

# DINWIDDIE ELEMENTARY EXTERIOR REPAIRS DINWIDDIE COUNTY PUBLIC SCHOOLS

## RRMM ARCHITECTS, PC ARCHITECTURE / PLANNING / INTERIORS

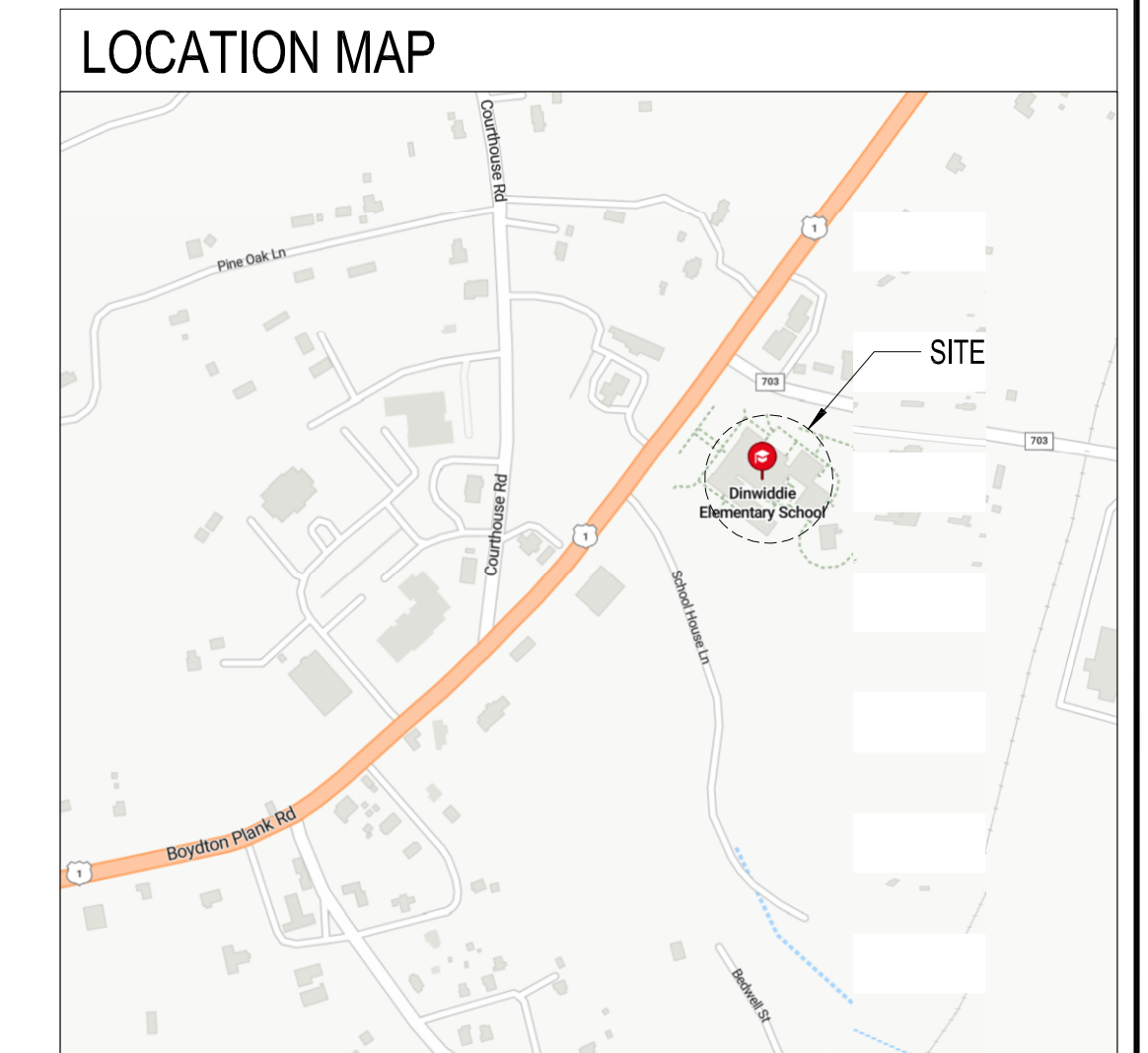
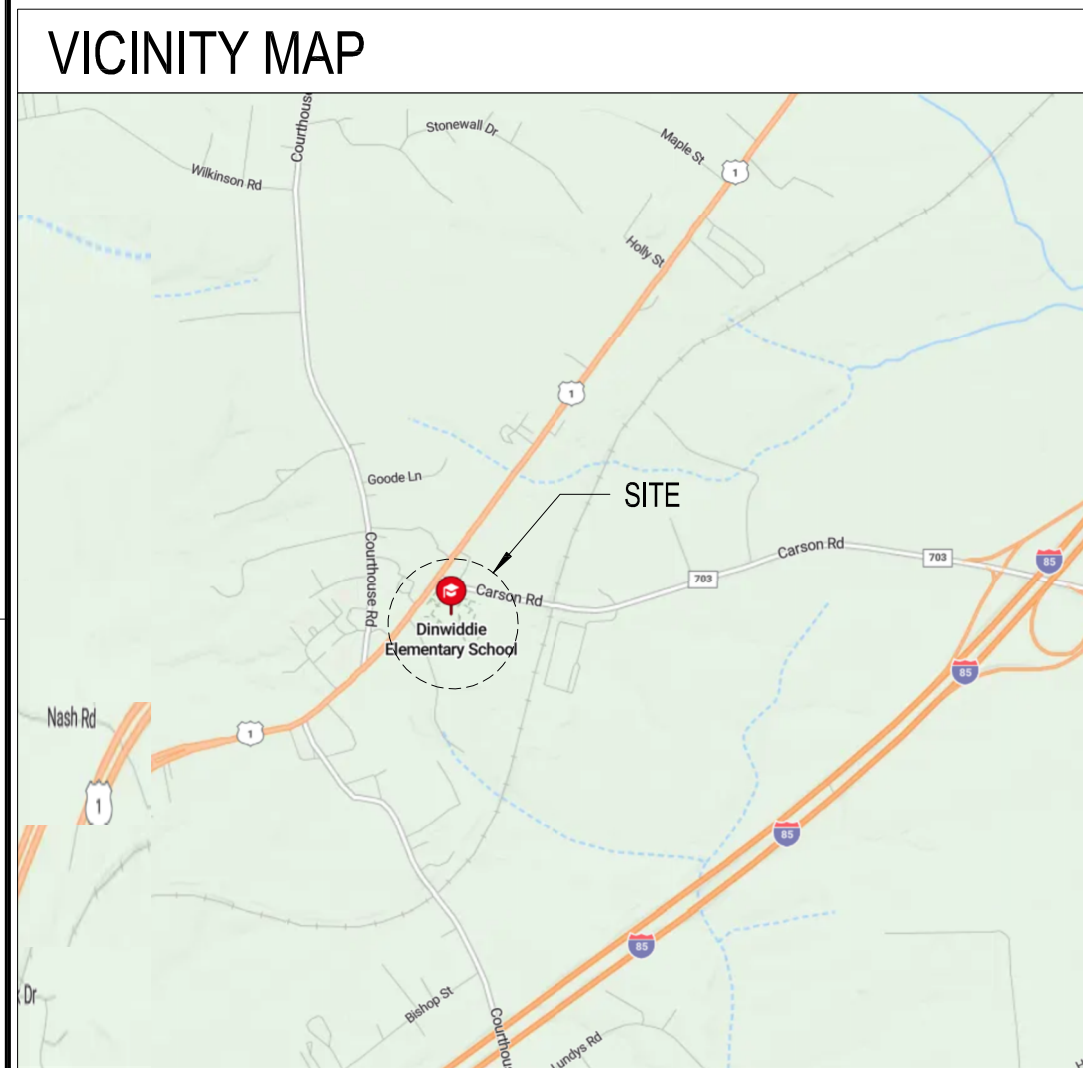
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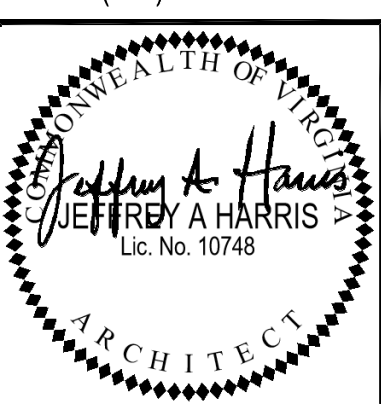


SHEET INDEX	
Sheet Number	Sheet Title
PROJECT TITLE SHEET	
G0.01	COVER SHEET
ARCHITECTURAL	
A0.01	GENERAL NOTES
A0.02	GENERAL NOTES
A0.03	GENERAL NOTES
A1.00	PROPOSED PHASING/EGRESS PLAN
A1.01	OVERALL FIRST FLOOR PLAN
A1.02	OVERALL SECOND FLOOR PLAN
A1.03	OVERALL ROOF PLAN
A5.01	PORCH SECTIONS & DETAILS
A5.02	OVERALL ROOF PLAN
A5.03	PORCH SECTIONS & DETAILS
A5.04	PORCH SECTIONS & DETAILS
MECHANICAL	
M0.01	MECHANICAL DEMOLITION AND NEW WORK - PARTIAL ROOF PLAN

MARK	DATE	BY	DESCRIPTION

DATE	PROJECT	DRAWN	CHECKED
08-15-2024	212506	JAH	MJP

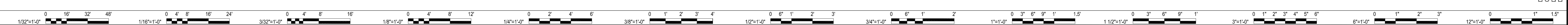
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**DINWIDDIE ELEMENTARY EXTERIOR REPAIRS**  
**DINWIDDIE COUNTY PUBLIC SCHOOLS**  
1381 BOYDTON PLANK ROAD  
DINWIDDIE, VA 23841  
**COVER SHEET**

SHEET  
**G0.01**

FILE NAME: I:\2024\212506\_BES\_LPT\_UPROPSCHENING\G001.dwg LAYOUT NAME: Layout1 PLOTTED: Thursday, September 19, 2024 - 5:18pm



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DIMENSIONAL TEXT FOR ACCURACY.



