WORCESTER MEMORIAL AUDITORIUM ROOF REPLACEMENT - PHASE 1

1 LINCOLN SQUARE - WORCESTER, MA 01605

JUNE 18, 2025 - BID SET

LOCUS PLAN

OWNER

CITY OF WORCESTER

WORCESTER REDEVELOPMENT AUTHORITY - ECONOMIC DEVELOPMENT
CITY HALL, 4TH FLOOR, 455 MAIN ST - WORCESTER, MA 01605

DEPARTMENT OF PUBLIC WORKS & PARKS
50 SKYLINE DRIVE - WORCESTER, MA 01604

ARCHITECT

MOUNT VERNON GROUP ARCHITECTS
200 HARVARD MILLS SQUARE
WAKEFIELD, MA 01880
(781) 213-5030

CONSULTANTS

MECHANICAL, PLUMBING, FIRE PROTECTION ENGINEERS
C.A. CROWLEY ENGINEERING
645 County St Ste 6
Taunton, MA 02780
(508) 884-5094

HAZARDOUS MATERIALS
UNIVERSAL ENVIRONMENTAL
12 Brewster Road
Framingham, MA 01702
(508) 628-5486

STRUCTURAL ENGINEER
SOUZA TRUE & PARTNERS, INC.
265 Waltham Street, Third Floor
Waltham, MA 02451
(617) 926-6100

CODE CONSULTANT
R.W. SULLIVAN ENGINEERING
529 Main St # 203
Boston, MA 02129
(617) 523-8227

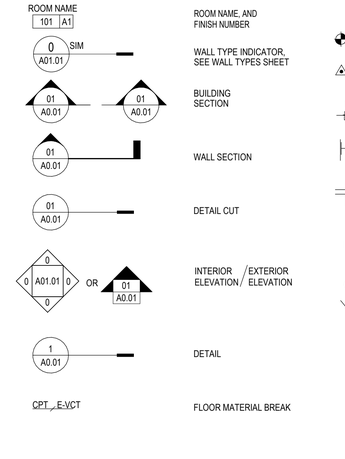
ROOF CONSULTANT
EWING ASSOCIATES
515 Converse St
Longmeadow, MA 01106
(413) 567-9544

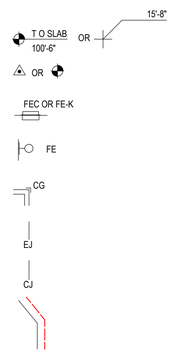
COST ESTIMATOR
FENNESSY CONSULTING
27 Glen Street, Suite 8
Stoughton, MA 02072
(781)-344-4464

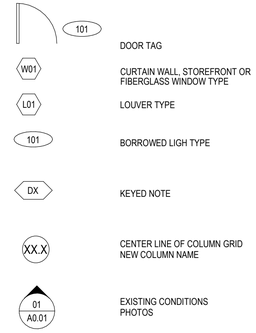
SYMBOLS

MATERIAL SYMBOL KEY

- UNDISTURBED OR COMPACTED SOIL
- CONCRETE
- MASONRY (CMU OR BRICK)
- EXPOSED WOOD TRIM
- WOOD FRAMING
- WOOD SHIM
- PLYWOOD
- PLYWOOD
- GWB
- BATT INSULATION
- RIGID INSULATION
- 1/2" SEALANT JOINT WITH BACKER ROD







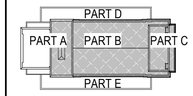
*NOTE: SEE INDIVIDUAL DRAWINGS FOR LEGENDS & DEFINITION OF POCHE USED TO REPRESENT LARGE AREAS OF REPETITIVE MATERIALS.

ABBREVIATIONS

@	AT
AB	ANCHOR BOLT
ACOUST	ACOUSTICAL
ACP	ACCESS PANEL
ACT	ACOUSTICAL CEILING TILE
AD	AREA DRAIN
ADO	AUTOMATIC DOOR OPENER
ADJ	ADJUSTABLE
AED	AUTOMATIC EMERGENCY DEFIBRILLATOR/CABINET
AFF	ABOVE FINISH FLOOR
ALUM	ALUMINUM
ANOD	ANODIZED
ASPH	ASPHALT
ASSY	ASSEMBLY
ATTACH	ATTACHMENT
ALT	ALTERNATE
BD OR BRD	BOARD
BF	BARRIER FREE
BITUM	BITUMINOUS
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BO	BOTTOM OF
BOD	BOTTOM OF DECK
BOTT	BOTTOM
BTWN	BETWEEN
CB	CATCH BASIN
CEM	CEMENT
CFMF	COLD FORM METAL FRAMING
CG	CORNER GUARD (SS)
CJ	CONTROL JOINT
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CORR	CORRIDOR
CL	CENTER LINE
CLR	CLEAR
CONN	CONNECT
CONT	CONTINUOUS
CP	CEMENT PLASTER
CPT	CARPET
CSK	COUNTERSINK
CT	CERAMIC TILE
CW	CURTAINWALL
D	CLOTHES DRYER
DBL	DOUBLE
DEMO	DEMOLISH
DF	DRINKING FOUNTAIN
DIA, Ø	DIAMETER
DN	DOWN
DO	DITTO OR REPEAT ADJACENT ELEMENT
DR	DOOR
DS	DOWNSPOUT
DWGS	DRAWINGS
EA	EACH
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
ELECT	ELECTRICAL
ELEV OR EL	ELEVATION
EMER	EMERGENCY
EMBED	EMBEDMENT
EN	ENAMEL
ENL	ENLARGED
EPS	EXPANDED POLYSTYRENE
EQ	EQUAL
EQUIP	EQUIPMENT
ETR	EXISTING TO REMAIN
EXP	EXPANSION
EXIST OR (E)	EXISTING
EXT	EXTERIOR
EXTR	EXTRUDED
FB	ELECTRICAL FLOOR BOX
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER - SEE SYMBOLS
FE-K	FIRE EXTINGUISHER - KITCHEN TYPE - SEE SYMBOLS
FEC	FIRE EXTINGUISHER CABINET - SEE SYMBOLS
FF	FACTORY FINISH
FH	FIRE HYDRANT
FIN	FINISHED)
FLASH'(G)	FLASHING
FLR	FLOOR
FM	FACTORY MUTUAL
FCIC	FURNISHED BY CONTRACTOR INSTALLED BY CONTRACTOR
FOIC	FURNISHED BY OWNER INSTALLED BY CONTRACTOR
FOIO	FURNISHED BY OWNER INSTALLED BY OWNER
FOM	FACE OF MASONRY
FO	FACE OF
FOB	FACE OF BRICK
FO CMU	FACE OF CMU
FP	FIREPLACE
FRMG	FRAMING
FRP	FIBERGLAS REINFORCED PANEL(S)
FT	FOOT OR FEET
FTR	FIN TUBE RADIATION
GA	GAUGE
GALV	GALVANIZED
GL	GLASS
GLB	GLUE LAMINATED BEAM
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
HBD	HARDBOARD
HC	HANDICAP
HD	HOOD
HDW	HARDWARE
HGT	HEIGHT
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
INT	INTERIOR
IFP	INTERACTIVE FLAT PANEL
INSUL	INSULATION
INSTALL OR INS	INSTALLATION
JAN	JANITOR
JT	JOINT
L	ANGLE
LAM	LAMINATE
LB OR #	POUND
LLH	LONG LEG HORIZONTAL
LOC	LOCATION
LLV	LONG LEG VERTICAL
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MECH	MECHANICAL
M/E/P OR MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MFR	MANUFACTURER
MH	MANHOLE
MIB	MOISTURE INFILTRATION BARRIER
MICRO	MICROWAVE
MIN	MINIMUM
MLDG	MOLDING
MTL	METAL
NATL	NATURAL
NC	NONCOMBUSTIBLE
NIC	NOT IN CONTRACT
NO	NUMBER
NP	NO PAINT
NR	NOT RATED
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
ODC	OVERFLOW DRAIN CAP
OHVD	OVERHEAD
OPER	OPERABLE
OPP	OPPOSITE HAND
OPNG	OPENING
OTS	OPEN TO STRUCTURE-PAINT TYP
OTA	OPEN TO ABOVE
OVHG	OVERHANG
PENE	PENETRATION
PERF	PERFORATED
PFMU	POLISHED FINISH MASONRY UNIT
PI	POST INDICATOR
PJSC	PROJECTION SCREEN
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PNL	PANEL
PNT	PAINT
POLY	EXTRUDED POLYSTYRENE
PR	PAIR
PROT	PROTECTION
PSI	POUND PER SQUARE INCH
PT	PRESSURE TREATED
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
PW OR PLYWD	PLYWOOD
QT	QUARRY TILE
RCP	REFLECTED CEILING PLAN
RAD	RADIUS
RD	ROOF DRAIN
RE	REFER TO
REF	REFRIGERATOR
RES	RESILIENT FLOORING
REQD	REQUIRED
RM	ROOM
RUB	RUBBER FLOORING
RWL	RAIN WATER LEADER
SAC	SUSPENDED ACOUSTICAL CEILING
SAM	SELF ADHERED MEMBRANE
SCHED	SCHEDULE
SC	SOLID CORE
SD	SMOKE DETECTOR
SEC	SECURITY
SF	STOREFRONT
SG	STEEL CORNER GUARD
SHEATH	SHEATHING
SHT	SHEET
SHM	SECURITY HOLLOW METAL
SIM	SIMILAR
SPEC	SPECIFICATION
SPK	SPEAKER
SQ	SQUARE
S/S OR SS	STAINLESS STEEL
STC	SOUND TRANSMISSION COEFFICIENT
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SV	SLEEVE
T & G	TONGUE & GROOVE
TERM	TERMINATION
THRESH	THRESHOLD
TO	TOP OF
TOS	TOP OF SLAB
TRTD	TREATED
TYP	TYPICAL
TS	TUBE STEEL
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
U/S	UNDER SIDE
VCT	VINYL COMPOSITION TILE
VIF	VERIFY IN FIELD
V PLAS	VENEER PLASTER
VERT	VERTICAL
VWC	VINYL WALL COVERING
W	WASHING MACHINE
W/	WITH
WB	WHITE BOARD
WC	WATER CLOSET
WF	WIDE FLANGE
WDO	WINDOW
WD	WOOD
WHS	WELDED HEAD STUD
WOM	WALK OFF MAT
WP	WALL PAD
WR	WATER RESISTANT
WWF	WELDED WIRE FABRIC

DRAWING LIST

SHEET NUMBER	SHEET NAME
GENERAL	
A0.00.1	COVER SHEET - PHASE 1
CR1.00.1	CODE REVIEW & PROJECT SUMMARY - PHASE 1
DEMOLITION	
D2.01.1	OVERALL ROOF PLAN - DEMOLITION - PHASE 1
D2.02.1	ROOF PLAN - PART A - DEMOLITION - PHASE 1
D2.05.1	ROOF PLAN - PART D - DEMOLITION - PHASE 1
D2.06.1	ROOF PLAN - PART E - DEMOLITION - PHASE 1
D2.07.1	ROOF DEMO DETAILS - PHASE 1
ARCHITECTURAL	
A2.00	ROOF WIND ZONES PLAN
A2.01.1	OVERALL ROOF PLAN - NEW - PHASE 1
A2.02.1	PARTIAL ROOF PLAN - PART A - NEW - PHASE 1
A2.05.1	PARTIAL ROOF PLAN - PART D & E - NEW - PHASE 1
A2.07	TYPICAL ROOF DETAILS
A2.08.1	ROOF DETAILS - PHASE 1
A2.09.1	ROOF DETAILS - PHASE 1
A4.01	EXTERIOR ELEVATIONS
A4.02	EXTERIOR ELEVATIONS
A5.01.1	BUILDING SECTIONS - PHASE 1
A7.01.1	ENLARGED STAIR PLANS & SECTIONS - PHASE 1
STRUCTURAL	
S0.01	GENERAL NOTES AND TYPICAL DETAILS
S0.02	TYPICAL DETAILS
S0.03	CONCRETE REPAIR NOTES & DETAILS
S0.04	CONCRETE REPAIR DETAILS
S0.05	CONCRETE REPAIR DETAILS
S1.01	PARTIAL ROOF FRAMING PLAN - PHASE 1
PLUMBING	
P000	PLUMBING LEGENDS & DETAILS
P100	PARTIAL ROOF PLAN - PART A
P101	PARTIAL BALCONY PLAN - PART D & E



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

COVER SHEET - PHASE 1

MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103

413 592 9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

A0.00.1

PROJECT INFORMATION:

PROJECT NAME: WORCESTER MEMORIAL AUDITORIUM ROOF REPLACEMENT - PHASE 1

PROJECT LOCATION: 1 LINCOLN SQUARE, WORCESTER, MA 01605

PROPOSED USE: VACANT / UNOCCUPIED

OWNER: CITY OF WORCESTER

AUTHORIZED AGENT: TIMOTHY L. BOUCHER, PHYSICAL PLANT DIRECTOR
CAPITAL PROJECTS DIVISIONS
DPW & PARKS, CITY OF WORCESTER
508-799-1297, BOUCHERT@WORCESTERMA.GOV

APPLICABLE CODES:

CODE TYPE	APPLICABLE CODE - MODEL TYPE BASIS
BUILDING	780 CMR: MASSACHUSETTS STATE BUILDING CODE, 10TH EDITION (AMENDED 2021 INTERNATIONAL BUILDING CODE (IBC)) (AMENDED 2021 INTERNATIONAL EXISTING BUILDING CODE (IEBC))
FIRE PREVENTION	527 CMR 1: MASSACHUSETTS FIRE PREVENTION REGULATIONS (AMENDED 2021 NFPA 1) M.G.L. CHAPTER 148 SECTION 26G – SPRINKLER PROTECTION
ACCESSIBILITY	521 CMR: MASSACHUSETTS ARCHITECTURAL ACCESS BOARD REGULATIONS
ELECTRICAL	527 CMR 12: MASSACHUSETTS ELECTRICAL CODE (AMENDED 2023 NATIONAL ELECTRICAL CODE)
ELEVATORS	524 CMR: MASSACHUSETTS ELEVATOR CODE (AMENDED 2013 ASME A17.1)
MECHANICAL	780 CMR: MASSACHUSETTS MECHANICAL CODE (AMENDED 2021 INTERNATIONAL MECHANICAL CODE)
PLUMBING	248 CMR: MASSACHUSETTS PLUMBING CODE
ENERGY CONSERVATION	225 CMR: MASSACHUSETTS STRETCH ENERGY CODE (AMENDED 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC))

GENERAL NOTE:
MASSACHUSETTS HAS ADOPTED THE 10TH EDITION OF THE BUILDING CODE WITH A CONCURRENCY PERIOD TO JUNE 30, 2025. THE APPLICABLE CODE FOR A PROJECT IS BASED ON THE BUILDING PERMIT APPLICATION SUBMISSION DATE.

PROJECT DESCRIPTION:

THIS PROJECT IS PLANNED TO BE EXECUTED IN TWO (2) SEPARATE PHASES. THIS IS PHASE 1 AND THE WORK IS LOCATED ON THE FOLLOWING ROOF AREAS: LITTLE THEATRE ROOF, NORTH LITTLE THEATRE ROOF, SOUTH LITTLE THEATRE ROOF, NORTH TERRACE ROOF, SOUTH TERRACE ROOF, AND THE EXISTING HISTORIC SKYLIGHT VENTILATOR ON THE STAGE ROOF.

PHASE 2 WORK WILL BE PERFORMED UNDER A SEPARATE FUTURE CONTRACT FOR THE FOLLOWING ROOF AREAS (NOT IN CONTRACT, NIC): STAGE ROOF, AUDITORIUM ROOF, MEMORIAL HALL ROOF & VENT WELLS, PORTICO ROOF.

THE WORCESTER MEMORIAL AUDITORIUM IS CURRENTLY VACANT AND UNOCCUPIED. THE PROPOSED WORK INVOLVES THE REPLACEMENT OF THE EXISTING ROOFING ASSEMBLIES AT ALL ROOF AREAS WITHIN THIS PHASE, REPAIRS TO ROOF SUBSTRATE AND STRUCTURE, AND ANCILLARY WORK REQUIRED TO ACCOMMODATE THE INTENDED ROOF WORK. ROOFING WORK INCLUDES, BUT IS NOT LIMITED TO: THE REPLACEMENT OF VAPOR BARRIERS, INSULATION, COVERBOARD, MEMBRANES, WOOD BLOCKING AND SUBSTRATES, DRAINS, FLASHINGS, SEALANTS, HATCHES, AND LADDERS.

THE LITTLE THEATRE ROOF, NORTH LITTLE THEATRE ROOF, AND SOUTH LITTLE THEATRE ROOF SHALL RECEIVE NEW PVC MEMBRANE ROOF SYSTEMS WITH INSULATION. THE NORTH TERRACE ROOF AND SOUTH TERRACE ROOF SHALL RECEIVE LIQUID APPLIED ROOF SYSTEMS WITH NO INSULATION.

THE PROJECT INCLUDES ASBESTOS ABATEMENT AT ALL ROOF AREAS WITHIN THIS PHASE. REPAIRS OF EXISTING STEEL AND CONCRETE STRUCTURE SHALL BE PERFORMED AS IDENTIFIED ON THE DRAWINGS. SELECTIVE DEMOLITION SHALL BE PERFORMED AS IDENTIFIED ON THE DRAWINGS. NEW STRUCTURAL FRAMING AND DECKING ARE INCLUDED AT AREAS WHERE DETERIORATED EXISTING STRUCTURE IS TO BE DEMOLISHED. REPOINTING AND RESEALING OF EXISTING MASONRY CAPSTONES AND PARAPETS SHALL BE PERFORMED. NEW FALL PROTECTION SPECIALTIES / EQUIPMENT SHALL BE PROVIDED. PREPARATION OF EXISTING SUBSTRATES SHALL BE PERFORMED AS REQUIRED FOR THE APPLICATION OF THE NEW ROOF SYSTEMS.

SEVERAL UNITS OF EXISTING UNUSED, NON-FUNCTIONAL, OBSOLETE OR UNREQUIRED ROOFTOP EQUIPMENT WILL BE DEMOLISHED AND NOT REPLACED, INCLUDING: HATCHES, LADDERS, EXHAUST FANS, VENTS, AND VENTILATORS. EXISTING OPENINGS BELOW THESE DEMOLISHED EQUIPMENT LOCATIONS WILL BE INFILLED WITH NEW STEEL FRAMING, ROOF DECK, AND ROOFING ASSEMBLY. SEVERAL EXISTING ROOF HATCH OPENINGS WILL BE MODIFIED WITH NEW STRUCTURE.

THE PROJECT INCLUDES THE DELEGATED-DESIGN AND INSTALLATION OF A LONG-TERM TEMPORARY CONSTRUCTION SHRINK WRAP PROTECTION ENCLOSURE THAT WILL SURROUND THE EXISTING HISTORIC SKYLIGHT VENTILATOR ON THE STAGE ROOF.

A FUTURE RENOVATION OF THE BUILDING IS BEING PLANNED AS A SEPARATE PROJECT BY OTHERS. THIS ROOF PROJECT WILL NOT INCLUDE REPLACEMENT PAVERS AT THE EXISTING PATIO TERRACES. PAVERS ARE PLANNED TO BE INCLUDED IN THE FUTURE PROJECT'S SCOPE.

DESCRIPTION OF ALTERNATES:

GENERAL NOTE: SEE DRAWINGS FOR FULL EXTENT OF ALTERATE SCOPE. REFER TO NOTES ON PLANS, SECTIONS, ELEVATIONS, AND DETAILS. THE FOLLOWING DESCRIPTIONS ARE SUPPLEMENTAL NARRATIVES.

ALTERNATE #: NO ALTERNATES

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02024.28

EXISTING BUILDING CODE SUMMARY

(NOTE: ONLY RELEVANT SECTIONS ARE LISTED)

CHAPTER 3 - COMPLIANCE REVIEW METHOD:

REQUIREMENT	RESPONSE
A. COMPLIANCE REVIEW METHOD	A. (301.1.2) WORK AREA REQUIREMENTS FOUND IN CHAPTERS 5 - 13

CHAPTER 5 - CLASSIFICATION OF WORK:

REQUIREMENT	RESPONSE
A. (503.1) ALTERATION - LEVEL 1: REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT OR FIXTURES THAT SERVE THE SAME PURPOSE.	A. WORK MUST COMPLY WITH CHAPTER 7. PROJECT DOES NOT INCLUDE ANY RECONFIGURED SPACE. THERE IS NO WORK AREA PER DEFINITION IN IEBC 202.
B. OCCUPANCY CLASSIFICATION	B. NO CHANGE OF OCCUPANCY. EXISTING NON-SEPARATED MIXED USES: • A-1 (MULTI-PURPOSE AUDITORIUM, THEATER) • A-3 (COURTROOMS) • B (OFFICES)

CHAPTER 7 ALTERATIONS - LEVEL 1:

REQUIREMENT	RESPONSE
A. CONSTRUCTION TYPE: THE BUILDING CONSTRUCTION CONSISTS OF FIRE RESISTANCE RATED NONCOMBUSTIBLE STRUCTURAL ELEMENTS INCLUDING PROTECTED STEEL AND CONCRETE. IT IS LIKELY THAT THE STRUCTURE CAN BE CLASSIFIED AS TYPE IA OR IB CONSTRUCTION.	A. PROJECT SCOPE DOES NOT INCLUDE ANY ALTERATIONS THAT TRIGGER COMPLIANCE WITH THE MINIMUM CONSTRUCTION TYPE OR HEIGHT AND AREA LIMITATIONS SUCH AS AN ADDITION OR CHANGE OF USE. NEW WORK IS ONLY REQUIRED TO BE CONSISTENT WITH THE EXISTING FIRE RATINGS AND MATERIALS AS NEEDED TO MAINTAIN THE EXISTING LEVEL OF PROTECTION (IEBC 701.2)
B. FIRE RESISTANCE RATINGS	B. THE PROJECT DOES NOT INCLUDE ANY NEW BUILDING ELEMENTS THAT REQUIRE A FIRE RESISTANCE RATING. THE WORK MUST BE CONDUCTED IN A MANNER THAT MAINTAINS THE EXISTING LEVEL OF FIRE PROTECTION FOR THE STRUCTURE (IEBC 703.1).
C. ROOF DRAINAGE	C. ROOF DRAINAGE MUST BE MODIFIED TO ACCOMMODATE THE WORK. SECONDARY ROOF DRAINAGE IS NOT REQUIRED AS PART OF A PROJECT THAT INCLUDES RECOVERING OR REPLACING THE EXISTING ROOF COVERING (780 CMR 1511.1 EXC. 2)
D. ROOF FALL PROTECTION: IT IS ULTIMATELY UP TO THE DISCRETION OF THE OWNER ON THE TYPE OF PROTECTION SYSTEM THAT IS PREFERRED TO BE UTILIZED TO COMPLY WITH OSHA 29 CFR § 1910.28(b)(13) WHEN PERFORMING MAINTENANCE ON THE ROOFS.	D. MAINTENANCE OF EQUIPMENT ON THE ROOFS, SUCH AS THE ROOF DRAINS, CONSISTS OF INFREQUENT AND TEMPORARY WORK. SOME EXISTING ROOF DRAINS ARE LOCATED LESS THAN 6' FROM THE EXISTING ROOF EDGE, AND SOME EXISTING PARAPETS ARE SHORTER THAN GUARDRAIL HEIGHT. THE PROJECT INCLUDES AN ALTERATE TO PROVIDE ROOF AND WALL ANCHORS FOR USE IN A PERSONAL FALL PROTECTION SYSTEM. THE ALTERNATE ALSO INCLUDES A BALLASTED FLAGGED GUARDRAIL SYSTEM AT THE TERRACE ROOFS TO COMMUNICATE THE UNSAFE NATURE OF THE EXISTING CONDITIONS. SINCE THE BUILDING IS VACANT, THE PURPOSE IS TO PROTECT ANYONE WHO MAY ACCESS THE ROOF AREAS FROM THE BUILDING'S INTERIOR AS PART OF THE PLANNED FUTURE RENOVATION PROJECT'S PLANNING AND WORK. THE DOORS TO THE TERRACE ROOFS ARE PERMANENTLY SECURED SHUT WITH SCREWED 2X LUMBER OR CHAINS & PADLOCKS. THE EXTERIOR STAIRS OF THE TERRACE ROOFS ARE CLOSED WITH LOCKED IRON GATES. ADDITIONAL PROTECTION WOULD BE REQUIRED TO COMPLY WITH OSHA REGULATIONS DURING MAINTENANCE TASKS AND / OR CONSTRUCTION TASKS ON THIS PROJECT AND FUTURE PROJECTS.

REQUIREMENT	RESPONSE
E. ROOF HATCHES: IEBC 702.6 REQUIRES THAT ANY NEW ROOF HATCHES COMPLY WITH THE MATERIALS AND METHODS REQUIREMENTS OF THE IBC BUT NOT BE FULLY COMPLIANT WITH ITEMS SUCH AS OPENING DIMENSIONS. IEBC 701.2 DOES NOT ALLOW ALTERATIONS THAT WOULD RESULT IN THE BUILDING BEING LESS SAFE THAN ITS EXISTING CONDITION.	E. THE EXISTING ROOF HATCHES ARE DIFFICULT AND UNSAFE TO OPERATE. THE EXISTING LOCATIONS AND SIZES CAUSE THE EXISTING HEAVY STEEL HATCH DOORS TO CONFLICT WITH THE EXISTING HEADWALL FLASHINGS, MAKING THE HATCHES UNABLE TO FULLY OPEN. THE EXISTING LOCATIONS ALSO CREATE DIMENSIONALLY TIGHT CONDITIONS THAT MAKE IT DIFFICULT TO ENSURE WATERTIGHT ROOFING ASSEMBLIES WITH POSITIVE DRAINAGE ARE CONSTRUCTED. THE PROJECT WILL PROVIDE NEW THERMALLY BROKEN ALUMINUM ROOF HATCH PRODUCTS THAT ARE MUCH EASIER TO OPERATE. THE PROJECT MUST COORDINATE WITH THE EXISTING EXTERIOR AND INTERIOR BUILDING COMPONENTS AND SPACE LAYOUT THAT WILL REMAIN IN PLACE. THE NEW ROOF HATCH PRODUCTS WILL HAVE SMALLER OPENING DIMENSIONS THAN THE EXISTING UNITS TO: 1. ELIMINATE THE CONFLICT WITH THE EXISTING HEADWALL FLASHINGS TO PROVIDE A SAFER OPERATION OF THE HATCHES 2. COORDINATE WITH THE EXISTING INTERIOR BUILDING COMPONENTS AND SPACE LAYOUT 3. ALLOW MORE SPACE AT ROOF LEVEL TO CREATE WATERTIGHT CONDITIONS WITH POSITIVE DRAINAGE. IT IS THE ARCHITECT'S UNDERSTANDING THAT THE PLANNED WORK AS DESCRIBED WILL CREATE A SAFER BUILDING THAN ITS EXISTING CONDITION. ***THE BUILDING OFFICIAL IS TO NOTIFY THE ARCHITECT IF ANY EXCEPTION IS TAKEN REGARDING THIS UNDERSTANDING PRIOR TO ISSUING A PERMIT.***
F. ROOF HATCH GUARDRAILS: 29 CFR § 1910.28(b) REQUIRES THAT A ROOF HATCH BE PROVIDED WITH GUARDS SINCE THEY ARE TYPICALLY LEFT IN THE OPEN POSITION WHEN USED AND WOULD BE CONSIDERED AN OPEN WALKING SURFACE.	F. THE PROJECT COMPLIES AND REQUIRES THE ROOF HATCH TO INCLUDE GUARDS.
G. LADDER DIMENSIONAL REQUIREMENTS: THE MINIMUM PERPENDICULAR DISTANCE FROM THE CENTERLINE OF THE STEPS OR RUNGS, OR GRAB BARS, OR BOTH, TO THE NEAREST PERMANENT OBJECT IN BACK OF A LADDER IS 7 INCHES (29 CFR § 1910.23(D)(2)).	G. THE PROJECT SHALL COMPLY.
H. LADDER SIDE RAILS: THE SIDE RAILS OF THROUGH OR SIDE-STEP LADDERS MUST EXTEND AT LEAST 42 INCHES ABOVE THE TOP OF THE ACCESS LEVEL OR LANDING PLATFORM SERVED BY THE LADDER (29 CFR § 1910.23(D)(4)).	H. THE PROJECT SHALL COMPLY.
I. LADDER DIMENSIONAL REQUIREMENTS: LADDERS MUST COMPLY WITH THE DIMENSIONAL REQUIREMENTS OF 29 CFR § 1910.23(D).	I. THE PROJECT SHALL COMPLY.
J. LADDER FALL PROTECTION: 29 CFR § 1910.28(B)(9) REQUIRES THE FOLLOWING FOR LADDERS THAT EXTEND MORE THAN 24' ABOVE A LANDING: 1. EXISTING LADDERS MUST HAVE A FALL ARREST SYSTEM, LADDER SAFETY SYSTEM, OR SAFETY CAGE. 2. NEW / REPLACEMENT LADDERS MUST HAVE A FALL ARREST OR LADDER SAFETY SYSTEM. 3. LANDINGS AND OFFSETS MUST BE PROVIDED EVERY 50 FEET.	J. THE PROJECT SHALL COMPLY.
K. VERTICAL OPENINGS: EXISTING LEVEL OF PROTECTION MUST BE MAINTAINED PER IEBC 701.2 & 704.1.	K. THE PROJECT SHALL COMPLY. THE PROJECT DOES NOT INCLUDE ANY WORK AREAS AND THE SCOPE DOES NOT INCLUDE ANY MODIFICATIONS TO THE EXISTING VERTICAL OPENINGS.
L. INTERIOR FINISHES: ALL NEWLY INSTALLED WALL AND CEILING FINISHES MUST COMPLY WITH 780 CMR TABLE 803.11 (IEBC 702.1, 702.2, & 702.3). NOTE THAT WHERE EXIT STAIRS AND EXIT ACCESS CORRIDORS SERVE MORE THAN ONE USE GROUP, THE MOST RESTRICTIVE INTERIOR FINISH IS REQUIRED.	L. THE PROJECT SHALL COMPLY. THE PROJECT DOES NOT INCLUDE ANY INTERIOR FINISH SCOPE.
M. MEANS OF EGRESS: IEBC 704.1 ONLY REQUIRES THAT THE EXISTING LEVEL OF PROTECTION BE MAINTAINED FOR THE MEANS OF EGRESS. ALSO, THE WORK CANNOT MAKE THE BUILDING LESS SAFE THAN THE EXISTING CONDITION (IEBC 701.2).	M. THE PROJECT SHALL COMPLY. REFER TO "ROOF FALL PROTECTION" SUMMARY REGARDING THE TERRACE ROOFS WHICH INCLUDE PARAPETS THAT HAVE AN EXISTING HEIGHT LESS THAN 42". THE TERRACE ROOFS' EXISTING CONDITIONS WILL NOT BE MADE LESS SAFE BY THIS PROJECT'S SCOPE. A FUTURE PROJECT SHOULD INCREASE THE HEIGHT OF THE PARAPET OR A NEW GUARD PROVIDED THAT IS 42" HIGH WITH OPENINGS THAT PROHIBIT A 4" SPHERE FROM PASSING THROUGH (780 CMR 1015.3 & 1015.4).

