April 21st, 2026

Contractors are hereby notified that this addendum shall become part of their Contract Documents. The following items are intended to revise and/or clarify the Contract Documents and shall be included in the contract. **All attachments are posted to the following website including the bid manual:**

https://edificeinc.box.com/v/BrunswickCountyHHS

ITEMS INCLUDED WITHIN THIS ADDENDUM:

1. Edifice Responses to Bidders Questions & Clarifications
2. Change to Scopes of Work
3. Attachments
    a. Design Team Responses to Bidders Questions & Clarifications
    b. Drawings
    c. Specifications

EDIFICE RESPONSES TO BIDDER QUESTIONS:

1. 23-001: There are three louvers not scheduled on mechanical drawings are not shown on the architectural layout, as noted on the drawings. Please provide details so sizes can be verified and confirm who is to furnish and install these louvers.
   Response: The 3 exterior louvers with HVAC connections can be located on A300 & A301 and sizes are shown on A111. Please reference the bid manual SOW 23-001, #36 for L1. For L2 & L3, reference SOW 08-001, #13, as these are within an insulated HM frame, per details provided.

2. 10-002: Please reference A994A, GB-01 & GB-02 glass markerboards are listed as CFCI but they do not appear in any scope of work. Please confirm which scope is to provide these.
   Response: Glass markerboards are to be provided by bid package 10-002, Specialties.

3. 14-001: Reference specification 142123.16, 3.4 If temporary use is to be provided, please confirm how much time should be provided in proposal, or if temporary use would be handled as a change order. If required, confirm that protection beyond standard factory finishes would be by others.
   Response: Please reference SOW 14-001, item #14.

4. 14-001: SOW 14-001, #31 – 220v single phase disconnect and 110 GFI outlet in close proximity to the lowest landing are required for installation and would be provided by others.
   Response:

5. 03-001: Could you please provide clarification on who is to provide the housekeeping pads for the MEP equipment? SOW 03-001, #54 says that contractor has them, but 22-001 #22 and 23-001 #37 says that the individual MEP trades provide their own.
   Response: Interior housekeeping pads will be provided by the MEP trades requiring them for their equipment. The concrete subcontractor should still carry the allowance as noted in SOW 03-001, item #54. See change to SOW item.

6. 04-001: SOW 04-001, item #4. Please confirm the allowance for dumpster hauling, including the number of pulls, anticipated frequency, and any assumptions regarding duration or volume.
   Response: Please reference SOW 04-001, item #4.

7. All Scopes: What is the approximate duration of the project and can you please provide a milestone schedule to include underground MEP activities?
   Response: Milestone schedule is below, please note that these dates are subject to change.
   - *07/13/2026 – NTP or Construction Start*
   - *07/28/2027 – Roundabout Start*
   - *07/13/2026 – Site/Civil Start*
   - *08/01/2026 – Aggregate Piers*
   - *09/14/2026 – MEP Underground Start*
   - *10/12/2026 – Pad Ready*
   - *08/13/2027 – Dry-in*
   - *12/16/2027 – Permanent Power*
   - *01/10/2028 – Conditioned Air*
   - *06/01/2028 – Substantial Completion*
   - *06/30/2028 – Final Completion.*

CHANGE TO SCOPES OF WORK (SOW):

- ***03-001, updates to #54:*** Forming and pouring of MEP equipment/housekeeping pads within building footprints are ~~included in this trade contract~~ by others. Contractor to carry a $10,000 allowance for additional equipment pads that may be added.
- ***0-001, NEW:*** This Subcontractor WILL include...

ATTACHMENTS:

- Design Team Responses (2 pages)
- Drawings (14 pages)
  - C3.1_GRADING, DRAINAGE, & EROSION CONTROL
  - C3.2_GRADING, DRAINAGE, & EROSION CONTROL
  - C6.1_LAYOUT PLAN
  - C6.2_LAYOUT PLAN
  - C7.3_NOTES & DETAILS
  - A002_EXTERIOR ASSEMBLIES
  - A303_BUILDING PERSPECTIVES AND PANEL ELEVATIONS
  - A341_SECTION DETAILS @ SUNSHADES AND CANOPY
  - A360_PLAN DETAILS
  - A814_WINDOW HEAD, JAMB & SILL DETAILS
  - A815_WINDOW HEAD, JAMB & SILL DETAILS
  - A840_FINISH LEGEND & INFORMATION
  - E-602_ELECTRICAL POWER RISER DIAGRAM 2-OF-2
  - EL111A_ELECTRICAL LEVEL 01 -LIGHTING PLAN -AREA A
- Specifications (52 pages)
  - 033500_Concrete Finishing
  - 072726_Fluid-Applied Membrane Air Barriers
  - 098316_Sprayed Cellulose Acoustical Insulation

- 099123_Interior Painting
- 102123_Cubicle Curtains and Track
- 142123.16_Machine Room-Less Electrica Traction Passenger Elevators
- 260519_Low Voltage Electrical Power Conductors and Cables

End of Addendum 02

Brunswick County HHS
Brunswick County
Bolivia, NC

Bidding RFIs
4/21/2026
RFI Log

Bid RFI #	Submitted by	Question	Response
9	09-003: Hard Tile	Specification 09 66 23-1.1-A-1 notes elevator floor to be terrazzo; however, the floor finish plans show this to be hard tile. Please confirm that the elevator flooring is to be hard tile as shown on the finish floor plans and the reference to terrazzo in the specification will to be removed.	Specification section 142123.16 Machine Room-Less Electric Traction Passenger Elevators will be revised to indicate floor tile, in the next addendum. There is no terrazzo in the elevator cabs.
10	26-001: Electrical 32-002: Fencing	Note 32 on A010 references access control gates; however, the Civil utility, Electrical site and Telecom site drawings do not show power/data or islands to these locations. Please provide updated site drawings & provide a specification for fencing and gate BOD. None is provided.	As of 04.17.2026, revised drawings are not available. The basis of design is to be Lift Master Techna Commercial Barrier Gate Operator. One operator is to be provided for each direction of travel (2 per roadway).
11	31-001: Sitework	Integral storm drainage is noted for the level 1 canopy on A1/A342; however, no connections to these downspouts is shown on the civil plans connecting back to the storm lines. Please provide updated details and locations for these connections.	Sheet C3.1 has been revised with additional information. Refer to the next addendum.
12	31-001: Sitework	The multi-use path is shown on the civil drawings; however, the assembly and thickness of this system is not provided. Please provide a detail for this system.	Sheets C3.1, C3.2, C6.1, C6.2, and C7.3 has been revised with additional information. Refer to the next addendum.
13	01-002: Specialties	Please provide BOD and tag # for Exam Room Curtain Track. The track is shown, but no further details are provided.	In the next addendum, a new specification section 102123 Cubicle Curtains and Track will be provided. Curtain product information will be provided on the finish legend on sheet A840.
14	04-001: Masonry	Detail 04/L3.1 shows a precast cap; however, there is no specification provided for cast stone. Please provide a specification.	Empire Precast and Stepstone Precast are approved providers of the precast site wall caps. All dowels, clips, and other fasteners used to secure the caps are to be stainless steel. Refer to the upcoming addendum for contact information and product data.
15	10-002: Specialties	Items TA-01, TA-02, TA-03 all say OFCI in the schedule and then there's a note under the mounting heights that says all grab bars to be CFCI. Please confirm which is correct.	All grab bars are to be CFCI. Provide blocking as required.
16	10-002: Specialties	Please reference A421, accessory item TA-06 remarks is blank and TA-18 remarks says "varies" instead of OFCI, OFOI, or CFCI. Can you confirm which one should be selected for these two items.	TA-04 and TA-06 are to be identical soap dispensers and both are to be OFCI. TA-18 Paper Towel Dispenser is to be OFCI. Provide blocking as required.
17	10-002: Specialties 26-001: Electrical	One of the Knox Boxes is an emergency electrical shut off and would require a certified electrician to install. Is this special style knox box required? If not required, can it be removed?	The full building electrical power shut off button and electrical Knox box has been removed from project scope. They are not code required..
18	10-002: Specialties	Please reference A994A, EQ-53 atomic clocks are listed as CFCI but no spec or BOD is provided. Please confirm these are to be OFOI.	EQ-53 Atomic Clock is to be OFCI. Note that it is to be hardwired with a recessed junction box. Refer to electrical drawings.
19	26-001: Electrical	General Note #1 on page E-100 calls for (2) Electrical Sleeves of 4" and also (1) Irrigation Sleeve of 4" to be provided for each grassed island and field that is within the project boundaries. Please provide locations for these sleeves and where the future connection is to be supplied from.	Proposed sleeve locations will be added on the next revision to the electrical site plan. This revision will also include new information on the traffic control gates.
20	26-001: Electrical	Is Johnson Controls-Simplex an acceptable manufacturer for fire alarm. Please reference spec section 28 31 11 Part 2.1	Johnson Controls-Simplex is an approved manufacturer, provided they meet all performance requirements of the basis of design products and systems.
21	26-001: Electrical	Reference EL111A, Breast Feeding Rm 1004 shows M2, but M2 does not appear on the light fixture schedule. Furthermore, on A421 TA-19 is shown in it's place. Please confirm M2 is not included in the light fixture package.	Light fixture type M2 has been removed from the light fixture package. Refer to revised sheet EL111A.
22	23-001: HVAC	Reference MH100 series drawings, the IDF and electrical rooms show duct openings through the walls, but no connection to duct work or split systems to control air tempertature. Please confirm no split systems are required and no connections to any systems at these rooms is to be provided.	IDF and electrical rooms are open to the return air plenum and should have louvers in the doors (refer to architectural plans). Any heat build up should just be pulled to the return air plenum. Split systems are not required.
23	26-001: Electrical	On Page E-602 the one line shows the Future Panels as dashed lines, but it shows the Future Transformer as a solid line. Is it the intent that all of the panels are not to be purchased and only the transformer is to be purchased and installed on its' pad?	The future transformer should be shown as dashed like the future panelboards. Refer to revised sheet E-602.
24	09-001: Framing & Drywall 10-002: Specialties 26-001: Electrical	In the 10-002 SOW #11, AED cabinets are included as OFCI. Do the owner furnished AED cabinets require any electrical or low voltage to charge AEDs, power strobe light or connect audio? Please confirm.	AED cabinets are standalone units that do not require any power or data connections to the building. They will require wall blocking though.

25	26-001: Electrical	Please reference 260519-3, 2.3-A & 260519-7, 3.4-P. The specifications note that MC cable can be used for low voltage control cable and in other applications; however, the sepcifications also say that daisy-chaining is prohibited. Please confirm that MC cable can be used for conceiled ceilings for branch power and light power.	Daisy-chaining of MC cable from light fixture to light fixture will be acceptable in concealed areas. Remove the last sentence in each of the referenced paragraphs. Refer to revised spec section 26 05 19 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES.

CONSTRUCTION SEQUENCE:

EROSION & SEDIMENTATION CONTROL CONSTRUCTION SEQUENCE (PER NCDEQ EC MANUAL, SEC 4, PART VI):

1. SCHEDULE AND HOLD PRE-CONSTRUCTION MEETING WITH NCDEQ STAFF, IF REQUIRED. THOROUGHLY GO OVER CONSTRUCTION SEQUENCE AND PLAN PRIOR TO MEETING. BECOME FAMILIAR WITH PLAN AND SURROUNDINGS.
2. REFERENCE PLAN SHEET EC1 FOR INITIAL SITE GRADING PHASE. EXISTING STORMWATER POND 2 WILL BE USED AS A TEMPORARY SEDIMENT BASIN FOR INITIAL SITE GRADING FOR DRAINAGE AREA #2. INSTALL EROSION CONTROL DEVICES INCLUDING: CUTTING WEIR INTO EXISTING OUTLET BOX AT ELEV: 29.0', EC1 SKIMMER, EC1 POND BAFFLES, TEMPORARY 18" DRIVE PIPE WITH ENERGY DISSIPATER, CONSTRUCTION ENTRANCES, TEMPORARY SILT FENCE, AND ROCK PIPE INLET PROTECTION AT DRAINAGE AREA #1.
3. ONCE ALL OF THE ITEMS IN STEP #2 (EC-1) ARE IN PLACE AND FUNCTIONAL, PROCEED WITH THE INITIAL GRADING (CLEARING AND GRUBBING) OF THE SITE THAT WILL ALLOW FOR THE SITE INFRASTRUCTURE TO BE INSTALLED ALLOWING THE CONSTRUCTION TO MOVE TO THE NEXT PHASE OF CONSTRUCTION, SHOWN ON THE GRADING, DRAINAGE, & EROSION CONTROL SHEETS (C3.1 & C3.2).
4. PRIOR TO MOVING TO THE NEXT PHASE, ENSURE THAT CONSTRUCTION ENTRANCES AND OTHER EC MEASURES ARE MAINTAINED AND FUNCTIONAL. BEGIN THE NEXT PHASE BY CONSTRUCTING THE NEW SW POND #2/SEDIMENT BASIN, INCLUDING THE EMERGENCY SPILLWAY, OUTLET STRUCTURE, NEW OUTLET BARREL, AND NEW SKIMMER.
5. WHEN ALL ITEMS IN STEP #4 ARE INSTALLED AND ACTIVE, BEGIN WITH INSTALLATION OF INFRASTRUCTURE (STORM DRAINAGE SEWER AND WATER).
6. BEGIN FINAL GRADING AS SOON AS POSSIBLE TO MINIMIZE THE EROSION FROM THE SITE. DISTURBED AREAS ARE TO BE STABILIZED AS SOON AS POSSIBLE.
7. ONCE ALL FINAL GRADING IS COMPLETE AND THE SITE IS STABLE, REQUEST AN INSPECTION FROM NCDEQ STAFF. REMOVE TEMPORARY MEASURES, ONLY AFTER INSPECTION AND NCDEQ STAFF INSTRUCTS THAT TEMPORARY MEASURES MAY BE REMOVED.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL TEMPORARY MEASURES FOR THE DURATION OF THE PROJECT.

BUILDING B

BUILDING C (EMS)

SEE SHEET C3.2

MATCHLINE

140 EXISTING PARKING STALLS

PROPOSED HEALTH & HUMAN SERVICES EOC BUILDING FFE=41.0'

PROPOSED STORM WATER POND #2

US HWY 17 BUS OLD OCEAN HIGHWAY 100' R/W

20.0' STREETYARD

TIE BACK INTO EXISTING ROAD (=38.10±)

TIE BACK INTO EXISTING =(38.00±)

TIE BACK INTO EXISTING =(37.80±)

TIE BACK INTO EXISTING GRADE

EXISTING CULVERT TO REMAIN

PROPOSED ROUNDABOUT SEE DETAIL

REMOVE EXISTING CULVERT

FILL EXISTING 18" SD WITH FLOWABLE GROUT

FES-1C INV (SE-Out): 34.00' 18" FES 12'x8'x12" CL 'B' RIP-RAP

FES-10B INV (SE-Out): 35.25' 15" FES

FES 1 INV (E-Out): 35.30' 6'x10'x12" CL 'B' RIP-RAP

APS-11B INV (SW-Out): 35.00±

SWALE # =127' So=0.55%

DI-2C TOP=GRADE(37.25±) INV (NW-Out): 34.18' INV (SW-In): 34.18'

CI-9B TOP=GRADE(36.50±) INV (NE-Out): 34.75'

CI-16B TOP=GRADE(37.10±) INV (SE-Out): 33.60'

SDMH-8B TOP=GRADE(37.22±) INV (NW-In): 34.50' INV (SW-In): 34.50' INV (NE-In): 34.50' INV (S-Out): 34.50'

DI-3C TOP=GRADE(38.48±) INV (NE-Out): 34.71' INV (SE-In): 34.71'

TEMPORARY CONSTRUCTION ENTRANCE

6' CURB TAPER

STORM OVER SEWER

REMOVE & REPLACE EXISTING ASPHALT THAT IS REQUIRED TO INSTALL VALLEY CURB & PIPE

VALLEY GUTTER WITH ADS SLOT DRAIN

DI-7B TOP=GRADE(36.60±) INV (SE-Out): 34.00' INV (N-In): 34.00' INV (SW-In): 34.00'

DI-15B TOP=GRADE(35.42±) INV (NE-Out): 34.20' INV (NW-In): 33.30'

CI-14B TOP=GRADE(37.00±) INV (SE-Out): 32.20'

CI-13B TOP=GRADE(37.50±) INV (SE-Out): 32.00' INV (NW-In): 32.00'

DI-4C TOP=GRADE(38.39±) INV (NW-Out): 35.25' INV (SE-In): 35.25'

DI-5C TOP=GRADE(38.40±) INV (NW-Out): 35.34' INV (SE-In): 35.34'

DI-6C TOP=GRADE(38.52±) INV (NW-Out): 35.46' INV (SE-In): 35.46'

DI-6B TOP=GRADE(37.50±) INV (SE-Out): 30.40' INV (NW-In): 30.40' INV (SW-In): 30.40'

DI-7C TOP=GRADE(38.62±) INV (NW-Out): 35.56' INV (SE-In): 35.56'

DI-12B TOP=GRADE(37.50±) INV (NE-Out): 31.00' INV (NW-In): 31.00'

CI-17B TOP=GRADE(37.95±) INV (E-Out): 31.00'

DI-8C TOP=GRADE(39.34±) INV (NW-Out): 36.62'

(1) 6"x12" INCREASER (1) RDCO (1) 6"x12" CROSS

DROP OFF

ASPHALT FLUSH WITH TURN DOWN WALK

6" ROOF DRAIN HEADER PIPE C900 DR18 PVC @ 1.00% SLOPE MIN. FOR CANOPY

CANOPY

12" C900 DR18 PVC @ 1.00% SLOPE MIN.

MAIN ENTRY

ROOF DRAIN TO CANOPY (SEE PLUMBING PLANS)

8" C900 DR18 PVC @ 1.00% (MIN.)

10" C900 DR18 PVC @ 1.00% (MIN.)

10" C900 PVC DR18

8"x10" INCREASER

10"x12" INCREASER

HANDICAP RAMP

RDCO

ASPHALT FLUSH WITH TURN DOWN WALK

EXISTING INLET GRATE=34.96' INV IN(NW-24")=30.06' INV OUT(SE-24")=29.89' NEW INV IN(W-15")=32.55'

REMOVE EXISTING ASPHALT FROM CENTERLINE TO SOUTH EDGE OF PAVEMENT. REGRADE ROAD TO GRADES SHOWN.

CI-5A TOP=GRADE(35.46±) INV (E-Out): 28.10'

CI-4A TOP=GRADE(36.50±) INV (NE-Out): 27.80 INV (W-In): 27.80

TEMPORARY CONSTRUCTION ENTRANCE

CI-3A TOP=GRADE(35.06±) INV (N-In): 27.31' INV (NE-Out): 27.21' INV (SW-In): 27.31'

CI-3B TOP=GRADE(38.40±) INV (NE-Out): 28.10' INV (SW-In): 28.10'

DROP INLET (4" HD FRAME & GRATE) T=34.75± 24" II=31.91' 24" IO EX.=31.91'

CI-3.5A TOP=GRADE(33.10±) INV (S-Out): 30.00'

SDMH-2A TOP=GRADE(34.54±) INV (SW-In): 26.58' INV (SE-Out): 26.58'

6' CURB TAPER

EXTEND 24" HDPE SD TO NEW POND POUR COLLAR SEE DETAIL

FES-1A INV (NW-Out): 24.00' ED: 15'x12'x18" CLASS 'B'

DUMPSTER PAD WITH ENCLOSURE SEE LANDSCAPE & STRUCTURAL PLANS FOR DETAIL

GENERATOR WITH ENCLOSURE SEE LANDSCAPE & STRUCTURAL PLANS FOR ENCLOSURE AND PAD DETAILS

TRANSFORMER PAD SEE LANDSCAPE & STRUCTURAL PLANS FOR DETAILS

CI-2.5B TOP=GRADE(35.50±) INV (SE-Out): 30.81'

FES-1B INV (S-Out): 27.00' ED: 21'x16'x18" CLASS 'B'

DI-2B TOP=GRADE(35.00±) INV (N-Out): 27.50' INV (SW-In): 30.04'

SILT FENCE DOUBLES AS TEMPORARY PROTECTION

LEGEND

- PROPERTY LINE
- DISTURBED AREA LIMITS
- PROPOSED CONTOUR
- TEMPORARY SILT FENCE
- PROPOSED STORMDRAIN PIPE
- PROPOSED WATERLINE
- PROPOSED SANITARY SEWER
- PROPOSED DITCH SWALE
- PROPOSED SPOT ELEVATION FLOW LINE
- PROPOSED SPOT ELEVATION TOP OF CURB
- PROPOSED SPOT ELEVATION FINISH GRADE
- FLARED END SECTION WITH RIP-RAP ENERGY DISSIPATOR
- DROP INLET WITH INLET PROTECTION (DI)
- CURB INLET WITH INLET PROTECTION (CI)
- JUNCTION BOX (JB)
- PROPOSED FIRE HYDRANT
- WATER TEE
- WATER VALVE
- WATER REDUCER
- EXISTING CONTOUR
- EXISTING TREE TO BE SAVED
- EXISTING TREE TO BE REMOVED
- TREE PROTECTION FENCING
- CONSTRUCTION ENTRANCE

SCALE: 1"=30'

0 15 30 60 90

SYMBOL	DATE	DESCRIPTION	BY
B	04/17/26	RD CANOPY, MUP DET,ETC	MWA
A	04/01/26	VAN ACCESS CALLOUT, ETC	MWA

REVISIONS

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GRADING, DRAINAGE, & EROSION CONTROL
BRUNSWICK COUNTY HEALTH & HUMAN SERVICES
67 GOVERNMENT CENTER DR NE
BOLIVIA, NC 28422

OWNER/DEVELOPER
STEVE STONE, COUNTY MANAGER
BRUNSWICK COUNTY
P.O. BOX 249
BOLIVIA, NC 28422
910-253-2015
steve.stone@brunswickcountync.gov

Tunstall Consulting Engineers PLLC
2602 IRON GATE DR., SUITE 102
WILMINGTON, NC 28412
PHONE (910) 343-9653
LICENSE# P-3152

25001

DES. JST
CKD. TJC
DRWN. MWA

DATE 04-17-26

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 040051 JOHN TUNSTALL

C3.1

G:\projects\2025\25001 BC HHS-EOC Bldg\25001 Plans\dwg\25001 MASTER.dwg (C3.1-BC) Plotted on: Apr 17, 2026 - 12:53pm by Thomas

SEE SHEET C3.1

MATCHLINE

BUILDING A

BUILDING

B

DROP INLET (4" HD FRAME & GRATE) T=34.75' 24" II=31.91' 24" IO EX.=31.91'

MATT WALK IS @ 4.07%±

NEW SIDEWALK

(35') 24" SD

24" FES INV=34.00'

CI-3.5A TOP=GRADE(33.10'±) INV (S-Out): 30.00'

SDMH-2A TOP=GRADE(34.54'±) INV (SW-In): 26.58' INV (SE-Out): 26.58'

6" CURB TAPER

EXTEND 24" HDPE SD TO NEW POND POUR COLLAR SEE DETAIL

FES-1A INV (NW-Out): 24.00' ED: 15'x12'x18' CLASS 'B'

DUMPSTER PAD WITH ENCLOSURE SEE LANDSCAPE & STRUCTURAL PLANS FOR DETAIL

GENERATOR WITH ENCLOSURE SEE LANDSCAPE & STRUCTURAL PLANS FOR ENCLOSURE AND PAD DETAILS

TRANSFORMER PAD SEE LANDSCAPE & STRUCTURAL PLANS FOR DETAILS

CI-2.5B TOP=GRADE(35.50'±) INV (SE-Out): 30.81'

FES-1B INV (S-Out): 27.00' ED: 21'x16'x18' CLASS 'B'

PROPOSED STORM WATER POND #2

SIDE SLOPES FROM 19' TO 26' ARE (2.5:1)

CLASS 'B' RIP-RAP ACROSS FOREBAY BERM

NEW OUTLET STRUCTURE WITH SKIMMER (SEE DETAIL)

NEW POND 2 SKIMMER SEE DETAIL

EROSION CONTROL SEDIMENT BASIN BAFFLES (TYP)

36" RCP 515' @ 0.28%

INV=26.75'

20' STREETYARD

DI-2B TOP=GRADE(35.00'±) INV (N-Out): 27.50' INV (SW-In): 27.50' INV (NW-In): 30.04'

SILT FENCE DOUBLES AS TREE PROTECTION

TSF AT P/L

450' EMERGENCY SPILLWAY @ 32.75'

PROPOSED 10' MULTI-USE PATH

SEE SHEET C3.1

GOVERNMENT CENTER DR NE

COURT HOUSE DR NE

APPROXIMATE OPEN CUT ROAD FOR STORM DRAIN INSTALLATION. REMOVE & REPLACE EXISTING PAVEMENT AS REQUIRED. COORDINATE ROAD REPAIR WITH BRUNSWICK COUNTY & REPAIR ROAD PER COUNTY DETAIL.

EXISTING STORMWATER POND #1

EXISTING 36" RCP

36" RCP 2' (MIN.) APART

CONC. RISER TOP=31.38 INV=25.45 36" RCP

36" NEW FES INV (SW-Out): 25.30' RCP

RIP-RAP ED 25'Wx25'Lx18"D CLASS 'B' RIP-RAP (EXTEND RIP-RAP DOWN TO TOE OF SLOPE)

GOVERNMENT CENTER DRIVE

15" CMP INV=27.53

STORM JUNCTION BOX (LOCKED)

18" CMP INV=25.86

15" CMP INV=27.50

15" CMP INV=27.53

18" CMP INV=27.41

36" RCP INV=25.90

18" CMP INV=28.13

48" RCP INV=25.62

50" CMP INV=24.04

60" CMP INV=24.02

60" CMP INV=21.95

60" CMP INV=22.11

APPROX. BLIND JUNCTION BOX

SCALE: 1"=30'

0 15 30 60 90

PROPERTY LINE
DISTURBED AREA LIMITS
PROPOSED CONTOUR
TEMPORARY SILT FENCE
PROPOSED STORMDRAIN PIPE
PROPOSED WATERLINE
PROPOSED SANITARY SEWER
PROPOSED DITCH SWALE
PROPOSED SPOT ELEVATION FLOW LINE
PROPOSED SPOT ELEVATION TOP OF CURB
PROPOSED SPOT ELEVATION FINISH GRADE
FLARED END SECTION WITH RIP-RAP ENERGY DISSIPATOR
DROP INLET WITH INLET PROTECTION (DI)
CURB INLET WITH INLET PROTECTION (CI)
JUNCTION BOX (JB)
PROPOSED FIRE HYDRANT
WATER TEE
WATER VALVE
WATER REDUCER
EXISTING CONTOUR
EXISTING TREE TO BE SAVED
EXISTING TREE TO BE REMOVED
TREE PROTECTION FENCING
CONSTRUCTION ENTRANCE

CONSTRUCTION SEQUENCE: EROSION & SEDIMENTATION CONTROL CONSTRUCTION SEQUENCE (PER NCDEQ EC MANUAL, SEC 4, PART VI):

1. SCHEDULE AND HOLD PRE-CONSTRUCTION MEETING WITH NCDEQ STAFF, IF REQUIRED. THOROUGHLY GO OVER CONSTRUCTION SEQUENCE AND PLAN PRIOR TO MEETING. BECOME FAMILIAR WITH PLAN AND SURROUNDINGS.
2. REFERENCE PLAN SHEET EC1 FOR INITIAL SITE GRADING PHASE. EXISTING STORMWATER POND 2 WILL BE USED AS A TEMPORARY SEDIMENT BASIN FOR INITIAL SITE GRADING FOR DRAINAGE AREA #2. INSTALL EROSION CONTROL DEVICES INCLUDING: CUTTING WEIR INTO EXISTING OUTLET BOX AT ELEV: 29.0', EC1 SKIMMER, EC1 POND BAFFLES, TEMPORARY 18" DRIVE PIPE WITH ENERGY DISSIPATER, CONSTRUCTION ENTRANCES, TEMPORARY SILT FENCE, AND ROCK PIPE INLET PROTECTION AT DRAINAGE AREA #1.
3. ONCE ALL OF THE ITEMS IN STEP #2 (EC-1) ARE IN PLACE AND FUNCTIONAL, PROCEED WITH THE INITIAL GRADING (CLEARING AND GRUBBING) OF THE SITE THAT WILL ALLOW FOR THE SITE INFRASTRUCTURE TO BE INSTALLED ALLOWING THE CONSTRUCTION TO MOVE TO THE NEXT PHASE OF CONSTRUCTION, SHOWN ON THE GRADING, DRAINAGE, & EROSION CONTROL SHEETS (C3.1 & C3.2).
4. PRIOR TO MOVING TO THE NEXT PHASE, ENSURE THAT CONSTRUCTION ENTRANCES AND OTHER EC MEASURES ARE MAINTAINED AND FUNCTIONAL. BEGIN THE NEXT PHASE BY CONSTRUCTING THE NEW SW POND #2/SEDIMENT BASIN, INCLUDING THE EMERGENCY SPILLWAY, OUTLET STRUCTURE, NEW OUTLET BARREL, AND NEW SKIMMER.
5. WHEN ALL ITEMS IN STEP #4 ARE INSTALLED AND ACTIVE, BEGIN WITH INSTALLATION OF INFRASTRUCTURE (STORM DRAINAGE SEWER AND WATER).
6. BEGIN FINAL GRADING AS SOON AS POSSIBLE TO MINIMIZE THE EROSION FROM THE SITE. DISTURBED AREAS ARE TO BE STABILIZED AS SOON AS POSSIBLE.
7. ONCE ALL FINAL GRADING IS COMPLETE AND THE SITE IS STABLE, REQUEST AN INSPECTION FROM NCDEQ STAFF. REMOVE TEMPORARY MEASURES, ONLY AFTER INSPECTION AND NCDEQ STAFF INSTRUCTS THAT TEMPORARY MEASURES MAY BE REMOVED.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL TEMPORARY MEASURES FOR THE DURATION OF THE PROJECT.
9. MUP & SIDEWALK MAXIMUM LONGITUDINAL SLOPE IS 5% AND THE MAXIMUM CROSS SLOPE IS 2%.

SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	
B	04/17/26	RD CANOPY, MUP DET,ETC	MWA
A	04/01/26	VAN ACCESS CALLOUT, ETC	MWA

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GRADING, DRAINAGE, & EROSION CONTROL
BRUNSWICK COUNTY HEALTH & HUMAN SERVICES
67 GOVERNMENT CENTER DR NE
BOLIVIA, NC 28422

OWNER/DEVELOPER
STEVE STONE, COUNTY MANAGER
BRUNSWICK COUNTY
P.O. BOX 249
BOLIVIA, NC 28422
910-253-2015
steve.stone@brunswickcountync.gov

Tunstall Consulting Engineers PLLC
2602 IRON GATE DR., SUITE 102
WILMINGTON, NC 28412
PHONE (910) 343-9653
LICENSE# P-3152

25001

DES. JST
CKD. TJC
DRWN. MWA

DATE 04-17-26

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 40951 JOHN S. TUNSTALL

C3.2

G:\projects\2025\25001 BC HHS-EOC Bldg\25001 MASTER.dwg (C3.2-BO) Plotted on: Apr 17, 2026 – 12:53pm by Thomas
G:\projects\2025\25001 BC HHS-EOC Bldg\25001 Plans\dwg\25001 MASTER.dwg (C3.2-BO) Plotted on: Apr 17, 2026 – 12:53pm by Thomas

BUILDING B

SEE SHEET C6.2

MATCHLINE

140 EXISTING PARKING STALLS

BUILDING C (EMS)

PROPOSED HEALTH & HUMAN SERVICES EOC BUILDING FFE=41.0'

PROPOSED STORM WATER POND #2

20.0' STREETYARD

NOTE:
1) ALL ADA SPACES & ACCESS ISLES SHALL BE 2% MAXIMUM SLOPE IN EACH DIRECTION, SEE DETAIL.

2) ALL HANDICAP SPACES ARE VAN ACCESSIBLE

A

B

ROUNDABOUT SIGN 10 MPH 200' FROM ROUNDABOUT

PROPOSED ROUNDABOUT SEE DETAIL

SPLIT MEDIAN SIGN

TYPE "D" CURB, SEE SECTION

ELECTRONIC GATE WITH CONCRETE ISLAND & BOLLARDS (SEE MEP PLANS FOR DETAILS)

6' CURB TAPER

10'x70' SITE TRIANGLES

LIGHT POLE

STOP SIGN

STOP BAR

8" WIDE YELLOW CENTERLINES

HEAVY DUTY ASPHALT

HEAVY DUTY CONCRETE (SEE DETAIL)

4" WIDE WHITE MINI-SKIPS (TYP)

W11-2 & W16-7PL

W11-2

W2-6

R1-2

NCDOT MONOLITHIC ISLAND TYPICAL (SEE DETAIL ON C6.3)

STRIPE OUT EXISTING PARKING SPACE FIELD VERIFY LOCATION OF EXISTING SPACE

DOME WARNING MAT

PROPOSED 5' SIDEWALK

NO OBSTRUCTION SHALL BE PLACED WITHIN SIGHT TRIANGLES

RAISED CROSS WALK BEGINS AT STATION 9+30 (SEE DETAIL)

HC RAMP WITH DOME MATS

6' CURB TAPER TO VALLEY GUTTER (SEE DETAIL)

CANOPY

ASPHALT FLUSH WITH TURN DOWN WALK

CONCRETE WHEEL STOP (TYP)

SIDEWALK CROSS SLOPE MAX 2% RUNNING SLOPE MAX 5%

LANDSCAPE ISLAND HANDICAP RAMP (TYP)

HANDICAP RAMP (TYP)

ONE WAY DO NOT ENTER SIGN

BOLLARDS (TYP)

DROP OFF

MAIN ENTRY

ADA MATS REQUIRED (TYP)

30' ONE WAY DRIVEWAY

TRUNCATED DOME WARNING MATTS (TYP) SEE DETAILS

HC SIGNS (TYP)

HANDICAP MAX SLOPE 2% IN EACH DIRECTION (ALL HANDICAP SPACES ARE VAN ACCESSIBLE)

HANDICAP MAX SLOPE 2% IN EACH DIRECTION

ASPHALT FLUSH WITH TURN DOWN SIDEWALK

CONCRETE SEATWALL SEE LANDSCAPE PLANS

CONCRETE SEATWALL SEE LANDSCAPE PLANS

REMOVABLE BOLLARDS

HC DOME MATS

ALL HANDICAP SPACES ARE VAN ACCESSIBLE

DUMPSTER PAD WITH ENCLOSURE SEE LANDSCAPE & STRUCTURAL PLANS FOR DETAIL

GENERATOR WITH ENCLOSURE SEE LANDSCAPE & STRUCTURAL PLANS FOR ENCLOSURE AND PAD DETAILS TRANSFORMER PAD SEE LANDSCAPE & STRUCTURAL PLANS FOR DETAILS

SEE SHEET C6.2

SIGNAGE LEGEND

W2-6

W13-1

R1-2

R4-7

R6-4

W11-2

W16-7PL

OM4-3

HATCH LEGEND

SIDEWALK

MULTI-USE PATH

ASPHALT - LD

POURED IN RUBBER SURFACE

ASPHALT - HD

HEAVY DUTY CONCRETE

LANDSCAPE AREA

SCALE: 1"=30'

0 15 30 60 90

SYMBOL	DATE	DESCRIPTION	BY
B	04/17/26	RD CANOPY, MUP DET,ETC	MWA
A	04/01/26	VAN ACCESS CALLOUT, ETC	MWA

REVISIONS

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LAYOUT PLAN
BRUNSWICK COUNTY HEALTH & HUMAN SERVICES
67 GOVERNMENT CENTER DR NE
BOLIVIA, NC 28422

OWNER/DEVELOPER
STEVE STONE, COUNTY MANAGER
BRUNSWICK COUNTY
P.O. BOX 249
BOLIVIA, NC 28422
910-253-2015
steve.stone@brunswickcountync.gov

Tunstall Consulting Engineers PLLC
2602 IRON GATE DR., SUITE 102
WILMINGTON, NC 28412
PHONE (910) 343-9653
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DES. JST
CKD. TJC
DRWN. MWA

DATE 04-17-26

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 40951 JOHN S. TUNSTALL

C6.1

G:\projects\2025\25001 BC HHS-EOC Bldg\25001 Plans\dwg\25001 MASTER.dwg (C6.1-BC) Plotted on: Apr 17, 2026 – 12:53pm by Thomas

HATCH LEGEND

- SIDEWALK
- MULTI-USE PATH
- ASPHALT - LD
- POND RIP-RAP
- ASPHALT - HD
- HEAVY DUTY CONCRETE
- LANDSCAPE AREA

SIGNAGE LEGEND

- W2-6
- W13-1
- R1-2
- R4-7
- R6-4
- W11-2
- W16-7PL
- OM4-3

SCALE: 1"=30'

0 15 30 60 90

SYMBOL	DATE	DESCRIPTION	BY
B	04/17/26	RD CANOPY, MUP DET,ETC	MWA
A	04/01/26	VAN ACCESS CALLOUT, ETC	MWA

REVISIONS

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DATE 04–17–26

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 40951 JOHN S. TUNSTALL

C6.2

SEE SHEET C6.1

BUILDING B

MATCHLINE

140 EXISTING PARKING STALLS

BUILDING A

SAN

PROPOSED 5' SIDEWALK

NO OBSTRUCTION SHALL BE PLACED WITHIN SIGHT TRIANGLES

W11-2

W11-2 & W16-7PL

RAISED HANDICAP CROSS WALK SECTION BEGINS AT STATION 5+53 (SEE DETAIL)

EXPAND SIDEWALK FROM 5' TO 8'

HEAVY DUTY ASPHALT

HC RAMP WITH DOME MATS

STOP SIGN & STOP BAR

GOVERNMENT CENTER DR NE

7+00 6+00 5+00 4+00 3+00

COURT HOUSE DR NE

2+00 1+00 0+00

DUMPSTER PAD WITH ENCLOSURE SEE LANDSCAPE & STRUCTURAL PLANS FOR DETAIL

GENERATOR WITH ENCLOSURE SEE LANDSCAPE & STRUCTURAL PLANS FOR ENCLOSURE AND PAD DETAILS

TRANSFORMER PAD SEE LANDSCAPE & STRUCTURAL PLANS FOR DETAILS

PROPOSED STORM WATER POND #2

NEW OUTLET STRUCTURE WITH SKIMMER (SEE DETAIL)

20' STREETYARD

EXISTING STORMWATER POND #1

EXISTING 36" RCP

PROPOSED 10' MULTI-USE PATH

GOVERNMENT CENTER DRIVE

JUNCTION BOX (LOCKED)

15" CMP INV=27.53

15" CMP INV=25.86

15" CMP INV=27.50

CONC. RISER TOP=31.39 INV=25.45-36" RCP

36" RCP INV=25.30

48" RCP INV=25.62

60" CMP INV=24.04

60" CMP INV=24.09

60" CMP INV=21.95

SEE SHEET C6.1

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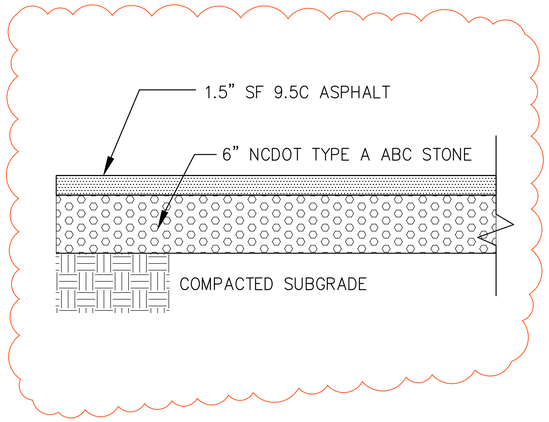
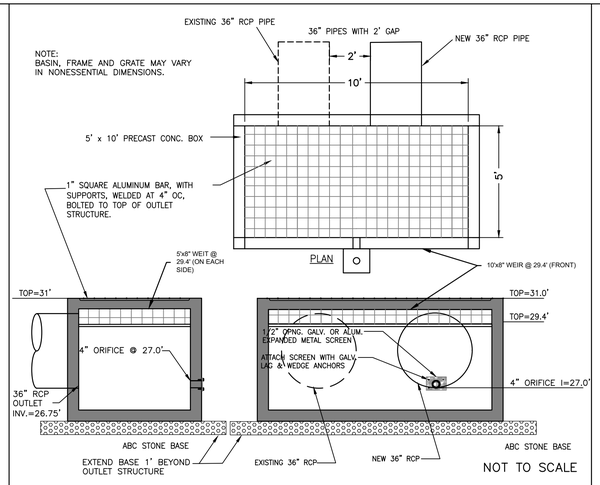
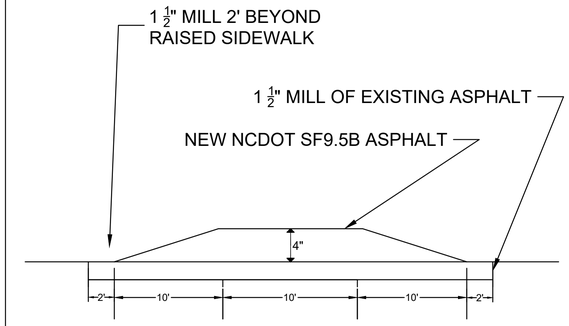


1 MULTI-USE PATH DETAIL



2 SW POND OUTLET STRUCTURE



3 RAISED CROSSWALK DETAIL

4

SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	
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A	04/01/26	VAN ACCESS CALLOUT, ETC	MWA

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NOTES & DETAILS
BRUNSWICK COUNTY HEALTH & HUMAN SERVICES
67 GOVERNMENT CENTER DR NE
BOLIVIA, NC 28422

OWNER/DEVELOPER
STEVE STONE, COUNTY MANAGER
BRUNSWICK COUNTY
P.O. BOX 249
BOLIVIA, NC 28422
910-253-2015
steve.stone@brunswickcountync.gov

Tunstall Consulting Engineers PLLC
2602 IRON GATE DR., SUITE 102
WILMINGTON, NC 28412
PHONE: (910) 343-9653
LICENSE# P-3152

25001

DES. JST
CKD. TJC
DRWN. MWA

DATE 04-17-26

C7.3

POND PLANTING LEGEND:

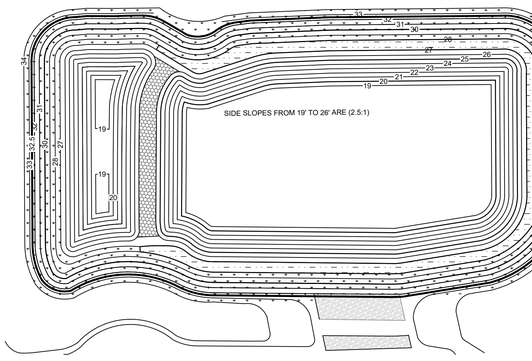
THE VEGETATED SHELF (27–28) SHALL BE PLANTED WITH A MINIMUM OF THREE DIVERSE SPECIES OF HERBACEOUS, NATIVE VEGETATION AT A MINIMUM DENSITY OF 50 PLANTS PER 200 SF OF SHELF AREA. PLANTS MAY BE SWAMP MILKWEED, SCARLET ROSE MALLOW, LONGLEAF LOBELIA OR OTHER NATIVE WETLAND SPECIES. FINAL PLANTINGS SHALL BE PER LANDSCAPE PROFESSIONAL.

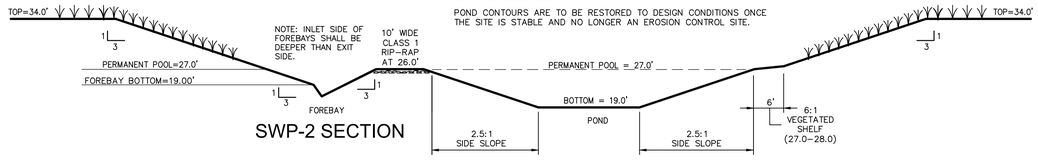
MAIN POND ABOVE ELEV. 27 AND FOREBAYS ABOVE ELEV. 26 ARE TO BE PLANTED WITH PERENNIAL TURF GRASS–HYBRID BERMUDA GRASS. POND SLOPE PLANTINGS SHALL BE EITHER SOD (BERMUDA GRASS) OR OR MATTED AND SEEDED WITH BERMUDA GRASS SEED.

NOTES:

1. THE VEGETATED SHELF SHALL BE PLANTED WITH A MINIMUM OF THREE DIVERSE SPECIES OF HERBACEOUS, NATIVE VEGETATION AT A MINIMUM DENSITY OF 50 PLANTS PER 200 SF OF SHELF AREA.
2. CATTAILS ARE NOT TO BE PLANTED IN OR AROUND POND.

5 POND PLANTING DETAIL





SWP-2 SECTION

7 SW POND 2 SECTION

BAFFLE MAINTENANCE NOTES:

1.) INSPECT BAFFLES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
2.) BE SURE TO MAINTAIN ACCESS TO THE BAFFLES. SHOULD THE FABRIC OF A BAFFLE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
3.) REMOVE SEDIMENT DEPOSITS WHEN IT REACHES HALF FULL, TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE BAFFLES. TAKE CARE TO AVOID DAMAGING THE BAFFLES DURING CLEANOUT, AND REPLACE IF DAMAGED DURING CLEANOUT OPERATIONS. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH.
4.) AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, REMOVE ALL BAFFLE MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE, AND STABILIZE IT.

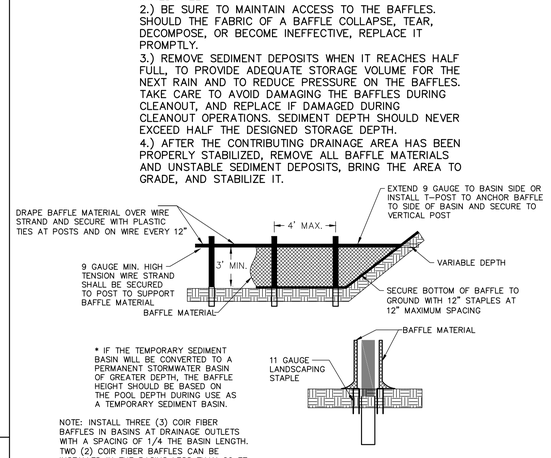
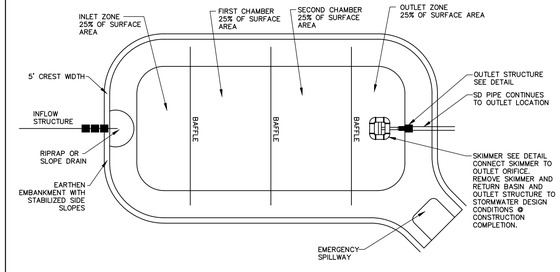


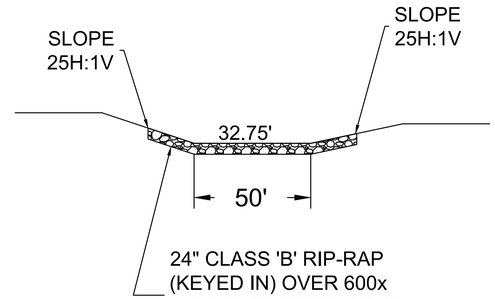
FIGURE 6.65b COIR FIBER BAFFLE DETAIL
CROSS SECTION OF A POROUS BAFFLE IN A SEDIMENT BASIN.



POROUS BAFFLES IN A SEDIMENT BASIN. THE FLOW IS DISTRIBUTED EVENLY ACROSS THE BASIN TO REDUCE FLOW RATES AND TURBULENCE, RESULTING IN GREATER SEDIMENT RETENTION.

NOTE: SEE GRADING PLAN FOR BAFFLE LOCATIONS.

8 BAFFLE DETAIL



NOTE: POND CONTOURS ARE TO BE RESTORED TO DESIGN CONDITIONS ONCE THE SITE IS STABLE AND NO LONGER AN EROSION CONTROL SITE.

6 50' EMERGENCY SPILLWAY

SKIMMER MAINTENANCE NOTES:

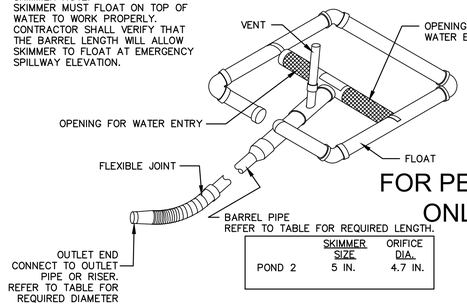
1. INSPECT SKIMMER SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ON–HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY.

2. IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY JERKING ON THE ROPE WILL MAKE THE SKIMMER BOB UP AND DOWN AND DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER TO THE SIDE OF THE BASIN AND REMOVE THE DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER TO SEE IF IT IS CLOGGED; IF SO REMOVE THE DEBIS.

3. IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, THE ORIFICE CAN BE REMOVED AND THE OBSTRUCTION CLEARED WITH A PLUMBER'S SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER.

4. FREEZING WEATHER CAN RESULT IN ICE FORMING IN THE BASIN. SOME SPECIAL PRECAUTIONS SHOULD BE TAKEN IN THE WINTER TO PREVENT THE SKIMMER FROM PLUGGING WITH ICE.

SKIMMER NOTE:
SKIMMER MUST FLOAT ON TOP OF WATER TO WORK PROPERLY. CONTRACTOR SHALL VERIFY THAT THE BARREL LENGTH WILL ALLOW SKIMMER TO FLOAT AT EMERGENCY SPILLWAY ELEVATION.



	SKIMMER SIZE	ORIFICE DIA.
POND 2	5 IN.	4.7 IN.

FOR PERMIT ONLY

9 STANDARD SKIMMER DETAIL

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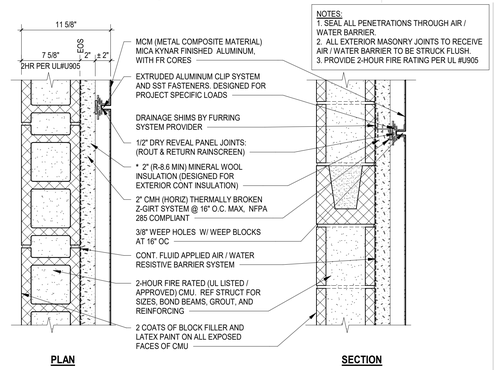
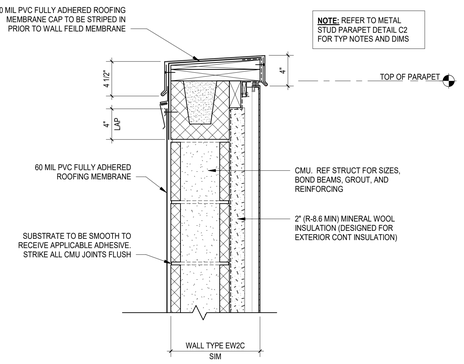
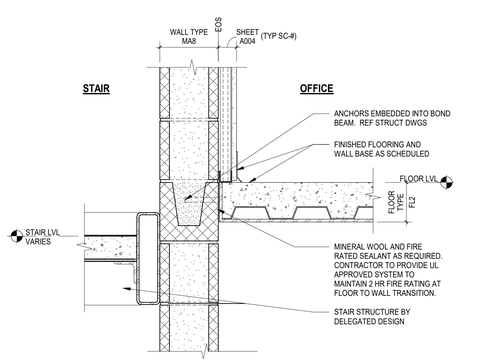


D4 / A002 — **EXT WALL TYPE EW2C - CMU & MCM PANELS** — 1 1/2" = 1'-0"

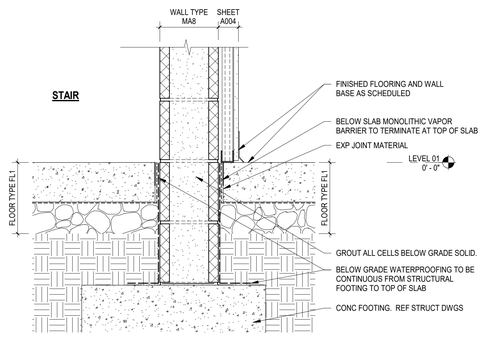
* REFER TO CONTINUOUS INSULATION (CI) NOTES ON SHEET A003 FOR SUBSTITUTION REQUESTS



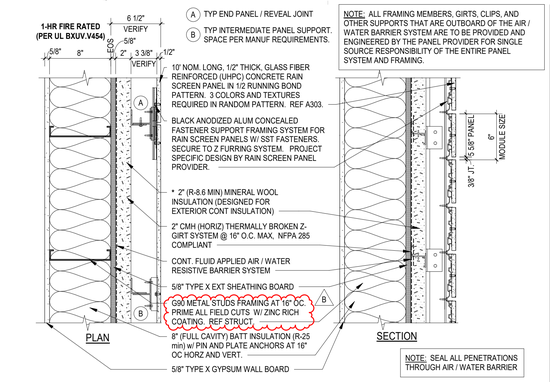
C4 / A002 — **EXT WALL TYPE EW2C - PARAPET DETAIL - CMU & MCM** — 1 1/2" = 1'-0"



B4 / A002 — **WALL TYPE MA8 - EOS SLAB DETAIL - STAIR** — 1 1/2" = 1'-0"

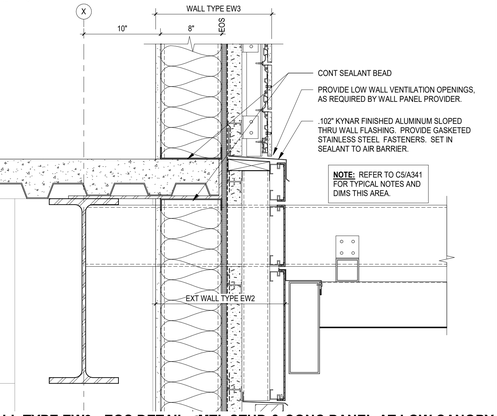


A4 / A002 — **WALL TYPE MA8 - BASE OF WALL DETAIL - CMU INTERIOR STR** — 1 1/2" = 1'-0"

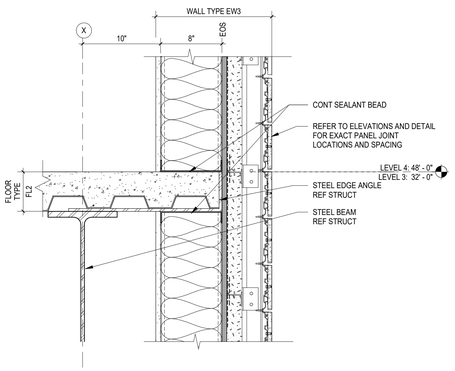


D3 / A002 — **EXT WALL TYPE EW3 - MTL STUD & CONC PANELS** — 1 1/2" = 1'-0"

* REFER TO CONTINUOUS INSULATION (CI) NOTES ON SHEET A003 FOR SUBSTITUTION REQUESTS

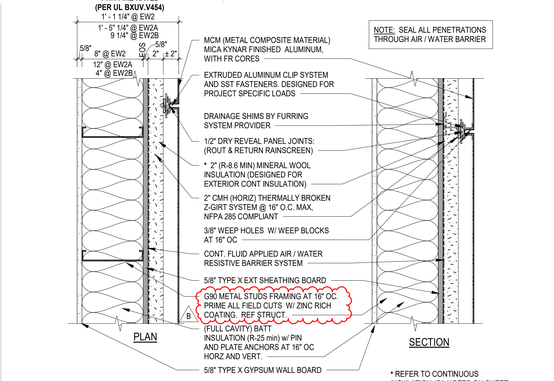


C3 / A002 — **EXT WALL TYPE EW3 - CONNECTION DETAILS** — 3" = 1'-0"



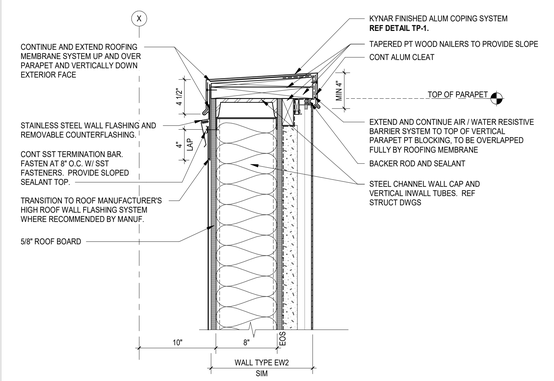
B3 / A002 — **EXT WALL TYPE EW3 - EOS DETAIL - MTL STUD & CONC PANEL** — 1 1/2" = 1'-0"

A3 / A002 — **WALL TYPE EW3 - EOS DETAIL - MTL STUD & CONC PANEL AT LOW CANOPY** — 1 1/2" = 1'-0"

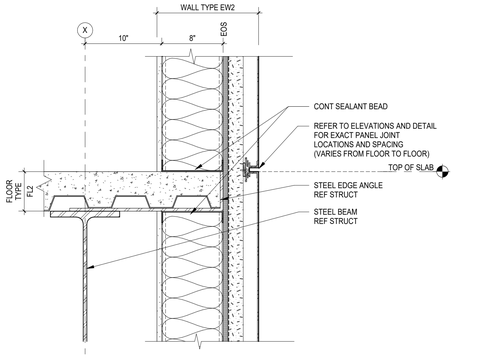


D2 / A002 — **EXT WALL TYPE EW2 / EW2A / EW2B - MTL STUD & MCM PANELS** — 1 1/2" = 1'-0"

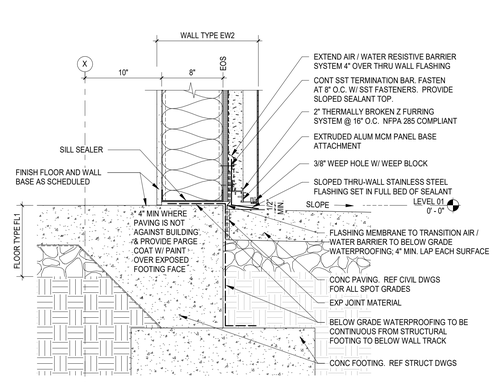
* REFER TO CONTINUOUS INSULATION (CI) NOTES ON SHEET A003 FOR SUBSTITUTION REQUESTS



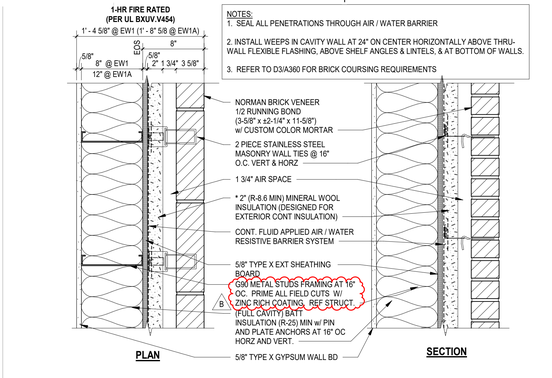
C2 / A002 — **EXT WALL TYPE EW2 / EW2A / EW2B - PARAPET DETAIL - MTL STUD & MCM** — 1 1/2" = 1'-0"



B2 / A002 — **WALL TYPE EW2 / EW2A / EW2B - EOS DETAIL - MTL STUD & MCM** — 1 1/2" = 1'-0"

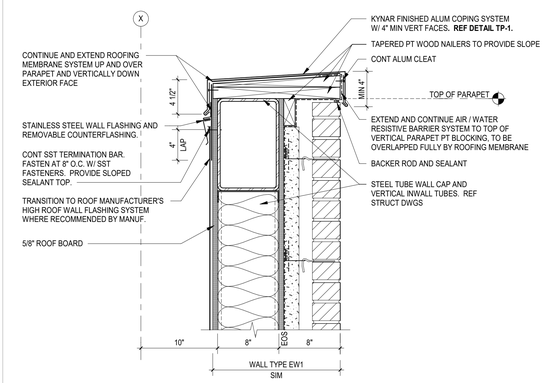


A2 / A002 — **WALL TYPE EW2 / EW2A / EW2B - BASE OF WALL DETAIL - MTL STUD & MCM** — 1 1/2" = 1'-0"