GENERAL EXTERIOR REPAIR NOTES
1.01 DINWIDDIE ELEMENTARY SCHOOL WAS ORIGINALLY CONSTRUCTED IN 1939. AND A MAJOR ADDITION WAS COMPLETED IN 1999. THE SCOPE OF THE REPAIRS IS BASED ON RECOMMENDATIONS OBTAINED BY RRMM IN THE AUGUST 19, 2020 EXTERIOR INVESTIGATION REPORT.
1.02 THE SCOPE OF WORK FOR THE PROJECT GENERALLY INCLUDES THE FOLLOWING:
A. REPAIR OR REPLACEMENT OF DAMAGED OR DETERIORATED CAST STONE WINDOW/SILLS.
B. REPAIR OR REPLACEMENT OF DAMAGED CAST STONE PLASTER CAPS.
C. REPLACEMENT OF EXISTING GUTTERS AND DECORATIVE CORNICE.
D. REPAIR OR DETERIORATED WOOD ELEMENTS AT EXTERIOR ENTRY PORCHES AND CANOPIES.
1.03 DRAWINGS ARE NOT AVAILABLE FOR THE 1939 CONSTRUCTION. REPAIR DRAWINGS WERE BASED ON A LIMITED SITE SURVEY TO DOCUMENT GENERAL DIMENSIONS AND CONDITIONS WHICH ARE SHOWN IN THE DRAWINGS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROVIDE INFORMATION TO THE ARCHITECT/ENGINEER FOR REVIEW AND ACTION. THESE INCLUDE BUT ARE NOT LIMITED TO:
A. QUANTITY OF MISSING SLATE ROOF TILE.
B. CONDITION OF ALL EXISTING CAST STONE ELEMENTS WITH CLASSIFICATION OF EACH DETERIORATED ELEMENT AS EITHER REPAIR IN-PLACE OR REPLACE.
C. EXISTING UNDERGROUND, STORMWATER PIPE DIAMETERS, MAXIMUM AND MINIMUM DOWNSPOUT DIAMETERS THAT CAN BE ACCOMMODATED AT EACH STONE PATCH REPAIR.
D. AS-BUILT DRAWINGS OF EXISTING BEAM CONFIGURATION ABOVE PORCH COLUMNS SO THAT CONNECTIONS FOR NEW COLUMNS TO EXISTING BEAMS CAN BE DEVELOPED.
E. CONDITION OF EXISTING CANOPY SUPPORTS WITH CLASSIFICATION OF EACH DETERIORATED ELEMENT AS EITHER REPAIR IN-PLACE OR REPLACE.
1.04 UNIT PRICES SHALL BE PROVIDED AS PART OF THE INITIAL BID AND USED TO MODIFY THE TOTAL PRICE OF WORK UP OR DOWN BASED ON FIELD VERIFIED QUANTITIES. PROVIDE UNIT PRICES FOR THE FOLLOWING ELEMENTS, INCLUDE COST FOR EACH ELEMENT IN THE BASE BID BASED ON THE QUANTITIES LISTED.
A. REPLACEMENT OF SLATE SHINGLES TO MATCH EXISTING. ASSUME 30 SLATE SHINGLES.
B. INSTALLATION OF NEW ROOF UNDERLAYMENT AT SLATE SHINGLE REPAIR. ASSUME 30 SQUARE FEET.
C. CAST STONE PATCH REPAIR. ASSUME 30 SQUARE FEET OF MATERIAL.
D. CAST STONE CRACK REPAIR. ASSUME 40 LINEAR FEET OF CRACK REPAIR.
E. CAST STONE REPLACEMENT. ASSUME REPLACEMENT OF 5 CAST STONE WINDOW/SILLS, 4 VERTICAL PLASTER CAP ELEMENTS AND 2 SLOPED PLASTER CAP ELEMENT.
F. WOOD MEMBER REPLACEMENT AT CANOPIES. ASSUME 30 BOARD FEET OF 4X4 MEMBERS TO BE REPLACED.
1.05 THE WORK IS EXCLUSIVELY LIMITED TO THE AREAS INDICATED IN THE DRAWINGS.
1.06 CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS, MATERIALS, DIMENSIONS, LOCATIONS, AND ELEMENTS TO REMAIN IN THE FIELD BEFORE PROCEEDING WITH ANY WORK. IF CONDITIONS VARY FROM WHAT IS PRESENTED IN THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER.
1.07 CONTRACTOR SHALL COMPLY WITH ALL CODES, ORDINANCES, RULES, REGULATIONS, ORDERS, AND OTHER LEGAL REQUIREMENTS OF PUBLIC AUTHORITIES WHICH BEAR ON THE PERFORMANCE OF WORK.
1.08 SECTION CUTS AND DETAIL CALLOUTS INDICATED IN THE DRAWINGS ARE TYPICAL FOR THE PROJECT UNLESS EXPRESSLY DEFINED OTHERWISE. THEY ARE TO BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS AND HAVE NOT BEEN SHOWN EVERYWHERE THEY APPLY WITHIN THE WORK AREA.
1.09 SYMBOLS IN THE DRAWINGS ARE NOT TO SCALE. DO NOT SCALE DIMENSIONS FROM THE DRAWINGS.
CONSTRUCTION NOTES
1.01 THE CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIALS NECESSARY FOR THE CONSTRUCTION OPERATIONS, INCLUDING ALL SUBDIVISIONS THEREOF, AND SHALL BE SOLELY RESPONSIBLE FOR THE EXECUTION OF THE WORK IN ITS ENTIRETY, WHETHER SUBLET OR EXECUTED BY THE CONTRACTOR'S OWN ORGANIZATION.
1.02 PRIOR TO THE EXECUTION OF WORK, THE CONTRACTOR SHALL COORDINATE A PRE-CONSTRUCTION MEETING ON-SITE WITH THE OWNER, ARCHITECT/ENGINEER, AND REPRESENTATIVES FROM ANY TRADES PERFORMING WORK TO REVIEW THE PROJECT DETAILS, SCHEDULE, ANTICIPATED INSTALLATION, AND SUBMITTALS.
1.03 THE WORK SHALL BE SCHEDULED AND COORDINATED WITH THE OWNER, WHO WILL APPROVE ALL PHASING AND SCHEDULING OF THE WORK. A PROPOSAL FOR SCHEDULING AND PHASING OF THE WORK SHALL BE SUBMITTED AS PART OF THE PRICING SUBMISSION USING THE CRITICAL PATH METHOD. WORK SHALL BE PERFORMED ACCORDING TO THE APPROVED CONSTRUCTION SCHEDULE AND PHASING PLAN AT THE TIME MUTUALLY AGREED TO BY THE OWNER AND CONTRACTOR.
1.04 CONTRACTOR SHALL HAVE LIMITED ACCESS TO AREAS OUTSIDE THE LOCATIONS WHERE CONSTRUCTION IS SHOWN. ACCESS TO WORK AREAS AND STORAGE ARE TO BE COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION TO BUILDING OCCUPANTS. USE OF INTERIOR SPACE AND OTHER AREAS, OUTSIDE OF DEFINED LIMITS OF CONSTRUCTION, WILL BE EVALUATED ON AN AS NEEDED BASIS. REQUESTS MUST BE MADE TO THE OWNER IN WRITING AT LEAST SEVEN (7) DAYS IN ADVANCE.
1.05 CONTRACTOR PARKING IS LIMITED AND SHALL BE COORDINATED WITH THE OWNER. PARKING SHALL ONLY BE PERMITTED IN PREDETERMINED LOCATIONS APPROVED IN WRITING BY THE OWNER. THE CONTRACTOR SHALL NOT PARK OR STORE MATERIAL OR EQUIPMENT IN LOCATIONS THAT IMPEDE THE OPERATIONS OF THE OWNER OR RESTRICT ACCESS AND USE OF THE FACILITIES BY STUDENTS, FACULTY, OR STAFF.
1.06 COORDINATE LADOWN AREAS WITH THE OWNER. EQUIPMENT AND MATERIALS SHALL BE STORED IN DESIGNATED AREAS AND SHALL NOT ENCROACH THE PUBLIC'S SURROUNDINGS RIGHT OF WAY, OR ADJOINING GROUNDS. DELIVERIES SHALL BE SCHEDULED TO MINIMIZE USE OF DRIVEWAYS AND ENTRANCES, AS WELL AS SPACE AND TIME REQUIREMENTS FOR STORAGE OF MATERIALS AND EQUIPMENT ON-SITE.
1.07 OWNER DINING AND TOILET FACILITIES WILL NOT BE AVAILABLE FOR CONTRACTOR USE.
1.08 NOTIFY THE OWNER AND THE ARCHITECT/ENGINEER OF VISIBLE CHANGES IN THE INTEGRITY OF MATERIALS OR COMPONENTS THAT DIFFER FROM THE DRAWINGS, WHETHER DUE TO ENVIRONMENTAL CAUSES (INCLUDING BIOLOGICAL GROWTH, UV DEGRADATION, FREEZING, OR THAWING) OR DUE TO STRUCTURAL DEFECTS (INCLUDING CRACKS, MOVEMENT, OR DISTORTION). DO NOT PROCEED WITH THE WORK IN QUESTION WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.
1.09 OBTAIN OWNER AND ARCHITECT/ENGINEER REVIEW AND WRITTEN APPROVAL IN THE FORM OF A CONSTRUCTION CHANGE DIRECTIVE OR SUPPLEMENTAL INSTRUCTION BEFORE MAKING CHANGES OR ADDITIONS TO CONSTRUCTION OR REMOVING MATERIALS THAT WERE INTENDED TO REMAIN.
1.10 THE CONTRACTOR IS FULLY RESPONSIBLE FOR ALL QUALITY CONTROL MEASURES FOR THIS PROJECT.
1.11 ALL WORK AREAS SHALL BE CLEANED DAILY. EQUIPMENT AND MATERIALS SHALL BE STORED IN AREAS DESIGNATED BY THE OWNER. MATERIAL STORED ON ELEVATED PLATFORMS OR ROOF LOCATIONS SHALL BE SECURED IN PLACE USING TEMPORARY MEANS.
1.12 LOADS MUST NOT BE EXCEEDED ON GENERAL TRASH, ON THE GROUND, OR IN THE STORM SEWER.
1.13 CONTRACTOR SHALL FOLLOW THE STANDARD OPERATING PROCEDURES ON CONCRETE, MASONRY MATERIALS, AND SAW CUTTING POLLUTION CONTROL IN ACCORDANCE WITH OSHA STANDARDS.
TEMPORARY PROTECTION
1.01 TEMPORARY CONSTRUCTION BARRIERS, TEMPORARY WEATHER BARRIERS, PEDESTRIAN PROTECTION, AND ALL NECESSARY TEMPORARY FACILITIES AND PROTECTION BARRIERS SHALL BE CONSTRUCTED OR INSTALLED IN ACCORDANCE WITH OSHA AND ALL APPLICABLE LOCAL AND STATE CODES AND REGULATIONS, AND AS REQUIRED BY THE 2021 VIRGINIA CONSTRUCTION CODE.
A. PROVIDE A MINIMUM OF 4' FOOT TALL FENCING WITH PRIVACY SCREENS AT PERIMETER OF WORK AREAS. FENCING SHALL BE PROVIDED WITH WEIGHTED BASE UNITS. CONTRACTOR SHALL PROVIDE SIGNAGE AT CORNERS THAT LEAD INTO THE WORK AREA THAT WILL BE CLOSURED DURING THE EXECUTION OF WORK.
1.02 PROVIDE FACILITIES AND SERVICES REQUIRED TO COMPLY WITH VIRGINIA CONSTRUCTION CODE CHAPTER 33, "SAFEGUARDS DURING CONSTRUCTION"; FHWA MUTCD CHAPTER 6, "TEMPORARY TRAFFIC CONTROL"; AND ANSI A10.34 "PROTECTING PUBLIC NEAR CONSTRUCTION SITES" - THE MOST STRINGENT REQUIREMENT SHALL GOVERN UNDER CIRCUMSTANCES OF OVERLAPPING STANDARD REQUIREMENTS.
1.03 ACCESSIBLE EGRESS TO AND FROM THE BUILDINGS SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE APPROVED OR AS DIRECTED BY THE OWNER. ADEQUATE PROTECTION FOR THE EXISTING BUILDINGS IN ACCORDANCE WITH ADA, OSHA, AND ALL APPLICABLE STATE CODES AND OWNER REQUIREMENTS SHALL BE PROVIDED. MEASURES SHALL BE TAKEN TO ENSURE GENERAL SAFETY IS HELD PARAMOUNT THROUGHOUT THE ENTIRE DURATION OF THE WORK. WORK SHALL BE CONDUCTED IN A MANNER THAT PROVIDES THE LEAST INTERFERENCE WITH OWNER AND OCCUPANT ACTIVITIES.
1.04 CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF BUILDING COMPONENTS ADJACENT TO AREAS OF WORK INDICATED TO REMAIN, MATERIALS, AND EQUIPMENT DURING THE ENTIRE PERIOD OF CONSTRUCTION.
1.05 CONTRACTOR SHALL PROTECT ANY OPEN AREAS FROM WIND, SNOW, AND RAIN DAMAGE BEFORE THE END OF EACH WORKING DAY. DAMAGE TO PORTIONS OF THE EXISTING BUILDINGS NOT SUBJECT TO WORK UNDER THE CONTRACT SHALL BE REPAIRED TO THE FULL SATISFACTION OF THE OWNER, AT THE CONTRACTOR'S EXPENSE.
1.06 PROTECT FROM INJURY OR DAMAGE ALL ON-SITE TREES, SHRUBBERY, AND OTHER PLANTINGS ADJACENT TO THE WORK AREA. REPLACE DAMAGED TREES AND PLANTING WITH LIKE MATERIAL AT NO ADDITIONAL COST TO THE OWNER AND AS APPROVED AND DIRECTED BY THE OWNER ARBORIST.
1.07 TEMPORARY MATERIALS MAY BE NEW OR USED BUT MUST BE ADEQUATE IN CAPACITY FOR REQUIRED USAGE, MUST NOT CREATE UNSAFE CONDITIONS, AND MUST NOT VIOLATE REQUIREMENTS OF APPLICABLE CODES AND STANDARDS. WOOD PRODUCTS USED FOR TEMPORARY MATERIALS SHALL BE TREATED TO RESIST ROT AND INSECT DAMAGE.
1.08 CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DUST AND ODOOR CONTROL MEASURES. CONTRACTOR SHALL PROVIDE FILTERS OR COVERS AS REQUIRED TO PREVENT THE INTAKE OF DUST, OVERSPRAY, OR FUMES INTO THE EQUIPMENT OR THE BUILDINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING OR REPLACEMENT OF ANY ITEMS DAMAGED OR AFFECTED BY INADEQUATE PROTECTION AND DUST CONTROL MEASURES.
1.09 THE CONTRACTOR SHALL INSTALL ALL PROTECTION REQUIRED TO COMPLY WITH OSHA CFR 1926.1153 "RESPIRABLE CRYSTALLINE SILICA" THE CONTRACT DOCUMENTS, STATE, FEDERAL, AND LOCAL JURISDICTIONS AND TO PROTECT ADJACENT AREAS FROM DUST AND FLYING DEBRIS FROM SLATE AND ANY OTHER AREAS FROM WHICH DUST, SNOW, AND RAIN DAMAGE BEFORE THE END OF EACH WORKING DAY.
1.10 CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY.
1.11 DO NOT OBSTRUCT ROADWAYS, SIDEWALKS, OR OTHER PUBLIC WAYS WITHOUT COORDINATION AND WRITTEN PERMISSION FROM THE OWNER.
