NOBLE COUNTY HIGHWAY DEPTARTMENT RENOVATION

2025.02329

1118 E MAIN ST, ALBION, IN 46701

BID DOCUMENTS
03.27.2026





VICINITY MAP

LOCATION MAP



PROJECT TEAM:

OWNER	CIVIL ENGINEER	STRUCTURAL ENGINEER	ARCHITECT	MEP ENGINEER
NAME: NOBLE COUNTY, INDIANA	**NAME:** AMERICAN STRUCTUREPOINT, INC	**NAME:** AMERICAN STRUCTUREPOINT, INC	**NAME:** AMERICAN STRUCTUREPOINT, INC	**NAME:** HEAPY ENGINEERING
ADDRESS: 1118 E MAIN ST. ALBION, INDIANA, 46701	**ADDRESS:** 9025 RIVER ROAD, SUITE 200 INDIANAPOLIS, IN 46250	**ADDRESS:** 9025 RIVER ROAD, SUITE 200 INDIANAPOLIS, IN 46250	**ADDRESS:** 9025 RIVER ROAD, SUITE 200 INDIANAPOLIS, IN 46250	**ADDRESS:** 3850 PRIORITY WAY S DR, SUITE 204 INDIANAPOLIS, IN 46240
TELEPHONE: 260-636-2124	**TELEPHONE:** 317-547-5580	**TELEPHONE:** 317-547-5580	**TELEPHONE:** 317-547-5580	**TELEPHONE:** 317-571-8795
FAX: N/A	**FAX:** 317-543-0270	**FAX:** 317-543-0270	**FAX:** 317-543-0270	**FAX:** N/A
EMAIL: ZSMITH@NOBLECO.US	**EMAIL:** PODONOGHUE@STRUCTUREPOINT.COM	**EMAIL:** ZKOUZNETSOV@STRUCTUREPOINT.COM	**EMAIL:** NPETERSON@STRUCTUREPOINT.COM	**EMAIL:** NSTINSON@HEAPY.COM
CONTACT: ZACHARY SMITH	**CONTACT:** PAUL O'DONOGHUE	**CONTACT:** ZE'EV KOUZNETSOV	**CONTACT:** NICK PETERSON	**CONTACT:** NANCY STINSON