REQUIREMENT	RESPONSE
N. FIRE PROTECTION SYSTEMS: IEBC 703.1 ONLY REQUIRES THAT THE EXISTING LEVEL OF FIRE PROTECTION BE MAINTAINED.	N. THE PROJECT SHALL COMPLY.
O. ENERGY CODE PROVISIONS (EXISTING BUILDINGS): THE BUILDING IS SUBJECT TO THE PRESCRIPTIVE REQUIREMENTS OF THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) WITH MASSACHUSETTS STRETCH ENERGY CODE AMENDMENTS (225 CMR 23.00).	O. ALTHOUGH THE CITY OF WORCESTER ADOPTS THE OPT-IN SPECIALIZED ENERGY CODE (225 CMR 23.00 APPENDIX CC), IT ONLY APPLIES TO NEW BUILDINGS AND WOULD NOT APPLY TO THIS PROJECT (225 CMR 23.09 SECTION CC101.2). THEREFORE, THE ALTERATIONS TO THE EXISTING BUILDINGS ARE ALLOWED WITHOUT REQUIRING THE ENTIRE BUILDING TO COMPLY WITH THE ENERGY REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION CODE (IECC C503.1). THE ALTERATIONS (NEW ELEMENTS) SHALL CONFORM TO THE ENERGY REQUIREMENTS OF THE IECC AS THEY RELATE TO NEW CONSTRUCTION WHILE ALLOWING UNALTERED PORTIONS TO REMAIN (225 CMR 23.00 SECTIONS C401.2.1 EXC., AND C503.1).
P. ENERGY CODE PROVISIONS (ROOF INSULATION): PER IECC TABLE C402.1.4 AND SECTION 503.2.1, THE ROOF ASSEMBLY AS PART OF A ROOF REPLACEMENT PROJECT MUST HAVE A U-VALUE OF U-0.032 (INSULATION ABOVE ROOF DECK).	P. THE PROJECT COMPLIES. THE EXISTING TERRACE ROOFS DO NOT HAVE INSULATION ABOVE THE ROOF DECK. THEREFORE IECC C503.2.1 WOULD NOT REQUIRE INSULATION BE ADDED AS PART OF A ROOF REPLACEMENT PROJECT. IF THE CAVITY IS EXPOSED BELOW THE ROOF DECK DURING A FUTURE PROJECT, INSULATION WOULD BE REQUIRED PER IECC C503.1 SINCE THE CAVITY WOULD BE EXPOSED AND IECC C503.1 EXC. 4 WOULD NO LONGER BE APPLICABLE. AS INDICATED IN IECC 503.1, COMPLIANCE WITH THE MINIMUM U-VALUE WOULD NOT BE REQUIRED WHERE IT WOULD CREATE A HAZARDOUS CONDITION OR OVERLOAD A SYSTEM. IN AREAS OF THE EXISTING BUILDING THAT CONTAIN EXISTING ELEMENTS SUCH AS LOUVERS (AUDITORIUM ROOF) AND DOORS (TERRACE ROOFS) THAT ARE IN CLOSE PROXIMITY TO THE FINISHED ROOF SURFACE, THE INSULATION WOULD ONLY BE REQUIRED TO A THICKNESS THAT WOULD NOT CAUSE THESE ELEMENTS TO BE OBSTRUCTED CREATING A POTENTIAL HAZARDOUS OR UNSAFE CONDITION. ALSO SINCE 225 CMR 23.00 DOES NOT AMEND OR DELETE IECC 501.5, THE REQUIREMENTS ARE NOT APPLICABLE TO ANY BUILDING ELEMENT WHERE COMPLIANCE WITH THE ENERGY CODE WOULD BE DETRIMENTAL TO THE HISTORIC FORM OR FABRIC OF THE BUILDING AS LONG AS APPROPRIATE DOCUMENTATION IS PROVIDED. DOCUMENTATION CAN BE PROVIDED IF REQUESTED.
Q. STRUCTURAL PROVISIONS FOR EXISTING BUILDINGS (IEBC 707)	Q. THE EXISTING ROOF MEMBERS, DIAPHRAGM CONNECTIONS, AND MASONRY PARAPETS ARE IN COMPLIANCE WITH THE REQUIREMENTS OF THE IEBC AS FOLLOWS: 1. SINCE THE WORK WILL NOT INCREASE THE DEAD LOAD ON THE STRUCTURE BY MORE THAN 5%, THE EXISTING STRUCTURAL MEMBERS ARE NOT REQUIRED TO MEET THE GRAVITY LOAD REQUIREMENTS OF 780 CMR (IEBC 707.2). 2. SINCE THE BUILDING IS SEISMIC DESIGN CATEGORY B, THE EXISTING MASONRY PARAPETS ARE NOT REQUIRED TO BE ANALYZED TO DETERMINE IF ADDITIONAL BRACING IS REQUIRED (IEBC 707.3.1). 3. SINCE THE WIND SPEED (V-ULT) IS 124 MPH, THE ROOF DIAPHRAGM CONNECTION AND ROOF-TO-WALL CONNECTIONS ARE NOT REQUIRED TO BE ANALYZED FOR THE WIND LOADS OF 780 CMR (IEBC 707.3.2).
R. ACCESSIBILITY FOR PERSONS WITH DISABILITIES: ALTERATIONS TO THE BUILDING MUST COMPLY WITH THE REQUIREMENTS OF THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD REGULATIONS (521 CMR).	R. SINCE THE BUILDING IS VACANT AND NOT OPEN TO THE GENERAL PUBLIC, IT IS CURRENTLY NOT SUBJECT TO THE REQUIREMENTS OF 521 CMR (521 CMR 11.1). SINCE THE PROJECT ONLY INCLUDES ROOF REPLACEMENT AND DOES NOT INCLUDE ANY ALTERATIONS TO PRIMARY FUNCTION AREAS OR BUILDING ELEMENTS REQUIRED TO BE ACCESSIBLE BY THE ADA, NO FURTHER UPGRADES ARE REQUIRED FOR ACCESSIBILITY COMPLIANCE. HOWEVER, FOR FUTURE ALTERATIONS TO THE EXISTING BUILDING WHEN THE BUILDING DOES BECOME OPEN TO THE PUBLIC AGAIN, THE REQUIREMENTS OF 521 CMR ARE BASED ON THE COST OF THE PROPOSED WORK. THE COST OF THE FUTURE WORK PLUS ALL WORK PERFORMED ON A BUILDING IN ANY 36 MONTH PERIOD, WHICH COULD INCLUDE THIS PROJECT, MUST BE ADDED TOGETHER IN DETERMINING THE APPLICABILITY OF 521 CMR (521 CMR SECTION 3.5). THE FULL AND FAIR CASH VALUE OF THE EXISTING BUILDING IS DETERMINED BY USING THE 100% EQUALIZED ASSESSED VALUE OF THE BUILDING ON RECORD WITH THE CITY ASSESSOR'S OFFICE.
S. PLUMBING PROVISIONS FOR EXISTING BUILDINGS (ROOF DRAINS): IEBC 702.6 REQUIRES THAT ANY NEW ROOF DRAINS COMPLY WITH THE MATERIALS AND METHODS REQUIREMENTS OF THE IPC BUT NOT BE FULLY COMPLIANT WITH ALL ASPECTS OF CURRENT CODE. IEBC 701.2 DOES NOT ALLOW ALTERATIONS THAT WOULD RESULT IN THE BUILDING BEING LESS SAFE THAN ITS EXISTING CONDITION.	S. THE IEBC ALLOWS FOR REPAIRS AND ALTERATIONS TO A PORTION OF THE EXISTING SYSTEMS (STORMWATER DRAINAGE) WITHOUT REQUIRING THE ENTIRE SYSTEM TO MEET CURRENT CODE. EXISTING ROOF DRAINS AND STORMWATER PIPING HAVE BEEN REVIEWED AND SOME PORTIONS OF THE EXISTING SYSTEM ARE IDENTIFIED AS UNDERSIZED PER CURRENT PLUMBING CODE. THE EXISTING STORMWATER AND DOMESTIC DRAIN SYSTEMS WERE REVIEWED AND ARE CURRENTLY COMBINED WITHIN THE BUILDING AND DISCHARGE FROM THE BUILDING COMBINED. THE PROJECT INCLUDES AN ALTERNATE TO PROVIDE ROOF DRAINS AND STORMWATER PIPING SIZED TO MEET CURRENT CODE. THE ALTERNATE ALSO INCLUDES THE WORK TO SEPARATE STORMWATER AND DOMESTIC DRAINAGE, AND TO PROVIDE NEW STORMWATER DISCHARGE PIPING FROM THE BUILDING TO A MANHOLE OF THE MUNICIPAL DRAINAGE SYSTEM IN THE STREET.

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

CODE REVIEW & PROJECT SUMMARY - PHASE 1

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	
DRAWN BY	DL
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

CR1.00.1

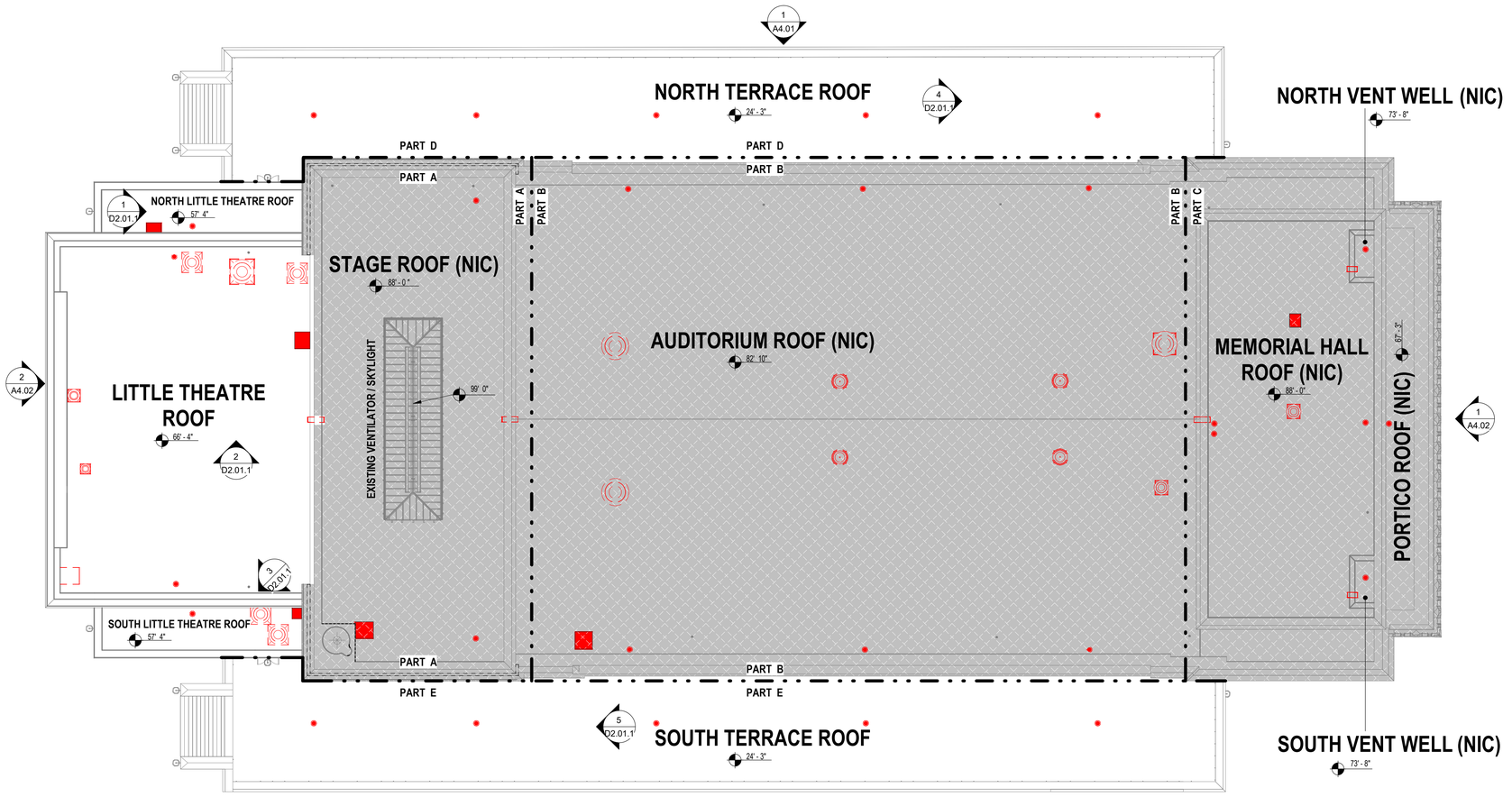
1 NORTH LITTLE THEATER ROOF
N.T.S.

2 LITTLE THEATER ROOF
N.T.S.

3 SOUTH LITTLE THEATER ROOF
N.T.S.

4 NORTH TERRACE ROOF
N.T.S.

5 SOUTH TERRACE ROOF
N.T.S.

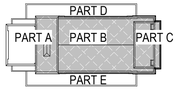


0 DEMOLITION OVERALL ROOF PLAN
1/16" = 1'-0"

ROOF DEMO LEGEND

- **PHASE 2:** ROOF AREAS OF FUTURE WORK - **NOT IN CONTRACT (NIC)**
- EXISTING ROOF ASSEMBLY TO BE DEMOLISHED
- EXISTING ROOF HATCH TO BE DEMOLISHED
- BUILDING COMPONENT TO BE DEMOLISHED
- 1 DEMOLITION SCOPE KEY NOTE

PROJECT NORTH
NORTH



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

OVERALL ROOF PLAN - DEMOLITION - PHASE 1

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info@mvgarchitects.com E

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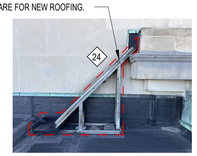
D2.01.1

DEMOLISH AND DISPOSE OF EXISTING WOOD GUTTER STRUCTURE IN FULL. PREPARE FOR NEW ROOFING.

1 EX. EQUIPMENT
N.T.S.



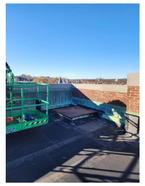
2 EX. GUTTER END
N.T.S.

3 EX. LADDER BASE
N.T.S.

4 EX. NORTH HATCH
N.T.S.

5 EX. EQUIP. & GUTTER
N.T.S.

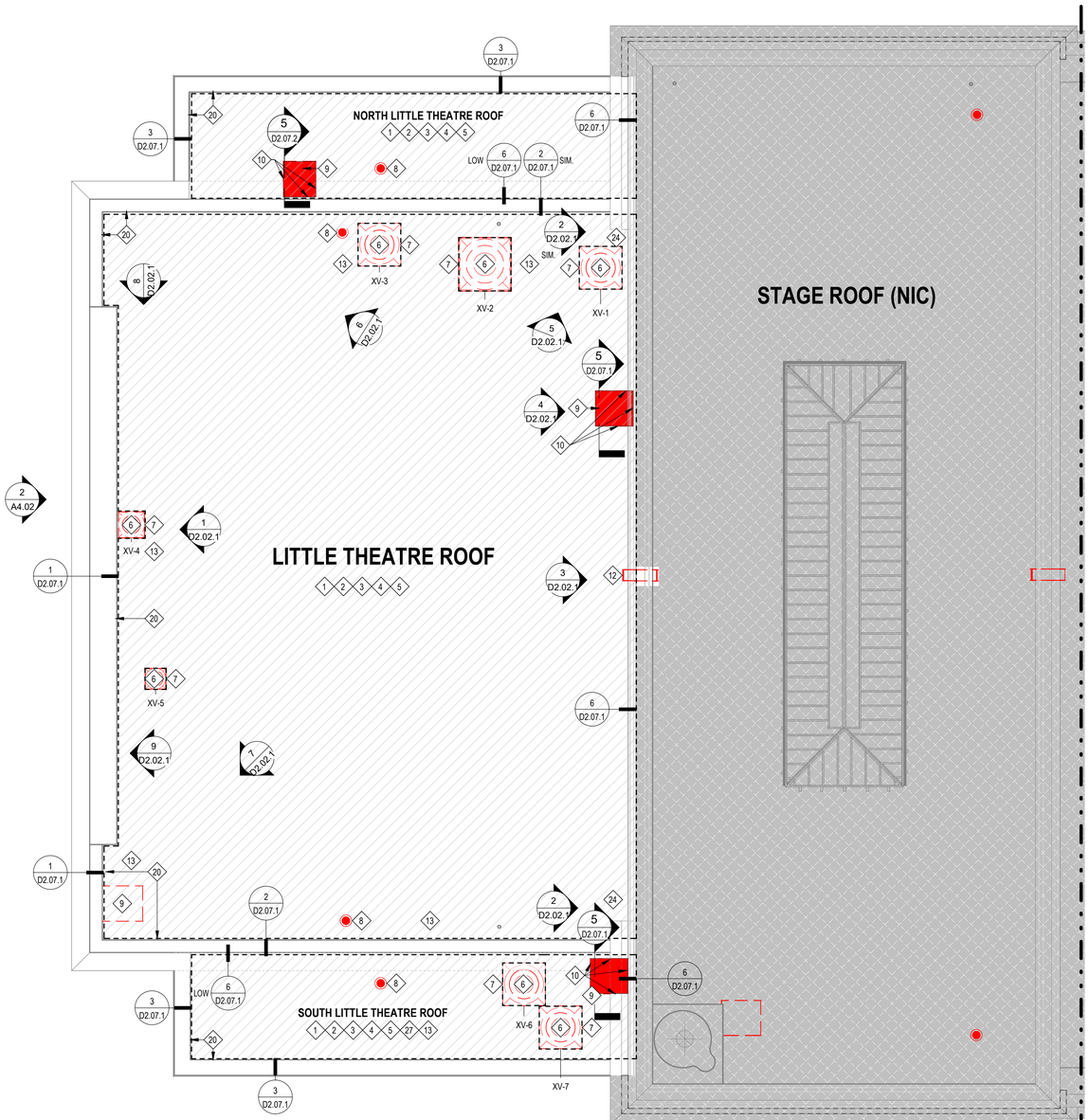
6 EX. PARAPETS
N.T.S.



7 EX. SOUTH HATCH
N.T.S.

8 EX. WEST PARAPET STEP
N.T.S.

9 EX. WEST PARAPET BRICK
N.T.S.



0 ROOF PLAN - PART A - DEMOLITION
1/8" = 1'-0"

EXISTING ROOFTOP EQUIPMENT SCHEDULE	
XV-1	40" VENTILATOR
XV-2	48" VENTILATOR
XV-3	36" VENTILATOR
XV-4	24" VENTILATOR
XV-5	18" VENTILATOR
XV-6	40" VENTILATOR
XV-7	42" VENTILATOR
XV-8	42" VENTILATOR
XV-9	42" VENTILATOR
XV-10	24" GRAVITY VENT
XV-11	24" GRAVITY VENT
XV-12	24" GRAVITY VENT
XV-13	24" GRAVITY VENT
XV-14	44" VENTILATOR
XV-15	30" VENTILATOR
XV-16	30" VENTILATOR

DEMOLITION KEYNOTE LEGEND - PHASE 1

1	PROTECT ALL ROOF OPENINGS AND EDGES THROUGHOUT PERFORMANCE OF CONSTRUCTION.
2	DEMOLISH AND DISPOSE OF EXISTING ROOF SYSTEM DOWN TO EXISTING ROOF DECK SUBSTRATE. REFER TO DETAILS.
3	ABATE AND DISPOSE OF EXISTING BLACK TAR (ACM) ON ROOF DECK / SUBSTRATE.
4	ABATE AND DISPOSE OF EXISTING BLACK TAR (ACM) MASTIC ON ALL EXISTING COPPER/SHEET-METAL, EQUIPMENT, FLASHINGS. TYPICAL.
5	ABATE AND DISPOSE OF EXISTING SEALANTS (ACM) AT ALL EXISTING FLASHINGS, TERMINATION BARS, ROOF EDGE SYSTEMS, EQUIPMENT AND PIPING PENETRATIONS.
6	DEMOLISH AND DISPOSE OF EXISTING MECHANICAL UNIT, CONCRETE CURB, WOOD BLOCKING, AND FLASHINGS.
7	MAKE-SAFE AND DISCONNECT ANY EXISTING INTERIOR MECHANICAL OR ELECTRICAL AS REQUIRED. DEMOLISH AND DISPOSE OF INTERIOR DUCT, WIRING, ACCESSORIES, SUPPORTS, AND APPURTENANCES DOWN TO 5'-0" MIN. BELOW EXISTING ROOF DECK TO FACILITATE THE INFILL SCOPE OF WORK.
8	DEMOLISH AND DISPOSE OF EXISTING ROOF DRAIN FIXTURE. MODIFY EXISTING ROOF SUBSTRATE AS REQUIRED TO ACCEPT AND INSTALL NEW ROOF DRAIN FIXTURE. REFER TO DETAILS, SPECIFICATIONS, AND PLUMBING DRAWINGS.
9	DEMOLISH AND DISPOSE OF EXISTING ROOF HATCH, CURB WOOD BLOCKING, FLASHINGS, ACCESSORIES AND APPURTENANCES. DEMOLISH AND DISPOSE OF EXISTING INTERIOR ROOF ACCESS LADDER.
10	DEMOLISH AND DISPOSE PORTION OF EXISTING CONCRETE CURB AT EXISTING ROOF HATCH. REFER TO DETAIL. COORDINATE FINAL EXTENTS OF DEMOLITION WITH THE REQUIRED CURB DIMENSIONS OF THE NEW HATCH.
12	DEMOLISH AND DISPOSE OF EXISTING ROOF LADDER. PATCH EXISTING ANCHOR PENETRATIONS TO MATCH EXISTING SUBSTRATE.
13	REFER TO STRUCTURAL DRAWINGS. PERFORM DEMOLITION AND DISPOSAL OF EXISTING DETERIORATED ROOF DECK AND STEEL FRAMING AS REQUIRED. PROVIDE TEMPORARY SUPPORT / BRACING OF EXISTING STRUCTURE TO REMAIN AS REQUIRED. PROVIDE TEMPORARY WEATHER PROTECTION DURING PERFORMANCE OF SCOPE.
15	DEMOLISH AND DISPOSE OF EXISTING PAVERS, SOIL, AND VEGETATION.
16	DEMOLISH AND DISPOSE OF EXISTING 1/2" THICK 4'x4' RULED CEMENT SCREED PATIO FINISH. ABATE AND DISPOSE OF EXISTING BLACK TAR MASTIC BETWEEN CEMENT SCREED LAYER AND SLOPED ARCHITECTURAL TOPPING SLAB LAYER. SCARIFY AND GRIND TOPPING SLAB TO PREPARE FOR APPLICATION OF NEW ROOF SYSTEM. REFER TO DETAIL.
17	DEMOLISH AND DISPOSE OF EXISTING TOP ROOF TREAD / PATIO ROOF EDGE ASSEMBLY.
20	DEMOLISH AND DISPOSE OF EXISTING FLASHING IN JOINT BENEATH EXISTING CORNICE CAPSTONES.
22	SALVAGE AND STORE EXISTING TERRACE DOORS, FRAMES, AND THRESHOLDS. DEMOLISH AND DISPOSE OF EXISTING SILL FLASHING AT EXISTING TERRACE DOOR PORTALS. ABATE SEALANTS.

DEMOLITION KEYNOTE LEGEND - PHASE 1

24	DEMOLISH AND DISPOSE OF EXISTING WOOD GUTTER STRUCTURE IN FULL.
25	CUT, MODIFY, AND/OR DEMOLISH AND DISPOSE OF EXISTING STEEL RING AT TERRACE ROOF DRAIN. MODIFY EXISTING CONCRETE SLAB AS REQUIRED TO ACCEPT NEW ROOF DRAIN FIXTURE AND SUMP RECEIVER. DEMOLISH AND DISPOSE OF 25 SF OF EXISTING INTERIOR PLASTER CEILINGS AS REQUIRED TO GAIN ACCESS TO EXISTING PLUMBING AND PERFORM WORK. AVOID EXISTING HISTORIC PLASTER CEILING MOULDINGS IF POSSIBLE. REFER TO DETAILS, SPECIFICATIONS, AND PLUMBING DRAWINGS.
26	DEMOLISH AND DISPOSE OF EXISTING HEADWALL FLASHING AND / OR TERMINATION BAR AND MEMBRANE AT ENTIRE LENGTH OF TERRACES. ABATE SEALANTS, TYPICAL.
27	DEMOLISH AND DISPOSE OF DETERIORATED PRECAST GYPSUM PANEL ROOF DECK AND STEEL FRAMING. REFER TO STRUCTURAL DRAWINGS.

ROOF DEMO LEGEND

PHASE 2: ROOF AREAS OF FUTURE WORK - **NOT IN CONTRACT (NIC)**

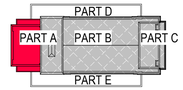
EXISTING ROOF ASSEMBLY TO BE DEMOLISHED

EXISTING ROOF HATCH TO BE DEMOLISHED

BUILDING COMPONENT TO BE DEMOLISHED

1 DEMOLITION SCOPE KEY NOTE

PROJECT NORTH
NORTH



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

ROOF PLAN - PART A - DEMOLITION - PHASE 1

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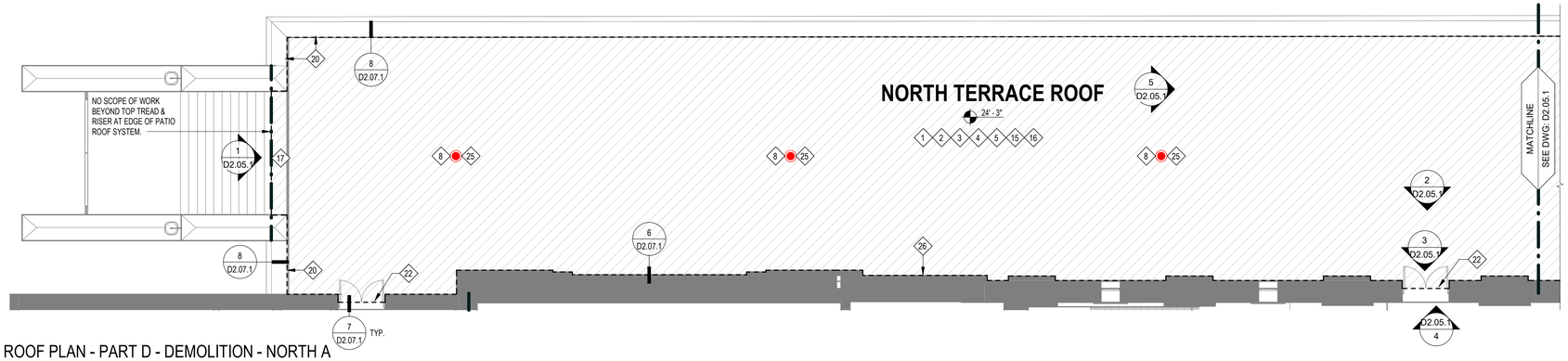
DRAWING INFORMATION

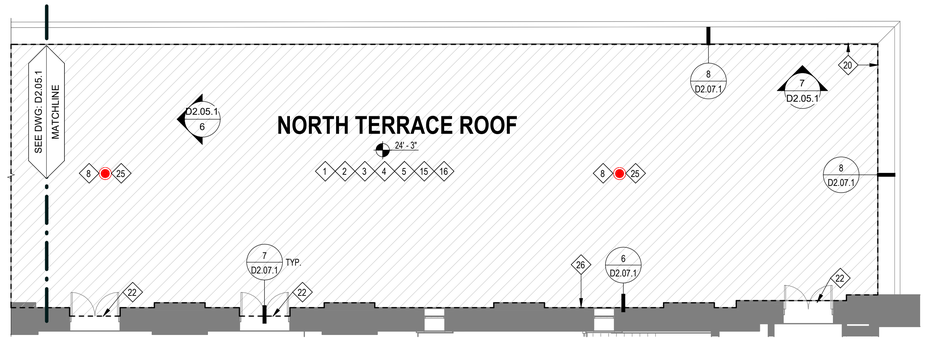
SCALE	As indicated
DRAWN BY	DL
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

D2.02.1



0A ROOF PLAN - PART D - DEMOLITION - NORTH A
1/8" = 1'-0"

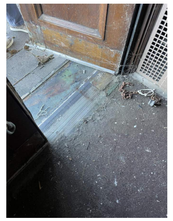


0B ROOF PLAN - PART D - DEMOLITION - NORTH B
1/8" = 1'-0"

1 EX. TOP STAIR RISER & TREAD
N.T.S.

2 EX. DOOR & HEAD WALL
N.T.S.

3 EX. DOOR SILL FLASHING
N.T.S.



4 EX. DOOR THRESHOLD
N.T.S.

5 EX. PATIO ROOF & PAVERS
N.T.S.

6 EX. PATIO ROOF & PAVERS
N.T.S.

7 EX. PARAPET FLASHING
N.T.S.

DEMOLITION KEYNOTE LEGEND - PHASE 1

1	PROTECT ALL ROOF OPENINGS AND EDGES THROUGHOUT PERFORMANCE OF CONSTRUCTION.
2	DEMOLISH AND DISPOSE OF EXISTING ROOF SYSTEM DOWN TO EXISTING ROOF DECK SUBSTRATE. REFER TO DETAILS.
3	ABATE AND DISPOSE OF EXISTING BLACK TAR (ACM) ON ROOF DECK / SUBSTRATE.
4	ABATE AND DISPOSE OF EXISTING BLACK TAR (ACM) MASTIC ON ALL EXISTING COPPER/SHEET-METAL, EQUIPMENT, FLASHINGS. TYPICAL.
5	ABATE AND DISPOSE OF EXISTING SEALANTS (ACM) AT ALL EXISTING FLASHINGS, TERMINATION BARS, ROOF EDGE SYSTEMS, EQUIPMENT AND PIPING PENETRATIONS.
6	DEMOLISH AND DISPOSE OF EXISTING MECHANICAL UNIT, CONCRETE CURB, WOOD BLOCKING, AND FLASHINGS.
7	MAKE-SAFE AND DISCONNECT ANY EXISTING INTERIOR MECHANICAL OR ELECTRICAL AS REQUIRED. DEMOLISH AND DISPOSE OF INTERIOR DUCT, WIRING, ACCESSORIES, SUPPORTS, AND APPURTENANCES DOWN TO 5'-0" MIN. BELOW EXISTING ROOF DECK TO FACILITATE THE INFILL SCOPE OF WORK.
8	DEMOLISH AND DISPOSE OF EXISTING ROOF DRAIN FIXTURE. MODIFY EXISTING ROOF SUBSTRATE AS REQUIRED TO ACCEPT AND INSTALL NEW ROOF DRAIN FIXTURE. REFER TO DETAILS, SPECIFICATIONS, AND PLUMBING DRAWINGS.
9	DEMOLISH AND DISPOSE OF EXISTING ROOF HATCH, CURB WOOD BLOCKING, FLASHINGS, ACCESSORIES AND APPURTENANCES. DEMOLISH AND DISPOSE OF EXISTING INTERIOR ROOF ACCESS LADDER.
10	DEMOLISH AND DISPOSE PORTION OF EXISTING CONCRETE CURB AT EXISTING ROOF HATCH. REFER TO DETAIL. COORDINATE FINAL EXTENTS OF DEMOLITION WITH THE REQUIRED CURB DIMENSIONS OF THE NEW HATCH.
12	DEMOLISH AND DISPOSE OF EXISTING ROOF LADDER. PATCH EXISTING ANCHOR PENETRATIONS TO MATCH EXISTING SUBSTRATE.
13	REFER TO STRUCTURAL DRAWINGS. PERFORM DEMOLITION AND DISPOSAL OF EXISTING DETERIORATED ROOF DECK AND STEEL FRAMING AS REQUIRED. PROVIDE TEMPORARY SUPPORT / BRACING OF EXISTING STRUCTURE TO REMAIN AS REQUIRED. PROVIDE TEMPORARY WEATHER PROTECTION DURING PERFORMANCE OF SCOPE.
15	DEMOLISH AND DISPOSE OF EXISTING PAVERS, SOIL, AND VEGETATION.
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22	SALVAGE AND STORE EXISTING TERRACE DOORS, FRAMES, AND THRESHOLDS. DEMOLISH AND DISPOSE OF EXISTING SILL FLASHING AT EXISTING TERRACE DOOR PORTALS. ABATE SEALANTS.