1.12 CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE FIRE PROTECTION IN THE FORM OF A FIRE EXTINGUISHER OR OTHER EFFECTIVE MEANS OF EXTINGUISHING FIRE, READY FOR INSTANT USE, DISTRIBUTED AROUND THE PROJECT AND IN AND ABOUT TEMPORARY INFLAMMABLE STRUCTURES DURING CONSTRUCTION OF WORK. EXISTING FIRE HOSE CONNECTIONS SHALL BE ACCESSIBLE AT ALL TIMES BY FIRE DEPARTMENT PERSONNEL. MATERIALS AND DEBRIS SHALL NOT BE STORED IN FRONT OF THE CONNECTION, THIS PREVENTING ACCESS. AVOID ACCUMULATIONS OF COMBUSTIBLE FORMS, FORM LUMBER, AND DEBRIS WITHIN CONSTRUCTION SITE. THE CONTRACTOR SHALL COORDINATE ACCESS PROCEDURES WITH THE FIRE MARSHAL.
1.13 ALL EXISTING FIRE PROTECTION SYSTEMS SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. IF TEMPORARY SHUTDOWN IS NECESSARY, THE SYSTEM SHALL BE RETURNED TO OPERATIONAL CONDITION AS SOON AS POSSIBLE AND NO LATER THAN THE END OF EACH WORKING DAY PRIOR TO THE CONTRACTOR LEAVING THE JOB SITE. THE CONTRACTOR IS TO NOTIFY THE FIRE MARSHAL PRIOR TO ANY NECESSARY SHUTDOWNS. ANY NECESSARY SHUTDOWNS SHALL NOT AFFECT OTHER AREAS NOT INVOLVED WITH THIS CONSTRUCTION PROJECT.
1.14 ALL OPERATIONAL STANDARDS ARE TO BE MAINTAINED AT ALL TIMES.
1.15 GASOLINE AND OTHER FLAMMABLE LIQUIDS SHALL BE STORED AND DISPENSED FROM UL LISTED SAFETY CONTAINERS IN CONFORMANCE WITH NATIONAL BOARD OF FIRE UNDERWRITERS' RECOMMENDATIONS. STORAGE SHALL NOT BE WITHIN BUILDINGS.
1.16 TORCH CUTTING, WELDING, AND OTHER "HOT" WORK OPERATIONS PERFORMED BY CONTRACTOR OR SUB-CONTRACTORS SHALL HAVE APPROVAL OF OWNER BEFORE SUCH WORK IS COMMENCED, AND CHEMICAL FIRE EXTINGUISHERS SHALL BE AVAILABLE AT LOCATION WHERE SUCH WORK IS IN PROGRESS. CONTRACTOR SHALL MAINTAIN A FIRE WATCH AFTER ALL HOT WORK FOR A MINIMUM OF FOUR HOURS OR AS OTHERWISE REQUIRED BY THE OWNER.
1.17 CONTRACTOR SHALL BE RESPONSIBLE FOR COSTS OF WATER DAMAGES RESULTING FROM THE CONTRACTOR'S CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL REPLACE ANY MATERIALS OR EQUIPMENT DAMAGED, LOST, OR STOLEN WITHOUT ADDITIONAL COST TO THE OWNER. PRIOR TO COMMENCEMENT OF WORK CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING, WITH PHOTOGRAPHS, ANY EXISTING DAMAGE IN AREAS WHERE WORK IS SCHEDULED. RECORD OF EXISTING DAMAGE SHALL BE PROVIDED TO THE OWNER PRIOR TO THE COMMENCEMENT OF ANY WORK.
DIVISION 02 DEMOLITION NOTES
1.01 PRIOR TO DEMOLITION FOR CAST STONE REPAIRS, SLATE ROOFING REPAIRS, OR CANOPY AND PORCH REPAIR, CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS AND SUBMIT A SUMMARY OF THE REPAIR TYPES AND QUANTITIES FOR EACH REPAIR FOR APPROVAL BY THE ARCHITECT/ENGINEER BEFORE CONTINUING WITH WORK.
HAZARDOUS MATERIALS: CONTRACTOR SHALL ENGAGE A QUALIFIED TESTING AGENCY TO SURVEY THE PORTION OF THE SCHOOL CONSTRUCTION IN 1939 TO IDENTIFY THE PRESENCE OF LEAD, PCBs OR ASBESTOS AT PART OF CORNICE, ROOF UNDERLAYMENT, SEALANTS, EXISTING FLASHINGS, OR OTHER SUSPECT EXISTING CONDITIONS THAT COULD BE DISTURBED AS PART OF THE DEMOLITION SCOPE. ENGAGE A QUALIFIED ABATEMENT FIRM TO REMOVE OR ASBESTOS CONTAINING MATERIALS AND DISPOSE OF ABATED MATERIALS IN ACCORDANCE WITH LOCAL AND STATE REQUIREMENTS. QUALIFIED INSPECTION AND ABATEMENT FIRMS SHALL HAVE A MINIMUM OF 5 YEARS EXPERIENCE PERFORMING SIMILAR WORK IN THE COMMONWEALTH OF VIRGINIA.
1.03 CONTRACTOR IS FULLY RESPONSIBLE FOR MEANS AND METHODS OF DEMOLITION AND SHALL MAINTAIN THE INTEGRITY AND STABILITY OF THE EXISTING STRUCTURE DURING DEMOLITION AND REPAIRS UNTIL THE WORK IS COMPLETED. NO PORTIONS OF THE STRUCTURE SHALL BE PERMITTED TO FALL OR DROP.
1.04 ALL DISCARDED MATERIAL SHALL BE DISPOSED OF PROPERLY OFFSITE. CONTRACTOR SHALL PROVIDE A PLAN FOR REMOVAL OF DISCARDED MATERIAL THROUGH THE PORTLAND CEMENT REPAIRS AND WALKWAYS FROM DAMAGE DUE TO CONSTRUCTION TRAFFIC.
1.05 MATERIALS INDICATED TO BE REMOVED, DISCARDED, OR DISPOSED OF SHALL BE REMOVED FROM THEIR EXISTING LOCATION AND DISPOSED OF OFFSITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS AND GUIDELINES.
1.06 MATERIALS INDICATED TO BE REMOVED AND SALVAGED SHALL BE REMOVED IN A MANNER THAT LIMITS DAMAGE OR DEGRADATION. ONLY MATERIALS THAT HAVE NOT BEEN CHIPPED, BROKEN, CRACKED, OR OTHERWISE DAMAGED SUCH THAT THE ORIGINAL FUNCTION, APPEARANCE, OR DURABILITY HAS NOT BEEN COMPROMISED SHALL BE SALVAGED. AS DEMOLITION PROGRESSES, CATALOGUE MATERIALS INDICATED TO BE SALVAGED AND STORE OFF THE GROUND, PROTECTED FROM WEATHER UNTIL THEY CAN BE REINSTALLED. NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY IF REPLACEMENT MATERIALS ARE REQUIRED DUE TO DAMAGE TO MATERIALS INDICATED TO BE SALVAGED. MATERIALS DAMAGED DUE TO AGGRESSIVE OR CARELESS DEMOLITION PROCEDURES OR IMPROPER STORAGE SHALL BE REJECTED AT NO COST TO THE OWNER.
1.07 IF ANY UNFORESEEN OR OTHER CONDITIONS ARE REVEALED DURING DEMOLITION THAT WOULD AFFECT INSTALLATION OF THE WORK SHOWN IN THE DRAWINGS, NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY.
1.08 ALL PRIMARY UTILITIES DISCOVERED DURING DEMOLITION SHALL BE PROPERLY PRESERVED AND PROTECTED.
1.09 CONTRACTOR SHALL PROTECT EXISTING PLUMB MATERIAL NOT DESIGNATED FOR REMOVAL OR RELOCATION FROM DAMAGE DURING CONSTRUCTION.
1.10 CONTRACTOR SHALL KEEP ALL SURROUNDING AREAS AND DRAINAGE SYSTEMS FREE FROM DIRT, MUD, AND CONSTRUCTION DEBRIS AT ALL TIMES.
1.11 CONTRACTOR SHALL REMOVE MISCELLANEOUS ITEMS AS NECESSARY TO FACILITATE CONSTRUCTION IN ACCORDANCE WITH STATE, LOCAL, AND OWNER REGULATORY REQUIREMENTS.
1.12 CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY ITEMS DAMAGED DURING CONSTRUCTION.
DIVISION 04 CAST STONE MASONRY
1.01 CAST STONE REPAIRS INCLUDE REMOVAL AND REPLACEMENT OF CAST STONE ELEMENTS, PATCH REPAIR OF SPALLED OR DELAMINATED CAST STONE ELEMENTS, AND REPAIR OF CRACKS WITHIN CAST STONE ELEMENTS.
1.02 EXISTING CAST STONE ELEMENTS SHALL BE REMOVED AND REPLACED IF THE FOLLOWING IS IDENTIFIED:
A. MORE THAN 40% OF THE EXPOSED SURFACE IS DAMAGED.
B. IF DELAMINATIONS OR SPALLS IN THE CAST STONE ELEMENT ARE MORE THAN 50% OF THE OVERALL DEPTH OF THE CAST STONE ELEMENT.
C. MORE THAN 40% OF THE EXPOSED SURFACE IS CRACKED.
1.03 DEFINITIONS:
A. DRY CAST - MANUFACTURED FROM ZERO SLUMP CONCRETE
B. VIBRANT DRY TAMP - DRY CAST METHOD USING VIBRATORY RAMMING OF EARTH MOIST, ZERO-SLUMP CONCRETE AGAINST A RIGID MOLD UNTIL IT IS DENSELY COMPACTED
C. MACHINE CASTING METHOD: MANUFACTURED FROM EARTH MOIST, ZERO-SLUMP CONCRETE COMPACTED BY MACHINERY USING VIBRATION AND PRESSURE AGAINST A MOLD UNTIL IT BECOMES DENSELY CONSOLIDATED.
D. WET CAST - MANUFACTURED FROM MEASURABLE SLUMP CONCRETE
E. WET CASTING METHOD: MANUFACTURED FROM MEASURABLE SLUMP CONCRETE AND VIBRATED INTO A MOLD UNTIL IT BECOMES DENSELY CONSOLIDATED.
F. CSI - CAST STONE INSTITUTE.
1.04 UNIT PRICES:
A. PORTIONS OF THE CAST STONEWORK BEYOND THE BASE BID SHALL BE PERFORMED AS UNIT PRICE WORK AND THE TOTAL VALUE OF THE CONSTRUCTION CONTRACT SHALL BE REVISED UP OR DOWN THROUGH CHANGE ORDERS USING UNIT PRICES SUBMITTED AT THE TIME OF BID AND FIELD VERIFIED QUANTITIES THAT HAVE BEEN APPROVED BY THE ARCHITECT/ENGINEER.
B. CONTRACTOR SHALL PROVIDE ACCESS AND VISUALLY SURVEY AND SOUND ALL CAST STONE ELEMENTS. CONTRACTOR SHALL DOCUMENT THE TYPE OF REPAIR, LOCATION OF REPAIR, AND QUANTITY FOR ALL UNIT PRICE ITEMS. ACCESS SHALL BE PROVIDED TO THE ARCHITECT/ENGINEER TO SURVEY AND SOUND CAST STONE FOR VERIFICATION OF CONTRACTOR'S SUBMITTED QUANTITIES.
1.05 PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE. CONTRACTOR TO PREPARE AGENDA AND DISTRIBUTE MEETING MINUTES AFTER THE MEETING. MEETING AGENDA SHALL INCLUDE REVIEW FIELD VERIFIED QUANTITIES FOR EACH TYPE OF PRECAST REPAIR ON THE PROJECT, REVIEWS APPROVED SUBMITTALS, DISCUSS SEQUENCE OF WORK AND COORDINATION OF WORK BASED ON BUILDING OPERATIONS. AT A MINIMUM, THE FOLLOWING PARTIES SHALL BE PRESENT:
A. OWNER'S REPRESENTATIVE.
B. ARCHITECT/ENGINEER'S PROJECT MANAGER.
C. CONTRACTOR'S PROJECT MANAGER.
D. CONTRACTOR'S SUPERINTENDENT.
E. FOREMAN FOR THE INSTALLER.
1.06 SUBMITTALS:
A. PRODUCT DATA: PROVIDE THE MANUFACTURER'S PUBLISHED PRODUCT LITERATURE FOR MATERIALS TO BE USED IN CAST STONE WORK TO SHOW COMPLIANCE WITH THE REQUIREMENTS INDICATED. INCLUDE TESTING REPORTS NOT MORE THAN ONE YEAR OLD, INSTALLATION INSTRUCTIONS AND STANDARD DETAILS AND INDICATED TOLERANCES.
B. SHOP DRAWINGS FOR REPLACEMENT UNITS: DETAIL FABRICATION AND INSTALLATION OF CAST STONE UNITS. INDICATE LOCATIONS, PLANS, ELEVATIONS, DIMENSIONS, SHAPES, AND CROSS SECTIONS OF EACH UNIT. INDICATE JOINTS, REVEALS, DRIPS, CHAMFERS, AND EXTENT AND LOCATION OF EACH SURFACE FINISH. INDICATE LOCATIONS, TOLERANCES, AND DETAILS OF ANCHORAGE DEVICES TO BE EMBEDDED IN OR ATTACHED TO STRUCTURE OR OTHER CONSTRUCTION. INDICATE RELATIONSHIP OF CAST STONE UNITS TO ADJACENT MATERIALS. COORDINATE AND INDICATE OPENINGS AND INSERTS REQUIRED BY OTHER TRADES.
C. SAMPLES FOR VERIFICATION:
1. PROVIDE THREE (3) CURED 2 INCH BY 2 INCH BY 2 INCH CUBE SAMPLES OF REPAIR MORTAR FOR VERIFICATION OF COLOR AND TEXTURE MATCH WITH EXISTING CAST STONE WINDOW/SILLS AND PLASTER CAPS.
2. PROVIDE CURED MORTAR SAMPLES FOR MORTAR TO BE USED FOR SETTING NEW CAST STONE ELEMENTS.
D. QUALIFICATION STATEMENT FOR MANUFACTURER OF REPLACEMENT CAST STONE ELEMENTS TO SHOW MANUFACTURER HAS PRODUCED CAST STONE UNITS SIMILAR TO THOSE INDICATED FOR THIS PROJECT, HAS SUFFICIENT PRODUCTION CAPACITY TO MANUFACTURE REQUIRED UNITS, AND IS A PLANT CERTIFIED BY CSI.
1.07 MOCK-UPS: BUILT MOCKUPS TO VERIFY SELECTIONS MADE UNDER SAMPLE SUBMITTALS AND SET QUALITY REQUIREMENTS FOR MATERIALS AND EXECUTION.
A. CONSTRUCT IN-PLACE MOCKUPS FOR ONE (1) CAST STONE CRACK REPAIR AND ONE (1) CAST STONE PATCH REPAIR. USE MATERIALS AND INSTALLATION METHODS IDENTICAL TO THE INTENDED INSTALLATION.
B. APPROVAL OF MOCKUPS DOES NOT CONSTITUTE APPROVAL OF DEVIATIONS FROM THE CONTRACT DOCUMENTS CONTAINED IN MOCKUPS UNLESS OWNER SPECIFICALLY APPROVES SUCH DEVIATIONS BY CHANGE ORDER.
1.08 DELIVERY, STORAGE AND HANDLING
A. PACK, HANDLE, AND SHIP CAST STONE UNITS IN SUITABLE PACKS OR PALLETS.
B. LIFT WITH WIDE-BELT SLINGS; DO NOT USE WIRE ROPE OR ROPES THAT MIGHT CAUSE STAINING. MOVE CAST STONE UNITS IF REQUIRED, USING COLLES WITH WOOD SUPPORTS.
C. STORE CAST STONE UNITS ON WOOD SKIDS OR PALLETS WITH NONSTAINING, WATERPROOF COVERS, SECURELY TIED. ARRANGE TO DISTRIBUTE WEIGHT EVENLY AND TO PREVENT DAMAGE TO UNITS. VENTILATE UNDER COVERS TO PREVENT CONDENSATION.
D. STORAGE UNITS WITH ADEQUATE DUNNAGE AND BRACING, AND PROTECT UNITS TO PREVENT CONTACT WITH SOIL, PREVENT STAINING, AND PREVENT CRACKING, DISTORTION, WARPING, OR OTHER PHYSICAL DAMAGE.
