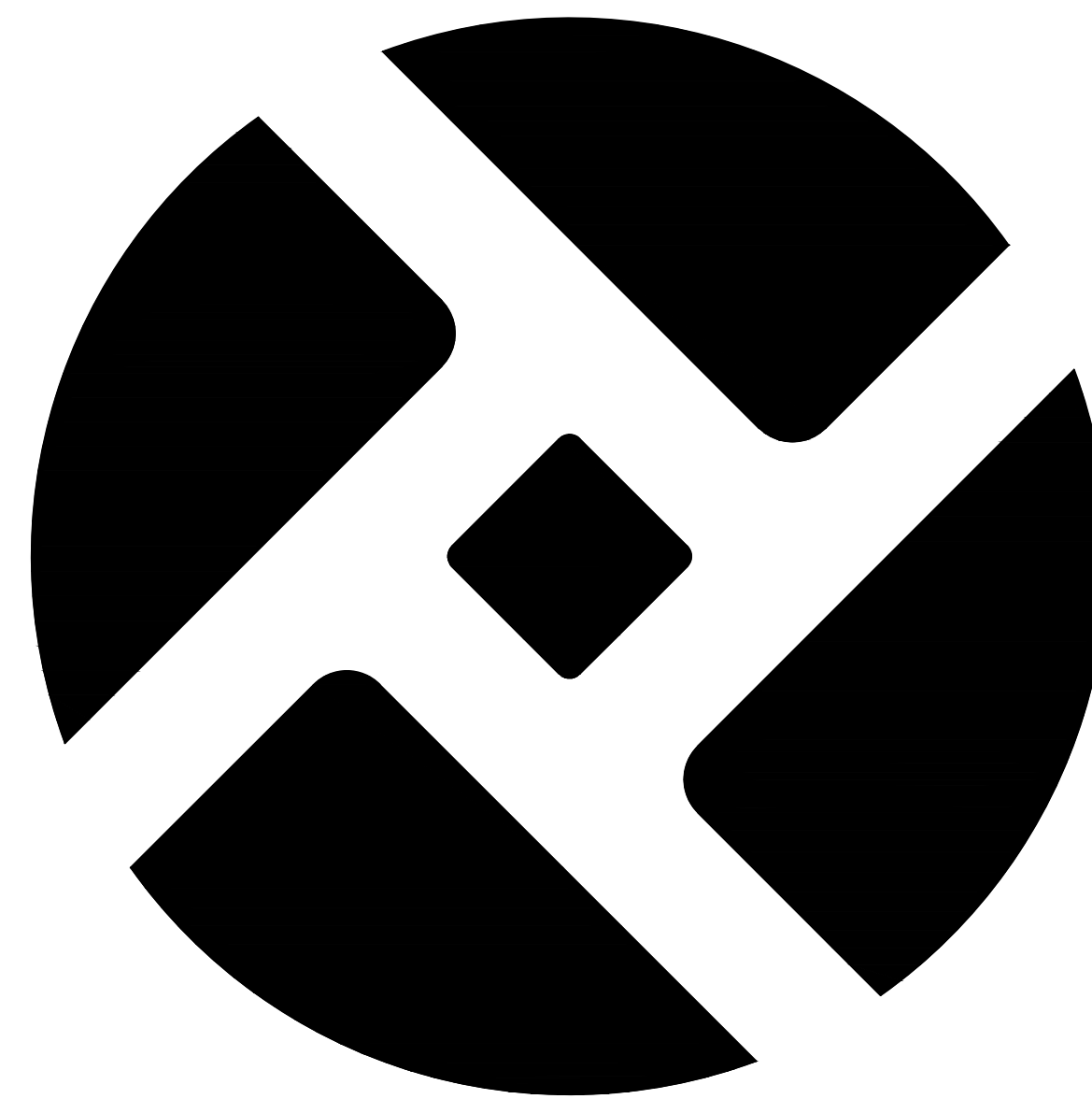


Port of Portland

THE PORT OF PORTLAND COMMISSION

ALICE CUPRILL-COMAS - PRESIDENT
MICHAEL C. ALEXANDER - VICE PRESIDENT
ROBERT L. LEVY - SECRETARY
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CURTIS ROBINHOLD, EXECUTIVE DIRECTOR
STAN WATTERS, CHIEF PROJECT DELIVERY & SAFETY OFFICER
DAN PIPPENGER, CHIEF OPERATING OFFICER



SHEET NO. DESCRIPTION

1 (GI0.01)	SITE PLAN AND VICINITY MAP
2 (A1.01)	OVERALL ROOF KEY PLAN
3 (A1.02)	PARTIAL ROOF PLAN 1
4 (A1.03)	PARTIAL ROOF PLAN 2
5 (A2.01)	DETAILS 1
6 (A2.02)	DETAILS 2
7 (A2.03)	DETAILS 3
8 (A2.04)	DETAILS 4
9 (S0.01)	GENERAL STRUCTURAL NOTES
10 (S1.01)	OVERALL ROOF PLAN - STRUCTURAL

PORTLAND INTERNATIONAL AIRPORT

MAINTENANCE BUILDING 7111 ROOF REPLACEMENT

BID SET

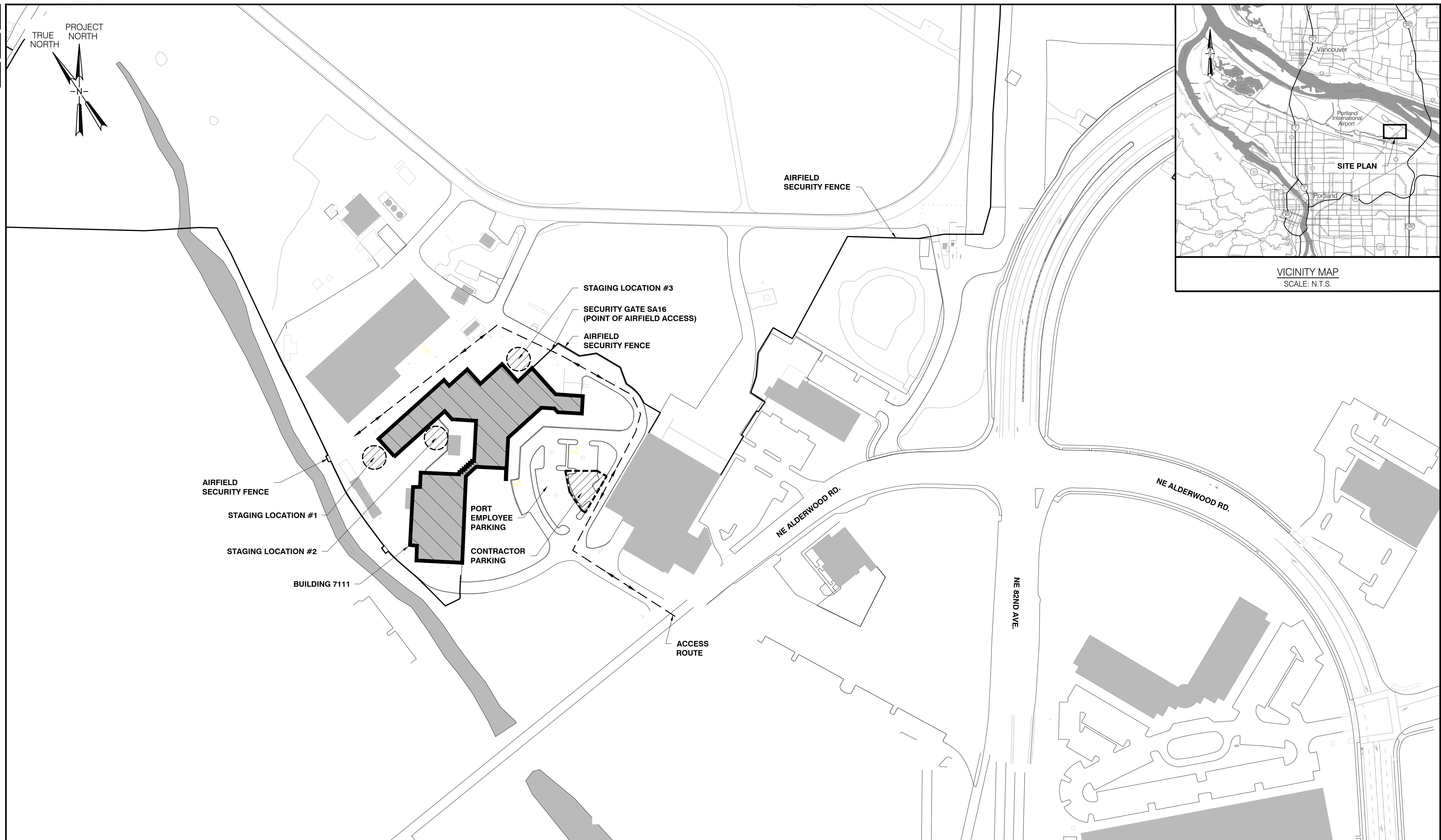
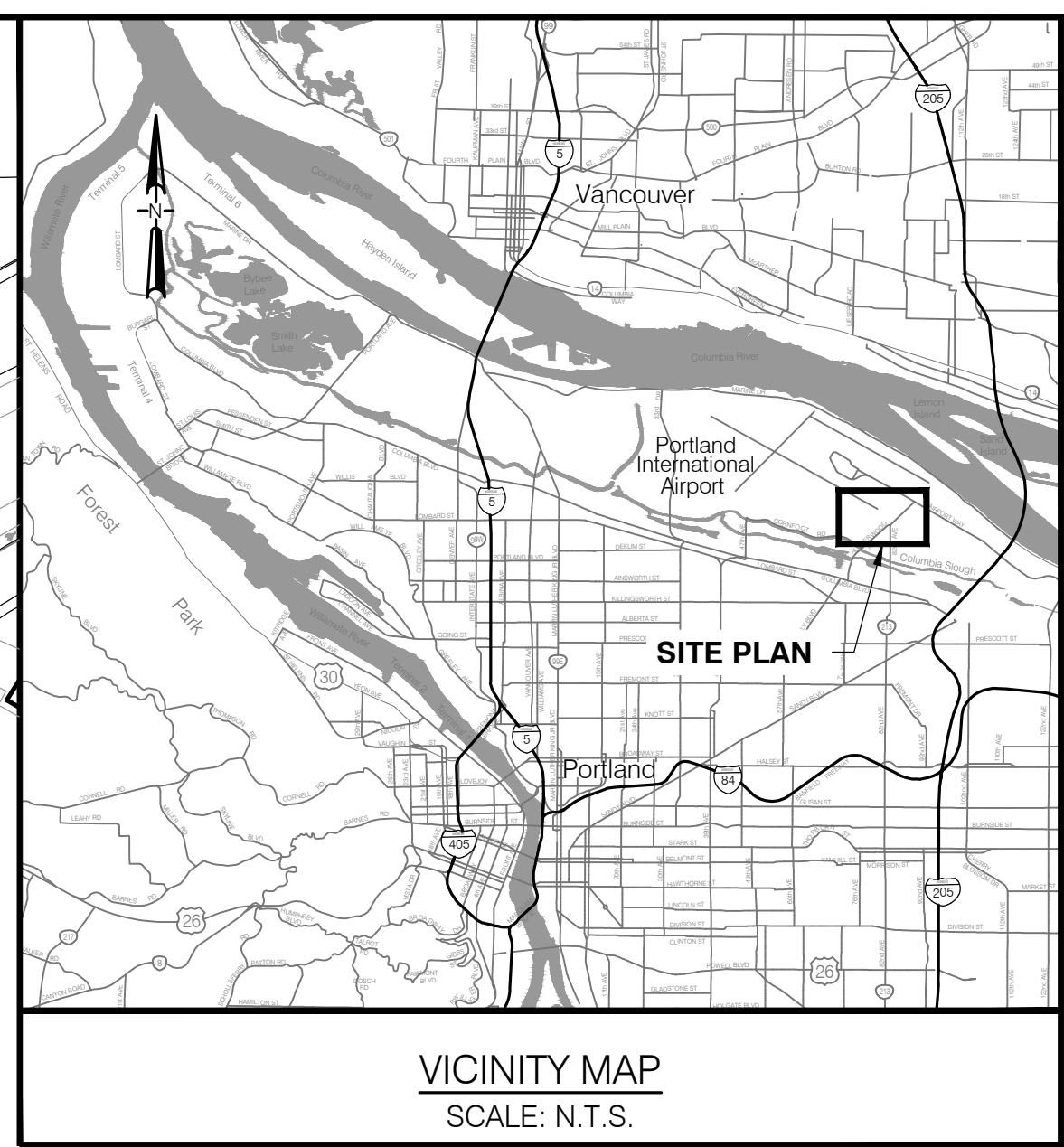
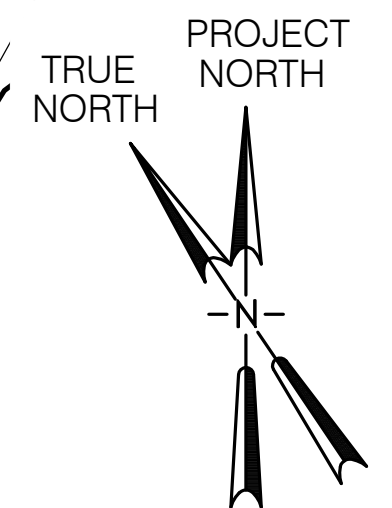
SEPTEMBER 2021

DESIGN NO. 2021D002 PROJECT MANAGER MARCEL HERMANS

PROJECT NO. 102842 DRAWING NO. PDX 2021-514

PDX - MAINTENANCE BUILDING 7111 ROOF REPLACEMENT

CAN YOU SEE THE AIRPLANES? THE ADJACENT SAMPLES SHOW THREE DIFFERENT LEVELS OF SHADING. SETTINGS FOR VIEWING AND PRINTING DRAWING CONTENT ARE OPTIMIZED WHEN ALL THREE PLANES ARE VISIBLE. THIS GUIDANCE IS PROVIDED FOR REFERENCE ONLY.



DATE	BY	REVISION	DATE	BY	REVISION

PORT OF PORTLAND
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PROFESSIONAL ROOF CONSULTANTS

1106 SE GRAND AVENUE, SUITE 300
PORTLAND, OREGON 97214
PH: 503 280 8759 FAX: 503 280 8866

2021D002
DESIGN NUMBER

102842
PROJECT NUMBER

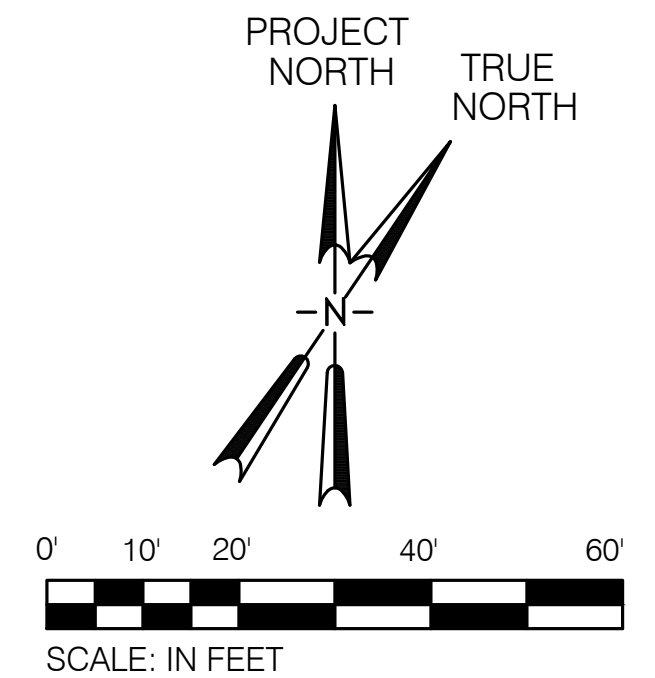
PORTLAND INTERNATIONAL AIRPORT

MAINTENANCE BUILDING 7111 ROOF REPLACEMENT

SITE PLAN AND VICINITY MAP

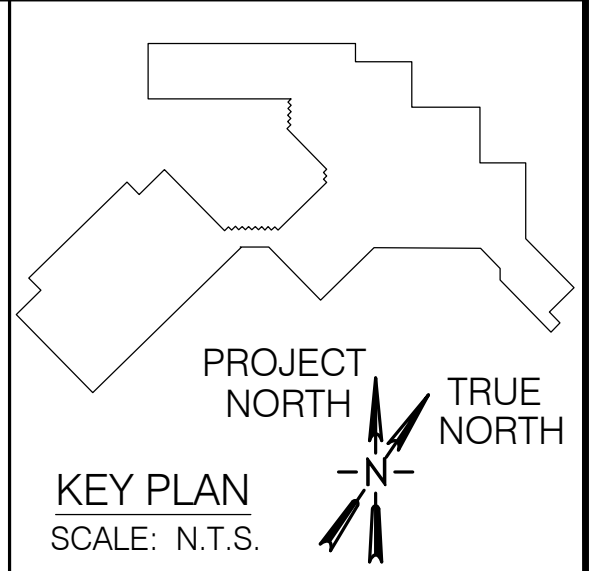
SUBMITTED BY	DEAN NORLIN
DESIGN BY	T. BERTRAND
DRAWN BY	T. BERTRAND
CHECKED BY	B. RYAN
DATE	SEPTEMBER 2021
SHEET NO.	1
DRAWING NO.	PDX 2021-514
TYPE: CD	DISC. SHT. NO.
	GI0.01

CAN YOU SEE THE AIRPLANES? THE ADJACENT SAMPLES SHOW THREE DIFFERENT LEVELS OF SHADING. SETTINGS FOR VIEWING AND PRINTING DRAWING CONTENT ARE OPTIMIZED WHEN ALL THREE PLANES ARE VISIBLE. THIS GUIDANCE IS PROVIDED FOR REFERENCE ONLY.



