of Steel Construction's (AISC) "Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings" for design requirements and allowable stresses.

E. Light Gage Cold Formed Steel - For the design of light gage cold formed steel members, comply with the requirements of the American Iron and Steel Institute's (AISI) "Specification for the Design of Cold Formed Steel Structural Members" and "Design of Light Gage Steel Diaphragms" for design requirements and allowable stresses.

F. For welded connections, comply with the American Welding Society's (AWS) "Standard Code for Arc and Gas Welding in Building Construction" for welding purposes.

G. Design Criteria and Loads - Basic design criteria and loads are as follows:

1. Building Height - As shown on drawings.

2. Roof Pitch - As indicated on drawings.

3. Uplift Rating - U.L. Class I-150

4. Loads - Dead Load - By building manufacturer

5. Roof Live load - 20 PSF (on horizontal projection)

6. Floor live load see load schedule in drawings.

7. Roof hanging load - 20 PSF (on horizontal projection, plus concentrated loads where indicated.)

7. Wind Loads - 142 MPH ultimate.

B. Design each member to withstand stresses resulting from combinations of loads that produce the maximum allowable stresses in that member as prescribed in MBMA's "Design Practices Manual".

C. Manufacturer's Qualifications - Provide pre-engineered metal buildings as produced by a manufacturer, who is a member of MBMA, with not less than 5 years successful experience in the fabrications of pre-engineered metal buildings of the type and quality required.

1.04 SUBMITTALS

A. Shop Drawings - Submit complete erection drawings showing anchor bolts settings, sidewall, endwall, and roof framing, transverse cross sections, covering and trim details, and accessory installation details to clearly indicate proper assembly of building components.

B. Product Data - Submit manufacturer's product information specifications and installation instructions for building components and accessories.

C. Certification - Submit written Certification prepared and signed by a Professional Engineer, registered to practice in the State of Florida verifying that building design meets indicated loading requirements and codes of authorities having jurisdiction.

D. Submit design drawings, calculations, and all column base reactions signed and sealed by a Professional Engineer, registered to practice in the State of Florida.

1.05 DELIVERY, STORAGE AND HANDLING

A. Deliver and store prefabricated components and other manufactured items so they will not be damaged or deformed.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Available Manufacturers - Subject to compliance with specified requirements, manufacturers offering pre-engineered building systems which may be incorporated in the work included, but are not limited to the following:

1. Atlantic Building Systems, Inc
2. Inryco, Inc.
3. Pascoe Building Systems, Inc.
4. Varco-Pruden Buildings
5. Gulf States.
6. Kirby Buildings Systems

Bases of design: Kirby Building Systems.

2.02 MATERIALS

(GENERAL) A. Metals

1. Hot-Rolled Structural Systems - Comply with the requirements of ASTM A36 or A529.
2. Tubing or pipe - Comply with the requirements of ASTM A500, Grade B, A501, or A53.
3. Members Fabricated from Plate or Bar Stock - Provide 42,000 psi minimum yield strength. Comply with the requirements of ASTM A529, A570, or A572.
4. Galvanized Steel Sheet - Comply with the requirements of ASTM A446 with G90 coating. "Class" to suit building manufacturer's standards.
5. Aluminum Coated Steel Sheets - Provide drawing quality aluminum coated steel sheets, complying with requirements of ASTM A463, Type 1, with T1-40 coating.

B. Paints for Shop Application

1. Shop Primer for Ferrous Metal - Provide manufacturer's standard, fast-curing lead-free, "universal" primer, selected for good resistance to normal atmospheric corrosion, for compatibility with finish paint systems indicated and for capability to provide a sound foundation for field applied topcoats despite prolonged exposure. Comply with performance requirements of FS TT-P-645.
2. Shop Primer for Galvanized Members - Provide manufacturer's standard zinc dust-zinc oxide primer selected for compatibility with substrate. Comply with performance requirements of FS TT-P-641.

2.03 FABRICATION (GENERAL)

A. Design prefabricated components and necessary field connections required for erection to permit easy assembly and disassembly. Fabricate components in such a manner that once assembled, they may be disassembled, repackaged and reassembled with a minimum amount of labor.

B. Clearly and legibly mark each piece and part of the assembly to correspond with previously prepared erection drawings, diagrams and instruction manuals.

2.04 STRUCTURAL FRAMING COMPONENTS

A. Rigid Frames - Fabricated rigid frames from hot-rolled structural steel. Provide built-up "I- Beam" shape of open web type rigid frames consisting of either tapered or parallel flange beams and tapered columns. Provide frames factory welded and shop painted. Furnish frames complete with attachment plates, bearing plates, and splice members. Factory drill frames for bolted field assembly.

B. End Wall Columns - Provide factory welded, shop painted windwall columns of built-up "I- Beam" shape of cold-formed sections. Fabricate endwall columns of not less than 14 ga. material.

C. Wind Bracing - Provide adjustable wind bracing using not less than 1/2" diameter threaded steel rods; comply with the requirements of ASTM A36 or A572, Grade D.

D. Secondary Framing - Provide not less than 16 ga. shop painted rolled formed sections for the following secondary framing members.

1. Purlins
2. Eave structs
3. Endwall beams
4. Flange bracing
5. Sag bracing

E. Provide not less than 14 ga. cold-formed galvanized steel sections for the following secondary framing members.

1. Base channels
2. Sill angles
3. Endwall structural members (except columns and beams)
4. Purlin spacers

F. Provide framing of the size indicated to support suspended mechanical loads.

G. Bolts - Comply with the requirements of ASTM A307 or A325 as necessary for design loads and connection details. Provide shop painted bolts, except when units are in direct contact with panels, provide zinc-plated or cadmium-plated bolts.

H. Fabrication - Shop fabricate structural framing components to the indicated size and section complete with base plates, bearing plates and other plates required for erection, welded in place. Provide all required holes for anchoring or for connections either shop drilled or punched to template dimensions.

I. Shop Connection - Provide power riveted, bolted or welded shop connections.

J. Field Connection - Provide bolted field connections.

K. Shop Painting - Clean surfaces to be primed of loose mill scale, rust, dirt, oil, grease, and other matter precluding paint bond. Follow procedures of SSPC-SP3 for power tool cleaning, SSPC-SP7 for brush-off blast cleaning, and SSPC-SP1 for solvent cleaning.

L. Prime structural steel primary and secondary framing members with the manufacturer's standard rust-inhibitive primer.

M. Prime galvanized members, after phosphoric acid pretreatment with manufacturer's standard zinc dust-zinc oxide primer.

PART 3 - EXECUTION

3.01 ERECTION

A. Framing - Erect structural framing true to line, level and plumb, rigid and secure. level base plates to a true even plane with full bearing to supporting structures, set with double-nutted anchor bolts. Use a non-shrinking non-metallic grout to obtain uniform bearing and to maintain a level base line elevation. Moist cure grout for not less than 7 days after placement.

B. Purlins and Girts - Provide rake or gable purlins with tight fitting closure channels and fascias. Locate and space wall girts to suit door, louver, and window arrangements and heights. Secure straight line by sag rods.

C. Bracing - Provide diagonal rod or angle bracing in both roof and sidewalls as required.

D. Movement resisting frames may be used in lieu of sidewall rod bracing, to suit manufacturer's standards.

E. Where diaphragm strength of roof or wall covering is adequate to resist wind forces, rod or forms of bracing will not be required.

