ABBREVIATIONS

A.B.	ANCHOR BOLTS
ACOUS.	ACOUSTICAL
ADM.	ADMINISTRATIVE
ALS	ASSISTIVE LISTENING SYSTEM
ALT.	ALTERNATE
ALUM.	ALUMINUM
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
B.N.	BOUNDARY NAIL
BOT.	BOTTOM
BRD.	BOARD
BTR.	BETTER
CAB.	CABINET
CAC.	CALIFORNIA ADMIN-ISTRATIVE CODE
CAT.	CATWALK
CEM. PLAS.	CEMENT PLASTER
CER.	CERAMIC
C.J.	CONSTRUCTION JOINT
CLG.	CEILING
CLR.	CLEAR
C.O.	(GSA) CONTRACTING OFFICER
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
C.M.U.	CONCRETE MASONRY UNIT
CP	COMPLETE PENETRATION
CSPE	CHLOROSULFONATED POLYETHYLENE ("HYPALON")
DBL.	DOUBLE
DET.	DETAIL
D.F.	DOUGLAS FIR
DIAG.	DIAGONAL
DIA.	DIAMETER
DIM.	DIMENSION
DN.	DOWN
DP.	DEEP
DR.	DOOR
D.S.	DOWNSPOUT
DSA	DIVISION OF THE STATE ARCHITECT
EA.	EACH
E.F.	EACH FACE
E.J.	EXPANSION JOINT
ELEV.	ELEVATION
ELVTR	ELEVATOR
ELEC.	ELECTRICAL
E.N.	EDGE NAIL
E.Q.	EQUAL
EQPT.	EQUIPMENT
E.S.	EACH SIDE
E.W.	EACH WAY
EXIST.	EXISTING
EXP.	EXPANSION
EXT.	EXTERIOR
FDN.	FOUNDATION
FHWS	FLAT HEAD WOOD SCREW
FIN.	FINISH
FIN. FL.	FINISH FLOOR
F.J.	FLOOR JOIST
FL.	FLOOR
FLUOR.	FLUORESCENT
F.N.	FIELD NAIL
F.O.C.	FACE OF CONCRETE
F.O.F.	FACE OF FINISH
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUD
FRMG.	FRAMING
FT.	FOOT/FEET
GA.	GAUGE
GAL.	GALLON
GALV.	GALVANIZED
GSS	GALVANIZED SHEET STELL
GLB	GLUE LAMINATED BEAM
GRD.	GRADE
GSA	GENERAL SERVICES ADMINISTRATION
G.S.M.	GALVANIZED SHEET METAL
GYP. BD.	GYPSUM BOARD
H.D.	HOLD-DOWN
HMA	HAZARDOUS MATERIALS ABATEMENT
HORIZ.	HORIZONTAL
H.S.B.	HIGH STRENGTH BOLTS
HT.	HEIGHT
HDR.	HEADER
IN.	INCH(ES)
I.D.	INSIDE DIAMETER
INSUL	INSULATION
ISA	INTERNATIONAL SYMBOL OF ACCESS
JT.	JOINT
JST.	JOIST
L.	LONG (LENGTH)
MAX.	MAXIMUM
M.B.	MACHINE BOLTS
MECH.	MECHANICAL
MET.	METAL
MEZZ.	MEZZANINE
MFR.	MANUFACTURER
MIN.	MINIMUM
mm	MILLIMETER
N/A	NOT APPLICABLE
N.I.C.	NOT IN CONTRACT
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.H.	OPPOSITE HAND
OLA	OFFICE OF LOCAL ASSISTANCE
OPP.	OPPOSITE
PERIM.	PERIMETER
PBS	PUBLIC BUILDINGS SERVICE
P.C.C.	PRECAST CONCRETE
PL.	PLATE
P.L.	PROPERTY LINE
P.LAM.	PLASTIC LAMINATE
PLYWD.	PLYWOOD
P.N.	PLATE NAIL
P.S.F.	POUNDS PER SQUARE FOOT
P.S.I.	POUNDS PER SQUARE INCH
P.T.	PRESSURE TREATED
PT.	POINT
R.	RISER
RAD.	RADIUS
REINF.	REINFORCEMENT
REQD.	REQUIRED
RES.	RESILIENT
R.O.	ROUGH OPENING
R.S.	ROUGH SAWN
RDWD.	REDWOOD
RO.	ROUGH
R.W.L.	RAIN WATER LEADER
SA	SUSPENDED ACOUSTICAL
S.A.D.	SEE ARCHITECTURAL DRAWINGS
S.C.D.	SEE CIVIL DRAWINGS
S.E.D.	SEE ELECTRICAL DRAWINGS
S.F.S.D.	SEE FOOD SERVICE DRAWINGS
SHT.	SHEET
S.H.	SINGLE HUNG
SIM.	SIMILAR
SLDR.	SLIDER
SMD.	SEE MECHANICAL DRAWINGS
S.O.G.	SLAB ON GRADE
SPEC(S)	SPECIFICATION(S)
SQ.	SQUARE
S.S.	STAINLESS STELL
S.S.D.	SEE STRUCTURAL DRAWINGS
S.S.P.	STANDARD STEEL PIPE
STRUC.	STRUCTURAL
SYM.	SYMMETRICAL
T.	TREAD
T.&B.	TOP AND BOTTOM
T.&G.	TONGUE AND GROOVE
T.C.	TOP OF CURB
TEL.	TELEPHONE
TERR.	TERRAZZO
T.O.C.	TOP OF CONCRETE
T.O.PL.	TOP OF PLATE LINE
T.O.S.	TOP OF STEEL
T.O.SF.	TOP OF SUBFLOOR
T.O.W.	TOP OF WALL
T.P.	TOP OF PAVEMENT
TRANSV.	TRANSVERSE
TR.	TREATED
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
USMS	UNITED STATES MARSHALL SERVICE
VERT.	VERTICAL
VFY	VERIFY
VG.	VERTICAL GRAIN
W.	WIDE
WASH.	WASHER
W/	WITH
W/C	WATER CLOSET
WD.	WOOD
W/O	WITHOUT
WP.	WATERPROOF
WPF.	WEATHERPROOF
X	CROSS

SYMBOLS

- & — AND
- @ — AT
- ℄ — CENTER LINE
- ϕ — DIAMETER OR ROUND LINE
- (E) — EXISTING
- ⊥ — PERPENDICULAR
- # — POUND OR NUMBER
- ℔ — PLATE
- (N) — NEW
- WP — WORK POINT
- NOMINAL FLOOR LEVEL OR MATCH LINE (A / 1)
- 4 — LOUVER SYMBOL
- 2000 — DOOR REFERENCE NO. (See Schedule)
- 4 — WINDOW SYMBOL
- 4 — GATE SYMBOL
- 4 / A-4 — SECTION / EXTERIOR ELEVATION SYMBOL; SECTION / ELEVATION NUMBER; SHEET NUMBER
- 4 / A-4 — DETAIL SYMBOL; DETAIL NUMBER; SHEET NUMBER
- 2 / A2.2 — DETAIL TITLE; DETAIL NUMBER; REFERENCED SHEET NUMBER
- 1 / 4 / A-4 / 2 / 3 — INTERIOR ELEVATION SYMBOL; DETAIL NUMBER; SHEET NUMBER
- 4 — REVISION SYMBOL
- REF N — NORTH
- 1 — EQUIPMENT SYMBOL
- H / 100 — WALL REFERENCE: Type Reference; Size of framing member (millimeters)
- 100 / 36 24 30 — WIC– WOODWORK INSTITUTE SERIES DESIGNATION; CABINET DESIGNATION; HEIGHT; DEPTH; WIDTH
- 4.44 — KEYNOTE SYMBOL (See Note List)

AC TRANSIT

MACK FACILITY REROOFING AND BUILDING ENVELOPE REPAIRS

20234 MACK STREET, HAYWARD CA 94545

SCOPE OF WORK

THE ARCH SCOPE OF WORK GENERALLY INCLUDES BUT IS NOT LIMITED TO:

1) PERMANENTLY REMOVE UNNECESSARY ROOFTOP EQUIPMENT.
2) REMOVE (E) ROOF SYSTEM AND REPLACE WITH (N) ROOF SYSTEM.
3) REPLACE OR REINSTALL ROOFTOP EQUIPMENT AS INDICATED.
4) REMOVE (E) GROUND MOUNTED MECHANICAL EQUIPMENT ON EAST SIDE OF BUILDING
5) REMOVE (E) ROOF ACCESS LADDER & HATCH, AND PROVIDE (N) EXTERIOR ROOF ACCESS LADDER.
6) REMOVE & REINSTALL METAL SIDING IN AREAS INDICATED REPAIR DAMAGE TO FRAMING AND FINSIHES.

THE MECH & ELEC SCOPE OF WORK GENERALLY INCLUDES BUT IS NOT LIMITED TO:

1) REMOVE MECHANICAL EQUIPMENT FROM ROOF AND PROVIDE NEW EQUIPMENT ON GROUND, ON EXTERIOR WALLS AND INSIDE STRUCTURE.
2) PROVIDE HVAC TO MEZZANINE OFFICE AREA AND TWO CLASSROOMS.

ELECTRICAL SCOPE:

1) REMOVE ELECTRICAL POWER FOR ROOFTOP HVAC EQUIPMENT
2) PROVIDE POWER FOR NEW HVAC EQUIPMENT
3) PROVIDE OCCUPANCY SENSORS FOR EXISTING BATHROOMS LIGHTS

PROJECT DATA

OWNER:

AC TRANSIT
STEPHEN P. STANLEY
PROJECT MANAGER
1600 FRANKLIN ST
OAKLAND, CA 94612
CELL: (510) 499-7452
EMAIL: STANLEY@ACTRANSIT.COM

SEISMIC DESIGN CATEGORY: D,E,F

OCCUPANCY CLASSIFICATION: B, F-1

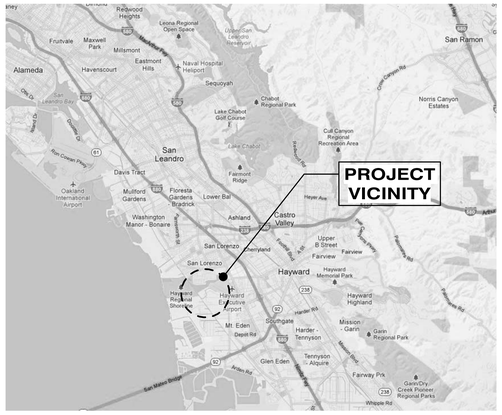
CONSTRUCTION TYPE: TYPE V-A; SPRINKLERED

APPLICABLE CODES and STANDARDS:

2016 CBC
2016 CBC FIRE
2016 CBC MECHANICAL
2016 CBC ELECTRICAL
2016 CBC PLUMBING

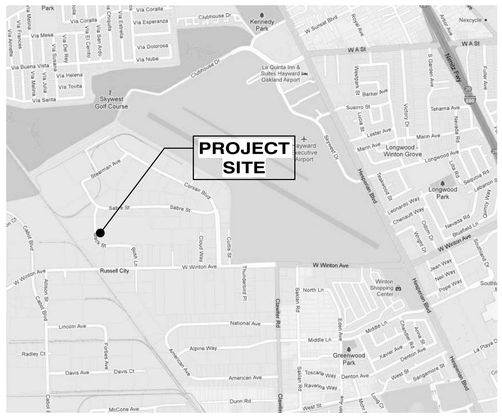
LOCATION MAP

NOT TO SCALE



VICINITY MAP

NOT TO SCALE



PROJECT TEAM

ARCHITECT OF RECORD

INTERACTIVE RESOURCES, INC.
TOM BUTT, FAIA, LEED BD+C
117 PARK PLACE
RICHMOND, CA 94801
TEL: (510) 236-7435
FAX: (510) 232-5325
EMAIL: TOM.BUTT@INTRES.COM
WEBSITE: WWW.INTRES.COM

MECHANICAL & ELECTRICAL ENGINEERS

ROSANNA LERMA, PE
PRINCIPAL
EDESIGNC INCORPORATED
582 MARKET STREET, SUITE 400
SAN FRANCISCO, CA 94104
TEL: (415) 963-4303
FAX: (415) 963-4341
EMAIL: ROSANNA@EDESIGNC.COM
WEBSITE: WWW.EDESIGNC.COM

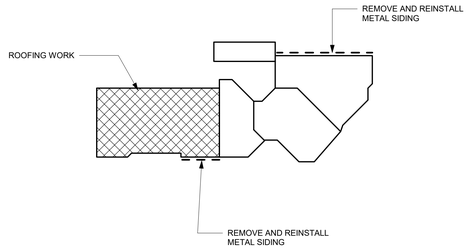
JIM DYER, PE, LEED AP
SENIOR MECHANICAL ENGINEER
EDESIGNC INCORPORATED
212 9TH STREET, SUITE 203
OAKLAND, CA 94607
TEL: (415) 963-4303
OFFICE: (510) 433-0913 X-109
EMAIL: JIM@EDESIGNC.COM
WEBSITE: WWW.EDESIGNC.COM

HENRY CHAN
PROJECT MANAGER
EDESIGNC INCORPORATED
212 9TH STREET, SUITE 203
OAKLAND, CA 94607
TEL: (415) 963-4303
OFFICE: (510) 433-0913 X-108
EMAIL: HENRY@EDESIGNC.COM
WEBSITE: WWW.EDESIGNC.COM

GENERAL NOTES

1. NEW CONSTRUCTION. IF SPECIFICALLY NOTED IN THE ARCHITECTURAL DRAWINGS, SHALL EITHER BE UNPREFIXED OR PREFIXED BY "NEW" OR (N) (NEW).
2. EXISTING CONSTRUCTION, IF SPECIFICALLY NOTED IN THE ARCHITECTURAL DRAWINGS, SHALL ALWAYS BE PREFIXED BY "EXIST" OR (E).
3. CONTRACTOR TO VERIFY ALL CONDITIONS AND MEASUREMENTS OF AS-BUILT CONSTRUCTION AFFECTING PROPOSED WORK. ANY/ALL INCONSISTENCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY AND BEFORE PROCEEDING WITH MATERIAL ORDER OR ANY WORK.
4. INFORMATION ON EXISTING CONDITIONS WAS OBTAINED FROM ORIGINAL DRAWINGS PROVIDED BY AC TRANSIT AND FROM LIMITED EXPLORATORY OBSERVATIONS. THE ARCHITECT ASSUMES THESE SOURCES TO BE RELIABLE, AND OBSERVED CONDITIONS ARE ASSUMED TO BE REPRESENTATIVE. HOWEVER, ACTUAL CONDITIONS MAY VARY. THE CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS.
5. THIS PROJECT INVOLVES REMOVAL OF PORTIONS OF EXISTING BUILDING SYSTEMS AND THEIR RECONSTRUCTION TO SUIT THE PROPOSED DESIGN. THESE DOCUMENTS INDICATE REQUIREMENTS FOR THE PRIMARY INTERFACE BETWEEN EXISTING AND NEW CONSTRUCTION. HOWEVER, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND ESTABLISH ALL OTHER INTERFACE CONDITIONS WHICH MAY BE REQUIRED AND DEEMED MOST SUITABLE TO SUIT THE PROPOSED DESIGN.
6. "ADEQUATE SLOPE" IF NOT SPECIFICALLY INDENTIFIED QUANTITATIVELY IS DEFINED AS A CONDITION THAT WILL NOT SUSTAIN PODING OF WATER AFTER 48 HOURS OF DRY WEATHER FOLLOWING PRECIPITATION.

SITE KEY PLAN



DRAWING INDEX

NO.	REVISION	DATE	APP'D

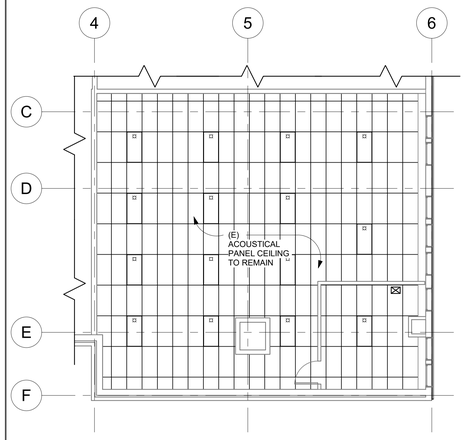
REFERENCES:

INTERACTIVE RESOURCES architects + engineers
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
www.intres.com

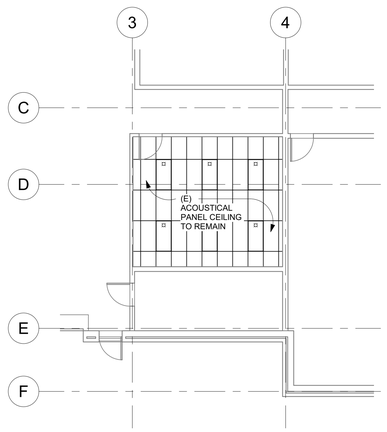
LICENSED ARCHITECT THOMAS K. BUTT No. C 7,389 REN. 3-31-19 STATE OF CALIFORNIA

DESIGNED BY: TOM BUTT, FAIA	MACK FACILITY REROOFING		
DRAWN BY: DERRICK PORTER, MIKE TRAN			
CHECKED BY: TOM BUTT, FAIA	COVER SHEET		
A-E PROJECT MANAGER: TOM BUTT, FAIA			
ACT DIVISION MANAGER:	A-E DRAWING NUMBER: 2016-077-07	SCALE: AS-NOTED	DATE: 09-18-2018
ACT PROJECT MANAGER: STEPHEN P. STANLEY	AC TRANSIT DRAWING NUMBER: ACT#		SIZE: 30x42
CONTRACT # NUMBER: 2013-1255	CAD FILE: \\HAL5\Projects\2016\2016-077-07 Mack Facility\Production\2016-077-07 AC TRANSIT - MACK hayward.rvt		SHEET T0.1

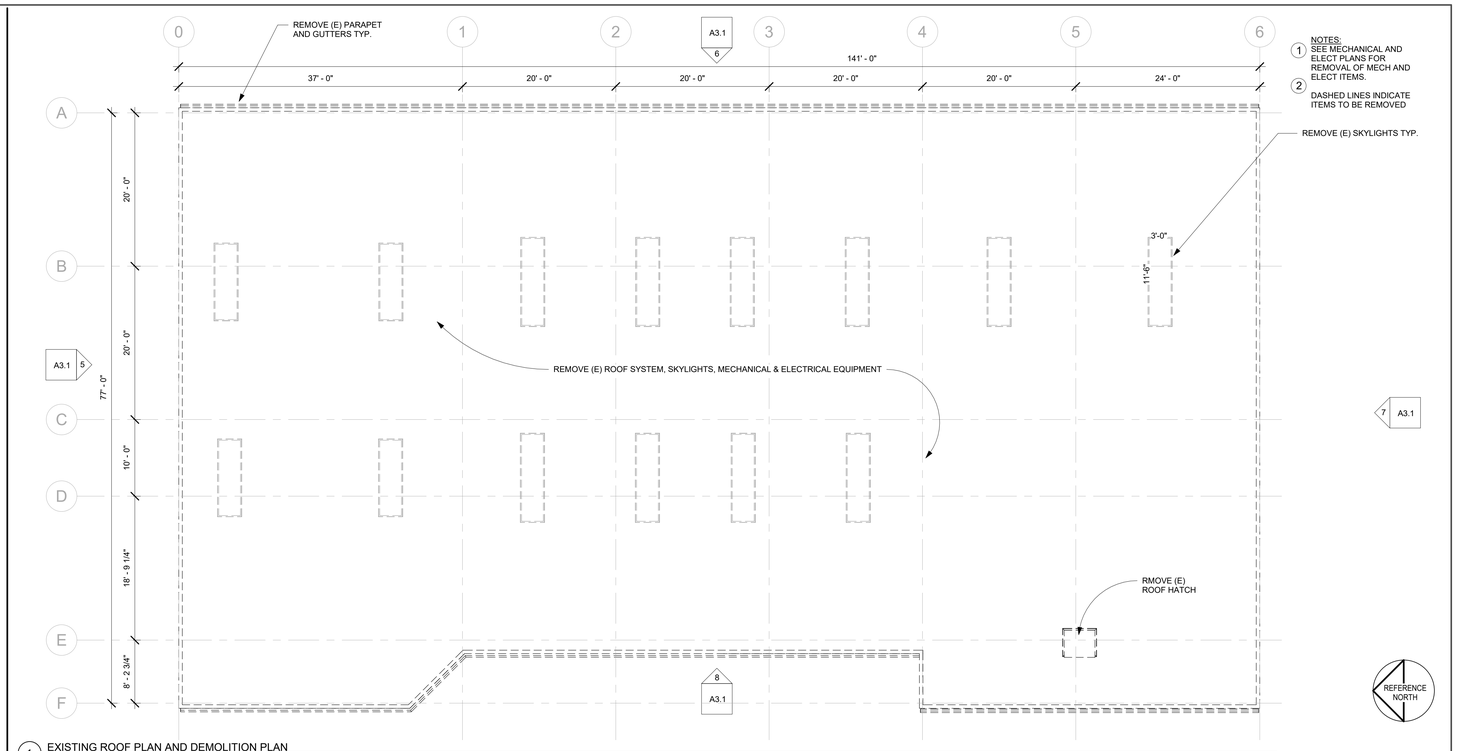
9/18/2018 10:09:59 AM



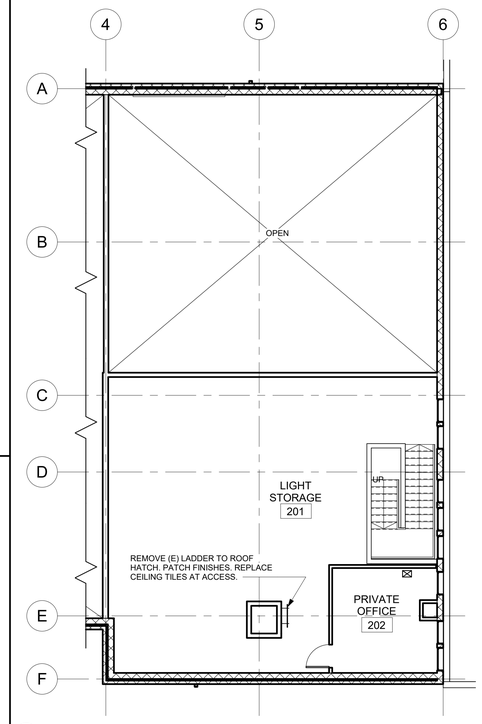
5 REFLECTED CEILING PLAN AT MEZZANINE
1/8" = 1'-0"



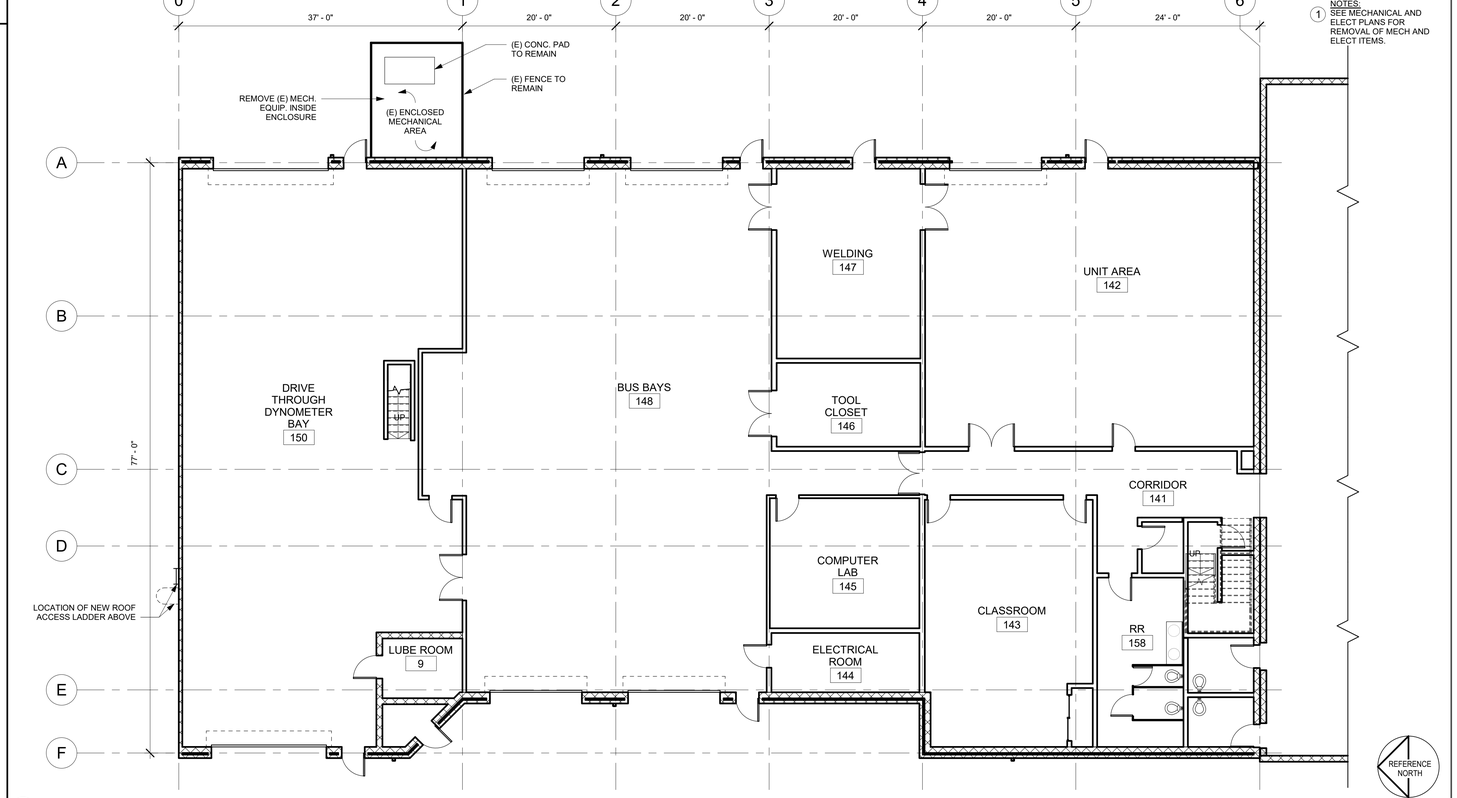
3 REFELECTED CEILING PLAN AT COMPUTER LAB
1/8" = 1'-0"