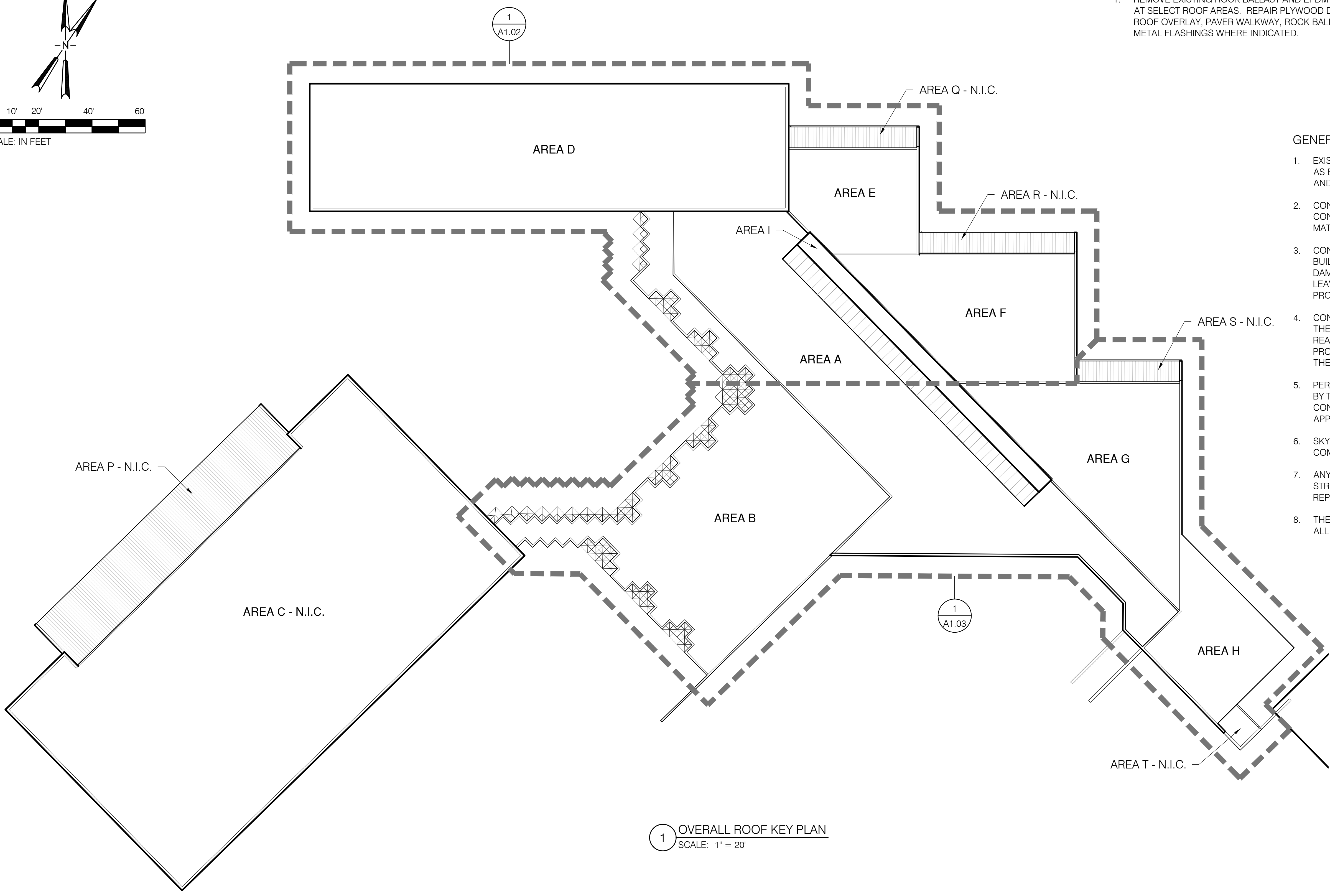
SCOPE OF WORK:

1. REMOVE EXISTING ROCK BALLAST AND EPDM MEMBRANE BASE FLASHINGS AT SELECT ROOF AREAS. REPAIR PLYWOOD DECK AND INSTALL NEW EPDM ROOF OVERLAY, PAVER WALKWAY, ROCK BALLAST, AND ASSOCIATED SHEET METAL FLASHINGS WHERE INDICATED.



GENERAL NOTES:

1. EXISTING MATERIALS AND CONSTRUCTION ARE NOTED ON THE DRAWINGS AS EXISTING. ALL OTHER NOTATIONS INDICATE NEW MATERIALS, PRODUCTS, AND CONSTRUCTION UNLESS OTHERWISE STATED OR INDICATED.
2. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS OF THE PROJECT, INCLUDING EXISTING CONSTRUCTION AND MATERIALS.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING BUILDING SURFACES, FINISHES, ROOF SYSTEMS, INTERIORS, ETC. FROM DAMAGE DURING THE COURSE OF CONSTRUCTION ACTIVITIES. DO NOT LEAVE ROOF OPEN TO THE WEATHER AT ANY TIME. PROVIDE TEMPORARY PROTECTION AS REQUIRED.
4. CONTRACTOR STAGING AND STORAGE AREAS SHALL BE AS DIRECTED BY THE PORT OF PORTLAND. CONTRACTOR SHALL ASSUME THAT A REASONABLE AMOUNT OF STAGING AND STORAGE SPACE SHALL BE PROVIDED FOR THIS PROJECT. ACCESS TO THE ROOF FROM THE FRONT OF THE BUILDING WILL NOT BE ALLOWED.
5. PERSONAL FALL PROTECTION DEVICES ARE NOT, NOR WILL BE, PROVIDED BY THE PORT. PERSONAL FALL PROTECTION IS THE RESPONSIBILITY OF THE CONTRACTOR. THE PORT DOES NOT RECOGNIZE SAFETY MONITOR AS AN APPROPRIATE FORM OF FALL PROTECTION.
6. SKYLIGHTS SHALL NOT BE WALKED UPON UNLESS COVERED WITH AN OSHA COMPLIANT SKYLIGHT COVER.
7. ANY DRY ROT, STRUCTURAL DEFICIENCIES, OR ABNORMALITIES IN THE ROOF STRUCTURE FOUND DURING CONSTRUCTION ACTIVITIES SHALL BE REPORTED TO THE PORT.
8. THE CONTRACTOR SHALL CAREFULLY REMOVE AND MINIMIZE DAMAGE TO ALL ROOFING MATERIALS SCHEDULED TO BE REINSTALLED.



1 OVERALL ROOF KEY PLAN
SCALE: 1" = 20'

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2021D002
DESIGN NUMBER

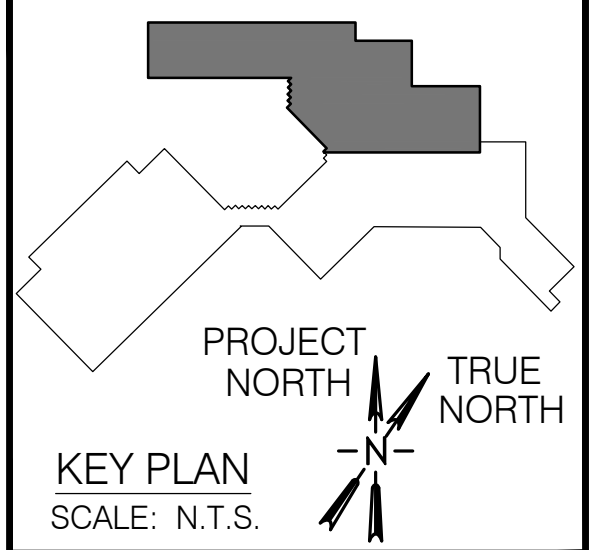
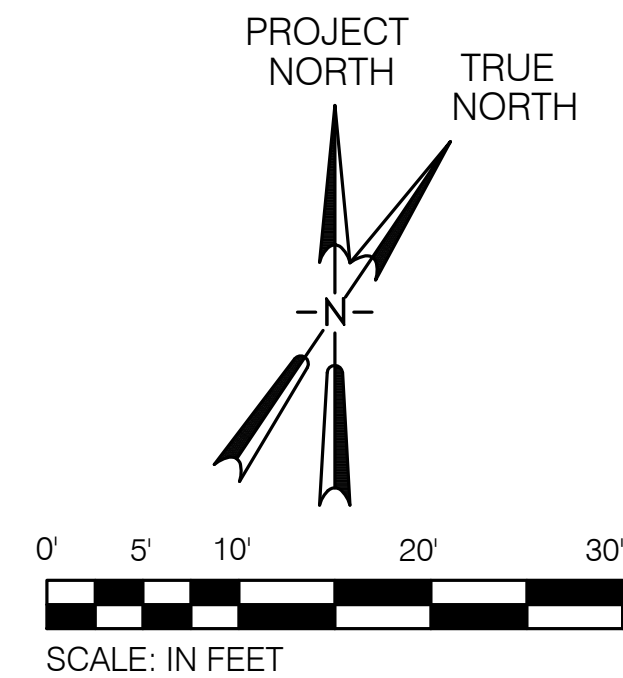
102842
PROJECT NUMBER

PORTLAND INTERNATIONAL AIRPORT

MAINTENANCE BUILDING 7111 ROOF REPLACEMENT

OVERALL ROOF KEY PLAN

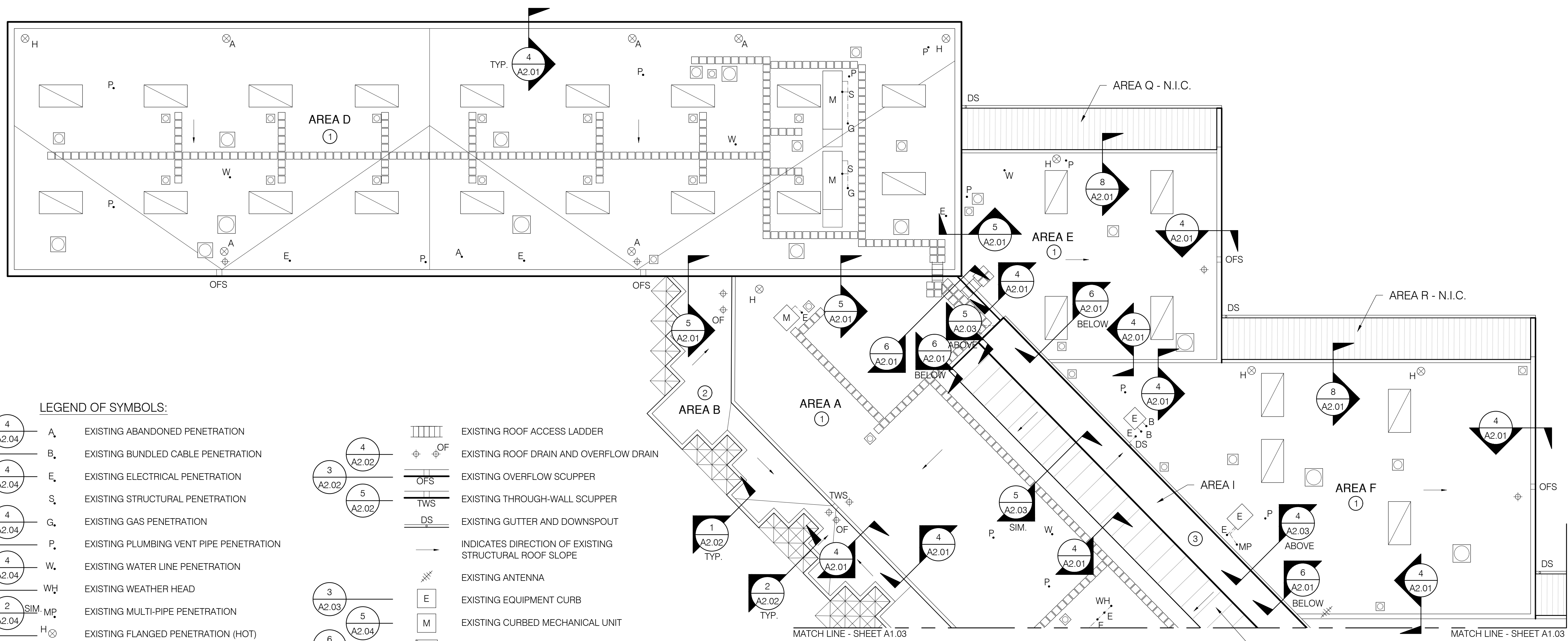
SUBMITTED BY	DEAN NORLIN
DESIGN BY	T. BERTRAND
DRAWN BY	T. BERTRAND
CHECKED BY	B. RYAN
DATE	SEPTEMBER 2021
SHEET NO.	2
TYPE	CD
DRAWING NO.	PDX 2021-514
DISC. SHT. NO.	A1.01



KEY NOTES:

- ① REMOVE EXISTING ROCK BALLAST - DO NOT SALVAGE FOR REUSE. REMOVE EXISTING EPDM MEMBRANE BASE FLASHINGS - EXISTING EPDM FIELD MEMBRANE TO REMAIN. INSTALL ELASTIC SHEET MEMBRANE OVERLAY ASSEMBLY AND COVER WITH ROCK BALLAST. - REFERENCE DETAIL 1/A2.01 FOR ROOF ASSEMBLY, AND STRUCTURAL DRAWINGS FOR BALLAST REQUIREMENTS.
- ② REMOVE EXISTING ROCK BALLAST - DO NOT SALVAGE FOR REUSE. REMOVE EXISTING EPDM MEMBRANE BASE FLASHINGS - EXISTING EPDM FIELD MEMBRANE TO REMAIN. INSTALL ELASTIC SHEET MEMBRANE OVERLAY ASSEMBLY AND COVER WITH ROCK BALLAST. - REFERENCE DETAIL 2/A2.01 FOR ROOF ASSEMBLY, AND STRUCTURAL DRAWINGS FOR BALLAST REQUIREMENTS
- ③ EXISTING EPDM FIELD MEMBRANE TO REMAIN. INSTALL MECHANICALLY ATTACHED ELASTIC SHEET MEMBRANE OVERLAY ASSEMBLY. - REFERENCE DETAIL 3/A2.01 FOR ROOF ASSEMBLY.

CAN YOU SEE THE AIRPLANES? THE ADJACENT SAMPLES SHOW THREE DIFFERENT LEVELS OF SHADING. SETTINGS FOR VIEWING AND PRINTING DRAWING CONTENT ARE OPTIMIZED WHEN ALL THREE PLANES ARE VISIBLE. THIS GUIDANCE IS PROVIDED FOR REFERENCE ONLY.



LEGEND OF SYMBOLS:

- | | | | | |
|--------------------|-----|--|------|---|
| ④
A2.04 | A. | EXISTING ABANDONED PENETRATION | | EXISTING ROOF ACCESS LADDER |
| ②
A2.04 | B. | EXISTING BUNDLED CABLE PENETRATION | ⊕ OF | EXISTING ROOF DRAIN AND OVERFLOW DRAIN |
| ④
A2.04 | E. | EXISTING ELECTRICAL PENETRATION | OFS | EXISTING OVERFLOW SCUPPER |
| ④
A2.04 | S. | EXISTING STRUCTURAL PENETRATION | TWS | EXISTING THROUGH-WALL SCUPPER |
| ④
A2.04 | G. | EXISTING GAS PENETRATION | DS | EXISTING GUTTER AND DOWNSPOUT |
| ①
A2.03 | P. | EXISTING PLUMBING VENT PIPE PENETRATION | → | INDICATES DIRECTION OF EXISTING STRUCTURAL ROOF SLOPE |
| ④
A2.04 | W. | EXISTING WATER LINE PENETRATION | ⊘ | EXISTING ANTENNA |
| ④
A2.04 | WH | EXISTING WEATHER HEAD | E | EXISTING EQUIPMENT CURB |
| ②
SIM.
A2.04 | MP. | EXISTING MULTI-PIPE PENETRATION | M | EXISTING CURBED MECHANICAL UNIT |
| ②
A2.03 | H ⊗ | EXISTING FLANGED PENETRATION (HOT) | ⊘ | EXISTING CURBED SKYLIGHT |
| ②
A2.03 | A ⊗ | EXISTING FLANGED PENETRATION (ABANDONED) | ⊘ | EXISTING CURBED FAN UNIT |
| | | EXISTING ACCESS DOOR | □ | WALKWAY PAVER |

① PARTIAL ROOF PLAN
SCALE: 1" = 10'

DATE	BY	REVISION	DATE	BY	REVISION

PORT OF PORTLAND
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1106 SE GRAND AVENUE, SUITE 300
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PH: 503 280 8759 FAX: 503 280 8866

2021D002
DESIGN NUMBER

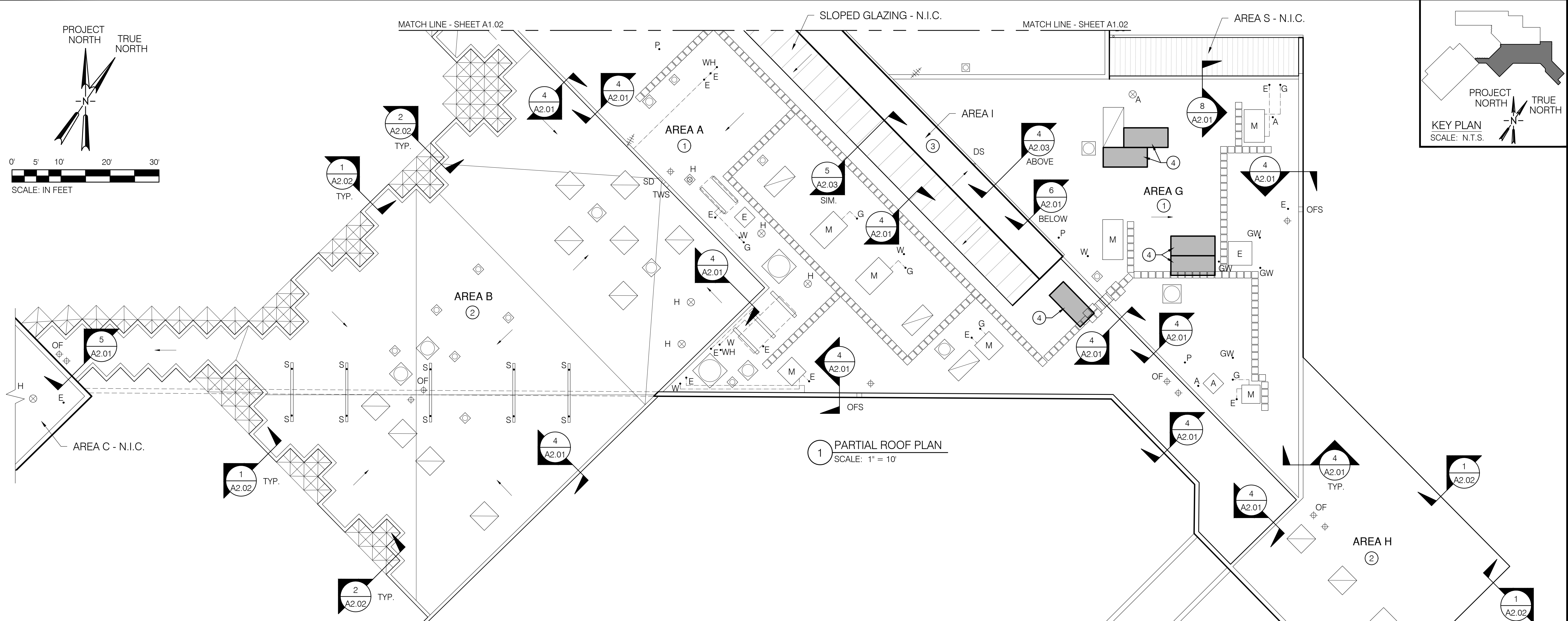
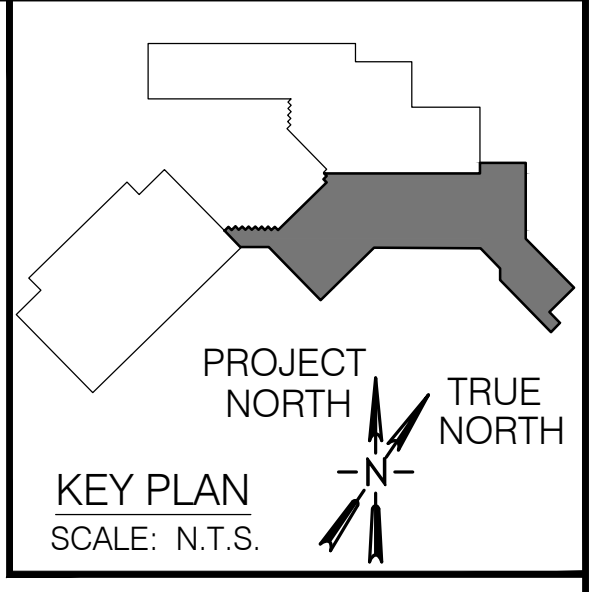
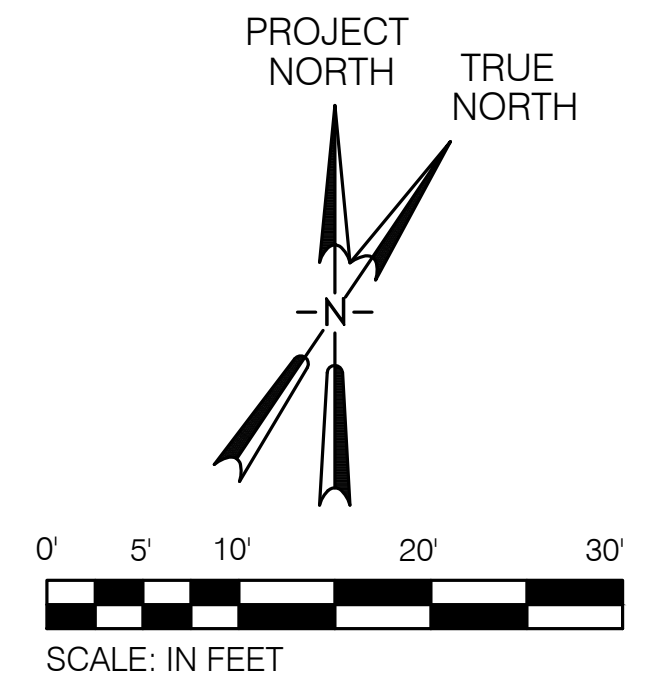
102842
PROJECT NUMBER

