

# DULUTH INTERNATIONAL AIRPORT NEW PASSENGER TERMINAL BUILDING

Director of Airports: Brian Ryks 4701 GRINDEN DRIVE - DULUTH INTERNATIONAL AIRPORT **DULUTH, MINNESOTA 55811** 

FAA AIP NO. \_\_ RS&H PROJ. NO. 213-1882-091

### DULUTH AIRPORT AUTHORITY BOARD OF DIRECTORS

- **President: Nancy Norr**
- Conrad Firling
- Vice President: John Eagleton
  - Roy Niemi
- Secretary: Robert C. Pearson
  - Roger Wedin
  - **Michael Lundstrom**

# VOLUME 1 OF 2



90% REVIEW NOT FOR CONSTRUCTION

Date:	
	License #
ARCHITECTU	JRAL CERTIFICATION
prepared by marking the property of the proper	y that the architectural plans, specifications, or report ne or under my direct supervision and that I am a duly essional Architect under the laws of the State of Illino
Signature:	
Date:	License #
-	L CERTIFICATION
prepared by n Licensed Prof	y that the structural plans, specifications, or report wane or under my direct supervision and that I am a duly essional Engineer under the laws of the State of Illino
Signature:	
Date:	License #
I hereby certify prepared by multicensed Prof	L CERTIFICATION  y that the mechanical plans, specifications, or report vote or under my direct supervision and that I am a duly essional Engineer under the laws of the State of Illino
Signature:	
Date:	License #
PLUMBING C	ERTIFICATION
	y that the plumbing plans, specifications, or report wa ne or under my direct supervision and that I am a duly
prepared by n Licensed Prof	essional Engineer under the laws of the State of Illino
prepared by marked by mark	

**Print Name** 

License #

MBJ 501 LAKE AVENUE SOUTH TEL: 218.722.1056







**STRUCTURAL** 

S001 TITLE SHEET

S002 GENERAL STRUCTURAL NOTES

S003 GENERAL STRUCTURAL NOTES

S110 FOUNDATION PLAN - AREA A

S111 FOUNDATION PLAN - AREA B

S114 TUG ROAD FOUNDATION PLAN

S101 OVERALL FIRST LEVEL FLOOR PLAN

S102 OVERALL SECOND LEVEL FLOOR PLAN

S112 CANOPY FOUNDATION PLAN - AREA A

S117 CANOPY FRAMING PLAN - AREA A

S118 CANOPY FRAMING PLAN - AREA B

S119 TUG ROAD ROOF FRAMING PLAN

S401 COLUMN SCHEDULE AND DETAILS

S301 BRACING ELEVATIONS

S501 STRUCTURAL DETAILS

S502 STRUCTURAL DETAILS

S503 STRUCTURAL DETAILS

S504 STRUCTURAL DETAILS

S505 STRUCTURAL DETAILS

S701 STRUCTURAL DETAILS

S702 STRUCTURAL DETAILS

S703 STRUCTURAL DETAILS

S704 STRUCTURAL DETAILS

S705 STRUCTURAL DETAILS

S302 ELEVATIONS

S113 CANOPY FOUNDATION PLAN - AREA B

S115 SECOND LEVEL FRAMING PLAN - AREA A

S116 SECOND LEVEL FRAMING PLAN - AREA B

S120 THIRD LEVEL FRAMING PLAN - AREA A

S121 THIRD LEVEL FRAMING PLAN - AREA B

S122 ROOF LEVEL FRAMING PLAN - AREA A

S123 ROOF LEVEL FRAMING PLAN - AREA B

S103 OVERALL THIRD LEVEL FLOOR PLAN

S104 OVERALL ROOF LEVEL FLOOR PLAN

G101 DRAWING LIST

L100 LANDSCAPE OVERALL PLAN

L101 LANDSCAPE PLAN (AREA 1)

L102 LANDSCAPE PLAN (AREA 2)

L103 LANDSCAPE PLAN (AREA 3)

L104 LANDSCAPE PLAN (AREA 4)

L105 LANDSCAPE PLAN (AREA 5)

L106 LANDSCAPE PLAN (AREA 6)

L107 LANDSCAPE PLAN (AREA 7)

L108 LANDSCAPE PLAN (AREA 8)

AS100 OVERALL SITE PLAN

A002 SYMBOLS AND ADA

A104 OVERALL ROOF PLAN

A110 FIRST FLOOR AREA A

A111 FIRST FLOOR AREA B

A112 SECOND FLOOR AREA A

A113 SECOND FLOOR AREA B

A201 OVERALL FIRST FLOOR RCP

A203 OVERALL THIRD FLOOR RCP

A202 OVERALL SECOND FLOOR RCP

A210 ENLARGED FIRST FLOOR RCP AREA A

A211 ENLARGED FIRST FLOOR RCP AREA B

A212 ENLARGED SECOND FLOOR RCP AREA A

A213 ENLARGED SECOND FLOOR RCP AREA B

A214 ENLARGED THIRD FLOOR RCP AREA A

A215 ENLARGED THIRD FLOOR RCP AREA B

A530 EXTERIOR SYSTEM SHEET - VERTICAL CIRCULATION

A531 EXTERIOR SYSTEM SHEET - VERTICAL CIRCULATION A532 EXTERIOR SYSTEM SHEET - VERTICAL CIRCULATION

A533 EXTERIOR SYSTEM SHEET - VERTICAL CIRCULATION

A540 INTERIOR SYSTEM SHEET - VERTICAL CIRCULATION

A114 THIRD FLOOR AREA A

A115 THIRD FLOOR AREA B

A216 ENLARGED MISC RCPS

A301 EXTERIOR ELEVATIONS

A302 EXTERIOR ELEVATIONS

A303 CANOPY ELEVATIONS

A310 BUILDING SECTIONS

A311 BUILDING SECTIONS

A312 BUILDING SECTIONS

A313 BUILDING SECTIONS

A401 WALL SECTIONS

A402 WALL SECTIONS

A403 WALL SECTIONS

A510 PLAN DETAILS

A511 PLAN DETAILS

A512 PLAN DETAILS

A520 SECTION DETAILS

A560 MILLWORK ELEVATIONS

A561 MILLWORK ELEVATIONS

A601 INTERIOR ELEVATIONS

A602 INTERIOR ELEVATIONS

A603 INTERIOR ELEVATIONS

A604 INTERIOR ELEVATIONS

A604 INTERIOR ELEVATIONS

A605 INTERIOR ELEVATIONS

A606 INTERIOR ELEVATIONS

A607 INTERIOR ELEVATIONS

A620 CEILING DETAILS

A621 CEILING DETAILS

A701 DOOR SCHEDULES

A702 DOOR DETAILS

A563 MILLWORK DETAILS

A562 MILLWORK ELEVATIONS AND DETAILS

A610 INTERIOR SYSTEM SHEET - RESTROOMS

A611 INTERIOR SYSTEM SHEET - RESTROOMS

A612 INTERIOR SYSTEM SHEET - RESTROOMS

A710 EXTERIOR SYSTEM SHEET - LANDSIDE CURTAIN WALL

A711 EXTERIOR SYSTEM SHEET - LANDSIDE CURTAIN WALL

A712 EXTERIOR SYSTEM SHEET - AIRSIDE CURTAIN WALL

A713 EXTERIOR SYSTEM SHEET - AIRSIDE CURTAIN WALL

A714 EXTERIOR SYSTEM SHEET - ENTRY VESTIBULE

A715 EXTERIOR SYSTEM SHEET - CORE WALL A720 EXTERIOR SYSTEM SHEET - TUG TUNNEL

A721 EXTERIOR SYSTEM SHEET - TUG TUNNEL

A722 EXTERIOR SYSTEM SHEET - TUG TUNNEL

A723 EXTERIOR SYSTEM SHEET - CANOPY

A812 FIRST FLOOR FURNITURE PLAN AREA A

A813 FIRST FLOOR FURNITURE PLAN AREA B

A815 SECOND FLOOR FURNITURE PLAN AREA A

A816 SECOND FLOOR FURNITURE PLAN AREA B

A818 THIRD FLOOR FURNITURE PLAN ADMIN

A801 INTERIOR FINISH SCHEDULES

A802 INTERIOR MATERIALS SCHEDULE

A811 FIRST FLOOR FURNITURE PLAN

A814 SECOND FLOOR FURNITURE PLAN

A817 THIRD FLOOR FURNITURE PLAN

LS101 FIRST FLOOR LIFE SAFETY

LS103 THIRD FLOOR LIFE SAFETY

LS102 SECOND FLOOR LIFE SAFETY

A622 INTERIOR SYSTEM SHEET - CEILINGS

A623 FEATURE WALL SYSTEM DETAILS

A624 FEATURE WALL SYSTEM DETAILS

A003 PARTITION TYPES

AS101 ARCHITECTURAL SITE PLAN

A101 OVERALL FIRST FLOOR PLAN

A103 OVERALL THIRD FLOOR PLAN

A102 OVERALL SECOND FLOOR PLAN

A001 ABBREIVATIONS AND GENERAL NOTES

L109 LANDSCAPE NOTES AND DETAILS

L110 LANDSCAPE NOTES AND DETAILS

**LANDSCAPING** 

**ARCHITECTURAL** 

ZONING DATA

PROJECT LOCATION:

PROPOSED USE:

**GROSS SITE AREA**:

FLOOR AREA RATIO:

**OFF-STREET PARKING:** 

ON-STREET PARKING:

APPLICABLE CODES:

**OCCUPANCY**:

**BUILDING HEIGHT:** 

TOTAL BUILDING AREA:

FIRST FLOOR AREA:

SECOND\_FLOOR\_AREA:

OFF-STREET LOADING AREAS: --

THIRD FLOOR AREA:

**ZONING**:

DULUTH INTERNATIONAL AIRPORT

4701 GRINDEN DRIVE

AIRPORT

N.A.

\_\_\_

\_\_\_

\_\_\_

DULUTH, MINNESOTA 55811

THIS PROJECT WILL COMPLY WITH ALL IAC 400.310 - NEW

2. ALL PASSENGER ELEVATORS PROVIDED IN A BUILDING OR FACILITY

SHALL BE ACCESSIBLE. SHALL SERVE ALL LEVELS OF A BUILDING OR

FACILITY, SHALL BE ON AN ACCESSIBLE ROUTE AND SHALL COMPLY WITH

3. ALL DOORS LEADING TO REQUIRED ACCESSIBLE ROOMS AND SPACES

HARDWARE (OR EQUAL), HAVE A MININUM OPENING FORCE OF 5 LBF,

4. ALL DOORS LEADING TO HAZARDOUS ROOMS WILL COMPLY WITH THE

ABOVE AND, IN ADDITION, WILL HAVE KNURLED OPERATING HARDWARE

5. ALL ENVIRONMENTAL CONTROLS AND OPERATING MECHANISMS WILL

COMPLY WITH IAC 400.310(r) (FRONT REACH BETWEEN 15" AND 48"

6. ALL EMERGENCY WARNING ALARMS, WHERE PROVIDED, SHALL BE

BOTH AUDIBLE AND VISUAL AND COMPLY WITH IAC 400.310(s). THE

SYNCHRONIZED AND IN COMPLIANCE FOR INTENSITY AND FREQUENCY,

ALL TENANT SPACES WILL BE WIRED FOR FUTURE INSTALLATION OF

EMERGENCY WARNING ALARMS ON AN AS NEEDED BASIS (SEE SECURITY

7. ANY NEW REQUIRED SIGNAGE IN CONTRACT SHALL BE INSTALLED AS

8. TOILET ROOMS SERVING PUBLIC AREAS (I.E., LOVVIES, CONCOURSE,

VISUAL ALARMS WILL BE FLASHING TYPE WHERE THE FLASHING IS

SHALL BE A MINIMUM OF 3'-0" WIDE, HAVE LEVER OPERATED

1. THE ENTRANCE IS ACCESSIBLE PER IAC 400.310(k).

AND FULLY COMPLY WITH IAC 400.310(j).

(I.E., ELECTRICAL/TELEPHONE ROOMS).

REQUIRED PER IAC 400.310(u).

ETC.) WILL FULLY COMPLY WITH IAC 400.310(n).

A. GENERAL REQUIREMENTS

THE ASME A 17.1-1996.

CONSTRUCTION.

DRAWINGS).

Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com

**DULUTH AIRPORT** 

**AUTHORITY** 

DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER** TERMINAL

CONSULTANTS

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: **COSENTINI ASSOCIATES INC.** 

1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031 Baggage Handling Systems Consultants:

BNP ASSOCIATES INC. 1 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants: APPOLD DESIGN

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

SEAL

DATE

REVISIONS DESCRIPTION

**DATE ISSUED: 04-12-10** REVIEWED BY: SBS/TC

DRAWN BY: MKG/MI DESIGNED BY: SBS/TC

**AEP PROJECT NUMBER** 

213-1882-091 (C) 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

**DRAWING** LIST

SHEET NUMBER **G101** 

> 90% NOT FOR CONSTRUCTION

G101 DRAWING LIST **MECHANICAL** 

> M001 MECHANICAL LEGEND M002 MECHANICAL SYMBOLS

M108 ENLARGED UNDERGROUND MECHANICAL PLAN AREA A M109 ENLARGED UNDERGROUND MECHANICAL PLAN AREA B M110 ENLARGED FIRST FLOOR MECHANICAL PLAN AREA A M111 ENLARGED FIRST FLOOR MECHANICAL PLAN AREA B M112 ENLARGED SECOND FLOOR MECHANICAL PLAN AREA A M113 ENLARGED SECOND FLOOR MECHANICAL PLAN AREA B M114 ENLARGED THIRD FLOOR MECHANICAL PLAN AREA A M115 ENLARGED THIRD FLOOR MECHANICAL PLAN AREA B M116 ENLARGED ROOF MECHANICAL PLAN AREA A

M117 ENLARGED ROOF MECHANICAL PLAN AREA B MP110 ENLARGED FIRST FLOOR MECH. PIPING PLAN AREA A MP111 ENLARGED FIRST FLOOR MECH. PIPING PLAN AREA B MP112 ENLARGED SECOND FLOOR MECH. PIPING PLAN AREA A MP113 ENLARGED SECOND FLOOR MECH. PIPING PLAN AREA B MP113 ENLARGED THIRD FLOOR MECH. PIPING PLAN AREA A MP114 ENLARGED THIRD FLOOR MECH. PIPING PLAN AREA B

M201 DIESEL GENERATOR MECHANICAL PLAN & DETAILS M202 MECHANICAL SECTIONS & ELEVATIONS

M301 HEATING HOT WATER FLOW DIAGRAM M302 CHILLED WATER FLOW DIAGRAM

M401 MECHANICAL EQUIPMENT SCHEDULES I M402 MECHANICAL EQUIPMENT SCHEDULES II

M501 MECHANICAL DETAILS I M502 MECHANICAL DETAILS II M503 MECHANICAL DETAILS III

**ELECTRICAL** 

E001 ELECTRICAL SYMBOLS E002 ELECTRICAL SITE PLAN

E110 ENLARGED FIRST FLOOR ELECTRICAL PLAN AREA A E111 ENLARGED FIRST FLOOR ELECTRICAL PLAN AREA B E112 ENLARGED SECOND FLOOR ELECTRICAL PLAN AREA A E113 ENLARGED SECOND FLOOR ELECTRICAL PLAN AREA B E114 ENLARGED THIRD FLOOR ELECTRICAL PLAN AREA A E115 ENLARGED THIRD FLOOR ELECTRICAL PLAN AREA B E116 ELECTRICAL ROOF PLAN E117 RAMP ELECTRICAL POWER AND LIGHTING PLAN

EL110 ENLARGED FIRST FLOOR LIGHTING PLAN AREA A EL111 ENLARGED FIRST FLOOR LIGHTING PLAN AREA B EL112 ENLARGED SECOND FLOOR LIGHTING PLAN AREA A EL113 ENLARGED SECOND FLOOR LIGHTING PLAN AREA B EL114 ENLARGED THIRD FLOOR LIGHTING PLAN AREA A EL115 ENLARGED THIRD FLOOR LIGHTING PLAN AREA B

E200 ENLARGED EQUIPMENT ROOMS

E201 GROUNDING PLAN

E300 POWER RISER DIAGRAM E301 FIRE ALARM AND GROUNDING RISER DIAGRAMS

E400 ELECTRICAL ABBREVIATIONS AND TABLES E401 LIGHTING FIXTURE SCHEDULE E402 ELECTRICAL EQUIPMENT SCHEDULE AND NOTES

E403 PANEL SCHEDULES E404 PANEL SCHEDULES E405 PANEL SCHEDULES E406 PANEL SCHEDULES E407 PANEL SCHEDULES E408 PANEL SCHEDULES

<u>PLUMBING</u>

PO-01 PLUMBING SYMBOL LIST, ABBREVIATIONS AND DRAWING LIST

P1-100 ENLARGED UNDERGROUND PLUMBING PLAN AREA A P1-101 ENLARGED UNDERGROUND PLUMBING PLAN AREA B P1-102 ENLARGED UNDERGROUND PLUMBING PLAN AREA A P1-103 ENLARGED UNDERGROUND PLUMBING PLAN AREA B

P1-10 ENLARGED FIRST FLOOR PLUMBING PLAN AREA A P1-11 ENLARGED FIRST FLOOR PLUMBING PLAN AREA B P1-12 ENLARGED SECOND FLOOR PLUMBING PLAN AREA A P1-13 ENLARGED SECOND FLOOR PLUMBING PLAN AREA B P1-14 ENLARGED THIRD FLOOR PLUMBING PLAN AREA A P1-15 ENLARGED THIRD FLOOR PLUMBING PLAN AREA B P1-16 ENLARGED ROOF LEVEL PLUMBING PLAN AREA A

P1-17 ENLARGED ROOF LEVEL PLUMBING PLAN AREA B P1-18 ENLARGED FIRST FLOOR PLUMBING PLAN AREA A CANOPY P1-19 ENLARGED FIRST FLOOR PLUMBING PLAN AREA B CANOPY P1-20 ENLARGED SECOND FLOOR PLUMBING PLAN AREA A CANOPY ROOF P1-21 ENLARGED SECOMD FLOOR PLUMBING PLAN AREA B CANOPY ROOF P1-22 TUG RAMP ROOF PLUMBING PLAN

P3-01 WATER SCHEMATIC, GAS SCHEMATIC, AND STORM RISER DIAGRAM

P3-02 COLD & HOT WATER RISER DIAGRAM P3-03 WASTE AND VENT RISER DIAGRAM

P4-01 PLUMBING DETAILS P4-02 PLUMBING DETAILS P4-03 PLUMBING DETAILS

P5-01 PLUMBING SCHEDULES

FIRE PROTECTION

FO-01 FIRE PROTECTION SYMBOL LIST, ABBREVIATIONS AND DRAWING INDEX

F1-10 ENLARGED FIRST FLOOR FIRE PROTECTION PLAN AREA A F1-11 FNLARGED FIRST FLOOR FIRE PROTECTION PLAN AREA B F1-12 ENLARGED SECOND FLOOR FIRE PROTECTION PLAN AREA A F1-13 ENLARGED SECOND FLOOR FIRE PROTECTION PLAN AREA B F1-14 ENLARGED THIRD FLOOR FIRE PROTECTION PLAN AREA A F1-15 ENLARGED THIRD FLOOR FIRE PROTECTION PLAN AREA B

F4-01 FIRE PROTECTION DETAILS

F0-02 FIRE PROTECTION FM200

F5-01 FIRE PROTECTION SCHEDULES AND RISER DIAGRAM

PAGING SYSTEM

PG000 PAGING SYSTEM TITLE SHEET NOTES & PG001 PAGING SYSTEM EQUIPMENT SCHEDULE

PG101 OVERALL FIRST FLOOR PLAN - FACILITY PG102 OVERALL SECOND FLOOR PLAN - FACILITY PG103 OVERALL THIRD FLOOR PLAN - FACILITY

PG201 OVERALL FIRST FLOOR RCP - FACILITY PG201A PARTIAL FIRST FLOOR RCP - FACILITY PG202 OVERALL SECOND FLOOR RCP - FACILITY PG203 OVERALL THIRD FLOOR RCP - FACILITY P301 OVERALL FIRST FLOOR PLAN - INFRASTRUCTURE

P302 OVERALL SECOND FLOOR PLAN - INFRASTRUCTURE P304 OVERALL THIRD FLOOR PLAN - INFRASTRUCTURE PG401 OVERALL FIRST FLOOR RCP - INFRASTRUCTURE PG401A OVERALL FIRST FLOOR RCP - INFRASTRUCTURE

PG402 OVERALL SECOND FLOOR RCP - INFRASTRUCTURE

PG403 OVERALL THIRD FLOOR RCP - INFRASTRUCTURE PG500 EQUIPMENT ROOMS - ENLARGED PLANS

PG800 BUILDING DETAILS PG801 INFRASTRUCTURE DETAILS

PG700 PAGING SYSTEM SIGNAL FLOW DIAGRAMS PG702 PAGING SYSTEM SIGNAL FLOW DIAGRAMS

PG800 ELEVATIONS

BAGGAGE SYSTEM

BG001 BAGGAGE HANDLING SYSTEM LEGEND SYMBOLS AND ABBREVIATIONS BG002 BAGGAGE HANDLING SYSTEM LEGEND SYMBOLS AND ABBREVIATIONS

B1001 BAGGAGE HANDLING SYSTEM TSA REIMBURSABLE PLAN

B2100 BAGGAGE HANDLING SYSTEM GENERAL ARRANGEMENT B2101 BAGGAGE HANDLING SYSTEM PARTIAL PLAN CLAIM HALL B2102 BAGGAGE HANDLING SYSTEM PARTIAL PLAN TICKETING AND CBIS B2103 BAGGAGE HANDLING SYSTEM CBIS ENLARGED PLAN

B3101 BAGGAGE HANDLING SYSTEM SECTIONS B3102 BAGGAGE HANDLING SYSTEM SECTIONS

B7101 BAGGAGE HANDLING SYSTEM CLAIM CONTROL STATION LAYOUT B7102 BAGGAGE HANDLING SYSTEM CBIS CONTROL STATION LAYOUT

B8101 BAGGAGE HANDLING SYSTEM TYPICAL DETAILS CONVEYOR LOADING B8102 BAGGAGE HANDLING SYSTEM TYPICAL DETAILS CONVEYOR LOADING B8103 BAGGAGE HANDLING SYSTEM TYPICAL DETAILS ATTACHMENTS

B8104 BAGGAGE HANDLING SYSTEM TYPICAL DETAILS ATTACHMENTS B8105 BAGGAGE HANDLING SYSTEM TYPICAL DETAILS CT80 DR B8106 BAGGAGE HANDLING SYSTEM TYPICAL DETAILS IMPACT PROTECTION B8107 BAGGAGE HANDLING SYSTEM TYPICAL DETAILS FLARED MU SIDEGUARD B8108 BAGGAGE HANDLING SYSTEM TYPICAL DETAILS FIRE DOOR B8109 BAGGAGE HANDLING SYSTEM TYPICAL DETAILS TYPICAL WARNING SIGNAGE

MOORHEAD SUPERIOR BRAINERD ■ ALEXANDRIA MINNEAPOLIS . □ MARSHALL ROCHESTER STATE OF MINNESOTA

DULUTH INTERNATIONAL Wild Rice Lake **AIRPORT** LOCATION State 194

GENERAL NOTE:

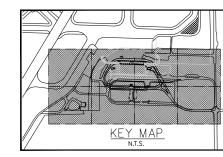
FOR ADA STANDARDS, PLUMBING FIXTURES' MOUNTING HEIGHTS AND CLEARANCES, SEE A002.

SHEET LAYOUT



LOCATION MAP

Duluth



#### LANDSCAPING

ORNAMENTAL TREE EVERGREEN TREE

LIGHT POLE

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW PASSENGER TERMINAL

SJA ARCHITECTS

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 500, Dukut TEL: (218) 722-1086 / FAX: (218) 722-4808

Baggaga Harding Bystama Consultaria: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 108, Darb TEL: (200) 782-5000 / FAX: (200) 782-4900

Lendscaping Consultants: APPOLD DESIGN



REVISIONS NO. DESCRIPTION

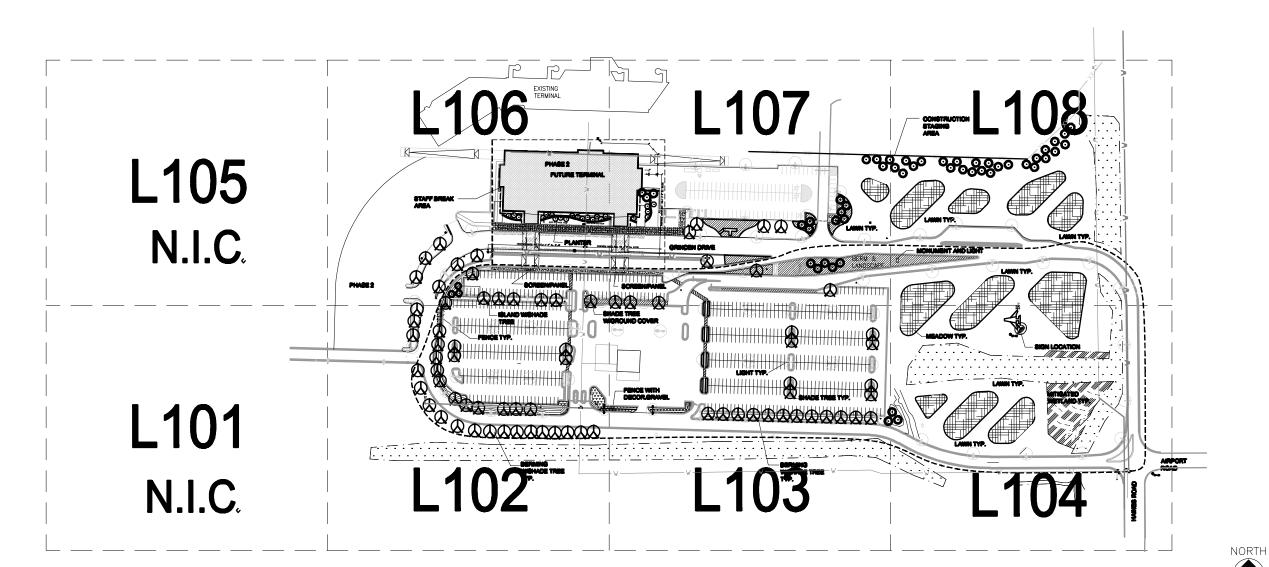
DATE ISSUED: 3-29-2010 REVIEWED BY: MMA DRAWN BY: SMW

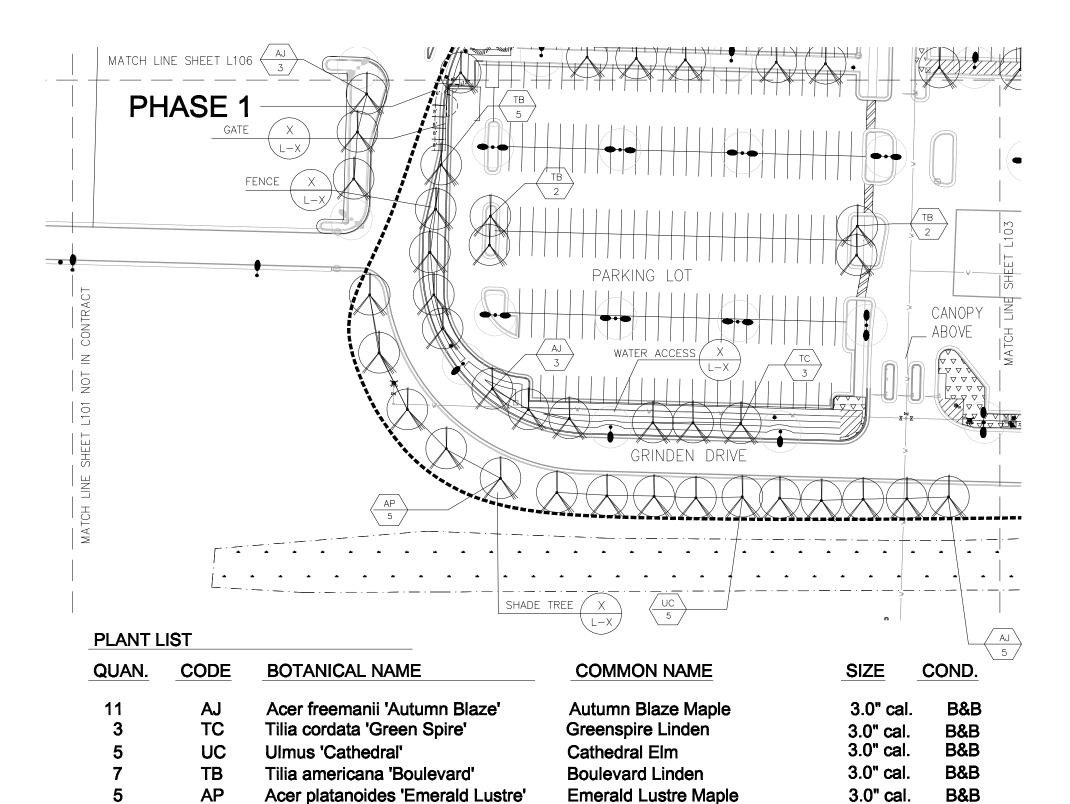
DESIGNED BY: MMA AEP PROJECT NUMBER 213-1882-091

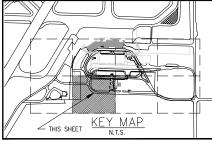
© 2006 REYNOLDS, SMITH AND HILLS IN SHEET TITLE

LANDSCAPE OVERALL PLAN

SHEET NUMBER L100







E173

ORNAMENTAL TREE



EVERGREEN TREE



WATER ACCESS

LIGHT POLE

NORTH





### RSH.

Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

Interior Architecto:
SUA ARCHITECTS
11 E Superior Street Suite 340, Dututh MN 8880
TEL: (2007 2048/079 / FAX: (2007 2048/079

Brustumi Engineen: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth AN 550 TEL: (218) 722-1008 / FAX: (218) 722-8008

COSENTINI
1 East Window Drive, Suito 103, Chicago IL 686
TEL: (\$12) 670-1600 / FAX: (\$12) 670-1601

Beggage Handing Systems Consultants: BNP ASSOCIATES INC. 101 Hest Ridge Office Park, Butle 108, Danbury CT C TEL: (200) 782-3000 / FAX: (200) 782-4809

Landscaping Consultants:
APPOLD DESIGN
2492 East Pirst Street, Dukuth MN 4
TEL: (216) 681-6079



DATE

REVIEWED BY: MMA

DRAWN BY: SMW

DESIGNED BY: MMA

AEP PROJECT NUMBER

213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS IN

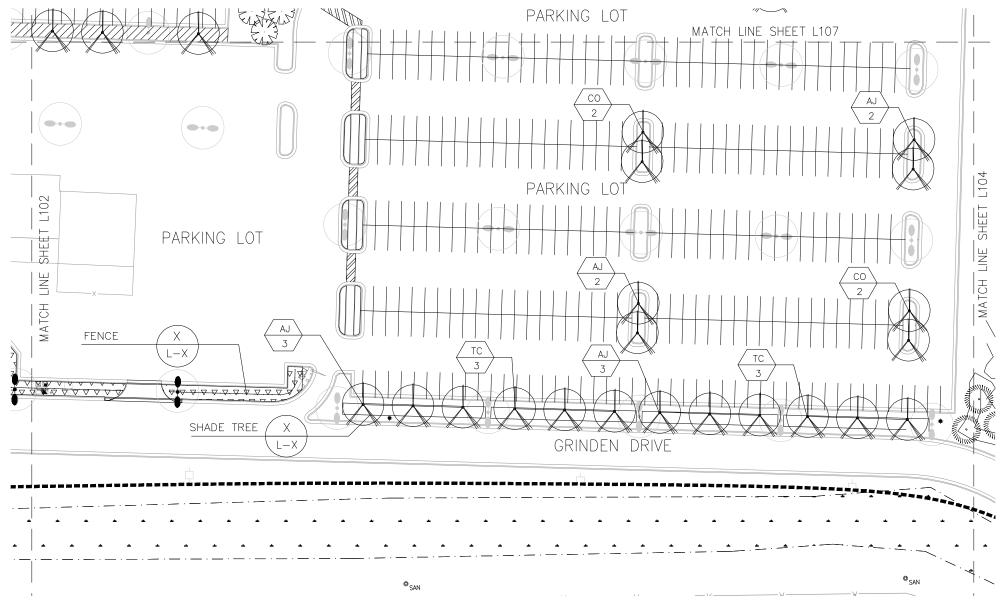
LANDSCAPE PLAN (AREA 2)

OF

SHEET NUMBER

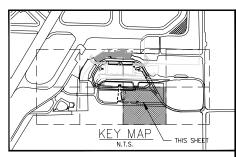
90% NOT FOR CONSTRUCTION

NOTE: L101 NOT IN CONTRACT



PLANT LIST

QUAN.	CODE	BOTANICAL NAME	COMMON NAME	SIZE	COND.
10	AJ	Acer freemanii "Autumn Blaze"	Autumn Blaze Maple	3.0"	B&B
6	TC	Tilia cordata "Green Spire"	Greenspire Linden	3.0"	B&B
4	CO	Celtis occcidentalis	Hackberry	3.0"	B&B



KEY

ORNAMENTAL TREE

EVERGREEN TREE

LIGHT POLE

WATER ACCESS





Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesoto 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

Interior Architecte:
SJA ARCHITECTS
11 E Superior Street Suite 340, Duluth NN 86802
TEL: (218) 724-8878 / FAX: (218) 724-8717

Strustum Engineers: MBJ CONSULTING ENG. 8011 Later Avenue South, Suite 200, Dubuth MN 80802 TEL: (218) 722-1088 / FAX: (218) 722-4808

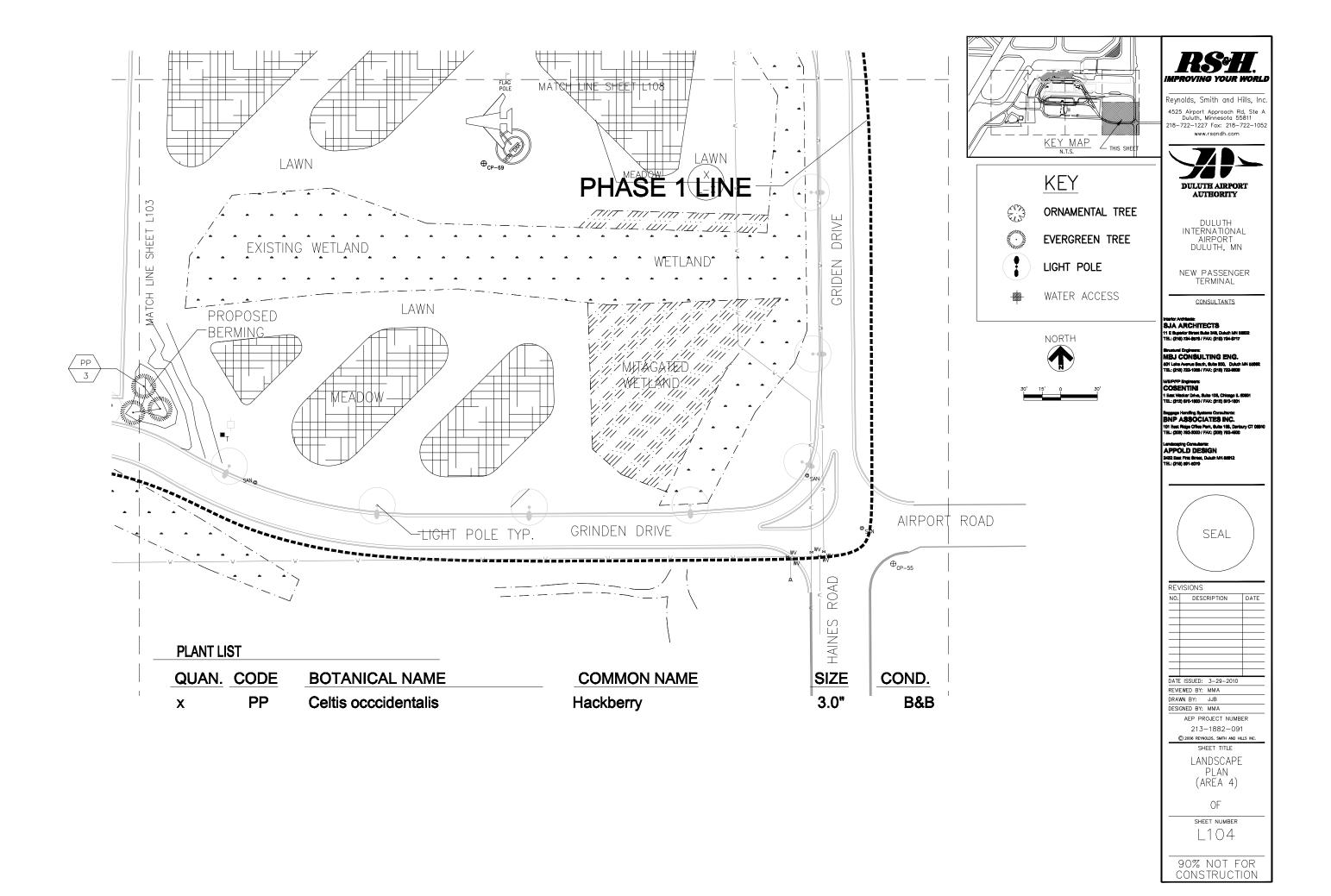
WEP/FP Engineers: COSENTINI 1 East Window Drive, Suite 103, Chicago IL 68801 TBL: (\$12) 670-1800 / FAX: (\$12) 670-1801

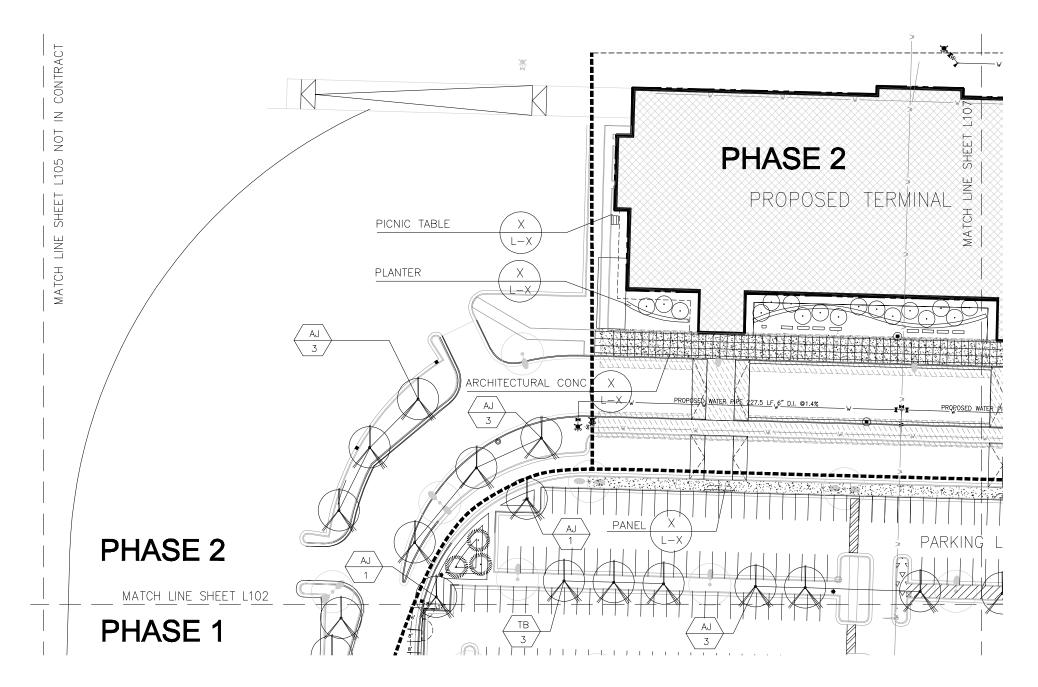
Baggage Harating Systems Consultanto: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 108, Dankury CT 088 TB.: (808) 783-8000 / PAX: (808) 783-4008

Lendscaping Consultants: APPOLD DESIGN 2492 Best Piret Brost, Dukuth MN 68812 TEL: (218) 681-8079

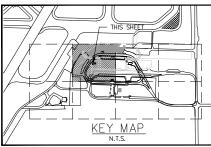


/	SLAL	- /
,	\	
		/
DE/	(ICIONIC	
_	ISIONS	
NO.	DESCRIPTION	DATE
_		
_		
_		
_		
DATE	ISSUED: 3-29-2010	
REVI	EWED BY: MMA	
DRAV	WN BY: SMW	
DESIG	GNED BY: MMA	
	AEP PROJECT NUMBE	ER
	213-1882-091	
(	2006 REYNOLDS, SMITH AND HIL	LS INC.
	SHEET TITLE	
	LANDSCAPE	
	PLAN (AREA 3)	
	(AINLA J)	
	0 05 0	
	0 OF 0	
	SHEET NUMBER	
	110.3	
	LIUU	





PLANT I	LIST				
QUAN.	CODE	BOTANICAL NAME	COMMON NAME	SIZE	COND.
11	AJ	Acer freemanii "Autumn Blaze"	Autumn Blaze Maple	3.0"	B&B
3	TB	Tilia americana "Boulevard"	Boulevard Linden	3.0"	B&B





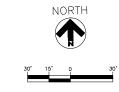
**EVERGREEN TREE** 



LIGHT POLE



WATER ACCESS



NOTE: L105 NOT IN CONTRACT

## MPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

#### SJA ARCHITECTS

Strustural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Dukuth TEL: (218) 722-1086 / FAX: (218) 722-808

ME/P/FP Engineers: COSENTINI 1 East Waster Drive, Suite 105, Chicago IL 5000/ TEL: (\$12) 670-1800 / FAX: (\$12) 670-1801

#### Beggage Handing Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 165, Denbury ( TEL: (208) 792-8000 / FAX: (208) 792-4900

Lendsceping Consultants: APPOLD DESIGN 2482 East First Street, Dulush MN & TEL: (218) 891-8079



RE۱	/ISIONS	
NO.	DESCRIPTION	DAT

DATE ISSUED: 3-29-2010 REVIEWED BY: MMA DRAWN BY: SMW

DESIGNED BY: MMA AEP PROJECT NUMBER 213-1882-091

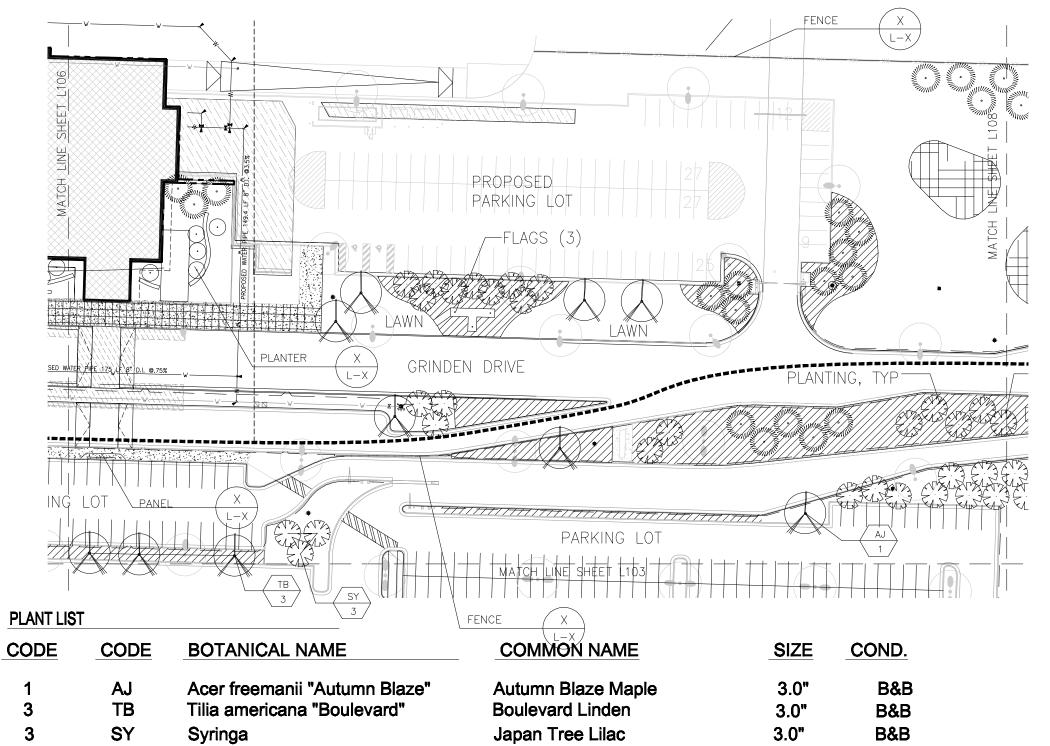
© 2006 REYNOLDS, SMITH AND HILLS INC.

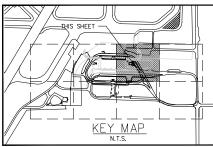
SHEET TITLE LANDSCAPE

PLAN (AREA 6)

OF

SHEET NUMBER L106







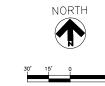
ORNAMENTAL TREE
EVERGREEN TREE



LIGHT POLE



WATER ACCESS



### RSH.

Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

### SJA ARCHITECTS 11 E Superior Street Suite 348, Duluth MN 58503

TEL: (216) 724-6576 / FAX: (216) 724-6717
Structural Engineers:
MBJ CONSULTING ENG.

MBJ CONSULTING ENG. 501 Lake Avenue South, Buite 300, Duluth MN 5580 TEL: (216) 722-1600 / FAX: (216) 722-6366

#### COSENTINI 1 East Wester Drive, Suite 108, Chicago I

TEL: (\$12) 678-1600 / FAX: (\$12) 670-1601

#### Beggings Handling Systems Cornultures: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 168, Darbury CT C TEL: (200) 782-1000 / FAX: (200) 782-1000

Landecaping Consultants:
APPOLD DESIGN
2492 East First Street, Dukuth MN 588
TEL: (249) 951-9879



_				
REV	/ISIONS			
NO.	DESC	RIPTION		DAT
_				
_				
_			_	
_			_	
			_	
DATE	ISSUED:	3-29-2	010	
REVI	EWED BY:	MMA		
DRAV	MN BY:	SMW		
DESI	GNED BY:	MMA		

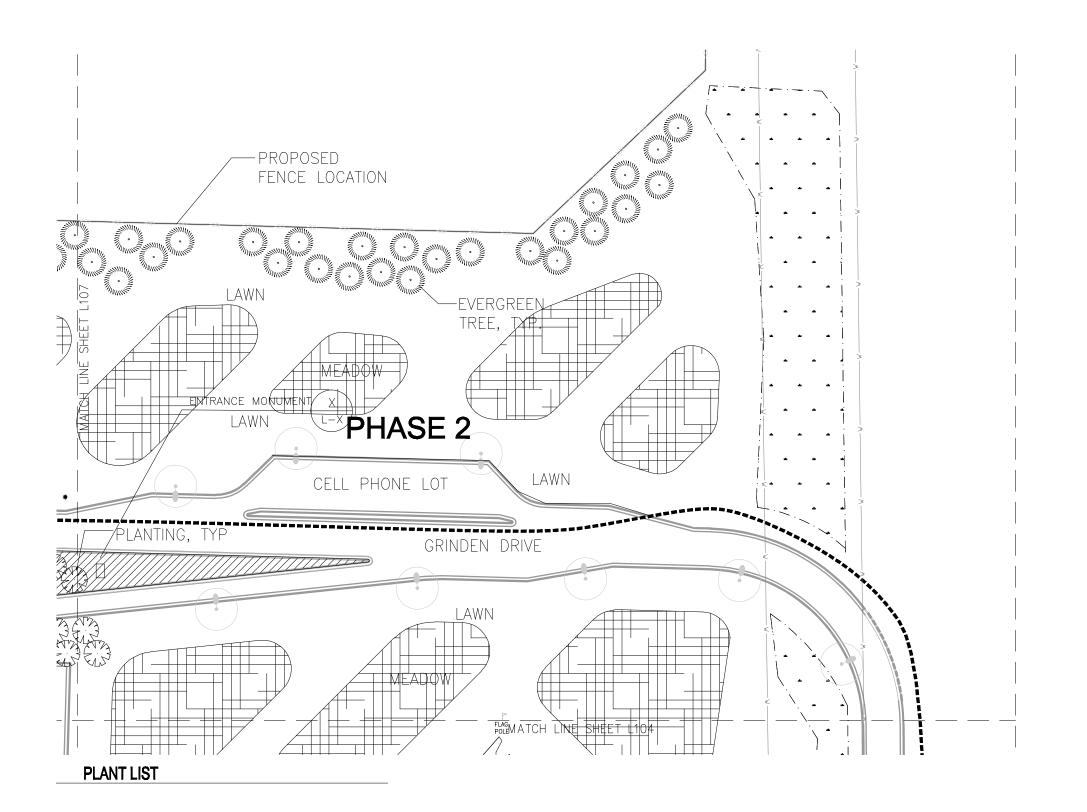
AEP PROJECT NUMBER 213-1882-091

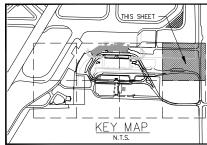
© 2006 REYNOLDS, SMITH AND HILLS INC.
SHEET TITLE

LANDSCAPE PLAN (AREA 7)

OF

SHEET NUMBER
L107
XX OF XX







ORNAMENTAL TREE



EVERGREEN TREE



LIGHT POLE

WATER ACCESS



NORTH



## IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

#### SJA ARCHITECTS

Strustural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Dukuth TEL: (218) 722-1086 / FAX: (218) 722-808

MEP/FP Engineers: COSENTINI 1 East Waster Drive, Suite 106, Criteago IL 6080/ TEL: (812) 670-1600 / FAX: (812) 670-1801

### Beggege Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 108, Denbury TEL: (208) 782-5000 / FAX: (208) 782-4600

Lendscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN & TEL: (210) 591-6079



### REVISIONS NO. DESCRIPTION

DATE	ISSUED:	3-29-2010	
REVI	EWED BY:	MMA	

DRAWN BY: SMW DESIGNED BY: MMA

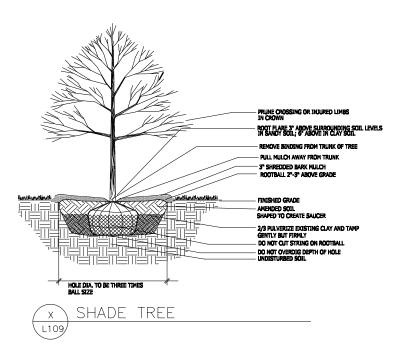
> AEP PROJECT NUMBER 213-1882-091

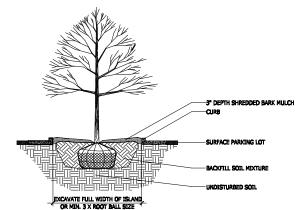
#### © 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE LANDSCAPE PLAN (AREA 8)

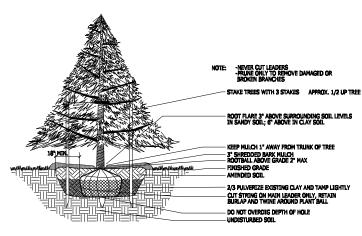
OF

SHEET NUMBER L108

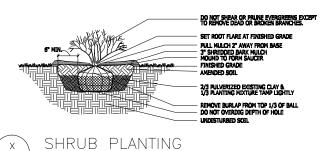




SHADE TREE IN PARKING LOT ISLAND

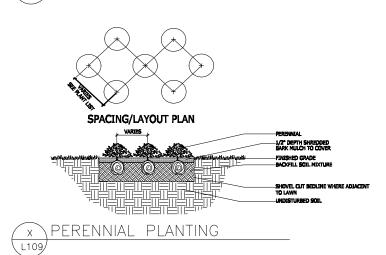


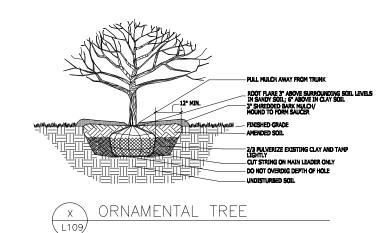
STAKED EVERGREEN W/ STAKES L109 N.T.S.



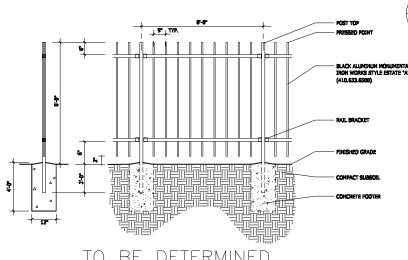
L109/

L109





TO BE DETERMINED



x METAL FENCE

FLAG POLE BLACK ALUMINUM MONUMENTAL IRON WORKS STYLE ESTATE "A" (410.633.6500) TO BE DETERMINED

TO BE DETERMINED

PANEL L109/N.T.S.



eynolds, Smith and Hills, Inc 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

SJA ARCHITECTS

Structural Engineers:
MBJ CONSULTING ENG.

Reggings Harding Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Bulte 109, Danibury CT ( TBL: (208) 782-8000 / FAX: (208) 792-4900

Lendsceping Consultants: APPOLD DESIGN 2432 East Piret Street, Dubuth MN & TEL: (218) 591-5079



REV	ISIONS		
NO.	DESCR	IPTION	DATE
-			
-			
-			
$\dashv$			
$\neg$			
DATE	ISSUED: 3	-29-2010	
REVIE	WED BY: N	IMA	
DRAV	N BY: J	JB	
DESIG	SNED BY: M	IMA	
	AEP PRO	JECT NUMB	ER
	213-1	1882-09°	1
a	2008 BEVNOLD	S SUITU AND UI	IIS INC

SHEET TITLE LANDSCAPE NOTES AND DETAILS

> SHEET NUMBER L109

TO BE DETERMINED

TO BE DETERMINED

TO BE DETERMINED

PLANTER

6' STRIP @ BUILDING

WATER ACCESS

TO BE DETERMINED

TO BE DETERMINED

FENCE GATE

L110/

STONE MONUMENT INSTALLATION

TO BE DETERMINED

ENTRANCE MONUMENT

TO BE DETERMINED

Reynolds, Smith and Hills, Inc 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW PASSENGER TERMINAL

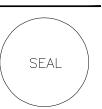
CONSULTANTS

SJA ARCHITECTS

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 500, Dukuth MN TEL: (218) 722-1006/ FAX: (218) 722-0808

Beggege Haroling Systems Consultants: BNP A880CIATES INC. 101 East Nidge Office Park, Suite 108, Darbury CT 0881 TBL: (208) 782-5000 / FAX: (208) 782-4000

Lendscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 68812 TEL: (218) 891-5079



REV	ISIONS	
NO.	DESCRIPTION	DATE
_		
_		
_		
DATE	ICCUED: 7 00 0010	
DAIL	ISSUED: 3-29-2010	

REVIEWED BY: MMA DRAWN BY: SMW DESIGNED BY: MMA

> AEP PROJECT NUMBER 213-1882-091

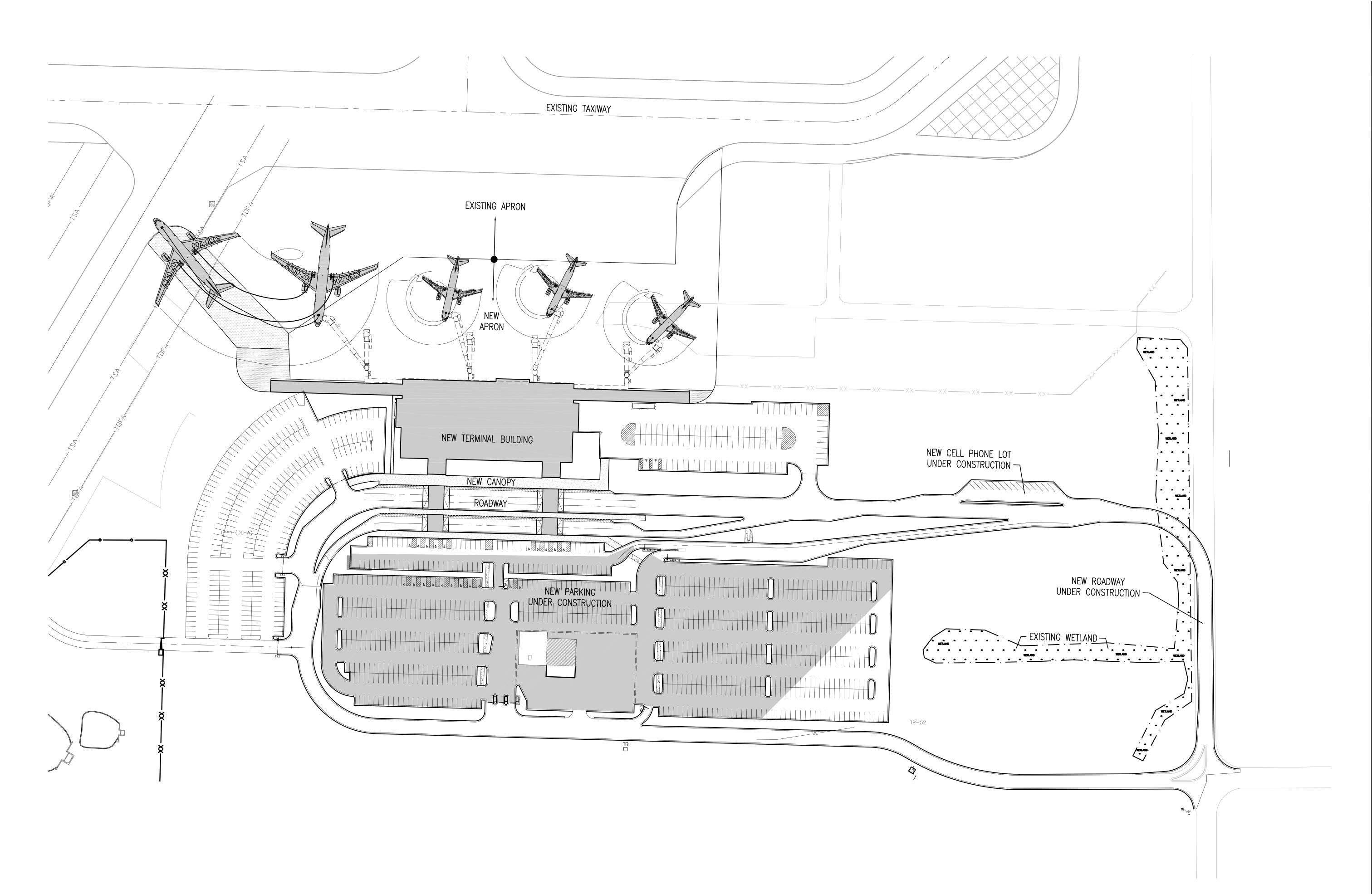
© 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

LANDSCAPE NOTES AND DETAILS

> SHEET NUMBER L110

90% NOT FOR CONSTRUCTION

FENCE SECTION





Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\AS100 Overall Site Plan.dwg Plotted on: 4/12/2010 4:49 PM

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052



www.rsandh.com

**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

### **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

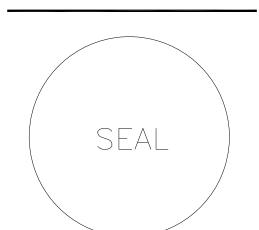
M/E/P/FP Engineers: **COSENTINI ASSOCIATES INC.** 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

TEL: (203) 792-3000 / FAX: (203) 792-4900

TEL: (218) 591-5079

Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.** 01 East Ridge Office Park, Suite 103, Danbury CT 06810

Landscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812



REVI	SIONS	
NO.	DESCRIPTION	DATI
_		
+		

**DATE ISSUED: 04-12-10** REVIEWED BY: SBS/TC DRAWN BY: MKG/MI

DESIGNED BY: SBS/TC AEP PROJECT NUMBER

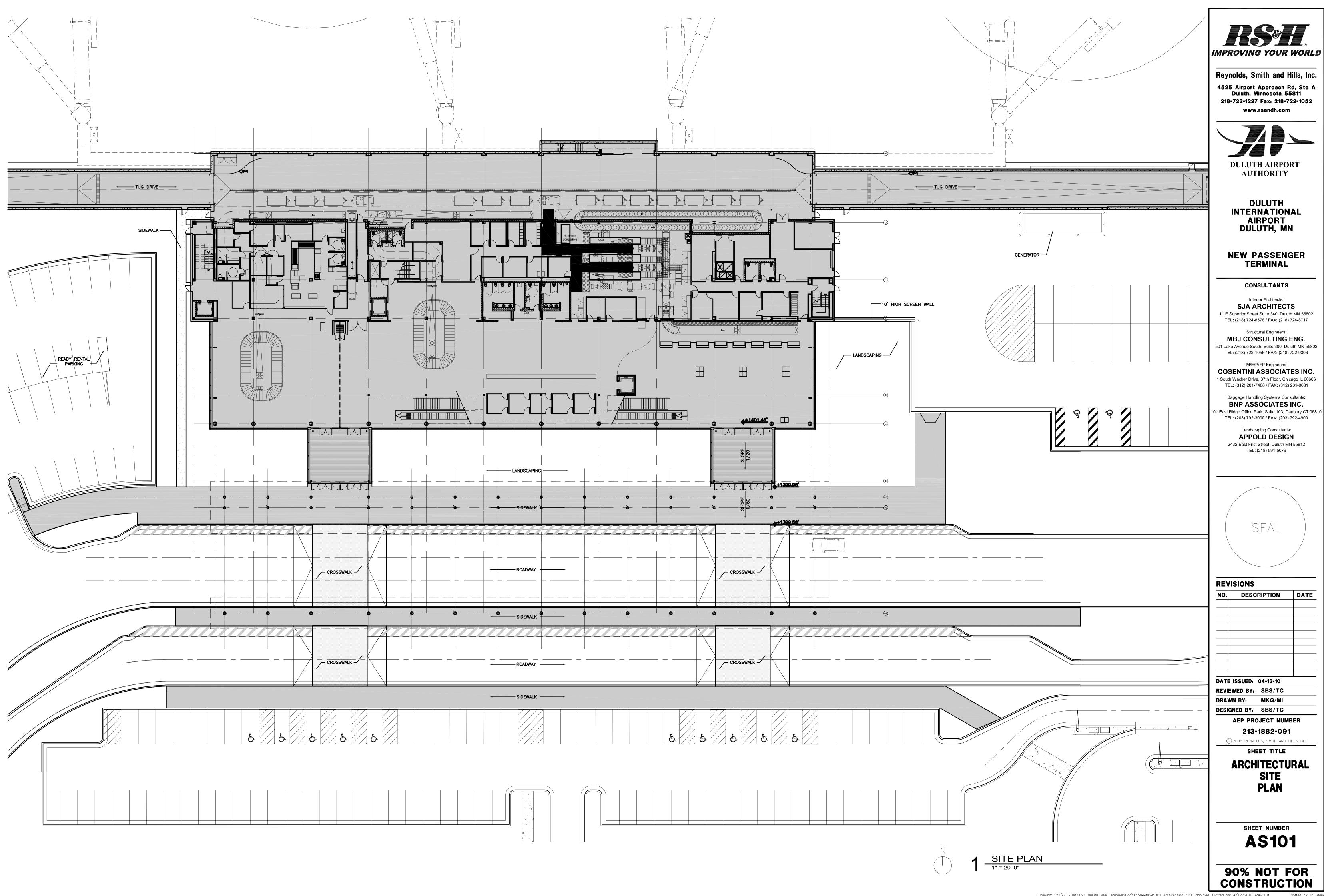
213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

**OVERALL** SITE Plan

SHEET NUMBER **AS100** 



### LIST OF ABBREVIATIONS

EXT

[2:41:59 PM] Mark Ip: http://www.cracked.com/article/149\_5-self-destructive-ways-people-accidentally-cured-themselves/

**EXTERIOR** 

<b>@</b>	AT	FA	FIRE ALARM	ОС	ON CENTER
@					
ACC	ACCESSIBLE	FACP	FIRE ALARM CONTROL PANEL	OF/CI	OWNER FURNISHED/CONTRACTOR INSTALLED
ACOUS INSUL	ACOUSTICAL INSULATION	FAR	FLOOR AREA RATIO	OF/OI	OWNER FURNISHED/OWNER INSTALLED
ACS DR	ACCESS DOOR	FC BRK	FACE BRICK	OPNG	OPENING
ACS FLR	ACCESS FLOOR	FD	FLOOR DRAIN	OPP	OPPOSITE
				011	311 33112
ACS PNL	ACCESS PANEL	FE	FIRE EXTINGUISHER	PART	PARTIAL
ACT	ACOUSTICAL CEILING TILE	FEC	FIRE EXTINGUISHER CABINET		
				PASS	PASSENGER
AD	AREA DRAIN	FF EL	FINISH FLOOR ELEVATION	PERP	PERPENDICULAR
ADA	AMERICANS WITH DISABILITIES ACT	FF&E	FURNITURE, FIXTURE, AND EQUIPMENT		
	ADDITIONAL	FHC		PLAM	PLASTIC LAMINATE
ADDL	ADDITIONAL	FHC	FIRE HOSE CABINET	PLYWD	PLYWOOD
ADJST	ADJUSTABLE	FIN	FINISH		
	ADJACENT	FIN FLR	FINISH FLOOR	POL	POLISHED
ADJ				PNL	PANEL
ADPT	ADAPTABLE	FIN GR	FINISH GRADE		
AFF	ABOVE FINISHED FLOOR	FLR	FLOOR	PR	PAIR
				PREFAB	PREFABRICATED
AFG	ABOVE FINISH GRADE	FLUOR	FLUORESCENT		
AFS	ABOVE FINISH SLAB	FP	FIRE PROTECTION	PSF	POUND PER SQUARE FOOT
				PSI	POUNDS PER SQUARE INCH
AHU	AIR HANDLING UNIT	FR	FIRE RESISTANT	PT	PAINT
ALT	ALTERNATE	FT	FEET / FOOT		
		• •	122171001	PTN	PARTITION
ALUM	ALUMINUM	GA	GAGE	PVC	POLYVINYL CHLORIDE
AMT	AMOUNT				
		GBD	GYPSUM BOARD	PVF	POLYVINYL FLUORIDE
AOR	AREA OF REFUGE	GC	GENERAL CONTRACTOR		
APPROX	APPROXIMATE			QT	QUARRY TILE
		GFRC	GLASS-FIBER-REINFORCED CONCRETE	QTY	
APT	APARTMENT	GFRG	GLASS-FIBER-REINFORCED GYPSUM	QIY	QUANTITY
ARCH	ARCHITECT			_	
		GL	GLASS	R	RISER
ASKLR	AUTOMATIC SPRINKLER	GRAN	GRANITE	RAD	RADIAN/RADIUS
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS				
		GYP PLAS	GYPSUM PLASTER	RBR	RUBBER
ATM	AUTOMATIC TELLER MACHINE			RCP	REFLECTED CEILING PLAN
AV	AUDIO VISUAL	HB	HOSE BIBB		
				RD	ROOF DRAIN
BALC	BALCONY	HCWD	HOLLOW CORE WOOD DOOR	REF	REFERENCE
		HDW	HARDWARE		
BD	BOARD	HMD	HOLLOW METAL DOOR	REINF	REINFORCE
BLDG	BUILDING			REQD	REQUIRED
		HORIZ	HORIZONTAL		
BLW	BELOW	HPT	HIGH POINT	REST	RESTROOM
B/	BOTTOM OF			REV	REVISION
		HR	HOUR(S)		
BR	BEDROOM	HSKPG	HOUSEKEEPING	RH	RIGHT HAND
BRZ	BRONZE			RM	ROOM
		HT	HEIGHT		
BSMT	BASEMENT			RO	ROUGH OPENING
BTWN	BETWEEN	ID	INSIDE DIAMETER		
				S	SOUTH
СТОС	CENTER TO CENTER	IN	INCH(ES)	SCWD	SOLID CORE WOOD DOOR
		INCAN	INCANDESCENT		
CBB	CEMENTITIOUS (BACKER) BOARD		INCLUDED	SECT	SECTION
CD	CONTRACT DOCUMENTS	INCL		SHT	SHEET
		INFO	INFORMATION		
CEM PLAS	CEMENT PLASTER		INCLUATION	SIM	SIMILAR
CJ	CONTROL JOINT	INSUL	INSULATION	SLNT	SEALANT
		INT	INTERIOR		
CL	CENTER LINE			SPEC	SPECIFICATION
CLG	CEILING	JC	JANITOR'S CLOSET	SST	STAINLESS STEEL
CLO	CLOSET	JT	JOINT	ST	STAIR
CLR	CLEAR			STC	SOUND TRANSMISSION CLASS
		KIT	KITCHEN		
CMU	CONCRETE MASONRY UNIT			STD	STANDARD
CNCL	CONCEALED	1	ANGLE	STL	STEEL
		_			
COL	COLUMN	LC	LINEN CLOSET	STN	STAIN
CONC	CONCRETE	LAM	LAMINATE	STOR	STORAGE
CONSTR	CONSTRUCTION	LAU	LAUNDRY	STRUCT	STRUCTURAL
CONT	CONTINUE	LAV	LAVATORY	SUSP	SUSPEND
CORR	CORRIDOR	LBS	POUND	SVCE	SERVICE
CPT	CARPET	LC	LAUNDRY CHUTE		
				Т	TREAD
CT	CERAMIC TILE	LDG	LANDING	TBA-#	TOILET BATH ACCESSORIES
CTR	CENTER	LH	LEFT HAND		
				TBD	TO BE DETERMINED
DET	DETAIL	LKR	LOCKER	TEL	TELEPHONE
		LL	LOW LEVEL		
DIA	DIAMETER	LMST	LIMESTONE	THK	THICKNESS
DIM	DIMENSION			T/	TOP OF
		LPT	LOW POINT		
DN	DOWN	LR	LIVING ROOM	TYP	TYPICAL
DWG	DRAWING	LN	LIVINO NOOW		
_ · · · <del>-</del>	= ······ =	R A	MENIC	UNO	UNLESS NOTED OTHERWISE
Е	EAST	M	MEN'S		
		MACH	MACHINE	VAR	VARIES
EA	EACH				
EC	EXPOSED CONSTRUCTION	MAR	MARBLE	VB	VINYL BASE
		MATL	MATERIAL	VCT	VINYL COMPOSITION TILE
ECS	EXPOSED CONCRETE SEALED				
ECP	EXPOSED CONSTRUCTION PAINTED	MAX	MAXIMUM	VERT	VERTICAL
		MDF	MEDIUM DENSITY FIBERBOARD	VEST	VESTIBULE
EGB	EXTERIOR GYPSUM BOARD				
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM	MECH	MECHANICAL	VIF	VERIFY IN FIELD
		MED	MEDIUM	VWC	VINYL WALL COVERING
EJ	EXPANSION JOINT				· · ···· <del>-</del>
EL	ELEVATION	MEZZ	MEZZANINE	W	WEST
LL		MFR	MANUFACTURER		
				W	WOMEN'S
ELEC	ELECTRIC	RAINI	N / I N I I N / I		
ELEC	ELECTRIC	MIN	MINIMUM	\///	WITH
ELEC ELEV	ELECTRIC ELEVATOR			W/	WITH
ELEC	ELECTRIC	MISC	MISCELLANEOUS	W/ W/O	WITH WITHOUT
ELEC ELEV ENCL	ELECTRIC ELEVATOR ENCLOSURE			W/O	WITHOUT
ELEC ELEV ENCL EPDM	ELECTRIC ELEVATOR ENCLOSURE ETHYLENE PROPYLENE DIENE MONOMER	MISC MLWK	MISCELLANEOUS MILLWORK	W/O WB	WITHOUT WOOD BASE
ELEC ELEV ENCL	ELECTRIC ELEVATOR ENCLOSURE	MISC MLWK MO	MISCELLANEOUS MILLWORK MASONRY OPENING	W/O	WITHOUT
ELEC ELEV ENCL EPDM EPJF	ELECTRIC ELEVATOR ENCLOSURE ETHYLENE PROPYLENE DIENE MONOMER EXPANDED POLYETHYLENE JOINT FILLER	MISC MLWK	MISCELLANEOUS MILLWORK	W/O WB WC	WITHOUT WOOD BASE WALL COVERING
ELEC ELEV ENCL EPDM EPJF EPS	ELECTRIC ELEVATOR ENCLOSURE ETHYLENE PROPYLENE DIENE MONOMER EXPANDED POLYETHYLENE JOINT FILLER EXPANDED POLYSTYRENE BOARD (INSULATION)	MISC MLWK MO MTD	MISCELLANEOUS MILLWORK MASONRY OPENING MOUNTED	W/O WB WC WD	WITHOUT WOOD BASE WALL COVERING WOOD
ELEC ELEV ENCL EPDM EPJF	ELECTRIC ELEVATOR ENCLOSURE ETHYLENE PROPYLENE DIENE MONOMER EXPANDED POLYETHYLENE JOINT FILLER	MISC MLWK MO	MISCELLANEOUS MILLWORK MASONRY OPENING	W/O WB WC	WITHOUT WOOD BASE WALL COVERING
ELEC ELEV ENCL EPDM EPJF EPS EQ	ELECTRIC ELEVATOR ENCLOSURE ETHYLENE PROPYLENE DIENE MONOMER EXPANDED POLYETHYLENE JOINT FILLER EXPANDED POLYSTYRENE BOARD (INSULATION) EQUAL	MISC MLWK MO MTD MTL	MISCELLANEOUS MILLWORK MASONRY OPENING MOUNTED METAL	W/O WB WC WD WD DR	WITHOUT WOOD BASE WALL COVERING WOOD WOOD DOOR
ELEC ELEV ENCL EPDM EPJF EPS EQ EQUIP	ELECTRIC ELEVATOR ENCLOSURE ETHYLENE PROPYLENE DIENE MONOMER EXPANDED POLYETHYLENE JOINT FILLER EXPANDED POLYSTYRENE BOARD (INSULATION) EQUAL EQUIPMENT	MISC MLWK MO MTD MTL N	MISCELLANEOUS MILLWORK MASONRY OPENING MOUNTED METAL NORTH	W/O WB WC WD WD DR WH	WITHOUT WOOD BASE WALL COVERING WOOD WOOD DOOR WATER HEATER
ELEC ELEV ENCL EPDM EPJF EPS EQ	ELECTRIC ELEVATOR ENCLOSURE ETHYLENE PROPYLENE DIENE MONOMER EXPANDED POLYETHYLENE JOINT FILLER EXPANDED POLYSTYRENE BOARD (INSULATION) EQUAL	MISC MLWK MO MTD MTL	MISCELLANEOUS MILLWORK MASONRY OPENING MOUNTED METAL	W/O WB WC WD WD DR	WITHOUT WOOD BASE WALL COVERING WOOD WOOD DOOR
ELEC ELEV ENCL EPDM EPJF EPS EQ EQUIP EWC	ELECTRIC ELEVATOR ENCLOSURE ETHYLENE PROPYLENE DIENE MONOMER EXPANDED POLYETHYLENE JOINT FILLER EXPANDED POLYSTYRENE BOARD (INSULATION) EQUAL EQUIPMENT ELECTRIC WATER COOLER	MISC MLWK MO MTD MTL N NCOMBL	MISCELLANEOUS MILLWORK MASONRY OPENING MOUNTED METAL NORTH NON-COMBUSTIBLE	W/O WB WC WD WD DR WH WP	WITHOUT WOOD BASE WALL COVERING WOOD WOOD DOOR WATER HEATER WORKING POINT
ELEC ELEV ENCL EPDM EPJF EPS EQ EQUIP EWC EXIST	ELECTRIC ELEVATOR ENCLOSURE ETHYLENE PROPYLENE DIENE MONOMER EXPANDED POLYETHYLENE JOINT FILLER EXPANDED POLYSTYRENE BOARD (INSULATION) EQUAL EQUIPMENT ELECTRIC WATER COOLER EXISTING	MISC MLWK MO MTD MTL N NCOMBL NIC	MISCELLANEOUS MILLWORK MASONRY OPENING MOUNTED METAL NORTH NON-COMBUSTIBLE NOT IN CONTRACT	W/O WB WC WD WD DR WH WP WT	WITHOUT WOOD BASE WALL COVERING WOOD WOOD DOOR WATER HEATER WORKING POINT WEIGHT
ELEC ELEV ENCL EPDM EPJF EPS EQ EQUIP EWC	ELECTRIC ELEVATOR ENCLOSURE ETHYLENE PROPYLENE DIENE MONOMER EXPANDED POLYETHYLENE JOINT FILLER EXPANDED POLYSTYRENE BOARD (INSULATION) EQUAL EQUIPMENT ELECTRIC WATER COOLER	MISC MLWK MO MTD MTL N NCOMBL	MISCELLANEOUS MILLWORK MASONRY OPENING MOUNTED METAL NORTH NON-COMBUSTIBLE	W/O WB WC WD WD DR WH WP	WITHOUT WOOD BASE WALL COVERING WOOD WOOD DOOR WATER HEATER WORKING POINT
ELEC ELEV ENCL EPDM EPJF EPS EQ EQUIP EWC EXIST EXP	ELECTRIC ELEVATOR ENCLOSURE ETHYLENE PROPYLENE DIENE MONOMER EXPANDED POLYETHYLENE JOINT FILLER EXPANDED POLYSTYRENE BOARD (INSULATION) EQUAL EQUIPMENT ELECTRIC WATER COOLER EXISTING EXPANSION	MISC MLWK MO MTD MTL N NCOMBL NIC NO	MISCELLANEOUS MILLWORK MASONRY OPENING MOUNTED METAL NORTH NON-COMBUSTIBLE NOT IN CONTRACT NUMBER	W/O WB WC WD WD DR WH WP WT	WITHOUT WOOD BASE WALL COVERING WOOD WOOD DOOR WATER HEATER WORKING POINT WEIGHT
ELEC ELEV ENCL EPDM EPJF EPS EQ EQUIP EWC EXIST	ELECTRIC ELEVATOR ENCLOSURE ETHYLENE PROPYLENE DIENE MONOMER EXPANDED POLYETHYLENE JOINT FILLER EXPANDED POLYSTYRENE BOARD (INSULATION) EQUAL EQUIPMENT ELECTRIC WATER COOLER EXISTING	MISC MLWK MO MTD MTL N NCOMBL NIC	MISCELLANEOUS MILLWORK MASONRY OPENING MOUNTED METAL NORTH NON-COMBUSTIBLE NOT IN CONTRACT	W/O WB WC WD WD DR WH WP WT	WITHOUT WOOD BASE WALL COVERING WOOD WOOD DOOR WATER HEATER WORKING POINT WEIGHT

NOT TO SCALE

### GENERAL NOTES

#### A. CODES, STANDARDS, AND PROCEDURES

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF LIMESTONE TOWNSHIP CODE AND AMENDMENTS, AND ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES, ACCESSIBILITY CODES, STANDARDS, AND REGULATORY
- 2. ALL REFERENCES TO CODES, SPECIFICATIONS, AND STANDARDS REFERRED TO IN THE SPECIFICATIONS AND/OR DRAWINGS SHALL MEAN THE LATEST EDITION, AMENDMENT OR REVISION OF SUCH REFERENCE IN EFFECT AS OF THE LATEST DATE OF THE CONTRACT DOCUMENTS.
- 3. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS, POLICIES, AND PROCEDURES OF THE OWNER.
- 4. DRAWINGS AND SPECIFICATIONS ARE TO BE ISSUED TO THE SUBCONTRACTORS IN COMPLETE SETS SO THAT THE FULL EXTENT OF WORK IS SHOWN AND COORDINATION OF WORK IS MADE POSSIBLE.
- 5. ALL WORK SHALL BE OF THE HIGHEST QUALITY FOLLOWING THE CONTRACT DOCUMENTS, PROJECT SPECIFICATIONS, MANUFACTURERS SPECIFICATIONS AND RECOMMENDATIONS, AND THE BEST ACCEPTED TRADE PRACTICES AND STANDARDS.
- 6. DETAILS SHOWN ARE INTENDED TO BE INDICATIVE OF THE PROFILES AND TYPES OF DETAILING REQUIRED FOR THE WORK. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE DETAILED.
- 7. PROVIDE ALL SHOP DRAWINGS, CATALOG CUTS, SAMPLES, ETC. FOR THE NECESSARY WORK REQUIRED AND FOR ARCHITECT'S REVIEW PRIOR TO COMMENCEMENT OF THE WORK.
- 8. EACH CONTRACTOR SHALL KEEP ACCURATE RECORDS OF ALL WORK WHICH DIFFERS FROM CONTRACT DOCUMENTS SO THAT ACCURATE RECORD DRAWINGS AND SPECIFICATIONS CAN BE KEPT AND PROVIDED TO THE OWNER AT PROJECT CLOSEOUT.
- 9. EACH CONTRACTOR SHALL VISIT THE SITE AND BE KNOWLEDGEABLE OF CONDITIONS THEREOF. FAILURE TO EXAMINE THE SITE AND DETERMINE EXISTING CONDITIONS OR NATURE OF NEW CONSTRUCTION, OR NATURE AND EXTENT OF WORK TO BE PERFORMED BY OTHER TRADES WILL NOT BE CONSIDERED A BASIS FOR GRANTING OF ADDITIONAL COMPENSATION.
- 10. THE CONTRACTOR SHALL INVESTIGATE, VERIFY AND BE RESPONSIBLE FOR ALL REQUIREMENTS OF THE PROJECT AND SHALL NOTIFY THE ARCHITECT OF ANY CONDITIONS CONTRARY TO THE CONSTRUCTION DOCUMENTS THAT REQUIRE MODIFICATION BEFORE PROCEEDING WITH THE WORK.
- 11. THE CONTRACTOR SHALL PROTECT ALL EXISTING SITE ELEMENTS FROM DAMAGE DUE TO THE CONSTRUCTION OPERATIONS, AND REPAIR OR REPLACE ANY ELEMENTS DAMAGED DURING THE PROJECT.
- 12. ANY UTILITY SHUT-OFFS AS REQUIRED BY THE CONTRACTOR FOR COMPLETION OF THEIR WORK SUCH AS ELECTRICAL, GAS, WATER, SEWER, ETC. MUST BE SCHEDULED WITH THE OWNER PRIOR TO COMMENCING WORK.
- 13. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ITEMS THAT ARE SHOWN ON ANOTHER DISCIPLINES DOCUMENTS BUT NOT ON THE TRADE CONTRACTOR'S
- DISCIPLINE DOCUMENTS. 14. IN ORDER TO MINIMIZE DISRUPTIONS TO AIRPORT OPERATIONS, ALL UTILITY SHUT-DOWNS AND CONNECTIONS SHALL BE SCHEDULED OF-HOURS. (FROM 11:00 PM UNTILL 5 AM) ALL PREMIUM COSTS SHALL BE INCLUDED IN THE BID.

### B. DIMENSIONS

- 1. DO NOT SCALE THE DRAWINGS, DIMENSIONS SHALL GOVERN. LARGE SCALE DRAWINGS SHALL GOVERN OVER SMALL SCALE. WHERE A DISCREPANCY MAY EXIST BETWEEN DRAWINGS AND SPECIFICATIONS, THE MORE RESTRICTIVE OR EXPENSIVE REQUIREMENTS SHALL GOVERN.
- 2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON SITE, AND SHALL NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES, OMISSIONS AND/OR CONFLICTS BEFORE PROCEEDING WITH THE WORK.
- 3. ALL PARTITIONS ARE DIMENSIONED TO THE FINISH FACE, UNLESS NOTED OTHERWISE. WHERE SPECIFIC DIMENSIONS, DETAILS AND/OR DESIGN INTENT CANNOT BE DETERMINED, NOTIFY THE ARCHITECT IN WRITING BEFORE PROCEEDING WITH ANY WORK IN QUESTION.
- 4. DOOR OPENINGS THAT ARE NOT DIMENSIONALLY LOCATED ARE TO BE CENTERED BETWEEN WALLS OR POSITIONED WITH ONE JAMB CASING TRIM AGAINST AN ADJACENT WALL OR COLUMN AS SHOWN ON THE PLANS AND/OR DETAILS.

#### C. COORDINATION

- 1. REFER TO THE SPECIFICATIONS AND CIVIL, LANDSCAPING, ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, AND ADDITIONAL CONSULTANT'S DRAWINGS FOR FULL COORDINATION OF WORK.
- 2. REFER TO SITE SURVEY FOR SITE INFORMATION. SITE SURVEY IS INCLUDED WITH THE DOCUMENTS FOR "INFORMATION ONLY", AND CONTRACTOR SHALL VERIFY ALL INFORMATION
- 3. THE GENERAL CONTRACTOR SHALL COORDINATE ADDITIONAL SUPPORT OR CONCEALED BLOCKING FOR INSTALLATION OF HANDRAILS, MILLWORK, WINDOW TREATMENTS, WALL PANELS, GRAB BARS, AND ALL OTHER SURFACE MOUNTED COMPONENTS.
- 4. THE CONTRACTOR SHALL COORDINATE AND VERIFY THE EXACT SIZE AND LOCATION OF ALL FLOOR PENETRATIONS AND OPENINGS IN WALLS AND CEILINGS WITH EACH OF THE RESPECTIVE MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION DRAWINGS, ALL PARTITIONS SHALL BE ADEQUATELY BRACED AND OPENINGS REINFORCED. SUBMIT COORDINATED DRAWING OF ALL PENETRATIONS FOR REVIEW.
- GENERAL CONTRACTOR TO COORDINATE ALL LIGHTING FIXTURES, ELECTRICAL DEVICES, AND SPRINKLER LOCATIONS WITH DIFFUSER AND DUCTWORK LAYOUT, AND SHALL IDENTIFY ALL POTENTIAL CONFLICTS INVOLVING ELEMENTS WITHIN THE CEILING CAVITY. ANY VARIATIONS OR CONFLICTS WITH LAYOUT OR CEILING HEIGHT SHOWN SHALL BE REVIEWED WITH THE ARCHITECT PRIOR TO INSTALLATION.
- 6. THE LOCATION OF MEP/FP EQUIPMENT AND DEVICES SUCH AS V.A.V. BOXES, PIPING VALVES, ETC. SHALL BE COORDINATED BY THE CONTRACTOR TO CORRESPOND TO ACCESS PANEL LOCATIONS SHOWN ON CONTRACTOR'S COORDINATION PLANS, AND IN SUCH A MANNER AS TO ALLOW READY ACCESS TO EQUIPMENT CONTROLS AND COMPONENTS WHICH REQUIRE ROUTINE SERVICING. SUBMIT ACCESS PANEL LOCATION DRAWINGS FOR REVIEW.
- 7. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN ADVANCE OF ANY MEP/FP DEVICES REQUIRED AS PART OF THE SPECIFIED SYSTEM WHICH ARE TO BE MOUNTED IN FINISHED SPACES AND ARE NOT LOCATED ON THE ARCHITECTURAL DRAWINGS. THE ARCHITECT WILL DETERMINE THE MOUNTING LOCATION, HEIGHT, AND DETAIL FOR ATTACHMENT.
- 8. ALL CONDUIT, PIPING, DUCTWORK, AND MECHANICAL SYSTEMS SHALL BE INSTALLED WITHIN OR TIGHT TO THE UNDERSIDE OF STRUCTURE WHERE FEASIBLE.
- 9. REFER TO MEP/FP DRAWINGS FOR EXTENT OF CONCRETE EQUIPMENT PADS. THE CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF THE CONCRETE PADS WITH THE EQUIPMENT INSTALLER.

### D. INSTALLATION, GENERAL

- 1. PROVIDE EXPANSION AND/OR CONTROL JOINTS IN ACCORDANCE WITH SPECIFIED OR DRAWN REQUIREMENTS. IN THE ABSENCE OF SPECIFIED OR DRAWN REQUIREMENTS, PROVIDE JOINTS IN ACCORDANCE WITH ACCEPTED INDUSTRY STANDARDS. LOCATIONS SHALL BE REVIEWED AND ACCEPTED BY THE ARCHITECT PRIOR TO INSTALLATION.
- 2. ALL JOINTS OF ANY ELEMENT OF CONSTRUCTION WHICH IS REQUIRED TO HAVE A FIRE RESISTIVE RATING SHALL BE INSTALLED PER MANUFACTURER'S TESTED ASSEMBLIES AND SHALL PREVENT PASSAGE OF SMOKE AND FLAME.
- 3. ALL WOOD BLOCKING AND FRAMING USED IN WALL, FLOOR, AND CEILING CONSTRUCTION SHALL BE FIRE RETARDANT TREATED.
- 4. ALL OPENINGS IN FIRE-RATED FLOORS AND FIRE-RATED WALLS INCLUDING SPACES BETWEEN DUCTS, PIPES, CONDUIT, ETC. SHALL BE CLOSED OFF BY APPROVED FIRE SAFING MATERIAL TO MAINTAIN FIRE RATING CONTINUITY OF RATED FLOOR AND WALL CONSTRUCTION. ALL OPENINGS AND PENETRATIONS SHALL BE SEALED TO PREVENT PASSAGE OF SMOKE AND FLAMES IN FIRE-RATED ASSEMBLIES.
- 5. OMIT MANUFACTURER'S NAMES, LABELS AND DESIGNATIONS FROM EXPOSED FACES ON ALL ACCESSORIES, GLAZING, FIXTURES, ETC. EXCEPT WHERE REQUIRED TO REMAIN PER CODE REQUIREMENTS.
- 6. UNLESS NOTED OTHERWISE, ALL FASTENERS AND FASTENING DEVICES ARE TO BE CONCEALED AT ALL EXTERIOR AREAS AND IN ALL INTERIOR FINISHED SPACES.
- 7. EXTERIOR FERROUS METAL WORK AT EXTERIOR OR OTHER NON-CONDITIONED SPACES THAT ARE NOT GALVANIZED SHALL BE PAINTED.
- 8. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER IN ORDER TO AVOID GALVANIC ACTION. WHEN ISOLATION IS NOT POSSIBLE, INSTALL PLASTIC RUBBER/PVC IN SUFFICIENT SIZE AND DEPTH TO COVER ENLARGED

### E. WALL TYPES

1. SEE SHEET AXX FOR WALLS TYPES.

### E. WALL TYPES

1. MULTIPLE BID PACKAGES:

DISSIMILAR MATERIAL.

This project consists of multiple construction bid packages. This package is referred to as "Bid Package D" New Terminal Building — Balance of the work as noted on these drawings. The previous Bid Packages have been issued and are not included in this scope of work are as

Bid Package B Bid Package C

Bid Package A Terminal Apron Terminal Footings, Foundations and exterior ramps and stairs Structural Steel, Steel metal pan stairs and connecting handrails

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A001 Abbreviations and General Notes.dwg Plotted on: 4/12/2010 4:49 PM

Future Bid Packages will include:

Technology/MUFID's/Security Package Building and Interior Signage Bid Package Electrical Vault Passenger Boarding Bridge Terminal Demolition



Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052



**DULUTH AIRPORT AUTHORITY** 

DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER** TERMINAL

### **CONSULTANTS**

Interior Architects SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG.

TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers: COSENTINI ASSOCIATES INC.

