

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT

This is to certify that 500 RIVERSIDE ASSOCIATES

Located At 524 RIVERSIDE IND PKWY

Job ID: 2011-12-2831-ALTCOMM

CBL: 370A-A-012-001

has permission to Install exterior concrete pads for equipment
provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

Fire Prevention Officer

 12/7/11

Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY
PENALTY FOR REMOVING THIS CARD



Renovations to 530 Riverside Parkway DNA Lab & Office Facilities Expansion Portland, Maine

Permitting Documents August 17, 2011

OWNER:
Envirollogix
500 Riverside Parkway
Portland, Maine 04103
207-797-0300
Contact: Peter Johnson

ARCHITECT:
TFH Architects
80 Middle Street
Portland, Maine 04101
207-775-6141
Contact: Scott Teas

STRUCTURAL ENGINEER:
Becker Structural Engineers
75 York Street
Portland, ME 04101-4550
207-879-1636
Contact: David Macolini

MECHANICAL ENGINEER
Integrated Energy Systems, PLLC
301 Middle Road
Falmouth, ME 04105-1229
207-781-4263
Contact: Richard Grondin

ELECTRICAL ENGINEER
Bennett Engineering
7 Bennett Road
Freeport, ME 04032
207-865-9475
Contact: Will Bennett

GENERAL CONTRACTOR
Warren Construction Group, LLC
POB 362
Freeport, ME 04078
207-865-3522
Contact: Peter Warren

BUILDING DESIGN CODES:

INTERNATIONAL BUILDING CODE	IBC 2009
INTERNATIONAL EXISTING BUILDING CODE	IEBC 2009
INTERNATIONAL ENERGY CONSERVATION CODE	IECC 2009
STANDARDS FOR ACCESSIBLE DESIGN	ADA 2010
LIFE SAFETY CODE	NFPA 101 2009
ELECTRICAL CODE	NEC 2007
MAINE STATE INTERNATIONAL PLUMBING CODE	UPC 2007
CITY OF PORTLAND AMENDMENTS	

OCCUPANCY CLASSIFICATION:
BUSINESS GROUP B IBC SECTION 304
ACCESSORY USES - LABORATORY, STORAGE, MECHANICAL

FIRE SUPPRESSION:
BUILDING CURRENTLY IS AND WILL BE FULLY SPRINKLERED PER NFPA 13

EXISTING & PROPOSED AREAS:

EXISTING BUILDING FOOTPRINT 520 / 530 RIVERSIDE INDUSTRIAL PARKWAY	+34,895 GSF
EXISTING FIRST FLOOR BUSINESS	27710 GSF
EXISTING SECOND FLOOR BUSINESS	15395 GSF
EXISTING BUILDING HEIGHT @ EAVES - ±23' 2"	@ RIDGE = ±26' 4"
PROPOSED ADDITIONAL FIRST FLOOR BUSINESS (MECHANICAL ONLY)	±1485 GSF
PROPOSED ADDITIONAL SECOND FLOOR BUSINESS	±9880 GSF
TOTAL OCCUPIED FIRST FLOOR	27710 GSF
TOTAL OCCUPIED SECOND FLOOR	±15,375 GSF
TOTAL VACANT FIRST FLOOR	±26,750 GSF

TYPE OF CONSTRUCTION / BUILDING LIMITS:

ALLOWABLE BUILDING HEIGHTS AND AREAS	TABLE 503
EXISTING SIMILAR TO TYPE IIB, PROPOSED TYPE IIB	ALLOWABLE HEIGHT = 55'
	ALLOWABLE STORIES = 3
	ALLOWABLE AREA = 19,000 GSF

ALLOWABLE AREA FORMULA WITH SPRINKLER & FRONTAGE ALLOWANCE
 ALLOWABLE AREA = (Area allowed x 2 (sprinkler systems)) + (area allowed x 49 (frontage increase))
 ALLOWABLE AREA = (19,000 x 2) + (19,000 x 49) = ±47,405 GSF

BUILDING FIRE SEPARATION:
 BUILDING SEPARATION = ± 70'-9" EXISTING
 PER TABLE 601 FIRE RESISTANCE RATING OF EXTERIOR BEARING WALLS, TYPE IIB = 2 HRS
 PER TABLE 602 FIRE RESISTANCE RATING OF EXTERIOR WALLS >30' = 0 HRS

EGRESS:

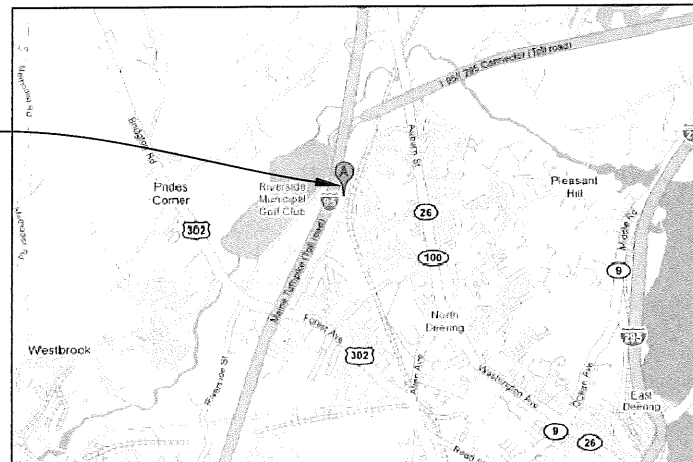
Occupant load	
First floor	
Business areas:	3170 GSF / 100 sf per occup = 32 occupants
Accessory storage, mechanical equipment:	4660 GSF / 300 sf per occup = 16 occupants
Second floor	
Business areas:	15060 GSF / 100 sf per occup = 151 occupants
Total	199 occupants

Exit capacity

Stairs:	3' x 199 occupants = 59.7' total, minimum stair width= 44' 154" provided
Other:	2' x 199 occupants = 39.8' total, minimum stair width= 44'

Number of exits
 Minimum number of exits for occupant load per IBC table 1021.1 = 2
 3 exits provided
 Remoteness minimum per IBC 1015.2.1 with sprinkler = Max diagonal (200') x 1/3 = 66'
 Remote distance provided = 119'

ENVIROLOGIX
530 RIVERSIDE
INDUSTRIAL
PARKWAY



LOCATION MAP

DRAWING LIST

GENERAL:

- G0-0 COVER, LOCUS, DRAWING LIST, CODE SUMMARY PARTIES
- G1-0 CONTENTS SHEET - ABBREVIATIONS, GENERAL NOTES & LEGEND

CIVIL:

- C1-1 SITE LAYOUT, ZONING DATA

ARCHITECTURAL:

- A1.1A FIRST FLOOR PLAN - PART A
- A1.1B FIRST FLOOR PLAN - PART B
- A1.2A SECOND FLOOR PLAN - PART A
- A1.2B SECOND FLOOR PLAN - PART B
- A1.3A FIRST FLOOR REFLECTED CEILING PLAN - PART A
- A1.3B FIRST FLOOR REFLECTED CEILING PLAN - PART B
- A1.4A SECOND FLOOR REFLECTED CEILING PLAN - PART A
- A1.4B SECOND FLOOR REFLECTED CEILING PLAN - PART B
- A1.5A NOT USED
- A1.5B NOT USED
- A1.6A SECOND FLOOR PLAN - PART A - FURNITURE, FIXTURES, & EQUIPMENT PLAN
- A1.6B SECOND FLOOR PLAN - PART B - FURNITURE, FIXTURES, & EQUIPMENT PLAN
- A1.7A SECOND FLOOR PLAN - PART A - CASEWORK
- A1.7B SECOND FLOOR PLAN - PART B - CASEWORK
- A2.0 EXTERIOR ELEVATIONS
- A3.0 BUILDING SECTIONS
- A4.0 INTERIOR ELEVATIONS
- A4.1 INTERIOR ELEVATIONS
- A4.2 INTERIOR ELEVATIONS
- A4.3 INTERIOR ELEVATIONS
- A4.4 INTERIOR DETAILS
- A5.0 STAIR DETAILS
- A5.1 DETAILS
- A5.2 DETAILS
- A5.3 CANOPY DETAILS
- A6.0 FINISH, DOOR, LIGHT FIXTURE SCHEDULES
- A6.1 EQUIPMENT SCHEDULE

STRUCTURAL:

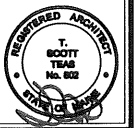
- S1.1 PROPOSED SECOND FLOOR FRAMING PLAN AREA A
- S1.2 SECOND FLOOR CEILING FRAMING
- S2.1 SECTIONS AND DETAILS
- S3.1 FOUNDATION AND STEEL SECTIONS AND TYPICAL DETAILS

MECHANICAL:

- P-1 LEGEND, ABBREVIATIONS, SCHEDULES, DETAILS AND SPECIFICATIONS
- P-2 FIRST FLOOR PLAN PART A PLUMBING
- P-3 FIRST FLOOR PLAN PART B PLUMBING
- P-4 SECOND FLOOR PLAN PART A PLUMBING
- P-5 SECOND FLOOR PLAN PART B PLUMBING
- M-1 LEGENDS, NOTES, ABBREVIATIONS, SCHEDULES AND SPECIFICATIONS
- M-2 SCHEDULES
- M-3 PIPING SCHEMATIC
- M-4 FIRST FLOOR PLAN PART A MECHANICAL
- M-5 FIRST FLOOR PLAN PART B MECHANICAL
- M-6 SECOND FLOOR PLAN PART A MECHANICAL
- M-7 SECOND FLOOR PLAN PART B MECHANICAL
- M-8 DETAILS
- MD-1 FIRST FLOOR PLAN PART A MECHANICAL DEMOLITION
- MD-2 FIRST FLOOR PLAN PART B MECHANICAL DEMOLITION
- MD-3 SECOND FLOOR PLAN PART B MECHANICAL DEMOLITION

ELECTRICAL:

- E1.0 SITE ELECTRICAL PLAN
- E2.0 FIRST FLOOR PLAN PART A LIGHTING
- E2.1 FIRST FLOOR PLAN PART B LIGHTING
- E2.2 SECOND FLOOR PLAN PART A LIGHTING
- E2.3 SECOND FLOOR PLAN PART B LIGHTING
- E3.0 FIRST FLOOR PLAN PART A POWER
- E3.1 FIRST FLOOR PLAN PART B POWER
- E3.2 SECOND FLOOR PLAN PART A POWER
- E3.3 SECOND FLOOR PLAN PART B POWER
- E4.0 LEGEND, DETAILS AND SCHEDULES



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RIVERSIDE CAMPUS
530 - DNA EXPANSION
PORTLAND, MAINE

TPA ARCHITECTS
80 MIDDLE STREET
PORTLAND, MAINE 04101
TELEPHONE 207 778 8141
ARCHITECTURE PLANNING

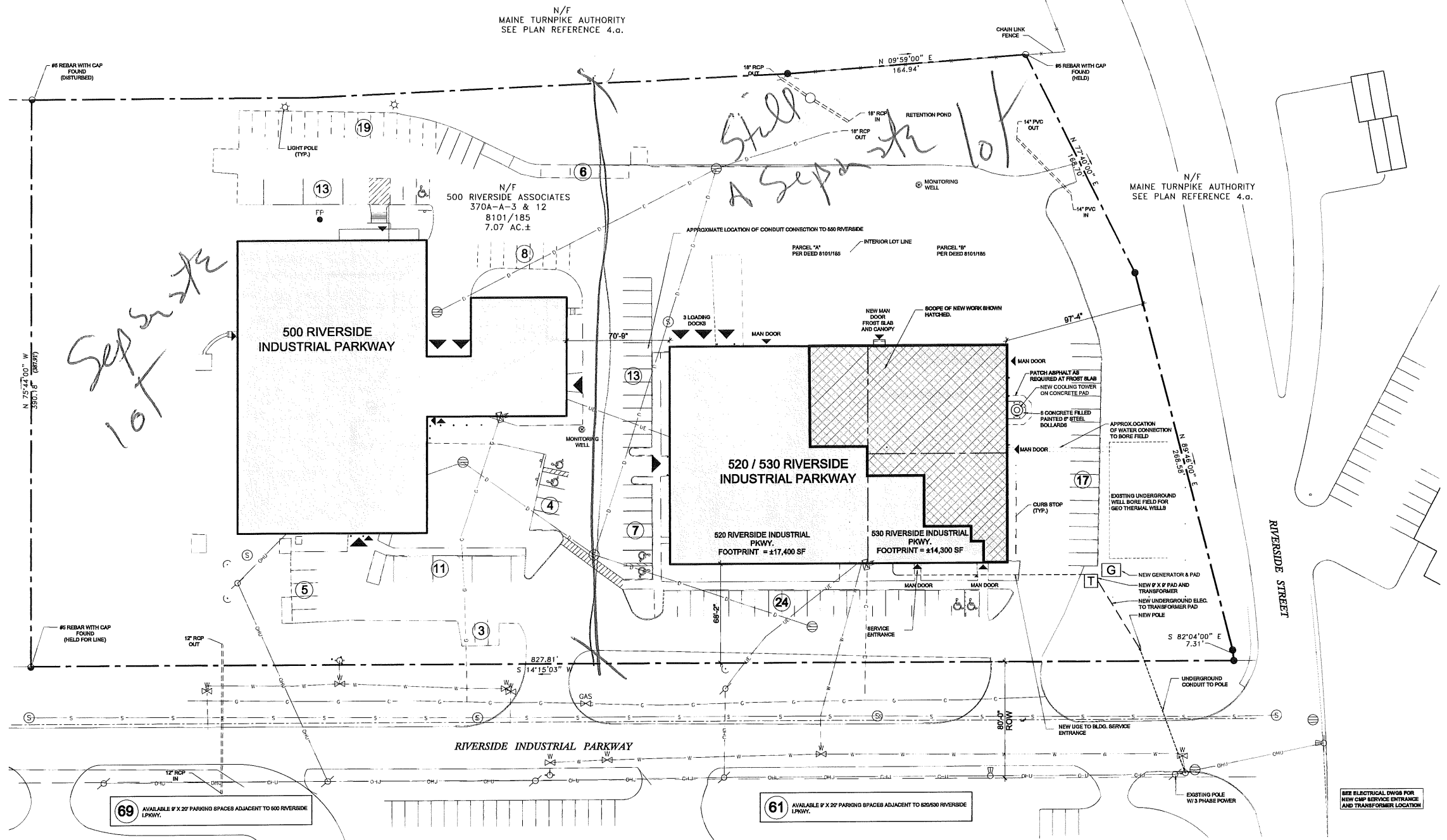
CONSULTANTS:
[List of consultants and their roles]

REVISIONS:

DATE: 8/17/11
PROJECT No. 1028A
DRAWN BY: DANJLR
CHECKED BY: TBT
SCALE: AS NOTED

SHEET TITLE:
SITE LAYOUT
UTILITIES
&
ZONING
PLAN

C1.1

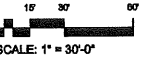


1 SITE PLAN
P-302

ZONING REQUIREMENTS	REQUIRED	PROVIDED	
1. MINIMUM LOT SIZE:	NONE		
2. MINIMUM STREET FRONTAGE:	NONE		
3. MAXIMUM IMPERVIOUS SURFACE RATIO	75%	NO CHANGE	
4. MAXIMUM BUILDING HEIGHT:	75 FEET	±23'	
5. MINIMUM YARD DIMENSIONS:	REAR: 1' PER FOOT OF BLDG. HEIGHT	±23'	
6. MINIMUM YARD DIMENSIONS:	SIDE: 1' PER FOOT OF BLDG. HEIGHT	±23'	
7. MINIMUM YARD DIMENSIONS:	FRONT: 1' PER FOOT OF BLDG. HEIGHT	±23'	
PARKING CALCULATIONS FOR 530 RIVERSIDE INDUSTRIAL PARKWAY:			
OFFICE=	1 SPACE PER 400 SQUARE FEET	530 RIVERSIDE	PARKING SPACES REQ.
LABORATORY	1 SPACE PER 600 SQUARE FEET (UNDEFINED)	12,542 SF	12,542 / 400 = 35
MANUFACT / STOR. =	1 SPACE PER 1000 SQUARE FEET	7,058 SF	7,058 / 600 = 12
SPACES		3,203 SF	3,203 / 1000 = 4
			51 SPACES REQ.
			61 AVAILABLE EXISTING

*only using
520/530 Riverside*

*13
7
24
17
61*
Parking



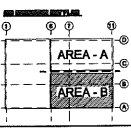


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CONSULTANTS:
[List of consultants and their roles]

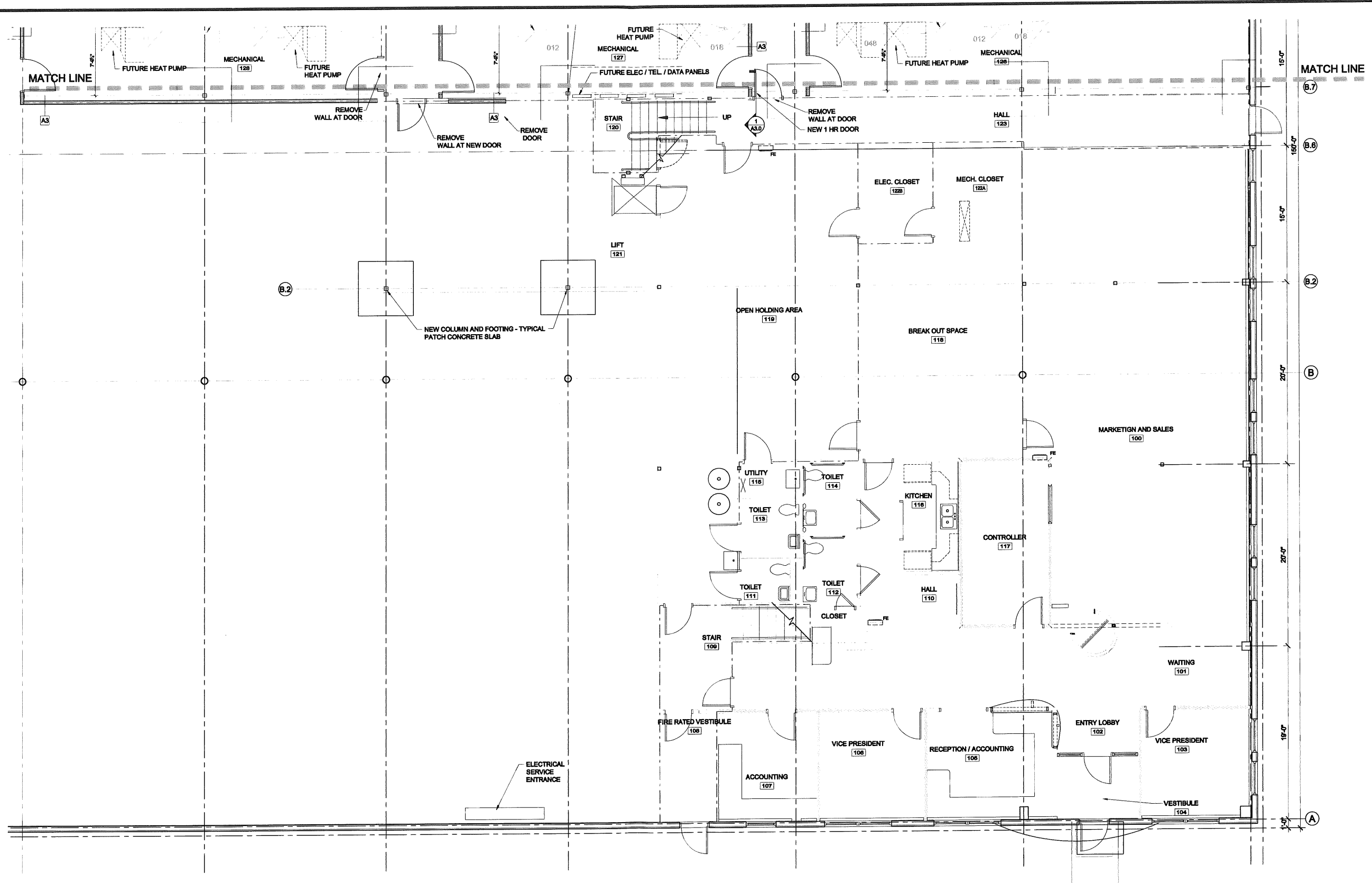


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DATE: 01/17/11
PROJECT No. 1028A
DRAWN BY: DAM/AM
CHECKED BY: TBT
SCALE: AS NOTED

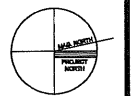
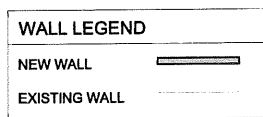
SHEET TITLE:
FIRST FLOOR
PLAN - PART B

A1.1B



EXISTING FLOOR PLAN (NO LAYOUT MODIFICATIONS)

1 FIRST FLOOR PLAN - PART B
A1.1B 1/4" = 1'-0"



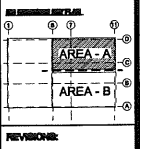


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ARCHITECTURE PLANNING

CONSULTANTS:
MECHANICAL: [unreadable]
ELECTRICAL: [unreadable]
PLUMBING: [unreadable]
STRUCTURAL: [unreadable]

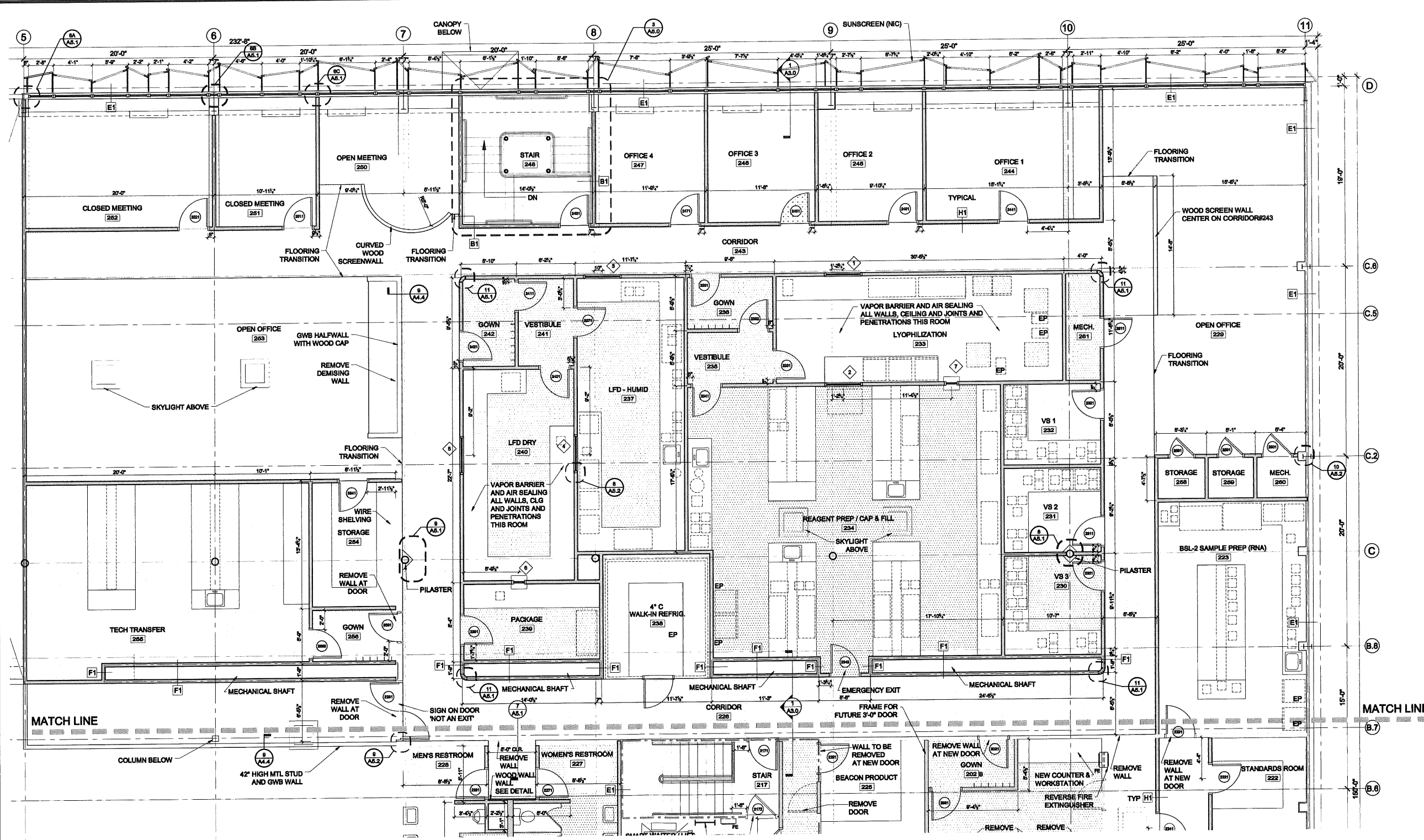


REVISIONS:

DATE: 01/11/11
PROJECT No: 1028A
DRAWN BY: DAN LARSEN
CHECKED BY: TPT
SCALE: AS NOTED

SHEET TITLE:
SECOND FLOOR PLAN - PART A

A1.2A

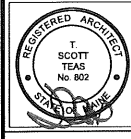


1 SECOND FLOOR PLAN - PART A
1/4" = 1'-0"

FLOORING LEGEND	
CARPET	[Symbol]
SHEET FLOORING	[Symbol]

WALL LEGEND	
NEW WALL	[Symbol]
EXISTING WALL	[Symbol]



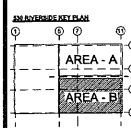


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CONSULTANTS:
MECHANICAL:
 Environmental Engineering, Inc.
 77 York Street
 Portland, ME 04101-4430
 207 879 1300
MECHANICAL:
 Thermal Energy Systems, LLC
 210 Main Street
 Portland, ME 04101
 791-4200
ELECTRICAL:
 SIKKETT ENGINEERING
 1000 Main Street
 Portland, ME 04102
 207-865-3473

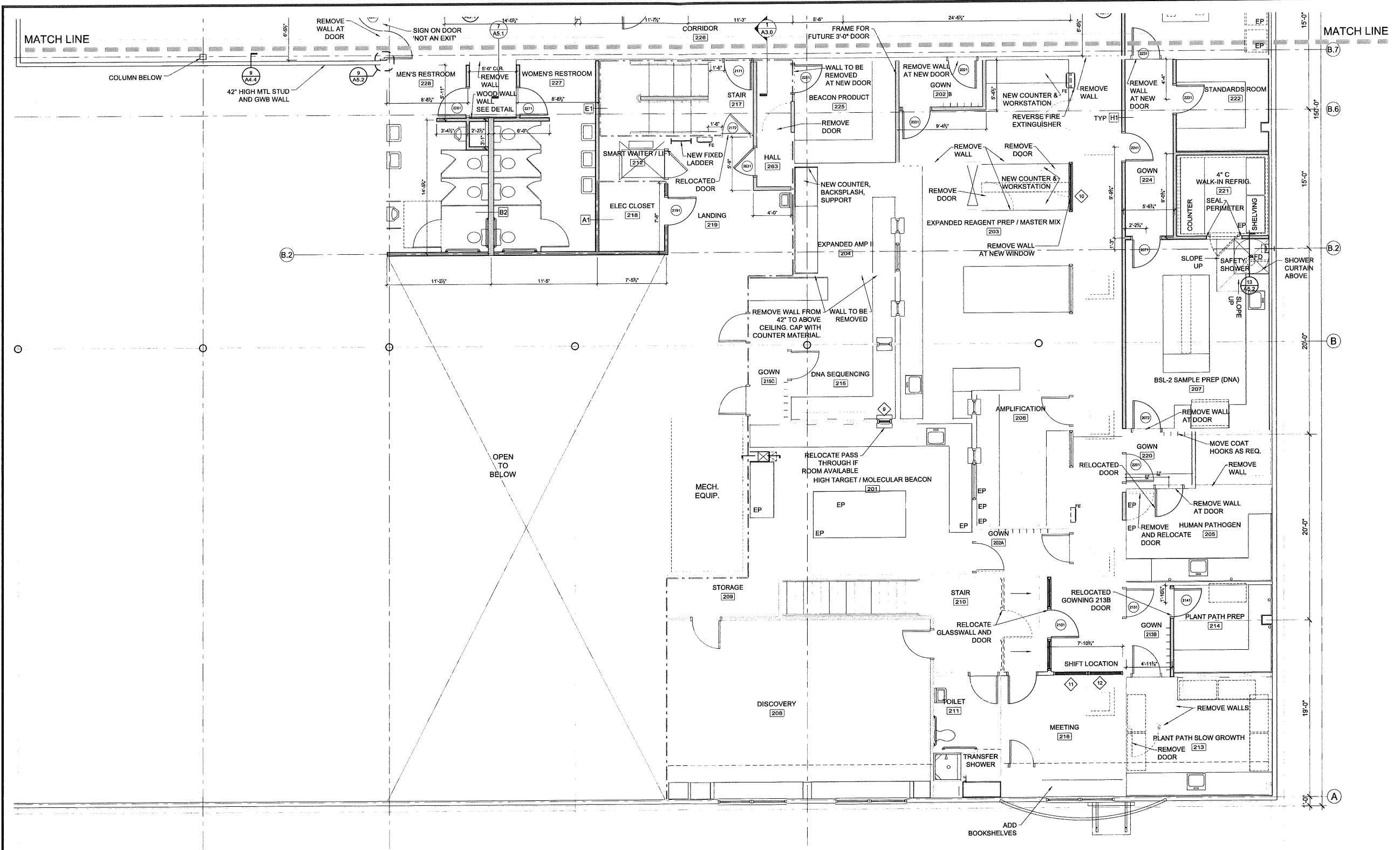


REVISIONS:

DATE: 8/17/11
 PROJECT No.: 1028A
 DRAWN BY: DAM,RJS
 CHECKED BY: TST
 SCALE: AS NOTED

SHEET TITLE:
 SECOND FLOOR
 PLAN - PART B

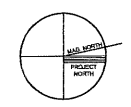
A1.2B



1 SECOND FLOOR PLAN - PART B
 A1.2B 1/4" = 1'-0"

FLOORING LEGEND	
	CARPET
	SHEET FLOORING

WALL LEGEND	
	NEW WALL
	EXISTING WALL



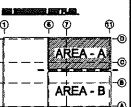


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CONSULTANTS:
 [List of consultants and their roles]

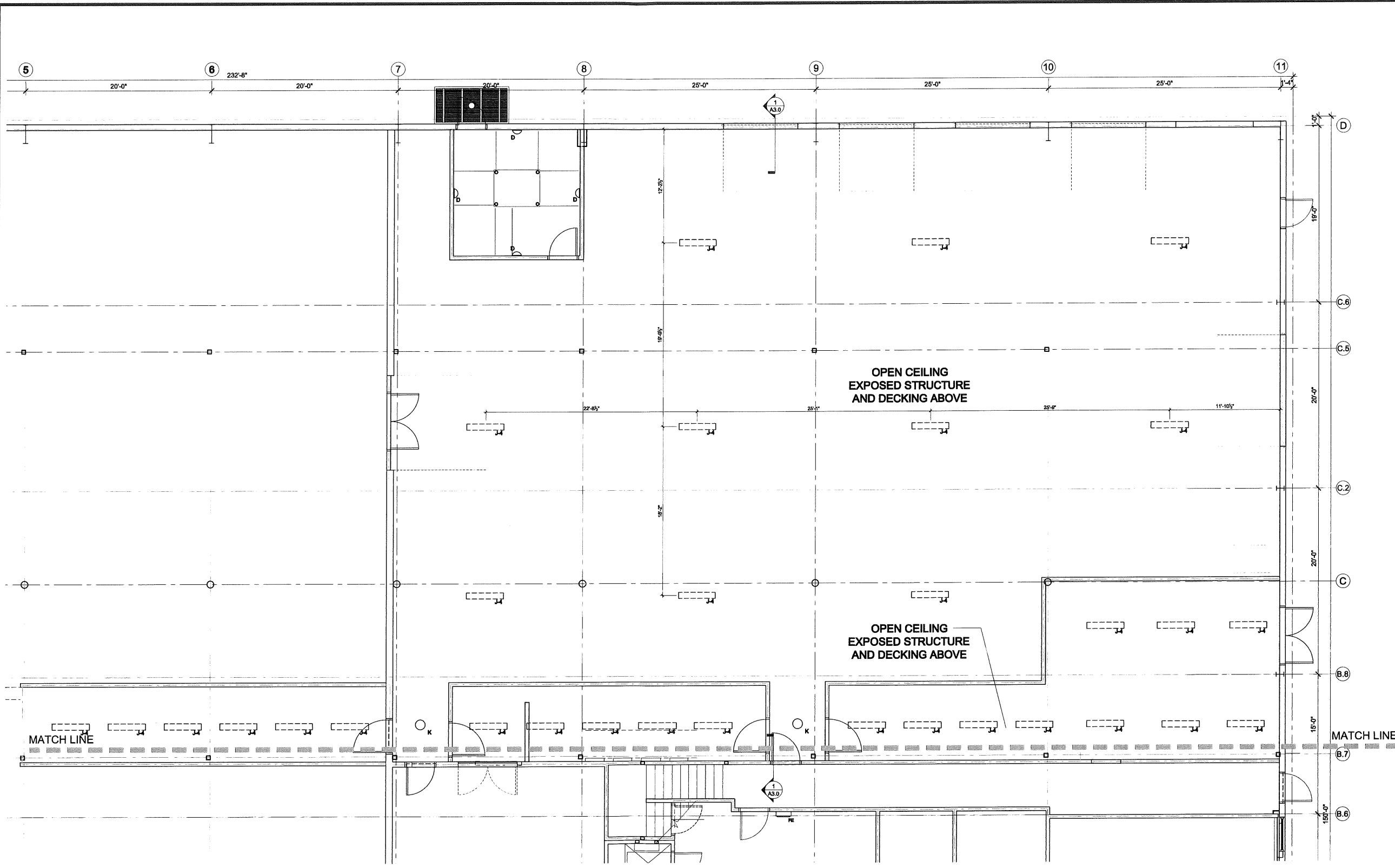


REVISIONS:

DATE: 01/17/11
 PROJECT NO: 1088A
 DRAWN BY: DANALUB
 CHECKED BY: TST
 SCALE: AS NOTED

SHEET TITLE:
 FIRST FLOOR REFLECTED
 CEILING PLAN
 PART A

A1.3A



1 FIRST FLOOR REFLECTED CEILING PLAN - PART A
 1/4" = 1'-0"

REFLECTED CEILING PLAN LEGEND GENERAL	
SYMBOL	DESCRIPTION
	HVAC DIFFUSERS SEE MECHANICAL PLANS FOR SIZE AND TYPE
	CONCEPTUAL SPRINKLER HEAD FINAL DESIGN BY INSTALLER
	2 x 4 ACOUSTICAL CEILING TILE AS INDICATED

REFLECTED CEILING PLAN LEGEND LIGHTING COORDINATE W/ ELECTRICAL PLANS		
SYMBOL	DESCRIPTION	PENDANT
	PENDANT LINEAR	
	SURFACE LINEAR	
	SURFACE	
	RECESSED	
	WALL WASHER	
	WALL SCONCE	

REFLECTED CEILING PLAN NOTES
 1.) GENERAL CONTRACTOR TO CONFIRM IN FIELD, ALL EXISTING PRIMARY STEEL 'BENT' ELEVATIONS WITH PROPOSED CEILING ELEVATIONS AND CONTACT ARCHITECT WITH ANY CONFLICTS PRIOR TO CONSTRUCTION



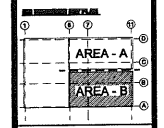


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 TELEPHONE 507 778 8441
 ARCHITECTURE PLANNING

CONSULTANTS:
 [List of consultants and their roles]

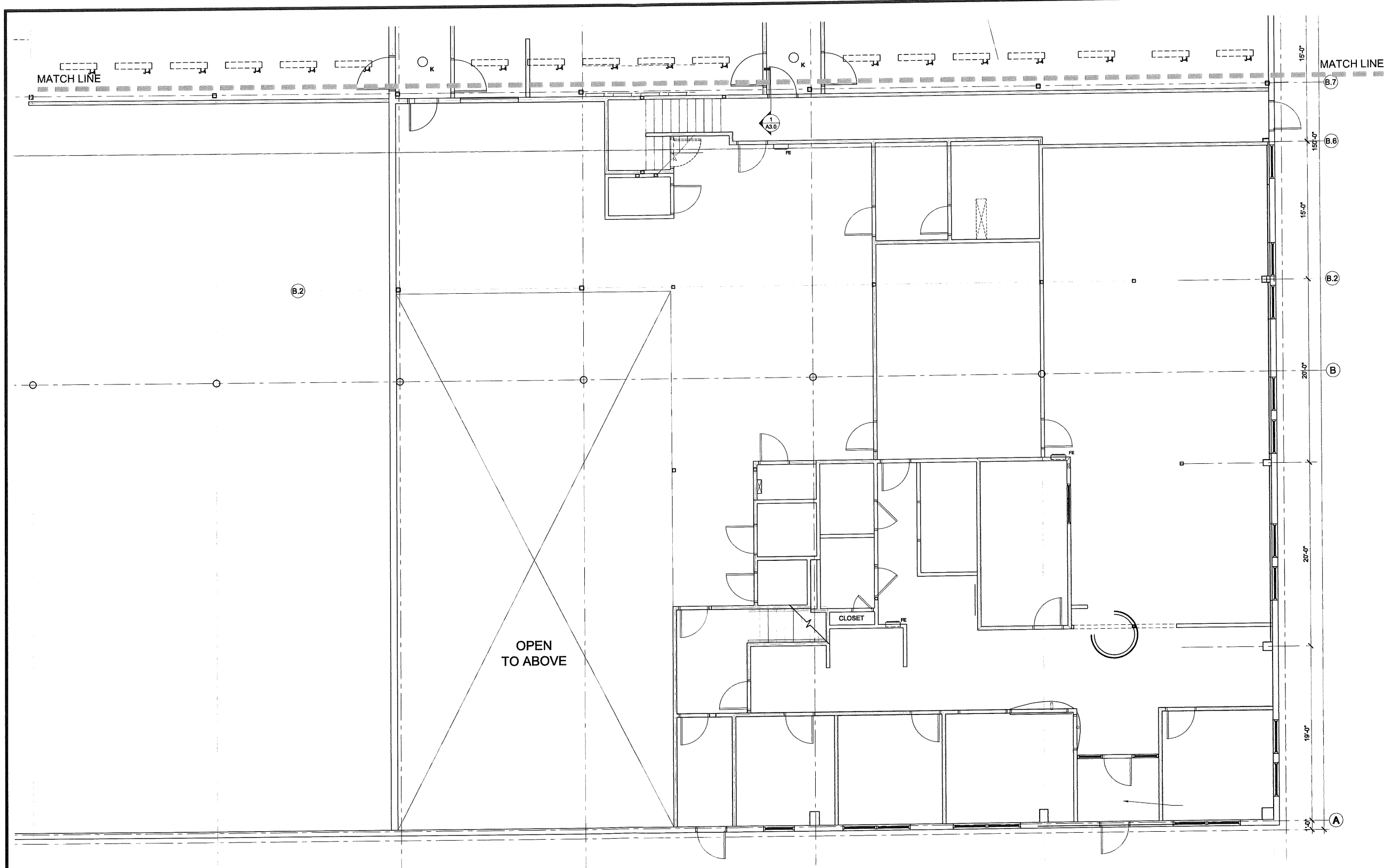


REVISIONS:

DATE: 8/17/11
 PROJECT No. 1098A
 DRAWN BY: DAM/LAB
 CHECKED BY: TBT
 SCALE: AS NOTED

SHEET TITLE:
 FIRST FLOOR REFLECTED CEILING PLAN PART B

A1.3B



1 FIRST FLOOR REFLECTED CEILING PLAN - PART B
 A1.3B 1/4" = 1'-0"

REFLECTED CEILING PLAN LEGEND GENERAL	
SYMBOL	DESCRIPTION
[Symbol: Square with diagonal lines]	HVAC DIFFUSERS SEE MECHANICAL PLANS FOR SIZE AND TYPE
[Symbol: Circle with a dot]	CONCEPTUAL SPRINKLER HEAD FINAL DESIGN BY INSTALLER
[Symbol: Square with a dot]	2 x 4 ACoustICAL CEILING TILE AS INDICATED

REFLECTED CEILING PLAN LEGEND LIGHTING COORDINATE W/ ELECTRICAL PLANS		
SYMBOL	DESCRIPTION	
[Symbol: Solid line]	PENDANT LINEAR	[Symbol: Circle with a dot]
[Symbol: Dashed line]	SURFACE LINEAR	[Symbol: Circle with a dot]
[Symbol: Circle]	SURFACE	[Symbol: Circle with a dot]
[Symbol: Circle with a dot]	RECESSED	[Symbol: Circle with a dot]
[Symbol: Circle with a dot]	WALL WASHER	[Symbol: Circle with a dot]
[Symbol: Circle with a dot]	WALL SCONCE	[Symbol: Circle with a dot]
[Symbol: Circle with a dot]		[Symbol: Circle with a dot]
[Symbol: Circle with a dot]		[Symbol: Circle with a dot]

REFLECTED CEILING PLAN NOTES
 1.) GENERAL CONTRACTOR TO CONFIRM IN FIELD, ALL EXISTING PRIMARY STEEL 'BENT' ELEVATIONS WITH PROPOSED CEILING ELEVATIONS AND CONTACT ARCHITECT WITH ANY CONFLICTS PRIOR TO CONSTRUCTION



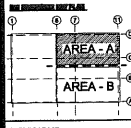


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PORTLAND MAINE 04101
TELEPHONE 307 776 8141
ARCHITECTURE PLANNING

CONSULTANTS
MECHANICAL: [Firm Name]
ELECTRICAL: [Firm Name]
PLUMBING: [Firm Name]
STRUCTURAL: [Firm Name]
GENERAL CONTRACTOR: [Firm Name]

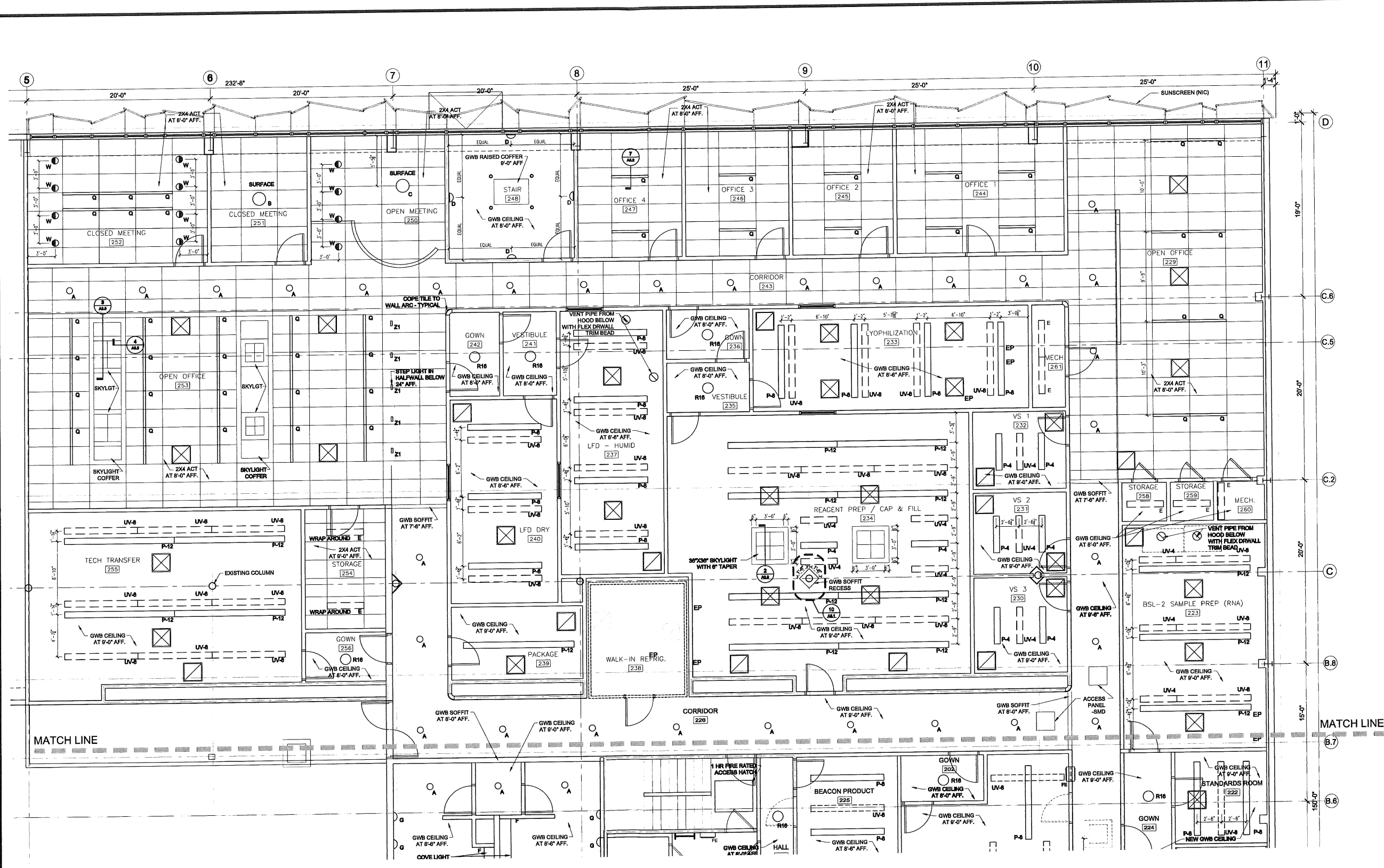


REVISIONS:

DATE: 8/17/11
PROJECT No.: 1028A
DRAWN BY: DML/AB
CHECKED BY: TBT
SCALE: AS NOTED

SHEET TITLE:
SECOND FLOOR REFLECTED CEILING PLAN PART A

A1.4A

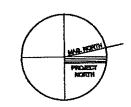


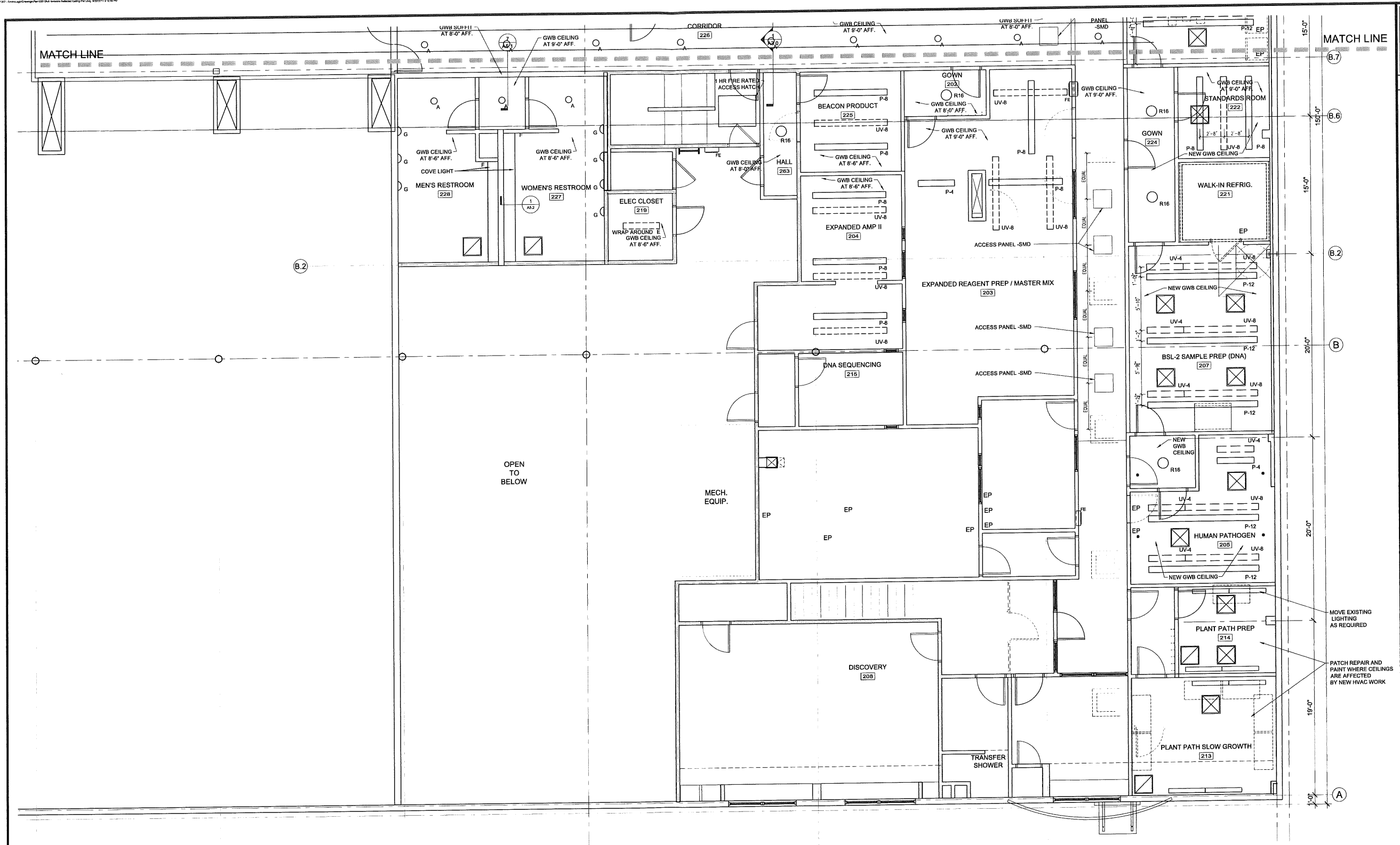
1 SECOND FLOOR REFLECTED CEILING PLAN - PART A
UP - 1/8"

REFLECTED CEILING PLAN LEGEND GENERAL	
SYMBOL	DESCRIPTION
	HVAC DIFFUSERS SEE MECHANICAL PLANS FOR SIZE AND TYPE
	CONCEPTUAL SPRINKLER HEAD FINAL DESIGN BY INSTALLER
	2 x 4 ACOUSTICAL CEILING TILE AS INDICATED

REFLECTED CEILING PLAN LEGEND LIGHTING COORDINATE W/ ELECTRICAL PLANS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	PENDANT LINEAR		ARM MOUNTED WALL WASHER
	SURFACE LINEAR		LINEAR WALL SCONCE
	SURFACE		EXIT LIGHT/DIRECTION
	RECESSED		EMERGENCY LIGHTS (SEE ELEC PLANS)
	WALL WASHER		
	WALL SCONCE		

REFLECTED CEILING PLAN NOTES
 1.) GENERAL CONTRACTOR TO CONFIRM IN FIELD, ALL EXISTING PRIMARY STEEL 'BENT' ELEVATIONS WITH PROPOSED CEILING ELEVATIONS AND CONTACT ARCHITECT WITH ANY CONFLICTS PRIOR TO CONSTRUCTION



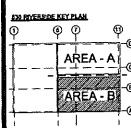


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PORTLAND, MAINE

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TELEPHONE 207 775 6141
ARCHITECTURE PLANNING

CONSULTANTS:
MECHANICAL: [unreadable]
ELECTRICAL: [unreadable]



REVISIONS:

DATE: 8/17/11
PROJECT No.: 1028A
DRAWN BY: DAM,PLS
CHECKED BY: TST
SCALE: AS NOTED

SHEET TITLE:
SECOND FLOOR
REFLECTED
CEILING PLAN
PART B

A1.4B

1 SECOND FLOOR REFLECTED CEILING PLAN - PART B
A1.4B 1/4" = 1'-0"

REFLECTED CEILING PLAN LEGEND GENERAL	
SYMBOL	DESCRIPTION
	HVAC DIFFUSERS SEE MECHANICAL PLANS FOR SIZE AND TYPE
	CONCEPTUAL SPRINKLER HEAD FINAL DESIGN BY INSTALLER
	2 x 4 ACOUSTICAL CEILING TILE AS INDICATED

REFLECTED CEILING PLAN LEGEND LIGHTING		
COORDINATE W/ ELECTRICAL PLANS		
SYMBOL	DESCRIPTION	
	PENDANT	
	ARM MOUNTED WALL WASHER	
	LINEAR WALL SCONCE	
	EXIT LIGHTS/DIRECTION	
	EMERGENCY LIGHTS (SEE ELEC PLANS)	
	PENDANT LINEAR	
	SURFACE LINEAR	
	SURFACE	
	RECESSED	
	WALL WASHER	
	WALL SCONCE	

REFLECTED CEILING PLAN NOTES
1.) GENERAL CONTRACTOR TO CONFIRM IN FIELD, ALL EXISTING PRIMARY STEEL 'BENT' ELEVATIONS WITH PROPOSED CEILING ELEVATIONS AND CONTACT ARCHITECT WITH ANY CONFLICTS PRIOR TO CONSTRUCTION



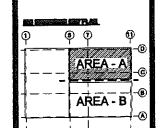


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PORTLAND, MAINE

TPH ARCHITECTS
 80 MIDDLE STREET
 PORTLAND, MAINE 04101
 TELEPHONE 577 78 8441
 ARCHITECTURE PLANNING

CONSULTANTS:
 [List of consultants and their roles]

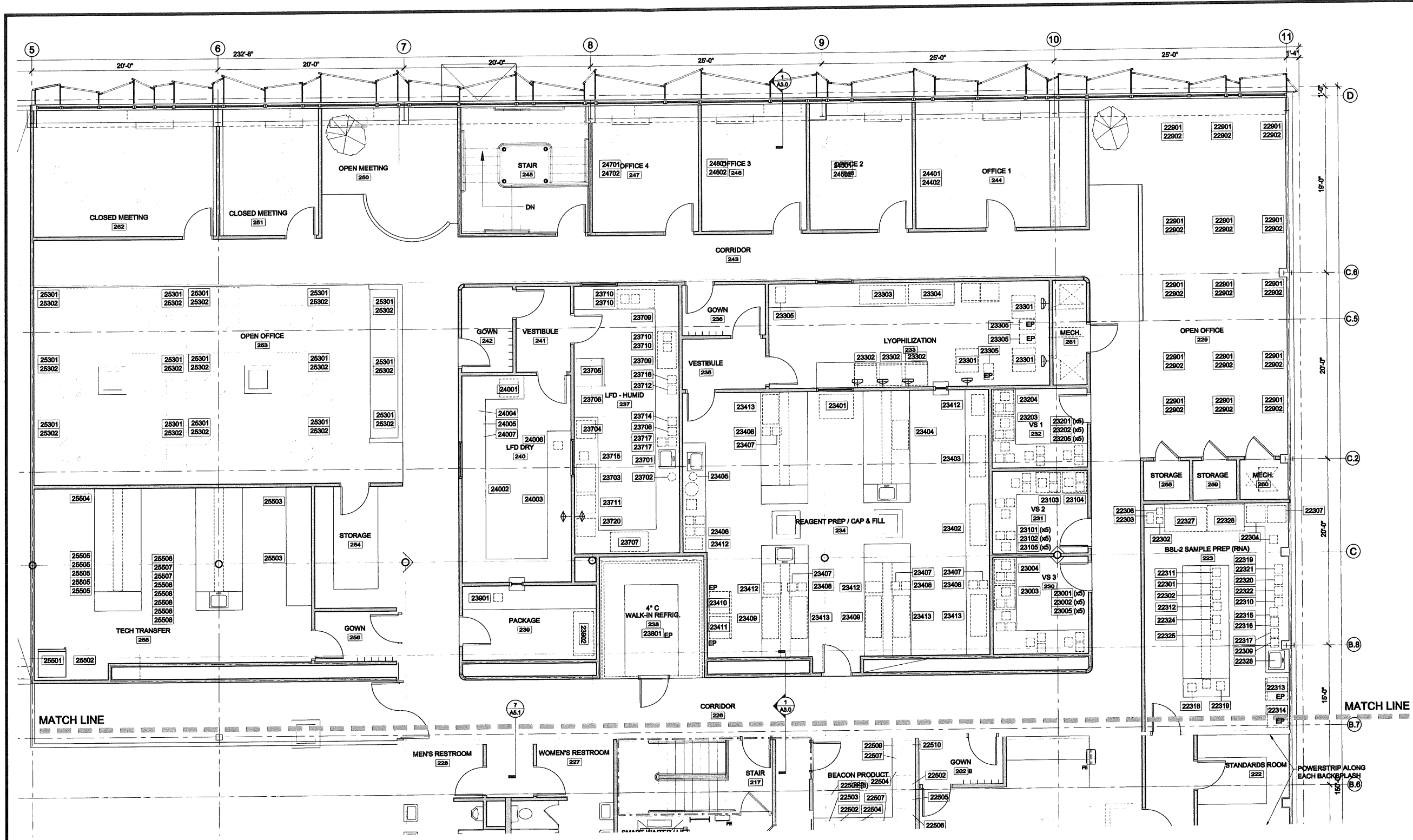


REVISIONS:

DATE: 8/17/11
 PROJECT No.: 1038A
 DRAWN BY: DAN LAR
 CHECKED BY: TBT
 SCALE: AS NOTED

SHEET TITLE:
SECOND FLOOR PLAN - PART A FURNITURE FIXTURES AND EQUIPMENT

A1.6A



1 SECOND FLOOR PLAN - PART A - FURNITURE FIXTURES AND EQUIPMENT
 1/4" = 1'-0"

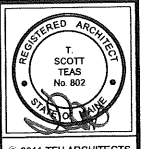
EQUIPMENT PLAN LEGEND

- NITROGEN / ARGON GAS CONNECTION
- COMPRESSED AIR CONNECTION
- EP EMERGENCY POWER

EQUIPMENT PLAN NOTES

- 1.) SEE ELECTRICAL DRAWINGS FOR EMERGENCY POWER REQUIREMENTS
- 2.) ONLY NEW OR RELOCATED EQUIPMENT IS LABELED. EXISTING EQUIPMENT IS NOT SHOWN FOR CLARITY.