F. Framed Openings - Provide shapes of proper design and size to reinforce openings and to carry loads and vibrations imposed, including equipment furnished under mechanical or electrical work. Securely attach to building structural frame.

END OF SECTION 133419

D. Template drawings prepared by manufacturer showing location of items supported or anchored by permanent construction.

E. Samples for verification purposes of each type of panel finish face indicated; in sets for each color, texture, and pattern specified, showing a full range of variations expected in these characteristics.

1. Finish Face Fabric: Full-width sample, not less than 36 inches long, with specified treatments applied. Show complete pattern repeat.
2. Panel Finish Face: Manufacturer's standard size unit, not less than 3 inches square.
3. Panel Edge Material: Manufacturer's standard size unit, not less than 3 inches square.
4. Hardware: One of each exposed door-operating device.

F. Product certificates signed by manufacturers of operable panel partitions certifying that their products comply with specified requirements.

G. Maintenance data for panel finish face to include in the "Operating and Maintenance Manual" specified in Division 1.

1. Precautions for cleaning materials and methods that could be detrimental to finishes and performance.
2. Instructions for re-stretching sagging or distorted finish face.

H. Acoustical test reports from and based on tests performed by a qualified independent testing agency certifying that the product and materials furnished comply with specified requirements.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Engage an experienced Installer who is certified in writing by the operable panel partition manufacturer as qualified to install the manufacturer's partition systems.

B. Testing Agency Qualifications: To qualify for acceptance, an independent testing agency must demonstrate to the Architect's satisfaction, based on an evaluation of agency-submitted criteria conforming to ASTM E 699, that it has the experience and capability to satisfactorily conduct the testing indicated without delaying progress of the Work.

C. Surface-Burning Characteristics: Provide panel finish face with the following surface-burning characteristics as determined by testing identical products per ASTM E 84 by UL or other testing and inspecting agencies acceptable to authorities having jurisdiction.

1. Flame Spread: 25 or less.
2. Smoke Developed: 450 or less.

1.6 EXTRA MATERIALS

A. Extra Materials: Furnished from same production run as materials installed. Package materials with protective covering and identify with labels describing contents. Deliver extra materials to Owner.

1. Finish Face Material: Furnish quantity of full-width, equal to 5 percent of linear yards installed.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by the following or an approved equal.

1. Modernfold Inc.
2. Panelfold Inc.
3. Moderco Inc.
4. Hufcor, Inc.

B. Basis of Design: Hufcor, Model 632, STC 51 with Type II Pocket Doors

2.2 OPERABLE WALLS

A. Panel Configuration: Operable panels as follows:

1. Manually operated, paired panel operation.

B. Panel Construction: Panels shall be nominal 3" (76 mm) thick in manufacturer's standard panel width of 48" (1220 mm) maximum. All panel horizontal and vertical framing elements shall be formed in steel. Top reinforcing as required to support suspension components and as follows:

1. Steel Frame: 22 gauge steel pressure laminated to structural acoustical backer welded to steel frame.

2. Section 09260 "Gypsum Board Assemblies" sound barrier construction above the ceiling at track.

C. Panel skin shall be 22 gauge roll-formed steel, lockformed and welded directly to the frame to form a unitized panel. Wrap-around skin construction shall not require vertical trim on panels and shall create a minimum groove appearance at the vertical panel joints.

D. Panel Weight: 11 psf.

E. Sound Transmission Class (STC): 52.

F. Hardware: Manufacturer's standard, finished to match exposed hardware on partition. Panels' hinges shall be full leaf butt hinges, attached directly to the panel frame.

G. Finish: Acoustical Wall Carpet: Acoustically absorbent, non-woven needle punch fibers fused to prevent fraying and unraveling of material. Carpet shall be Class A rated in accordance with ASTM E84 and shall achieve a minimum NRC rating of .60 in accordance with ASTM C243. Color to be selected by Architect from manufacturer's full range.

2.3 SUSPENSION SYSTEMS

A. Carriers: Steel trolley system as required for type, size, and weight of partition for ease of operation.

B. Suspension Tracks: Steel or aluminum with overhead supports of adjustable steel hanger rods designed for size and type of operable panel partition assembly indicated. Track deflection shall be no more than 0.10 inch between bracket supports.

2.4 SEALS

A. Vertical Seals: Deep nesting, interlocking astragals mounted on each edge of panel with continuous vinyl acoustical seal.

B. Horizontal Top Seals: Continuous-contact extruded vinyl or mechanical retractable vinyl-faced seal exerting consistent pressure on track when extended.

C. Horizontal Bottom Seals: Retractable seal exerting positive pressure downward ensuring horizontal and vertical sealing and resisting panel movement.

1. Extension/retraction of bottom seal by operating handle or built-in operating mechanism. Clearance between retracted seal and floor finish shall be not less than 1-1/2 inch.

D. Final Closure: Positive lever activated mechanical closure expanding from panel edge to create a positive acoustical seal.

1. Stack End: Fixed jamb with nesting interlocking astragals and continuous vinyl acoustical seal.

2. Leading End: Fixed jamb with nesting interlocking astragals and continuous vinyl acoustical seal.

2.5 ACCESSORIES

A. Pass Doors: Swinging door built into and matching panel materials, construction, acoustical qualities, finish and thickness, complete with frames and operating hardware. Hinges finished to match other exposed hardware.

1. Accessibility Standard: Fabricate doors to comply with applicable provisions in [the USDOJ's "2010 ADA Standards for Accessible Design" and the Florida Building Code.
2. Single Pass Door: 36 by 84 inches.
3. Pass-Door Hardware: Equip pass door with the following:
   a. Door Seals: Mechanically operated floor seal on panels containing pass doors.
   b. Panic hardware.
   c. Concealed door closer.
   d. Exit Sign: Recessed, self-illuminated.
   e. Latchset: Passage set.

PART 3 - EXECUTION

3.1 EXAMINATION

D. Examine flooring, structural support, and opening for compliance with requirements for installation tolerances and other conditions affecting performance of operable panel partitions.

E. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install operable panel partitions and accessories complying with ASTM E 557 after other finishing operations including painting, have been completed.

B. Install operable panel partitions that conform to Drawings and approved shop drawings and in strict compliance with manufacturer's written installation instructions.

C. Match operable panel partitions for color and pattern by installing partitions from cartons in same sequence as manufactured and packaged, if so numbered. Broken, cracked, chipped, or deformed panels are not acceptable.

3.3 FIELD QUALITY CONTROL

A. Extent and Testing Methodology: Arrange for testing the completed operable panel partition installation in successive stages in areas of extent described below. Partitions are to be properly adjusted and fitted to ensure compliance with NIC requirements.

1. Within each area, independent testing agency shall randomly select an operable panel partition installation and test according to ASTM E 336 for complying NIC. The NIC rating shall be calculated according to ASTM E 413.

B. Repair or replace operable panel partitions within areas where test results indicate

partitions do not comply with requirements and retest new partitions.

3.4 ADJUSTING

A. Lubricate bearings and sliding parts; adjust to ensure smooth, easy operation.

3.5 DEMONSTRATION

A. Startup Services: Provide the services of a factory-authorized service representative to provide start-up service and to demonstrate and train Owner's representative.

1. Test and adjust controls and safeties. Replace damaged or malfunctioning controls and equipment.
2. Train Owner's representative on procedures and schedules related to startup and shutdown, troubleshooting, servicing, and preventative maintenance.
3. Review data in the "Operating and Maintenance Manual."

