ADDENDUM NO. ONE (1)
ILM TERMINAL IMPROVEMENTS
CONTRACT 3

Date: July 12, 2019

RE: ILM Terminal Improvements Contract 3

From: The Wilson Group
PO Box 5510
Charlotte, NC 28299

To: All Plan Holders

This Addendum is hereby made a part of the contract documents and specifications of the above referenced project. All other requirements of the original specification shall remain in effect in their respective order. Acknowledge receipt of this Addendum by inserting its number and date in the Proposal form.

NOTE

1. THIS ADDENDUM DOES NOT CHANGE BID DATE AND TIME.

PROJECT MANUAL

1. **REPLACE** the following sections with the sections provided in this Addendum:
    a. 000116 – INVITATION TO BID (AD-01). *Note: corrected pre-qualification requirements and withdrawal period for bids.*
    b. 000117 – BID FORM (AD-01). *Note: corrected base bid, bid guarantee, allowances, deleted HUB requirements, and other items.*
    c. 033000 – CAST IN PLACE CONCRETE (AD-01).
    d. 087100 – DOOR HARDWARE (AD-01). *Note: some Plan Rooms may not have had the correct door hardware schedule. We are reissuing the door hardware schedule for clarity. 1 door was labeled incorrectly and is fixed in this Addendum. There are 5 doors that are added to the index in this Addendum.*

2. In Section 30 – General Conditions – Award and Execution of Contract, **CHANGE** "120" to "90" in subsection 30-02. *Note: Period for award corrected.*

3. In Section 092900 – GYPSUM BOARD, **ADD** the following to subparagraph 2.5: "B. Aluminum Trim: Extruded accessories of profiles and dimensions indicated. 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following: a. Fry Reglet Corp. b. Gordon, Inc. c. MM Systems Corporation. D. Pittcon Industries. 2. Aluminum: Allow and temper with not less than strength and durability properties of ASTM B 221, Alloy 6063-T5. 3. Finish: Corrosion-resistant primer compatible with joint compound and finish materials specified. *Note: added specification language for reveals shown on plans.*

4. In Section 096813 – TILE CARPETING, **REVISE** subparagraph 2.1.A to read "Carpet Tile (CPT-1 and CPT-2). *Note: corrected specification to reflect 2 carpets used.*

5. In Section 102600 – WALL PROTECTION, **ADD** the following to Part 2: "2.2 CORNER GUARDS. A. Surface-Mounted, Plastic-Cover Corner Guards: Assembly consisting of snap-on resilient plastic cover installed over continuous aluminum retainer; including mounting hardware; fabricated with 90- or 135-degree turn to match wall condition. 1. Basis of Design: Subject to compliance with requirements, provide basis of design or one of the following comparable products: a. Construction Specialties, Inc.; Acrovyn FS-20N (Basis of Design). b. Arden Architectural Specialties, Inc c. Balco, Inc. d. IPC Door and Wall Protection Systems; Division of InPro Corporation. e. Korogard Wall Protection Systems; a division of RJF International Corporation. f. Pawling Corporation. g. Tepromark International, Inc. 2. Cover: Extruded rigid plastic, minimum 0.078-inch wall thickness; as follows: a. Profile: Nominal 3-inch-long leg and 1/4-inch corner radius. b. Height: As indicated on Drawings. c. Texture: Pebblette. d. Color: As selected by Architect from manufacturer's full range. 3. Continuous Retainer: Minimum 0.060-inch thick, one-piece, extruded aluminum. 4. Retainer Clips: Manufacturer's standard impact-absorbing clips. 5. Top and Bottom Caps: Prefabricated, injection-molded plastic; color matching cover; field adjustable for close alignment with snap-on cover.6. Quantity: 30. 7. Location: As selected by Architect during construction. *Note: added corner guards.*

6. In Section 102800 – TOILET ACCESSORIES, **MAKE** the following changes:
    a. **REPLACE** paragraphs 1.1.A. 2 and 2.4 with "Deleted." *Note: there are no hand dryers on the project.*
    b. **CHANGE** model number in paragraph 2.3.D. from "B-43644" to "B-3944." *Note: wrong model number identified.*
    c. **ADD** the following to paragraph 2.3.J: "6. Provide Bobrick B-4354 at toilet compartments as shown on drawings." *Note: added language in accordance with toilet accessories schedule shown on drawings.*

7. In Section 113100 – APPLIANCES AND EQUIPMENT, **ADD** the following to paragraph 2.2:
    a) "C. Television Mounting Bracket: 1. Basis of Design: Rocketfish Full-Motion TV Wall Mount, Model No. RF-HTVMM170C. 2. Alternate Manufacturers: a. Sanus. b. Dynex. 3. Compatibility: 32" to 70" flat-panel TVs up to 130 lbs. 4. Quantity: One per wall-mounted television. *Note: added mounting bracket for wall displays.*

8. In Section 113100 – APPLIANCES AND EQUIPMENT, **ADD** the following:
    a) "2.3 REFRIGERATOR / FREEZER A. Basis of Design: KitchenAid KRSF505ESS 24.8 Cubic Foot Capacity Standard Depth Side by Side with Exterior Ice and Water Dispenser in Door. 2. Alternate Manufacturers: a. Frigidaire. b. Whirlpool. 3. Quantity: One unit. *Note: added specification for refrigerator shown on A2-256.*

9. In Sections 238121 – PRE-CONDITIONED AIR UNIT AND ACCESSORIES, 263543 – GROUND POWER UNIT AND ACCESSORIES, and 347713 – PASSENGER BOARDING BRIDGES, **REPLACE** paragraphs 1.1.A in their entirety with the following:

    "A. The New Hanover County Airport Authority (Owner) proposes to procure and install three (3) new Passenger Boarding Bridges (PBB's) and associated equipment for the new terminal expansion being constructed at the Wilmington International Airport (ILM) in Wilmington, NC. In addition, one (1) existing PBB and associated equipment will be relocated from the existing concourse to the

new concourse and one (1) existing PBB shall be removed, stored and reinstalled on the existing concourse.

1. The Scope of Work for this Specification will be included in the Contract 3, Schedule 2 lump sum price, but as specified below, portions of Schedule 2 work will actually be executed during the Schedule 1 work.

2. During the Contract 3 – Schedule 1 work, two (2) new Passenger Boarding Bridges and associated equipment will be supplied and installed at Gates 7 and 9 of the new terminal expansion.

3. During the Contract 3 – Schedule 1 work, a new Fixed Walkway shall be supplied and installed at Gate 8 of the new terminal expansion.

4. During the Contract 3 – Schedule 1 work, the ThyssenKrupp Airport Systems Passenger Boarding Bridge and associated equipment currently installed at the existing Gate 1 will be relocated to Gate 8 of the new terminal expansion.

5. As part of Contract 3 – Schedule 2 work, one (1) additional new Passenger Boarding Bridge and associated equipment will be supplied and installed at the new Gate 1 of the new terminal expansion.

6. At the start of Contract 3 – Schedule 2 work, the ThyssenKrupp Airport Systems Passenger Boarding Bridge and associated equipment at the current Gate 2 shall be taken out of service, removed and stored at the gate.
   a. The terminal door for the current Gate 2 will be relocated to be centered on the current Gate 2 PBB foundation. Once the terminal door relocation is completed, the ThyssenKrupp Airport Systems Passenger Boarding Bridge and associated equipment will be reinstalled and recommissioned. The existing fixed walkway at Gate 2 will be scrapped."

Note: Clarified to which base bid schedule cost of work should be applied.

DRAWINGS

1. **REPLACE** the following sheets with the sheets provided in this Addendum:
   a. S1-121 – PARTIAL BOARDING LEVEL FRAMING PLAN SCHEDULE 1 ZONE 1 (AD-01)
   b. S1-122 – PARTIAL BOARDING LEVEL FRAMING PLAN SCHEDULE 1 ZONE 2 (AD-01)
   c. S1-123 – PARTIAL BOARDING LEVEL FRAMING PLAN SCHEDULE 1 ZONE 3 (AD-01)
   d. S1-131 – PARTIAL ROOF FRAMING PLAN SCHEDULE 1 ZONE 1 (AD-01)
   e. S1-132 – PARTIAL ROOF FRAMING PLAN SCHEDULE 1 ZONE 2 (AD-01)
   f. S1-133 – PARTIAL ROOF FRAMING PLAN SCHEDULE 1 ZONE 3 (AD-01)
   g. S1-141 – PARTIAL HIGH ROOF FRAMING PLAN SCHEDULE 1 ZONE 1 (AD-01)
   h. S1-142 – PARTIAL HIGH ROOF FRAMING PLAN SCHEDULE 1 ZONE 2 (AD-01)
   i. S2-121 – PARTIAL BOARDING LEVEL FRAMING PLAN SCHEDULE 2 ZONE 1 (AD-01)
   j. S2-123 – PARTIAL BOARDING LEVEL FRAMING PLAN SCHEDULE 2 ZONE 3 (AD-01)

k. S2-133 – PARTIAL ROOF FRAMING PLAN SCHEDULE 2 ZONE 3 (AD-01)
l. S2-141 – PARTIAL HIGH ROOF PLAN SCHEDULE 2 ZONE 1 (AD-01)
m. S-201 – ELEVATIONS (AD-01)
n. S-202 – ELEVATIONS (AD-01)
o. S-211 – VERTICAL FRAME ELEVATIONS AND DETAILS (AD-01)
p. S-251 – WALL SECTIONS (AD-01)
q. S-253 – WALL SECTIONS (AD-01)
r. S-301 – FOUNDATION DETAILS (AD-01)
s. S-302 – FOUNDATION DETAILS (AD-01)
t. S-311 – FOUNDATION SECTIONS (AD-01)
u. S-321 – ELEVATED CONCRETE DETAILS (AD-01)
v. S-341 – CONCRETE FLOOR SECTIONS (AD-01)
w. S-511 – FLOOR SECTIONS (AD-01)
x. S-512 – FLOOR SECTIONS (AD-01)
y. S-521 – ROOF SECTIONS (AD-01)
z. S-522 – ROOF SECTIONS (AD-01)
aa. S-523 – ROOF SECTIONS (AD-01)
bb. S-524 – ROOF SECTIONS (AD-01)
cc. A1-111 – SCHEDULE 1 – RAMP LEVEL FLOOR PLAN ZONE 1 (AD-01). *Note: Scheduled louver locations identified on plans.*
dd. A1-112 – SCHEDULE 1 – RAMP LEVEL FLOOR PLAN ZONE 2 (AD-01). *Note: Scheduled louver locations identified on plans.*
ee. A1-122 – SCHEDULE 1 BOARDING LEVEL FLOOR PLAN ZONE 2 (AD-01). *Note: Scheduled louver locations identified on plans.*
ff. A1-143 – SCHEDULE 1 ROOF LEVEL FLOOR PLAN ZONE 3 (AD-01). *Note: All roof insulation tapered where noted.*
gg. A1-201 – SCHEDULE 1 EXTERIOR ELEVATIONS (AD-01). *Note: Showing louvers.*
hh. A1-221 – SCHEDULE 1 ENLARGED ELEVATIONS (AD-01). *Note: Showing louvers.*
ii. A1-222 – SCHEDULE 1 ENLARGED ELEVATIONS (AD-01). *Note: Showing louvers.*
jj. A1-223 – SCHEDULE 1 ENLARGED ELEVATIONS (AD-01). *Note: Showing louvers.*
kk. A1-225 – SCHEDULE 1 ENLARGED ELEVATIONS (AD-01). *Note: Showing louvers.*
ll. A1-251 – SCHEDULE 1 INTERIOR ELEVATIONS (AD-01). *Note: Showing TVs & removed data from gate signage.*
mm. A1-252 – SCHEDULE 1 INTERIOR ELEVATIONS (AD-01). *Note: Showing TVs & removed data from gate signage.*
nn. A1-271 – SCHEDULE 1 ENLARGED INTERIOR ELEVATIONS (AD-01). *Note: Showing elevation at signage section – 2 locations.*
oo. A1-402 – SCHEDULE 1 ENLARGED FLOOR PLANS (AD-01)
pp. A1-404 – SCHEDULE 1 ENLARGED SARA PLAN (AD-01) *Note: changed sand bed to cast-in-place concrete, specified artificial turf, provided section showing fence mounting detail, corrected fence type to PVC-coated chain link type.*
qq. A1-421 – SCHEDULE 1 ENLARGED STAIR PLANS (AD-01) *Note: changed fire extinguishers to all be semi-recessed type in cabinet.*
rr. A2-111 – SCHEDULE 2 RAMP LEVEL FLOOR PLAN ZONE 1 (AD-01). *Note: Showing louvers.*
ss. A2-113 – SCHEDULE 2 RAMP LEVEL FLOOR PLAN ZONE 3 (AD-01). *Note: Showing louvers.*
tt. A2-114 – SCHEDULE 2 RAMP LEVEL FLOOR PLAN ZONE 4 (AD-01). *Note: Showing louvers.*

uu. A2-115 – SCHEDULE 2 RAMP LEVEL FLOOR PLAN ZONE 5 (AD-01). *Note: Showing louvers.*
vv. A2-121 – SCHEDULE 2 BOARDING LEVEL FLOOR PLAN ZONE 1 (AD-01). *Note: Modified Gate 2 to incorporate roof drain enclosure.*
ww. A2-143 – SCHEDULE 2 ROOF LEVEL PLAN ZONE 3 (AD-01). *Note: All roof insulation tapered where noted.*
xx. A2-161 – SCHEDULE 2 BOARDING LEVEL RCP ZONE 1 (AD-01). *Note: Modified Gate 2 to incorporate roof drain enclosure.*
yy. A2-201 – SCHEDULE 2 BUILDING ELEVATIONS (AD-01). *Note: Showing louvers and modified window at Gate 2.*
zz. A2-221 – SCHEDULE 2 BUILDING ELEVATIONS (AD-01). *Note: Showing louvers.*
aaa. A2-222 – SCHEDULE 2 BUILDING ELEVATIONS (AD-01). *Note: Showing louvers.*
bbb. A2-251 – SCHEDULE 2 INTERIOR ELEVATIONS (AD-01). *Note: Showing TVs & removed data from gate signage.*
ccc. A2-252 – SCHEDULE 2 INTERIOR ELEVATIONS (AD-01). *Note: Note: Showing louvers.*
ddd. A2-255 – SCHEDULE 2 INTERIOR ELEVATIONS (AD-01). *Note: Note: Showing louvers.*
eee. A2-302 – SCHEDULE 2 BUILDING SECTIONS (AD-01). *Note: Modified detail at existing & new roof condition.*
fff. A2-354 – SCHEDULE 2 WALL SECTIONS (AD-01). *Note: Modified detail at existing & new roof condition.*
ggg. A2-404 – SCHEDULE 2 ENLARGED FLOOR PLANS (AD-01). *Note: Showing louvers.*
hhh. A2-731 – SCHEDULE 2 BOARDING LEVEL FLOOR PLAN (AD-01). *Note: Modified seating at Gate 2.*
iii. A-503 – PLAN DETAILS (AD-01). *Note: Modified plan detail notes.*
jjj. A-505 – PLAN DETAILS (AD-01). *Note: Added details at signage.*
kkk. A-514 – SECTION DETAILS (AD-01). *Note: Modified detail at existing & new roof condition.*
lll. A-611 – WINDOW SCHEDULES (AD-01). *Note: Modified detail at existing & new roof condition.*
mmm. A-654 – WALL BASE, WALL AND PANEL REVEAL DETAILS (AD-01). *Note: Added details at gate portals.*
nnn. F1-112 – SCHEDULE 1 – BOARDING LEVEL PLAN ZONE 2 FIRE PROTECTION (AD-01)
ooo. F1-115 – SCHEDULE 1 RAMP LEVEL PLAN ZONE 5 FIRE PROTECTION (AD-01)
ppp. F1-121 – SCHEDULE 1 BOARDING LEVEL PLAN ZONE 1 FIRE PROTECTION (AD-01)
qqq. F2-115 – SCHEDULE 2 RAMP LEVEL PLAN ZONE 5 FIRE PROTECTION (AD-01)
rrr. FD1-115 – SCHEDULE 1 RAMP LEVEL DEMP PLAN ZONE 5 FIRE PROTECTION (AD-01)
sss. FD2-115 – SCHEDULE 2 RAMP LEVEL DEMO PLAN ZONE 5 FIRE PROTECTIO (AD-01)
ttt. P1-001 – LEGEND, SCHEDULES & DETAILS (AD-01)
uuu. P1-002 – DETAILS (AD-01)
vvv. P1-111 – SCHEDULE 1 RAMP LEVEL PLAN ZONE 1 PLUMBING (AD-01)
www. P1-112 – SCHEDULE 1 RAMP LEVEL PLAN ZONE 2 PLUMBING (AD-01)
xxx. P1-121 – SCHEDULE 1 BOARDING LEVEL PLAN ZONE 1 PLUMBING (AD-01)

yyy. P1-122 – SCHEDULE 1 BOARDING LEVEL PLAN ZONE 2 PLUMBING (AD-01)
zzz. P2-001 – LEGEND, SCHEDULES & DETAILS (AD-01)
aaaa. P2-111 – SCHEDULE 2 RAMP LEVEL FLOOR PLAN ZONE 1 PLUMBING (AD-01)
bbbb. P2-113 – SCHEDULE 2 RAMP LEVEL FLOOR PLAN ZONE 3 PLUMBING (AD-01)
cccc. P2-114 – SCHEDULE 2 BOARDING LEVEL FLOOR PLAN ZONE 1 PLUMBING (AD-01)
dddd. P2-121 – SCHEDULE 2 BOARDING LEVEL FLOOR PLAN ZONE 1 PLUMBING (AD-01)

2. **INSERT** the following sheets included in this Addendum:
a. AD1-110 – SCHEDULE 1 – RAMP LEVEL OVERALL DEMO PLAN (AD-01).
b. AD1-120 – SCHEDULE 1 – BOARDING/TICKET LEVELS OVERALL DEMO PLAN (AD-01).
c. AD2-110 – SCHEDULE 2 – RAMP LEVEL OVERALL DEMO PLAN (AD-01).
d. AD2-120 – SCHEDULE 2 – RAMP LEVEL OVERALL DEMO PLAN (AD-01).
e. A1-401 – SCHEDULE 1 ENLARGED FLOOR PLANS (AD-01)

3. On all sheets with the TOILET ACCESSORIES LEGEND, MAKE the following changes:
a. **DELETE** "TA-1B 24" x 36" FRAMED MIRROR." *Note: only TA-1A is used.*
b. **DELETE** TA-15". *Note: product not used.*

4. On sheet A2-124 – SCHEDULE 2 – TICKET LEVEL FLOOR PLAN ZONE 4, **CHANGE** door tag at FAMILY TOILET A2254 from "A2554" TO "A2254X". *Note: Door tagged incorrectly.*

5. On sheets A2-123 – SCHEDULE 2 – TICKET LEVEL FLOOR PLAN ZONE 3, A2-124 – SCHEDULE 2 – TICKET LEVEL FLOOR PLAN ZONE 4, AND A2-125 SCHEDULE 2 – TICKET LEVEL FLOOR PLAN ZONE 5, **CHANGE** room name at "CONCESSIONS" A2241 to "CIRCULATION". *Note: Room named incorrectly.*

6. On sheet A2-417 – SCHEDULE 2 – RESTROOM ELEVATIONS; **REPLACE** "TA-1B" with "TA-1A." *Note: Changed mirror to illuminated type.*

QUESTIONS AND ANSWERS

1. QUESTION: On drawing A1-404, can you provide details and specifications for the artificial turf at the SARA? On detail 7, this section does not show up on A1-302. Also, can you provide details of curbing at underside of fence?
ANSWER: See revised drawing included with this Addendum.

2. QUESTION: Are there any hand dryers in this project?
ANSWER: No.

3. QUESTION: What does OFCI stand for?
ANSWER: Owner Furnished – Contractor Installed.

4. QUESTION: Where is the vehicular barrier detail shown on A1-112?
ANSWER: See revised S-302 sheet included with this Addendum.

5. QUESTION: Where are the SARA bench and SARA fire hydrant statue?

ANSWER: See 5/A1-404.

ATTACHMENTS

1. PRE-BID MEETING AGENDA
2. PRE-BID MEETING SIGN-IN SHEET
3. PRE-BID MEETING MINUTES
4. 001116 – INVITATION TO BID (AD-01)
5. 000117 – BID FORM (AD-01)
6. 033000 – CAST IN PLACE CONCRETE (AD-01)
7. 087100 – DOOR HARDWARE (AD-01)
8. S1-121 – PARTIAL BOARDING LEVEL FRAMING PLAN SCHEDULE 1 ZONE 1 (AD-01)
9. S1-122 – PARTIAL BOARDING LEVEL FRAMING PLAN SCHEDULE 1 ZONE 2 (AD-01)
10. S1-123 – PARTIAL BOARDING LEVEL FRAMING PLAN SCHEDULE 1 ZONE 3 (AD-01)
11. S1-131 – PARTIAL ROOF FRAMING PLAN SCHEDULE 1 ZONE 1 (AD-01)
12. S1-132 – PARTIAL ROOF FRAMING PLAN SCHEDULE 1 ZONE 2 (AD-01)
13. S1-133 – PARTIAL ROOF FRAMING PLAN SCHEDULE 1 ZONE 3 (AD-01)
14. S1-141 – PARTIAL HIGH ROOF FRAMING PLAN SCHEDULE 1 ZONE 1 (AD-01)
15. S1-142 – PARTIAL HIGH ROOF FRAMING PLAN SCHEDULE 1 ZONE 2 (AD-01)
16. S2-121 – PARTIAL BOARDING LEVEL FRAMING PLAN SCHEDULE 2 ZONE 1 (AD-01)
17. S2-123 – PARTIAL BOARDING LEVEL FRAMING PLAN SCHEDULE 2 ZONE 3 (AD-01)
18. S2-133 – PARTIAL ROOF FRAMING PLAN SCHEDULE 2 ZONE 3 (AD-01)
19. S2-141 – PARTIAL HIGH ROOF PLAN SCHEDULE 2 ZONE 1 (AD-01)
20. S-201 – ELEVATIONS (AD-01)
21. S-202 – ELEVATIONS (AD-01)
22. S-211 – VERTICAL FRAME ELEVATIONS AND DETAILS (AD-01)
23. S-251 – WALL SECTIONS (AD-01)
24. S-253 – WALL SECTIONS (AD-01)
25. S-301 – FOUNDATION DETAILS (AD-01)
26. S-302 – FOUNDATION DETAILS (AD-01)
27. S-311 – FOUNDATION SECTIONS (AD-01)
28. S-321 – ELEVATED CONCRETE DETAILS (AD-01)
29. S-341 – CONCRETE FLOOR SECTIONS (AD-01)
30. S-511 – FLOOR SECTIONS (AD-01)
31. S-512 – FLOOR SECTIONS (AD-01)
32. S-521 – ROOF SECTIONS (AD-01)
33. S-522 – ROOF SECTIONS (AD-01)
34. S-523 – ROOF SECTIONS (AD-01)
35. S-524 – ROOF SECTIONS (AD-01)
36. AD1-110 – SCHEDULE 1 – RAMP LEVEL OVERALL DEMO PLAN (AD-01)
37. AD1-120 – SCHEDULE 1 – BOARDING/TICKET LEVELS OVERALL DEMO PLAN (AD-01)
38. AD2-110 – SCHEDULE 2 – RAMP LEVEL OVERALL DEMO PLAN (AD-01)
39. AD2-120 – SCHEDULE 2 – RAMP LEVEL OVERALL DEMO PLAN (AD-01)
40. A1-111 – SCHEDULE 1 – RAMP LEVEL FLOOR PLAN ZONE 1 (AD-01)
41. A1-112 – SCHEDULE 1 – RAMP LEVEL FLOOR PLAN ZONE 2 (AD-01)
42. A1-122 – SCHEDULE 1 BOARDING LEVEL FLOOR PLAN ZONE 2 (AD-01)
43. A1-143 – SCHEDULE 1 ROOF LEVEL FLOOR PLAN ZONE 3 (AD-01)
44. A1-201 – SCHEDULE 1 EXTERIOR ELEVATIONS (AD-01)

45. A1-221 – SCHEDULE 1 ENLARGED ELEVATIONS (AD-01)
46. A1-222 – SCHEDULE 1 ENLARGED ELEVATIONS (AD-01)
47. A1-223 – SCHEDULE 1 ENLARGED ELEVATIONS (AD-01)
48. A1-225 – SCHEDULE 1 ENLARGED ELEVATOINS (AD-01)
49. A1-251 – SCHEDULE 1 INTERIOR ELEVATIONS (AD-01)
50. A1-252 – SCHEDULE 1 INTERIOR ELEVATIONS (AD-01)
51. A1-271 – SCHEDULE 1 ENLARGED INTERIOR ELEVATIONS (AD-01)
52. A1-401 – SCHEDULE 1 ENLARGED FLOOR PLANS (AD-01)
53. A1-402 – SCHEDULE 1 ENLARGED FLOOR PLANS (AD-01)
54. A1-404 – SCHEDULE 1 ENLARGED SARA PLAN (AD-01)
55. A1-421 – SCHEDULE 1 ENLARGED STAIR PLANS (AD-01)
56. A2-111 – SCHEDULE 2 RAMP LEVEL FLOOR PLAN ZONE 1 (AD-01)
57. A2-113 – SCHEDULE 2 RAMP LEVEL FLOOR PLAN ZONE 3 (AD-01)
58. A2-114 – SCHEDULE 2 RAMP LEVEL FLOOR PLAN ZONE 4 (AD-01)
59. A2-115 – SCHEDULE 2 RAMP LEVEL FLOOR PLAN ZONE 5 (AD-01)
60. A2-121 – SCHEDULE 2 BOARDING LEVEL FLOOR PLAN ZONE 1 (AD-01)
61. A2-143 – SCHEDULE 2 ROOF LEVEL PLAN ZONE 3 (AD-01)
62. A2-161 – SCHEDULE 2 BOARDING LEVEL RCP ZONE 1 (AD-01)
63. A2-201 – SCHEDULE 2 BUILDING ELEVATIONS (AD-01)
64. A2-221 – SCHEDULE 2 BUILDING ELEVATIONS (AD-01)
65. A2-222 – SCHEDULE 2 BUILDING ELEVATIONS (AD-01)
66. A2-251 – SCHEDULE 2 INTERIOR ELEVATIONS (AD-01)
67. A2-252 – SCHEDULE 2 INTERIOR ELEVATIONS (AD-01)
68. A2-255 – SCHEDULE 2 INTERIOR ELEVATIONS (AD-01)
69. A2-302 – SCHEDULE 2 BUILDING SECTIONS (AD-01)
70. A2-354 – SCHEDULE 2 WALL SECTIONS (AD-01)
71. A2-404 – SCHEDULE 2 ENLARGED FLOOR PLANS (AD-01)
72. A2-731 – SCHEDULE 2 BOARDING LEVEL FLOOR PLAN (AD-01)
73. A-503 – PLAN DETAILS (AD-01)
74. A-505 – PLAN DETAILS (AD-01)
75. A-514 – SECTION DETAILS (AD-01)
76. A-611 – WINDOW SCHEDULES (AD-01)
77. A-654 – WALL BASE, WALL AND PANEL REVEAL DETAILS (AD-01)
78. F1-112 – SCHEDULE 1 – BOARDING LEVEL PLAN ZONE 2 FIRE PROTECTION (AD-01)
79. F1-115 – SCHEDULE 1 RAMP LEVEL PLAN ZONE 5 FIRE PROTECTION (AD-01)
80. F1-121 – SCHEDULE 1 BOARDING LEVEL PLAN ZONE 1 FIRE PROTECTION (AD-01)
81. F2-115 – SCHEDULE 2 RAMP LEVEL PLAN ZONE 5 FIRE PROTECTION (AD-01)
82. FD1-115 – SCHEDULE 1 RAMP LEVEL DEMP PLAN ZONE 5 FIRE PROTECTION (AD-01)
83. FD2-115 – SCHEDULE 2 RAMP LEVEL DEMO PLAN ZONE 5 FIRE PROTECTIO (AD-01)
84. P1-001 – LEGEND, SCHEDULES & DETAILS (AD-01)
85. P1-002 – DETAILS (AD-01)
86. P1-111 – SCHEDULE 1 RAMP LEVEL PLAN ZONE 1 PLUMBING (AD-01)
87. P1-112 – SCHEDULE 1 RAMP LEVEL PLAN ZONE 2 PLUMBING (AD-01)
88. P1-121 – SCHEDULE 1 BOARDING LEVEL PLAN ZONE 1 PLUMBING (AD-01)
89. P1-122 – SCHEDULE 1 BOARDING LEVEL PLAN ZONE 2 PLUMBING (AD-01)
90. P2-001 – LEGEND, SCHEDULES & DETAILS (AD-01)
91. P2-111 – SCHEDULE 2 RAMP LEVEL FLOOR PLAN ZONE 1 PLUMBING (AD-01)
92. P2-113 – SCHEDULE 2 RAMP LEVEL FLOOR PLAN ZONE 3 PLUMBING (AD-01)
93. P2-114 – SCHEDULE 2 BOARDING LEVEL FLOOR PLAN ZONE 1 PLUMBING (AD-01)

94. P2-121 – SCHEDULE 2 BOARDING LEVEL FLOOR PLAN ZONE 1 PLUMBING (AD-01)

END OF ADDENDUM NO. ONE (1)

PRE-BID MEETING AGENDA
ILM TERMINAL IMPROVEMENTS
CONTRACT 3

Prebid Meeting: Tuesday, July 9, 2019, 3:00 p.m. (local time)
Wilmington International Airport (ILM) Conference Room
Wilmington, NC

IMPORTANT NOTICE TO BIDDERS: *Each bidder for this project shall be registered as a prequalified prime bidder (central letting) with the NCDOT at the time of the bid opening and shall hold a North Carolina General Contractor's License. Each civil subcontractor shall be prequalified (subcontractor or higher level) with the NCDOT prior to beginning work on the project. Prime bidders and civil subcontractors shall also either be prequalified with New Hanover County or shall not previously have had a New Hanover County prequalification application denied.*

1. ARCHITECT'S AUTHORITY AND RESPONSIBILITY

A. Architect's representative and project manager is **Travis Pence** who will be receiving questions, substitution requests and issuing addenda. All correspondence pertaining to the work will be directed to him. All questions shall be submitted in writing via email to **travis@twgarchitects.com**. Questions will **not** be entertained via voice communications. All questions will be addressed via addenda in written response. Only the written word in the Bid Documents, including Addenda will be valid.

B. All work will be per the Contract Documents, including Construction Drawings (2) volumes and Project Manual (2 volumes) dated June 28, 2019.

C. Contract Documents are available from McGee CADD Reprographics. They will be responsible for receiving requests for contract documents and keeping the Bid Register, available at your request. The cost for the documents is a non-refundable service charge. Checks shall be made out to McGee CADD Reprographics.

D. Contract Documents are also available from the following plan rooms:

Carolinas Plan Room – www.carolinasplanroom.com
Dodge Data & Analytics – www.construction.com
iSqFt + bidclerk – www.iSqFt.com

2. PRE-BID CONFERENCE REQUIREMENTS

A. This Pre-Bid Conference is non-mandatory.

B. Site visit will be held following meeting. For access to the site contact Eric Stumph at (910) 763-5350.

C. All bidders are encouraged to identify their current status with NCDOT pre-qualification in writing via e-mail to Travis Pence as soon as possible.

3. SCOPE OF WORK

A. Civil Project Special Provisions: Eric Stumph (Talbert & Bright Engineers)
   1. PSP-3 – protection, relocation & restoration of utilities and systems applies to all trades; contractor's survey requirements to layout the work and establish column grid line extensions

B. Building Work Phasing: Travis Pence (The Wilson Group)

C. General Items:
   2. Maintaining Terminal operations through construction
   3. Airport experiencing all-time records
   4. 9 to 10 overnight aircraft and multiple fast turns throughout the day

4. SCHEDULE

A. Bids will be received on **Tuesday, August 6th, 2019, at 2:00 p.m. (local time)**, in the ILM Conference Room. Bid opening will be public. Overnight Delivery may not arrive until after 2:00 p.m. and late bids will not be opened. It is the contractor's responsibility to make sure their bid has been delivered no later than 2:00 p.m. Bid package should be sealed and the outside of the envelope shall contain bidders name, license number, project name.

B. If bids are not opened as indicated above it is Owner's intent to re-advertise the project on the ILM website immediately following the meeting with a re-bid opening date on **Tuesday, August 13th, 2019 at 3:00 p.m. (local time).**

C. It is the Owner's intent to approve the Contract at the September 4, 2019 or October 2, 2019 Airport Authority board meeting.

D. A Notice to Proceed (NTP) from the Owner is anticipated to be issued for mobilization on November 4, 2019.

E. Construction duration is 1,095 calendar days.

F. Substantial Completion will be expected on November 2022.

G. No bids may be withdrawn for a period of 90 days after opening of bids.

H. Liquidated damages are $1,000.00 per calendar day.

I. Work in publicly-occupied areas is limited to after hours, which varies depending on the area of the building and time of year. Refer to section Summary 011000.

5. ADDENDA

A. Addenda will be issued to respond to questions received during the bid period, to list all substitutions approved by the A/E or Owner, clarify items in the contract documents prior to the bid date, and/or to change, postpone, or reschedule the bid date.

B. Number of Addenda issued will depend on the number of questions received.

C. Addendum 1 will be issued on **Friday, July 12, 2019** and will include the Pre-Bid Meeting Agenda, Pre-Bid Meeting Minutes, Pre-Bid Meeting Sign-In Sheet and any Contract Document modifications.

D. The final day for questions will be **Friday, July 26, 2019**. Questions must be submitted in writing via e-mail to Travis Pence at travis@twgarchitects.com using the form provided in the Project Manual.

E. The final day for Substitutions will be **Friday, July 26, 2019**. Substitution requests must be submitted in writing via email to Travis Pence at travis@twgarchitects.com using the form provided in the Project Manual. Only substitution requests submitted through a prime bidder (General Contractor) will be considered. No substitutions will be accepted after award of contract. All "or equals" shall be submitted and accepted prior to bid.

F. Addendum 2 will be issued on **Tuesday, July 30, 2019** and will include any Contract Document modifications.

6. BID FORM

A. Refer to section Bid Form. *Note: Bid Form is going to be revised in Addendum 1*. Bids will be received and read aloud in public. Items to be included on the bid form:

1. Bid Information
2. Certifications and Base Bid
3. Bid Guarantee
4. Subcontractors
5. Unit Prices
6. Alternates
7. Acknowledgement of Addenda
8. Submission of Bid

B. Post-Bid Information:

1. Contractor's Qualification Statement
2. BHS Price Schedule and BHS Unit Pricing Schedule

3. Designation of work to be performed by Bidder's own forces
4. Names of the manufacturers, products, and the supplier of principal items or systems of materials and equipment proposed for the work
5. Names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the work

7. ALLOWANCES

A. There are 4 allowances in this project. Refer to specification 012100. Allowances will not be used to determine low bidder.

Allowance No. 1: $100,000 for baggage handling system (BHS) spare parts to be included in Schedule 2 Bid Alternate 1.

Allowance No. 2: $25,000 for temporary construction signage.

Allowance No. 3: Owner's Contingency Allowance – 10% of the base bid (not to be included in the base bid amounts). *Note: This is going to be corrected in Addendum 1 as an allowance for each base bid.*

Allowance No. 4: $150,000 for specialty terrazzo installation – Design by Owner's consultant.

8. UNIT PRICES

A. There are 7 unit prices in this project. Refer to specification 012200. Unit prices will not be used to determine low bidder.

9. ALTERNATES

A. There are 11 primary alternates in this project – 29 alternates total. Refer to specification section 001230.

B. In accordance with North Carolina General Statute GS 133-3. This project will contain preferred bid alternates (Alternates 3-11). The Airport stipulates that these preferred brand alternates are necessary to provide branding and aesthetic consistency, compatibility with existing building functions and maintenance, and reduction of cost of building operations and maintenance processes.

1. Schedule 2 Bid Alternate 1: Renovation and expansion of the baggage claim and replacement of two sloped plate baggage conveyors and conveyor system. Alternate includes allowance of $100,000 for spare parts.
2. Schedule 2 Bid Alternate 2: Provide three bag conveyors attached to the passenger boarding bridges.
3. Alternate No. 3: Door hardware locksets by Best. Alternate is divided into Schedule 1, Schedule 2 and Schedule 2 Bid Alternate 1.
4. Alternate No. 4: Carpet tile by Shaw. Alternate is divided into Schedule 1, Schedule 2 and Schedule 2 Bid Alternate 1.
5. Alternate No. 5: Direct Digital Control (DDC) Energy Management and Building Automation System (BAS) by Honeywell. Alternate is divided into Schedule 1, Schedule 2 and Schedule 2 Bid Alternate 1.
6. Alternate No. 6: Closed-Circuit Television (CCTV) Surveillance System by Johnson Controls (JCI). Alternate is divided into Schedule 1, Schedule 2 and Schedule 2 Bid Alternate 1.
7. Alternate No. 7: Public Address System by MOOD Media. Alternate is divided into Schedule 1, Schedule 2 and Schedule 2 Bid Alternate 1.
8. Alternate No. 8: Access Control System by JCI. Alternate is divided into Schedule 1, Schedule 2 and Schedule 2 Bid Alternate 1.
9. Alternate No. 9: Intelligent Fire Alarm Detection System and Integrated Digital Audio by Notifier. Alternate is divided into Schedule 1, Schedule 2 and Schedule 2 Bid Alternate 1.
10. Alternate No. 10: Fully adhered 145 mil EPDM membrane roofing system in lieu of 60 mil PVC membrane roofing system. Alternate is divided into Schedule 1, Schedule 2 and Schedule 2 Bid Alternate 1.

11. Alternate No. 11: Impact-resistant curtain wall system with insulated, laminated glazing in lieu of standard glazed curtain wall system. Alternate is divided into Schedule 1, Schedule 2 and Schedule 2 Bid Alternate 1.

C. Public comments on preferred brand alternate.
D. The selection of Alternates is at the discretion of the Owner for inclusion in this project.

10. FEDERAL CONTRACT PROVISIONS

A. This project may be funded in part with federal grant funds under the Airport Improvement Program (AIP) administered by the Federal Aviation Administration (FAA). Refer to Federal Contract Provision in the Project Manual.
B. Buy American

11. DBE REQUIREMENTS

A. Review of DBE requirements by Ken Weeden

12. BADGING AND SECURITY

A. Badging requirements – application, fee, fingerprints, background check, IDs
B. Contractor's Badge & Security Management program
C. Escort Requirements – Escort table; all badge holders must wear their badge – cannot be escorted; visual/voice contact within SIDA, Sterile Area
D. Tool & equipment material management – SIDA and Sterile Areas
E. Temporary SIDA and Sterile Area Limits – fencing, barriers, temporary walls

13. OTHER WORK OCCURING AT THE AIRPORT

A. Contract 2
B. Roofing project
C. Repair project
D. Air carrier apron expansion
E. Installation of new boarding bridges at Gates 2 and 8
F. Airline ramp-level tenant upfits
G. Concessionaire ticket-level tenant upfits

14. BIDDER QUESTIONS

15. SITE VISIT

A. A site visit will be conducted immediately following this meeting.

END OF AGENDA

PRE-BID MEETING SIGN-IN SHEET

NAME	COMPANY	ADDRESS	PHONE	EMAIL	TYPE OF BIDDER (GC OR SUB - INDICATE TRADE)	STATE-CERTIFIED MINORITY-OWNED BUSINESS (YES OR NO)
John Eason	Macson		910-247-0945	John Eason 2015@gmail	Sub	N
Bill Sanford	MACSONS		910-538-0184	BSANford@MACSONS.com	DEMO	
Benito Avila-Aubriz	Daniels & Daniels	178 NC Hwy 111 S. Goldsboro, NC 27534	919-778-4525	estimating@danddcc.com	GC	
BRANDON REISSER	WALBRIDGE	8514 McLaine Park Dr. Charlotte NC 28211	(704) 362-2132	Breisser@walbridge.com	G.C.	N
Lyle Haguood	Monteith	208 Princess St. Wilmington, NC 28401	910-473-2124	LHaguood@monkithcc.com	G.C.	
Glenda Longo	Atlantic Coast Trucking	PO Box 88 234 Lloyd St Holly Ridge NC 28445	910-803-0363	atbgm17476@gmail.com	Sub - Trucking	Y
Wendy Fletcher-Hardee	Atlantic Coast Trucking	"	910-803-0363	atb2126@gmail.com	Sub - Trucking/Hauling	Y
Nathan Horniman	Cheatham & Associates	3412 Enterprise Dr Wilmington, NC 28405	910-452-4210	nhorniman@cheathampa.com	Mechanical Engineer	
MARK CARROCCA	"	"	"	mcarrocca@cheathampa.com	Elec Engineer	
Wilfred Nixon	Ken Weeden Associates	P O Box 3113 Wilmington, NC 28406	910-762-6296	wilfred-nixon@kwaplanning.com	consultant	YES
KEN WEEDEN	Ken Weeden & Assoc.	P.O. Box 3113 Wilm. NC 28406	910.762.6297	Kenneth-weeden@kwaplanning.com	DBE Programs Consultants	YES

PRE-BID MEETING SIGN-IN SHEET

NAME	COMPANY	ADDRESS	PHONE	EMAIL	TYPE OF BIDDER (GC OR SUB - INDICATE TRADE)	STATE-CERTIFIED MINORITY-OWNED BUSINESS (YES OR NO)
BRIAN STAMP	Monteith Construction	WILMINGTON, NC	910-791-9101	bstamp@monteithcacm	G.C.	No.
RICH FEVANG	JBT AEROTECH	OGDEN UT	713-428-1192	RICHARD.FEVANG@JBTC.COM	BHS	No
Charles Powell	United Construction	2045 Farmers Union Rd Clarkton, NC	9101 991-5555	Graymanc@intrastar.net	G.C.	NO
Bryan Harrelson	Harrelson Mechanical	6615 WINDMILL WAY WILMINGTON	910-799-6969	bryan@harrelsonmech.com	SUB	NO
David Pickers	record-usa	4324 Phil Hargett Monroe, NC	704-315-7392	David.Pickers@recordoors.com	SUB	NO
Jeff Joiner	Watson Elec		910-443-6122	RJoiner@watsonelec.com	Sub	NO
Andrew Cooke	McKinley Building	3807 Peachtree #200 - 28403	910-815-1524	acooke@mckinleybuilding.com	G.C.	No
WAYNE BRYANT	Echo Green Environmental	1672 Woodyard Rd Riegelwood, 28456	910-302 6879	wb@echogreenenvironmental.com	GC/Sub	yes
JACKIE W. JOHNSON	GROUP III MGT	2715 W. Vernon Ave KINSTON, LC	252-527-3333 x220	Jackie@groupiii mgt.com	GC.	NO
HAKEEM BRANTLEY	Roadway Construction Solutions LLC	4506 Dean dr Wilmington NC 28405	(910) 352-5837	hbrantleysr@roadwayconstructionsolutions.com	SUB	yes

Granseur Dick, Planning & Development Director, ILM, 1740 Airport Blvd., Ste. 12, (910) 341-4333 x1016, gdick@flyilm.com
Tamie Keel, Facilities Manager, ILM, 1740 Airport Blvd., Ste. 12, (910) 341-4333 x 1005, tkeel@flyilm.com
Travis Pence, The Wilson Group, PO Box 5510, Charlotte, NC 28299, (704) 331-9747, travis@twgarchitects.com

PRE-BID MEETING SIGN-IN SHEET

NAME	COMPANY	ADDRESS	PHONE	EMAIL	TYPE OF BIDDER (GC OR SUB - INDICATE TRADE)	STATE-CERTIFIED MINORITY-OWNED BUSINESS (YES OR NO)
MARK DEAN	S&ME	3006 Hall Waters Dr. Wilmington	910-799-9945	MDEAN@SMEINC.COM	SUB	NO
VINCE TAYLOR	Thomas Const	Wilmington NC	910 799 2255	~~Thomas C.~~ Estimating@ThomasConstructionGroup.com	GC	NO
CHRIS DORAN	ARCHER WESTERN	4 PENN CENTER BLVD SUITE 100 PITT, PA ZIP 15276	412 275 8800		GC	NO
Buddy Watts	Harrelson Mechanical	6615 Windmill Way Wilmington NC 28405	910-799-6969	buddy@harrelsonmech.com	HVAC Sub	NO
ANDREW YOCUM	TA WOODS	6713 NETHERLAND WIL, NC 28405	910-452-7700	AYOCUM@TAWOODS.COM	MEP	YES
JOE SMITH	TA WOODS	↓	↓	JSMITH@TAWOODS.COM	MEP	YES
Pamela Culp	TBI	180 Shelley Drive, Ilm	9167365350	pculp@tbilm.com	—	—
Girard Newkirk	Kwitcoin / Crypto Road	1844 Sir Tyler Dr Wilmington NC	910-238-9331	gnewkirk@kwhcoin.com	SUB	NO
ERIC STUMPH	TAYLOR & BYARS	4810 SHELLEY WLM 28405	910-765-5350	estumph@tbirlm.com	CIVIL	NO
CHARLES BONEY	LS3P				—	—

Casey Gilman	Cheatham & Associates	3412 Enterprise Drive Wilmington, NC 28405	910-452-4240	Cgilman@cheathampa.com	Plumbing/Fire Protection Engineer	NO
Corey McCall	B.O.Y.	1006 Hardin Hill Lane Knightdale NC 27545	919-698-4059	Boytransport LLC@gmail.com		

PRE-BID MEETING MINUTES
ILM TERMINAL IMPROVEMENTS
CONTRACT 3

Prebid Meeting: Tuesday, July 9, 2019, 3:00 p.m. (local time)
Wilmington International Airport (ILM) Conference Room
Wilmington, NC

1. Agenda was followed.
2. Participants were introduced. Sign-in Sheet distributed.
3. Architectural phasing was described. (A-02* & A-03) series sheets presented and reviewed.
4. Participants were allowed to ask questions. There were no questions.

END OF MINUTES

DOCUMENT 001116 - INVITATION TO BID

1.1 PROJECT INFORMATION

~~A. Notice to Bidders: Prequalified bidders, as indicated on the New Hanover County "Contractors Approved for Bidding" list, are invited to submit bids for Project as described in this Document according to the Instructions to Bidders.~~ **Notice to Bidders: Prequalified bidders (see subsection 1.7) are invited to submit bids for Project as described in this document according to the Instructions to Bidders.**

B. Project Identification: ILM Terminal Improvements - Contract 3.

1. Project Location: 1740 Airport Boulevard, Wilmington, NC 28405.

C. Owner: New Hanover County Airport Authority, 1740 Airport Boulevard, Suite 12, Wilmington, NC 28405.

1. Owner's Representative: Granseur Dick, PE, ILM Planning and Development Director

D. Architect: The Wilson Group, 2113 Commonwealth Avenue, Charlotte, NC 28205.

1. Architect's Representative: Travis Pence, AIA

E. Project Description: Project consists of furnishing all labor, materials and equipment and performing all work required to satisfactorily complete the project, which consists of phased renovation and expansion of the Concourse, Holdroom, Holdroom Restrooms and Terminal Restrooms. Work also includes demolition of the existing Connector between the Holdroom and the Terminal. The project is broken down into two work schedules, with Substantial Completion of Schedule 1 to be completed prior to commencing work for Schedule 2. There is an alternate to Schedule 2 for the renovation and expansion of the inbound baggage handling system (BHS) and bag claim area.

F. Construction Contract: Bids will be received for General Contract (all trades).

1.2 BID SUBMITTAL AND OPENING

A. Owner will receive sealed bids until the bid time and date at the location indicated below. Owner will consider bids prepared in compliance with the Instructions to Bidders issued by Owner, and delivered as follows:

1. Bid Date: Tuesday, August 6, 2019.
2. Bid Time: 2:00 pm (local time).
3. Location: Conference Room, Wilmington International Airport, 1740 Airport Boulevard, Wilmington, North Carolina.

B. Bids will be thereafter publicly opened and read aloud.

1.3 BID SECURITY

A. Bid security shall be submitted with each bid in the amount of 5 percent of the bid amount. No bids may be withdrawn for a period of ~~60~~ **90** days after opening of bids. Owner reserves the right to reject any and all bids and to waive informalities and irregularities.

1.4 PREBID CONFERENCE

A. A prebid conference for all bidders will be held at Conference Room of Wilmington International Airport, 1740 Airport Boulevard, Wilmington, North Carolina on Tuesday, July 9, 2019 at 3:00 p.m., local time. Prospective bidders are requested to attend.

1.5 DOCUMENTS

A. Bid Forms, Plans, Specifications, and Contract Documents Bidding documents may be examined at the office of Mr. Granseur Dick, Wilmington International Airport, 1740 Airport Boulevard, Suite 12, Wilmington, NC 28405, between the hours of 8:00 a.m. and 5:00 p.m., and the following plan rooms' websites:

1. Dodge Data & Analytics – www.construction.com
2. Carolinas Plan Room – www.carolinasplanroom.com
3. iSqFt + bidclerk – www.iSqFt.com

B. Bidders may obtain a complete set of bidding documents beginning on Monday, July 1, 2019 from: McGee Cadd Reprographics, 2527 S. 17th St., Wilmington, NC 28403, (910) 799-1212, e-mail: mcgee01@mcgee-cadd.com, upon the non-refundable payment of services charges.

1.6 TIME OF COMPLETION AND LIQUIDATED DAMAGES

A. Bidders shall begin the Work on receipt of the Notice to Proceed and shall complete the Work within the Contract Time. Work is subject to liquidated damages as indicated in the Contract Documents.

1.7 BIDDER'S QUALIFICATIONS

A. ~~**Bidders must be prequalified by New Hanover County**~~. **Each bidder for this project shall be registered as a prequalified prime bidder (central letting) with the North Carolina Department of Transportation (NCDOT) at the time of the bid and shall hold a North Carolina General Contractor's License. Prime bidders shall also either be prequalified with New Hanover County or shall not previously have had a New Hanover County prequalification application denied. The New Hanover County Airport Authority anticipates awarding the project at its regular meeting on September 4, 2019 or October 2, 2019.**

Each civil subcontractor shall be prequalified (subcontractor or higher level) with the NCDOT prior to the subcontractor beginning work on the project. Civil subcontractors shall also either be prequalified with New Hanover County or shall not previously have had a New Hanover County prequalification application denied.

B. Bidders must be properly licensed under the laws governing their respective trades and be able to obtain insurance and bonds required for the Work. A Performance Bond, a separate Labor and Material Payment Bond, and Insurance in a form acceptable to Owner will be required of the successful Bidder.

END OF DOCUMENT 001116

BID FORM

Project Name: ILM Terminal Improvements Contract 3
Project Location: Wilmington, North Carolina

1.1 BID INFORMATION

A. Date: _____

B. Bidder: _____

C. Bidder's Contractor License Number: _____

D. Owner: New Hanover County Airport Authority

E. Architect: The Wilson Group

F. Architect Project Number: 9202-200

1.2 CERTIFICATIONS AND BASE BID

A. Base Bid, Single-Prime Contract: The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by The Wilson Group, LS3P and Architect's consultants, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and services, including all scheduled/indicated allowances, necessary to complete the construction of the above-named project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:

1. Schedule 1:

_____

_____ Dollars ($_____).

Schedule 1 Owner's Contingency: (10% of Base Bid = Contingency) Do Not Include Contingency in Base Bid.

_____

_____ Dollars ($_____).

2. Schedule 2:

_____

_____ Dollars ($_____).

Schedule 2 Owner's Contingency: (10% of Base Bid = Contingency) Do Not Include Contingency in Base Bid.

_____

_____ Dollars ($_____).

3. Total Base Bid:

_____

_____ Dollars ($_____).

1.3 BID GUARANTEE

A. The undersigned Bidder agrees to execute a contract for this Work in the above amount and to furnish surety as specified within 10 days after a written Notice of Award, if offered within 90 days after receipt of bids, and on failure to do so agrees to forfeit to Owner the attached cash, cashier's check, certified check, U.S. money order, or bid bond, as liquidated damages for such failure, in the following amount constituting five percent (5%) of the Base Bid amount above:

1. _____ Dollars ($_____).

B. In the event Owner does not offer Notice of Award within the time limits stated above, Owner will return to the undersigned the cash, cashier's check, certified check, U.S. money order, or bid bond.

1.4 SUBCONTRACTORS

A. The following companies shall execute subcontracts for the portions of the Work indicated:

		Name	License Number
1.	Plumbing Work:	_____	_____
2.	HVAC Work:	_____	_____
3.	Electrical Work:	_____	_____
4.	Baggage Handling:	_____	
5.	Baggage Control System Subcontractor: _____		

B. The General Contractor shall act as Project Expediter.

1.5 ALLOWANCES

Allowance 1: BHS Spare Parts	$100,000.00	Include allowance in Schedule 2 Bid Alternate 1.
Allowance 2: Temporary Signage	$25,000.00	Include allowance in Schedule 1 Base Bid.
Allowance 3: Owner's Contingency		
3a. 10% of Schedule 1 Base Bid		Do not include allowance in Schedule 1 Base Bid.
3b. 10% of Schedule 2 Base Bid		Do not include allowance in Schedule 2 Base Bid.
Allowance 4: Terrazzo		
4a. Schedule 1	$75,000.00	Include allowance in Schedule 1 Base Bid.
4b. Schedule 2	$75,000.00	Include allowance in Schedule 2 Base Bid.

1.6 UNIT PRICES

A. Unit prices quoted and accepted shall apply throughout the life of the contract, except as specifically noted. Unit prices shall be applied, as appropriate, to compute the total value of changes in the scope of the work in accordance with the contract documents.

Unit Price No. 1 - Unsuitable Soil - Engineered Fill:

1. Description: Unsuitable soil removal and disposal and placement and compaction of new satisfactory fill.
2. Cost per Cubic Yard: $ _____

Unit Price No. 2 - Unsuitable Soil - No. 57 Stone:

1. Description: Unsuitable soil removal and disposal and placement and compaction of No. 57 stone.
2. Cost per Cubic Yard: $ _____

Unit Price No. 3 - Concrete Pavement Demolition:

1. Description: Cutting, demolition and off-site disposal of existing concrete pavement, plain or reinforced, 10-inch to 17.5-inch thick plus the existing 6-inch thick econocrete base.
2. Cost per Square Yard: $_____

Unit Price No. 4 - New Concrete Pavement:

1. Description: 6-inch ABC base, 8-inch to 10-inch thick concrete pavement, including all reinforcing, joint steel and joint sealant.
2. Cost per Square Yard: $_____

Unit Price No. 5 - New Bituminous Pavement:

1. Description: 6-inch ABC base and 4-inch NCDPT S9.5B surface.
2. Cost per Square Yard: $_____

Unit Price No. 6 - Borrow:

1. Description: Supply, placement, moisture conditioning and compaction of borrow material meeting the requirements of Section 020153 Subparagraphs 152-2.1 and 152-2.4. The material shall be measured by the cubic yard, compacted in place.
2. Cost per Cubic Yard: $_____

Unit Price No. 7 - Baggage Porter:

1. Description: Provide one person for baggage portering to be used on an as-needed basis during baggage handling modifications of Schedule 2 Bid Alternate 1.
2. Cost per Man Hour: $_____

1.7 ALTERNATES

A. The undersigned proposes to perform alternatives for stated resulting additions to or deductions from the Base Bid. Additions and deductions shall include any modifications of work or additional work that undersigned may be required to perform by reason of the acceptance of any alternative. (Bidder shall write in the amounts for the alternates listed below.)

Schedule 2 Alternate No. 1: Baggage Claim Area and Baggage Conveyors

Adjust Base Bid by Adding _____

_____ Dollars ($ _____)

Schedule 2 Alternate No. 2: Three New Conveyors

Adjust Base Bid by Adding _____

_____ Dollars ($ _____)

Alternate No. 3: Locksets by Best

1. Alternate 3A: Locksets by Best - Schedule 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

2. Alternate 3B: Locksets by Best - Schedule 2

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

3. Alternate 3C: Locksets by Best - Schedule 2 Bid Alternate 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

Alternate No. 4: Carpet Tile by Shaw

1. Alternate 4A: Carpet Tile by Shaw t - Schedule 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

2. Alternate 4B: Carpet Tile by Shaw - Schedule 2

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

3. Alternate 4C: Carpet Tile by Shaw - Schedule 2 Bid Alternate 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

Alternate No. 5: Direct Digital Control BAS by Honeywell

1. Alternate 5A: DDC BAS by Honeywell - Schedule 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

2. Alternate 5B: DDC BAS by Honeywell - Schedule 2

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

3. Alternate 5C: DDC BAS by Honeywell - Schedule 2 Bid Alternate 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

Alternate No. 6: Closed-Circuit Television (CCTV) Surveillance System by Johnson Controls

1. Alternate 6A: CCTV by Johnson Controls - Schedule 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

2. Alternate 6B: CCTV by Johnson Controls - Schedule 2

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

3. Alternate 6C: CCTV by Johnson Controls - Schedule 2 Bid Alternate 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

Alternate No. 7: Public Address System by MOOD Media

1. Alternate 7A: Public Address by MOOD Media - Schedule 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

2. Alternate 7B: Public Address by MOOD Media - Schedule 2

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

3. Alternate 7C: Public Address by MOOD Media - Schedule 2 Bid Alternate 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

Alternate No. 8: Access Control by Johnson Controls

1. Alternate 8A: Access Control by Johnson Controls - Schedule 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

2. Alternate 8B: Access Control by Johnson Controls - Schedule 2

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

3. Alternate 8C: Access Control by Johnson Controls - Schedule 2 Bid Alternate 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

Alternate No. 9: Intelligent Fire Alarm Detection System and Integrated Digital Audio by Notifier

1. Alternate 9A: Fire Alarm by Notifier - Schedule 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

2. Alternate 9B: Fire Alarm by Notifier - Schedule 2

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

3. Alternate 9C: Fire Alarm by Notifier - Schedule 2 Bid Alternate 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

Alternate No. 10: EPDM Roofing System, 145 mil thickness

1. Alternate 10A: EPDM Membrane Roofing - Schedule 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

2. Alternate 10B: EPDM Membrane Roofing - Schedule 2

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

3. Alternate 10C: EPDM Membrane Roofing - Schedule 2 Bid Alternate 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

Alternate No. 11: Impact-Resistant Curtain Wall with Insulated, Laminated Glazing

1. Alternate 11A: Impact-Resistant Curtain Wall - Schedule 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

2. Alternate 11B: Impact-Resistant Curtain Wall - Schedule 2

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

3. Alternate 11C: Impact-Resistant Curtain Wall - Schedule 2 Bid Alternate 1

   Adjust Base Bid by Adding _____

   _____ Dollars ($ _____)

1.8 DELETED

1.9 TIME OF COMPLETION

A. The undersigned Bidder proposes and agrees hereby to commence the Work of the Contract Documents on a date specified in a written Notice to Proceed to be issued by Architect, and shall fully complete the Work within and not exceed the time limits set forth in the Contract Document.

B. The undersigned Bidder acknowledges that 'Liquidated Damages' provisions shall be in effect for this project as stated in the Contract Document.

1.10 ACKNOWLEDGEMENT OF ADDENDA

A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:

1. Addendum No. I, Dated _____.
2. Addendum No. II, Dated _____.
3. Addendum No. III, Dated _____.
4. Addendum No. IV, Dated _____.
5. Addendum No. V, Dated _____.

1.11 CONTRACTOR'S LICENSE

A. The undersigned further states that it is a duly licensed contractor, for the type of work proposed, in the State of North Carolina, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.

1.12 SUBMISSION OF BID

A. Respectfully submitted this _____ day of _____, 20_____.

B. Submitted By: _____
(Name of Bidding Firm or Corporation)

C. Authorized Signature: _____
(Handwritten Signature)

D. Signed By: _____
(Type or Print Name)

E. Title: _____
(Owner/Partner/President/Vice President)

F. Witness/Attest: _____
(Handwritten Signature)

G. Signed By: _____
(Type or Print Name)

H. Title: _____
(Corporate Secretary or Assistant Secretary)

I. Street Address: _____

J. City, State, Zip: _____

K. Phone: _____

L. E-Mail: _____

M. License No.: _____

N. Federal ID No.:_____ (Affix Corporate Seal Here)

END OF BID FORM

SECTION 033000 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies cast-in place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes, for the following:

1. Footings.
2. Foundation walls.
3. Slabs-on-grade.
4. Elevated slabs.

B. Related Sections include the following:

1. Division 31 Section "Earth Moving" for drainage fill under slabs-on-grade.
2. Division 32 Section "Concrete Paving" for concrete pavement and walks.
3. Division 32 Section "Decorative Concrete Paving" for decorative concrete pavement and walks.

1.3 DEFINITIONS

A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash and other pozzolans, ground granulated blast-furnace slag, and silica fume; subject to compliance with requirements.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Design Mixtures: For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

1. Indicate amounts of mixing water to be withheld for later addition at Project site.

C. Steel Reinforcement Shop Drawings: Placing drawings that detail fabrication, bending, and placement. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.

D. Formwork Shop Drawings: Prepared by or under the supervision of a qualified professional engineer detailing fabrication, assembly, and support of formwork.

1. Shoring and Reshoring: Indicate proposed schedule and sequence of stripping formwork, shoring removal, and installing and removing reshoring.

E. Qualification Data: For installer and manufacturer.

F. Material Certificates: For each of the following, signed by manufacturers:

1. Cementitious materials.
2. Admixtures.
3. Form materials and form-release agents.
4. Steel reinforcement and accessories.
5. Curing compounds.
6. Floor and slab treatments.
7. Bonding agents.
8. Adhesives.
9. Vapor retarders.
10. Joint-filler strips.
11. Repair materials.

G. Floor surface flatness and levelness measurements to determine compliance with specified tolerances.

H. Field quality-control test and inspection reports.

I. Minutes of preinstallation conference.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: A qualified installer who employs on Project personnel qualified as ACI-certified Flatwork Technician and Finisher and a supervisor who is an ACI-certified Concrete Flatwork Technician.

B. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.

1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."

C. Testing Agency Qualifications: An independent agency, acceptable to authorities having jurisdiction, qualified according to ASTM C 1077 and ASTM E 329 for testing indicated, as documented according to ASTM E 548.

1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-01 or an equivalent certification program.
2. Personnel performing laboratory tests shall be ACI-certified Concrete Strength Testing Technician and Concrete Laboratory Testing Technician - Grade I. Testing Agency laboratory supervisor shall be an ACI-certified Concrete Laboratory Testing Technician - Grade II.

D. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from one source, and obtain admixtures through one source from a single manufacturer.

E. Welding: Qualify procedures and personnel according to AWS D1.4, "Structural Welding Code--Reinforcing Steel."

F. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:

1. ACI 301, "Specification for Structural Concrete," Sections 1 through 5 and Section 7, "Lightweight Concrete."
2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."

G. Concrete Testing Service: Engage a qualified independent testing agency to perform material evaluation tests and to design concrete mixtures.

H. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination."

1. Require representatives of each entity directly concerned with cast-in-place concrete to attend, including the following:

a. Contractor's superintendent.
b. Independent testing agency responsible for concrete design mixtures.
c. Ready-mix concrete manufacturer.
d. Concrete subcontractor.
e. Special Inspector if Special Inspections are required by the Statement of Special Inpsections.

2. Review special inspection and testing and inspecting agency procedures for field quality control, concrete finishes and finishing, cold- and hot-weather concreting procedures, curing procedures, construction contraction and isolation joints, and joint-filler strips, semirigid joint fillers, forms and form removal limitations, shoring and reshoring procedures, vapor-retarder installation, anchor rod and anchorage device installation tolerances, steel reinforcement installation, floor and slab flatness and levelness measurement, concrete repair procedures, and concrete protection.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Steel Reinforcement: Deliver, store, and handle steel reinforcement to prevent bending and damage.

B. Waterstops: Store waterstops under cover to protect from moisture, sunlight, dirt, oil, and other contaminants.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:

1. Products: Subject to compliance with requirements, provide one of the products specified.
2. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.

2.2 FORM-FACING MATERIALS

A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.

1. Plywood, metal, or other approved panel materials.
2. Exterior-grade plywood panels, suitable for concrete forms, complying with DOC PS 1, and as follows:

a. High-density overlay, Class 1 or better.
b. Medium-density overlay, Class 1 or better; mill-release agent treated and edge sealed.
c. Structural 1, B-B or better; mill oiled and edge sealed.
d. B-B (Concrete Form), Class 1 or better; mill oiled and edge sealed.

B. Forms for Pedestals, and Supports: Metal, glass-fiber-reinforced plastic, paper, or fiber tubes that will produce surfaces with gradual or abrupt irregularities not exceeding specified formwork surface class. Provide units with sufficient wall thickness to resist plastic concrete loads without detrimental deformation.

C. Chamfer Strips: Wood, metal, PVC, or rubber strips, 3/4 by 3/4 inch, minimum.

D. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.

1. Formulate form-release agent with rust inhibitor for steel form-facing materials.

E. Form Ties: Factory-fabricated, removable or snap-off metal or glass-fiber-reinforced plastic form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.

1. Furnish units that will leave no corrodible metal closer than 1 inch to the plane of exposed concrete surface.
2. Furnish ties that, when removed, will leave holes no larger than 1 inch in diameter in concrete surface.
3. Furnish ties with integral water-barrier plates to walls indicated to receive dampproofing or waterproofing.

2.3 STEEL REINFORCEMENT

A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.

2.4 REINFORCEMENT ACCESSORIES

A. Joint Dowel Bars: ASTM A 615, Grade 60, plain-steel bars, cut bars true to length with ends square and free of burrs.

B. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows:

1. For concrete surfaces exposed to view where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected steel wire or CRSI Class 2 stainless-steel bar supports.

2.5 CONCRETE MATERIALS

A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:

1. Portland Cement: ASTM C 150, Type I, II.

a. Fly Ash: ASTM C 618, Class C or F.

B. Normal-Weight Aggregates: ASTM C 33, Class 3S coarse aggregate or better, graded. Provide aggregates from a single source with documented service record data of at least 10 years' satisfactory service in similar applications and service conditions using similar aggregates and cementitious materials.

1. Maximum Coarse-Aggregate Size: 3/4 inch nominal.
2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.

C. Lightweight Aggregate: ASTM C 330, 3/4-inch nominal maximum aggregate size.

D. Water: ASTM C 94/C 94M and potable.

2.6 ADMIXTURES

A. Air-Entraining Admixture: ASTM C 260.

B. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.

1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
2. Retarding Admixture: ASTM C 494/C 494M, Type B.
3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.
6. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.

C. Set-Accelerating Corrosion-Inhibiting Admixture: Commercially formulated, anodic inhibitor or mixed cathodic and anodic inhibitor; capable of forming a protective barrier and minimizing chloride reactions with steel reinforcement in concrete and complying with ASTM C 494/C 494M, Type C.

1. Products:

a. Euclid Chemical Company (The); Eucon CIA.
b. Grace Construction Products, W. R. Grace & Co.; DCI.
c. BASF, Inc.; Rheocrete CNI.
d. Sika Corporation; Sika CNI.

D. Non-Set-Accelerating Corrosion-Inhibiting Admixture: Commercially formulated, non-set-accelerating, anodic inhibitor or mixed cathodic and anodic inhibitor; capable of forming a protective barrier and minimizing chloride reactions with steel reinforcement in concrete.

1. Products:

a. Boral Material Technologies, Inc.; Boral BCN2.
b. Grace Construction Products, W. R. Grace & Co.; DCI-S.
c. BASF, Inc.; Rheocrete 222+.
d. Sika Corporation; FerroGard-901.

2.7 VAPOR RETARDERS

A. Plastic Vapor Retarder: ASTM E 1745, Class A, not less than 15 mils thick. Include manufacturer's recommended adhesive or pressure-sensitive joint tape.

1. Products:

a. Raven Industries Inc.; Vaporblock 15.
b. Reef Industries, Inc.; Griffolyn 15 mils.
c. Stego Industries, LLC; Stego Wrap, 15 mils.

B. Granular Fill: Clean mixture of crushed stone or crushed or uncrushed gravel; ASTM D 448, Size 57, with 100 percent passing a 1-1/2-inch sieve and 0 to 5 percent passing a No. 8 sieve.

2.8 CURING MATERIALS

A. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.

1. Products:

a. Burke by Edoco; BurkeFilm.

b. ChemMasters; Spray-Film.
c. Conspec Marketing & Manufacturing Co., Inc., a Dayton Superior Company; Aquafilm.
d. Dayton Superior Corporation; Sure Film.
e. Euclid Chemical Company (The); Eucobar.
f. Meadows, W. R., Inc.; Sealtight Evapre.
g. Metalcrete Industries; Waterhold.
h. Nox-Crete Products Group, Kinsman Corporation; Monofilm.
i. Sika Corporation, Inc.; SikaFilm.

B. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.

C. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.

D. Water: Potable.

E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.

1. Products:

a. Burke by Edoco; Aqua Resin Cure.
b. ChemMasters; Safe-Cure Clear.
c. Conspec Marketing & Manufacturing Co., Inc., a Dayton Superior Company; W.B. Resin Cure.
d. Dayton Superior Corporation; Day Chem Rez Cure (J-11-W).
e. Euclid Chemical Company (The); Kurez DR VOX.
f. Meadows, W. R., Inc.; 1100 Clear.
g. US Mix Products Company; US Spec Maxcure Resin Clear.

F. Clear, Waterborne, Membrane-Forming Curing and Sealing Compound: ASTM C 1315, Type 1, Class A.

1. Products:

a. Burke by Edoco; Cureseal 1315 WB.
b. ChemMasters; Polyseal WB.
c. Conspec Marketing & Manufacturing Co., Inc., a Dayton Superior Company; Sealcure 1315 WB.
d. Euclid Chemical Company (The); Super Diamond Clear VOX.
e. Meadows, W. R., Inc.; Vocomp-30.
f. US Mix Products Company; US Spec Radiance UV-25.

2.9 RELATED MATERIALS

A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber or ASTM D 1752, cork or self-expanding cork.

B. Semirigid Joint Filler: Two-component, semirigid, 100 percent solids, epoxy resin with a Type A shore durometer hardness of 80 per ASTM D 2240.

C. Bonding Agent: ASTM C 1059, Type II, non-redispersible, acrylic emulsion or styrene butadiene.

D. Epoxy Bonding Adhesive: ASTM C 881, two-component epoxy resin, capable of humid curing and bonding to damp surfaces, of class suitable for application temperature and of grade to suit requirements, and as follows:

1. Types IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.

E. Reglets: Fabricate reglets of not less than 0.0217-inch- thick, galvanized steel sheet. Temporarily fill or cover face opening of reglet to prevent intrusion of concrete or debris.

F. Dovetail Anchor Slots: Hot-dip galvanized steel sheet, not less than 0.0336 inch thick, with bent tab anchors. Temporarily fill or cover face opening of slots to prevent intrusion of concrete or debris.

2.10 REPAIR MATERIALS

A. Repair Underlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/8 inch and that can be feathered at edges to match adjacent floor elevations.

1. Cement Binder: ASTM C 150, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
2. Primer: Product of underlayment manufacturer recommended for substrate, conditions, and application.
3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch or coarse sand as recommended by underlayment manufacturer.
4. Compressive Strength: Not less than 4100 psi at 28 days when tested according to ASTM C 109.

B. Repair Overlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/8 inch and that can be feathered at edges to match adjacent floor elevations.

1. Cement Binder: ASTM C 150, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
2. Primer: Product of topping manufacturer recommended for substrate, conditions, and application.
3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch or coarse sand as recommended by topping manufacturer.
4. Compressive Strength: Not less than 5000 psi at 28 days when tested according to ASTM C 109/C 109M.

2.11 CONCRETE MIXTURES, GENERAL

A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.

1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures.

B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:

1. Fly Ash: 20 percent.

C. Limit water-soluble, chloride-ion content in hardened concrete to 0.06 percent by weight of cement.

D. Admixtures: Use admixtures according to manufacturer's written instructions.

1. Use water-reducing high-range water-reducing or plasticizing admixture in concrete, as required, for placement and workability.
2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
3. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs and parking structure slabs, concrete required to be watertight, and concrete with a water-cementitious materials ratio below 0.50.

4. Use corrosion-inhibiting admixture in concrete mixtures where indicated.

2.12 CONCRETE MIXTURES FOR BUILDING ELEMENTS

A. See drawings for mix design information.

2.13 FABRICATING REINFORCEMENT

A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.14 CONCRETE MIXING

A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94 and furnish batch ticket information.

1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94. Mix concrete materials in appropriate drum-type batch machine mixer.

1. For mixer capacity of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released.
2. For mixer capacity larger than 1 cu. yd., increase mixing time by 15 seconds for each additional 1 cu. yd.
3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixture time, quantity, and amount of water added. Record approximate location of final deposit in structure.

PART 3 - EXECUTION

3.1 FORMWORK

A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.

B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.

C. Limit concrete surface irregularities, designated by ACI 347R as abrupt or gradual, as follows:

1. Class A, 1/8 inch for smooth-formed finished surfaces.
2. Class B, 1/4 inch for rough-formed finished surfaces.

D. Construct forms tight enough to prevent loss of concrete mortar.

E. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.

1. Install keyways, reglets, recesses, and the like, for easy removal.
2. Do not use rust-stained steel form-facing material.

F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.

G. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.

H. Chamfer exterior corners and edges of permanently exposed concrete.

I. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.

J. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.

K. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.

L. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

3.2 EMBEDDED ITEMS

A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

1. Install anchor rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of AISC's "Code of Standard Practice for Steel Buildings and Bridges."
2. Install reglets to receive waterproofing and to receive through-wall flashings in outer face of concrete frame at exterior walls, where flashing is shown at lintels, shelf angles, and other conditions.
3. Install dovetail anchor slots in concrete structures as indicated.

3.3 REMOVING AND REUSING FORMS

A. General: Formwork for sides of beams, walls, columns, and similar parts of the Work that does not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F for 24 hours after placing concrete, if concrete is hard enough to not be damaged by form-removal operations and curing and protection operations are maintained.

1. Leave formwork for beam soffits, joists, slabs, and other structural elements that supports weight of concrete in place until concrete has achieved at least 70 percent of its 28-day design compressive strength.
2. Remove forms only if shores have been arranged to permit removal of forms without loosening or disturbing shores.

B. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form-release agent.

C. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for exposed concrete surfaces unless approved by Architect.

3.4 VAPOR RETARDERS

A. Plastic Vapor Retarders: Place, protect, and repair vapor retarders according to ASTM E 1643 and manufacturer's written instructions.

1. Lap joints 6 inches and seal with manufacturer's recommended tape.

B. Bituminous Vapor Retarders: Place, protect, and repair vapor retarders according to manufacturer's written instructions.

3.5 STEEL REINFORCEMENT

A. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.

1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.

B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials that would reduce bond to concrete.

C. Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars.

1. Weld reinforcing bars according to AWS D1.4, where indicated.

D. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.

E. Install welded wire reinforcement in longest practicable lengths on bar supports spaced to minimize sagging. Lap edges and ends of adjoining sheets at least one mesh spacing. Offset laps of adjoining sheet widths to prevent continuous laps in either direction. Lace overlaps with wire.

3.6 JOINTS

A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.

B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.

1. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints, unless otherwise indicated. Do not continue reinforcement through sides of strip placements of floors and slabs.
2. Form keyed joints as indicated. Embed keys at least 1-1/2 inches into concrete.
3. Locate joints for beams, slabs, joists, and girders in the middle third of spans. Offset joints in girders a minimum distance of twice the beam width from a beam-girder intersection.
4. Locate horizontal joints in walls and columns at underside of floors, slabs, beams, and girders and at the top of footings or floor slabs.
5. Space vertical joints in walls as indicated. Locate joints beside piers integral with walls, near corners, and in concealed locations where possible.
6. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
7. Use epoxy-bonding adhesive at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.

C. Contraction Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness as follows:

1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8 inch. Repeat grooving of contraction joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.
2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch- wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before concrete develops random contraction cracks.

D. Isolation Joints in Slabs-on-Grade: After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.

1. Extend joint-filler strips full width and depth of joint, terminating flush with finished concrete surface, unless otherwise indicated.
2. Terminate full-width joint-filler strips not less than 1/2 inch or more than 1 inch below finished concrete surface where joint sealants, specified in Division 07 Section "Joint Sealants," are indicated.
3. Install joint-filler strips in lengths as long as practicable. Where more than one length is required, lace or clip sections together.

E. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt coat one-half of dowel length to prevent concrete bonding to one side of joint.

3.7 CONCRETE PLACEMENT

A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.

B. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301.

1. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.

C. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.

1. Deposit concrete in horizontal layers of depth to not exceed formwork design pressures and in a manner to avoid inclined construction joints.
2. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301.
3. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations to rapidly penetrate placed layer and at least 6 inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mixture constituents to segregate.

D. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.

1. Consolidate concrete during placement operations so concrete is thoroughly worked around reinforcement and other embedded items and into corners.
2. Maintain reinforcement in position on chairs during concrete placement.

3. Screed slab surfaces with a straightedge and strike off to correct elevations.
4. Slope surfaces uniformly to drains where required.
5. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane, before excess bleedwater appears on the surface. Do not further disturb slab surfaces before starting finishing operations.

E. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.

1. When average high and low temperature is expected to fall below 40 deg F for three successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301.
2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.

F. Hot-Weather Placement: Comply with ACI 305 and as follows:

1. Maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

3.8 FINISHING FORMED SURFACES

A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defects repaired and patched. Remove fins and other projections that exceed specified limits on formed-surface irregularities.

1. Apply to concrete surfaces not exposed to public view.

B. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defects. Remove fins and other projections that exceed specified limits on formed-surface irregularities.

1. Apply to concrete surfaces exposed to public view, to receive a rubbed finish, to be covered with a coating or covering material applied directly to concrete.

C. Rubbed Finish: Apply the following to smooth-formed finished as-cast concrete where indicated:

1. Smooth-Rubbed Finish: Not later than one day after form removal, moisten concrete surfaces and rub with carborundum brick or another abrasive until producing a uniform color and texture. Do not apply cement grout other than that created by the rubbing process.
2. Grout-Cleaned Finish: Wet concrete surfaces and apply grout of a consistency of thick paint to coat surfaces and fill small holes. Mix one part portland cement to one and one-half parts fine sand with a 1:1 mixture of bonding admixture and water. Add white portland cement in amounts determined by trial patches so color of dry grout will match adjacent surfaces. Scrub grout into voids and remove excess grout. When grout whitens, rub surface with clean burlap and keep surface damp by fog spray for at least 36 hours.
3. Cork-Floated Finish: Wet concrete surfaces and apply a stiff grout. Mix one part portland cement and one part fine sand with a 1:1 mixture of bonding agent and water. Add white portland cement in amounts determined by trial patches so color of dry grout will match adjacent surfaces. Compress grout into voids by grinding surface. In a swirling motion, finish surface with a cork float.

D. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces, unless otherwise indicated.

3.9 FINISHING FLOORS AND SLABS

A. General: Comply with ACI 302.1R recommendations for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.

B. Scratch Finish: While still plastic, texture concrete surface that has been screeded and bull-floated or darbied. Use stiff brushes, brooms, or rakes to produce a profile amplitude of 1/4 inch in 1 direction.

1. Apply scratch finish to surfaces indicated and to receive concrete floor toppings to receive mortar setting beds for bonded cementitious floor finishes.

C. Float Finish: Consolidate surface with power-driven floats or by hand floating if area is small or inaccessible to power driven floats. Restraighten, cut down high spots, and fill low spots. Repeat float passes and restraightening until surface is left with a uniform, smooth, granular texture.

1. Apply float finish to surfaces indicated to receive trowel finish and to be covered with fluid-applied or sheet waterproofing, built-up or membrane roofing, or sand-bed terrazzo.

D. Trowel Finish: After applying float finish, apply first troweling and consolidate concrete by hand or power-driven trowel. Continue troweling passes and restraighten until surface is free of trowel marks and uniform in texture and appearance. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.

1. Apply a trowel finish to surfaces indicated exposed to view or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint, or another thin-film-finish coating system.
2. Finish surfaces to the following tolerances, according to ASTM E 1155, for a randomly trafficked floor surface:

    a. Specified overall values of flatness, F(F) 35; and of levelness, F(L) 25; with minimum local values of flatness, F(F) 24; and of levelness, F(L) 17; for slabs-on-grade.
    b. For elevated Slabs on structural steel: Specified overall values of flatness, F(F) 30; with minimum local values of flatness, F(F) 24.

E. Trowel and Fine-Broom Finish: Apply a first trowel finish to surfaces indicated where ceramic or quarry tile is to be installed by either thickset or thin-set method. While concrete is still plastic, slightly scarify surface with a fine broom.

1. Comply with flatness and levelness tolerances for trowel finished floor surfaces.

F. Broom Finish: Apply a broom finish to exterior concrete platforms, steps, and ramps, and elsewhere as indicated.

1. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route. Coordinate required final finish.

3.10 MISCELLANEOUS CONCRETE ITEMS

A. Filling In: Fill in holes and openings left in concrete structures, unless otherwise indicated, after work of other trades is in place. Mix, place, and cure concrete, as specified, to blend with in-place construction. Provide other miscellaneous concrete filling indicated or required to complete the Work.

B. Curbs: Provide monolithic finish to interior curbs by stripping forms while concrete is still green and by steel-troweling surfaces to a hard, dense finish with corners, intersections, and terminations slightly rounded.

C. Equipment Bases and Foundations: Provide machine and equipment bases and foundations as shown on Drawings. Set anchor bolts for machines and equipment at correct elevations, complying with diagrams or templates from manufacturer furnishing machines and equipment.

D. Steel Pan Stairs: Provide concrete fill for steel pan stair treads, landings, and associated items. Cast-in inserts and accessories as shown on Drawings. Screed, tamp, and trowel-finish concrete surfaces.

3.11 CONCRETE PROTECTING AND CURING

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.

B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.

C. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing for the remainder of the curing period.

D. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces.

E. Cure concrete according to ACI 308.1, by one or a combination of the following methods:

1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
    a. Water.
    b. Continuous water-fog spray.
    c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
    a. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive floor coverings.
    b. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive penetrating liquid floor treatments.
    c. Cure concrete surfaces to receive floor coverings with either a moisture-retaining cover or a curing compound that the manufacturer certifies will not interfere with bonding of floor covering used on Project.
3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

a. After curing period has elapsed, remove curing compound without damaging concrete surfaces by method recommended by curing compound manufacturer unless manufacturer certifies curing compound will not interfere with bonding of floor covering used on Project.

4. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

3.12 LIQUID FLOOR TREATMENTS

A. Penetrating Liquid Floor Treatment: Prepare, apply, and finish penetrating liquid floor treatment according to manufacturer's written instructions.

1. Remove curing compounds, sealers, oil, dirt, laitance, and other contaminants and complete surface repairs.
2. Do not apply to concrete that is less than 14 days' old.
3. Apply liquid until surface is saturated, scrubbing into surface until a gel forms; rewet; and repeat brooming or scrubbing. Rinse with water; remove excess material until surface is dry. Apply a second coat in a similar manner if surface is rough or porous.

B. Sealing Coat: Uniformly apply a continuous sealing coat of curing and sealing compound to hardened concrete by power spray or roller according to manufacturer's written instructions.

3.13 CONCRETE SURFACE REPAIRS

A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.

B. Patching Mortar: Mix dry-pack patching mortar, consisting of one part portland cement to two and one-half parts fine aggregate passing a No. 16 sieve, using only enough water for handling and placing.

C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.

1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch in any dimension in solid concrete, but not less than 1 inch in depth. Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.
2. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement so that, when dry, patching mortar will match surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
3. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by Architect.

D. Repairing Unformed Surfaces: Test unformed surfaces, such as floors and slabs, for finish and verify surface tolerances specified for each surface. Correct low and high areas. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.

1. Repair finished surfaces containing defects. Surface defects include spalls, popouts, honeycombs, rock pockets, crazing and cracks in excess of 0.01 inch wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width, and other objectionable conditions.

2. After concrete has cured at least 14 days, correct high areas by grinding.
3. Correct localized low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.
4. Correct other low areas scheduled to receive floor coverings with a repair underlayment. Prepare, mix, and apply repair underlayment and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface. Feather edges to match adjacent floor elevations.
5. Correct other low areas scheduled to remain exposed with a repair topping. Cut out low areas to ensure a minimum repair topping depth of 1/4 inch to match adjacent floor elevations. Prepare, mix, and apply repair topping and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface.
6. Repair defective areas, except random cracks and single holes 1 inch or less in diameter, by cutting out and replacing with fresh concrete. Remove defective areas with clean, square cuts and expose steel reinforcement with at least a 3/4-inch clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials and mixture as original concrete except without coarse aggregate. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.
7. Repair random cracks and single holes 1 inch or less in diameter with patching mortar. Groove top of cracks and cut out holes to sound concrete and clean off dust, dirt, and loose particles. Dampen cleaned concrete surfaces and apply bonding agent. Place patching mortar before bonding agent has dried. Compact patching mortar and finish to match adjacent concrete. Keep patched area continuously moist for at least 72 hours.

E. Perform structural repairs of concrete, subject to Architect's approval, using epoxy adhesive and patching mortar.

F. Repair materials and installation not specified above may be used, subject to Architect's approval.

3.14 FIELD QUALITY CONTROL

A. Testing and Inspecting: Owner will engage a special inspector (if required) and qualified testing and inspecting agency to perform field tests and inspections and prepare test reports.

B. Testing and Inspecting: Engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports.

C. Inspections:

1. Steel reinforcement placement.
2. Steel reinforcement welding.
3. Headed bolts and studs.
4. Verification of use of required design mixture.
5. Concrete placement, including conveying and depositing.
6. Curing procedures and maintenance of curing temperature.
7. Verification of concrete strength before removal of shores and forms from beams and slabs.

D. Concrete Tests: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:

1. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. or fraction thereof of each concrete mixture placed each day.

    a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.

2. Slump: ASTM C 143/C 143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
3. Air Content: ASTM C 231, pressure method, for normal-weight concrete; ASTM C 173, volumetric method, for structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
4. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each composite sample.
5. Unit Weight: ASTM C 567, fresh unit weight of structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
6. Compression Test Specimens: ASTM C 31.

    a. Cast and laboratory cure four standard cylinder specimens for each composite sample.

7. Compressive-Strength Tests: ASTM C 39 (6” Ø); test one laboratory-cured specimen at 7 days, two specimens at 28 days, and hold one specimen as reserve for 56 day if required. For 4”Ø specimens, test three at 28 days.

    a. A compressive-strength test shall be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated.

8. Strength of each concrete mixture will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
9. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
10. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.
11. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42/C 42M or by other methods as directed by Architect.
12. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
13. Correct deficiencies in the Work that test reports and inspections indicate dos not comply with the Contract Documents.

E. Measure floor and slab flatness and levelness according to ASTM E 1155 within 48 hours of finishing.

END OF SECTION 033000

SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes:

1. Mechanical and electrified door hardware for:
    a. Swinging doors.
    b. Gates.
2. Electronic access control system components, including:
    a. Electronic access control devices.
3. Field verification, preparation and modification of existing doors and frames to receive new door hardware.
4. The intent of the hardware specification is to specify the hardware for interior and exterior doors, and to establish a type, continuity, and standard of quality. However, it is the door hardware supplier’s responsibility to thoroughly review existing conditions, schedules, specifications, drawings, and other Contract Documents to verify the suitability of the hardware specified.

B. Exclusions: Unless specifically listed in hardware sets, hardware is not specified in this section for:

1. Windows
2. Cabinets (casework), including locks in cabinets
3. Signage
4. Toilet accessories

C. Related Sections:

1. Section 012300 "Alternates" for alternates affecting this section.
2. Section 079200 "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
3. Division 09 sections for touchup, finishing or refinishing of existing openings modified by this section.
4. Division 26 sections for connections to electrical power system and for low-voltage wiring.
5. Division 28 sections for coordination with other components of electronic access control system.

1.3 REFERENCES

A. UL - Underwriters Laboratories

1. UL 10B - Fire Test of Door Assemblies
2. UL 10C - Positive Pressure Test of Fire Door Assemblies
3. UL 1784 - Air Leakage Tests of Door Assemblies
4. UL 305 - Panic Hardware

B. DHI - Door and Hardware Institute

1. Sequence and Format for the Hardware Schedule
2. Recommended Locations for Builders Hardware
3. Key Systems and Nomenclature

C. ANSI - American National Standards Institute

1. ANSI/BHMA A156.1 - A156.29, and ANSI/BHMA A156.31 - Standards for Hardware and Specialties

1.4 SUBMITTALS

A. General:

1. Submit in accordance with Conditions of Contract and Division 01 requirements.
2. Highlight, encircle, or otherwise specifically identify on submittals deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.
3. Prior to forwarding submittal, comply with procedures for verifying existing door and frame compatibility for new hardware, as specified in PART 3, "EXAMINATION" article, herein.

B. Action Submittals:

1. Product Data: Product data including manufacturers' technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
2. Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:

    a. Wiring Diagrams: For power, signal, and control wiring and including:

        1) Details of interface of electrified door hardware and building safety and security systems.
        2) Schematic diagram of systems that interface with electrified door hardware.
        3) Point-to-point wiring.
        4) Risers.

3. Samples for Verification: If requested by Architect, submit production sample or sample installations of each type of exposed hardware unit in finish indicated, and tagged with full description for coordination with schedule.

    a. Samples will be returned to supplier in like-new condition. Units that are acceptable to Architect may, after final check of operations, be incorporated into Work, within limitations of key coordination requirements.

4. Door Hardware Schedule: Submit schedule with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule as published by the Door and Hardware Institute. Indicate complete designations of each item required for each door or opening, include:

    a. Door Index; include door number, heading number, and Architects hardware set number.
    b. Opening Lock Function Spreadsheet: List locking device and function for each opening.
    c. Quantity, type, style, function, size, and finish of each hardware item.
    d. Name and manufacturer of each item.
    e. Fastenings and other pertinent information.
    f. Location of each hardware set cross-referenced to indications on Drawings.
    g. Explanation of all abbreviations, symbols, and codes contained in schedule.
    h. Mounting locations for hardware.
    i. Door and frame sizes and materials.
    j. Name and phone number for local manufacturer's representative for each product.
    k. Operational Description of openings with any electrified hardware (locks, exits, electromagnetic locks, electric strikes, automatic operators, door position switches, magnetic

holders or closer/holder units, and access control components). Operational description should include operational descriptions for: egress, ingress (access), and fire/smoke alarm connections.

1) Submittal Sequence: Submit door hardware schedule concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work that is critical in Project construction schedule.

5. Key Schedule:

a. After Keying Conference, provide keying schedule listing levels of keying as well as explanation of key system's function, key symbols used and door numbers controlled.
b. Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.
c. Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.
d. Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.
e. Provide one complete bitting list of key cuts and one key system schematic illustrating system usage and expansion.

1) Forward bitting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.

f. Prepare key schedule by or under supervision of supplier, detailing Owner’s final keying instructions for locks.

6. Templates: After final approval of hardware schedule, provide templates for doors, frames and other work specified to be factory or shop prepared for door hardware installation.

C. Informational Submittals:

1. Qualification Data: For Supplier, Installer and Architectural Hardware Consultant.
2. Product data for electrified door hardware:

a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.

3. Certificates of Compliance:

a. UL listings for fire-rated hardware and installation instructions if requested by Architect or Authority Having Jurisdiction.
b. Installer Training Meeting Certification: Letter of compliance, signed by Contractor, attesting to completion of installer training meeting specified in "QUALITY ASSURANCE" article, herein.
c. Electrified Hardware Coordination Conference Certification: Letter of compliance, signed by Contractor, attesting to completion of electrified hardware coordination conference, specified in "QUALITY ASSURANCE" article, herein.

4. Warranty: Special warranty specified in this Section.

D. Closeout Submittals:

1. Operations and Maintenance Data: Provide in accordance with Division 01 and include:

a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
b. Catalog pages for each product.
c. Factory order acknowledgement numbers (for warranty and service)
d. Name, address, and phone number of local representative for each manufacturer.

e. Parts list for each product.
f. Final approved hardware schedule, edited to reflect conditions as-installed.
g. Final keying schedule
h. Copies of floor plans with keying nomenclature
i. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.
j. Copy of warranties including appropriate reference numbers for manufacturers to identify project.

1.5 QUALITY ASSURANCE

A. Product Substitutions: Comply with product requirements stated in Division 01 and as specified herein.

1. Where specific manufacturer’s product is named and accompanied by "No Substitute," including make or model number or other designation, provide product specified. (Note: Certain products have been selected for their unique characteristics and particular project suitability.)

a. Where no additional products or manufacturers are listed in product category, requirements for "No Substitute" govern product selection.

2. Where products indicate "acceptable manufacturers" or "acceptable manufacturers and products", provide product from specified manufacturers, subject to compliance with specified requirements and "Single Source Responsibility" requirements stated herein.

B. Supplier Qualifications and Responsibilities: Recognized architectural hardware supplier with record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this Project and that provides certified Architectural Hardware Consultant (AHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.

1. Warehousing Facilities: In Project's vicinity.
2. Scheduling Responsibility: Preparation of door hardware and keying schedules.
3. Engineering Responsibility: Preparation of data for electrified door hardware, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this Project.
4. Coordination Responsibility: Assist in coordinating installation of electronic security hardware with Architect and electrical engineers and provide installation and technical data to Architect and other related subcontractors.

a. Upon completion of electronic security hardware installation, inspect and verify that all components are working properly.

C. Architectural Hardware Consultant Qualifications: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:

1. For door hardware, DHI-certified, Architectural Hardware Consultant (AHC).
2. Can provide installation and technical data to Architect and other related subcontractors.
3. Can inspect and verify components are in working order upon completion of installation.
4. Capable of producing wiring diagrams.
5. Capable of coordinating installation of electrified hardware with Architect and electrical engineers.

D. Single Source Responsibility: Obtain each type of door hardware from single manufacturer.

1. Provide electrified door hardware from same manufacturer as mechanical door hardware, unless otherwise indicated.
2. Manufacturers that perform electrical modifications and that are listed by testing and inspecting agency acceptable to authorities having jurisdiction are acceptable.

E. Fire-Rated Door Openings: Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed products tested by Underwriters Laboratories, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.

F. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.

G. Accessibility Requirements: For door hardware on doors in an accessible route, comply with governing accessibility regulations cited in "REFERENCES" article, herein.

H. Keying Conference: Conduct conference at Project site to comply with requirements in Division 01.

1. Attendees: Owner, Contractor, Architect, Installer, Owner's security consultant, and Supplier’s Architectural Hardware Consultant.
2. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:

    a. Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
    b. Preliminary key system schematic diagram.
    c. Requirements for key control system.
    d. Requirements for access control.
    e. Address for delivery of keys.

I. Pre-installation Conference: Conduct conference at Project site.

1. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
2. Inspect and discuss preparatory work performed by other trades.
3. Inspect and discuss electrical roughing-in for electrified door hardware.
4. Review sequence of operation for each type of electrified door hardware.
5. Review required testing, inspecting, and certifying procedures.