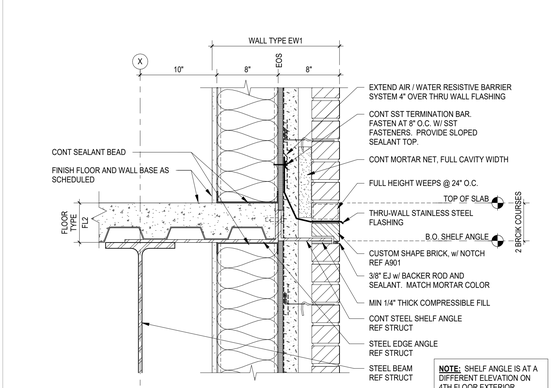


D1 / A002 — **EXT WALL TYPE EW1 / EW1A - MTL STUD & BRICK** — 1 1/2" = 1'-0"

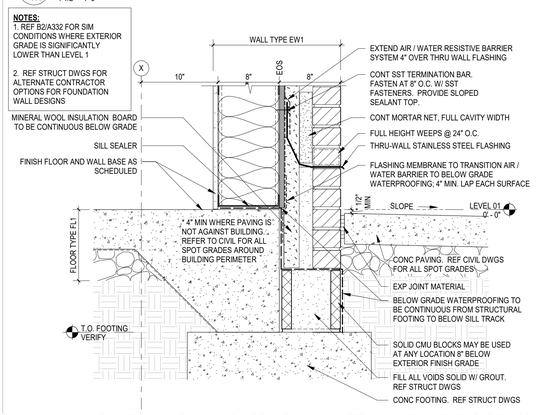
* REFER TO CONTINUOUS INSULATION (CI) NOTES ON SHEET A003 FOR SUBSTITUTION REQUESTS



C1 / A002 — **EXT WALL TYPE EW1 / EW1A - PARAPET DETAIL - MTL STUD & BRICK** — 1 1/2" = 1'-0"



B1 / A002 — **WALL TYPE EW1 / EW1A - EOS DETAIL - MTL STUD & BRICK** — 1 1/2" = 1'-0"



A1 / A002 — **WALL TYPE EW1 / EW1A - BASE OF WALL DETAIL - MTL STUD & BRICK** — 1 1/2" = 1'-0"

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EDIFICE CONSTRUCTION

BRUNSWICK COUNTY HEALTH & HUMAN SERVICES

ISSUE DATE: 02/06/2026
PHASE: PERMIT SET

SHEET ISSUE:

NO.	DATE	DESCRIPTION
B	04/17/26	PreCon RFIs - Batch 1

PRINCIPAL IN CHARGE: M. SHEWARD
PROJECT ARCHITECT: L. HOWELL
DRAWN BY: GC/DK

SHEET TITLE:

EXTERIOR ASSEMBLIES

SHEET NO. A002

PROJ. NO. 024370.01

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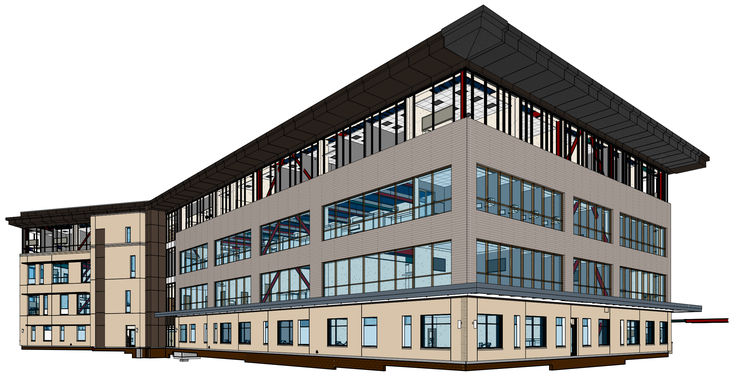
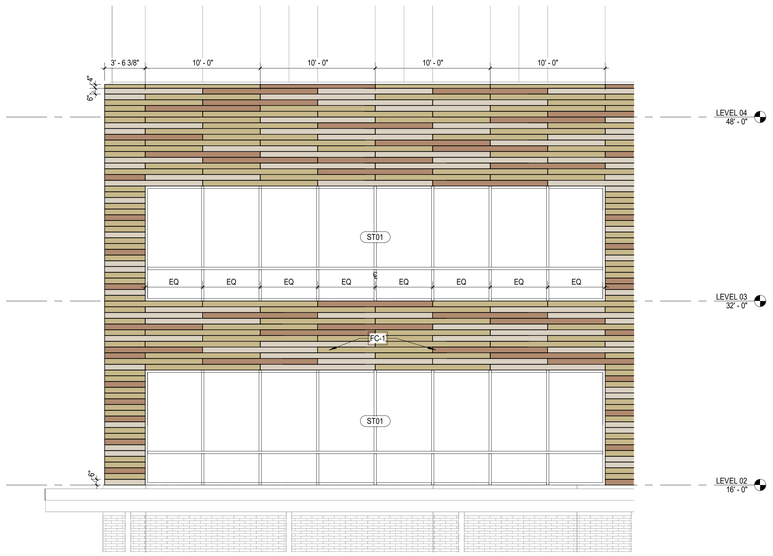
D2 / A303 **NORTH EAST PERSPECTIVE**

D1 / A303 **SOUTH EAST PERSPECTIVE**



C2 / A303 **NORTH WEST PERSPECTIVE**

C1 / A303 **SOUTH PERSPECTIVE**

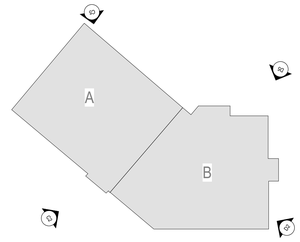


A1 / A303 **ENLARGED ELEVATION - SOUTHWEST - OKO SKIN PANEL LAYOUT**

3/16" = 1'-0"

OKO SKIN PANEL MATERIAL

PANEL TYPE 1	COLOR: STANDARD SAHARA TEXTURE: MATT
PANEL TYPE 2	COLOR: STANDARD SAHARA TEXTURE: FERRO LIGHT
PANEL TYPE 3	COLOR: STANDARD SAHARA TEXTURE: FERRO PLUS



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PRINCIPAL IN CHARGE: M. SHEWARD
PROJECT ARCHITECT: L. HOWELL
DRAWN BY: Author

SHEET TITLE:

BUILDING PERSPECTIVES AND PANEL ELEVATIONS

SHEET NO. PROJ. NO. 024370.01

A303

Autodesk Docs://2025/25_@ Brunswick Cty Health Annex @ mcMillan, @ Brunswick County Health Annex_R25.rvt
2/6/2026 10:57:57 AM
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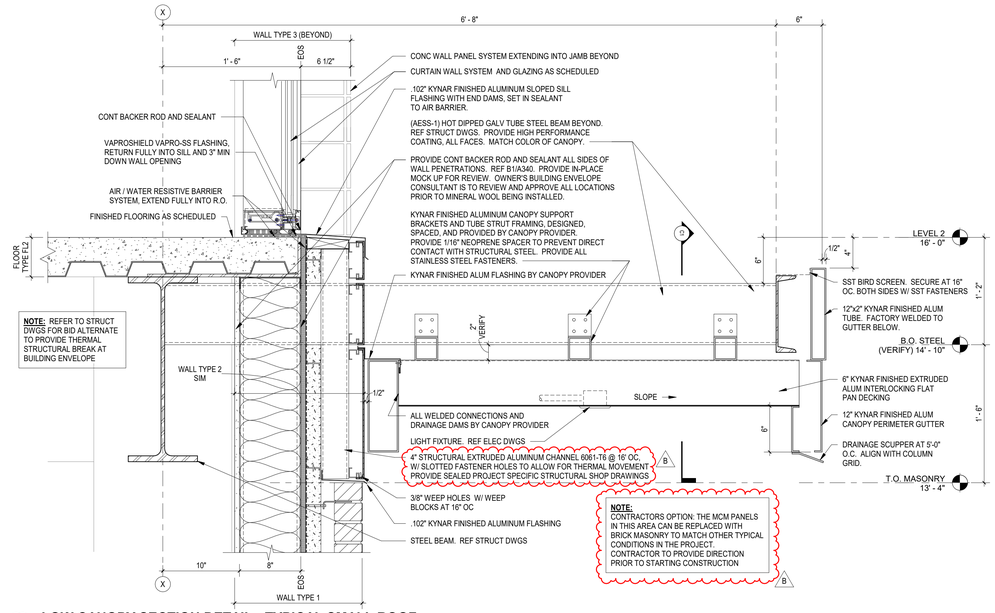
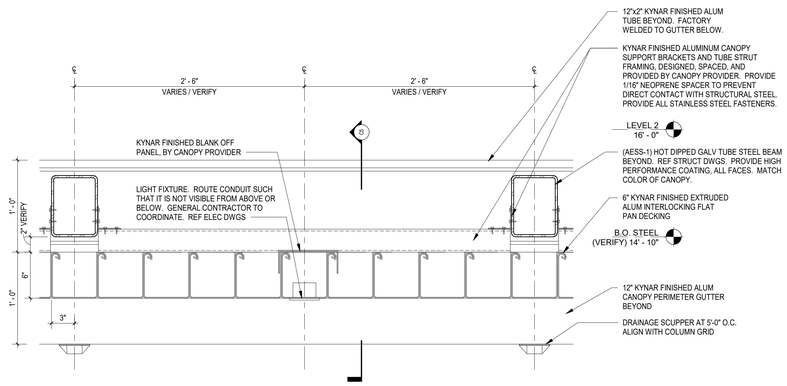


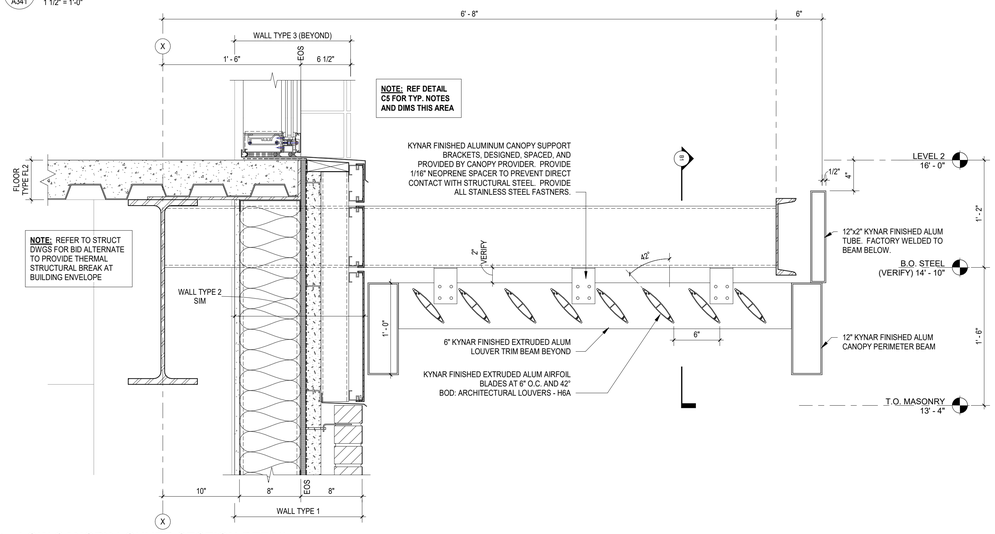
D2 A341 **LOW CANOPY SECTION DETAIL - TYPICAL SMALL ROOF**

1 1/2" = 1'-0"



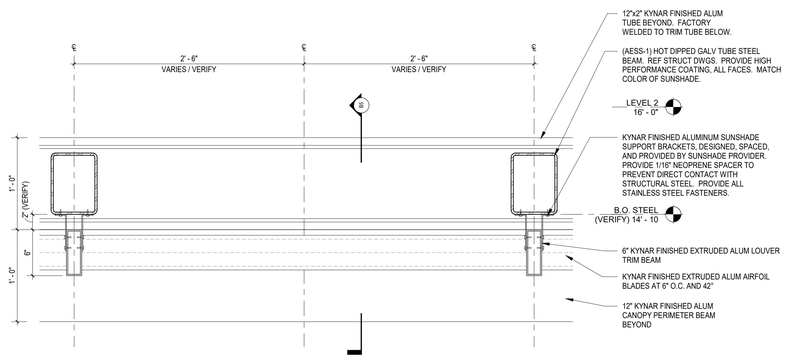
D1 A341 **LOW CANOPY CROSS SECTION - TYPICAL SMALL ROOF**

1 1/2" = 1'-0"



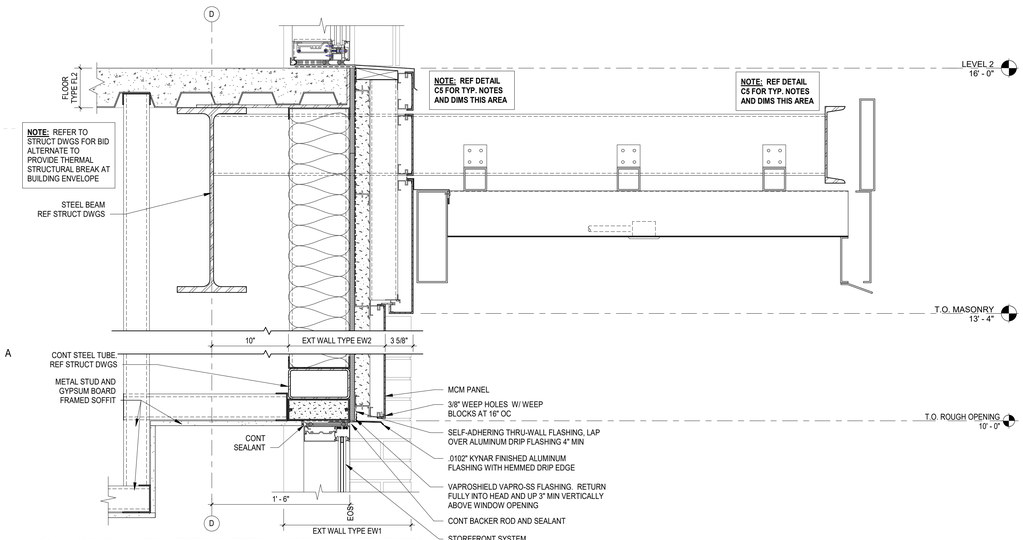
B2 A341 **LOW CANOPY LOUVER SECTION DETAIL**

1 1/2" = 1'-0"



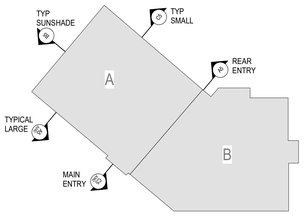
A1 A341 **LOW CANOPY TO SUNSHADE CROSS SECTION**

1 1/2" = 1'-0"



A2 A341 **LOW CANOPY SECTION DETAIL - REAR STAFF ENTRY**

1 1/2" = 1'-0"



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EDIFICE CONSTRUCTION

BRUNSWICK COUNTY HEALTH & HUMAN SERVICES

ISSUE DATE: 02/06/2026
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NO.	DATE	DESCRIPTION
B	04/17/26	PreCon RFIs - Batch 1

PRINCIPAL IN CHARGE: M. SHEWARD
PROJECT ARCHITECT: L. HOWELL
DRAWN BY: GC/DK

SHEET TITLE:

SECTION DETAILS @ SUNSHADES AND CANOPY

SHEET NO. A341

PROJ. NO. 024370.01

GENERAL NOTES - PILASTERS

1. STRUCTURAL STEEL COLUMN SIZES VARY. REFER TO STRUCT DWGS.

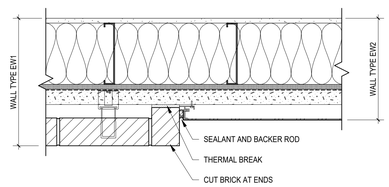
2. PROVIDE (SC-3) 3-5/8" METAL STUD FRAMING WHERE CLEARANCES PERMIT. PROVIDE SMALLER (SC-#) STUD FRAMING WHERE REQUIRED TO MAINTAIN DIMENSIONS NOTED. BRACE TO STRUCTURE AS REQUIRED.

3. PILASTERS ARE TO EXTEND TIGHT TO THE DECK IN ALL LOCATIONS, REGARDLESS OF SCHEDULED CEILING SYSTEM HEIGHTS

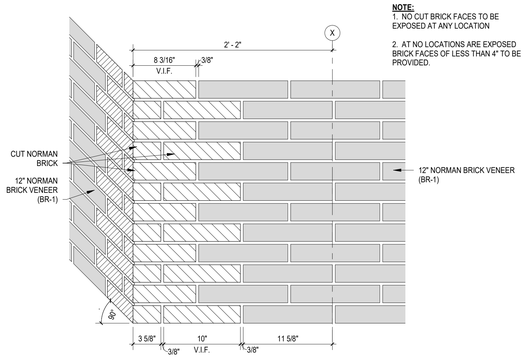
4. ACOUSTICAL BATT INSULATION IS NOT REQUIRED FOR PILASTERS THAT DO NOT CONNECT TO OTHER INTERIOR WALLS.

5. PROVIDE MULTI-PHASE IN-PLACE MOCK UPS OF CONDITIONS SHOWN ON A1, B1, C1, D1 THIS SHEET.
   PHASE 1 MOCK-UP: CHALK LINES ON SLAB (INCLUDING ALL ANGLE BRACING)
   PHASE 2 MOCK-UP: PIPING AND METAL FRAMING

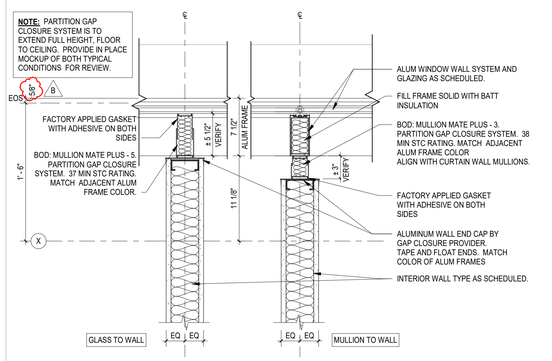
6. FIELD VERIFY ALL CLEARANCE REQUIREMENTS (INCLUDING ANGLE BRACING) PRIOR TO DRILLING ANY SLAB PENETRATIONS FOR DRAINAGE PIPING.



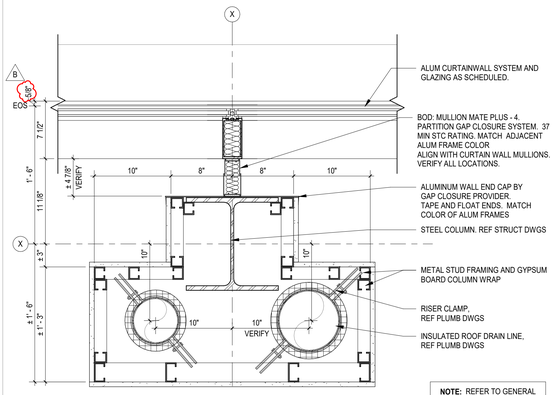
D4 / A360 — **EXT WALL TYPE EW1C / EW2C - WALL TRANSITION**
1 1/2" = 1'-0"



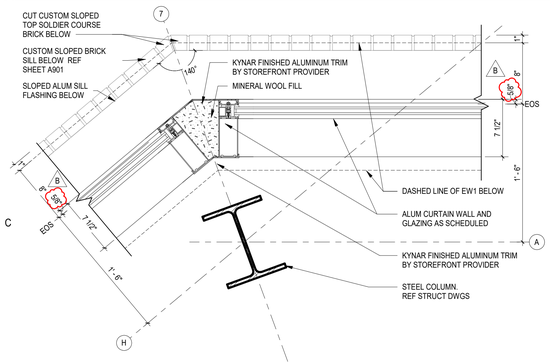
D3 / A360 — **WALL TYPE EW1 - TYPICAL BRICK 90°CORNER DETAIL**
1 1/2" = 1'-0"



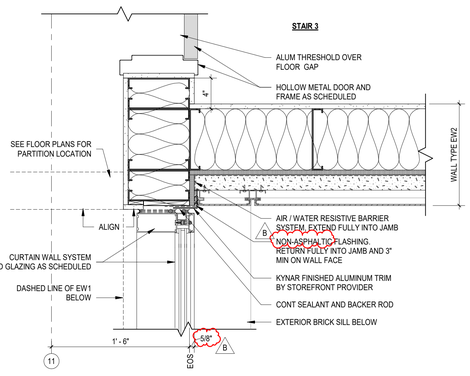
D2 / A360 — **PLAN DETAIL - WALL TO WINDOWS**
1 1/2" = 1'-0"



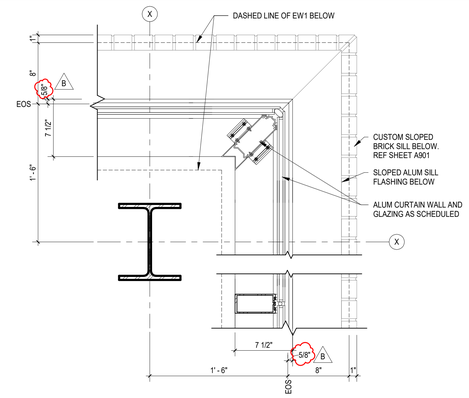
D1 / A360 — **ROOF DRAINAGE DETAIL - 4TH LEVEL**
1 1/2" = 1'-0"



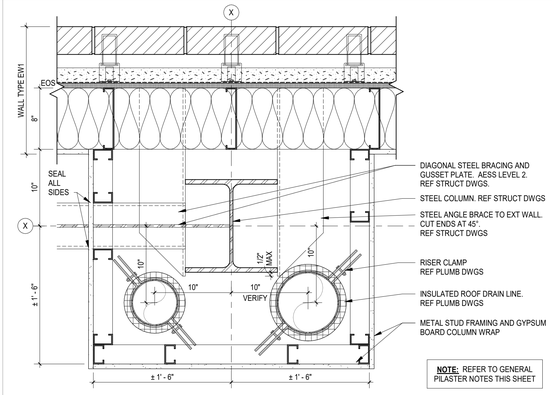
C4 / A360 — **EXT ANGLED CORNER @ LEVEL 4**
1 1/2" = 1'-0"



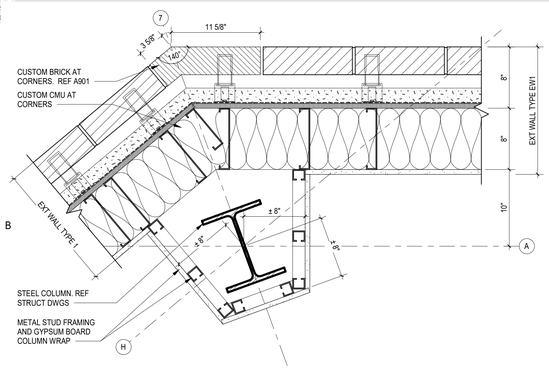
C3 / A360 — **EXT WALL TYPE EW2 - EXT CORNER DETAIL AT STAIR 3 - LEVEL 4**
1 1/2" = 1'-0"



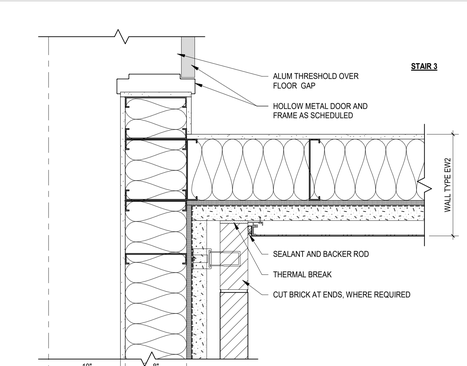
C2 / A360 — **EXT CORNER @ LEVEL 04**
1 1/2" = 1'-0"



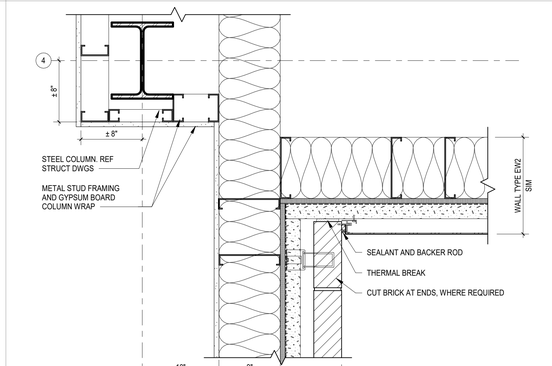
C1 / A360 — **EXT WALL TYPE EW1 - ROOF DRAINAGE DETAIL - TYP W/ CROSS BRACING**
1 1/2" = 1'-0"



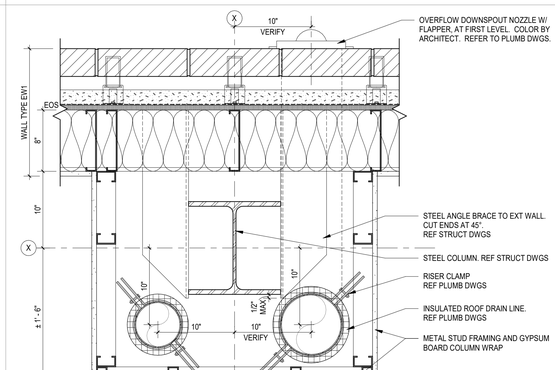
B4 / A360 — **EXT WALL TYPE EW1 - EXT ANGLED CORNER DETAIL**
1 1/2" = 1'-0"



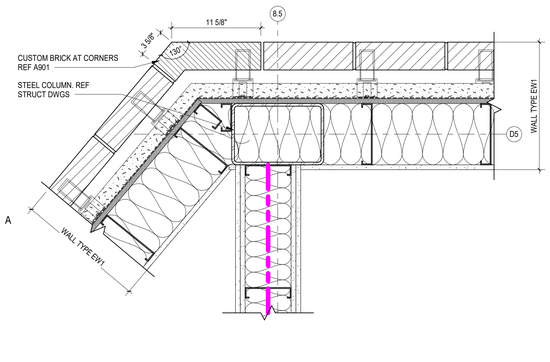
B3 / A360 — **EXT WALL TYPE EW1 / EW2 - EXT CORNER DETAIL AT STAIR 3 - LEVELS 1-3**
1 1/2" = 1'-0"



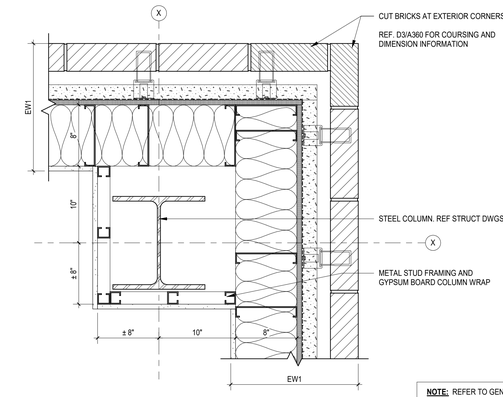
B2 / A360 — **EXT WALL TYPE EW1 / EW2 - EXT CORNER DETAIL AT MAIN ENTRY**
1 1/2" = 1'-0"



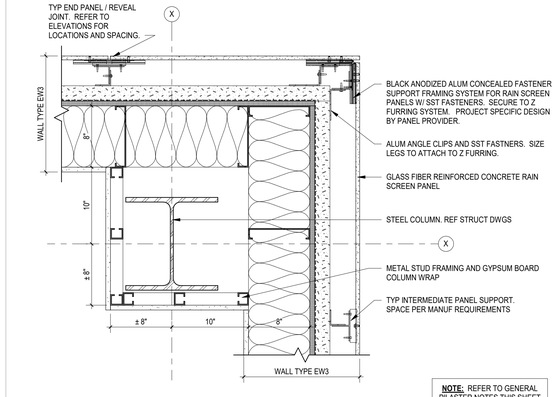
B1 / A360 — **ROOF DRAINAGE DETAIL - TYPICAL**
1 1/2" = 1'-0"



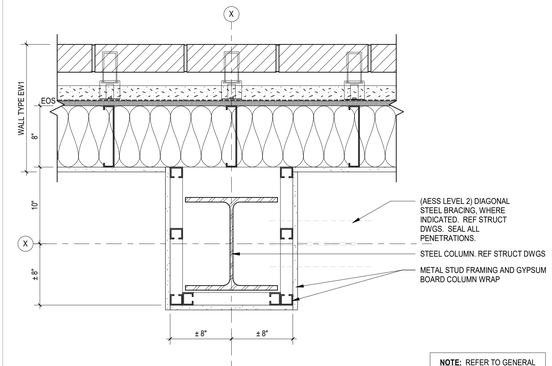
A4 / A360 — **EXT WALL TYPE EW1 - EXT ANGLED CORNER DETAIL AT STAIR 2**
1 1/2" = 1'-0"



A3 / A360 — **EXT WALL TYPE EW1 - EXT CORNER DETAIL**
1 1/2" = 1'-0"



A2 / A360 — **EXT WALL TYPE EW3 - EXT CORNER DETAIL**
1 1/2" = 1'-0"



A1 / A360 — **EXT WALL TYPE EW1 - INTERIOR COLUMN WRAP DETAIL - TYPICAL**
1 1/2" = 1'-0"

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ISSUE DATE: 02/06/2026
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PRINCIPAL IN CHARGE: M. SHEWARD
PROJECT ARCHITECT: L. HOWELL
DRAWN BY: D. KIM

SHEET TITLE:

PLAN DETAILS

SHEET NO. A360

PROJ. NO. 024370.01

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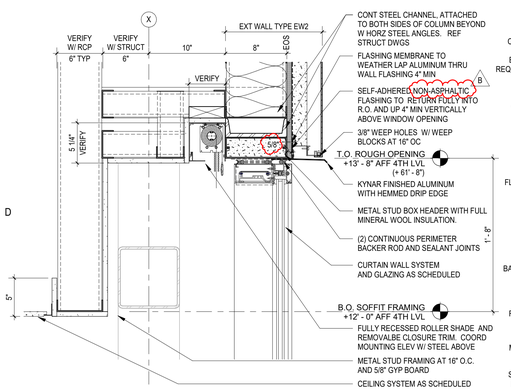
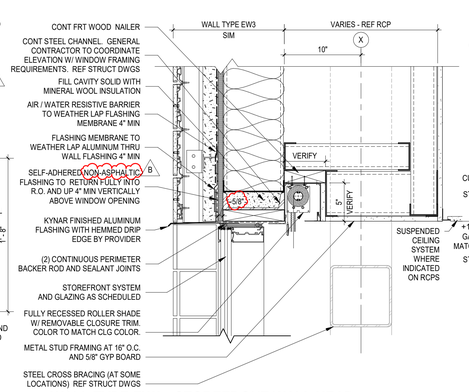
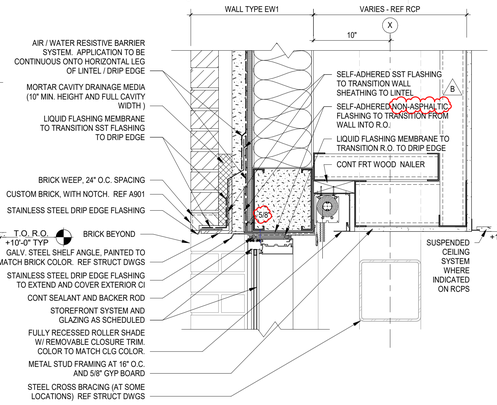


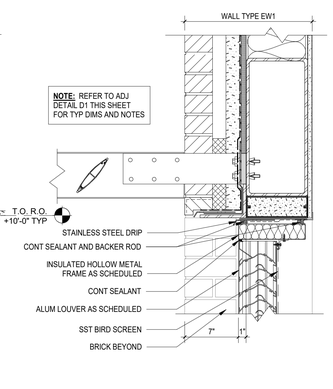
D5 / A814 **WALL TYPE EW2 - CURTAIN WALL HEAD**
1 1/2" = 1'-0"



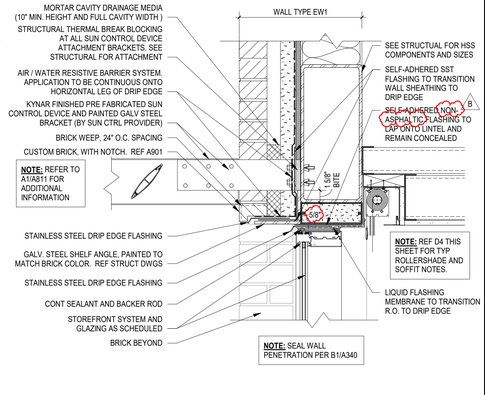
D4 / A814 **WALL TYPE EW3 - STOREFRONT WALL HEAD**
1 1/2" = 1'-0"



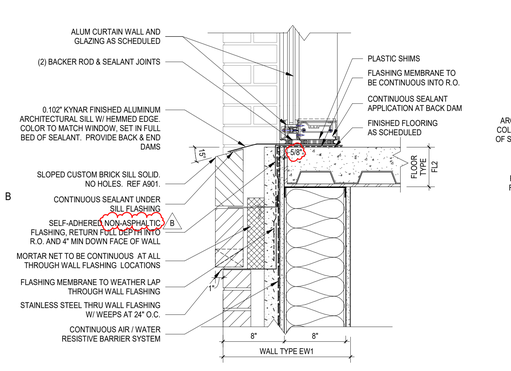
D3 / A814 **WALL TYPE EW1 - STOREFRONT HEAD**
1 1/2" = 1'-0"



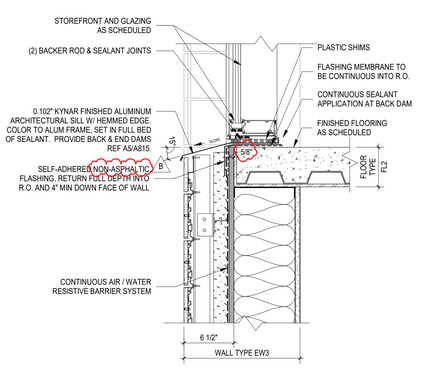
D2 / A814 **WALL TYPE EW1 - LOUVER HEAD & SUN CTRL**
1 1/2" = 1'-0"



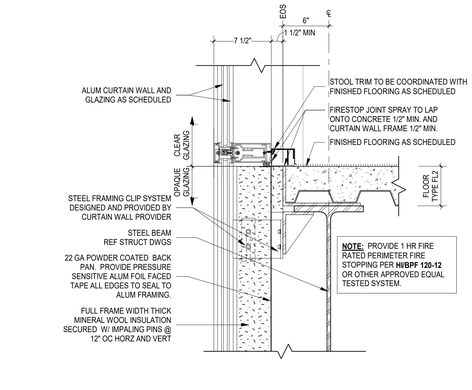
D1 / A814 **WALL TYPE EW1 - STOREFRONT HEAD & SUN CONTROL DEVICE**
1 1/2" = 1'-0"



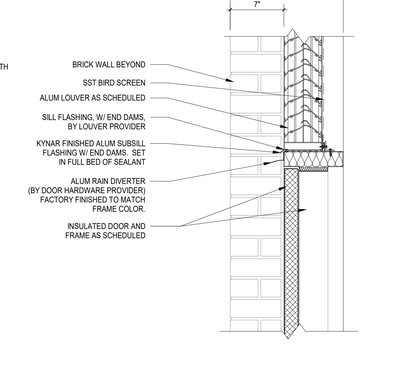
C5 / A814 **WALL TYPE EW2 - CURTAIN WALL JAMB**
1 1/2" = 1'-0"



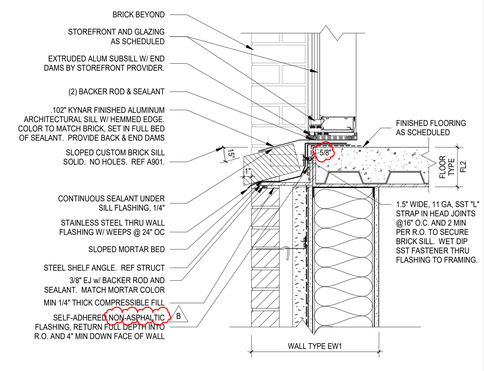
C4 / A814 **WALL TYPE EW3 - STOREFRONT WALL JAMB**
1 1/2" = 1'-0"



C3 / A814 **WALL TYPE EW3 - CURTAIN WALL JAMB - INSIDE CORNER**
1 1/2" = 1'-0"



C2 / A814 **WALL TYPE EW1 - LOUVER JAMB**
1 1/2" = 1'-0"



C1 / A814 **WALL TYPE EW1 - STOREFRONT JAMB**
1 1/2" = 1'-0"

B5 / A814 **WALL TYPE EW1 - CURTAIN WALL SILL - 4TH ELEV SLAB**
1 1/2" = 1'-0"

B4 / A814 **WALL TYPE EW3 - STOREFRONT SILL - 3RD ELEV SLAB**
1 1/2" = 1'-0"

B3 / A814 **CURTAIN WALL - SPANDREL**
1 1/2" = 1'-0"

B2 / A814 **WALL TYPE EW1 - LOUVER HEAD 2**
1 1/2" = 1'-0"

B1 / A814 **WALL TYPE EW1 - STOREFRONT SILL - ELV SLAB**
1 1/2" = 1'-0"

A5 / A814 **STOREFRONT SILL AT GRADE**
3" = 1'-0"

A4 / A814 **WALL TYPE EW3 - CURTAIN WALL SILL - 4TH ELEV SLAB**
1 1/2" = 1'-0"

A3 / A814 **WALL TYPE EW1 - CURTAIN WALL SILL - 4TH ELEV SLAB**
1 1/2" = 1'-0"

A2 / A814 **WALL TYPE EW1 - LOUVER SILL**
1 1/2" = 1'-0"

A1 / A814 **WALL TYPE EW1 - STOREFRONT SILL**
1 1/2" = 1'-0"

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EDIFICE CONSTRUCTION

BRUNSWICK COUNTY HEALTH & HUMAN SERVICES

ISSUE DATE: 02/06/2026
PHASE: PERMIT SET

SHEET ISSUE:

NO.	DATE	DESCRIPTION
B	04/17/26	PreCon RFIs - Batch 1

PRINCIPAL IN CHARGE: M. SHEWARD
PROJECT ARCHITECT: L. HOWELL
DRAWN BY: B. FESSLER

SHEET TITLE:

WINDOW HEAD, JAMB & SILL DETAILS

SHEET NO. A814
PROJ. NO. 024370.01

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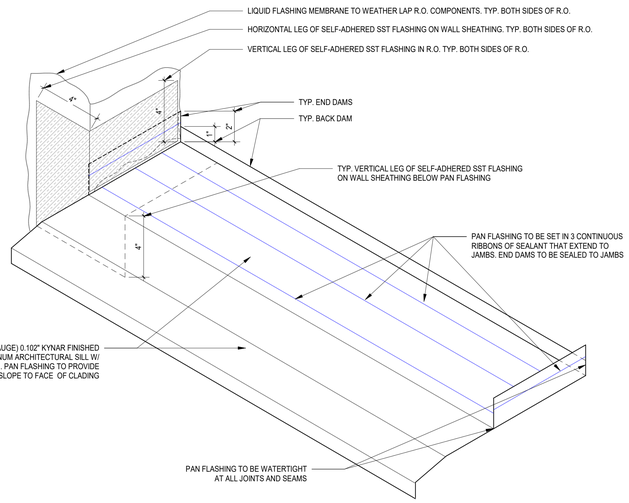
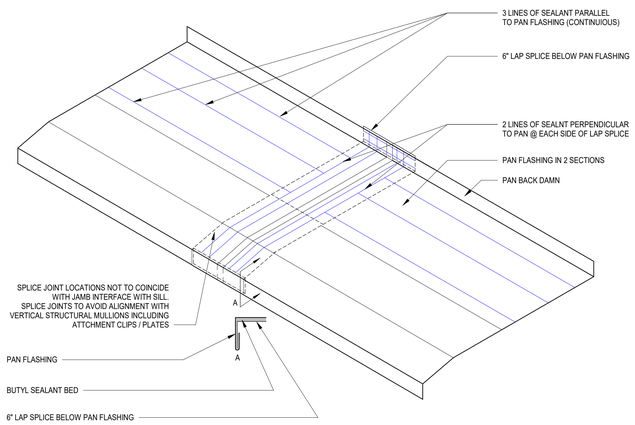
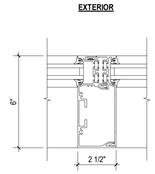


A5 / A815 SILL PLAN FLASHING AND SPLICE DETAIL

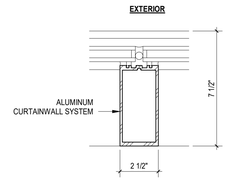
3" = 1'-0"





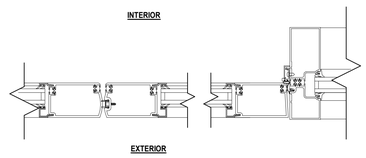
D3 / A815 STOREFRONT DETAIL - MULLION CAP

3" = 1'-0"



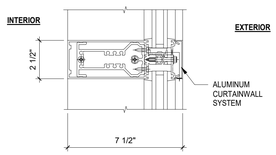
C3 / A815 CURTAIN WALL DETAIL - BUTT GLAZING MULLION

3" = 1'-0"



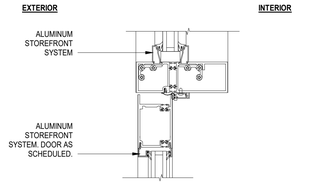
B3 / A815 WINDOW DETAIL - STOREFRONT DOOR JAMB

3" = 1'-0"



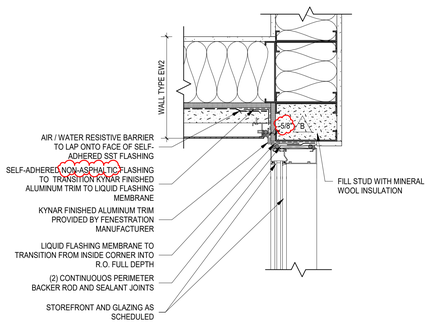
A3 / A815 CURTAIN WALL DETAIL - INTERMEDIATE MULLION

3" = 1'-0"



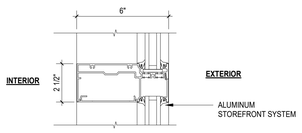
C2 / A815 WINDOW DETAIL - STOREFRONT DOOR HEAD

3" = 1'-0"



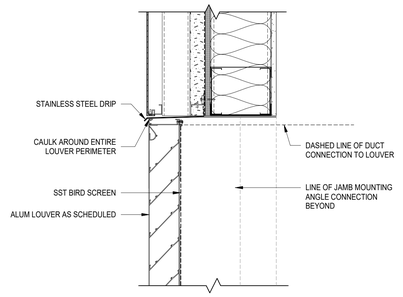
B2 / A815 WALL TYPE EW2 - STOREFRONT JAMB

1 1/2" = 1'-0"



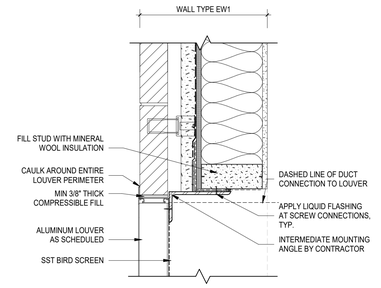
A2 / A815 STOREFRONT DETAIL - INTERMEDIATE MULLION

3" = 1'-0"



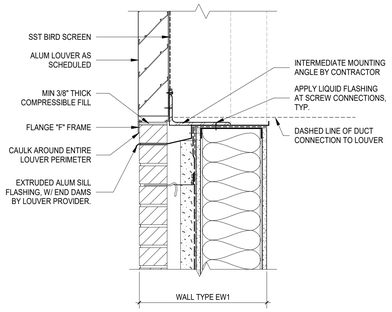
C1 / A815 FRAMELESS LOUVER HEAD DETAIL

1 1/2" = 1'-0"



B1 / A815 FRAMELESS LOUVER JAMB DETAIL

1 1/2" = 1'-0"



A1 / A815 FRAMELESS LOUVER SILL DETAIL

1 1/2" = 1'-0"

mcmillan pazdan smith ARCHITECTURE

EDIFICE CONSTRUCTION

BRUNSWICK COUNTY HEALTH & HUMAN SERVICES

ISSUE DATE:	02/06/2026
PHASE:	PERMIT SET

SHEET ISSUE:

NO.	DATE	DESCRIPTION
B	04/17/26	PreCon RFIs - Batch 1

PRINCIPAL IN CHARGE:	M. SHEWARD
PROJECT ARCHITECT:	L. HOWELL
DRAWN BY:	D. KIM

SHEET TITLE:

WINDOW HEAD, JAMB & SILL DETAILS

SHEET NO. A815

PROJ. NO. 024370.01

INTERIOR FINISH LEGEND

FLOORING

CPT 1
MANUFACTURER: SHAW CONTRACT
PATTERN: LANDSCAPE TILE 5T604
COLOR: COASTAL 04105
SIZE: 18"X24"
INSTALLATION: STAGGER
NOTE: DIRECTION OF TILE MUST RUN SAME DIRECTION AS CPT 3/ SEE FLOOR FINISH PLANS FOR MORE INFORMATION
NOTE 2: MEETS CPSC FF 1 70 PILL TEST AND ASTM E662 — A

CPT 2
MANUFACTURER: SHAW CONTRACT
PATTERN: MIGRATE TILE 5T606
COLOR: COASTAL WATER 04411
SIZE: 18"X24"
INSTALLATION: ALIGN BLUE SIDE OF TILE WITH CPT 3 AND NEUTRAL SIDE WITH CPT 1 (TYP ALL LOCATIONS U.N.O.
NOTE 2: MEETS CPSC FF 1 70 PILL TEST AND ASTM E662 — A

CPT 3
MANUFACTURER: SHAW CONTRACT
PATTERN: LANDSCAPE TILE 5T604
COLOR: WATER 04411
SIZE: 18"X24"
INSTALLATION: STAGGER
NOTE: DIRECTION OF TILE MUST RUN SAME DIRECTION AS CPT 1/ SEE FLOOR FINISH PLANS FOR MORE INFORMATION
NOTE 2: MEETS CPSC FF 1 70 PILL TEST AND ASTM E662 — A

CPT 4
MANUFACTURER: SHAW CONTRACT/ INTERFACE
PATTERN: BELIEF ECOWORX TILE 5T429
COLOR: WISDOM 27490
SIZE: 18"X24"
INSTALLATION: BRICK
NOTE 2: MEETS CPSC FF 1 70 PILL TEST AND ASTM E662 — A

LVT 1
MANUFACTURER: PATCRAFT
STYLE: ENRICH PLANK
COLOR: RELAX V-1/ 00710
SIZE: 9"X 36"
INSTALLATION: STAGGER
NOTE: MEETS CLASS I — A

LVT 2
MANUFACTURER: PATCRAFT
STYLE: SENSE PLANK
COLOR: EASE V-1/ 00100 (BEIGE)
SIZE: 9"X 36"
INSTALLATION: BRICK
NOTE: MEETS CLASS I — A

LVT 3
MANUFACTURER: PATCRAFT
STYLE: SENSE PLANK
COLOR: CARE V-1/ 00300 (GREEN)
SIZE: 9"X 36"
INSTALLATION: BRICK
NOTE: MEETS CLASS I — A

LVT 4
MANUFACTURER: PATCRAFT
STYLE: SENSE PLANK
COLOR: ADVANCE V-1/ 00300 (BLUE)
SIZE: 9"X 36"
INSTALLATION: BRICK
NOTE: MEETS CLASS I — A

LVT 5
MANUFACTURER: SHAW CONTRACT
STYLE: TERRAIN II 30 MIL/ 0892V
COLOR: AZURE/ 00450
SIZE: 6"X48"
INSTALLATION: STAGGER
NOTE: MEETS CLASS I — A

LVT 6
MANUFACTURER: SHAW CONTRACT
STYLE: TERRAIN II 30 MIL/ 0892V
COLOR: POPLAR/ 00515
SIZE: 6"X48"
INSTALLATION: ASHLAR
NOTE: MEETS CLASS I — A

POR 1
MANUFACTURER: DALTILE
STYLE: DIGNITARY
COLOR: TAUPE
GROUT: LATICRETE SPECTRALOCK PRO EPOXY
GROUT COLOR: TBD
SIZE: 12" X 24"
INSTALL: 1/3 OFFSET PER MANUF RECOMMENDATIONS
LOCATION: SEE FLOOR FINISH SHEETS
NOTE: MEETS CLASS I — A

POR 2
MANUFACTURER: DALTILE
STYLE: VOLUME 1.0
COLOR: DEGREES SILVER
GROUT: LATICRETE SPECTRALOCK PRO EPOXY
GROUT COLOR: TBD
SIZE: 12" X 24"
INSTALL: TBD
INSTALL: 1/3 OFFSET PER MANUF RECOMMENDATIONS
LOCATION: SEE FLOOR FINISH SHEETS
NOTE: MEETS CLASS I — A

RST 1
MANUFACTURER: TARKETT
STYLE: STAIR TREAD W/ INTEGRATED RISER
PROFILE: HAMMERED
INSERT: INTEGRATED INSERT ADA COMPLIANT
COLOR: TBD
LOCATION: EXIT STAIRS (NOT STAIR 4)
LANDING: RUBBER FLOORING TO MATCH TREAD
NOTE: MEETS CLASS I — A

EPOXY FOR STAIR #4
MANUFACTURER: WAUSAU TILE
STYLE: EPOXY TERRAZZO TREAD/RISERS
COLOR: TBD
NOTE: MEETS CLASS I — A

WOM1
MANUFACTURER: SHAW COMMERCIAL
STYLE: PATH TILE/ 5T034
COLOR: PORTABELLA/ 34761
SIZE: 24"X 24"
INSTALL: BRICK
NOTE: MEETS CLASS I — A

WSSV 1
MANUFACTURER: PATCRAFT BEIGE
STYLE: SENSE SHEET
COLOR: EASE / 00100
SIZE: 78.72" ROLL GOODS
INSTALLATION: HEAT WELD ALL SEAMS
NOTE: MEETS CLASS I — A

BASE

RB 1
MANUFACTURER: JOHNSONITE
STYLE: RUBBER COVE BASE
COLOR: TBD
SIZE: 4" HEIGHT
COMMMENT: USE CONTINUOUS ROLLS
NOTE: MEETS CLASS I — A

RB 2
MANUFACTURER: JOHNSONITE
STYLE: MILLWORK PROFILE BASE/ RECESSED
STYLE NUMBER: MW-XX-X63
COLOR: TBD
SIZE: 6" HEIGHT
LOCATION: SEE FLOOR FINISH SHEETS FOR MORE INFORMATION
NOTE: MEETS CLASS I — A

RB 3
MANUFACTURER: JOHNSONITE
STYLE: MILLWORK PROFILE BASE/MANDALAY
COLOR: STERLING SILVER 69
SIZE: 6" HEIGHT
COMMMENT: USE CONTINUOUS ROLLS
LOCATION: ON FRONT OF RECEPTION/ GREETER DESKS TYPICAL/ SEE FLOOR FINISH PLANS FOR MORE INFORMATION
NOTE: MEETS CLASS I — A

WSSB 1
MANUFACTURER: PATCRAFT BEIGE
STYLE: SENSE SHEET
COLOR: EASE / 00100
SIZE: 78.72" ROLL GOODS
INSTALLATION: HEAT WELD ALL SEAMS
NOTE: MEETS CLASS I — A

WALLS

CWT 1
MANUFACTURER: GARDEN STATE
STYLE: STICK/ MATTE
COLOR: AGEAN BLUE
GROUT: LATICRETE SEPCTRALOCK PRO EPOXY
GROUT: TBD
SIZE: 1"X6"
INSTALL: INSTALL VERTICALLY
LOCATION: BACKSPLASH IN BREAK AREAS FLOORS 2-4 / SMALLER BREAK ROOMS IN DEPARTMENTS AND KITCHEN 4267
NOTE: MEETS CLASS I — A

CWT 2
MANUFACTURER: GARDEN STATE
STYLE: STICK/ MATTE
COLOR: LAUREL GREEN
GROUT: LATICRETE SEPCTRALOCK PRO EPOXY
GROUT: TBD
SIZE: 1"X6"
INSTALL: INSTALL VERTICALLY
LOCATION: BACKSPLASH IN BREAK AREAS FLOORS 2-4 / SMALLER BREAK ROOMS IN DEPARTMENTS AND KITCHEN 4267
NOTE: MEETS CLASS I — A

CWT 3
MANUFACTURER: GARDEN STATE
STYLE: STICK/ MATTE
COLOR: AZURE MIST
GROUT: LATICRETE SEPCTRALOCK PRO EPOXY
GROUT: TBD
SIZE: 1"X6"
INSTALL: INSTALL VERTICALLY
LOCATION: BACKSPLASH IN BREAK AREAS FLOORS 2-4 / SMALLER BREAK ROOMS IN DEPARTMENTS AND KITCHEN 4267
NOTE: MEETS CLASS I — A

CWT 4
MANUFACTURER: GARDEN STATE
STYLE: STICK/ MATTE
COLOR: CADET BLUE
GROUT: LATICRETE SEPCTRALOCK PRO EPOXY
GROUT: TBD
SIZE: 1"X6"
INSTALL: INSTALL VERTICALLY
LOCATION: BACKSPLASH IN BREAK AREAS FLOORS 2-4 / SMALLER BREAK ROOMS IN DEPARTMENTS AND KITCHEN 4267
NOTE: MEETS CLASS I — A

CWT 5
MANUFACTURER: DALTILE
STYLE: VOLUME 1.0
COLOR: DEGREES SILVER
GROUT: LATICRETE SEPCTRALOCK PRO EPOXY
GROUT: TBD
SIZE: 6"x24"
INSTALL: HERRINGBONE
LOCATION: MULTIFIXTURE TOILET ROOMS ALL FLOORS SEE WALL FINISH PLANS & INTERIOR ELEVATIONS FOR MORE INFORMATION
NOTE: MEETS CLASS I — A

CWT 6
MANUFACTURER: DALTILE
STYLE: COLORWHEEL LINEAR
COLOR: ARCTIC WHITE 0190
GROUT: LATICRETE SEPCTRALOCK PRO EPOXY
GROUT: TBD
SIZE: 4" x 12"
INSTALL: HORIZONTAL BRICK
LOCATION: COFFEE/BREAK 1308, KITCHEN 4267
NOTE: MEETS CLASS I — A

DP 1
MANUFACTURER: FIND YOUR LEVEL
MATERIAL: WINDOW FILM/ L15-2001 INFINITY
COLOR: SPA
LOCATION: INTERVIEW ROOM GLASS IN LOBBY 1001
NOTE: SEE INTERIOR WALL FINISH PLANS AND INTERIOR ELEVATIONS FOR MORE INFORMATION
NOTE: MEETS CLASS A — A

DP 2
MANUFACTURER: FIND YOUR LEVEL
MATERIAL: TARGA RIGID WALL PROTECTION PANELS
STYLE: L16-1003/ STYLED STRIPE
COLOR: MIDORI
LOCATION: SUBWAIT 1118, SUBWAIT 1463, CORRIDOR 1457
NOTE: SEE INTERIOR WALL FINISH PLANS AND INTERIOR ELEVATIONS FOR MORE INFORMATION
NOTE2: MEETS CLASS I /A — A

WALLS (CONT)

PORW 1
MANUFACTURER: DALTILE
STYLE: MARFIL GLOSSY CM06
GROUT: LATICRETE SPECTRALOCK PRO EPOXY
GROUT COLOR: TBD
SIZE: 6MM/ 63x126
INSTALL: SEE INTERIOR ELEVATIONS/DETAILS
LOCATION: MAIN LOBBY
NOTE: MEETS CLASS I — A

PORW 2
MANUFACTURER: DALTILE
STYLE: VOLUME 1.0
COLOR: TBD
GROUT: LATICRETE SPECTRALOCK PRO EPOXY
GROUT COLOR: TBD
SIZE: 12" X 24"
INSTALL: TBD
INSTALL: STACKED
LOCATION: PUBLIC TOILETS
NOTE: MEETS CLASS I — A

PORW 3
MANUFACTURER: DALTILE
STYLE: VOLUME 1.0
COLOR: DEGREES SILVER
GROUT: LATICRETE SEPCTRALOCK PRO EPOXY
GROUT: TBD
SIZE: 6"x24"
INSTALL: HERRINGBONE
LOCATION: MULTIFIXTURE TOILET ROOMS ALL FLOORS SEE WALL FINISH PLANS & INTERIOR ELEVATIONS FOR MORE INFORMATION
NOTE: MEETS CLASS I — A

ALL PAINT SPECIFICATIONS MUST INCLUDE BOTH A PAINT PREFIX AND A COLOR NUMBER SUFFIX (EXAMPLES: PE-1 OR PF-12)

PAINT FINISH PREFIX DESIGNATIONS:
PE- PRODUCT: INTERIOR LATEX PAINT - EGGSHELL FINISH
PF- PRODUCT INTERIOR LATEX PAINT - FLAT FINISH
PS- PRODUCT INTERIOR LATEX PAINT - SEMI GLOSS FINISH TYPE PRO INDUSTRIAL APPLICATION: USE ON ALL METAL DOORS, DOOR FRAMES AND MISCELLANEOUS METALS AS REQUIRED
PEP- PRODUCT: LOW VOC EPOXY PAINT- EGGSHELL FINISH

PAINT COLOR NUMBER SUFFIX DESIGNATIONS

-1
MANUFACTURER: SHERWIN WILLIAMS
COLOR: SW 6070 HERON PLUME
LOCATION: TYPICAL FIELD COLOR

-2
MANUFACTURER: SHERWIN WILLIAMS
COLOR: SW 7643 PUSSYWILLOW
LOCATION: ACCENT COLOR/ ACCENT IN OFFICES

-3
MANUFACTURER: SHERWIN WILLIAMS
COLOR: SW
LOCATION: ACCENT COLOR PEDS/ WIC EXAM ROOMS

-4
MANUFACTURER: SHERWIN WILLIAMS
COLOR: SW 6219 RAIN
LOCATION: ACCENT COLOR PEDS/WIC EXAM ROOMS

-5
MANUFACTURER: SHERWIN WILLIAMS
COLOR: SW
LOCATION: ACCENT COLOR

-6
MANUFACTURER: SHERWIN WILLIAMS
COLOR: SW 9134 DELFT
LOCATION: ACCENT COLOR

-7
MANUFACTURER: SHERWIN WILLIAMS
COLOR: SW 7619 LABRADORITE
LOCATION: ACCENT COLOR

-8
MANUFACTURER: SHERWIN WILLIAMS
COLOR: SW 0032 NEEDLEPOINT NAVY
LOCATION: ACCENT COLOR

-9
MANUFACTURER: SHERWIN WILLIAMS
COLOR: EXTRA WHITE
LOCATION: TYPICAL CEILING PAINT

CEILINGS

ACT 1
MANUFACTURER: ARMSTRONG
STYLE: ULTIMA
SIZE: 24" X 24"
EDGE: TEGULAR EDGE
GRID: SUPRAFINE XL 9/16" EXPOSED TEE
LOCATION: TYPICAL CEILING TILE
NOTE: MEETS ASTM 1264 — A

ACT 2
MANUFACTURER: ARMSTRONG
STYLE: ULTIMA
SIZE: 24"X48"
EDGE: TEGULAR EDGE
GRID: SUPRAFINE XL 9/16" EXPOSED TEE
LOCATION: LOBBY
NOTE: MEETS ASTM 1264 — A

ACT 3
MANUFACTURER: ARMSTRONG
STYLE: ULTIMA HEALTH ZONE
SIZE: 24" X 24"
EDGE: TEGULAR EDGE
GRID: SUPRAFINE XL 9/16" EXPOSED TEE
LOCATION: TYPICAL CEILING TILE
NOTE: MEETS ASTM 1264 — A