PORTLAND INTERNATIONAL AIRPORT
MAINTENANCE BUILDING 7111 ROOF REPLACEMENT

PARTIAL ROOF PLAN 1

SUBMITTED BY	DEAN NORLIN
DESIGN BY	T. BERTRAND
DRAWN BY	T. BERTRAND
CHECKED BY	B. RYAN
DATE	SEPTEMBER 2021
SHEET NO.	3
DRAWING NO.	PDX 2021-514
TYPE: CD	
DISC. SHT. NO.	A1.02

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1 PARTIAL ROOF PLAN
SCALE: 1" = 10'

LEGEND OF SYMBOLS:

- | | | | | |
|--|----|--|--|---|
| | A | EXISTING ABANDONED PENETRATION | | EXISTING ROOF DRAIN AND OVERFLOW DRAIN |
| | E | EXISTING ELECTRICAL PENETRATION | | EXISTING SCUPPER DRAIN |
| | S | EXISTING STRUCTURAL PENETRATION | | EXISTING THROUGH WALL SCUPPER |
| | G | EXISTING GAS PENETRATION | | EXISTING GUTTER AND DOWNSPOUT |
| | P | EXISTING PLUMBING VENT PIPE PENETRATION | | INDICATES DIRECTION OF EXISTING STRUCTURAL ROOF SLOPE |
| | W | EXISTING WATER LINE PENETRATION | | EXISTING ANTENNA |
| | WH | EXISTING WEATHER HEAD | | EXISTING EQUIPMENT CURB |
| | GW | EXISTING GUY WIRE | | EXISTING CURBED MECHANICAL UNIT |
| | H | EXISTING FLANGED PENETRATION (HOT) | | EXISTING ABANDONED CURB |
| | A | EXISTING FLANGED PENETRATION (ABANDONED) | | EXISTING SKYLIGHT |
| | | EXISTING ROOF ACCESS LADDER | | EXISTING CURBED FAN UNIT |
| | | EXISTING EQUIPMENT SLEEPER | | WALKWAY PAVER |

KEY NOTES:

- ① REMOVE EXISTING ROCK BALLAST - DO NOT SALVAGE FOR REUSE. REMOVE EXISTING EPDM MEMBRANE BASE FLASHINGS - EXISTING EPDM FIELD MEMBRANE TO REMAIN. INSTALL ELASTIC SHEET MEMBRANE OVERLAY ASSEMBLY AND COVER WITH ROCK BALLAST. - REFERENCE DETAIL 1/A2.01 FOR ROOF ASSEMBLY, AND STRUCTURAL DRAWINGS FOR BALLAST REQUIREMENTS.
- ② REMOVE EXISTING ROCK BALLAST - DO NOT SALVAGE FOR REUSE. REMOVE EXISTING EPDM MEMBRANE BASE FLASHINGS - EXISTING EPDM FIELD MEMBRANE TO REMAIN. INSTALL ELASTIC SHEET MEMBRANE OVERLAY ASSEMBLY AND COVER WITH ROCK BALLAST. - REFERENCE DETAIL 2/A2.01 FOR ROOF ASSEMBLY, AND STRUCTURAL DRAWINGS FOR BALLAST REQUIREMENTS.
- ③ EXISTING EPDM FIELD MEMBRANE TO REMAIN. INSTALL MECHANICALLY ATTACHED ELASTIC SHEET MEMBRANE OVERLAY ASSEMBLY. - REFERENCE DETAIL 3/A2.01 FOR ROOF ASSEMBLY.
- ④ SHADED AREAS INDICATED 4' x 8' PANELS OF PLYWOOD SHEATHING DECK REPLACEMENT. - REFERENCE DETAIL 3/A2.04 FOR ROOF ASSEMBLY, AND STRUCTURAL DRAWINGS FOR DECK INFILL.

DATE	BY	REVISION	DATE	BY	REVISION

PORT OF PORTLAND
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PORTLAND, OREGON 97214
PH: 502 280 8759 FAX: 503 280 8866

2021D002
DESIGN NUMBER

102842
PROJECT NUMBER

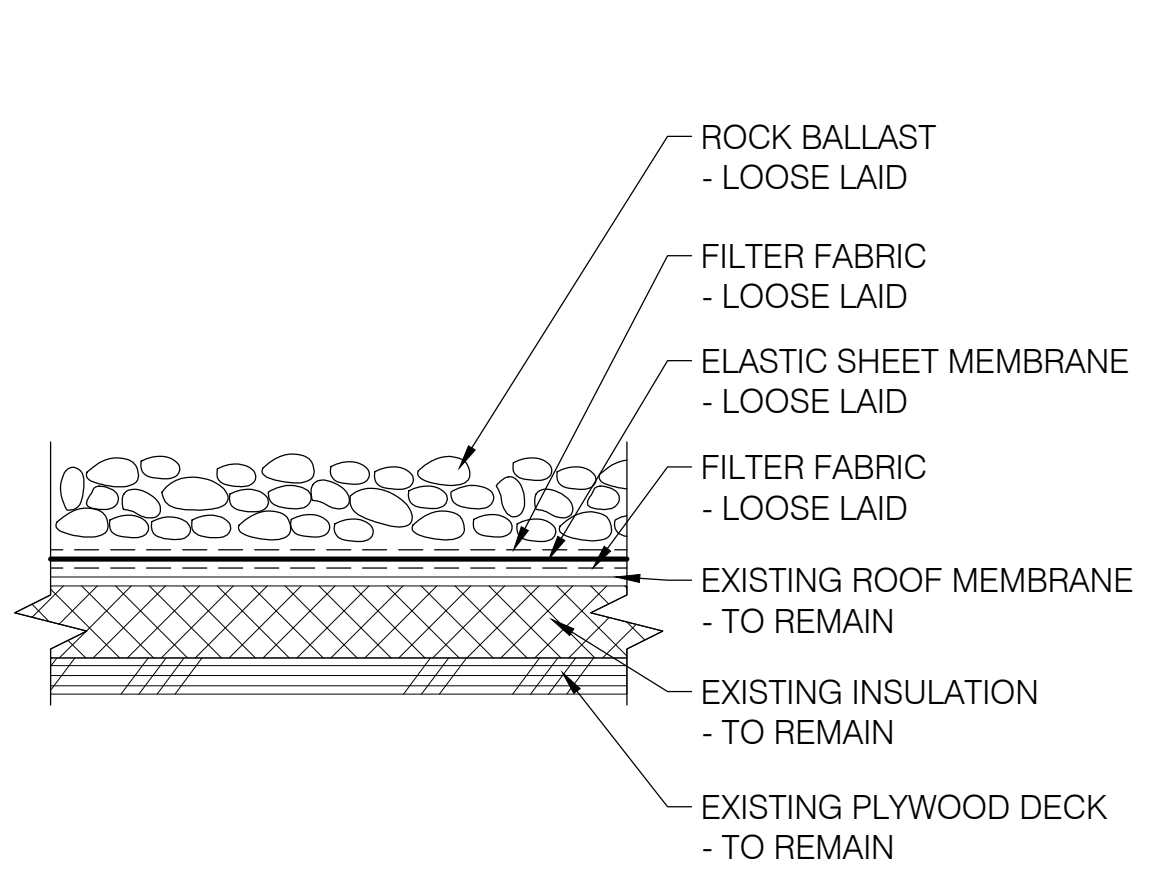
PORTLAND INTERNATIONAL AIRPORT

MAINTENANCE BUILDING 7111 ROOF REPLACEMENT

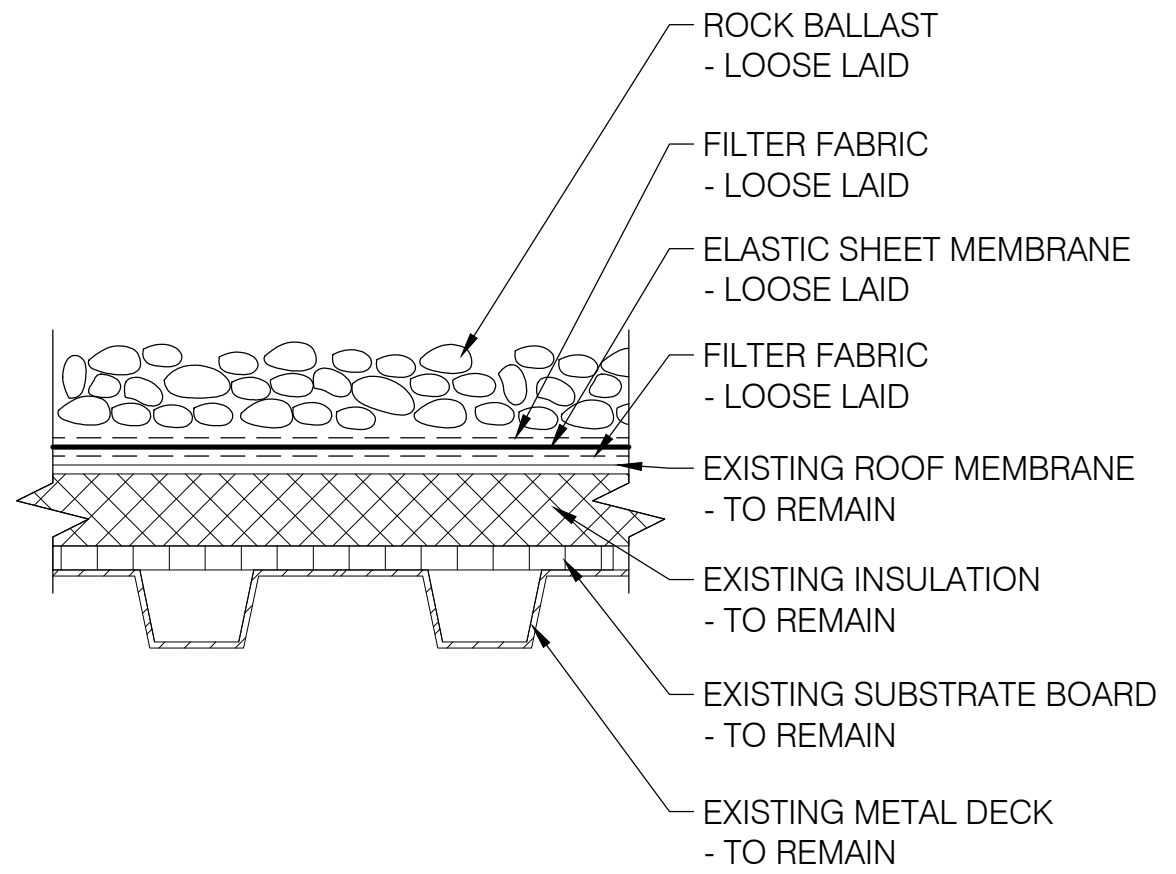
PARTIAL ROOF PLAN 2

SUBMITTED BY	DEAN NORLIN
DESIGN BY	T. BERTRAND
DRAWN BY	T. BERTRAND
CHECKED BY	B. RYAN
DATE	SEPTEMBER 2021
SHEET NO.	4
DRAWING NO.	PDX 2021-514
TYPE:	CD
DISC. SHT. NO.	A1.03

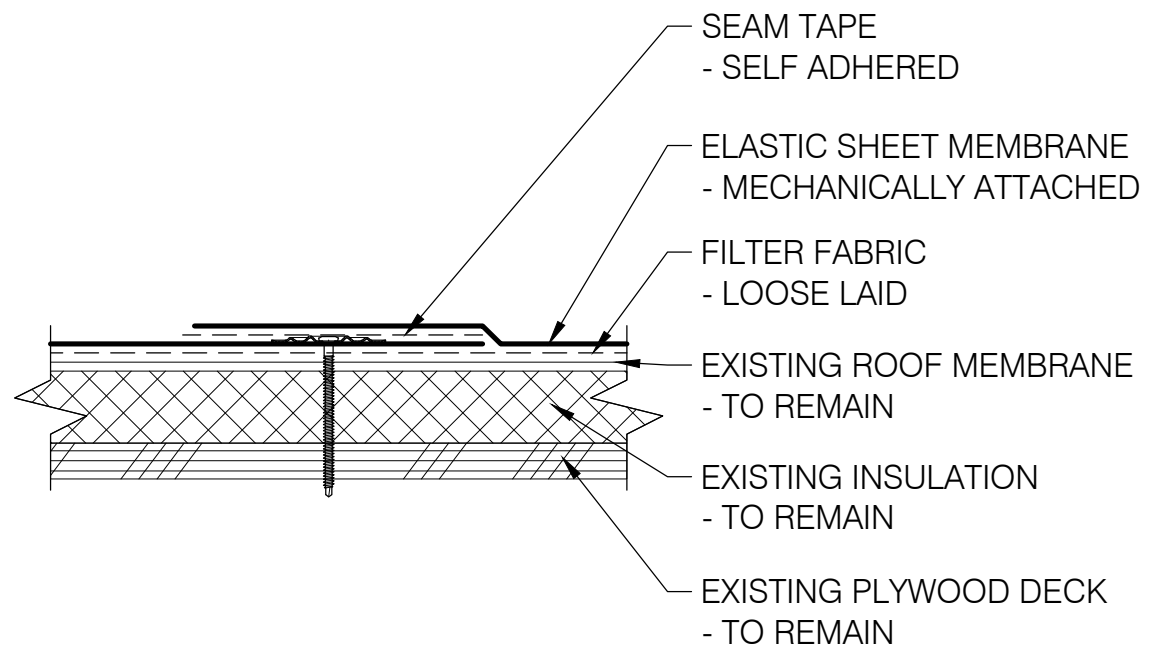
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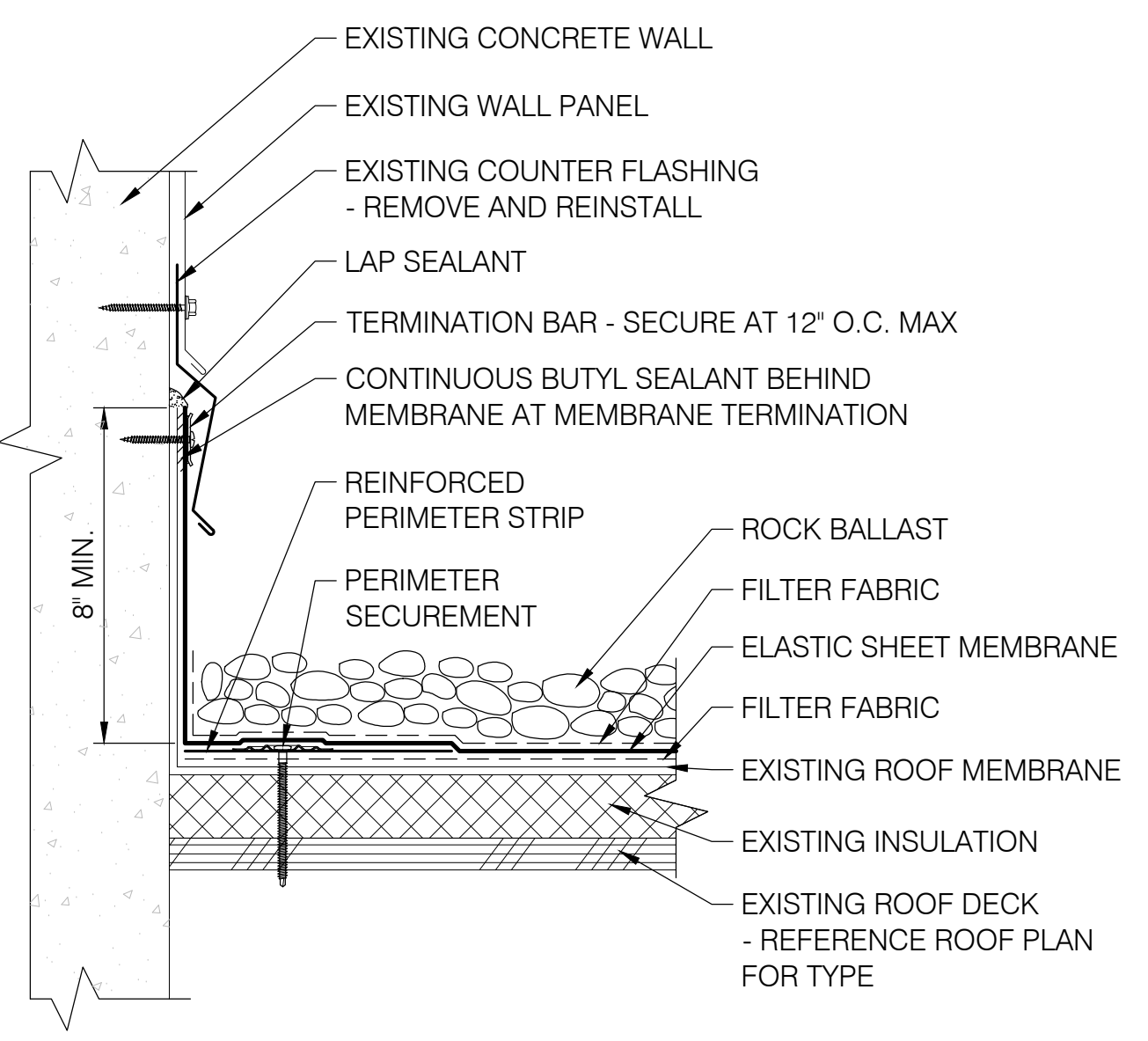
1 BALLASTED ROOF ASSEMBLY OVER WOOD DECK
SCALE: 3" = 1'-0"