J. Coordination Conferences:

1. Installation Coordination Conference: Prior to hardware installation, schedule and hold meeting to review questions or concerns related to proper installation and adjustment of door hardware.

    a. Attendees: Door hardware supplier, door hardware installer, Contractor.
    b. After the meeting, provide letter of compliance to Architect, indicating when meeting was held and who was in attendance.

2. Electrified Hardware Coordination Conference: Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.

    a. Attendees: Electrified door hardware supplier, doors and frames supplier, electrified door hardware installer, electrical subcontractor, Owner, Owner’s security consultant, Architect and Contractor.
    b. After the meeting, provide letter of compliance to Architect, indicating when coordination conference was held and who was in attendance.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site.

B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package.

1. Deliver each article of hardware in manufacturer’s original packaging.

C. Project Conditions:

1. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
2. Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.

D. Protection and Damage:

1. Promptly replace products damaged during shipping.
2. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work.
3. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.

E. Deliver keys and permanent cores to Owner by registered mail or overnight package service.

1.7 COORDINATION

A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete. Concrete, reinforcement, and formwork requirements are specified in Division 03.

B. Installation Templates: Distribute for doors, frames, and other work specified to be factory or shop prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

C. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.

D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.

E. Existing Openings: Where existing doors, frames and/or hardware are to remain, field verify existing functions, conditions and preparations and coordinate to suit opening conditions and to provide proper door operation.

F. Direct shipments not permitted, unless approved by Contractor.

1.8 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Years from date of Substantial Completion, for durations indicated.

a. Closers:

1) Mechanical: 30 years.

2) Electrified: 2 years.

b. Automatic Operators: 2 years.
c. Exit Devices:

1) Mechanical: 3 years.
2) Electrified: 1 year.

d. Locksets:

1) Mechanical: 10 years.
2) Electrified: 1 year.

e. Continuous Hinges: Lifetime warranty.
f. Key Blanks: Lifetime

2. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.

1.9 MAINTENANCE

A. Maintenance Tools: Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Approval of manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category shall be in accordance with QUALITY ASSURANCE article, herein.

B. Approval of products from manufacturers indicated in "Acceptable Manufacturers" is contingent upon those products providing all functions and features and meeting all requirements of scheduled manufacturer’s product.

C. Where specified hardware is not adaptable to finished shape or size of members requiring hardware, furnish suitable types having same operation and quality as type specified, subject to Architect's approval.

2.2 MATERIALS

A. Fasteners

1. Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation.
2. Furnish screws for installation with each hardware item. Finish exposed (exposed under any condition) screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.
3. Provide concealed fasteners for hardware units exposed when door is closed except when no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on opposite face is exposed in other work unless thru-bolts are required to fasten hardware securely. Review door specification and advise Architect if thru-bolts are required.
4. Install hardware with fasteners provided by hardware manufacturer.

B. Modification and Preparation of Existing Doors: Where existing door hardware is indicated to be removed and reinstalled.

1. Provide necessary fillers, Dutchmen, reinforcements, and fasteners, compatible with existing materials, as required for mounting new opening hardware and to cover existing door and frame preparations.
2. Use materials which match materials of adjacent modified areas.
3. When modifying existing fire-rated openings, provide materials permitted by NFPA 80 as required to maintain fire-rating.

C. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.

1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.

D. Cable and Connectors: Hardwired Electronic Access Control Lockset and Exit Device Trim:

1. Data: 24AWG, 4 conductor shielded, Belden 9843, 9841 or comparable.
2. DC Power: 18 AWG, 2 conductor, Belden 8760 or comparable.
3. Provide type of data and DC power cabling required by access control device manufacturer for this installation.
4. Where scheduled in the hardware sets, provide each item of electrified hardware and wire harnesses with sufficient number and wire gauge with standardized Molex plug connectors to accommodate electric function of specified hardware. Provide Molex connectors that plug directly into connectors from harnesses, electric locking and power transfer devices. Provide through-door wire harness for each electrified locking device installed in a door and wire harness for each electrified hinge, electrified continuous hinge, electrified pivot, and electric power transfer for connection to power supplies.

2.3 HINGES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product: Ives 5BB series.
2. Acceptable Manufacturers and Products: Hager BB series, McKinney TA/T4A series.

B. Requirements:

1. Provide hinges conforming to ANSI/BHMA A156.1.
2. 1-3/4-inch-thick doors, up to and including 36 inches wide:
    a. Exterior: Standard weight, bronze or stainless steel, 4-1/2 inches high
    b. Interior: Standard weight, steel, 4-1/2 inches high
3. 1-3/4-inch-thick doors over 36 inches wide:
    a. Exterior: Heavy weight, bronze/stainless steel, 5 inches high
    b. Interior: Heavy weight, steel, 5 inches high
4. Provide three hinges per door leaf for doors 90 inches or less in height, and one additional hinge for each 30 inches of additional door height.
5. Where new hinges are specified for existing doors or existing frames, provide new hinges of identical size to hinge preparation present in existing door or existing frame.
6. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
    a. Steel Hinges: Steel pins
    b. Non-Ferrous Hinges: Stainless steel pins
    c. Out-Swinging Exterior Doors: Non-removable pins
    d. Out-Swinging Interior Lockable Doors: Non-removable pins
    e. Interior Non-lockable Doors: Non-rising pins

7. Width of hinges: 4-1/2 inches at 1-3/4-inch-thick doors, and 5 inches at 2 inches or thicker doors. Adjust hinge width as required for door, frame, and wall conditions to allow proper degree of opening.
8. Provide hinges with electrified options as scheduled in the hardware sets. Provide with sufficient number and wire gage to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to electrified locking component.
9. Provide mortar guard for each electrified hinge specified.

2.4 CONTINUOUS HINGES

A. Aluminum Geared

1. Manufacturers:

a. Scheduled Manufacturer: Ives.
b. Acceptable Manufacturers: Select, Hager.

2. Requirements:

a. Provide aluminum geared continuous hinges conforming to ANSI/BHMA A156.26, Grade 1.
b. Provide aluminum geared continuous hinges, where specified in the hardware sets, fabricated from 6063-T6 aluminum.
c. Provide split nylon bearings at each hinge knuckle for quiet, smooth, self-lubricating operation.
d. Provide hinges capable of supporting door weights up to 450 pounds, and successfully tested for 1,500,000 cycles.
e. On fire-rated doors, provide aluminum geared continuous hinges that are classified for use on rated doors by testing agency acceptable to authority having jurisdiction.
f. Provide aluminum geared continuous hinges with electrified option scheduled in the hardware sets. Provide with sufficient number and wire gage to accommodate electric function of specified hardware.
g. Install hinges with fasteners supplied by manufacturer.
h. Provide hinges 1 inch shorter in length than nominal height of door, unless otherwise noted or door details require shorter length and with symmetrical hole pattern.

2.5 ELECTRIC POWER TRANSFER

A. Manufacturers:

1. Scheduled Manufacturer: Von Duprin EPT-10.
2. Acceptable Manufacturers: ABH PT1000, Securitron CEPT-10.

B. Provide power transfer with electrified options as scheduled in the hardware sets. Provide with number and gage of wires sufficient to accommodate electric function of specified hardware.

C. Locate electric power transfer per manufacturer’s template and UL requirements, unless interference with operation of door or other hardware items.

2.6 FLUSH BOLTS

A. Manufacturers:

1. Scheduled Manufacturer: Ives.
2. Acceptable Manufacturers: Burns, Hager.

B. Requirements:

1. Provide automatic, constant latching, and manual flush bolts with forged bronze or stainless-steel face plates, extruded brass levers, and with wrought brass guides and strikes. Provide 12-inch steel or brass rods at doors up to 90 inches in height. For doors over 90 inches in height increase top rods by 6 inches for each additional 6 inches of door height. Provide dust-proof strikes at each bottom flush bolt.

2.7 COORDINATORS

A. Manufacturers:

1. Scheduled Manufacturer: Ives.
2. Acceptable Manufacturers: Burns, Rockwood.

B. Requirements:

1. Where pairs of doors are equipped with automatic flush bolts, an astragal, or other hardware that requires synchronized closing of the doors, provide bar-type coordinating device, surface applied to underside of stop at frame head.
2. Provide filler bar of correct length for unit to span entire width of opening, and appropriate brackets for parallel arm door closers, surface vertical rod exit device strikes or other stop mounted hardware. Factory-prepared coordinators for vertical rod devices as specified.

2.8 ALUMINUM DOOR LOCKS – NARROW STYLE

A. Manufacturer and Product:

1. Scheduled Manufacturer and Product: Adams Rite 4900 series X 4568/9 Lever or 4590/1 Paddle.
2. Acceptable Manufacturers and Products: No Substitute.

B. Requirements:

1. Provide narrow style aluminum door locks as specified. Cylinders: Refer to "KEYING" article, herein.
2. Provide locks with necessary backset as required for door detail with full 5/8 inch throw latchbolt.
3. Provide manufacturer’s standard strikes unless extended lip strikes are necessary to protect trim.

2.9 CYLINDRICAL LOCKS – GRADE 1

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product: Schlage ND series.
2. Acceptable Manufacturers and Products: Sargent 11-Line, Best 93K series.

B. Requirements:

1. Provide cylindrical locks conforming to ANSI/BHMA A156.2 Series 4000, Grade 1, and UL Listed for 3 hour fire doors.
2. Cylinders: Refer to "KEYING" article, herein.
3. Provide cylindrical locksets exceeding the ANSI/BHMA A156.2 Grade 1 performance standards for strength, security, and durability in the categories below:
    a. Abusive Locked Lever Torque Test – minimum 3,100 inch-pounds without gaining access
    b. Cycle life - tested to minimum 10 million cycles per ANSI/BHMA A156.2 Cycle Test with no visible lever sag or use of performance aids such as set screws or spacers.

4. Provide locks with standard 2-3/4 inches backset, unless noted otherwise, with 1/2-inch latch throw. Provide proper latch throw for UL listing at pairs.
5. Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.
6. Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.
7. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
8. Provide electrified options as scheduled in the hardware sets.
9. Lever Trim: Solid cast levers without plastic inserts, and wrought roses on both sides.

    a. Lever Design: Schlage Rhodes (RHO).

2.10 AUXILIARY LOCKS

A. Deadlocks:

1. Manufacturers and Products:

    a. Scheduled Manufacturer and Product: Schlage L400 series.
    b. Acceptable Manufacturers and Products: Best 38H series, Sargent 4870 series.

2. Requirements:

    a. Provide mortise deadlock series conforming to ANSI/BHMA A156 and function as specified.
    b. Cylinders: Refer to "KEYING" article, herein.
    c. Provide deadlocks with standard 2-3/4 inches backset. Provide deadbolt with full 1-inch throw, constructed of stainless steel.
    d. Provide manufacturer’s standard strike.

B. Aluminum Door Deadbolt - Narrow Style:

1. Manufacturers and Products:

    a. Scheduled Manufacturer and Product: Adams Rite MS1850 Series.
    b. Acceptable Manufacturers and Products: No Substitute.

2. Requirements:

    a. Provide narrow style aluminum door deadbolts as specified.
    b. Cylinders: Refer to "KEYING" article, herein.
    c. Provide deadbolts with necessary backset with full 1-13/32 inches throw deadbolt.
    d. Provide manufacturer’s standard strikes unless extended lip strikes are necessary to protect trim.

2.11 EXIT DEVICES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product: Von Duprin 99/33A series (Owner Preferred).
2. Acceptable Manufacturers and Products: Detex Advantex series, Sargent 80 Series.

B. Requirements:

1. Provide exit devices tested to ANSI/BHMA A156.3 Grade 1 and UL listed for Panic Exit or Fire Exit Hardware.
2. Cylinders: Refer to "KEYING" article, herein.
3. Provide touchpad type exit devices, fabricated of brass, bronze, stainless steel, or aluminum, plated to standard architectural finishes to match balance of door hardware.

4. Touchpad must extend a minimum of one half of door width. No plastic inserts are allowed in touchpads.
5. Provide exit devices with deadlatching feature for security and for future addition of alarm kits and/or other electrified requirements.
6. Provide flush end caps for exit devices.
7. Provide exit devices with manufacturer's approved strikes.
8. Provide exit devices cut to door width and height. Install exit devices at height recommended by exit device manufacturer, allowable by governing building codes, and approved by Architect.
9. Mount mechanism case flush on face of doors, or provide spacers to fill gaps behind devices. Where glass trim or molding projects off face of door, provide glass bead kits.
10. Provide cylindrical or hex-key dogging as specified at non fire-rated openings.
11. Removable Mullions: 2 inches x 3 inches steel tube. Where scheduled as keyed removable mullion, provide type that can be removed by use of a keyed cylinder, which is self-locking when re-installed.
12. Provide factory drilled weep holes for exit devices used in full exterior application, highly corrosive areas, and where noted in hardware sets.
13. Provide electrified options as scheduled.
14. Top latch mounting: double or single tab mount for steel doors, face mount for aluminum doors eliminating requirement of tabs, and double tab mount for wood doors.
15. Provide exit devices with optional trim designs to match other lever and pull designs used on the project.

    a. Tactile Warning (Knurling): Where required by authority having jurisdiction. Provide on levers on exterior (secure side) of doors serving rooms considered to be hazardous.

2.12 MAGNETIC LOCKS

A. Magnetic Locks – Surface Type:

1. Manufacturers and Products:

    a. Scheduled Manufacturer and Product: Schlage M490 series.
    b. Acceptable Manufacturers and Products: Dynalock 3000 series, Security Door Controls 1510 series.

2. Requirements:

    a. Provide magnetic locks certified to meet ANSI/BHMA A156.23 classification criteria including minimum holding force of 1500 LBF. Provide magnetic locks equipped with SPDT Magnetic Bond Sensing device, where specified, to monitor whether sufficient magnetic holding force exists to ensure adequate locking and SPDT Door Status Monitor device, where specified, to monitor whether door is open or closed. Provide bond sensors fully concealed within electromagnet to resist tampering or damage.
    b. Provide magnetic locks certified to meet UL10C, and UL1034 for burglary-resistant electronic locking mechanisms.
    c. Provide fasteners, mounting brackets, and spacer bars required for mounting and details.
    d. Provide power supply recommended and approved by manufacturer of magnetic locks.
    e. Where magnetic locks are scheduled, provide complete assemblies of controls, switches, power supplies, relays, and parts/material recommended and approved by manufacturer of magnetic locks for each individual leaf. Switches control both doors simultaneously at pairs. Locate controls as directed by Architect.

2.13 POWER SUPPLIES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product: Schlage/Von Duprin PS900 series.
2. Acceptable Manufacturers and Products: Dynalock 5000 series, Security Door Controls 600 series.

B. Requirements:

1. Provide power supplies approved by manufacturer of supplied electrified hardware.
2. Provide appropriate quantity of power supplies necessary for proper operation of electrified locking components as recommended by manufacturer of electrified locking components with consideration for each electrified component using power supply, location of power supply, and approved wiring diagrams. Locate power supplies as directed by Architect.
3. Provide regulated and filtered 24 VDC power supply, and UL class 2 listed.
4. Provide power supplies with the following features:

   a. 12/24 VDC Output, field selectable.
   b. Class 2 Rated power limited output.
   c. Universal 120-240 VAC input.
   d. Low voltage DC, regulated and filtered.
   e. Polarized connector for distribution boards.
   f. Fused primary input.
   g. AC input and DC output monitoring circuit w/LED indicators.
   h. Cover mounted AC Input indication.
   i. Tested and certified to meet UL294.
   j. NEMA 1 enclosure.
   k. Hinged cover w/lock down screws.
   l. High voltage protective cover.

2.14 CYLINDERS

A. Manufacturers:

1. Scheduled Manufacturer: Schlage.

B. Requirements:

1. Provide small format interchangeable cylinders/cores to match Owner’s existing Best key system, compliant with ANSI/BHMA A156.5; latest revision, Section 12, Grade 1; permanent cylinders; cylinder face finished to match lockset, manufacturer’s series as indicated. Refer to "KEYING" article, herein.
2. Provide the following keyway: Keyway to match existing key system.

C. Construction Keying:

1. Replaceable Construction Cores.

   a. Provide temporary construction cores replaceable by permanent cores, furnished in accordance with the following requirements.

      1) 3 construction control keys
      2) 12 construction change (day) keys.

   b. Owner or Owner’s Representative will replace temporary construction cores with permanent cores.

2.15 KEYING

A. Comply with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.

B. Provide cylinders/cores keyed into Owner’s existing keying system managed by Owner’s locksmith, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.

C. Requirements:

1. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.
    a. Master Keying system as directed by the Owner.
2. Forward bitting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements will be cause for replacement of cylinders/cores involved at no additional cost to Owner.
3. Provide keys with the following features:
    a. Material: Nickel silver; minimum thickness of .107-inch.
    b. Patent Protection: Keys and blanks protected by one or more utility patent(s).
4. Identification:
    a. Mark permanent cylinders/cores and keys with applicable blind code per DHI publication "Keying Systems and Nomenclature" for identification. Do not provide blind code marks with actual key cuts.
    b. Identification stamping provisions must be approved by the Architect and Owner.
    c. Stamp cylinders/cores and keys with Owner’s unique key system facility code as established by the manufacturer; key symbol and embossed or stamped with "DO NOT DUPLICATE" along with the "PATENTED" or patent number to enforce the patent protection.
    d. Failure to comply with stamping requirements will be cause for replacement of keys involved at no additional cost to Owner.
    e. Forward permanent cylinders/cores to Owner, separately from keys, by means as directed by Owner.
5. Quantity: Furnish in the following quantities.
    a. Change (Day) Keys: 3 per cylinder/core.
    b. Permanent Control Keys: 3.
    c. Master Keys: 6.

2.16 DOOR CLOSERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product: LCN 4040XP series.
2. Acceptable Manufacturers and Products: Corbin-Russwin DC8000 series, Sargent 281 series.

B. Requirements:

1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify closers. Stamp units with date of manufacture code.
2. Provide door closers with fully hydraulic, full rack and pinion action with high strength cast iron cylinder, and full complement bearings at shaft.
3. Cylinder Body: 1-1/2-inch diameter with 3/4 inch diameter double heat-treated pinion journal.
4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards.
6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck.
7. Provide closers with solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers.
8. Pressure Relief Valve (PRV) Technology: Not permitted.
9. Finish for Closer Cylinders, Arms, Adapter Plates, and Metal Covers: Powder coating finish which has been certified to exceed 100 hours salt spray testing as described in ANSI Standard A156.4 and ASTM B117, or has special rust inhibitor (SRI).

10. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

2.17 DOOR TRIM

A. Manufacturers:

1. Scheduled Manufacturer: Ives.
2. Acceptable Manufacturers: Burns, Hager.

B. Requirements:

1. Provide push plates 4 inches wide by 16 inches high by 0.050-inch-thick and beveled 4 edges. Where width of door stile prevents use of 4 inches wide plate, adjust width to fit.
2. Provide push bars of solid bar stock, diameter and length as scheduled. Provide push bars of sufficient length to span from center to center of each stile. Where required, mount back to back with pull.
3. Provide offset pulls of solid bar stock, diameter and length as scheduled. Where required, mount back to back with push bar.
4. Provide flush pulls as scheduled. Where required, provide back-to-back mounted model.
5. Provide pulls of solid bar stock, diameter and length as scheduled. Where required, mount back to back with push bar.
6. Provide pull plates 4 inches wide by 16 inches high by 0.050-inch-thick, beveled 4 edges, and prepped for pull. Where width of door stile prevents use of 4 inches wide plate, adjust width to fit.
7. Provide wire pulls of solid bar stock, diameter and length as scheduled.
8. Provide decorative pulls as scheduled. Where required, mount back to back with pull.

2.18 PROTECTION PLATES

A. Manufacturers:

1. Scheduled Manufacturer: Ives.
2. Acceptable Manufacturers: Burns, Rockwood.

B. Requirements:

1. Provide kick plates, mop plates, and armor plates minimum of 0.050-inch-thick, beveled four edges as scheduled. Furnish with sheet metal or wood screws, finished to match plates.
2. Sizes of plates:
    a. Kick Plates: 10 inches high by 2 inches less width of door on single doors, 1 inch less width of door on pairs
    b. Mop Plates: 4 inches high by 2 inches less width of door on single doors, 1 inch less width of door on pairs
    c. Armor Plates: 36 inches high by 2 inches less width of door on single doors, 1 inch less width of door on pairs

2.19 OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

A. Manufacturers:

1. Scheduled Manufacturers: Glynn-Johnson.
2. Acceptable Manufacturers: Rixson, Sargent.

B. Requirements:

1. Provide heavy duty concealed mounted overhead stop or holder as specified for exterior and interior vestibule single acting doors.
2. Provide heavy duty concealed mounted overhead stop or holder as specified for double acting doors.
3. Provide heavy or medium duty and concealed or surface mounted overhead stop or holder for interior doors as specified. Provide medium duty surface mounted overhead stop for interior doors and at any door that swings more than 140 degrees before striking wall, open against equipment, casework, sidelights, and where conditions do not allow wall stop or floor stop presents tripping hazard.
4. Where overhead holders are specified provide friction type at doors without closer and positive type at doors with closer.

2.20 DOOR STOPS AND HOLDERS

A. Manufacturers:

1. Scheduled Manufacturer: Ives.
2. Acceptable Manufacturers: Burns, Rockwood.

B. Provide door stops at each door leaf:

1. Provide wall stops wherever possible. Provide convex type where mortise type locks are used and concave type where cylindrical type locks are used.
2. Where a wall stop cannot be used, provide universal floor stops for low or high rise options.
3. Where wall or floor stop cannot be used, provide medium duty surface mounted overhead stop.

2.21 THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING

A. Manufacturers:

1. Scheduled Manufacturer: Zero International.
2. Acceptable Manufacturers: National Guard, Reese.

B. Requirements:

1. Provide thresholds, weather-stripping (including door sweeps, seals, and astragals) and gasketing systems (including smoke, sound, and light) as specified and per architectural details. Match finish of other items.
2. Size of thresholds:

    a. Saddle Thresholds: 1/2-inch-high by jamb width by door width

3. Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.

2.22 SILENCERS

A. Manufacturers:

1. Scheduled Manufacturer: Ives.
2. Acceptable Manufacturers: Steelcraft, Republic.

B. Requirements:

1. Provide "push-in" type silencers for hollow metal or wood frames.
2. Provide one silencer per 30 inches of height on each single frame, and two for each pair frame.
3. Omit where gasketing is specified.

2.23 DOOR POSITION SWITCHES

A. Manufacturers:

1. Scheduled Manufacturer: Schlage.
2. Acceptable Manufacturers: GE-Interlogix, Sargent.

B. Requirements:

1. Provide recessed or surface mounted type door position switches as specified.
2. Coordinate door and frame preparations with door and frame suppliers. If switches are being used with magnetic locking device, provide minimum of 4 inches between switch and magnetic locking device.

2.24 LATCH PROTECTORS

A. Manufacturers:

1. Scheduled Manufacturer: Ives.
2. Acceptable Manufacturers: Burns, Rockwood.

B. Provide stainless steel latch protectors of type required to function with specified lock.

2.25 COAT HOOKS

A. Manufacturers:

1. Scheduled Manufacturer: Ives.
2. Acceptable Manufacturers: Burns, Rockwood.

B. Provide coat hooks as specified.

2.26 FINISHES

A. Finish: BHMA 626/652 (US26D); except:

1. Hinges at Exterior Doors: BHMA 630 (US32D)
2. Continuous Hinges: BHMA 630 (US32D)
3. Continuous Hinges: BHMA 628 (US28)
4. Push Plates, Pulls, and Push Bars: BHMA 630 (US32D)
5. Protection Plates: BHMA 630 (US32D)
6. Overhead Stops and Holders: BHMA 630 (US32D)
7. Door Closers: Powder Coat to Match
8. Wall Stops: BHMA 630 (US32D)
9. Latch Protectors: BHMA 630 (US32D)
10. Weatherstripping: Clear Anodized Aluminum
11. Thresholds: Mill Finish Aluminum

PART 3 - EXECUTION

3.1 EXAMINATION

A. Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance.

B. Existing Door and Frame Compatibility: Field verify existing doors and frames receiving new hardware and existing conditions receiving new openings. Verify that new hardware is compatible with existing door and frame preparation and existing conditions.

C. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.

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

3.2 PREPARATION

A. Where on-site modification of doors and frames is required:

1. Carefully remove existing door hardware and components being reused. Clean, protect, tag, and store in accordance with storage and handling requirements specified herein.
2. Field modify and prepare existing door and frame for new hardware being installed.
3. When modifications are exposed to view, use concealed fasteners, when possible.
4. Prepare hardware locations and reinstall in accordance with installation requirements for new door hardware and with:

    a. Steel Doors and Frames: For surface applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.
    b. Wood Doors: DHI WDHS.5 "Recommended Hardware Reinforcement Locations for Mineral Core Wood Flush Doors."
    c. Doors in rated assemblies: NFPA 80 for restrictions on on-site door hardware preparation.

3.3 INSTALLATION

A. Mounting Heights: Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.

1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
2. Custom Steel Doors and Frames: HMMA 831.
3. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."

B. Install each hardware item in compliance with manufacturer’s instructions and recommendations, using only fasteners provided by manufacturer.

C. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.

D. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.

E. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.

F. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.

G. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated or one hinge for every 30 inches of door height, whichever is more stringent, unless other equivalent means of support for door.

H. Lock Cylinders: Install construction cores to secure building and areas during construction period.

1. Replace construction cores with permanent cores as indicated in keying section.

I. Wiring: Coordinate with Division 26, Electrical sections for:

1. Conduit, junction boxes and wire pulls.
2. Connections to and from power supplies to electrified hardware.
3. Connections to fire/smoke alarm system and smoke evacuation system.
4. Connection of wire to door position switches and wire runs to central room or area, as directed by Architect.
5. Testing and labeling wires with Architect's opening number.

J. Door Closers: Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.

K. Closer/Holders: Mount closer/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.

L. Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.

M. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Section 079200 "Joint Sealants."

N. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.

O. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.

P. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.

Q. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.

3.4 FIELD QUALITY CONTROL

A. Architectural Hardware Consultant: Engage qualified independent Architectural Hardware Consultant to perform inspections and to prepare inspection reports.

1. Architectural Hardware Consultant will inspect door hardware and state in each report whether installed work complies with or deviates from requirements, including whether door hardware is properly installed and adjusted.

3.5 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

1. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.
2. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.

B. Occupancy Adjustment: Approximately three to six months after date of Substantial Completion, Installer's Architectural Hardware Consultant must examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors, door hardware, and electrified door hardware.

3.6 CLEANING AND PROTECTION

A. Clean adjacent surfaces soiled by door hardware installation.

B. Clean operating items as necessary to restore proper function and finish.

C. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Substantial Completion.

3.7 DOOR HARDWARE SCHEDULE

A. Locksets, exit devices, and other hardware items are referenced in the following hardware sets for series, type and function. Refer to the above-specifications for special features, options, cylinders/keying, and other requirements.

B. Hardware Sets:

HARDWARE GROUP NO. 01

Provide each RU door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	SFIC CORE	80-033	626	SCH
1	EA	SFIC MORTISE CYL.	80-105 X B520-378 118 36-083 36-082-025	626	SCH
		NOTE	HARDWARE BY DOOR SUPPLIER		

HARDWARE GROUP NO. 02

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	630	IVE
1	EA	PANIC HARDWARE	CD-98-NL	626	VON
1	EA	SFIC RIM CYLINDER	80-116	626	SCH
2	EA	SFIC CORE	80-033	626	SCH
1	EA	SFIC MORTISE CYL.	80-110 X K510-730 36-083 36-082-025	626	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	429AA-S	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER

HARDWARE GROUP NO. 03

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	PANIC HARDWARE	CD-98-NL	626	VON
2	EA	SFIC CORE	80-033	626	SCH
1	EA	SFIC MORTISE CYL.	80-110 X K510-730 36-083 36-082-025	626	SCH
1	EA	SFIC RIM CYLINDER	80-116	626	SCH
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	EA	GASKETING	188SBK PSA (AS REQUIRED)	BK	ZER

HARDWARE GROUP NO. 04

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PASSAGE SET	ND10S RHO	626	SCH
1	EA	WALL STOP	WS406/407CVX	630	IVE

HARDWARE GROUP NO. 05

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PASSAGE SET	ND10S RHO	626	SCH
1	EA	OH STOP	450S	630	GLY

HARDWARE GROUP NO. 06

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ENTRANCE/OFFICE LOCK	ND50BDC RHO	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	EA	COAT AND HAT HOOK	507	626	IVE

HARDWARE GROUP NO. 07

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	CLASSROOM LOCK	ND70BDC RHO	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
1	EA	OH STOP	450S	630	GLY

HARDWARE GROUP NO. 08

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	SET	CONST LATCHING BOLT	FB51P	630	IVE
1	EA	DUST PROOF STRIKE	DP1	626	IVE
1	EA	STOREROOM LOCK	ND80BDC RHO	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	GASKETING	429AA-S	AA	ZER
1	EA	ASTRAGAL	339AA ASTRAGAL	AA	ZER
2	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER

HARDWARE GROUP NO. 09

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5	630	IVE
1	EA	PASSAGE SET	ND10S RHO	626	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	429AA-S	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER

HARDWARE GROUP NO. 10

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
1	EA	PASSAGE SET	ND10S RHO	626	SCH
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	EA	GASKETING	429AA-S	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER

HARDWARE GROUP NO. 11

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PRIVACY LOCK	L9040 06A 09-662 630 10-072 630 L583-363 L283-722	626	SCH
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	EA	SINGLE HOOK	507B	626	IVE

HARDWARE GROUP NO. 12

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	ND70BDC RHO	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE

HARDWARE GROUP NO. 13

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	ND80BDC RHO	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE

OPERATIONAL DESCRIPTION: DOOR NORMALLY CLOSED AND LOCKED. ACCESS BY KEY FROM OUTSIDE. INSIDE LEVER ALWAYS FREE FOR EGRESS.

HARDWARE GROUP NO. 14

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	ND80BDC RHO	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
1	EA	OH STOP	450S	630	GLY
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE

HARDWARE GROUP NO. 15

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	STOREROOM LOCK	ND80BDC RHO	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE

HARDWARE GROUP NO. 16

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	STOREROOM LOCK	ND80BDC RHO	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
1	EA	SURFACE CLOSER	4040XP CUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE

HARDWARE GROUP NO. 17

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	STOREROOM LOCK	ND80BDC RHO	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
1	EA	LOCK GUARD	LG1	630	IVE
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE

1	EA	GASKETING	429AA-S	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER

HARDWARE GROUP NO. 18

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	SET	CONST LATCHING BOLT	FB51P	630	IVE
1	EA	DUST PROOF STRIKE	DP1	626	IVE
1	EA	STOREROOM LOCK	ND80BDC RHO	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
1	EA	COORDINATOR	COR X FL	US26D	IVE
2	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	WALL STOP	WS406/407CVX	630	IVE
1	EA	GASKETING	429AA-S	AA	ZER
1	EA	ASTRAGAL	339AA ASTRAGAL	AA	ZER
2	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER

HARDWARE GROUP NO. 19

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	PANIC HARDWARE	CD-98-NL	626	VON
1	EA	SFIC MORTISE CYL.	80-110 X K510-730 36-083 36-082-025	626	SCH
2	EA	SFIC CORE	80-033	626	SCH
1	EA	SFIC RIM CYLINDER	80-116	626	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	429AA-S	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER

HARDWARE GROUP NO. 20

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ELECTRIC HINGE	5BB1 4.5 X 4.5 TW4	652	IVE
1	EA	STOREROOM LOCK	ND80BDCEU RHO RX CON 12V/24V DC	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	EA	DOOR CONTACT	679-05HM	BLK	SCE
1	EA	POWER SUPPLY	PS902 BBK 900-2RS KL900	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT CARD READER BY OTHERS		SCE

OPERATIONAL DESCRIPTION: DOOR NORMALLY CLOSED AND LOCKED. ACCESS BY KEY, OR VALID CREDENTIAL READ, WHICH SHUNTS DOOR POSITION SWITCH AND MOMENTARILY UNLOCKS OUTSIDE LEVER. INSIDE LEVER ALWAYS FREE FOR EGRESS.

HARDWARE GROUP NO. 21

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	ELECTRIC HINGE	5BB1HW 4.5 X 4.5 TW4	630	IVE
1	EA	STOREROOM LOCK	ND80BDCEU RHO RX CON 12V/24V DC	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	EA	GASKETING	429AA-S	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	DOOR CONTACT	679-05HM	BLK	SCE
1	EA	POWER SUPPLY	PS902 BBK 900-2RS KL900	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT		SCE
1			CARD READER BY OTHERS		

OPERATIONAL DESCRIPTION: DOOR NORMALLY CLOSED AND LOCKED. ACCESS BY KEY, OR VALID CREDENTIAL READ, WHICH SHUNTS DOOR POSITION SWITCH AND MOMENTARILY UNLOCKS OUTSIDE LEVER. INSIDE LEVER ALWAYS FREE FOR EGRESS.

HARDWARE GROUP NO. 22

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD	628	IVE
1	EA	MAGNETIC LOCK	M490P ATS/LED 12/24 VDC	628	SCE
1	EA	PUSH/PULL BAR	9190HD-10"-NO	630	IVE
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	EA	POWER SUPPLY	PS902 BBK FA900 KL900	LGR	SCE
1			PROVIDE FACTORY POINT TO POINT WIRING DIAGRAMS		
1			CARD READER BY OTHERS		

OPERATIONAL DESCRIPTION: DOOR NORMALLY LOCKED IN BOTH DIRECTIONS. AUTHORIZED ACCESS OR EGRESS BY VALID CREDENTIAL, WHICH UNLOCKS MAGNETIC LOCK AND ALLOWS DOOR TO BE PUSHED OR PULLED OPEN.

HARDWARE GROUP NO. 23

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
5	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	ELECTRIC HINGE	5BB1HW 4.5 X 4.5 TW4	630	IVE
2	EA	MANUAL FLUSH BOLT	FB457 12"	626	IVE
1	EA	DUST PROOF STRIKE	DP1	626	IVE
1	EA	STOREROOM LOCK	ND80BDCEU RHO RX CON 12V/24V DC	626	SCH

1	EA	SFIC CORE	80-033	626	SCH
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	GASKETING	429AA-S	AA	ZER
1	EA	ASTRAGAL	339AA ASTRAGAL	AA	ZER
2	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER
2	EA	DOOR CONTACT	679-05HM	BLK	SCE
1	EA	POWER SUPPLY	PS902 BBK 900-2RS KL900	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT		SCE
1			CARD READER BY OTHERS		

HARDWARE GROUP NO. 24

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD EPT	628	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	ELEC FIRE EXIT HARDWARE	QEL-99-NL-F-CON 24 VDC	626	VON
1	EA	SFIC RIM CYLINDER	80-116	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	BLK	IVE
1	EA	GASKETING	429AA-S	AA	ZER
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	DOOR CONTACT	679-05HM	BLK	SCE
1	EA	POWER SUPPLY	PS902 BBK 900-2RS FA900 KL900 120/240 VAC	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT		SCE
1			CARD READER BY OTHERS		

ALARM BY ACCESS CONTROL PROVIDER.

OPERATIONAL DESCRIPTION: DOOR NORMALLY CLOSED AND LOCKED. AUTHORIZED ACCESS BY VALID CREDENTIAL READ, WHICH SHUNTS DOOR POSITION SWITCH AND RETRACTS EXIT DEVICE LATCHBOLT, ALLOWING DOOR TO BE PULLED OPEN. AUTHORIZED EGRESS BY VALID CREDENTIAL READ, WHICH SHUNTS DOOR POSITION SWITCH AND ALARM, ALLOWING DOOR TO BE PUSHED OPEN USING TOUCH PAD EXIT DEVICE. EGRESS WITHOUT VALID CREDENTIAL WILL SOUND ALARM. FREE EGRESS ALLOWED AT ALL TIMES.

HARDWARE GROUP NO. 25

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD EPT	628	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	ELEC PANIC HARDWARE	QEL-99-NL-CON 24 VDC	626	VON

1	EA	SFIC RIM CYLINDER	80-116	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
1	EA	SURFACE CLOSER	4040XP SHCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	BLK	IVE
1	EA	GASKETING	429AA-S	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	DOOR CONTACT	679-05HM	BLK	SCE
1	EA	POWER SUPPLY	PS902 BBK 900-2RS FA900 KL900 120/240 VAC	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT		SCE
1			CARD READER BY OTHERS		

ALARM BY ACCESS CONTROL PROVIDER.
OPERATIONAL DESCRIPTION: DOOR NORMALLY CLOSED AND LOCKED. AUTHORIZED ACCESS BY VALID CREDENTIAL READ, WHICH SHUNTS DOOR POSITION SWITCH AND RETRACTS EXIT DEVICE LATCHBOLT, ALLOWING DOOR TO BE PULLED OPEN. AUTHORIZED EGRESS BY VALID CREDENTIAL READ, WHICH SHUNTS DOOR POSITION SWITCH AND ALARM, ALLOWING DOOR TO BE PUSHED OPEN USING TOUCH PAD EXIT DEVICE. EGRESS WITHOUT VALID CREDENTIAL WILL SOUND ALARM. FREE EGRESS ALLOWED AT ALL TIMES.

HARDWARE GROUP NO. 26

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
5	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	ELECTRIC HINGE	5BB1HW 4.5 X 4.5 TW4	630	IVE
1	SET	AUTO FLUSH BOLT	FB31P	630	IVE
1	EA	DUST PROOF STRIKE	DP1	626	IVE
1	EA	STOREROOM LOCK	ND80BDCEU RHO RX CON 12V/24V DC	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
1	EA	COORDINATOR	COR X FL	US26D	IVE
2	EA	SURFACE CLOSER	4040XP DEL SCUSH	689	LCN
2	EA	ARMOR PLATE	8400 34" X 1" LDW B-CS	630	IVE
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	GASKETING	429AA-S	AA	ZER
1	EA	ASTRAGAL	339AA ASTRAGAL	AA	ZER
2	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER
2	EA	DOOR CONTACT	679-05HM	BLK	SCE
1	EA	POWER SUPPLY	PS902 BBK 900-2RS KL900	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT		SCE
1			CARD READER BY OTHERS		

DOOR ALARM BY ACCESS CONTROL PROVIDER.
OPERATIONAL DESCRIPTION: DOORS NORMALLY CLOSED AND LOCKED. AUTHORIZED ACCESS BY VALID CREDENTIAL READ, WHICH SHUNTS DOOR POSITION SWITCHES AND UNLOCKS OUTSIDE LEVER. AUTHORIZED EGRESS VIA VALID CREDENTIAL WHICH BYPASSES ALARM. FREE EGRESS ALLOWED AT ALL TIMES.

HARDWARE GROUP NO. 27

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD EPT	628	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	STOREROOM LOCK	ND80BDCEU RHO RX CON 12V/24V DC	626	SCH
1	EA	SFIC CORE	80-033	626	SCH
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	BLK	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	GASKETING	429AA-S	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	DOOR CONTACT	679-05HM	BLK	SCE
1	EA	POWER SUPPLY	PS902 BBK 900-2RS FA900 KL900 120/240 VAC	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT		SCE
1			CARD READER BY OTHERS		

ALARM BY ACCESS CONTROL PROVIDER.

OPERATIONAL DESCRIPTION: DOOR NORMALLY CLOSED AND LOCKED. AUTHORIZED ACCESS BY VALID CREDENTIAL READ, WHICH SHUNTS DOOR POSITION SWITCH AND UNLOCKS OUTSIDE LEVER. AUTHORIZED EGRESS BY VALID CREDENTIAL READ, WHICH SHUNTS DOOR POSITION SWITCH AND ALARM. EGRESS WITHOUT VALID CREDENTIAL WILL SOUND ALARM. FREE EGRESS ALLOWED AT ALL TIMES.

HARDWARE GROUP NO. 28

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10 CON	689	VON
2	EA	RX PUSHPAD	672 RD 12/24 VDC	628	SCE
1	EA	MAGNETIC LOCK	M492P ATS/LED-2	628	SCE
2	EA	90 DEG OFFSET PULL	8190EZHD 10" O	630-316	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	MEETING STILE	8879AA	AA	ZER
2	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	POWER SUPPLY	PS902 BBK FA900 KL900	LGR	SCE
1			CARD READER BY OTHERS		
1			PROVIDE FACTORY POINT TO POINT WIRING DIAGRAMS		

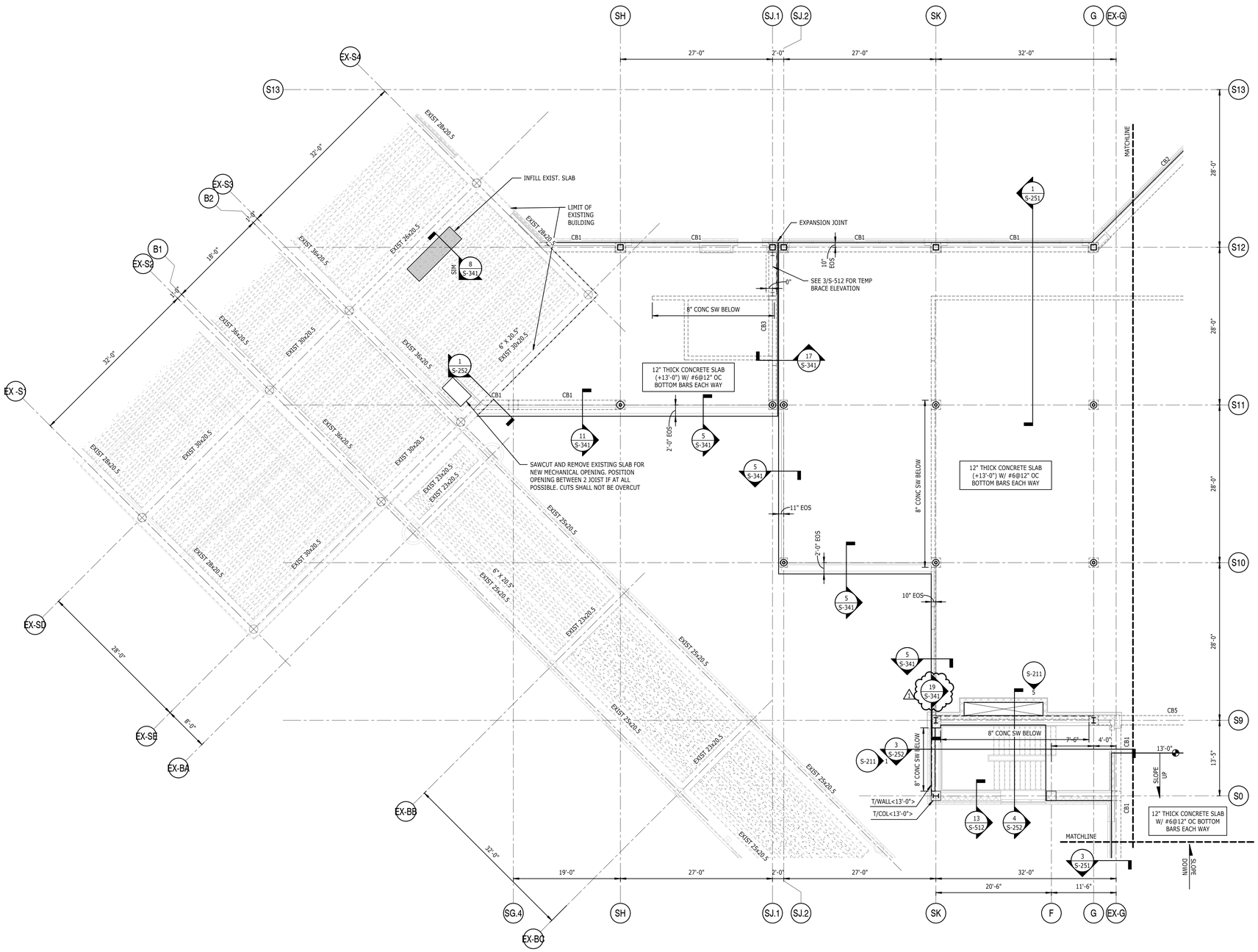
OPERATIONAL DESCRIPTION: DOORS NORMALLY CLOSED AND LOCKED MAGNETICALLY. AUTHORIZED ACCESS BY VALID CREDENTIAL, WHICH UNLOCKS MAGNETIC LOCKS, ALLOWING DOORS TO BE PULLED OPEN. FREE EGRESS ALLOWED AT ALL TIMES BY TOUCH SENSE BAR, WHICH RELEASES MAGNETIC LOCKS, ALLOWING DOORS TO BE PUSHED OPEN.

END OF SECTION 087100

Door Number	Hdw. Set #
108X	02
108Y	03
108Z	13
A1101X	18
A1102X	23
A1104X	08
A1104XX	08
A1104Y	08
A1104Z	08
A1105X	23
A1105XX	20
A1105Y	23
A1105Z	13
A1106X	27
A1106Y	24
A1107X	20
A1107Y	24
A1108X	16
A1109X	20
A1110X	19
A1110Y	19
A1111X	17
A1111XX	13
A1111Y	08
A1111Z	13
A1112X	20
A1113X	23
A1113Y	14
A1117X	26
A1120X	21
A1120XX	21
A1120Y	21
A1120YY	01
A1120Z	21
A1130X	13
A1132X	13
A1132Y	17
A1132Z	01
A1134X	08
A1135X	10
A1202X	25
A1203X	25
A1207X	24
A1208X	24
A1210X	14
A1224X	11
A1225X	11
A1226X	13

Door Number	Hdw. Set #
A1233X	25
A1234X	25
A2101Y	01
A2101Z	17
A2102X	08
A2102Y	01
A2102Z	01
A2132X	28
A2132Y	28
A2133X	04
A2133Y	05
A2136X	11
A2137X	11
A2138X	07
A2139X	07
A2140X	06
A2141X	06
A2142X	06
A2143X	06
A2144X	09
A2144XX	01
A2144XXX	01
A2144Y	09
A2144YY	01
A2144Z	09
A2144ZZ	01
A2203Y	25
A2204X	13
A2231X	22
A2232X	04
A2233X	20
A2234X	01
A2234Y	01
A2238X	22
A2252X	15
A2255X	11
A2263X	13
A2264X	15
A2272X	16
A2273X	12
A2275X	06
A2276X	11
A2277X	15
A2307X	13
A2505X	13
A2506X	20
A2506Y	20
A2554X	11

END OF DOOR INDEX



1 S1-121 BOARDING LEVEL FRAMING PLAN SCHEDULE 1 ZONE 1

1/8" = 1'-0"

NOTES:

1. FOR GENERAL NOTES AND ABBREVIATIONS, SEE S-001.
2. SEE PLAN FOR FINISHED FLOOR ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
3. FOR TYPICAL SLAB CONSTRUCTION DETAILS, SEE S-320 SERIES OF DRAWINGS.
4. FOR STEEL COLUMN SCHEDULE, SEE 1/S-501.
5. FOR CONCRETE COLUMN SCHEDULE, SEE 1/S-323.
6. "CONC SW" INDICATES CONCRETE SHEARWALL, SEE S-321 FOR SCHEDULE.
7. "CB#" INDICATES CONCRETE BEAM TYPE, SEE 12/S-321.
8. "51" INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 3 1/4" LIGHT WEIGHT CONCRETE ON 2"-20GA COMPOSITE STEEL DECK. TOTAL THICKNESS = 5 1/4". SEE TYPICAL SLAB CONSTRUCTION DETAILS ON S-511.
9. "A=#K" INDICATES FACTORED AXIAL FORCE IN COLLECTOR BEAM TO BE USED IN CONNECTION DESIGN.
10. "T/WALL" INDICATES TOP OF WALL ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
11. "T/COL" INDICATES TOP OF COLUMN ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
12. "◇" INDICATES TOP OF SLAB ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
13. B/BEAM = BOTTOM OF BEAM ELEVATION ABOVE REFERENCE FINISH FLOOR ELEVATION.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

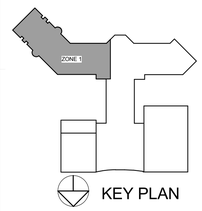
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

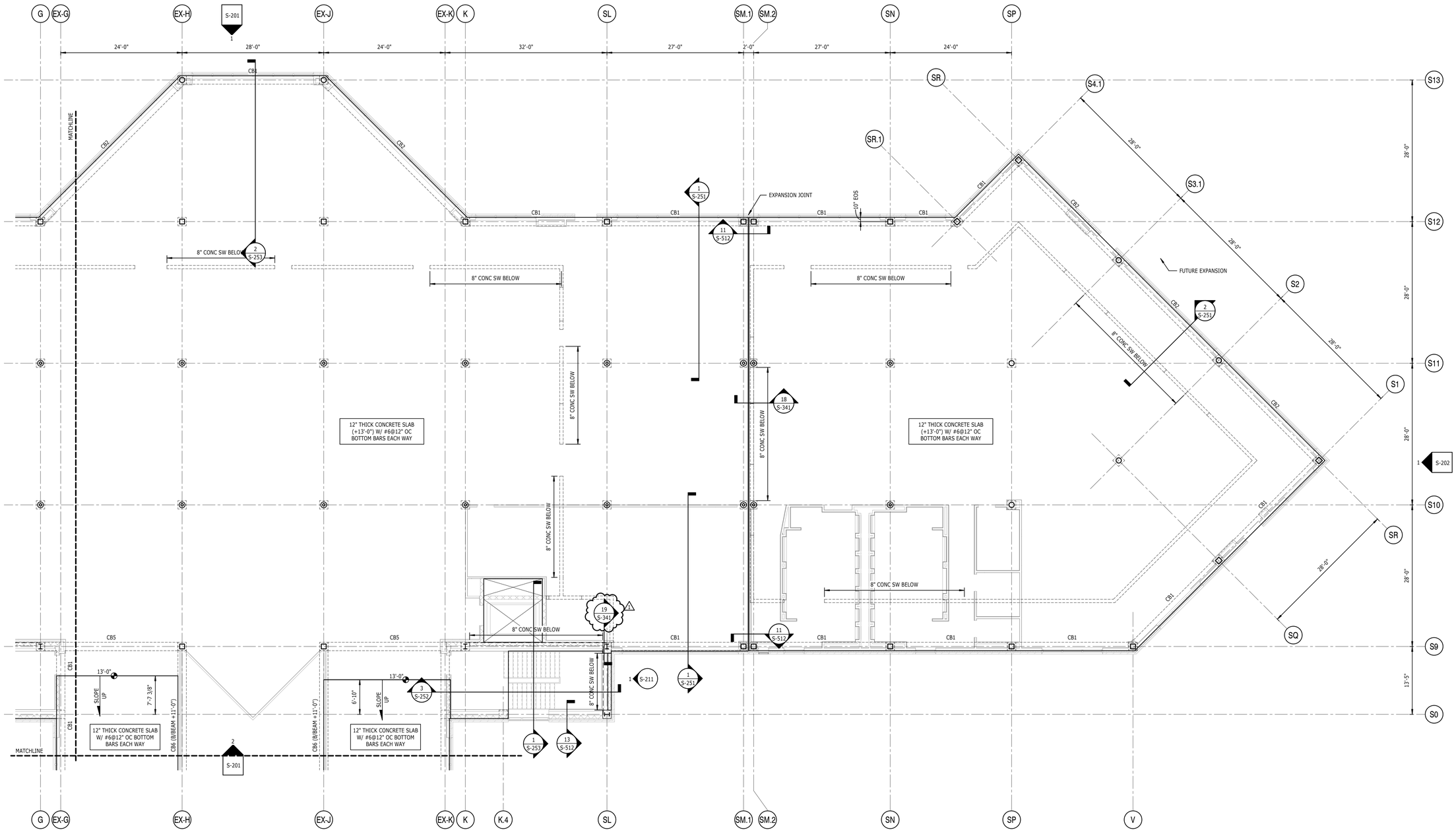
1	7/12/19	AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

PARTIAL BOARDING LEVEL FRAMING PLAN SCHEDULE 1 ZONE 1

SHEET NUMBER

S1-121



1 S1-122 BOARDING LEVEL FRAMING PLAN SCHEDULE 1 ZONE 2

1/8" = 1'-0"

NOTES:

1. FOR GENERAL NOTES AND ABBREVIATIONS, SEE S-001.
2. SEE PLAN FOR FINISHED FLOOR ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
3. FOR TYPICAL SLAB CONSTRUCTION DETAILS, SEE S-320 SERIES OF DRAWINGS.
4. FOR STEEL COLUMN SCHEDULE, SEE 1/S-501.
5. FOR CONCRETE COLUMN SCHEDULE, SEE 1/S-323.
6. "CONC SW" INDICATES CONCRETE SHEARWALL, SEE S-321 FOR SCHEDULE.
7. "CB#" INDICATES CONCRETE BEAM TYPE, SEE 12/S-321.
8. 51 INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 3 1/4" LIGHT WEIGHT CONCRETE ON 2"-20GA COMPOSITE STEEL DECK. TOTAL THICKNESS = 5 1/4". SEE TYPICAL SLAB CONSTRUCTION DETAILS ON S-511.
9. "A=#K" INDICATES FACTORED AXIAL FORCE IN COLLECTOR BEAM TO BE USED IN CONNECTION DESIGN.
10. "T/WALL" INDICATES TOP OF WALL ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
11. "T/COL" INDICATES TOP OF COLUMN ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
12. "T/◆" INDICATES TOP OF SLAB ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
13. B/BEAM = BOTTOM OF BEAM ELEVATION ABOVE REFERENCE FINISH FLOOR ELEVATION.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

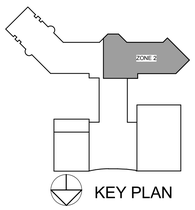
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

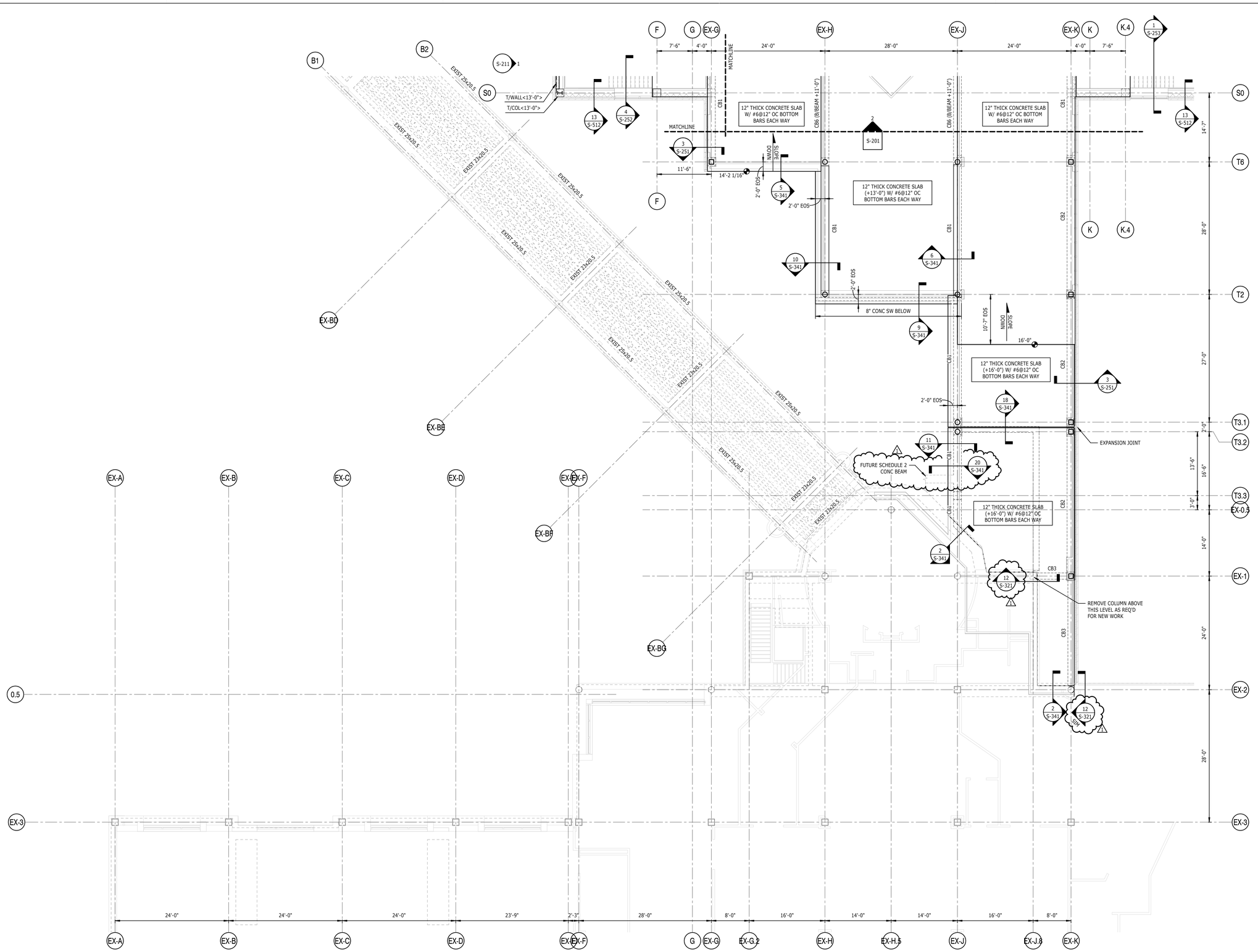
1	7/12/19	AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

PARTIAL BOARDING LEVEL FRAMING PLAN SCHEDULE 1 ZONE 2

SHEET NUMBER

S1-122



1 S1-123 BOARDING LEVEL FRAMING PLAN SCHEDULE 1 ZONE 3

1/8" = 1'-0"

NOTES:

1. FOR GENERAL NOTES AND ABBREVIATIONS, SEE S-001.
2. SEE PLAN FOR FINISHED FLOOR ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
3. FOR TYPICAL SLAB CONSTRUCTION DETAILS, SEE S-320 SERIES OF DRAWINGS.
4. FOR STEEL COLUMN SCHEDULE, SEE 1/S-501.
5. FOR CONCRETE COLUMN SCHEDULE, SEE 1/S-323.
6. "CONC SW" INDICATES CONCRETE SHEARWALL, SEE S-321 FOR SCHEDULE.
7. "CB#" INDICATES CONCRETE BEAM TYPE, SEE 12/S-321.
8. 51 INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 3 1/4" LIGHT WEIGHT CONCRETE ON 2"-20GA COMPOSITE STEEL DECK. TOTAL THICKNESS = 5 1/4". SEE TYPICAL SLAB CONSTRUCTION DETAILS ON S-511.
9. "A=#K" INDICATES FACTORED AXIAL FORCE IN COLLECTOR BEAM TO BE USED IN CONNECTION DESIGN.
10. "T/WALL" INDICATES TOP OF WALL ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
11. "T/COL" INDICATES TOP OF COLUMN ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
12. "◆" INDICATES TOP OF SLAB ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
13. B/BEAM = BOTTOM OF BEAM ELEVATION ABOVE REFERENCE FINISH FLOOR ELEVATION.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

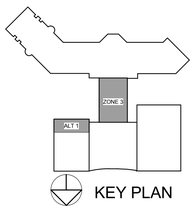
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

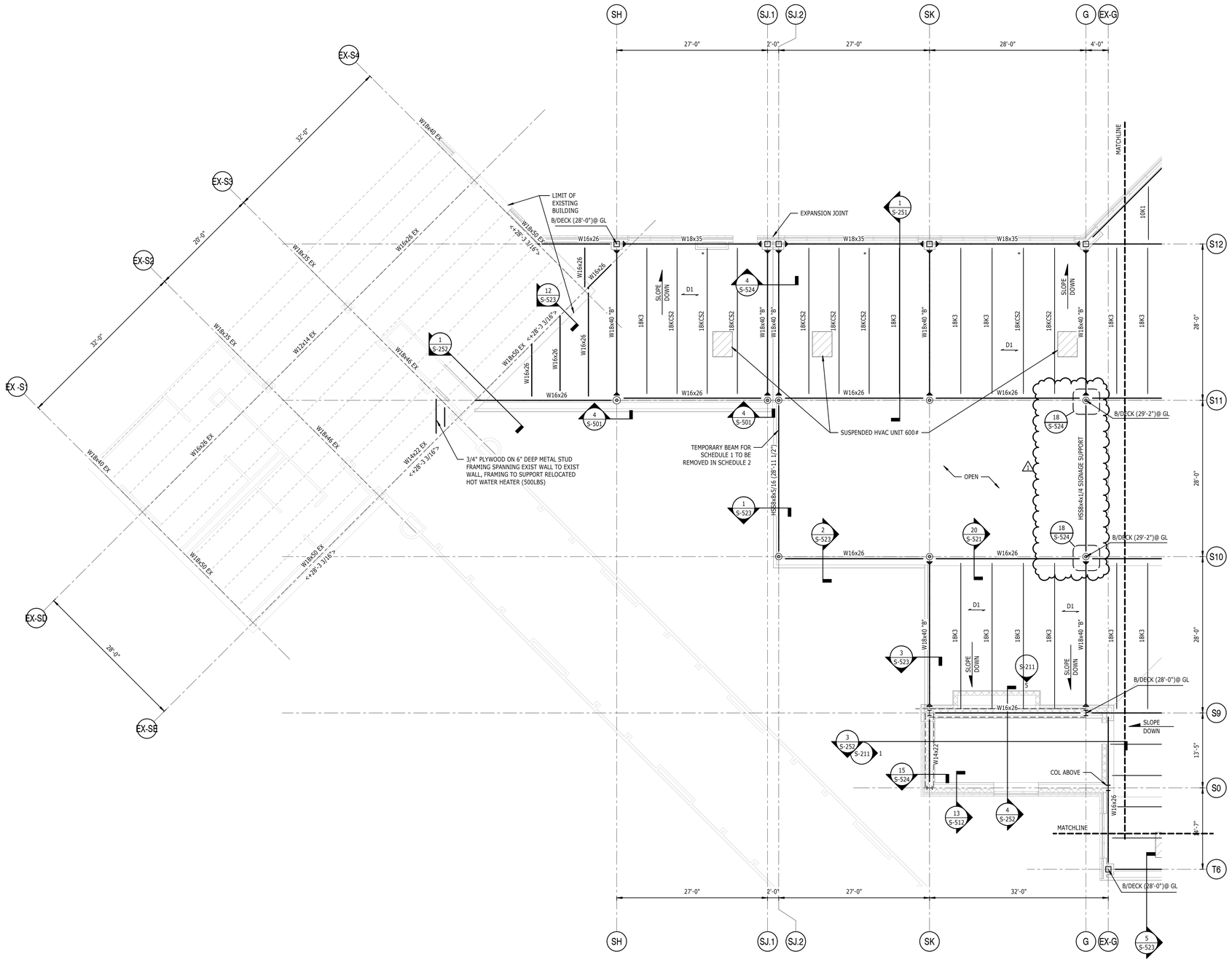
1 7/12/19 AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

PARTIAL BOARDING LEVEL FRAMING PLAN SCHEDULE 1 ZONE 3

SHEET NUMBER

S1-123



1 S1-131 ROOF FRAMING PLAN SCHEDULE 1 ZONE 1

1/8" = 1'-0"

NOTES:

1. FOR GENERAL NOTES AND ABBREVIATIONS, SEE S-001.
2. (No) INDICATES TOP OF STEEL ELEVATION ABOVE REFERENCED FINISH FLOOR ELEVATION.
3. _D1_ INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 1 1/2"18GA METAL DECK. SEE 1/S-521 FOR TYPICAL ROOF CONSTRUCTION DETAIL.
4. ▶— INDICATES MOMENT CONNECTION, SEE 19/S-511 FOR SCHEDULE.
5. SEE ELEVATIONS ON PLAN FOR VERTICAL FRAME LOCATIONS AND S-211 FOR ELEVATIONS AND DETAILS.
6. FOR TYPICAL ROOF FRAMING DETAILS, SEE S-521.
7. FOR STEEL COLUMN SCHEDULE, SEE 1/S-501.
8. "B" INDICATES BOTTOM FLANGE BEAM BRACING REQUIRED.
9. "*" INDICATES BOTTOM CHORD EXTENSION REQUIRED.
10. "A=#K" INDICATES FACTORED AXIAL FORCE IN COLLECTOR BEAM TO BE USED IN CONNECTION DESIGN.
11. "B/DECK (+#'-##")" INDICATES BOTTOM OF DECK ELEVATION FROM REFERENCED FINISH FLOOR ELEVATION.
12. "TRUSS T#" INDICATES TRUSS TYPE, SEE S200 SERIES FOR ELEVATIONS.
13. ALL EXPOSED STRUCTURAL STEEL (COLUMNS, ROOF TRUSSES, TRUSS BEARING & ETC) SHALL BE CONSIDERED AESS.
14. _D2_ INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 1 1/2"18GA METAL DECK. SEE 1/S-521 FOR TYPICAL ROOF CONSTRUCTION DETAIL.
15. "#K-ft" DENOTES FACTORED MOMENT TO BE USED IN DESIGN OF MOMENT CONNECTIONS.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

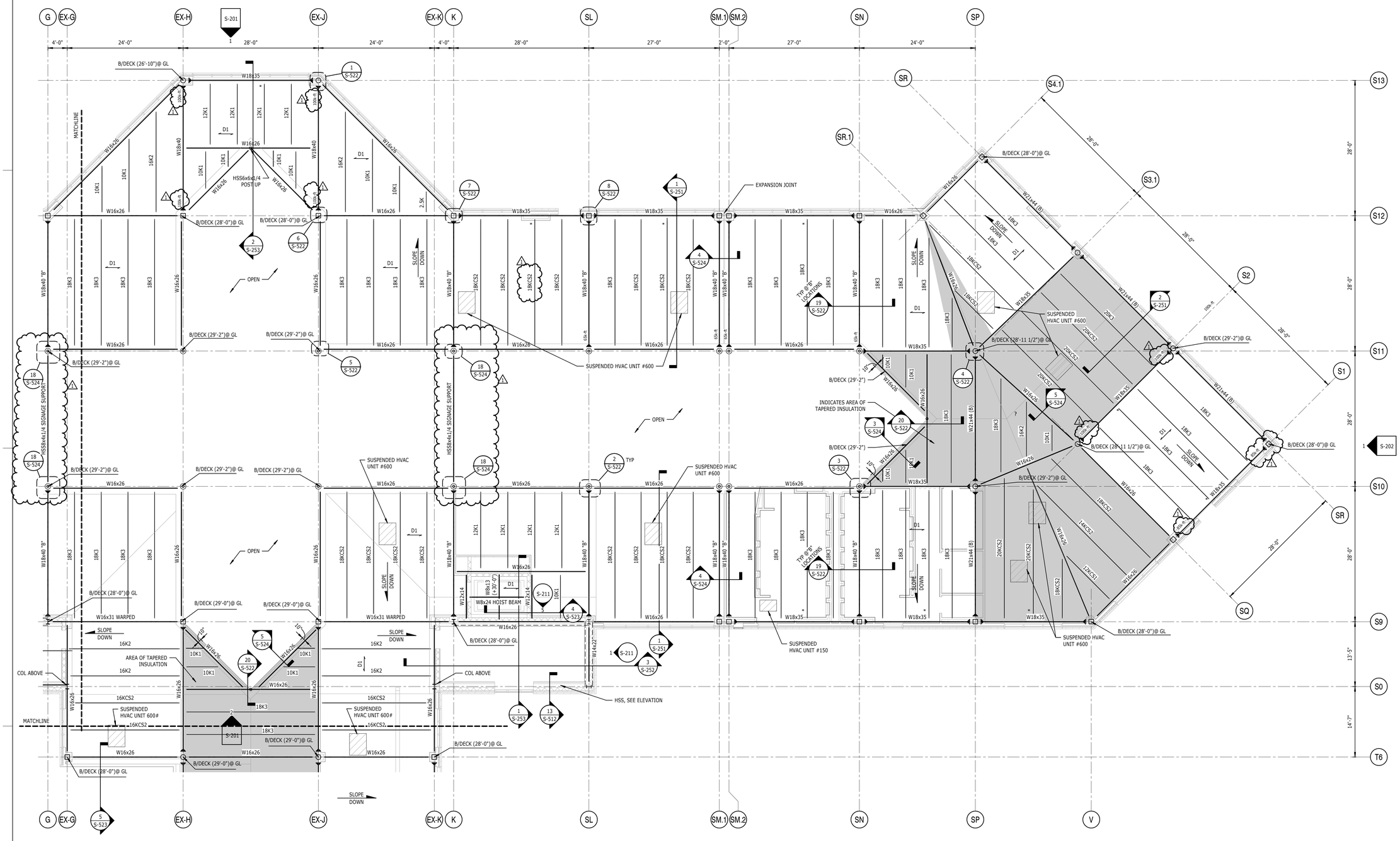
1	7/12/19	AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

PARTIAL ROOF FRAMING PLAN SCHEDULE 1 ZONE 1

SHEET NUMBER

S1-131



1 ROOF FRAMING PLAN SCHEDULE 1 ZONE 2

S1-132

1/8" = 1'-0"

NOTES:

1. FOR GENERAL NOTES AND ABBREVIATIONS, SEE S-001.
2. (No) INDICATES TOP OF STEEL ELEVATION ABOVE REFERENCED FINISH FLOOR ELEVATION.
3. D1 INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 1 1/2"18GA METAL DECK. SEE 1/S-521 FOR TYPICAL ROOF CONSTRUCTION DETAIL.
4. ▶—— INDICATES MOMENT CONNECTION, SEE 19/S-511 FOR SCHEDULE.
5. SEE ELEVATIONS ON PLAN FOR VERTICAL FRAME LOCATIONS AND S-211 FOR ELEVATIONS AND DETAILS.
6. FOR TYPICAL ROOF FRAMING DETAILS, SEE S-521.
7. FOR STEEL COLUMN SCHEDULE, SEE 1/S-501.
8. "B" INDICATES BOTTOM FLANGE BEAM BRACING REQUIRED.
9. "*" INDICATES BOTTOM CHORD EXTENSION REQUIRED.
10. "A=#K" INDICATES FACTORED AXIAL FORCE IN COLLECTOR BEAM TO BE USED IN CONNECTION DESIGN.
11. "B/DECK (+#'-#")" INDICATES BOTTOM OF DECK ELEVATION FROM REFERENCED FINISH FLOOR ELEVATION.
12. "TRUSS T#" INDICATES TRUSS TYPE, SEE S200 SERIES FOR ELEVATIONS.
13. ALL EXPOSED STRUCTURAL STEEL (COLUMNS, ROOF TRUSSES, TRUSS BEARING & ETC) SHALL BE CONSIDERED AESS.
14. D2 INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 1 1/2"18GA METAL DECK. SEE 1/S-521 FOR TYPICAL ROOF CONSTRUCTION DETAIL.
15. "#K-ft" DENOTES FACTORED MOMENT TO BE USED IN DESIGN OF MOMENT CONNECTIONS.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

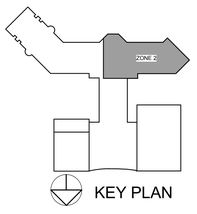
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

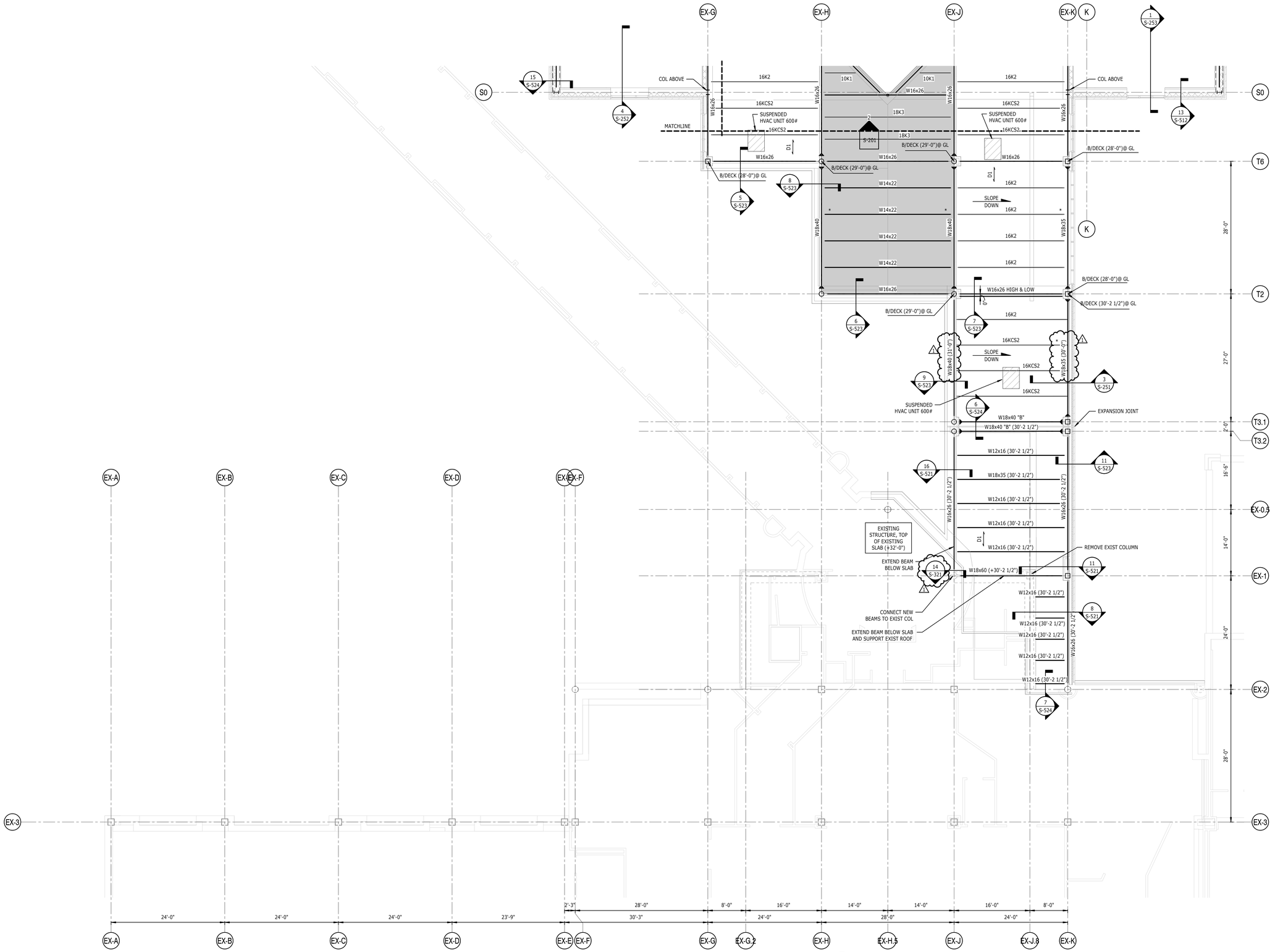
1 7/12/19 AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

PARTIAL ROOF FRAMING PLAN SCHEDULE 1 ZONE 2

SHEET NUMBER

S1-132



1 S1-133 ROOF FRAMING PLAN SCHEDULE 1 ZONE 3

1/8" = 1'-0"

NOTES:
1. FOR GENERAL NOTES AND ABBREVIATIONS, SEE S-001.
2. (No) INDICATES TOP OF STEEL ELEVATION ABOVE REFERENCED FINISH FLOOR ELEVATION.
3. _D1_ INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 1 1/2"18GA METAL DECK. SEE 1/S-521 FOR TYPICAL ROOF CONSTRUCTION DETAIL.
4. ▶— INDICATES MOMENT CONNECTION, SEE 19/S-511 FOR SCHEDULE.
5. SEE ELEVATIONS ON PLAN FOR VERTICAL FRAME LOCATIONS AND S-211 FOR ELEVATIONS AND DETAILS.
6. FOR TYPICAL ROOF FRAMING DETAILS, SEE S-521.
7. FOR STEEL COLUMN SCHEDULE, SEE 1/S-501.
8. "B" INDICATES BOTTOM FLANGE BEAM BRACING REQUIRED.
9. "*" INDICATES BOTTOM CHORD EXTENSION REQUIRED.
10. "A=#K" INDICATES FACTORED AXIAL FORCE IN COLLECTOR BEAM TO BE USED IN CONNECTION DESIGN.
11. "B/DECK (+#'-#")" INDICATES BOTTOM OF DECK ELEVATION FROM REFERENCED FINISH FLOOR ELEVATION.
12. "TRUSS T#" INDICATES TRUSS TYPE, SEE S200 SERIES FOR ELEVATIONS.
13. ALL EXPOSED STRUCTURAL STEEL (COLUMNS, ROOF TRUSSES, TRUSS BEARING & ETC) SHALL BE CONSIDERED AESS.
14. _D2_ INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 1 1/2"18GA METAL DECK. SEE 1/S-521 FOR TYPICAL ROOF CONSTRUCTION DETAIL.
15. "##K-ft" DENOTES FACTORED MOMENT TO BE USED IN DESIGN OF MOMENT CONNECTIONS.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

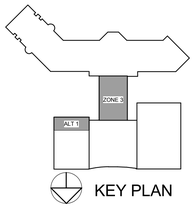
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

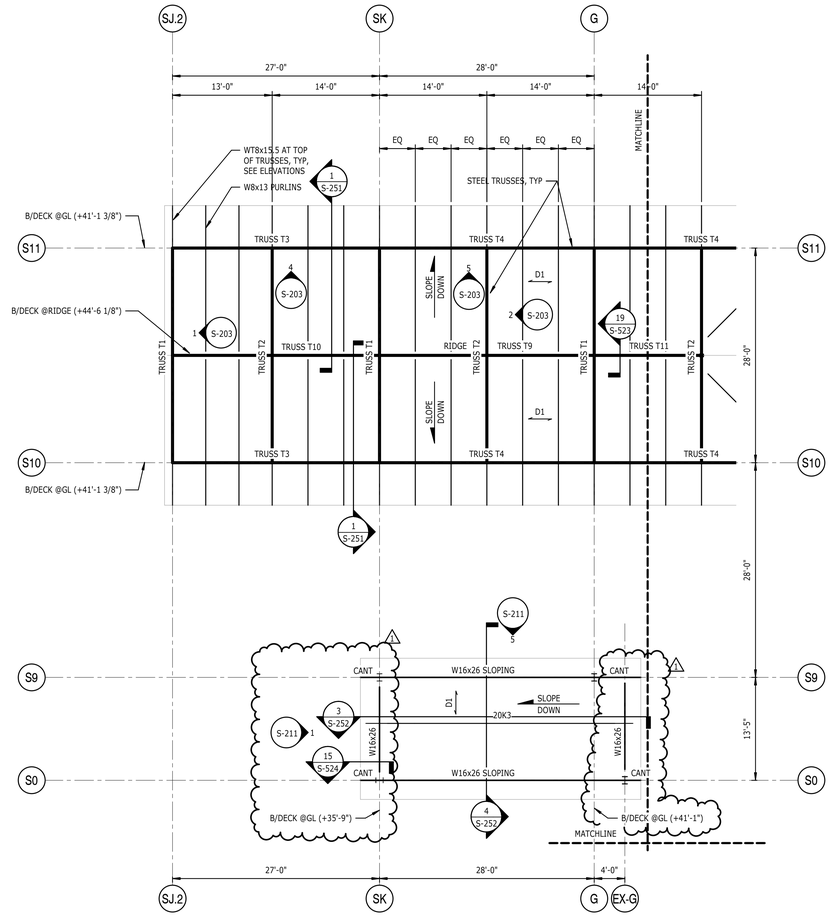
1 7/12/19 AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

PARTIAL ROOF FRAMING PLAN SCHEDULE 1 ZONE 3

SHEET NUMBER

S1-133



1 / S1-141 HIGH ROOF FRAMING PLAN SCHEDULE 1 ZONE 1

1/8" = 1'-0"

NOTES:
1. FOR GENERAL NOTES AND ABBREVIATIONS, SEE S-001.
2. (No) INDICATES TOP OF STEEL ELEVATION ABOVE REFERENCED FINISH FLOOR ELEVATION.
3. D1 INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 1 1/2"18GA METAL DECK. SEE 1/S-521 FOR TYPICAL ROOF CONSTRUCTION DETAIL.
4. ▶— INDICATES MOMENT CONNECTION, SEE 19/S-511 FOR SCHEDULE.
5. SEE ELEVATIONS ON PLAN FOR VERTICAL FRAME LOCATIONS AND S-211 FOR ELEVATIONS AND DETAILS.
6. FOR TYPICAL ROOF FRAMING DETAILS, SEE S-521.
7. FOR STEEL COLUMN SCHEDULE, SEE 1/S-501.
8. "B" INDICATES BOTTOM FLANGE BEAM BRACING REQUIRED.
9. "*" INDICATES BOTTOM CHORD EXTENSION REQUIRED.
10. "A=#K" INDICATES FACTORED AXIAL FORCE IN COLLECTOR BEAM TO BE USED IN CONNECTION DESIGN.
11. "B/DECK (+#'-##")" INDICATES BOTTOM OF DECK ELEVATION FROM REFERENCED FINISH FLOOR ELEVATION.
12. "TRUSS T#" INDICATES TRUSS TYPE, SEE S200 SERIES FOR ELEVATIONS.
13. ALL EXPOSED STRUCTURAL STEEL (COLUMNS, ROOF TRUSSES, TRUSS BEARING & ETC) SHALL BE CONSIDERED AESS.
14. D2 INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 1 1/2"18GA METAL DECK. SEE 1/S-521 FOR TYPICAL ROOF CONSTRUCTION DETAIL.
15. "-##k-ft" DENOTES FACTORED MOMENT TO BE USED IN DESIGN OF MOMENT CONNECTIONS.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

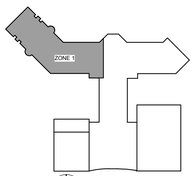
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

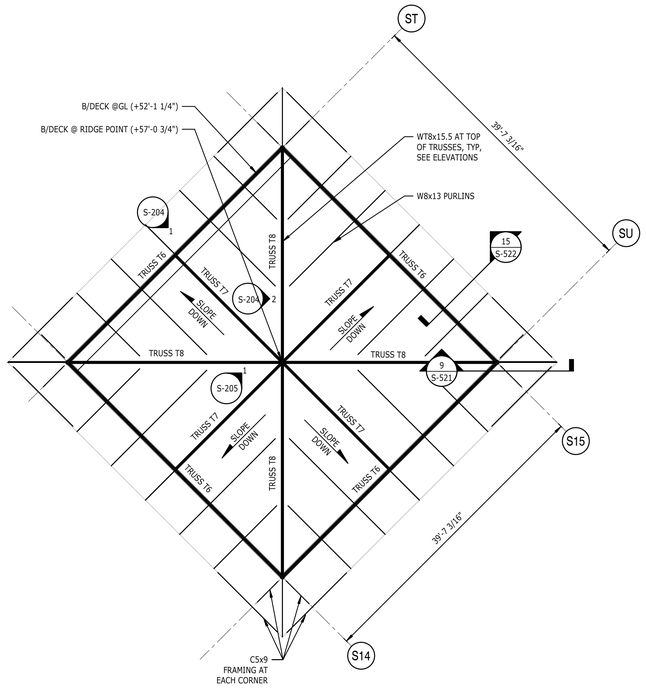
1	7/12/19	AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

PARTIAL HIGH ROOF FRAMING PLAN SCHEDULE 1 ZONE 1

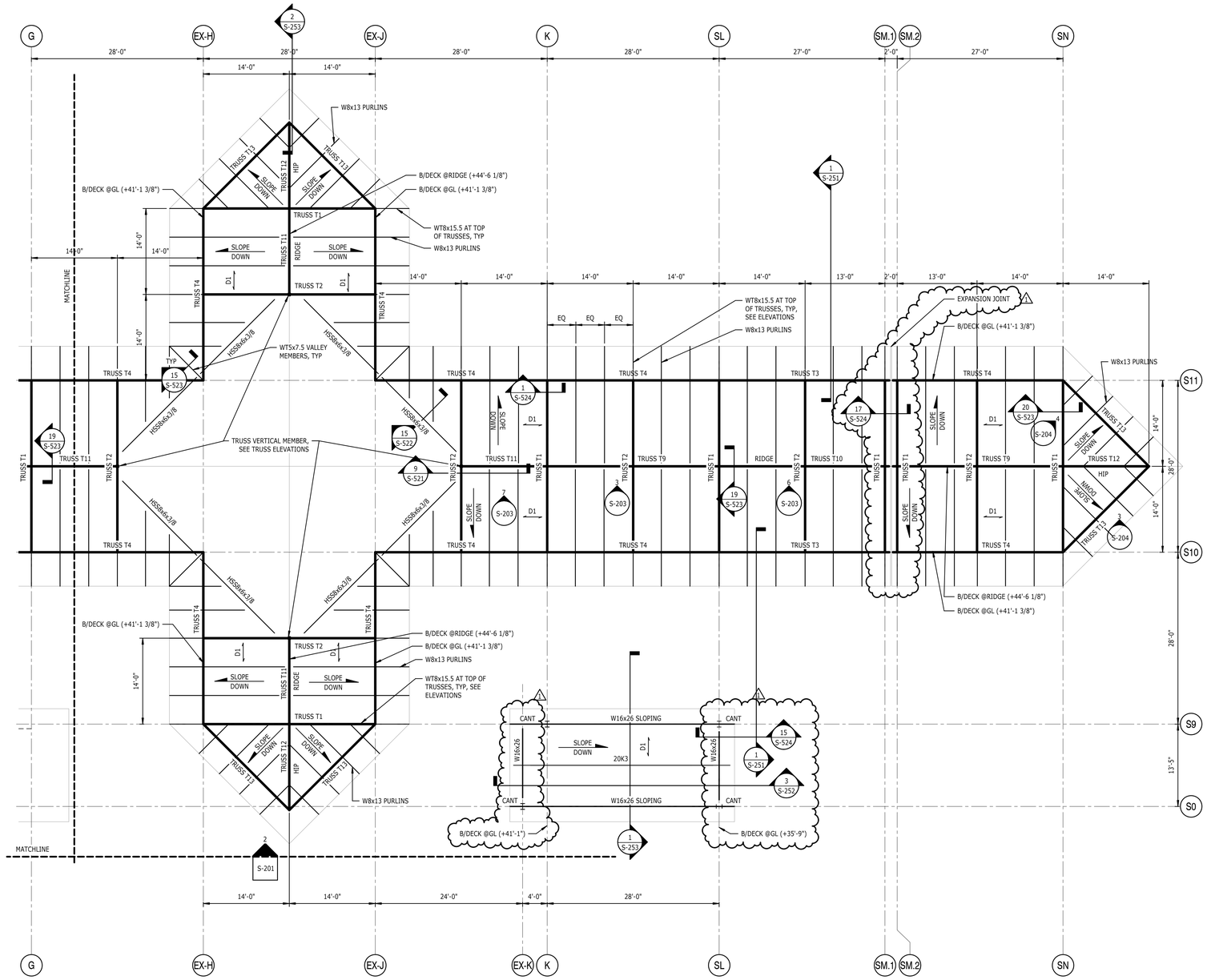
SHEET NUMBER

S1-141



2 S1-142 HIGH ROOF FRAMING PLAN SCHEDULE 1

1/8" = 1'-0"



1 S1-142 HIGH ROOF FRAMING PLAN SCHEDULE 1 ZONE 2

1/8" = 1'-0"

NOTES:

1. FOR GENERAL NOTES AND ABBREVIATIONS, SEE S-001.
2. (No) INDICATES TOP OF STEEL ELEVATION ABOVE REFERENCED FINISH FLOOR ELEVATION.
3. _D1_ INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 1 1/2"18GA METAL DECK. SEE 1/S-521 FOR TYPICAL ROOF CONSTRUCTION DETAIL.
4. ▶— INDICATES MOMENT CONNECTION, SEE 19/S-511 FOR SCHEDULE.
5. SEE ELEVATIONS ON PLAN FOR VERTICAL FRAME LOCATIONS AND S-211 FOR ELEVATIONS AND DETAILS.
6. FOR TYPICAL ROOF FRAMING DETAILS, SEE S-521.
7. FOR STEEL COLUMN SCHEDULE, SEE 1/S-501.
8. "B" INDICATES BOTTOM FLANGE BEAM BRACING REQUIRED.
9. "*" INDICATES BOTTOM CHORD EXTENSION REQUIRED.
10. "A=#K" INDICATES FACTORED AXIAL FORCE IN COLLECTOR BEAM TO BE USED IN CONNECTION DESIGN.
11. "B/DECK (+#'-#"1" INDICATES BOTTOM OF DECK ELEVATION FROM REFERENCED FINISH FLOOR ELEVATION.
12. "TRUSS T#" INDICATES TRUSS TYPE, SEE S200 SERIES FOR ELEVATIONS.
13. ALL EXPOSED STRUCTURAL STEEL (COLUMNS, ROOF TRUSSES, TRUSS BEARING & ETC) SHALL BE CONSIDERED AESS.
14. _D2_ INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 1 1/2"18GA METAL DECK. SEE 1/S-521 FOR TYPICAL ROOF CONSTRUCTION DETAIL.
15. "##K-ft" DENOTES FACTORED MOMENT TO BE USED IN DESIGN OF MOMENT CONNECTIONS.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

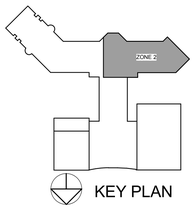
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM



COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

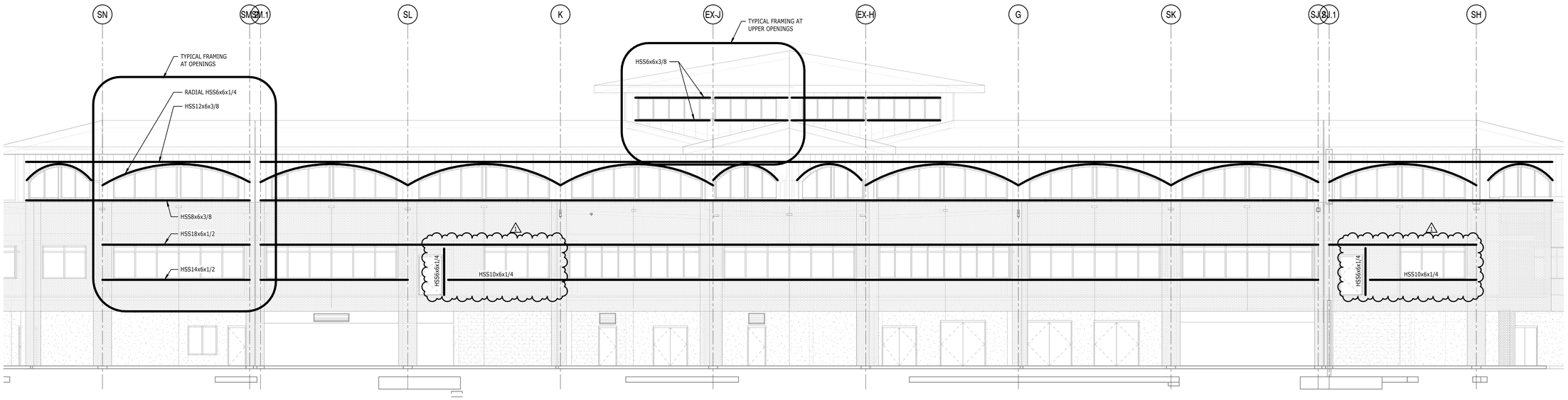
1 7/12/19 AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

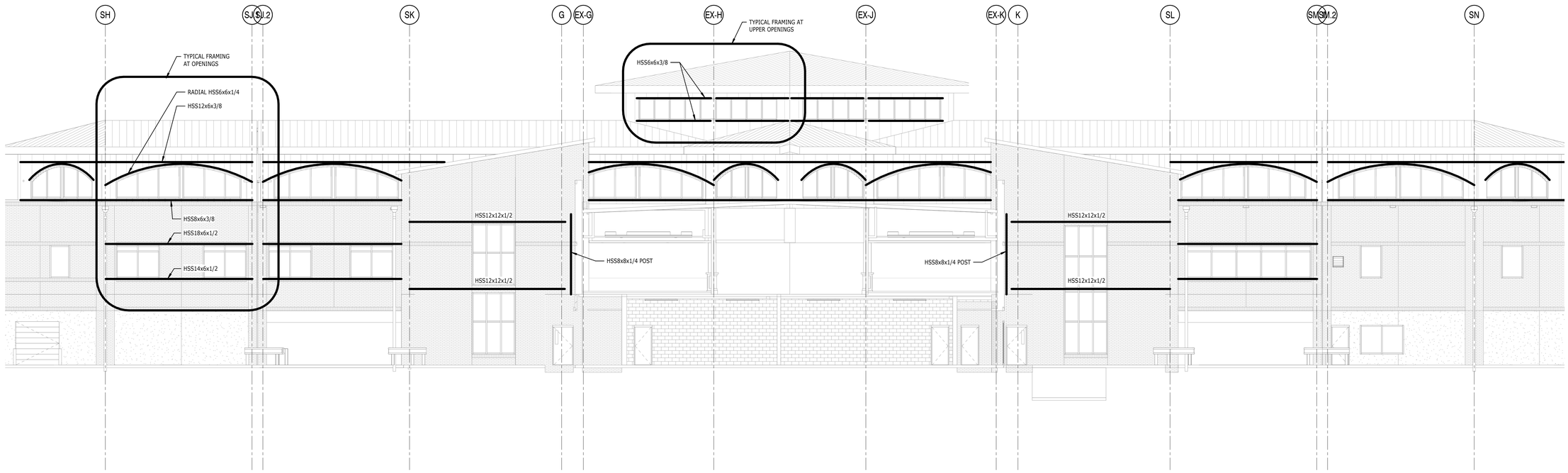
PARTIAL HIGH ROOF FRAMING PLAN SCHEDULE 1 ZONE 2

SHEET NUMBER

S1-142



1 S-201 SOUTH ELEVATION
1/8" = 1'-0"



2 S-201 NORTH ELEVATION
1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

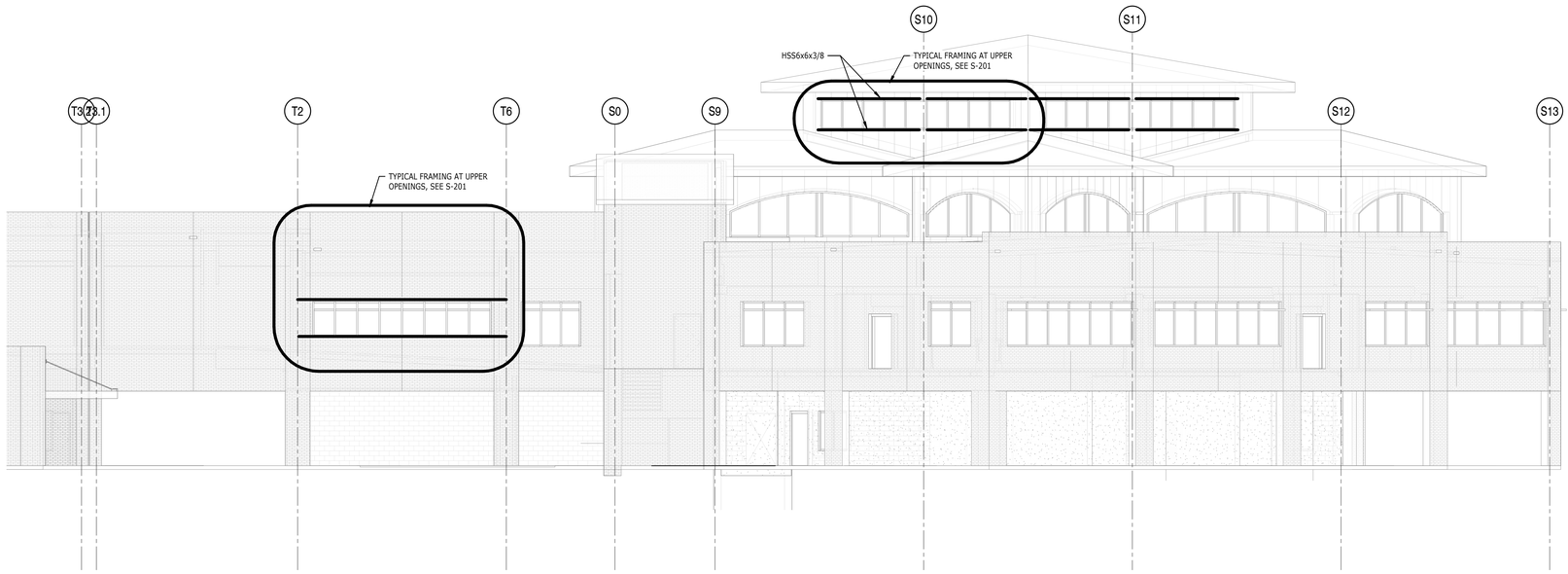
1 7/12/19 AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

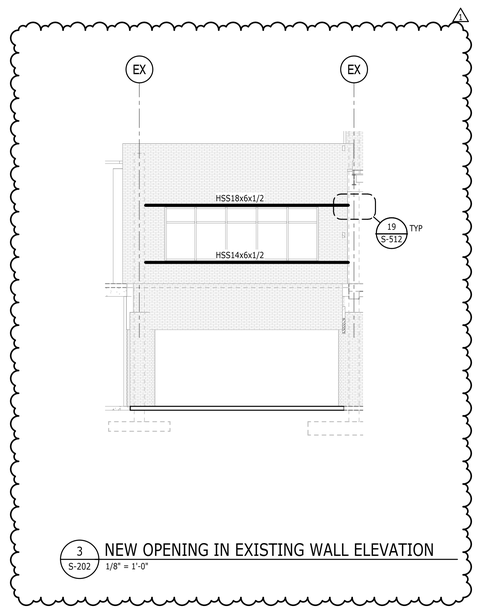
STRUCTURAL ELEVATIONS

SHEET NUMBER

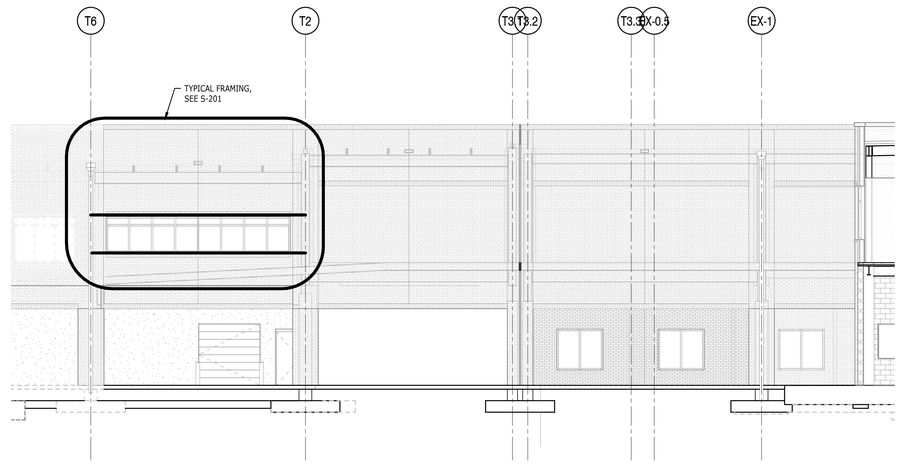
S-201



1 S-202 WEST ELEVATION
1/8" = 1'-0"



3 S-202 NEW OPENING IN EXISTING WALL ELEVATION
1/8" = 1'-0"



2 S-202 EAST ELEVATION SCHEDULE 2
1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

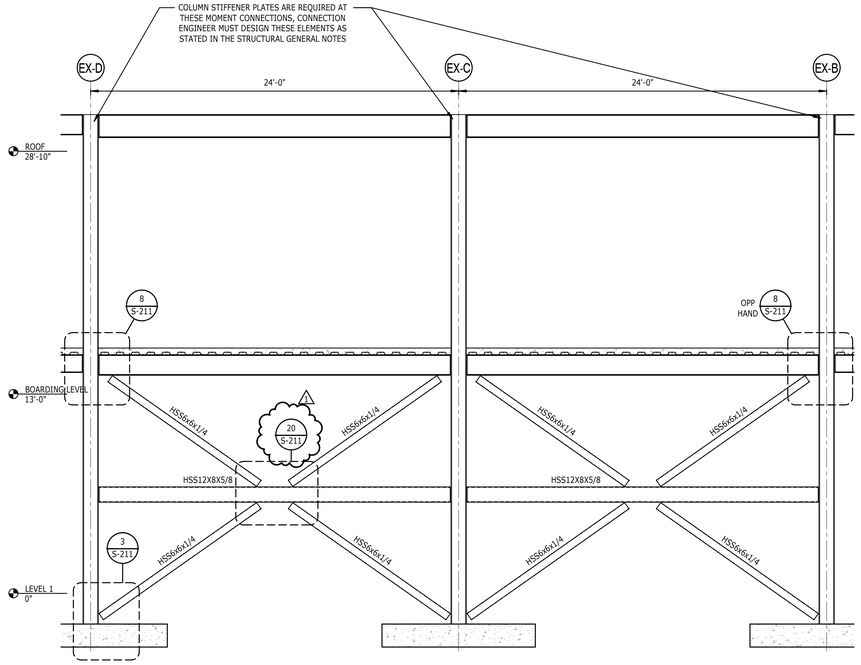
1 7/12/19 AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

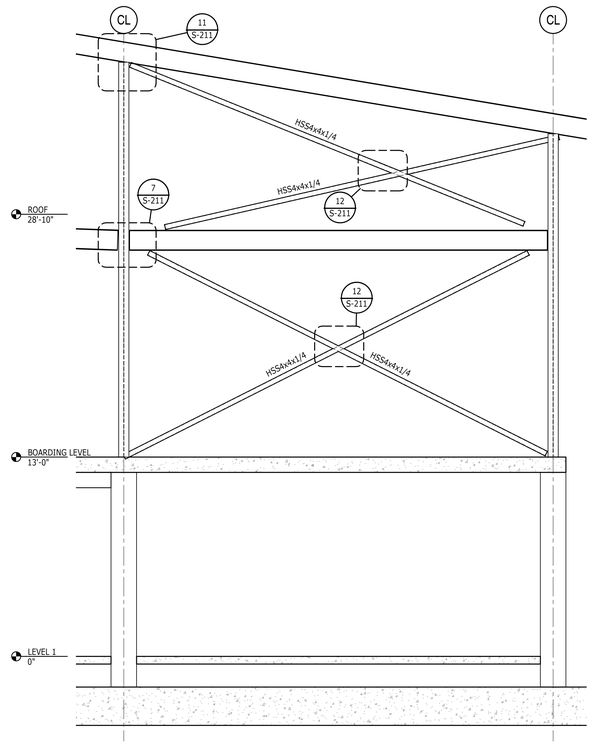
STRUCTURAL ELEVATIONS

SHEET NUMBER

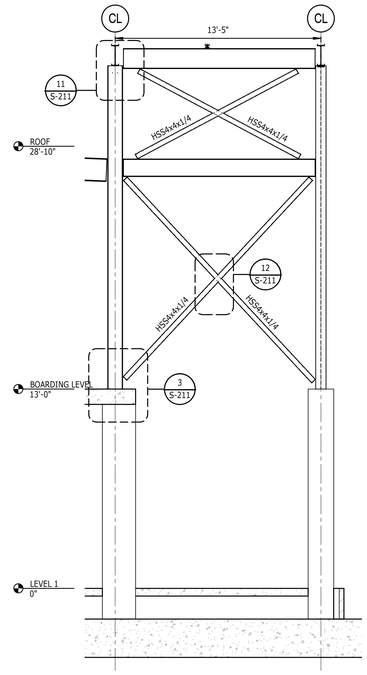
S-202



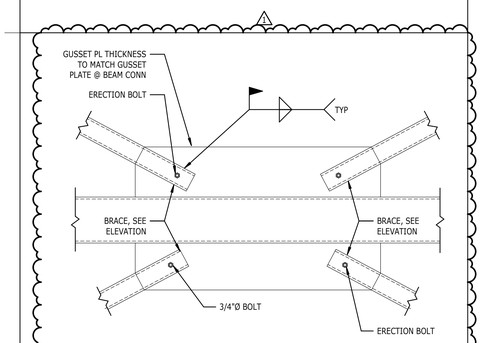
13 S-211 VF#3 ALONG GL 0.8
1/4" = 1'-0"



5 S-211 VF#2 ALONG GL-S9
1/4" = 1'-0"

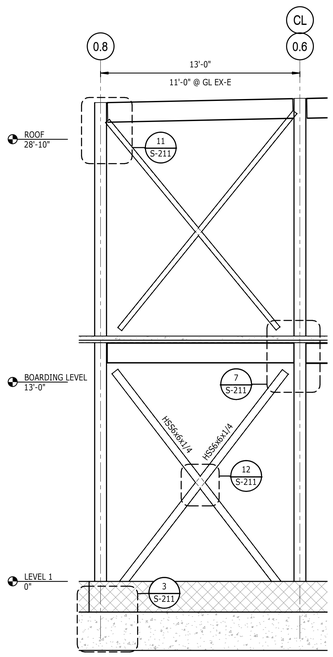


1 S-211 VF#1 ALONG GL-SK & GL-SL
1/4" = 1'-0"

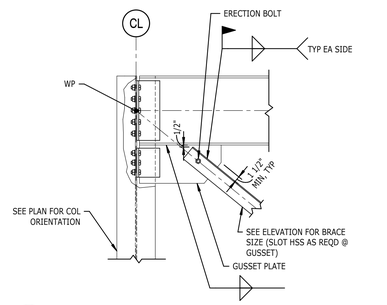


NOTES:
FABRICATOR SHALL DESIGN ALL BEAM TO COLUMN CONNECTIONS, GUSSET PLATES, AND WELDS WITHIN VERTICAL FRAME TO SUPPORT THE HORIZONTAL AND VERTICAL COMPONENTS OF THE BRACE FORCE PLUS THE BEAM REACTION SHOWN ON THE ELEVATION. ALLOWABLE STRESS INCREASES OR LOAD REDUCTIONS ARE NOT PERMITTED.