1 EXISTING ROOF PLAN AND DEMOLITION PLAN
1/8" = 1'-0"



4 MEZZANINE LEVEL - EXISTING PLAN & DEMOLITION PLAN
1/8" = 1'-0"



2 GROUND LEVEL - EXISTING PLAN & DEMOLITION PLAN
1/8" = 1'-0"

NO.	REVISION	DATE	APP'D

AC TRANSIT

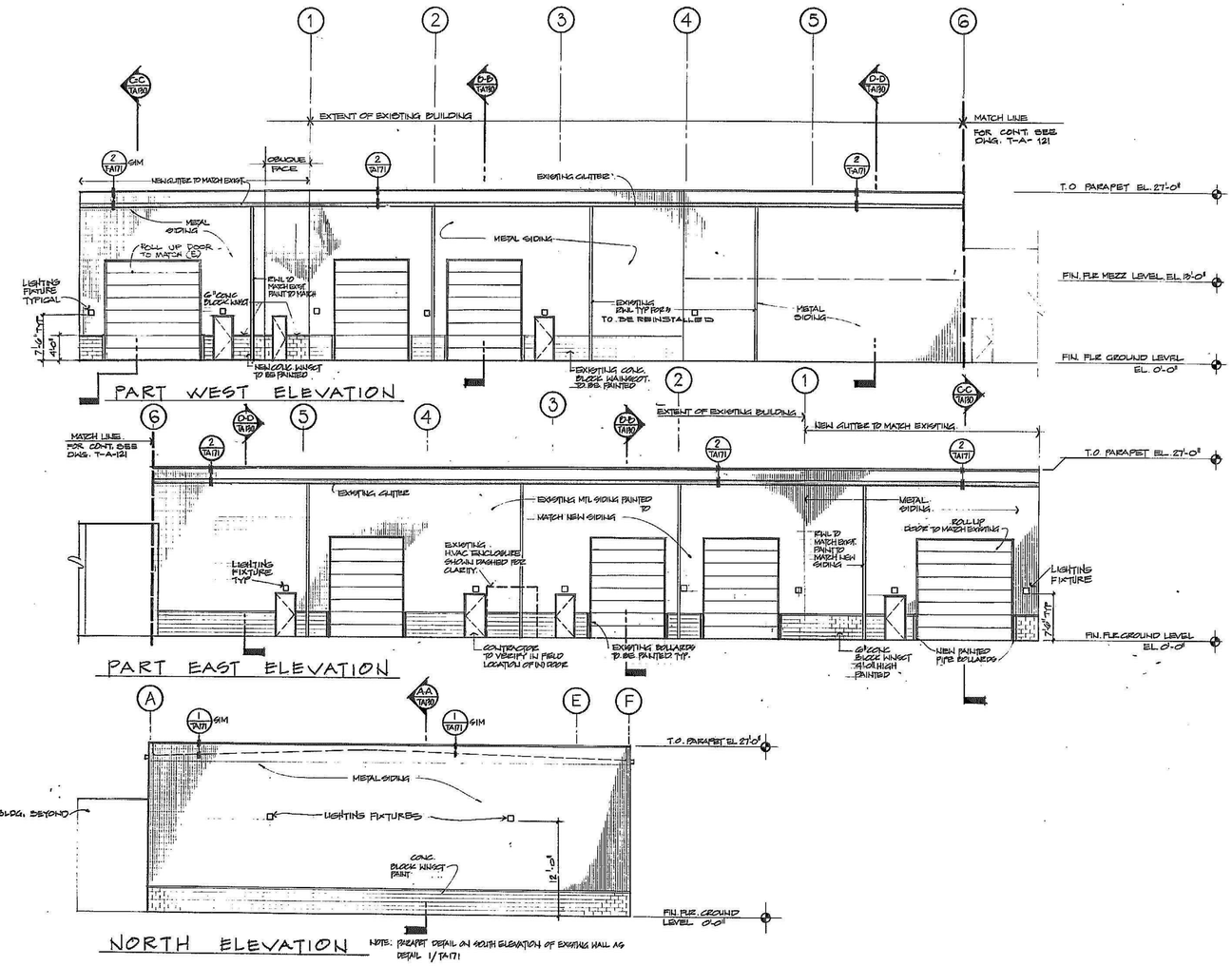
REFERENCES:

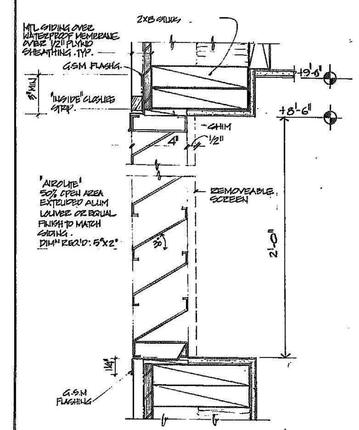
INTERACTIVE RESOURCES
architects + engineers
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
www.intres.com

LICENSED ARCHITECT
THOMAS K. BUTT
Lic. C 7,389
REN. 5-31-19
STATE OF CALIFORNIA

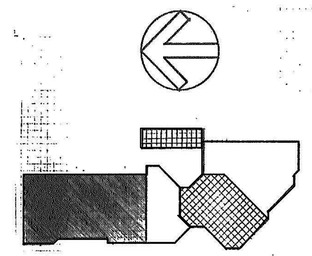
DESIGNED BY: TOM BUTT, FAIA	MACK FACILITY REROOFING		
DRAWN BY: DERRICK PORTER			
CHECKED BY: TOM BUTT, FAIA	DEMOLITION PLANS		
A-E PROJECT MANAGER: TOM BUTT, FAIA			
ACT DIVISION MANAGER:	A-E DRAWING NUMBER: 2016-077-07	SCALE: AS-NOTED	DATE: 09-18-2018
ACT PROJECT MANAGER: STEPHEN P. STANLEY	AC TRANSIT DRAWING NUMBER: ACT#		SIZE: 30x42
CONTRACT # NUMBER: 2013-1255	CAD FILE: \\HAL5\Projects\2016\2016-077-07 Mack Facility\Production\2016-077-07 AC TRANSIT - MACK hayward.rvt		SHEET A1.1

9/18/2018 10:07:12 AM





LOUVER DETAIL. SCALE : 3" = 1'-0" (1)



KEY PLAN
NO SCALE

NO.	DATE	REVISION	BY	APP.	APP.

AC Transit

APPROVED	DATE
KECC:	
ACT:	2/6/83

JOB No. 80097

S. IYAMA & ASSOCIATES
ARCHITECTS & PLANNERS
355 GRAND AVE. OAKLAND, CA 94610
TELEPHONE (415) 836-4726

DESCRIPTION	DATE
DESIGNED BY S. BHATNAGER	2/4/83
DRAWN BY J.V	2/4/83
CHECKED BY BHATNAGER	2/4/83
APPROVED BY S.I.	2/4/83
APPROVED BY [illegible]	2/4/83
SCALE: 1/8" = 1'-0"	

PROFESSIONAL SEAL

Kaiser Engineers California
KAISER ENGINEERS (CALIFORNIA) CORPORATION
300 LAKESIDE DRIVE
P.O. BOX 23910
OAKLAND, CALIFORNIA 94623-2321

DIVISION 6 - HAYWARD
TRAINING CENTER
EXTERIOR ELEVATIONS

DWG No. T-A-120 | REVISION R-0 | CONTRACT: T-1 | SHEET No. 120

NO.	REVISION	DATE	APP'D

AC TRANSIT

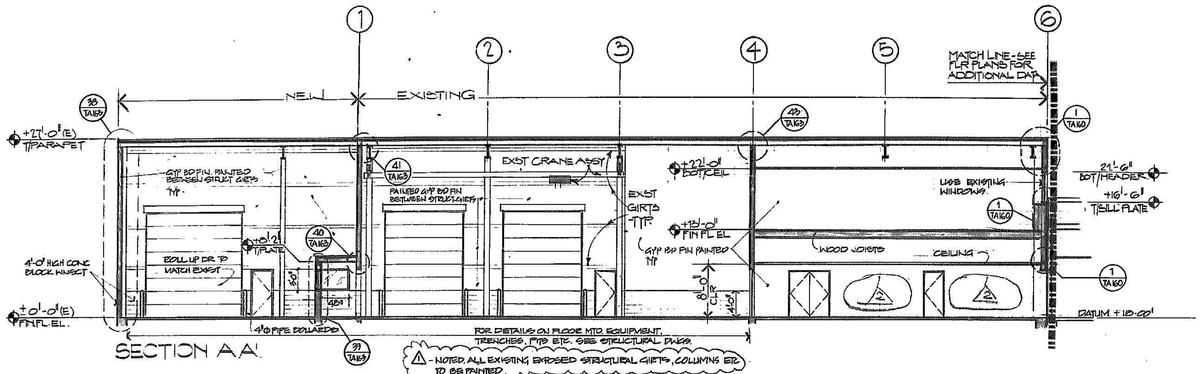
REFERENCES:

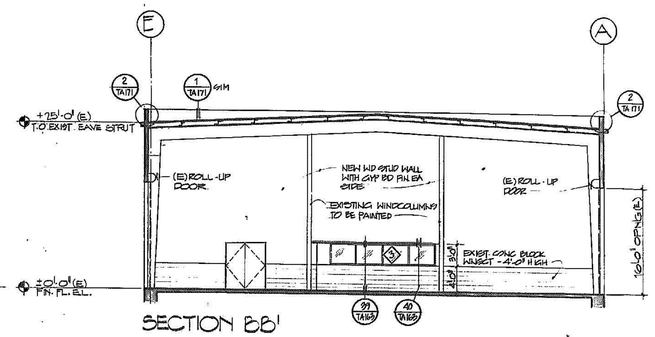
INTERACTIVE RESOURCES
architects + engineers
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
www.intres.com

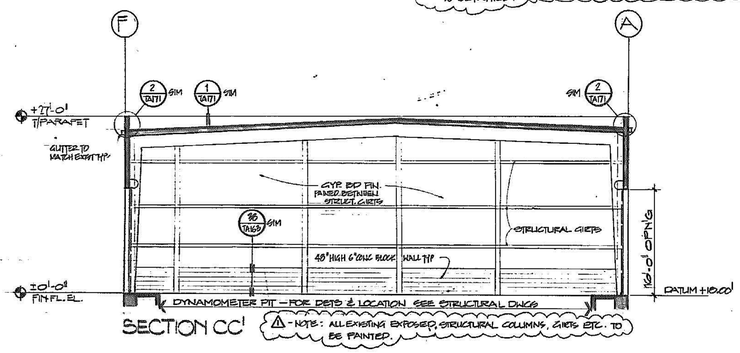
LICENSED ARCHITECT THOMAS K. BUTT No. C 7,389 REN. 5-31-19 STATE OF CALIFORNIA

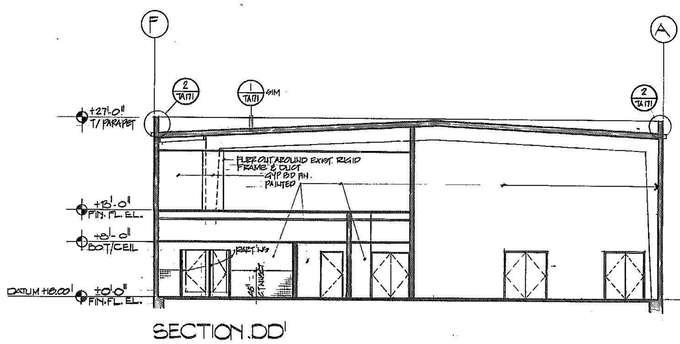
DESIGNED BY: TOM BUTT, FAIA	MACK FACILITY REROOFING		
DRAWN BY: DERRICK PORTER	RECORD DRAWING – FOR REFERNCE ONLY		
CHECKED BY: TOM BUTT, FAIA			
A-E PROJECT MANAGER: TOM BUTT, FAIA			
ACT DIVISION MANAGER:	A-E DRAWING NUMBER: 2016-077-07	SCALE: AS-NOTED	DATE: 09-18-2018
ACT PROJECT MANAGER: STEPHEN P. STANLEY	AC TRANSIT DRAWING NUMBER: ACT#		SIZE: 30x42
CONTRACT # NUMBER: 2013-1255	CAD FILE: \\HAL5\Projects\2016\2016-077-07 Mack Facility\Production\2016-077-07 AC TRANSIT - MACK hayward.rvt		SHEET A1.11

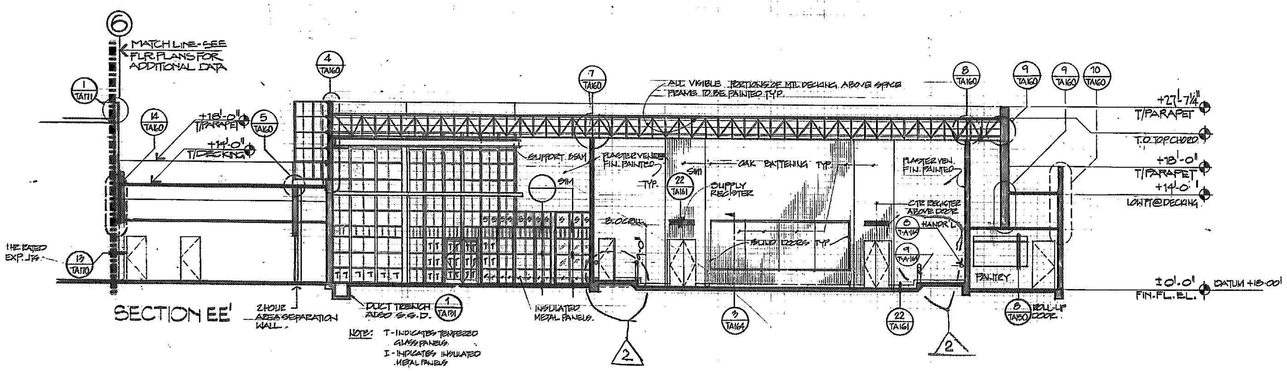
9/18/2018 10:07:24 AM

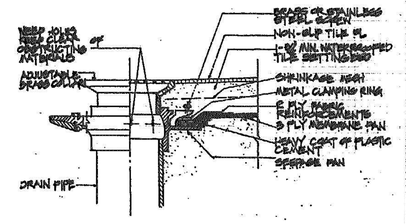




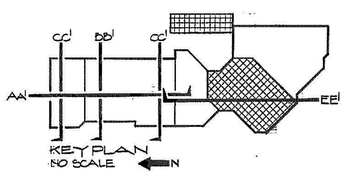








SHOWER DRAIN DETAIL 1
NO SCALE



NO.	DATE	REVISION	BY	APP.	APP.
3	3.3.88	ALL (E) EXPOSED STRUCTURE TO BE PAINTED	SD		
2	7.5.85	GEN. REV. PER HOOD COMMENTS	SD		
1					

AC Transit — APPROVED — DATE — KECC: — ACT: — JOB No. 80097

S. IYAMA & ASSOCIATES ARCHITECTS & PLANNERS
355 GRAND AVE. OAKLAND, CA 94610
TELEPHONE (415) 836-4726

DESCRIPTION	DATE
DESIGNED BY S. BHATNAGER	2/4/83
DRAWN BY J.V.	2/4/83
CHECKED BY BHATNAGER	2/4/83
APPROVED BY S.I.	2/4/83
APPROVED BY EE William Hagemann	2/11/83

SCALE: 1/8" = 1'-0"

PROFESSIONAL SEAL

Kaiser Engineers California — KAISER ENGINEERS (CALIFORNIA) CORPORATION, 300 LAKESIDE DRIVE, P.O. BOX 23210, OAKLAND, CALIFORNIA 94623-2301

DIVISION 6 - HAYWARD
TRAINING CENTER
BUILDING SECTIONS

DWG No. T-A-130 | REVISION R-2 | CONTRACT: T-1 | SHEET No. 15

24 X — Date 9/21/90

NO.	REVISION	DATE	APP'D

AC TRANSIT

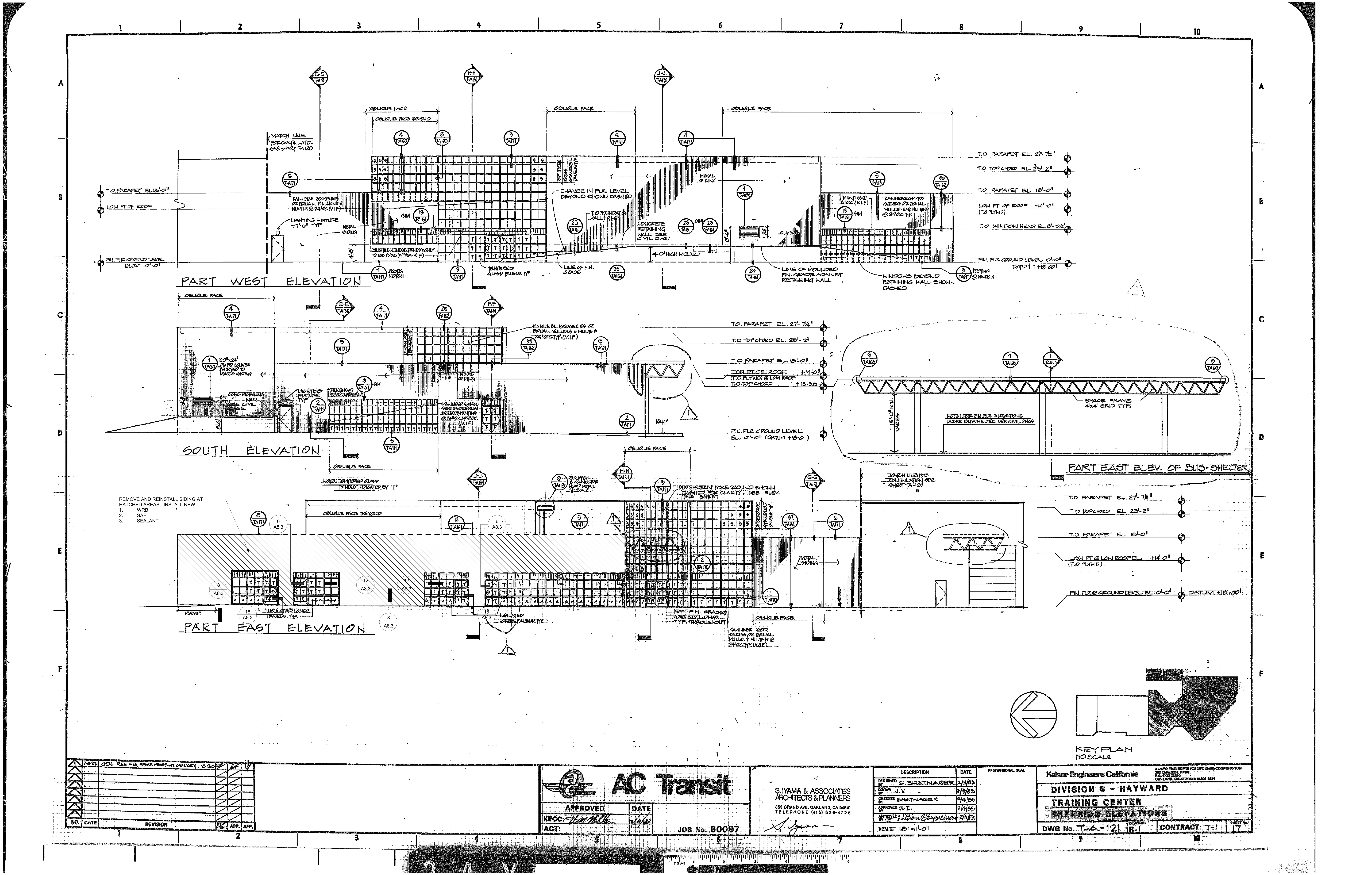
REFERENCES:

INTERACTIVE RESOURCES architects + engineers
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
www.intres.com

LICENSED ARCHITECT THOMAS K. BUTT No. C 7,389 REN 3-31-19 STATE OF CALIFORNIA

DESIGNED BY:	TOM BUTT, FAIA	MACK FACILITY REROOFING	
DRAWN BY:	DERRICK PORTER	RECORD DRAWING – FOR REFERENCE ONLY	
CHECKED BY:	TOM BUTT, FAIA		
A-E PROJECT MANAGER:	TOM BUTT, FAIA		
ACT DIVISION MANAGER:		A-E DRAWING NUMBER: 2016-077-07	SCALE: AS-NOTED
ACT PROJECT MANAGER:	STEPHEN P. STANLEY	AC TRANSIT DRAWING NUMBER: ACT#	SIZE: 30x42
CONTRACT # NUMBER:	2013-1255	CAD FILE: \\HAL5\Projects\2016\2016-077-07 Mack Facility\Production\2016-077-07 AC TRANSIT - MACK hayward.rvt	SHEET A1.12

9/18/2018 10:08:25 AM



NO.	REVISION	DATE	APP'D

REFERENCES:

INTERACTIVE RESOURCES architects + engineers
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
www.intres.com

LICENSED ARCHITECT THOMAS K. BUTT No. C 7,389 STATE OF CALIFORNIA

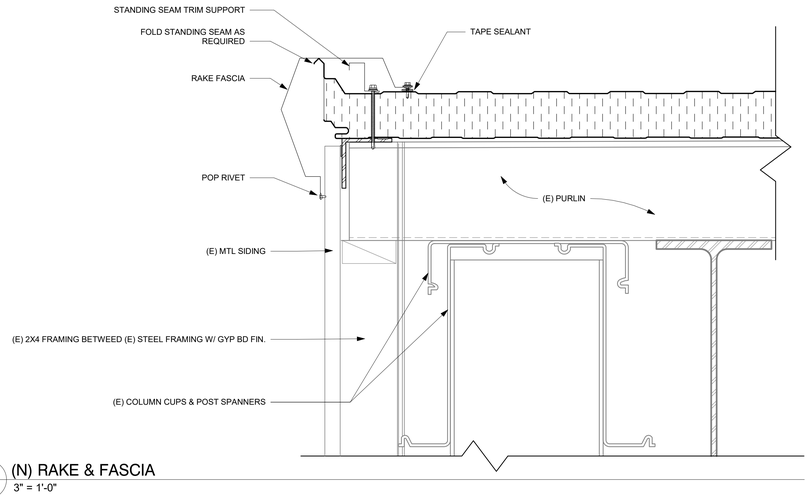
DESIGNED BY:	Designer
DRAWN BY:	Author
CHECKED BY:	Checker
A-E PROJECT MANAGER:	TOM BUTT, FAIA
ACT DIVISION MANAGER:	
ACT PROJECT MANAGER:	STEPHEN P. STANLEY
CONTRACT # NUMBER:	2013-1255