ABBREVIATIONS

A	
A/E	ARCHITECT/ENGINEER
ACOUS	ACOUSTICAL
ACT	ACOUSTICAL CEILING TILE
ADA	AMERICAN'S WITH DISABILITIES ACT
ADD	ADDENDUM
ADJ	ADJACENT
AFF	ABOVE FINISH FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZED
ARCH	ARCHITECT (URAL)
B	
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BOT	BOTTOM
BRG	BEARING
C	
C/C	CENTER TO CENTER
CAB	CABINET
CB	CORNER BEAD
CER	CERAMIC
CF	CUBIC FOOT
CFCI	CONTRACTOR FURNISHED / CONTRACTOR INSTALLED
CHAN	CHANNEL
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CP/CPT	CARPET
D	
DEMO	DEMOLITION (ISH)
DF	DRINKING FOUNTAIN
DIFF	DIFFUSER
DIM	DIMENSION
DISP	DISPENSER
DO	DOOR OPENING
DS	DOWNSPOUT
DWG	DRAWING
E	
EJ	EXPANSION JOINT
ELEC	ELECTRICAL (ELEVATOR)
ELEV	ELEVATION
ENCL	ENCLOSURE
ENGR	ENGINEER
EQUIP	EQUIPMENT
EWC	ELECTRICAL WATER COOLER
EXST	EXISTING
F	
F/F	FACE TO FACE
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FHC	FIRE HOSE CABINET
FIN	FINISH
FIN FL	FINISHED FLOOR
FLR (FLRG)	FLOOR(IING)
FLUOR	FLUORESCENT
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FR	FIRE RATING
FT	FIRE TREATED
FTG	FOOTING
FURN	FURNITURE
FURR	FURRING
G	
GALV	GALVANIZED
GLZ	GLAZING
GUT	GUTTER
GYP BD/GWB	GYPSUM BOARD
H	
HC	HANDICAP(PED)
HCW	HOLLOW CORE WOOD
HDWE/HDW	HARDWARE
HM	HOLLOW METAL
HMD	HOLLOW METAL DOOR
HORIZ	HORIZONTAL
HT	HEIGHT
HVAC	HEATING, VENTILATION, AIR CONDITIONING
I	
ICF	INSULATED CONCRETE FORM
ID	INSIDE DIAMETER
IF	INSIDE FACE
INCAND	INCANDESCENT
INDIC	INDICATE
INSTL	INSTALL(ATION)
INSUL	INSULATION
INT	INTERIOR
J	
JST	JOIST
JT	JOINT
L	
LAV	LAVATORY
LD BRG	LOAD BEARING
LF	LINEAR FOOT
LTG	LIGHTING
LTWT	LIGHTWEIGHT
LVR	LOUVER
M	
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MED	MEDICINE (MEDICAL)
MET	METAL
MFG	MANUFACTURER (ING)
MIN	MINIMUM
MISC	MISCELLANEOUS
MLWK	MILLWORK
MO	MASONRY OPENING
MTD	MOUNTED
MTG	MOUNTING
MULL	MULLION
MULT	MULTIPLE
N	
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NOM	NOMINAL
NTS	NOT TO SCALE
O	
O/O	OUT TO OUT
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OFCI	OWNER FURNISHED - CONTRACTOR INSTALLED
OH	OVERHEAD
OPNG	OPENING
OPP	OPPOSITE
OPT	OPTIONAL
ORD	OVERFLOW ROOF DRAIN
ORIG	ORIGINAL
P	
PERM	PERMANENT
PH	PHASE
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTIC
PNL	PANEL
PREFAB	PREFABRICATED
PREFIN	PREFINISHED
PRELIM	PRELIMINARY
PREP	PREPARATION
PROJ	PROJECT
PT	PRESERVATIVE TREATED
PTD	PAINTED
PTN	PARTITION
Q	
QT	QUARRY TILE
R	
R	RADIUS
RD	ROOF DRAIN
REC	RECESSED
RECPT	RECEPTACLE
REF	REFER(ENCE)
REINF	REINFORCE(D)(ING)(MENT)
REQD	REQUIRED
RESIL	RESILIENT
RM	ROOM
RO	ROUGH OPENING
RTU	ROOF TOP UNOT
S	
SAN	SANITARY
SCW	SOLID CORE WOOD
SF	SQUARE FOOT
SPKLR	SPRINKLER
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STOR or ST	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SYM	SYMBOL
SYS	SYSTEM
T	
T&G	TONGUE AND GROOVE
T/	TOP OF
TEL	TELEPHONE
TEMP	TEMPORARY
THRES	THRESHOLD
TOT	TOTAL
TYP	TYPICAL
U	
UNIF	UNIFORM
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
V	
VB	VINYL BASE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VIN	VINYL
VT	VINYL TILE
VWC	VINYL WALL COVERING
W	
W/W	WALL TO WALL
WC	WATER CLOSET
WD	WOOD
WDW	WINDOW
WH	WALL HUNG
WT	WEIGHT