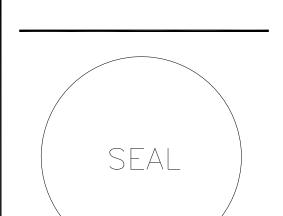
501 Lake Avenue South, Suite 300, Duluth MN 55802

1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031 Baggage Handling Systems Consultants:

BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

TEL: (218) 591-5079

Landscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812



### REVISIONS

DESCRIPTION	DATE
 ISSUED: 04-12-10	
	ISSUED: 04-12-10

**REVIEWED BY:** SBS/TC DRAWN BY: MKG/MI

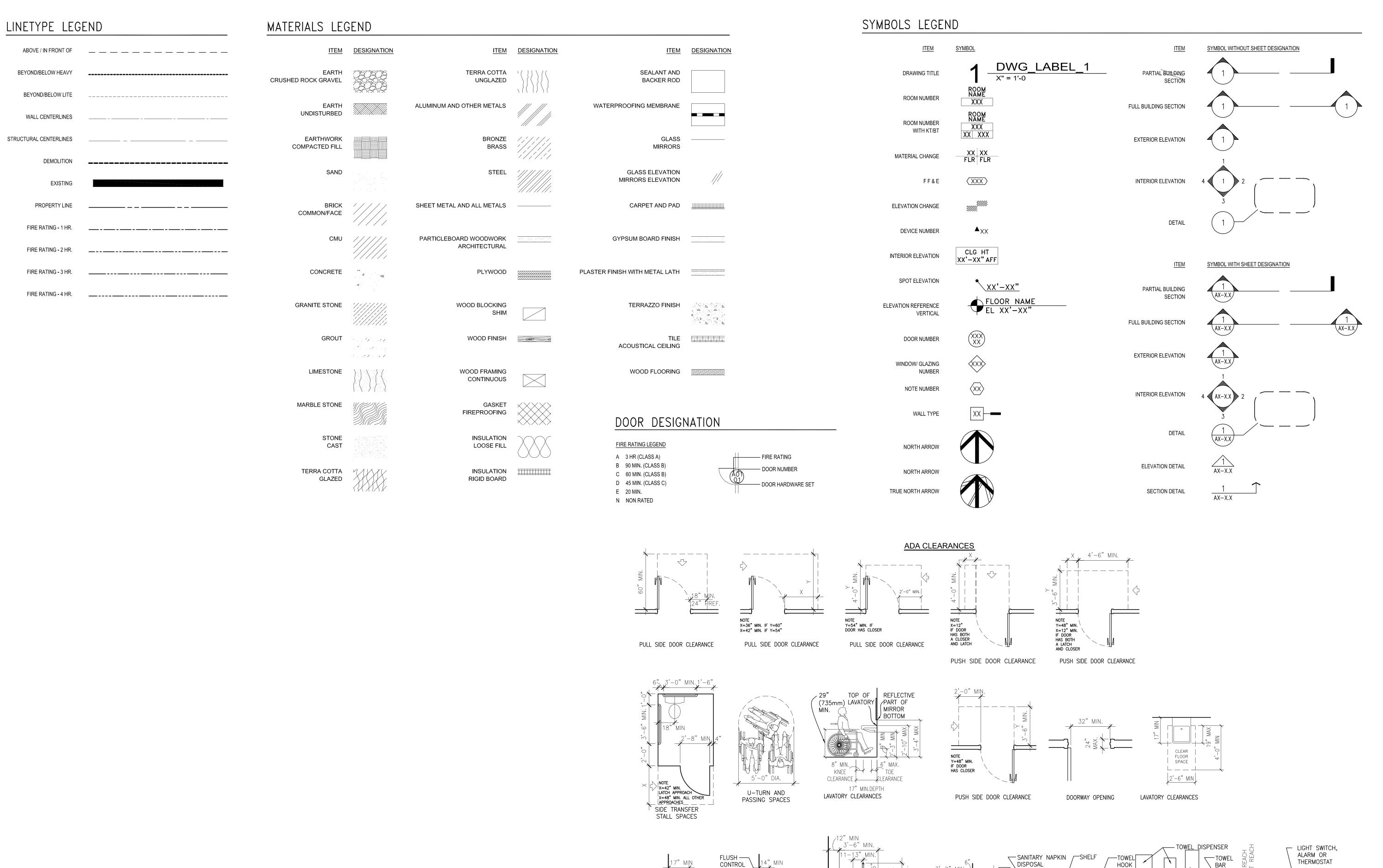
**DESIGNED BY:** SBS/TC **AEP PROJECT NUMBER** 

213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

**ABBREVIATIONS** 

SHEET NUMBER A001



11" MIN DRINKING FOUNTAIN

URINAL

DISPOSAL

TOILET ROOM ACCESSORIES

WATER CLOSET ELEVATIONS



Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com



**AUTHORITY** 

**DULUTH** INTERNATIONAL **AIRPORT** 

DULUTH, MN

**NEW PASSENGER TERMINAL** 

**CONSULTANTS** 

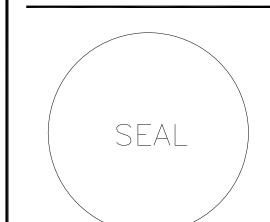
Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: **COSENTINI ASSOCIATES INC.** 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



NO.	DESC	RIPTION	DATE
DATE	ISSUED:	04-12-10	·
REVIE	WED BY:	SBS/TC	
DRAW	N BY:	MKG/MI	
DESIG	NED BY:	SBS/TC	
	AEP PRO	JECT NU	MBER
	040	1882-09	

© 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

SYMBOLS AND

ELECTRIC AND DATA OUTSETS

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A002 Symbols.dwg Plotted on: 4/12/2010 4:49 PM

SANTARY NAPKIN/ TAMPON VENDOR

**ADA** 

SHEET NUMBER **A002** 

### MATERIALS LEGEND

BRICK VENEER

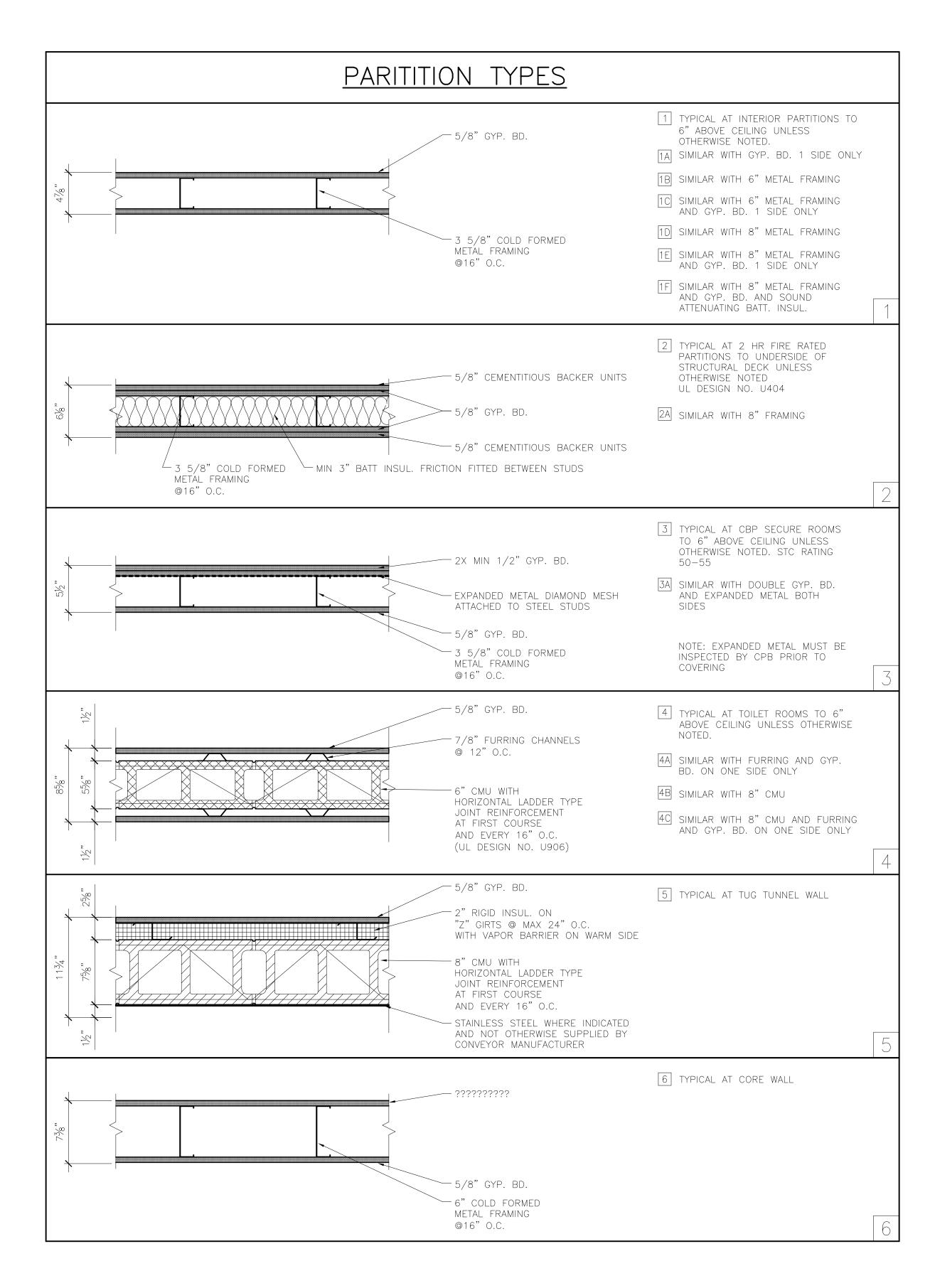
NEER

BATT INSULATION

CONCRETE

WOOD BLOCKING

GYPSUM BOARD





Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Sto A Duleth, Minnecota 55811 218-722-1227 Fax: 218-722-1052 www.reandh.com



**AUTHORITY** 

DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

#### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

## Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

# BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



REVISIONS		
NO.	DESCRIPTION	DATE
DATE	<b>88UED</b> 04-12-10	
REVIEW	VED BY: SBS/TC	

DRAWN BY: MKG/MI
DESIGNED BY: SBS/TC

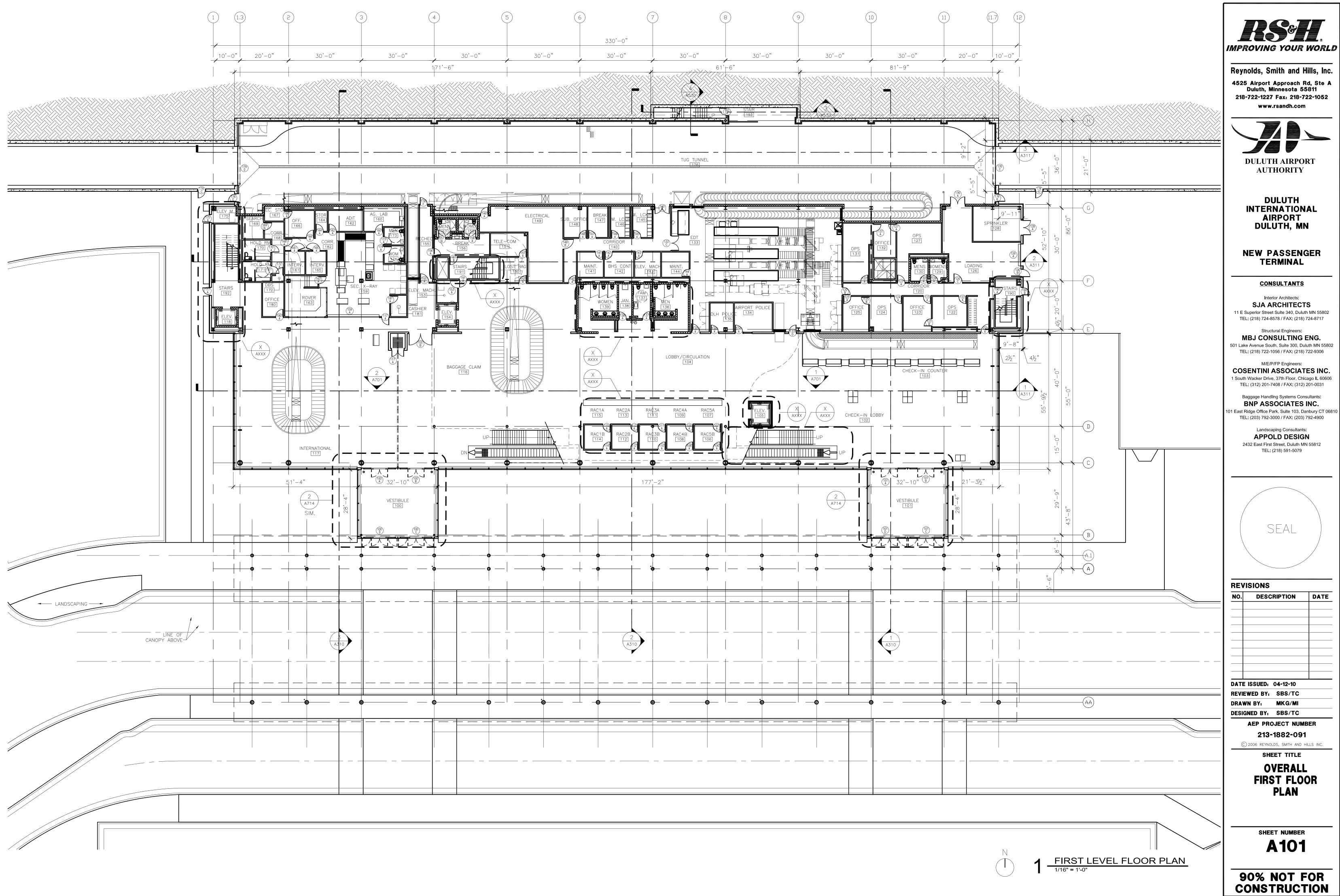
AEP PROJECT NUMBER 213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

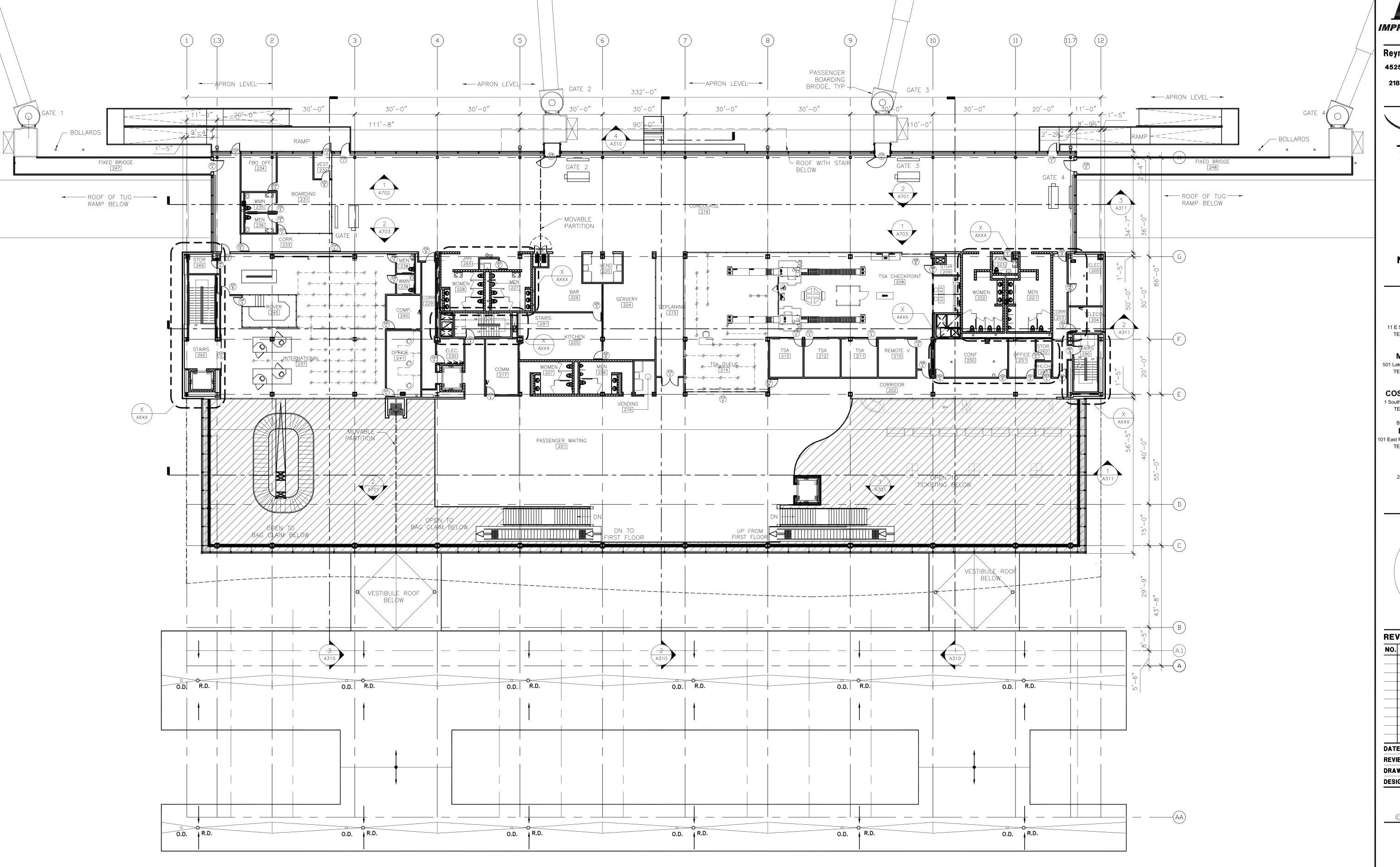
PARTITION TYPES

A003





Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A101 Overall First Floor Plan.dwg Plotted on: 4/12/2010 4:50 PM



ISSELL.

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.
4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811
218-722-1227 Fax: 218-722-1052
www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

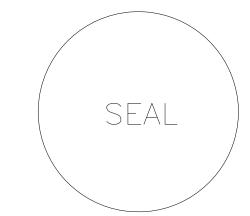
COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031 Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.
01 East Ridge Office Park, Suite 103, Danbury CT 06810
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN
2432 East First Street, Duluth MN 55812
TEL: (218) 591-5079



NO.	DESCRIPTION	DA <sup>-</sup>

REVIEWED BY: SBS/TC
DRAWN BY: MKG/MI
DESIGNED BY: SBS/TC

AEP PROJECT NUMBER 213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

OVERALL SECOND FLOOR

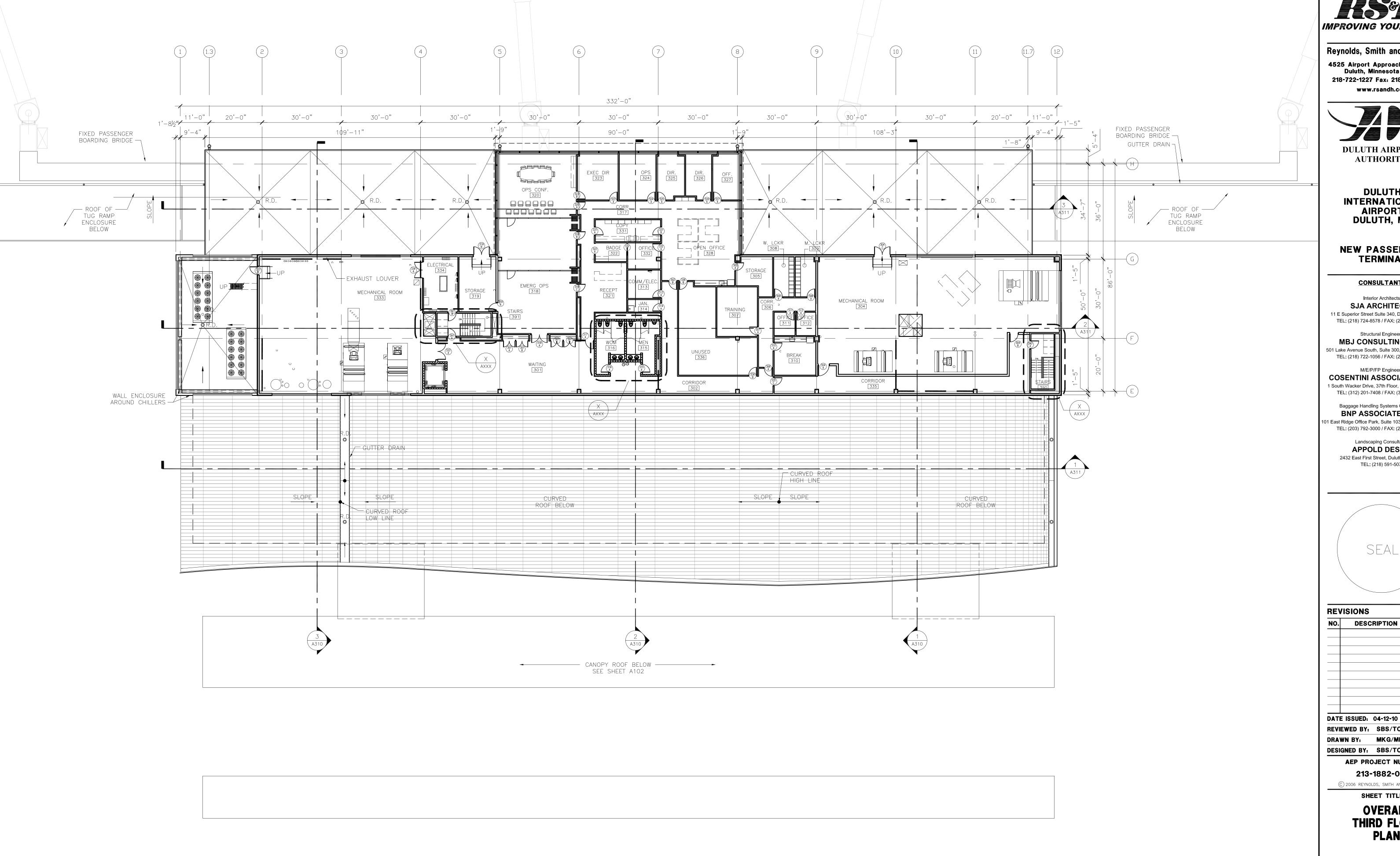
SECOND FLOOR PLAN

sheet number A 102

90% NOT FOR CONSTRUCTION

SECOND LEVEL FLOOR PLAN

1/16" = 1'-0"



IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052

**DULUTH AIRPORT** 

**AUTHORITY** 

www.rsandh.com

**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants: **APPOLD DESIGN** 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

SEAL

**REVISIONS** 

NO. DESCRIPTION DATE

REVIEWED BY: SBS/TC DRAWN BY: MKG/MI DESIGNED BY: SBS/TC

**AEP PROJECT NUMBER** 

213-1882-091 © 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

**OVERALL** THIRD FLOOR **PLAN** 

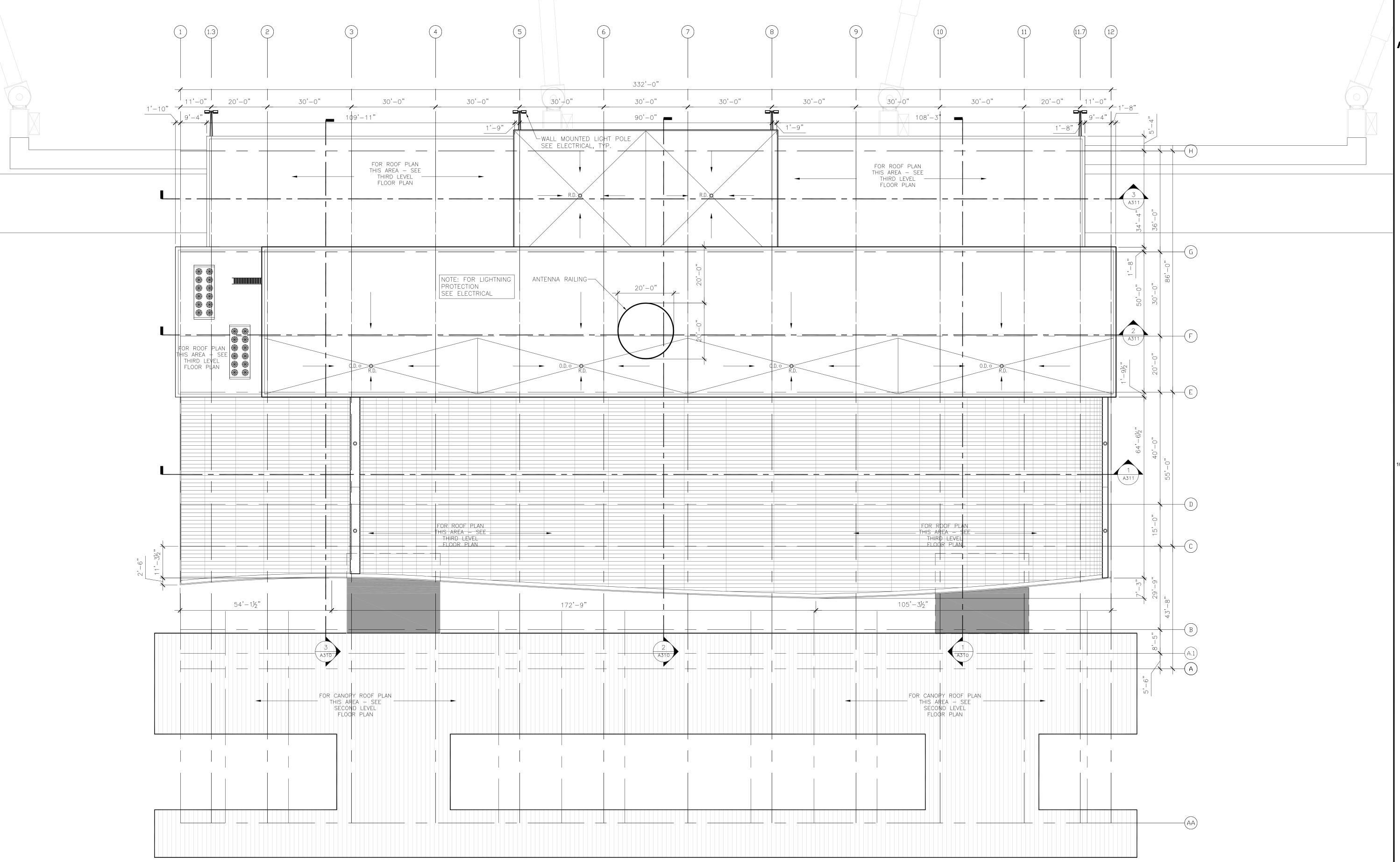
SHEET NUMBER

A103

90% NOT FOR CONSTRUCTION

THIRD LEVEL FLOOR PLAN

1/16" = 1'-0"





Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-1052

www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

### CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:
MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810

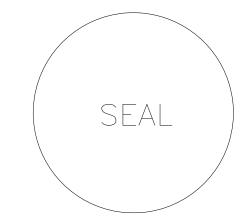
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



REV	REVISIONS			
NO.	DESCRIPTION	DATE		
-+				
-				
		•		

DATE ISSUED: 04-12-10
REVIEWED BY: SBS/TC
DRAWN BY: MKG/MI
DESIGNED BY: SBS/TC

AEP PROJECT NUMBER

213-1882-091
© 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

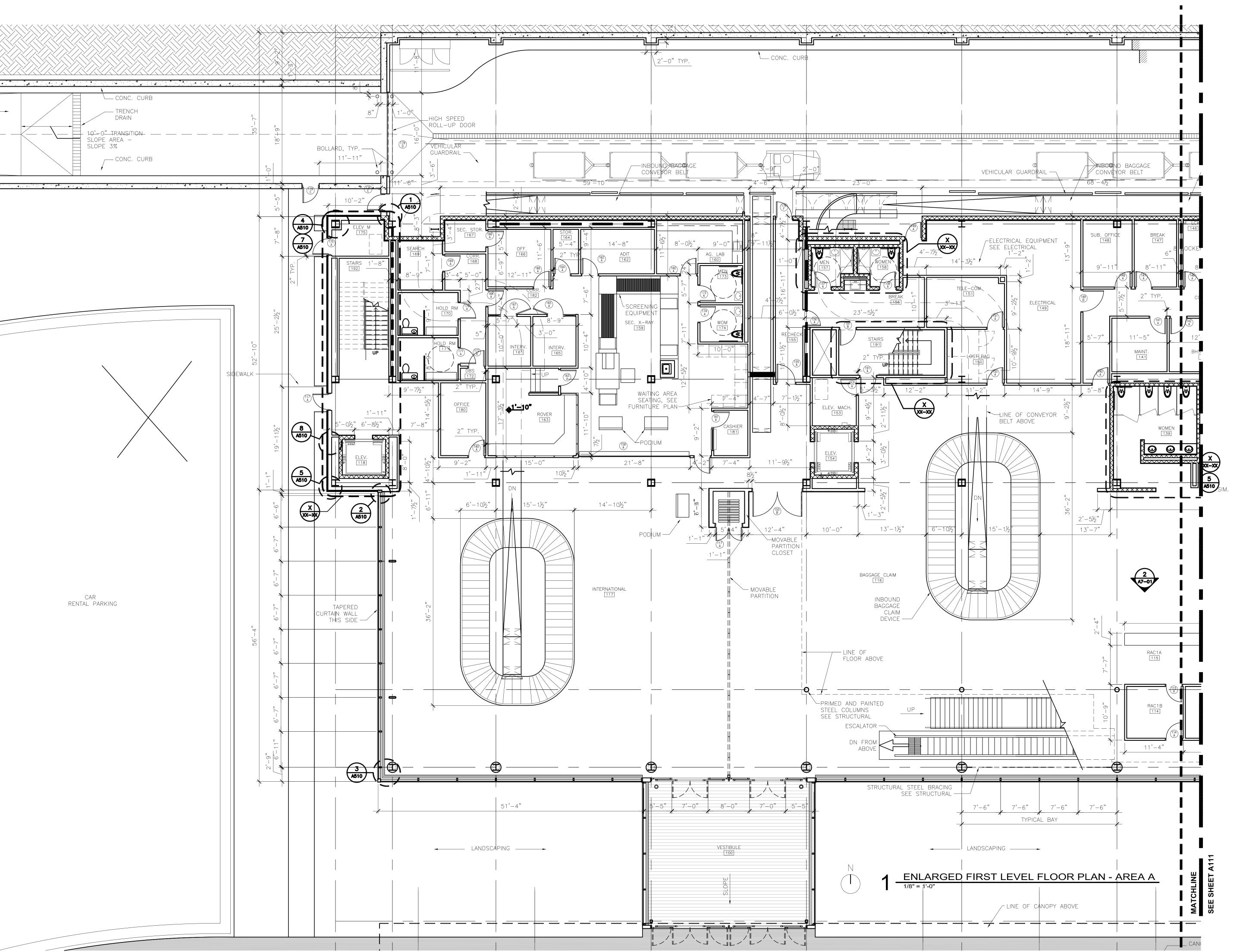
OVERALL ROOF PLAN

A104

90% NOT FOR CONSTRUCTION

ROOF PLAN

1/16" = 1'-0"





Reynolds, Smith and Hills, Inc.
4525 Airport Approach Rd. Ste A

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

Interior Architects: **SJA ARCHITECTS**11 E Superior Street Suite 340, Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

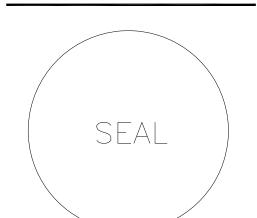
Baggage Handling Systems Consultants:
BNP ASSOCIATES INC.

1 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN
2432 East First Street, Duluth MN 55812
TEL: (218) 591-5079



REVISIONS

NO. DESCRIPTION DATE

REVIEWED BY: SBS/TC
DRAWN BY: MKG/MI

DESIGNED BY: SBS/TC

AEP PROJECT NUMBER

**213-1882-091**© 2006 REYNOLDS, SMITH AND HILLS INC.

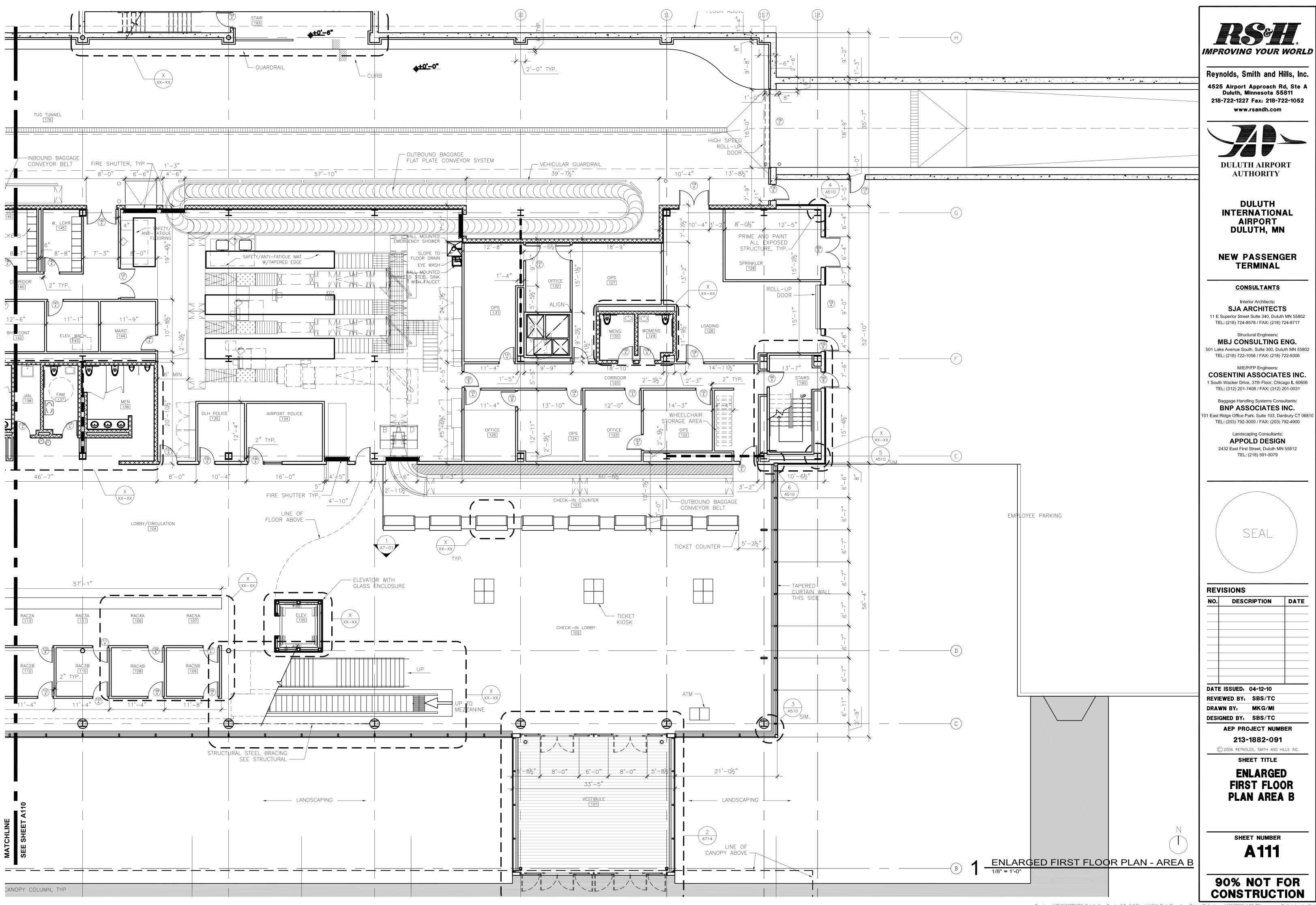
SHEET TITLE

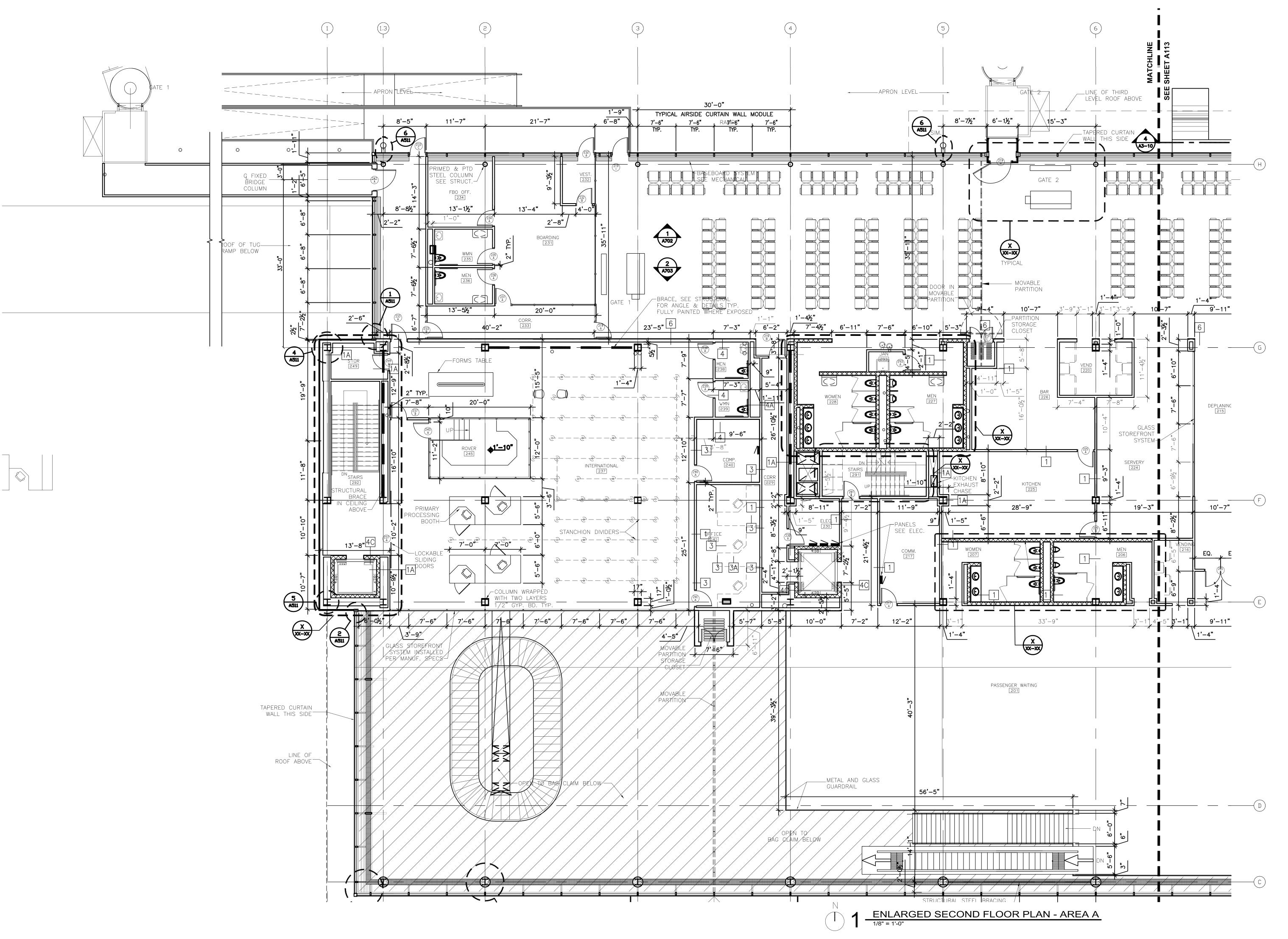
ENLARGED FIRST FLOOR PLAN AREA A

SHEET NUMBER
A110

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A110 First Floor Area A.dwg Plotted on: 4/12/2010 4:51 PM Plotted by: Ip,







Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-1052

www.rsandh.com



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW PASSENGER TERMINAL

### CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

## Structural Engineers: MBJ CONSULTING ENG. Lake Avenue South Suite 200 Duluth MN 55803

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

## M/E/P/FP Engineers: COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606

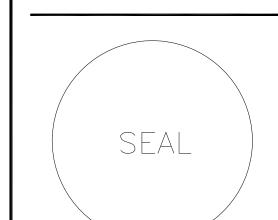
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

#### 1 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900 Landscaping Consultants:

APPOLD DESIGN
2432 East First Street, Duluth MN 55812
TEL: (218) 591-5079



NO.	DESCRIPTION	DATE

# DATE ISSUED: 04-12-10 REVIEWED BY: SBS/TC DRAWN BY: MKG/MI

DESIGNED BY: SBS/TC

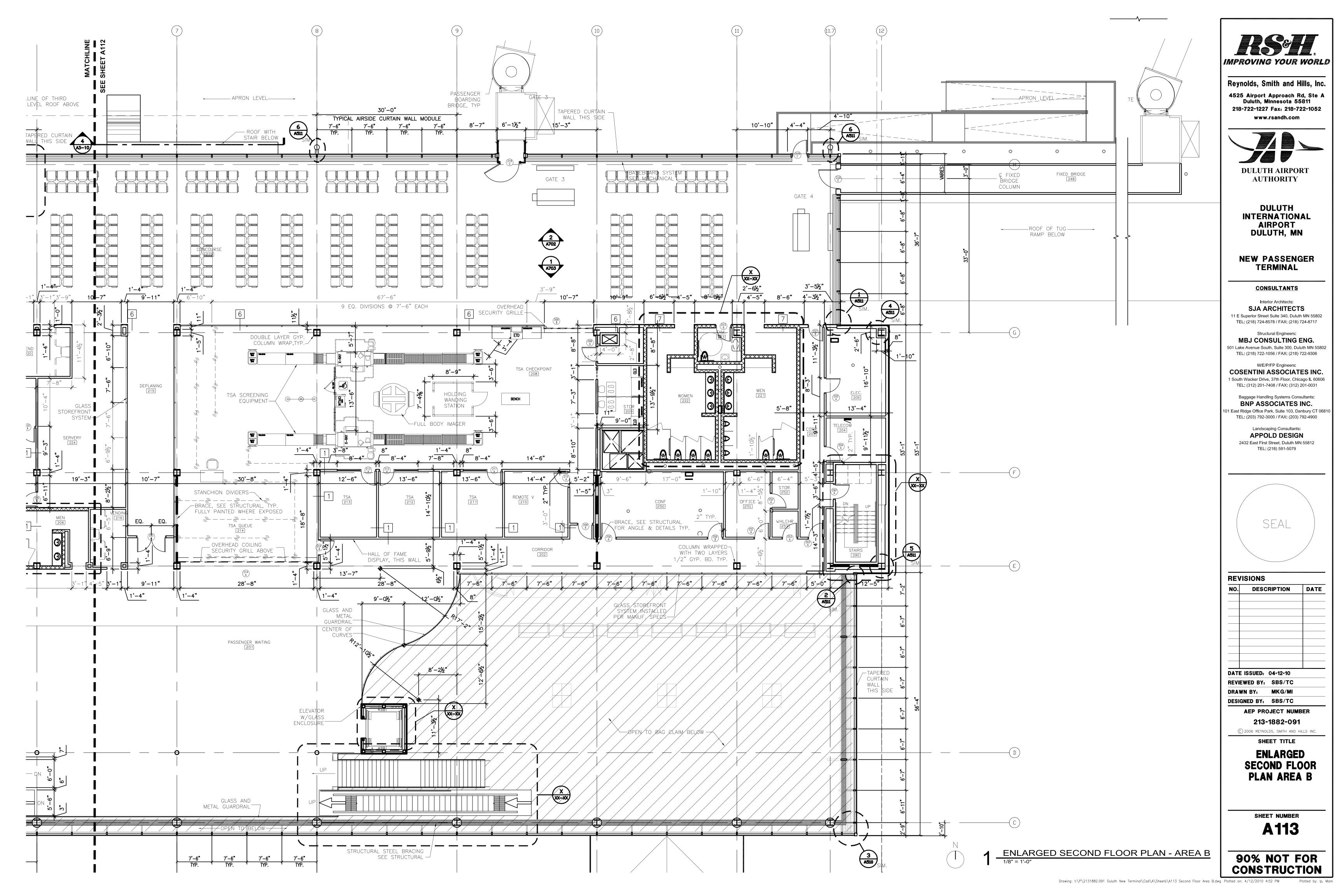
AEP PROJECT NUMBER

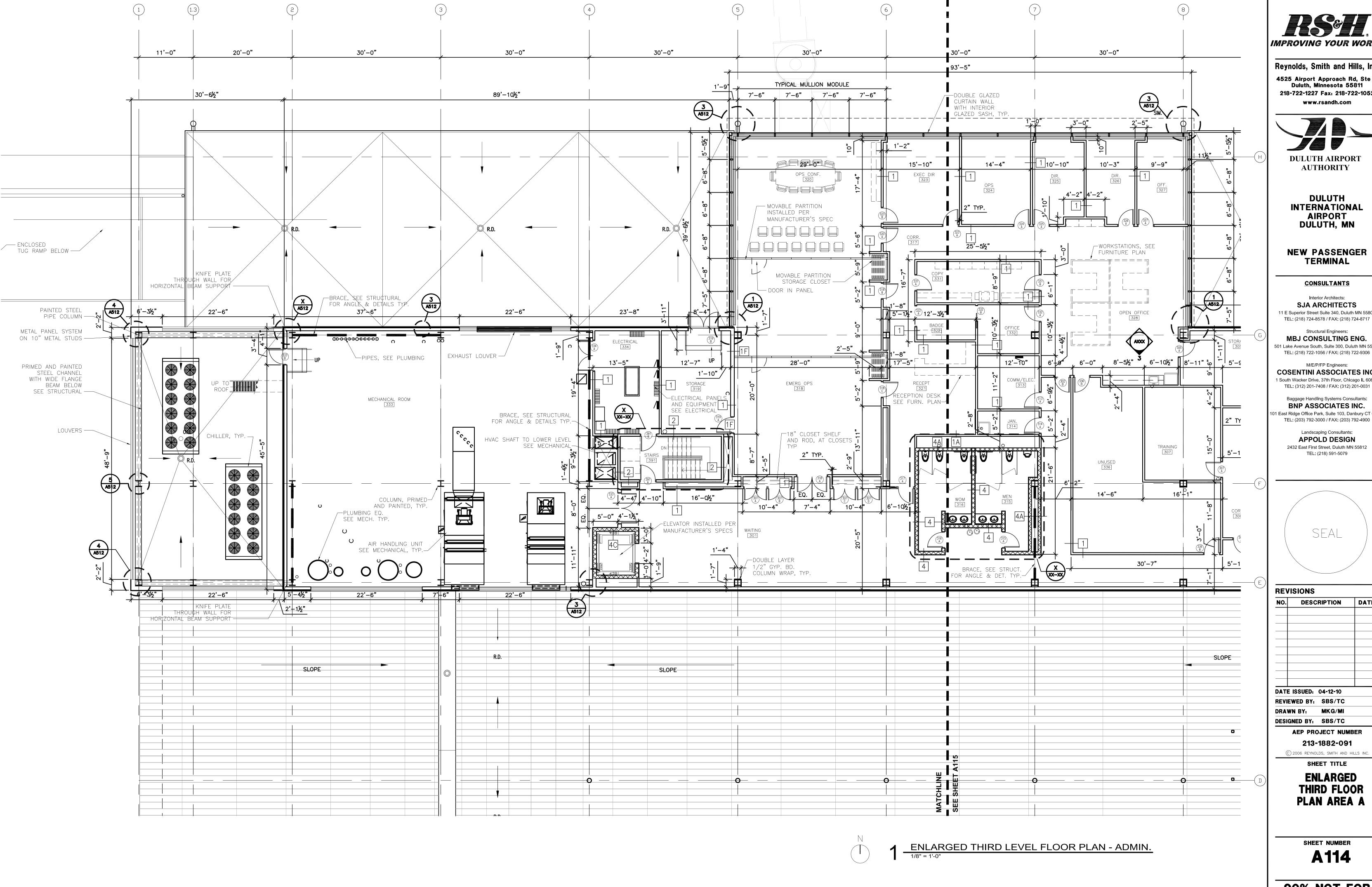
## 213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

ENLARGED SECOND FLOOR PLAN AREA A

A 112





IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com



**DULUTH INTERNATIONAL AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

**CONSULTANTS** 

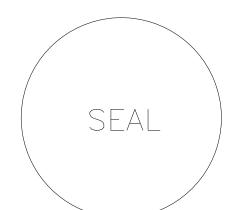
Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: **COSENTINI ASSOCIATES INC.** 1 South Wacker Drive, 37th Floor, Chicago IL 60606

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 1 East Ridge Office Park, Suite 103, Danbury CT 06810

Landscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



NO.	DESCRIPTION	DA.
DATE	SSUED: 04-12-10	
REVIEV	VED BY: SBS/TC	

DRAWN BY: MKG/MI DESIGNED BY: SBS/TC **AEP PROJECT NUMBER** 

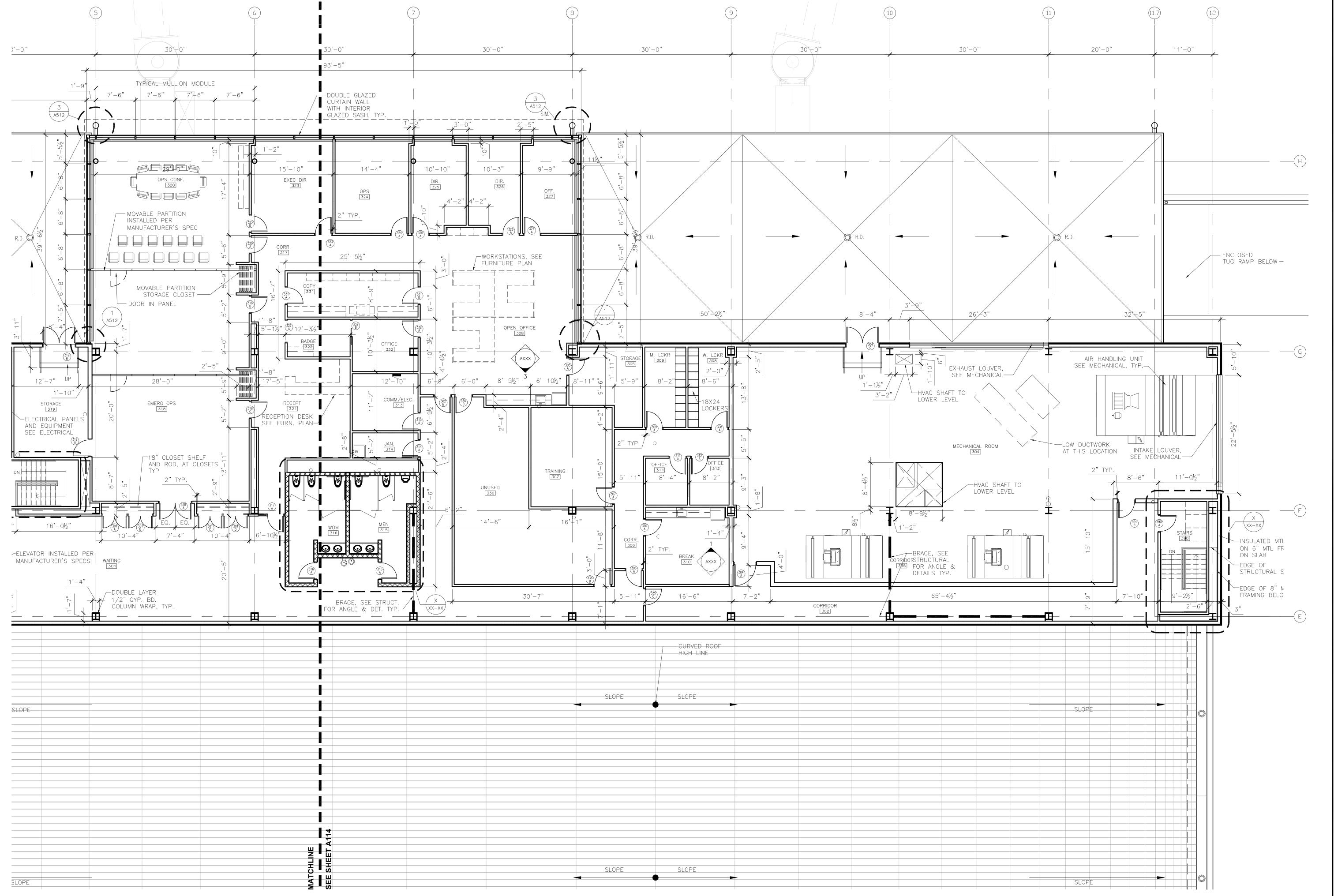
213-1882-091 © 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

**ENLARGED THIRD FLOOR** PLAN AREA A

SHEET NUMBER

A114





ENLARGED THIRD FLOOR PLAN - AREA B

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-1052

www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:
BNP ASSOCIATES INC.

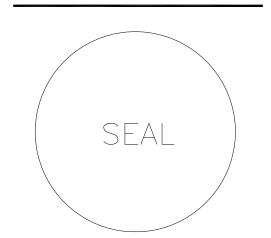
1 East Ridge Office Park, Suite 103, Danbury CT 06810
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



NO.	DESCRIPTION	DAT
	SSUED: 04-12-10	

REVIEWED BY: SBS/TC
DRAWN BY: MKG/MI
DESIGNED BY: SBS/TC

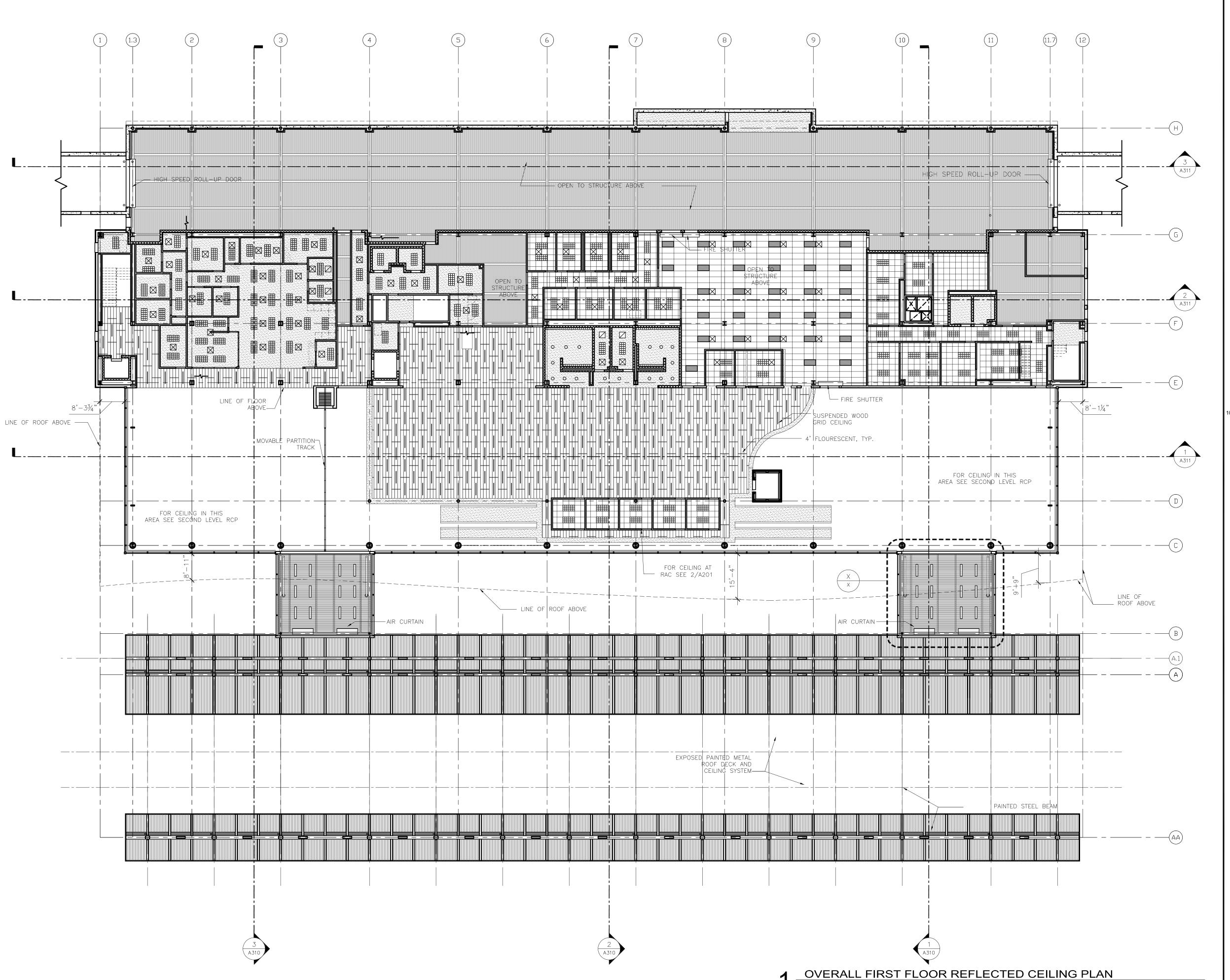
AEP PROJECT NUMBER

213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

ENLARGED THIRD FLOOR PLAN AREA B

A 115





Heynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste /
Duluth, Minnecota 55811

218-722-1227 Fax: 218-722-1052

**AAA.teeuqproom** 



**AUTHORITY** 

DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

### CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

# Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

### 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

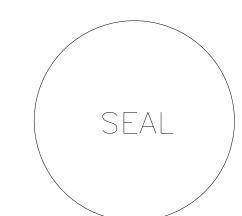
BNP ASSOCIATES INC.

11 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

## Landscaping Consultants: APPOLD DESIGN

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



REVISIONS				
NO.	DESCRIPTION	DATE		
		_		

DATE ISSUED: 04-12-10
REVIEWED BY: SBS/TC

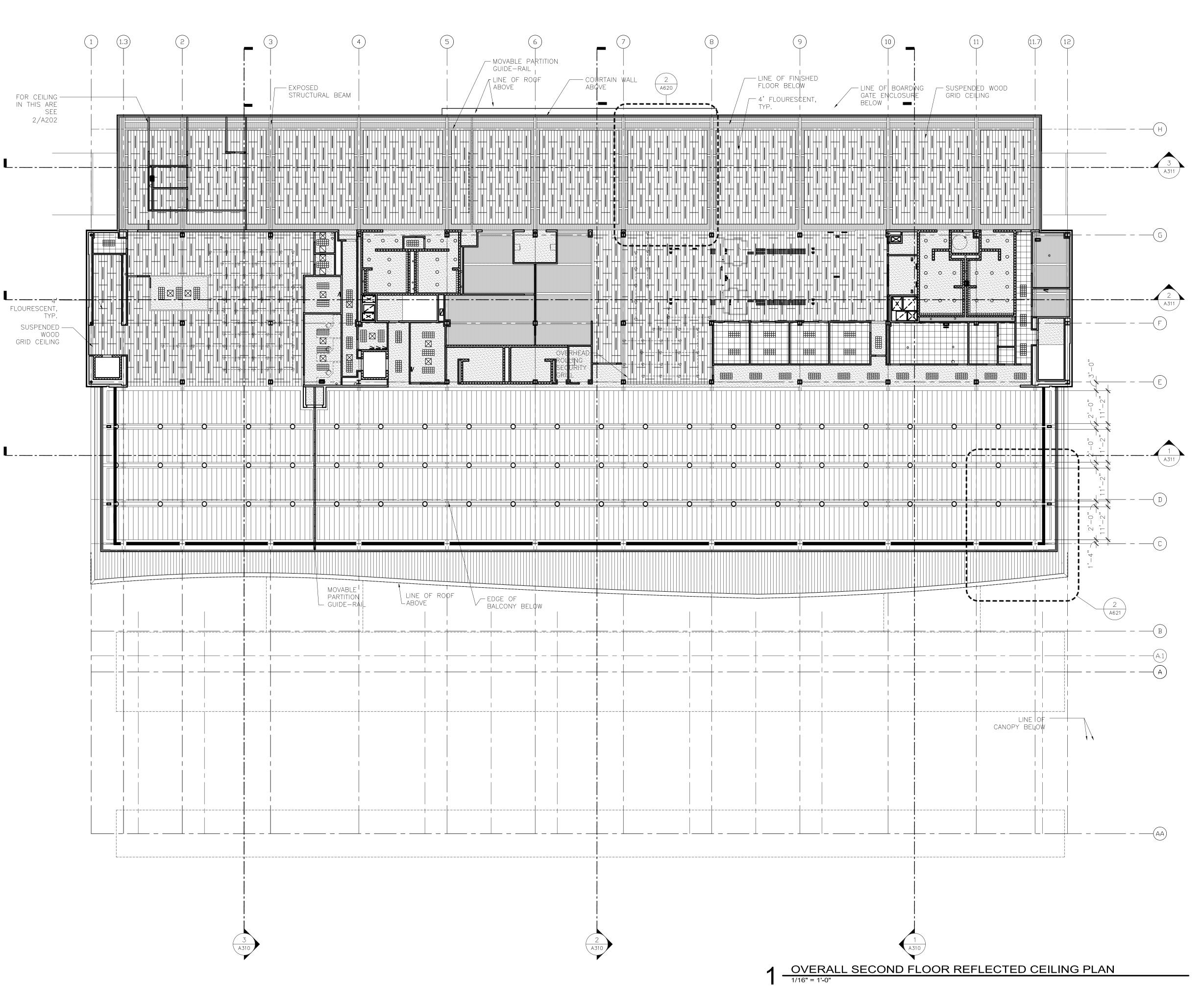
# DRAWN BY: MKG/MI DESIGNED BY: SBS/TC

AEP PROJECT NUMBER 213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

OVERALL FIRST FLOOR RCP

A201





Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-1052 www.reandb.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:
BNP ASSOCIATES INC.

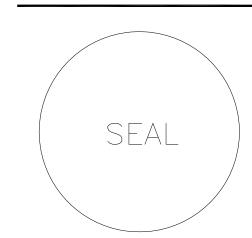
01 East Ridge Office Park, Suite 103, Danbury CT 06810
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



RE\	/ <b>ISION</b> 8
NO.	DE8

NO.	DESCRIPTION	DAT
DATI	<b>E 188UED</b> : 04-12-10	

DRAWN BY: MKG/MI
DESIGNED BY: SBS/TC

AEP PROJECT NUMBER

**213-1882-091** © 2006 REYNOLDS, SMITH AND HILLS INC.

OVERALL SECOND FLOOR

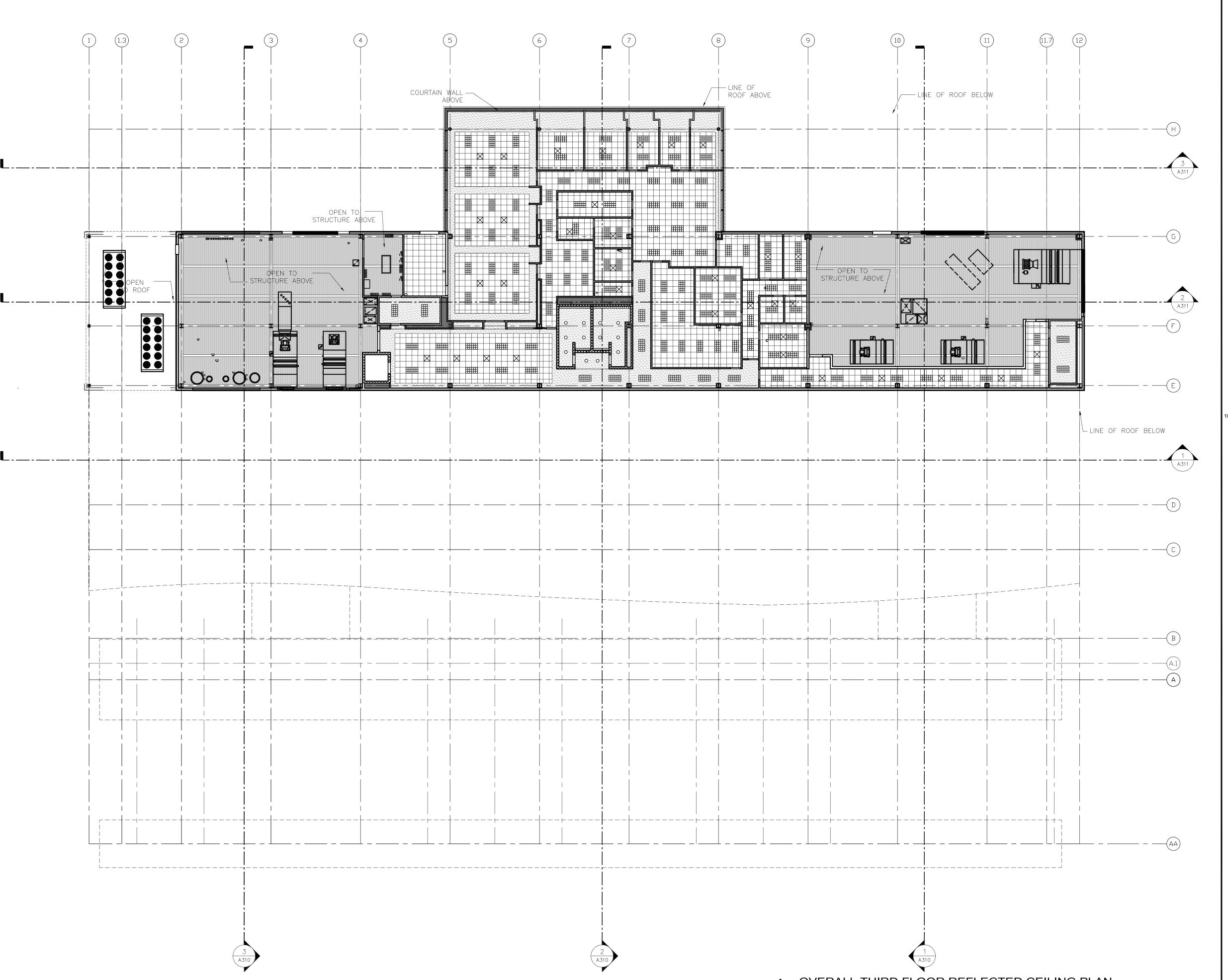
**RCP** 

SHEET NUMBER

A202

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A202 Overall Second Floor RCP.dwg Plotted on: 4/12/2010 4:54 PM





4525 Airport Approach Rd, Sto A Duluth, Minnocota 55811 218-722-1227 Fex: 218-722-1052

**AAA.teeuqproom** 



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:
BNP ASSOCIATES INC.

01 East Ridge Office Park, Suite 103, Danbury CT 06810
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



REV	REVISIONS				
NO.	DESCRIPTION	DATE			
DATE	188UED: 04-12-10				
REVI	WED BY, SBS/TC				
DRAY	MRY. MKG/MI				

DESIGNED BY: SBS/TC

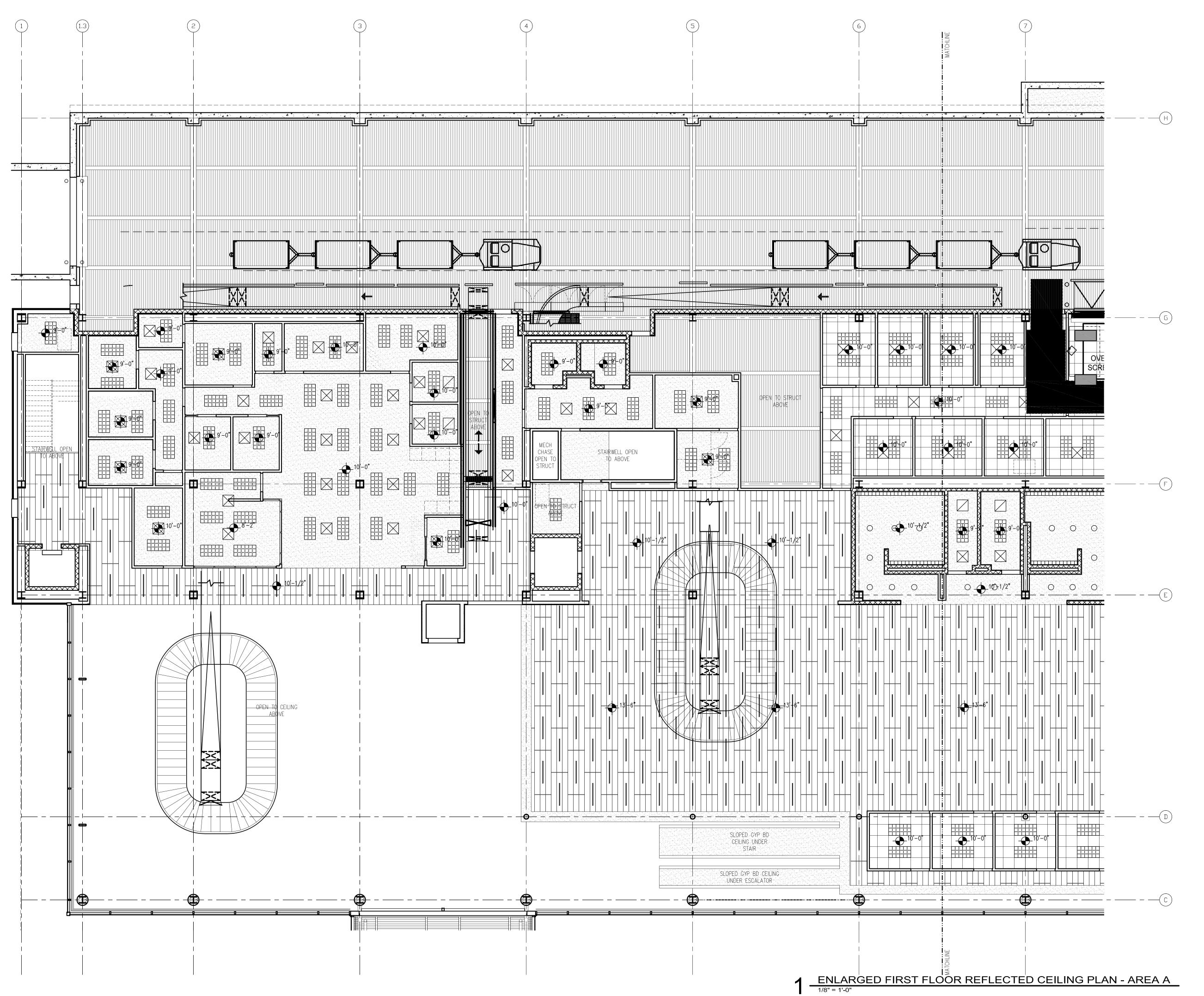
AEP PROJECT NUMBER

213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

OVERALL THIRD FLOOR RCP

A203





218-722-1227 Fex: 218-722-1052



www.reendh.com

**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

### **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

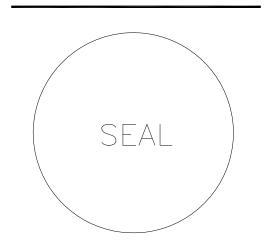
Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: **COSENTINI ASSOCIATES INC.** 1 South Wacker Drive, 37th Floor, Chicago IL 60606

TEL: (312) 201-7408 / FAX: (312) 201-0031 Baggage Handling Systems Consultants: BNP ASSOCIATES INC.

01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants: **APPOLD DESIGN** 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



REVISIONS			
NO.	DESCRIPTION	DATE	
DATI	E ISSUED: 04-12-10		
REVI	EWED BY. SBS/TC		
DRA	WN BY, MKG/MI		

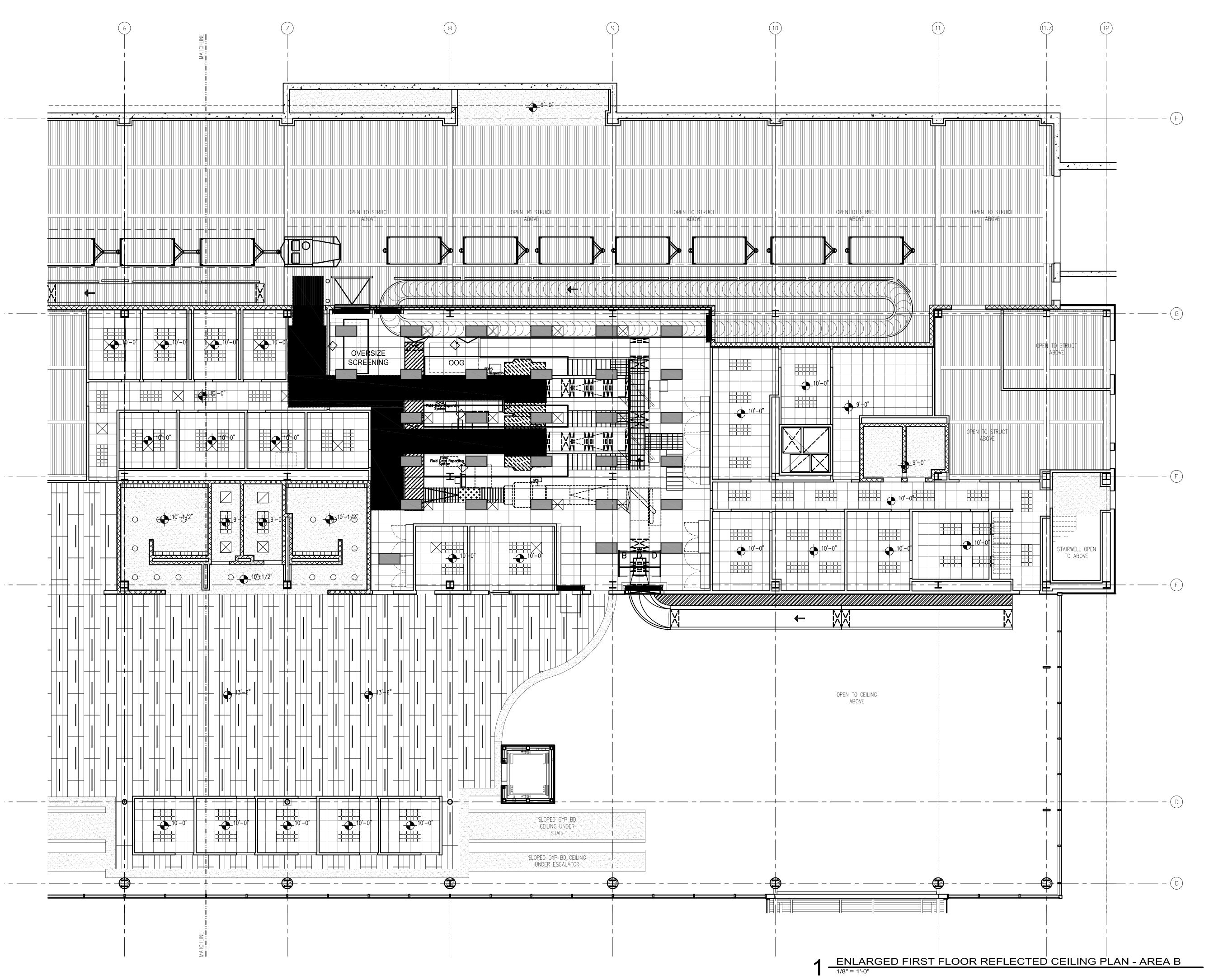
DESIGNED BY: SBS/TC AEP PROJECT NUMBER

213-1882-091 © 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

ENLARGED
FIRST FLOOR
REFLECTED CEILING
PLAN AREA A

SHEET NUMBER **A210** 





Reynolds, Smith and Hills, Inc.
4525 Airport Approach Rd, Sto /
Duluth, Minnecota 55811
218-722-1227 Fax: 218-722-1052



**AAA.teeuqproom** 

DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

11 East Ridge Office Park, Suite 103, Danbury CT 06810

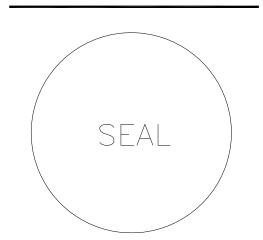
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



REVISIONS				
NO.	DESCRIPTION	DATE		
DATE	<b>188UED</b> : 04-12-10	'		
REVIEY	VED BY: SBS/TC			

ESIGNED BY, SBS/TC

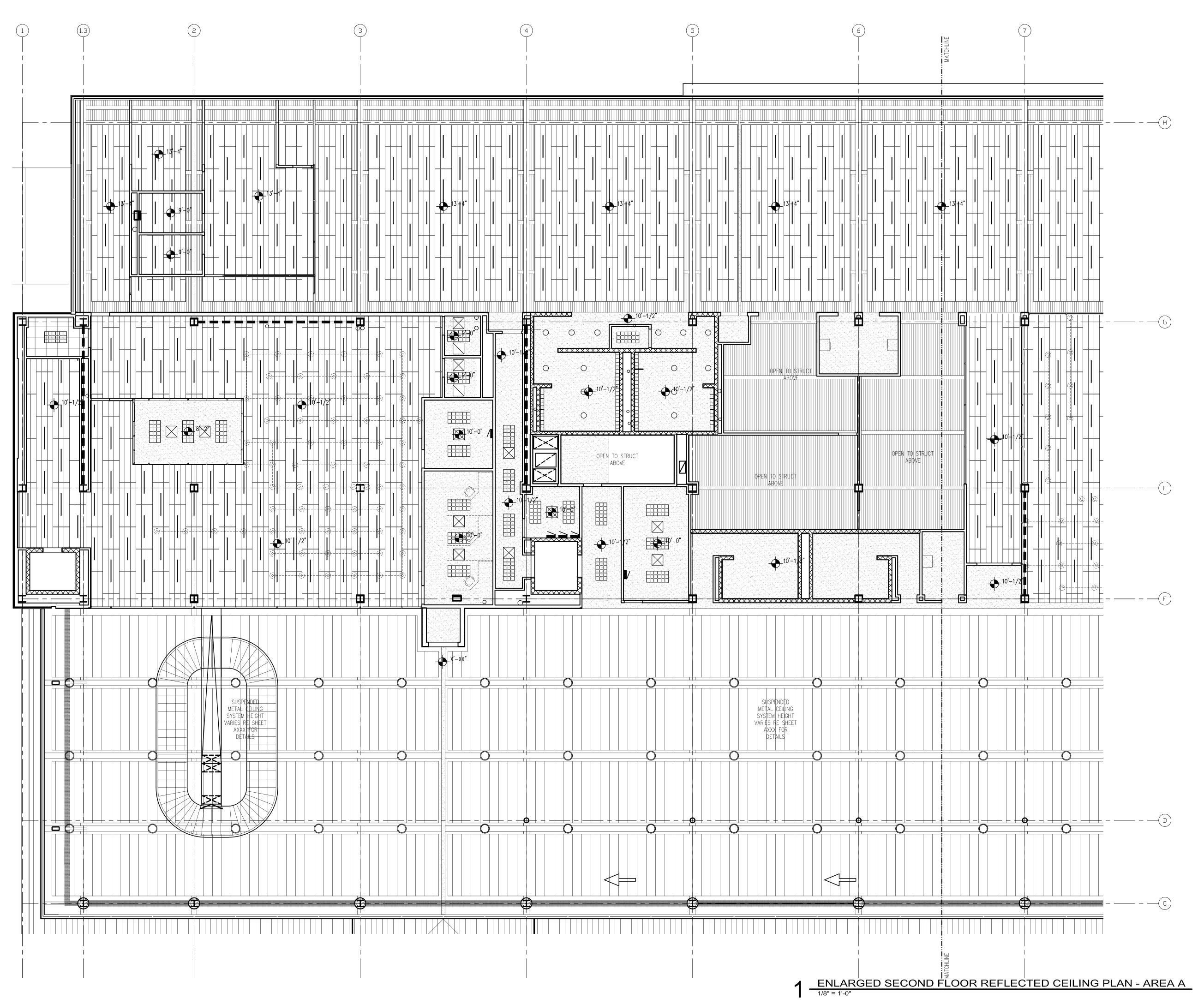
AEP PROJECT NUMBER

213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

ENLARGED
FIRST FLOOR
REFLECTED CEILING
PLAN AREA B

A 211





Reynolds, Smith and Hills, Inc.
4525 Airport Approach Rd, Ste A

4525 Airport Approach Rd, Ste A Duluth, Minnecota 55811 218-722-1227 Fax: 218-722-1052 www.reandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:
MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:
BNP ASSOCIATES INC.

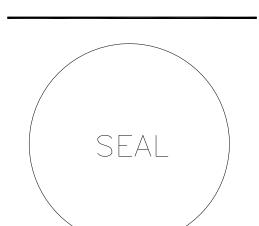
01 East Ridge Office Park, Suite 103, Danbury CT 06810
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



NO.	<b>DESCRIPTION</b>	D/

DATE ISSUED: 04-12-10
REVIEWED BY: SBS/TC
DRAWN BY: MKG/MI

DESIGNED BY: SBS/TC

AEP PROJECT NUMBER

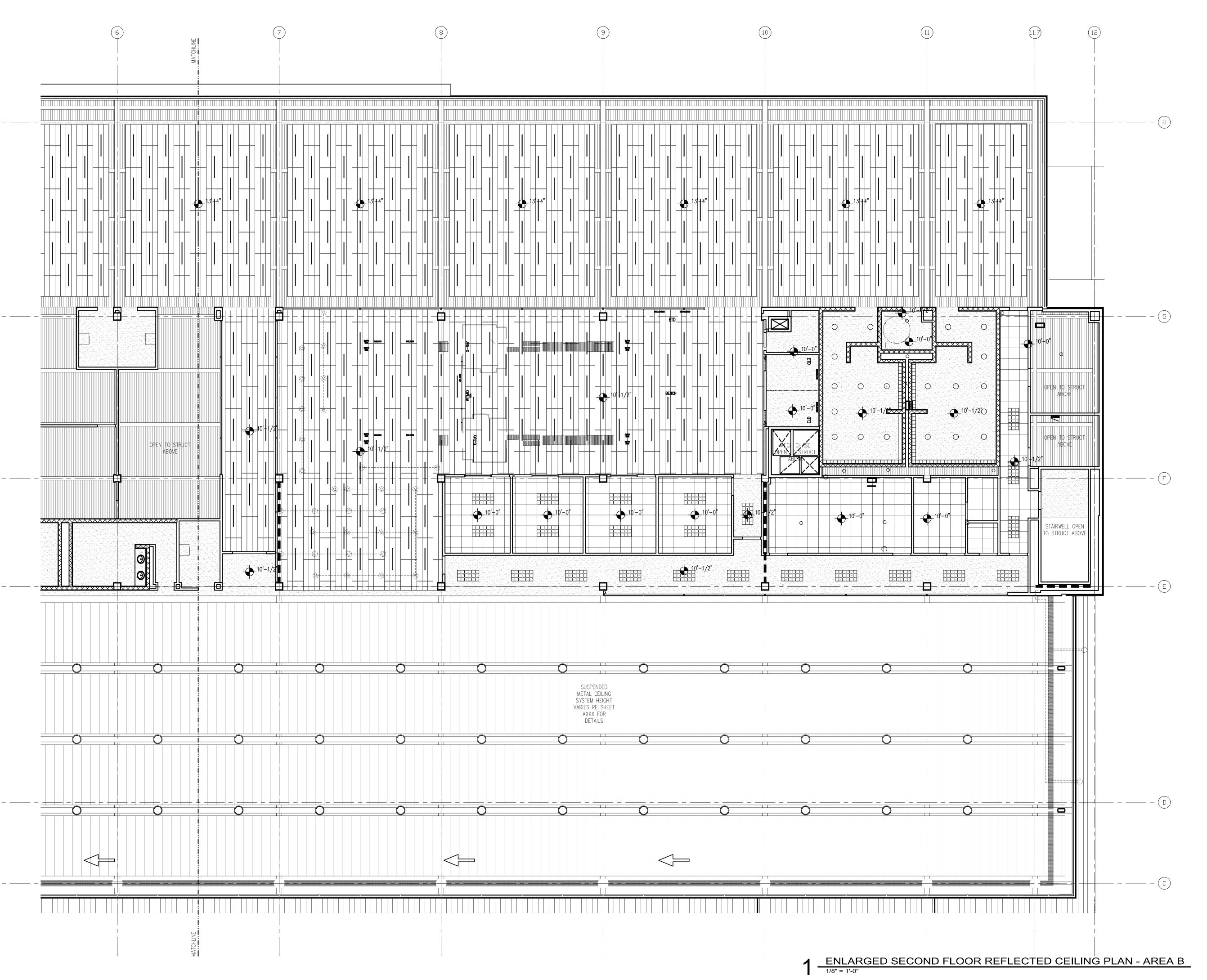
**213-1882-091** © 2006 REYNOLDS, SMITH AND HILLS INC.

ENLARGED
SECOND FLOOR
REFLECTED CEILING
PLAN AREA A

A 212

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A212 Enlarged Second Floor RCP Area A.dwg Plotted on: 4/12/2010 4:55 PM





Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duleth, Minnesota 55811

218-722-1227 Fex: 218-722-1052 www.reandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

MBJ CONSULTING ENG.
501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

Structural Engineers:

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

01 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

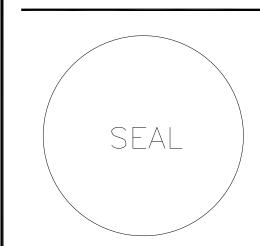
TEL: (312) 201-7408 / FAX: (312) 201-0031

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



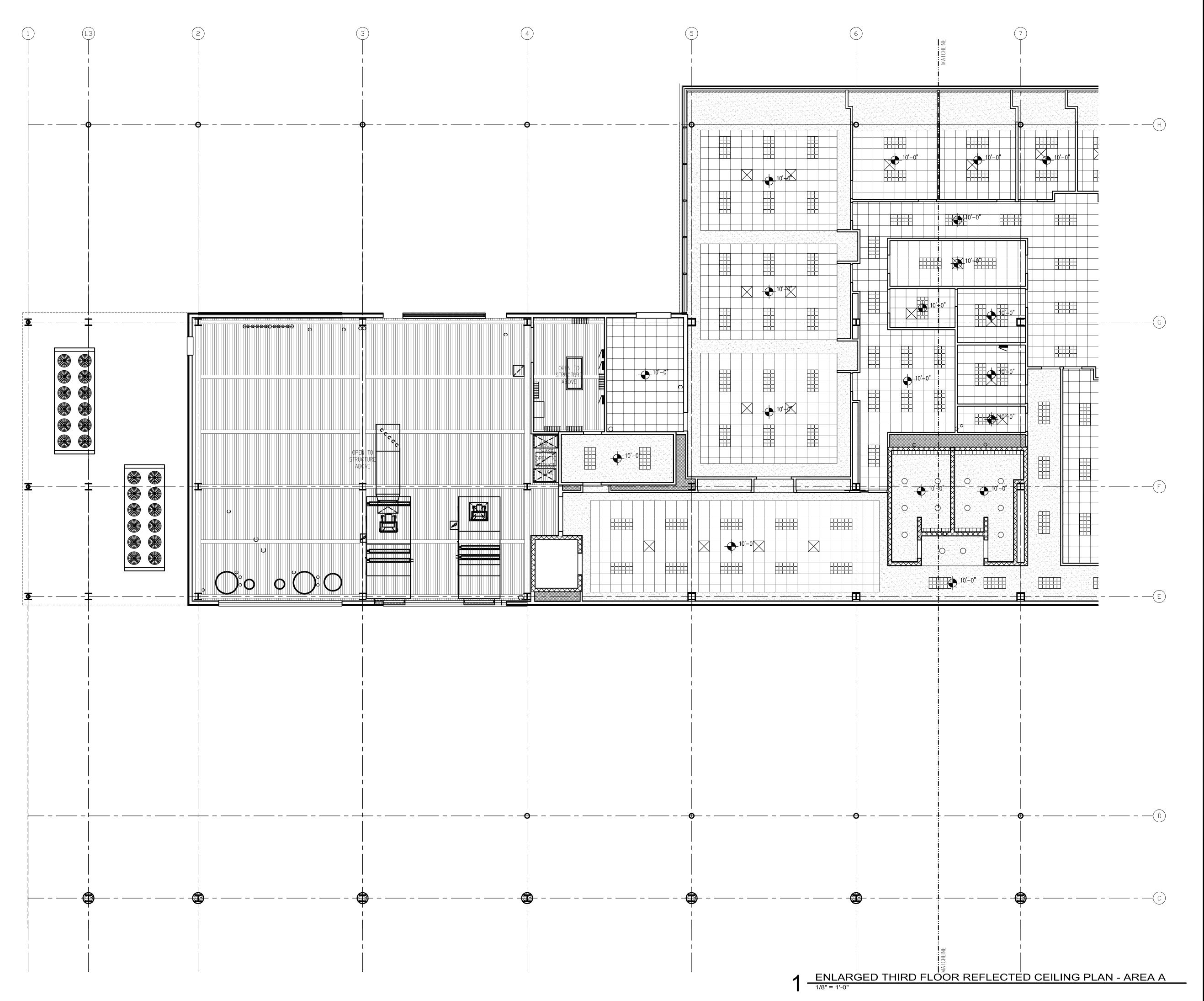
REVISIONS			
NO.	DESC	RIPTION	DAT
_			
			+
DATE	SSUED:	04-12-10	
REVIEY	VED BY.	SBS/TC	
DRAWI	BY:	MKG/MI	
DESIGN	ED BY:	SBS/TC	

AEP PROJECT NUMB

213-1662-091 2006 REYNOLDS, SMITH AND HILLS SHEET TITLE

ENLARGED
SECOND FLOOR
REFLECTED CEILING
PLAN AREA B

A 213





Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Sto A
Duluth, Minnocota 55811

218-722-1227 Fax: 218-722-1052



**AAA.teeuqproom** 

DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW PASSENGER TERMINAL

### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

## Structural Engineers: MBJ CONSULTING ENG. Lake Avenue South, Suite 300, Duluth MN 55802

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers:

## COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

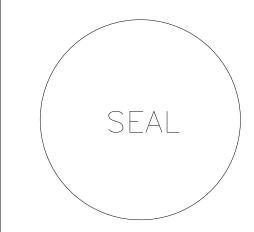
BNP ASSOCIATES INC.

01 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

# Landscaping Consultants: APPOLD DESIGN

APPOLD DESIGN
2432 East First Street, Duluth MN 55812
TEL: (218) 591-5079



REVISIONS			
NO.	DESCRIPTION	DATE	
DATI	<b>E ISSUED</b> 04-12-10		
REVI	EWED BY: SBS/TC		

# DRAWN BY: MKG/MI DESIGNED BY: SBS/TC

AEP PROJECT NUMBER 213-1882-091

# © 2006 REYNOLDS, SMITH AND HILLS INC.

ENLARGED
THIRD FLOOR
REFLECTED CEILING
PLAN AREA A

A214

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A214 Enlarged Third Floor RCP Area A.dwg Plotted on: 4/12/2010 4:55 PM





Reynolds, Smith and Hills, Inc.
4525 Airport Approach Rd, Ste A
Duluth, Minnecote 55811
218-722-1227 Fex: 218-722-1052



**AAA.teeuqproom** 

DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

## Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

## COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

01 East Ridge Office Park, Suite 103, Danbury CT 06810

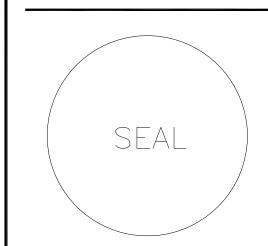
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



<b>REVISIONS</b>		
NO.	DESCRIPTION	E

DATE ISSUED: 04-12-10
REVIEWED BY: SBS/TC
DRAWN BY: MKG/MI

DESIGNED BY: SBS/TC

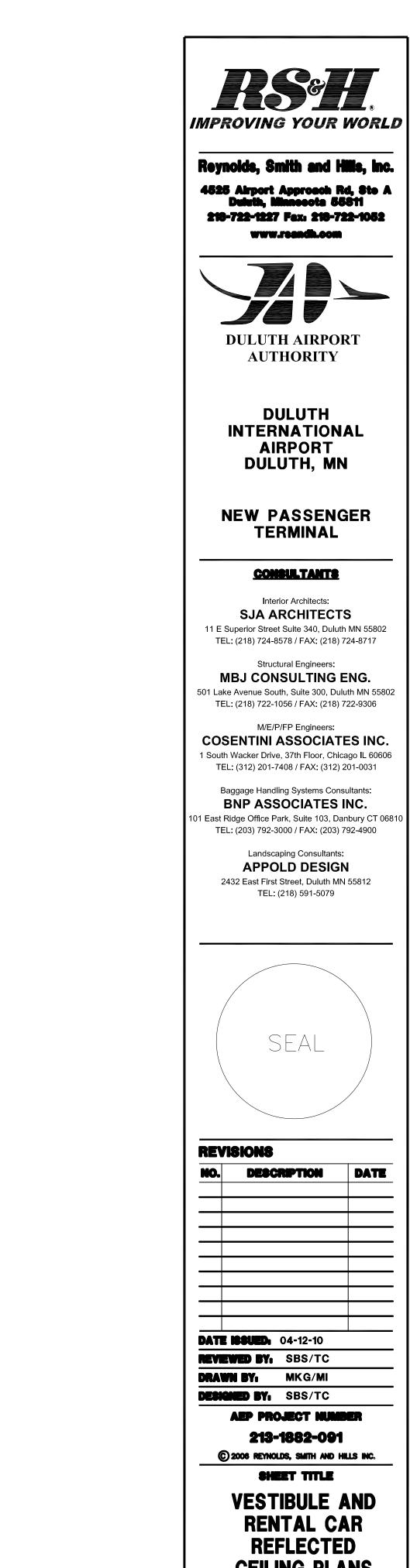
AEP PROJECT NUMBER

213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

ENLARGED
THIRD FLOOR
REFLECTED CEILING
PLAN AREA B

A 215



IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duieth, Minnesota 55811 218-722-1227 Fex: 218-722-1052 **AAA.teeuqproom** 



**DULUTH** INTERNATIONAL **AIRPORT** 

**NEW PASSENGER TERMINAL** 

### **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

### Structural Engineers: MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

#### M/E/P/FP Engineers: COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: BNP ASSOCIATES INC.

### Landscaping Consultants: APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



REVISIONS		
NO.	DESCRIPTION	DATE
`		

**DATE ISSUED** 04-12-10 REVIEWED BY. SBS/TC

AEP PROJECT NUMBER

213-1882-091

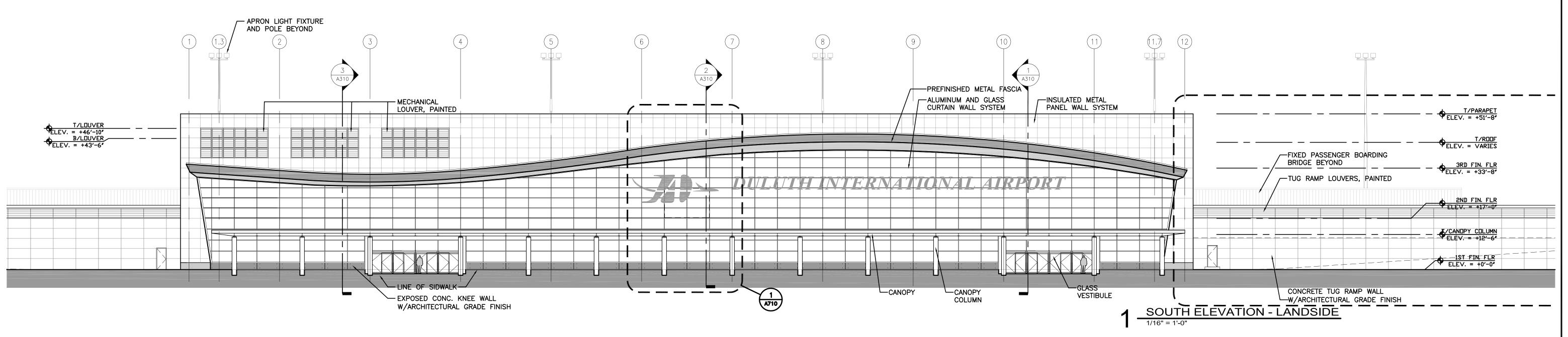
© 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

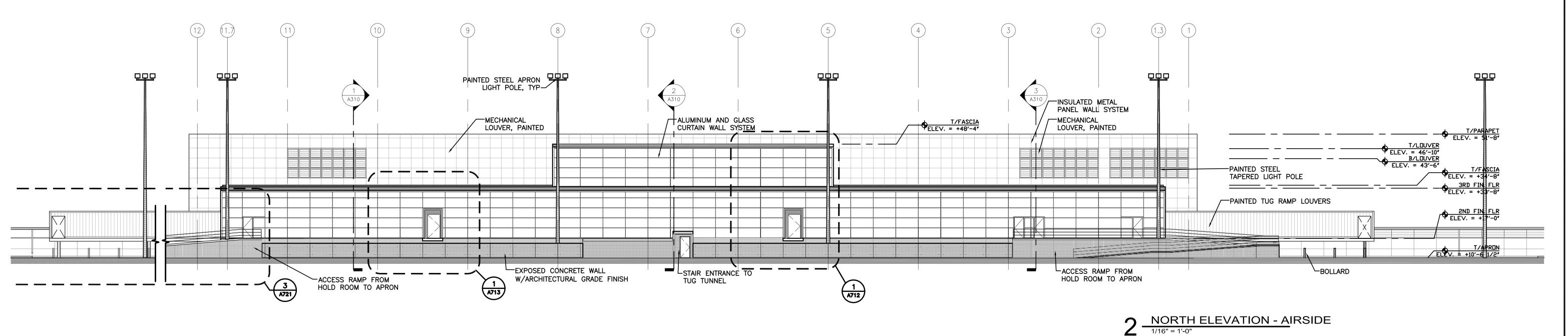
VESTIBULE AND RENTAL CAR REFLECTED CEILING PLANS

SHEET NUMBER **A216** 

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A216 Enlarged Misc RCPs.dwg Plotted on: 4/12/2010 4:56 PM





ISSELL.

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-1052

www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

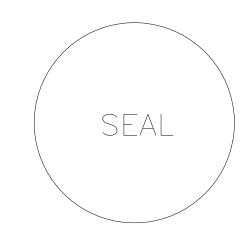
Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.**01 East Ridge Office Park, Suite 103, Danbury CT 06810
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

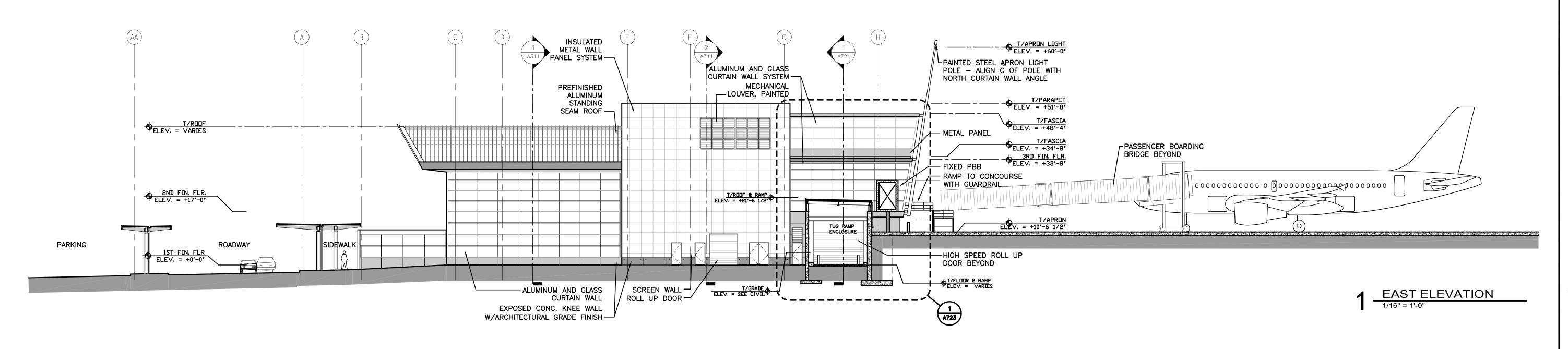


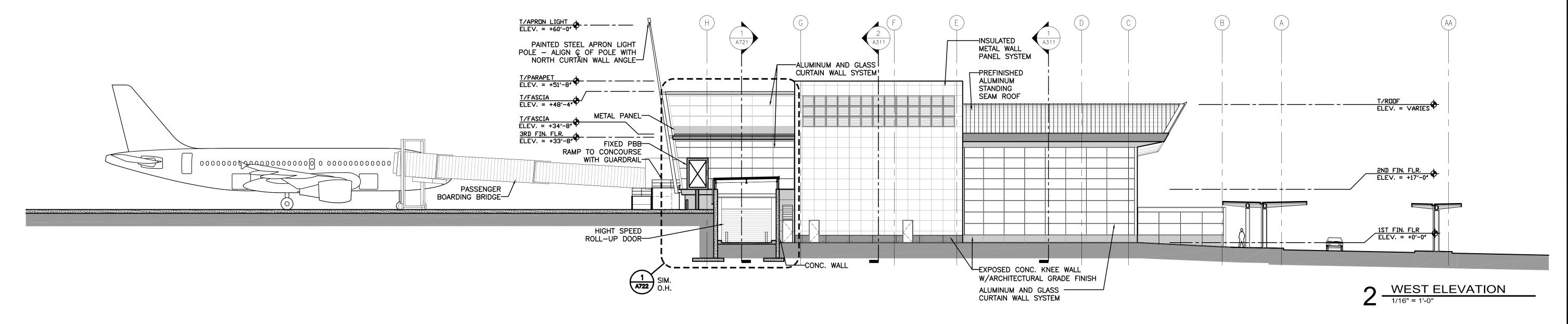
NO.	DESCRIPTI	ON	DATE
DATE	SSUED: 04-12	2-10	
REVIEV	VED BY: SBS	/TC	
DRAW	BY: MK	3/MI	
DESIGN	IED BY: SBS	/TC	
	AEP PROJECT	NUME	BER

EXTERIOR ELEVATIONS

© 2006 REYNOLDS, SMITH AND HILLS INC.

A301







Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com



**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606

TEL: (312) 201-7408 / FAX: (312) 201-0031 Baggage Handling Systems Consultants: BNP ASSOCIATES INC.

01 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900 Landscaping Consultants: **APPOLD DESIGN** 2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

SEAL

	EVICIONO	
REVI	SIONS	
NO.	DESCRIPTION	DATI

**DATE ISSUED: 04-12-10** REVIEWED BY: SBS/TC DRAWN BY: MKG/MI

DESIGNED BY: SBS/TC **AEP PROJECT NUMBER** 

213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

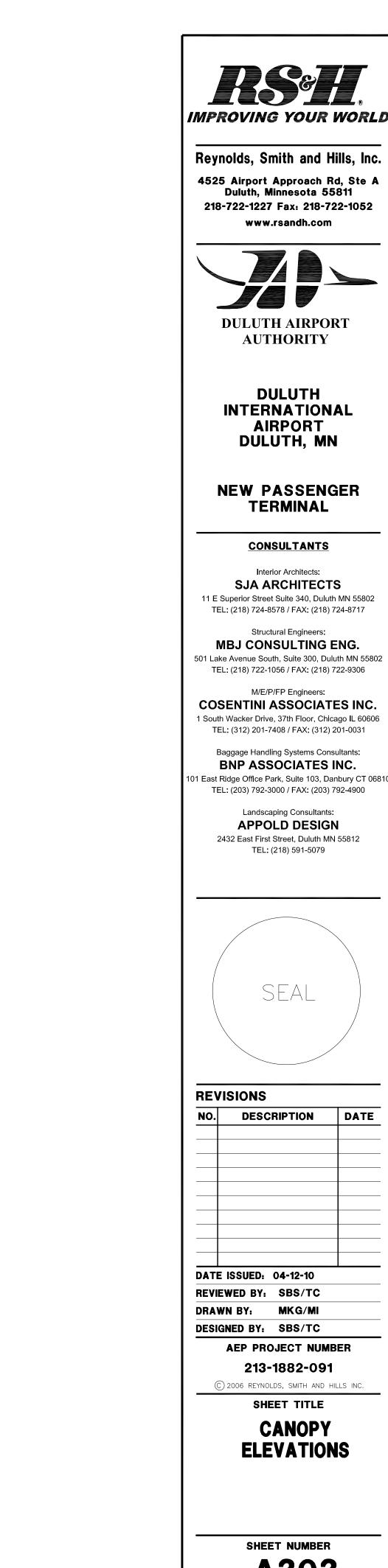
> **EXTERIOR ELEVATIONS**

SHEET NUMBER

A302

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A302 Exterior Elevations.dwg Plotted on: 4/12/2010 4:57 PM



IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052

**DULUTH AIRPORT** 

**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 . TEL: (218) 724-8578 / FAX: (218) 724-8717

MBJ CONSULTING ENG.

M/E/P/FP Engineers: COSENTINI ASSOCIATES INC.

