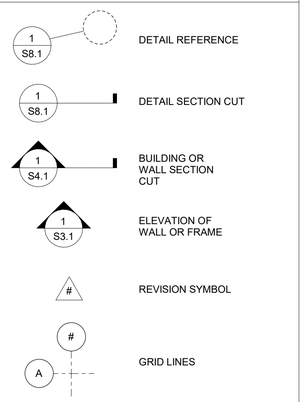
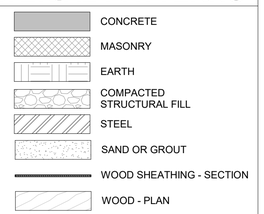
STRUCTURAL ABBREVIATIONS

#	NUMBER OR POUNDS
AB	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
ADDL	ADDITIONAL
ADJ	ADJACENT
AESS	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL
AFF	ABOVE FINISH FLOOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
ALUM	ALUMINUM
APA	AMERICAN PLYWOOD ASSOCIATION
APPROX	APPROXIMATELY
ARCH	ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ASD	ALLOWABLE STRESS DESIGN
ASSY	ASSEMBLY
ATR	ALL THREAD ROD
ATR/A	ALL THREAD ROD WITH ADHESIVE
AWS	AMERICAN WELDING SOCIETY
B/	BOTTOM OF
BF	BRACED FRAME
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BN	BOUNDARY NAIL
BOT	BOTTOM
BRBF	BUCKLING RESTRAINED BRACED FRAME
BRNG	BEARING
BSMT	BASEMENT
BTWN	BETWEEN
BU	BUILT-UP
C	CAMBER OR CHANNEL (AMERICAN STANDARD)
CANT	CANTILEVER
CFS	COLD-FORMED STEEL
CIP	CAST IN PLACE
CG	CENTER OF GRAVITY
CGS	CENTER OF GRAVITY OF (PRESTRESSING) STEEL
CJ	CONTROL OR CONSTRUCTION JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTERLINE
CLG	CEILING
CLR	CLEARANCE; CLEAR
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
COORD	COORDINATE
CSA	CONCRETE SCREW ANCHOR
d	PENNY (NAIL)
db	NOMINAL BAR DIAMETER
DBA	DEFORMED BAR ANCHOR
DBL	DOUBLE
DBO	DESIGNED BY OTHERS
DEG	DEGREE
DEMO	DEMOLISH; DEMOLITION
DF/L	DOUGLAS FIR-LARCH
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIST	DISTANCE
DL	DEAD LOAD
DN	DOWN
DP	DEPTH OR DEEP
DTL	DETAIL
DWG	DRAWING
(E)	EXISTING
E	MODULUS OF ELASTICITY
EA	EACH
EB	EXPANSION BOLT
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
EN	EDGE NAIL
EOR	ENGINEER OF RECORD
EQ	EQUAL; EARTHQUAKE
EW	EACH WAY
EXT	EXTERIOR
EXTD	EXTEND; EXTENDED
f'c	28 DAY CONC COMPRESSIVE STRENGTH
f'm	MASONRY NET AREA COMPRESSIVE STRENGTH
Fy	YIELD STRESS
Fu	TENSILE STRESS
F/	FACE OF
FAB	FABRICATED / FABRICATOR
FF	FINISH FLOOR
FN	FIELD NAIL
FLR	FLOOR
FDN	FOUNDATION
FRT	FIRE RETARDANT TREATED
FS	FAR SIDE
FT	FEET
FTG	FOOTING
GA	GAUGE
GAF	GAS ACTUATED FASTENER
GALV	GALVANIZED
GLB	GLUE LAMINATED BEAM
GR	GRADE
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
HD	HOLDOWN
HDG	HOT-DIP GALVANIZED
HDR	HEADER
HEX	HEXAGONAL
HF	HEM-FIR
HGR	HANGER
HORIZ	HORIZONTAL
HSA	HEADED STUD ANCHOR
HSS	HOLLOW STRUCTURAL SECTION
HT	HEIGHT
HVAC	HEATING VENTILATION AIR CONDITIONING
IBC	INTERNATIONAL BUILDING CODE
ICF	INSULATED CONCRETE FORMS
ID	INSIDE DIAMETER
IN	INCH
INFO	INFORMATION
INT	INTERIOR
JST	JOIST
JT	JOINT
K	KIP(S) (1,000 POUNDS)
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
L, 2L	ANGLE OR DOUBLE ANGLE
LAT	LATERAL
LB	POUND
LF	LINEAR FOOT
LG	LIGHT GAUGE
LL	LIVE LOAD
LLBB	LONG LEGS BACK TO BACK
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
LRFD	LOAD AND RESISTANCE FACTOR DESIGN
LSL	LAMINATED STRAND LUMBER
LSH	LONG SLOTTED HOLE
LVL	LAMINATED VENEER LUMBER
LWC	LIGHT WEIGHT CONCRETE
MANUF	MANUFACTURER
MAX	MAXIMUM
MC	MISCELLANEOUS CHANNEL
MECH	MECHANICAL
MF	MOMENT FRAME
MFR	MANUFACTURER
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MSA	MASONRY SCREW ANCHOR
MT	MAGNETIC PARTICLE TESTING
MTL	METAL
(N)	NEW
NDT	NON-DESTRUCTIVE TESTING
NIC	NOT IN CONTRACT
NOM	NOMINAL
NS	NEAR SIDE
NTE	NOT TO EXCEED
NTS	NOT TO SCALE
NWC	NORMAL WEIGHT CONCRETE
OC	ON CENTER
OCBF	ORDINARY CONCENTRIC BRACED FRAME
OD	OUTSIDE DIAMETER
OMF	ORDINARY MOMENT FRAME
OPP	OPPOSITE
OWJ	OPEN WEB JOIST
PAF	POWER ACTUATED FASTENER
PC	PRECAST
PCF	POUNDS PER CUBIC FOOT
PERP	PERPENDICULAR
PJP	PARTIAL JOINT PENETRATION
PL	PLATE
PLF	POUNDS PER LINEAL FOOT
PLWD	PLYWOOD
PSI	POUNDS PER SQUARE INCH
PSF	POUNDS PER SQUARE FOOT
PSL	PARALLEL STRAND LUMBER
PT	PRESSURE TREATED
P/T	POST TENSIONED
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
RAD	RADIUS
RBS	REDUCED BEAM SECTION
REF	REFERENCE
REINF	REINFORCING
REQD	REQUIRED
RET	RETAINING
REV	REVISED; REVISION
RO	ROUGH OPENING
SC	SLIP CRITICAL
SCBF	SPECIAL CONCENTRIC BRACE FRAME
SCH	SCHEDULE
SEOR	STRUCTURAL ENGINEER OF RECORD
SFRS	SEISMIC FORCE RESISTING SYSTEM
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SLBB	SHORT LEGS BACK TO BACK
SMF	SPECIAL MOMENT FRAME
SMS	SHEET METAL SCREW
SOG	SLAB ON GRADE
SOMD	SLAB ON METAL DECK
SQ	SQUARE
SS	STAINLESS STEEL
SSH	SHORT SLOTTED HOLE
STD	STANDARD
STL	STEEL
SQ	SQUARE
SYM	SYMMETRICAL
T/	TOP OF
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
THRD	THREADED
TPL	TRIPLE
TRANS	TRANSVERSE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
URM	UNREINFORCED MASONRY
UT	ULTRASONIC TEST
VERT	VERTICAL
VIF	VERIFY IN FIELD
W/	WITH
W/O	WITHOUT
WD	WOOD
WF	WIDE FLANGE
WP	WORK POINT
WT	WEIGHT
WWR	WELDED WIRE REINFORCING

