

ROOF REHABILITATION PROGRAM BUILDING "E" McHENRY COUNTY COLLEGE

8900 US HWY 14
CRYSTAL LAKE, ILLINOIS

GENERAL NOTES

VERIFY ALL CONDITIONS IN FIELD. PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR SHALL VISIT THE PROJECT SITE TO LOCATE, SURVEY, AND VERIFY ALL CONDITIONS, INCLUDING (BUT NOT LIMITED TO) DECK CONDITIONS, FASCIAS, STRUCTURE RELATED TO WORK, MASONRY WALL SURFACES, AND ALL AREAS INCLUDED IN SCOPE OF WORK. MEASURE THE WORK AND BE RESPONSIBLE FOR ALL REQUIRED QUANTITIES. SCALED DIMENSIONS ON THE DRAWINGS ARE INTENDED TO BE APPROXIMATE AND GENERALLY LOCATE THE AREAS OF WORK ONLY.

THE CONTRACTOR SHALL RESTORE ANY AND ALL PORTIONS OF BUILDINGS AND GROUNDS DAMAGED DURING CONSTRUCTION TO PRE-CONSTRUCTION CONDITIONS. RESTORATION SHALL INCLUDE DAMAGE TO ANY EXTERIOR AND INTERIOR FINISHES.

UNLESS OTHERWISE INDICATED BY THE CONTRACT DOCUMENTS OF THE SPECIFIED MANUFACTURER'S RECOMMENDATIONS, FOLLOW INSTALLATION PROCEDURES RECOMMENDED BY THE NATIONAL ROOFING CONTRACTORS ASSOCIATION [NRCA] AND/OR THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION [SMACNA] CURRENT EDITION LITERATURE.

PRIOR TO BEGINNING THE WORK, REVIEW THE FOLLOWING WITH THE OWNER'S REPRESENTATIVE: A) TEMPORARY BUILDING AND GROUNDS PROTECTION AND HOUSEKEEPING, B) PROJECT SAFETY PROVISIONS AND PROCEDURES. THE OWNER'S REPRESENTATIVE PRIOR TO FABRICATION MUST APPROVE FULL SIZE SHEET METAL MOCK-UPS. ALL EXPOSED EDGES OF THE SHEET METAL FABRICATION MUST BE HEMMED. SPECIFIED CLEATS MUST BE CONTINUOUS. PROTECT NEW METAL WORK FINISHES FROM DAMAGE DUE TO OTHER ROOFING OPERATIONS.

ALL DRAINS, VENTS AND DECK OPENINGS MUST BE COVERED AND/OR PROTECTED DURING ROOFING OPERATIONS TO PREVENT ENTRY OF FOREIGN DEBRIS AND FUMES INTO EXISTING CONSTRUCTION.

TARGET NOTES (IDENTIFIED IN THE NOTE LEGEND) ARE INTENDED TO IDENTIFY TYPICAL DETAILING REQUIREMENTS. IN THE EVENT THAT THE DETAIL CONDITIONS ENCOUNTERED ARE SIMILAR TO THOSE SHOWN ON THE DRAWINGS, ASSUME THAT THE TYPICAL DETAILING APPLIES UNLESS OTHERWISE INDICATED VIA THE OWNER'S REPRESENTATIVE.

THE CONTRACTOR SHALL NOTIFY THE OWNER AND/OR OWNERS REPRESENTATIVE OF ANY DAMAGED DECKING DURING THE REMOVAL PROCESS. THE CONTRACTOR SHALL ALSO BE PREPARED TO MAKE ANY CORRECTIVE REPAIRS UNDER UNIT PRICE PROVISIONS. THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY AND COORDINATE ALL DECKING WORK WITH THE OWNERS PRIOR TO PROCEEDING WITH ANY WORK.

POSITION HOT KETTLES AND/OR TANKERS IN A MANNER, WHICH WILL NOT INTERFERE WITH THE BUILDINGS FRESH AIR INTAKE REQUIREMENTS. THIS ASPECT SHALL BE COORDINATED WITH THE BUILDING ENGINEERS AND/OR OWNERS REPRESENTATIVE.

SITE SET-UP AREAS SHALL BE RESTRICTED TO AREAS AS DESIGNATED BY THE OWNER'S REPRESENTATIVE.

INTERIOR ACCESS: MATERIAL LOADING AND DEBRIS REMOVAL SHALL BE PERFORMED IN A CONTROLLED MANNER. ANY MATERIAL LOADING AND/OR DEBRIS REMOVAL THAT MAY REQUIRE INTERIOR ACCESS AND/OR FREIGHT ELEVATOR ACCESS SHALL BE ARRANGED WITH THE BUILDING OWNER / OWNER'S REPRESENTATIVE. INTERIOR PROTECTION FOR MATERIAL LOADING AND DEBRIS REMOVAL SHALL BE PROVIDED BY THE CONTRACTOR.

DRAWING NOTES

BASE BID: [ROOF RECOVERY (20-YEAR NDL WARRANTY) NEW FULLY ADHERED 45 MILL PVC/KEE OR 60MILL TPO SINGLE-PLY MEMBRANE RECOVERY SYSTEM / EXISTING ROOFING ASSEMBLY REPAIR/PREP / SHEET METAL FLASHINGS AND RELATED METAL WORK]

LOW SLOPE ROOF: WORK SHALL CONSIST OF THE COMPLETE REMOVAL AND REPLACEMENT OF SHEET METAL FLASHINGS AND COPING CAPS WITH SAFE REMOVAL AND STORAGE OF THE EXISTING ROOF MOUNTED EQUIPMENT INCLUSIVE OF VENT HOODS AS NECESSARY TO ACCOMMODATE THE INSTALLATION OF THE NEW SINGLE-PLY ROOF SYSTEM. SAFELY DISCONNECT RTUS AND RELATED EQUIPMENT AS NECESSARY TO ACCOMMODATE NEW ROOFING.

THE EXISTING ROCK BALLAST SHALL BE REMOVED AND DISPOSED OF INCLUSIVE OF PAD SUPPORTS BELOW RTU'S AND GRAVEL STOP EDGES AT PENTHOUSE LOCATIONS. ROOF AREA TO BE INSPECTED FOR ANY IRREGULARITIES, BLISTERING, OR DETERIORATION AND AREAS OF WET INSULATION AND DETERIORATED DECKING REPLACED UNDER UNIT PRICE PROVISIONS. EXISTING MEMBRANE FLASHINGS SHALL BE REMOVED AT THE PERIMETER PARAPET WALLS. THE CURB FLASHINGS AND AREA OF EQUIPMENT REMAINING IN PLACE SHALL BE CUT 3" BELOW THE UPPER EDGE OF THE EQUIPMENT CURBS AND REMAINING SECTION REMOVED. THE ENTIRE MEMBRANE SURFACE SHALL BE LEFT IN PLACE AND SWEEPED CLEAN. ANY AREAS OF WET INSULATION AND/OR DAMAGED METAL DECKING SHALL BE REMOVED AND REPLACED UNDER UNIT PRICE PROVISIONS.

