

METRO

OREGON CONVENTION CENTER

ROOF REPLACEMENT - PHASE 1

777 NE MARTIN LUTHER KING JR. BLVD. PORTLAND, OREGON

PROJECT TEAM

OWNER:
METRO
600 NE GRAND AVENUE
PORTLAND, OREGON 97232
JOSH LIPSCOMB

ARCHITECT:
CARLETON HART ARCHITECTURE
322 NW 8TH AVENUE
PORTLAND, OREGON 97209
(503) 206-3181
CONTACT: SCOTT PALMER

ROOF CONSULTANT:
PROFESSIONAL ROOF
CONSULTANTS
1108 SE GRAND AVENUE
SUITE 300
PORTLAND, OREGON 97214
(503) 280-8759
CONTACT: JOSE PONCE

STRUCTURAL ENGINEER:
KPFF
111 SW FIFTH AVENUE
SUITE 2500
PORTLAND, OREGON 97204
(503) 764-0522
CONTACT: ERIK KABUSREITER

PROJECT DESCRIPTION

THE SCOPE OF WORK INCLUDES, BUT IS NOT LIMITED TO, REMOVAL OF THE EXISTING ROOF SYSTEM AND RELATED FLASHING DOWN TO EXISTING SUBSTRATE. REMOVAL AND REPLACEMENT OF DAMAGED INSULATION AND SUBSTRATE BOARD WHERE EXISTS. INSTALLATION OF PVC ROOF SYSTEM, SHEET METAL FLASHINGS, AND RIGID INSULATION ASSEMBLIES. INSTALLATION OF FALL PROTECTION ATTACHMENTS AND ROOF HATCH GUARDRAILS. MODIFICATIONS TO EXISTING SCREEN WALL SUPPORT ASSEMBLIES. RE-FURBISHING OF EXISTING DRAIN ASSEMBLIES.

PROPERTY INFORMATION

ADDRESS:
777 NE MARTIN LUTHER KING JR. BLVD.
PORTLAND, OREGON

MAP: 2930
PROPERTY ID: R305194
STATE ID: 1N1E34AD
PROPERTY DESCRIPTION: WHEELERS ADD, TL
100 BLOCK 28, BLKS Roll
10-12&20&22&27-29&40-42

BUILDING CODE INFORMATION

BUILDING CODE: 2010 OREGON STRUCTURAL SPECIALTY CODE
OCCUPANCY: A
SPRINKLERS: YES
HEIGHT: 30' TO 50' (NOT INCLUDING SPIRES)
DESIGN WIND SPEED: 90 MPH
ROOF UL RATING: CLASS A

ZONING: CXZ

APPROXIMATE ROOF AREAS:
AREA A (MAIN ROOF): 216,973 SF PHASE 2 (FUTURE)
AREA B (BALLROOM): 63,346 SF PHASE 1
AREA C (LOADING DOCK): 34,220 SF PHASE 1
(PHASE 1 - LOADING DOCK AND BALLROOM - 97,566 SF)

SHEET INDEX

G0.01 TITLE SHEET
G1.01 WORK ACCESS AND STAGING PLAN
G1.02 ROOF KEY PLAN

D1.01 AREA B ROOF PLAN - DEMO
D1.02 AREA C ROOF PLAN - DEMO

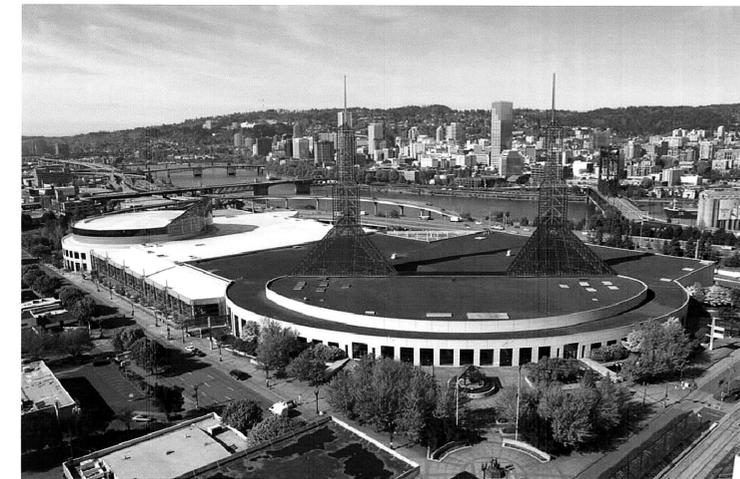
A1.01 AREA B ROOF PLAN
A1.02 AREA C ROOF PLAN

A2.01 ENLARGED ROOF PLANS

A5.01 ROOF DETAILS
A5.02 ROOF DETAILS
A5.03 ROOF DETAILS
A5.04 ROOF DETAILS
A5.05 ROOF DETAILS

DEFERRED SUBMITTALS

1. FALL PROTECTION DEVICES



ABBREVIATIONS

NOTE: THIS IS A STANDARD LIST OF ABBREVIATIONS, THEREFORE, SOME ABBREVIATIONS APPEAR ON THIS SHEET THAT MAY NOT APPEAR IN THE DRAWINGS

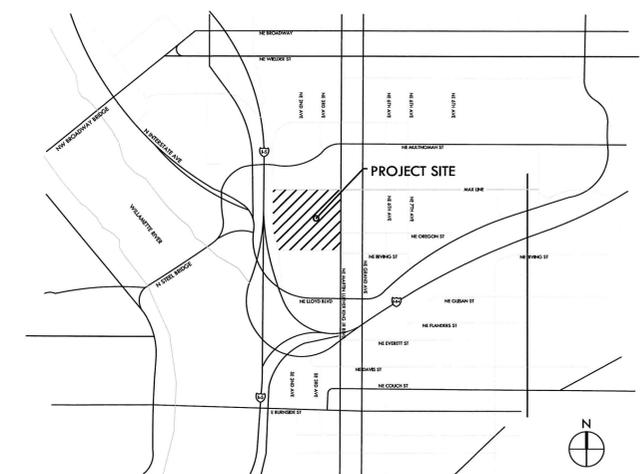
@	AT	(E)	EXISTING	JAN.	JANITOR	S.	SOUTH
A.B.	ANCHOR BOLT	E.	EAST	JT.	JOINT	SECT.	SECTION
ABBR.	ABBREVIATION	EA.	EACH	LT.	LIGHT	SH.	SHIELD
A.C.	AIR CONDITIONING	ELEC.	ELECTRICAL	MECH.	MECHANICAL	SHT.	SHEET
ADJ.	ADJUSTABLE	ELEV.	ELEVATION OR ELEVATOR	M.O.	MASONRY OPENING	SIM.	SIMILAR
A.H.U.	AIR HANDLING UNIT	E.P.	ELECTRICAL PANEL	MIN.	MINIMUM	S.G.	SAFETY GLASS
ALT.	ALTERNATE	EPS.	EXPANDED POLYSTYRENE	MTL.	METAL	SPEC.	SPECIFICATION
AL.	ALUMINUM	EQ.	EQUAL	N.	NORTH	SQ.	SQUARE
A.P.	ACCESS PANEL	EQUIP.	EQUIPMENT	NEC.	NECESSARY	S.S.	STAINLESS STEEL
B.	BOTTOM	EXIST.	EXISTING	N.T.S.	NOT TO SCALE	STD.	STANDARD
BD.	BOARD	EXT.	EXTERIOR	OA	OVERALL	STL.	STEEL
BLDG.	BUILDING	F.D.	FLOOR DRAIN	OC	ON CENTER	STRUCT.	STRUCTURAL
BLKG.	BLOCKING	FIN.	FINISH	OF	OVERFLOW DRAIN	T & G	TONGUE AND GROOVE
B.O.	BY OWNER	F.F.	FINISHED FLOOR	OPP.	OPPOSITE	T.G.	TEMPERED GLASS
B.U.R.	BUILT UP ROOF	FLASH.	FLASHING	P.	PAINT	T.O.C.	TOP OF CURB
CLG	CEILING	F.R.T.	FIRE RETARDANT TREATED	P.F.	PREFINISHED	T.O.PLY.	TOP OF PLYWOOD
CLR.	CLEAR	FRMG.	FRAMING	P.L.	PROPERTY LINE	T.O.S.	TOP OF SLAB
C.M.U.	CONCRETE MASONRY UNIT	FT.	FOOT OR FEET	PLYWD.	PLYWOOD	T.O.W.	TOP OF WALL
COL	COLUMN	GA	GAUGE	PRPT.	POLYISOCYANURATE	T.S.	TUBE SECTION
CONC.	CONCRETE	GALV.	GALVANIZED	RD.	ROOF DRAIN	TYP.	TYPICAL
CONT.	CONTINUOUS	GL	GLASS	REF.	REFERENCE	U.O.N.	UNLESS OTHERWISE NOTED
DET.	DETAIL	GYP.	GYPSUM	REQ.	REQUIRED	V.B.	VAPOR BARRIER
DIA.	DIAMETER	H.B.	HOSE BIB	REV.	REVERSE OR REVISED	VERT.	VERTICAL
DIM.	DIMENSION	H.M.	HOLLOW METAL	R.O.	ROUGH OPENING	W.	WEST
DN.	DOWN	HORIZ.	HORIZONTAL	RM.	ROOM	WD	WOOD
D.P.	DIMENSION POINT	HT.	HEIGHT			WP.	WATERPROOF
DS.	DOWNSPOUT	HVAC	HEATING/AIR CONDITIONING			W/	WITH
DWG.	DRAWING	INSUL.	INSULATION			W/O	WITHOUT
		INT.	INTERIOR			WT.	WEIGHT

DRAWING SYMBOLS

NOTE: THIS IS A STANDARD LIST OF SYMBOLS, THEREFORE, SOME SYMBOLS APPEAR ON THIS SHEET THAT MAY NOT APPEAR IN THE DRAWINGS

SYMBOL	DESCRIPTION
	DETAIL REFERENCE SYMBOL
	WALL SECTION REFERENCE SYMBOL
	EXTERIOR ELEVATION REFERENCE SYMBOL
	GRID IDENTIFICATION SYMBOL
	DIMENSION LINE - F.O.S. OR C.L. OF OPENING
	KEYNOTE
	NORTH ARROW

LOCATION MAP NOT TO SCALE



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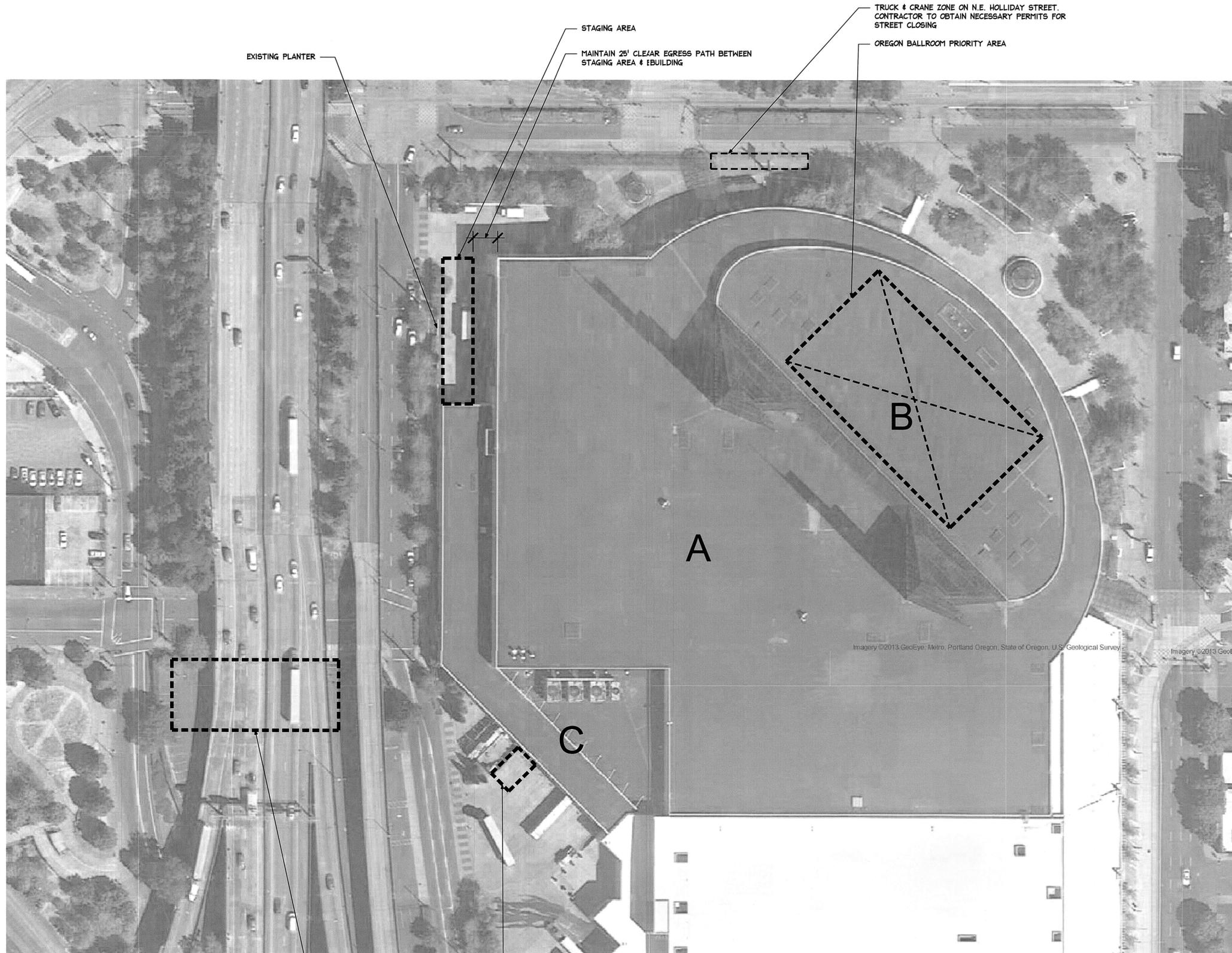
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CONSTRUCTION SET

PROJECT DATA, SHEET INDEX
PROJECT TEAM,
ABBREVIATIONS & SYMBOLS

PROJ NO.
21262.00

04.09.2013

G0.01



EXISTING PLANTER

STAGING AREA

MAINTAIN 25' CLEAR EGRESS PATH BETWEEN STAGING AREA & BUILDING

TRUCK & CRANE ZONE ON N.E. HOLLIDAY STREET. CONTRACTOR TO OBTAIN NECESSARY PERMITS FOR STREET CLOSING

OREGON BALLROOM PRIORITY AREA

A

B

C

EXISTING OVERFLOW PARKING LOT (BELOW FREEWAY) - CONTRACTOR WILL HAVE UP TO 20 PARKING SPACES AVAILABLE UNTIL OCTOBER 30, 2013, EXCEPT FOR AUGUST 23, 2013 - PARKING WILL NOT BE AVAILABLE ON THAT DAY

DUMPSTER LOCATION WILL BE MADE AVAILABLE IN ONE OF THE LOADING DOCK BAYS - COORDINATE WITH METRO

1 WORK ACCESS & STAGING PLAN
SCALE: N.T.S.



STAGING AND ACCESS NOTES

1. NO MATERIALS SHALL BE STORED ON ROOF AREA A (PHASE 2)
2. CONTRACTOR SHALL RESTRICT CIRCULATION ACROSS ROOF AREA A TO DESIGNATED ACCESS WALKWAYS THAT ARE PROPOSED BY THE CONTRACTOR AND APPROVED BY METRO
3. WHERE THE CONTRACTOR PROVIDES WALKWAYS ACROSS ROOF AREA A, THE EXISTING ROOF MEMBRANE SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. MINIMUM PROTECTION SHALL INCLUDE REMOVAL OF ROCK BALLAST, SWEEP MEMBRANE CLEAN, INSTALL MINIMUM 1" THICK LAYER OF XPS INSULATION, AND MINIMUM 1/2" PLYWOOD OR OSB SHEATHING. PROVIDE BALLAST.
4. ALL ACCESS TO THE ROOF SHALL BE FROM THE EXTERIOR - NO INTERIOR ACCESS PROVIDED. USE OF SCAFFOLD IS PERMITTED IN DESIGNATED ACCESS/STAGING AREAS, AND TO GAIN ACCESS BETWEEN ROOF LEVELS. PROTECT EXISTING ROOF MEMBRANE AS NOTED ABOVE.
5. CONTRACTOR SHALL ENSURE ALL TEMPORARY MEANS OF ACCESS TO ROOF ARE SECURED TO PREVENT UNAUTHORIZED ACCESS

PHASING NOTES

1. WORK PHASING PRIORITY: BETWEEN JULY 1ST AND JULY 17TH THE CONTRACTOR SHALL PRIORITIZE ROOF REPLACEMENT WORK OVER THE OREGON BALLROOM, IN THE LOCATION NOTED ON ROOF AREA B.