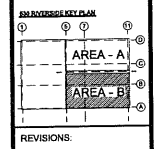


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TELEPHONE 207 775 8141
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CONSULTANTS:
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75 Park Street
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1000 Commercial Street
Portland, ME 04106
407-776-6225
ELECTRICAL:
SMART ELECTRICAL
7 Barret Road
Portland, ME 04102
207-865-9474



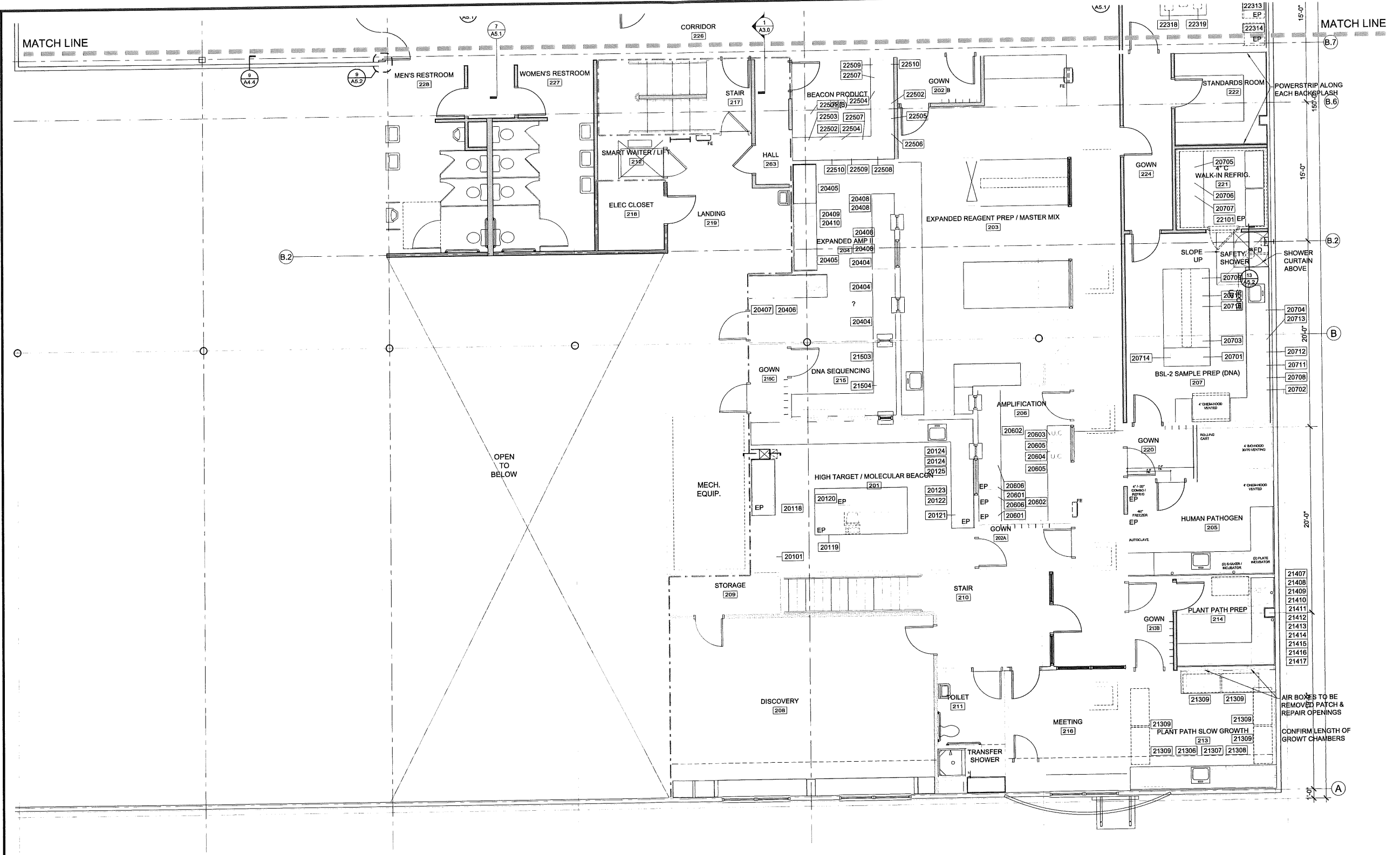
REVISIONS:

1	AREA - A
2	AREA - B

DATE: 8/17/11
PROJECT No.: 1028A
DRAWN BY: DAM/RJS
CHECKED BY: TST
SCALE: AS NOTED

SHEET TITLE:
SECOND FLOOR
PLAN - PART B
FURNITURE
FIXTURES AND
EQUIPMENT

A1.6B



1 SECOND FLOOR PLAN - PART B - FURNITURE FIXTURES AND EQUIPMENT
A1.6B 1/4" = 1'-0"

EQUIPMENT PLAN LEGEND	
	NITROGEN / ARGON GAS CONNECTION
	COMPRESSED AIR CONNECTION
	EMERGENCY POWER

EQUIPMENT PLAN NOTES	
1.)	SEE ELECTRICAL DRAWINGS FOR EMERGENCY POWER REQUIREMENTS
2.)	ONLY NEW OR RELOCATED EQUIPMENT IS LABELED. EXISTING EQUIPMENT IS NOT SHOWN FOR CLARITY



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OLIVER L. JONES
PATRICK L. JONES
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STEPHEN L. JONES
TIMOTHY L. JONES
WALTER L. JONES
XAVIER L. JONES
YVES L. JONES
ZACHARY L. JONES

REVISIONS

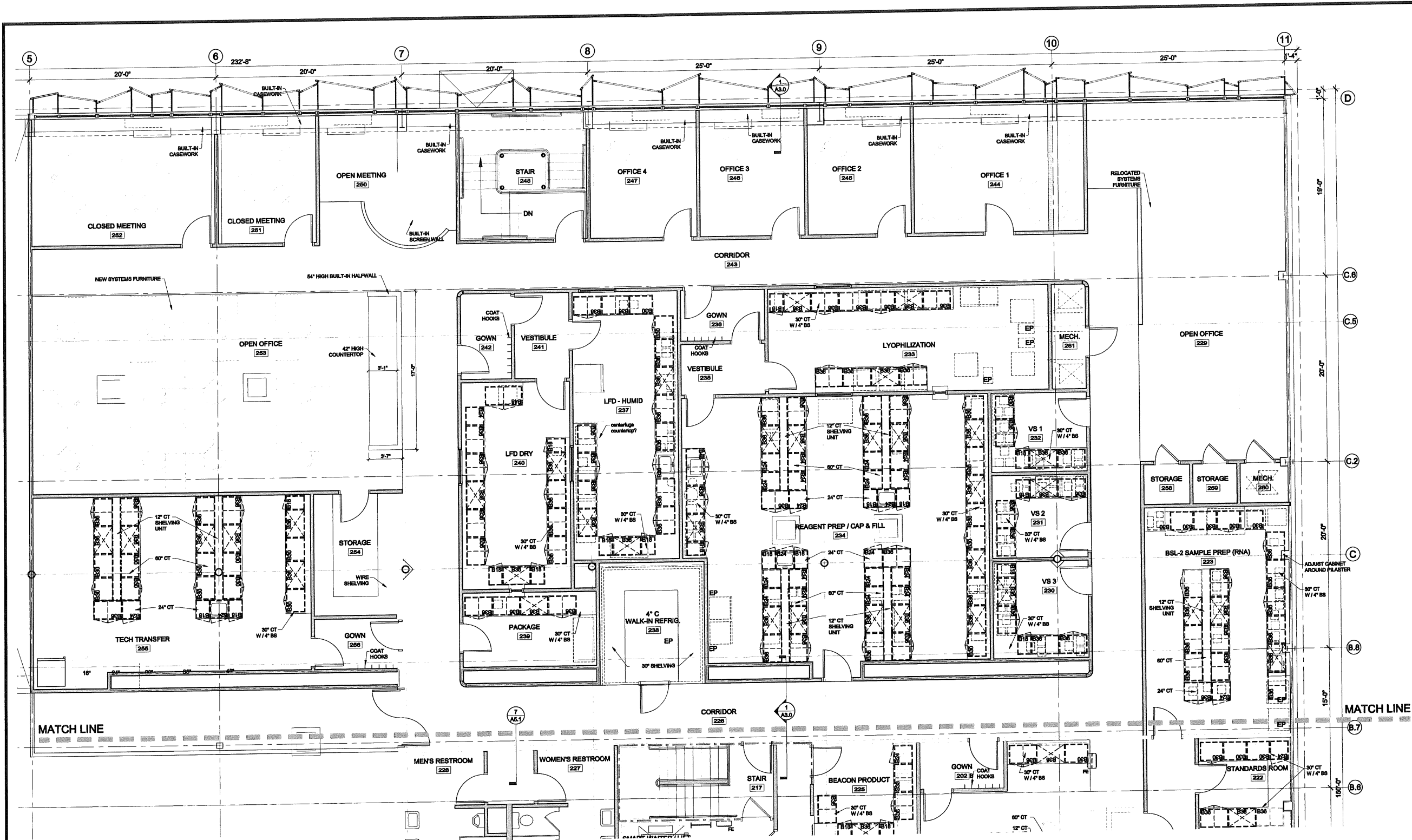
NO.	DESCRIPTION
1	AREA - A
2	AREA - B

REVISIONS

DATE:	8/17/11
PROJECT No.:	1038A
DRAWN BY:	DALFUR
CHECKED BY:	TST
SCALE:	AS NOTED

SHEET TITLE:
SECOND FLOOR
PLAN - PART A
CASEWORK

A1.7A



1 SECOND FLOOR PLAN - PART A - CASEWORK
1/4" = 1'-0"

BASE CABINETS - WITH (2) 4" AND (2) 8" DRAWERS

18"	24"	30"	36"	48"
B18	B24	B30	B36	B48

BASE CABINETS - DOOR AND SHELF OR SINK BASE

18"	24"	30"	36"	48"
B18	B24	B30	B36	B48

BASE CABINETS - OPEN WITH UNDERSHELF

18"	24"	30"	36"	48"
B18	B24	B30	B36	B48

WALL CABINETS - SOLID DOORS

18"	24"	30"	36"	48"
B18	B24	B30	B36	B48

2 CASEWORK LEGEND AND ABBREVIATIONS
1/4" = 1'-0"

ABBREVIATIONS

CT = COUNTERTOP
BS = BACKSPASH



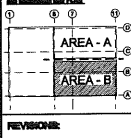


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CONSULTANTS:
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D. M. R. J., Registered Architect
D. M. R. J., Registered Architect
D. M. R. J., Registered Architect
D. M. R. J., Registered Architect
D. M. R. J., Registered Architect
D. M. R. J., Registered Architect
D. M. R. J., Registered Architect



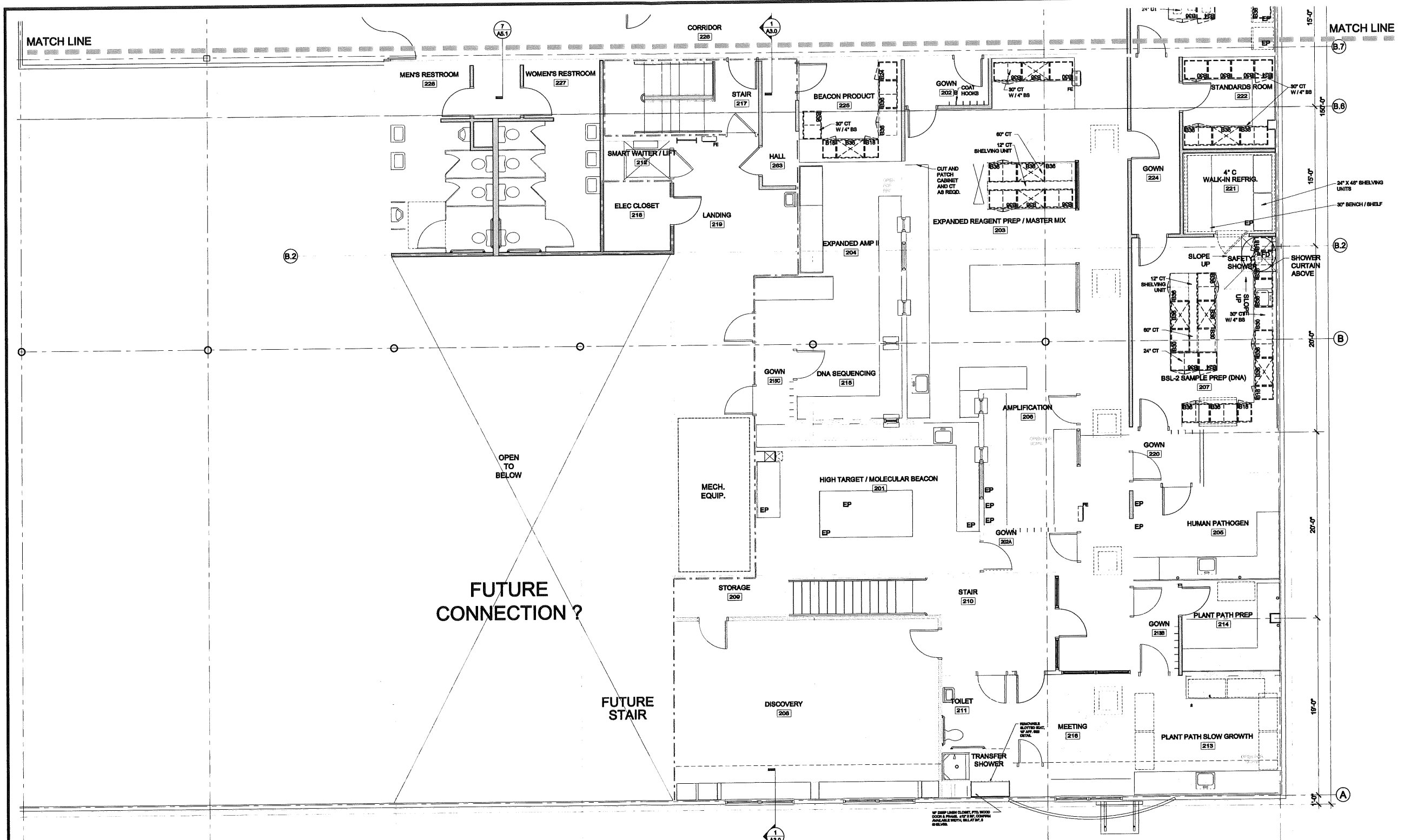
REVISIONS:

NO.	DATE	DESCRIPTION

DATE: 8/17/11
PROJECT No. 1038A
DRAWN BY: DML/RJB
CHECKED BY: TST
SCALE: AS NOTED

SHEET TITLE:
SECOND FLOOR PLAN - PART B CASEWORK

A1.7B



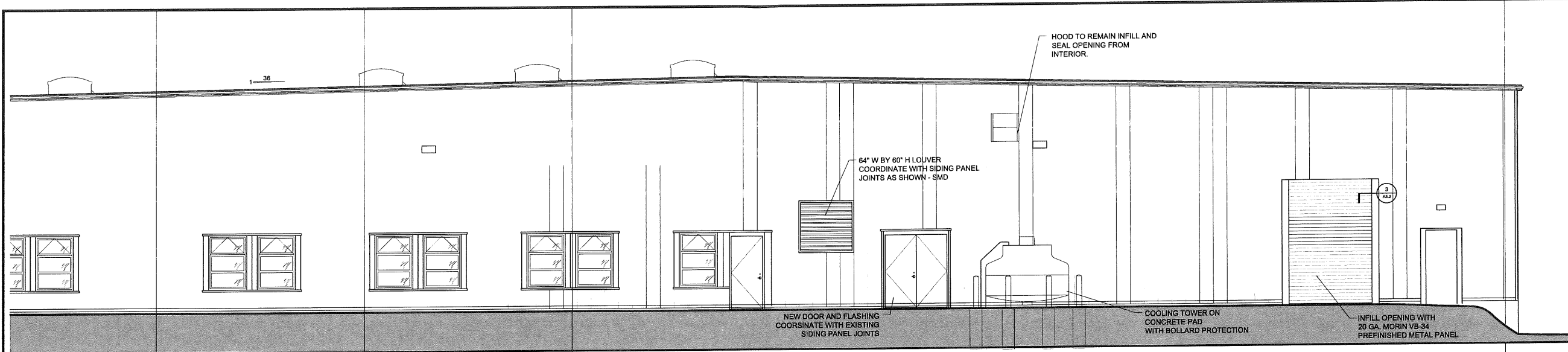
1 SECOND FLOOR PLAN - PART B - CASEWORK
1/4\" = 1'-0\"

ABBREVIATIONS
CT = COUNTERTOP
BS = BACKSPLASH

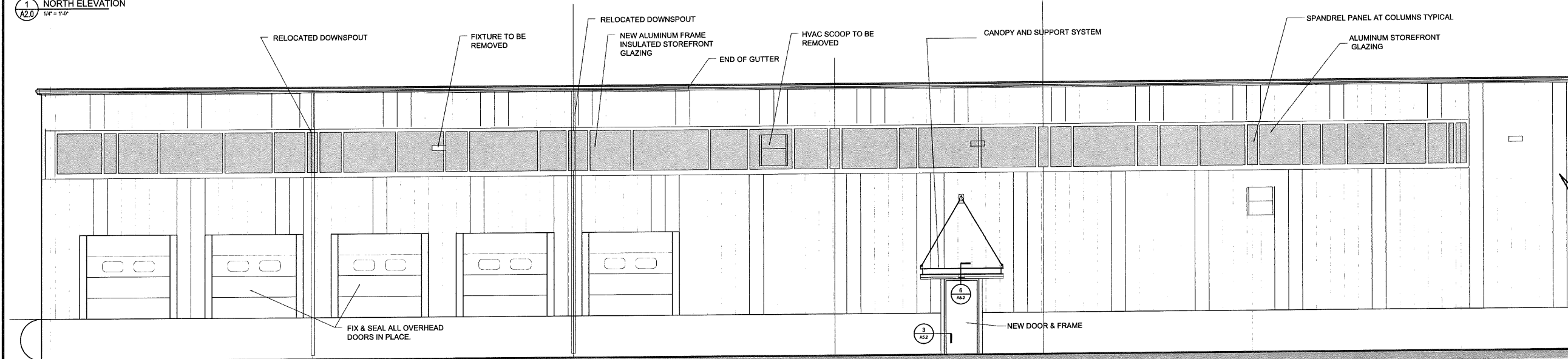
CASEWORK LEGEND

DESCRIPTION	18"	24"	30"	36"	48"
BASE CABINETS - WITH (2) 4" AND (2) 6" DRAWERS	B1B1	B2B1	B3B1	B4B1	B5B1
BASE CABINETS - DOOR AND SHELF OR SINK BASE	B1B2	B2B2	B3B2	B4B2	B5B2
BASE CABINETS - OPEN WITH UNDERSHELF	B1B3	B2B3	B3B3	B4B3	B5B3
WALL CABINETS - SOLID DOORS	W1B	W2B	W3B	W4B	W5B

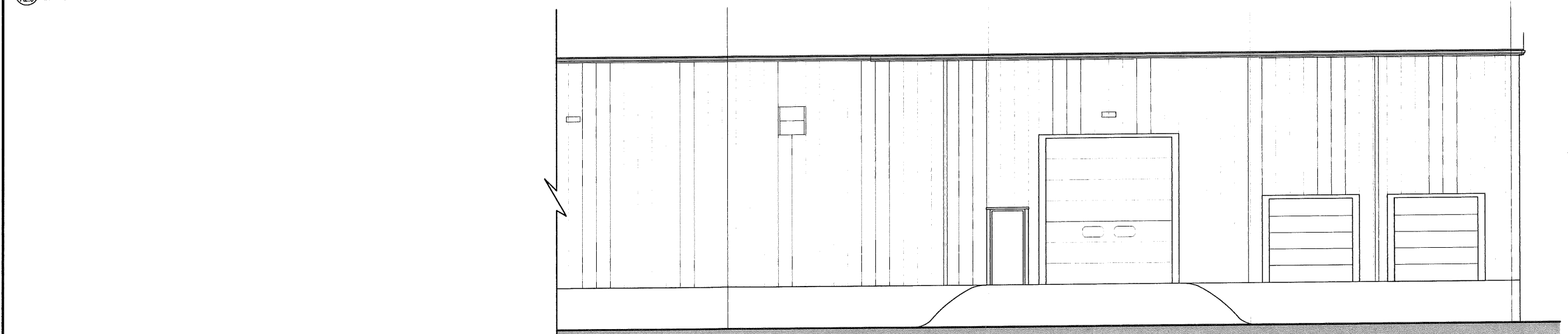
2 CASEWORK LEGEND
1/4\" = 1'-0\"



1 NORTH ELEVATION
1/4" = 1'-0"



2 PARTIAL WEST ELEVATION
1/4" = 1'-0"



3 PARTIAL WEST ELEVATION
1/4" = 1'-0"



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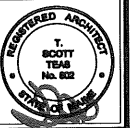
CONSULTANTS:
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 22 York Street
 Portland, ME 04101-4590
 207-679-0100
 MECHANICAL:
 Environmental Energy Systems, PLLC
 310 W. Main Street
 Portland, ME 04101
 207-781-6200
 ELECTRICAL:
 SECURITY ENGINEERING
 7 Forest Street
 Portland, ME 04101
 207-861-9100

REVISIONS:

DATE: 8/17/2011
 PROJECT No.: 1026A
 DRAWN BY: DAM,RJS,DSM
 CHECKED BY: TST
 SCALE: AS NOTED

SHEET TITLE:
EXTERIOR ELEVATIONS

A2.0



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TELEPHONE 527 778 8441
ARCHITECTURE PLANNING

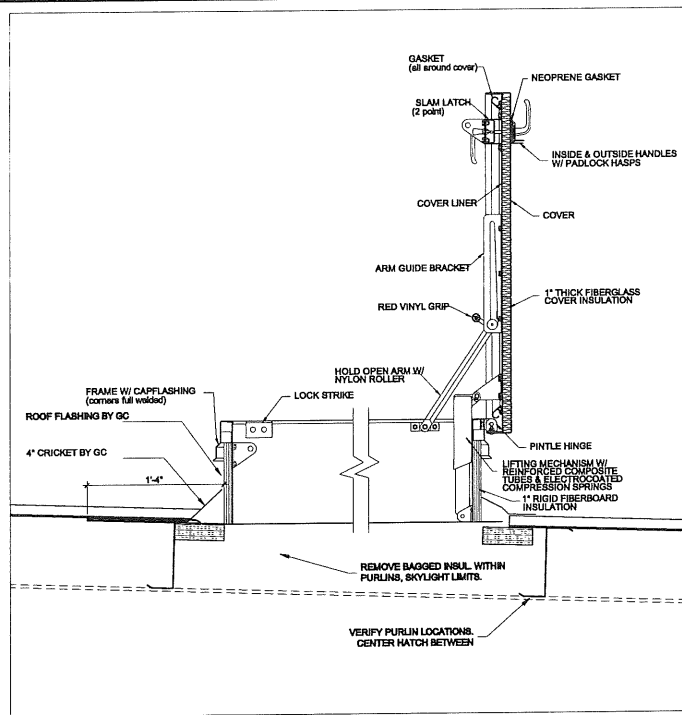
CONSULTANTS:
TPA ARCHITECTS
TPA ARCHITECTS
TPA ARCHITECTS
TPA ARCHITECTS
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TPA ARCHITECTS
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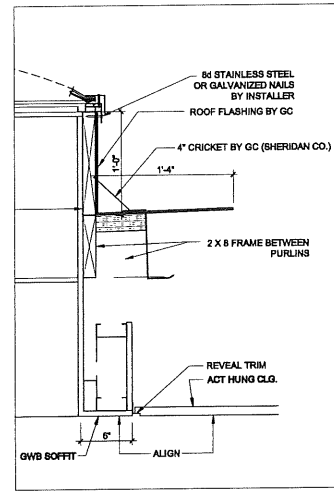
DATE: 8/17/11
PROJECT No.: 1036A
DRAWN BY: DMJ/LJB
CHECKED BY: TWT
SCALE: AS NOTED

SHEET TITLE:
BUILDING SECTION

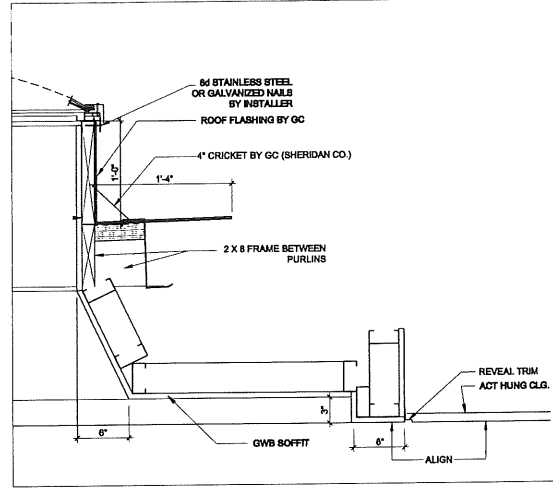
A3.0



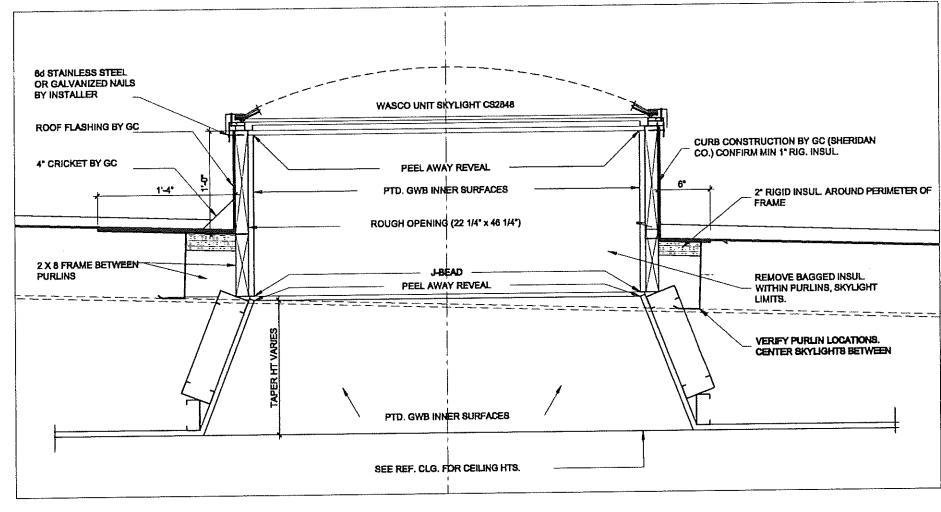
6 SECTION DETAIL AT ROOF HATCH
A3.0 1/4" = 1'-0"



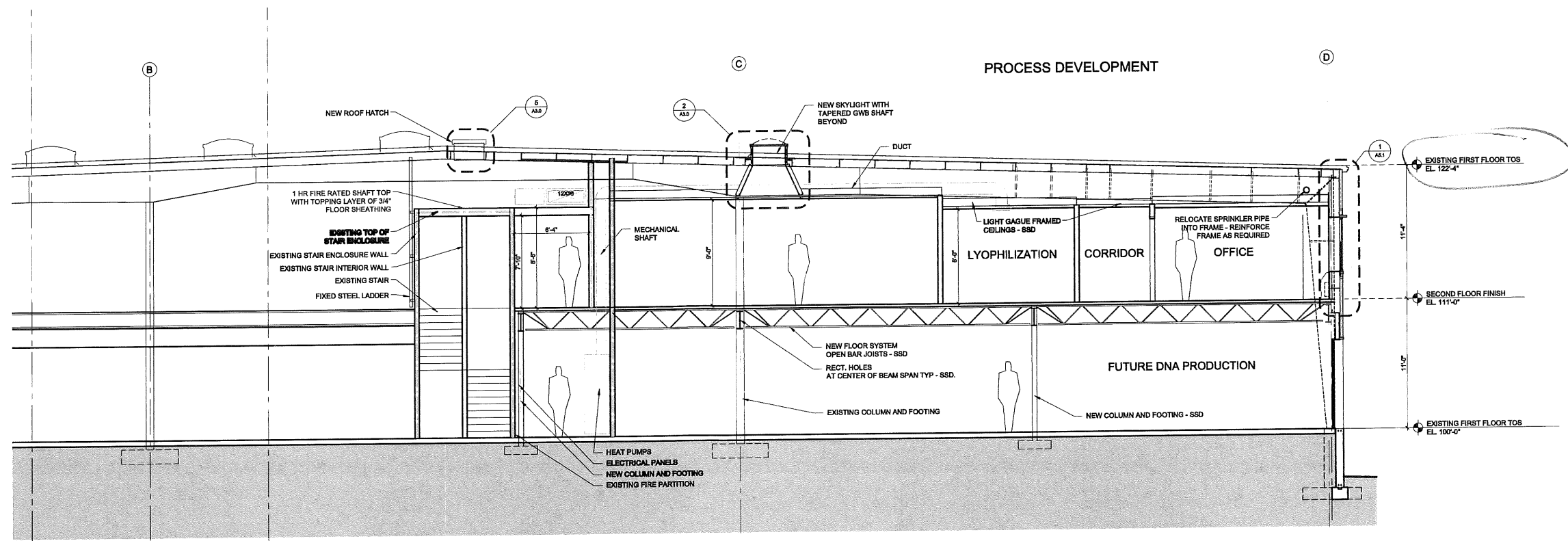
4 SECTION DETAIL AT SKYLIGHT
A3.0 1/4" = 1'-0"



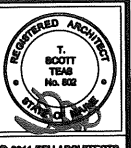
3 SECTION DETAIL AT SKYLIGHT
A3.0 1/4" = 1'-0"



2 SECTION DETAIL AT SKYLIGHT
A3.0 1/4" = 1'-0"



1 BUILDING SECTION
A3.0 1/4" = 1'-0"



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ARCHITECTURE PLANNING

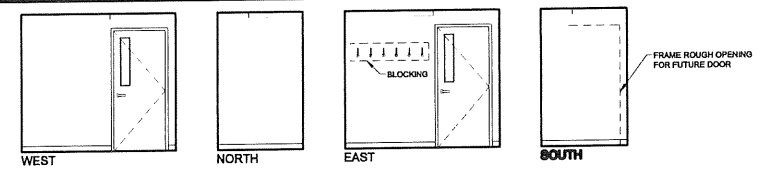
CONSULTANTS:
T. BOGTT
M. BOGTT
J. BOGTT
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S. BOGTT
L. BOGTT
D. BOGTT
C. BOGTT
B. BOGTT
A. BOGTT
M. BOGTT
J. BOGTT
K. BOGTT
S. BOGTT
L. BOGTT
D. BOGTT
C. BOGTT
B. BOGTT
A. BOGTT

REVISIONS:

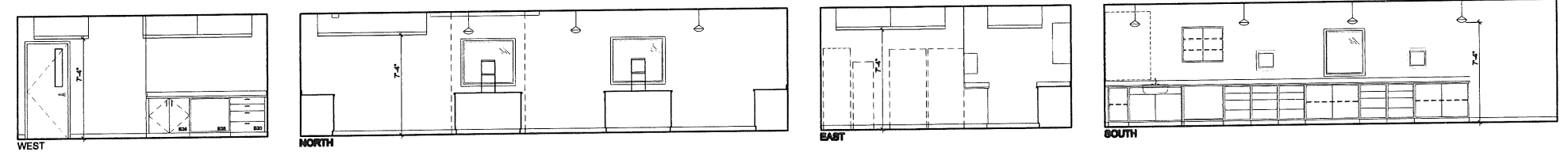
DATE: 01/17/11
PROJECT No. 1028A
DRAWN BY: DAMJLB
CHECKED BY: TBT
SCALE: AS NOTED

SHEET TITLE:
INTERIOR ELEVATIONS

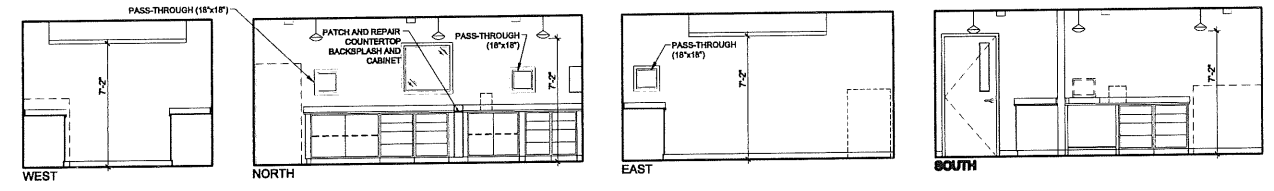
A4.0



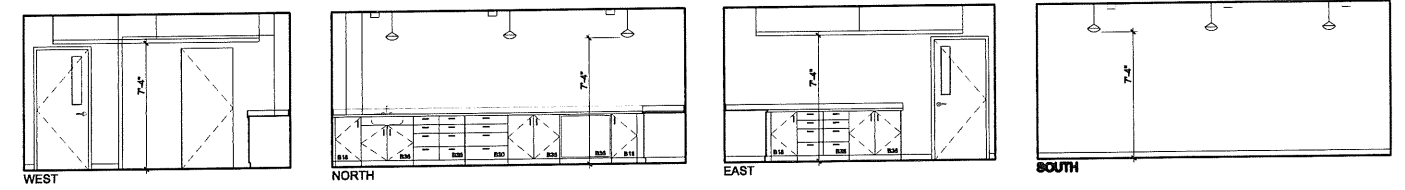
1 202 - GOWN
WF=TF



2 203 - EXPANDED REAGENT PREP / MASTER MIX
WF=TF



3 204 - EXPANDED AMP II
WF=TF

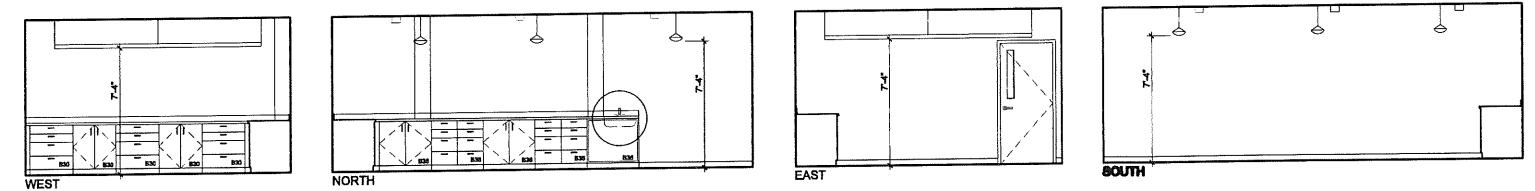


4 207 - BSL-2 SAMPLE PREP (DNA)
WF=TF

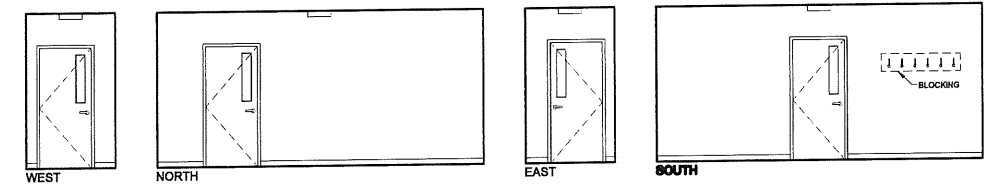


5 215 - DNA SEQUENCING
WF=TF

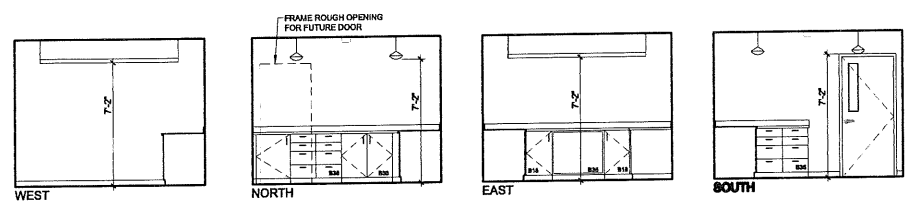
6 222 - STANDARDS ROOM
WF=TF



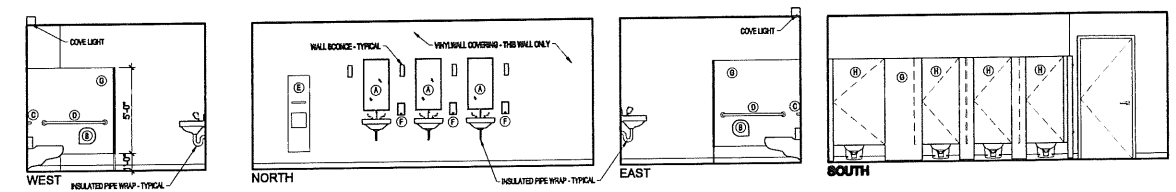
7 223 - BSL-2 SAMPLE PREP (RNA)
WF=TF



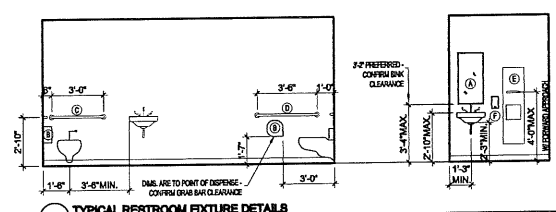
8 224 - GOWN
WF=TF



9 225 - BEACON PRODUCT
WF=TF

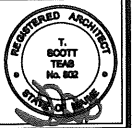


10 227 - WOMEN'S RESTROOM
WF=TF



11 TYPICAL RESTROOM FIXTURE DETAILS
WF=TF

NOTES:
1. WHEN GIVEN A RANGE OF DIMENSIONS FOR PLACEMENT, PLACE ALL FIXTURES OF SAME TYPE AT THE SAME ELEVATION THROUGHOUT, UNLESS OTHERWISE SPECIFIED.
2. FIXTURES TO BE CENTERED OVER BOWL, REAR LOWER EDGE.
3. PROVIDE APPROPRIATE BLOCKING IN WALLS BEHIND ALL FIXTURES, PARTITIONS, AND ACCESSORIES.
4. FOR CONTROLS OR OPERATING MECHANISMS PROVIDE CLEAR FLOOR SPACE WITH SIDE OR PARALLEL APPROACH COMPLIANT.
TOILET ACCESSORIES KEY:
① IMPROV 1/4\"/>



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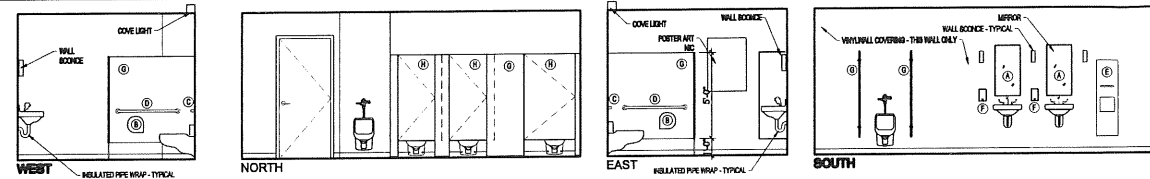
CONSULTANTS:
Interior Design: Regan & Co.
Mechanical: Regan & Co.
Electrical: Regan & Co.
Plumbing: Regan & Co.
Structural: Regan & Co.
Civil: Regan & Co.

REVISIONS:

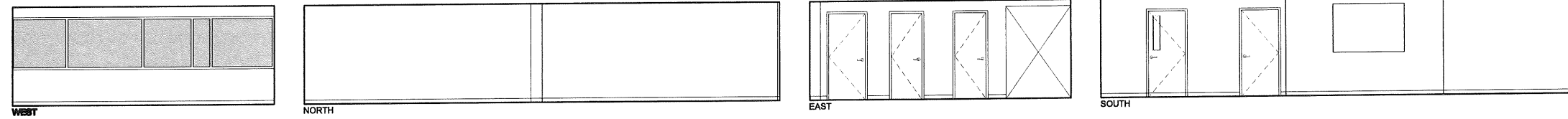
DATE: 6/17/11
PROJECT No: 1026A
DRAWN BY: DML/DJB
CHECKED BY: TBT
SCALE: AS NOTED

SHEET TITLE:
INTERIOR
ELEVATIONS

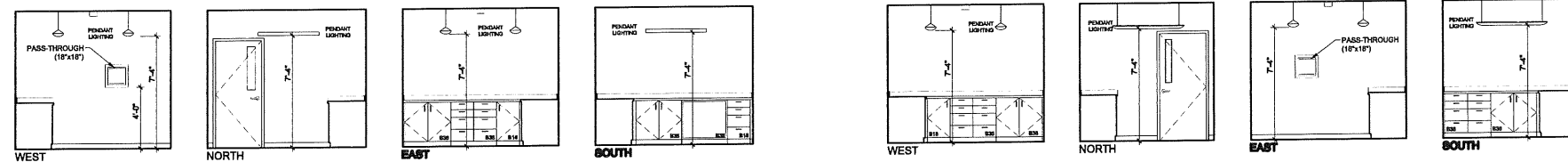
A4.1



1 228 - MENS RESTROOM
WF+FP

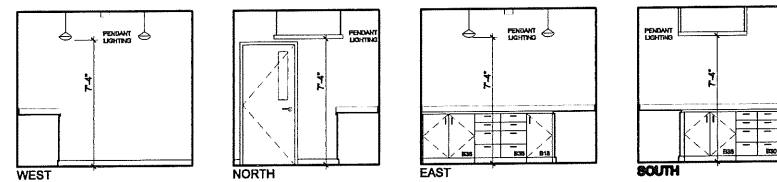


2 229 - OPEN OFFICE
WF+FP

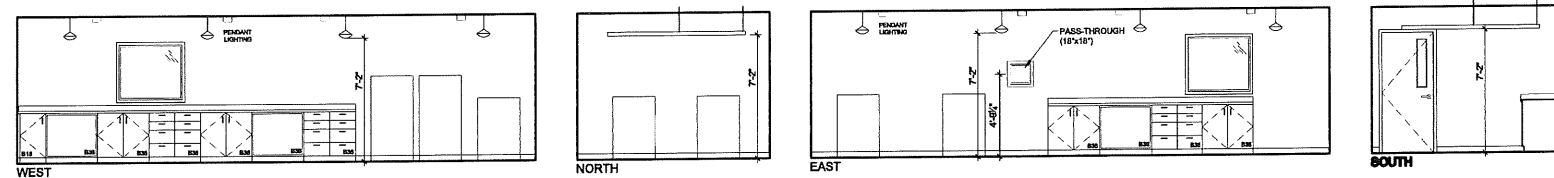


3 230 - VBS
WF+FP

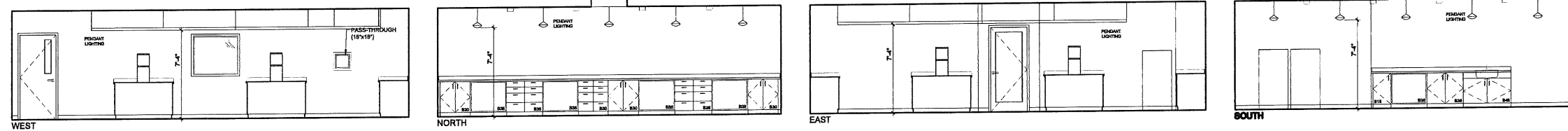
4 231 - VBS
WF+FP



5 232 - VBI
WF+FP



6 233 - LYOPHILIZATION
WF+FP

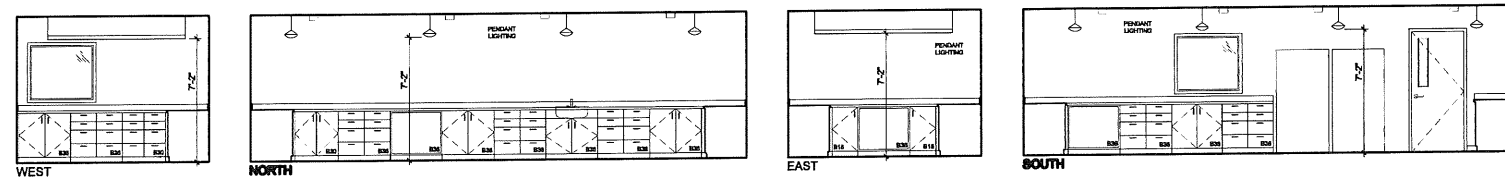


7 234 - REAGENT PREP / CAP AND FILL
WF+FP

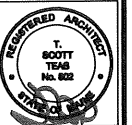


8 236 - VESTIBULE
WF+FP

9 236 - GOWN
WF+FP



10 237 - LFD - HUMID
WF+FP



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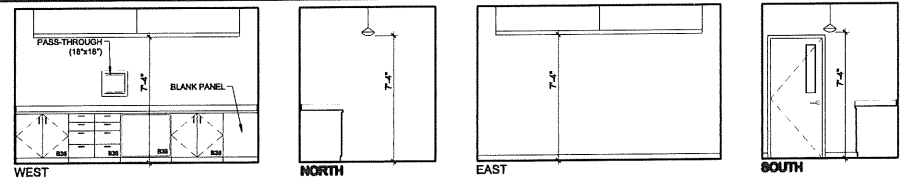


CONSULTANTS:
T. Scott Tsao, Registered Arch.
T. Scott Tsao, Registered Arch.
T. Scott Tsao, Registered Arch.
T. Scott Tsao, Registered Arch.
T. Scott Tsao, Registered Arch.