INSTALL NEW MECHANICALLY FASTENED RECOVER BOARD OVER THE ENTIRE FIELD OF THE MAIN AND PENTHOUSE ROOFS. ROLL OUT NEW SINGLE-PLY MEMBRANE AND ALLOW MEMBRANE TO "RELAX" PRIOR TO INSTALLATION. INSTALL NEW TREATED WOOD BLOCKING AT EXISTING CURBS AND EXTEND PIPE VENTS AS REQUIRED TO ENSURE MINIMUM 8" FLASHING HEIGHTS IN ALL INSTANCES. DAMAGED DRAINS SHALL BE REPLACED UNDER UNIT PRICE PROVISIONS. INSTALL NEW FULLY ADHERED ASSEMBLY IN ACCORDANCE WITH MANUFACTURER GUIDELINES TO ACHIEVE WIND UP LIFT RATINGS OF FMI-90. CLEAN AND WELD MEMBRANE SEAMS AS RECOMMENDED BY MEMBRANE MANUFACTURER, SHINGLING ALL MEMBRANE LAPS WITH THE SLOPE OF THE ROOF DECK. MECHANICALLY FASTEN ROOF MEMBRANE AT ALL TERMINATIONS, PENETRATIONS AND AT THE ROOF PERIMETER AS REQUIRED.

MEMBRANE FLASHINGS SHALL BE FULLY ADHERED TO ALL CURBS AND VERTICAL TRANSITIONS AND SECURED WITH MECHANICAL FASTENERS AND/OR RUSH STRIPS AS REQUIRED. THE MEMBRANE FLASHINGS AT THE RTU UNITS SHALL BE FULLY ADHERED AND WRAPPED UNDER THE ORIGINAL EPDM MEMBRANE FOLLOWED BY A 1" SEAL BUYTL TAPE BETWEEN THE TWO MEMBRANES AND SURFACE MOUNTED TERMINATION BAR AND SUBSEQUENT SHEET METAL COUNTER FLASHINGS. MEMBRANE FLASHINGS SHALL EXTEND OVER THE PARAPET WALLS AND ROOF TRANSITIONS WITH NEW WOOD BLOCKING AND SHEET METAL COPING CAPS. NEW BASE FLASHING MEMBRANES SHALL NOT EXTEND MORE THAN 24" ABOVE THE ROOF SURFACE OR PER MANF. RECOMMENDATIONS AND SHALL BE SECURED WITH A TERMINATION BAR. ADHERE ADDITIONAL PLIES OF FLASHING MEMBRANE LAPPED OVER THE BASE FLASHING TO COVER THE REMAINDER OF THE WALL AND MECHANICALLY FASTEN AS REQUIRED BY THE MANUFACTURER.

INSTALL NEW PREFABRICATED PIPE BOOT FLASHINGS AND PITCH PANS. INSTALL NEW SHEET METAL FLASHINGS, COUNTER-FLASHINGS, GRAVEL STOP EDGES, AND RELATED METAL WORK. INSTALL NEW SEALANT/CAULKING. PROVIDE COVER TAPE BETWEEN ALL METAL AND MEMBRANE SURFACES. FOLLOW ALL MANUFACTURER REQUIREMENTS AND INSTALLATION GUIDELINES.

EXISTING WALKING PAVERS TO BE RAISED AND RESET. PROVIDE SACRIFICIAL UNDER PAVERS. REPLACE DAMAGED PAVERS UNDER UNIT PRICE PROVISIONS.

ALTERNATE BIDS:
ALTERNATE BID 1: [80 MIL TPO OR 45MIL PVC/KEE REINFORCED SHEET, (20-YEAR NDL WARRANTY)]
• IN LIEU OF 60 MIL TPO / 45MIL PVC/KEE MEMBRANE INSTALL NEW 80 MIL TPO OR 60MILL PVC/KEE MEMBRANE. REMAINDER OF WORK TO REMAIN SAME.

ALTERNATE BID 2: [NEW WALKWAY PAVERS]
• IN LIEU OF RAISING AND RESETING EXISTING WALKWAY PAVERS, PROVIDE PRICE TO INSTALL NEW WALKWAY PAVERS. REMAINDER OF WORK TO REMAIN SAME.

INDEX OF DRAWINGS

ALL WORK PERFORMED SHALL CONFORM TO ALL CODES RECOGNIZED BY McHENRY COUNTY, ILLINOIS

- 2015 INTERNATIONAL BUILDING CODE
- 2015 INTERNATIONAL RESIDENTIAL CODE

BUILDING CODES

- T1. . GENERAL NOTES, DRAWING NOTES, LOCATION MAP
- A1. . ROOF PLAN, TARGET NOTES
- A2. . DETAILS, PHOTOS



SITE LOCATION

LOCATION OF WORK
BUILDING "E"
CRYSTAL LAKE, ILLINOIS



N
SITE MAP

Architectural
Consulting
Group,
Ltd. **ACG**
422 N. Hough Street
Barrington, IL 60010
Tel: 847-277-1900
www.acg-llc.net

I hereby certify that these documents have been prepared under my supervision and to the best of my knowledge conform with all applicable building codes ordinances.

Thomas F. Zordan, AIA
IL Arch. Lic. #001-014575
Expires: 11-30-2020

ROOF REHABILITATION PROGRAM
BUILDING "E" McHENRY COUNTY COLLEGE
CRYSTAL LAKE, ILLINOIS 60012

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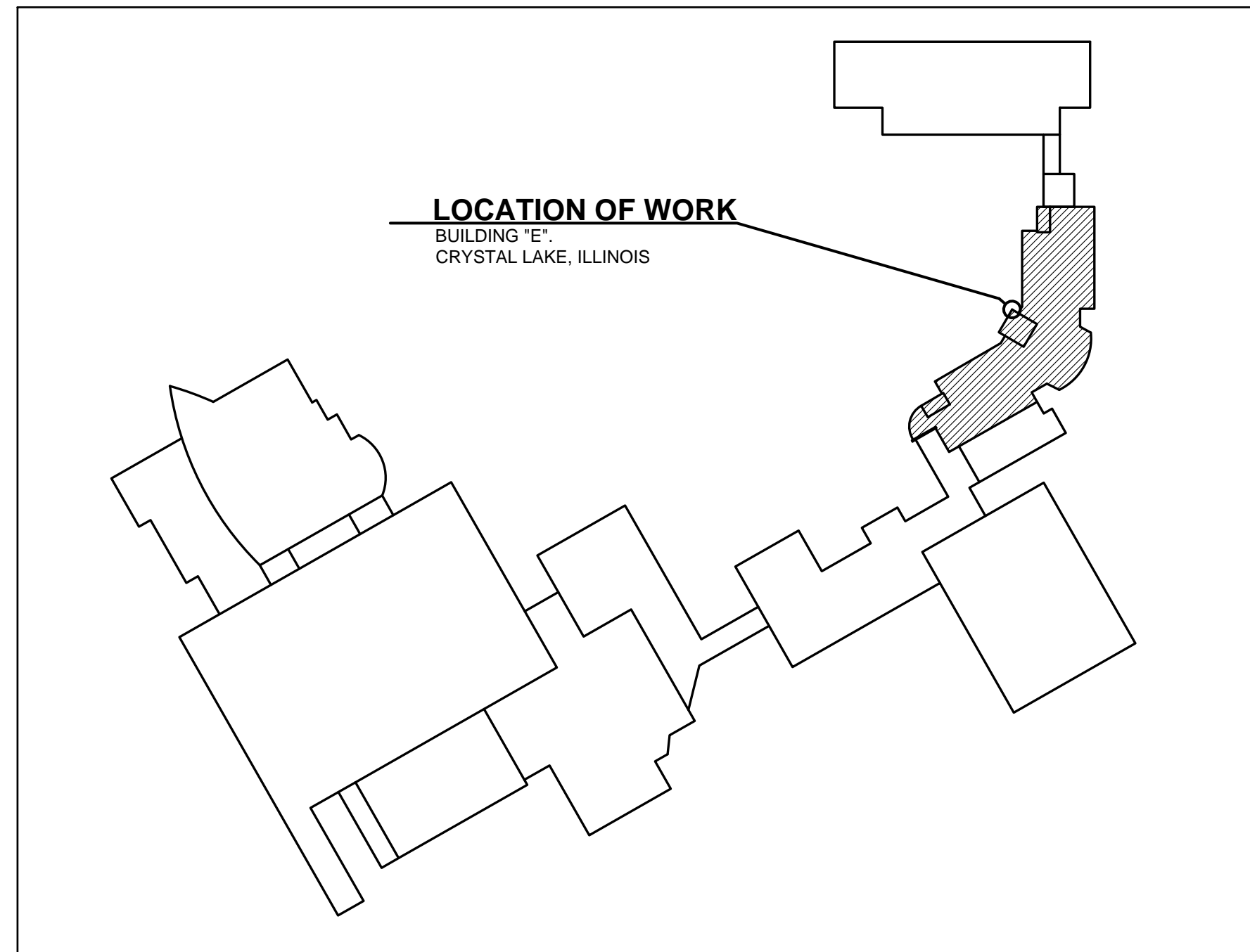
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Project No.: 19-129