OUTSIDE OF THIS TIMEFRAME WORK HOURS MAY BECOME RESTRICTED DEPENDING UPON THE SOUND LEVEL OF THE ROOF REPLACEMENT ACTIVITIES AND THE TYPE OF EVENT OCCURRING IN THE OREGON BALLROOM.



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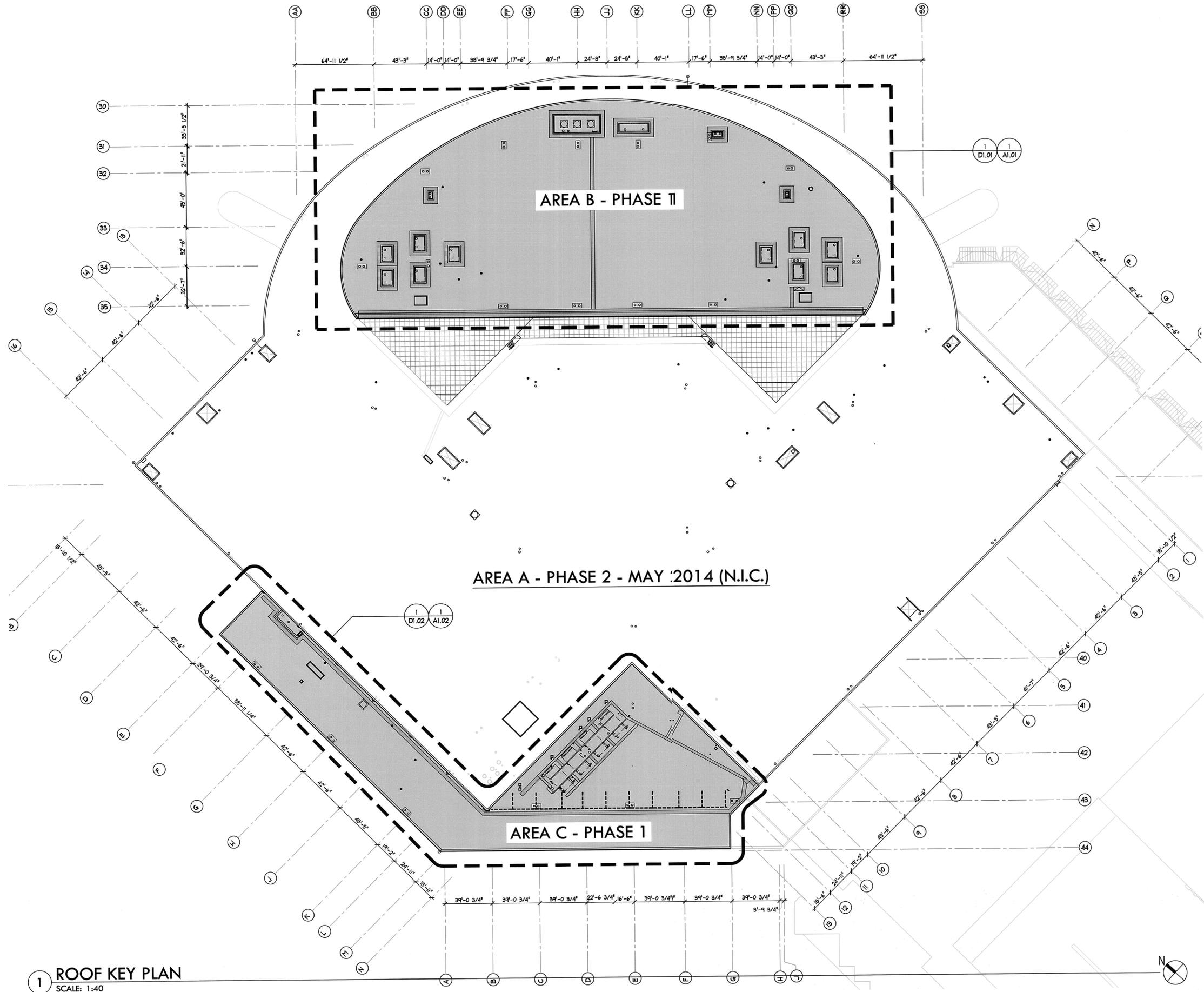


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WORK ACCESS & STAGING PLAN, PHASING NOTES
PROJ NO. 21262.00
04.09.2013

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G1.01



1 ROOF KEY PLAN
SCALE: 1:40

GENERAL NOTES

- ROOF AREAS:
 AREA A (MAIN ROOF): 216,973 SF PHASE 2 (FUTURE)
 AREA B (BALLROOM): 63,346 SF PHASE 1
 AREA C (LOADING DOCK): 34,220 SF PHASE 1
- GRID LINES AND DIMENSIONS ARE SHOWN FOR REFERENCE. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS

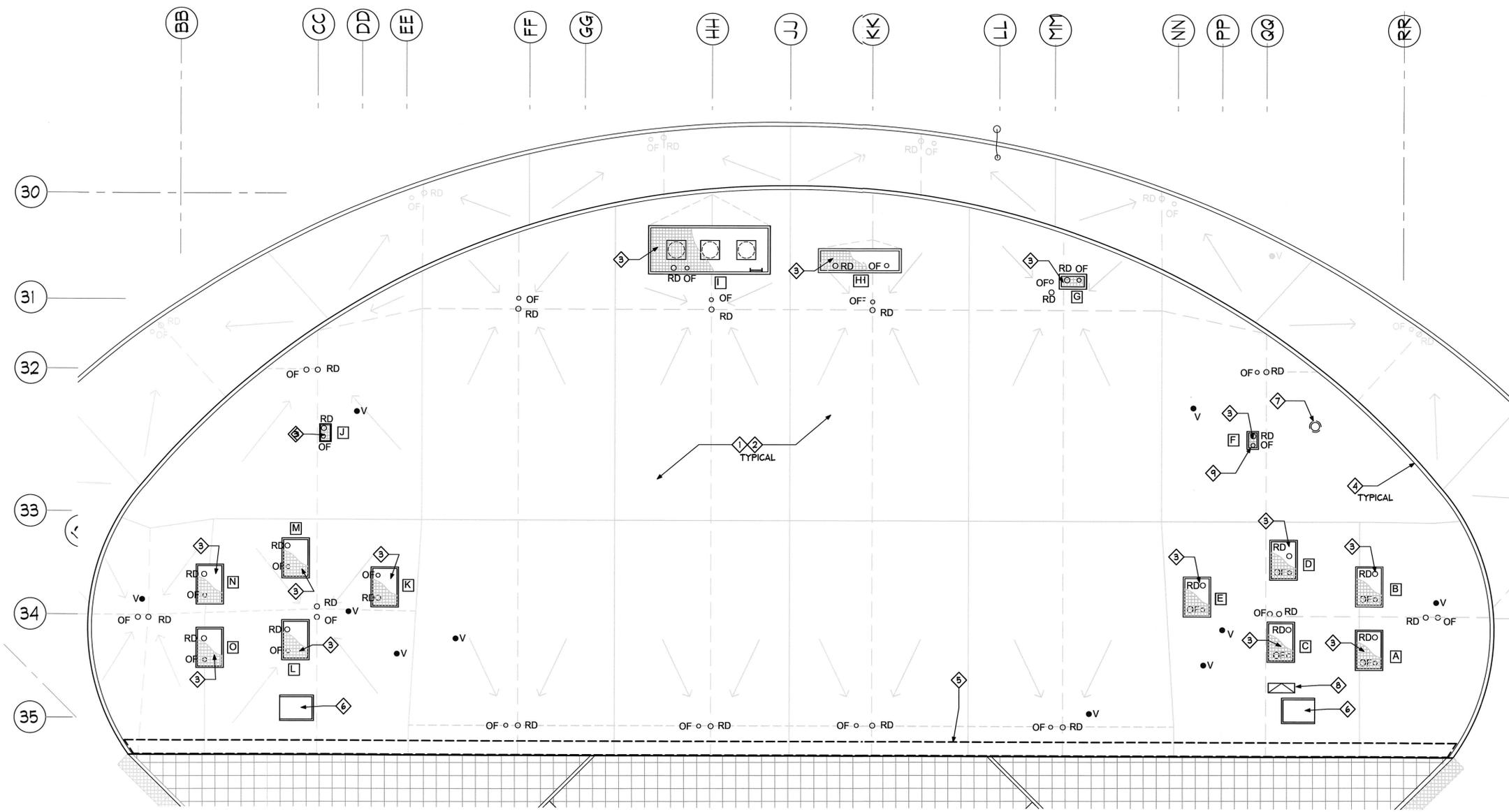
LEGEND



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ROOF KEY PLAN
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 04.09.2013

G1.02



1 AREA B - ROOF PLAN - DEMO
SCALE: 1" = 20'-0"

LEGEND	
--- (Dashed line)	REMOVE ITEM
- - - (Long dashed line)	(E) ROOF VALLEY
— (Solid line)	(E) ROOF RIDGE
→ (Arrow)	(E) STRUCTURAL SLOPE
•V (Circle with dot)	(E) VENT PENETRATION
○OF (Circle with dot)	(E) OVER FLOW DRAIN
○RD (Circle with dot)	(E) ROOF DRAIN
•C (Circle with dot)	(E) CONDUIT PENETRATION
□ (Square with dot)	(E) CURB MOUNTED EXHAUST FAN - SEE KEY NOTE
▣ (Square with grid)	(E) ROOF PIT WITH REMOVABLE GRATING
⊙ (Circle with dot)	(E) MUSHROOM VENT
⊞ (Square with dot)	(E) RECTANGULAR MUSHROOM VENT
— (Horizontal line)	(E) METAL ACCESS LADDER
⊞ (Envelope shape)	(E) ACCESS HATCH - SEE KEY NOTE

GENERAL NOTES

1. CONTRACTOR SHALL INDEPENDENTLY VERIFY TYPE, LOCATION AND CONDITION OF ALL ROOFTOP EQUIPMENT, PENETRATIONS & STRUCTURES.
2. ALL EXISTING EQUIPMENT & ACCESSORIES TO REMAIN UNLESS OTHERWISE NOTED.
3. ALL MECHANICAL, ELECTRICAL AND PLUMBING WORK SHALL BE COMPLETED BY QUALIFIED AND PROPERLY LICENSED MECHANICAL AND ELECTRICAL CONTRACTORS. ALL DISCONNECTIONS AND RECONNECTIONS SHALL BE COORDINATED WITH THE METRO PROJECT MANAGER PRIOR TO ANTICIPATED INTERRUPTION.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS OF THE PROJECT, INCLUDING VERIFICATION OF EXISTING ROOF SYSTEM CONSTRUCTION AND MATERIALS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING BUILDING SURFACES, FINISHES, AND SYSTEMS FROM DAMAGE, DISCOLORATION, ETC. DURING THE COURSE OF ALL CONSTRUCTION ACTIVITIES.
6. FALL PROTECTION DEVICES ARE NOT, NOR WILL BE, PROVIDED BY THE OWNER ON ANY ROOF AREA WHETHER DESIGNATED TO RECEIVE WORK OR NOT. PERSONAL FALL PROTECTION IS THE RESPONSIBILITY OF THE CONTRACTOR.
7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT BUILDING OCCUPANTS AND PASSERS-BY FROM FALLING DEBRIS OR EQUIPMENT. DO NOT THROW MATERIALS FROM THE ROOF.

KEY NOTES

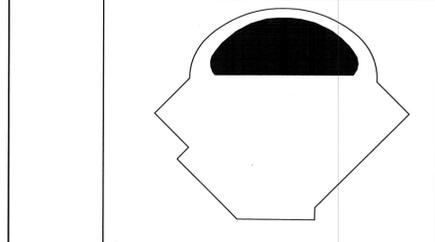
1. ROOF TEAR OFF TYPE 1 - AREA B, TYP.
REMOVE ROCK BALLAST
REMOVE MEMBRANE ROOFING DOWN TO INSULATION ASSEMBLY
REMOVE WET OR DAMAGED INSULATION ASSEMBLIES DOWN TO EXISTING SUBSTRATE BOARD/THERMAL BARRIER. PERMANENTLY ADHERED VAPOR BARRIER SHALL BE ALLOWED TO REMAIN IN PLACE. PLASTIC SHEETING VAPOR BARRIER SHALL BE REMOVED.
2. REMOVE ALL METAL COUNTERFLASHING AT CURBS & PARAPETS
3. ROOF TEAR OFF TYPE 3 - ROOF WELLS
REMOVE ROCK BALLAST
REMOVE MEMBRANE ROOFING AND INSULATION ASSEMBLY DOWN TO EXISTING SUBSTRATE
4. REMOVE MOSS FROM PARAPET CAP BRICK AND PREPARE BRICK TO RECEIVE NEW MATERIALS - ALLOW BRICK TO DRY OUT COMPLETELY BEFORE INSTALLATION OF NEW WORK
5. REMOVE ROOF PAVERS, TYPICAL
6. REMOVE STAINLESS STEEL GRAVEL STOP, ROCK BALLAST, ROOFING ASSEMBLY DOWN TO (E) INSULATION
7. (E) LARGE DIAMETER VENT PENETRATION, REMOVE FLASHING COLLAR
8. (E) ROOF HATCH - REMOVE FOR ROOFING INSTALLATION AND REINSTALL
9. ROOF PIT 'F' - REMOVE MECHANICAL EXHAUST HOODS AS REQUIRED TO REMOVE AND INSTALL ROOFING, REINSTALL
10. RAISE CURB MOUNTED EQUIPMENT AS REQUIRED TO MAINTAIN 8" MINIMUM FLASHING HEIGHT, UNLESS OTHERWISE NOTED.