Baggage Handling Systems Consultants: BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900 Landscaping Consultants:

APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

REVISIONS			
NO.	DESCRIPTION	DATE	
DAT	E ISSUED: 04-12-10		

REVIEWED BY: SBS/TC

DESIGNED BY: SBS/TC

AEP PROJECT NUMBER

© 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

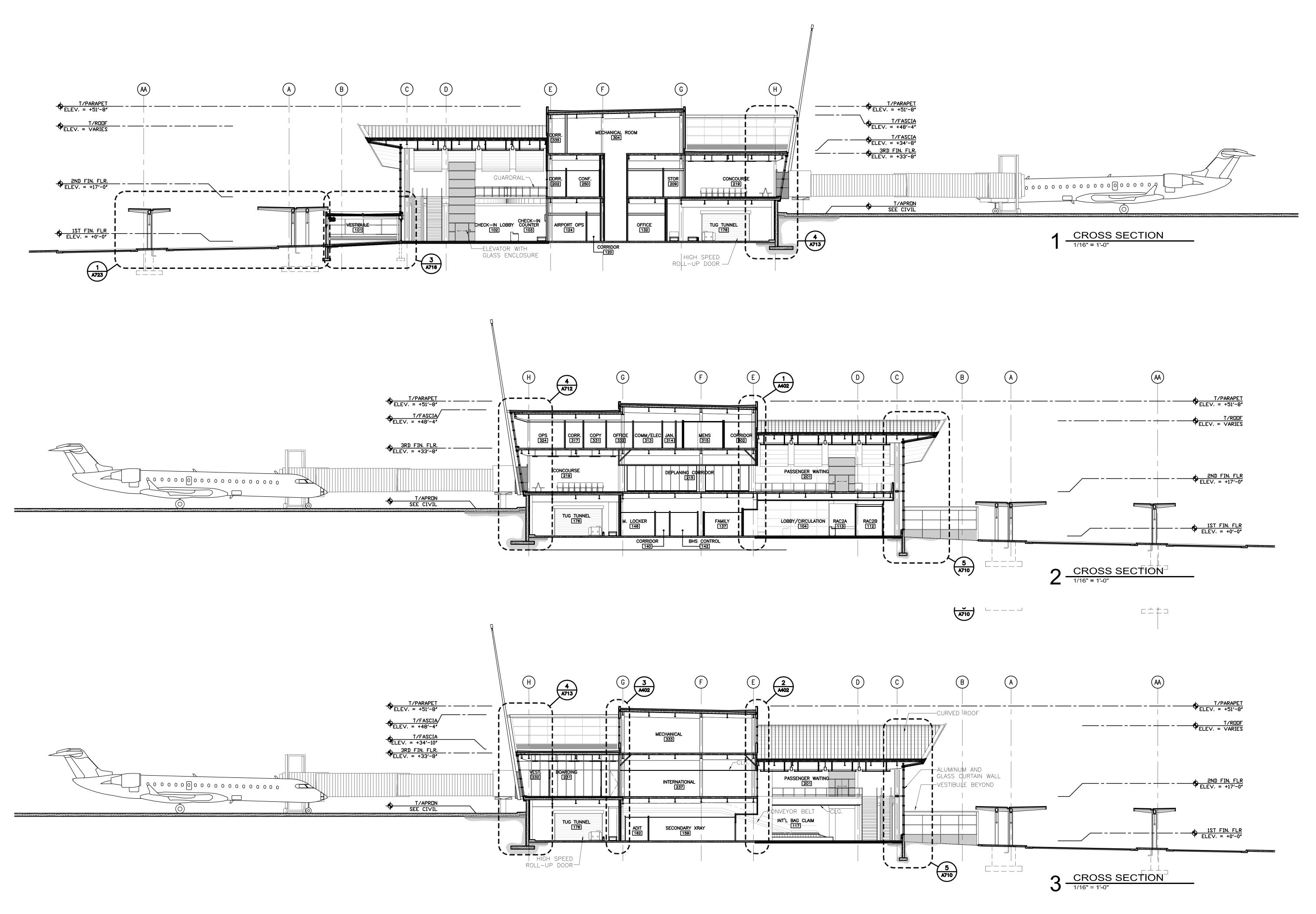
CANOPY ELEVATIONS

SHEET NUMBER

A303

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A303 Canopy Elevations.dwg Plotted on: 4/12/2010 4:57 PM





Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-1052

www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

#### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

## Structural Engineers: MBJ CONSULTING ENG. Lake Avenue South, Suite 300, Duluth MN 55802

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

## COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

M/E/P/FP Engineers:

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

11 East Ridge Office Park, Suite 103, Danbury CT 06810

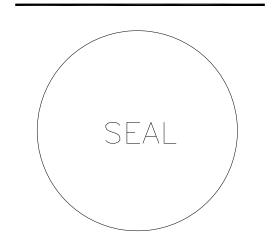
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



110	25002125	011
NO.	DESCRIPTI	ON DA
-		
DATE	ISSUED: 04-12	2-10
REVIE	WED BY: SBS	S/TC
DRAV	VN BY: MK	G/MI
DESIG	NED BY: SBS	S/TC

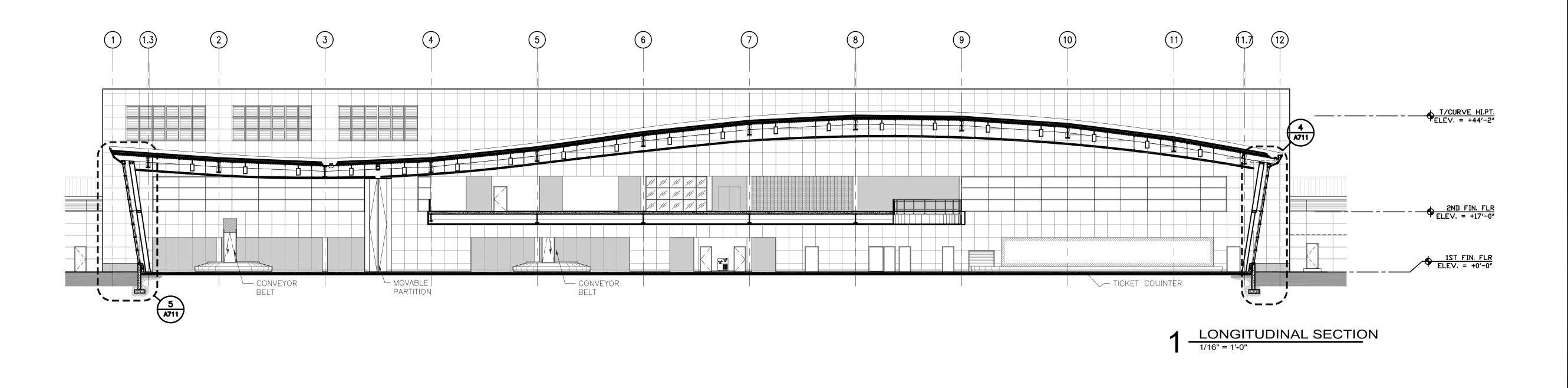
# © 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE BUILDING

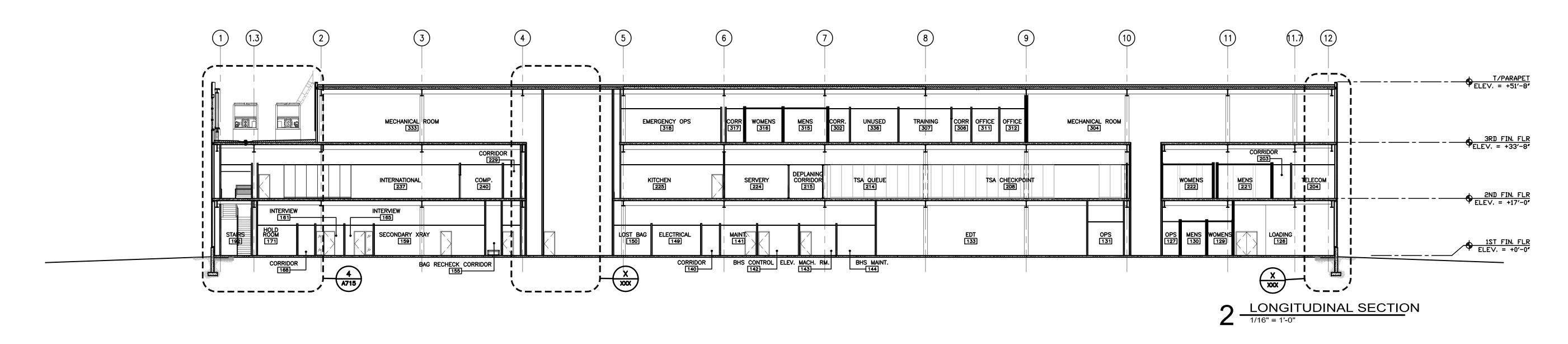
213-1882-091

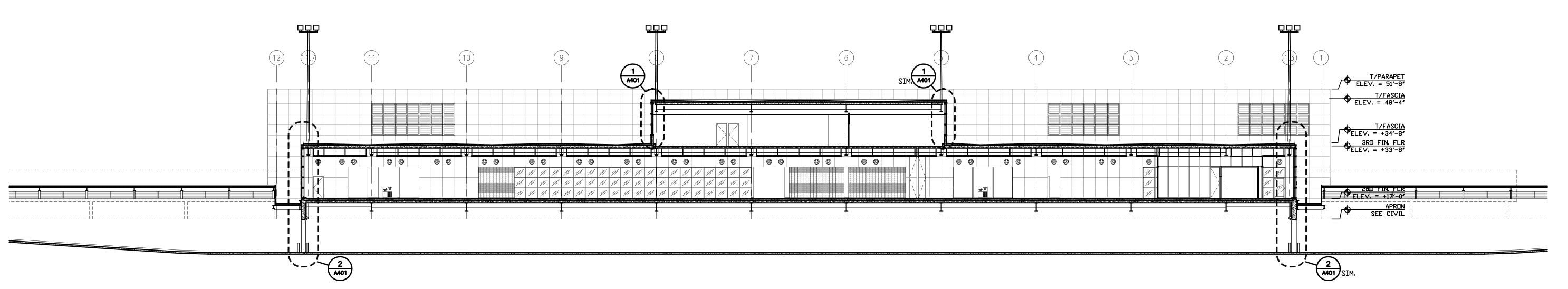
SHEET NUMBER

SECTIONS

A310







3 LONGITUDINAL SECTION

1/16" = 1'-0"

ISSIT.

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-1052
www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

#### CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

### Structural Engineers: MBJ CONSULTING ENG. Lake Avenue South, Suite 300, Duluth MN 55802

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

## M/E/P/FP Engineers: COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606

TEL: (312) 201-7408 / FAX: (312) 201-0031

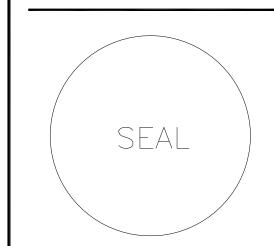
Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

01 East Ridge Office Park, Suite 103, Danbury CT 06810

## TEL: (203) 792-3000 / FAX: (203) 792-4900 Landscaping Consultants: APPOLD DESIGN

APPOLD DESIGN
2432 East First Street, Duluth MN 55812
TEL: (218) 591-5079



NO.	DESCRIPTION	DA-
-+		
DATE	SSUED: 04-12-10	
REVIEV	VED BY: SBS/TC	
DRAWI	N BY: MKG/MI	

## DESIGNED BY: SBS/TC AEP PROJECT NUMBER

**213-1882-091**© 2006 REYNOLDS, SMITH AND HILLS INC.

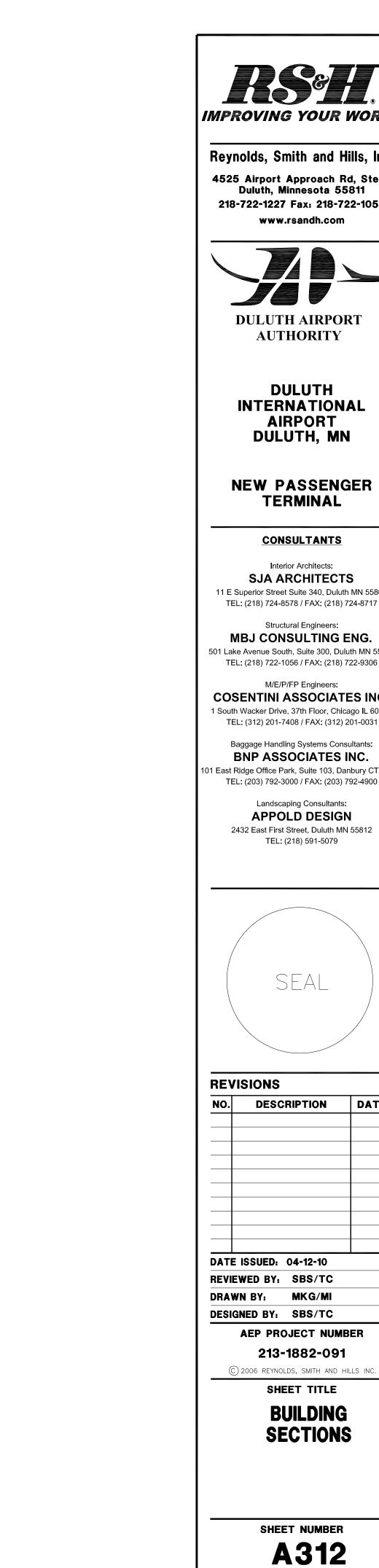
SHEET TITLE

BUILDING SECTIONS

A 311

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A311 Building Sections.dwg Plotted on: 4/12/2010 5:00 PM



IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com



**DULUTH** INTERNATIONAL **AIRPORT** 

**NEW PASSENGER TERMINAL** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 . TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

> Landscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



NO.	DESCRIPTION	DAT
DATE I	SSUED: 04-12-10	

REVIEWED BY: SBS/TC

DESIGNED BY: SBS/TC

AEP PROJECT NUMBER 213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

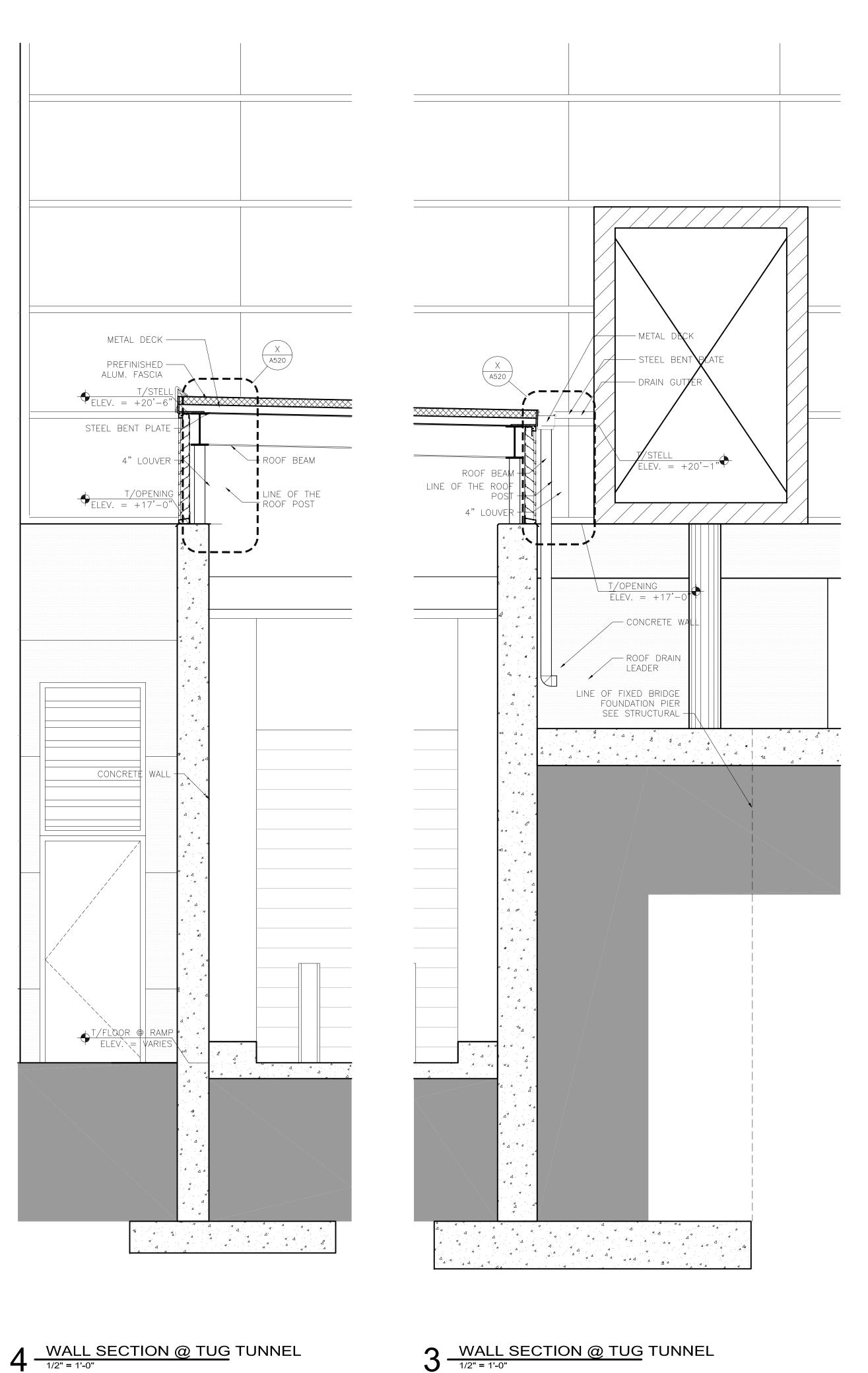
BUILDING SECTIONS

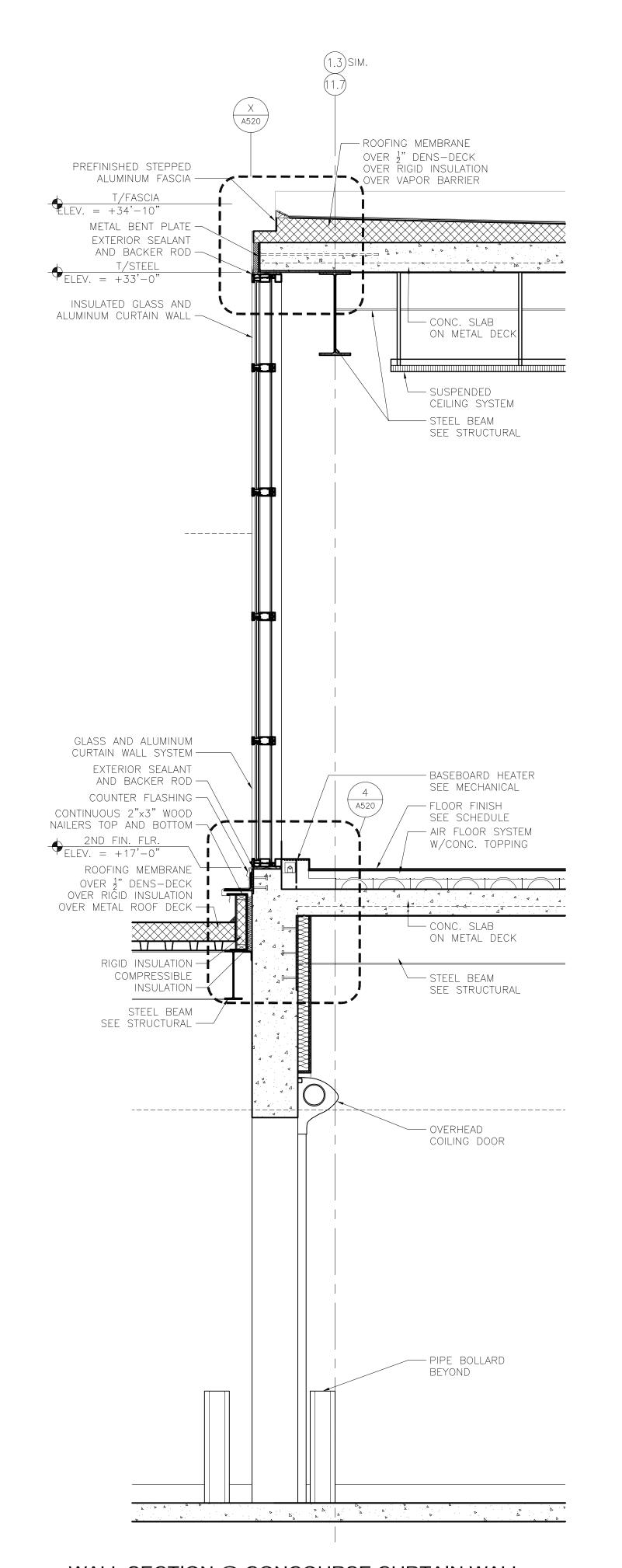
SHEET NUMBER

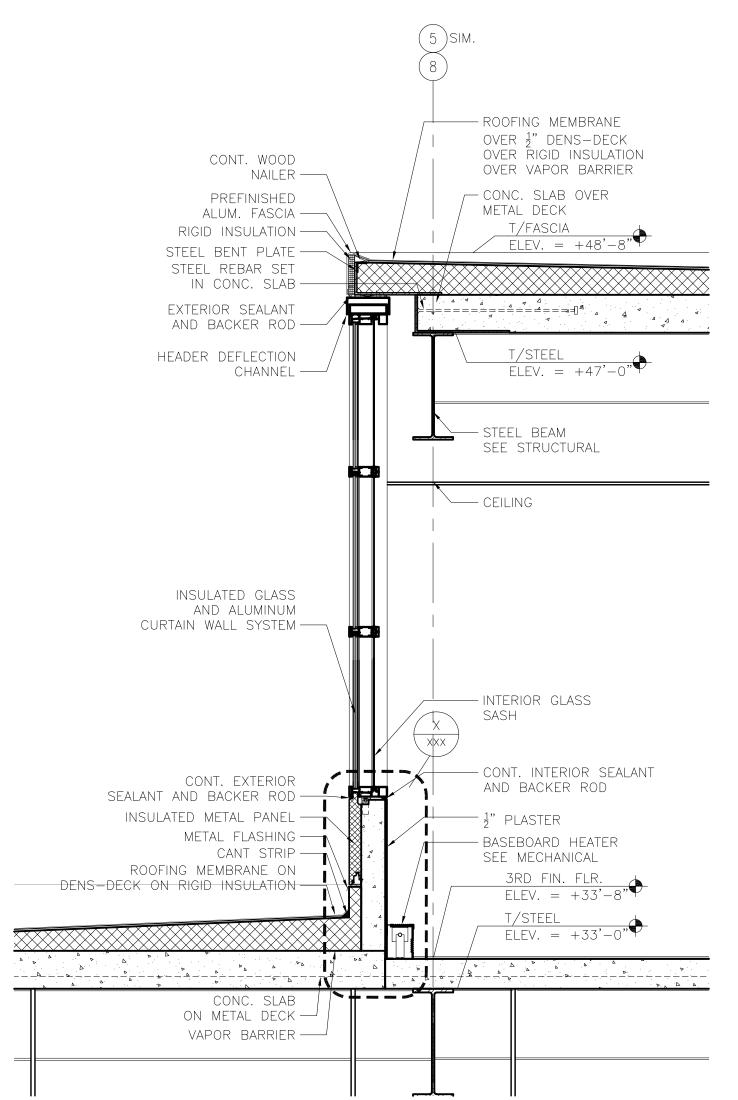
**A312** 

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A312 Building Sections.dwg Plotted on: 4/12/2010 5:00 PM







WALL SECTION @ ADMIN CURTAIN WALL



Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com



**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

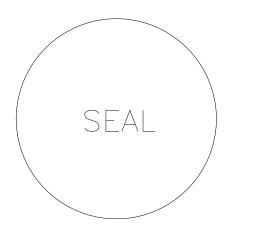
Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606

TEL: (312) 201-7408 / FAX: (312) 201-0031 Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900 Landscaping Consultants:

APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

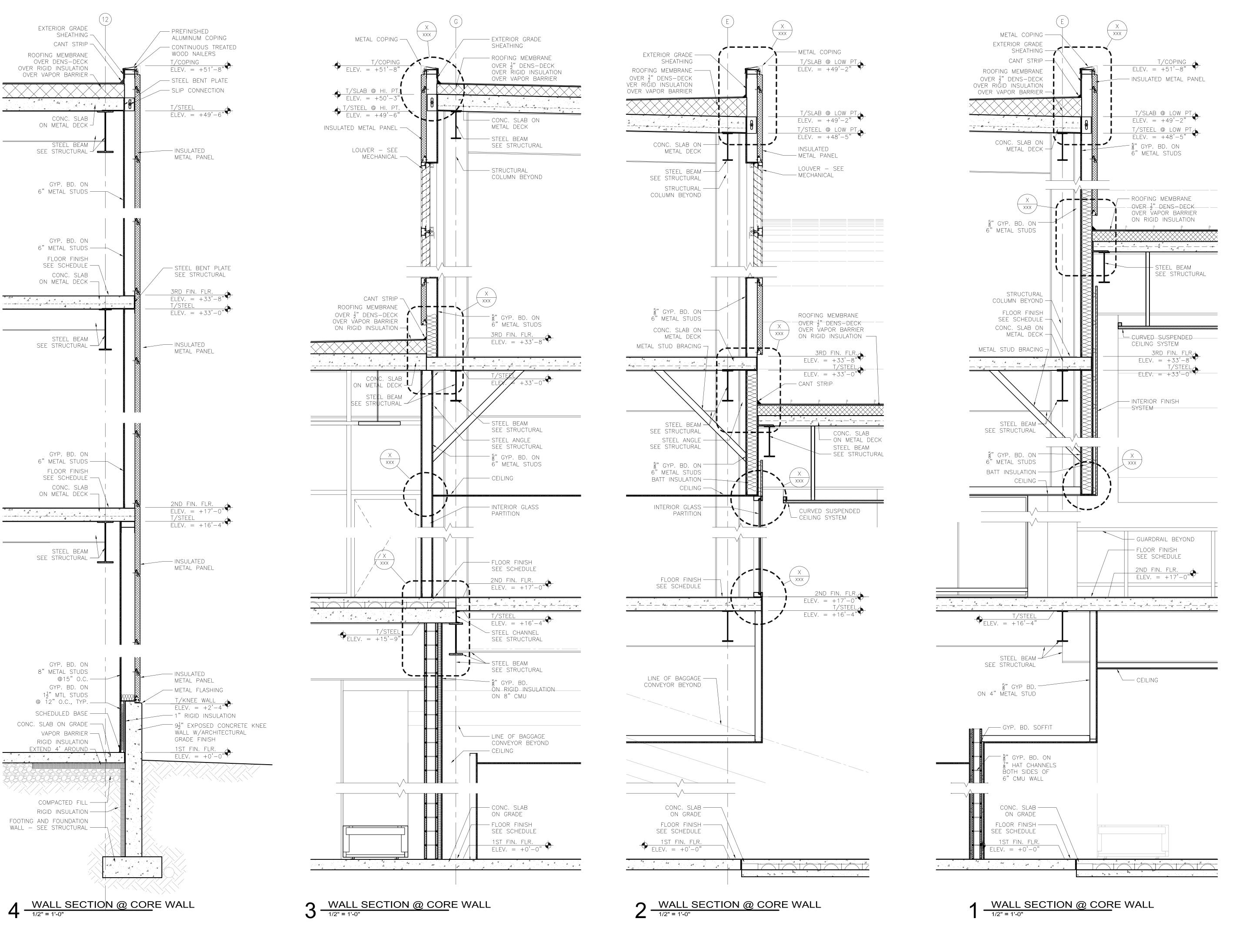


**REVISIONS** NO. DESCRIPTION DATE **DATE ISSUED: 04-12-10** REVIEWED BY: SBS/TC DRAWN BY: MKG/MI DESIGNED BY: SBS/TC **AEP PROJECT NUMBER** 213-1882-091 © 2006 REYNOLDS, SMITH AND HILLS INC.

**WALL SECTIONS** 

SHEET TITLE

SHEET NUMBER **A401** 



ISSII.

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-1052
www.rsandh.com



**AUTHORITY** 

DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER

**TERMINAL** 

CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.**91 East Ridge Office Park, Suite 103, Danbury CT 06810

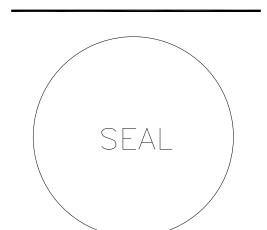
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

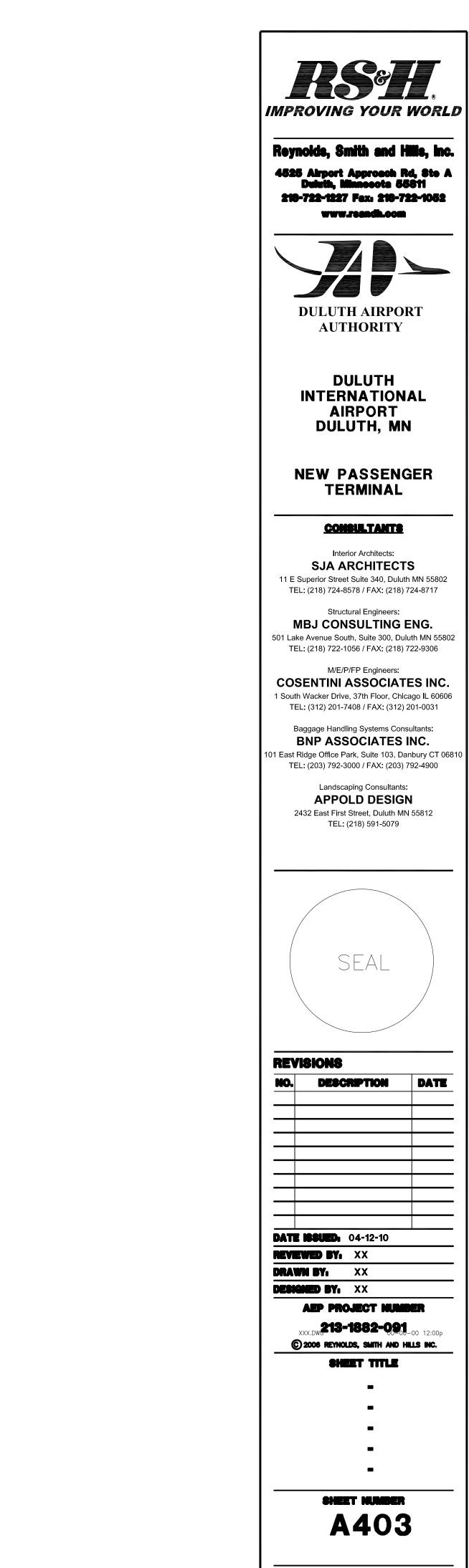
TEL: (218) 591-5079



	SIONS		i
NO.	DESC	RIPTION	DATE
DATE I	SSUED:	04-12-10	
REVIEV	/ED BY:	SBS/TC	
DRAWN	I BY:	MKG/MI	
DESIGN	IED BY:	SBS/TC	
- 1	AEP PRO	DJECT NU	MBER
	213-	1882-09	91
© 2	2006 REYNO	LDS, SMITH ANI	O HILLS INC.
	<b>213</b> -	1882-09	91 D HILLS INC

**WALL SECTIONS** 

SHEET NUMBER
A402



Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A403 Wall Sections.dwg Plotted on: 4/12/2010 5:13 PM

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duirth, Minnesota 55811 218-722-1227 Fex: 218-722-1052 www.reeuqproom

**DULUTH AIRPORT** 

**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

#### **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: BNP ASSOCIATES INC.

> Landscaping Consultants: **APPOLD DESIGN**

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

SEAL

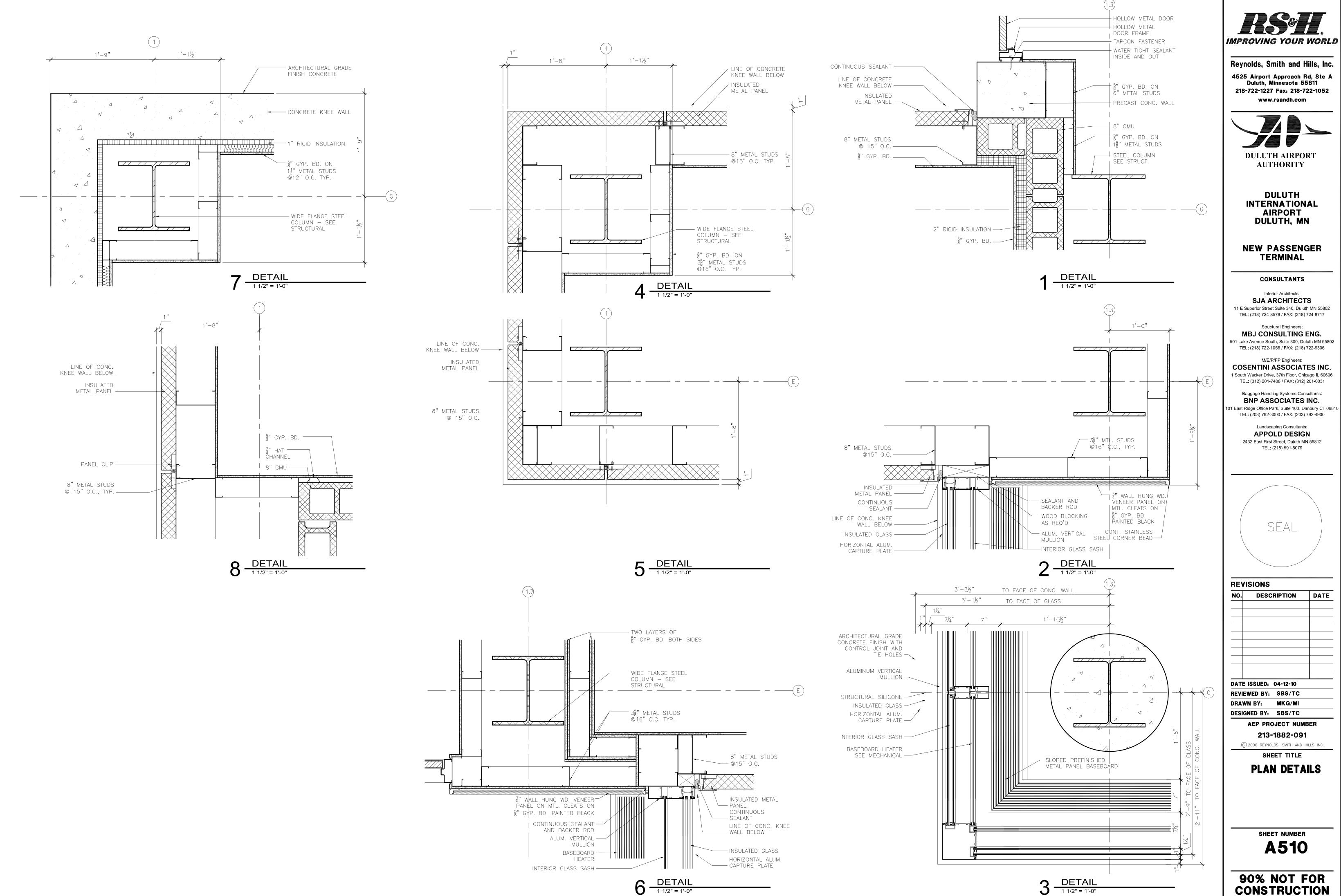
NO.	DESCRIPTION	DATE

**DATE ISSUED:** 04-12-10 REVIEWED BY. XX

DESIGNED BY: XX

XXX.DW.**213-1882-0.9**1-00 12:00p © 2006 REYNOLDS, SMITH AND HILLS INC.

A403



Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811

**DULUTH AIRPORT** 

**INTERNATIONAL** 

SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802

MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

**COSENTINI ASSOCIATES INC.** 

Baggage Handling Systems Consultants: BNP ASSOCIATES INC.

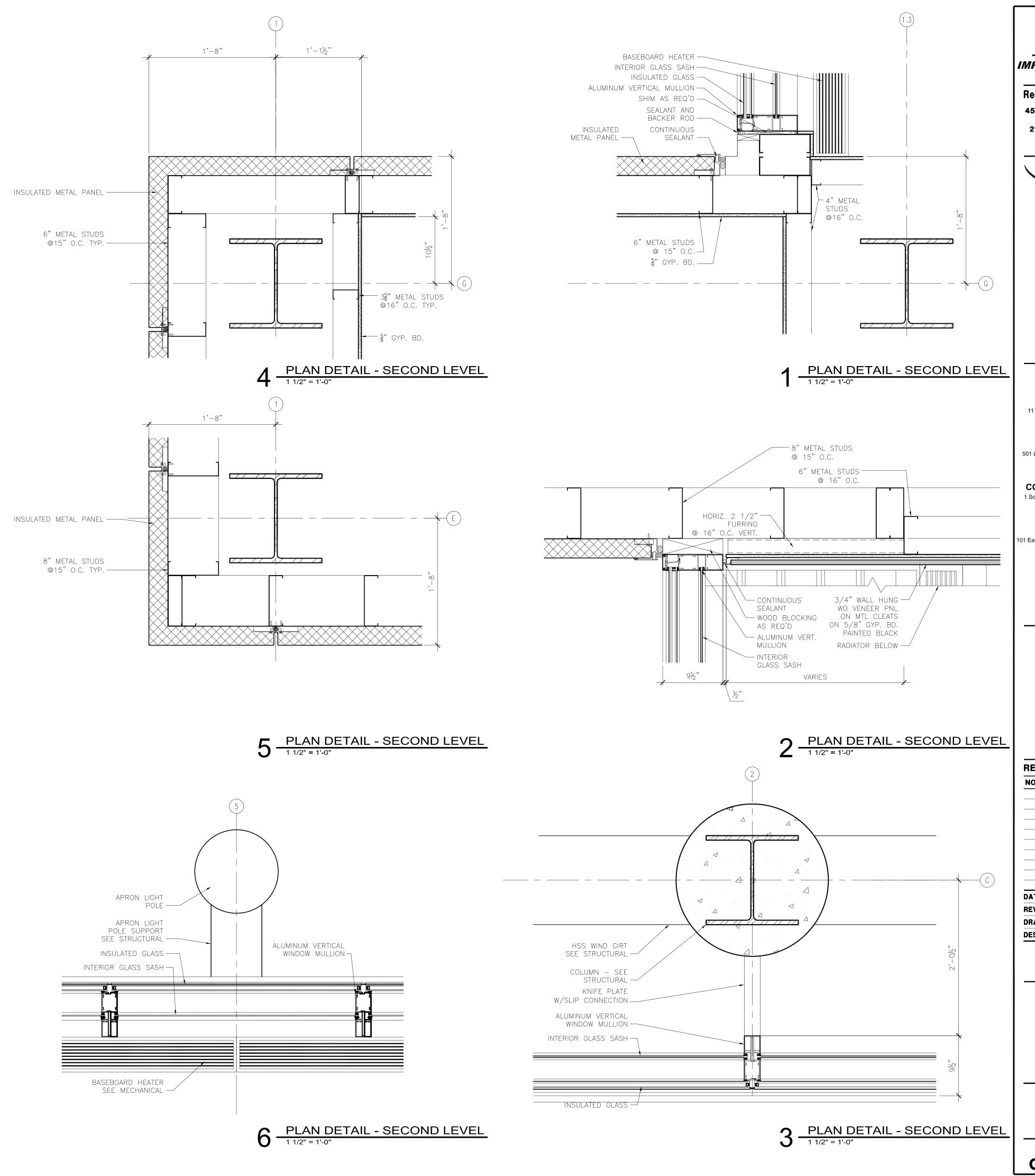
2432 East First Street, Duluth MN 55812



REVISIONS			
		BIRTION	DATE
NO.	DESC	RIPTION	DATE
DAT	E ISSUED:	04-12-10	
REVI	EWED BY:	SBS/TC	
DRA	WN BY:	MKG/MI	
DESI	GNED BY:	SBS/TC	
	AEP PRO	JECT NUME	BER
	213-	1882-091	

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A510 Plan Details.dwg Plotted on: 4/12/2010 5:14 PM



ISSELL.

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-1052 www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

#### CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

11 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN
2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

SEAL

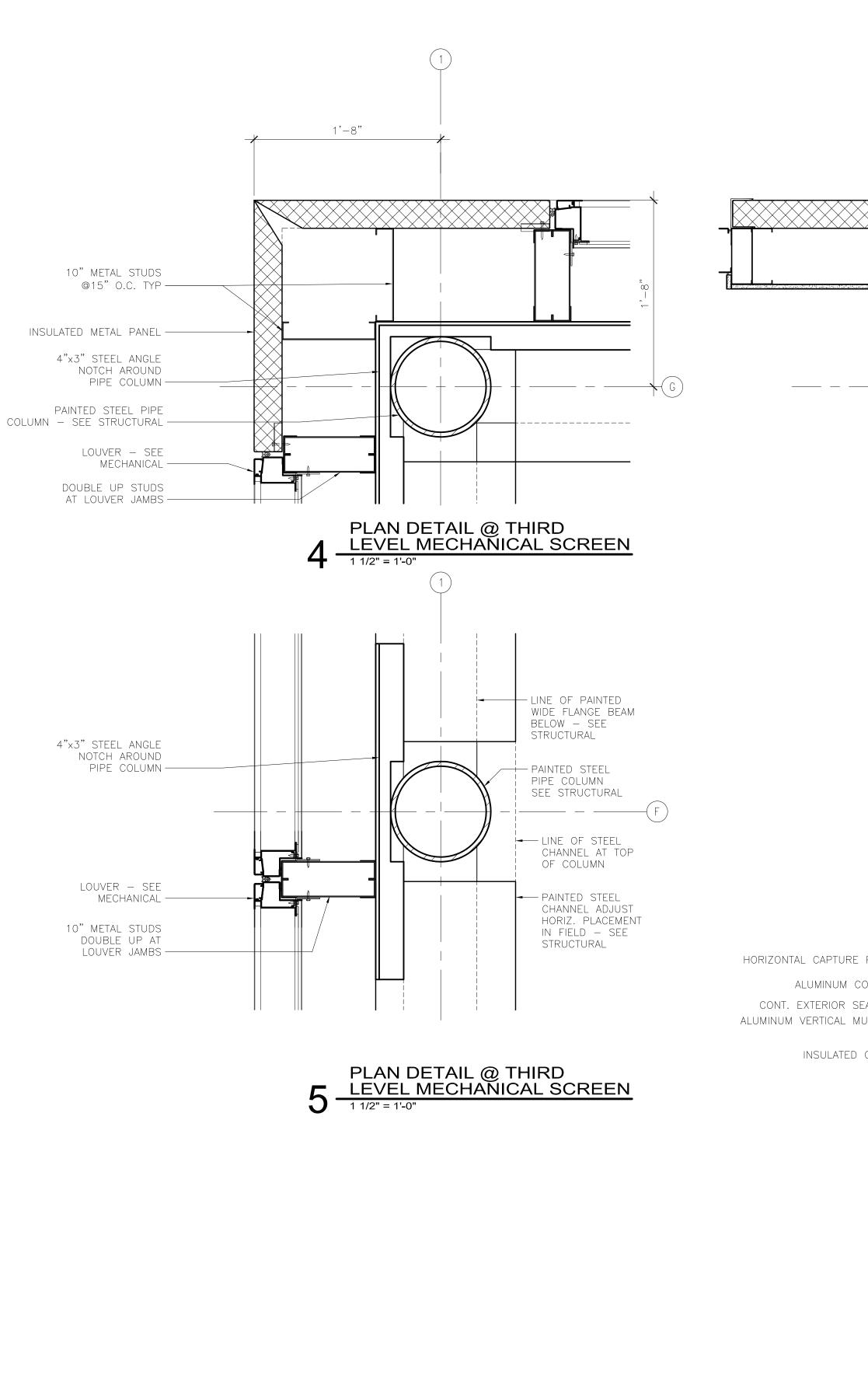
NO.	DESC	RIPTION	DA
-			
-			
DATE I	SSUED:	04-12-10	
REVIEW	/ED BY:	SBS/TC	
DRAWN	I BY:	MKG/MI	
DESIGN	ED BY:	SBS/TC	
	NEP PRO	DJECT NU	MBER
-			
	213-	·1882-09	91

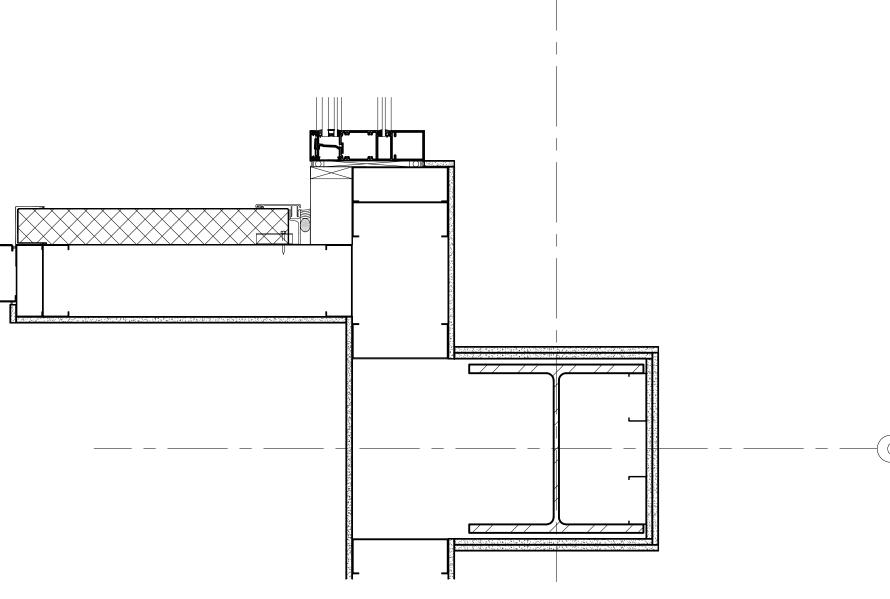
SHEET TITLE

**PLAN DETAILS** 

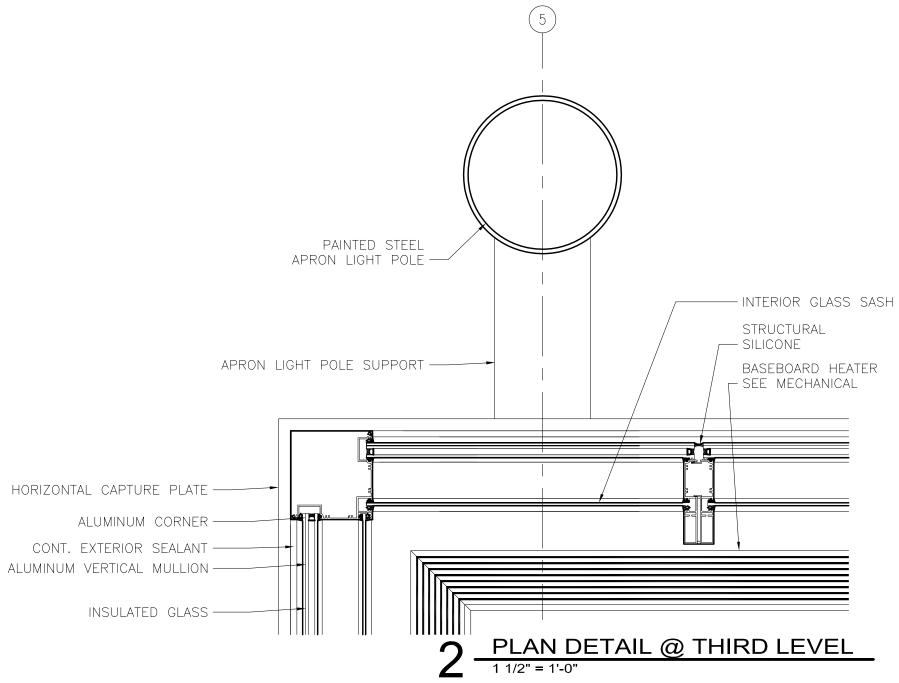
SHEET NUMBER

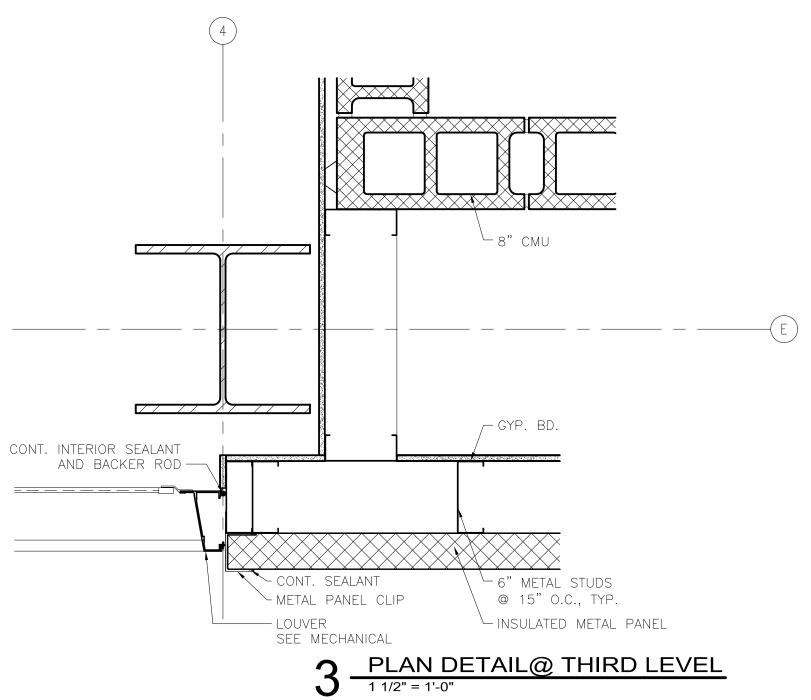
A511





### PLAN DETAIL @ THIRD LEVEL





IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com



**DULUTH** INTERNATIONAL

**AIRPORT** 

DULUTH, MN **NEW PASSENGER** 

**TERMINAL** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

> Landscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

SEAL

REVISIONS NO. DESCRIPTION DATE DATE ISSUED: 04-12-10

REVIEWED BY: SBS/TC DRAWN BY: MKG/MI DESIGNED BY: SBS/TC

AEP PROJECT NUMBER

213-1882-091 © 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

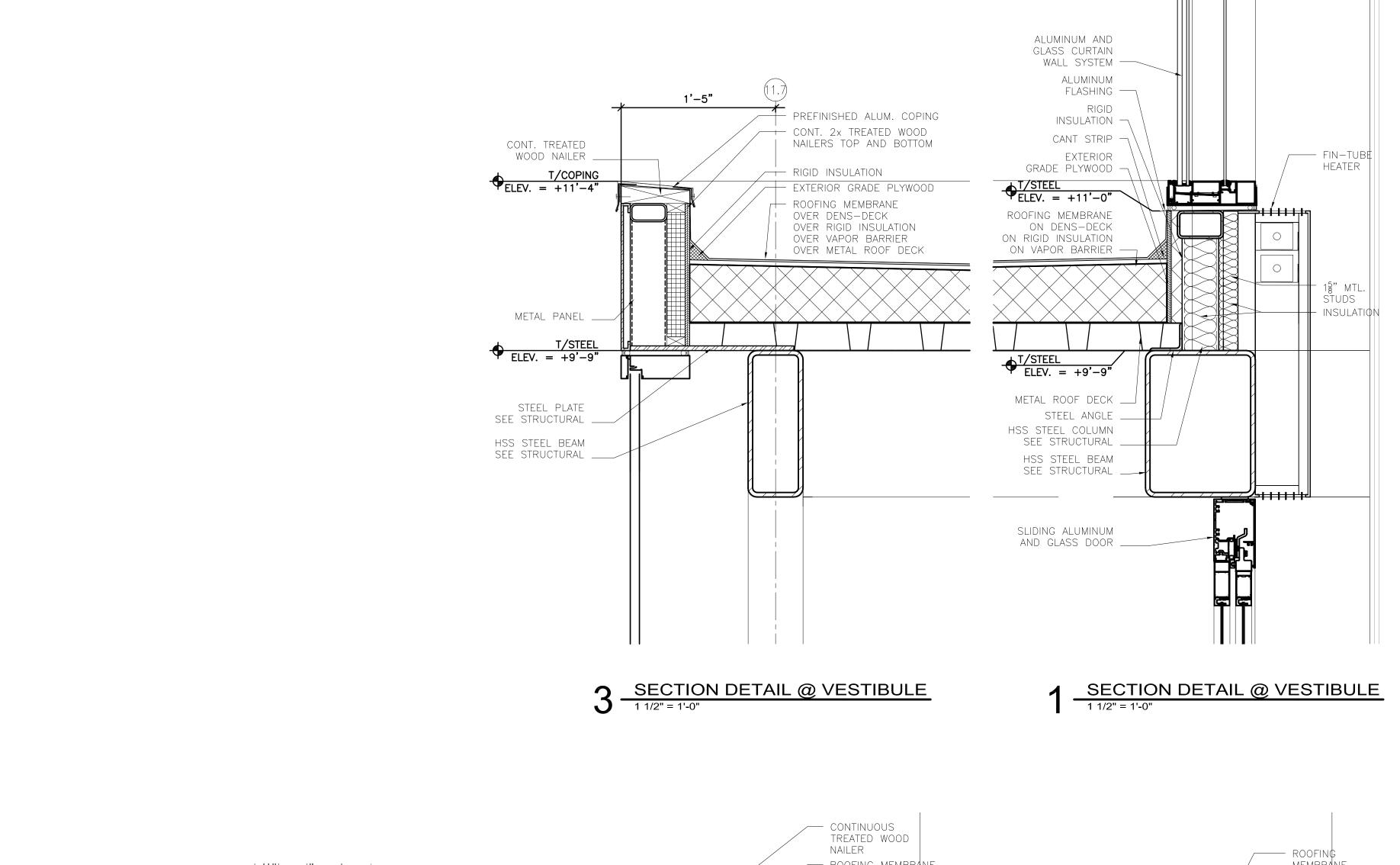
**PLAN DETAILS** 

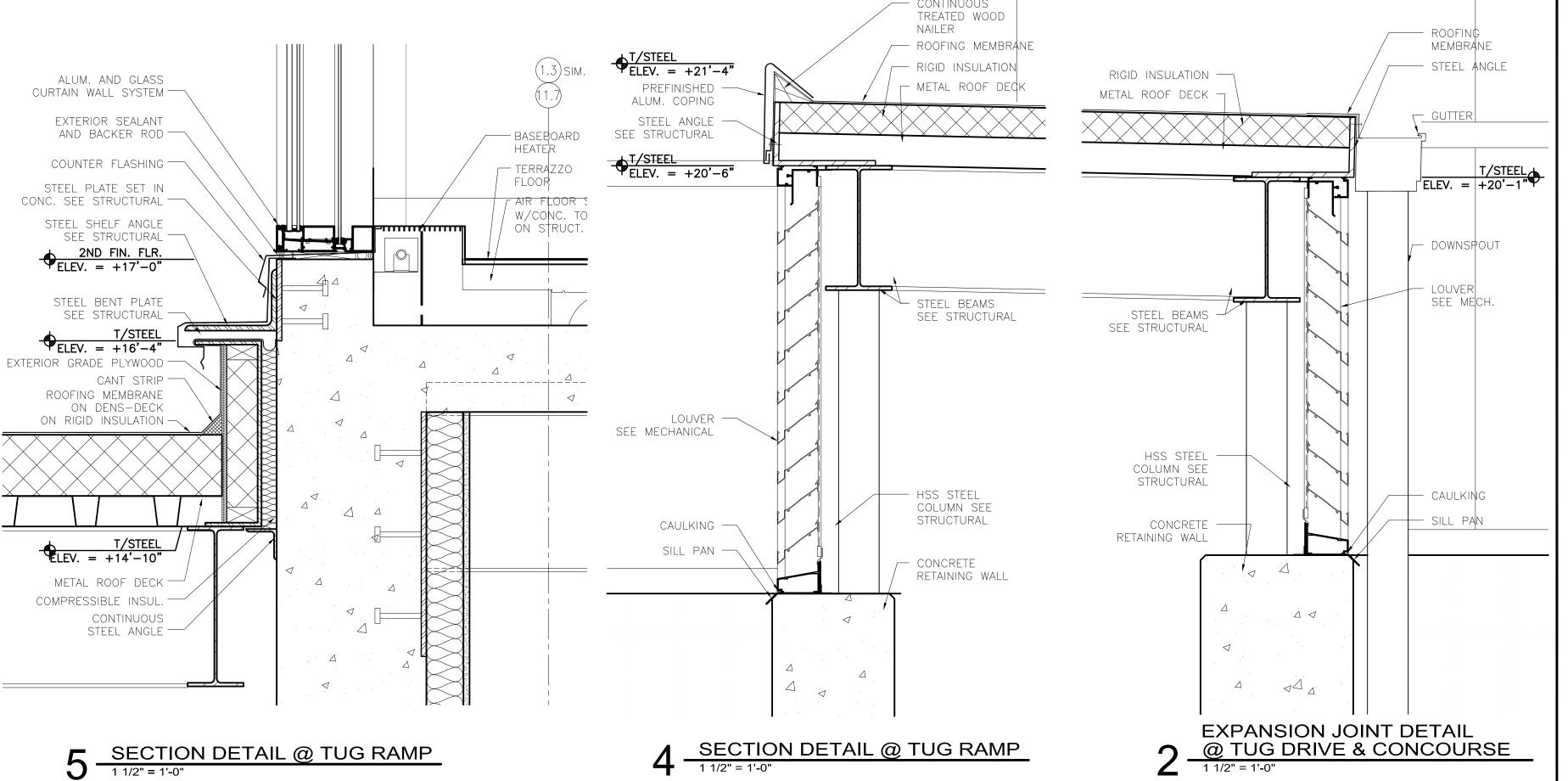
SHEET NUMBER

A512

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A512 Plan Details.dwg Plotted on: 4/12/2010 5:14 PM







Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-1052
www.rsandh.com



DULUTH AIRPORT AUTHORITY

DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802

Structural Engineers:
MBJ CONSULTING ENG.

TEL: (218) 724-8578 / FAX: (218) 724-8717

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

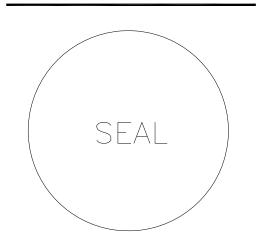
Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.**I East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



NO.	DESC	RIPTION	DATE
-			
DATE	ISSUED:	04-12-10	
REVIEV	VED BY:	SBS/TC	
DRAWI	N BY:	MKG/MI	
DESIGN	NED BY:	SBS/TC	
		DJECT NU	

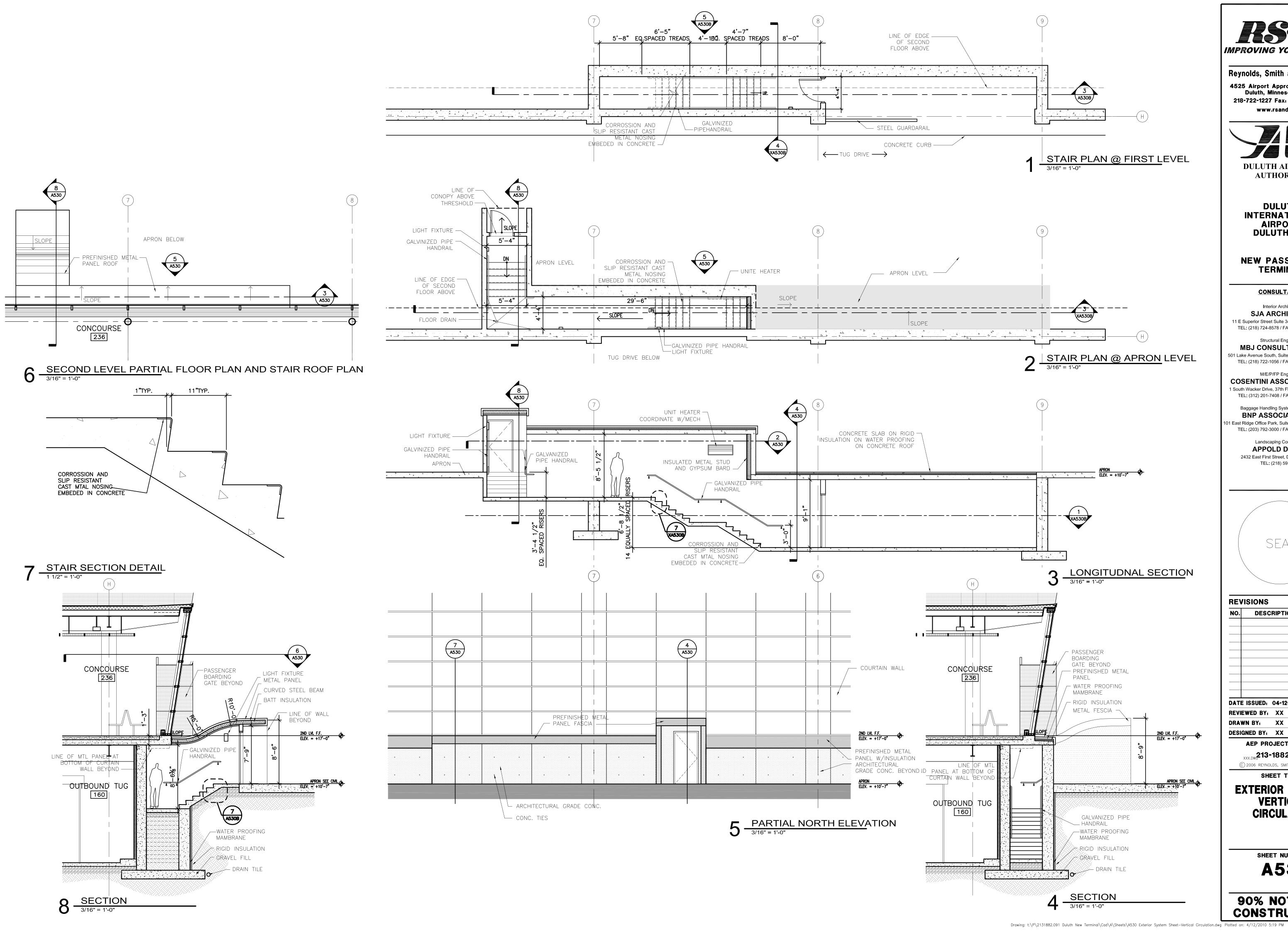
213-1882-091
© 2006 REYNOLDS, SMITH AND HILLS INC.

SECTION DETAILS

SHEET TITLE

SHEET NUMBER

**A520** 





Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com



**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

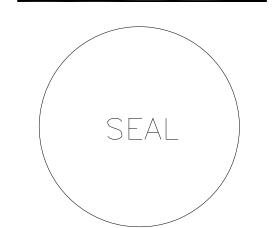
TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031 Baggage Handling Systems Consultants:

**BNP ASSOCIATES INC.** 01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

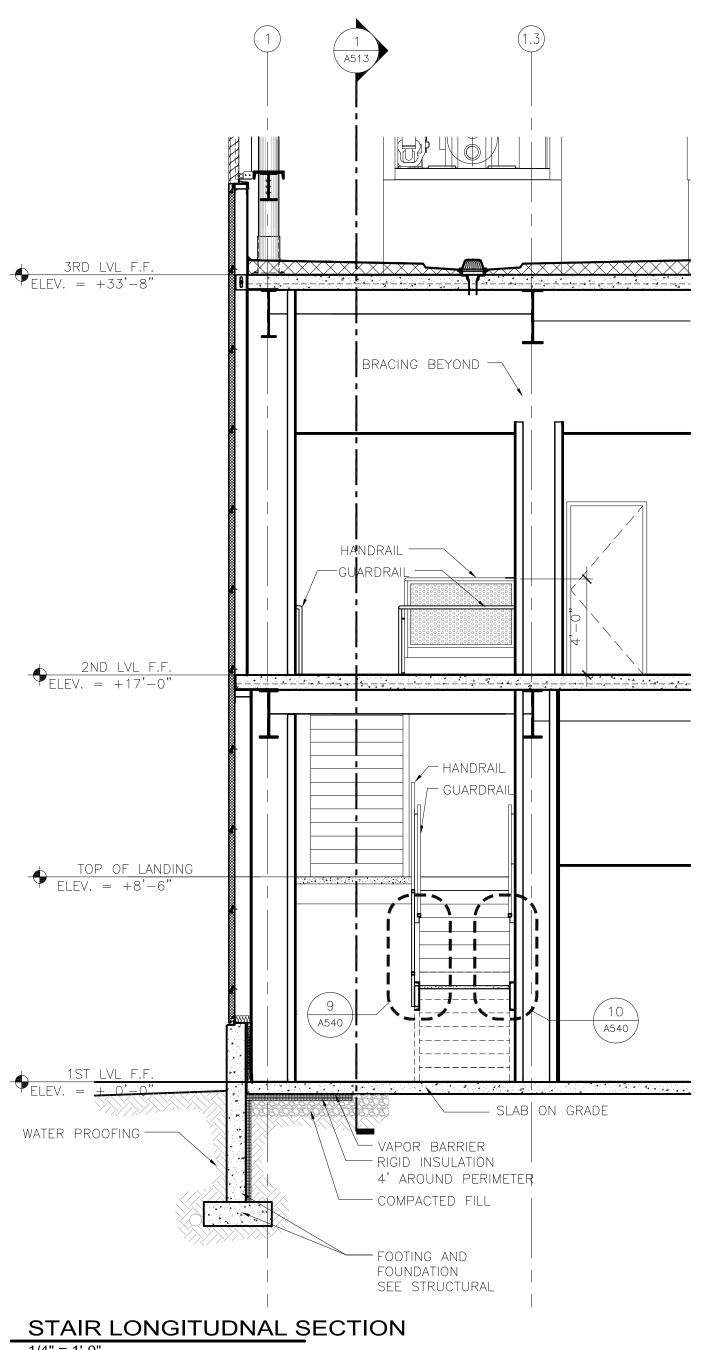


REVISIONS			
NO.	DESCRIPTION	ON DATE	
DATI	E ISSUED: 04-12-	·10	
REVI	EWED BY: XX		
DRA	WN BY: XX		
DESI	GNED BY: XX		
	AEP PROJECT	NUMBER	

XXX.DW. **213-1882-0.91** © 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

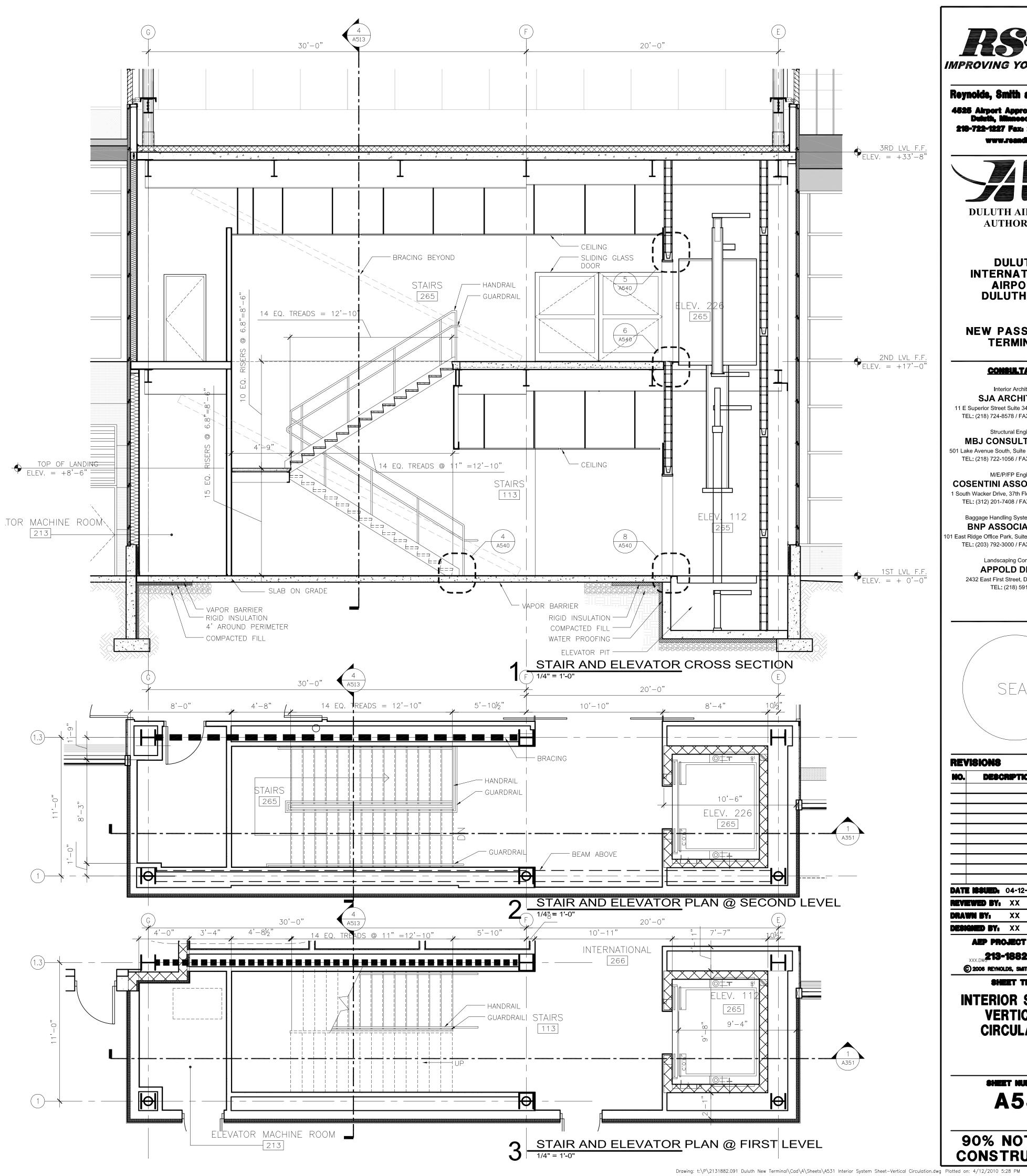
EXTERIOR SYSTEMS **VERTICAL CIRCULATION** 

> SHEET NUMBER **A530**



4 STAIR LONGITUDNAL SECTION

1/4" = 1'-0"



IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

218-722-1227 Fex: 218-722-1052 **AAA.teeuqproom** 



**DULUTH INTERNATIONAL AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

#### **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

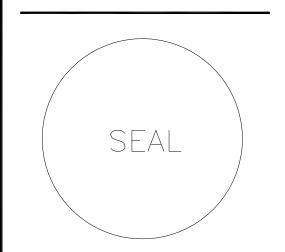
Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: **COSENTINI ASSOCIATES INC.** 1 South Wacker Drive, 37th Floor, Chicago IL 60606

TEL: (312) 201-7408 / FAX: (312) 201-0031 Baggage Handling Systems Consultants: BNP ASSOCIATES INC.

01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900 Landscaping Consultants: **APPOLD DESIGN** 

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



DATE

**REVISIONS** NO. DESCRIPTION

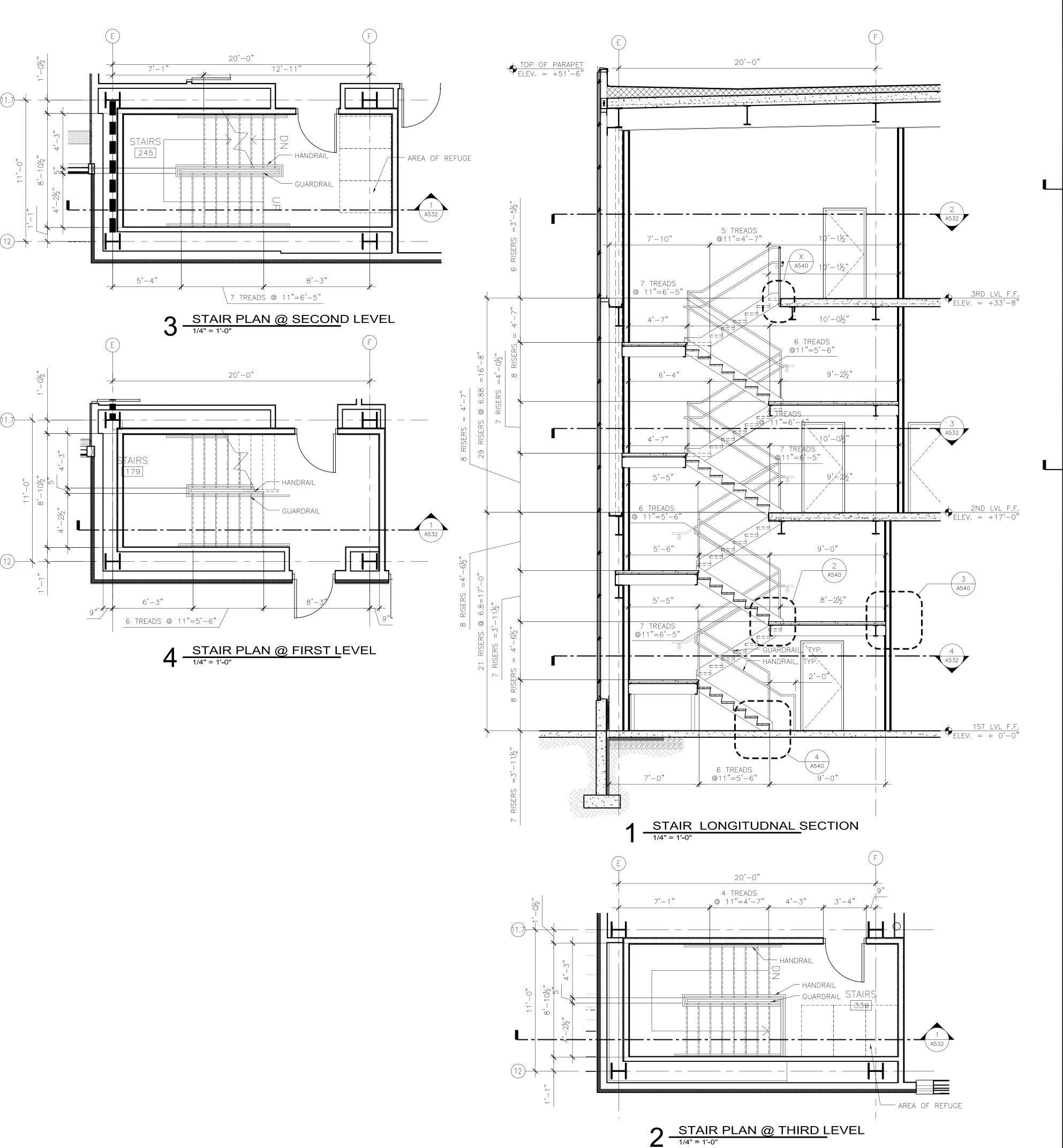
**DATE ISSUED** 04-12-10 REVIEWED BY: XX DRAWN BY: XX

**DESIGNED BY:** XX **AEP PROJECT NUMBER** 

XXX.DW**213-1882-Q91**-00 12:00c © 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE INTERIOR SYSTEMS **VERTICAL CIRCULATION** 

> SHEET NUMBER A531





Reynolds, Smith and Hills, Inc.
4525 Airport Approach Rd, Sto A

218-722-1227 Fex. 218-722-1052 www.reendh.com



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW PASSENGER TERMINAL

#### CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

### Structural Engineers: MBJ CONSULTING ENG. 01 Lake Avenue South. Suite 300. Duluth MN 558

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers:

## COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

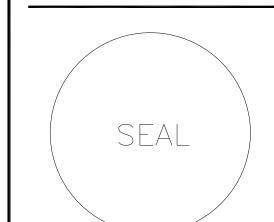
BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

### Landscaping Consultants: APPOLD DESIGN

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



REVISIONS		
NO.	DESCRIPTION	DA
_		
DATE	<b>88UED:</b> 04-12-10	
REVIEV	<b>YED BY:</b> XX	

DRAWN BY: XX
DESIGNED BY: XX

AEP PROJECT NUMBER

XXX.DW.**213-1882-Q.91**-00 12:00p © 2008 REYNOLDS, SMITH AND HILLS ING.

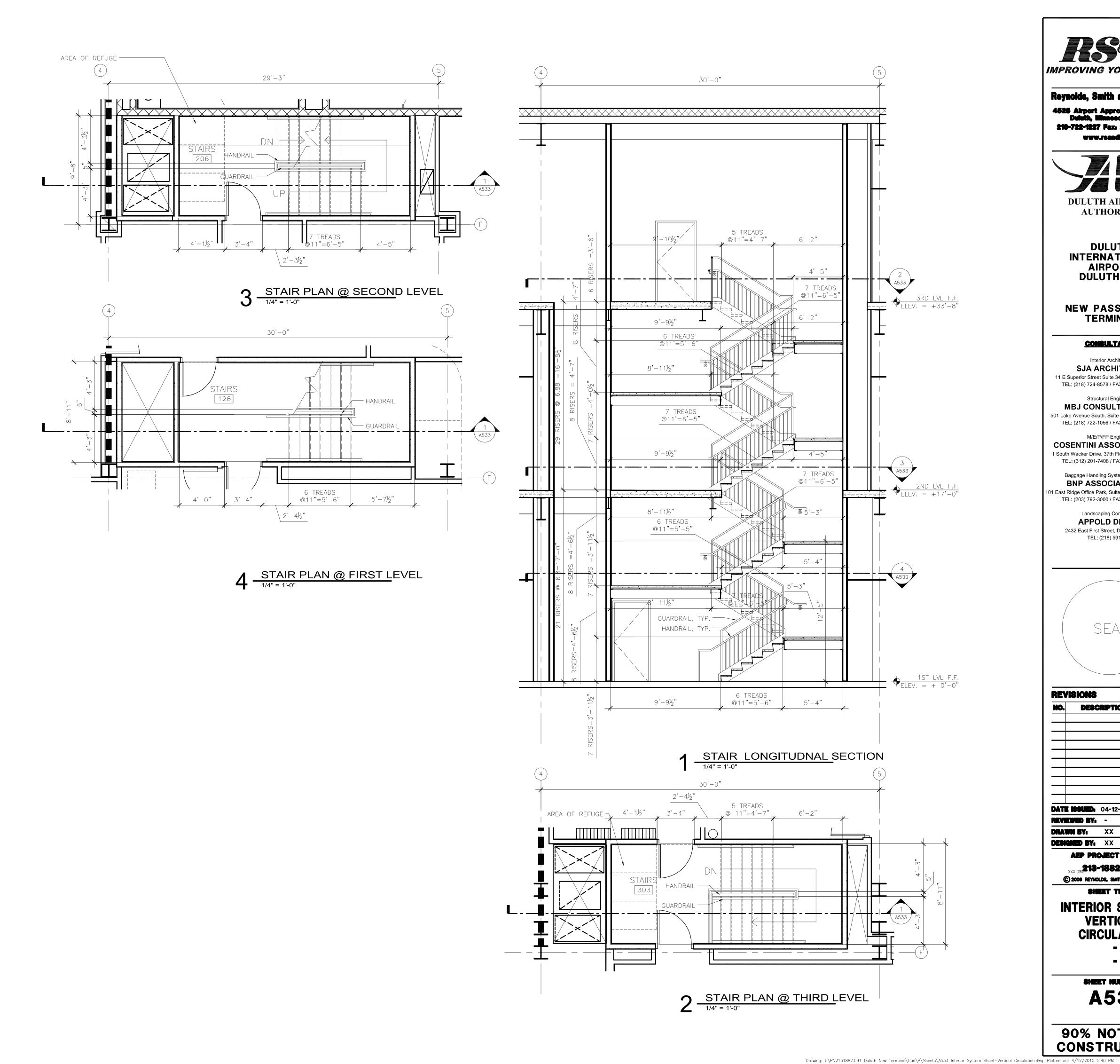
© 2006 REYNOLDS, SMITH AND HILLS INC.

INTERIOR SYSTEMS
VERTICAL
CIRCULATION

A532

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A532 Interior System Sheet-Vertical Circulation.dwg Plotted on: 4/12/2010 5:34 PM





Reynolds, Smith and Hills, Inc.

218-722-1227 Fex: 218-722-1052 **AAA.teeuqproom** 



**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

#### **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

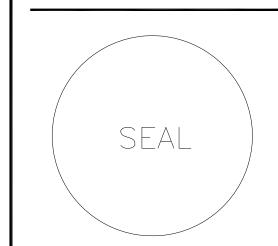
TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

> Landscaping Consultants: **APPOLD DESIGN** 2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



**REVISIONS** 

NO.	DESC	RIPTION		DAT
$\rightarrow$				
DATE	ISSUED.	04-12-10	١	
REVIE	WED BY:	-		
DRAW	N BY:	XX		

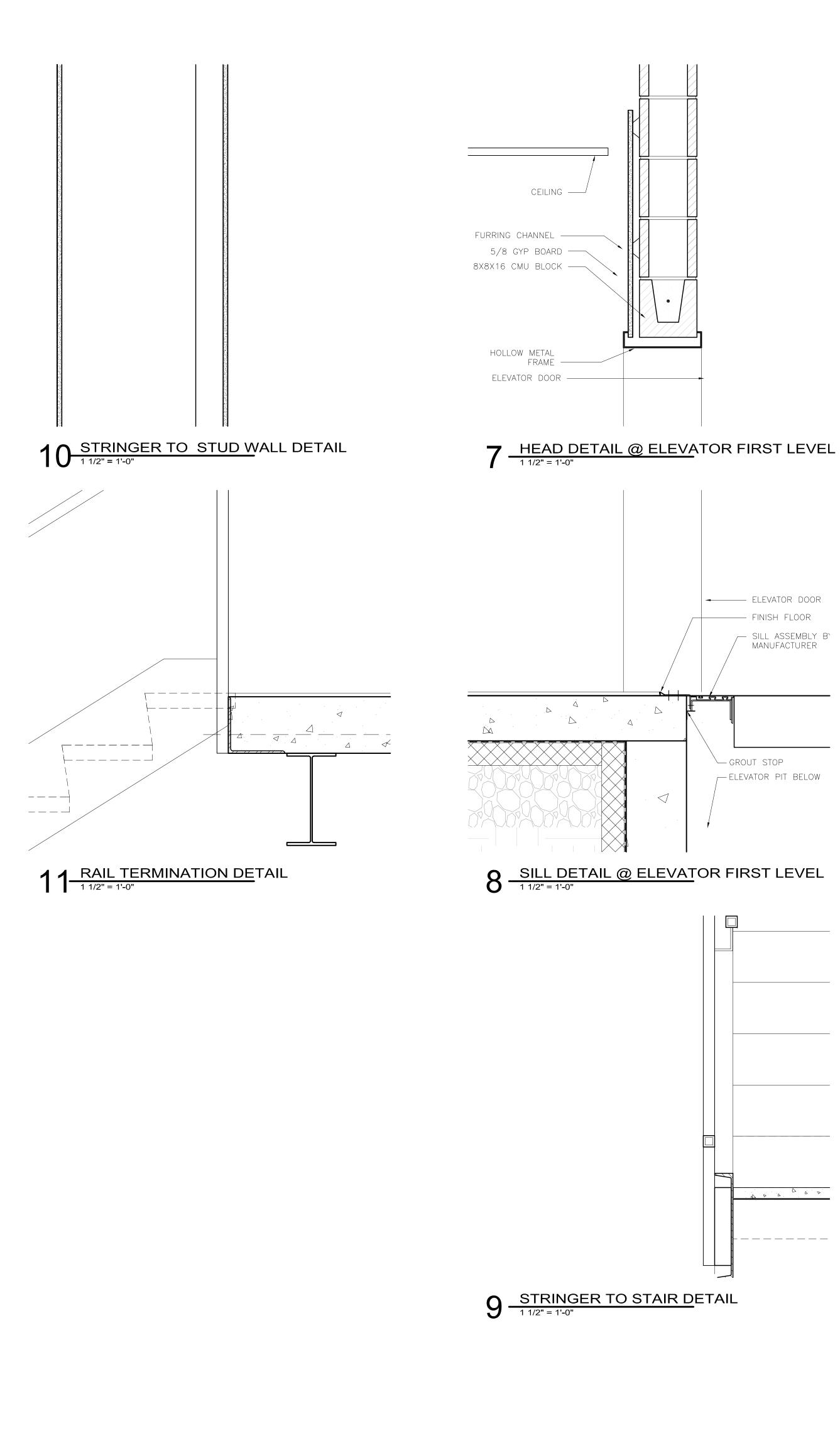
DESIGNED BY. XX **AEP PROJECT NUMBER** 

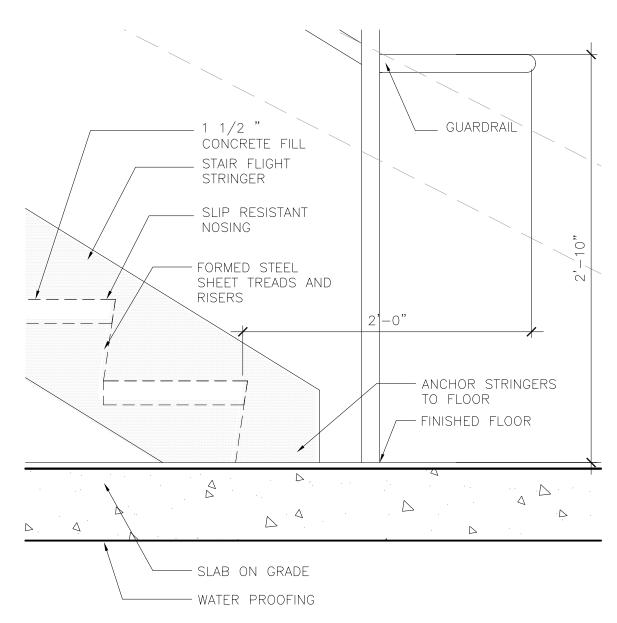
XXX.Dw.**213-1882-091**\_00\_12:00p © 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE INTERIOR SYSTEMS

**VERTICAL CIRCULATION** 

SHEET NUMBER **A533** 





## 4 STAIR STRINGER @ FIRST LEVEL

ELEVATOR DOOR

GROUT STOP

\_\_ ELEVATOR PIT BELOW

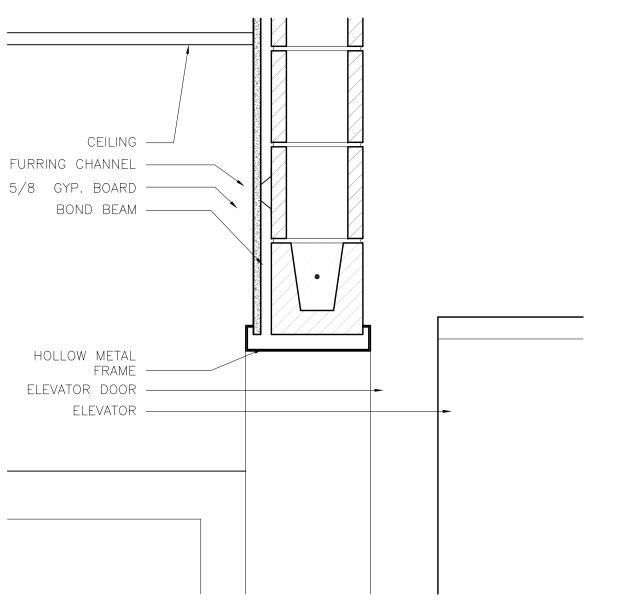
D D D D

\_\_\_\_\_

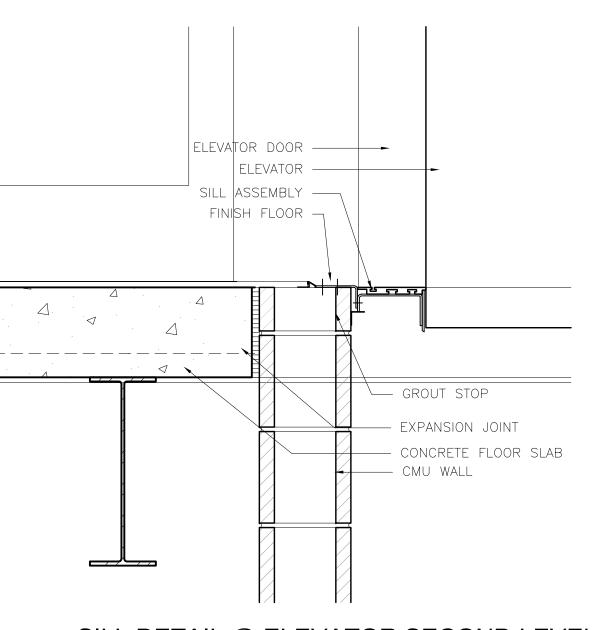
--- FINISH FLOOR

SILL ASSEMBLY B'

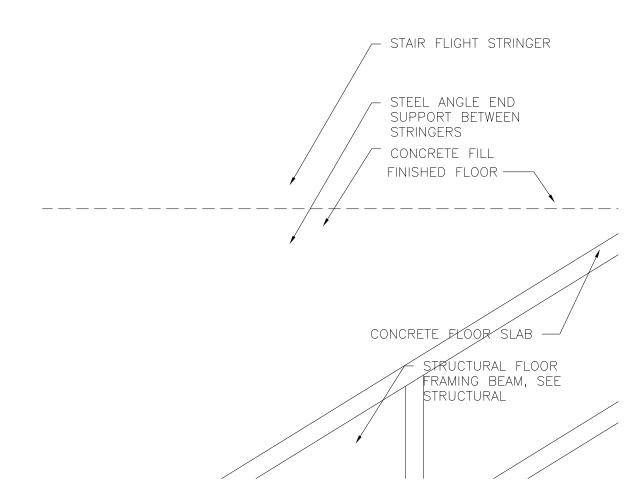
MANUFACTURER



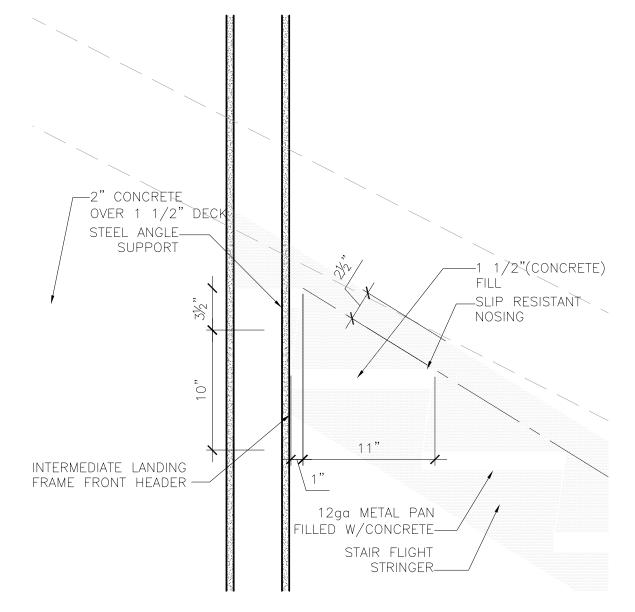
5 HEAD DETAIL @ ELEVATOR SECOND LEVEL



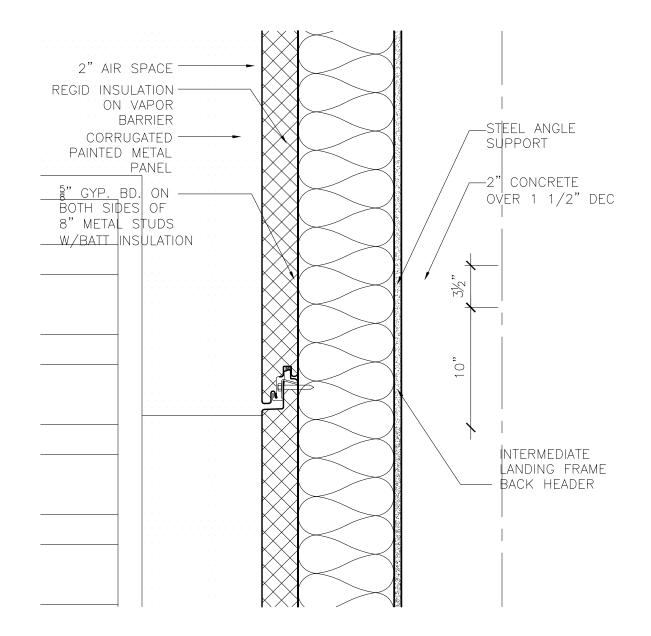
6 SILL DETAIL @ ELEVATOR SECOND LEVEL



STAIR STRINGER @ SECOND LEVEL



2 STAIR STRINGER TO INTERMETIATE LANDING



3 LANDING TO WALL DEATAIL
1 1/2" = 1'-0"



218-722-1227 Fex: 218-722-1052 www.reendh.com



**DULUTH INTERNATIONAL AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

#### **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

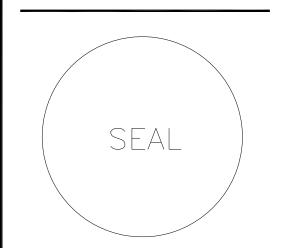
Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606

TEL: (312) 201-7408 / FAX: (312) 201-0031 Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.** 01 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900 Landscaping Consultants: APPOLD DESIGN

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



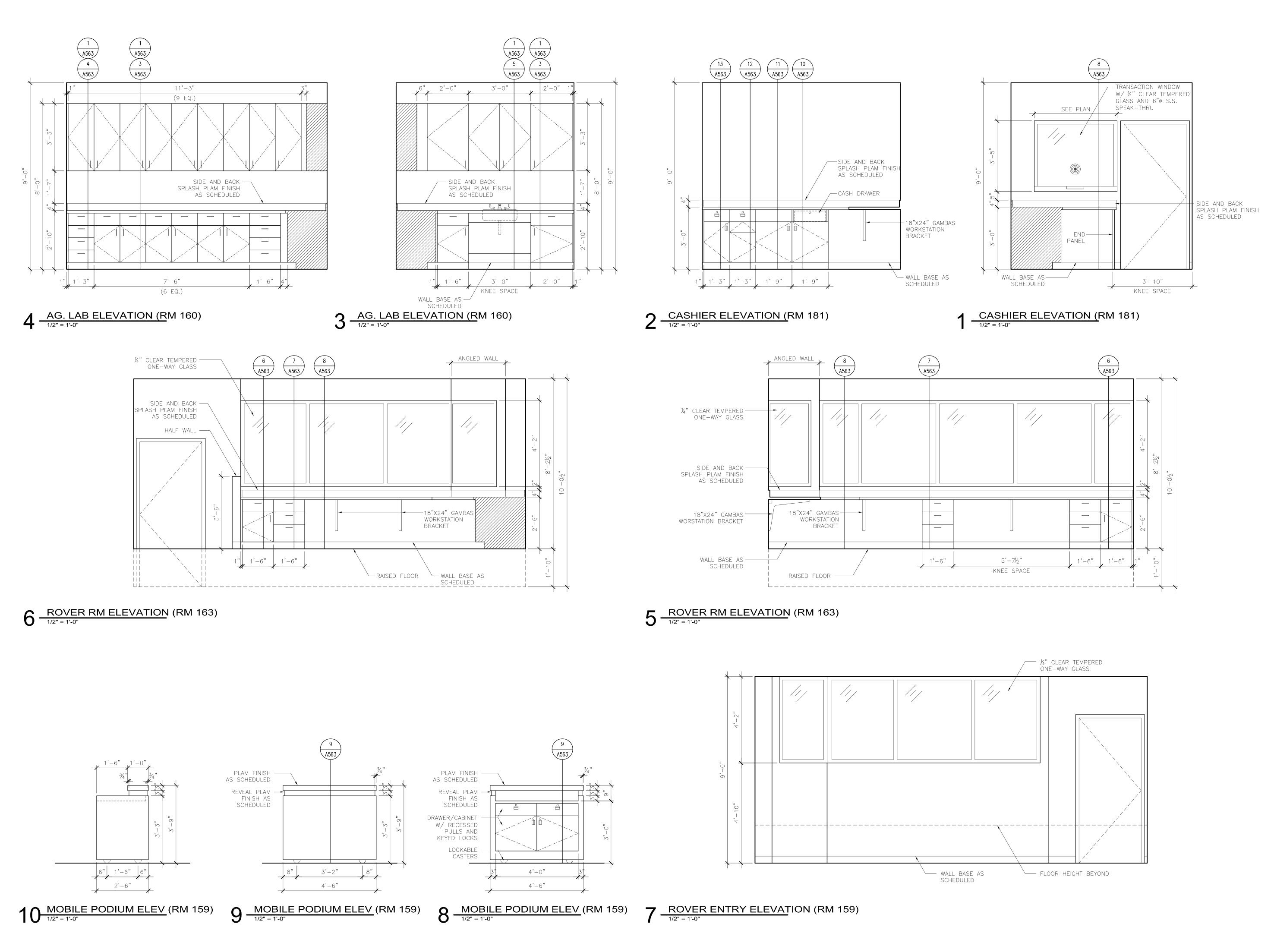
REVISIONS				
NO.	DESC	RIPTION	DATE	
DATE	issued.	04-12-10		
REVI	EWED BY:	XX		
DRAY	W BY.	XX		
DESK	MED BY.	XX		
	AEP PRO	JECT M	MBER	
			<b>91</b> 0-00-00 12:00p	

VERTICAL CIRCULATION DETAILS

© 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

SHEET NUMBER **A540** 



ILSEH.
IMPROVING YOUR WORLD

Reynolds, Smith and Hills,

4525 Airport Approach Rd, Sto / Duluth, Minnocote 55811 218-722-1227 Fex: 218-722-1052 www.reendh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

#### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

TEL: (312) 201-7408 / FAX: (312) 201-0031

TEL: (203) 792-3000 / FAX: (203) 792-4900

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606

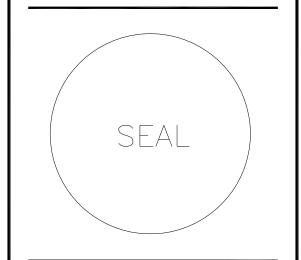
Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.**01 East Ridge Office Park, Suite 103, Danbury CT 06810