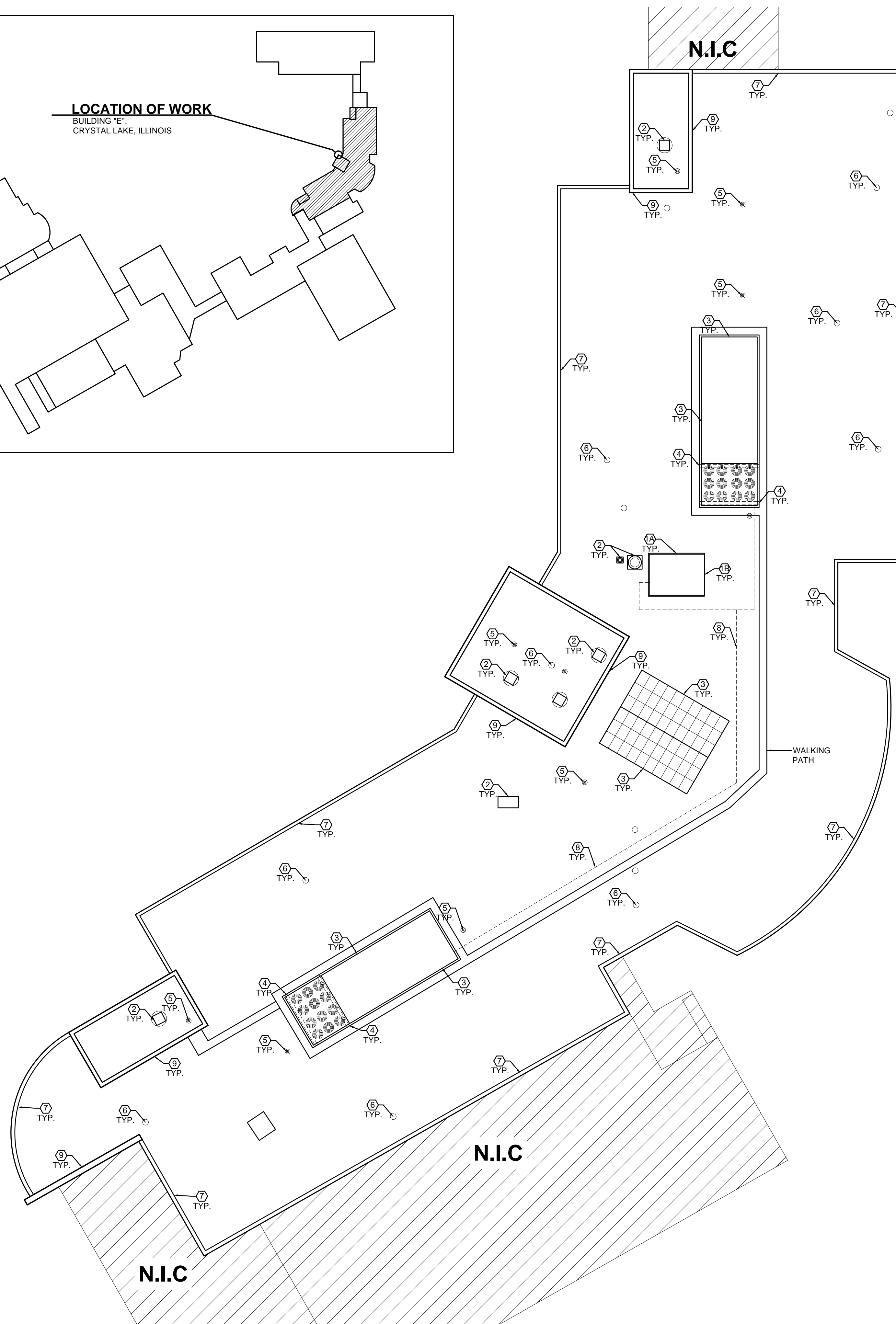
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DRAWING NOTES
LOCATION/ SITE MAP

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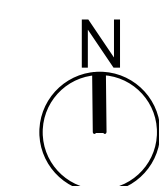
T-1



KEY PLAN



1 ROOF PLAN
SCALE: NTS



TARGET NOTES

- 1 **GRAVEL STOP DETAIL (A & B):** Remove existing roof ballast, membrane flashing's and existing sheet metal flashing as specified. Install new mechanically fastened cover board. Install new roofing and flashing assembly lapping membrane over leading edge. Install new mechanically fastened gravel stop with new continuous cleat and gasketed fasteners. Prime metal flange and install new membrane stripping plies and membrane sealant. For detail 1B, install new sheet metal gutter apron flashing in lieu of gravel stop termination with new continuous cleat. See Detail 1 / Sheet A2.
- 2 **CURB DETAIL:** Safely remove and store existing equipment. Remove existing roof ballast, membrane flashing's and existing sheet metal flashing as specified. Install new mechanically fastened cover board. Install new treated wood blocking as required at top of existing curb to maintain minimum 8" flashing heights. Install new flashing plies terminated at the top edge of the equipment curb with new gasketed fasteners. Install new sheet metal counter flashing flashing with gasketed fasteners. Reinstall existing equipment and secure with new fasteners and gasketed washers. See Detail 2 / Sheet A2.
- 3 **FIXED CURB DETAIL:** Existing unit/ skylight to remain in place. Remove existing roof ballast, cut existing membrane at curb location and leave in place. Lap new roofing assembly behind existing flashing membrane an up onto existing curb. Install new butyl tape and termination bar a transition. Install new termination bar with new gasketed fasteners. Install new slip flashing with gasketed fasteners @ 12" o.c. See Detail 3 / Sheet A2.
- 4 **RAIL CURB DETAIL:** Raise existing mechanical units as required. Remove and discard metal cap. Install treated wd. blocking as req'd. to existing curbs/rails to achieve 8" minimum flashing heights in all instances. Install new roofing assembly at existing curbs. Run new roof flashing up and over top of curb. Install new shet metal cap secured with new gasketed fasteners w/ washers. Re-install and re-connect existing equipment. Equipment is to be reconnected and tested by certified technicians. See Detail 4 / Sheet A2.
- 5 **DRAIN DETAIL:** Remove existing roof ballast and clamping rings. Adjust height of drain head as required. Provide 4'x4' sumps at all drain locations with tapered sump. Install lead flashing and membrane flashing. Install new roofing assembly. Install new clamping ring and drain dome using new hardware, tap and thread mountings as required. Replace all damaged drain strainers as required. See Detail 5 / Sheet A2
- 6 **PIPE PENETRATION DETAIL:** Remove existing roof ballast and membrane flashing's as specified. Remove existing stack flashing. Install new roof assembly, membrane flashings and sealer. Install new pre - fabricated pipe boot flashing and draw band. See Detail 6 / Sheet A2.
- 7 **PARAPET WALL DETAIL:** Remove existing roof ballast, membrane flashing's, existing sheet metal flashing and coping caps as specified. Install new mechanically fastened cover board, roofing and flashing assembly. Install new flashing plies lapping over leading edge of parapet wall. Add new wood blocking as required on top of existing parapet wall to accommodate new sheet metal coping cap. install new sheet metal coping caps with gasketed fasteners @ 16" O.C. See Detail 7/A2
- 8 **PIPE SUPPORT DETAIL:** Disconnect and raise existing pipe, line sets and related components as required to accommodate new roofing assembly. Remove existing roof ballast. Install new mechanically fastened cover board and roofing assembly. Install new pre-fab pillow block with additional membrane ply underneath at 8'-0" o.c. Reconnect all lines and related components by licensed certified technician. See Detail 8 / Sheet A2.
- 9 **MASONRY WALL:** Remove existing roof ballast, membrane flashing's and existing sheet metal flashing as specified. Install new mechanically fastened cover board, roofing and flashing assembly. Inspect masonry wall, damaged and/or deteriorated masonry to be replaced under unit price provision. Install new reglet and sheet metal counter flashing with gasketed fasteners at 16' O.C. See Detail 9 / Sheet A2.