ROOF PIT LEGEND ☒

SUPPLY AIR INTAKES
ROOF PITS B, C, D, G, L, M, N
COORDINATE MECHANICAL SHUT-OFFS WITH METRO PRIOR TO ACTIVITIES CAUSING DUST OR FUMES

EXHAUST
ROOF PITS A, E, F, H, I, K, O

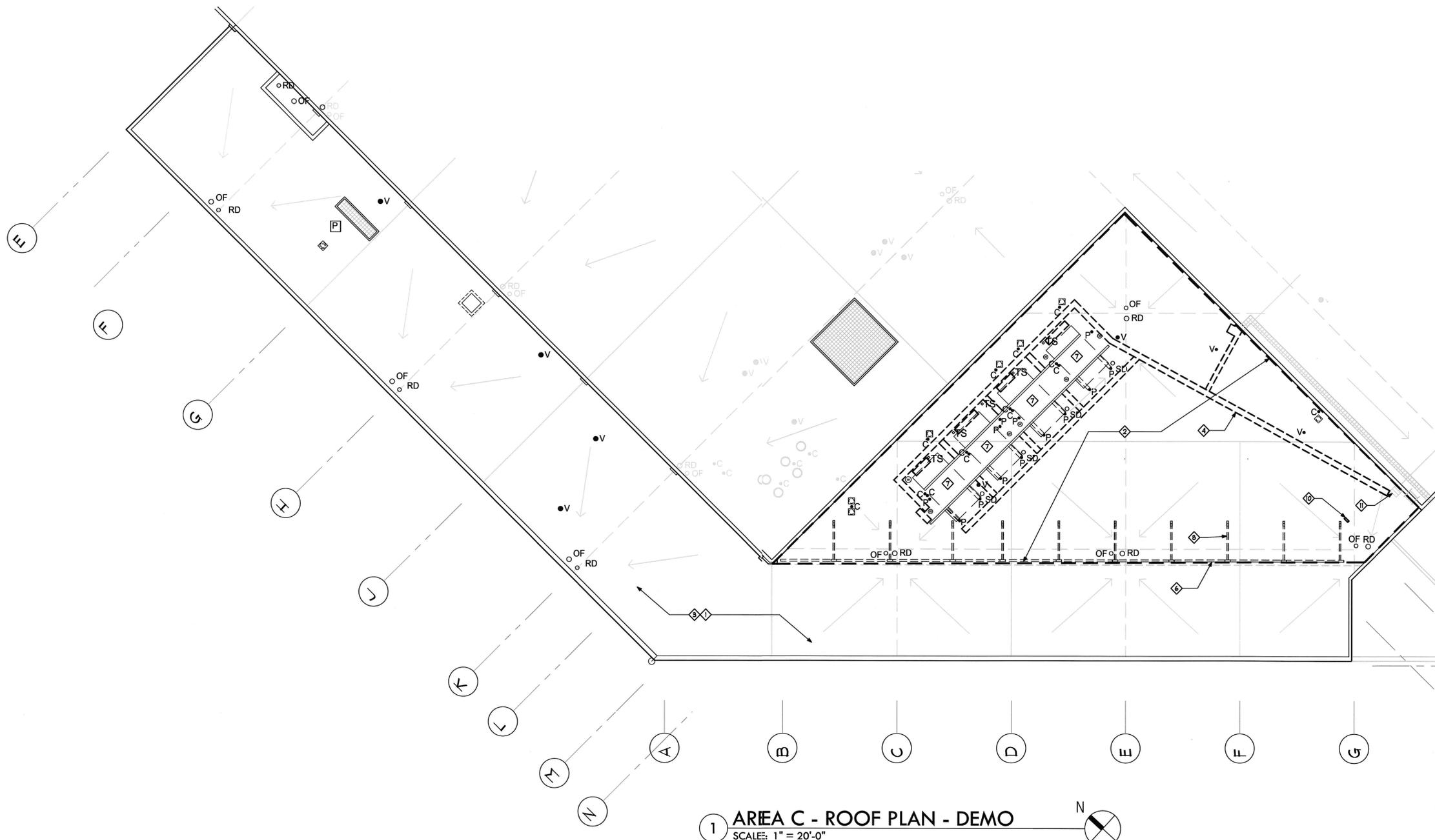
LOCATION PLAN



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1 AREA C - ROOF PLAN - DEMO
SCALE: 1" = 20'-0"

LEGEND	
---	REMOVE ITEM
- - -	(E) ROOF VALLEY
—	(E) ROOF RIDGE
→	(E) STRUCTURAL SLOPE
● V	(E) VENT PENETRATION
○ OF	(E) OVER FLOW DRAIN
○ RD	(E) ROOF DRAIN
○ SD	(E) SANITARY DRAIN
• C	(E) CONDUIT PENETRATION
• P	(E) PIPE PENETRATION
□ TS	(E) TUBE STEEL SUPPORT PENETRATION
⊙ W	(E) WATER PIPE PENETRATION
⊠	(E) CURB MOUNTED EXHAUST FAN - SEE KEY NOTE
▣	(E) ROOF PIT WITH REMOVABLE GRATING
⊙	(E) MUSHROOM VENT - ROUND PENETRATION
⊠	(E) MUSHROOM VENT - RECTANGULAR PENETRATION
⊙	(E) GENERATOR EXHAUST PENETRATION

GENERAL NOTES

- CONTRACTOR SHALL INDEPENDENTLY VERIFY TYPE, LOCATION AND CONDITION OF ALL ROOFTOP EQUIPMENT, PENETRATIONS & STRUCTURES.
- ALL EXISTING EQUIPMENT & ACCESSORIES TO REMAIN UNLESS OTHERWISE NOTED.
- ALL MECHANICAL, ELECTRICAL AND PLUMBING WORK SHALL BE COMPLETED BY QUALIFIED AND PROPERLY LICENSED MECHANICAL AND ELECTRICAL CONTRACTORS. ALL DISCONNECTIONS AND RECONNECTIONS SHALL BE COORDINATED WITH THE METRO PROJECT MANAGER PRIOR TO ANTICIPATED INTERRUPTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS OF THE PROJECT, INCLUDING VERIFICATION OF EXISTING ROOF SYSTEM CONSTRUCTION AND MATERIALS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING BUILDING SURFACES, FINISHES, AND SYSTEMS FROM DAMAGE, DISCOLORATION, ETC. DURING THE COURSE OF ALL CONSTRUCTION ACTIVITIES.
- FALL PROTECTION DEVICES ARE NOT, NOR WILL BE, PROVIDED BY THE OWNER ON ANY ROOF AREA WHETHER DESIGNATED TO RECEIVE WORK OR NOT. PERSONAL FALL PROTECTION IS THE RESPONSIBILITY OF THE CONTRACTOR.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT BUILDING OCCUPANTS AND PASSERS-BY FROM FALLING DEBRIS OR EQUIPMENT. DO NOT THROW MATERIALS FROM THE ROOF.

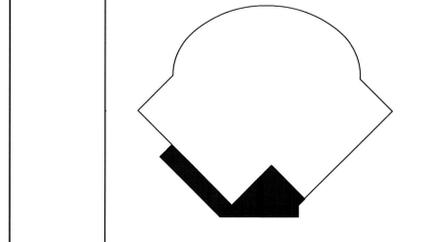
KEY NOTES

- ◆ ROOF TEAR OFF TYPE 1 - AREA C, TYP. REMOVE ROCK BALLAST
REMOVE MEMBRANE ROOFING DOWN TO INSULATION ASSEMBLY
REMOVE WET OR DAMAGED INSULATION ASSEMBLIES DOWN TO EXISTING SUBSTRATE BOARD/THERMAL BARRIER. PERMANENTLY ADHERED VAPOR BARRIER SHALL BE ALLOWED TO REMAIN IN PLACE. PLASTIC SHEETING VAPOR BARRIER SHALL BE REMOVED.
- ◆ ROOF TEAR OFF TYPE 2 - AREA C AT LOCATION OF TOPPING SLAB
- ◆ REMOVE ALL METAL COUNTERFLASHING AT CURBS & PARAPETS, UNLESS OTHERWISE NOTED
- ◆ REMOVE ROOF PAVERS, TYPICAL
- ◆ (E) CURB-MOUNTED MECHANICAL EQUIPMENT, REMOVE COUNTERFLASHING
- ◆ (E) MECHANICAL SCREEN - MODIFY BOTTOM OF SCREEN ASSEMBLY TO ACCOMMODATE NEW ROOFING. SEE DETAILS 1-4/A5.02
- ◆ (E) CHILLER, ABOVE, SUPPORTED ON CONCRETE SLEEPERS
- ◆ (E) SCREEN WALL SUPPORT BRACE, TYPICAL OF 10
- ◆ RAISE CURB MOUNTED EQUIPMENT AS REQUIRED TO MAINTAIN 8" MINIMUM FLASHING HEIGHT, UNLESS OTHERWISE NOTED.
- ◆ REMOVE ABANDONED ANGLED SUPPORT BRACE DOWN TO BELOW TOP OF INSULATION
- ◆ REMOVE AND REINSTALL STEPS

ROOF PIT LEGEND ☒

- SUPPLY AIR INTAKES
- ROOF PIT P
- COORDINATE MECHANICAL SHUT-OFFS WITH METRO PRIOR TO ACTIVITIES CAUSING DUST OR FUMES

LOCATION PLAN



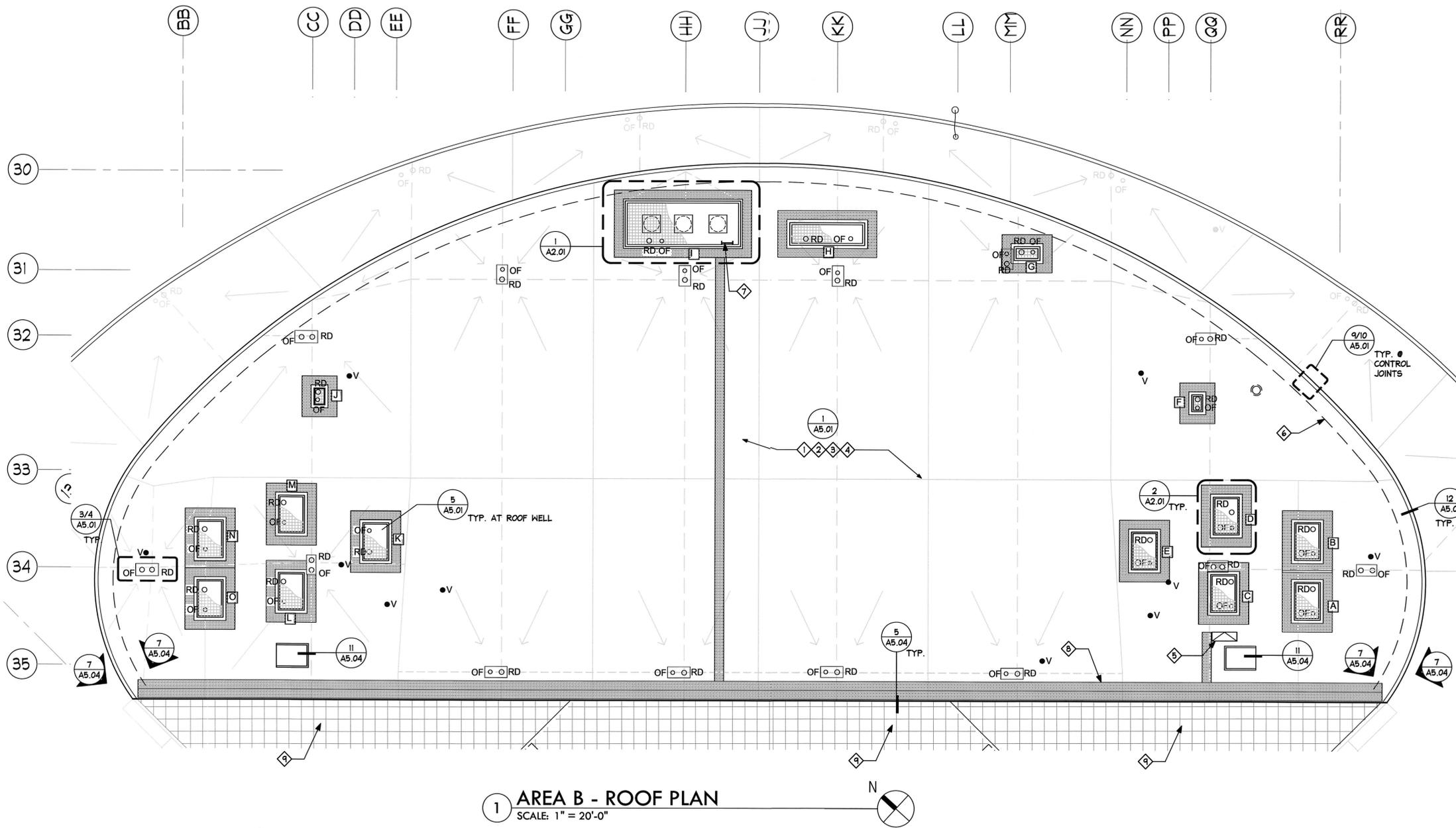
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1 AREA B - ROOF PLAN
SCALE: 1" = 20'-0"

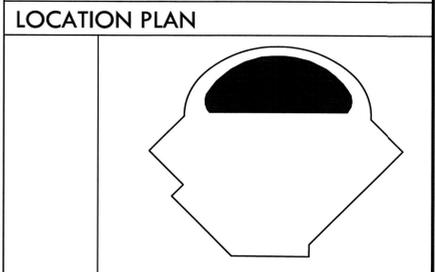
LEGEND			
	(E) ROOF VALLEY		(E) CURB MOUNTED EXHAUST FAN - SEE DETAILS
	(E) ROOF RIDGE		(E) ROOF PIT WITH REMOVABLE GRATING
	(E) STRUCTURAL SLOPE		(E) MUSHROOM VENT - ROUND PENETRATION - SEE DETAIL 6 OR 7/A5.01
	(E) VENT PENETRATION - SEE 1/A5.05		(E) MUSHROOM VENT - RECTANGULAR PENETRATION - SEE DETAIL 2/A5.03
	SUMPED OVER FLOW DRAIN AND ROOF DRAIN - SEE DETAIL 3/A5.01		(E) METAL ACCESS LADDER
	(E) CONDUIT PENETRATION - SEE 7/A5.01		(E) ACCESS HATCH
			INDICATES WALK PAD LAYOUT

- ### GENERAL NOTES
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 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT BUILDING OCCUPANTS AND PASSERS-BY FROM FALLING DEBRIS OR EQUIPMENT. DO NOT THROW MATERIALS FROM THE ROOF.