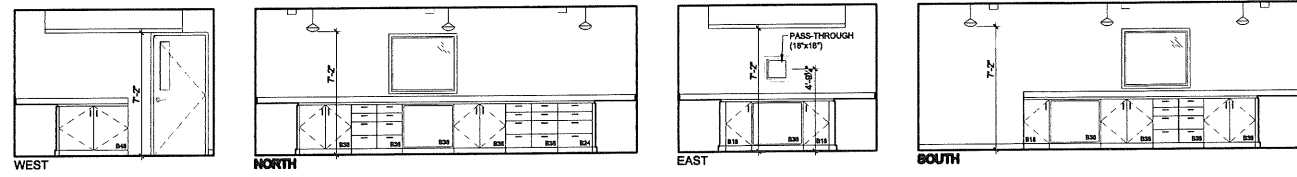
REVISIONS

DATE: 8/17/11
PROJECT No. 1028A
DRAWN BY: DANLUE
CHECKED BY: TBT
SCALE: AS NOTED

#SHEET TITLE:
INTERIOR
ELEVATIONS



1 239 - PACKAGE
WF-10

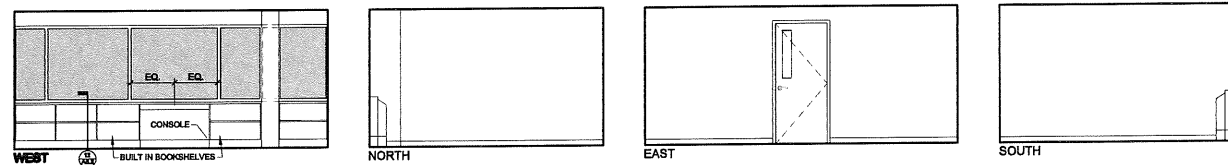


2 240 - LFD - DRY
WF-10

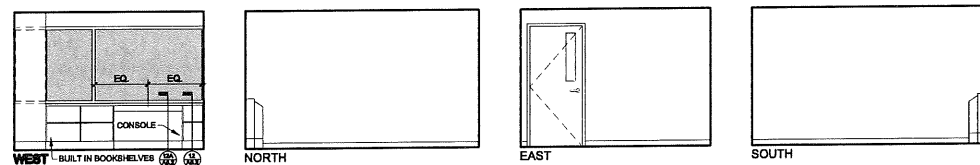


3 241 - VESTIBULE
WF-10

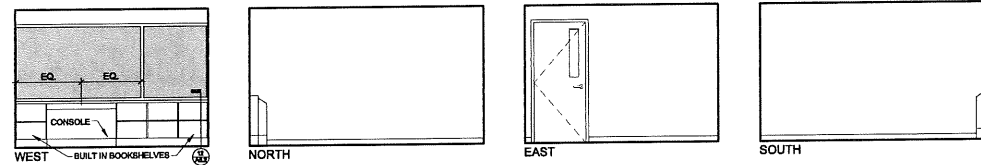
4 242 - GOWN
WF-10



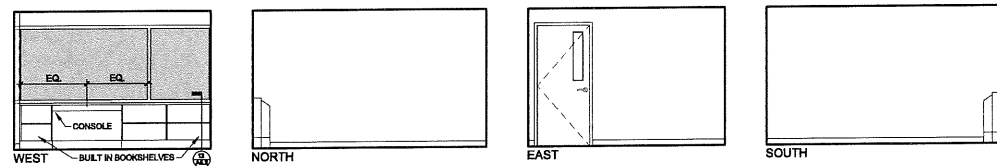
5 244 - OFFICE 1
WF-10



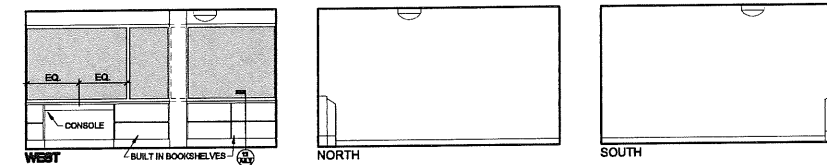
6 245 - OFFICE 2
WF-10



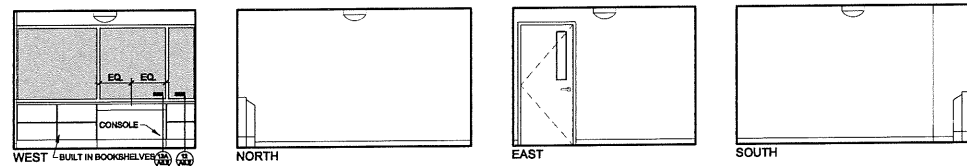
7 246 - OFFICE 3
WF-10



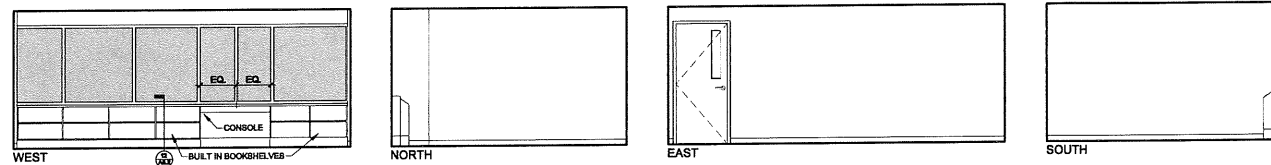
8 247 - OFFICE 4
WF-10



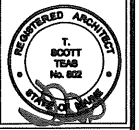
9 250 - OPEN MEETING
WF-10



10 251 - CLOSED MEETING
WF-10



11 252 - CLOSED MEETING
WF-10



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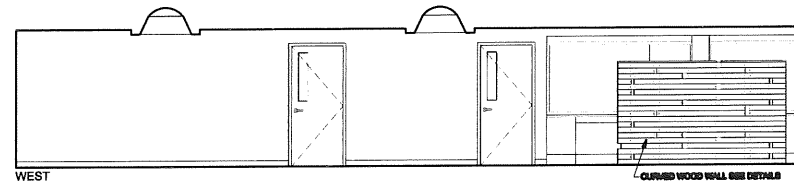
TPA ARCHITECTS
80 MIDDLE STREET
PORTLAND, MAINE 04101
TELEPHONE 507 778 8441
ARCHITECTURE PLANNING

CONSULTANTS:
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Mechanical: [unreadable]
Electrical: [unreadable]
Plumbing: [unreadable]
HVAC: [unreadable]
Civil: [unreadable]
Landscape: [unreadable]
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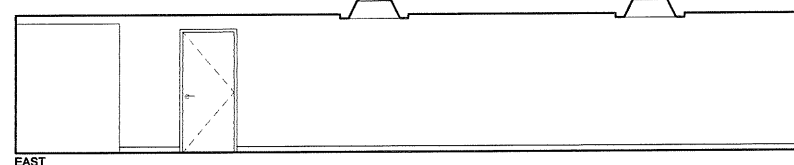
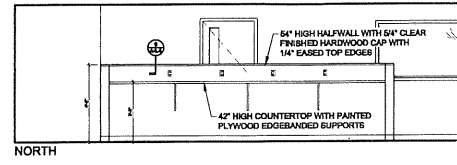
REVISIONS:

DATE: 8/17/11
PROJECT No. 1028A
DRAWN BY: DAMJUB
CHECKED BY: TBT
SCALE: AS NOTED

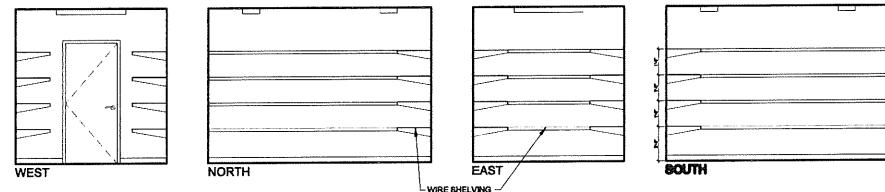
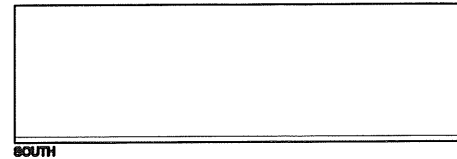
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ELEVATIONS



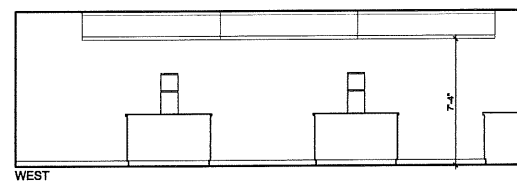
1 283 - OPEN OFFICE
W-F



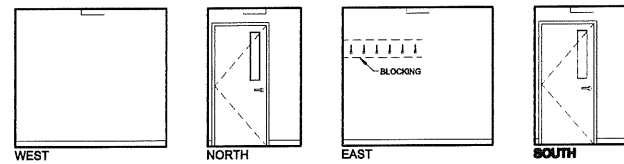
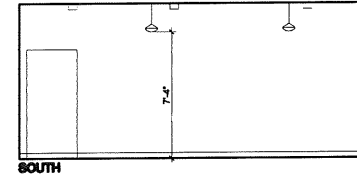
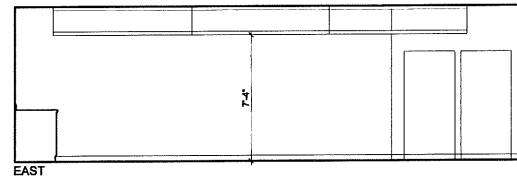
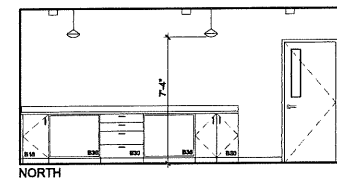
2 283 - OPEN OFFICE
W-F



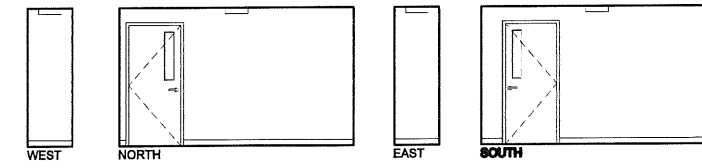
3 284 - STORAGE
W-F



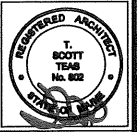
4 285 - TECH TRANSFER
W-F



5 286 - GOWN
W-F



6 288 - HALL
W-F



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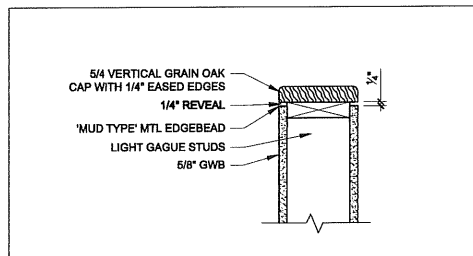
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REVISIONS:

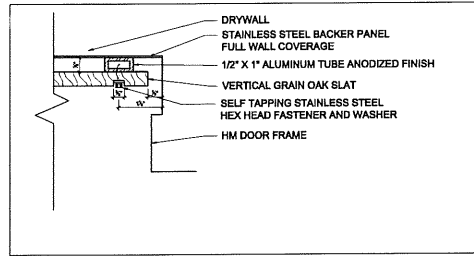
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 PROJECT No.: 1028A
 DRAWN BY: DAMJUB
 CHECKED BY: TBT
 SCALE: AS NOTED

SHEET TITLE:
 INTERIOR
 DETAILS

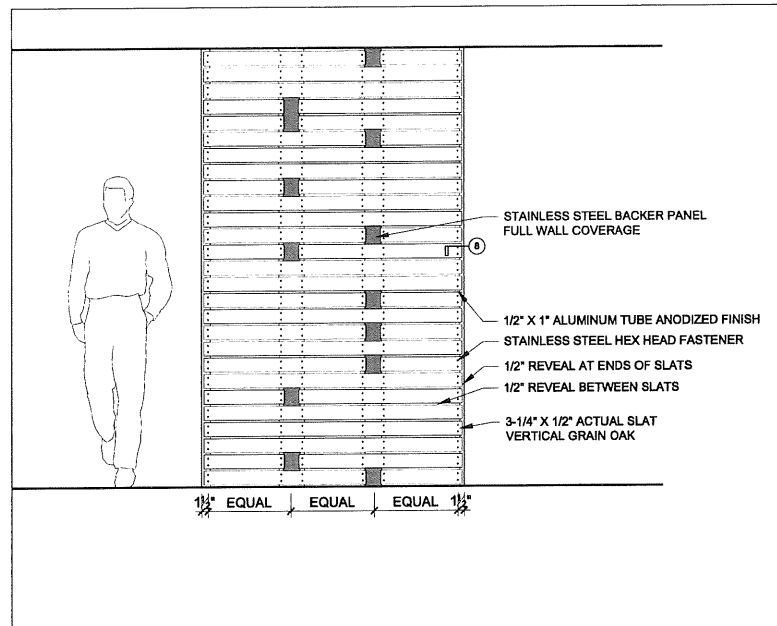
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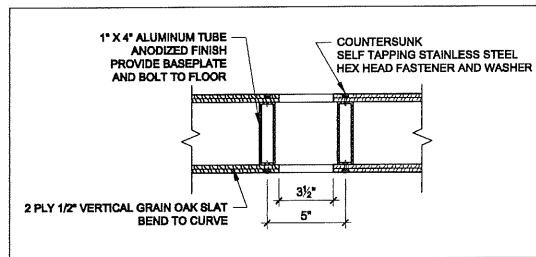
8 HALF WALL CAP DETAIL
 1/4" - 1/4"



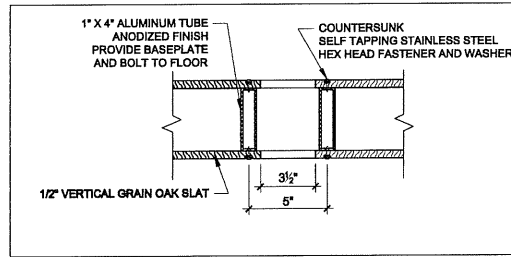
6 WOOD WALL PLAN DETAIL
 1/4" - 1/4"



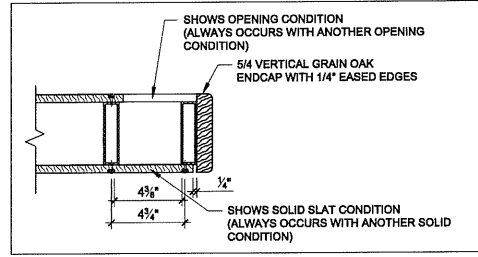
7 WOOD WALL AT RESTROOM ALCOVE
 1/4" - 1/4"



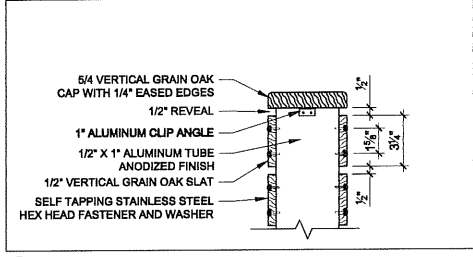
5 SCREEN WALL VOID DETAIL AT CURVED WALL
 1/4" - 1/4"



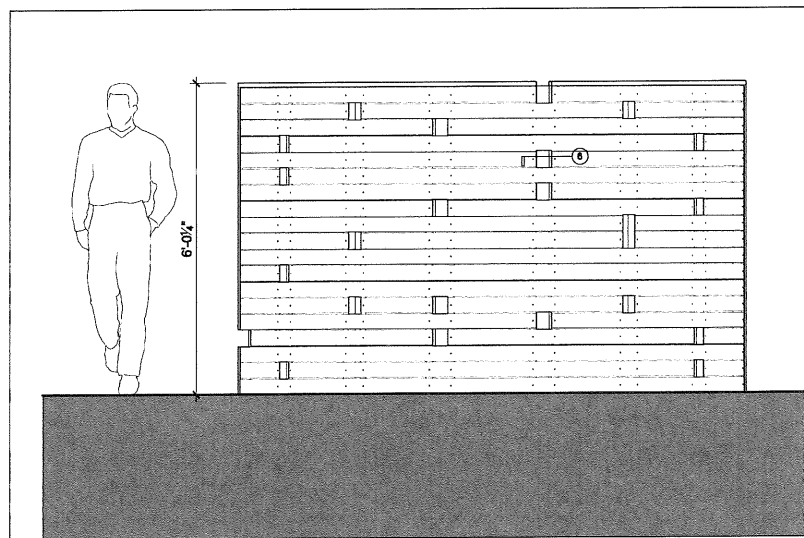
8 SCREEN WALL VOID DETAIL
 1/4" - 1/4"



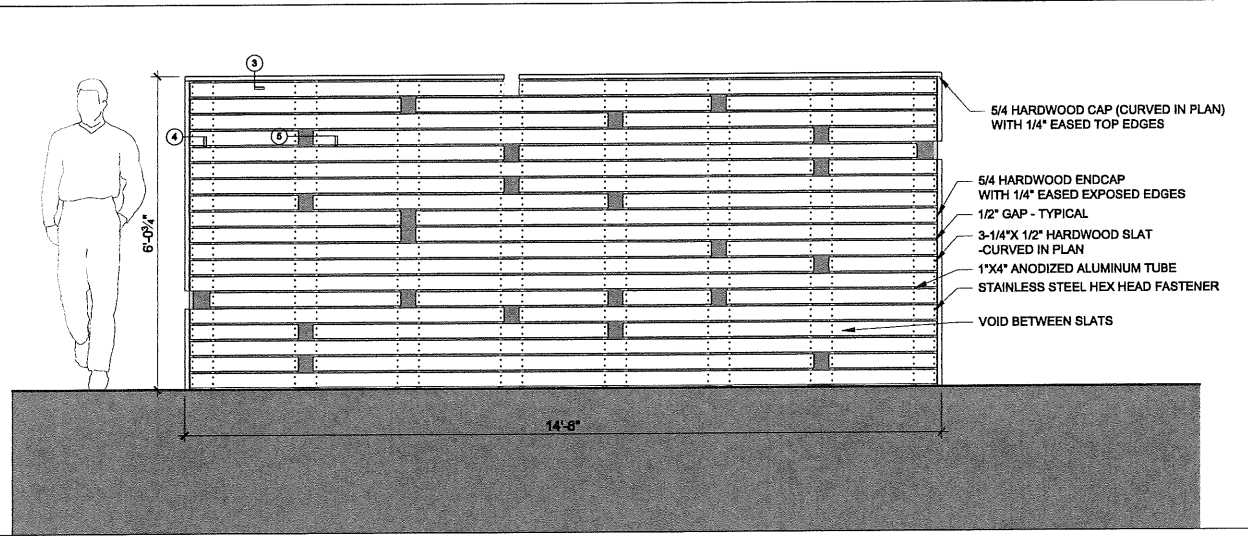
4 SCREEN WALL END DETAIL
 1/4" - 1/4"



3 SCREEN WALL CAP DETAIL
 1/4" - 1/4"



2 CURVED SCREEN WALL AT OPEN MEETING # 220
 3/4" - 1/4"



1 SCREEN WALL AT OPEN OFFICE # 220
 3/4" - 1/4"



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TELEPHONE 207 778 8141
ARCHITECTURE PLANNING

CONSULTANTS:
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TTH ARCHITECTS
TTH ARCHITECTS
TTH ARCHITECTS
TTH ARCHITECTS
TTH ARCHITECTS
TTH ARCHITECTS
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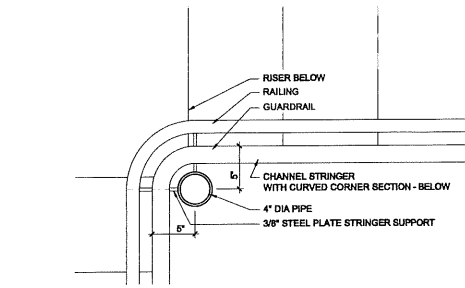
REVISIONS:

DATE: 8/17/11
PROJECT No: 1028A
DRAWN BY: DAN LARSEN
CHECKED BY: TBT

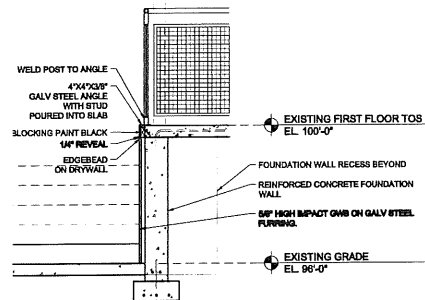
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SHEET TITLE:
STAIR DETAILS

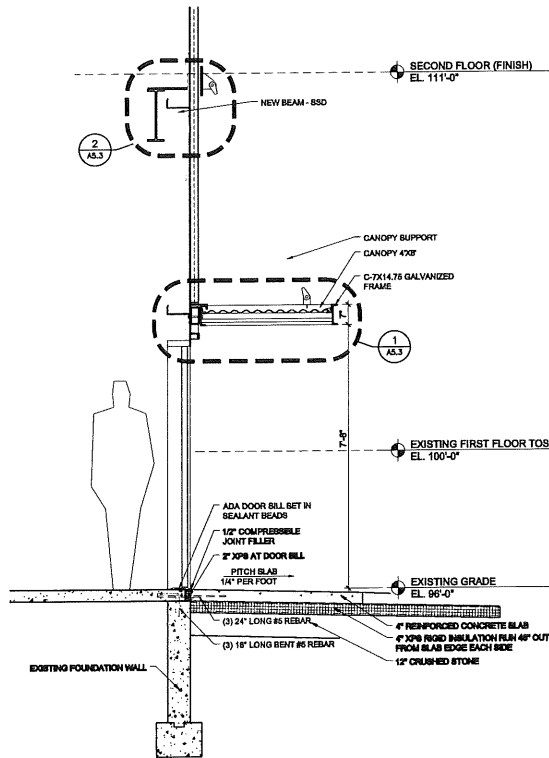
A5.0



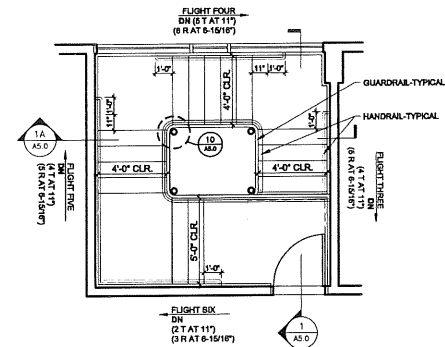
10 PLAN DETAIL AT STAIR INNER CORNER
A5.0 1/2" = 1'-0"



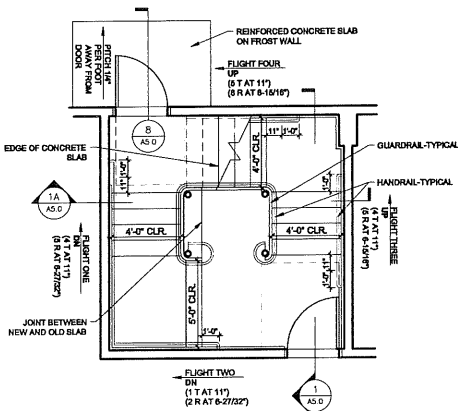
9 SECTION AT STAIR RECESSED SLAB
A5.0 1/2" = 1'-0"



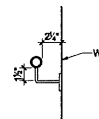
8 SECTION AT DOOR AND FROST SLAB
A5.0 1/2" = 1'-0"



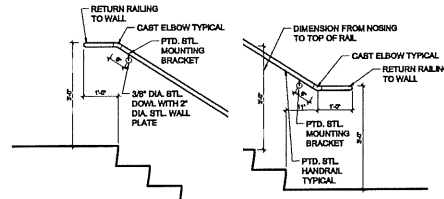
3 STAIR PLAN AT SECOND FLOOR
A5.0 1/2" = 1'-0"



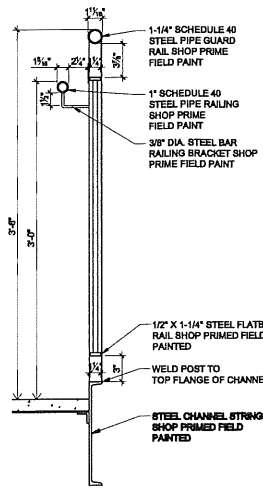
2 STAIR PLAN AT FIRST FLOOR
A5.0 1/2" = 1'-0"



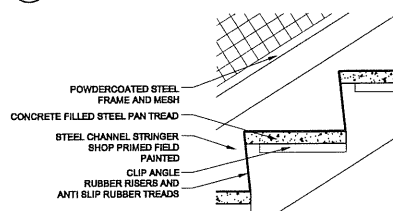
5 TYPICAL HANDRAIL AT WALL
A5.0 1/2" = 1'-0"



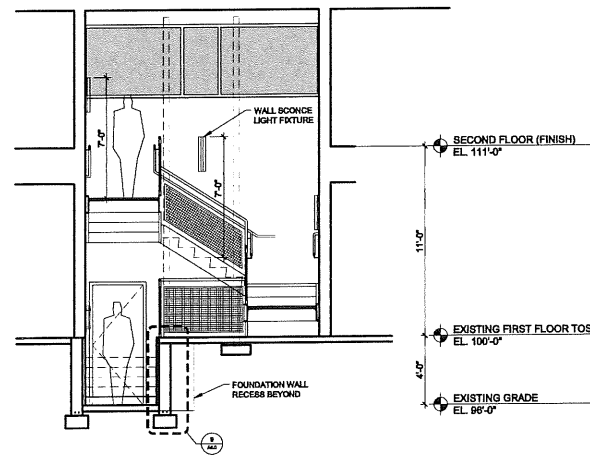
7 TYPICAL HANDRAIL DETAIL TOP AND BOTTOM
A5.0 1/2" = 1'-0"



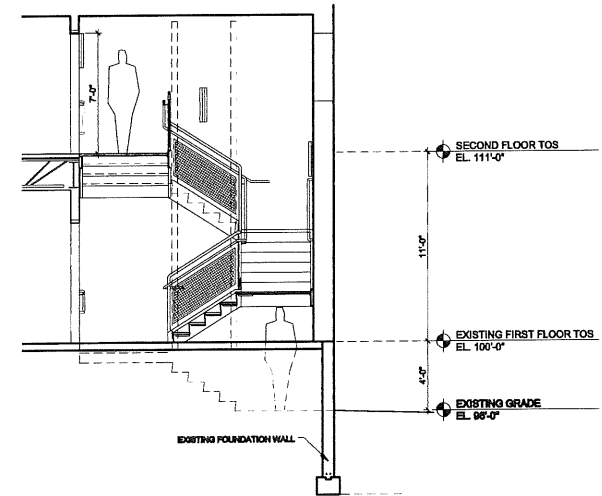
4 GUARDRAIL AND STRINGER DETAIL
A5.0 1/2" = 1'-0"



6 TYPICAL STAIR TREAD / RISER
A5.0 1/2" = 1'-0"



1A STAIR SECTION
A5.0 1/2" = 1'-0"



1 STAIR SECTION
A5.0 1/2" = 1'-0"

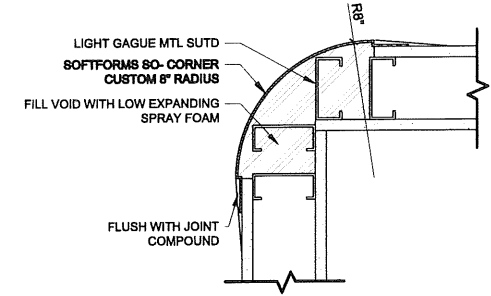
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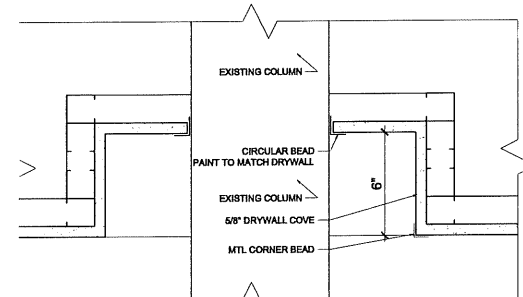
CONSULTANTS:
James C. Hoopes, Inc.
HARVEY KALPROOF ARCHITECTS
LAW OFFICE OF DAVID L. WELLS
MERRILL LYNCH PIERCE FENNER SMITH
LAW OFFICE OF DAVID L. WELLS
MERRILL LYNCH PIERCE FENNER SMITH

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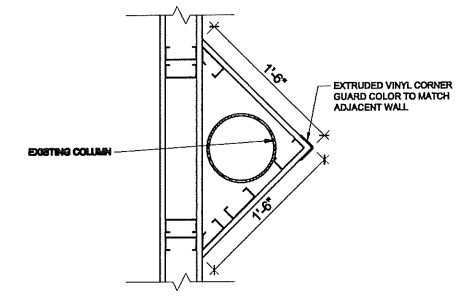
DATE: 8/17/11
PROJECT No: 1028A
DRAWN BY: DANLUB
CHECKED BY: TBT
SCALE: AS NOTED
SHEET TITLE:
DETAILS



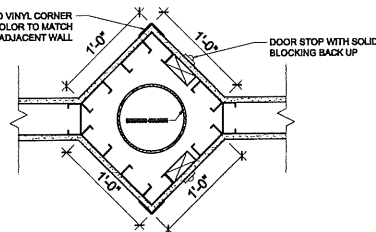
11 WALL CORNER PLAN DETAIL
1/4" = 1'-0"



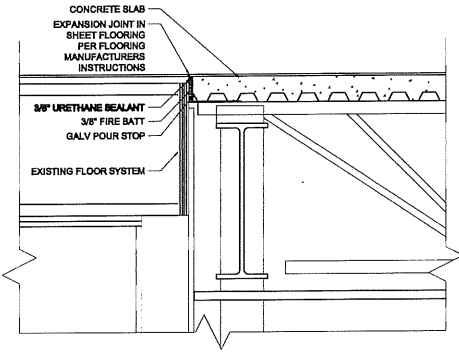
10 COLUMN / CEILING SECTION DETAIL
3/8" = 1'-0"



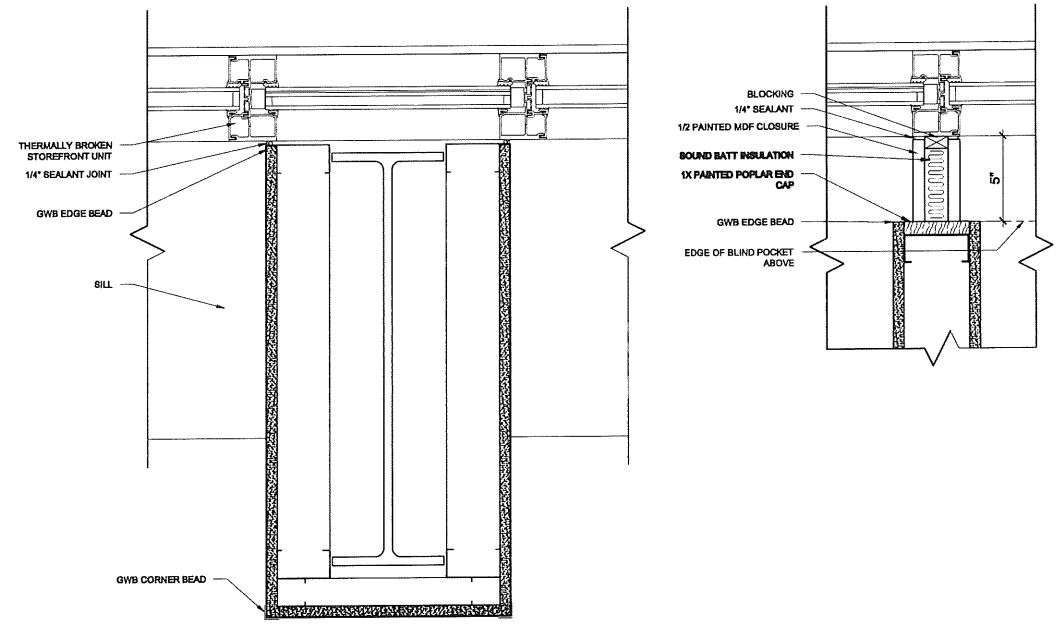
9 COLUMN PILASTER PLAN DETAIL
1/4" = 1'-0"



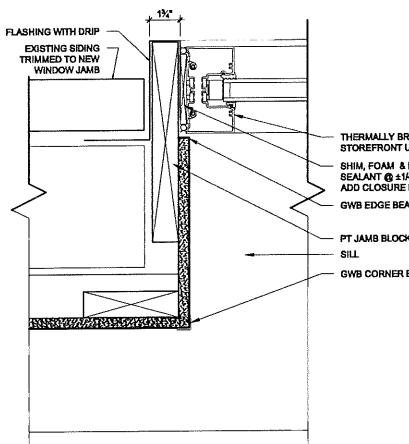
8 COLUMN PILASTER PLAN DETAIL
1/4" = 1'-0"



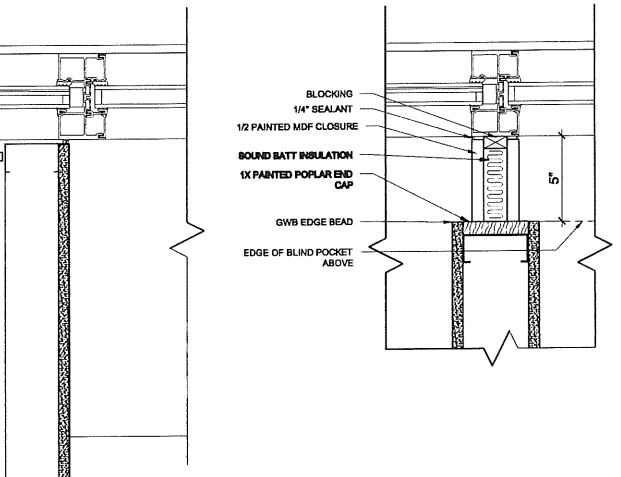
7 EXISTING / NEW FLOOR JOINT DETAIL
1/4" = 1'-0"



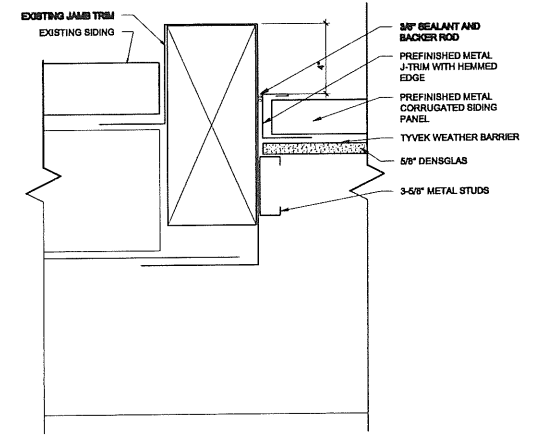
8B STOREFRONT PLAN DETAIL
3/8" = 1'-0"



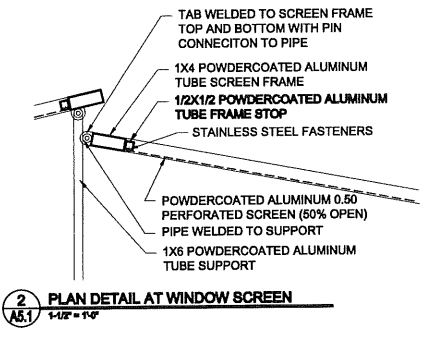
6B STOREFRONT PLAN DETAIL
3/8" = 1'-0"



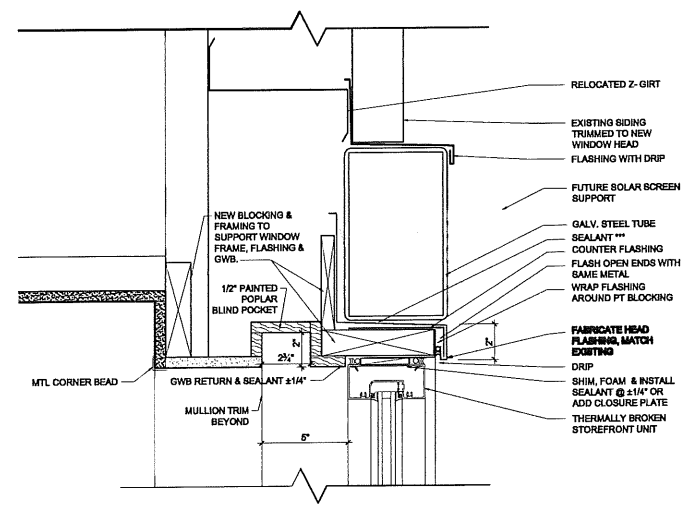
8C STOREFRONT PLAN DETAIL
3/8" = 1'-0"



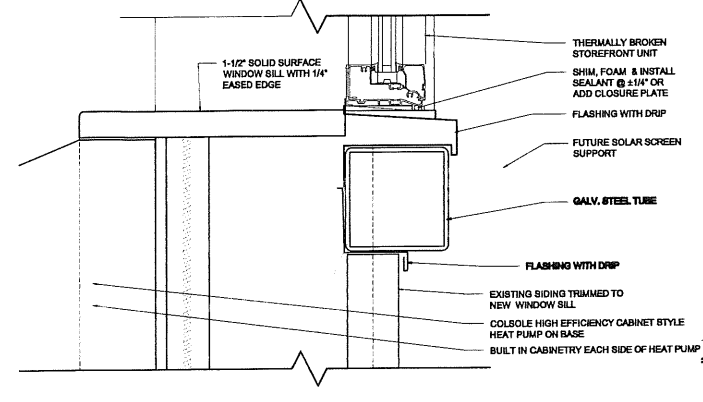
6 PLAN DETAIL AT OHD INFILL
3/8" = 1'-0"



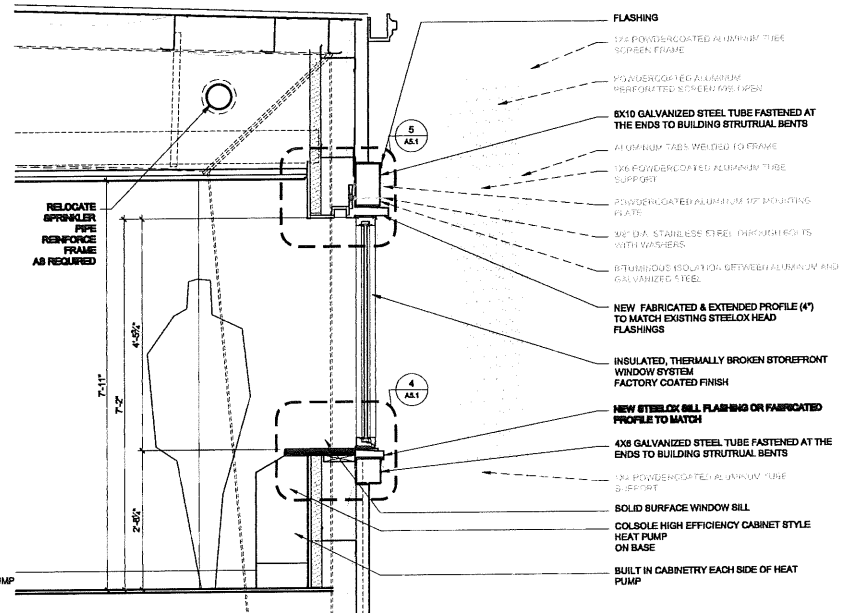
2 PLAN DETAIL AT WINDOW SCREEN
1/4" = 1'-0"



5 WINDOW HEAD DETAIL
3/8" = 1'-0"



4 WINDOW SILL DETAIL
3/8" = 1'-0"



1 WALL SECTION AT WINDOW SCREEN
3/4" = 1'-0"



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ARCHITECTURE PLANNING

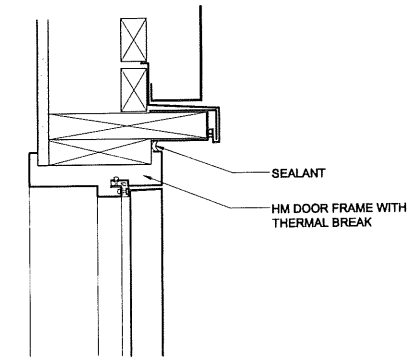
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TTH ARCHITECTS
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REVISIONS

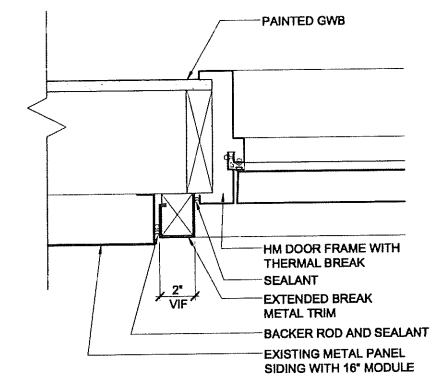
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SHEET TITLE:
INTERIOR
DETAILS

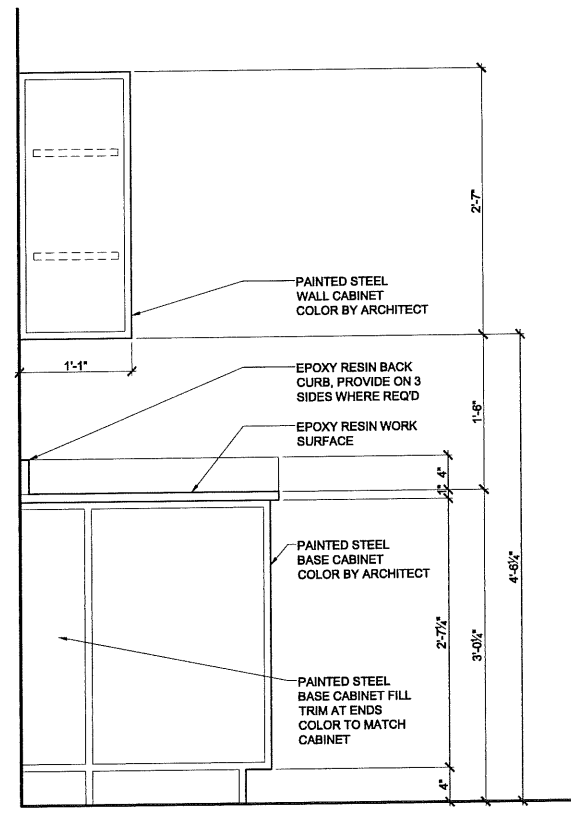
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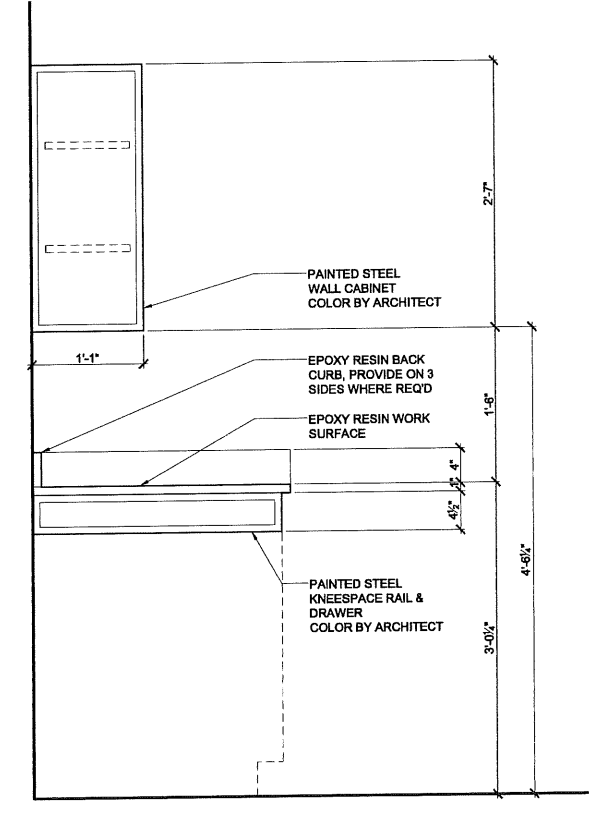
6 SECTION DETAIL AT EXTERIOR DOOR HEAD
A5.2 1/2" = 1'-0"



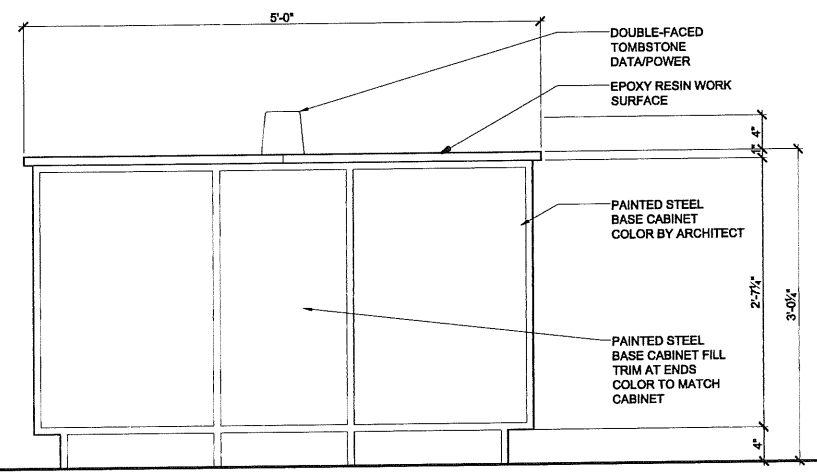
3 PLAN DETAIL AT EXTERIOR DOOR JAMB
A5.2 1/2" = 1'-0"



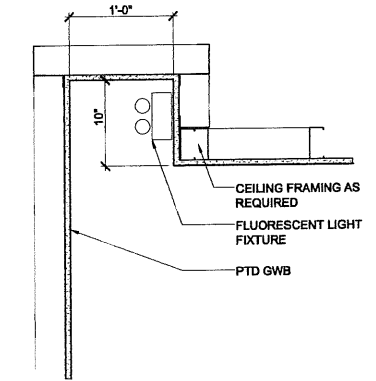
5 SECTION DETAIL AT LAB BENCH AND UPPER CABINET
A5.2 1/2" = 1'-0"



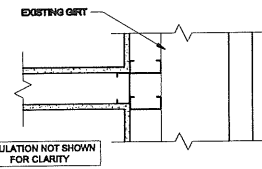
2 SECTION DETAIL AT LAB BENCH WITH KNEE SPACE
A5.2 1/2" = 1'-0"



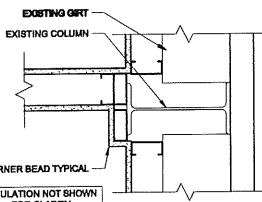
4 SECTION DETAIL AT PENINSULA LAB BENCH
A5.2 1/2" = 1'-0"



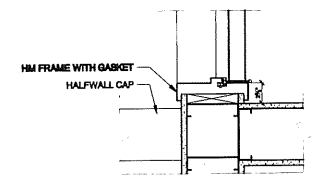
1 SECTION DETAIL AT RESTROOM LIGHT COVE
A5.2 1/2" = 1'-0"



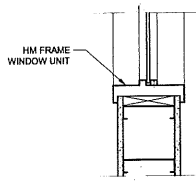
11 PLAN DETAIL AT INTERIOR / EXTERIOR WALL INTERSECTION
A5.2 1/2" = 1'-0"



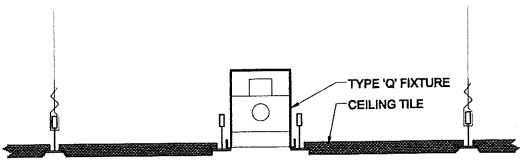
10 PLAN DETAIL AT INTERIOR / EXTERIOR WALL INTERSECTION
A5.2 1/2" = 1'-0"



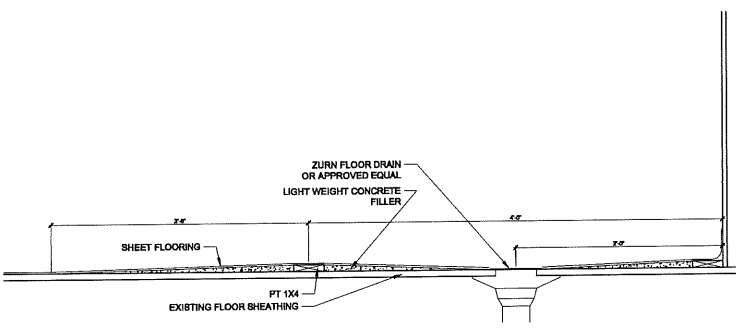
9 PLAN DETAIL AT INTERIOR DOOR
A5.2 1/2" = 1'-0"



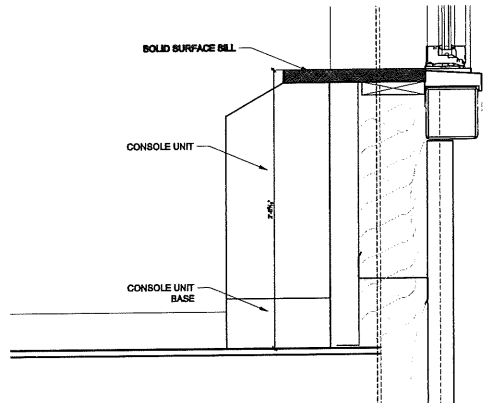
8 PLAN DETAIL AT INTERIOR WINDOW
A5.2 1/2" = 1'-0"



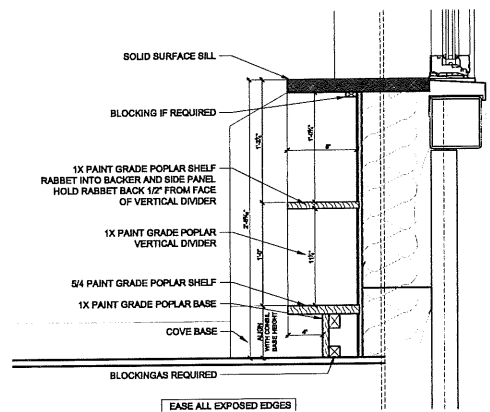
7 SECTION DETAIL AT 'Q' LIGHT FIXTURE AND CEILING
A5.2 1/2" = 1'-0"



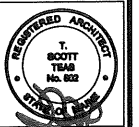
13 SECTION DETAIL AT SAFETY SHOWER FLOOR
A5.2 1/2" = 1'-0"



12A SECTION DETAIL AT CONSOLE UNIT CABINETRY
A5.2 1/2" = 1'-0"

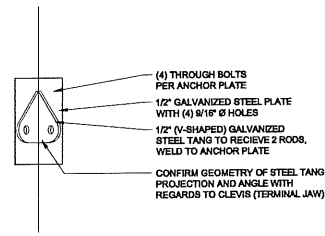


12 SECTION DETAIL AT WINDOW WALL CABINETRY
A5.2 1/2" = 1'-0"



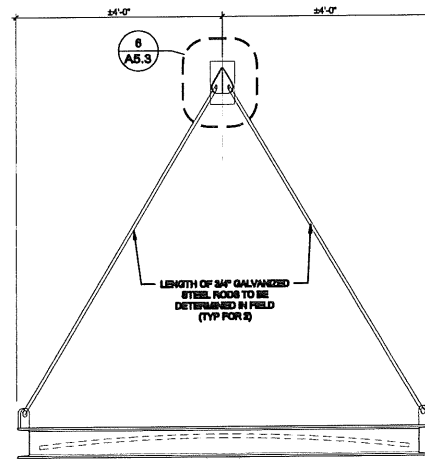
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PORTLAND, MAINE



- (4) THROUGH BOLTS PER ANCHOR PLATE
- 1/2" GALVANIZED STEEL PLATE WITH (4) 3/16" Ø HOLES
- 1/2" (V-SHAPED) GALVANIZED STEEL TANG TO RECEIVE 2 ROOFS, WELD TO ANCHOR PLATE
- CONFIRM GEOMETRY OF STEEL TANG PROJECTION AND ANGLE WITH REGARDS TO CLEVIS (TERMINAL JAW)

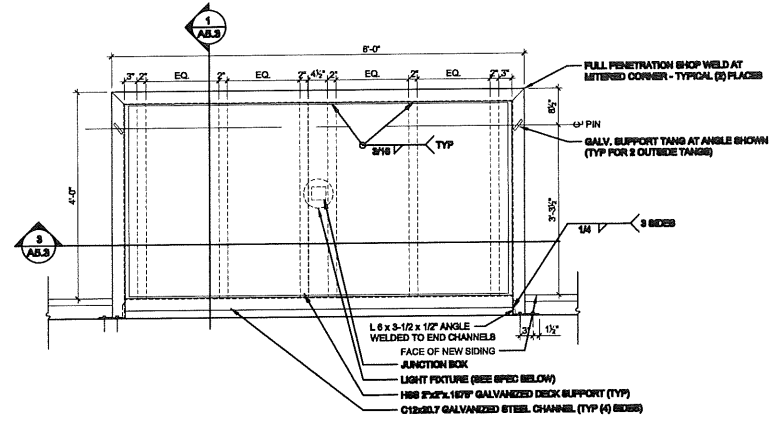
6 ELEVATION OF CANOPY SUPPORT PLATE
A5.3 1/4" = 1'-0"



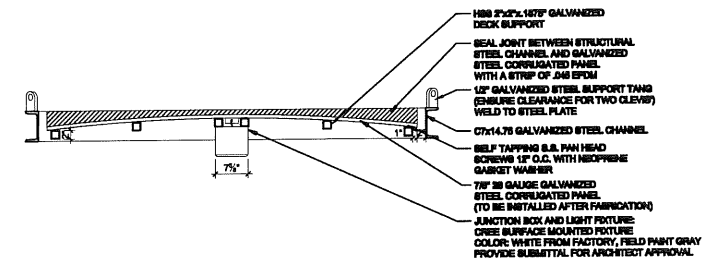
6
A5.3

LENGTH OF 3/4" GALVANIZED STEEL RODS TO BE DETERMINED IN FIELD (TYP FOR 2)

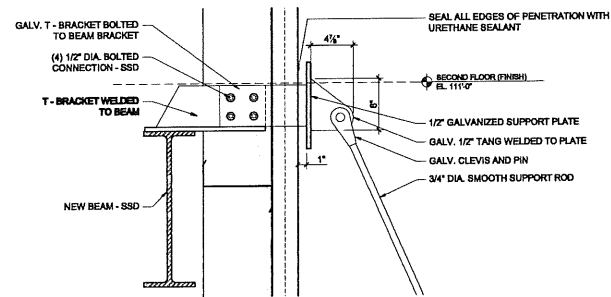
5 ELEVATION OF CANOPY
A5.3 1/4" = 1'-0"



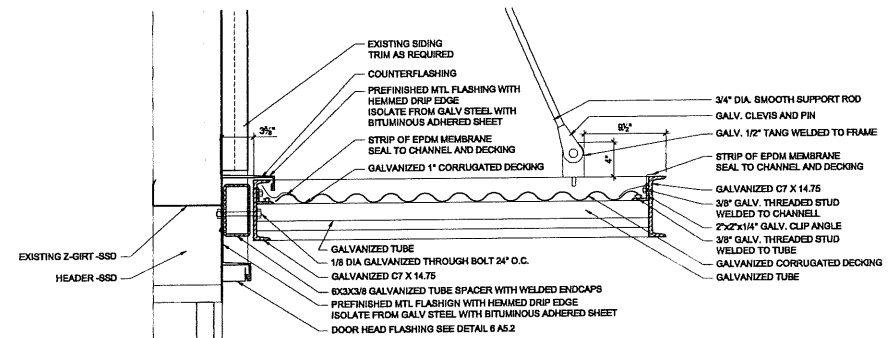
4 PLAN DETAIL OF CANOPY
A5.3 1/4" = 1'-0"



3 SECTION DETAIL OF CANOPY
A5.3 1/4" = 1'-0"



2 SECTION DETAIL AT CANOPY SUPPORT
A5.3 1/4" = 1'-0"



1 SECTION DETAIL AT CANOPY
A5.3 1/4" = 1'-0"



TTH ARCHITECTS
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Professional Engineering Firm
No. 0000000000
EnviroLogix is a registered
Professional Surveying Firm
No. 0000000000
EnviroLogix is a registered
Professional Land Surveyor
No. 0000000000

REVISIONS

DATE: 8/17/11

PROJECT No: 1028A

DRAWN BY: DMJ/RJB

CHECKED BY: TST

SCALE: AS NOTED

SHEET TITLE:

CANOPY

DETAILS

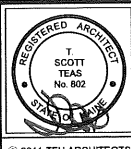
A5.3

LABORATORY EQUIPMENT MATRIX - DNA EXPANSION 7/25/11

Main equipment matrix table with columns for Equipment Description, Quantity, Room, and various technical specifications.

LABORATORY EQUIPMENT MATRIX - DNA EXPANSION 7/25/11

Summary table for laboratory equipment matrix, including columns for Equipment Description, Quantity, Room, and various technical specifications.



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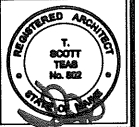
CONSULTANTS: Structural: ... Electrical: ...