I hereby certify that these documents have been prepared under my supervision and to the best of my knowledge conform with all applicable building codes ordinances.

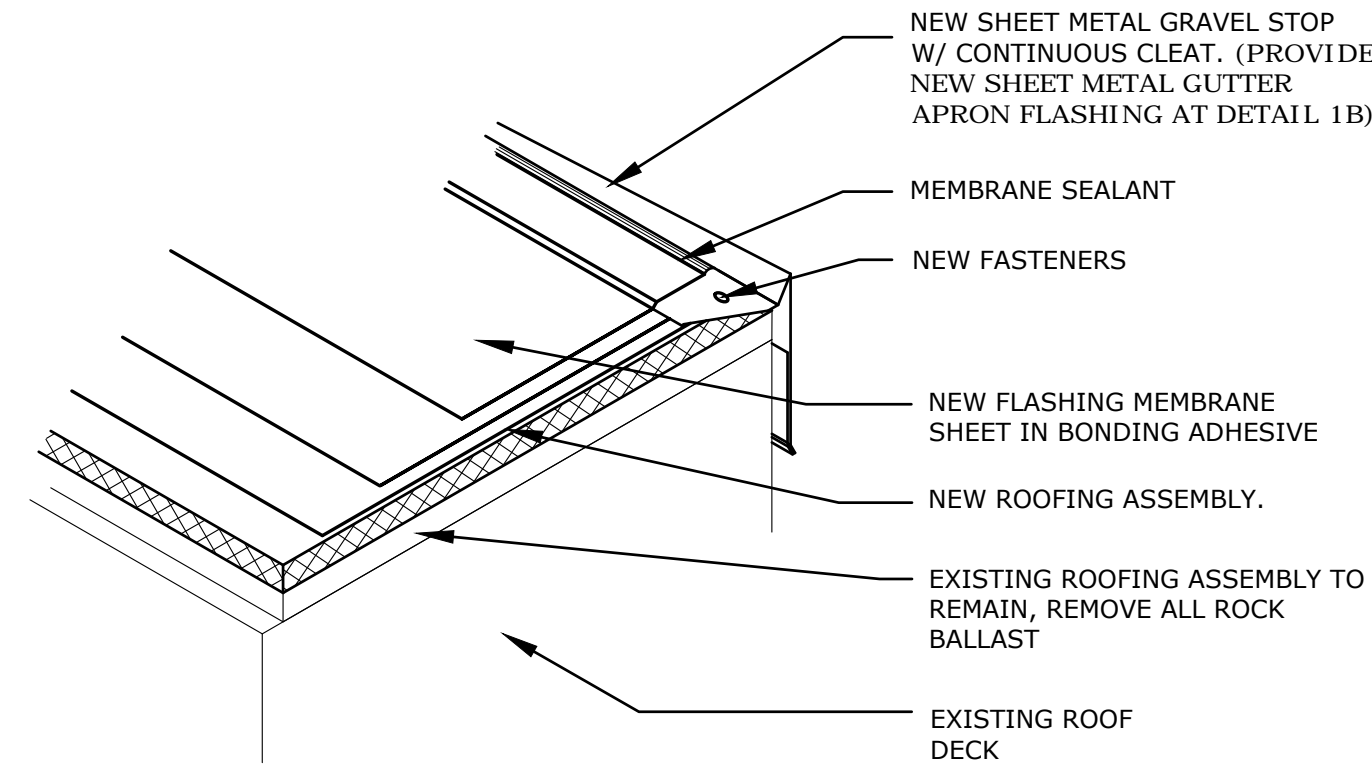
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Expires: 11-30-2020

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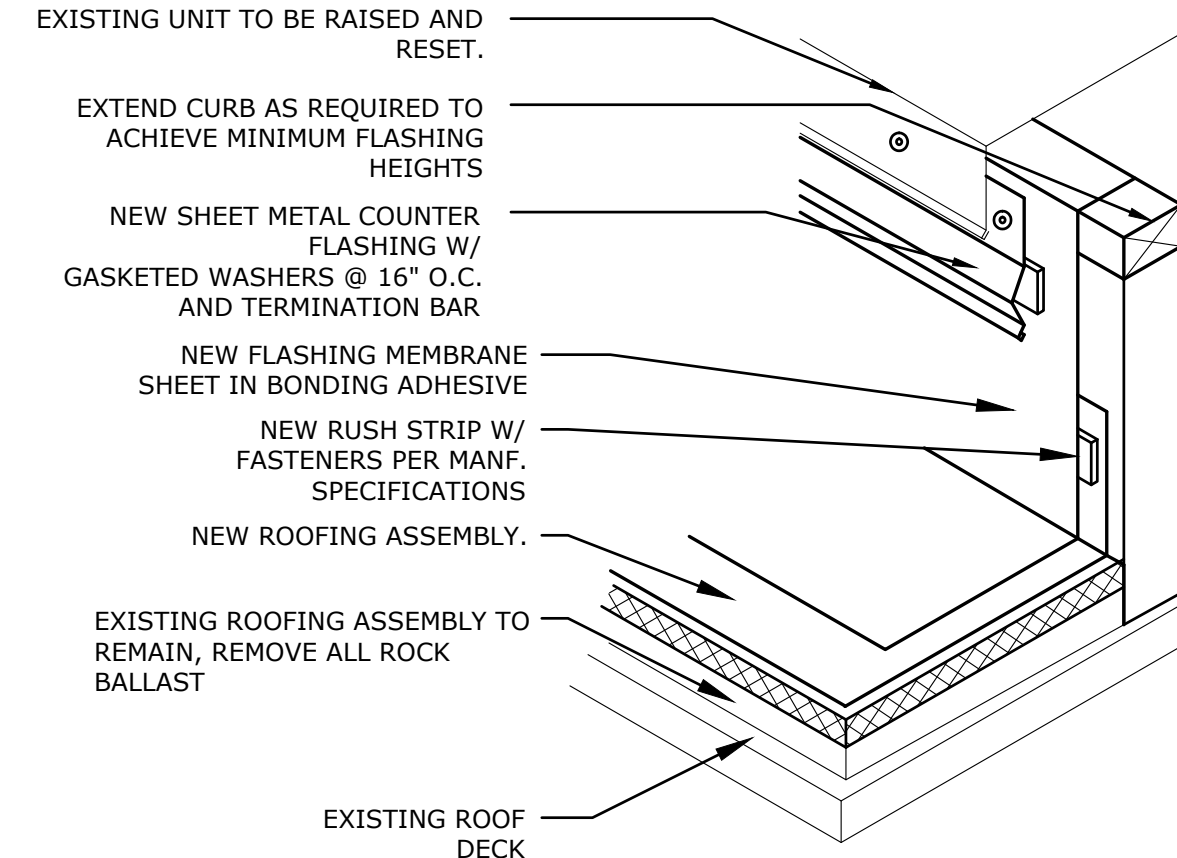
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TARGET NOTES