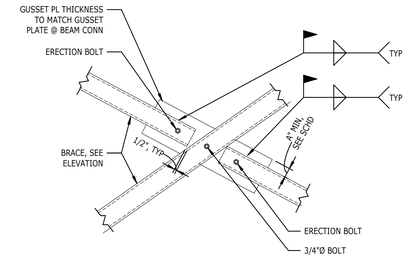
20 S-211 SECTION
TYPICAL BRACE INTERSECTION, DOUBLE ANGLE
NTS



15 S-211 VF#4 ALONG GL EX-A AND EX-E
1/4" = 1'-0"

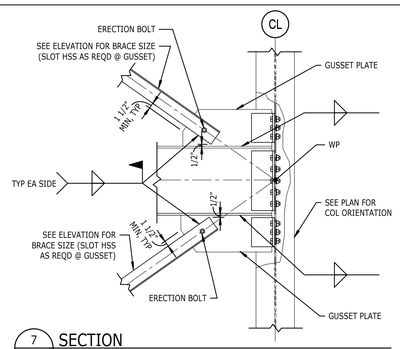


11 S-211 SECTION
TYPICAL BRACE CONNECTION AT BEAM
NTS
NOTES:
1. FABRICATOR SHALL DESIGN ALL BEAM TO COLUMN CONNECTIONS, GUSSET PLATES, AND WELDS WITHIN VERTICAL FRAME TO SUPPORT THE HORIZONTAL AND VERTICAL COMPONENTS OF THE BRACE FORCE PLUS THE BEAM REACTION SHOWN ON THE ELEVATION. ALLOWABLE STRESS INCREASES OR LOAD REDUCTIONS ARE NOT PERMITTED.

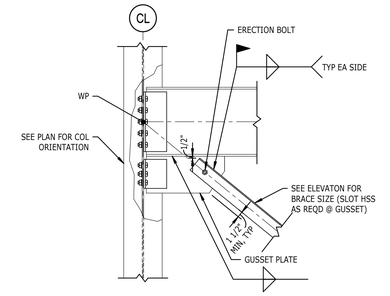


12 S-211 SECTION
TYPICAL BRACE INTERSECTION, DOUBLE ANGLE
NTS

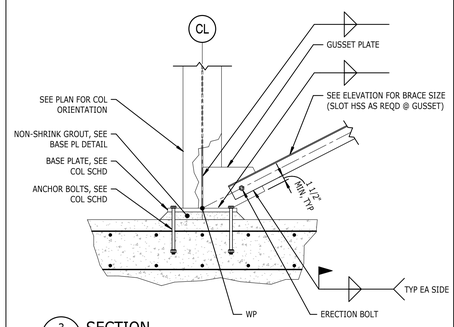
NOTES:
FABRICATOR SHALL DESIGN ALL BEAM TO COLUMN CONNECTIONS, GUSSET PLATES, AND WELDS WITHIN VERTICAL FRAME TO SUPPORT THE HORIZONTAL AND VERTICAL COMPONENTS OF THE BRACE FORCE PLUS THE BEAM REACTION SHOWN ON THE ELEVATION. ALLOWABLE STRESS INCREASES OR LOAD REDUCTIONS ARE NOT PERMITTED.



7 S-211 SECTION
TYPICAL BRACE CONNECTION AT BEAM
NTS
NOTES:
1. FABRICATOR SHALL DESIGN ALL BEAM TO COLUMN CONNECTIONS, GUSSET PLATES, AND WELDS WITHIN VERTICAL FRAME TO SUPPORT THE HORIZONTAL AND VERTICAL COMPONENTS OF THE BRACE FORCE PLUS THE BEAM REACTION SHOWN ON THE ELEVATION. ALLOWABLE STRESS INCREASES OR LOAD REDUCTIONS ARE NOT PERMITTED.



8 S-211 SECTION
TYPICAL BRACE CONNECTION AT BEAM
NTS
NOTES:
1. FABRICATOR SHALL DESIGN ALL BEAM TO COLUMN CONNECTIONS, GUSSET PLATES, AND WELDS WITHIN VERTICAL FRAME TO SUPPORT THE HORIZONTAL AND VERTICAL COMPONENTS OF THE BRACE FORCE PLUS THE BEAM REACTION SHOWN ON THE ELEVATION. ALLOWABLE STRESS INCREASES OR LOAD REDUCTIONS ARE NOT PERMITTED.



3 S-211 SECTION
TYPICAL BRACE CONNECTION AT SLAB
NTS
NOTES:
1. FABRICATOR SHALL DESIGN ALL BEAM TO COLUMN CONNECTIONS, GUSSET PLATES, AND WELDS WITHIN VERTICAL FRAME TO SUPPORT THE HORIZONTAL AND VERTICAL COMPONENTS OF THE BRACE FORCE PLUS THE BEAM REACTION SHOWN ON THE ELEVATION. ALLOWABLE STRESS INCREASES OR LOAD REDUCTIONS ARE NOT PERMITTED.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

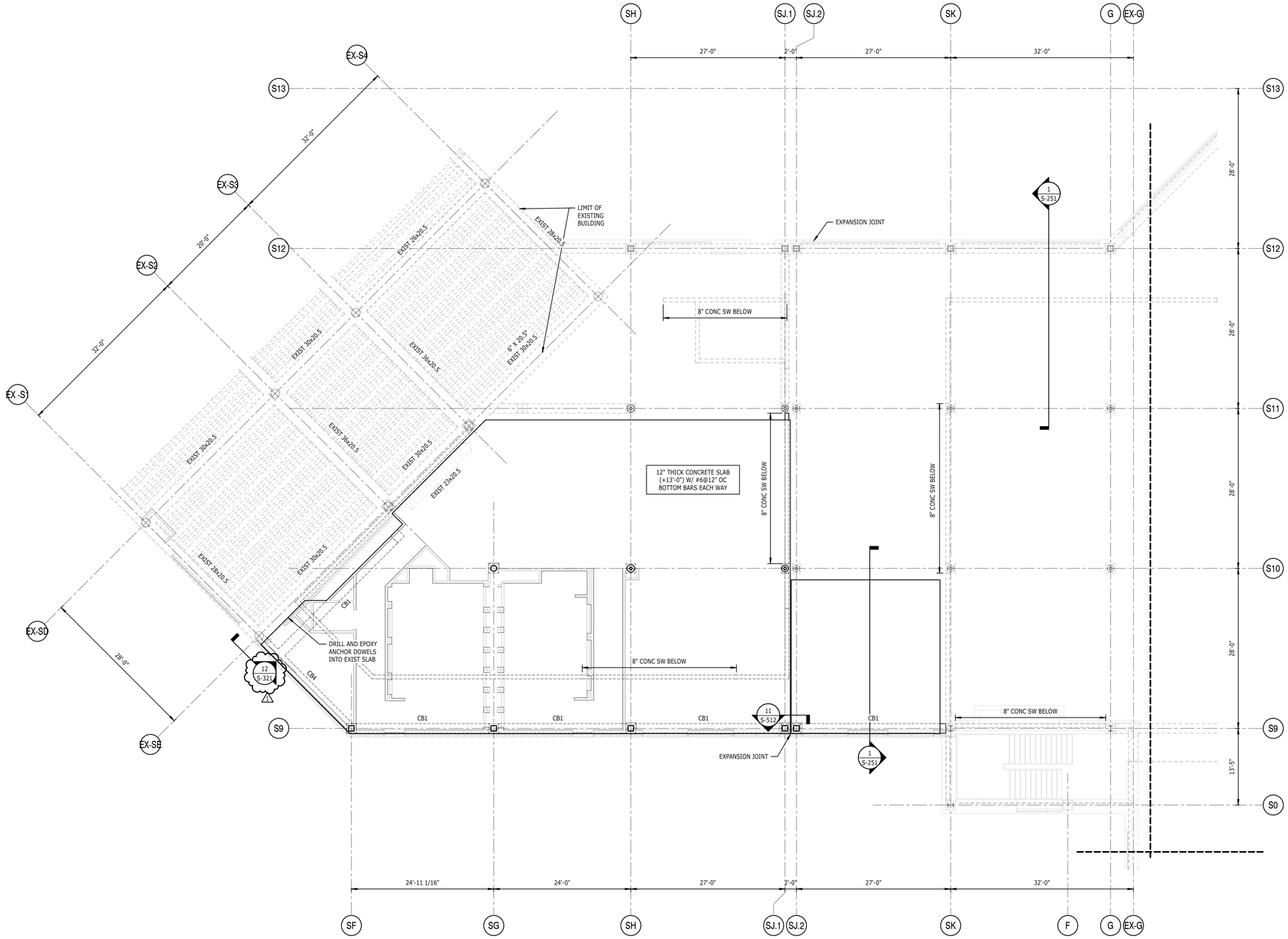
REVISIONS

1 7/12/19 AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

VERTICAL FRAME ELEVATIONS AND DETAILS

SHEET NUMBER
S-211



1 S2-121 BOARDING LEVEL SCHEDULE 2 ZONE 1

1/8" = 1'-0"

NOTES:

1. FOR GENERAL NOTES AND ABBREVIATIONS, SEE S-001.
2. SEE PLAN FOR FINISHED FLOOR ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
3. FOR TYPICAL SLAB CONSTRUCTION DETAILS, SEE S-320 SERIES OF DRAWINGS.
4. FOR STEEL COLUMN SCHEDULE, SEE 1/S-501.
5. FOR CONCRETE COLUMN SCHEDULE, SEE 1/S-323.
6. "CONC SW" INDICATES CONCRETE SHEARWALL, SEE S-321 FOR SCHEDULE.
7. "CB#" INDICATES CONCRETE BEAM TYPE, SEE 12/S-321.
8. S1 INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 3 1/4" LIGHT WEIGHT CONCRETE ON 2"-20GA COMPOSITE STEEL DECK. TOTAL THICKNESS = 5 1/4". SEE TYPICAL SLAB CONSTRUCTION DETAILS ON S-511.
9. "A=#K" INDICATES FACTORED AXIAL FORCE IN COLLECTOR BEAM TO BE USED IN CONNECTION DESIGN.
10. "T/WALL" INDICATES TOP OF WALL ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
11. "T/COL" INDICATES TOP OF COLUMN ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
12. "◆" INDICATES TOP OF SLAB ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
13. B/BEAM = BOTTOM OF BEAM ELEVATION ABOVE REFERENCE FINISH FLOOR ELEVATION.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER

07/12/2019

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

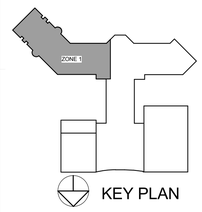
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

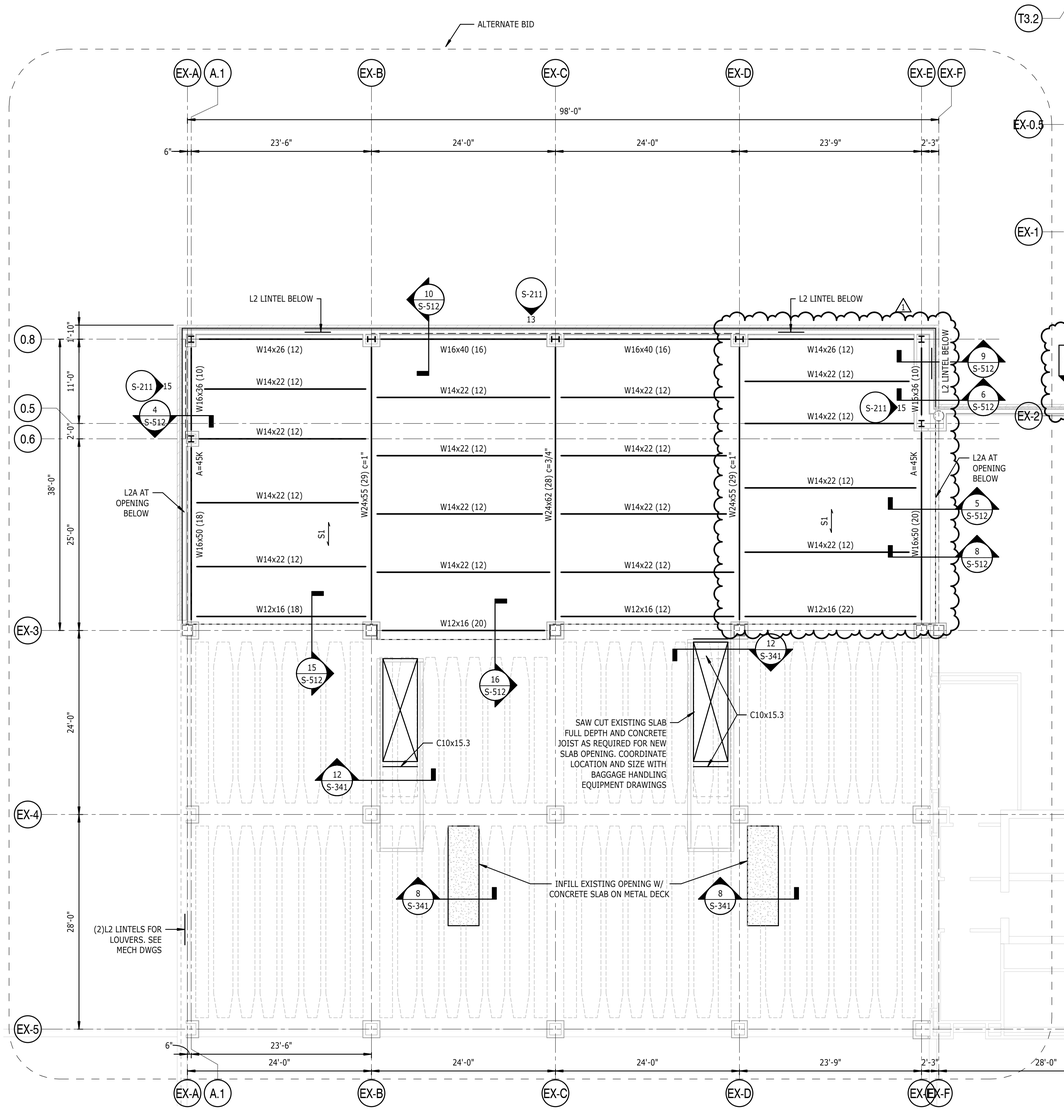
1 7/12/19 AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

PARTIAL BOARDING LEVEL SCHEDULE 2 ZONE 1

SHEET NUMBER

S2-121



1 S2-123 BOARDING LEVEL SCHEDULE 2 ZONE 3

1/8" = 1'-0"

NOTES:

1. FOR GENERAL NOTES AND ABBREVIATIONS, SEE S-001.
2. SEE PLAN FOR FINISHED FLOOR ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
3. FOR TYPICAL SLAB CONSTRUCTION DETAILS, SEE S-320 SERIES OF DRAWINGS.
4. FOR STEEL COLUMN SCHEDULE, SEE 1/S-501.
5. FOR CONCRETE COLUMN SCHEDULE, SEE 1/S-323.
6. "CONC SW" INDICATES CONCRETE SHEARWALL, SEE S-321 FOR SCHEDULE.
7. "CB#" INDICATES CONCRETE BEAM TYPE, SEE 12/S-321.
8. S1 INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 3 1/4" LIGHT WEIGHT CONCRETE ON 2"-20GA COMPOSITE STEEL DECK. TOTAL THICKNESS = 5 1/4". SEE TYPICAL SLAB CONSTRUCTION DETAILS ON S-511.
9. "A=#K" INDICATES FACTORED AXIAL FORCE IN COLLECTOR BEAM TO BE USED IN CONNECTION DESIGN.
10. "T/WALL" INDICATES TOP OF WALL ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
11. "T/COL" INDICATES TOP OF COLUMN ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
12. "◆" INDICATES TOP OF SLAB ELEVATION ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
13. B/BEAM = BOTTOM OF BEAM ELEVATION ABOVE REFERENCE FINISH FLOOR ELEVATION.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

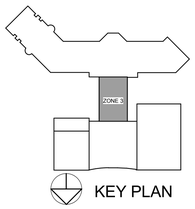
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

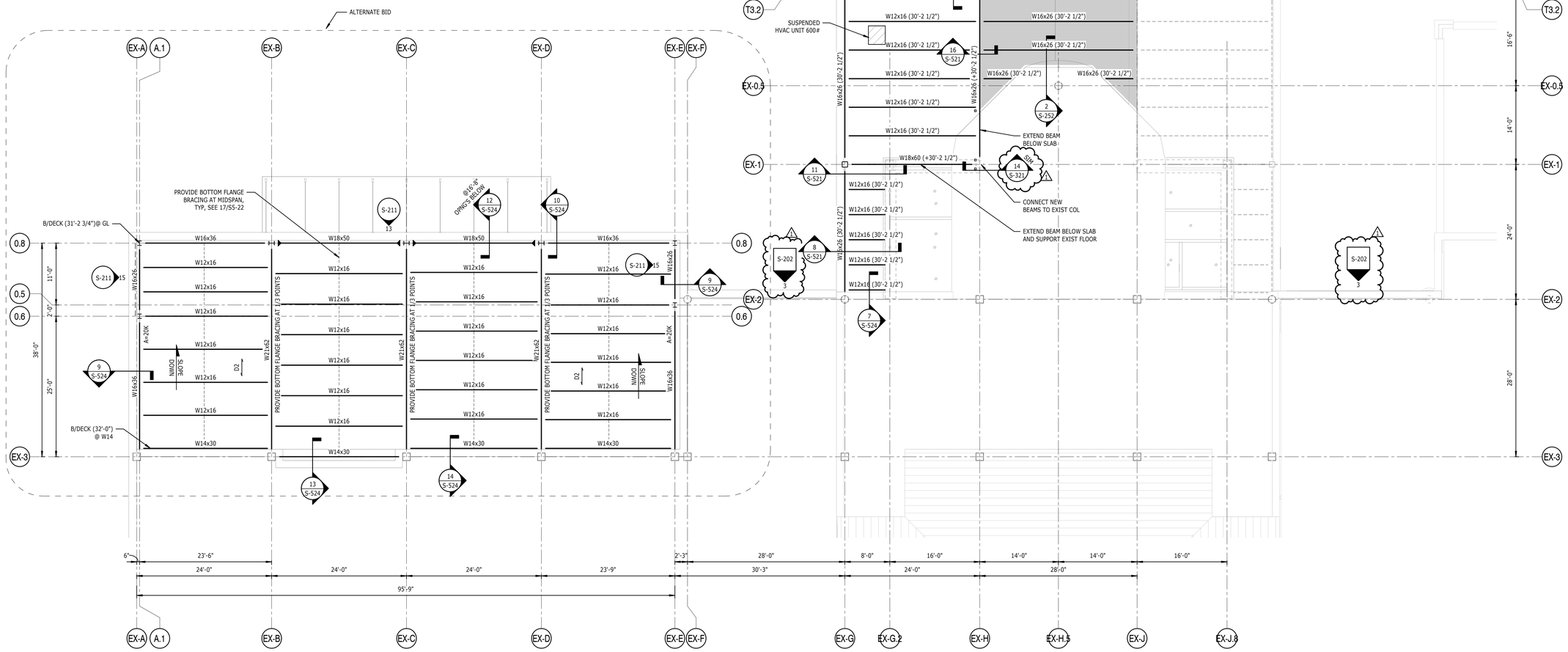
1	7/12/19	AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

PARTIAL BOARDING LEVEL PLAN SCHEDULE 2 ZONE 3

SHEET NUMBER

S2-123



1 ROOF FRAMING PLAN
S2-133

1/8" = 1'-0"

NOTES:
1. FOR GENERAL NOTES AND ABBREVIATIONS, SEE S-001.
2. (No) INDICATES TOP OF STEEL ELEVATION ABOVE REFERENCED FINISH FLOOR ELEVATION.
3. D1 INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 1 1/2"18GA METAL DECK. SEE 1/S-521 FOR TYPICAL ROOF CONSTRUCTION DETAIL.
4. ▶—— INDICATES MOMENT CONNECTION, SEE 19/S-511 FOR SCHEDULE.
5. SEE ELEVATIONS ON PLAN FOR VERTICAL FRAME LOCATIONS AND S-211 FOR ELEVATIONS AND DETAILS.
6. FOR TYPICAL ROOF FRAMING DETAILS, SEE S-521.
7. FOR STEEL COLUMN SCHEDULE, SEE 1/S-501.
8. "B" INDICATES BOTTOM FLANGE BEAM BRACING REQUIRED.
9. "*" INDICATES BOTTOM CHORD EXTENSION REQUIRED.
10. "A=#K" INDICATES FACTORED AXIAL FORCE IN COLLECTOR BEAM TO BE USED IN CONNECTION DESIGN.
11. "B/DECK (+#'-#")" INDICATES BOTTOM OF DECK ELEVATION FROM REFERENCED FINISH FLOOR ELEVATION.
12. "TRUSS T#" INDICATES TRUSS TYPE, SEE S200 SERIES FOR ELEVATIONS.
13. ALL EXPOSED STRUCTURAL STEEL (COLUMNS, ROOF TRUSSES, TRUSS BEARING & ETC) SHALL BE CONSIDERED AESS.
14. D2 INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 1 1/2"18GA METAL DECK. SEE 1/S-521 FOR TYPICAL ROOF CONSTRUCTION DETAIL.
15. "#K-ft" DENOTES FACTORED MOMENT TO BE USED IN DESIGN OF MOMENT CONNECTIONS.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

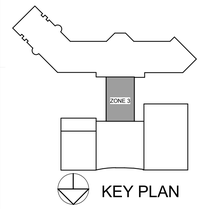
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

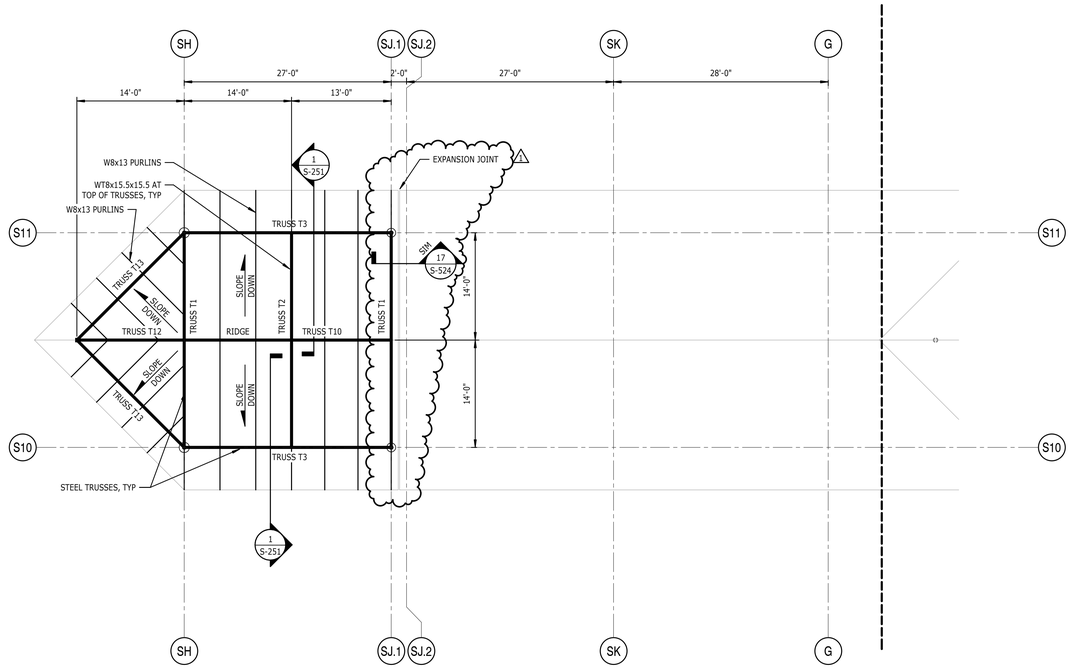
REVISIONS

1	7/12/19	AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

PARTIAL ROOF FRAMING PLAN
SCHEDULE 2
ZONE 3

SHEET NUMBER
S2-133



1 S2-141 HIGH ROOF FRAMING PLAN SCHEDULE 2 ZONE 1

1/8" = 1'-0"

NOTES:

1. FOR GENERAL NOTES AND ABBREVIATIONS, SEE S-001.
2. (No) INDICATES TOP OF STEEL ELEVATION ABOVE REFERENCED FINISH FLOOR ELEVATION.
3. D1 INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 1 1/2"18GA METAL DECK. SEE 1/S-521 FOR TYPICAL ROOF CONSTRUCTION DETAIL.
4. ▶—— INDICATES MOMENT CONNECTION, SEE 19/S-511 FOR SCHEDULE.
5. SEE ELEVATIONS ON PLAN FOR VERTICAL FRAME LOCATIONS AND S-211 FOR ELEVATIONS AND DETAILS.
6. FOR TYPICAL ROOF FRAMING DETAILS, SEE S-521.
7. FOR STEEL COLUMN SCHEDULE, SEE 1/S-501.
8. "B" INDICATES BOTTOM FLANGE BEAM BRACING REQUIRED.
9. "*" INDICATES BOTTOM CHORD EXTENSION REQUIRED.
10. "A=#K" INDICATES FACTORED AXIAL FORCE IN COLLECTOR BEAM TO BE USED IN CONNECTION DESIGN.
11. "B/DECK (+#'-##")" INDICATES BOTTOM OF DECK ELEVATION FROM REFERENCED FINISH FLOOR ELEVATION.
12. "TRUSS T#" INDICATES TRUSS TYPE, SEE S200 SERIES FOR ELEVATIONS.
13. ALL EXPOSED STRUCTURAL STEEL (COLUMNS, ROOF TRUSSES, TRUSS BEARING & ETC) SHALL BE CONSIDERED AESS.
14. D2 INDICATES STEEL DECK SPAN DIRECTION. CONSTRUCTION SHALL BE 1 1/2"18GA METAL DECK. SEE 1/S-521 FOR TYPICAL ROOF CONSTRUCTION DETAIL.
15. "##k-ft" DENOTES FACTORED MOMENT TO BE USED IN DESIGN OF MOMENT CONNECTIONS.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER

07/12/2019

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

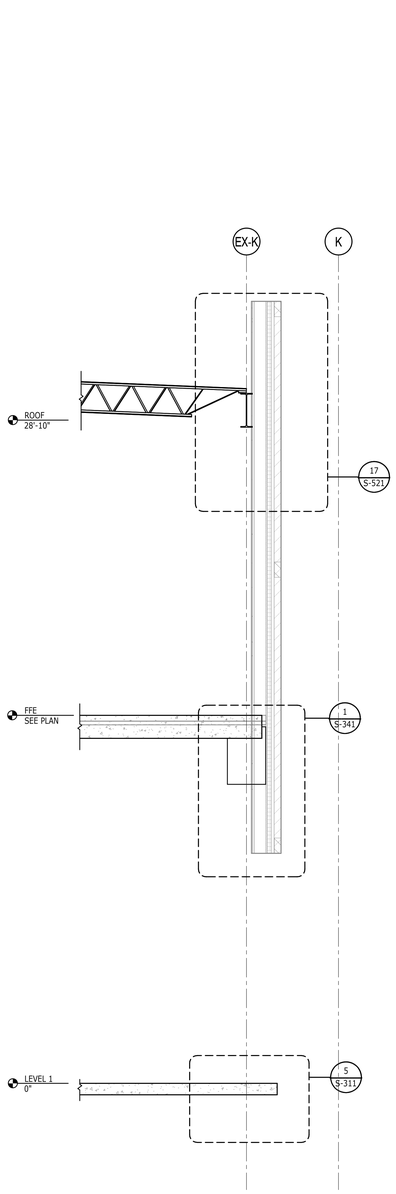
1	7/12/19	AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

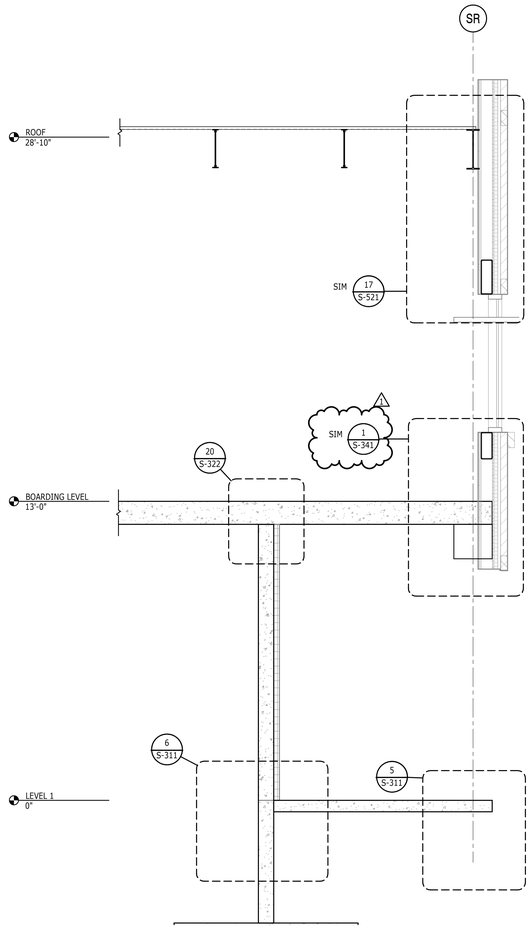
PARTIAL HIGH ROOF PLAN SCHEDULE 2 ZONE 1

SHEET NUMBER

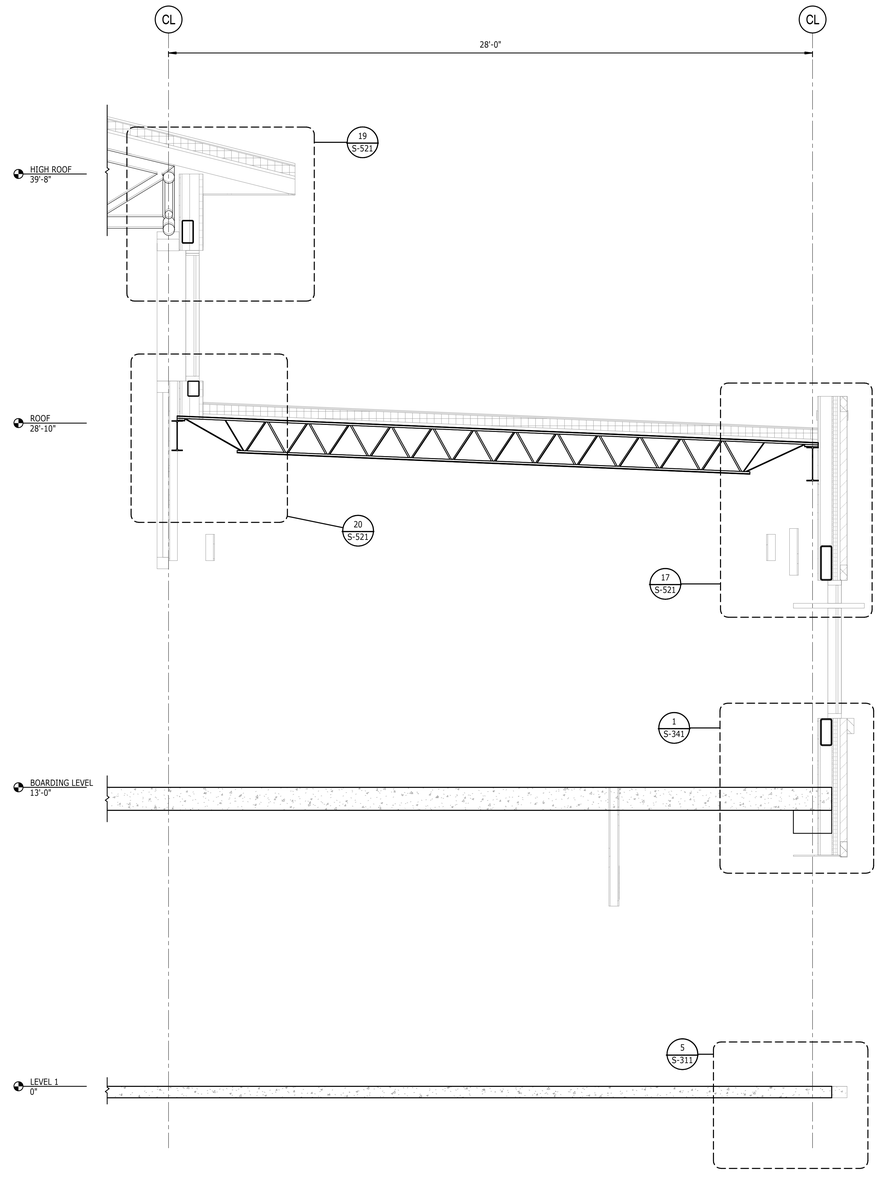
S2-141



3 SECTION S-251 3/8" = 1'-0"



2 SECTION S-251 3/8" = 1'-0"



1 SECTION S-251 3/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER

07/12/2019

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

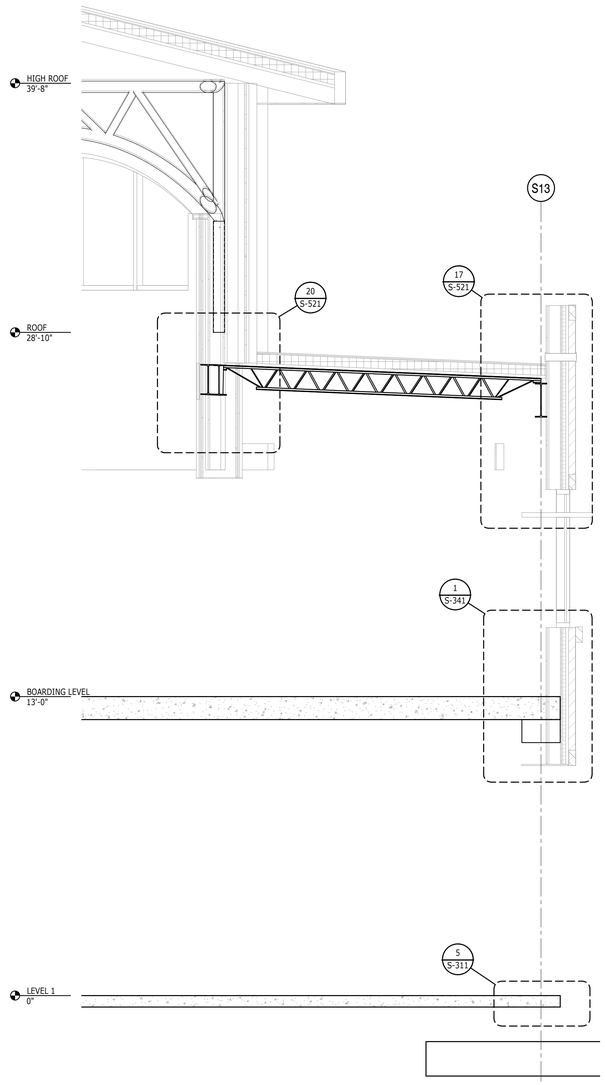
1 7/12/19 AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

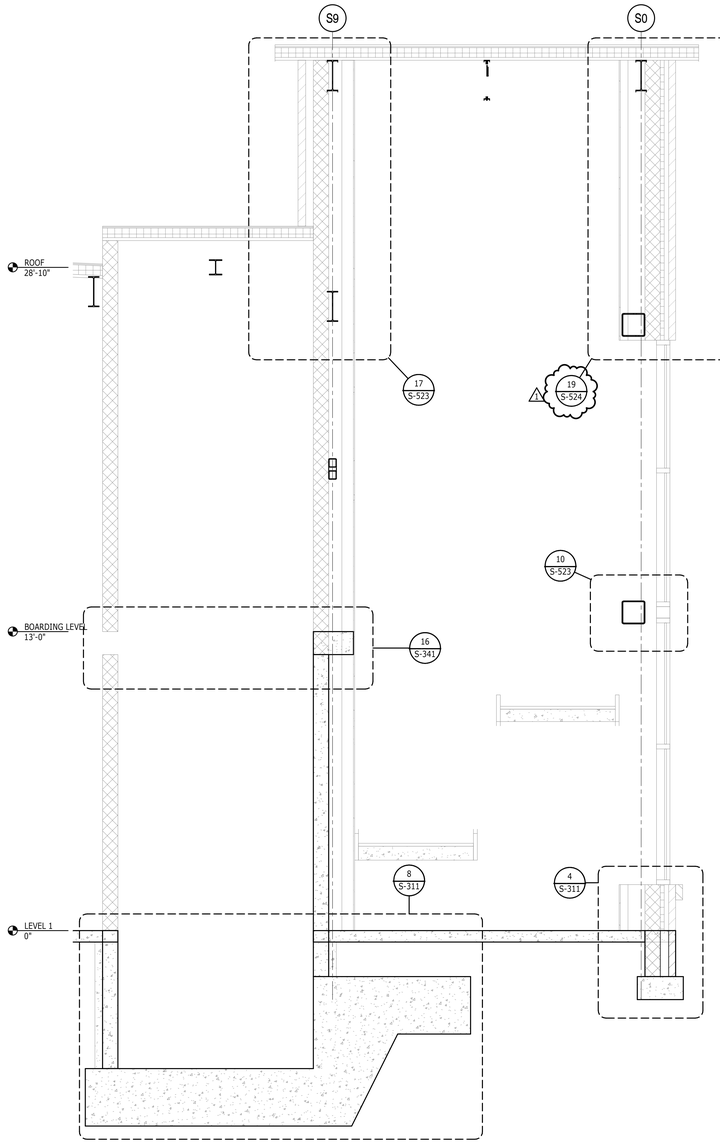
STRUCTURAL WALL SECTIONS

SHEET NUMBER

S-251



2 S-253 SECTION
3/8" = 1'-0"



1 S-253 SECTION
3/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

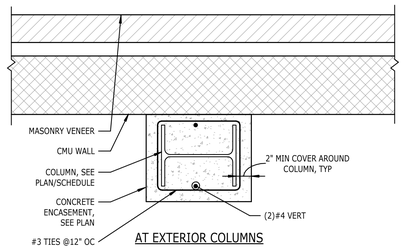
REVISIONS

1 7/12/19 AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

STRUCTURAL WALL SECTIONS

SHEET NUMBER
S-253

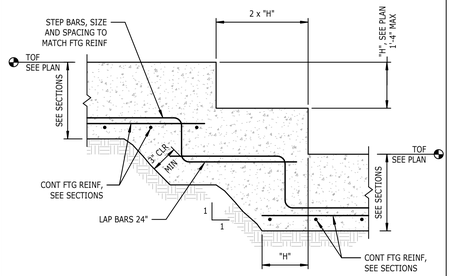


AT EXTERIOR COLUMNS

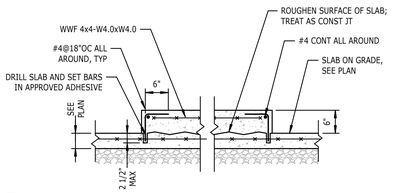
17 / S-301 **DETAIL**
CONCRETE ENCASEMENT DETAIL
NTS

GRADE BEAM SCHEDULE					
TYPE	DEPTH	WIDTH	LENGTH	REINFORCING	NOTES
GB1	24"	36"	SEE PLAN	(8)#9 T&B W/#4 STIRRUPS @6" OC	BUILD INTEGRAL W/ FOOTING
GB2	32"	32"	SEE PLAN	(12)#8 T&B W/ #4 STIRRUPS @12" OC	

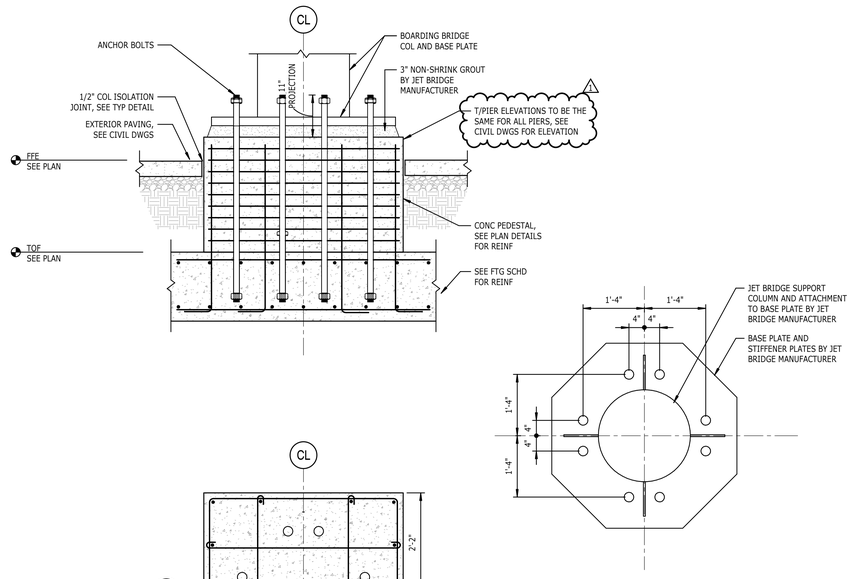
13 / S-301 **SCHEDULE**
GRADE BEAM SCHEDULE
3/4" = 1'-0"

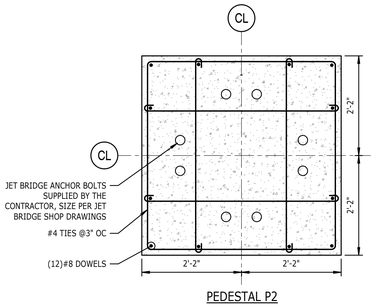


9 / S-301 **SECTION**
TYPICAL STEP IN MASONRY WALL FOOTING
3/4" = 1'-0"



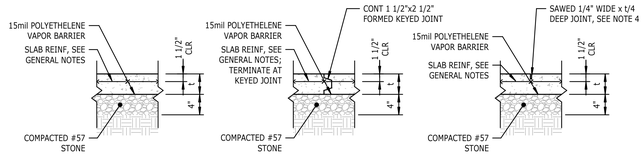
18 / S-301 **SECTION**
TYPICAL EQUIPMENT PAD
NTS
NOTES:
1. THE EXACT SIZE, SHAPE, AND LOCATION OF EQUIPMENT (HOUSEKEEPING) PAD(S) SHALL BE DETERMINED BY THE CONTRACTOR AFTER APPROVAL OF EQUIPMENT SHOP DRAWINGS. ANCHOR BOLTS WHERE REQUIRED SHALL BE SIZED AND LOCATED ACCORDING TO MANUFACTURER'S REQUIREMENTS.





PEDESTAL P2

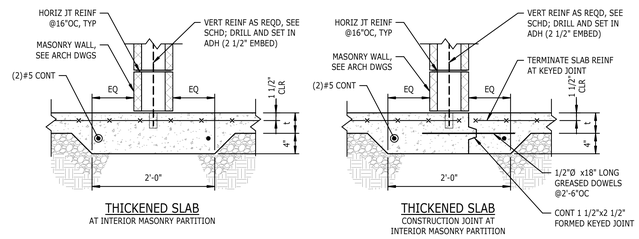
10 / S-301 **JET BRIDGE FOUNDATION**
3/4" = 1'-0"



TYPICAL CONSTRUCTION

CONSTRUCTION JOINT
AT POUR BREAK

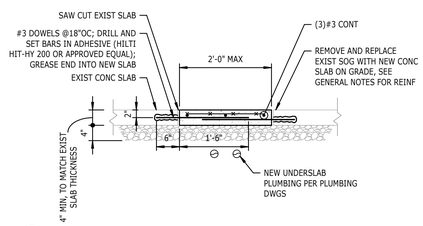
SAWED CONTROL JOINT



THICKENED SLAB
AT INTERIOR MASONRY PARTITION

THICKENED SLAB
CONSTRUCTION JOINT AT INTERIOR MASONRY PARTITION

1 / S-301 **DETAIL**
TYPICAL SLAB ON GRADE
NTS
NOTES:
1. 't' DENOTES SLAB THICKNESS, SEE PLANS.
2. LOCATION OF SLAB ON GRADE CONSTRUCTION JOINTS SHALL BE DETERMINED BY THE CONTRACTOR. JOINT LOCATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
3. SEE PLANS FOR LOCATION OF CONTROL JOINTS. WHERE NOT SHOWN ON PLAN, CONTACT THE ENGINEER.
4. SAW CUT CONTROL JOINTS WITHIN 8 HOURS OF SLAB POUR.

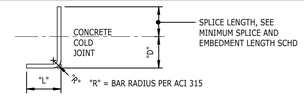


19 / S-301 **SECTION**
TYPICAL SLAB ON GRADE REPAIR
NTS
NOTES:
1. SEE ARCHITECTURAL AND PLUMBING DRAWINGS FOR LOCATIONS WHERE EXISTING SLAB REMOVAL AND REPLACEMENT IS REQUIRED.
2. INFILL ANY TRENCHES REQUIRED FOR UPFIT WITH COMPLACTED #57 STONE PRIOR TO REPLACING SLAB ON GRADE.
3. SEAL JOINT IN NEW VAPOR BARRIER WITH EXISTING.

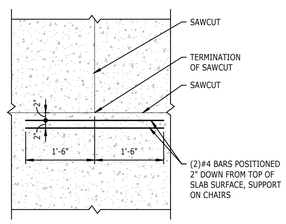
7 / S-301

FOOTING SCHEDULE					
Type	Width	Length	Depth	Bottom Bars	Top Bars
F5	5'-0"	5'-0"	1'-2"	(7)#5	NA
F6	6'-0"	6'-0"	1'-2"	(7)#5	NA
F7	7'-0"	7'-0"	1'-4"	(8)#5	NA
F8	8'-0"	8'-0"	1'-6"	(9)#6	NA
F9	9'-0"	9'-0"	1'-6"	(9)#7	NA
F10	10'-0"	10'-0"	1'-6"	(10)#7	NA
F10A	10'-0"	10'-0"	1'-6"	(10)#7	(10)#7
F10x8	10'-0"	8'-0"	1'-6"	(9)#6	NA
F11	11'-0"	11'-0"	1'-8"	(10)#7	NA
F12	12'-0"	12'-0"	1'-9"	(11)#7	NA
F13	13'-0"	13'-0"	1'-9"	(12)#8	NA
F13*	13'-0"	13'-0"	2'-0"	(14)#7	(14)#7
F14x8	14'-0"	8'-0"	1'-6"	(8)#7 LONG BARS (14)#7 SHORT BARS	NA
F15	15'-0"	15'-0"	2'-3"	(16)#7	(16)#7
F16x8	16'-0"	8'-0"	1'-6"	(15)#7	NA
F17	17'-0"	17'-0"	2'-3"	(18)#7	(18)#7
F35x16	35'-0"	16'-0"	2'-6"	(17)#8 LONG, (36)#8 SHORT	(17)#8 LONG, (36)#8 SHORT

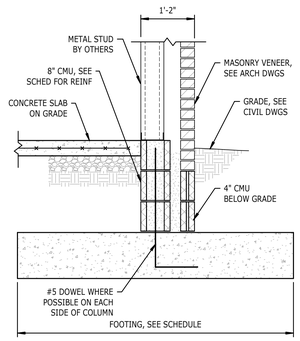
CONCRETE REINFORCING DOWEL EMBEDMENT				
BAR SIZE	LEG DIM, "L"	EMBEDMENT, "D"		
		f'c = 3,000 PSI	f'c = 4,000 PSI	f'c = 5,000 PSI
#3	6"	6"	6"	6"
#4	8"	8"	7"	6"
#5	10"	10"	9"	8"
#6	1'-0"	1'-0"	10"	9"
#7	1'-2"	1'-2"	1'-0"	11"
#8	1'-4"	1'-4"	1'-2"	1'-0"
#9	1'-7"	1'-6"	1'-3"	1'-2"
#10	1'-10"	1'-8"	1'-5"	1'-3"
#11	2'-0"	1'-10"	1'-7"	1'-5"



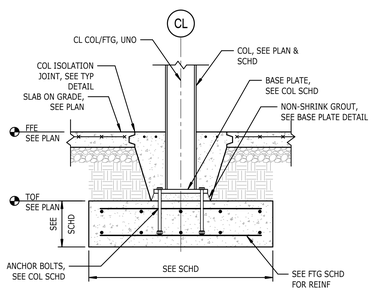
2 / S-301 **SCHEDULE**
SCHEDULE
NTS
NOTES:
1. SIDE COVER ON BARS MUST BE GREATER THAN 2 1/2". END COVER ON 90° HOOKED BARS MUST BE GREATER THAN 2".
2. VALUES SHOWN ARE FOR NORMAL WEIGHT CONCRETE. FOR LIGHT WEIGHT CONCRETE, INCREASE THE "D" VALUES BY 30%.
3. FOR EPOXY-COATED BARS, INCREASE THE "D" VALUES BY 20%.



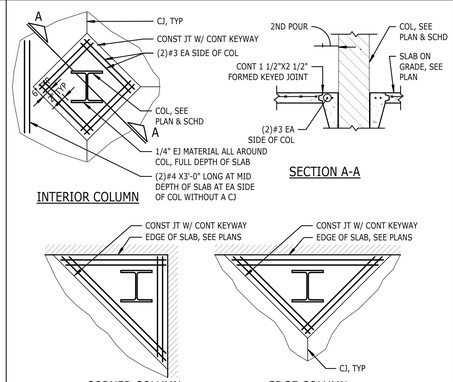
20 / S-301 **SECTION**
TYPICAL DETAIL WHEN CONTROL JOINT TERMINATES
NTS



16 / S-301 **SECTION**
3/4" = 1'-0"



12 / S-301 **SECTION**
TYPICAL SPREAD FOOTING AT STEEL COLUMN
NTS
NOTES:
1. COAT BASE PLATE, ANCHOR BOLTS, AND COLUMN BELOW SLAB ON GRADE WITH AN APPROVED ASPHALT PAINT.



INTERIOR COLUMN

SECTION A-A

CORNER COLUMN

EDGE COLUMN

8 / S-301 **DETAIL**
COLUMN ISOLATION JOINTS, WF COLUMNS
NTS

CONCRETE REINFORCING SPLICES			
BAR SIZE	f'c = 3,000 PSI	f'c = 4,000 PSI	f'c = 5,000 PSI
#3	1'-10"	1'-7"	1'-5"
#4	2'-4"	2'-1"	1'-10"
#5	3'-0"	2'-7"	2'-4"
#6	3'-7"	3'-1"	2'-9"
#7	5'-2"	4'-6"	4'-1"
#8	5'-11"	5'-2"	4'-8"
#9	6'-6"	5'-10"	5'-3"
#10	7'-6"	6'-6"	5'-10"
#11	8'-4"	7'-3"	6'-6"

SPLICE LENGTH

4 / S-301 **SCHEDULE**
CONCRETE REINFORCING SPLICE SCHEDULE
NTS
NOTES:
1. FOR CLASS B LAP SPLICE, SPLICE LENGTH = 1.3 x DEVELOPMENT LENGTH.
2. APPLIES TO BOTTOM BARS ONLY (LESS THAN 12" OF FRESH CONCRETE BELOW BAR)
3. APPLIES WHERE THE CLEAR COVER IS GREATER THAN THE BAR DIAMETER.
4. WHEN MORE THAN 12" OF FRESH CONCRETE BELOW SPLICE, THEN INCREASE SPLICE TO 1.3 x SPLICE LENGTH.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

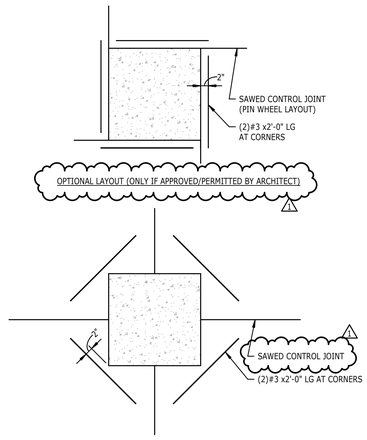
1 7/12/19 AD-01

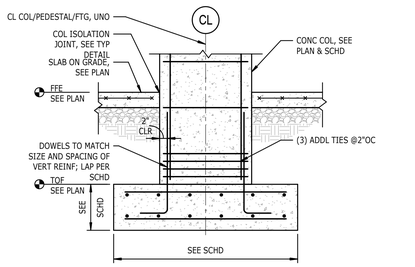
DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

FOUNDATION DETAILS

SHEET NUMBER

S-301

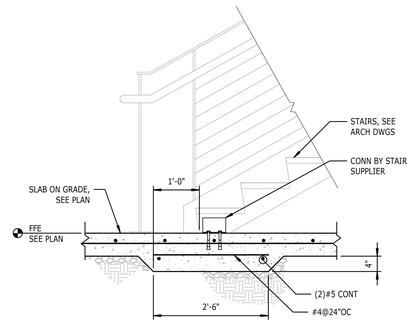




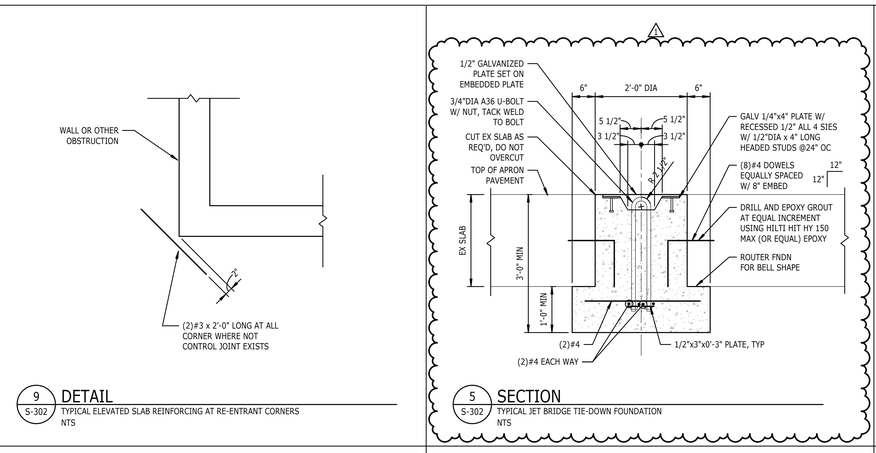
NOTES:
1. SEE SCHEDULES FOR SIZE, DEPTH, AND REINFORCING.
2. CENTERLINE OF COLUMN IS CENTERLINE OF FOOTING, UNLESS NOTED OTHERWISE.

13 / S-302 **SECTION**
TYPICAL SPREAD FOOTING AT CONCRETE COLUMN
NTS

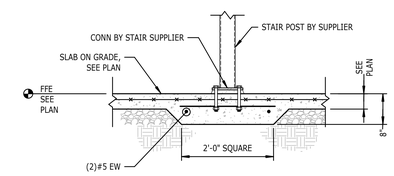
9 / S-302 **DETAIL**
TYPICAL ELEVATED SLAB REINFORCING AT RE-ENTRANT CORNERS
NTS



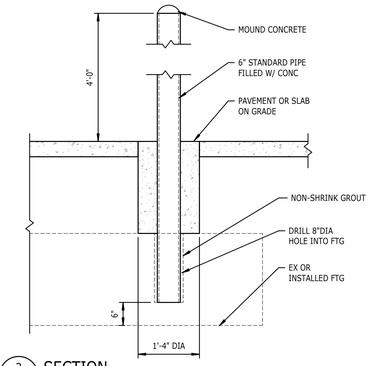
10 / S-302 **SECTION**
THICKENED SLAB AT STAIR
NTS



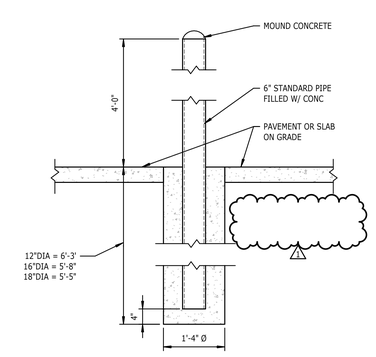
5 / S-302 **SECTION**
TYPICAL JET BRIDGE TIE-DOWN FOUNDATION
NTS



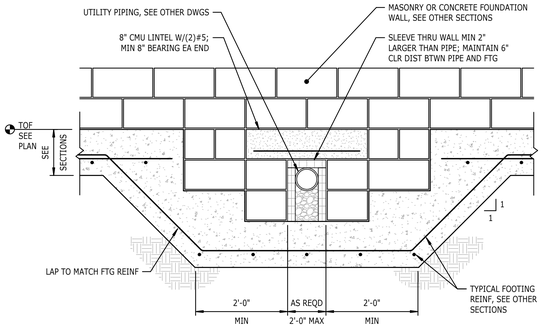
6 / S-302 **SECTION**
TYPICAL THICKENED SLAB AT STAIR POST
NTS



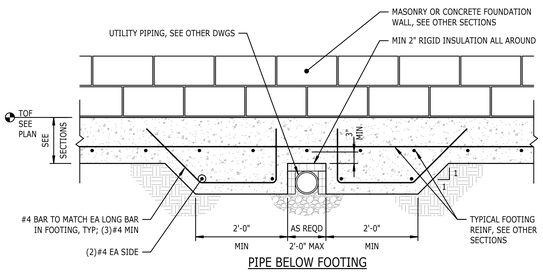
2 / S-302 **SECTION**
TYPICAL PIPE BOLLARD DETAIL
NTS



1 / S-302 **SECTION**
TYPICAL PIPE BOLLARD DETAIL
NTS

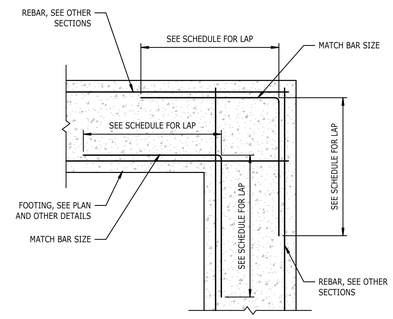


PIPE THRU FOOTING

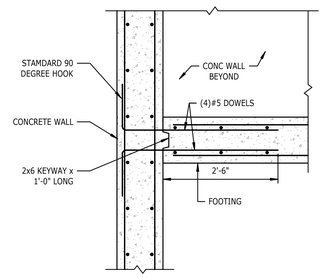


PIPE BELOW FOOTING

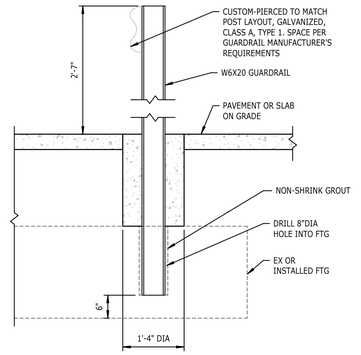
15 / S-302 **SECTION**
TYPICAL UTILITY BELOW FOOTING
NTS



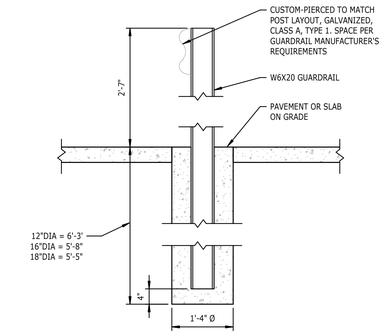
11 / S-302 **TYPICAL FOOTING CORNER PLAN**
3/4" = 1'-0"



7 / S-302 **SECTION**
TYPICAL FOOTING TO WALL CONNECTION
NTS



3 / S-302 **SECTION**
TYPICAL VEHICLE GUARDRAIL AT FOOTING
NTS



4 / S-302 **SECTION**
TYPICAL VEHICLE GUARDRAIL DETAIL
NTS

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

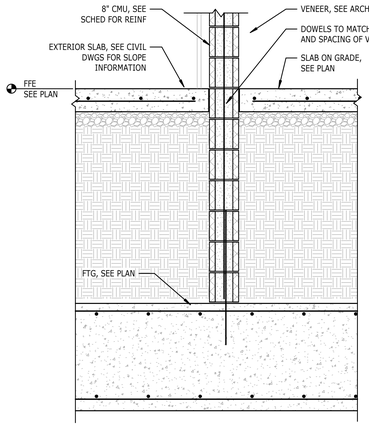
1 7/12/19 AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

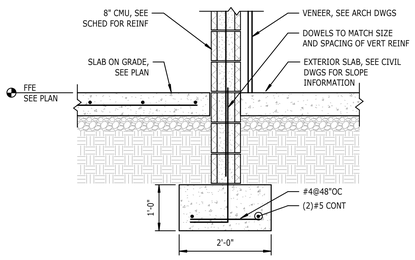
FOUNDATION DETAILS

SHEET NUMBER

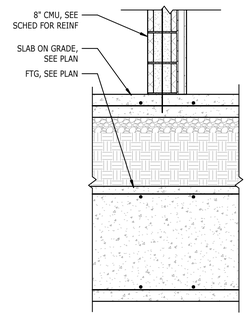
S-302



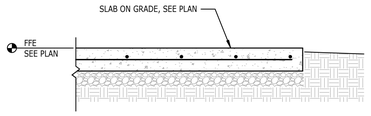
17 S-311 SECTION 3/4" = 1'-0"



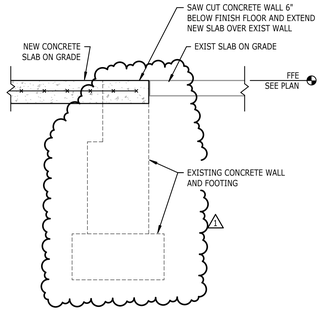
13 S-311 SECTION 3/4" = 1'-0"



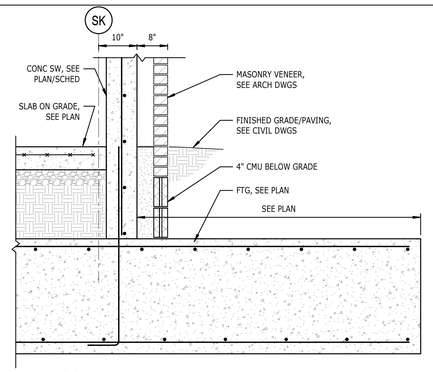
9 S-311 SECTION 3/4" = 1'-0"



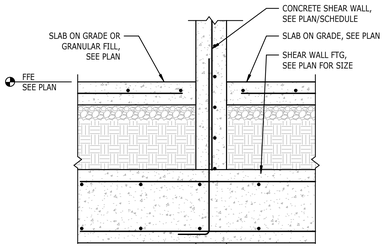
5 S-311 SECTION 3/4" = 1'-0"



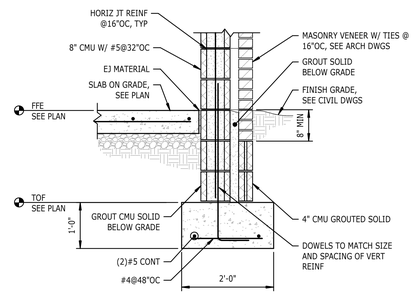
14 S-311 SECTION 3/4" = 1'-0"



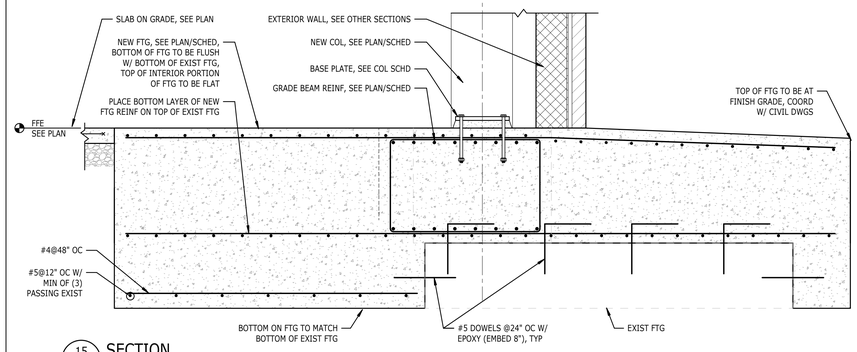
10 S-311 SECTION 3/4" = 1'-0"



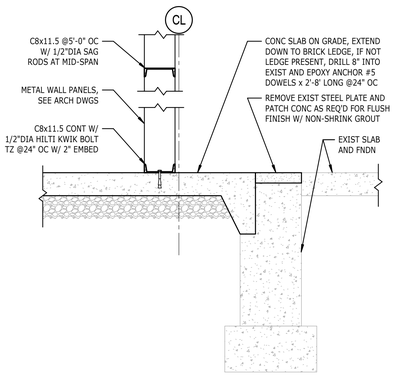
6 S-311 SECTION 3/4" = 1'-0"



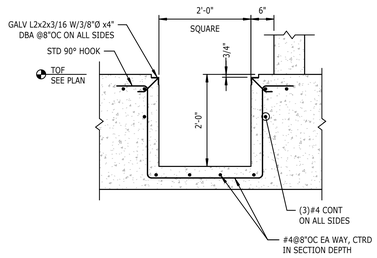
2 S-311 DETAIL TYPICAL WALL FOOTING AT CMU WALL WITH MASONRY VENEER NTS



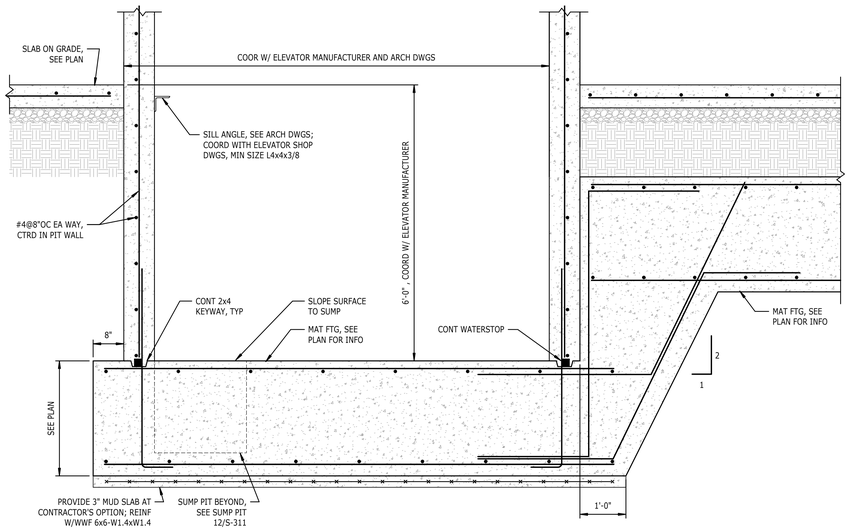
15 S-311 SECTION 3/4" = 1'-0"



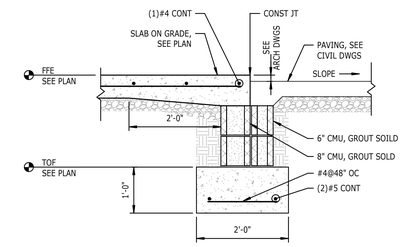
20 S-311 SECTION 3/4" = 1'-0"



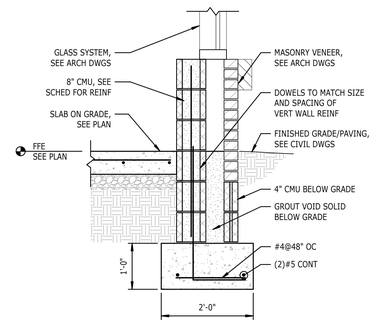
12 S-311 SECTION ELEVATOR SUMP PIT NTS



8 S-311 SECTION 3/4" = 1'-0"



3 S-311 DETAIL TYPICAL DOOR ENTRANCE NTS



4 S-311 SECTION 3/4" = 1'-0"

ILM
TERMINAL IMPROVEMENTS CONTRACT 3
Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1 7/12/19 AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

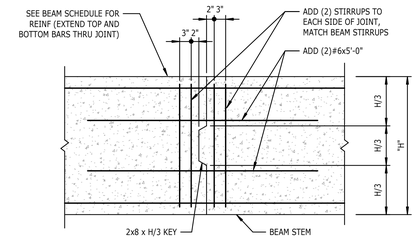
FOUNDATION SECTIONS

SHEET NUMBER
S-311

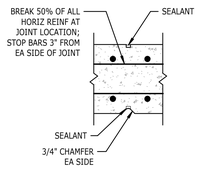
13 S-321

CONCRETE BEAM SCHEDULE

CB MARK	CB WIDTH	CB DEPTH	CB TOP BARS - LEFT	CB TOP BARS - RIGHT	CB TOP BARS - CENTER	CB STIRRUPS - SIZE	CB STIRRUP SPACING	CB BOT BARS	CB NOTES
CB1	1'-8"	2'-0"	(6)#8	(6)#8	(6)#8	#4	(14)@5" OC EACH END, REMAINDER @9" OC	(6)#8	SEE PLAN FOR ADDITIONAL TOP BARS
CB2	1'-8"	2'-6"	(6)#8	(6)#8	(6)#8	#4	(10)@6" OC EACH END, REMAINDER @9" OC	(6)#8	SEE PLAN FOR ADDITIONAL TOP BARS
CB3	1'-4"	2'-0"	(5)#8	(5)#8	(5)#8	#4	@9" OC	(5)#8	SEE PLAN FOR ADDITIONAL TOP BARS
CB4	1'-6"	2'-0"	(6)#8	(6)#8	(6)#8	#4	@9" OC	(6)#8	SEE PLAN FOR ADDITIONAL TOP BARS
CB5	1'-8"	2'-0"	(6)#8	(6)#8	(6)#8	#4	(26)@3" OC EACH END REMAINDER @9" OC	(6)#8	SEE PLAN FOR ADDITIONAL TOP BARS
CB6	1'-8"	2'-0"	(8)#8	(8)#8	(8)#8	#4	(30)@ 2 1/2" OC EACH END, REMAINDER @4 1/2" OC	(10)#8	SEE PLAN FOR ADDITIONAL TOP BARS

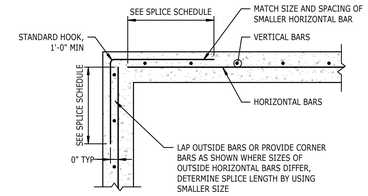


9 S-321 TYPICAL CONSTRUCTION JOINTS IN BEAMS
3/4" = 1'-0"

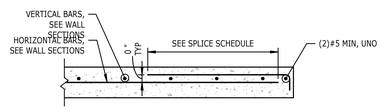


CONTROL JOINT (WCJ)

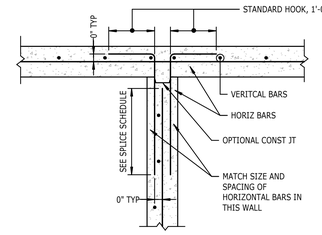
5 S-321 DETAIL
TYPICAL JOINTS IN CONCRETE WALLS
NTS
NOTES:
1. FOAM JOINT FILLER TO BE CLOSED CELL NEOPRENE FOAM.
2. SEALANT TO BE "TREMCO DYMERIC" OR EQUAL.
3. SUBMIT SAMPLES OF JOINT FILLER & SEALANT FOR APPROVAL.
4. ALL CHAMFERS TO BE ON EXPOSED FACE OF WALL.



AT CORNERS

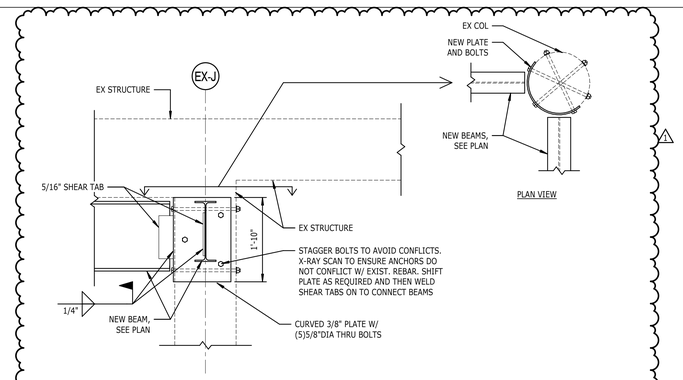


AT ENDS

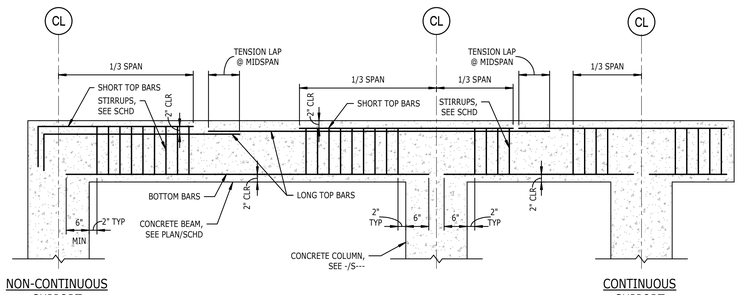


AT INTERSECTIONS

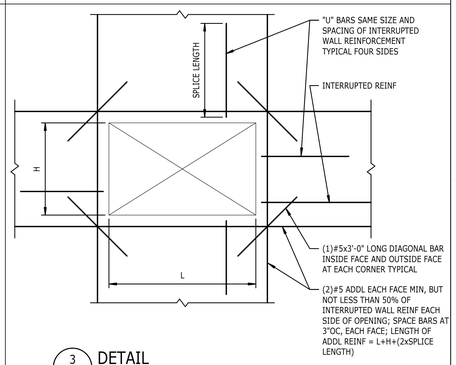
1 S-321 PLAN
TYPICAL HORIZONTAL WALL REINFORCING, SINGLE LAYER
3/4" = 1'-0"



14 S-321 SECTION
3/4" = 1'-0"

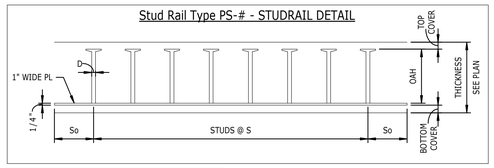


6 S-321 TYPICAL CONCRETE BEAM ELEVATION
3/4" = 1'-0"

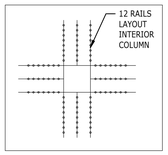


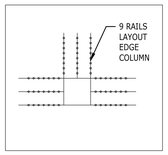
3 S-321 DETAIL
NTS
NOTES:
1. WALL OPENINGS SHALL BE COORDINATED AND DETAILED ON THE REINFORCEMENT SHOP DRAWINGS.
2. OPENINGS NOT TO EXCEED 3'-0" IN EITHER DIRECTION.
3. MAXIMUM CORED OPENING WITHOUT SLEEVE SHALL BE 6" DIA MINIMUM CENTER TO CENTER SPACING OF CORED OPENINGS TO BE 1'-6".

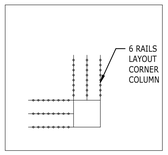
Stud Rail Type PS-# - STUDRAIL DETAIL



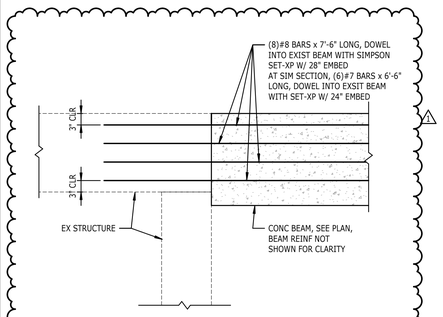
Type	PS1	PS2
Number of rails/column	12	12
Number of studs/rail	7	8
Stud diameter "D"	1/2"	1/2"
Stud spacing "S"	5"	5"
Distance to first stud "So"	5"	5"
Overall height of rail "OAH"	8 3/4"	8 3/4"
Top cover	1"	1"
Bottom cover	2"	2"



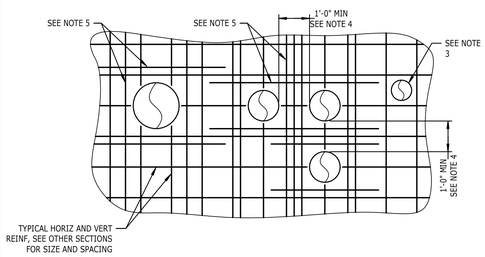




7 S-321 ELEVATED SLAB STUD RAILS SCHEDULE
1/8" = 1'-0"



12 S-321 SECTION
3/4" = 1'-0"



NOTES:
1. WALL OPENINGS SHALL BE COORDINATED AND DETAILED ON THE REINFORCEMENT SHOP DRAWINGS.
2. PROVIDE SLEEVES FOR ALL OPENINGS EXCEEDING 6" IN DIAMETER.
3. NO ADDITIONAL REINFORCING IS REQUIRED FOR OPENINGS NOT EXCEEDING 6" IN DIAMETER, PROVIDED NO TYPICAL REINFORCING IS INTERRUPTED.
4. PROVIDE 1'-0" MINIMUM SPACING BETWEEN EDGES OF OPENINGS, TYPICAL IN ALL DIRECTIONS FOR OPENINGS NOT EXCEEDING 18" IN DIAMETER. FOR OPENINGS BETWEEN 18" AND 30" IN DIAMETER, PROVIDE 2'-0" MINIMUM SPACING BETWEEN EDGES OF OPENINGS.
5. FOR OPENINGS EXCEEDING 6" IN DIAMETER AND FOR OPENINGS THAT INTERRUPT TYPICAL REINFORCING, PROVIDE ADDITIONAL VERTICAL REINFORCING BAR EACH SIDE OF OPENING. BAR SIZE TO MATCH TYPICAL VERTICAL REINFORCING. SPACING BETWEEN BARS SHALL BE 3". PROVIDE (2)#5 HORIZONTAL BARS EACH SIDE OF OPENING. MAINTAIN 3" SPACING BETWEEN BARS. BAR LENGTH SHALL BE TWO TIMES THE OPENING SIZE PLUS TWO TIMES THE BAR SPLICE LENGTH.
6. ALL PENETRATIONS TO BE CORE DRILLED SHALL BE SUBMITTED FOR APPROVAL PRIOR TO PROCEEDING WITH THE WORK.

4 S-321 DETAIL
PENETRATIONS IN CONCRETE WALLS
NTS

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

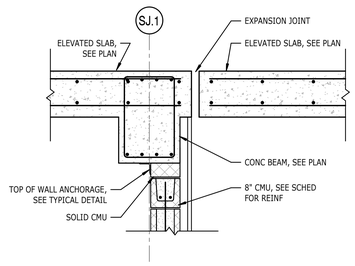
REVISIONS

1	7/12/19	AD-01

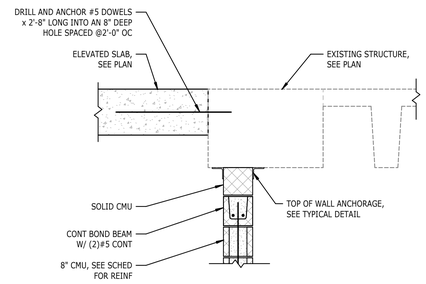
DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

ELEVATED CONCRETE DETAILS

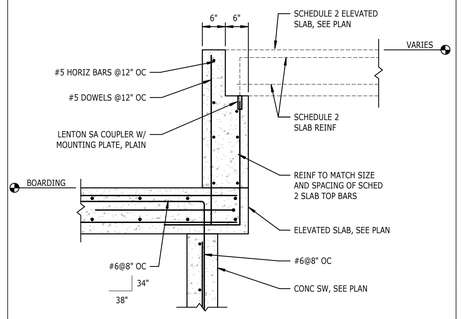
SHEET NUMBER
S-321



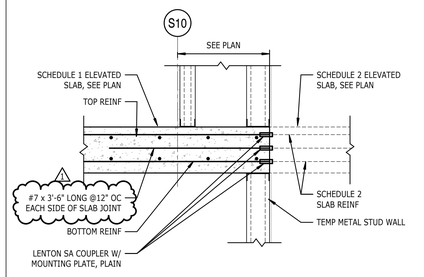
17 S-341 SECTION 3/4" = 1'-0"



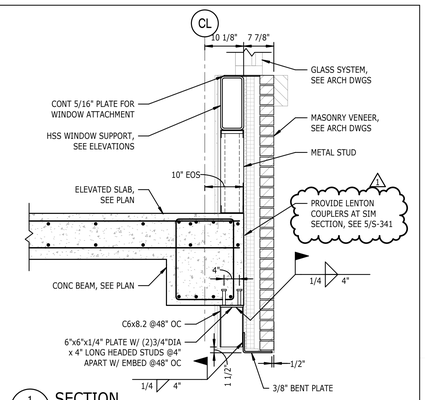
13 S-341 SECTION 3/4" = 1'-0"



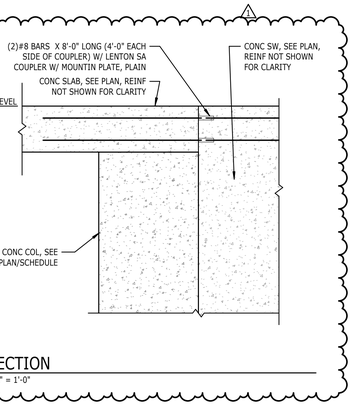
9 S-341 SECTION 3/4" = 1'-0"



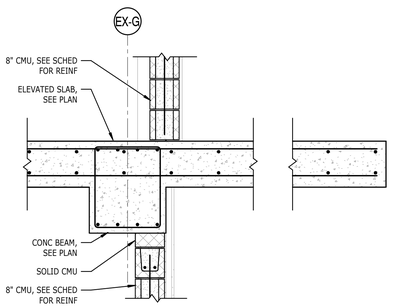
5 S-341 SECTION 3/4" = 1'-0"



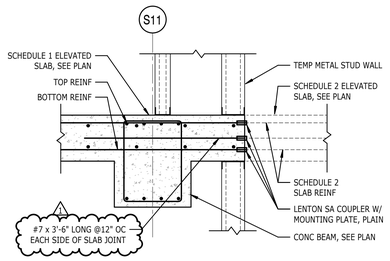
1 S-341 SECTION 3/4" = 1'-0"



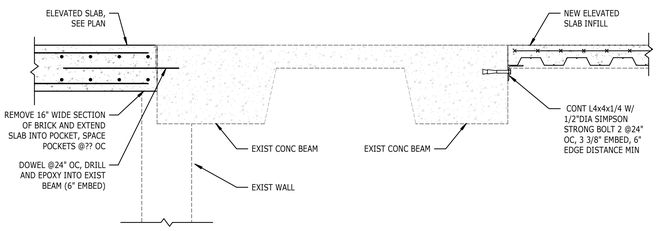
19 S-341 SECTION 3/4" = 1'-0"



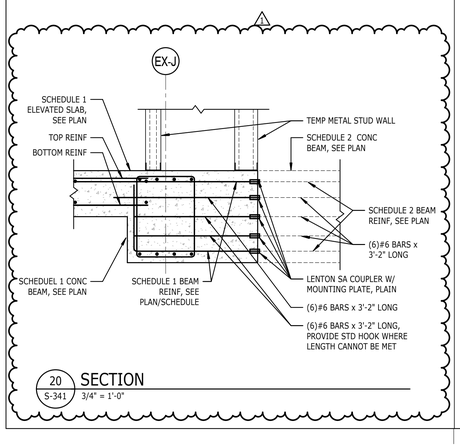
15 S-341 SECTION 3/4" = 1'-0"



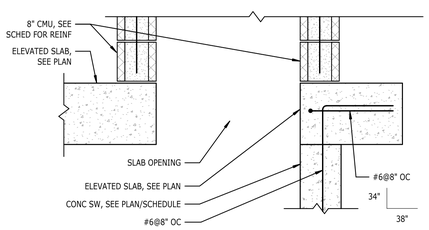
11 S-341 SECTION 3/4" = 1'-0"



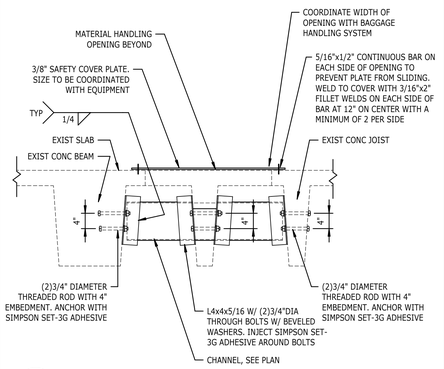
3 S-341 SECTION 3/4" = 1'-0"



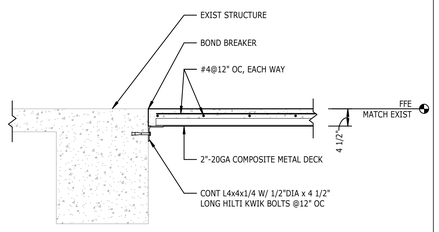
20 S-341 SECTION 3/4" = 1'-0"



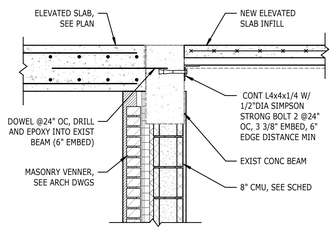
16 S-341 SECTION 1" = 1'-0"



12 S-341 SLAB OPENING IN EXIST SLAB 3/4" = 1'-0"



8 S-341 SLAB INFILL SECTION 3/4" = 1'-0"



4 S-341 SECTION 3/4" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1	7/12/19	AD-01

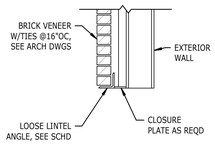
DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

CONCRETE FLOOR SECTIONS

SHEET NUMBER

S-341

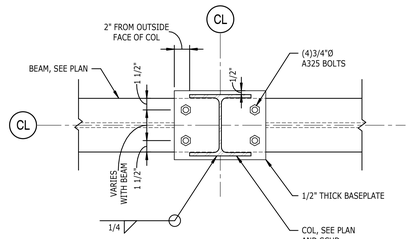
STEEL LOOSE LINTEL ANGLE SUPPORTING BRICK VENEER	
CLEAR OPENING	LOOSE LINTEL ANGLE
UP TO 5'-0"	L4x4x3/8
5'-1" TO 8'-0"	L6x4x3/8 (LLV)
8'-1" TO 10'-0"	L7x4x3/8 (LLV)
10'-1" TO 12'-0"	L8x4x1/2 (LLV)



17 S-511 SCHEDULE

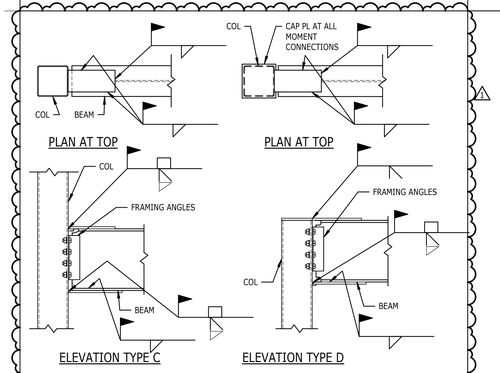
STEEL LOOSE LINTEL ANGLES SUPPORTING BRICK VENEER
NTS

NOTES:
1. ALL LOOSE LINTELS SHALL BE PAINTED OR GALVANIZED, SEE ARCHITECTURAL DRAWINGS.
2. PROVIDE 6" MINIMUM BEARING FOR OPENINGS UP TO 8'-0" WIDE. PROVIDE 8" MINIMUM BEARING FOR OPENINGS OVER 8'-0" WIDE.
3. SEE ARCHITECTURAL DRAWINGS FOR ANGLE PLACEMENT AND FLASHING.
4. LOOSE LINTEL ANGLES ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR ALL LOCATIONS OF OPENINGS REQUIRING ANGLES.
5. FOR CLEAR OPENING DIMENSIONS GREATER THAN THOSE SHOWN IN THE SCHEDULE, SEE OTHER DETAILS OR CONTACT THE ENGINEER OF RECORD.