ACT 4
MANUFACTURER: SOUNDPLY
STYLE: LINO LRM CEILING PLANKS/ PL LRM25 1" ACOUSTICAL WOOD PLANKS
FINISH: PLAIN SLICED WALNUT
EDGE: BANDED WITH MATCHING MATERIALS TO MATCH FACE OF PANELS
GRID: SUSPENDED GRID USING BAYONET CLIPS
INSTALLATION: STACKED (NO STAGGERED JOINTS) SEE RCP SHEETS FOR JOINT LOCATION
LOCATION: SEE RCP FOR MORE INFORMATION
NOTE: MEETS REQUIREMENTS TO BE USED IN CLASS A ENVIRONMENTS PER IBC CHAPTER 8/ SECTON 803 — A

MISC

PLAM 1
MANUFACTURER: FORMICA
COLOR: CAMEL ELM NG 05795
LOCATION: THROUGHOUT
NOTE: MEETS ASTM E84 AS PART OF AN ASSEMBLY — A

PLAM 2
MANUFACTURER: NEVAMAR
COLOR: NEVAMAR DEEP BLUE S3022
LOCATION: KITCHEN 4267/ SEE ELEVATIONS
NOTE: MEETS ASTM E84 AS PART OF AN ASSEMBLY — A

SS1
MANUFACTURER: CORIAN
COLOR: ANTARTCTICA
LOCATION: COUNTERTOPS THROUGHOUT
NOTE: MEETS ASTM E84 — A

SS2
MANUFACTURER: CORIAN
COLOR: BISQUE
LOCATION: WINDOW SILLS THROUGHOUT U.N.O.
NOTE: MEETS ASTM E84 — A

CG1
MANUFACTURER: INPRO
STYLE: 150 HIGH IMPACT CORNERGUARD
COLOR: TBD
HEIGHT: TOP OF BASE TO CEILING
LOCATION: CLINIC/ WIC SEE WALL FINISH PLANS
NOTE: MEETS ASTM E84/ CLASS A — A

CG2
MANUFACTURER: INPRO
STYLE: STAINLESS STEEL CORNERGUARD
HEIGHT: TOP OF BASE TO 4'
LOCATION: RECEVING/ PURCHASING AREAS ALL CORNERS
NOTE: MEETS ASTM E84/ CLASS A — A

CR1
MANUFACTURER: INPRO
STYLE: 1500 WALLGUARD 5"
COLOR: TBD
HEIGHT: TOP OF BASE TO CEILING
LOCATION: WAITING SPACES ALL FLOORS AT SEATING AREAS
NOTE: MEETS ASTM E84/ CLASS A — A

HIP 1
MANUFACTURER: INPRO
STYLE: SHEET WALL PROTECTION
COLOR: FEATHER 0238
GAUGE: .040
LOCATION: SEE WALL FINISH PLANS
NOTE: MEETS ASTM E84/ CLASS A — A

RS-1
MANUFACTURER: SWF CONTRACT
TYPE: MANUAL SHADE CLOTH
PATTERN / COLOR: SoHo
SHADE CLOTH TBD
DENSITY: 1%
NOTE: MEETS ASTM84/ TO BE LOCATED AT ALL EXTERIOR WINDOWS BOTH 1ST & 2ND FLOORS
NOTE: MEETS ASTM E84 — A

RS-2
MANUFACTURER: SWF CONTRACT
TYPE: MANUAL SHADE CLOTH
PATTERN / COLOR: SoHo
SHADE CLOTH TBD
DENSITY: BLACK OUT
NOTE: MEETS ASTM84/ TO BE LOCATED AT ALL EXTERIOR WINDOWS BOTH 1ST & 2ND FLOORS
NOTE: MEETS ASTM E84 — A

SC
MANUFACTURER: ASHFORD FORMULA
TYPE: CONCRETE DENSIFIER / HARDENER
COLOR: CLEAR

CC 1
MANUFACTURER: PALLAS
TYPE: PRIVACY CURTAIN
PATTERN: SUN SALUTATION
COLOR: SEAGLASS — B

FINISH GENERAL NOTES

CEILING
A. U.N.O. ALL ACOUSTICAL CEILING TILE SHALL BE ACT 1. REFER TO REFLECTED CEILING PLANS FOR EXCEPTIONS.
B. U.N.O. ALL GYPSUM BOARD CEILINGS ARE TO RECEIVE PF-9/ CEILINGS IN WET LOCATIONS(I.E. TOILET ROOMS, TOILET SHOWER ROOMS AND PROCEDURE ROOMS TO RECEIVE PS-9. REFER TO REFLECTED CEILING PLANS FOR NOTED EXCEPTIONS FOR PAINT COLOR AND FINISH DESIGNATIONS
C. ALL CUT TEGULAR TILE IS TO BE FACTORY CUT AND FINISHED TO ENSURE CLEAN CUT AND FINISHED EDGES ON ALL EXPOSED EDGES U.N.O.
D. ALL SOUNDPLY WOOD PLANK (ACT 4) CEILINGS ARE BASED UPON USING 4'X10' PANELS AND 10' PLANKS AS THE TYPICAL UNIT OF SIZE U.N.O.

GENERAL NOTES
A. REFER TO THE PROJECT SPECIFICATIONS REGARDING INTERIOR WOOD DOOR SPECIES, CUT AND STAIN.
B. GC TO PROVIDE A MINIMUM OF 3% ATTIC STOCK OF ALL MATERIALS TO OWNER. PROVIDE MATERIALS IN UNOPENED BOXES.
C. CAULK AT BASE OF DOOR FRAME BETWEEN DOOR FRAME AND RESILIENT FLOORING TYPICAL ALL LOCATIONS. CAULK TO BE COLOR MATCHED TO MATCH DOOR FRAME PAINT COLOR
D. ALL ITEMS EXPOSED TO VIEW SHALL BE FINISHED (I.E. PAINTED, STAINED, ETC.) UNLESS PREFINISHED BY MANUFACTURER. NO UNFINISHED SURFACES WILL BE ACCEPTED U.N.O.
E. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK LEAD TIMES ON ALL FINISH ITEMS SO AS NOT TO DELAY WORK OR WORK OF OTHER TRADES.
F. U.N.O. TILES LESS THAN AN 1/3 OF A FULL PIECE OF TILE WILL NOT BE ACCEPTED. COORDINATE LAYOUT WITH ARCHITECT TO AVOID TILE "SLIVERS".
G. LOCKERS SHALL BE FACTORY FINISHED. GC TO PROVIDE ARCHITECT MANUFACTURERS FULL LINE OF COLOR/ FINISH OFFERINGS FOR SELECTION.
H. PROVIDE ROLLER SHADE AT EACH EXTERIOR WINDOW AND WINDOWS AT INTERIOR WINDOWS U.N.O. SEE FINISH LEGEND AND REFLECTED CEILING PLANS FOR MORE INFORMATION.
I. REFER TO ELECTRICAL INFORMATION FOR LIGHTING ALLOWANCES (DECORATIVE AND TASK LIGHTING) AND TYPES TO BE INCLUDED IN PRICING SET
J. PROVIDE BOBRICK LED BACKLIT MIRRORS IN ALL MULTIPLE FIXTURE PUBLIC TOILETS
K. PROVIDE BOBRICK WELDED FRAME MIRRORS AT ALL OTHER MIRROR LOCATIONS. SIZES AS SPECIFIED IN ELEVATIONS

WALLS
A. U.N.O. GYP BD. WALLS SHALL RECEIVE PE-1
B. U.N.O. ALL RECESSED WIREWAYS, ACCESS PANELS, GRILLES, ELEC PANELS AND ALL OTHER SUCH ARCHITECTURAL, ELECTRICAL AND MECHANICAL DEVICES SHALL BE FINISHED TO MATCH ADJACENT WALL OR CEILING COLOR.
C. U.N.O.ALL PAINTED HOLLOW METAL FRAMES AND DOORS SHALL RECEIVE PS-1. SEE WALL FINISH PLANS FOR NOTED EXCEPTIONS
D. REFER TO WALL FINISH PLANS AND/OR INTERIOR ELEVATIONS FOR EXTENT AND PATTERNING OF PORCELAIN AND CERAMIC WALL TILE
E. WALLS IN DATA ROOMS ARE TO RECEIVE FIRE RATED PLYWOOD, FIRE RATED PAINTED COLOR: BLACK: FINISH: FLAT
F. ON WALLS SCHEDULED TO RECEIVE PORCELAIN TILE, PROVIDE SCHLUTER FINEC TRIM PIECE ON ALL OUTSIDE CORNER U.N.O.

FLOORING
A. U.N.O. ALL AREAS RECEIVING RESILIENT FLOORING (TILE OR SHEET GOODS) AND/ OR CARPET SHALL RECEIVE RB-1.
B. FEATHER ALL FLOORING MATERIALS AS REQUIRED TO ENSURE A LEVEL TRANSITION BETWEEN MATERIALS OF VARYING THICKNESS.
C. U.N.O. TRANSITION ALL FLOOR FINISHES AT CENTER OF DOOR WHEN IN THE "CLOSED" POSITION.
D. CONTINUE ALL SCHEDULED FLOORING MATERIAL UNDER MILLWORK AND INTO ALL RECESSES U.N.O.
E. MAINTAIN UNIFORMITY OF FLOOR COVERING DIRECTION U.N.O.
F. MINIMIZE NUMBER OF SEAMS, PLACE SEAMS IN INCONSPICUOUS AND LOW TRAFFIC AREAS WHERE POSSIBLE.
G. REFERENCE FLOORING GRAINING SYMBOL FOR CORRECT INSTALLATION DIRECTION OF FLOOR GRAINING. **DO NOT FOLLOW HATCH PATTERN DIRECTION SHOWN ON PLANS.**
H. GC TO PROVIDE ARCHITECT SEAMING DIAGRAM AND INSTALLATION PLAN FOR ALL FLOORING PRIOR TO INSTALLATION OF ANY AND ALL FLOOR COVERINGS.
I. ALL SHEET RESILIENT FLOORING IS TO BE HEAT WELDED. GC TO SUBMIT MANUFACTURERS FULL LINE OF SAMPLES FOR ARCHITECT SELECTION.

WALL PROTECTION
A. REFER TO WALL FINISH PLAN FOR CORNERGUARDS AND HIGH IMPACT PANEL LOCATIONS.
B. PROVIDE ALL FINISH PIECES ON ALL WALL PROTECTION PRODUCTS U.N.O.
C. PROVIDE ALL COORDINATING TRIM PIECES ON ALL HIGH IMPACT WALL PANELS. BUTT JOINT VERTICAL SEAMS AND SEAL WITH COLOR MATCH CAULK.
D. PROVIDE CORNERGUARDS AT ALL EXTERIOR CORNERS U.N.O./ CORNERGUARDS ARE NOT TO BE USED ON EXTERIOR CORNERS SCHEDULED TO RECEIVE WALL TILE U.N.O.
E. CONTRACTOR TO VERIFY ANGLE OF ALL CORNERS BEFORE PURCHASE AND INSTALLATION OF ALL CORNERGUARDS.
F. ALL CORNERGUARDS TO RUN FROM TOP OF BASE TO FINISHED CEILING U.N.O./ CORNERGUARDS ON HALF WALLS TO RUN FROM TOP OF BASE TO UNDERSIDE OF WALL CAP U.N.O.
G. DO NOT RUN WALL PROTECTION PANELS/TRIM BEHIND CASEWORK. PANELS/TRIM TO BE INSTALLED TIGHT TO THE CASEWORK (DO NOT CUT SHORT)

MILLWORK
A. U.N.O. ALL VERTICAL SURFACES OF CASEWORK/ MILLWORK TO RECEIVE PLAM-1. ALL COUNTERTOPS AND BACKSPLASHES SURFACES TO RECEIVE SS-1 OR SS-2 SEE FINISH LEGEND FOR MORE INFORMATION ON LOCATIONS / REFER TO CASEWORK/MILLWORK ELEVATIONS FOR MORE INFORMATION.
B. U.N.O. ALL WOOD GRAIN LAMINATE IS TO BE INSTALLED WITH THE GRAINING RUNNING VERTICALLY. SEE INTERIOR ELEVATIONS FOR NOTED EXCEPTIONS
C. ALL EXPOSED SURFACES OF MILLWORK TO BE COVERED WITH LAMINATE, NO MELAMINE OR UNFINISHED SURFACES WILL BE ACCEPTED.
D. GLASS LOCATED IN AND AROUND CARE TEAM STATIONS IS TO BE COUNTERSUNK IN TRANSACTION TOPS (AT BOTTOM OF PANEL) AND IN CEILING SOFFIT (AT TOP OF PANEL) TYP. U.N.O. SEE MILLWORK SECTIONS FOR MORE INFORMATION
E. PROVIDE 1" DEEP TOE KICK ON SIDES OF ALL MILLWORK PIECES THAT DO NOT TERMINATE AT WALL U.N.O./ THIS AREA IS TO RECEIVE RB. RUBBER BASE APPLIED TO PANELS WILL NOT BE ACCEPTED U.N.O./ COORDINATED HEIGHTS WITH ELEVATIONS
F. ALL SOLID SURFACE PRODUCTS ARE TO HAVE EASED EDGES TO ENSURE NO SHARP CORNERS
G. INCLUDE FIELD CUT GROMMETS IN ALL COUNTERTOPS TO ACCOMMODATE UNDERCOUNTER POWER/ COORDINATE WITH OWNER ON EXACT LOCATIONS

FINISH ABBREVIATIONS

ACT	ACOUSTICAL CEILING TILE
CG	CORNERGUARD
CPT	CARPET TILE
CWT	CERAMIC WALL TILE
DP	DECORATIVE PANEL
EPY	RESINOUS FLOORING
EPYB	RESINOUS FLOORING BASE
EPT	EPOXY TERRAZZO
FRL	FIBERGLASS REINFORCED LAMINATE
GB	GLASS MARKER BOARD
HIP	HIGH IMPACT PANEL
HR	HANDRAIL
LVT	LUXURY VINYL FLOORING
PE	PAINT - EGGSHELL FINISH
PEP	PAINT - EPOXY- EGGSHELL FINISH
PF	PAINT - FLAT
POR	PORCELAIN TILE
PORB	PORCELAIN TILE BASE
PORW	PORCELAIN WALL TILE
PLAM	PLASTIC LAMINATE
PS	PAINT - SEMI GLOSS
QZ	QUARTZ
RAF	RAISED ACCESS FLOORING
RB	RUBBER COVE BASE
RESP	RESIN PANEL
RS	ROLLER WINDOW SHADE
RST	RUBBER STAIR TREAD & RISER
SC	SEALED CONCRETE
SP	SIGNAGE PANEL
SS	SOLID SURFACE
T	TRIM
TER	TERRAZZO FLOORING
WD	WOOD CEILING
WDB	WOOD BASE
WOM	WALK OFF MAT
WP	WALL PROTECTION
WSSV	WELDED SEAM SHEET VINYL
WSSB	WELDED SEAM SHEET VINYL BASE

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mcmillan pazdan smith ARCHITECTURE
EDIFICE CONSTRUCTION

BRUNSWICK COUNTY HEALTH & HUMAN SERVICES

ISSUE DATE: 02/06/2026
PHASE: PERMIT SET

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/02/26	REVIEW COMMENTS 1
B	04/17/26	PreCon RFIs - Batch 1

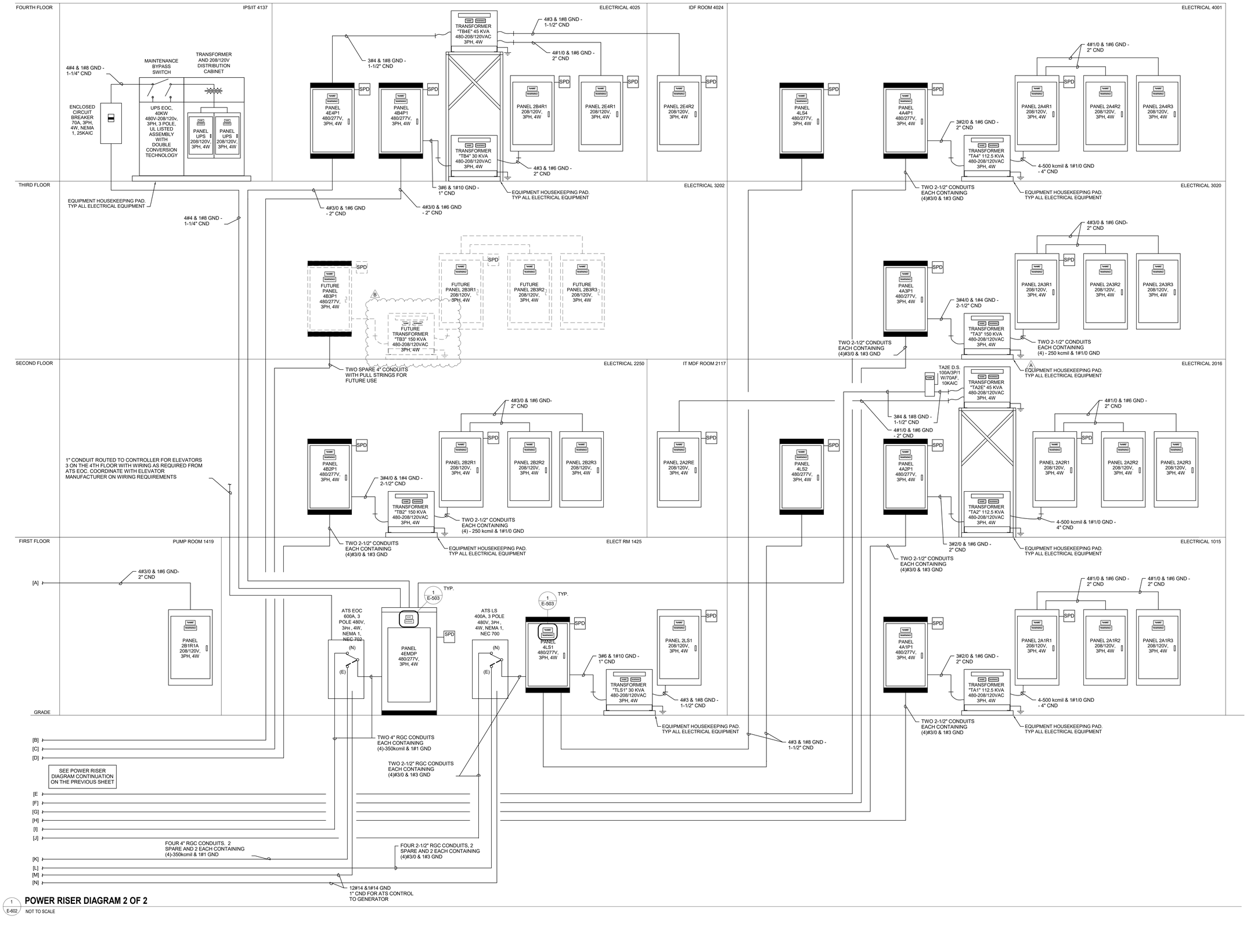
PRINCIPAL IN CHARGE: M. SHEWARD
PROJECT ARCHITECT: L. HOWELL
DRAWN BY: Author

SHEET TITLE:
FINISH LEGEND & INFORMATION

SHEET NO. A840
PROJ. NO. 024370.01

TRANSFORMER STACKING FRAMES:

TRANSFORMER STACKING FRAMES SHALL BE CONSTRUCTED FROM 1-5/8" X 1-5/8" BY 12 GAGE P1000 UNISTRUT CHANNEL, OR APPROVED EQUIVALENT, FOR THE HORIZONTAL AND VERTICAL MEMBERS. THE MAXIMUM SPAN FOR THE HORIZONTAL MEMBERS SHALL BE 48 INCHES. THE MAXIMUM HEIGHT OF VERTICAL MEMBERS SHALL BE 60 INCHES. ALL CONNECTIONS SHALL BE MADE WITH 1-5/8" GENERAL FITTINGS AND POST BASES. PROVIDE P2484W - 7 HOLE, 90 DEGREE GUSSETED FITTINGS AT ALL HORIZONTAL TO VERTICAL CONNECTIONS. ALL CONNECTIONS SHALL FOLLOW REQUIREMENTS AND RECOMMENDATIONS OF MANUFACTURER.



1 E-602 **POWER RISER DIAGRAM 2 OF 2**

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mcmillan pazdan smith ARCHITECTURE
1422 south tryon street, suite 700
charlotte, nc 28203

EDIFICE CONSTRUCTION

NORTH CAROLINA PROFESSIONAL ENGINEER JASON P. FAMIGLETTI SEAL 35230 4/20/2026

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com
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BRUNSWICK COUNTY HEALTH AND HUMAN SERVICES
67 GOVERNMENT CENTER DR.
BRUNSWICK COUNTY, NORTH CAROLINA

ISSUE DATE: 02/06/2026
PHASE: PERMIT SET

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/02/2026	REVIEW COMMENTS 1
B	04/20/2026	Precon RFIs-Batch 2

PRINCIPAL IN CHARGE: JPF
DESIGNER: RRD / AJC
DRAWN BY: RRD / AJC

SHEET TITLE:
ELECTRICAL POWER RISER DIAGRAM 2-OF-2

SHEET NO. E-602
PROJ. NO. 024370.00

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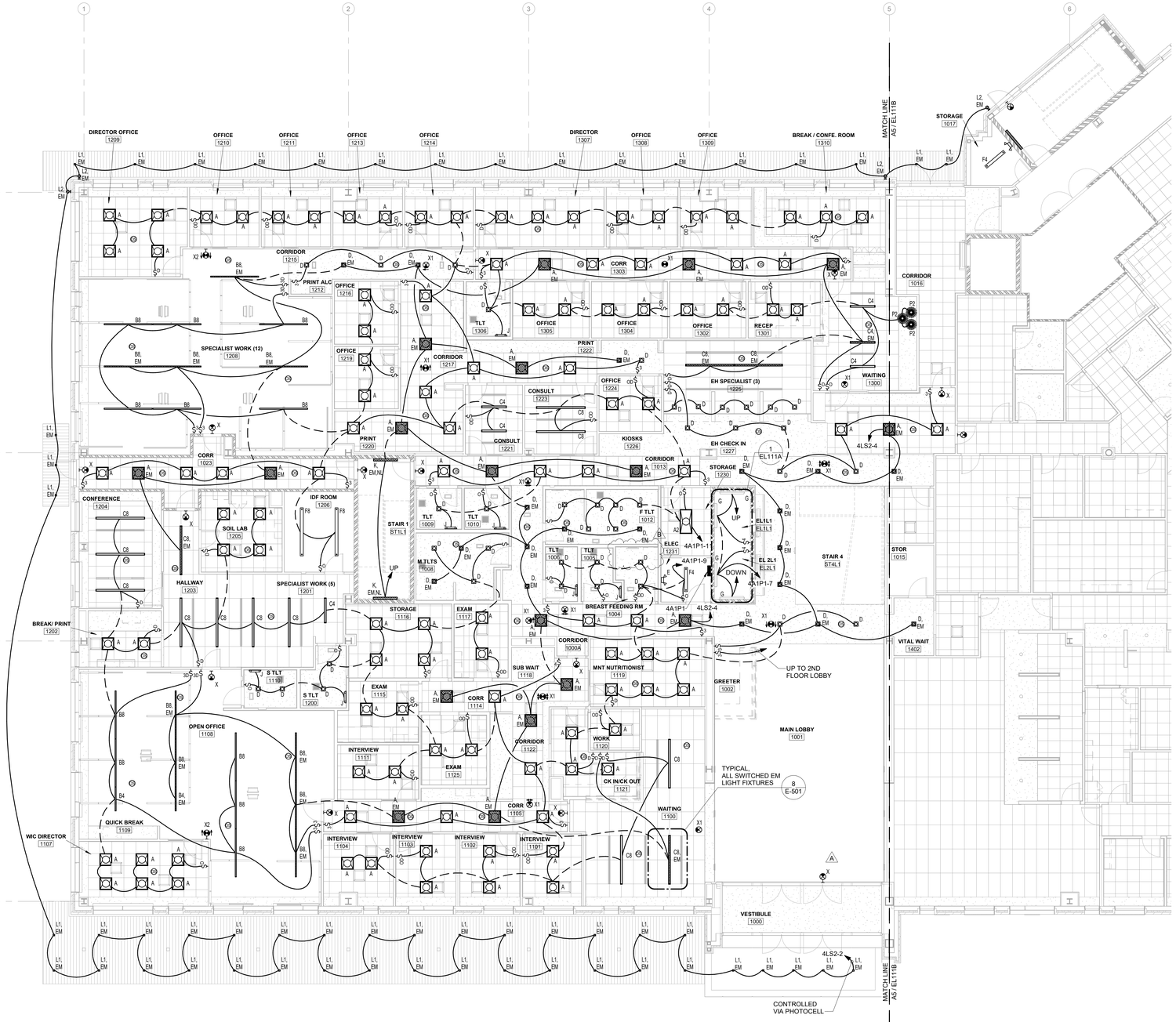
GENERAL NOTES:

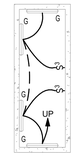
ALL HATCHED LIGHTS ON LIFE SAFETY POWER IN CORRIDORS AND MULTI-GANG TOILET ROOMS SHALL BE UNSWITCHED, NIGHT LIGHTS.

ALL HATCHED LIGHTS ON LIFE SAFETY CIRCUITS IN ROOMS THAT ARE CONTROLLED VIA SWITCHES AND/OR SENSORS SHALL BE WIRED TO A UL924 EMERGENCY OVERRIDE DEVICE TO OPERATE THE LIGHTING AT FULL BRIGHT UPON LOSS OF NORMAL POWER REGARDLESS OF SWITCHING STATUS.

PROVIDE HOISTWAY LIGHTING CONTROLLED BY KEYED, MAINTAINED MULTI-LOCATION SWITCHES LOCATED AT EACH ELEVATOR LANDING ACCESS DOOR. ALL SWITCHES SHALL CONTROL THE ENTIRE HOISTWAY LIGHTING SYSTEM. LIGHTING SHALL REMAIN ENERGIZED UNTIL MANUALLY SWITCHED OFF BY AUTHORIZED PERSONNEL.

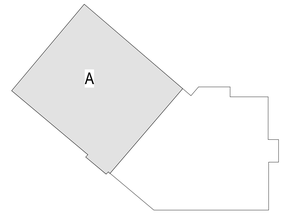


A5 / EL111A **LEVEL 01-LIGHTING-AREA A**
1/8" = 1'-0"



1 / EL111A **ELEVATOR #1 & #2 PIT**
1/8" = 1'-0"

KEY PLAN



PROJECT NORTH

mcmillan pazdan smith ARCHITECTURE
1422 south tryon street, suite 700
charlotte, nc 28203

EDIFICE CONSTRUCTION

NORTH CAROLINA PROFESSIONAL SEAL 35230 ENGINEER JASON P. FAMIGLETTI 4/20/2026

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com
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BRUNSWICK COUNTY HEALTH AND HUMAN SERVICES
67 GOVERNMENT CENTER DR,
BRUNSWICK COUNTY, NORTH CAROLINA

ISSUE DATE:	02/06/2026
PHASE:	PERMIT SET

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/02/2026	REVIEW COMMENTS 1
B	04/20/2026	Precon RFIs-Batch 2

PRINCIPAL IN CHARGE:	JPF
DESIGNER:	RRD / AJC
DRAWN BY:	RRD / AJC

SHEET TITLE:
ELECTRICAL LEVEL 01 - LIGHTING PLAN - AREA A

SHEET NO.	PROJ. NO.
	024370.00

EL111A

SECTION 03 35 00

CONCRETE FINISHING

Added Specification Section

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Single application cure-densifier-hardener for new and existing concrete floors.
   2. Precautions for avoiding staining concrete before and after application.

1.2 REFERENCES

A. American National Standards Institute (ANSI):
   1. ANSI B101.1 Test Method for Measuring Wet SCOF of Common Hard-Surface Floors.
   2. ANSI B101.3 Test Method for Measuring Wet DCOF of Common Hard-Surface Floors.

B. ASTM International (ASTM):
   1. ASTM C779 Standard Test Method for Abrasion Resistance of Horizontal Concrete Surfaces.
   2. ASTM C805 Standard Test Method for Rebound Number of Hardened Concrete.
   3. ASTM D3359 Standard Test Methods for Measuring Adhesion by Tape Test.
   4. ASTM F150-06(2018) Standard Test Method for Electrical Resistance of Conductive and Static Dissipative Resilient Flooring.
   5. ASTM G23 Practice for Operating Light-Exposure Apparatus (Carbon-Arc Type) With and Without Water for Exposure of Nonmetallic Materials (Withdrawn 2000).

C. National Floor Safety Institute (NFSI):
   1. Certified as High Traction by the National Floor Safety Institute (NFSI), Phase 2 testing.

D. USGBC LEED Version 4
   1. Indoor VOC Emission Test; California Department of Public Health CDPH/EHLB/Standard Method Version 1.2, 2017.

E. Health Product Declaration Collaborative (HPD)
   1. HPD v1.0.
   2. HPD v2.1.

F. Additional Testing Methods
   1. Mohs Pencil Hardness Test.
   2. Modified Phenolphthalein Test.

1.3 SUBMITTALS

A. General: Submit listed submittals in accordance with Conditions of the Contract and Section 01 33 00 - Submittal Procedures.

B. Test Reports: Provide concrete mix design and cement mill certificate(s)

C. Product Data: Submit product data, including manufacturer’s Spec-Data® sheet, installation instructions and technical bulletins for specified products.

D. Certificates: Manufacturer’s certification that the installer is acceptable.

E. Maintenance Data: Maintenance instructions, including precautions for avoiding staining after application.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Acceptable to the manufacturer.

1.5 DELIVERY, STORAGE & HANDLING

A. Delivery: Deliver materials in manufacturer’s original, unopened, undamaged containers with identification labels intact.

B. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

PART 2 PRODUCTS

2.1 MATERIAL

A. Manufacturer: Curecrete Distribution, Inc.
   1. Contact: 1203 Spring Creek Place, Springville, UT 84663-0551; Telephone: (800) 998-5664, (801) 489-5663; Fax: (801) 489-3307; Email: info@ashfordformula.com; Website: www.ashfordformula.com.