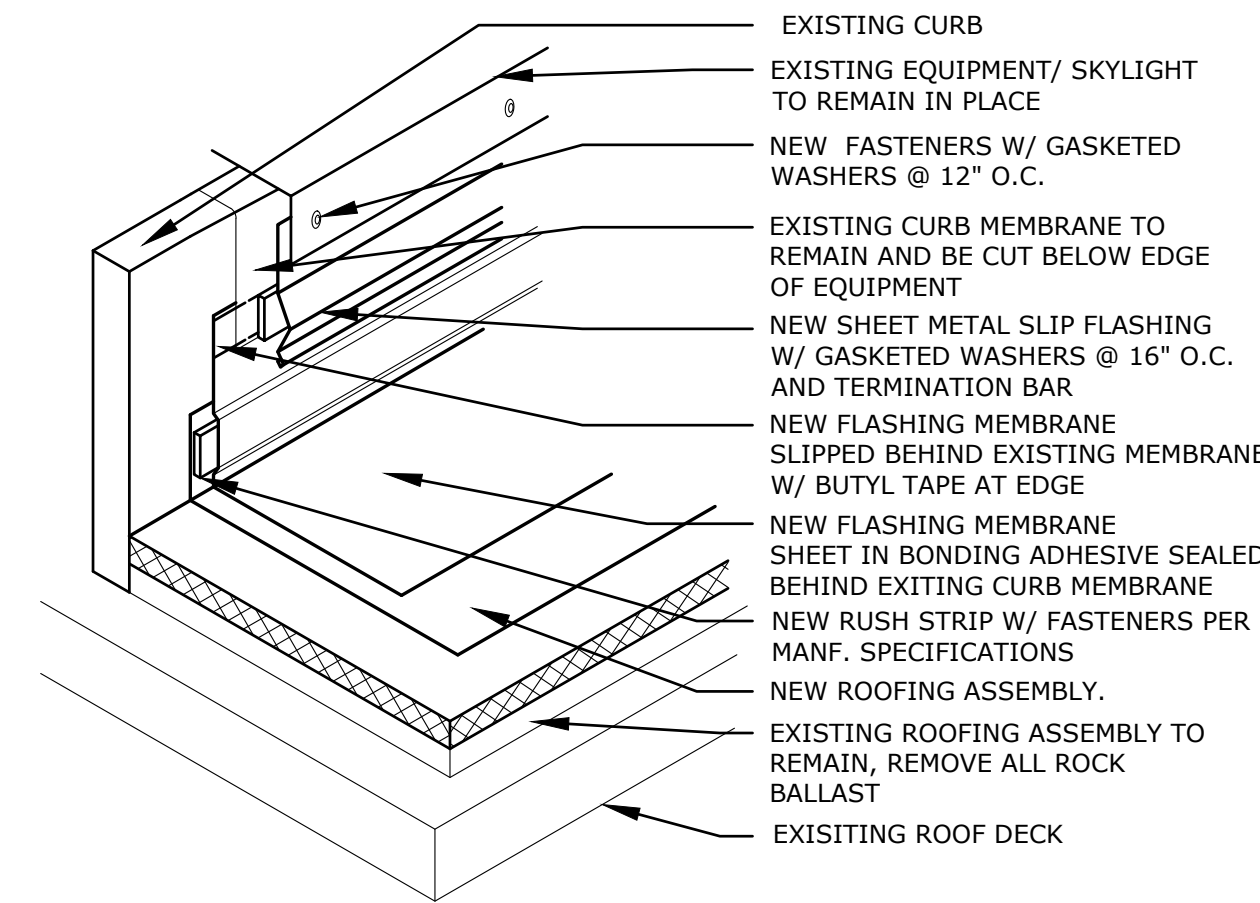
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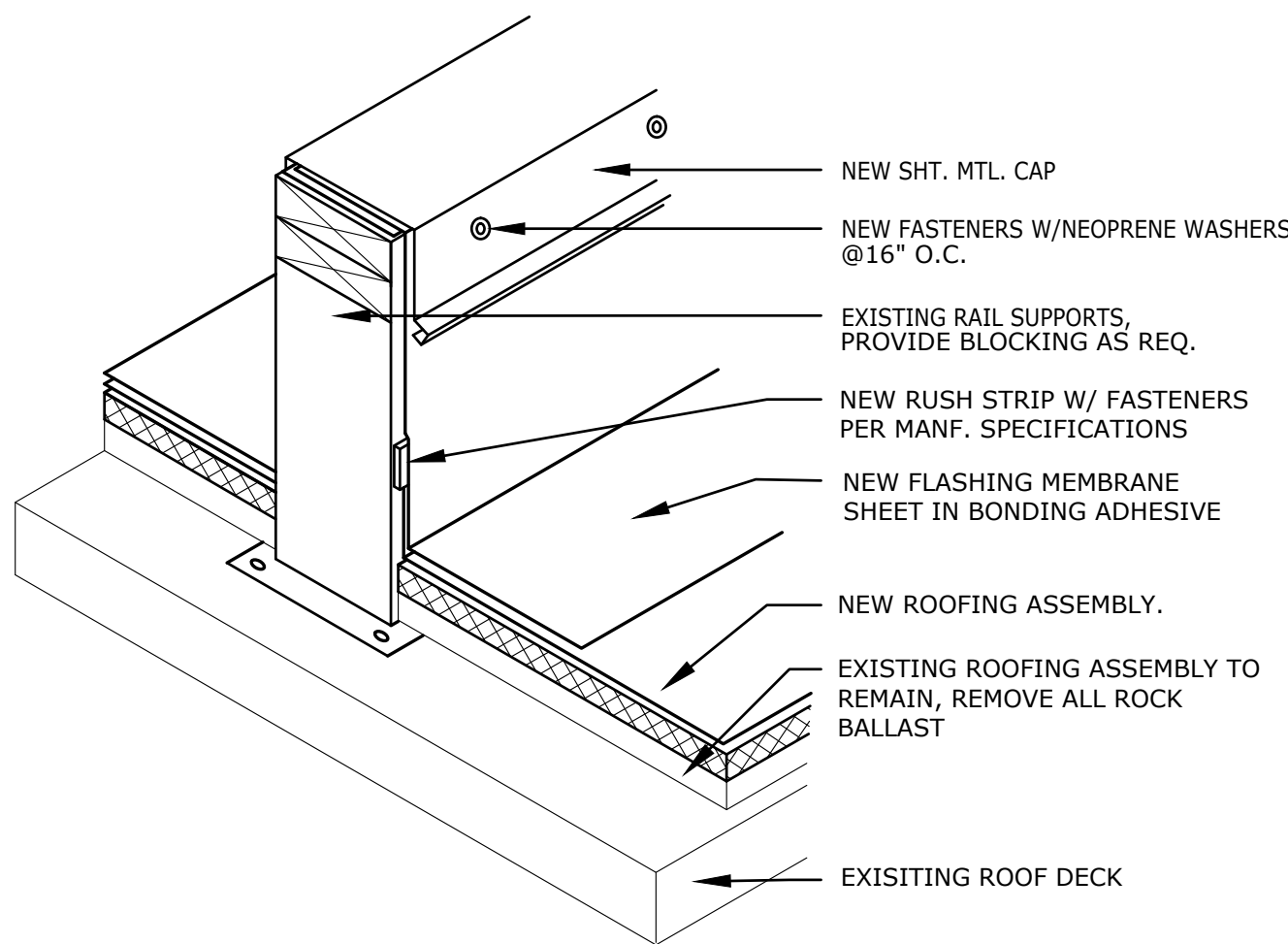
1 GRAVEL STOP DETAIL (A & B)
SCALE: NTS