18 S-511 DETAIL

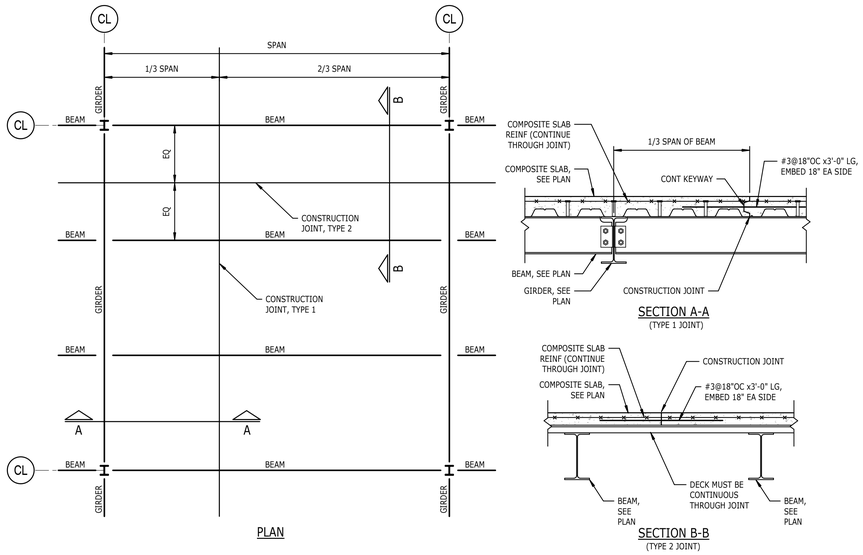
TYPICAL COLUMN BEARING ON BEAM
NTS



19 S-511 SCHEDULE

MOMENT CONNECTION SCHEDULE AND DETAILS
NTS

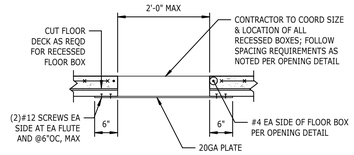
NOTES:
1. PROVIDE ULTRASONIC TESTING AT FULL PENETRATION WELDS.
2. ALL MOMENT CONNECTIONS TO BE DESIGNED FOR A FACTORED LOAD OF 75k-ft UNO ON PLAN.



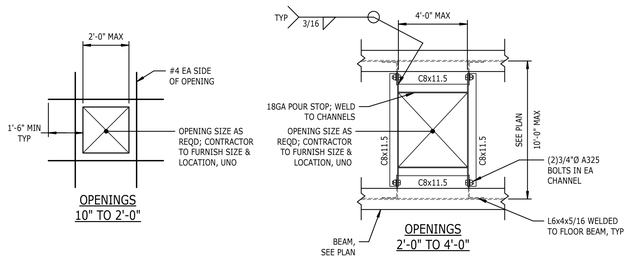
9 S-511 DETAIL

TYPICAL CONSTRUCTION JOINTS IN COMPOSITE DECK
NTS

NOTES:
1. CONTRACTOR SHALL SUBMIT LOCATION OF ALL CONSTRUCTION JOINTS FOR APPROVAL PRIOR TO CONSTRUCTION AND FABRICATION.



RECESSED FLOOR BOX

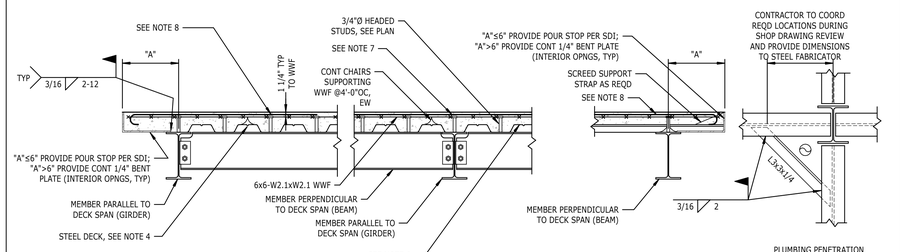


NOTES:
1. PROVIDE REINFORCING AROUND ALL DUCT PENETRATIONS, CHASES, ELECTRICAL BOXES, PLUMBING PIPES, AND OTHER OPENINGS IN SLABS, FOR OPENINGS FROM 10"x10" (OR 10"Ø) TO 2'-0"x2'-0" (OR 24"Ø).
2. OPENINGS THAT ARE SPACED CLOSER THAN (2) TIMES THE OPENING SIZE SHALL BE CONSIDERED ONE OPENING.
3. MINIMUM CLEAR DISTANCE BETWEEN OPENINGS IS 2'-0".
4. ALL OPENINGS 10" TO 2'-0" MAY NOT BE SHOWN ON STRUCTURAL DRAWINGS.
5. OPENINGS GREATER THAN 2'-0" NOT SHOWN ON STRUCTURAL DRAWINGS REQUIRE APPROVAL BY THE ENGINEER OF RECORD.

NOTES:
1. PROVIDE CHANNEL FRAMING AROUND ALL DUCT PENETRATIONS, CHASES, ELECTRICAL BOXES, PLUMBING PIPES, AND OTHER OPENINGS IN SLABS, FOR OPENINGS LARGER THAN 2'-0"x2'-0" (OR 24"Ø).
2. OPENINGS THAT ARE SPACED CLOSER THAN (2) TIMES THE OPENING SIZE SHALL BE CONSIDERED ONE OPENING.
3. MINIMUM CLEAR DISTANCE BETWEEN OPENINGS IS 1'-0".
4. OPENINGS GREATER THAN 2'-0" NOT SHOWN ON STRUCTURAL DRAWINGS REQUIRE APPROVAL BY THE ENGINEER OF RECORD.

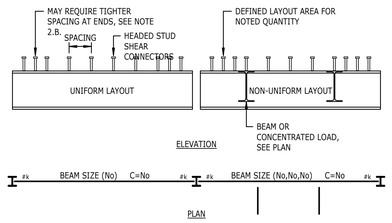
12 S-511 DETAIL

TYPICAL FRAMING AROUND SLAB OPENINGS
NTS



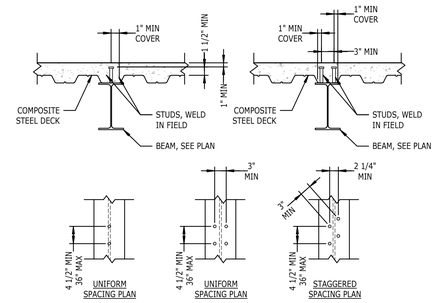
COMPOSITE FLOOR CONSTRUCTION DETAIL

NOTES:
1. THIS DETAIL APPLIES TO DECK SUPPORTED COMPOSITE SLABS, AS INDICATED ON PLANS.
2. WELD DECK TO SUPPORTS PER FLOOR DECKING ATTACHMENT DETAIL.
3. SUPPORT DECK AROUND COLUMNS WITH COLUMN CLOSURE. WHERE PLUMBING LINES ARE ADJACENT TO COLUMNS, PROVIDE ANGLES TO SUPPORT DECK PER PLUMBING PENETRATION DETAIL.
4. MINIMUM STEEL DECK PROPERTIES: 2'-20 GAGE COMPOSITE DECK WITH Ip=0.409 in4/ft, In=0.406 in4/ft, Sp=0.341 in3/ft, Sn=0.346 in3/ft, AND Fy=50 ksi.
5. COMPOSITE SLABS HAVE BEEN DESIGNED AS "UNSHORED CONSTRUCTION".
6. DECK SHALL BE CONTINUOUS OVER (2) OR MORE SPANS, TYPICAL. IF A SINGLE SPAN CONDITION IS REQUIRED AND SUPPORT BEAM SPACING EXCEEDS 8'-5", CONTRACTOR SHALL SHORE AREA.
7. PROVIDE #4@12"OC x6'-0" LONG TOP BARS CENTERED OVER ALL GIRDERS RUNNING PARALLEL TO DECK SPAN. PLACE BARS OVER WWF AND PROVIDE 3/4" MINIMUM COVER. PROVIDE SUPPORT CHAIRS @4'-0"OC EACH WAY. ROTATE IF REQUIRED TO FIT IN SLAB THICKNESS.
8. AT INTERIOR AND EXTERIOR SLAB EDGES, PROVIDE #4@12"OC x5'-0" LONG TOP BARS WITH STANDARD 180° HOOKS AT ONE END AS SHOWN WHERE DIMENSION "A" EXCEEDS 10". PROVIDE 3/4" MINIMUM COVER. DIMENSION "A" SHALL NOT EXCEED 2'-0" UNLESS SPECIFICALLY DETAILED OTHERWISE.
9. THE CONTRACTOR SHALL ASSUME CONCRETE OVERAGES IN ELEVATED DECK POURS DUE TO MEMBER AND DECK DEFLECTIONS. UNLESS SHOWN ON PLANS, BEAMS ARE NOT CAMBERED. CONCRETE OVERAGES MAY BE CALCULATED BY THE CONTRACTOR FOR BEAM DEFLECTIONS EQUALING L/300 INCLUDING ADDITIONAL DEFLECTIONS DUE TO PONDING AND DECK DEFLECTIONS PER SDI.



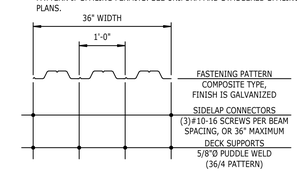
STUD LAYOUT

NOTES:
1. ALL STUDS SHALL BE FIELD WELDED TO CENTERLINE OF BEAMS, UNO.
2. UNIFORM LAYOUT:
   A. METAL DECK IS PARALLEL WITH BEAM - UNIFORMLY SPACE ALL STUDS EQUALLY ALONG THE ENTIRE LENGTH OF BEAM. FOLLOW MAXIMUM AND MINIMUM SPACING NOTED.
   B. METAL DECK IS PERPENDICULAR TO BEAM - TAKE THE TOTAL QUANTITY OF STUDS NOTED AND COMPARE TO THE NUMBER OF RIBS IN THE DECK. IF THE QUANTITY IS LESS THAN THE NUMBER OF RIBS, THEN LOCATE ONE STUD IN EVERY OTHER RIB ALONG THE LENGTH OF THE BEAM. THEN, STARTING AT THE SECOND RIB FROM THE END AT BOTH ENDS OF THE BEAM, LAYOUT THE REMAINING STUDS IN THE OPEN RIBS WORKING YOUR WAY TOWARD THE CENTER. YOU WILL END UP WITH A TIGHTER SPACING NEAR THE SUPPORTS. IF THE QUANTITY OF STUDS EXCEED THE NUMBER OF RIBS, THEN A DOUBLE ROW OF STUDS WILL BE REQUIRED NEAR THE ENDS OF THE BEAM. LOCATE ONE STUD IN EACH RIB ALONG THE LENGTH OF THE BEAM, KEEPING IN MIND THE CLEARANCES FOR A DOUBLE STUD INSTALLATION NEAR THE ENDS. THEN LOCATE THE ADDITIONAL STUDS STARTING AT THE FIRST RIB FROM THE SUPPORT AS A DOUBLE STUD INSTALLATION, WORKING YOUR WAY TOWARD THE CENTER FROM BOTH ENDS.
3. NON-UNIFORM LAYOUT:
   A. METAL DECK IS PARALLEL WITH BEAM - UNIFORMLY SPACE THE NOTED QUANTITY OF STUDS EQUALLY BETWEEN TWO FRAMING BEAMS OR CONCENTRATED LOADS BOUNDING THE AREA. FOLLOW MAXIMUM AND MINIMUM SPACINGS NOTED.
   B. METAL DECK IS PERPENDICULAR TO BEAM - FOLLOW THE SAME PROCEDURE NOTED IN ITEM 2.B. ABOVE. HOWEVER, THE LAYOUT OF THE STUDS FOR EACH QUANTITY IS LOCATED BETWEEN TWO FRAMING BEAMS OR CONCENTRATED LOADS BOUNDING THE AREA.
4. "(No)" INDICATES NUMBER OF SHEAR STUDS REQUIRED FOR ENTIRE BEAM LENGTH IF ONLY ONE QUANTITY IS NOTED. IF MULTIPLE QUANTITIES ARE NOTED, THEN NON-UNIFORM SPACING WILL BE REQUIRED.
5. "#k" INDICATES BEAM DESIGN END REACTION IN KIPS (UNFACTORED LOADS). MINIMUM BEAM REACTION TO BE 10k, UNO.
6. "C=No" INDICATES REQUIRED BEAM CAMBER IN INCHES.



STUD CLEARANCES AND SPACING

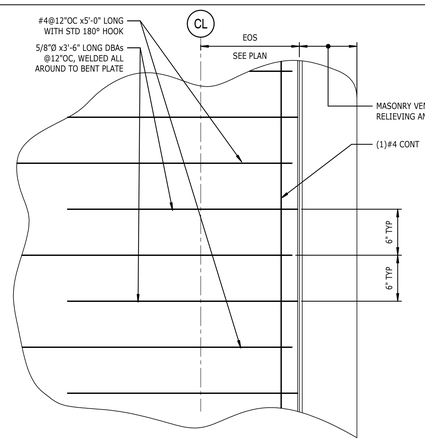
NOTES:
1. BEAM PARALLEL TO DECK CONDITION SHOWN. BEAM PERPENDICULAR TO DECK CONDITION IS SIMILAR.
2. WHEN DOUBLE ROW OF STUDS IS REQUIRED, USE A STAGGERED PATTERN IF SPACING PERMITS. SEE UNIFORM AND STAGGERED SPACING PLANS.



FLOOR DECK ATTACHMENT DETAIL

1 S-511 DETAIL

TYPICAL COMPOSITE SLAB DETAILS
NTS



4 S-511 DETAIL

TYPICAL EDGE OF SLAB AT BRICK RELIEVING ANGLE
NTS

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

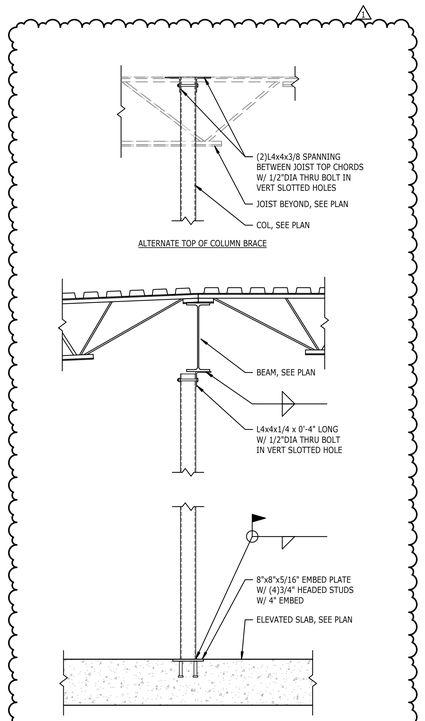
1	7/12/19	AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

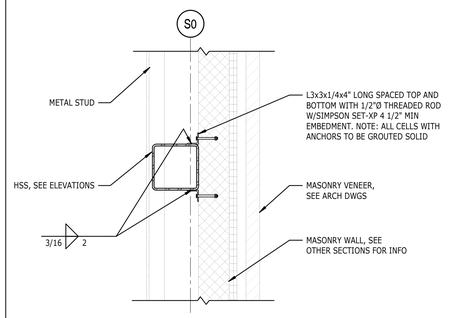
STRUCTURAL FLOOR SECTIONS

SHEET NUMBER

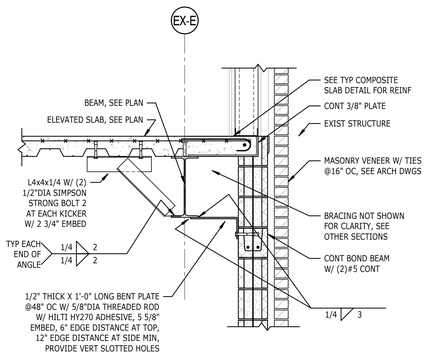
S-511



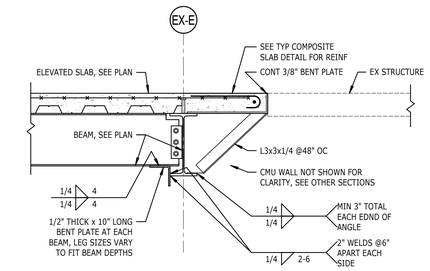
17 S-512 SECTION 3/4" = 1'-0"



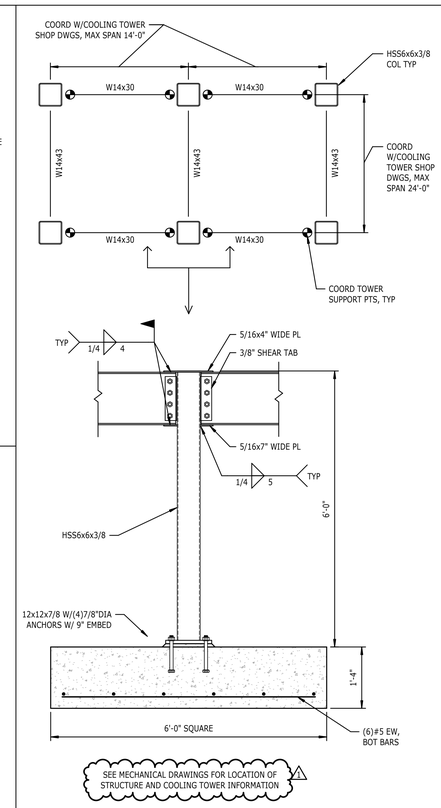
13 S-512 SECTION 3/4" = 1'-0"



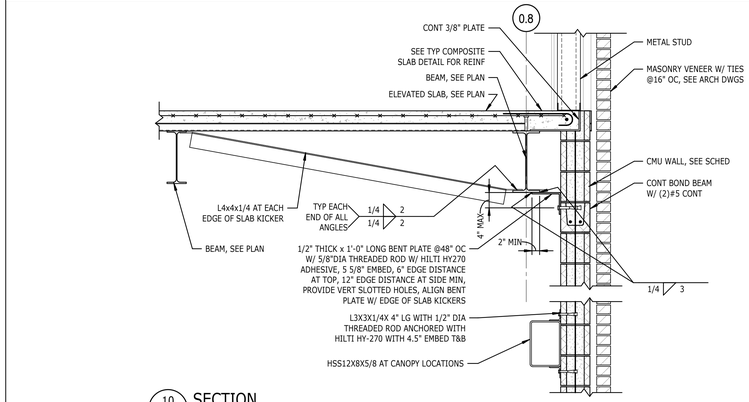
9 S-512 SECTION 3/4" = 1'-0"



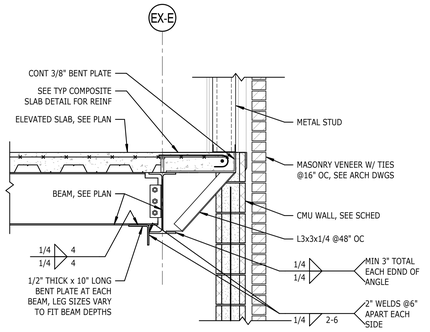
5 S-512 SECTION 3/4" = 1'-0"



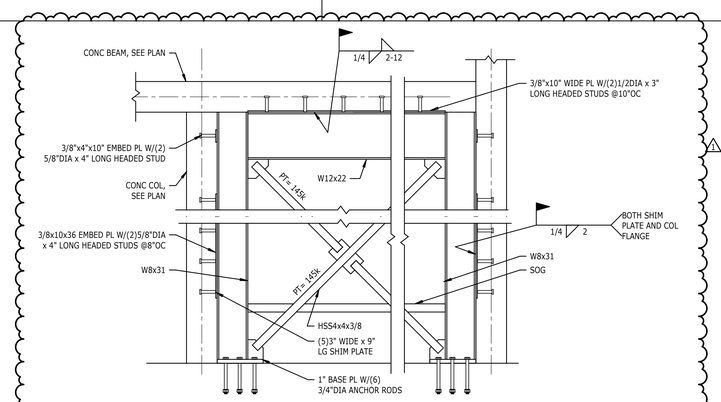
1 S-512 PLAN 3/4" = 1'-0"



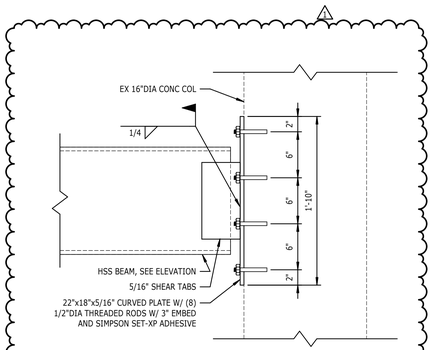
10 S-512 SECTION 3/4" = 1'-0"



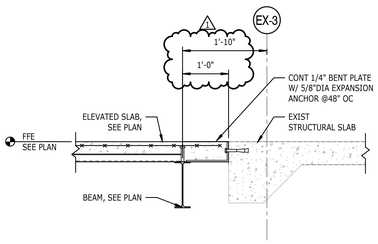
6 S-512 SECTION 3/4" = 1'-0"



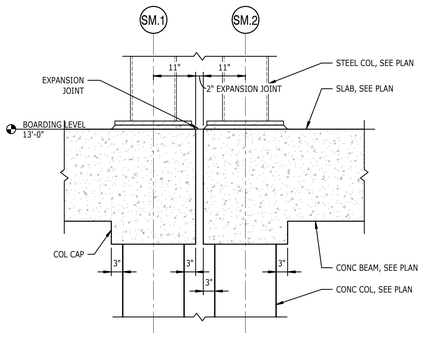
3 S-512 ELEVATION TEMPORARY BRACE ELEVATION 3/4" = 1'-0"



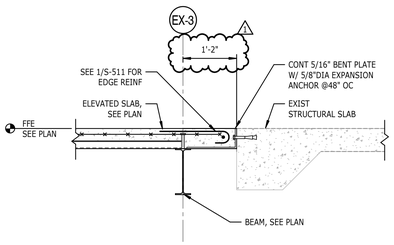
19 S-512 SECTION 1 1/2" = 1'-0"



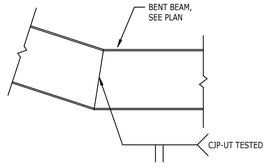
15 S-512 SECTION 3/4" = 1'-0"



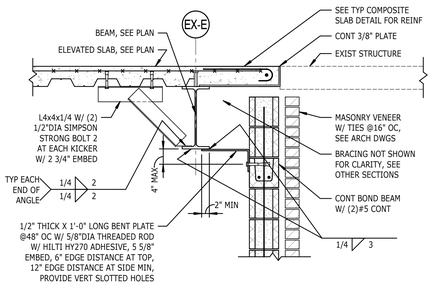
11 S-512 SECTION 3/4" = 1'-0"



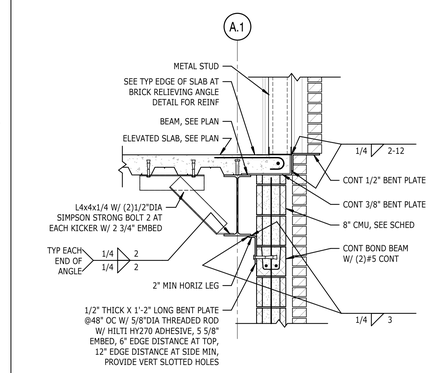
16 S-512 SECTION 3/4" = 1'-0"



12 S-512 SECTION TYPICAL BENT BEAM DETAIL NTS



8 S-512 SECTION 3/4" = 1'-0"



4 S-512 SECTION 3/4" = 1'-0"

ILM
TERMINAL IMPROVEMENTS CONTRACT 3
Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDNER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

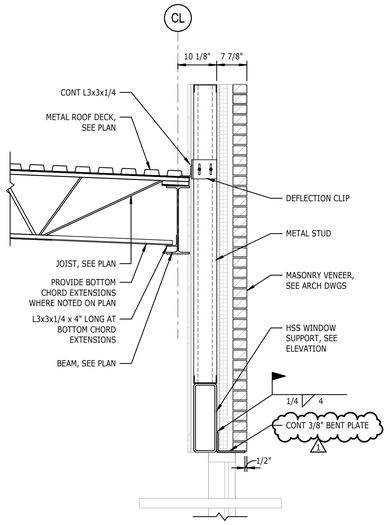
REVISIONS

1	7/12/19	AD-01

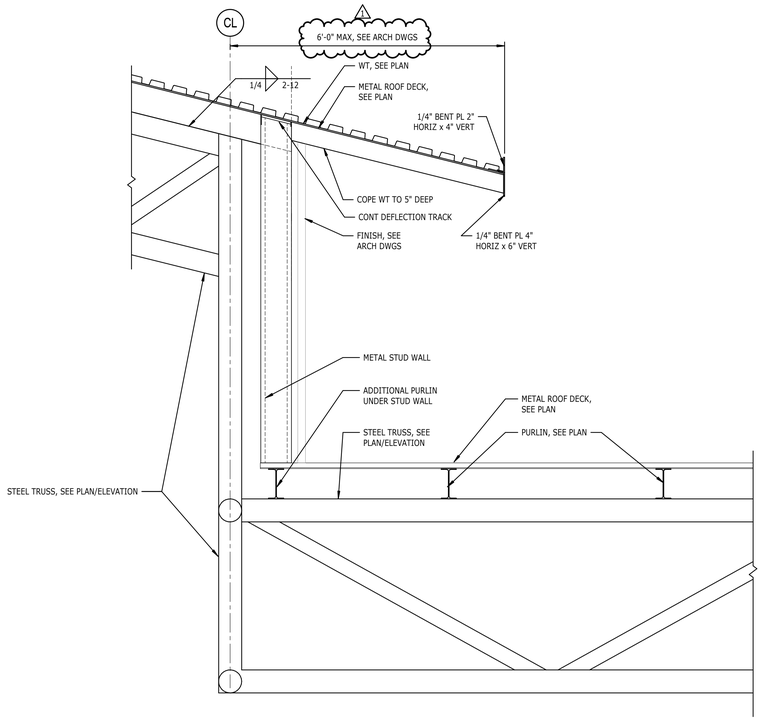
DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

STRUCTURAL FLOOR SECTIONS

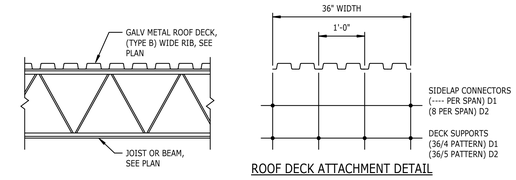
SHEET NUMBER
S-512



17 S-521 SECTION
3/4" = 1'-0"



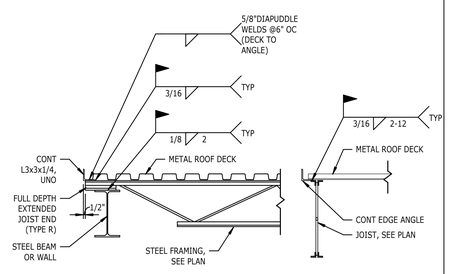
9 S-521 SECTION
3/4" = 1'-0"



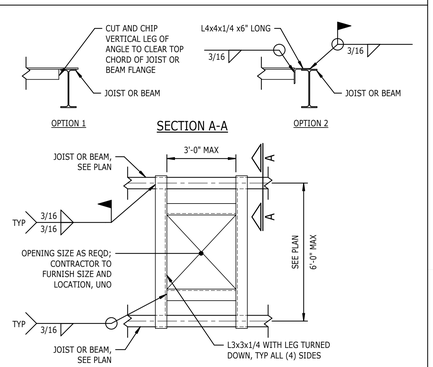
ROOF DECK ATTACHMENT DETAIL

NOTES:
1. ATTACH DECK TO SUPPORTING MEMBERS WITH 5/8"DIA PUDDLE WELDS. USE #10-16 FOR SIDELAP ATTACHMENT.
2. AT DECK BEARING SUPPORTS, PROVIDE 5/8"DIA PUDDLE WELDS AT SPECIFIED ATTACHMENT PATTERN.
3. AT SUPPORTS PARALLEL TO DECK SPAN, PROVIDE 5/8"DIA PUDDLE WELDS AT SPECIFIED ATTACHMENT PATTERN.
4. AT DECK SIDELAPS/PERIMETER EDGE, PROVIDE SCREWS AT SPECIFIED ATTACHMENT PATTERN, TYPICAL. WELDING OF SIDELAPS IS NOT PERMITTED FOR 22GA DECK.
5. MINIMUM DECK PROPERTIES: 1 1/2"-22 GAGE; Ip=0.155 in4/ft; Sp=0.186 in3/ft; In=0.183 in4/ft; Sn=0.192 in3/ft; Fy=33 ksi.
   1 1/2"-18 GAGE; Ip=0.289 in4/ft; Sp=0.318 in3/ft; In=0.295 in4/ft; Sn=0.329 in3/ft; Fy=33 ksi.
6. DECK SHALL BE CONTINUOUS OVER (2) OR MORE SPANS, TYPICAL.
7. SIDELAP FASTENING MUST BE SCREWED AS DESCRIBED ABOVE.
8. CONTRACTOR OPTION TO SUBMIT MECHANICAL FASTENERS BY HILTI, SIMSPON STRONG-TIE, OR APPROVED EQUAL. SUBSTITUTION REQUESTS FOR PRODUCTS MAY BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER-OF-RECORD (EOR) FOR REVIEW. SUBSTITUTIONS WILL ONLY BE CONSIDERED FOR PRODUCTS THAT MEET THE CODE REQUIREMENTS FOR DECK ATTACHMENT, POSSESS A FM GLOBAL APPROVAL AND POSSESS A CODE REPORT (ICC-ES) RECOGNIZING THE PRODUCT FOR THE APPROPRIATE APPLICATION. SUBSTITUTION REQUESTS SHALL INCLUDE CALCULATIONS THAT DEMONSTRATE THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE EQUIVALENT PERFORMANCE VALUES OF THE DESIGN BASIS PRODUCT. CONTRACTOR SHALL CONTACT MANUFACTURER'S REPRESENTATIVE FOR PRODUCT INSTALLATION TRAINING AND A LETTER SHALL BE SUBMITTED TO THE EOR INDICATING TRAINING HAS TAKEN PLACE. FASTENERS SHALL BE COLLATED AND INSTALLED USING THE MANUFACTURER'S DELIVERY TOOL AND FOLLOWING MANUFACTURER'S INSTRUCTIONS.

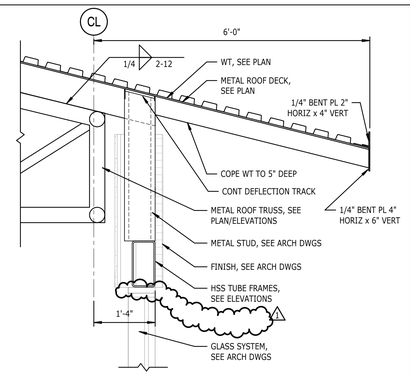
1 S-521 DETAIL
TYPICAL ROOF CONSTRUCTION, 1 1/2" METAL ROOF DECK
NTS



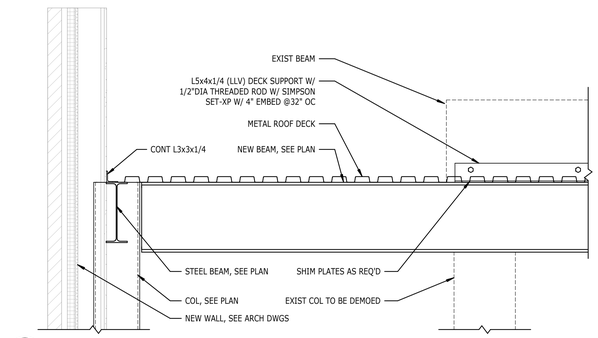
4 S-521 SECTION
TYPICAL EDGE DETAIL AT ROOF
NTS
NOTES:
1. SEE OTHER DETAILS FOR INFORMATION NOT SHOWN.



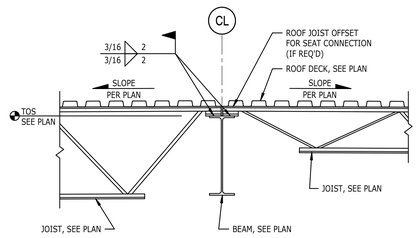
2 S-521 DETAIL
TYPICAL FRAMING AROUND ROOF OPENINGS, 1 1/2" METAL ROOF DECK
NTS
NOTES:
1. PROVIDE ANGLE FRAMING AROUND ALL OPENINGS LARGER THAN 10"x10" (10"Ø).



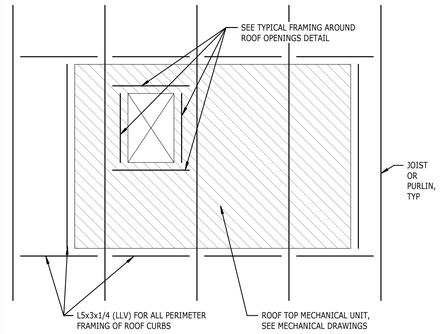
19 S-521 SECTION
3/4" = 1'-0"



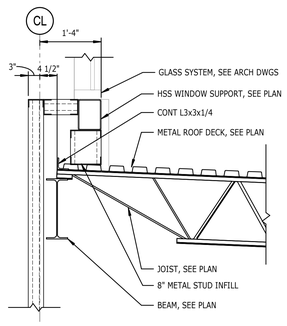
11 S-521 SECTION
3/4" = 1'-0"



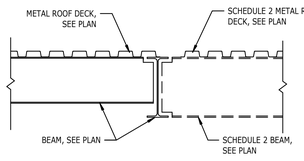
6 S-521 SECTION
JOIST BEARING AT RIDGE
NTS



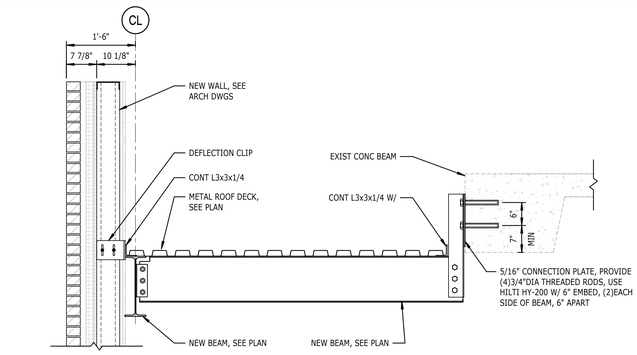
5 S-521 DETAIL
TYPICAL ROOF TOP MECHANIAL UNIT FRAMING
NTS
NOTES:
1. ALL MEMBERS NOT SIZED ON FRAMING PLAN SHALL BE L5x3x1/4.



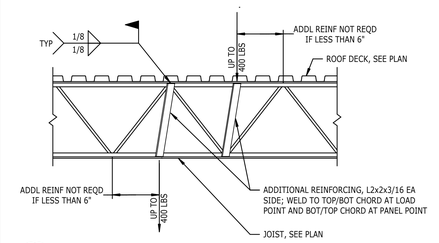
20 S-521 SECTION
3/4" = 1'-0"



16 S-521 SECTION
3/4" = 1'-0"



8 S-521 SECTION
3/4" = 1'-0"



3 S-521 DETAIL
TYPICAL REINFORCING FOR CONCENTRATED LOADS ON STEEL JOISTS
NTS
NOTES:
1. WHERE POSSIBLE, ALL LOADS ARE TO BE SUPPORTED FROM PANEL POINTS. WHERE NOT POSSIBLE, PROVIDE REINFORCEMENT AS DETAILED.
2. LOADS LESS THAN 100 LBS REQUIRE NO ADDITIONAL REINFORCING. LOADS LARGER THAN 400 LBS PER JOIST REQUIRE SPECIAL SUPPORT CONDITIONS TO BE APPROVED BY THE ENGINEER OF RECORD.
3. BOTTOM CHORDS EXTENDING UNSUPPORTED PAST THE FIRST BOTTOM PANEL POINT TOWARD JOIST BEARING LOCATION ARE NOT TO BE USED TO SUPPORT ANY LOAD WITHOUT WRITTEN PERMISSION FROM THE ENGINEER OF RECORD.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

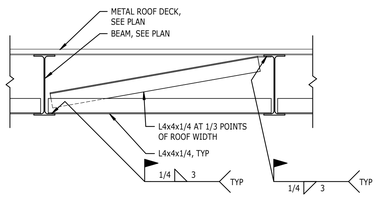
REVISIONS

1 7/12/19 AD-01

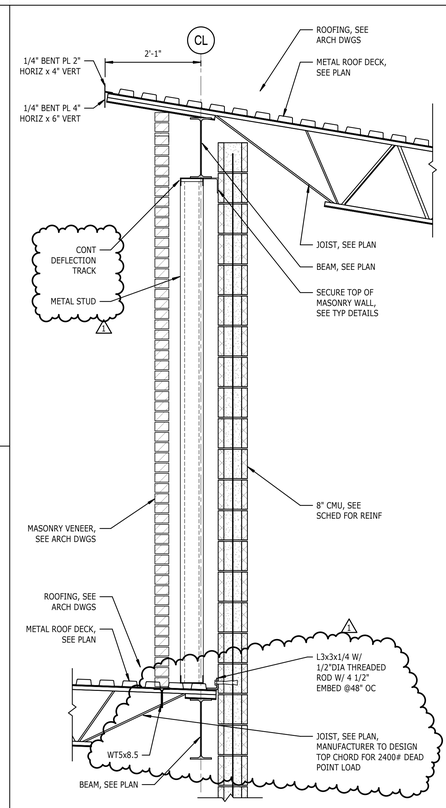
DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

STRUCTURAL ROOF SECTIONS

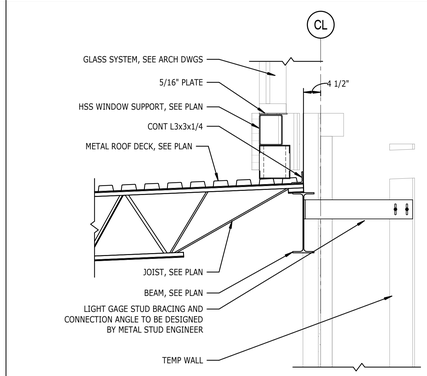
SHEET NUMBER
S-521



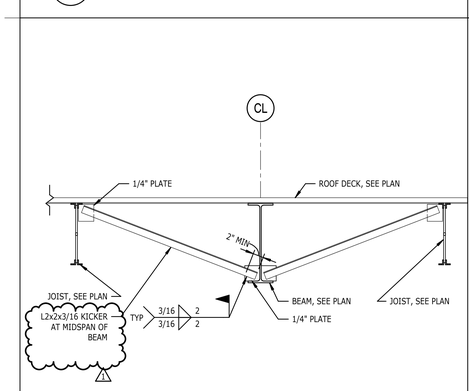
17 S-522 **SECTION**
BOTTOM FLANGE BRACING DETAIL
NTS



13 S-522 **SECTION**
3/4" = 1'-0"

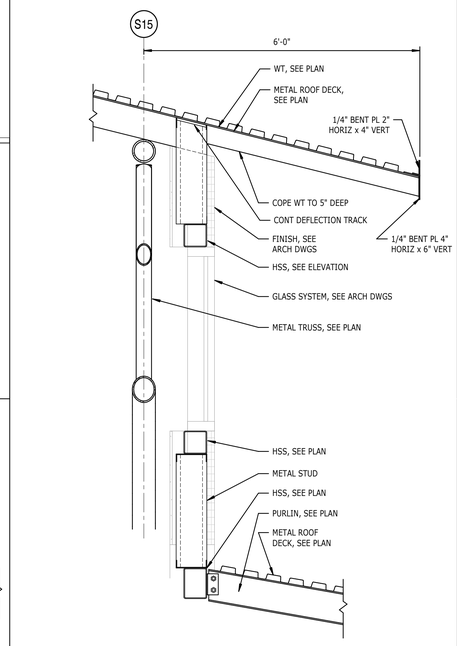


18 S-522 **SECTION**
3/4" = 1'-0"

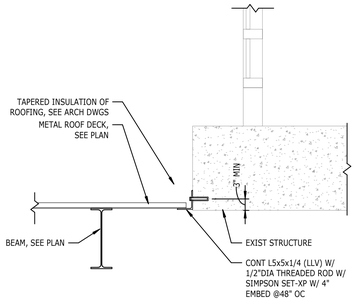


19 S-522 **SECTION**
3/4" = 1'-0"

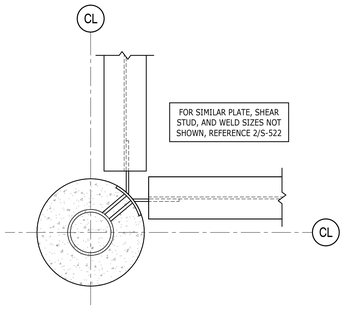
20 S-522 **SECTION**
3/4" = 1'-0"



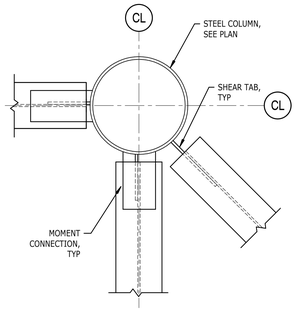
15 S-522 **SECTION**
3/4" = 1'-0"



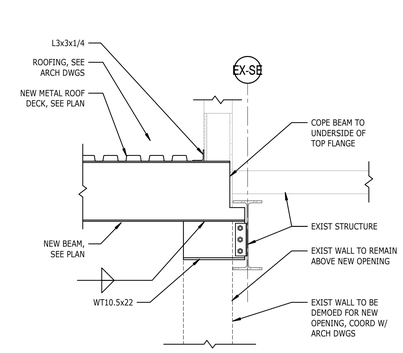
9 S-522 **SECTION**
3/4" = 1'-0"



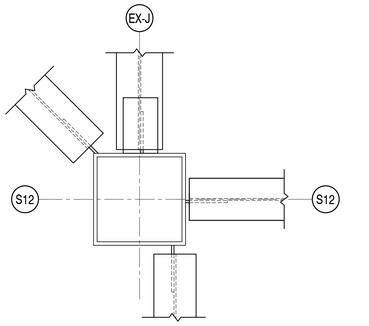
5 S-522 **PLAN**
CONNECTION PLATE DETAIL
1 1/2" = 1'-0"



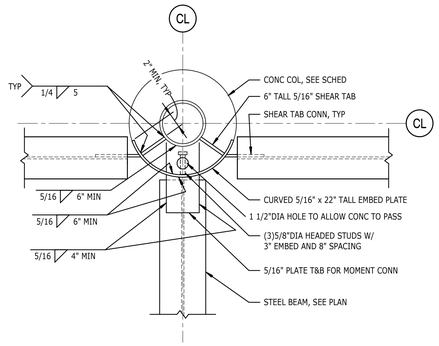
1 S-522 **CONNECTION PLAN DETAIL**
NTS



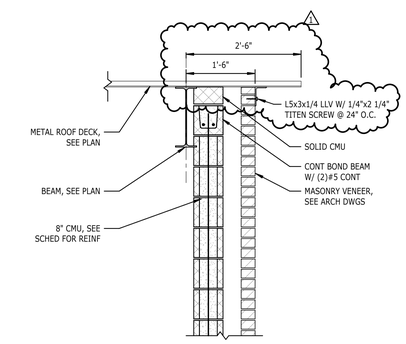
10 S-522 **SECTION**
3/4" = 1'-0"



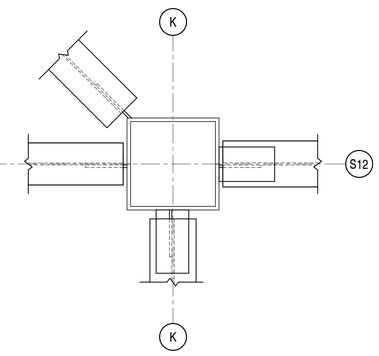
6 S-522 **PLAN**
CONNECTION PLATE DETAIL
1 1/2" = 1'-0"



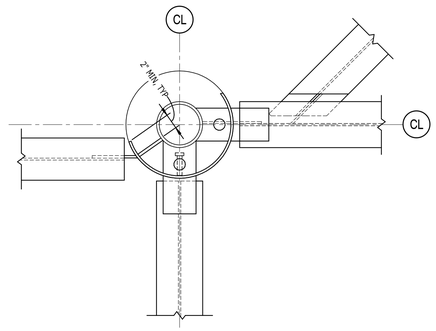
2 S-522 **CONNECTION PLAN DETAIL**
1 1/2" = 1'-0"



11 S-522 **SECTION**
3/4" = 1'-0"

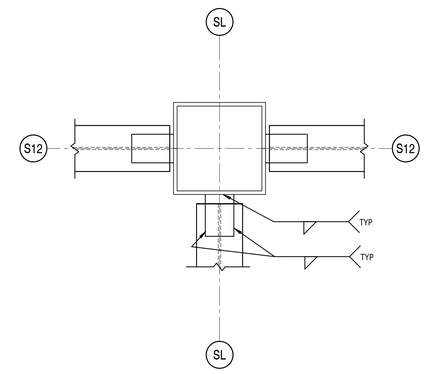


7 S-522 **PLAN**
CONNECTION PLATE DETAIL
1 1/2" = 1'-0"

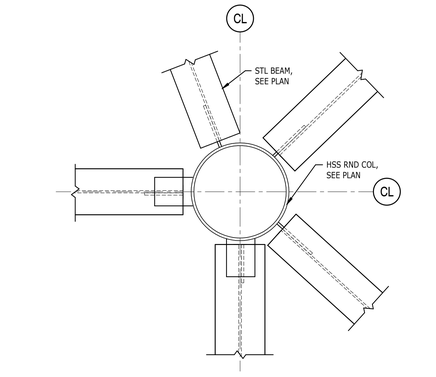


3 S-522 **CONNECTION PLAN DETAIL**
1 1/2" = 1'-0"

12 S-522 **SECTION**
3/4" = 1'-0"



8 S-522 **PLAN**
CONNECTION PLATE DETAIL
1 1/2" = 1'-0"



4 S-522 **CONNECTION PLAN DETAIL**
1 1/2" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

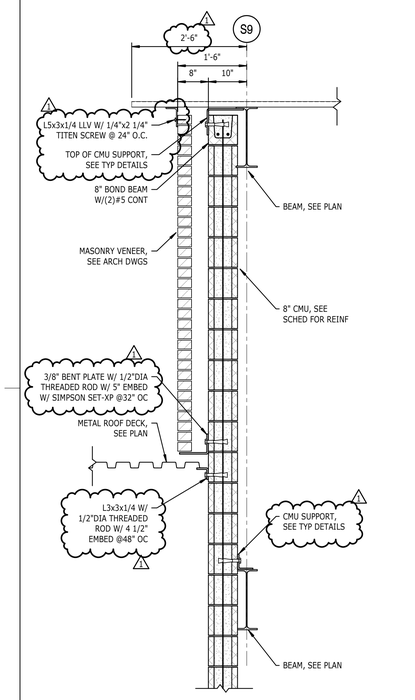
1	7/12/19	AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

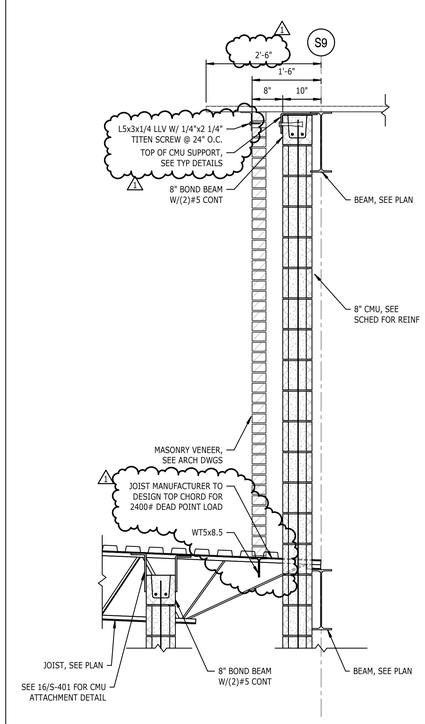
STRUCTURAL ROOF SECTIONS

SHEET NUMBER

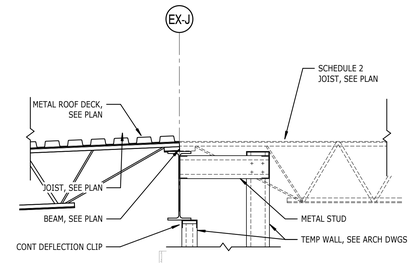
S-522



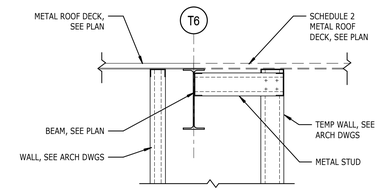
17 S-523 SECTION 3/4" = 1'-0"



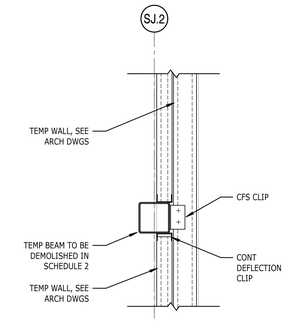
13 S-523 SECTION 3/4" = 1'-0"



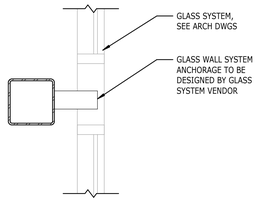
9 S-523 SECTION 3/4" = 1'-0"



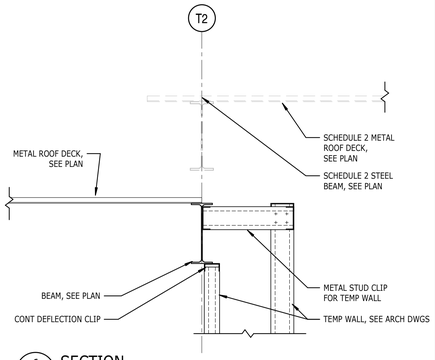
5 S-523 SECTION 3/4" = 1'-0"



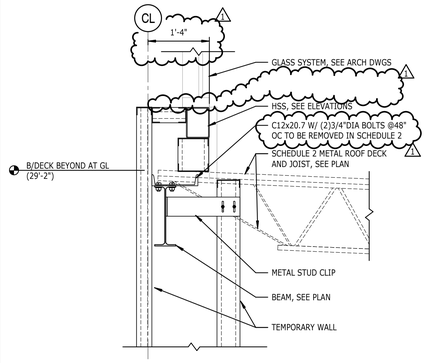
1 S-523 SECTION 3/4" = 1'-0"



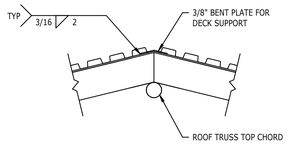
10 S-523 SECTION 3/4" = 1'-0"



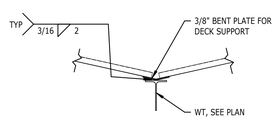
6 S-523 SECTION 3/4" = 1'-0"



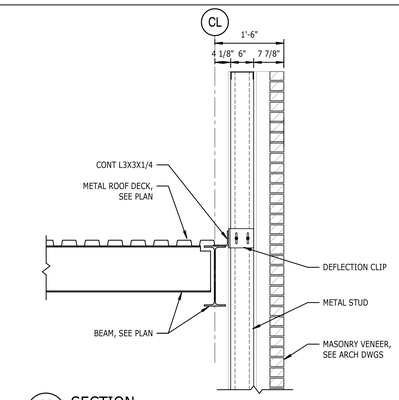
2 S-523 SECTION 3/4" = 1'-0"



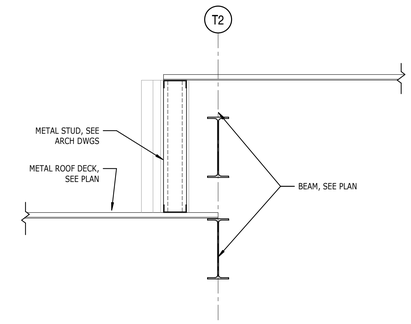
19 S-523 DETAIL 3/4" = 1'-0"



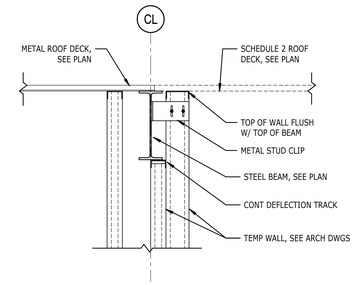
15 S-523 DETAIL 3/4" = 1'-0"



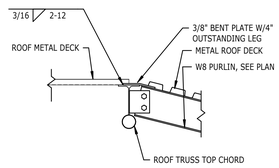
11 S-523 SECTION 3/4" = 1'-0"



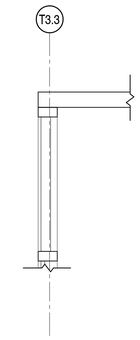
7 S-523 SECTION 3/4" = 1'-0"



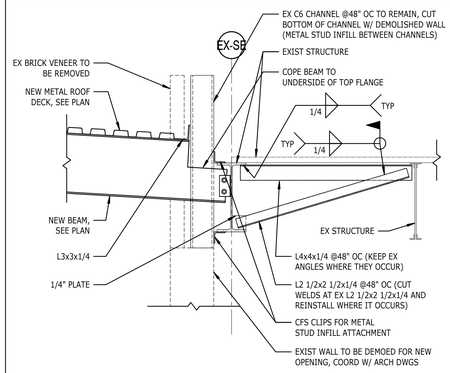
3 S-523 SECTION 3/4" = 1'-0"



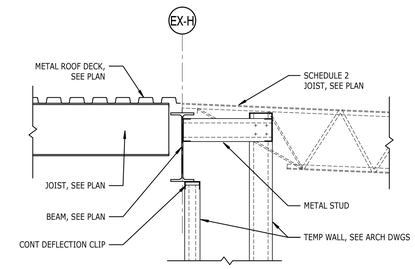
20 S-523 DETAIL 3/4" = 1'-0"



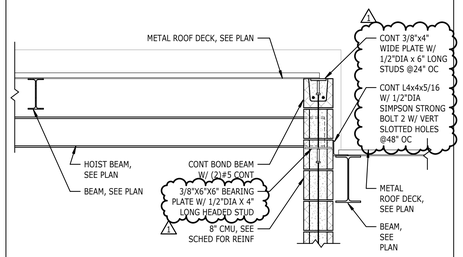
16 S-523 SECTION 3/4" = 1'-0"



12 S-523 SECTION 3/4" = 1'-0"



8 S-523 SECTION 3/4" = 1'-0"



4 S-523 SECTION 3/4" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

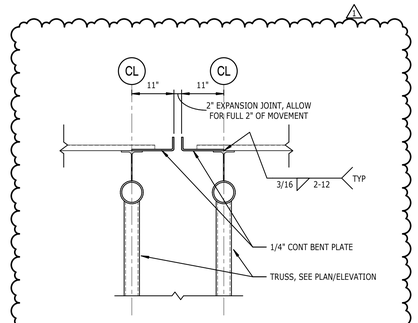
1 7/12/19 AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

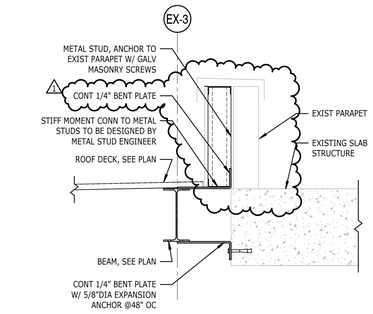
STRUCTURAL ROOF SECTIONS

SHEET NUMBER

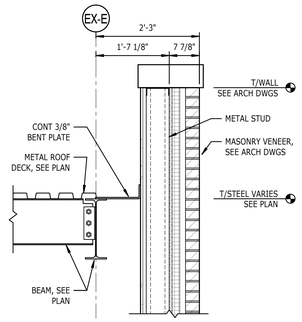
S-523



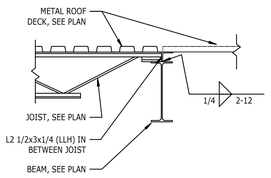
17 S-524 SECTION
3/4" = 1'-0"



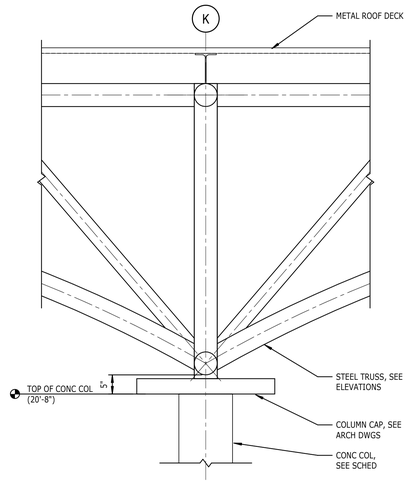
13 S-524 SECTION
3/4" = 1'-0"



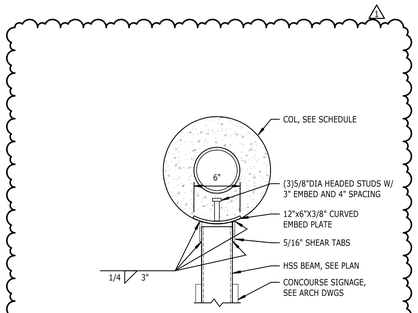
9 S-524 SECTION
3/4" = 1'-0"



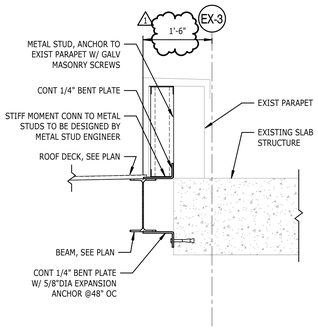
5 S-524 SECTION
3/4" = 1'-0"



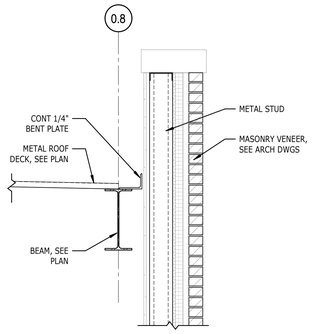
1 S-524 Section 4
3/4" = 1'-0"



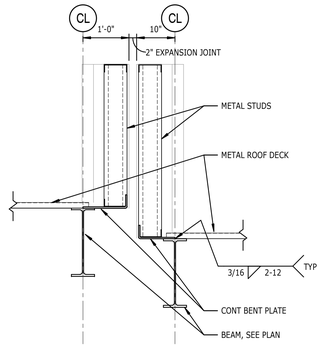
18 S-524 DETAIL
CONCOURSE SIGNAGE CONNECTION DETAIL
NTS



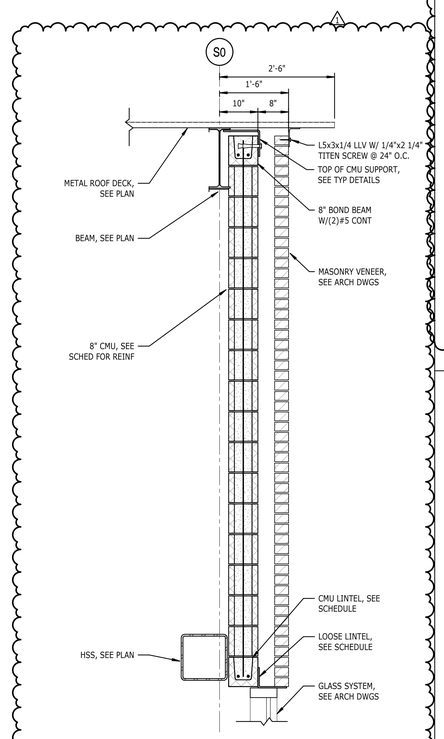
14 S-524 SECTION
3/4" = 1'-0"



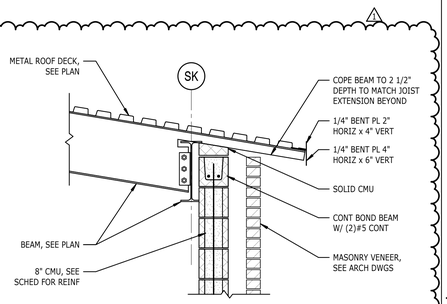
10 S-524 SECTION
3/4" = 1'-0"



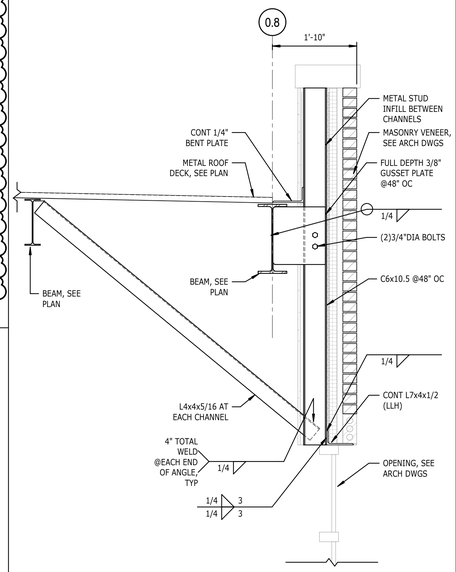
6 S-524 SECTION
3/4" = 1'-0"



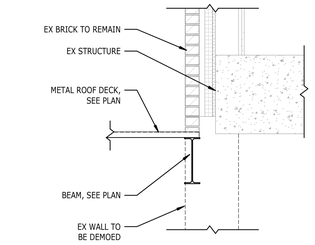
19 S-524 SECTION
3/4" = 1'-0"



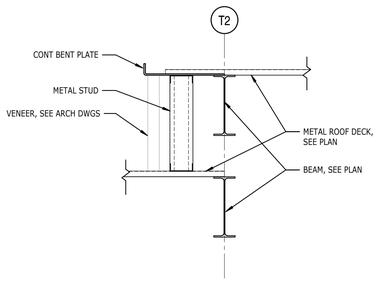
15 S-524 SECTION
3/4" = 1'-0"



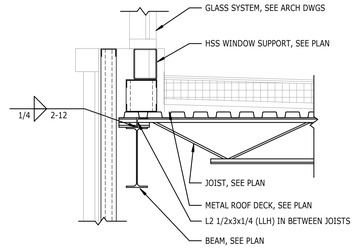
12 S-524 SECTION
3/4" = 1'-0"



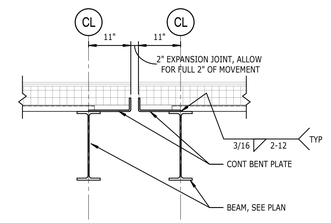
7 S-524 SECTION
3/4" = 1'-0"



8 S-524 SECTION
3/4" = 1'-0"



3 S-524 SECTION
3/4" = 1'-0"



4 S-524 S534 /
3/4" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

NORTH CAROLINA PROFESSIONAL SEAL 024096 ENGINEER MICHAEL A. GARDINER
07/12/2019

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
FIRM LICENSE #C-1051
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SINGAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

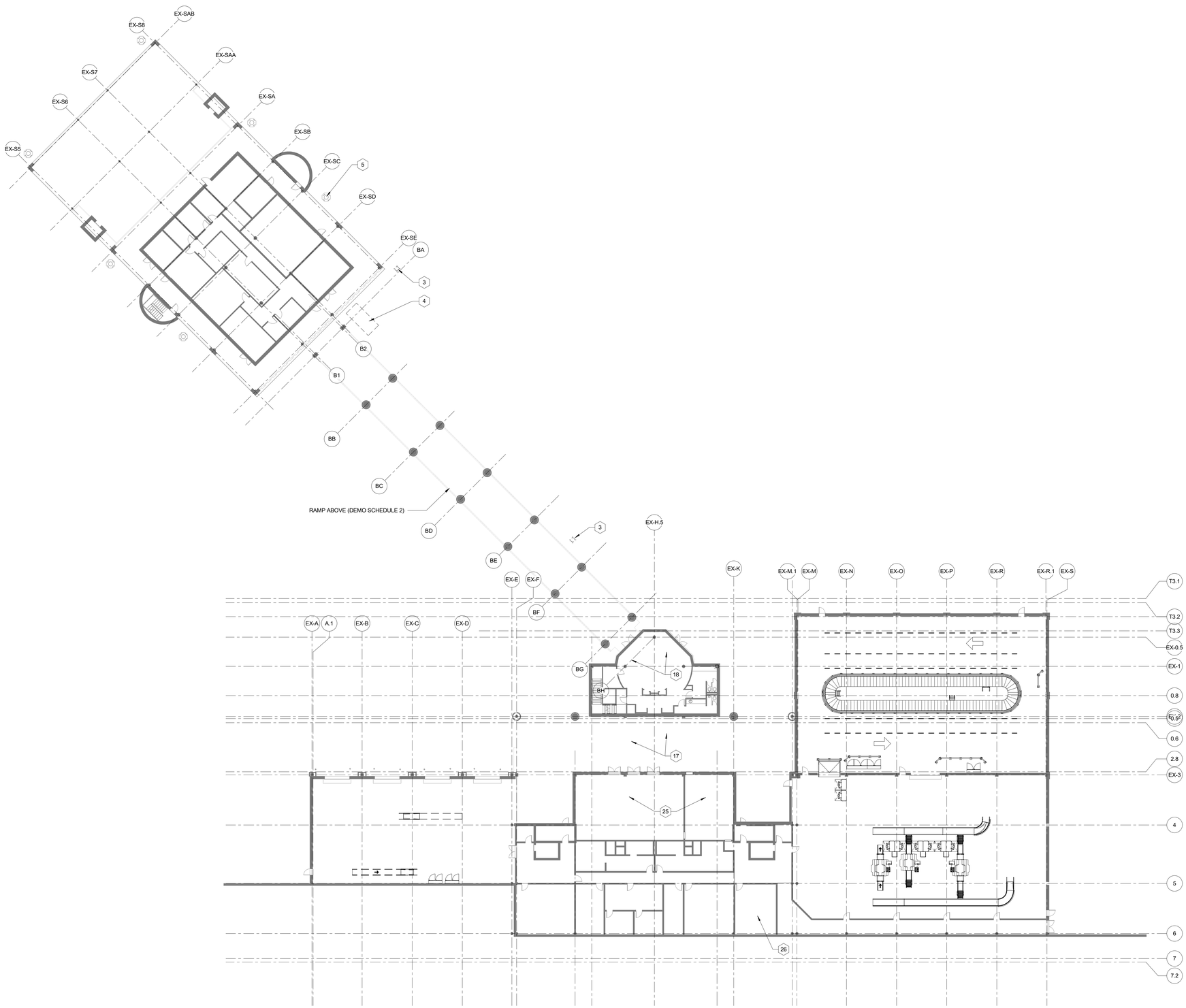
REVISIONS

1 7/12/19 AD-01

DATE 06/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

STRUCTURAL ROOF SECTIONS

SHEET NUMBER
S-524



1 SCHEDULE 1 - OVERALL RAMP LEVEL DEMO FLOOR PLAN - MAP
1" = 20'-0"

DEMOLITION GENERAL NOTES

1. NUMBERED KEY NOTES DO NOT IMPLY SEQUENCE. CONTRACTOR TO PERFORM DEMOLITION WORK AS REQUIRED PER WORK SEQUENCE.
2. DEMOLITION DRAWINGS ARE INTENDED TO SHOW GENERAL AREAS OF DEMOLITION AS WELL AS GENERAL EXISTING CONDITIONS. THEY DO NOT SHOW ALL WORK WHICH MAY BE NECESSARY. COMPARE WITH DRAWINGS INDICATING NEW CONSTRUCTION.
3. REFER TO OTHER DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION ON DEMOLITION. REFER TO FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL DEMOLITION.
4. EXISTING WORK TO REMAIN SHALL BE TEMPORARILY SECURED, BRACED, AND STABILIZED UNTIL PERMANENT CONSTRUCTION IS IN PLACE.
5. VERIFY FIELD CONDITIONS PRIOR TO START OF DEMOTION AND CONSTRUCTION ACTIVITIES, AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
6. VERIFY THAT CONSTRUCTION INDICATED FOR REMOVAL IS NOT LOAD BEARING OR IS ADEQUATELY SHORED AS INDICATED ON STRUCTURAL DRAWINGS PRIOR TO STARTING ANY WORK.
7. ERECT BARRICADES, FENCES OR OTHER SECURABLE MEANS TO PREVENT UNAUTHORIZED ACCESS INTO CONSTRUCTION ZONES.
8. DO NOT ALLOW MATERIAL AND DEBRIS GENERATED BY DEMOLITION ACTIVITIES TO ACCUMULATE ON THE JOB SITE. REMOVE DAILY AND DISPOSE OF IN A LEGAL MANNER. NO ON-SITE SALE OR BURNING OF REMOVED ITEMS IS PERMITTED.
9. THE CONTRACTOR MUST MAINTAIN ADEQUATE SUPPORT INSULATION, WATERPROOFING, EMERGENCY LIGHTING, SECURITY, ALARMS, ETC. FOR ALL OR PART OF ITEMS WHICH ARE TO REMAIN.
10. TERMINATE AND CAP ANY UTILITY IN WALLS CEILINGS AND FLOORS TO BE REMOVED AND NOT INTENDED FOR REUSE.
11. PREPARE AND PATCH SURFACES THAT RECEIVE NEW FINISHES AS REQUIRED, BY REMOVING OR RELOCATING DEVICES, WIRING, OR OTHER APPURTENANCES NO LONGER APPROPRIATE FOR THE NEW USE OF THE ROOM.
12. MAINTAIN EXISTING FINISHES, OPERATIONAL CHARACTERISTICS, AND APPEARANCE OF ITEMS SCHEDULED TO REMAIN OR BE REUSED.
13. CLEAN, PATCH, REPAIR, AND PREPARE ALL SURFACES AS REQUIRED TO RECEIVE SCHEDULED FINISHES INCLUDING BUT NOT LIMITED TO GRINDING, MOISTURE MITIGATION, CRACK SUPPRESSION, CRACK REPAIR, AND LEVELING. NOTE THAT ADDITIONAL GRINDING OF THE FLOOR AT COLUMN BASES MAY BE REQUIRED TO ENSURE THAT THE CARPET FINISH IS EVEN WITH THE TERRAZZO FINISH.
14. ONLY ONE SET OF FIDS CAN BE OUT OF COMMISSION AT ANY GIVEN TIME, UNLESS DOWNTIME IS LIMITED TO OVERNIGHT. WHEN ONE SET OF FIDS IS DOWN, GC IS TO PROVIDE SIGNAGE DIRECTING PASSENGERS TO OTHER FIDS BANKS.
15. WHERE WALLS ARE INDICATED TO BE DEMOLISHED ALONG EXISTING TENANT OR AIRPORT SPACES, INTERIOR FIRE PROTECTION, PLUMBING, MECHANICAL, ELECTRICAL, AND TELECOM SERVICES ARE TO BE RELOCATED AND COORDINATED WITH NEW WALLS. PROVIDED ONE-FOR-ONE RELOCATION OR REPLACEMENT OF AFFECTED SERVICE.
16. ALL EXISTING GATE SIGNS ARE TO BE REMOVED AND TURNED-OVER TO THE OWNER.

DEMOLITION KEYED NOTES

1	REMOVE WALLS/ALL RELATED DASHED WALLS
3	REMOVE LIGHT POLE
4	REMOVE GENERATOR
5	BRIDGE TO BE RELOCATED- CAP EXISTING ROTUNDA FOUNDATION
6	REMOVE PIERS AND FOOTINGS
7	REMOVE DOORS AND FILL OPENING
8	REMOVE BAGGAGE DEVICE (SEE BAGGAGE DEMO PLAN)
9	REMOVE BRICK AS NEEDED TO ALLOW FOR NEW STRUCTURE
10	REMOVE BOLLARDS
11	REMOVE PLUMBING FIXTURES & PIPING
12	REMOVE STAIRS
13	REMOVE WALLS TO ALLOW FOR NEW WINDOW OR DOOR
14	REMOVE CONCRETE SLAB
15	REMOVE BRICK VENEER TO STAIR TOWER EDGE
16	REMOVE WALLS & ROOF OF ENTIRE CONNECTOR BRIDGE
17	REMOVE CEILING ENCLOSURE FOR UTILITY WORK TUG LANE TO REMAIN IN OPERATION
18	DEMO AS REQUIRED FOR UTILITY WORK
19	REMOVE SMOKE CONTROL SYSTEM
20	RELOCATE TSA IT EQUIPMENT TO TSA TRAING ROOM AND DEMO IT AND SUPERVISOR ROOMS
21	DECOMMISION ELEVATOR
22	LOCK STAIR DOOR AND REMOVE EXIT SIGNS
23	REMOVE EXISTING EXTERIOR BRICK ENSURE WATER PROOF CONDITION @ EXTERIOR
24	CONSTRUCT TEMP WALL ON EXTERIOR SIDE OF EXTERIOR WALL @ WINDOW LEDGE
25	MODIFICATIONS FOR ROUTING EXISTING MECHANICAL AND ELECTRICAL SYSTEMS
26	MODIFICATIONS FOR ROUTING EXISTING BAS SYSTEMS
27	REMOVE EXISTING COLUMN
28	FILL IN HOLE @ HVAC CHASE

TRUE NORTH

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 51140 NORTH CAROLINA CHARLOTTE, N.C.

EVANS WALKER PAUL NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 9272 CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

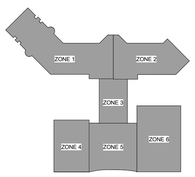
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

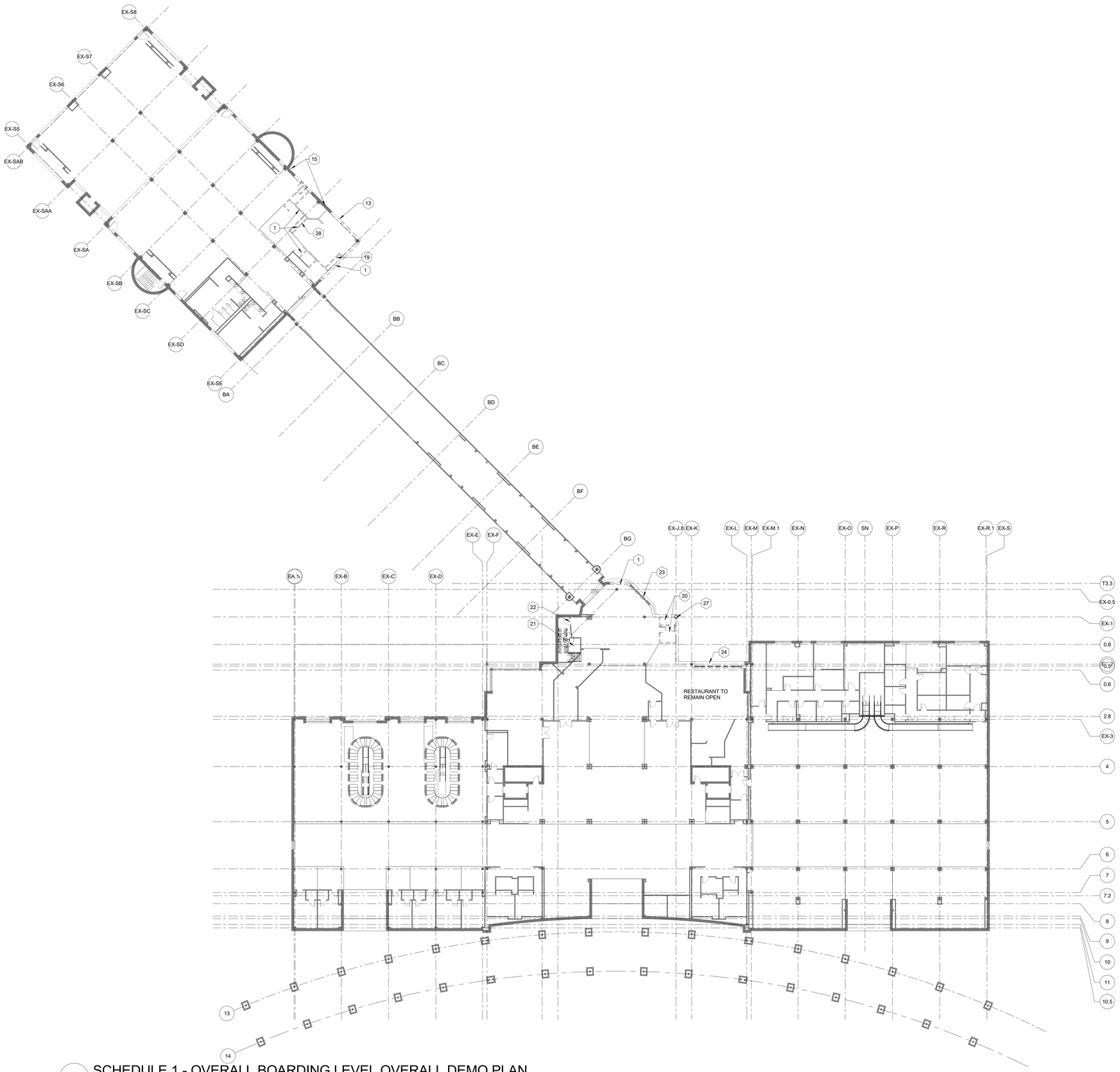
1 7/12/19 AD-01

DATE 7/12/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - RAMP LEVEL OVERALL DEMO PLAN

SHEET NUMBER

AD1-110



1 SCHEDULE 1 - OVERALL BOARDING LEVEL OVERALL DEMO PLAN
1" = 20'-0"

DEMOLITION GENERAL NOTES

1. NUMBERED KEY NOTES DO NOT IMPLY SEQUENCE. CONTRACTOR TO PERFORM DEMOLITION WORK AS REQUIRED PER WORK SEQUENCE.
2. DEMOLITION DRAWINGS ARE INTENDED TO SHOW GENERAL AREAS OF DEMOLITION AS WELL AS GENERAL EXISTING CONDITIONS. THEY DO NOT SHOW ALL WORK WHICH MAY BE NECESSARY. COMPARE WITH DRAWINGS INDICATING NEW CONSTRUCTION.
3. REFER TO OTHER DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION ON DEMOLITION. REFER TO FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL DEMOLITION.
4. EXISTING WORK TO REMAIN SHALL BE TEMPORARILY SECURED, BRACED, AND STABILIZED UNTIL PERMANENT CONSTRUCTION IS IN PLACE.
5. VERIFY FIELD CONDITIONS PRIOR TO START OF DEMOTION AND CONSTRUCTION ACTIVITIES, AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
6. VERIFY THAT CONSTRUCTION INDICATED FOR REMOVAL IS NOT LOAD BEARING OR IS ADEQUATELY SHORED AS INDICATED ON STRUCTURAL DRAWINGS PRIOR TO STARTING ANY WORK.
7. ERECT BARRICADES, FENCES OR OTHER SECURABLE MEANS TO PREVENT UNAUTHORIZED ACCESS INTO CONSTRUCTION ZONES.
8. DO NOT ALLOW MATERIAL AND DEBRIS GENERATED BY DEMOLITION ACTIVITIES TO ACCUMULATE ON THE JOB SITE. REMOVE DAILY AND DISPOSE OF IN A LEGAL MANNER. NO ON-SITE SALE OR BURNING OF REMOVED ITEMS IS PERMITTED.
9. THE CONTRACTOR MUST MAINTAIN ADEQUATE SUPPORT INSULATION, WATERPROOFING, EMERGENCY LIGHTING, SECURITY, ALARMS, ETC. FOR ALL OR PART OF ITEMS WHICH ARE TO REMAIN.
10. TERMINATE AND CAP ANY UTILITY IN WALLS CEILINGS AND FLOORS TO BE REMOVED AND NOT INTENDED FOR REUSE.
11. PREPARE AND PATCH SURFACES THAT RECEIVE NEW FINISHES AS REQUIRED, BY REMOVING OR RELOCATING DEVICES, WIRING, OR OTHER APPURTENANCES NO LONGER APPROPRIATE FOR THE NEW USE OF THE ROOM.
12. MAINTAIN EXISTING FINISHES, OPERATIONAL CHARACTERISTICS, AND APPEARANCE OF ITEMS SCHEDULED TO REMAIN OR BE REUSED.
13. CLEAN, PATCH, REPAIR, AND PREPARE ALL SURFACES AS REQUIRED TO RECEIVE SCHEDULED FINISHES INCLUDING BUT NOT LIMITED TO GRINDING, MOISTURE MITIGATION, CRACK SUPPRESSION, CRACK REPAIR, AND LEVELING. NOTE THAT ADDITIONAL GRINDING OF THE FLOOR AT COLUMN BASES MAY BE REQUIRED TO ENSURE THAT THE CARPET FINISH IS EVEN WITH THE TERRAZZO FINISH.
14. ONLY ONE SET OF FIDS CAN BE OUT OF COMMISSION AT ANY GIVEN TIME, UNLESS DOWNTIME IS LIMITED TO OVERNIGHT. WHEN ONE SET OF FIDS IS DOWN, GC IS TO PROVIDE SIGNAGE DIRECTING PASSENGERS TO OTHER FIDS BANKS.
15. WHERE WALLS ARE INDICATED TO BE DEMOLISHED ALONG EXISTING TENANT OR AIRPORT SPACES, INTERIOR FIRE PROTECTION, PLUMBING, MECHANICAL, ELECTRICAL, AND TELECOM SERVICES ARE TO BE RELOCATED AND COORDINATED WITH NEW WALLS. PROVIDED ONE-FOR-ONE RELOCATION OR REPLACEMENT OF AFFECTED SERVICE.
16. ALL EXISTING GATE SIGNS ARE TO BE REMOVED AND TURNED-OVER TO THE OWNER.

DEMOLITION KEYED NOTES

1	REMOVE WALLS/ALL RELATED DASHED WALLS
3	REMOVE LIGHT POLE
4	REMOVE GENERATOR
5	BRIDGE TO BE RELOCATED- CAP EXISTING ROTUNDA FOUNDATION
6	REMOVE PIERS AND FOOTINGS
7	REMOVE DOORS AND FILL OPENING
8	REMOVE BAGGAGE DEVICE (SEE BAGGAGE DEMO PLAN)
9	REMOVE BRICK AS NEEDED TO ALLOW FOR NEW STRUCTURE
10	REMOVE BOLLARDS
11	REMOVE PLUMBING FIXTURES & PIPING
12	REMOVE STAIRS
13	REMOVE WALLS TO ALLOW FOR NEW WINDOW OR DOOR
14	REMOVE CONCRETE SLAB
15	REMOVE BRICK VENEER TO STAIR TOWER EDGE
16	REMOVE WALLS & ROOF OF ENTIRE CONNECTOR BRIDGE
17	REMOVE CEILING ENCLOSURE FOR UTILITY WORK TUG LANE TO REMAIN IN OPERATION
18	DEMO AS REQUIRED FOR UTILITY WORK
19	REMOVE SMOKE CONTROL SYSTEM
20	RELOCATE TSA IT EQUIPMENT TO TSA TRAING ROOM AND DEMO IT AND SUPERVISOR ROOMS
21	DECOMMISION ELEVATOR
22	LOCK STAIR DOOR AND REMOVE EXIT SIGNS
23	REMOVE EXISTING EXTERIOR BRICK ENSURE WATER PROOF CONDITION @ EXTERIOR
24	CONSTRUCT TEMP WALL ON EXTERIOR SIDE OF EXTERIOR WALL @ WINDOW LEDGE
25	MODIFICATIONS FOR ROUTING EXISTING MECHANICAL AND ELECTRICAL SYSTEMS
26	MODIFICATIONS FOR ROUTING EXISTING BAS SYSTEMS
27	REMOVE EXISTING COLUMN
28	FILL IN HOLE @ HVAC CHASE

TRUE NORTH

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 51140 NORTH CAROLINA CHARLOTTE, N.C.

TRAVIS WALKER PAGE REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

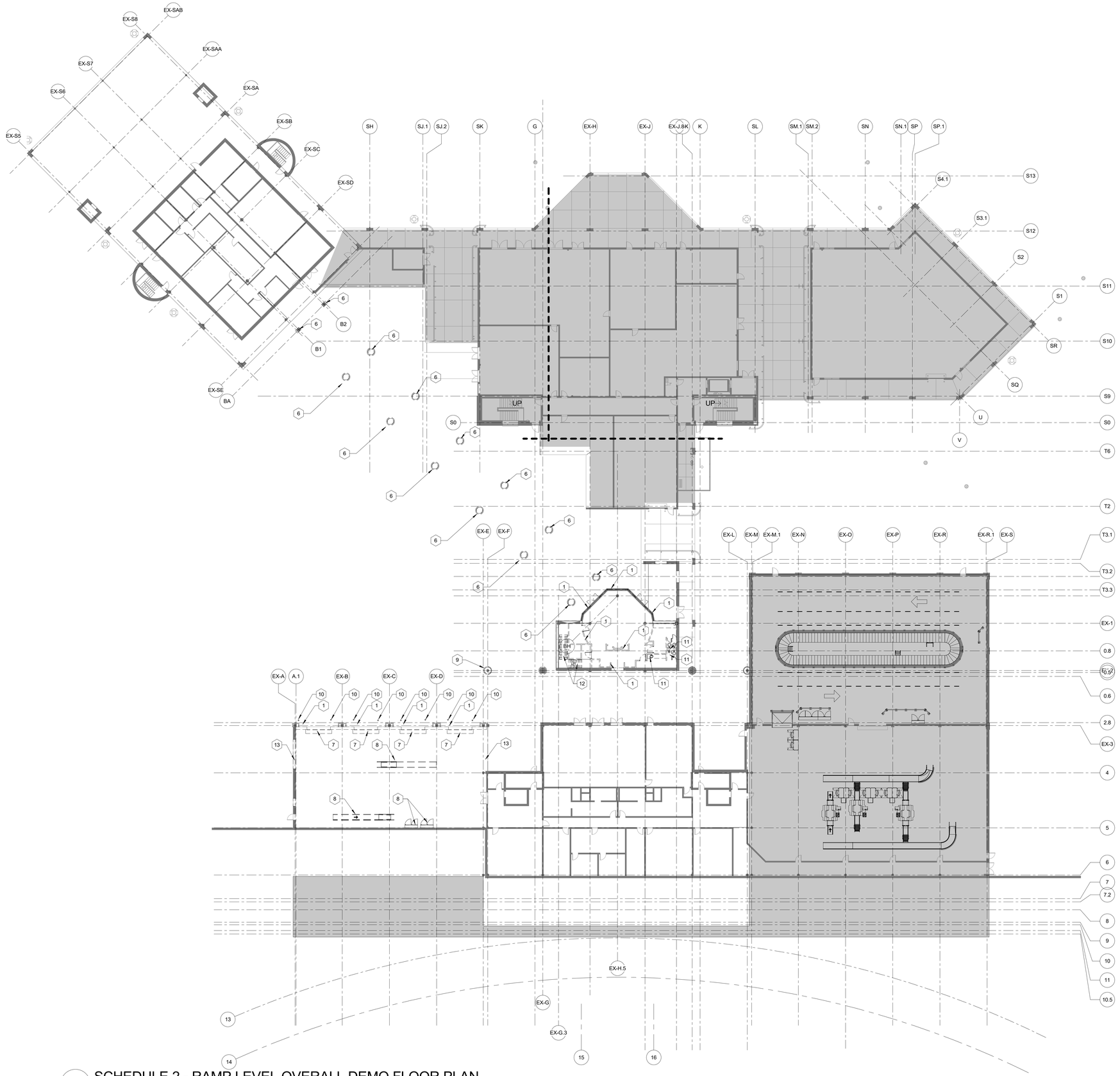
1 7/12/19 AD-01

DATE 7/12/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - BOARDING / TICKET LEVELS OVERALL DEMO PLAN

SHEET NUMBER

AD1-120



1 SCHEDULE 2 - RAMP LEVEL OVERALL DEMO FLOOR PLAN

1" = 20'-0"

DEMOLITION GENERAL NOTES

1. NUMBERED KEY NOTES DO NOT IMPLY SEQUENCE. CONTRACTOR TO PERFORM DEMOLITION WORK AS REQUIRED PER WORK SEQUENCE.
2. DEMOLITION DRAWINGS ARE INTENDED TO SHOW GENERAL AREAS OF DEMOLITION AS WELL AS GENERAL EXISTING CONDITIONS. THEY DO NOT SHOW ALL WORK WHICH MAY BE NECESSARY. COMPARE WITH DRAWINGS INDICATING NEW CONSTRUCTION.
3. REFER TO OTHER DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION ON DEMOLITION. REFER TO FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL DEMOLITION.
4. EXISTING WORK TO REMAIN SHALL BE TEMPORARILY SECURED, BRACED, AND STABILIZED UNTIL PERMANENT CONSTRUCTION IS IN PLACE.
5. VERIFY FIELD CONDITIONS PRIOR TO START OF DEMOTION AND CONSTRUCTION ACTIVITIES, AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
6. VERIFY THAT CONSTRUCTION INDICATED FOR REMOVAL IS NOT LOAD BEARING OR IS ADEQUATELY SHORED AS INDICATED ON STRUCTURAL DRAWINGS PRIOR TO STARTING ANY WORK.
7. ERECT BARRICADES, FENCES OR OTHER SECURABLE MEANS TO PREVENT UNAUTHORIZED ACCESS INTO CONSTRUCTION ZONES.
8. DO NOT ALLOW MATERIAL AND DEBRIS GENERATED BY DEMOLITION ACTIVITIES TO ACCUMULATE ON THE JOB SITE. REMOVE DAILY AND DISPOSE OF IN A LEGAL MANNER. NO ON-SITE SALE OR BURNING OF REMOVED ITEMS IS PERMITTED.
9. THE CONTRACTOR MUST MAINTAIN ADEQUATE SUPPORT INSULATION, WATERPROOFING, EMERGENCY LIGHTING, SECURITY, ALARMS, ETC. FOR ALL OR PART OF ITEMS WHICH ARE TO REMAIN.
10. TERMINATE AND CAP ANY UTILITY IN WALLS CEILINGS AND FLOORS TO BE REMOVED AND NOT INTENDED FOR REUSE.
11. PREPARE AND PATCH SURFACES THAT RECEIVE NEW FINISHES AS REQUIRED, BY REMOVING OR RELOCATING DEVICES, WIRING, OR OTHER APPURTENANCES NO LONGER APPROPRIATE FOR THE NEW USE OF THE ROOM.
12. MAINTAIN EXISTING FINISHES, OPERATIONAL CHARACTERISTICS, AND APPEARANCE OF ITEMS SCHEDULED TO REMAIN OR BE REUSED.
13. CLEAN, PATCH, REPAIR, AND PREPARE ALL SURFACES AS REQUIRED TO RECEIVE SCHEDULED FINISHES INCLUDING BUT NOT LIMITED TO GRINDING, MOISTURE MITIGATION, CRACK SUPPRESSION, CRACK REPAIR, AND LEVELING. NOTE THAT ADDITIONAL GRINDING OF THE FLOOR AT COLUMN BASES MAY BE REQUIRED TO ENSURE THAT THE CARPET FINISH IS EVEN WITH THE TERRAZZO FINISH.
14. ONLY ONE SET OF FIDS CAN BE OUT OF COMMISSION AT ANY GIVEN TIME, UNLESS DOWNTIME IS LIMITED TO OVERNIGHT. WHEN ONE SET OF FIDS IS DOWN, GC IS TO PROVIDE SIGNAGE DIRECTING PASSENGERS TO OTHER FIDS BANKS.
15. WHERE WALLS ARE INDICATED TO BE DEMOLISHED ALONG EXISTING TENANT OR AIRPORT SPACES, INTERIOR FIRE PROTECTION, PLUMBING, MECHANICAL, ELECTRICAL, AND TELECOM SERVICES ARE TO BE RELOCATED AND COORDINATED WITH NEW WALLS. PROVIDED ONE-FOR-ONE RELOCATION OR REPLACEMENT OF AFFECTED SERVICE.
16. ALL EXISTING GATE SIGNS ARE TO BE REMOVED AND TURNED-OVER TO THE OWNER.

DEMOLITION KEYED NOTES

1	REMOVE WALLS/ALL RELATED DASHED WALLS
3	REMOVE LIGHT POLE
4	REMOVE GENERATOR
5	BRIDGE TO BE RELOCATED- CAP EXISTING ROTUNDA FOUNDATION
6	REMOVE PIERS AND FOOTINGS
7	REMOVE DOORS AND FILL OPENING
8	REMOVE BAGGAGE DEVICE (SEE BAGGAGE DEMO PLAN)
9	REMOVE BRICK AS NEEDED TO ALLOW FOR NEW STRUCTURE
10	REMOVE BOLLARDS
11	REMOVE PLUMBING FIXTURES & PIPING
12	REMOVE STAIRS
13	REMOVE WALLS TO ALLOW FOR NEW WINDOW OR DOOR
14	REMOVE CONCRETE SLAB
15	REMOVE BRICK VENEER TO STAIR TOWER EDGE
16	REMOVE WALLS & ROOF OF ENTIRE CONNECTOR BRIDGE
17	REMOVE CEILING ENCLOSURE FOR UTILITY WORK TUG LANE TO REMAIN IN OPERATION
18	DEMO AS REQUIRED FOR UTILITY WORK
19	REMOVE SMOKE CONTROL SYSTEM
20	RELOCATE TSA IT EQUIPMENT TO TSA TRAING ROOM AND DEMO IT AND SUPERVISOR ROOMS
21	DECOMMISION ELEVATOR
22	LOCK STAIR DOOR AND REMOVE EXIT SIGNS
23	REMOVE EXISTING EXTERIOR BRICK ENSURE WATER PROOF CONDITION @ EXTERIOR
24	CONSTRUCT TEMP WALL ON EXTERIOR SIDE OF EXTERIOR WALL @ WINDOW LEDGE
25	MODIFICATIONS FOR ROUTING EXISTING MECHANICAL AND ELECTRICAL SYSTEMS
26	MODIFICATIONS FOR ROUTING EXISTING BAS SYSTEMS
27	REMOVE EXISTING COLUMN
28	FILL IN HOLE @ HVAC CHASE

TRUE NORTH

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 51140 NORTH CAROLINA CHARLOTTE, N.C.