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



REVISIONS			
NO.	DESCRIPTION	DATE	
DATE I	<b>88UED</b> 04-12-10	•	
REVIEV	FED BY: SBS/TC		

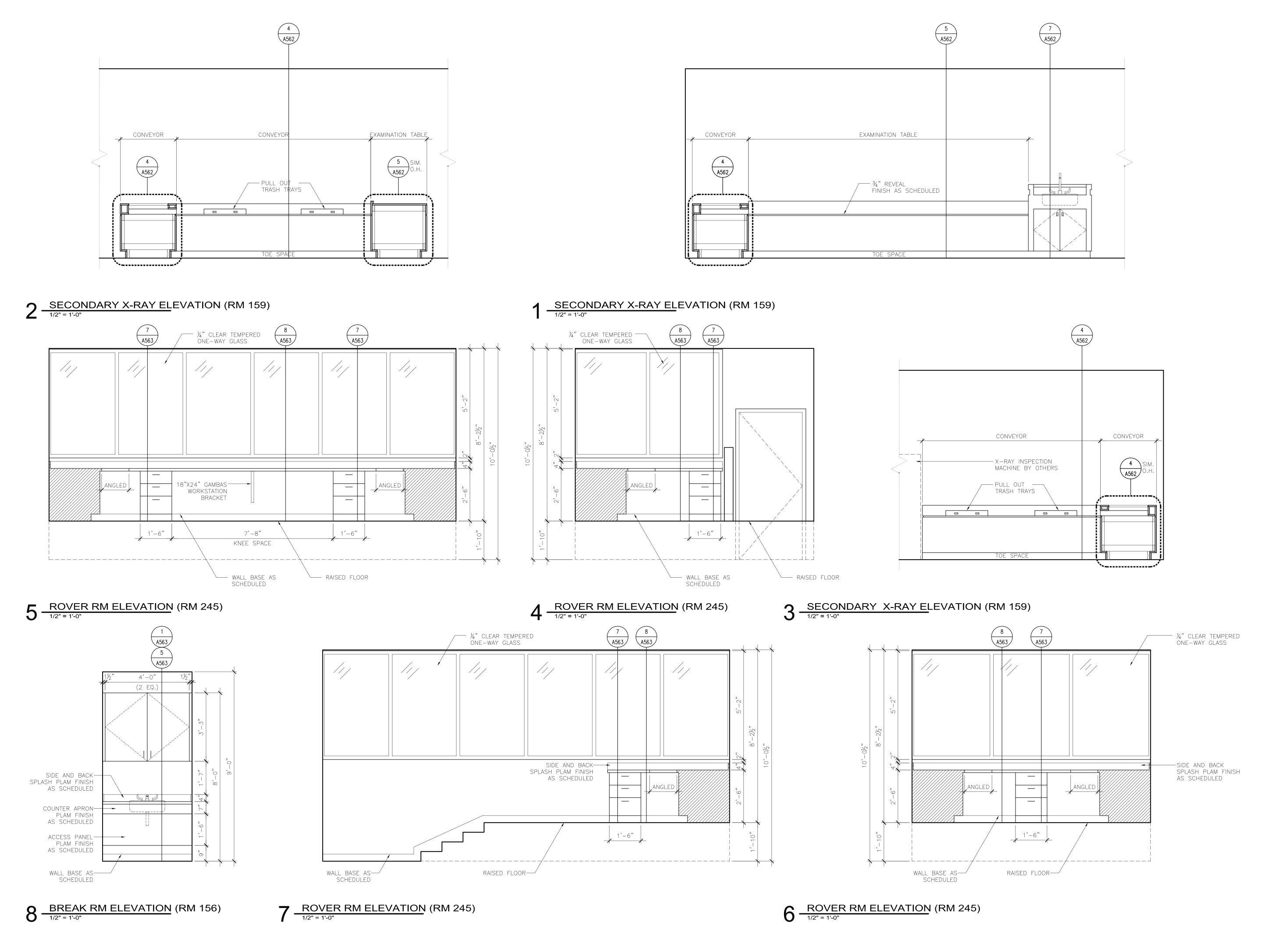
DRAWN BY: VO
DESIGNED BY: SBS/TC

AEP PROJECT NUMBER 213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

MILLWORK ELEVATIONS

A560





4525 Airport Approach Rd, Ste

Duluth, Minnecote 55811 218-722-1227 Fex: 218-722-1052 www.reendh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

#### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802

01 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810

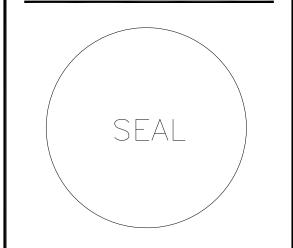
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

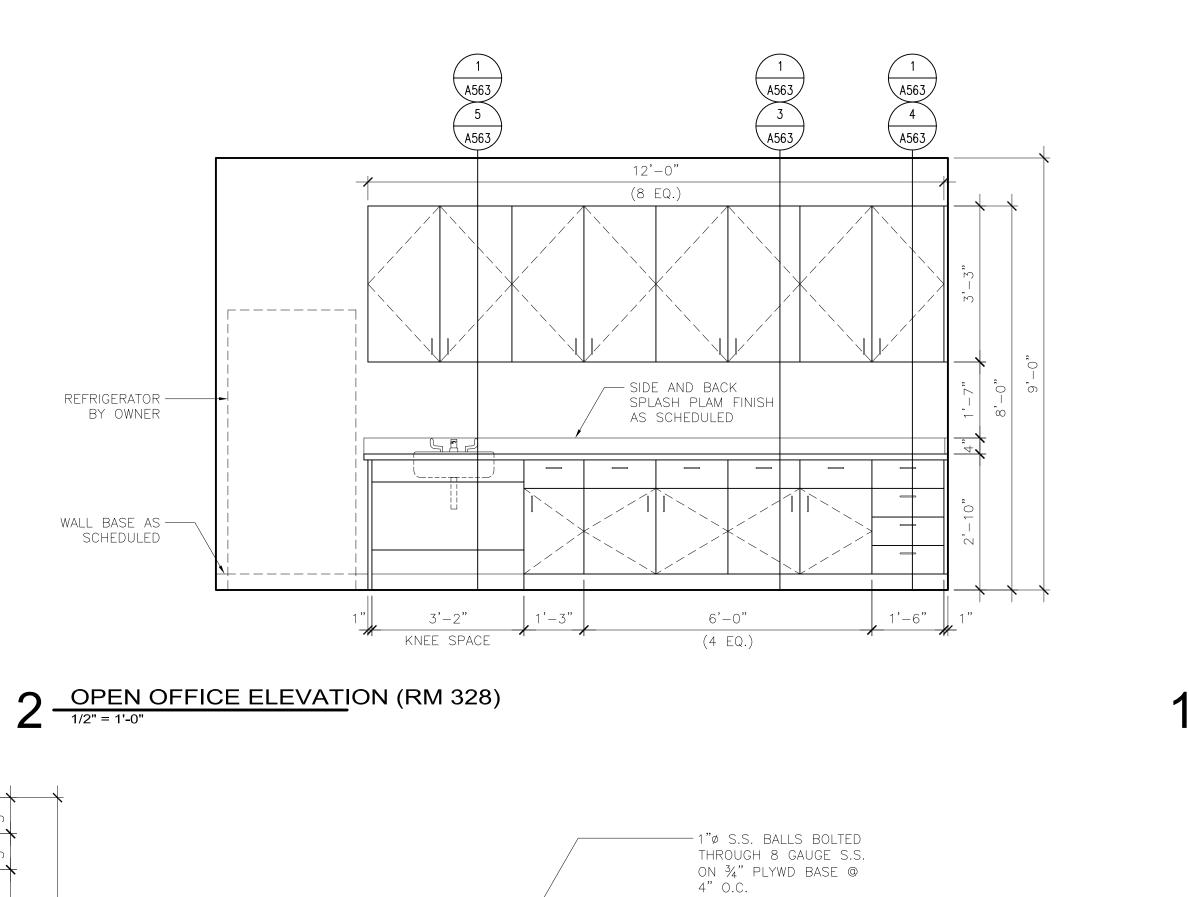


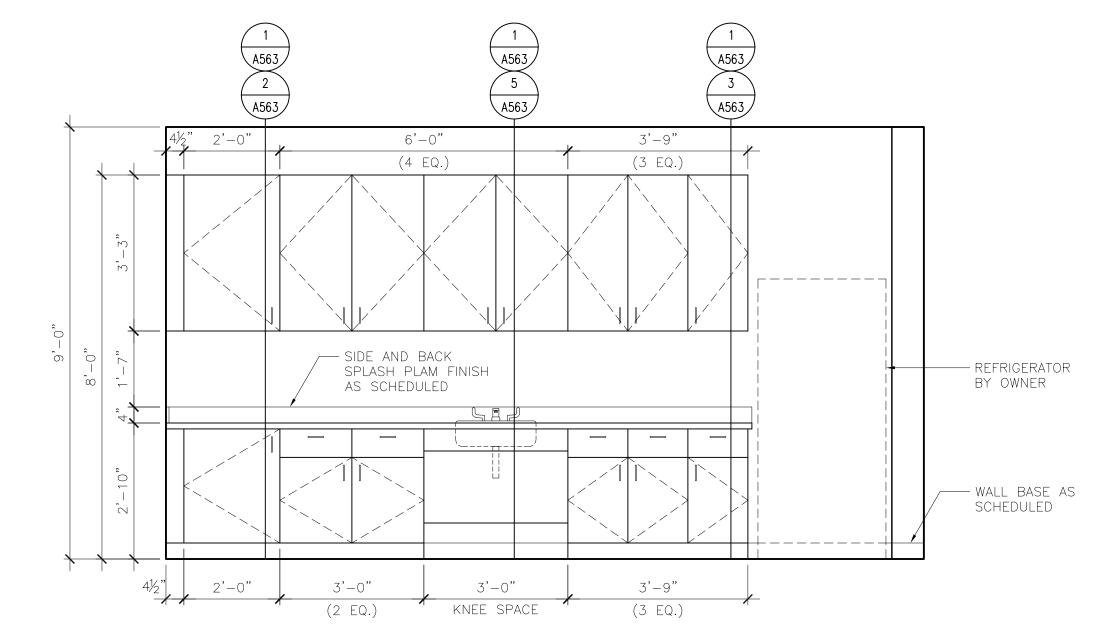
REVISIONS			
NO.	DESC	RIPTION	DATE
DATE	ISSUED:	04-12-10	·
REVIE	WED BY:	SBS/TC	
DRAW	N BY:	VO	
DESIG	KED BY:	SBS/TC	
	AED DO	LECT MIN	

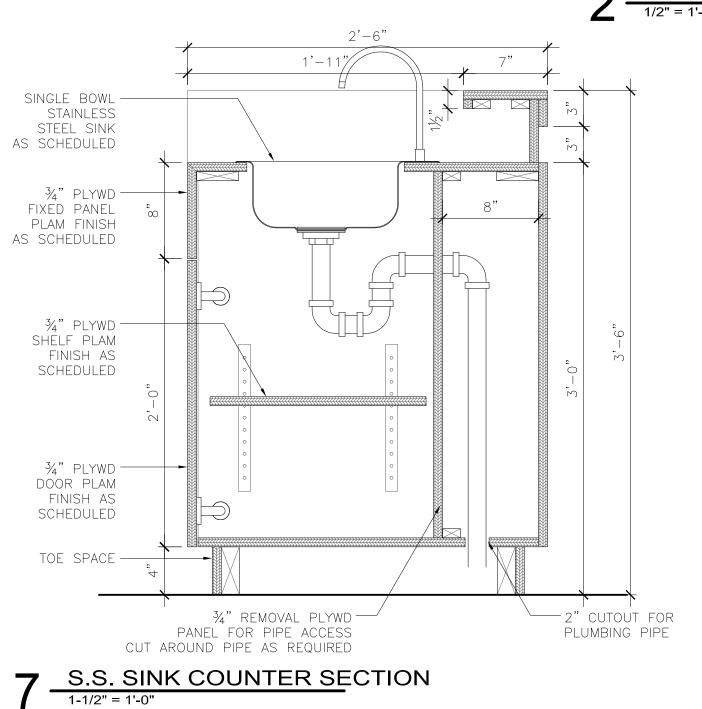
213-1882-091
© 2006 REYNOLDS, SMITH AND HILLS INC.
SHEET TITLE

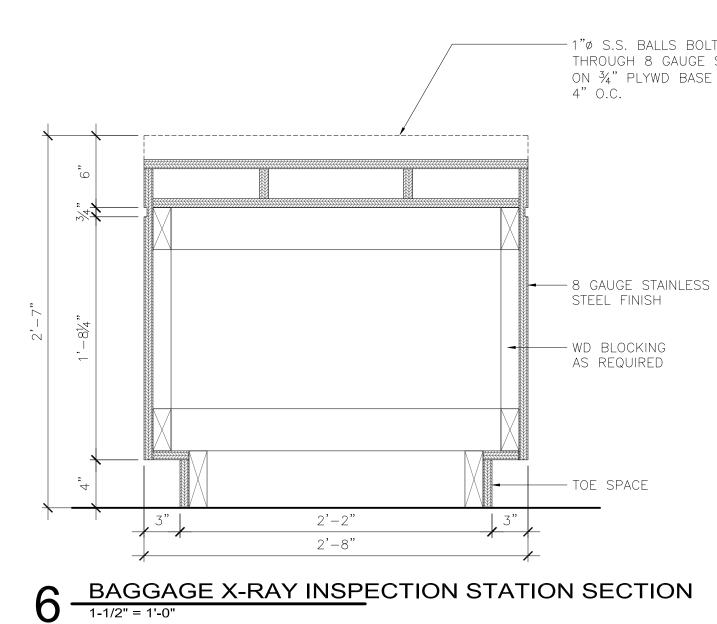
MILLWORK ELEVATIONS

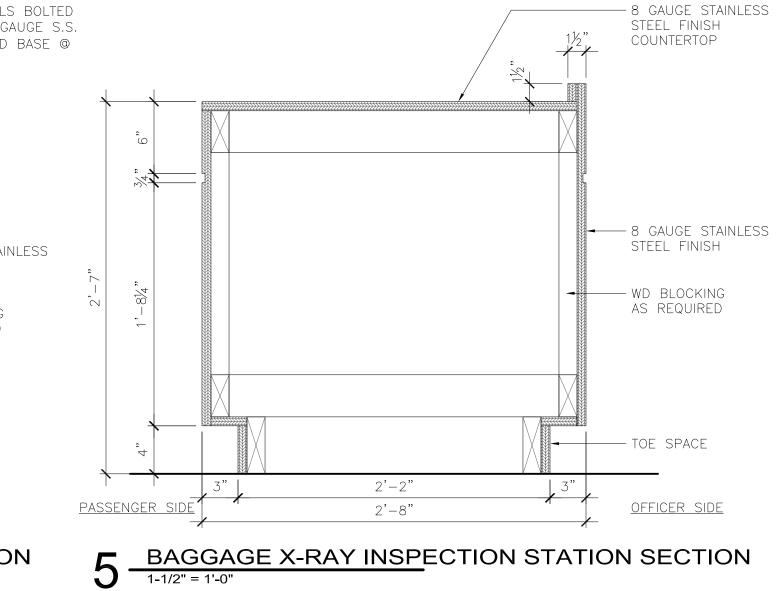
A561



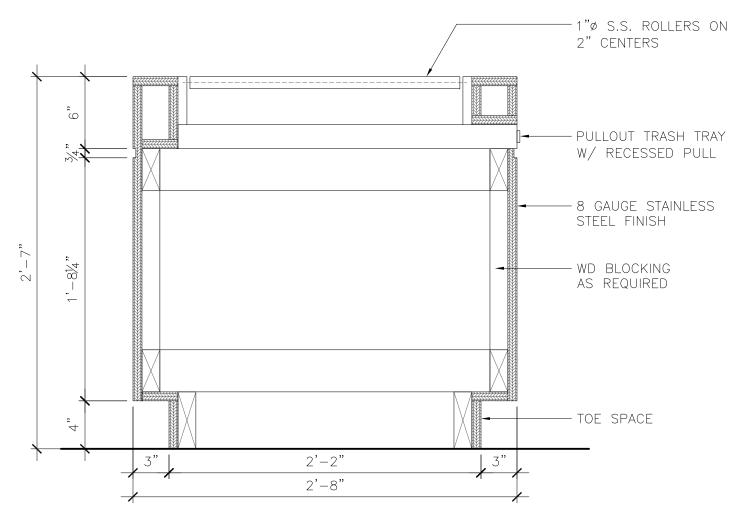








BREAK RM ELEVATION (RM 310)



4 BAGGAGE X-RAY INSPECTION STATION SECTION
1-1/2" = 1'-0"

RSET.

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Sto A
Duluth, Minnecota 55811

218-722-1227 Fex: 218-722-1052



DULUTH AIRPORT AUTHORITY

DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

#### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802

01 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

TEL: (203) 792-3000 / FAX: (203) 792-4900

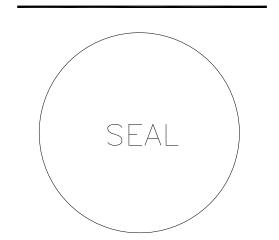
TEL: (218) 591-5079

Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.**101 East Ridge Office Park, Suite 103, Danbury CT 06810

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812



RE	/ISIONS
NO.	DESC

NO.	DESCRIPTION	DAT
DAT	<b>F 18811ED.</b> 04-12-10	

DATE ISSUED: 04-12-10
REVIEWED BY: SBS/TC
DRAWN BY: VO

DESIGNED BY: SBS/TC

AEP PROJECT NUMBER

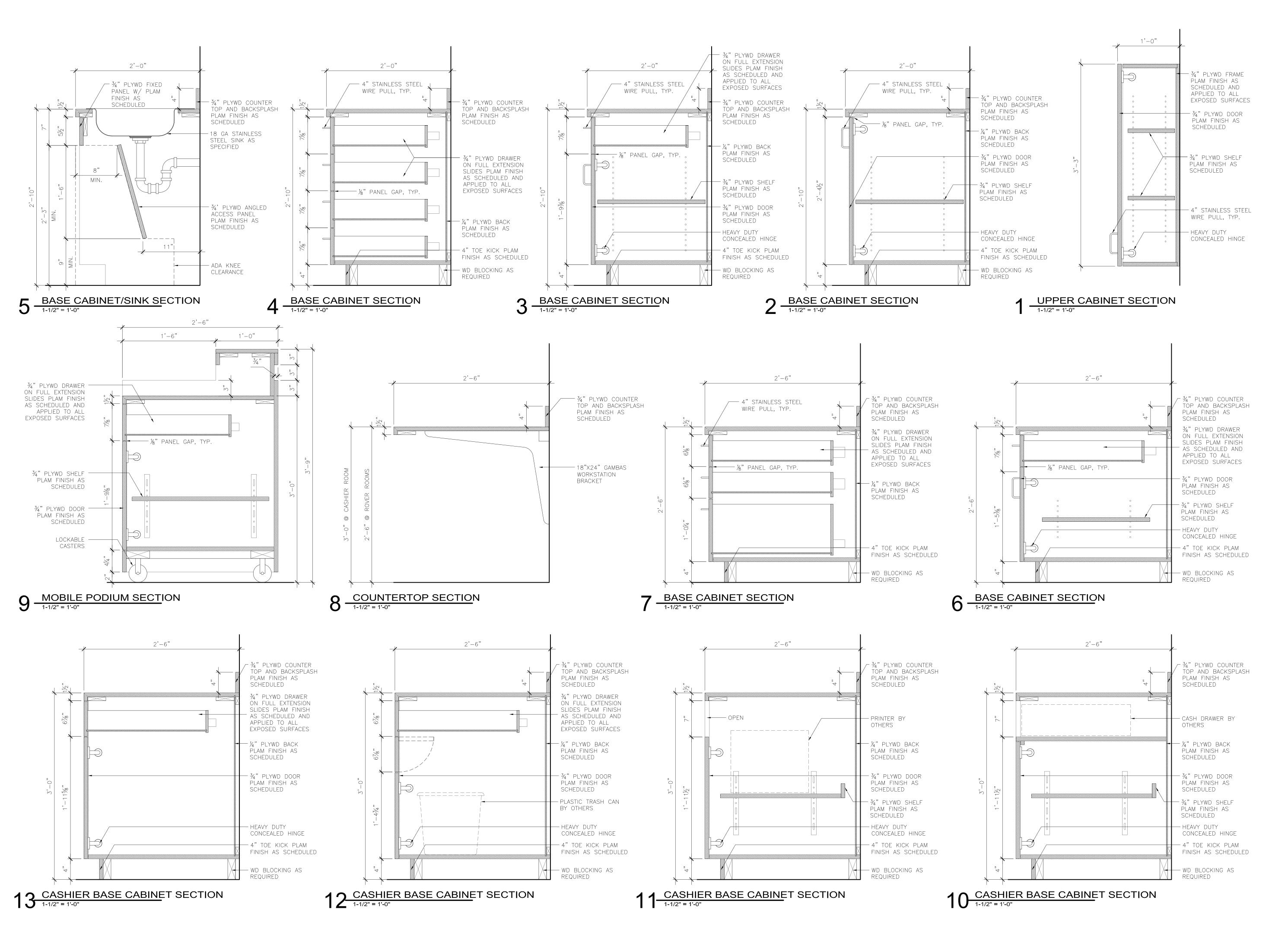
213-1882-09

213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

MILLWORK ELEVATIONS AND DETAILS

A562



ISSETT.

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duleth, Minnecota 55811 218-722-1227 Fax: 218-722-1052 www.reandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

#### CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606

TEL: (312) 201-7408 / FAX: (312) 201-0031

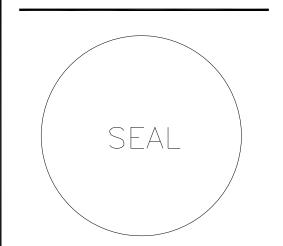
Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.**01 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN
2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



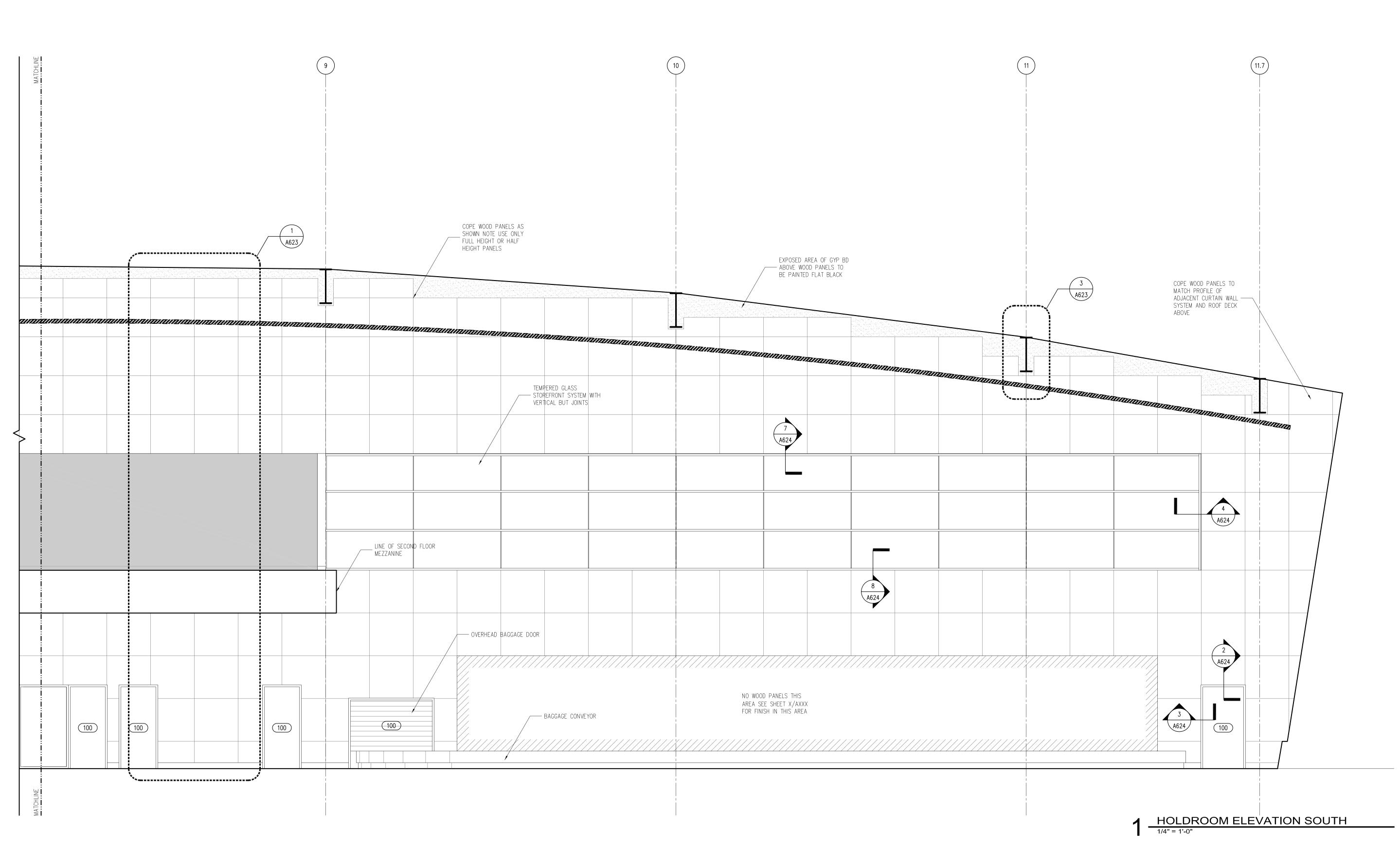
REVI	BIONS			
NO.	DESC	RIPTION		DAT
_				
DATE I	SSUED:	04-12-10		
REVIET	/ED BY:	SBS/T	•	
DRAWI	BY.	VO		
DESIGN	ED BY:	SBS/T	)	
	AEP PRO	JECT N	JMB	ER
_				
	<b>Z13</b> -	1882-0		

MILLWORK DETAILS

© 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

A563



ILSELL.

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duleth, Minnecota 55811

218-722-1227 Fex: 218-722-1052

www.reendh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

#### CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802

01 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810

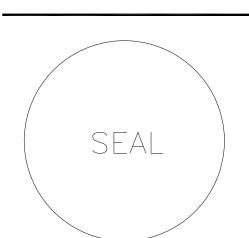
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



REVI	BIONS	
NO.	DESCRIPTION	DATE
_		
_		
DATE	<b>88UED</b> : 04-12-10	<u> </u>
REVE	VED BY. SBS/TC	

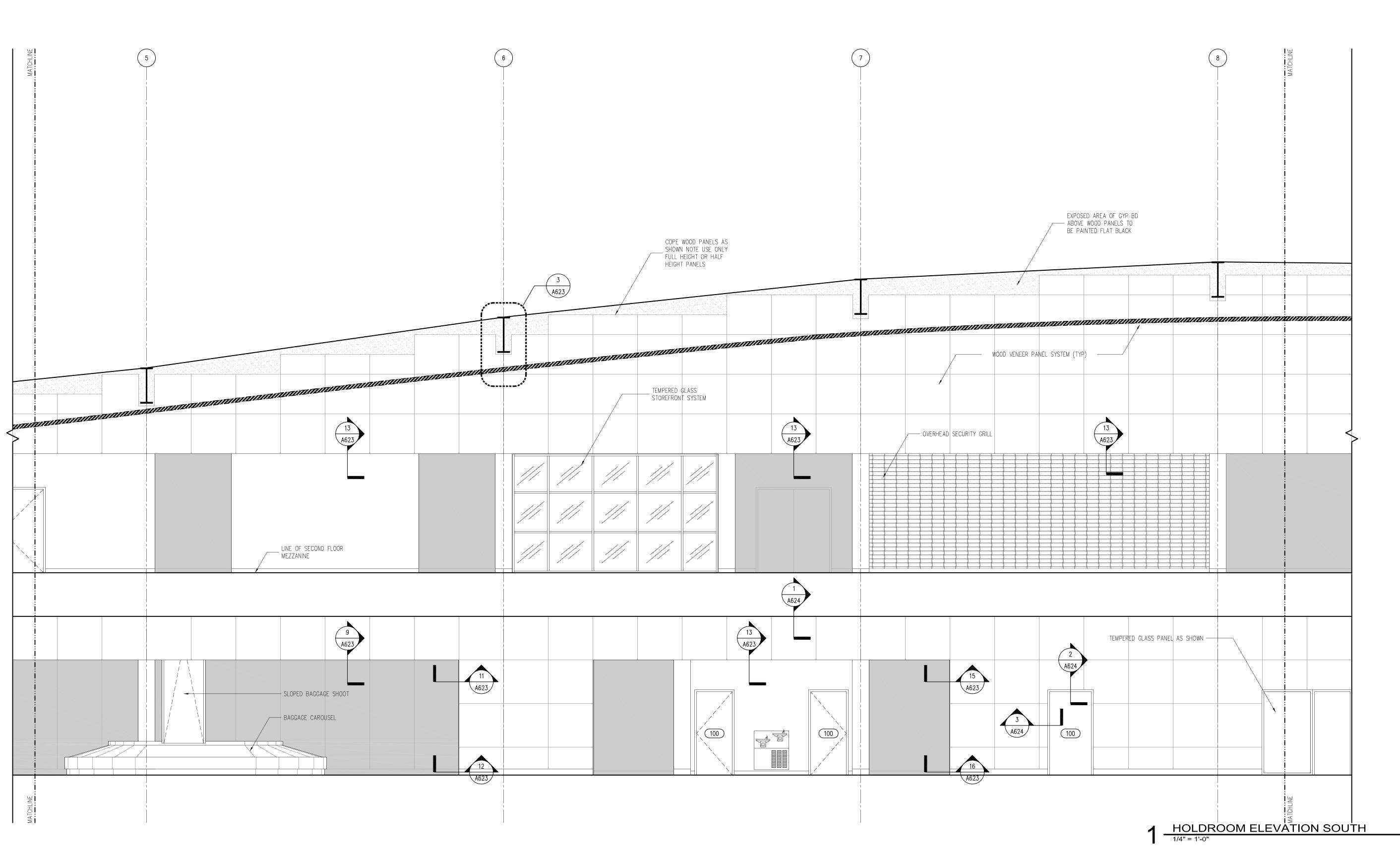
DRAWN BY: MKG/MI
DESIGNED BY: SBS/TC

AEP PROJECT NUMBER 213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

INTERIOR ELEVATIONS

A601





Reynolds, Smith and Hills, Inc.
4525 Airport Approach Rd, Ste A
Duluth, Manecote 55811
218-722-1227 Fex: 218-722-1052

**AAA.teeuqproom** 



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW PASSENGER TERMINAL

#### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

Lake Avenue South, Suite 300, Duluth MN 55802

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.**01 East Ridge Office Park, Suite 103, Danbury CT 06810

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

TEL: (203) 792-3000 / FAX: (203) 792-4900

SEAL

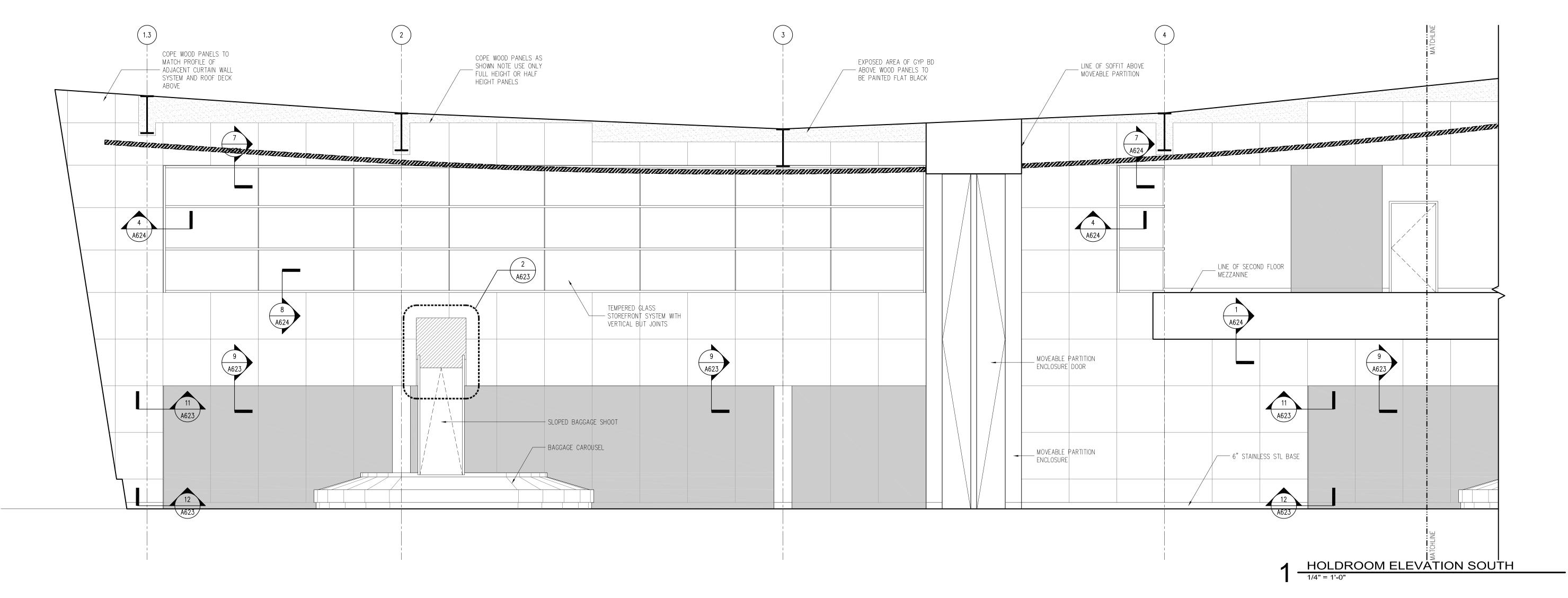
REVISIONS					
NO.	DESC	RIPTION	DATE		
DATI	E ISSUED.	04-12-10			
REVI	EWED BY:	SBS/TC			
DRA	WN BY:	MKG/MI			
DESI	CALED BY:	SBS/TC			
	AED PROJECT MINISER				

AEP PROJECT NUMBER 213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

INTERIOR ELEVATIONS

sheet number A602



INPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Sto A
Deluth, Minnecota 55811

218-722-1227 Fex: 218-722-1052

www.reandh.com

DULUTH AIRPORT AUTHORITY

DULUTH INTERNATIONAL AIRPORT

DULUTH, MN

NEW PASSENGER TERMINAL

#### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:
BNP ASSOCIATES INC.

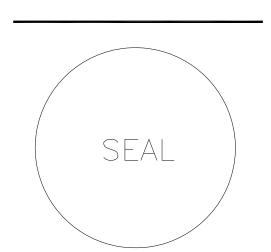
101 East Ridge Office Park, Suite 103, Danbury CT 06810
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



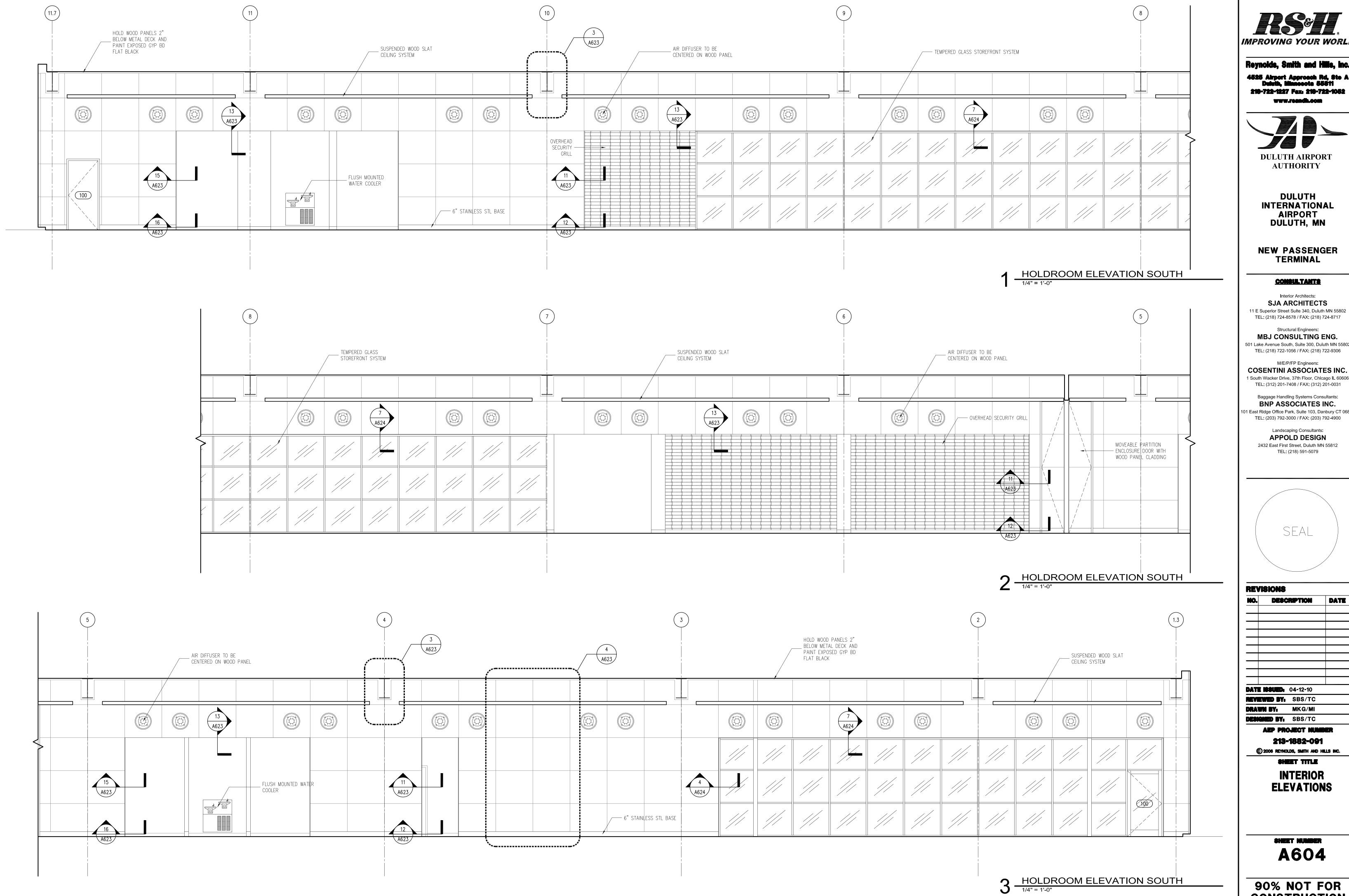
REVISIONS					
NO.	DESC	RIPTION	DATE		
DATI	E ISSUED.	04-12-10			
REVI	EWED BY:	SBS/TC			
DRA	WN BY:	MKG/MI			
DESI	CALED BY:	SBS/TC			
	AED DOG	WAT MIN			

AEP PROJECT NUMB 213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

INTERIOR ELEVATIONS

A603



IMPROVING YOUR WORLD

218-722-1227 Fex: 218-722-1052



**DULUTH INTERNATIONAL AIRPORT** 

**NEW PASSENGER TERMINAL** 

#### **CONSULTANTS**

SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

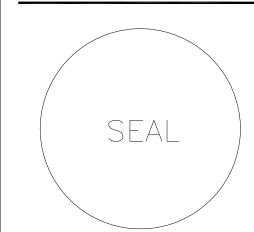
MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

M/E/P/FP Engineers:

1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

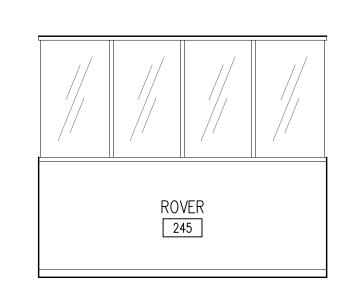
> Landscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812

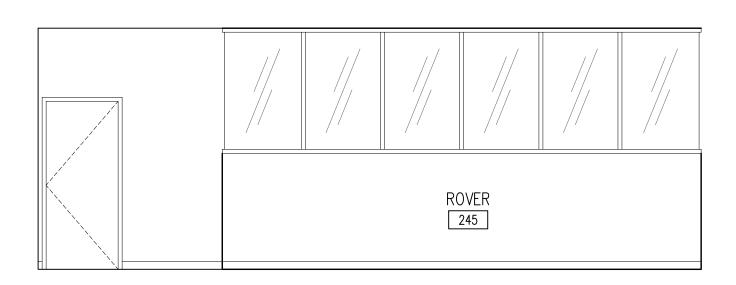


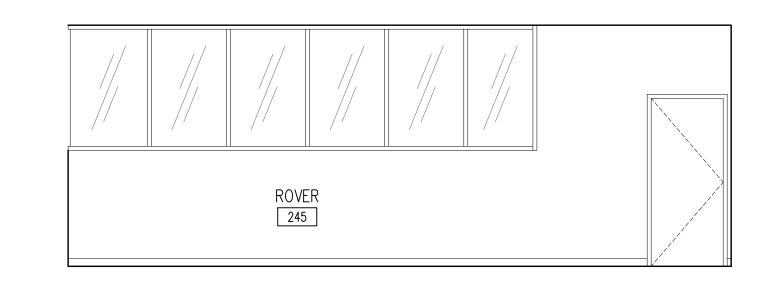
RE			
NO.	DESC	RIPTION	DATE
DATI	E ISSUED:	04-12-10	
REVI	EWED BY:	SBS/TC	
DRA	WN BY:	MKG/MI	
DESI	CHED BY:	SBS/TC	
	AEP PRO	JECT NUN	IBER

INTERIOR **ELEVATIONS** 

A604

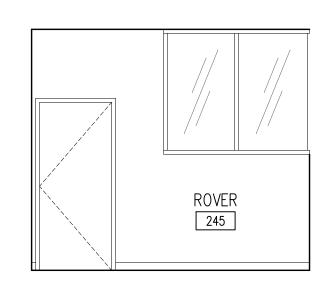


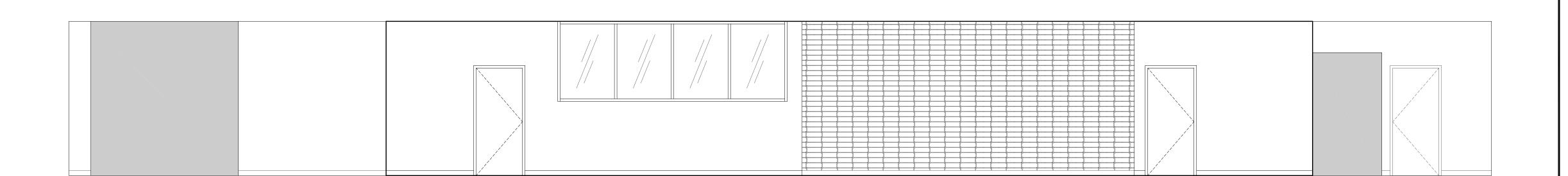




6 SECOND FLOOR ROVER ELEVATION EAST 7 SECOND FLOOR ROVER ELEVATION EAST

8 SECOND FLOOR ROVER ELEVATION EAST





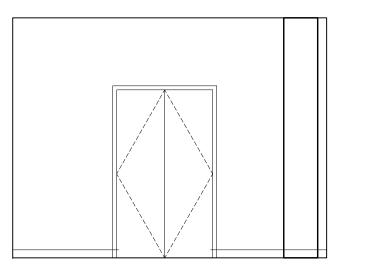
5 SECOND FLOOR ROVER ELEVATION EAST 1

INTERNATIONAL BAGGAGE CLAIM NORTH

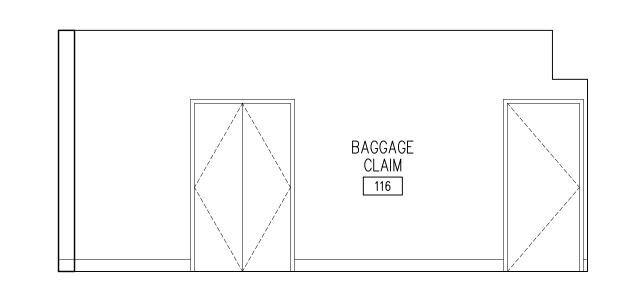
5 INTERNATIONAL BAGGAGE CLAIM EAST



4 INTERNATIONAL BAGGAGE CLAIM WEST



2 INTERNATIONAL BAGGAGE CLAIM EAST



BAGGAGE CLAIM 116

BAGGAGE CLAIM 116

6 DOMESTIC BAGGAGE CLAIM NORTH

3 DOMESTIC BAGGAGE CLAIM EAST

218-722-1227 Fex: 218-722-1052



**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

#### **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

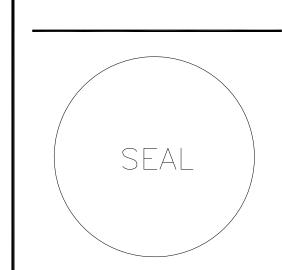
Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers: COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031 Baggage Handling Systems Consultants:

BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



REVISIONS			
NO.	DESCRIPTION	DATE	
-			
-			

**DATE ISSUED.** 04-12-10 REVIEWED BY: SBS/TC DRAWN BY: MKG/MI

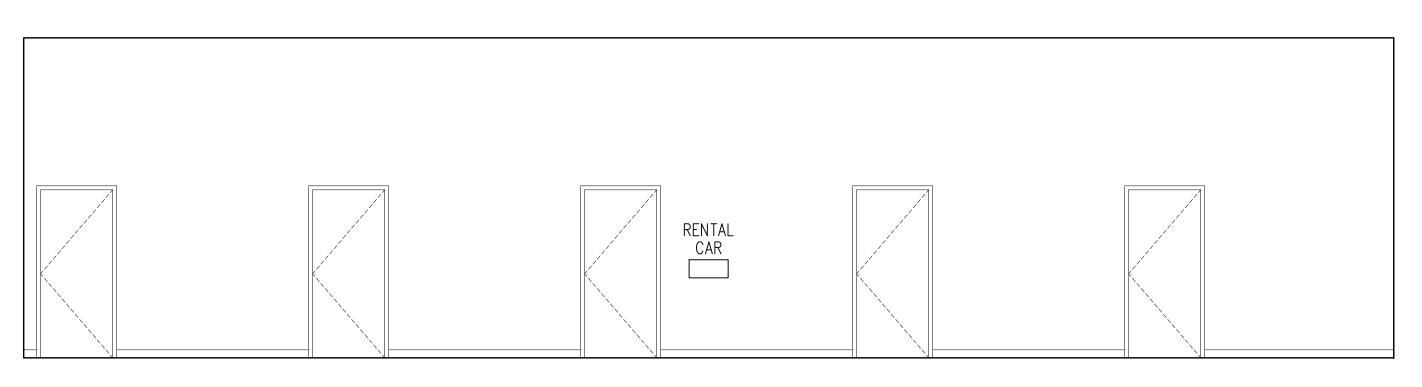
DESIGNED BY: SBS/TC AEP PROJECT NUMBER

213-1882-091

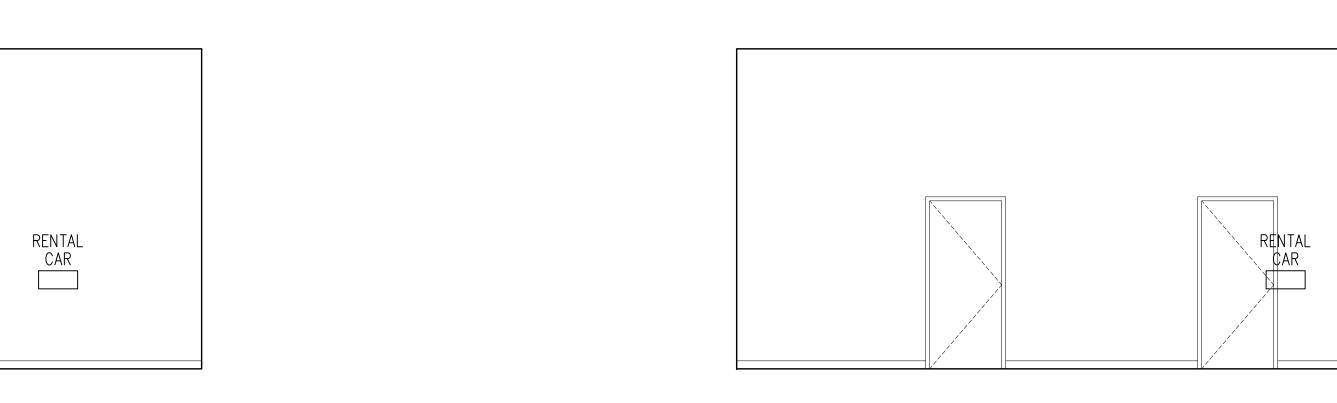
© 2008 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

**INTERIOR ELEVATIONS** 

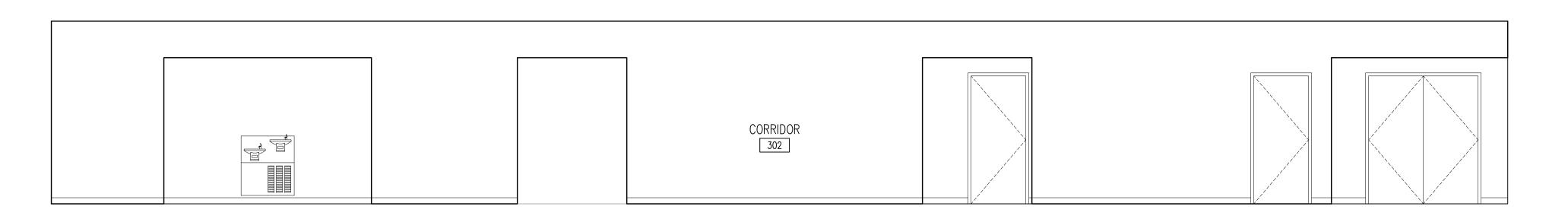
SHEET NUMBER A605



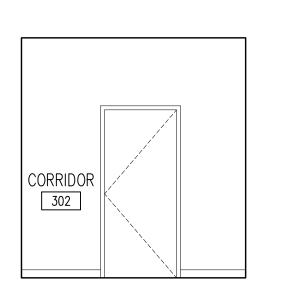
1 RENTAL CAR ELEVATION SOUTH



2 RENTAL CAR ELEVATION NORTH



3 THIRD FLOOR CORRIDOR ELEVATION NORTH



5 RENTAL CAR ELEVATION EAST

4 THIRD FLOOR CORRIDOR ELEVATION SOUTH

218-722-1227 Fex: 218-722-1052 **AAA.teeuqproom** 



**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

#### **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

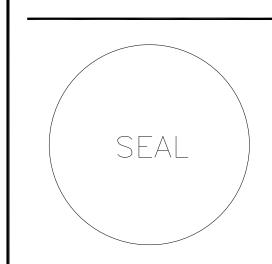
Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers: COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031 Baggage Handling Systems Consultants:

BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

> Landscaping Consultants: **APPOLD DESIGN** 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



REVISIONS			
NO.	DESCRIPTION	D	
l <u>—</u>		_	
I —		+	
		$\vdash$	

**DATE ISSUED** 04-12-10 REVIEWED BY: SBS/TC DRAWN BY: MKG/MI

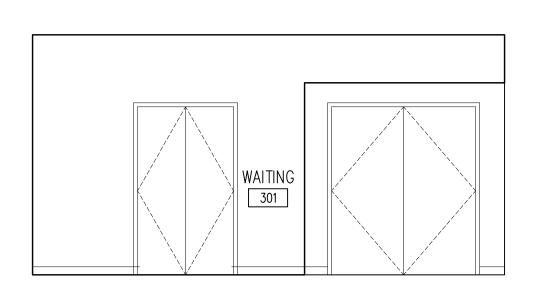
DESIGNED BY: SBS/TC AEP PROJECT NUMBER

213-1882-091

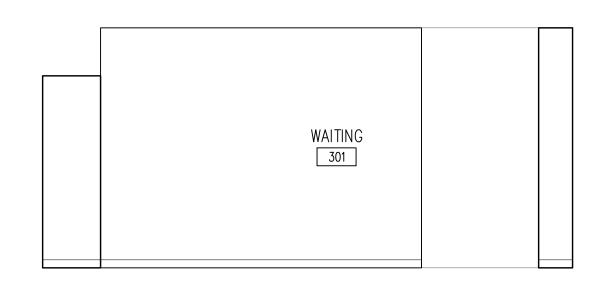
© 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

INTERIOR **ELEVATIONS** 

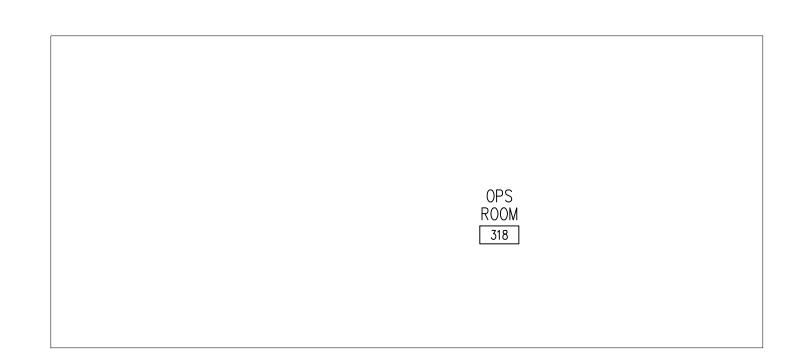
SHEET NUMBER A606



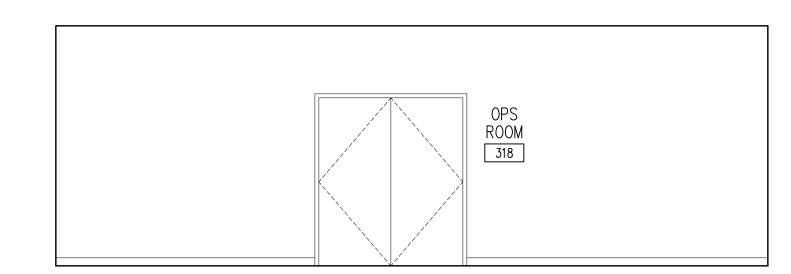
5 THIRD FLOOR WAITING ROOM ELEVATION EAST



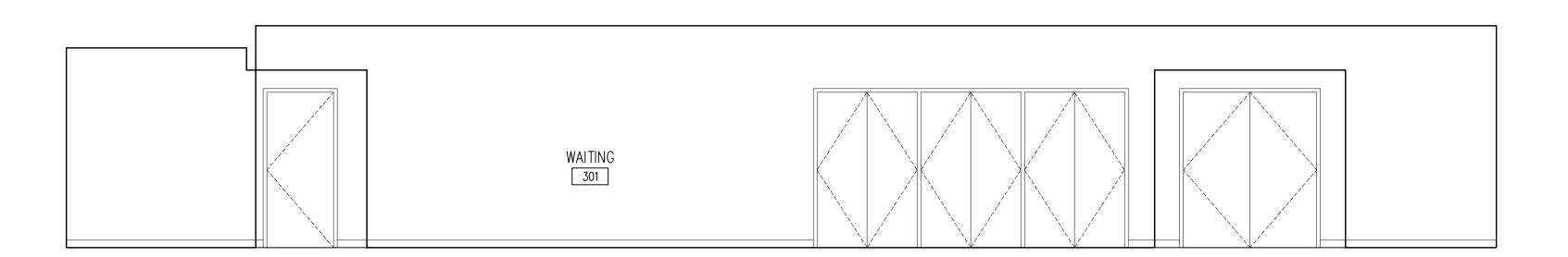
6 THIRD FLOOR WAITING ROOM ELEVATION WEST



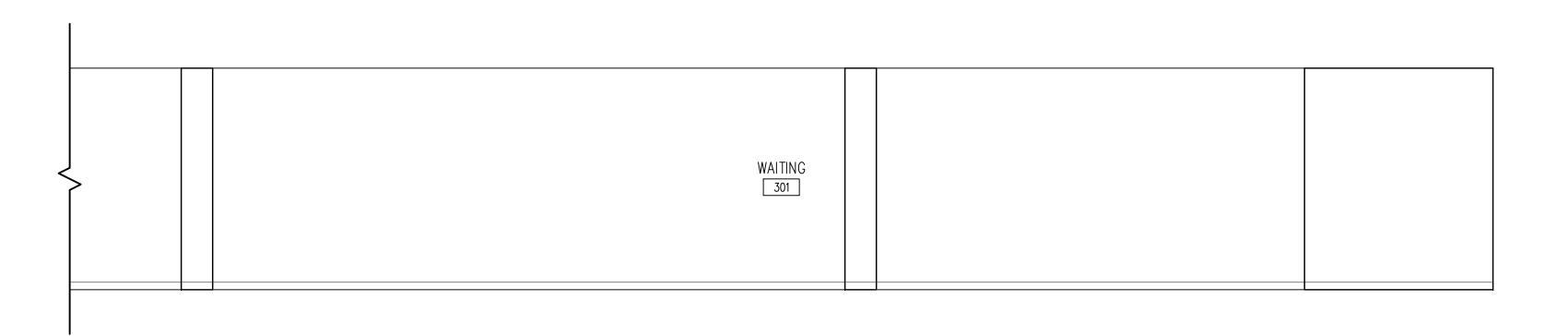
THIRD FLOOR OPS ROOM ELEVATION EAST



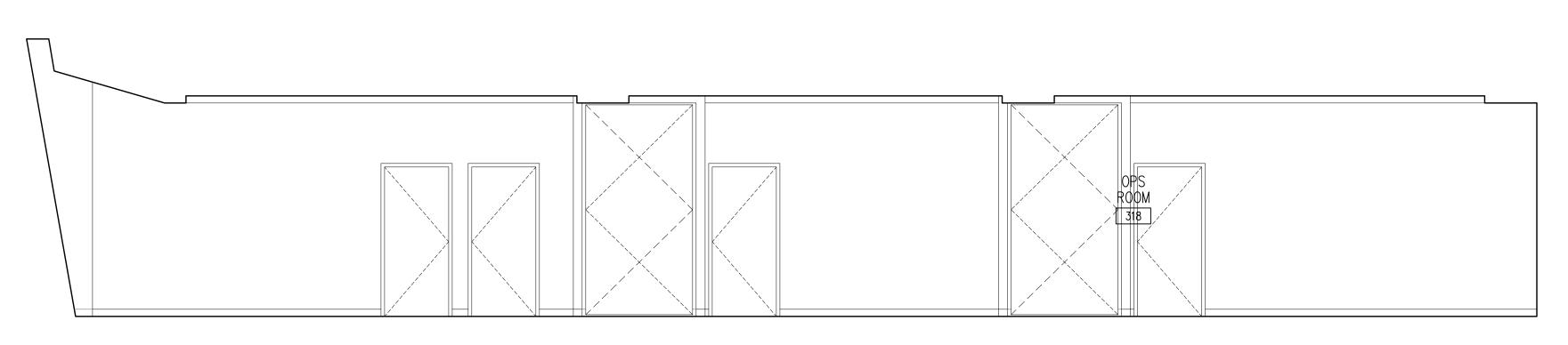
8 THIRD FLOOR OPS ROOM ELEVATION WEST



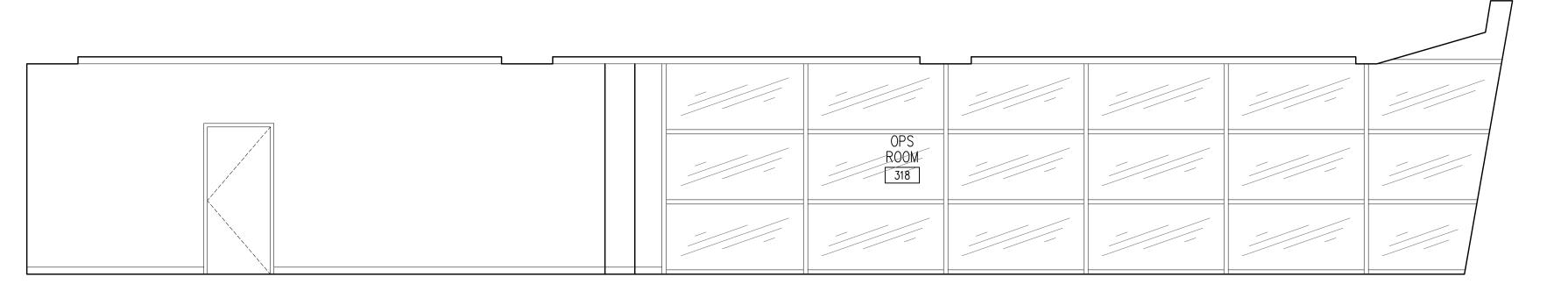
THIRD FLOOR WAITING ROOM ELEVATION NORTH



2 THIRD FLOOR WAITING ROOM ELEVATION SOUTH



3 THIRD FLOOR OPS ROOM ELEVATION SOUTH



4 THIRD FLOOR OPS ROOM ELEVATION SOUTH



218-722-1227 Fex: 218-722-1052



**AUTHORITY** 

**DULUTH** INTERNATIONAL AIRPORT DULUTH, MN

**NEW PASSENGER TERMINAL** 

#### **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

> Structural Engineers: MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900 Landscaping Consultants: **APPOLD DESIGN** 2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

SEAL

**REVISIONS** 

NO.	DESCRIPTION	DATI
	<u> </u>	

**DATE ISSUED:** 04-12-10 REVIEWED BY: SBS/TC DRAWN BY: MKG/MI

DESIGNED BY: SBS/TC

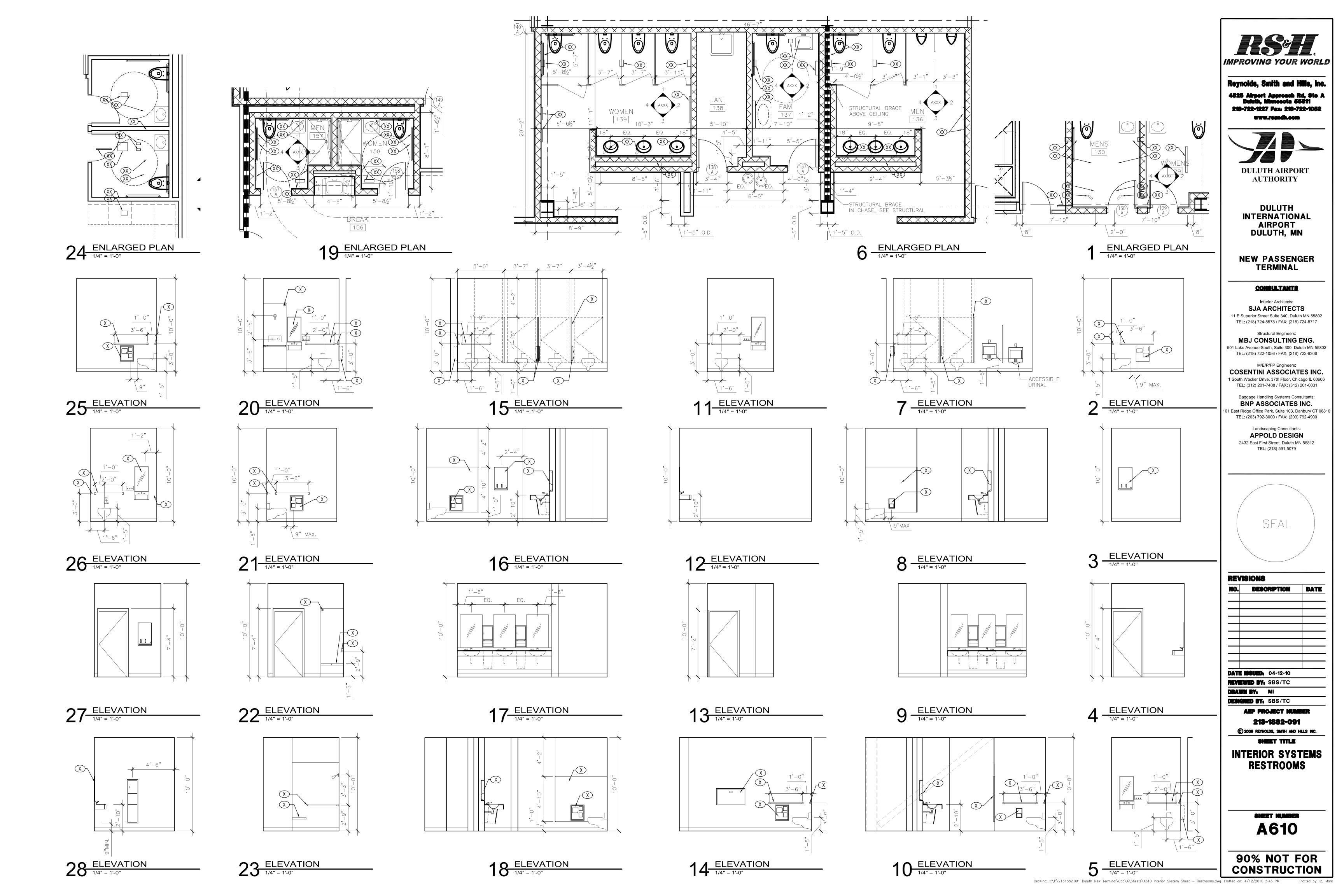
AEP PROJECT NUMBER 213-1882-091

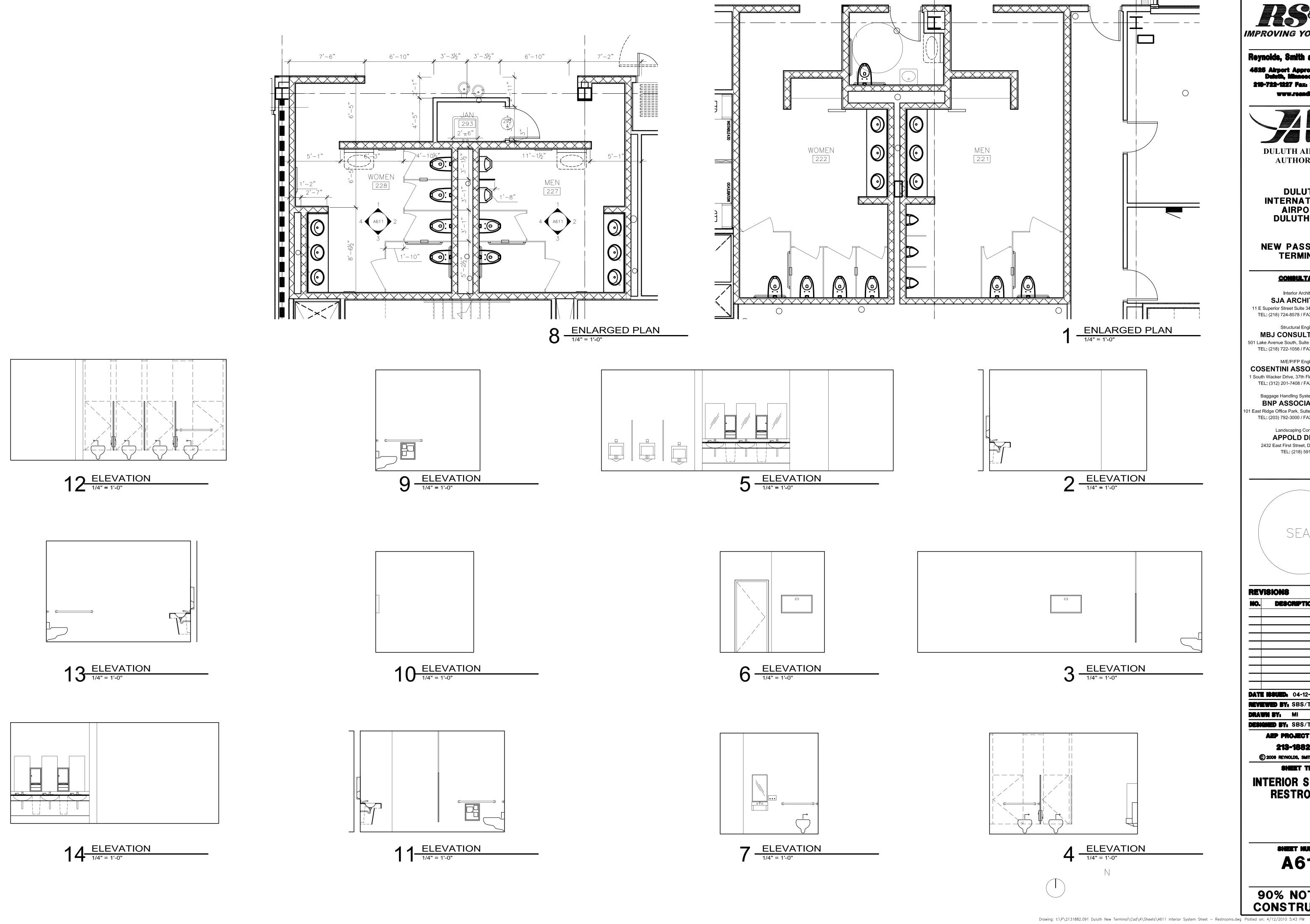
© 2008 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

**INTERIOR** 

**ELEVATIONS** 

**A607** 





IMPROVING YOUR WORLD

218-722-1227 Fex: 218-722-1052 www.reendh.com



**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

#### **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

#### Structural Engineers: MBJ CONSULTING ENG.

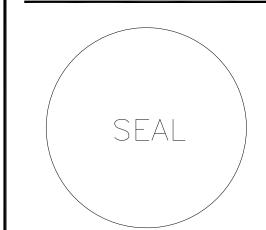
501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers:

#### COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

#### Landscaping Consultants: **APPOLD DESIGN**

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



RE\	/ISIONS
NO.	DESCR

**DATE ISSUED:** 04-12-10 REVIEWED BY, SBS/TC

DRAWN BY: MI **DESIGNED BY:** SBS/TC

AEP PROJECT NUMBER

213-1882-091 © 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE INTERIOR SYSTEMS **RESTROOMS** 

A611





218-722-1227 Fex: 218-722-1052 www.reendh.com



**DULUTH INTERNATIONAL AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

#### **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG.

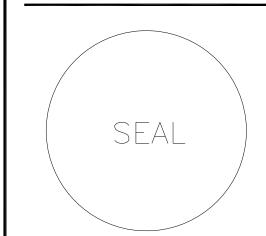
501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: **COSENTINI ASSOCIATES INC.** 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900 Landscaping Consultants:

**APPOLD DESIGN** 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



RE\	/ISIONS
-	-

NO.	DESCRIPTION	DATE
	1001110 0.4-10-10	
PAIL	<b>ISSUED:</b> 04-12-10	

REVIEWED BY, SBS/TC DRAWN BY: MI/MK

DESIGNED BY, SBS/TC

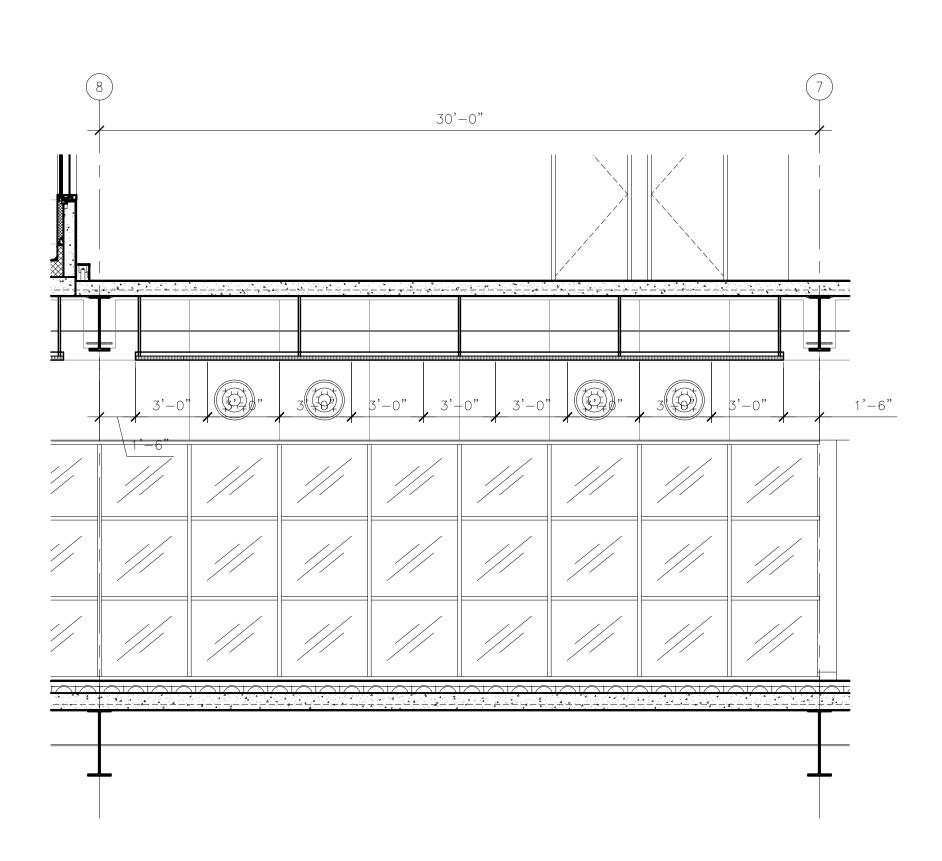
**AEP PROJECT NUMBER** 213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

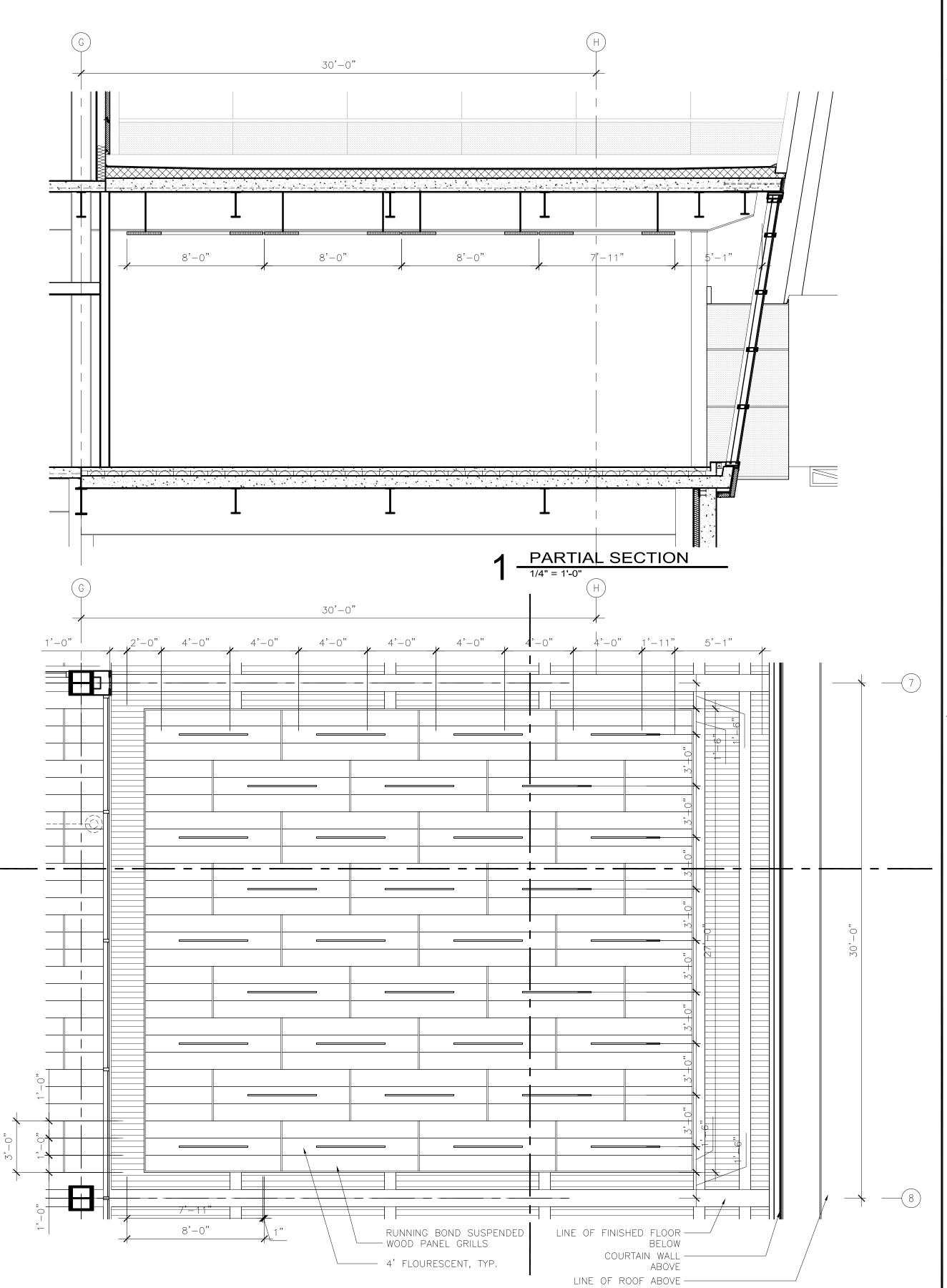
INTERIOR SYSTEMS

**RESTROOMS** 

A612



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



2 ENLARGED PLAN

1/4" = 1'-0"



Reynolds, Smith and Hills, I 4525 Airport Approach Rd, Ste

4525 Airport Approach Rd, Ste A Duluth, Minnecote 55811 218-722-1227 Fex: 218-722-1052 www.reendh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

#### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606

TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

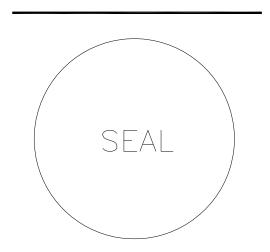
BNP ASSOCIATES INC.
01 East Ridge Office Park, Suite 103, Danbury CT 06810
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



REVISIONS			
NO.	DESCRIPTION	DATE	
DATE	<b>ISSUED:</b> 04-12-10		
REVIE	WED BY: XX		

DRAWN BY: MK

DESIGNED BY: TC

AEP PROJECT NUMBER

XXX.DW, 213-1882-Q. 10-00 12:00p

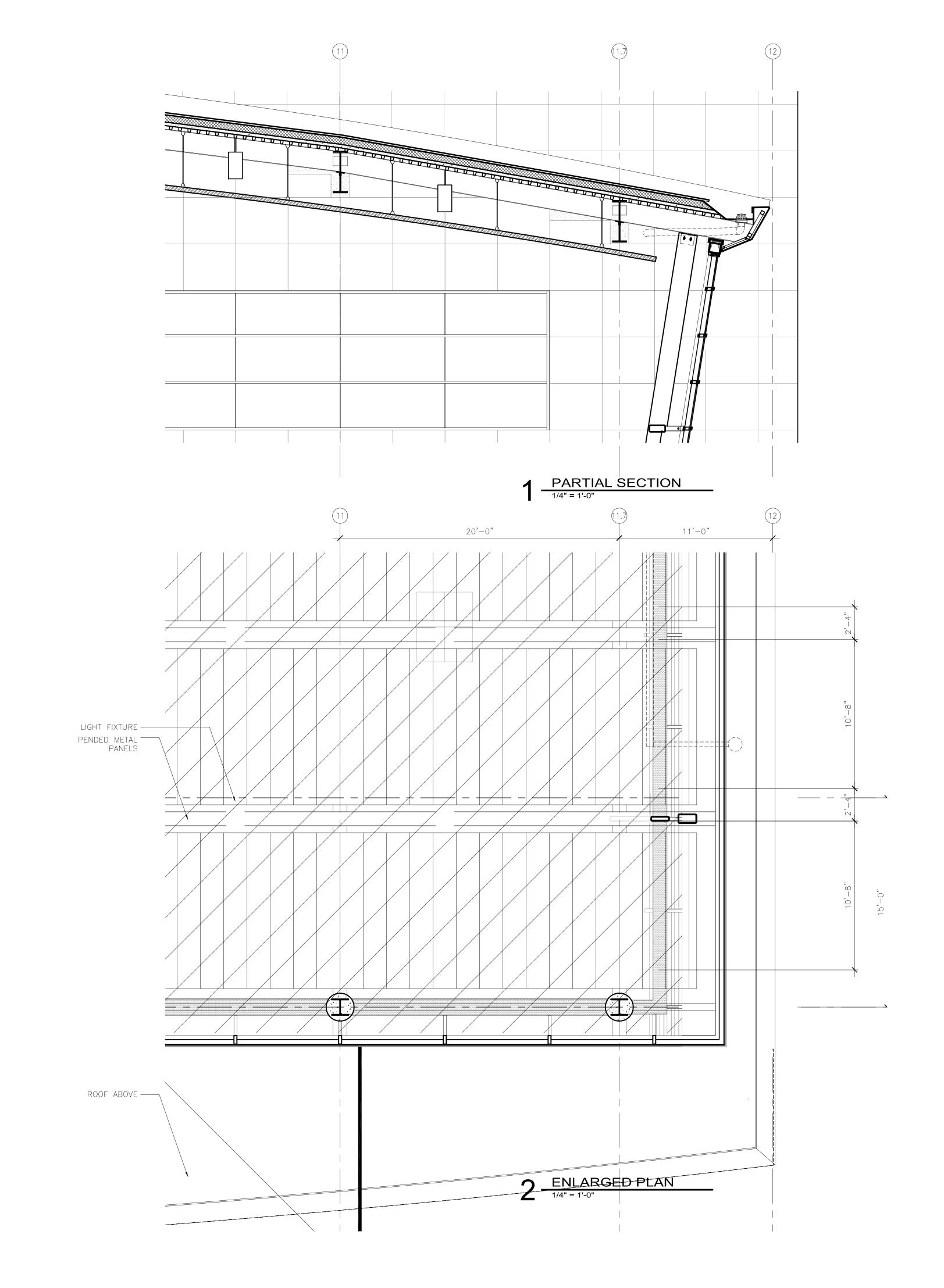
© 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

INTERIOR

INTERIOR SYSTEM SHEET CEILINGS

A620





218-722-1227 Fex: 218-722-1052 **AAA.teeuqproom** 



**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

#### **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717 Structural Engineers:

#### MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: COSENTINI ASSOCIATES INC.

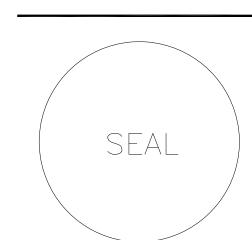
1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

#### Baggage Handling Systems Consultants: BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants: APPOLD DESIGN

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



NO.	DESCRIPTION	DATE
_		
_		

**DATE ISSUED.** 04-12-10 REVIEWED BY: XX

DRAWN BY: XX

DESIGNED BY: XX

AEP PROJECT NUMBER

XXX.DW.**213-1882-Q.91**\_-00\_12:00p © 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET NUMBER A621

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A621 Ceiling Details.dwg Plotted on: 4/12/2010 5:46 PM

PARTIAL SECTION

1/4" = 1'-0"

2 ENLARGED PLAN



Reynolds, Smith and Hills, Inc.
4525 Airport Approach Rd, Ste A
Duluth, Minnecota 55811
218-722-1227 Fex: 218-722-1052
www.reandh.com



DULUTH AIRPORT AUTHORITY

DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

#### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

Lake Avenue South, Suite 300, Duluth MN 55802

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:
BNP ASSOCIATES INC.

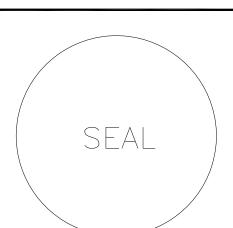
101 East Ridge Office Park, Suite 103, Danbury CT 06810
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



REVI	BIONS	
NO.	DESCRIPTION	DATE
		+

ATI	E ISSUED.	04-12-10	
EVI	EWED BY:	XX	
	WM RV.	YY	

DRAWN BY: XX
DESIGNED BY: XX

**AEP PROJECT NUMBER**XXX.DW, 213-1882-Q.9.1<sub>-00 12:00p</sub>

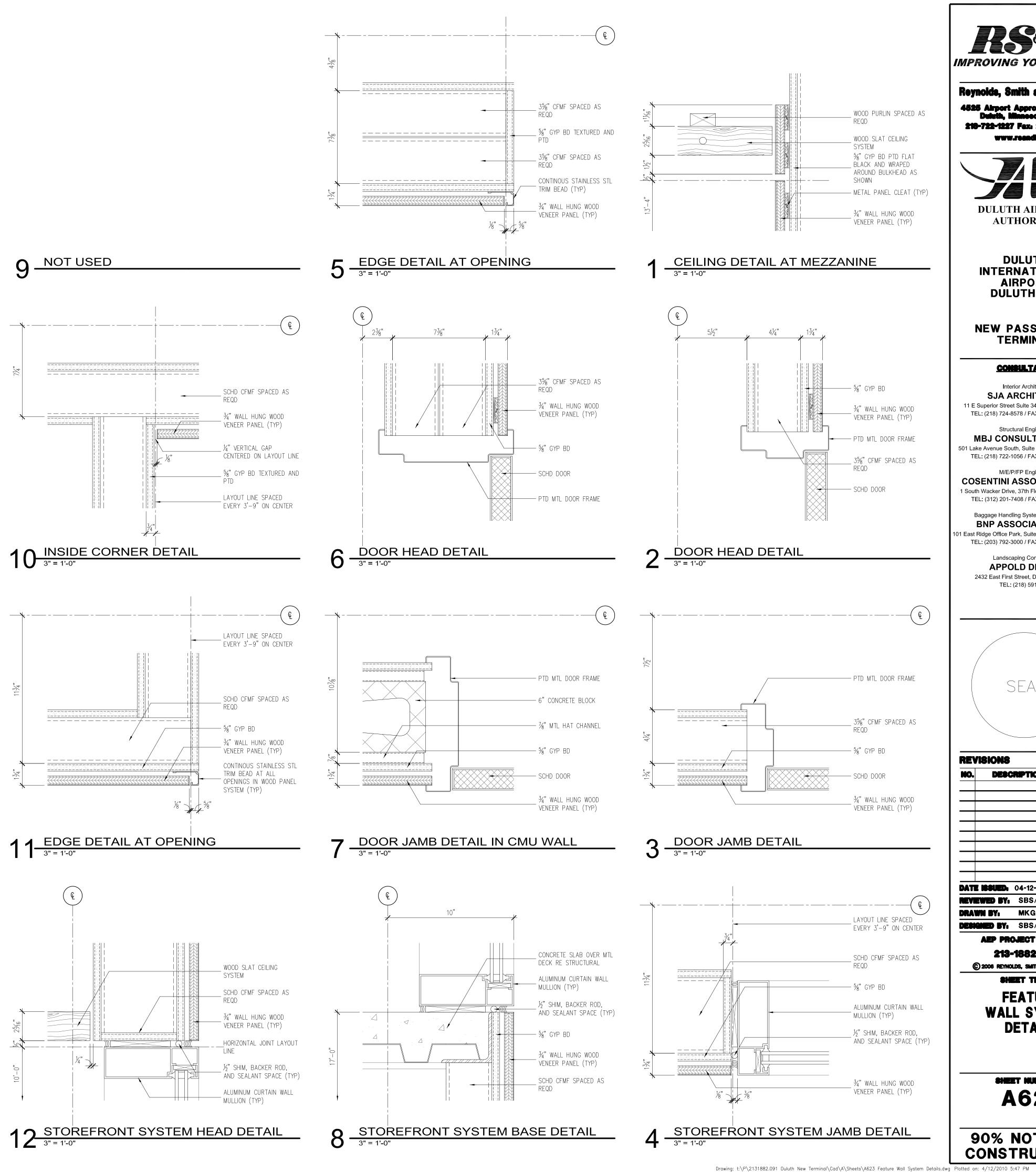
© 2006 REYNOLDS, SMITH AND HILLS INC.

INTERIOR SYSTEM
SHEET
CEILINGS

A622

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A622 Interior System Sheet — Ceilings.dwg Plotted on: 4/12/2010 5:47 PM



IMPROVING YOUR WORLD

**DULUTH AIRPORT** 

**AUTHORITY** 

218-722-1227 Fax: 218-722-1052

www.reendproom

**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

TEL: (218) 591-5079

Landscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812

SEAL

**REVISIONS** DATE NO. DESCRIPTION **DATE ISSUED.** 04-12-10 REVIEWED BY: SBS/TC

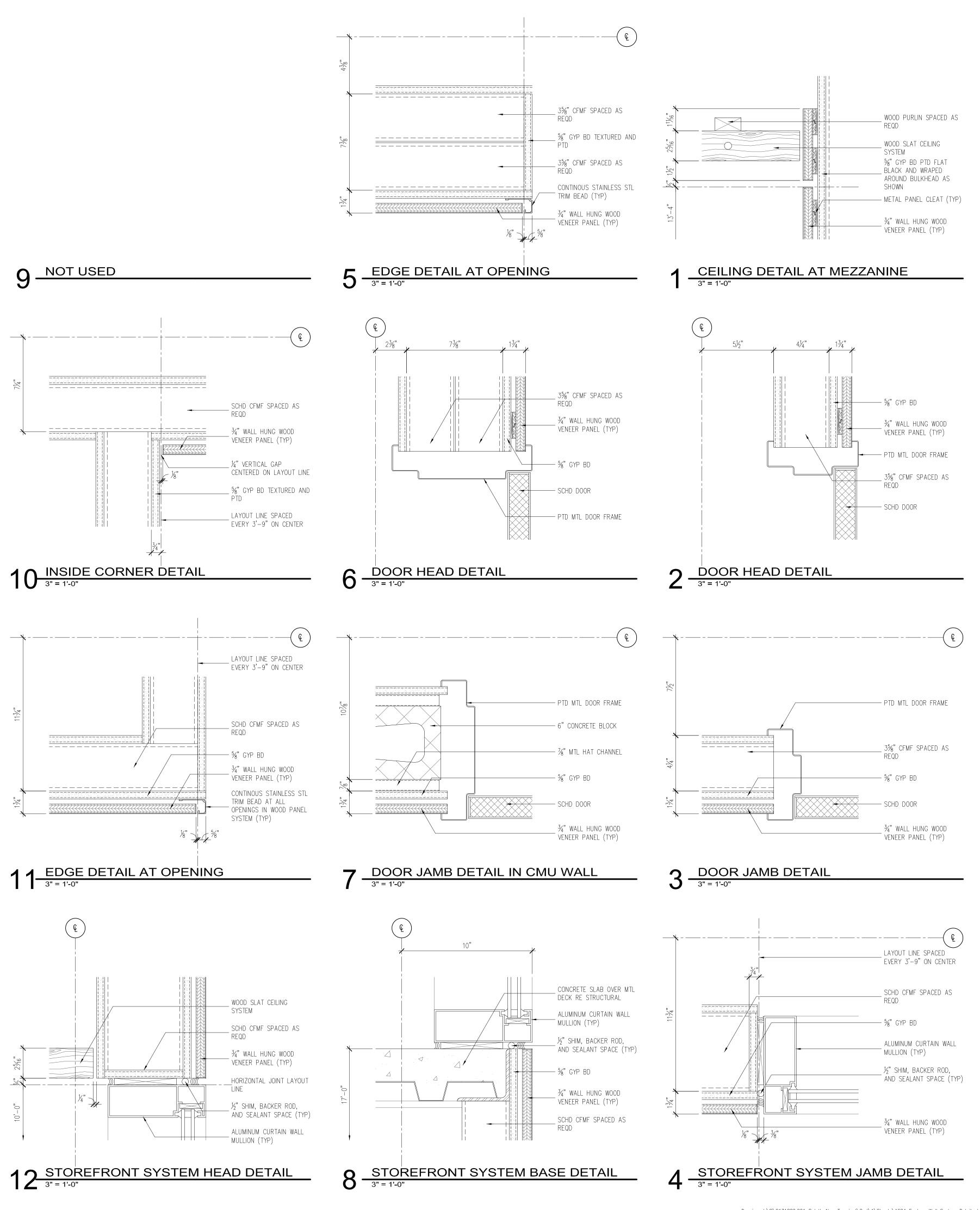
DRAWN BY: MKG/MI **DESIGNED BY.** SBS/TC

AEP PROJECT NUMBER 213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE **FEATURE** 

WALL SYSTEM **DETAILS** 

> SHEET NUMBER A623



INPROVING YOUR WORLD

Reynolds, Smith and Hills,

219-722-1227 Fex: 216-722-1052 www.reandb.com



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW PASSENGER TERMINAL

# CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

# Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

# 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

# Landscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

SEAL

EVISIONS	

DATE ISSUED: 04-12-10

# DATE ISSUED: 04-12-10 REVIEWED BY: SBS/TC DRAWN BY: MKG/MI

DESIGNED BY: SBS/TC

AEP PROJECT NUMBER

# **213-1882-091** © 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE
FEATURE

WALL SYSTEM DETAILS

A624

	Opening		Door			Frame			Details				ı
Door Number	Width	Height	Thick	Туре	Mat.	Туре	Mat.	Rating	Head	Sill	Jamb	Hdwr. Group	Remarks
100A	6'-10"	7'-0"	1 3/4"									Hawn Group	Romana
100A	6'-10"	7'-0"	1 3/4"										
100C	6'-10"	7'-0"	1 3/4"										
100D	6'-10"	7'-0"	1 3/4"								<del> </del>		
101A	6'-10"	7'-0"	1 3/4"								<del></del>		
101A	6'-10"	7'-0"	1 3/4"										
					+	+	-	+		-			
101C	6'-10"	7'-0"	1 3/4"										
101D	6'-10"	7'-0"	1 3/4"										
106A	3'-0"	7'-0"	2"										
107A	3'-0"	7'-0"	2"										
108A	3'-0"	7'-0"	2"										
109A	3'-0"	7'-0"	2"										
110A	3'-0"	7'-0"	2"										
111A	3'-0"	7'-0"	2"										
112A	3'-0"	7'-0"	2"										
113A	3'-0"	7'-0"	2"										
123A	3'-0"	7'-0"	2"										
123B	3'-0"	7'-0"	2"										
124A	3'-0"	7'-0"	2"										
125A	3'-0"	7'-0"	2"										
127A	3'-0"	7'-0"	2"							-			
128A	6'-0"	7'-0"	1 3/4"										
129A	3'-0"	7'-0"	1 3/4"										
130A	3'-0"	7'-0"	1 3/4"								<del> </del>		
131A	3'-0"	7'-0"	2"									<del> </del>	
131A	3'-0"	7'-0"	2"			<del>  -</del>				<del>  -</del>		+	<del>                                     </del>
133A	3'-6"	7'-0"	2"			<del>-</del>				<del>  -</del>	<del></del>	†	
133C	6'-0"	7'-0"	1 3/4"			<del>-</del>		<del></del>	<del>-</del>	<del>  -</del>	<del></del>	†	
133D	3'-0"	7'-0"	2"							<del></del>		1	
134A	3'-0"	7'-0"	2"							<del></del>		1	
135A	3'-0"	7'-0"	2"			<del></del>				<del></del>		1	
	3'-0"	7'-0"	2"				+			+			
137A 138A	3'-0"	7-0"	2"							<del> </del>	<del></del>	+	<del>                                     </del>
140A	3'-0"	7'-0"	2"			<del>  -</del>							
140A	6'-0"	7'-0"	1 3/4"	<del> </del>		+	+	+		+			
141A	3'-0"	7'-0"	2"										
141A 142A	3'-0"	7'-0"	2"										
143A	3'-0"	7'-0"	2"							-			
143A 144A	3'-0"	7'-0"	2"										
	3'-0"	7'-0"	2"										
145A	3'-0"	7'-0"	2"										
146A													
147A	3'-0"	7'-0"	2"	-									
148A	3'-0"	7'-0"	2"										
149A	3'-0"	7'-0"	1 3/4"	-									
149B	4'-0"	6'-8"	1 3/4"										
150A	3'-0"	7'-0"	2"										
151A	3'-0"	7'-0"	2"										
153A	3'-0"	7'-0"	2"										
155A	3'-6"	7'-0"	2"										
155B	9'-6"	7'-0"	1 3/4"	-						-			
156A	3'-0"	7'-0"	2"										
157A	3'-0"	7'-0"	2"							-			
158A	3'-0"	7'-0"	2"										
159A	21'-3"	7'-0"	1"	-									
160A	3'-0"	7'-0"	2"										
161A	3'-0"	7'-0"	1 3/4"										
162A	3'-0"	7'-0"	2"										
163A	3'-0"	7'-0"	2"										
164A	3'-0"	7'-0"	2"										
165A	3'-0"	7'-0"	1 3/4"										
166A	3'-0"	7'-0"	2"										
166A	3'-0"	7'-0"	2"										
168A	3'-0"	7'-0"	2"										
169A	3'-0"	7'-0"	2"										
170A	3'-0"	7'-0"	2"										
171A	3'-0"	7'-0"	2"										
172A	3'-0"	7'-0"	2"										
173A	3'-0"	7'-0"	2"										
174A	3'-0"	7'-0"	2"										
175A	3'-0"	7'-0"	1 3/4"										
176A	6'-0"	7'-0"	1 3/4"										
176B	3'-0"	7'-0"	2"							-			
176C	16'-0"	7'-0"	1 3/4"							-			
176E	3'-0"	7'-0"	2"										
176F	3'-0"	7'-0"	2"										
178A	3'-0"	7'-0"	2"									Ī	
178B	14'-0"	7'-0"	1 3/4"							-			
178C	3'-0"	7'-0"	2"							<del> </del>		1	1
179A	3'-0"	7'-0"	2"							<del> </del>			1
179B	14'-0"	7'-0"	1 3/4"									1	
179C	3'-0"	7'-0"	2"							<del>  -</del>		1	1
179D	16'-0"	7'-0"	1 3/4"							<del>† -</del>	<del> </del>	1	
180A	3'-0"	7'-0"	2"									1	1
181A	3'-0"	7'-0"	2"									†	İ
190A	3'-0"	7'-0"	2"									1	1
190A	3'-0"	7'-0"	2"									1	1
191A	3'-0"	7'-0"	1 3/4"							<del></del>		1	
191A 191B	3'-0"	7'-0"	1 3/4"									+	1
193A	3'-0"	7'-0"	1 3/4"									1	1
	J 3-0	1-0	1 3/4				<u> </u>			1 -	<u> </u>	<u> </u>	<u> </u>
emarks 1	<del>                                     </del>												
1	1												
2													
3													
4													
5													
6													

2	DOOR SCHEDULE - FIRST FLOOR

	Opening		Door	Door					Details				
Door Number		Height	Thick	Туре	Mat.	Frame Type	Mat.	Rating	Head	Sill	Jamb	Hdwr. Group	Romarks
203A	3'-0"	7'-0"	1 3/4"									Hawii Group	Remarks
203B	3'-0"	7'-0"	1 3/4"										
204A	3'-0"	7'-0"	1 3/4"										
	3'-0"	7-0"	1 3/4										
205A											-		
208A	3'-0"	7'-0"	1 3/4"										
208A	3'-0"	7'-0"	1 3/4"										
208B	10'-4 1/2"	7'-0"	1"										
210A	3'-0"	7'-0"	1 3/4"										
211A	3'-0"	7'-0"	1 3/4"										
212A	3'-0"	7'-0"	1 3/4"										
213A	3'-0"	7'-0"	1 3/4"										
214A	30'-0"	7'-0"	1"										
214B	3'-0"	7'-0"	1 3/4"										
215A	6'-0"	7'-0"	1 3/4"										
217A	3'-0"	7'-0"	1 3/4"										
219A	3'-0"	7'-0"	1 3/4"										
219B	3'-2"	7'-0"	1 3/4"										
219C	4'-6"	7'-0"	1 3/4"										
219E	4'-0"	7'-0"	1 3/4"										
219F	3'-0"	7'-0"	1 3/4"										
219G	4'-0"	7'-0"	1 3/4"										
219H	4'-0"	7'-0"	1 3/4"				<del></del>						
2191	3'-0"	7'-0"	1 3/4"										
223A	3'-0"	7'-0"	1 3/4"										
225A	3'-0"	7'-0"	1 3/4"										
225B	3'-0"	7'-0"	1 3/4"										
230A	3'-0"	7'-0"	1 3/4"										
231A	3'-0"	7'-0"	1 3/4"										
232A	3'-0"	7'-0"	1 3/4"		-				-				
232B	3'-0"	7'-0"	1 3/4"										
233A	3'-0"	7'-0"	1 3/4"										
233B	3'-0"	7'-0"	1 3/4"								-		
233C	3'-0"	7'-0"	1 3/4"										
234A	3'-0"	7'-0"	1 3/4"										
235A	3'-0"	7'-0"	1 3/4"										
236A	3'-0"	7'-0"	1 3/4"										
237A	10'-1"	7'-0"	1 3/8"										
237B	3'-0"	7'-0"	1 3/4"										
238A	3'-0"	7'-0"	1 3/4"										
239A	3'-0"	7'-0"	1 3/4"										
240A	3'-0"	7'-0"	1 3/4"										
241A	3'-0"	7'-0"	1 3/4"										
245A	3'-0"	7'-0"	2"										
247A	4'-0"	7'-0"	1 3/4"										
249A	3'-0"	7'-0"	1 3/4"										
250A	3'-0"	7'-0"	1 3/4"										
250B	3'-0"	7'-0"	1 3/4"										
251A	3'-0"	7'-0"	1 3/4"										
252A	3'-0"	7'-0"	1 3/4"										
253A	3'-0"	7'-0"	1 3/4"										
290A	3'-0"	7'-0"	1 3/4"										
291A	3'-0"	7'-0"	1 3/4"										
291A 293A	3'-0"	7-0"	1 3/4	1	+		+	ł					
	3-0	7-0	1 3/4										
Remarks	1												
1													
2													
3													
4													
5													
6	T												

7	DOOR SCHEDULE - SECOND FLOOR

	Opening		Door			Frame			Details				
Door Number		Height	Thick	Туре	Mat.	Туре	Mat.	Rating	Head	Sill	Jamb	Hdwr. Group	Remark
301A	4'-6"	7'-0"	1 3/4"									1	
301B	4'-6"	7'-0"	1 3/4"										
301C	4'-6"	7'-0"	1 3/4"										
301D	4'-6"	7'-0"	1 3/4"			<del>-</del>						+	1
302B	3'-0"	7'-0"	2"			<del> </del>						-	1
304A	4'-0"	7'-0"	1 3/4"			<del>-</del>						+	1
304B	3'-0"	7'-0"	1 3/4"									+	
304C	6'-0"	7'-0"	1 3/4"			-						+	
305A	3'-0"	7'-0"	2"									+	
306A	3'-0"	7'-0"	2"									+	
307A	3'-0"	7'-0"	2"				<del> </del>					+	
308A	3'-0"	7'-0"	2"			<del> </del>			<u> </u>			+	<del>                                     </del>
309A	3'-0"	7'-0"	2"			<del> </del>						+	<del> </del>
310A	3'-0"	7'-0"	2"			<del> </del>			<del> </del>	<del> </del>	<del> </del>		
311A	3'-0"	7'-0"	2"		<del>-</del>					<del>  -</del>	<del> </del>	+	<del>                                     </del>
312A	3'-0"	7'-0"	2"	<del></del>	<del></del>					<del>  -</del>	<del> </del>	+	1
313A	3'-0"	7'-0"	2"	<del></del>	<del></del>						<del></del>	+	1
314A	3'-0"	7'-0"	2"									+	1
315A	3'-0"	7'-0"	2"		_	-	-	+		-	-	+	<del>                                     </del>
316A	3'-0"	7'-0"	2"										-
317A	3'-0"	7'-0"	2"										
	6'-0"	7-0"		1									1
318A			1 3/4"									+	<b> </b>
318B	3'-0"	7'-0"	2"			-	-			-		<del> </del>	
318C	3'-0"	7'-0"	2"			-	-					<del> </del>	
319A	3'-0"	7'-0"	1 3/4"										
319B	6'-0"	7'-0"	1 3/4"							-			
320A	3'-0"	7'-0"	2"										
322A	4'-0"	7'-0"	NA							-			
323A	3'-0"	7'-0"	2"										
323B	3'-0"	7'-0"	2"										
324A	3'-0"	7'-0"	2"										
325A	3'-0"	7'-0"	2"										
326A	3'-0"	7'-0"	2"										<b>.</b>
327A	3'-0"	7'-0"	2"										
331A	3'-0"	7'-0"	1 3/4"										
331B	3'-0"	7'-0"	1 3/4"										
332A	3'-0"	7'-0"	2"										<b>.</b>
332B	3'-0"	7'-0"	1 3/8"										<b>.</b>
333A	6'-0"	7'-0"	1 3/4"										
333B	3'-0"	7'-0"	2"										<u> </u>
334A	6'-0"	7'-0"	1 3/4"										
335C	3'-0"	7'-0"	2"										
336B	3'-0"	7'-0"	2"										
336B	3'-0"	7'-0"	2"										
390A	3'-0"	7'-0"	2"										
391A	3'-0"	7'-0"	1 3/4"										
391B	3'-0"	7'-0"	1 3/4"										
Remarks												<u> </u>	
1	1				_	_				_	_		

1 DOOR SCHEDULE - THIRD FLOOR



Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnecote 55811

218-722-1227 Fex: 218-722-1052
www.reendb.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

**CONSULTANTS** 

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.**101 East Ridge Office Park, Suite 103, Danbury CT 06810

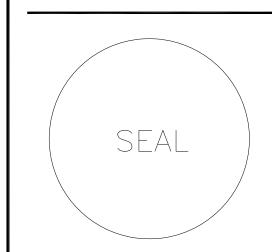
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



**REVISIONS** 

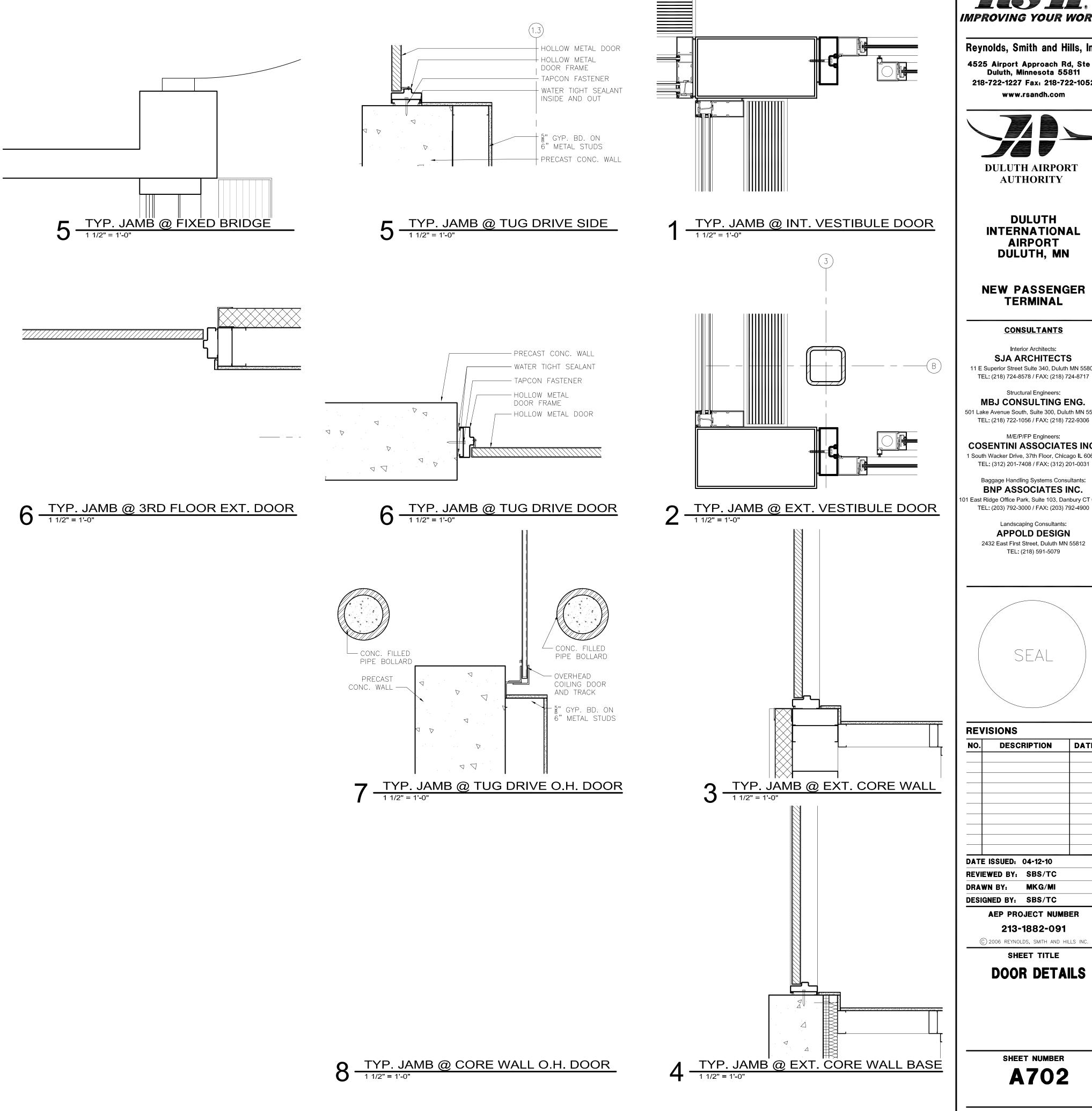
NO.	DESCRIPTION	DATE
DATI	<b>E ISSUED.</b> 04-12-10	
REVI	EWED BY. SBS/TC	

DRAWN BY: MI
DESIGNED BY: SBS/TC

AEP PROJECT NUMBER
213-1882-091
© 2006 REYNOLDS, SMITH AND HILLS INC.