END OF SECTION

SECTION 133419 – METAL BUILDING

SYSTEMS PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the contract, including General and Supplementary Conditions and Division 1 Specifications sections apply to work specified in this section.

1.02 DESCRIPTION OF WORK

A. Extent of pre-engineered buildings work is shown on drawings. The finished product shall be a weather-tight structure.

B. Building Type - The pre-engineered building shown is a singles story, single span, rigid- frame type metal building of nominal length, width, eave height and roof pitch indicated. Exterior walls are covered with field assembled insulated metal wall panels.

C. Manufacturer's standard components may be used, providing components, accessories, and complete structure conform to Architectural design appearance shown and to specified requirements.

D. Concrete floor and foundations and installation of anchor bolts are specified in Division-3. E. Interior Partitions and Finishes are specified in other Divisions.

1.03 QUALITY

ASSURANCE A.

Design Criteria

B. Structural Framing - Design primary and secondary structural members and exterior covering materials for applicable loads and combinations of loads in accordance with the Metal Building Manufacturer's Association's (MBMA) "Design Practices Manual".

C. Coordinate building frame with Mechanical Engineer for opening sizes and locations, and hung loads. Maximum deflection of roof or wall span: 1/180.

D. Structural Steel - For the design of structural steel members, comply with the requirements of the American Institute of Steel Construction's (AISC) "Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings" for design requirements and allowable stresses.

E. Light Gage Cold Formed Steel - For the design of light gage cold formed steel members, comply with the requirements of the American Iron and Steel Institute's (AISI) "Specification for the Design of Cold Formed Steel Structural Members" and "Design of Light Gage Steel Diaphragms" for design requirements and allowable stresses.

F. For welded connections, comply with the American Welding Society's (AWS) "Standard Code for Arc and Gas Welding in Building Construction" for welding purposes.

G. Design Criteria and Loads - Basic design criteria and loads are as follows:

1. Building Height - As shown on drawings.

2. Roof Pitch - As indicated on drawings.

3. Uplift Rating - U.L. Class I-150

4. Loads - Dead Load - By building manufacturer

5. Roof Live load - 20 PSF (on horizontal projection)

6. Floor live load see load schedule in drawings.

7. Roof hanging load - 20 PSF (on horizontal projection, plus concentrated loads where indicated.)

7. Wind Loads - 142 MPH ultimate.

B. Design each member to withstand stresses resulting from combinations of loads that produce the maximum allowable stresses in that member as prescribed in MBMA's "Design Practices Manual".

C. Manufacturer's Qualifications - Provide pre-engineered metal buildings as produced by a manufacturer, who is a member of MBMA, with not less than 5 years successful experience in the fabrications of pre-engineered metal buildings of the type and quality required.

1.04 SUBMITTALS

A. Shop Drawings - Submit complete erection drawings showing anchor bolts settings, sidewall, endwall, and roof framing, transverse cross sections, covering and trim details, and accessory installation details to clearly indicate proper assembly of building components.

B. Product Data - Submit manufacturer's product information specifications and installation instructions for building components and accessories.

C. Certification - Submit written Certification prepared and signed by a Professional Engineer, registered to practice in the State of Florida verifying that building design meets indicated loading requirements and codes of authorities having jurisdiction.

D. Submit design drawings, calculations, and all column base reactions signed and sealed by a Professional Engineer, registered to practice in the State of Florida.

1.05 DELIVERY, STORAGE AND HANDLING

A. Deliver and store prefabricated components and other manufactured items so they will not be damaged or deformed.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Available Manufacturers - Subject to compliance with specified requirements, manufacturers offering pre-engineered building systems which may be incorporated in the work included, but are not limited to the following:

1. Atlantic Building Systems, Inc
2. Inryco, Inc.
3. Pascoe Building Systems, Inc.
4. Varco-Pruden Buildings
5. Gulf States.
6. Kirby Buildings Systems

Bases of design: Kirby Building Systems.

2.02 MATERIALS

(GENERAL) A. Metals

1. Hot-Rolled Structural Systems - Comply with the requirements of ASTM A36 or A529.
2. Tubing or pipe - Comply with the requirements of ASTM A500, Grade B, A501, or A53.
3. Members Fabricated from Plate or Bar Stock - Provide 42,000 psi minimum yield strength. Comply with the requirements of ASTM A529, A570, or A572.
4. Galvanized Steel Sheet - Comply with the requirements of ASTM A446 with G90 coating. "Class" to suit building manufacturer's standards.
5. Aluminum Coated Steel Sheets - Provide drawing quality aluminum coated steel sheets, complying with requirements of ASTM A463, Type 1, with T1-40 coating.

B. Paints for Shop Application

1. Shop Primer for Ferrous Metal - Provide manufacturer's standard, fast-curing lead-free, "universal" primer, selected for good resistance to normal atmospheric corrosion, for compatibility with finish paint systems indicated and for capability to provide a sound foundation for field applied topcoats despite prolonged exposure. Comply with performance requirements of FS TT-P-645.
2. Shop Primer for Galvanized Members - Provide manufacturer's standard zinc dust-zinc oxide primer selected for compatibility with substrate. Comply with performance requirements of FS TT-P-641.

2.03 FABRICATION (GENERAL)

A. Design prefabricated components and necessary field connections required for erection to permit easy assembly and disassembly. Fabricate components in such a manner that once assembled, they may be disassembled, repackaged and reassembled with a minimum amount of labor.

B. Clearly and legibly mark each piece and part of the assembly to correspond with previously prepared erection drawings, diagrams and instruction manuals.

2.04 STRUCTURAL FRAMING COMPONENTS

A. Rigid Frames - Fabricated rigid frames from hot-rolled structural steel. Provide built-up "I- Beam" shape of open web type rigid frames consisting of either tapered or parallel flange beams and tapered columns. Provide frames factory welded and shop painted. Furnish frames complete with attachment plates, bearing plates, and splice members. Factory drill frames for bolted field assembly.

B. End Wall Columns - Provide factory welded, shop painted windwall columns of built-up "I- Beam" shape of cold-formed sections. Fabricate endwall columns of not less than 14 ga. material.

C. Wind Bracing - Provide adjustable wind bracing using not less than 1/2" diameter threaded steel rods; comply with the requirements of ASTM A36 or A572, Grade D.

D. Secondary Framing - Provide not less than 16 ga. shop painted rolled formed sections for the following secondary framing members.

1. Purlins
2. Eave structs
3. Endwall beams
4. Flange bracing
5. Sag bracing

E. Provide not less than 14 ga. cold-formed galvanized steel sections for the following secondary framing members.

1. Base channels
2. Sill angles
3. Endwall structural members (except columns and beams)
4. Purlin spacers

F. Provide framing of the size indicated to support suspended mechanical loads.

G. Bolts - Comply with the requirements of ASTM A307 or A325 as necessary for design loads and connection details. Provide shop painted bolts, except when units are in direct contact with panels, provide zinc-plated or cadmium-plated bolts.

H. Fabrication - Shop fabricate structural framing components to the indicated size and section complete with base plates, bearing plates and other plates required for erection, welded in place. Provide all required holes for anchoring or for connections either shop drilled or punched to template dimensions.