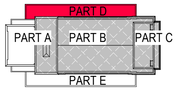
DEMOLITION KEYNOTE LEGEND - PHASE 1

24	DEMOLISH AND DISPOSE OF EXISTING WOOD GUTTER STRUCTURE IN FULL.
25	CUT, MODIFY, AND/OR DEMOLISH AND DISPOSE OF EXISTING STEEL RING AT TERRACE ROOF DRAIN. MODIFY EXISTING CONCRETE SLAB AS REQUIRED TO ACCEPT NEW ROOF DRAIN FIXTURE AND SUMP RECEIVER. DEMOLISH AND DISPOSE OF 25 SF OF EXISTING INTERIOR PLASTER CEILINGS AS REQUIRED TO GAIN ACCESS TO EXISTING PLUMBING AND PERFORM WORK. AVOID EXISTING HISTORIC PLASTER CEILING MOULDINGS IF POSSIBLE. REFER TO DETAILS, SPECIFICATIONS, AND PLUMBING DRAWINGS.
26	DEMOLISH AND DISPOSE OF EXISTING HEADWALL FLASHING AND / OR TERMINATION BAR AND MEMBRANE AT ENTIRE LENGTH OF TERRACES. ABATE SEALANTS, TYPICAL.
27	DEMOLISH AND DISPOSE OF DETERIORATED PRECAST GYPSUM PANEL ROOF DECK AND STEEL FRAMING. REFER TO STRUCTURAL DRAWINGS.

ROOF DEMO LEGEND

- **PHASE 2:** ROOF AREAS OF FUTURE WORK - **NOT IN CONTRACT (NIC)**
- EXISTING ROOF ASSEMBLY TO BE DEMOLISHED
- EXISTING ROOF HATCH TO BE DEMOLISHED
- BUILDING COMPONENT TO BE DEMOLISHED
- DEMOLITION SCOPE KEY NOTE

PROJECT NORTH
NORTH



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WORCESTER, MA 01605

DRAWING TITLE

ROOF PLAN - PART D - DEMOLITION - PHASE 1

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103

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STAMP

DRAWING INFORMATION

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DRAWN BY	DL
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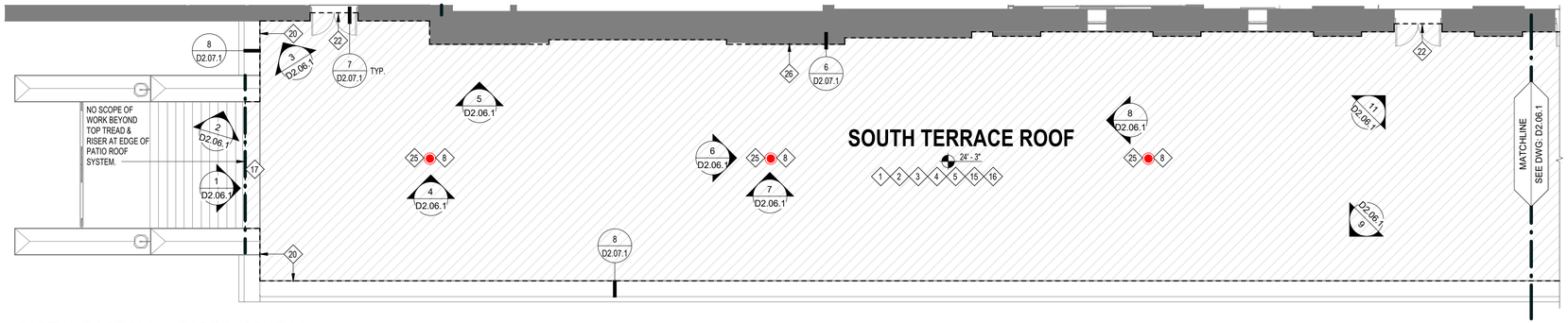
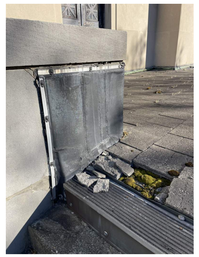
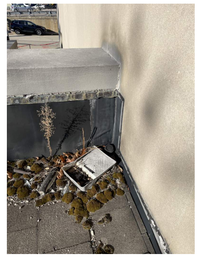


0A PARTIAL ROOF PLAN - PART D- SOUTH A
1/8" = 1'-0"

1 EX. TOP STAIR TREAD & RISER
N.T.S.

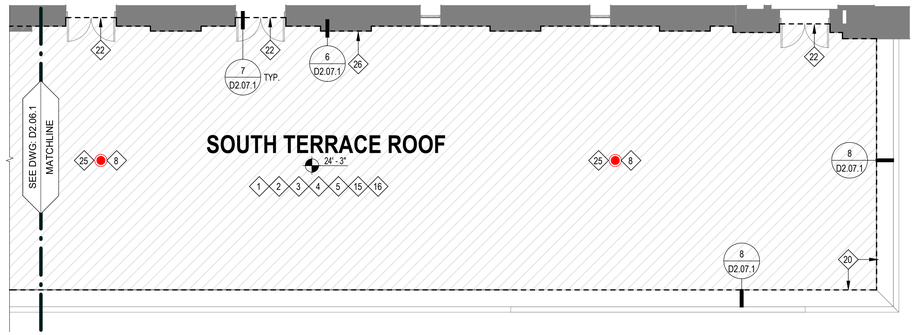


2 EX. PARAPET AT STAIR
N.T.S.

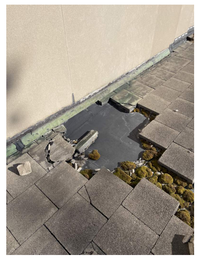


3 EX. PARAPET AT BLDG CRNR
N.T.S.

4 EX. ROOF PAVERS AT DRAIN
N.T.S.



0B PARTIAL ROOF PLAN - PART D- SOUTH B
1/8" = 1'-0"



5 EX. HEADWALL FLASHINGS
N.T.S.

6 EX. RETROFIT DRAIN
N.T.S.

7 EX. DRAIN SUMP
N.T.S.

8 EX. TERRACE ROOF SYSTEMS
N.T.S.

9 EX. CEMENT SCREED FINISH
N.T.S.

10 EX. PARAPET
N.T.S.

11 EX. DOOR SILL
N.T.S.

12 EX. DOOR SILL FLASHING
N.T.S.

DEMOLITION KEYNOTE LEGEND - PHASE 1

1	PROTECT ALL ROOF OPENINGS AND EDGES THROUGHOUT PERFORMANCE OF CONSTRUCTION.
2	DEMOLISH AND DISPOSE OF EXISTING ROOF SYSTEM DOWN TO EXISTING ROOF DECK SUBSTRATE. REFER TO DETAILS.
3	ABATE AND DISPOSE OF EXISTING BLACK TAR (ACM) ON ROOF DECK / SUBSTRATE.
4	ABATE AND DISPOSE OF EXISTING BLACK TAR (ACM) MASTIC ON ALL EXISTING COPPER/SHEET-METAL, EQUIPMENT, FLASHINGS. TYPICAL.
5	ABATE AND DISPOSE OF EXISTING SEALANTS (ACM) AT ALL EXISTING FLASHINGS, TERMINATION BARS, ROOF EDGE SYSTEMS, EQUIPMENT AND PIPING PENETRATIONS.
6	DEMOLISH AND DISPOSE OF EXISTING MECHANICAL UNIT, CONCRETE CURB, WOOD BLOCKING, AND FLASHINGS.
7	MAKE-SAFE AND DISCONNECT ANY EXISTING INTERIOR MECHANICAL OR ELECTRICAL AS REQUIRED. DEMOLISH AND DISPOSE OF INTERIOR DUCT, WIRING, ACCESSORIES, SUPPORTS, AND APPURTENANCES DOWN TO 5'-0" MIN. BELOW EXISTING ROOF DECK TO FACILITATE THE INFILL SCOPE OF WORK.
8	DEMOLISH AND DISPOSE OF EXISTING ROOF DRAIN FIXTURE. MODIFY EXISTING ROOF SUBSTRATE AS REQUIRED TO ACCEPT AND INSTALL NEW ROOF DRAIN FIXTURE. REFER TO DETAILS, SPECIFICATIONS, AND PLUMBING DRAWINGS.
9	DEMOLISH AND DISPOSE OF EXISTING ROOF HATCH, CURB WOOD BLOCKING, FLASHINGS, ACCESSORIES AND APPURTENANCES. DEMOLISH AND DISPOSE OF EXISTING INTERIOR ROOF ACCESS LADDER.
10	DEMOLISH AND DISPOSE PORTION OF EXISTING CONCRETE CURB AT EXISTING ROOF HATCH. REFER TO DETAIL. COORDINATE FINAL EXTENTS OF DEMOLITION WITH THE REQUIRED CURB DIMENSIONS OF THE NEW HATCH.
12	DEMOLISH AND DISPOSE OF EXISTING ROOF LADDER. PATCH EXISTING ANCHOR PENETRATIONS TO MATCH EXISTING SUBSTRATE.
13	REFER TO STRUCTURAL DRAWINGS. PERFORM DEMOLITION AND DISPOSAL OF EXISTING DETERIORATED ROOF DECK AND STEEL FRAMING AS REQUIRED. PROVIDE TEMPORARY SUPPORT / BRACING OF EXISTING STRUCTURE TO REMAIN AS REQUIRED. PROVIDE TEMPORARY WEATHER PROTECTION DURING PERFORMANCE OF SCOPE.
15	DEMOLISH AND DISPOSE OF EXISTING PAVERS, SOIL, AND VEGETATION.
16	DEMOLISH AND DISPOSE OF EXISTING 1/2" THICK 4'x4' RULED CEMENT SCREED PATIO FINISH. ABATE AND DISPOSE OF EXISTING BLACK TAR MASTIC BETWEEN CEMENT SCREED LAYER AND SLOPED ARCHITECTURAL TOPPING SLAB LAYER. SCARIFY AND GRIND TOPPING SLAB TO PREPARE FOR APPLICATION OF NEW ROOF SYSTEM. REFER TO DETAIL.
17	DEMOLISH AND DISPOSE OF EXISTING TOP ROOF TREAD / PATIO ROOF EDGE ASSEMBLY.
20	DEMOLISH AND DISPOSE OF EXISTING FLASHING IN JOINT BENEATH EXISTING CORNICE CAPSTONES.
22	SALVAGE AND STORE EXISTING TERRACE DOORS, FRAMES, AND THRESHOLDS. DEMOLISH AND DISPOSE OF EXISTING SILL FLASHING AT EXISTING TERRACE DOOR PORTALS. ABATE SEALANTS.

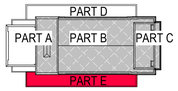
DEMOLITION KEYNOTE LEGEND - PHASE 1

24	DEMOLISH AND DISPOSE OF EXISTING WOOD GUTTER STRUCTURE IN FULL.
25	CUT, MODIFY, AND/OR DEMOLISH AND DISPOSE OF EXISTING STEEL RING AT TERRACE ROOF DRAIN. MODIFY EXISTING CONCRETE SLAB AS REQUIRED TO ACCEPT NEW ROOF DRAIN FIXTURE AND SUMP RECEIVER. DEMOLISH AND DISPOSE OF 25 SF OF EXISTING INTERIOR PLASTER CEILINGS AS REQUIRED TO GAIN ACCESS TO EXISTING PLUMBING AND PERFORM WORK. AVOID EXISTING HISTORIC PLASTER CEILING MOULDINGS IF POSSIBLE. REFER TO DETAILS, SPECIFICATIONS, AND PLUMBING DRAWINGS.
26	DEMOLISH AND DISPOSE OF EXISTING HEADWALL FLASHING AND / OR TERMINATION BAR AND MEMBRANE AT ENTIRE LENGTH OF TERRACES. ABATE SEALANTS, TYPICAL.
27	DEMOLISH AND DISPOSE OF DETERIORATED PRECAST GYPSUM PANEL ROOF DECK AND STEEL FRAMING. REFER TO STRUCTURAL DRAWINGS.

ROOF DEMO LEGEND

- **PHASE 2:** ROOF AREAS OF FUTURE WORK - **NOT IN CONTRACT (NIC)**
- EXISTING ROOF ASSEMBLY TO BE DEMOLISHED
- EXISTING ROOF HATCH TO BE DEMOLISHED
- BUILDING COMPONENT TO BE DEMOLISHED
- 1 DEMOLITION SCOPE KEY NOTE

PROJECT NORTH
NORTH



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

ROOF PLAN - PART E - DEMOLITION - PHASE 1

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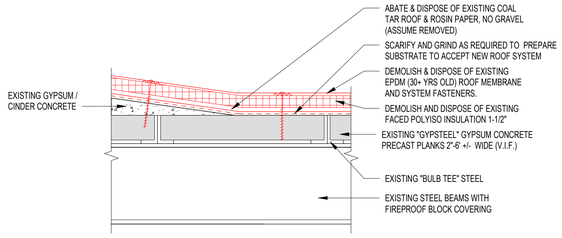
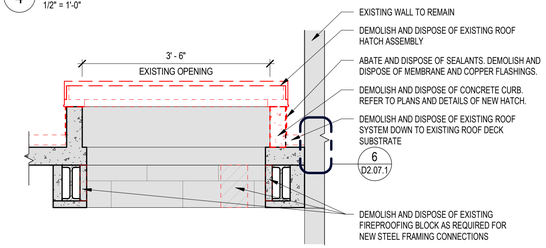
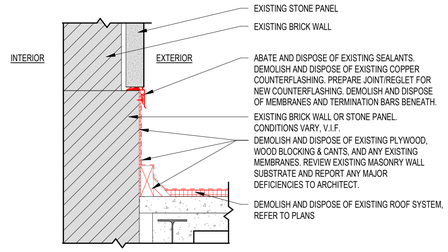


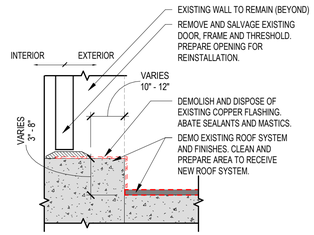
4 TYPICAL EXISTING ROOF SYSTEM DEMOLITION - PART A
1/2" = 1'-0"



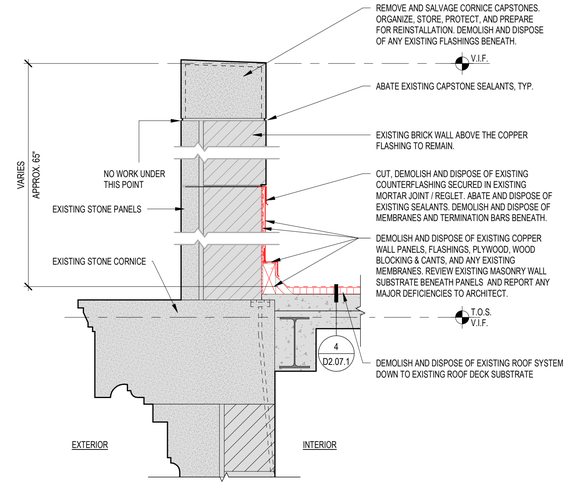
5 DEMOLITION DETAIL - HATCH AND CURB
3/4" = 1'-0"



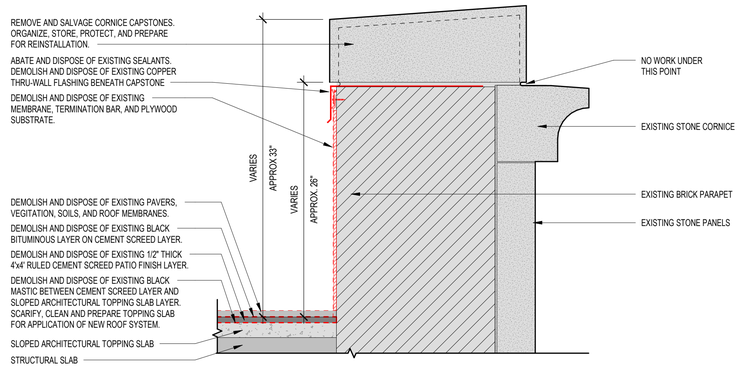
6 DEMO SECTION - TYPICAL HEADWALL FLASHING
3/4" = 1'-0"



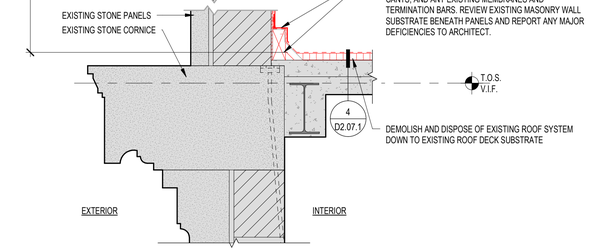
7 DOOR THRESHOLD DETAIL
1 1/2" = 1'-0"



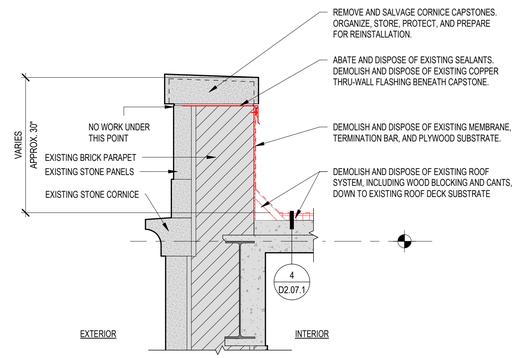
DEMO SECTION - WEST PARAPET - LITTLE THEATRE ROOF (PART A)
1 3/4" = 1'-0"



8 DEMOLITION DETAIL AT TERRACE PARAPET WALL
1 1/2" = 1'-0"



DEMO SECTION - NORTH AND SOUTH PARAPET - LITTLE THEATRE ROOF (PART A)
2 3/4" = 1'-0"



DEMO SECTION - TYP. PARAPET - NORTH & SOUTH LITTLE THEATRE ROOFS (PART A)
3 3/4" = 1'-0"

REVISIONS

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CITY OF WORCESTER

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1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

ROOF DEMO DETAILS - PHASE 1

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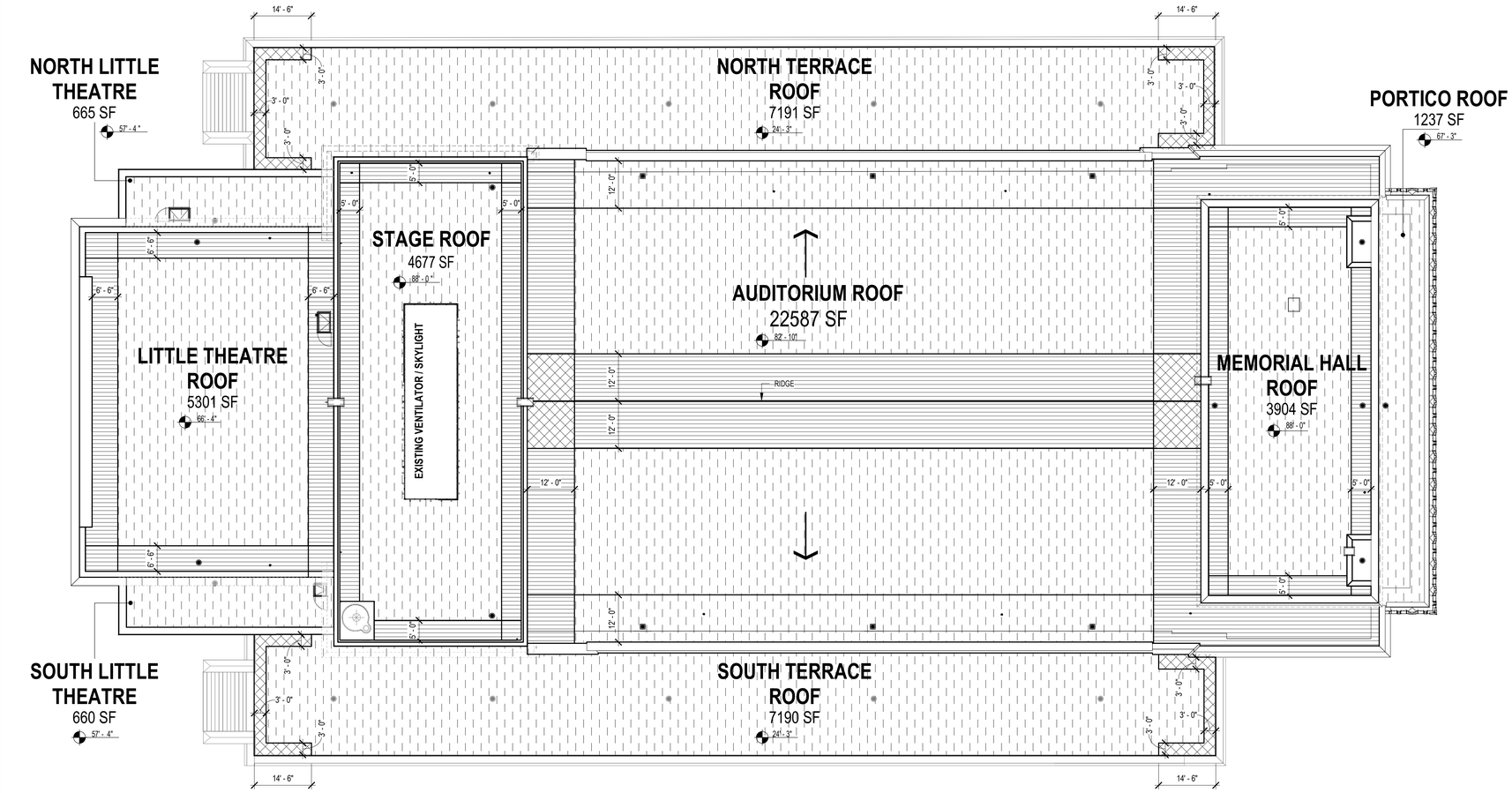

1 ROOF WIND ZONES PLAN
1/16" = 1'-0"

ROOF WIND ZONE LEGEND & NOTES

1. REFER TO STRUCTURAL DRAWINGS FOR DESIGN LOAD INFORMATION INCLUDING DESIGN WIND PRESSURE TABLE.
2. VALUES SHOWN ARE WIND UPLIFT PRESSURES PER ASCE 7-10 IN POUNDS PER SQUARE FOOT.
3. FM = FM GLOBAL (FACTORY MUTUAL INSURANCE COMPANY). *EXAMPLE RATING:* FM 1-150 = FM GLOBAL WIND UPLIFT RATING, 1-150 POUNDS PER SQUARE FOOT OF UPLIFT PRESSURE
4. ROOF SYSTEMS SHALL PERFORM ACCORDING TO THE RATINGS LISTED BELOW.

LITTLE THEATRE ROOF (PHASE 1)

ZONE 1: FIELD OF ROOF =	72 PSF	(FM 1-150)
ZONE 2: PERIMETER =	112 PSF	(FM 1-225)

NORTH LITTLE THEATRE ROOF (PHASE 1)

ZONE 1: FIELD OF ROOF =	110 PSF	(FM 1-225)

SOUTH LITTLE THEATRE ROOF (PHASE 1)

ZONE 1: FIELD OF ROOF =	110 PSF	(FM 1-225)

NORTH TERRACE ROOF (PHASE 1)

ZONE 1: FIELD OF ROOF =	69 PSF	(FM 1-150)
ZONE 3: CORNER =	91 PSF	(FM 1-195)

SOUTH TERRACE ROOF (PHASE 1)

ZONE 1: FIELD OF ROOF =	69 PSF	(FM 1-150)
ZONE 3: CORNER =	91 PSF	(FM 1-195)

STAGE ROOF (PHASE 2)

ZONE 1: FIELD OF ROOF =	77 PSF	(FM 1-165)
ZONE 2: PERIMETER =	120 PSF	(FM 1-270)

AUDITORIUM ROOF (PHASE 2)

ZONE 1: FIELD OF ROOF =	103 PSF	(FM 1-225)
ZONE 2: PERIMETER =	150 PSF	(FM 1-330)
ZONE 3: CORNER =	179 PSF	(FM 1-370)

MEMORIAL HALL ROOF (PHASE 2)

ZONE 1: FIELD OF ROOF =	77 PSF	(FM 1-165)
ZONE 2: PERIMETER =	120 PSF	(FM 1-270)

PORTICO ROOF (PHASE 2)

ZONE 1: FIELD OF ROOF =	110 PSF	(FM 1-225)

WIND ZONE DIMENSIONS

ZONE 2 - PERIMETER
- A. LITTLE THEATRE ROOF: FM 1-210, 6'-6" WIDTH MIN.
- B. STAGE ROOF: FM 1-225, 5'-0" WIDTH MIN.
- C. AUDITORIUM ROOF: FM 1-285, 12'-0" WIDTH MIN.
- D. MEMORIAL HALL ROOF: FM 1-225, 5'-0" WIDTH MIN.

ZONE 3 - CORNERS
- A. NORTH TERRACE ROOF (L-SHAPED): FM 1-165, 3'-0" WIDTH X 14'-6" LENGTH MIN.
- B. SOUTH TERRACE ROOF (L-SHAPED): FM 1-165, 3'-0" WIDTH X 14'-6" LENGTH MIN.
- C. AUDITORIUM ROOF: FM 1-330, 12'-0" WIDTH X 12'-0" LENGTH MIN.