REVISIONS:

DATE: 8/17/11 PROJECT No.: 1026A DRAWN BY: DAM,RJS CHECKED BY: TST SCALE: AS NOTED

SHEET TITLE: EQUIPMENT SCHEDULE

A6.1



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PORTLAND, MAINE



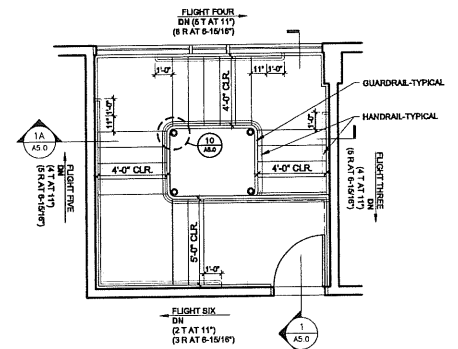
CONSULTANTS:
T. Scott Yeas, Registered Architect, No. 852
T. Scott Yeas, Registered Professional Engineer, No. 10288
Dana Rubin, Registered Professional Engineer, No. 10288
T. Scott Yeas, Registered Professional Engineer, No. 10288
T. Scott Yeas, Registered Professional Engineer, No. 10288
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T. Scott Yeas, Registered Professional Engineer, No. 10288
T. Scott Yeas, Registered Professional Engineer, No. 10288

REVISIONS:

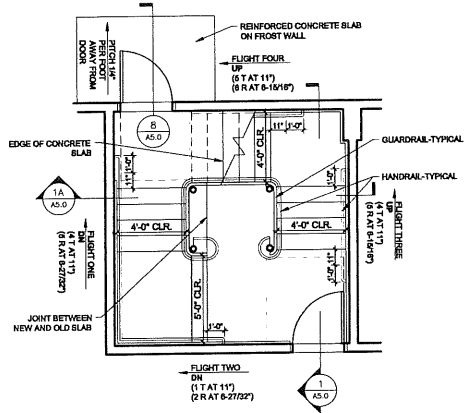
DATE: 8/17/11
PROJECT No.: 10288A
DRAWN BY: DAM/RJB
CHECKED BY: TTY
SCALE: AS NOTED

SHEET TITLE:
STAIR DETAILS

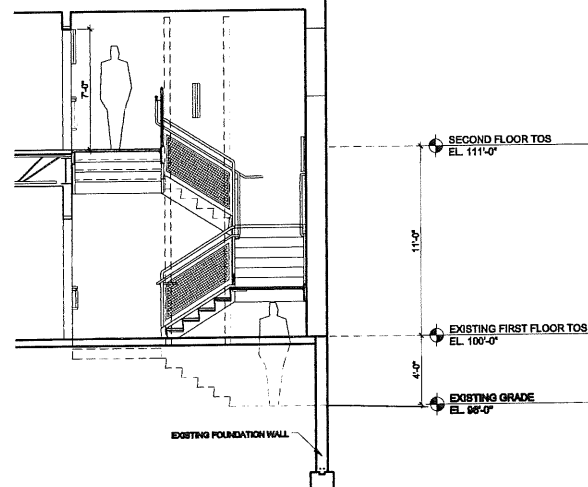
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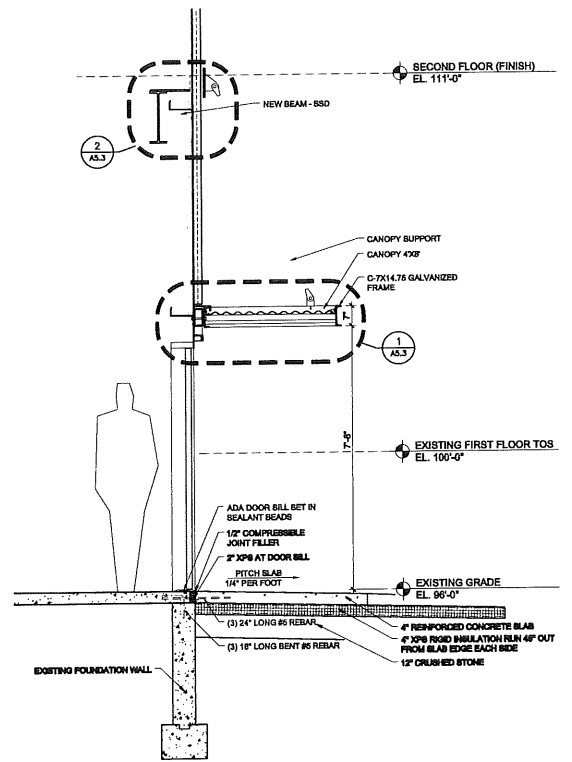
3 STAIR PLAN AT SECOND FLOOR
A5.0 1/2" = 1'-0"



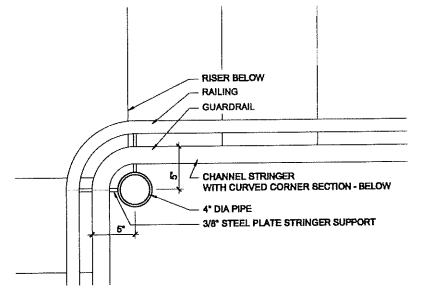
2 STAIR PLAN AT FIRST FLOOR
A5.0 1/2" = 1'-0"



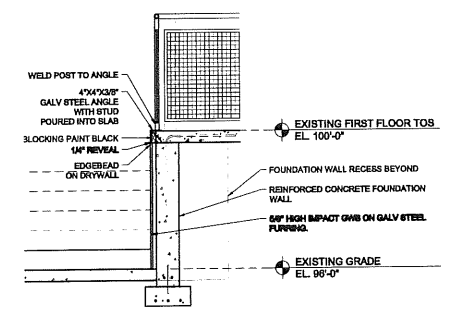
1 STAIR SECTION
A5.0 1/2" = 1'-0"



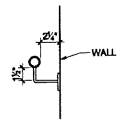
8 SECTION AT DOOR AND FROST SLAB
A5.0 1/2" = 1'-0"



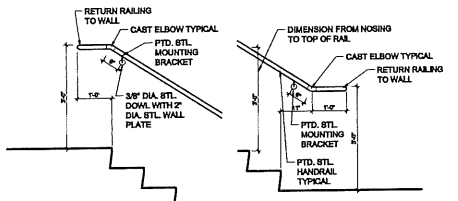
10 PLAN DETAIL AT STAIR INNER CORNER
A5.0 1/2" = 1'-0"



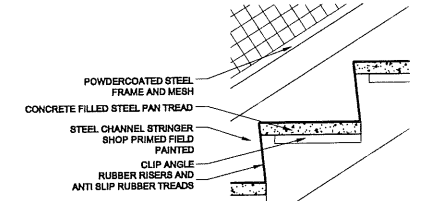
9 SECTION AT STAIR RECESSED SLAB
A5.0 1/2" = 1'-0"



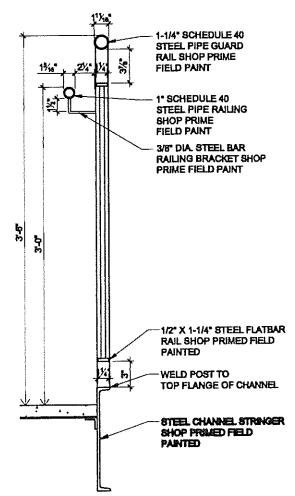
5 TYPICAL HANDRAIL AT WALL
A5.0 1/2" = 1'-0"



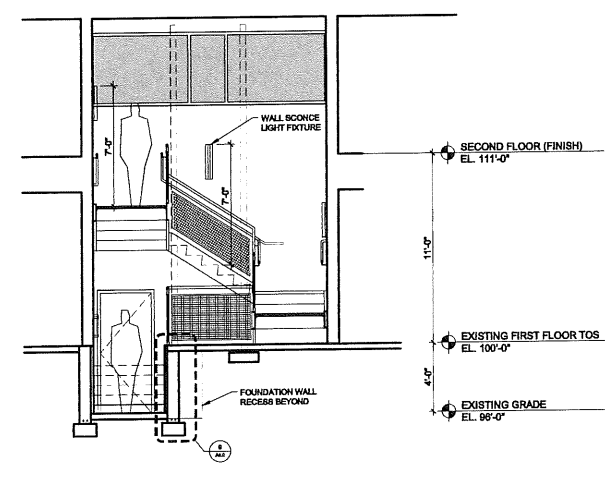
7 TYPICAL HANDRAIL DETAIL TOP AND BOTTOM
A5.0 1/2" = 1'-0"



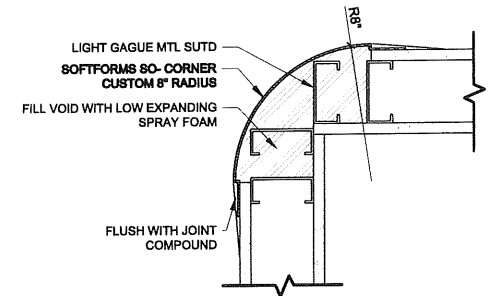
6 TYPICAL STAIR TREAD / RISER
A5.0 1/2" = 1'-0"



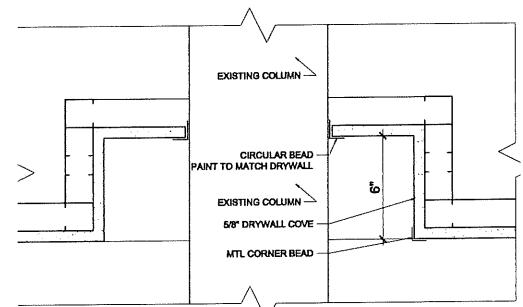
4 GUARDRAIL AND STRINGER DETAIL
A5.0 1/2" = 1'-0"



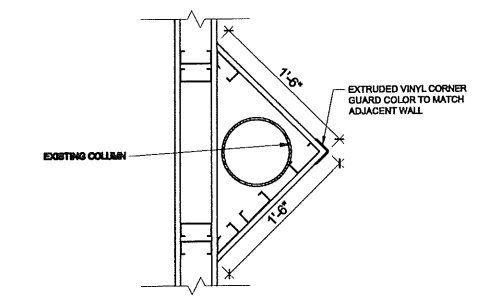
1A STAIR SECTION
A5.0 1/2" = 1'-0"



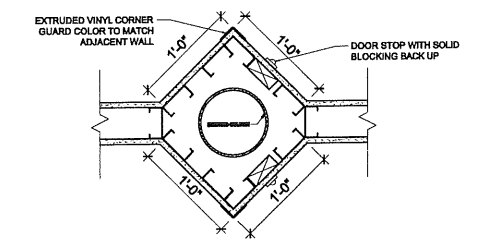
11 WALL CORNER PLAN DETAIL
1-1/2" = 1'-0"



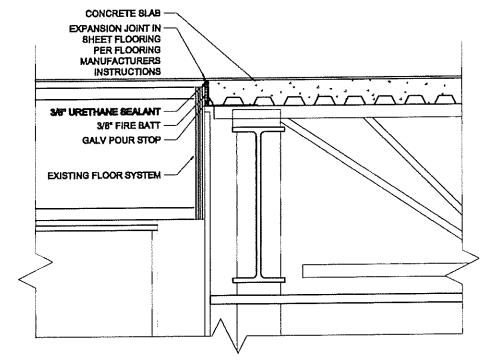
10 COLUMN / CEILING SECTION DETAIL
2" = 1'-0"



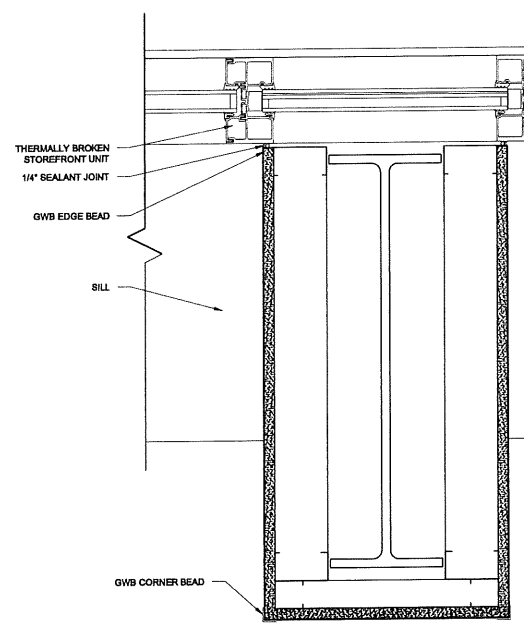
9 COLUMN PILASTER PLAN DETAIL
1-1/2" = 1'-0"



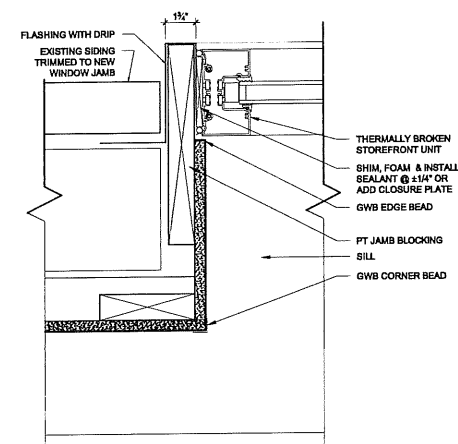
8 COLUMN PILASTER PLAN DETAIL
1-1/2" = 1'-0"



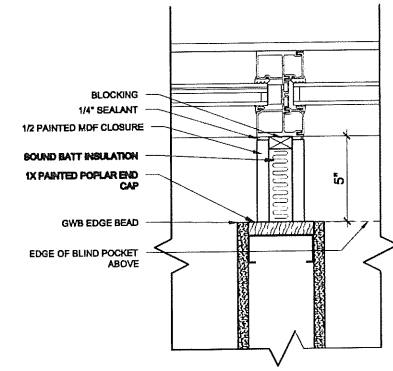
7 EXISTING / NEW FLOOR JOINT DETAIL
1-1/2" = 1'-0"



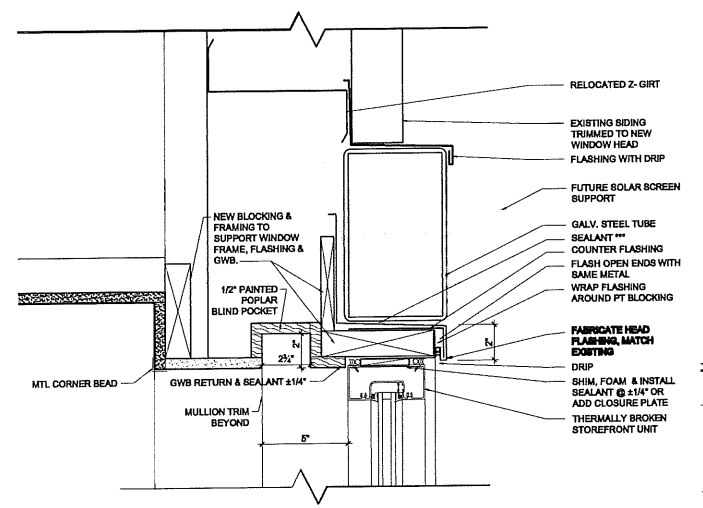
6B STOREFRONT PLAN DETAIL
2" = 1'-0"



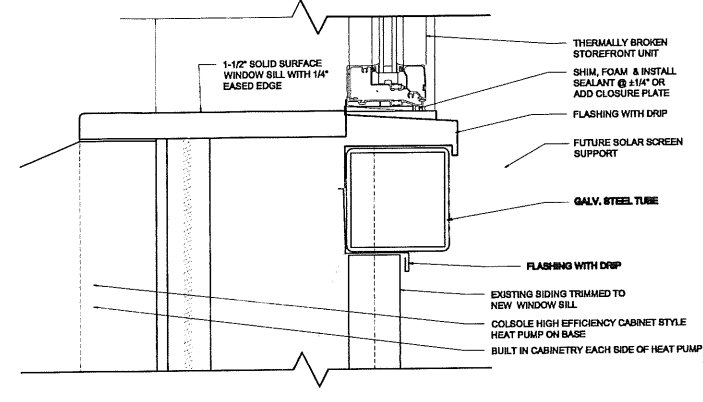
6A STOREFRONT PLAN DETAIL
2" = 1'-0"



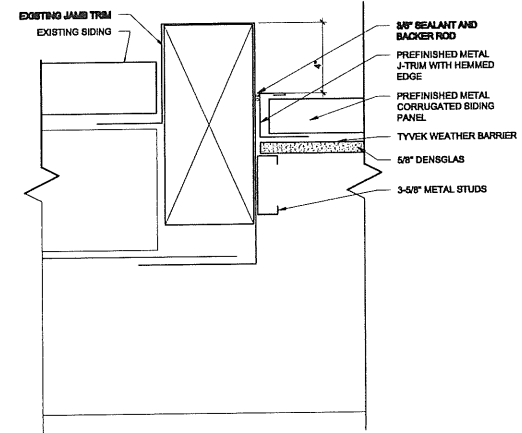
6C STOREFRONT PLAN DETAIL
2" = 1'-0"



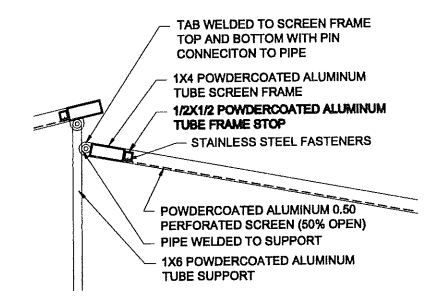
5 WINDOW HEAD DETAIL
2" = 1'-0"



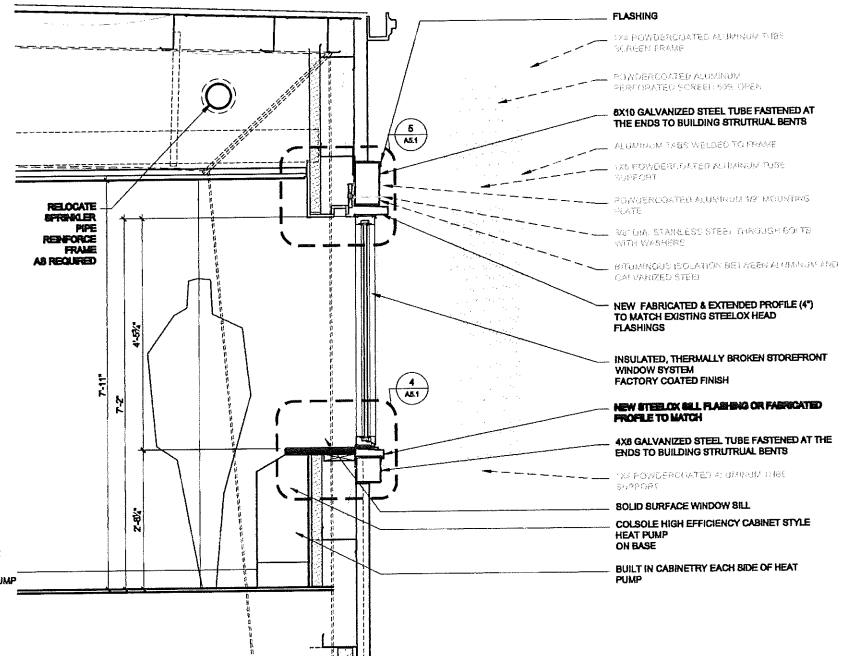
4 WINDOW SILL DETAIL
2" = 1'-0"



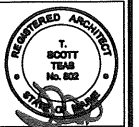
6 PLAN DETAIL AT OHD INFILL
2" = 1'-0"



2 PLAN DETAIL AT WINDOW SCREEN
1-1/2" = 1'-0"



1 WALL SECTION AT WINDOW SCREEN
3/4" = 1'-0"



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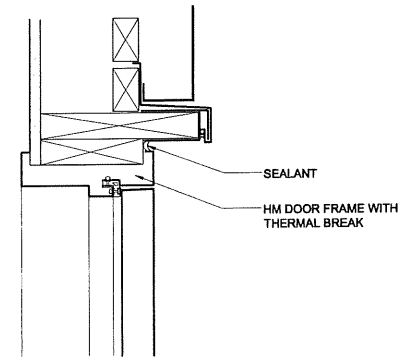
CONSULTANTS:
TTH ARCHITECTS
TTH ARCHITECTS
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REVISIONS:

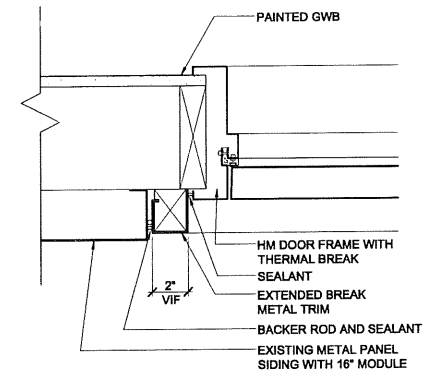
DATE: 8/17/11
PROJECT No: 1028A
DRAWN BY: DSM
CHECKED BY: TBT
SCALE: AS NOTED

SHEET TITLE:
INTERIOR
DETAILS

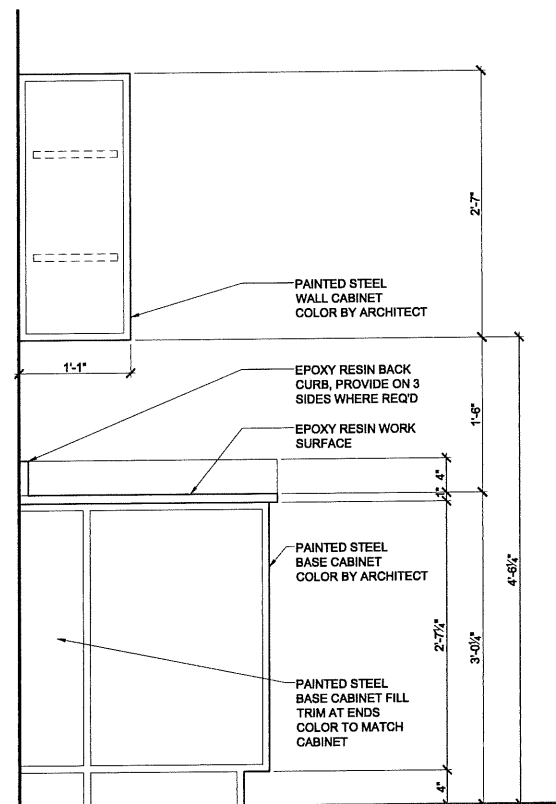
A5.2



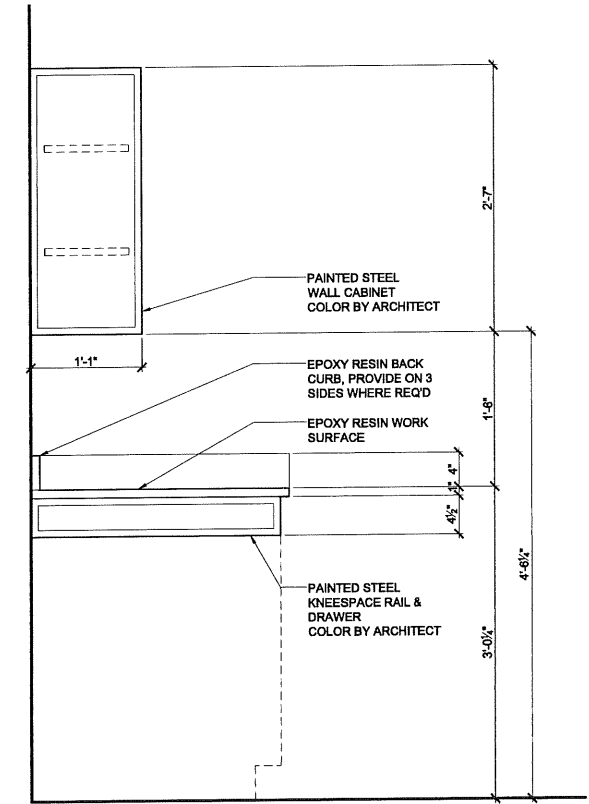
6 SECTION DETAIL AT EXTERIOR DOOR HEAD
A5.2 1/2" = 1'-0"



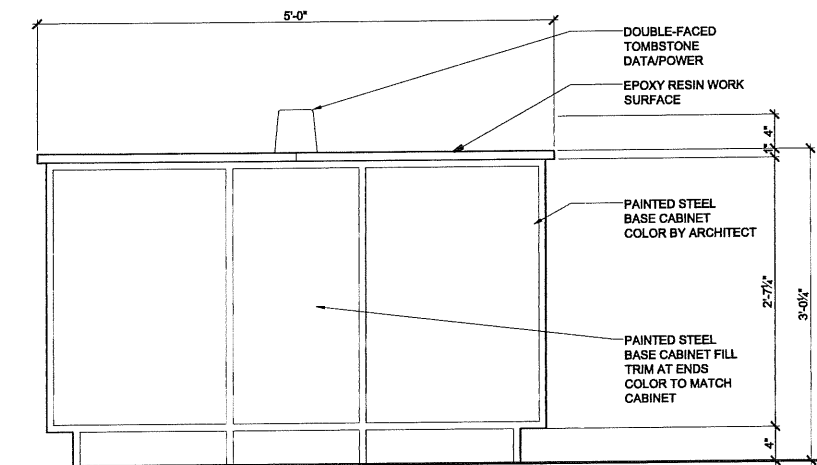
3 PLAN DETAIL AT EXTERIOR DOOR JAMB
A5.2 1/2" = 1'-0"



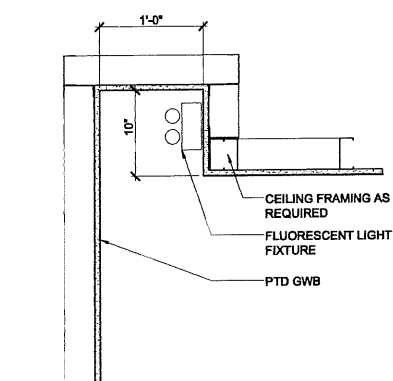
5 SECTION DETAIL AT LAB BENCH AND UPPER CABINET
A5.2 1/2" = 1'-0"



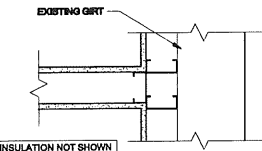
2 SECTION DETAIL AT LAB BENCH WITH KNEE SPACE
A5.2 1/2" = 1'-0"



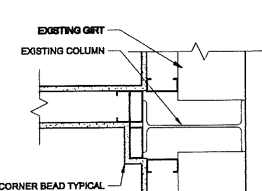
4 SECTION DETAIL AT PENINSULA LAB BENCH
A5.2 1/2" = 1'-0"



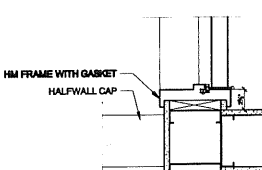
1 SECTION DETAIL AT RESTROOM LIGHT COVE
A5.2 1/2" = 1'-0"



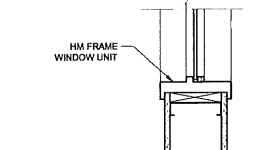
11 PLAN DETAIL AT INTERIOR / EXTERIOR WALL INTERSECTION
A5.2 1/2" = 1'-0"



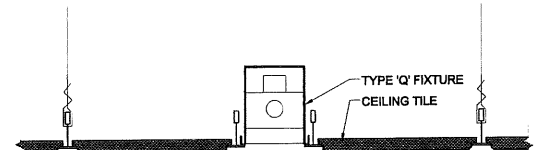
10 PLAN DETAIL AT INTERIOR / EXTERIOR WALL INTERSECTION
A5.2 1/2" = 1'-0"



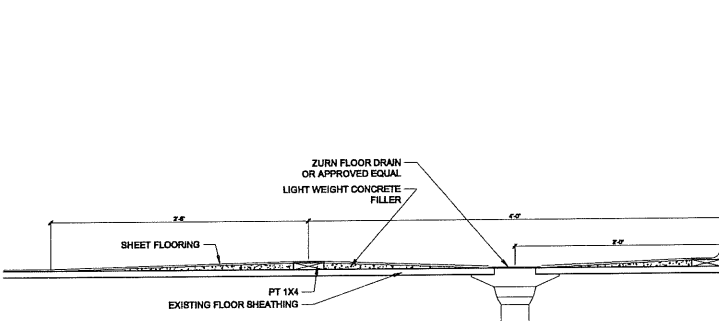
9 PLAN DETAIL AT INTERIOR DOOR
A5.2 1/2" = 1'-0"



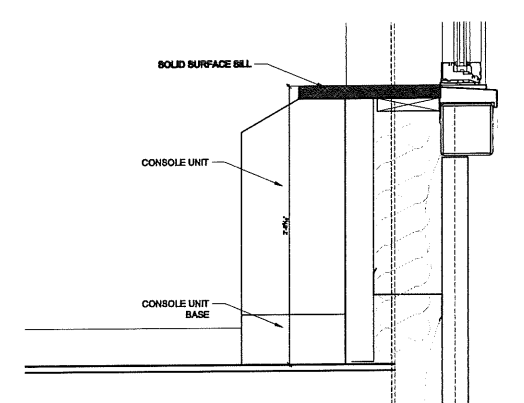
8 PLAN DETAIL AT INTERIOR WINDOW
A5.2 1/2" = 1'-0"



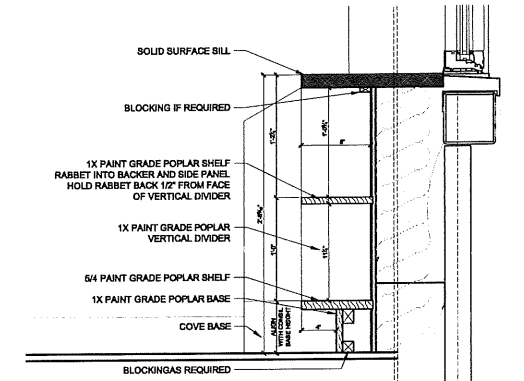
7 SECTION DETAIL AT 'Q' LIGHT FIXTURE AND CEILING
A5.2 1/2" = 1'-0"



13 SECTION DETAIL AT SAFETY SHOWER FLOOR
A5.2 1/2" = 1'-0"



12A SECTION DETAIL AT CONSOLE UNIT CABINETS
A5.2 1/2" = 1'-0"



12 SECTION DETAIL AT WINDOW WALL CABINETS
A5.2 1/2" = 1'-0"



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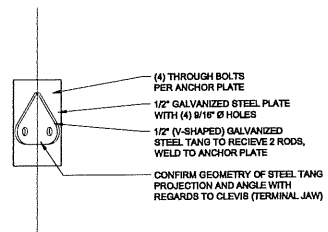
CONSULTANTS:
 TTH ARCHITECTS
 80 MIDDLE STREET
 PORTLAND, MAINE 04101
 TELEPHONE 507 778 8141
 ARCHITECTURE PLANNING

REVISIONS:

DATE: 8/17/11
 PROJECT No.: 1088A
 DRAWN BY: DAMJUB
 CHECKED BY: TST
 SCALE: AS NOTED

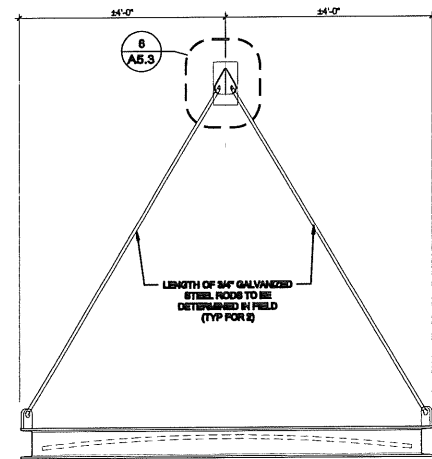
SHEET TITLE:
CANOPY DETAILS

A5.3



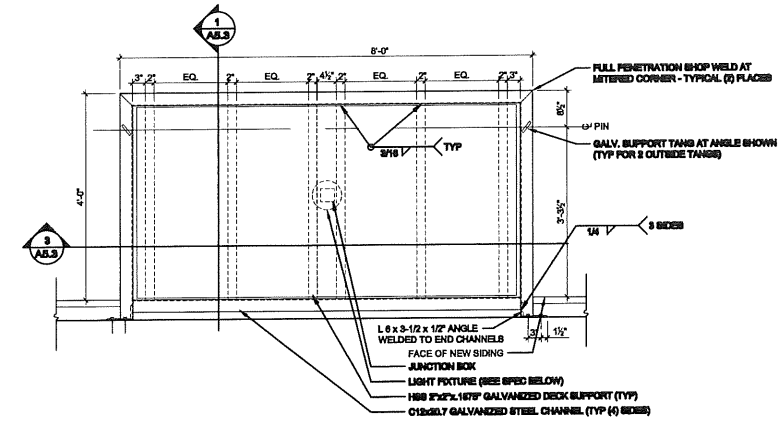
8 ELEVATION OF CANOPY SUPPORT PLATE
 A5.3 1/4" = 1'-0"

- (4) THROUGH BOLTS PER ANCHOR PLATE
- 1/2" GALVANIZED STEEL PLATE WITH (4) 8/16" HOLES
- 1/2" (N-SHAPED) GALVANIZED STEEL TANG TO RECEIVE 2 RODS, WELD TO ANCHOR PLATE
- CONFIRM GEOMETRY OF STEEL TANG PROJECTION AND ANGLE WITH REGARDS TO CLEVIS (TERMINAL JAW)



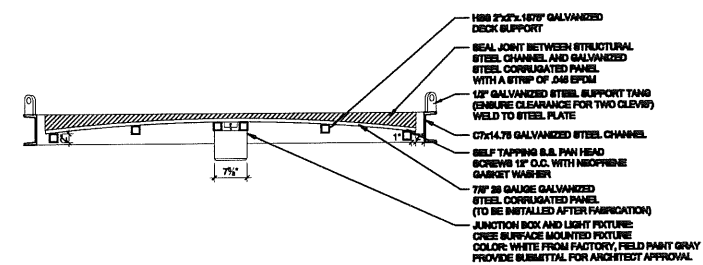
5 ELEVATION OF CANOPY
 A5.3 3/4" = 1'-0"

LENGTH OF 3/4" GALVANIZED STEEL RODS TO BE DETERMINED IN FIELD (TYP FOR 2)



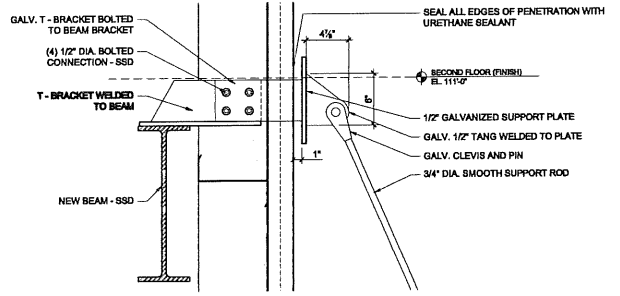
4 PLAN DETAIL OF CANOPY
 A5.3 3/4" = 1'-0"

- FULL PENETRATION SHOP WELD AT MITERED CORNER - TYPICAL (2 PLACES)
- 4" PIN
- GALV. SUPPORT TANG AT ANGLE SHOWN (TYP FOR 2 OUTSIDE TANGS)
- 3/8" V TYP
- 1/4" V 3 SIDES
- 3'-3 1/2"
- 1'-1 1/2"
- L 6 x 3-1/2 x 1/2" ANGLE WELDED TO END CHANNELS
- FACE OF NEW SIDING
- JUNCTION BOX
- LIGHT FIXTURE (SEE SPEC BELOW)
- HSS 2"x4"x1/2" GALVANIZED DECK SUPPORT (TYP)
- 1"x2"x1/2" GALVANIZED STEEL CHANNEL (TYP (4) SIZES)



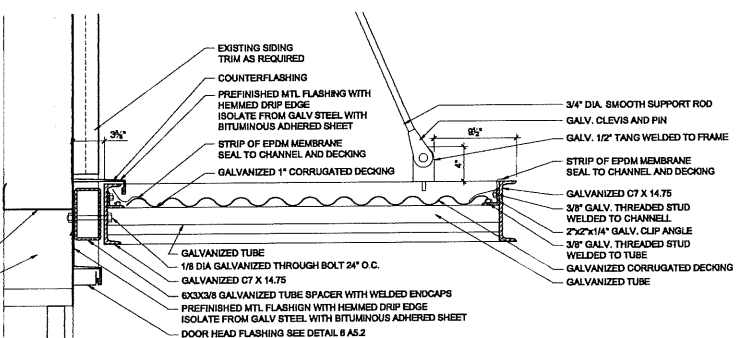
3 SECTION DETAIL OF CANOPY
 A5.3 3/4" = 1'-0"

- HSS 2"x4"x1/2" GALVANIZED DECK SUPPORT
- SEAL JOINT BETWEEN STRUCTURAL STEEL CHANNEL AND GALVANIZED STEEL CORRUGATED PANEL WITH A STRIP OF 3/16" EPDM
- 1/2" GALVANIZED STEEL SUPPORT TANG (ENSURE CLEARANCE FOR TWO CLEVIS) WELD TO STEEL PLATE
- C7x14.75 GALVANIZED STEEL CHANNEL
- SELF TAPPING S.S. PAN HEAD SCREWS 1/2" O.C. WITH NEOPRENE GASKET WASHERS
- 7/8" 30 GAUGE GALVANIZED STEEL CORRUGATED PANEL (TO BE INSTALLED AFTER FABRICATION)
- JUNCTION BOX AND LIGHT FIXTURE: CRUIE SURFACE MOUNTED FIXTURE COLOR: WHITE FROM FACTORY, FIELD PAINT GRAY PROVIDE SUBMITTAL FOR ARCHITECT APPROVAL



2 SECTION DETAIL AT CANOPY SUPPORT
 A5.3 1/4" = 1'-0"

- GALV. T - BRACKET BOLTED TO BEAM BRACKET
- (4) 1/2" DIA. BOLTED CONNECTION - SSD
- T - BRACKET WELDED TO BEAM
- NEW BEAM - SSD
- SEAL ALL EDGES OF PENETRATION WITH URETHANE SEALANT
- SECOND FLOOR (FINISH) SL. 1112
- 1/2" GALVANIZED SUPPORT PLATE
- GALV. 1/2" TANG WELDED TO PLATE
- GALV. CLEVIS AND PIN
- 3/4" DIA. SMOOTH SUPPORT ROD



1 SECTION DETAIL AT CANOPY
 A5.3 1/4" = 1'-0"

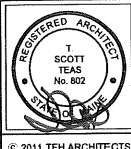
- EXISTING SIDING TRIM AS REQUIRED
- COUNTERFLASHING
- PREFINISHED METAL FLASHING WITH HEMMED DRIP EDGE ISOLATE FROM GALV STEEL WITH BITUMINOUS ADHERED SHEET
- STRIP OF EPDM MEMBRANE SEAL TO CHANNEL AND DECKING
- GALVANIZED 1" CORRUGATED DECKING
- 3/4" DIA. SMOOTH SUPPORT ROD
- GALV. CLEVIS AND PIN
- GALV. 1/2" TANG WELDED TO FRAME
- STRIP OF EPDM MEMBRANE SEAL TO CHANNEL AND DECKING
- GALVANIZED C7 X 14.75
- 3/8" GALV. THREADED STUD WELDED TO CHANNEL
- 2"x2"x1/4" GALV. CLIP ANGLE
- 3/8" GALV. THREADED STUD WELDED TO TUBE
- GALVANIZED CORRUGATED DECKING
- GALVANIZED TUBE
- GALVANIZED TUBE
- 1/8" DIA GALVANIZED THROUGH BOLT 24" O.C.
- GALVANIZED C7 X 14.75
- 6x6x3/8 GALVANIZED TUBE SPACER WITH WELDED END CAPS
- PREFINISHED METAL FLASHING WITH HEMMED DRIP EDGE ISOLATE FROM GALV STEEL WITH BITUMINOUS ADHERED SHEET
- DOOR HEAD FLASHING SEE DETAIL # A5.2

LABORATORY EQUIPMENT MATRIX - DNA EXPANSION 7/25/11

Table with columns: Equipment Description, Quantity, Room No., Room Name, Equipment Code, Manufacturer, Model, and various technical specifications. Includes sections for 'CONSTRUCTION PHASE 1' and 'CONSTRUCTION PHASE 2'.

LABORATORY EQUIPMENT MATRIX - DNA EXPANSION 7/25/11

Table with columns: Equipment Description, Quantity, Room No., Room Name, Equipment Code, Manufacturer, Model, and various technical specifications. Includes sections for 'CONSTRUCTION PHASE 1' and 'CONSTRUCTION PHASE 2'.



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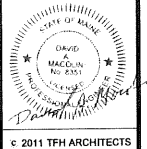
EnviroLogix RIVERSIDE CAMPUS 530 - DNA EXPANSION PORTLAND, MAINE



CONSULTANTS: ENVIRONMENTAL ENGINEERING, INC. 75 York Street, Portland, ME 04101-4440, 207 879-1930

REVISIONS:

DATE: 8/17/11, PROJECT No.: 1028A, DRAWN BY: DAM/RJS, CHECKED BY: TST, SCALE: AS NOTED, SHEET TITLE: EQUIPMENT SCHEDULE

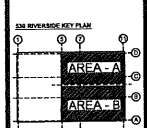


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RIVERSIDE CAMPUS
530 - DNA EXPANSION
PORTLAND, MAINE

TFH ARCHITECTS
80 MIDDLE STREET
PORTLAND, MAINE 04101
TELEPHONE 207 776 6141
ARCHITECTURE PLANNING

CONSULTANTS:
STRUCTURAL: BAKER STRUCTURAL ENGINEERS, INC.
MECHANICAL: INTEGRATED ENERGY SYSTEMS, PLLC
ELECTRICAL: ELECTRICAL ENGINEERS ASSOCIATES, INC.

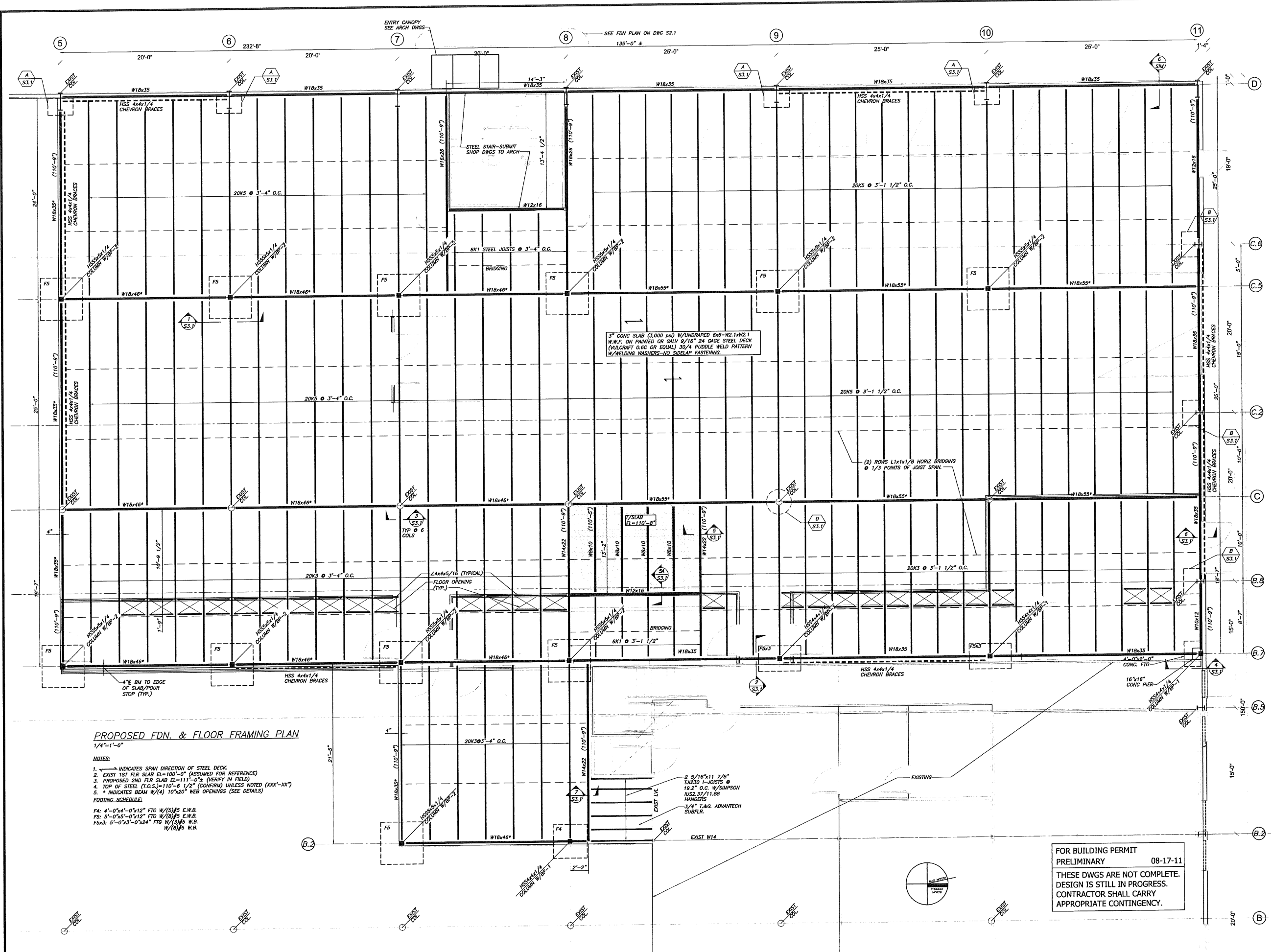


REVISIONS:

DATE: 08-17-11
PROJECT No. 1028A
DRAWN BY: MK
CHECKED BY: DAM
SCALE: AS NOTED

SHEET TITLE:
PROPOSED SECOND FLOOR FRAMING PLAN AREA A

S1.1



PROPOSED FDN. & FLOOR FRAMING PLAN
1/4"=1'-0"

- NOTES:**
- INDICATES SPAN DIRECTION OF STEEL DECK.
 - EXIST 1ST FLR SLAB EL=100'-0" (ASSUMED FOR REFERENCE)
 - PROPOSED 2ND FLR SLAB EL=111'-0" (VERIFY IN FIELD)
 - TOP OF STEEL (T.O.S.)=110'-6 1/2" (CONFIRM) UNLESS NOTED (XXX'-XX")
 - * INDICATES BEAM W/(4) 10"x20" WEB OPENINGS (SEE DETAILS)
- LOADING SCHEDULE:**
- F4: 4'-0"x4'-0"x12" FTG W/(8)FS E.W.B.
 FS: 5'-0"x5'-0"x12" FTG W/(8)FS E.W.B.
 FSx3: 5'-0"x3'-0"x24" FTG W/(3)FS W.B. W/(6)FS W.B.

FOR BUILDING PERMIT
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DESIGN IS STILL IN PROGRESS.
CONTRACTOR SHALL CARRY
APPROPRIATE CONTINGENCY.

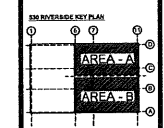


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 PORTLAND, MAINE

TFH ARCHITECTS
 80 MIDDLE STREET
 PORTLAND, MAINE 04101
 TELEPHONE 207 775 6141
 ARCHITECTURE PLANNING

CONSULTANTS:
 STRUCTURAL: BROWN ENGINEERING, INC.
 73 West Street
 Portland, ME 04101-4400
 207-649-1318
 MECHANICAL: Integrated Energy Systems, PLLC
 113 Main Street
 Portland, ME 04101
 207-781-1200
 ELECTRICAL: SWEET ENGINEERING
 1 Market Street
 Portland, ME 04101
 207-865-3675

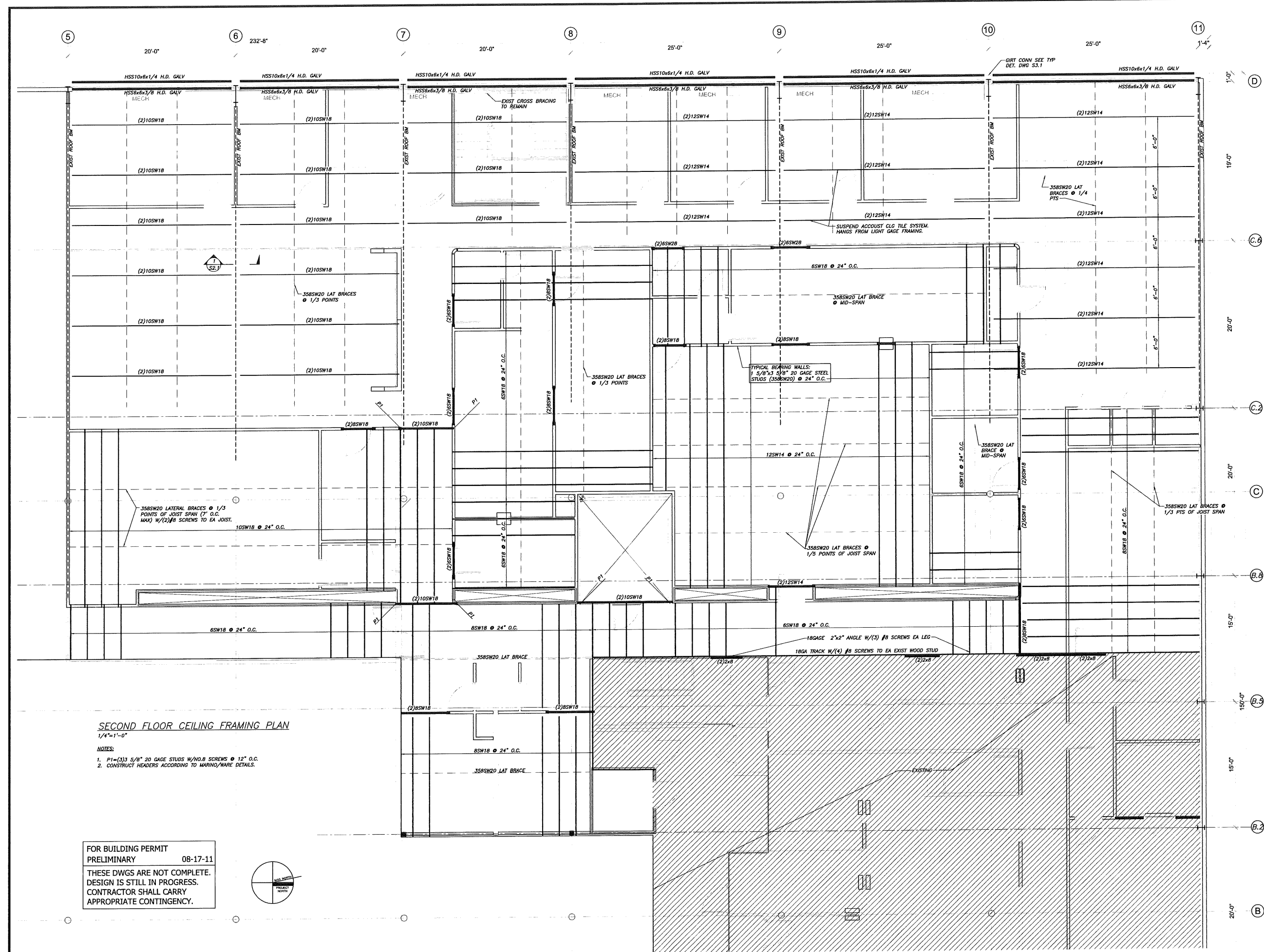


REVISIONS:

DATE: 08-17-11
 PROJECT No.: 1028A
 DRAWN BY: MK
 CHECKED BY: DAM
 SCALE: AS NOTED

SHEET TITLE:
 2ND FLOOR CEILING FRAMING

S1.2

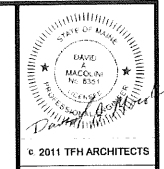


SECOND FLOOR CEILING FRAMING PLAN
 1/4"=1'-0"

- NOTES:**
1. P1-(3) 3/8" 20 GAGE STUDS W/NO.8 SCREWS @ 12" O.C.
 2. CONSTRUCT HEADERS ACCORDING TO MARINO/WARE DETAILS.

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 APPROPRIATE CONTINGENCY.



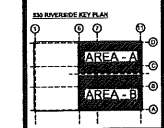


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TFH ARCHITECTS
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PORTLAND, MAINE 04101
TELEPHONE 207 775 6141
ARCHITECTURE PLANNING

CONSULTANTS:
STRUCTURAL: Butler Structural Engineers, Inc.
75 York Street
Portland, ME 04101-4100
207-679-1888
MECHANICAL: Thermal Energy Systems, PLLC
100 State Ave.
Farmington, ME 04840
207-251-8800
ELECTRICAL: Electrical Engineering
7 Central Ave.
Portland, ME 04102
207-656-5475

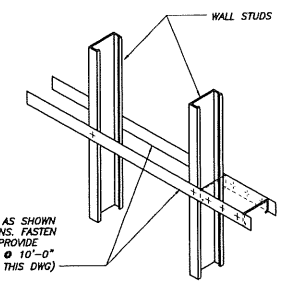


REVISIONS:

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SCALE: AS NOTED

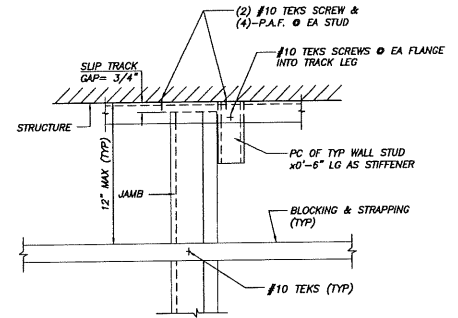
SHEET TITLE:
SECTIONS
&
DETAILS

S2.1

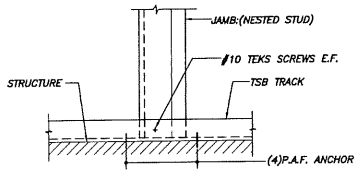


NOTE: BRIDGING TO BE INSTALLED PRIOR TO LOADING OF WALL.