STRUCTURAL DRAWING SYMBOLS



STRUCTURAL MATERIAL PATTERNS



STRUCTURAL DRAWING INDEX

SHEET #	SHEET NAME	PERMIT SET
S0.01	COVER SHEET	•
S0.02	STRUCTURAL NOTES & SPECIAL INSPECTION	•
S1.00	STRUCTURAL SITE PLAN	•
S1.01	PLAN & REPAIR DETAILS	•
S1.02	PICTURE PLAN	•
S1.03	REFERENCE PHOTOS	•
S1.04	REFERENCE PHOTOS	•
S3.01	EXISTING ELEVATIONS	•

CODE SUMMARY:

BUILDING CODE: 2021 WSBC
YEAR BUILT: 1927

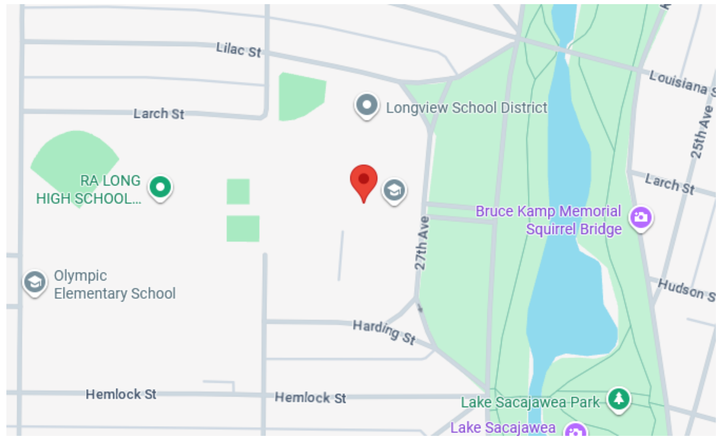
BUILDING CONSTRUCTION TYPE: II-B
OCCUPANCY CLASSIFICATION: E (NO CHANGE)

SCOPE OF WORK:
THE FOLLOWING PLANS ARE FOR THE REPAIR OF A DAMAGED STONE ON THE FRONT PORTICO OF RA LONG HIGH SCHOOL

PROJECT DESIGN TEAM:

MILLER CONSULTING ENGINEERS, INC
STRUCTURAL ENGINEER OF RECORD

PRIMARY CONTACT: RON VANDEHEY, RON@MILLER-SE.COM
SECONDARY CONTACT: STEVEN DOMITER, STEVEN@MILLER-SE.COM



-NORTH-

1 VICINITY MAP

S0.01 | NOT TO SCALE

Ronald G. Vandehey

Digitally signed by Ronald G. Vandehey
DN: cn=Ronald G. Vandehey, o=Miller Consulting Engineers, Inc., ou=Engineering, email=ron@miller-se.com, c=US
Date: 2026.04.29 10:02:49-07'00'

DIGITALLY SIGNED

4/29/2026

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503.246.1250 | miller-se.com

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RA LONG HIGH SCHOOL PORTICO STONE REPAIR

2903 NICHOLS BLVD.
LONGVIEW, WA

BRITTELL ARCHITECTURE INC.

BRITTELL ARCHITECTURE, INC.

REV	DESCRIPTION	DATE

DESIGNED BY: SJD
CHECKED BY: RGV

MCE PROJ #: 260364
ISSUE DATE: 04.20.2026
ISSUANCE: PERMIT SET

SHEET CONTENT
COVER SHEET

SHEET
S0.01

STRUCTURAL NOTES

GENERAL NOTES
THESE CONTRACT DOCUMENTS COMPRISED OF PLANS, SPECIFICATIONS, ENGINEERING AND DESIGN WORK ARE INTENDED SOLELY FOR THE PROJECT SPECIFIED HEREIN. MILLER CONSULTING ENGINEERS (MCE) DISCLAIMS ALL LIABILITY IF THESE PLANS AND SPECIFICATIONS OR THE DESIGN, ADVICE AND INSTRUCTIONS ATTENDANT THERETO ARE USED ON ANY PROJECT OR AT ANY LOCATION OTHER THAN THE PROJECT AND LOCATION SPECIFIED HEREIN.

THE CONTRACT DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE TO ALL SAFETY REGULATIONS DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL METHODS, DIRECTION AND RELATED EQUIPMENT NECESSARY TO PERFORM THE WORK.