B. Cure-Densifier-Hardener: Ashford Formula is a transparent, chemically reactive, water-based treatment that penetrates into the concrete surface, forming a chemical reaction of crystalline growth that fills in the natural pores and voids in the concrete surface.
   1. Manufacturer shall provide a current Environmental Product Declaration, issued by an accredited Program Operator
   2. Abrasion Resistance to Revolving Disks: At least a 32.5% improvement over untreated samples when tested in accordance with ASTM C779.
   3. Surface Adhesion: At least a 22% increase in adhesion for epoxy when tested in accordance with ASTM D3359.
   4. Hardening: As follows when tested in accordance with ASTM C39:
      a. After 7 Days: An increase of at least 40% over untreated samples.
      b. After 28 Days: An increase of at least 38% over untreated samples.
   5. Rebound Number: An increase of at least 13.3% over untreated samples when tested in accordance with ASTM C805.
   6. Electrical Resistance: To ASTM F150.
   7. Light Exposure Degradation: No evidence of adverse effects on treated samples when tested in accordance with ASTM G23.
   8. Test Method for Measuring Wet SCOF of Common Hard-Surface Floors in accordance with ANSI B101.1.
   9. Test Method for Measuring Wet DCOF of Common Hard-Surface Floors in accordance with ANSI B101.3.
   10. Certified as High Traction by the National Floor Safety Institute (NFSI), Phase 2 testing.

2.2 ADDITIONAL PRODUCTS/SYSTEMS

A. Joint Filler: CreteFill Pro 85MI, semi-rigid, 2-component, self-leveling, 100% solids, rapid curing, polyurea control joint and crack filler with an 85 Shore-A hardness.

B. Cleaning Solution: CreteClean Plus with Scar Guard

C. Oil Repellent Sealer: RetroPel

D. Stain Protector: RetroGuard

E. Spall Repair: CreteFill Pro Spall Repair

F. Crack Repair: CreteFill Pro Crack Repair EZ Shave

G. Densification Enhancer: PowerPrep LC (low-carbon type concretes)

PART 3 EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

A. Compliance: Comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions and product carton instructions for installation.

3.2 EXAMINATION

A. Do not begin installation until substrates have been properly prepared and are suitable for application of product.

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

3.3 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.

C. If the Ashford Formula was used as a cure, but the concrete later exhibits softness, dusting, or excessive porosity, apply PowerPrep LC as directed, wait for the floor to thoroughly dry (usually 2-3 hours), then re-apply the Ashford Formula.

D. If the Ashford Formula is being used after the concrete has been cured by some other means, examine the floor to ensure soundness of the wearing surface.
   1. Conduct Mohs Pencil Hardness Test. If reading is above 4, continue Ashford Formula installation; if 4 or less, process in 1 of 2 ways:
      a. Apply PowerPrep LC, then densify with the Ashford Formula 2-3 hours later.
      b. If carbonation is suspected, conduct a modified phenolphthalein test to determine if the concrete surface is carbonated; if positive, apply the 2-part SnapBack system as directed.

E. Do not use frozen material. Thaw and agitate prior to use.

F. If construction equipment must be used for application, diaper all components that might drip oil, hydraulic fluid or other liquids.

3.4 INSTALLATION

A. New Concrete: Apply cure-densifier hardener to new concrete as soon as the concrete is firm enough to work on after troweling; with colored concrete, wait a minimum of 30 days before application.
   1. Spray on at rate of 200 ft2/gal (5 m2/L).
   2. Keep surface wet with cure-densifier-hardener for a minimum soak-in period of 30 minutes without allowing it to dry or become slippery. If slipperiness occurs before the 30 minute time period has elapsed, apply additional cure-densifier-hardener, as needed, to keep the entire surface in a non-slippery state for the first 15 minutes; for the remaining 15 minutes, mist the surface as needed with water to keep the material in a non-slippery state. In hot weather conditions, follow manufacturer's special application procedures.
   3. When the treated surface becomes slippery after this period, lightly mist with water until slipperiness disappears.
   4. Wait for surface to become slippery again, and then flush entire surface with water to remove all cure-densifier-hardener residue.
   5. Squeegee surface completely dry, flushing any remaining slippery areas until no residue remains.
   6. Wet vacuum or scrubbing machines can be used in accordance with manufacturer's instructions to remove residue.

B. Existing Concrete: Apply cure-densifier-hardener only to clean, bare concrete.
   1. Thoroughly remove previous treatments, laitance, oil and other contaminants.
   2. Saturate surface with cure-densifier-hardener; respray or broom excess onto dry spots.
   3. Keep surface wet with cure-densifier-hardener for a minimum soak-in period of 30-40 minutes.
   4. If most of the material has been absorbed after the 30 minute soak-in period, remove all excess material, especially from low spots, using broom or squeegee.
   5. If most of the material remains on the surface after the 30 minute soak-in period, wait until the surface becomes slippery and then flush with water, removing all cure-densifier-hardener residue. Squeegee completely dry, flushing any remaining slippery areas until no residue remains.
   6. If water is not available, remove residue using squeegee.

3.5 PROTECTION

A. Protect installed floors for at least 3 months until chemical reaction process is complete.
   1. Do not allow traffic on floors for 3 hours after application.
   2. Do not allow parking of vehicles on concrete slab.
   3. If vehicles must be temporarily parked on slab, place drop cloths under vehicles during entire time parked.
   4. Do not allow pipe cutting using pipe cutting machinery on concrete slab.
   5. Do not allow temporary placement and storage of steel members on concrete slabs.

6. Clean up spills immediately and spot-treat stains with degreaser or oil emulsifier.
7. Clean floor regularly in accordance with manufacturer's recommendations.

END OF SECTION

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12.2024

CLASSIC WALL CAP
8" X 24" X 2 ½"
10 ¼" X 24" X 2 ½"
12" X 24" X 2 ½"
14" X 24" X 2 ½"
16" X 24" X 2 ½"
24" X 24" X 2 ½"

CLASSIC PILASTER CAP FLAT
14" X 14" X 2 ½"
16" X 16" X 2 ½"
19" X 19" X 2 ½"
22" X 22" X 2 ½"
24" X 24" X 2 ½"
28" X 28" X 2 ½"

CLASSIC PILASTER CAP PEAKED
14" X 14" X 3 ¾"
16" X 16" X 4"
19" X 19" X 4 ¼"
22" X 22" X 4 ⅜"
24" X 24" X 4 ½"
28" X 28" X 5"

SONORASTONE® WALL CAP FLAT
10" X 24" X 2 ½"
12" X 24" X 2 ½"
16" X 24" X 2 ½"

SONORASTONE® WALL CAP PEAKED
9 ¼" X 24" X 3"
12 ¼" X 24" X 3 ¼"
16 ¼" X 24" X 3 ¾"

SONORASTONE® PILASTER CAP FLAT
18 ¼" X 18 1/4" X 3"
24 ¼" X 24 1/4" X 3"
24 ¼" X 18 1/4" X 3"

SONORASTONE® PILASTER CAP PEAKED
13 ¼" X 13 ¼" X 3 ½"
18 ¼" X 18 ¼" X 4"
22 ¼" X 22 ¼" X 4 ⅜"
24 ¼" X 24 ¼" X 4 ¾"

SQUARE MODULAR WALL CAP
7 ¼" X 24" X 3 ⅜"
9 ¼" X 24" X 3 ⅜"
13 ¼" X 24" X 3 ⅜"
20 ¼" X 24" X 3 ⅜"

SQUARE WALL CAP 2 ½"
9 ¼" X 24" X 2 ½"

SQUARE MODULAR PILASTER CAP
13" X 13" X 3 ⅜"
15" X 15" X 3 ⅜"
20" X 20" X 3 ⅜"
23" X 23" X 3 ⅜"
27" X 27" X 3 ⅜"

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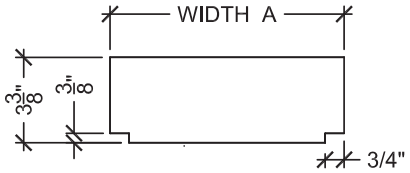

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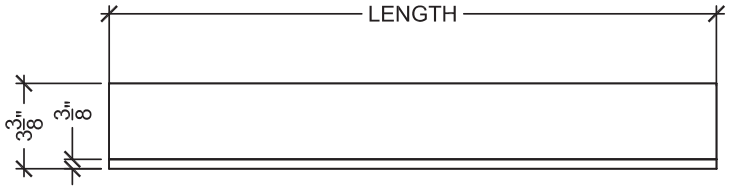

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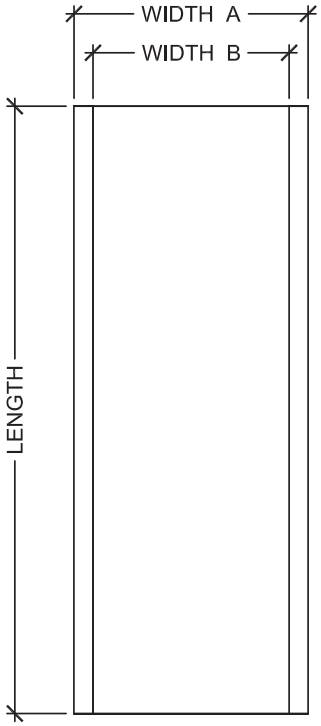


BOTTOM

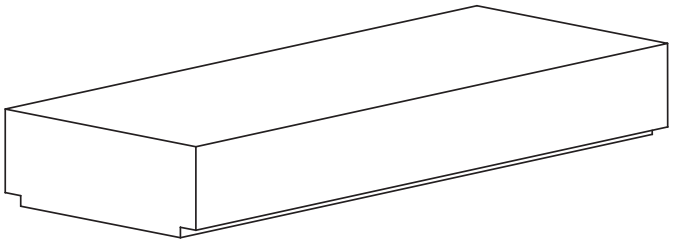
THICKNESS: 3-3/8"
LENGTH: 24"

WIDTH A:7-1/4"
WIDTH B:5-3/4"

WIDTH A: 9-1/4"
WIDTH B: 7-3/4"

WIDTH A: 13-1/4"
WIDTH B: 11-3/4"

WIDTH A: 20-1/4"
WIDTH B: 18-3/4"



ISOMETRIC

NOTES:
1. PRECAST UNITS ARE INDIVIDUALLY HAND CAST. LENGTHS ARE APPROXIMATE. SOME VARIATIONS ARE EXPECTED.
2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH GENERALLY ACCEPTED MASONRY PRACTICE.
3. SMOOTH FINISH ON TOP AND SIDES. SANDBLAST FINISH AVAILABLE.
4. PRECAST UNITS MAY BE CUT TO FIT FIELD CONDITIONS.

Square Modular Wall Cap - Straight Pieces

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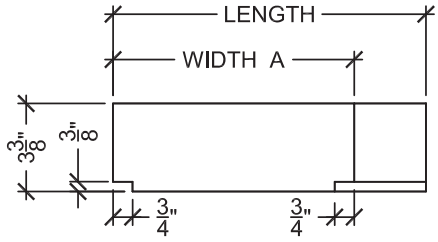

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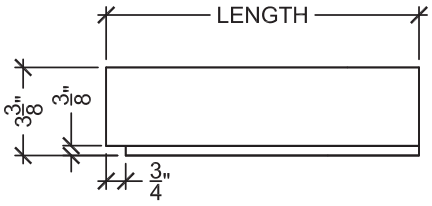


SIDE

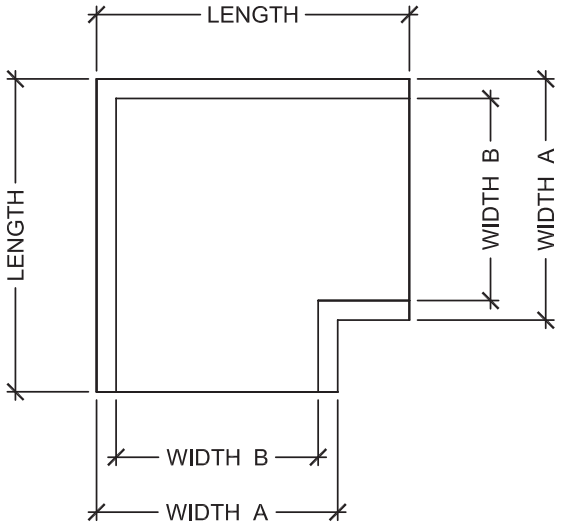
THICKNESS: 3-3/8"

LENGTH: 10" SQ.
WIDTH:7-1/4"
WIDTH:5-3/4"

LENGTH: 12" SQ.
WIDTH A: 9-1/4"
WIDTH B: 7-3/4"

LENGTH: 16" SQ.
WIDTH A: 13-1/4"
WIDTH B: 11-3/4"

LENGTH: 23" SQ.
WIDTH A: 20-1/4"
WIDTH B: 18-3/4"



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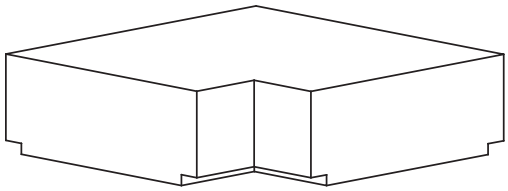

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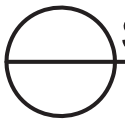

Square Modular Wall Cap - Corner Pieces

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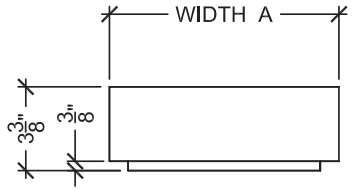

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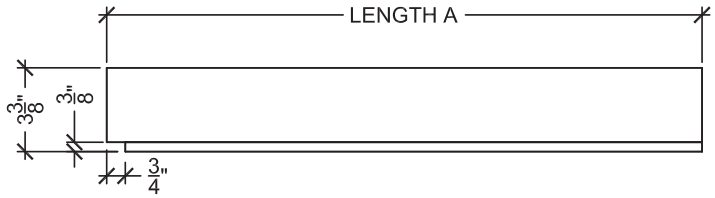

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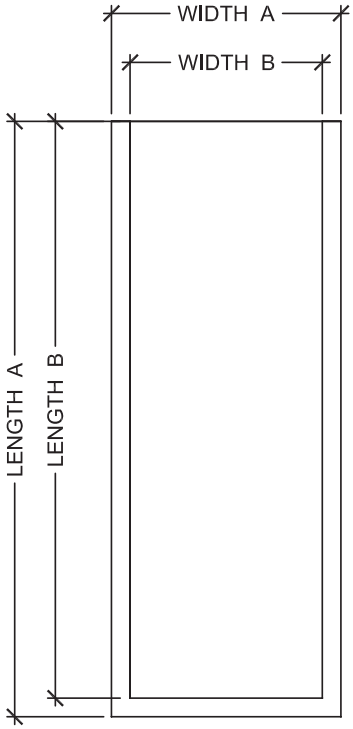


BOTTOM

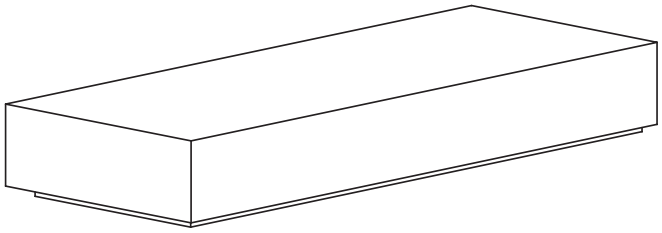
THICKNESS: 3-3/8"
LENGTH A: 24"
LENGTH B: 23 1/4"

WIDTH A:7-1/4"
WIDTH B:5-3/4"

WIDTH A: 9-1/4"
WIDTH B: 7-3/4"

WIDTH A: 13-1/4"
WIDTH B: 11-3/4"

WIDTH A: 20-1/4"
WIDTH B: 18-3/4"



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4. PRECAST UNITS MAY BE CUT TO FIT FIELD CONDITIONS.

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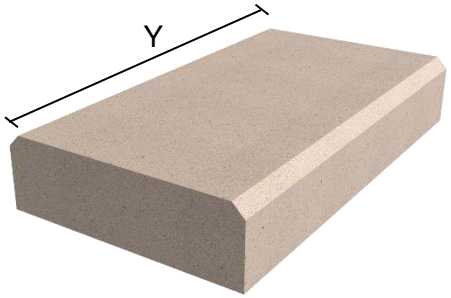
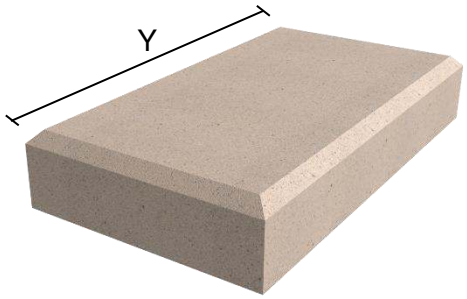
PERSPECTIVE VIEWS

ITEM	W	X	Y
EP-CHC8S	8”	4”	24”
EP-CHC10S	10”	4”	24”
EP-CHC12S	12”	4”	24”
EP-CHC14S	14”	4”	24”
EP-CHC16S	16”	4”	24”
EP-CHC18S	18”	4”	24”
EP-CHC20S	20”	4”	24”



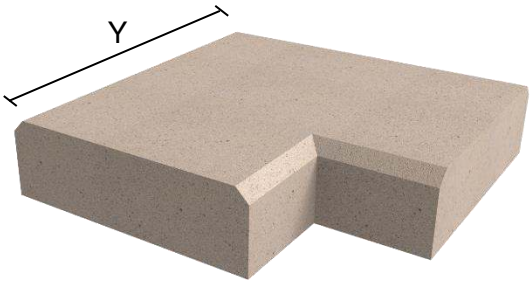
STRAIGHT

ITEM	W	X	Y
EP-CHC8E	8”	4”	24”
EP-CHC10E	10”	4”	24”
EP-CHC12E	12”	4”	24”
EP-CHC14E	14”	4”	24”
EP-CHC16E	16”	4”	24”
EP-CHC18E	18”	4”	24”
EP-CHC20E	20”	4”	24”



END

ITEM	W	X	Y
EP-CHC8C	8”	4”	10”
EP-CHC10C	10”	4”	12”
EP-CHC12C	12”	4”	14”
EP-CHC14C	14”	4”	16”
EP-CHC16C	16”	4”	18”
EP-CHC18C	18”	4”	20”
EP-CHC20C	20”	4	22



CORNER

FRONT VIEW

**RADIUS

*Custom dimensions available upon request
**Custom radiuses available upon request

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SECTION 07 27 26

FLUID-APPLIED MEMBRANE AIR BARRIERS

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Low-build air barriers, vapor permeable.

1.2 DEFINITIONS

A. Air-Barrier Accessory: A transitional component of the air barrier that provides continuity.

B. Air-Barrier Assembly: The collection of air-barrier materials and accessories applied to an opaque wall, including joints and junctions to abutting construction, to control air movement through the wall.

C. Air-Barrier Material: A primary element that provides a continuous barrier to the movement of air.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.
   1. Review air-barrier requirements and installation, special details, mockups, air-leakage and bond testing, air-barrier protection, and work scheduling that covers air barriers.

1.4 ACTION SUBMITTALS

A. Product Data: Include manufacturer's written instructions for evaluating, preparing, and treating each substrate; technical data; dry film thickness; and tested physical and performance properties of products.
   1. Low-build air barriers, vapor permeable.

B. Shop Drawings: For air-barrier assemblies.
   1. Show locations and extent of air-barrier materials, accessories, and assemblies specific to Project conditions.
   2. Include details for substrate joints and cracks, counterflashing strips, penetrations, inside and outside corners, terminations, and tie-ins with adjoining

construction.

3. Include details of interfaces with other materials that form part of air barrier.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

B. Product Certificates: From air-barrier manufacturer, certifying compatibility of air barriers and accessory materials with Project materials that connect to or that come in contact with the barrier.

C. Product Test Reports: For each air-barrier assembly, for tests performed by a qualified testing agency.

D. Field quality-control reports.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.
   1. Installer to be licensed by ABAA in accordance with ABAA's Quality Assurance Program and to employ ABAA-certified installers and supervisors on Project.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Remove and replace liquid materials that cannot be applied within their stated shelf life.

B. Protect stored materials from direct sunlight.

1.8 FIELD CONDITIONS

A. Environmental Limitations: Apply air barrier within the range of ambient and substrate temperatures recommended in writing by air-barrier manufacturer.
   1. Protect substrates from environmental conditions that affect air-barrier performance.
   2. Do not apply air barrier to a damp or wet substrate or during snow, rain, fog, or mist.

PART 2 PRODUCTS

2.1 SOURCE LIMITATIONS

A. Obtain primary air-barrier materials and air-barrier accessories from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. Air-Barrier Performance: Air-barrier assembly and seals with adjacent construction to be capable of performing as a continuous air barrier and as a liquid-water drainage plane flashed to discharge to the exterior incidental condensation or water penetration. Air-barrier assemblies to be capable of accommodating substrate movement and of sealing substrate expansion and control joints, construction material changes, penetrations, tie-ins to installed waterproofing, and transitions at perimeter conditions without deterioration and air leakage exceeding specified limits.

B. Air-Barrier Assembly Air Leakage: Maximum 0.04 cfm/sq. ft. of surface area at 1.57 lbf/sq. ft., when tested in accordance with ASTM E2357.

C. Air Permeance: Maximum 0.004 cfm/sq. ft. of surface area at 1.57 lbf/sq. ft. pressure difference; ASTM E2178.

D. Fire Propagation Characteristics: Passes NFPA 285 testing as part of an approved assembly.

E. UV Resistance: Can be exposed to sunlight for 360 days in accordance with manufacturer's written instructions.

2.3 LOW-BUILD AIR BARRIERS, VAPOR PERMEABLE

A. Low-Build, Vapor-Permeable Air Barrier: Synthetic polymer material with an installed dry film thickness, according to manufacturer's written instructions, of 6 to 15 mils over smooth, void-free substrates.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide PROSOCO, Inc; R-Guard Cat 5 or comparable product by one of the following
      a. Polyguard Products, Inc.; Polyguard Airlok Flex VP.
      b. W. R. Meadows, Inc; Air-Shield TMP.
      c. Tremco ExoAir 230.
   2. Tensile Bond: ASTM C297; Pass (minimum 105 kPa).
   3. Water Resistance: ASTM D2247; no cracking, checking, crazing, erosion, delamination, or other deleterious effects: Pass.
   4. Water Vapor Transmission: ASTM E96 Wet Cup; 14 perms.
   5. Water Penetration: ASTM E331; no visible water penetration at the sheathing joints as viewed from the back of the panel; Pass.

2.4 ACCESSORY MATERIALS

A. Provide primers, transition strips, termination strips, joint reinforcing fabric and strips, joint sealants, counterflashing strips, flashing sheets and metal termination bars, termination mastic, substrate patching materials, adhesives, tapes, foam sealants, lap sealants, and other accessory materials that are recommended in writing by air-barrier manufacturer to produce a complete air-barrier assembly and that are compatible with primary air-barrier material and adjacent construction to which they may seal.

B. Primer: Liquid waterborne primer recommended for substrate by air-barrier material manufacturer.

C. Stainless Steel Sheet: ASTM A240/A240M, Type 304, 0.0187 inch thick, and Series 300 stainless steel fasteners.
   1. Stainless steel shall comply with DFARS (Defense Federal Acquisition Regulation Supplement) requirements for stainless steel necessitate that specialty metals are melted in the United States or a qualifying country, as outlined in DFARS 252.225-7009.

D. Transition Flashing: Multi-purpose, flexible, stainless steel, self-adhering flashing that provides a watertight bond. Flashing shall be a flexible 2 mil (0.05mm) sheet of type 304 stainless steel, 8 mil (0.2032mm) of butyl adhesive and a siliconized release paper. Class A, ASTM E84 fire rated. DFARS compliant.
   1. Manufacturers:
      a. Basis-of-Design: VaproShield; Vapro-SS Flashing.
      b. York Flashings; York 304 SA.

E. Waterproof Flashing: Waterproofing adhesive/flashing and detailing compound for air barrier applications that combines best characteristics of silicone and polyurethane. Single component STP is easy to gun, spread-and tool, or roller apply to produce a highly durable, seamless, elastomeric flashing membrane.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide PROSOCO, Inc; R-Guard FastFlash, R-Guard Joint & Seam Filler, or comparable product by one of the following:
      a. Pecora Corporation.
      b. The Dow Chemical Company.

F. Preformed Silicone Extrusion: Manufacturer's standard system consisting of cured low-modulus silicone extrusion, sized to fit opening widths, with a single-component, neutral-curing, Class 100/50 (low-modulus) silicone sealant for bonding extrusions to substrates.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide PROSOCO, Inc; or comparable product by one of the following
      a. Pecora Corporation.
      b. The Dow Chemical Company.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.
   1. Verify that substrates are sound and free of oil, grease, dirt, excess mortar, or other contaminants.
   2. Verify that substrates have cured and aged for minimum time recommended in writing by air-barrier manufacturer.
   3. Verify that substrates are visibly dry and free of moisture.
   4. Verify that masonry joints are flush and completely filled with mortar.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 SURFACE PREPARATION

A. Clean, prepare, treat, fill, and seal substrate and joints and cracks in substrate in accordance with manufacturer's written instructions and details. Provide clean, dust-free, and dry substrate for air-barrier application.

B. Mask off adjoining surfaces not covered by air barrier to prevent spillage and overspray affecting other construction.

C. Remove grease, oil, bitumen, form-release agents, paints, curing compounds, and other penetrating contaminants or film-forming coatings from concrete.

D. Remove fins, ridges, mortar, and other projections and fill honeycomb, aggregate pockets, holes, and other voids in concrete with substrate-patching material.

E. Remove excess mortar from masonry ties, shelf angles, and other obstructions.

F. At changes in substrate plane, apply sealant or termination mastic beads at sharp corners and edges to form a smooth transition from one plane to another.

G. Cover gaps in substrate plane and form a smooth transition from one substrate plane to another with stainless steel sheet mechanically fastened to structural framing to provide continuous support for air barrier.

H. Bridge expansion joints and discontinuous wall-to-wall, deck-to-wall, and deck-to-deck joints with air-barrier accessory material that accommodates joint movement in accordance with manufacturer's written instructions and details.

3.3 INSTALLATION OF ACCESSORIES

A. Install accessory materials in accordance with air-barrier manufacturer's written instructions and details to form a seal with adjacent construction and ensure continuity of air and water barrier.
   1. Coordinate the installation of air barrier with installation of roofing membrane and base flashing to ensure continuity of air barrier with roofing membrane.
   2. Install transition strip on roofing membrane or base flashing so that a minimum of 3 inches of coverage is achieved over each substrate.
   3. Unless manufacturer recommends in writing against priming, apply primer to substrates at required rate and allow it to dry.
   4. Apply primer to substrates at required rate and allow it to dry. Limit priming to areas that will be covered by air-barrier material on same day. Reprime areas exposed for more than 24 hours.

B. Connect and seal exterior wall air-barrier material continuously to roofing-membrane air barrier, concrete below-grade structures, floor-to-floor construction, exterior glazing and window systems, glazed curtain-wall systems, storefront systems, exterior louvers, exterior door framing, and other construction used in exterior wall openings, using accessory materials.

C. At end of each working day, seal top edge of strips and transition strips to substrate with termination mastic.

D. Apply joint sealants forming part of air-barrier assembly within manufacturer's recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.

E. Wall Openings: Prime concealed, perimeter frame surfaces of windows, curtain walls, storefronts, and doors. Apply liquid flashing membrane capable of spanning joint widths; maximum width not to exceed 3/4-inch. of full contact over firm bearing to perimeter frames, with not less than

F. Fill gaps in perimeter frame surfaces of windows, curtain walls, storefronts, and doors, and miscellaneous penetrations of air-barrier material with liquid flashing membrane.

G. Seal top of through-wall flashings to air barrier with an additional 6-inch- wide, liquid flashing membrane.

H. Seal exposed edges of strips at seams, cuts, penetrations, and terminations not concealed by metal counterflashings or ending in reglets with liquid flashing membrane.

I. Repair punctures, voids, and deficient lapped seams in strips and liquid flashing membrane. Slit and flatten fishmouths and blisters. Patch with transition strips extending 6 inches beyond repaired areas in strip direction.

3.4 INSTALLATION OF PRIMARY AIR-BARRIER MATERIAL

A. Apply air-barrier material to form a seal with strips and transition strips and to achieve a continuous air barrier in accordance with air-barrier manufacturer's written instructions and details. Apply air-barrier material within manufacturer's recommended application temperature ranges.
   1. Unless manufacturer recommends in writing against priming, apply primer to substrates at required rate and allow it to dry.
   2. Limit priming to areas that will be covered by air-barrier material on same day. Reprime areas exposed for more than 24 hours.
   3. Where multiple prime coats are needed to achieve required bond, allow adequate drying time between coats.

B. Low-Build Air Barriers: Apply continuous unbroken air-barrier material to substrates according to the following thickness. Apply an increased thickness of air-barrier material in full contact around protrusions such as masonry ties.
   1. Vapor-Permeable, Low-Build Air Barrier: Total dry film thickness as recommended in writing by manufacturer to comply with performance requirements, applied in one or more equal coats. Apply additional material as needed to achieve void- and pinhole-free surface, but do not exceed thickness on which required vapor permeability is based.

C. Do not cover air barrier until it has been tested and inspected by testing agency.

D. Correct deficiencies in or remove air barrier that does not comply with requirements; repair substrates and reapply air-barrier components.

3.5 FIELD QUALITY CONTROL

A. ABAA Quality Assurance Program: Perform examinations, preparation, installation, testing, and inspections under ABAA's Quality Assurance Program.