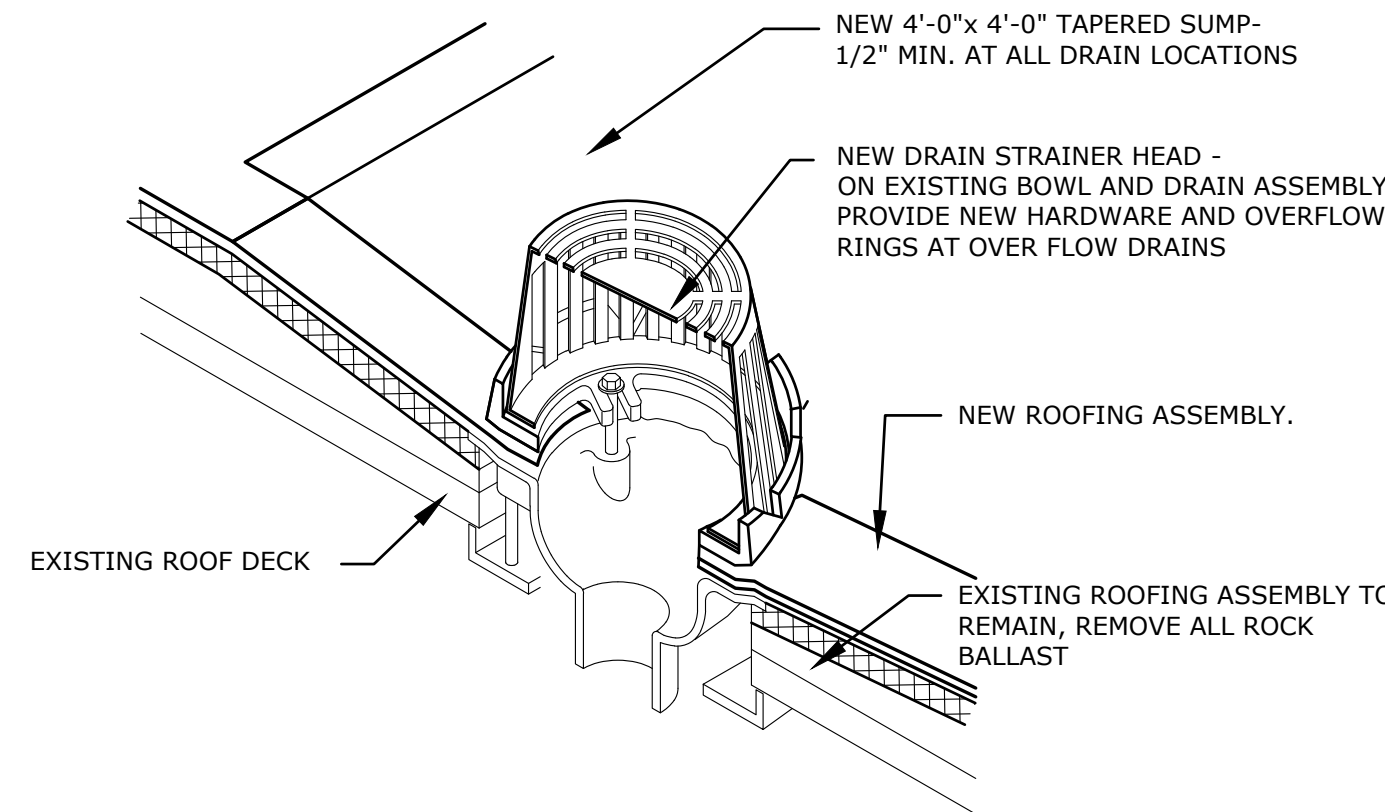
2 CURB DETAIL
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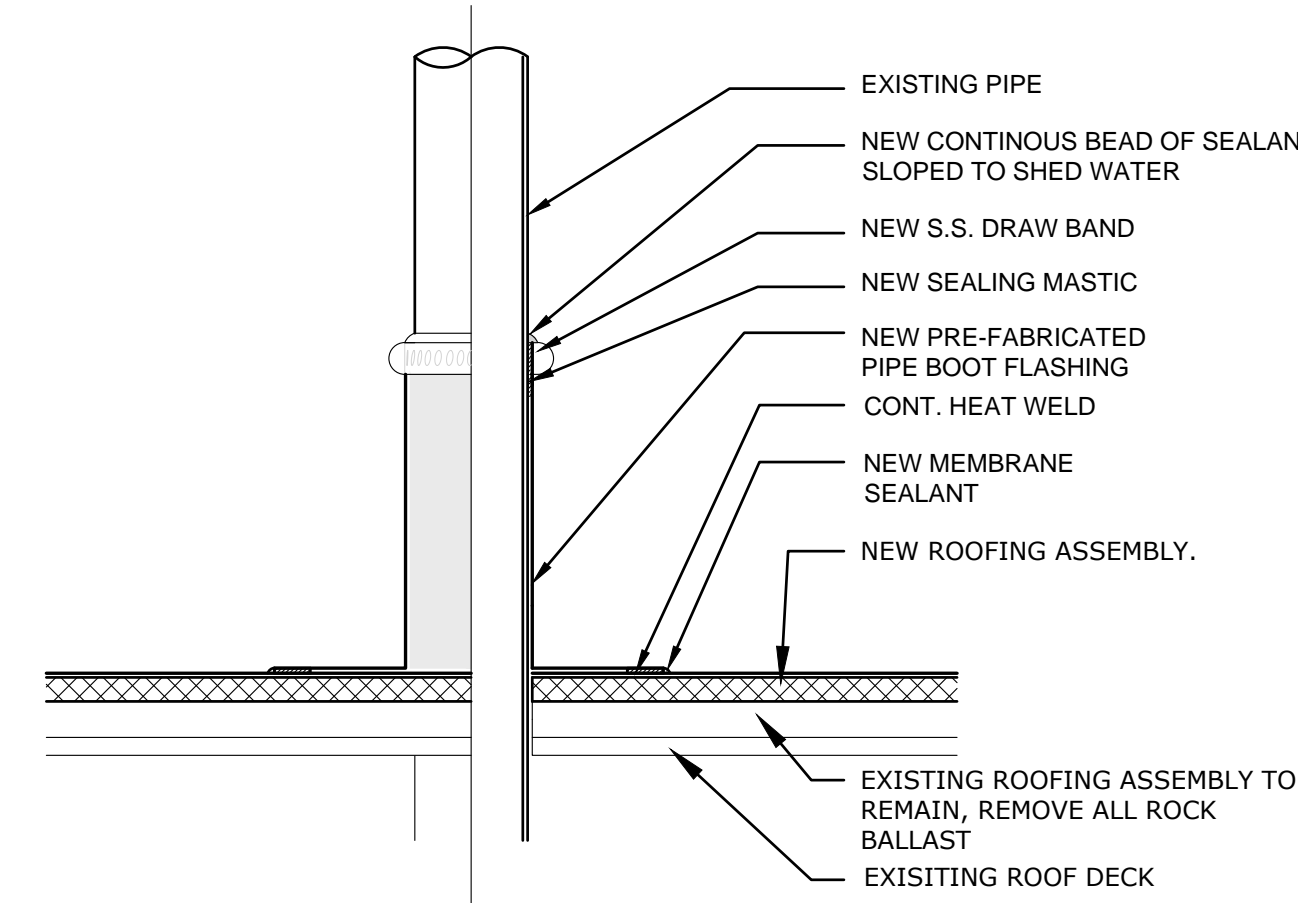
3 FIXED CURB DETAIL
SCALE: NTS