PROJECT NORTH
NORTH

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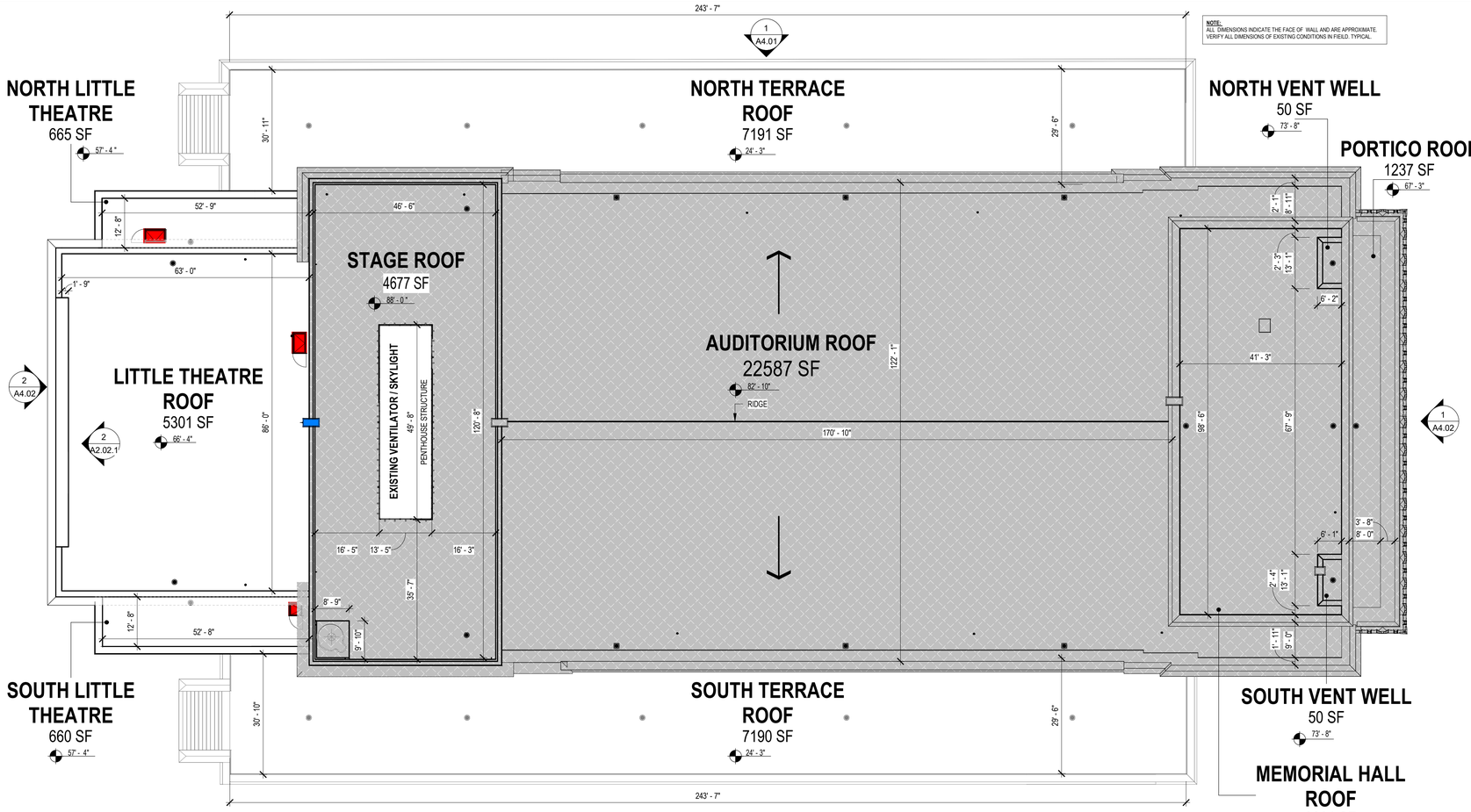


1 OVERALL ROOF PLAN - PHASE 1

1/16" = 1'-0"

CONSTRUCTION KEYNOTE LEGEND - PHASE 1

0	PROVIDE ROOF SYSTEM TYPE "A" OVER ENTIRE EXISTING ROOF AREA.
2	PROVIDE ROOF SYSTEM TYPE "C" OVER ENTIRE EXISTING ROOF AREA. ANY EXISTING CONCRETE SUBSTRATE THAT IS SPALLED OR DETERIORATED SHALL BE REMOVED TO SOUND CONCRETE AND REPAIRED WITH REPAIR MORTAR OR NEW CAST CONCRETE. EXISTING STEEL REINFORCEMENT THAT IS CORRODED SHALL BE CLEANED OF THE CORROSION PRIOR TO APPLICATION OF THE REPAIR MORTAR/CONCRETE. SCARIFY / GRIND EXISTING DECK TO REMOVE ALL CONTAMINANTS. REINFORCE ALL CONTROL JOINTS PER MFR. REPAIR ANY MOVING AND NON-MOVING CRACKS PER MFR.
4	THE EXISTING HISTORIC SKYLIGHT / VENTILATOR PENTHOUSE STRUCTURE ON THE STAGE ROOF SHALL REMAIN. PERFORM AND PROVIDE A DELEGATED-DESIGN FOR THE TEMPORARY PROTECTION ENCLOSURE THAT SHALL SURROUND THE EXISTING STRUCTURE. PROVIDE A HEAVY-DUTY 12 MIL. FIRE-RETARDANT, UV-RESISTANT, PREMIUM CONSTRUCTION SHRINK WRAP ASSEMBLY. COLOR SHALL BE WHITE. CREATE A CONTINUOUS WEATHER-TIGHT BARRIER THAT COMPLETELY ENVELOPES THE EXISTING STRUCTURE, INCLUDING BUT NOT LIMITED TO THE EXISTING: VERTICAL WALLS, COPPER PANELS, COUNTERWEIGHT BRACKETS, GUTTERS, DOWNSPOUTS, AND SLOPED SKYLIGHT ROOF. PROVIDE ALL TEMPORARY FRAMEWORK / SCAFFOLD COMPONENTS, ATTACHMENTS, ACCESSORIES, AND MATERIALS REQUIRED TO PROTECT THE EXISTING BUILDING AND PREVENT PUNCTURES OF THE SHRINK WRAP BARRIER. THE ASSEMBLY SHALL REMAIN ON THE EXISTING STRUCTURE FOR A DURATION NO LESS THAN 36 MONTHS. INCLUDE ALL REGULAR MAINTENANCE REQUIRED TO ENSURE THE ASSEMBLY PERFORMS PROPERLY FOR THE ENTIRE 36 MONTH DURATION. ASSUME A MINIMUM OF FIVE (5) MAINTENANCE VISITS, ONE (1) EVERY SIX (6) MONTHS AFTER SUBSTANTIAL COMPLETION. INCLUDE THREE (3) REPLACEMENTS OF THE SHRINK WRAP MEMBRANE. TWO (2) REPLACEMENTS SHALL BE PART OF REGULAR MAINTENANCE. ONE (1) REPLACEMENT SHALL BE TO ADDRESS A FAILURE OF THE MEMBRANE. SUBMIT STAMPED SHOP DRAWINGS AND CALCULATIONS FOR THE FRAMEWORK COMPONENTS AND CONNECTION TO THE EXISTING STRUCTURE, PREPARED BY A STRUCTURAL ENGINEER LICENSED IN MA FOR APPROVAL BY THE ARCHITECT AND SEOR. SUBMIT PRODUCT DATA OF ASSEMBLY COMPONENTS FOR REVIEW AND APPROVAL BY THE ARCHITECT PRIOR TO PROCUREMENT AND INSTALLATION OF MATERIALS. THE CONTRACTOR SHALL REMOVE THE ENTIRE TEMPORARY ASSEMBLY FROM THE SITE AT THE END OF THE 36 MONTH DURATION.
5	INFILL ROOF STRUCTURE AT FORMER MECHANICAL UNIT LOCATION. REFER TO DETAIL AND STRUCTURAL DRAWINGS. MATCH ELEVATIONS OF EXISTING ADJACENT CONSTRUCTION TO CREATE FLUSH AND CONTINUOUS CONDITIONS. EXTEND NEW ROOF SYSTEM OVER INFILLED STRUCTURE. REFER TO THE DETAIL 12/A12.07
7	PROVIDE NEW ROOF DRAIN FIXTURE. INCLUDE MAINTENANCE MARKER. PROVIDE SUMP AS INDICATED ON PLANS. MODIFY EXISTING ROOF SUBSTRATE AS REQUIRED TO ACCEPT NEW ROOF DRAIN FIXTURE. REFER TO DETAILS, SPECIFICATIONS, AND PLUMBING DRAWINGS. EXTEND PLUMBING AND MAKE CONNECTIONS AS REQUIRED.
8	INFILL ROOF STRUCTURE AT FORMER ROOF HATCH LOCATION. REFER TO DETAIL AND STRUCTURAL DRAWINGS. MATCH ELEVATIONS OF EXISTING ADJACENT CONSTRUCTION TO CREATE FLUSH AND CONTINUOUS CONDITIONS. EXTEND NEW ROOF SYSTEM OVER INFILLED STRUCTURE.
9	PROVIDE PARTIAL INFILL TO MODIFY EXISTING ROOF HATCH OPENING AND PROVIDE NEW CURB BUILD-UP. COORDINATE WITH EXISTING CONCRETE CURB TO REMAIN. REFER TO DETAILS. COORDINATE WITH THE MANUFACTURER REQUIREMENTS OF THE NEW HATCH PRODUCT. PROVIDE NEW INTERIOR ROOF ACCESS LADDER MOUNTED TO EXISTING STRUCTURE AND FLOOR BELOW. O'KEEFFE'S 500 ACCESS LADDER OR EQUAL. PROVIDE TELESCOPING SAFETY POST MOUNTED TO TOP TWO RUNGS OF LADDER (BILCO LADDERUP SAFETY POST, OR EQUAL BY O'KEEFFE'S OR OTHERS).
9A	LADDER HEIGHT APPROX. 20'-0" (V.I.F.)
9B	LADDER HEIGHT APPROX. 12'-0" (V.I.F.)
11A	PROVIDE NEW ROOF LADDER WITH PLATFORM AND RETURN LADDER. O'KEEFFE'S 503 HIGH PARAPET ACCESS LADDER OR EQUAL. INCLUDE RAIL AND HARNESS FALL ARREST SYSTEM (OKEEFFES SAF-T-CLIMB POST ACCESSORY, OR EQUAL). INCLUDE ALL INTERMEDIATE BRACKETS, EXTENDED BRACKETS, AND OFF-FLOOR MOUNTING BRACKETS AS REQUIRED. FASTEN INTO EXISTING SUBSTRATE WITH EPOXY ADHESIVE ANCHORS. FLASH AND SEAL BRACKET FASTENERS MOUNTED THROUGH NEW ROOF SYSTEM MEMBRANE OR EXISTING EXTERIOR WALL. FLASH AND SEAL LADDER LEGS AND FLOOR/ROOF-MOUNTED BRACKETS AS REQUIRED. MOUNT LOWEST BRACKETS ABOVE ROOF SYSTEM TERMINATIONS AND AVOID FASTENING BRACKETS THROUGH ROOF MEMBRANE WHERE POSSIBLE.

CONSTRUCTION KEYNOTE LEGEND - PHASE 1

12	REFER TO STRUCTURAL DRAWINGS. PERFORM CLEANING AND REPAIRS OF EXISTING ROOF DECK AND STEEL FRAMING, AND/OR, PROVIDE NEW ROOF DECK AND STEEL FRAMING WHERE EXISTING DETERIORATED COMPONENTS HAVE BEEN DEMOLISHED. PROVIDE TEMPORARY SUPPORT / BRACING OF EXISTING STRUCTURE TO REMAIN AS REQUIRED. PROVIDE TEMPORARY WEATHER PROTECTION DURING PERFORMANCE OF SCOPE.
14	PATCH EXISTING SLOPED ARCHITECTURAL TOPPING SLAB AT EXISTING TERRACE ROOFS AND PRIME AS REQUIRED TO PREPARE SUBSTRATE TO RECEIVE NEW ROOF SYSTEM. COORDINATE WITH MANUFACTURER REQUIREMENTS.
16	PROVIDE NEW PATIO ROOF EDGE ASSEMBLY AT EXISTING CONCRETE STAIRS. REFER TO DETAIL. STAIR RENOVATION SHALL BE PERFORMED AT A LATER DATE BY OTHERS.
19	PROVIDE NEW SILL FLASHING AND SEALANTS AT EXISTING TERRACE DOORS. REFER TO DETAIL. REINSTALL AND RESEAL SALVAGED DOORS, FRAMES, AND THRESHOLDS. MODIFY AND RESEAL EXISTING DOOR THRESHOLDS AS REQUIRED.
20	PROVIDE NEW 30" X 54" THERMALLY BROKEN ALUMINUM ROOF HATCH WITH INTEGRAL/PREFABRICATED INSULATED CURB. COORDINATE WITH CURB DETAILS AND EXISTING CONDITIONS. BILCO MODEL NB-50TB OR EQUAL. INCLUDE ROOF HATCH SAFETY RAILING SYSTEM ACCESSORY (BIL-GUARD 2.0 OR EQUAL).
20A	PROVIDE NEW 36" X 30" THERMALLY BROKEN ALUMINUM ROOF HATCH WITH INTEGRAL/PREFABRICATED INSULATED CURB. COORDINATE WITH CURB DETAILS AND EXISTING CONDITIONS. BILCO MODEL S-50TB OR EQUAL. INCLUDE ROOF HATCH SAFETY RAILING SYSTEM ACCESSORY (BIL-GUARD 2.0 OR EQUAL).
21	REFER TO STRUCTURAL DRAWINGS FOR REPAIR NOTES AND DETAILS. REMOVE AND DISPOSE OF CONCRETE ENCASEMENT / FIREPROOFING AT BEAM AS REQUIRED TO GAIN ACCESS TO STEEL BEAM. REVIEW CONDITION OF EXISTING STEEL BEAM. CLEAN AND REMOVE ALL CORROSION. REPAIR STEEL BEAM PER STRUCTURAL DRAWINGS. REPAINT EXISTING STEEL BEAM WITH RUST INHIBITIVE PAINT. REVIEW CONDITION OF EXISTING CONCRETE SLAB. REMOVE AND DISPOSE OF DETERIORATED CONCRETE BACK TO SOUND CONCRETE - APPROX. 2" DEPTH. CLEAN, REPAIR, AND PREPARE EXISTING STEEL MESH AND/OR REBAR. REPAIR HORIZONTAL UNDERSIDE SURFACE OF CONCRETE SLAB. DEMOLISH AND DISPOSE OF EXISTING INTERIOR PLASTER CEILING SYSTEM AS REQUIRED TO ACCESS WORK LOCATION. APPLY 1-HOUR SPRAY APPLIED FIREPROOFING AT LOCATIONS WHERE EXISTING CONCRETE ENCASEMENT / FIREPROOFING WAS REMOVED.
22	PROVIDE FALL PROTECTION ROOF ANCHORS AND CABLE SYSTEM. CONNECT TO EXISTING STRUCTURAL STEEL BEAMS, GIRDERS, OR TRUSSES BELOW (VERIFY EXISTING LOCATIONS IN FIELD). SPACE ANCHORS AT 30'-0" O.C. MAX. FLASH INTO NEW MEMBRANE ROOF SYSTEM. PROVIDE REINFORCEMENT OF EXISTING STRUCTURE AS REQUIRED. REFER TO STRUCTURAL DRAWINGS.
28	STABILIZE AND REPOINT EXISTING BRICK MASONRY OF LITTLE THEATRE WEST PARAPET WALL PRIOR TO INSTALLATION OF NEW ROOF SYSTEM. REFER TO SPECIFICATIONS, DETAILS, AND ELEVATION.
30	EXISTING 16" DIAMETER X 12" DEEP STEEL RING CAST INTO EXISTING CONCRETE SLAB AT TERRACE ROOF DRAIN LOCATIONS. MODIFY EXISTING CONDITIONS AS REQUIRED TO ACCOMMODATE INSTALLATION OF NEW DRAIN FIXTURE, NEW ROOF SYSTEM, AND PLUMBING CONNECTIONS. REPAIR AND/OR MODIFY SURROUNDING CONCRETE SLAB AS REQUIRED. REFER TO DETAIL.
31	INSTALL NEW 16 OZ COPPER COUNTERFLASHING IN JOINT BENEATH STAIR WALL CAPSTONE. TERMINATE NEW ROOF MEMBRANE BENEATH NEW FLASHING. PROVIDE VERTICAL TERMINATION BAR DOWN TO TOP TREAD CONDITION AND SEAL COMPLETELY. REFER TO DETAIL.
32	PROVIDE A BALLASTED WARNING LINE SYSTEM 15'-0" BACK FROM TERRACE PARAPET AND STAIRS. INCLUDE WEIGHTED BASES, POSTS, NYLON-COATED GALVANIZED CABLE, ALUMINUM WARNING FLAGS, AND OUTRIGGERS AT ENDS OF SYSTEM. REFER TO DETAIL.
36	REMOVE AND SALVAGE CORINCE CAPSTONES. REVIEW CONDITION OF EXISTING CAPSTONES AND MASONRY WALLS BENEATH. REPORT ANY MAJOR DEFICIENCIES. PROVIDE NEW STAINLESS STEEL ANCHOR PINS FOR CAPSTONE REINSTALLATION, AND FASTEN WITH EPOXY ADHESIVE. PROVIDE NEW THRU-WALL FLASHING WITH SOLDERED THIMBLES TO BE INSTALLED OVER NEW ANCHOR PINS. REINSTALL SALVAGED CAPSTONES. RESEAL WITH NEW MORTAR AND SEALANT TO MATCH EXISTING. FASTEN CAPSTONES TO NEW PINS WITH EPOXY ADHESIVE. REFER TO DETAILS.
40	REPOINT AND RESEAL EXISTING CAPSTONES. REFER TO DETAILS.

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.07 AND A2.08 FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL GIRDERS, BEAMS, OR TRUSSES. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS AND ROOF INSULATION. TYPICAL.
6. EXISTING HISTORIC ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS.

ROOF TYPE

ROOF TYPE ASSEMBLY

SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.07

A

TYPE A - FLAT ROOF

- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM -* (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- TAPERED RIGID INSULATION TOP LAYER (REFER TO PLANS FOR LOCATIONS & SLOPE, TYP.), 3" RIGID INSULATION TOP LAYER / INTERMEDIATE LAYER(S) ADHERED / FASTENED PER MFR., AND 3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED. INCLUDE 8"-4" x 8'-4" INSULATION DRAIN SUMPS. (REFER TO DETAILS); MIN THICKNESS OF 7" AT ROOF DRAIN. INCLUDE INSULATION CRICKETS AS SHOWN AT SUMPS AND AT EQUIPMENT AND HATCHES (REFER TO PLANS).
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- PRIMER FOR VAPOR RETARDER.
- EXISTING SUBSTRATE SCARIFIED, GROUND, AND PREPARED TO RECEIVE PRIMER / SURFACE CONDITIONER.
  - EXISTING TAPERED GYPSUM TOPPING.
  - EXISTING GYPSTEEL GYPSUM PLANKS.
  - EXISTING FLAT STRUCTURAL STEEL FRAMING.

C

TYPE C - PATIO TERRACES

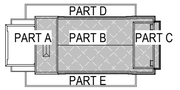
- FUTURE PAVERS ON PEDESTALS BY OTHERS (N.I.C.)
- FUTURE INSULATION BY OTHERS (N.I.C.)
- FUTURE FILTER FABRIC BY OTHERS (N.I.C)
- FUTURE DRAINAGE MAT BY OTHERS (N.I.C.)
- *MONOLITHIC LIQUID MEMBRANE / RESIN (THICKNESS PER MFR.)*
- *FABRIC REINFORCING.*
- *MONOLITHIC LIQUID MEMBRANE / RESIN (THICKNESS PER MFR.)*
- PRIMER / SURFACE CONDITIONER.
- EXISTING SUBSTRATE SCARIFIED, GROUND, AND PREPARED TO RECEIVE PRIMER / SURFACE CONDITIONER.
  - EXISTING SLOPED CONCRETE ARCHITECTURAL TOPPING SLAB.
  - EXISTING FLAT CONCRETE STRUCTURAL DECK.
  - EXISTING FLAT STRUCTURAL STEEL FRAMING.

ROOF SYMBOL LEGEND

- **PHASE 2:** ROOF AREAS OF FUTURE WORK - **NOT IN CONTRACT (NIC)**
- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP. SEE DETAILS: 6A / A2.07 AND 6B / A2.07 (ALL SUMP LOCATIONS SHALL HAVE A MIN. SLOPE OF 1/2" PER FT, TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET. PROVIDE SIZE AND SLOPE AS REQUIRED. (1/2" PER FT SLOPE, TYP. 1/4" PER FT MIN. UNLESS NOTED OTHERWISE, REFER TO PLANS) POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE, TYP)
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL: 10 / A2.07
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: 5A / A2.07, 5B / A2.07. EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" / 12" — DIRECTION OF ROOF SLOPE / TAPERED INSULATION
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE: 11 / A2.07
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1)
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: 1 / A2.09.1 AND 2 / A2.09.1
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- ROOF STRUCTURE INFILL LOCATION, SEE DETAIL: 7 / A2.07
- WARNING LINE SYSTEM. SEE DETAIL: 9 / A2.08.1

PROJECT NORTH

NORTH



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

OVERALL ROOF PLAN - NEW - PHASE 1

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

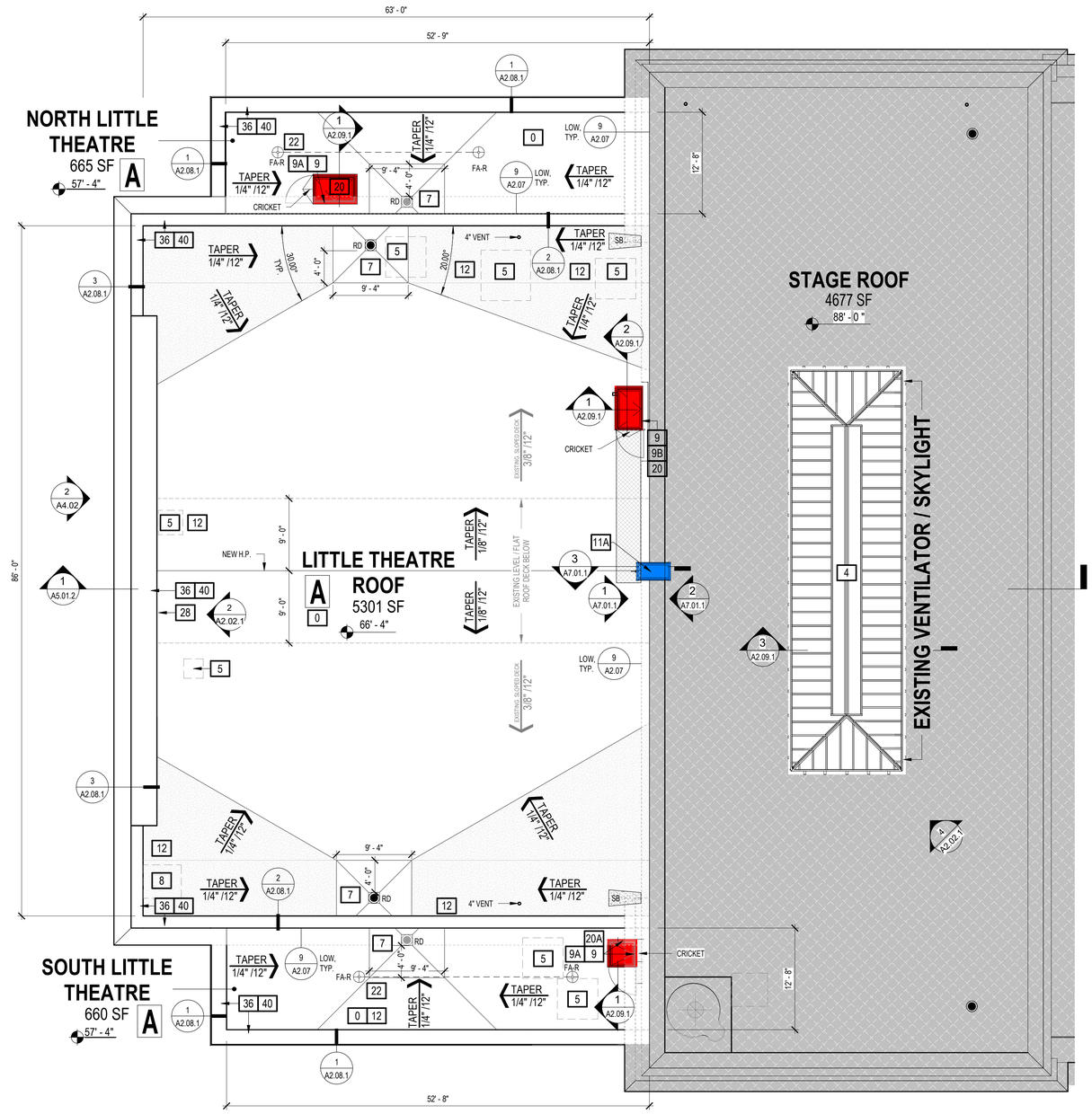
STAMP

DRAWING INFORMATION

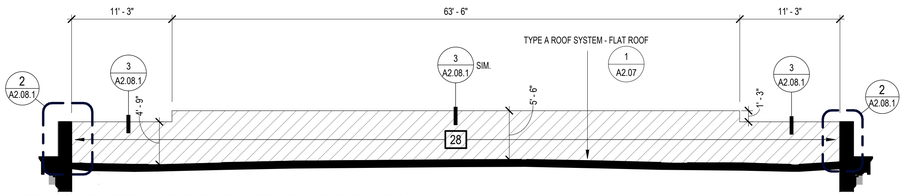
SCALE	As indicated
DRAWN BY	DL
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

A2.01.1



1 PARTIAL ROOF PLAN - PART A - PHASE 1
1/8" = 1'-0"



2 LITTLE THEATRE - WEST PARAPET - EAST ELEVATION
1/8" = 1'-0"

4 EXISTING VENTILATOR / SKYLIGHT
1/4" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.07 AND A2.08 FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL GIRDERS, BEAMS, OR TRUSSES. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS AND ROOF INSULATION. TYPICAL.
6. EXISTING HISTORIC ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS.

ROOF TYPE — **ROOF TYPE ASSEMBLY**

SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.07

A — TYPE A - FLAT ROOF

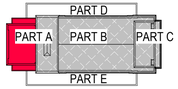
- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM -* (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- TAPERED RIGID INSULATION TOP LAYER (REFER TO PLANS FOR LOCATIONS & SLOPE, TYP.),
  3" RIGID INSULATION TOP LAYER / INTERMEDIATE LAYER(S) ADHERED / FASTENED PER MFR., AND
  3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED.
  INCLUDE 8"-4" x 9'-4" INSULATION DRAIN SUMPS, (REFER TO DETAILS); MIN THICKNESS OF 7" AT ROOF DRAIN. INCLUDE INSULATION CRICKETS AS SHOWN AT SUMPS AND AT EQUIPMENT AND HATCHES (REFER TO PLANS).
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- PRIMER FOR VAPOR RETARDER.
- EXISTING SUBSTRATE SCARIFIED, GROUND, AND PREPARED TO RECEIVE PRIMER / SURFACE CONDITIONER.
  - EXISTING TAPERED GYPSUM TOPPING.
  - EXISTING GYPSTEEL GYPSUM PLANKS.
  - EXISTING FLAT STRUCTURAL STEEL FRAMING.

C — TYPE C - PATIO TERRACES

- FUTURE PAVERS ON PEDESTALS BY OTHERS (N.I.C.)
- FUTURE INSULATION BY OTHERS (N.I.C.)
- FUTURE FILTER FABRIC BY OTHERS (N.I.C)
- FUTURE DRAINAGE MAT BY OTHERS (N.I.C.)
- *MONOLITHIC LIQUID MEMBRANE / RESIN (THICKNESS PER MFR.)*
- *FABRIC REINFORCING.*
- *MONOLITHIC LIQUID MEMBRANE / RESIN (THICKNESS PER MFR.)*
- PRIMER / SURFACE CONDITIONER.
- EXISTING SUBSTRATE SCARIFIED, GROUND, AND PREPARED TO RECEIVE PRIMER / SURFACE CONDITIONER.
  - EXISTING SLOPED CONCRETE ARCHITECTURAL TOPPING SLAB.
  - EXISTING FLAT CONCRETE STRUCTURAL DECK.
  - EXISTING FLAT STRUCTURAL STEEL FRAMING.

ROOF SYMBOL LEGEND

- **PHASE 2:** ROOF AREAS OF FUTURE WORK - **NOT IN CONTRACT (NIC)**
- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: 6A A2.07 AND 6B A2.07 (ALL SUMP LOCATIONS SHALL HAVE A MIN. SLOPE OF 1/2" PER FT, TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET, PROVIDE SIZE AND SLOPE AS REQUIRED. (1/2" PER FT SLOPE, TYP. 1/4" PER FT MIN. UNLESS NOTED OTHERWISE, REFER TO PLANS) POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE, TYP)
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL: 10 A2.07
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: 5A A2.07 5B A2.07 EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" / 12" — DIRECTION OF ROOF SLOPE / TAPERED INSULATION
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE: 11 A2.07
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1)
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: 1 A2.09.1 AND 2 A2.09.1
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- ROOF STRUCTURE INFILL LOCATION, SEE DETAIL: 7 A2.07
- WARNING LINE SYSTEM. SEE DETAIL: 9 A2.08.1



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

PARTIAL ROOF PLAN - PART A - NEW - PHASE 1

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

STAMP

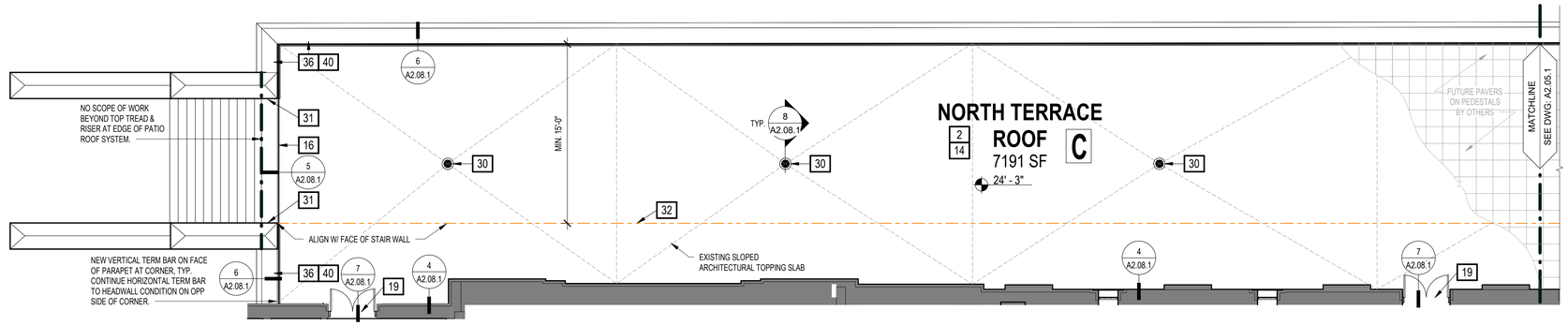
DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL
CHECKED	JL
DATE	JUNE 18, 2025

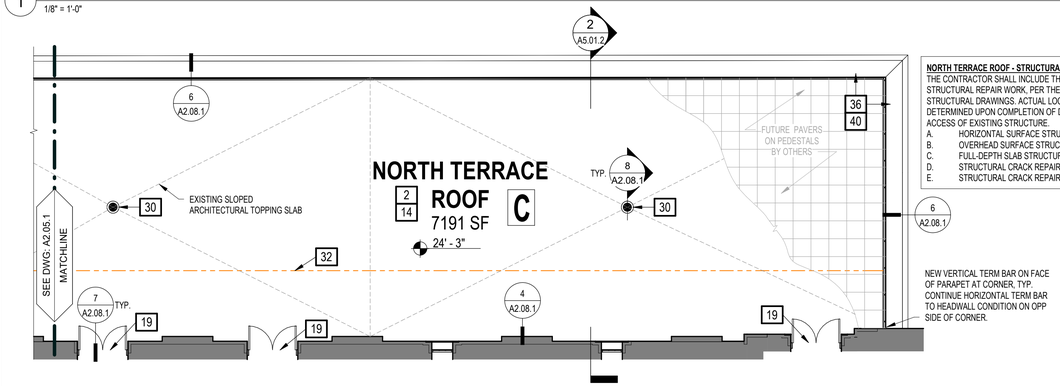
DRAWING NUMBER

A2.02.1

PROJECT NORTH
NORTH



1 PARTIAL ROOF PLAN - PART D- NORTH A
1/8" = 1'-0"



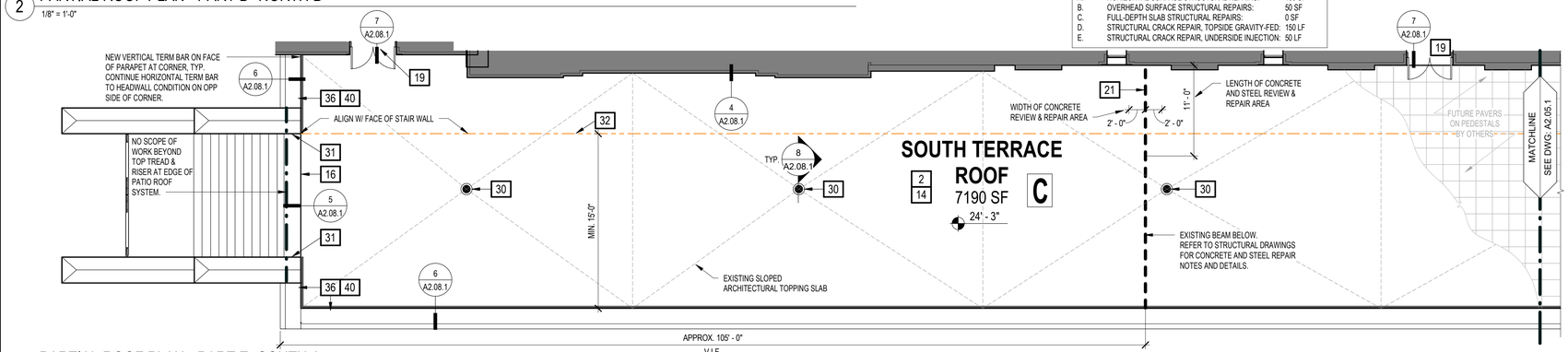
2 PARTIAL ROOF PLAN - PART D- NORTH B
1/8" = 1'-0"

NORTH TERRACE ROOF - STRUCTURAL REPAIRS
THE CONTRACTOR SHALL INCLUDE THE FOLLOWING QUANTITIES FOR STRUCTURAL REPAIR WORK, PER THE NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS. ACTUAL LOCATIONS AND QUANTITIES SHALL BE DETERMINED UPON COMPLETION OF DEMOLITION TASKS FOR VISUAL ACCESS OF EXISTING STRUCTURE.