I. Shop Connection - Provide power riveted, bolted or welded shop connections.

J. Field Connection - Provide bolted field connections.

K. Shop Painting - Clean surfaces to be primed of loose mill scale, rust, dirt, oil, grease, and other matter precluding paint bond. Follow procedures of SSPC-SP3 for power tool cleaning, SSPC-SP7 for brush-off blast cleaning, and SSPC-SP1 for solvent cleaning.

L. Prime structural steel primary and secondary framing members with the manufacturer's standard rust-inhibitive primer.

M. Prime galvanized members, after phosphoric acid pretreatment with manufacturer's standard zinc dust-zinc oxide primer.

PART 3 - EXECUTION

3.01 ERECTION

A. Framing - Erect structural framing true to line, level and plumb, rigid and secure. level base plates to a true even plane with full bearing to supporting structures, set with double-nutted anchor bolts. Use a non-shrinking non-metallic grout to obtain uniform bearing and to maintain a level base line elevation. Moist cure grout for not less than 7 days after placement.

B. Purlins and Girts - Provide rake or gable purlins with tight fitting closure channels and fascias. Locate and space wall girts to suit door, louver, and window arrangements and heights. Secure straight line by sag rods.

C. Bracing - Provide diagonal rod or angle bracing in both roof and sidewalls as required.

D. Movement resisting frames may be used in lieu of sidewall rod bracing, to suit manufacturer's standards.

E. Where diaphragm strength of roof or wall covering is adequate to resist wind forces, rod or forms of bracing will not be required.

F. Framed Openings - Provide shapes of proper design and size to reinforce openings and to carry loads and vibrations imposed, including equipment furnished under mechanical or electrical work. Securely attach to building structural frame.

END OF SECTION 133419

07550 – MODIFIED BITUMEN MEMBRANE ROOFING

PART 1 GENERAL

1.01 GENERAL REQUIREMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

B. Deviations: In the event this Specification deviates from the manufacturer's current specification, this specification prevails, except where they conflict with the manufacturer's requirements for the specified guarantee. In this case, the manufacturer's specification prevails.

C. Specification Amendments: Drawings, addenda and modifications may be issued subsequent to the printing of this Specification.

D. Contractor Acceptance: Prior to the project start, ascertain that all aspects of this Specification and possible modifications are workable and do not conflict with the manufacturer's requirements for the specified guarantee. Upon commencement of the work, it will be presumed that this Specification and drawings, addenda and modifications are satisfactory to both the Contractor and the manufacturer in their entirety.

E. Supplied Materials: Supply all materials of the roofing system, including accessory products. The bidding Contractor, by making his bid, represents that his bid price is based on the use of the materials listed in Part 2 Products. Refer to Part 1.03 Description of Work for specific use within each roofing assembly outlined.

1.02 REFERENCE STANDARDS

References in these specifications to standards, test methods, and codes, are implied to mean the latest edition of each such standard adopted. The following is an abbreviated list of associations, institutions, and societies which may be used as references throughout these specifications.

ASTM	American Society for Testing and Materials Philadelphia, PA
FM	Factory Mutual Engineering and Research Norwood, MA
NRCA	National Roofing Contractors Association Rosemont, IL
OSHA	Occupational Safety and Health Administrations Washington, DC
SMACNA	Sheet Metal and Air Conditioning Contractors National Association Chantilly, VA
UL	Underwriters Laboratories Northbrook, IL
CCRC	Cool Roof Rating Council Oakland, CA

1.03 DESCRIPTION OF WORK

The basic work descriptions (components, layering and attachment methods) required in this specification are referenced below.

Siplast Roof System Specification #: 2030 WSH

Project Type: New

Deck: Metal

Slope: Positive Drainage

Slope: Minimum 1/8 inch per foot. – See Drawings

Roof System: Siplast Paradiene 20 TG mid sheet torch applied.

Siplast Paradiene 30 CR FR TG granual cap torch applied.

Flashing system: Siplast Veral Aluminum, torch applied.

Specialty Flashing System: Siplast Parapro 123 Catalyzed Acrylic Resin Flashing System - fully adhere.

1.04 QUALITY ASSURANCE

A. Acceptable Products: Primary roofing products, including each type of sheet, all manufactured in the United States, shall be supplied by a single manufacturer which has been successfully producing the specified types of primary products for not less than 10 years. The primary roofing products shall have maintained a consistent composition for a minimum of five years.

B. Product Quality Assurance Program: Primary roofing materials shall be manufactured under a quality management system that is monitored regularly by a third party auditor under the ISO 9001:2000 audit process. A certificate of analysis for reporting/confirming the tested values of the actual material being supplied for the project will be required prior to project close-out.

C. Agency Approvals: The proposed roof system shall conform to the following requirements. No other testing agency approvals will be accepted.

1. Underwriters Laboratories Class A acceptance of the proposed roofing system (including mopping asphalt or cold adhesive) without additional requirements for gravel or coatings.

2. Factory Mutual Approval Standard 4470 listing for the proposed membrane system. The roof membrane configuration shall be approved by FM for Class 1-SH (severe hail) exposure. The roof configuration (including fastening of base sheet or insulation) shall be approved by FM for minimum 1-150 windstorm construction.

D. Acceptable Contractor: Contractor shall have a minimum of 2 years experience in successfully installing the same or similar roofing materials and be certified in writing by the roofing materials manufacturer to install the primary roofing products.

E. Scope of Work: The work to be performed under this specification shall include but is not limited to the following: Attend necessary job meetings, furnish competent and full time supervision, experienced roof mechanics, all materials (unless noted otherwise), tools, and equipment necessary to complete, in an acceptable manner, the roof installation in accordance with this specification. Comply with the latest written application instructions of the manufacturer of the primary roofing products. In addition, application practice shall comply with requirements and recommendations contained in the latest edition of the Handbook of Accepted Roofing Knowledge (HARK) as published by the National Roofing Contractor's Association, amended to include the acceptance of a phased roof system installation.

F. Local Regulations: Conform to regulations of public agencies, including any specific requirements of the city and/or state of jurisdiction.

G. Manufacturer Requirements: Ensure that the primary roofing materials manufacturer provides direct trained company personnel to attend necessary job meetings, perform periodic inspections as necessary, and conduct a final inspection upon successful completion of the project.

1.05 GUARANTEE/WARRANTY

A. Roof System Guarantee (Siplast 20 Year Roof System Guarantee): Upon successful completion of the project, and after all post installation procedures have been completed, furnish the Owner with the roof system manufacturer's 20 year labor and materials roof system guarantee. The roof system guarantee shall include both the roofing and flashing membranes, and the specified new lightweight insulating concrete system consisting of aggregate fill, patented-pre-formed polystyrene panels, and base sheet fasteners. All repair or replacement costs covered under the guarantee shall be borne by the roofing membrane manufacturer. The guarantee shall be a term type, without deductibles or limitations on coverage amount, and be issued at no additional cost to the Owner. Specific items covered under the roof system guarantee include:

1. The actual resistance to heat flow through the roof insulation will be at least 80% of the design thermal resistance, provided that the roofing membrane is free of leaks;

2. The roof insulation will remain in a reroofable condition should the roof membrane require replacement (excluding damage caused by fastener pullout during removal of the old membrane.)

3. The roof insulation will remain in place even if the roof membrane sustains wind damage covered by the guarantee.

1.06 SUBMITTALS

All submittals which do not conform to the following requirements will be rejected.

A. Submittals following Contract Award:

1. Letter from the proposed primary roofing manufacturer confirming that the bidder is an acceptable Contractor authorized to install the proposed system.