MACK FACILITY REROOFING

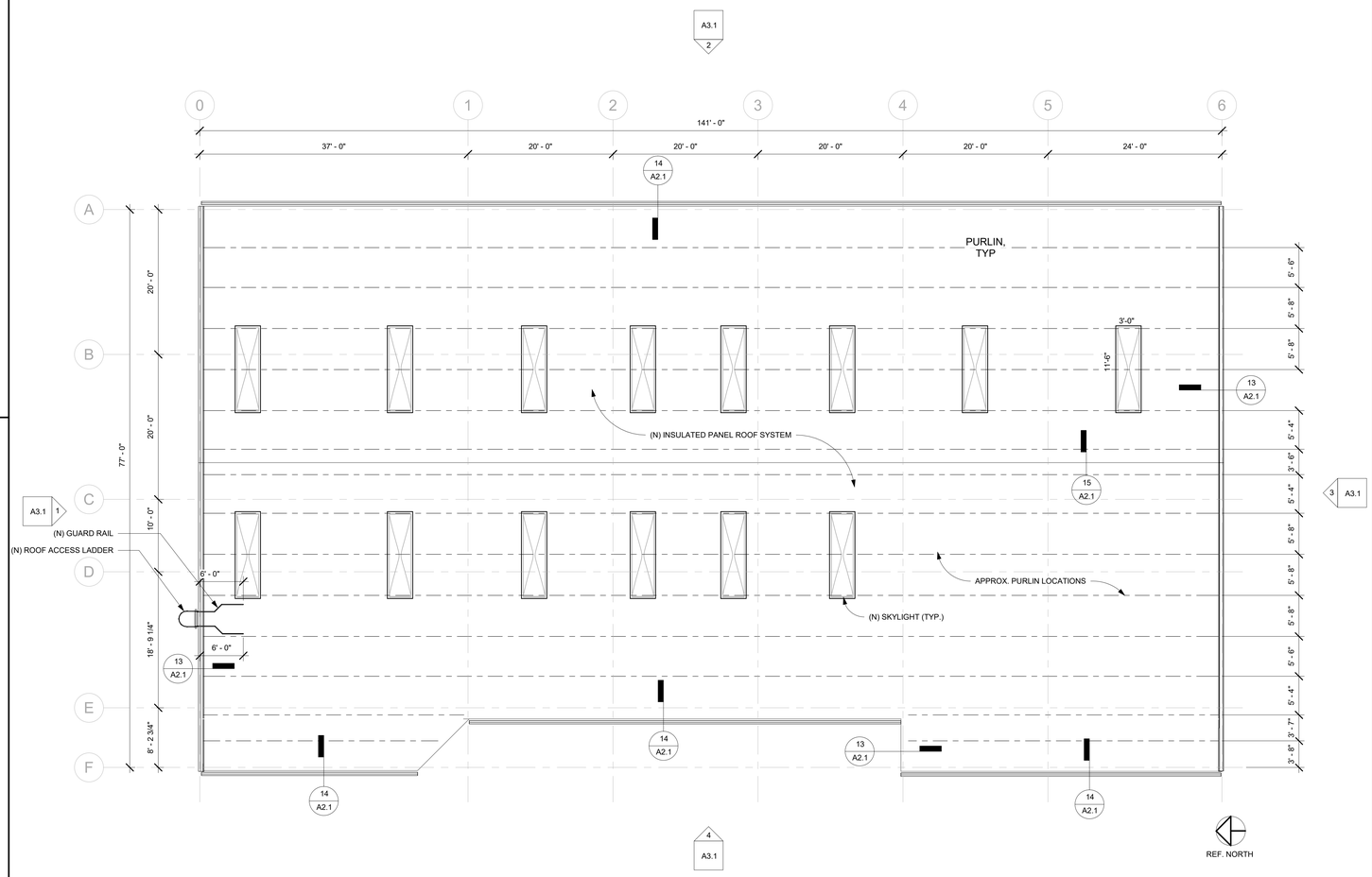
RECORD DRAWING – FOR REFERENCE ONLY

A-E DRAWING NUMBER: 2016-077-07	SCALE: AS-NOTED	DATE: 09-18-2018
AC TRANSIT DRAWING NUMBER: ACT#		SIZE: 30x42
CAD FILE: \\HALS\Projects\2016\2016-077-07 Mack Facility\Production\2016-077-07 AC TRANSIT - MACK hayward.rvt		SHEET A1.13

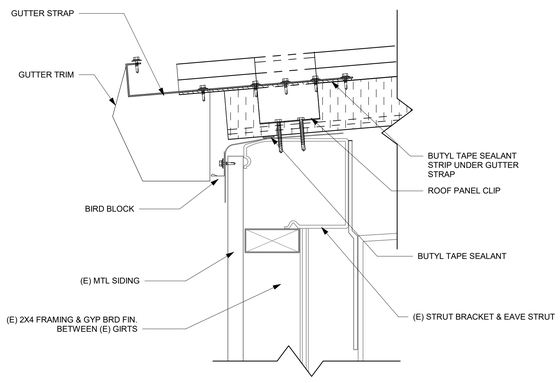
9/18/2018 10:08:39 AM



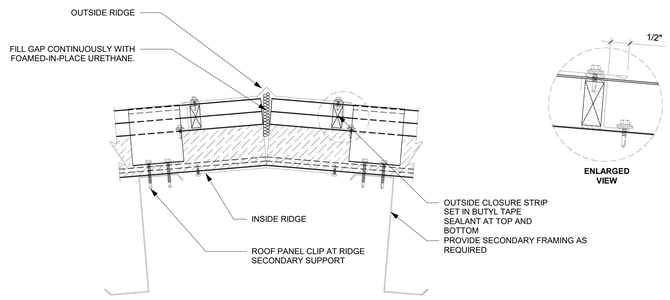
13 / A2.1 (N) RAKE & FASCIA
3" = 1'-0"



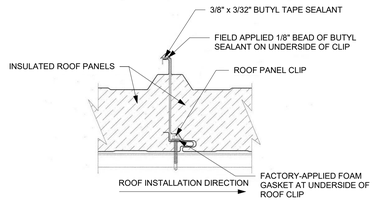
8 NEW ROOF PLAN
1/8" = 1'-0"



14 / A2.1 (N) EAVE W/ GUTTER
3" = 1'-0"



15 / A2.1 (N) RIDGE APEX
3" = 1'-0"



9 (N) ROOF PANEL JOINT
3" = 1'-0"

NO.	REVISION	DATE	APP'D

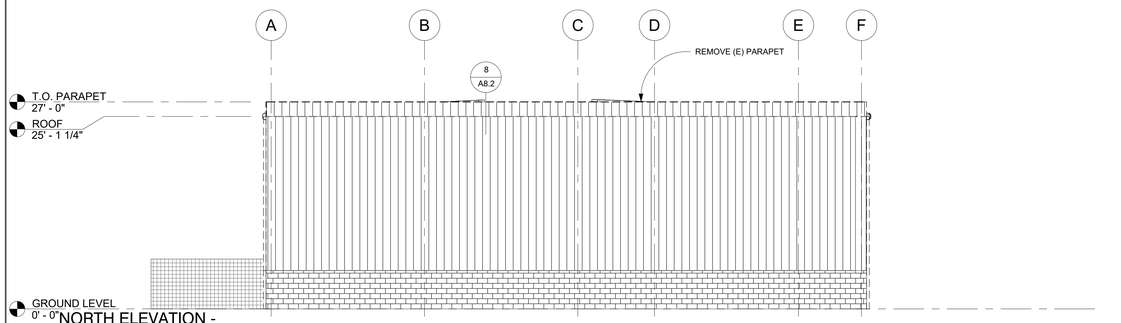
REFERENCES:

INTERACTIVE RESOURCES architects + engineers
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
www.intres.com

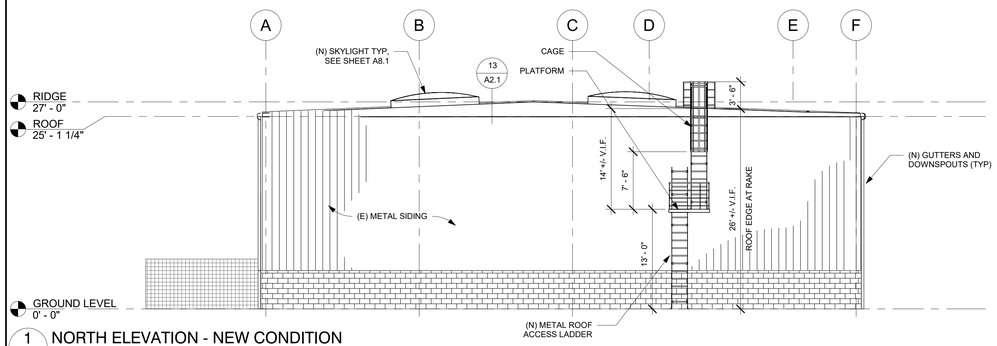
LICENSED ARCHITECT THOMAS K. BUTT No. C 7,389 REN 5-31-19 STATE OF CALIFORNIA

DESIGNED BY: TOM BUTT, FAIA	MACK FACILITY REROOFING		
DRAWN BY: DERRICK PORTER	NEW ROOF PLAN		
CHECKED BY: TOM BUTT, FAIA			
A-E PROJECT MANAGER: TOM BUTT, FAIA			
ACT DIVISION MANAGER:	A-E DRAWING NUMBER: 2016-077-07	SCALE: AS-NOTED	DATE: 09-18-2018
ACT PROJECT MANAGER: STEPHEN P. STANLEY	AC TRANSIT DRAWING NUMBER: ACT#		SIZE: 30x42
CONTRACT # NUMBER: 2013-1255	CAD FILE: \\HAL5\Projects\2016\2016-077-07 Mack Facility\Production\2016-077-07 AC TRANSIT - MACK hayward.rvt		SHEET A2.1

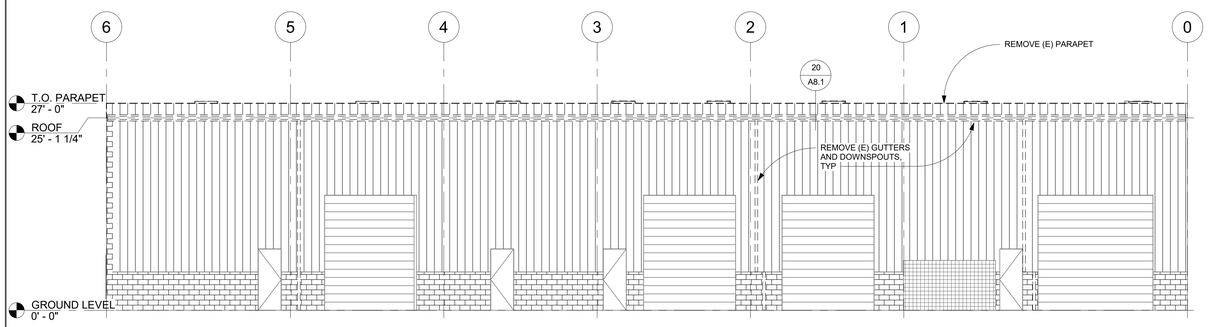
9/18/2018 10:08:53 AM



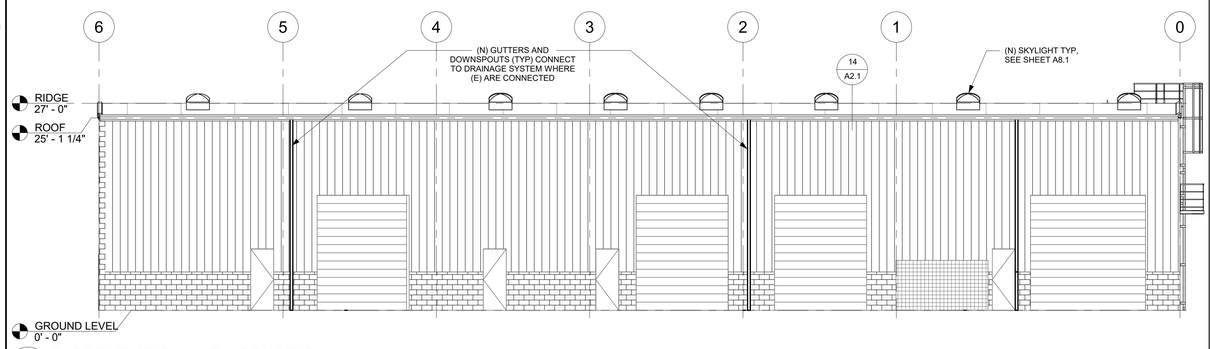
5 A1.1 NORTH ELEVATION - EXISTING CONDITION & DEMOLITION
1/8" = 1'-0"



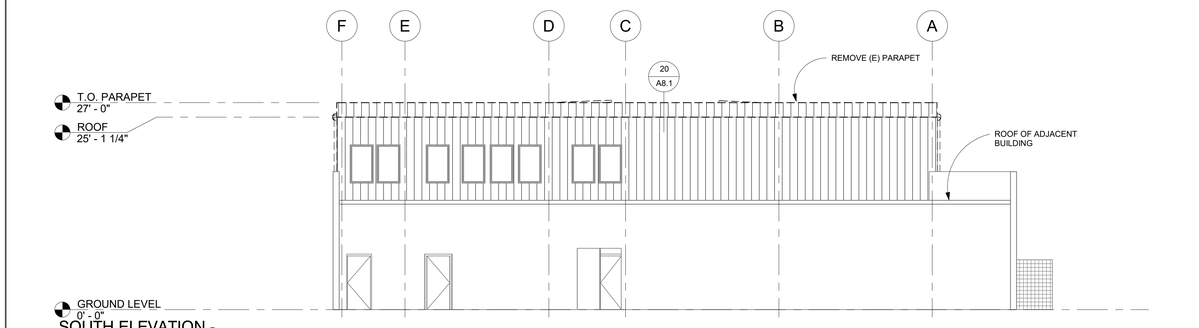
1 A2.1 NORTH ELEVATION - NEW CONDITION
1/8" = 1'-0"



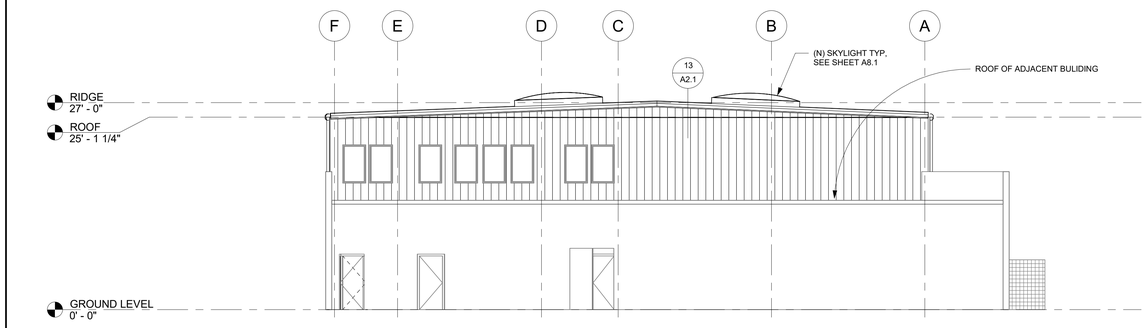
6 A1.1 EAST ELEVATION - EXISTING CONDITION & DEMOLITION
1/8" = 1'-0"



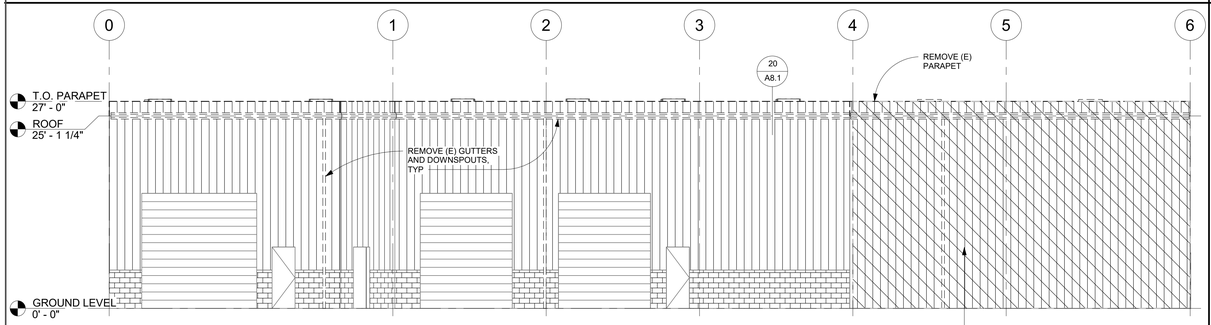
2 A2.1 EAST ELEVATION - NEW CONDITION
1/8" = 1'-0"



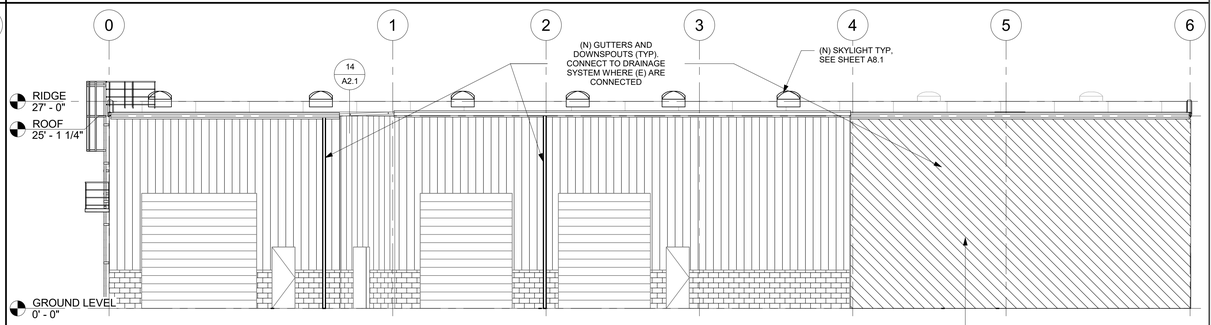
7 A1.1 SOUTH ELEVATION - EXISTING CONDITION & DEMOLITION
1/8" = 1'-0"



3 A2.1 SOUTH ELEVATION - NEW CONDITION
1/8" = 1'-0"



8 A1.1 WEST ELEVATION - EXISTING CONDITION & DEMOLITION
1/8" = 1'-0"



4 A2.1 WEST ELEVATION - NEW CONDITION
1/8" = 1'-0"

NO.	REVISION	DATE	APP'D

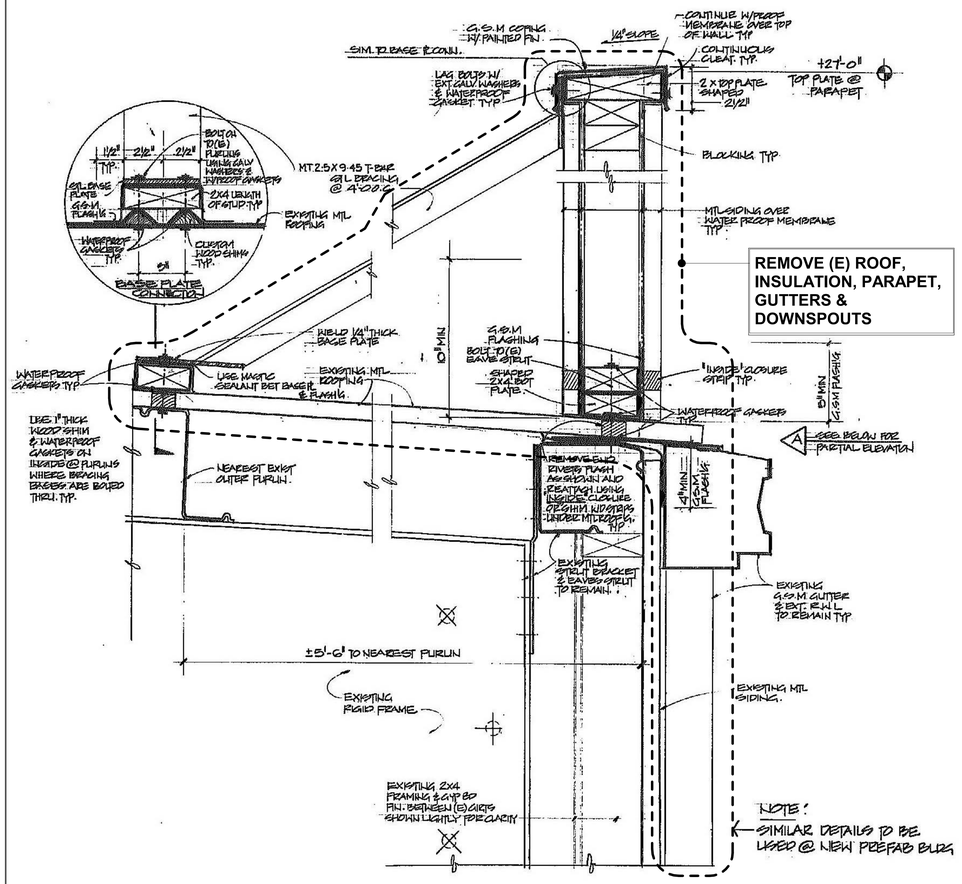
REFERENCES:

INTERACTIVE RESOURCES architects + engineers
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
www.intres.com

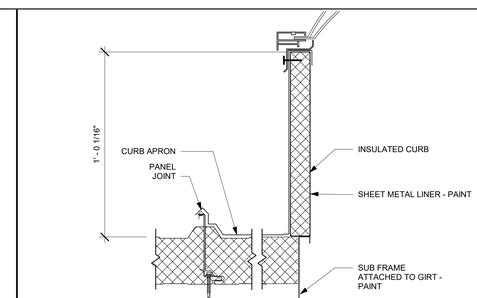
LICENSED ARCHITECT THOMAS K. BUTT No. C 7,389 REN. 5-31-19 STATE OF CALIFORNIA

DESIGNED BY: TOM BUTT, FAIA	MACK FACILITY REROOFING		
DRAWN BY: DERRICK PORTER			
CHECKED BY: TOM BUTT, FAIA	ELEVATIONS		
A-E PROJECT MANAGER: TOM BUTT, FAIA			
ACT DIVISION MANAGER:	A-E DRAWING NUMBER: 2016-077-07	SCALE: AS-NOTED	DATE: 09-18-2018
ACT PROJECT MANAGER: STEPHEN P. STANLEY	AC TRANSIT DRAWING NUMBER: ACT#		SIZE: 30x42
CONTRACT # NUMBER: 2013-1255	CAD FILE: \\HAL5\Projects\2016\2016-077-07 Mack Facility\Production\2016-077-07 AC TRANSIT - MACK hayward.rvt		SHEET A3.1

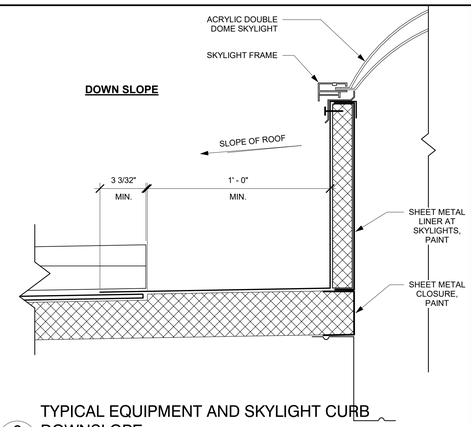
9/18/2018 10:09:11 AM



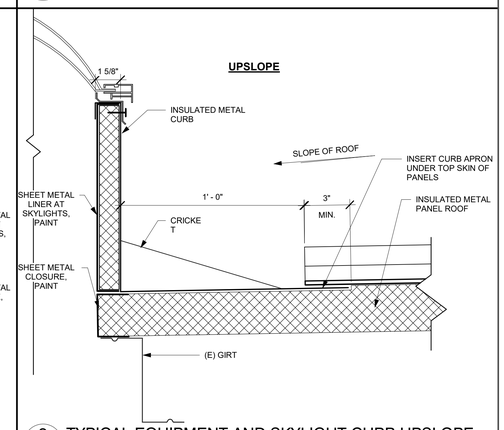
20 A3.1 (E) PARAPET ALONG GUTTER @ EXISTING BUILDING AND DEMOLITION NOTE
NTS



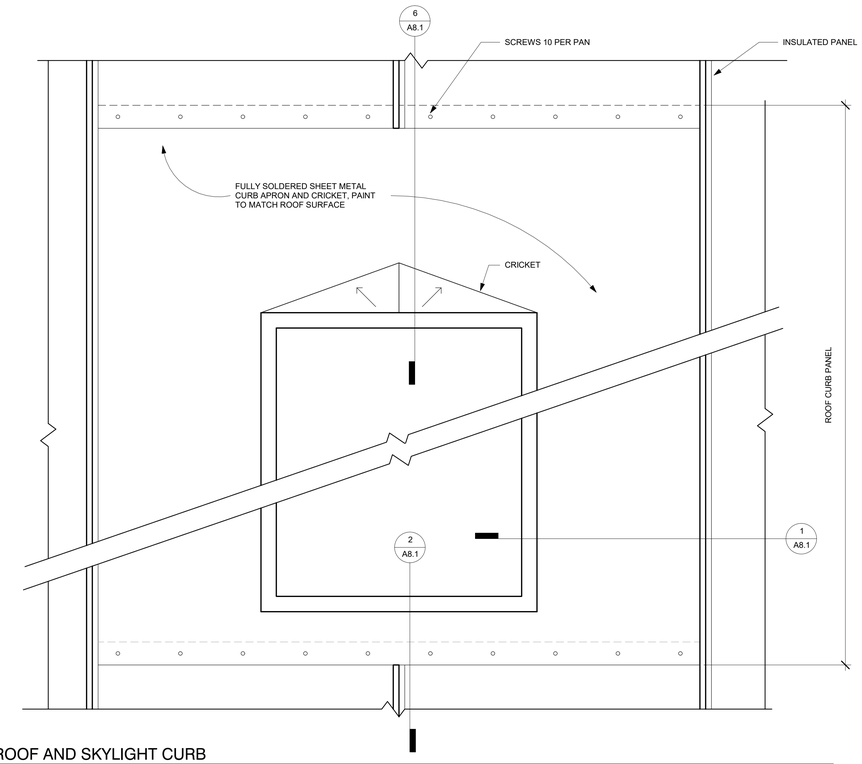
1 A8.1 TYPICAL SKYLIGHT CURB (SIDE)
3" = 1'-0"