E. PLACE STORED UNITS SO IDENTIFICATION MARKS ARE CLEARLY VISIBLE, AND UNITS CAN BE INSPECTED.
F. HANDLE AND TRANSPORT UNITS IN A MANNER THAT AVOIDS EXCESSIVE STRESSES THAT CAUSE CRACKING OR DAMAGE.
G. LIFT AND SUPPORT UNITS ONLY AT DESIGNATED POINTS INDICATED ON SHOP DRAWINGS.
H. MORTAR AND REPAIR MATERIALS ARE TO BE DELIVERED, STORED, AND HANDLED TO PROTECT THEM FROM DAMAGE, EXTREME TEMPERATURE, AND MOISTURE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
I. DELIVER AND STORE MORTAR AND REPAIR MATERIALS IN MANUFACTURER'S ORIGINAL, UNOPENED CONTAINERS WITH THE PRODUCTION DATE SHOWN ON THE CONTAINER OR PACKAGING.
J. COMPLY WITH THE MANUFACTURER'S WRITTEN SPECIFICATIONS AND RECOMMENDATIONS FOR MIXING, APPLICATION, AND CURING OF MORTARS.
1.09 PROTECTION / SITE CONDITIONS
A. COLD-WEATHER REQUIREMENTS: DO NOT USE FROZEN MATERIALS OR MATERIALS MIXED OR COATED WITH ICE OR FROST. DO NOT BUILD ON FROZEN SUBSTRATES. COMPLY WITH COLD-WEATHER CONSTRUCTION REQUIREMENTS IN TMS 802.
B. HOT-WEATHER REQUIREMENTS: COMPLY WITH HOT-WEATHER CONSTRUCTION REQUIREMENTS IN TMS 802.
2.01 MANUFACTURERS
A. SOURCE LIMITATIONS FOR CAST STONE: OBTAIN CAST STONE UNITS FROM SINGLE SOURCE FROM SINGLE MANUFACTURER.
B. SOURCE LIMITATIONS FOR MORTAR MATERIALS: OBTAIN MORTAR INGREDIENTS OF A UNIFORM QUALITY, INCLUDING COLOR, FROM ONE MANUFACTURER FOR EACH CEMENTITIOUS COMPONENT AND FROM ONE SOURCE OR PRODUCER FOR EACH AGGREGATE.
C. SOURCE LIMITATIONS FOR CAST STONE REPAIR MATERIALS: OBTAIN PATCH AND CRACK REPAIR MATERIALS FROM A SINGLE MANUFACTURER.
2.02 CAST STONE MATERIALS FOR REPAIR UNITS
A. GENERAL: COMPLY WITH ASTM C1394. MANUFACTURER UNITS USING THE MANUFACTURER'S RECOMMENDED METHOD. SIZES, TEXTURE FOR EXPOSED SURFACES, AND SHAPES OF UNITS SHALL MATCH THE EXISTING UNIT TO BE REPLACED BASED ON FIELD VERIFIED DIMENSIONS. FABRICATE UNITS WITH SHARP ARRIS AD ACCURATELY REPRODUCED DETAILS. SLOPE EXPOSED HORIZONTAL SURFACES 1:12 TO DRAIN UNLESS OTHERWISE INDICATED. PROVIDE DRIPS ON PROJECTING ELEMENTS UNLESS OTHERWISE INDICATED.
B. PORTLAND CEMENT: ASTM C150/C150M, TYPE I OR TYPE II, CONTAINING NOT MORE THAN 0.60 PERCENT TOTAL ALKALI WHEN TESTED ACCORDING TO ASTM C114. PROVIDE NATURAL COLOR OR WHITE CEMENT AS REQUIRED TO PRODUCE CAST STONE COLOR INDICATED.
C. COARSE AGGREGATES: GRANITE, QUARTZ, OR LIMESTONE COMPLYING WITH ASTM C33/C33M. GRADATION AND COLORS AS NEEDED TO PRODUCE REQUIRED CAST STONE TEXTURES AND COLORS.
D. FINE AGGREGATES: NATURAL SAND OR CRUSHED STONE COMPLYING WITH ASTM C33/C33M. GRADATION AND COLORS AS NEEDED TO PRODUCE REQUIRED CAST STONE TEXTURES AND COLORS.
E. COLOR PIGMENTS: ASTM C979/C979M. SYNTHETIC MINERAL-OXIDE PIGMENTS OR COLORED WATER-REDUCING ADMIXTURES; COLOR STABLE, FREE OF CARBON BLACK, NONFADING, AND RESISTANT TO LIME AND OTHER ALKALIS.
F. ADMIXTURES: USE ONLY ADMIXTURES SPECIFIED OR APPROVED IN WRITING BY ARCHITECT/ENGINEER.
1. DO NOT USE ADMIXTURES THAT CONTAIN MORE THAN 1.0 PERCENT WATER-SOLUBLE CHLORIDE IONS BY MASS OF CEMENTITIOUS MATERIALS. DO NOT USE ADMIXTURES CONTAINING CALCIUM CHLORIDE.
2. USE ONLY ADMIXTURES THAT ARE CERTIFIED BY MANUFACTURER TO BE COMPATIBLE WITH CEMENT AND OTHER ADMIXTURES USED.
3. AIR-ENTRAINING ADMIXTURE: ASTM C820/C820M. ADD TO MIXES FOR UNITS EXPOSED TO THE EXTERIOR AT MANUFACTURER'S PRESCRIBED RATE TO RESULT IN AN AIR CONTENT OF 4 TO 6 PERCENT, EXCEPT DO NOT ADD TO ZERO-SLUMP CONCRETE MIXES.
4. WATER-REDUCING ADMIXTURE: ASTM C494/C494M, TYPE A.
5. WATER-REDUCING, RETARDING ADMIXTURE: ASTM C494/C494M, TYPE D.
6. WATER-REDUCING, ACCELERATING ADMIXTURE: ASTM C494/C494M, TYPE E.
REINFORCEMENT:
1. DEFORMED STEEL BARS COMPLYING WITH ASTM A615/A615M, GRADE 40. USE GALVANIZED OR EPOXY-COATED REINFORCEMENT WHEN COVERED WITH LESS THAN 1-1/2 INCHES OF CAST STONE MATERIAL.
2. EPOXY COATING: ASTM A775/A775M.
3. GALVANIZED COATING: ASTM A767/A767M.
4. PLAIN-STEEL, WELDED-WIRE REINFORCEMENT: ASTM A1064/A1064M, PLAIN, FABRICATED FROM AS-DRAWN STEEL WIRE INTO FLAT SHEETS.
5. GALVANIZED-STEEL, WELDED-WIRE REINFORCEMENT: ASTM A1064/A1064M, PLAIN, FABRICATED FROM GALVANIZED-STEEL WIRE INTO FLAT SHEETS.
6. FIBER REINFORCED CEMENT: ASTM C1166/C1166M.
H. FABRICATION TOLERANCES:
1. VARIATION IN CROSS SECTION: DO NOT VARY FROM INDICATED DIMENSIONS BY MORE THAN 1/8 INCH.
2. VARIATION IN LENGTH: DO NOT VARY FROM INDICATED DIMENSIONS BY MORE THAN 1/80 OF THE LENGTH OF UNIT OR 1/8 INCH, WHICHEVER IS GREATER, BUT IN NO CASE BY MORE THAN 1/4 INCH.
3. WARP, BOW, AND TWIST: NOT TO EXCEED 1/80 OF THE LENGTH OF UNIT OR 1/8 INCH, WHICHEVER IS GREATER.
4. LOCATION OF GROOVES, FALSE JOINTS, HOLES, ANCHORAGES, AND SIMILAR FEATURES: DO NOT VARY FROM INDICATED POSITION BY MORE THAN 1/8 INCH ON FORMED SURFACES OF UNITS AND 3/8 INCH ON UNFORMED SURFACES.
CURE UNITS AS FOLLOWS:
1. CURE UNITS IN ENCLOSED, MOIST CURING ROOM AT 95 PERCENT RELATIVE HUMIDITY AND TEMPERATURE OF 100 DEG F FOR 12 HOURS OR TO 70 DEG F FOR 16 HOURS.
2. KEEP UNITS DAMP AND CONTINUE CURING TO COMPLY WITH ONE OF THE FOLLOWING:
9. NO FEWER THAN FIVE DAYS AT MEAN DAILY TEMPERATURE OF 70 DEG F OR ABOVE.
10. NO FEWER THAN SEVEN DAYS AT MEAN DAILY TEMPERATURE OF 50 DEG F OR ABOVE.
11. ADD ETCH UNITS AFTER CURING TO REMOVE CEMENT FILM FROM SURFACES TO BE EXPOSED TO VIEW.
J. SETTING MORTAR FOR CAST STONE REPLACEMENT UNITS:
1. PORTLAND CEMENT: ASTM C150/C150M, TYPE I OR II EXCEPT TYPE III MAY BE USED FOR COLD-WEATHER CONSTRUCTION. PROVIDE NATURAL COLOR OR WHITE CEMENT AS REQUIRED TO PRODUCE MORTAR COLOR INDICATED.
2. HYDRATED LIME: ASTM C207, TYPE S.
3. WATER: POTABLE.
4. MORTAR PIGMENTS: NATURAL AND SYNTHETIC IRON OXIDES AND CHROMIUM OXIDES, COMPOUNDED FOR USE IN MORTAR MIXES AND COMPLYING WITH ASTM C979/C979M. USE ONLY PIGMENTS WITH A RECORD OF SATISFACTORY PERFORMANCE IN MASONRY MORTAR.
5. FORMULATE BLEND AS REQUIRED TO PRODUCE COLOR, AS SELECTED FROM MANUFACTURER'S STANDARD COLORS. SUBMIT SAMPLES FOR OWNER'S APPROVAL OF COLOR.
6. AGGREGATE FOR MORTAR: ASTM C144.
K. ACCESSORIES:
1. ANCHORS: TYPE AND SIZE AND TO BE DETERMINED ONCE EXISTING CONDITIONS ARE EXPOSED DURING REMOVAL OF EXISTING CAST STONE ELEMENTS TO BE REPLACED. FABRICATED FROM TYPE 304 STAINLESS STEEL, COMPLYING WITH ASTM A240/A240M, ASTM A276/A276M, OR ASTM A666.
2. PROPRIETARY ACIDIC CLEANER: MANUFACTURER'S STANDARD STRENGTH CLEANER DESIGNED FOR REMOVING MORTAR/GROUT STAINS, EFFLORESCENCE, AND OTHER NEW CONSTRUCTION STAINS FROM NEW MASONRY WITHOUT DISCOLORING OR DAMAGING MASONRY SURFACES. USE PRODUCT EXPRESSLY APPROVED FOR INTENDED USE BY CAST STONE MANUFACTURER AND EXPRESSLY APPROVED BY ARCHITECT/ENGINEER FOR USE ON CAST STONE AND ADJACENT MASONRY MATERIALS.
L. MORTAR MIXES:
1. PROVIDE PORTLAND CEMENT-LIME (PCL) MORTAR COMPLYING WITH ASTM C270, TYPE N PROPORTION SPECIFICATION.
2.03 CAST STONE PATCH REPAIR MATERIALS: PROVIDE PREMIXED CEMENTITIOUS REPAIR MATERIALS FORMULATED TO MATCH THE COLOR AND TEXTURE OF THE EXISTING CAST STONE, AND DO NOT CONTAIN ANY ACRYLIC, LATEX, OR OTHER SYNTHETIC POLYMER ADDITIVES.
A. PROVIDE JAHN M90 REPAIR MORTAR OR APPROVED EQUAL, COLOR MATCH TO BE APPROVED BY THE OWNER.
2.04 ENGAGE A QUALIFIED INDEPENDENT TESTING AGENCY TO SAMPLE AND TEST CAST STONE UNITS ACCORDING TO ASTM C1394.
3.01 DEMOLITION:
A. CAST STONE REPLACEMENT: REMOVE EXISTING CAST STONE ELEMENTS AND CLEAN EXISTING SURFACES TO REMAIN TO PREPARE FOR INSTALLATION OF NEW CAST STONE.
1. PROVIDE TEMPORARY SHORING OF ELEMENTS TO REMAIN TO PREVENT MOVEMENT, SAGGING OR DISPLACEMENT OF EXISTING ELEMENT BEARING ON CAST STONE.
2. VISUALLY INSPECT CONDITIONS PRIOR TO DEMOLITION TO IDENTIFY ANY FLASHINGS OR DRAINAGE COMPONENTS. PERFORM DEMOLITION IN A MANNER THAT DOES NOT EXPOSE EXISTING FLASHING OR DRAINAGE ELEMENTS. IF ANY FLASHINGS ARE FOUND NOTIFY THE ARCHITECT/ENGINEER TO DETERMINE IF EXISTING FLASHING ELEMENTS SHOULD BE REPLACED.
3. REMOVE MORTAR AROUND CAST STONE USING GRINDERS AND CHIPPING HAMMERS TO LOOSEN THE CAST STONE ELEMENT FROM THE WALL. REMOVE CAST STONE ELEMENTS TAKING CARE NOT TO DAMAGE SURROUNDING ELEMENTS TO REMAIN.
4. ONCE CAST STONE IS REMOVED RETAIN SAMPLES OF EXISTING CAST STONE UNTIL PROJECT COMPLETION TO BE USED FOR COLOR MATCHING AND SAMPLE VERIFICATION.
B. CAST STONE PATCH REPAIR: IDENTIFY LIMITS OF PATCH REPAIR USING SOUNDING TECHNIQUES TO DETERMINE LIMITS OF EXISTING DELAMINATIONS.
1. SAW CUT PERIMETER OF PATCH A 1/4 INCH DEEP USING GRINDERS EQUIPPED WITH A CONCRETE OR MASONRY BLADE.
2. REMOVE DELAMINATED CONCRETE USING CHIPPING HAMMERS. REMOVE DEVOID SURFACE TO ENSURE ALL DELAMINATED CONCRETE HAS BEEN REMOVED.
3. WHERE EXISTING REINFORCEMENT IS EXPOSED CLEAN REINFORCING BARS TO REMOVE SURFACE CORROSION. NOTIFY ARCHITECT/ENGINEER IF EXISTING BARS EXHIBIT AREAS OF SECTION LOSS.
4. WHERE MORE THAN 50% OF A REINFORCING BAR DIAMETER IS EXPOSED, UNDERCUT THE BAR TO ALLOW FOR INSTALLATION OF PATCH MATERIAL BEHIND BAR.
C. CAST STONE CRACK REPAIR: USING GRINDERS RUD CRACKS AS INDICATED IN THE DRAWINGS.
3.02 EXAMINE SUBSTRATES AND CONDITIONS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK.
3.03 PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
3.04 PROVIDE ACCESS TO ARCHITECT/ENGINEER TO REVIEW SUBSTRATE CONDITIONS WHERE CAST STONE ELEMENTS ARE TO BE REMOVED IN REPLACEMENT. COORDINATE ARCHITECT/ENGINEER REVIEW OF CONDITIONS TO ALLOW MINIMUM SEVEN (7) DAYS FOR DESIGN OF ANY REQUIRED CONNECTIONS BASED ON EXISTING CONDITIONS.
3.05 REPLACEMENT CAST STONE INSTALLATION:
A. SET CAST STONE UNITS AS INDICATED IN TMS 604.
B. SET UNITS ACCURATELY IN LOCATIONS APPROVED BY THE ARCHITECT/ENGINEER, WITH EDGES AND FACES ALIGNED ACCORDING TO ESTABLISHED RELATIONSHIPS AND INDICATED TOLERANCES.
C. INSTALL ANCHORS, SUPPORTS, FASTENERS, AND OTHER ATTACHMENTS INDICATED IN ASB PROVIDED BY ARCHITECT/ENGINEER FOLLOWING FIELD VERIFICATION OF EXISTING CONDITIONS AND AS NECESSARY TO SECURE UNITS IN PLACE.
D. WET, JOINT SURFACES THOROUGHLY BEFORE APPLYING MORTAR OR SETTING MORTAR.
E. SET UNITS IN FULL BED OF MORTAR WITH FULL HEAD JOINTS UNLESS OTHERWISE INDICATED.
F. SET UNITS WITH 3/8 WIDE MORTAR JOINTS.
G. BUILD ANCHORS AND TIES INTO MORTAR JOINTS AS UNITS ARE SET. ANCHORS SHALL BE INSTALLED AT 16" OC OR AS INDICATED BY THE ARCHITECT/ENGINEER AFTER REVIEW OF THE SUBSTRATE CONDITIONS.