CERTIFICATE OF AUTHORIZATION C-1351 JAMES WALKER PAGE 9272 REGISTERED ARCHITECT NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

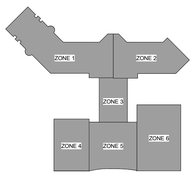
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

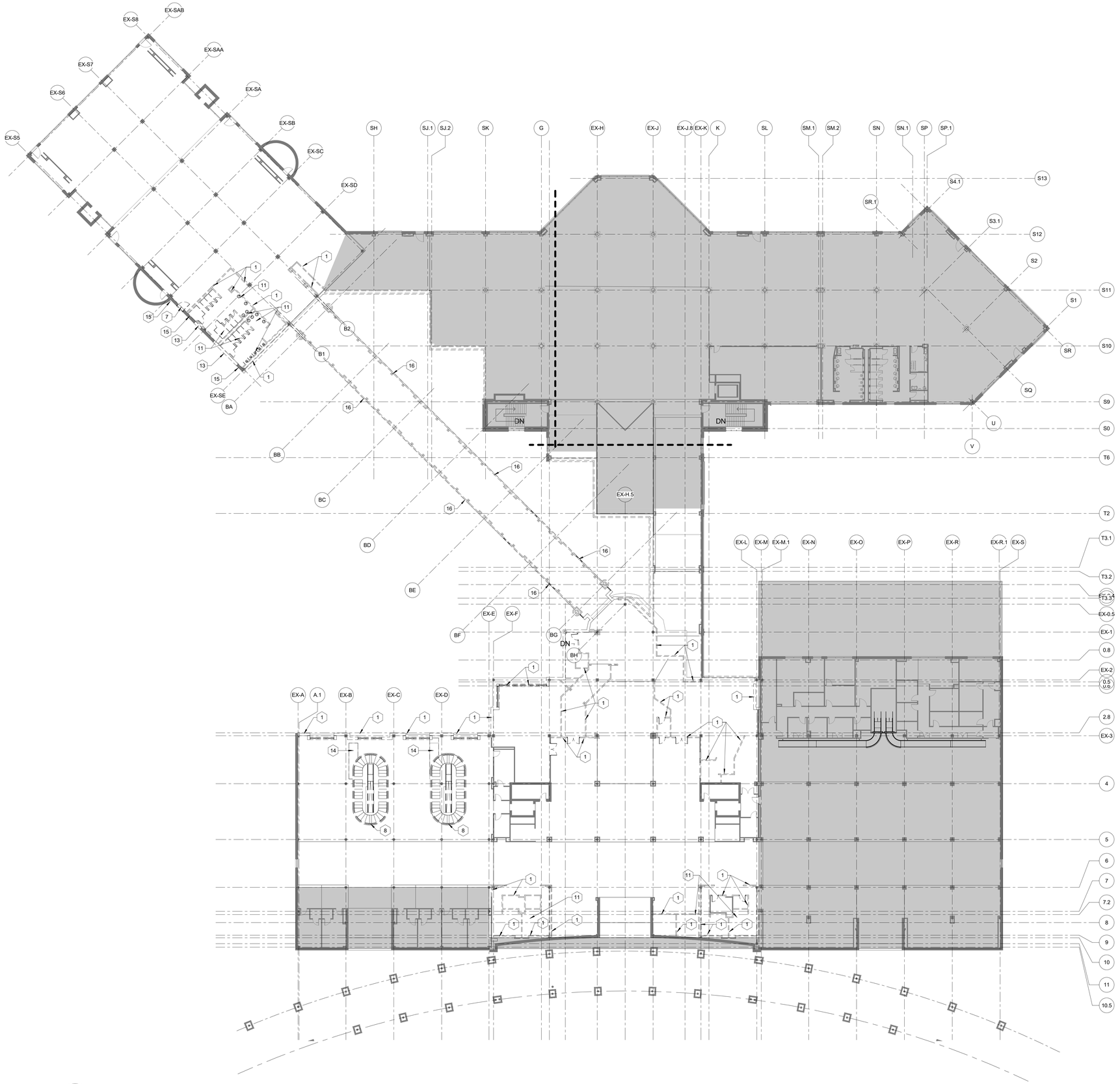
1 7/12/19 AD-01

DATE 7/12/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - RAMP LEVEL OVERALL DEMO PLAN

SHEET NUMBER

AD2-110



1 SCHEDULE 2 - BOARDING / TICKET LEVELS OVERALL DEMO PLAN
1" = 20'-0"

DEMOLITION GENERAL NOTES

1. NUMBERED KEY NOTES DO NOT IMPLY SEQUENCE. CONTRACTOR TO PERFORM DEMOLITION WORK AS REQUIRED PER WORK SEQUENCE.
2. DEMOLITION DRAWINGS ARE INTENDED TO SHOW GENERAL AREAS OF DEMOLITION AS WELL AS GENERAL EXISTING CONDITIONS. THEY DO NOT SHOW ALL WORK WHICH MAY BE NECESSARY. COMPARE WITH DRAWINGS INDICATING NEW CONSTRUCTION.
3. REFER TO OTHER DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION ON DEMOLITION. REFER TO FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL DEMOLITION.
4. EXISTING WORK TO REMAIN SHALL BE TEMPORARILY SECURED, BRACED, AND STABILIZED UNTIL PERMANENT CONSTRUCTION IS IN PLACE.
5. VERIFY FIELD CONDITIONS PRIOR TO START OF DEMOTION AND CONSTRUCTION ACTIVITIES, AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
6. VERIFY THAT CONSTRUCTION INDICATED FOR REMOVAL IS NOT LOAD BEARING OR IS ADEQUATELY SHORED AS INDICATED ON STRUCTURAL DRAWINGS PRIOR TO STARTING ANY WORK.
7. ERECT BARRICADES, FENCES OR OTHER SECURABLE MEANS TO PREVENT UNAUTHORIZED ACCESS INTO CONSTRUCTION ZONES.
8. DO NOT ALLOW MATERIAL AND DEBRIS GENERATED BY DEMOLITION ACTIVITIES TO ACCUMULATE ON THE JOB SITE. REMOVE DAILY AND DISPOSE OF IN A LEGAL MANNER. NO ON-SITE SALE OR BURNING OF REMOVED ITEMS IS PERMITTED.
9. THE CONTRACTOR MUST MAINTAIN ADEQUATE SUPPORT INSULATION, WATERPROOFING, EMERGENCY LIGHTING, SECURITY, ALARMS, ETC. FOR ALL OR PART OF ITEMS WHICH ARE TO REMAIN.
10. TERMINATE AND CAP ANY UTILITY IN WALLS CEILINGS AND FLOORS TO BE REMOVED AND NOT INTENDED FOR REUSE.
11. PREPARE AND PATCH SURFACES THAT RECEIVE NEW FINISHES AS REQUIRED, BY REMOVING OR RELOCATING DEVICES, WIRING, OR OTHER APPURTENANCES NO LONGER APPROPRIATE FOR THE NEW USE OF THE ROOM.
12. MAINTAIN EXISTING FINISHES, OPERATIONAL CHARACTERISTICS, AND APPEARANCE OF ITEMS SCHEDULED TO REMAIN OR BE REUSED.
13. CLEAN, PATCH, REPAIR, AND PREPARE ALL SURFACES AS REQUIRED TO RECEIVE SCHEDULED FINISHES INCLUDING BUT NOT LIMITED TO GRINDING, MOISTURE MITIGATION, CRACK SUPPRESSION, CRACK REPAIR, AND LEVELING. NOTE THAT ADDITIONAL GRINDING OF THE FLOOR AT COLUMN BASES MAY BE REQUIRED TO ENSURE THAT THE CARPET FINISH IS EVEN WITH THE TERRAZZO FINISH.
14. ONLY ONE SET OF FIDS CAN BE OUT OF COMMISSION AT ANY GIVEN TIME, UNLESS DOWNTIME IS LIMITED TO OVERNIGHT. WHEN ONE SET OF FIDS IS DOWN, GC IS TO PROVIDE SIGNAGE DIRECTING PASSENGERS TO OTHER FIDS BANKS.
15. WHERE WALLS ARE INDICATED TO BE DEMOLISHED ALONG EXISTING TENANT OR AIRPORT SPACES, INTERIOR FIRE PROTECTION, PLUMBING, MECHANICAL, ELECTRICAL, AND TELECOM SERVICES ARE TO BE RELOCATED AND COORDINATED WITH NEW WALLS. PROVIDED ONE-FOR-ONE RELOCATION OR REPLACEMENT OF AFFECTED SERVICE.
16. ALL EXISTING GATE SIGNS ARE TO BE REMOVED AND TURNED-OVER TO THE OWNER.

DEMOLITION KEYED NOTES

1	REMOVE WALLS/ALL RELATED DASHED WALLS
3	REMOVE LIGHT POLE
4	REMOVE GENERATOR
5	BRIDGE TO BE RELOCATED- CAP EXISTING ROTUNDA FOUNDATION
6	REMOVE PIERS AND FOOTINGS
7	REMOVE DOORS AND FILL OPENING
8	REMOVE BAGGAGE DEVICE (SEE BAGGAGE DEMO PLAN)
9	REMOVE BRICK AS NEEDED TO ALLOW FOR NEW STRUCTURE
10	REMOVE BOLLARDS
11	REMOVE PLUMBING FIXTURES & PIPING
12	REMOVE STAIRS
13	REMOVE WALLS TO ALLOW FOR NEW WINDOW OR DOOR
14	REMOVE CONCRETE SLAB
15	REMOVE BRICK VENEER TO STAIR TOWER EDGE
16	REMOVE WALLS & ROOF OF ENTIRE CONNECTOR BRIDGE
17	REMOVE CEILING ENCLOSURE FOR UTILITY WORK TUG LANE TO REMAIN IN OPERATION
18	DEMO AS REQUIRED FOR UTILITY WORK
19	REMOVE SMOKE CONTROL SYSTEM
20	RELOCATE TSA IT EQUIPMENT TO TSA TRAING ROOM AND DEMO IT AND SUPERVISOR ROOMS
21	DECOMMISION ELEVATOR
22	LOCK STAIR DOOR AND REMOVE EXIT SIGNS
23	REMOVE EXISTING EXTERIOR BRICK ENSURE WATER PROOF CONDITION @ EXTERIOR
24	CONSTRUCT TEMP WALL ON EXTERIOR SIDE OF EXTERIOR WALL @ WINDOW LEDGE
25	MODIFICATIONS FOR ROUTING EXISTING MECHANICAL AND ELECTRICAL SYSTEMS
26	MODIFICATIONS FOR ROUTING EXISTING BAS SYSTEMS
27	REMOVE EXISTING COLUMN
28	FILL IN HOLE @ HVAC CHASE

TRUE NORTH

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA CERT. NO. 51140 CHARLOTTE, N.C.

JAMES WALKER PAGE REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

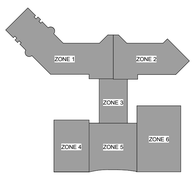
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

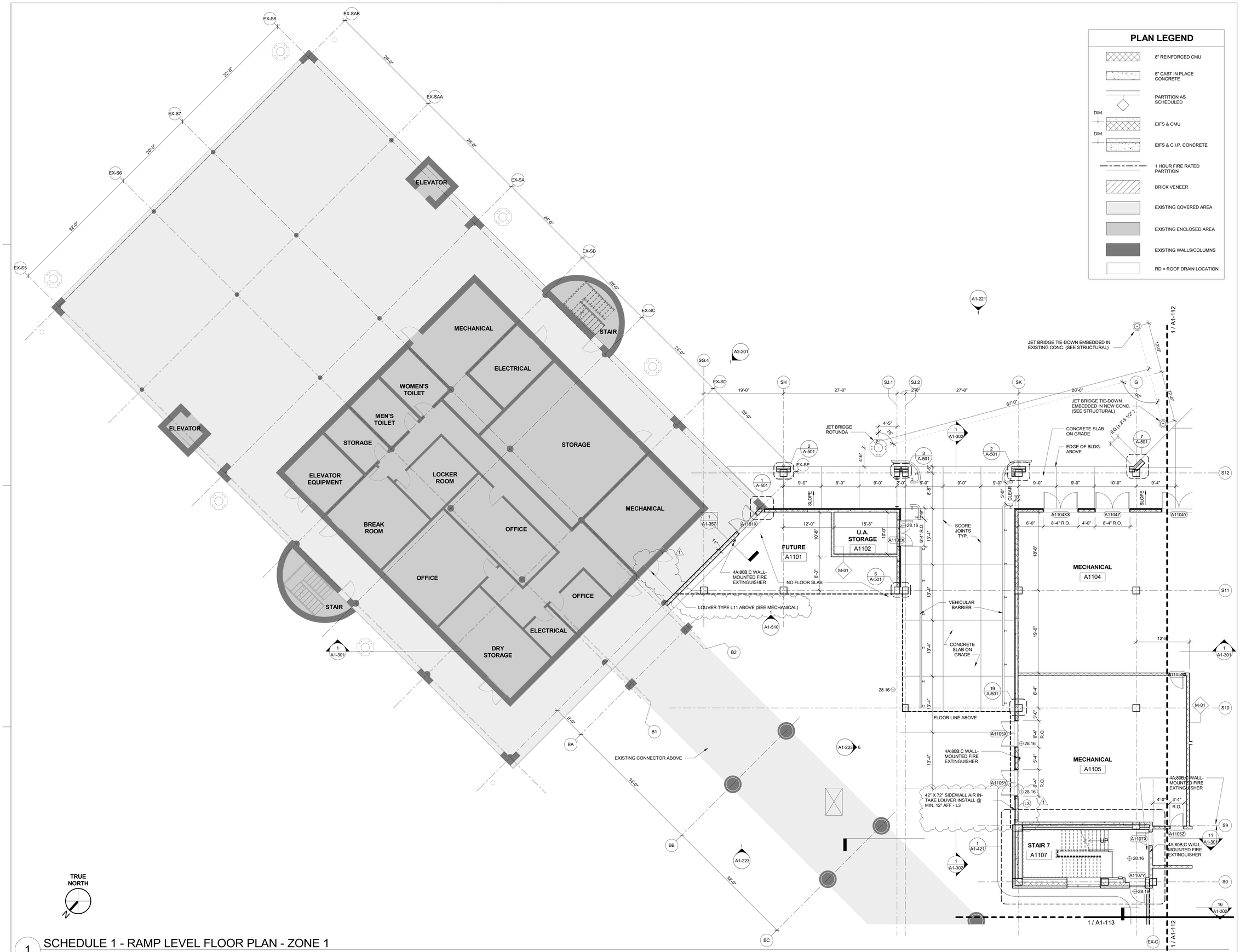
1	7/12/19	AD-01

DATE 7/12/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - BOARDING / TICKET LEVELS OVERALL DEMO PLAN

SHEET NUMBER

AD2-120



PLAN LEGEND

- 8" REINFORCED CMU
- 8" CAST IN PLACE CONCRETE
- PARTITION AS SCHEDULED
- DIM. EIFS & CMU
- DIM. EIFS & C.I.P. CONCRETE
- 1 HOUR FIRE RATED PARTITION
- BRICK VENEER
- EXISTING COVERED AREA
- EXISTING ENCLOSED AREA
- EXISTING WALLS/COLUMNS
- RD = ROOF DRAIN LOCATION

TRUE NORTH

1 SCHEDULE 1 - RAMP LEVEL FLOOR PLAN - ZONE 1
1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS, REGISTERED ARCHITECTURAL CORPORATION, CERT. NO. 51140, NORTH CAROLINA, CHARLOTTE, N.C.

TRAVIS WALKER PAGE, REGISTERED ARCHITECT, 9272, NORTH CAROLINA, CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

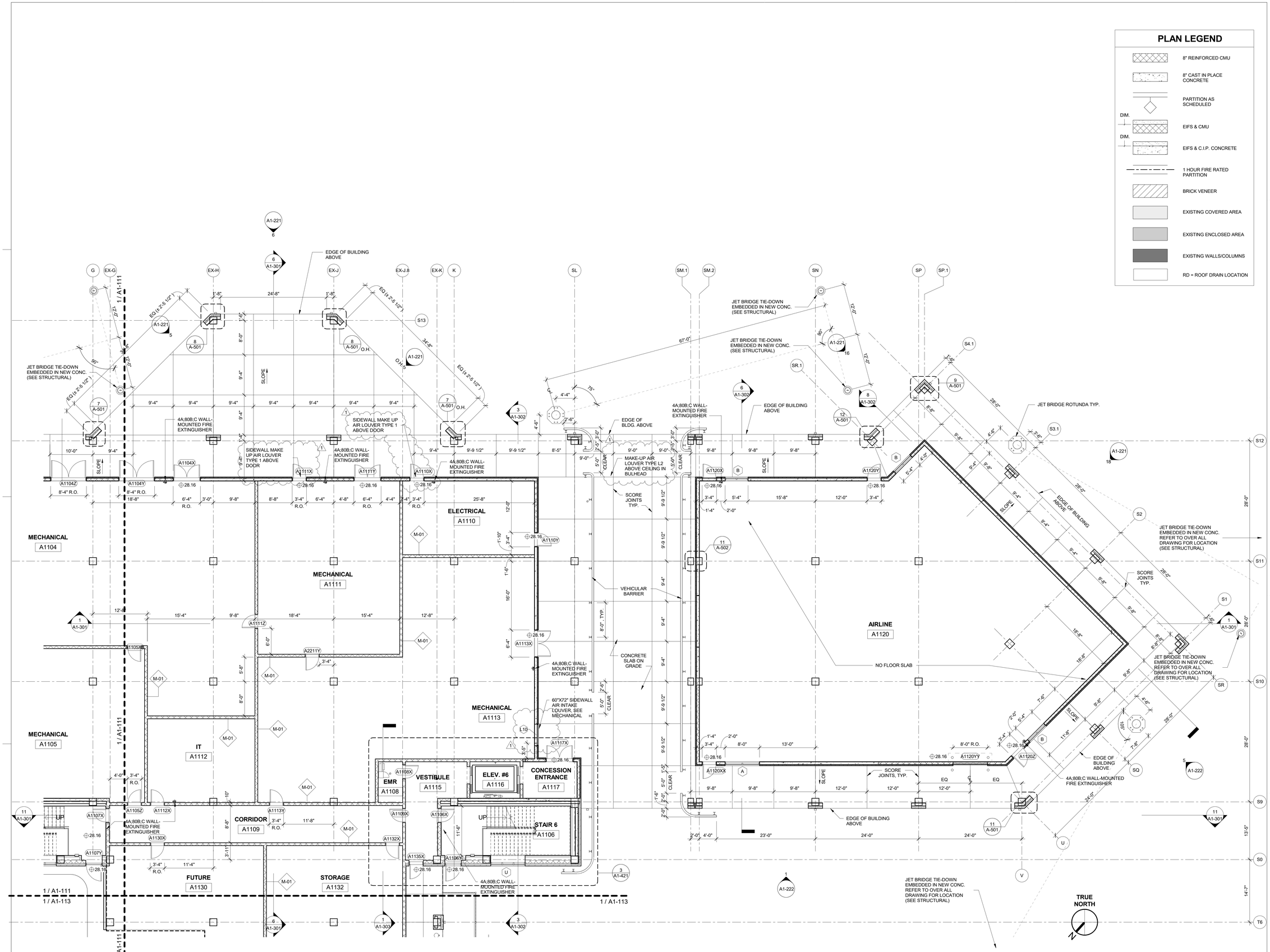
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - RAMP LEVEL FLOOR PLAN ZONE 1

SHEET NUMBER

A1-111



1 SCHEDULE 1 - RAMP LEVEL FLOOR PLAN - ZONE 2
1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS
REGISTERED ARCHITECTURAL CORPORATION
CERT. NO. 51140
NORTH CAROLINA
CHARLOTTE, N.C.

TRAVIS WALKER PAGE
REGISTERED ARCHITECT
9272
NORTH CAROLINA
CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

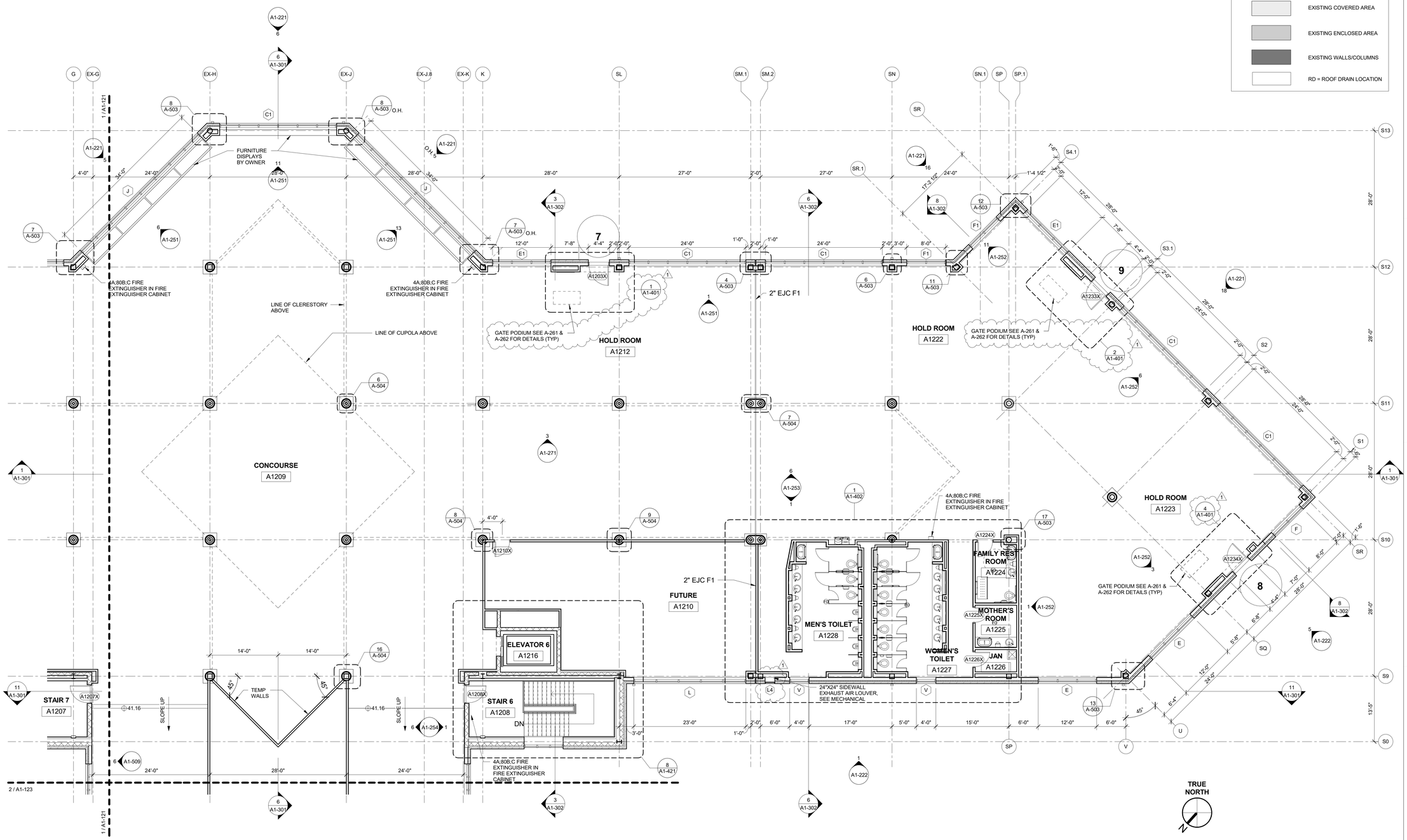
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - RAMP LEVEL FLOOR PLAN ZONE 2

SHEET NUMBER

A1-112



1 SCHEDULE 1 - BOARDING LEVEL FLOOR PLAN ZONE 2
1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 51140 NORTH CAROLINA CHARLOTTE, N.C.

CRAIG WALKER PAGE II REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

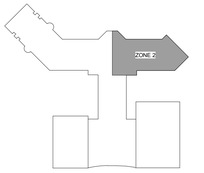
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

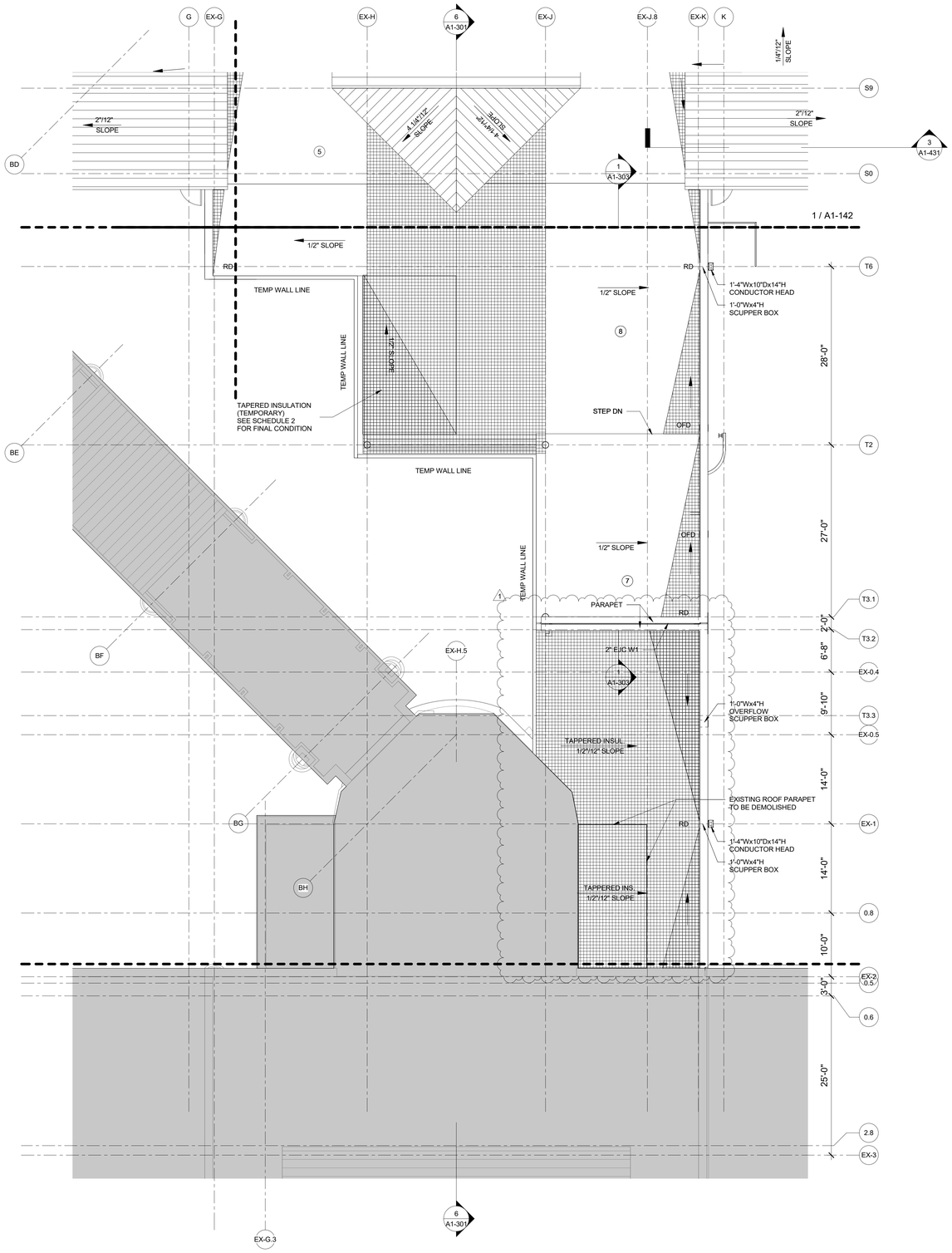
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - BOARDING LEVEL FLOOR PLAN ZONE 2

SHEET NUMBER

A1-122



ROOF DRAINAGE CALCULATIONS

DRAINAGE AREA (X)	MAX. SF	AREA SF	LEADER SIZE	REMARKS:
1	8,240 SF	1,218 SF	4" X 6"	(1) PRIMARY ROOF DRAIN 4"/HR PER P1106.1
2	8,240 SF	2,564 SF	4" X 6"	(2) MAX. VERTICAL CODUCTOR FOR 4"/HR RAINFALL RATE FOR X" DIA. LEADER
3	8,240 SF	1,184 SF	4" X 6"	(3) SEE PLUMBING DRAWINGS FOR ROOF DRAIN SIZES AND LOCATIONS. (RD)=PRIMARY ROOF DRAIN) (ORD=OVERFLOW ROOF DRAIN / SCUPPER)
4	8,240 SF	2,581 SF	4" X 6"	
5	8,240 SF	2,400 SF	4" X 6"	
6	8,240 SF	2,746 SF	4" X 6"	
7	8,240 SF	2,746 SF	4" X 6"	
8	8,240 SF	3,101 SF	4" X 6"	(4) PARAPET WALL ROOF DRAINAGE OVERFLOW SCUPPER SIZED PER P1106.5 (12"L X 6"H) (1 GPM=0.0104 X RAINFALL RATE X AREA)
9	8,240 SF	2,573 SF	4" X 6"	
10	8,240 SF	1,207 SF	4" X 6"	
11	8,240 SF	2,362 SF	4" X 6"	
12	8,240 SF	1,297 SF	4" X 6"	
13	8,240 SF	1,197 SF	4" X 6"	
14	8,240 SF	1,105 SF	4" X 6"	
15	8,240 SF	2,279 SF	4" X 6"	
16	8,240 SF	2,596 SF	4" X 6"	
17	8,240 SF	3,006 SF	4" X 6"	
18	8,240 SF	3,006 SF	4" X 6"	
19	8,240 SF	2,594 SF	4" X 6"	
20	8,240 SF	2,130 SF	4" X 6"	
21	8,240 SF	1,511 SF	4" X 6"	
22	8,240 SF	1,505 SF	4" X 6"	

ROOF DRAINAGE LEGEND

- AREA
- TAPERED INSULATION
- METAL ROOF
- SLOPE DIRECTION

ROOF NOTE

1. SEE DETAILS 18 & 19 /A-514 FOR LIGHTNING ARREST MOUNTING DETAILS

TRUE NORTH

1 SCHEDULE 1 - ROOF LEVEL PLAN ZONE 3
1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS
REGISTERED ARCHITECTURAL CORPORATION
CERT. NO. 511140
NORTH CAROLINA
CHARLOTTE, N.C.

THOMAS WALKER PAGE
REGISTERED ARCHITECT
9272
NORTH CAROLINA
CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

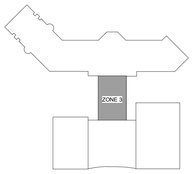
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

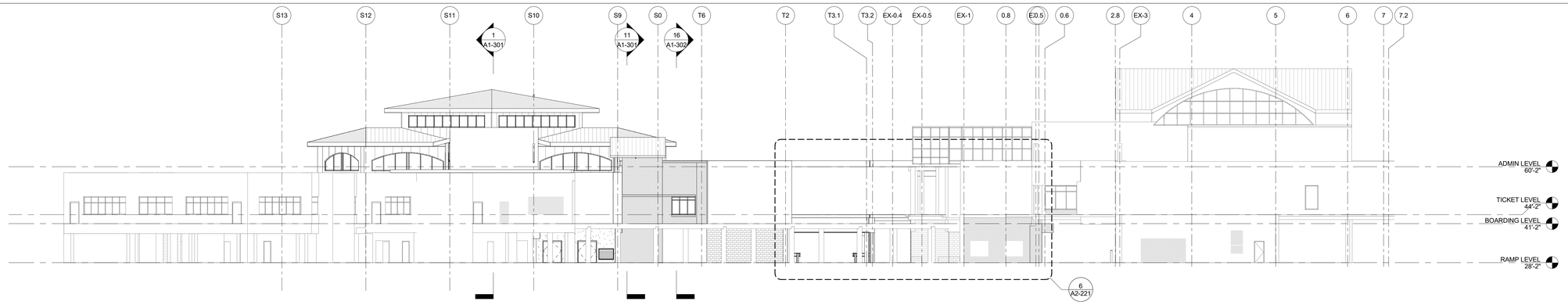
1	7/12/19	AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - ROOF LEVEL FLOOR PLAN ZONE 3

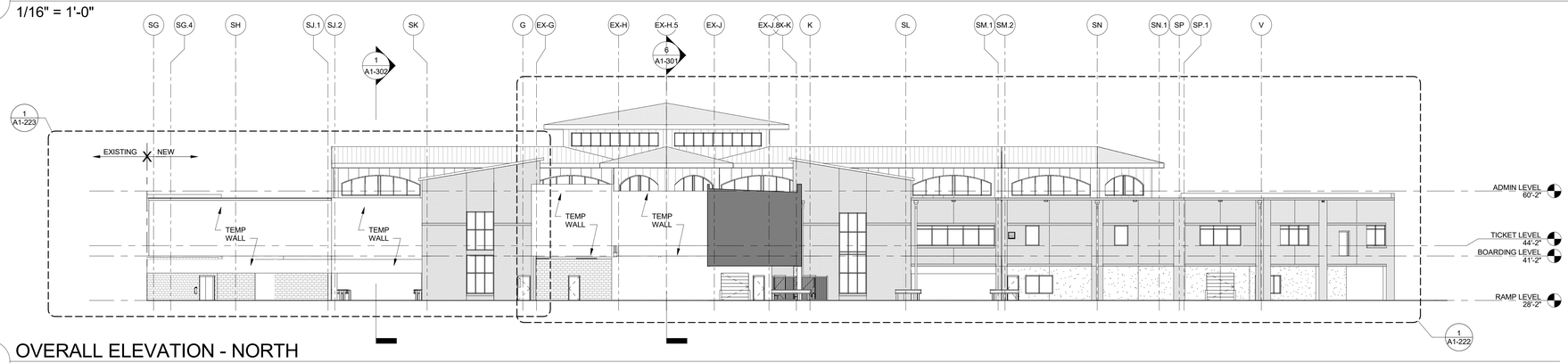
SHEET NUMBER

A1-143



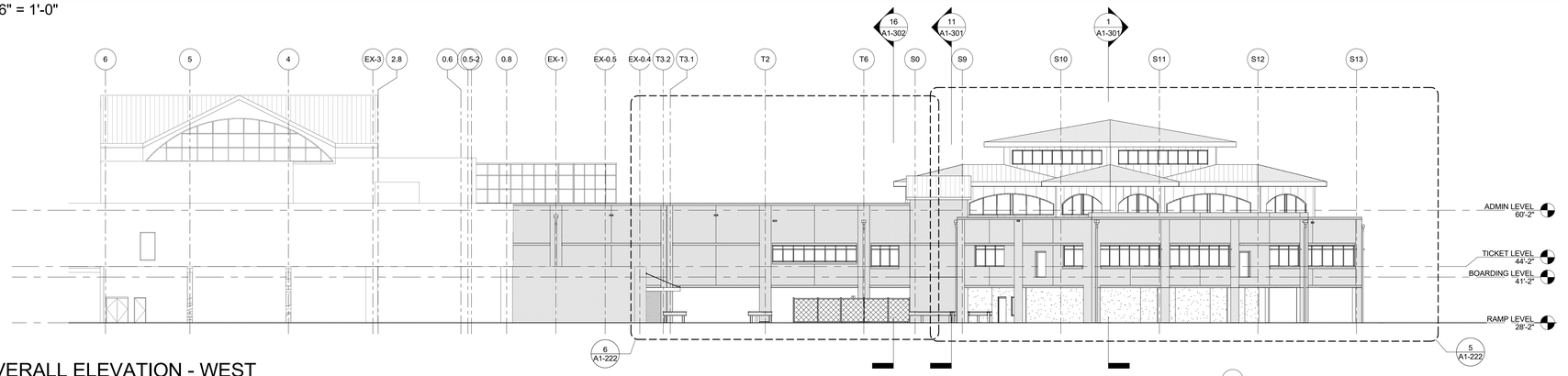
16 OVERALL ELEVATION - EAST

1/16" = 1'-0"



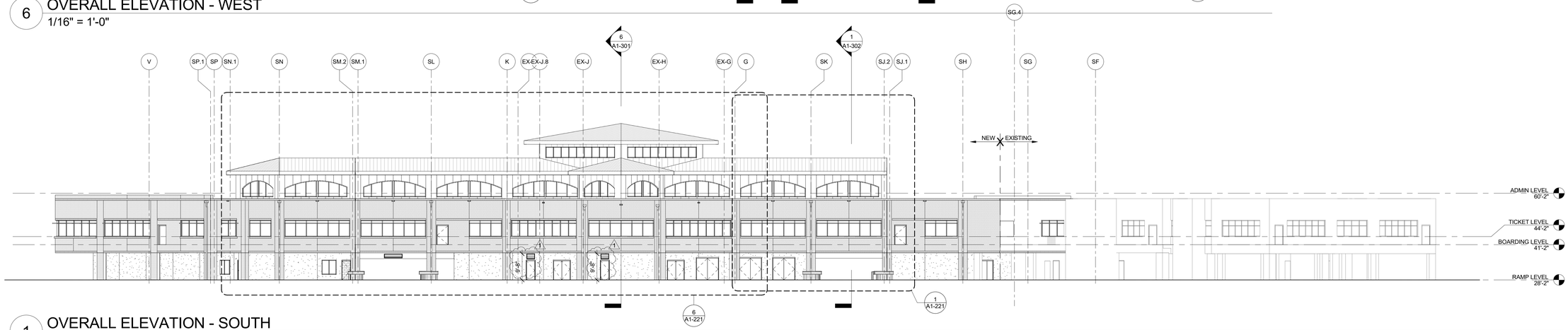
11 OVERALL ELEVATION - NORTH

1/16" = 1'-0"



6 OVERALL ELEVATION - WEST

1/16" = 1'-0"



1 OVERALL ELEVATION - SOUTH

1/16" = 1'-0"

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS
REGISTERED ARCHITECTURAL CORPORATION
CERT. NO. 51140
NORTH CAROLINA
CHARLOTTE, N.C.

TRAVIS WALKER PAGE
REGISTERED ARCHITECT
9272
CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

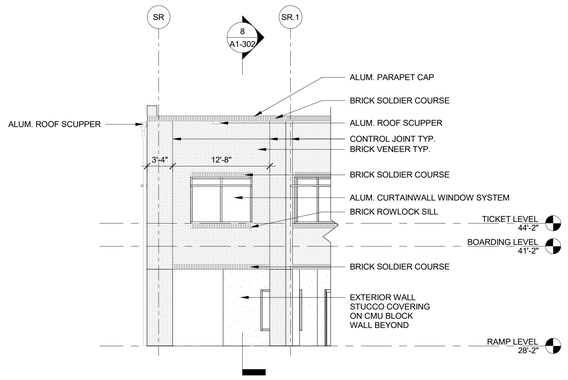
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

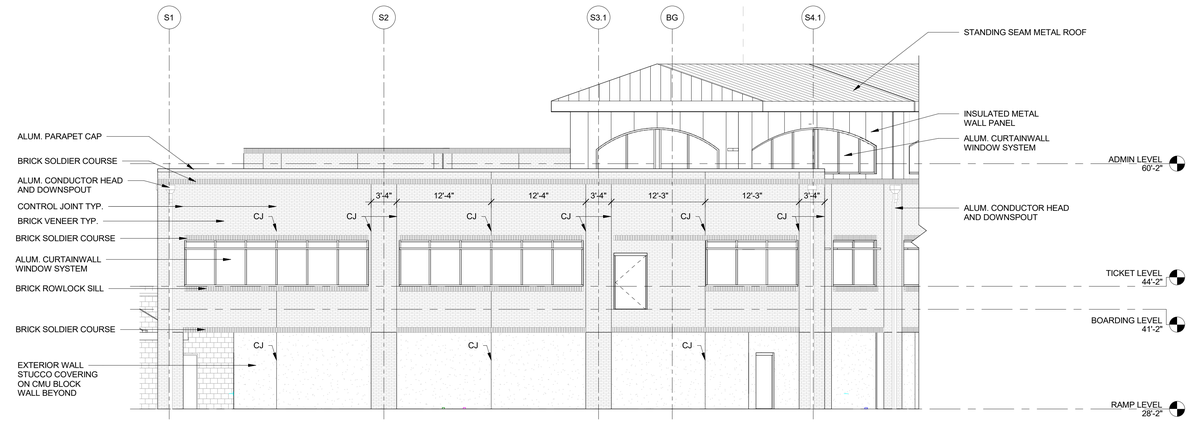
SCHEDULE 1 - EXTERIOR ELEVATIONS

SHEET NUMBER

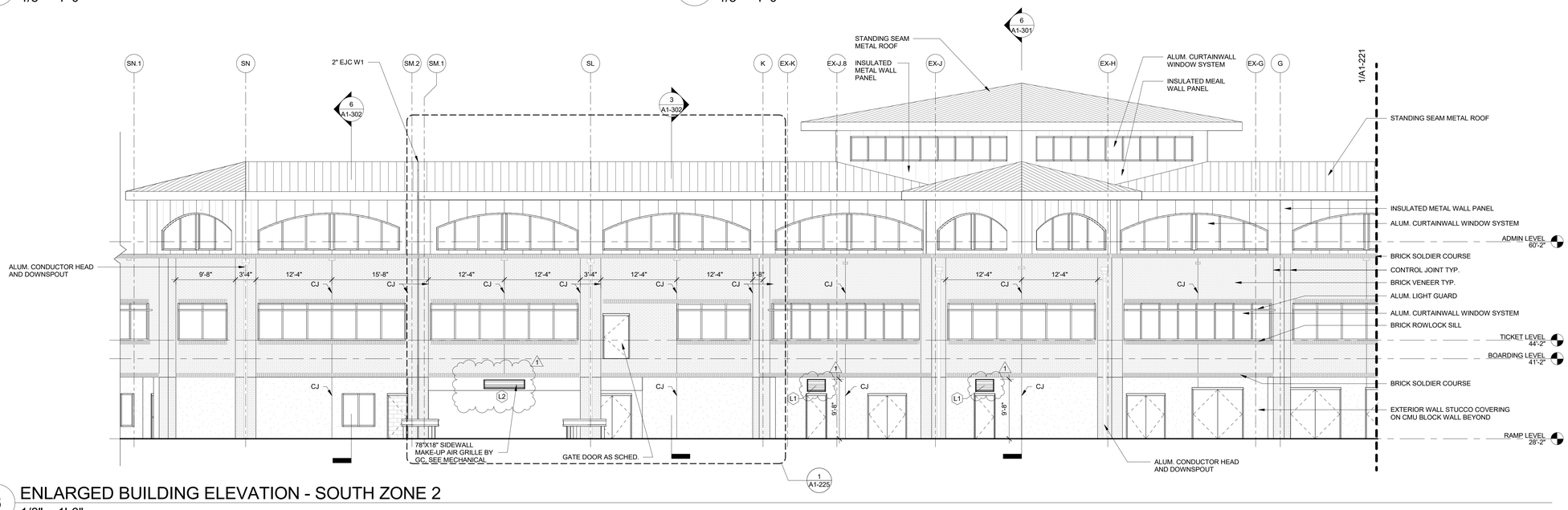
A1-201



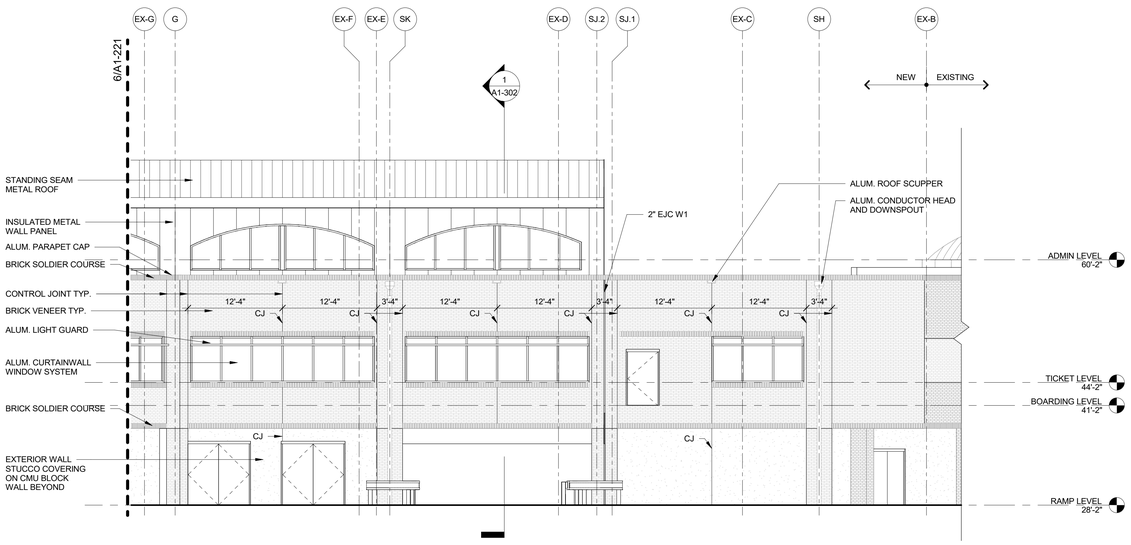
16 ENLARGED BUILDING ELEVATION - NW ZONE 2
1/8" = 1'-0"



18 ENLARGED BUILDING ELEVATION - SOUTH EAST ZONE 2
1/8" = 1'-0"



6 ENLARGED BUILDING ELEVATION - SOUTH ZONE 2
1/8" = 1'-0"



1 ENLARGED BUILDING ELEVATION - SOUTH ZONE 1&2
1/8" = 1'-0"

5 ENLARGED BUILDING ELEVATION - SOUTH ZONE 2 OBSERVE 3
1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS · REGISTERED ARCHITECTURAL CORPORATION · CERT. NO. 51140 · NORTH CAROLINA · CHARLOTTE, N.C.

JAMES WALKER PAGE · REGISTERED ARCHITECT · 9272 · NORTH CAROLINA · CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

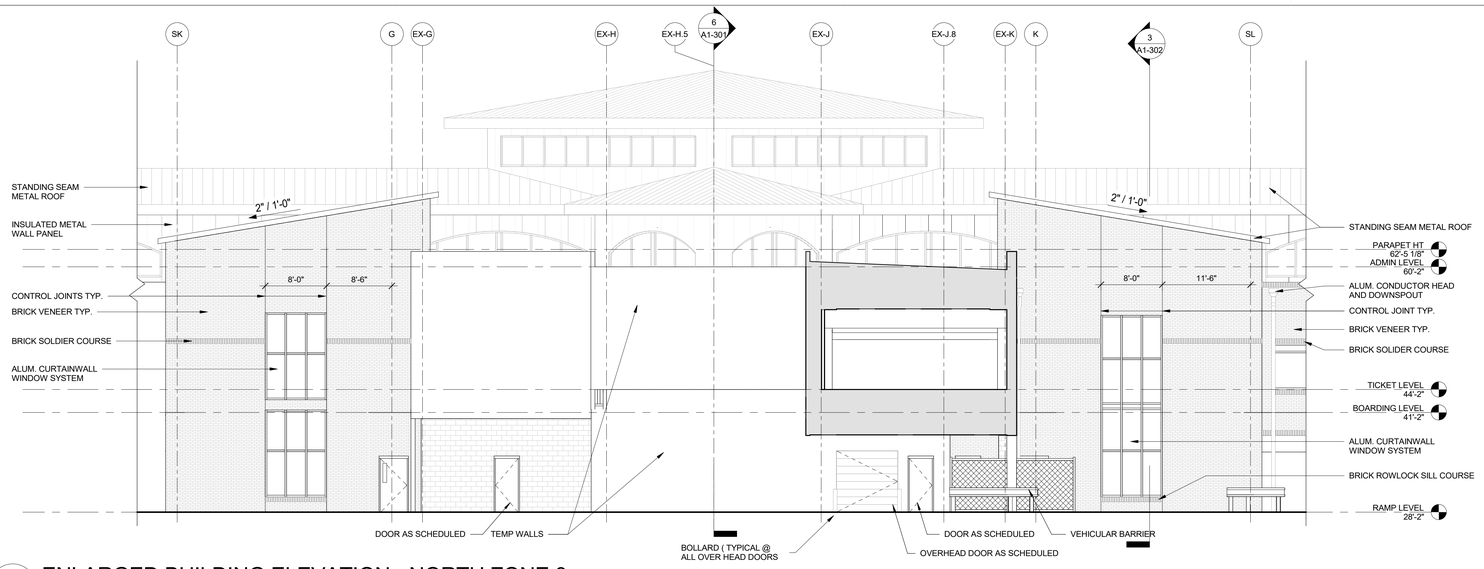
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - ENLARGED ELEVATIONS

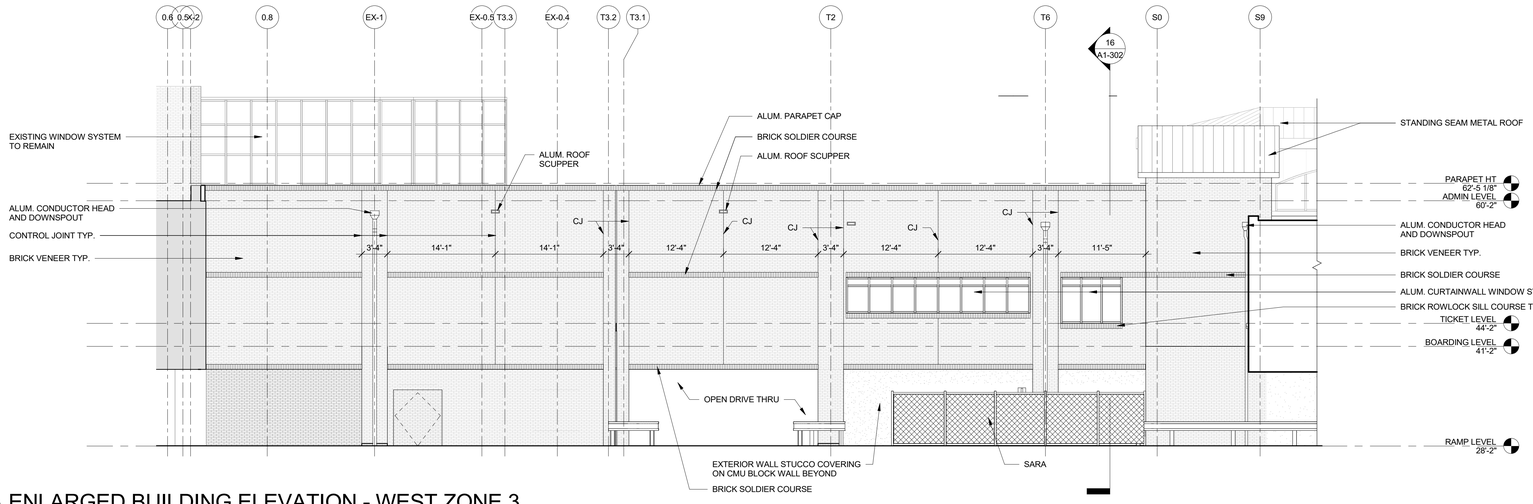
SHEET NUMBER

A1-221



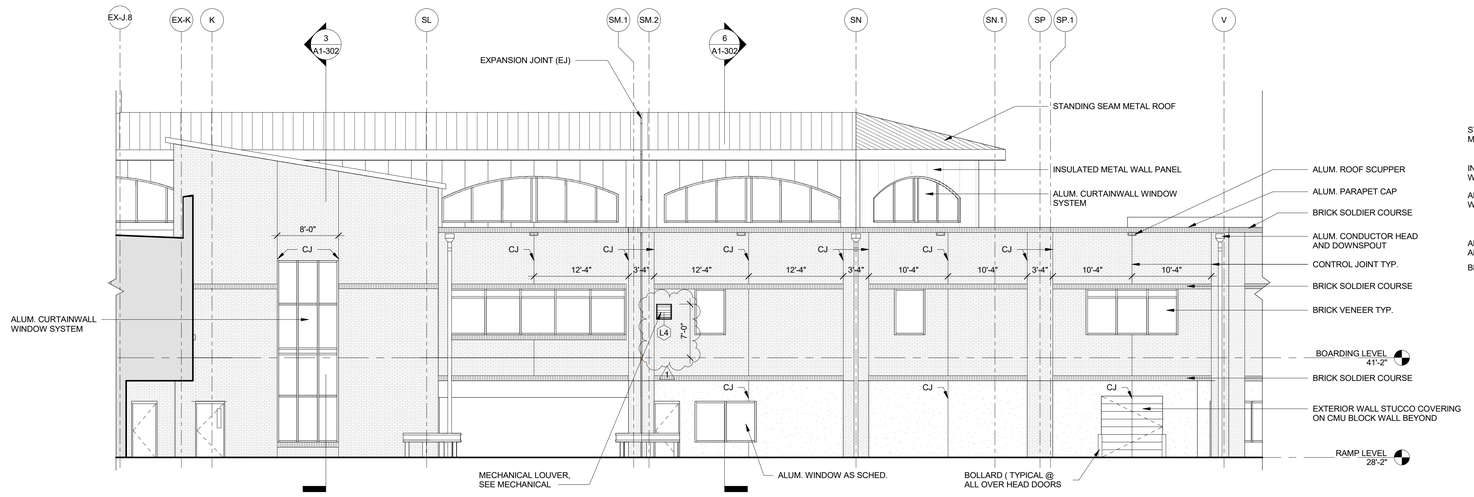
16 ENLARGED BUILDING ELEVATION - NORTH ZONE 3

1/8" = 1'-0"



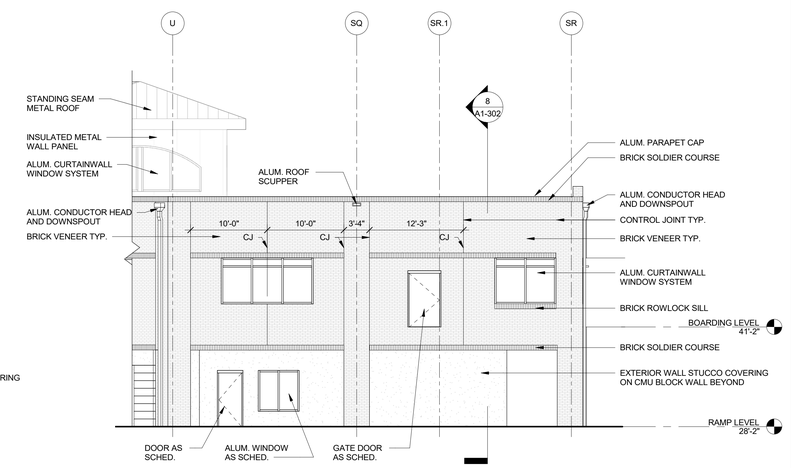
6 ENLARGED BUILDING ELEVATION - WEST ZONE 3

1/8" = 1'-0"



1 ENLARGED BUILDING ELEVATION - NORTHZONE 2

1/8" = 1'-0"



5 ENLARGED BUILDING ELEVATION WEST ZONE 2

1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 51140 NORTH CAROLINA CHARLOTTE, N.C.

CRAIG WALKER PAGE REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

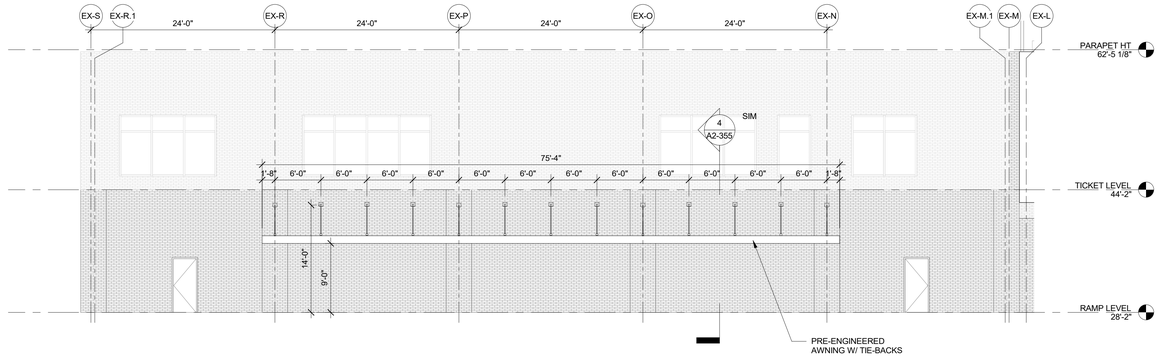
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - ENLARGED ELEVATIONS

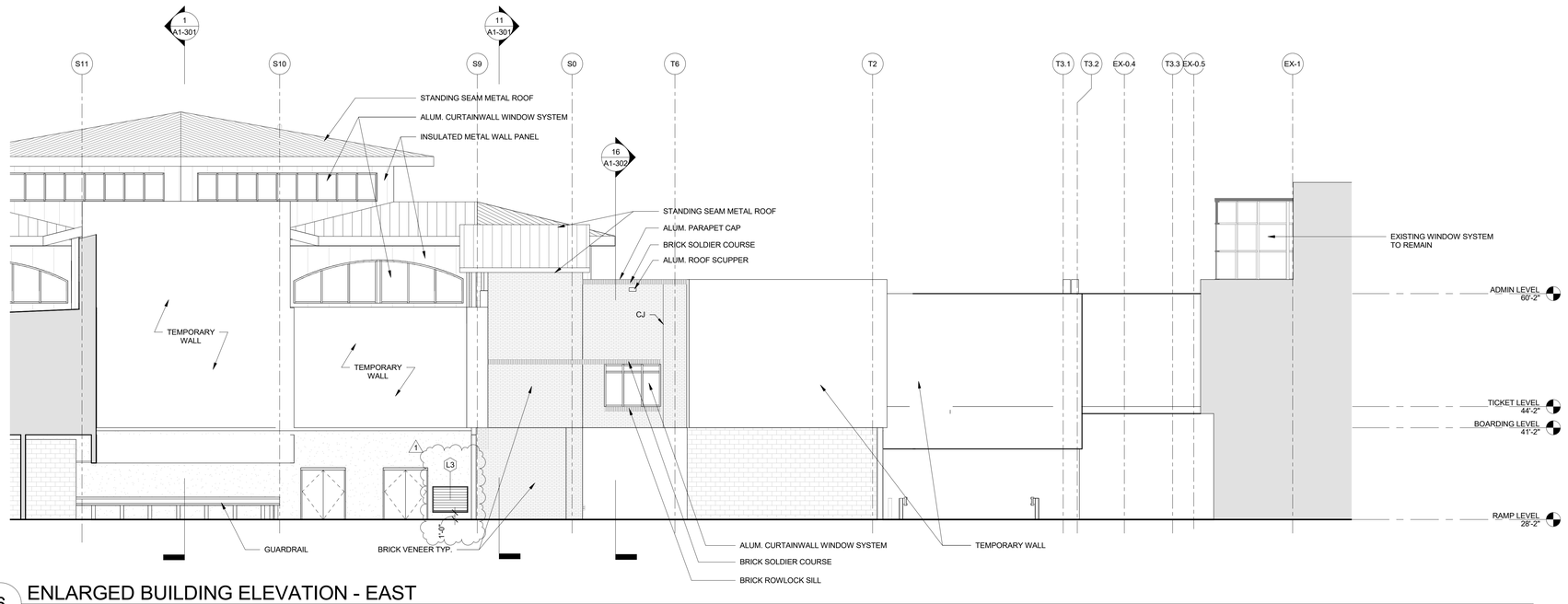
SHEET NUMBER

A1-222



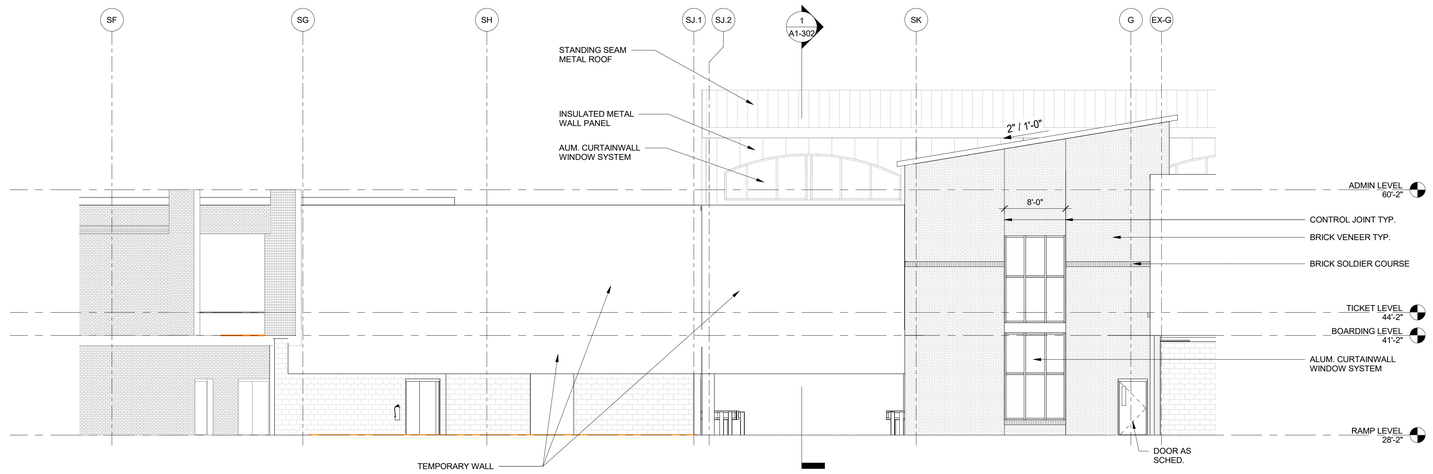
11 ENLARGED BUILDING ELEVAION-SOUTH ZONE 6

1/8" = 1'-0"



6 ENLARGED BUILDING ELEVATION - EAST

1/8" = 1'-0"



1 ENLARGED BUILDING ELEVATION - NORTH ZONE 1

1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 51140 NORTH CAROLINA CHARLOTTE, N.C.

TRAVIS WALKER PARRILL REGISTERED LICENSED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

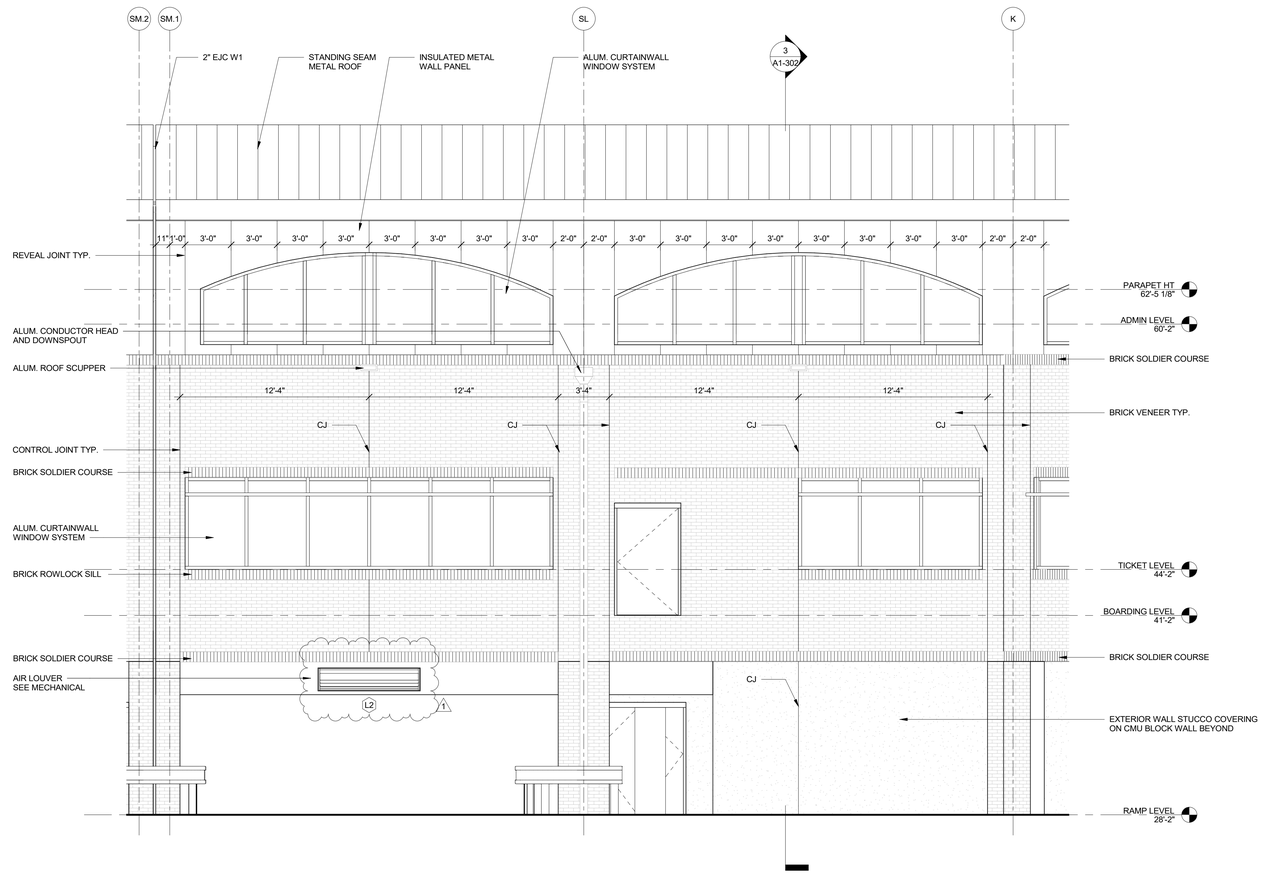
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - ENLARGED ELEVATIONS

SHEET NUMBER

A1-223



1 ENLARGED ELEV TYP BAY & EJ BAY

1/4" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA CERT. NO. 51140 CHARLOTTE, N.C.

CRAIG WALKER PARKER REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

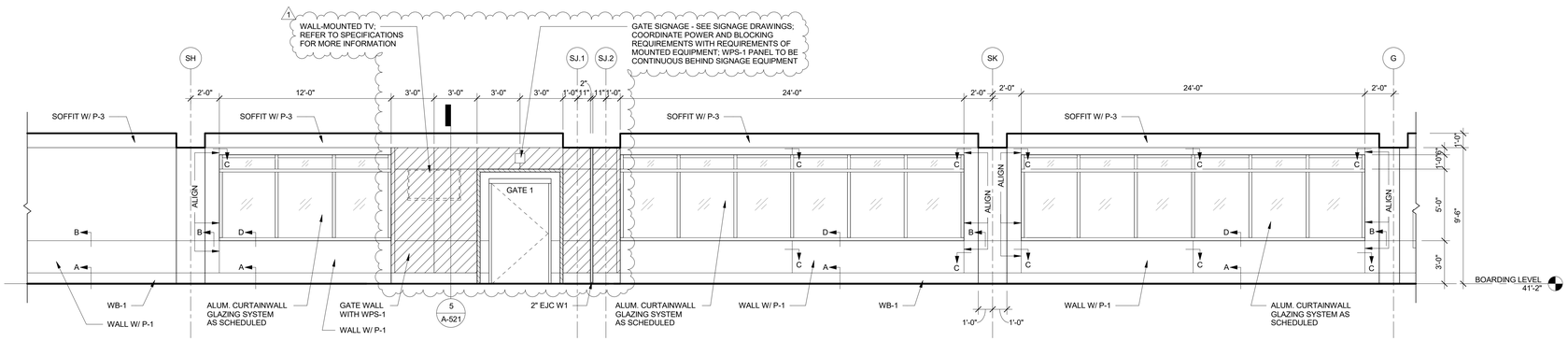
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - ENLARGED ELEVATIONS

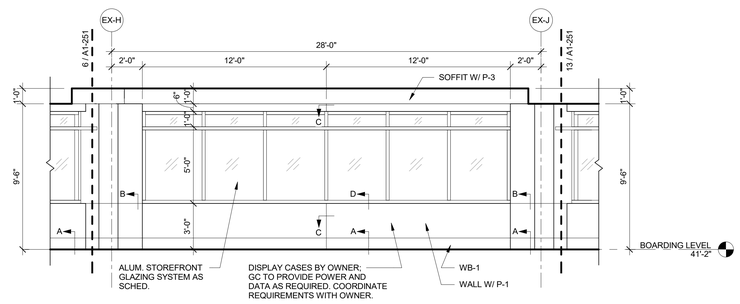
SHEET NUMBER

A1-225



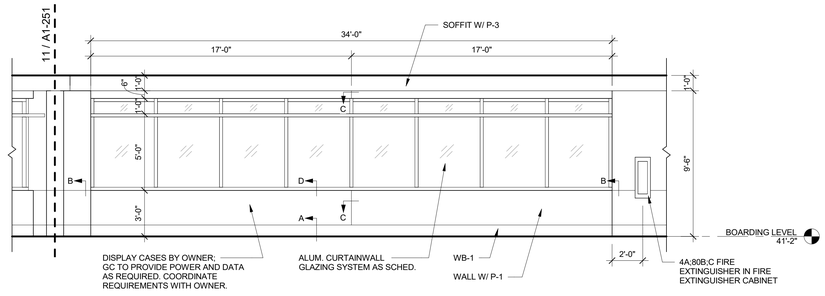
16 INTERIOR ELEVATION - HOLD ROOM 36 - NORTH

1/4" = 1'-0"



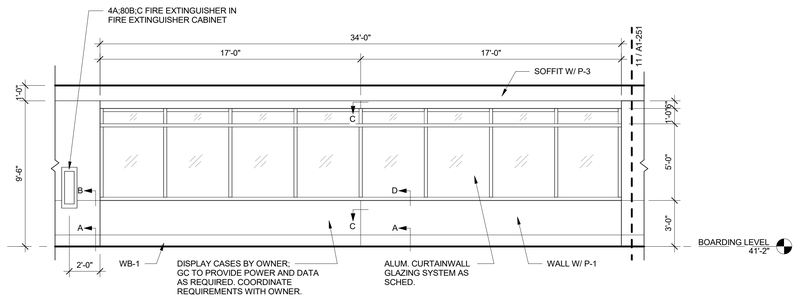
11 INTERIOR ELEVATION - OBSERVATION NORTH

1/4" = 1'-0"



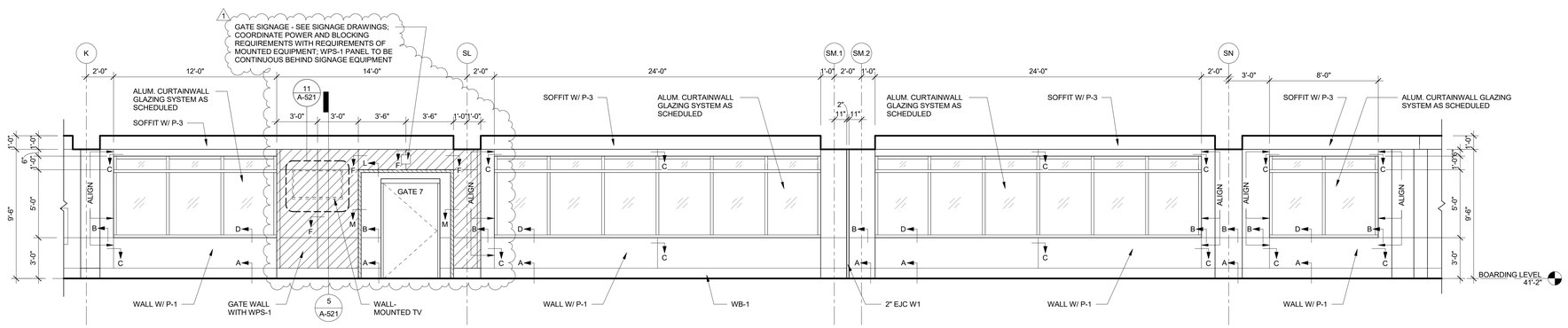
13 INTERIOR ELEVATION - OBSERVATION NORTH EAST

1/4" = 1'-0"



6 INTERIOR ELEVATION - OBSERVATION NORTHWEST

1/4" = 1'-0"



1 INTERIOR ELEVATION - HOLD ROOM 32 - NORTH

1/4" = 1'-0"

GENERAL NOTES - INTERIOR ELEVATIONS

1. REFER TO SHEET A-654 FOR WALL BASE, WALL, AND PANEL REVEAL DETAILS.
2. ABBREVIATIONS:
   - CLR = CENTERLINE OF REVEAL
   - TOR = TOP OF REVEAL
   - BOR = BOTTOM OF REVEAL
3. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO ARCHITECT FOR REVIEW AND APPROVAL OF ALL SPECIALTY WALL PANEL SYSTEMS (WPS) PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION
4. CONTRACTOR TO PROVIDE MOCKUPS OF EACH SPECIALTY WALL PANEL SYSTEM (WPS) FOR REVIEW AND APPROVAL PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION.
5. ALL VERTICAL AND HORIZONTAL REVEALS ARE TO BE CONTINUOUS AND UNINTERRUPTED, U.N.O.
6. ALL DEAD STOP EXTRUSIONS ARE TO BE CONTINUOUS AND UNINTERRUPTED.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 51140 NORTH CAROLINA CHARLOTTE, N.C.

CRAIG WALKER PAGE REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

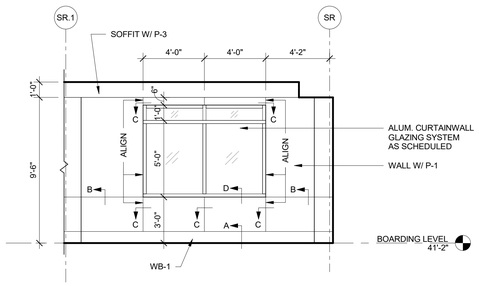
SCHEDULE 1 - INTERIOR ELEVATIONS

SHEET NUMBER

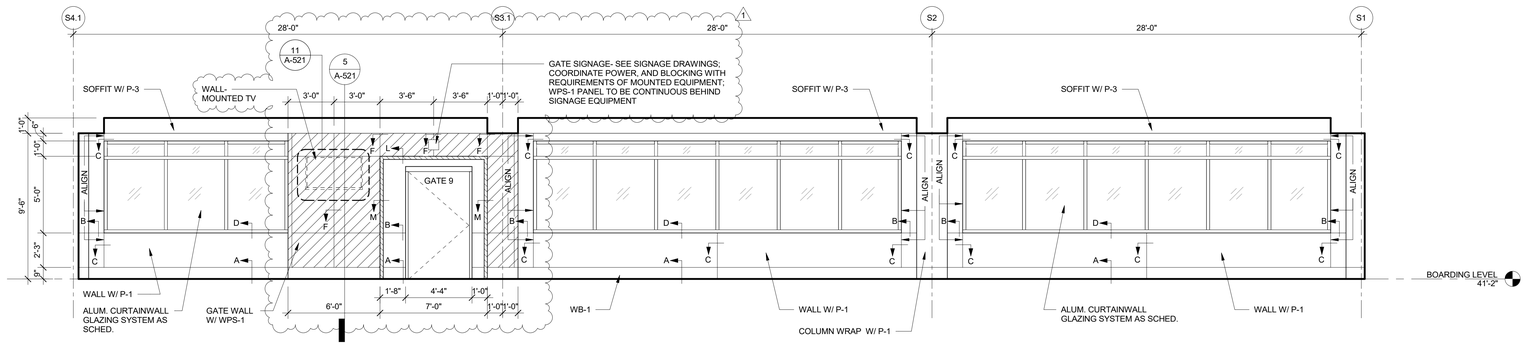
A1-251

GENERAL NOTES - INTERIOR ELEVATIONS

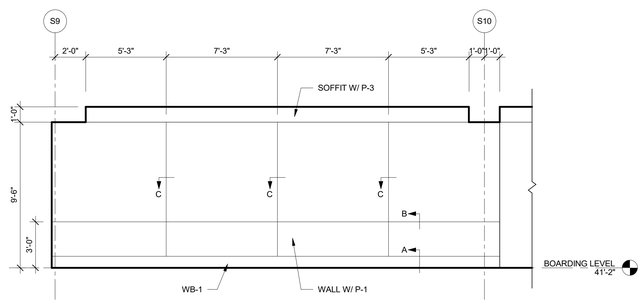
1. REFER TO SHEET A-654 FOR WALL BASE, WALL, AND PANEL REVEAL DETAILS.
2. ABBREVIATIONS:
   - CLR = CENTERLINE OF REVEAL
   - TOR = TOP OF REVEAL
   - BOR = BOTTOM OF REVEAL
3. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO ARCHITECT FOR REVIEW AND APPROVAL OF ALL SPECIALTY WALL PANEL SYSTEMS (WPS) PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION
4. CONTRACTOR TO PROVIDE MOCKUPS OF EACH SPECIALTY WALL PANEL SYSTEM (WPS) FOR REVIEW AND APPROVAL PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION.
5. ALL VERTICAL AND HORIZONTAL REVEALS ARE TO BE CONTINUOUS AND UNINTERRUPTED, U.N.O.
6. ALL DEAD STOP EXTRUSIONS ARE TO BE CONTINUOUS AND UNINTERRUPTED.



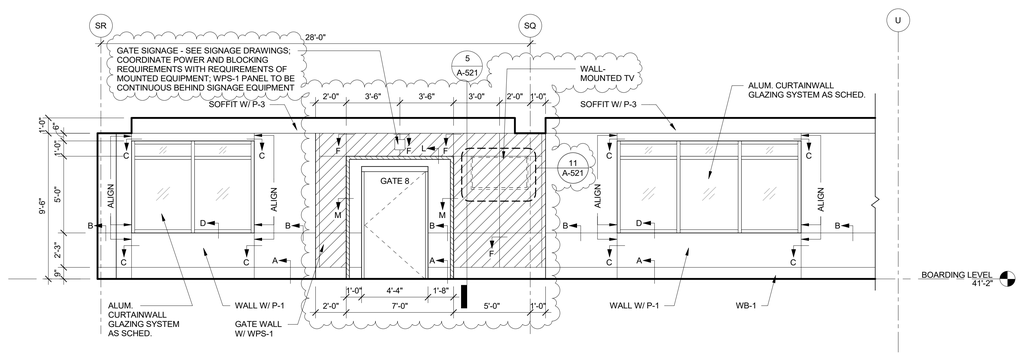
11 NORTH WEST INTERIOR ELEVATION - ZONE 2
1/4" = 1'-0"



6 NORTH EAST INTERIOR ELEVATION - ZONE 2
1/4" = 1'-0"



1 SOUTH WEST INTERIOR ELEVATION - ZONE 2
1/4" = 1'-0"



3 SOUTH EAST INTERIOR ELEVATION - ZONE 2
1/4" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA CERT. NO. 511140 CHARLOTTE, N.C.

CRAIG WALKER PAGE REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

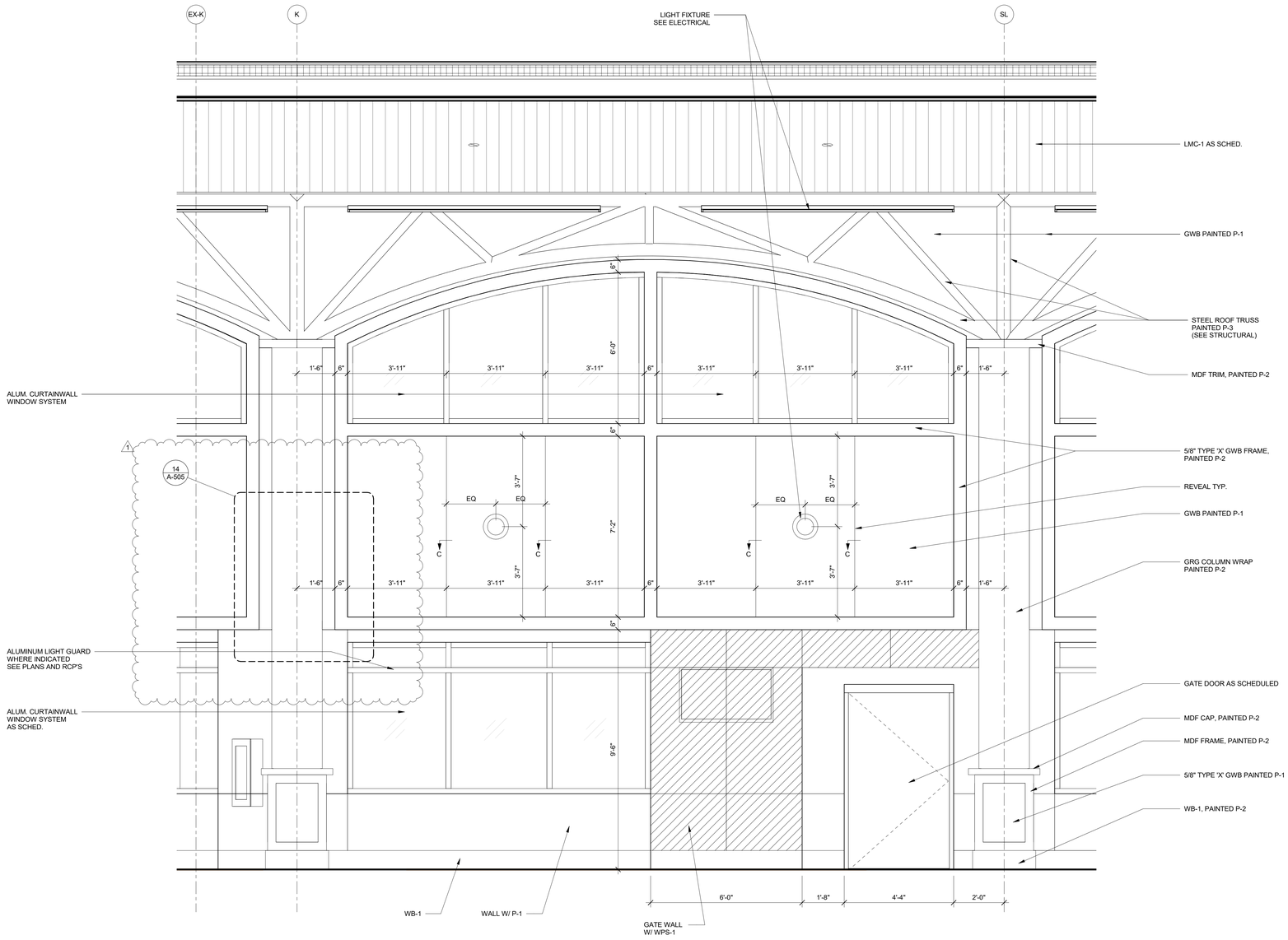
SCHEDULE 1 - INTERIOR ELEVATIONS

SHEET NUMBER

A1-252

GENERAL NOTES - INTERIOR ELEVATIONS

1. REFER TO SHEET A-654 FOR WALL BASE, WALL, AND PANEL REVEAL DETAILS.
2. ABBREVIATIONS:
   - CLR = CENTERLINE OF REVEAL
   - TOR = TOP OF REVEAL
   - BOR = BOTTOM OF REVEAL
3. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO ARCHITECT FOR REVIEW AND APPROVAL OF ALL SPECIALTY WALL PANEL SYSTEMS (WPS) PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION
4. CONTRACTOR TO PROVIDE MOCKUPS OF EACH SPECIALTY WALL PANEL SYSTEM (WPS) FOR REVIEW AND APPROVAL PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION.
5. ALL VERTICAL AND HORIZONTAL REVEALS ARE TO BE CONTINUOUS AND UNINTERRUPTED, U.N.O.
6. ALL DEAD STOP EXTRUSIONS ARE TO BE CONTINUOUS AND UNINTERRUPTED.



3 INTERIOR ELEVATION
1/2" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS
REGISTERED ARCHITECTURAL CORPORATION
CERT. NO. 51140
NORTH CAROLINA
CHARLOTTE, N.C.

CRAIG WALKER PAULE
REGISTERED ARCHITECT
9272
NORTH CAROLINA
CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - ENLARGED INTERIOR ELEVATIONS

SHEET NUMBER

A1-271

1 ENLARGED FLOOR PLAN AT ZONE 2 (GATE 7)
3/8" = 1'-0"

2 ENLARGED FLOOR PLAN AT ZONE 2 (GATE 9)
3/8" = 1'-0"

4 ENLARGED FLOOR PLAN AT ZONE 2 (GATE 8)
3/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA CERT. NO. 51140 CHARLOTTE, N.C.

CRAIG WALKER PAGE REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1	7/12/19	AD-01

DATE 7/12/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - ENLARGED FLOOR PLANS

SHEET NUMBER

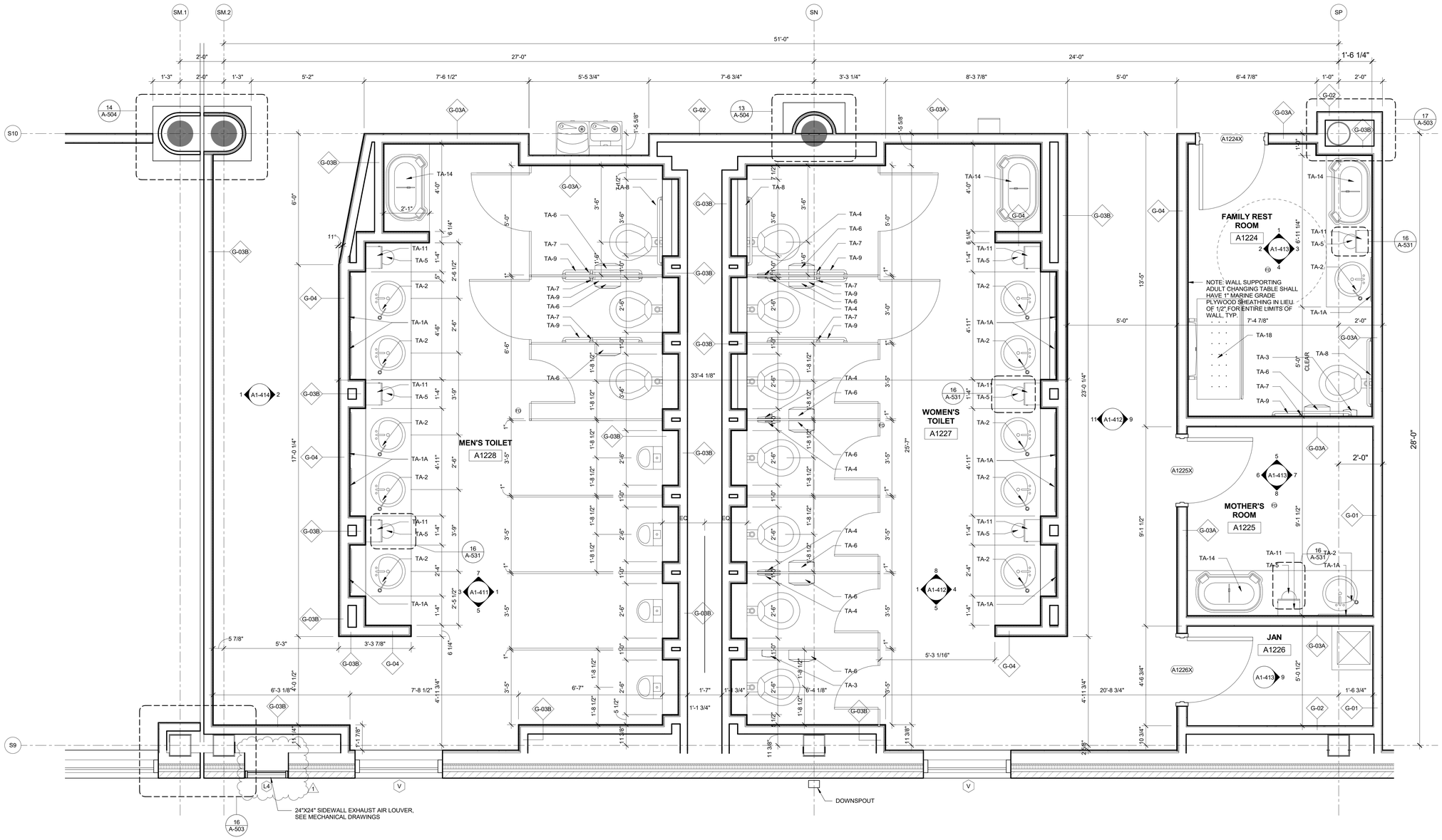
A1-401

GENERAL TOILET ACCESSORY AND BATHROOM FINISH NOTES

REFER TO SPECIFICATION SECTION 10 28 00 - TOILET ACCESSORIES FOR TOILET ACCESSORY LEGEND AND INFORMATION.

TOILET ACCESSORIES LEGEND

SYMBOL	DESCRIPTION
TA-1A	24" X 48" LIGHTED LED MIRROR- SEE ELECTRICAL DRAWINGS
TA-1B	24" X 36" FRAMED MIRROR
TA-2	AUTOMATIC TOP-FILL COUNTER MOUNTED SOAP DISPENSER
TA-3	SURFACE MOUNTED SANITARY NAPKIN DISPENSER- BOBRICK B-270
TA-4	SURFACE MOUNTED SANITARY NAPKIN DISPENSER- BOBRICK B-4354
TA-5	COUNTER WASTE RECEPTACLE GROMMET
TA-6	MULTI-ROLL TOILET TISSUE DISPENSER
TA-7	18" GRAB BAR (VERTICAL)
TA-8	36" GRAB BAR (HORIZONTAL, REAR)
TA-9	42" GRAB BAR (HORIZONTAL, SIDE)
TA-10	SS COAT HOOK (CENTERED ON TOILET SIDE OF DOOR @ 60" A.F.F.)
TA-11	PAPER TOWEL DISPENSER
TA-12	BATTERY OPERATED WALL MOUNTED HAND SOAP DISPENSER
TA-14	BABY CHANGING STATION
TA-15	WASTE RECEPTACLE
TA-16	MOP AND BROOM HOLDER
TA-17	UNDERCOUNTER PULL OUT TRASH RECEPTACLE
TA-18	ADULT CHANGING STATION
TA-19	COMBINATION PAPER TOWEL AND WASTE RECEPTACLE



1 ZONE 2 - ENLARGED TOILET ROOM AREA
1/2" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA CERT. NO. 51140 CHARLOTTE, N.C.

TRAVIS WALKER PAYNE REGISTERED LANDSCAPE ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

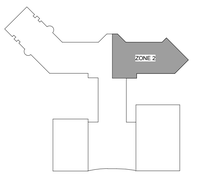
BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

KEY PLAN



COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

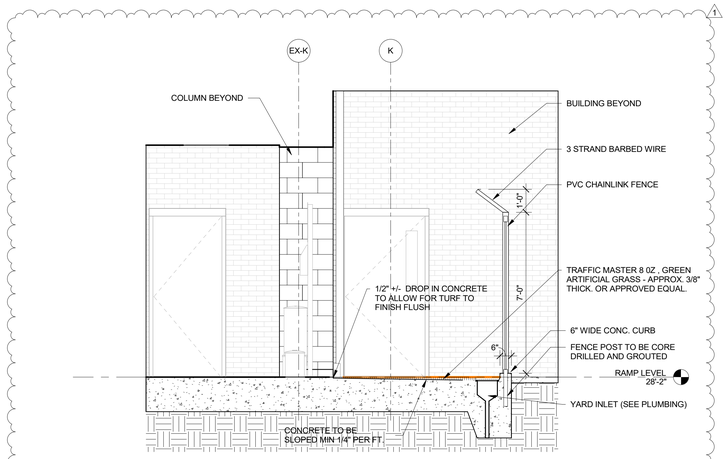
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

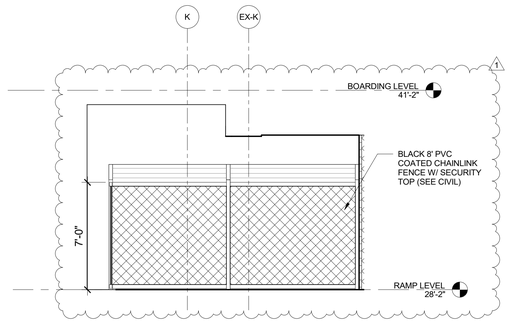
SCHEDULE 1 - ENLARGED FLOOR PLANS

SHEET NUMBER

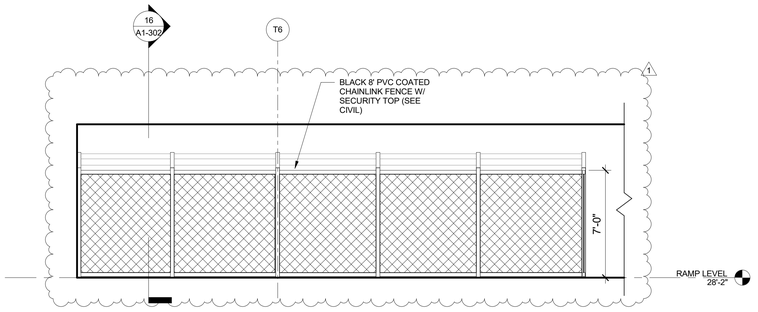
A1-402



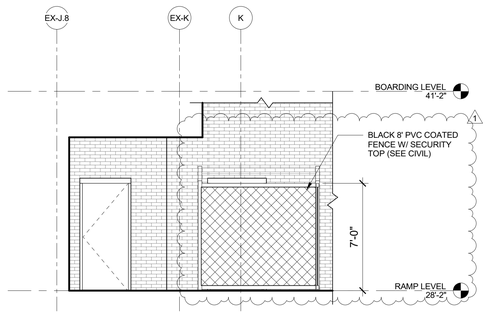
3 DETAIL SECTION SARA
3/8" = 1'-0"



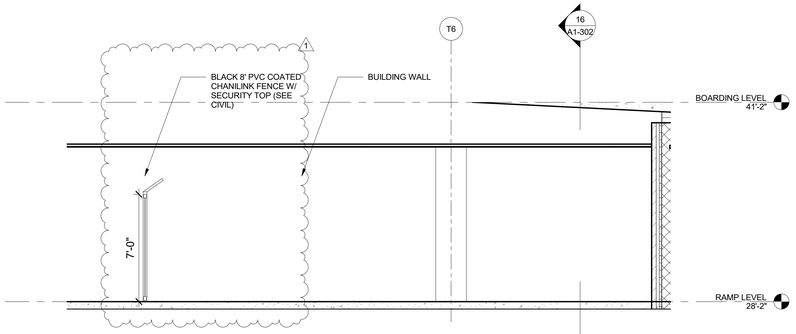
6 ELEVATION SARA - NORTH
1/4" = 1'-0"



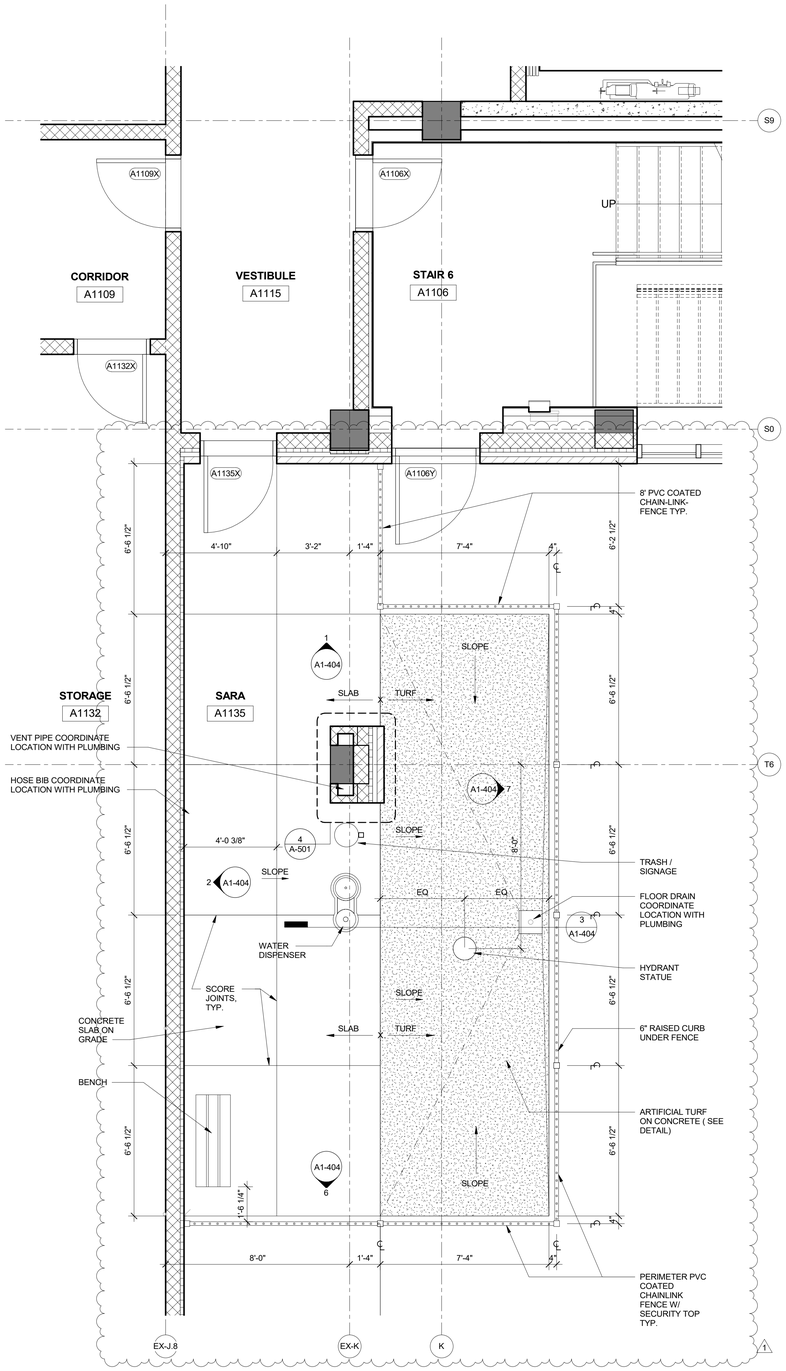
7 ELEVATION SARA - WEST
1/4" = 1'-0"



1 ELEVATION SARA -SOUTH
1/4" = 1'-0"



2 ELEVATION SARA - EAST
1/4" = 1'-0"



5 SCHEDULE 1 - SARA PLAN
3/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS
REGISTERED ARCHITECTURAL CORPORATION
CERT. NO. 51140
NORTH CAROLINA
CHARLOTTE, N.C.