- ### KEY NOTES
- PROVIDE EPS INSULATION IN AREAS WHERE EXISTING DAMAGED INSULATION IS REMOVED
 - PROVIDE POLYISO INSULATION ASSEMBLY AND COVERBOARD
 - PROVIDE PVC MEMBRANE SYSTEM
 - PROVIDE COUNTERFLASHING AT ALL PENETRATIONS UNLESS NOTED OTHERWISE
 - PROVIDE MANUFACTURED GUARDRAIL AT EXISTING ROOF HATCH
 - PROVIDE 12" WIDE BRIGHT YELLOW PVC MEMBRANE SAFETY STRIP HEAT-WELDED TO PVC MEMBRANE ROOFING 6' FROM OUTSIDE FACE OF PERIMETER WALL
 - EXISTING FIXED ACCESS LADDER TO REMAIN
 - PROVIDE DOUBLE WIDE WALKPAD LAYOUT ADJACENT TO SKYLIGHTS
 - EXISTING SKYLIGHT - PROTECT FROM DAMAGE

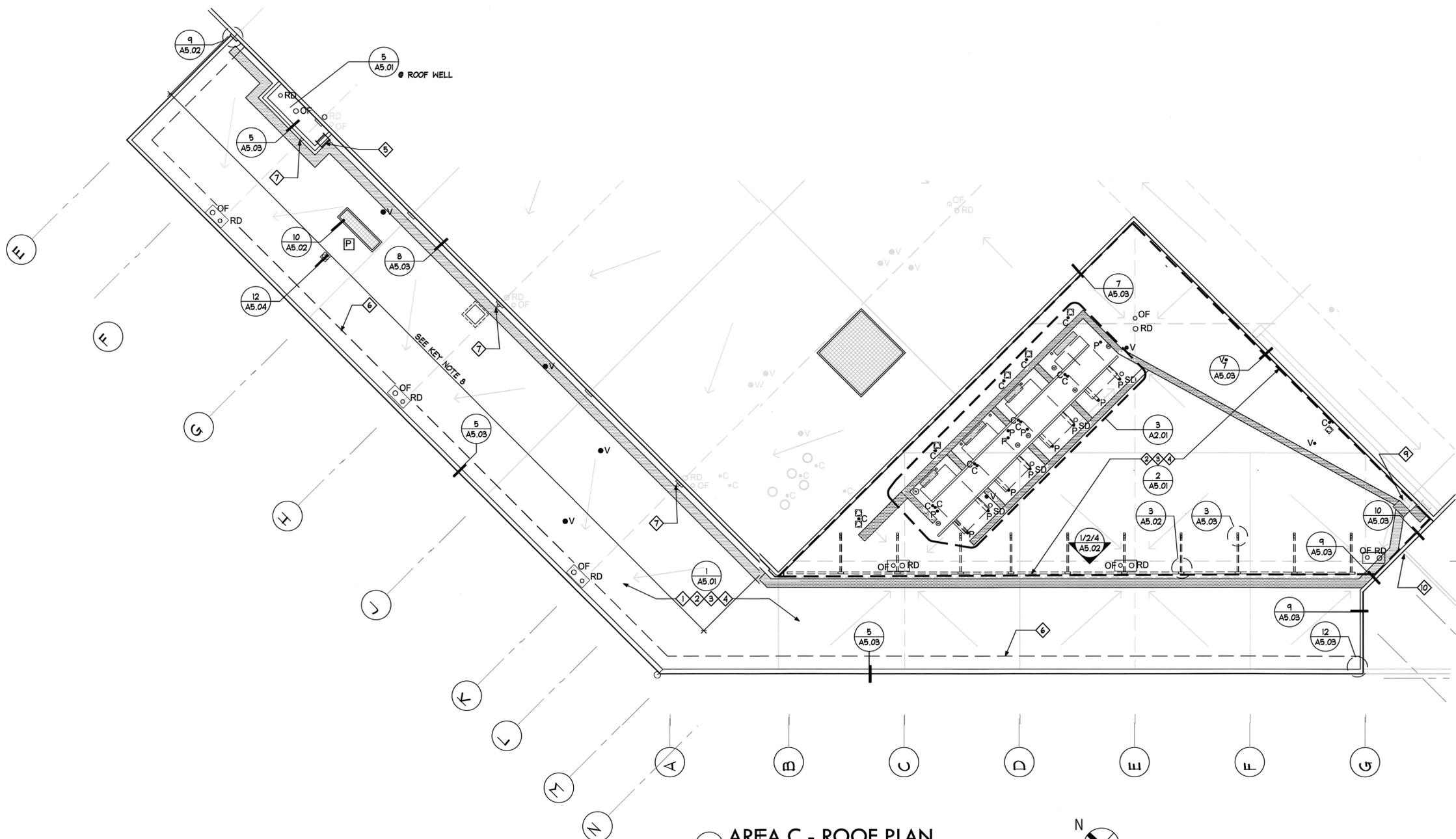
ROOF PIT LEGEND

<input checked="" type="checkbox"/>	SUPPLY AIR INTAKES
	ROOF PITS B, C, D, G, L, M, N
	COORDINATE MECHANICAL SHUT-OFFS WITH METRO PRIOR TO ACTIVITIES CAUSING DUST OR FUMES
<input checked="" type="checkbox"/>	EXHAUST
	ROOF PITS A, E, F, H, I, K, O



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AREA B
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21262.00
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1 AREA C - ROOF PLAN
SCALE: 1" = 20'-0"

LEGEND	
---	(E) ROOF VALLEY
---	(E) ROOF RIDGE
---	(E) STRUCTURAL SLOPE
●V	(E) VENT PENETRATION - SEE 1/A5.05
○OF ○RD	SUMPED OVER FLOW DRAIN AND ROOF DRAIN - SEE DETAIL 3/A5.01
○SD	SANITARY DRAIN
●C	(E) CONDUIT PENETRATION - SEE 7/A5.01
●P	(E) PIPE PENETRATION - SEE 6 OR 7/A5.01
□TS	(E) TUBE STEEL SUPPORT PENETRATION - SEE 3/A5.02, SIM.
○W	(E) WATER PIPE PENETRATION - SEE 6/A5.01
□	(E) CURB MOUNTED EXHAUST FAN - SEE DETAILS
■	(E) ROOF PIT WITH REMOVABLE GRATING
○	(E) MUSHROOM VENT
□	(E) RECTANGULAR MUSHROOM VENT
	METAL ACCESS LADDER
■	INDICATES WALK PAD LAYOUT

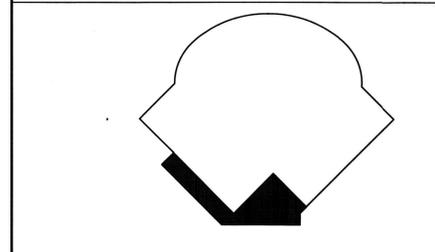
- GENERAL NOTES**
- CONTRACTOR SHALL INDEPENDENTLY VERIFY TYPE, LOCATION AND CONDITION OF ALL ROOFTOP EQUIPMENT, PENETRATIONS & STRUCTURES.
 - ALL EXISTING EQUIPMENT & ACCESSORIES TO REMAIN UNLESS OTHERWISE NOTED.
 - ALL MECHANICAL, ELECTRICAL AND PLUMBING WORK SHALL BE COMPLETED BY QUALIFIED AND PROPERLY LICENSED MECHANICAL AND ELECTRICAL CONTRACTORS. ALL DISCONNECTIONS AND RECONNECTIONS SHALL BE COORDINATED WITH THE METRO PROJECT MANAGER PRIOR TO ANTICIPATED INTERRUPTION.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS OF THE PROJECT, INCLUDING VERIFICATION OF EXISTING ROOF SYSTEM CONSTRUCTION AND MATERIALS.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING BUILDING SURFACES, FINISHES, AND SYSTEMS FROM DAMAGE, DISCOLORATION, ETC. DURING THE COURSE OF ALL CONSTRUCTION ACTIVITIES.
 - FALL PROTECTION DEVICES ARE NOT, NOR WILL BE, PROVIDED BY THE OWNER ON ANY ROOF AREA WHETHER DESIGNATED TO RECEIVE WORK OR NOT. PERSONAL FALL PROTECTION IS THE RESPONSIBILITY OF THE CONTRACTOR.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT BUILDING OCCUPANTS AND PASSERS-BY FROM FALLING DEBRIS OR EQUIPMENT. DO NOT THROW MATERIALS FROM THE ROOF.

- KEY NOTES**
- PROVIDE EPS INSULATION IN AREAS WHERE EXISTING DAMAGED INSULATION IS REMOVED
 - PROVIDE POLYISO INSULATION ASSEMBLY AND COVERBOARD
 - PROVIDE PVC MEMBRANE SYSTEM
 - PROVIDE COUNTERFLASHING AT ALL PENETRATIONS UNLESS NOTED OTHERWISE
 - PROVIDE FIXED ACCESS LADDER INTO RAISED ROOF WELL - SEE DETAILS 11 & 12/A5.02
 - PROVIDE 12" WIDE BRIGHT YELLOW PVC MEMBRANE SAFETY STRIP HEAT-WELDED TO PVC MEMBRANE ROOFING 6' FROM OUTSIDE FACE OF PERIMETER WALL
 - FALL PROTECTION ANCHOR POINT INSTALLED AT PRECAST WALL
 - ALTERNATE NO. 1 - PROVIDE NEW FULL-HEIGHT SEALANT JOINTS BETWEEN PRECAST PANELS, APPROXIMATELY 10'-0" O.C.
 - REINSTALL STEPS ON WALKPADS
 - INSTALL METAL WALL PANEL WHERE REMOVED FOR ROOFING INSTALLATION - SEE DETAIL 11/A5.03.

ROOF PIT LEGEND ☒

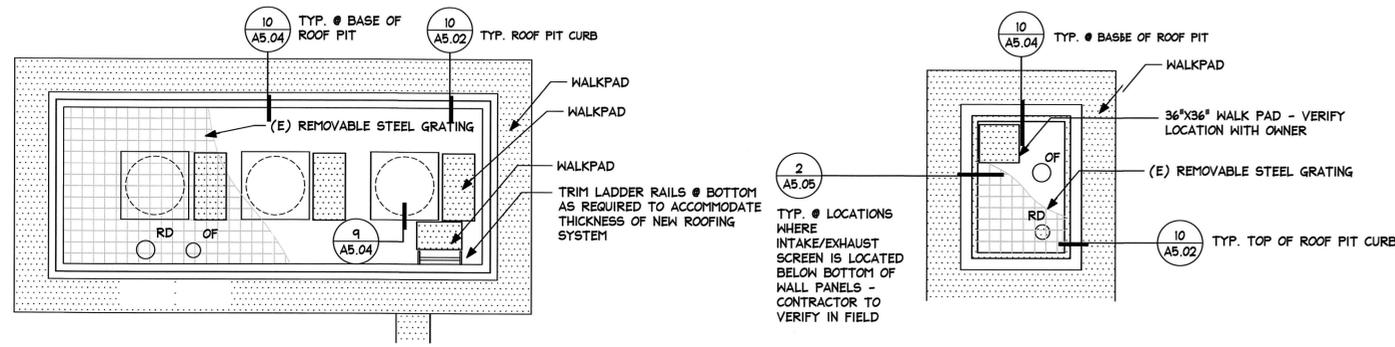
- SUPPLY AIR INTAKES**
 ROOF PIT "P"
 COORDINATE MECHANICAL SHUT-OFFS WITH METRO PRIOR TO ACTIVITIES CAUSING DUST OR FUMES

LOCATION PLAN



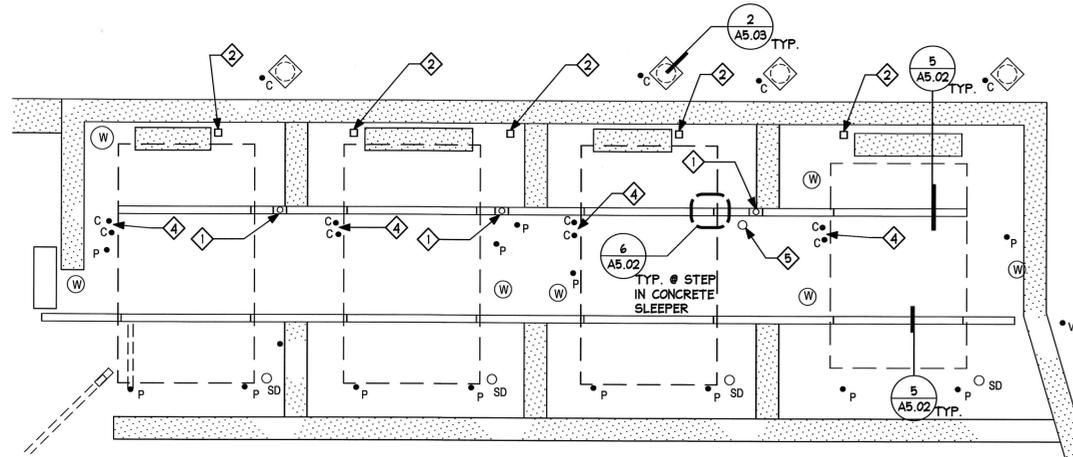
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AREA C
 ROOF PLAN
 PROJ NO.
 21262.00
 04.09.2013



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

2 ENLARGED PLAN - TYP. ROOF PIT
SCALE: 1/8" = 1'-0"



3 ENLARGED PLAN - ROOFTOP MECHANICAL
SCALE: 1/8" = 1'-0"

LEGEND	
•V	(E) VENT PENETRATION - SEE 1/A5.05
•C	(E) CONDUIT PENETRATION - SEE 7/A5.01
□ TS	(E) TUBE STEEL SUPPORT PENETRATION - SEE 3/A5.02
•P	(E) PIPE PENETRATION - SEE 6 OR 7/A5.01
⊙ W	(E) WATER PIPE PENETRATION - SEE 6/A5.01
⊠	(E) CURB MOUNTED EXHAUST FAN - SEE DETAILS
—	(E) METAL ACCESS LADDER
▨	INDICATES WALK PAD LAYOUT
○ OF	(E) OVER FLOW DRAIN
○ RD	(E) ROOF DRAIN, SEE KEY NOTE ④
○ SD	(E) SANITARY DRAIN

- ### GENERAL NOTES
- CONTRACTOR SHALL INDEPENDENTLY VERIFY TYPE, LOCATION AND CONDITION OF ALL ROOFTOP EQUIPMENT, PENETRATIONS & STRUCTURES.
 - ALL EXISTING EQUIPMENT & ACCESSORIES TO REMAIN UNLESS OTHERWISE NOTED.
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 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT BUILDING OCCUPANTS AND PASSERS-BY FROM FALLING DEBRIS OR EQUIPMENT. DO NOT THROW MATERIALS FROM THE ROOF.