6 A8.1 TYPICAL EQUIPMENT AND SKYLIGHT CURB DOWNSLOPE
3" = 1'-0"



2 A8.1 TYPICAL EQUIPMENT AND SKYLIGHT CURB UPSLOPE
3" = 1'-0"



8 ROOF AND SKYLIGHT CURB
1 1/2" = 1'-0"

NO.	REVISION	DATE	APP'D

AC TRANSIT

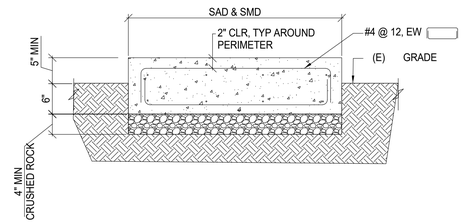
REFERENCES:

INTERACTIVE RESOURCES architects + engineers
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
www.intres.com

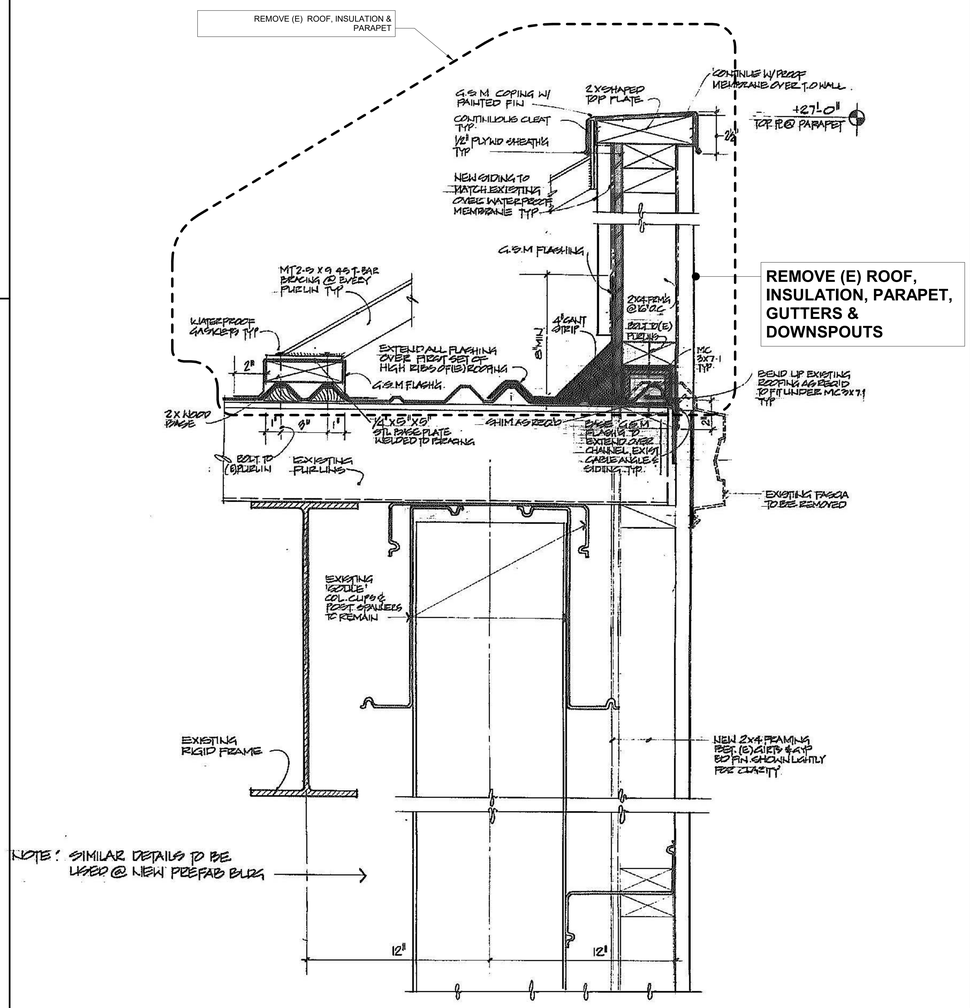
LICENSED ARCHITECT THOMAS K. BUTT No. C 7,389 REN 3-31-19 STATE OF CALIFORNIA

DESIGNED BY: TOM BUTT, FAIA	MACK FACILITY REROOFING		
DRAWN BY: DERRICK PORTER			
CHECKED BY: TOM BUTT, FAIA	DETAILS		
A-E PROJECT MANAGER: TOM BUTT, FAIA			
ACT DIVISION MANAGER:	A-E DRAWING NUMBER: 2016-077-07	SCALE: AS-NOTED	DATE: 09-18-2018
ACT PROJECT MANAGER: STEPHEN P. STANLEY	AC TRANSIT DRAWING NUMBER: ACT#		SIZE: 30x42
CONTRACT # NUMBER: 2013-1255	CAD FILE: \\HAL5\Projects\2016\2016-077-07 Mack Facility\Production\2016-077-07 AC TRANSIT - MACK hayward.rvt		SHEET A8.1

9/18/2018 10:09:26 AM



1 (N) HOUSEKEEPING PAD
1" = 1'-0"



REMOVE (E) ROOF, INSULATION, PARAPET, GUTTERS & DOWNSPOUTS

8 (E) PARAPET @ EXISTING BUILDING GABLE & DEMOLITION NOTES
A3.1 NTS

NO.	REVISION	DATE	APP'D

AC TRANSIT

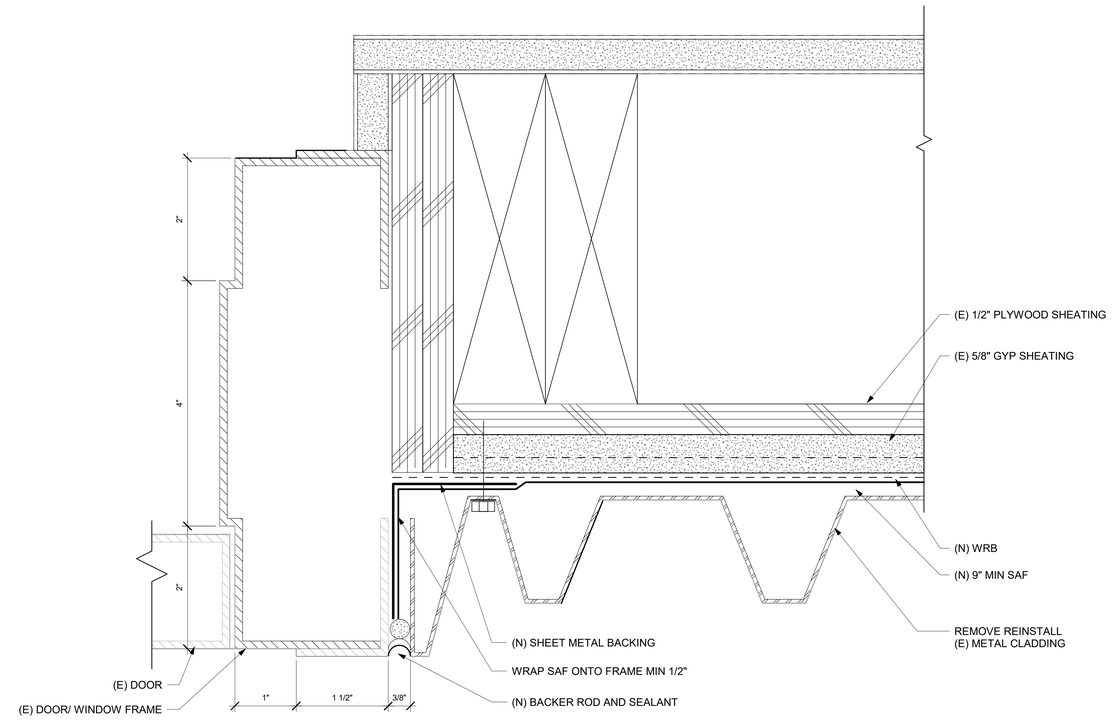
REFERENCES:

INTERACTIVE RESOURCES architects + engineers
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
www.intres.com

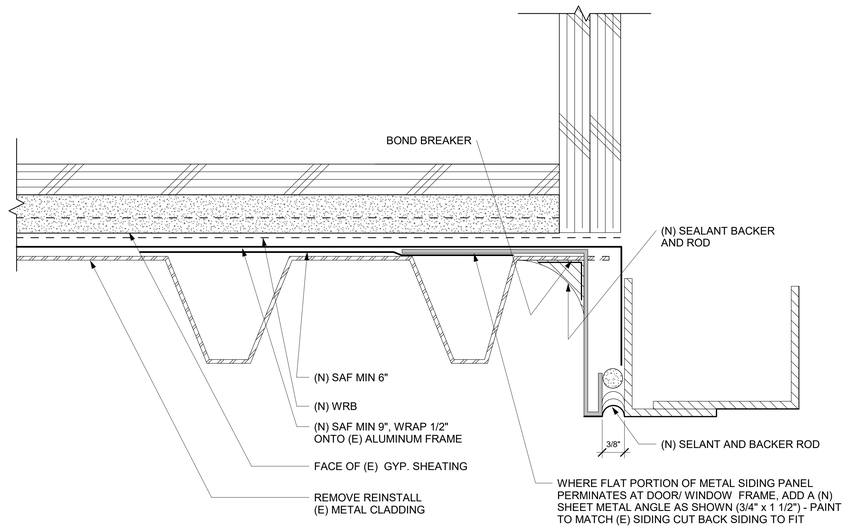
LICENSED ARCHITECT THOMAS K. BUTT No. C 7,389 STATE OF CALIFORNIA

DESIGNED BY: TOM BUTT, FAIA	MACK FACILITY REROOFING		
DRAWN BY: DERRICK PORTER			
CHECKED BY: TOM BUTT, FAIA	DETAILS		
A-E PROJECT MANAGER: TOM BUTT, FAIA			
ACT DIVISION MANAGER:	A-E DRAWING NUMBER: 2016-077-07	SCALE: AS-NOTED	DATE: 09-18-2018
ACT PROJECT MANAGER: STEPHEN P. STANLEY	AC TRANSIT DRAWING NUMBER: ACT#		SIZE: 30x42
CONTRACT # NUMBER: 2013-1255	CAD FILE: \\HAL5\Projects\2016\2016-077-07 Mack Facility\Production\2016-077-07 AC TRANSIT - MACK hayward.rvt		SHEET A8.2

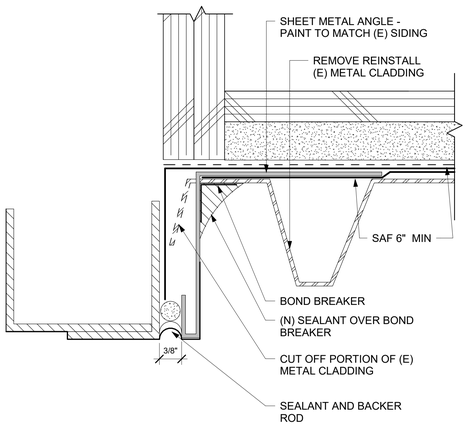
9/18/2018 10:09:34 AM



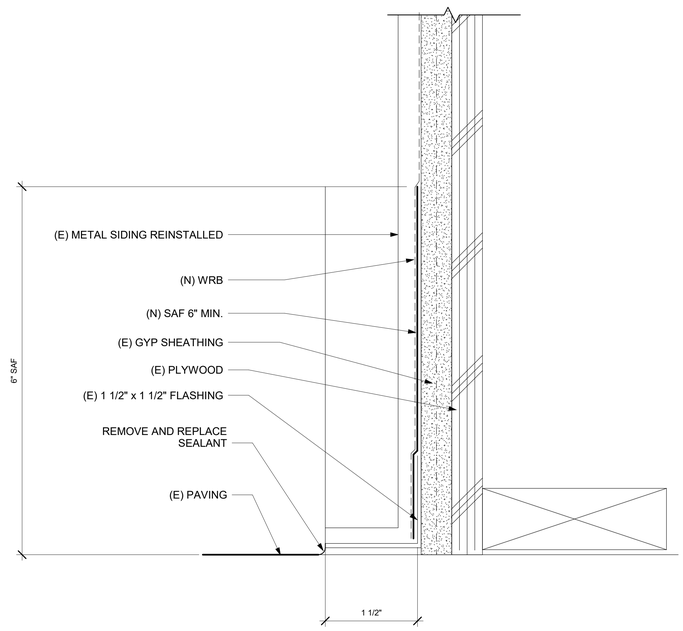
18 A1.13 DOOR/WINDOW JAMB AT (E) METAL CLADDING
12" = 1'-0"



6 A1.13 DOOR/ WINDOW JAMB AT METAL CLADDING
12" = 1'-0"



12 A1.13 DOOR/WINDOW JAMB AT METAL CLADDING
12" = 1'-0"



8 A1.13 WALL BASE AT METAL SIDING
12" = 1'-0"

NO.	REVISION	DATE	APP'D

REFERENCES:

INTERACTIVE RESOURCES architects + engineers
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
www.intres.com

LICENSED ARCHITECT THOMAS K. BUTT No. C 7,389 REN 3-31-19 STATE OF CALIFORNIA

DESIGNED BY: Designer	MACK FACILITY REROOFING		
DRAWN BY: Author			
CHECKED BY: Checker	DETAILS		
A-E PROJECT MANAGER: TOM BUTT, FAIA			
ACT DIVISION MANAGER:	A-E DRAWING NUMBER: 2016-077-07	SCALE: AS-NOTED	DATE: 09-18-2018
ACT PROJECT MANAGER: STEPHEN P. STANLEY	AC TRANSIT DRAWING NUMBER: ACT#		SIZE: 30x42
CONTRACT # NUMBER: 2013-1255	CAD FILE: \\HAL5\Projects\2016\2016-077-07 Mack Facility\Production\2016-077-07 AC TRANSIT - MACK hayward.rvt		SHEET A8.3

9/18/2018 10:09:44 AM

VARIABLE REFRIGERANT FLOW FAN COIL UNITS

SYMBOL	MANUF.	MODEL #	AREA SERVED	COND. UNIT	OSA (CFM) EACH FCU	CAPACITY		SUPPLY FAN						WEIGHT	NOTES
						COOL (MBH)	HEAT (MBH)	CFM	ESP	MOTOR					
										VOLTS	PHASE	KW	MCA	DRIVE	
FC-1	DAIKIN	FXZQ09TAVJU	MEZZANINE-PRIVATE OFFICE	CU-1	30	9.5	10.5	317	-	208/230	1	0.04	0.3	DIRECT	50	1
FC-2, FC-3, FC-4, FC-5	DAIKIN	FXZQ09TAVJU	MEZZANINE-OPEN OFFICE	CU-1	50	9.5	10.5	317	-	208/230	1	0.04	0.3	DIRECT	50	1
FC-6, FC-7, FC-8	DAIKIN	FXZQ09TAVJU	LARGE CLASSROOM	CU-1	50	9.5	10.5	317	-	208/230	1	0.04	0.3	DIRECT	50	1
FC-9, FC-10, FC-11	DAIKIN	FXZQ09TAVJU	COMPUTER LAB	CU-1	40	9.5	10.5	317	-	208/230	1	0.04	0.3	DIRECT	50	1

NOTES: 1. PROVIDE WITH CONDENSATE PUMP AND CONDENSATE OVERFLOW FLOAT TO SHUT-OFF UNIT.

VARIABLE REFRIGERANT FLOW CONDENSING UNITS

SYMBOL	MANUF.	MODEL #	AREA SERVED	REFRIG. TYPE	AMBIENT TEMP (F)	COOLING		HEATING (MBH)	ELECTRICAL			WEIGHT	NOTES
						TOTAL	IEER		VOLTS	PHASE	MCA		
CU-1	DAIKIN	REYQ72TATJU	OFFICES/CLASSROOMS	R410A	95	72	20.9	81	208/230	3	30.2	510	

VARIABLE REFRIGERANT FLOW BC CONTROLLER UNITS

SYMBOL	MANUF.	MODEL #	AREA SERVED	COND. UNIT	POWER INPUT		ELECTRICAL			WEIGHT	NOTES
					COOL (KWH)	HEAT (KWH)	VOLTS	PHASE	MCA		
BC-1	DAIKIN	BS12Q54TVJ	OFFICES/CLASSROOMS	CU-1	0.13	0.053	208/230	1	1.2	110	

NOTES: 1. PROVIDE CONDENSATE PUMP AND CONDENSATE OVERFLOW FLOAT TO SHUT-OFF UNIT.

VENTILATION-HEAT RECOVERY FAN UNITS

SYMBOL	MANUF.	MODEL #	AREA SERVED	FANS							WEIGHT	NOTES
				CFM	ESP	MOTOR						
						VOLTS	PHASE	FLA	MCA	DRIVE		
VF-1	DAIKIN	VENTILATOR 300 - VAM300GVJU	OFFICES	230	0.6	208/230	1	1.4	1.6	DIRECT	80	1, 2
VF-2	DAIKIN	VENTILATOR 300 - VAM300GVJU	CLASSROOMS	270	0.6	208/230	1	1.4	1.6	DIRECT	80	1, 2

NOTES: 1. PROVIDE WITH CONDENSATE PUMP AND CONDENSATE OVERFLOW FLOAT TO SHUT-OFF UNIT.
2. PROVIDE WITH FILTER BOX.

EXHAUST FANS

SYMBOL	MANUF.	MODEL #	AREA SERVICED	MOUNT TYPE	FAN		ELECTRICAL				CONTROL	WEIGHT	NOTES
					CFM	ESP (INCH)	VOLTS	PHASE	HP	DRIVE			
EF-1	GREENHECK	CW-101-A	TRAINING BAY PIT	WALL	1200	0.5	230	1	1/3	DIRECT	INTERCONNECT WITH HV-1	70	1,2,3
EF-2	GREENHECK	CW-099-A	TRAINING BAY PIT	WALL	1000	0.5	230	1	1/3	DIRECT	INTERCONNECT WITH HV-1	60	1,2,3
EF-3	GREENHECK	CW-099-A	TRAINING BAY	WALL	1000	0.5	230	1	1/3	DIRECT	INTERCONNECT WITH HV-1	60	1,2
EF-4	GREENHECK	CW-090-D	LUBE ROOM	WALL	400	0.5	115	1	1/15	DIRECT	RUN CONTINUOUSLY	40	1,2,3
EF-5	GREENHECK	CW-099-A	TRAINING BAY TAILPIPE EXHAUST	WALL	785	1	230	1	1/3	DIRECT	INTERCONNECT WITH HV-1	60	1,2
EF-6	GREENHECK	CW-161-B	BUS REPAIR BAY TAILPIPE EXHAUST	WALL	1995	1	230	1	1/2	DIRECT	INTERCONNECT WITH HV-2	100	1,2
EF-7	GREENHECK	CW-131-A	BUS REPAIR BAY	WALL	2020	0.3	230	1	3/4	DIRECT	INTERCONNECT WITH HV-2	80	1,2
EF-8	GREENHECK	CW-099-A	WELDING SHOP	WALL	1000	0.5	230	1	1/3	DIRECT	INTERCONNECT WITH HV-3	60	1
EF-10	GREENHECK	CW-121-A	SOUTH BAY	WALL	1350	0.5	230	1	1/2	DIRECT	INTERCONNECT WITH HV-3	80	1,2
EF-12	GREENHECK	CW-099-A	TOILETS/JANITOR	WALL	800	0.5	230	1	1/3	DIRECT	TIME CLOCK	60	1,2

NOTES:
1. PROVIDE WITH BACKDRAFT DAMPER.
2. PROVIDE WITH SPEED CONTROL.
3. PROVIDE WITH ALUMINUM FAN WHEEL AND HOUSING AND EXPLOSION RESISTANT MOTOR.

NATURAL GAS FIRED HEATING/VENTILATION UNITS

SYMBOL	MANUFACTURER	MODEL #	AREA SERVICED	MOUNT TYPE	HEATING			FAN		ELECTRICAL					CONTROL	WEIGHT	NOTES
					INPUT (MBH)	OUTPUT (MBH)	EFF (%)	CFM	ESP (INCH)	VOLTS	PHASE	MCA	FAN HP	DRIVE			
HV-1	REZNOR	RHH-180C	TRAINING BAY PIT	OUTDOOR/ GROUND	175	159	91	3900	1	208	1	36.25	5	BELT	TIMECLOCK	830	1,2
HV-2	REZNOR	RHH-130C	BUS REPAIR BAY	OUTDOOR/ GROUND	131	121	92	2680	1	208	1	13.44	2	BELT	TIMECLOCK	790	1,2
HV-3	REZNOR	RHH-130C	SOUTH BAY/ WELDING SHOP	OUTDOOR/ GROUND	131	121	92	1970	1	208	1	11	1-1/2	BELT	TIMECLOCK	790	1,2

NOTES:
1. PROVIDE WITH BACKDRAFT DAMPER.

GRILLE - REGISTER - DIFFUSER SCHEDULE

SYMBOL NO.	FACE SIZE	SERVICE	MOUNT	MANUFACTURER & MODEL	FINISH	OPTIONS-ACCESSORIES
A	REFER TO DRAWING	SUPPLY	DUCT MOUNTED	TITUS 300 FL	ALUMINUM	3/4" BLADE SPACING, DOUBLE DEFLECTION ADJUSTABLE
B	24"x24"	RETURN	CEILING	TITUS 50F	ALUMINUM	1/2" X 1/2" EGGCRATE, ALUMINUM BORDER
C	REFER TO DRAWING	EXHAUST	DUCT MOUNTED	TITUS 350ZFL	ALUMINUM	3/4" BLADE SPACING, 22.5 DEGREE ANGLE, SINGLE DEFLECTION
D	REFER TO DRAWING	OUTSIDE AIR	EXTERIOR WALL	RUSKIN -ELF375DX	ALUMINUM	4" DEEP EXTRUDED ALUMINUM FRAME, 37.5 DEGREE DRAINABLE BLADES, PROVIDE WITH BIRD SCREEN
E	REFER TO DRAWING	EXHAUST AIR	EXTERIOR WALL	RUSKIN -ELF375DX	ALUMINUM	4" DEEP EXTRUDED ALUMINUM FRAME, 37.5 DEGREE DRAINABLE BLADES, PROVIDE WITH BIRD SCREEN

INLET HOOD

SYMBOL	MANUF.	MODEL #	AREA SERVED/ LOCATION	MOUNT TYPE	FAN		DIMENSIONS				CURB CAP (WID x LEN)	WEIGHT	NOTES
					CFM	ESP (INCH)	THROAT		CASING				
							WIDTH	LENGTH	WIDTH	LENGTH			
IH-1	GREENHECK	FGI	ROOF	CURB	1340	0.01	32	32	51	60	38" x 38"	140	1

NOTES:
1. PROVIDE WITH ROOF CURB AND BACKDRAFT DAMPER.