SHOULD ANY QUESTION ARISE REGARDING THE CONTRACT DOCUMENTS OR SITE CONDITIONS, THE CONTRACTOR SHALL REQUEST INTERPRETATION AND CLARIFICATION FROM THE ENGINEER BEFORE BEGINNING THE PROJECT. THE ABSENCE OF SUCH REQUEST SHALL SIGNIFY THAT THE CONTRACTOR HAS REVIEWED AND FAMILIARIZED THEMSELVES AND HAS COMPLETE COMPREHENSION OF ALL ASPECTS OF THE PROJECT.

THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION AND CORRELATION OF ALL ITEMS AND WORK NECESSARY FOR COMPLETION OF THE PROJECT AS INDICATED BY THE CONTRACT DOCUMENTS. THE CONTRACT DOCUMENTS ARE STRUCTURAL ONLY AND DO NOT NECESSARILYINDICATE ALL NON-STRUCTURAL PORTIONS OF THE PROJECT INCLUDING, BUT NOT LIMITED TO, PLUMBING, FIRE SUPPRESSION, ELECTRICAL, MECHANICAL, LAND USE, SITE PLANNING, EROSION CONTROL FLASHING AND WATER-PROOFING. ALL NON-STRUCTURAL PORTIONS OF WORK, AND STRUCTURAL WORK NOTED AS DELEGATED DESIGN IN THE SUBMITTAL SCHEDULE, ARE BEYOND THE SCOPE OF THESE DOCUMENTS AND ARE PROVIDED BY OTHERS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION AND CORRELATION OF ALL NON-STRUCTURAL ITEMS IMPACTED BY THE STRUCTURAL WORK. THESE ITEMS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR MODIFIED IN ACCORDANCE WITH THE RECOMMENDATIONS OF A QUALIFIED DESIGN PROFESSIONAL ENGAGED AT THE CONTRACTOR'S OWN EXPENSE.

ANY MATERIAL NOT AS SPECIFIED IN THE CONTRACT DOCUMENTS OR IMPROPER MATERIAL INSTALLATION OR WORKMANSHIP SHALL BE REMOVED AND REPLACED WITH SPECIFIED MATERIAL IN A WORKMANLIKE MANNER AT THE CONTRACTOR'S EXPENSE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL MATERIALS FROM DAMAGE THROUGHOUT THE COURSE OF CONSTRUCTION. CHANGES TO THE CONTRACT DOCUMENTS REQUESTED BY THE CONTRACTOR TO ACCOMPLISH THEIR PREFERRED MEANS OR METHOD OF CONSTRUCTION MAY BE AT THE CONTRACTOR'S EXPENSE.

ALL MANUFACTURED PRODUCTS SPECIFIED SHALL BE USED UNLESS AN ALTERNATE IS SUBMITTED AND APPROVED BY THE SEOR. MANUFACTURED PRODUCTS REQUIRING A BUILDING CODE EVALUATION REPORT SHALL HAVE A CURRENT REPORT DEMONSTRATING CONFORMANCE WITH THE APPLICABLE BUILDING CODE, VALID AT THE TIME OF PRODUCT INSTALLATION.

BUILDING CODE
ALL PHASES OF THE WORK SHALL CONFORM TO THE 2021 WASHINGTON STATE BUILDING CODE (WSBC), BASED ON THE 2021 INTERNATIONAL BUILDING CODE (IBC), INCLUDING ALL REFERENCE STANDARDS, UNLESS NOTED OTHERWISE.

SHOP DRAWINGS/SUBMITTALS
SUBMITTALS AND SHOP DRAWINGS FOR SPECIFIC PRODUCTS GENERATED BY THE SUPPLIER SHALL BE SUBMITTED FOR THE ITEMS NOTED IN THE SUBMITTAL SCHEDULE. SHOP DRAWINGS SHALL BE TO SCALE AND SHOW COMPLETE DETAILS AND INSTRUCTIONS FOR FABRICATION AND ASSEMBLY. SHOP DRAWINGS SHALL INDICATE ERECTION AND TEMPORARY BRACING INFORMATION FOR CONTRACTOR'S USE.

THE DESIGN OF ITEMS NOTED IN THE SUBMITTAL SCHEDULE AS DELEGATED DESIGN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DOCUMENTS FOR THE DESIGN AND FABRICATION OF DELEGATED DESIGN ITEMS (INCLUDING STRUCTURAL CALCULATIONS AND DRAWINGS) SHALL BEAR THE SEAL AND SIGNATURE OF A LICENSED ENGINEER REGISTERED IN THE STATE THAT THE PROJECT IS BEING CONSTRUCTED.

DEFERRED SUBMITAL ITEMS NOTED IN THE SUBMITTAL SCHEDULE ARE PORTIONS OF THE DESIGN THAT ARE NOT SUBMITTED AT THE TIME OF PERMIT APPLICATION AND ARE REQUIRED TO BE SUBMITTED TO THE BUILDING OFFICIAL.

THE CONTRACTOR SHALL REVIEW AND MODIFY ALL SUBMITTALS AS REQUIRED FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS AND SIGN AND DATE ALL SETS OF THE SUBMITTAL DOCUMENTS PRIOR TO SUBMITTAL TO THE ENGINEER. THE CONTRACTOR SHALL SCHEDULE SUBMITTALS TO ALLOW SUFFICIENT TIME FOR REVIEW AND POSSIBLE RE-SUBMITTAL. WHERE RE-SUBMITTALS ARE REQUIRED, CHANGES FROM THE PREVIOUS SUBMITTAL SHALL BE CLEARLY INDICATED WITH REVISION CLOUDS OR SIMILAR.