DOOR SCHEDULES

A701





Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com



**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

# **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802

Structural Engineers: MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers:

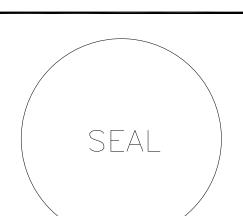
COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants: **APPOLD DESIGN** 

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



REV	/ISIONS		
NO.	DESC	RIPTION	DATE
DATI	E ISSUED:	04-12-10	
REVI	EWED BY:	SBS/TC	
DRA	WN BY:	MKG/MI	
DESI	GNED BY:	SBS/TC	
	AEP PRO	JECT NUMB	ER
	213-	1882-091	

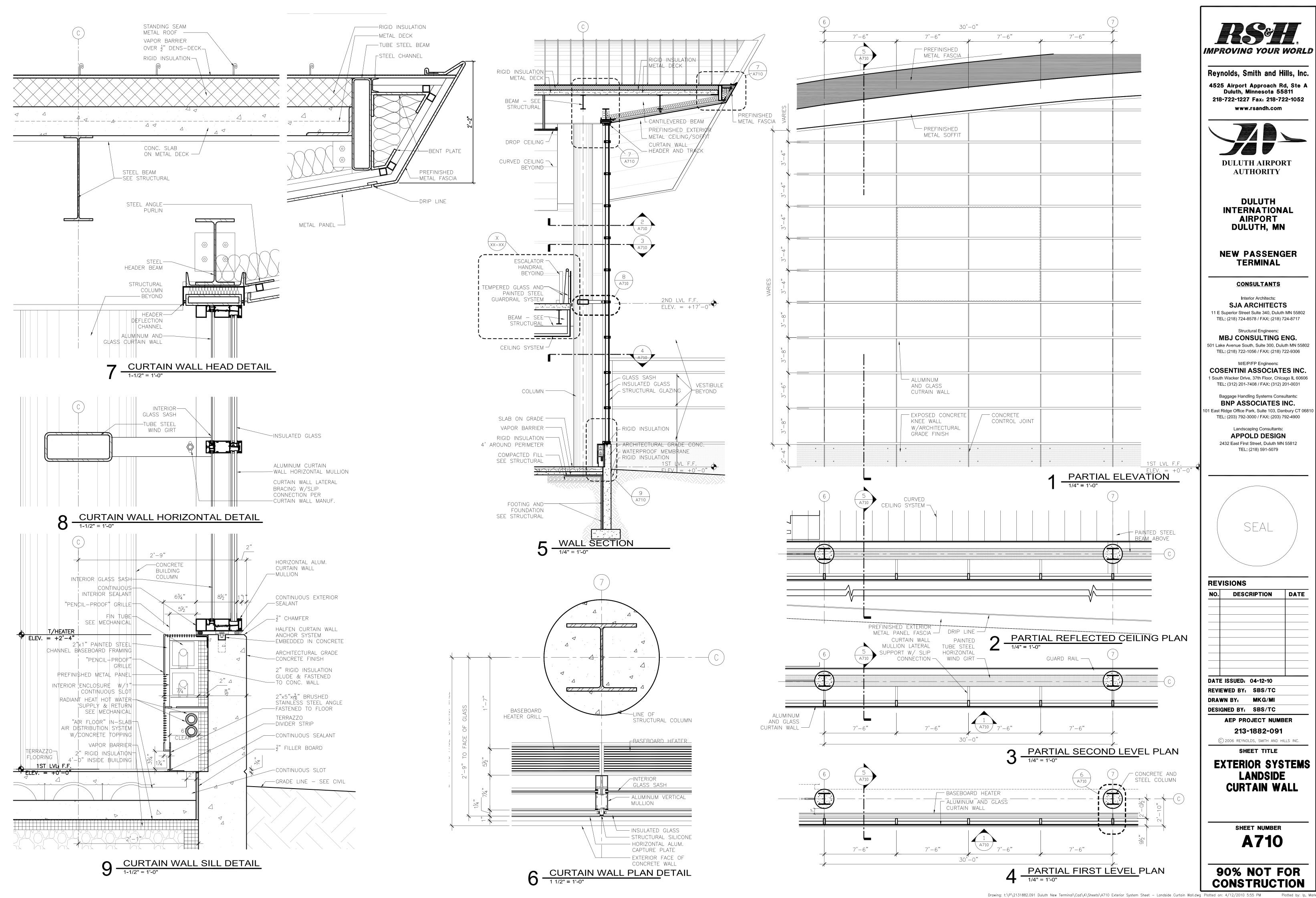
DOOR DETAILS

SHEET TITLE

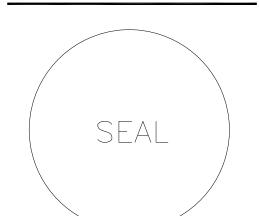
SHEET NUMBER A702

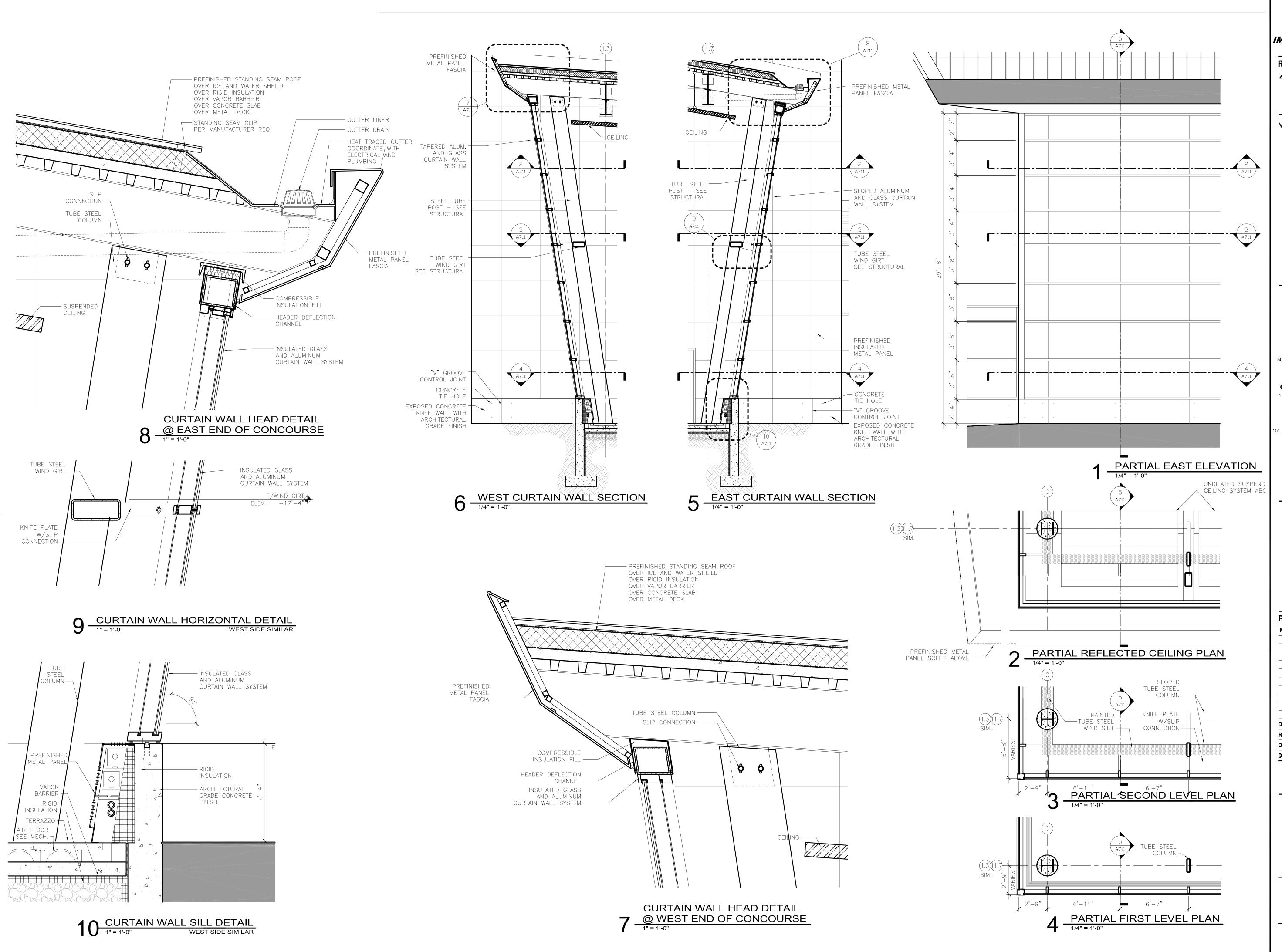
90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A702 Door Details.dwg Plotted on: 4/12/2010 5:48 PM









INPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-1052
www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

# CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.
501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606

TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810

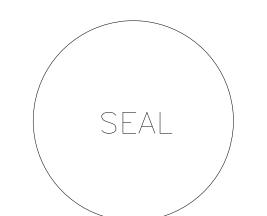
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 Fast First Street, Duluth MN 55812

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



REVISIONS

NO. DESCRIPTION DATE

DATE ISSUED: 04-12-10

REVIEWED BY: SBS/TC

DRAWN BY: MKG/MI
DESIGNED BY: SBS/TC

AEP PROJECT NUMBER

AEP PROJECT NUMBER 213-1882-091

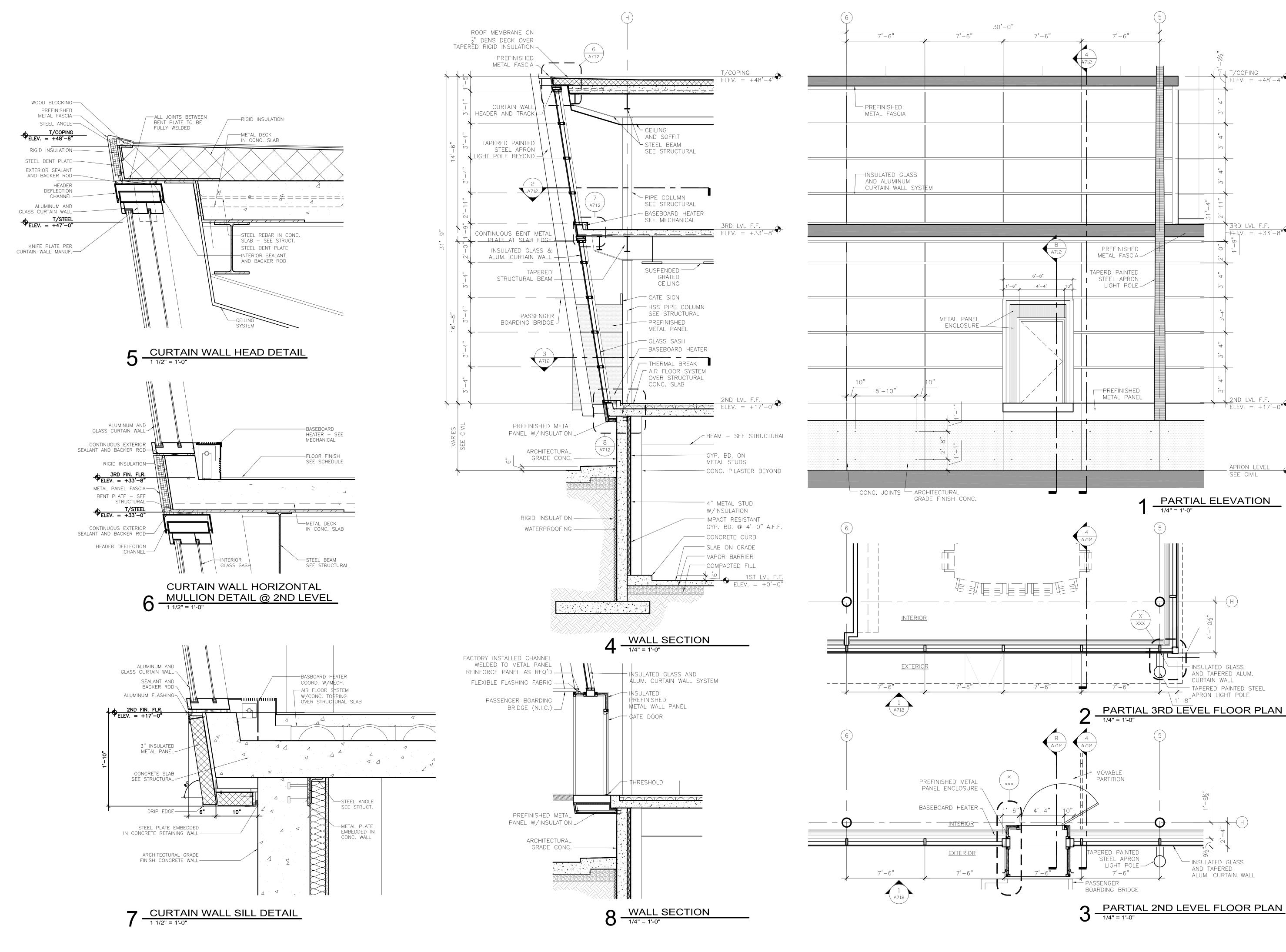
© 2006 REYNOLDS, SMITH AND HILLS INC.

EXTERIOR SYSTEMS
LANDSIDE
CURTAIN WALL

A711

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A711 Exterior System Sheet - Landside Curtain Wall.dwg Plotted on: 4/12/2010 6:02 PM





Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A

 $\frac{T/COPING}{ELEV. = +48'-4"}$ 

2ND LVL F.F. ELEV. = +17'-0"

APRON LEVEL

SEE CIVIL

PARTIAL ELEVATION

1/4" = 1'-0"

AND TAPERED ALUM.

TAPERED PAINTED STEEL
APRON LIGHT POLE

- INSULATED GLASS

ALUM. CURTAIN WALL

AND TAPERED

Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com



**DULUTH** 

**INTERNATIONAL AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

M/E/P/FP Engineers: **COSENTINI ASSOCIATES INC.** 1 South Wacker Drive, 37th Floor, Chicago IL 60606

TEL: (218) 722-1056 / FAX: (218) 722-9306

TEL: (312) 201-7408 / FAX: (312) 201-0031 Baggage Handling Systems Consultants: BNP ASSOCIATES INC.

01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900 Landscaping Consultants:

APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

SEAL

**REVISIONS** NO. DESCRIPTION DATE

REVIEWED BY: SBS/TC DRAWN BY: MKG/MI DESIGNED BY: SBS/TC

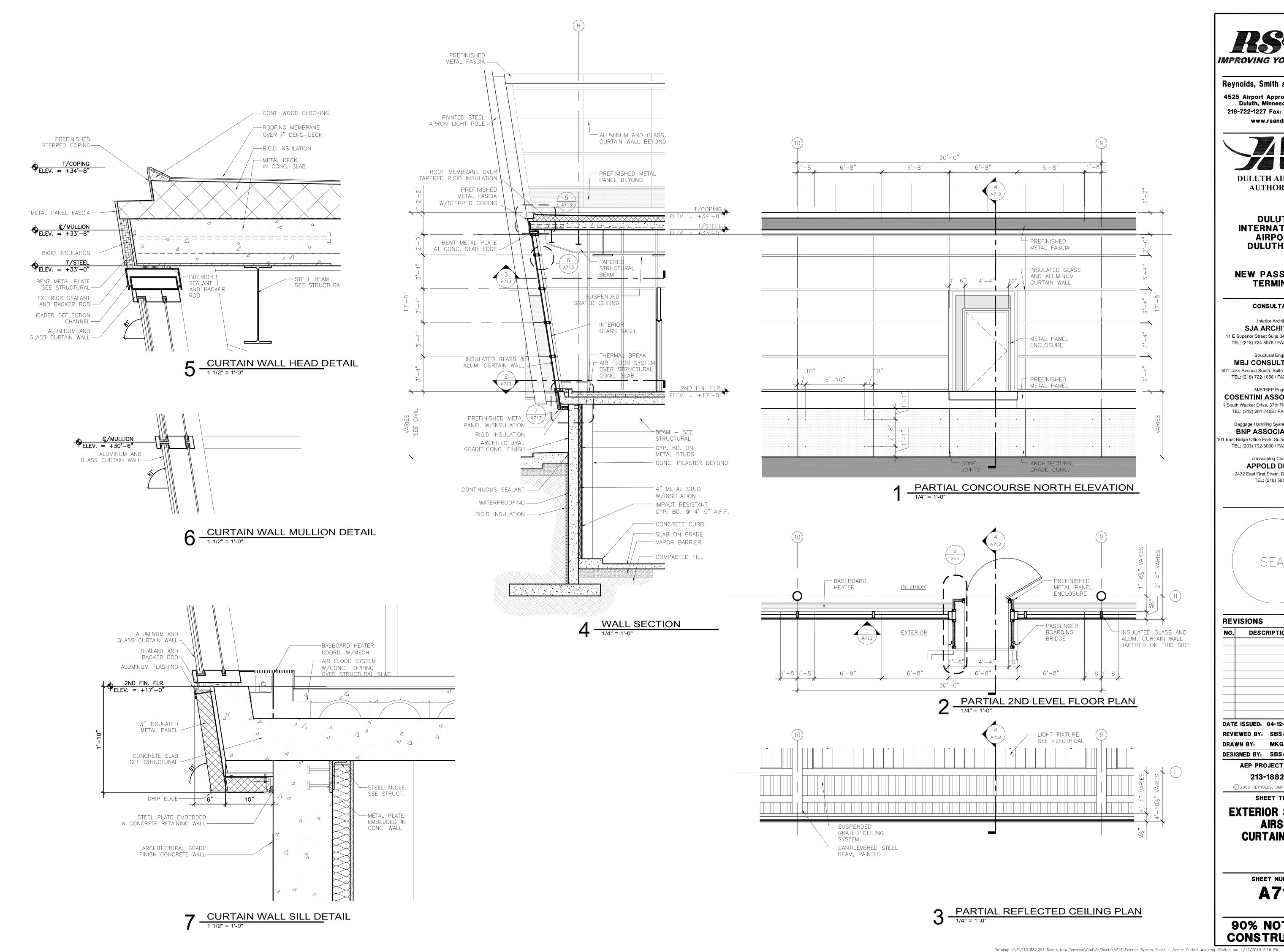
**DATE ISSUED: 04-12-10** 

AEP PROJECT NUMBER 213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

EXTERIOR SYSTEMS **AIRSIDE CURTAIN WALL** 

> SHEET NUMBER A712



IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com



**DULUTH INTERNATIONAL AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

M/E/P/FP Engineers: COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606

TEL: (312) 201-7408 / FAX: (312) 201-0031

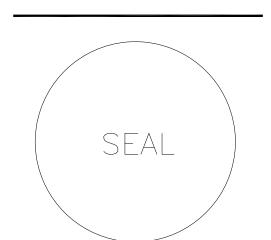
TEL: (203) 792-3000 / FAX: (203) 792-4900

TEL: (218) 722-1056 / FAX: (218) 722-9306

Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.** 101 East Ridge Office Park, Suite 103, Danbury CT 06810

> Landscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



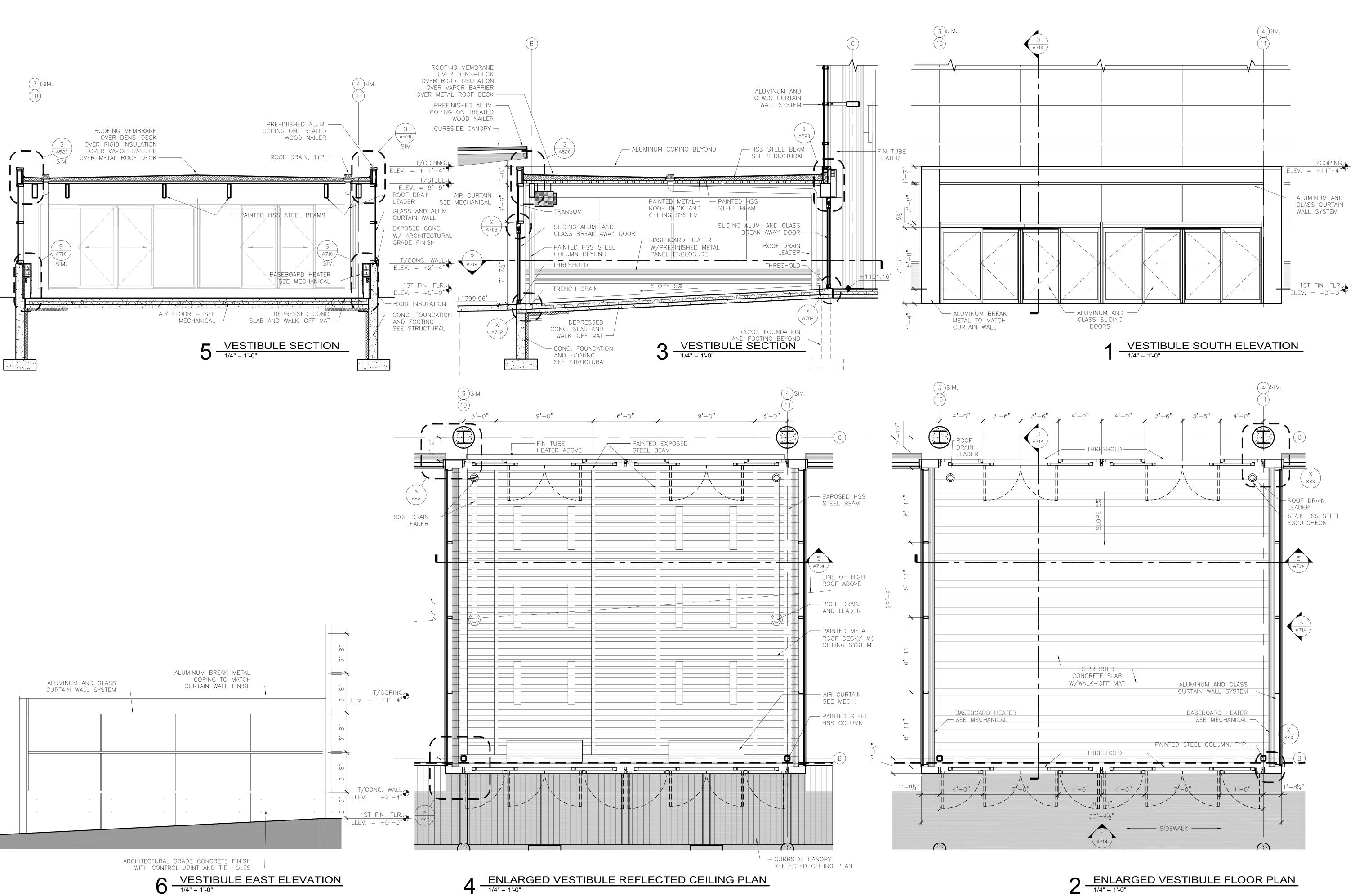
**REVISIONS** NO. DESCRIPTION DATE **DATE ISSUED: 04-12-10** REVIEWED BY: SBS/TC DRAWN BY: MKG/MI DESIGNED BY: SBS/TC

**AEP PROJECT NUMBER** 213-1882-091 © 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

EXTERIOR SYSTEMS **AIRSIDE CURTAIN WALL** 

> SHEET NUMBER A713





Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-1052

www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.
501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.**01 East Ridge Office Park, Suite 103, Danbury CT 06810
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

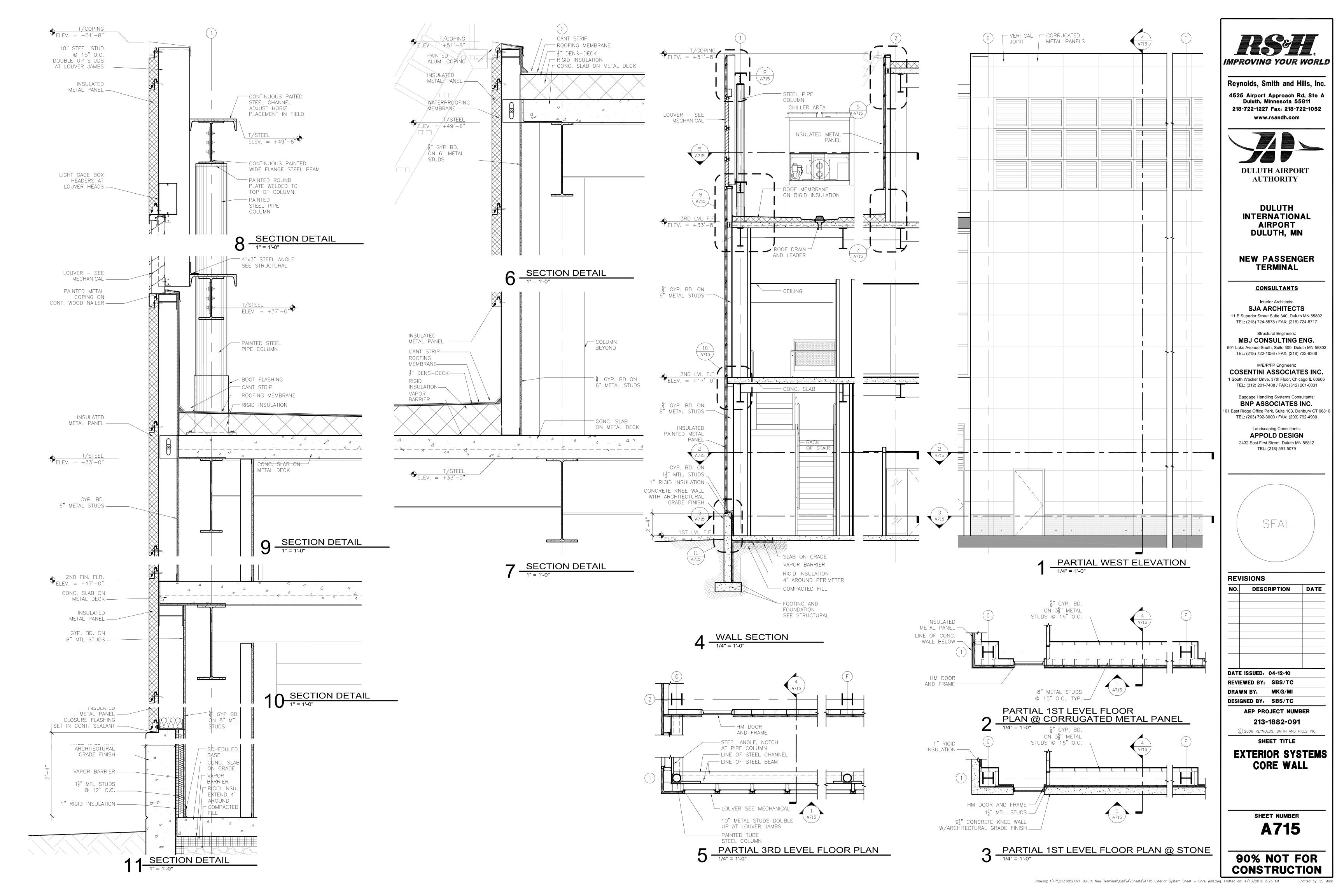
SEAL

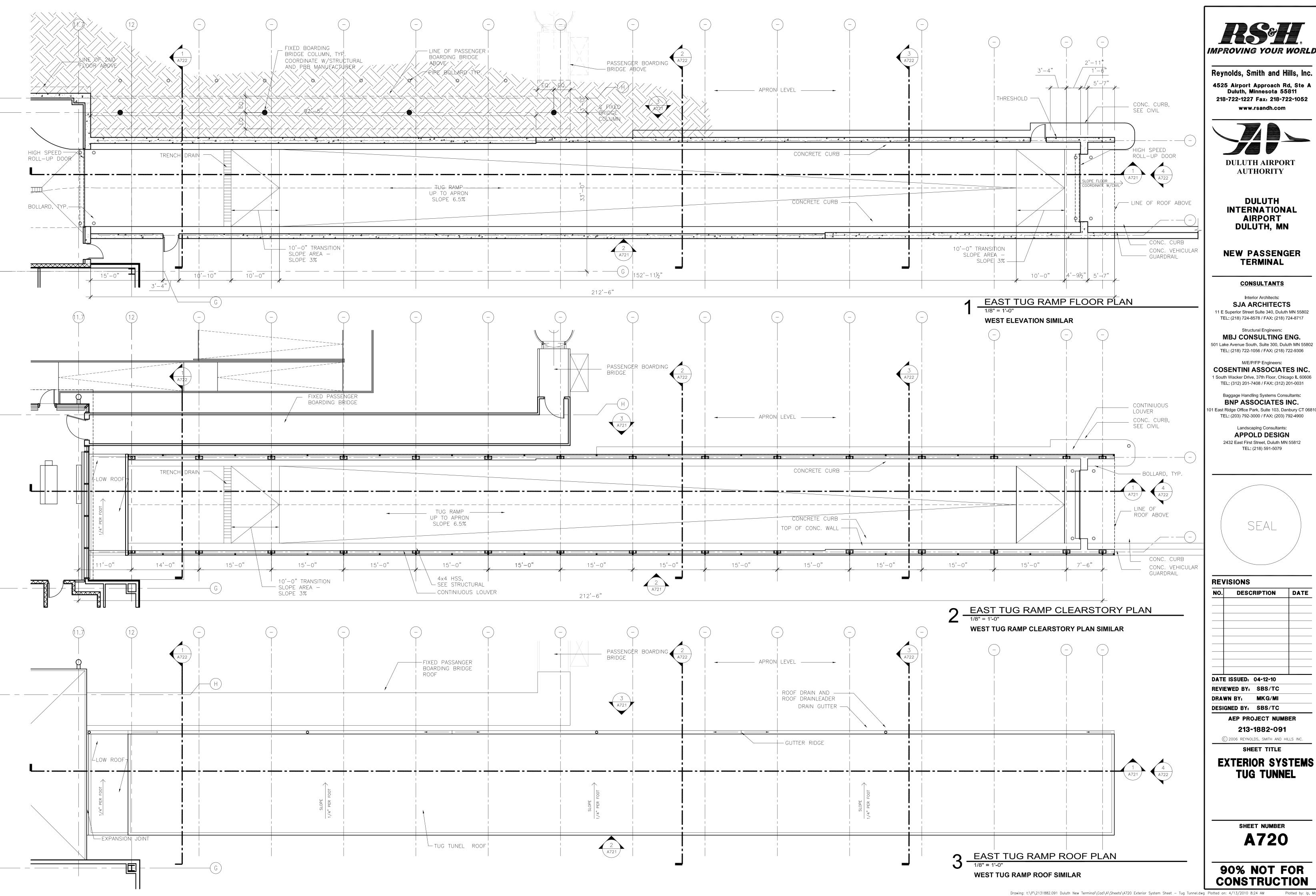
REV	ISIONS		
NO.	DESC	RIPTION	DATE
$\rightarrow$			
-+			
$\rightarrow$			
-+			
DATE	ISSUED:	04-12-10	
REVIE	WED BY:	SBS/TC	
DRAW	N BY:	MKG/MI	
DESIG	NED BY:	SBS/TC	
	AEP PRO	JECT NUI	MBER

**213-1882-091**© 2006 REYNOLDS, SMITH AND HILLS INC.

EXTERIOR SYSTEMS
ENTRY VESTIBULE

SHEET NUMBER
A714





Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811

**DULUTH AIRPORT** 

**DULUTH INTERNATIONAL AIRPORT** 

**NEW PASSENGER** 

**CONSULTANTS** 

SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802

MBJ CONSULTING ENG.

M/E/P/FP Engineers: **COSENTINI ASSOCIATES INC.** 1 South Wacker Drive, 37th Floor, Chicago IL 60606

Baggage Handling Systems Consultants: BNP ASSOCIATES INC.

TEL: (203) 792-3000 / FAX: (203) 792-4900 Landscaping Consultants:

**APPOLD DESIGN** 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



NO. DESCRIPTION DATE

REVIEWED BY: SBS/TC DRAWN BY: MKG/MI

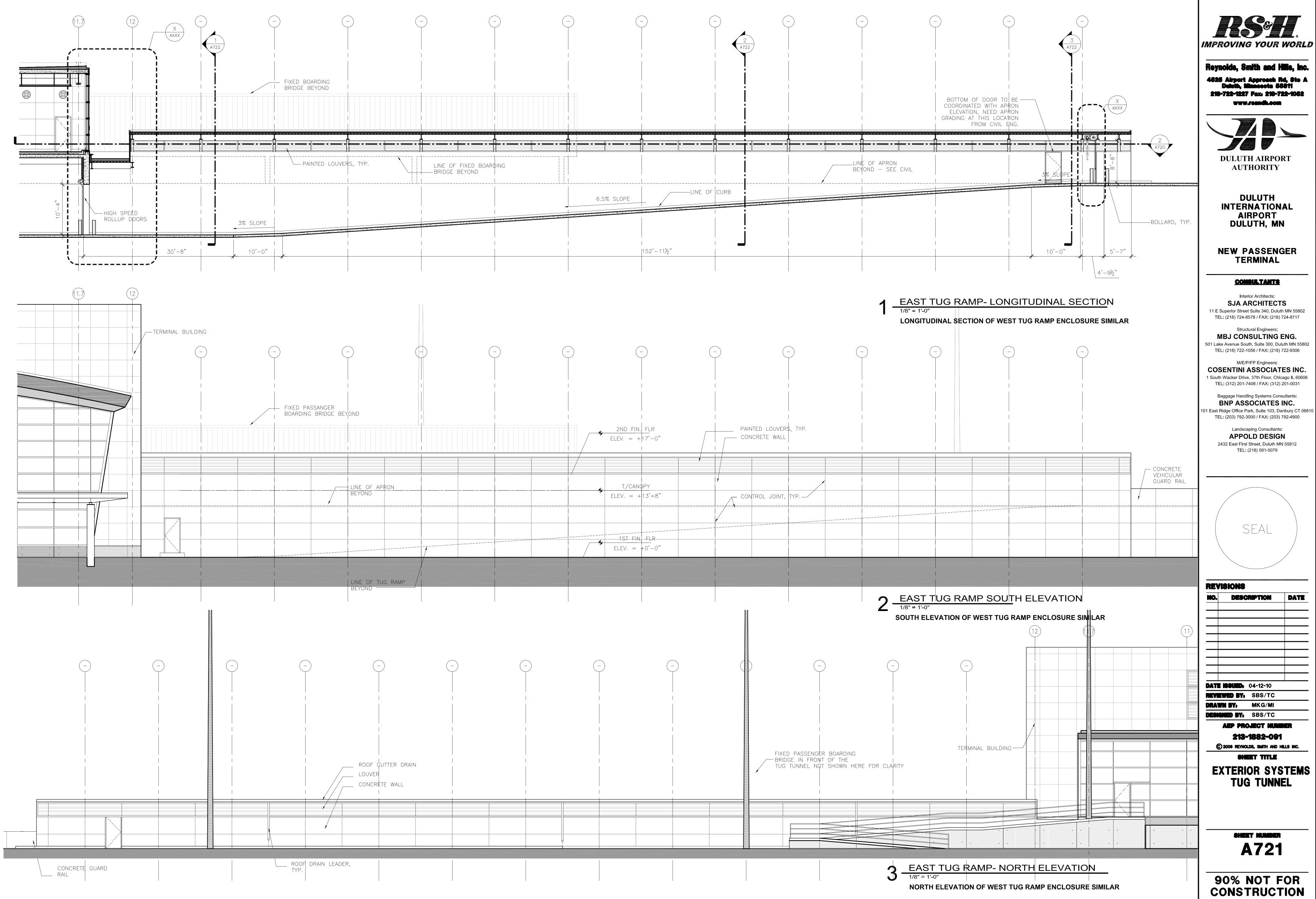
AEP PROJECT NUMBER

213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

EXTERIOR SYSTEMS **TUG TUNNEL** 

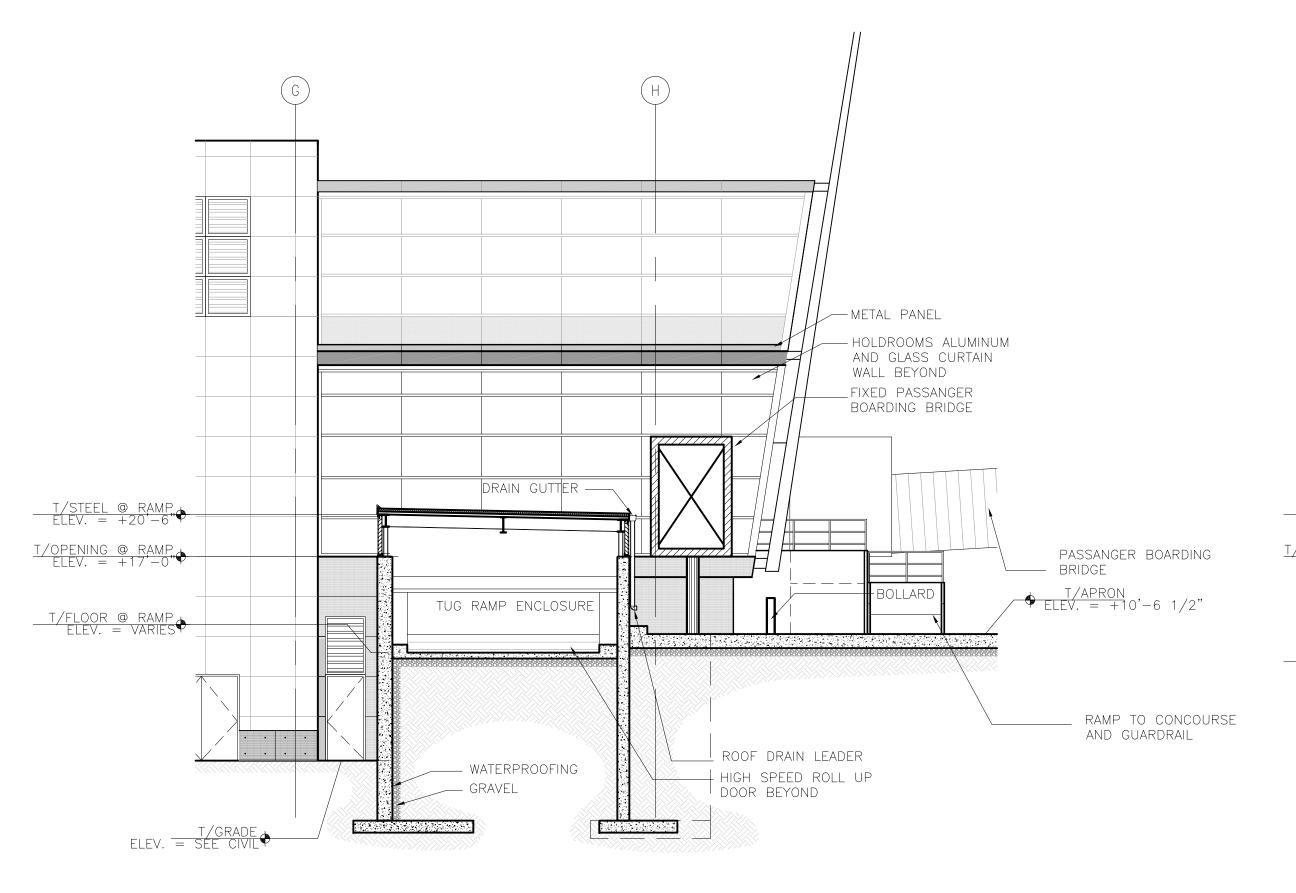
SHEET NUMBER



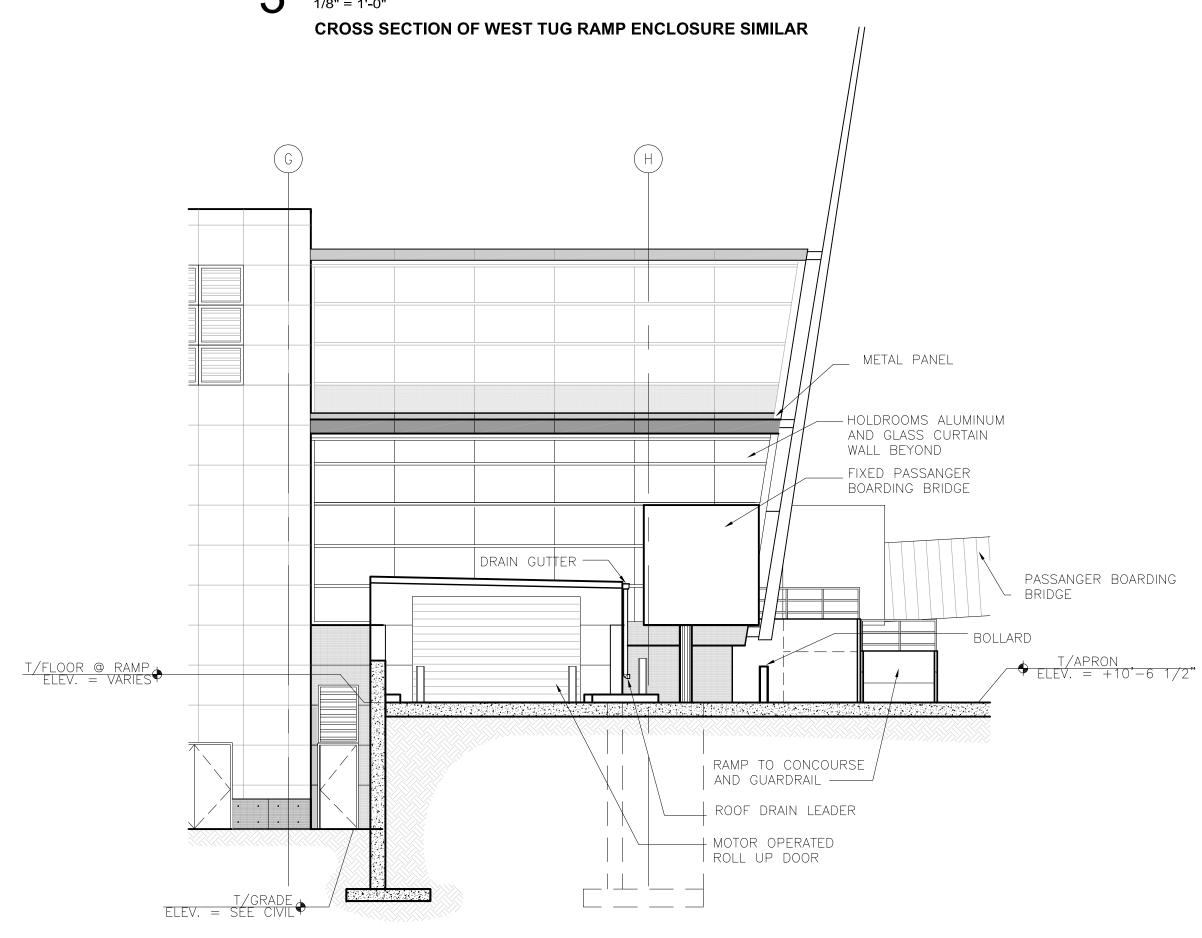


NO. DESCRIPTION DATE

90% NOT FOR



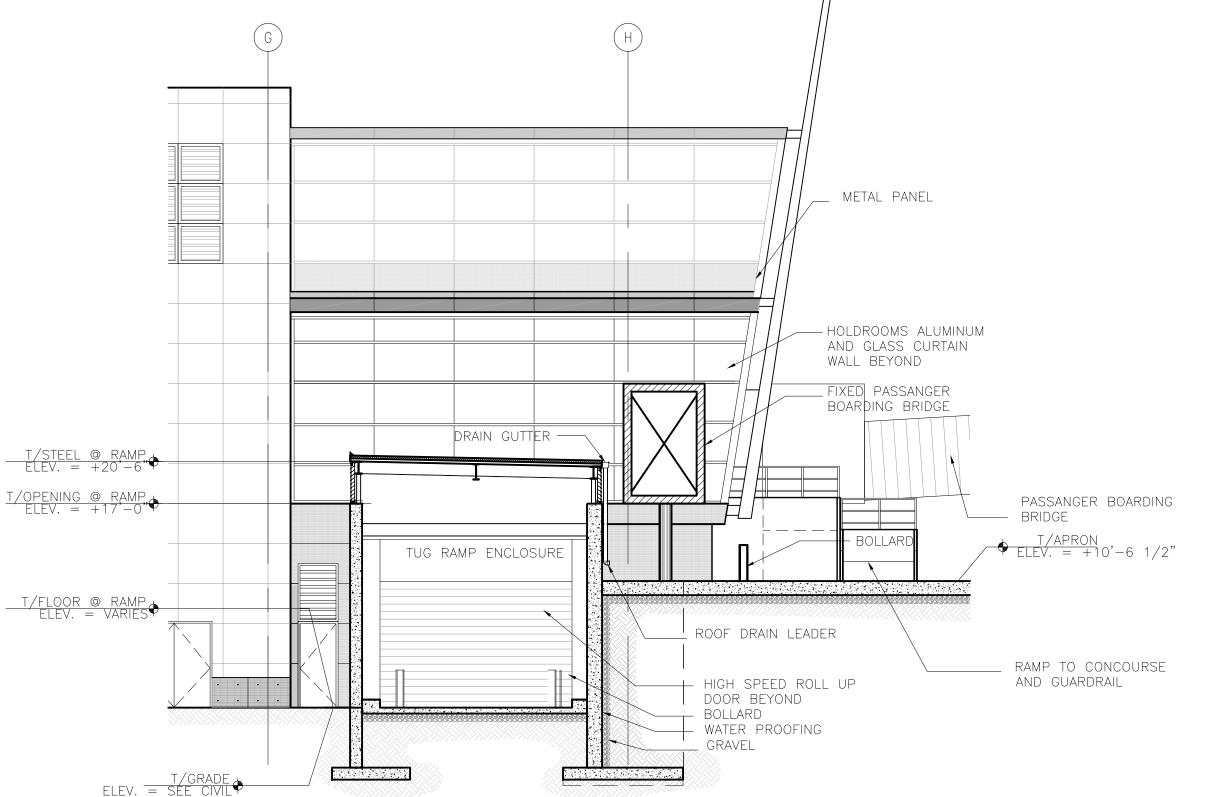
3 EAST TUG RAMP- CROSS SECTION WITH BUILDING ELEV BEYOND



EAST TUG RAMP ENCLOSURE- EAST ELEVATION

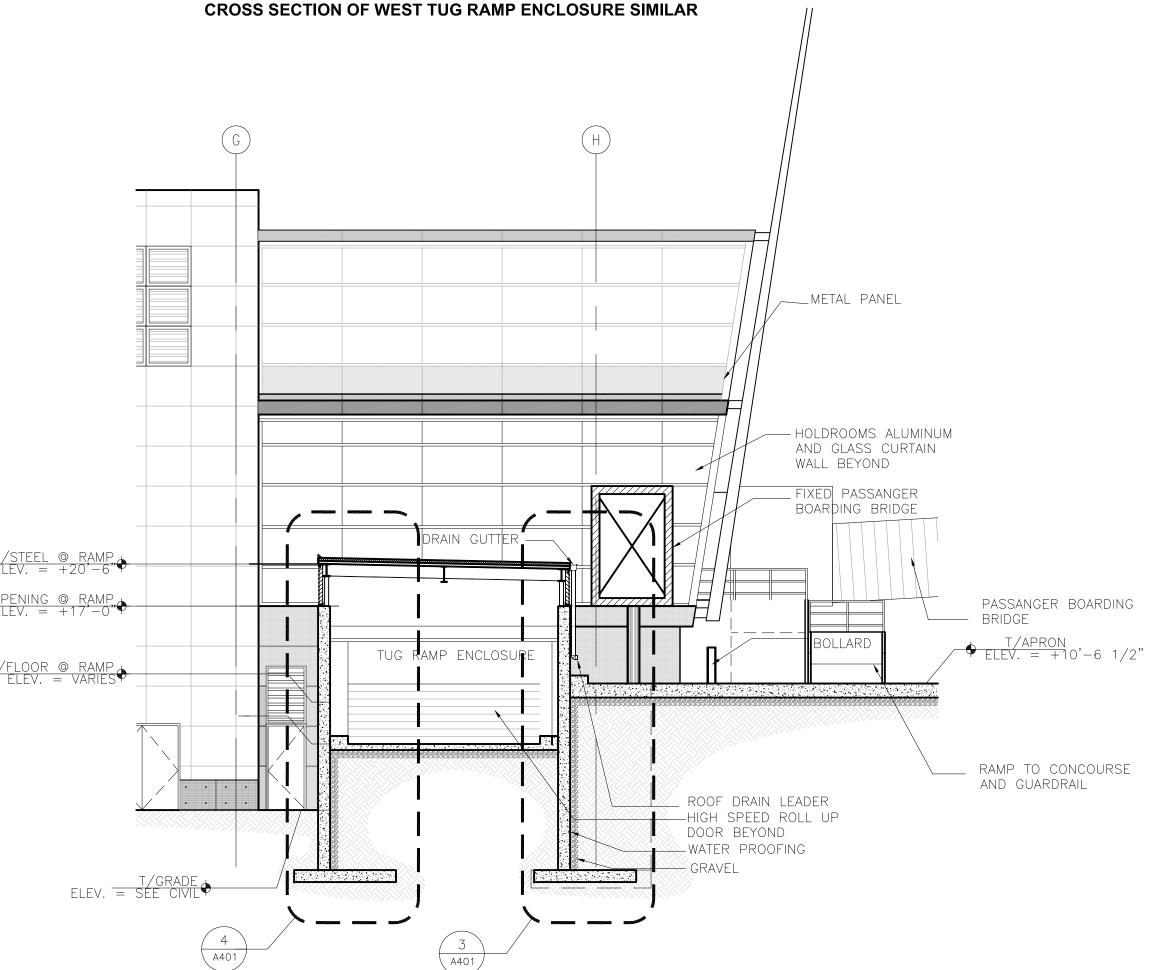
1/8" = 1'-0"

WEST ELEVATION OF WEST TUG RAMP ENCLOSURE SIMILAR



EAST TUG RAMP- CROSS SECTION WITH BUILDING ELEV BEYOND

1/8" = 1'-0"



EAST TUG RAMP- CROSS SECTION WITH BUILDING ELEV BEYOND

1/8" = 1'-0"

CROSS SECTION OF WEST TUG RAMP ENCLOSURE SIMILAR

ISSET.

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.
4525 Airport Approach Rd, Sto A

Duluth, Minnecote 55811 218-722-1227 Fex: 218-722-1052 www.reendh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

01 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

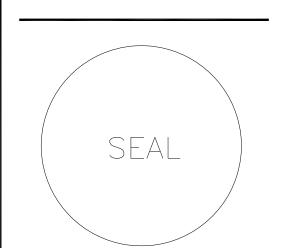
TEL: (312) 201-7408 / FAX: (312) 201-0031

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



REVISIONS

NO. DESCRIPTION DATE

DATE ISSUED: 04-12-10

REVIEWED BY: SBS/TC

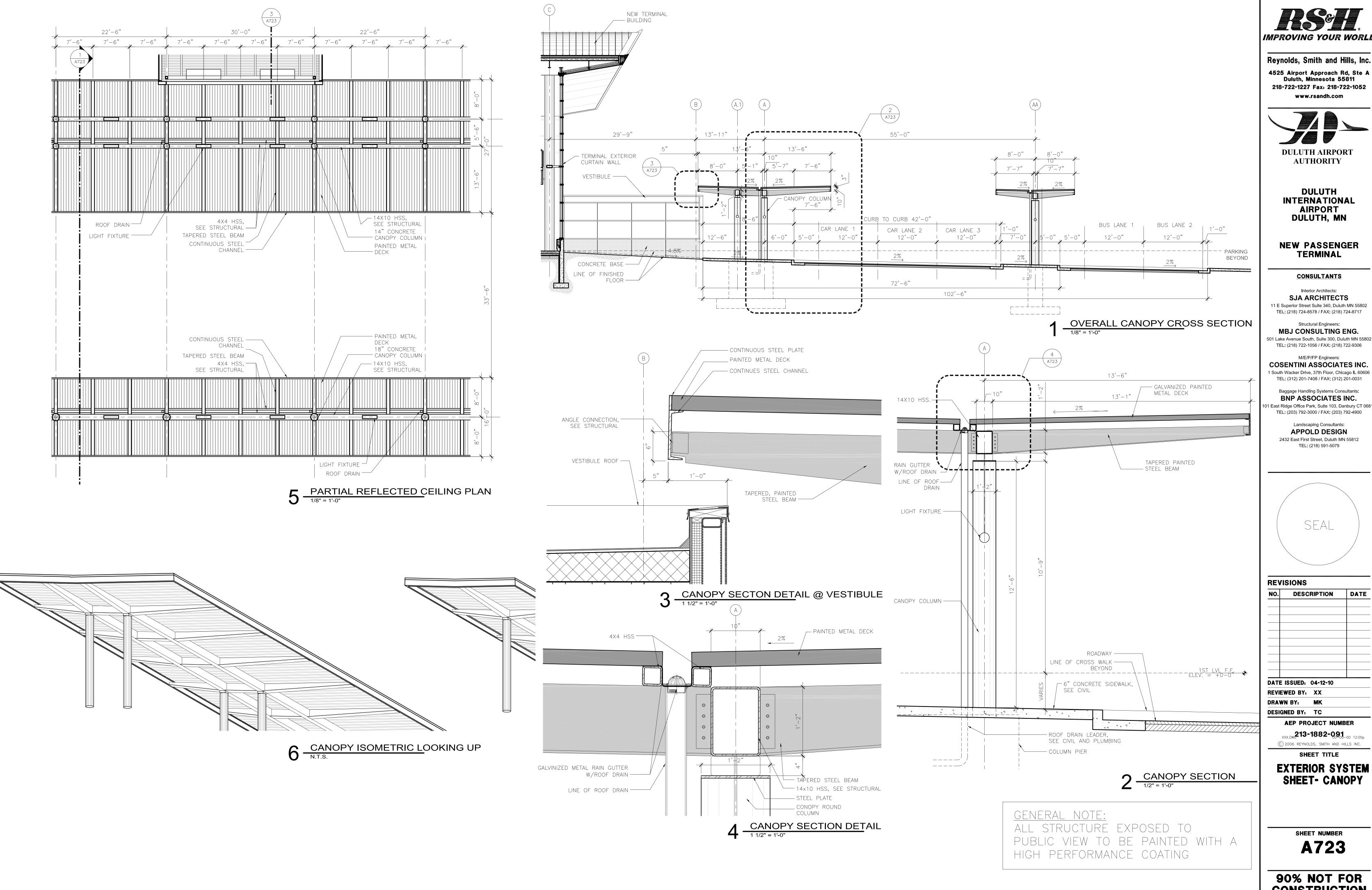
AEP PROJECT NUMBER

213-1882-091 © 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

**DRAWN BY:** MKG/MI

EXTERIOR SYSTEMS TUG TUNNEL

A722



Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811

**AUTHORITY** 

INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802

Structural Engineers: MBJ CONSULTING ENG.

TEL: (218) 722-1056 / FAX: (218) 722-9306

COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606

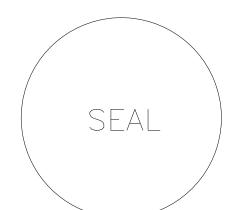
Baggage Handling Systems Consultants:

**BNP ASSOCIATES INC.** 101 East Ridge Office Park, Suite 103, Danbury CT 06810

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



NO. DESCRIPTION DATE

AEP PROJECT NUMBER

© 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

EXTERIOR SYSTEM SHEET- CANOPY

						V	/ALLS									
		FLOOR	NORTH			EAST	so	UTH	w	EST	CE	ILING	DOOR	FRAME	WINDOW	1
ROOM #	ROOM NAME	FINISH	FINISH	BASE	FINISH	BASE	FINISH	BASE	FINISH	BASE	MATERIAL	HEIGHT	COLOR	COLOR	COVERING	REMARK
	PASSENGER WAITING	TER	DP/MTL	TER	GL	TER	GL	TER	GL	TER	CL-1					<b></b>
	CORRIDOR	TER	DP/MTL	TER	PT	TER	GL	TER	DP	TER	PT					<b></b>
	CORRIDOR	TER	PT	TER	PT	TER	PT	TER	PT	TER	PT		-			<b></b>
204	TELE COM	SC-1	PT	-	PT	-	PT	-	PT	-	EX-1					<del>                                     </del>
205 206	ELECTRICAL	SC-1	PT	- -	PT T/CT	-  -	PT T/GT	-	PT -	-  -	EX-1					<del>                                     </del>
207	MEN WOMEN	-   <sup> </sup> -		   <del> </del>	T/GT		T/GT	  -	T/GT		CL-4/PT CL-4/PT					<del>                                     </del>
208	TSA CHECKPOINT	TER	GL	TER	GL/PT	TER	PT	TER	1/G1 -	TER	CL-4/PT					<del>                                     </del>
209	STORAGE	RF	PT	RB	PT	RB	PT	RB	PT	RB	PT					<del>                                     </del>
	REMOTE V	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
	TSA	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
212	TSA	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
213	TSA	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
214	TSA QUEUE	TER	GL	TER	-	TER	-	TER	GL	TER	CL-2					
215	DEPLANING	TER	-	TER	GL	TER	-	TER	DP	TER	CL-2		1			
216	VENDING	TER	PT	TER	PT	TER	PT	TER	PT	TER	PT					
217	COMM	RF	PT	RB	PT	RB	PT	RB	PT	RB	EX-1					
219	CONCOURSE	-	GL	-	GL	-	GL/DP/MTL	-	GL	-	CL-2					
220	VENDING	TER	PT	TER	PT	TER	PT	TER	PT	TER	PT					<u> </u>
221	MEN	Т	T	Т	T/GT	Т	Т	Т	T/GT	Т	CL-4/PT					
222	WOMEN	Т	T	Т	T/GT	Т	Т	Т	T/GT	Т	CL-4/PT					<b></b>
	FAMILY	Т	Т	Т	Т	Т	Т	Т	Т	Т	CL-4/PT					<b></b>
224	SERVERY	-	-	-	-	-	-	-	-	-	-					<b></b>
225	KITCHEN	-	-	-	-	-	-	-	-	-	-					<b>↓</b>
	BAR	-	-	-	-	-	-	-	-	-	-					1
227	MEN	T	T	<u> </u>	T		T/GT	T	T/GT	T	CL-4/PT		_			<del>                                     </del>
228 229	WOMEN	T	DT	T	T/GT	T	T/GT	T	T	T	CL-4/PT					<del>                                     </del>
	CORRIDOR	RF	PT PT	RB RB	PT PT	RB	PT PT	RB	PT	RB	PT PT					<del>                                     </del>
	ELECTRICAL BOARDING	TER	GL/PT	TER	GL	RB TER	GL	RB TER	PT PT	RB TER	CL-2		+			<del>                                     </del>
	VESTIBULE	IEK	GL/P1	IEK	GL	IEK	GL	IEK	GL	IER	CL-2					<del>                                     </del>
	CORRIDOR	TER	GL/PT	TER	GL/PT	TER	GL/PT	TER	GL/PT	TER	CL-2					<del>                                     </del>
	FBO OFFICE	RF	GL/PT	RB	PT	RB	PT	RB	PT	RB	CL-2					<del>                                     </del>
	WOMEN	Т	T	T	T .	T	T/GT	Т	Т	T	CL-4/PT		1			
	MEN	T	T/GT	T	T	T	Т	T	T	T T	CL-4/PT					
	INTERNATIONAL	TER	GL	TER	DP/MTL	TER	GL	TER	DP/MTL/GL	TER	CL-2					
	MEN	Т	Т	Т	T/GT	Т	T	Т	Т	Т	CL-4/PT					
	WOMEN	Т	Т	Т	T/GT	Т	Т	Т	Т	Т	CL-4/PT					
240	COMP.	RF	PT	RB	PT	RB	PT	RB	PT	RB	PT		1			
241	OFFICE	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
245	ROVER	RF	GL/PT	RB	GL/PT	RB	GL/PT	RB	GL/PT	RB	CL-2					
	FIXED BRIDGE	-	-	-	-	-	-	-	-	-	-					
	FIXED BRIDGE	-	-	-	-	-	-	-	-	-	-					
	STORAGE	RF	PT	RB	PT	RB	PT	RB	PT	RB	PT		1			
	CONFERENCE	-	PT	-	PT	-	PT	-	PT	-	CL-3		1			
	OFFICE	-	PT	-	PT	-	PT	-	PT	-	CL-3		1			<b></b>
	STORAGE	RF	PT	RB	PT	RB	PT	RB	PT	RB	PT		<b>_</b>			<del>                                     </del>
	WHL CHR	RF	PT	RB	PT	RB	PT	RB	PT	RB	PT		-			<del>                                     </del>
	STAIR	SC-1	PT	RB	PT	RB	PT	RB	PT	RB	EX-1		+			<u> </u>
	STAIR	SC-1	PT PD/MT	RB	PT PD/MT	RB	PT PD/MT	RB	PT PD/MT	RB	EX-1		1			<del>                                     </del>
	STAIR	TER	DP/MTL	TER	DP/MTL	TER	DP/MTL	TER	DP/MTL	TER	CL-2		1			1
293	JANITOR	SC-1	PT	RB	PT	RB	PT	RB	PT	RB	PT			<u> </u>		<u> </u>
EMARKS																
1																
3																
NERAL N	IOTES															

						,	WALLS									
		FLOOR	ı	NORTH		EAST		SOUTH		WEST	CEILING		DOOR	FRAME	WINDOW	i
ROOM #	ROOM NAME	FINISH	FINISH	BASE	FINISH	BASE	FINISH	BASE	FINISH	BASE	MATERIAL	HEIGHT	COLOR	COLOR	COVERING	REMARKS
301	WAITING	CPT-1	WC/PT	RB	WC/PT	RB	WC/PT	RB	WC/PT	RB	PT					<del>                                     </del>
302	CORRIDOR	CPT-1	WC/PT	RB	WC/PT	RB	WC/PT	RB	WC/PT	RB	PT					
304	MECHANICAL ROOM	SC-1	PT	-	PT PT	-	PT	-	PT	-	EX-1					
305	STORAGE	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
306	CORRIDOR	CPT-1	PT	RB	PT	RB	PT	RB	PT	RB	PT PT					
307	TRAINING	CPT-1	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
308	WOMEN LOCKER	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
309	MEN LOCKER	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
310	BREAK	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
311	OFFICE	CPT-2	PT	RB	PT	RB	PT	RB	PT	RB	CL-3	1			<u> </u>	
312	OFFICE	CPT-2	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
313	COMM/ELEC	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
314	JANITOR	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
315	MEN	Т	Т	Т	T/GT	Т	T/GT	Т	Т	T	CL-4/PT					
316	WOMEN	Т	İτ	T	Т	Т	T/GT	Т	T/GT	Т	CL-4/PT					
317	CORRIDOR	CPT-1	WC/PT	RB	PT	RB	PT	RB	PT	RB	PT					
318	EMERG OPS		PT	RB	WC/PT	RB	WC/PT	RB	WC/PT	RB	CL-5/PT					
319	STORAGE	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
320	OPS CONFERENCE	CPT-3/CPT-4	PT	RB	WC/PT	RB	WC/PT	RB	WC/PT	RB	CL-5/PT					
321	RECEPTION	CPT-1	PT	RB	WC/PT	RB	WC/PT	RB	WC/PT	RB	PT					
322	BADGE	-	-	-	-	-	-	-	-	-	CL-3					
323	EXEC DIRECTOR	CPT-2	GL	RB	PT	RB	PT	RB	PT	RB	CL-3/PT					
324	OPS	CPT-2	GL	RB	PT	RB	PT	RB	PT	RB	CL-3/PT					
325	DIR.	CPT-2	GL	RB	PT	RB	PT	RB	PT	RB	CL-3/PT					
326	DIR.	CPT-2	GL	RB	PT	RB	PT	RB	PT	RB	CL-3/PT					
327	BREAK ROOM	RF	GL	RB	GL	RB	PT	RB	PT	RB	CL-3/PT					
328	OPEN OFFICE	CPT-2	PT	RB	PT	RB	PT	RB	PT	RB	PT					
331	COPY ROOM	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
332	OFFICE	CPT-2	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
333	MECHANICAL ROOM	SC-1	PT	-	PT	-	PT	-	PT	-	EX-1					
334	ELECTRICAL	SC-1	PT	-	PT	-	PT	-	PT	-	EX-1					
335	CORRIDOR	-	PT	-	-	-	-	-	-	-	PT					
390	STAIRS	SC-1	PT	RB	PT	RB	PT	RB	PT	RB	PT					
391	STAIRS	SC-2	PT	RB	PT	RB	PT	RB	PT	RB	EX-2					

		EL COD		ODTU			/ALLS	OUTU	100	ГОТ	OF!!	INC				
OOM #	ROOM NAME	FLOOR	FINISH	ORTH BASE	FINISH	BASE	FINISH	OUTH BASE	FINISH	BASE	MATERIAL	LING HEIGHT	DOOR COLOR	FRAME COLOR	WINDOW COVERING	REMAR
J C III. II	Noom 10 mil		1	27.02	1	27.102	1	27.02	1		,		002011	002011	0012.10	1120071
100	VESTIBULE	Ţ-	GL/ST-1	-	GL/ST-1	-	GL/ST-1	-	GL/ST-1	-	-					
101	VESTIBULE	-	GL/ST-1	-	GL/ST-1	-	GL/ST-1	-	GL/ST-1	-	-					
102	CHECK-IN LOBBY	TER	-	TER	GL/ST-1	TER	GL/ST-1	TER	-	TER	CL-1					
103	CHECK-IN COUNTER	TER	DP/MTL	TER	GL/ST-1	TER	<u>-</u>	TER	-	TER	CL-1					
104	LOBBY/CIRCULATION	TER	DP	TER	-	TER	DP/PT	TER	-	TER	CL-2					
	ELEVATOR	ST-2	GL	-	GL	-	GL	-	GL	-	-					
	RAC 5B	RF-1 RF-1	PT DP/PT	RB RB	PT CL/DT	RB	PT PT	RB RB	PT CL/DT	RB	CL-2					
	RAC 5A RAC 4B	RF-1	PT	RB	GL/PT PT	RB RB	PT PT	RB	GL/PT PT	RB RB	CL-2 CL-2					
	RAC 4A	RF-1	DP/PT	RB	GL/PT	RB	PT	RB	GL/PT	RB	CL-2 CL-2					
	RAC 3B	RF-1	PT	RB	PT	RB	PT	RB	PT	RB	CL-2					
	RAC 3A	RF-1	DP/PT	RB	GL/PT	RB	PT	RB	GL/PT	RB	CL-2					
	RAC 2B	RF-1	PT	RB	PT	RB	PT	RB	PT	RB	CL-2					
	RAC 2A	RF-1	DP/PT	RB	GL/PT	RB	PT	RB	GL/PT	RB	CL-2					
114	RAC 1B	RF-1	PT	RB	PT	RB	PT	RB	PT	RB	CL-2					
115	RAC 1A	RF-1	DP/PT	RB	GL/PT	RB	PT	RB	GL/PT	RB	CL-2					
116	BAGGAGE CLAIM	TER	DP	TER	DP	TER	GL/ST-1	TER	DP	TER	CL-2					
117									GL/DP/ST-1/							
	INTERNATIONAL	TER	DP/MTL	TER	GL/DP/ST-1	TER	GL/ST-1	TER	MTL	TER	CL-1					
118	ELEVATOR	ST-2	SS	-	SS	-	SS	-	SS	-	-					
	CORRIDOR	FT-2	WP/PT	RB	WP/PT	RB	WP/PT	RB	WP/PT	RB	CL-3		1			
	OPS	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
	OFFICE	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
	OPS	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3		1			
	OFFICE	RF SC 1	PT PT	RB	PT	RB	PT	RB	PT	RB	CL-3					-
	LOADING	SC-1	<u> </u>	- DD	PT DT	- DP	PT DT	- DD	PT DT	-  DD	EX-1					
	OPS SPRINKLER	RF SC-1	PT PT	RB	PT PT	RB -	PT PT	RB -	PT PT	RB -	CL-3 EX-1		1			
129	WOMEN	FT-1	T .	FT-1	T	FT-1	T T	- ET 1	T T	FT-1	CL-4/PT					
	MEN MEN	FT-1	<u>'</u>  T	FT-1	<del> </del>	FT-1	<u>'</u>	FT-1	<del> </del>	FT-1	CL-4/PT CL-4/PT					
	OPS	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-4/P1 CL-3		1			
	OFFICE	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
	EDT	SC-1	PT	-	PT	-	PT	-	PT	-	CL-3					2X4
	DLH POLICE	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
	AIRPORT POLICE	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
	MEN	Т	Т	Т	T/GL	Т	T/GL	Т	Т	Т	CL-4/PT					
	FAMILY	Т	Т	Т	Т	Т	Т	Т	Т	Т	CL-4/PT					
138	JANITOR	SC-1	PT	RB	PT	RB	PT	RB	PT	RB	EX-1					
139	WOMEN	Т	Т	Т	Т	Т	T/GL	Т	T/GL	Т	CL-4/PT					
140	CORRIDOR	RF	WP/PT	RB	WP/PT	RB	WP/PT	RB	WP/PT	RB	CL-3					
	MAINTENANCE	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
	BHS CONT	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
	ELEVATOR MACHINE	SC-1	PT	-	PT	-	PT	-	PT	-	EX-1					
	MAINTENANCE	RF	PT	RB	PT	RB	PT	RB	PT	RB	EX-1					
	WOMEN LOCKER	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
	MEN LOCKER	RF	PT	RB	PT	RB	PT	RB	PT	RB	CL-3					
	BREAK	RF RF	PT	RB RB	PT PT	RB RB	PT	RB RB	PT	RB	CL-3					
	SUB. OFFICE ELECTRICAL	SC-1	PT PT	RB	PT	KB	PT PT	KB	PT PT	RB	CL-3 EX-1		+			
150	LOST BAG	RF	PT	RB	PT	RB	PT	- RB	PT	RB	PT					
	TELE COM	SC-1	PT	-	PT	L L	PT	-	PT	L L	PT					
	ELEVATOR MACHINE	SC-1	PT	-	PT	_	PT	-	PT	_	EX-1					
	ELEVATOR	ST-2	SS	_	SS	-	SS	-	SS	_	-					
	RECHECK	TER	DP/MTL	TER	DP/MTL	TER	DP/MTL	TER	GL	TER	CL-2/PT					
	BREAK	RF	PT	RB	PT	RB	PT	RB	PT	RB	PT					
	MEN	FT-1	Т	FT-1	Т	FT-1	Т	FT-1	Т	FT-1	CL-4/PT					
	WOMEN	FT-1	T	FT-1	Т	FT-1	Т	FT-1	Т	FT-1	CL-4/PT					
159	SECONDARY X-RAY	RF	WP/PT	RB	WP/PT	RB	GL/PT	RB	WP/GL/PT	RB	PT					
	AG. LAB	FT-2	PT	FT-2	PT	FT-2	PT	FT-2	PT	FT-2	PT					
	INTERV.	RF	PT	RB	PT	RB	PT	RB	PT	RB	PT					
	ADIT	RF	PT	RB	PT	RB	PT	RB	PT	RB	PT					
	ROVER	RF	GL/PT	RB	GL/PT	RB	GL/PT	RB	PT	RB	PT		1			
164	STORAGE	RF	PT	RB	PT	RB	PT	RB	PT	RB	PT					<del>                                     </del>
	INTERV.	RF	PT	RB	PT	RB	PT	RB	PT	RB	PT		-			
	OFFICE	RF	PT	RB	PT	RB	PT	RB	PT	RB	PT					
	SEC. STORAGE CORRIDOR	SC-1 FT-2	PT WP/PT	RB FT-2	PT WP/PT	RB FT-2	PT WP/PT	RB FT-2	PT WP/PT	RB FT-2	PT PT					
	SEARCH	F1-2 FT-1	PT	FT-1	PT	FT-1	WP/PT PT	F1-2 FT-1	PT	FT-1	PT PT		1			
	HOLD ROOM	FT-1	FRP	FT-1	FRP	FT-1	FRP	FT-1	FRP	FT-1	PT PT		1			1
	HOLD ROOM	FT-1	FRP	FT-1	FRP	FT-1	FRP	FT-1	FRP	FT-1	PT		1			
	DBS	FT-2	PT	FT-2	PT	FT-2	PT	FT-2	PT	FT-2	PT					
	MEN	Т	Т	T -	T	T	T	T	Т	T	CL-4/PT		1			
	WOMEN	Т	Т	Т	Т	Т	Т	Т	Т	T	CL-4/PT					
	ELEVATOR MACHINE	SC-1	PT	-	PT	1-	PT	-	PT	-	EX-1					
	TUG TUNNEL	SC-1	PT	-	PT		PT	-	PT							
	TUG RAMP	SC-1	PT	-	PT		PT	<u></u>	PT		<u>-</u>					
	TUG RAMP	SC-1	PT	<u></u>	PT		PT		PT							
	OFFICE	RF	PT	RB	PT	RB	PT	RB	PT	RB	PT					
	CASHIER	RF	PT	RB	PT	RB	PT	RB	PT	RB	PT					
182	CORRIDOR	RF	WP/PT	RB	WP/PT	RB	WP/PT	RB	WP/PT	RB	PT					
190	STAIRS	SC-1	PT	RB	PT	RB	PT	RB	PT	RB	EX-2					
	STAIRS	SC-1	PT	RB	PT	RB	PT	RB	PT	RB	EX-2					
	STAIRS	TER	DP/MTL	TER	DP/MTL	TER	DP/MTL	TER	DP/MTL	TER	CL-2					
	STAIRS	SC-1	PT	RB	PT	RB	PT	RB	PT	RB	EX-2					

GENERAL NOTES

218-722-1227 Fex: 218-722-1052



**AUTHORITY** 

**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

## **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

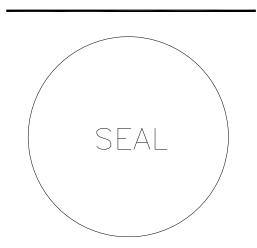
# Structural Engineers: MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

## Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



REVISIONS					
NO.	DESCRIPTION	DAT			
-		+			
		+			
		+			

**DATE ISSUED** 04-12-10 REVIEWED BY: SBS/TC DRAWN BY: VO

DESIGNED BY, SBS/TC AEP PROJECT NUMBER

213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

> INTERIOR **FINISH SCHEDULES**

A801

CODE TAG	MATERIAL	MANUEACTURER	SERIES	COLOR	DIMENSIONS	DEMARKS
CODE TAG	MATERIAL	MANUFACTURER	SERIES	COLOR	DIMENSIONS	REMARKS
MILLWOR	rK					
PL-1	PLASTIC LAMINATE					
PL-2	PLASTIC LAMINATE					
PL-3	PLASTIC LAMINATE					
PL-4	PLASTIC LAMINATE					
QS-1	QUARTZ SURFACING					
QS-2	QUARTZ SURFACING					
SS-1	STAINLESS STEEL					
SSM-1	SOLID SURFACE					
SSM-2	SOLID SURFACE					
WD-1	MAPLE - FSC CERTIFIED					
WD-2	RECLAIMED DOUGLAS FIR					
WD-3	PAINTED-GRADE TRIM					
1						

EQUI	EQUIPMENT SCHEDULE							
MARK	ITEM	QTY	MANUFACTURER	MODEL	COLOR	DESCRIPTION		
E-1								
E-2								
E-3								
E-4								
NOTES								

INTERIOR MATERIAL SCHEDULE						
CODE TAG		MANUFACTURER	SERIES	COLOR	DIMENSIONS	REMARKS
FLOOR						
CPT-1	CARPET TILE					
CPT-2	BROADLOOM					
CPT-3	CARPET TILE					
CPT-4 FT-1	CARPET TILE FLAKE COATING SYSTEM					
FT-2	FLAKE COATING SYSTEM					
RF-1	RESILIENT SHEET FLOORING	MANNINGTON COMMERCIAL				
RF-2	RESILIENT SHEET FLOORING	MANNINGTON COMMERCIAL				
SC-1 SC-2	SEALED CONCRETE - NO STAIN SEALED CONCRETE - STAINED					
TER-1	TERRAZZO FLOORING					
TER-2	TERRAZZO FLOORING					
TER-3 TER-4	TERRAZZO FLOORING TERRAZZO FLOORING					
T-1	PORCELAIN TILE					
T-2	PORCELAIN TILE					
T-3	PORCELAIN TILE					
T-4 T-5	PORCELAIN TILE PORCELAIN TILE					
T-6	PORCELAIN TILE					
T-7	PORCELAIN TILE					
VT-1 VT-2	BIO-BASED FLOOR TILE BIO-BASED FLOOR TILE					
VT-3	BIO-BASED FLOOR TILE					
BASE						
RB-1	RUBBER BASE					
RB-2	RUBBER BASE					
WALLS						
DP-1	DECORATIVE PANELS					
DP-2	DECORATIVE PANELS					
DP-3 FRP-1	DECORATIVE PANELS FIBERGLASS REINFORCED PANEL					
G-1	LAM. CUSTOM GLASS W/ FRITTED INNER					
O-1	LAYER					
G-2	LAM. DECORATIVE GLASS W/ ETCHED PATTERN					
G-3	MIRRORED GLASS					
GT-1	GLASS MOSAIC TILE					
GT-2 MTL-1	GLASS MOSAIC TILE  METAL WALL PANELS					
MTL-2	METAL WALL PANELS  METAL WALL PANELS					
PT-1	PAINT					
PT-2	PAINT					
PT-3 PT-4	PAINT PAINT					
PT-5	PAINT					
	PAINT					
PT-7 PT-8	PAINT PAINT					
PT-9	PAINT					
PT-10	PAINT					
ST-2	STONE TILE STONE TILE					
ST-2 WC-1	WALL COVERING					
WC-2	WALL COVERING					
WC-3	WALL COVERING					
WP-1	WALL PROTECTION - RIGID SHEET VINYL	ACROVYN				
CEILING						
CL-1 CL-2	SUSPENDED LINEAR METAL CEILING WOOD GRILLE CEILING SYSTEM					
CL-2	MINERAL FIBER CEILING TILE					
CL-4	WATERPROOF GYP BD					
CL-5	MINERAL FIBER CEILING TILE					
EX-1 EX-2	EXPOSED CEILING - UNFINISHED  EXPOSED CEILING - PAINTED					
-						



4525 Airport Approach Rd, Ste A Duluth, Minnecota 55811 218-722-1227 Fex: 218-722-1052 www.reandh.com



**AUTHORITY** 

DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

# Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810

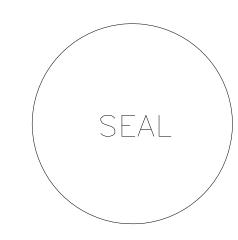
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



NO.	<b>DESCRIPTION</b>	DAT

DATE ISSUED: 04-12-10
REVIEWED BY: SBS/TC
DRAWN BY: VO

DESIGNED BY, SBS/TC

AEP PROJECT NUMBER

213-1882-091

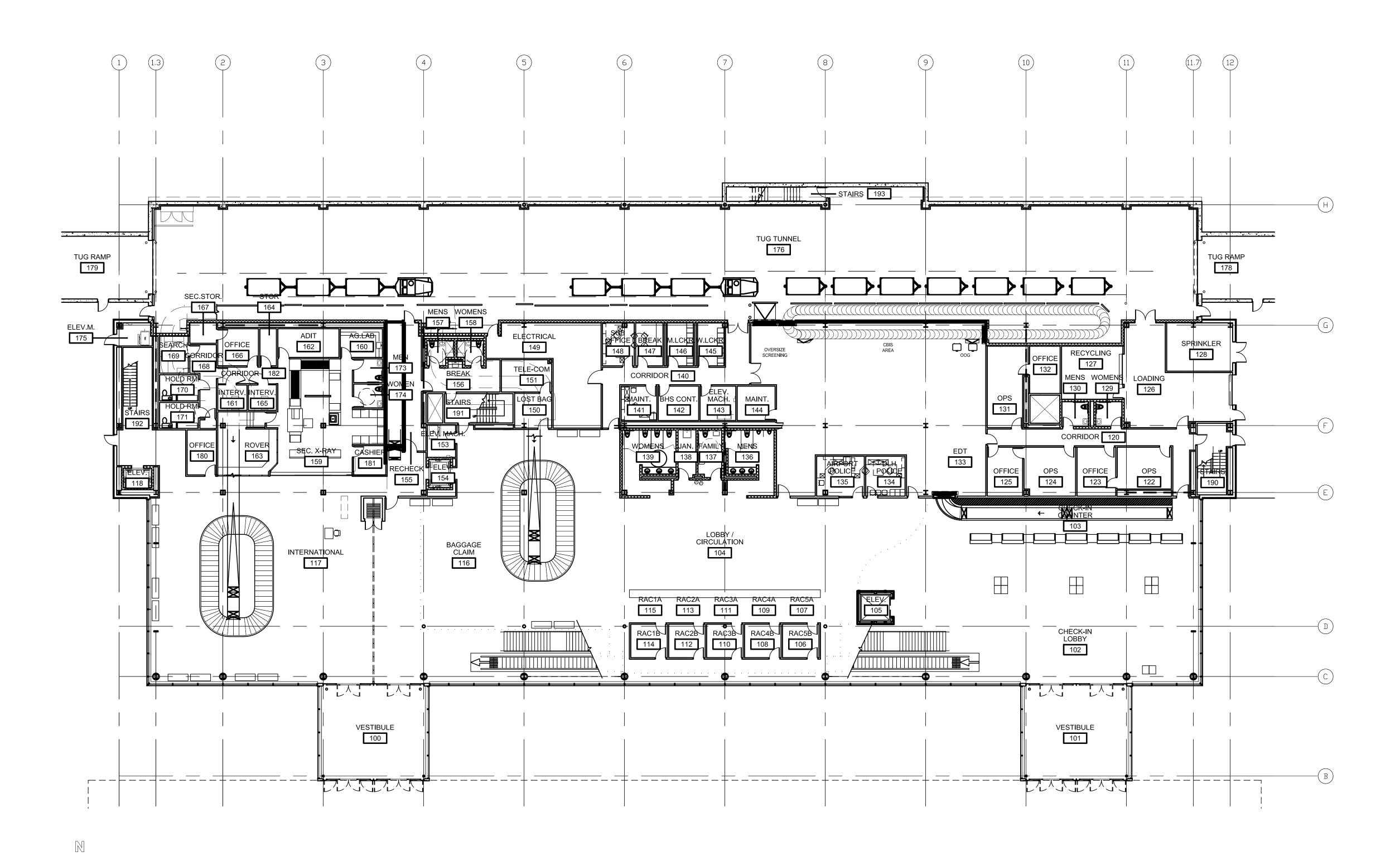
© 2006 REYNOLDS, SMITH AND HILLS INC.