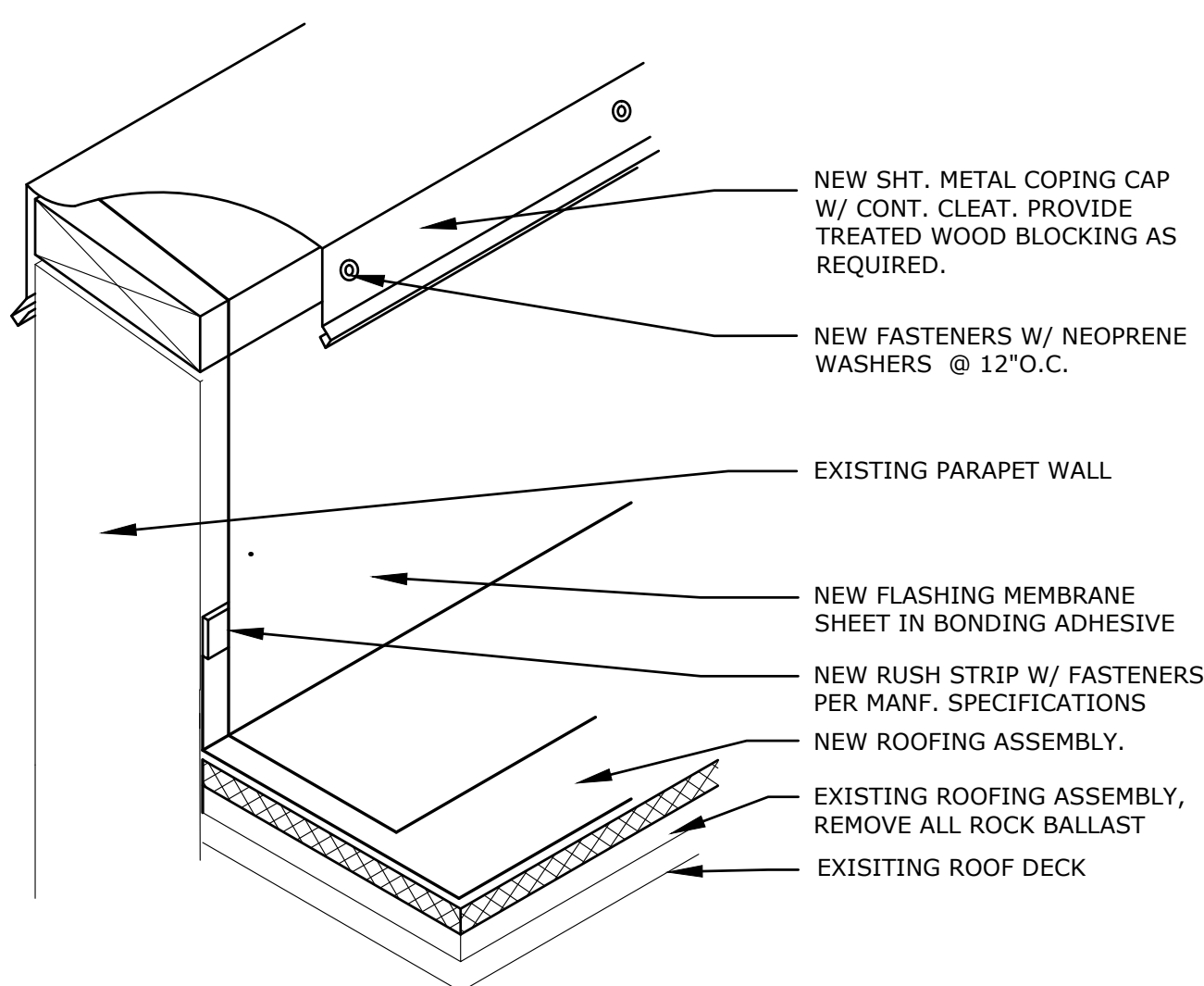
4 RAIL CURB DETAIL
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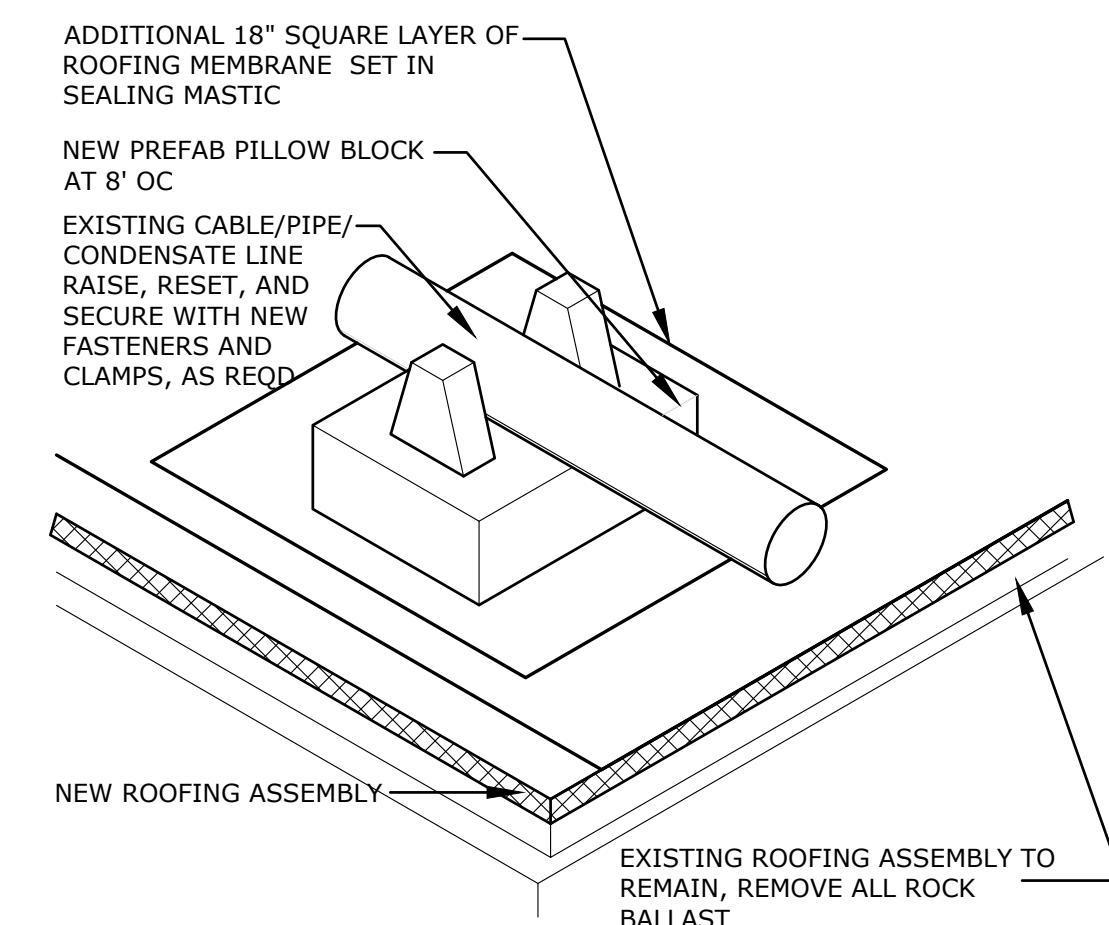
5 ROOF DRAIN DETAIL
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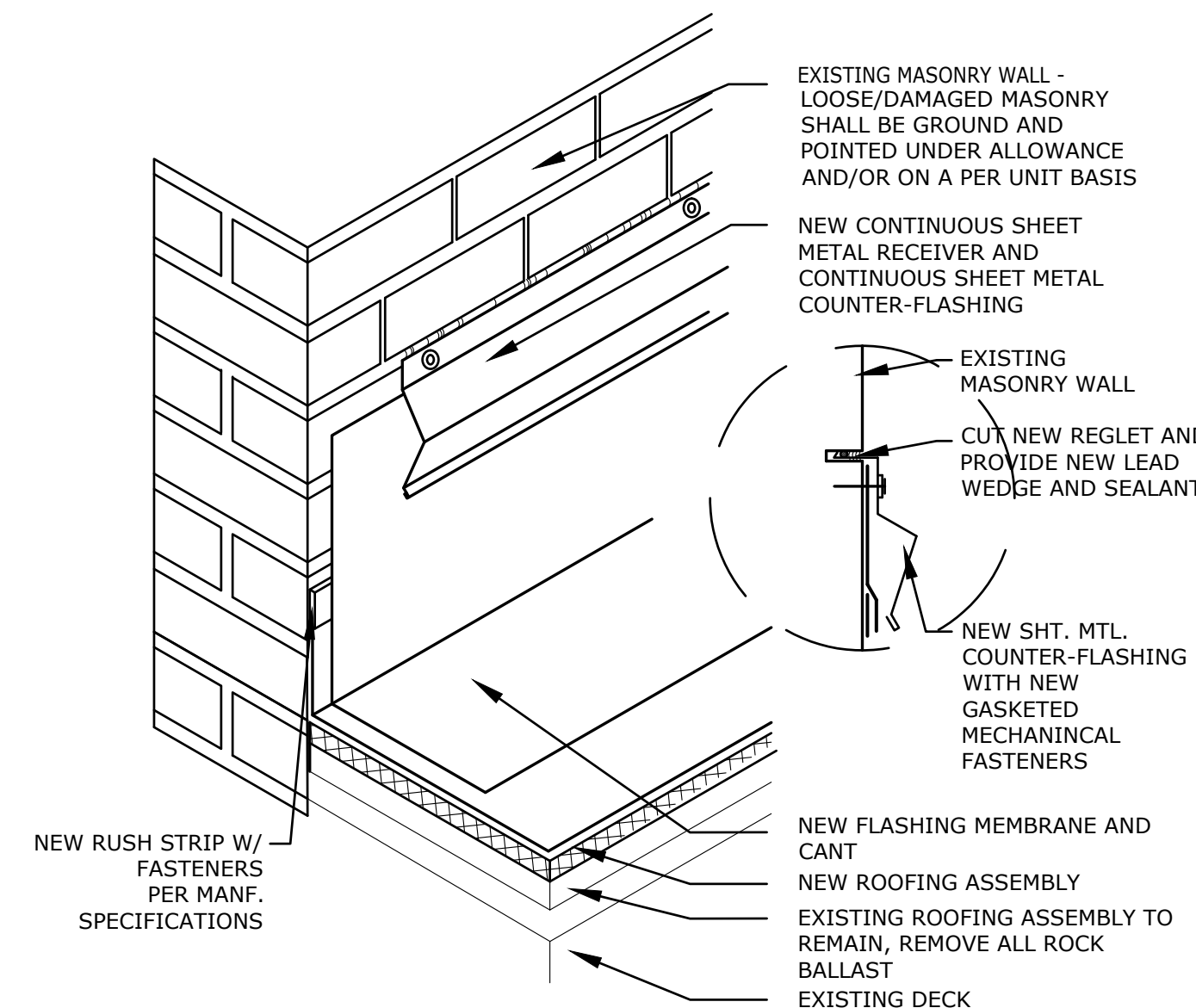
6 PIPE PENETRATION DETAIL
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7 PARAPET WALL DETAIL