TRAVIS WALKER PAGE
REGISTERED ARCHITECT
9272
NORTH CAROLINA
CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

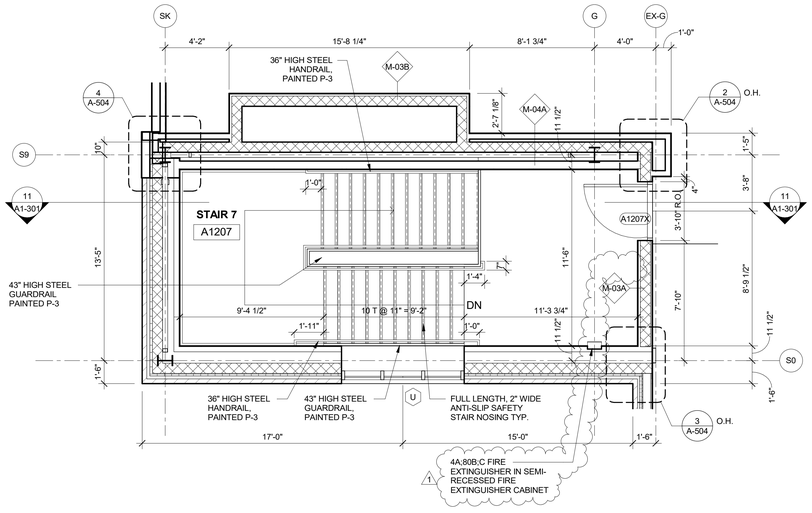
REVISIONS

1	7/12/19	AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

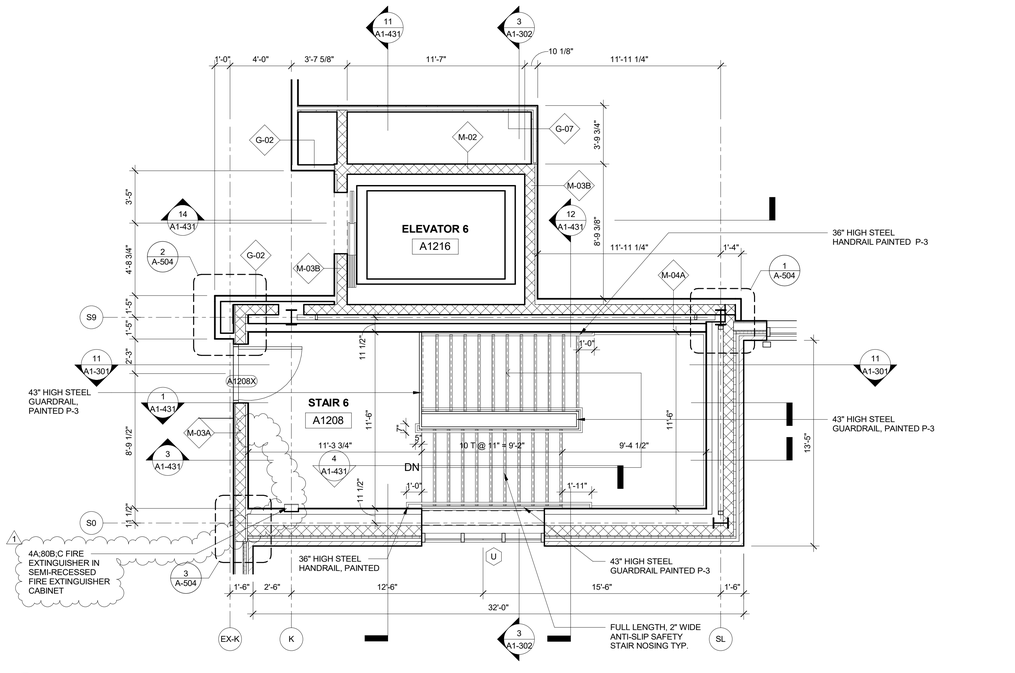
SCHEDULE 1 - ENLARGED SARA PLAN

SHEET NUMBER
A1-404



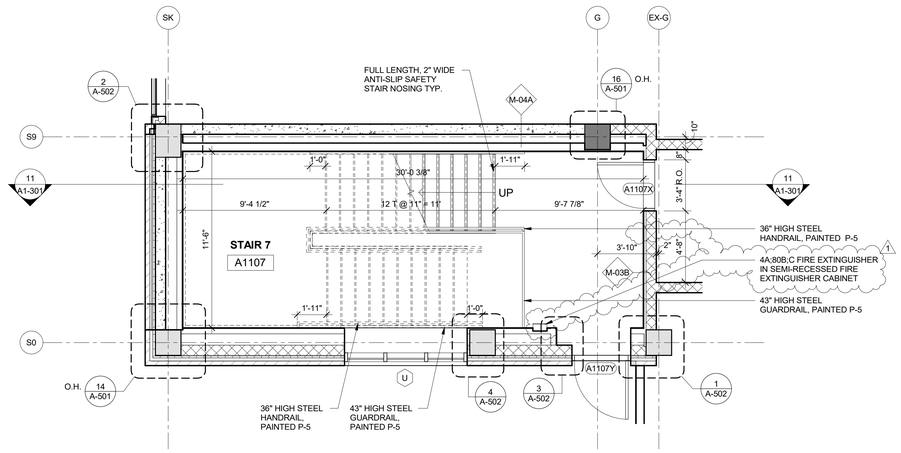
6 BOARDING-SCHEDULE 1-STAIR LEFT PLAN

1/4" = 1'-0"



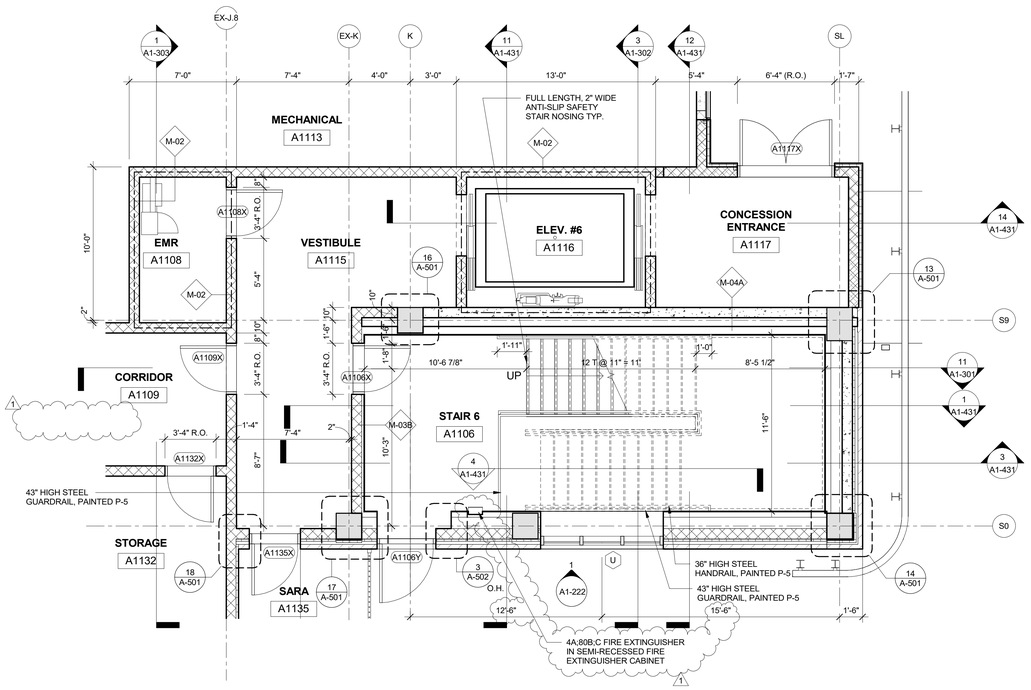
8 BOARDING-SCHEDULE 1-STAIR RIGHT PLAN

1/4" = 1'-0"



1 RAMP-SCHEDULE 1-STAIR LEFT PLAN

1/4" = 1'-0"



3 RAMP-SCHEDULE 1-STAIR RIGHT PLAN

1/4" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS
REGISTERED ARCHITECTURAL CORPORATION
CERT. NO. 51140
NORTH CAROLINA
CHARLOTTE, N.C.

CRAIG WALKER PAGE
REGISTERED ARCHITECT
9272
NORTH CAROLINA
CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

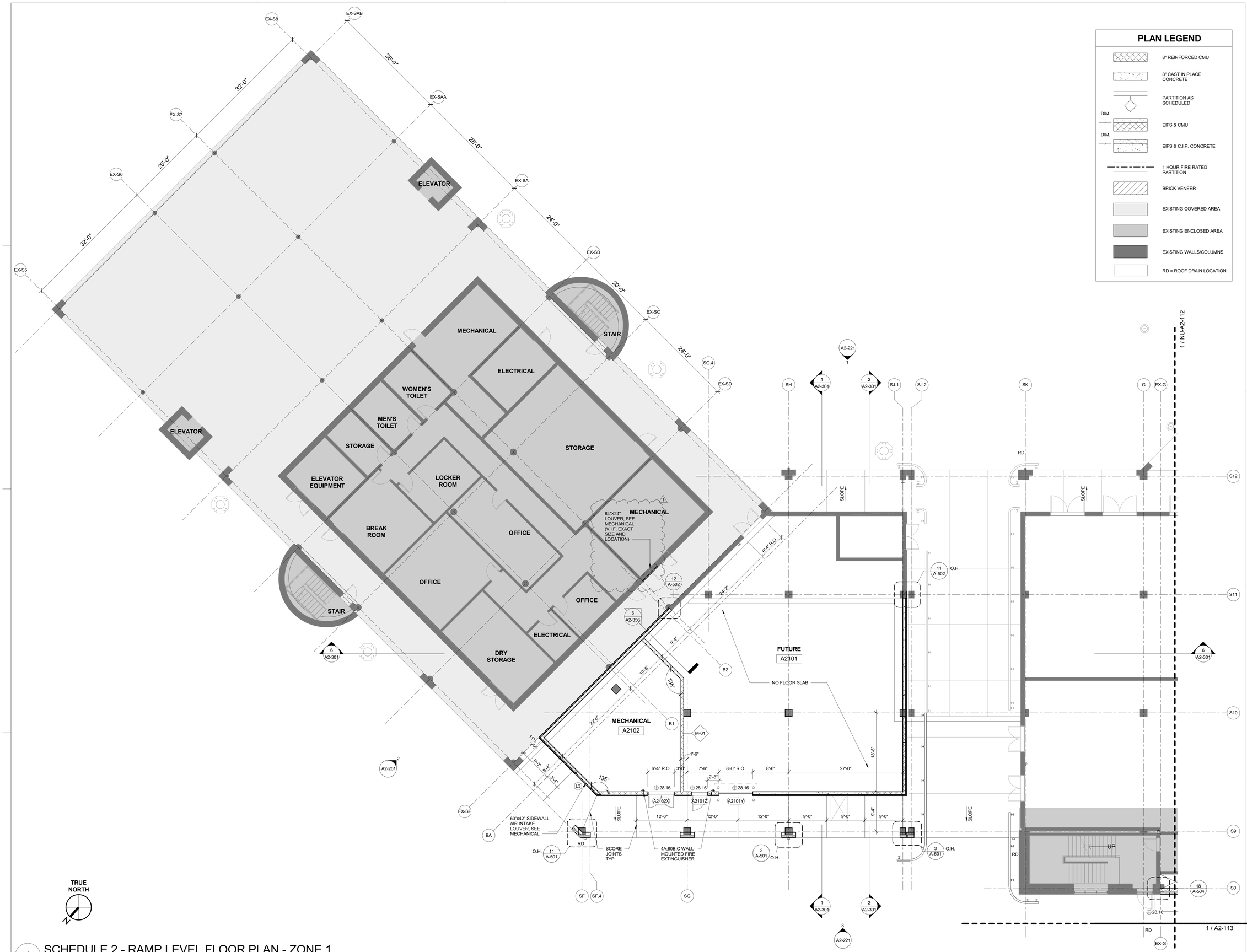
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - ENLARGED STAIR PLANS

SHEET NUMBER

A1-421



1 SCHEDULE 2 - RAMP LEVEL FLOOR PLAN - ZONE 1
1/8" = 1'-0"

PLAN LEGEND

- 8" REINFORCED CMU
- 8" CAST IN PLACE CONCRETE
- PARTITION AS SCHEDULED
- DIM. EIFS & CMU
- DIM. EIFS & C.I.P. CONCRETE
- 1 HOUR FIRE RATED PARTITION
- BRICK VENEER
- EXISTING COVERED AREA
- EXISTING ENCLOSED AREA
- EXISTING WALLS/COLUMNS
- RD = ROOF DRAIN LOCATION

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 51140 NORTH CAROLINA CHARLOTTE, N.C.

CURTIS WALKER PAGE II REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

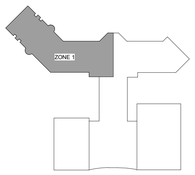
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

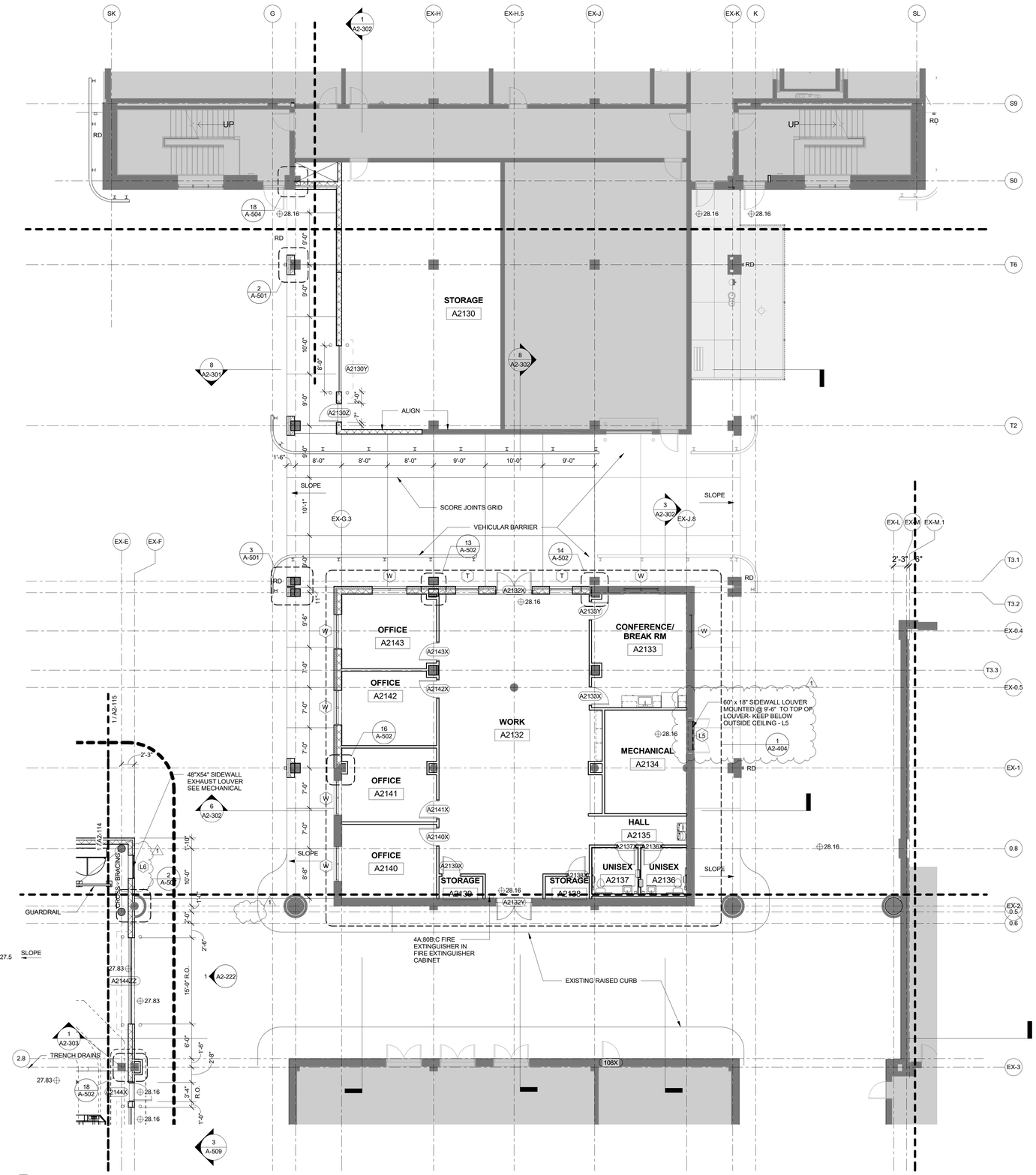
1	7/12/19	AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - RAMP LEVEL FLOOR PLAN ZONE 1

SHEET NUMBER

A2-111



1 SCHEDULE 2 - RAMP LEVEL FLOOR PLAN - ZONE 3

1/8" = 1'-0"

PLAN LEGEND

- 8" REINFORCED CMU
- 8" CAST IN PLACE CONCRETE
- PARTITION AS SCHEDULED
- EIFS & CMU
- EIFS & C.I.P. CONCRETE
- 1 HOUR FIRE RATED PARTITION
- BRICK VENEER
- EXISTING COVERED AREA
- EXISTING ENCLOSED AREA
- EXISTING WALLS/COLUMNS
- RD = ROOF DRAIN LOCATION

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS — REGISTERED ARCHITECTURAL CORPORATION — CERT. NO. 51140 — NORTH CAROLINA — CHARLOTTE, N.C.

TRAVIS WALKER PAGE — REGISTERED ARCHITECT — 9272 — NORTH CAROLINA — CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

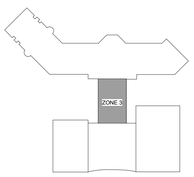
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

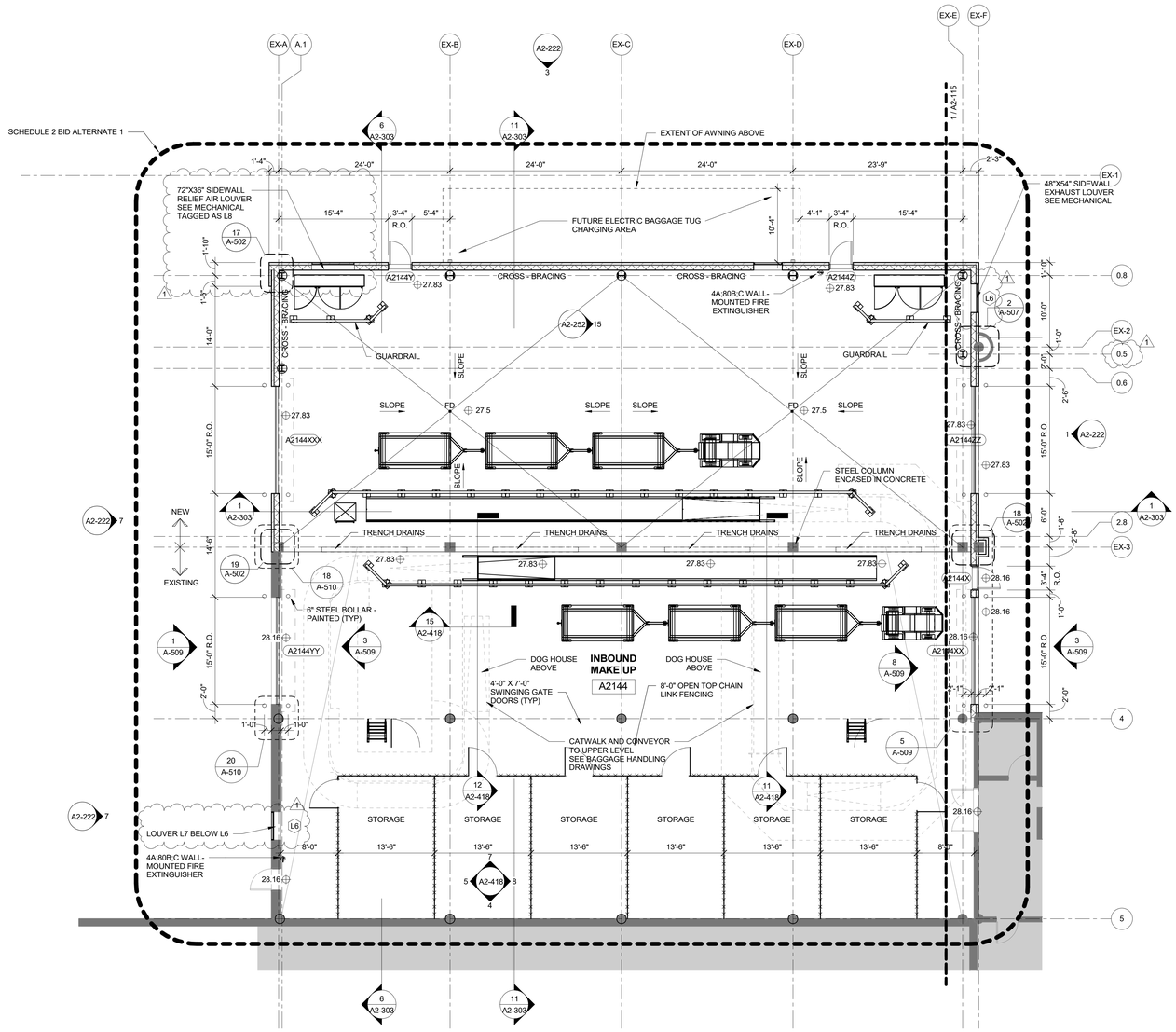
1	7/12/19	AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - RAMP LEVEL FLOOR PLAN ZONE 3

SHEET NUMBER

A2-113



1 SCHEDULE 2 - RAMP LEVEL FLOOR PLAN - ZONE 4

1/8" = 1'-0"

PLAN LEGEND

- 8" REINFORCED CMU
- 8" CAST IN PLACE CONCRETE
- PARTITION AS SCHEDULED
- EIFS & CMU
- EIFS & C.I.P. CONCRETE
- 1 HOUR FIRE RATED PARTITION
- BRICK VENEER
- EXISTING COVERED AREA
- EXISTING ENCLOSED AREA
- EXISTING WALLS/COLUMNS
- RD = ROOF DRAIN LOCATION

PLAN NOTES

SHEETS A-509 & A-510 FOR CONDITIONING @ ENABLING STAGE.

TRUE NORTH

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA CERT. NO. 51140 CHARLOTTE, N. C.

CRAIG WALKER PAYNE REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N. C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

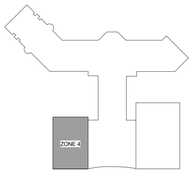
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

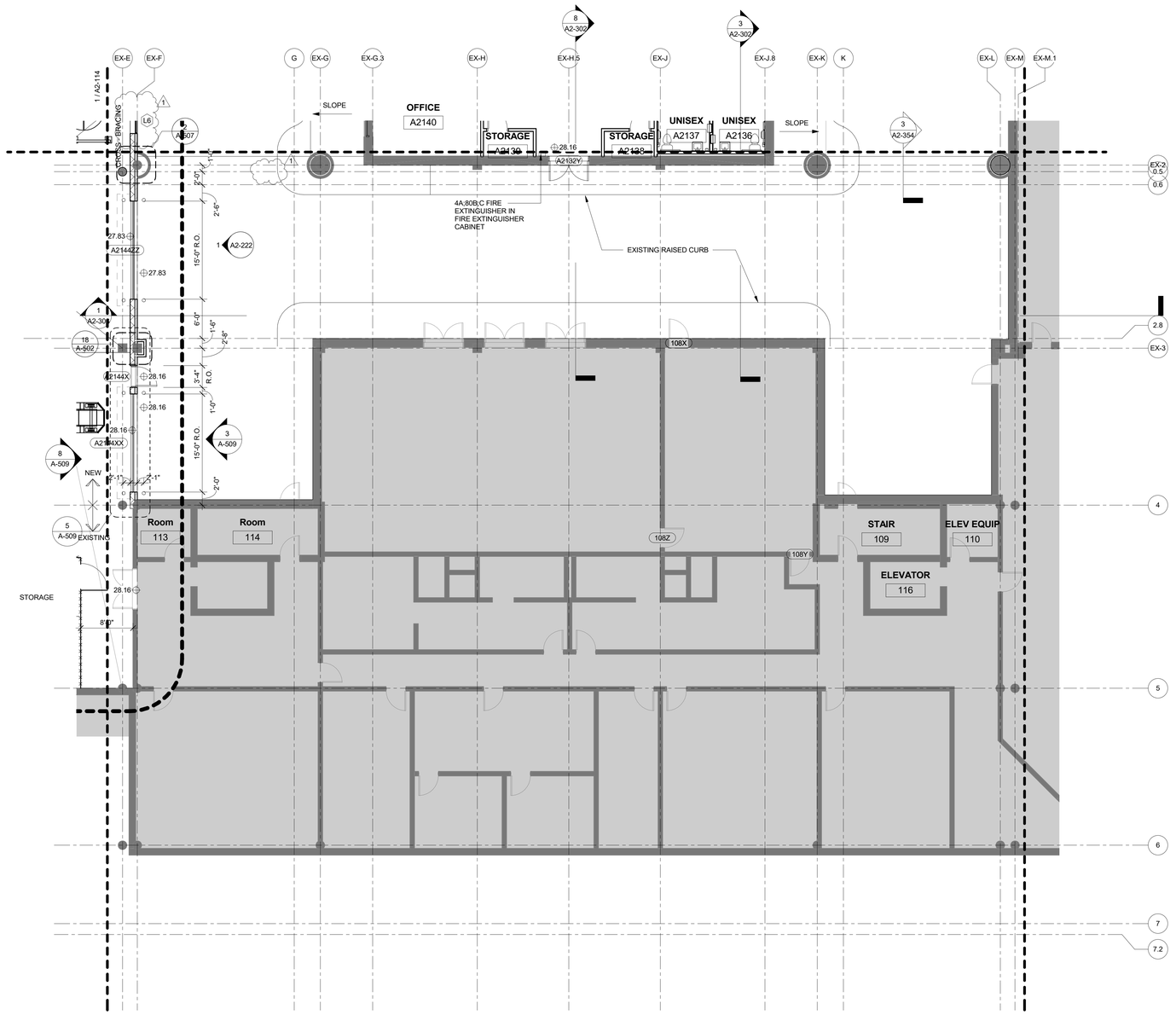
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - RAMP LEVEL FLOOR PLAN ZONE 4

SHEET NUMBER

A2-114



PLAN LEGEND

- 8" REINFORCED CMU
- 8" CAST IN PLACE CONCRETE
- PARTITION AS SCHEDULED
- DIM. EIFS & CMU
- DIM. EIFS & C.I.P. CONCRETE
- 1 HOUR FIRE RATED PARTITION
- BRICK VENEER
- EXISTING COVERED AREA
- EXISTING ENCLOSED AREA
- EXISTING WALLS/COLUMNS
- RD = ROOF DRAIN LOCATION

TRUE NORTH

1 SCHEDULE 2 - RAMP LEVEL FLOOR PLAN - ZONE 5
1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS — REGISTERED ARCHITECTURAL CORPORATION — CERT. NO. 51140 — NORTH CAROLINA — CHARLOTTE, N.C.

CRAIG WALKER PAGE — REGISTERED ARCHITECT — 9272 — NORTH CAROLINA — CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

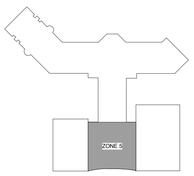
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

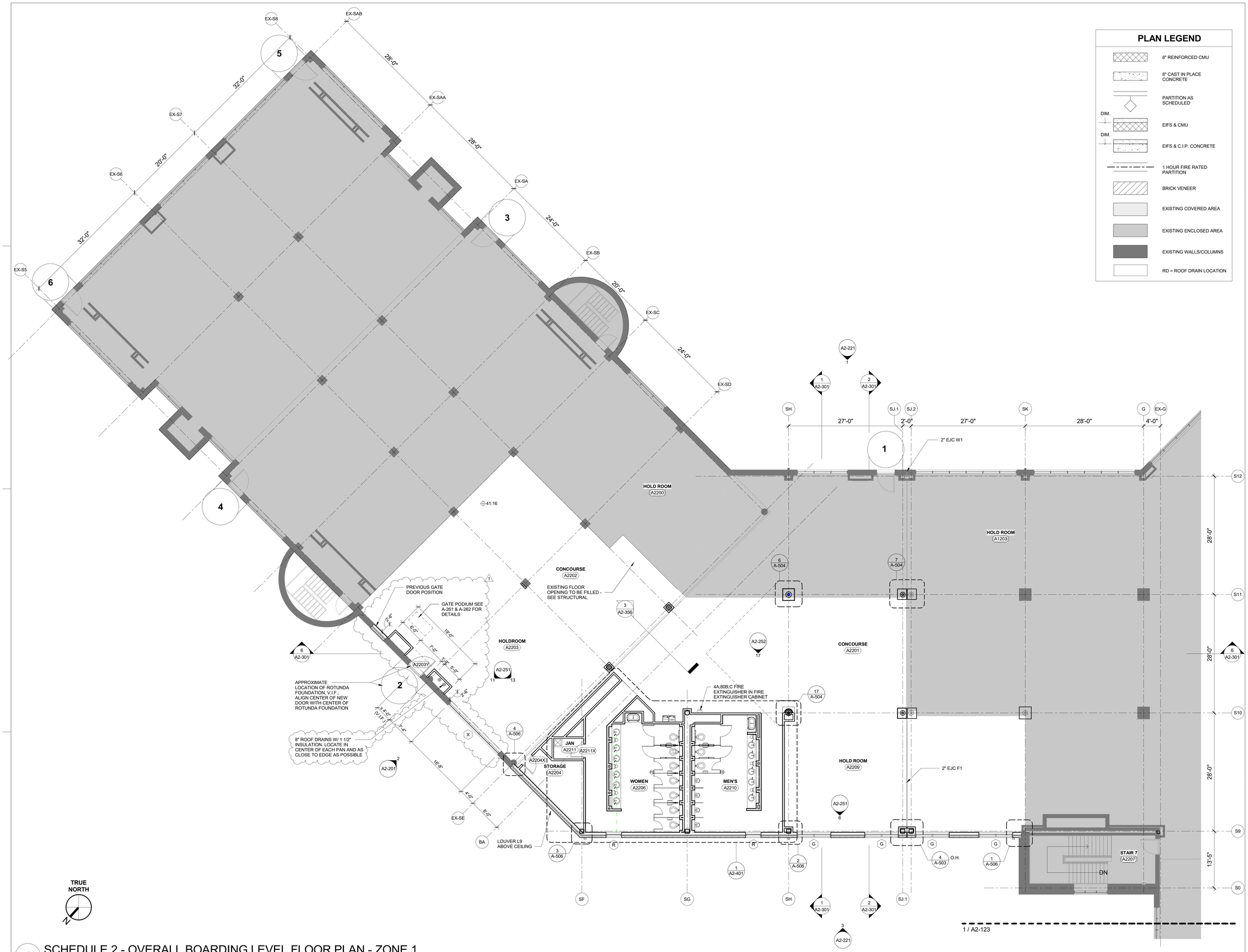
1	7/12/19	AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - RAMP LEVEL FLOOR PLAN ZONE 5

SHEET NUMBER

A2-115



TRUE NORTH

1 SCHEDULE 2 - OVERALL BOARDING LEVEL FLOOR PLAN - ZONE 1

1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 51140 NORTH CAROLINA CHARLOTTE, N.C.

CRAIG WALKER PAGE II REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

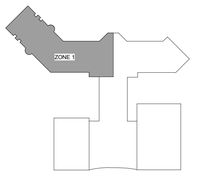
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

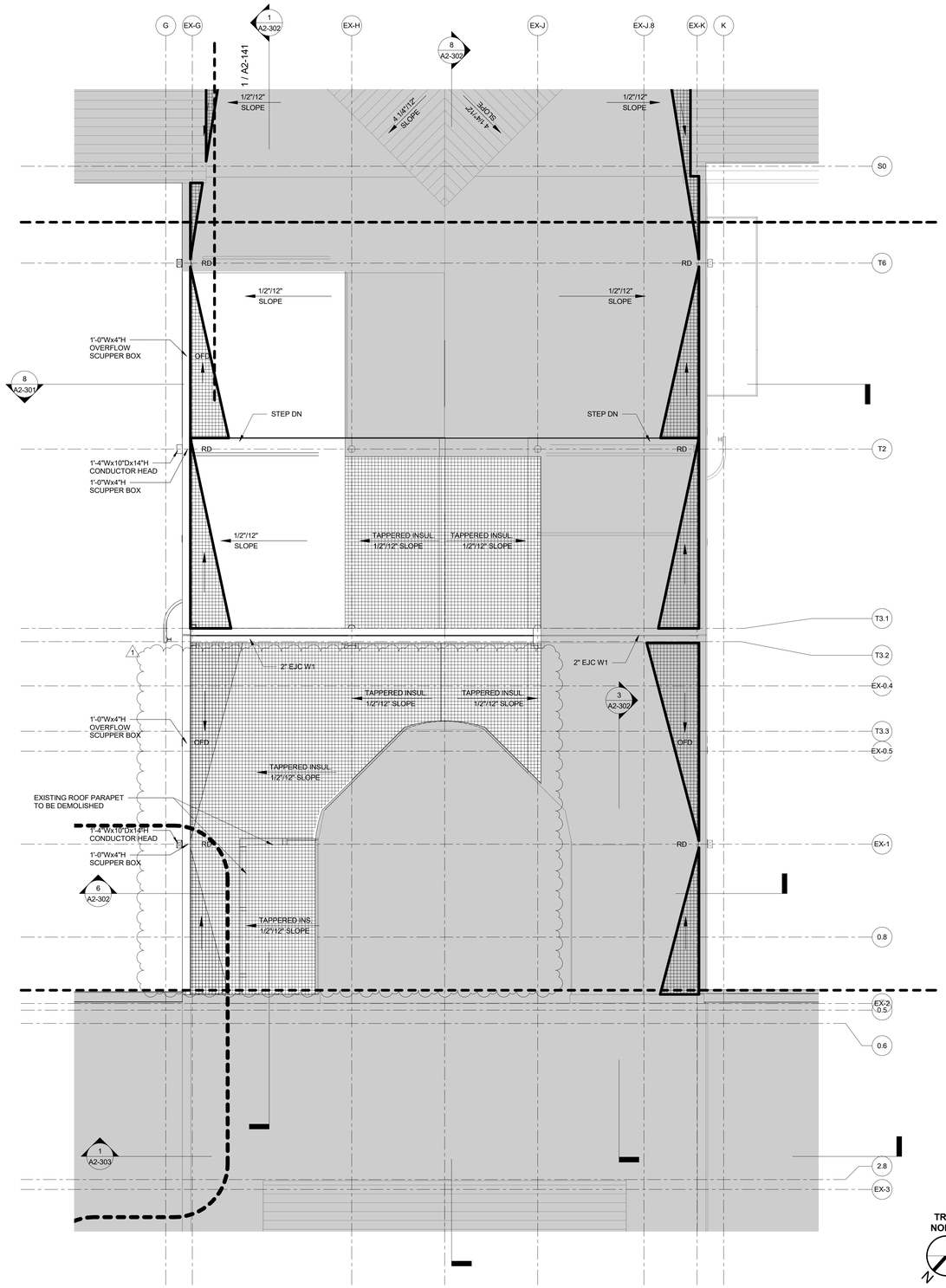
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - BOARDING LEVEL FLOOR PLAN ZONE 1

SHEET NUMBER

A2-121



1 SCHEDULE 2 - ROOF PLAN ZONE 3

1/8" = 1'-0"

ROOF DRAINAGE CALCULATIONS

DRAINAGE AREA (X)	MAX. SF	AREA SF	LEADER SIZE	REMARKS:
1	8,240 SF	1,218 SF	4" X 6"	(1) PRIMARY ROOF DRAIN 4"/HR PER P1106.1 (2) MAX. VERTICAL CODUCTOR FOR 4"/HR RAINFALL RATE FOR X" DIA. LEADER (3) SEE PLUMBING DRAWINGS FOR ROOF DRAIN SIZES AND LOCATIONS. (RD)=PRIMARY ROOF DRAIN) (ORD=OVERFLOW ROOF DRAIN / SCUPPER) (4) PARAPET WALL ROOF DRAINAGE OVERFLOW SCUPPER SIZED PER P1106.5 (12"L X 6"H) (1 GPM=0.0104 X RAINFALL RATE X AREA)
2	8,240 SF	2,564 SF	4" X 6"	
3	8,240 SF	1,184 SF	4" X 6"	
4	8,240 SF	2,581 SF	4" X 6"	
5	8,240 SF	2,400 SF	4" X 6"	
6	8,240 SF	2,746 SF	4" X 6"	
7	8,240 SF	2,746 SF	4" X 6"	
8	8,240 SF	3,101 SF	4" X 6"	
9	8,240 SF	2,573 SF	4" X 6"	
10	8,240 SF	1,207 SF	4" X 6"	
11	8,240 SF	2,362 SF	4" X 6"	
12	8,240 SF	1,297 SF	4" X 6"	
13	8,240 SF	1,197 SF	4" X 6"	
14	8,240 SF	1,105 SF	4" X 6"	
15	8,240 SF	2,279 SF	4" X 6"	
16	8,240 SF	2,596 SF	4" X 6"	
17	8,240 SF	3,006 SF	4" X 6"	
18	8,240 SF	3,006 SF	4" X 6"	
19	8,240 SF	2,594 SF	4" X 6"	
20	8,240 SF	2,130 SF	4" X 6"	
21	8,240 SF	1,511 SF	4" X 6"	
22	8,240 SF	1,505 SF	4" X 6"	

ROOF DRAINAGE LEGEND

- AREA
- TAPERED INSULATION
- METAL ROOF
- SLOPE DIRECTION

ROOF NOTE

1. SEE DETAILS 18 & 19 /A-514 FOR LIGHTNING ARREST MOUNTING DETAILS

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS — REGISTERED ARCHITECTURAL CORPORATION — CERT. NO. 51140 — NORTH CAROLINA — CHARLOTTE, N.C.

TRAVIS WALKER PAGE — REGISTERED ARCHITECT — 9272 — NORTH CAROLINA — CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

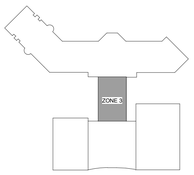
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

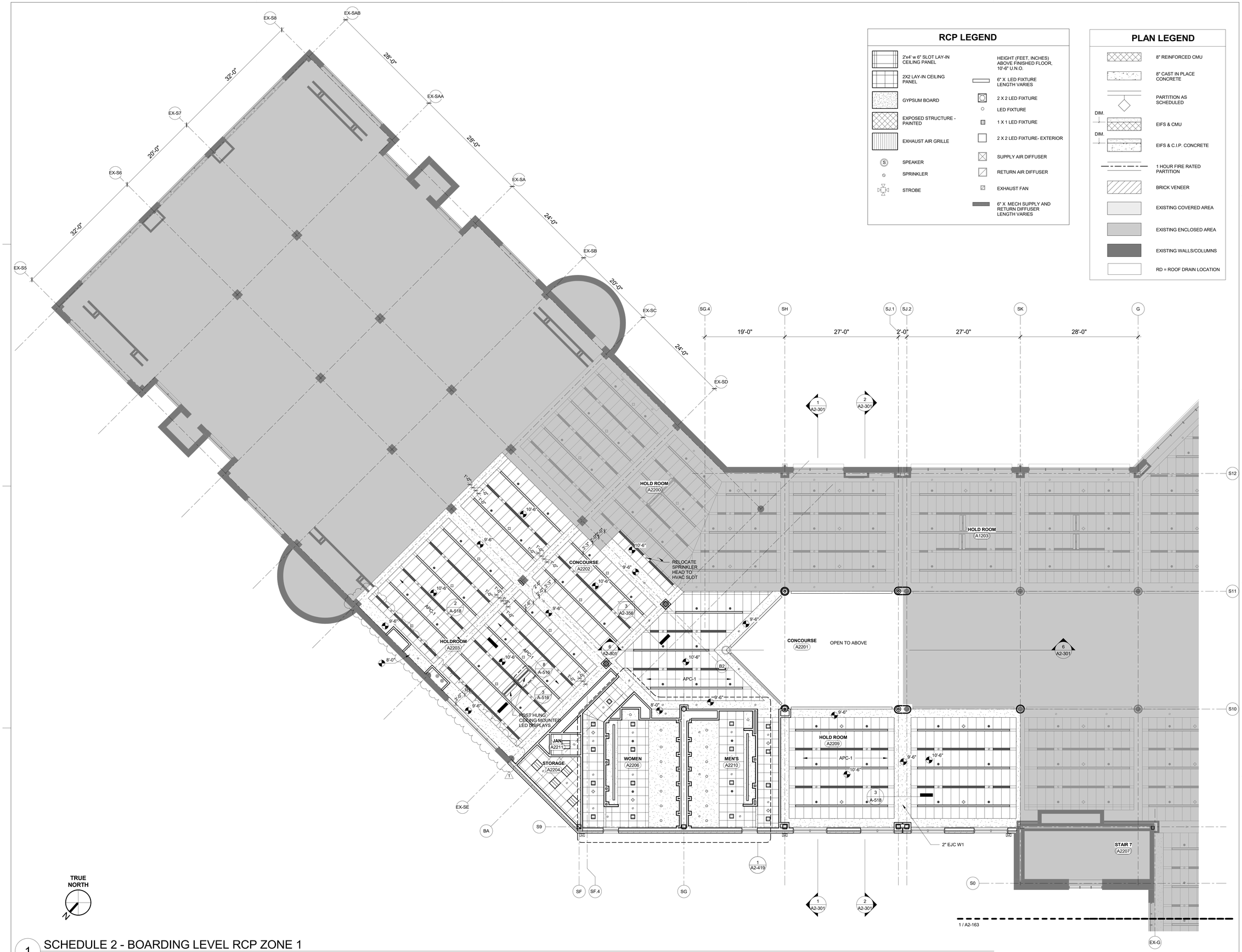
1	7/12/19	AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - ROOF LEVEL PLAN ZONE 3

SHEET NUMBER

A2-143



RCP LEGEND

- 2'x4' w 6" SLOT LAY-IN CEILING PANEL
- 2X2 LAY-IN CEILING PANEL
- GYPSUM BOARD
- EXPOSED STRUCTURE - PAINTED
- EXHAUST AIR GRILLE
- (S) SPEAKER
- SPRINKLER
- STROBE

HEIGHT (FEET, INCHES) ABOVE FINISHED FLOOR, 10'-6" U.N.O.

- 6" X LED FIXTURE LENGTH VARIES
- 2 X 2 LED FIXTURE
- LED FIXTURE
- 1 X 1 LED FIXTURE
- 2 X 2 LED FIXTURE- EXTERIOR
- SUPPLY AIR DIFFUSER
- RETURN AIR DIFFUSER
- EXHAUST FAN
- 6" X MECH SUPPLY AND RETURN DIFFUSER LENGTH VARIES

PLAN LEGEND

- 8" REINFORCED CMU
- 8" CAST IN PLACE CONCRETE
- PARTITION AS SCHEDULED
- DIM. EIFS & CMU
- DIM. EIFS & C.I.P. CONCRETE
- 1 HOUR FIRE RATED PARTITION
- BRICK VENEER
- EXISTING COVERED AREA
- EXISTING ENCLOSED AREA
- EXISTING WALLS/COLUMNS
- RD = ROOF DRAIN LOCATION

1 SCHEDULE 2 - BOARDING LEVEL RCP ZONE 1
1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS — REGISTERED ARCHITECTURAL CORPORATION — CERT. NO. 51140 — NORTH CAROLINA — CHARLOTTE, N.C.

THOMAS WALKER PAGE — REGISTERED ARCHITECT — 9272 — NORTH CAROLINA — CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

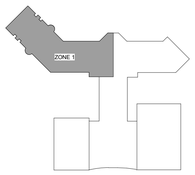
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

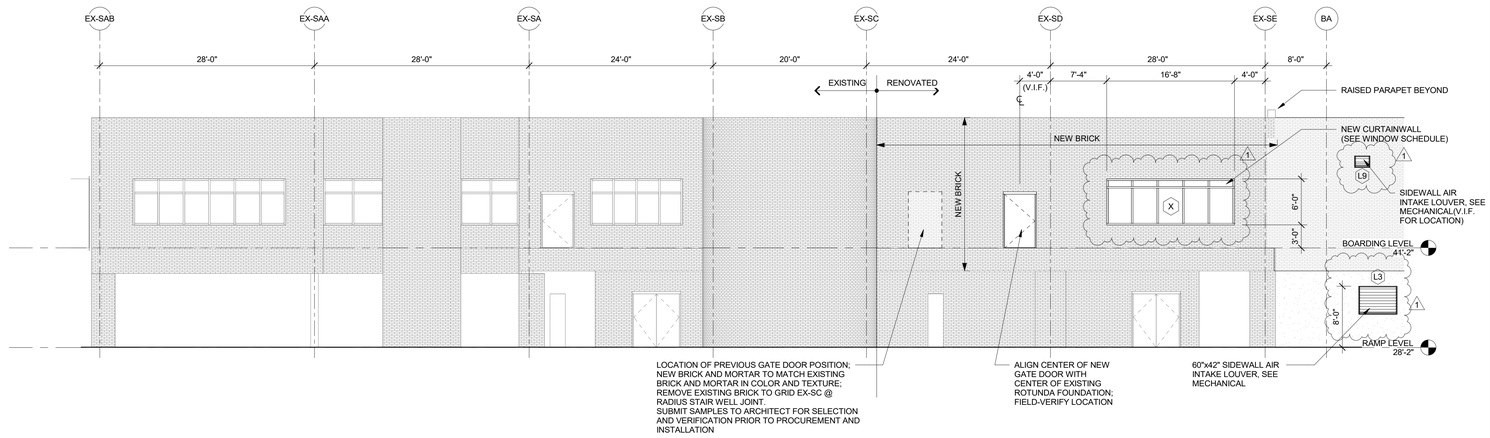
SCHEDULE 2 - BOARDING LEVEL RCP ZONE 1

SHEET NUMBER

A2-161

1 Elevation 39 - a

1/8" = 1'-0"



2 ENLARGED BUILDING ELEVATION - EXISTING HOLDING ROOM ZONE I

1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA CERT. NO. 51140 CHARLOTTE, N.C.

CRAIG WALKER PAGE REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

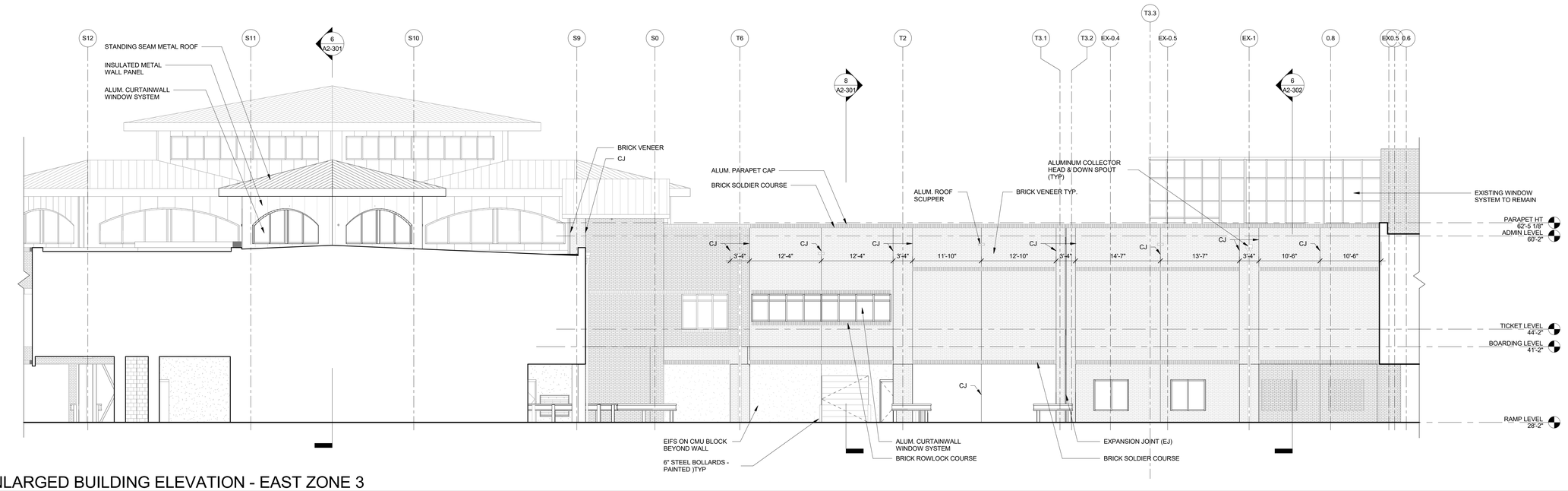
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - BUILDING ELEVATIONS

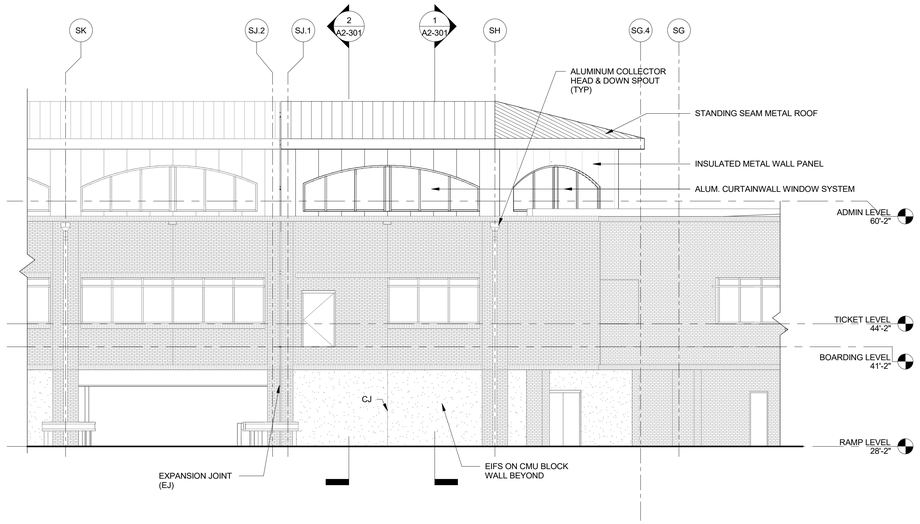
SHEET NUMBER

A2-201



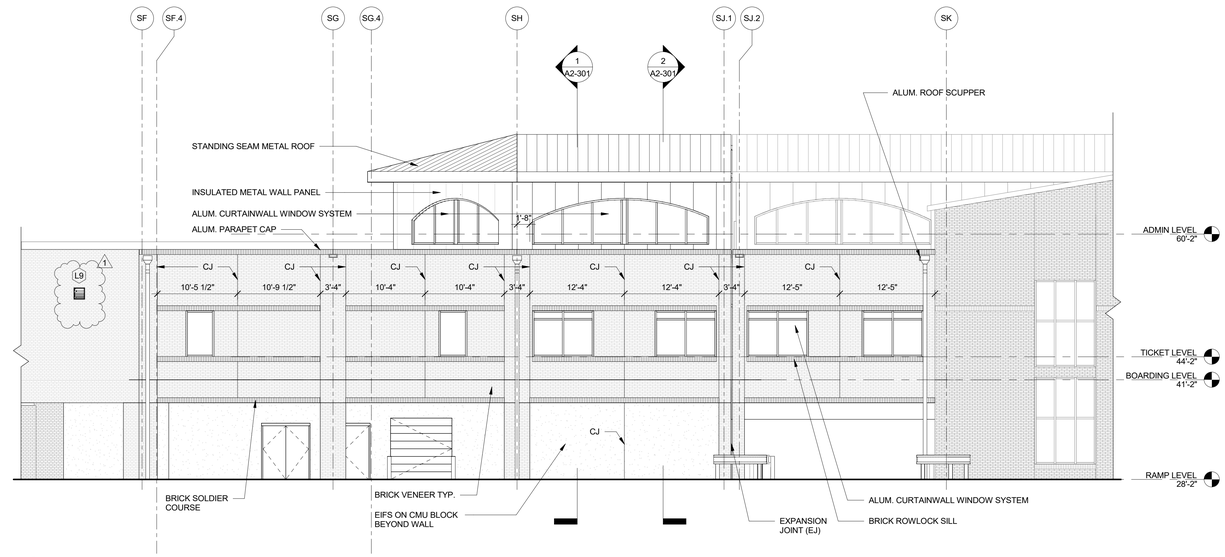
6 ENLARGED BUILDING ELEVATION - EAST ZONE 3

1/8" = 1'-0"



1 ENLARGED ELEVATION - SOUTH ZONE 1

1/8" = 1'-0"



3 ENLARGED BUILDING ELEVATION NORTH ZONE 1

1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA CERT. NO. 51140 CHARLOTTE, N.C.

CRAIG WALKER PAGE REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

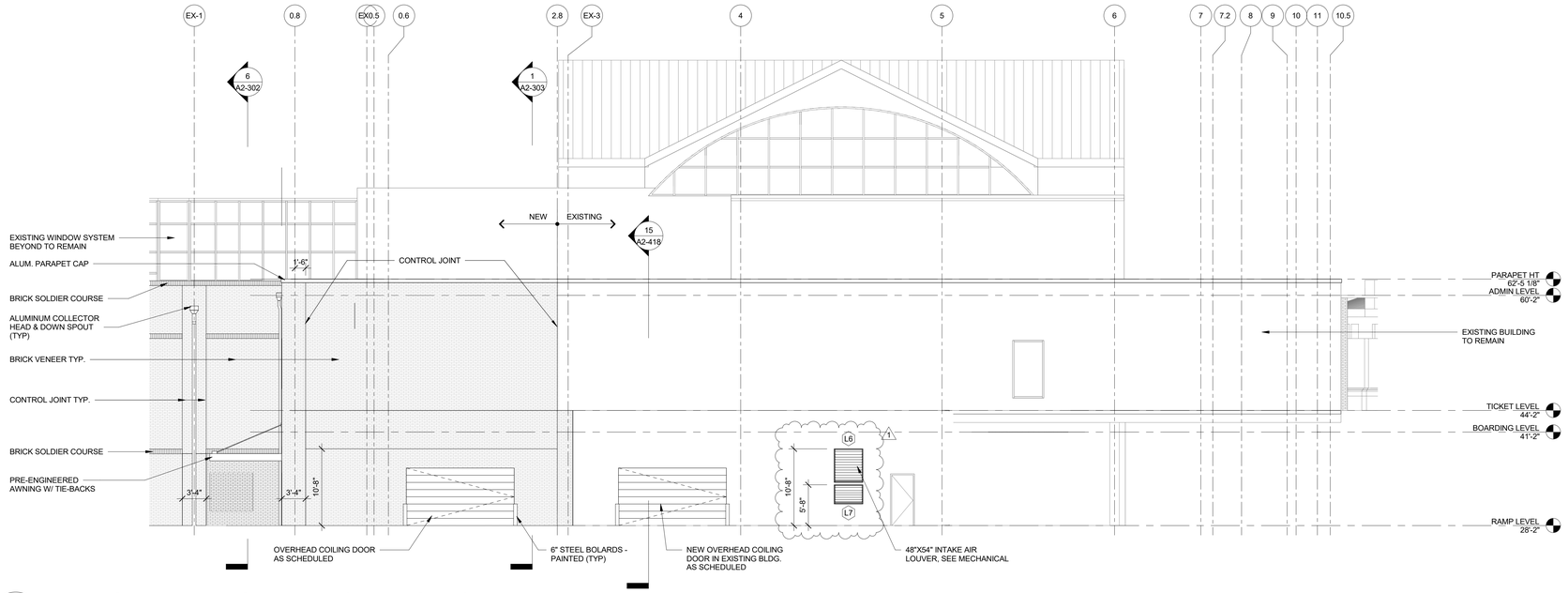
1	7/12/19	AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - BUILDING ELEVATIONS

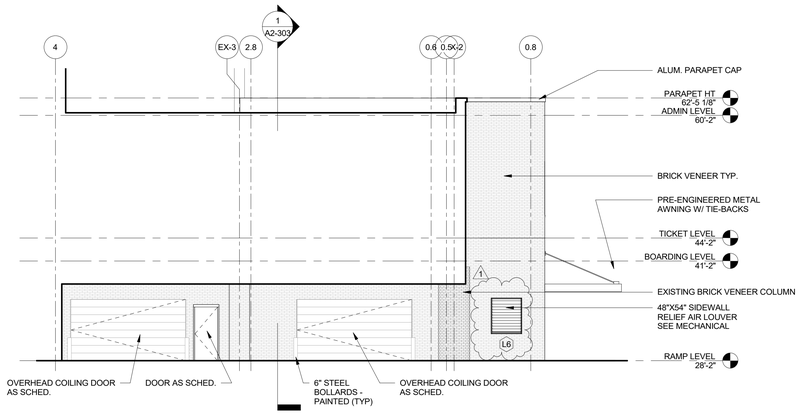
SHEET NUMBER

A2-221



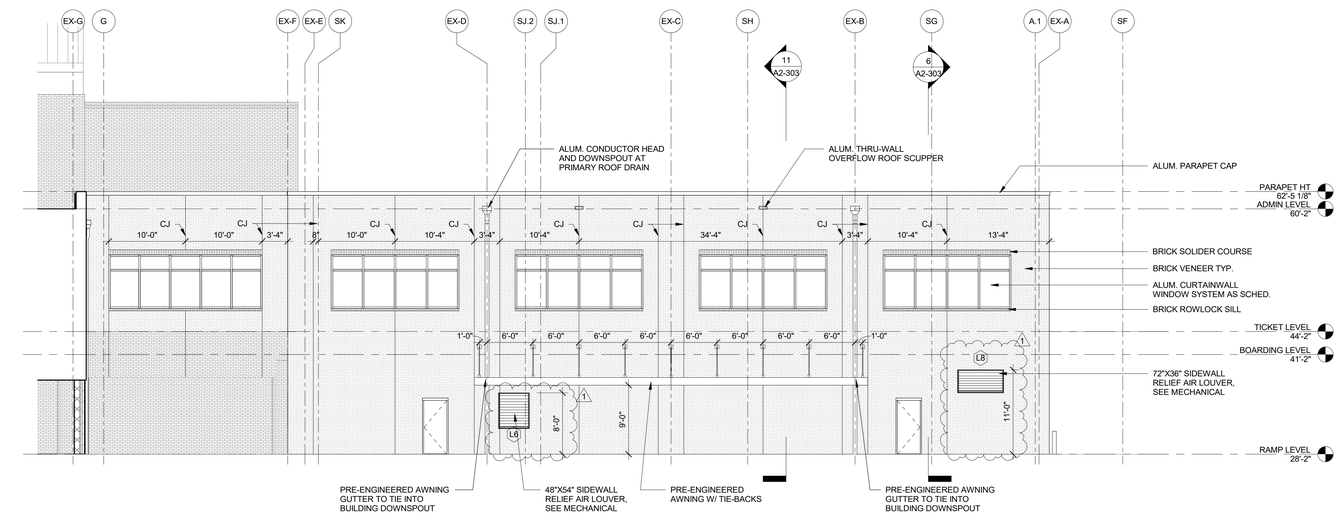
7 ENLARGED BUILDING ELEVATION - EAST ZONE 4

1/8" = 1'-0"



1 ENLARGED EXTERIOR ELEVATION-WEST ZONE 4

1/8" = 1'-0"



3 ENLARGED BUILDING ELEVATION - SOUTH ZONE 4

1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS
REGISTERED ARCHITECTURAL CORPORATION
CERT. NO. 51140
NORTH CAROLINA
CHARLOTTE, N.C.

TRAVIS WALKER PAGE
REGISTERED ARCHITECT
9272
NORTH CAROLINA
CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1	7/12/19	AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

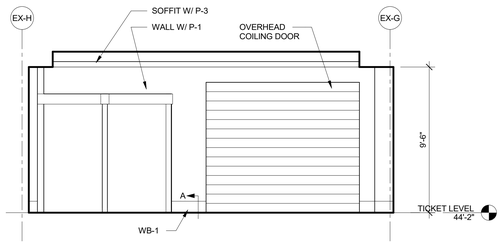
SCHEDULE 2 - BUILDING ELEVATIONS

SHEET NUMBER

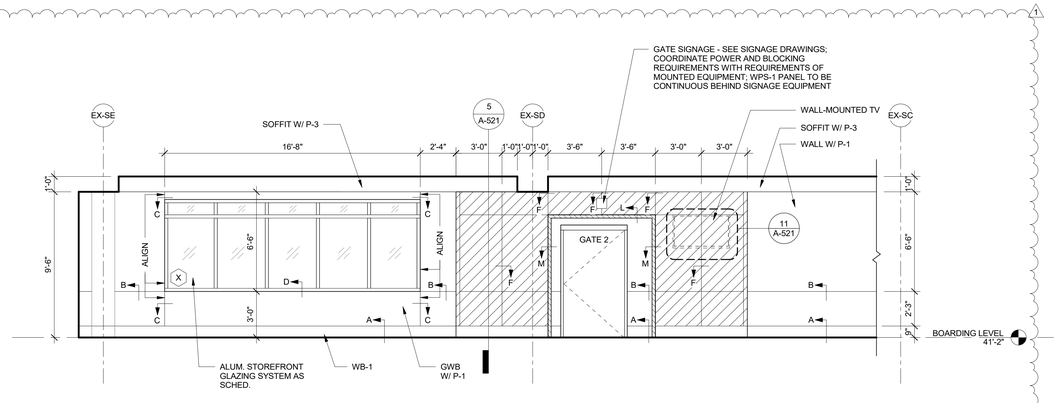
A2-222

GENERAL NOTES - INTERIOR ELEVATIONS

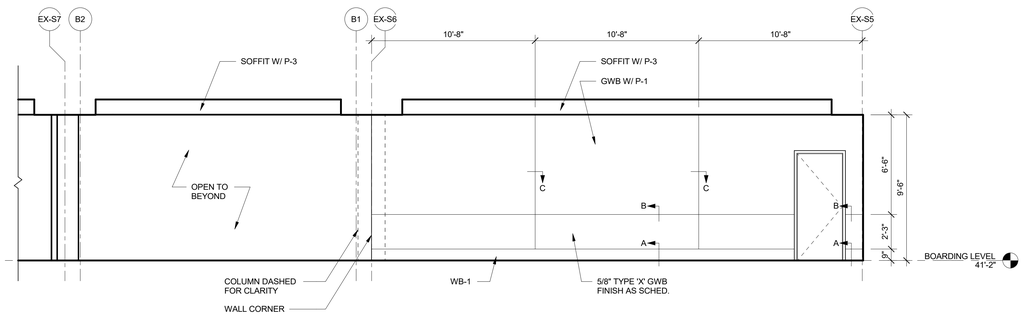
1. REFER TO SHEET A-654 FOR WALL BASE, WALL, AND PANEL REVEAL DETAILS.
2. ABBREVIATIONS:
   - CLR = CENTERLINE OF REVEAL
   - TOR = TOP OF REVEAL
   - BOR = BOTTOM OF REVEAL
3. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO ARCHITECT FOR REVIEW AND APPROVAL OF ALL SPECIALTY WALL PANEL SYSTEMS (WPS) PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION
4. CONTRACTOR TO PROVIDE MOCKUPS OF EACH SPECIALTY WALL PANEL SYSTEM (WPS) FOR REVIEW AND APPROVAL PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION.
5. ALL VERTICAL AND HORIZONTAL REVEALS ARE TO BE CONTINUOUS AND UNINTERRUPTED, U.N.O.
6. ALL DEAD STOP EXTRUSIONS ARE TO BE CONTINUOUS AND UNINTERRUPTED.



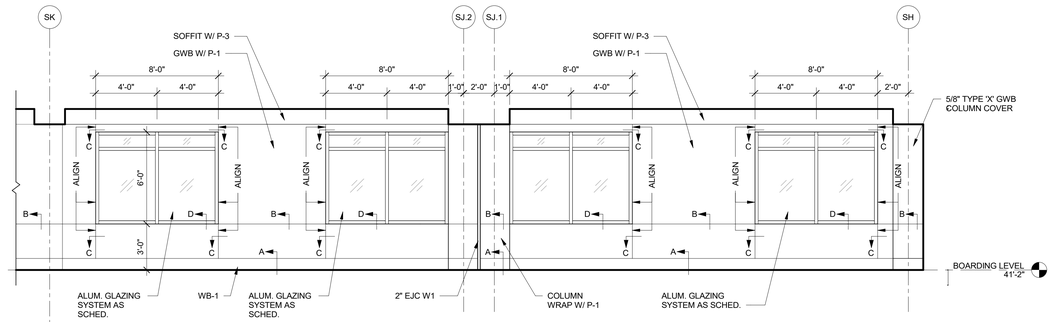
17 SCH 2 INT ELEV - CIRCULATION SOUTH
1/4" = 1'-0"



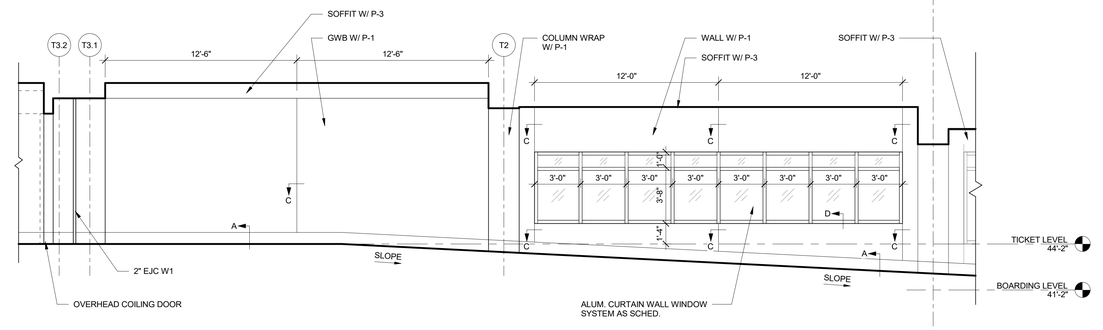
11 INTERIOR ELEVATION - HOLDROOM A2203
1/4" = 1'-0"



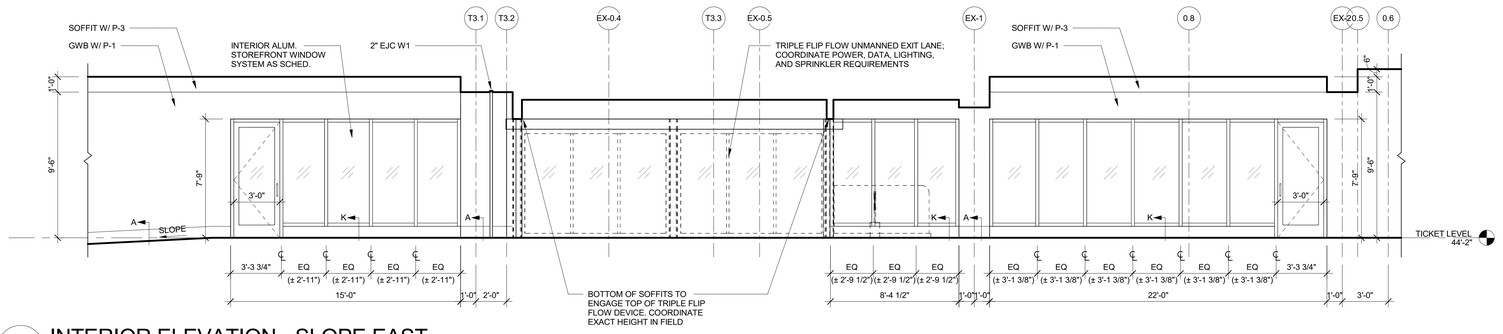
13 INTERIOR ELEVATION - HOLDROOM A2203
1/4" = 1'-0"



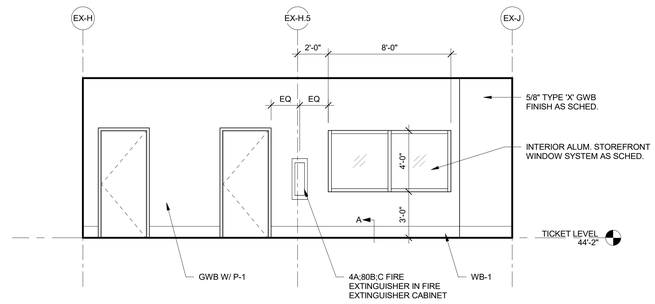
6 INTERIOR ELEVATION - HOLDROOM A2209
1/4" = 1'-0"



8 INTERIOR ELEVATION - SLOPE WEST
1/4" = 1'-0"



1 INTERIOR ELEVATION - SLOPE EAST
1/4" = 1'-0"



5 INTERIOR ELEVATION - PSR/OFFICE
1/4" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS
REGISTERED ARCHITECTURAL CORPORATION
CERT. NO. 51140
NORTH CAROLINA
CHARLOTTE, N.C.

CRAIG WALKER PAGE
REGISTERED ARCHITECT
9272
NORTH CAROLINA
CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1	7/12/19	AD-01

DATE	6/28/2019
PROJECT NUMBER	9202-000
SHEET TITLE	

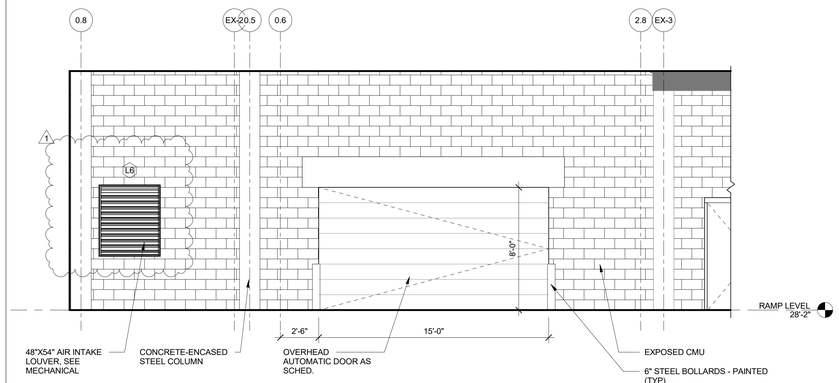
SCHEDULE 2 - INTERIOR ELEVATIONS

SHEET NUMBER

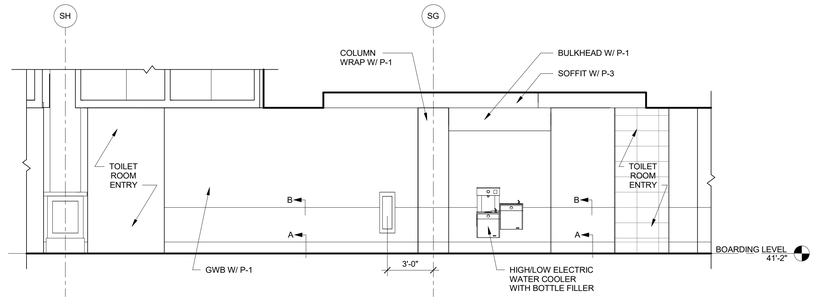
A2-251

GENERAL NOTES - INTERIOR ELEVATIONS

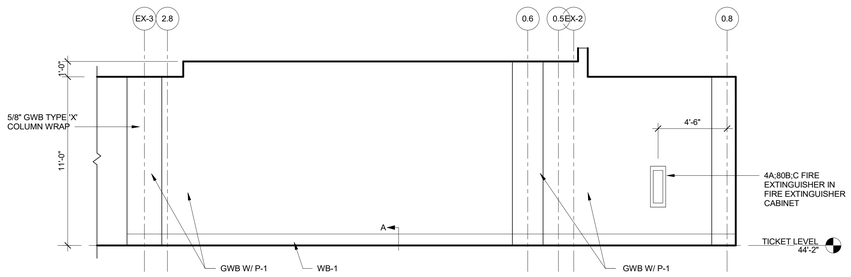
1. REFER TO SHEET A-654 FOR WALL BASE, WALL, AND PANEL REVEAL DETAILS.
2. ABBREVIATIONS:
   - CLR = CENTERLINE OF REVEAL
   - TOR = TOP OF REVEAL
   - BOR = BOTTOM OF REVEAL
3. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO ARCHITECT FOR REVIEW AND APPROVAL OF ALL SPECIALTY WALL PANEL SYSTEMS (WPS) PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION
4. CONTRACTOR TO PROVIDE MOCKUPS OF EACH SPECIALTY WALL PANEL SYSTEM (WPS) FOR REVIEW AND APPROVAL PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION.
5. ALL VERTICAL AND HORIZONTAL REVEALS ARE TO BE CONTINUOUS AND UNINTERRUPTED, U.N.O.
6. ALL DEAD STOP EXTRUSIONS ARE TO BE CONTINUOUS AND UNINTERRUPTED.



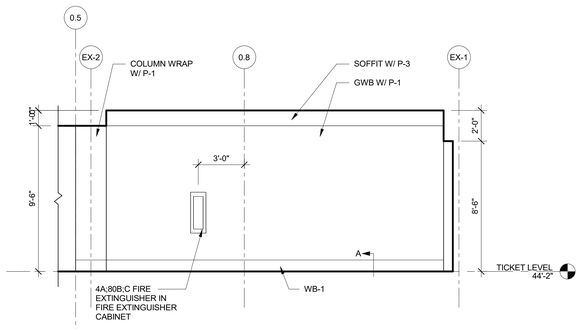
15 INTERIOR ELEVATION - ZONE 4 ALTERNATE
1/4" = 1'-0"



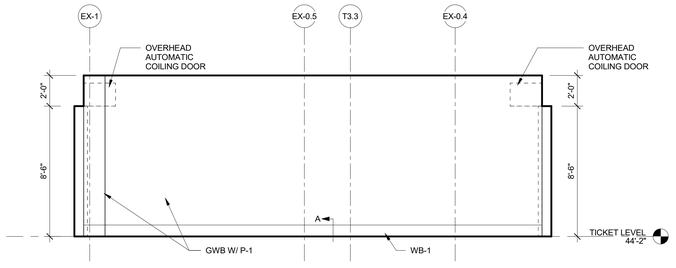
17 INTERIOR ELEVATION AT ZONE 1 TOILET ROOMS
1/4" = 1'-0"



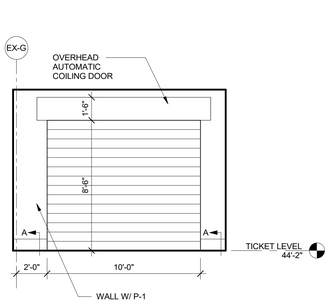
10 INTERIOR ELEVATION - ZONE 4 WEST
1/4" = 1'-0"



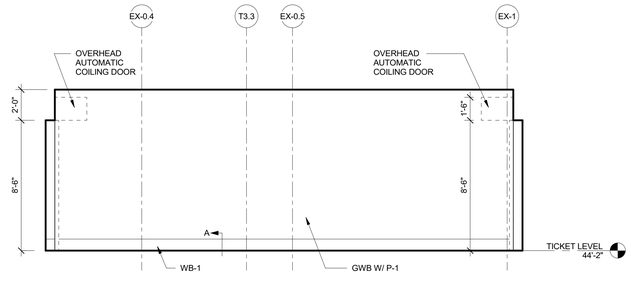
12 INTERIOR ELEVATION
1/4" = 1'-0"



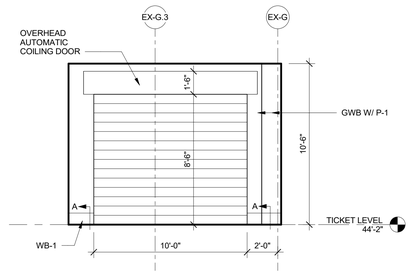
13 INTERIOR ELEVATION - BYPASS WEST
1/4" = 1'-0"



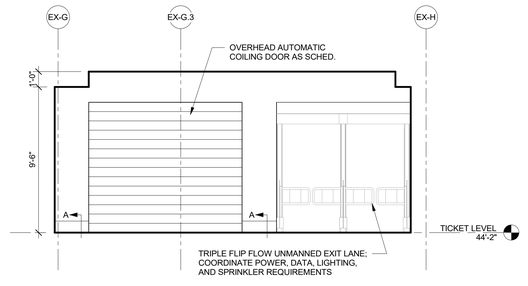
6 INTERIOR ELEVATION - BYPASS NORTH
1/4" = 1'-0"



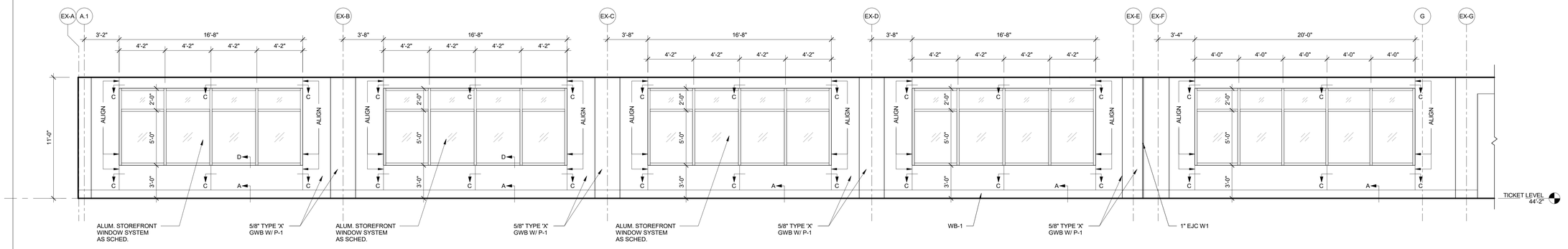
7 INTERIOR ELEVATION - BYPASS EAST
1/4" = 1'-0"



8 INTERIOR ELEVATION - BYPASS SOUTH
1/4" = 1'-0"



9 SCH 2 INT ELEV CIRCULATION NORTH
1/4" = 1'-0"



1 INTERIOR ELEVATION - ZONE 4 NORTH
1/4" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA CERT. NO. 51140 CHARLOTTE, N.C.

CRAIG WALKER PAUL REGISTERED LANDSCAPE ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1	7/12/19	AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

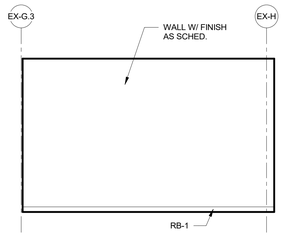
SCHEDULE 2 - INTERIOR ELEVATIONS

SHEET NUMBER

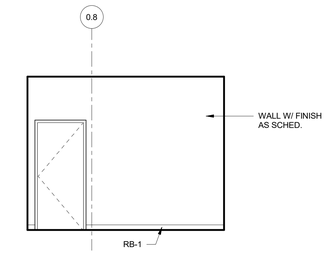
A2-252

GENERAL NOTES - INTERIOR ELEVATIONS

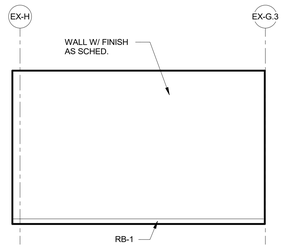
1. REFER TO SHEET A-654 FOR WALL BASE, WALL, AND PANEL REVEAL DETAILS.
2. ABBREVIATIONS:
   - CLR = CENTERLINE OF REVEAL
   - TOR = TOP OF REVEAL
   - BOR = BOTTOM OF REVEAL
3. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO ARCHITECT FOR REVIEW AND APPROVAL OF ALL SPECIALTY WALL PANEL SYSTEMS (WPS) PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION
4. CONTRACTOR TO PROVIDE MOCKUPS OF EACH SPECIALTY WALL PANEL SYSTEM (WPS) FOR REVIEW AND APPROVAL PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION.
5. ALL VERTICAL AND HORIZONTAL REVEALS ARE TO BE CONTINUOUS AND UNINTERRUPTED, U.N.O.
6. ALL DEAD STOP EXTRUSIONS ARE TO BE CONTINUOUS AND UNINTERRUPTED.



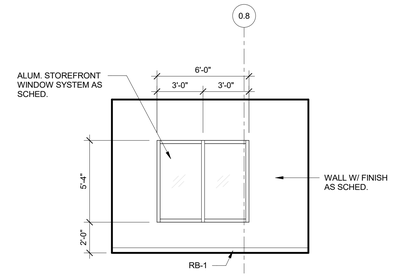
11 SCH 2 INT ELEV OFFICE A2140 NORTH
1/4" = 1'-0"



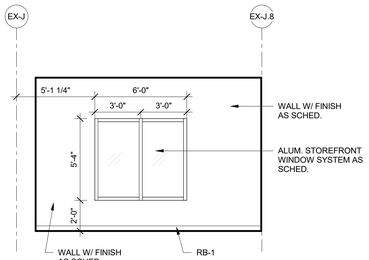
12 SCH 2 INT ELEV OFFICE A2140 EAST
1/4" = 1'-0"



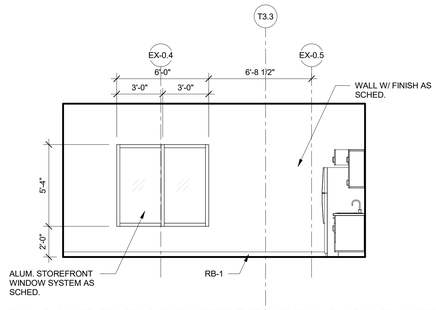
13 SCH 2 INT ELEV OFFICE A2140 SOUTH
1/4" = 1'-0"



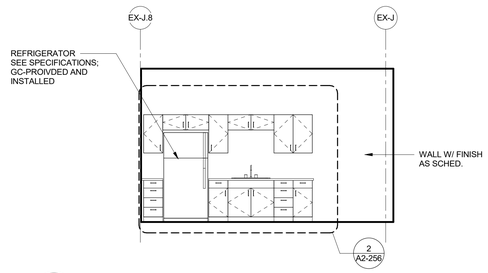
14 SCH 2 INT ELEV OFFICE A2140 WEST
1/4" = 1'-0"



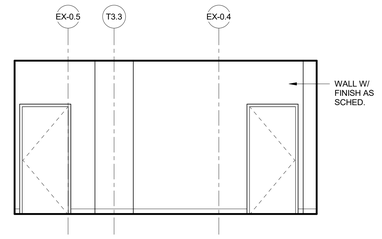
6 SCH 2 INT ELEV CONFERENCE A2133 NORTH
1/4" = 1'-0"



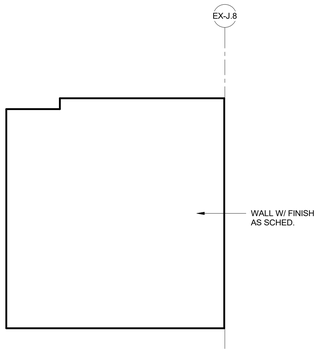
7 SCH 2 INT ELEV CONFERENCE A2133 EAST
1/4" = 1'-0"



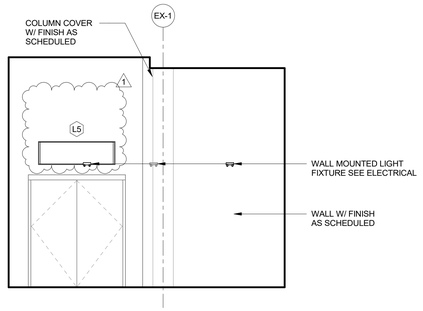
8 SCH 2 INT ELEV CONFERENCE A2133 SOUTH
1/4" = 1'-0"



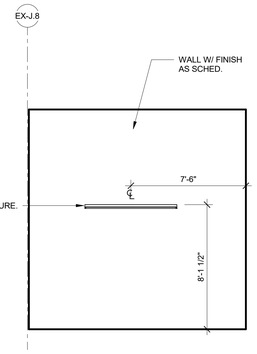
9 SCH 2 INT ELEV CONFERENCE A2133 WEST
1/4" = 1'-0"



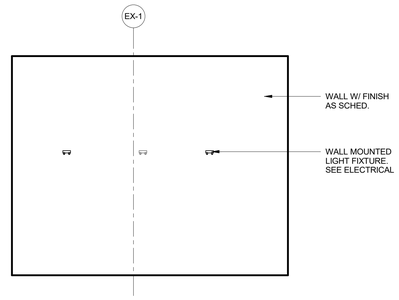
1 SCH 2 INT ELEV MECHANICAL A2134 NORTH
1/4" = 1'-0"



2 SCH 2 INT ELEV MECHANICAL A2134 EAST
1/4" = 1'-0"



3 SCH 2 INT ELEV MECHANICAL A2134 SOUTH
1/4" = 1'-0"



4 SCH 2 INT ELEV MECHANICAL A2134 WEST
1/4" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS, REGISTERED ARCHITECTURAL CORPORATION, CERT. NO. 51140, NORTH CAROLINA, CHARLOTTE, N.C.