INTERIOR
MATERIALS
AND
EQUIPMENT
SCHEDULE

A802

90% NOT FOR CONSTRUCTION

Drawing: t:\P\2131882.091 Duluth New Terminal\Cad\A\Sheets\A802 Interior Materials Schedule.dwg Plotted on: 4/13/2010 8:32 AM



FIRST LEVEL FURNITURE PLAN

REVISIONS

DESCRIPTION

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811

**DULUTH AIRPORT AUTHORITY** 

DULUTH INTERNATIONAL

AIRPORT

DULUTH, MN

NEW PASSENGER TERMINAL

<u>CONSULTANTS</u>

Interior Architects: SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 11 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

SEAL

218-722-1227 Fax: 218-722-105 www.rsandh.com

DATE ISSUED: 04-12-10 REVIEWED BY: XXX DRAWN BY: **EB** DESIGNED BY: EB

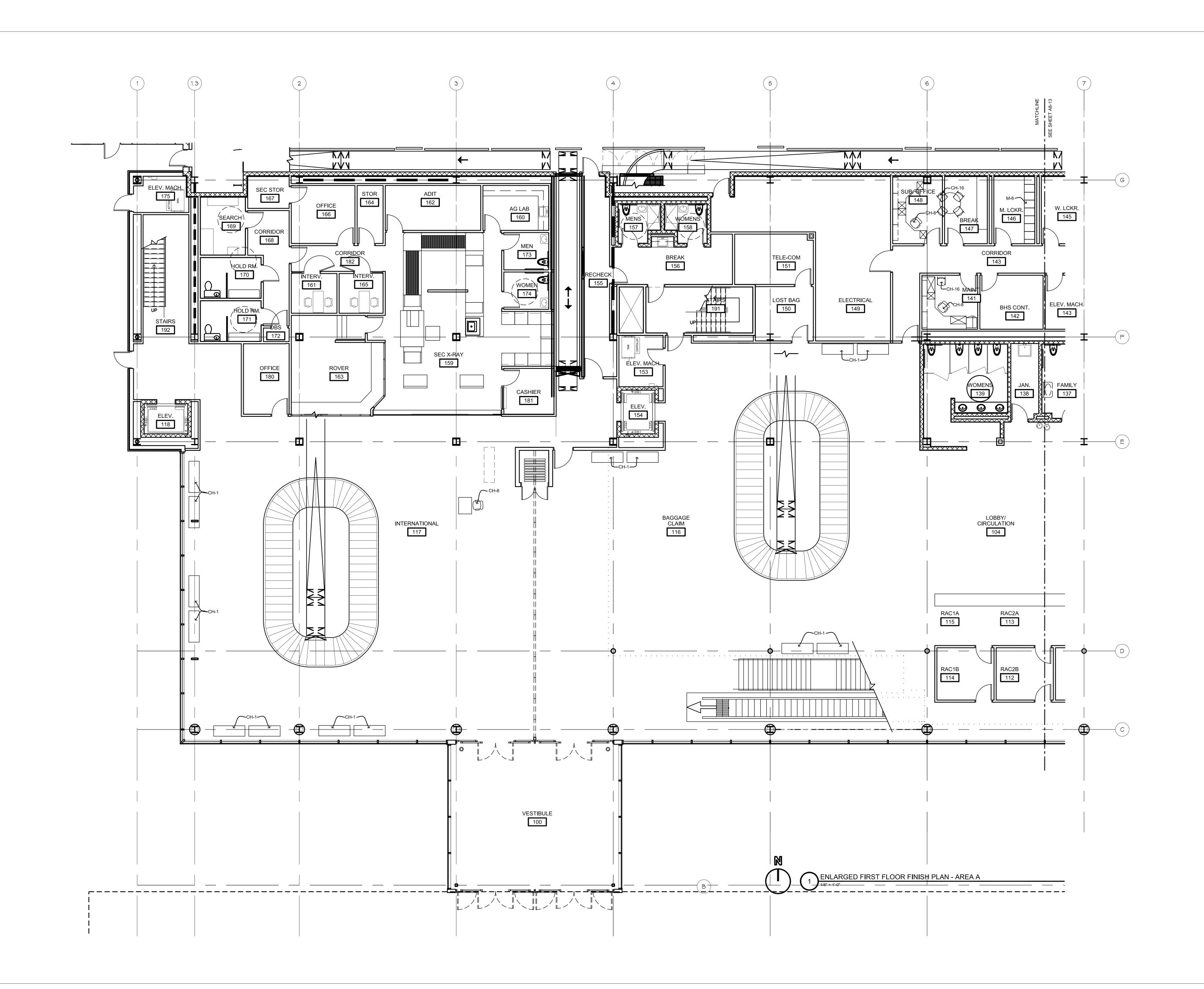
> AEP PROJECT NUMBER 213-1882-091 © 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

FIRST FLOOR FURNITURE PLAN

SHEET NUMBER

A811





Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-105

www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

<u>CONSULTANTS</u>

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

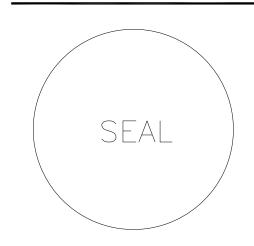
Baggage Handling Systems Consultants:
BNP ASSOCIATES INC.
11 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



REV	/ISIONS			
NO.	DESC	RIPTION		DATE
DATE	ISSUED:	04-12-10	C	
REVI	EWED BY:	XXX		
DRAV	WN BY:	EB		
DESI	GNED BY:	EB		

© 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

FIRST FLOOR

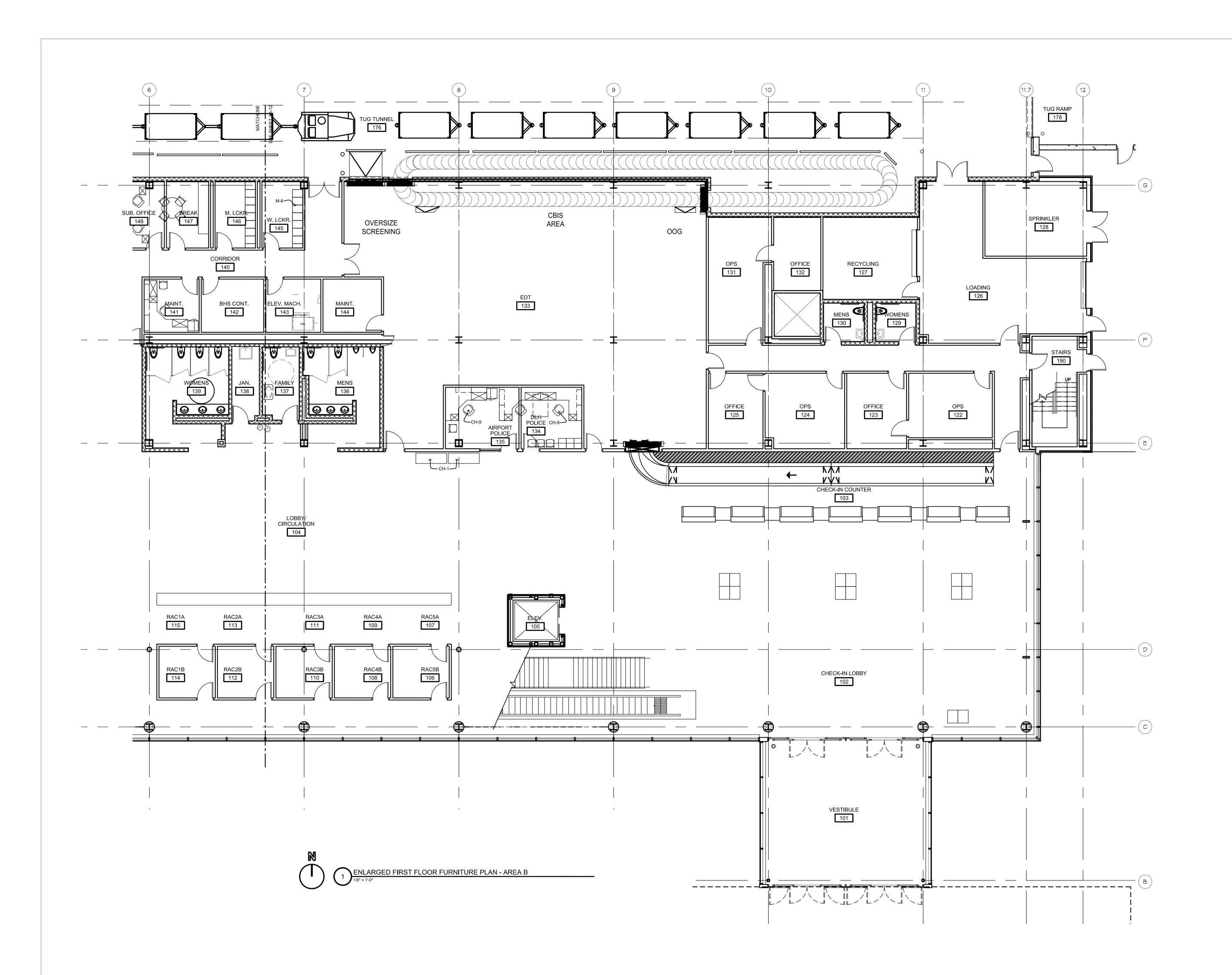
AEP PROJECT NUMBER

213-1882-091

FURNITURE PLAN AREA A

SHEET NUMBER

A812





Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-105

www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

<u>CONSULTANTS</u>

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

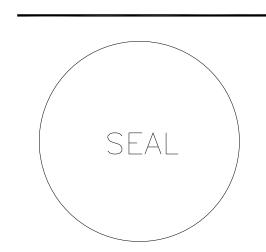
D1 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN
2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



NO.	ロたろし	CRIPTION	V	D.
			•	+
+				
DATE I	SSUED:	04-12	-10	
REVIEW	ED BY:	XXX		

DESIGNED BY: EB

AEP PROJECT NUMBER

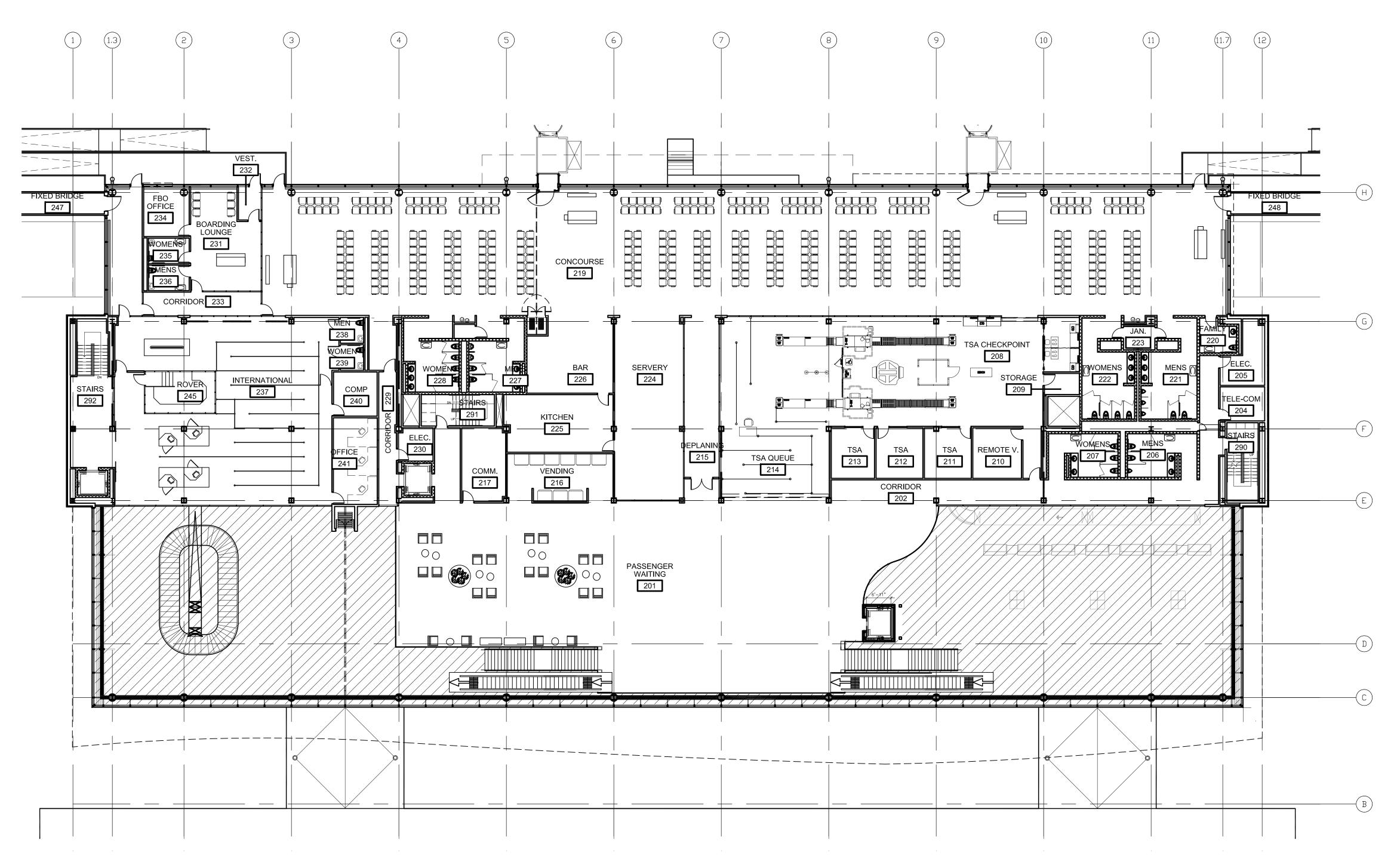
213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

FIRST FLOOR
FURNITURE PLAN
AREA B

SHEET NUMBER

A813



SECOND LEVEL FURNITURE PLAN



Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-105

www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

<u>CONSULTANTS</u>

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

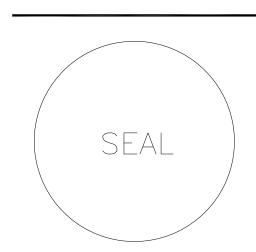
1 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



NO.	DESC	CRIPTION	D.A
-			

DRAWN BY: EB

DESIGNED BY: EB

AEP PROJECT NUMBER

213-1882-091

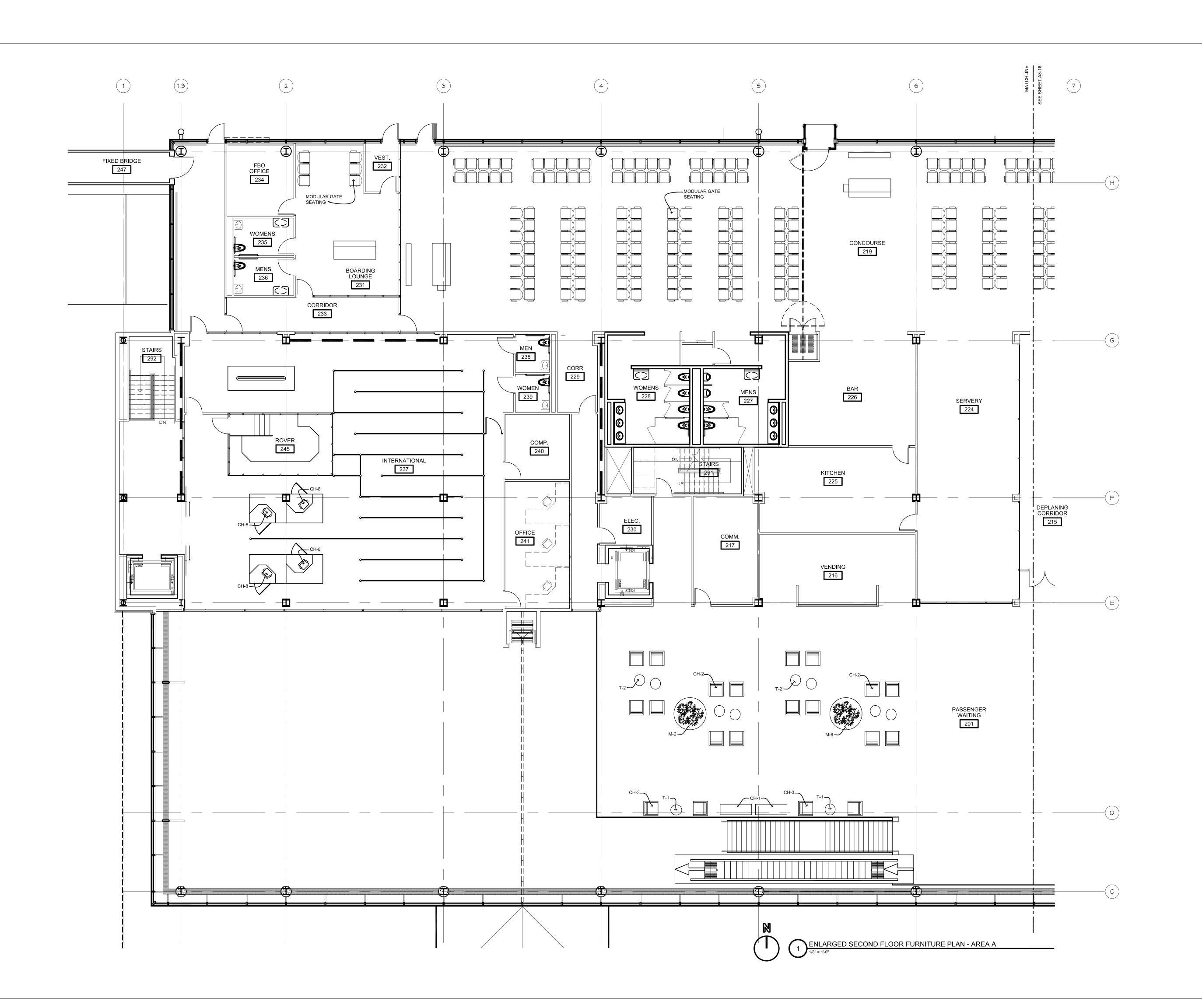
© 2006 REYNOLDS, SMITH AND HILLS INC.

SECOND FLOOR

FURNITURE PLAN

SHEET NUMBER

A814





4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-7

DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

ILINIIINAL

Interior Architects:
SJA ARCHITECTS

<u>CONSULTANTS</u>

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717
Structural Engineers:

MBJ CONSULTING ENG.
501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.**01 East Ridge Office Park, Suite 103, Danbury CT 06810

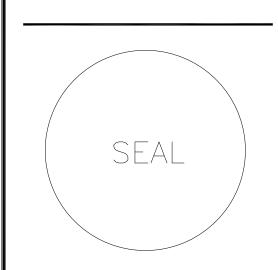
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079



REVISIONS

NO. DESCRIPTION DAT

DATE ISSUED:

REVIEWED BY: XXX

DRAWN BY: EB

DESIGNED BY: EB

AEP PROJECT NUMBER

© 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

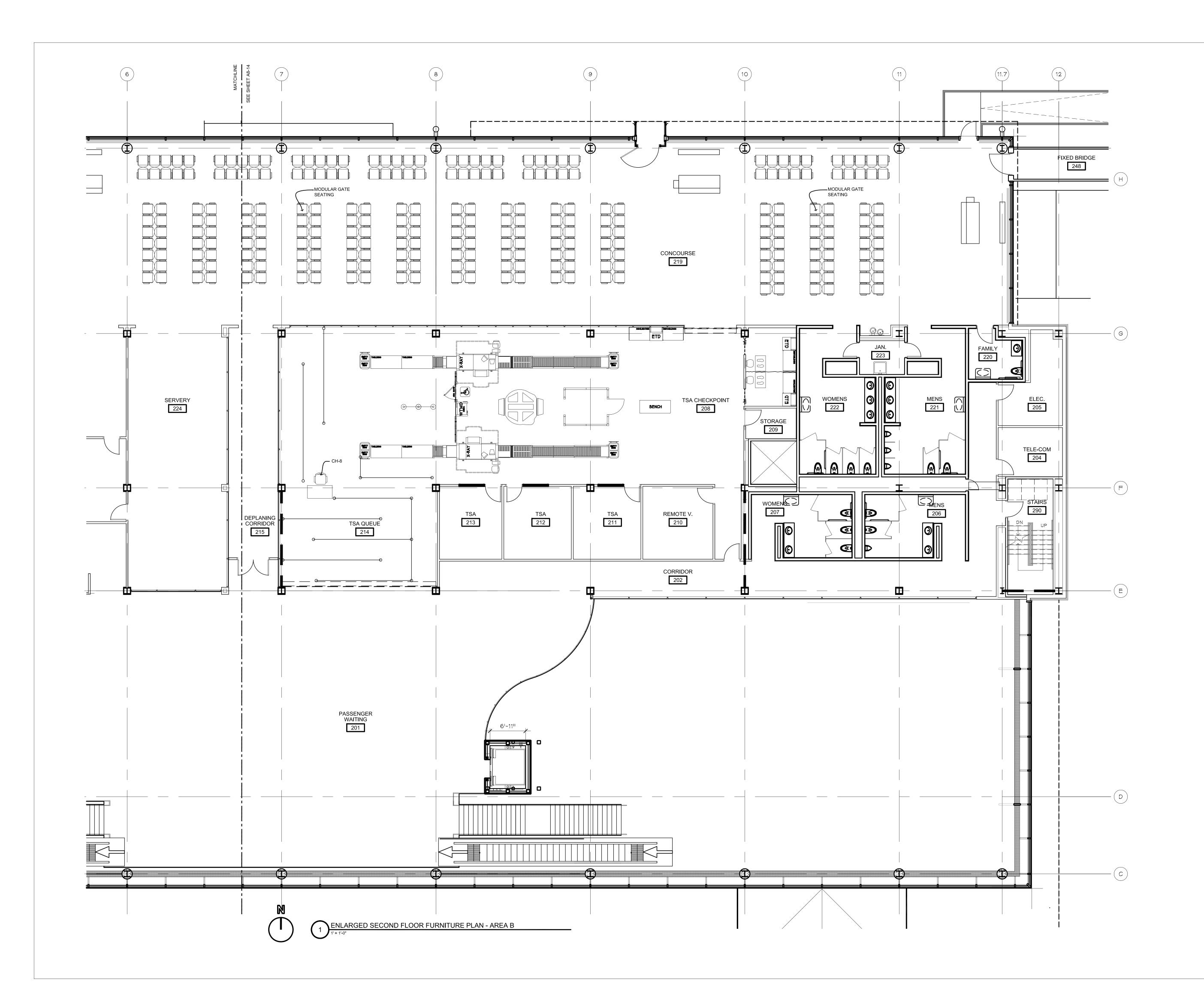
SECOND FLOOR
FURNITURE PLAN

AREA A

213-1882-091

SHEET NUMBER

A815





4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-105 www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

<u>CONSULTANTS</u>

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

MBJ CONSULTING ENG.
501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

Structural Engineers:

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

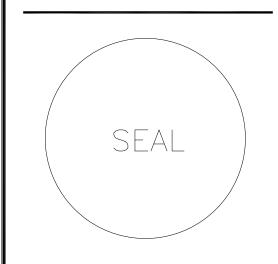
1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.**D1 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



REV	/ISIONS		
NO.	DESC	RIPTION	DATE
DATE	ISSUED:	04-12-10	
REVII	EWED BY:	XXX	
	MNI DV.	ED	

DRAWN BY: EB

DESIGNED BY: EB

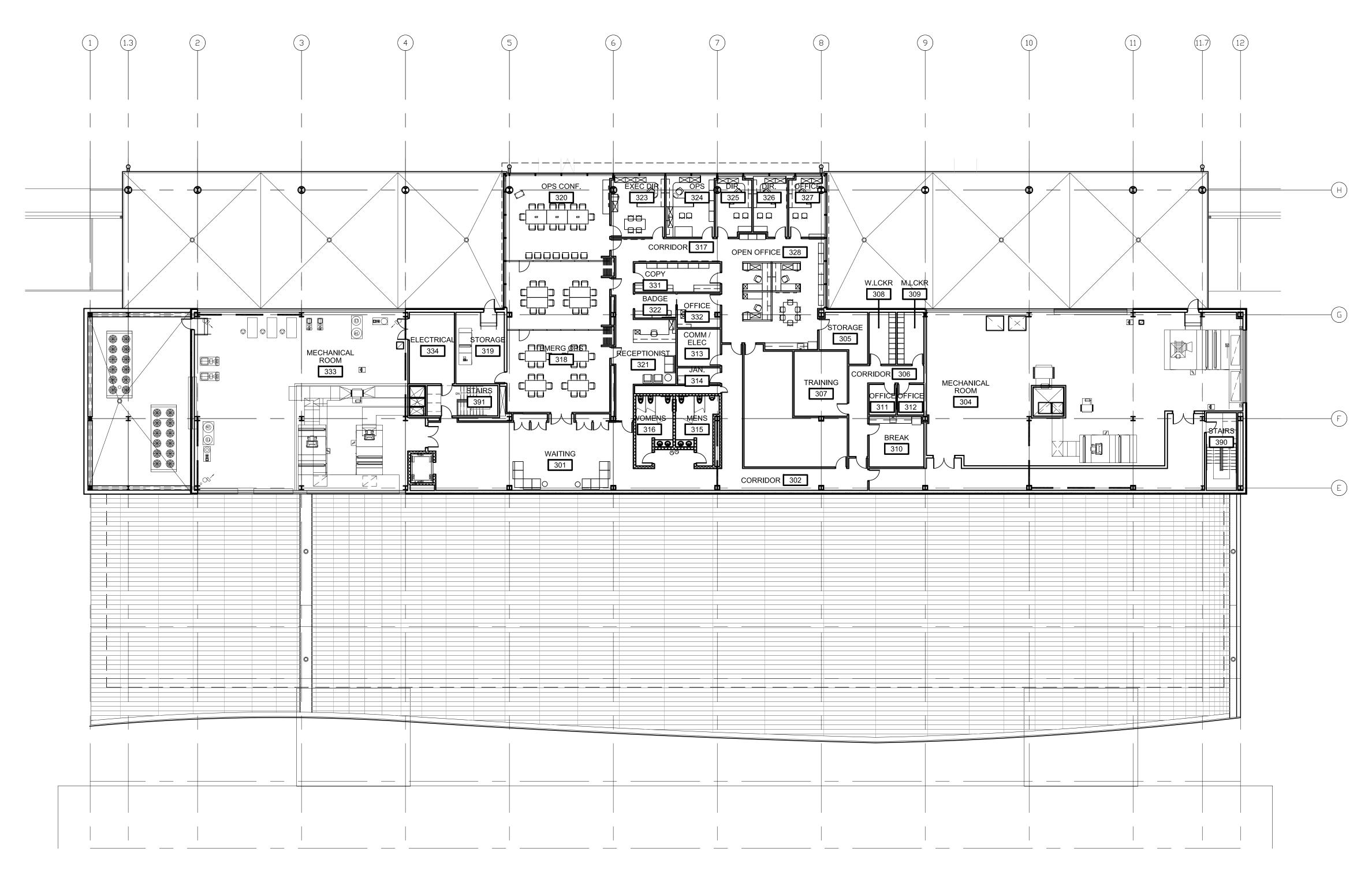
AEP PROJECT NUMBER 213-1882-091 © 2006 reynolds, smith and hills inc.

© 2006 REYNOLDS, SMITH AND
SHEET TITLE

SECOND FLOOR FURNITURE PLAN AREA B

SHEET NUMBER

A816



THIRD LEVEL FURNITURE PLAN



Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-105

www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

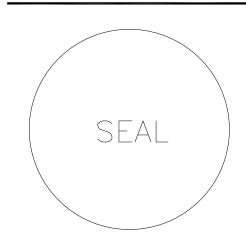
101 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



NO.	DESCRI	PTION	
			$\top$

AEP PROJECT NUMBER

213-1882-091
© 2006 REYNOLDS, SMITH AND HILLS INC.

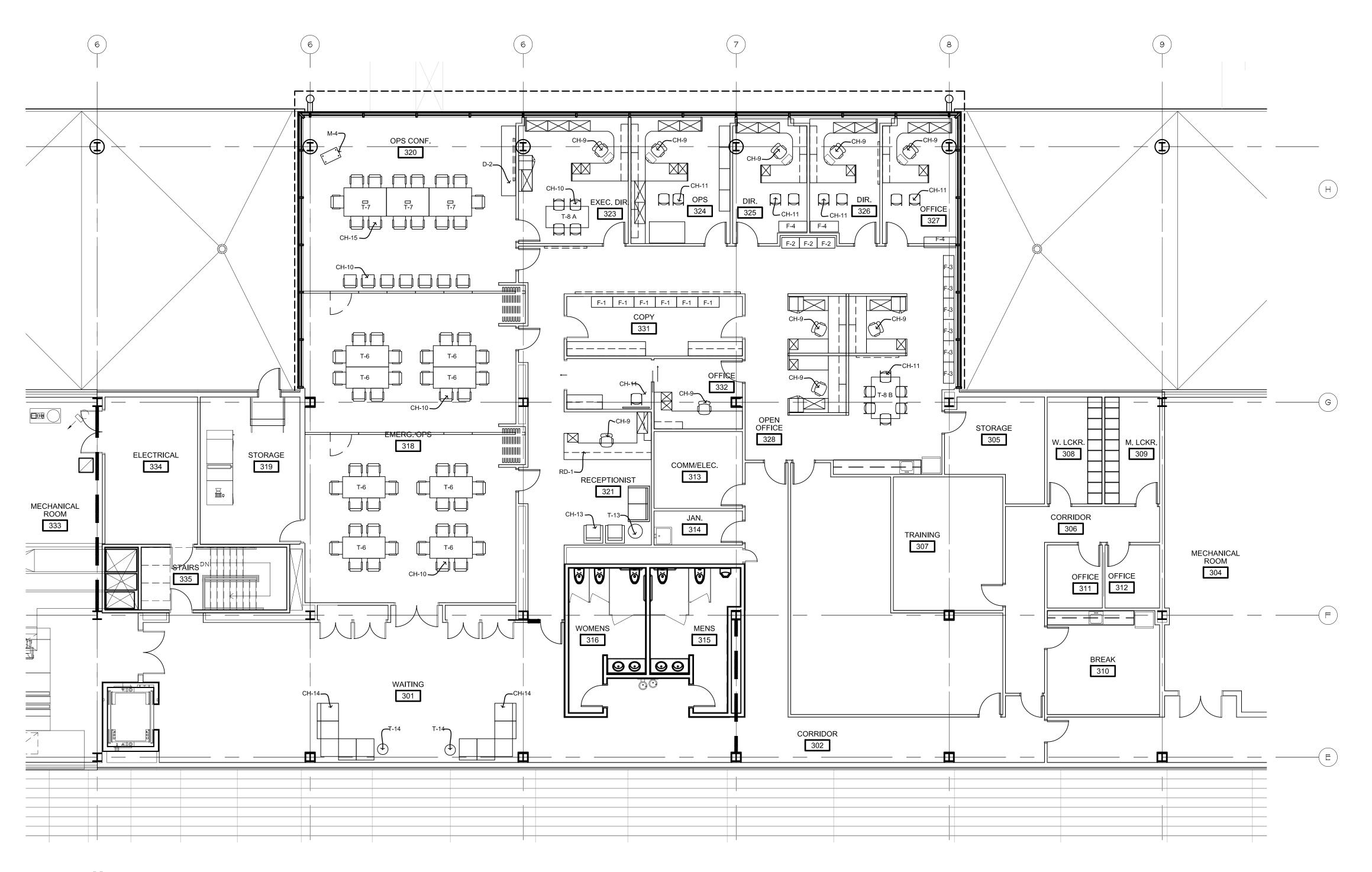
DRAWN BY: **EB**DESIGNED BY: **EB** 

006 REYNOLDS, SMITH AND H

THIRD FLOOR FURNITURE PLAN

SHEET NUMBER

A817



ENLARGED THIRD FLOOR FURNITURE PLAN - ADMIN.



Reynolds, Smith and Hills, Inc 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811





DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

<u>CONSULTANTS</u>

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

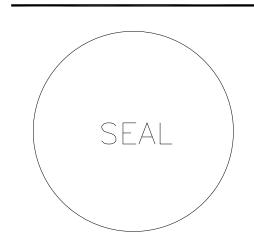
BNP ASSOCIATES INC.

11 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN
2432 East First Street, Duluth MN 55812
TEL: (218) 591-5079



REVISIONS

NO. DESCRIPTION DAT

DATE ISSUED: 04-12-10

REVIEWED BY: XXX

DRAWN BY: **EB**DESIGNED BY: **EB**AEP PROJECT NUMBER

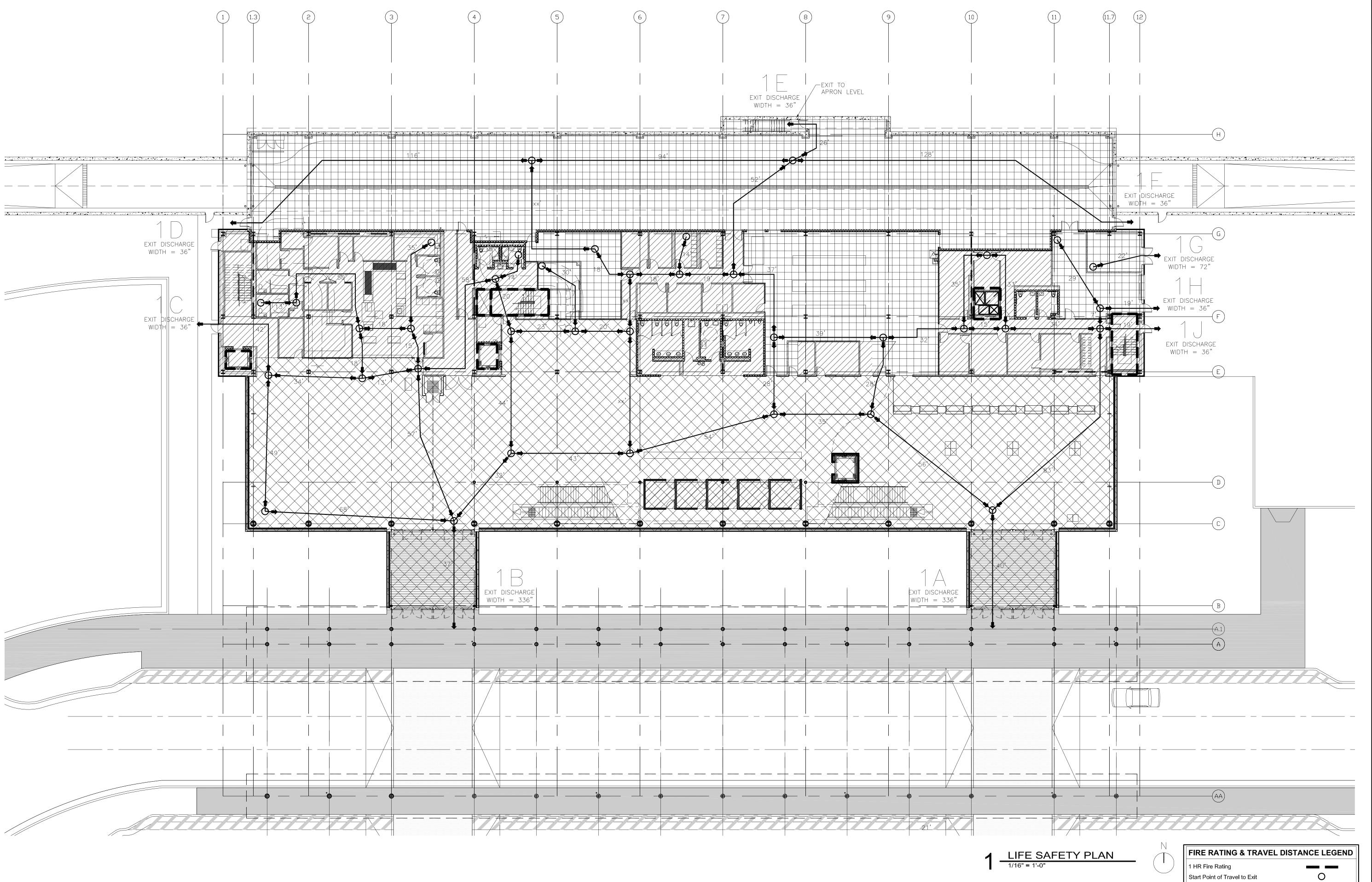
213-1882-091 © 2006 REYNOLDS, SMITH AND HILLS INC.

) 2006 REYNOLDS, SMITH AND HILI SHEET TITLE

THIRD FLOOR FURNITURE PLAN ADMIN.

SHEET NUMBER

A818



ISSIT.

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811

218-722-1227 Fax: 218-722-1052
www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340, Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC.

1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

11 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:

APPOLD DESIGN
2432 East First Street, Duluth MN 55812

SEAL

TEL: (218) 591-5079

_						
R	F١	<b>/</b> I	Q I	$\mathbf{\cap}$	N	C

Ο.	DESCRIPTION	DAT				
A T	F ICCUED 04 40 40					

DATE ISSUED: 04-12-10
REVIEWED BY: SBS/TC
DRAWN BY: MKG/MI

DESIGNED BY: SBS/TC

AEP PROJECT NUMBER
213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

FIRST FLOOR LIFE SAFETY PLAN

LS101

90% NOT FOR CONSTRUCTION

Travel Distance to Exit

OCCUPANCY AREAS LEGEND

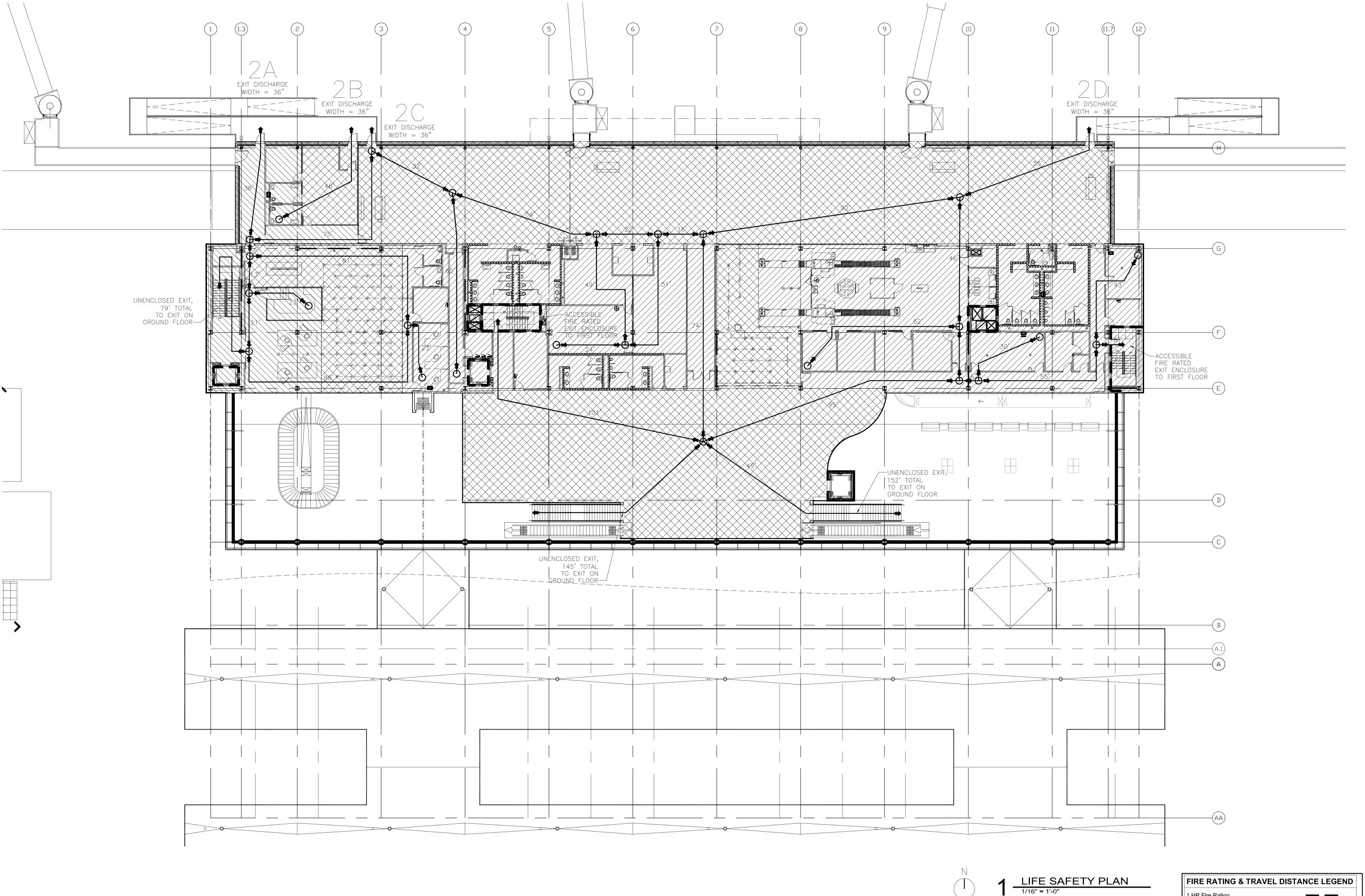
Fire Extinguisher

Eye Wash Station

S2 Occupancy

A3 Occupancy

B Occupancy



IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc. 4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com



**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

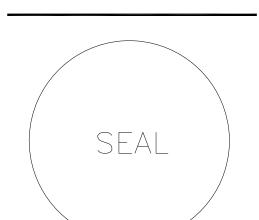
Structural Engineers: MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers:

COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



NO.	DESCRIPTION	DA.
_		

AEP PROJECT NUMBER 213-1882-091 © 2006 REYNOLDS, SMITH AND HILLS INC.

DESIGNED BY: SBS/TC

SHEET TITLE

SECOND FLOOR LIFE SAFETY **PLAN** 

SHEET NUMBER LS102

90% NOT FOR CONSTRUCTION

0

XX'

Ф

1 HR Fire Rating

Fire Extinguisher Eye Wash Station

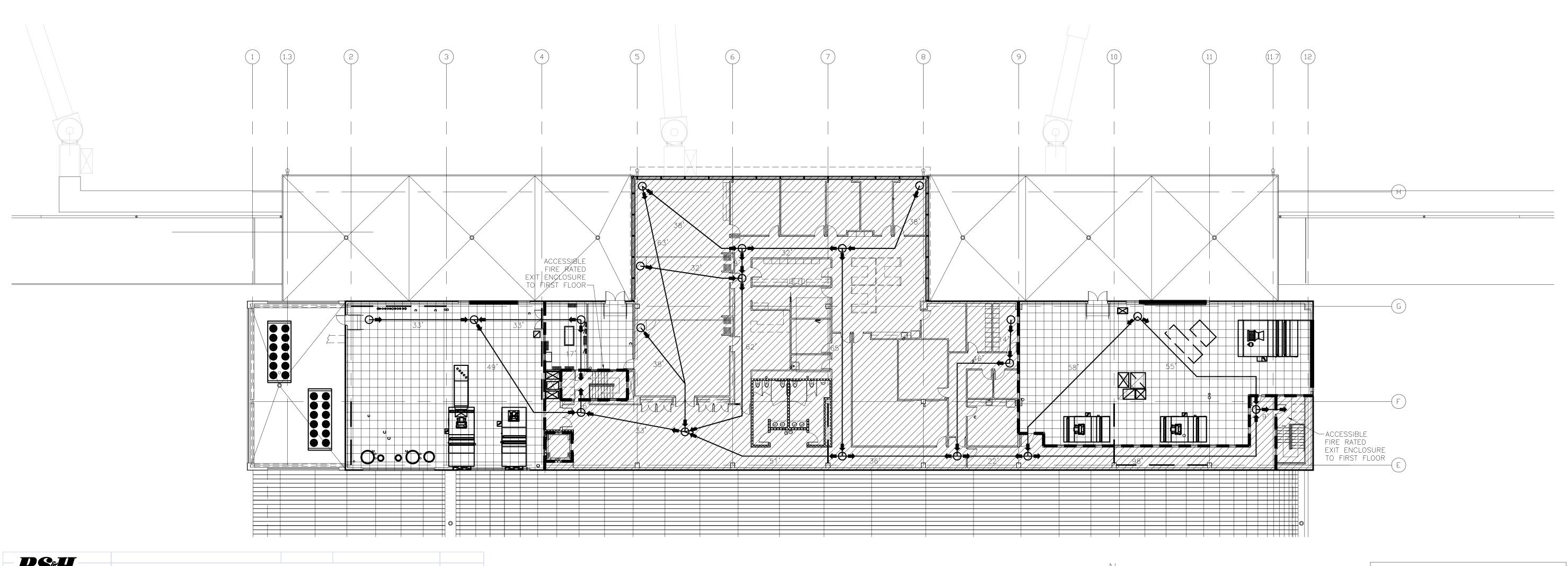
B Occupancy

A3 Occupancy

Start Point of Travel to Exit

OCCUPANCY AREAS LEGEND

Travel Distance to Exit



Reynolds, Smith and Hills. Inc.	CODE CO	MPLIANCE EVA	ALUATION	
	-			
		Prepared by:	Mark Ip	
	10/2/2000	rrepared by.	Markip	
	Life Safetv: IBC-2006		Mechanical: IMC-2006	
	· · · · · · · · · · · · · · · · · · ·			
	, and the second second second second second second second second second second second second second second se		Other:	
BUILDING DATA				
	Total Gross Square Feet	101.625	6. Sprinklered	Υ
		3		Υ
		51		1077
				1077
			20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1011
	or return resimble or coordinates			
CODE REVIEW		Reference	Notes	
· · · · · ·	Assembly for worshin/recreation/amusement (A-3)	Ref 302	See section 508 for occupancy ser	aration red
		NOI OOZ	See Section See for Seedpaney Sep	aration req.
	• •			
	Storage Low Hazard (5-2)			
	Assambly for warshin/regreation/amusement (A-3)			
			Noncombustible Frame Walls Flo	or Poof
• •				
		•	Covered Mail Occupancy, fer 40	Z. I
			Covered Mall Cooungage, ref 40	2.4
	3			
•	0		Note. 11 adjusted for const. type of	Spillikieis
	-	•		
	U	Rei 60 i/Criap /		
-	0	Def 601/Chap 7		
	•			
•	U	Nei ou i/Chap /		
	4	Pof Toblo 602	Note: Adjusted for Group and Cons	t Typo
·			Note. Adjusted for Group and Cons	гтуре
·	•			
	•		Dof: 700 4 postitions to wardenside	f poiling
	_		Rei: 706.4 partitions to underside o	ceiling
	•			
	•			
	·			
•			Florest - 100 - 1 - 1 - 1	41
8. Elevator Enclosures	1 hr, see 707 for details	Ref 707.4	Elevator 103 not required to be i	rated.
	APPLICABLE CODE(S):  BUILDING DATA  CODE REVIEW Classification Of Occupancy: 1. Occupancy Type 1 2. Occupancy Type 2 3. Occupancy Type 3 4. Occupancy Type 4 5. Occupancy Type 5 6. Governing Occupancy Construction Type: Area Limitation: Height Limitation: Maximum number of Floors: Fire Protective Requirements: 1. Structural Frame Supporting Roof Only 2. Bearing Walls Exterior Interior Supporting Roofs Only 3. Nonbearing Walls/Partitions Exterior <5' Separation Exterior <5' Separation Exterior 10'-29' Separation Exterior >30' Separation Interior 4. Floor Construction 5. Roof Construction 6. Corridors 7. Stair/Ramp Enclosures	Reynolds, Smith and Hills, Inc.   PROJECT:   PROJECT:   PROJECT:   PROJECT:   PROJECT:   POWNET:   10/2/2009   PURDICABLE CODE(S):   Life Safety: IBC-2006   Accessibility: IBC-2006   Accessibility: IBC-2006   Accessibility: IBC-2006   Accessibility: IBC-2006   Accessibility: IBC-2006   Plumbing Code:	Reynolds, Smith and Hills, Inc.   PROJECT:   Duluth International Airport   Propert by   2131882.991   Prepared by   Prepared	PROJ.   213182.091   DATE:   10727009   Properted by:   Mark   p

	CODE REVIEW (cont.)		Reference	Notes
;	Occupant Load			
	Design Occupant Load	2976.93	Ref 1004.1	
	2. GLA	2601.00	Ref 402.4	
	3. OLF	25.18	Ref 402.4	
	·····	== .	Ref Chap 10	Ref 1025 for Assembly Occupancies
	1. Minimum Egress Width	446.55 inches	Ref 1005.1	0.15 inches x 2977 occupants
	2. Minimum number of exits	2	Ref 1019.2	Ref 1019.1 for req. exits by room
	- Actual number of exits	12		Ref 1018.2 for single exit requirements
	Capacity of each Exit			
	- Width of each Exit	36		
		576 inches		
	4. Maximum travel Distance (fl	A: 250', B: 300'	Ref 1016.1	Note: Adjusted for sprinklers & Occ
	<ol><li>Dead End Corridor Limit</li></ol>	A: 20', B: 50'	Ref 1017.3	See ref for Group I occupancies
	6. Min. Corridor Width	44"	Ref 1017.2	For Exit Passageway corridor, see H8 below
	7. Interior Corridor Rating	0 hr if occupant load is >30	Table 1017.1	
	8. Exit Passageway			
	a. Width	min 44	Ref 1021	
	b. Fire Rating	Min 1hr or match adjacent if higher	Ref 1021.3	
	c. Door rating	1/3 hr		
	9. Ramps			
	a. Minimum Width	36" min., not less than corridors.	Ref 1010.5.1	
	b. Maximum Slope	1:12 (8%) for egress, 1:8 (12.5%) other	Ref 1010.2	
	c. Height Between Landings		ref 1010.4	
	10. Doorways:			
	a. Minimum Number	See 1015.1 for requirements for each room	Ref 1015.1	
	b. Door Size	Min 32"	Ref 1008.1.1	
	c. Special Size Rqts.	See 1008.1.1 for exceptions	Ref 1008.1.1	
	11. Horizontal Exit:			
	a. Separation	Ref 705, 706 for separations	Ref 1022.2	
	b. Fire Rating	2 hr	Ref 1022.2	
	c. Area Of Refuge	3 sf per occupant, see references	Ref 1022.4	
	12. Exit Stairways:	e er per eccapain, ecc reierenece	101 1022.1	
	a. Capacity	See references	Ref 1009/1019	
	b. Width	min 44	Ref 1009/1005	Note: Adjusted for max Occupants
	c. Min. Headroom	80"	Ref 1009/1003	Troto. Adjusted for max Occupants
	d. Max. Ht. Between Landi		Ref 1009.2	
	e. Max. Riser Height	7"	Ref 1009.3	
	f. Min. tread width	11"	Ref 1009.3	
		1 hr	Ref 715.4	
	g. Door Rating h. Enclosure	1 hr, see 1020 for exceptions	Ref 1020/706	
		Req'd if flr > 75' above or >30' below exit discharge	Ref 1020/706	
	I. Smokeproof tower	1.25" - 2" dia. W. 1.5" clearance W. 12" extension	Ref 1020.1.7	See also 1607.7
	j. Handrails	1.25 - 2 uia. vv. 1.5 clearance vv. 12 extension		See also 1001.1
	13. Interior Finishes	D	Ref Chap 8	
	a. Exits, Vertical & Passaç		Ref 803.5	
	b. Exit Access Corr.	В	Ref 803.5	
	c. Rooms & Enclosed	C	Ref 803.5	
	Compartmentalized Areas:	For floors > 60' below exit discharge, see Ref	Ref 405.1	
	Protection of Vert.Openings	Fire door Ref 715.3	Ref 1020.1.1	
(	Exit Lighting	Min. 1 fc (11lux) along egress, see ref for exceptions	Ref 1006	
-		Provide portable extinguishers req'd by IFC-2003	Ref 906	
1	Mech.Conveyance (Vertical)	See references	Ref 3005	

N	_		FIRE RA
	1	LIFE SAFETY PLAN  1/16" = 1'-0"	 1 HR Fire F
		1/16 - 1-0	Start Point
			Travel Dist
			Fire Exting
			1

Men's WC Required

Men's WC Provided

Baths Required

Baths Provided

Sinks Required

Sinks Provided

Men's Lavatories Required

Men's Lavatories Provided

Drinking Fountains Required Drinking Fountains Provided

9.49

0.00

1.00

IV PLUMBING CODE REVIEW A Min. Plumbing Fixture Req'ts:

. Water Closets

4. Drinking Fountains

Lavatories

3. Baths

5. Sinks

FIRE RATING & TRAVEL I	DISTANCE LEGEN
1 HR Fire Rating	
Start Point of Travel to Exit	0
Travel Distance to Exit	XX'
Fire Extinguisher	<del></del>
Eye Wash Station	

B Occupancy

Women's WC Required

Women's WC Provide

Women's Lavatories Required

Women's Lavatories Provided

OCCUPANCY AREAS LEGE	ΕN	D				
S2 Occupancy						Ī
32 333apa.139						Ī

	SEAL	

NO.	DESCRIPTION	DATE

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 Fax: 218-722-1052 www.rsandh.com

> **DULUTH AIRPORT AUTHORITY**

**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW PASSENGER TERMINAL** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340, Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: COSENTINI ASSOCIATES INC. 1 South Wacker Drive, 37th Floor, Chicago IL 60606 TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants: BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants: **APPOLD DESIGN** 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

REVIEWED BY: SBS/TC DRAWN BY: MKG/MI DESIGNED BY: SBS/TC

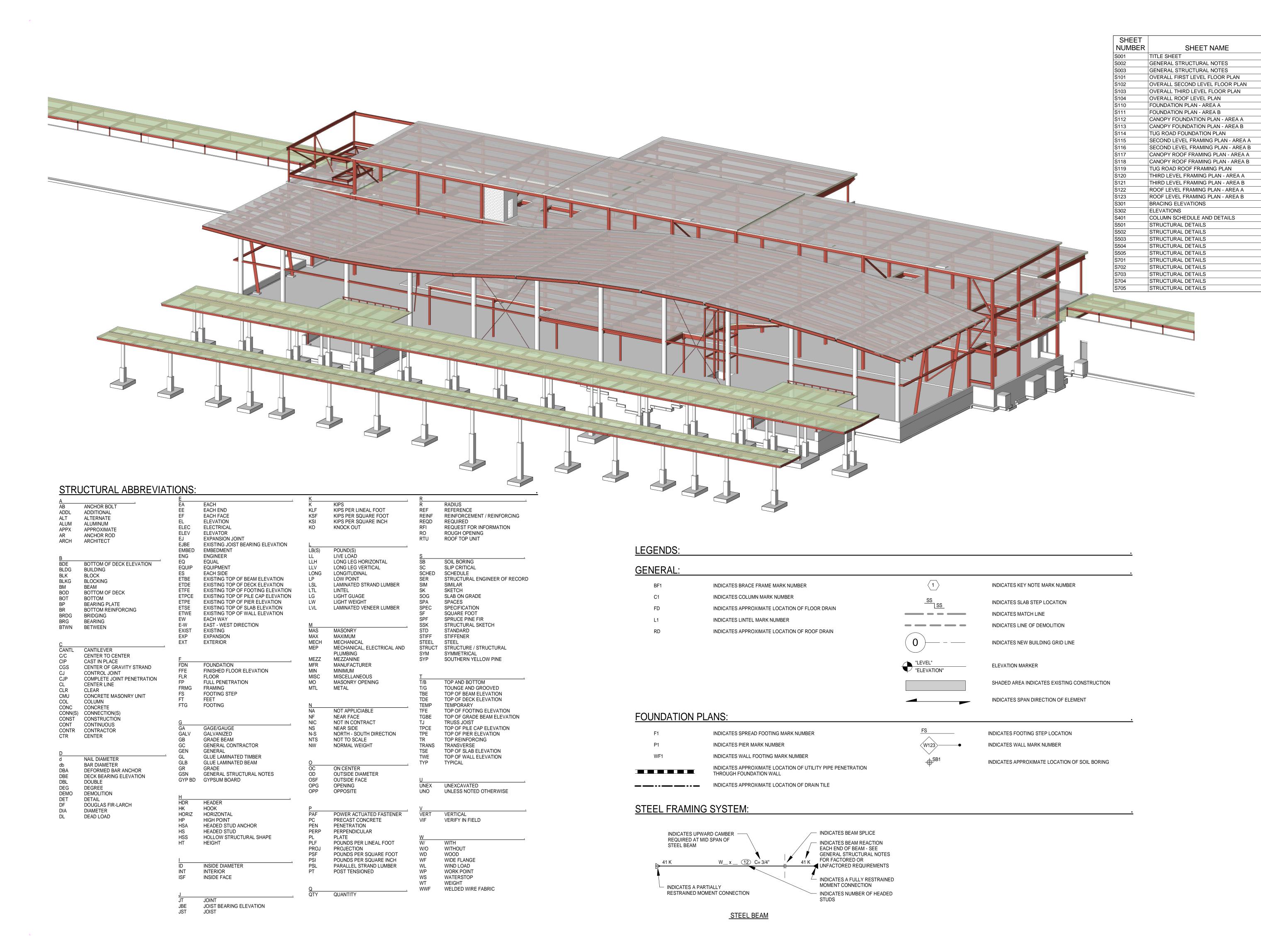
**AEP PROJECT NUMBER** 

213-1882-091

© 2006 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

> THIRD FLOOR LIFE SAFETY **PLAN**

SHEET NUMBER LS103



RSSH.

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW TERMINAL DESIGN

## CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340 Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

# M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

# Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscape Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

REVISIONS

**REVIEWED BY:** 

DRAWN BY: SJL

**DESIGNED BY:** CWB

NO.	DESC	RIPTION	DATE
DATE	ISSUED:	04-12-10	

TITLE SHEET

AEP PROJECT NUMBER

213-1882-091

(C) 2009 REYNOLDS, SMITH AND HILLS INC

SHEET NUMBER **S001** 

These notes specify the requirements for the design represented in these documents. The construction and materials shall comply with all the pertinent codes and references, plans, and details, including (but not limited to) those shown in architectural, civil, mechanical and electrical drawings. The contractor shall verify all dimensions and existing conditions in the field that affect construction prior to

commencing work on the affected element or shop drawing submittals. Resolve any discrepancies with the

The contract structural drawings and specifications represent the completed structure. The contractor is responsible for bracing and shoring (without overstressing) all structural elements as necessary at any stage of construction until completion of the project. The Structural Engineer is not responsible for the contractor's means, methods, sequences or procedures of construction. Contractor shall recognize and consider effects of thermal movements of structural elements during construction period.

The contractor is solely responsible for site safety including all temporary precautionary measures and safety programs. Site observation visits by the Structural Engineer do not include review of the contractor's safety

Refer to architectural, mechanical and electrical drawings for locations, elevations, dimensions, and details of sleeves, inserts, openings, recesses, curbs, housekeeping pads, etc. that are not shown on the structural drawings and do not damage structural members.

Information shown in the structural drawings regarding existing conditions represents the current and general field conditions related to the new work, to the best of our knowledge. Report all discrepancies to the Architect for resolution prior to performing related new work.

Requests for information shall be submitted in writing and shall reference the part of the construction documents

Contractor shall read and understand their duties in the specification and under the building code for special

inspections and coordinate as necessary the owner's responsibilities.

The special inspectors shall be provided and shall only use approved shop drawings.

Special inspection reports are to be submitted immediately to the SER, Architect, and Contractor daily when inspections are performed.

The general contractor shall provide timely notice to the special inspector and sufficient time for the inspector to perform their inspection

SHOP DRAWINGS

that is in question.

architect prior to construction.

All engineering design provided by others and submitted for review shall bear the certification stamp and signature of a qualified professional engineer who is licensed in the state of Minnesota.

Submit shop drawing schedule with construction schedule that includes consideration for review period. See specification for additional information.

**DEFERRED SUBMITTALS:** The following items shall be issued as deferred submittals per IBC: Steel Connections

All items issued as deferred submittals shall be issued a minimum of 30 days prior to installation and shall not be installed until their design and submittal documents have been reviewed for general conformance to the drawings by the general contractor, the engineer of record and the building official. A copy of the deferred submittal shall be forwarded to the city after the engineer of record has reviewed the documents and prior to erection of the deferred

**DESIGN CODES AND STANDARDS:** Minnesota State Building Code, MSBC 2007

2006 International Building Code, as amended and adopted by the MSBC 2007

AF & PA - NDS --05 National Design Specification for Wood Construction and Supplement

ACI 318-05 Building Code Requirements for Reinforced Concrete

ACI 530-05 Building Code Requirements for Masonry Structures, Allowable Stress Design

ACI 530.1-05 Masonry Structures

AISC 360-05 Specification for Structural Steel Buildings

AISI NAS-01 North American Specification for the design of Cold-Formed Steel Structural Members including 2004

ASCE 7-05 Minimum design loads for buildings and other structures including supplement NO. 1 and excluding Chapter 14 and Appendix 11A.

2,000 psi

ASCE 3-01 Structural Design of Composite Slabs

MATERIAL PROPERTIES: Reinforcing Steel (Fy):

ATSM A615 Grade 60 60,000 psi Weldable ASTM A706 Grade 60 60,000 psi

Cast-in-Place Concrete (f'c) at 28 days, UNO:

Controlled Low 1,200 psi (at 5 days) Maximum Strength Material (CLSM) 500 psi (at 5 days) Minimum Footings 4,000 psi Piers and Walls (non-shear) 4,000 psi 4,000 psi Concrete placed over Metal Floor Deck 4,000 psi Slabs on Grade 4.000 psi 4,000 psi Exterior Concrete Masonry Corefill Concrete 3,000 psi 4,000 psi All Concrete not otherwise noted

Concrete Masonry- Prism (f'm): Typical Units:

Structural Fasteners:

Structural Steel (Fy): Wide Flanges 50,000 psi ASTM A992 Angles, Channels 36.000 psi ASTM A36 Grade B Rectangular HSS ASTM A500 46,000 psi Grade B Round HSS 42,000 psi ASTM A500 ASTM A53 Grade B Steel Pipe 35,000 psi Plates, Bars 50,000 psi ASTM A572

ASTM A325 Typical High-Strength Bolts 92,000 psi ASTM A490 High-Strength Bolts as noted on plan 150,000 psi ASTM F1554 Grade 36 Anchor Rods, UNO 36,000 psi 36,000 psi ASTM A36 Threaded Rods Direct -Tension Indicator Washers as noted on plan ASTM F959

Cold-formed Light Gauge Metal Framing (Fy): ASTM A653 Studs, Joists, Braces-16 ga. and heavier 50,000 psi Studs, Joists, Braces-18 ga. and lighter 33,000 psi ASTM A653 Track, Channels and Accessories ASTM A653 33,000 psi

**DESIGN LOADS:** Primary Frame Wind Data: Basic Wind Speed: Wind Importance Factor: 1.15 Exposure:

Primary Seismic Data: No design required

Component Loads: Exterior Component/Cladding: Supplier to develop based on MSBC 2007 and to indicate on shop drawings.

**GRAVITY LOADS:** Roof Snow Load:

Ground Snow Load, Pg: 60 psf Flat-Roof Snow Load, Pf: 42 psf Snow Exposure Factor, Ce: 0.70 Snow Load Importance Factor, I: Unbalanced/Drift Snow Load: As required by ASCE 7

Floor Loads: Live Load:

Mechanical Rooms

100 psf (not reducible) Hanging loads at underside of 2nd floor: Stairs, Corridors and Lobbies: 100 psf (not reducible) Stair Tread Concentrated Load:

Exterior Site Surcharge Loads: Fire Trucks: Sidewalk:

Provisions For Future Expansion: Design for additional 30' bay (3 story) between grids "E" and "G", east of grid 12 and west of grid 1.

Design for one story expansion of 3rd floor office space north of grid "G".

Refer to Geotechnical report number AET #07-04216.2 by American Engineering Testing, Inc., dated October 14, 2009 and the subsequent addendum (AET project #07-04216.3) dated January 29, 2010.

250 psf

250 psf

125 psf (not reducible)

The contractor shall verify the location of all existing and new underground utilities and tanks prior to beginning excavation and contact Gopher State One Call.

The minimum dimension from exterior grade to bottom of footing and foundation shall be 72" in unheated areas.

For underground utilities adjacent to foundations and through foundations reference drawings for detail showing step footings below utilities as required to avoid undermining of structure by utilities.

See geotechnical report for water table elevations. Contractor to make adequate provisions for dewatering as

Footings are designed for a maximum allowable soil bearing pressure of 8000 pounds per square foot on undisturbed native soil or lean mix concrete/controlled low strength material fill. Soil bearing pressure is to be verified in the field during construction by a qualified Geotechnical Engineer.

All topsoil, fill, organic swamp deposits, and/or other unsuitable bearing material shall be removed below the footings and/or within the building area to the depths indicated in the geotechnical engineering report and extent of removal shall be field verified by the Geotechnical Engineer.

For footings that do not bear on natural undisturbed soil, extend engineered fill laterally beyond bottom edge of footing for a distance equal to the depth of engineered fill. Reference drawings for details.

Foundation and retaining walls shall be back filled with free draining fill approved by the Geotechnical Engineer.

Provide drain tile required by the contract documents and verify with architect and civil engineer. Backfill equally on both sides of foundation walls to prevent overturning or lateral wall movement, or brace as

For stepping of wall footings reference drawings for detail.

**REINFORCED CONCRETE:** 

The detailing, fabrication and erection of all reinforcing shall be done in accordance with the latest edition of ACI-315, "Manual of Standard Practice for Detailing Reinforced Concrete Structures and ACI-318, "Building Code Requirements for Structural Concrete.'

All reinforcing bars are deformed and continuous, unless noted otherwise. Refer to drawings for reinforcing lap length schedule.

Provide suitable wire spacers, chairs, etc. for support of reinforcing steel in proper position while placing concrete. All bars shall be tied to prevent displacement while placing concrete. All chairs and slab bolsters shall be plastic or steel with plastic tips. When reinforcing steel is epoxy coated or p/t tendons are fully encapsulated, all chairs and slab bolsters shall be epoxy coated or plastic and all support bars shall be epoxy coated. Chairs are to be stable and resist tipping. Acceptable products are GTI or approved equal.

The fabricator shall submit a complete list of accessories and placing details with the shop drawings.

No horizontal construction joints shall be placed in beams, joists, or slabs, unless shown on drawings.

proposed construction joint locations to the Structural Engineer of Record for review prior to placement of concrete. Where new concrete is placed against existing concrete, the existing concrete shall be roughened to a minimum 1/4"

Locate vertical construction joints in beams and slabs at central one third of span. Refer to drawings for details. Submit

Refer to drawings and ACI 318 Chapter 6 for placement guidelines of embedded pipes, sleeves, and conduits. Conduits are not permitted in slabs 3 inches or less in thickness.

Provide a 3/4 inch chamfer for all exposed concrete corners. See Architectural drawings for details and additional

The general contractor shall notify the Special Inspector a sufficient period in advance of placing concrete to allow required inspections and testing to occur in a timely fashion.

Formwork and all shoring for flatwork shall be left in place until the concrete reaches at least 75 percent of the 28-day compressive strength. Design of shoring and reshoring is the responsibility of the contractor and shall conform to ACI

Aluminum conduit, aluminum sleeves and aluminum embeds are not permitted in concrete.

Exterior concrete to have 6% +/- 1% entrained air.

Calcium chloride is not permitted as a concrete additive.

Concrete Cover on Reinforcing:

Topping Slab: 3/4" clear top Slab on Grade: Middle of slab Footings: 3" clear bottom and sides

2" clear top Walls: #5 and smaller 1 1/2" clear earth or weather face #6 and greater 2" clear earth or weather face 3/4" interior face Columns and Beams: 1 1/2" clear to ties or stirrups

CONCRETE SLABS ON GRADE: Slabs on grade shall be place in lane fashion.

The control or construction joints shall be placed as shown on the drawings. The joints shall align with the column grids and be spaced as noted below:

Exterior slabs 24 times slab thickness, maximum; Interior slabs 36 times slab thickness maximum: Interior slabs 48 times slab thickness, maximum, with carpeting

The panels formed by control or construction joints shall not be "L" shaped and a rectangular panel's aspect ratio shall not exceed 1.5.

Refer to the drawings for the typical slab on grade construction and saw cut control joint detail. Control and construction joints must be continuous and not offset.

Refer to drawings for detail of isolation diamonds or circles at columns.

Refer to drawings for reinforcing at re-entrant corners. Bend bars as necessary at obstructions.

Refer to the specification for the existence, type, and thickness of interior ground vapor retarder. Locate a vapor retarder directly beneath the slab on grade on top of a 6 inch compactable granular base. Refer to the specification for requirements for the compactable granular base.

Mechanically vibrate concrete around trench drains, floor ducts, construction joint dowels, loading docks, architectural features and other embedded items.

Refer to the specification for slab on grade pre-placement meeting.

Refer to the specification for acceptable methods of curing the concrete.

Refer to flooring manufacturer's specification for levelness, flatness and curing of concrete slabs on grade to receive special architectural floor finishes.

REINFORCED MASONRY: All masonry units are placed in running bond fashion. Corners shall have a standard bond by overlapping units.

Special shapes shall be provided for jambs, columns, pilasters, control joints, corners, and lintels.

All masonry walls shall have horizontal joint reinforcing spaced at 16" o.c. Horizontal joint reinforcing shall be truss style and fabricated with galvanized nine-gauge wire and shall include corner and intersecting wall pieces. Provide minimum 6" laps at all splices.

Vertical reinforcing shall be held in place by rebar positioners, crossties, chairs, or tying to every other layer of horizontal reinforcing steel. Refer to the detail in the drawings for vertical reinforcing bar location in a core.

Provide concrete cover of minimum 1/2" to face shell.

Refer to detail in the drawings for reinforcing bar lap lengths. Extend vertical reinforcing from footings to 2" clear top of wall or to beam bearing. Extend vertical reinforcing into the

next level of construction and lap in accordance with the lap schedule. When typical vertical wall reinforcing is interrupted by long wall openings, provide typical vertical wall reinforcing above and below opening, and extend into horizontal bond beams. Refer to the schedule on the drawings, for

masonry wall opening lintels. Refer to the detail in the drawings for masonry openings minimum jamb reinforcing. Provide vertical reinforcing at the ends of walls and at wall intersections to match specified reinforcing. Run

All masonry units shall be placed with full face shell mortar coverage on horizontal and vertical face shells. Webs shall also have full mortar coverage around all grouted cells.

Fill block core at vertical reinforcing (8" minimum length along wall) with concrete grout. Filling cores with mortar is not allowed. Vibrate in place. Rodding and puddling are not allowed.

Maximum lift height is four feet. For concrete core fill pour height up to maximum 8'-0", provide cleanouts if pour height exceeds 5'-0".

Masonry cement mortar is not allowed.

reinforcing full height of walls.

Calcium chloride or admixtures containing chloride shall not be used in mortar or grout.

For reinforced masonry bond beams, provide bent corner bars at corners and intersections that match reinforcing. Step bond beams as necessary to match roof slopes. Lap reinforcing bars per schedule.

For construction of masonry control joints refer to detail in drawings.

Unless noted otherwise on the drawings place control joints in masonry walls such that no straight run of wall exceeds 24'-0" and within 4'-0" of corners. Do not place control joints within 48 inches of a masonry opening jamb

Place bond beam reinforcing continuously through control joints. Do not splice bond beam reinforcing within 6'-0" of

Provide bond beam with reinforcing at all floor lines, roof lines, and top of walls. Refer to details in the drawings. Grout below steel bearing plate and refer to the drawings for additional information.

Refer to drawings for reinforcing schedule, top of wall bracing, thickened bearing slab and lintel schedule for nonbearing masonry walls. Refer to Architectural drawings for location and extent.

MASONRY BEAMS (HIGH-LOW BOND BEAMS): For all masonry beams use lintel blocks.

Masonry beams are to bear 8" minimum at jambs, minimum. Extend vertical reinforcing through masonry beam

Extend horizontal reinforcing full length.

Grout masonry beams solid. Mechanically vibrate grout in place.

LOOSE ANGLE BRICK LINTELS:

Fit lintel such that vertical leg is tight to back of brick, locate brick ties to backup at first bed joint above angle's vertical leg and provide minimum 8" support each end.

Refer to architectural drawing for locations and to drawings for size span criteria, and loading limits.

**EXPANSION AND ADHESIVE ANCHORS:** 

Anchors in concrete or concrete masonry when not exposed to earth, weather, or corrosive environment shall be

Expansion anchors shall be stud type with a single piece three section wedge and zinc plated in accordance with ASTM B633.

Threaded anchor rod for adhesive anchors in concrete shall be ASTM A193. Grade B7. or ASTM A36, as noted in the drawings. The adhesive used for anchors shall be a structural grade, two part epoxy or acrylic material that meets the requirement of ASTM C-881 Types I, II, IV, and V, Grade 3, Classes B and C as noted on plans.

Holes shall be drilled with a bit and cleaned using a method that complies with the manufacturer's guidelines, and specifications. Do not cut or damage reinforcing steel or P-T tendons.

Upon the request of the structural engineer the anchors shall be proof tested by the manufacturer to verify capacity of anchors that do not meet the conditions in the construction documents.

Minimum embedment depths in concrete and concrete masonry for expansion and adhesive anchors shall be as noted below:

Concrete base material: For 1/2", 5/8", and 3/4" diameter expansion anchors provide 4 3/4"embed, UNO on plan.

For 1/2", 5/8", and 3/4" diameter expansion anchors provide 4 3/4" embed, UNO on plan.

For 1/2" and 5/8" diameter adhesive anchors provide 5" embed. For 3/4" diameter adhesive anchors provide 7" embed, UNO on plan.

Grouted solid concrete masonry unit material:

For adhesive anchors refer to the product's ICBO Report.

Pre-approved manufacturer are as follows: HILTI, ITWR Ramset/Redhead, Powers Fasteners, and Simpson

Strong-Tie. For review of alternate products, submit manufacture's product data and product's current ICBO

Anchors in concrete or concrete masonry when exposed to earth, weather, or corrosive environment shall be manufactured from AISI 304/316 Stainless Steel.

unless noted otherwise.

Structural steel shall be detailed, fabricated and erected in compliance with AISC Specification for the design, fabrication, erection of structural steel for building, and Code of standard practice, and OSHA steel erection

All beams and girders shall be cambered at mid-span as indicated on the structural drawings. The cambers indicated shall be present in the beam in its erected position after completion of the end connections and shall be verified prior to placing concrete. Cambering tolerances shall be (-0", +1/4"). No center point cambering allowed.

Modification of structural steel members in the field is not allowed without written approval by the structural

Splicing structural members where not detailed on the drawings is prohibited without prior approval of the

All composite beams using the concrete slab as a compression flange are designed for unshored construction

Anchor rods shall be minimum 3/4" diameter or as detailed in drawings.

STRUCTURAL STEEL CONNECTIONS:

is licensed in the state of Minnesota.

All steel connections shall be designed by the steel fabricator for the criteria indicated on the drawings unless noted or detailed otherwise. Connection design shall conform to the requirements of the AISC Specifications for the design, fabrication, erection of structural and OSHA regulations. Submit calculations certified by a Professional Engineer who is licensed in the state of Minnesota.

Non-composite beams: Unless noted otherwise, design simple beam shear connections per the AISC Manual connection tables. The required end reaction shall be based on the maximum allowable uniform load for the given span or the reactions indicated on the plans. Design connections for the reactions based on the above or for the minimum connection requirements indicated in the Connection Schedule, whichever provides the greater capacity.

Composite beams: Design simple composite beam shear connections per the AISC Manual connection tables UNO. Design connections for the reactions indicated on the plans or the minimum connection requirements indicated in the Connection Schedule, whichever provides the greater capacity.

Unless detailed otherwise, beam shop connections may be welded or bolted and field connections are to be bolted. Bolts shall be a minimum 3/4" diameter for connections specified or detailed in the drawings. The fabricator may submit an alternate connection with the calculations that is certified by a professional engineer who

All beam web copes must be made to a 1 inch minimum radius.

Welded connections shall be made in accordance with ANSI/AWS D1.1 Structural Welding Code using E70XX electrodes unless noted otherwise. Weld sizes not shown or controlled by the required forces shall be AWS code minimum size. Welds shall be visually inspected for compliance with the AWS code visual inspection criteria. Welders shall be qualified in accordance with ANSI/AWS D1.1 and shall be experienced in weld in structural steel.

Full penetration welds shall be tested using NDT methods such as ultrasonic, magnetic particle or other methods referenced in the AWS code. Welds subject to NDT methods shall also have been found compliant with the AWS visual inspection criteria.

STEEL ROOF DECK: Manufacturer shall be a current member of the Steel Deck Institute (SDI).

Detail, manufacture and install steel roof deck and accessories in accordance with the SDI specifications and

codes and OSHA requirements. Steel roof deck shall be as noted on plan.

Welding shall be in accordance with AWS D1.3. Welders shall be qualified in accordance with AWS D1.3.

Where spray-on fireproofing of the deck is required, the contractor shall verify that the deck finish is compatible with the proposed fireproofing material to ensure proper bonding of the fireproofing. Coordinate fireproofing locations and requirements with the architect.

All steel deck shall span a minimum of three spans, unless otherwise approved by the engineer. Deck ends are

to be lapped over supports. Contractor shall verify the location and extent of acoustical steel deck with the architectural drawings.

Reference drawings for detail on steel roof deck fastening requirements unless noted otherwise. Powder actuated

or pneumatically driven fasteners are not allowed. Provide reinforcement or frames for deck openings as indicated on the drawings.

LIMITATIONS ON M/E SUPPORT FROM PRIMARY STRUCTURE: All M/E systems shall be supported from the primary structural frame, unless noted otherwise. Do not connect to roof deck, floor slabs, or secondary members unless specifically allowed on the structural construction

All M/E support systems, hangers, brackets and connections to the primary structural frame shall be designed,

provided and installed by the M/E contractor, unless noted otherwise on the structural construction documents. All M/E supports and connections for loads in excess of 300 lbs shall be designed by a structural engineer

licensed in the state of Minnesota and engaged by the M/E contractor. COMPOSITE STEEL FLOOR DECK:

Manufacturer shall be a current member of the Steel Deck Institute (SDI). Composite steel floor deck shall be as noted on plan.

Detail, manufacture and install composite steel floor deck and accessories in accordance with the SDI specifications, codes and OSHA steel erection standards.

Refer to drawings for composite steel floor deck fastening requirements unless noted otherwise. Powder actuated or pneumatically driven fasteners are not allowed.

Provide and install pour stops, column closures, end closures, cover plates and girder fillers and other accessories as required by the SDI unless otherwise indicated or detailed.

Where spray-on fireproofing of the deck is required, the contractor shall verify that the deck finish is compatible with the proposed fireproofing material to ensure proper bonding of the fireproofing. Coordinate fireproofing locations and requirements with the architect.

Provide reinforcement or frames for deck openings as indicated on the drawings.



Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL** DESIGN

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

> M/E/P/FP Engineers: COSENTINI 1 East Wacker Drive, Suite 103, Chicago IL 60601

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (312) 670-1800 / FAX: (312) 670-1801

TEL: (203) 792-3000 / FAX: (203) 792-4900

TEL: (218) 591-5079

Landscape Consultants: **APPOLD DESIGN** 2432 East First Street, Duluth MN 55812

**REVISIONS** 

NO.	DESCRIPTION	DAT

**DATE ISSUED:** 04-12-10 **REVIEWED BY:** 

DRAWN BY:

**DESIGNED BY:** CWB AEP PROJECT NUMBER

SJL

213-1882-091 (C) 2009 REYNOLDS, SMITH AND HILLS INC

SHEET TITLE **GENERAL STRUCTURAL** 

SHEET NUMBER

NON-COMPOSITE STEEL FLOOR DECK:

Manufacturer shall be a current member of the Steel Deck Institute (SDI).

Non-composite steel floor deck shall be as noted on plan.

Detail, manufacture and install non-composite steel floor deck and accessories in accordance with the SDI specifications and codes and OSHA steel erection standards.

Refer to drawings for non-composite steel floor deck fastening requirements. Powder actuated or pneumatically driven fasteners are not allowed.

Where spray-on fireproofing of the deck is required, the contractor shall verify that the deck finish is compatible with the proposed fireproofing material to ensure proper bonding of the material. Coordinate locations and requirements with the architect.

Provide reinforcement or frames for deck openings as indicated on the drawings.

LIGHT GAUGE METAL FRAMING:

The design and connection detailing of all light gage material including, but not limited to exterior studs, bearing studs, headers, jambs, joists, rafters and anchorage shall be by the Light Gauge Supplier. The design for systems other than bearing framing shall meet the following criteria:

Stud in exterior walls shall be minimum 600S162-43 (6"-18 gauge) studs at 16" OC. See architectural for additional spacing requirements at exterior finishes.

Studs shall be cold rolled steel, galvanized, C shape, with minimum 1 5/8" flange and minimum 1/2" return. They are to be punched for utility access and galvanized to G60 coating per ASTM 525.

At all openings in exterior and bearing walls provide a minimum two studs full wall height each side of opening and a minimum one additional stud each side for lintel bearing.

Anchor bottom track to concrete or masonry with minimum 5/32" x 1 1/4" power driven fasteners at 16" OC.

Top and bottom tracks shall be cold rolled or break formed steel, galvanized U shaped and minimum 18 gauge and as noted on the drawings.

Light gauge metal framing fasteners shall be minimum #10 self-drilling sheet metal screws, 16 threads per inch, with low profile head. Provide a minimum of two screws per connection unless noted

Fasten light gage framing to wood with minimum #10 x 1 7/8" bugle head wood screws. Pre-drill holes in metal studs. Provide a minimum of two screws per connection unless noted otherwise.

All framing components shall be squarely cut for attachment to perpendicular members. Stud ends must seat tightly into tracks for all bearing applications.

At all wall elements, provide 1 1/2"-16 gauge horizontal channel bridging to prevent stud rotation. For all axial loaded walls, space bridging at 4'-0" OC. For all non-load bearing exterior walls, space bridging at 5'-0" OC.

Wall stud deflection criteria:

For wall studs providing lateral support to masonry veneer and cementitious stucco, provide L/600.

For wall studs providing lateral support to other materials, provide L/360.

Joist and rafter deflection criteria:

Live Load Deflection is L/360.

Total Load Deflection is L/240.

An additional joist shall be provided under parallel non-load bearing partition walls.

The light gauge supplier shall submit certified shop drawings and design calculations prepared by a qualified Professional Engineer registered in the state of Minnesota. See project specification manual for additional submittal requirements.

All light gauge designations are in accordance with the Steel Stud Manufacturers Association (SSMA).

Refer to architectural drawings and specification for size, minimum gage, extent, and location of interior non-bearing light gage framing not shown on the structural drawings. Interior light gauge framing is to be designed for 5 psf lateral pressure by the light gauge supplier.

Temporary bracing shall be furnished by the light gauge supplier and framing installer and maintained until permanent systems providing lateral stability are in place.

Welding shall conform to the American Welding Society (AWS) "Structural Welding Code - Sheet Steel, D1.3 - Current Edition." Welders shall be qualified in accordance with AWS D1.3 and shall be experienced in light gage welding.

All light gage material to be welded must be nominal 16 gauge or thicker.

Touch up all light gage material at welds with zinc-rich paint.

Align load bearing wall studs with floor or roof joists.

Splices in studs, joists, and headers, are not permitted, unless approved in writing by the structural engineer.

Framing components may be pre-assembled into panels prior to erecting. Prefabricated panels shall be square, with components attached in a manner that prevents racking.

# SPECIAL INSPECTION SCHEDULE:

SPECIAL INSPECTIONS REQUIRED OF STRUCTURAL ELEMENTS (PER IBC 2006, CHAPTER 17):

4 04-51 *	Continuous	Periodic	Not Req'd	See Arch.	T 11 47040
1. Steel					Table 1704.3
1.1 Welding					
1.2 Details					
1.3 High-strength Bolts					
2. Concrete					Table 1704.4
2.1 Reinforcing steel including Prestressing tendons					
2.2 Bolts installed in concrete					
2.3 Required design mix	$\Box$		$\Box$	$\Box$	
2.4 Sampling			Ī	Ē	
2.5 Shotcrete	┌	一		Ē	
2.6 Curing techniques	$\Box$		┌	$\Box$	
2.7 Prestressed concrete				$\Box$	
forces and grouting	_	_	_	_	
2.8 Erection of precast concrete members					
2.9 Verification of IN-SITU concrete strength					
3. Masonry					
3.1 Level 1 Special Inspection *					1704.5.1,
	_		_	_	1704.5.2,
					Table 1704.5.1
3.2 Level 2 Special Inspection					1704.5.3, Table 1704.5.3
4. Wood	П				1704.6
5. Soils	<b>=</b>		┌	Ē	1704.7
6. Pile Foundations	− −			Ħ	1704.8
7. Pier Foundations	Ä			Ä	1704.9
8. Wall Panel and Veneers	H	H			1704.10
9. Sprayed Fire-Resistant Materials					1704.11
0. Exterior Insulation and		Ħ	Ī		1704.12
Finish Systems (EIFS)				_	
11. Special Cases					1704.13
<ol><li>Smoke Control Systems</li></ol>					1704.14
	<u> </u>		<del></del>		

<sup>\*</sup> Please see referenced tables for exceptions.



Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH

**AUTHORITY** 

INTERNATIONAL AIRPORT DULUTH, MN

NEW TERMINAL DESIGN

CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340 Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802

M/E/P/FP Engineers:

COSENTINI

TEL: (218) 722-1056 / FAX: (218) 722-9306

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810

Landscape Consultants:
APPOLD DESIGN
2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

TEL: (203) 792-3000 / FAX: (203) 792-4900

REVISIONS

NO.	DESC	CRIPTION	DATI
DATE	ISSUED:	04-12-10	

REVIEWED BY:

DRAWN BY: SJL

DESIGNED BY: CWB

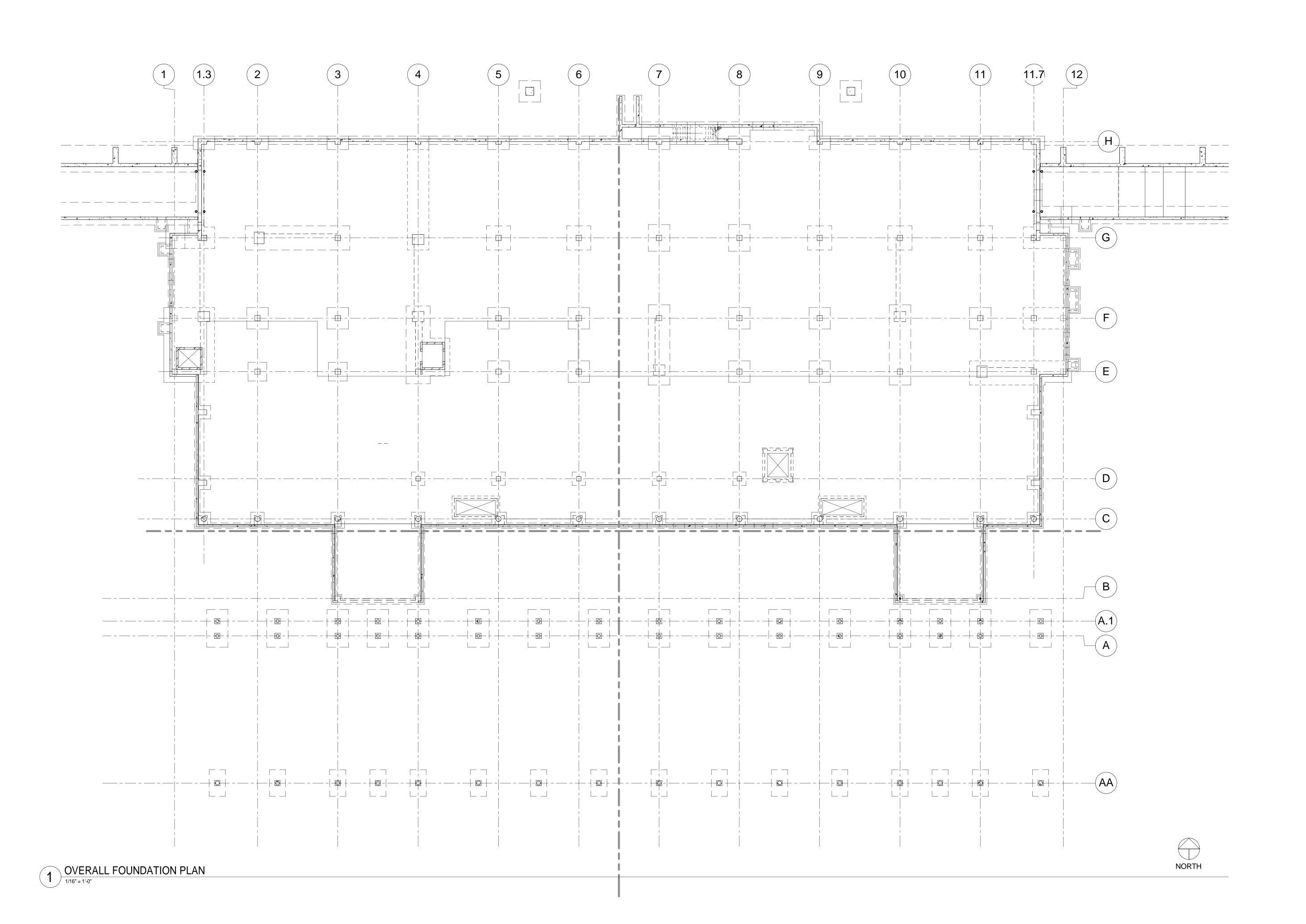
AEP PROJECT NUMBER

213-1882-091
(c) 2009 REYNOLDS, SMITH AND HILLS INC.

GENERAL STRUCTURA

STRUCTURAL NOTES

SHEET NUMBER





4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW TERMINAL DESIGN

CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340 Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI

At Wasker Price Suite 103, Chie

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.**101 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

TEL: (218) 591-5079

Landscape Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

REVISIONS

NO.	DESC	RIPTION		DAT
<b>DATE ISSUED:</b> 04-12-10				
DEVIEWED BY				

REVIEWED BY:

DRAWN BY: SJL

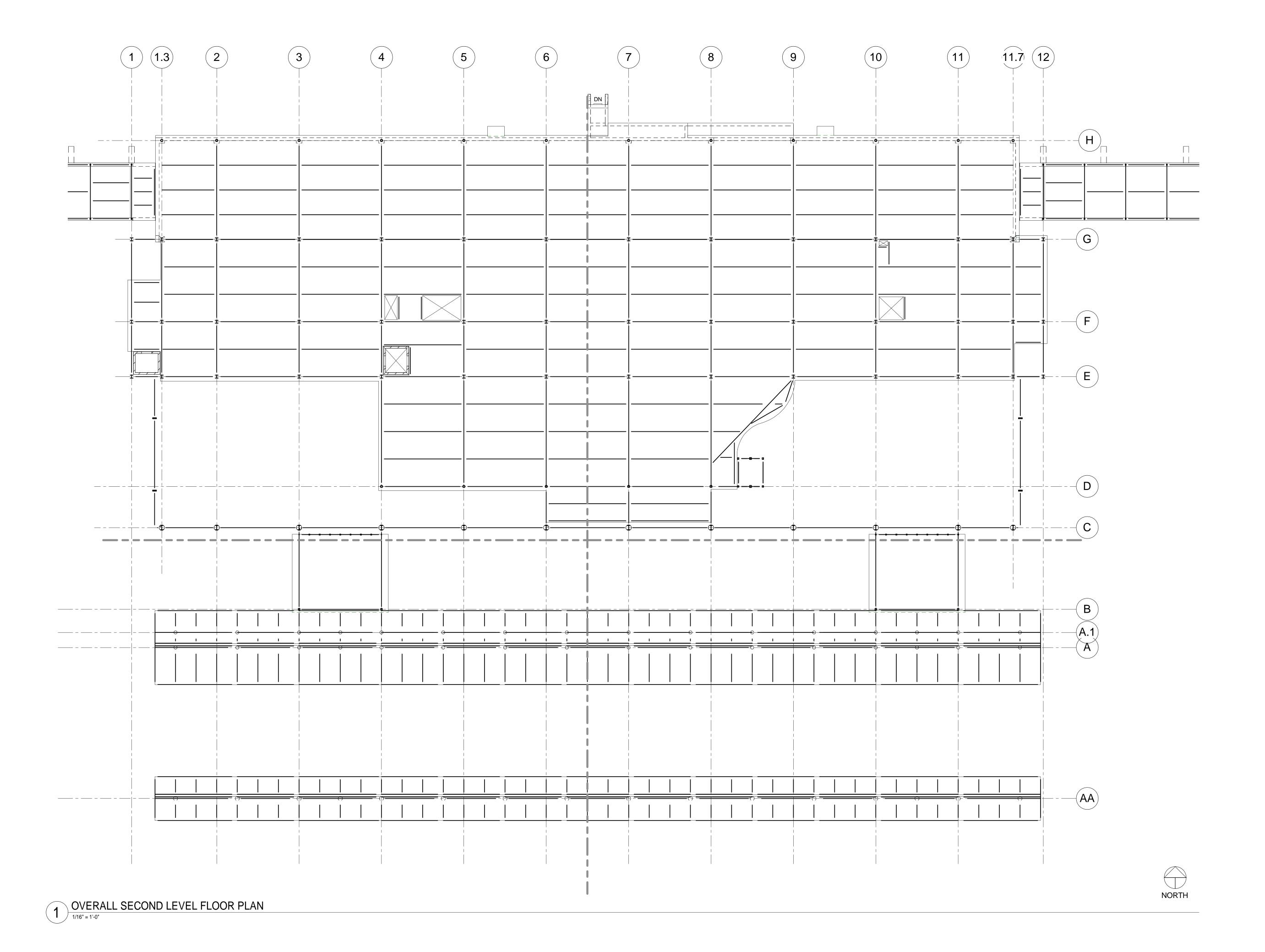
DESIGNED BY: CWB

AEP PROJECT NUMBER

213-1882-091
(C) 2009 REYNOLDS, SMITH AND HILLS INC

OVERALL FIRST LEVEL FLOOR PLAN

SHEET NUMBER
S101





4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

## **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

#### M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

#### Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscape Consultants: APPOLD DESIGN

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

REVISIONS
INE VICIOI 10

NO.	DESC	CRIPTION		DAT	
DATE ISSUED:		04-12-10			
	DE\((E\(\)(E\) D\()				

REVIEWED BY:

**DESIGNED BY:** CWB

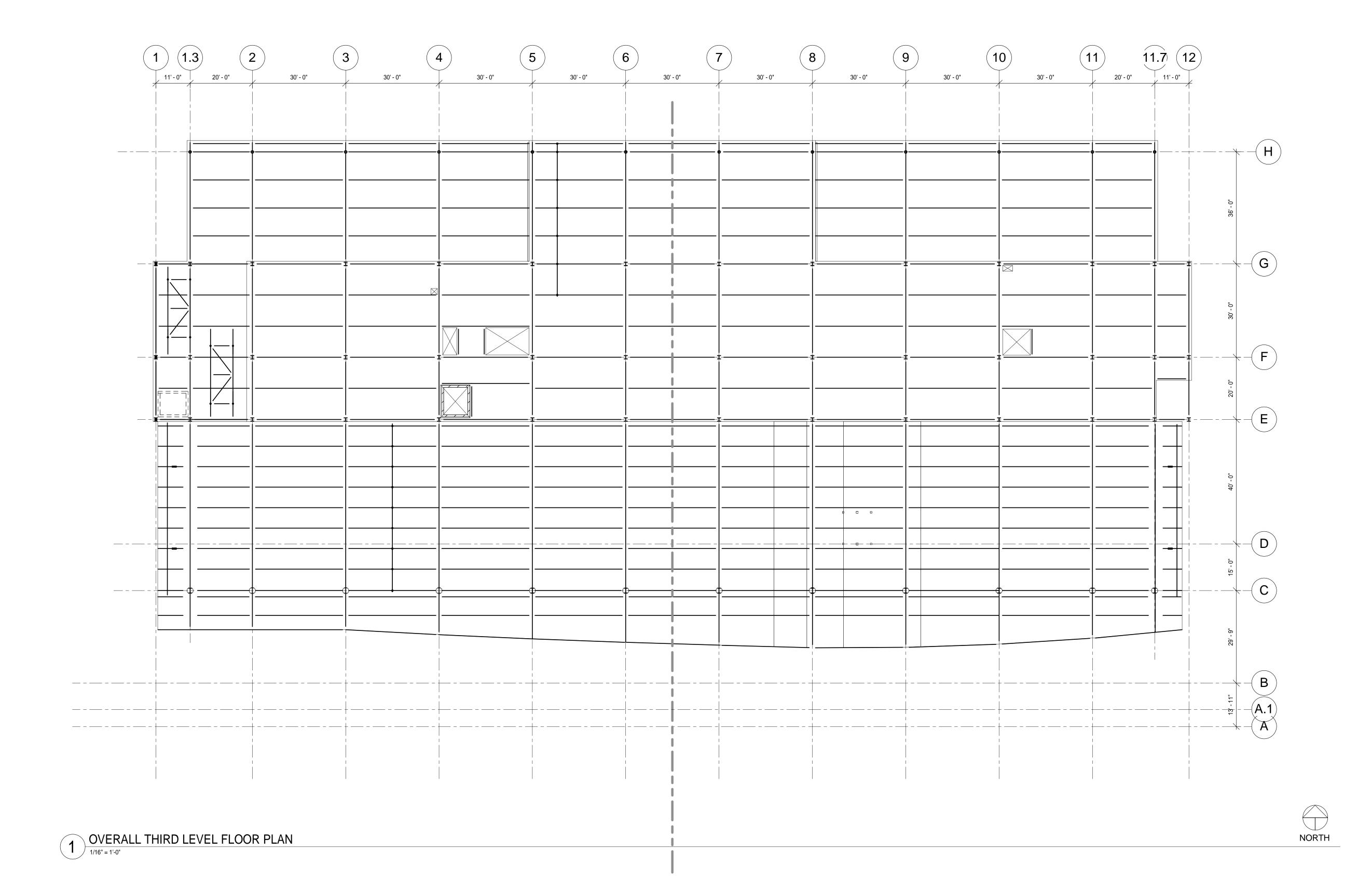
AEP PROJECT NUMBER

213-1882-091

SHEET TITLE

**OVERALL SECOND LEVEL FLOOR PLAN** 

> SHEET NUMBER **S102**





4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW TERMINAL DESIGN

# CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340 Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

# M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

# Landscape Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

# REVISIONS

NO.	DE2	CRIPTION	DATE
DATE IS	SUED:	04-12-10	

REVIEWED BY:

REVIEWED

DESIGNED BY: CWB

AEP PROJECT NUMBER

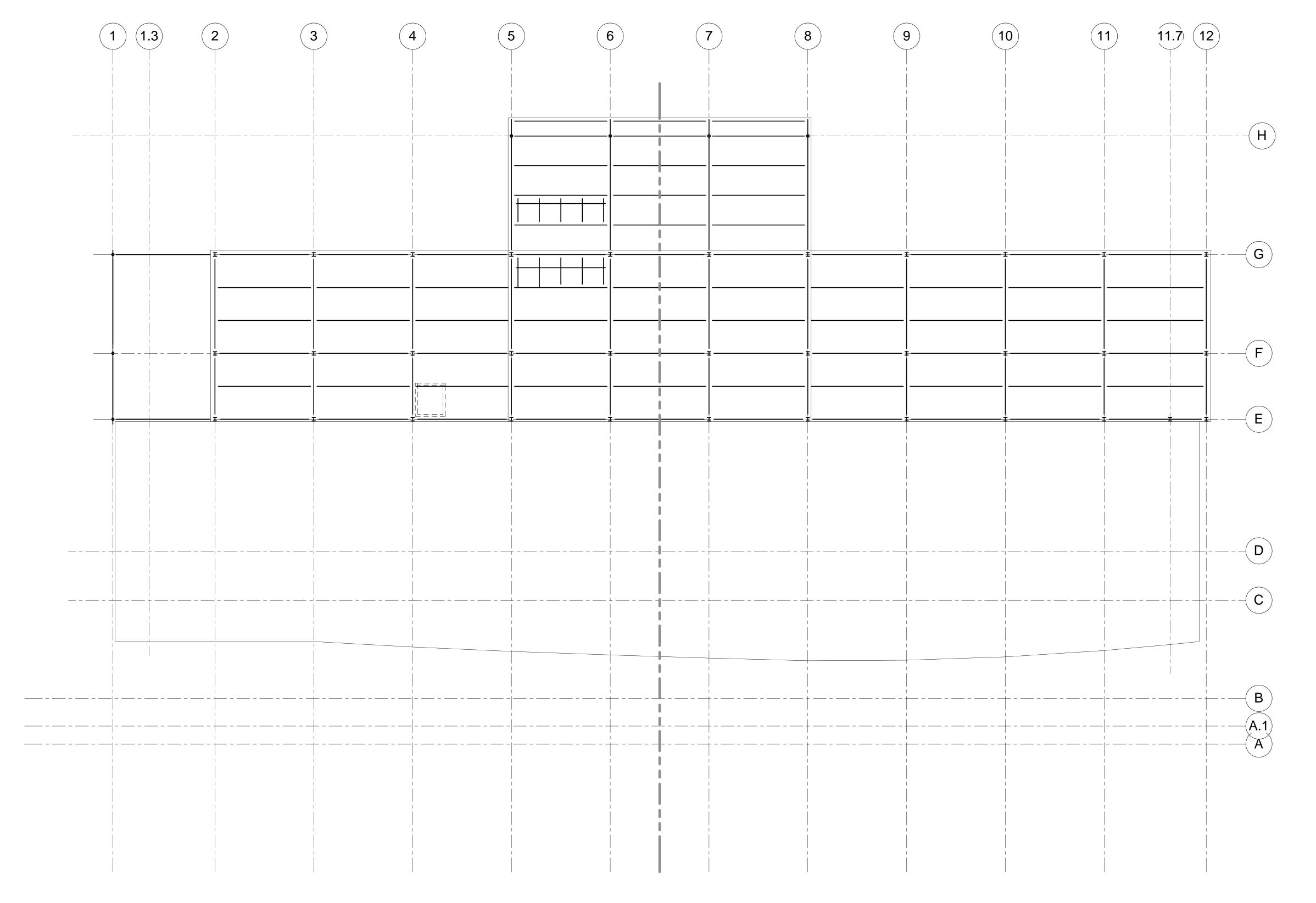
213-1882-091

213-1882-091
© 2009 REYNOLDS, SMITH AND HILLS INC.