SHEET INDEX

DISCIPLINE	SHEET NUMBER	SHEET NAME
GENERAL	G000	COVER SHEET
	G001	SHEET INDEX
	G101	FIRST FLOOR LIFE SAFETY PLAN
CIVIL	C001	TITLE SHEET
	C002	GENERAL NOTES
	C003	SPECIFICATIONS
	C100	EXISTING TOPOGRAPHY
	C110	DEMOLITION PLAN
	C200	SITE PLAN
	C300	GRADING PLAN
	C400	UTILITY PLAN
	C500	EROSION CONTROL PLAN
	C520	EROSION CONTROL DETAILS
	C521	EROSION CONTROL DETAILS
	C600	SITE DETAILS
STRUCTURAL	S001	ABBREVIATIONS AND SYMBOLS
	S002	GENERAL NOTES
	S003	GENERAL NOTES
	S004	SPECIAL INSPECTION REQUIREMENTS
	S005	SPECIAL INSPECTION REQUIREMENTS
	S006	LOAD MAPS
	S007	WIND LOAD ELEVATIONS
	S008	AXONOMETRICS
	S101	FOUNDATION PLAN
	S102	ROOF FRAMING PLAN
	S301	FOUNDATION SCHEDULES, SECTIONS, AND DETAILS
	S302	FOUNDATION SECTIONS AND DETAILS
	S501	STEEL SCHEDULES, SECTIONS, AND DETAILS
	S502	STEEL SECTIONS AND DETAILS
	S511	STEEL COLUMN AND BASE PLATE SCHEDULES
	S521	STEEL FRAME ELEVATIONS
ARCHITECTURAL	D101	FIRST FLOOR DEMOLITION PLAN
	D151	ROOF DEMOLITION PLAN
	D301	DEMOLITION SECTIONS
	D302	DEMOLITION SECTIONS
	A000	WALL TYPES AND BUILDING SYSTEMS
	A101	FIRST FLOOR PLAN
	A121	FIRST FLOOR REFLECTED CEILING PLAN
	A131	ROOF PLAN
	A201	EXTERIOR ELEVATIONS
	A301	BUILDING SECTIONS
	A321	WALL SECTIONS
	A401	ENLARGED PLANS AND ELEVATIONS
	A501	ARCHITECTURAL DETAILS
	A502	ARCHITECTURAL DETAILS
	A601	DOOR SCHEDULES & WINDOW ELEVATIONS
	A701	FIRST FLOOR FINISH PLAN

SHEET INDEX

DISCIPLINE	SHEET NUMBER	SHEET NAME
MECHANICAL	M001	MECHANICAL INDEX, SYMBOLS AND GENERAL NOTES
	M002	MECHANICAL SPECS
	MD101	MECHANICAL FIRST FLOOR - DEMOLITION
	M101	MECHANICAL FIRST FLOOR - NEW WORK
	M501	DETAILS - MECHANICAL
	M601	SCHEDULES - MECHANICAL
	M700	CONTROL DIAGRAMS
PLUMBING	P001	PLUMBING INDEX, SYMBOLS, AND NOTES
	P002	PLUMBING SPECS
	PD101	DEMO FLOOR PLAN - PLUMBING
	P100	FOUNDATION PLAN - PLUMBING
	P101	FLOOR PLAN - PLUMBING
	P102	ROOF PLAN - PLUMBING
	P301	RISER DIAGRAMS - PLUMBING
	P501	DETAILS - PLUMBING
	P601	SCHEDULES - PLUMBING
ELECTRICAL	E001	ELECTRICAL INDEX, SYMBOLS, AND LEGEND
	E002	ELECTRICAL SPECS AND GENERAL NOTES
	ED101	DEMO FLOOR PLAN - ELECTRICAL
	E101	LIGHTING FLOOR PLAN
	E102	POWER & SYSTEMS FLOOR PLAN
	E501	PANEL SCHEDULE & DETAILS - ELECTRICAL
	E601	SCHEDULES - ELECTRICAL
TECHNOLOGY	T001	TECHNOLOGY INDEX, SYMBOLS, LEGEND, AND GENERAL NOTES
	T002	TECHNOLOGY SPECS
	T101	TECHNOLOGY FLOOR PLAN