SUBMITTAL SCHEDULE				
ITEM	SUBMITTAL	SHOP DRAWINGS	DELEGATED DESIGN	DEFERRED SUBMITTAL
CONCRETE PANEL		X		
PANEL COLOR	X			
GROUT COLOR	X			

STRUCTURAL DESIGN CRITERIA

LIVE LOAD REDUCTION FOR BEAMS AND COLUMNS WAS NOT USED. DESIGN FOR MECHANICAL LOADS INCLUDES ONLY THOSE INDICATED ON STRUCTURAL DRAWINGS. THE FOLLOWING ARE THE DESIGN REQUIREMENTS:

STRUCTURAL DESIGN CRITERIA	
RISK CATEGORY	III
DEAD LOAD	
CONC PANEL	717 LBS
SEISMIC DESIGN DATA	
IMPORTANCE FACTOR	I_P = 1.5
SPECTRAL RESPONSE ACCELERATIONS	S_S = 0.903, S_1 = 0.439
SITE CLASS	D
SPECTRAL RESPONSE COEFFICIENTS	S_{DS} = 0.722, S_{D1} = 0.545
SEISMIC DESIGN CATEGORY	D

CONCRETE
MIXING, BATCHING, TRANSPORTING, PLACING AND CURING OF CONCRETE SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE, ACI 318, ACI 301 AND BUILDING CODE CHAPTER 19.

ALL CONCRETE WITH REINFORCEMENT SHALL HAVE NO CHLORINE OR CHLORIDES. NO WATER MAY BE ADDED TO THE CONCRETE IN THE FIELD UNLESS SPECIFICALLY APPROVED IN WRITING BY THE CONCRETE SUPPLIER IN CONJUNCTION WITH THE REVIEWED CONCRETE MIX DESIGN.

DESIGN OF FORMWORK, SHORING AND RE-SHORING DESIGN IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM TO THE MOST RECENT EDITION OF ACI 347R.

CONCRETE MIX DESIGN REQUIREMENTS:

CONCRETE MIX DESIGN REQUIREMENTS				
MEMBER TYPE/LOCATION	**COMPRESSIVE STRENGTH AT 28 DAYS, f'c (PSI)**	**MAXIMUM AGGREGATE SIZE**	**MAXIMUM W/CM RATIO**	**EXPOSURE CLASS**
PRECAST CONCRETE PANEL	5000	1/2"	0.40	F1, S0, W1, C0

CONCRETE MIX AIR CONTENT REQUIREMENTS:
AIR ENTRAINMENT SHALL BE PROVIDED IN ACCORDANCE WITH THE MAXIMUM AGGREGATE SIZE AND EXPOSURE CLASS OF THE MIX DESIGN SPECIFIED. THE AIR-ENTRAINING ADMIXTURE SHALL CONFORM TO ASTM C260. MIX DESIGNS SPECIFIED AS EXPOSURE CLASS F0 DO NOT REQUIRE AIR ENTRAINMENT.

CONCRETE MIX AIR CONTENT REQUIREMENTS		
MAXIMUM AGGREGATE SIZE	**CONCRETE SUBJECT TO FREEZE/ITHAW CYCLES (EXPOSURE CLASS F1)**	**CONCRETE SUBJECT TO CONTINUOUS MOISTURE AND/OR DEICING CHEMICALS (EXPOSURE CLASS F2, F3)**
3/8"	6%	7.5%
1/2"	5.5%	7%
3/4"	5%	6%
1"	4.5%	6%
1-1/2"	4.5%	5.5%

GFRP REINFORCING
ALL REINFORCING SHALL BE GFRP TO CONFORM TO ASTM D7957 PER ACI 440.11-22, GRADE 120 UNLESS NOTED OTHERWISE. BARS SHALL BE PRODUCED WITH A SAND-COATED OR HELICALLY-WRAPPED SURFACE FOR BOND DEVELOPMENT. GFRP SHALL NOT BE FIELD BENT, ALL BENT SHAPES SHOULD BE FACTORY FORMED UNDER CONTROLLED CONDITIONS.

ALL REINFORCING SHALL BE SUPPORTED ON WELL-CURED CONCRETE BLOCKS, PLASTIC CHAIRS OR METAL CHAIRS, AS SPECIFIED BY THE CRSI MANUAL OF STANDARD PRACTICE, MSP-1. REINFORCING SHALL BE SECURELY TIED IN PLACE WITH #16 ANNEALED IRON WIRE PRIOR TO PLACING CONCRETE.

CONCRETE COVER SHALL BE MAINTAINED TO ALL REINFORCEMENT AT CONCRETE REVEALS AND INSETS.

NON-SHRINK GROUT
ALL NON-SHRINK GROUT SHALL BE NON-METALLIC GROUT CONFORMING TO ASTM C1107, AND SHALL BE APPLIED AND CURED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. PRE-GROUTING OF BASE PLATES IS NOT PERMITTED.

NON-SHRINK GROUT MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS = 6000 PSI

STEEL SCREWS
ALL SCREWS SHALL BE A #10 MINIMUM SIZE AND CONFORM TO ASTM C1513 STEEL TAPPING SCREWS, ASTM C-1002 AND ASTM C-954 TYPE S AND/OR TYPE S-12. SCREWS TO BE TESTED IN ACCORDANCE WITH SAE J78 STANDARDS. LENGTH OF SCREWS SHOULD BE APPROXIMATELY 3/8" TO 1/2" LONGER THAN THE TOTAL MATERIAL THICKNESS AND A MINIMUM OF 3 EXPOSED THREADS SHOULD EXTEND THROUGH THE STEEL. ALL SCREWS SHALL BE THREAD-FORMING OR THREAD-CUTTING, WITH OR WITHOUT A SELF-DRILLING POINT. SCREWS SHALL BE INSTALLED AND TIGHTENED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

RONALD G. VANDHEI
STATE OF WASHINGTON
21137
REGISTERED
PROFESSIONAL ENGINEER
DIGITALLY SIGNED
4/29/2026

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RA LONG HIGH SCHOOL PORTICO STONE REPAIR

2903 NICHOLS BLVD.
LONGVIEW, WA

BRITTELL ARCHITECTURE INC.