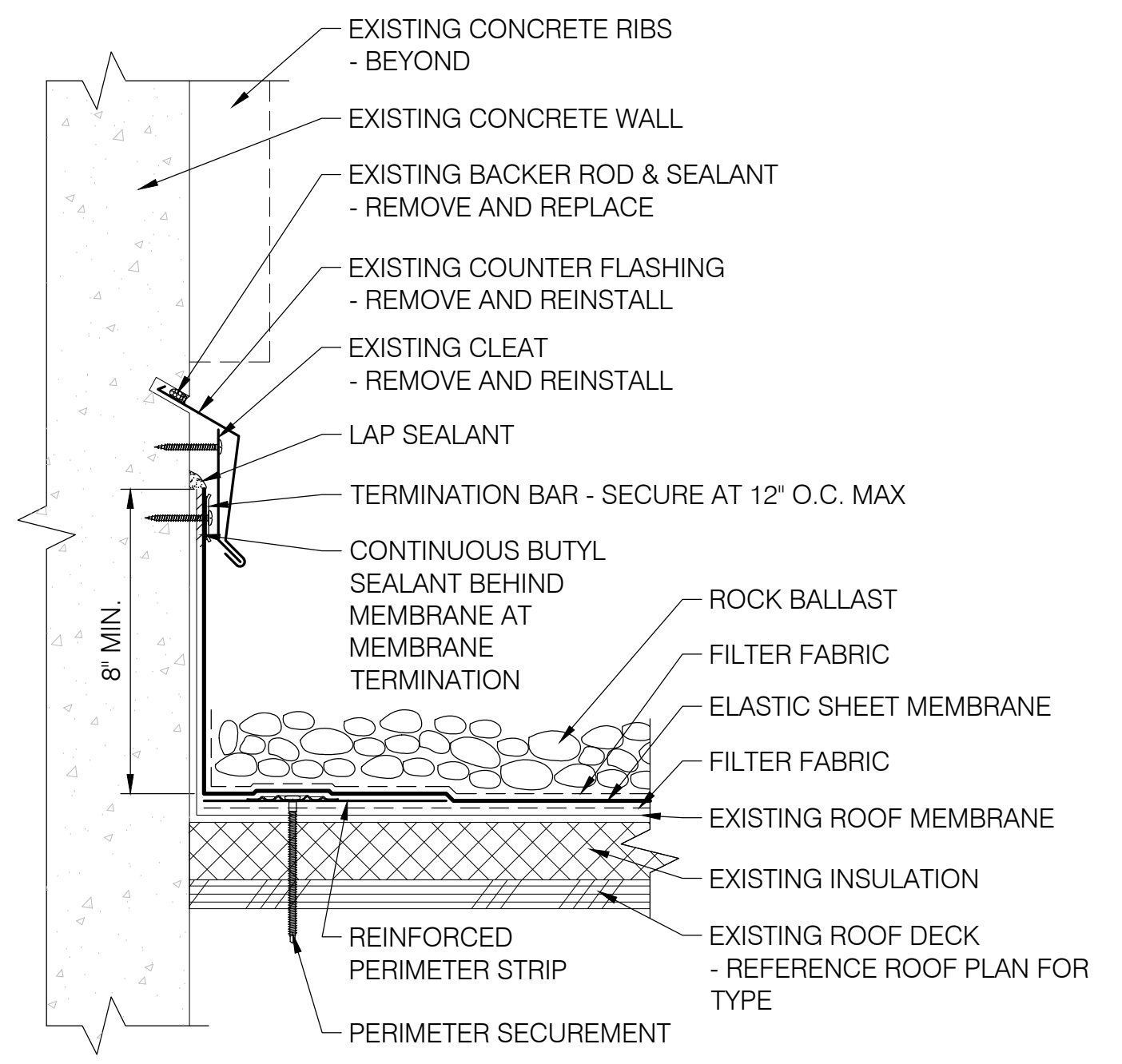
2 BALLASTED ROOF ASSEMBLY OVER METAL DECK
SCALE: 3" = 1'-0"



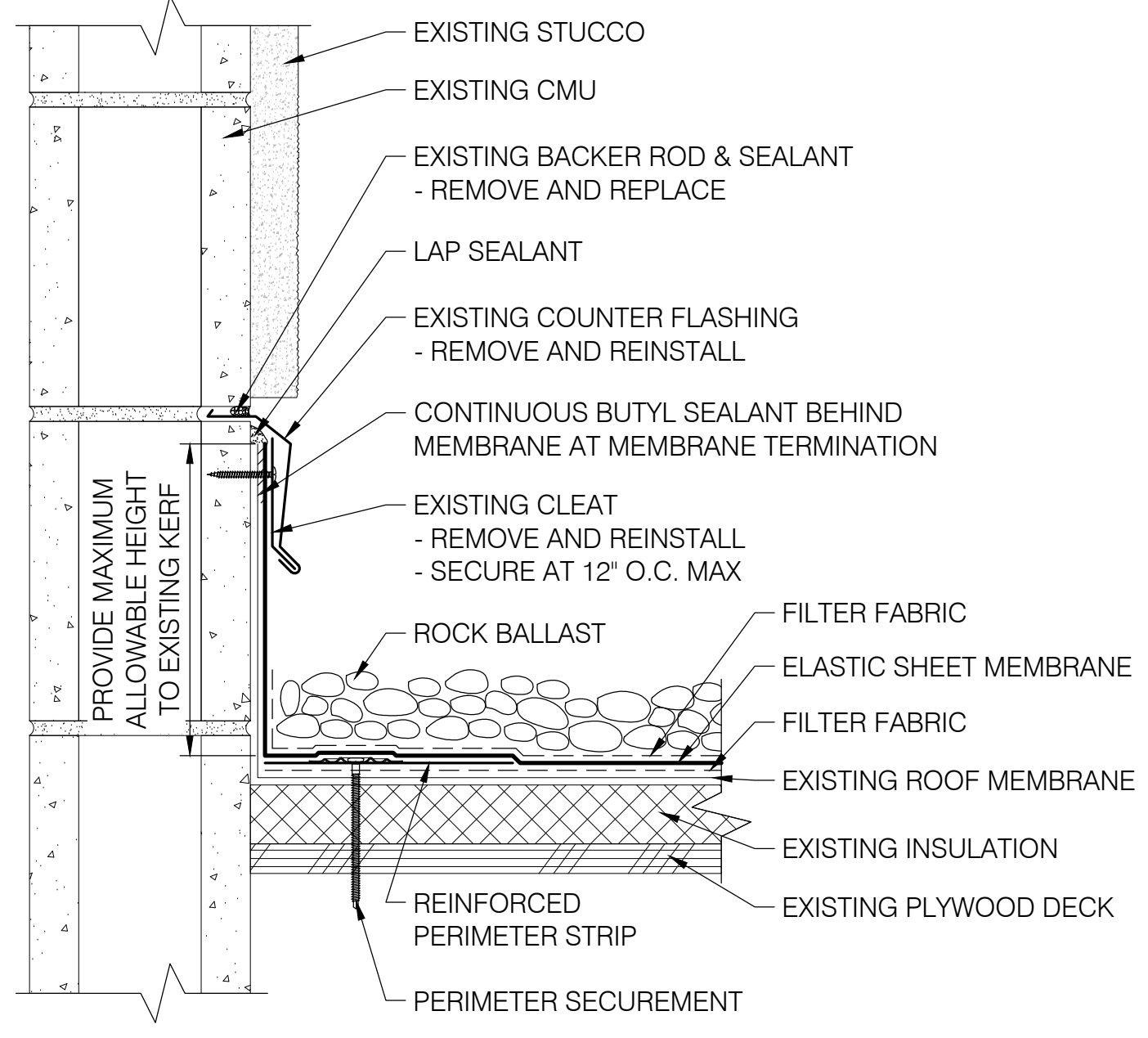
3 MECHANICALLY ATTACHED ROOF ASSEMBLY OVER WOOD DECK
SCALE: 3" = 1'-0"



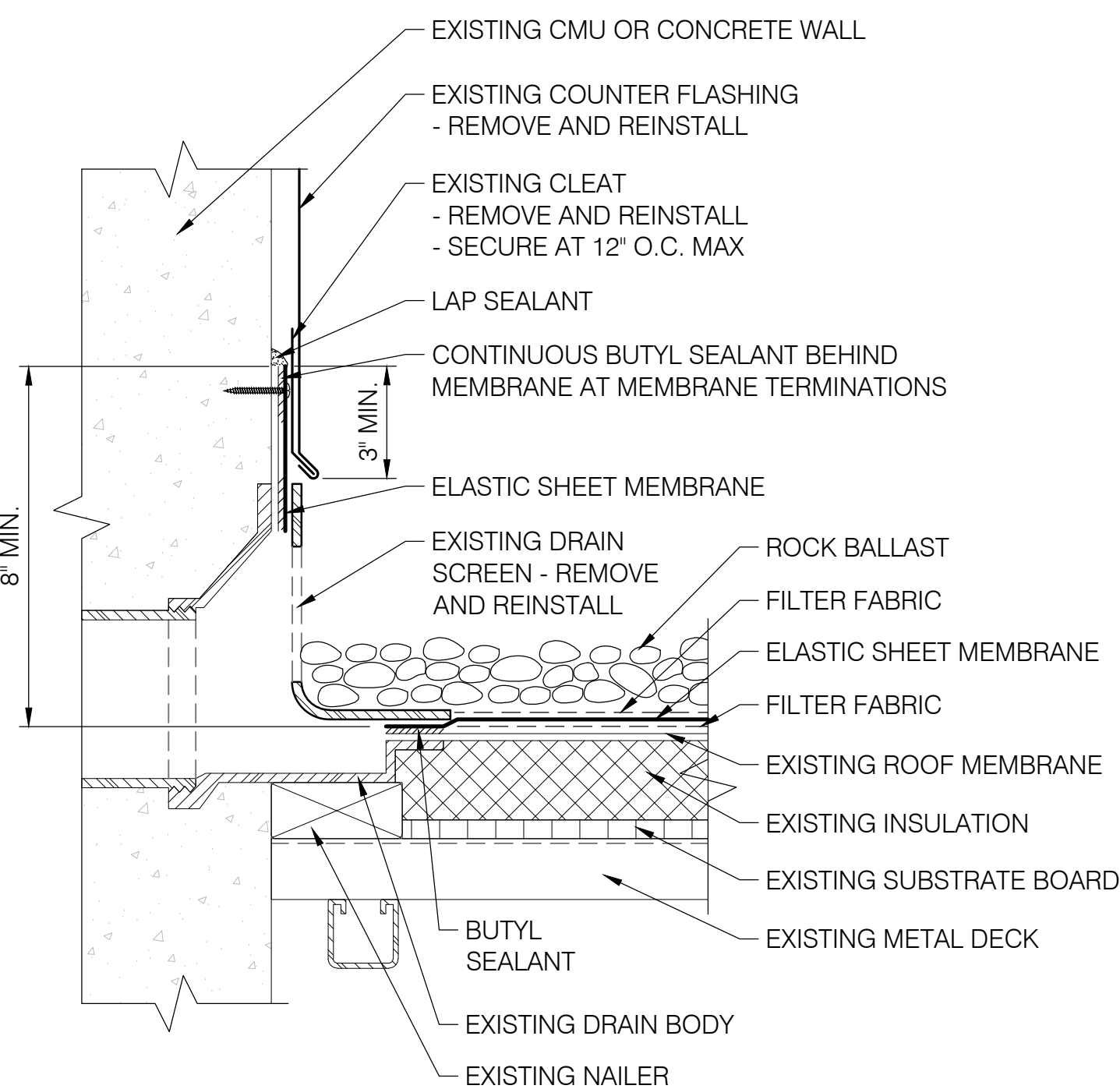
4 ROOF-TO-WALL AT METAL WALL PANELS
SCALE: 3" = 1'-0"



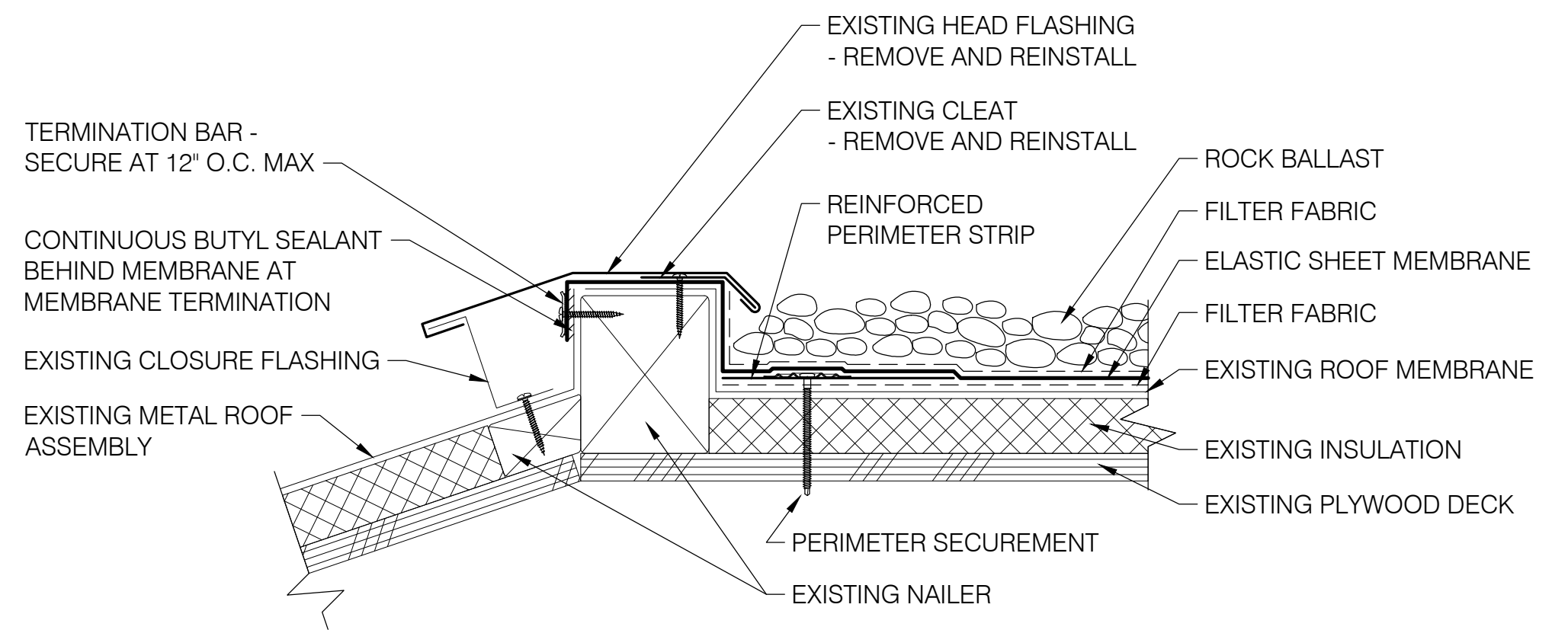
5 ROOF-TO-WALL AT CONCRETE RIBS
SCALE: 3" = 1'-0"



6 ROOF-TO-WALL AT STUCCO
SCALE: 3" = 1'-0"



7 SCUPPER DRAIN
SCALE: 3" = 1'-0"



8 HEADWALL AT METAL ROOF PANELS
SCALE: 3" = 1'-0"

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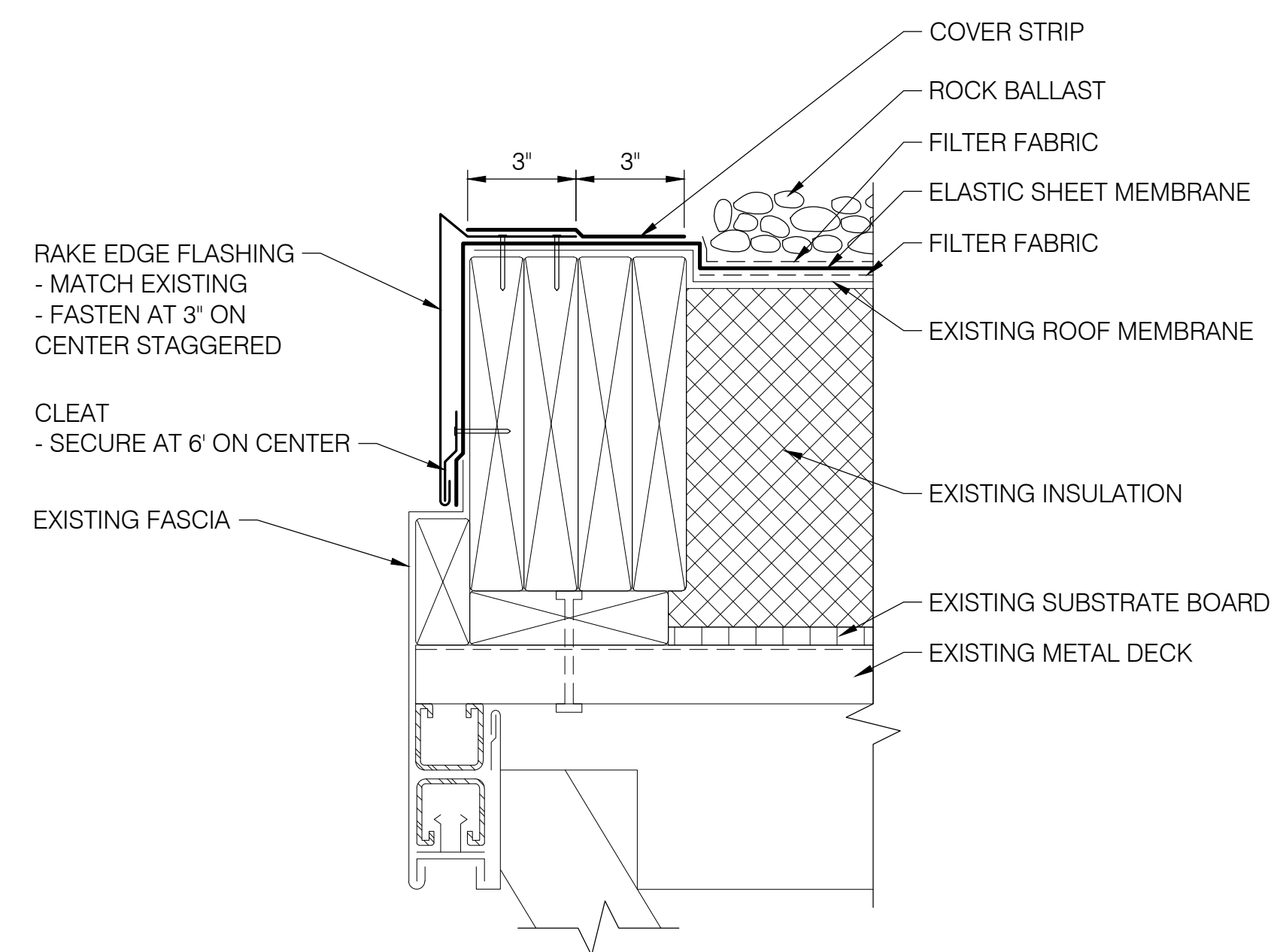
102842
PROJECT NUMBER