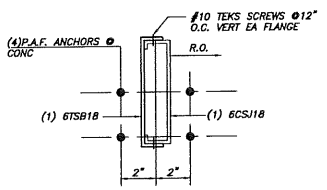
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N.T.S.



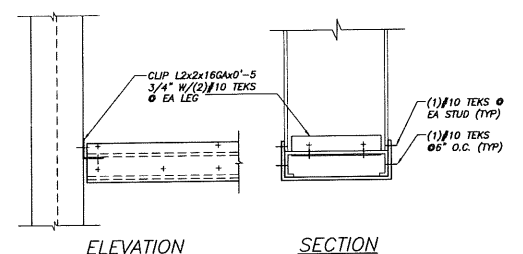
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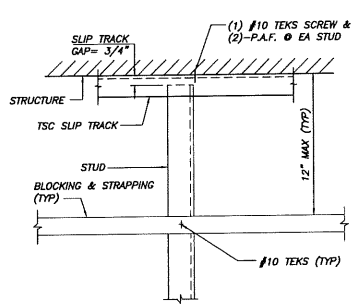
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N.T.S.



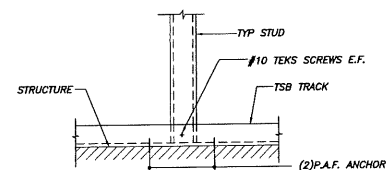
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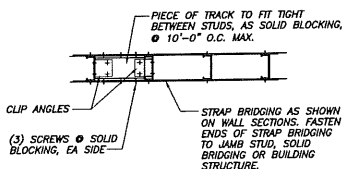
TYP HEADER/SILL DETAIL
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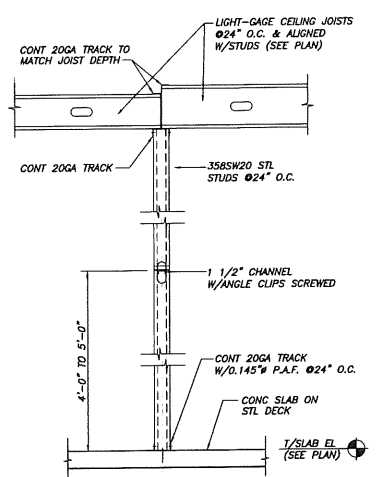
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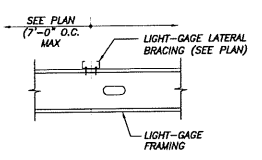
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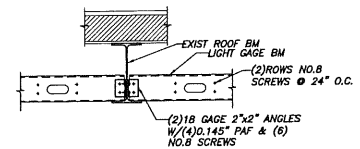
TYP SOLID BLOCKING PLAN DETAIL
N.T.S.



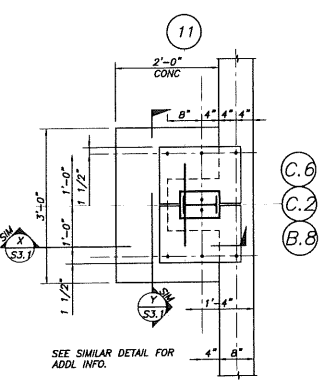
TYPICAL LIGHT GAGE WALL & CEILING JOIST FRAMING DETAIL



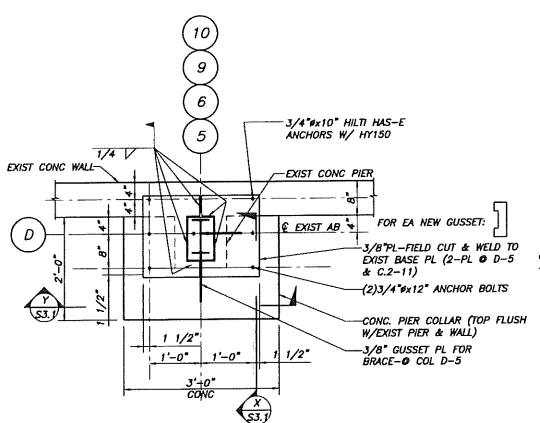
TYPICAL LATERAL BRACE DETAIL AT LIGHT-GAGE FRAMING



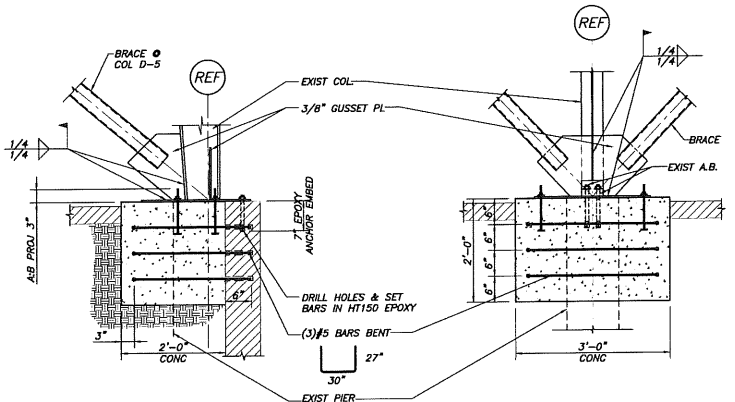
SECTION
3/4"=1'-0" S1.2



DETAIL
3/4"=1'-0" S1.1

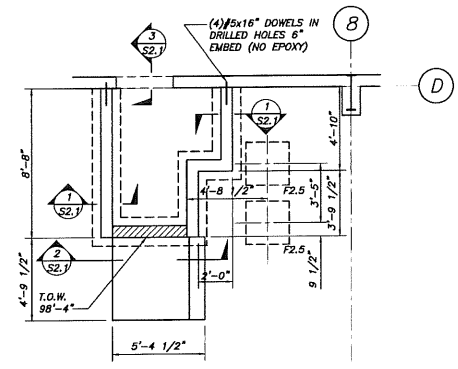


DETAIL
3/4"=1'-0" S1.1



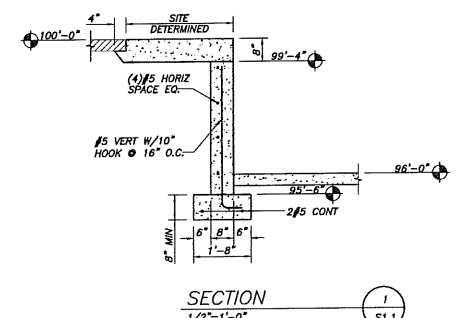
SECTION
3/4"=1'-0" S3.2

SECTION
3/4"=1'-0" S3.2

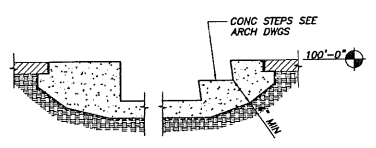


FDN PLAN @ STAIR
1/4"=1'-0"

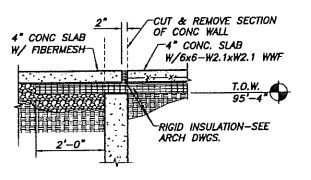
NOTE:
F2.5: 2'-6"x2'-6"x0'-10" FTG W/ (3) #5 E.W.



SECTION
1/2"=1'-0" S1.1



SECTION
1/2"=1'-0" S2.1



SECTION
1/2"=1'-0" S2.1

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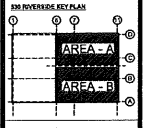


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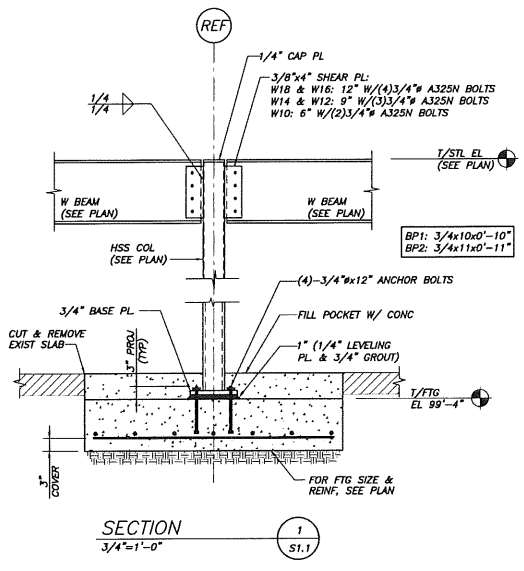
CONSULTANTS:
 STRUCTURAL: BROWN ENGINEERING, Inc.
 25 Free Street
 Portland, ME 04103-4400
 207-639-6100
 MECHANICAL: Integrated Energy Systems, PLLC
 215 Main Street
 Portland, ME 04101
 207-781-4000
 ELECTRICAL: EDWORTHY ENGINEERING
 1 Market Street
 Portland, ME 04101
 207-853-5415



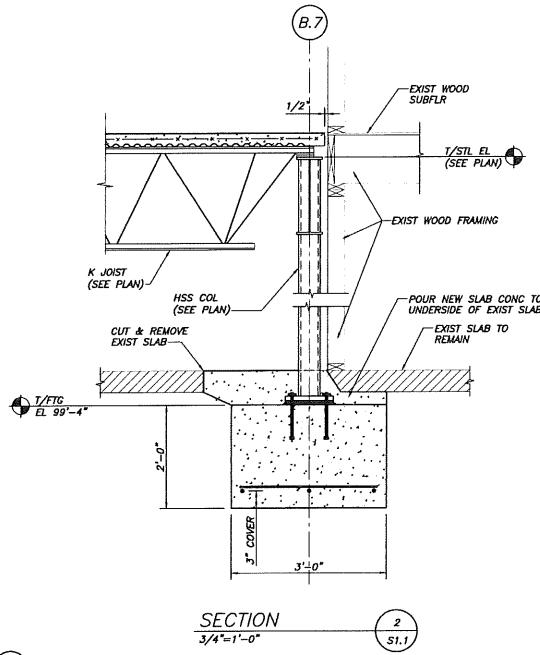
REVISIONS:

DATE: 08-17-11
 PROJECT No: 1026A
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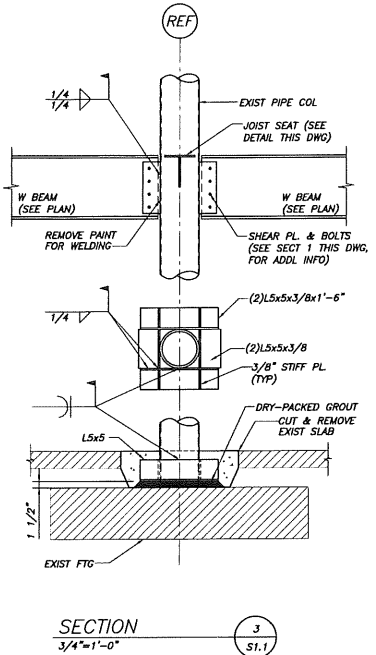
SHEET TITLE:
 FDN & STEEL
 SECTIONS &
 TYPICAL DETAILS



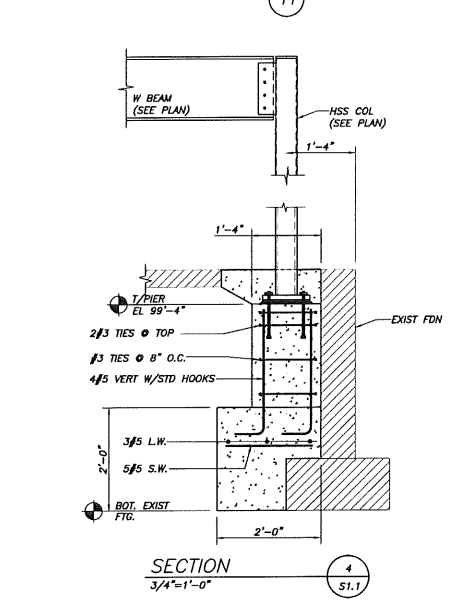
TYPICAL BEAM TO EXIST COL CONN
 3/4"=1'-0"



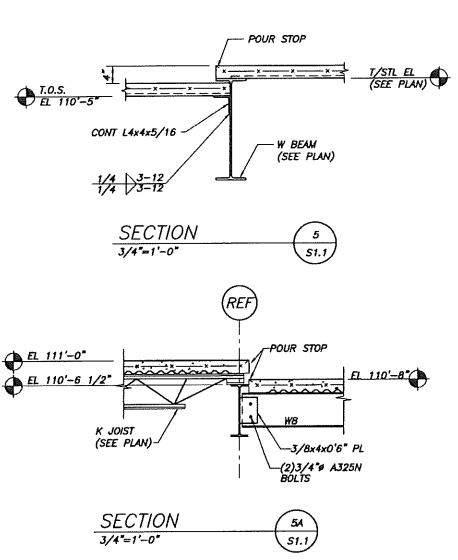
SECTION 2
 3/4"=1'-0"



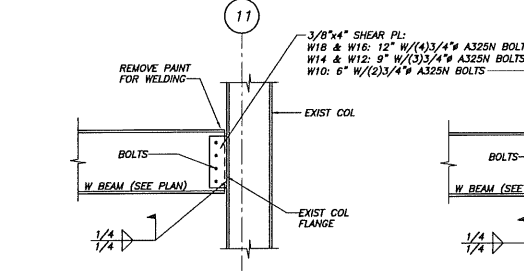
SECTION 3
 3/4"=1'-0"



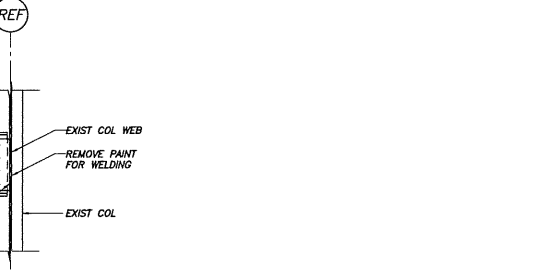
SECTION 4
 3/4"=1'-0"



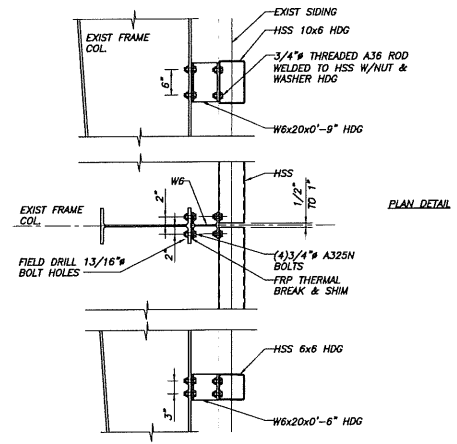
SECTION 5A
 3/4"=1'-0"



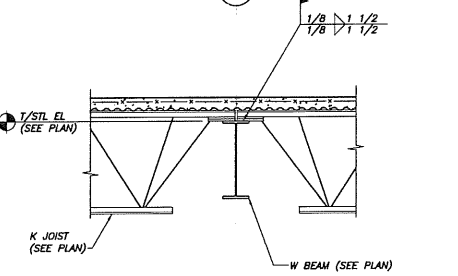
TYPICAL BEAM TO EXIST TAPERED COL CONN
 3/4"=1'-0"



TYPICAL BEAM TO BEAM CONN
 3/4"=1'-0"

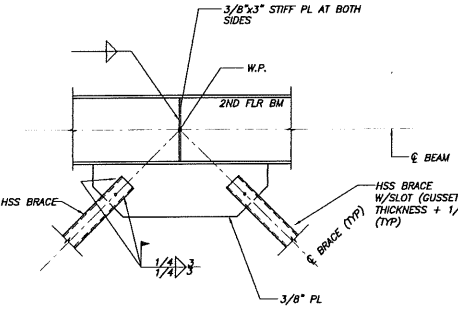


TYPICAL GIRT DETAIL CONN @ WEST WALL
 3/4"=1'-0"

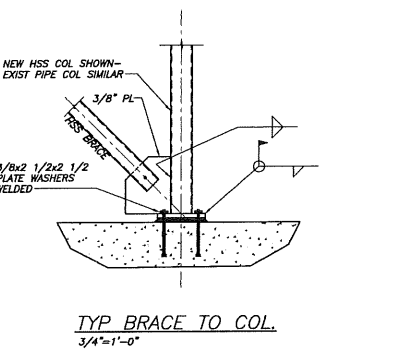


TYPICAL JOIST ON BEAM
 3/4"=1'-0"

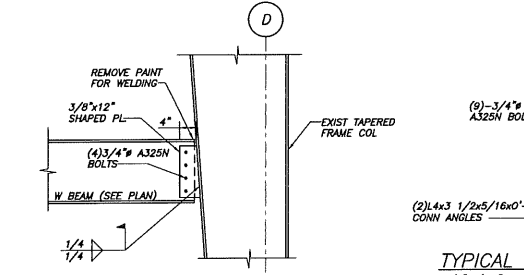
TYPICAL JOIST SEAT @ COL
 3/4"=1'-0"



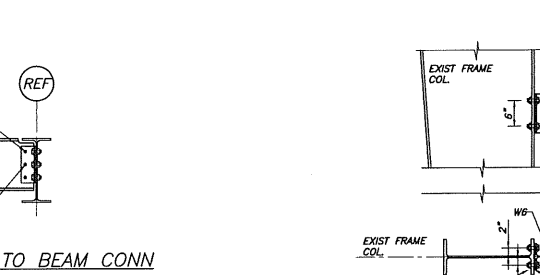
TYP. CHEVRON BRACING DETAILS
 3/4"=1'-0"



TYP BRACE TO COL
 3/4"=1'-0"

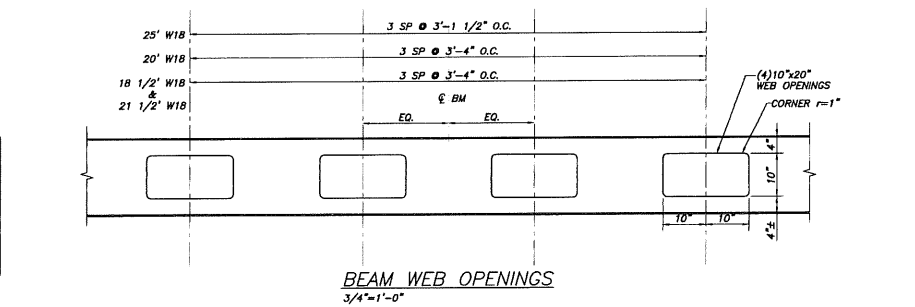


SECTION 11
 3/4"=1'-0"

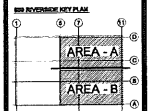


SECTION 12
 3/4"=1'-0"

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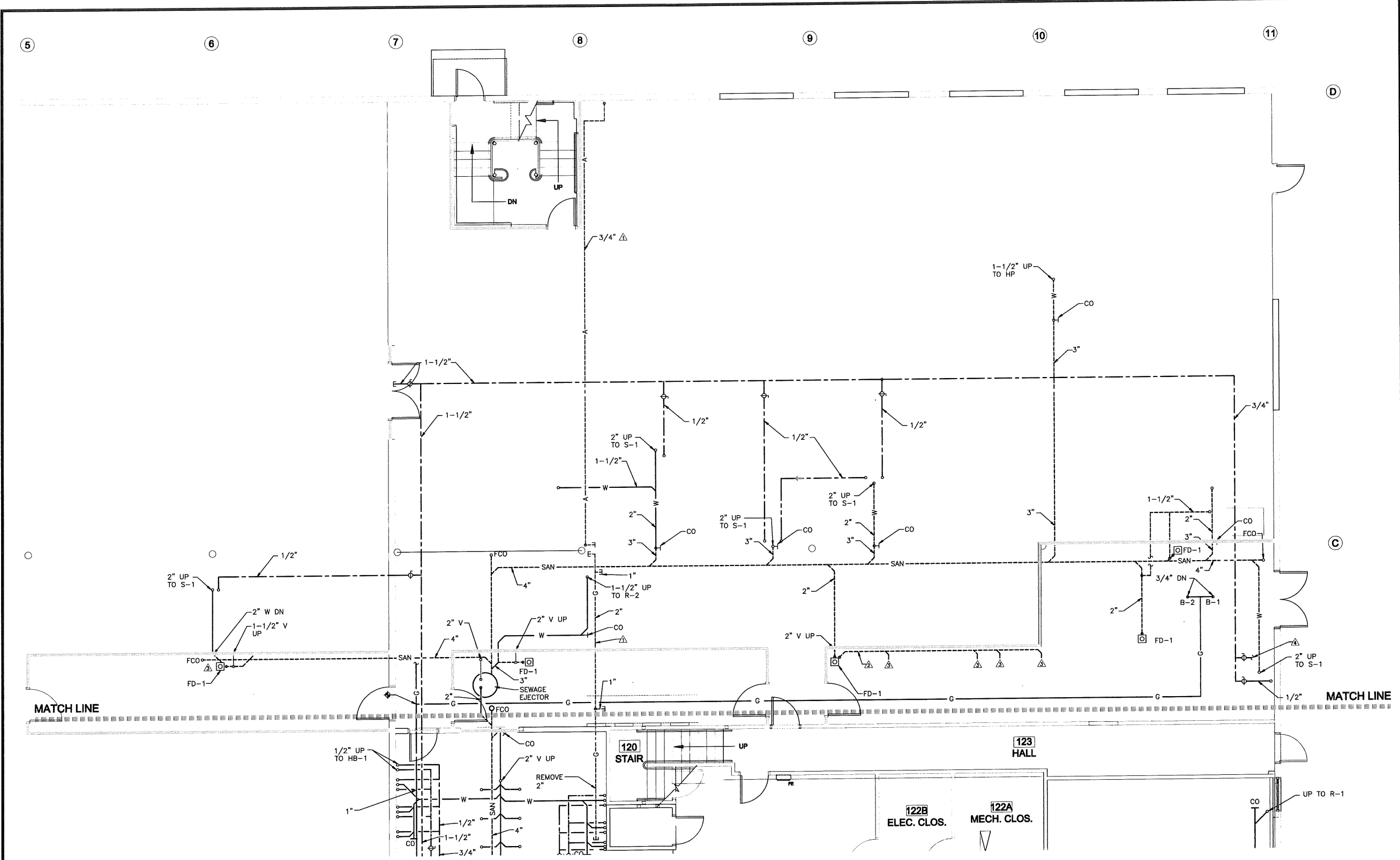
BEAM WEB OPENINGS
 3/4"=1'-0"



REVISIONS:

DATE: 8/17/11
 PROJECT No: 1028A
 DRAWN BY: AZZ
 CHECKED BY: RPP
 SCALE: AS NOTED

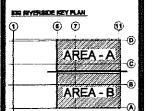
SHEET TITLE:
**FIRST FLOOR PLAN - PART A
 PLUMBING**



- KEY NOTES**
- 1 REMOVE ABANDONED PIPING
 - 2 1" INDIRECT WASTE FOR HEAT PUMPS
 - 3 3/4" CONDENSATE TO HEAT PUMPS, HP-1
 - 4 3/4" MAKE-UP WATER (CHM-1) FOR MECHANICAL SYSTEMS WITH 3/4" RPZ BACKFLOW PREVENTER. PIPE VENT TO FLOOR DRAIN.
 - 5 PROVIDE ALTERNATE PRICE FOR DUPLEX SEWAGE SYSTEM. LIBERTY PUMP MODEL 1102/LE41M: 4/10 HP; 115 V, SINGLE PHASE

1 FIRST FLOOR PLAN - PART B
 P-2 1/8" = 1'-0"

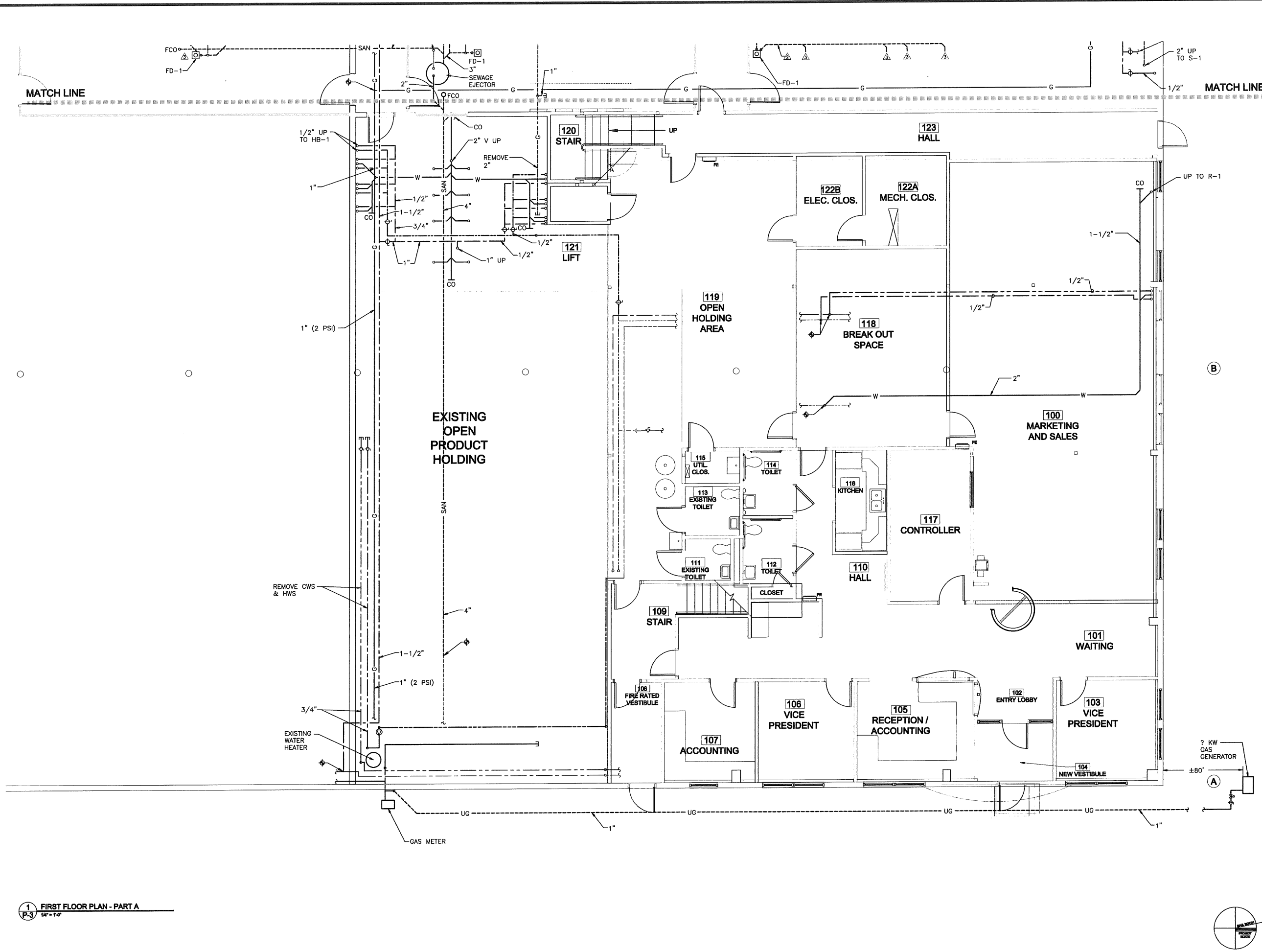
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 PROJECT No: 1028A
 DRAWN BY: AZZ
 CHECKED BY: RPG
 SCALE: AS NOTED

SHEET TITLE:
 FIRST FLOOR
 PLAN - PART B
 PLUMBING



1 FIRST FLOOR PLAN - PART A
 P-3 1/4" = 1'-0"

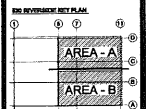


8/17/2011 10:57:24 AM

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530 - DNA EXPANSION
PORTLAND, MAINE

TFH ARCHITECTS
60 MIDDLE STREET
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TELEPHONE: 207 778 6141
ARCHITECTURE PLANNING

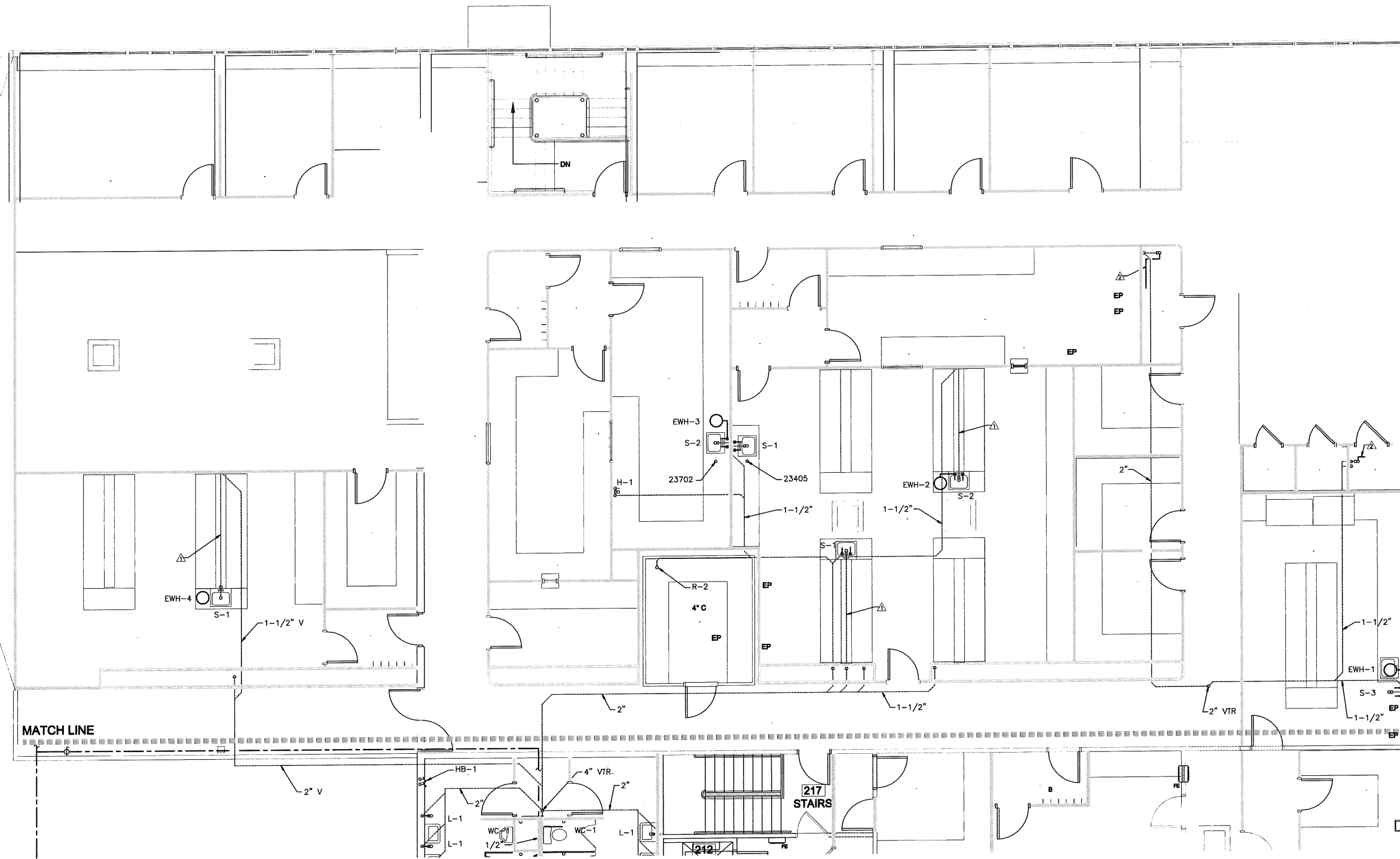
CONSULTANTS:
STRUCTURAL:
2010 Structural Engineers, Inc.
1000 Main Street
Portland, ME 04101-4400
207 475 4100
MECHANICAL:
Mechanical Energy Systems, PLLC
210 South Main
Portland, ME 04101
207 791-4300
ELECTRICAL:
BENNETT ENGINEERING
7 Market Street
Bangor, ME 04401
207 848-4000



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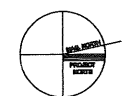
DATE: 8/17/11
PROJECT No: 1028A
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SCALE: AS NOTED

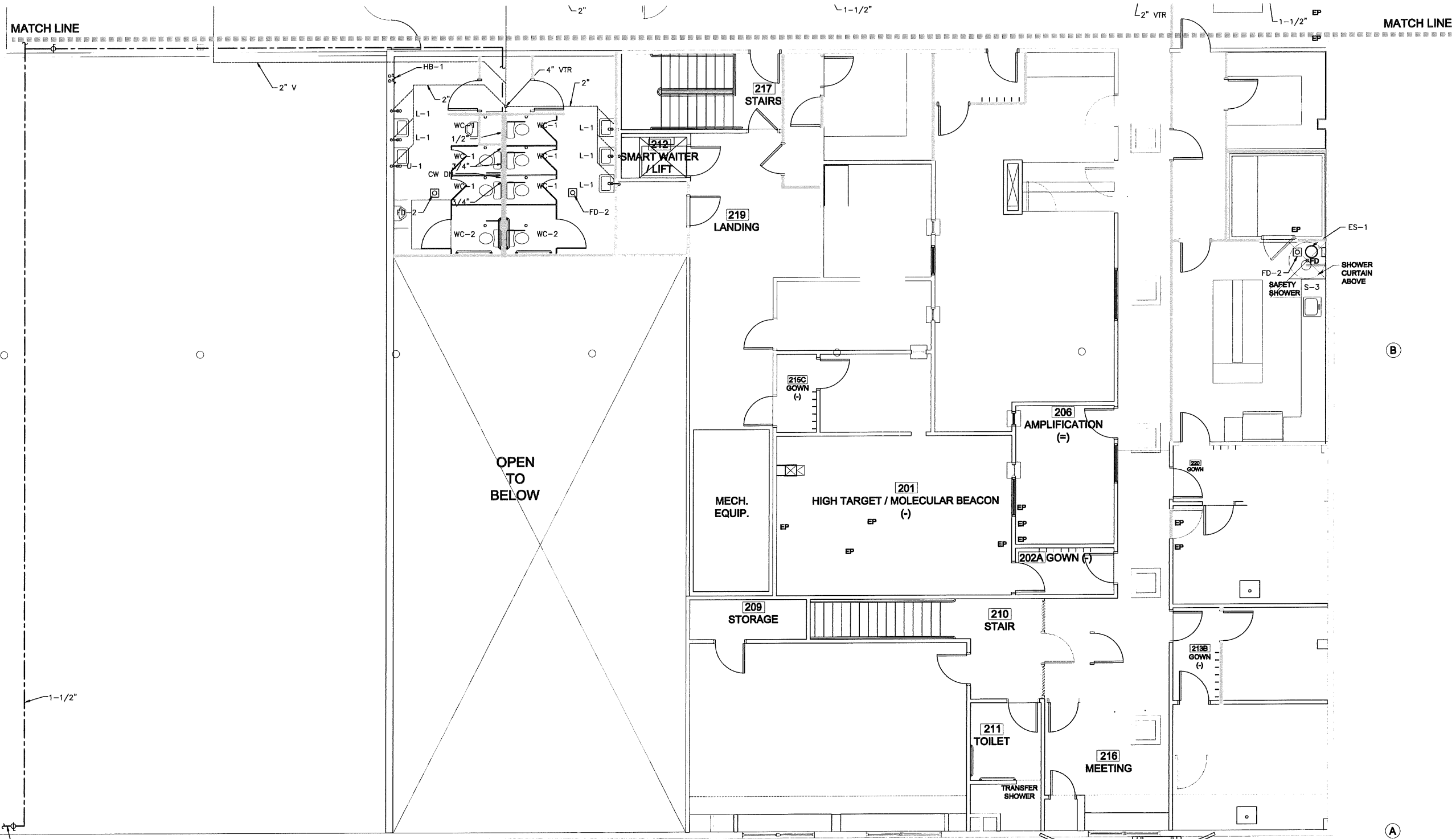
SHEET TITLE:
SECOND FLOOR
PLAN - PART A
PLUMBING



1 SECOND FLOOR PLAN - PART A
P-4 1/4" = 1'-0"

KEY NOTES
▲ 1-1/2" ISLAND VENT UNDER COUNTER





MATCH LINE

MATCH LINE

OPEN TO BELOW

CONNECT TO WATER MAIN IN ADJACENT ROOM

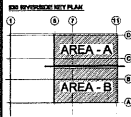
1 SECOND FLOOR PLAN - PART B
P-5 1/4" = 1'-0"

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530 - DNA EXPANSION
PORTLAND, MAINE

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80 MIDDLE STREET
PORTLAND MAINE 04101
TELEPHONE 207 775 6141
ARCHITECTURE PLANNING

CONSULTANTS:
MECHANICAL:
310 Middle Street
Portland, ME 04101-4400
207-775-6141
ELECTRICAL:
310 Middle Street
Portland, ME 04101-4400
207-775-6141



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










































































DATE: 8/17/11
PROJECT No. 1026A
DRAWN BY: AZZ
CHECKED BY: RFG
SCALE: AS NOTED

SHEET TITLE:
SECOND FLOOR PLAN - PART B
PLUMBING



P-5

SYMBOLS & ABBREVIATIONS

- | | | | |
|---|-----------------------------------|---|---------------------------------|
|  | PELLET VACUUM HOSES |  | RELIEF VALVE |
|  | PUMP, CIRCULATOR |  | ROOM THERMOSTAT |
|  | STRAINER |  | HUMIDISTAT |
|  | THERMOMETER |  | CIRCUIT SETTER, BALANCING VALVE |
|  | PRESSURE GAUGE |  | FINTUBE RADIATION |
|  | CHECK VALVE |  | CAST IRON RADIATOR |
|  | KEY NOTE |  | RELAY |
|  | BOILER DRAIN |  | TEMPERATURE SENSOR |
|  | CONNECT TO EXISTING |  | SWITCH |
|  | PIPING UP OR PIPE UP AND DOWN |  | LIGHT FIXTURE |
|  | PIPING DOWN |  | 4" FLUORESCENT LIGHT FIXTURE |
|  | TEE WITH BRANCH DOWN |  | FLOW SENSOR |
|  | TEE WITH BRANCH UP |  | LOW WATER CUTOFF |
|  | REMOVE ITEM |  | THERMAL SWITCH |
|  | EXISTING |  | FINTUBE RADIATION |
|  | PROVIDE ITEM |  | THOUSAND BTU/HR |
|  | LOW PRESSURE STEAM PIPE |  | EFFICIENCY |
|  | LOW PRESSURE CONDENSATE PIPE |  | DIAMETER |
|  | SANITARY DRAIN ABOVE GRADE |  | HORSEPOWER |
|  | VENT PIPE |  | MINIMUM |
|  | FUEL OIL PIPING |  | GALLON PER MINUTE |
|  | DOMESTIC COLD WATER |  | EXISTING |
|  | DOMESTIC HOT WATER |  | NUMBER |
|  | DOMESTIC HOT WATER RECIRCULATION |  | TEMPERATURE |
|  | HOT WATER SUPPLY |  | INCHES |
|  | HOT WATER RECIRCULATION |  | BRITISH THERMAL UNIT |
|  | CONTINUATION |  | HOT WATER SUPPLY |
|  | DIRECTION OF FLOW |  | HOT WATER RETURN |
|  | FIN-TUBE RADIATION |  | CEILING DIFFUSER |
|  | VOLUME DAMPER |  | CUBIC FEET PER MINUTE |
|  | MOTORIZED VALVE |  | CABINET UNIT HEATER |
|  | CONTROL VALVE |  | EXHAUST FAN |
|  | BALL VALVE |  | EXHAUST GRILLE |
|  | GATE VALVE |  | EXHAUST REGISTER |
|  | THERMOSTATIC ANGLE VALVE |  | ENERGY RECOVERY UNIT |
|  | FLEXIBLE ROUND DUCTWORK |  | HEAT PUMP |
|  | CEILING RETURN GRILLE OR REGISTER |  | RETURN GRILLE |
|  | CEILING SUPPLY DIFFUSER |  | TRANSFER GRILLE |

DIFFUSER / REGISTER SCHEDULE

UNIT NO	FACE SIZE IN	NECK SIZE IN	MAX PRESSURE DROP IN WC	MAX NOISE CRITERIA	CFM RANGE	TYPE	MANUFACTURER AND MODEL	NOTES
S-1, S-1T	24"x24"	6"φ	0.15	30	0-250	4-WAY DIFFUSER	METALAIRE 5700	1,3
S-2, S-2T	24"x24"	8"φ	0.15	30	251-440	4-WAY DIFFUSER	METALAIRE 5700	1,3
S-3, S-3T	24"x24"	10"φ	0.15	30	441-600	4-WAY DIFFUSER	METALAIRE 5700	1,3
S-4, S-4T	24"x24"	12"φ	0.15	30	601-790	4-WAY DIFFUSER	METALAIRE 5700	1,3
S-5	12"x12"	6"φ	0.15	30	0-200	4-WAY DIFFUSER	METALAIRE 5700	1,3
S-6	12"x12"	8"φ	0.15	30	201-350	4-WAY DIFFUSER	METALAIRE 5700	1,3
R-1, S-1T	18"x18"	8"x8"	0.05	30	0-300	RETURN GRILLE	RETURN GRILLE	2,3
R-1, R-2T	12"x12"	12"x12"	0.05	30	301-550	RETURN GRILLE	RETURN GRILLE	2,3
S-3, R-3T	22"x22"	22"x22"	0.05	30	551-2000	RETURN GRILLE	RETURN GRILLE	2,3

NOTES:

LOUVER SCHEDULE

UNIT NO	SERVES	CFM	MAX APD	DIMENSIONS			MIN FREE AREA SQUARE FT	MANUFACTURER AND MODEL	NOTES
				LENGTH	HEIGHT	DEPTH			
L-1	AHU-1	8000	0.08	84	36	4	13	RUSKIN ELF6375DX	-

NOTES:

GENERAL NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR WORK, MATERIALS, AND LABOR TO SATISFY A COMPLETE WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED. DISCONNECT, REMOVE, AND OR RELOCATE EXISTING MATERIAL, EQUIPMENT AND OTHER WORK AS NOTED OR REQUIRED FOR PROPER INSTALLATION OF NEW SYSTEM.
- APPLICABLE CODES, LAWS AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS, AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR WHO SHALL INFORM THE OWNER, PRIOR TO SUBMITTING A PROPOSAL, OF ANY WORK OR MATERIALS WHICH VIOLATE THE LAWS AND REGULATIONS.
- WORK SHALL BE PERFORMED IN COMPLIANCE WITH THE NATIONAL STANDARD PLUMBING CODE (LATEST EDITION), LOCAL CODES, AND OTHER REGULATIONS GOVERNING WORK OF THIS NATURE.
- WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER. CARE SHALL BE EXERCISED TO MINIMIZE ANY INCONVENIENCE OR DISTURBANCE TO OTHER AREAS OF THE BUILDING WHICH ARE TO REMAIN IN OPERATION. ISOLATE WORK AREAS BY MEANS OF TEMPORARY PARTITIONS AND/OR TARPS TO KEEP DUST AND DIRT WITHIN THE CONSTRUCTION AREA.
- CLEAN THE JOB SITE DAILY AND REMOVE FROM THE PREMISES ANY DIRT AND DEBRIS CAUSED BY THE PERFORMANCE OF THE WORK INCLUDED IN THIS CONTRACT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFEKEEPING OF HIS OWN PROPERTY ON THE JOB SITE. OWNER ASSUMES NO RESPONSIBILITY FOR PROTECTION OF PROPERTIES AGAINST FIRE, THEFT AND ENVIRONMENTAL CONDITIONS.
- PROVIDE NECESSARY TEMPORARY OR PERMANENT CAPS OR PLUGS FOR PIPING. DO NOT LEAVE PIPING OPEN ENDED.
- THE TERM "PROVIDE" SHALL MEAN "FURNISH AND INSTALL".
- COORDINATE INSTALLATION OF ALL ROOF FLASHING AT ROOF PENETRATION.
- DO NOT SCALE THIS DRAWING FOR EXACT DIMENSIONS. VERIFY FIGURES, CONDITIONS, AND DIMENSIONS AT THE JOB SITE.
- THE PLANS ARE INTENDED TO BE DIAGRAMMATIC AND ARE BASED ON THE MANUFACTURER'S EQUIPMENT. THEY ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION, THE EXACT DIMENSIONS OR THE DETAILS OF THE EQUIPMENT. THE CONTRACTOR SHALL VERIFY THE ACTUAL DIMENSIONS OF THE EQUIPMENT PROPOSED TO ENSURE THAT THE EQUIPMENT WILL FIT IN THE AVAILABLE SPACE.
- PROVIDE SUBMITTALS FOR EQUIPMENT AND MATERIAL TO THE ENGINEER FOR APPROVAL. CONTRACTOR SHALL PROVIDE THREE COPIES.
- EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR "APPROVED EQUAL" BY ENGINEER.
- PROVIDE AS-BUILT DRAWINGS.
- CONTRACTOR SHALL OBTAIN AND PAY FOR PERMITS AND APPLICATIONS.
- MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE. DEFECTS WHICH APPEAR DURING THAT PERIOD SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT PROVIDED.
- EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- COORDINATE WORK WITH OTHER TRADES.
- CONTRACTOR SHALL COORDINATE SYSTEM SHUTDOWN WITH THE OWNER 48 HOURS IN ADVANCE.
- PIPING SHOWN SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
- PIPING PENETRATIONS THROUGH NEW, EXISTING WALL OR FLOOR SHALL BE SEALED TO EQUAL THE RATING OF THE NEW, EXISTING WALL OR FLOOR. SEAL OPENINGS AROUND PIPES THROUGH PARTITIONS AND WALLS WITH APPROVED FIRE STOPPING MATERIAL MEETING ASTM E814 AND NFPA-101.
- PLUG OR CAP PIPING. DO NOT LEAVE PIPING OPEN ENDED.
- INSTALL WORK SO AS TO BE READILY ACCESSIBLE FOR OPERATION, MAINTENANCE AND REPAIR.
- THE CONTRACTOR SHALL FIELD VERIFY DIMENSIONS, INVERTS AND EXISTING CONDITIONS PRIOR TO PROCEEDING WITH ANY WORK. WHERE DISCREPANCIES OCCUR BETWEEN THESE DOCUMENTS AND EXISTING CONDITIONS, THE DISCREPANCY SHALL BE REPORTED TO THE OWNER AND/OR ENGINEER.
- LOCATE ACCESS PANELS IN NON ACCESSIBLE CEILINGS AND WALLS FOR VALVES, CONTROLS, VAV BOXES AND OTHER ITEMS THAT REQUIRE ACCESS TO PROPERLY MAINTAIN OR SERVICE THE BUILDING.
- ROOF PENETRATIONS INDICATED ON PLANS ARE PRELIMINARY. FINAL LOCATIONS SHALL BE COORDINATED WITH TRADES. EXHAUST DUCTS SHALL BE A MINIMUM OF 10'-0" FROM FRESH AIR INTAKES.
- PIPING IS SHOWN DIAGRAMMATICALLY AND DOES NOT SHOW OFFSETS, DROPS, AND RISES OR RUNS. THE CONTRACTOR SHALL ALLOW IN THE BID FOR ROUTING TO AVOID OBSTRUCTIONS.

VIBRATION AND SEISMIC CONTROL: COMPLY WITH LOCAL AND STATE CODES FOR SEISMIC ISOLATION. THE DRAWINGS DO NOT SHOW SEISMIC ISOLATION POINTS, THEREFORE ALLOW FOR SEISMIC ISOLATION IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION.

IDENTIFICATION: PROVIDE PIPE, DUCT AND EQUIPMENT IDENTIFICATION.

HANGERS AND PIPE SUPPORTS:
ABOVE GRADE: PIPE SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN A NEAT AND WORKMANLIKE MANNER. SPACING OF PIPE SUPPORT SHALL BE AS SPECIFIED IN THE INTERNATIONAL MECHANICAL CODE. WHERE OVERHEAD CONSTRUCTION DOES NOT PERMIT FASTENING OF SUPPORTS FOR EQUIPMENT, FURNISH ADDITIONAL FRAMING.

BELOW GRADE: EARTH SHALL BE EXCAVATED TO A MINIMUM DEPTH WITH AN EVEN SURFACE TO INSURE SOLID BEARING OF PIPE FOR ITS ENTIRE LENGTH. INTERIOR PIPING SHALL BE INSTALLED (UNLESS OTHERWISE SPECIFIED) A MINIMUM OF 4 INCHES BELOW THE BOTTOM OF THE SLAB AND SHALL NOT BE IN ANY DIRECT CONTACT WITH THE CONCRETE. EXTERIOR WATER PIPING SHALL HAVE A MINIMUM OF 48" OF COVER.

TESTING AND BALANCING:
 1. PIPING SYSTEMS SHALL BE FLOW AND PRESSURE TESTED IN ACCORDANCE WITH STANDARD PRACTICE AND THE INTERNATIONAL MECHANICAL CODE. TEST SYSTEMS AT 1.5 TIMES THE OPERATING PRESSURE FOR ONE (1) HOUR.

2. BALANCING SHALL BE PERFORMED BY AN INDEPENDENT TESTING AND BALANCING AGENCY IN ACCORDANCE WITH SMACNA, AABC, OR NEBB STANDARDS. SUBMIT THREE COPIES OF REPORT.

INSULATION:
 INSULATION SHALL HAVE A FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPED RATING OF 50 OR LESS IN ACCORDANCE WITH ASTM E84 AND NFPA90A.

PIPE INSULATION SHALL BE 1" THICK FIBERGLASS (ASTM C547) FOR PIPING 1.5" AND SMALLER AND 1.5" THICK FOR PIPING 2" AND LARGER. INSULATION SHALL FOIL SCREWM JACKET. PROVIDE PVC FITTING COVERS. INSULATE JOINTS, FITTINGS, VALVES, FLANGES, STRAINERS AND PIPING. INSULATE CHILLED WATER PIPING AND HEATING PIPING. HEAT PUMP WATER LOOP DOES NOT REQUIRE INSULATION.

DUCT INSULATION SHALL BE 2" THICK FIBERGLASS DUCT WRAP (0.22 THERMAL CONDUCTIVITY AT 75F) WITH REINFORCED ALUMINUM FOIL VAPOR BARRIER. INSULATE SUPPLY, RETURN DUCTS AND EXHAUST DUCT FROM ENERGY RECOVERY COIL TO ROOF EXHAUST FAN.

HVAC CONTROLS:
 PROVIDE A COMPLETE AND FUNCTIONAL DIRECT DIGITAL CONTROL SYSTEM WITH GRAPHICS.

HYDRONIC PIPING:
 PROVIDE DIELECTRIC FITTING OR BRONZE FITTING BETWEEN DISSIMILAR METALS.

BALL VALVES SHALL BE APOLLO OR APPROVED EQUAL. PVC BALL VALVES SHALL BE SPEARS OR APPROVED EQUAL.

HEATING PIPING SHALL BE TYPE L COPPER WITH SOLDERED COPPER FITTINGS, VICTAULIC MECHANICAL JOINTS OR PRO-PRESS FITTINGS; OR SCHEDULE 40 STEEL PIPING WITH THREADED CAST IRON FITTINGS, OR VICTAULIC MECHANICAL JOINTS; OR SCHEDULE 80 PVC PIPING. SCHILLED WATER PIPING SHALL BE SCHEDULE 80 PVC PIPING.

HEAT PUMP LOOP PIPING SHALL BE SCHEDULE 80 PVC PIPING.

CONDENSATE PIPING SHALL BE SCHEDULE 40 PVC PIPE WITH SOLVENT JOINTS. EXTEND PIPING TO NEAREST FLOOR DRAIN OR INDIRECT WASTE PIPE.

GROUND-LOOP PIPING:
 INTERIOR PIPING SHALL BE SCHEDULE 80 PVC. EXTERIOR PIPING SHALL BE HOPE PE3408/3608.

PUMPS

STEAM PIPING

REFRIGERANT PIPING:
 TYPE L OR ACR DRAWN COPPER TUBING WITH COPPER FITTINGS AND BRAZED JOINTS. INSTALL IN ACCORDANCE WITH ASHRAE STANDARD 15.

WATER TREATMENT:
 PROVIDE WATER QUALITY TESTING AND TREATMENT FOR ONE YEAR.

PROVIDE GLYCOL FOR BOILER LOOP. GLYCOL SHALL BE POLYPROPYLENE, FOOD GRADE, -7 FREEZE POINT, -15F FLOW POINT, -60F BURST POINT. NOBURST OR APPROVED EQUAL. SYSTEMS HAVE BEEN SIZED FOR FUTURE 25% GLYCOL WHEN SYSTEM IS CONVERTED TO GROUND SOURCE HEAT PUMP SYSTEM.

DUCTS

EXCEPT AS SHOWN OR NOTED, DUCTWORK SHALL BE GALVANIZED STEEL AND SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA DUCT CONSTRUCTION STANDARDS-METAL AND FLEXIBLE. DUCT CONSTRUCTION SHALL BE BASED ON 2" PRESSURE CLASS.

SEAL TRANVERSE AND LONGITUDINAL JOINTS.