H. AT WINDOW/SILLS REPLACE WINDOW PERIMETER SEALS THAT WERE DISTURBED AS PART OF THE WORK USING AN ASTM C820, SINGLE COMPONENT, INS, CLASS 50 SILICONE SEALANT OF COLOR TO MATCH EXISTING.
3.06 INSTALLATION TOLERANCES FOR REPLACEMENT CAST STONE:
A. VARIATION FROM PLUMB: DO NOT EXCEED 1/8 INCH IN 10 FT. MAXIMUM.
B. VARIATION FROM LEVEL: DO NOT EXCEED 1/8 INCH IN 10 FT. MAXIMUM.
C. VARIATION IN JOINT WIDTH: DO NOT VARY JOINT THICKNESS MORE THAN 1/8 INCH IN 36 INCHES OR ONE-FOURTH OF NOMINAL JOINT WIDTH, WHICHEVER IS LESS.
D. VARIATION IN PLANE BETWEEN ADJACENT SURFACES (LIPPING): DO NOT VARY FROM FLUSH ALIGNMENT WITH ADJACENT UNITS OR ADJACENT SURFACES INDICATED TO BE FLUSH WITH UNITS BY MORE THAN 1/16 INCH, EXCEPT WHERE VARIATION IS DUE TO WARPAGE OF UNITS WITH TOLERANCES SPECIFIED.
3.07 INSTALLATION OF PATCH MATERIAL AT PATCHES AND CRACK REPAIR:
A. FOLLOW MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
B. PROCEED ONLY ONCE ALL DEMOLITION AND REINFORCING BAR CLEANING/REPAIR HAS BEEN COMPLETED. DOCUMENT EXISTING PATCH LOCATIONS WITH PHOTOGRAPHS TO BE DISTRIBUTED TO THE ARCHITECT/ENGINEER PRIOR TO INSTALLATION OF PATCH MATERIAL.
C. PRE-WET THE SUBSTRATE AHEAD OF TIME TO PREVENT THE SUBSTRATE FROM DRAWING MOISTURE OUT OF THE REPAIR TOO QUICKLY. RE-WET THE SURFACE IMMEDIATELY BEFORE APPLYING THE REPAIR MATERIAL.
D. MIX REPAIR MATERIAL AT 5:1 (DRY MATERIAL TO POTABLE WATER) RATIO OR AS REQUIRED BY THE MANUFACTURER FOR PROPER INSTALLATION.
E. APPLY MANUFACTURER'S RECOMMENDED PRIME COAT TO SURFACE OR REPAIRS. PRIME COAT SHALL BE 1/8 INCH THICK UNLESS OTHERWISE INDICATED IN WRITING BY THE MANUFACTURER.
F. APPLY REPAIR MATERIAL IN LIFTS PRIOR TO THE PRIME COAT DRYING OUT. APPLY MATERIAL IN LIFTS NOT MORE THAN 2 INCHES THICK. ALLOW EACH LIFT TO CURE 2 HOURS PRIOR TO INSTALLATION OF SUBSEQUENT LIFTS.
G. IF APPLIED IN LAYERS SCRAPE OFF ANY CEMENT SKIN THAT HAS FORMED AND CONTINUE APPLICATION. DAMPEN THE SURFACE BEFORE APPLYING THE NEXT LAYER. WORK MORTAR FIRMLY INTO THE SURFACE OF THE CAST STONE. INCLUDING THE CORNERS, UNDER AND AROUND ALL MECHANICAL ANCHORS.
H. BUILD UP REPAIR MATERIAL SO THAT IT IS SLIGHTLY ABOVE THE ADJACENT CAST STONE SURFACE. ALLOW MORTAR TO 30 TO 60 MINUTES TO SET SLIGHTLY (WAIT TIME WILL VARY WITH TEMPERATURE AND HUMIDITY) LONGER IN COOL, WEATHER, AND THEN SCRAPE OFF EXCESS MATERIAL USING A STRAIGHT EDGE (A PLASTERER'S MITER ROD IS GOOD FOR THIS), DO NOT PRESS DOWN OR "FLOAT" THE REPAIR, WHERE REPAIRS OCCUR AT PANEL EDGES OR CORNERS, FORM MORTAR TO MATCH THE PROFILE OF THE SURROUNDING MASONRY.
3.08 FINAL CLEANING: AFTER MORTAR IS THOROUGHLY SET AND CURED, CLEAN EXPOSED CAST STONE AS FOLLOWS:
A. REMOVE LARGE MORTAR PARTICLES BY HAND WITH WOODEN PADDLES AND NONMETALLIC SCRAPE HOES OR CHISELS.
B. TEST CLEANING METHODS ON SAMPLE LEAVE ONE SAMPLE UNCLEANED FOR COMPARISON PURPOSES. OBTAIN ARCHITECT'S APPROVAL OF SAMPLE CLEANING BEFORE PROCEEDING WITH CLEANING OF CAST STONE.
DIVISION 04 BRICK MASONRY REPAIRS
1.01 BRICK MASONRY REPAIRS FOR THE PROJECT ARE LIMITED TO REPOINTING OF CRACKS IN THE BRICK FACADE AND REPLACEMENT OF BRICK THAT HAVE CRACKED.
1.02 UNIT PRICES
A. BRICK MASONRY WORK BEYOND THE BASE BID SHALL BE PERFORMED AS UNIT PRICE WORK AND THE TOTAL VALUE OF THE CONSTRUCTION CONTRACT SHALL BE REVISED UP OR DOWN THROUGH CHANGE ORDERS USING UNIT PRICES SUBMITTED AT THE TIME OF BID AND FIELD VERIFIED QUANTITIES THAT HAVE BEEN APPROVED BY THE ARCHITECT/ENGINEER.
B. CONTRACTOR SHALL PROVIDE ACCESS AND VISUALLY SURVEY THE FACADE TO IDENTIFY LOCATIONS OF CRACKS IN THE BRICK VENEER. CONTRACTOR SHALL DOCUMENT THE TYPE OF REPAIR, LOCATION OF REPAIR, AND QUANTITY FOR ALL UNIT PRICE ITEMS.
1.03 PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE. CONTRACTOR TO PREPARE AGENDA AND DISTRIBUTE MEETING MINUTES AFTER THE MEETING. MEETING AGENDA SHALL INCLUDE REVIEW FIELD VERIFIED QUANTITIES FOR EACH TYPE OF BRICK MASONRY REPAIR ON THE PROJECT, REVIEW APPROVED SUBMITTALS, DISCUSS SEQUENCE OF WORK AND COORDINATION OF WORK BASED ON BUILDING OPERATIONS. AT A MINIMUM, THE FOLLOWING PARTIES SHALL BE PRESENT:
A. OWNER'S REPRESENTATIVE.
B. ARCHITECT/ENGINEER'S PROJECT MANAGER.
C. CONTRACTOR'S PROJECT MANAGER.
D. CONTRACTOR'S SUPERINTENDENT.
E. FOREMAN FOR THE INSTALLER.
1.04 SUBMITTALS:
A. PRODUCT DATA: PROVIDE THE MANUFACTURER'S PUBLISHED PRODUCT LITERATURE FOR MATERIALS TO BE USED IN BRICK MASONRY REPAIRS TO SHOW COMPLIANCE WITH THE REQUIREMENTS INDICATED. INCLUDE TESTING REPORTS NOT MORE THAN ONE YEAR OLD, INSTALLATION INSTRUCTIONS AND STANDARD DETAILS.
B. SAMPLES FOR VERIFICATION:
1. PROVIDE SAMPLE BRICK TO ILLUSTRATE COLOR, COLOR BLEND, SHAPE AND SIZE WILL MATCH EXISTING.
2. PROVIDE CURED MORTAR SAMPLES FOR MORTAR TO BE USED FOR SETTING NEW CAST STONE ELEMENTS.
C. QUALIFICATION STATEMENT FOR INSTALLER SHOWING EXPERIENCE PERFORMING SIMILAR MASONRY REPAIR WORK ON NOT LESS THAN FIVE (5) PROJECTS IN THE LAST 10 YEARS.
D. PRECONSTRUCTION TEST REPORTS: FOR EXISTING MORTAR TO BE USED FOR VERIFICATION AND SELECTION OF POINTING MORTAR AND SETTING MORTAR FOR BRICK MASONRY REPAIRS.
1. SUBMIT TESTING REPORTS INDICATING FINDINGS AND RECOMMENDATIONS FOR MORTAR CONSTITUENTS. SEE ARTICLE IN THIS SECTION ENTITLED "PRECONSTRUCTION TESTING" FOR REQUIREMENTS.
1.05 PRECONSTRUCTION TESTING
A. PRECONSTRUCTION TESTING SERVICE: ENGAGE A QUALIFIED TESTING AGENCY TO PERFORM PRECONSTRUCTION TESTING ON BRICK MASONRY AS FOLLOWS:
1. PROVIDE TEST SPECIMENS AS INDICATED AND REPRESENTATIVE OF PROPOSED MATERIALS AND EXISTING CONSTRUCTION.
EXISTING MORTAR: TEST ACCORDING TO ASTM C1324 TO DETERMINE PROPORTIONAL COMPOSITION OF ORIGINAL INGREDIENTS, SIZES AND COLORS OF STONE PARTICLES, AND APPROXIMATE STRENGTH. USE X-RAY DIFFRACTION, INFRARED SPECTROSCOPY, AND DIFFERENTIAL THERMAL ANALYSIS TO SUPPLEMENT MICROSCOPICAL METHODS. CAREFULLY REMOVE EXISTING MORTAR FOR TESTING FROM WITHIN JOINTS AT FIVE (5) LOCATIONS ON THE NORTHWEST WING AND FIVE (5) LOCATIONS ON THE NORTHEAST WING AS DESIGNATED BY ARCHITECT/ENGINEER. AT EACH SAMPLE LOCATION, TAKE SAMPLES AT TWO DEPTHS TO ENSURE SAMPLES ARE TAKEN OF EXISTING POINTING MORTAR AND EXISTING SETTING MORTAR. LABEL EACH SAMPLE BY LOCATION AND DEPTH FROM THE OUTSIDE FACE OF THE WALL WHERE THE SAMPLE WAS TAKEN.
1.06 DELIVERY, STORAGE AND HANDLING
A. PACK, HANDLE, AND BRICK UNITS IN SUITABLE PACKS OR PALLETS.
B. STORE BRICK UNITS ON WOOD SKIDS OR PALLETS WITH NONSTAINING, WATERPROOF COVERS, SECURELY TIED. ARRANGE TO DISTRIBUTE WEIGHT EVENLY AND TO PREVENT DAMAGE TO UNITS. VENTILATE UNDER COVERS TO PREVENT CONDENSATION.
C. STORE UNITS WITH ADEQUATE DUNNAGE AND BRACING, AND PROTECT UNITS TO PREVENT CONTACT WITH SOIL, PREVENT STAINING, AND PREVENT CRACKING, DISTORTION, WARPING, OR OTHER PHYSICAL DAMAGE.
D. HANDLE AND TRANSPORT UNITS IN A MANNER THAT AVOIDS EXCESSIVE STRESSES THAT CAUSE CRACKING OR DAMAGE.
E. MORTAR MATERIALS ARE TO BE DELIVERED, STORED, AND HANDLED TO PROTECT THEM FROM DAMAGE, EXTREME TEMPERATURE, AND MOISTURE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
F. DELIVER AND STORE MORTAR AND REPAIR MATERIALS IN MANUFACTURER'S ORIGINAL, UNOPENED CONTAINERS WITH THE PRODUCTION DATE SHOWN ON THE CONTAINER OR PACKAGING.
G. COMPLY WITH THE MANUFACTURER'S WRITTEN SPECIFICATIONS AND RECOMMENDATIONS FOR MIXING, APPLICATION, AND CURING OF MORTARS.
1.07 PROTECTION / SITE CONDITIONS
A. COLD-WEATHER REQUIREMENTS: DO NOT USE FROZEN MATERIALS OR MATERIALS MIXED OR COATED WITH ICE OR FROST. DO NOT BUILD ON FROZEN SUBSTRATES. COMPLY WITH COLD-WEATHER CONSTRUCTION REQUIREMENTS IN TMS 802.
B. HOT-WEATHER REQUIREMENTS: COMPLY WITH HOT-WEATHER CONSTRUCTION REQUIREMENTS IN TMS 802.
2.01 REPLACEMENT BRICK: PROVIDE ASTM C216 GRADE SN, TYPE FBS BRICK OF SIZE, COLOR, AND TEXTURE TO MATCH EXISTING.
A. POINTING MORTAR: THE EXISTING MORTAR ON THE ORIGINAL BUILDING AND ADDITION ARE ANTICIPATED TO BE "MODERN" MORTAR CONTAINING PORTLAND CEMENT. EXISTING MORTAR MATERIALS TO BE VERIFIED WITH PRE-CONSTRUCTION TESTING, AND CONTRACTOR TO PROVIDE CEMENT LIME MORTAR OR A HISTORIC LIME MORTAR TO ALIGN WITH THE ACTUAL MORTAR MATERIALS IDENTIFIED.
A. PORTLAND CEMENT: ASTM C150/C150M, TYPE I WHITE OR GRAY WHERE REQUIRED FOR COLOR MATCHING OF MORTAR.
B. PROVIDE CEMENT CONTAINING NOT MORE THAN 0.60 PERCENT TOTAL ALKALI WHEN TESTED ACCORDING TO ASTM C114.
B. HYDRATED LIME: ASTM C207, TYPE S.
C. MORTAR SAND: ASTM C144 UNLESS OTHERWISE INDICATED.
1. MATCH SIZE, TEXTURE, AND GRADATION OF EXISTING MORTAR SAND AS CLOSELY AS POSSIBLE. BLEND SEVERAL SANDS IF NECESSARY TO ACHIEVE SUITABLE MATCH.
2. COLORED MORTAR: NATURAL SAND OR GROUND MARBLE, GRANITE, OR OTHER SOUND STONE OF COLOR NECESSARY TO PRODUCE REQUIRED MORTAR COLOR.
3. PROVIDE SAND WITH SHAPES MATCHING EXISTING.
D. MORTAR PIGMENTS: ASTM C979/C979M, COMPOUNDED FOR USE IN MORTAR MIXES, AND HAVING A RECORD OF SATISFACTORY PERFORMANCE IN MASONRY MORTAR MIXES.
E. WATER: POTABLE.
2.02 MORTAR MIXES: SHOULD EXISTING SETTING MORTAR FOR BRICK FACADES BE FOUND TO CONTAIN CEMENT, PROVIDE PORTLAND CEMENT LIME MORTAR COMPLYING WITH ASTM C270 PROPORTION SPECIFICATION CONSISTING OF 1 PART CEMENT, 1 PART LIME, AND 6 PARTS SAND.
A. MEASUREMENT AND MIXING: MEASURE CEMENTITIOUS MATERIALS AND SAND IN A DRY CONDITION BY VOLUME OR EQUIVALENT WEIGHT. DO NOT MEASURE BY SHOVEL. USE KNOWN MEASURE, MIX MATERIALS IN A CLEAN, MECHANICAL BATCH MIXER.
B. MIXING POINTING MORTAR: THOROUGHLY MIX CEMENTITIOUS MATERIALS AND SAND TOGETHER BEFORE ADDING ANY WATER. THEN MIX AGAIN, ADDING ONLY ENOUGH WATER TO PRODUCE A DAMP, UNWORKABLE MIX THAT WILL RETAIN ITS FORM WHEN PRESSED INTO A BALL. MAINTAIN MORTAR IN THIS DAMPENED CONDITION FOR UP TO 30 MINUTES. ONLY REMAINING WATER CONSUMED FOR PORTION REQUIREMENTS IN TMS 802.
C. MORTAR SAND: ASTM C144 UNLESS OTHERWISE INDICATED.
1. MATCH SIZE, TEXTURE, AND GRADATION OF EXISTING MORTAR SAND AS CLOSELY AS POSSIBLE. BLEND SEVERAL SANDS IF NECESSARY TO ACHIEVE SUITABLE MATCH.
2. COLORED MORTAR: NATURAL SAND OR GROUND MARBLE, GRANITE, OR OTHER SOUND STONE OF COLOR NECESSARY TO PRODUCE REQUIRED MORTAR COLOR.
3. PROVIDE SAND WITH SHAPES MATCHING EXISTING.
D. MORTAR PIGMENTS: ASTM C979/C979M, COMPOUNDED FOR USE IN MORTAR MIXES, AND HAVING A RECORD OF SATISFACTORY PERFORMANCE IN MASONRY MORTAR MIXES.
E. WATER: POTABLE.
2.03 MORTAR MIXES: SHOULD EXISTING SETTING MORTAR FOR BRICK FACADES BE FOUND TO CONTAIN CEMENT,