PORTLAND INTERNATIONAL AIRPORT
MAINTENANCE BUILDING 7111 ROOF REPLACEMENT

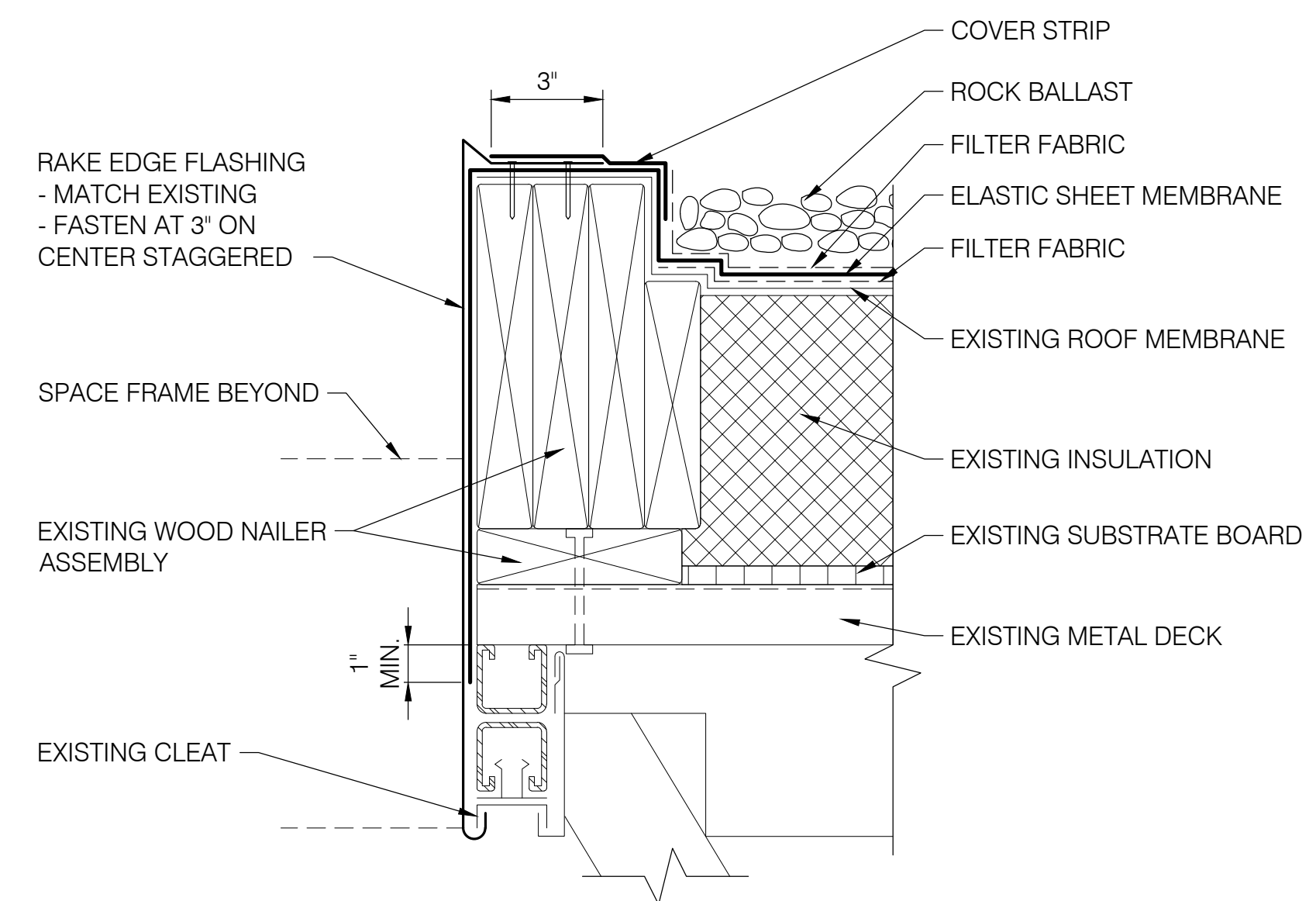
DETAILS 1

SUBMITTED BY	DEAN NORLIN
DESIGN BY	T. BERTRAND
DRAWN BY	T. BERTRAND
CHECKED BY	B. RYAN
DATE	SEPTEMBER 2021
SHEET NO.	5
DRAWING NO.	PDX 2021-514
TYPE: CD	DISC. SHT. NO. A2.01

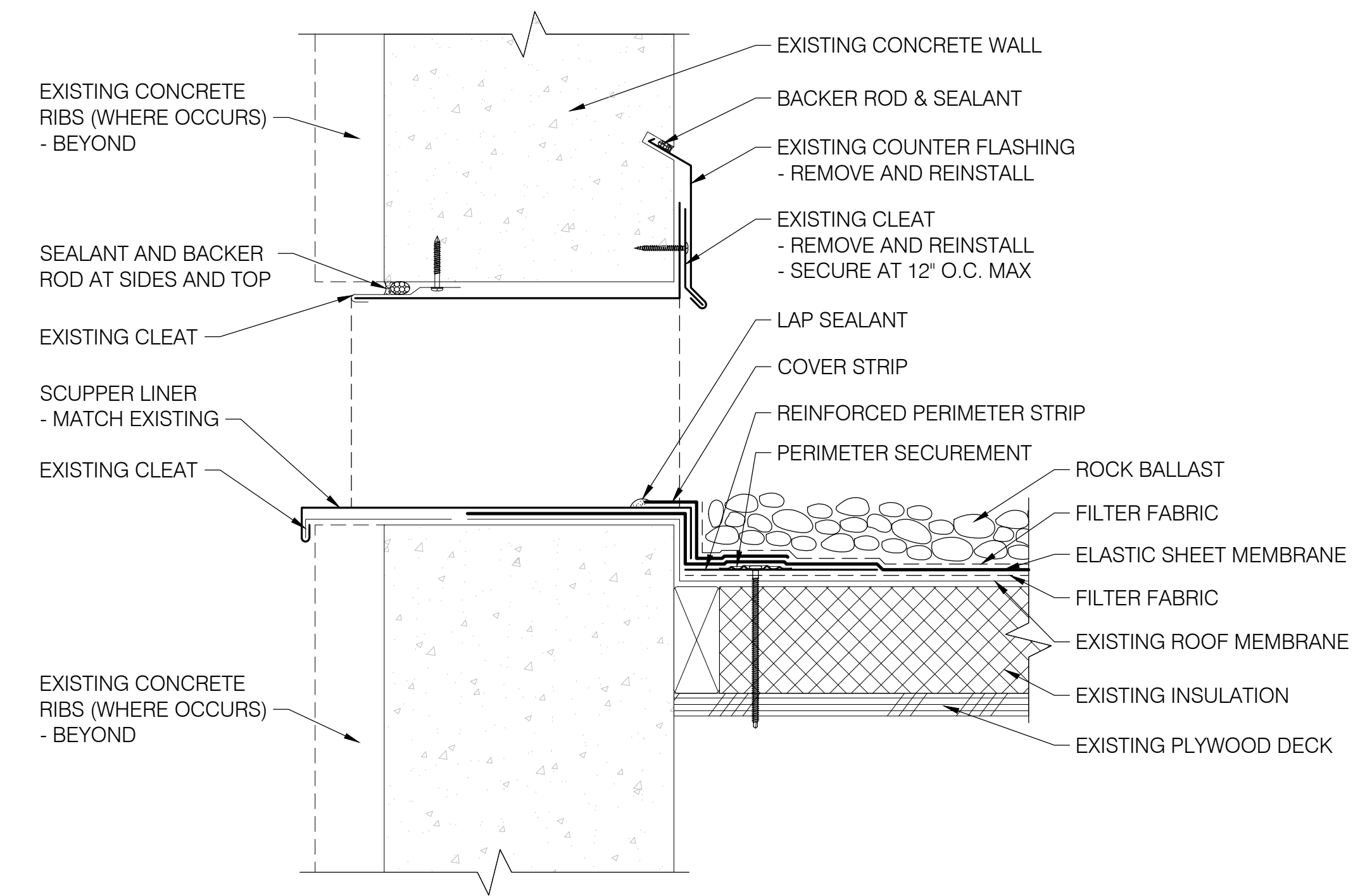
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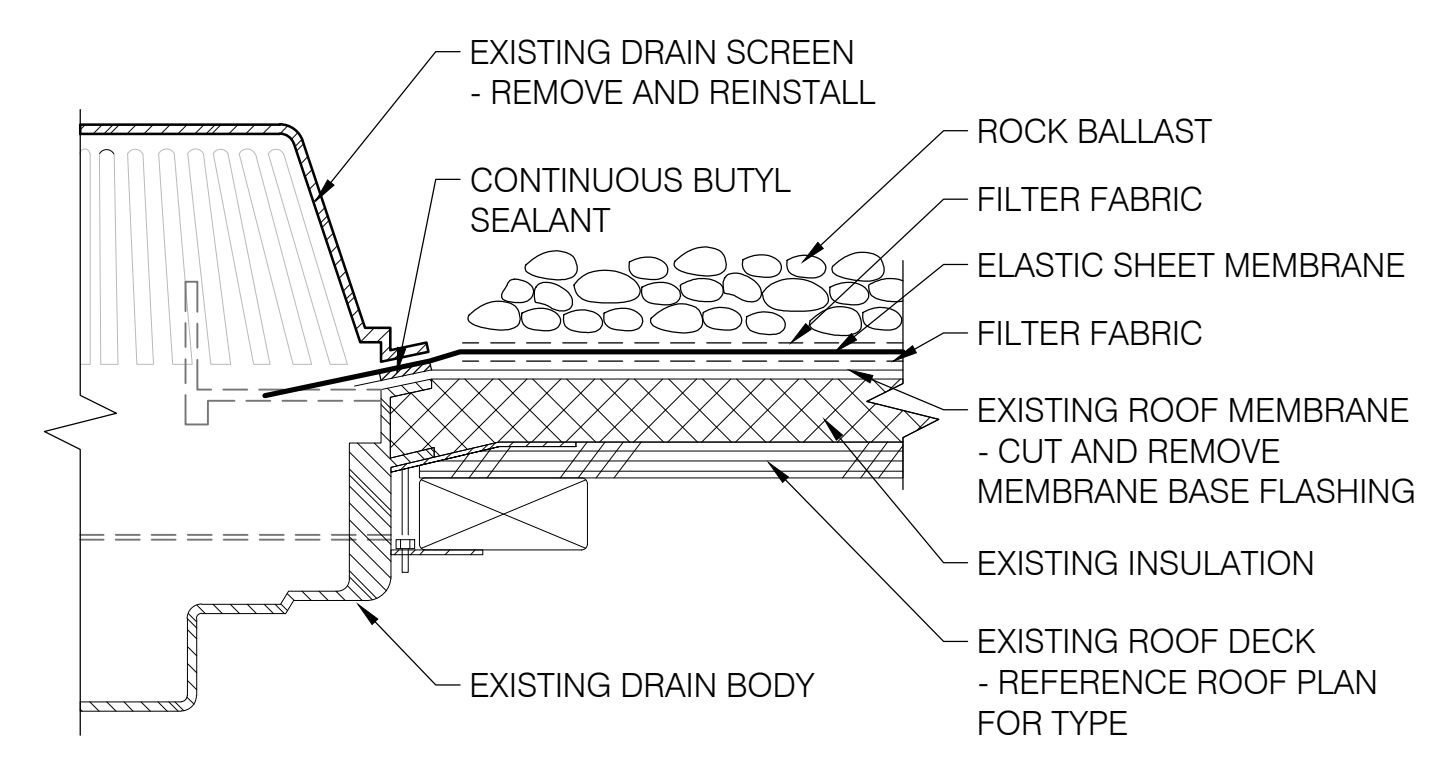
1 PERIMETER EDGE
SCALE: 3" = 1'-0"



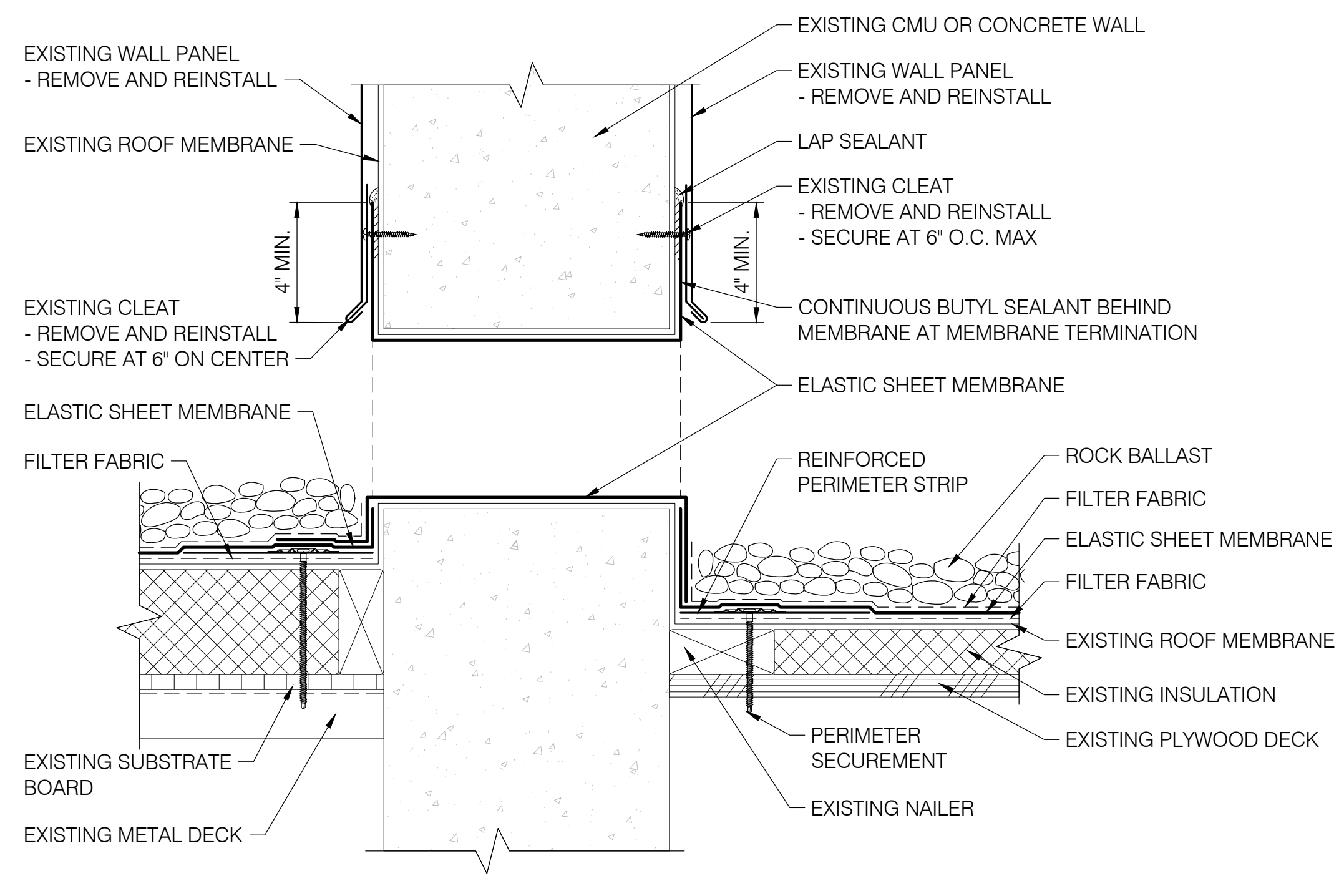
2 PERIMETER EDGE AT SPACE FRAME
SCALE: 3" = 1'-0"



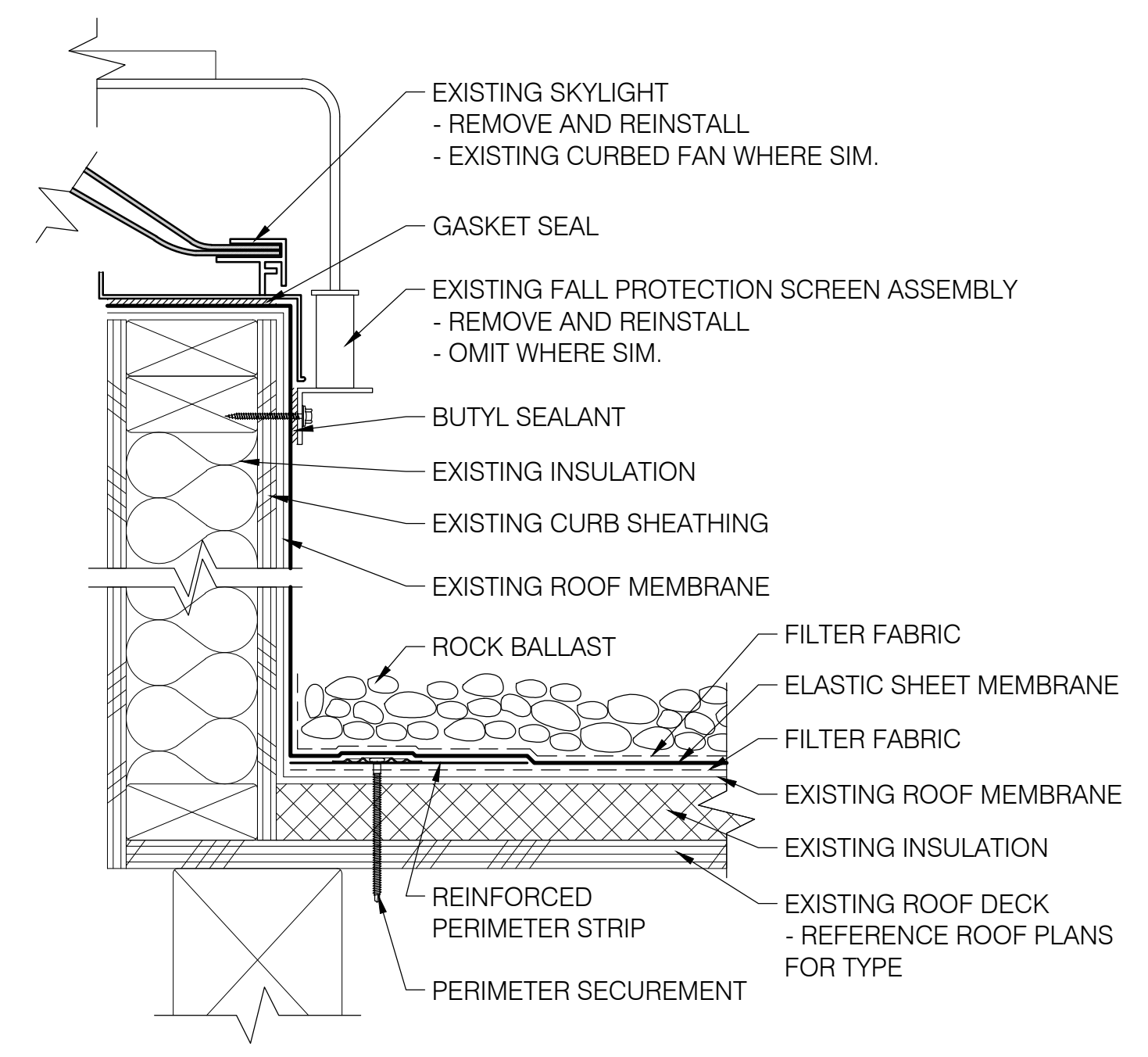
3 OVERFLOW SCUPPER
SCALE: 3" = 1'-0"