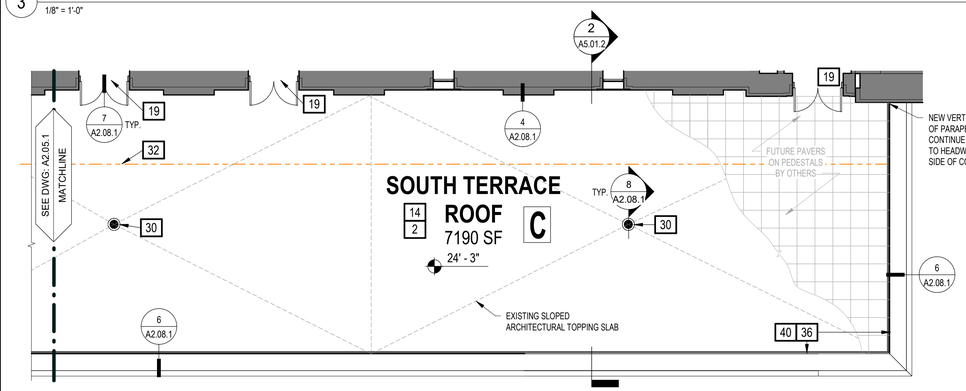
A.	HORIZONTAL SURFACE STRUCTURAL REPAIRS:	100 SF
B.	OVERHEAD SURFACE STRUCTURAL REPAIRS:	0 SF
C.	FULL-DEPTH SLAB STRUCTURAL REPAIRS:	0 SF
D.	STRUCTURAL CRACK REPAIR, TOPSIDE GRAVITY-FED:	150 LF
E.	STRUCTURAL CRACK REPAIR, UNDERSIDE INJECTION:	0 LF

SOUTH TERRACE ROOF - STRUCTURAL REPAIRS
THE CONTRACTOR SHALL INCLUDE THE FOLLOWING QUANTITIES FOR STRUCTURAL REPAIR WORK, PER THE NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS. ACTUAL LOCATIONS AND QUANTITIES SHALL BE DETERMINED UPON COMPLETION OF DEMOLITION TASKS FOR VISUAL ACCESS OF EXISTING STRUCTURE.

A.	HORIZONTAL SURFACE STRUCTURAL REPAIRS:	100 SF
B.	OVERHEAD SURFACE STRUCTURAL REPAIRS:	50 SF
C.	FULL-DEPTH SLAB STRUCTURAL REPAIRS:	0 SF
D.	STRUCTURAL CRACK REPAIR, TOPSIDE GRAVITY-FED:	150 LF
E.	STRUCTURAL CRACK REPAIR, UNDERSIDE INJECTION:	50 LF

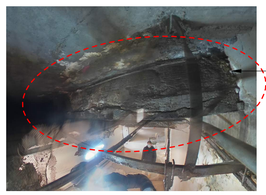


3 PARTIAL ROOF PLAN - PART E- SOUTH A
1/8" = 1'-0"



4 PARTIAL ROOF PLAN - PART E- SOUTH B
1/8" = 1'-0"

5 EX. BEAM LOCATION - WATER DAMAGE
N.T.S.



6 EX. BEAM - WATER DAMAGE
N.T.S.

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.07 AND A2.08 FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL GIRDERS, BEAMS, OR TRUSSES. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS AND ROOF INSULATION. TYPICAL.
6. EXISTING HISTORIC ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS.

ROOF TYPE ASSEMBLY
SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.07

ROOF TYPE A

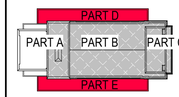
TYPE A - FLAT ROOF
- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM -* (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- TAPERED RIGID INSULATION TOP LAYER (REFER TO PLANS FOR LOCATIONS & SLOPE, TYP.), 3" RIGID INSULATION TOP LAYER / INTERMEDIATE LAYER(S) ADHERED / FASTENED PER MFR., AND 3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED. INCLUDE 9'-4" x 9'-4" INSULATION DRAIN SUMPS, (REFER TO DETAILS); MIN THICKNESS OF 7" AT ROOF DRAIN. INCLUDE INSULATION CRICKETS AS SHOWN AT SUMPS AND AT EQUIPMENT AND HATCHES (REFER TO PLANS).
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- PRIMER FOR VAPOR RETARDER.
- EXISTING SUBSTRATE SCARIFIED, GROUND, AND PREPARED TO RECEIVE PRIMER / SURFACE CONDITIONER.
  - EXISTING TAPERED GYPSUM TOPPING.
  - EXISTING GYPSTEEL GYPSUM PLANKS.
  - EXISTING FLAT STRUCTURAL STEEL FRAMING.

ROOF TYPE C

TYPE C - PATIO TERRACES
- FUTURE PAVERS ON PEDESTALS BY OTHERS (N.I.C.)
- FUTURE INSULATION BY OTHERS (N.I.C.)
- FUTURE FILTER FABRIC BY OTHERS (N.I.C)
- FUTURE DRAINAGE MAT BY OTHERS (N.I.C.)
- *MONOLITHIC LIQUID MEMBRANE / RESIN (THICKNESS PER MFR.)*
- *FABRIC REINFORCING.*
- *MONOLITHIC LIQUID MEMBRANE / RESIN (THICKNESS PER MFR.)*
- PRIMER / SURFACE CONDITIONER.
- EXISTING SUBSTRATE SCARIFIED, GROUND, AND PREPARED TO RECEIVE PRIMER / SURFACE CONDITIONER.
  - EXISTING SLOPED CONCRETE ARCHITECTURAL TOPPING SLAB.
  - EXISTING FLAT CONCRETE STRUCTURAL DECK.
  - EXISTING FLAT STRUCTURAL STEEL FRAMING.

ROOF SYMBOL LEGEND

- **PHASE 2:** ROOF AREAS OF FUTURE WORK - **NOT IN CONTRACT (NIC)**
- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: 6A A2.07 AND 6B A2.07 (ALL SUMP LOCATIONS SHALL HAVE A MIN. SLOPE OF 1/2" PER FT, TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30° — TAPERED INSULATION CRICKET. PROVIDE SIZE AND SLOPE AS REQUIRED. (1/2" PER FT SLOPE, TYP. 1/4" PER FT MIN. UNLESS NOTED OTHERWISE, REFER TO PLANS) POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE, TYP)
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL: 10 A2.07
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: 5A A2.07 5B A2.07 EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" / 12" — DIRECTION OF ROOF SLOPE / TAPERED INSULATION
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE: 11 A2.07
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1)
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: 1 A2.09.1 AND 2 A2.09.1
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- ROOF STRUCTURE INFILL LOCATION, SEE DETAIL: 7 A2.07
- WARNING LINE SYSTEM, SEE DETAIL: 9 A2.08.1



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
BID SET

PROJECT NUMBER
02024.28

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER
MEMORIAL AUDITORIUM ROOF REPLACEMENT
1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE
PARTIAL ROOF PLAN - PART D & E - NEW - PHASE 1

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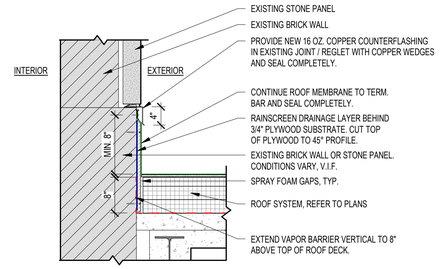
DRAWING INFORMATION

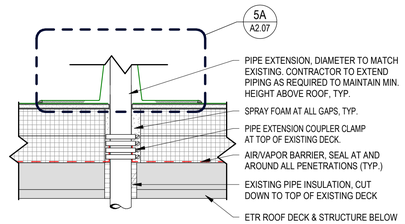
SCALE	As indicated
DRAWN BY	DL
CHECKED	JL
DATE	JUNE 18, 2025

PROJECT NORTH
NORTH

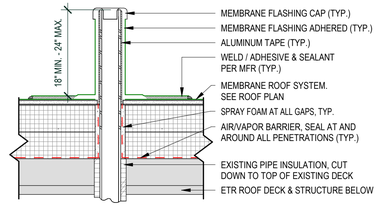
DRAWING NUMBER
A2.05.1



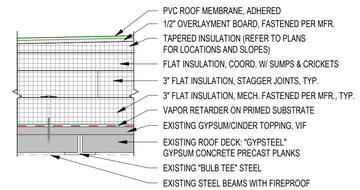
9 SECTION - TYPICAL HEADWALL FLASHING
3/4" = 1'-0"



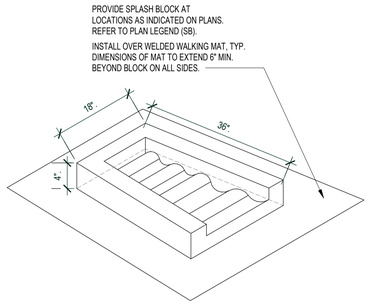
5B TYPICAL VENT PIPE EXTENSION
1 1/2" = 1'-0"



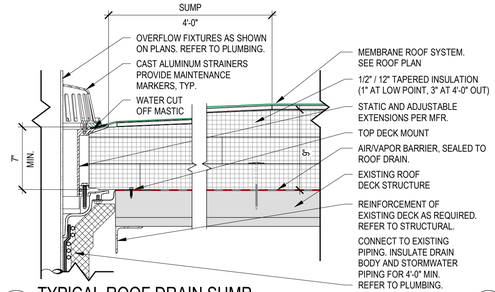
5A TYPICAL VENT PIPE FLASHING
1 1/2" = 1'-0"



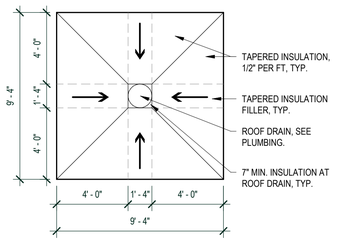
1 TYPE A ROOF SYSTEM - FLAT ROOF
1 1/2" = 1'-0"



10 PRECAST SPLASH BLOCK
1 1/2" = 1'-0"

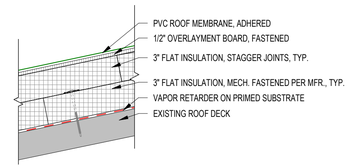


6B TYPICAL ROOF DRAIN SUMP
1 1/2" = 1'-0"

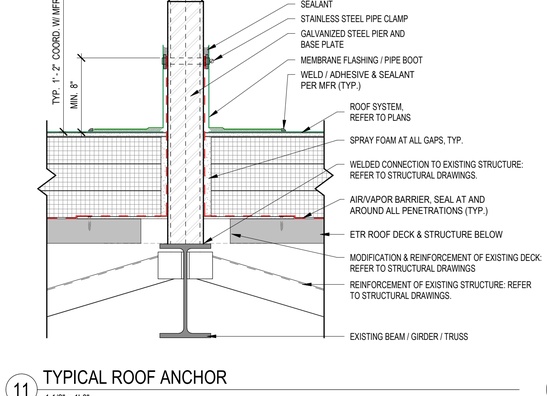


6A TYPICAL ROOF DRAIN & SUMP LAYOUT
1/4" = 1'-0"

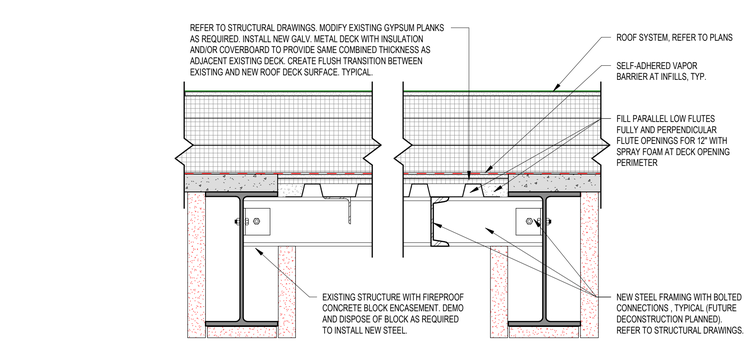
PHASE 2 ONLY
NOT USED IN PHASE 1



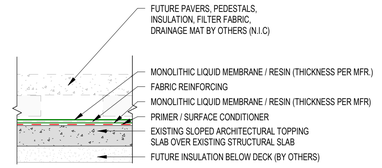
2 TYPE B ROOF SYSTEM - SLOPED
1 1/2" = 1'-0"



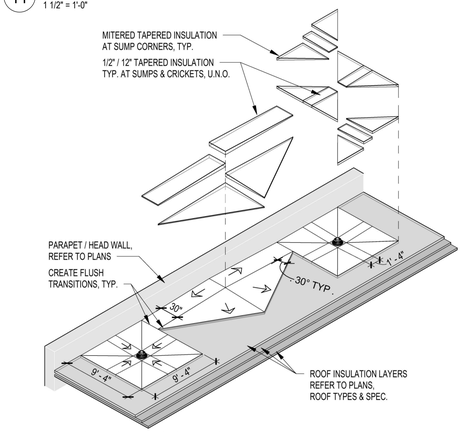
11 TYPICAL ROOF ANCHOR
1 1/2" = 1'-0"



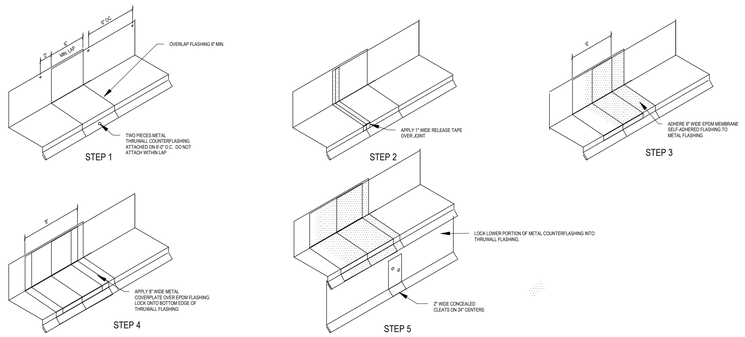
7 TYPICAL STEEL AND DECK INFILL DETAIL
1 1/2" = 1'-0"



3 TYPE C ROOF SYSTEM - PATIO TERRACES
1 1/2" = 1'-0"

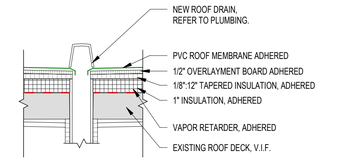


12 TYPICAL SUMPS & CRICKETS AT PARAPET OR HEADWALL
N.T.S.



8 TYPICAL FLASHING JOINTS
1 1/2" = 1'-0"

PHASE 2 ONLY
NOT USED IN PHASE 1



4 TYPE D ROOF SYSTEM - VENT WELL
1 1/2" = 1'-0"

REVISIONS

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MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

TYPICAL ROOF DETAILS

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DRAWING INFORMATION

SCALE	As indicated
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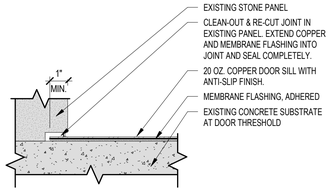
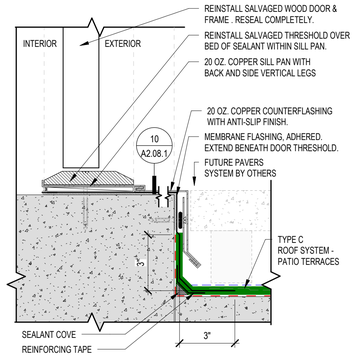
A2.07



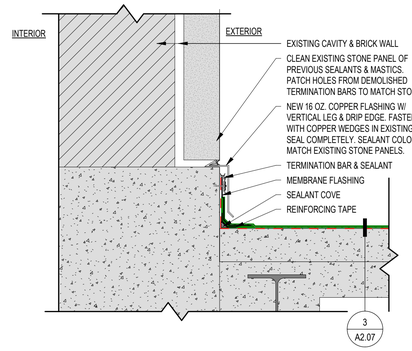
10 TERRACE DOOR - PORTAL JAMB FLASHING TO SILL

3" = 1'-0"



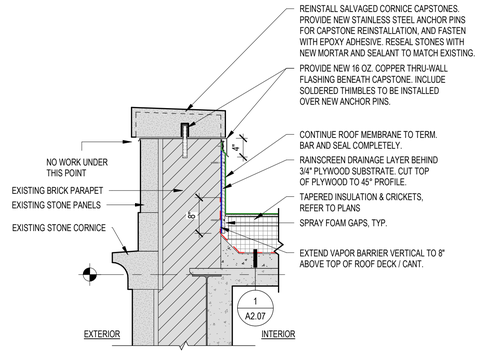
7 TERRACE DOOR THRESHOLD DETAIL

3" = 1'-0"



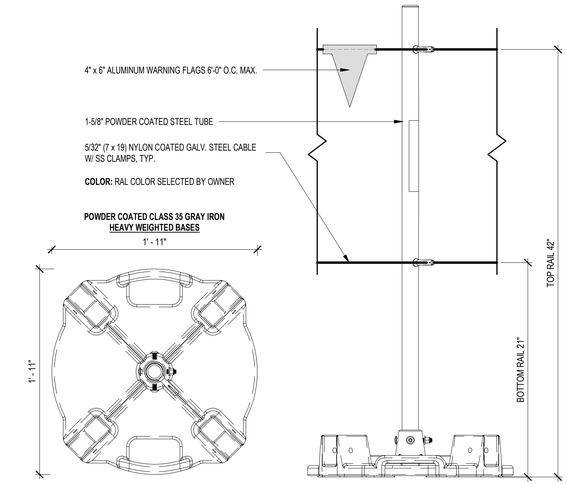
4 SECTION - HEADWALL FLASHING - TERRACES

1 1/2" = 1'-0"



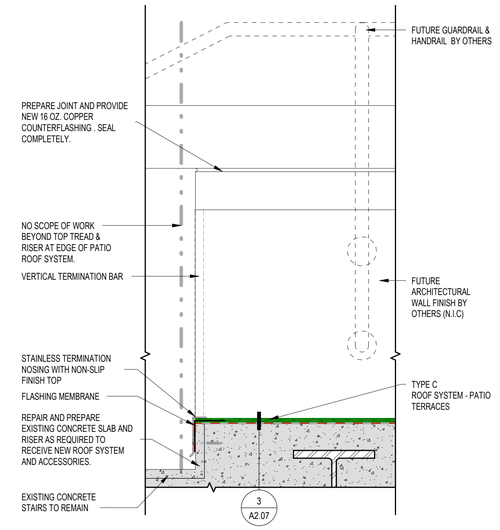
1 SECTION - TYP. PARAPET - LITTLE THEATRE NORTH & SOUTH ROOFS (PART A)

3/4" = 1'-0"



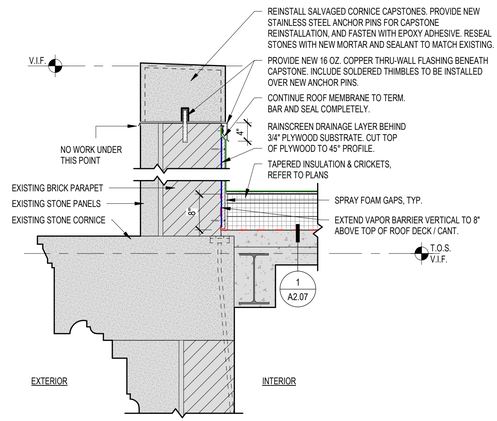
8 TERRACE ROOF DRAIN

3" = 1'-0"



5 STAIR DETAIL AT TERRACE

1 1/2" = 1'-0"

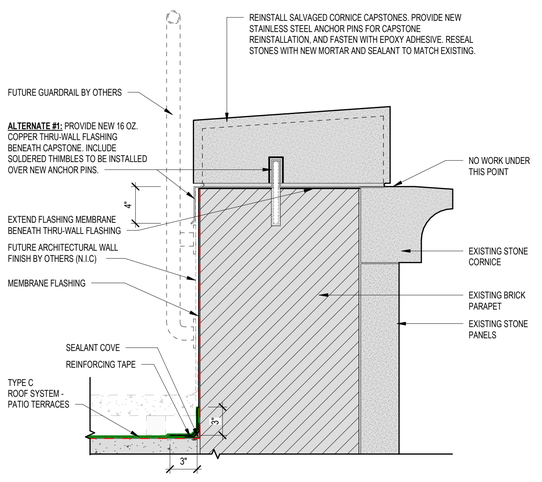


2 SECTION - NORTH & SOUTH PARAPET - LITTLE THEATRE ROOF (PART A)

3/4" = 1'-0"

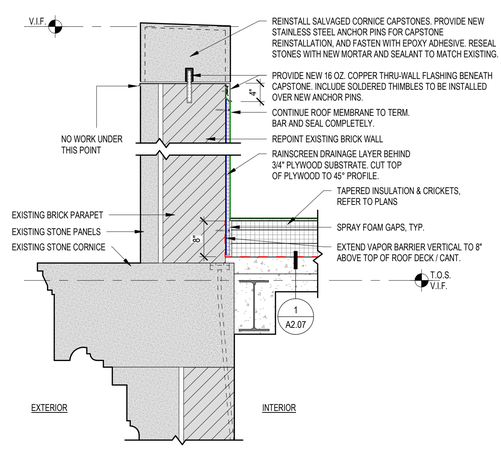
9 BALLASTED WARNING LINE SYSTEM

1 1/2" = 1'-0"



6 PARAPET DETAIL AT TERRACE

1 1/2" = 1'-0"



3 SECTION - WEST PARAPET - LITTLE THEATRE ROOF (PART A)

3/4" = 1'-0"

REVISIONS

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PROJECT PHASE

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CITY OF WORCESTER

MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

ROOF DETAILS - PHASE 1

MVG
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DRAWING INFORMATION

SCALE	As indicated
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CHECKED	CL
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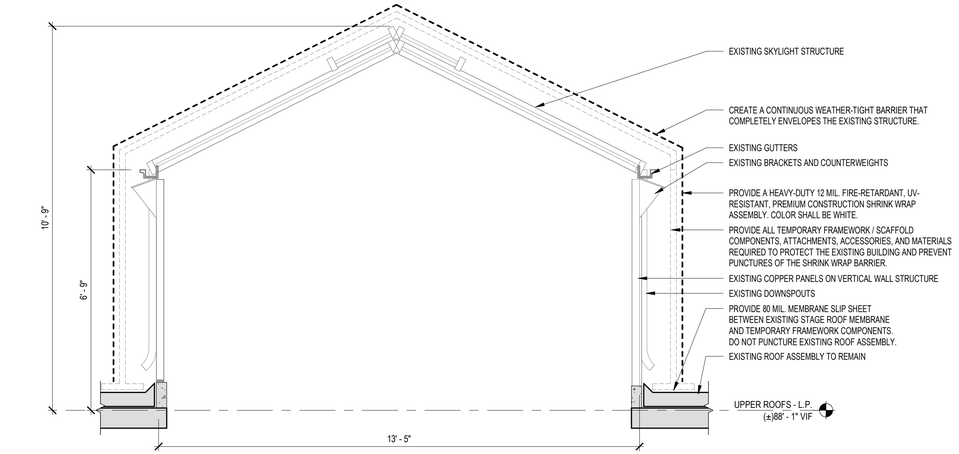
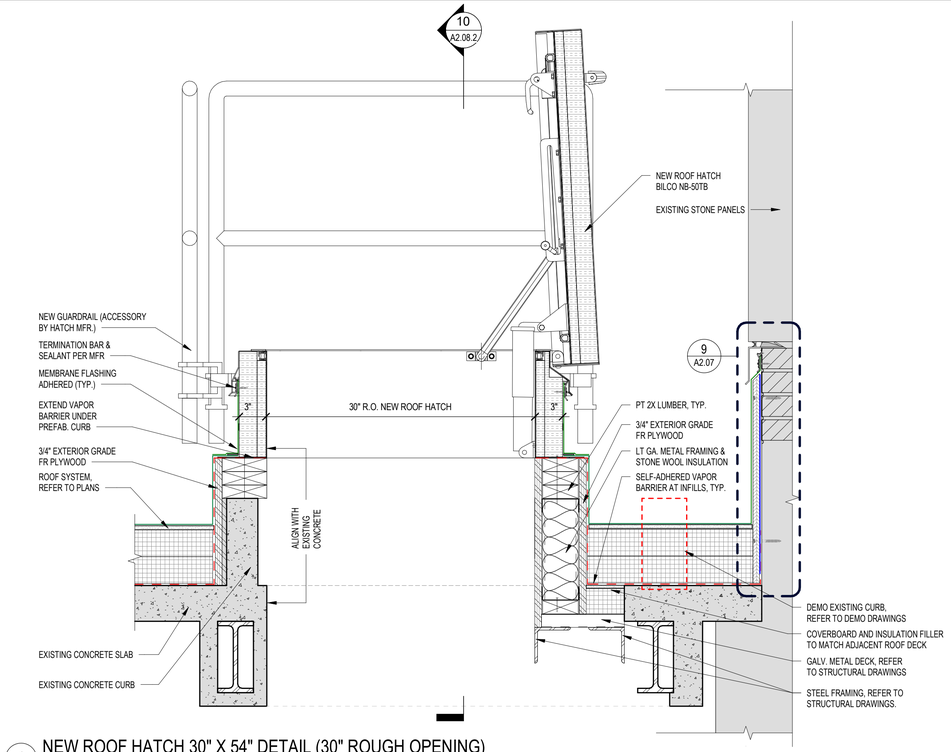
DRAWING NUMBER

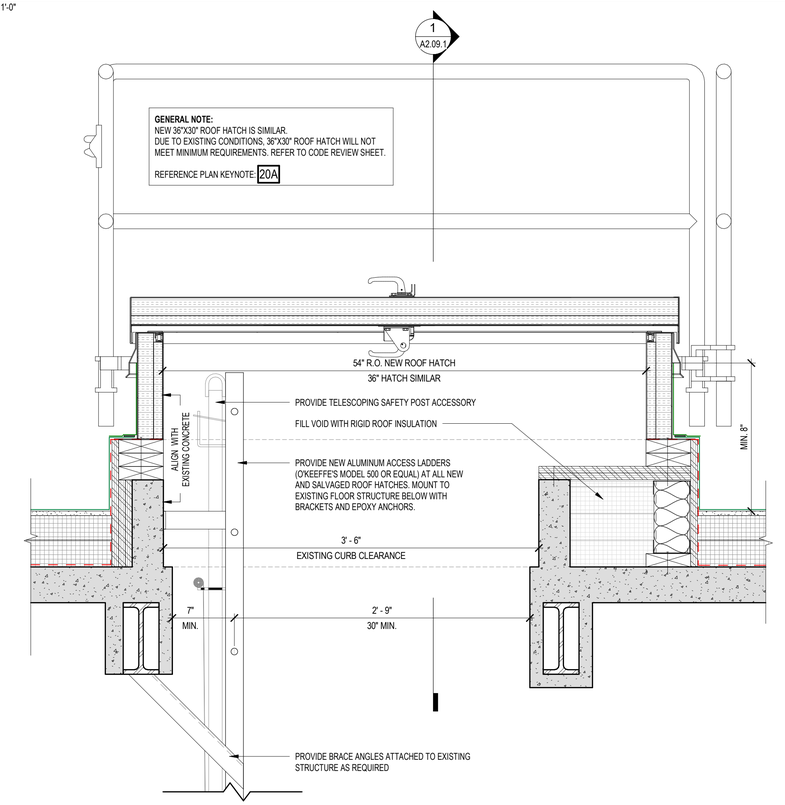
A2.08.1



3 STAGE VENTILATOR / SKYLIGHT - SHRINK WRAP
1/2" = 1'-0"



1 NEW ROOF HATCH 30" X 54" DETAIL (30" ROUGH OPENING)
1 1/2" = 1'-0"



2 NEW HATCH 30" X 54" DETAIL (54" ROUGH OPENING)
1 1/2" = 1'-0"

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

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ROOF DETAILS - PHASE 1

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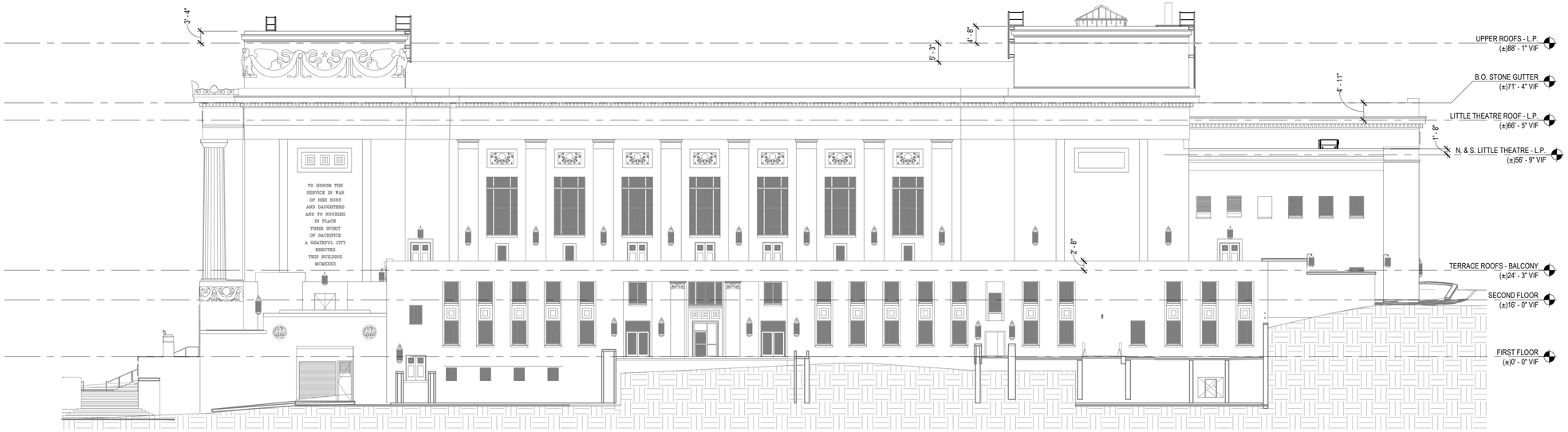
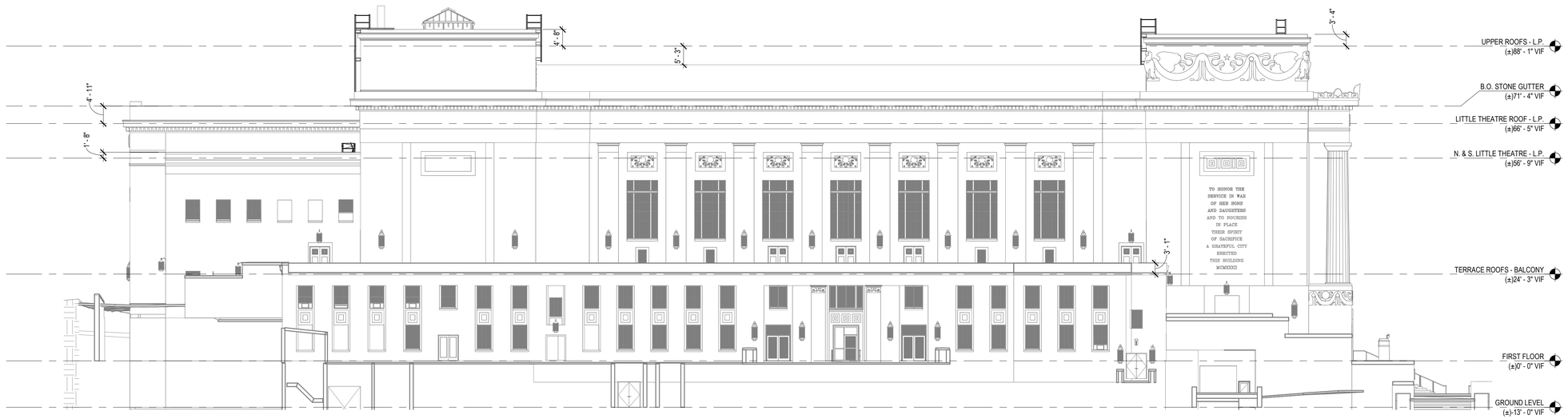