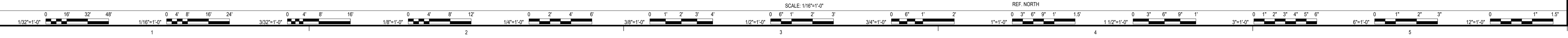








PROPOSED PHASING/EGRESS PLAN



MARK	DATE	BY	DESCRIPTION

DATE	PROJECT	DESIGNED	DRAWN	CHECKED

DATE	PROJECT	DESIGNED	DRAWN	CHECKED

**RRMM ARCHITECTS, P.C.**  
 1317 Executive Blvd, Suite 200  
 Chesapeake, Virginia 23320  
 (757) 622-2626

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PROJECT: **DINWIDDIE ELEMENTARY EXTERIOR REPAIRS**  
**DINWIDDIE COUNTY PUBLIC SCHOOLS**  
 13811 BOYDTON PLANK ROAD  
 DINWIDDIE, VA 23841

DRAWING: **PROPOSED PHASING/EGRESS PLAN**

SHEET: **A1.00**





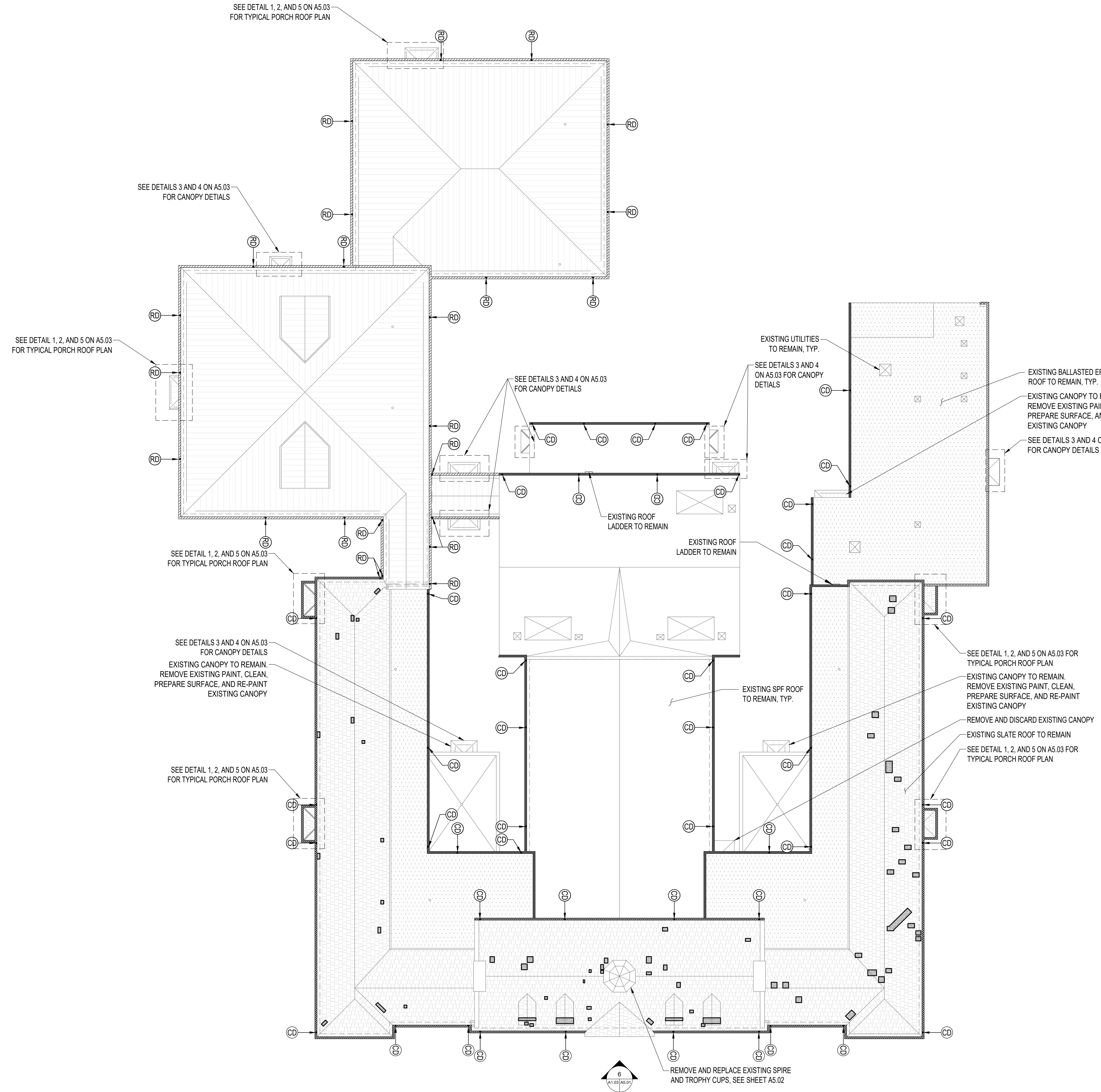






FILE NAME: Z:\Share\chris.d\2024\2024-09-19\_dwg\A1.03.dwg; LAYOUT NAME: Overall roof plan; PLOTTED FILE: September 20, 2024 - 5:54pm