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



5 THROUGH-WALL SCUPPER
SCALE: 3" = 1'-0"



6 CURBED SKYLIGHT
SCALE: 3" = 1'-0"

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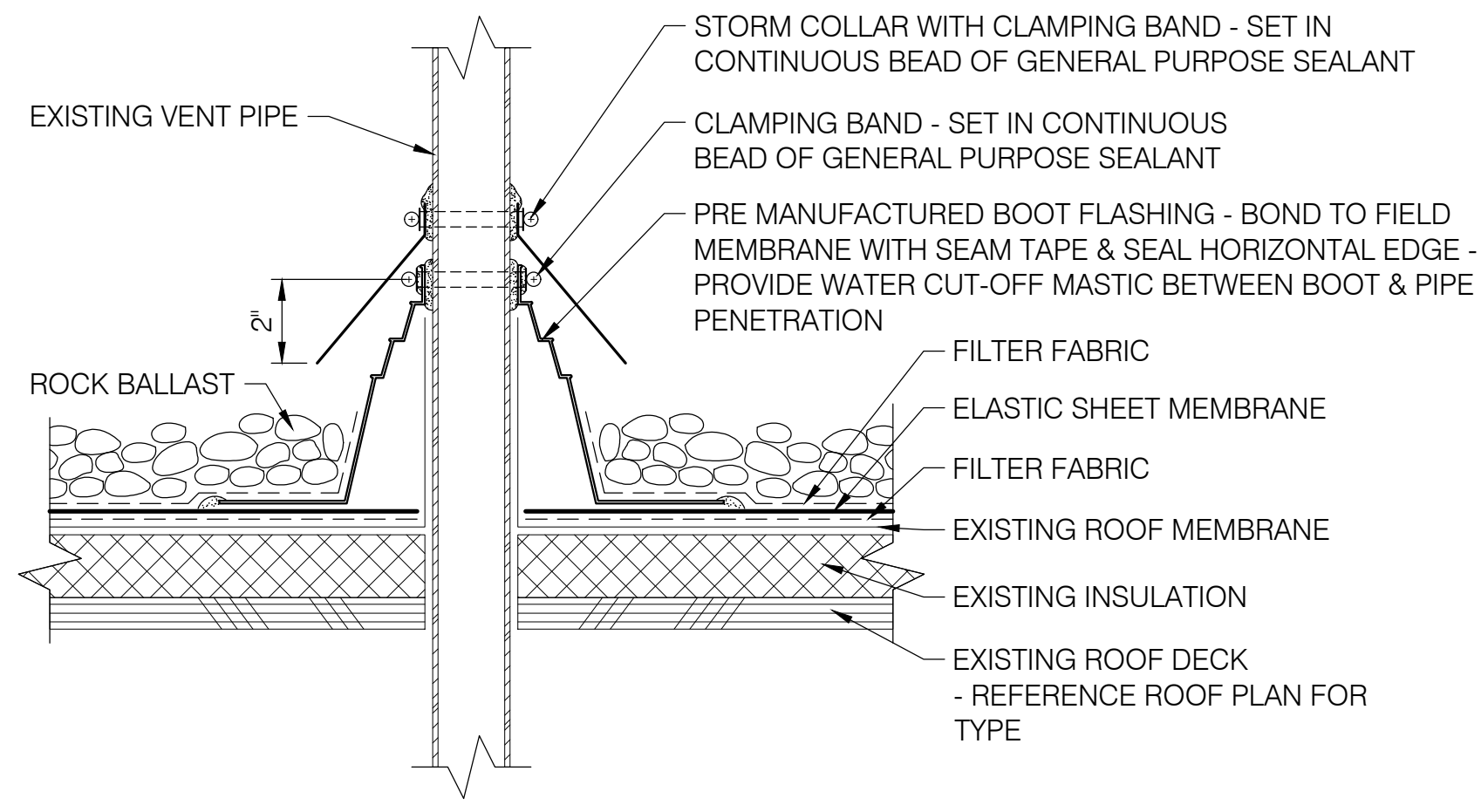
PORTLAND INTERNATIONAL AIRPORT

MAINTENANCE BUILDING 7111 ROOF REPLACEMENT

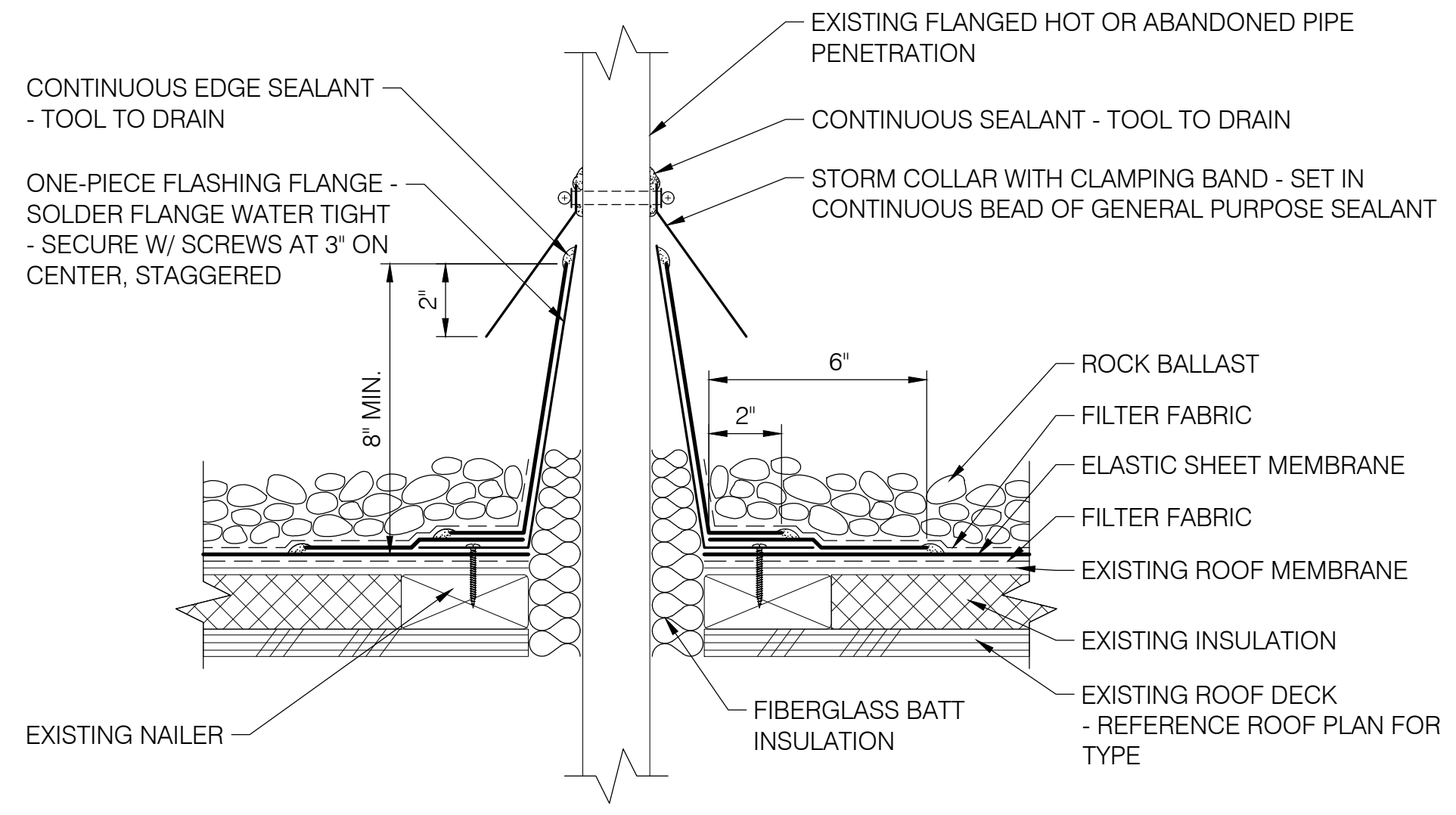
DETAILS 2

SUBMITTED BY	DEAN NORLIN
DESIGN BY	T. BERTRAND
DRAWN BY	T. BERTRAND
CHECKED BY	B. RYAN
DATE	SEPTEMBER 2021
SHEET NO.	6
DRAWING NO.	PDX 2021-514
TYPE	CD
DISC. SHT. NO.	A2.02

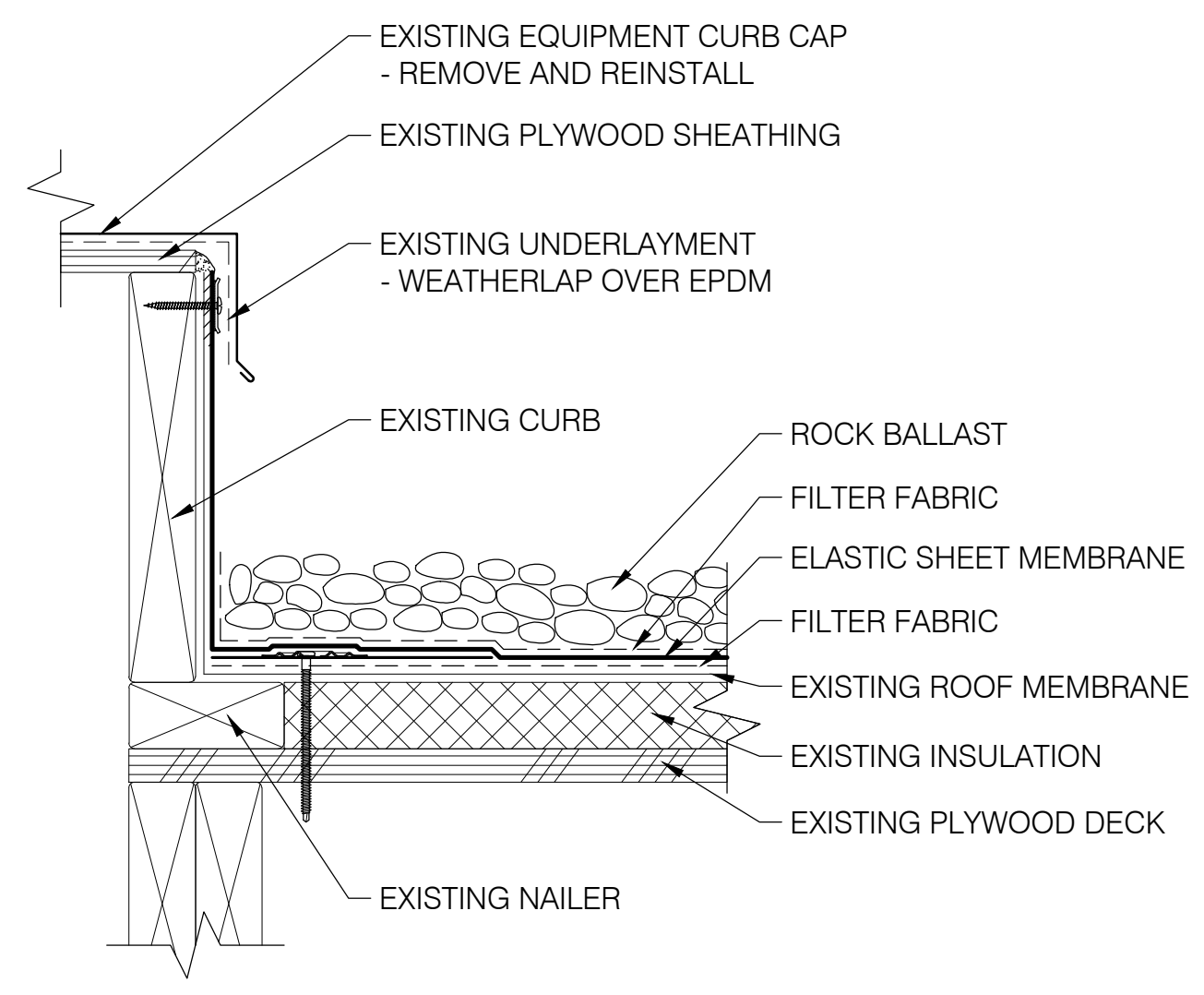
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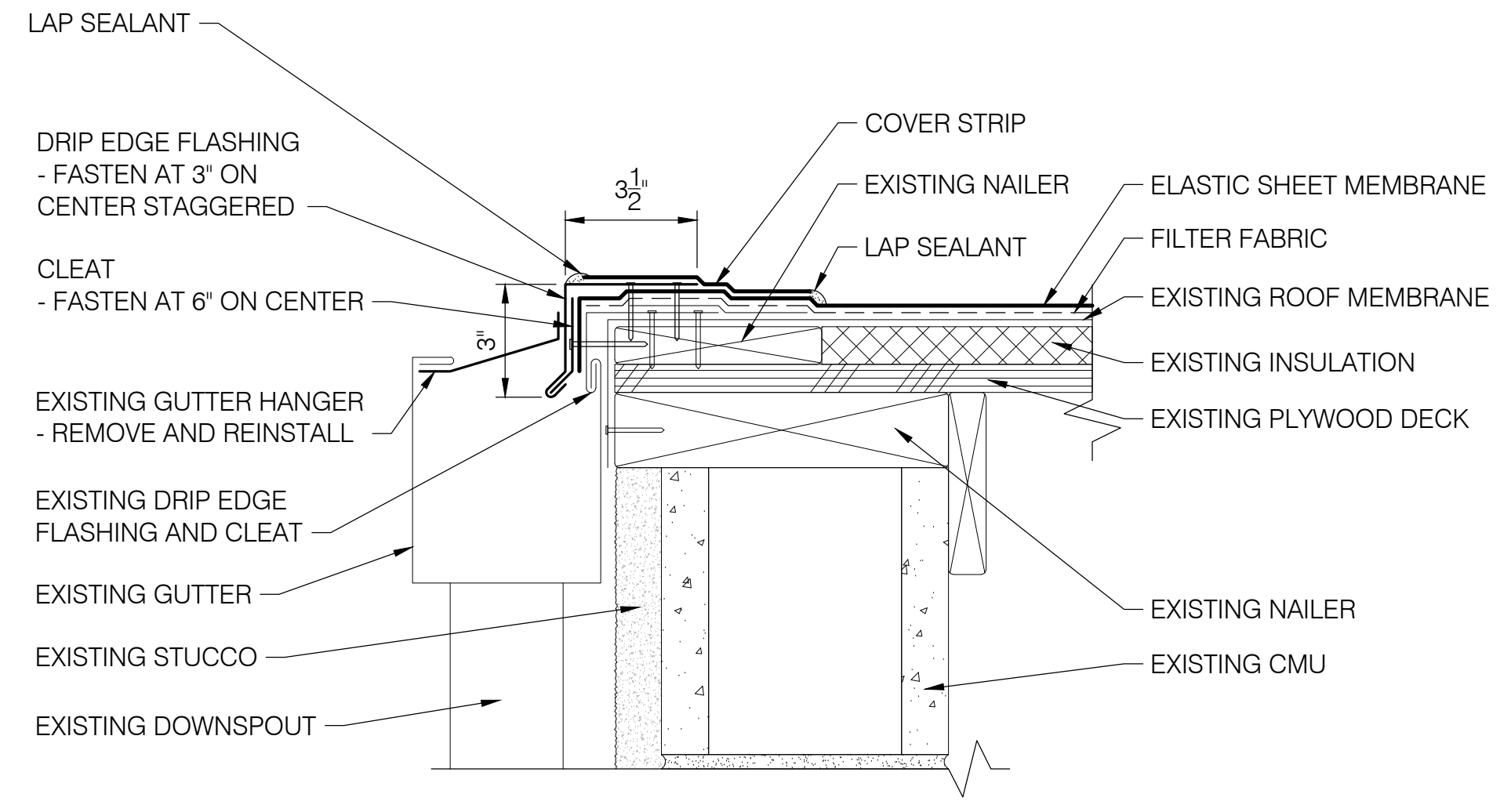
1 PLUMBING VENT PIPE PENETRATION
SCALE: 3" = 1'-0"



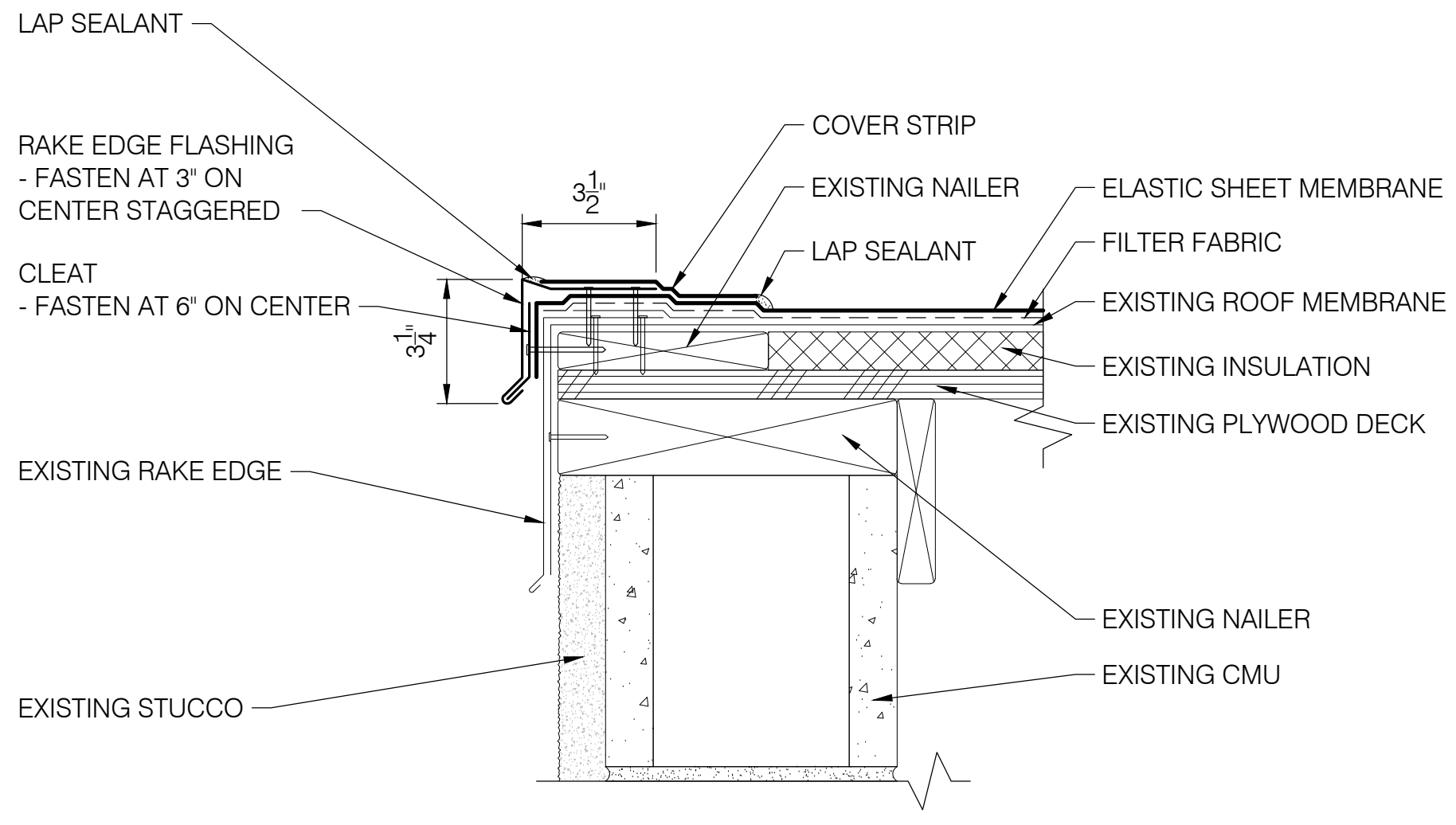
2 FLANGED HOT PIPE PENETRATION
SCALE: 3" = 1'-0"