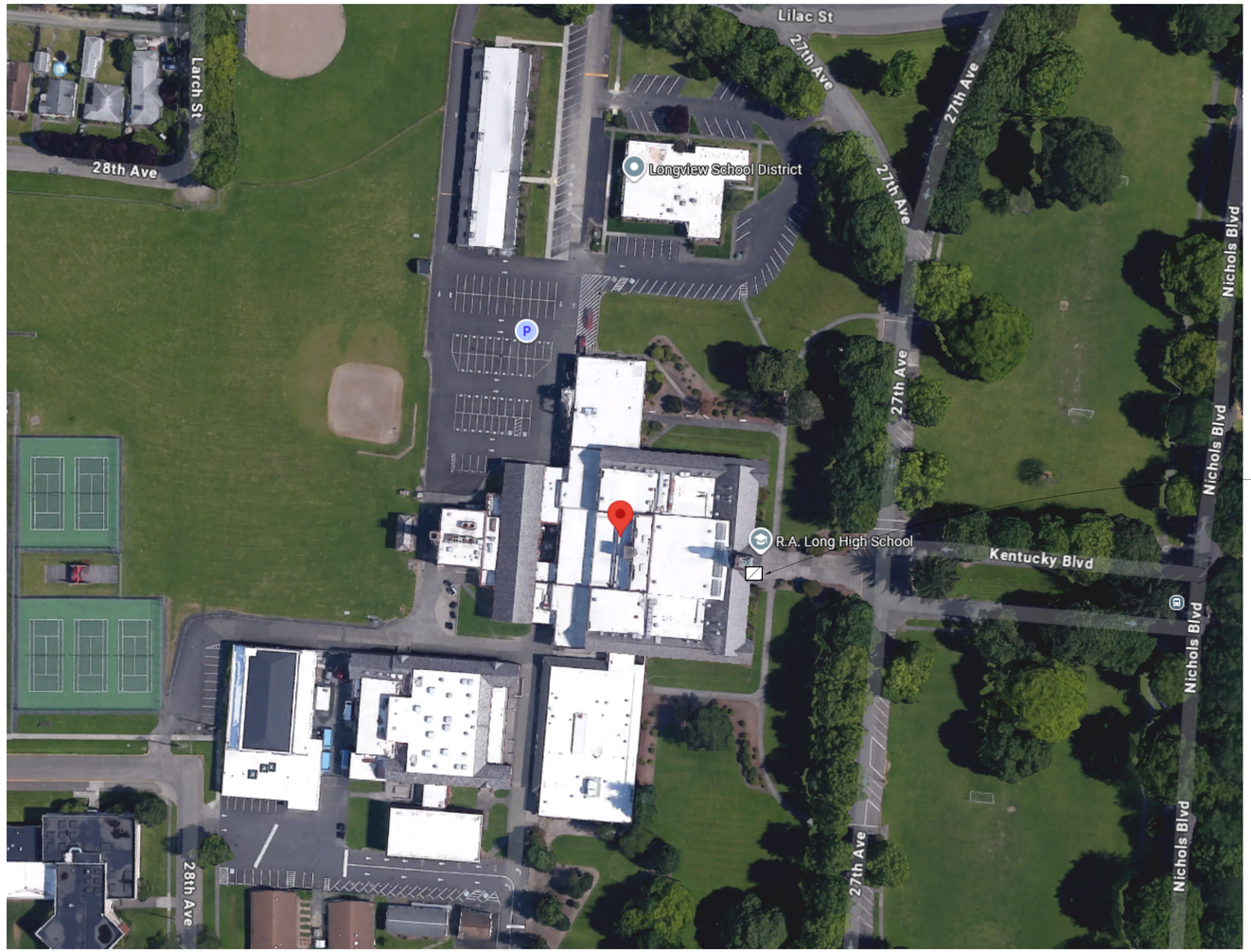
BRITTELL ARCHITECTURE, INC.

REV	DESCRIPTION	DATE

DESIGNED BY: SJD
CHECKED BY: RGV
MCE PROJ #: 260364
ISSUE DATE: 04.20.2026
ISSUANCE: PERMIT SET

SHEET CONTENT
STRUCTURAL NOTES & SPECIAL INSPECTION

SHEET
S0.02



NORTH

1 STRUCTURAL SITE PLAN

S1.00 | NOT TO SCALE

ROLAND G. VANDEHEY
STATE OF WASHINGTON
21137
REGISTERED
PROFESSIONAL ENGINEER

DIGITALLY SIGNED
4/29/2026

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BRITTELL ARCHITECTURE INC.

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SHEET CONTENT
STRUCTURAL SITE PLAN

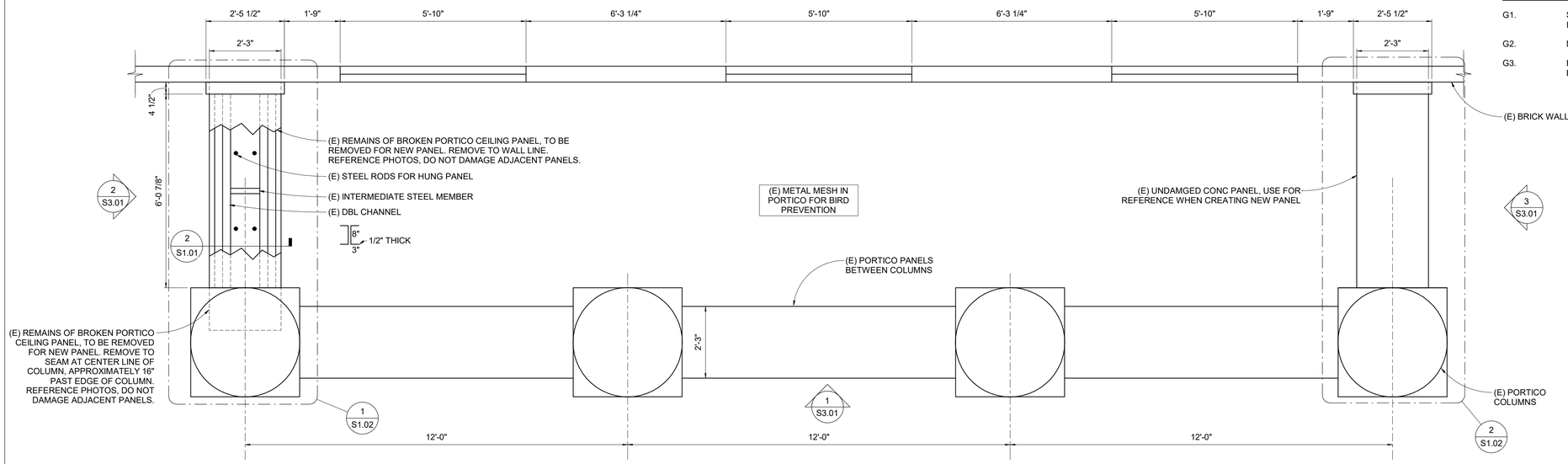
SHEET
S1.00

GENERAL SHEET NOTES:

G1. SEE S0.02 FOR STRUCTURAL NOTES AND SPECIAL INSPECTION REQUIREMENTS

G2. MATCH COLOR, TEXTURE AND PATTERN OF EXISTING PANEL

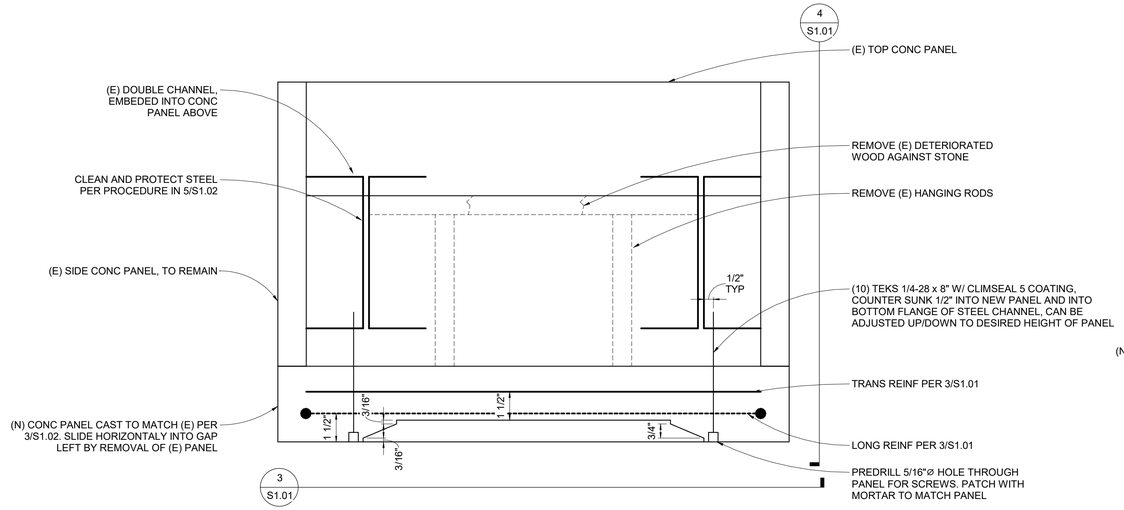
G3. FIELD VERIFY DIMENSIONS BEFORE CREATION OF NEW CONCRETE PANEL AND PURCHASE OF MATERIALS



NORTH

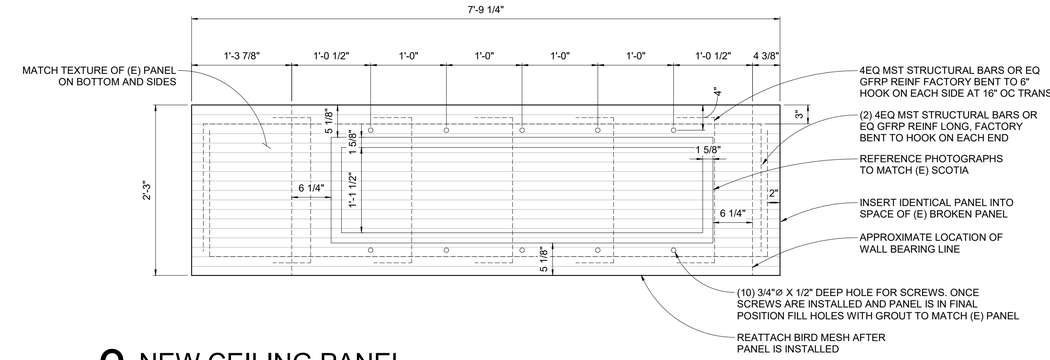
1 EXISTING REFLECTED PORTICO CEILING PLAN

S1.01 | 1/2" = 1'-0"



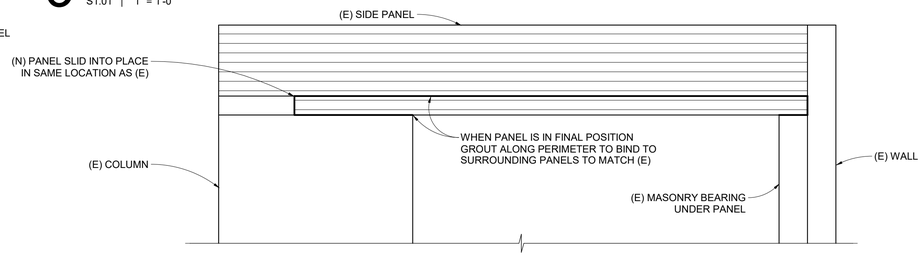
2 CEILING PANEL REPAIR SECTION

S1.01 | 3" = 1'-0"



3 NEW CEILING PANEL

S1.01 | 1" = 1'-0"



4 NEW CEILING PANEL SIDE ELEVATION

S1.01 | 3/4" = 1'-0"

STEP 1: REMOVE ALL EXISTING RUST FROM ANY SURFACE OF BEAM THAT IS POSSIBLE TO ACCESS. CLEAN TO BARE STEEL. PREPARE SURFACE TO SP11 STANDARD. DO NOT REMOVE GREATER THAN .05" OF STEEL, VERIFY WITH CALIPERS.
STEP 2: REMOVE ANY OIL OR DIRT THAT WOULD PREVENT ADHESION OF NEW COATING. WIPE WITH ACETONE AND CLEAN RAGS. BLOW OFF DUST WITH CLEAN DRY AIR SO THAT SURFACE IS DRY AND HAS NO VISIBLE CONTAMINANTS.
STEP 3: COAT ALL VISIBLE AND CLEANED AREAS OF STEEL WITH GALVINIZING PAINT CONTAINING AT LEAST 95% ZINC USING A BRUSH. MIX THOROUGHLY BEFORE APPLICATION, MAINTAIN AGITATION DURING APPLICATION TO PREVENT SETTLING.
STEP 4: APPLY FIRST COAT AND ALLOW TO TACK DRY BEFORE APPLICATION OF SECOND COAT. APPLY ZINC COATING TO A TOTAL DRY FILM THICKNESS OF AT LEAST 5 MILS, APPROXIMATELY 3-4 COATS, IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. ALLOW FULL CURE BEFORE INSTALLING CEILING PANEL.