MINIMUM VENTILATION RATES

ROOM #	ROOM NAME	AREA	OCC	TITLE 24 SECTION 121 (b) 2 (TABLE 121-A)				REQ OSA (CFM)
				OCC MIN (CFM/OCC)	OCC MIN (CFM)	AREA MIN (CFM/SQFT)	AREA MIN (CFM)	
145	COMPUTER LAB	489	8	15.0	120	0.15	73	120
143	CLASSROOM	670	10	15.0	150	0.15	101	150
202	PRIVATE OFFICE	187	2	15.0	28	0.15	28	28
201	OPEN OFFICE	1301	13	15.0	195	0.15	195	195
								493

HYDRONIC LEGEND

SYMBOL	ABBR	DESCRIPTION
HWS	HWS	HEATING HOT WATER SUPPLY
HWR	HWR	HEATING HOT WATER RETURN
CHWS	CHWS	CHILLED WATER SUPPLY
CHWR	CHWR	CHILLED WATER RETURN
		DIRECTION OF SLOPE
		DIRECTION OF FLOW
		BALL VALVE
		SOLENOID CONTROL VALVE
	P&TRV	RELIEF VALVE, P&T RELIEF VALVE
		BUTTERFLY VALVE
		MOTORIZED BUTTERFLY VALVE
		GATE VALVE
		CHECK VALVE
		2-WAY CONTROL VALVE
		3-WAY CONTROL VALVE
		STRAINER
		STRAINER WITH BLOW OFF
		PRESSURE GAGE
		PRESSURE GAUGE WITH COCK
		THERMOMETER
		PUMP
		TEST TAP (PETE'S PLUG)
		FLEXIBLE CONNECTOR
		UNION
		CAPPED OR PLUGGED TEE
		PIPE UP
		PIPE DOWN
		TOP CONNECTION - BRANCH LINE
		BOTTOM CONNECTION - BRANCH LINE
		TEE UP
		TEE DOWN

NOTE: NOT ALL SYMBOLS OR ABBREVIATIONS APPLY

HVAC LEGEND

SYMBOL	ABBR	DESCRIPTION
1 / M-1		DETAIL NUMBER / DRAWING NUMBER
1 / M-1		SECTION NUMBER / DRAWING NUMBER
AC / 1		EQUIPMENT TYPE / UNIT NUMBER
A CFM,ED / NECK SIZE		SYMBOL AIR QUANTITY / NECK SIZE (4-WAY UON)
		CEILING SUPPLY DIFFUSER/REGISTER
		CEILING RETURN GRILLE/REGISTER
		CEILING EXHAUST GRILLE/REGISTER
		CEILING TRANSFER DIFFUSER/GRILLE
		CEILING OUTSIDE AIR GRILLE/REGISTER
		WALL SUPPLY GRILLE/REGISTER
		WALL RETURN GRILLE/REGISTER
		WALL EXHAUST GRILLE/REGISTER
		SUPPLY AIR DUCT RISER/DROP
		RETURN AIR DUCT RISER/DROP
		EXHAUST AIR DUCT RISER/DROP
		OUTSIDE AIR DUCT RISER/DROP
(D)	R or D	SLOPED DUCT (RISE OR DROP)
	AL	ACOUSTICAL LINING (1" FIBERGLASS U.O.N.)
	TV	TURNING VANES
	FC	FLEXIBLE DUCT CONNECTION
	FSD/FD	FIRE-SMOKE DAMPER/FIRE DAMPER
	VD	VOLUME DAMPER
	BDD	BACK DRAFT DAMPER
		FLEXIBLE DUCT
		SQUARE TO ROUND DUCT
		DUCT/PIPE CONTINUATION
RL		REFRIGERANT LIQUID
RS		REFRIGERANT SUCTION
T	T-STAT	THERMOSTAT (MOUNT AT 48" AFF)
S		TEMPERATURE SENSOR (MOUNT AT 48" AFF)
1		REFERENCE NOTE

NOTE: NOT ALL SYMBOLS OR ABBREVIATIONS APPLY

MECHANICAL ABBREVIATIONS

ABBR	DESCRIPTION	ABBR	DESCRIPTION
Ø	DIAMETER	LWT	LEAVING WATER TEMPERATURE
AC	AIR CONDITIONING	MA	MIXED AIR
AFF	ABOVE FINISHED FLOOR	MAX	MAXIMUM
AMP	AMPERE	MBH	THOUSAND BTU PER HOUR
ARCH	ARCHITECTURAL	MECH	MECHANICAL
BDD	BACKDRAFT DAMPERS	MIN	MINIMUM
BHP	BRAKE HORSEPOWER	(N)	NEW
BLDG	BUILDING	N/A	NOT APPLICABLE
BOD	BOTTOM OF DUCT	NIC	NOT IN CONTRACT
BTU	BRITISH THERMAL UNIT	NO	NUMBER
BTUH	BRITISH THERMAL UNIT PER HOUR	NTS	NOT TO SCALE
CFM	CUBIC FEET PER MINUTE	OAT	OUTSIDE AIR TEMPERATURE
CL	CENTER LINE	OBD	OPPOSED BLADE DAMPER
CLG	CEILING	OC	ON CENTER
DBT	DRY BULB TEMPERATURE	OSA	OUTSIDE AIR
DSD	DUCT MOUNTED SMOKE DETECTOR	PD	PRESSURE DROP
(E)	EXISTING	PLBG	PLUMBING
EA	EXHAUST AIR	POC	POINT OF CONNECTION
EAT	ENTERING AIR TEMPERATURE	POD	POINT OF DEMOLITION
EER	ENERGY EFFICIENCY RATIO	RA	RETURN AIR
ELEC	ELECTRICAL	REQ'D	REQUIRED
ESP	EXTERNAL STATIC PRESSURE (IN WG)	REV	REVISION
EWT	ENTERING WATER TEMPERATURE	RPM	REVOLUTIONS PER MINUTE
F	FAHRENHEIT	SA	SUPPLY AIR
FLA	FULL LOAD AMPS	SD	SMOKE DAMPER
FD	FIRE DAMPER	SEER	SEASONAL ENERGY EFFICIENCY RATIO
FPM	FEET PER MINUTE	SP	STATIC PRESSURE
FSD	FIRE/SMOKE DAMPER	SQ.FT.	SQUARE FEET
FT	FEET	STRUCT	STRUCTURAL
GA	GAUGE	TA	TRANSFER AIR
GAL	GALLONS	TCP	TEMPERATURE CONTROL PANEL
GALV	GALVENIZED	TEMP	TEMPERATURE
GPM	GALLONS PER MINUTE	TOD	TOP OF DUCT
HD	HEAD	TYP	TYPICAL
HP	HORSEPOWER	UC	UNDERCUT
HVAC	HEATING VENTILATING AND AC	UG	UNDERGROUND
HZ	HERTZ	UON	UNLESS OTHERWISE NOTED
IN.	INCH	VAV	VARIABLE AIR VOLUME
IN. W.G.	INCHES WATER GAGE (PRESSURE)	VEL	VELOCITY
KW	KILOWATT	VFD	VARIABLE FREQUENCY DRIVE
LAT	LEAVING AIR TEMPERATURE	WG	WATER GAGE
LBS	POUNDS	WT	WEIGHT

NOTE: NOT ALL SYMBOLS OR ABBREVIATIONS APPLY

HVAC GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS (C.C.R.), 2016 CMC, AND ASCE 7.
2. ALL SYSTEMS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE CITY, COUNTY, FEDERAL AND STATE CODES AND ORDINANCES, AND SHALL MEET ALL REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION.
3. SYSTEM LAYOUTS AS INDICATED ON DRAWINGS ARE GENERALLY DIAGRAMMATIC BUT SHALL BE FOLLOWED AS CLOSELY AS ACTUAL CONSTRUCTION WILL PERMIT.
4. PRIOR TO SUBMISSION OF BID, REVIEW FULL SET OF NEW CONSTRUCTION DRAWINGS (INCLUDING ALL OTHER TRADES). INCLUDE ANY ADDITIONAL DUCT OFF-SETS THAT ARE NOT CURRENTLY SHOWN ON DRAWINGS BUT MAY BE REQUIRED TO CLEAR STRUCTURE, FINISHES OR WORK OF OTHER TRADES. NO EXTRA PAYMENT WILL BE ALLOWED FOR WORK RESULTING FROM LACK OF PROPER INITIAL APPRAISAL OF ENTIRE SCOPE OF WORK. SUBMIT REQUESTS FOR INFORMATIONS (RFIS) AS REQUIRED TO ANSWER ANY QUESTIONS THAT MAY ARISE DURING BIDDING PHASE. CLEARLY INDICATE SCOPE INCLUSION AND EXCLUSION IN BID.
5. FURNISH ALL LABOR, MATERIALS, TRANSPORTATION, AND PERFORM ALL REQUIRED OPERATIONS TO PROVIDE COMPLETE AND OPERABLE MECHANICAL SYSTEM, IN ACCORDANCE WITH THE FULL INTENT AND MEANING OF THE DRAWINGS AND SPECIFICATIONS AND PER STANDARD TRADE PRACTICES.
6. WORKMANSHIP SHALL BE FIRST CLASS THROUGHOUT AND PERFORMED ONLY BY COMPETENT AND EXPERIENCED WORKMEN IN A MANNER SATISFACTORY TO THE OWNER AND ARCHITECT.
7. ALL EQUIPMENT SHALL BE INSTALLED WITH SUFFICIENT ACCESS TO CONTROLS, FILTERS, ELECTRIC MOTORS, ETC. CONTRACTOR SHALL PROVIDE ACCESS PANELS WHERE REQUIRED.
8. COORDINATE ACCESS TO ALL DAMPERS, VALVES, AND OTHER SERVICEABLE EQUIPMENT.
9. PROVIDE BIRD SCREENS AT ALL INTAKE AND EXHAUST OPENINGS.
10. FLASH AND COUNTER FLASH ALL ROOF PENETRATIONS AS REQUIRED TO SEAL WEATHER TIGHT. (SEE ARCHITECTURAL ROOFING DETAILS AND SPECIFICATIONS).
11. WHERE JOIST, STUD OR BEAM PENETRATIONS ARE REQUIRED, REVIEW ALL SUCH PENETRATIONS WITH ARCHITECT AND GENERAL CONTRACTOR BEFORE DRILLING OR NOTCHING. SEE STRUCTURAL DRAWINGS FOR CRITERIA ON JOIST PENETRATIONS - VERIFY WITH GENERAL CONTRACTOR.
12. PROVIDE DIELECTRIC INSULATING CONNECTIONS BETWEEN ALL DISSIMILAR METALS.
13. NOTIFY ARCHITECT AND GENERAL CONTRACTOR 48 HOURS IN ADVANCE BEFORE ANY TESTING.
14. ALL EXHAUST FAN DISCHARGES SHALL BE MINIMUM 3'-0" FROM ANY OPERABLE WINDOW.
15. DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA LOW PRESSURE DUCT CONSTRUCTION STANDARDS.
16. ALL DUCT JOINTS SHALL BE MADE WITH MASTIC SEALANT, SHEET METAL SCREWS AND TAPED AIR TIGHT WITH HARDCAST OR EQUIV., MINIMUM 2-1/2" WIDTH.
17. AIR BALANCE:
    A. PROVIDE SERVICES NECESSARY TO INITIALLY DELIVER THE AIR QUANTITIES SHOWN ON THE PLANS AND FINALLY BALANCE FOR UNIFORM TEMPERATURE IN THE SPACES SERVED. ADJUST ALL ELEMENTS IN GRILLES AND DIFFUSERS FOR PROPER AIR DISTRIBUTION AND TO MINIMIZE DRAFTS. SUBMIT FINAL AIR BALANCE REPORT FOR APPROVAL BEFORE FINAL COMPLETION OF THE CONSTRUCTION CONTRACT. COMPLY WITH SMACNA MANUAL FOR THE BALANCING AND ADJUSTMENT OF AIR DISTRIBUTION SYSTEMS.
    B. AS A MINIMUM, THE BALANCE REPORT SHALL INCLUDE CFM AND NECK SIZE AT EACH SUPPLY AND RETURN GRILLE.

APPLICABLE CODES

1. 2016 BUILDING STANDARD ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
2. 2016 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.;
3. 2016 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.;
4. 2016 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.;
5. 2016 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.;
6. 2016 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.;
7. 2016 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, C.C.R.;
8. 20160 CALIFORNIA EXISTING BUILDING CODE, PART 10, TITLE 24 C.C.R)
9. 2016 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24, C.C.R.
10. TITLE 19, CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

TITLE 24 C.C.R. ACCESSIBILITY STANDARDS
AMERICAN WITH DISABILITIES ACT (A.D.A., ADAAG) FEDERAL ACCESSIBILITY STANDARDS
CITY OF HAYWARD BUILDING CODES

SHEET INDEX

NO.	REVISION	DATE	APP'D

REFERENCES:

INTERACTIVE RESOURCES
ARCHITECTURE ▫ PLANNING ▫ ENGINEERING
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
(FAX) 232-5325
http://www.intres.com

EDESIGNC INCORPORATED
ENGINEERING DESIGN COLLABORATIVE
582 MARKET STREET, SUITE 400
SAN FRANCISCO, CA 94104
(415) 963-4303

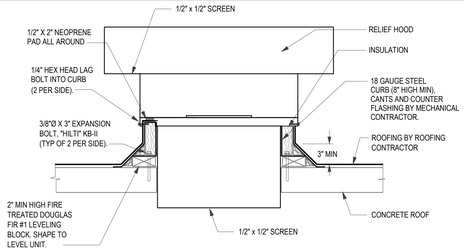
212 9TH STREET, SUITE 203
OAKLAND, CA 94612

CONSULTANTS

DESIGNED BY:	JD		
DRAWN BY:	JD, SH		
CHECKED BY:	RL		
A-E PROJECT MANAGER:	TOM BUTT, FAIA		
ACT FAC. MAINT. MANAGER:	RICHARD WRZENSINSKI	A-E DRAWING NUMBER:2016-077.02 M0.1	SCALE: AS-NOTED
ACT PROJECT MANAGER:	ALIEZA BIRCHER	AC TRANSIT PROJECT ID: P2157	DATE: 09-07-2018
CONTRACT # NUMBER:	2018-1420	CAD FILE: P:\2012\2012-044.01 AC Transit Weatherization & Roof\GO Project Only\Production\Revit - General Offices\mt\AC TRANSIT - GENERAL OFFICES - mt.rvt	SIZE: 30x42
			SHEET M0.1 OF 33

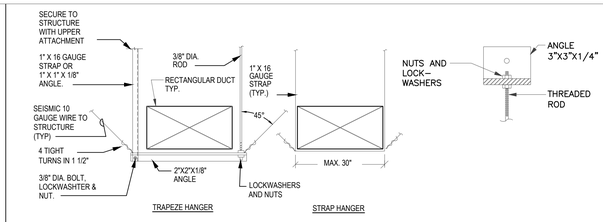
MACK FACILITY RE-ROOFING
MECHANICAL TITLE SHEET

NOT FOR CONSTRUCTION



12 IH-1 SUPPORT DETAIL

SCALE: NONE

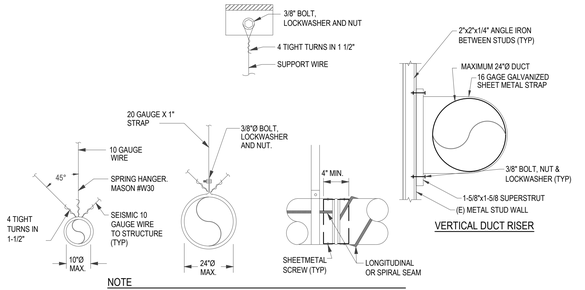


NOTES

HANGERS AND TRAPEZE ANGLES TO BE SIZED IN ACCORDANCE WITH SMACNA DUCT CONTRUCTION STANDARDS, TABLES 4-1 & 4-3. MAXIMUM SPACING BETWEEN HANGERS - 10 FEET.

11 RECTANGULAR DUCT SUPPORT DETAIL

SCALE: NONE

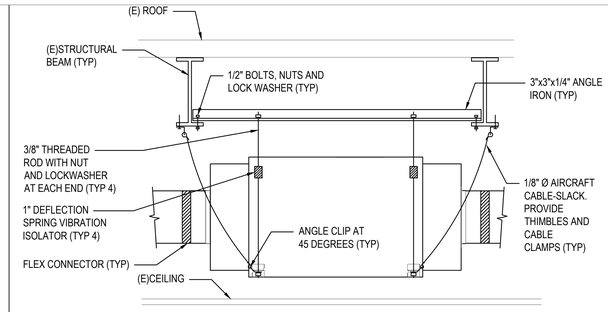


NOTE

STRAP AND WIRE TO BE SIZED PER SMACNA DUCT CONSTRUCTION STANDARDS TABLE 4-2. MAXIMUN SPACING BETWEEN SUPPORTS - 12 FEET MAX AND AT EACH ELBOW. SECURE STRAPS TIGHT TO DUCT

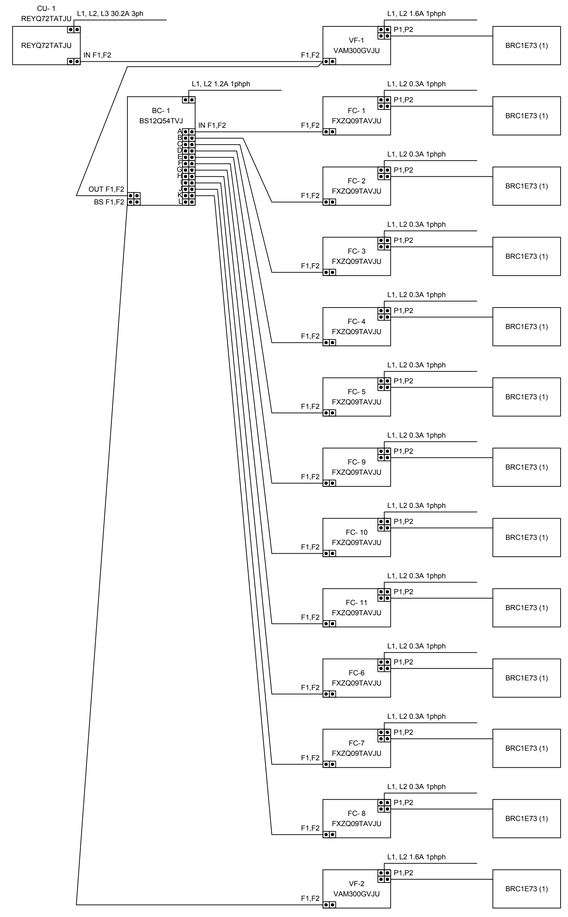
9 ROUND DUCT SUPPORT DETAIL

SCALE: NONE

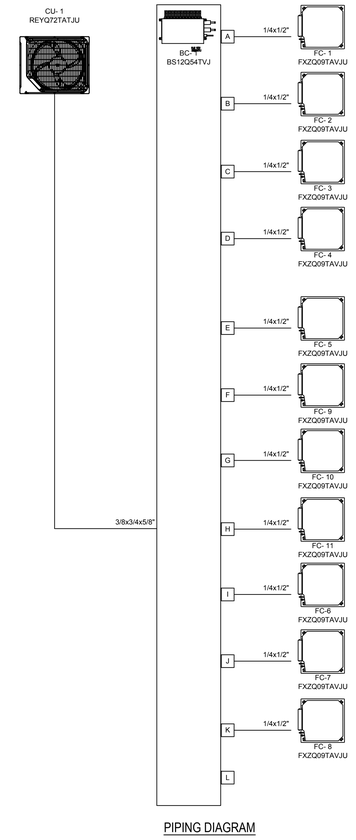


4 HEAT RECOVERY/VENTILATION FAN SUPPORT DETAIL (VF-1)

SCALE: NONE



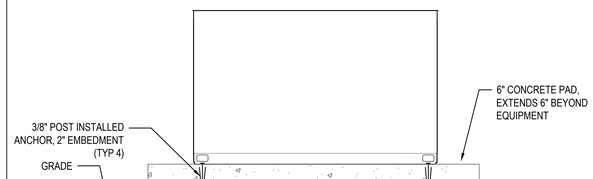
WIRING DIAGRAM



PIPING DIAGRAM

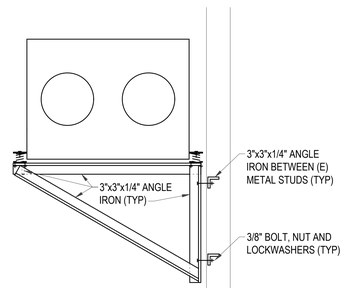
8 CU-1 VRF SYSTEM DIAGRAM

SCALE: NONE



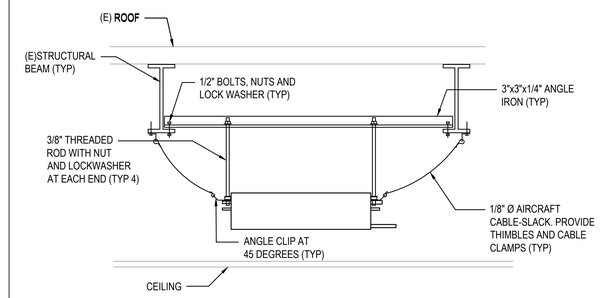
10 HEATING/VENTILATION UNIT MOUNTING DETAIL (HV-1, 2, 3)

SCALE: NONE



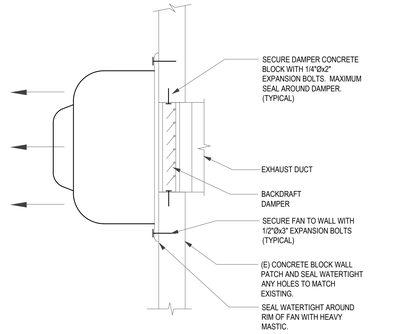
7 HEAT RECOVERY/VENTILATION FAN SUPPORT DETAIL (VF-2, 3)

SCALE: NONE



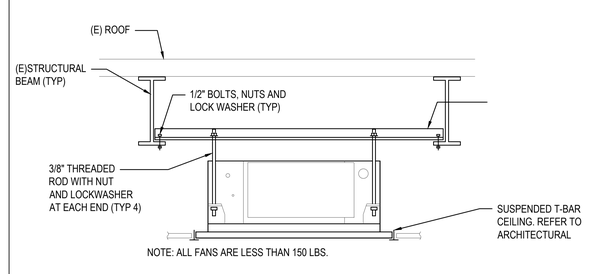
3 BRANCH CONTROLER SUPPORT DETAIL

SCALE: NONE



6 SIDE WALL EXHAUST FAN SUPPORT DETAIL

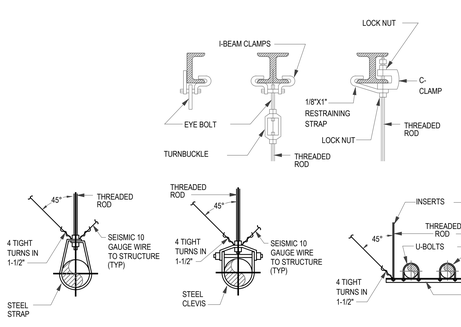
SCALE: NONE



NOTE: ALL FANS ARE LESS THAN 150 LBS.