CRAIG WALKER PAGE, REGISTERED ARCHITECT, 9272, NORTH CAROLINA, CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

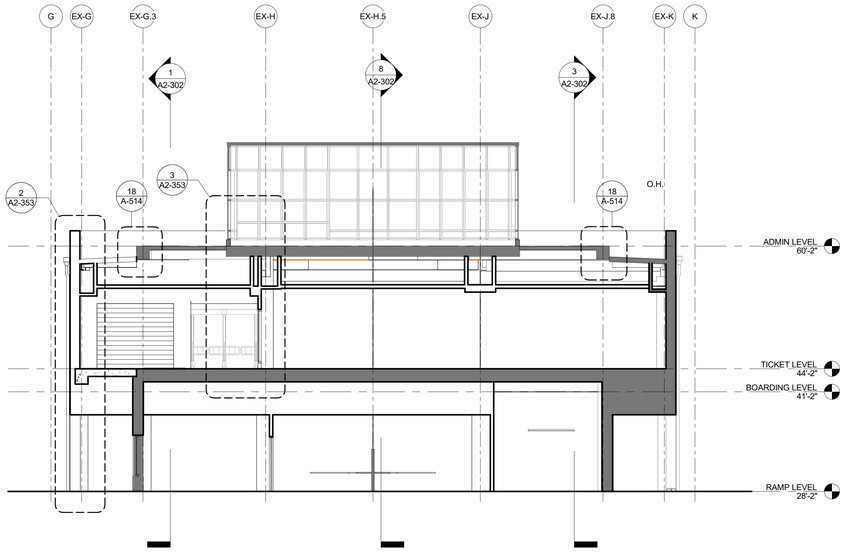
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

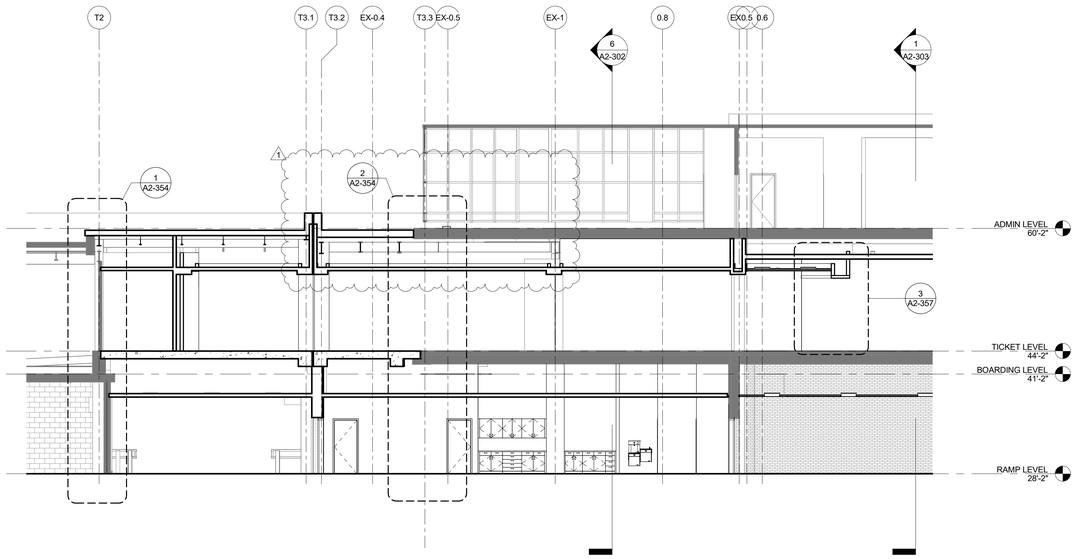
SCHEDULE 2 - INTERIOR ELEVATIONS

SHEET NUMBER

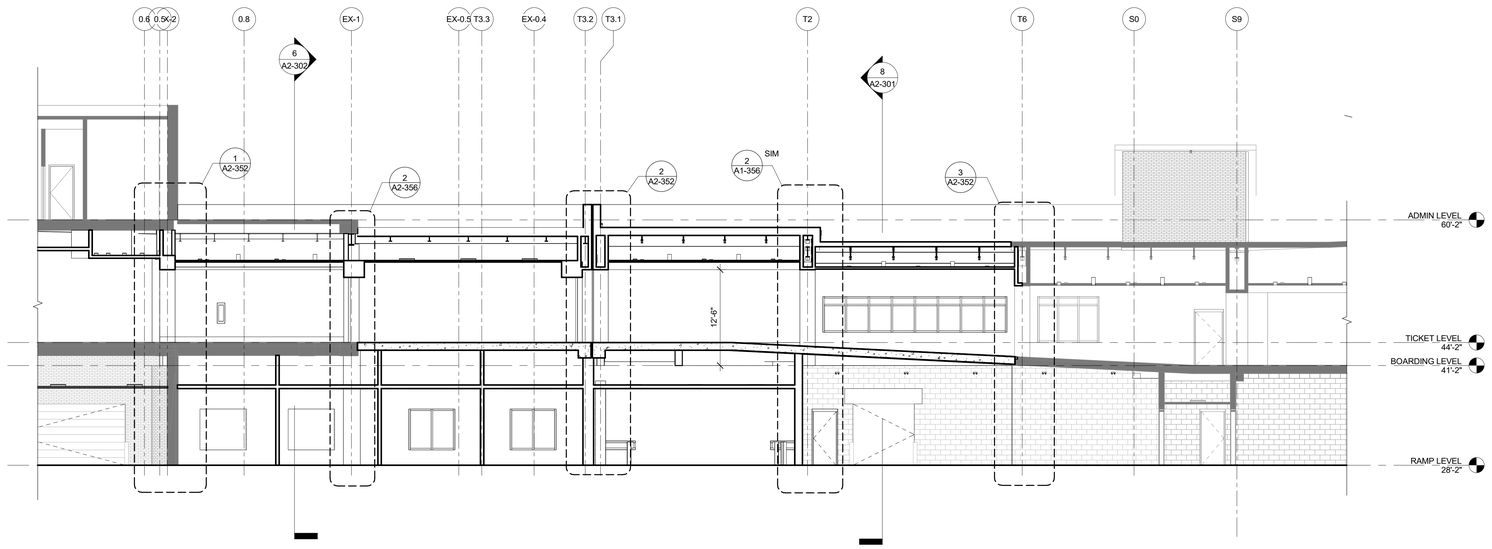
A2-255



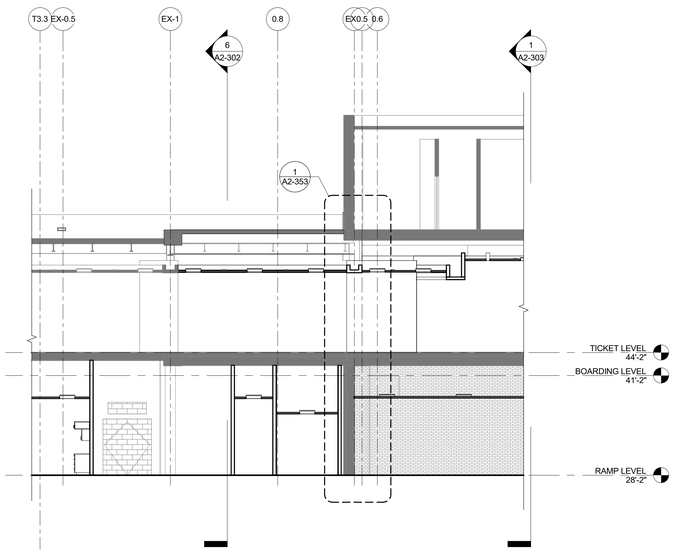
6 BUILDING SECTION
1/8" = 1'-0"



8 BUILDING SECTION
1/8" = 1'-0"



1 BUILDING SECTION
1/8" = 1'-0"



3 BUILDING SECTION
1/8" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CERT. NO. 51140
CHARLOTTE, N.C.

CRAIG WALKER PAGE
REGISTERED ARCHITECT
9272
NORTH CAROLINA
CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

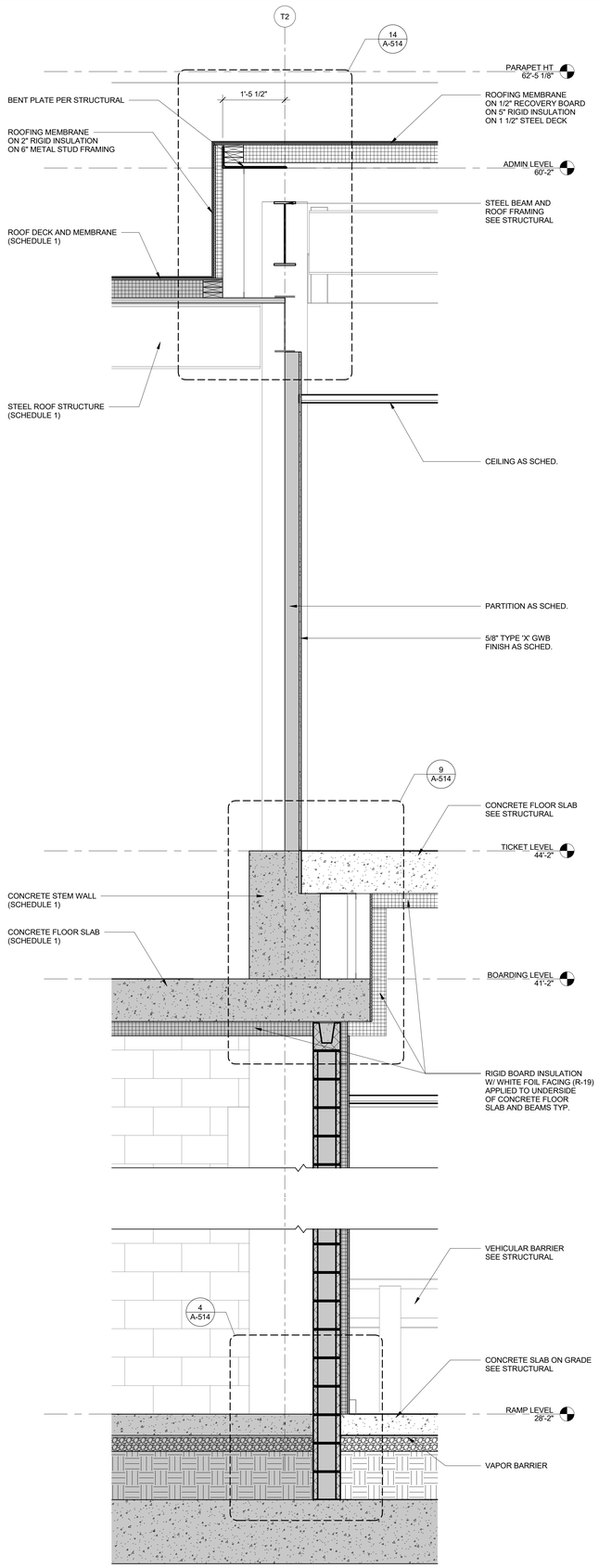
REVISIONS

1	7/12/19	AD-01

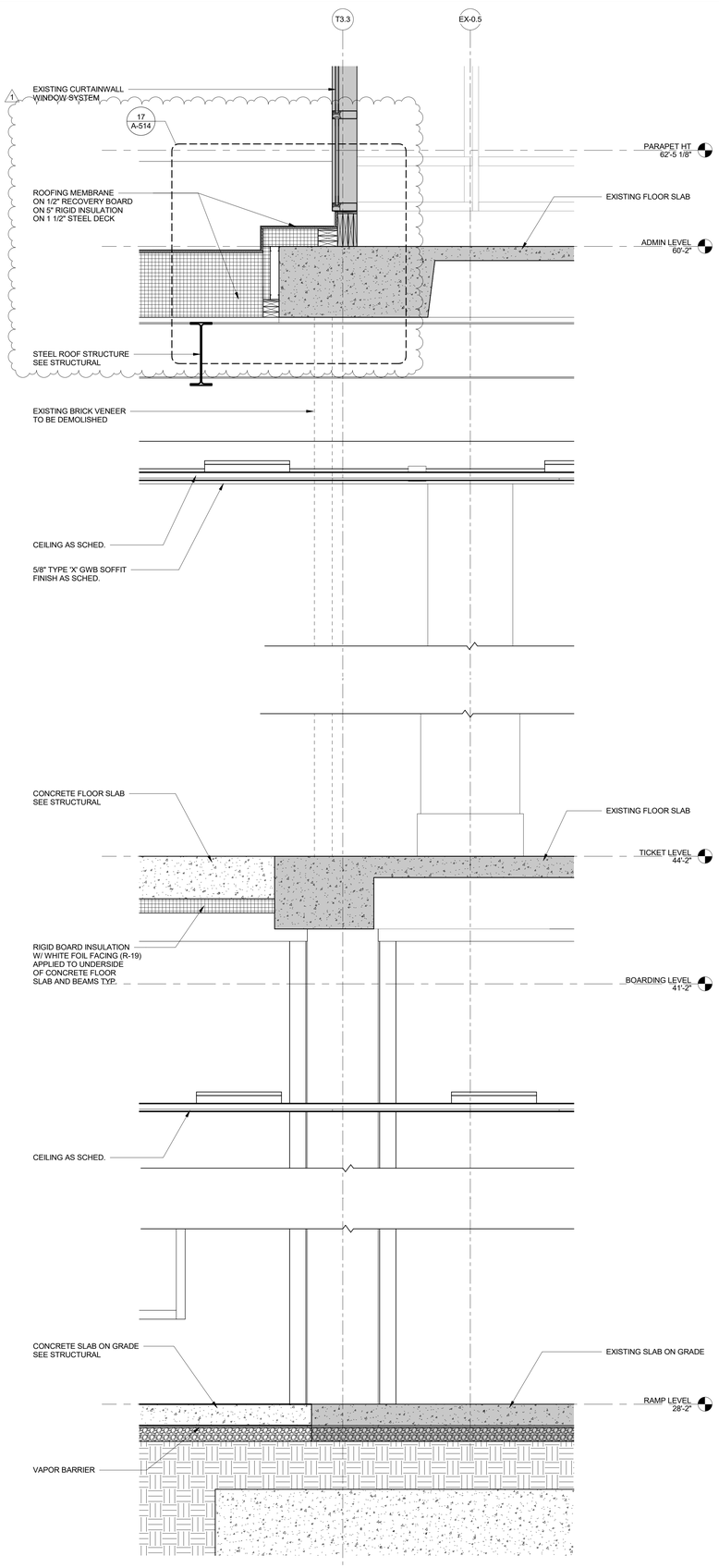
DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - BUILDING SECTIONS

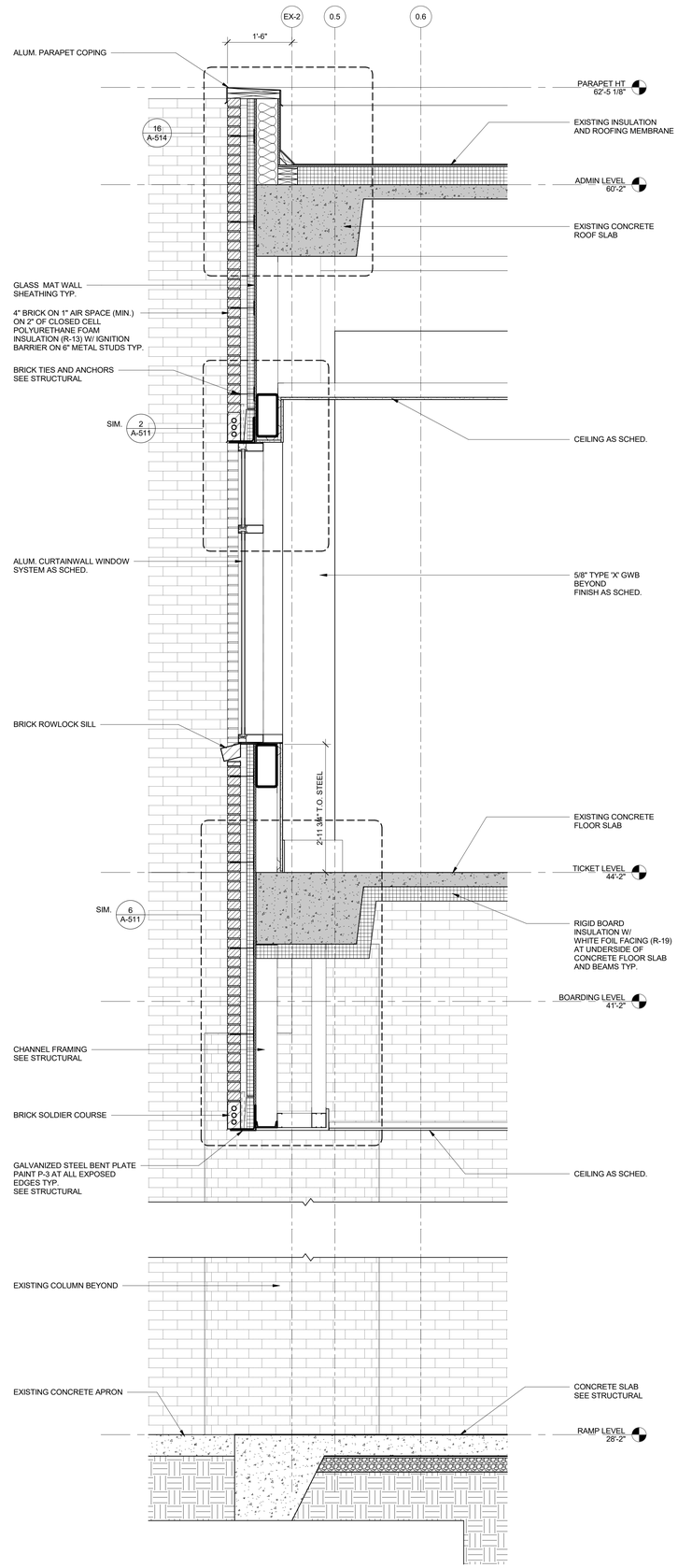
SHEET NUMBER
A2-302



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



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



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

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS
REGISTERED ARCHITECTURAL CORPORATION
CERT. NO. 51140
NORTH CAROLINA
CHARLOTTE, N. C.

EVANS WALKER PAUL
REGISTERED ARCHITECT
9272
CHARLOTTE, N. C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

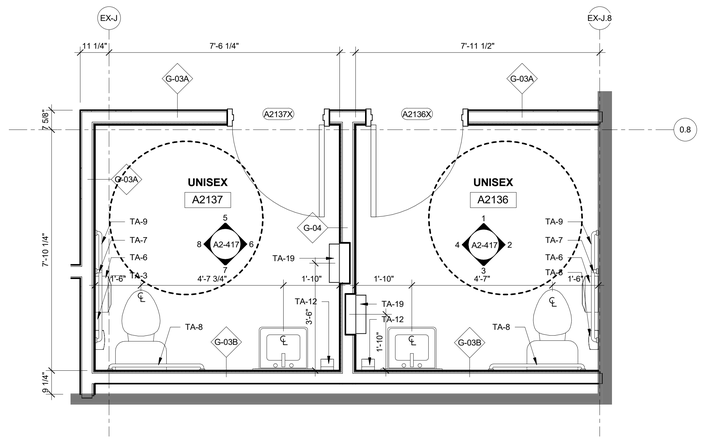
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 -
WALL SECTIONS

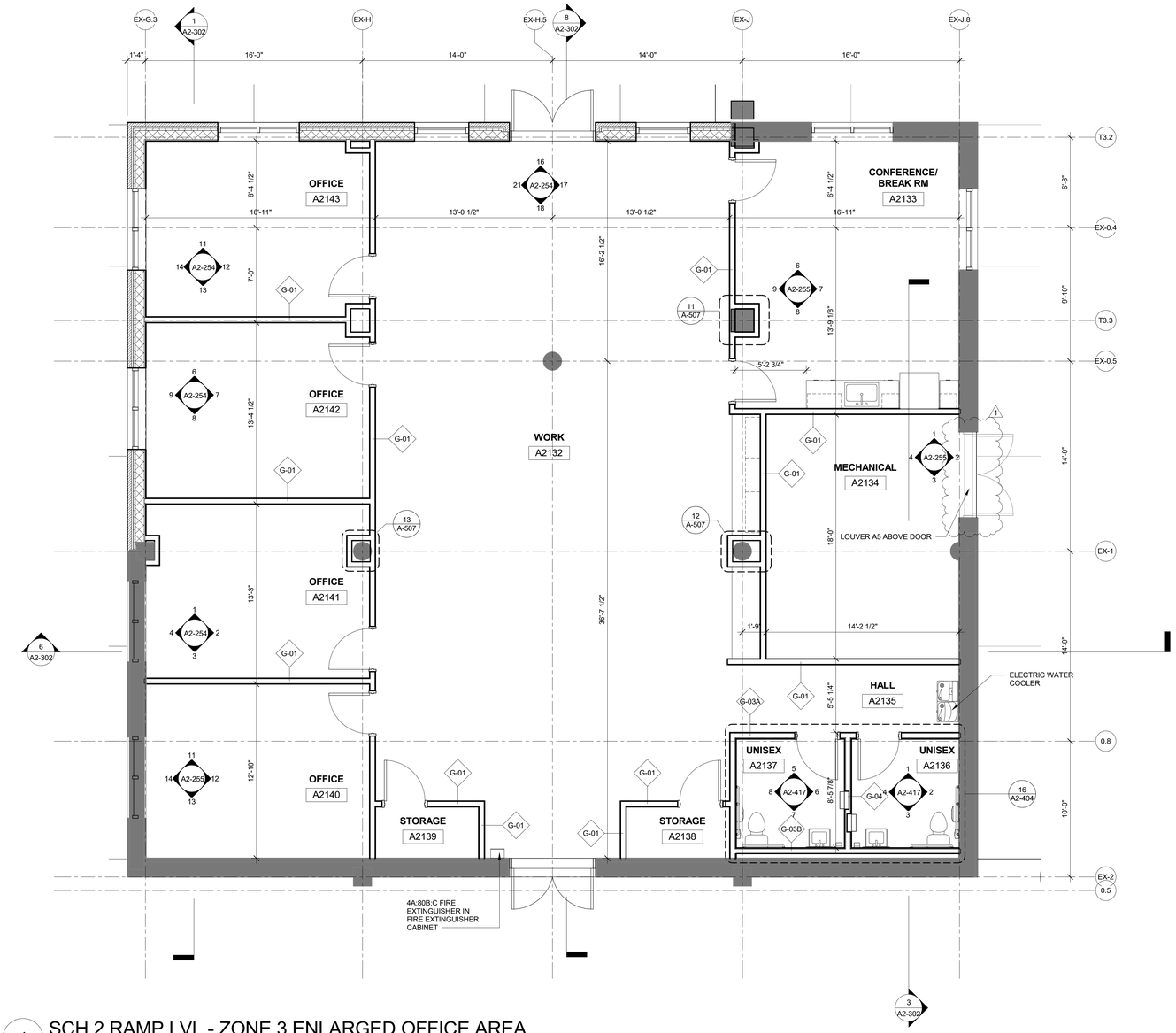
SHEET NUMBER

A2-354



16 ENLARGED RESTROOM FLOOR PLAN

1/2" = 1'-0"



1 SCH 2 RAMP LVL - ZONE 3 ENLARGED OFFICE AREA

1/4" = 1'-0"

GENERAL TOILET ACCESSORY AND BATHROOM FINISH NOTES

REFER TO SPECIFICATION SECTION 10 28 00 - TOILET ACCESSORIES FOR TOILET ACCESSORY LEGEND AND INFORMATION.

TOILET ACCESSORIES LEGEND

SYMBOL	DESCRIPTION
TA-1A	24" X 48" LIGHTED LED MIRROR- SEE ELECTRICAL DRAWINGS
TA-1B	24" X 36" FRAMED MIRROR
TA-2	AUTOMATIC TOP-FILL COUNTER MOUNTED SOAP DISPENSER
TA-3	SURFACE MOUNTED SANITARY NAPKIN DISPENSER- BOBRICK B-270
TA-4	SURFACE MOUNTED SANITARY NAPKIN DISPENSER- BOBRICK B-4354
TA-5	COUNTER WASTE RECEPTACLE GROMMET
TA-6	MULTI-ROLL TOILET TISSUE DISPENSER
TA-7	18" GRAB BAR (VERTICAL)
TA-8	36" GRAB BAR (HORIZONTAL, REAR)
TA-9	42" GRAB BAR (HORIZONTAL, SIDE)
TA-10	SS COAT HOOK (CENTERED ON TOILET SIDE OF DOOR @ 60" A.F.F.)
TA-11	PAPER TOWEL DISPENSER
TA-12	BATTERY OPERATED WALL MOUNTED HAND SOAP DISPENSER
TA-14	BABY CHANGING STATION
TA-15	WASTE RECEPTACLE
TA-16	MOP AND BROOM HOLDER
TA-17	UNDERCOUNTER PULL OUT TRASH RECEPTACLE
TA-18	ADULT CHANGING STATION
TA-19	COMBINATION PAPER TOWEL AND WASTE RECEPTACLE

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 51140 NORTH CAROLINA CHARLOTTE, N.C.

CRAIG WALKER PAGE REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1 7/12/19 AD-01

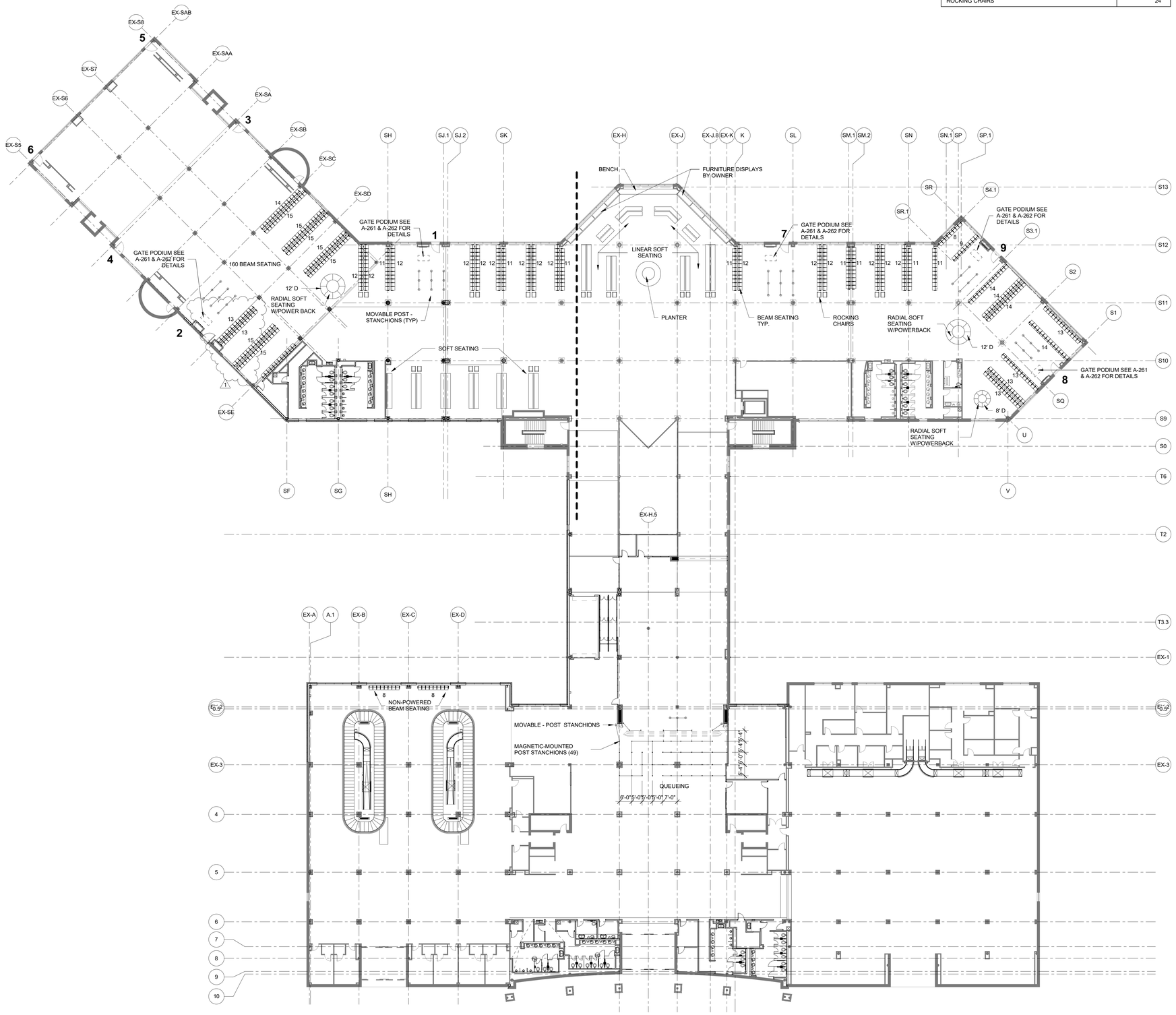
DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - ENLARGED FLOOR PLANS

SHEET NUMBER

A2-404

SEAT TYPE	QNTY.
BEAM SEATING - POWERED (TYP)	570
BEAM SEATING - NOT POWERED - SEE PLAN FOR LOCATIONS	16
LINEAR SOFT SEATING	277 +/-
RADIAL SOFT SEATING	40 +/-
ROCKING CHAIRS	24



1 SCHEDULE 2 - TICKET LEVEL OVERALL FURNITURE FLOOR PLAN
1" = 20'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA CERT. NO. 51140 CHARLOTTE, N.C.

TRAVIS WALKER PAGE NORTH CAROLINA REGISTERED ARCHITECT 9272 CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

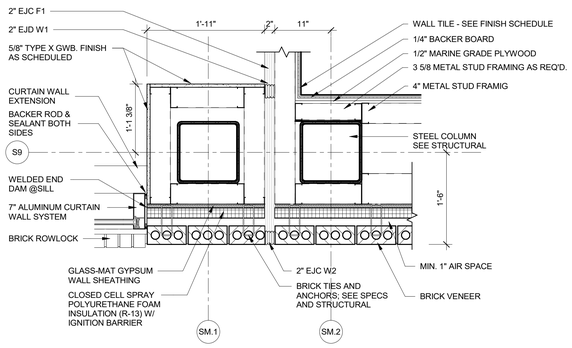
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

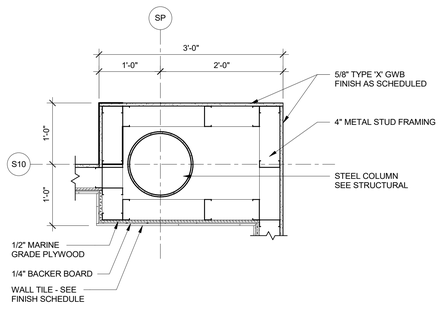
SCHEDULE 2 - BOARDING LEVEL FURNITURE PLAN

SHEET NUMBER

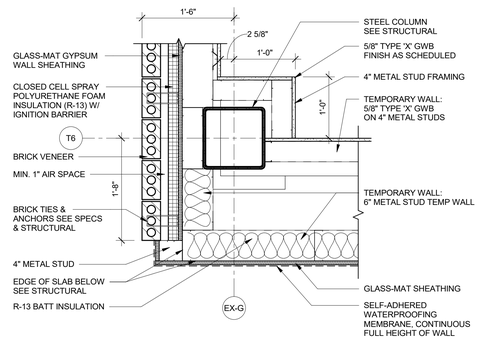
A2-731



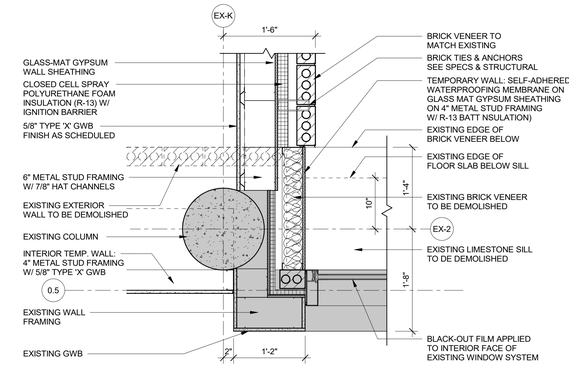
16 PLAN DETAIL AT BOARDING LEVEL
1" = 1'-0"



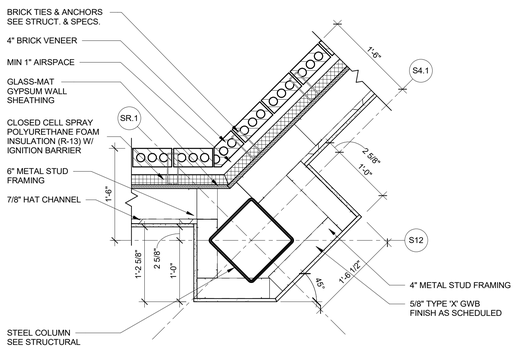
17 PLAN DETAIL AT BOARDING LEVEL
1" = 1'-0"



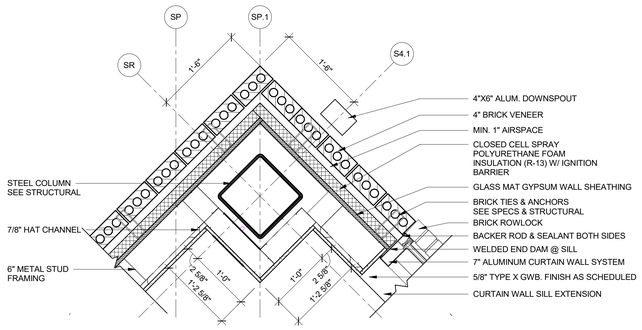
18 PLAN DETAIL AT BOARDING LEVEL
1" = 1'-0"



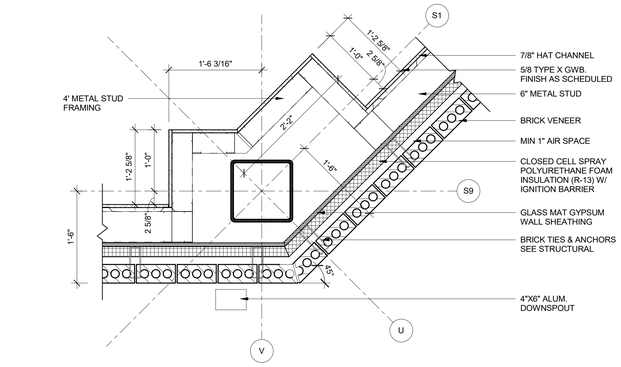
19 PLAN DETAIL AT BOARDING LEVEL
1" = 1'-0"



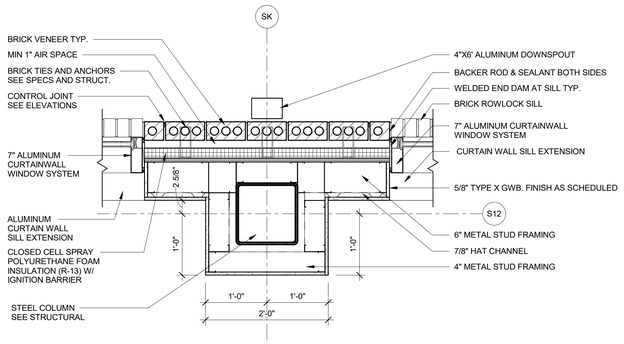
11 PLAN DETAIL AT BOARDING LEVEL
1" = 1'-0"



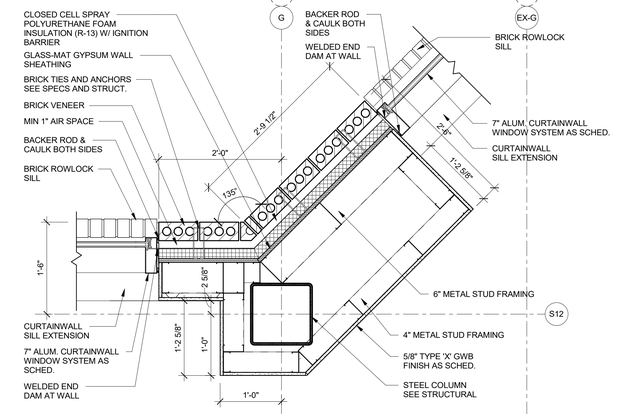
12 PLAN DETAIL AT BOARDING LEVEL
1" = 1'-0"



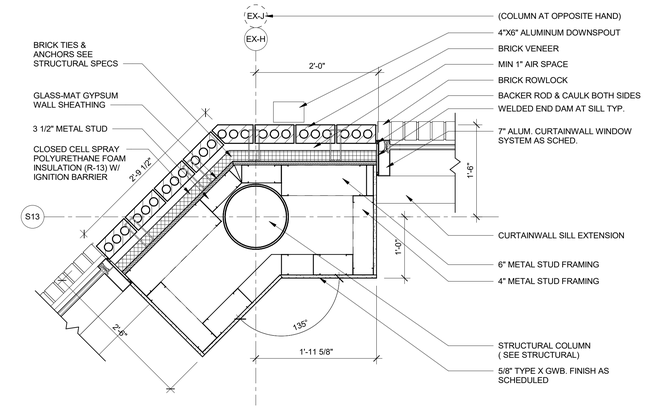
13 PLAN DETAIL AT BOARDING LEVEL
1" = 1'-0"



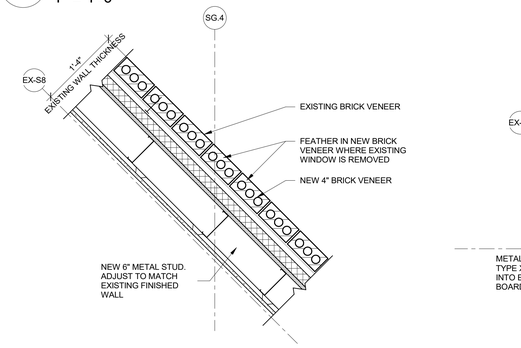
6 PLAN DETAIL AT BOARDING LEVEL
1" = 1'-0"



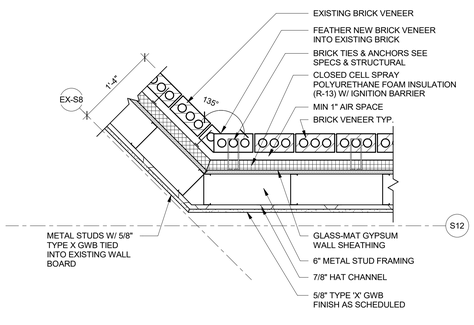
7 PLAN DETAIL AT BOARDING LEVEL
1" = 1'-0"



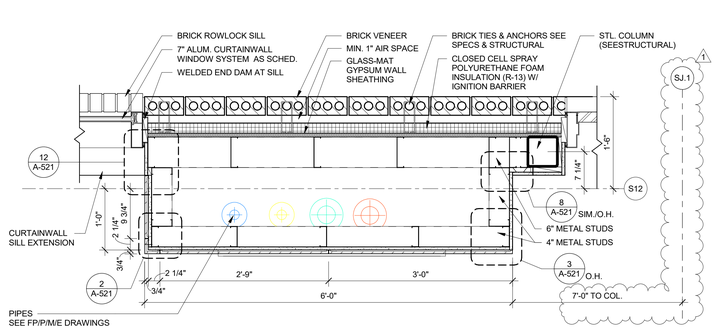
8 PLAN DETAIL AT BOARDING LEVEL
1" = 1'-0"



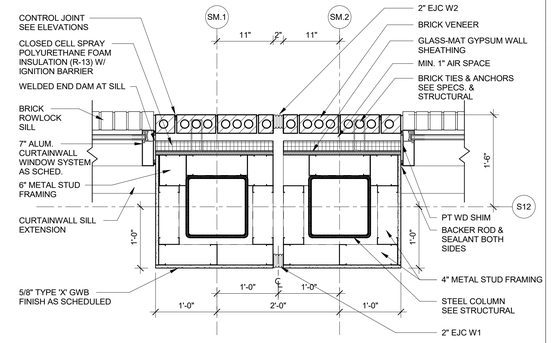
1 PLAN DETAIL AT BOARDING LEVEL
1" = 1'-0"



2 PLAN DETAIL AT BOARDING LEVEL
1" = 1'-0"



3 PLAN DETAIL AT BOARDING LEVEL
1" = 1'-0"



4 PLAN DETAIL AT BOARDING LEVEL
1" = 1'-0"

ILM
TERMINAL IMPROVEMENTS CONTRACT 3
Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 51140 NORTH CAROLINA CHARLOTTE, N.C.

STEPHEN WALKER PAGE REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

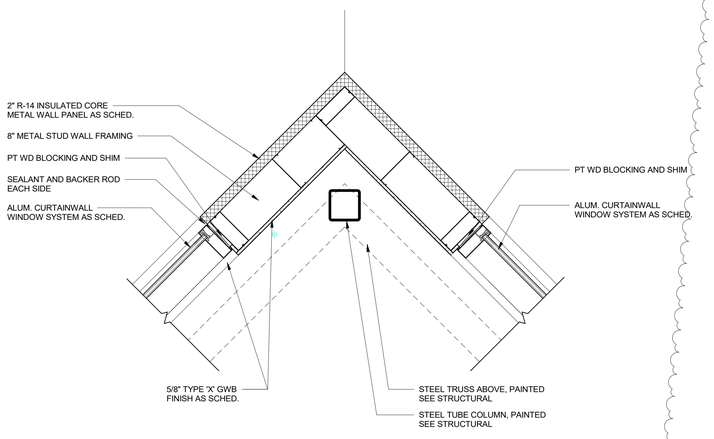
1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

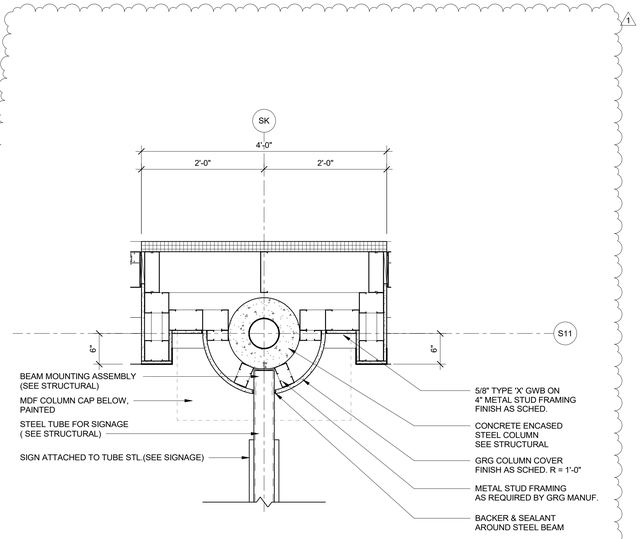
PLAN DETAILS

SHEET NUMBER

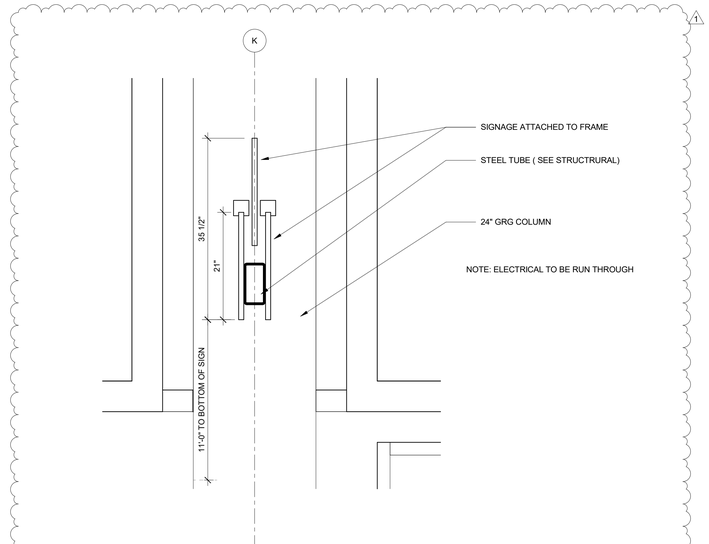
A-503



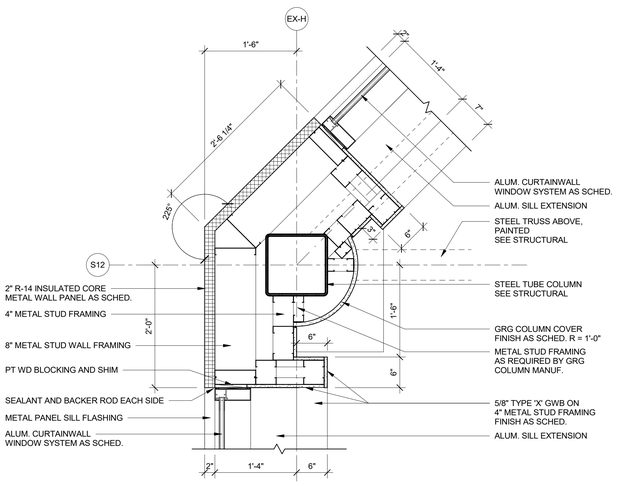
11 PLAN DETAIL AT CUPOLA
1" = 1'-0"



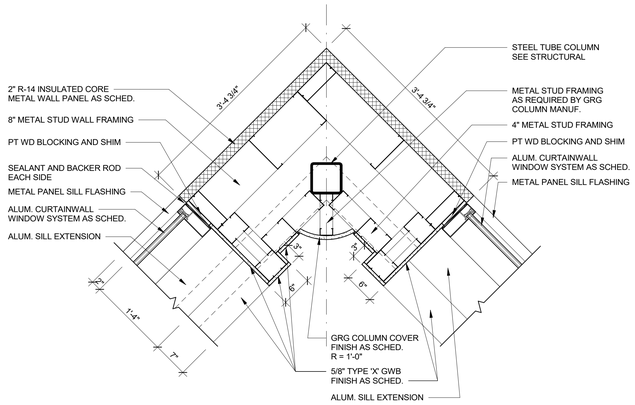
12 PLAN DETAIL AT CLERESTORY
1" = 1'-0"



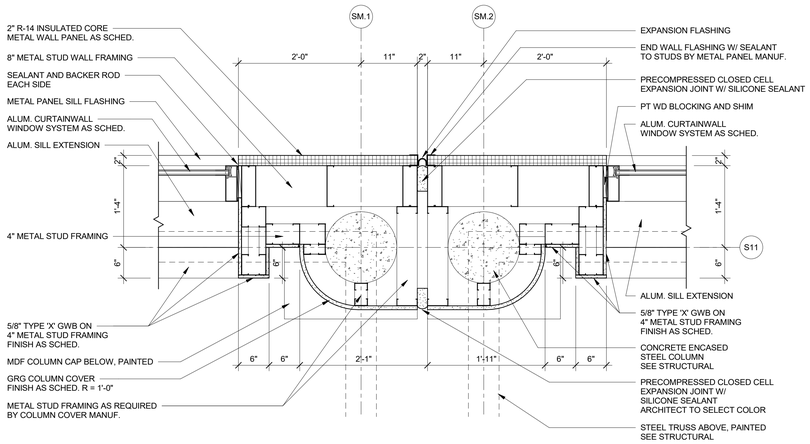
14 SIGNAGE SECTION @ GRIDS K & G - BOARDING LEVEL
1" = 1'-0"



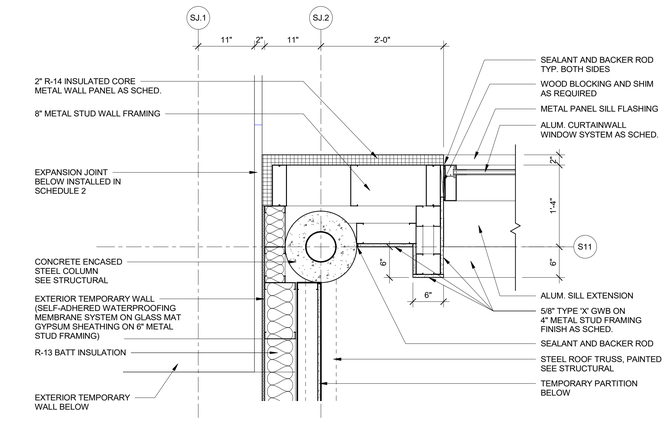
6 PLAN DETAIL AT CLERESTORY
1" = 1'-0"



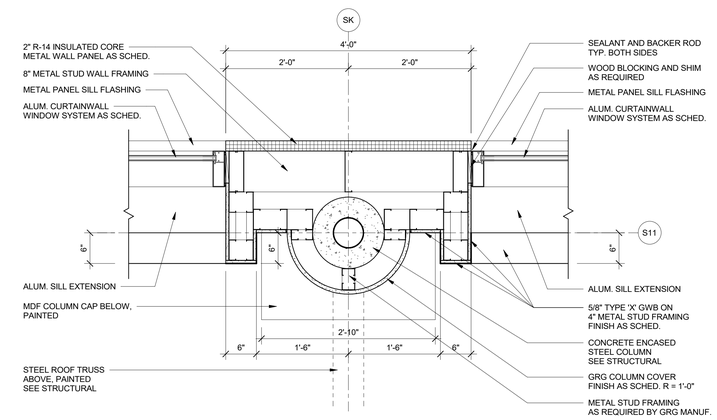
7 PLAN DETAIL AT CLERESTORY
1" = 1'-0"



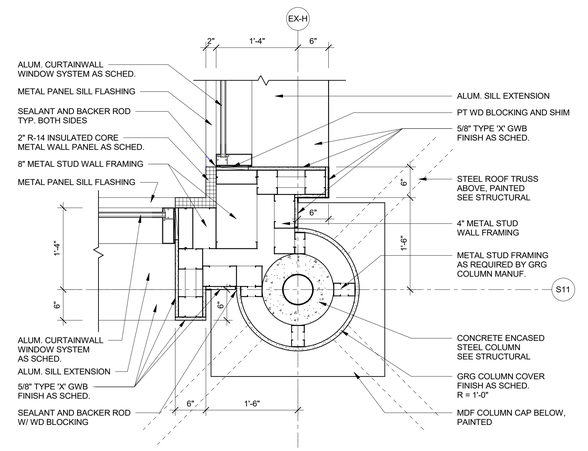
8 PLAN DETAIL AT CLERESTORY
1" = 1'-0"



1 PLAN DETAIL AT CLERESTORY
1" = 1'-0"



2 PLAN DETAIL AT CLERESTORY
1" = 1'-0"



3 PLAN DETAIL AT CLERESTORY
1" = 1'-0"

ILM
TERMINAL IMPROVEMENTS CONTRACT 3
Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS
REGISTERED ARCHITECTURAL CORPORATION
CERT. NO. 51140
NORTH CAROLINA
CHARLOTTE, N.C.

THOMAS WALKER PAGE
REGISTERED
9272
LICENSED ARCHITECT
CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT
CONSULTING ARCHITECT
LS3P
STRUCTURAL ENGINEER
STEWART
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.
BAGGAGE HANDLING CONSULTANTS
BNP
AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS
SPECIALTY LIGHTING CONSULTANT
HARTRANFT
SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

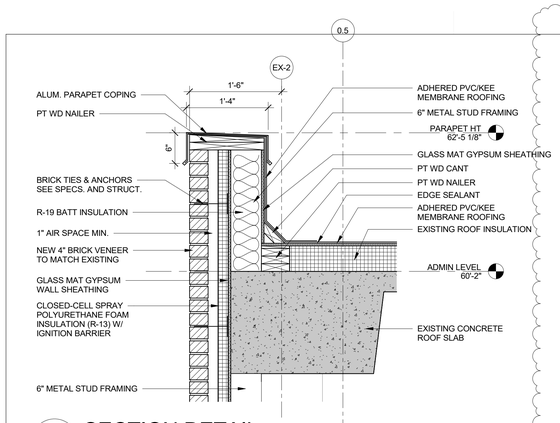
REVISIONS

1	7/12/19	AD-01

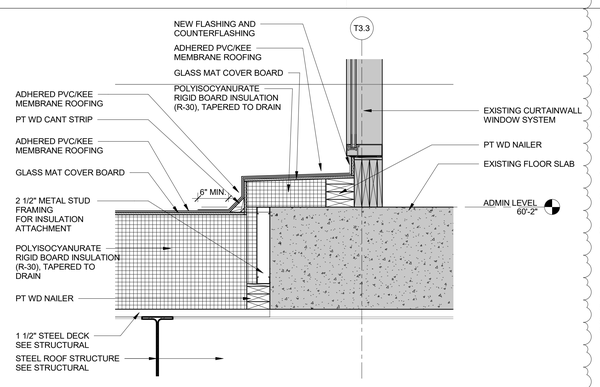
DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

PLAN DETAILS

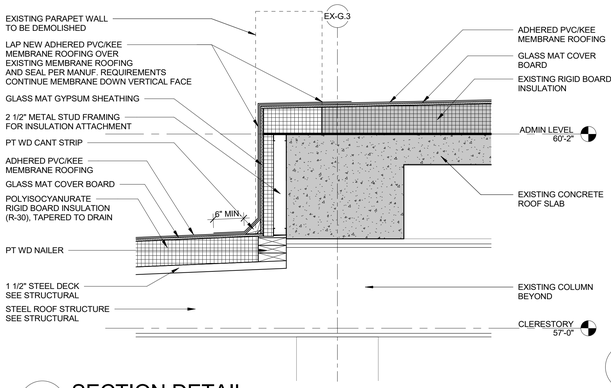
SHEET NUMBER
A-505



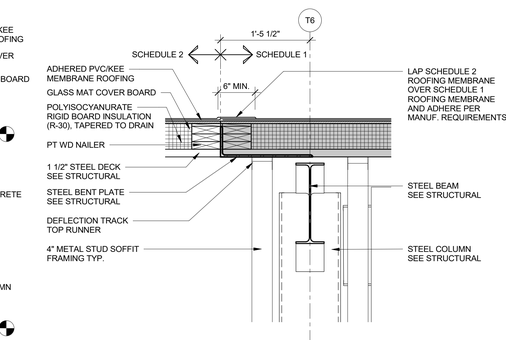
16 SECTION DETAIL
1" = 1'-0"



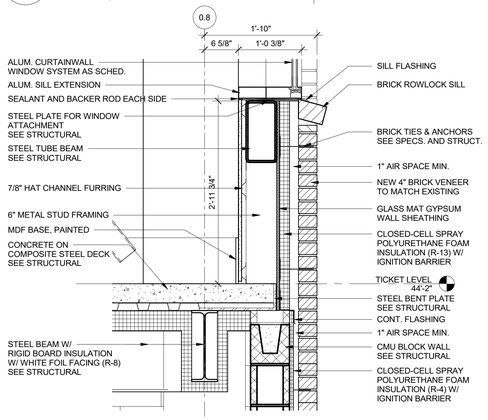
17 SECTION DETAIL
1" = 1'-0"



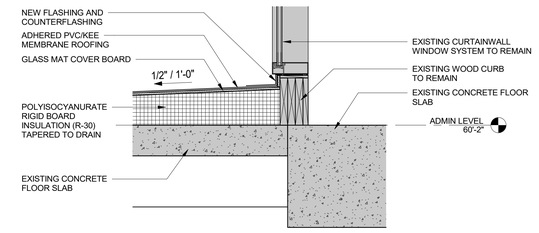
18 SECTION DETAIL
1" = 1'-0"



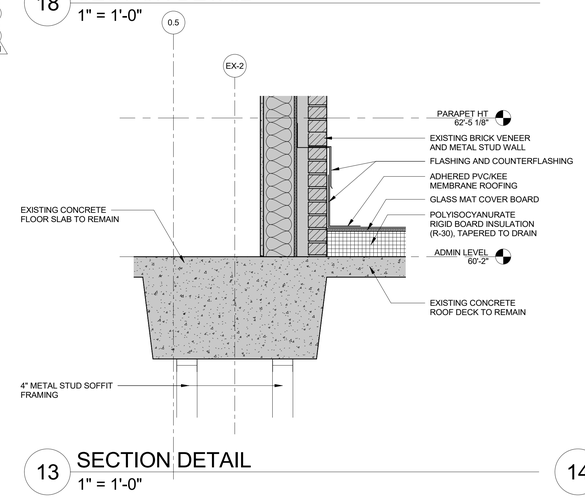
19 SECTION DETAIL
1" = 1'-0"



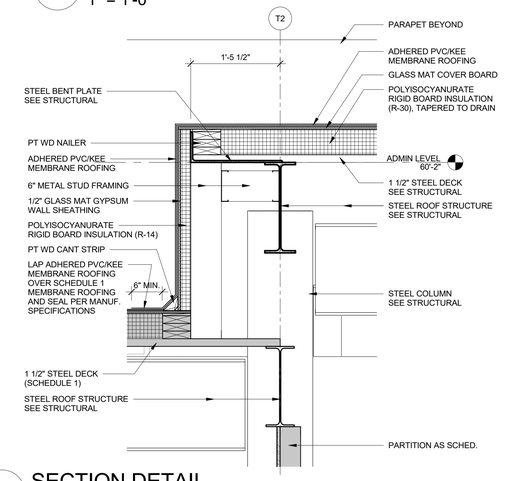
11 SECTION DETAIL
1" = 1'-0"



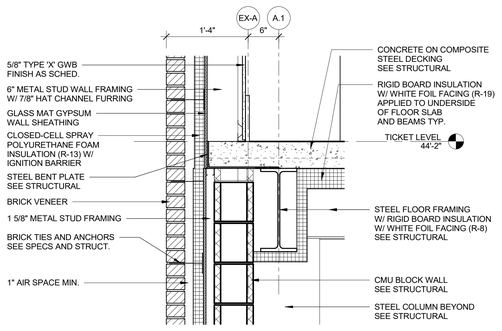
12 SECTION DETAIL
1" = 1'-0"



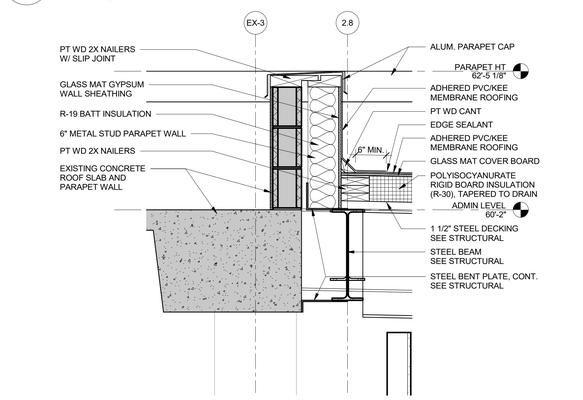
13 SECTION DETAIL
1" = 1'-0"



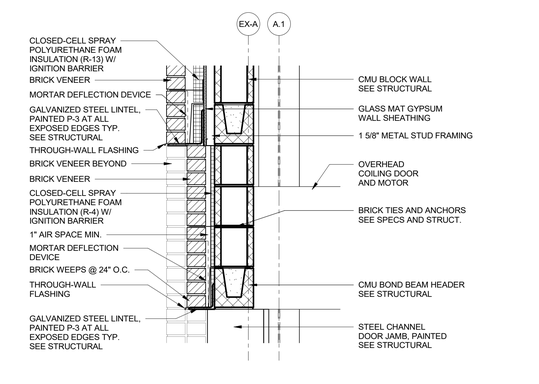
14 SECTION DETAIL
1" = 1'-0"



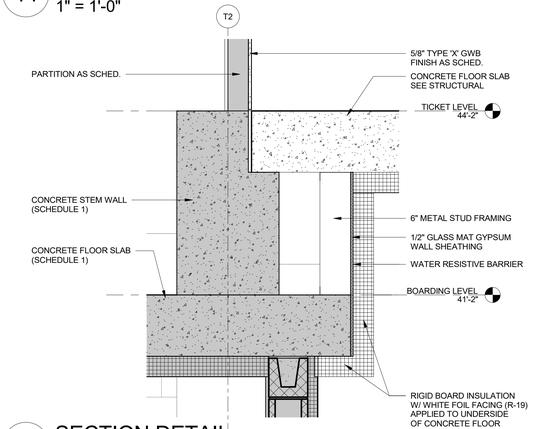
6 SECTION DETAIL
1" = 1'-0"



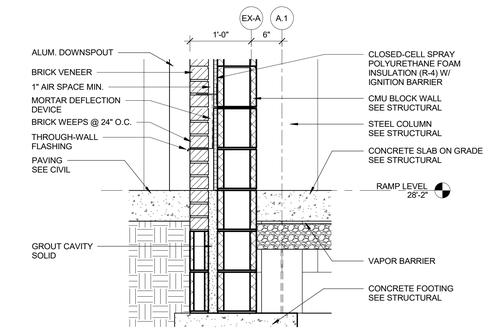
5 SECTION DETAIL
1" = 1'-0"



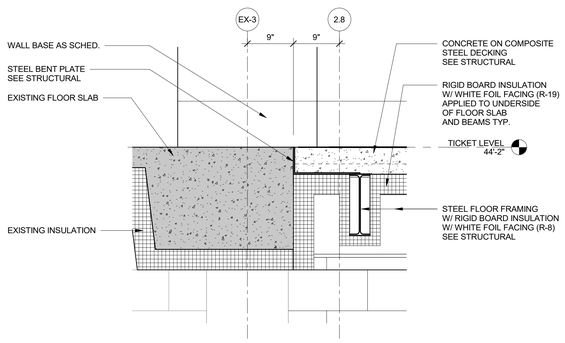
7 SECTION DETAIL
1" = 1'-0"



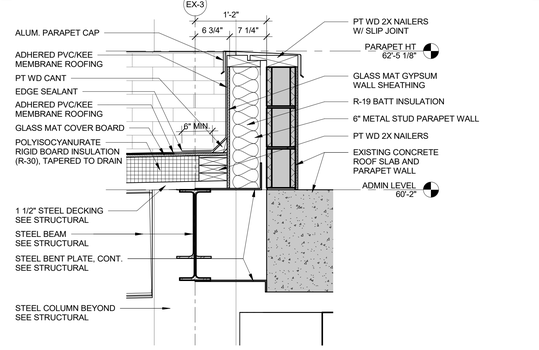
9 SECTION DETAIL
1" = 1'-0"



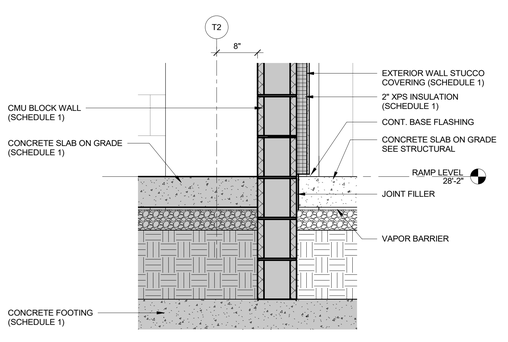
1 SECTION DETAIL
1" = 1'-0"



2 SECTION DETAIL
1" = 1'-0"



3 SECTION DETAIL
1" = 1'-0"



4 SECTION DETAIL
1" = 1'-0"

ILM
TERMINAL IMPROVEMENTS CONTRACT 3
Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 51140 NORTH CAROLINA CHARLOTTE, N.C.

CRAIG WALKER POWELL REGISTERED LANDSCAPE ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

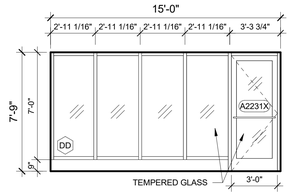
REVISIONS

1	7/12/19	AD-01

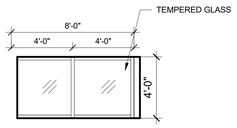
DATE	6/28/2019
PROJECT NUMBER	9202-000
SHEET TITLE	

SECTION DETAILS

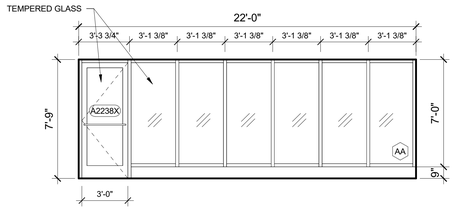
SHEET NUMBER
A-514



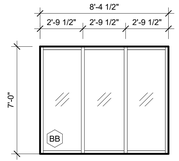
TYPE DD



TYPE EE



TYPE AA

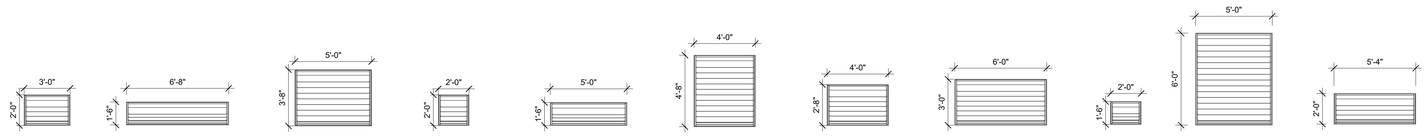


TYPE BB

WINDOW SCHEDULE - INTERIOR STOREFRONT

1/4" = 1'-0"

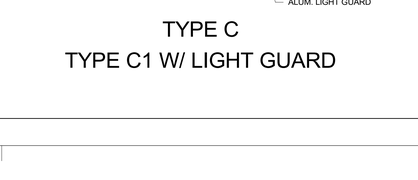
LOUVER SCHEDULE				
Type Mark	Height	Width	Description	Comments
RAMP LEVEL				
L1	2'-0"	3'-0"	ARCHITECTURAL METAL LOUVER WITH 2" FRAME PROFILE ON ALL SIDES	
L2	1'-6"	6'-8"	ARCHITECTURAL METAL LOUVER WITH 2" FRAME PROFILE ON ALL SIDES	
L3	3'-8"	5'-0"	ARCHITECTURAL METAL LOUVER WITH 2" FRAME PROFILE ON ALL SIDES	
L5	1'-6"	5'-0"	ARCHITECTURAL METAL LOUVER WITH 2" FRAME PROFILE ON ALL SIDES	
L6	4'-8"	4'-0"	ARCHITECTURAL METAL LOUVER WITH 2" FRAME PROFILE ON ALL SIDES	
L7	2'-8"	4'-0"	ARCHITECTURAL METAL LOUVER WITH 2" FRAME PROFILE ON ALL SIDES	
L8	3'-0"	6'-0"	ARCHITECTURAL METAL LOUVER WITH 2" FRAME PROFILE ON ALL SIDES	
L10	6'-0"	5'-0"	ARCHITECTURAL METAL LOUVER WITH 2" FRAME PROFILE ON ALL SIDES	
L11	2'-0"	5'-0"	ARCHITECTURAL METAL LOUVER WITH 2" FRAME PROFILE ON ALL SIDES	
BOARDING LEVEL				
L4	2'-0"	2'-0"	ARCHITECTURAL METAL LOUVER WITH 2" FRAME PROFILE ON ALL SIDES	
TICKET LEVEL				
L9	1'-6"	2'-0"	ARCHITECTURAL METAL LOUVER WITH 2" FRAME PROFILE ON ALL SIDES	



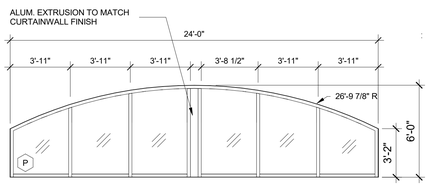
LOUVER LEGEND

TYPE V

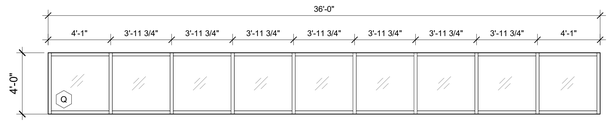
TYPE W



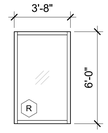
TYPE X



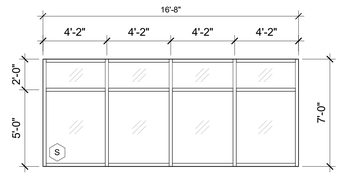
TYPE P



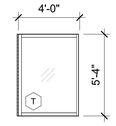
TYPE Q



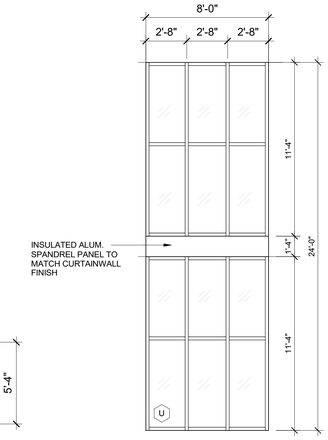
TYPE R



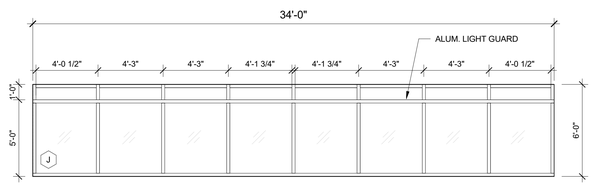
TYPE S



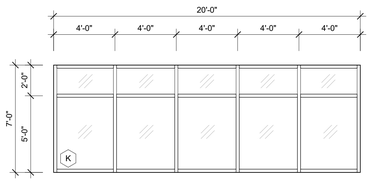
TYPE T



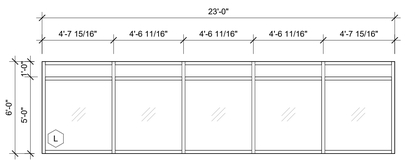
TYPE U



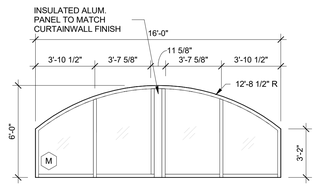
TYPE J W/ LIGHT GUARD



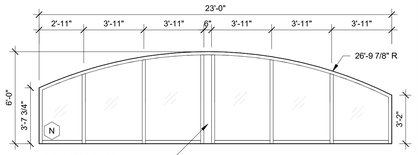
TYPE K



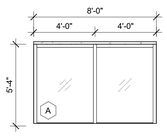
TYPE L



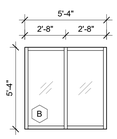
TYPE M



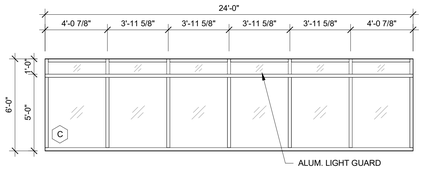
TYPE N



TYPE A

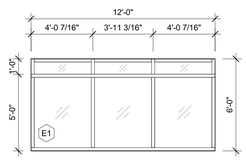


TYPE B

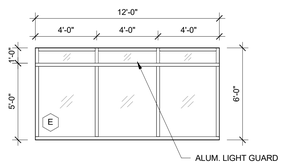


TYPE C

TYPE C1 W/ LIGHT GUARD

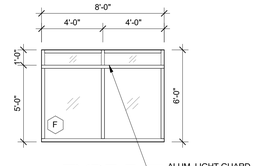


TYPE D



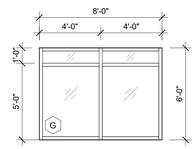
TYPE E

TYPE E1 W/ LIGHT GUARD

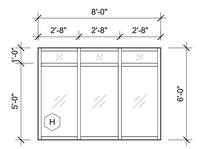


TYPE F

TYPE F1 W/ LIGHT GUARD



TYPE G



TYPE H

WINDOW SCHEDULE - CURTAINWALL

1/4" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA CERT. NO. 51140 CHARLOTTE, N.C.

CRAIG WALKER PAGE REGISTERED ARCHITECT 9272 NORTH CAROLINA CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

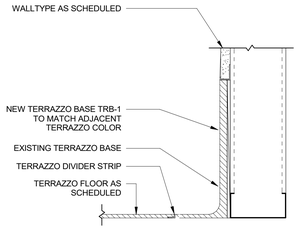
1	7/12/19	AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

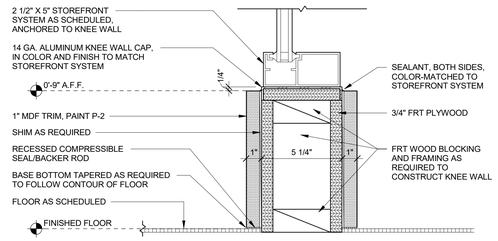
WINDOW SCHEDULES

SHEET NUMBER

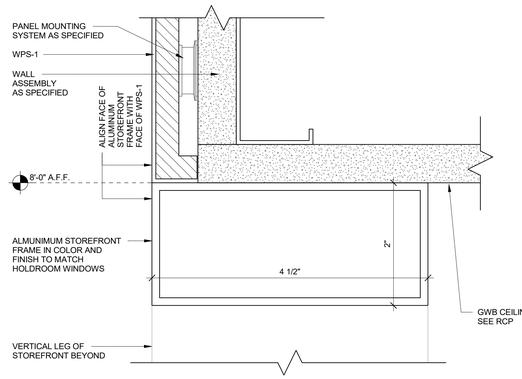
A-611



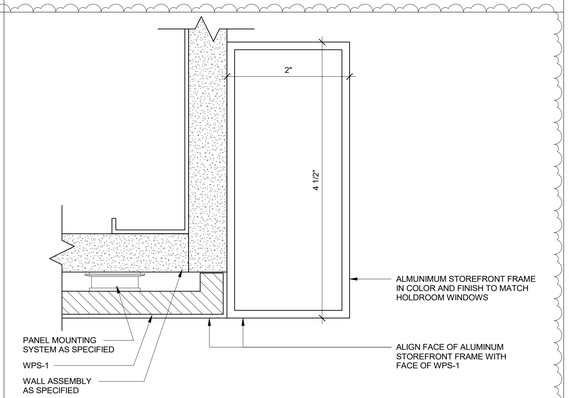
J DETAIL "J" - SECTION @ TRB-1 AND GWB
3" = 1'-0"



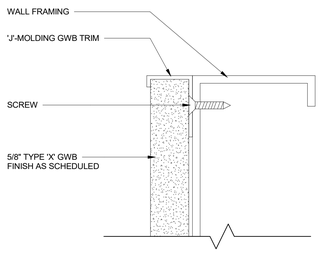
K DETAIL "K" - SECTION @ STOREFRONT BASE
3" = 1'-0"



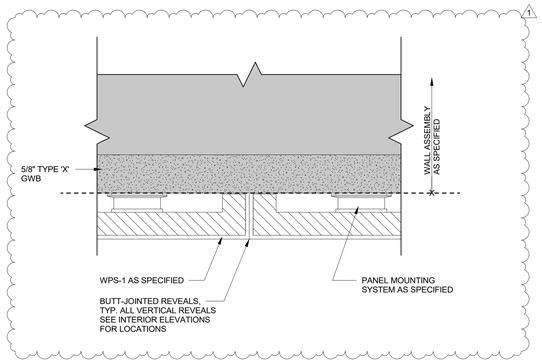
L DETAIL "L" - GATE WALL PORTAL (HORIZONTAL)
12" = 1'-0"



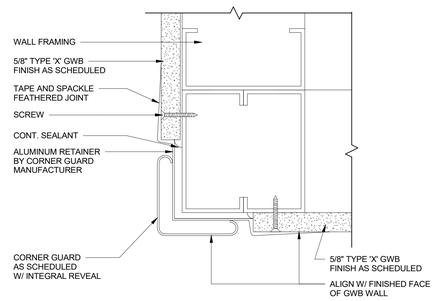
M DETAIL "M" - GATE WALL PORTAL (VERTICAL)
12" = 1'-0"



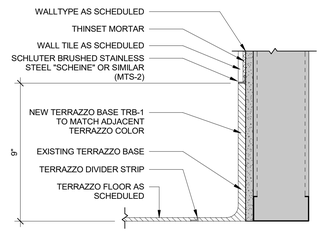
E DETAIL "E" - GWB TERMINATION
12" = 1'-0"



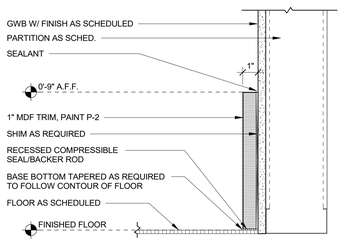
F DETAIL "F" - VERTICAL REVEAL AT WPS-1
12" = 1'-0"



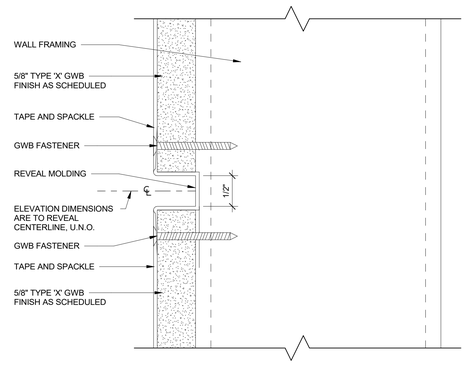
G DETAIL "G" - CORNER GUARD
6" = 1'-0"



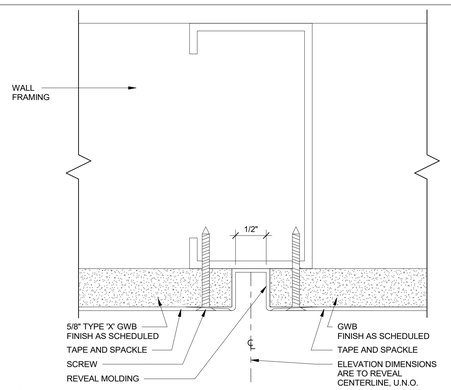
H DETAIL "H" - SECTION @ TRB-1 AND TILE
3" = 1'-0"



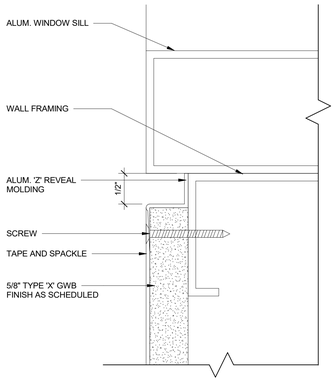
A DETAIL "A" - SECTION @ WB-1
3" = 1'-0"



B DETAIL "B" - GWB REVEAL (HORIZONTAL)
12" = 1'-0"



C DETAIL "C" - GWB REVEAL (VERTICAL)
12" = 1'-0"



D DETAIL "D" - GWB REVEAL AT WINDOW
12" = 1'-0"

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

THE WILSON GROUP ARCHITECTS
REGISTERED ARCHITECTURAL CORPORATION
CERT. NO. 51140
NORTH CAROLINA
CHARLOTTE, N.C.

TRAVIS WALKER PAGE
REGISTERED ARCHITECT
9272
NORTH CAROLINA
CHARLOTTE, N.C.

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1 7/12/19 AD-01

DATE 6/28/2019
PROJECT NUMBER 9202-000
SHEET TITLE

WALL BASE, WALL, AND PANEL REVEAL DETAILS

SHEET NUMBER

A-654

HAZARD LEGEND

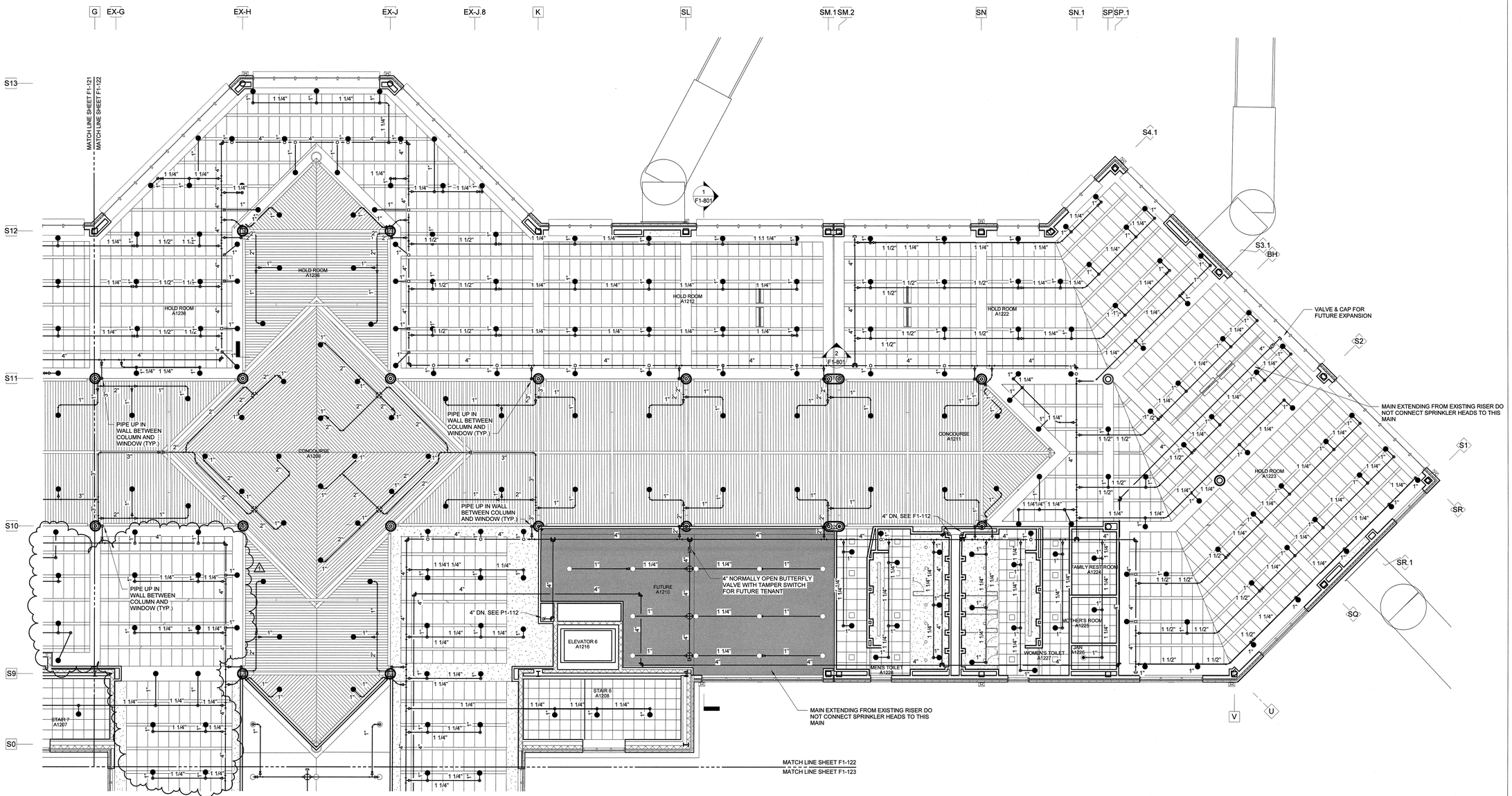
- LIGHT HAZARD
- ORDINARY HAZARD I

SPRINKLER PIPE LEGEND

- EXISTING SPRINKLER PIPING TO REMAIN
- EXISTING SPRINKLER PIPING TO BE REMOVED
- NEW WET SYSTEM SPRINKLER PIPING
- NEW DRY SYSTEM SPRINKLER PIPING

SPRINKLER LEGEND

- EXISTING RECESSED PENDANT SPRINKLER HEAD
- EXISTING CONCEALED PENDANT SPRINKLER HEAD
- EXISTING UPRIGHT SPRINKLER HEAD
- EXISTING SIDEWALL SPRINKLER HEAD
- RECESSED PENDANT SPRINKLER HEAD
- CONCEALED PENDANT SPRINKLER HEAD
- DRY RECESSED PENDANT SPRINKLER HEAD
- UPRIGHT SPRINKLER HEAD
- SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL SPRINKLER HEAD
- WET SPRINKLER RISER
- DRY SPRINKLER RISER
- CNTE CONNECT NEW TO EXISTING



1 F1-122 F1-122 SCHEDULE 1 - BOARDING LEVEL CEILING PLAN - ZONE 2 - FIRE PROTECTION

SCALE: 1/8" = 1'-0"

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:

- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
5412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

NORTH CAROLINA PROFESSIONAL SEAL 043164 ENGINEER CASEY D. GILMAN
7/12/19

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

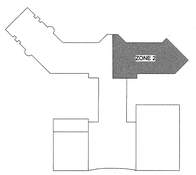
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1	7/12/19	AD-01

DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - BOARDING LEVEL PLAN ZONE 2 FIRE PROTECTION

SHEET NUMBER

F1-122

HAZARD LEGEND

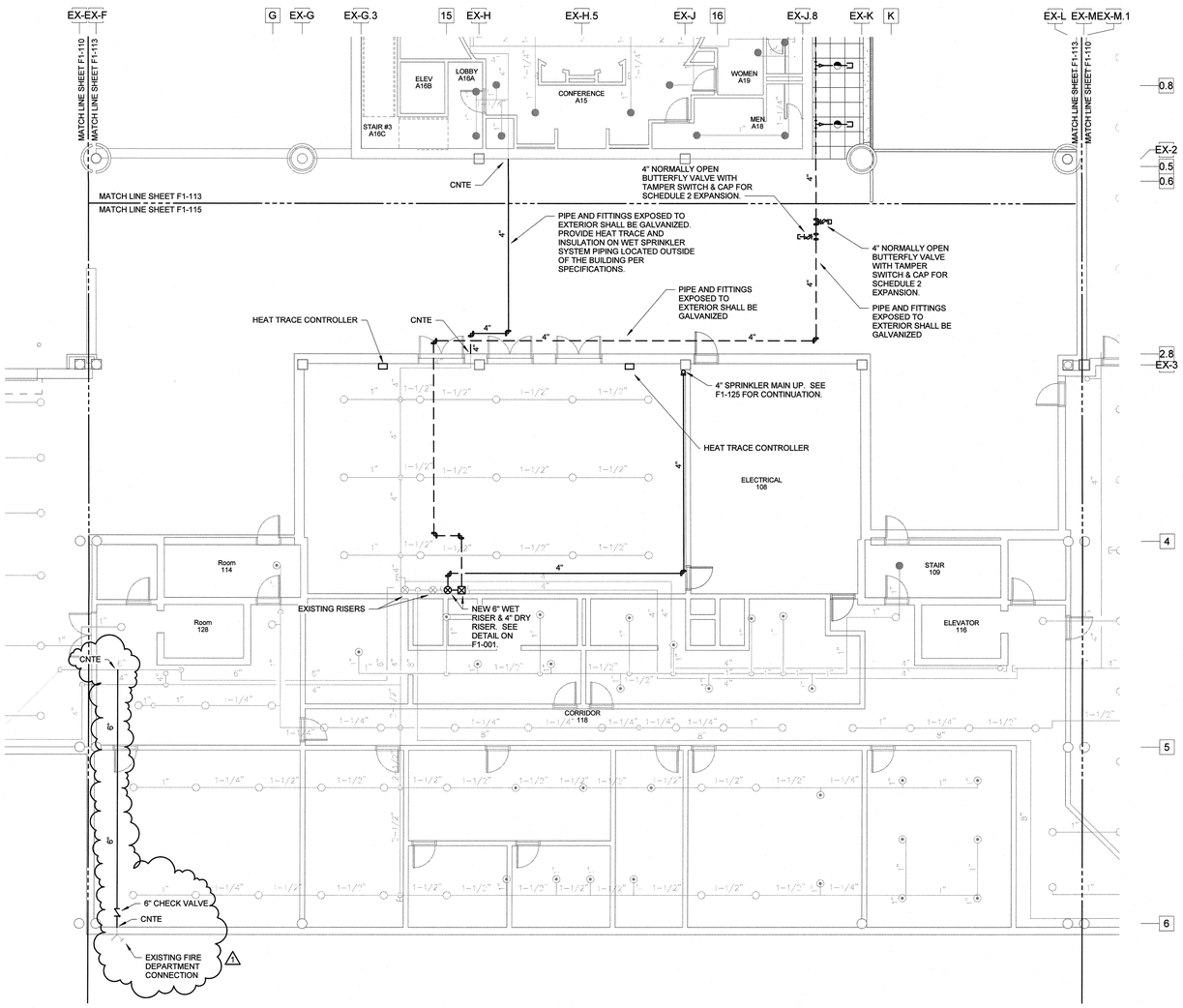
- LIGHT HAZARD
- ORDINARY HAZARD I

SPRINKLER PIPE LEGEND

- EXISTING SPRINKLER PIPING TO REMAIN
- EXISTING SPRINKLER PIPING TO BE REMOVED
- NEW WET SYSTEM SPRINKLER PIPING
- NEW DRY SYSTEM SPRINKLER PIPING

SPRINKLER LEGEND

- EXISTING RECESSED PENDANT SPRINKLER HEAD
- EXISTING CONCEALED PENDANT SPRINKLER HEAD
- EXISTING UPRIGHT SPRINKLER HEAD
- EXISTING SIDEWALL SPRINKLER HEAD
- RECESSED PENDANT SPRINKLER HEAD
- CONCEALED PENDANT SPRINKLER HEAD
- DRY RECESSED PENDANT SPRINKLER HEAD
- UPRIGHT SPRINKLER HEAD
- SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL SPRINKLER HEAD
- WET SPRINKLER RISER
- DRY SPRINKLER RISER
- CNTE CONNECT NEW TO EXISTING



1 / F1-115 F1-115 SCHEDULE 1 - RAMP LEVEL CEILING PLAN - ZONE 5 - FIRE PROTECTION

SCALE: 1/8" = 1'-0"

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:

- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

SEAL 043164 ENGINEER CASEY D. GILMAN 7/12/19

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

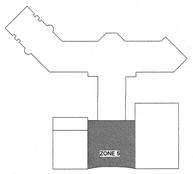
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

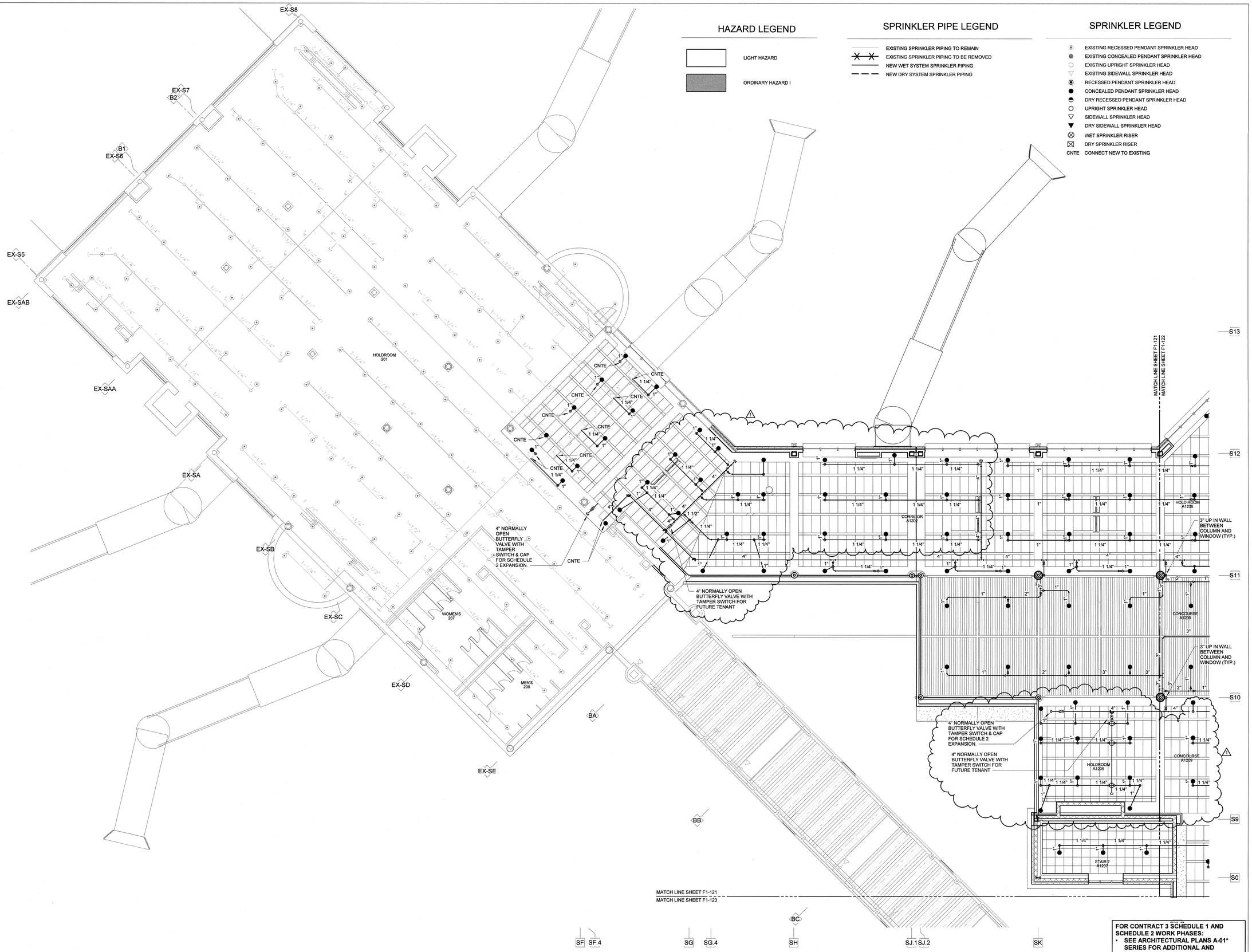
1	7/12/19	AD-01

DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - RAMP LEVEL PLAN ZONE 5 FIRE PROTECTION

SHEET NUMBER

F1-115



1 / F1-121 F1-121 SCHEDULE 1 - BOARDING LEVEL CEILING PLAN - ZONE 1 - FIRE PROTECTION
SCALE: 1/8" = 1'-0"

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:

- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
5412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

NORTH CAROLINA PROFESSIONAL SEAL 043164 ENGINEER CASEY D. GILMAN
7/12/19

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

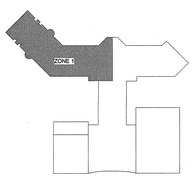
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1	7/12/19	AD-01

DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 -BOARDING LEVEL PLAN ZONE 1 FIRE PROTECTION

SHEET NUMBER

F1-121

SPRINKLER LEGEND

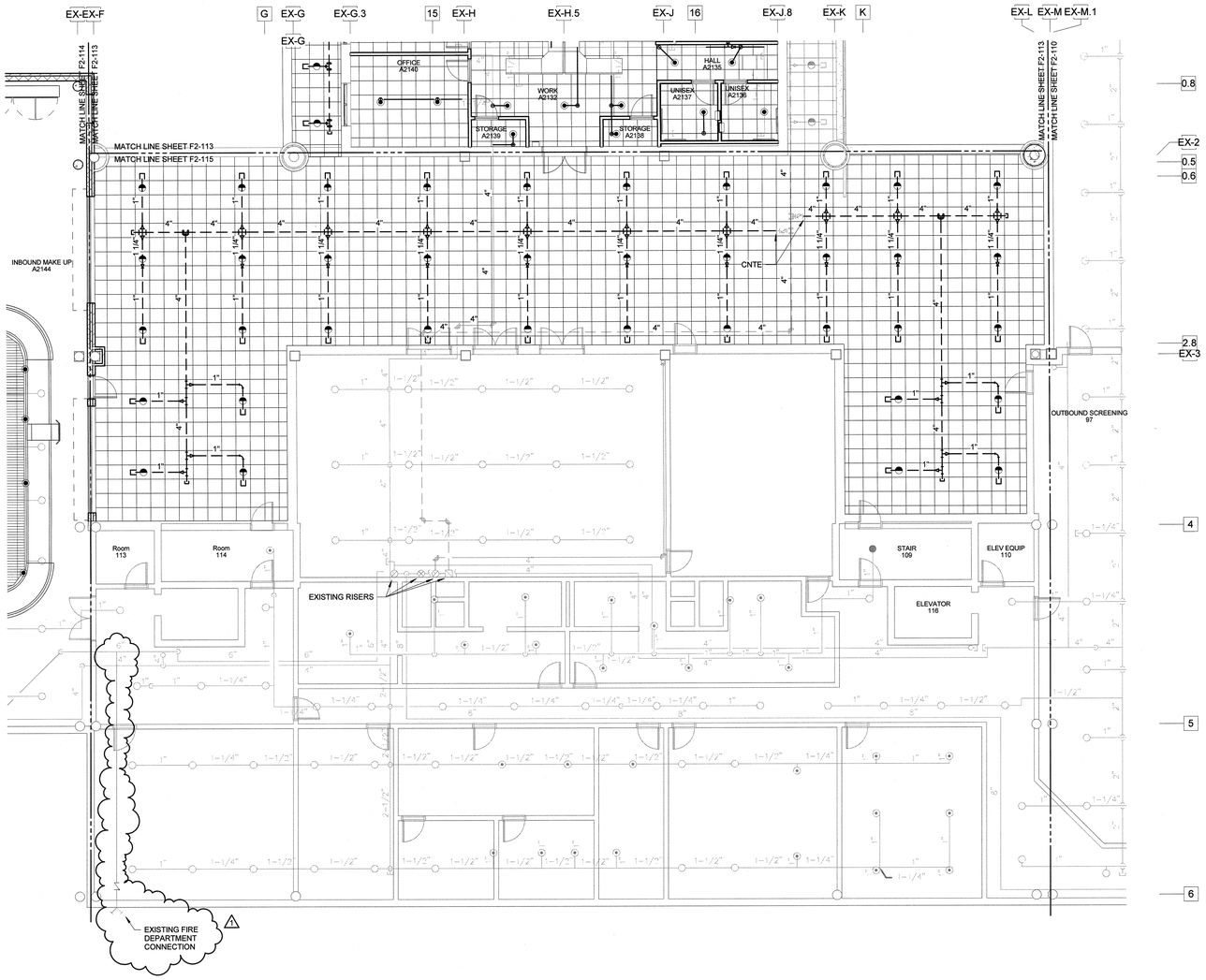
- EXISTING RECESSED PENDANT SPRINKLER HEAD
- EXISTING CONCEALED PENDANT SPRINKLER HEAD
- EXISTING UPRIGHT SPRINKLER HEAD
- EXISTING SIDEWALL SPRINKLER HEAD
- RECESSED PENDANT SPRINKLER HEAD
- CONCEALED PENDANT SPRINKLER HEAD
- DRY RECESSED PENDANT SPRINKLER HEAD
- UPRIGHT SPRINKLER HEAD
- SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL SPRINKLER HEAD
- WET SPRINKLER RISER
- DRY SPRINKLER RISER
- CNTE CONNECT NEW TO EXISTING

SPRINKLER PIPE LEGEND

- EXISTING SPRINKLER PIPING TO REMAIN
- EXISTING SPRINKLER PIPING TO BE REMOVED
- NEW WET SYSTEM SPRINKLER PIPING
- NEW DRY SYSTEM SPRINKLER PIPING

HAZARD LEGEND

- LIGHT HAZARD
- ORDINARY HAZARD I



1 / F2-115 F2-115 SCHEDULE 2 - RAMP LEVEL CEILING PLAN - ZONE 5 - FIRE PROTECTION
SCALE: 1/8" = 1'-0"

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:

- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

NORTH CAROLINA PROFESSIONAL SEAL 043164 ENGINEER CASEY D. GILMAN
7/12/19

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

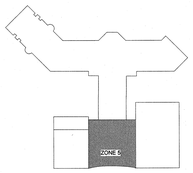
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1 7/12/19 AD-01

DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - RAMP LEVEL PLAN ZONE 5 FIRE PROTECTION

SHEET NUMBER

F2-115

HAZARD LEGEND

- LIGHT HAZARD
- ORDINARY HAZARD I

SPRINKLER PIPE LEGEND

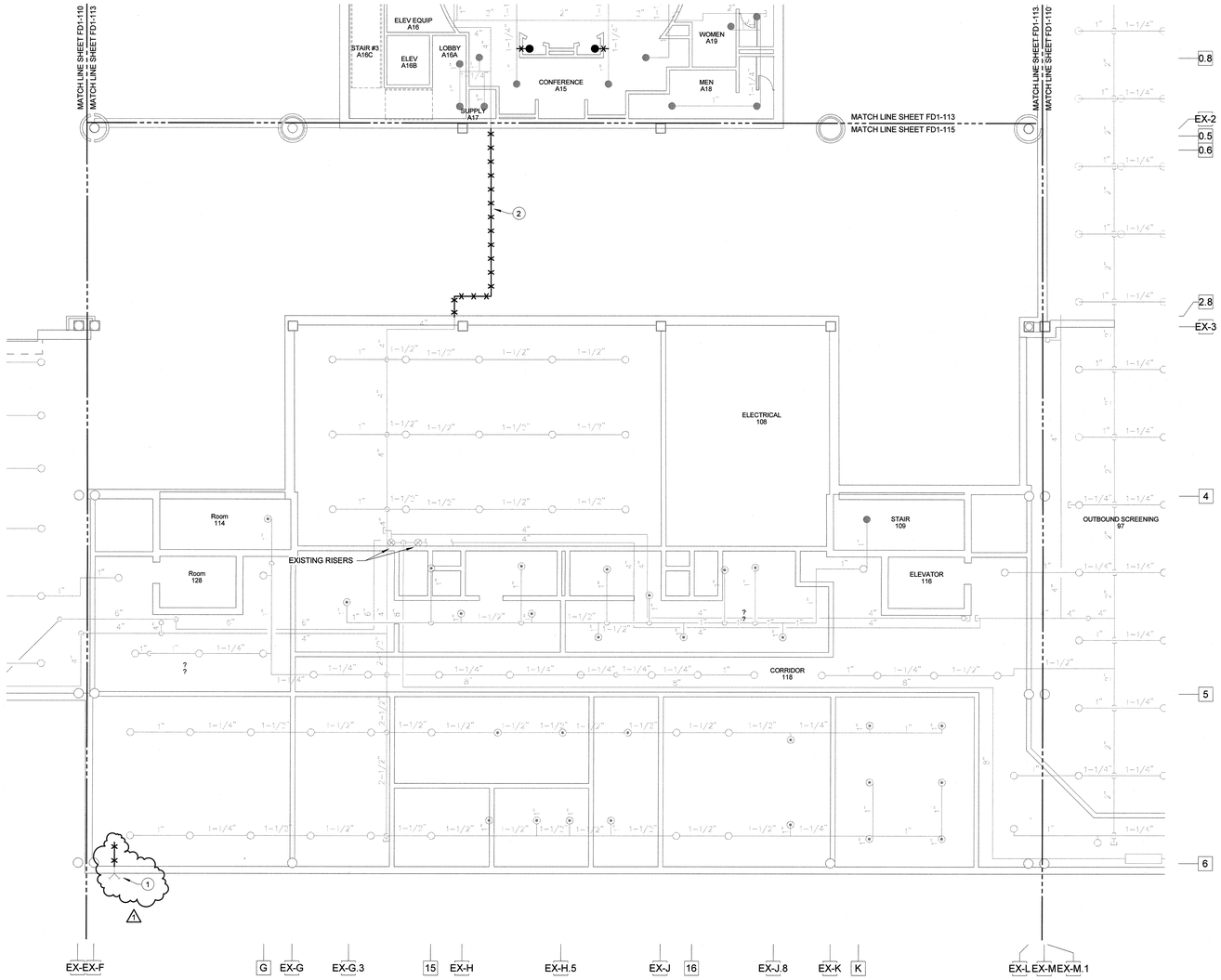
- EXISTING SPRINKLER PIPING TO REMAIN
- EXISTING SPRINKLER PIPING TO BE REMOVED
- NEW WET SYSTEM SPRINKLER PIPING
- NEW DRY SYSTEM SPRINKLER PIPING

SPRINKLER LEGEND

- EXISTING RECESSED PENDANT SPRINKLER HEAD
- EXISTING CONCEALED PENDANT SPRINKLER HEAD
- EXISTING UPRIGHT SPRINKLER HEAD
- EXISTING SIDEWALL SPRINKLER HEAD
- RECESSED PENDANT SPRINKLER HEAD
- CONCEALED PENDANT SPRINKLER HEAD
- DRY RECESSED PENDANT SPRINKLER HEAD
- UPRIGHT SPRINKLER HEAD
- SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL SPRINKLER HEAD
- WET SPRINKLER RISER
- DRY SPRINKLER RISER
- CNTE CONNECT NEW TO EXISTING

KEYED NOTES: (THIS SHEET ONLY)

1. EXISTING FIRE DEPARTMENT CONNECTION TO REMAIN AND BE RECONNECTED. REMOVE 4" PIPE BACK TO EXTERIOR WALL.
2. REMOVE PORTION OF EXISTING SPRINKLER MAIN THAT IS OUTSIDE OF THE BUILDING AS INDICATED. PIPING SHALL BE REPLACED.