OVERALL
THIRD LEVEL
FLOOR PLAN

SHEET NUMBER

**S103** 







IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



**DULUTH** INTERNATIONAL **AIRPORT DULUTH, MN** 

**NEW TERMINAL DESIGN** 

## **CONSULTANTS**

Interior Architects: SJA ARCHITECTS
11 E Superior Street Suite 340 Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

#### M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

#### Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscape Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

REVISIONS

NO.	DES	CRIPTION	D
		04.40.40	
DATE	E ISSUED:	04-12-10	

**REVIEWED BY:** 

DESIGNED BY: CWB

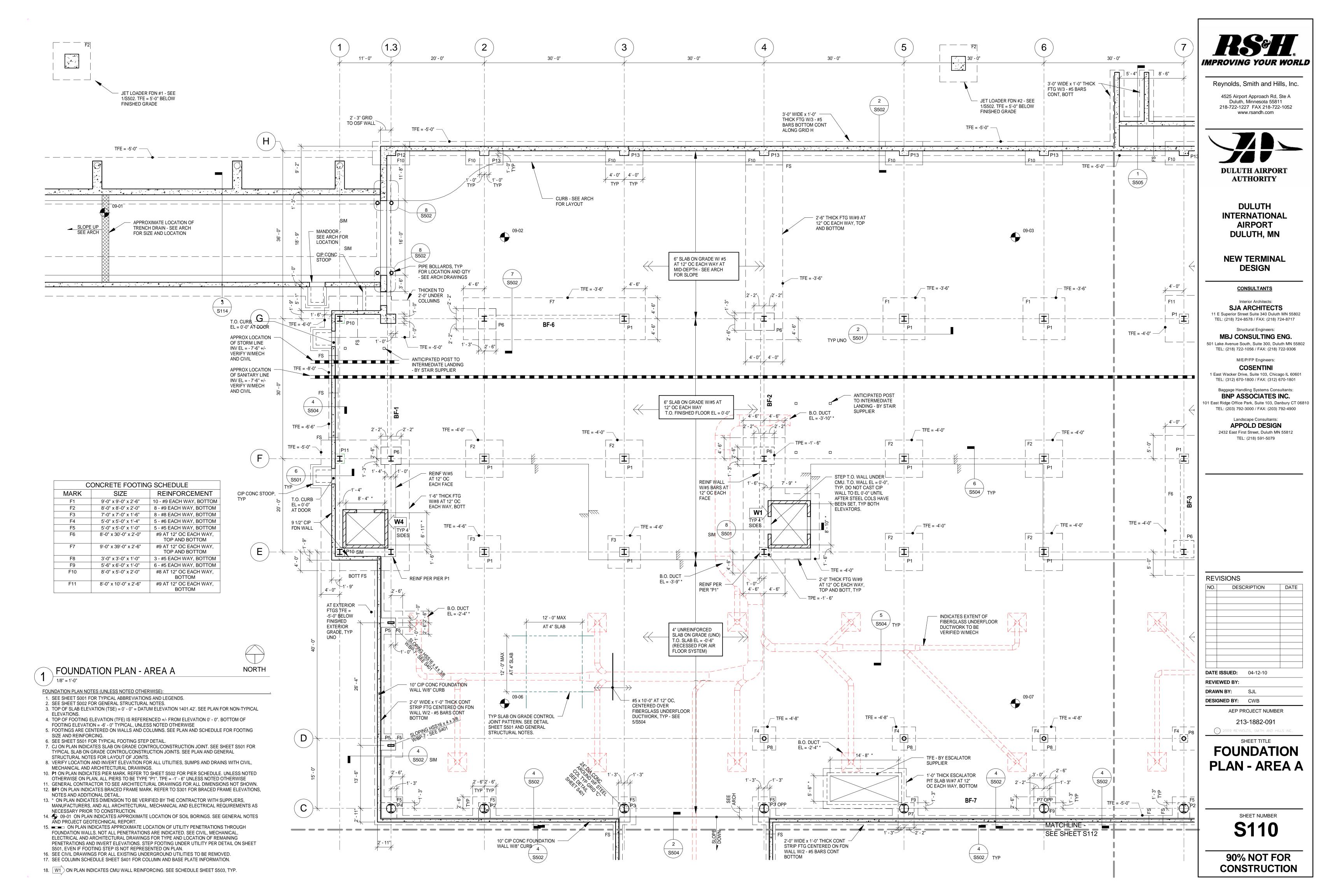
AEP PROJECT NUMBER

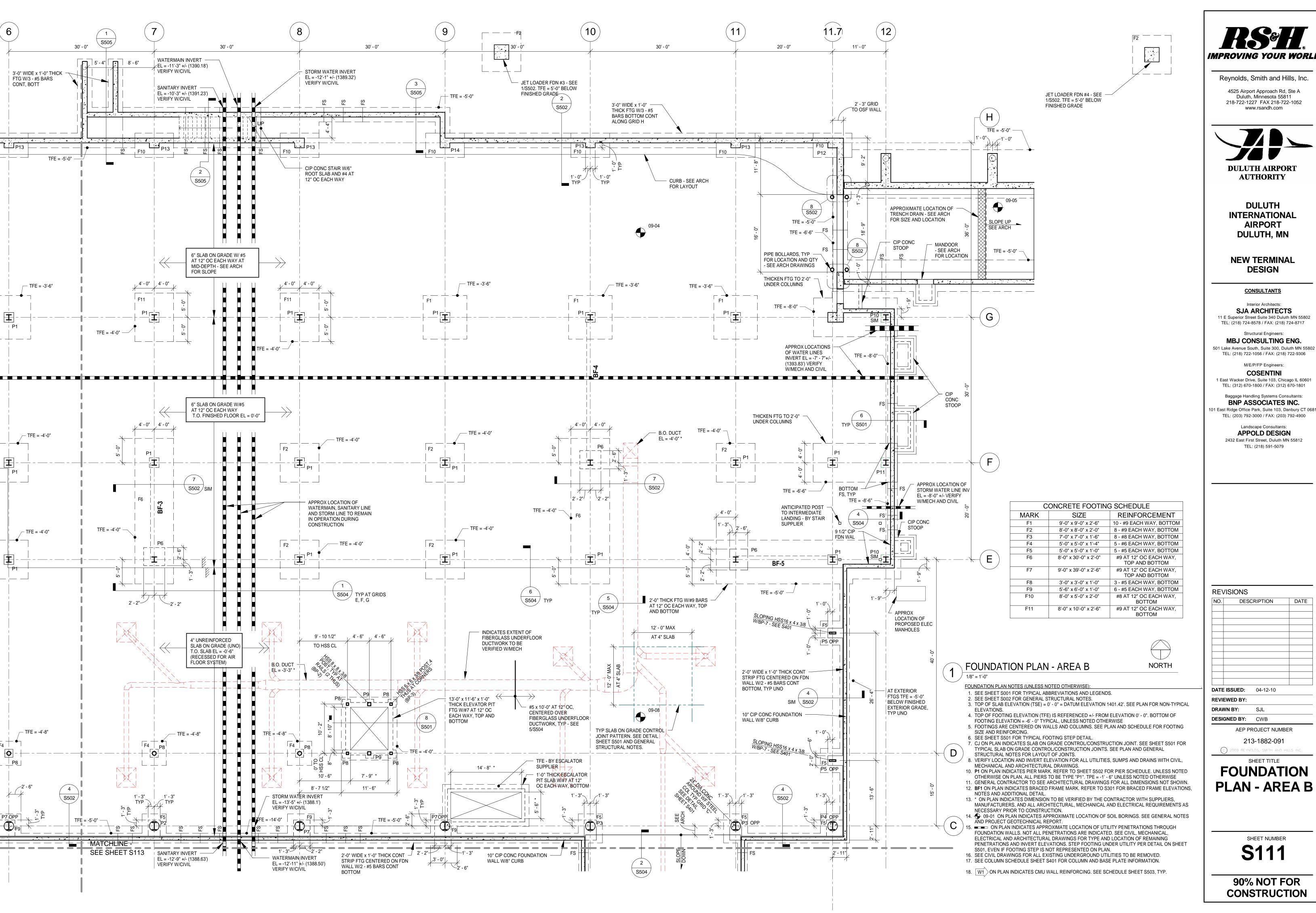
213-1882-091

SHEET TITLE

**OVERALL ROOF LEVEL PLAN** 

**S104** 







4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

# **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802

Structural Engineers: MBJ CONSULTING ENG.

### TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers:

COSENTINI 1 East Wacker Drive, Suite 103, Chicago IL 60601

### TEL: (312) 670-1800 / FAX: (312) 670-1801 Baggage Handling Systems Consultants:

BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

#### Landscape Consultants: **APPOLD DESIGN**

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

		CI	_	
$\sim$ $\sim$	· \ / I	<u> </u>	AI	$\sim$

Э.	DESCRIPTION	DATE

SJL

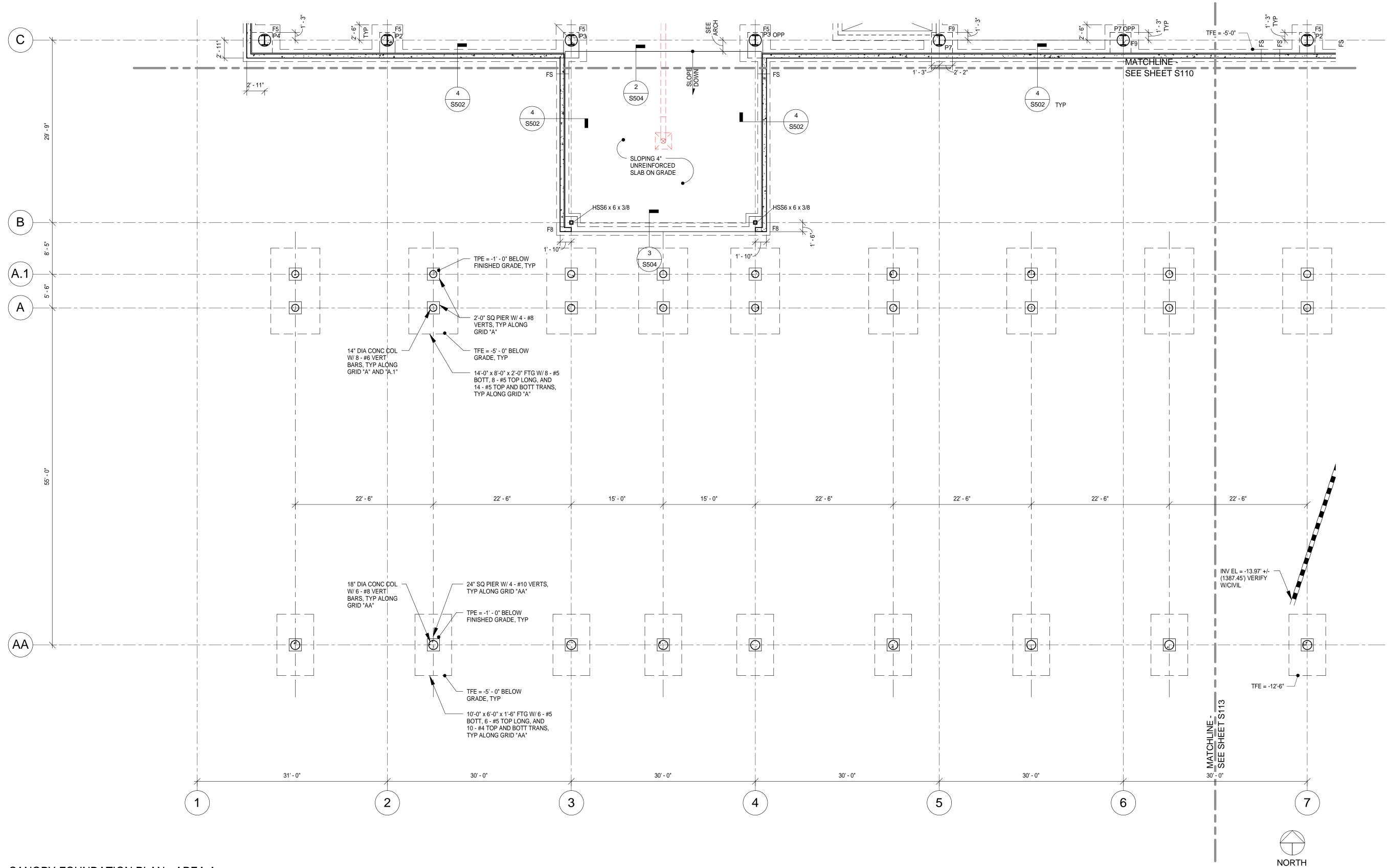
**DESIGNED BY:** CWB

AEP PROJECT NUMBER

213-1882-091

# SHEET TITLE **FOUNDATION**

SHEET NUMBER **S111** 



CANOPY FOUNDATION PLAN - AREA A

NOTES:
1. REFER TO S110 FOR TYPICAL PLAN NOTES.



Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW TERMINAL DESIGN

CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340 Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants:
BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscape Consultants:
APPOLD DESIGN
2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

REVISIONS

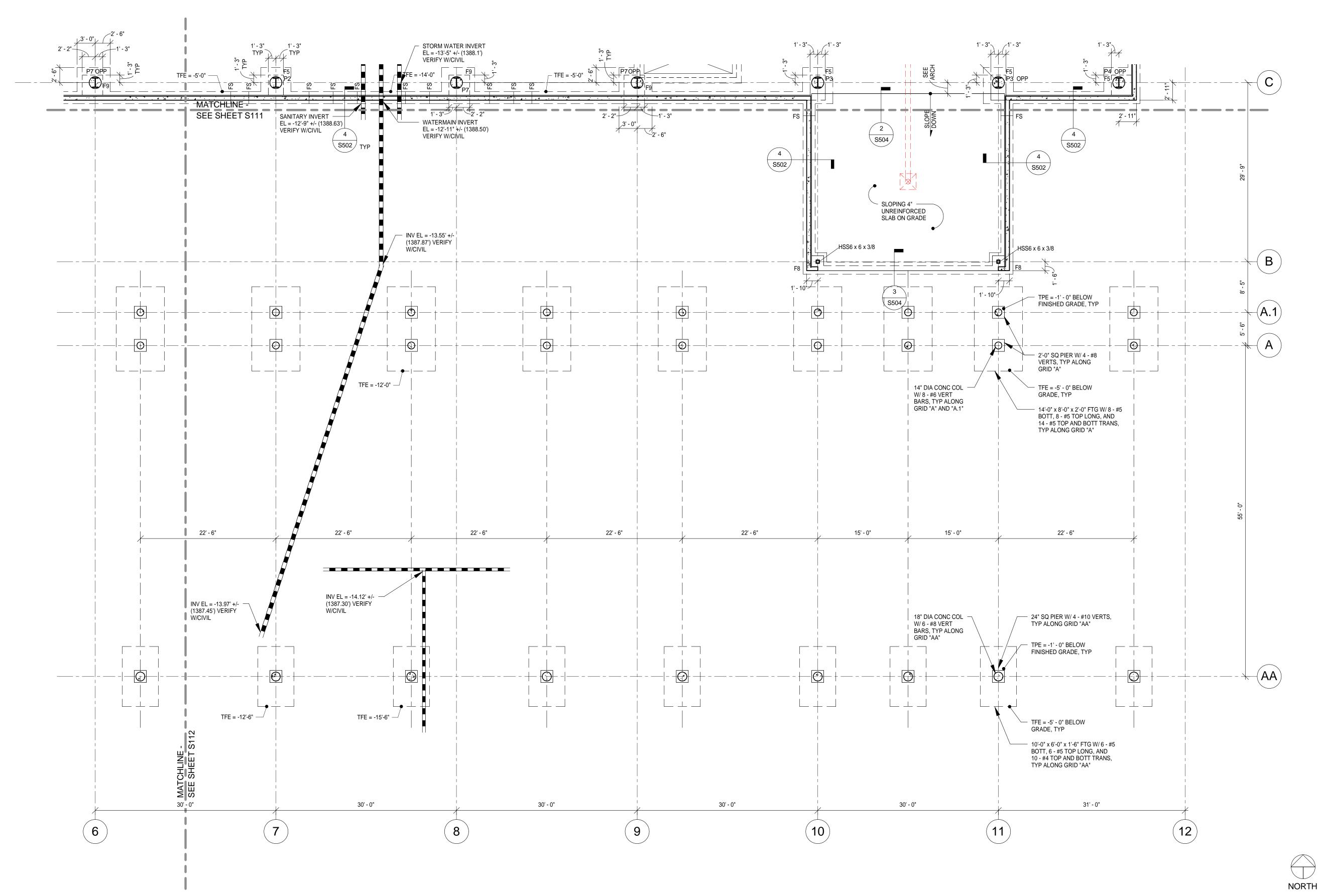
NO.	DESCRIPTION	DATE
DATE ISSUEI	<b>D:</b> 04-12-10	
REVIEWED B	BY:	
DRAWN BY:	SJL	
DESIGNED B	Y: CWB	
AE	P PROJECT NUMB	ER
	213-1882-091	

CANOPY FOUNDATION PLAN - AREA A

C) 2009 REYNOLDS, SMITH AND HILLS INC.

SHEET NUMBER

S112



CANOPY FOUNDATION PLAN - AREA B

NOTES:

1. REFER TO S110 FOR TYPICAL PLAN NOTES.



Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW TERMINAL DESIGN

### **CONSULTANTS**

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340 Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

# M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

# Landscape Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

**DATE ISSUED:** 04-12-10

REVIEWED BY:
DRAWN BY: SJL

DESIGNED BY: CWB

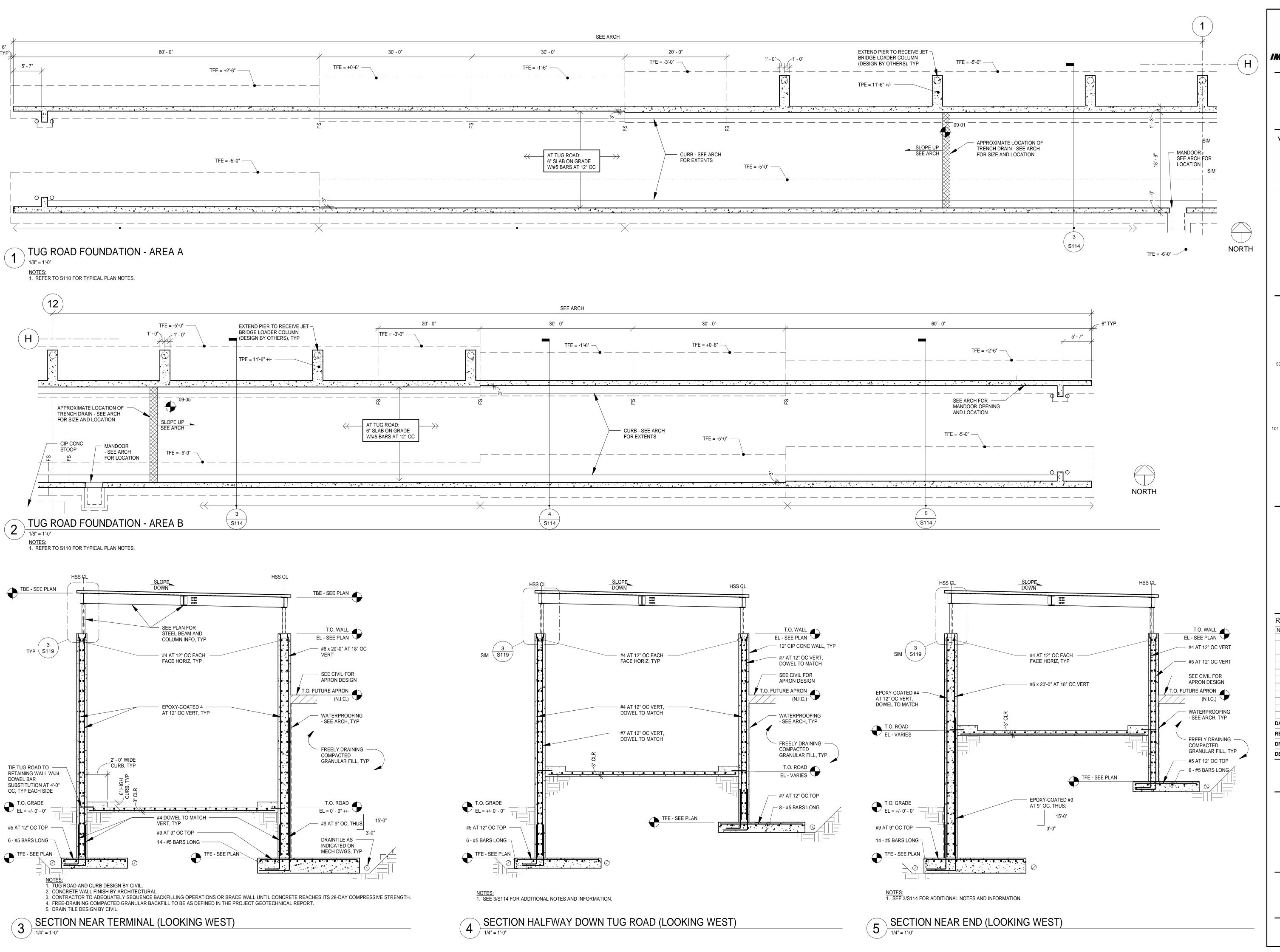
AEP PROJECT NUMBER

213-1882-091

© 2009 REYNOLDS, SMITH AND HILLS INC

CANOPY FOUNDATION PLAN - AREA B

SHEET NUMBER



ISSETT.

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW TERMINAL DESIGN

CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340 Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscape Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

NO. DESCRIPTION DATE

NO. DESCRIPTION DATE

DATE ISSUED: 04-12-10

REVIEWED BY:

DRAWN BY: SJL

DESIGNED BY: CWB

AEP PROJECT NUMBER

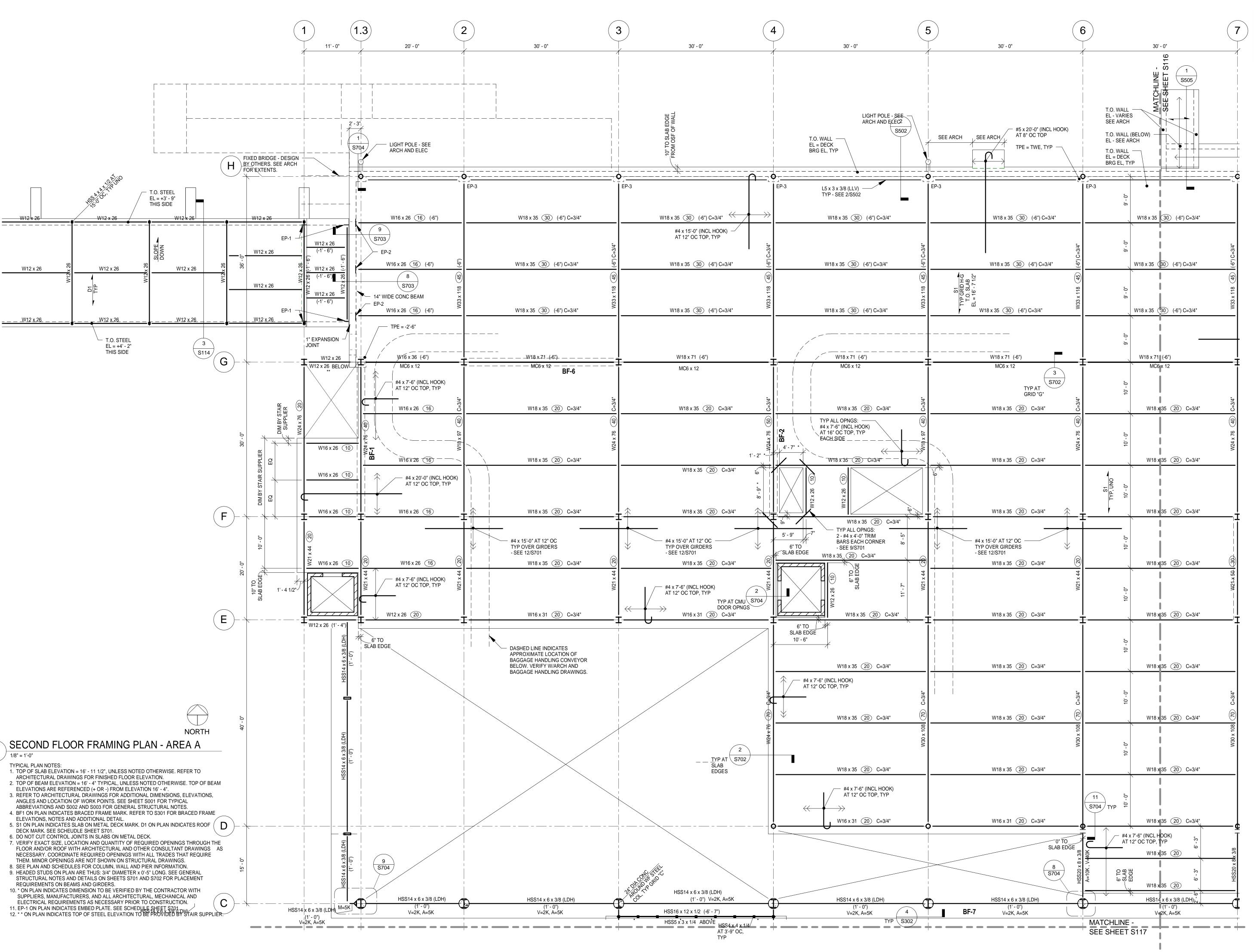
213-1882-091

© 2009 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

TUG ROAD FOUNDATION PLAN

SHEET NUMBER
S114





4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW TERMINAL DESIGN

CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340 Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:
COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

01 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscape Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

NO. DESCRIPTION DATE

NO. DESCRIPTION

DATE

DATE ISSUED: 04-12-10

REVIEWED BY:

DRAWN BY: SJL

AEP PROJECT NUMBER

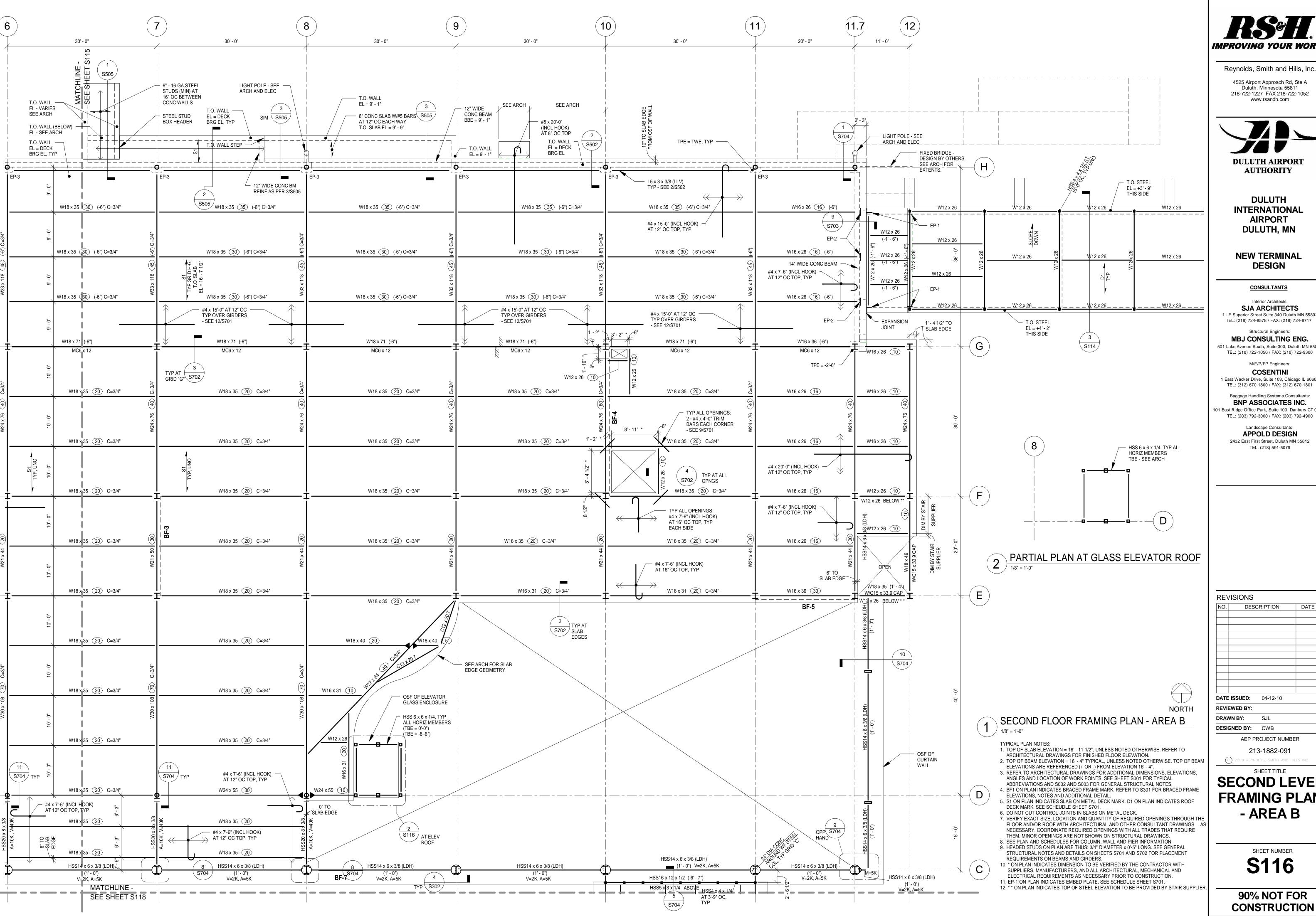
213-1882-091

213-1882-091

© 2009 REYNOLDS, SMITH AND HILLS INC.

SECOND LEVEL FRAMING PLAN - AREA A

SHEET NUMBER S115



4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

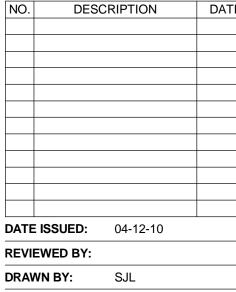
> M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

> Landscape Consultants: **APPOLD DESIGN** 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

**REVISIONS** 

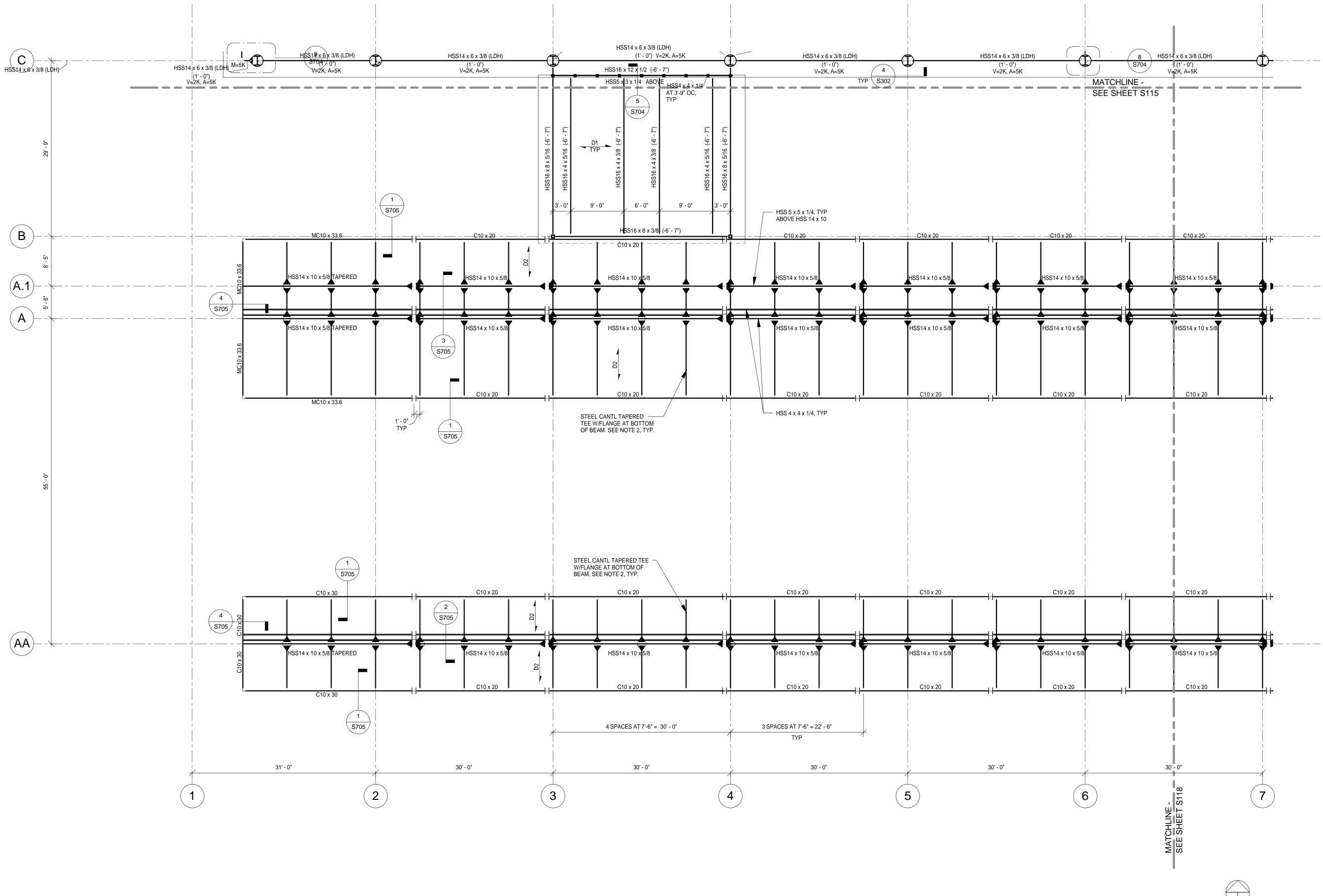


**DESIGNED BY:** CWB AEP PROJECT NUMBER

213-1882-091 (C) 2009 REYNOLDS, SMITH AND HILLS INC

SHEET TITLE **SECOND LEVEL FRAMING PLAN** - AREA B

> SHEET NUMBER **S116**



CANOPY ROOF PLAN - AREA A

NORTH

NOTES:

1. REFER TO S115 FOR TYPICAL PLAN NOTES.

2. FABRICATOR TO PROVIDE SECTION (BUILT UP PLATE SECTION OR CUT WT OR CUT WIDE FLANGE) WITH THE FOLLOWING DIMENSIONAL PROPERTIES:

d min = 6" bf = 12"

tf = 1 3/8" tw = 3/4" Fy = 50 ksi IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801 Baggage Handling Systems Consultants:

BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

> Landscape Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

**REVISIONS** DESCRIPTION

ATE ISSU	ED:	04-12-10	
EVIEWED	BY:		
RAWN BY	<b>':</b>	SJL	
ESIGNED	BY:	CWB	
	. =	0 IEOT 1 II II I	_

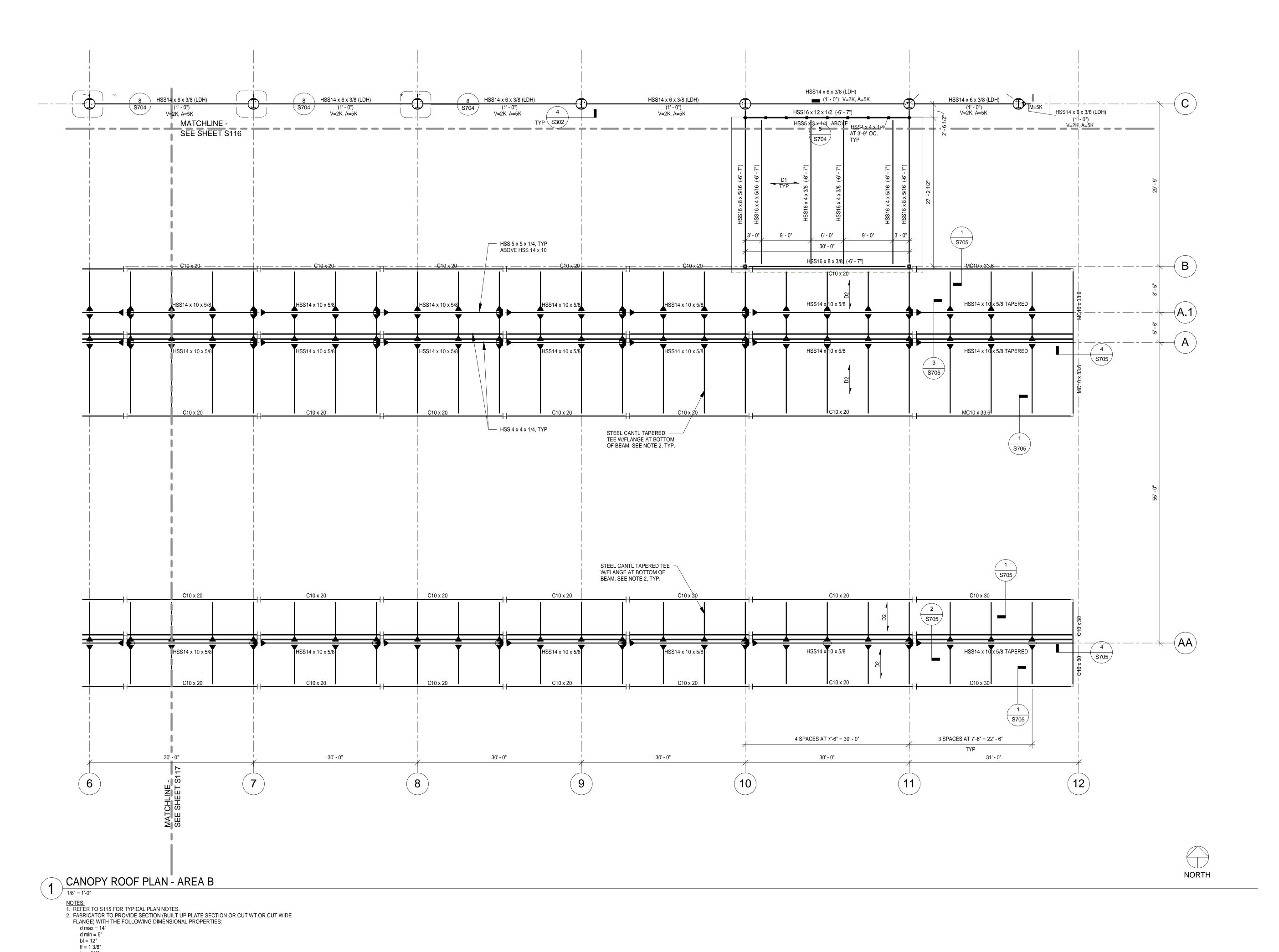
AEP PROJECT NUMBER

213-1882-091

SHEET TITLE

**CANOPY ROOF FRAMING PLAN** - AREA A

> SHEET NUMBER **S117**



tw = 3/4"

Fy = 50 ksi



Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW TERMINAL DESIGN

**CONSULTANTS** 

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340 Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.**101 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

TEL: (218) 591-5079

Landscape Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

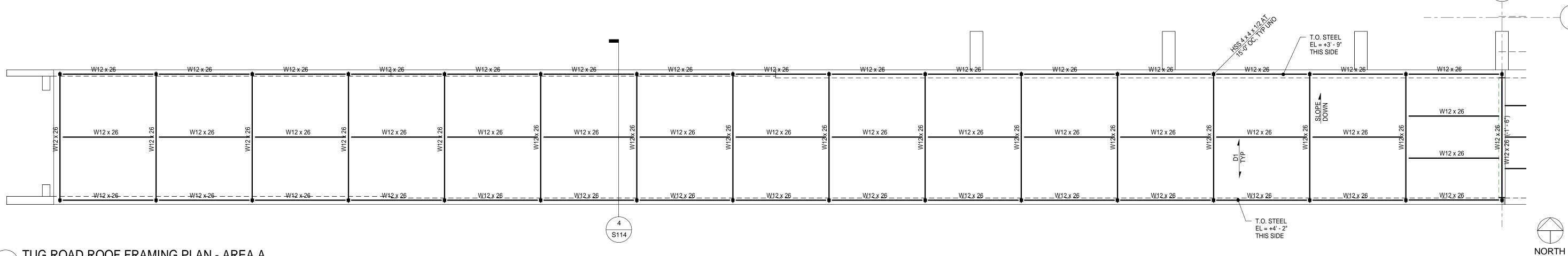
REVISIONS

NO. DES	CRIPTION	D.
DATE ISSUED:	04-12-10	
REVIEWED BY:		
DRAWN BY:	SJL	
DESIGNED BY:	CWB	

CANOPY ROOF FRAMING PLAN - AREA B

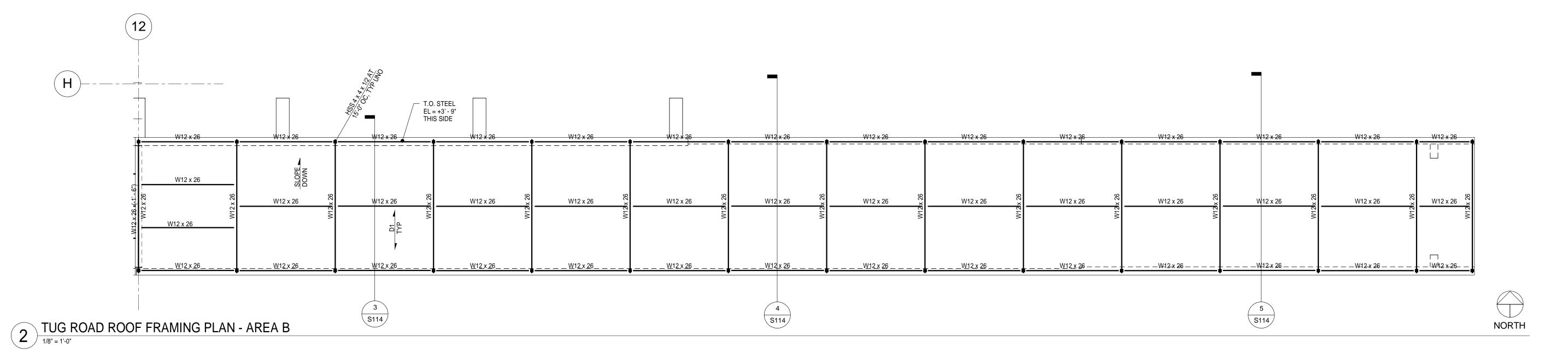
213-1882-091
© 2009 REYNOLDS, SMITH AND HILLS INC

SHEET NUMBER

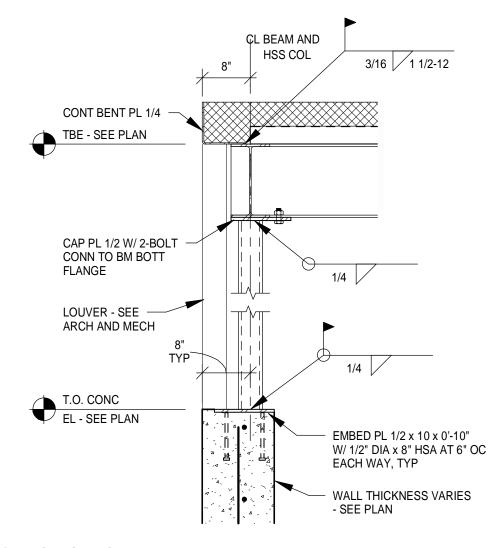


TUG ROAD ROOF FRAMING PLAN - AREA A

NOTES:
1. REFER TO S115 FOR TYPICAL PLAN NOTES.



NOTES: 1. REFER TO S115 FOR TYPICAL PLAN NOTES.



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



Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810

> Landscape Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

TEL: (203) 792-3000 / FAX: (203) 792-4900

REVISIONS

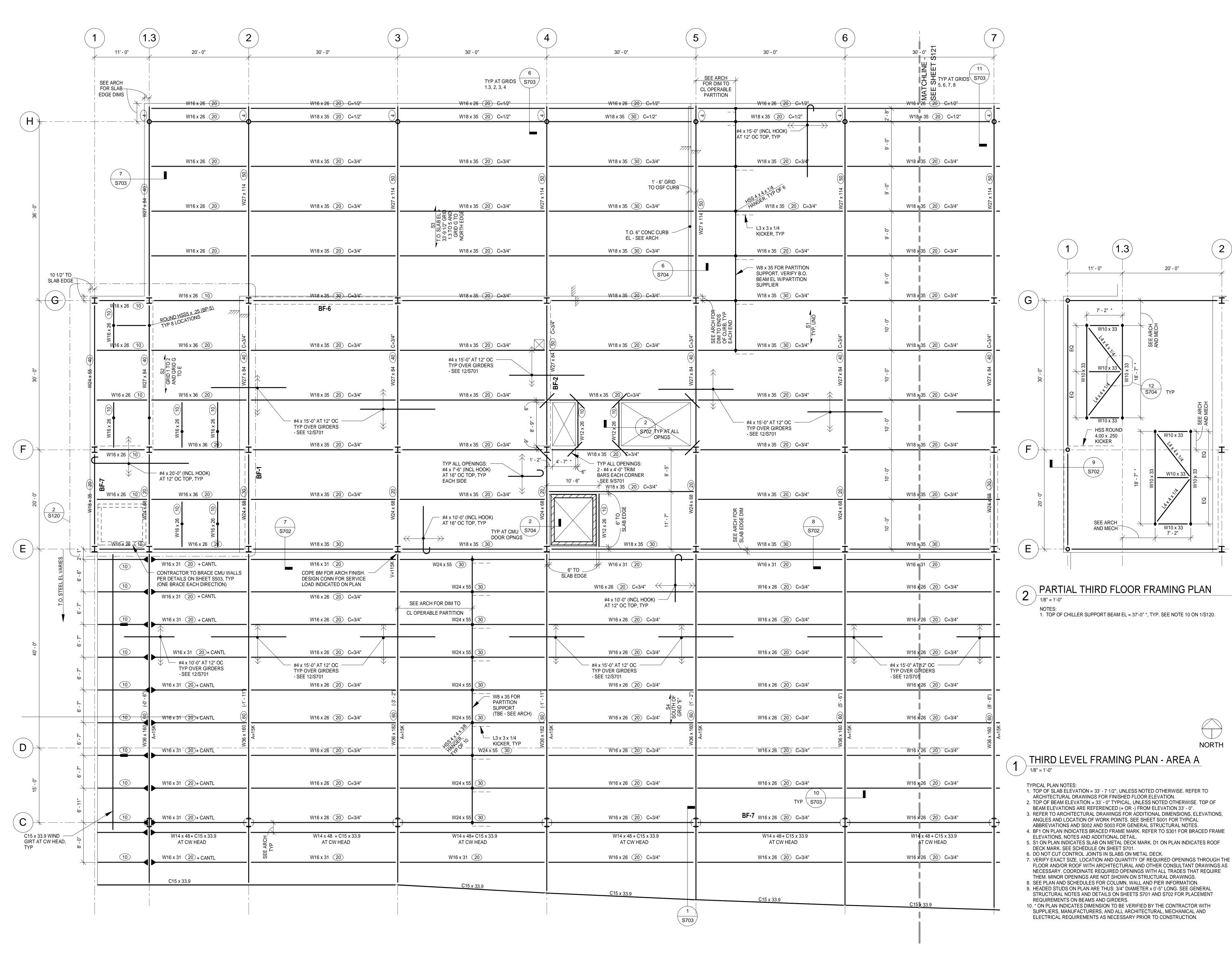
NO.	DESC	CRIPTION	DATE
DATE	ISSUED:	04-12-10	
REVI	EWED BY:		
DRAWN BY:		SJL	
DESI	GNED BY:	CWB	

AEP PROJECT NUMBER 213-1882-091

C) 2009 REYNOLDS, SMITH AND HILLS IN

SHEET TITLE **TUG ROAD ROOF FRAMING PLAN** 

> SHEET NUMBER **S119**





4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

## **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802

### Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

TEL: (218) 722-1056 / FAX: (218) 722-9306

### M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

### Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscape Consultants: **APPOLD DESIGN** 

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

**REVISIONS** 

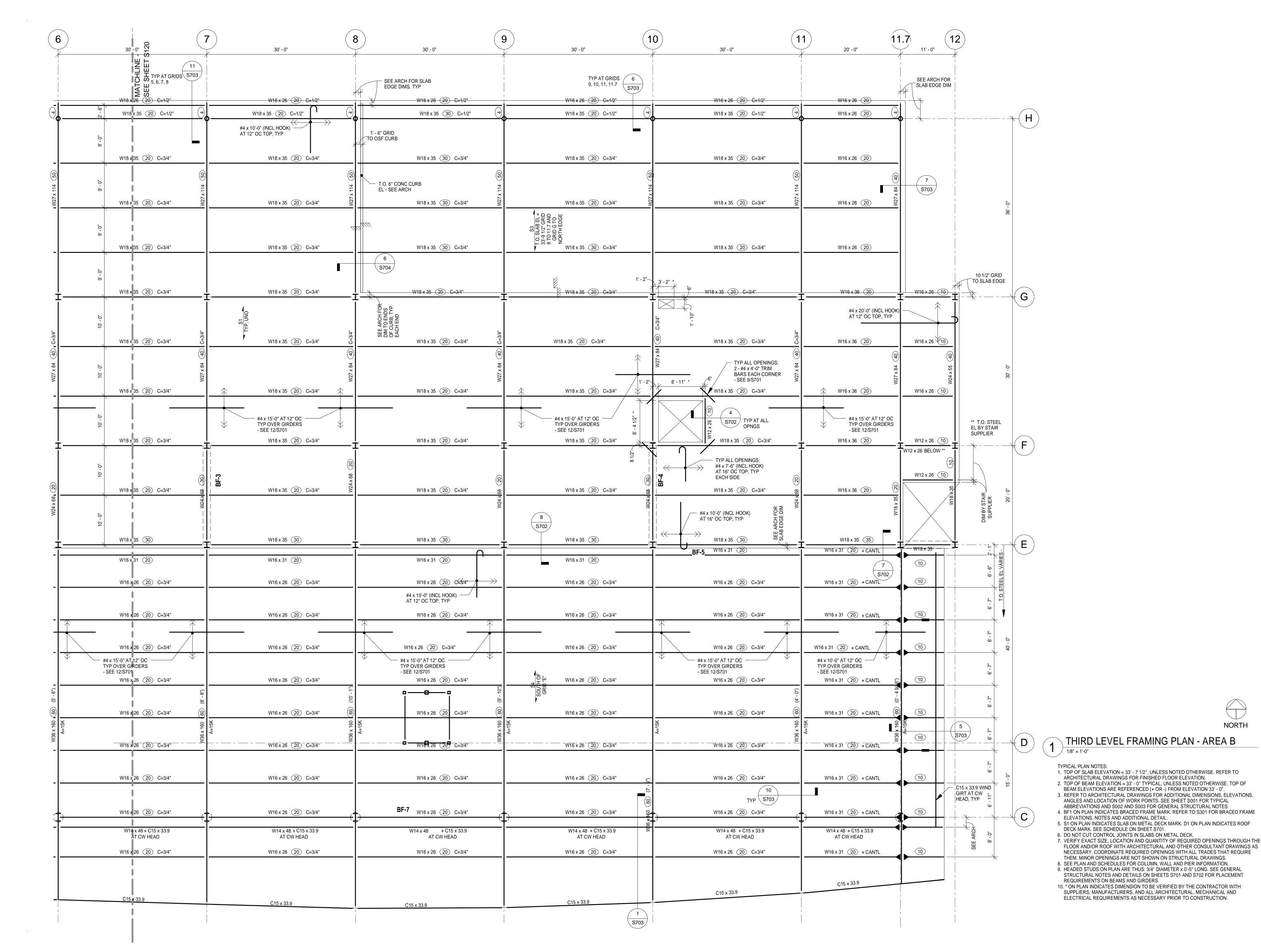
10.	DESC	RIPTION	DATE
ATE	SSUED:	04-12-10	
EVI	EWED BY:		
RAV	WN BY:	SJL	

**DESIGNED BY:** CWB AEP PROJECT NUMBER

213-1882-091 (C) 2009 REYNOLDS, SMITH AND HILLS INC

## SHEET TITLE THIRD LEVEL **FRAMING PLAN** - AREA A

SHEET NUMBER **S120** 





4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

### **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

### M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

### Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscape Consultants: **APPOLD DESIGN** 

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

REVISIONS

DA

**REVIEWED BY:** DRAWN BY: SJL

NORTH

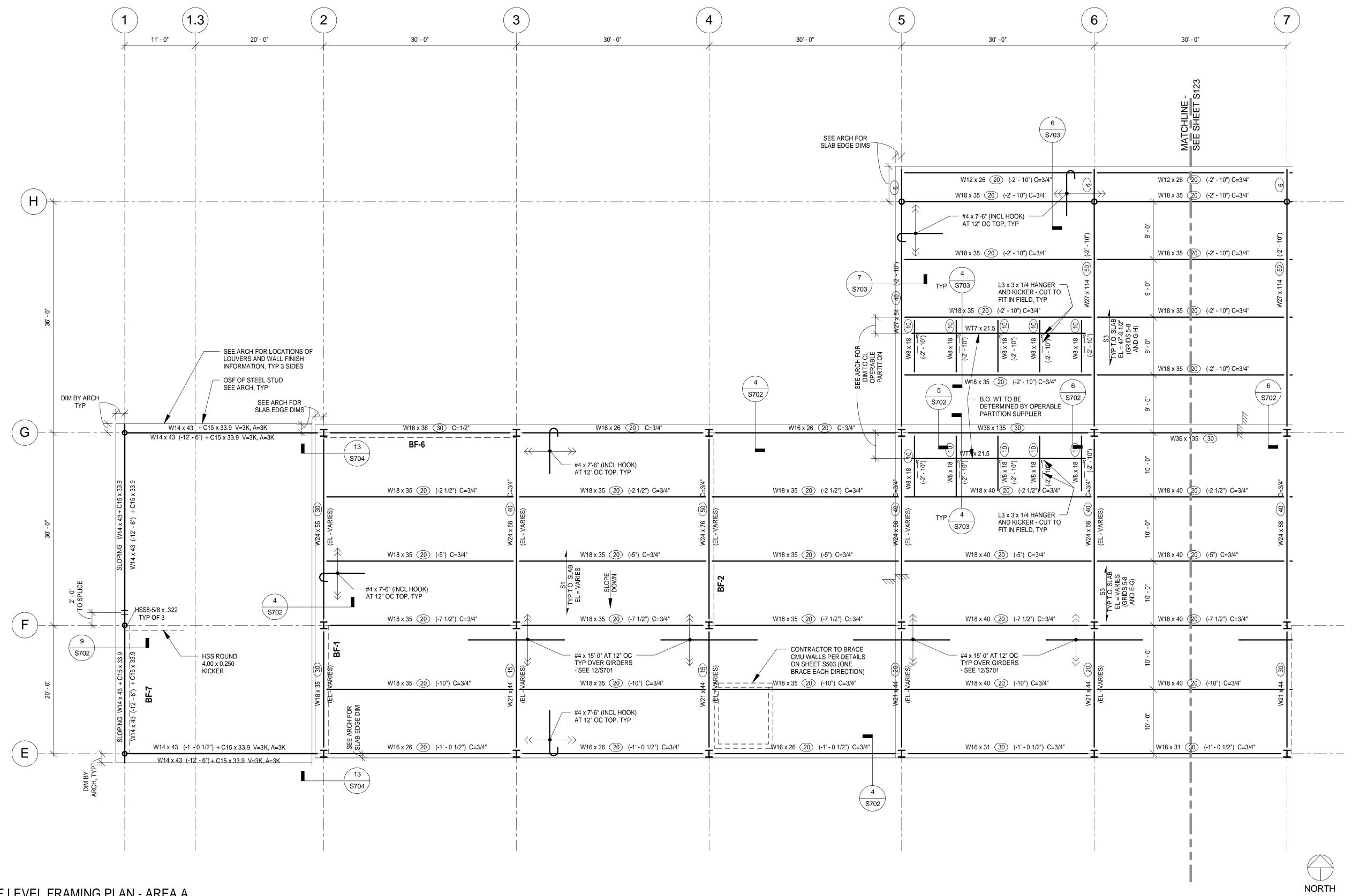
**DESIGNED BY:** CWB AEP PROJECT NUMBER

213-1882-091 (C) 2009 REYNOLDS, SMITH AND HILLS INC

## SHEET TITLE THIRD LEVEL **FRAMING PLAN**

- AREA B

SHEET NUMBER **S121** 



ROOF LEVEL FRAMING PLAN - AREA A

TYPICAL PLAN NOTES:

1. TOP OF STEEL BEAM ELEVATION IS REFERENCED (+ OR -) FROM ELEVATION 49' - 6". TOP OF STEEL BEAM = 49' - 6", UNLESS NOTED OTHERWISE.

2. TOP OF SLAB ELEVATION VARIES. SEE PLAN

3. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS, ELEVATIONS, ANGLES AND LOCATION OF WORK POINTS. SEE SHEET S001 FOR TYPICAL

ABBREVIATIONS AND S002 AND S003 FOR GENERAL STRUCTURAL NOTES. 4. BF1 ON PLAN INDICATES BRACED FRAME MARK. REFER TO \$301 FOR BRACED FRAME

ELEVATIONS, NOTES AND ADDITIONAL DETAIL.

5. S1 ON PLAN INDICATES SLAB ON METAL DECK MARK. D1 ON PLAN INDICATES ROOF

DECK MARK. SEE SCHEDULE ON SHEET S701. 6. DO NOT CUT CONTROL JOINTS IN SLABS ON METAL DECK.

7. VERIFY EXACT SIZE, LOCATION AND QUANTITY OF REQUIRED OPENINGS THROUGH THE FLOOR AND/OR ROOF WITH ARCHITECTURAL AND OTHER CONSULTANT DRAWINGS AS NECESSARY. COORDINATE REQUIRED OPENINGS WITH ALL TRADES THAT REQUIRE

THEM. MINOR OPENINGS ARE NOT SHOWN ON STRUCTURAL DRAWINGS. 8. SEE PLAN AND SCHEDULES FOR COLUMN, WALL AND PIER INFORMATION. 9. HEADED STUDS ON PLAN ARE THUS: 3/4" DIAMETER x 0'-5" LONG. SEE GENERAL

STRUCTURAL NOTES AND DETAILS ON SHEETS S701 AND S702 FOR PLACEMENT REQUIREMENTS ON BEAMS AND GIRDERS. 10. \* ON PLAN INDICATES DIMENSION TO BE VERIFIED BY THE CONTRACTOR WITH SUPPLIERS, MANUFACTURERS, AND ALL ARCHITECTURAL, MECHANICAL AND

ELECTRICAL REQUIREMENTS AS NECESSARY PRIOR TO CONSTRUCTION.

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

> M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

> Landscape Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

**REVISIONS** 

NO.	DES	CRIPTION	DA
DATE IS:	SUED:	04-12-10	
REVIEW	ED BY:		

**DRAWN BY:** SJL

AEP PROJECT NUMBER

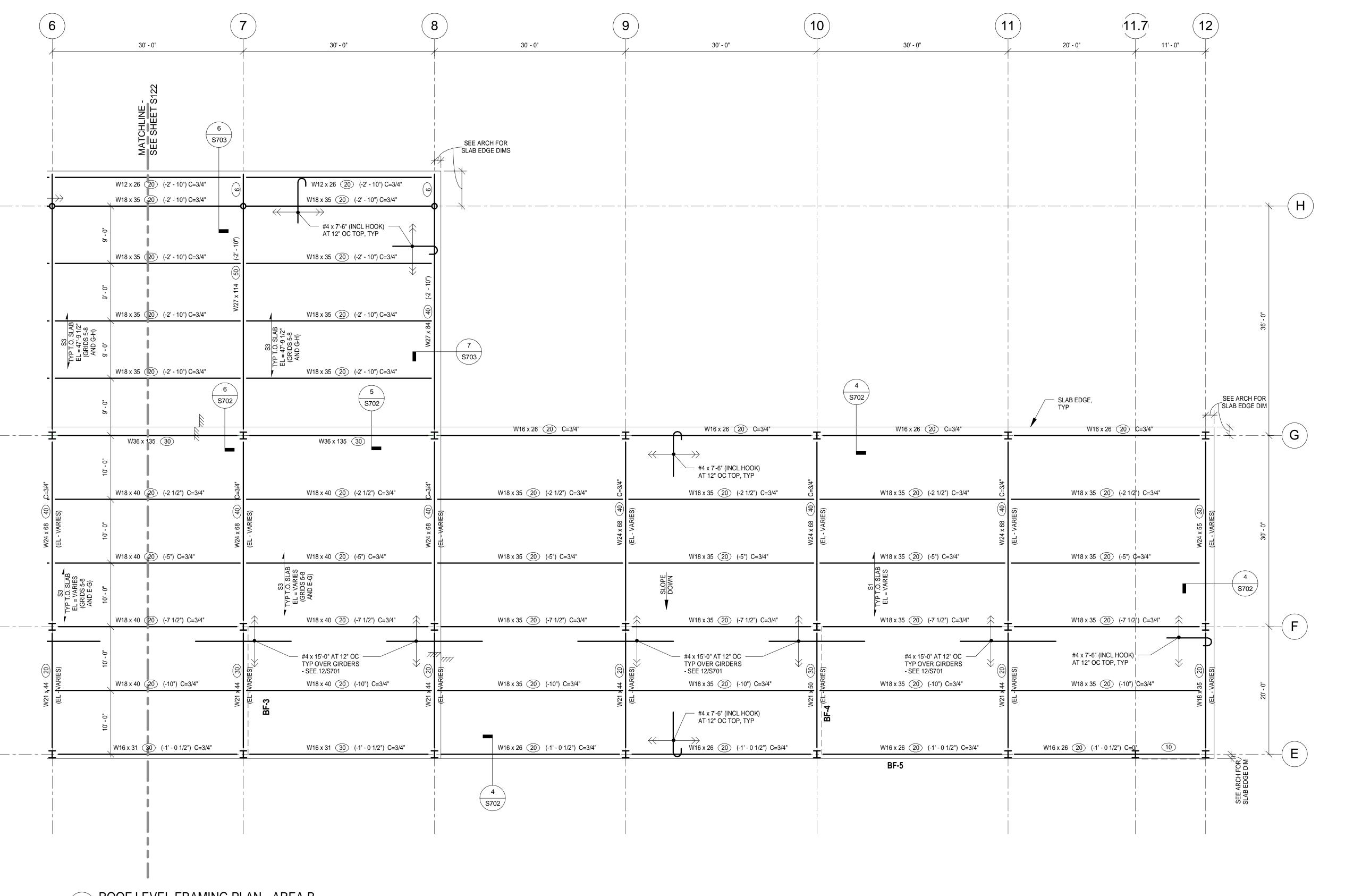
**DESIGNED BY:** CWB

213-1882-091 (C) 2009 REYNOLDS, SMITH AND HILLS INC

SHEET TITLE **ROOF LEVEL** 

FRAMING PLAN - AREA A

> SHEET NUMBER **S122**



NORTH

ROOF LEVEL FRAMING PLAN - AREA B

TYPICAL PLAN NOTES: 1. TOP OF STEEL BEAM ELEVATION IS REFERENCED (+ OR -) FROM ELEVATION 49' - 6".

TOP OF STEEL BEAM = 49' - 6", UNLESS NOTED OTHERWISE.

2. TOP OF SLAB ELEVATION VARIES. SEE PLAN

3. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS, ELEVATIONS, ANGLES AND LOCATION OF WORK POINTS. SEE SHEET S001 FOR TYPICAL

ABBREVIATIONS AND S002 AND S003 FOR GENERAL STRUCTURAL NOTES.

4. BF1 ON PLAN INDICATES BRACED FRAME MARK. REFER TO \$301 FOR BRACED FRAME ELEVATIONS, NOTES AND ADDITIONAL DETAIL.

5. S1 ON PLAN INDICATES SLAB ON METAL DECK MARK. D1 ON PLAN INDICATES ROOF DECK MARK. SEE SCHEDULE ON SHEET S701.

6. DO NOT CUT CONTROL JOINTS IN SLABS ON METAL DECK.

7. VERIFY EXACT SIZE, LOCATION AND QUANTITY OF REQUIRED OPENINGS THROUGH THE FLOOR AND/OR ROOF WITH ARCHITECTURAL AND OTHER CONSULTANT DRAWINGS AS NECESSARY. COORDINATE REQUIRED OPENINGS WITH ALL TRADES THAT REQUIRE

THEM. MINOR OPENINGS ARE NOT SHOWN ON STRUCTURAL DRAWINGS. 8. SEE PLAN AND SCHEDULES FOR COLUMN, WALL AND PIER INFORMATION. 9. HEADED STUDS ON PLAN ARE THUS: 3/4" DIAMETER x 0'-5" LONG. SEE GENERAL

STRUCTURAL NOTES AND DETAILS ON SHEETS S701 AND S702 FOR PLACEMENT REQUIREMENTS ON BEAMS AND GIRDERS. 10. \* ON PLAN INDICATES DIMENSION TO BE VERIFIED BY THE CONTRACTOR WITH SUPPLIERS, MANUFACTURERS, AND ALL ARCHITECTURAL, MECHANICAL AND

ELECTRICAL REQUIREMENTS AS NECESSARY PRIOR TO CONSTRUCTION.

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

### **CONSULTANTS**

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

### M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

### Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscape Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

REVISIONS	

NO.	DESCRIPTION	DA
DATE ISSUE	<b>ED</b> : 04-12-10	

**REVIEWED BY:** 

DRAWN BY: SJL

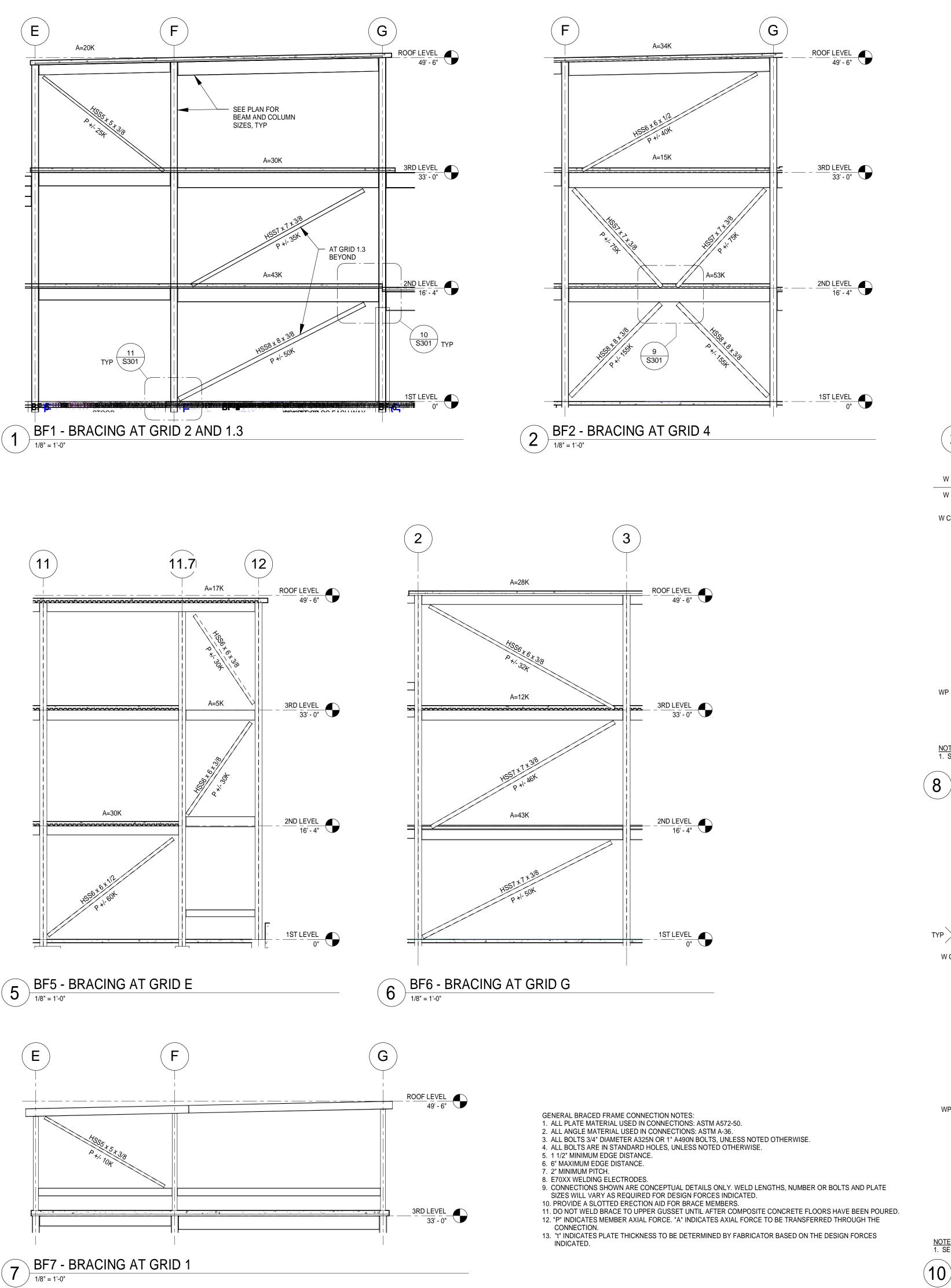
**DESIGNED BY:** CWB AEP PROJECT NUMBER

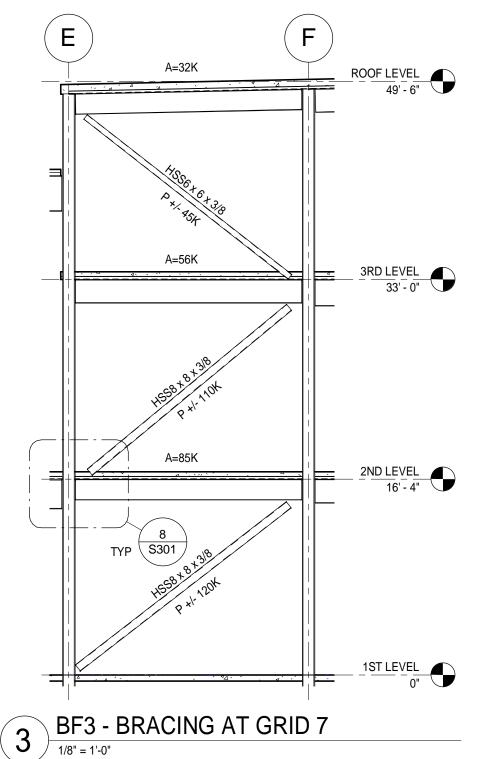
213-1882-091

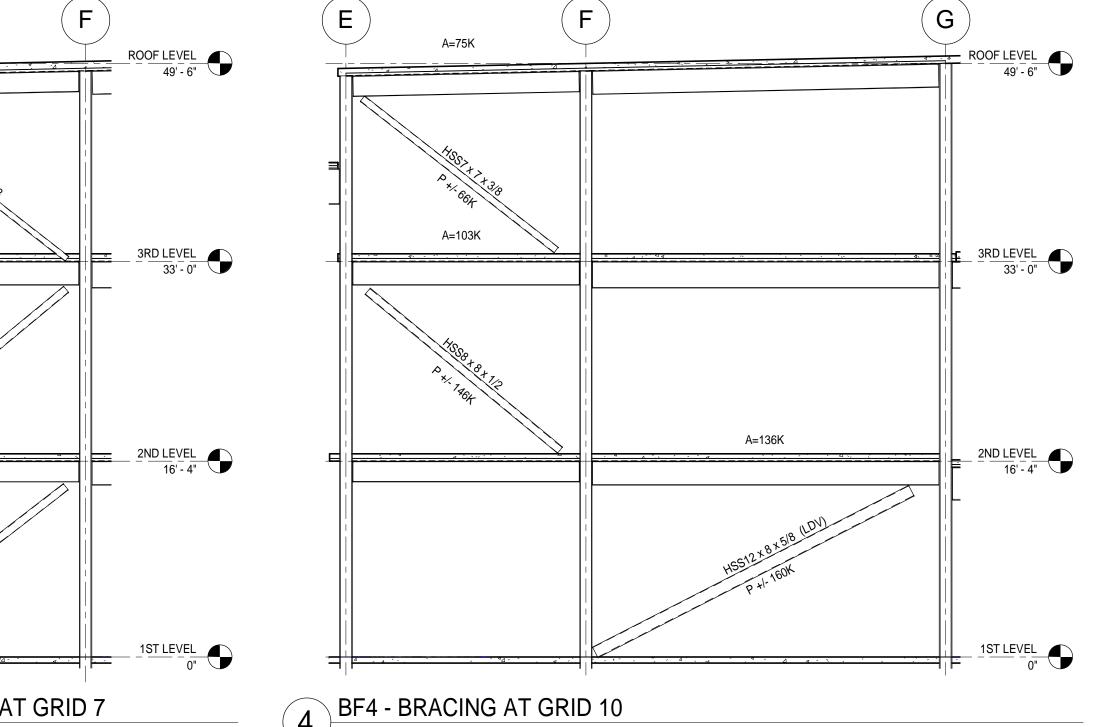
(C) 2009 REYNOLDS, SMITH AND HILLS INC. SHEET TITLE

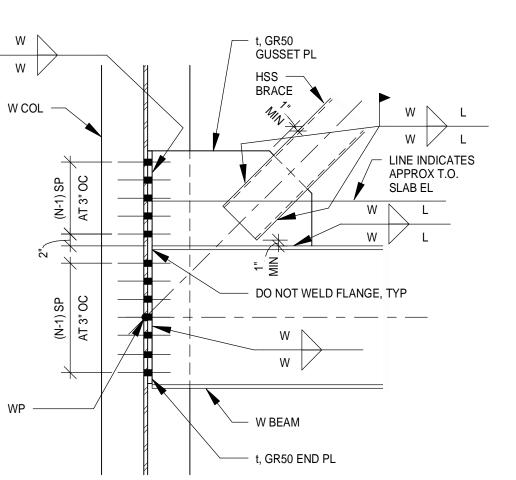
**ROOF LEVEL FRAMING PLAN** - AREA B

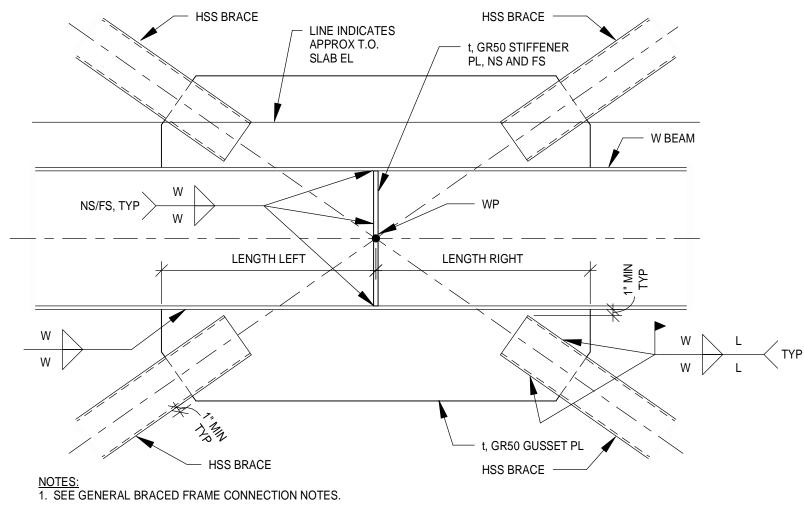
> SHEET NUMBER **S123**







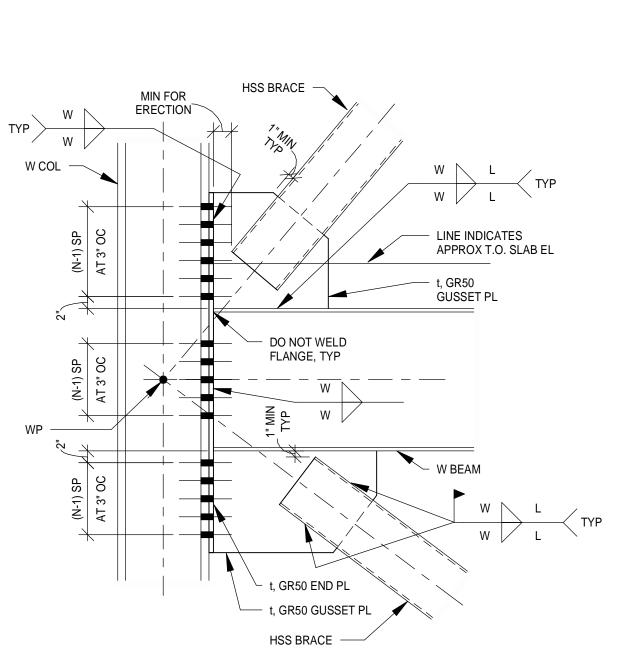




NOTES:

1. SEE GENERAL BRACED FRAME CONNECTION NOTES 8 DETAIL NO SCALE





SEE SHEET S401 — FOR BASE PL INFO TYPICAL FOUNDATION DETAIL AT BRACED FRAMES L7 x 4 x 3/4 x 1'-8" (LLV)
 EACH SIDE OF COLUMN T.O. SLAB
EL - SEE PLAN TYP EACH END TFE - SEE PLAN EMBED PL 3/4 x 10 x 2'-0" (CENTER ON LONG SIDE OF BASE PL) W/8 - 3/4" DIA x 7" HSA AT 7" OC EACH WAY SEE PLAN AND SCHEDULES FOR FTG, BASE PL AND ANCHOR BOLT INFO

SECTION NO SCALE

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS

11 E Superior Street Suite 340 Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717 Structural Engineers:

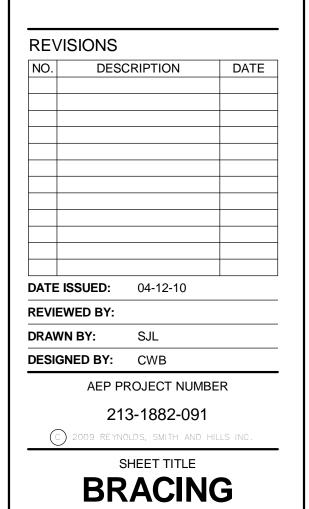
MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers: COSENTINI 1 East Wacker Drive, Suite 103, Chicago IL 60601

TEL: (312) 670-1800 / FAX: (312) 670-1801 Baggage Handling Systems Consultants:

BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

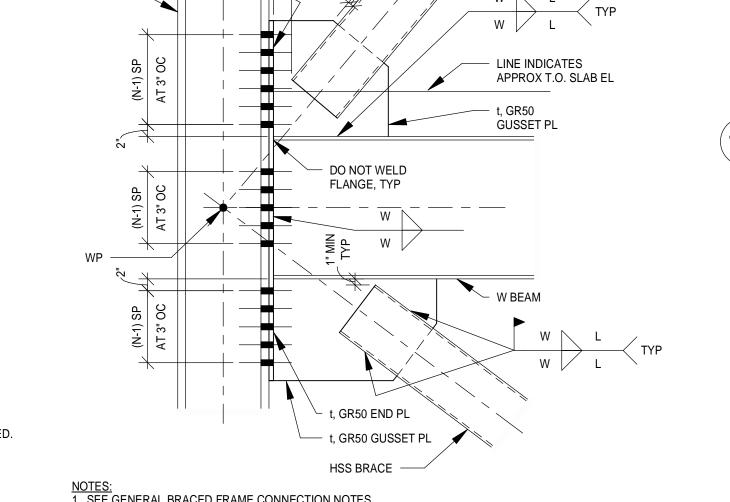
> Landscape Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079



SHEET NUMBER **S301** 

**ELEVATIONS** 

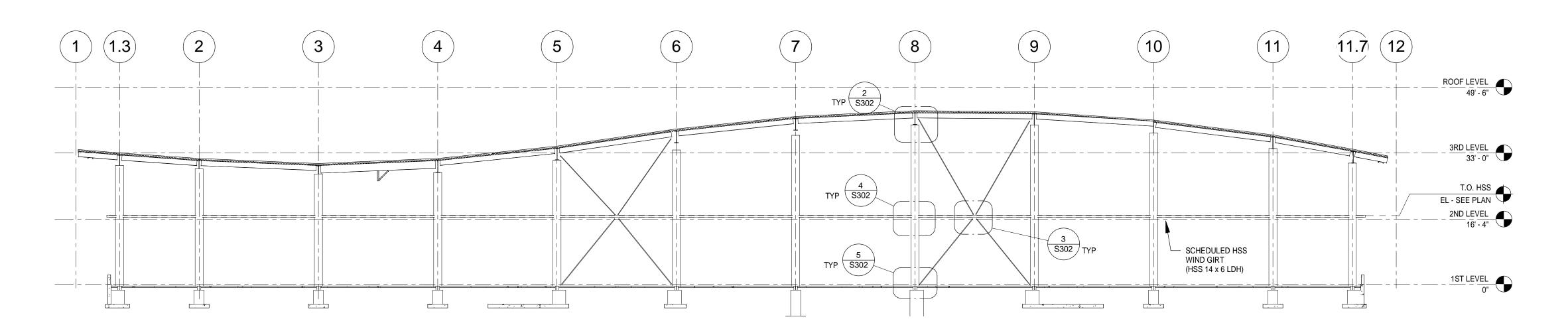
90% NOT FOR CONSTRUCTION



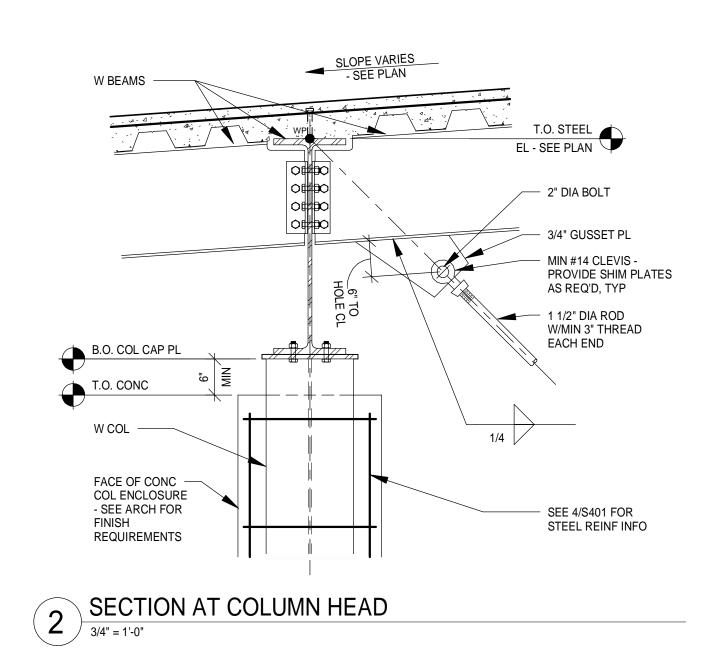
NOTES:

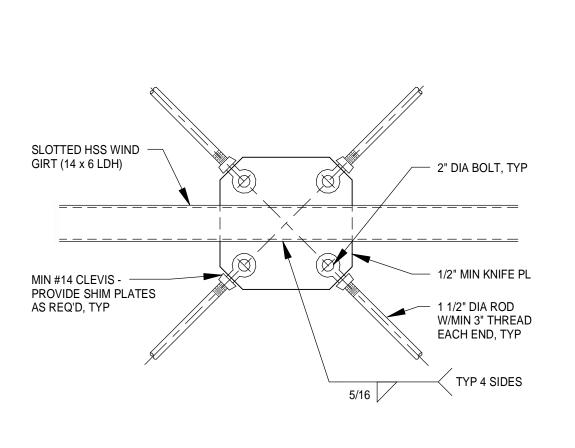
1. SEE GENERAL BRACED FRAME CONNECTION NOTES.

10 DETAIL NO SCALE

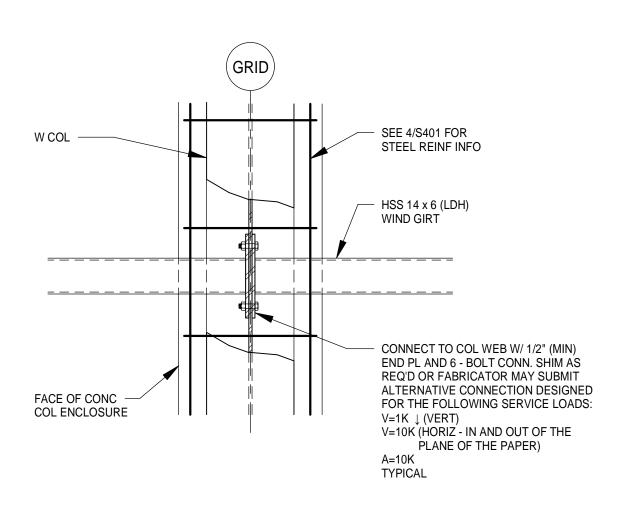


# 1 ELEVATION AT GRID "C" 1/16" = 1'-0"



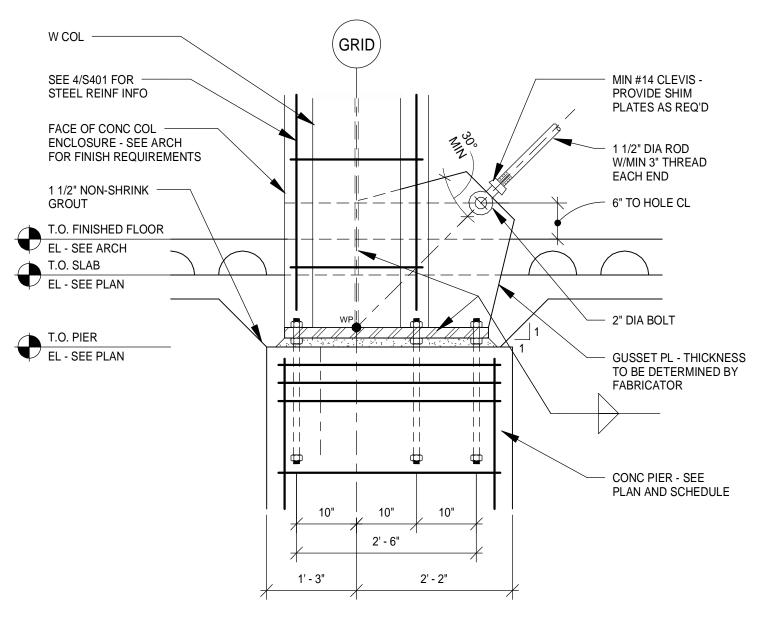






SECTION AT COLUMN TO GIRT CONNECTION

3/4" = 1'-0"



SECTION AT COLUMN BASE

3/4" = 1'-0"



Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW TERMINAL DESIGN

CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340 Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants:
BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscape Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

REVISIONS

NO.	DESC	CRIPTION	DATE
DATE	E ISSUED:	04-12-10	
REVI	EWED BY:		
DRA	WN BY:	SJL	
DESI	GNED BY:	CWB	

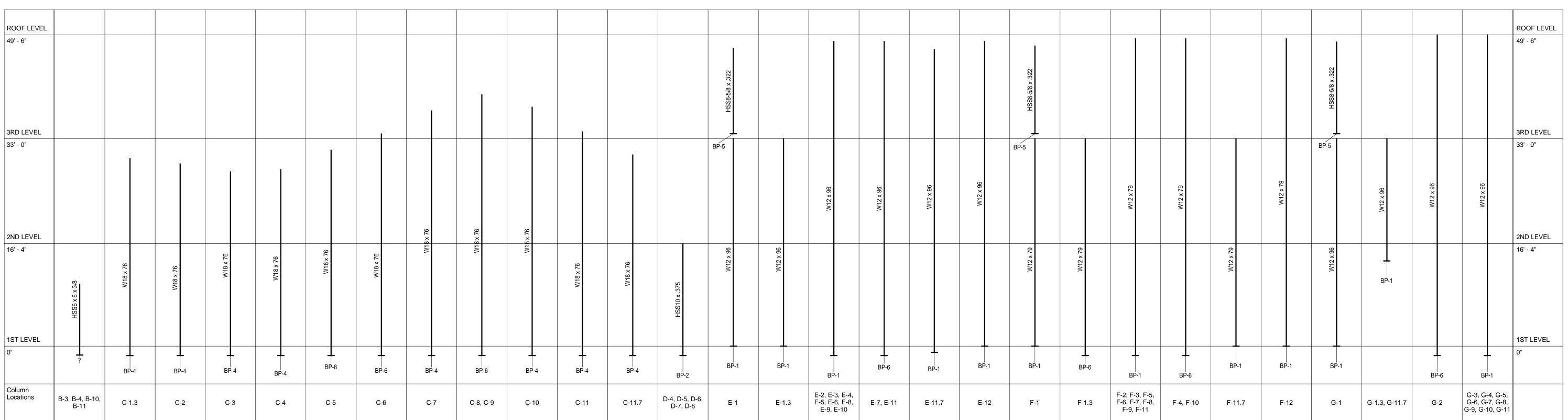
AEP PROJECT NUMBER

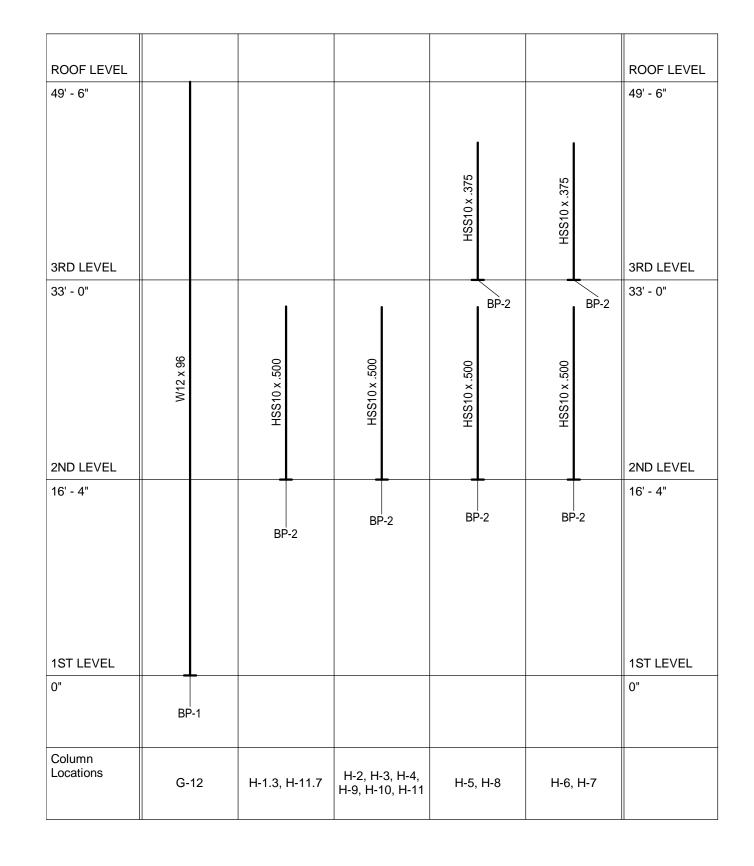
213-1882-091
(c) 2009 REYNOLDS, SMITH AND HILLS INC.

ELEVATIONS

SHEET NUMBER

S302

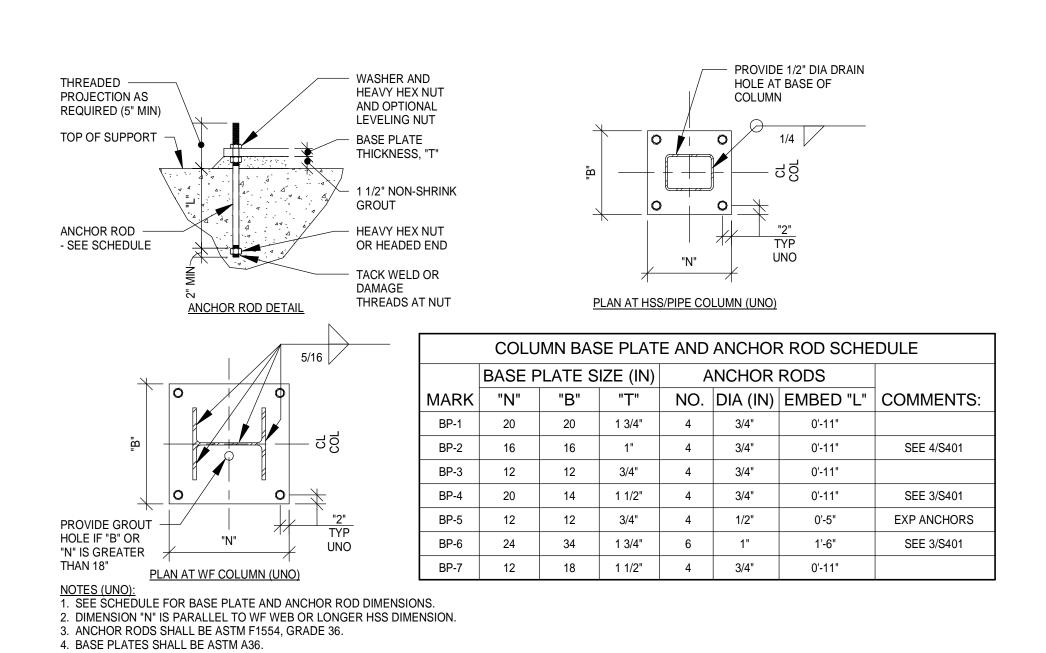




NOTES:

1. FOR BASE PLATE AND ANCHOR BOLT INFORMATION, SEE COLUMN BASE PLATE SCHEDULE THIS SHEET. 2. AT HSS ROUND COLUMNS, FABRICATOR MAY OPT TO SUBMIT EQUIVALENT PIPE SECTION TO A/E FOR REVIEW IN LIEU OF HSS ROUND COLUMN SHOWN.

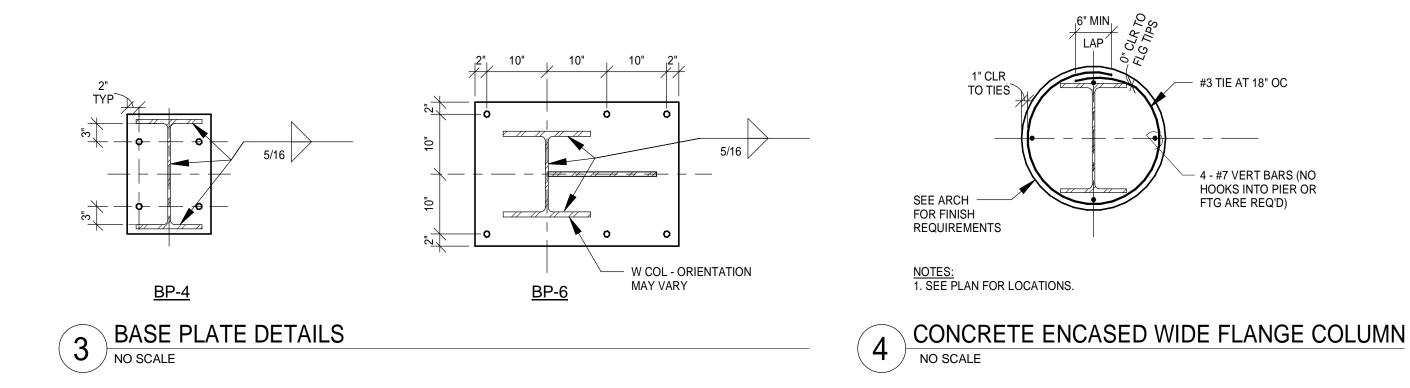
STEEL COLUMN SCHEDULE NO SCALE



COLUMN BASE PLATE AND ANCHOR ROD SCHEDULE (2) COLUIV NO SCALE

7. SEE SHEETS S301 AND S302 FOR ADDITIONAL INFORMATION AT BRACED FRAME BASE PLATES.

5. MILL COLUMN BASE AND/OR BASE PLATE AS NECESSARY FOR FULL CONTACT.6. ANCHOR RODS SHALL SET BY TEMPLATE AND NOT BE SET INTO CONCRETE AFTER CONCRETE IS CAST.



IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

> M/E/P/FP Engineers: COSENTINI

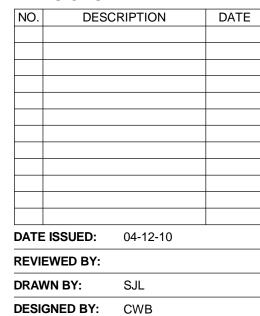
1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

> Landscape Consultants: APPOLD DESIGN

2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

**REVISIONS** 



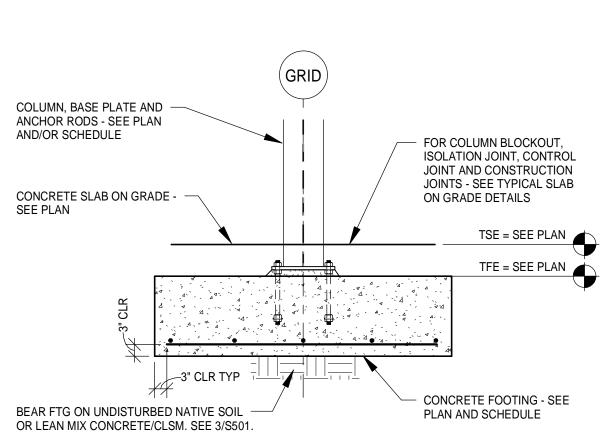
AEP PROJECT NUMBER

213-1882-091 C 2009 REYNOLDS, SMITH AND HILLS INC

SHEET TITLE COLUMN **SCHEDULE** 

**AND DETAILS** 

SHEET NUMBER **S401** 

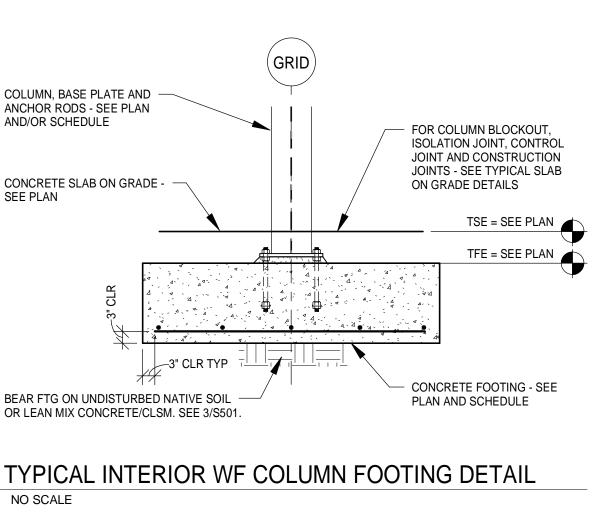


# NO SCALE

TENSION LAP SPLICE / CONCRETE / GR 60 UNCOATED REINFORCING				
STRUCTURAL ELEMENTS		FOOTINGS / SL DNCRETE FILL		
CONCRETE	F'o	c = 4,000 PSI (N	IORMAL WEIGH	HT)
BAR SIZE	CLASS	"A" LAP	CLASS "B" LAP	
	BASIC	TOP BAR	BASIC	TOP BAR
#3	12"	14"	14"	18"
#4	15"	19"	19"	25"
#5	18"	23"	23"	30"
#6	22"	28"	28"	36"
#7	32"	42"	42"	55"
#8	42"	55"	55"	71"
#9	53"	69"	69"	90"
#10	68"	88"	88"	114"
#11	83"	108"	108"	140"

1. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE PLACED BELOW THEM. 2. USE CLASS "B" LAP LENGTHS - TYPICAL UNLESS NOTED OTHERWISE ON DRAWINGS.