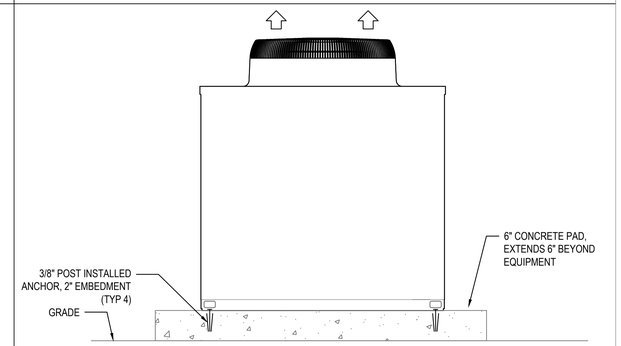
2 FAN COIL UNIT MOUNTING DETAIL

SCALE: NONE



5 REFRIGERANT PIPE SUPPORT DETAIL

SCALE: NONE



1 CU-1 MOUNTING DETAIL

SCALE: NONE

NO.	REVISION	DATE	APP'D

REFERENCES:

INTERACTIVE RESOURCES
ARCHITECTURE ▫ PLANNING ▫ ENGINEERING
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
(FAX) 232-5325
http://www.intres.com

EDESIGNC INCORPORATED
ENGINEERING DESIGN COLLABORATIVE
582 MARKET STREET, SUITE 400
SAN FRANCISCO, CA 94104
(415) 963-4303

212 9TH STREET, SUITE 203
OAKLAND, CA 94612

CONSULTANTS

REGISTERED PROFESSIONAL ENGINEER — RICHARD L. WRZESINSKI — No. 09772 — ELECTRICAL — STATE OF CALIFORNIA

DESIGNED BY:	JD
DRAWN BY:	JD, SH
CHECKED BY:	RL
A-E PROJECT MANAGER:	TOM BUTT, FAIA
ACT FAC. MAINT. MANAGER:	RICHARD WRZENSINSKI
ACT PROJECT MANAGER:	ALIEZA BIRCHER
CONTRACT # NUMBER:	2018-1420

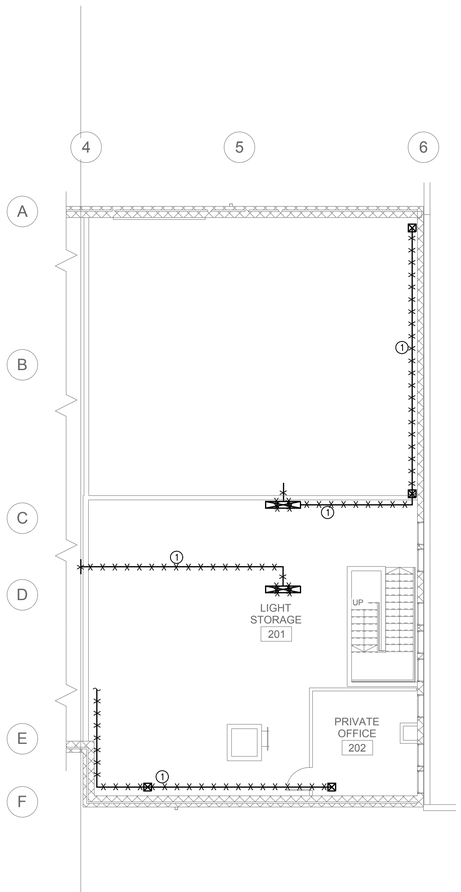
MACK FACILITY RE-ROOFING
MECHANICAL DETAIL SHEET

A-E DRAWING NUMBER:2016-077.02 M0.2	SCALE: AS-NOTED	DATE: 09-07-2018	
AC TRANSIT PROJECT ID: P2157		SIZE: 30x42	
CAD FILE: P:\2012\2012-044.01 AC Transit Weatherization & Roof\GO Project Only\Production\Revit - General Offices\mt\AC TRANSIT - GENERAL OFFICES - mt.rvt		SHEET M0.2	OF 33

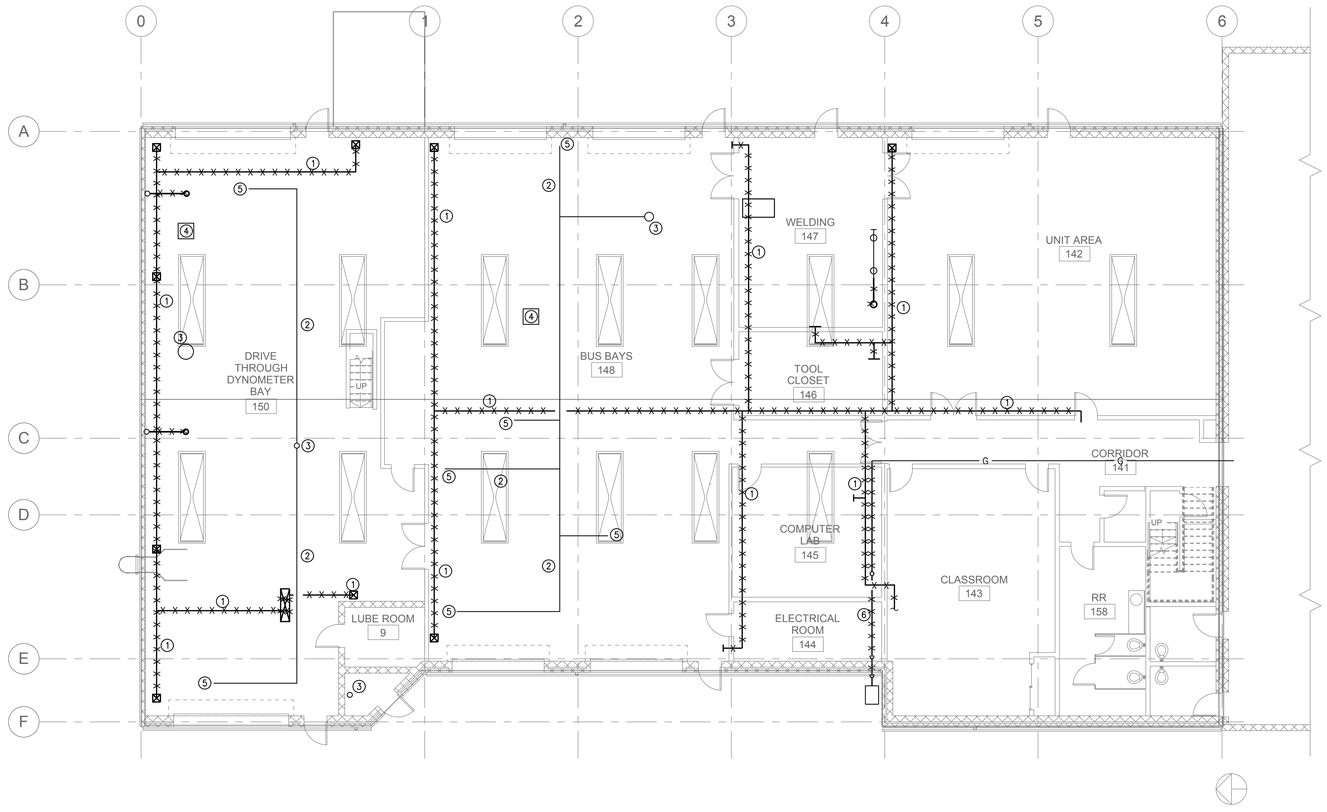
NOT FOR CONSTRUCTION

REFERENCE SHEET NOTES

1. DEMOLISH (E) DUCTWORK, SUPPORTS, CONTROLS AND ASSOCIATED ACCESSORIES.
2. (E) EXHAUST DUCTWORK TO REMAIN.
3. (E) EXHAUST DUCT UP TO FAN ON ROOF.
4. (E) RELIEF VENT OPENING TO REMAIN.
5. (E) FLEXIBLE EXHAUST DUCT DOWN TO WORK AREA.
6. DEMOLISH (E) NATURAL GAS PIPING BACK TO METER.



1 MECHANICAL MEZZANINE DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



2 MECHANICAL DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

TRUE NORTH / REFERENCE NORTH

NO.	REVISION	DATE	APP'D

REFERENCES:

INTERACTIVE RESOURCES
ARCHITECTURE • PLANNING • ENGINEERING
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
(FAX) 232-5325
http://www.intres.com

EDESIGNC INCORPORATED
ENGINEERING DESIGN COLLABORATIVE
582 MARKET STREET, SUITE 400
SAN FRANCISCO, CA 94104
(415) 963-4303
212 9TH STREET, SUITE 203
OAKLAND, CA 94612
CONSULTANTS

REGISTERED PROFESSIONAL ENGINEER — RICHARD WRZENSINSKI — No. 09778 — ELECTRICAL — STATE OF CALIFORNIA

DESIGNED BY:	JD
DRAWN BY:	JD, SH
CHECKED BY:	RL
A-E PROJECT MANAGER:	TOM BUTT, FAIA
ACT FAC. MAINT. MANAGER:	RICHARD WRZENSINSKI
ACT PROJECT MANAGER:	ALIEZA BIRCHER
CONTRACT # NUMBER:	2018-1420

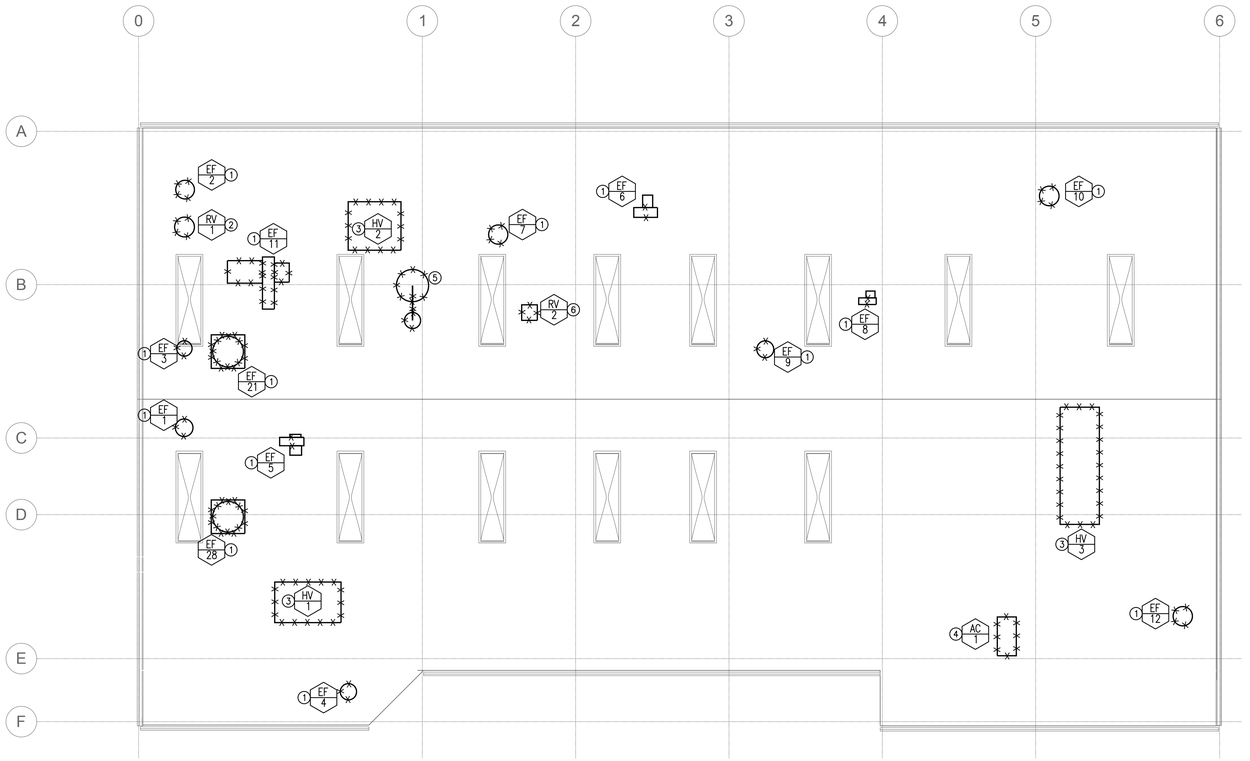
MACK FACILITY RE-ROOFING
MECHANICAL DEMOLITION PLANS

A-E DRAWING NUMBER:2016-077.02 M1.1	SCALE: AS-NOTED	DATE: 09-07-2018	
AC TRANSIT PROJECT ID: P2157		SIZE: 30x42	
CAD FILE: P:\2012\2012-044.01 AC Transit Weatherization & Roof\GO Project Only\Production\Revit - General Offices\mt\AC TRANSIT - GENERAL OFFICES - mt.rvt		SHEET M1.1	OF 33

NOT FOR CONSTRUCTION

REFERENCE SHEET NOTES

1. DEMOLISH (E) ROOF MOUNTED EXHAUST FAN, DUCTWORK, CURBS, CONTROLS AND ASSOCIATED ACCESSORIES. COORDINATE WITH ARCHITECTURAL.
2. DEMOLISH (E) ROOF MOUNTED RELIEF VENT, DUCTWORK, CURB AND ASSOCIATED ACCESSORIES. COORDINATE WITH ARCHITECTURAL.
3. DEMOLISH (E) HEATING AND VENTILATION UNIT, DUCTWORK, CURBS, CONTROLS AND ASSOCIATED ACCESSORIES. COORDINATE WITH ARCHITECTURAL.
4. DEMOLISH (E) HVAC UNIT, DUCTWORK, CURBS, CONTROLS AND ASSOCIATED ACCESSORIES. COORDINATE WITH ARCHITECTURAL.
5. DEMOLISH (E) ROOF MOUNTED EXHAUST FLUE, DUCTWORK, CURBS, CONTROLS AND ASSOCIATED ACCESSORIES. COORDINATE WITH ARCHITECTURAL.
6. DEMOLISH (E) ROOF MOUNTED RELIEF VENT, DUCTWORK, CURB AND ASSOCIATED ACCESSORIES. PROVIDE (N) RELIEF VENT AND CURB IN SAME LOCATION.



1 MECHANICAL ROOF DEMOLITION
SCALE: 1/8" = 1'-0"

TRUE NORTH
REFERENCE NORTH

NO.	REVISION	DATE	APP'D

REFERENCES:

INTERACTIVE RESOURCES
ARCHITECTURE ▫ PLANNING ▫ ENGINEERING
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
(FAX) 232-5325
http://www.intres.com

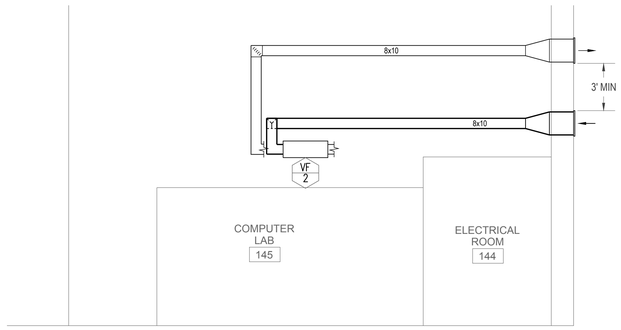
EDESIGNC INCORPORATED
ENGINEERING DESIGN COLLABORATIVE
582 MARKET STREET, SUITE 400
SAN FRANCISCO, CA 94104
(415) 963-4303
212 9TH STREET, SUITE 203
OAKLAND, CA 94612
CONSULTANTS

REGISTERED PROFESSIONAL ENGINEER — No. 23777 — MECHANICAL — STATE OF CALIFORNIA

DESIGNED BY:	JD		
DRAWN BY:	JD, SH		
CHECKED BY:	RL		
A-E PROJECT MANAGER:	TOM BUTT, FAIA		
ACT FAC. MAINT. MANAGER:	RICHARD WRZENSINSKI	A-E DRAWING NUMBER:2016-077.02 M1.2	SCALE: AS-NOTED
ACT PROJECT MANAGER:	ALIEZA BIRCHER	AC TRANSIT PROJECT ID: P2157	DATE: 09-07-2018
CONTRACT # NUMBER:	2018-1420	CAD FILE: P:\2012\2012-044.01 AC Transit Weatherization & Roof\GO Project Only\Production\Revit - General Offices\mt\AC TRANSIT - GENERAL OFFICES - mt.rvt	SIZE: 30x42
			SHEET M1.2 OF 33

MACK FACILITY RE-ROOFING
MECHANICAL ROOF DEMOLITION

NOT FOR CONSTRUCTION

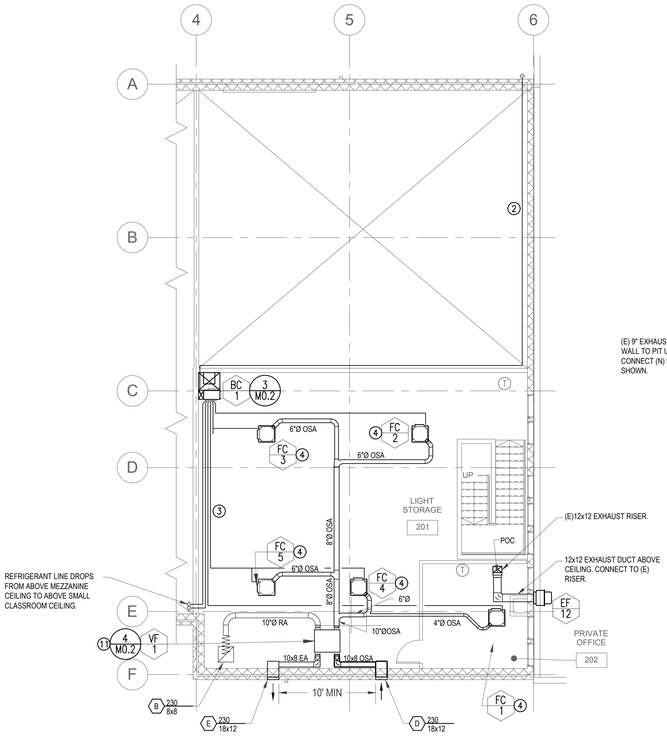


3 MECHANICAL SECTION

SCALE: 1/4" = 1'-0"

REFERENCE SHEET NOTES

1. VARIABLE REFRIGERANT FLOW CONDENSING UNIT MOUNTED ON CONCRETE SLAB.
2. REFRIGERANT PIPING FROM CONDENSING UNIT (CU-1) TO BRANCH CONTROLLER (BC-1).
3. REFRIGERANT PIPING FROM BRANCH CONTROLLER (BC-1) TO FAN COIL UNITS.
4. VARIABLE REFRIGERANT FLOW CEILING RECESSED FAN COIL UNITS.
5. HEATING AND VENTILATION UNIT MOUNTED ON CONCRETE SLAB.
6. DUCTWORK ON OUTSIDE OF BUILDING.
7. SUPPLY DUCT HIGH ON WALL, BOD HEIGHT 21 FT AFF.
8. SUPPLY AIR DUCT DROP DOWN TO 14 FT AFF. MOUNT SUPPLY AIR GRILLE JUST ABOVE BOD.
9. EXHAUST DUCT MOUNTED SO BOD IS 23 FT AFF.
10. (E) DROPS TO TAILPIPE EXHAUSTS.
11. VENTILATION/HEAT RECOVERY FAN MOUNTED ABOVE CEILING.
12. OUTSIDE AIR INLET LOUVER ABOVE EXHAUST AIR LOUVER. PROVIDE MIN 3 FT DISTANCE FROM TOP OF EXHAUST LOUVER TO BOTTOM OF OUTSIDE AIR LOUVER.



2 MECHANICAL MEZZANINE PLAN

SCALE: 1/8" = 1'-0"

1 MECHANICAL FLOOR PLAN

SCALE: 1/8" = 1'-0"

NO.	REVISION	DATE	APP'D

REFERENCES:

INTERACTIVE RESOURCES
ARCHITECTURE ▫ PLANNING ▫ ENGINEERING
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
(FAX) 232-5325
http://www.intres.com

EDESIGNC INCORPORATED
ENGINEERING DESIGN COLLABORATIVE
582 MARKET STREET, SUITE 400
SAN FRANCISCO, CA 94104
(415) 963-4303
212 9TH STREET, SUITE 203
OAKLAND, CA 94612
CONSULTANTS

DESIGNED BY:	JD
DRAWN BY:	JD
CHECKED BY:	RL
A-E PROJECT MANAGER:	TOM BUTT, FAIA
ACT FAC. MAINT. MANAGER:	RICHARD WRZENSINSKI
ACT PROJECT MANAGER:	ALIEZA BIRCHER
CONTRACT # NUMBER:	2018-1420

MACK FACILITY NEW INSTALLATION
MECHANICAL FLOOR PLAN

A-E DRAWING NUMBER:2016-077.02 M2.1	SCALE: AS-NOTED	DATE: 09-07-2018	
AC TRANSIT PROJECT ID: P2157		SIZE: 30x42	
CAD FILE: P:\2012\2012-044.01 AC Transit Weatherization & Roof\GO Project Only\Production\Revit - General Offices\mt\AC TRANSIT - GENERAL OFFICES - mt.rvt		SHEET M2.1	OF 33

NOT FOR CONSTRUCTION

NATURAL GAS SIZING TABLE

BASED ON 2016 CPC EQUATION 1216.3(1) LOW PRESSURE (SCHEDULE 40 METALLIC)
PIPE LENGTH (FT)= 220
MAXIMUM LOAD (MBH)= 437

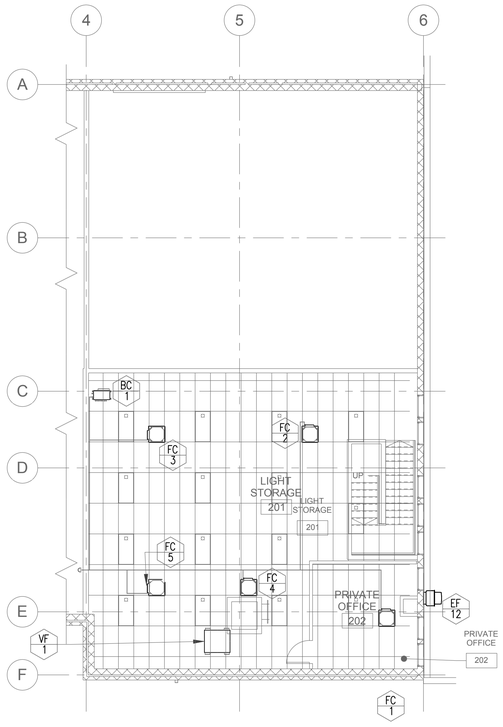
PIPE SIZE	PIPE ID	MAX. MBH (CFH)
1/2	0.622	32
3/4	0.824	68
1	1.049	128
1-1/4	1.38	263
1-1/2	1.61	394
2	2.067	760
2-1/2	2.469	1212
3	3.068	2144
4	4.026	4376

GAS EQUIPMENT CAPACITIES

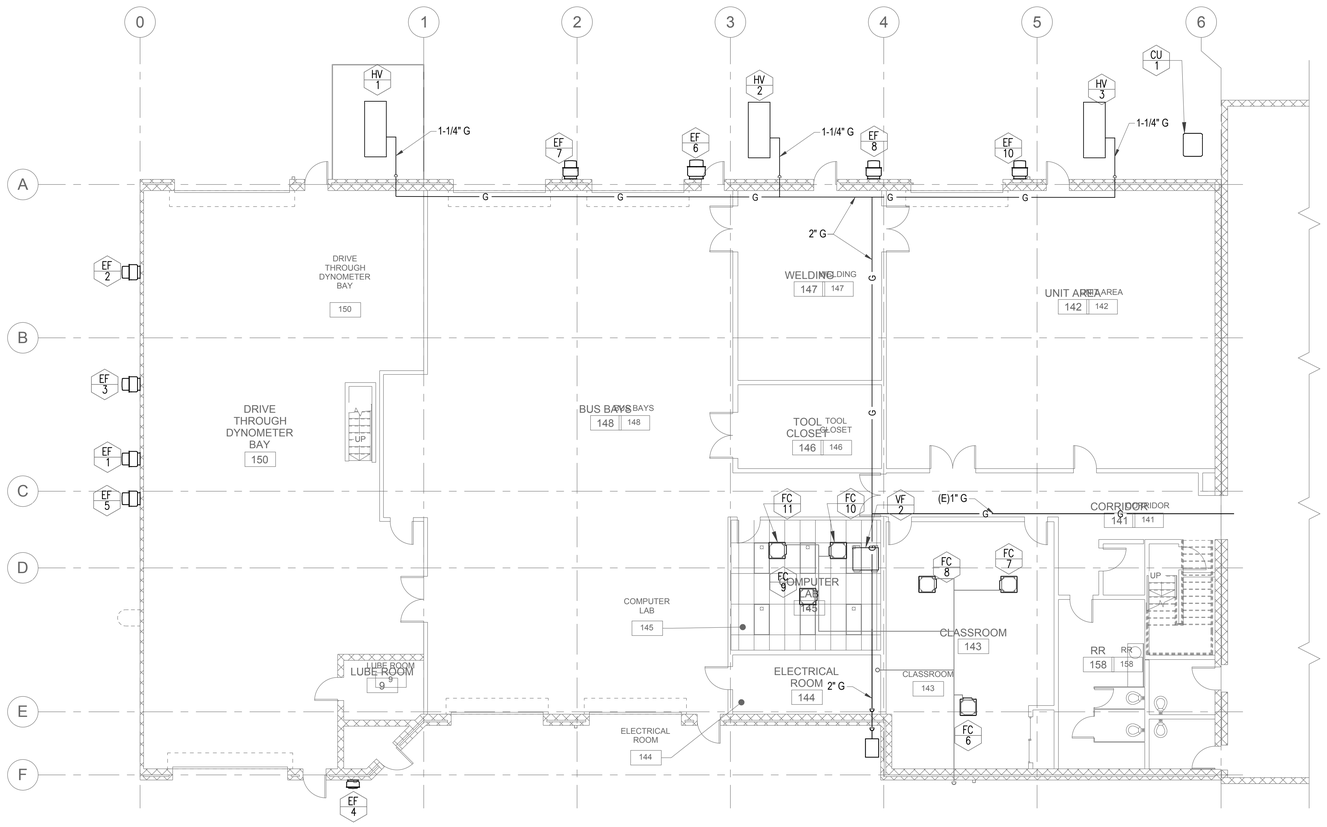
NO.	EQUIPMENT	UNIT LOAD (MBH)	TOTAL LOAD (MBH)
1	HV-1	175	175
1	HV-2	131	131
1	HV-3	131	131
			0
TOTAL			437

REFERENCE SHEET NOTES

1. VARIABLE REFRIGERANT FLOW CONDENSING UNIT (6 TONS) MOUNTED ON CONCRETE SLAB.
2. REFRIGERANT PIPING FROM CONDENSING TO BRANCH CONTROLLER (BC-1).
3. REFRIGERANT PIPING FROM BRANCH CONTROLLER (BC-1) TO FAN COIL UNITS.
4. VARIABLE REFRIGERANT FLOW CEILING RECESSED FAN COIL UNITS.
5. HEATING AND VENTILATION UNIT MOUNTED ON CONCRETE SLAB.
6. DUCTWORK ON OUTSIDE OF BUILDING.
7. WALL MOUNTED EXHAUST FAN (1000 CFM).
8. WALL MOUNTED EXHAUST FAN (2000 CFM).
9. WALL MOUNTED EXHAUST FAN (1700 CFM).
10. WALL MOUNTED EXHAUST FAN (1800 CFM).