- ### KEY NOTES
- REMOVE EXISTING STEEL PIPE SUPPORT OVER CONCRETE SLEEPERS, INSTALL NEW PVC MEMBRANE FLASHING OVER WALL AND REINSTALL PIPE SUPPORT. SECURE PIPE SUPPORT USING EXISTING FASTENER PENETRATION HOLES. SEAL AROUND FLATE PERIMETERS AT BOTH VERTICAL AND HORIZONTAL SURFACES. PROVIDE TEMPORARY DUCT SUPPORT DURING INSTALLATION.
 - (E) TUBE STEEL SUPPORT - PROVIDE FLASHING PER DETAIL 3/A5.02
 - PROVIDE SUMP @ ROOF DRAIN ONLY WITHIN ROOF PITS - SEE DETAIL 4/A5.01
 - AT PAIRED CONDUIT PENETRATIONS, PROVIDE CUSTOM FITTED, PRE-FABRICATED PVC MEMBRANE FLASHING AT CLOSELY SPACED CONDUIT PENETRATIONS. FIT CONDUITS WITH STAINLESS STEEL STORM COLLAR SIMILAR TO DETAIL 6/A5.01
 - (E) CAPPED PIPE - PROVIDE FLASHING PER DETAIL 6 OR 7/A5.01, PROVIDE PVC CAP FLASHING

REGISTERED ARCHITECT
WILLIAM F. HART, JR.
PORTLAND, OREGON

STATE OF OREGON

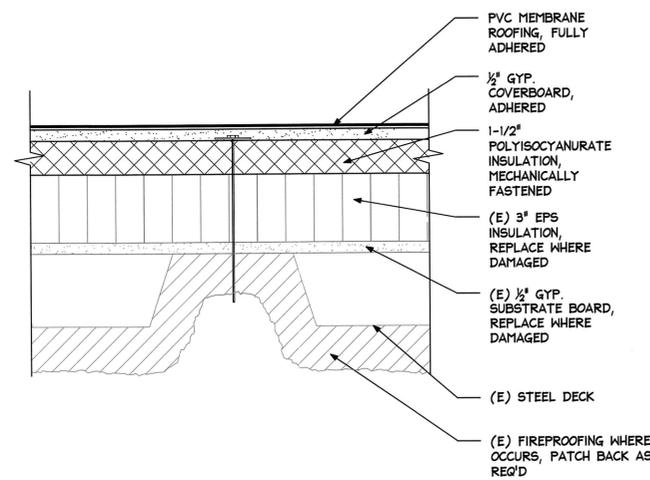
CARLETON HART ARCHITECTURE
332 N.W. 8th Avenue, Portland, Oregon 97209
1.503.243.2282 | 1.503.243.9261 | carletonhart.com

PROFESSIONAL ROOF CONSULTANTS

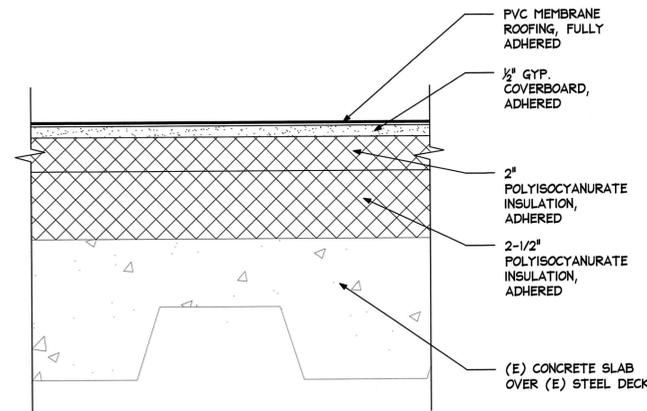
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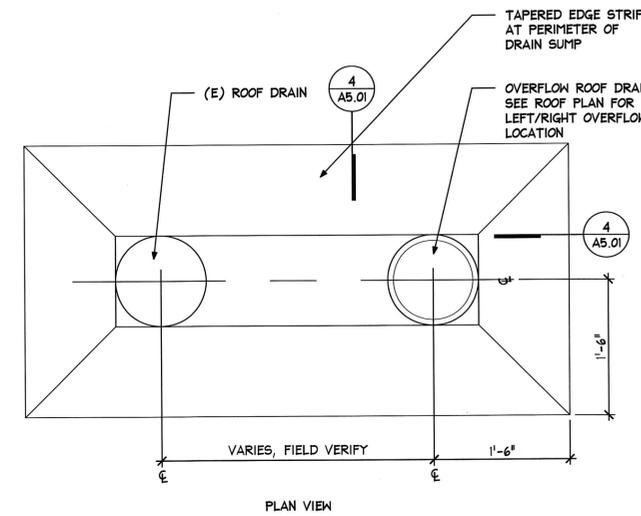
ROOF PLAN
PROJ NO.
21262.00
04.09.2013



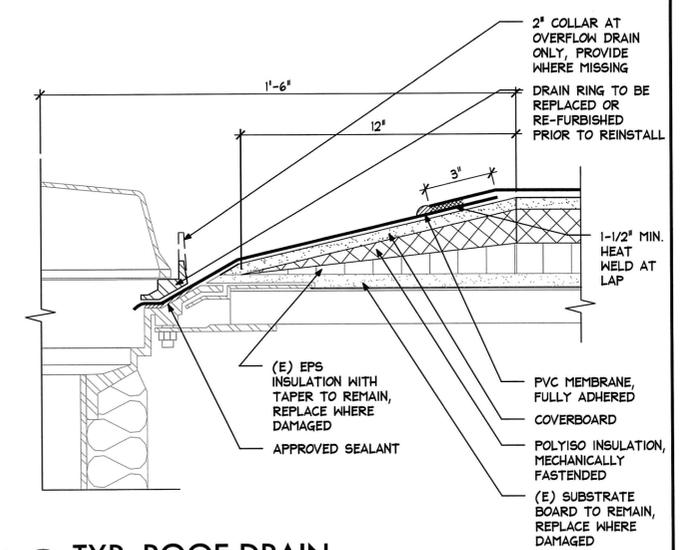
1 AREAS B & C: TYP. ROOF ASSEMBLY
SCALE: 3" = 1'-0"



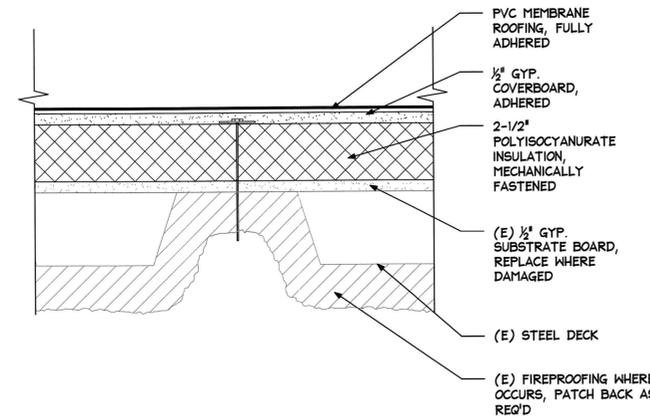
2 AREA C: TYP. ROOF ASSEMBLY
SCALE: 3" = 1'-0"



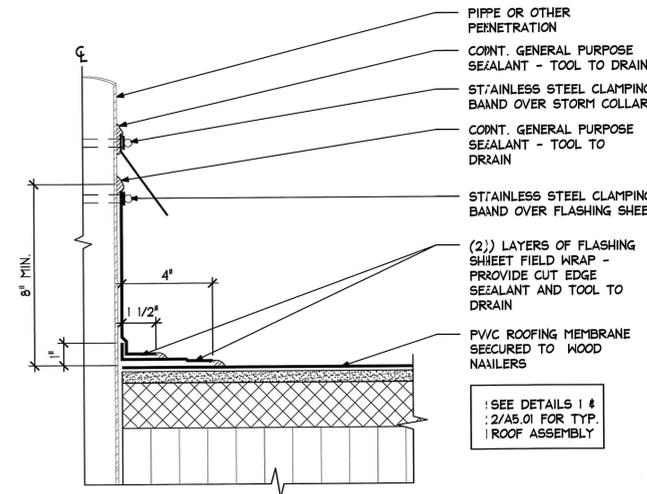
3 TYP. ROOF DRAIN & OVERFLOW SUMP
SCALE: 1" = 1'-0"



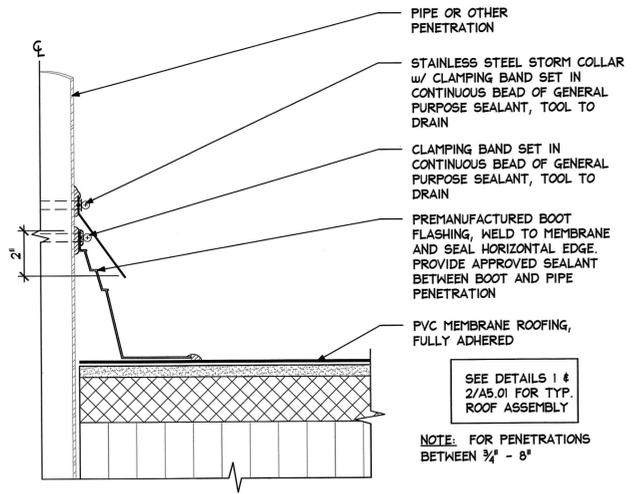
4 TYP. ROOF DRAIN
SCALE: 3" = 1'-0"



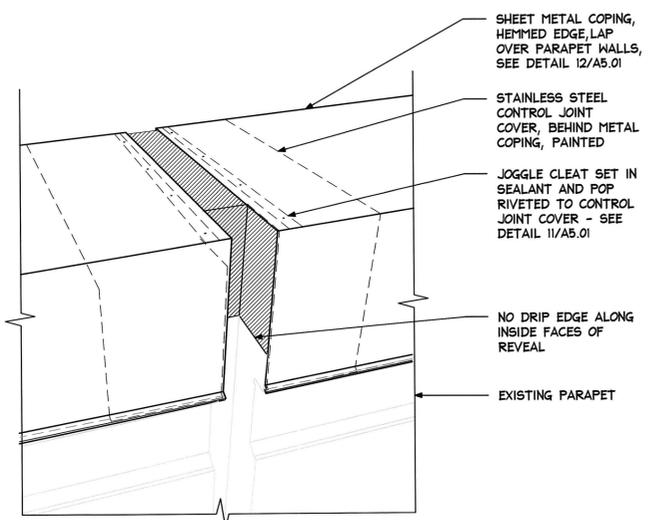
5 TYP. ROOF ASSEMBLY @ ROOF PITS
SCALE: 3" = 1'-0"



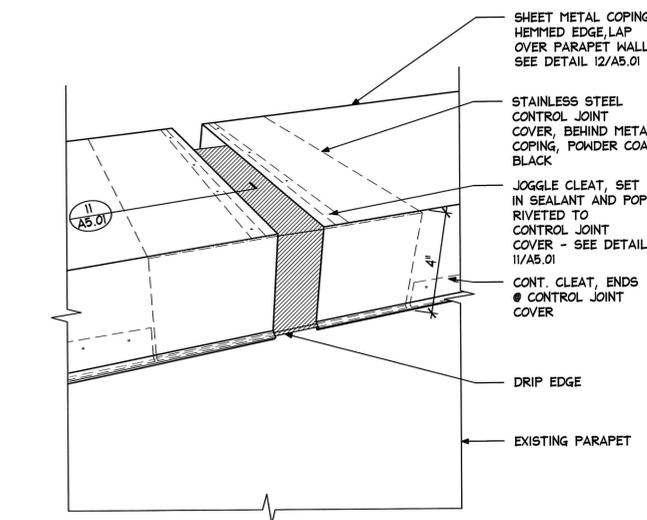
6 TYP. FLASHING AT PIPE PENETRATION
SCALE: 3" = 1'-0"



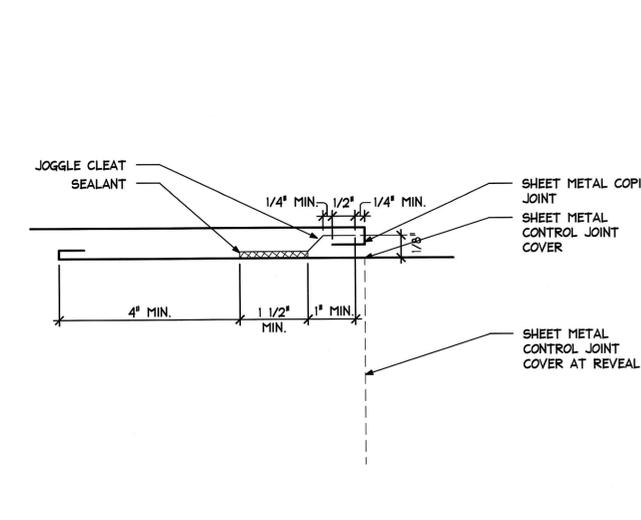
7 TYP. PIPE PENETRATION FLASHING
SCALE: 3" = 1'-0"



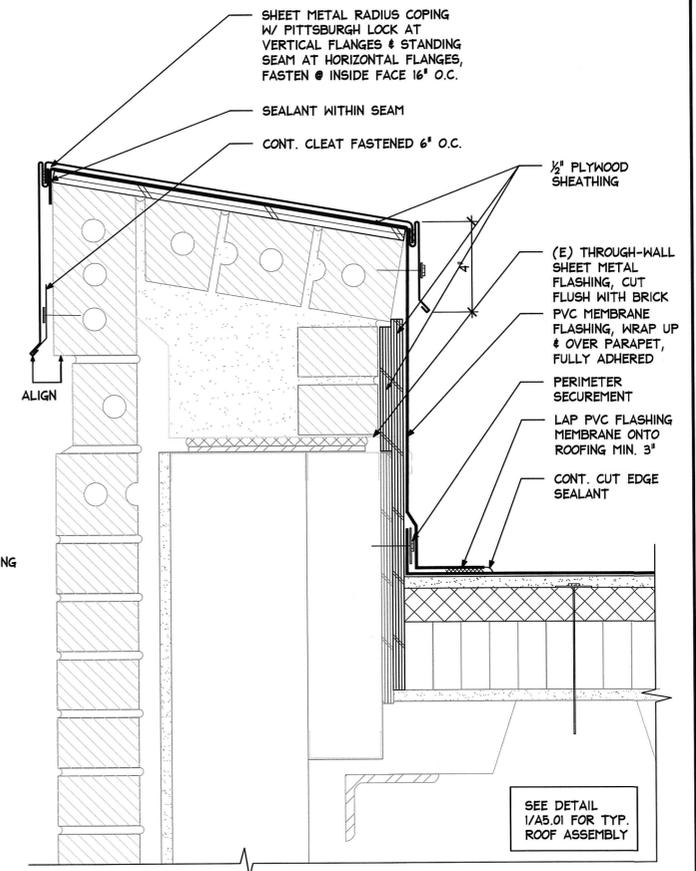
9 PARAPET FLASHING AT REVEAL - EXT.
SCALE: 3" = 1'-0"