3 EQUIPMENT CURB
SCALE: 3" = 1'-0"



4 MONITOR ROOF - GUTTER EDGE
SCALE: 3" = 1'-0"



5 MONITOR ROOF - RAKE EDGE
SCALE: 3" = 1'-0"

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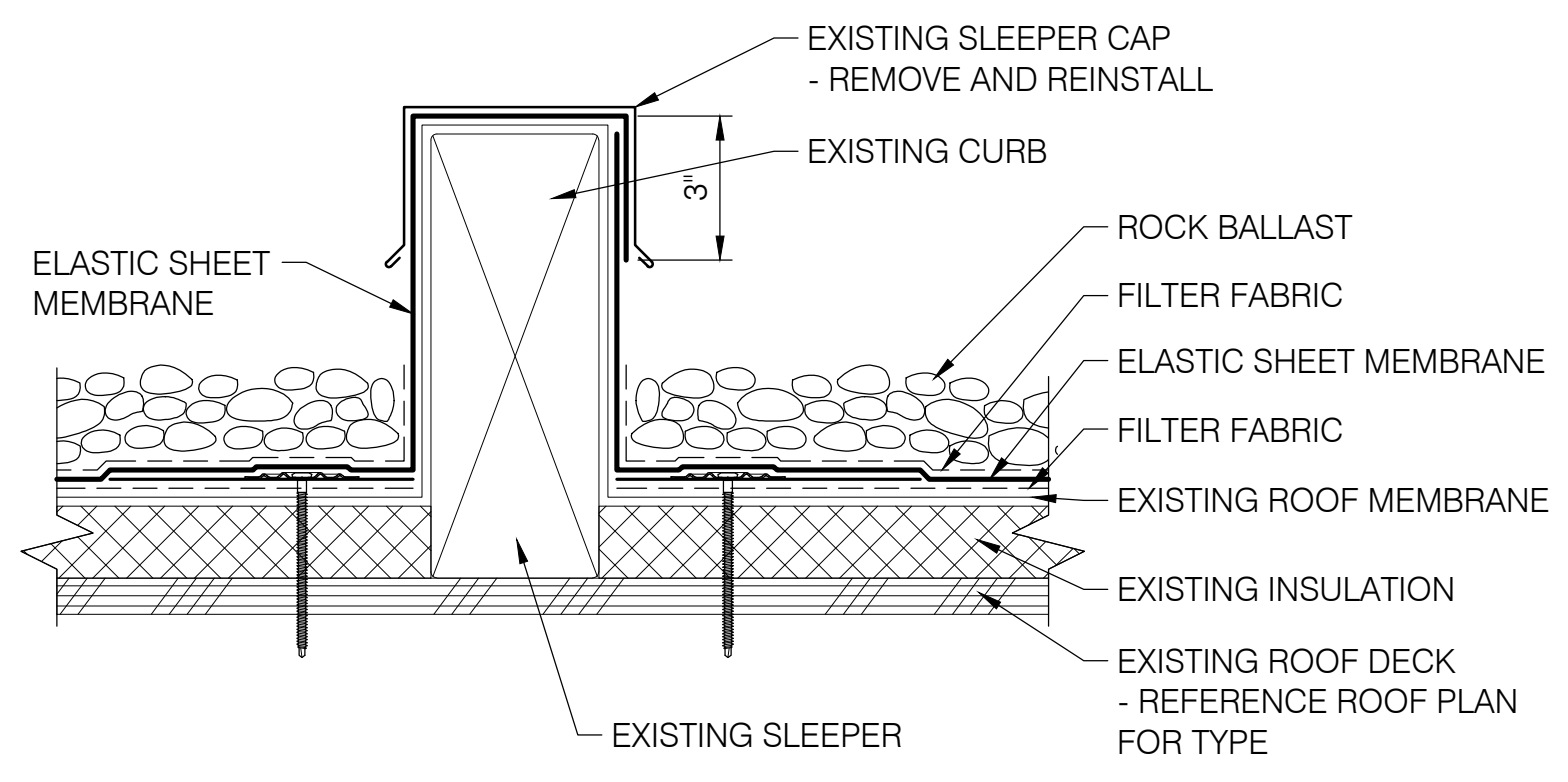
2021D002 DESIGN NUMBER
102842 PROJECT NUMBER

PORTLAND INTERNATIONAL AIRPORT
MAINTENANCE BUILDING 7111 ROOF REPLACEMENT

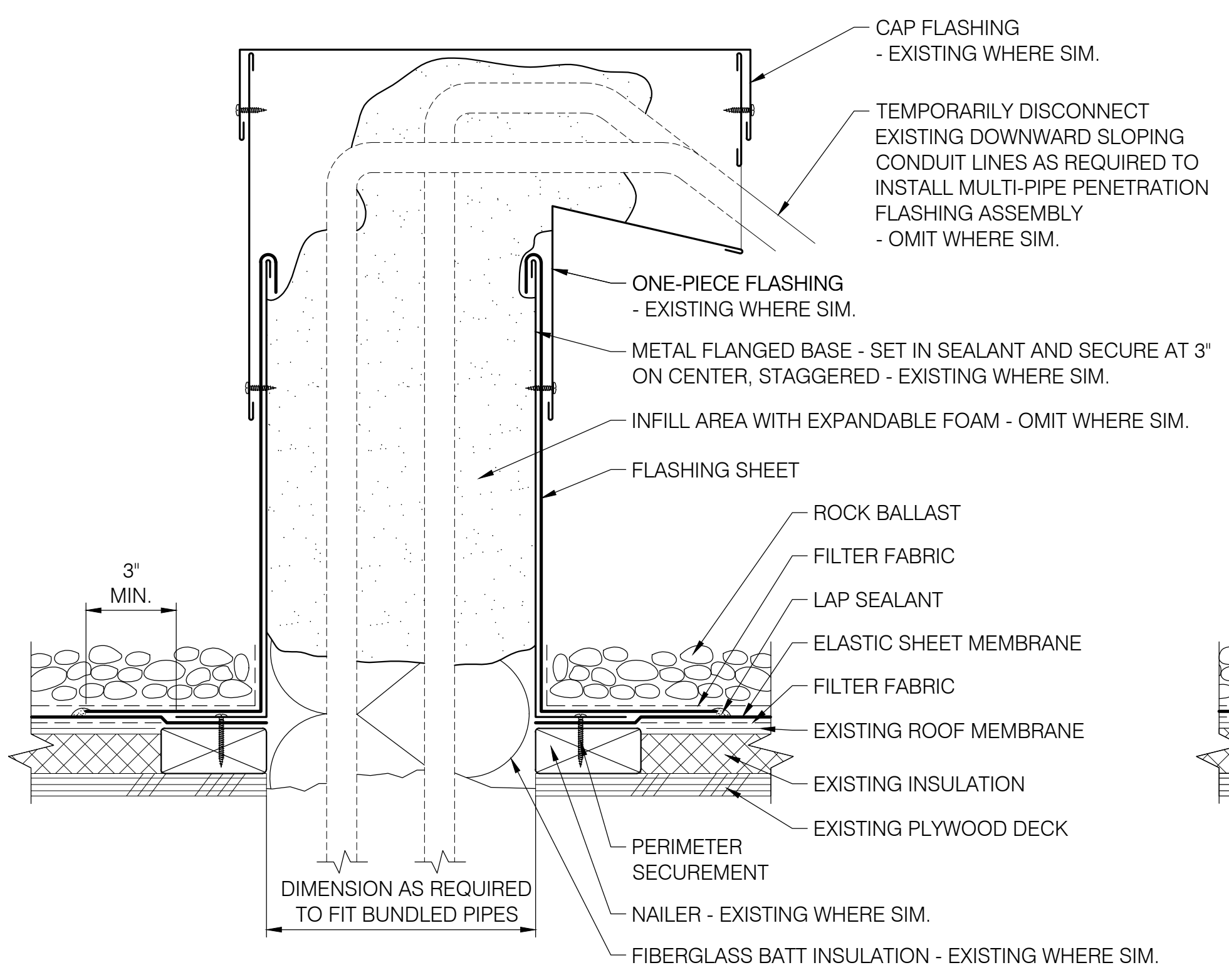
DETAILS 3

SUBMITTED BY	DEAN NORLIN
DESIGN BY	T. BERTRAND
DRAWN BY	T. BERTRAND
CHECKED BY	B. RYAN
DATE	SEPTEMBER 2021
SHEET NO.	7
DRAWING NO.	PDX 2021-514
TYPE	CD
DISC. SHT. NO.	A2.03

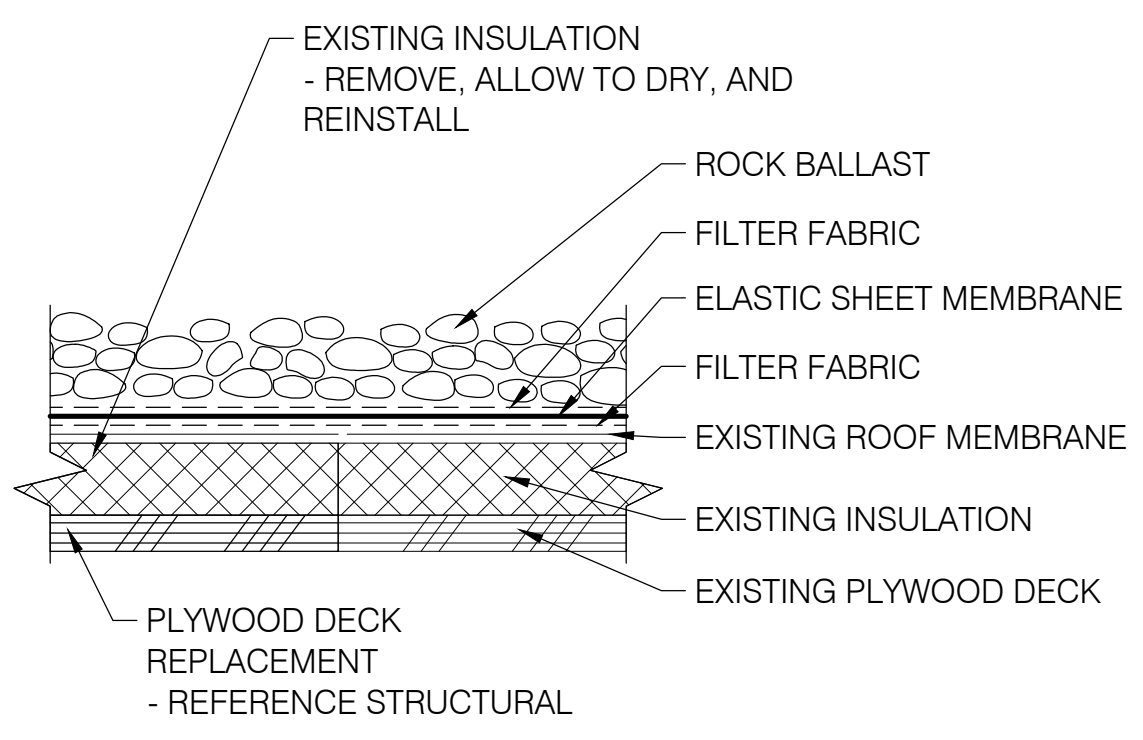
CAN YOU SEE THE AIRPLANES? THE ADJACENT SAMPLES SHOW THREE DIFFERENT LEVELS OF SHADING. SETTINGS FOR VIEWING AND PRINTING DRAWING CONTENT ARE OPTIMIZED WHEN ALL THREE PLANES ARE VISIBLE. THIS GUIDANCE IS PROVIDED FOR REFERENCE ONLY.



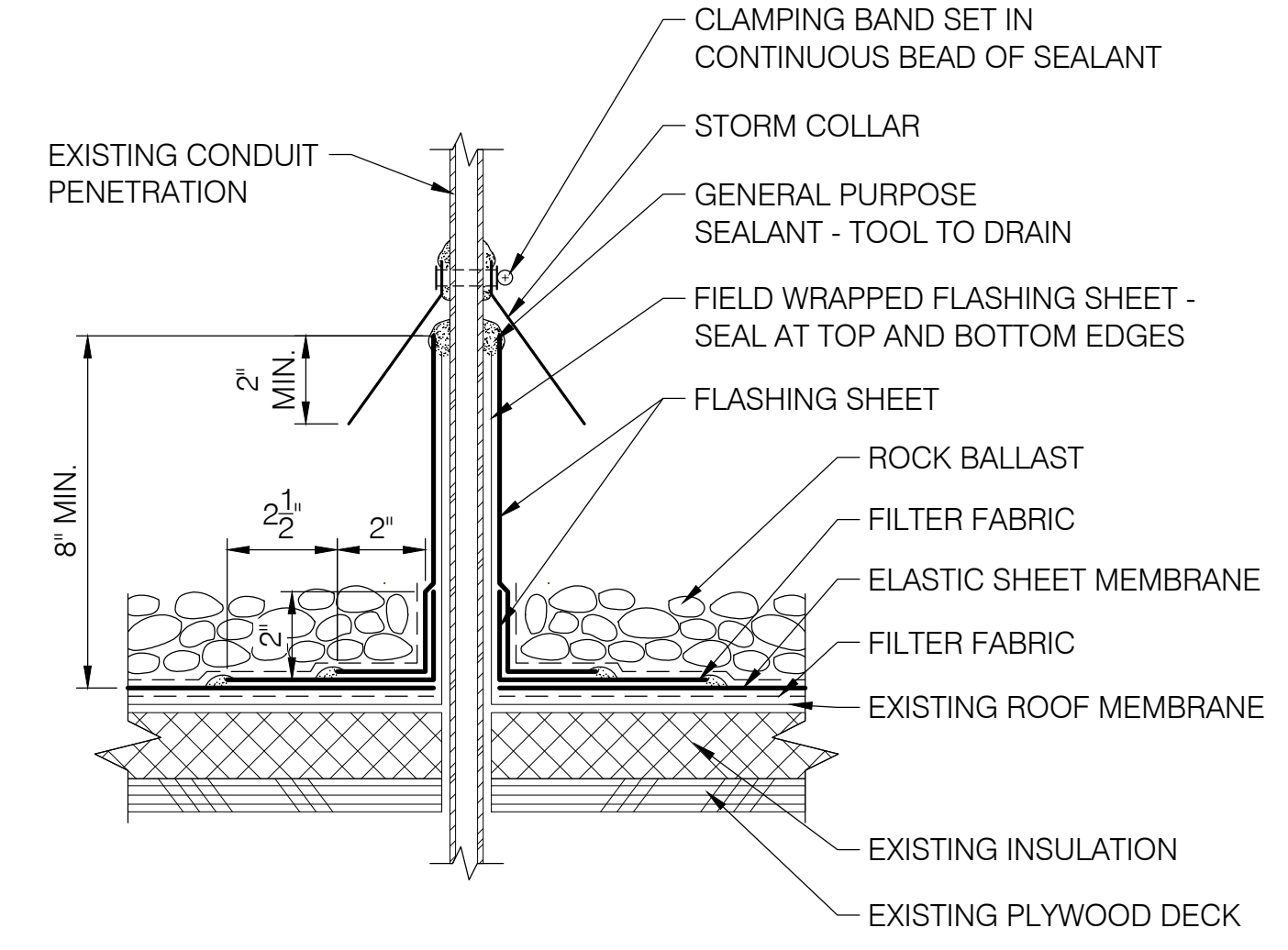
1 EQUIPMENT SLEEPER
SCALE: 3" = 1'-0"



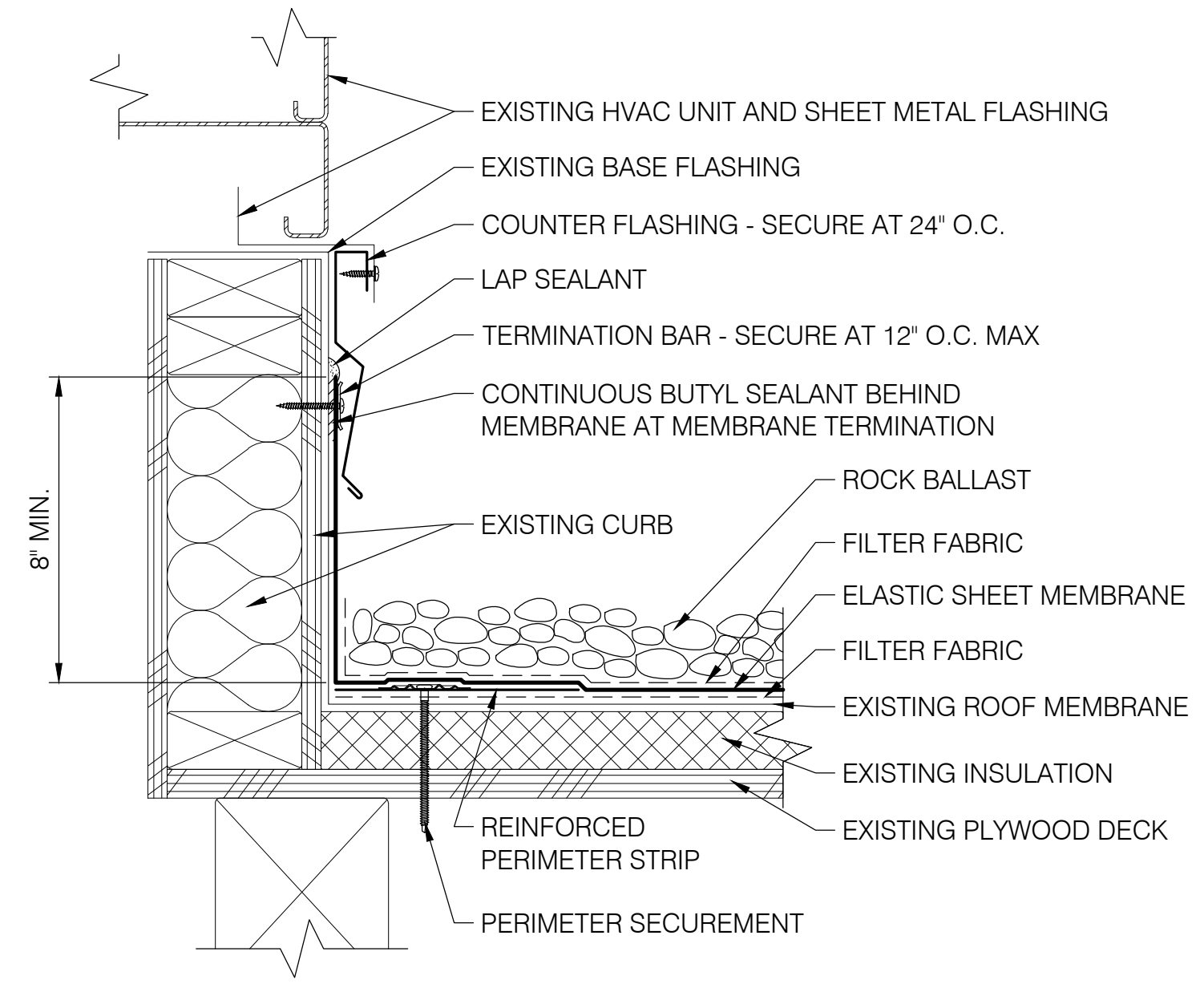
2 MULTI-PIPE PENETRATION
SCALE: 3" = 1'-0"



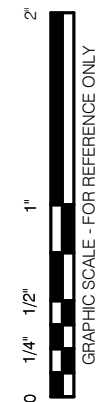
3 DECK INFILL
SCALE: 3" = 1'-0"



4 CONDUIT/LINE PENETRATION
SCALE: 3" = 1'-0"



5 HVAC CURB
SCALE: 3" = 1'-0"



DATE	BY	REVISION	DATE	BY	REVISION

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1106 SE GRAND AVENUE, SUITE 300
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2021D002
DESIGN NUMBER

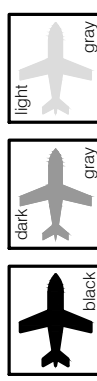
102842
PROJECT NUMBER

PORTLAND INTERNATIONAL AIRPORT
MAINTENANCE BUILDING 7111 ROOF REPLACEMENT

DETAILS 4

SUBMITTED BY	DEAN NORLIN
DESIGN BY	T. BERTRAND
DRAWN BY	T. BERTRAND
CHECKED BY	B. RYAN
DATE	SEPTEMBER 2021
SHEET NO.	8
DRAWING NO.	PDX 2021-514
TYPE: CD	DISC. SHT. NO. A2.04

CAN YOU SEE THE AIRPLANES? THE ADJACENT SAMPLES SHOW THREE DIFFERENT LEVELS OF SHADING. SETTINGS FOR VIEWING AND PRINTING DRAWING CONTENT ARE OPTIMIZED WHEN ALL THREE PLANES ARE VISIBLE. THIS GUIDANCE IS PROVIDED FOR REFERENCE ONLY.