ELBOWS SHALL HAVE A RADIUS/DIAMETER OF 1.5. PROVIDE TURNING VANES IN RECTANGULAR ELBOWS.

DUCT DIMENSIONS INDICATED ARE CLEAR INSIDE DIMENSIONS.

FLEXIBLE DUCT SHALL BE RATED CLASS I, UL181, 1.5" INSULATION WITH POLYETHYLENE JACKET. SIX FOOT MAXIMUM LENGTH.

MANUAL VOLUME DAMPERS SHALL BE GALVANIZED STEEL WITH A BEARING AT ONE END OF DAMPER ROD AND QUADRANT WITH LVER AND LOCKSCREW. ATTACH FLOURESCENT TAPE TO HANDLE IN CONCEALED AREAS. PROVIDE VOLUME DAMPERS AT EACH BRANCH.

PROVIDE ACCESS DOORS IN DUCTS WHEREVER CONTROLS, CONTROL DAMPERS, FIRE DAMPERS, COILS AND INSTRUMENTS ARE INSTALLED.

PROVIDE FIRE DAMPERS IN FIRE RATED PARTITIONS AND FIRE RATED FLOORS.

AIR FILTRATION

FANS

DIFFUSERS, REGISTERS, GRILLES AND LOUVERS:
 SUPPLY AIR DIFFUSERS AND GRILLES SHALL BE WHITE. SUPPLY DIFFUSERS SHALL HAVE ADJUSTABLE SEAL DIFFUSERS TO HARD CEILING. RETURN GRILLES SHALL HAVE A 3/4" BLADE SPACING.
UNIT HEATERS:

HUMIDIFIER

WATER TO AIR HEAT PUMPS:
 CLIMATE MASTER TRANAQUIILITY SERIES, R-410A, ECM MOTORS, ULTRAQUIET PACKAGE, CSM UNIT MOUNTED CONTROLS, EXTENDED RANGE. PROVIDE DYNAMIC AIR CLEANER MODEL V-8 (24 VOLT) WITH A MERV 13 RATING FOR HEAT PUMPS NOTED ON DWG M-2.

WATER TO WATER HEAT PUMPS

DESSICANT DEHUMIDIFIER

ROLLERS

HEAT EXCHANGERS

COOLING TOWERS

AIR HANDLER

COILS

CLEANING AND FLUSHING

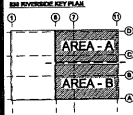
THE PIPING SYSTEMS (EXISTING/NEW) SHALL BE CLEANED AND FLUSHED PRIOR TO FINAL CHARGING OF SYSTEMS.

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REVISIONS:

DATE: 8/17/11
 PROJECT No. 1028A
 DRAWN BY: AZZ
 CHECKED BY: RPO
 SCALE: AS NOTED

SHEET TITLE:
 LEGENDS, NOTES
 ABBREVIATIONS
 SCHEDULES
 & SPECIFICATIONS

M-1

PUMP SCHEDULE													
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLUID			EFFICIENCY (%)	ELECTRICAL			NOTES		
				FLOW RATE (GPM)	WORKING FLUID	HEAD LOSS (FT)		MOTOR SIZE (HP)	MOTOR BHP (HP)	MOTOR SPEED (RPM)		VOLT/PH/HZ	
P-B1	TACO 2430	MECH ROOM	CIRCULATOR	33.9	WATER	15.2	N/A	IRON	0.16	N/A	3450	120/1/60	
P-B2	TACO 2430	MECH ROOM	CIRCULATOR	33.9	WATER	15.1	N/A	IRON	0.16	N/A	3450	120/1/60	
P-2A	TACO 1641	MECH ROOM	HORIZONTAL INLINE	74	WATER	32	55.3	IRON	2	1.29	1750	460/3/60	
P-2B	TACO 1641	MECH ROOM	HORIZONTAL INLINE	74	WATER	31.6	55.3	IRON	2	1.279	1750	460/3/60	
P-3	TACO CI2507		HORIZ CLOSE-COUPLED END-SUCTION	208.8	WATER	35.5	72.3	BRONZE FITTED	3	2.369	1760	460/3/60	1
P-4	TACO CI3009		HORIZ CLOSE-COUPLED END-SUCTION	232.4	WATER	24.8	72	BRONZE FITTED	3	1.868	1760	460/3/60	1
P-5	TACO 1635	MECH ROOM	HORIZONTAL INLINE	99.7	WATER	19.2	62.2	IRON	0.75	0.705	1750	120/1/60	
P-6	TACO 2470	MECH ROOM	CIRCULATOR	79.2	WATER	16.4	N/A	IRON	0.5	N/A	3450	120/1/60	
P-7	TACO 2470	MECH ROOM	CIRCULATOR	58.6	WATER	14.1	N/A	IRON	0.5	N/A	3450	120/1/60	
P-8	TACO 2470	MECH ROOM	CIRCULATOR	79.2	WATER	16.4	N/A	IRON	0.5	N/A	3450	120/1/60	
P-9	TACO 2470	MECH ROOM	CIRCULATOR	58.6	WATER	13.3	N/A	IRON	0.5	N/A	3450	120/1/60	
P-10	TACO 2470	MECH ROOM	CIRCULATOR	58.6	WATER	20.7	N/A	IRON	0.5	N/A	3450	120/1/60	
P-11	TACO 007	MECH ROOM	CIRCULATOR	9.2	WATER	3.7	N/A	IRON	0.04	N/A	3250	120/1/60	
P-12	TACO 2450	MECH ROOM	CIRCULATOR	45	WATER	29.9	N/A	IRON	0.5	N/A	3450	120/1/60	

BOILER SCHEDULE															
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FUEL TYPE	FLUID			ELECTRICAL			PHYSICAL	NOTES			
					INPUT LOAD (BTU/H)	OUTPUT LOAD (BTU/H)	FLOW RATE (GPM)	ENTERING/LEAVING TEMP. (°F)	WORKING FLUID	HEAD LOSS (FT)			MOTOR QUAN.	MOTOR SIZE (HP)	MOTOR VOLT/PH/HZ	CONTROL CIRCUIT VOLT/PH/HZ
B-1	HTP MODCON 500		CONDENSING, INDUCED	NAT GAS	392000	368500	33.9	98/120	WATER	12	1	0.167	120/1/60	120/1/60	
B-2	HTP MODCON 500		CONDENSING, INDUCED	NAT GAS	460700	368500	33.9	98/120	WATER	12	1	0.167	120/1/60	120/1/60	

COIL SCHEDULE																	
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	USAGE	AIR			FLUID			PHYSICAL			NOTES				
				FLOW RATE (CFM)	LOAD (BTU/H)	SENSIBLE LOAD (BTU/H)	ENTERING/LEAVING TEMP. (°F)	WORKING FLUID	HEAD LOSS (FT)	NO. COILS	EACH COIL FIN W/TH/HT (IN)	MINIMUM FACE AREA (FT²)		MINIMUM NO. ROWS/FINS PER INCH			
CC-AHU1		AHU1	COOLING	8240	530700	279100	80.1/69.4	52/50.6	0.3	98.3	48/80	1	43/31.5	18.5	8/8		
DHC-1			HEATING	8240	468600	466600	81.7/4	52/52.5	0.25	47.2	120/100	3	111/24	18.5	2/6		
DHC-2			HEAT DEL	8240	112600	112600	3.7/-5.6	81.7/4	0.25	45	65/60	1	111/24	18.5	8/8		
DRC-1			COOL DEL	8240	63600	62700	86.4/71.2	80.1/69.4	0.25	25.5	65/70	5	111/24	18.5	2/6		
HC-AHU1		AHU1	HEAT REC	8240	112600	112600	70.8/59.1	60/54.9	0.75	45	60/65	5	111/24	19.5	8/8		
RC-AHU1		AHU1	HEAT REC	8240	63600	62700	74/60.8	80/62.9	0.75	25.5	70/65	5	2	0/31.5	0	2/6	
		AHU1	HEAT REC	8240	63600	62700	74/60.8	80/62.9	0.75	25.5	70/65	5	2	0/31.5	0	2/6	
		AHU1	COOL REC	8240	63600	62700	74/60.8	80/62.9	0.75	25.5	70/65	5	2	0/31.5	0	2/6	

COOLING TOWER SCHEDULE															
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FAN AIRFLOW (CFM)	FLUID			ELECTRICAL, FAN			PHYSICAL	NOTES			
					AMBIENT TEMP. (°F)	FLOW RATE (GPM)	ENTERING/LEAVING TEMP. (°F)	WORKING FLUID	INLET/OUTLET HEAD LOSS (FT)	MOTOR QUAN.			MOTOR SIZE (HP)	MOTOR SPEED (RPM)	TOWER AND CONTROL CIRCUIT VOLT/PH/HZ
CT-1	AMCOAT SILVER SERIES ST80		OPEN, COUNTERFLOW, CENT	18900	86.36/71.24	208.8	68/78	WATER	1/1	1	2	1750	480/3/60	120/1/60	

HEAT EXCHANGER SCHEDULE																
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	USAGE	SOURCE MEDIUM (HYDRONIC)			TRANSFER MEDIUM (HYDRONIC)			PHYSICAL	NOTES				
					LOAD (BTU/H)	FLOW RATE (GPM)	ENTERING/LEAVING TEMP. (°F)	WORKING FLUID	HEAD LOSS (FT)	FLOW RATE (GPM)			ENTERING/LEAVING TEMP. (°F)	WORKING FLUID	HEAD LOSS (FT)	
HX-1			PLATE	COOLING	1039700	208.8	78/88	WATER	15	232.4	89.4/80	30% P GLY	10	10		

FAN SCHEDULE															
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	AIR TYPE	AIR			FAN			ELECTRICAL		PHYSICAL	NOTES	
					MAXIMUM AIRFLOW RATE (CFM)	STATIC PRESSURE (IN. WATER)	FAN EFFICIENCY (%)	FAN SPEED (RPM)	FAN WHEEL DIAMETER (IN)	MOTOR SIZE (HP)	MOTOR BHP (HP)	MOTOR SPEED (RPM)			VOLT/PH/HZ
EF-2	GREENHECK VECTOR H		MIXED FLOW, CENTRIFUGAL	EXHAUST AIR	9705	3.95	0	3	1750	460/3/60					
OF-AHU1	TRANE CLIMATE CHANGER #12	AHU1	BACKWARD INCLINED	OUTSIDE AIR	9244	3.89	0	3	1750	460/3/60					

AIR HANDLER SCHEDULE													
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	SUPPLY AIRFLOW (CFM)	AIR COMPONENTS			ELECTRICAL			PHYSICAL		NOTES	
				FANS	COILS	OTHER	SINGLE POINT VOLT/PH/HZ	CABINET LENGTH/HT (IN)	WEIGHT (LB)				
AHU1			9244	OF-AHU1	CC-AHU1, HC-AHU1, RC-AHU1	F-AHU1.1, F-AHU1.2	OD-AHU1	N/A	8/62/84				

FILTER SCHEDULE									
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	EFFICIENCY (%)	AIR		PHYSICAL		NOTES
					CLEAN STATIC PRESSURE (IN. WATER)	DIRTY STATIC PRESSURE (IN. WATER)	NUMBER 24"x24" MODULES	NUMBER 12"x24" MODULES	
F-AHU1.1		AHU1	ANGLE	30%	0.6	0.8	6	0	
F-AHU1.2		AHU1	ANGLE	80%	0.7	1.2	6	0	
F-AHU1.2		AHU1	ANGLE	80%	0.7	1	4	1	

EXPANSION TANK SCHEDULE										
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	WORKING FLUID	FLUID			PHYSICAL		NOTES
					MIN. TANK/ACCEPTANCE (GAL)	TANK SIZE (GAL)	RELIEF VALVE (PSIG)	DIA./HEIGHT (IN)	NPT FITTING (IN)	
ET-1	TACO CX-42		VERT DIAPH FLOOR	WATER	10.5/3.6	11	30	14/27	0.75	1
ET-2	TACO CX-30		VERT DIAPH FLOOR	WATER	4.1/1.4	8	30	14/22	0.75	1
ET-3	TACO CX-42		VERT DIAPH FLOOR	WATER	10.5/3.6	11	30	14/27	0.75	1
ET-4	TACO CX-30		VERT DIAPH FLOOR	WATER	1.9/0.7	8	30	14/22	0.75	1

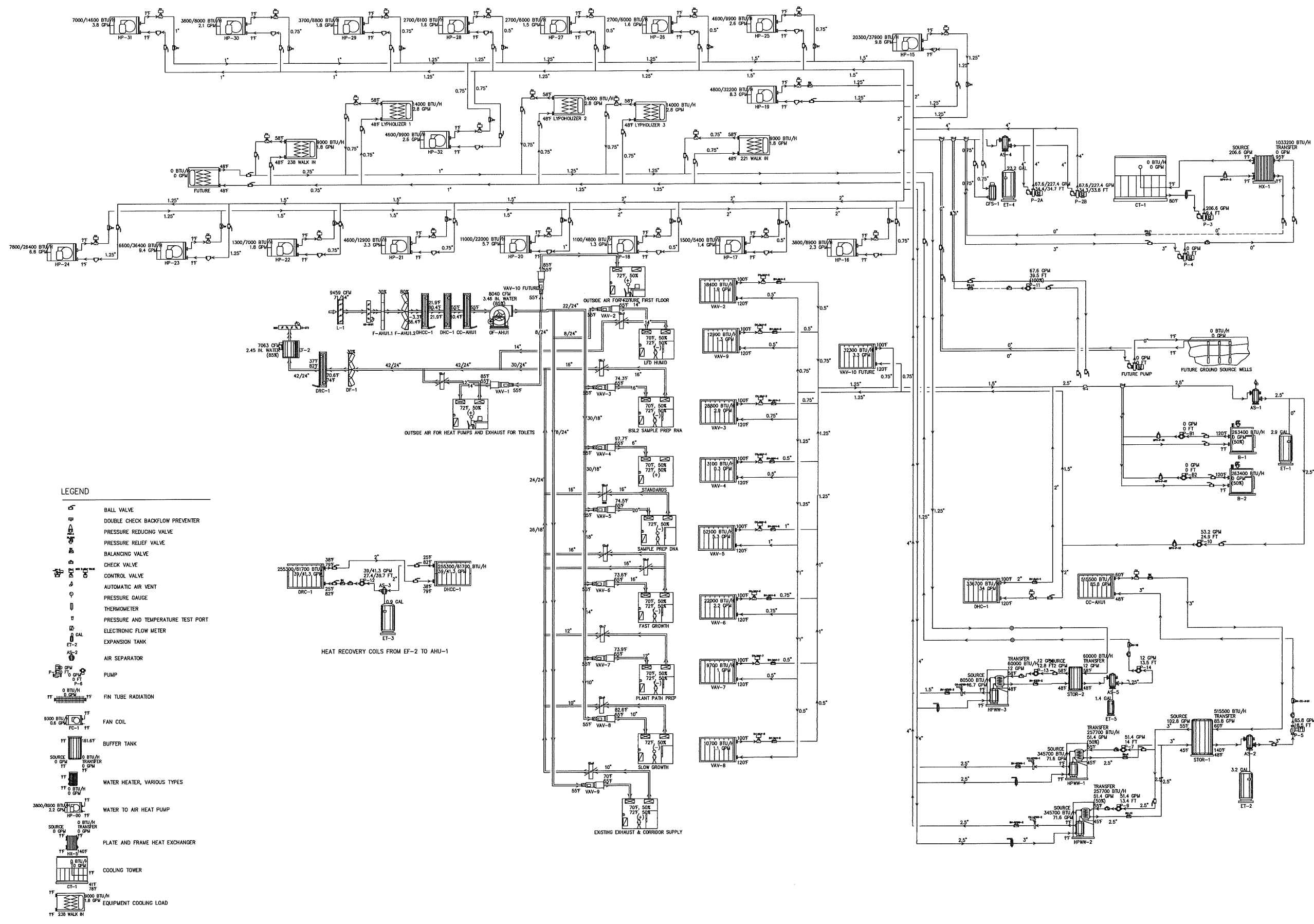
AIR SEPARATOR SCHEDULE										
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	WORKING FLUID	FLUID			PHYSICAL		NOTES
					FLOW RATE (GPM)	WORKING FLUID	HEAD LOSS (FT)	DIA./HEIGHT (IN)		
AS-1	TACO AC3F		TANK	WATER	67.9	0.18	14/27.25	1		
AS-2	TACO AC25F		TANK	WATER	63.2	0.38	10.75/20	1		
AS-3	TACO AC3F		TANK	WATER	99.7	0.38	14/27.25	1		
AS-4			INLINE	WATER	45	2.5				

PROJECT SCHEDULE					
NAME	LOCATION	OUTSIDE AIR HEATING SEASON DB/WB (°F)	COOLING SEASON DB/WB (°F)	ALTITUDE (FT)	NOTES

WATER TO AIR HEAT PUMP SCHEDULE																
UNIT NO	SERVES	GPM	WATER P.D. FT.	SUPPLY CFM	HEATING			COOLING			ELECTRICAL		CLIMATE MASTER AND MODEL	NOTES		
					EWT °F	EAT °F	LOAD BTU/H	HTG COP	EWT °F	EAT °F	LOAD BTU/H	EER			VOLTS/PHASE	MCA
HP-1	NORTH OFFICE	6.0	7.2	850	30	64.9	17.5	3.5	80	77.6/65.7	18.7/16.1	18.4	208-230/1	14.7	TSV 024	EXISTING
HP-2	BREAKOUT	2.6	4.8	350	30	64.9	2.9	3.3	80	77.7/67.0	11.1/7.6	15.1	208-230/1	7.4	TSV 012	EXISTING
HP-3	CONTROLLER	2.6	4.8	350	30	68.3	1.0	3.3	80	77.7/65.7	9.0/7.1	15.1	208-230/1	7.4	TSV 012	EXISTING
HP-4	EAST OFFICES	6.3	5.1	1250	30	67.0	26.6	3.8	80	77.5/64.6	29.5/26.4	18.2	208-230/1	18.1	TSV 038	EXISTING
HP-5	2ND OFFICE AREA	8.3	5.1	1270	30	62.0	26.2	3.4	80	78.3/65.3	32.5/27.7	17.8	208-230/1	19.5	TSV 042	EXISTING
HP-6	SAMPLE PREP	1.5	3.7	160	30	70.3	1.7	2.8	80	78.9/64.5	3.9/3.5	15.1	208-230/1	4.7	TSV 006	EXISTING
HP-7	LFY STRIPING	1.5	3.7	160	30	63.5	2.8	2.8	80	77.7/65.2	3.7/3.2	15.1	208-230/1	4.7	TSV 006	EXISTING
HP-8	LFY DRY	1.5	3.7	160	30	62.8	3.5	2.8	80	77.6/65.1	3.8/3.3	15.1	208-230/1	4.7	TSV 006	EXISTING
HP-9	CONFERENCE	6.0	7.2	750	30	66.4	10.8	3.4	80	77.3/66.0	20.8/15.5	18.4	208-230/1	14.7	TSV 024	EXISTING
HP-10	AMPLIFICATION	1.5	3.7	240	30	65.2	1.9	3.1	80	77.2/64.6	5.7/5.0	15.2	208-230/1	4.7	TSV 006	EXISTING
HP-11	HT/AB	4.1	2.7	550	30	70.2	3.4	3.0	80	76.9/64.8	10.3/9.3	16.5	208-230/1	16	TSV 018	EXISTING
HP-12	REAG MSTR MIX	1.0	6.0	1570	30	68.7	4.4	3.4	80	76.4/63.9	32.2/30.6	16.2	208-230/1	24.7	TVV 049	EXISTING
HP-13	HT/AB	1.5	3.7	170	30	70.1	1.1	2.8	80	76.7/64.8	3.8/3.3	15.1	208-230/1	4.7	TSV 006	EXISTING
HP-14	ASSEMBLY/POUCHING	2.8	3.4	335	30	70.1	2.3	3.2	80	77.0/64.7	7.4/6.7	15.1	208-230/1	7.4	TSV 012	EXISTING

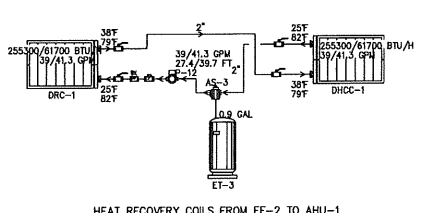
SINGLE DUCT TERMINAL UNIT SCHEDULE																	
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	INLET SIZE (IN)	USAGE	AIR			FLUID			PHYSICAL		NOTES				
					HEATING SEASON AIRFLOW RATE (CFM)	COOLING SEASON AIRFLOW RATE (CFM)	4 ACH MINIMUM AIRFLOW (CFM)	LOAD (BTU/H)	ENTERING/LEAVING TEMP. (°F)	LEAVING TEMP. (°F)	STATIC PRESSURE (IN. WATER)	FLOW RATE (GPM)		ENTERING/LEAVING TEMP. (°F)	WORKING FLUID	HEAD LOSS (FT)	MINIMUM NO. ROWS/FINS PER INCH
VAV-1	HT PUMPS		12	REHEAT	900	900	90	29000	55	85	0.65	1.9	7/7	WATER	2	2/6	
VAV-2	LFD HUMID		12	REHEAT	887	887	90	18400	55	52	0.65	0	7/7	WATER	2	2/6	
VAV-3	SAMPLE RNA		16	REHEAT	1386	1386	125	28800	55	74.3	0.65	1.9	120/90	WATER	2	2/6	
VAV-4	STANDARDS		14	REHEAT	67	1112	175	19000	55	71.7	0.65	1.3	120/90	WATER	2	2/6	
VAV-5	SAMPLE PREP DNA		18	REHEAT	2479	2479	0	52100	55	74.5	0.65	3.5	120/90	WATER	2	2/6	
VAV-6	FAST GROWTH		14	REHEAT	1100	1100	175	22000	55	73.6	0.65	1.5	120/90	WATER	2	2/6	
VAV-7	PLANT PATH		14	REHEAT	520	520	90	10400	55	73.6	0.65	0.7	120/90	WATER	2	2/6	
VAV-8	SLOW GROWTH		10	REHEAT	360	360	50	10700	55	82.6	0.65	0.7	120/90	WATER	2	2/6	
VAV-9	CORRIDOR		-	REHEAT	-	-	90	8100	55	70	0.65	0.5	120/90	WATER	2	2/6	
VAV-10	FIRST FLOOR		-	REHEAT	-	-	-	0	52	52	0.65	0	7/7	WATER	2	2/6	

LOUVER SCHEDULE									
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	USAGE	AIR		PHYSICAL		NOTES
					AIR TYPE	LOAD (BTU/H)	STATIC PRESSURE (IN. WATER)	WIDTH/HEIGHT/THICKNESS (IN)	
L-1	RUSKIN	MECH ROOM	STATIONARY	INTAKE	INTAKE	9244	0.15	32/64/8	



LEGEND

- BALL VALVE
- DOUBLE CHECK BACKFLOW PREVENTER
- PRESSURE REDUCING VALVE
- PRESSURE RELIEF VALVE
- BALANCING VALVE
- CHECK VALVE
- CONTROL VALVE
- AUTOMATIC AIR VENT
- PRESSURE GAUGE
- THERMOMETER
- PRESSURE AND TEMPERATURE TEST PORT
- ELECTRONIC FLOW METER
- EXPANSION TANK
- AIR SEPARATOR
- PUMP
- FIN TUBE RADIATION
- FAN COIL
- BUFFER TANK
- WATER HEATER, VARIOUS TYPES
- WATER TO AIR HEAT PUMP
- PLATE AND FRAME HEAT EXCHANGER
- COOLING TOWER
- EQUIPMENT COOLING LOAD

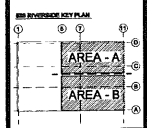


HEAT RECOVERY COILS FROM EF-2 TO AHU-1

EnviroLogix
RIVERSIDE CAMPUS
530 - DNA EXPANSION
PORTLAND, MAINE

TFH ARCHITECTS
 80 MIDDLE STREET
 PORTLAND, MAINE 04101
 TELEPHONE 207 775 6141
 ARCHITECTURE PLANNING

CONSULTANTS:
 ELECTRICAL
 Solar Structural Engineers, Inc.
 75 York Street
 Portland, ME 04105-4407
 603-875-1188
 MECHANICAL
 Integrated Energy Systems, LLC
 210 Main Street
 Portland, ME 04101
 603-875-1188
 MECHANICAL
 Mechanical Engineering
 7 Bevil Water
 Portland, ME 04101
 207-865-6475

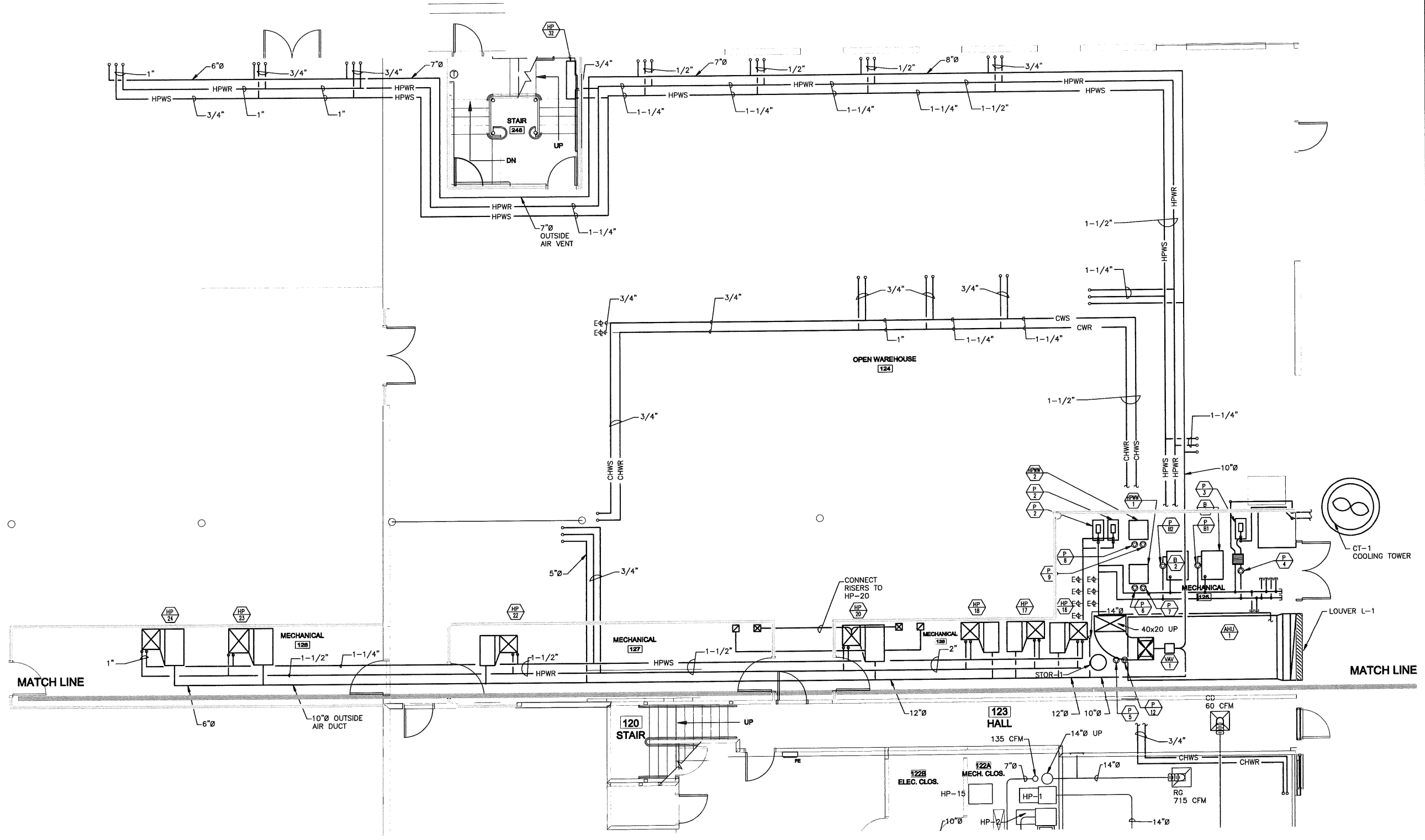


REVISIONS:

DATE: 8/17/11
 PROJECT No. 1026A
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 CHECKED BY: RPD
 SCALE: AS NOTED

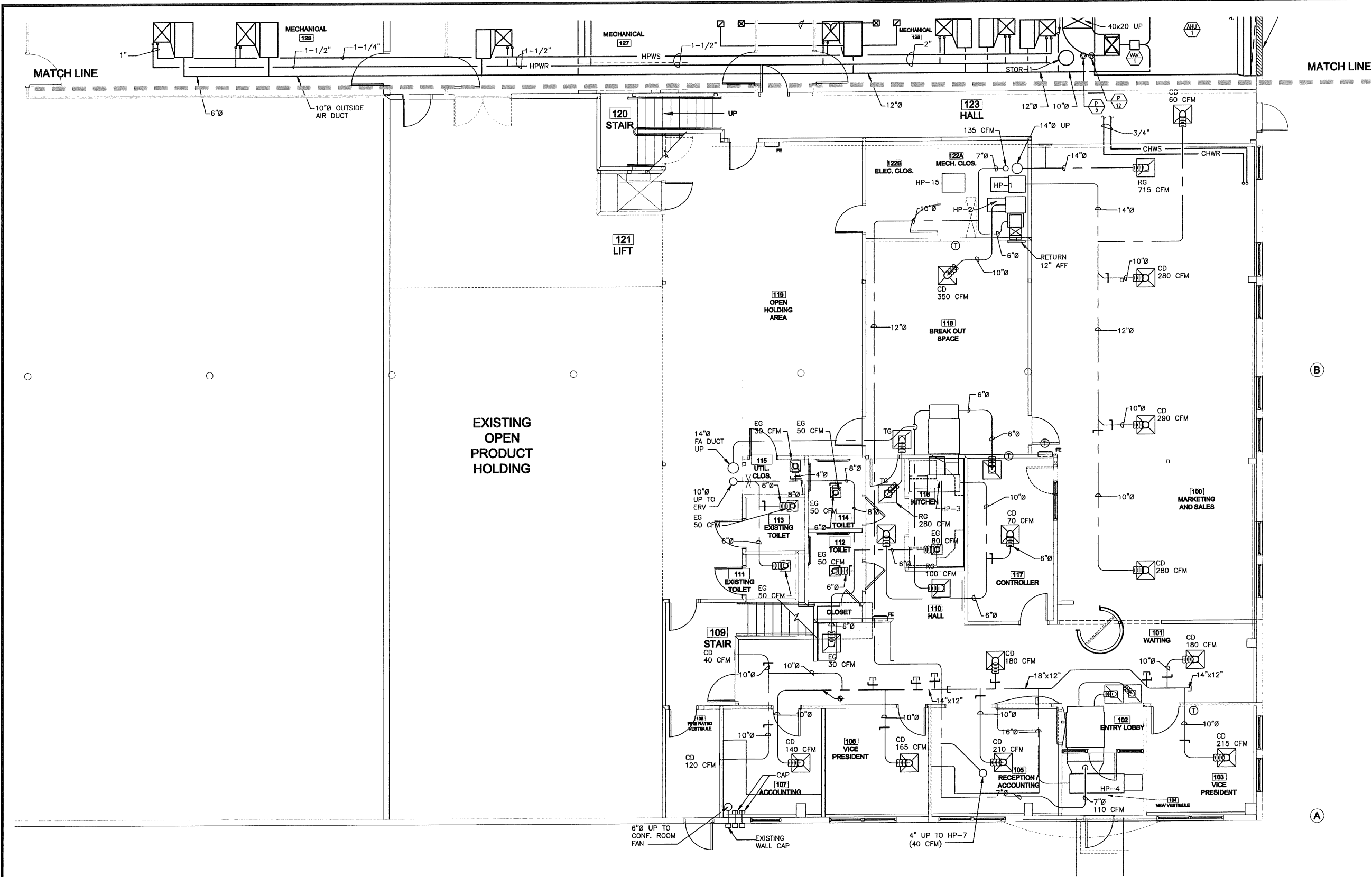
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FIRST FLOOR PLAN - PART A
MECHANICAL

M-4



1 FIRST FLOOR PLAN - PART A
M-4
 1/4" = 1'-0"





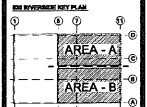
1 FIRST FLOOR PLAN - PART B
M-5 1/4" = 1'-0"

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RIVERSIDE CAMPUS
530 - DNA EXPANSION
PORTLAND, MAINE

TFH ARCHITECTS
80 MIDDLE STREET
PORTLAND MAINE 04101
TELEPHONE 207 775 6141
ARCHITECTURE PLANNING

CONSULTANTS:
STRUCTURAL: T. J. ...
MECHANICAL: ...
ELECTRICAL: ...



REVISIONS:

DATE: 8/17/11
PROJECT No. 1028A
DRAWN BY: AZZ
CHECKED BY: RPG
SCALE: AS NOTED

SHEET TITLE:
FIRST FLOOR
PLAN - PART B
MECHANICAL



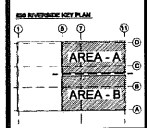
M-5

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PORTLAND, MAINE

TFH ARCHITECTS
 80 MIDDLE STREET
 PORTLAND MAINE 04101
 TELEPHONE 207 778 6141
 ARCHITECTURE PLANNING

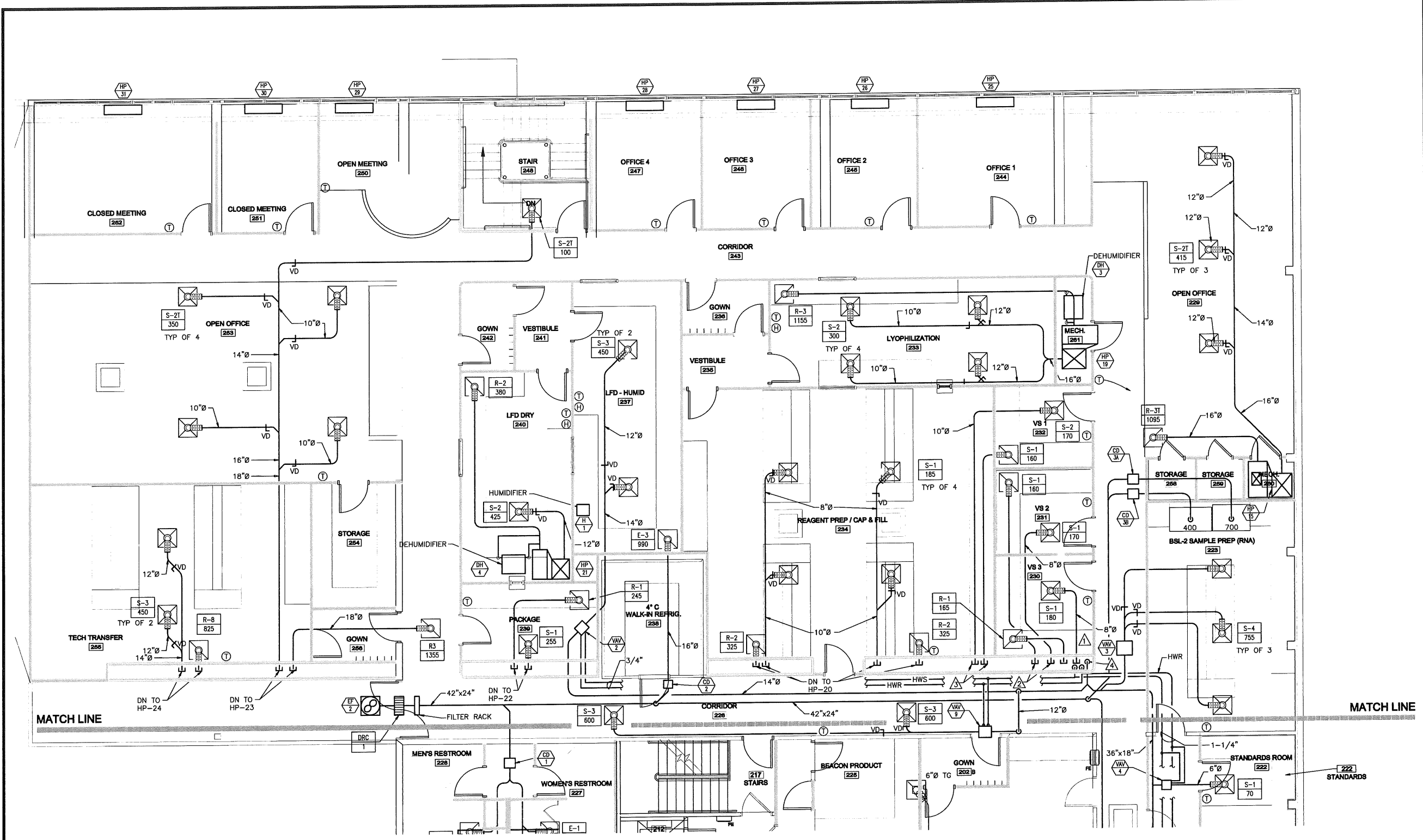
CONSULTANTS:
 ELECTRICAL: **Stellar Structural Engineers, Inc.**
 75 York Street
 Portland, ME 04109-4400
 207 876 1888
 MECHANICAL: **Integrated Energy Systems, LLC**
 111 Commercial Street
 Portland, ME 04108
 207 778 6141
 MECHANICAL: **MECHANICAL CONSULTANTS**
 7 General Street
 Portland, ME 04108
 207 866 6478



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DATE: 8/17/11
 PROJECT No: 1028A
 DRAWN BY: ASZ
 CHECKED BY: RPO
 SCALE: AS NOTED

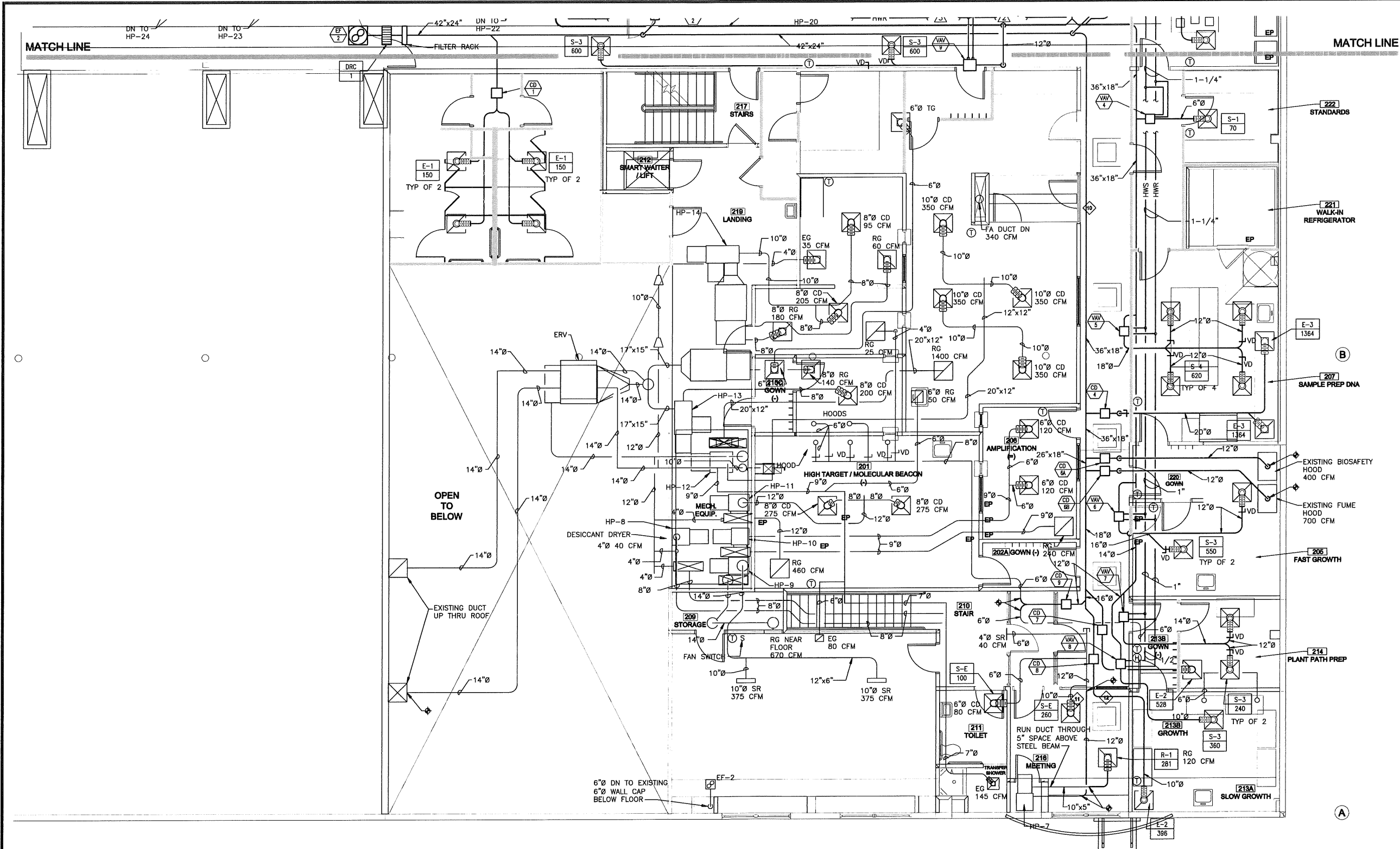
SHEET TITLE:
SECOND FLOOR PLAN - PART A
MECHANICAL



1 SECOND FLOOR PLAN - PART A
 M-6 1/4" = 1'-0"

- DRAWING NOTES**
- 1 DN TO HP-16
 - 2 DN TO HP-17
 - 3 DN TO HP-18
 - 4 46x18 DN TO AHU-1





MATCH LINE

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PORTLAND, MAINE

MATCH LINE

TFM ARCHITECTS
80 MIDDLE STREET
PORTLAND, MAINE 04101
TELEPHONE 207 778 6141
ARCHITECTURE PLANNING

CONSULTANTS:

STRUCTURAL:
Parker Structural Engineers, Inc.
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Portland, ME 04101-4480
207 475-1100

MECHANICAL:
Parker Energy Systems, PLLC
215 Middle Street
Portland, ME 04101
207 778-4200

ELECTRICAL:
SIMPSON ENGINEERS
7 Second Street
Amesbury, ME 04413
207 834-4474

REVISIONS:

DATE: 8/17/11
PROJECT No: 1028A
DRAWN BY: AZZ
CHECKED BY: RPG
SCALE: AS NOTED

SHEET TITLE:
SECOND FLOOR PLAN - PART B
MECHANICAL

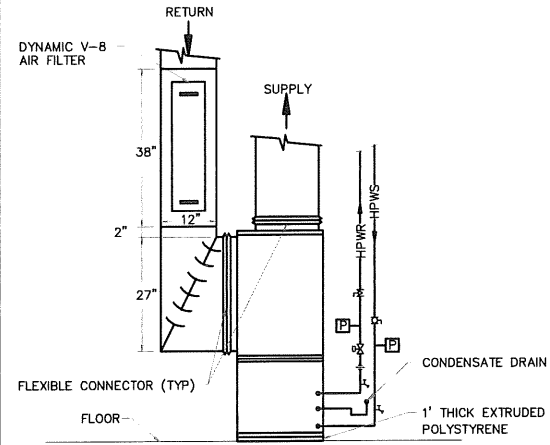
M-7

1 SECOND FLOOR PLAN - PART B
M-7 1/4" = 1'-0"

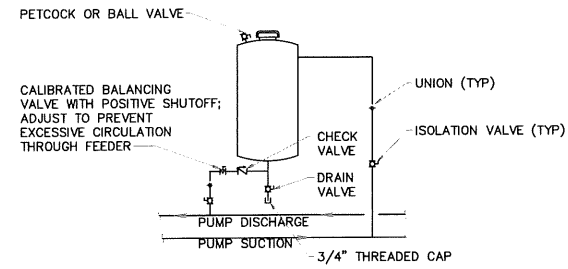
DRAWING NOTE
1. SEE M-3 FOR BRANCH PIPING SIZES



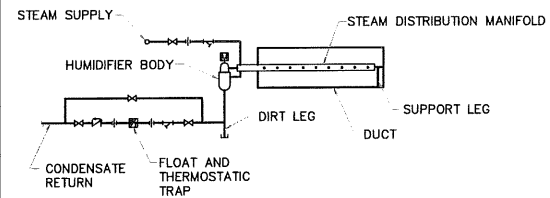
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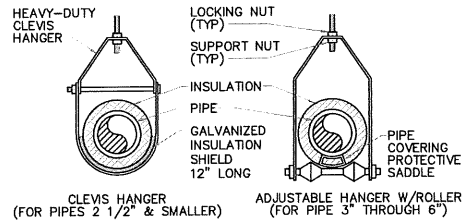
WATER TO AIR HEAT PUMP
NOT TO SCALE



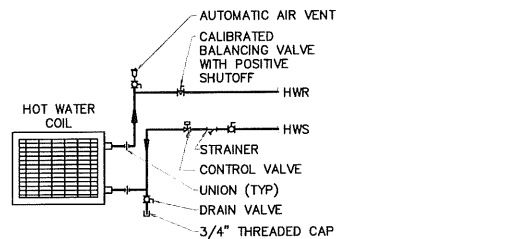
BYPASS CHEMICAL FEEDER PIPING SCHEMATIC
NOT TO SCALE



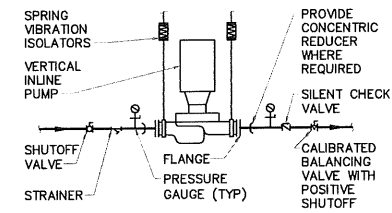
DUCT MOUNTED STEAM HUMIDIFIER PIPING SCHEMATIC
NOT TO SCALE



PIPE HANGER ATTACHMENT DETAILS
NOT TO SCALE

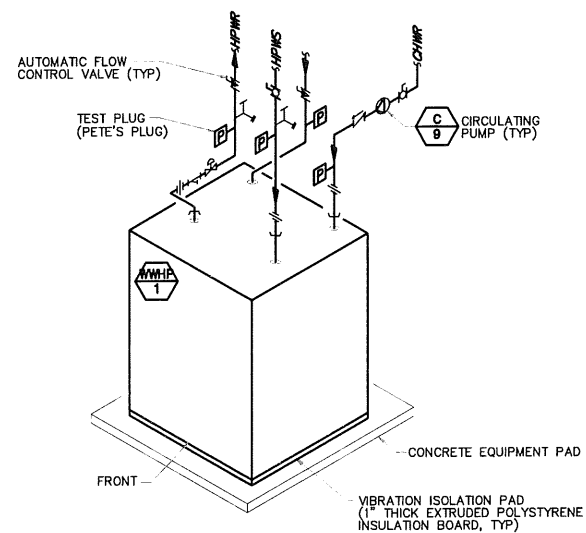


DUCT MOUNTED HOT WATER COIL PIPING SCHEMATIC
NOT TO SCALE



INLINE PUMP PIPING DETAIL
NOT TO SCALE

DUCT MOUNTED HOT WATER COIL PIPING SCHEMATIC
NOT TO SCALE



WATER-TO-WATER HEAT PUMP PIPING DIAGRAM
NOT TO SCALE

DIGITAL CONTROLLER POINTS LIST

POINT DESCRIPTION	GRAPHIC	ANALOG INPUT	BINARY INPUT	ANALOG OUTPUT	BINARY OUTPUT	ALARM POINT	NON-DDC POINT	OTHER	NOTES
HP-15 THRU HP-32									
ROOM TEMP	X	X							
FAN ON/OFF	X				X				
REVERSING VALVE	X				X				
COMPRESSOR ENABLE	X				X				
TROUBLE	X		X						
WATER SOURCE VALVE							X		
HPWW-1									
WATER SUPPLY TEMP	X	X							
REVERSING VALVE	X				X				
COMPRESSOR ENABLE	X				X				
SECOND STAGE	X				X				
TROUBLE	X		X						
HPWW-2									
WATER SUPPLY TEMP	X	X							
REVERSING VALVE	X				X				
COMPRESSOR ENABLE	X				X				
SECOND STAGE	X				X				
TROUBLE	X		X						
P-3 PUMP START/STOP & STATUS	X		X		X				
P-4 PUMP START/STOP & STATUS	X		X		X				
P-6 PUMP START/STOP & STATUS	X		X		X				
P-7 PUMP START/STOP & STATUS	X		X		X				
P-8 PUMP START/STOP & STATUS	X		X		X				
P-9 PUMP START/STOP & STATUS	X		X		X				
P-B1 PUMP START/STOP & STATUS	X		X		X				
P-B2 PUMP START/STOP & STATUS	X		X		X				
P-12 PUMP START/STOP & STATUS	X		X		X				
P-2A PUMP START/STOP & STATUS	X		X		X				
P-2A VFD	X			X					
P-2B PUMP START/STOP & STATUS	X		X		X				
P-2B VFD	X			X					
P-5 PUMP START/STOP & STATUS	X		X		X				
P-5 VFD	X			X					
P-10 PUMP START/STOP & STATUS	X		X		X				
P-10 VFD	X			X					
P-11 PUMP START/STOP & STATUS	X		X		X				
P-11 VFD	X			X					
HP SUPPLY LOOP TEMPERATURE	X	X							
HP RETURN LOOP TEMPERATURE	X	X							
BOILER HWS LOOP TEMPERATURE	X	X							
BOILER HWR LOOP TEMPERATURE	X	X							
CHILLED WATER SUPPLY(BOTTOM OF TANK)	X	X							
CHILLED WATER RETURN(TOP OF TANK)	X	X							
CT-1 COOLING TOWER INLET	X	X							
CT-1 COOLING TOWER OUTLET	X	X							
HX-1 INLET TEMPERATURE	X	X							
HX-1 OUTLET TEMPERATURE	X	X							
HUMIDITY ROOM 233	X	X							
HUMIDITY ROOM 237	X	X							
HUMIDITY ROOM 240	X	X							
DH-3 DEHUMIDIFIER FOR ROOM 233	X				X				
DH-4 DEHUMIDIFIER FOR ROOM 240	X				X				
H-1 HUMIDIFIER FOR ROOM 237	X				X				
EF-2 START STOP & STATUS	X		X		X				
EF-2 VFD	X			X					
DRC-1 INLET WATER TEMPERATURE	X	X							
DRC-21OUTLET WATER TEMPERATURE	X	X							
AHU-1									
DISCHARGE SUPPLY AIR TEMPERATURE	X	X							
FAN START/STOP & STATUS	X		X		X				
FAN VFD	X			X					
OUTSIDE AIR DAMPER	X			X					
FACE & BYPASS DAMPER	X			X					
PREFILTER PRESSURE DIFFERENTIAL	X						X		
FINAL FILTER PRESSURE DIFFERENTIAL	X						X		
COOLING CONTROL VALVE	X			X					
HEATING CONTROL VALVE	X			X					
SMOKE DETECTOR	X							X	
FREESTAT	X							X	
DISCHARGE AIR RESET BASED ON OA TEMP	X								X
DHCC-1 INLET WATER TEMPERATURE	X	X							
DHCC-1 OUTLET WATER TEMPERATURE	X	X							
SUPPLY DUCT PRESSURE SENSOR	X	X							
EXHAUST DUCT PRESSURE SENSOR	X	X							
VAV-1 THROUGH VAV-9									
ROOM TEMPERATURE	X	X							
AIRFLOW, CFM	X	X							
DAMPER ACTUATOR	X				X				
REHEAT VALVE	X				X				
CD-1, 2, 3A, 3B, 4, 5, 6A, 6B, 7, 8, 9									
AIRFLOW, CFM	X	X							
DAMPER ACTUATOR	X				X				
EQUIPMENT COOLING									
238 WALK-IN COOLER VALVE	X				X				
LYPHOLIZER #1 VALVE	X				X				
LYPHOLIZER #2 VALVE	X				X				
LYPHOLIZER #3 VALVE	X				X				
221 WALK-IN COOLER VALVE	X				X				

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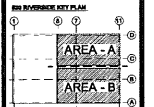
EnviroLogix
RIVERSIDE CAMPUS
530 - DNA EXPANSION
PORTLAND, MAINE

TFH ARCHITECTS
60 MIDDLE STREET
PORTLAND MAINE 04101
TELEPHONE 207 778 8144
ARCHITECTURE PLANNING

CONSULTANTS:

MECHANICAL:
Diverse Mechanical Engineers, Inc.
201 Commercial Street
Portland, ME 04101-4400
207-633-3333

ELECTRICAL:
Diverse Mechanical Engineers, Inc.
201 Commercial Street
Portland, ME 04101-4400
207-633-3333



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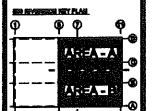
DATE:	BY:
8/17/11	
PROJECT No:	1028A
DRAWN BY:	AZZ
CHECKED BY:	RPG
SCALE:	AS NOTED
SHEET TITLE:	DETAILS

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TFM ARCHITECTS
80 MIDDLE STREET
PORTLAND, MAINE 04101
TELEPHONE 207 775 6141
ARCHITECTURE PLANNING

CONSULTANTS:
MECHANICAL: TFM ARCHITECTS
ELECTRICAL: TFM ARCHITECTS
PLUMBING: TFM ARCHITECTS
HVAC: TFM ARCHITECTS
MECHANICAL: TFM ARCHITECTS
ELECTRICAL: TFM ARCHITECTS
PLUMBING: TFM ARCHITECTS
HVAC: TFM ARCHITECTS