1 EXTERIOR ELEVATIONS - NORTH
1/16" = 1'-0"



2 EXTERIOR ELEVATIONS - SOUTH
1/16" = 1'-0"

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

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PROJECT NUMBER

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ROOF REPLACEMENT

1 LINCOLN SQUARE
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EXTERIOR ELEVATIONS

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DRAWING INFORMATION

SCALE	1/16" = 1'-0"
DRAWN BY	DL
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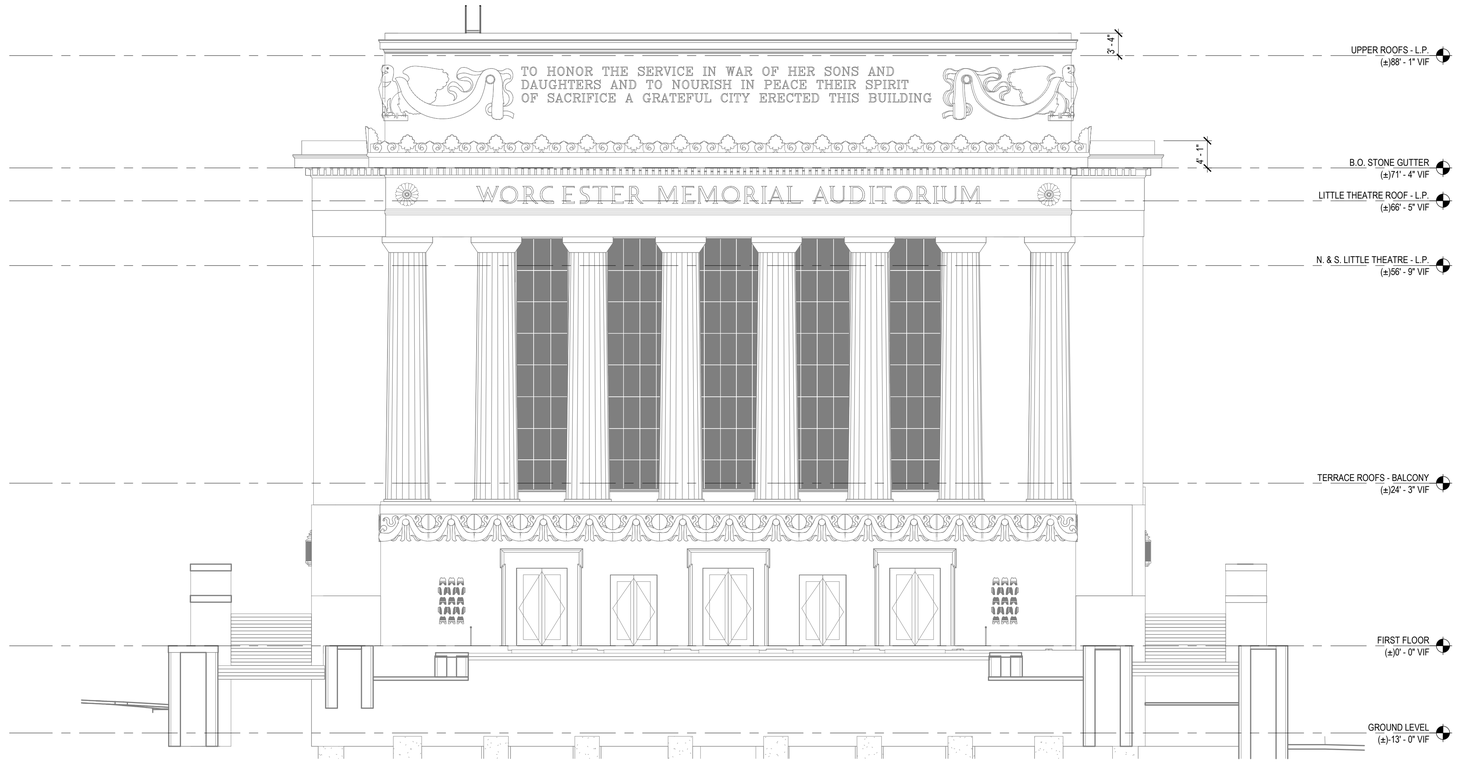
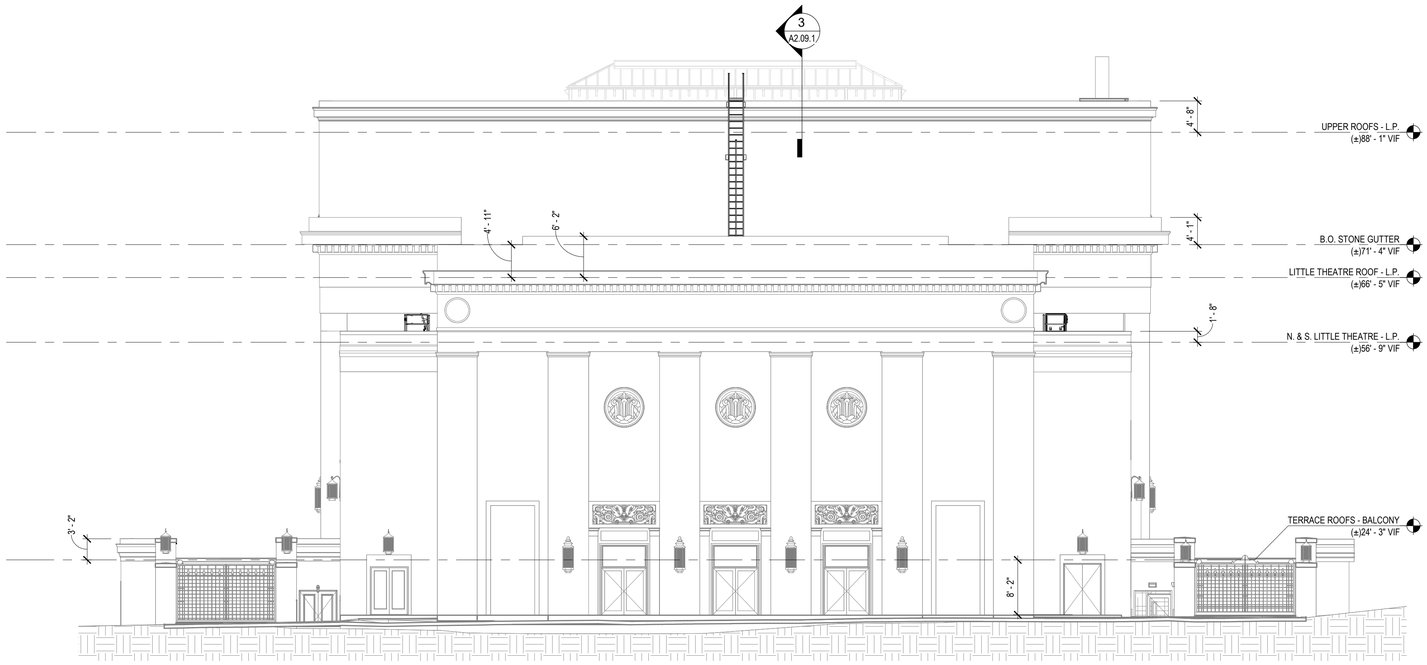
DATE	JUNE 18, 2025

DRAWING NUMBER

A4.01



1 EXTERIOR ELEVATION - EAST
3/32" = 1'-0"



2 EXTERIOR ELEVATION - WEST
3/32" = 1'-0"

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EXTERIOR ELEVATIONS

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DRAWING INFORMATION

SCALE	3/32" = 1'-0"
DRAWN BY	DL
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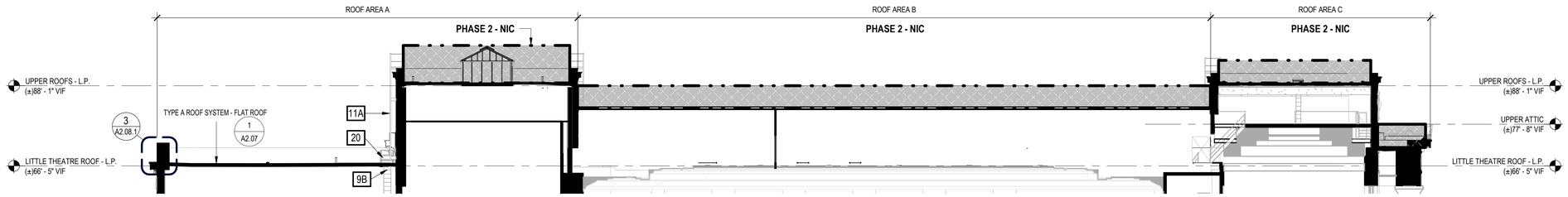
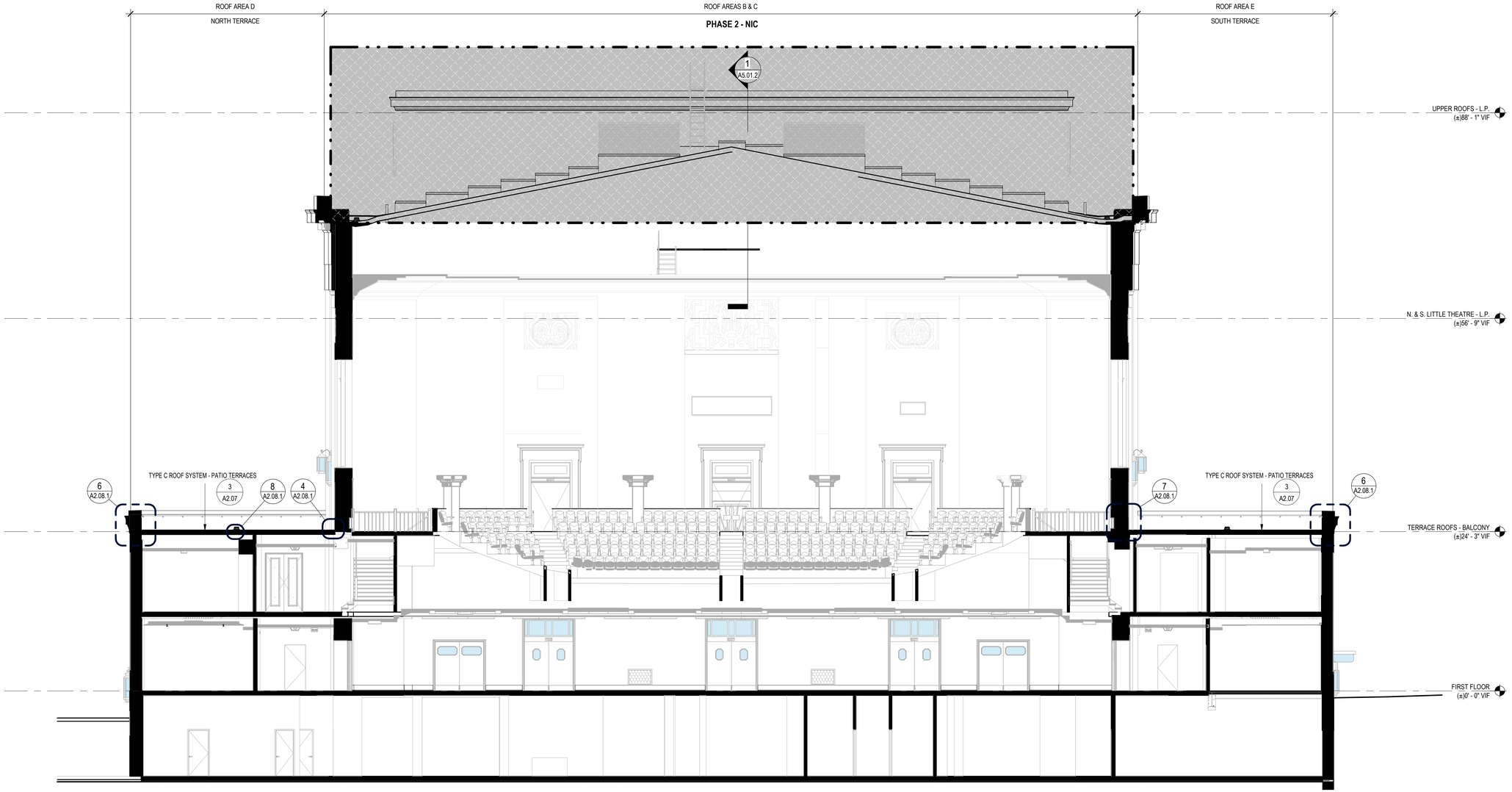
DRAWING NUMBER

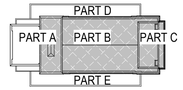
A4.02



1 BUILDING SECTION - WEST / EAST - LOOKING NORTH - PHASE 1
1/16" = 1'-0"



2 BUILDING SECTION - NORTH / SOUTH - LOOKING EAST - PHASE 1
1/8" = 1'-0"



KEY PLAN

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MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

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BUILDING SECTIONS - PHASE 1

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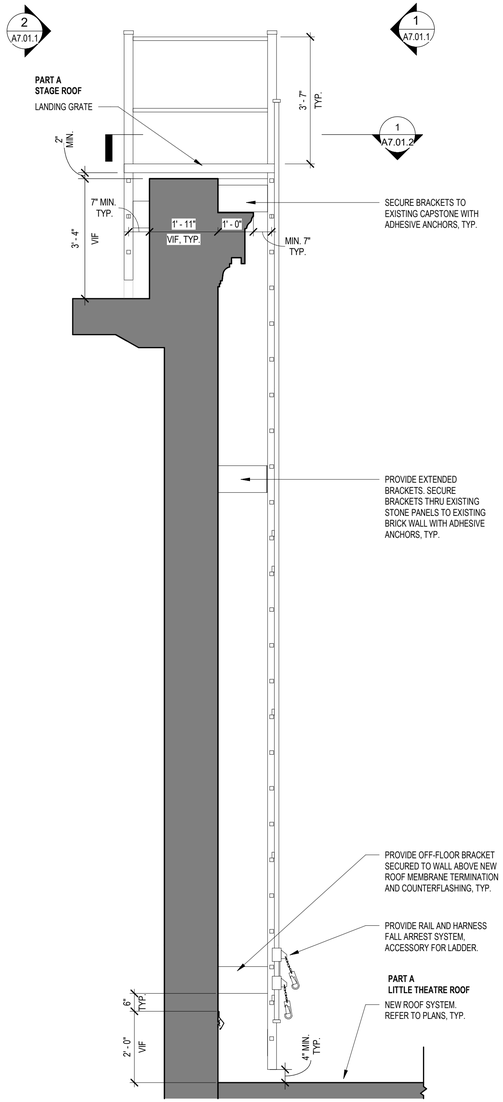
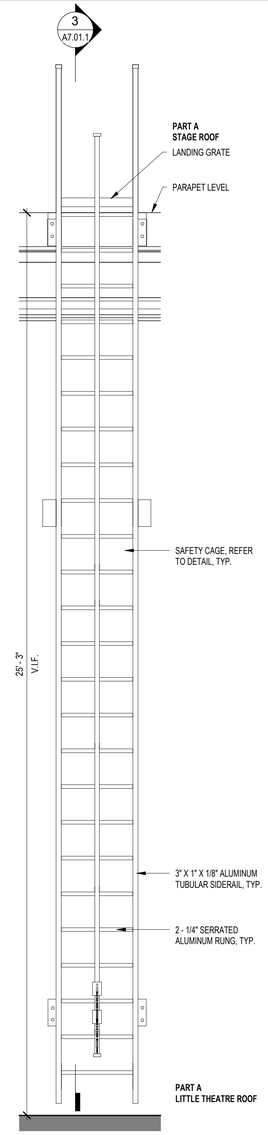


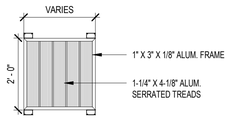
LADDER SECTION -
STAGE TO LITTLE THEATRE

3 1/2" = 1'-0"



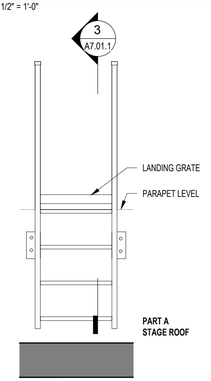
LADDER ELEVATION -
LITTLE THEATRE TO STAGE

1 1/2" = 1'-0"



TYPICAL LADDER LANDING PLAN - PHASE 1

4 1/2" = 1'-0"



LADDER ELEVATION -
STAGE TO LITTLE THEATRE

2 1/2" = 1'-0"

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DRAWING TITLE

ENLARGED STAIR PLANS
& SECTIONS - PHASE 1

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SCALE	1/2" = 1'-0"
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GENERAL NOTES

GENERAL

1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS, ALONG WITH SHOP DRAWINGS AND SPECIFICATIONS.
2. REFER TO THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND / OR ELEVATIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS. DO NOT SCALE THESE DRAWINGS.
3. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
4. IN CASE OF CONFLICT AMONG CONTRACT DOCUMENTS, THE MORE SPECIFIC AND LOCALIZED INFORMATION IN THE FOLLOWING ASCENDING ORDER SHALL GOVERN: SPECIFICATIONS, NOTES, PLANS, SCHEDULES, AND SECTIONS / DETAILS.
5. WHERE A SECTION / DETAIL IS CUT ON THE PLAN, IT IS ASSUMED TO BE REPRESENTATIVE OF ALL LIKE OR SIMILAR CONDITIONS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING SUCH REQUIREMENTS INTO THEIR SHOP DRAWINGS AND WORK. UNLESS OTHERWISE NOTEED, DETAILS SHOWN ON ANY DRAWINGS ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.
6. ANY DIMENSION NOTED (±) SHALL BE COORDINATED AND VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO THE SUBMISSION OF SHOP DRAWINGS.
7. NO CHANGE IN SIZE OR LOCATION OF STRUCTURAL MEMBERS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
8. NO OPENINGS SHALL BE MADE IN ANY STRUCTURAL MEMBER WITHOUT THE WRITTTEN APPROVAL OF THE STRUCTURAL ENGINEER.
9. SHOP DRAWINGS FOR STRUCTURAL STEEL AND STEEL DECKING SHALL BE SUBMITTED TO THE ARCHITECT AND A STAMPED ACCEPTANCE RECEIVED BEFORE FABRICATION CAN PROCEED. ERECTION SHALL BE EXECUTED FROM ACCEPTED SHOP DRAWINGS ONLY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL TEMPORARY SHORING AND BRACING FOR THE BUILDING DURING THE ENTIRE REPAIR PHASE, AS REQUIRED TO PREVENT DAMAGE TO PERSONS AND PROPERTY.
11. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE FOLLOWING BUILDING CODES AND DESIGN STANDARDS:
    A. THE COMMONWEALTH OF MASSACHUSETTS STATE BUILDING CODE, 9TH EDITION
    B. IBC-2015: THE INTERNATIONAL BUILDING CODE
    C. IEBC-2015: THE INTERNATIONAL EXISTING BUILDING CODE
    D. ACI-2014: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
    E. AISC 360-10: SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS
    F. AISC 303-10: CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES
    G. ASCE 7-10: MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
12. U.O.N. = UNLESS OTHERWISE NOTED
13. (E) DESIGNATES AN EXISTING STRUCTURAL ELEMENT
14. "F.V." OR "V.I.F." = FIELD VERIFY OR VERIFIED IN FIELD

DESIGN LOADS

1. ALL LOADS ARE BASED ON A BUILDING RISK CATEGORY OF III
2. ROOF LOADS (AT LITTLE THEATER SOUTH ROOF AND STAGE ROOF)
    A. SNOW LOAD
        i. GROUND SNOW LOAD — P_g = 50 psf
        ii. EXPOSURE FACTOR — C_e = 1.0
        iii. THERMAL FACTOR — C_t = 1.0 TYPICAL
        iv. SNOW IMPORTANCE FACTOR — Is = 1.10
        v. ROOF SNOW LOAD — P_f = 39 PSF + SNOW DRIFT LOADING (WHERE APPLICABLE)
    B. ROOFING AND INSULATION — SELF-WEIGHT OF EXISTING MATERIALS
    C. SERVICES — SELF-WEIGHT OF EXISTING MATERIALS
    D. CEILINGS — SELF-WEIGHT OF EXISTING MATERIALS
    E. STRUCTURE — SELF-WEIGHT OF EXISTING MATERIALS
3. FLOOR LOADS
    A. LIVE LOADS
        i. TERRACES — 100 PSF
    B. SERVICES — SELF-WEIGHT OF EXISTING MATERIALS
    C. CEILINGS — SELF-WEIGHT OF EXISTING MATERIALS
    D. STRUCTURE — SELF-WEIGHT OF EXISTING MATERIALS
4. SEISMIC LOADS
    A. SEISMIC IMPORTANCE FACTOR — I_E = 1.25
    B. SITE CLASS — D (ASSUMED)
    C. SPECTRAL RESPONSE COEFFICIENTS — S_s = 0.180, S_1 = 0.066
    D. DESIGN RESPONSE COEFFICIENTS — S_{DS} = 0.192, S_{D1} = 0.106
    E. SEISMIC DESIGN CATEGORY — B
5. WIND LOADS
    A. ULTIMATE DESIGN WIND SPEED — V_{ult} = 134 MPH
    B. NOMINAL DESIGN WIND SPEED — Vasd = 104 MPH
    C. EXPOSURE CATEGORY — B
    D. INTERNAL PRESSURE COEFFICIENT — GC_{pi} = ±0.18
    E. COMPONENTS AND CLADDING PRESSURES FOR ROOFS SHALL BE PER THE TABLES BELOW:

DESIGN WIND PRESSURE TABLE

EFFECTIVE AREA	ZONE 1 (ROOF INTERIOR)	ZONE 2 (ROOF EDGE)	ZONE 3 (ROOF CORNER)
10 ft²	61.1 PSF	95.9 PSF	130.7 PSF
20 ft²	58.0 PSF	91.1 PSF	124.2 PSF
50 ft²	53.8 PSF	84.4 PSF	115.0 PSF
100 ft²	50.1 PSF	78.7 PSF	107.2 PSF
500 ft²	42.8 PSF	67.1 PSF	91.5 PSF

NOTES:

1. ALL VALUES SHOWN ARE ULTIMATE LOADS PER ASCE 7-10.
2. FOR EFFECTIVE WIND AREAS BETWEEN THOSE GIVEN, VALUE MAY BE INTERPOLATED. OTHERWISE USE THE VALUE ASSOCIATED WITH THE LOWER EFFECTIVE WIND AREA.
3. PRESSURES SHALL BE CONSIDERED TO ACT TOWARDS OR AWAY FROM WALL SURFACES OR AWAY FROM ROOF SURFACES.
4. PRESSURES SHOWN ARE FOR STRUCTURAL ELEMENTS ONLY. FOR ROOF PRESSURES ON ROOF ASSEMBLIES, THE ASSUMED EFFECTIVE WIND AREA MAY NOT EXCEED 10 ft². REFER TO THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR FURTHER INFORMATION.

EXISTING CONSTRUCTION

1. ALL INFORMATION RELATING TO THE EXISTING STRUCTURAL CONDITIONS HAS BEEN DERIVED FROM OBSERVATIONAL SITE VISITS AND THE FOLLOWING EXISTING STRUCTURAL DRAWINGS:

    WORCESTER MUNICIPAL MEMORIAL AUDITORIUM
    WORCESTER, MASS.
    PREPARED BY H. G. BALCOM CONSULTING ENGINEER
    DATED MAY 29, 1931; LAST REVISED DECEMBER 9, 1931

2. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND MEMBER SIZES AS INDICATED ON THE DRAWINGS, IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL TEMPORARY SHORING AND BRACING FOR THE BUILDING DURING THE ENTIRE REPAIR PHASE, AS REQUIRED TO PREVENT DAMAGE TO PERSONS AND PROPERTY.
4. ANY DIMENSION NOTED (±) SHALL BE COORDINATED AND VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO THE SUBMISSION OF SHOP DRAWINGS.
5. ALTERATIONS TO THE EXISTING CONDITIONS ARE IN ACCORDANCE WITH LEVEL 1 WORK PER THE WORK AREA METHOD OF IEBC 2015 AND 780 CMR MA, 9TH EDITION.

CONCRETE (CAST-IN-PLACE)

1. ALL NEW CONCRETE (WHERE UTILIZED) SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS AND SHALL BE NORMAL WEIGHT (150 PCF MAXIMUM).
2. ALL NEW REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60 (DEFORMED), AND SHALL BE FREE FROM LOOSE RUST AND SCALE.
3. LAP ALL CONTINUOUS BARS IN ACCORDANCE WITH THE TYPICAL DETAILS OR A MINIMUM OF 42 BAR DIAMETERS (WHICHEVER IS GREATER). IN LIEU OF LAPPING / SPLICING NEW REBAR WITH EXISTING REBAR, MECHANICAL SPLUCE ANCHORS (COUPLERS) MAY BE UTILIZED.
4. ALL NEW WELDED WIRE FABRIC (W.W.F.) SHALL BE GALVANIZED AND CONFORM TO ASTM A1064 WITH A MINIMUM ULTIMATE TENSILE STRENGTH OF 70 KSI. LAP (2) SQUARES AT ALL JOINTS AND TIE AT 3'-0" ON CENTER. UNLESS OTHERWISE NOTED, USE 6x6-W2.9xW2.9 W.W.F.
5. CLEAR CONCRETE PROTECTION FOR REINFORCING SHALL CONFORM TO THE FOLLOWING REQUIREMENTS, UNLESS OTHERWISE NOTED:
    A. COMPOSITE SLABS-ON-DECK: 1 1/4" FROM TOP AND 1" FROM BOTTOM
6. DETAILS NOT SHOWN ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI DETAILING MANUAL 315.
7. NEW CONCRETE SHALL BE CAST MONOLITHICALLY, EXCEPT AS INDICATED ON THE DRAWINGS.
8. NO BARS SHALL BE CUT OR OMITTED IN THE FIELD BECAUSE OF SLEEVES, DUCT OPENINGS OR RECESSES. BARS MAY BE MOVED ASIDE WITHOUT CHANGE IN LEVEL WITH THE APPROVAL OF THE ENGINEER.
9. PROVIDE ADDITIONAL REINFORCING AT ALL CONSTRUCTION JOINTS, WITH THE APPROVAL OF THE STRUCTURAL ENGINEER.
10. ALUMINUM CONDUITS AND PIPES SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE UNLESS EFFECTIVELY COATED OR COVERED TO PREVENT ALUMINUM-CONCRETE REACTION OR ELECTROLYTIC ACTION BETWEEN ALUMINUM AND STEEL.
11. PIPE PENETRATIONS THROUGH CONCRETE ARE NOT ALLOWED WITHOUT THE PERMISSION OF THE ENGINEER. STEEL PIPE SLEEVES SHALL BE PROVIDED AND SPACED A MINIMUM OF THREE PIPE DIAMETERS APART. ALL OTHER SLEEVE LOCATIONS MUST BE SUBMITTED FOR REVIEW.
12. SUPPORT BARS FOR SLAB REINFORCING SHALL BE #5 OR GREATER, AND SHALL BE SPACED NOT MORE THAN 4'-0" O.C. SUPPORT BARS AND ENDS OF MAIN REINFORCING BARS SHALL NOT EXTEND MORE THAN 1'-6" PAST THE OUTERMOST CHAIR OR SUPPORT BAR.
13. ALL REINFORCING ACCESSORIES FOR EXPOSED SURFACES SHALL HAVE UPTURNED LEGS AND BE PLASTIC DIPPED AFTER FABRICATION. ACCESSORIES FOR REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI STANDARDS.
14. SAMPLES FOR STRENGTH TESTS OF EACH CLASS OF CONCRETE PLACED EACH DAY SHALL BE TAKEN NOT LESS THAN ONCE A DAY, NOR LESS THAN ONCE FOR EACH 150 CUBIC YARDS OF CONCRETE, NOR LESS THAN ONCE FOR EACH 5000 SQUARE FEET OF SURFACE AREA FOR SLABS.

STRUCTURAL STEEL

1. ALL NEW STRUCTURAL STEEL MATERIALS, WORKMANSHIP, AND DETAILS SHALL CONFORM TO THE 2010 EDITION OF THE ANSI / AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES". NEW STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

    STRUCTURAL STEEL W-SHAPES..... ASTM A992 (Fy=50 KSI)
    STRUCTURAL STEEL ANGLES..... ASTM A572, GRADE 50
    STRUCTURAL STEEL PLATES..... ASTM A36 (MINIMUM)

2. ALL SHOP CONNECTIONS SHALL BE WELDED TO CONFORM TO "STRUCTURAL WELDING CODE" AWS D1.1, LATEST EDITION, OF THE AMERICAN WELDING SOCIETY, E70 SERIES. SHOP CONNECTIONS MAY BE HIGH STRENGTH BOLTED TO CONFORM TO SPECIFICATION ASTM F3125 (GRADE A325).
3. ALL FIELD CONNECTIONS SHALL BE HIGH STRENGTH BOLTED TO CONFORM TO ASTM F3125 GRADE A325 (OR GRADE A490), UNLESS OTHERWISE NOTED. WHERE WELDING IS SPECIFIED, WELDING PER NOTE #2 ABOVE SHALL APPLY.
4. UNLESS OTHERWISE NOTED, ALL NEW STRUCTURAL STEEL MEMBERS SHALL REMAIN UNPRIMED TO RECEIVE SPRAYED-ON FIREPROOFING (SOFP). REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
5. ALL "SIMPLY SUPPORTED" CONNECTIONS SHALL CONFORM TO THE TYPICAL DETAILS AND SHALL BE DESIGNED BY THE STEEL FABRICATOR TO SUPPORT THE MINIMUM LOADS GIVEN ON THE "TYPICAL W-BEAM TO BEAM / COLUMN SHEAR CONNECTION" DETAIL.
6. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS IN ACCORDANCE WITH AWS SPECIFICATIONS. ALL CERTIFICATIONS MUST BE CURRENT (i.e., WITHIN 12 MONTHS OF PERFORMANCE OF WELDING).
7. PROVIDE A MINIMUM OF 1/4" FILLET WELDS (ALL AROUND) AT WELDED CONNECTIONS, U.O.N.
8. SHORT-SLOTTED HORIZONTAL HOLES IN WEB OF BEAM FOR BOLTED CONNECTIONS ARE PERMISSIBLE.