GENERAL STRUCTURAL NOTES:

CODE REQUIREMENTS:
CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE AS AMENDED BY THE 2019 OREGON STRUCTURAL SPECIALTY CODE, REFERENCED HEREAFTER AS IBC.

DESIGN CRITERIA:
DESIGN WAS BASED ON THE STRENGTH AND DEFLECTION CRITERIA OF THE IBC. IN ADDITION TO THE DEAD LOADS, THE FOLLOWING LOADS WERE USED FOR DESIGN, WITH LIVE LOADS REDUCED PER IBC:

- ROOF LIVE LOAD: 20 psf
- GROUND SNOW LOAD Pg: 15 psf
- FLAT-ROOF SNOW LOAD Pf: 25 psf
- SNOW EXPOSURE FACTOR Ce: 1.0
- SNOW IMPORTANCE FACTOR Ic: 1.0
- THERMAL FACTOR Ct: 1.0

BASIC WIND SPEED (3-SEC GUST, ULTIMATE): 98 MPH
WIND EXPOSURE: C
BUILDING RISK CATEGORY: II
BUILDING TYPE: ENCLOSED
COMPONENTS AND CLADDING WIND PRESSURE: PER PLAN

EXISTING CONDITIONS:
THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES FROM CONDITIONS SHOWN ON THE DRAWINGS PRIOR TO THE START OF THE WORK.

TEMPORARY CONDITIONS:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR STRUCTURAL STABILITY OF THE NEW AND EXISTING STRUCTURES AND WALLS DURING CONSTRUCTION. THE STRUCTURE SHOWN ON THE DRAWINGS HAS BEEN DESIGNED FOR STABILITY UNDER THE FINAL CONFIGURATION ONLY.

CARPENTRY:
SAWN LUMBER DESIGN IS BASED ON THE NATIONAL DESIGN SPECIFICATION, LATEST EDITION. SAWN LUMBER SHALL CONFORM TO WEST COAST LUMBER INSPECTION BUREAU OR WESTERN WOOD PRODUCTS ASSOCIATION GRADING RULES. UNLESS NOTED OTHERWISE ALL LUMBER SHALL BE 19% AT TIME OF FABRICATION AND DRIED TO A MAXIMUM OF 15% BEFORE INSTALLATION OF GYP. BOARD AND OF BRICK VENEER AND VERIFIED BY THE GENERAL CONTRACTOR. ALL WOOD IN PERMANENT CONTACT WITH CONCRETE OR CMU SHALL BE PRESSURE TREATED UNLESS AN APPROVED BARRIER IS PROVIDED. GRADES SHALL BE AS DOUG FIR NUMBER 2 UNLESS NOTED OTHERWISE ON THE PLANS.

FRAMING ACCESSORIES AND STRUCTURAL FASTENERS SHALL BE MANUFACTURED BY SIMPSON STRONG-TIE COMPANY (OR PORT APPROVED EQUAL) AND OF THE SIZE AND TYPE SHOWN ON THE DRAWINGS AND ATTACHED PER MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS UNLESS NOTED OTHERWISE. HANGERS NOT SHOWN SHALL BE SIMPSON HU OF SIZE RECOMMENDED FOR MEMBER. ALL FRAMING NAILS SHALL BE COMMON NAILS. NO BOX NAILS ALLOWED. FASTENERS AND ACCESSORIES IN CONTACT WITH PRESERVATIVE TREATED WOOD MUST BE HOT DIPPED GALVANIZED OR HAVE ZMAX COATING.

SHEATHING PANELS SHALL CONFORM TO THE REQUIREMENTS OF VOLUNTARY PRODUCT STANDARD PS 1 OR PS 2, OR APA PRP-108 PERFORMANCE STANDARDS. UNLESS NOTED, PANELS SHALL BE APA RATED SHEATHING, EXPOSURE 1, OF THE THICKNESS AND SPAN RATING SHOWN ON THE DRAWINGS. INSTALLATION SHALL BE IN CONFORMANCE WITH APA RECOMMENDATIONS. ALLOW 1/8" SPACING AT PANEL ENDS AND EDGES, UNLESS OTHERWISE RECOMMENDED BY THE PANEL MANUFACTURER.

ALL ROOF SHEATHING SHALL BE INSTALLED WITH FACE GRAIN PERPENDICULAR TO SUPPORTS, EXCEPT AS INDICATED ON THE DRAWINGS. ROOF SHEATHING SHALL BE BLOCKED AT UNSUPPORTED EDGES. NAILING NOT SPECIFICALLY IDENTIFIED ON THE DRAWINGS SHALL CONFORM TO IBC TABLE 2304.9.1.

MECHANICAL:
THE CONTRACTOR SHALL COORDINATE SEISMIC RESTRAINTS OF ELECTRICAL EQUIPMENT, MECHANICAL, PLUMBING, FIRE SPRINKLER, MACHINERY, AND ASSOCIATED PIPING WITH THE STRUCTURE. ANY CONNECTIONS TO STRUCTURE NOT CONFORMING TO SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA) SHALL BE DESIGNED IN ACCORDANCE OF THESE GENERAL NOTES, BY AN ENGINEER REGISTERED IN THE STATE OF OREGON, AND SHALL BE SUBMITTED TO THE PORT PRIOR TO FABRICATION.

FLASHING AND WATERPROOFING:
ALL FLASHING AND WATERPROOFING SHALL BE PER PROFESSIONAL ROOF CONSULTANTS DRAWINGS.

INSPECTION:
SPECIAL INSPECTIONS: IN ACCORDANCE WITH SECTION 1704 OF THE IBC AND APPLICABLE SECTIONS OF THE PROJECT SPECIFICATIONS. SPECIAL INSPECTIONS ARE TO BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY EMPLOYED BY THE OWNER FOR THE FOLLOWING AREAS:

NONE REQUIRED.

ROOF SHEATHING REPLACEMENT:
WHERE EXISTING 3/4" ROOF SHEATHING IS FOUND DETERIORATED, IT SHALL BE REPLACED WITH NEW 3/4" ROOF SHEATHING IN FULL SIZE 4X8 SHEETS (SPAN RATING 48/24). ORIENT STRENGTH AXIS PERPENDICULAR TO SUPPORTS AND PROVIDED NAILING AS FOLLOWS:

1. 8d AT 4" ON CENTER AT ALL PANEL EDGES (BLOCK UNSUPPORTED EDGES WITH 2X4 FLAT BLOCKING).
2. 8d AT 12" ON CENTER AT INTERMEDIATE SUPPORTS.
3. 8d AT 3" ON CENTER AT LEDGERS AND ROOF EDGES.

CONTACT PORT FOR REPAIR DIRECTION PRIOR TO COVERING WITH ROOFING MATERIALS IF ANY SUPPORT FRAMING IS FOUND DECAYED OR OTHERWISE DAMAGED.

METAL ROOF STRAPPING REMOVED FOR PLYWOOD REPLACEMENT SHALL BE RE-INSTALLED USING LIKE SIZE, KIND, AND QUANTITY OF FASTENERS REMOVED. DO NOT BEND OR OTHERWISE DAMAGE STRAPS TO BE RE-USED.



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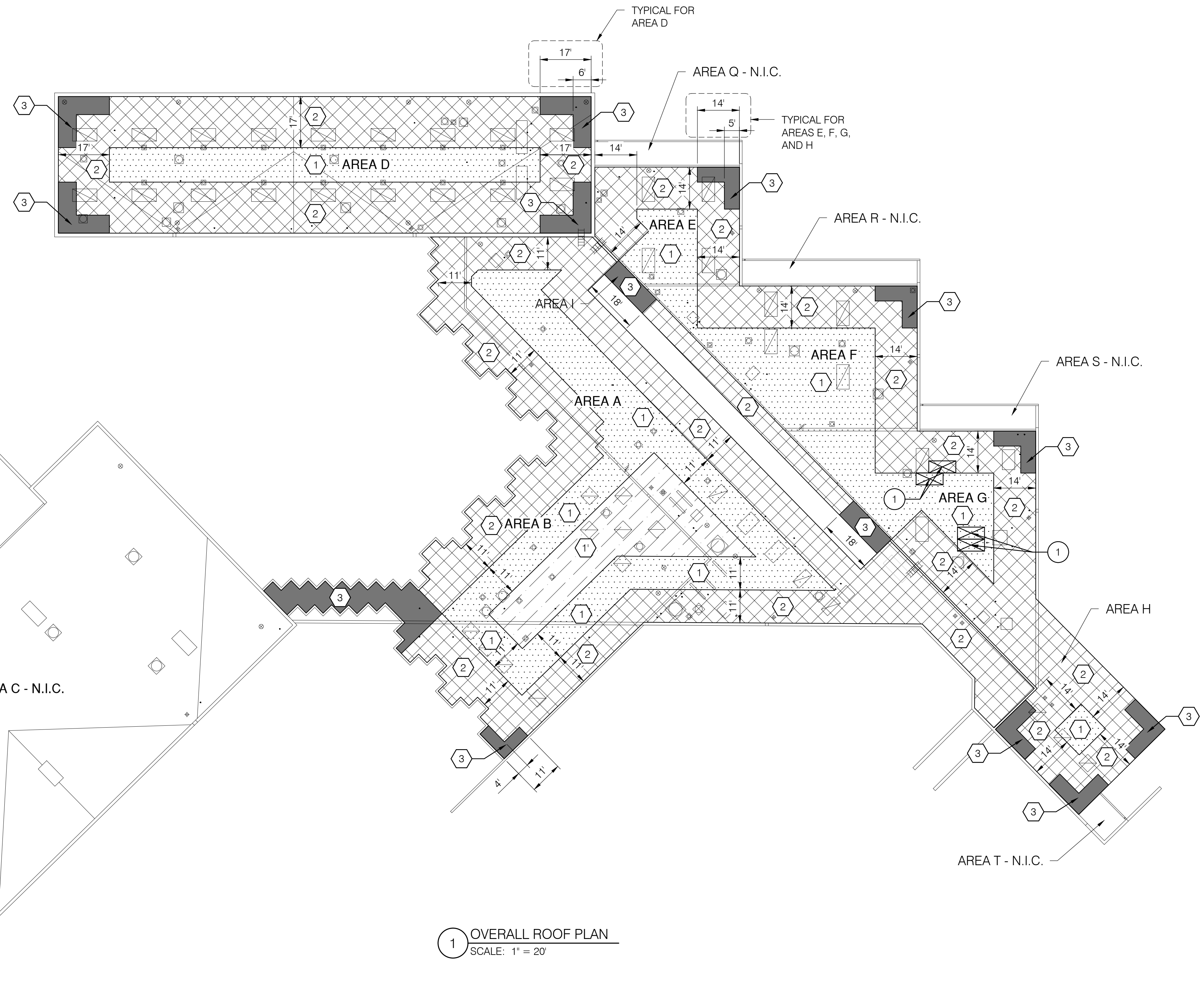
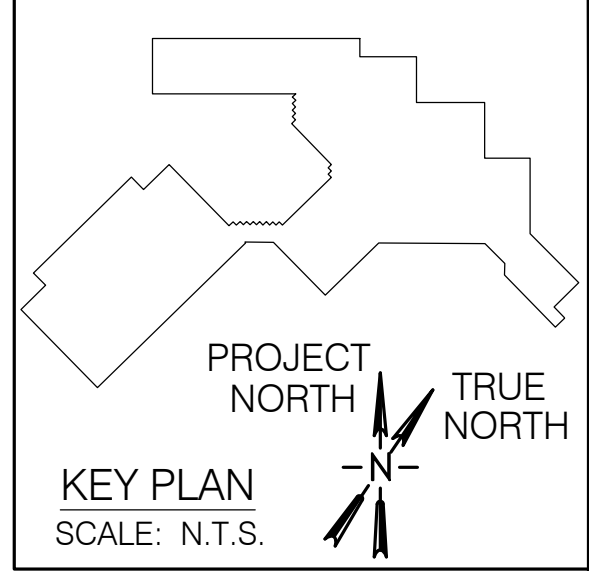
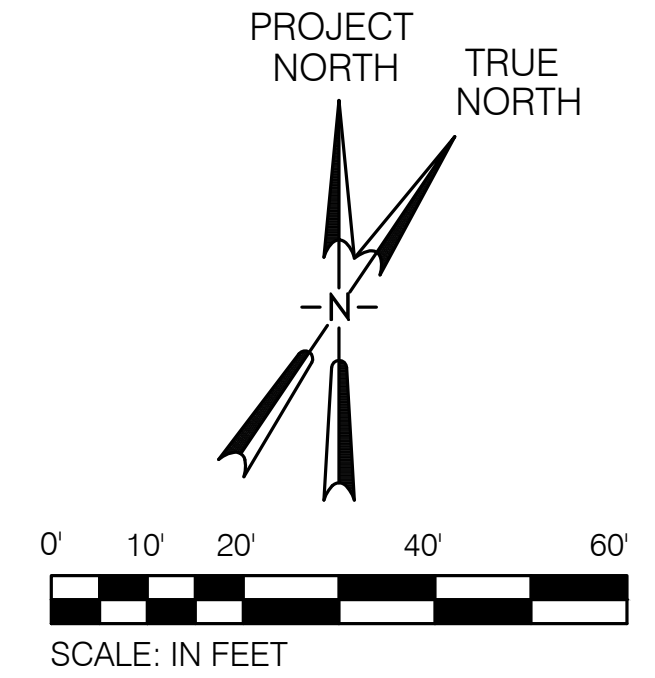
T.M. RIPPEY
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PORTLAND INTERNATIONAL AIRPORT	
MAINTENANCE BUILDING 7111 ROOF REPLACEMENT	
GENERAL STRUCTURAL NOTES	

SUBMITTED BY	DEAN NORLIN
DESIGN BY	R. TURNBAUGH
DRAWN BY	J. CAVANAGH
CHECKED BY	R. TURNBAUGH
DATE	SEPTEMBER 2021
SHEET NO.	9
TYPE:	CD
DRAWING NO.	PDX2021-514
DISC. SHT. NO.	S0.01

CAN YOU SEE THE AIRPLANES? THE ADJACENT SAMPLES SHOW THREE DIFFERENT LEVELS OF SHADING. SETTINGS FOR VIEWING AND PRINTING DRAWING CONTENT ARE OPTIMIZED WHEN ALL THREE PLANES ARE VISIBLE. THIS GUIDANCE IS PROVIDED FOR REFERENCE ONLY.



KEY NOTES:

- ① REPLACE DAMAGED ROOF SHEATHING IN FULL SIZE SHEETS, SEE STRUCTURAL GENERAL NOTES FOR ROOF SHEATHING REPLACEMENT.

ROOF WIND UPLIFT LOADS

ROOF WIND UPLIFT (psf)			
ZONE 1	ZONE 2	ZONE 3	ZONE 4
18.3	34.7	46.9	65.2

NOTES:

1. CODE: ASCE 7-16 CHAPTER. 30.
2. BASIC WIND SPEED (3-SECOND GUST) = 98 MPH
3. RISK CATEGORY: II
4. WIND EXPOSURE: C
5. LOADS ARE AT ULTIMATE (LRFD) LEVEL. MULTIPLY VALUES BY 0.6 TO OBTAIN ALLOWABLE STRESS (ASD) LEVEL LOADS.
6. UPLIFT VALUES BASED ON TRIBUTARY AREA OF 10 SQUARE FEET.
7. UPLIFT LOADS ARE PROVIDED FOR ROOFERS INFORMATION IN SELECTING APPROPRIATE METHOD OF SECURING ROOFING MATERIALS. THE DESIGN OF FASTENER TYPE AND SPACING IS NOT INCLUDED IN TM RIPPEY'S SCOPE OF WORK AND IS BY OTHERS.

ROOF BALLAST

ROOF ZONE	ZONE 1	ZONE 2	ZONE 3	ZONE 4
BALLAST TYPE	#4	#4	#2	#2

NOTES:

1. PROVIDE NEW ROCK BALLAST AT THOSE AREAS IDENTIFIED ON A1.03 TO RECEIVE BALLAST.
2. ROCK BALLAST TO BE INSTALLED IN ACCORDANCE WITH ANSI / SPR 1 RP-4 2008, "WIND DESIGN STANDARD FOR BALLASTED SINGLE-PLY ROOFING SYSTEMS", SYSTEM 2.
3. #4 BALLAST: NOMINAL 1 1/2 INCH SMOOTH RIVER BOTTOM STONE OF BALLAST GRADATION SIZE #4, OR ALTERNATIVELY, #3, #24, #2, OR #1 AS SPECIFIED IN ASTM D448, "STANDARD SIZES OF COARSE AGGREGATE" SPREAD AT A MINIMUM RATE OF 1,000 POUNDS PER 100 SQUARE FEET.
4. #2 BALLAST: NOMINAL 2 1/2 INCH (64MM) SMOOTH RIVER BOTTOM STONE OF BALLAST GRADATION SIZE #2 OR ALTERNATIVELY #1, AS SPECIFIED ASTM D448, "STANDARD SIZES OF COARSE AGGREGATE" SPREAD AT A MINIMUM RATE OF 1,300 POUNDS PER 100 SQUARE FEET.

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PROFESSIONAL
ROOF
CONSULTANTS

PORTLAND INTERNATIONAL AIRPORT
MAINTENANCE BUILDING 7111 ROOF REPLACEMENT
OVERALL ROOF PLAN - STRUCTURAL

SUBMITTED BY	DEAN NORLIN
DESIGN BY	R. TURNBAUGH
DRAWN BY	J. CAVANAGH
CHECKED BY	R. TURNBAUGH
DATE	SEPTEMBER 2021
SHEET NO.	10
TYPE:	CD
DRAWING NO.	PDX2021-514
DISC. SHT. NO.	S1.01