2. Letter from the primary roofing manufacturer stating that the proposed application will comply with the manufacturer's requirements in order to qualify the project for the specified guarantee.

B. Submittals Prior to Project Close-out:

1. Manufacturer's printed recommendations for proper maintenance of the specified roof system including inspection frequencies, penetration addition policies, temporary repairs, and leak call procedures.

1.07 PRODUCT DELIVERY STORAGE AND HANDLING

A. Delivery: Deliver materials in the manufacturer's original sealed and labeled containers and in quantities required to allow continuity of application.

B. Storage: Store materials out of direct exposure to the elements. Store roll goods on a clean, flat and dry surface. All material stored on the roof overnight shall be stored on pallets. Rolls of roofing must be stored on ends. Store materials on the roof in a manner so as to preclude overloading of deck and building structure. Store materials such as solvents, adhesives and asphalt cutback products away from open flames, sparks or excessive heat. Cover all material using a breathable cover such as a canvas. Polyethylene or other non-breathable plastic coverings are not acceptable.

C. Handling: Handle all materials in such a manner as to preclude damage and contamination with moisture or foreign matter. Handle rolled goods to prevent damage to edges or ends.

D. Damaged Material: Any materials that are found to be damaged or stored in any manner other than stated above will be automatically rejected, removed and replaced at the Contractor's expense.

1.08 PROJECT/SITE CONDITIONS

A. Requirements Prior to Job Start

1. Notification: Give a minimum of 5 days notice to the Owner and manufacturer prior to commencing any work and notify both parties on a daily basis of any change in work schedule.

2. Permits: Obtain all permits required by local agencies and pay all fees which may be required for the performance of the work.

3. Safety: Familiarize every member of the application crew with all fire and safety regulations recommended by OSHA, NRCA and other industry or local governmental groups.

B. Environmental Requirements

1. Precipitation: Do not apply roofing materials during precipitation or in the event there is a probability of precipitation during application. Take adequate precautions to ensure that materials, applied roofing, and building interiors are protected from possible moisture damage or contamination.

C. Protection Requirements

1. Membrane Protection: Provide protection against staining and mechanical damage for newly applied roofing and adjacent surfaces throughout this project.

2. Torch Safety: Designate one person on each crew to perform a daily fire watch. The designated crew member shall watch for fires or smoldering materials on all areas of roof construction Continue the fire watch after roofing material application has been suspended for the day.

3. Limited Access: Prevent access by the public to materials, tools and equipment during the course of the project.

4. Debris Removal: Remove all debris daily from the project site and take to a legal dumping area authorized to receive such materials.

5. Site Condition: Complete, to the owner's satisfaction, all job site clean-up including building interior, exterior and landscaping where affected by the construction.

6. Asbestos Containing Roofing Materials – Removal: Remove and dispose of any and all asbestos materials including asbestos containing roof materials (ACRM) in a manner which creates no hazard to the workers, the building occupants, or the environment. Follow local, state and federal laws, codes and ordinances during handling, demolition, removal and dumping of ACRM. Provide permits and certification letters in order to comply with all local, state and federal regulations pertaining to this project.

D. Removal of existing and installation of temporary and permanent roof systems shall be performed in a manner to avoid disruption of the use and operation of the building.

PART 2 PRODUCTS

2.01 DESCRIPTION OF SYSTEMS

A. Roofing Membrane Assembly (Siplast Paradiene 20 TG/30 CR FR TG roof system): A roof membrane assembly consisting of two plies of a prefabricated, reinforced, homogeneous Styrene-Butadiene-Styrene (SBS) block copolymer modified asphalt membrane, applied over a prepared substrate. Both reinforcement mats shall be impregnated/saturated and coated each side with an SBS modified bitumen blend. The roof system shall pass 500 cycles of ASTM D 5849 Resistance to Cyclic Joint Displacement (fatigue) at 14°F (-10°C). Passing results shall show no signs of membrane cracking or interply delamination after 500 cycles. The roof system shall pass 200 cycles of ASTM D 5849 after heat conditioning performed in accordance with ASTM D 5147. The assembly shall possess waterproofing capability, such that a phased roof application, with only the modified bitumen base ply in place, can be achieved for prolonged periods of time without detriment to the watertight integrity of the entire roof system.

1. Modified Bitumen Base and Stripping Ply (Siplast Paradiene 20 – torchable grade):

   a) Thickness (avg): 114 mils (2.9 mm) (ASTM D 5147)
   b) Thickness (min): 110 mils (2.8 mm) (ASTM D 5147)
   c) Weight (min per 100 ft² of coverage): 76 lb (3.7 kg/m²)
   d) Maximum filler content in elastomeric blend: 35% by weight
   e) Low temperature flexibility @ -13° F (-25° C) - PASS (ASTM D 5147)
   f) Maximum Load (avg) @ 73°F (23°C): 30 lbf/inch (5.3 kN/m) (ASTM D 5147)
   g) Maximum Load (avg) @ 0°F (-18°C): 75 lbf/inch (13.2 kN/m) (ASTM D 5147)
   h) Elongation @ 5% Maximum Load (avg.) @ 73°F (23°C): 50% (ASTM D 5147)
   i) Dimensional Stability (max): 0.1% (ASTM D 5147)

j) High Temperature Stability (min): 250ºF (121ºC) (ASTM D 5147)
k) Approvals: UL Class listed, FM Approved (products shall bear seals of approval)
l) Reinforcement: fiberglass mat or other meeting the performance and dimensional stability criteria

2. Modified Bitumen Finish Ply (Siplast Paradiene 30 CR FR – torchable grade):

a) Thickness (avg): 180 mils (3.8 mm) (ASTM D 5147)
b) Thickness at selvage (coating thickness) (avg): 118 mils (3.0 mm) (ASTM D 5147)
c) Thickness at selvage (coating thickness) (min): 114 mils (2.9 mm) (ASTM D 5147)
d) Weight (min per 100 ft² of coverage): 112 lb (5.4 kg/m²)
e) Maximum filler content in elastomeric blend: 35% by weight
f) Low temperature flexibility @ -13ºF (-25ºC): PASS (ASTM D 5147)
g) Maximum Load (avg) @ 73ºF (23ºC): 30 lbf/inch (5.3 kN/m) (ASTM D 5147)
h) Maximum Load (avg) @ 0ºF (-18ºC): 75 lbf/inch (13.2 kN/m) (ASTM D 5147)
i) Elongation @ 5% Maximum Load (avg.) @ 73ºF (23ºC): 55% (ASTM D 5147)
j) Dimensional Stability (max): 0.1% (ASTM D 5147)
k) High Temperature Stability (min): 250ºF (121º C) (ASTM D 5147)
l) Granule Embedment (max loss): 2.0 grams per sample (ASTM D 5147)
m) Approvals: UL Class listed, FM Approved (products shall bear seals of approval)
n) Reinforcement: fiberglass mat or other meeting the performance and dimensional stability criteria
o) Surfacing: ceramic granules (white synthetic chips)

B. Flashing Membrane Assembly (Siplast Veral flashing system, aluminum finish): A flashing membrane assembly consisting of a prefabricated, reinforced, Styrene-Butadiene-Styrene (SBS) block copolymer modified asphalt membrane with a continuous, channel-embossed metal-foil surfacing. The finish ply shall conform to ASTM D 6298 and the following physical and mechanical property requirements.