10 PARAPET FLASHING AT REVEAL - INT.
SCALE: 3" = 1'-0"



11 COPING CONTROL JOINT
SCALE: N.T.S.



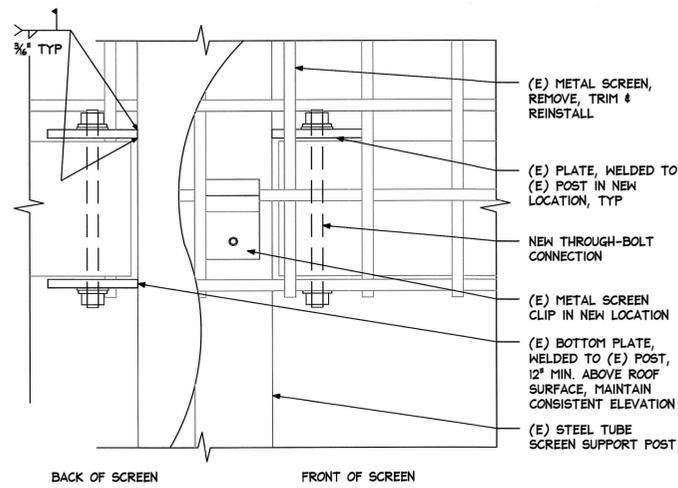
12 AREA B: BASE FLASHING @ BRICK PARAPET
SCALE: 3" = 1'-0"



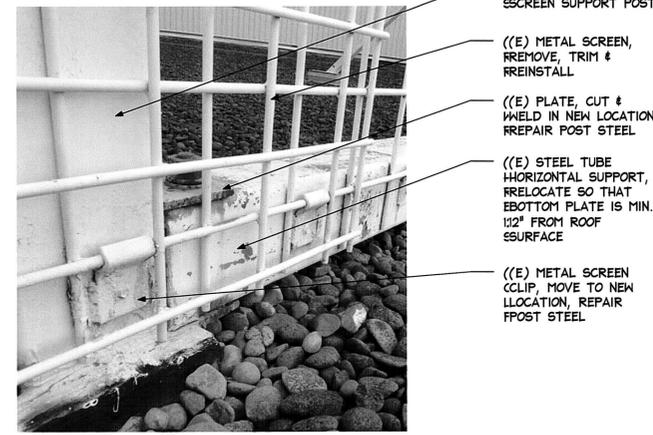
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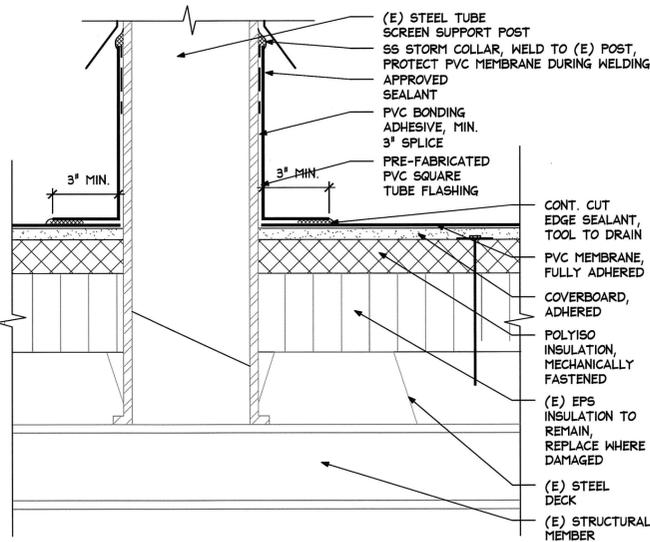
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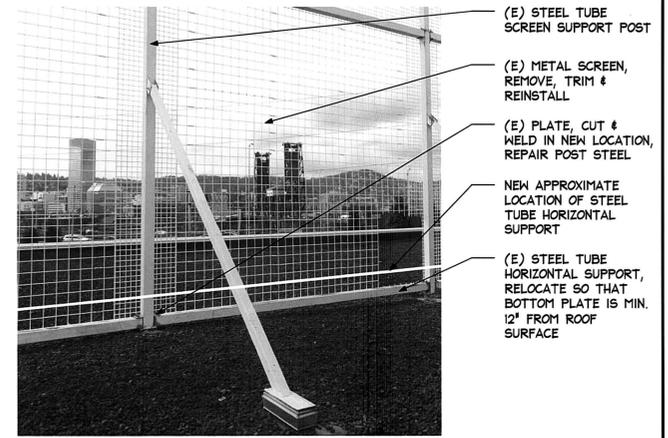
1 AREA C: SCREEN ATTACHMENT
SCALE: 3" = 1'-0"



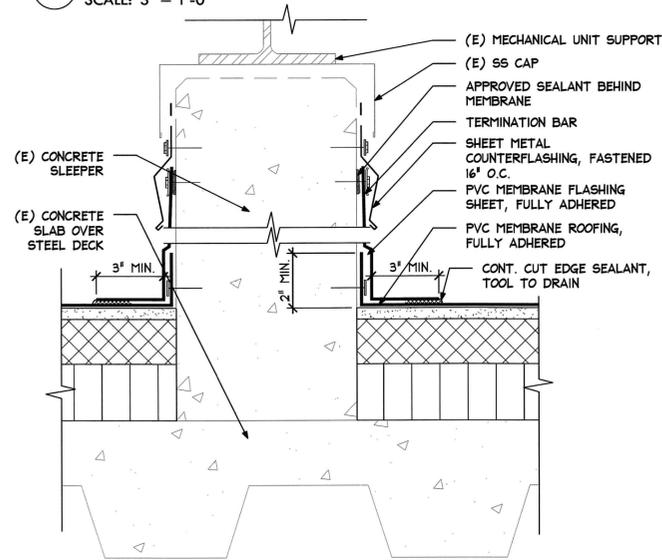
2 AREA C: SCREEN CLIP
SCALE: N.T.S.



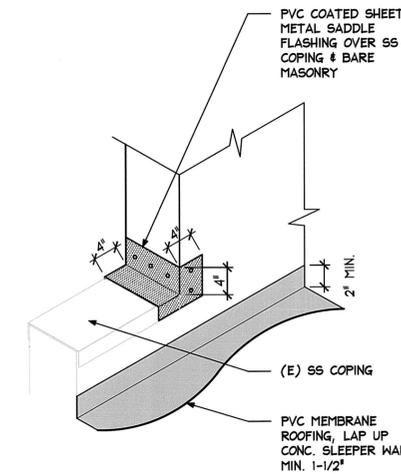
3 AREA C: BASE FLASHING @ SCREEN
SCALE: 3" = 1'-0"



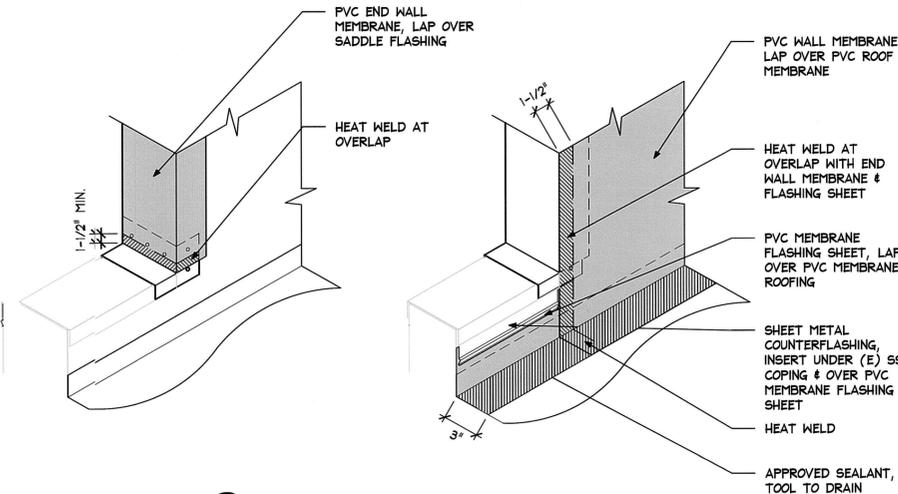
4 AREA C: SCREEN RELOCATION
SCALE: N.T.S.



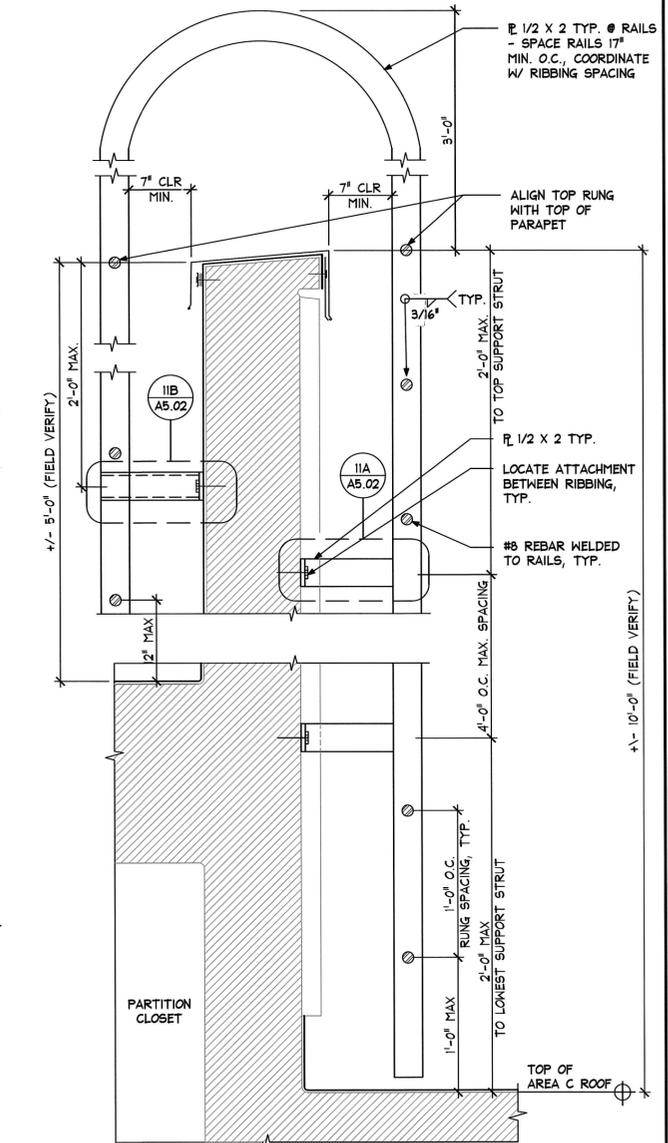
5 AREA C: CONC. SLEEPER @ EQUIPMENT
SCALE: 3" = 1'-0"



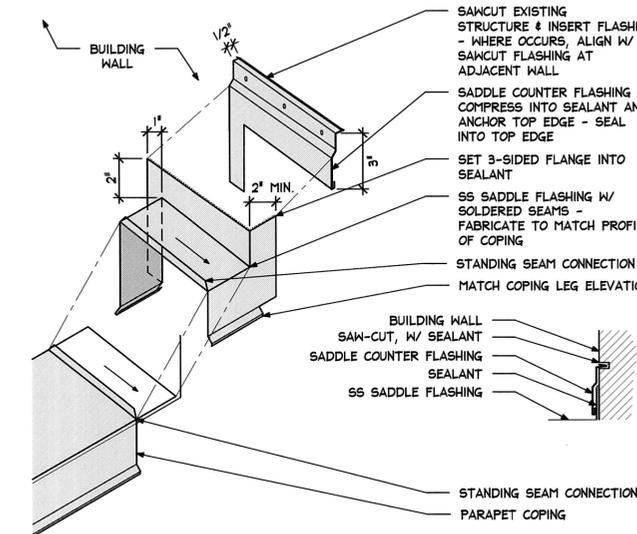
6 AREA C: SADDLE FLASHING SEQUENCE @ CONCRETE SLEEPERS
SCALE: 3" = 1'-0"



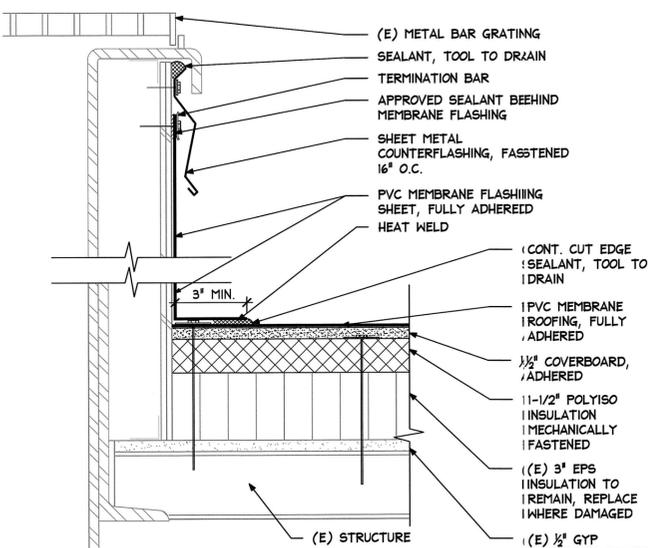
11 LADDER CONNECTION
SCALE: 3" = 1'-0"



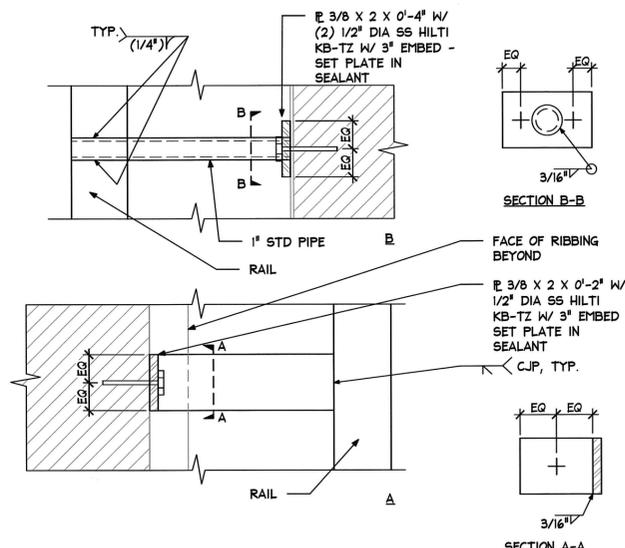
12 LADDER AT AREA 'C'
SCALE: 1 1/2" = 1'-0"