STEEL DECKING

1. NEW STEEL DECK UNITS SHALL BE FORMED FROM STEEL SHEETS CONFORMING TO THE REQUIREMENTS OF ASTM A653, GRADE 40 (MINIMUM). BEFORE FORMING, SHEETS SHALL BE COATED WITH A ZINC COATING CONFORMING TO ASTM A653 G90 COATING.
2. STEEL DECK UNITS SHALL SPAN THREE OR MORE SUPPORTS WHERE POSSIBLE.
3. STEEL DECK UNITS SHALL BE FASTENED TO STEEL FRAMING WITH HILTI X-ENP-19 L15 POWDER-ACTUATED FASTENERS SPACED AS FOLLOWS, U.O.N.:

PANEL TYPE	WIDE RIB ROOF DECK
END SUPPORTS	6" O.C.
SIDE SUPPORTS	12" O.C.
INTERMEDIATE SUPPORTS	12" O.C.

4. STEEL DECKING SIDELAPS SHALL BE CONNECTED WITH #10 TEK SCREWS @ 12" O.C. (MAXIMUM), BUT THERE SHALL BE A MINIMUM OF THREE SIDELAP FASTENERS PER DECK SPAN.
5. PROVIDE END CLOSURES, CAPS, SUMP PANS, AND ALL OTHER ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION. SUMP PANS ARE REQUIRED FOR OPENINGS GREATER THAN 13" AND AT ALL ROOF DRAINS.
6. MECHANICAL, ELECTRICAL, PLUMBING, OR CEILING CONSTRUCTION SHALL NOT BE HUNG DIRECTLY FROM THE STEEL ROOF DECK.

QUALITY ASSURANCE

1. THE OWNER WILL EMPLOY AND PAY FOR THE SERVICES OF AN INDEPENDENT TESTING AGENCY TO PROVIDE QUALITY ASSURANCE TESTING AND INSPECTIONS FOR WORK SPECIFIED IN CHAPTER 17 OF THE 2015 INTERNATIONAL BUILDING CODE, MASSACHUSETTS STATE BUILDING CODE 9TH EDITION AMENDMENTS. THE TESTING AGENCY SHALL BE LICENSED IN THE COMMONWEALTH OF MASSACHUSETTS AND ALL TESTING AND INSPECTIONS SHALL BE PERFORMED UNDER THE SUPERVISION OF AN ENGINEER REGISTERED IN THE COMMONWEALTH OF MASSACHUSETTS.
2. FAILURE OF QUALITY ASSURANCE TESTING AND INSPECTIONS TO DETECT ANY DEFECTIVE WORK OR MATERIAL SHALL NOT IN ANY WAY PREVENT LATER REJECTION WHEN SUCH DEFECT IS NOTED, NOR SHALL IT OBLIGATE THE OWNER'S REPRESENTATIVE FOR FINAL ACCEPTANCE.
3. THE TESTING AGENCY AND ITS REPRESENTATIVES ARE NOT AUTHORIZED TO REVOKE, ALTER, RELAX, ENLARGE OR RELEASE ANY PORTION OF THE WORK, PERFORM ANY DUTIES OF THE CONTRACTOR, OR BE A PARTY TO SCHEDULING OF WORK.
4. RECORDS OF INSPECTIONS SHALL BE KEPT AVAILABLE TO THE BUILDING OFFICIAL DURING PROGRESS OF THE WORK AND FOR TWO YEARS AFTER COMPLETION OF THE PROJECT. RECORDS SHALL BE PRESERVED BY THE INDEPENDENT TESTING AGENCY.

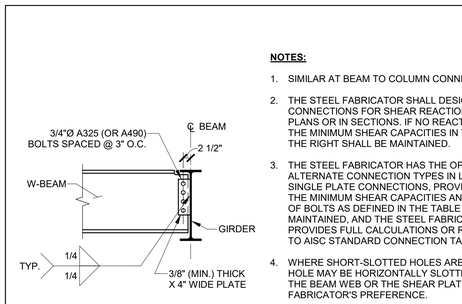
TYPICAL REBAR DEVELOPMENT AND LAP SPLICE LENGTH SCHEDULE

LENGTHS (IN INCHES) BASED ON f'_c = 5000 PSI AND NORMAL WEIGHT CONCRETE

		BAR TYPE \ BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#11
DEVELOPMENT LENGTH	TENSION	TOP BARS	17	23	28	34	49	56	63	71	78
		OTHER BARS	13	17	22	26	38	43	48	54	60
	COMPRESSION	ALL BARS	8	9	12	14	16	18	21	23	26
LAP SPLICE LENGTH	TENSION	TOP BARS	22	29	36	44	63	72	81	92	102
		OTHER BARS	17	23	28	34	49	56	63	71	78
	COMPRESSION	ALL BARS	12	15	19	23	27	30	34	39	43

NOTES:

1. LENGTHS ARE BASED ON f_y = 60 KSI, f'_c = 3000 PSI, AND NORMAL WEIGHT CONCRETE. WHERE LIGHTWEIGHT AGGREGATE CONCRETE IS SPECIFIED, MULTIPLY THE ABOVE TENSION VALUES BY A FACTOR OF 1.3.
2. TOP BARS ARE HORIZONTAL BARS SO PLACED THAT MORE THAN 12" OF FRESH CONCRETE IS PLACED IN THE MEMBER BELOW THE BAR.
3. TENSION LAP SPLICE LENGTHS ARE FOR "CLASS B" SPLICES PER ACI 318. LESSER SPLICE LENGTHS MAY BE SUBMITTED BY THE CONTRACTOR PROVIDED FULL CALCULATIONS AND REFERENCE TO THE APPLICABLE PORTIONS OF THE LATEST EDITION OF ACI 318 ACCOMPANY THE SUBMITTAL.
4. WHERE BARS OF DIFFERENT SIZES ARE SPLICED, LAP SPLICE LENGTH SHALL BE AS REQUIRED FOR THE LARGEST BAR.



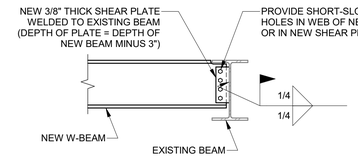
NOTES:

1. SIMILAR AT BEAM TO COLUMN CONNECTIONS.
2. THE STEEL FABRICATOR SHALL DESIGN ALL CONNECTIONS FOR SHEAR REACTIONS GIVEN ON PLANS OR IN SECTIONS. IF NO REACTION IS GIVEN, THE MINIMUM SHEAR CAPACITIES IN THE TABLE TO THE RIGHT SHALL BE MAINTAINED.
3. THE STEEL FABRICATOR HAS THE OPTION TO USE ALTERNATE CONNECTION TYPES IN LIEU OF SINGLE PLATE CONNECTIONS, PROVIDED THAT THE MINIMUM SHEAR CAPACITIES AND NUMBERS OF BOLTS AS DEFINED IN THE TABLE ARE MAINTAINED, AND THE STEEL FABRICATOR PROVIDES FULL CALCULATIONS OR REFERENCES TO AISC STANDARD CONNECTION TABLES.
4. WHERE SHORT-SLOTTED HOLES ARE USED, THE HOLE MAY BE HORIZONTALLY SLOTTED IN EITHER THE BEAM WEB OR THE SHEAR PLATE AT THE FABRICATOR'S PREFERENCE.
5. MINIMUM SHEAR CONNECTION REQUIREMENTS ARE FOR ALLOWABLE STRENGTH DESIGN (ASD).

MINIMUM SHEAR CONNECTION REQUIREMENTS (ASD LOADS)

BEAM DEPTH	MINIMUM SHEAR CAPACITY (KIPS)	MINIMUM NUMBER OF ROWS OF BOLTS	BOLT HOLE TYPE
W10s AND LESS	16.5	2	STANDARD OR SHORT-SLOTTED
W12s AND W14s	28.8	3	STANDARD OR SHORT-SLOTTED
W16s AND W18s	41.5	4	STANDARD OR SHORT-SLOTTED
W21s	54.1	5	STANDARD OR SHORT-SLOTTED
W24s	66.5	6	SHORT-SLOTTED

1 **TYPICAL W-BEAM TO BEAM/COLUMN SHEAR CONNECTION**



2 **TYPICAL NEW W-BEAM TO EXISTING BEAM CONNECTION**

STRUCTURAL DRAWING LIST

SHEET NUMBER	SHEET NAME
S0.01	GENERAL NOTES AND TYPICAL DETAILS
S0.02	TYPICAL DETAILS
S0.03	CONCRETE REPAIR NOTES & DETAILS
S0.04	CONCRETE REPAIR DETAILS
S0.05	CONCRETE REPAIR DETAILS
S1.01	PARTIAL ROOF FRAMING PLAN - PHASE 1

PROJECT NORTH
NORTH

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REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

GENERAL NOTES AND TYPICAL DETAILS

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

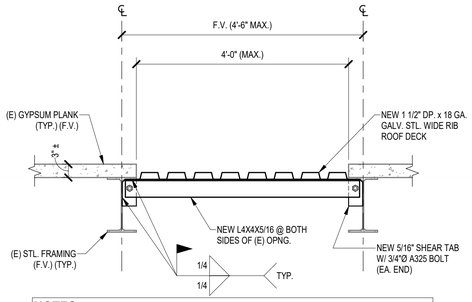
STAMP

DRAWING INFORMATION

SCALE	1/2" = 1'-0"
DRAWN BY	BDA
CHECKED	TPB
DATE	JUNE 18, 2025

DRAWING NUMBER

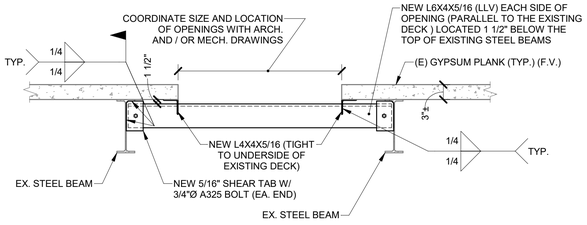
S0.01



NOTES:

1. COORDINATE QUANTITY AND LOCATIONS WITH ARCH. DWGS.
2. STEEL SHOWN TO REMAIN UNPRIMED TO RECEIVE SOFP.

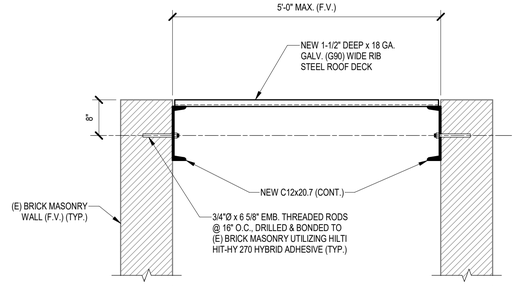
1 TYPICAL EXISTING OPENING INFILL DETAIL (4'-0" MAX. OPENING)



NOTES:

1. COORDINATE QUANTITY AND LOCATIONS WITH ARCH. DWGS.
2. STEEL SHOWN TO REMAIN UNPRIMED TO RECEIVE SOFP.

2 TYPICAL ROOF OPENING AND / OR ROOF DRAIN SUPPORT DETAIL AT EXISTING STEEL BEAMS

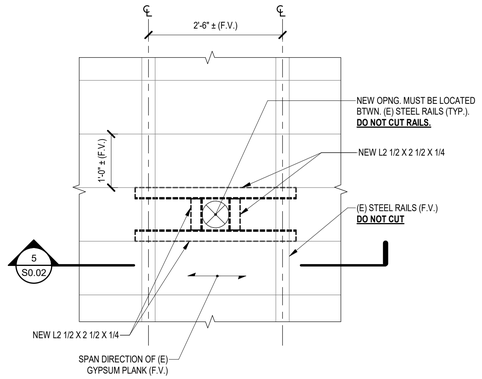


NOTES:

1. COORDINATE QUANTITY AND LOCATIONS WITH ARCH. DWGS.
2. STEEL SHOWN TO REMAIN UNPRIMED TO RECEIVE SOFP.

3 TYPICAL EXISTING VENT INFILL DETAIL

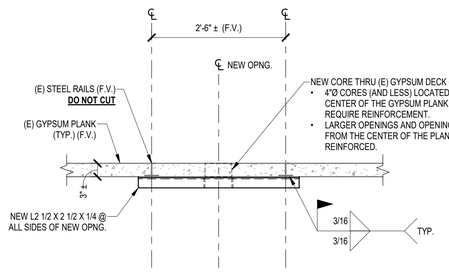
SCOPE TO BE DETERMINED



NOTES:

1. COORDINATE QUANTITY AND LOCATIONS WITH ARCH. DWGS.
2. STEEL SHOWN SHALL BE PRIMED AND PAINTED PER THE ARCHITECTURAL REQUIREMENTS.

4 TYPICAL REINFORCING OF NEW OPENING IN EXISTING GYPSUM PLANK (12"Ø MAX. OPNG.)

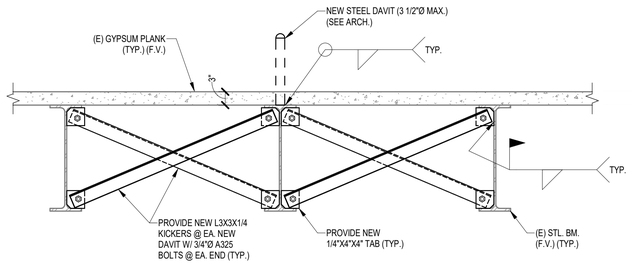


NOTES:

1. COORDINATE QUANTITY AND LOCATIONS WITH ARCH. DWGS.
2. STEEL SHOWN SHALL BE PRIMED AND PAINTED PER THE ARCHITECTURAL REQUIREMENTS.

SECTION 5

3/4" = 1'-0"



NOTES:

1. COORDINATE QUANTITY AND LOCATIONS WITH ARCH. DWGS.
2. NEW KICKERS NOT NEEDED @ MAIN SLOPED ROOF. NEW DAVITS @ MAIN SLOPED ROOF MUST BE WELDED TO EXISTING MAIN ROOF TRUSSES.
3. STEEL SHOWN SHALL BE PRIMED AND PAINTED PER THE ARCHITECTURAL REQUIREMENTS.

6 TYPICAL NEW DAVIT SUPPORT DETAIL AT FLAT ROOFS

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

TYPICAL DETAILS

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
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info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	BDA
CHECKED	TPB
DATE	JUNE 18, 2025

DRAWING NUMBER

S0.02

PROJECT NORTH
NORTH

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SOUZA, TRUE AND PARTNERS INC.
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GENERAL REPAIR NOTES:
(UNLESS OTHERWISE NOTED ON DRAWINGS)

1. THE REPAIR DETAILS SHOWN ON SHEETS S0.03 THROUGH S0.05 ARE TO BE APPLIED AS NECESSARY AND TO BE USED IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS. THE ARCHITECTURAL DRAWINGS INDICATE LOCATIONS OF DETERIORATED CONCRETE TO BE REVIEWED & REPAIRED.

2. THE CONTRACTOR SHALL PROVIDE A WRITTEN 2 YEAR WARRANTY ON LABOR AND A WRITTEN 5 YEAR WARRANTY ON ALL MATERIALS USED.

3. THE CONTRACTOR SHALL REVIEW ALL REPAIR DETAILS PRIOR TO BIDDING AND SHALL THOROUGHLY REVIEW EDGE PREPARATION REQUIREMENTS, EQUIPMENT REQUIREMENTS, CLEANING OF REBAR, AND REBAR SPLICE DETAILS, PRIOR TO COMMENCING ANY WORK.

4. SURFACE PREPARATION OF EXISTING CONCRETE:

   A. THE SURFACE MUST BE MECHANICALLY PREPARED. AREAS TO BE PATCHED OR OVERLAID MUST BE CLEAN AND SOUND. ALL LOOSE AND DETERIORATED CONCRETE SHALL BE REMOVED BY MECHANICAL MEANS APPROVED BY THE ENGINEER (SEE 4B BELOW). CHIP CONCRETE SUBSTRATE TO OBTAIN A SURFACE PROFILE OF +1/8" WITH A NEW FRACTURED AGGREGATE SURFACE. STEEL BRUSH THE REINFORCING STEEL TO REMOVE ALL CONTAMINANTS AND RUST. WHERE REINFORCING STEEL IS ENCOUNTERED, THE FOLLOWING PROCEDURES WILL BE USED: IF HALF OF THE DIAMETER OF THE BAR IS EXPOSED, CHIP OUT BEHIND THE REINFORCING STEEL. THE DISTANCE CHIPPED BEHIND THE REBAR SHOULD EQUAL APPROXIMATELY 3/4". CUTTING SHALL BE MADE FROM THE PERIPHERY TO THE CENTER OF DAMAGED SURFACES TO AVOID UNECESSARY CUTS. ALL REMOVED MATERIALS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR. ALL REMOVAL AND DISPOSAL COSTS SHALL BE INCLUDED IN THE REPAIR WORK.

   B. CHIPPING HAMMERS USED TO REMOVE LOOSE AND DETERIORATED CONCRETE SHALL NOT EXCEED 30 POUNDS AND SHALL BE CHISEL-POINTS. SPECIAL CARE SHOULD BE APPLIED IN REMOVING UNSOUND CONCRETE AROUND REINFORCING STEEL AND EMBEDDED ITEMS TO PREVENT LOSS OF BOND IN THE REMAINING SOUND CONCRETE.

5. CONSTRUCTION COSTS:

   CONTRACTOR SHALL PROVIDE THE FOLLOWING IN HIS PROJECT BID:

   A. BASE BID:
   QUANTITIES INDICATED ON THE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING (INCLUDING REMOVAL AND DISPOSAL OF EXISTING MATERIAL FROM THE SITE BY THE CONTRACTOR):
   - HORIZONTAL SURFACE REPAIRS
   - OVERHEAD SURFACE REPAIRS
   - FULL-DEPTH SLAB REPAIRS
   - CRACK REPAIRS (FOR EACH TYPE OF REPAIR):
     GRAVITY-FED FOR TOPSIDE OF SLABS, OR
     EPOXY INJECTION FOR UNDERSIDE OF SLABS

   CONTRACTOR TO NOTE WELL:
   THE SPECIFIC SIZE AND LOCATION OF ALL CONCRETE REPAIRS SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS BUT ALSO VERIFIED IN THE FIELD BY THE CONTRACTOR.

   B. UNIT RATE COST BID (FOR ADDS & DEDUCTS ONLY):
   FOR EACH WORK ITEM LISTED ABOVE IN THE BASE BID (INCLUDING REMOVAL AND DISPOSAL OF EXISTING MATERIAL FROM THE SITE BY THE CONTRACTOR).

6. THE PRODUCTS / MATERIALS INDICATED ON THESE DRAWINGS FOR CONCRETE REPAIRS SHALL BE USED AS THE BASIS OF DESIGN FOR THIS PROJECT. ALTERNATIVE EQUIVALENT PRODUCTS / MATERIALS MAY BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE.

7. UNLESS OTHERWISE NOTED, DETAILS SHOWN ON ANY DRAWINGS ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.

1 GENERAL REPAIR NOTES

EXISTING CONSTRUCTION:

1. ALL INFORMATION RELATED TO THE EXISTING STRUCTURAL CONDITIONS HAS BEEN DERIVED FROM EXISTING STRUCTURAL DRAWINGS AND OBSERVATIONAL SITE VISITS.

2. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND MEMBER SIZES AS INDICATED ON THE DRAWINGS, IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL TEMPORARY BRACING AND SHORING, AS REQUIRED, TO PREVENT DANGER TO PERSONS AND PROPERTY DURING THE ENTIRE REPAIR PHASE.

4. ANY DIMENSION NOTED (±) OR "F.V." ON PLAN SHALL BE COORDINATE AND VERIFIED BY THE CONTRACTOR IN THE FIELD, PRIOR TO THE SUBMISSION OF ANY SHOP DRAWINGS.

5. REMOVAL OF THE EXISTING CONCRETE SPALLED / DELAMINATED AREAS OF SLABS SHALL BE EXECUTED WITH CARE AND CAUTION IN ORDER TO PREVENT DAMAGE TO THE EXISTING STRUCTURAL FRAMING SYSTEMS, WHICH SHALL REMAIN.

6. ALL EXISTING STRUCTURAL STEEL BEAMS, CONNECTIONS, PLATES, AND CLIP ANGLES SHALL BE MECHANICALLY ABRADED IN ORDER TO REMOVE ALL RUST AND SCALE. PROVIDE (1) COAT OF TNEMEC 90-97 ZINC-RICH PRIMER (OR APPROVED EQUAL) - BRUSH APPLIED ONLY (4 MILS MIN.) AT ALL EXPOSED STRUCTURAL STEEL SURFACES (i.e., PLATES, ANGLES, CHANNELS, AND BEAMS).

2 EXISTING CONSTRUCTION NOTES

PROCEDURE NOTES:

1. CHIP OUT DETERIORATED CONCRETE SUBSTRATE W/ "CHISEL-TIPPED" JACK HAMMER (W/ MAX. 30 LB CAPACITY) OR HAND CHIP WITH 15 LB MAX. HAMMER AND REMOVE ALL LOOSE AND DETERIORATED CONCRETE DOWN TO SOUND CONCRETE, LEAVING A NEW FRACTURED AGGREGATE SURFACE WITH A PROFILE OF ±1/8".

2. PREPARE PATCH PERIMETER FOR PROPER EDGE CONDITIONING, AS SHOWN IN "EDGE PREPARATION METHOD DETAIL".

3. REMOVE SUBSTRATE UNDER (OR OVER) REINFORCING BARS PER "UNDERCUTTING AT REBAR DETAIL" FOR REBAR EXPOSED DURING CHIPPING.

4. PROVIDE REBAR CUTTING AND SPLICING WHERE REBAR HAS LOST MORE THAN 20% OF THE ORIGINAL CROSS SECTIONAL AREA, PER "REBAR SPLICE DETAIL".

5. CLEAN EXPOSED REINFORCING STEEL PER "CLEANING OF EXISTING STEEL MESH OR REBAR" DETAIL.

6. SSD SURFACE AND APPLY SCRUB COAT / SLURRY OF SIKA REPAIR MORTAR (SEE NOTE #7) [OR APPROVED EQUAL] AS BONDING AGENT TO CONCRETE SURFACES. ON THE SAME DAY, APPLY 2 COATS OF SIKA ARMATEC 110 EPOCEM [OR APPROVED EQUAL] AS CORROSION INHIBITOR TO REBAR (ONLY) PER "CLEANING OF EXISTINGG STEEL MESH OR REBAR DETAIL". DO NOT APPLY ARMATEC 110 TO CONCRETE SURFACES.

7. HAND APPLY NEW REPAIR MORTAR OVER SCRUB COAT / SLURRY AND SUBSTRATE (WHILE SCRUB COAT / SLURRY IS STILL WET). ALL SURFACE PREPARATION AND APPLICATION SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

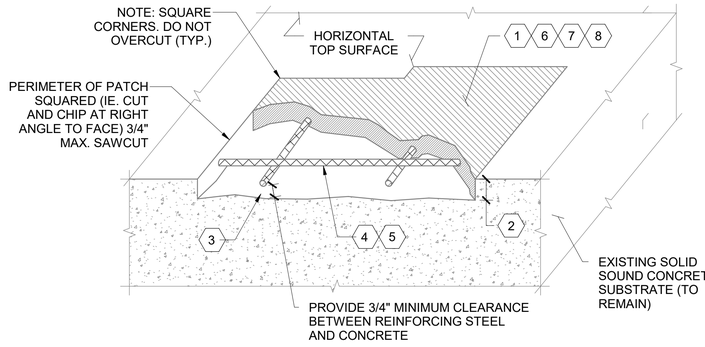
FOR PATCH DEPTH OF:	USE:
A) HORIZONTAL (TOP) SURFACES: 1/4" TO 3"	SIKAQUICK 1000 REPAIR MORTAR (OR APPROVED EQUAL) - NEAT (WITH NO AGGREGATE) UP TO 1" MAX. DEPTH / LIFT - EXTENDED (WITH 3/8" MAX. CLEAN COARSE AGGREGATE ADDED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS) FROM 1"-6" MAX. DEPTH / LIFT
B) OVERHEAD CONCRETE SURFACES (HAND APPLIED): 1/4" TO 3"	SIKAQUICK VOH REPAIR MORTAR (OR APPROVED EQUAL) (2" MAX. THICKNESS / LIFT)
C) FULL-DEPTH REMOVAL AND REPLACEMENT AT HORIZONTAL SURFACES:	REPLACE WITH NEW 5000 PSI NORMAL WEIGHT CONCRETE SLAB - UP TO 4 1/2" DEPTH - WITH 3/8" PEA STONE AGGREGATE - DEPTHS GREATER THAN 4 1/2" - WITH 1/2" OR 3/4" COARSE AGGREGATE

D) FOR OVERHEAD CONCRETE REPAIRS (IN LIEU OF "C" ABOVE), SIKACRETE 211 SCC PLUS WITH 3/8" AGGREGATE MAY BE FORMED AND PUMPED (FROM 1 1/2" MINIMUM THICKNESS WITH NO MAXIMUM LIMIT).

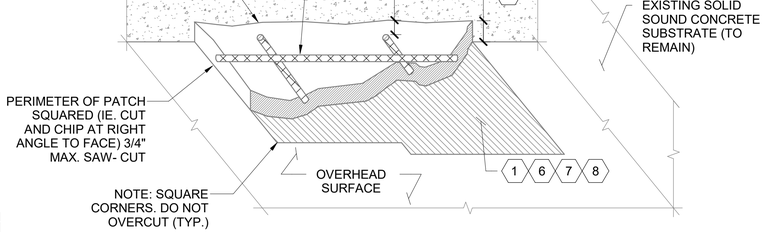
8. PROVIDE 2 TOPCOATS OF SIKA FERROGARD 903 (OR APPROVED EQUAL) AFTER NEW PATCH IS SET. COATING SHALL INCLUDE NEW MATERIAL AREA AND RUN BEYOND EXTENT OF PATCH A MINIMUM OF 2 FEET (ALL AROUND PATCH). CONTRACTOR SHALL CONFIRM POLYMER WATERPROOFING IS COMPATIBILE WITH SIKA FERROGARD 903.

NOTES:

1. THE FLOOR BELOW THE CHIPPING AND CUTTING AREAS SHALL BE SECURED TO PROTECT PEDESTRIAN TRAFFIC, ETC. AGAINST FALLING CONCRETE DEBRIS.
2. OVERHEAD MORTAR REPAIRS SHALL BE HAND-APPLIED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. OVERHEAD MORTAR REPAIRS MAY BE PNEUMATICALLY PLACED.
3. PRIOR TO PLACING NEW MATERIAL, ENSURE THAT EDGE(S) OF EXISTING MATERIAL IS / ARE ROUGHENED FOR PROPER BONDING AND ARE SURFACE-SATURATED DRY (SSD) PER MANUFACTURER'S RECOMMENDATIONS.

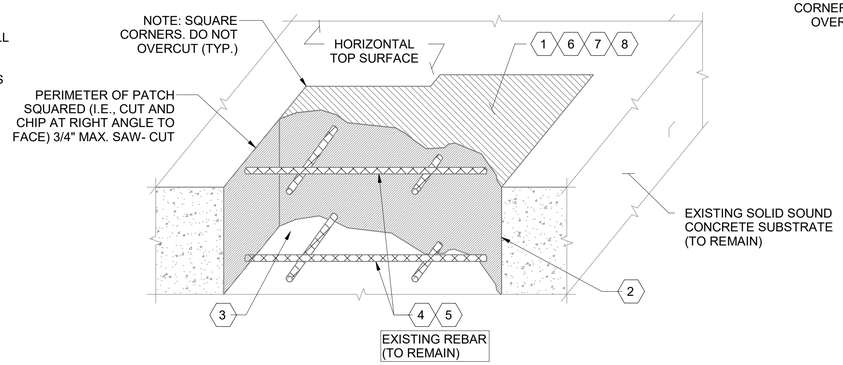


3A AT HORIZONTAL SURFACES - TOPSIDE



3B AT HORIZONTAL SURFACES - UNDERSIDE

NOTE WELL: CONTRACTOR TO PROVIDE TEMPORARY SHORING, AS REQUIRED, AT UNDERSIDE OF STRUCTURE



3C FULL-DEPTH REPAIR AT CONCRETE SLAB

NOTE WELL: DETAIL TO BE USED IN ISOLATED AREAS FOR SHALLOW CONCRETE SLABS WHERE TOP & BOTTOM SLAB REPAIR IN SAME AREA WILL LEAVE LESS THAN 2" OF ORIGINAL SOUND CONCRETE.

3 TYPICAL CONCRETE REPAIR PROCEDURE AND DETAILS FOR EXISTING SPALLED / DELAMINATED / HONEYCOMBED CAST-IN-PLACE CONCRETE ELEMENTS

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

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OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

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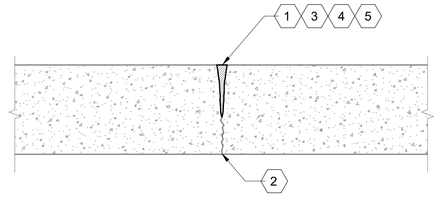
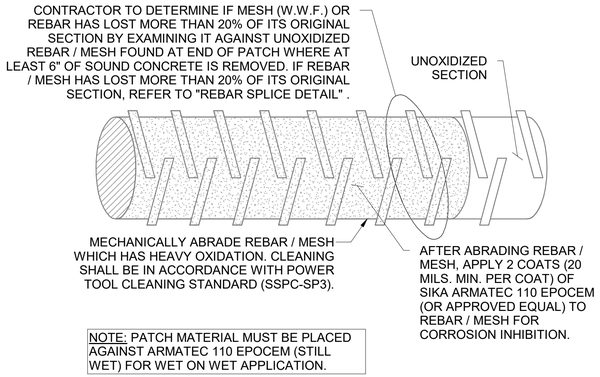
PROCEDURE NOTES:

1. IN EVENT THAT EXISTING SEALANT IS FOUND AT FACE OF STRUCTURAL ELEMENT, REMOVE IT FROM THE CRACK AND PREPARE JOINT FOR REPAIR.
2. SEAL UNDERSIDE OF EXISTING CRACK WITH SIKADUR 31 HI-MOD EPOXY GEL.
3. SAWCUT JOINT WITH 3/4" THICK VEE GROOVE AT TOPSIDE OF CRACKS AND CLEAN JOINT, AS REQUIRED.
4. GRAVITY-FEED SIKADUR 35 HI-MOD LV EPOXY RESIN ADHESIVE INTO THE CRACK(S).
5. AFTER CRACK(S) IS / ARE COMPLETELY FILLED AND THE EPOXY RESIN ADHESIVE HAS BEEN ALLOWED TO CURE, GRIND SURFACE AND FINISH FLUSH WITH THE ADJACENT CONCRETE.