- GENERAL ROOF REPAIR NOTES**
- LIMITED ACCESS HAS BEEN PROVIDED TO DATE FOR VERIFICATION OF ROOF CONDITIONS. CONTRACTOR SHALL PROVIDE ACCESS TO THE ROOF AND NOTIFY THE ARCHITECT/ENGINEER OF ANY ADDITIONAL REPAIR QUANTITIES PRIOR TO EXECUTION OF WORK.
  - AT LOCATIONS OF GUTTER AND CORNICE REMOVAL AND REPLACEMENT, NOTIFY ARCHITECT/ENGINEER OF ANY LOCATIONS WHERE DAMAGE OR DETERIORATION OF EXISTING ELEMENTS, NOT INDICATED TO BE REMOVED, ARE OBSERVED.
  - AT LOCATIONS OF SLATE TILE REPLACEMENT, INSPECT EXISTING UNDERLAYMENT AND DECKING, NOTIFY ARCHITECT/ENGINEER OF ANY LOCATIONS WHERE DAMAGE OR DETERIORATION IS PRESENT.
  - CONTRACTOR TO VERIFY ALL ROOF SLOPES AND PROVIDE SLOPES TO ARCHITECT/ENGINEER PRIOR TO GUTTER INSTALLATION.
  - DOWNSPOUTS ARE TO INTEGRATE WITH EXISTING SUBSURFACE DRAINAGE SYSTEM. NOTIFY ARCHITECT/ENGINEER OF ANY LOCATIONS STORM INLETS ARE NOT PRESENT, DAMAGED, CLOGGED, OR DETERIORATED.



**OVERALL ROOF PLAN**  
SCALE: 1/16"=1'-0"

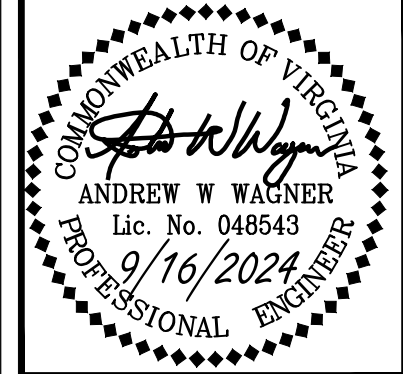
KEY	
	REMOVE EXISTING DOWNSPOUT, INSTALL NEW RECTANGULAR DOWNSPOUT COLOR T.B.D. WITH MIN 1.65 SQ. INCH CROSS SECTION
	REMOVE EXISTING DOWNSPOUT, INSTALL NEW WHITE CIRCULAR DOWNSPOUT WITH MINIMUM 1.65 SQ. INCH CROSS SECTION
	REMOVE, DISCARD AND REPLACE EXISTING BLACK OGEE GUTTER, SEE DETAILS 2&5/A5.01
	REMOVE, DISCARD AND REPLACE EXISTING WHITE OGEE GUTTER, SEE DETAILS 2&5/A5.01
	REMOVE, DISCARD AND REPLACE EXISTING WHITE RECTANGULAR GUTTER, SEE DETAIL 3/A5.01
	REMOVE, DISCARD AND REPLACE EXISTING CORNICE. EXISTING GUTTER NOT PRESENT
	REMOVE AND REPLACE EXISTING SLATE TILES

DISCLAIMER:  
GRAPHIC INFORMATION IN DRAWINGS MAY NOT NECESSARILY BE TO SCALE.  
DO NOT RELY UPON SCALED INFORMATION FOR DIMENSIONAL ACCURACY/USE DIMENSIONAL TEXT FOR ACCURACY.

MARK	DATE	BY	DESCRIPTION

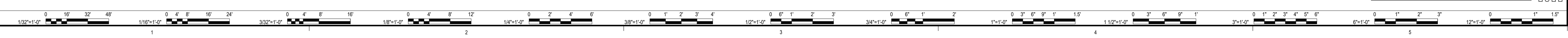
DATE	PROJECT	DESIGNED	DRAWN	CHECKED
9/16/2024	2025	AWW	SD	AWW

**RRMM ARCHITECTS, P.C.**  
1317 Executive Blvd, Suite 200  
Chesapeake, Virginia 23320  
(757) 622-2628



**DINWIDDIE ELEMENTARY SCHOOL**  
DINWIDDIE ELEMENTARY EXTERIOR REPAIRS  
VIRGINIA DEPARTMENT OF EDUCATION, DEPARTMENT OF EDUCATION #  
1811 BOYTON PLANK ROAD, DINWIDDIE, VA 23041

**OVERALL ROOF PLAN**  
PROJECT DRAWING SHEET  
**A1.03**



















**GENERAL NOTES**

1. CONTRACTOR SHALL VISIT JOB SITE TO DETERMINE EXTENT OF WORK INVOLVED PRIOR TO BIDDING THE PROJECT.
2. SEAL AROUND AND MAKE AIRTIGHT ALL DUCT PENETRATIONS OF THE ROOF MEMBRANE.
3. DUCT SIZES SHOWN ARE FROM EXISTING DOCUMENTATION. CONTRACTOR SHALL FIELD VERIFY DUCT SIZES FOR PURPOSES OF ESTIMATING INSULATION QUANTITIES. CONTRACTOR SHALL FIELD VERIFY DUCT SIZES FOR PURPOSES OF CONNECTING TO NEW PLENUM BOXES.

**ABBREVIATIONS**

- " INCHES
- EA EXHAUST AIR
- ETR EXISTING TO REMAIN
- OA OUTSIDE AIR
- THRU THROUGH
- TYP TYPICAL

**LEGEND**

- 1 NEW WORK NOTE
- D1 DEMOLITION NOTE
- NEW PLENUM BOX BELOW ROOF SURFACE
- ▭ NEW PLENUM BOX
- EXISTING DUCTWORK BELOW ROOF SURFACE
- EXISTING DUCTWORK
- A SECTION VIEW INDICATOR

LOUVER SCHEDULE										
MARK	SERVICE	CFM	MINIMUM FREE AREA (SF)	MAX VELOCITY (FPM)	SHAPE	WIDTH 'W'	HEIGHT 'H'	HEIGHT 'H1'	SELECTION BASED ON "GREENHECK"	REMARKS
LV-A	RF-2	11,800	42.4	278	TF/TG	8'-0"	6'-8"	4'-0"	EDD-601	①②③④
LV-B	RF-2	4,785	42.4	113	TF/TG	8'-0"	6'-8"	4'-0"	EDD-601	①②③④