5 STEEL CLEANING/PROTECTION PROCEDURE

S1.01 | 3/4" = 1'-0"

RONALD G. VANDEHEY
STATE OF WASHINGTON
21137
REGISTERED PROFESSIONAL ENGINEER
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4/29/2026

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LONGVIEW, WA

BRITTELL ARCHITECTURE INC.

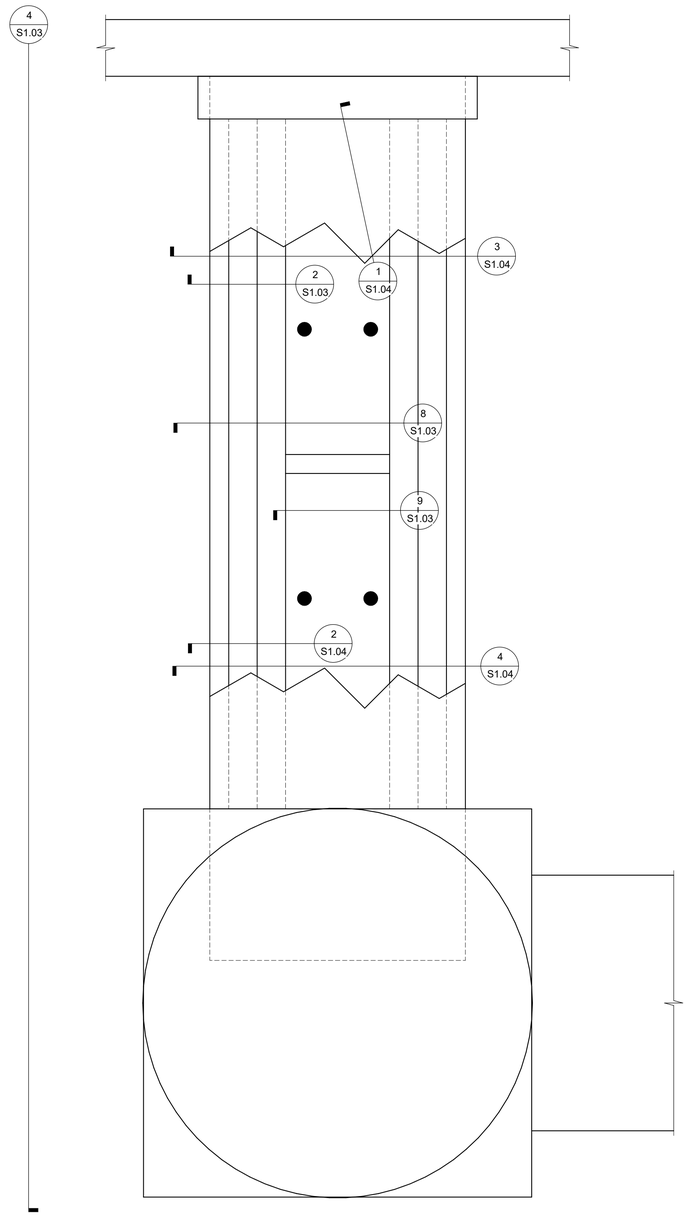
BRITTELL ARCHITECTURE, INC.