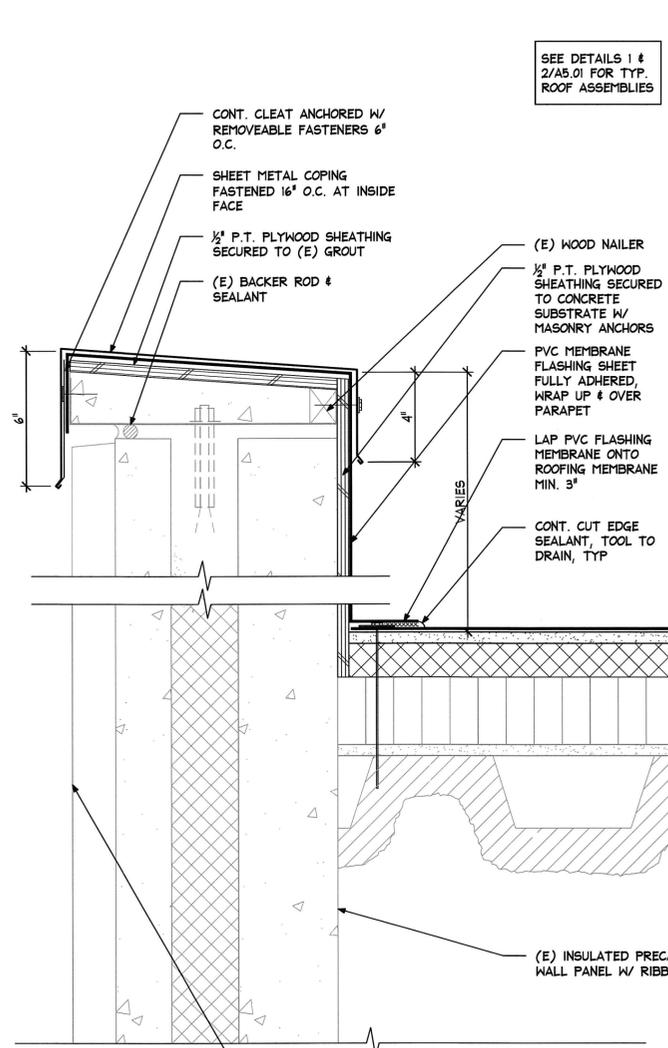


9 AREA C: COPING SADDLE FLASHING
SCALE: 1 1/2" = 1'-0"

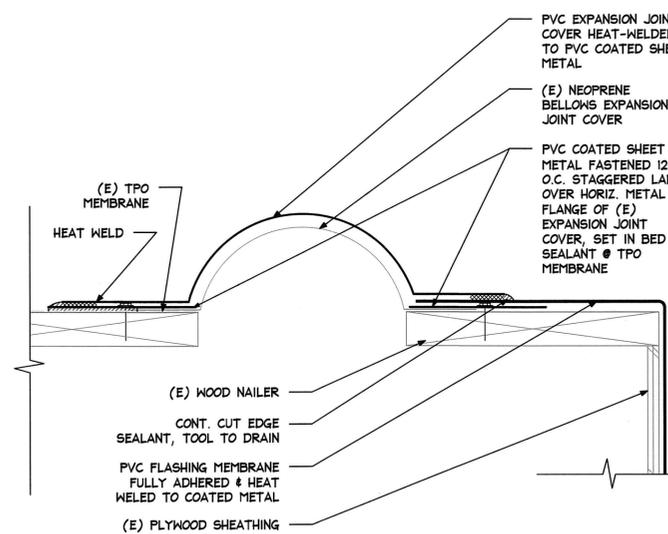


10 AREA B: ROOF PIT CURB
SCALE: 3" = 1'-0"

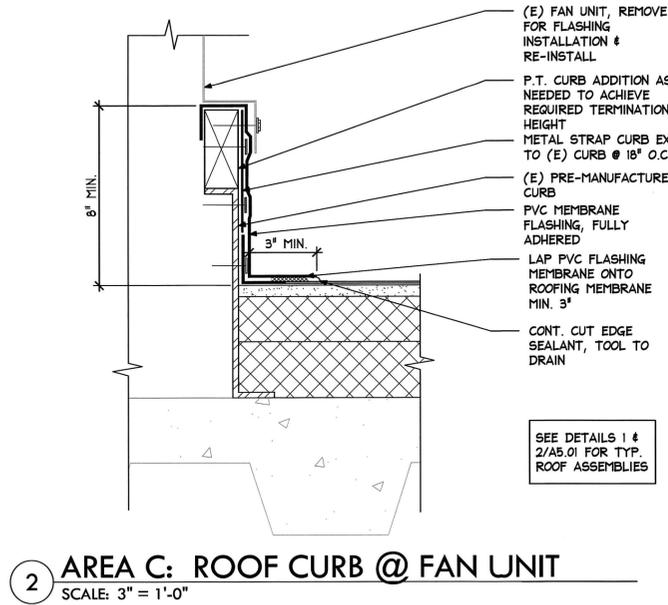




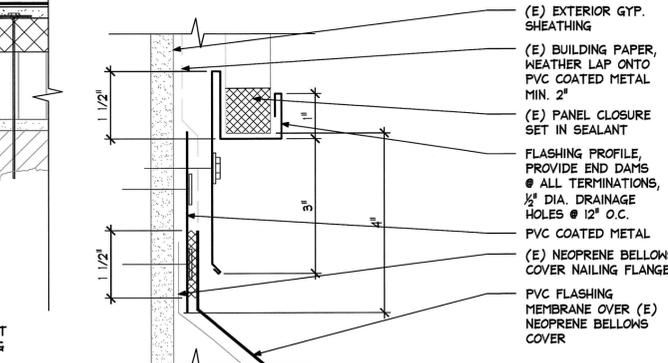
5 AREA C: PARAPET WALL BASE FLASHING
SCALE: 3" = 1'-0"



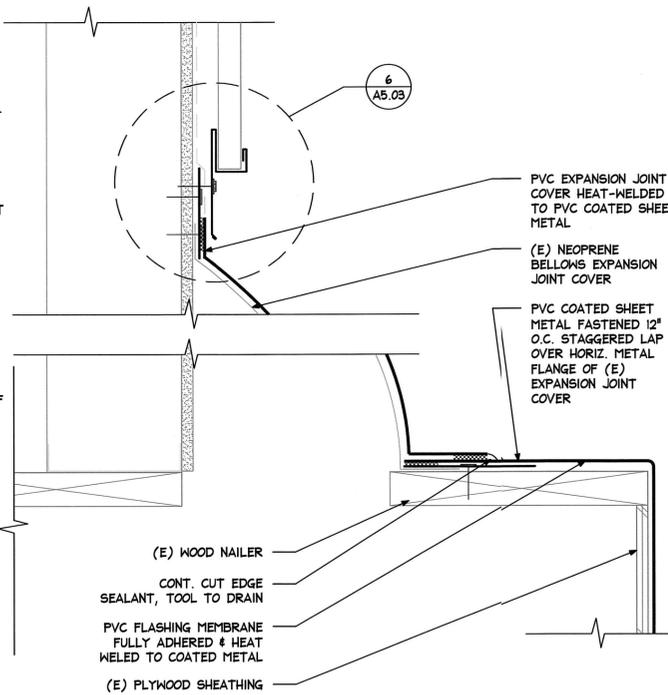
9 AREA C: CURB EXPANSION JOINT
SCALE: 3" = 1'-0"



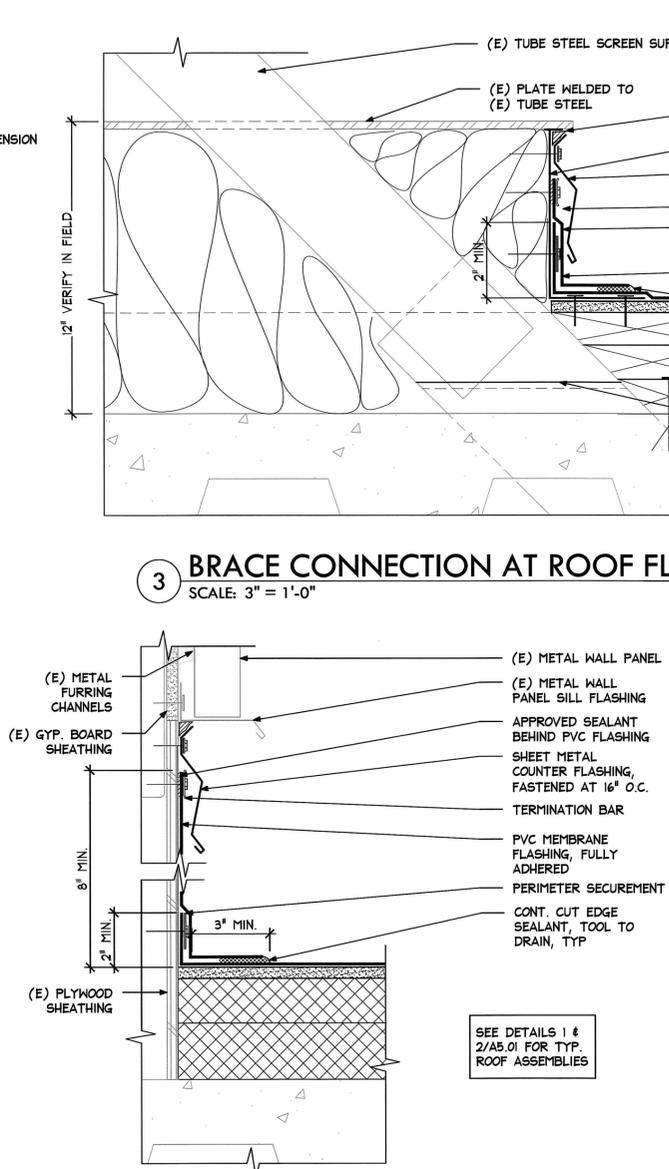
2 AREA C: ROOF CURB @ FAN UNIT
SCALE: 3" = 1'-0"



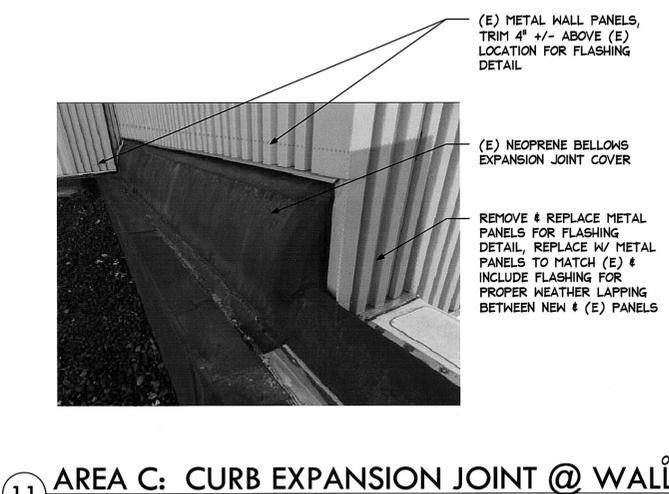
6 FLASHING PROFILE DETAIL
SCALE: 6" = 1'-0"



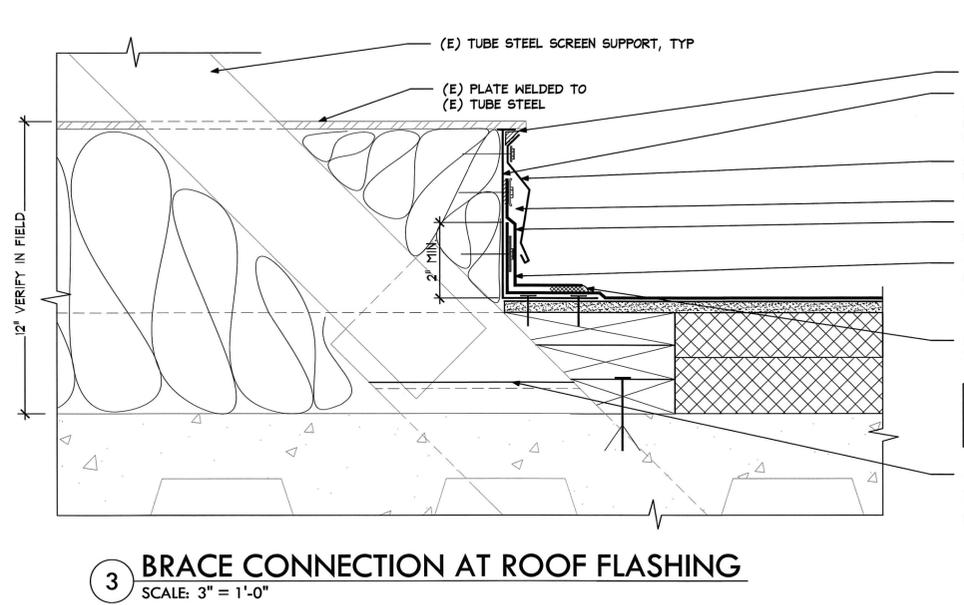
10 AREA C: CURB EXPANSION JOINT @ WALL
SCALE: 3" = 1'-0"



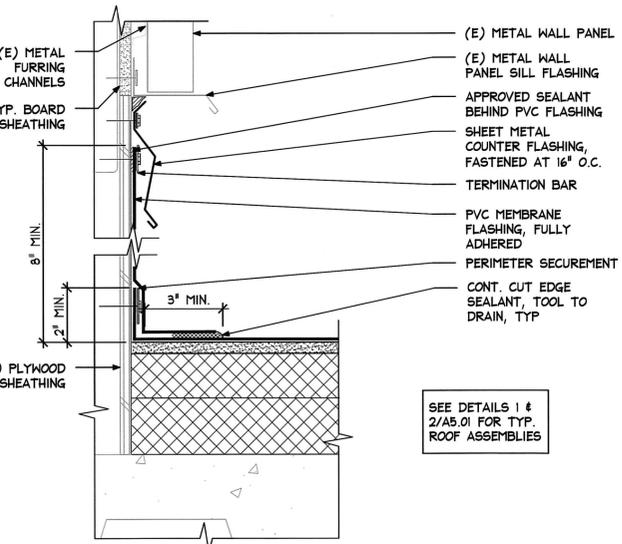
7 EXT. METAL WALL/ROOF FLASHING
SCALE: 3" = 1'-0"



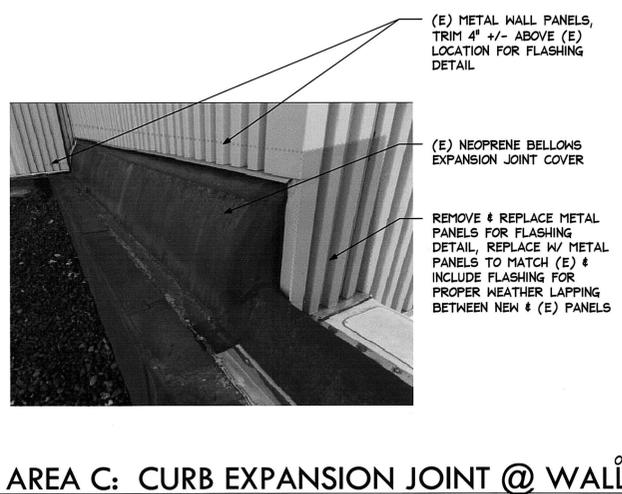
11 AREA C: CURB EXPANSION JOINT @ WALL
SCALE: N.T.S.