1. Metal-Clad Modified Bitumen Flashing Sheet (Siplast Veral Aluminum):

a) Thickness (avg): 142 mils (3.6 mm) (ASTM D 5147)
b) Thickness (min): 138 mils (3.5 mm) (ASTM D 5147)
c) Weight (min per 100 ft² of coverage): 92 lb (4.5 kg/m²)
d) Coating Thickness – back surface (min): 40 mils (1 mm) (ASTM D 5147)
e) Maximum filler content in elastomeric blend: 35% by weight
f) Low temperature flexibility @ 0º F (-18º C): PASS (ASTM D 5147)
g) Maximum Load (avg) @ 73ºF (23ºC): 85 lbf/inch (15 kN/m) (ASTM D 5147)
h) Maximum Load (avg) @ 0ºF (-18ºC): 180 lbf/inch (31.7 kN/m) (ASTM D 5147)
i) Elongation @ 5% Maximum Load (avg) @ 73ºF (23ºC): 45% (ASTM D 5147)
j) Tear-Strength (avg): 120 lbf (0.54 kN) (ASTM D 5147)
k) Dimensional Stability (max): 0.2% (ASTM D 5147)
l) High Temperature Stability (min): 225ºF (107ºC) (ASTM D 5147)
m) Cyclic Thermal Shock Stability (maximum): 0.2% (ASTM D 6298)
n) Approvals: UL Approved, FM Approved (products shall bear seals of approval)
o) Reinforcement: fiberglass scrim mat or other meeting the performance and dimensional stability criteria
p) Surfacing: aluminum metal foil

C. Flashing Reinforcing Ply - (Same as roof system base ply – refer to Section 07550 – 2.02.A.1.)

D. Catalyzed Acrylic Resin Flashing System (Parapro 123 Flashing System by Siplast/Icopal; Irving, TX): A specialty flashing system consisting of a liquid-applied, fully reinforced, multi-component acrylic membrane installed over a prepared or primed substrate. The flashing system consists of a catalyzed acrylic resin primer, basecoat and topcoat, combined with a non-woven polyester fleece. The resin and catalyst are pre-mixed immediately prior to installation. The use of the specialty flashing system shall be specifically approved in advance by the membrane manufacturer for each application.

2.02 ROOFING ACCESSORIES

A. Bituminous Cutback Materials

1. Primer (Siplast PA-1125 Asphalt Primer by Siplast / Icopal; Irving, TX): A high flash, quick drying, asphalt solvent blend which meets or exceeds ASTM D 41 requirements.

2. Mastics (Siplast PA-1021 Plastic Cement by Siplast / Icopal; Irving, TX): An asphalt cutback mastic, reinforced with non-asbestos fibers, used as a base for setting metal flanges conforming to ASTM D 4586 Type II requirements.

B. Caulking/Sealants (Siplast PS-304 Elastomeric Sealant by Siplast / Icopal; Irving, TX): A moisture-curing, non-slump elastomeric sealant designed for roofing applications. The sealant shall be approved by the roof membrane manufacturer for use in conjunction with the roof membrane materials. Acceptable types are as follows:

C. Ceramic Granules: No. 11 grade specification ceramic granules of color scheme matching the granule surfacing of the finish ply.

D. Metallic Powder: A finely graded metal dust as supplied or approved by the membrane manufacturer, used for covering of bitumen overruns over the foil surfaced membrane.

E. Perlite Cant Strips: A cant strip composed of expanded volcanic minerals combined with waterproofing binders. The top surface shall be pre-treated with an asphalt based coating. The face of the cant shall have a nominal 4 inch dimension.

F. Fasteners

1. Base Sheet Fasteners: Base sheet fasteners shall be approved by the manufacturer of the primary roofing products. Acceptable base sheet fasteners for specific substrate types are listed below.

a. Wood Nailer Fasteners (Tapper Concrete Screws by Powers Fastener, Inc.):

- Stainless steel screws, nominal 1/4 inch diameter, providing for a minimum 1 inch embedment. Fasteners in 6 inch or wider lumber should be installed in 2 rows staggered 1/3 of the nailer
width. Maximum 12 inch o.c. spacing between adjacent fastener rows at the perimeter, 6 inches o.c. at the corners. Corner fastener spacing should extend 8 feet from all outside building comers. Install 2 fasteners within 6 inches of each nailer end.

2.03 RELATED COMPONENTS

A. Rough Carpentry: Lumber used for nailers, curbs, and cants shall be No. 2 kiln dried (19% maximum moisture content after treatment), grade marked, and surfaced on four

sides. Lumber shall be salt treated with Wolman Salts (wood shall retain 0.25 lbs. dry salt per cubic foot of wood) or an approved equal.

1. Perimeter Nailers for Edge Metal Securement. Lumber shall have a nominal 6 inch width with a thickness to match the height of the new insulation assembly.

B. Perlite Cant Strips: A cant strip composed of expanded volcanic minerals combined with waterproofing binders. The top surface shall be pre-treated with an asphalt based coating. The face of the cant shall have a nominal 4 inch dimension.

C. Moisture Relief Vents For Lightweight Insulating Concrete Substrates: Insulated, spun aluminum roof vents having a one-way valve design. An acceptable type is the Aluminum Insulvent (one-way) by Marathon Roofing Products, Inc. Note that roof vents constructed of plastic are not acceptable.

D. Lead Drain Flashings: Formable type, weighing a minimum of 4 lb. per square foot; in sheets of minimum 30 inch x 30 inch dimension.

E. Lead Pipe Flashings: Preformed from sheet stock weighing a minimum of 4 lb. per square foot, and soldered with a minimum 4 inch perimeter flange with a sleeve opening fabricated to fit closely around the penetration without forcing. Lead sleeve length shall be of sufficient height to allow a minimum of 1 inch to be crimped inside of the pipe stack.

F. Fabricated Metal (Refer to Sections 07600 and 07620): Fabricate all metal components to be used in conjunction with the roof system using material specified, detailed and approved.

1. Metal Edge/Fascia: Fabricate metal edge/fascia incorporating a 4 inch perimeter flange with a minimum 1/4 inch gravel stop rise. The fascia shall be of sufficient width to adequately cover the roof assembly/wall juncture. The bottom edge of the fascia shall have a minimum 1/2 inch drip edge, hemmed and formed at 30 degrees and shall be fabricated for attachment to a continuous cleat at the outside base of the nailer. Fabricate metal edge/fascia in maximum 10 feet sections. Fabricate corner pieces of metal edge fascia with 1 foot sections in either direction from the corner. Fabricate cover plates and accessory components in accordance with SMACNA guidelines.

2. Metal Pipe Flashings: Fabricate metal pipe flashings in a two-component assembly in accordance with the following:

- The first component shall be a metal roof jack having a minimum 4 inch perimeter flange, and a sleeve opening to fit closely around the penetration without forcing, with a minimum 6 inch height. Fasten and solder metal laps.

- The second component shall be a metal, water tight umbrella, fabricated to be mechanically secured tightly around the roof penetration and extend beyond the roof jack opening by a minimum radius of 3 inches. Caulk top edge of the watertight umbrella using an approved sealant.

PART 3 EXECUTION

3.01 FIELD QUALITY CONTROL

A. Pre-Job Conference: Conduct a pre-job conference to include the designer, Owner, roofing Contractor and manufacturer's representative prior to application of roofing.