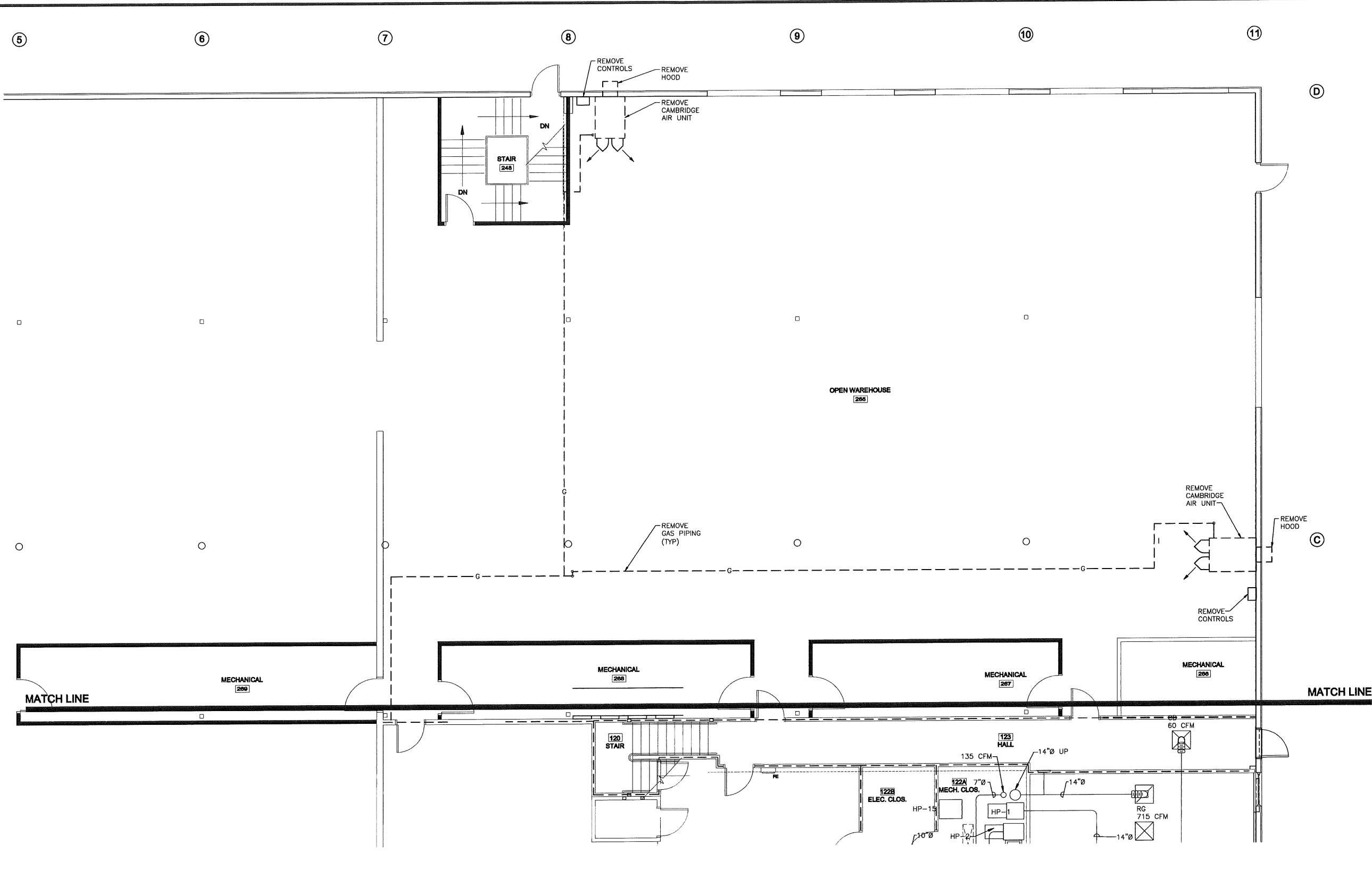


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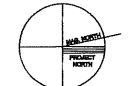
DATE: 8/17/11
PROJECT No.: 1028A
DRAWN BY: AZZ
CHECKED BY: RPO
SCALE: AS NOTED

SHEET TITLE:
FIRST FLOOR
PLAN - PART A
MECHANICAL

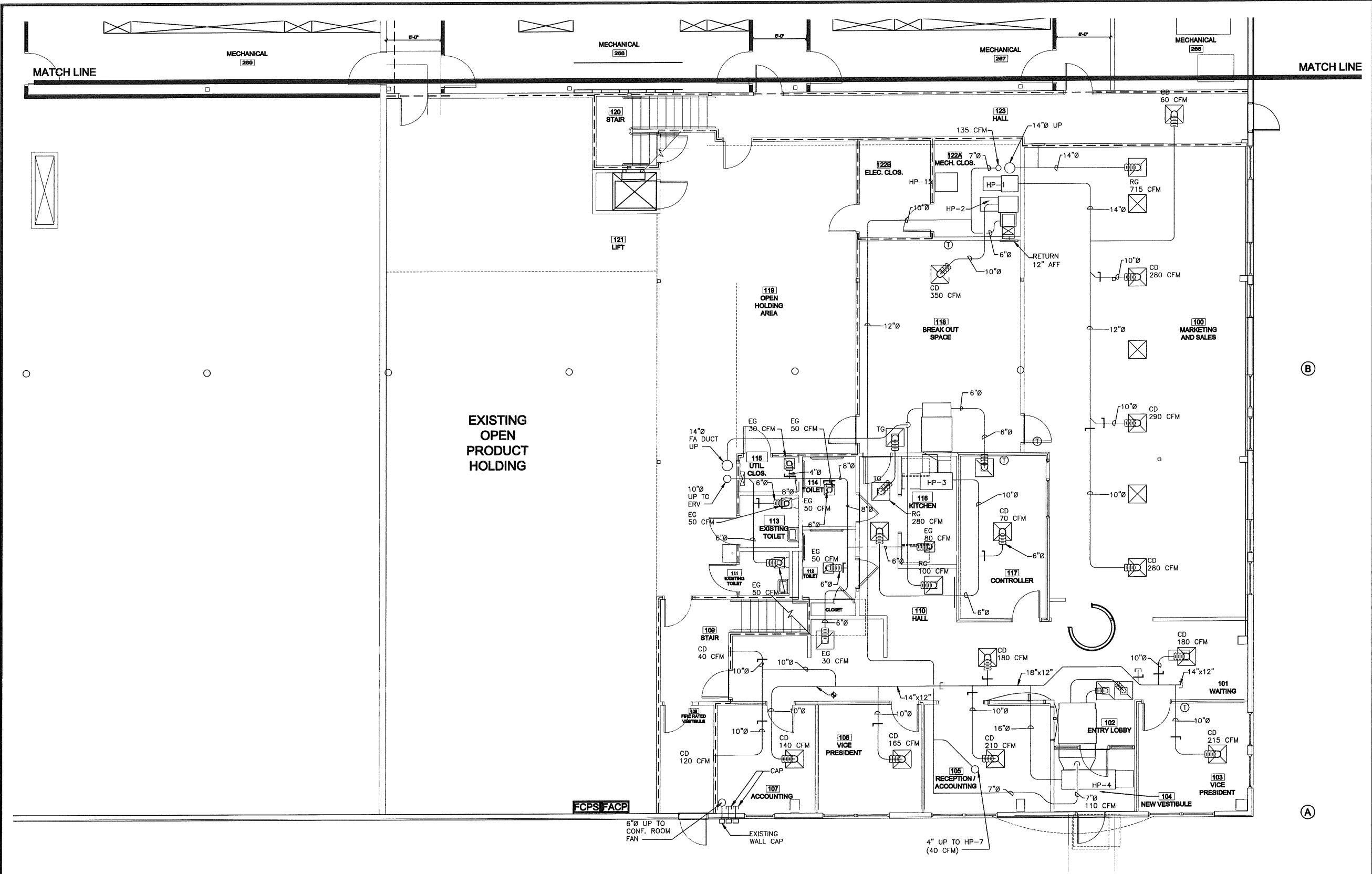
MD-1



1 FIRST FLOOR PLAN - PART A
MD-1 1/4" = 1'-0"



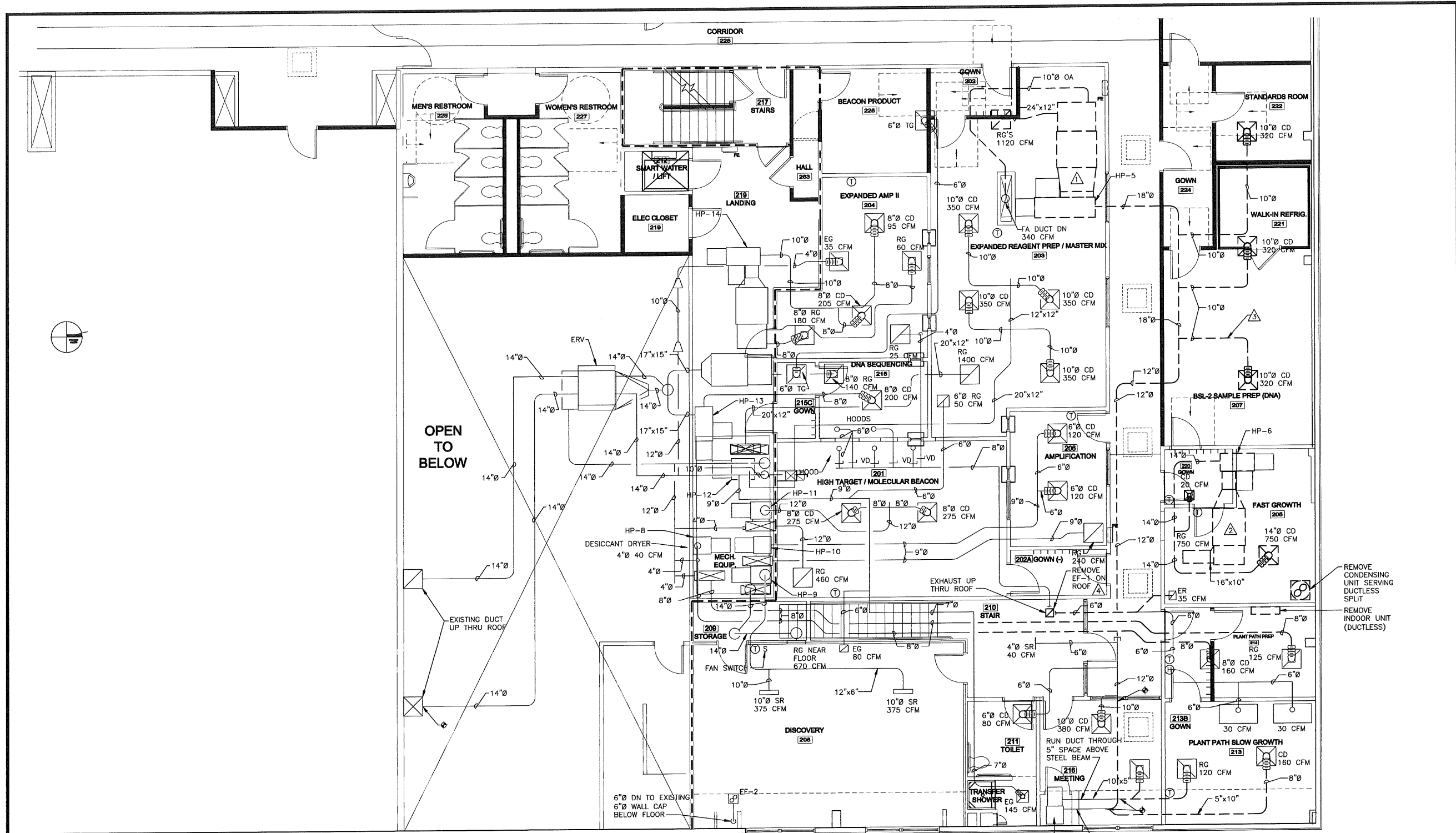
8/17/2011 10:56:57 AM



1 FIRST FLOOR PLAN - PART B
MD-2 1/4" = 1'-0"

DRAWING NOTE
1. THIS SHEET IS FOR INFORMATIONAL PURPOSES ONLY. NO WORK IN THIS AREA.

01/20/2011 10:55:44 AM

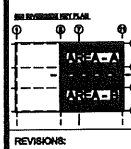


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TFH ARCHITECTS
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 PORTLAND, MAINE 04101
 TELEPHONE 207 778 6141
 ARCHITECTURE PLANNING

CONSULTANTS:
 ENGINEERING: [unreadable]
 MECHANICAL: [unreadable]
 ELECTRICAL: [unreadable]
 PLUMBING: [unreadable]
 STRUCTURAL: [unreadable]



REVISIONS:

DATE: 8/17/11
 PROJECT No.: 1008A
 DRAWN BY: AZZ
 CHECKED BY: RPO
 SCALE: AS NOTED

SHEET TITLE:
**SECOND FLOOR
 PLAN - PART B
 MECHANICAL**

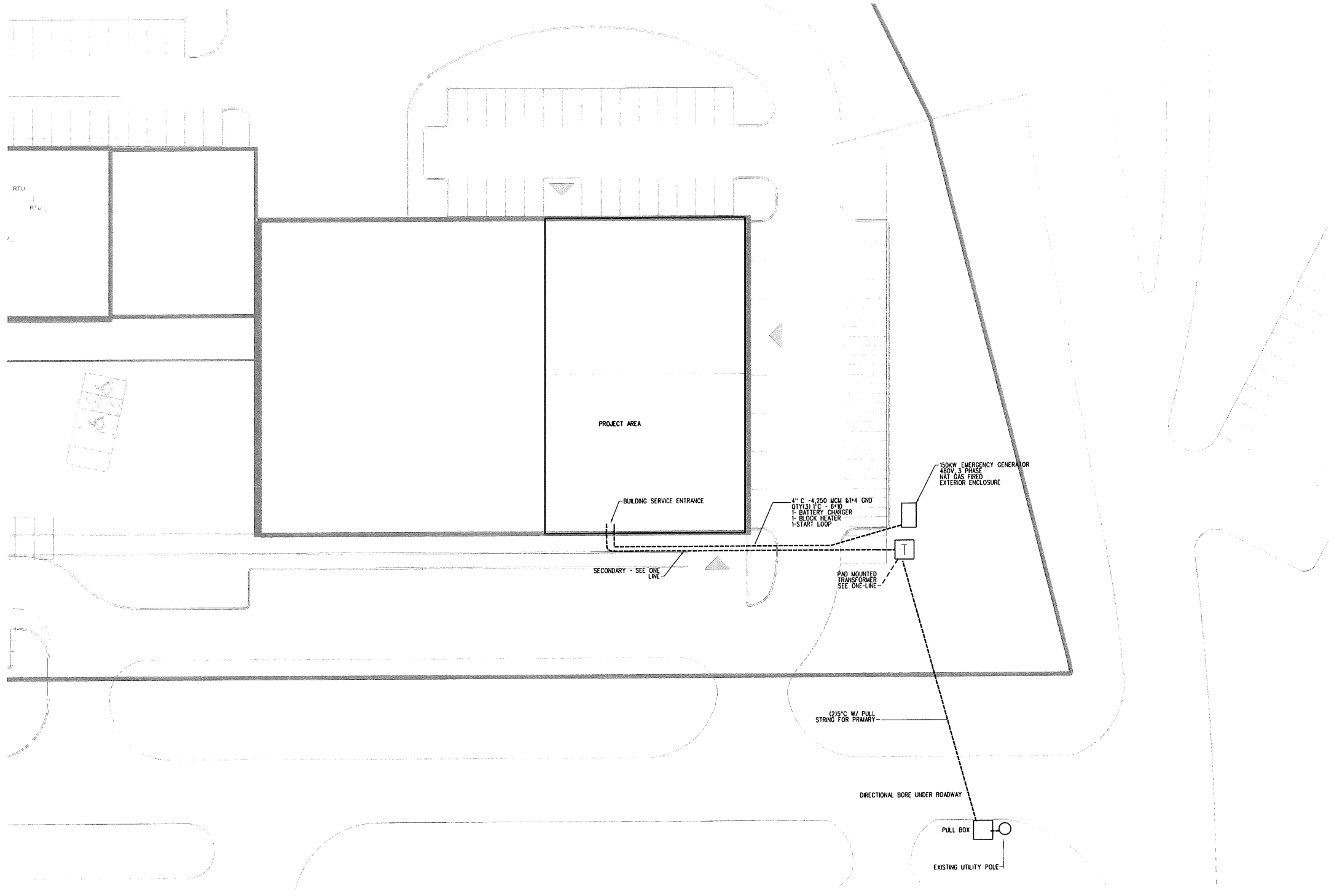
MD-3

1 SECOND FLOOR PLAN - PART B
 MD-3 1/8" = 1'-0"

- DRAWING NOTES**
- 1 REMOVE HP-5 AND DYNAMIC V-8 FILTER. DELIVER TO OWNER. REMOVE ASSOCIATED DUCTWORK, WATER SOURCE PIPING
 - 2 REMOVE HP-5 AND DYNAMIC V-8 FILTER. DELIVER TO OWNER. REMOVE ASSOCIATED DUCTWORK, WATER SOURCE PIPING
 - 3 REMOVE DUCTWORK, TYPICAL
 - 4 REMOVE EF-1 ON ROOF AND EXHAUST DUCT.



8/17/2011 10:46:59 AM



SITE ELECTRICAL PLAN
SCALE: 1" = 20'-0"

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ARCHITECTURE PLANNING

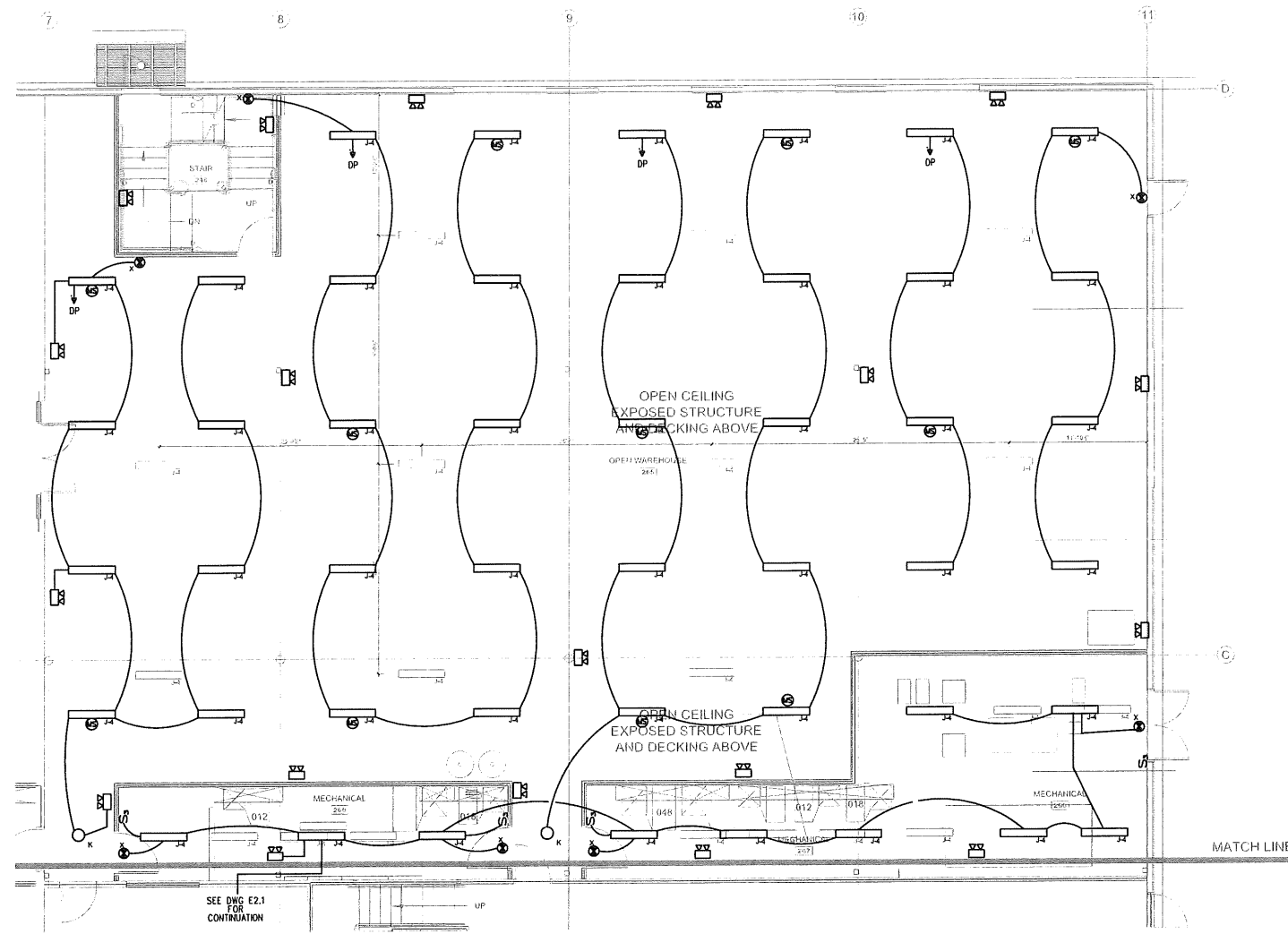
CONSULTANTS:
MECHANICAL:
Bennett Mechanical Engineers, Inc.
25 Park Street
Portland, ME 04101-4400
207-885-7475
ELECTRICAL:
Bennett Engineering Systems, P.L.L.C.
310 Middle Street
Portland, ME 04101
207-781-4383
PLUMBING:
Bennett Engineering Systems
310 Middle Street
Portland, ME 04101
207-885-7475

ENVIRONMENTAL REVIEW PLAN

REVISIONS:

DATE: 8/17/11
PROJECT No: 1026A
DRAWN BY: TWG
CHECKED BY: xxx
SCALE: AS NOTED
SHEET TITLE:
SITE ELECTRICAL
PLAN

E1.0



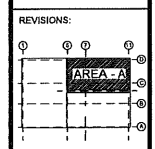
FIRST FLOOR PLAN - PART A LIGHTING
SCALE: 3/16"=1'-0"

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TFH ARCHITECTS
60 MIDDLE STREET
PORTLAND MAINE 04101
TELEPHONE: 207 776 6141
ARCHITECTURE PLANNING

CONSULTANTS:
ELECTRICAL:
Snyder Electrical Engineers, Inc.
33 York Street
Portland, ME 04101-4430
207-776-1000
MECHANICAL:
Energy Systems, P.L.C.
312 Middle Street
Portland, ME 04101
207-781-2213
MECHANICAL:
Bennett Engineering
7 Turner Road
Portland, ME 04102
207-864-9071

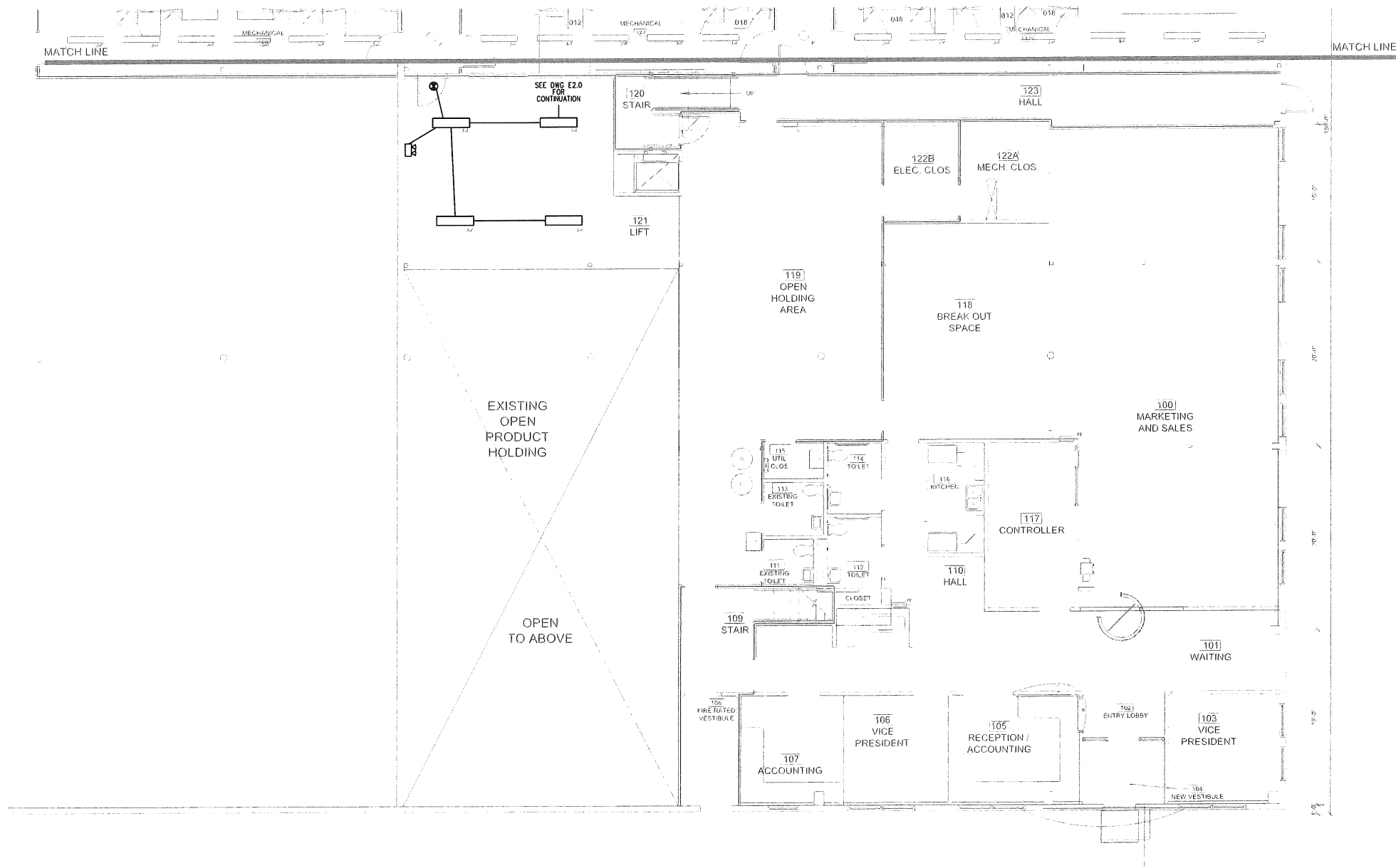
ENVIROLOGIX PLAN



DATE: 8/17/11
PROJECT No: 1026A
DRAWN BY: TWG
CHECKED BY: xxx
SCALE: AS NOTED

SHEET TITLE:
FIRST FLOOR PLAN
PART A
LIGHTING

E2.0



FIRST FLOOR PLAN - PART B LIGHTING

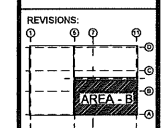
3/16"=1'-0"

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TFH ARCHITECTS
60 MIDDLE STREET
PORTLAND MAINE 04101
TELEPHONE 207 775 5141
ARCHITECTURE PLANNING

CONSULTANTS:
ELECTRICAL:
Senior Electrical Engineer, Inc.
35 York Street
Portland, ME 04101-4430
207-773-1100
MECHANICAL:
Energy Efficiency Systems, PLLC
310 Middle Street
Portland, ME 04101
207-741-1293
PLUMBING:
BENNETT ENGINEERING
7 Forest Road
Portland, ME 04102
207-863-8171

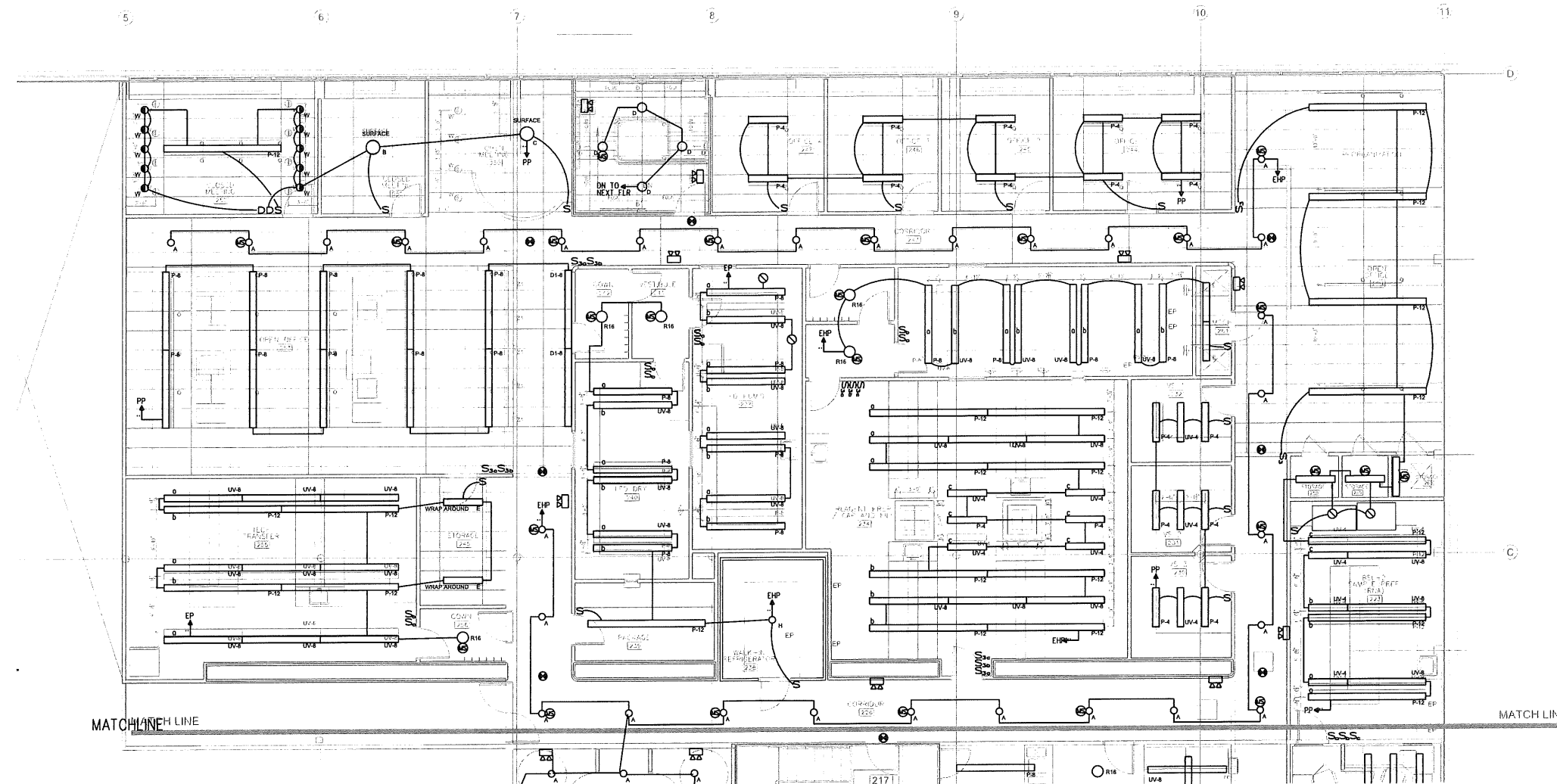
MECHANICAL PLAN



DATE: 8/17/11
PROJECT No: 1026A
DRAWN BY: TWG
CHECKED BY: xxx
SCALE: AS NOTED

SHEET TITLE:
FIRST FLOOR PLAN
PART B
LIGHTING

E2.1



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80 MIDDLE STREET
PORTLAND MAINE 04101
TELEPHONE 207 775 6141
ARCHITECTURE PLANNING

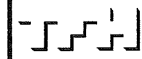
CONSULTANTS:
STRUCTURAL:
Bentley Structural Engineers, Inc.
215 Oak Street
Portland, ME 04101-4400
207 799 4000
Mechanical:
Bennett Engineering Systems, PLLC
215 Oak Street
Portland, ME 04101
207 791 4243
Electrical:
Bennett Engineering
1 Forest Road
Portland, ME 04102
207 663 6112

REVISIONS:

DATE: 8/17/11
PROJECT No: 1026A
DRAWN BY: TWG
CHECKED BY: xxx
SCALE: 3/16"=1'-0"AS NOTED
SHEET TITLE:
SECOND FLOOR PLAN
PART A
LIGHTING

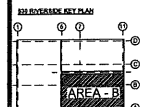
E2.2

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TFH ARCHITECTS
80 MIDDLE STREET
PORTLAND, MAINE 04101
TELEPHONE: 207 775 5141
ARCHITECTURE PLANNING

CONSULTANTS:
STRUCTURAL:
Bentley Structural Engineers, Inc.
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Telephone: 207-775-5141
207-775-5141
Mechanical:
Mechanical Energy Systems, PLLC
310 Adams Road
Portland, ME 04105
207-771-4293
Electrical:
Bennett Engineering
7 Laurel Road
Portland, ME 04103
207-861-6611

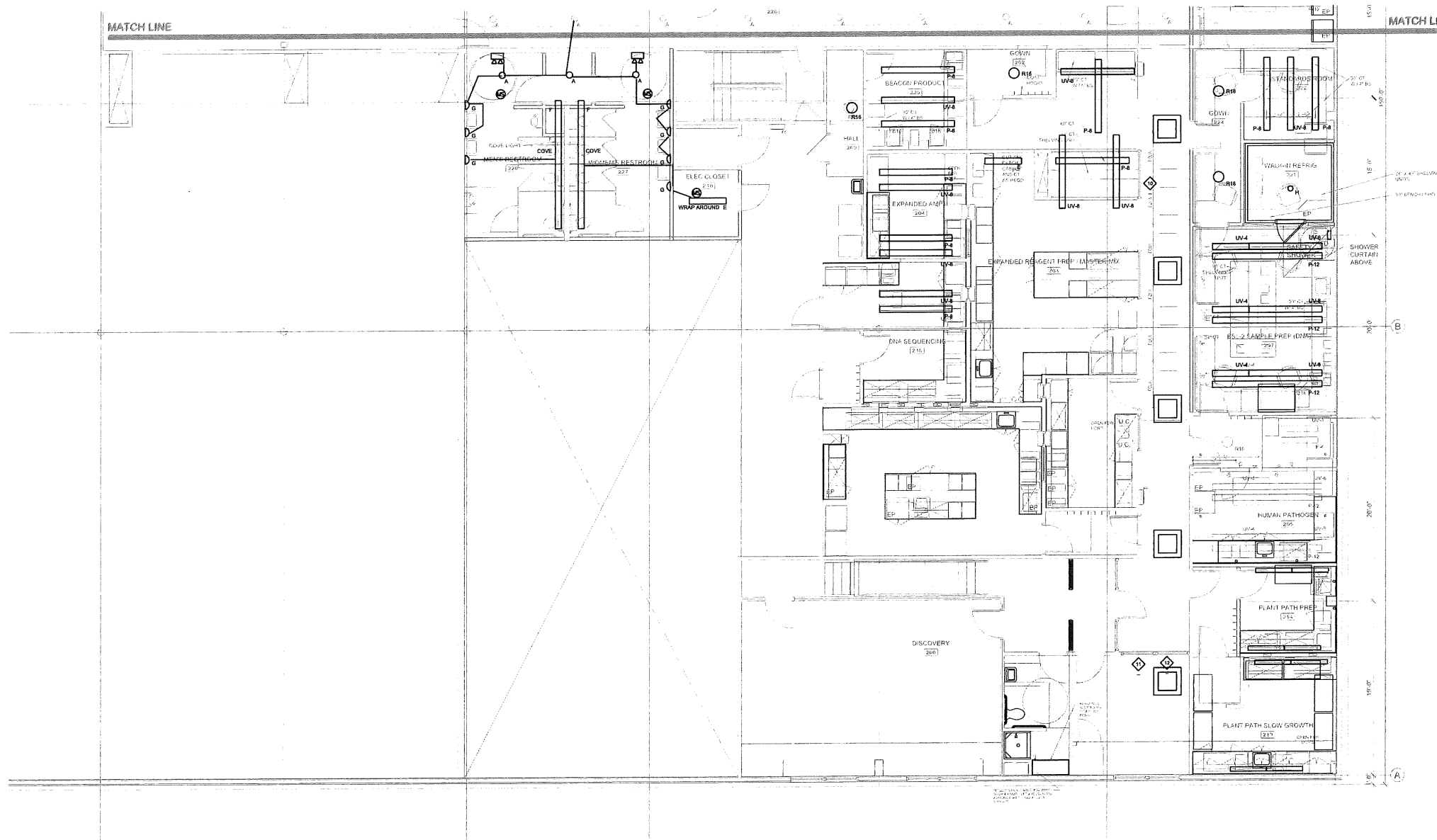


REVISIONS:

DATE: 8/17/11
PROJECT No: 1026A
DRAWN BY: TWG
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SCALE: AS NOTED

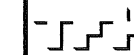
SHEET TITLE:
SECOND FLOOR PLAN
PART B
LIGHTING

E2.3



SECOND FLOOR PLAN - PART B LIGHTING
3/16"=1'-0"

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PORTLAND MAINE 04101
TELEPHONE 207 775 8141
ARCHITECTURE PLANNING

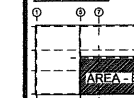
CONSULTANTS:

STRUCTURAL
Bennett Engineering, Inc.
75 York Street
Portland, ME 04101-4400
207 478-1334

Mechanical
Integrated Energy Systems, P.L.L.C.
215 Main Street
Portland, ME 04101
207 775-6242

ELECTRICAL
Bennett Engineering
Portland, ME 04101
207 478-8475

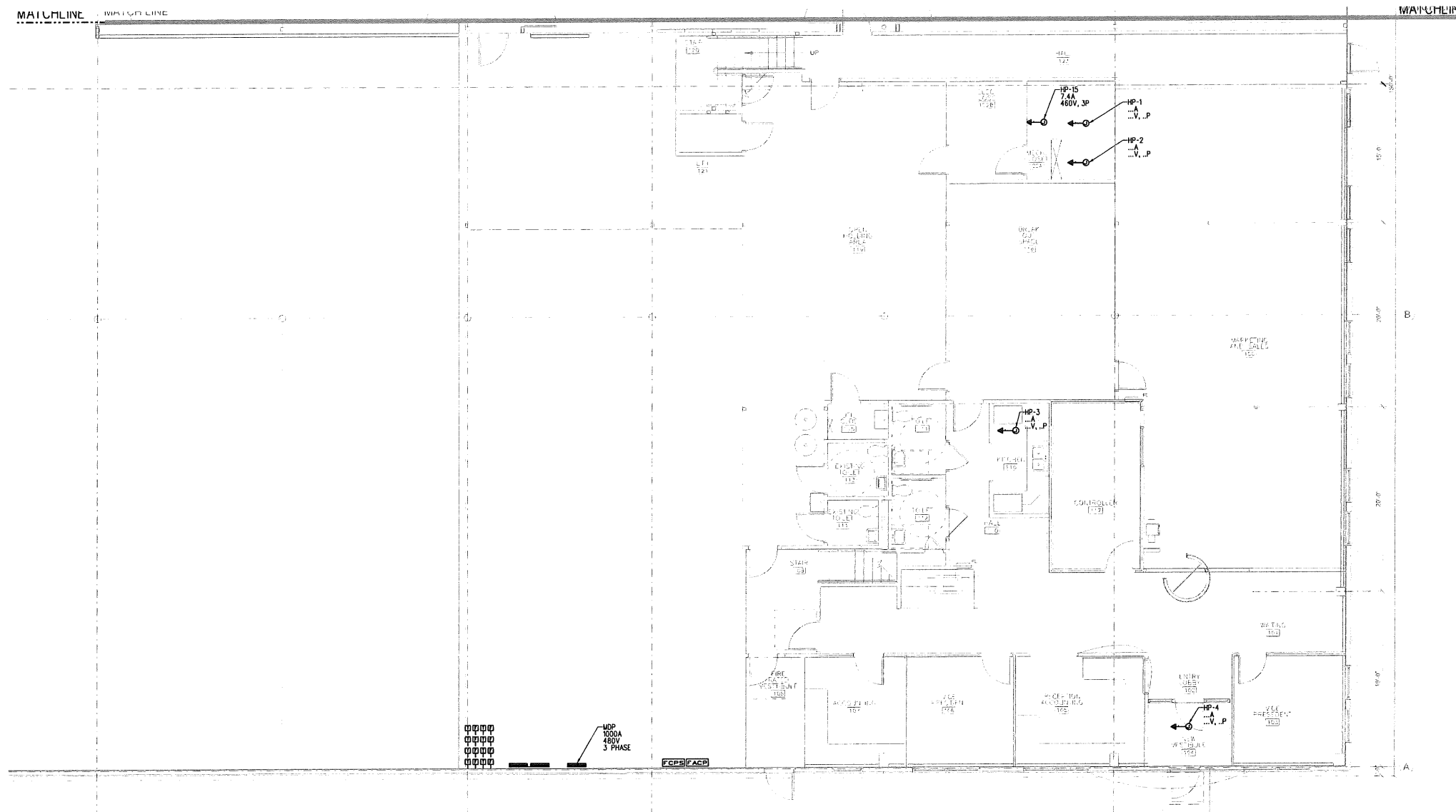
SEE EXHIBIT PLANS



REVISIONS:

DATE:	8/17/11
PROJECT No.:	1026A
DRAWN BY:	TWG
CHECKED BY:	xxx
SCALE:	AS NOTED
SHEET TITLE:	FIRST FLOOR PLAN PART B POWER

E3.1



FIRST FLOOR PLAN - PART B POWER
3/16"=1'-0"

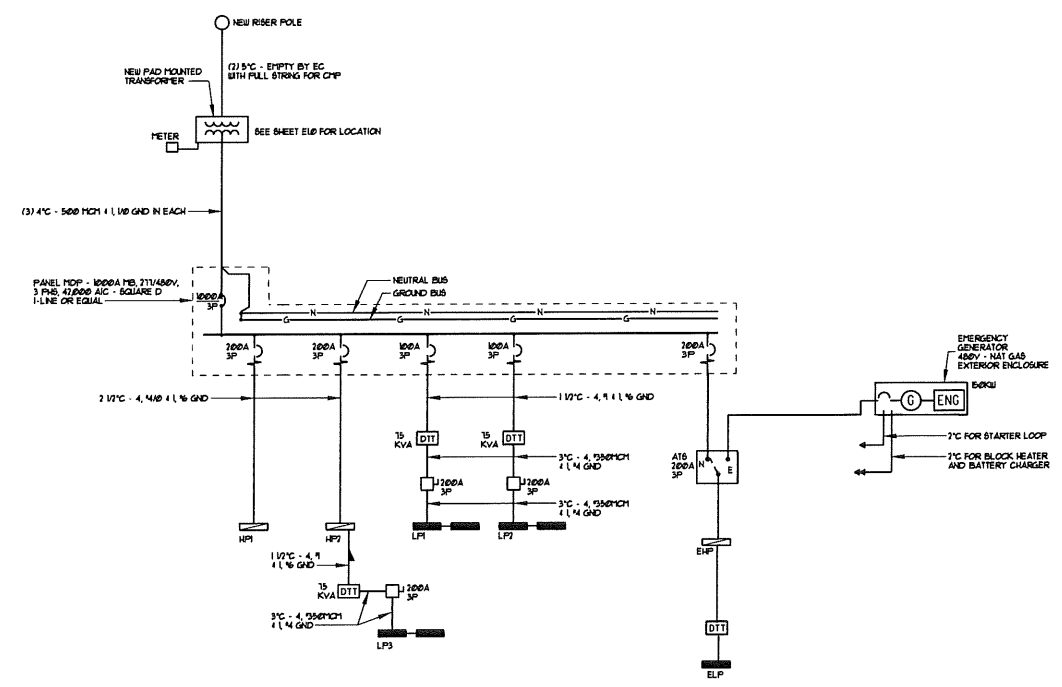
LIGHTING FIXTURE SCHEDULE

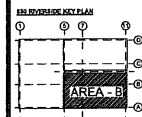
TYPE	DESCRIPTION	LAMPS QUANTITY & TYPE	REMARKS
A	PRESCOLITE LF6CFV32EB-6CFVWW	(1) 32W 4 PIN	....
B	....	....	....
C	....	....	....
D1	FINELITE S12-WH-D-WCB-4'-218-SC-91W-120V-CE	(2) T8	....
E	....	....	....
F	....	....	....
G	....	....	....
H	....	....	....
I	....	....	....
J4	PROGRESS LIGHTING P7186-30EB	(2) F32T8	....
K	....	....	....
L	....	....	....
M	....	....	....
N	....	....	....
O	....	....	....
P-4	FINELITE S12-D-WCB-4'-218-SC-91W-OPEN-120V-FA50-CE-C1	(2) T8 4 FOOT LENGTH	....
P-8	FINELITE S12-D-WCB-8'-218-SC-91W-OPEN-120V-FA50-CE-C1	(2) T8 8 FOOT LENGTH	....
P-12	FINELITE S12-D-WCB-12'-218-SC-91W-OPEN-120V-FA50-CE-C1	(2) T8 12 FOOT LENGTH	....
Q	....	....	....
R16	PROGRESS LIGHTING P7308-60 16" DIAMETER	(1) FC219 32W	....
R20	PROGRESS LIGHTING P7309-60 120" DIAMETER	(1) FC219 32W	....
S	....	....	....
T	....	....	....
UV4	COLUMBIA LIGHTING WC4-232-EU	(2) T8 32W 4 FOOT LENGTH	....
UV8	COLUMBIA LIGHTING WCB-232-EU	(2) T8 32W 8 FOOT LENGTH	....
V	....	....	....
W	....	....	....
X	COMPASS LIGHTING CSKWREB3 (EXIT LIGHT)	LED SUPPLIED W/ UNIT	....
Y	COMPASS LIGHTING CSEU2 (EMERGENCY LIGHT)	(2) 5.4W	....
Z	....	....	....

All lighting fixtures shall be energy star rated or have high performance T8 ballast and lamps to meet efficiency Maine criteria.