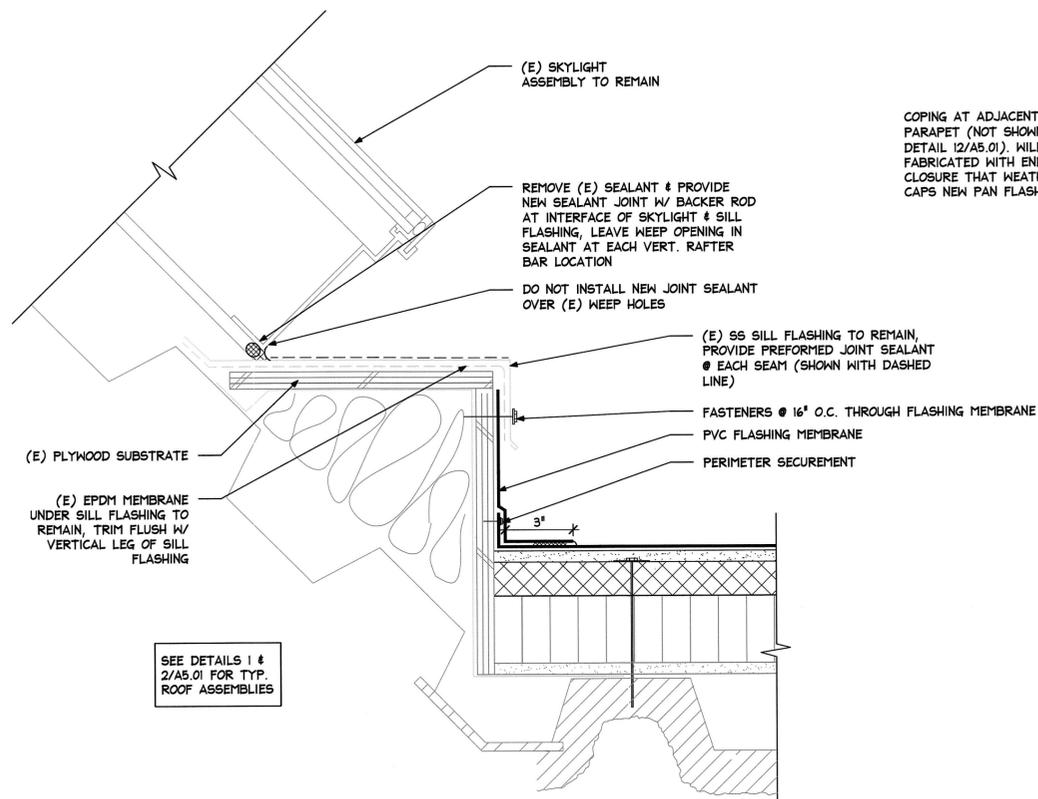
3 BRACE CONNECTION AT ROOF FLASHING
SCALE: 3" = 1'-0"



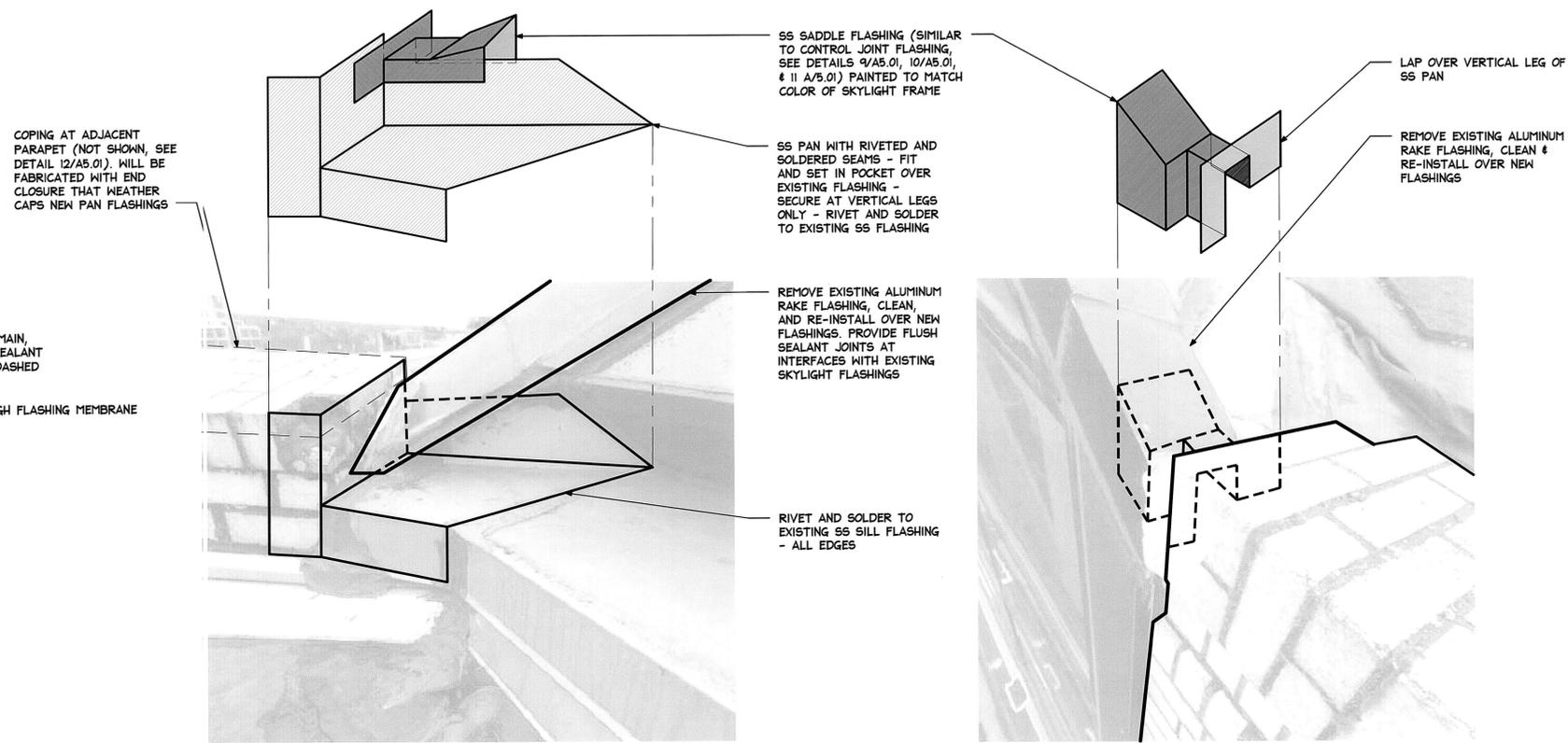
8 EXT. CONC. WALL/ROOF FLASHING
SCALE: 3" = 1'-0"



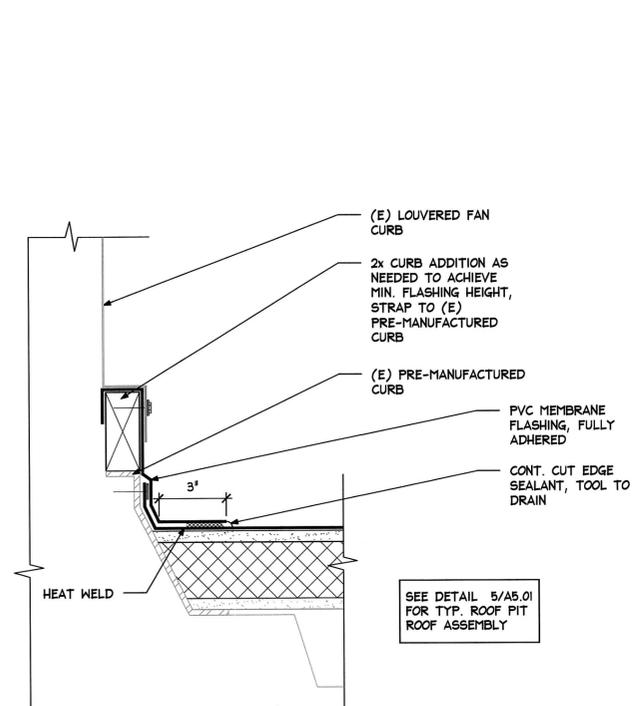
12 AREA C: EXP. JOINT COVER @ VERT.
SCALE: 3" = 1'-0"



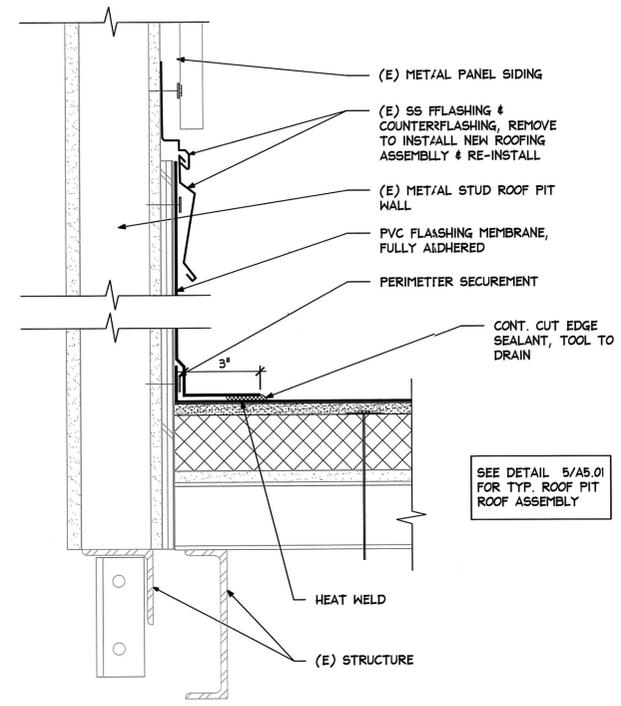
5 AREA B: SILL FLASHING DETAIL @ SKYLIGHT
SCALE: 3" = 1'-0"



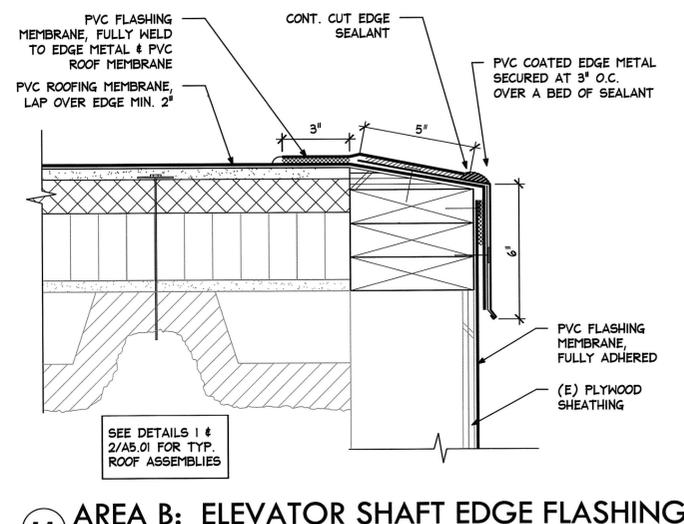
7 AREA B: FLASHING AT PARAPET/SKYLIGHT INTERFACE
SCALE: N.T.S.



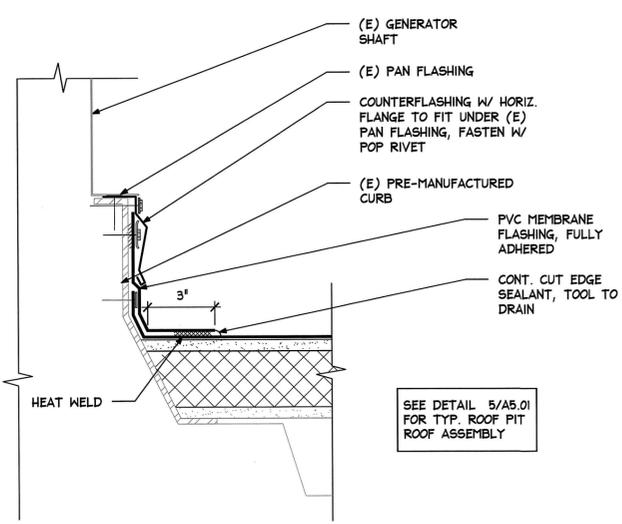
9 ROOF PIT: ROOF CURB @ FAN UNIT
SCALE: 3" = 1'-0"



10 ROOF PIT: TYP. WALL/FLOOR INTERSECTION
SCALE: 3" = 1'-0"



11 AREA B: ELEVATOR SHAFT EDGE FLASHING
SCALE: 3" = 1'-0"



12 GENERATOR EXHAUST FLASHING
SCALE: 3" = 1'-0"

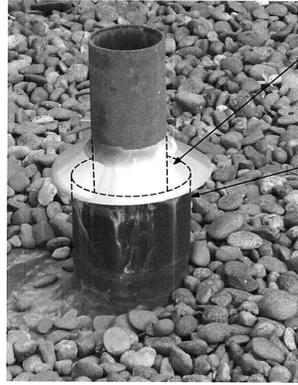


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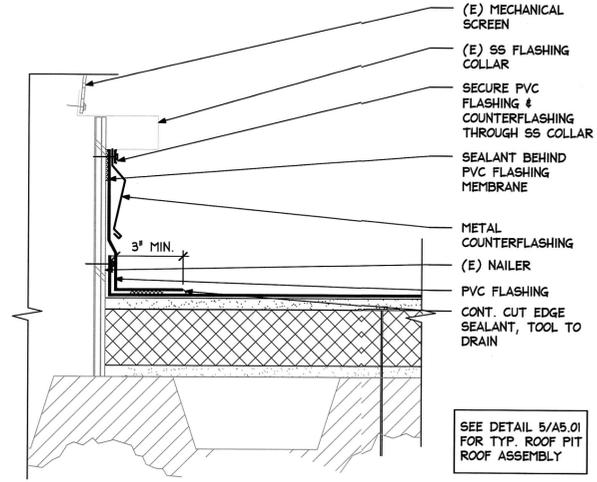
A5.04



WHERE THERE IS AN EXTERIOR SLEEVE PROVIDE SEALANT BETWEEN OUTER SLEEVE & ROOF PENETRANT

REMOVE ROOFING AND FLASHING COLLAR, PROVIDE FLASHING PER 7/A5.01

1 VENT PIPE PENETRATION
SCALE: N.T.S.



2 ROOF PIT FLASHING @ MECH. SCREEN
SCALE: 3" = 1'-0"



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