B. Foremen: Provide the roofing foreman with a copy of these specifications to be available at the job site at all times. The presence of specifications and an inspector shall not relieve the Contractor of strict compliance with the manufacturer's specifications, detail drawings, and/or approved material requirements.

C. Deck Penetrations: Verify that work penetrating the roof deck, or which may otherwise affect the roofing application, has been properly completed.

D. Final Inspection – post installation meeting: Arrange a meeting at the completion of the project to be attended by all parties that were present at the pre-job conference. A punch list of items required for completion shall be compiled by the Contractor and the manufacturer's representative. Complete, sign, and mail the punch list form to the manufacturer's headquarters.

3.02 SUBSTRATE REQUIREMENTS

A. Roof Decks: Structural roof decks should properly provide sufficient strength to support anticipated dead and live loads and normal construction traffic without excessive deflection or movement. All openings, walls or projections through the roof deck should be completed before application of the roof membrane is begun. Necessary deck repairs should be made according to the deck manufacturer's specifications following best established practices.

3.03 SUBSTRATE PREPARATION

A. Perimeter Wood Nailers: Install perimeter wood nailers in accordance with the guidelines set forth in latest edition of Factory Mutual Loss Prevention Bulletin 1-49.

B. Base Sheet Securement to Prepared Substrate: Lay the base sheet over the entire area to be roofed, lapping sides 3 inches and ends 6 inches. Using the specified fasteners, fasten each sheet every 7 inches through laps and stagger fasten the remainder of the sheet in 3 rows on nominal 9 inch centers with fasteners in each row on 10 inch centers. Increase the fastening pattern at the corners/perimeter in accordance with the recommendations set forth in Factory Mutual Loss Prevention Bulletin 1-29.

3.04 ROOF MEMBRANE INSTALLATION - GENERAL

A. Membrane Application: Apply roofing in accordance with roofing system manufacturer's instructions and the following requirements. Application of roofing membrane components shall immediately follow application of base sheet and/or insulation as a continuous operation.

B. Aesthetic Considerations: An aesthetically pleasing overall appearance of the finished roof application is a standard requirement for this project. Make necessary preparations, utilize recommended application techniques, apply the specified materials including granules and metallic powder, and exercise care in ensuring that the finished application is acceptable to the Owner.

C. Priming: Prime metal and concrete and masonry surfaces with a uniform coating of the specified asphalt primer.

D. Bitumen Consistency: Cutting or alterations of bitumen, primer, and sealants will not be permitted.

E. Roofing Application: Apply all layers of roofing free of wrinkles, creases or fishmouths. Exert sufficient pressure on the roll during application to ensure prevention of air pockets.

1. Apply all layers of roofing perpendicular to the slope of the deck.

2. Fully bond the base ply to the prepared substrate, utilizing minimum 3 inch side and end laps. Apply each sheet directly behind the torch applicator. Cut a dog ear angle at the end laps on overlapping selvage edges. Using a clean trowel, apply top pressure to top seal T-laps immediately following sheet application. Stagger end laps a minimum of 3 feet.

3. Fully bond the finish ply to the base ply, utilizing minimum 3 inch side and end laps. Apply each sheet directly behind the torch applicator. Stagger end laps of the finish ply a minimum 3 feet. Cut a dog ear angle at the end laps on overlapping selvage edges. Using a clean trowel, apply top pressure to top seal T-laps immediately following sheet application. Stagger side laps of the finish ply a minimum 12 inches from side laps in the underlying base ply. Stagger end laps of the finish ply a minimum 3 feet from end laps in the underlying base ply.

4. Maximum sheet lengths and special fastening of the specified roof membrane system may be required at various slope increments where the roof deck slope exceeds 1/2 inch per foot. The manufacturer shall provide acceptable sheet lengths and the required fastening schedule for all roofing sheet applications to applicable roof slopes.

F. Granule Embedment: Broadcast mineral granules over all bitumen overruns on the finish ply surface, while the bitumen is still hot or the adhesive is soft, to ensure a monolithic surface color.

G. Flashing Application - masonry surfaces: Flash masonry parapet walls and curbs using the reinforcing sheet and the metal foil flashing membrane. After the base ply has been applied to the top of the cant, fully adhere the reinforcing sheet, utilizing minimum 3 inch side laps and extend a minimum of 3 inches onto the base ply surface and 3 inches up the parapet wall above the cant. After the final roofing ply has been applied to the top of the cant, prepare the surface area that is to receive flashing coverage by torch heating granular surfaces or by application of asphalt primer; allowing primer to dry thoroughly. Torch apply the metal foil-faced flashing into place using three foot widths (cut off the end of roll) always lapping the factory selvage edge. Stagger the laps of the metal foil flashing layer from lap seams in the reinforcing layer. Extend the flashing sheet a minimum of 4 inches beyond the toe of the cant onto the prepared surface of the finished roof and up the wall to the desired flashing height. Exert pressure on the flashing sheet during application to ensure complete contact with the wall/roof surfaces, preventing air pockets; this can be accomplished by using a damp sponge or shop rag. Check and seal all loose laps and edges. Nail the top edge of the flashing on 9 inch centers. (See manufacturer's schematic for visual interpretation).

H. Flashing Application - wood surfaces: Flash wood or plywood parapet walls and curbs using the reinforcing sheet and the metal foil flashing membrane. The reinforcing sheet shall have minimum 3 inch side laps and extend a minimum of 3 inches onto the base ply surface and to the top of the parapet wall or curb. Nail the reinforcing sheet through the field of the sheet to the vertical wood surface on 12 inch centers from the top of the cant to top of the wall or curb. Fully adhere the remainder of the flashing reinforcing sheet that extends over the cant and roof level. After the final roofing ply has been applied to the top of the cant, prepare the surface area that is to receive flashing coverage by torch heating granular surfaces or by application of asphalt primer; allowing primer to dry thoroughly.

Torch apply the metal foil-faced flashing into place using three foot widths (cut off the end of roll) always lapping the factory selvage edge. Extend the flashing sheet a minimum of 4 inches beyond the toe of the cant onto the prepared surface of the finished roof and up the wall to the desired flashing height. Exert pressure on the flashing sheet during application to ensure complete contact with the wall/roof surfaces, preventing air pockets; this can be accomplished by using a damp sponge or shop rag. Check and seal all loose laps and edges. Nail the top edge of the flashing on 9 inch centers. (See manufacturer's schematic for visual interpretation).

I. Use of Metallic Powder: Broadcast metallic powder over all bitumen overruns on the metal foil membrane surface while the bitumen is still hot to ensure a monolithic surface color.

J. Water Cut-Off: At end of day's work, or when precipitation is imminent, construct a water cut-off at all open edges. Cut-offs can be built using asphalt or plastic cement and roofing felts, constructed to withstand protracted periods of service. Cut-offs must be completely removed prior to the resumption of roofing. Maintain roof drains in operation at all times. Provide sump pumps as needed to remove standing water.

K. Catalyzed Acrylic Resin Flashing System: Install the liquid-applied primer and flashing system in accordance with the membrane system manufacturer’s printed installer’s guidelines and other applicable written recommendations as provided by the manufacturer.

3.05 RELATED COMPONENTS - INSTALLATION

The following is a list of verbal descriptions for correct installation of components integrated into the roof membrane assembly. In all cases, unless otherwise approved, incorporate flanged components into the system between the application of the base ply and the finish ply. Prime the flange with a uniform coating of approved ASTM D 41 asphalt primer and allow to dry thoroughly; all flanges must be set in the specified mastic.