SYMBOL LEGEND

- POWER PANEL 277/480, 3PHS, 4WRE
 - POWER PANEL 120/208, 3PHS, 4WRE
 - ELECTRIC MOTOR DRIVEN EQUIPMENT, HP SHOWN
 - MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD DEVICE MOUNT AT UNIT
 - JUNCTION BOX
 - DISCONNECT SWITCH - 600 VOLT - SIZE & NO. POLES AS NOTED.
 - DISCONNECT SWITCH - 250 VOLT - SIZE & NO. POLES AS NOTED.
 - COMBINATION CIRCUIT BREAKER & MAGNETIC MOTOR STARTER - NEMA SIZE 1W/4 AUX CONTACTS AND HAND-OFF-AUTO SWITCH W/RED POWER ON PILOT LIGHT, SUPPLIED BY E.C. - UNLESS OTHERWISE NOTED.
 - VARIABLE SPEED DRIVE SUPPLIED BY M.C. WIRED BY E.C.
- LIGHTING FIXTURES- CAPITAL LETTERS DENOTE TYPE AS PER LIGHTING FIXTURE SCHEDULE. LOWER CASE LETTERS INDICATE SWITCH CONTROL. "O" INDICATES INBOARD LAMPS CONTROLLED BY SWITCH "O"-OUTBOARD CONTROLLED BY SWITCH "O" DIAGONAL INDICATES NIGHT LIGHT (UNSWITCHED)
- EXIT LIGHT FIXTURE-UNSWITCHED - SEE LIGHTING FIXTURE SCHEDULE
 - SELF CONTAINED EMERGENCY LIGHTING UNIT W/2 HEADS.
 - SINGLE POLE SWITCH, 120 VOLT, 20 AMP, SPECIFICATION GRADE, GROUNDING TYPE, MOUNT 48"
 - 3-1-WAY, 4-1-WAY, P-PILOT, W-WEATHERPROOF LOWER CASE LETTERS INDICATES FIXTURE OR CONTROLLED LOAD. PILOT LIGHT SWITCHES SHALL BE PROVIDED W/ ENGRAVED NAMEPLATE IDENTIFYING USE.
 - LIGHTING DIMMER SWITCH, SPECIFICATION GRADE, GROUNDING TYPE, MOUNT 48"
 - MOTION SENSOR SWITCH, 120 VOLT, WALL MOUNT 48" OR CEILING MOUNTED - DUAL TECHNOLOGY.
- RACEWAY & WIRING OR MC CABLE RUN CONCEALED IN WALLS/CEILING.
 RACEWAY & WIRING RUN EXPOSED
 RACEWAY & WIRING RUN CONCEALED UNDER FLOOR
 HOME RUN TO PANEL- ARROWS INDICATE QUANTITY OF CIRCUITS- NUMERALS DENOTE CIRCUIT NUMBERS
- BRANCH CIRCUIT WIRING SHALL CONSIST OF 2/19, 2/12, 2/10, 2/8 UNLESS OTHERWISE NOTED. ACTING INDICATES "10" AND FOR ALL CIRCUITS CONTAINED IN HOWERUN DOUBLE ASTERISK INDICATES 2, *8 & 1, *10, 3/4"
- TEMPERATURE CONTROL PANEL - SUPPLIED BY M.C. WIRED BY E.C.
 - DUPLEX RECEPTACLE- 20A, 125V SPECIFICATION GRADE GROUNDING TYPE MOUNT 18" AFF OR AS INDICATED ON DRAWINGS. "R" DENOTES REFRIGERATOR
 - DOUBLE DUPLEX RECEPTACLE- 20A, 125V SPECIFICATION GRADE GROUNDING TYPE AND MOUNT 18" AFF OR AS INDICATED ON DRAWINGS.
 - DUPLEX RECEPTACLE- GROUND FAULT OUTLET 20A, 125V - SPECIFICATION GRADE FLUSH MOUNTED 45" AFF - EXCEPT AS NOTED
 - DUPLEX RECEPTACLE - FLUSH FLOOR MOUNTED 20A, 125V SPECIFICATION GRADE GROUNDING TYPE
 - FIRE ALARM HEAT DETECTOR, FIXED TEMPERATURE 200°F
 - SMOKE DETECTOR, PHOTOELECTRIC TYPE- SYSTEM CONNECTED
 - FIRE ALARM PULL STATION MOUNT 48" AFF
 - FIRE ALARM AUDIO/VISUAL, MOUNT AT 6'-8" AFF "10" DENOTES MWHORN NUMERALS INDICATE CANDELA RATING
 - FIRE ALARM VISUAL STROBE ONLY, MOUNT AT 6'-8" AFF NUMERALS INDICATE CANDELA RATING
 - DUCT MOUNTED SMOKE DETECTOR
 - FIRE ALARM ANNUNCIATOR PANEL
 - FIRE ALARM CONTROL PANEL
 - TELEPHONE/DATA DUAL JACK LOCATION - FLUSH FLOOR MOUNTED - TWO CAT 5E CABLES BACK TO TBB.
 - TELEPHONE/DATA DUAL JACK LOCATION MOUNT 18" AFF - TWO CAT 5E CABLES BACK TO TBB.
 - TELEPHONE JACK LOCATION MOUNT 18" AFF - ONE CAT 5E CABLE BACK TO TBB.
 - TV OUTLET LOCATION
 - MAGNETIC DOOR HOLDER
 - FWU DENOTES FURNISHED WITH UNIT
 - WP DENOTES WEATHERPROOF CONSTRUCTION
 - CRD CARD READER
 - DOOR ELECTRIC STRIKE



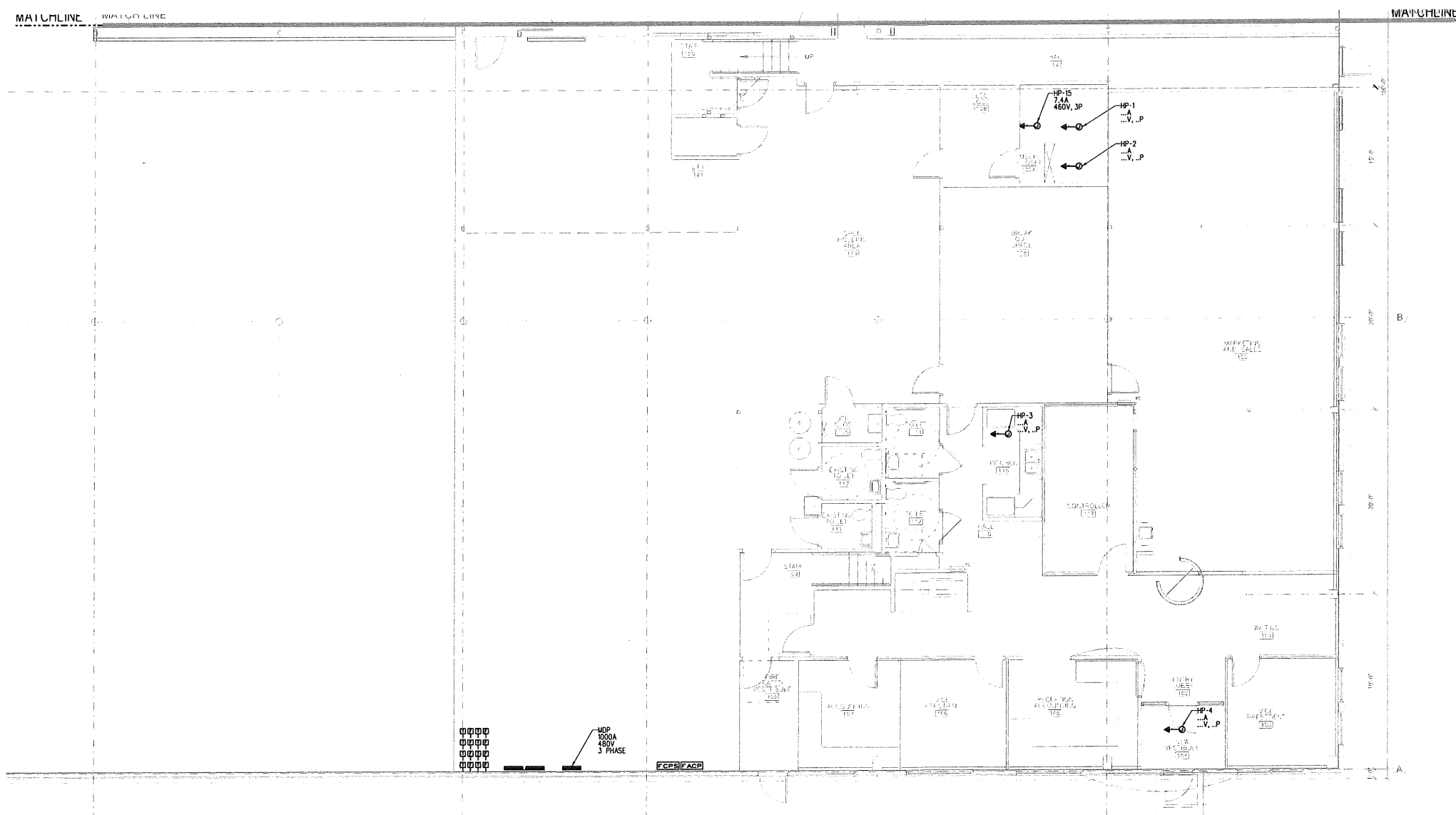


REVISIONS:

DATE: 8/17/11
PROJECT No: 1026A
DRAWN BY: TWG
CHECKED BY: xxx
SCALE: AS NOTED

SHEET TITLE:
FIRST FLOOR PLAN
PART B
POWER

E3.1

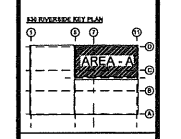


FIRST FLOOR PLAN - PART B POWER
3/16"=1'-0"

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RIVERSIDE CAMPUS
530 - DNA EXPANSION
PORTLAND, MAINE

TFH ARCHITECTS
60 MIDDLE STREET
PORTLAND MAINE 04101
TELEPHONE 207 775 8141
ARCHITECTURE PLANNING

CONSULTANTS:
MECHANICAL:
Bennett Engineering, Inc.
310 Main Street
Portland, ME 04101-4400
207-775-8141
ELECTRICAL:
Bennett Engineering, Inc.
310 Main Street
Portland, ME 04101-4400
207-775-8141



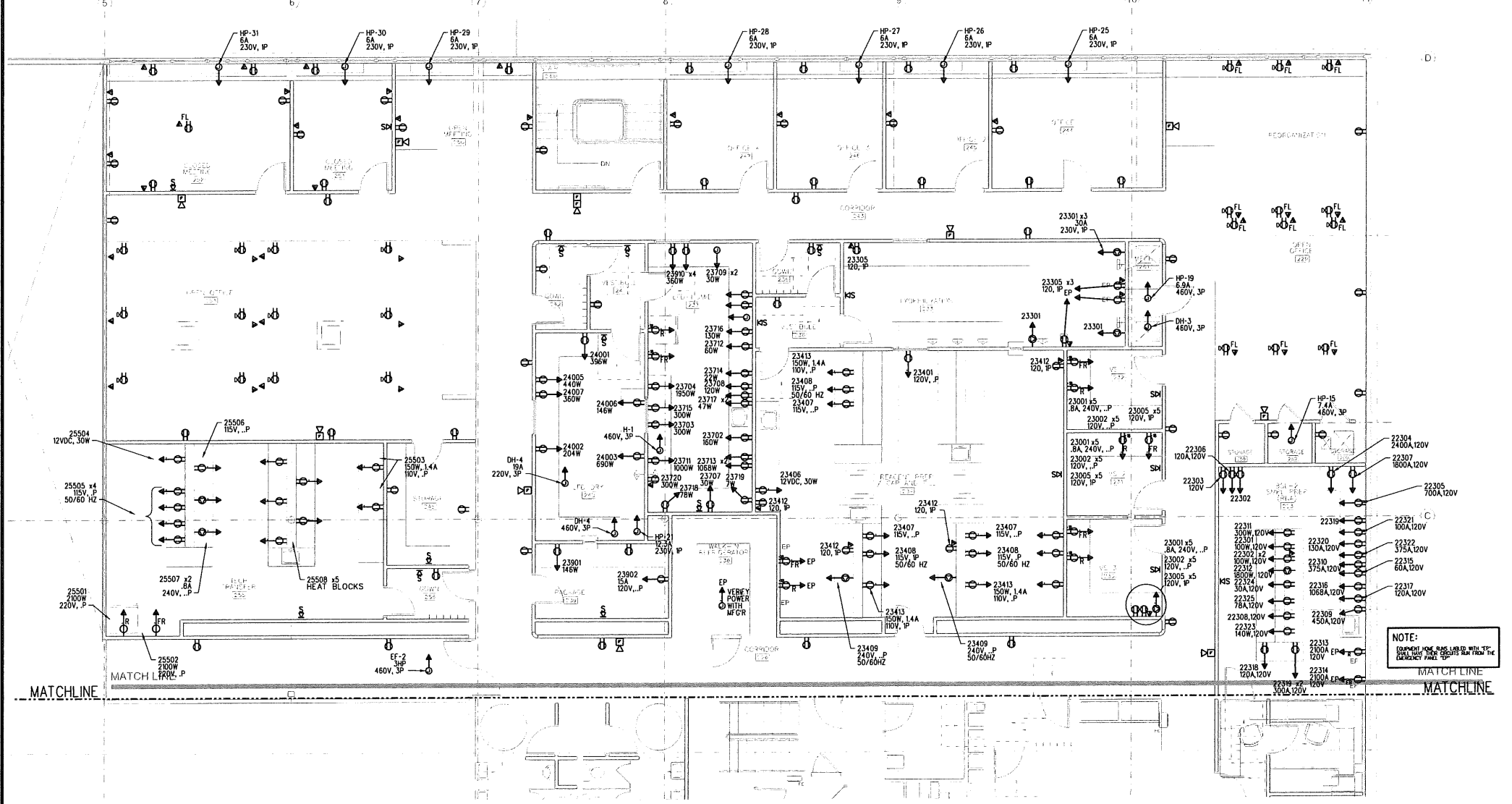
REVISIONS:

DATE: 8/17/11
PROJECT No: 1026A
DRAWN BY: TWG
CHECKED BY: xxx
SCALE: AS NOTED

SHEET TITLE:
SECOND FLOOR PLAN
PART A
POWER

E3.2

ISSUED FOR PERMITTING



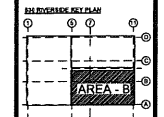
SECOND FLOOR PLAN - PART A POWER
3/16"=1'-0"

NOTE:
EQUIPMENT AND PANELS LISTED WITH "EP"
INDICATE THAT THEY REQUIRE EARTHING FOR
ELECTRIC SAFETY.

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RIVERSIDE CAMPUS
530 - DNA EXPANSION
PORTLAND, MAINE

TFH ARCHITECTS
80 MIDDLE STREET
PORTLAND MAINE 04101
TELEPHONE 207 776 6141
ARCHITECTURE PLANNING

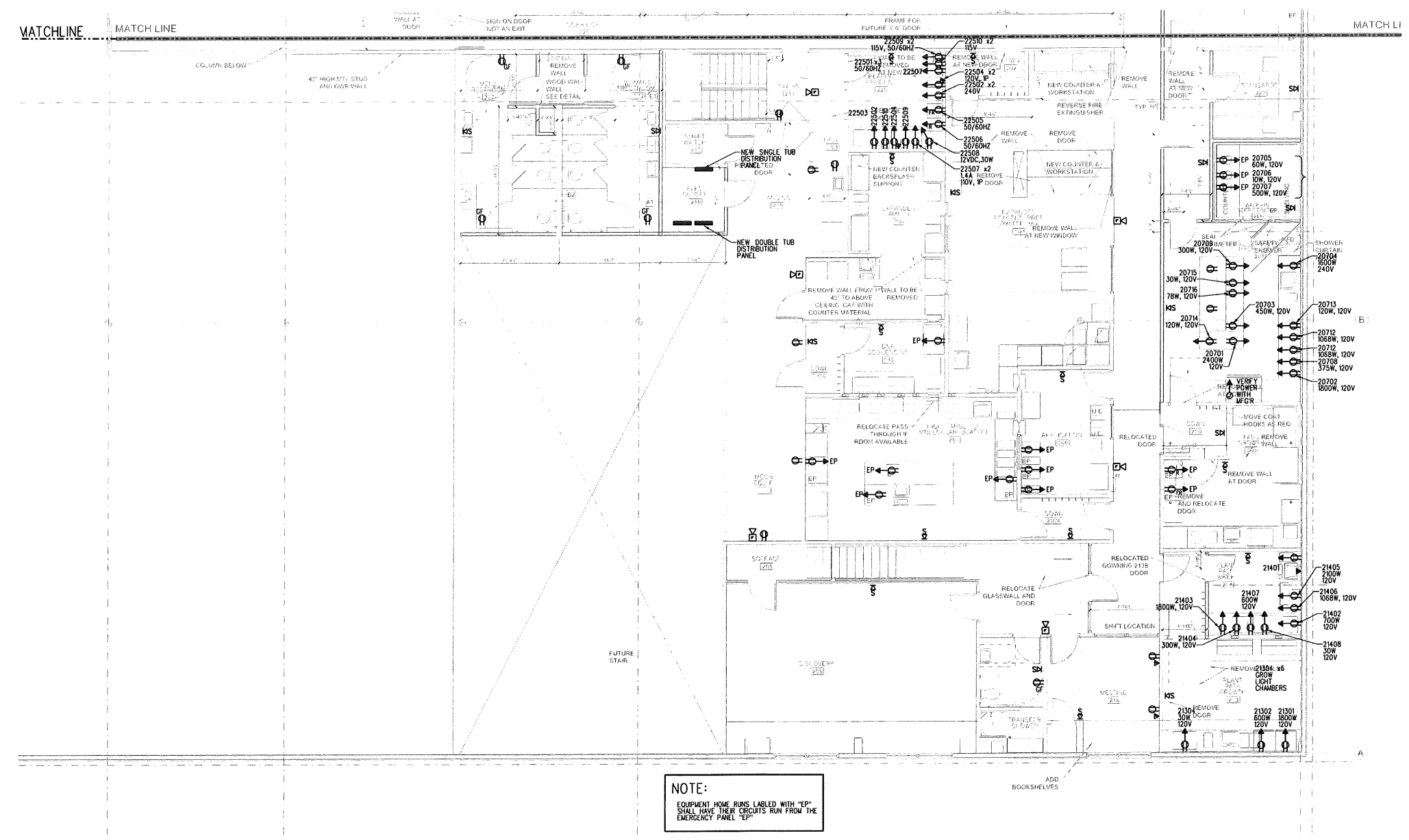
CONSULTANTS:
STRUCTURAL:
Bentley Structural Engineers, Inc.
715 Oak Street
Portland, ME 04101-4400
207-750-0100
Mechanical:
Bentley Energy Systems, PLLC
215 Main Street
Portland, ME 04101
207-751-4200
ELECTRICAL:
BENTLEY ENGINEERING
715 Oak Street
Portland, ME 04101
207-750-0100



REVISIONS:

DATE:	8/17/11
PROJECT No.	1026A
DRAWN BY:	TWG
CHECKED BY:	xxx
SCALE:	AS NOTED
SHEET TITLE:	SECOND FLOOR PLAN PART B POWER

E3.3



SECOND FLOOR PLAN - PART B POWER
3/16"=1'-0"

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

Job No: 2011-12-2831-ALTCOMM	Date Applied: 11/29/2011	CBL: 370A- A-012-001	
Location of Construction: 524 RIVERSIDE IND PKWY (530)	Owner Name: 500 RIVERSIDE ASSOCIATES	Owner Address: PO BOX 382 CUMBERLAND CTR, ME 4021	Phone 207-797-0300
Business Name:	Contractor Name: Warren Construction Group	Contractor Address: POB 362, South Freeport, ME 04078	Phone: 207-865-3522
Lessee/Buyer's Name:	Phone:	Permit Type: BLDG - Building	Zone:
Past Use: Manufacturing and Research & Development - EnviroLogix	Proposed Use: Same - EnviroLogix - amendment to permit #2011-09- 2338 - to complete the exterior work - doors, louvers & mechanical equipment	Cost of Work: 1000.000000	CEO District:
		Fire Dept: <input checked="" type="checkbox"/> Approved w/ conditions <input type="checkbox"/> Denied <input type="checkbox"/> N/A	Inspection: Use Group: B Type: N/A EXTERIOR Pads Signature: JMB
Proposed Project Description: amendment 2011-09-2338 - exterior work		Pedestrian Activities District (P.A.D.) 12/7/11	
Permit Taken By:	Zoning Approval		

<p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building Permits do not include plumbing, septic or electrical work.</p> <p>3. Building permits are void if work is not started within six (6) months of the date of issuance. False informatin may invalidate a building permit and stop all work.</p>	<p>Special Zone or Reviews</p> <p><input type="checkbox"/> Shoreland</p> <p><input type="checkbox"/> Wetlands</p> <p><input type="checkbox"/> Flood Zone</p> <p><input type="checkbox"/> Subdivision</p> <p><input type="checkbox"/> Site Plan - Admin Author 2011-375</p> <p><input type="checkbox"/> Maj <input type="checkbox"/> Min <input type="checkbox"/> MM</p> <p>Date: OK w/ condition 12/16/11 JMB</p>	<p>Zoning Appeal</p> <p><input type="checkbox"/> Variance</p> <p><input type="checkbox"/> Miscellaneous</p> <p><input type="checkbox"/> Conditional Use</p> <p><input type="checkbox"/> Interpretation</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Denied</p> <p>Date:</p>	<p>Historic Preservation</p> <p><input checked="" type="checkbox"/> Not in Dist or Landmark</p> <p><input type="checkbox"/> Does not Require Review</p> <p><input type="checkbox"/> Requires Review</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Approved w/Conditions</p> <p><input type="checkbox"/> Denied</p> <p>Date: JMB</p>
	CERTIFICATION		

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the appication is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
- **Permits expire in 6 months. If the project is not started or ceases for 6 months.**
- **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.**

Footings/Rebar/Setbacks prior to pouring concrete

Final Inspection

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.



PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life • www.portlandmaine.gov

Director of Planning and Urban Development

Penny St. Louis

Job ID: 2011-12-2831-ALTCOMM

Located At: 524 RIVERSIDE IND
PKWY

CBL: 370A- A-012-001

Conditions of Approval:

Zoning

1. This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.
2. Permit 2011-09-2338 was issued for interior work only because an Administrative Authorization Application was not applied for to do the proposed exterior work. The Administrative Authorization Application was approved 11/8/11. This permit is to do the exterior work that was shown on the original permit.

Fire

1. All construction shall comply with City Code Chapter 10.
2. Any cutting and welding done will require a Hot Work Permit from Fire Department.

Building

1. Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approval prior to work.
2. Equipment shall be installed in compliance with the manufacturer's specifications and the UL listing.
3. Separate permits are required for any electrical, plumbing, sprinkler, fire alarm, HVAC systems, heating appliances, including pellet/wood stoves, commercial hood exhaust systems and fuel tanks. Separate plans may need to be submitted for approval as a part of this process.

66

IM

2011 12 28 31

General Building Permit Application



If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: ⁵²⁴ 530 Riverside Industrial Parkway, Portland ME 04103-1486		
Total Square Footage of Proposed Structure/Area Interior Addition of ±9880 GSF		Square Footage of Lot ± 7.07 Acres
Tax Assessor's Chart, Block & Lot Chart# Block# Lot# 370A - A -12	Applicant *must be owner, Lessee or Buyer* Name Bruce S. Ferguson, President Address 500 Riverside Ind. Pkwy. City, State & Zip Portland, ME 04103-1486	Telephone: 207-797-0300
Lessee/DBA (If Applicable) EnviroLogix 500 Riverside Industrial Parkway Portland, ME 04103-1486	Owner (if different from Applicant) Name Address City, State & Zip	Cost Of Work: \$ 0 C of O Fee: \$ NA Total Fee: \$ 30.00
Current legal use (i.e. single family) Industrial / Business If vacant, what was the previous use? Proposed Specific use: Business Is property part of a subdivision? No If yes, please name _____ Project description: Interior expansion and renovation of current facilities. Expansion includes new second floor deck & fitout. Exterior work includes doors, louvers and mechanical equipment added to exterior of existing building. In order to meet our clients deadline our contractor is scheduled to commence work by September 8.		
Contractor's name: Warren Construction Group, LLC Address: POB 362 City, State & Zip South Freeport, ME 04078 Who should we contact when the permit is ready: Peter Warren Mailing address: POB 362, South Freeport, ME 04078		NOV 29 2011 Dept. of Building Inspections City of Portland, Maine Telephone: 207-865-3522 Telephone: 207-865-3522

amend ment to 2011 09 23 31

- exterior work not part of original

RECEIVED

perm. - needed site plan approval

Please submit all of the information outlined on the applicable Checklist. Failure to do so will result in the automatic denial of your permit.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information or to download copies of this form and other applications visit the Inspections Division on-line at www.portlandmaine.gov, or stop by the Inspections Division office, room 315 City Hall or call 874-8703.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature: Date: 11/29/11

This is not a permit; you may not commence ANY work until the permit is issue



2011 09 23 38

* 201-375

Administrative Authorization Application

Portland, Maine

Planning and Urban Development Department, Planning Division

PROJECT NAME: ENVIROLOGIX DNA LAB & OFFICE EXPANSION
 PROJECT ADDRESS: (524) 530 RIVERSIDE IND. PKWY CHART/BLOCK/LOT: 370A12
 APPLICATION FEE: ✓ (\$50.00) 370A-A-12

PROJECT DESCRIPTION: (Please Attach Sketch/Plan of the Proposal/Development)
INTERIOR RENOVATION & EXPANSION, EXTERIOR ENTRANCE & UTILITIES

CONTACT INFORMATION:

OWNER/APPLICANT

CONSULTANT/AGENT

Name: ENVIROLOGIX - PETER JOHNSON
 Address: 500 RIVERSIDE IND PKWY.
PORTLAND ME 04103
 Work #: 207-797-0300
 Cell #: 978-239-1621
 Fax #: 207-797-7533
 Home #: _____
 E-mail: PETER.JOHNSON@PAINTEDSIR
PARTNERS.COM

Name: TFH ARCHITECTS - DAVE MERRILL
 Address: 40 MIDDLE ST
PORTLAND, ME 04101
 Work #: 207-775-6141
 Cell #: _____
 Fax #: 207-773-0144
 Home #: _____
 E-mail: dave@TFHARCHITECTS.COM

Criteria for an Administrative Authorizations: (see section 14-523(4) on pg .2 of this appl.)

Applicant's Assessment Planning Division
 Y(yes), N(no), N/A Y(yes), N(no), N/A

a) Is the proposal within existing structures?	<u>YES EXCEPT UTILITY PADS</u>	<u>Yes - tanks</u>
b) Are there any new buildings, additions, or demolitions?	<u>N</u>	<u>outside tanks</u>
c) Is the footprint increase less than 500 sq. ft.?	<u>Y</u>	<u>Y</u>
d) Are there any new curb cuts, driveways or parking areas?	<u>N</u>	<u>N</u>
e) Are the curbs and sidewalks in sound condition?	<u>Y</u>	<u>✓</u>
f) Do the curbs and sidewalks comply with ADA?	<u>Y</u>	<u>✓</u>
g) Is there any additional parking?	<u>N</u>	<u>N</u>
h) Is there an increase in traffic?	<u>N</u>	<u>N</u>
i) Are there any known stormwater problems?	<u>N</u>	<u>N</u>
j) Does sufficient property screening exist?	<u>Y</u>	<u>Y</u>
k) Are there adequate utilities?	<u>Y</u>	<u>Y</u>
l) Are there any zoning violations?	<u>N</u>	<u>N</u>
m) Is an emergency generator located to minimize noise?	<u>Y</u>	<u>Y</u>
n) Are there any noise, vibration, glare, fumes or other impacts?	<u>N</u>	<u>N</u>

Signature of Applicant: [Signature] TFH ARCHITECTS Date: 10/28/11

Planning Division Use Only

Authorization Granted Partial Exemption Exemption Denied

with standard condition

Barbara S. Smyth, Dev. Rev. Mgr.

Standard Condition of Approval: The applicant shall obtain all required City Permits, including building permits from the Inspection Division (Room 315, City Hall (874-8703)) prior to the start of any construction.

IMPORTANT NOTICE TO APPLICANT: The granting of an Administrative Authorization to exempt a development from site plan review does not exempt this proposal from other approvals or permits, nor is it an authorization for construction. You should first check with the Building Inspections Office, Room 315, City Hall (207)874-8703, to determine what other City permits, such as a building permit, will be required.

**PROVISION OF PORTLAND CITY CODE
14-523 (SITE PLAN ORDINANCE)
RE: Administrative Authorization**

Sec. 14-523 (b). Applicability

No person shall undertake any development identified in Section 14-523 without obtaining a site plan improvement permit under this article. (c) Administrative Authorization. Administrative Authorization means the Planning Authority may grant administrative authorization to exempt a development proposal from complete or partial site plan review that meets the standards below, as demonstrated by the applicant.

1. The proposed development will be located within existing structures, and there will be no new buildings, demolitions, or building additions other than those permitted by subsection b of this section;
2. Any building addition shall have a new building footprint expansion of less than five hundred (500) square feet;
3. The proposed site plan does not add any new curb cuts, driveways, or parking areas; the existing site has no more than one (1) curb cut and will not disrupt the circulation flows and parking on-site; and there will be no drive-through services provided;
4. The curbs and sidewalks adjacent to the lot are complete and in sound condition, as determined by the public works authority, with granite curb with at least four (4) inch reveal, and sidewalks are in good repair with uniform material and level surface and meet accessibility requirements of the Americans with Disabilities Act;
5. The use does not require additional or reduce existing parking, either on or off the site, and the project does not significantly increase traffic generation;
6. There are no known stormwater impacts from the proposed use or any existing deficient conditions of stormwater management on the site;
7. There are no evident deficiencies in existing screening from adjoining properties; and
8. Existing utility connections are adequate to serve the proposed development and there will be no disturbance to or improvements within the public right-of-way.
9. There are no current zoning violations;
10. Any emergency generators are to be located to minimize noise impacts to adjoining properties and documentation that routine testing of the generators occur on weekdays between the hours of 9 a.m. to 5 p.m. Documentation pertaining to the noise impacts of the emergency generator shall be submitted; and
11. There is no anticipated noise, vibration, glare, fumes or other foreseeable impacts associated with the project.

- a. **Filing the Application.** An applicant seeking an administrative authorization under this subsection shall submit an administrative authorization application for review, detailing the site plan with dimensions of proposed improvements and distances from all property lines, and stating that the proposal meets all of the provisions in standards 1-11 of Section 14-423 (b)1. **The application must be accompanied by an application fee of \$50.**
- b. **Review.** Upon receipt of such a complete application, the Planning Authority will process it and render a written decision of approval, approval with conditions or denial, with all associated findings.
- c. **Decision.** If a full administrative authorization is granted, the application shall be approved without further review under this article, and no performance guarantee shall be required. In the event that the Planning Authority determines that standards a and b of Section 14-523 (b) (1) and at least four (4) of the remaining standards have been met, the Planning Authority shall review the site plan according to all applicable review standards of Section 14-526 that are affected by the standards in this subsection that have not been met. If an exemption or partial exemption from site plan review is not granted, the applicant must submit a site plan application that will undergo a full review by the Planning Board or Planning Authority according to the standards of Section 14-526.

Criteria for an Administrative Authorizations:
 (See Section 14-523 (4) on page 2 of this application)

Applicant's Assessment
 Y(yes), N(no), N/A

Planning Division
 Use Only

a) Is the proposal within existing structures?	Yes	Except for Utility pads for tanks, the rest is interior changes
b) Are there any new buildings, additions, or demolitions?	No	Outside tanks
c) Is the footprint increase less than 500 sq. ft.?	Yes	Yes
d) Are there any new curb cuts, driveways or parking areas?	No	No
e) Are the curbs and sidewalks in sound condition?	yes	okay
f) Do the curbs and sidewalks comply with ADA?	Yes	okay
g) Is there any additional parking?	no	No
h) Is there an increase in traffic?	no	No
i) Are there any known stormwater problems?	No	No
j) Does sufficient property screening exist?	yes	Yes
k) Are there adequate utilities?	Yes	Yes
l) Are there any zoning violations?	No	No
m) Is an emergency generator located to minimize noise?	Yes	Yes
n) Are there any noise, vibration, glare, fumes or other impacts?	No	No

Captain Chris Pirone, confirmed on Tuesday, November 8th that the proposal was acceptable for the administrative authorization. The Fire Department will conduct a separate review of the proposed tanks under a building permit application.

The Administrative Authorization for 524 Riverside Industrial Parkway was approved by Barbara Barhydt, Development Review Services Manager on November 8, 2011 with the following Standard Condition of Approval listed below:

1. **Standard Condition of Approval:** The applicant shall obtain all required City Permits, including building permits from the Inspection Division (874-8703) and any other permits required from the Department of Public Services (874-8801) prior to the start of any construction.



Certificate of Design Application

From Designer: T. Scott Teas
 Date: 11/28/2011
 Job Name: EnviroLogix DNA Expansion
 Address of Construction: 530 Riverside Industrial Parkway, Portland, ME 04103

2003 International Building Code

Construction project was designed to the building code criteria listed below:

Building Code & Year 2009 IBC Use Group Classification (s) B - Business

Type of Construction 3B

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IRC Yes

Is the Structure mixed use? No If yes, separated or non separated or non separated (section 302.3) _____

Supervisory alarm System? Yes Geotechnical/Soils report required? (See Section 1802.2) No

Structural Design Calculations

NA Submitted for all structural members (106.1 – 106.11)

Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (7603.11, 1807)

Floor Area Use	Loads Shown
Office	50 psf
Corridor	80 psf
Stair	100 psf

Wind loads (1603.1.4, 1609) N/A Interior addition

_____ Design option utilized (1609.1.1, 1609.6)
 _____ Basic wind speed (1809.3)
 _____ Building category and wind importance Factor, K_d ,
 table 1604.5, 1609.5)
 _____ Wind exposure category (1609.4)
 _____ Internal pressure coefficient (ASCE 7)
 _____ Component and cladding pressures (1609.1.1, 1609.6.2.2)
 _____ Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

ELF Design option utilized (1614.1)
B Seismic use group ("Category")
0.325 / 0.123 Spectral response coefficients, S_D & S_{D1} (1615.1)
D Site class (1615.1.5)

0.57 Live load reduction
NA Roof *live* loads (1603.1.2, 1607.11)
45 psf Roof snow loads (1603.7.3, 1608)
60 psf Ground snow load, P_g (1608.2)
45 psf If $P_g > 10$ psf, flat-roof snow load P_f
1.0 If $P_g > 10$ psf, snow exposure factor, C_e
1.0 If $P_g > 10$ psf, snow load importance factor, I_s
1.1 Roof thermal factor, C_t (1608.4)
45 psf Sloped roof snowload, P_s (1608.4)
B Seismic design category (1616.3)
Steel Frame Basic seismic force resisting system (1617.6.2)
3 Response modification coefficient, R_f and
 deflection amplification factor C_d (1617.6.2)
ELF Analysis procedure (1616.6, 1617.5)
100 K Design base shear (1617.4, 1617.5.1)

Flood loads (1803.1.6, 1612)

NA Flood Hazard area (1612.3)
NA Elevation of structure

Other loads

2000 # Concentrated loads (1607.4)
15 psf Partition loads (1607.5)
 _____ Misc. loads (Table 1607.8, 1607.6.1, 1607.7,
 1607.12, 1607.13, 1610, 1611, 2404)



Certificate of Design

Date: 8/17/11

From: T. Scott Teas

These plans and / or specifications covering construction work on:

at 530 Riverside Industrial Parkway, Portland, ME 04103

Have been designed and drawn up by the undersigned, a Maine registered Architect / Engineer according to the *2009 International Building Code* and local amendments.

Signature: _____

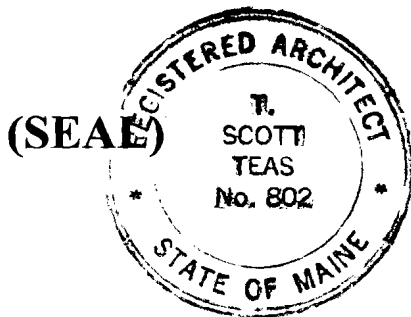
Title: Principal

Firm: TFH Architects

Address: 80 Middle Street

Portland, ME 04101

Phone: 207-775-6141



For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov



Accessibility Building Code Certificate

Designer:

T. Scott Teas

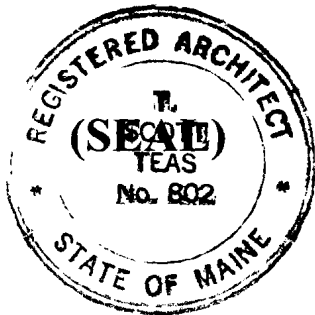
Address of Project:

530 Riverside Industrial Parkway, Portland, ME 04103

Nature of Project:

Exterior work for the previously approved project to include, a transformer & concrete pad, generator & pad, cooling tower & pad, 1 new entry door, 1 mechanical door, & new windows to the envelope of the building.

The technical submissions covering the proposed construction work as described above have been designed in compliance with applicable referenced standards found in the Maine Human Rights Law and Federal Americans with Disability Act. Residential Buildings with 4 units or more must conform to the Federal Fair Housing Accessibility Standards. Please provide proof of compliance if applicable.



Signature: _____

Title: _____

Principal

Firm: _____

TFH Architects

Address: _____

80 Middle Street

Portland, ME 04101

Phone: _____

207-775-6141

For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov

10-17-12 DWM Final OK

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT

This is to certify that 500 Riverside Associates

Located At 524 RIVERSIDE IND PKWY

Job ID: 2011-12-2853-HVAC

CBL: 370A-A-012-001

has permission to install a HW Boilers (Mod Con)

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

Fire Prevention Officer

Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY
PENALTY FOR REMOVING THIS CARD



Certificate of Occupancy



CITY OF PORTLAND, MAINE Department of Planning and Urban Development Building Inspections Division

Location: 524 RIVERSIDE IND PKWY

Issued to: 500 RIVERSIDE ASSOCIATES

CBL: 370A- A-012-001

Date Issued: 6/29/2012

This is to certify that the building, premises, or part thereof, at the above location, built-altered-changed as to use under Building Permit No. 2011-09-2338-ALTCOMM, has had a final inspection, has been found to conform substantially to the requirements of the Building Code and the Land Use Code of the City of Portland, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORION OF BUILDING OR PREMISES

2nd FLOOR INTERIOR ADDITION

APPROVED OCCUPANCY

USE GROUP B
MANUFACTURING AND
RESEARCH AND DEVELOPMENT
TYPE B B
IPC 2009

Approved: Don Walker
(Date) Inspector

[Signature]
Inspections Division Director

Notice: This certificate identifies the legal use of the building or premises, and ought to be transferred from owner to owner upon the sale of the property.



CITY OF PORTLAND, MAINE
Department of Building Inspections

Original Receipt

Sept. 16 2011

Received from White Building

Location of Work 230 Commercial

Cost of Construction \$ _____ Building Fee: _____

Permit Fee \$ _____ Site Fee: _____

Certificate of Occupancy Fee: _____

Total: _____

Building (IL) _____ Plumbing (IS) _____ Electrical (I2) _____ Site Plan (U2) _____

Other _____

CBL: 230 AA 012

Check #: 49536 Total Collected \$ 1,000.00

**No work is to be started until permit issued.
Please keep original receipt for your records.**

Taken by: [Signature]

WHITE - Applicant's Copy
YELLOW - Office Copy
PINK - Permit Copy



Certificate of Design Application

From Designer: T. Scott Teas
 Date: 8/17/11
 Job Name: EnviroLogix DNA Expansion
 Address of Construction: 530 Riverside Industrial Parkway, Portland, ME 04103

2003 International Building Code

Construction project was designed to the building code criteria listed below:

Building Code & Year 2009 IBC Use Group Classification (s) B - Business

Type of Construction 3B

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IRC Yes

Is the Structure mixed use? No If yes, separated or non separated or non separated (section 302.3) _____

Supervisory alarm System? Yes Geotechnical/Soils report required? (See Section 1802.2) No

Structural Design Calculations

NA Submitted for all structural members (106.1 – 106.11)

Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (7603.11, 1807)

Floor Area Use	Loads Shown
Office	50 psf
Corridor	80 psf
Stair	100 psf

Wind loads (1603.1.4, 1609) N/A Interior addition

_____ Design option utilized (1609.1.1, 1609.6)
 _____ Basic wind speed (1809.3)
 _____ Building category and wind importance Factor, w ,
 table 1604.5, 1609.5)
 _____ Wind exposure category (1609.4)
 _____ Internal pressure coefficient (ASCE 7)
 _____ Component and cladding pressures (1609.1.1, 1609.6.2.2)
 _____ Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

ELF Design option utilized (1614.1)
B Seismic use group ("Category")
0.325 / 0.123 Spectral response coefficients, S_D s & S_{D1} (1615.1)
D Site class (1615.1.5)

0.57 Live load reduction
NA Roof *live* loads (1603.1.2, 1607.11)
45 psf Roof snow loads (1603.7.3, 1608)
60 psf Ground snow load, P_g (1608.2)
45 psf If $P_g > 10$ psf, flat-roof snow load P_f
1.0 If $P_g > 10$ psf, snow exposure factor, C_e
1.0 If $P_g > 10$ psf, snow load importance factor, I_s
1.1 Roof thermal factor, C_t (1608.4)
45 psf Sloped roof snowload, P_s (1608.4)
B Seismic design category (1616.3)
Steel Frame Basic seismic force resisting system (1617.6.2)
3 Response modification coefficient, R , and
 deflection amplification factor C_d (1617.6.2)
ELF Analysis procedure (1616.6, 1617.5)
100 K Design base shear (1617.4, 1617.5.1)

Flood loads (1803.1.6, 1612)

NA Flood Hazard area (1612.3)
NA Elevation of structure

Other loads

2000 # Concentrated loads (1607.4)
15 psf Partition loads (1607.5)
 _____ Misc. loads (Table 1607.8, 1607.6.1, 1607.7,
 1607.12, 1607.13, 1610, 1611, 2404)



Accessibility Building Code Certificate

Designer:

T. Scott Teas

Address of Project:

530 Riverside Industrial Parkway, Portland, ME 04103

Nature of Project:

Addition of ± 9880 sf to the interior and renovations to approx. 2500 sf of _____ the existing building. 1 new entry door, 1 mechanical door and new windows to the envelope of the building.

The technical submissions covering the proposed construction work as described above have been designed in compliance with applicable referenced standards found in the Maine Human Rights Law and Federal Americans with Disability Act. Residential Buildings with 4 units or more must conform to the Federal Fair Housing Accessibility Standards. Please provide proof of compliance if applicable.

Signature: _____

Title: _____

Principal

Firm: _____

TFH Architects

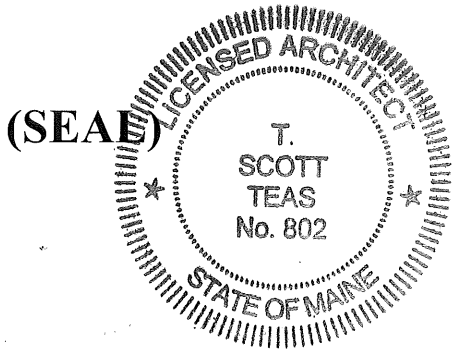
Address: _____

80 Middle Street

Portland, ME 04101

Phone: _____

207-775-6141



For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov



Certificate of Design

Date: 8/17/11

From: T. Scott Teas

These plans and / or specifications covering construction work on:

Interior addition and renovations to 530 Riverside Industrial Parkway, Portland, ME 04103

Have been designed and drawn up by the undersigned, a Maine registered Architect / Engineer according to the *2009 International Building Code* and local amendments.

Signature: 

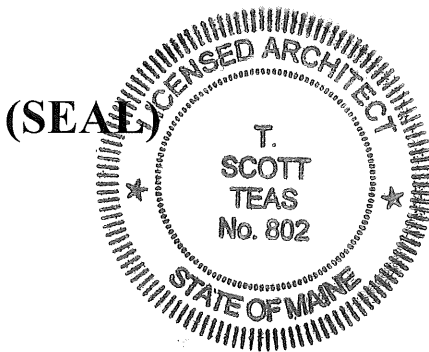
Title: Principal

Firm: TFH Architects

Address: 80 Middle Street

Portland, ME 04101

Phone: 207-775-6141



For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov

For discussion with Portland Planning, Zoning, Site Review

June 2, 2011

rest fits for Agricultural

Participants for EnviroLogix:

TFH Architects: Scott Teas, David Merrill

EnviroLogix Consultant: Peter Johnson, former VP Operations and CFO

Ensign-Bickford Realty: Gus Jasminski

- A. Walk through Site Plan at Building Level, existing and through Phase 4
- B. Brief product, platform, customer overview
- C. Current headcount overview, summarized by building.
- D. Outline nature of occupancy in both buildings; use coded floor plan for 500
- E. Outline potential relocation of immuno development and production into 520, with integration and optimization with DNA development and production, shared storage, shipping & receiving, refrigerated storage.
- F. Review TFH initial parking and circulation layouts; seek PtlD general input on lot sufficiency for number of spaces.

Specific questions:

1996 - 4 people now 106

1. In 3rd Quarter 2009, ELIX renovated and expanded approximately 2,500 s.f. of office space in the NE corner of 530 Riverside, converting it to approximately 4,800 s.f. of office space on the ground floor, and 5500 sf of lab, cubicle and conference space on a new second floor.

For the next phase of development (Fall 2011 – 1st Qtr 2012) (the “B2 Expansion”), we propose to deck approximately 8,000 s.f. at the NW corner of 530, extending our current deck to the rear of the building and slightly to the south. This will create additional lab, cubicle, meeting room, rest room and utilities room space for the DNA Development Group.

This will mean a change in use of the space in 530 of 10,300 s.f. (8,000 + 4800 – 2500) within a three year period. Are we correct in assuming that this phase will not require a Level III Planning Review?

2. If our succeeding phase (Fall 2012 – 1st Qtr 2013) were to consist solely of building out lab, production, shipping and receiving space on the 1st floor of 520-530 Riverside (“C1 Expansion”, approximately 26,000 s.f.), conversion from open floor plan woodworking manufacturing and assembly operations, would this constitute a Change of Use requiring a Level III Planning Review?

3. What are the elements of a Level III Planning Review?

4. Is a Level III Planning Review a Site Plan Review delegated to the City by ME DEP?

5. Does laboratory space qualify as manufacturing space for parking demand measurements, or is there a hybrid?

Marge Schmuckal - Fwd: Enviroligix - 530 Riverside Industrial Parkway - 3:00 Wed.

From: Barbara Barhydt
To: Jaegerman, Alex; Schmuckal, Marge
Date: 5/31/2011 8:15 AM
Subject: Fwd: Enviroligix - 530 Riverside Industrial Parkway
CC: Jaegerman, Alex

I-M
370A-A-12
#09-0490-use

Are you available Wednesday afternoon at 3 to meet? Thank you.

Commercial Warehouse in office
150,028#

Barbara

>>> "David Merrill" <dam@TFHArchitects.com> Friday, May 27, 2011 2:32 PM >>>

Barbara-
Per our conversation, we would like to schedule a follow up meeting for this project with yourself and any other parties which may have comments on the Zoning and Planning requirements. Pete Johnson from Enviroligix will be attending and will have some information to share regarding employee numbers, projections and descriptions of the various functions within the company. In the mean time we will be forwarding plans which better define the uses within the building for your review and discussion at our meeting.

If it is available we would like to meet later Wednesday afternoon, 3-5 or early Thursday afternoon, around 1 if possible.

If you have any questions in the mean time please let me know directly.

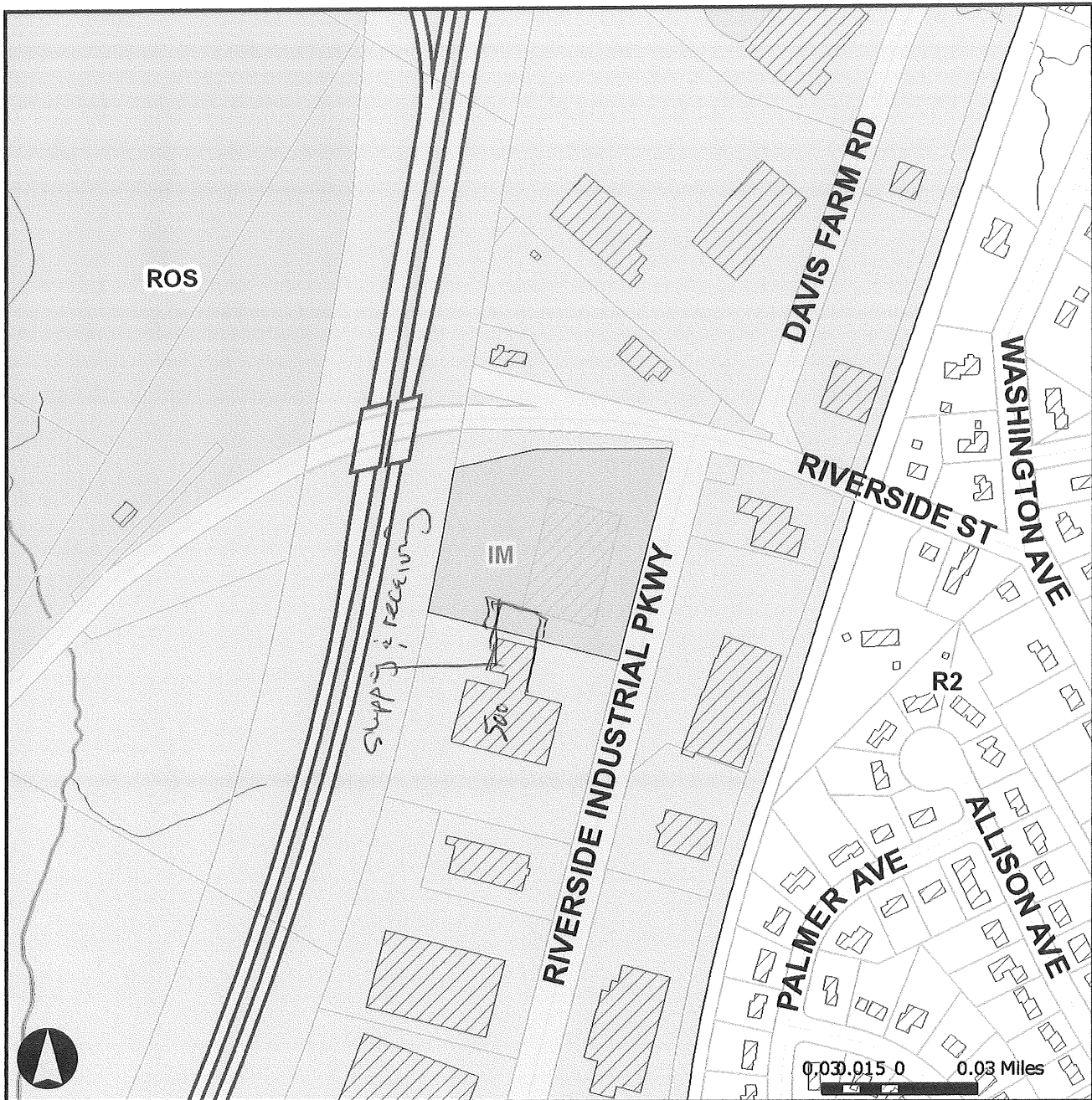
Thanks,

David Merrill LEED AP
SENIOR ASSOCIATE

TFH ARCHITECTS 80 MIDDLE STREET PORTLAND ME 04101
207-775-6141 fax 207-773-0194 <http://www.tfharchitects.com>

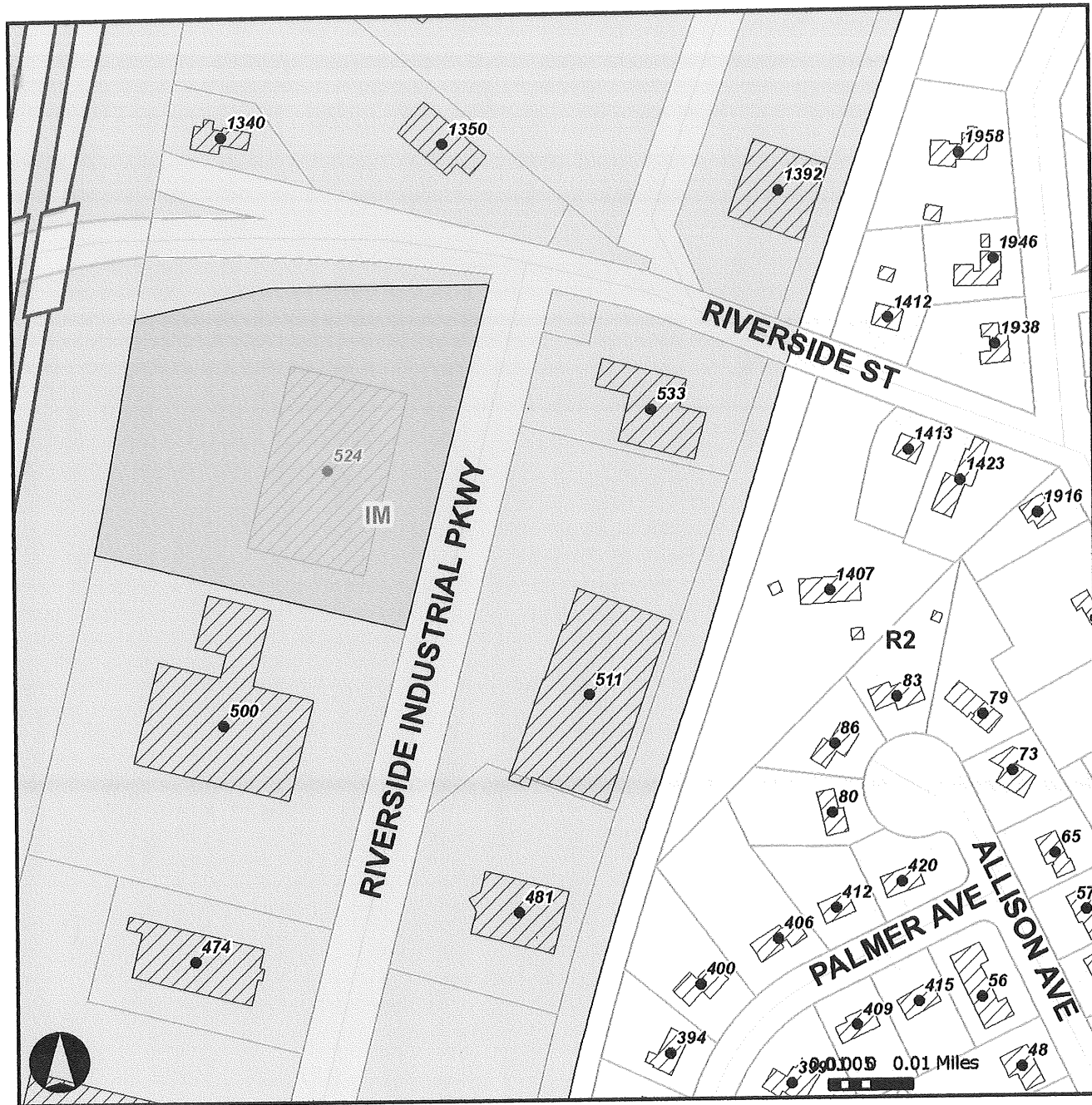
Please consider the environment before printing this email

Map



Parcels	Stream Overlay Zone	Zoning (continued)	Zoning (continued)
<input type="checkbox"/> Parcel	<input checked="" type="checkbox"/> Stream_protection	<input type="checkbox"/> R2 Residential	<input type="checkbox"/> C25
Interstate	Island Zoning	<input type="checkbox"/> R3 Residential	<input type="checkbox"/> C26
<input type="checkbox"/> Interstate	<input type="checkbox"/> C43	<input type="checkbox"/> R4 Residential	<input type="checkbox"/> C27
Streets	<input type="checkbox"/> I-B	<input type="checkbox"/> R5 Residential	<input type="checkbox"/> C28
<input type="checkbox"/> Street	<input type="checkbox"/> I-TS	<input checked="" type="checkbox"/> R6 Residential	<input type="checkbox"/> C29
Buildings	<input type="checkbox"/> I-R1	<input type="checkbox"/> ROS Recreation Open	<input type="checkbox"/> C30
<input checked="" type="checkbox"/> Building	<input type="checkbox"/> I-R2	Space	<input type="checkbox"/> C31
<input checked="" type="checkbox"/> Out Building			

Map



Parcels

- Parcels
- Parcels
- Interstate
- Streets
- Buildings

Shoreland Overlay Zone

- Stream Overlay Zone
- Stream_protection
- Island Zoning**
- C43
- I-B
- I-TS

Zoning (continued)

- OP Office Park
- R1 Residential
- R2 Residential
- R3 Residential
- R4 Residential
- R5 Residential
- R6 Residential

Zoning (continued)

- C23
- C24
- C25
- C26
- C27
- C28
- C29



PORTLAND MAINE

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Penny St. Louis, Director of Planning and Development
Marge Schmuckal, Zoning Administrator

Meeting Information

DATE: 6/2/11 ZONE: I-M

LOCATION: 530 Riverside Industrial PKway - ENVIROlogix

PEOPLE PRESENT: Peter Johnson - Scott Tera - Alex DAVID Merrill -
marge ^{LATE} Gus J.

DISCUSSION:

Discussed Their business & testing kits - rapidly identifying
manufacturing & ^{Research} Development -

Arch. Wood workers on 1st floor - may not be a change of use - just
- under 20,000 ^{change of use level 2 site} A different type of manuf.

Transformer on City property → NOT A typical

Making lots in the future - Discussion - I do not see the
property as merged yet

3 phase power discussion

low impact drainage ^{use veg. med} = chapter 500 stormwater management - Quality
control

75% impervious max. - 10' pavement setback req.

previous pavement discussion

discussed the swale

sidewalks discussion

Adding curb cuts among them -

Please note: this meeting is not an pre-approval of any ordinances. No project can be approved without going thru the appropriate reviews. This meeting is only to outline the City processes to go through based on the information given at this meeting. Any changes to that information may change the process requirements. Please check ordinances that are on-line for further information at www.portlandmaine.gov.

12. Installation of a sprinkler or fire alarm system requires a Knox Box to be installed per city ordinance.
13. Fire extinguishers are required per NFPA 10.
14. All means of egress to remain accessible at all times.
15. Emergency lights and exit signs are required. Emergency lights and exit signs are required to be labeled in relation to the panel and circuit and on the same circuit as the lighting for the area they serve.
16. Any cutting and welding done will require a Hot Work Permit from Fire Department.
17. Walls in structure are to be labeled according to fire resistance rating. IE; 1 hr. / 2 hr. / smoke proof.
18. A single source supplier should be used for all through penetrations.

Building

1. Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approval prior to work. **THIS PERMIT APPROVES INTERIOR WORK ONLY. A SEPARATE BUILDING PERMIT IS REQUIRED FOR THE EXTERIOR PADS AND AN ADMINISTRATIVE AUTHORIZATION APPROVAL FROM PLANNING.**
2. All penetrations through rated assemblies must be protected by an approved firestop system installed in accordance with ASTM 814 or UL 1479, per IBC 2009 Section 713.
3. Separate permits are required for any electrical, plumbing, sprinkler, fire alarm, HVAC systems, heating appliances, including pellet/wood stoves, commercial hood exhaust systems and fuel tanks. Separate plans may need to be submitted for approval as a part of this process.
4. The statement of special inspections shall be submitted for review prior to work on structural components
5. A ComCheck certificate of compliance shall be submitted for the MEP systems.
6. The Special Inspections Final Report shall be submitted to this office prior to the Certificate of Occupancy or final inspection.

11-1-11

Concrete Pats #4 #B Rebar

3000 PSI form Dubuque

P, E on Record already inspected
N/A

2-2-12 DWM/ Ken 939-9412 consult.

2-13-12 DWM Bill 971-2766 Plumbing OK except bathrooms. (Provide clean outs in foot vents)

2-29-12 DWM Ken close-in OK lines 7-11

4-2-12 DWM/BKL close-in OK Rms 202B, 203, 207, 221, 222,
224, ²²⁵255 + 256

5-17-12 DWM Ken Above ceilings Phase I OK

6-29-12 DWM/BKL/capt Phrone Ken Final CO OK