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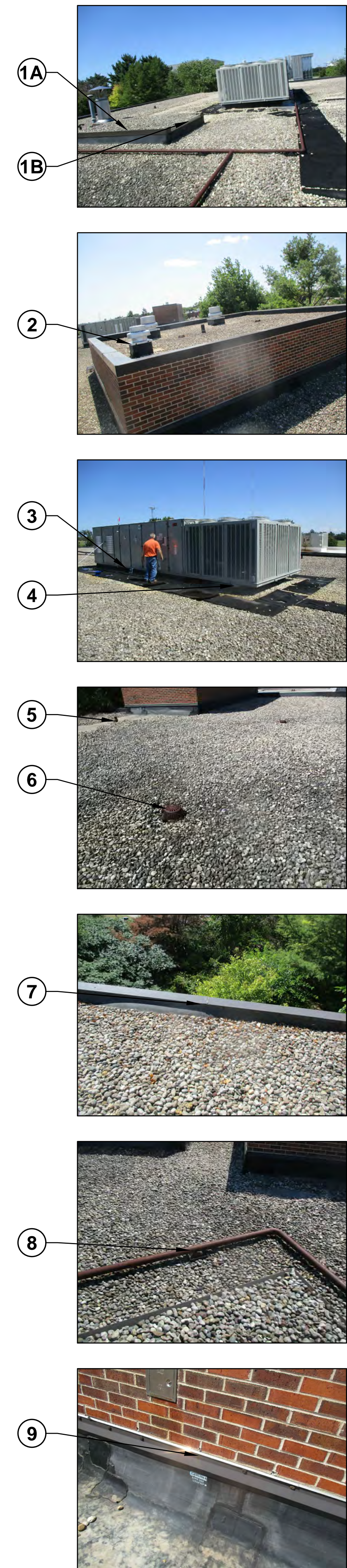


8 PIPE SUPPORT DETAIL
SCALE: NTS



9 MASONRY WALL DETAIL
SCALE: NTS

DETAIL PHOTOS



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Project No.: 19-129

Sheet Title:

DETAILS

Sheet No.:

A-2