B. Testing Agency: Engage a qualified testing agency to perform tests and inspections.

C. Inspections: Air-barrier materials, accessories, and installation are subject to inspection for compliance with requirements. Inspections may include the following:
   1. Continuity of air-barrier system has been achieved throughout the building envelope with no gaps or holes.
   2. Air-barrier dry film thickness.
   3. Continuous structural support of air-barrier system has been provided.
   4. Masonry and concrete surfaces are smooth, clean, and free of cavities, protrusions, and mortar droppings.
   5. Site conditions for application temperature and dryness of substrates have been maintained.
   6. Maximum exposure time of materials to UV deterioration has not been exceeded.
   7. Surfaces have been primed, if applicable.
   8. Laps in strips and transition strips have complied with minimum requirements and have been shingled in the correct direction (or mastic has been applied on

exposed edges), with no fishmouths.
9. Termination mastic has been applied on cut edges.
10. Strips and transition strips have been firmly adhered to substrate.
11. Compatible materials have been used.
12. Transitions at changes in direction and structural support at gaps have been provided.
13. Connections between assemblies (air-barrier and sealants) have complied with requirements for cleanliness, surface preparation and priming, structural support, integrity, and continuity of seal.
14. All penetrations have been sealed.

D. Tests: As determined by testing agency from among the following tests:
1. Air-Leakage-Volume Testing: Air-barrier assemblies will be tested for air-leakage rate in accordance with ASTM E3158.
2. Adhesion Testing: Air-barrier assemblies will be tested for required adhesion to substrate in accordance with ASTM D4541 for each 600 sq. ft. of installed air barrier or part thereof.

E. Air barriers will be considered defective if they do not pass tests and inspections.
1. Apply additional air-barrier material, in accordance with manufacturer's written instructions, where inspection results indicate insufficient thickness.
2. Remove and replace deficient air-barrier components for retesting as specified above.

F. Repair damage to air barriers caused by testing; follow manufacturer's written instructions.

G. Prepare test and inspection reports.

3.6 CLEANING AND PROTECTION

A. Protect air-barrier system from damage during application and remainder of construction period, in accordance with manufacturer's written instructions.
1. Protect air barrier from exposure to UV light and harmful weather exposure as recommended in writing by manufacturer. If exposed to these conditions for longer than recommended, remove and replace air barrier or install additional, full-thickness, air-barrier application after repairing and preparing the overexposed materials in accordance with air-barrier manufacturer's written instructions.
2. Protect air barrier from contact with incompatible materials and sealants not approved by air-barrier manufacturer.

B. Clean spills, stains, and soiling from construction that would be exposed in the completed work using cleaning agents and procedures recommended in writing by manufacturer of affected construction.

C. Remove masking materials after installation.

END OF SECTION

New Section Added

SECTION 09 83 16

SPRAYED CELLULOSE ACOUSTICAL INSULATION

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Sprayed cellulose acoustical insulation.

1.2 SUBMITTALS

A. Product Data: Submit data showing compliance with performance requirements of this Section.

B. Shop Drawings and Installation Instructions: Provide details for installation and manufacturer's instructions for installation of system.

1.3 RELATED ITEMS

A. Clips, hangers, supports, sleeves and other attachments to spray bases are to be placed by other trades prior to the application of sprayed insulation.

B. Ducts, piping, conduit or other suspended equipment shall not be positioned until after the application of sprayed insulation.

C. Roof penetrations to be installed prior to application.

1.4 QUALITY ASSURANCE

A. Manufacturer must have a current Underwriters Laboratories (UL) Code Evaluation Report.

B. Manufacturer must be in compliance with the 2009-2021 International Building Code.

C. Manufacturer must be ISO 9001:2015 Certified.

D. Applicator: Licensed by manufacturer.

E. Manufacturer must subscribe to independent laboratory follow-up inspection services of Underwriters Laboratories and Factory Mutual. Each bag shall be labeled accordingly.

F. Mock-up: Apply a 100 square foot representative sample to be reviewed by the Architect and/or Owner prior to proceeding.

G. Manufacturer shall have a minimum 10-year successful performance history of producing and installing spray-applied cellulose on similar projects

H. Material must be tested in accordance with ASTM E 1042 by a NVLAP accredited testing laboratory.

1.5 DELIVERY, STORAGE AND HANDLING

A. Deliver in original, unopened containers bearing name of manufacturer, product identification and reference to U.L. testing.

B. Store materials dry, off ground, and under cover.

C. Protect liquid adhesive from freezing.

D. Water to be potable.

1.6 PERFORMANCE REQUIREMENTS

A. Spray-on system shall have the following performance requirements.
1. Bond strength shall be greater than 150 psf per ASTM E 736.
2. Product shall be Class 1 Class A per ASTM E 84/ UL 723.
3. Non-corrosive per ASTM C 1149
4. Bond Deflection per ASTM E 759: 6” Deflection in 10’ Span - No Spalling or Delamination.
5. R-Value to be 3.70 per inch per ASTM C 518.
6. Comply with 2015 IBC Section 803.12 stability requirements for interior finishes.
7. Meet ASTM C 1149
8. Product shall be Cradle to Cradle® Certified v.3.1 or higher to a minimum certification level of Bronze
9. Product must have a publicly available Health Product Declaration (HPD) to 100 PPM
10. Product must have a third-party verified, publicly available, product-specific Environmental Product Declaration per ISO 14025
11. Manufacturer's written certification that product contains no asbestos, fiberglass or other man-made mineral fibers.
12. Copy of manufacturer’s ISO 9001:2015 Certification.
13. Cannot contain any added Urea-Formaldehyde Resins.

PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. International Cellulose Corporation 12315 Robin Boulevard
   1. For approved applicators contact ICC at (800) 444-1252.

2.2 MATERIALS

A. K-13 Spray-On-Systems.
   1. Color shall be from Manufacturer's standard color chart as selected by Architect.
   2. Class A per ASTM E 84.
   3. Applied Thickness: 1-1/2 inch.

B. Each drum of adhesive shall be labeled "SK-2000 adhesive to be used with K-13"

C. Each bag must be labeled with appropriate UL classification and FM markings

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine surfaces and report unsatisfactory conditions in writing. Do not proceed until unsatisfactory conditions are corrected.

B. Verify surfaces to receive spray insulation to determine if priming/sealing is required to insure bonding and/or to prevent discoloration caused by migratory stains.

3.2 PREPARATION

A. Provide masking, drop cloths or other satisfactory coverings for materials/surfaces that are not to receive insulation to protect from over-spray.

B. Coordinate installation of the sprayed cellulose fiber with work of other trades.

C. Prime surfaces as required by manufacturer's instructions or as determined by examination.

D. Prime all gypsum board surfaces with high quality, commercial, gypsum board primer

3.3 INSTALLATION

A. Install spray applied insulation according to manufacturer's recommendations.

B. Comply with local Building Code requirements.

C. Install spray applied insulation to achieve an average R-Value of .

D. Install spray applied insulation to achieve an average NRC of .

K-13 Sprayed Thermal and Acoustical Insulation on Solid Backing:		
Thickness:	NRC:	R-Value:
1.00”	0.80	3.70
1.50”	0.90	5.60
1.75”	1.00	6.50
2.00”	1.00	7.40
3.00”	1.00	11.10
4.00”	1.05	14.80
5.00”	1.00	18.50
K-13 Sprayed Thermal and Acoustical Insulation on 1.50” Metal Deck:		
Thickness:	NRC:	R-Value:
1.50”	1.05	5.60
3.00”	1.05	11.10
K-13 Sprayed Thermal and Acoustical Insulation on 2” Metal Deck:		
Thickness:	NRC:	R-Value:
1.00”	0.90	3.70
2.00”	1.05	7.40
K-13 Sprayed Thermal and Acoustical Insulation on 3” Metal Deck:		
Thickness:	NRC:	R-Value:
1.00”	0.95	3.70
1.50”	1.00	5.60
2.75”	1.05	10.20

Cure insulation with continuous natural or mechanical ventilation.Continuous ventilation must be maintained until the material has properly cured.Remove and dispose of over-spray.ProtectionProtect finished installation under provision of Division 1.

END OF SECTION

SECTION 09 91 23

INTERIOR PAINTING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Primers.
   2. Water-based finish coatings.
   3. Solvent-based finish coatings.
   4. Dry fall coatings.

B. Related Requirements:
   1. Section 03 35 00 "Concrete Finishing" for concrete floor finish.
   2. Section 05 12 00 "Structural Steel Framing" for shop priming of metal substrates with primers specified in this Section.
   3. Section 09 91 13 "Exterior Painting" for surface preparation and the application of paint systems on exterior substrates.
   4. Section 09 93 00 "Staining and Transparent Finishing" for surface preparation and the application of wood stains and transparent finishes on interior wood substrates.
   5. Section 09 96 00 "High-Performance Coatings" for tile-like coatings.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product. Include preparation requirements and application instructions.
   1. Include preparation requirements and application instructions.
   2. Indicate VOC content.

B. Samples: For each type of topcoat product.

C. Samples for Initial Selection: For each type of topcoat product.

D. Samples for Verification: For each type of paint system and each color and gloss of topcoat.
   1. Submit Samples on rigid backing, 8 inches square.
   2. Label each coat of each Sample.
   3. Label each Sample for location and application area.

E. Product Schedule. For each product indicated, include the following:
   1. Use same designations indicated on Drawings and in the Interior Painting Schedule to cross-reference paint systems specified in this Section.
   2. Indicate VOC content.

1.3 CLOSEOUT SUBMITTALS

A. Coating Maintenance Manual: Provide coating maintenance manual including area summary with finish schedule; area detail designating location where each product/color/finish was used; product data pages; material safety data sheets; care and cleaning instructions; touch-up procedures; and color samples of each color and finish used.

1.4 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
   1. Paint Products: 5 percent, but not less than 1 gal. of each material and color applied.

1.5 QUALITY ASSURANCE

A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
   1. Architect will select one surface to represent surfaces and conditions for application of each paint system specified in Part 3.
      a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft.
      b. Other Items: Architect will designate items or areas required.
   2. Final approval of color selections will be based on mockups.
      a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.
   3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
   4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Delivery and Handling: Deliver products to Project site in undamaged condition in manufacturer's original sealed containers, complete with labels and instructions for handling, storing, unpacking, protecting, and installing. Packaging shall bear the manufacturer’s label with the following information:
   1. Product name and type (description).
   2. Batch date.
   3. Color number.
   4. VOC content.
   5. Environmental handling requirements.
   6. Surface preparation requirements.
   7. Application instructions.

B. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
   1. Maintain containers in clean condition, free of foreign materials and residue.
   2. Remove rags and waste from storage areas daily.

1.7 FIELD CONDITIONS

A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.

B. Do not apply paints when relative humidity exceeds 85 percent; at temperatures of less than 5 deg F above the dew point; or to damp or wet surfaces.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); products indicated below or comparable product by one of the following:
   1. Benjamin Moore & Co.
   2. PPG Paints.
   3. Pratt & Lambert.
   4. Valspar Corporation (The).

B. Source Limitations: Obtain each paint product from single source from single manufacturer.
   1. Manufacturer's designations listed on a separate color schedule are for color reference only and do not indicate prior approval.

C. Comparable Products: Comparable products of approved manufacturers will be considered in accordance with Section 01 60 00 "Product Requirements," and the following:
   1. Products are approved by manufacturer in writing for application specified.
   2. Products meet performance and physical characteristics of basis-of-design product including published ratio of solids by volume, plus or minus two percent.

2.2 PAINT, GENERAL

A. Material Compatibility:
   1. Materials for use within each paint system to be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
   2. For each coat in a paint system, products to be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.

B. Emissions Requirements: Field-applied paints and coatings that are inside the weatherproofing system shall comply with either of the following:
   1. Low-Emitting Materials: VOC emissions shall comply with the requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."
   2. VOC content shall not exceed limits of authorities having jurisdiction and the following:
      a. Flat Coatings: 50 g/L.
      b. Nonflat Coatings: 100 g/L.
      c. Primers, Sealers, and Undercoats: 100 g/L.
      d. Shellacs, Clear: 730 g/L.
      e. Shellacs, Pigmented: 550 g/L.

2.3 PRIMERS

A. Alkali-Resistant, Water-Based Primer: Water-based primer formulated for use on alkaline surfaces, such as plaster, vertical concrete, and masonry.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Loxon Concrete & Masonry Primer Sealer, LX02W50 Series or comparable product.

B. Interior, Institutional Low-Odor/VOC Primer Sealer: Water-based primer sealer with low-odor characteristics and a VOC of less than 10 grams per liter for use on new interior plaster, concrete, and gypsum wallboard surfaces that are subsequently to be painted with latex finish coats.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); ProMar 200 Zero VOC Latex Primer, B28W2600 Series or comparable product.

C. Water-Based Rust-Inhibitive Primer: Corrosion-resistant, water-based-emulsion primer formulated for resistance to flash rusting when applied to cleaned, interior ferrous metals subject to mildly corrosive environments.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Pro Industrial Pro-Cryl Universal Primer, B66-310 Series or comparable product.

D. Alkyd Quick-Dry Primer for Metal: Corrosion-resistant, solvent-based, modified-alkyd primer; lead and chromate free; formulated for quick-drying capabilities and for use on cleaned, interior steel surfaces.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Kem Bond HS B50WZ1 or comparable product.

E. Water-Based Galvanized-Metal Primer: Corrosion-resistant, acrylic primer; formulated for use on cleaned/etched, exterior, galvanized metal to prepare it for subsequent water-based coatings.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Pro-Cryl Universal Metal Primer B66 Series or comparable product.

2.4 WATER-BASED FINISH COATS

A. Interior, Latex, Flat: Pigmented, water-based paint for use on primed/sealed interior plaster and gypsum board, and on primed wood and metals.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); ProMar 200 Zero VOC Latex Flat, B30-2600 Series or comparable product.
   2. Gloss and Sheen Level: Manufacturer's standard flat finish.

B. Interior, Latex, Low Sheen: Pigmented, water-based paint for use on primed/sealed interior plaster and gypsum board, and on primed wood and metals.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); ProMar 200 Zero VOC Latex Low Sheen Enamel, B24-2600 Series or comparable product.
   2. Gloss and Sheen Level: Manufacturer's standard low-sheen finish.

C. Interior, Latex, Eggshell: Pigmented, water-based paint for use on primed/sealed interior plaster and gypsum board, and on primed wood and metals.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); ProMar 200 Zero VOC Latex Eg-Shel, B20-2600 Series or comparable product.
   2. Gloss and Sheen Level: Manufacturer's standard eggshell finish.

D. Interior, Latex, Institutional Low Odor/VOC, Flat: White or colored latex paint with low-odor characteristics and a VOC of less than 10 grams per liter, for use in areas, such as hospitals and other occupied buildings, where the odor and VOC levels of conventional latex products would preclude their use.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); ProMar 200 Zero VOC Latex Flat, B30-2600 Series or comparable product.

E. Interior, Latex, Institutional Low Odor/VOC, Eggshell: White or colored latex paint with low-odor characteristics and a VOC of less than 10 grams per liter, for use in areas, such as hospitals and other occupied buildings, where the odor and VOC levels of conventional latex products would preclude their use.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); ProMar 200 Zero VOC Latex Eg-Shel, B20-2600 Series or comparable product.
   2. Gloss and Sheen Level: Manufacturer's standard eggshell finish.

F. Interior, Water-Based Light-Industrial Coating, Eggshell: Pigmented, water-based emulsion coating for interior primed wood and metal surfaces (e.g., walls, doors, frames, trim, and sash), providing resistance to moderate abrasion and mild chemical exposure and corrosive conditions.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Pro Industrial Pre-Catalyzed Waterbased Epoxy, K45-151 Series or comparable product.
   2. Gloss and Sheen Level: Manufacturer's standard eggshell finish.

G. Interior, Water-Based Light-Industrial Coating, Semigloss: Pigmented, water-based emulsion coating for interior primed wood and metal surfaces (e.g., walls, doors, frames, trim, and sash), providing resistance to moderate abrasion and mild chemical exposure and corrosive conditions.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Pro Industrial Pre-Catalyzed Waterbased Epoxy, K46-151 Series or comparable product.
   2. Gloss Level: Manufacturer's standard semigloss finish.

2.5 FLOOR SEALERS AND PAINTS

A. Refer to Section 03 35 00 - Concrete Finishing.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers. Where acceptability of substrate conditions is in question, apply samples and perform in-situ testing to verify compatibility, adhesion, and film integrity of new paint application.
   1. Report, in writing, conditions that may affect application, appearance, or performance of paint.

B. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.

C. Proceed with coating application only after unsatisfactory conditions have been corrected; application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Comply with manufacturer's written instructions and recommendations applicable to substrates indicated.

B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
   1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.

C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
   1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.

D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
   1. Concrete Floors: Remove oil, dust, grease, dirt, and other foreign materials. Comply with SSPC-SP-13/NACE 6 or ICRI 03732.

E. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and abraded areas of shop paint and paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.

F. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal fabricated from coil stock by mechanical methods to produce clean, lightly

etched surfaces that promote adhesion of subsequently applied paints.

3.3 INSTALLATION

A. Apply paints in accordance with manufacturer's written instructions.
   1. Use applicators and techniques suited for paint and substrate indicated.
   2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
   3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
   4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
   5. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.

B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.

C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

E. Painting Fire-Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work:
   1. Paint the following work where exposed in equipment rooms:
      a. Equipment, including panelboards.
      b. Uninsulated metal piping.
      c. Uninsulated plastic piping.
      d. Pipe hangers and supports.
      e. Metal conduit.
      f. Plastic conduit.
      g. Tanks that do not have factory-applied final finishes.
      h. Duct, equipment, and pipe insulation having cotton or canvas insulation covering or other paintable jacket material.
   2. Paint the following work where exposed in occupied spaces:
      a. Equipment, including panelboards.
      b. Uninsulated metal piping.
      c. Uninsulated plastic piping.
      d. Pipe hangers and supports.
      e. Metal conduit.
      f. Plastic conduit.
      g. Duct, equipment, and pipe insulation having cotton or canvas insulation

covering or other paintable jacket material.
h. Other items as directed by Architect.

3. Paint portions of internal surfaces of metal ducts, without liner, behind air inlets and outlets that are visible from occupied spaces.

3.4 FIELD QUALITY CONTROL

A. Dry-Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry-film thickness.
1. Contractor shall touch up and restore painted surfaces damaged by testing.
2. If test results show that dry-film thickness of applied paint does not comply with paint manufacturer's written instructions, Contractor shall pay for testing and apply additional coats as needed to provide dry-film thickness that complies with paint manufacturer's written instructions.

3.5 CLEANING AND PROTECTION

A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
1. Do not clean equipment with free-draining water and prevent solvents, thinners, cleaners, and other contaminants from entering into waterways, sanitary and storm drain systems, and ground.
2. Dispose of contaminants in accordance with requirements of authorities having jurisdiction.
3. Allow empty paint cans to dry before disposal.
4. Collect waste paint by type and deliver to recycling or collection facility.

B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.

D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 INTERIOR PAINTING SCHEDULE

A. Steel Substrates:
1. Latex System, Alkyd Primer :
a. Prime Coat: Shop primer specified in Section where substrate is specified.
b. Intermediate Coat: Matching topcoat.
c. Topcoat: Interior, latex, semigloss.
2. Institutional Low-Odor/VOC Latex System :

a. Prime Coat: Water-based rust-inhibitive primer.
b. Intermediate Coat: Matching topcoat.
c. Topcoat: Interior, latex, institutional low odor/VOC, semigloss.

B. Gypsum Board Substrates:
1. Latex over Latex Sealer System :
a. Prime Coat: Interior latex primer sealer.
b. Intermediate Coat: Matching topcoat.
c. Topcoat: Interior, latex, flat andeggshell.
2. High-Performance Architectural Latex System :
a. Prime Coat: Interior latex primer sealer.
b. Intermediate Coat: Matching topcoat.
c. Topcoat: Interior, latex, high-performance architectural coating, satin.
3. Water-Based Light-Industrial Coating System :
a. Prime Coat: Interior latex primer sealer.
b. Intermediate Coat: Matching topcoat.
c. Topcoat: Interior, water-based, light-industrial coating, eggshell.

END OF SECTION

New Section Added

SECTION 10 21 23

CUBICLE CURTAINS AND TRACK

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Cubicle-curtain support systems.
   2. Cubicle curtains.

1.2 ACTION SUBMITTALS

A. Product Data:
   1. Cubicle-curtain support systems.
   2. Cubicle curtains.

B. Shop Drawings: For curtains and tracks.
   1. Show layout and types of cubicles, sizes of curtains, number of carriers, anchorage details, and conditions requiring accessories. Indicate dimensions taken from field measurements.
   2. Include details of blocking for track support.

C. Samples: For each exposed product and for each color and texture specified, 10 inches in size.

1.3 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For curtains, tracks, and hardware to include in operation and maintenance manuals.

PART 2 PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Cubicle Curtains: Provide curtain fabrics with the following characteristics:
   1. Laundering: Launderable to a water temperature of not less than 160 deg F.
   2. Flame Resistance: Provide fabrics identical to those that have passed NFPA 701 when tested by a qualified testing agency acceptable to authorities having jurisdiction.

a. Identify fabrics with appropriate markings of a qualified testing agency.

B. Available Manufacturers: Refer to Finish Schedule on Drawings. Available manufacturers include:
1. Construction Specialties, Inc.
2. Inpro.

2.2 CUBICLE-CURTAIN SUPPORT SYSTEMS

A. Cubicle Curtains suspended-mounted tracks of heavy extruded aluminum alloy 6063-T5, slotted to receive roller carriers, complete with accessories and components required for complete and secure installations including splices, end caps and corner bends.

B. Extruded-Aluminum Curtain Track: Not less than 1-1/4 inches wide by 3/4 inch high.
1. Track Minimum Wall Thickness: 0.058 inch.
2. Finish: Clear anodized.

C. Curtain-Track Mounting: Surface.

D. Curtain-Track Accessories: Fabricate splices, end caps, connectors, end stops, coupling and joining sleeves, wall flanges, brackets, ceiling clips, and other accessories from same material and with same finish as track.
1. End Stop: Removable with carrier hook.
2. Switch Unit: Shuttle and coupling device for rerouting and securing cubicle curtain, with pull chain for switching track.

E. Curtain Roller Carriers: Two nylon rollers and nylon axle with chrome-plated steel hook.

F. Curtain Glide Carriers: One-piece nylon glide with nylon hook.

G. Exposed Fasteners: Stainless steel.

H. Concealed Fasteners: Stainless steel.

2.3 CUBICLE CURTAINS

A. Fabric: Curtain manufacturer's standard, 100 percent polyester; inherently and permanently flame resistant, stain resistant, and antimicrobial.
1. Pattern and Color: As indicated on Finish Schedule on Drawings.

B. Curtain Grommets: Two-piece, rolled-edge, rustproof, nickel-plated brass; spaced not more than 6 inches o.c.; machined into top hem.

C. Curtain Tieback: Nickel-plated brass chain; one at each curtain termination.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install tracks level and plumb, according to manufacturer's written instructions.

B. For tracks of up to 20 feet in length, provide track fabricated from single, continuous length.
   1. Curtain-Track Mounting: Surface.

C. Surface-Track Mounting: Fasten tracks to ceilings at intervals recommended by manufacturer. Fasten tracks to structure at each splice and tangent point of each corner. Center fasteners in track to ensure unencumbered carrier operation. Attach track to ceiling as follows:
   1. Mechanically fasten directly to bottom of concrete deck with post-installed anchors.
   2. Mechanically fasten directly to finished ceiling with toggle bolts.
   3. Mechanically fasten to furring through suspended ceiling with screw and tube spacer.
   4. Mechanically fasten to suspended ceiling grid with screws.
   5. Attach track to suspended ceiling grid with manufacturer's proprietary clip.

D. Track Accessories: Install splices, end caps, connectors, end stops, coupling and joining sleeves, and other accessories as required for a secure and operational installation.

E. Curtain Carriers: Provide curtain carriers adequate for 6-inch spacing along full length of curtain plus an additional carrier.

F. Cubicle Curtains: Hang curtains on each curtain track. Secure with curtain tieback.

END OF SECTION

SECTION 14 21 23.16

MACHINE ROOM-LESS ELECTRIC TRACTION PASSENGER ELEVATORS

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Machine-room-less electric traction elevators.

1.2 DEFINITIONS

A. Definitions in ASME A17.1/CSA B44 apply to work of this Section.

B. Service Elevator: A passenger elevator that is also used to carry freight.

1.3 ACTION SUBMITTALS

A. Product Data Submittals: For each product.
   1. Include capacities, sizes, performances, operations, safety features, finishes, and similar information.
   2. Include Product Data for car enclosures, hoistway entrances, and operation, control, and signal systems.

B. Shop Drawings:
   1. Include plans, elevations, sections, and large-scale details indicating service at each landing, coordination with building structure, relationships with other construction, and locations of equipment.
   2. Include large-scale layout of car-control station and standby power operation control panel.
   3. Indicate maximum dynamic and static loads imposed on building structure at points of support, and maximum and average power demands.

C. Samples for Verification: For exposed car, hoistway door and frame, and signal equipment finishes; 3-inch- square Samples of sheet materials; and 4-inch lengths of running trim members.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

B. Seismic Qualification Certificates: For elevator equipment, accessories, and components, from manufacturer.
   1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.
   2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.
   3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.

C. Manufacturer Certificates: Signed by elevator manufacturer certifying that hoistway and pit layout and dimensions, as indicated on Drawings, and electrical service including standby power generator, as shown and specified, are adequate for elevator system being provided.

D. Sample Warranty: For special warranty.

1.5 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For elevators to include in emergency, operation, and maintenance manuals.
   1. Submit manufacturer's or Installer's standard operation and maintenance manual, in accordance with ASME A17.1/CSA B44 including diagnostic and repair information available to manufacturer's and Installer's maintenance personnel.

B. Continuing Maintenance Proposal:
   1. Submit a continuing maintenance proposal from Installer to Owner, in the form of a standard one-year maintenance agreement, starting on date initial maintenance service is concluded. State services, obligations, conditions, and terms for agreement period and for future renewal options.
   2. Submit a continuing maintenance proposal from Installer to Owner with terms, conditions, and obligations as set forth in, and in same form as, a "Draft of Elevator Maintenance Agreement" at end of this Section, starting on date initial maintenance service is concluded.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: Elevator manufacturer or an authorized representative who is trained and approved by manufacturer.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle materials, components, and equipment in manufacturer's protective packaging. Store materials, components, and equipment off of ground, under cover, and in a dry location.

1.8 COORDINATION

A. Coordinate installation of inserts, sleeves, block outs, elevator equipment with integral anchors, and other items that are embedded in concrete or masonry for elevator equipment. Furnish templates, inserts, sleeves, elevator equipment with integral anchors, and installation instructions and deliver to Project site in time for installation.

B. Coordinate locations and dimensions of work specified in other Sections that relates to electric traction elevators including pit ladders; sumps and floor drains in pits; entrance subsills; electrical service; and electrical outlets, lights, and switches in hoistways and pits.

1.9 WARRANTY

A. Manufacturer's Special Warranty: Manufacturer agrees to repair, restore, or replace elevator work that fails in materials or workmanship within specified warranty period.
   1. Failures include, but are not limited to, operation or control system failure, including excessive malfunctions; performances below specified ratings; excessive wear; unusual deterioration or aging of materials or finishes; unsafe conditions; need for excessive maintenance; abnormal noise or vibration; and similar unusual, unexpected, and unsatisfactory conditions.
   2. Warranty Period: one (1) year(s) from date of Substantial Completion.

PART 2 PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Regulatory Requirements: Comply with ASME A17.1/CSA B44.

B. Accessibility Requirements: Comply with requirements for accessible elevators in the United States Access Board's ADA-ABA Accessibility Guidelines and with ICC A117.1.

C. Seismic Performance: Elevator system shall withstand the effects of earthquake motions determined in accordance with ASCE/SEI 7 and shall comply with elevator seismic requirements in ASME A17.1/CSA B44.
   1. The term "withstand" means "the system will remain in place without separation of any parts when subjected to the seismic forces specified and the system will be fully operational after the seismic event."
   2. Project Seismic Design Category: C.
   3. Elevator Component Importance Factor: 1.5.
   4. Provide earthquake equipment required by ASME A17.1/CSA B44.
   5. Provide seismic switch required by ASCE/SEI 7.

2.2 ELEVATORS

A. Elevator System, General: Manufacturer's standard elevator systems. Unless otherwise indicated, manufacturer's standard components shall be used, as included in standard elevator systems and as required for complete system.

B. Elevator Description:
   1. Group Number:.
      a. Group 1: Elevators 1 and 2.
      b. Group 2: Elevator 3.
   2. Emergency Elevator Number(s): Elevator 3.
   3. Service Elevator Number(s): Elevators 1 and 2.
   4. Rated Load:.
      a. Elevators 1 and 2: 2,100 lbs.
      b. Elevator 3: 3,500 lbs.
   5. Freight Loading Class for Service Elevator(s): Class A.
   6. Rated Speed: 150 fpm.
   7. Operation System: Group automatic operation.
   8. Auxiliary Operations:
      a. Standby power operation.
      b. Earthquake Emergency Operation: Comply with requirements in ASME A17.1/CSA B44.
   9. Security Features: [Card-reader operation], [Keypad operation], and [Car-to-lobby feature].
   10. Car Enclosures:
      a. Inside Width: Not less than 70 inches from side wall to side wall.
      b. Inside Depth: Not less than 53 inches from back wall to front wall (return panels).
      c. Inside Height: Not less than 93 inches to underside of ceiling.
      d. Front Walls (Return Panels): Satin stainless steel, ASTM A480/A480M, No. 4 finish.
      e. Car Fixtures: Satin stainless steel, ASTM A480/A480M, No. 4 finish.
      f. Side and Rear Wall Panels: Plastic laminate.
      g. Reveals: Satin stainless steel, ASTM A480/A480M, No. 4 finish.
      h. Door Faces (Interior): Satin stainless steel, ASTM A480/A480M, No. 4 finish.
      i. Door Sills: Aluminum.
      j. Ceiling: Satin stainless steel, ASTM A480/A480M, No. 4 finish.
      k. Handrails: 1/2 by 2 inches rectangular satin stainless steel, at sides and rear of car.
      l. Floor recessed and prepared to flooring specified in Section 09 6 23 - Resinous Matrix Terrazzo Flooring.
   11. Hoistway Entrances:
      a. Width: 90 inches.
      b. Height: 84 inches.
      c. Type: Single-speed center opening.
      d. Frames: Satin stainless steel, ASTM A480/A480M, No. 4 finish.
      e. Doors and Transoms: Satin stainless steel, ASTM A480/A480M, No. 4 finish.
      f. Sills: Aluminum.