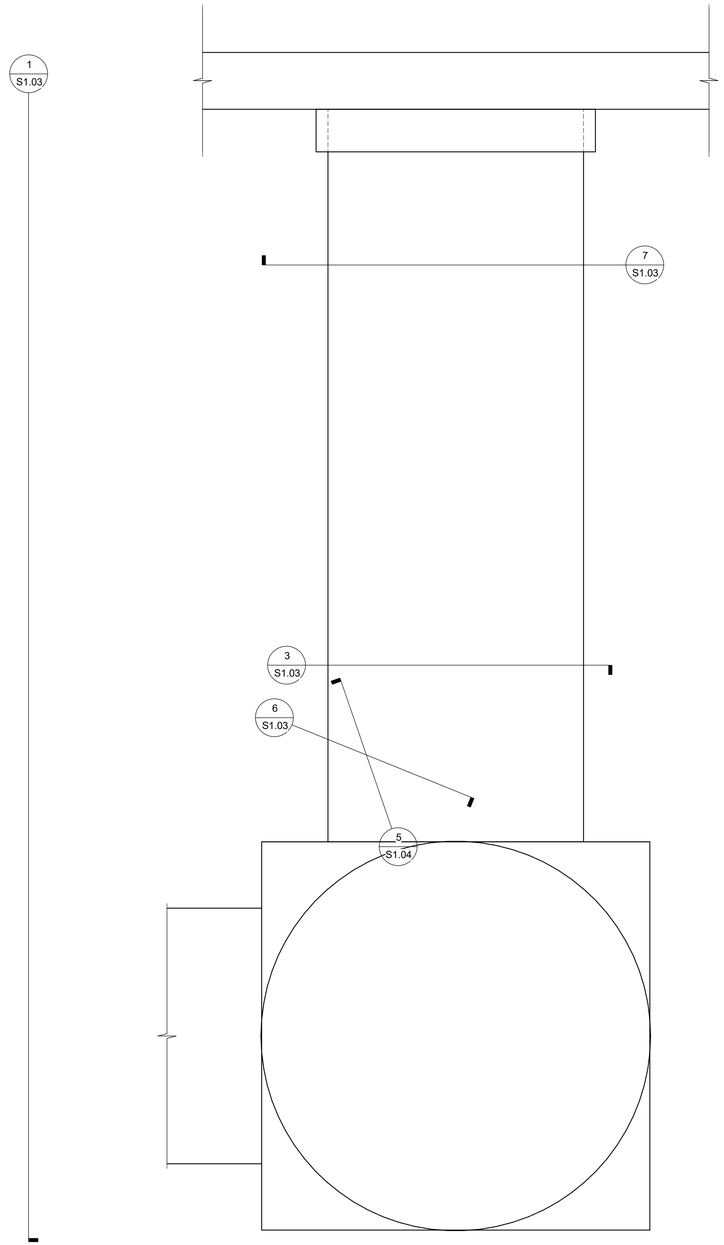
REV	DESCRIPTION	DATE

DESIGNED BY: SJD
CHECKED BY: RGV
MCE PROJ #: 260364
ISSUE DATE: 04.20.2026
ISSUANCE: PERMIT SET

SHEET CONTENT
PLAN & REPAIR DETAILS

SHEET
S1.01





5
S1.03

1 DAMAGED PORTICO PICTURE PLAN

S1.02 | 1 1/2" = 1'-0"

2 UNDAMAGED PORTICO PICTURE PLAN

S1.02 | 1 1/2" = 1'-0"

RONALD G. VANDEHEY
STATE OF WASHINGTON
21137
REGISTERED
PROFESSIONAL ENGINEER

DIGITALLY SIGNED

4/29/2026

MILLER CONSULTING ENGINEERS

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RA LONG HIGH SCHOOL PORTICO STONE REPAIR

2903 NICHOLS BLVD.
LONGVIEW, WA

BRITTELL ARCHITECTURE INC.

BRITTELL ARCHITECTURE, INC.

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SHEET CONTENT
PICTURE PLAN

SHEET
S1.02



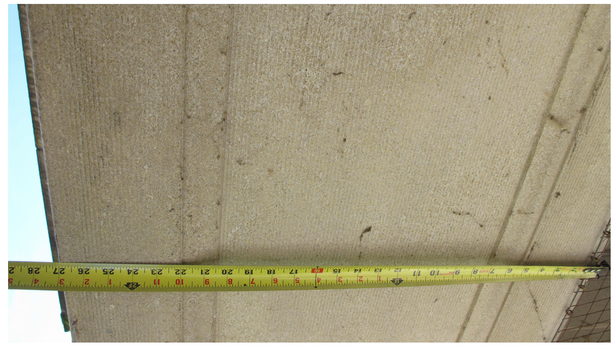
1 EXISTING PANEL REFERENCE BOTTOM VIEW

S1.03 | NOT TO SCALE



2 EXISTING PANEL REFERENCE SCOTIA SECTION

S1.03 | NOT TO SCALE



3 EXISTING PANEL REFERENCE WIDTH

S1.03 | NOT TO SCALE



4 DAMAGED PANEL REFERENCE SIDE VIEW

S1.03 | NOT TO SCALE



5 REFERENCE FRONT ELEVATION

S1.03 | NOT TO SCALE



6 EXISTING PANEL REFERENCE TEXTURE

S1.03 | NOT TO SCALE



7 EXISTING PANEL REFERENCE

S1.03 | NOT TO SCALE



8 EXISTING STEEL RUST REFERENCE

S1.03 | NOT TO SCALE



9 EXISTING DETERIORATED WOOD REFERENCE

S1.03 | NOT TO SCALE

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SHEET CONTENT
REFERENCE PHOTOS

SHEET
S1.03



1 EXISTING STEEL RUST SIDE REFERENCE

S1.04 | 3/4" = 1'-0"



2 EXISTING STONE TO BE REMOVED REFERENCE

S1.04 | NOT TO SCALE



3 EXISTING STONE TO BE REMOVED REFERENCE 2

S1.04 | NOT TO SCALE



4 EXISTING STONE TO BE REMOVED REFERENCE 3

S1.04 | NOT TO SCALE



5 EXISTING STONE REFERENCE

S1.04 | NOT TO SCALE

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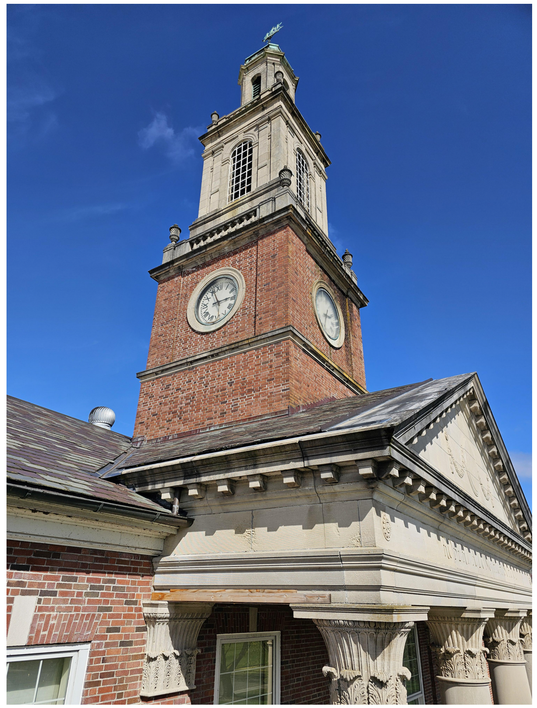
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SHEET CONTENT
REFERENCE PHOTOS

SHEET
S1.04



1 EAST ELEVATION
S3.01 | NOT TO SCALE



2 SOUTH ELEVATION
S3.01 | NOT TO SCALE



3 NORTH ELEVATION
S3.01 | 1/4" = 1'-0"

GENERAL SHEET NOTES:

G1. SEE S0.02 FOR STRUCTURAL NOTES AND SPECIAL INSPECTION REQUIREMENTS

G2. MATCH COLOR, TEXTURE AND PATTERN OF EXISTING PANEL

G3. FIELD VERIFY DIMENSIONS BEFORE CREATION OF NEW CONCRETE PANEL AND PURCHASE OF MATERIALS

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SHEET CONTENT
EXISTING ELEVATIONS

SHEET
S3.01