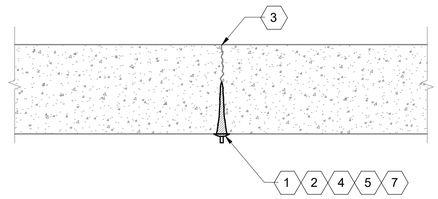
1 GRAVITY-FED INFILL OF HORIZONTAL TOPSIDE CRACKS (HAIRLINE TO 1/4" WIDE)



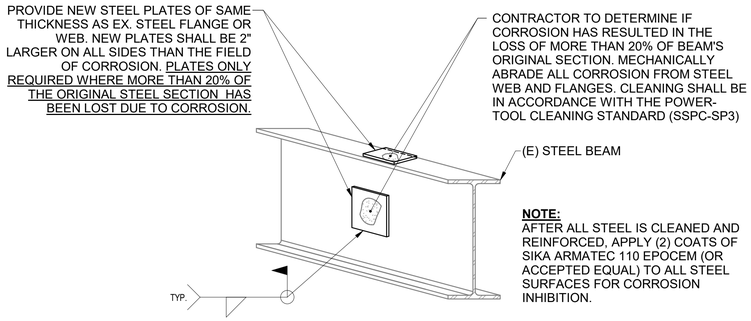
NOTE: PATCH MATERIAL MUST BE PLACED AGAINST ARMATEC 110 EPOCEM (STILL WET) FOR WET ON WET APPLICATION.

PROCEDURE NOTES:

1. IN EVENT THAT EXISTING SEALANT IS FOUND AT FACE OF STRUCTURAL ELEMENT, REMOVE IT FROM THE CRACK AND PREPARE JOINT FOR REPAIR.
2. USE A STEEL WIRE BRUSH TO REMOVE ALL LOOSE MATERIAL, OIL, ETC.
3. SEAL TOPSIDE OF EXISTING CRACK WITH SIKADUR 31 HI-MOD EPOXY GEL, AS APPLICABLE.
4. SEAL ENDS OF EXISTING CRACK WITH SIKADUR 31 HI-MOD GEL. INSTALL INJECTION PORTS ON UNDERSIDE FACE OF SLAB WITH THE PORT FLAT FACE AND OPENING DIRECTLY OVER THE CRACK. FIX PORTS TO FACE OF SLAB USING SIKADUR 31 SEALANT. PORTS SHALL BE INSTALLED AT ENDS OF CRACK AND AT 12" O.C. ALONG LENGTH OF CRACK.
5. INJECT SIKADUR 35 HI-MOD LV EPOXY RESIN USING LOW PRESSURE (HAND PUMP) INTO THE FIRST INJECTION PORT. PROCEED WITH LOW PRESSURE INJECTION UNTIL A SMALL AMOUNT OF THE RESIN BEGINS TO SEEP OUT OF THE NEXT ADJACENT OPEN INJECTION PORT. SEAL THE INJECTION PORT AND MOVE TO THE NEXT ADJACENT PORT. CONTINUE WORKING ALONG THE LENGTH OF THE CRACK UNTIL COMPLETE.
6. ALLOW EPOXY RESIN TO CURE FOR 48 HOURS, WITH THE INJECTION PORTS AND SEALANT REMAINING IN PLACE.
7. AFTER EPOXY RESIN HAS CURED, REMOVE INJECTION PORTS BY HAMMER BLOW AND GRIND THE SURFACE SMOOTH TO MATCH THE ADJACENT CONCRETE.

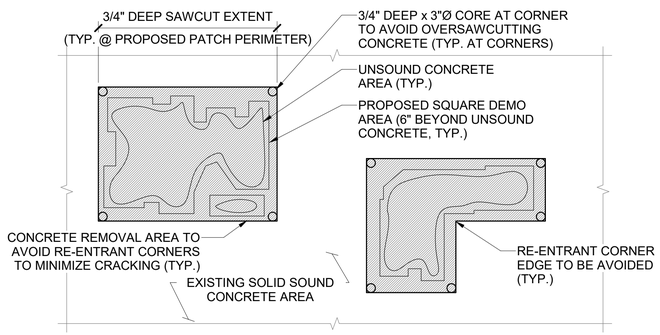


2 EPOXY INJECTION REPAIR OF HORIZONTAL UNDERSIDE CRACKS (HAIRLINE TO 1/4" WIDE)



NOTE:
AFTER ALL STEEL IS CLEANED AND REINFORCED, APPLY (2) COATS OF SIKA ARMATEC 110 EPOCEM (OR ACCEPTED EQUAL) TO ALL STEEL SURFACES FOR CORROSION INHIBITION.

3 CLEANING OF EXISTING STEEL MESH OR REBAR

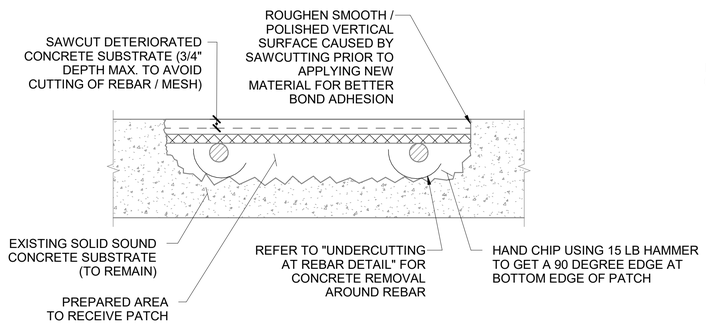


PLAN

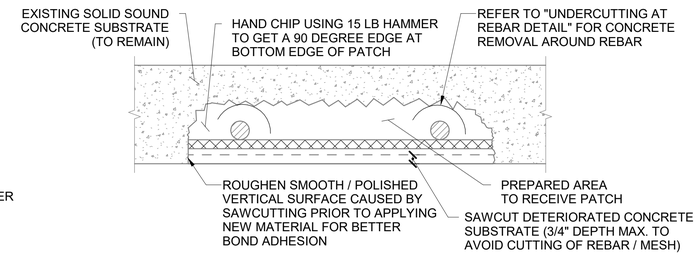
NOTES:

1. CONTRACTOR SHALL MAKE A 3/4" DEEP x 3"Ø CORE AT CORNERS OF PATCH AREA TO AVOID OVER-SAWCUTTING. AREA BETWEEN CORE AND PATCH CORNER MUST BE HAND-CHIPPED.
2. DO NOT CUT EXISTING REINFORCING. WHERE REINFORCING IS CLOSER THAN 3/4" FROM THE SURFACE, NO SAW CUTS SHALL BE MADE. INSTEAD, CHIP CONCRETE WITH A LIGHT DUTY CHIPPING HAMMER TO ACHIEVE A SQUARE EDGE.

4 CLEANING OF STRUCTURAL STEEL BEAM



5A SECTION (AT TOPSIDE OF SLAB)



5B SECTION (AT UNDERSIDE OF SLAB)

5 EDGE PREPARATION METHOD DETAILS

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

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OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

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SCALE	1/8" = 1'-0"
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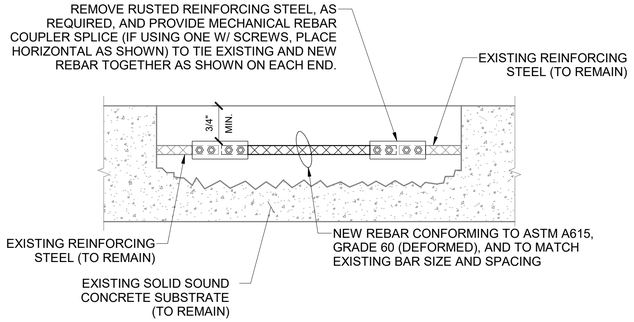
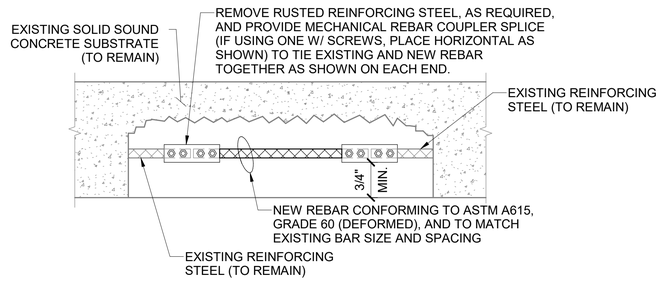


NOTES:

1. PROVIDE NEW REINFORCING IN SLABS WHERE EXISTING STEEL HAS LESS THAN 80% OF THE ORIGINAL CROSS-SECTIONAL AREA.
2. IN LIEU OF REBAR SPLICE DETAIL USING MECHANICAL COUPLERS, NEW REINFORCING STEEL MAY BE UTILIZED WITH A LAP SPLICE OF 42 BAR DIAMETERS ON EACH END.

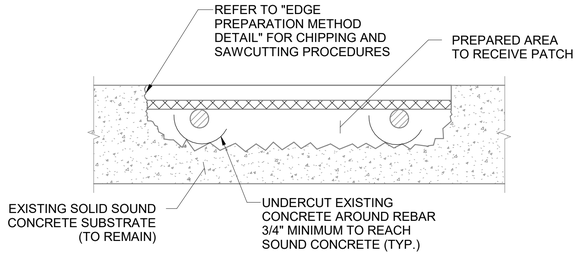
1 UNDERCUTTING AT REBAR DETAIL (AT TOPSIDE OF SLAB)



NOTES:

1. PROVIDE NEW REINFORCING IN SLABS, WALLS, COLUMNS, AND / OR BEAMS WHERE EXISTING STEEL HAS LESS THAN 80% OF THE ORIGINAL CROSS-SECTIONAL AREA.
2. IN LIEU OF REBAR SPLICE DETAIL USING MECHANICAL COUPLERS, NEW REINFORCING STEEL MAY BE UTILIZED WITH A LAP SPLICE OF 42 BAR DIAMETERS ON EACH END.

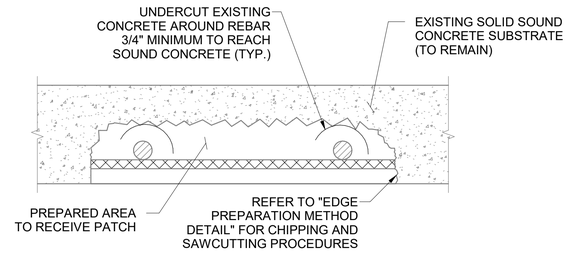
2 UNDERCUTTING OF REBAR DETAIL (AT UNDERSIDE OF SLAB)



NOTES:

1. PROVIDE NEW REINFORCING IN SLABS WHERE EXISTING STEEL HAS LESS THAN 80% OF THE ORIGINAL CROSS-SECTIONAL AREA.
2. WHEN REBAR IS UNDERCUT IN ONE LOCATION OF PATCH AREA, CONCRETE AT ADJACENT REBAR AREAS SHALL BE UNDERCUT AS WELL TO PROVIDE UNIFORM REPAIR DEPTH.
3. REFER TO "CLEANING OF EXISTING STEEL MESH OR REBAR" DETAIL AFTER CONCRETE IS REMOVED AROUND REBAR.

3 REBAR SPLICE DETAIL (AT TOPSIDE OF SLAB)



NOTES:

1. PROVIDE NEW REINFORCING IN SLABS WHERE EXISTING STEEL HAS LESS THAN 80% OF THE ORIGINAL CROSS-SECTIONAL AREA.
2. WHEN REBAR IS UNDERCUT IN ONE LOCATION OF PATCH AREA, CONCRETE AT ADJACENT REBAR AREAS SHALL BE UNDERCUT AS WELL TO PROVIDE UNIFORM REPAIR DEPTH.
3. REFER TO "CLEANING OF EXISTING STEEL MESH OR REBAR" DETAIL AFTER CONCRETE IS REMOVED AROUND REBAR.

4 REBAR SPLICE DETAIL (AT UNDERSIDE OF SLAB)

REVISIONS

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PROJECT PHASE

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CITY OF WORCESTER

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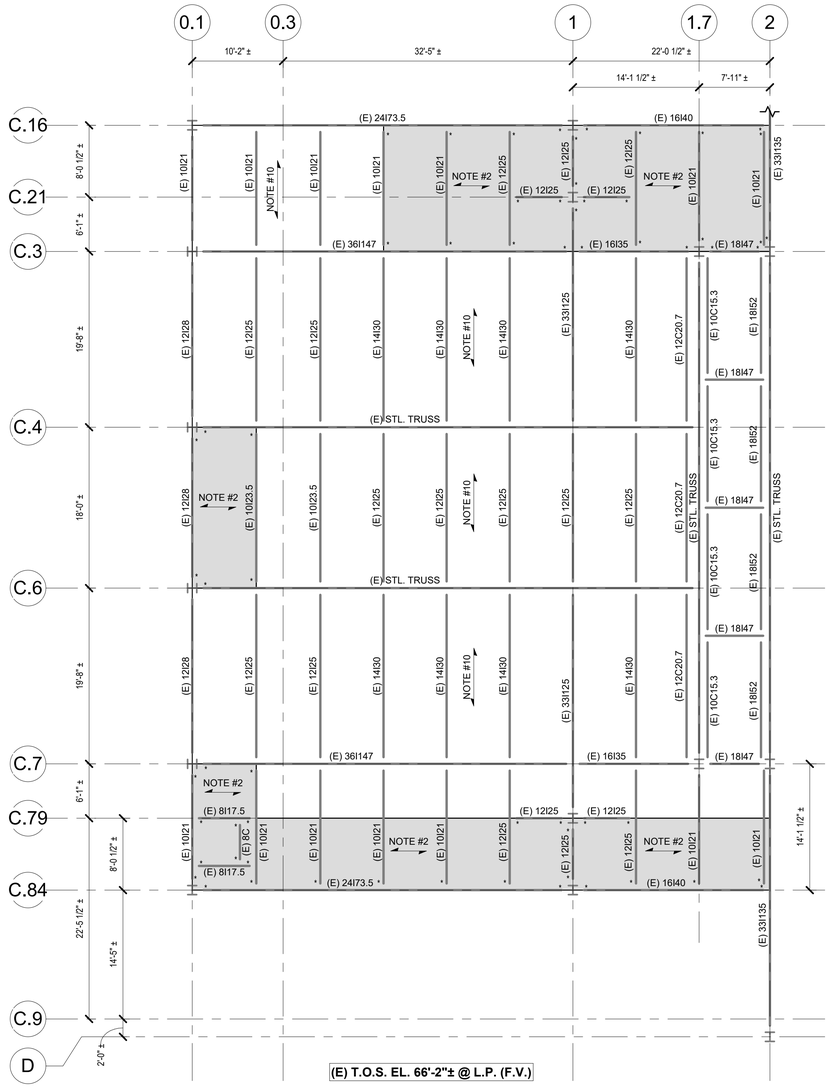
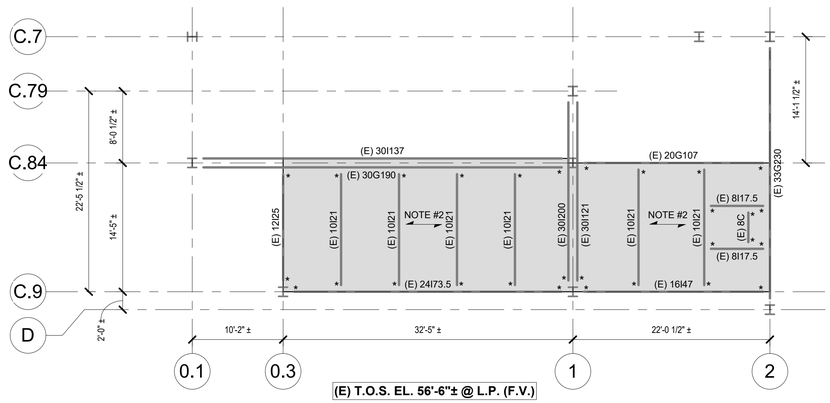


A **LITTLE THEATER ROOF FRAMING PLAN**
1/8" = 1'-0"



B **SOUTH LITTLE THEATER ROOF FRAMING PLAN**
1/8" = 1'-0"

ROOF FRAMING PLAN NOTES:

1. ▭ INDICATES APPROXIMATE EXTENTS OF EXISTING DETERIORATED GYPSUM PLANK (SUPPORTED BY EXISTING STEEL RAILS) TO BE REMOVED.
2. ◄► INDICATES SPAN DIRECTION OF NEW 1-1/2" DEEP x 18 GA. GALV. (G90) WIDE RIB STEEL ROOF DECK TO BE PROVIDED WHERE EXISTING DETERIORATED GYPSUM PLANK AND STEEL RAILS HAVE BEEN REMOVED (TYP.).
3. REFER TO DRAWINGS S0.01 AND S0.02 FOR GENERAL NOTES AND TYPICAL DETAILS.
4. REFER TO DRAWINGS S0.03 THROUGH S0.05 FOR CONCRETE REPAIR NOTES AND DETAILS.
5. REFER TO THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS, ELEVATIONS, SLOPES, AND ANGLES NOT SHOWN ON THE STRUCTURAL DRAWINGS.
6. ALL EXISTING STEEL MEMBERS AT AREAS THAT ARE TO RECEIVE NEW STEEL ROOF DECK SHALL BE CLEANED OF ALL CORROSION AND REPAIRED AS NEEDED. SEE DETAIL 4/S0.04.
7. ALTERNATIVELY TO NOTE #6, EXISTING STEEL BEAMS MAY BE REPLACED IF CLEANING AND REPAIRING IS NOT FEASIBLE. THE FOLLOWING ARE THE EQUIVALENT REPLACEMENT SIZES:
   (E) 8C MAY BE REPLACED W/ NEW C8X11.5
   (E) 8I17.5 MAY BE REPLACED W/ NEW W8X18
   (E) 10I21 MAY BE REPLACED W/ NEW W10X22
   (E) 10I23.5 MAY BE REPLACED W/ NEW W10X26
   (E) 12I25 MAY BE REPLACED W/ NEW W12X26
   (E) 12I28 MAY BE REPLACED W/ NEW W12X30
   (E) 16I35 MAY BE REPLACED W/ NEW W16X36
   (E) 16I40 MAY BE REPLACED W/ NEW W16X40
   (E) 18I47 MAY BE REPLACED W/ NEW W18X50
8. WHERE INDICATED, REPLACE ALL EXISTING BOLTED CONNECTIONS WITH NEW A325 BOLTS MATCHING DIAMETER OF EXISTING BOLTS AT ENDS OF ALL BEAMS SHOWN (TYP. U.O.N.). LOCATIONS ARE DENOTED THUS (*) ON PLAN.
9. UNLESS OTHERWISE NOTED, NEW T.O.S. EL. OF REPLACEMENT MEMBERS SHALL MATCH EXISTING T.O.S. EL. (G.C. MUST F.V. & COORD.).
10. ◄► INDICATES SPAN DIRECTION OF EXISTING GYPSUM PLANK (SUPPORTED BY EXISTING STEEL RAILS) (F.V.)

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

PARTIAL ROOF FRAMING PLAN - PHASE 1

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
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DRAWING INFORMATION

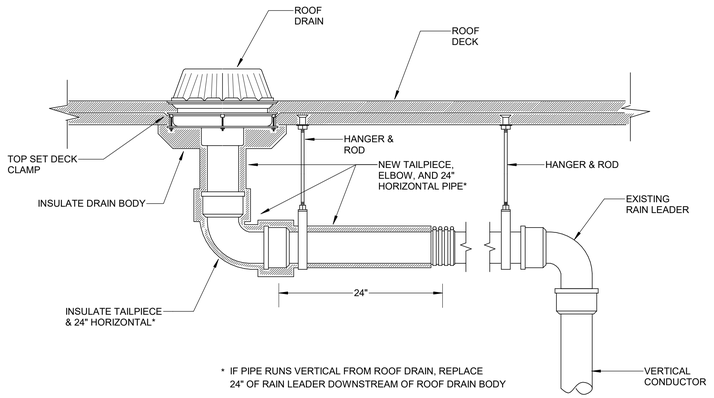
SCALE	As indicated
DRAWN BY	BDA
CHECKED	TPB
DATE	JUNE 18, 2025

DRAWING NUMBER

S1.01

PROJECT NORTH
NORTH

ST&P
SOUZA, TRUE AND PARTNERS INC.
STRUCTURAL ENGINEERS
1 CRANBERRY HILL, SUITE 301
LEXINGTON, MA 02421
(617) 926 - 6100
WWW.SOUZATRUE.COM

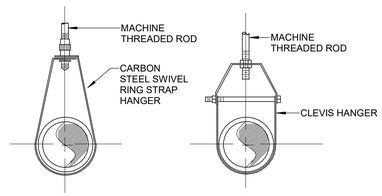


* IF PIPE RUNS VERTICAL FROM ROOF DRAIN, REPLACE 24" OF RAIN LEADER DOWNSTREAM OF ROOF DRAIN BODY

ROOF DRAIN DETAIL

NO SCALE

REFER TO ARCHITECTURAL PLANS FOR ROOF CONSTRUCTION



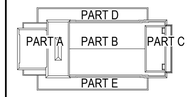
PIPE HANGER DETAIL

NO SCALE

GENERAL NOTES

1. ALL PIPING AND EQUIPMENT SHOWN DIAGRAMMATICALLY ONLY. GENERAL ORIENTATION SHOWN IN PLAN AND SECTIONAL DRAWINGS. EXACT LOCATIONS TO BE DETERMINED IN FIELD.
2. FABRICATE AND INSTALL ALL PIPING IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE COMMONWEALTH OF MASSACHUSETTS STATE PLUMBING CODE AND NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) CURRENT EDITION.
3. INSTALL PIPING STRAIGHT, PLUMB AND AS DIRECT AS POSSIBLE. FORM RIGHT ANGLES ON LINES PARALLEL WITH BUILDING WALLS.
4. MANUFACTURER'S PRINTED INSTALLATION DIRECTIONS SHALL BE FOLLOWED.
5. ALL PIPING SHALL BE REAMED TO BE FREE OF BURRS. KEEP PIPING FREE FROM SCALE AND DIRT, PROTECT OPEN PIPE ENDS WHENEVER WORK IS SUSPENDED DURING CONSTRUCTION TO PREVENT FOREIGN MATERIAL ENTERING AND LODGING THERE; USE TEMPORARY PLUG, BURLAP, OR OTHER APPROVED MATERIAL FOR PROTECTION.

c.a.crowley.
ENGINEERING, INC.
645 County Street, Suite 6
Taunton, MA 02780
tel. (508) 884.5094 - fax. (508) 884.5099
www.crowleyeng.com



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

PLUMBING LEGENDS & DETAILS

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DRAWING INFORMATION

SCALE	As indicated
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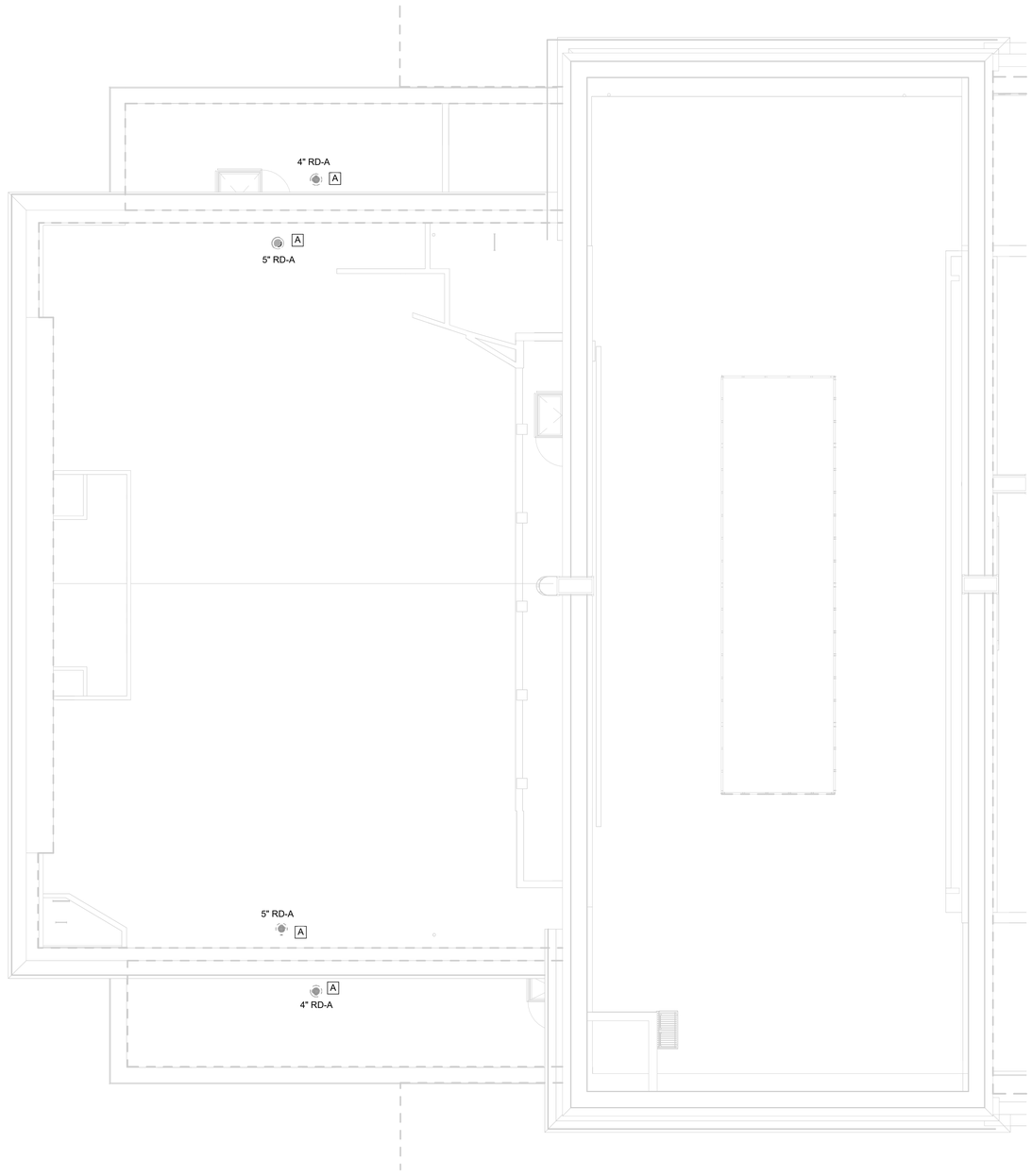
DATE	JUNE 18, 2025

DRAWING NUMBER

P000

A REMOVE AND REPLACE EXISTING ROOF DRAIN WITH NEW. OUTLET SIZE TO MATCH EXISTING. REPLACE TAILPIECE, ELBOW, AND 24" OF HORIZONTAL RAIN LEADER WITH NEW. INSULATE DRAIN BODY AND NEW PIPING.



1 Plumbing - Roof Plan - Part A
1/8" = 1'-0"

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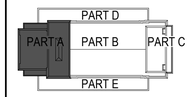

KEY PLAN

REVISIONS

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PROJECT PHASE

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PROJECT NUMBER

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OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

PARTIAL ROOF PLAN - PART A

MVG
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SCALE	As indicated
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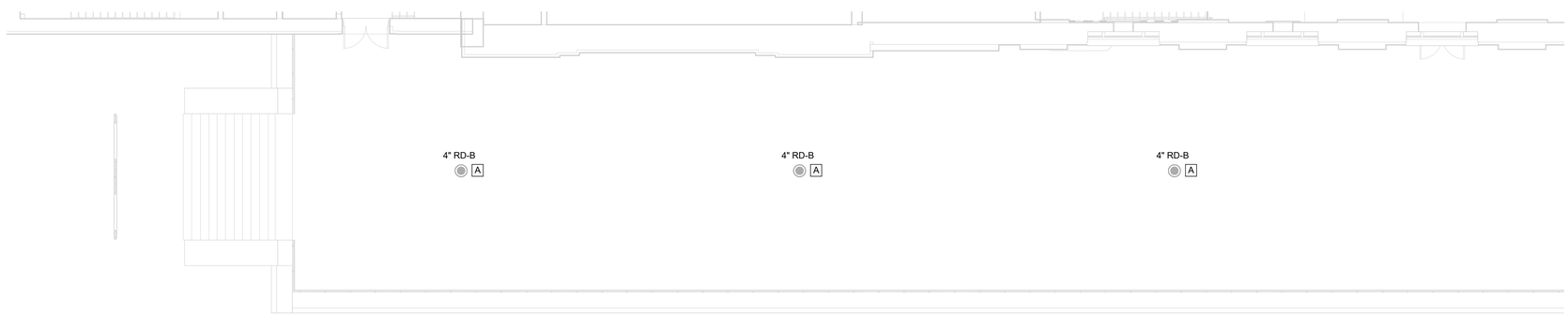
DRAWING NUMBER

P100

A REMOVE AND REPLACE EXISTING ROOF DRAIN WITH NEW. OUTLET SIZE TO MATCH EXISTING. REPLACE TAILPIECE, ELBOW, AND 24" OF HORIZONTAL RAIN LEADER WITH NEW. INSULATE DRAIN BODY AND NEW PIPING.

1 Plumbing - Balcony Plan - Part D - NORTH A
1/8" = 1'-0"

2 Plumbing - Balcony Plan - Part D - NORTH B
1/8" = 1'-0"



3 Plumbing - Balcony Plan - Part E - SOUTH A
1/8" = 1'-0"

4 Plumbing - Balcony Plan - Part E - SOUTH B
1/8" = 1'-0"

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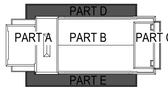

KEY PLAN

REVISIONS

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OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

MEMORIAL AUDITORIUM ROOF REPLACEMENT

1 LINCOLN SQUARE
WORCESTER, MA 01605

DRAWING TITLE

PARTIAL BALCONY PLAN - PART D & E

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SCALE	As indicated
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DRAWING NUMBER

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