12. Hall Fixtures: Satin stainless steel, ASTM A480/A480M, No. 4 finish.
13. Additional Requirements:
    a. Provide inspection certificate in each car, mounted under acrylic cover with frame made from satin stainless steel, ASTM A480/A480M, No. 4 finish.
    b. Provide hooks for protective pads in service car and one complete set(s) of full-height protective pads.

2.3 MACHINE ROOM-LESS ELECTRIC TRACTION ELEVATORS

A. HYPERLINK "http://www.specagent.com/LookUp/?ulid=15517&mf=04&src=wd" Basis-of-Design Product: Subject to compliance with requirements, provide Schindler Elevator Corp; 3300 MRL, Traction, or comparable product by one of the following:
   1. Otis Worldwide Corporation.
   2. ThyssenKrupp Elevator.

B. Source Limitations: Obtain elevators from single manufacturer.
   1. Major elevator components, including driving machines, controllers, signal fixtures, door operators, car frames, cars, and entrances, shall be manufactured by single manufacturer.

2.4 TRACTION SYSTEMS

A. Elevator Machines: Permanent magnet, variable-voltage, variable-frequency, ac-type hoisting machines and solid-state power converters.
   1. Provide regenerative or nonregenerative system.
   2. Limit total harmonic distortion of regenerated power to 5 percent in accordance with IEEE 519.
   3. Provide means for absorbing regenerated power when elevator system is operating on standby power.
   4. Provide line filters or chokes to prevent electrical peaks or spikes from feeding back into building power system.

B. Fluid for Hydraulic Buffers: Fire-resistant fluid.

C. Inserts: Furnish required concrete and masonry inserts and similar anchorage devices for installing guide rails, machinery, and other components of elevator work. Device installation is specified in another Section.

D. Machine Beams: Provide steel framing to support elevator hoisting machine and deflector sheaves from the building structure. Comply with Section 05 50 00 "Metal Fabrications" for materials and fabrication.

E. Car Frame and Platform: Bolted- or welded-steel units.

F. Guides: Roller guides or polymer-coated, nonlubricated sliding guides. Provide guides at top and bottom of car and counterweight frames.

2.5 OPERATION SYSTEMS

A. Provide manufacturer's standard microprocessor operation systems as required to provide type of operation indicated.

B. Group Automatic Operation with Demand-Based Dispatching: Provide reprogrammable group automatic system that assigns cars to hall calls based on a dispatching program designed to minimize passenger wait time. System automatically adjusts to demand changes for different traffic conditions including heavy incoming, heavy two-way, heavy outgoing, and light off-hours as variations of normal two-way traffic.

C. Auxiliary Operations:
   1. Group Standby Power Operation:
      a. On activation of standby power, cars are returned to a designated floor and parked with doors open. One car is returned at a time, with priority given to loaded cars. If a car cannot be returned after two attempts, it is removed from the system. When all cars have been returned or removed from the system, one car is automatically placed in service. If car selected for service cannot operate within 60 seconds, the system removes car from service and places another car in service. Cars can be manually put in service on standby power, either for return operation or for regular operation, by switches in control panel located at main lobby. Manual operation causes automatic operation to cease.
      b. On activation of standby power, cars are returned, one at a time, to a designated floor and parked with doors open. If a car cannot be returned, it is removed from the system. When all cars have been returned or removed from the system, one car can be put in service on standby power by a selector switch in control panel located at main lobby.
   2. Automatic Dispatching of Loaded Car: When car load exceeds 80 percent of rated capacity, doors begin closing.
   3. Loaded-Car Bypass: When car load exceeds 80 percent of rated capacity, car responds only to car calls, not to hall calls.
   4. Distributed Parking: When cars are not required for response to calls, they are parked with doors closed and distributed in predetermined zones throughout the building. One zone to include the main floor and adjacent floors; remaining floors to be divided into approximately equal zones.

D. Security features may not affect emergency firefighters' service.
   1. Card-Reader Operation: System uses card readers at car-control stations and hall push-button stations to authorize calls. Security system determines which landings and at what times calls require authorization by card reader. Provide required conductors in traveling cable and panel in machine room for interconnecting card readers, other security access system equipment, and elevator controllers. Allow space for card reader in car.
      a. Security access system equipment is specified in Section 28 15 00 "Access Control Hardware Devices."
   2. Keyswitch Operation: Push buttons are activated and deactivated by security

keyswitches at car-control stations and hall push-button stations. Key is removable position.

3. Keypad Operation: Allows each landing to be restricted or unrestricted. When a restricted landing button is pressed, a "Restricted Floor" lamp lights and remains lit until landing access code has been entered into a keypad or predetermined time has elapsed. Car calls for restricted landings do not register until landing access code is entered into keypad within predetermined time after landing button is pressed.
   a. Access codes are programmed at each car operating panel using a security keyswitch. Keypad operation can be activated and deactivated by security keyswitch at main landing.
4. Car-to-Lobby Feature: Feature, activated by keyswitch at main lobby, that causes all cars in a group to return immediately to lobby and open doors for inspection. On deactivation by keyswitch, calls registered before keyswitch activation are completed and normal operation is resumed.

2.6 DOOR REOPENING DEVICES

A. Infrared Array: Provide door reopening device with uniform array of 36 or more microprocessor-controlled, infrared light beams projecting across car entrance. Interruption of one or more light beams causes doors to stop and reopen.

B. Nudging Feature: After car doors are prevented from closing for predetermined adjustable time, through activating door reopening device, a loud buzzer sounds and doors begins to close at reduced kinetic energy.

2.7 CAR ENCLOSURES

A. Provide enameled or powder-coated steel car enclosures to receive removable wall panels, with removable car roof, access doors, power door operators, and ventilation.
   1. Provide standard railings complying with ASME A17.1/CSA B44 on car tops where required by ASME A17.1/CSA B44.
   2. See "Elevator Car Allowances" Paragraph in "Allowances" Article for items to be provided under the Elevator Car Allowance. Provide items not included in the Elevator Car Allowance as needed for finished car including materials and finishes specified below.

B. Materials and Finishes: Manufacturer's standards, but not less than the following:
   1. Subfloor:
      a. Exterior, underlayment grade plywood, not less than 5/8-inch nominal thickness.
      b. Exterior, C-C Plugged grade plywood, not less than 7/8-inch nominal thickness.
   2. Floor Finish:
      a. Refer to Section 09 30 13 - Ceramic Tiling and Finish Schedule.
   3. Stainless Steel Wall Panels: Plush, formed-metal construction; fabricated from

stainless steel sheet.
4. Fabricate car with recesses and cutouts for signal equipment.
5. Fabricate car door frame integrally with front wall of car.
6. Stainless Steel Doors: Flush, hollow-metal construction; fabricated from stainless steel sheet.
7. Sight Guards: Provide sight guards on car doors.
8. Sills: Extruded or machined metal, with grooved surface, 1/4 inch thick.
9. Luminous Ceiling: LED light fixtures and ceiling panels of translucent acrylic or other permanent rigid plastic.
10. Light Fixture Efficiency: Not less than 35 lumens/W.
11. Ventilation Fan Efficiency: Not less than 3.0 cfm/W.

2.8 HOISTWAY ENTRANCES

A. Hoistway Entrance Assemblies: Manufacturer's standard horizontal-sliding, door-and-frame hoistway entrances complete with track systems, hardware, sills, and accessories. Frame size and profile to accommodate hoistway wall construction.
   1. Where gypsum board wall construction is indicated, frames to be self-supporting with reinforced head sections.

B. Fire-Rated Hoistway Entrance Assemblies: Door and frame assemblies to comply with NFPA 80 and be listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction based on testing at as close-to-neutral pressure as possible in accordance with NFPA 252 or UL 10B.
   1. Fire-Protection Rating: 1-1/2 hours.

C. Materials and Fabrication: Manufacturer's standards, but not less than the following:
   1. Steel Subframes: Formed from cold- or hot-rolled steel sheet, with factory-applied enamel or powder-coat finish or rust-resistant primer. Fabricate to receive applied finish as indicated.
   2. Stainless Steel Frames: Formed from stainless steel sheet.
   3. Star of Life Symbol: Identify emergency elevators with star of life symbol, not less than 3 inches high, on both jambs of hoistway door frames.
   4. Stainless Steel Doors and Transoms: Flush, hollow-metal construction; fabricated from stainless steel sheet.
   5. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C1107/C1107M.

2.9 SIGNAL EQUIPMENT

A. Provide hall-call and car-call buttons that light when activated and remain lit until call has been fulfilled. Provide vandal-resistant buttons and lighted elements illuminated with LEDs.

B. Car-Control Stations: Provide manufacturer's standard recessed car-control stations. Mount in return panel adjacent to car door unless otherwise indicated.
   1. Mark buttons and switches for required use or function. Use both tactile symbols and Braille.
   2. Provide "No Smoking" sign matching car-control station, either integral with car-control station or mounted adjacent to it, with text and graphics as required by authorities having jurisdiction.

C. Swing-Return Car-Control Stations: Provide car-control stations mounted on rear of hinged return panel adjacent to car door and with buttons, switches, controls, and indicator lights projecting through return panel but substantially flush with face of return panel.
   1. Mark buttons and switches for function. Use both tactile symbols and Braille.
   2. Provide "No Smoking" sign matching car-control station, either integral with car-control station or mounted adjacent to it, with text and graphics as required by authorities having jurisdiction.

D. Emergency Communication System: Two-way voice communication system, with visible signal, which dials preprogrammed number of monitoring station and does not require handset use. System is contained in flush-mounted cabinet, with identification, instructions for use, and battery backup power supply.

E. Car Position Indicator: Provide illuminated, digital-type car position indicator, located above car door or above car-control station. Also, provide audible signal to indicate to passengers that car is either stopping at or passing each of the floors served. Include travel direction arrows if not provided in car-control station.

F. Hall Push-Button Stations: Provide one hall push-button station at each landing for each single elevator or group of elevators, but not less than one station for each four elevators in a group.
   1. Provide units with flat faceplate for mounting with body of unit recessed in wall.
   2. Equip units with buttons for calling elevator and for indicating desired direction of travel.
      a. Provide for connecting units to building security access system so a card reader can be used to register calls.
   3. Provide telephone jack in each unit for firefighters' two-way telephone communication service specified in Section 28 46 21.11 "Addressable Fire-Alarm Systems."

G. Hall Lanterns: Units with illuminated arrows; but provide single arrow at terminal landings. Provide one of the following:
   1. Manufacturer's standard wall-mounted units, for mounting above entrance frames.
   2. Units with flat faceplate for mounting with body of unit recessed in wall and with illuminated elements projecting from faceplate for ease of angular viewing.
   3. Units mounted in both jambs of entrance frame for each elevator.
   4. Units mounted in both car door jambs; may be used only for single elevators or for two-car groups.

H. Hall Annunciator: With each hall lantern, provide audible signals indicating car arrival and direction of travel. Signals sound once for up and twice for down.
   1. At manufacturer's option, audible signals may be placed on cars.

I. Standby Power Elevator Selector Switches: Provide switches, as required by ASME A17.1/CSA B44, where indicated. Adjacent to switches, provide illuminated signal that indicates when normal power supply has failed.

J. Fire-Command-Center Annunciator Panel: Provide panel containing illuminated position indicators for each elevator, clearly labeled with elevator designation; include illuminated signal that indicates when elevator is operational and when it is at the designated emergency return level with doors open. Provide standby power elevator selector switch(es), as required by ASME A17.1/CSA B44, adjacent to position indicators. Provide illuminated signal that indicates when normal power supply has failed.

K. Emergency Pictorial Signs: Fabricate from materials matching hall push-button stations, with text and graphics as required by authorities having jurisdiction, indicating that in case of fire, elevators are out of service and exits should be used instead. Provide one sign at each hall push-button station unless otherwise indicated.

2.10 FINISH MATERIALS

A. Cold-Rolled Steel Sheet: ASTM A1008/A1008M, commercial steel, Type B, exposed, matte finish.

B. Hot-Rolled Steel Sheet: ASTM A1011/A1011M, commercial steel, Type B, pickled.

C. Stainless Steel Sheet: ASTM A240/A240M, Type 304.

D. Stainless Steel Bars: ASTM A276/A276M, Type 304.

E. Stainless Steel Tubing: ASTM A554, Grade MT 304.

F. Aluminum Extrusions: ASTM B221, Alloy 6063.

G. Plastic Laminate: High-pressure type complying with ISO 4586-3, Type HGS for flat applications.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine elevator areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work. Examine hoistways, hoistway openings, and pits as constructed; verify critical

dimensions; and examine supporting structure and other conditions under which elevator work is to be installed.

B. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION OF MACHINE ROOM-LESS ELECTRIC TRACTION ELEVATORS

A. Comply with manufacturer's written instructions.

B. Welded Construction: Provide welded connections for installing elevator work where bolted connections are not required for subsequent removal or for normal operation, adjustment, inspection, maintenance, and replacement of worn parts. Comply with AWS standards for workmanship and for qualifications of welding operators.

C. Sound Isolation: Mount rotating and vibrating equipment on vibration-isolating mounts to minimize vibration transmission to structure and structure-borne noise due to elevator system.

D. Lubricate operating parts of systems, including ropes, as recommended by manufacturers.

E. Alignment: Coordinate installation of hoistway entrances with installation of elevator guide rails for accurate alignment of entrances with car. Where possible, delay final adjustment of sills and doors until car is operable in shaft. Reduce clearances to minimum, safe, workable dimension at each landing.

F. Leveling Tolerance: 1/8 inch, up or down, regardless of load and travel direction.

G. Set sills flush with finished floor surface at landing. Fill space under sill solidly with nonshrink, nonmetallic grout.

H. Locate hall signal equipment for elevators as follows unless otherwise indicated:
   1. For groups of elevators, locate hall push-button stations between two elevators at center of group or at location most convenient for approaching passengers.
   2. Place hall lanterns either above or beside each hoistway entrance.
   3. Mount hall lanterns at a minimum of 72 inches above finished floor.

3.3 FIELD QUALITY CONTROL

A. Acceptance Testing: On completion of elevator installation and before permitting elevator use (either temporary or permanent), perform acceptance tests as required and recommended by ASME A17.1/CSA B44 and by governing regulations and agencies.

B. Advise Owner, Architect, and authorities having jurisdiction in advance of dates and times that tests are to be performed on elevators.

3.4 PROTECTION

A. Temporary Use: Limit temporary use for construction purposes to one elevator. Comply with the following requirements for elevator used for construction purposes:
   1. Provide car with temporary enclosure, either within finished car or in place of finished car, to protect finishes from damage.
   2. Provide strippable protective film on entrance and car doors and frames.
   3. Provide padded wood bumpers on entrance door frames covering jambs and frame faces.
   4. Provide other protective coverings, barriers, devices, signs, and procedures as needed to protect elevator and elevator equipment.
   5. Do not load elevators beyond their rated weight capacity.
   6. Engage elevator Installer to provide full maintenance service. Include preventive maintenance, repair or replacement of worn or defective components, lubrication, cleanup, and adjustment as necessary for proper elevator operation at rated speed and capacity. Provide parts and supplies same as those used in the manufacture and installation of original equipment.
   7. Engage elevator Installer to restore damaged work, if any, so no evidence remains of correction. Return items that cannot be refinished in the field to the shop, make required repairs and refinish entire unit, or provide new units as required.

3.5 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to operate, adjust, and maintain elevator(s).

B. Check operation of each elevator with Owner's personnel present before date of Substantial Completion and again not more than one month before end of warranty period. Determine that operation systems and devices are functioning properly.

3.6 MAINTENANCE SERVICE

A. Initial Maintenance Service: Beginning at Substantial Completion, maintenance service to include 12 months' full maintenance by skilled employees of elevator Installer. Include monthly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper elevator operation at rated speed and capacity. Parts and supplies to be manufacturer's authorized replacement parts and supplies.
   1. Perform maintenance during normal working hours.
   2. Perform emergency callback service during normal working hours with response time of two hours or less.
   3. Include 24-hour-per-day, 7-day-per-week emergency callback service with response time of two hours or less.

END OF SECTION

SECTION 26 05 19 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Building wires and cables rated 600 V and less.
2. Metal-clad cable, Type MC, rated 600 V or less.
3. Lighting Control Cables.
4. Connectors, splices, and terminations rated 600 V and less.

B. Related Requirements:

1. Drawings and General Provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
2. Section 26 05 33 “Raceway and Boxes for Electrical Systems”.
3. Section 26 05 53 “Identification for Electrical Systems” specifies electrical equipment labels and warning signs installed by this Section.

C. References:

1. ANSI/NFPA 70 National Electrical Code.
2. NECA Standard of Installation (National Electrical Contractors Association).

1.2 ACTION SUBMITTALS

A. Submit under provisions of the General and Supplemental General Conditions and Division 1 Specifications Sections.

B. Product Data: Provide manufacturer’s catalog information showing dimensions, ratings, colors, and configurations.

C. Test Reports: Indicate procedures and values obtained.

D. Manufacturer’s Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency specified under Regulatory Requirements.

1.3 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum three years documented experience.

1.4 REGULATORY REQUIREMENTS

A. Conform to requirements of ANSI/NFPA 70.

B. Furnish products listed and classified by testing firm acceptable to authority having jurisdiction as suitable for purpose specified and shown.

1.5 PROJECT CONDITIONS

A. All wire and cable shall be installed in conduit, except where MC Cable and/or free run lighting control, data, and fire alarm cable is specifically permitted concealed above accessible ceilings. Cabling, connectors, tape and insulating materials above ceilings in plenums, must be UL 2043 listed for use in air-handling spaces. This includes all power wiring, emergency systems control conductors, and other electrical systems required by Codes to be installed raceways.

B. Verify that field measurements are as shown on Drawings.

C. Conductor sizes are based on 75° C. copper.

D. Wire and cable routing shown on Drawings is approximate unless dimensioned. Route wire and cable as required to meet Project Conditions.

E. Where wire and cable routing is not shown, and destination only is indicated, determine exact routing and lengths required.

1.6 COORDINATION

A. Coordinate Work under provisions of the General and Supplemental General Conditions and Division 1 Specifications Sections.

PART 2 - PRODUCTS

2.1 CONDUCTORS AND CABLES

A. Description: Single conductor insulated building wire.

B. Conductor: Copper. Solid and stranded as specified below. Minimum #12 AWG, maximum 500 KCMil, unless noted otherwise.

C. Insulation/Voltage Rating: 600 volts.

D. Insulation: Dual-rated THHN/THWN or XHHW.

Color Coding:	120/240 volts and 208/120 volts	480/277 volts
Phase A -	Black	Brown

Phase B -	Red	Orange
Phase C -	Blue	Yellow
Neutral -	White*	Grey*
Ground -	Green	Green

*Provide branch circuit neutral conductors with factory color coded markings or stripes identified for their associated phase conductor (white-black, white-blue, white-red, gray-brown, gray-orange, gray-yellow) where individual neutral conductors are required.

2.2 METAL CLAD (MC) CABLE

A. Description: Metal clad (MC) cable with aluminum interlocked armor, copper conductors and an internal green insulated equipment grounding conductor may be used for branch circuits 30 amperes and less, where approved by the AHJ. MC Cable must be health care rated where used in patient care areas as defined by the NEC and the AHJ. Use cable with individual neutral conductors where specified and/or required. Cable with individual neutral per phase design neutral conductors shall be provided with factory color coded neutral markings or stripes identified for their associated phase conductor (white-black, white-red, white-blue, gray-brown, gray-orange, gray-yellow).

B. Conductors: Copper. Solid and stranded as specified below. Minimum #12 AWG, maximum #10 AWG.

C. Insulation/Voltage Rating: 600 volts.

D. Insulation: Dual-rated THHN/THWN or XHHW.

E. Conductor Color Coding: Same as Building Wire above.

F. Interlocked armor color coding: Consistent with Section 26 05 53 requirements for raceways.

G. MC cable with integral power and low voltage cable for lighting control is permitted.

H. Power-Limited Fire-Alarm Circuits, complying with UL 1424 are permitted.

I. Connectors shall be zinc plated malleable iron or steel body with locknut, dual cable gripping saddle design with set screw and insulated throat. Pressure cast (pot metal) connectors are not permitted.

2.3 LIGHTING CONTROL CABLE

A. Lighting control cable for dimming and occupancy sensor control shall be provided as required. Lighting control cable may be provided integral to MC cable, or discrete, as approved by the lighting controls manufacturer and as required by NEC Article 725. If discrete, cable shall be NEC Type CMP, in raceway from the switch outlet box to the

accessible ceiling cavity, then free run to follow the lighting power system raceways to the fixtures controlled, be secured to the structure to the plane of the lighting power raceway system, then supported by the lighting power raceway system using NEC approved cable ties installed on no more than six foot intervals, or less if required by Codes and the AHJ. Lighting control cable shall be plenum rated and be approved by the lighting controls manufacturer. It shall consist of a 2#18 AWG solid, violet and gray insulated conductors minimum with an outer jacket rating of 300V minimum. Cable outer jacket shall not be red. Cable shall be daisy chain connected to lighting fixtures or be taped in junction boxes installed at the same plane of the lighting power raceway system. Do not support cable with ceiling grid supports wires. Do not drape cable over ceilings, lighting fixtures, conduit, ductwork, piping or equipment. ~~Daisy chaining cable at the ceiling level is not permitted.~~

2.4 FIRE-ALARM WIRE AND CABLE

A. General Wire and Cable Requirements: NRTL listed and labeled as complying with NFPA 70, Article 760.NFPA 70 permits wire sizes down to No. 16 AWG.

B. Signaling Line Circuits: Twisted, shielded pair, not less than No. 18 AWG, size as recommended by system manufacturer.

1. Circuit Integrity Cable: Twisted shielded pair, NFPA 70, Article 760, Classification CI, for power-limited fire-alarm signal service Type FPL. NRTL listed and labeled as complying with UL 1424 and UL 2196 for a two-hour rating.

C. Non-Power-Limited Circuits: Solid-copper conductors with 600 V rated, 75 deg C, color-coded insulation, and complying with requirements in UL 2196 for a two-hour rating.

1. Low-Voltage Circuits: No. 16 AWG, minimum, in pathway.
2. Line-Voltage Circuits: No. 12 AWG, minimum, in pathway.

3. Multiconductor Armored Cable: NFPA 70, Type MC, copper conductors, Type TFN/THHN conductor insulation, copper drain wire, copper armor with outer jacket with red identifier stripe, NTRL listed for fire-alarm and cable tray installation, plenum rated.

2.5 WIRING CONNECTORS AND CONNECTIONS

A. Conductors shall be installed continuous from outlet to outlet with no splicing except within outlet or junction boxes, troughs and gutters. Make splices, taps, and terminations to carry full ampacity of conductors with no perceptible temperature rise. In plenum spaces, all wiring methods, including boxes and connectors, shall be plenum-rated and comply with UL 2043 for low smoke production.

B. Use mechanical connectors for copper conductor splices and taps, 8 AWG and larger, except main grounding conductors, which shall be terminated with compression lugs. Tape un-insulated conductors and connector with electrical tape to 150 percent of insulation rating of conductor or use third party testing agency-approved insulating

covers. In plenum spaces, only tape and insulating materials listed for plenum use (UL 2043 compliant) shall be used.

C. Use insulated spring wire connectors with plastic caps for copper conductors, 10 AWG and smaller, splices and taps in junction boxes, outlet boxes and lighting fixtures, Ideal "Wire-Nut" or "Wing-Nut", 3M Company "Scotchlock" series or NSI "Easy-Twist". "Push wire" type connectors are not acceptable. In plenum spaces, only connectors that are UL 2043-rated for use in air plenums shall be permitted.

D. "Sta-Kon" or other permanent type crimp connectors shall not be used for branch circuit connections.

E. Joints in stranded conductors shall be spliced by approved mechanical connectors and insulated with vinyl mastic tape and covered with vinyl electrical tape, 3M Scotch Vinyl Mastic Tape 2210 and Scotch Vinyl Electrical Tape Super 88, respectively, or approved equal. In plenum spaces, use only UL 2043-listed insulating materials or factory-applied UL-listed insulators on connectors. Solderless mechanical connectors for splices and taps, provided with U.L approved insulating covers, may be used instead of mechanical connectors plus tape.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that interior of building has been protected from weather.

B. Verify that mechanical work likely to damage wire has been completed.

C. Verify that raceway installation is complete and supported.

3.2 PREPARATION

A. Completely and thoroughly swab raceway before installing wire.

3.3 WIRING METHODS

A. Service: Use building wire in raceway.

B. Panelboard and Equipment Feeders: Use building wire in raceway.

C. Exposed Branch Circuits in Unfinished Dry Interior Locations: Use building wire in raceway. Use rigid metallic conduit for Life Safety and EOC distribution feeders.

D. Branch Circuits in Wet or Damp Interior Locations: Use building wire in raceway.

E. Underground Installations: Use building wire in non-metallic raceway. Provide concrete encasement where shown and where required by relevant Codes.

F. Under Accessible Floor Installations:
   1. Cables must be securely supported, not resting directly on floor.
      a. Utilize pedestal brackets that attach to the raised floor pedestals to elevate and support MC cable.
      b. Do not attach cables directly to removable floor panels.
      c. Allow for separation of MC cables from low-voltage cables.

G. Branch Circuits in Concealed Dry Interior Locations:

   1. Use building wire in metallic raceway or metal clad cable.
   2. MC cable may be used exposed in electrical equipment rooms where branch circuits originate at panelboards, but cable shall be supported and neatly arranged above panelboards on steel ladder rack, width as required. Cable shall be strapped to ladder rack using approved, UV resistant plastic cable ties. Alternately, MC cable shall be transitioned to building wire and metallic raceway outside of the electrical equipment rooms in a junction box or wiring trough concealed above an accessible ceiling. If this method is utilized to convert MC cable to building wire and metallic raceway, provide screw connection, feed-through, modular type DIN rail terminal blocks for termination and extension of circuit conductors. Terminal blocks shall be rated 30A, 300VAC minimum, and higher as required by circuit ampacity and voltage, quantity as required for phase, neutral and equipment ground conductors. Wirenut and similar terminations are not permitted in splice boxes or panelboard interiors. All splices shall be clearly labeled and neatly trained as judged acceptable by the Engineer.

H. Above Accessible Ceilings: Use building wire in metallic raceway or health care rated metal clad cable in patient care areas. Cabling and materials above ceilings must be plenum rated.

I. Wet or Damp Interior Locations: Use building wire in metallic raceway.

J. Exterior Locations: Use building wire in metallic raceway.

3.4 INSTALLATION

A. Install products in accordance with manufacturer’s instructions.

B. Route wire and cable as required to meet Project Conditions.

C. Install cable in accordance with the NECA “Standard of Installation”.

D. If a continuous raceway system is not shown on the Drawings, all concealed cabling not shown in raceway shall be supported with a cable support structure.

   1. Cabling shall be installed in straight paths and exit pathways at ninety degree angles. Diagonal, beeline and or non-supported cabling are unacceptable. Cabling shall be routed as high as possible and above other building facilities in the path with the least obstructions in the ceiling space while maintaining the separation requirements of the equipment manufacturer and NFPA 70 (NEC). Cables shall not be strapped to electrical conduits, piping, ductwork, etc.
   2. The cable support structure shall utilize approved cable supports and be sized to accommodate change. J hook type cable supports shall be securely fastened to

the building structure and be spaced at a maximum distance of four (4) feet so that sag between supports does not exceed 12 inches. J hooks shall be sized as follows: two inch J hooks rated for 75 cables and shall be used to support cable paths of 50 or less cables, four inch J hooks rated for 150 cables and shall be used to support cable paths of 51 to 100 cables. All cable paths shall be sized with 20% spare capacity. All attachment hardware shall be approved for the type of installation and maximum load rating of the products to be installed.

3. All penetrations through walls and ceilings shall be sleeved. All sleeves shall have permanently attached bushings. Sleeves shall be sized to accept 50% growth. All sleeves shall be fire-stopped using UL® approved methods and shall maintain assembly fire ratings.
4. Cables of different systems shall be separately bundled on 2 foot intervals using hook and loop cable ties. Plastic cable ties are not permitted.
5. All cable shall be installed in a complete, neat, and orderly fashion. Install cable with sufficient bending radius as not to kink, shear, or damage binders. Bend radius shall meet manufacturer's specifications.

E. Use solid conductor for feeders and branch circuits 10 AWG and smaller, and Class B stranded for larger conductors.

F. Use conductor not smaller than 12 AWG for power and lighting circuits.

G. Use conductor not smaller than 14 AWG for fire alarm and control circuits.

H. Pull all conductors into raceway at same time.

I. Use suitable wire pulling lubricant for building wire 4 AWG and larger.

J. Neatly train and lace wiring inside boxes, equipment, and panelboards. Do not tightly bundle conductors.

K. Clean conductor surfaces before installing lugs and connectors.

L. Identify wire and cable under provisions of Section 26 05 53.

M. Identify each conductor with its circuit number or other designation indicated on Drawings.

N. Common neutral multiwire lighting and receptacle branch circuits are not permitted. Provide separate, individual neutral conductors for receptacle circuits.

O. Do not bundle metal clad cable in a manner that requires the conductors be derated.

P. MC cable shall be supported in straight lines using approved supporting means and in compliance with the NEC. Dedicated support wires may be used above finished ceilings and shall be painted red prior to installation. Do not support cable with ceiling grid supports wires. Do not drape cable over ceilings, lighting fixtures, conduit, ductwork, piping or equipment. ~~Do not "daisy-chain" connect lighting fixtures with MC cable.~~

3.5 FIELD QUALITY CONTROL

A. Perform field inspection and testing under provisions of the General and Supplemental General Conditions and Division 1 Specifications Sections.

B. Inspect wire for physical damage and proper connection.

C. Measure tightness of bolted connections and compare torque measurements with manufacturer's recommended values.

D. Verify continuity of each branch circuit conductor

E. Prior to energizing, feeders, sub-feeders and service conductor cables shall be tested for electrical continuity and short circuits. See Section 26 05 00. A copy of these tests shall be sent to the Architect/Engineer.

END OF SECTION