1 1/2" CLR TYP

ALL FACES

FOR COLUMN BLOCKOUT.

GRADE DETAILS

— 1' - 6" TYP UNO ON PLAN

CONCRETE PIER - SEE

PLAN AND SCHEDULE

**CONCRETE FOOTING -**

SEE PLAN AND SCHEDULE

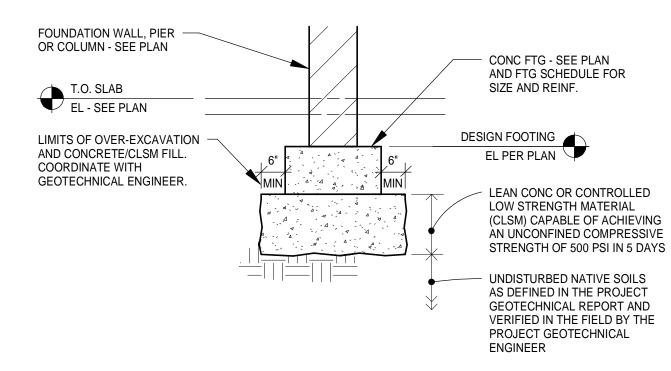
ISOLATION JOINT, CONTROL

JOINT AND CONSTRUCTION

JOINTS - SEE TYPICAL SLAB ON

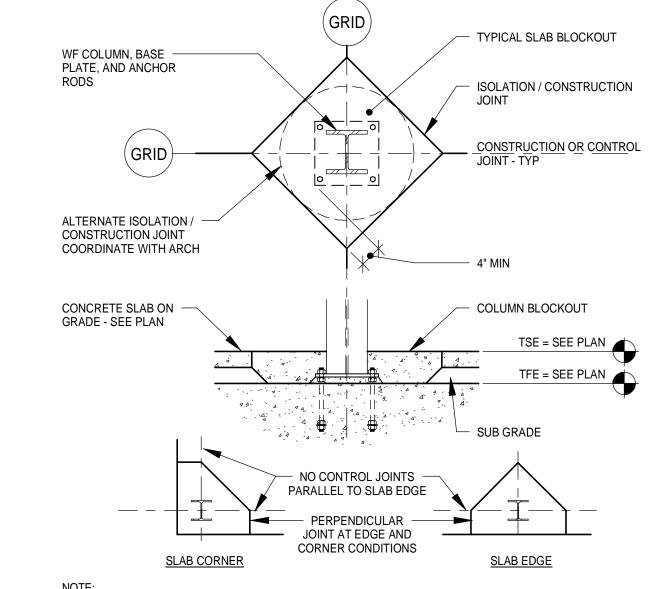
TSE = SEE PLAN

TFE = SEE PLAN



1. THIS DETAIL APPLIES ONLY AT LOCATIONS WHERE THE GEOTECHNICAL ENGINEER HAS DETERMINED THAT SOILS AT THE DESIGN FOOTING ELEVATIONS ARE NOT ADEQUATE FOR FOOTING SUPPORT ACCORDING TO THE ALLOWABLE SOIL BEARING CAPACITY LISTED UNDER "DESIGN UNIT STRESS" ON SHEET S002. 2. IN LIEU OF OVER-EXCAVATING AND PLACING LEAN CONCRETE OR CLSM AS OUTLINED IN THIS DETAIL CONTRACTOR MAY LOWER THE DESIGN FOOTING ELEVATION SUCH THAT THE FOOTING RESTS DIRECTLY ON UNDISTURBED NATIVE SOILS AS APPROVED BY THE GEOTECHNICAL ENGINEER IN THE FIELD. 3. SEE GEOTECHNICAL REPORT FOR WATER TABLE ELEVATIONS. CONTRACTOR TO MAKE ADEQUATE PROVISIONS FOR DEWATERING AS REQUIRED.

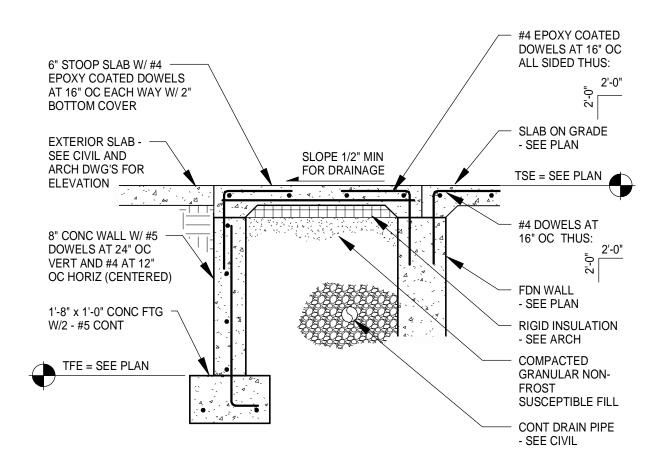
### OVER-EXCAVATION WITH LEAN CONCRETE/CLSM FILL DETAIL NO SCALE



1. CONTRACTOR MAY PROPOSE ALTERNATE ISOLATION JOINT DETAIL TO A/E PRIOR TO CONSTRUCTION.

TYPICAL COLUMN ISOLATION JOINT NO SCALE





COLUMN, BASE PLATE AND —

ANCHOR RODS - SEE PLAN

CONCRETE SLAB ON GRADE -

AND/OR SCHEDULE - TYP

2 ADDITIONAL TIES

#4 TEMPLATE TIE TO BE

INSTALLED DURING FTG

CONCRETE PLACEMENT

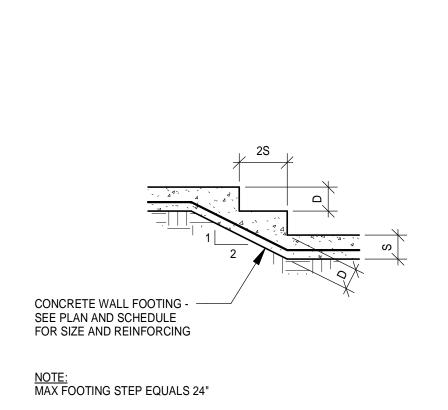
BEAR FTG ON UNDISTURBED NATIVE SOIL

OR LEAN MIX CONCRETE/CLSM. SEE 3/S501.

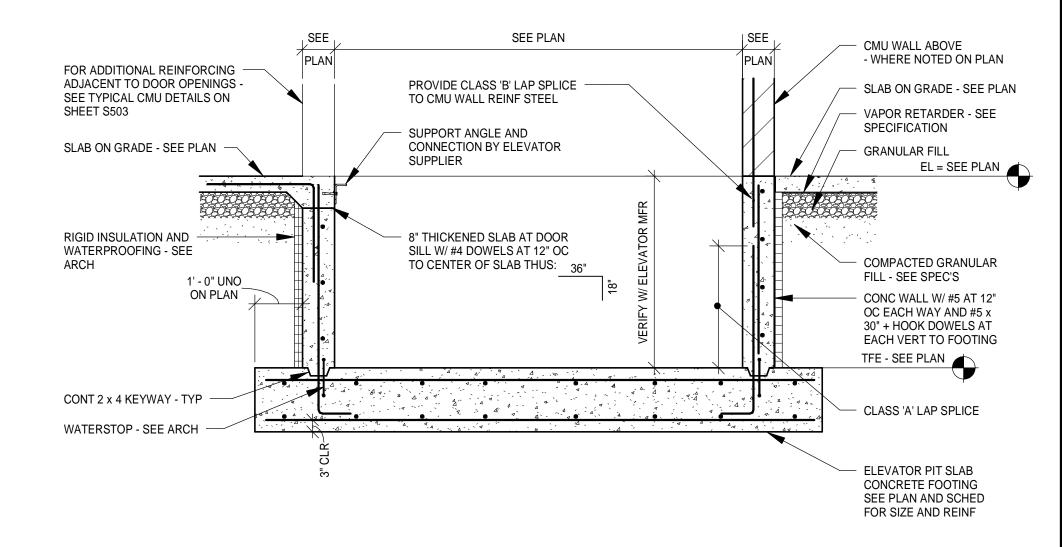
AT 3" OC - TYPICAL

SEE PLAN

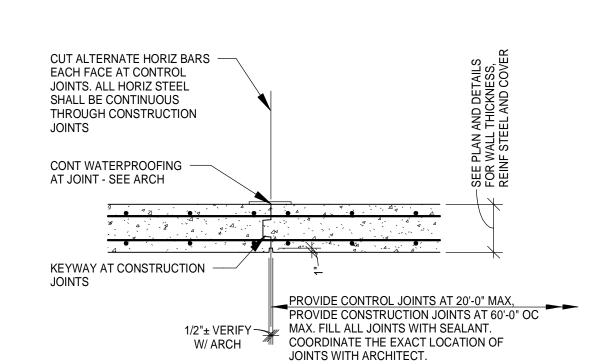
TYPICAL STOOP DETAIL NO SCALE



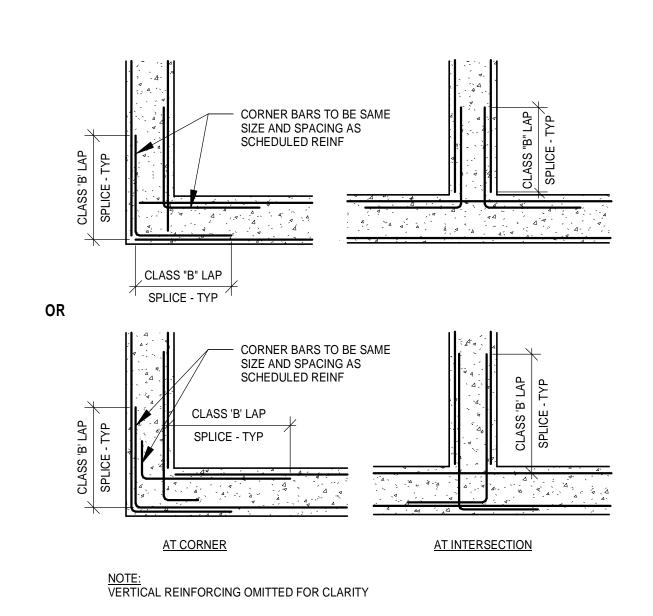
TYPICAL FOOTING STEP NO SCALE



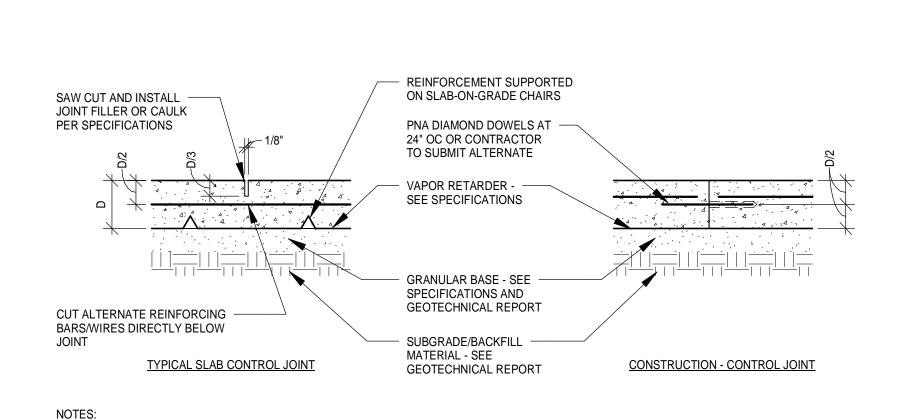
SECTION THRU ELEVATOR PIT NO SCALE



TYPICAL CONSTRUCTION/CONTROL JOINTS FOR CONCRETE WALLS



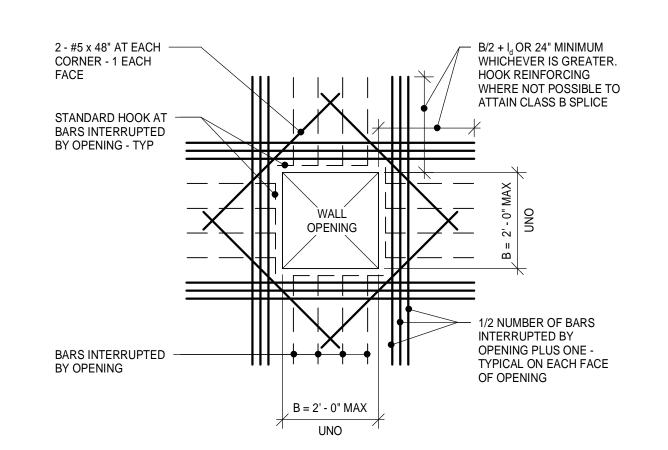
TYPICAL CORNER BAR PLACING DETAIL NO SCALE



1. A CONSTRUCTION JOINT WHICH IS NOT INTENDED TO ALSO SERVE AS A CONTROL JOINT IS TO HAVE ALL REINFORCING EXTEND THROUGH IT AND TO HAVE NO GROOVE/SAW-CUT, UNLESS NOTED OTHERWISE. 2. IGNORE REINFORCING NOTES AT UNREINFORCED OR FIBER REINFORCED SLABS-ON-GRADE. 3. FOR EXTERIOR SLAB ON GRADE EXPOSED TO FREEZE-THAW CYCLES, CONSTRUCT A SLAB EXPANSION-CONTRACTION JOINT THE SAME EXCEPT ADD 3/8" COMPRESSIBLE MATERIAL THROUGH JOINT.

TYPICAL SLAB ON GRADE CONSTRUCTION DETAIL

1/2" = 1'-0"



1. FOR WALL OPENINGS LARGER THAN 2'-0" (FOR WALLS NOT SUBJECT TO LATERAL EARTHPRESSURE) ADD 2 - #5 EACH FACE ALL 4 SIDES OF OPENING. EXTEND BAR 24" PAST OPENING UNLESS NOTED

TYPICAL ADDITIONAL BAR PLACING DETAIL FOR WALL OPENING

1/2" = 1'-0"

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers:

COSENTINI 1 East Wacker Drive, Suite 103, Chicago IL 60601

TEL: (312) 670-1800 / FAX: (312) 670-1801 Baggage Handling Systems Consultants:

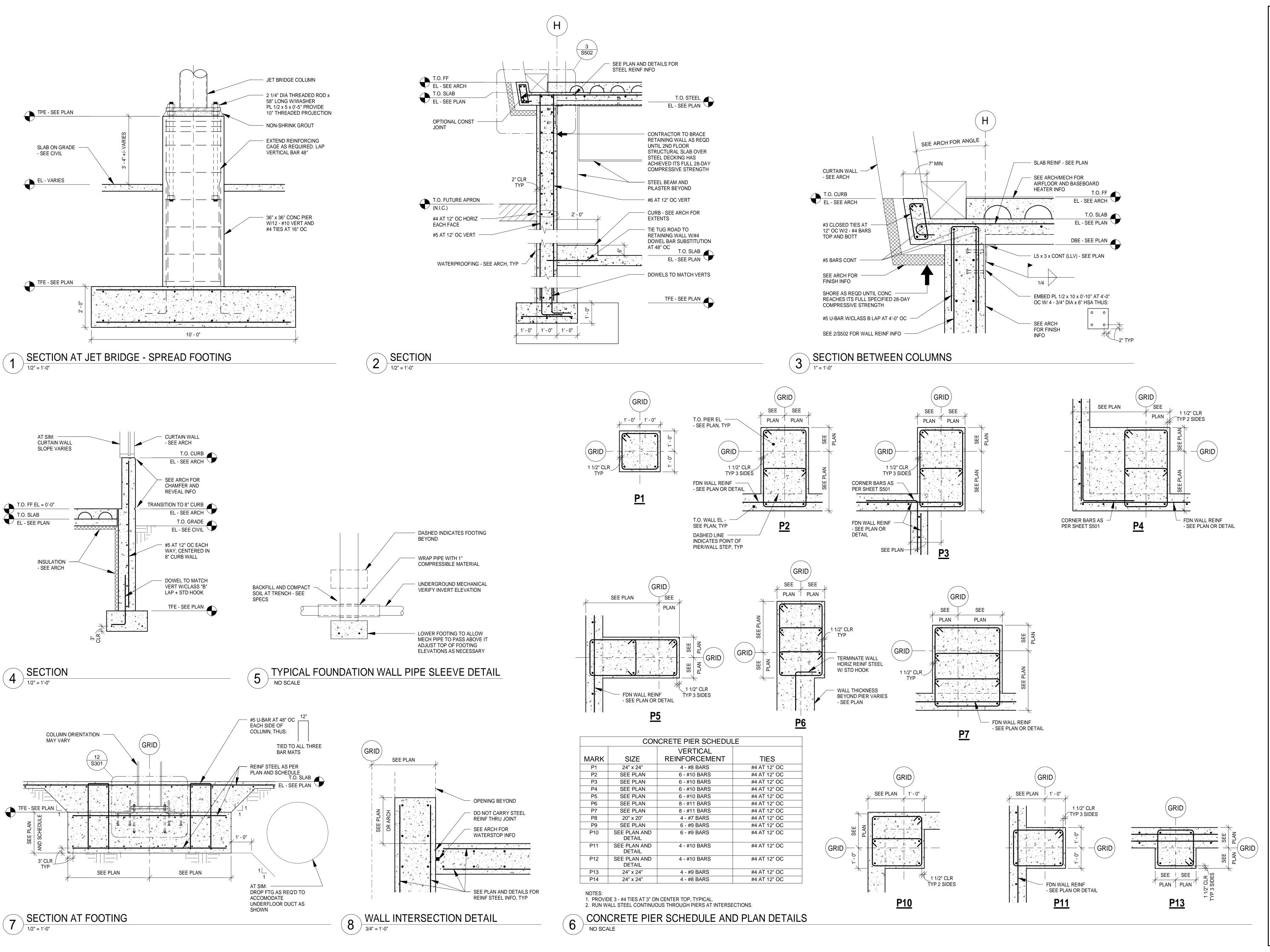
BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscape Consultants: **APPOLD DESIGN** 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

REVISIONS DESCRIPTION **DATE ISSUED:** 04-12-10 **REVIEWED BY:** DRAWN BY: SJL **DESIGNED BY:** CWB AEP PROJECT NUMBER 213-1882-091 (C) 2009 REYNOLDS, SMITH AND HILLS INC SHEET TITLE

**STRUCTURAL DETAILS** 

> SHEET NUMBER **S501**





4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW TERMINAL DESIGN

CONSULTANTS

Interior Architects: **SJA ARCHITECTS**11 E Superior Street Suite 340 Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

TEL: (218) 722-1056 / FAX: (218) 722-9306

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802

M/E/P/FP Engineers:

COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants:

BNP ASSOCIATES INC.

101 East Ridge Office Park, Suite 103, Danbury CT 06810

Landscape Consultants:

APPOLD DESIGN

TEL: (203) 792-3000 / FAX: (203) 792-4900

2432 East First Street, Duluth MN 55812
TEL: (218) 591-5079

REVISIONS

NO.	DESC	RIPTION	DATE			
DATE	<b>DATE ISSUED:</b> 04-12-10					
REVI	EWED BY:					
DRAWN BY: SJL						
DESIGNED BY: CWB						
AEP PROJECT NUMBER						
213-1882-091						

# STRUCTURAL DETAILS

SHEET NUMBER

5502

	CMU WALL REINFORCING SCHEDULE					
		CI	CENTERED IN WALL			
MARK	WALL TYPE	FOOTING DOWELS	HORIZONTAL	VERTICAL	COMMENTS	
W1	8" CMU	#5 AT 24" OC	AS NOTED ON DETAILS	#5 AT 24" OC		

/ NO SCALE

1. PROVIDE CLASS "A" SPLICE TO DOWELS TYPICAL.

2. FOR ALL CMU WALLS NOT INDICATED ON STRUCTURAL PLANS, SEE "NON-LOAD BEARING MASONRY PARTITION WALL REINFORCING SCHEDULE". 3. SEE LINTEL SCHEDULE THIS SHEET FOR LINTELS OVER MASONRY WALL OPENINGS.

WALL REINFORCING SCHEDULE

	CMU LINTEL SCHEDULE				
WALL TYPE	ROUGH OPENING	REQUIRED LINTEL	BEARING LENGTH EACH END		
6" CMU	UP TO 3'-4"	8" DEEP BOND BM W/1 - #5 CONT BOTT	8"		
6" CMU	3'-4" TO 8'-0"	16" DEEP BOND BM W/1 - #5 CONT TOP AND BOTT	16"		
8" CMU	UP TO 5'-4"	8" DEEP BOND BM W/2 - #5 CONT BOTT	8"		
8" CMU	5'-4" TO 10'-0"	16" DEEP BOND BM W/2 - #5 CONT TOP AND BOTT AND #4 SINGLE LEG HOOKED STIRRUP AT 8" OC	16"		

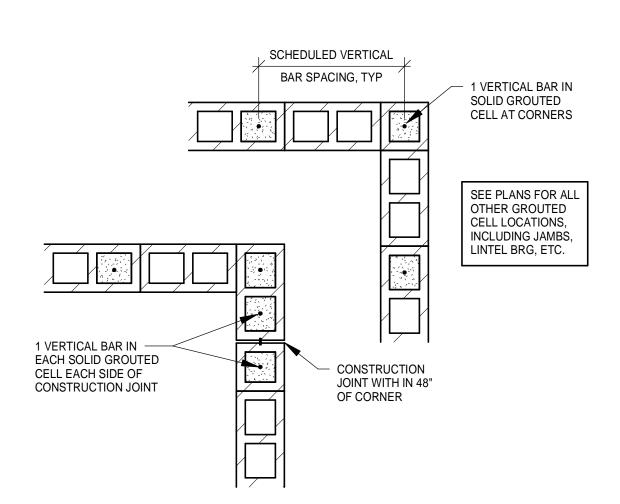
NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROUGH OPENING SIZES AND ELEVATIONS. 2. USE LINTEL BLOCKS FOR ALL CMU LINTELS.

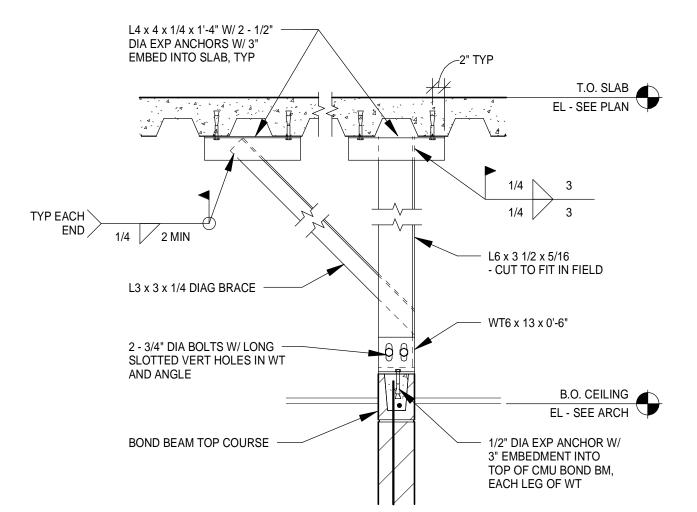
3. PROVIDE 8" DEEP BOND BM W/2 - #5 CONT BOTTOM AT ALL SILLS.

4. ALL LINTEL REINFORCING TO EXTEND 1'-4" MINIMUM BEYOND EDGES OF ROUGH OPENING.





## MASONRY CORNER DETAIL



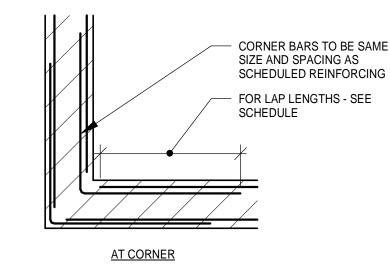
FLOOR DECK PARALLEL TO WALL NO SCALE

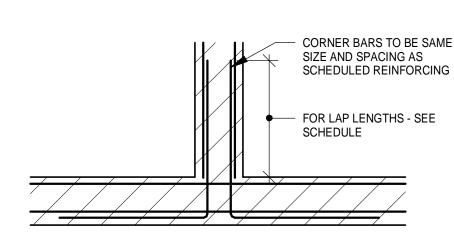
MASONRY	LAP SPLICE SCHEDULE
BAR SIZE	8" CMU (1 BAR IN CENTER)
DAR SIZE	f'c = 2,000 PSI
#4	24"
#5	30"
#6	36"

NOTES:

1. ALL BARS TO BE IN FULLY GROUTED CELLS OR BOND BEAMS 2. Fy = 60 KSI (Fs = 24 KSI MAX) 3. BAR LAP LENGTHS PER IBC 2006 SECTION 2107.5 AND ACI 530 EQ 2-9

# NO SCALE

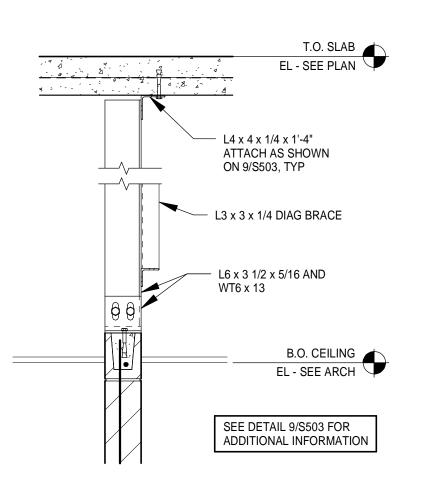




AT INTERSECTION

NOTE: VERTICAL REINFORCING OMITTED FOR CLARITY

# TYPICAL HORIZONTAL REINFORCING



FLOOR DECK PERPENDICULAR TO WALL

NON-LOAD BEARING MASONRY PARTITION WALL REINFORCING SCHEDULE WALL VERTICAL HORIZONTAL TYPE REINFORCING REINFORCING 6" CMU #4 AT 4'-0" OC, CENTERED BOND BM AT 5'-4" OC UP TO 13'-0" W/1 - #5 CONT, CENTERED #5 AT 5'-4" OC, CENTERED BOND BM AT TOP OF WALL AND ABOVE 8" CMU UP TO 13'-0" ALL OPNGS, EACH W/2 - #5 CONT 8" CMU CANT'L #5 AT 2'-8" OC, CENTERED BOND BM AT TOP OF WALL TO 5'-4" MAX W/2 - #5 CONT

**ROOF DECK** 

NOTES:

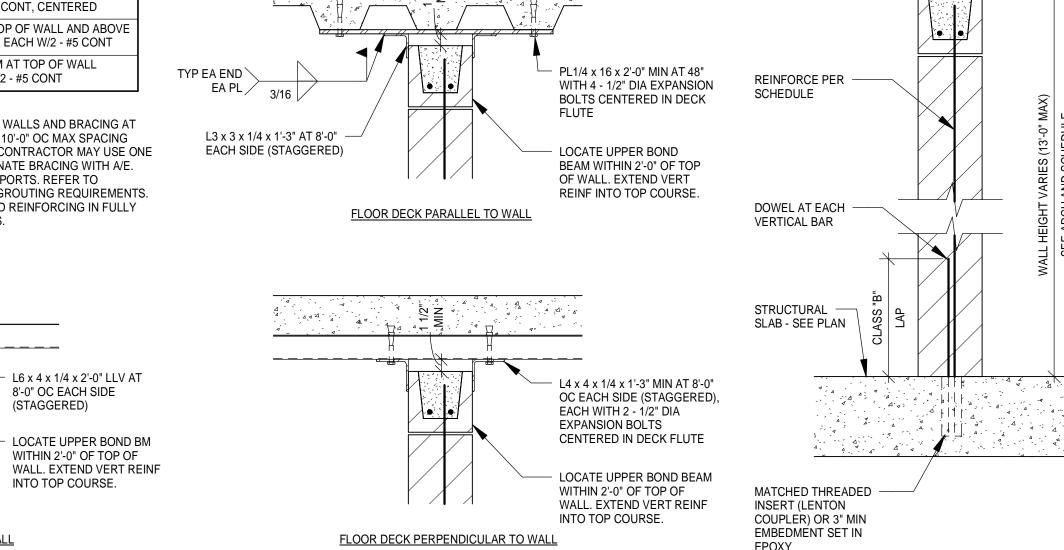
1. REFER TO TYPICAL DETAILS FOR DOWELS AT BOTTOM OF CMU WALLS AND BRACING AT TOP OF CMU WALLS. TOP OF WALL BRACING TO BE PLACED AT 10'-0" OC MAX SPACING WHERE DISTANCE BETWEEN WALL CORNERS EXCEEDS 12'-0". CONTRACTOR MAY USE ONE

- OF THE BRACING OPTIONS PROVIDED OR COORDINATE ALTERNATE BRACING WITH A/E. 2. GROUT CMU SOLID AT HANDRAIL, GUARDRAIL AND OTHER SUPPORTS, REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND ADDITIONAL GROUTING REQUIREMENTS.
- 3. PROVIDE (1) ADDITIONAL VERTICAL BAR MATCHING SCHEDULED REINFORCING IN FULLY GROUTED CELL AT CORNERS AND WITHIN 8" OF ALL OPENINGS.

\_\_\_\_\_

ROOF DECK PERPENDICULAR TO WALL

4. REFER TO 3/S503 FOR MASONRY LINTEL SCHEDULE.



SEE ARCH DETAILS -

FOR TRANSITION TO

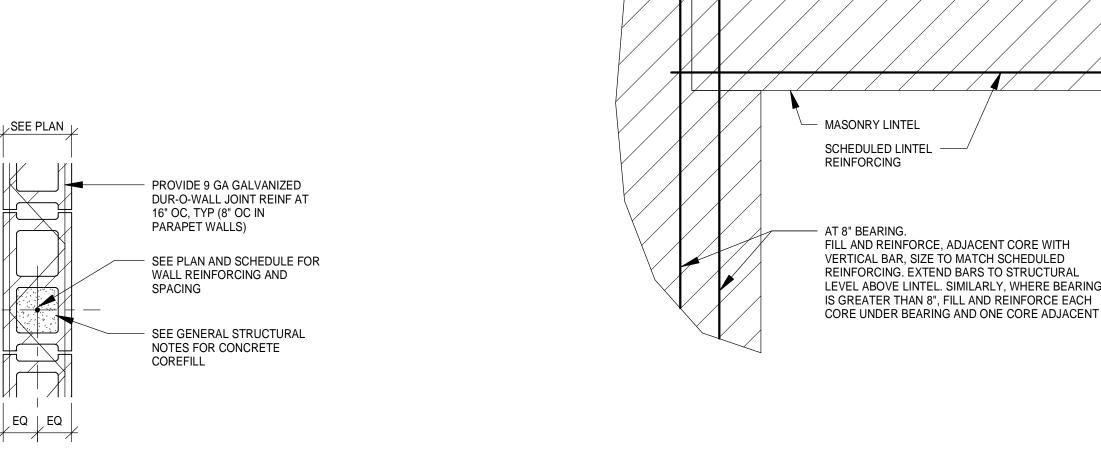
OTHER WALL TYPES

### NON-LOAD BEARING WALL REINFORCING SCHEDULE AND TYPICAL DETAILS NO SCALE

8'-0" OC EACH SIDE

INTO TOP COURSE.

(STAGGERED)



TYPICAL WALL REINFORCING

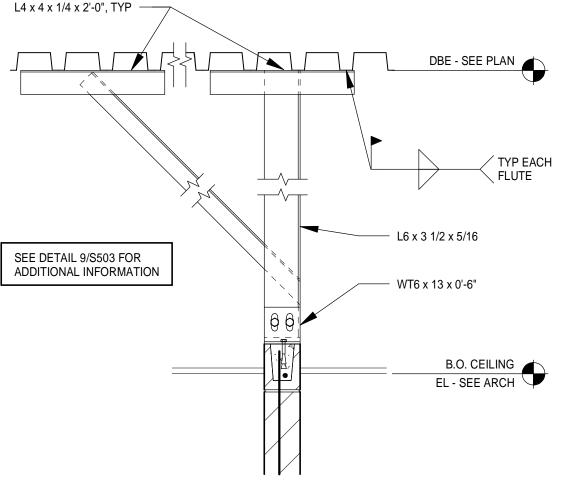
- SEE WALL REINFORCING

SCHEDULE AND GENERAL

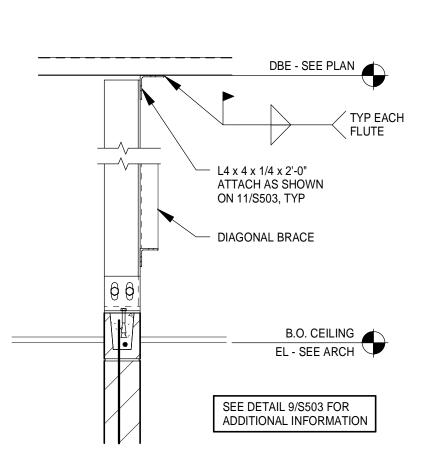
STRUCTURAL NOTES

# TYPICAL CMU WALL DETAIL

# TYPICAL CMU LINTEL BEARING DETAIL



ROOF DECK PARALLEL TO WALL



ROOF DECK PERPENDICULAR TO WALL

3/4" = 1'-0"

# IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscape Consultants: **APPOLD DESIGN** 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

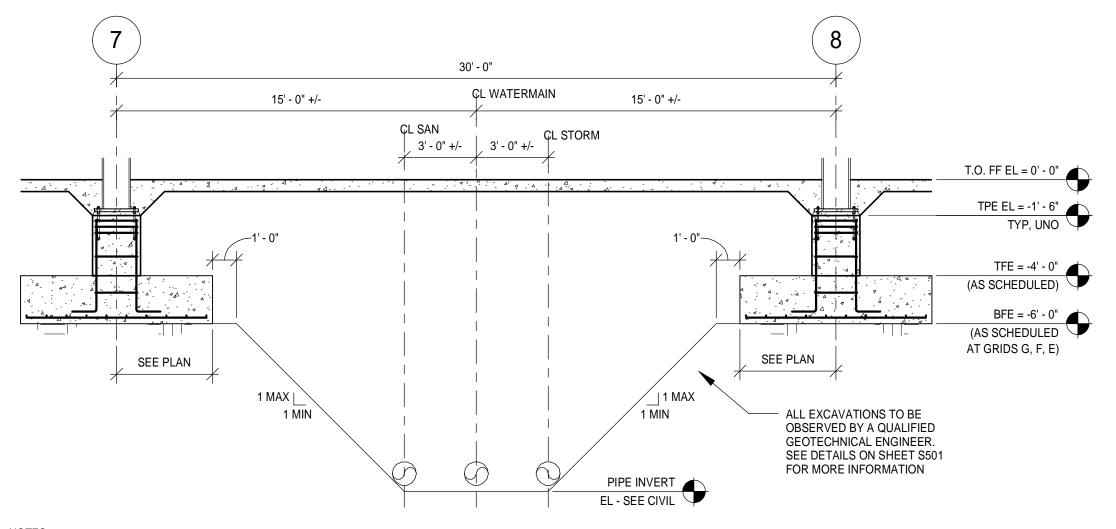
**REVISIONS** DESCRIPTION **DATE ISSUED:** 04-12-10 **REVIEWED BY:** DRAWN BY: SJL **DESIGNED BY:** CWB AEP PROJECT NUMBER

SHEET TITLE **STRUCTURAL DETAILS** 

213-1882-091

(C) 2009 REYNOLDS, SMITH AND HILLS INC

SHEET NUMBER **S503** 



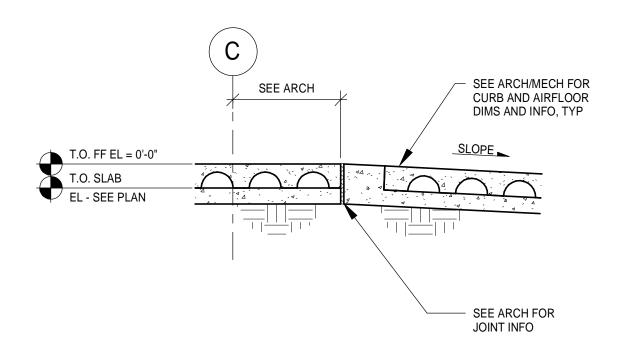
NOTES:

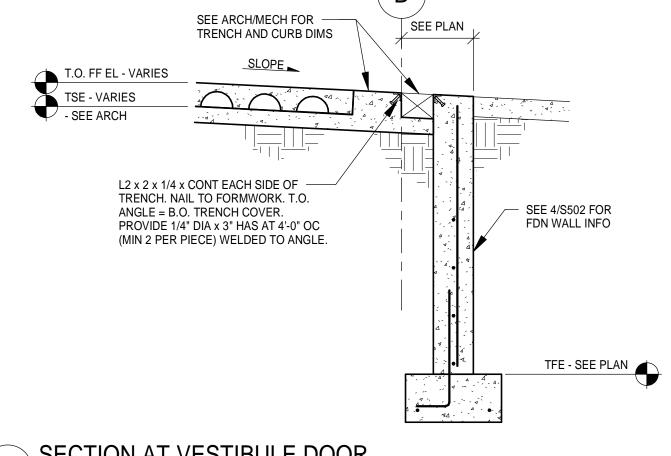
1. SEE GEOTECHNICAL REPORT FOR WATER TABLE ELEVATIONS. CONTRACTOR TO MAKE ADEQUATE PROVISIONS FOR DEWATERING AS REQUIRED.

2. PIPE INVERT LOCATION SHOWN SCHEMATICALLY REPRESENT LOCATIONS AT GRID E.

3. CONTRACTOR TO NOTIFY A/E IMMEDIATELY IF ACTUAL FIELD CONDITIONS VARY FROM LOCATIONS/SLOPES INDICATED.



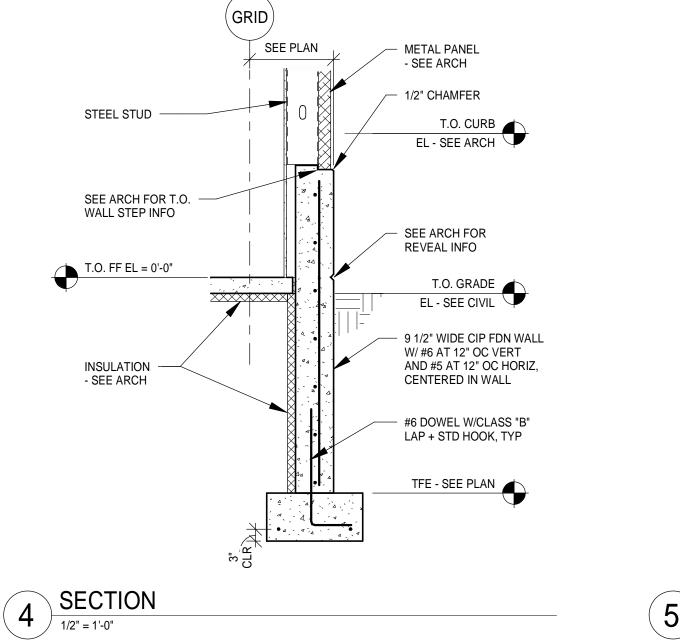


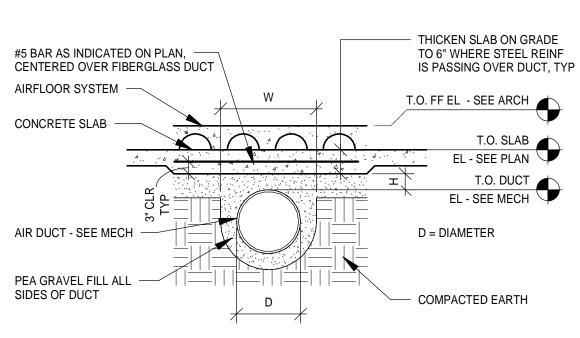


SECTION

1/2" = 1'-0"

SECTION AT VESTIBULE DOOR (3) SEC11 1/2" = 1'-0"

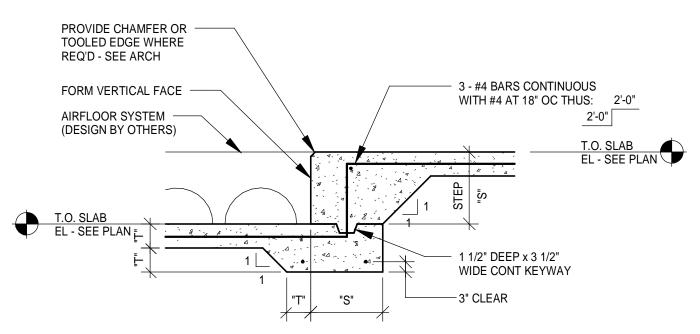




NOTE:
1. "H" AND "W" DIMENSIONS AND SPECIFICATIONS FOR "PEA GRAVEL FILL" TO BE VERIFIED WITH UNDERGROUND DUCT SUPPLIER PRIOR TO CONSTRUCTION.

5 UNDERGROUND DUCTWORK DETAIL

1/2" = 1'-0"



SLAB STEP DETAIL

3/4" = 1'-0"



Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



**DULUTH** INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

> M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

TEL: (218) 722-1056 / FAX: (218) 722-9306

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

> Landscape Consultants: APPOLD DESIGN 2432 East First Street, Duluth MN 55812

TEL: (218) 591-5079

REVISIONS

NO.	DES	CRIPTION		DAT
DATE ISS	SUED:	04-12-1	0	

**REVIEWED BY:** 

DRAWN BY: SJL

**DESIGNED BY:** CWB

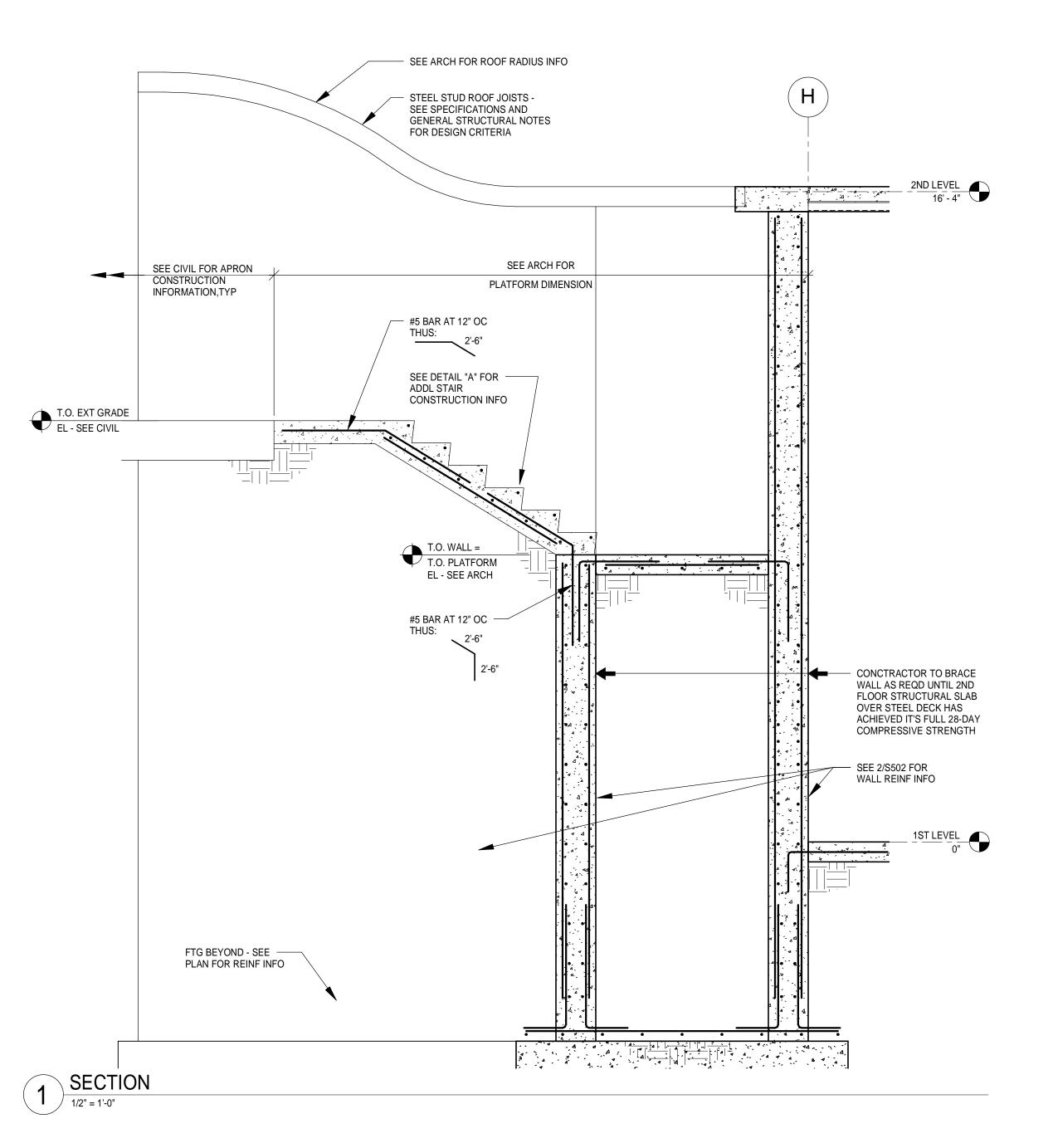
AEP PROJECT NUMBER

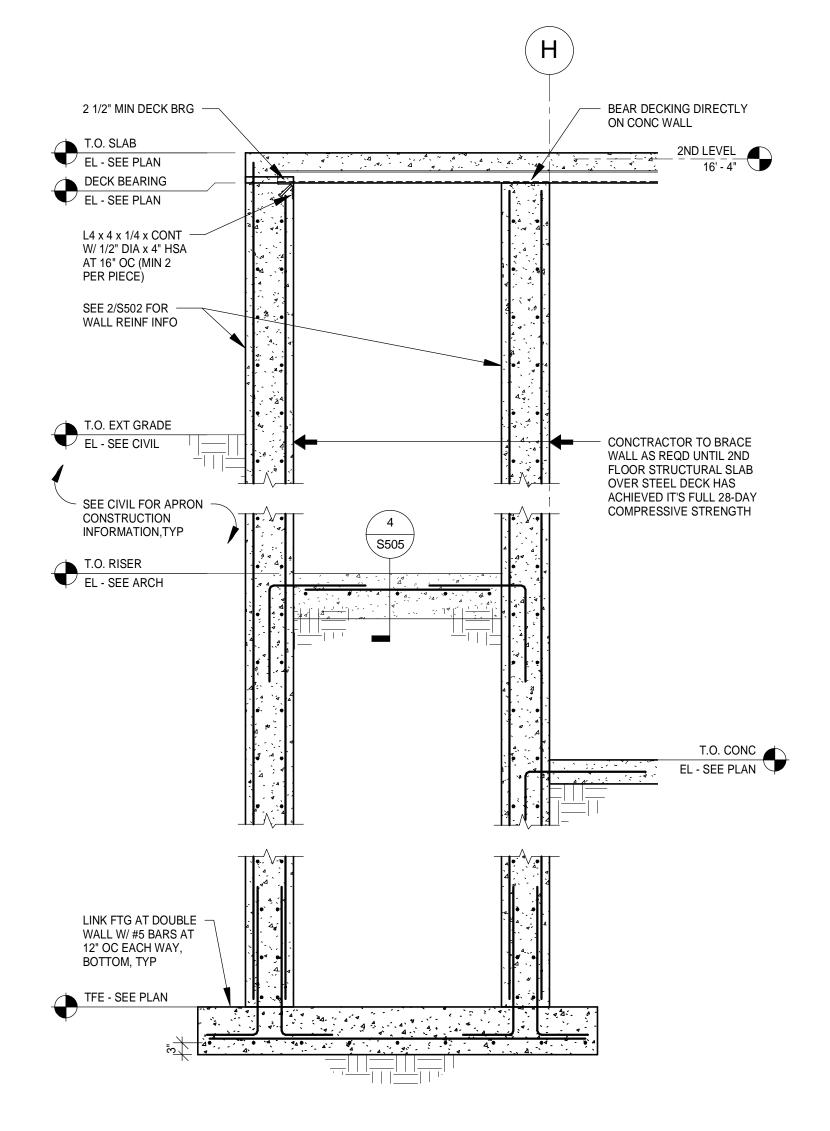
213-1882-091 (C) 2009 REYNOLDS, SMITH AND HILLS INC

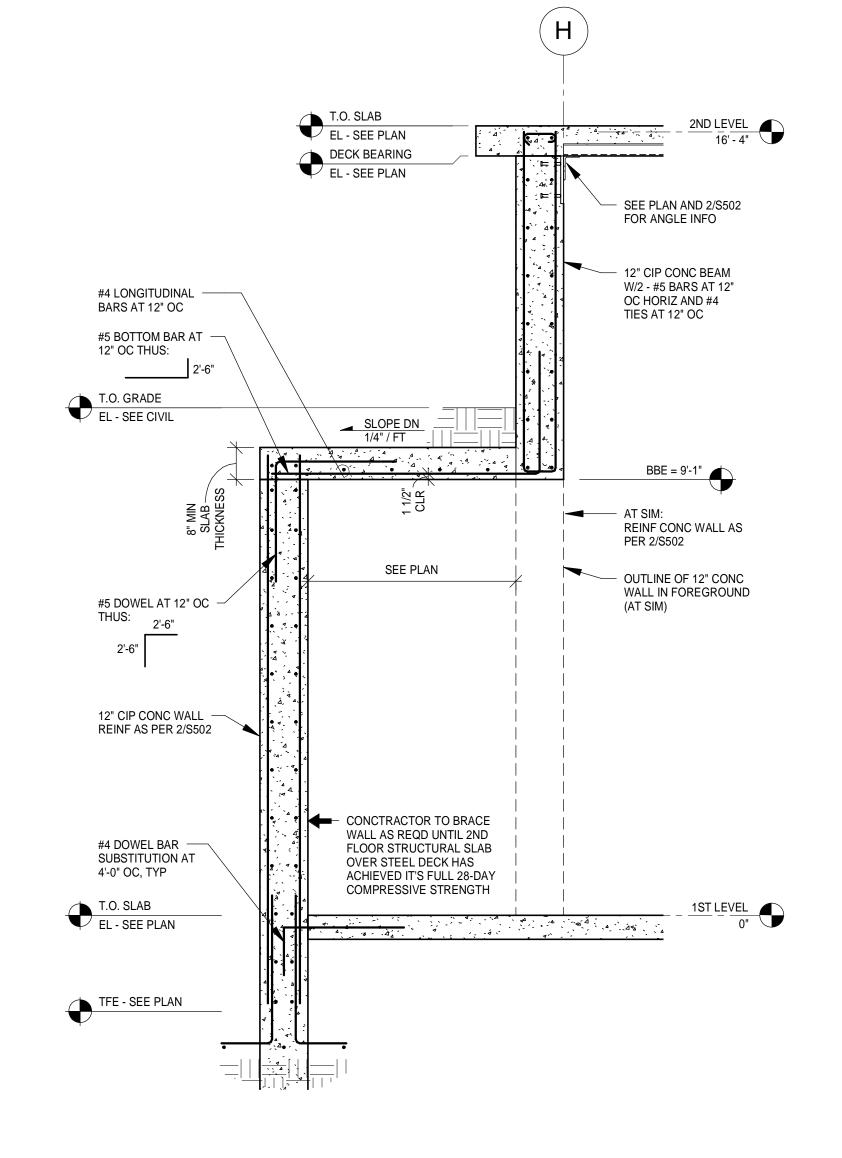
SHEET TITLE

STRUCTURAL **DETAILS** 

> SHEET NUMBER **S504**



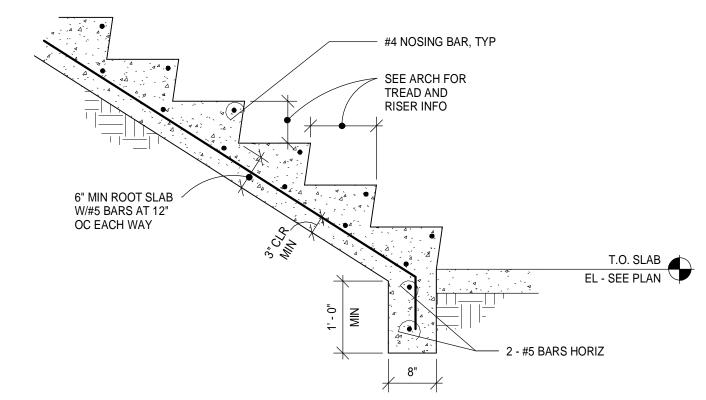




SECTION

1/2" = 1'-0"

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



4 STAIR SECTION

3/4" = 1'-0"

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers:

COSENTINI 1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

TEL: (218) 591-5079

Landscape Consultants: **APPOLD DESIGN** 2432 East First Street, Duluth MN 55812

REVISIONS			
NO. DESCRIPTION			

DATE ISSUED:	04-12-10	
REVIEWED BY:		

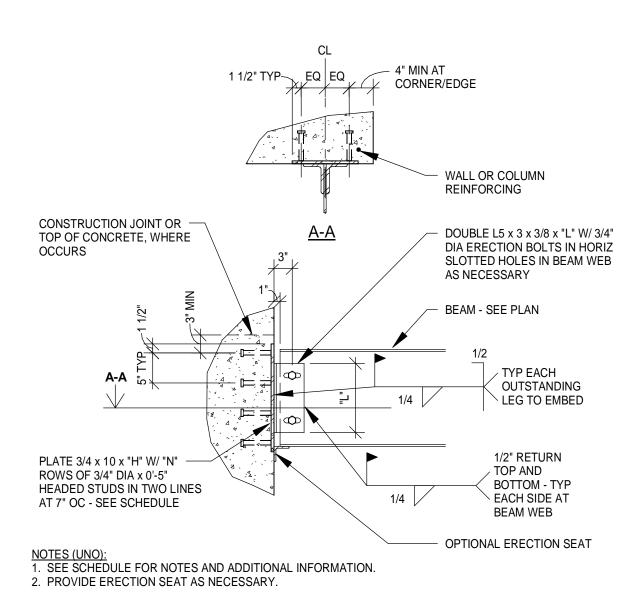
DATE

**DESIGNED BY:** CWB AEP PROJECT NUMBER

213-1882-091

SHEET TITLE **STRUCTURAL DETAILS** 

> SHEET NUMBER **S505**



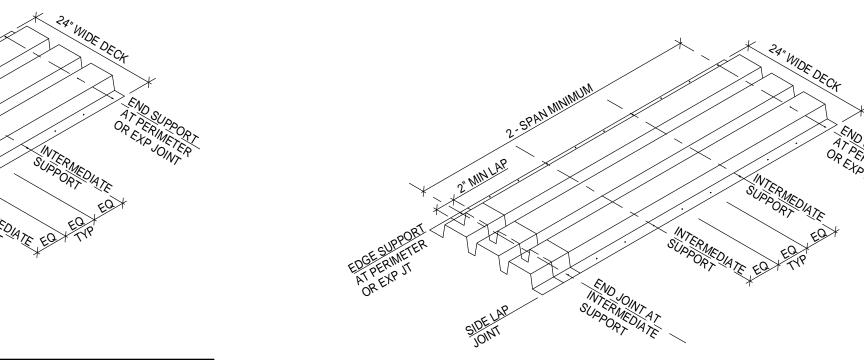
# TYPICAL EMBED PLATE - DOUBLE ANGLE CONNECTION

### TYPICAL EMBED PLATE SCHEDULE MARK STUD ROWS | PLATE LENGTH | MIN ANGLE LENGTH STEEL **BEAM SIZE** "N" "L" W12, W14 13" 8 1/2" EP-2 18" W16 11 1/2" EP-3 W33 38" 24"

NOTES (UNO):

1. PROVIDE EMBED PLATES CORRESPONDING TO BEAM SIZES IN SCHEDULE, UNLESS NOTED OTHERWISE ON PLANS OR DETAILS. 2. PROVIDE HOLES AS NECESSARY FOR PLATE ATTACHMENT TO FORMWORK (5/16" DIA MAX). 3. COORDINATE CONCRETE REINFORCING BAR PLACEMENT WITH HEADED STUDS. 4. FIELD VERIFY EMBED PLATE PLACEMENT PRIOR TO BEAM ERECTION.

# TYPICAL EMBED PLATE SCHEDULE



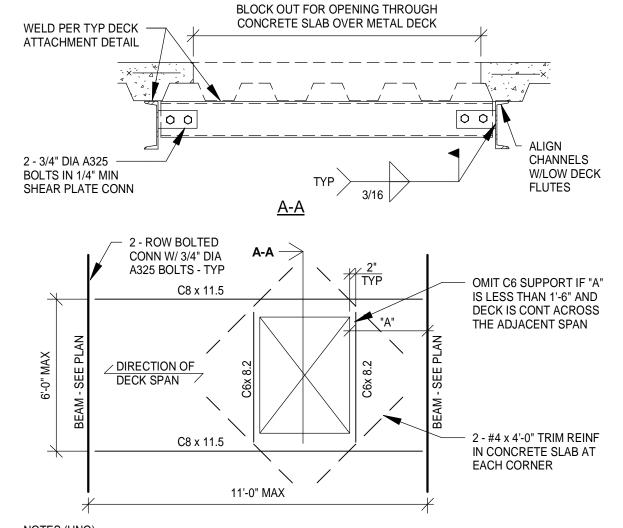
DECK SUPPORT CONDITION	DECK ATTACHMENT
END SUPPORT	PUDDLE WELDS AT EACH LOW FLUTE
EDGE SUPPORT	PUDDLE WELDS AT 12" OC
INTERMEDIATE SUPPORT	PUDDLE WELDS AT EACH LOW FLUTE
END JOINT AT INT SUPPORT	PUDDLE WELDS AT EACH LOW FLUTE, EACH SIDE
SIDE LAP JOINT	#10 TEK SCREWS OR 1 1/2" SEAM WELD AT 36" OC MAX

NOTES (UNO):

1. ALL PUDDLE (ARC-SPOT) WELDS SHALL BE 5/8" DIAMETER.

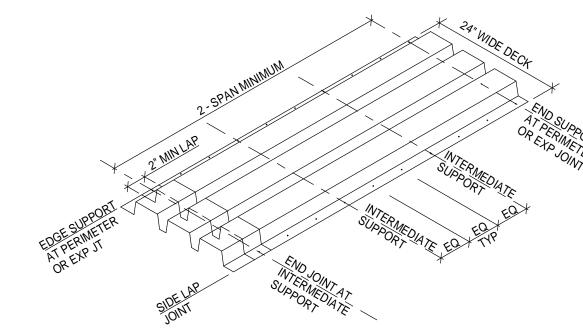
- 2. PROVIDE DECK ATTACHMENTS AT SPACING SHOWN UNLESS NOTED OTHERWISE ON DRAWINGS 3. DECK SHEETS SHALL BE BUTTED AT END JOINTS. PROVIDE 2 1/2" MINIMUM BEARING. GAPS UP TO 1" ARE
- ACCEPTABLE AT BUTT JOINTS. 4. HEADED STUD INSTALLED THROUGH THE DECK MAY BE SUBSTITUTED FOR PUDDLE WELD

### TYPICAL 3" COMPOSITE STEEL DECK ATTACHMENT DETAIL NO SCALE



1. DO NOT CUT DECK AT OPENINGS UNTIL CONCRETE HAS ATTAINED ITS SPECIFIED COMPRESSIVE 2. VERIFY OPENING DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND MECHANICAL TRADES

TYPICAL FLOOR OPENING FRAME (OVER 32")



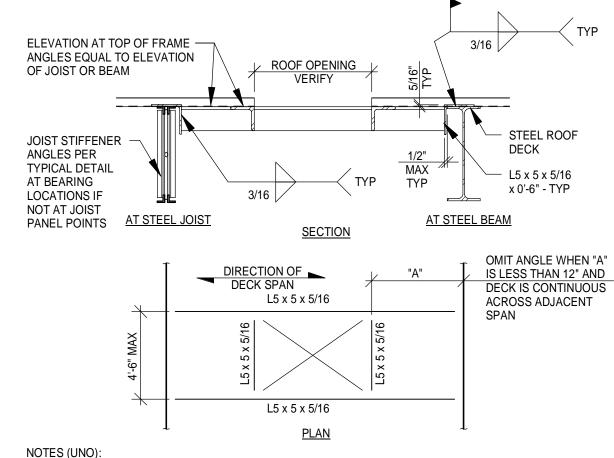
DECK SUPPORT CONDITION	DECK ATTACHIMENT
END SUPPORT	PUDDLE WELDS AT EACH LOW FLUTE
EDGE SUPPORT	PUDDLE WELDS AT 12" OC
INTERMEDIATE SUPPORT	PUDDLE WELDS AT EACH LOW FLUTE
END LAP JOINT	PUDDLE WELDS AT EACH LOW FLUTE
SIDE LAP JOINT	#10 TEK SCREWS PER SPAN

DECK SLIPPORT CONDITION DECK ATTACHMENT

NOTES (UNO):

1. ALL PUDDLE (ARC-SPOT) WELDS SHALL BE 5/8" DIAMETER. 2. PROVIDE DECK ATTACHMENTS AT SPACING SHOWN UNLESS NOTED OTHERWISE ON DRAWINGS 3. AT END LAP CONDITIONS, PUDDLE WELDS SHALL PROVIDE FUSION THROUGH ALL DECK LAYERS.

# TYPICAL 3" STEEL ROOF DECK ATTACHMENT DETAIL



NOTES (UNO):

1. VERIFY OPENING SIZES AND LOCATIONS WITH MECHANICAL CONTRACTOR PRIOR TO FABRICATION. 2. WELD DECK AT OPENING AT EACH FLUTE WITH PUDDLE WELDS, PER THE TYP DECK ATTACHMENT DETAIL DO NOT CUT OPENING IN DECK UNTIL NECESSARY, CONTRACTOR TO COORDINATE 4. THIS ROOF OPENING FRAME IS NOT DESIGNED TO SUPPORT THE WEIGHT OF ROOF TOP MECHANICAL EQUIPMENT WEIGHING OVER 400 LBS. EQUIPMENT SHALL BE SUPPORTED ON A STRUCTURAL CURB DESIGNED BY THE SUPPLIER TO SPAN TO THE PRIMARY STRUCTURAL FRAMING.

TYPICAL ROOF OPENING FRAME FOR 3" DECK NO SCALE

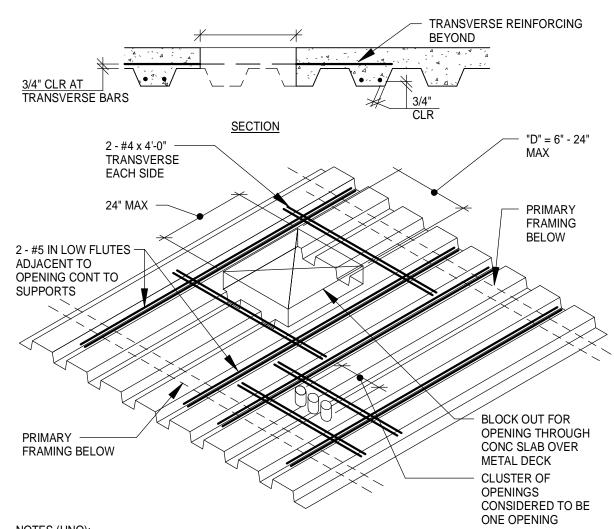
	BEAM SHEAR CONNECTION SCHEDULE			
STEEL BEAM			DOUBLE SHEAR CONNECTION FOR BEAMS SUPPORTING OTHER BEAM	
SIZE	MIN ROWS OF BOLTS	MIN DESIGN SERVICE CAPACITY (KIPS)	MIN ROWS OF BOLTS	MIN DESIGN SERVICE CAPACITY (KIPS)
W8, W10	2	12	2	24
W12	3	23	3	46
W14	3	23	3	46
W16	4	35	4	70
W18	5	45	4	70
W21	6	55	5	90
W24	7	65	6	110
W27	7	65	6	110
W30	8	75	7	130
W33	8	75	7	130
W36	9	85	8	150

NOTES:

1. CONTRACTOR/FABRICATOR SHALL DESIGN TYPICAL SHEAR CONNECTIONS FOR THIS PROJECT. CONNECTION TYPES SHALL CONFORM TO AISC STANDARD SHEAR CONNECTIONS. SUBMIT PROPOSED CONNECTION TYPES FOR APPROVAL BEFORE STARTING SHOP DRAWINGS. 2. PROVIDE BEAM CONNECTIONS FOR END REACTIONS INDICATED ABOVE OR AS SHOWN ON PLAN OR DETAIL, WHICHEVER IS GREATER. BEAM TO BEAM CONNECTIONS MAY BE SINGLE OR DOUBLE SHEAR, AS REQUIRED TO PROVIDE THE SPECIFIED CONNECTION CAPACITY

- WITHIN THE AVAILABLE CONNECTION GEOMETRY. ALL BEAM TO COLUMN CONNECTIONS SHALL BE DOUBLE SHEAR. 3. ALL BOLTS SHALL BE MINIMUM 3/4" DIAMETER A325-N, UNLESS NOTED OTHERWISE. 4. SHOP CONNECTIONS MAY BE WELDED (WITH CAPACITY AS NOTED HEREIN) OR BOLTED.
- 5. VALUES SHOWN ASSUME 1/4" BEAM WEB THICKNESS, MINIMUM.
- 6. USE TWO ANGLE CONNECTION TO ALL BEAMS FRAMING INTO CONCRETE EMBED PLATES.

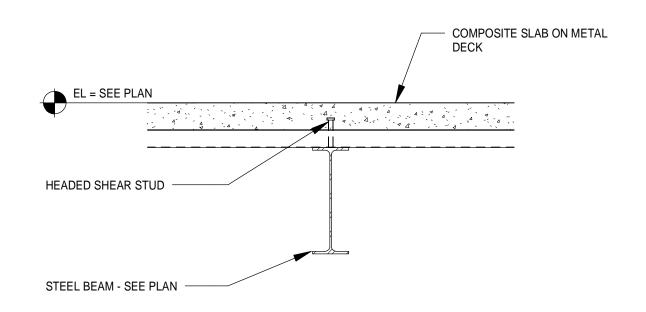
# BEAM SHEAR CONNECTION SCHEDULE



NOTES (UNO):

1. DO NOT CUT DECK AT OPENINGS UNTIL CONCRETE HAS ATTAINED ITS SPECIFIED COMPRESSIVE STRENGTH. 2. PROVIDE 2 TIMES "D" CLEAR DISTANCE BETWEEN OPENING EDGES. "D" IS LARGEST OF ADJACENT

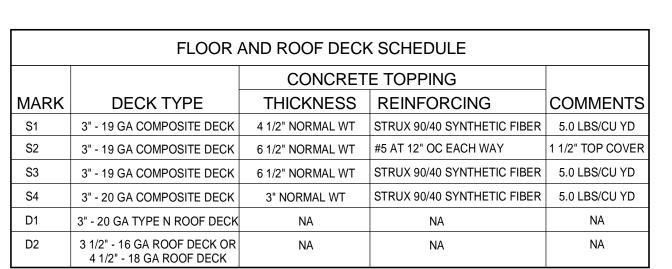
### TYPICAL FRAMING AT FLOOR OPENINGS (6"-32" MAX) NO SCALE



NOTES (UNO):

1. SEE TYPICAL DETAILS FOR DECK ATTACHMENT AND HEADED STUD INFORMATION.

TYPICAL SECTION AT COMPOSITE DECK PERPENDICULAR TO BEAM NO SCALE

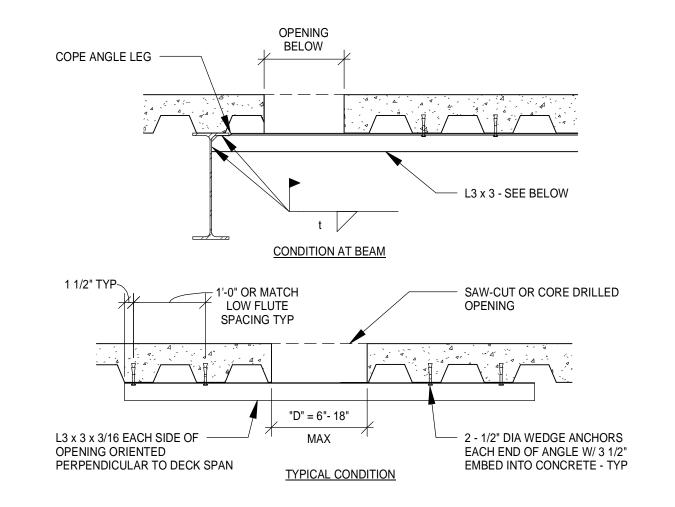


NOTES (UNO):

1. SEE TYPICAL DETAILS FOR DECK ATTACHMENT DETAILS. 2. SEE GENERAL STRUCTURAL NOTES FOR CONCRETE STRENGTH.

- 3. CONCRETE TOPPING THICKNESS IS FROM TOP OF DECK TO TOP OF CONCRETE
- 4. SEE PLANS AND DETAILS FOR ADDITIONAL REINFORCING AND REINFORCING PLACEMENT AT CONCRETE SLABS ON METAL DECK.
- 5. SEE SPECIFICATIONS FOR SYNTHETIC FIBERS.
- 6. ALL COMPOSITE DECK IS GALVANIZED. REFER TO SPECIFICATIONS FOR ROOF DECK FINISH.





NOTES (UNO):

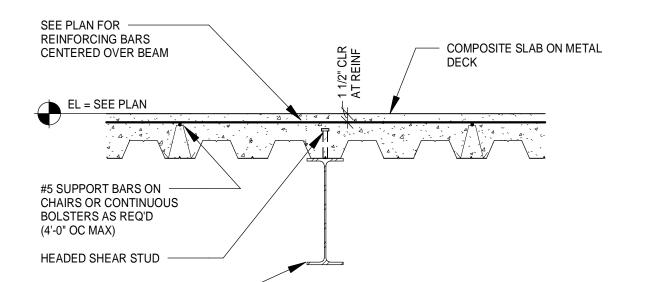
1. DO NOT OVER CUT CORNERS OF SQUARE OR RECTANGULAR OPENINGS

2. CLUSTER OF OPENINGS CONSIDERED TO BE ONE OPENING. PROVIDE SUPPORT ANGLES IF OPENINGS LOCATED WITH LESS THAN TWO TIMES "D" CLEAR BETWEEN OPENING EDGES. "D" IS LARGEST OF ADJACENT OPENING DIMENSIONS.

TYPICAL OPENING (6"-24" MAX) THROUGH SLAB



STEEL BEAM - SEE PLAN



NOTES (UNO):

1. CUT HIGH DECK FLUTE WHEN IT OCCURS AT BEAM AND PROVIDE GIRDER FILLER DECK 2. SEE TYPICAL DETAILS FOR DECK ATTACHMENT AND HEADED STUD INFORMATION

TYPICAL SECTION AT COMPOSITE DECK PARALLEL TO BEAM 12) TYPICA



Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL** DESIGN

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802

TEL: (218) 722-1056 / FAX: (218) 722-9306 M/E/P/FP Engineers:

COSENTINI 1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

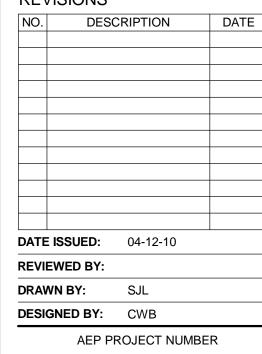
Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810

TEL: (203) 792-3000 / FAX: (203) 792-4900

TEL: (218) 591-5079

Landscape Consultants: **APPOLD DESIGN** 2432 East First Street, Duluth MN 55812

**REVISIONS** 



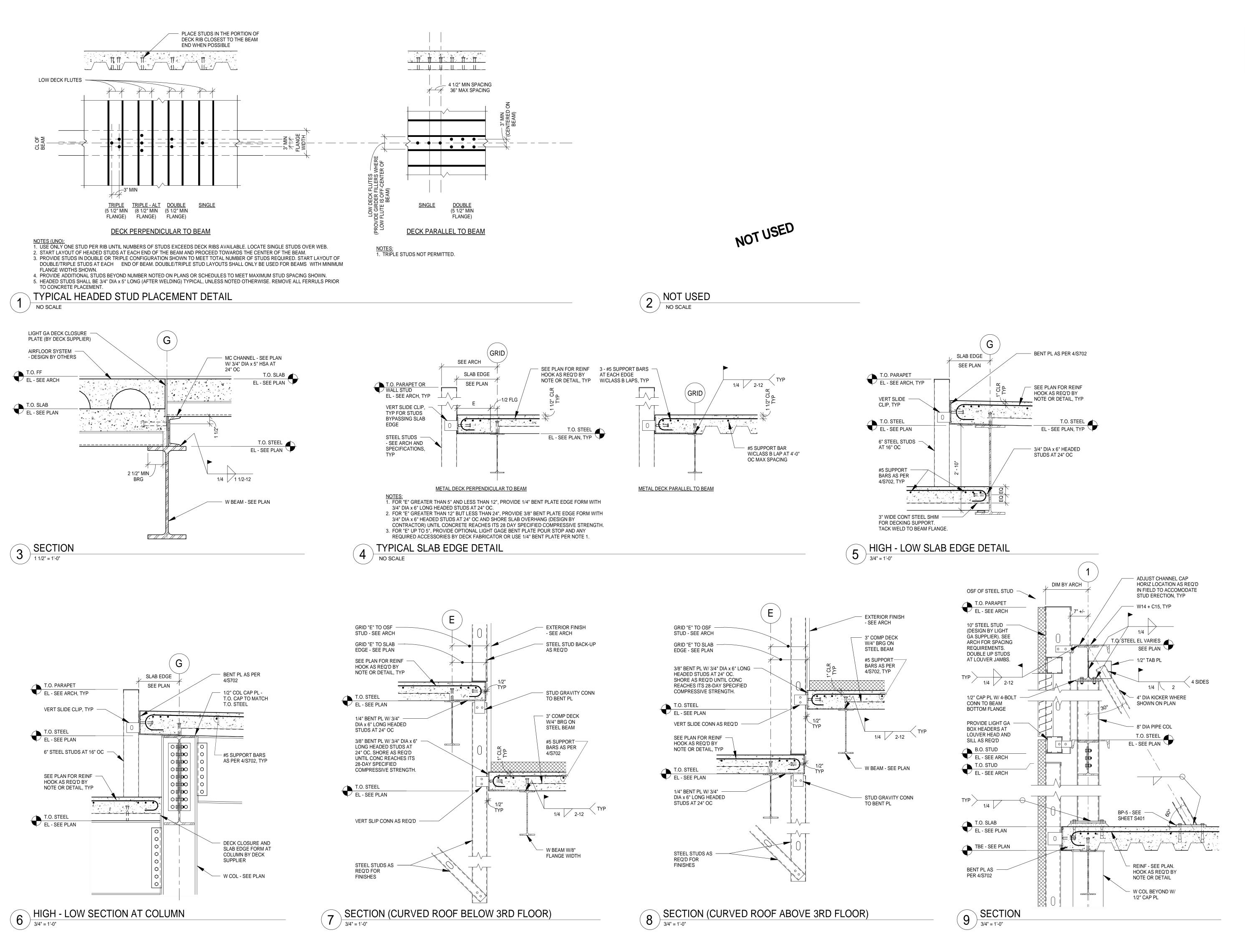
SHEET TITLE **STRUCTURAL** 

213-1882-091

(C) 2009 REYNOLDS, SMITH AND HILLS INC

**DETAILS** 

SHEET NUMBER **S701** 



ISSETT.

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH
INTERNATIONAL
AIRPORT
DULUTH, MN

NEW TERMINAL DESIGN

## CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340 Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

# M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

# Baggage Handling Systems Consultants: **BNP ASSOCIATES INC.**01 East Ridge Office Park, Suite 103, Danbury CT 06810

Landscape Consultants:

TEL: (203) 792-3000 / FAX: (203) 792-4900

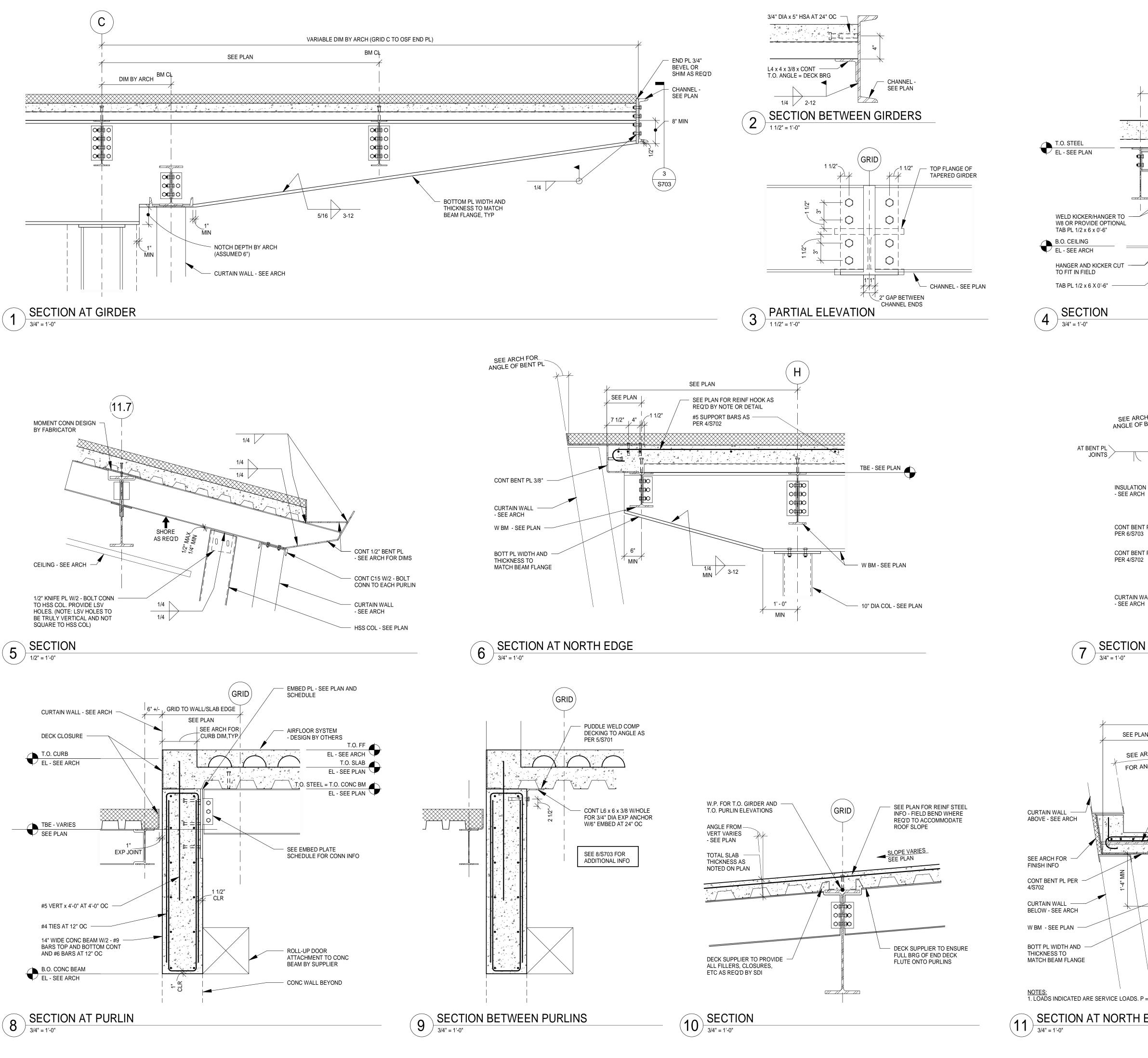
APPOLD DESIGN
2432 East First Street, Duluth MN 55812
TEL: (218) 591-5079

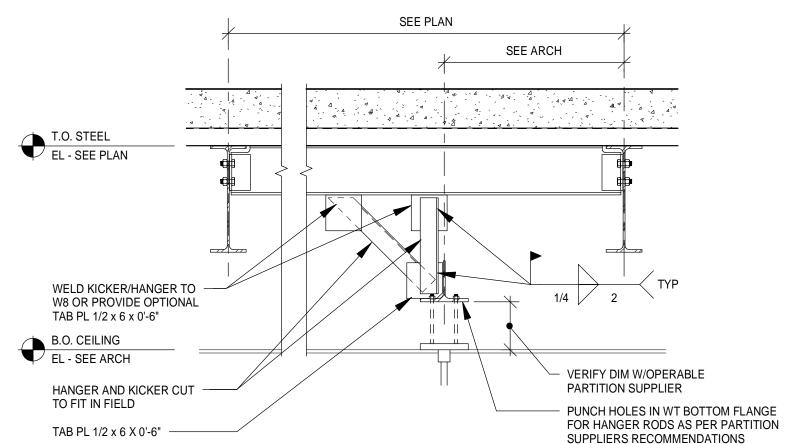
REVISIONS

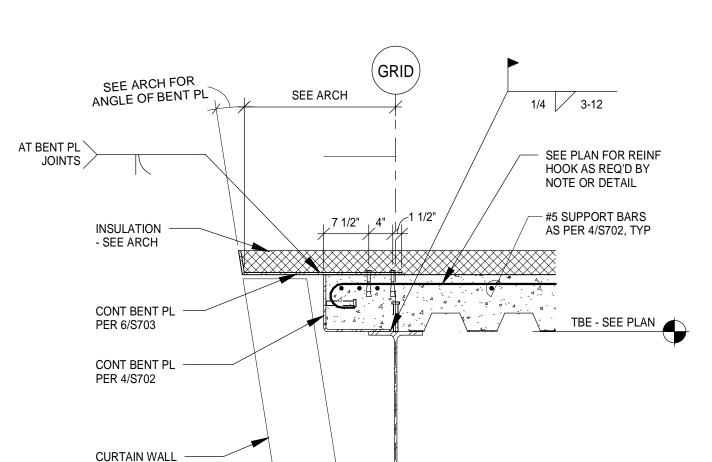
INE VIOIOINO				
NO. DES	CRIPTION	DATE		
DATE ISSUED:	04-12-10			
REVIEWED BY:				
DRAWN BY:	SJL			
DESIGNED BY:	DESIGNED BY: CWB			
AEP PROJECT NUMBER				
213-1882-091				
© 2009 REYNOLDS, SMITH AND HILLS INC.				

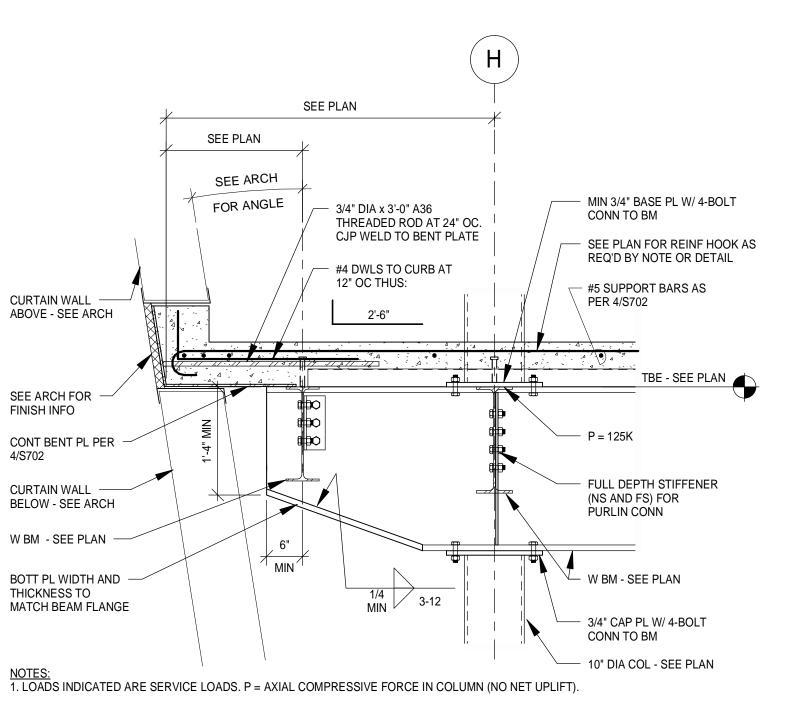
# STRUCTURAL DETAILS

SHEET NUMBER **5702** 









SECTION AT NORTH EDGE

3/4" = 1'-0"

IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS 11 E Superior Street Suite 340 Duluth MN 55802

TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers: MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI 1 East Wacker Drive, Suite 103, Chicago IL 60601

TEL: (312) 670-1800 / FAX: (312) 670-1801 Baggage Handling Systems Consultants: BNP ASSOCIATES INC.

01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900 Landscape Consultants:

**APPOLD DESIGN** 2432 East First Street, Duluth MN 55812 TEL: (218) 591-5079

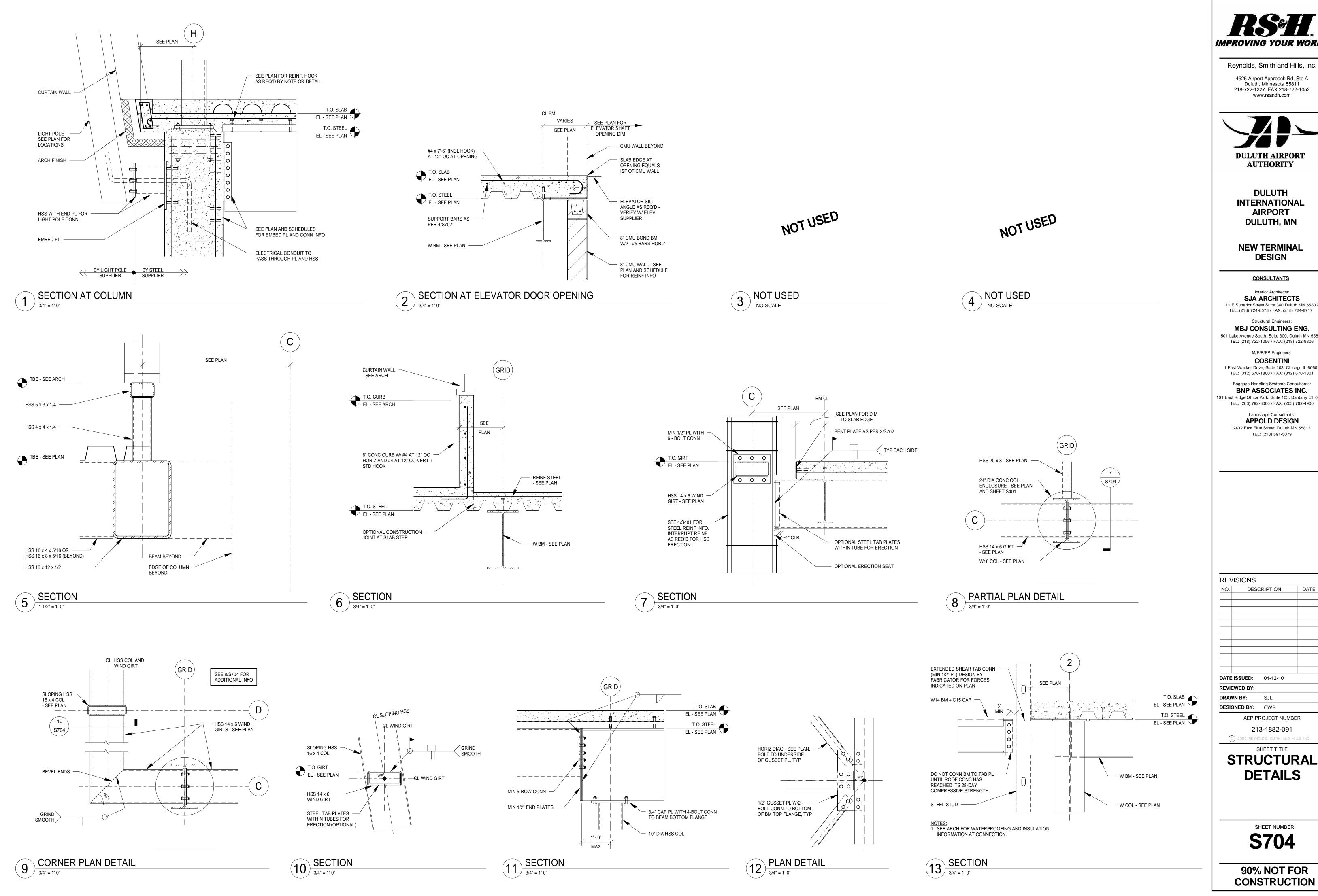
**REVISIONS** DESCRIPTION **DATE ISSUED:** 04-12-10 **REVIEWED BY:** DRAWN BY: SJL **DESIGNED BY:** CWB AEP PROJECT NUMBER 213-1882-091

**STRUCTURAL DETAILS** 

SHEET TITLE

(C) 2009 REYNOLDS, SMITH AND HILLS INC

SHEET NUMBER **S703** 



IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.

4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL **AIRPORT** DULUTH, MN

**NEW TERMINAL DESIGN** 

**CONSULTANTS** 

Interior Architects: SJA ARCHITECTS

11 E Superior Street Suite 340 Duluth MN 55802 TEL: (218) 724-8578 / FAX: (218) 724-8717 Structural Engineers:

MBJ CONSULTING ENG. 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

> M/E/P/FP Engineers: COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601 TEL: (312) 670-1800 / FAX: (312) 670-1801

Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 101 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

TEL: (218) 591-5079

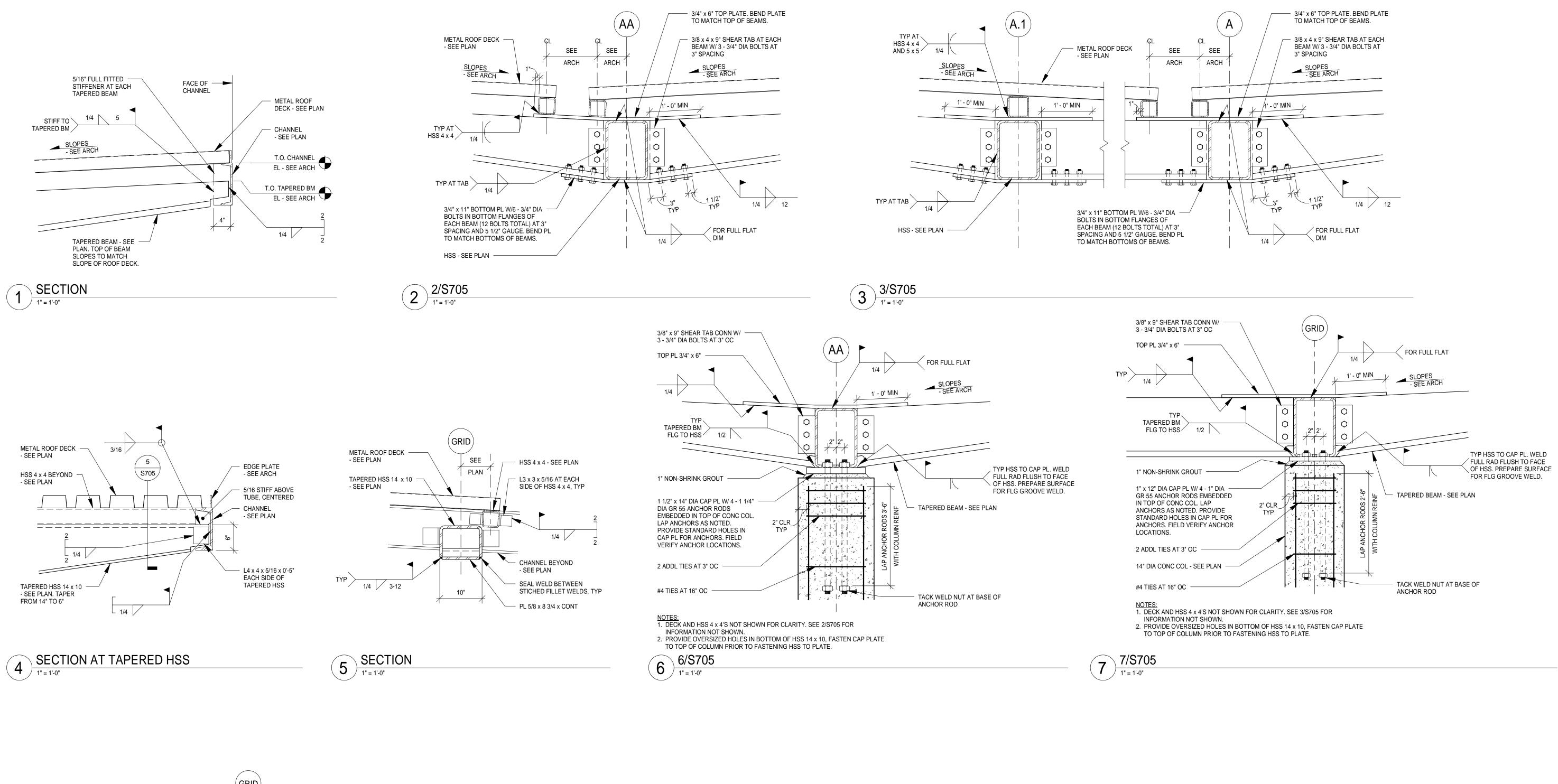
Landscape Consultants: **APPOLD DESIGN** 2432 East First Street, Duluth MN 55812

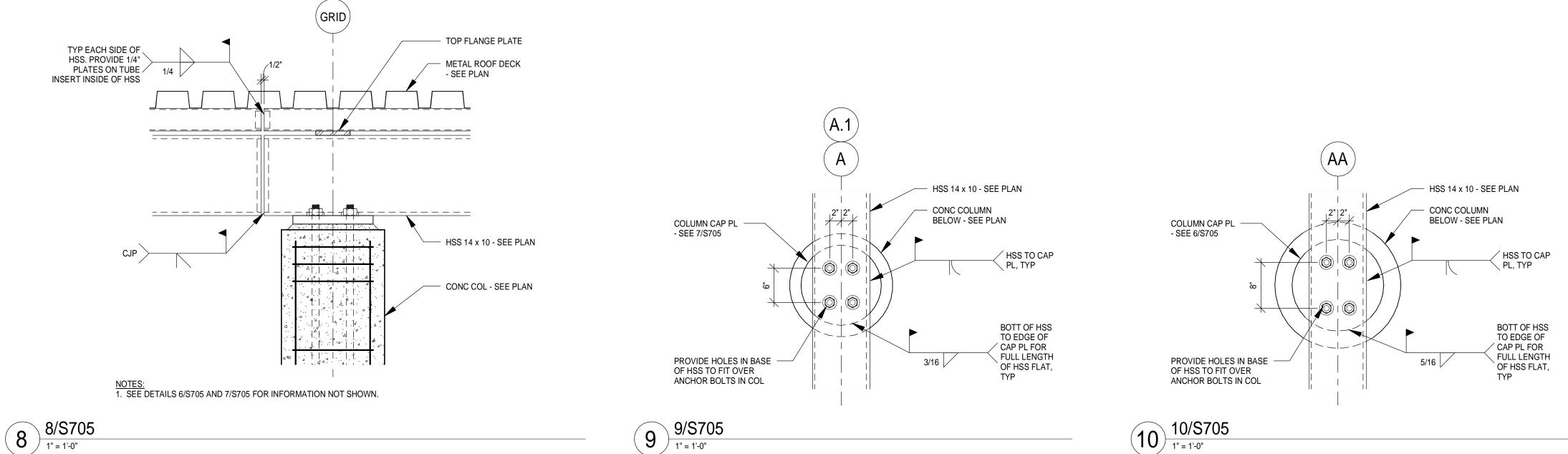
REVISIONS				
NO. DESC	SCRIPTION DAT			
DATE ISSUED:	04-12-10			
REVIEWED BY:				
DRAWN BY:	SJL			
DESIGNED BY:	CWB			
AEP PROJECT NUMBER				
213-1882-091				
C) 2009 REYNOLDS, SMITH AND HILLS INC.				

SHEET NUMBER **S704** 

SHEET TITLE

**DETAILS** 







4525 Airport Approach Rd, Ste A Duluth, Minnesota 55811 218-722-1227 FAX 218-722-1052 www.rsandh.com



DULUTH INTERNATIONAL AIRPORT DULUTH, MN

NEW TERMINAL DESIGN

### CONSULTANTS

Interior Architects:

SJA ARCHITECTS

11 E Superior Street Suite 340 Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:

MBJ CONSULTING ENG.

501 Lake Avenue South, Suite 300, Duluth MN 5580

### 501 Lake Avenue South, Suite 300, Duluth MN 55802 TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:

COSENTINI

1 East Wacker Drive, Suite 103, Chicago IL 60601

TEL: (312) 670-1800 / FAX: (312) 670-1801

# Baggage Handling Systems Consultants: BNP ASSOCIATES INC. 01 East Ridge Office Park, Suite 103, Danbury CT 06810 TEL: (203) 792-3000 / FAX: (203) 792-4900

TEL: (218) 591-5079

Landscape Consultants:

APPOLD DESIGN

2432 East First Street, Duluth MN 55812

REVISIONS

NO.	DESC	CRIPTION	DATE	
NO.	DESC	RIPTION	DATE	
DATE	ISSUED:	04-12-10	I	
REVI	EWED BY:			
DRAV	VN BY:	SJL		
DESI	GNED BY:	CWB		
AEP PROJECT NUMBER				
213-1882-091				

# STRUCTURAL DETAILS

SHEET NUMBER **S705**