**REMARKS:**

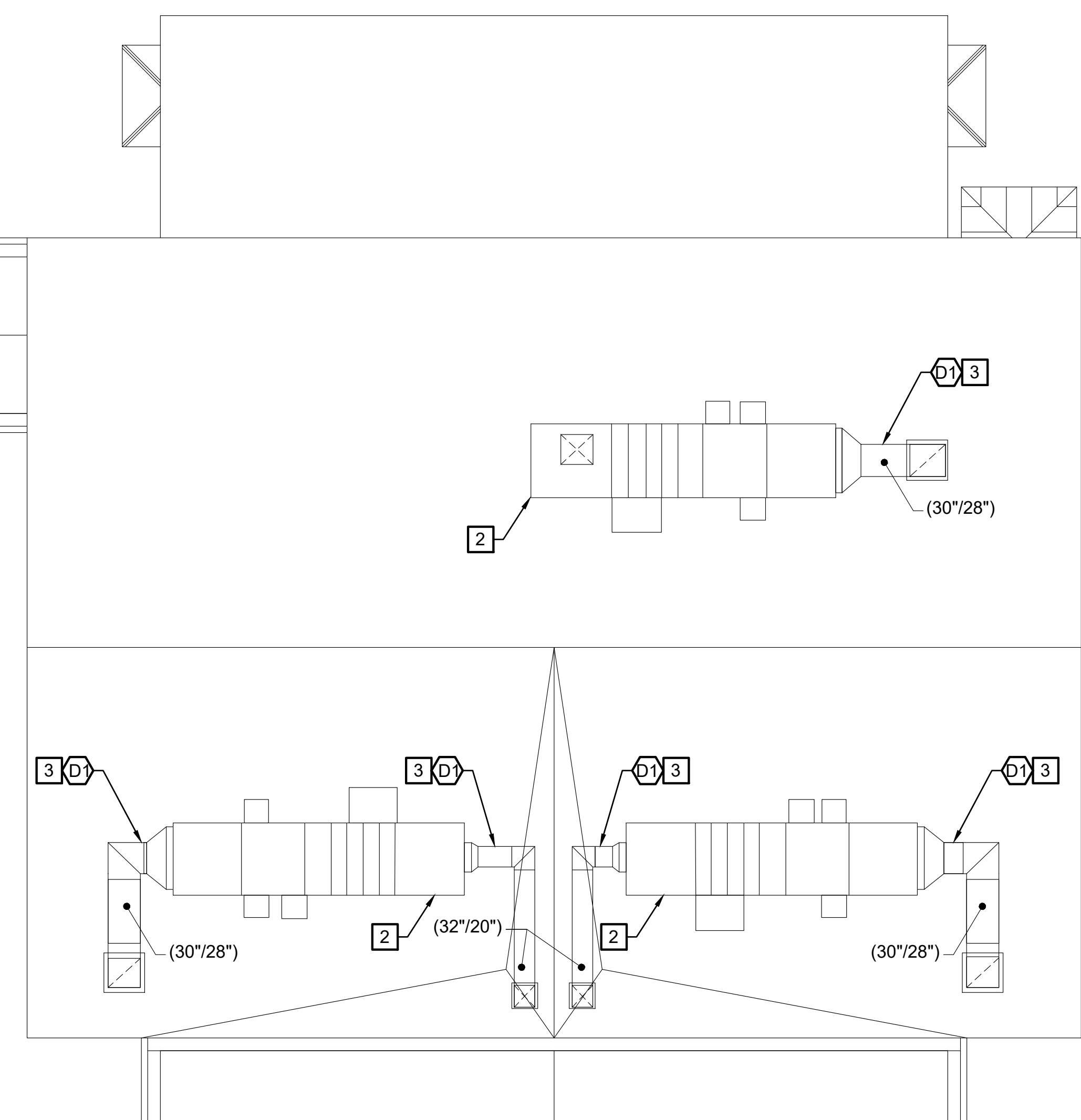
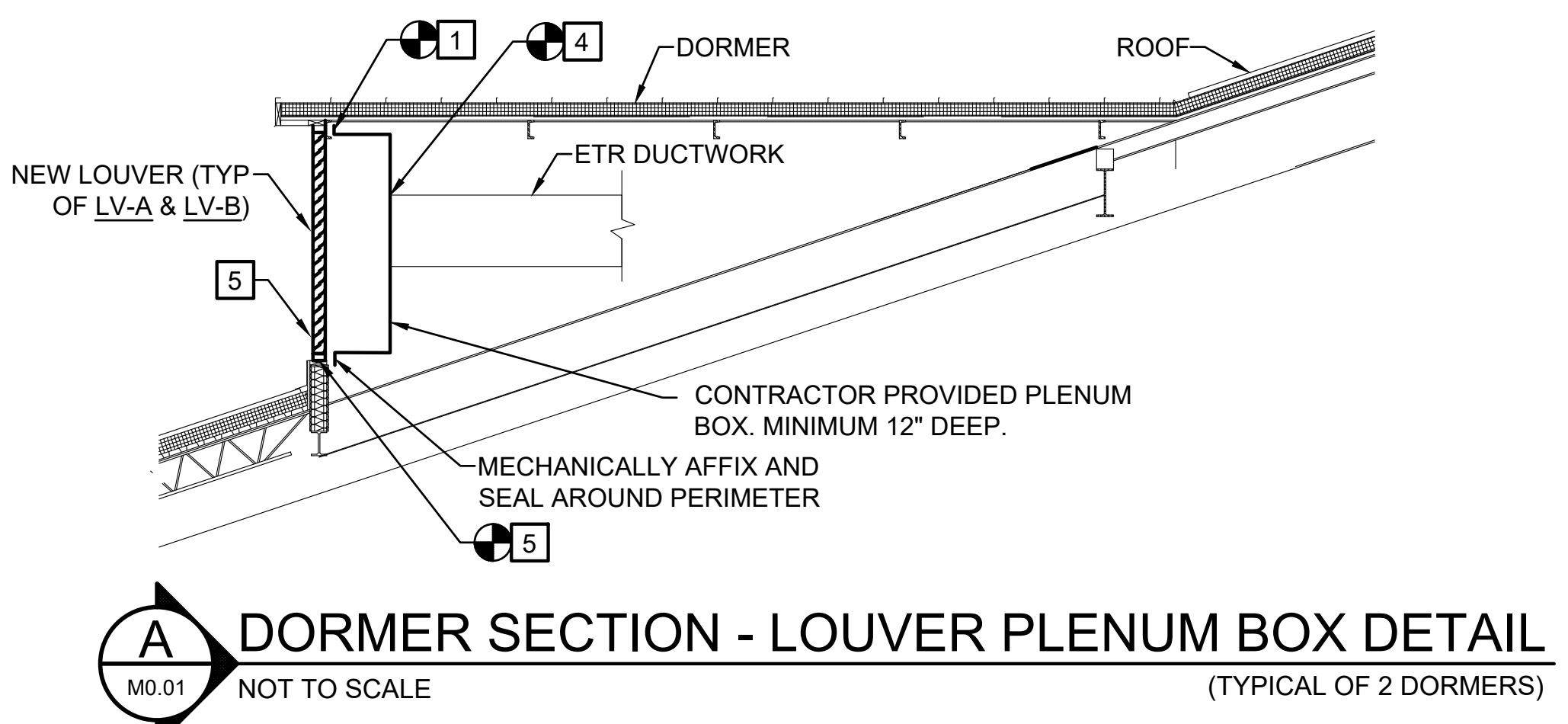
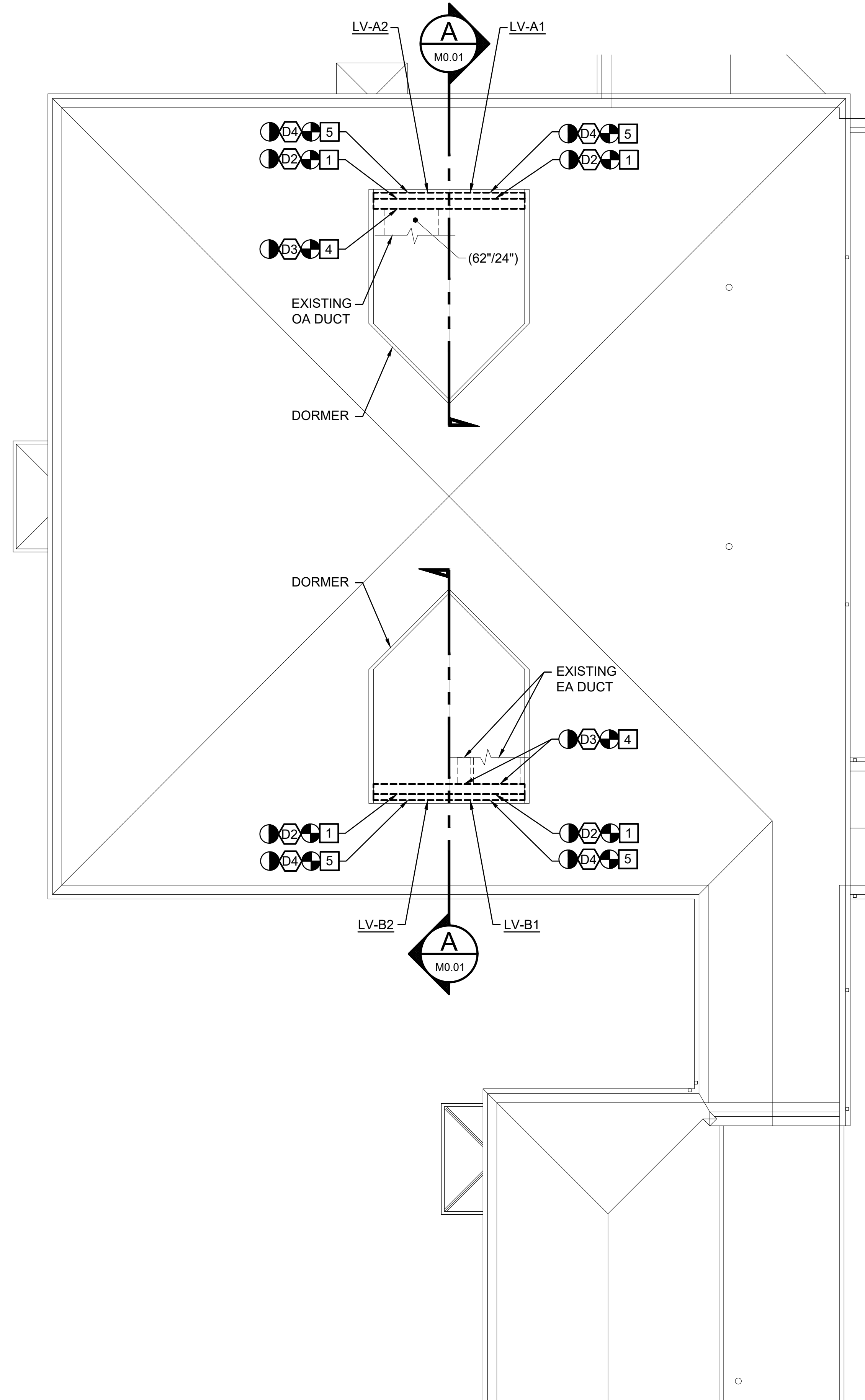
- ① FRAME AND BLADES SHALL BE HEAVY GAUGE EXTRUDED ALUMINUM.
- ② COORDINATE FINISH COLOR WITH ARCHITECT.
- ③ PROVIDE WITH ALUMINUM BIRD SCREEN.
- ④ CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS.

**SPECIFICATIONS**

- DUCTWORK AND PLENUM BOXES**
1. ALL PLENUM BOXES SHALL BE CONSTRUCTED OF SHEET METAL TO COVER THE ENTIRE FREE AREA OF EACH LOUVER.
  2. SHEET-METAL PLENUM BOXES SHALL BE FABRICATED FROM SHEET ALUMINUM AND SHALL BE OF GAUGES CALLED FOR AND AS DETAILED IN 2020 SMACNA MANUAL, HVAC DUCT CONSTRUCTION STANDARDS (METAL AND FLEXIBLE).
  3. DUCT SEALING REQUIREMENTS SHALL BE CLASS A FOR ALL DUCTWORK AND PLENUM BOXES INDICATED TO BE FABRICATED, RESEALED, AND/OR CONNECTED TO NEW WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING AND INSULATION OF THE DUCTWORK CONNECTION TO NEW PLENUM BOXES.

- DUCT INSULATION**
2. BOARD TYPE IN UNCONDITIONED SPACE OR OUTSIDE BUILDING: GLASS FIBER, 3.0-LBS./CU. FT., FOIL FACED, VAPOR-SEALED BOARD INSULATION. THERMAL CONDUCTIVITY SHALL NOT EXCEED 0.23 BTU\*IN/HR\*SQFT\*°F.
  3. WHERE INSULATION OF EXISTING OUTDOOR DUCTWORK IS INDICATED, INSULATION SHALL BE 3" THICKNESS RIGID BOARD INSULATION.
  4. WHERE INSULATION OF EXISTING OUTDOOR DUCTWORK IS INDICATED, INSULATION SHALL BE APPLIED FROM AIR HANDLING UNIT CONNECTION TO ROOF PENETRATION. SEAL INSULATION TO UNIT AND ROOF PENETRATION CURB.
  5. NEW PLENUM BOXES SHALL BE FULLY INSULATED.

- SELF-ADHESIVE, FIELD-APPLIED, OUTDOOR JACKETS**
1. PROVIDE SELF-ADHESIVE OUTDOOR JACKET BY POLYGUARD PRODUCTS INC., 3M, MFM BUILDING PRODUCTS CORP., OR APPROVED EQUAL.
  2. OUTDOOR JACKET SHALL CONSIST OF A LAMINATED VAPOR BARRIER AND WATERPROOFING MEMBRANE WITH PERM RATING 0.00 PERM, WHEN TESTED ACCORDING TO ASTM 96/E-96M, FOR INSTALLATION OVER FOAM BOARD INSULATION LOCATED ABOVE GROUND OUTDOORS. SYSTEM SHALL CONSIST OF A FOIL POLYMER LAMINATED FILM WITH A COATING OF RUBBERIZED BITUMINOUS COMPOUND OR ACRYLIC ADHESIVE THAT ALLOWS MEMBRANE TO SELF-ADHERE TO THE SUBSTRATE.
  3. COMPOSITE MEMBRANE SHALL CONSIST OF A MULTI-PLY EMBOSSED UV RESISTANT ALUMINUM FOIL/POLYMER LAMINATE TO WHICH IS APPLIED A LAYER OF RUBBERIZED ASPHALT AND SHALL HAVE THE FOLLOWING CHARACTERISTICS:
    - A. MEMBRANE THICKNESS: 59 MILS
    - B. SOLAR REFLECTANCE, CRRC INITIAL RATING: 0.86
    - C. SOLAR REFLECTANCE, CRRC 3-YEAR RATING: 0.77
    - D. THERMAL EMITTANCE, CRRC INITIAL RATING: 0.82
    - E. THERMAL EMITTANCE, CRRC 3-YEAR RATING: 0.86

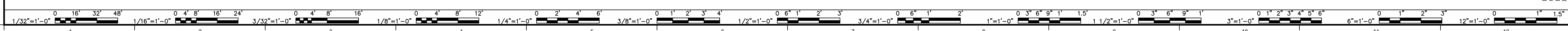


NOTE: EXISTING CONDITIONS ILLUSTRATED HAVE BEEN DETERMINED FROM ORIGINAL CONSTRUCTION DOCUMENTS AND LIMITED NON-INVASIVE FIELD INVESTIGATION. THE CONTRACTOR SHALL INVESTIGATE FIELD CONDITIONS PRIOR TO COMMENCEMENT OF WORK, COORDINATE AND MAKE ADJUSTMENTS AS NECESSARY.

DEMOLITION NOTES	
NO.	DESCRIPTION
D1	DEMOLISH EXISTING EXTERIOR INSULATION COMPLETE.
D2	DEMOLISH EXISTING MATERIAL COVERING INTERIOR OF LOUVER FREE AREA.
D3	DISCONNECT DUCTWORK FROM EXISTING PLENUM BOX. DEMOLISH EXISTING PLENUM BOX.
D4	DEMOLISH EXISTING LOUVER COMPLETE.

NEW WORK NOTES	
NO.	DESCRIPTION
1	FABRICATE AND ATTACH GALVANIZED SHEET METAL PLENUM BOX TO THE PERIMETER OF NEW LOUVER. MAKE WEATHER-TIGHT, MECHANICALLY AFFIX TO THE INTERIOR, AND SEAL. SEE DETAIL ON THIS SHEET.
2	MAKE ALL AIR HANDLING UNIT ACCESS DOORS WEATHER-TIGHT. REPLACE DOOR SEALS AND ADJUST OR REPLACE DOOR HANGING HARDWARE AS NECESSARY TO FULLY SEAL.
3	CLEAN SURFACE AND APPLY DUCT SEALANT TO ALL SEAMS AND JOINTS OF EXISTING DUCTWORK INDICATED. INSULATE EXTERIOR DUCTWORK WITH 3" RIGID BOARD INSULATION. PROVIDE AND INSTALL SELF-ADHESIVE, FIELD-APPLIED, OUTDOOR DUCT JACKET.
4	CONNECT EXISTING DUCTWORK TO NEW PLENUM BOX.
5	INSTALL NEW LOUVER IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS. PROVIDE WITH MANUFACTURER SILL PAN AND BIRD SCREEN.

**MECHANICAL DEMOLITION AND NEW WORK - PARTIAL ROOF PLAN**  
NOT TO SCALE



**THOMPSON Consulting Engineers**  
13811 BOYDTON PLANK ROAD  
DINWIDDIE, VA 23041  
PROJECT NUMBER: 2407

**RRMM ARCHITECTS, PC**  
129 W Virginia Beach Blvd  
Norfolk, Virginia 23510  
(757)622-2828

DATE: 09-16-2024  
PROJECT: 2125-58  
DESIGNED: JMD  
DRAWN: JMD  
CHECKED: KDA

DESCRIPTION: DINWIDDIE ELEMENTARY EXTERIOR REPAIRS  
BY: [Signature]  
DATE: 09-16-2024  
REVISIONS: [Signature]

PROJECT: DINWIDDIE COUNTY PUBLIC SCHOOLS  
13811 BOYDTON PLANK ROAD  
DINWIDDIE, VA 23041  
DRAWING: MECHANICAL DEMOLITION AND NEW WORK - PARTIAL ROOF PLAN

SHEET: M0.01

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