2 MECHANICAL MEZZANINE PLAN
SCALE: 1/8" = 1'-0"



1 MECHANICAL FLOOR PLAN
SCALE: 1/8" = 1'-0"

TRUE NORTH / REFERENCE NORTH

NO.	REVISION	DATE	APP'D

REFERENCES:

INTERACTIVE RESOURCES
ARCHITECTURE ▪ PLANNING ▪ ENGINEERING
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
(FAX) 232-5325
http://www.intres.com

EDESIGNC INCORPORATED
ENGINEERING DESIGN COLLABORATIVE
582 MARKET STREET, SUITE 400
SAN FRANCISCO, CA 94104
(415) 963-4303
212 9TH STREET, SUITE 203
OAKLAND, CA 94612
CONSULTANTS

DESIGNED BY:	JD
DRAWN BY:	JD
CHECKED BY:	RL
A-E PROJECT MANAGER:	TOM BUTT, FAIA
ACT FAC. MAINT. MANAGER:	RICHARD WRZENSINSKI
ACT PROJECT MANAGER:	ALIEZA BIRCHER
CONTRACT # NUMBER:	2018-1420

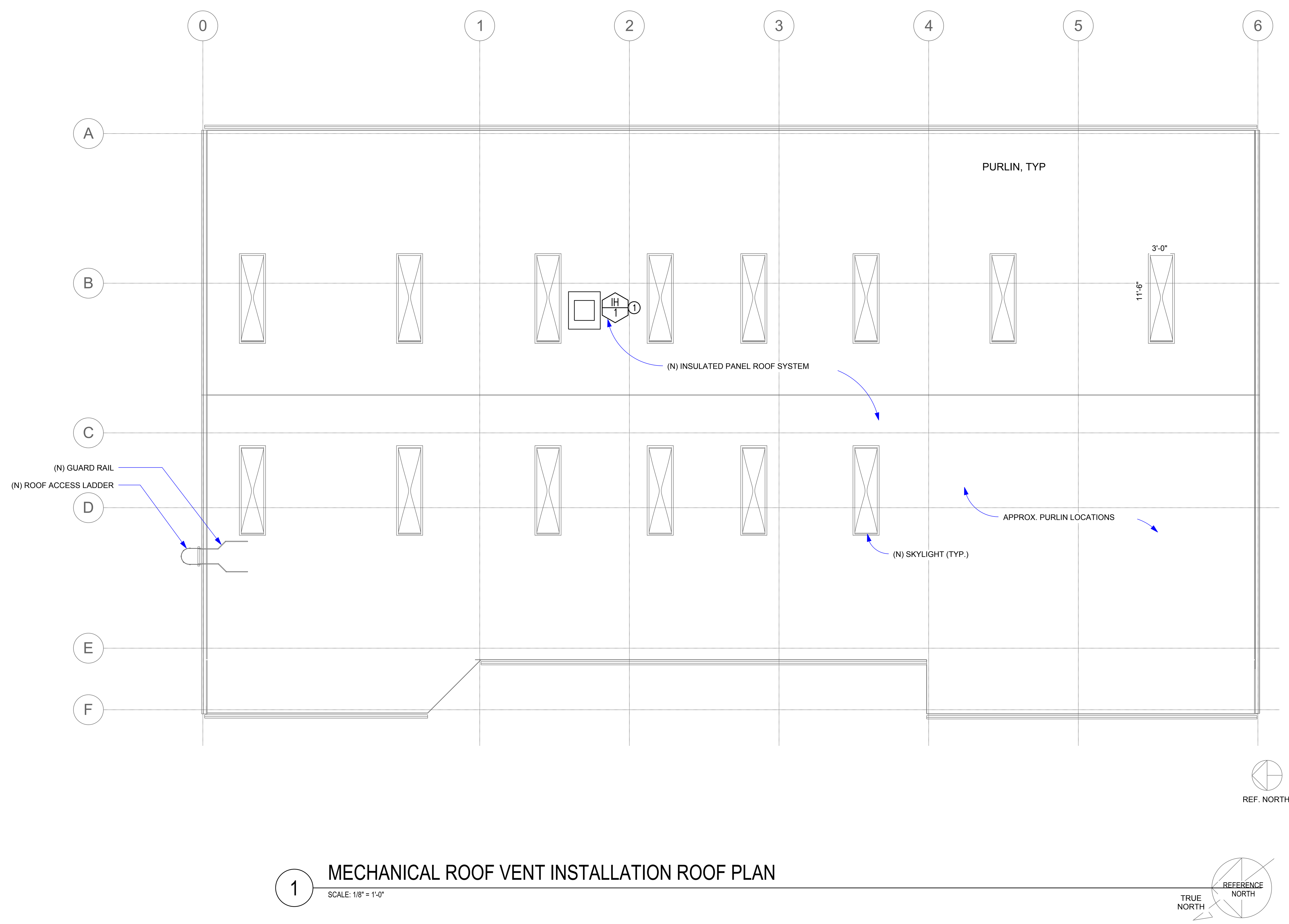
MACK FACILITY NEW INSTALLATION
PLUMBING FLOOR PLAN

A-E DRAWING NUMBER:2016-077.02 M2.2	SCALE: AS-NOTED	DATE: 09-07-2018	
AC TRANSIT PROJECT ID: P2157		SIZE: 30x42	
CAD FILE: P:\2012\2012-044.01 AC Transit Weatherization & Roof\GO Project Only\Production\Revit - General Offices\mt\AC TRANSIT - GENERAL OFFICES - mt.rvt		SHEET M2.2	OF 33

NOT FOR CONSTRUCTION

REFERENCE SHEET NOTES

(1) PROVIDE (N) INLET HOOD AND CURB IN SAME LOCATION AS (E).



1 MECHANICAL ROOF VENT INSTALLATION ROOF PLAN

SCALE: 1/8" = 1'-0"

NO.	REVISION	DATE	APP'D

REFERENCES:

INTERACTIVE RESOURCES
ARCHITECTURE ∘ PLANNING ∘ ENGINEERING
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
(FAX) 232-5325
http://www.intres.com

EDESIGNC INCORPORATED
ENGINEERING DESIGN COLLABORATIVE
582 MARKET STREET, SUITE 400
SAN FRANCISCO, CA 94104
(415) 963-4303

212 9TH STREET, SUITE 203
OAKLAND, CA 94612

CONSULTANTS

DESIGNED BY:	JD
DRAWN BY:	JD, SH
CHECKED BY:	RL
A-E PROJECT MANAGER:	TOM BUTT, FAIA
ACT FAC. MAINT. MANAGER:	RICHARD WRZENSINSKI
ACT PROJECT MANAGER:	ALIEZA BIRCHER
CONTRACT # NUMBER:	2018-1420

MACK FACILITY NEW INSTALLATION
MECHANICAL ROOF PLAN

A-E DRAWING NUMBER:2016-077.02 M2.3	SCALE: AS-NOTED	DATE: 09-07-2018
AC TRANSIT PROJECT ID: P2157		SIZE: 30x42
CAD FILE: P:\2012\2012-044.01 AC Transit Weatherization & Roof\GO Project Only\Production\Revit - General Offices\mt\AC TRANSIT - GENERAL OFFICES - mt.rvt		SHEET M2.3 OF 33

NOT FOR CONSTRUCTION

SYMBOLS

Symbol	Description
	BRANCH CIRCUIT WIRING IN CONDUIT CONCEALED IN CEILING SPACE OR WHERE POSSIBLE, EXPOSED ON ROOF OR BUILDING EXTERIOR.
	BRANCH CIRCUIT WIRING IN CONDUIT CONCEALED UNDER FLOOR, UNDERGROUND OR WHERE POSSIBLE.
	CONDUIT UP
	CONDUIT DOWN
	CONDUIT STUBBED OUT IN ACCESSIBLE CEILING LOCATION OR 12" BELOW STRUCTURE AND CAPPED
	BRANCH CIRCUIT HOME RUN TO PANEL. CONCEALED IN CEILING SPACE OR WHERE POSSIBLE.
J , J , J	JUNCTION BOX - CEILING/FLOOR/WALL MOUNTED
X	
	PANEL BOARD/TERMINAL CABINET - FLUSH/SURFACE MOUNTED
	FUSED DISCONNECT SWITCH
	WALL-MOUNTED DUPLEX RECEPTACLE 20A, 125V, NEMA 5-20R, +18" (UON)
	WALL-MOUNTED, COUNTER-TOP DUPLEX RECEPTACLE 20A, 125V, NEMA 5-20R, +36" (UON)
POS	SURFACE MOUNTED DUPLEX RECEPTACLE FOR POS AND PRINTER
	PHONE AND DATA OUTLET IN SINGLE RECEPTACLE
# EX.XX	DETAIL TAG. REFER TO DETAIL # ON SHEET X.XX
X	REFERENCE SHEET NOTE
	ILLUMINATED EXIT SIGN AND J-BOX, WALL MOUNTED, SHADED PORTION INDICATED FACE(S) ON SIGN, ARROW INDICATES DIRECTIONAL ARROW IN FACE. BATTERY BACKUP FOR EMERGENCY LIGHTS ON FIXTURE.

ABBREVIATIONS

A	AMPERE
AC	ALTERNATING CURRENT
AF	AMPERE RATING OF FUSE
AFF	ABOVE FINISHED FLOOR
C	CONDUIT
CKT	CIRCUIT
D	DEDICATED
(E)	EXISTING TO REMAIN
ELEC	ELECTRICAL
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
(F)	FUTURE
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CAN
G	GROUNDING CONDUCTOR
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
HP	HORSEPOWER
kVA	KILOVOLT AMPS
kW	KILOWATTS
LTG	LIGHTING
LTS	LIGHTS
L.V.	LOW VOLTAGE
MECH	MECHANICAL
MTD	MOUNTED
MV	MEDIUM VOLTAGE
N	NEUTRAL
(N)	NEW
N.E.C.	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
NEUT	NEUTRAL
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PB	PULL BOX
PNL	PANEL
POS	POINT OF SALE
RSC	RIGID STEEL CONDUIT
SLD	SINGLE LINE DIAGRAM
SPEC	SPECIFICATION
TYP	TYPICAL
TV	TELEVISION
UG	UNDERGROUND
UAC	UNDER ANOTHER CONTRACT
UON	UNLESS OTHERWISE NOTED
V	VOLT
VP	VANDAL PROOF
W	WATTS
WP	WEATHERPROOF (NEMA 3R)
WT	WATERTIGHT
XFMR	TRANSFORMER

GENERAL NOTES

1. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE EXISTING JOB CONDITION. HE SHALL EXAMINE CONSTRUCTION DRAWINGS AND SPECIFICATIONS AND SHALL HAVE HAD VISITED THE CONSTRUCTION SITE, PRIOR TO SUBMITTING HIS BID PROPOSAL. HE SHALL BE FAMILIAR WITH THE EXISTING CONDITIONS UNDER WHICH HE WILL HAVE TO OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THIS CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART. DETERMINE THE SEQUENCE OF CONSTRUCTION THROUGHOUT THE PROJECT, INCLUDING TEMPORARY FACILITIES AND CONNECTIONS REQUIRED FOR THE DURATION OF THE PROJECT.
2. EXISTING ARCHITECTURAL SURFACES DISTURBED DURING CONSTRUCTION SHALL BE PATCHED AND PAINTED TO MATCH EXISTING.
3. WORK SHOWN IN THESE PLANS ARE NEW, UON. INSTALLATION SHALL BE CONCEALED. WHERE NOT POSSIBLE, CONTRACTOR SHALL OBTAIN APPROVAL FROM ARCHITECT AND ENGINEER FOR EXPOSED INSTALLATION. A WRITTEN APPROVAL IS REQUIRED. USE SURFACE RACEWAYS, WIREMOLD, OR EQUAL.
4. ALL CONDUIT SHALL BE 3/4" MINIMUM. ALL CONDUIT SHALL BE RUN PARALLEL TO EXISTING SURFACES. WHEN CONDUIT CROSSES CORRIDORS OR ROOMS IT SHALL BE DONE PERPENDICULAR TO WALLS.
5. SEAL ALL CONDUIT PENETRATIONS THROUGH FIRE RATED WALLS. FURNISH AND INSTALL FIRE RATED BACKBOXES AS REQUIRED TO MAINTAIN FIRE RATING OF CEILING OR WALLS WHERE RECESSED ELECTRIC EQUIPMENT SUCH AS LIGHT FIXTURES, SWITCHES, RECEPTACLES, PANEL, ETC. ARE INSTALLED IN RATED WALL OR CEILINGS. PENETRATIONS OF FIRE RATED WALLS, CEILINGS, OR FLOORS SHALL COMPLY WITH CBC CHAPTER 7 REQUIREMENTS. IN WALLS AND PARTITIONS THAT ARE FOR FIRE RESISTIVE CONSTRUCTION, OPENINGS FOR STEEL ELECTRICAL OUTLET BOXES SHALL NOT EXCEED 16 SQUARES INCHES. IN ADDITION, THE AGGREGATE AREA OF SUCH OPENING SHALL NOT EXCEED 100 SQ IN FOR ANY 100 SQUARE FEET OF WALL OR PARTITION. OUTLET BOXES ON OPPOSITE SIDES OF THE WALLS OR PARTITION SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF AT LEAST 24 INCHES, OR BE PROVIDED WITH FIRE PUTTY.
6. THE ELECTRICAL PLANS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL OF THE ARCHITECTURAL DETAILS OR SPECIFICS OF ELECTRICAL CONSTRUCTION. TAKE ALL DIMENSIONS FROM THE ARCHITECTURAL DRAWINGS. BEFORE ROUGH-IN, VERIFY ALL MOUNTING HEIGHTS AND EXACT LOCATIONS FOR ALL EQUIPMENT ELECTRICAL CONNECTIONS, STUB-UPS, RECEPTACLES, OUTLETS, CONDUIT RUNS, ETC. WITH ARCHITECT AND OWNER. PLACE DEVICES LOCATED ABOVE COUNTERS, SHELVING, ETC. AND IN BATHROOMS SO AS NOT TO CONFLICT WITH EDGES OF WAINSCOTING, COUNTER SPLASH, SHELVING, ETC. ARCHITECTURAL SHEETS SHALL GOVERN. SEE ELECTRICAL SECTION OF ARCHITECTURAL SPECIFICATION FOR ADDITIONAL INFORMATION.
7. PULLROPES: ANY RACEWAY WITHOUT CABLE OR WIRE SHALL BE INSTALLED WITH MINIMUM 200 POUND TEST PULL LINE AND LARGER.
8. ALL DEVICES AND EQUIPMENT INSTALLED OUTDOORS OR EXPOSED TO THE WEATHER SHALL BE OF WEATHERPROOF CONSTRUCTION. ALL WALL PENETRATIONS TO EXTERIOR WALLS SHALL BE SEALED WATER TIGHT.
9. ALL EQUIPMENT SHALL BE LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY AND SHALL BE INSTALLED AS PER LISTING OR LABELING (IE. MAXIMUM FUSE SIZE MEANS FUSE PROTECTION IS REQUIRED).
10. CONNECTIONS TO MECHANICAL EQUIPMENT SHALL BE MADE WITH A MINIMUM OF 24" OF WEATHERPROOF FLEXIBLE CONDUIT TO PREVENT SOUND AND VIBRATION TRANSMISSION TO THE STRUCTURE. COORDINATE ALL MOTOR OVERLOADS AND/OR FUSES FURNISHED BY THIS CONTRACT WITH THE ACTUAL EQUIPMENT INSTALLED. SIZE OVERLOADS BASED ON MOTOR NAMEPLATE FULL LOAD CURRENT AND SERVICE FACTOR. FUSES FOR MOTOR AND TRANSFORMER CIRCUITS SHALL BE DUAL ELEMENT. FUSES FOR OTHER "NON-INRUSH" LOADS SHALL BE FAST ACTING. ALL FUSES SHALL BE CURRENT LIMITING CLASS RK5 OR CLASS L, UON
11. SEE MECHANICAL AND PLUMBING DRAWINGS FOR LOCATION OF FANS AND WATER HEATERS.
12. ALL CONDUIT SHALL BE 3/4" MINIMUM.
13. GROUNDING CONDUCTORS ARE GENERALLY NOT SHOWN. GROUND AND BOND ALL EQUIPMENT, RACEWAYS, MOTORS, PANELBOARDS AND SWITCHBOARDS, ETC. IN ACCORDANCE WITH NEC ARTICLE 250.
14. ELECTRICAL CONTRACTOR TO PROVIDE EXPANSION FITTINGS AT ALL EXPANSION JOINT LOCATION. USE STEEL FLEX 6 FEET EACH SIDE OF THE JOINT AND TERMINATE IN A PULLBOX AT EACH END, OR OTHER APPLIED METHODS.
15. ALL LIGHTING FIXTURE LOCATIONS AND ROUTING SHALL BE REVIEWED BY ARCHITECT PRIOR TO ROUGH-IN.
16. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED TO MAINTAIN A MINIMUM OF 36" CLEARANCE PER NEC ARTICLE 110.26.
17. ALL NEW WIRING SHALL BE IN CONDUIT. COORDINATE ROUTING OF CONDUIT WITH ARCHITECT AND STRUCTURAL FOR OPENINGS IN WALLS AND ANY NOTCHING OF JOISTS.
18. DEVICES AND EQUIPMENT ARE NEW UNLESS OTHERWISE NOTED.
19. ALL EQUIPMENT SHALL BE LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY AND SHALL BE INSTALLED AS PER THE LISTING AND LABELING.
20. PENETRATIONS OF FIRE RATED WALLS CEILINGS OR FLOORS SHALL COMPLY WITH CBC CHAPTER 7 REQUIREMENTS.
21. WHERE OUTLET BOXES ARE INSTALLED WITHIN RATED ASSEMBLIES, PROVIDE 3M MOLDABLE PUTTY PADS OR EQUAL TO MAINTAIN FIRE RATED ASSEMBLIES.
22. ALL EQUIPMENT MANUFACTURERS SHALL BE NOTED IN DRAWINGS. SUBSTITUTIONS ARE PERMITTED BUT MUST BE EQUAL.

APPLICABLE CODES

1. 2010 BUILDING STANDARD ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
2. 2010 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.; (2009 INTERNATIONAL BUILDING CODE VOLUMES 1-2 & 2010 CALIFORNIA AMENDMENT)
3. 2010 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.; (2008 NATIONAL ELECTRICAL CODE & 2010 CALIFORNIA AMENDMENT)
4. 2010 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.; (2009 UNIFORM MECHANICAL CODE & 2010 CALIFORNIA AMENDMENT)
5. 2010 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.; (2009 UNIFORM PLUMBING CODE & 2010 CALIFORNIA AMENDMENT)
6. 2010 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.;
7. 2010 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, C.C.R.; (2009 INTERNATIONAL FIRE CODE & 2010 CALIFORNIA AMENDMENT)
8. 2010 CALIFORNIA "GREEN" BUILDING REQUIREMENTS, PART 11, TITLE 24 C.C.R (PENDING ADOPTION)
9. 2004 SAFETY CODE FOR ELEVATORS AND ESCALATOR (ASME A17.1-2004)
10. 2010 CALIFORNIA EXISTING BUILDING CODE, PART 10, TITLE 24 C.C.R (2009 INTERNATIONAL EXISTING BUILDING CODE AND 2010 CALIFORNIA AMENDMENTS)
11. 2010 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24, C.C.R.
12. TITLE 19, CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

AISC 360-05 SPECIFICATION FOR STRUCTURAL BUILDINGS
NDS-05 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH 2005 SUPPLEMENT
ACI-318-05 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
ASME 17.1 ELEVATOR STANDARD, 2004 EDITION
NFPA 13, AUTOMATIC SPRINKLER SYSTEM, 2002 EDITION
NFPA 14, STANDPIPE AND HOSE SYSTEMS, 2007 EDITION
NFPA 17-A, WET CHEMICAL EXTINGUISHING SYSTEMS, 2002 EDITION
NFPA 20, STATIONARY PUMPS, 2003 EDITION
NFPA 24, PRIVATE FIRE SERVICE MAINS, 2002 EDITION
NFPA 72, NATIONAL FIRE ALARM CODE, 2007 EDITION
(AS AMENDED BY SFM. NOTE SEE UL STANDARD 1971 FOR "VISUAL DEVICES")
NFPA 253, CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS, 2006 EDITION
NFPA 2001, CLEAN AGENT FIRE EXTINGUISHING SYSTEMS, 2004 EDITION
REFERENCE CODE SECTION FOR NFPA STANDARDS - CBC(SFM) 3504.1
TITLE 24 C.C.R. ACCESSIBILITY STANDARDS
AMERICAN WITH DISABILITIES ACT (A.D.A., ADAAG) FEDERAL ACCESSIBILITY STANDARDS
CITY OF HAYWARD BUILDING CODES

SHEET INDEX

NO.	REVISION	DATE	APP'D

REFERENCES:

INTERACTIVE RESOURCES
ARCHITECTURE ◦ PLANNING ◦ ENGINEERING
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
(FAX) 232-5325
http://www.intres.com

EDESIGNC INCORPORATED
ENGINEERING DESIGN COLLABORATIVE
582 MARKET STREET, SUITE 400
SAN FRANCISCO, CA 94104
(415) 963-4303

212 9TH STREET, SUITE 203
OAKLAND, CA 94612

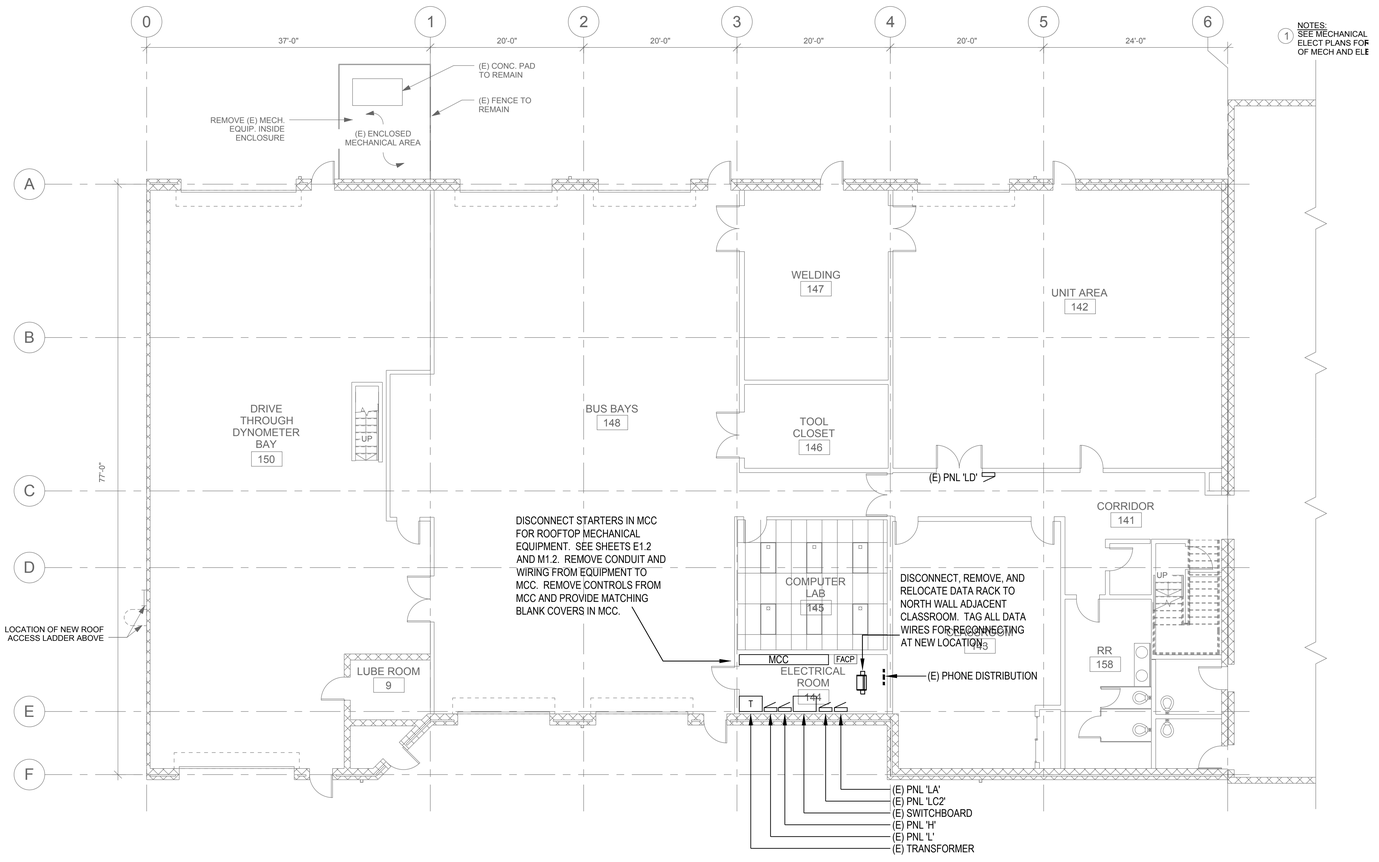
CONSULTANTS

DESIGNED BY:	HC
DRAWN BY:	HC, SH
CHECKED BY:	RL
A-E PROJECT MANAGER:	TOM BUTT, FAIA
ACT FAC. MAINT. MANAGER:	RICHARD WRZENSINSKI
ACT PROJECT MANAGER:	ALIEZA BIRCHER
CONTRACT # NUMBER:	2018-1420