1 / FD1-115 F1-115 SCHEDULE 1 - RAMP LEVEL DEMO PLAN - ZONE 5 - FIRE PROTECTION

SCALE: 1/8" = 1'-0"

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:

- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

PROFESSIONAL ENGINEER SEAL 043164 CASEY D. G. LYMAN

7/12/19

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

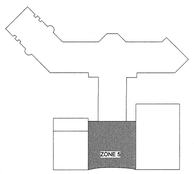
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

1	7/12/19	AD-01

DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - RAMP LEVEL DEMO PLAN ZONE 5 FIRE PROTECTION

SHEET NUMBER

FD1-115

SPRINKLER LEGEND

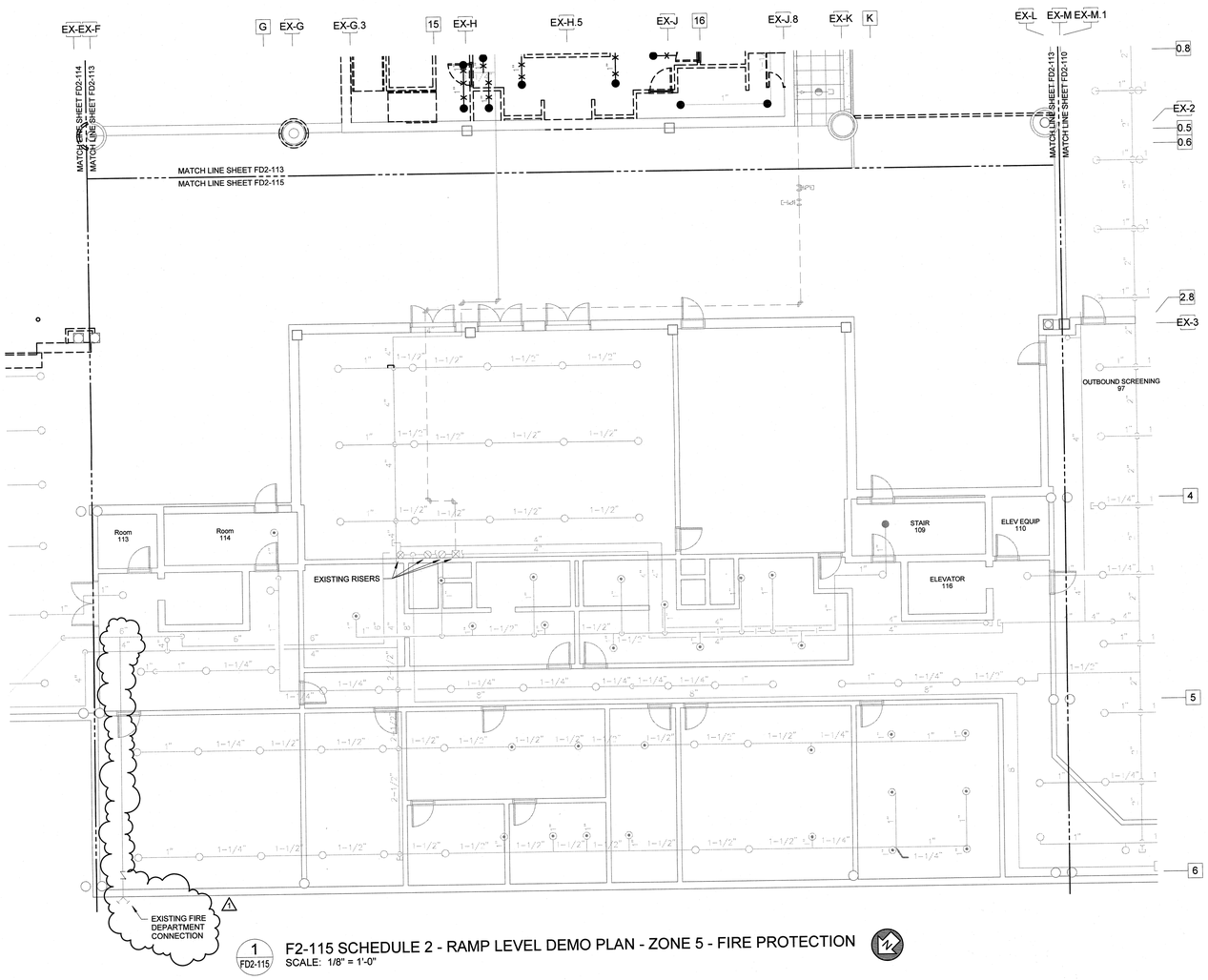
- EXISTING RECESSED PENDANT SPRINKLER HEAD
- EXISTING CONCEALED PENDANT SPRINKLER HEAD
- EXISTING UPRIGHT SPRINKLER HEAD
- EXISTING SIDEWALL SPRINKLER HEAD
- RECESSED PENDANT SPRINKLER HEAD
- CONCEALED PENDANT SPRINKLER HEAD
- DRY RECESSED PENDANT SPRINKLER HEAD
- UPRIGHT SPRINKLER HEAD
- SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL SPRINKLER HEAD
- WET SPRINKLER RISER
- DRY SPRINKLER RISER
- CNTE CONNECT NEW TO EXISTING

SPRINKLER PIPE LEGEND

- EXISTING SPRINKLER PIPING TO REMAIN
- EXISTING SPRINKLER PIPING TO BE REMOVED
- NEW WET SYSTEM SPRINKLER PIPING
- NEW DRY SYSTEM SPRINKLER PIPING

HAZARD LEGEND

- LIGHT HAZARD
- ORDINARY HAZARD I



1 / FD2-115 F2-115 SCHEDULE 2 - RAMP LEVEL DEMO PLAN - ZONE 5 - FIRE PROTECTION

SCALE: 1/8" = 1'-0"

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:

- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

NORTH CAROLINA PROFESSIONAL SEAL 043164 ENGINEER CASEY D. GILLMAN
7/12/19

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

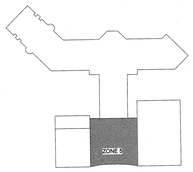
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

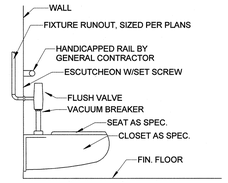
1	7/12/19	AD-01

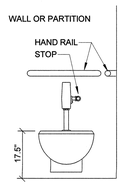
DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - RAMP LEVEL DEMO PLAN ZONE 5 FIRE PROTECTION

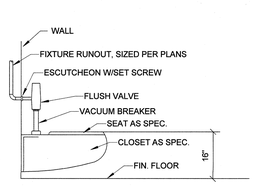
SHEET NUMBER

FD2-115

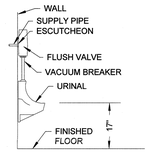




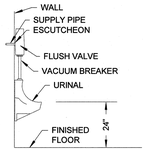
A P1-001 ADULT ADA WATER CLOSET (WC-1) DETAIL
SCALE: NONE



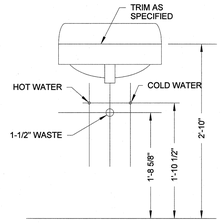
B P1-001 STANDARD WATER CLOSET (WC-2) DETAIL
SCALE: NONE



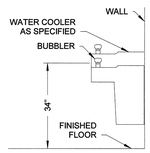
C P1-001 ADA URINAL (U-1) DETAIL
SCALE: NO SCALE



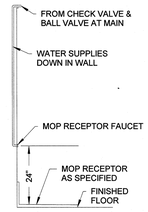
D P1-001 STANDARD URINAL (U-2) DETAIL
SCALE: NO SCALE



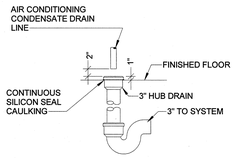
E P1-001 WALL HUNG ADA LAVATORY (L-1) DETAIL
SCALE: NONE



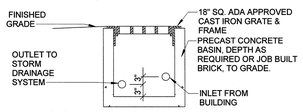
F P1-001 DUAL HEIGHT EWC (EWC-1) DETAIL
SCALE: NONE



G P1-001 MOP RECEPTOR (MR-1) DETAIL
SCALE: NONE



H P1-001 HUB DRAIN (HD-1) DETAIL
SCALE: NONE



J P1-001 CONDENSATE RELIEF BASIN
SCALE: NONE

PLUMBING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	ROUGH-IN SIZES			REMARKS
		WASTE	C.W.	H.W.	
WC-1	WATER CLOSET - WALL HUNG	4"	1-1/4"	-	ADA HEIGHT/DETAIL A/P1-001
WC-2	WATER CLOSET - WALL HUNG	4"	1-1/4"	-	STANDARD/DETAIL B/P1-001
WC-3	WATER CLOSET - FLOOR MOUNTED	4"	1-1/4"	-	ADA HEIGHT/DETAIL H/P1-002
U-1	URINAL	2"	3/4"	-	ADA HEIGHT/DETAIL C/P1-001
U-2	URINAL	2"	3/4"	-	STANDARD/DETAIL D/P1-001
L-1	LAVATORY	1-1/2"	1/2"	1/2"	ADA HEIGHT/DETAIL E&R/P1-001
L-2	COUNTERTOP LAVATORY	1-1/2"	1/2"	1/2"	DETAIL R/P1-001
EWC-1	ELECTRIC WATER COOLER	1-1/2"	1/2"	-	DUAL HEIGHT/BOTTLE FILLER/DET. F/P1-001
MR-1	MOP RECEPTOR	3"	1/2"	1/2"	DETAIL G/P1-001
HB-1	HOSE BIBB	-	1/2"	-	MOUNT 12" AFF
HB-2	HOSE BIBB IN BOX	-	1/2"	-	MOUNT 12" AFF
HB-3	WALL HYDRANT	-	3/4"	-	MOUNT 24" AFG
FD-1	FLOOR DRAIN	3"	-	-	
FD-2	FLOOR DRAIN	4"	-	-	
HD-1	HUB DRAIN	3"	-	-	DETAIL H/P1-001
FS-1	FLOOR SINK	4"	-	-	FULL GRATE

WATER HEATER SCHEDULE

SYMBOL	DESCRIPTION	ROUGH-IN SIZES		TEMP. SETTING	STORAGE CAPACITY	RECOVERY	FUEL	LOAD	LOCATION	DETAIL
		C.W.	H.W.							
WH-1	TANK TYPE ELECTRIC WATER HEATER	3/4"	3/4"	140°F	40 GAL.	41 GPH	ELECTRIC	10 kw, 480 V, 3ø	JANITOR A1226	G/P1-002
WH-3	TANK TYPE ELECTRIC WATER HEATER	3/4"	3/4"	140°F	20 GAL.	24 GPH	ELECTRIC	6 kw, 480 V, 3ø	MENS 208	F/P1-002

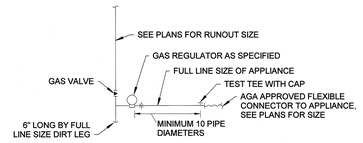
CIRCULATOR PUMP SCHEDULE

SYMBOL	GPM	THD	ELECTRICAL		LOCATION	SERVICE	CONTROL
			HP	VOLTAGE			
CP-1	1	6	1/40	115 V., 1Ø	JANITOR 55	H.W. RETURN	AQUASTAT

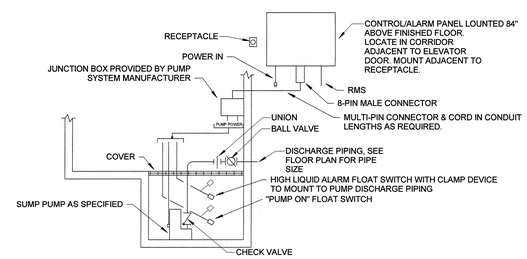
GAS REGULATOR SCHEDULE

SYMBOL	LOCATION	SERVING	CAPACITY			REMARKS
			CFH	INLET PRESSURE	OUTLET PRESSURE	
REG 1	MECHANICAL 107	EXISTING BOILER #1	3400-3450*	2 PSIG	7" W.C.	LIMITED VENTING
REG 2	MECHANICAL 107	EXISTING BOILER #2	3400-3450*	2 PSIG	7" W.C.	LIMITED VENTING
REG 3	BOILER PLANT	BOILER # 3	2500	2 PSIG	7" W.C.	LIMITED VENTING
REG 4	BOILER PLANT	BOILER #4	2500	2 PSIG	7" W.C.	LIMITED VENTING
REG 5	BOILER PLANT	BOILER #5	2500	2 PSIG	7" W.C.	LIMITED VENTING
REG 6	MECHANICAL 107	EXISTING WATER HEATER	200	2 PSIG	7" W.C.	LIMITED VENTING
REG 7	MECHANICAL 107	EXISTING WATER HEATER	200	2 PSIG	7" W.C.	LIMITED VENTING

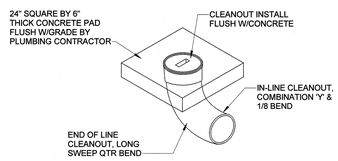
* REGULATOR TO BE REUSED IN SCHEDULE 2 FOR NEW EQUIPMENT. SIZE REGULATOR TO ACCOMODATE EXISTING AND FUTURE EQUIPMENT AS INDICATED BY CFH



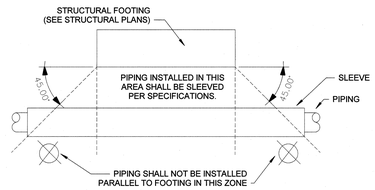
K P1-001 TYPICAL GAS PIPING CONNECTION
SCALE: NO SCALE



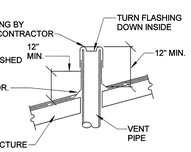
L P1-001 ELEVATOR SUMP PUMP PIPING & WIRING SCHEMATIC
SCALE: NONE



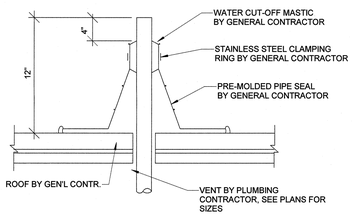
M P1-001 EXTERIOR CLEANOUT DETAIL
SCALE: NONE



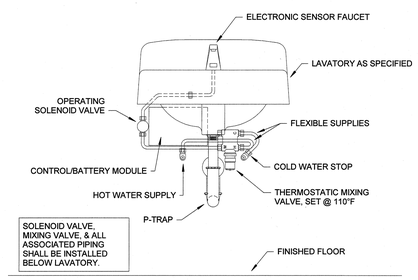
N P1-001 FOOTING DETAIL
SCALE: NONE



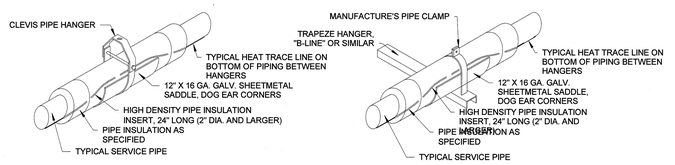
P P1-001 VENT THRU ROOF DETAIL
SCALE: NONE



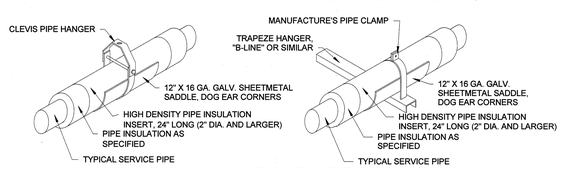
Q P1-001 VENT THRU ROOF DETAIL
SCALE: NONE



R P1-001 SENSOR LAVATORY FAUCET (L-1, L-2) PIPING DIAGRAM
SCALE: NO SCALE



PIPING WITH HEAT TRACE CABLE

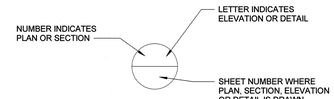


PIPING WITHOUT HEAT TRACE CABLE

S P1-001 PIPE HANGER DETAILS
SCALE: NONE

LEGEND

X X X	PIPING TO BE REMOVED (LINE TYPE & NOTES INDICATE SYSTEM)
EXW	EXISTING WASTE PIPING
EXV	EXISTING VENT PIPING
EXC	EXISTING CONDENSATE PIPING
EXRDL	EXISTING ROOF DRAIN LEADER
EXCW	EXISTING COLD WATER PIPING
EXHW	EXISTING HOT WATER PIPING
EXHWR	EXISTING HOT WATER RETURN PIPING
EXG	EXISTING NATURAL GAS PIPING
W	WASTE PIPING
GW	GREASE WASTE PIPING
V	VENT PIPING
GV	GREASE WASTE VENT PIPING
C	CONDENSATE PIPING
RDL	ROOF DRAIN LEADER
CW	COLD WATER PIPING
HW	HOT WATER PIPING
HWR	HOT WATER RETURN PIPING
G	NATURAL GAS PIPING
	BALL/BUTTERFLY VALVE
	BALANCING VALVE
	CHECK VALVE
	GAS VALVE
	SOLENOID VALVE
	VALVE IN RISE
	PIPE ELBOW TURNED DOWN
	PIPE ELBOW TURNED UP
	PIPE TEE TURNED DOWN
	PIPE TEE TURNED UP
	UNION
	STRAINER
	DOUBLE CHECK VALVE BACKFLOW PREVENTER
	REDUCED PRESSURE BACKFLOW PREVENTER
'A'	SHOCK ARRESTER, 'A' INDICATES PLUMBING DRAINAGE INSTITUTE STANDARD SIZE
	ASME PRESSURE TEMPERATURE RELIEF VALVE
VTR	VENT THRU ROOF
GVTR	GREASE VENT THRU ROOF
CO	CLEANOUT
ECO	EXTERIOR CLEANOUT
WCO	WALL CLEANOUT
FCO	FLOOR CLEANOUT
RD	ROOF DRAIN
ORD	OVERFLOW ROOF DRAIN
AFF	ABOVE FINISHED FLOOR
BFF	BELOW FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BFG	BELOW FINISHED GRADE
INV.	INVERT ELEVATION
CNTE	CONNECT NEW TO EXISTING
EXHB	EXISTING HOSE BIBB OR WALL HYDRANT
EXFCO	EXISTING FLOOR CLEAN OUT
EXECO	EXISTING EXTERIOR CLEAN OUT
EXWCO	EXISTING WALL CLEAN OUT
EXFD	EXISTING FLOOR DRAIN
EXHD	EXISTING HUB DRAIN
	4 HOUR FIRE WALL
	2 HOUR FIRE WALL
	1 HOUR FIRE WALL
	UNRATED SMOKE PARTITION



GENERAL NOTES:

1. EXISTING INFORMATION IS BASED ON A FIELD SURVEY AND EXISTING PLANS. SOME INFORMATION PRESENTED IS ESTIMATED OR ASSUMED BASED ON EXPERIENCE. CONTRACTOR SHALL FIELD VERIFY CONDITIONS DURING THE COURSE OF WORK AND ALERT THE ARCHITECT AND/OR ENGINEER OF DIFFERENCES BETWEEN FIELD CONDITIONS AND THE DRAWINGS THAT WILL PREVENT ANY PORTIONS OF THE PLUMBING SCOPE OF WORK FROM BEING INSTALLED AS DESIGNED.

TOTAL CONNECTED LOAD

WASTE FIXTURE UNITS =	394.5	F.U.
GREASE WASTE FIXTURE UNITS =	FUTURE	
TOTAL WASTE FIXTURE UNITS =	394.5	F.U.
COLD WATER DEMAND =	208	GPM
HOT WATER DEMAND =	48	GPM
GAS LOADS		
BUILDING HEATING DEMAND =	17,260	CFH
WATER HEATING DEMAND =	400	CFH
TOTAL CONNECTED LOAD =	17,660	CFH

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:
- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

NORTH CAROLINA PROFESSIONAL SEAL 043164 ENGINEER CASEY D. GILMAN
7/12/19

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

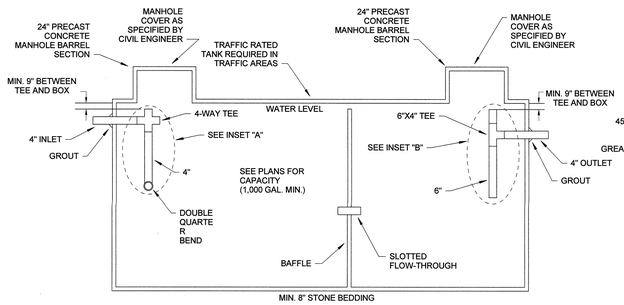
REVISIONS

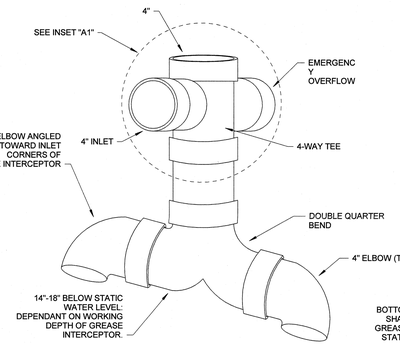
1	7/12/19	AD-01

DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

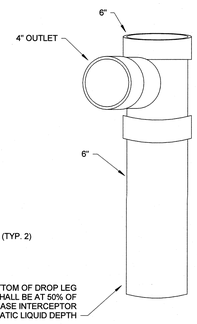
PLUMBING LEGEND, SCHEDULES, & DETAILS

SHEET NUMBER
P1-001

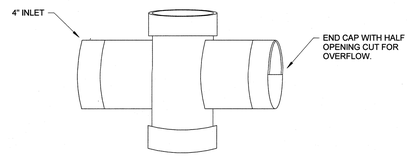




INSET "A"



INSET "B"

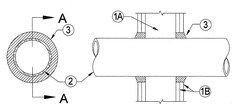


INSET "A1"

A P1-002 GREASE INTERCEPTOR DETAIL
SCALE: NO SCALE

UL SYSTEM No. W-L-1001
(FORMERLY SYSTEM NO. 147)

F RATINGS - 1, 2, 3 AND 4 HR (SEE ITEMS 2 AND 3)
T RATINGS - 0, 1, 2, 3 AND 4 HR (SEE ITEM 3)
L RATINGS AT AMBIENT - LESS THAN 1 CFM/SQFT
L RATING AT 400 F - LESS THAN 1 CFM/SQ FT



SECTION A-A

1. WALL ASSEMBLY - THE 1, 2, 3 OR 4 HR FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
   A. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAX 2 HR FIRE RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER SPACED 16 IN. (406 MM) OC WITH NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN 3-5/8 IN. (92 MM) WIDE BY 1-3/8 IN. (35 MM) DEEP CHANNELS SPACED MAX 24 IN. (610 MM) OC.
   B. GYPSUM BOARD* - NOM 1/2 OR 5/8 IN. (13 OR 16 MM) THICK, 4 FT. (122 CM) WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY.
2. THROUGH-PENETRANT - ONE METALLIC PIPE, CONDUIT OR TUBING INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND PERIPHERY OF OPENING SHALL BE MIN OF 0 IN. (0 MM) (POINT CONTACT) TO MAX 2 IN. (51 MM). PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:
   A. STEEL PIPE - NOM 24 IN. (610 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
   B. IRON PIPE - NOM 24 IN. (610 MM) DIAM (OR SMALLER) SERVICE WEIGHT (OR HEAVIER) CAST IRON SOIL PIPE. NOM 12 IN. (305 MM) DIAM (OR SMALLER) OR CLASS 50 (OR HEAVIER) DUCTILE IRON PRESSURE PIPE.
   C. CONDUIT - NOM 6 IN. (152 MM) DIAM (OR SMALLER) STEEL CONDUIT OR NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING.
   D. COPPER TUBING - NOM 6 IN. (152 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
   E. COPPER PIPE - NOM 6 IN. (152 MM) DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
   F. THROUGH PENETRATING PRODUCT* - FLEXIBLE METAL PIPING - THE FOLLOWING TYPES OF STEEL FLEXIBLE METAL GAS PIPING MAY BE USED:

1. NOM 2 IN. (51 MM) DIAM (OR SMALLER) STEEL, FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

OMEGA FLEX INC

2. NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL, FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

TITEFLEX CORP
A BUNDY CO

3. NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL, FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

WARD MFG INC

3. FILL VOID OR CAVITY MATERIAL* - CAULK OR SEALANT - MIN 5/8 1-1/4,1-7/8 AND 2-1/2 IN. [16, 32, 48 AND 64 MM]. THICKNESS OF CAULK FOR 1, 2, 3 AND 4 HR RATED ASSEMBLIES, RESPECTIVELY. APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. MIN 1/4 IN. (6 MM) DIAM BEAD OF CAULK APPLIED TO GYPSUM BOARD/PENETRANT INTERFACE AT POINT CONTACT LOCATION ON BOTH SIDES OF WALL.
THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE.
THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED BELOW:

MAX. PIPE OR CONDUIT DIAM IN	F RATING HR	T RATING HR
1	1 OR 2	0+1 OR 2
4	3 OR 4	3 OR 4
6	1 OR 2	0
12	1 OR 2	0

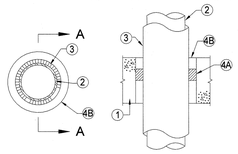
+WHEN COPPER PIPE IS USED, T RATING IS 0 HR.

3M COMPANY - CP 25WB+ CAULK OR FB-3000 WT SEALANT,

*BEARING THE UL CLASSIFICATION MARKING

UL SYSTEM No. CA-J-5002
(FORMERLY SYSTEM NO 91-B)

(F RATINGS - 2 AND 3 HR (SEE ITEM 1A AND 4)
T RATING - 0, 1/2 AND 1 HR (SEE ITEM 1A AND 4)
L RATING AT AMBIENT - 2 CFM/SQ FT
L RATING AT 400 F - LESS THAN 1 CFM/SQ FT



SECTION A-A

1. FLOOR OR WALL ASSEMBLY - MIN 2-1/2 IN. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIEDCONCRETE BLOCKS* MAX DIAM OF OPENING IS 12-3/4 IN.
   SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
1A. STEEL SLEEVE (OPTIONAL, NOT SHOWN) - NOM 36 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE SLEEVE CAST INTO MIN 4-1/2 IN. THICK CONCRETE FLOOR OR WALL. SLEEVE TO BE FLUSH WITH OR PROJECT MAX 2 IN. FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WHEN STEEL SLEEVE IS USED, F RATING IS 2 HR AND T RATING IS 0 HR.
2. PIPE - NOM 4 IN. DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER PIPE. NOM 15 IN. DIAM (OR SMALLER) SERVICE WEIGHT (OR HEAVIER) CAST IRON SOIL PIPE. NOM 30 IN. DIAM (OR SMALLER) CLASS 50 (OR HEAVIER) DUCTILE IRON PRESSURE PIPE OR NOM 30 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE CENTERED IN THE OPENING AND RIGIDLY SUPPORTED ON BOTH SIDES OF THE FLOOR OR WALL ASSEMBLY.
3. PIPE COVERING* - NOM 1, 2 OR 3 IN. THICK HOLLOW CYLINDRICAL HEAVY DENSITY GLASS FIBER UNITS JACKETED ON THE OUTSIDE WITH AN ALL SERVICE JACKET. LONGITUDINAL JOINTS SEALED WITH METAL FASTENERS OR FACTORY-APPLIED SELF SEALING LAP TAPE. TRANSVERSE JOINTS SECURED WITH METAL FASTENERS OR WITH BUTT STRIP TAPE SUPPLIED WITH THE PRODUCT
   SEE PIPE AND EQUIPMENT COVERING - MATERIALS* (BRGU) CATEGORY IN BUILDING MATERIALS DIRECTORY FOR NAMES OF MANUFACTURERS. ANY PIPE COVERING MATERIAL MEETING THE ABOVE SPECIFICATIONS AND BEARING THE UL CLASSIFICATION MARKING WITH A FLAME SPREAD INDEX OF 25 OR LESS AND A SMOKE DEVELOPED INDEX OF 50 OR LESS MAY BE USED.
4. FIRESTOP SYSTEM - THE DETAILS OF THE FIRESTOP SYSTEM SHALL BE AS FOLLOWS:
   A. FILL, VOID OR CAVITY MATERIALS* - WRAP STRIP - NOM 1/4 IN. THICK INTUMESCENT ELASTOMERIC MATERIAL FACED ON ONE SIDE WITH ALUMINUM FOIL. SUPPLIED IN 2 IN. WIDE BY 24 IN. LONG STRIPS. NOM 2 IN. WIDE STRIPS TIGHTLY WRAPPED AROUND PIPE COVERING (FOIL SIDE EXPOSED) TO FILL ANNULAR SPACE. EACH LAYER OF WRAP STRIP IS TO BE INSTALLED WITH A BUTTED SEAM, WITH THE BUTTED SEAMS IN SUCCESSIVE LAYERS STAGGERED. WRAP STRIP LAYERS SECURELY BOUND WITH STEEL WIRE ON BOTH SIDES OF THE ANNULUS. ANNULAR SPACE IS THAT SPACE BETWEEN PIPE COVERING AND THE CIRCULAR CUTOUT IN TOP SURFACE OF FLOOR IN WALL ASSEMBLIES. THE WRAP STRIP LAYERS SHALL BE INSTALLED IN THE SAME MANNER USED FOR FLOOR ASSEMBLIES BUT SHALL BE INSTALLED SYMMETRICALLY ON BOTH SIDES OF THE WALL. THE MIN NUMBER OF WRAP STRIP LAYERS REQUIRED IS DEPENDENT UPON THE MAX PIPE SIZE AND THE PIPE COVERING THICKNESS, AS SHOWN IN THE FOLLOWING TABLE.

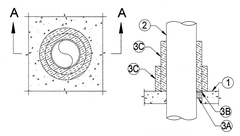
MIN. FLOOR OR WALL THKNS, IN	MAX NOM PIPE DIAM, IN	MIN NUMBER OF WRAP STRIP COVERING THKNS, IN	ANNULAR SPACE, IN	F RATING HR	T RATING HR
2-1/2	6	1	1/4 TO 3/8	2	1
2-1/2	6	2	1/2 TO 3/8	2	1
4-1/2	12	1	1/4 TO 3/8	2	1/2
4-1/2	12	1	1/4 TO 1/2	1	1
4-1/2	12	2	1/2 TO 1/8	2	2
4-1/2	20	1	1/2 TO 1	3	1
4-1/2	30	2	3/4 TO 1-1/4	3	2
4-1/2	20	3	1 TO 1-1/2	4	2

3M COMPANY - FS-195+

B. FILL, VOID OR CAVITY MATERIALS* - CAULK OR SEALANT - APPLIED TO FILL THE ANNULAR SPACE (OVER EDGES OF WRAP STRIP LAYERS) TO A MIN DEPTH OF 1/2 IN., FLUSH WITH TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL.
3M COMPANY - CP 25WB+ CAULK OR FB-3000 WT SEALANT.

*BEARING THE UL CLASSIFICATION MARKING

UL SYSTEM No. F-A-1105
F RATINGS - 2 HR
T RATING - 2 HR
L RATING AT AMBIENT - LESS THAN 1 CFM/SQ.FT.
L RATING AT 400 F - 4 CFM/SQ.FT
W RATING - CLASS 1 (SEE ITEM 3B)



SECTION A-A

1. FLOOR ASSEMBLY - MIN. 4-1/2 IN. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE, AS AN ALTERNATE, ANY MIN 2 HR, FIRE RATED D700, D800 OR D900 SERIES FLOOR-CEILING DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MIN. 2-1/2 IN. THICKNESS OF LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE TOPPING OVER THE STEEL DECK MAY BE USED. MAX. DIAM. OF OPENING IS 12-3/4 IN.
2. THROUGH - PENETRANT - ONE METALLIC PIPE INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN OPENING. ANNULAR SPACE BETWEEN PENETRANT AND PERIPHERY OF OPENING SHALL BE MIN. OF 0 IN. (POINT CONTACT) TO MAX 2 IN. PENETRANT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF PENETRANTS MAY BE USED:
   A. STEEL PIPE - NOM. 10 IN. DIAM (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE.
   B. IRON PIPE - NOM. 10 IN. DIAM. (OR SMALLER) CAST OR DUCTILE IRON PIPE.
   C. CONDUIT - NOM. 4 IN. DIAM. (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR NOM. 6 IN. DIAM. (OR SMALLER) RIGID STEEL CONDUIT.
3. FIRESTOP SYSTEM - THE FIRESTOP SYSTEM SHALL CONSIST OF THE FOLLOWING:
   A. PACKING MATERIAL - MIN. 2 IN. THICKNESS OF MIN. 4 PCF MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. WHEN CF 604 SEALANT IS USED (SEE ITEM 3B), MIN. THICKNESS OF PACKING MATERIAL IS 4 IN. AND MIN. THICKNESS OF FLOOR IS 4-1/2 IN. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
   B. FILL, VOID OR CAVITY MATERIALS* - SEALANT - MIN. 1/2 IN. THICKNESS OF SEALANT APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI, INC - FS-ONE SEALANT OR CP 604 SELF-LEVELING FIRESTOP SEALANT

W RATING APPLIES ONLY WHEN CP 604 SEALANT IS USED.

C. DUCT WRAP MATERIAL* - NOM. 2 IN. THICK ENCAPSULATED DUCT WRAP TIGHTLY WRAPPED AROUND PENETRANT TO EXTEND 36 IN. ABOVE FLOOR. AN ADDITIONAL LAYER OF NOM. 2 IN. THICK ENCAPSULATED DUCT WRAP TIGHTLY WRAPPED AROUND FIRST LAYER OF DUCT WRAP TO EXTEND 12 IN. ABOVE FLOOR. ALL LONGITUDINAL SEAMS OF BOTH LAYERS OF DUCT WRAP AND JOINTS BETWEEN LAYERS OF DUCT WRAP ARE SEALED WITH FOIL TAPE. ONE OF THE FOLLOWING WRAP MAY BE USED:

C1. NOM. 1-1/2 IN. OF 2 IN. THICK ENCAPSULATED DUCT WRAP.

UNIFRAX I L L C - FIREVERAP DUCT INSULATION OR FIREWRAP DUCT 1.5 INSULATION.

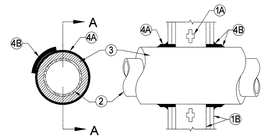
C2. NOM. 1-1/2 IN. THICK ENCAPSULATED DUCT WRAP.

THERMAL CERAMICS INC - FIREMASTER FASTWRAP XL DUCT INSULATION.

*BEARING THE UL CLASSIFICATION MARKING

UL SYSTEM No. W-L-5001
(FORMERLY SYSTEM NO. 147)

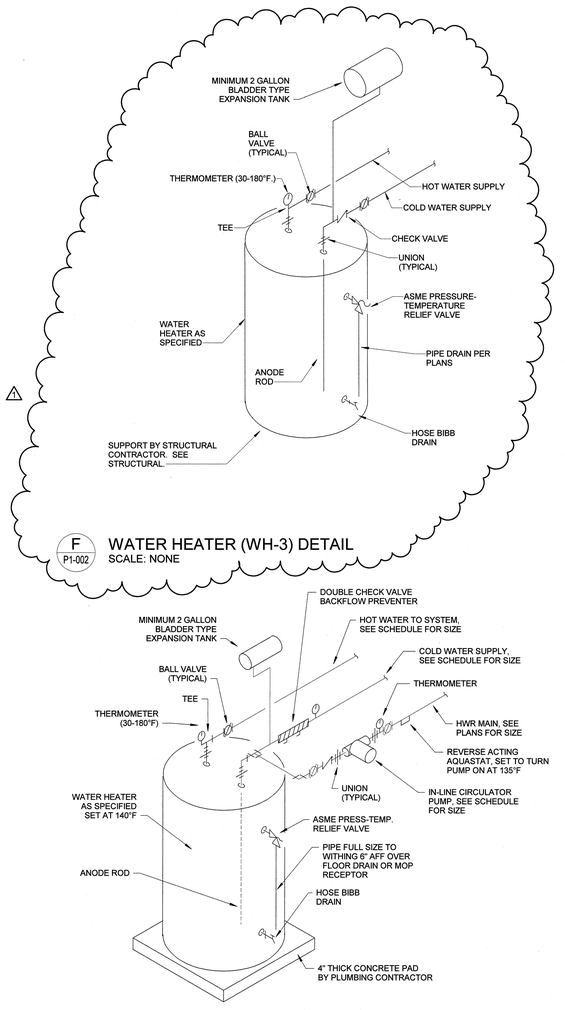
F RATINGS - 1 AND 2 HR (SEE ITEM 1)
T RATINGS - 3/4, 1 AND 1-1/2 HR (SEE ITEM 3)
L RATINGS AT AMBIENT - 2 CFM/SQ FT
L RATING AT 400 F - LESS THAN 1 CFM/SQ FT



SECTION A-A

1. WALL ASSEMBLY - THE 1 OR 2 HR FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U309, U409 OR V400 SERIES WALL OR PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
   A. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 IN. BY 4 IN. (25 MM BY 102 MM) LUMBER SPACED 16 IN. (406 MM) OC WITH NOM 2 BY 4 IN. LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN 3-5/8 IN. (92 MM) WIDE BY 1-3/8 IN. (35 MM) DEEP CHANNELS SPACED MAX 24 IN. (610 MM) OC.
   B. GYPSUM BOARD* - NOM 5/8 IN. (16 MM) THICK, 4 FT (122 CM) WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U309 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAM OF OPENING IS 14-1/2 IN (368 MM) FOR WOOD STUD WALLS AND 18 IN. (457 MM) FOR STEEL STUD WALLS.
THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS 1 HR WHEN INSTALLED IN A 1 HR FIRE RATED WALL AND 2 HR WHEN INSTALLED IN A 2 HR FIRE RATED WALL.
2. THROUGH PENETRANTS - ONE METALLIC PIPE OR TUBING TO BE CENTERED WITHIN THE FIRESTOP SYSTEM. PIPE OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR TUBING MAY BE USED:
   A. STEEL PIPE - NOM 12 IN. (305 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
   B. COPPER TUBING - NOM 6 IN. (152 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
   C. COPPER PIPE - NOM 6 IN. (152 MM) DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
3. PIPE COVERING* - NOM 1 IN. OR 2 IN. (25 MM OR 51 MM) THICK HOLLOW CYLINDRICAL HEAVY DENSITY GLASS FIBER UNITS JACKETED ON THE OUTSIDE WITH AN ALL SERVICE JACKET. LONGITUDINAL JOINTS SEALED WITH METAL FASTENERS OR FACTORY-APPLIED SELF-SEALING LAP TAPE. TRANSVERSE JOINTS SECURED WITH METAL FASTENERS OR WITH BUTT STRIP TAPE SUPPLIED WITH THE PRODUCT. WHEN NOM 1 IN. (25 MM) THICK PIPE COVERING IS USED, THE ANNULAR SPACE BETWEEN THE PIPE COVERING AND THE CIRCULAR CUTOUT IN THE GYPSUM WALLBOARD LAYERS ON EACH SIDE OF THE WALL SHALL BE MIN 1/4 IN. TO MAX 3/8 IN. (6 MM TO MAX 10 MM). WHEN NOM 2 IN. (51 MM) THICK PIPE COVERING IS USED, THE ANNULAR SPACE BETWEEN THE PIPE COVERING AND THE CIRCULAR CUTOUT IN THE GYPSUM WALLBOARD LAYERS ON EACH SIDE OF THE WALL SHALL BE MIN 1/2 IN. TO MAX 3/4 IN. (13 MM TO MAX 19 MM).
   SEE PIPE AND EQUIPMENT COVERING - MATERIALS (BRGU) CATEGORY IN BUILDING MATERIALS DIRECTORY FOR NAMES OF MANUFACTURERS. ANY PIPE COVERING MATERIAL MEETING THE ABOVE SPECIFICATIONS AND BEARING THE UL CLASSIFICATION MARKING WITH A FLAME SPREAD INDEX OF 25 OR LESS AND A SMOKE DEVELOPED INDEX OF 50 OR LESS MAY BE USED.
THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS 3/4 HR WHEN NOM 1 IN. (25 MM) THICK PIPE COVERING IS USED.
THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS 1 HR AND 1-1/2 HR WHEN NOM 2 IN. (51 MM) THICK PIPE COVERING IS USED WITH 1 HR AND 2 HR FIRE RATED WALLS, RESPECTIVELY.
4. FIRESTOP SYSTEM - INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. THE DETAILS OF THE FIRESTOP SYSTEM SHALL BE AS FOLLOWS:
   A. FILL, VOID OR CAVITY MATERIALS* - WRAP STRIP - NOM 1/4 IN. (6 MM) THICK INTUMESCENT ELASTOMERIC MATERIAL FACED ON ONE SIDE WITH ALUMINUM FOIL. SUPPLIED IN 2 IN. (51 MM) WIDE STRIPS. NOM 2 IN. (51 MM) WIDE STRIP TIGHTLY WRAPPED AROUND PIPE COVERING (FOIL SIDE EXPOSED) TO FILL ANNULAR SPACE. WRAP STRIP LAYER SECURELY BOUND WITH STEEL WIRE OR ALUMINUM FOIL TAPE AND 0.62 IN. ANNULAR SPACE. APPROX 1-1/4 IN. (32 MM) SUCH THAT APPROX 3/4 IN. (19 MM) OF THE WRAP STRIP THICKNESS PROTRUDES FROM THE WALL SURFACE. ONE LAYER OF WRAP STRIP IS REQUIRED WHEN NOM 1 IN. (25 MM) THICK PIPE COVERING IS USED. TWO LAYERS OF WRAP STRIP ARE REQUIRED WHEN NOM 2 IN. (51 MM) THICK PIPE COVERING IS USED.
3M COMPANY - FS-195+
   B. FILL, VOID OR CAVITY MATERIALS* - CAULK OR SEALANT - MIN 1/4 IN. (6 MM) DIAM CONTINUOUS BEAD APPLIED TO THE WRAP STRIP/WALL INTERFACE AND TO THE EXPOSED EDGE OF THE WRAP STRIP LAYER APPROX 3/4 IN. (19 MM) FROM THE WALL SURFACE.
3M COMPANY - CP 25WB+, IC 15WB+, FIREDAM 150+ CAULK OR FB-3000 WT SEALANT

*BEARING THE UL CLASSIFICATION MARKING
REPRINTED FROM THE 2007 FIRE RESISTANCE DIRECTORY WITH PERMISSION FROM UNDERWRITERS LABORATORIES, INC.
COPYRIGHT 2009 © UNDERWRITERS LABORATORIES INC. ®



F P1-002 WATER HEATER (WH-3) DETAIL
SCALE: NONE

G P1-002 WATER HEATER (WH-1) PIPING DETAIL
SCALE: NONE

NOTE: DETAIL FOR REFERENCE ONLY. THE CONTRACTOR SHALL INSTALL FIRE PROOFING IN COMPLETE ACCORDANCE WITH IT'S UL LISTING AND PENETRATION SYSTEM INSTALLATION INSTRUCTIONS.

B P1-002 U.L. DETAIL W-L-1001
SCALE: 1/4" = 1'-0"

REPRINTED FROM THE 2005 FIRE RESISTANCE DIRECTORY WITH PERMISSION FROM UNDERWRITERS LABORATORIES, INC.
COPYRIGHT 2009 © UNDERWRITERS LABORATORIES INC ®

NOTE: DETAIL FOR REFERENCE ONLY. THE CONTRACTOR SHALL INSTALL FIRE PROOFING IN COMPLETE ACCORDANCE WITH IT'S UL LISTING AND PENETRATION SYSTEM INSTALLATION INSTRUCTIONS.

C P1-002 U.L. DETAIL CA-J-5002
SCALE: 1/4" = 1'-0"

REPRINTED FROM THE 2007 FIRE RESISTANCE DIRECTORY WITH PERMISSION FROM UNDERWRITERS LABORATORIES, INC.
COPYRIGHT 2009 © UNDERWRITERS LABORATORIES INC ®

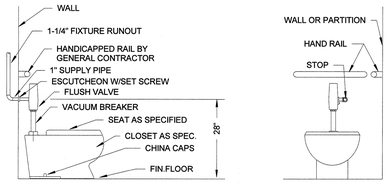
NOTE: DETAIL FOR REFERENCE ONLY. THE CONTRACTOR SHALL INSTALL FIRE PROOFING IN COMPLETE ACCORDANCE WITH IT'S UL LISTING AND PENETRATION SYSTEM INSTALLATION INSTRUCTIONS.

D P1-002 U.L. DETAIL F-A-1105
SCALE: 1/4" = 1'-0"

NOTE: DETAIL FOR REFERENCE ONLY. THE CONTRACTOR SHALL INSTALL FIRE PROOFING IN COMPLETE ACCORDANCE WITH IT'S UL LISTING AND PENETRATION SYSTEM INSTALLATION INSTRUCTIONS.

E P1-002 U.L. DETAIL W-L-5001
SCALE: 1/4" = 1'-0"

REPRINTED FROM THE 2007 FIRE RESISTANCE DIRECTORY WITH PERMISSION FROM UNDERWRITERS LABORATORIES, INC.
COPYRIGHT 2009 © UNDERWRITERS LABORATORIES INC. ®



H P1-002 ADULT ADA WATER CLOSET (WC-3) DETAIL
SCALE: NONE

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:
- SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.
- SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.
- COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

NORTH CAROLINA PROFESSIONAL SEAL 043164 ENGINEER CASEY D. GILMAN
7/12/19

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

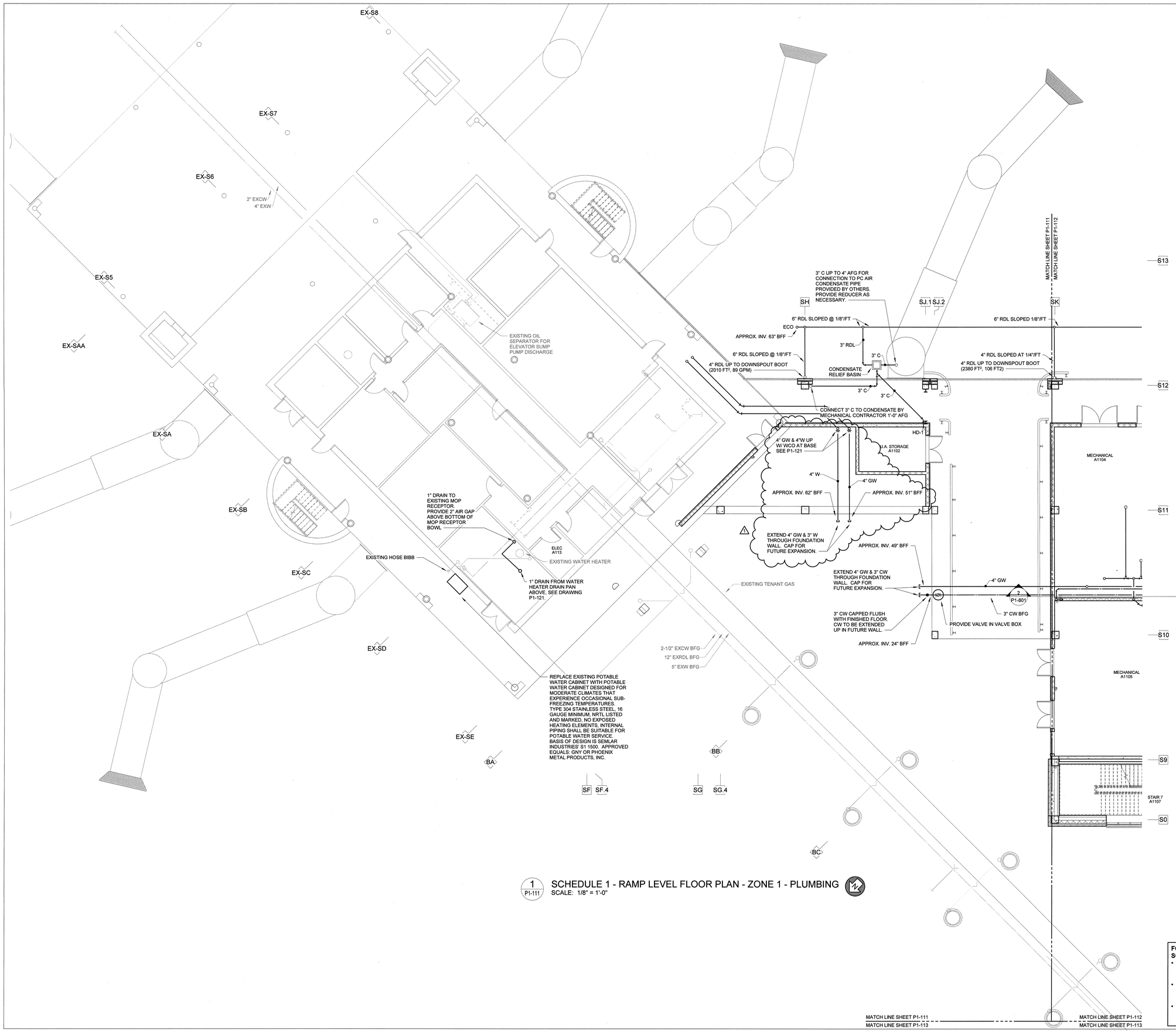
REVISIONS

1 7/12/19 AD-01

DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

PLUMBING DETAILS

SHEET NUMBER
P1-002



1 / P1-111 SCHEDULE 1 - RAMP LEVEL FLOOR PLAN - ZONE 1 - PLUMBING

SCALE: 1/8" = 1'-0"

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:

- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

PROFESSIONALLY SEAL 043164 ENGINEER CASEY D. GILMAN
7/12/19

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

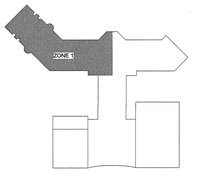
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

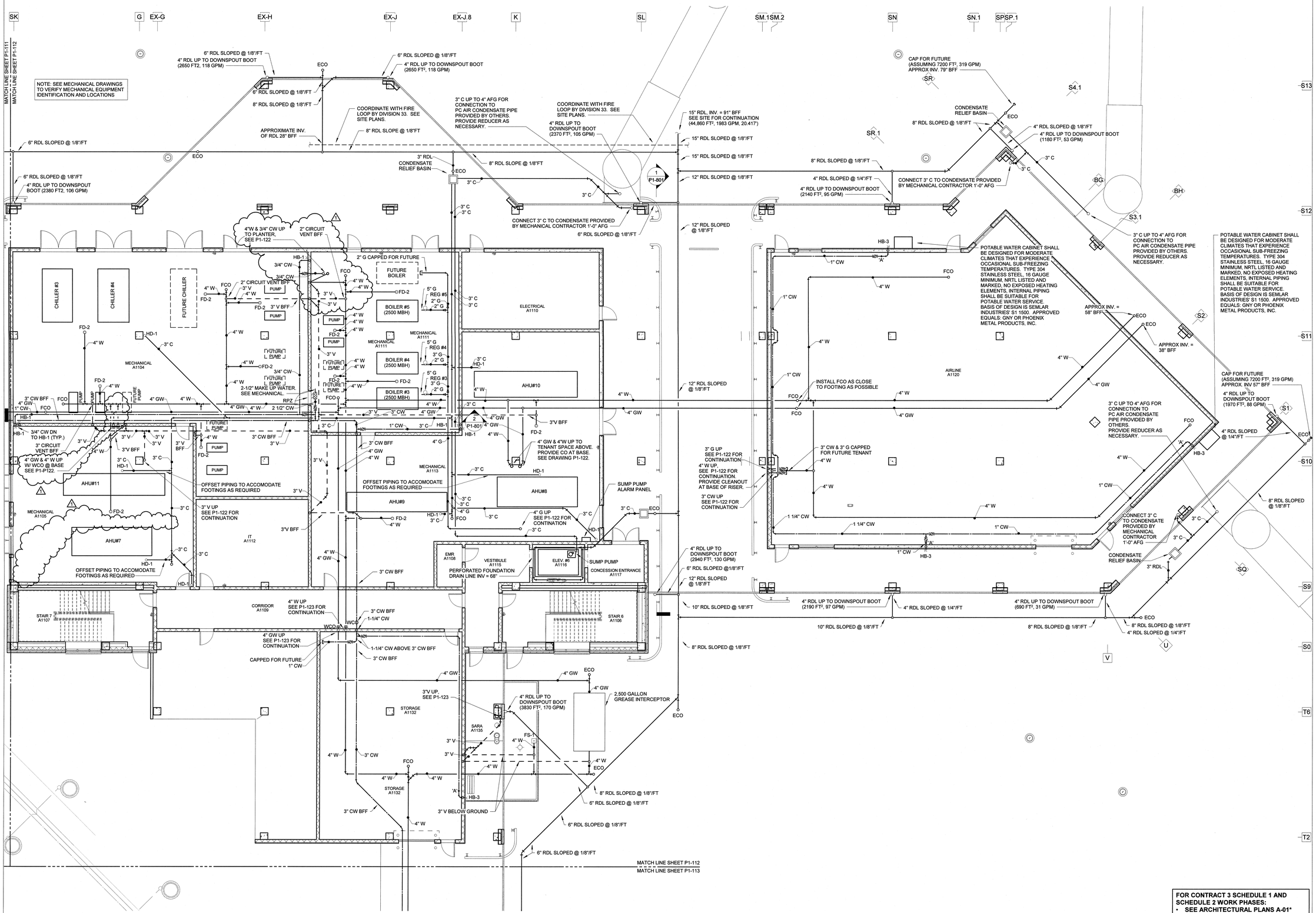
1	7/12/19	AD-01

DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - RAMP LEVEL PLAN ZONE 1 PLUMBING

SHEET NUMBER

P1-111



1 P1-112 SCHEDULE 1 - RAMP LEVEL FLOOR PLAN - ZONE 2 - PLUMBING
SCALE: 1/8" = 1'-0"

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:
- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 043164 CASEY D. GILMAN 7/12/19

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

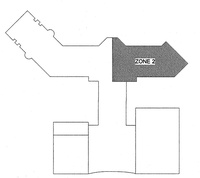
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

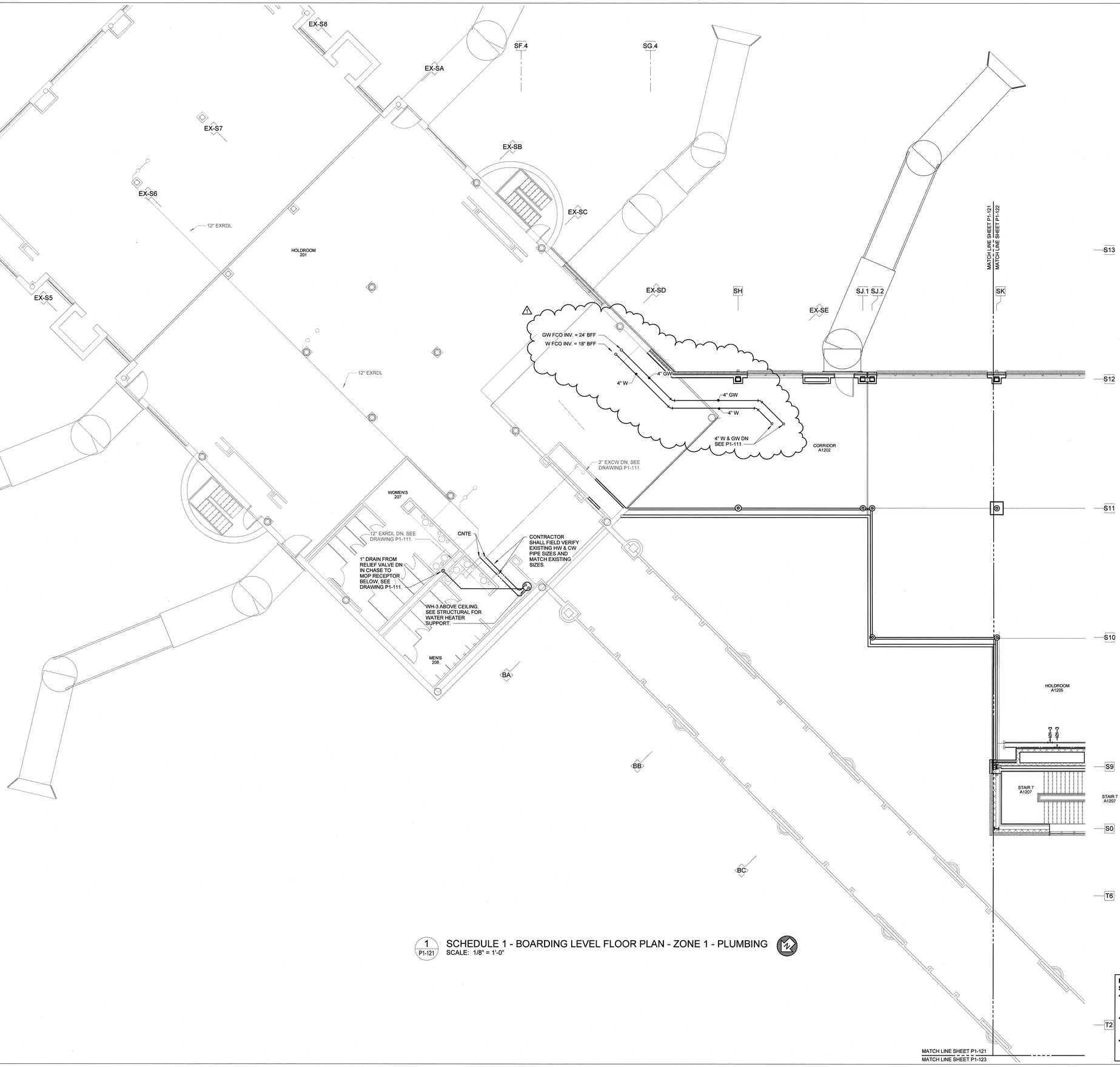
1	7/12/19	AD-01

DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - RAMP LEVEL PLAN ZONE 2 PLUMBING

SHEET NUMBER

P1-112



1 / P1-121 SCHEDULE 1 - BOARDING LEVEL FLOOR PLAN - ZONE 1 - PLUMBING

SCALE: 1/8" = 1'-0"

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:

- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

NORTH CAROLINA PROFESSIONAL SEAL 043164 ENGINEER CASEY D. GILMAN

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

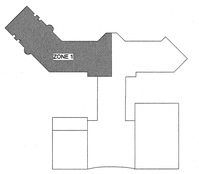
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

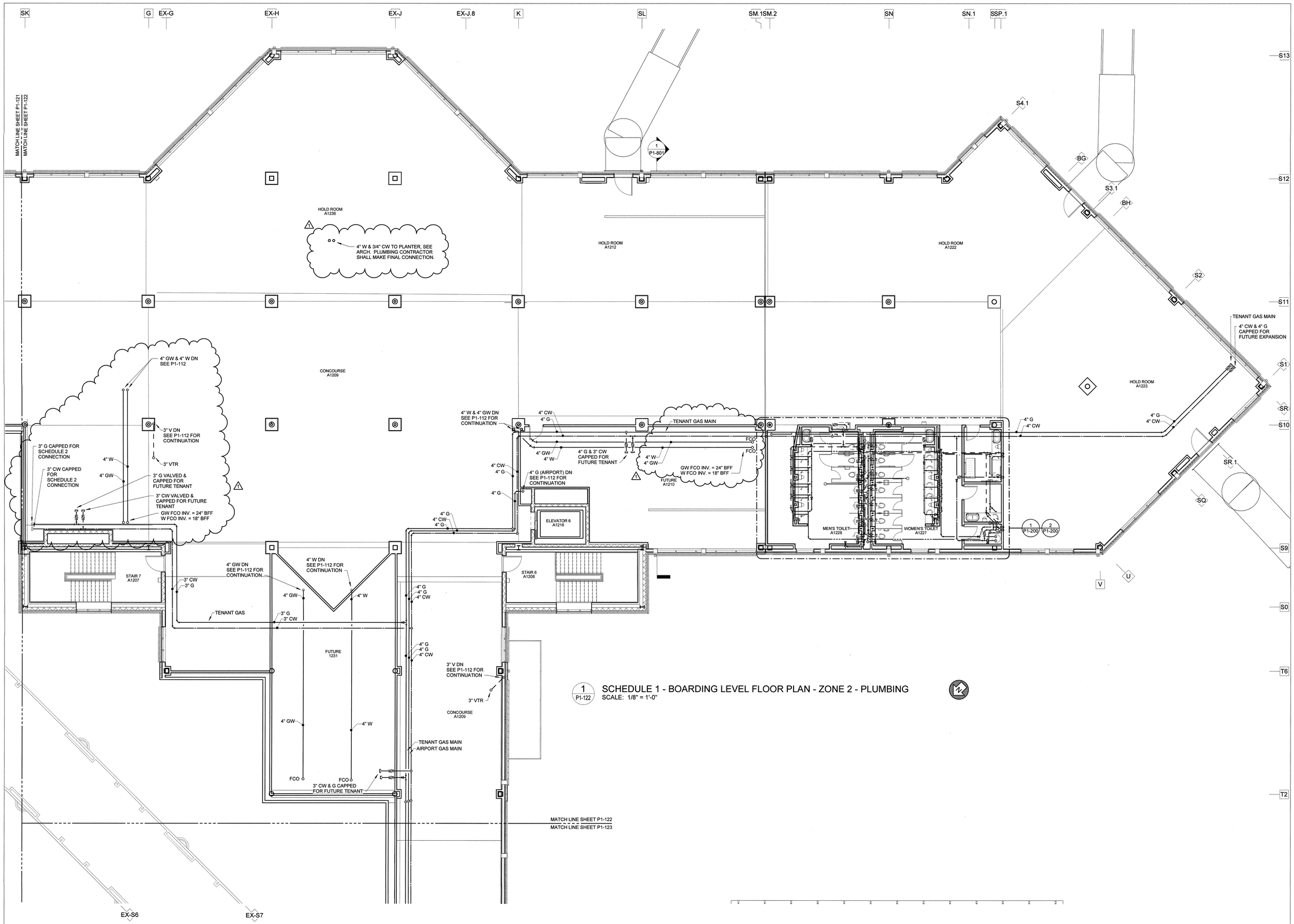
1	7/12/19	AD-01

DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - BOARDING LEVEL PLAN ZONE 1 PLUMBING

SHEET NUMBER

P1-121



1 P1-122 SCHEDULE 1 - BOARDING LEVEL FLOOR PLAN - ZONE 2 - PLUMBING
SCALE: 1/8" = 1'-0"

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:
- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

PROFESSIONAL SEAL 043164 ENGINEER CASEY D. GILMAN 7/12/19

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

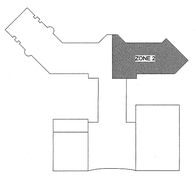
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

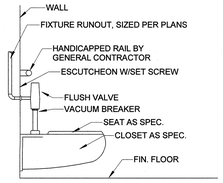
1	7/12/19	AD-01

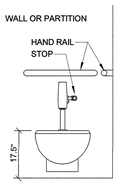
DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 1 - BOARDING LEVEL PLAN ZONE 2 PLUMBING

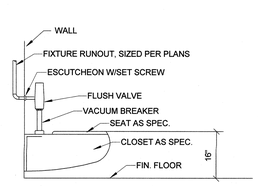
SHEET NUMBER

P1-122

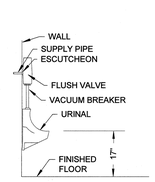




A P2-001 ADULT ADA WATER CLOSET (WC-1) DETAIL
SCALE: NONE



B P2-001 STANDARD WATER CLOSET (WC-2) DETAIL
SCALE: NONE



C P2-001 ADA URINAL (U-1) DETAIL
SCALE: NO SCALE

PLUMBING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	ROUGH-IN SIZES			REMARKS
		WASTE	C.W.	H.W.	
WC-1	WATER CLOSET - WALL HUNG	4"	1-1/4"	-	ADA HEIGHT/DETAIL A/P2-001
WC-2	WATER CLOSET - WALL HUNG	4"	1-1/4"	-	STANDARD/DETAIL B/P2-001
WC-3	WATER CLOSET - FLOOR MOUNTED	4"	1-1/4"	-	ADA HEIGHT/DETAIL J/P2-001
U-1	URINAL	2"	3/4"	-	ADA HEIGHT/DETAIL C/P2-001
U-2	URINAL	2"	3/4"	-	STANDARD/DETAIL D/P2-001
L-1	LAVATORY	1-1/2"	1/2"	1/2"	ADA HEIGHT/DETAIL E&H/P2-001
L-2	COUNTERTOP LAVATORY	1-1/2"	1/2"	1/2"	DETAIL H/P1-001
SK-1	BREAK ROOM SINK	1-1/2"	1/2"	1/2"	
EWC-1	ELECTRIC WATER COOLER	1-1/2"	1/2"	-	DUAL HEIGHT/BOTTLE FILLER/DET. F/P2-001
MR-1	MOP RECEPTOR	3"	1/2"	1/2"	DETAIL G/P2-001
HB-1	HOSE BIBB	-	1/2"	-	MOUNT 12" AFF
HB-2	HOSE BIBB IN BOX	-	1/2"	-	MOUNT 12" AFF
HB-3	WALL HYDRANT	-	3/4"	-	MOUNT 24" AFG
FD-1	FLOOR DRAIN	3"	-	-	
FD-2	FLOOR DRAIN	4"	-	-	
FD-3	HEAVY DUTY FLOOR DRAIN	4"	-	-	
HD-1	HUB DRAIN	3"	-	-	DETAIL K/P2-001
CB-1	ICE MAKER CONNECTION BOX	-	1/2"	-	

WATER HEATER SCHEDULE

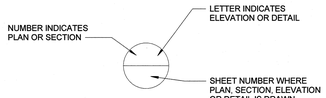
SYMBOL	DESCRIPTION	ROUGH-IN SIZES		TEMP. SETTING	STORAGE CAPACITY	RECOVERY	FUEL	LOAD	LOAD	DETAIL
		C.W.	H.W.							
WH-2	TANK TYPE ELECTRIC WATER HEATER	3/4"	3/4"	140°F	40 GAL.	36 GPH	ELECTRIC	9 kw, 480 V, 3Ø	JANITOR A2211	A/P2-002

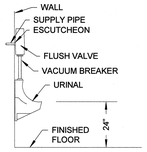
CIRCULATOR PUMP SCHEDULE

SYMBOL	GPM	THD	ELECTRICAL		LOCATION	SERVICE	CONTROL
			HP	VOLTAGE			
CP-2	1	6	1/40	115 V., 1Ø	JANITOR A2205	H.W. RETURN	AQUASTAT

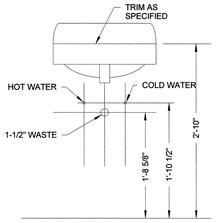
LEGEND

X X X	PIPING TO BE REMOVED (LINE TYPE & NOTES INDICATE SYSTEM)
EXW	EXISTING WASTE PIPING
EXV	EXISTING VENT PIPING
EXC	EXISTING CONDENSATE PIPING
EXRDL	EXISTING ROOF DRAIN LEADER
EXCW	EXISTING COLD WATER PIPING
EXHW	EXISTING HOT WATER PIPING
EXHWR	EXISTING HOT WATER RETURN PIPING
EXG	EXISTING NATURAL GAS PIPING
W	WASTE PIPING
GW	GREASE WASTE PIPING
V	VENT PIPING
GV	GREASE WASTE VENT PIPING
C	CONDENSATE PIPING
RDL	ROOF DRAIN LEADER
CW	COLD WATER PIPING
HW	HOT WATER PIPING
HWR	HOT WATER RETURN PIPING
G	NATURAL GAS PIPING
	BALL/BUTTERFLY VALVE
	BALANCING VALVE
	CHECK VALVE
	GAS VALVE
	SOLENOID VALVE
	VALVE IN RISE
	PIPE ELBOW TURNED DOWN
	PIPE ELBOW TURNED UP
	PIPE TEE TURNED DOWN
	PIPE TEE TURNED UP
	UNION
	STRAINER
	DOUBLE CHECK VALVE BACKFLOW PREVENTER
	REDUCED PRESSURE BACKFLOW PREVENTER
'A'	SHOCK ARRESTER, 'A' INDICATES PLUMBING DRAINAGE INSTITUTE STANDARD SIZE
	ASME PRESSURE TEMPERATURE RELIEF VALVE
VTR	VENT THRU ROOF
GVTR	GREASE VENT THRU ROOF
CO	CLEANOUT
ECO	EXTERIOR CLEANOUT
WCO	WALL CLEANOUT
FCO	FLOOR CLEANOUT
RD	ROOF DRAIN
ORD	OVERFLOW ROOF DRAIN
AFF	ABOVE FINISHED FLOOR
BFF	BELOW FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BFG	BELOW FINISHED GRADE
INV.	INVERT ELEVATION
CNTE	CONNECT NEW TO EXISTING
EXHB	EXISTING HOSE BIBB OR WALL HYDRANT
EXFCO	EXISTING FLOOR CLEAN OUT
EXECO	EXISTING EXTERIOR CLEAN OUT
EXWCO	EXISTING WALL CLEAN OUT
EXFD	EXISTING FLOOR DRAIN
EXHD	EXISTING HUB DRAIN
	4 HOUR FIRE WALL
	2 HOUR FIRE WALL
	1 HOUR FIRE WALL
	UNRATED SMOKE PARTITION

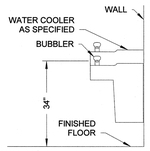




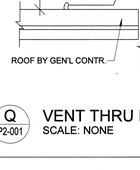
D P2-001 STANDARD URINAL (U-2) DETAIL
SCALE: NO SCALE



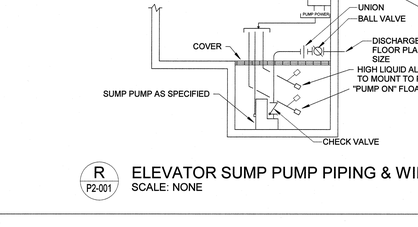
E P2-001 WALL HUNG ADA LAVATORY (L-1) DETAIL Copy 1
SCALE: NONE



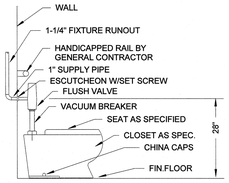
F P2-001 DUAL HEIGHT EWC (EWC-1) DETAIL
SCALE: NONE

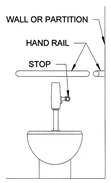


G P2-001 MOP RECEPTOR (MR-1) DETAIL
SCALE: NONE

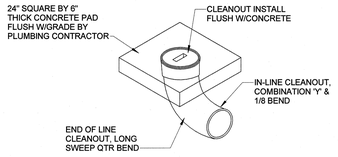


H P2-001 SENSOR LAVATORY (L-1, L-2) FAUCET PIPING DIAGRAM
SCALE: NO SCALE

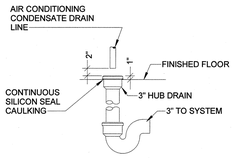




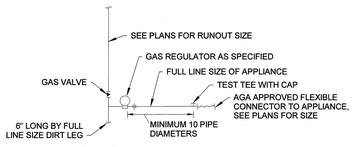
J P2-001 ADULT ADA WATER CLOSET (WC-3) DETAIL
SCALE: NONE



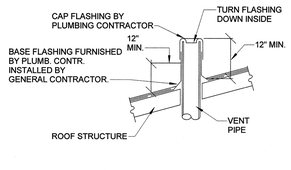
K P2-001 EXTERIOR CLEANOUT DETAIL
SCALE: NONE



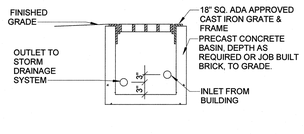
L P2-001 HUB DRAIN (HD-1) DETAIL
SCALE: NONE



M P2-001 TYPICAL GAS PIPING CONNECTION
SCALE: NO SCALE



N P2-001 VENT THRU ROOF DETAIL
SCALE: NONE



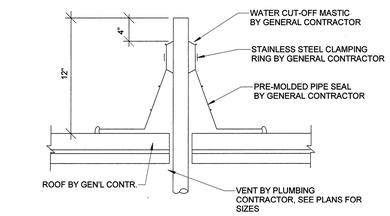
P P2-001 CONDENSATE RELIEF BASIN
SCALE: NONE

GENERAL NOTES:

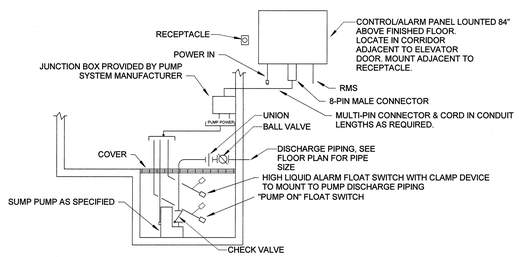
1. EXISTING INFORMATION IS BASED ON A FIELD SURVEY AND EXISTING PLANS. SOME INFORMATION PRESENTED IS ESTIMATED OR ASSUMED BASED ON EXPERIENCE. CONTRACTOR SHALL FIELD VERIFY CONDITIONS DURING THE COURSE OF WORK AND ALERT THE ARCHITECT AND/OR ENGINEER OF DIFFERENCES BETWEEN FIELD CONDITIONS AND THE DRAWINGS THAT WILL PREVENT ANY PORTIONS OF THE PLUMBING SCOPE OF WORK FROM BEING INSTALLED AS DESIGNED.

TOTAL CONNECTED LOAD

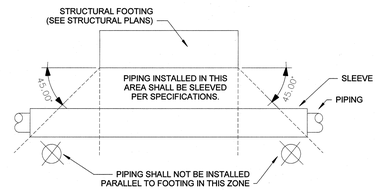
WASTE FIXTURE UNITS =	424	F.U.
GREASE WASTE FIXTURE UNITS =	FUTURE	
TOTAL WASTE FIXTURE UNITS =	424	F.U.
COLD WATER DEMAND =	208	GPM
HOT WATER DEMAND =	48	GPM
GAS LOADS		
BUILDING HEATING DEMAND =	17,260	CFH
WATER HEATING DEMAND =	400	CFH
TOTAL CONNECTED LOAD =	17,660	CFH



Q P2-001 VENT THRU ROOF DETAIL
SCALE: NONE



R P2-001 ELEVATOR SUMP PUMP PIPING & WIRING SCHEMATIC
SCALE: NONE



S P2-001 FOOTING DETAIL
SCALE: NONE

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:
- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

PROFESSIONAL ENGINEER SEAL 043164 CASEY D. GILLMAN
7/12/19

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

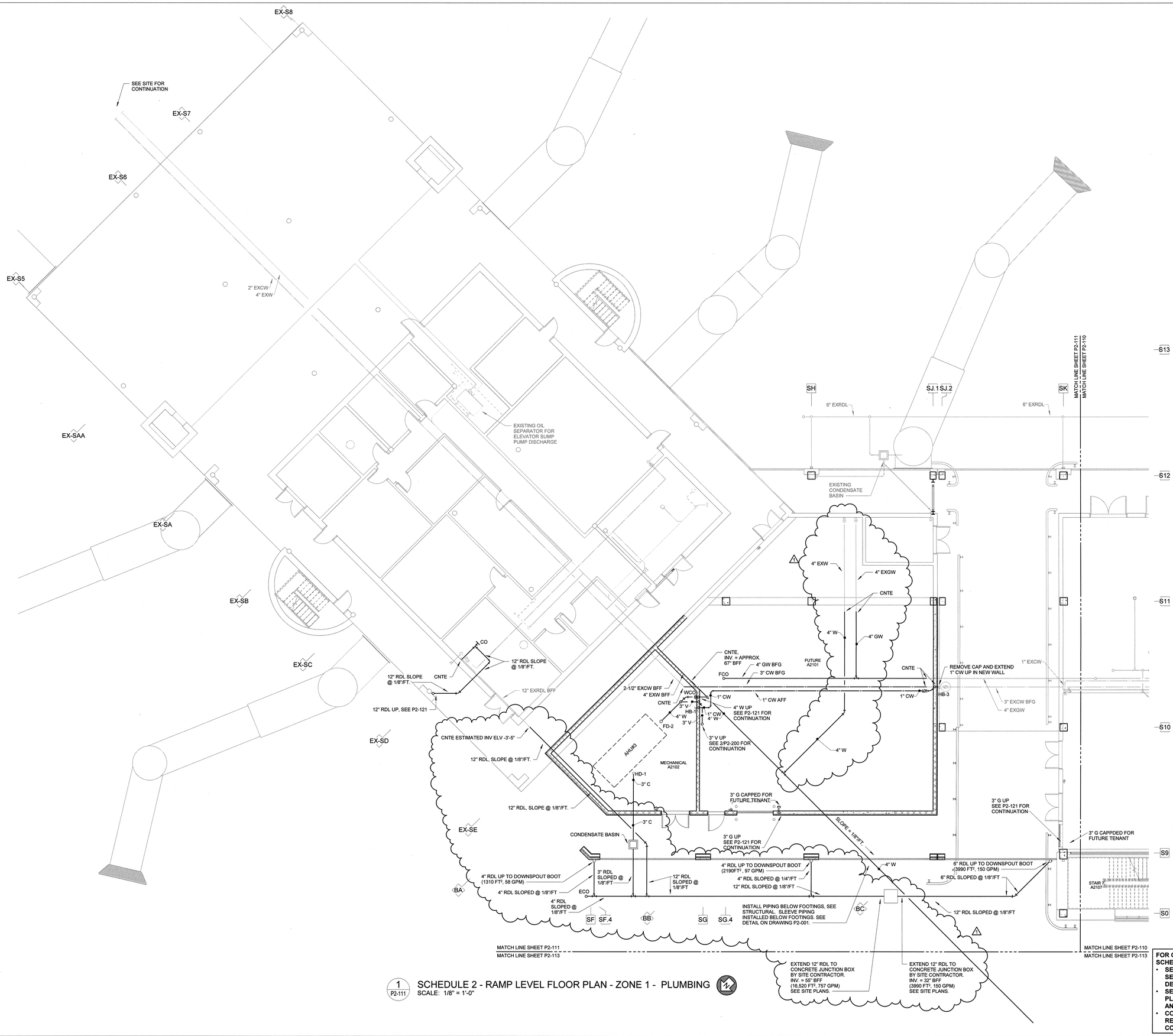
REVISIONS

1	7/12/19	AD-01

DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

PLUMBING LEGEND, SCHEDULES, & DETAILS

SHEET NUMBER
P2-001



1 / P2-111 SCHEDULE 2 - RAMP LEVEL FLOOR PLAN - ZONE 1 - PLUMBING

SCALE: 1/8" = 1'-0"

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:

- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

NORTH CAROLINA PROFESSIONAL SEAL 043164 ENGINEER CASEY D. GILMAN
7/12/19

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

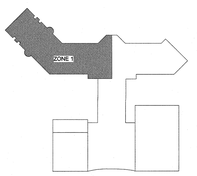
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

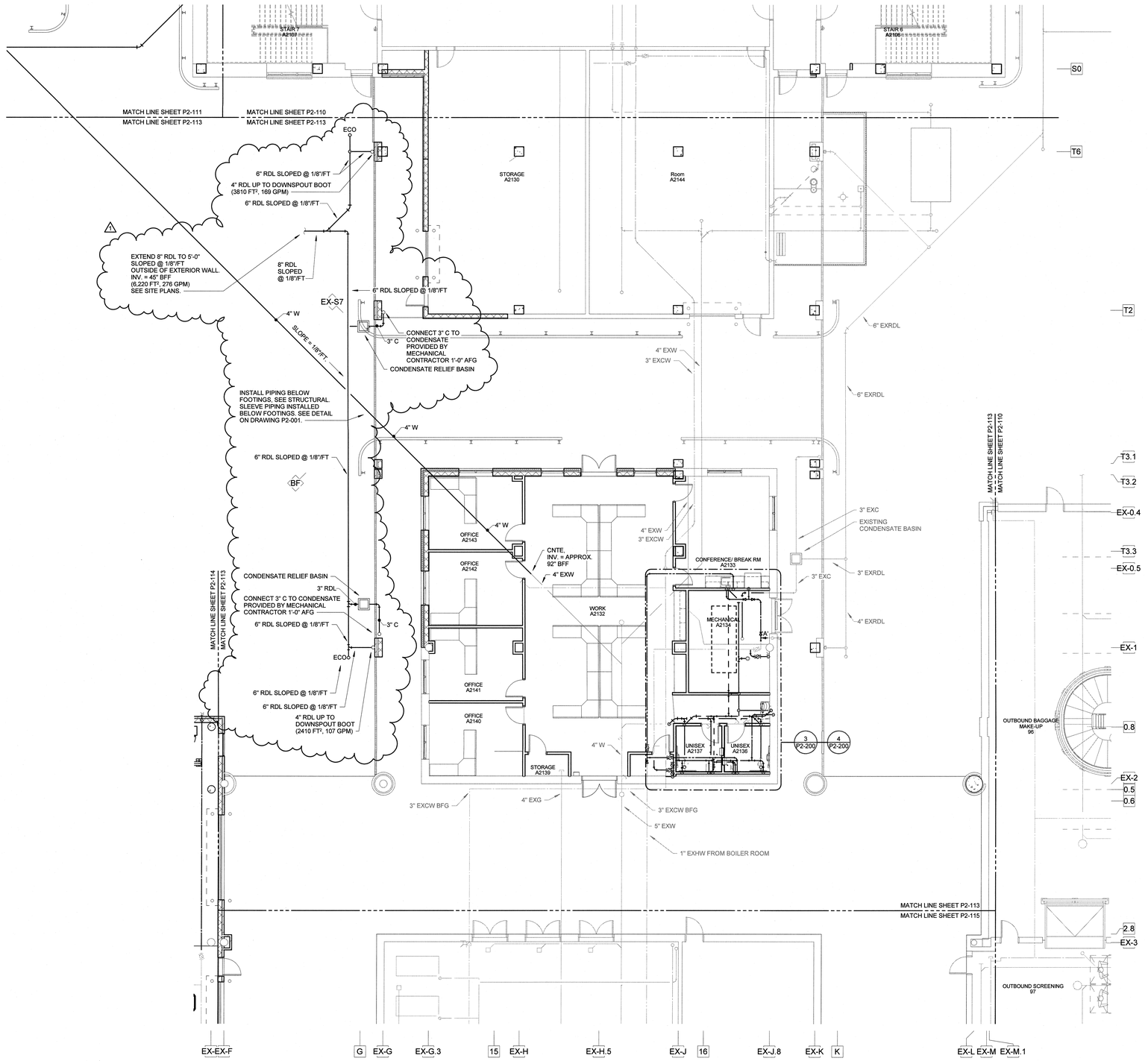
1	7/12/19	AD-01

DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - RAMP LEVEL FLOOR PLAN ZONE 1 PLUMBING

SHEET NUMBER

P2-111



1 / P2-113 SCHEDULE 2 - RAMP LEVEL FLOOR PLAN - ZONE 3 - PLUMBING

SCALE: 1/8" = 1'-0"

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:

- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

NORTH CAROLINA PROFESSIONAL SEAL 043164 ENGINEER CASEY D. GILMAN

7/12/19

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

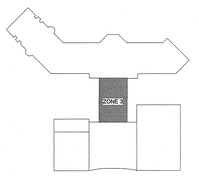
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
•
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

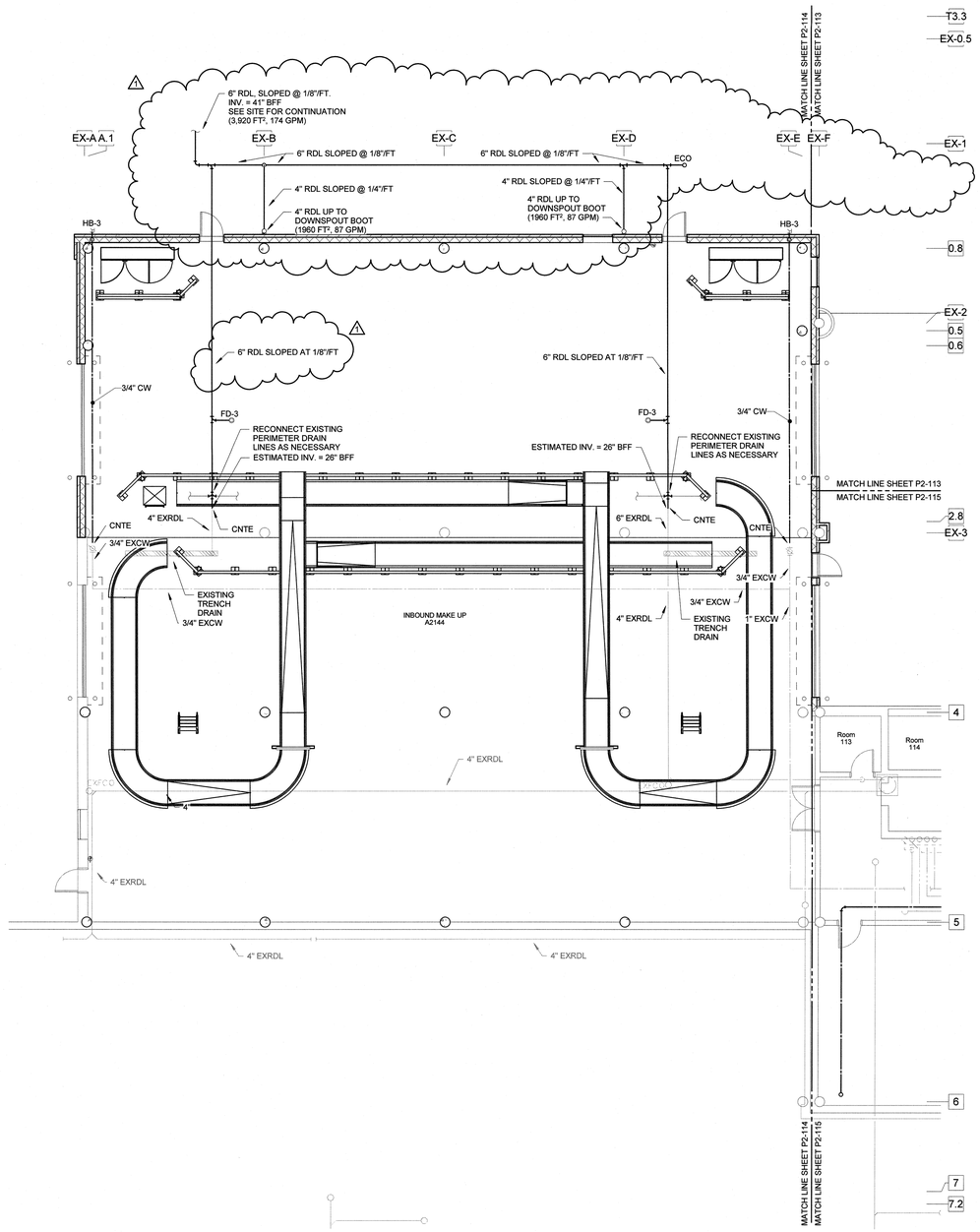
1	7/12/19	AD-01

DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - RAMP LEVEL FLOOR PLAN ZONE 3 PLUMBING

SHEET NUMBER

P2-113



1 / P2-114 SCHEDULE 2 - RAMP LEVEL FLOOR PLAN - ZONE 4 - PLUMBING (12)
SCALE: 1/8" = 1'-0"

NOTE: UNLESS OTHERWISE NOTED, WORK INDICATED ON THIS SHEET SHALL BE PRICED AS PART OF ALTERNATE 1.

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:
- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

NORTH CAROLINA PROFESSIONAL SEAL 043164 ENGINEER CASEY D. GILMAN
7/12/19

THE WILSON GROUP
- ARCHITECTS -
PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

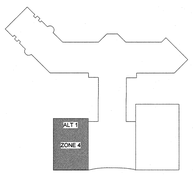
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

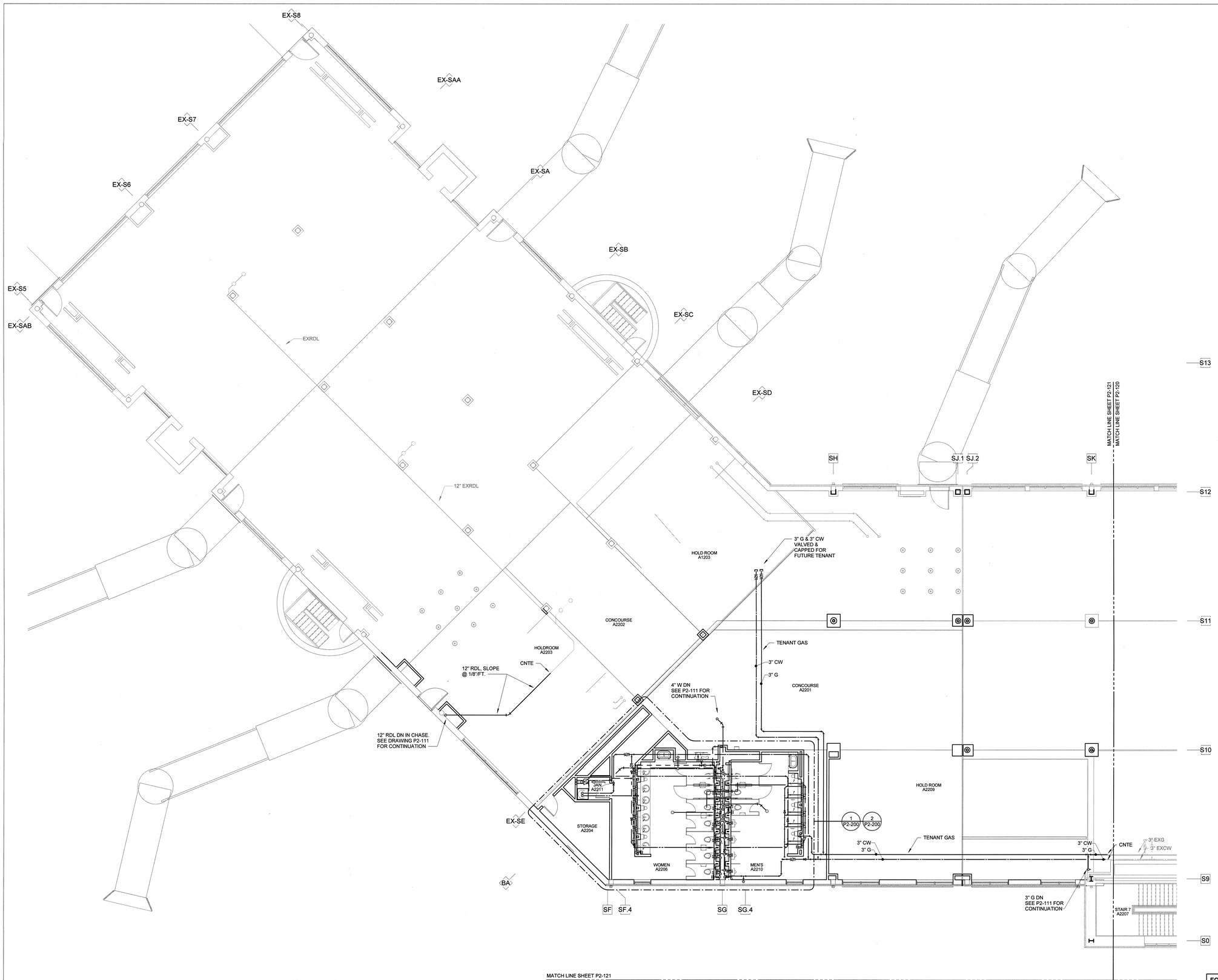
1	7/12/19	AD-01

DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - RAMP LEVEL FLOOR PLAN ZONE 4 PLUMBING ALTERNATE 1

SHEET NUMBER

P2-114



1 / P2-121 SCHEDULE 2 - BOARDING LEVEL FLOOR PLAN - ZONE 1 - PLUMBING

SCALE: 1/8" = 1'-0"

FOR CONTRACT 3 SCHEDULE 1 AND SCHEDULE 2 WORK PHASES:

- **SEE ARCHITECTURAL PLANS A-01* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **SEE BAGGAGE HANDLING SYSTEM PLANS B-* SERIES FOR ADDITIONAL AND DETAILED PHASING INFORMATION.**
- **COORDINATE ACTUAL PHASED WORK REQUIREMENTS WITH THE GENERAL CONTRACTOR'S SCHEDULE.**

ILM

TERMINAL IMPROVEMENTS CONTRACT 3

Wilmington International Airport
1740 Airport Boulevard, Suite 12
Wilmington, NC 28405

CHEATHAM & ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
NC LICENSE# C-1073

JOB # 19005

PROFESSIONALLY SEALED 043164 ENGINEER CASEY D. GILMAN
7/12/19

THE WILSON GROUP
- ARCHITECTS -

PO Box 5510 Charlotte, NC 28299
704-331-9747 • www.twgarchitects.com

PROJECT MANAGER & CIVIL ENGINEER
TALBERT & BRIGHT

CONSULTING ARCHITECT
LS3P

STRUCTURAL ENGINEER
STEWART

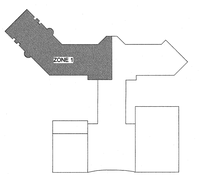
FP/P/M/E ENGINEER
CHEATHAM & ASSOC.

BAGGAGE HANDLING CONSULTANTS
BNP

AIRCRAFT SUPPORT SYSTEMS
DK CONSULTANTS

SPECIALTY LIGHTING CONSULTANT
HARTRANFT

SIGNAGE & WAYFINDING
TAKEFORM



KEY PLAN

COPYRIGHT © 2019
THE WILSON GROUP ARCHITECTS
ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE WILSON GROUP ARCHITECTS

REVISIONS

DATE 06/28/19
PROJECT NUMBER 9202-000
SHEET TITLE

SCHEDULE 2 - BOARDING LEVEL FLOOR PLAN ZONE 1 PLUMBING

SHEET NUMBER

P2-121