A. Edge Metal (coordination with Sections 07600 and 07620): Completely prime metal flanges and allow to dry prior to installation. Turn the base ply down 2 inches past the roof edge and over the nailer. After the base ply and continuous cleat (if applicable) have been installed, set the flange in mastic and stagger nail every 3 inches on center. Strip-in the flange using the stripping-ply material, extending a minimum of 4 inches beyond the edge of the flange. Terminate the finish ply at the gravel-stop rise of the edge metal. Refer to Section 07550 – 3.06.G, Sealant, for completion of this work.

B. Lead Pipe Flashings: Completely prime the lead flanges and allow to dry prior to installation. After the base ply has been applied, set the flange in mastic and strip-in the flange using the stripping-ply material, extending a minimum of 4 inches beyond the edge of the flange. Terminate the finish ply at the flange-sleeve juncture of the pipe flashing. Refer to Section 07550 – 3.06.G, Sealant, for completion of this work.

C. Lead Drain Flashings: Completely prime the lead drain flashing and allow to dry prior to installation. After the base ply has been applied, set the lead flashing sheet in mastic and form to turn down inside of the drain bowl. Ply-in the perimeter of the lead flashing using an additional layer of the base ply material, overlapping the perimeter of the lead a minimum of 4 inches. Terminate the finish ply to extend beneath the clamping ring seal. Install the clamping ring with all bolts in place.

D. Roof Moisture Relief Vents – non-vented lightweight insulating concrete substrates: Completely prime the metal flanges and allow to dry prior to installation. After the base ply has been applied, mark the venting designations. Cut a 2 diameter core from the roof

assembly down to the top surface of the embedded Insulperm expanded polystyrene panels. Fill the resulting void with fiberglass insulation. Set the vent flange in mastic, centered over the core cut. Strip-in the flange using the stripping-ply material, extending a minimum of 4 inches beyond the edge of the flange. Terminate the finish ply at the flange-throat juncture of the vent. Refer to Section 07550 – 3.06.G, Sealant, for completion of this work.

E. Metal Pipe Flashings: Completely prime the metal pipe flanges and allow to dry prior to installation. After the base ply has been applied, set the flanges in mastic and strip-in the flange using the stripping-ply material, extending a minimum of 4 inches beyond the edge of the flange. Terminate the finish ply at the flange-sleeve juncture of the pipe flashing. Install a watertight umbrella to the penetration, completely covering the opening of the pipe flashing. Refer to Section 07550 – 3.06.G, Sealant, for completion of this work.

F. Walktread: Cut the walktread into maximum 5 foot lengths and allow to relax until flat. Adhere the sheet using the specified plastic cement. Apply the specified cement in a 3/8 inch thickness to the back of the product in 5 inch by 5 inch spots in accordance with the pattern as supplied by the walktread manufacturer. Walk-in each sheet after application to ensure proper adhesion. Use a minimum spacing of 2 inches between sheets to allow for proper drainage.

G. Sealant: Apply a smooth continuous bead of the specified sealant at the exposed finish ply edge transition to metal flashings incorporated into the roof system.

3.06 SPECIAL CONDITIONS

A. Site Condition: Leave all areas around job site free of debris, roofing materials, equipment and related items after completion of job.

B. Notification Of Completion: Notify the manufacturer by means of manufacturer's printed Notification of Completion form of job completion in order to schedule a final inspection date.

C. Final Inspection

1. Post-Installation Meeting: Hold a meeting at the completion of the project, attended by all parties that were present at the pre-job conference. A punch list of items required for completion shall be compiled by the Contractor and the manufacturer's representative. Complete, sign, and mail the punch list form to the manufacturer's headquarters.

D. Issuance Of The Guarantee: Complete all post installation procedures and meet the manufacturer's final endorsement for issuance of the specified guarantee.

END OF SECTION 07550

Door/Hardware Index

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X118	03
X120	02
X121	02
X123	02
X124	02

Hardware Group No. 01

Provide each PR door(s) with the following:

Qty		Description	Catalog Number	Finish	Mfr
6	EA	HINGE	5BB1 4.5 X 4.5 NRP	630	IVE
1	EA	PANIC HARDWARE	9847-EO	626	VON
1	EA	PANIC HARDWARE	9847-NL-OP-110MD	626	VON
1	EA	RIM CYLINDER	20-057	626	SCH
2	EA	90 DEG OFFSET PULL	8190EZHD 10" STD	630-316	IVE
2	EA	SURFACE CLOSER	4040XP CUSH	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61	689	LCN
1	EA	THRESHOLD	65A-223	A	ZER

Balance of Door Hardware to be supplied by Aluminum supplier

Hardware Group No. 02

Provide each SGL door(s) with the following:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	630	IVE
1	EA	ELEC PANIC HARDWARE	RX-99-L-06-ALK	626	VON
1	EA	RIM CYLINDER	20-057	626	SCH
1	EA	MORTISE CYLINDER	20-061	626	SCH
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	188SBK PSA	BK	ZER
1	EA	THRESHOLD	65A-223	A	ZER

Battery Alarm kit built in Exit Device

Hardware Group No. 03

Provide each SGL door(s) with the following:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	630	IVE
1	EA	PRIVACY W/DB & IND	L9496P 06A L583-363 L283-722	626	SCH
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	188SBK PSA	BK	ZER
1	EA	THRESHOLD	65A-223	A	ZER

Hardware Group No. 04

Provide each PR door(s) with the following:

Qty		Description	Catalog Number	Finish	Mfr
6	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
2	EA	MANUAL FLUSH BOLT	FB458	626	IVE
1	EA	CLASSROOM LOCK	ND70PD RHO	626	SCH
2	EA	OH STOP	450S	652	GLY

Hardware Group No. 05

Provide each PR door(s) with the following:

Qty		Description	Catalog Number	Finish	Mfr
6	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
2	EA	MANUAL FLUSH BOLT	FB458	626	IVE
1	EA	STOREROOM LOCK	ND80PD RHO	626	SCH
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
2	EA	WALL STOP	WS406/407CCV	630	IVE
1	EA	GASKETING	188SBK PSA	BK	ZER

Hardware Group No. 06

Provide each SGL door(s) with the following:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	ND70PD RHO	626	SCH
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CCV	630	IVE
1	EA	GASKETING	188SBK PSA	BK	ZER

Hardware Group No. 07

Provide each SGL door(s) with the following:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	ND80PD RHO	626	SCH
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CCV	630	IVE
1	EA	GASKETING	188SBK PSA	BK	ZER

Hardware Group No. 08

Provide each SGL door(s) with the following:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PRIVACY LOCK	ND40S RHO	626	SCH
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CCV	630	IVE
1	EA	GASKETING	188SBK PSA	BK	ZER

Hardware Group No. 09

Provide each SGL door(s) with the following:

Qty		Description	Catalog Number	Finish	Mfr
1	EA	PANIC HARDWARE	98-NL-OP-110MD	630	VON
1	EA	RIM CYLINDER	20-057	626	SCH
1	EA	DOOR PULL, 1" ROUND	8103EZHD 10" I	630	IVE
1	EA	GATE CLOSER	LOCKEYUSA TB400SS	630	B/O

Balance of Hardware by Gate Manuf.

END OF SECTION