MACK FACILITY RE-ROOFING
ELECTRICAL TITLE SHEET

A-E DRAWING NUMBER:2016-077.02 E0.1	SCALE: AS-NOTED	DATE: 09-07-2018
AC TRANSIT PROJECT ID: P2157		SIZE: 30x42
CAD FILE: P:\2012\2012-044.01 AC Transit Weatherization & Roof\GO Project Only\Production\Revit - General Offices\mt\AC TRANSIT - GENERAL OFFICES - mt.rvt		SHEET E0.1 OF 33

NOT FOR CONSTRUCTION



1 FIRST FLOOR ELECTRICAL DEMOLITION PLAN

SCALE: 1/8" = 1'-0"

NO.	REVISION	DATE	APP'D

REFERENCES:

INTERACTIVE RESOURCES
ARCHITECTURE ▫ PLANNING ▫ ENGINEERING
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
(FAX) 232-5325
http://www.intres.com

EDESIGNC INCORPORATED
ENGINEERING DESIGN COLLABORATIVE
582 MARKET STREET, SUITE 400
SAN FRANCISCO, CA 94104
(415) 963-4303
212 9TH STREET, SUITE 203
OAKLAND, CA 94612
CONSULTANTS

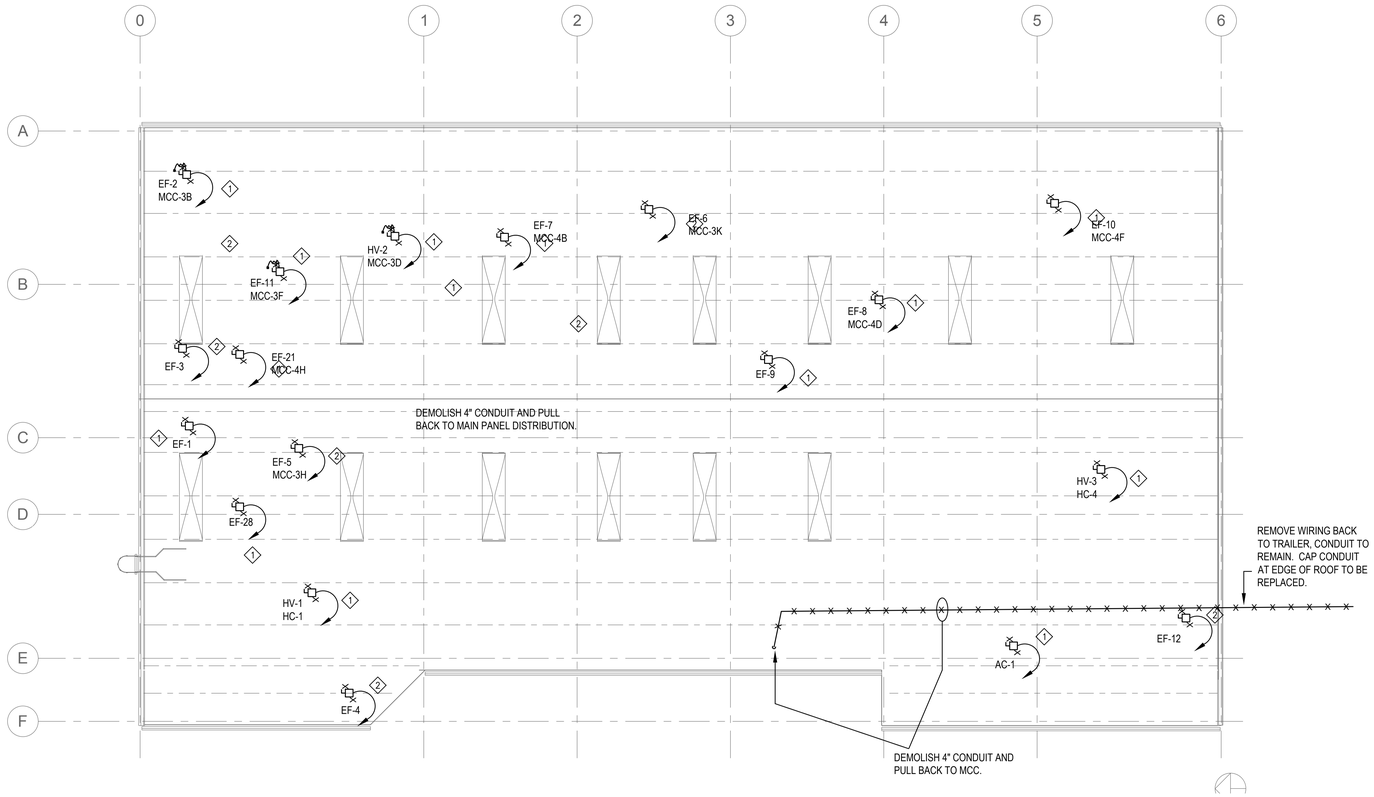
DESIGNED BY:	HC		
DRAWN BY:	HC, SH		
CHECKED BY:	RL		
A-E PROJECT MANAGER:	TOM BUTT, FAIA		
ACT FAC. MAINT. MANAGER:	RICHARD WRZENSINSKI	A-E DRAWING NUMBER:2016-077.02 E1.1	SCALE: AS-NOTED
ACT PROJECT MANAGER:	ALIEZA BIRCHER	AC TRANSIT PROJECT ID: P2157	DATE: 09-07-2018
CONTRACT # NUMBER:	2018-1420	CAD FILE: P:\2012\2012-044.01 AC Transit Weatherization & Roof\GO Project Only\Production\Revit - General Offices\mt\AC TRANSIT - GENERAL OFFICES - mt.rvt	SIZE: 30x42
			SHEET E1.1 OF 33

MACK FACILITY RE-ROOFING
ELECTRICAL FIRST FLOOR DEMOLITION PLAN

NOT FOR CONSTRUCTION

REFERENCE SHEET NOTES

1. DEMOLISH ALL CIRCUITS AND CONDUITS BACK TO CLOSEST PANEL.
2. DEMOLISH DISCONNECT FOR MECHANICAL EQUIPMENT. REMOVE CONDUIT AND CONDUCTOR BACK TO MCC.



1 ROOF ELECTRICAL DEMOLITION
SCALE: 1/8" = 1'-0"

TRUE NORTH
REFERENCE NORTH

NO.	REVISION	DATE	APP'D

REFERENCES:

INTERACTIVE RESOURCES
ARCHITECTURE ▫ PLANNING ▫ ENGINEERING
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
(FAX) 232-5325
http://www.intres.com

EDESIGNC INCORPORATED
ENGINEERING DESIGN COLLABORATIVE
582 MARKET STREET, SUITE 400
SAN FRANCISCO, CA 94104
(415) 963-4303
212 9TH STREET, SUITE 203
OAKLAND, CA 94612
CONSULTANTS

DESIGNED BY:	HC		
DRAWN BY:	HC, SH		
CHECKED BY:	RL		
A-E PROJECT MANAGER:	TOM BUTT, FAIA		
ACT FAC. MAINT. MANAGER:	RICHARD WRZENSINSKI	A-E DRAWING NUMBER:2016-077.02 **E1.2**	SCALE: AS-NOTED
ACT PROJECT MANAGER:	ALIEZA BIRCHER	AC TRANSIT PROJECT ID: **P2157**	DATE: 09-07-2018
CONTRACT # NUMBER:	2018-1420	CAD FILE: P:\2012\2012-044.01 AC Transit Weatherization & Roof\GO Project Only\Production\Revit - General Offices\mt\AC TRANSIT - GENERAL OFFICES - mt.rvt	SIZE: 30x42
			SHEET E1.2 OF 33

MACK FACILITY RE-ROOFING
ROOF ELECTRICAL DEMOLITION

NOT FOR CONSTRUCTION

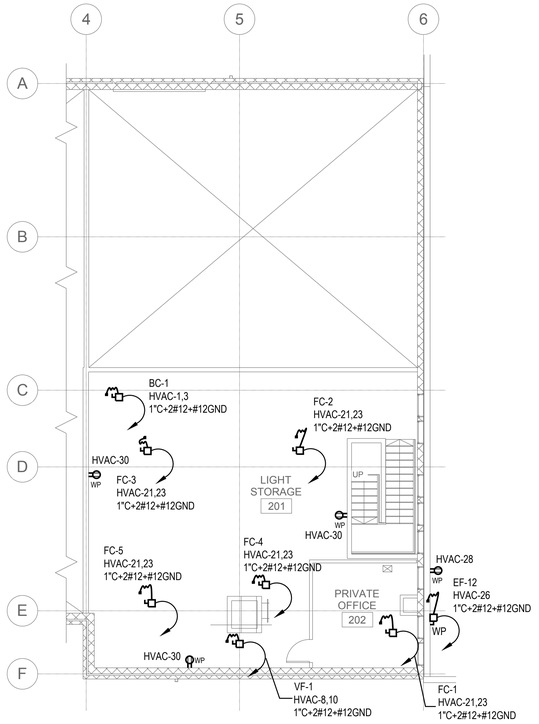
PANEL'HVAC' PHASE 3 VOLTAGE 120/208 MCB
LOCATED IN CLASSROOM WIRE 4 AIC MLO 200 AMPS
SURFACE MOUNTED

CKT	NOTES	TYPE	T	P	DESCRIPTION	LOAD		LOAD	DESCRIPTION	T	P	TYPE	NOTES	CKT
1		D		20 2	BC-1	0.1248	A	3.622	CU-1	40	3	D		2
3		D	---	---	---	0.1248	B	3.622	---	---	---	D		4
5		D		50 2	HV-1	3.77	C	3.622	---	---	---	D		6
7		D	---	---	---	3.77	A	0.504	VF-1 AND VF-2	20	2	D		8
9		D		20 2	HV-2	1.39776	B	0.504	---	---	---	D		10
11		D	---	---	---	1.39776	C	2.879	EF-1, EF-2, EF-3, EF-5	30	2	D		12
13		D		20 2	HV-3	0.1095	A	2.879	---	---	---	D		14
15		D	---	---	---	0.1095	B	0.208	EF-4	20	1	D		16
17		D		20 1	FC-1	0.02	C	2.339	EF-6, EF-7	30	2	D		18
19		D	---	---	---	0.02	A	2.339	---	---	---	D		20
21		D		20 1	FC-2, FC-3, FC-4, FC-5	0.08	B	1.691	EF-8, EF-10	20	2	D		22
23		D	---	---	---	0.08	C	1.691	---	---	---	D		24
25		D		20 1	FC-6, FC-7, FC-8	0.06	A	0.832	EF-12	20	1	D		26
27		D	---	---	---	0.06	B	0.18	CONVIENCE RECEPTACLE	20	1	G		28
29		D		20 1	FC-9, F-10, F-11	0.06	C	0.54	CONVIENCE RECEPTACLE	20	1	G		30
31		D	---	---	---	0.06	A	1	CONVIENCE RECEPTACLE	20	1	G		32
33					SPACE		B	1	CONVIENCE RECEPTACLE	20	1	G		34
35					SPACE		C		SPACE					36
37					SPACE		A		SPACE					38
39					SPACE		B		SPACE					40
41					SPACE		C		SPACE					42

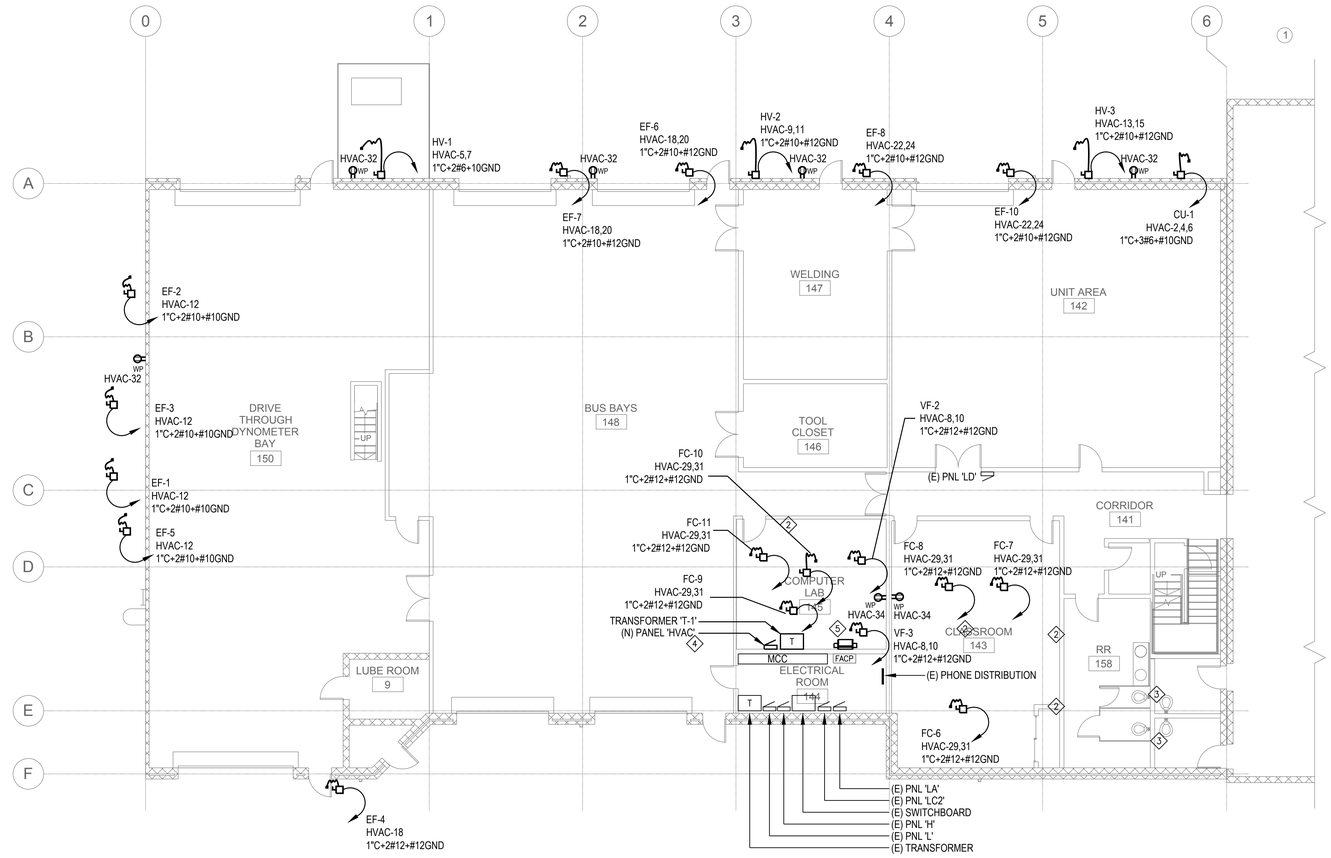
PHASE A	15.32	SUBTOTAL	DEMAND CALCULATION
PHASE B	8.977	0	CONTINUOUS LOAD (C) 125% 0
PHASE C	16.4	37.976696	DEDICATED LOAD (D) 100% 37.976696
		2.72	GENERAL LOAD (G) 100 1ST 10KVA, 50% REST 2.72
NOTES:			LARGEST MOTOR 25% 0
225A BUS RATING		0	MOTOR LOAD (M) 100% 0
PROVIDE DOOR-IN-DOOR ENCLOSURE			TOTAL DEMAND 41
			AMPS @ 120/208 113

REFERENCE SHEET NOTES

1. PROVIDE HORSEPOWER RATED HEAVY DUTY DISCONNECT FOR NEW MECHANICAL EQUIPMENT AT EXISTING LOCATIONS. USE EXISTING CIRCUITS.
2. PROVIDE NEW CEILING MOUNTED OCCUPANCY SENSOR FOR CLASS ROOM.
3. PROVIDE NEW OCCUPANCY WALL SWITCH FOR SINGLE USE RESTROOMS FOR LIGHTS.
4. PROVIDE NEW 100A/3P BREAKER FOR NEW 100KW TRANSFORMER. ROUTE 2" CONDUIT OVER HEAD FROM MCC TO NEW TRANSFORMER WITH 3 #1 AND #8 GND.
5. RELOCATED DATA RACK FROM ELECTRICAL ROOM. SEE SHEET E1.1. PROVIDE ENCLOSURE FOR (E) FULL HEIGHT DATA RACK.



2 ELECTRICAL MEZZANINE PLAN
SCALE: 1/8" = 1'-0"



2 ELECTRICAL FLOOR PLAN
SCALE: 1/8" = 1'-0"

NO.	REVISION	DATE	APP'D

REFERENCES:

INTERACTIVE RESOURCES
ARCHITECTURE · PLANNING · ENGINEERING
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
(FAX) 232-5325
http://www.intres.com

EDESIGNC INCORPORATED
ENGINEERING DESIGN COLLABORATIVE
582 MARKET STREET, SUITE 400
SAN FRANCISCO, CA 94104
(415) 963-4303

212 9TH STREET, SUITE 203
OAKLAND, CA 94612

CONSULTANTS

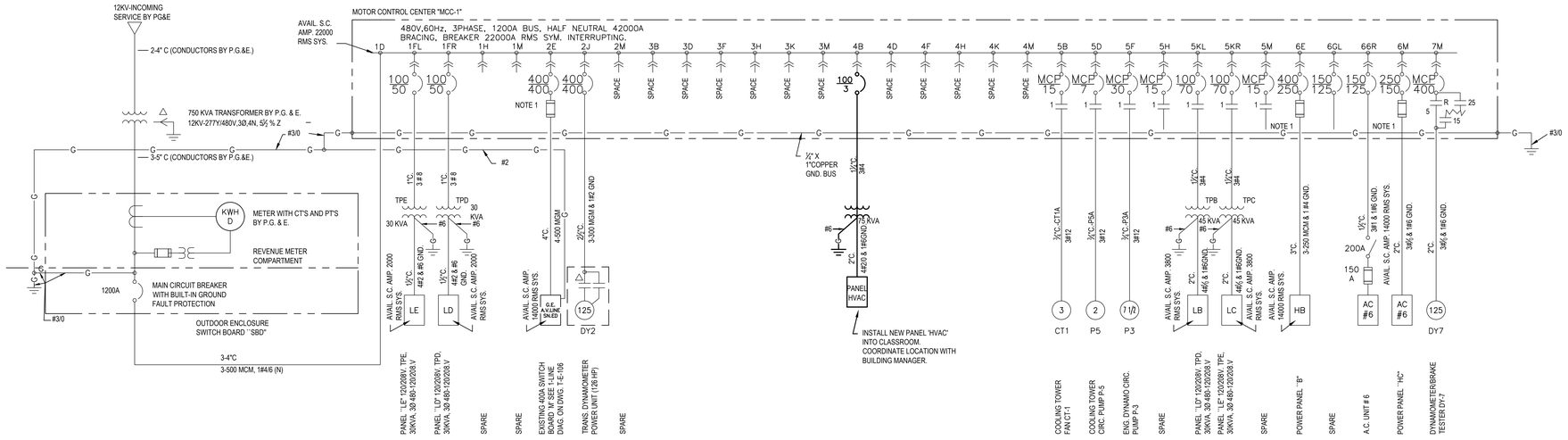
DESIGNED BY:	HC		
DRAWN BY:	HC, SH		
CHECKED BY:	RL		
A-E PROJECT MANAGER:	TOM BUTT, FAIA		
ACT FAC. MAINT. MANAGER:	RICHARD WRZENSINSKI	A-E DRAWING NUMBER:2016-077.02 E2.1	SCALE: AS-NOTED
ACT PROJECT MANAGER:	ALIEZA BIRCHER	AC TRANSIT PROJECT ID: P2157	DATE: 09-07-2018
CONTRACT # NUMBER:	2018-1420	CAD FILE: P:\2012\2012-044.01 AC Transit Weatherization & Roof\GO Project Only\Production\Revit - General Offices\mt\AC TRANSIT - GENERAL OFFICES - mt.rvt	SIZE: 30x42
			SHEET E2.1 OF 33

MACK FACILITY NEW INSULATION
ELECTRICAL FLOOR PLAN

NOT FOR CONSTRUCTION

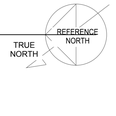
GENERAL SHEET NOTE

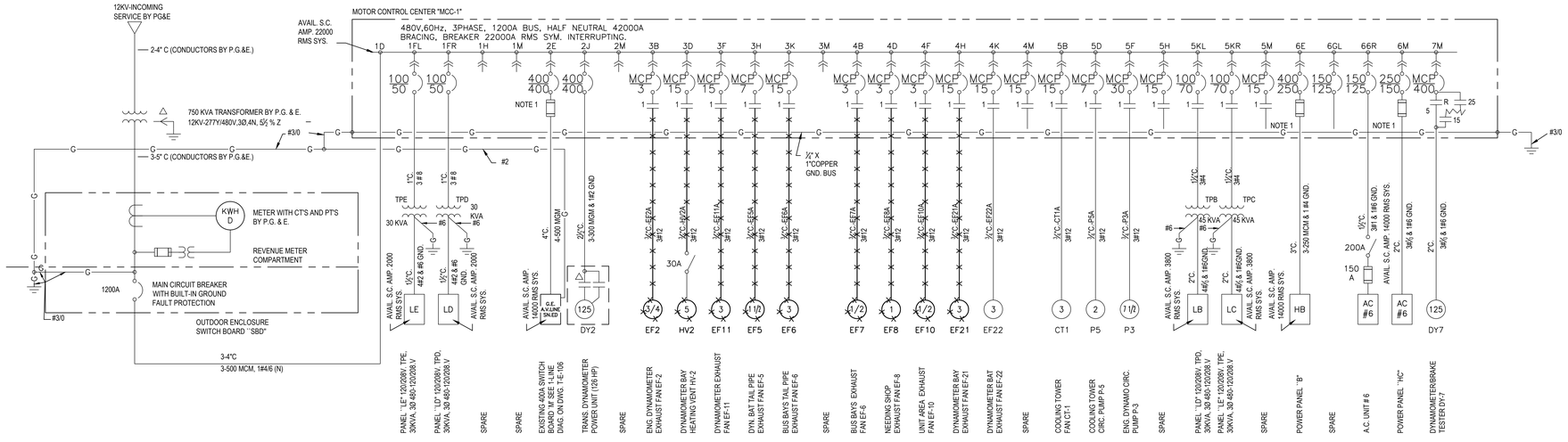
1. SINGLE LINE DIAGRAM BASED ON EXISTING ASBUILTS. VERIFY IN FIELD.



1 ELECTRICAL DEMO SINGLE LINE DIAGRAM

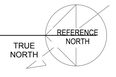
SCALE: NONE





1 ELECTRICAL DEMO SINGLE LINE DIAGRAM

SCALE: NONE



NO.	REVISION	DATE	APP'D

REFERENCES:

INTERACTIVE RESOURCES
ARCHITECTURE ▫ PLANNING ▫ ENGINEERING
117 PARK PLACE
POINT RICHMOND
CALIFORNIA 94801
(510) 236-7435
(FAX) 232-5325
http://www.intres.com

EDESIGNC INCORPORATED
ENGINEERING DESIGN COLLABORATIVE
582 MARKET STREET, SUITE 400
SAN FRANCISCO, CA 94104
(415) 963-4303
212 9TH STREET, SUITE 203
OAKLAND, CA 94612

CONSULTANTS

DESIGNED BY:	HC
DRAWN BY:	HC, SH
CHECKED BY:	RL
A-E PROJECT MANAGER:	TOM BUTT, FAIA
ACT FAC. MAINT. MANAGER:	RICHARD WRZENSINSKI
ACT PROJECT MANAGER:	ALIEZA BIRCHER
CONTRACT # NUMBER:	2018-1420

MACK FACILITY NEW INSTALLATION
ELECTRICAL SINGLE LINE DIAGRAM

A-E DRAWING NUMBER:2016-077.02 E3.1	SCALE: AS-NOTED	DATE: 09-07-2018	
AC TRANSIT PROJECT ID: P2157		SIZE: 30x42	
CAD FILE: P:\2012\2012-044.01 AC Transit Weatherization & Roof\GO Project Only\Production\Revit - General Offices\mt\AC TRANSIT - GENERAL OFFICES - mt.rvt		SHEET E3.1	OF 33

NOT FOR CONSTRUCTION