GENERAL NOTES

A. ALL DIMENSIONS ARE TO GRID LINES, FACE OF STUD FRAMING, FINISHED FACE OF EXISTING WALL SURFACE, OR FACE OF CONCRETE / MASONRY UNITS UNLESS NOTED OTHERWISE.
B. BUILDING FIRST FLOOR IS REFERENCE ELEVATION 100'-0". REFERENCE CIVIL DRAWINGS FOR U.S.G.S. ELEVATION.
C. ALL WORK SHALL BE PERFORMED IN A SKILLED WORKMANSHIP TYPE AND MANNER AS SET FORTH IN THE CONTRACT.
D. CONFLICTS BETWEEN NOTES, DETAILS, SPECIFICATIONS, ETC., SHALL BE VERIFIED WITH THE A/E PRIOR TO CONSTRUCTION, OR THE STRICTEST PROVISIONS SHALL GOVERN.
E. CONTRACTORS ARE REQUIRED TO REVIEW THE ENTIRE SET OF CONSTRUCTION DOCUMENTS & SHALL COORDINATE THEIR RESPECTIVE WORK WITH ALL OTHER DISCIPLINES TO AVOID ANY CONFLICTS DURING CONSTRUCTION. CONTRACTORS ARE RESPONSIBLE TO COORDINATE THE ARCHITECTURAL DRAWINGS WITH ALL OTHER CONSTRUCTION DOCUMENTS.
F. DETAILS OF CONSTRUCTION NOT FULLY SHOWN SHALL BE OF THE SAME NATURE AS SHOWN FOR SIMILAR CONDITIONS. ANY UNCLEAR CONDITIONS SHALL BE VERIFIED WITH THE A/E PRIOR TO CONSTRUCTION.
G. DO NOT SCALE DRAWINGS. DIMENSIONS SHALL GOVERN EACH BUILDING COMPONENT LOCATION. BRING ANY DISCREPANCIES TO THE ARCHITECT'S ATTENTION IN WRITING IMMEDIATELY.
H. EXISTING CONDITIONS SHALL BE FIELD VERIFIED PRIOR TO BIDDING OR BEGINNING OF WORK. ANY ERRORS OR OMISSIONS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION IN WRITING IMMEDIATELY.
I. PROVIDE SEALANT BETWEEN DISSIMILAR MATERIALS PER MANUFACTURERS' RECOMMENDATION. COLOR TO BE CHOSEN BY ARCHITECT FROM MANUFACTURER'S FULL RANGE OF COLORS.
J. THE CONTRACTOR AND SUBCONTRACTORS INVOLVED IN THIS PROJECT SHALL BE RESPONSIBLE FOR MEANS AND METHODS FOR INSTALLING THEIR RESPECTIVE WORK AND SYSTEMS. WORK SHALL MEET APPLICABLE FEDERAL, STATE, AND LOCAL CODES, LAWS, SAFETY REGULATIONS, HAZARDOUS WASTE LAWS, ETC. THE CONTRACTOR SHALL FURNISH ALL NECESSARY PERMITS.
K. FOLLOWING THE DEMOLITION OF ANY M.E.P. DUCTS/PIPING/CONDUIT/ETC., THE CONTRACTOR SHALL PATCH & REPAIR ALL VOIDS/PENETRATIONS IN WALLS, CEILINGS, & FLOORS W/ NEW CONSTRUCTION TO MATCH. THE CONTRACTOR SHALL PATCH WALLS & FLOORS AS REQ'D TO RECEIVE NEW FINISHES. TOOTH-IN BRICK/BLOCK AT MASONRY CONDITIONS.

MATERIALS LEGEND

- ACOUSTICAL CEILING TILE
- BATT INSULATION: THERMAL OR ACOUSTICAL, UNO
- BRICK MASONRY
- CONCRETE, CAST-IN-PLACE
- CONCRETE, PRECAST/CAST STONE
- CONCRETE MASONRY UNIT
- EARTH
- EIFS
- GLASS FIBER REINFORCED CONCRETE SIDING OR TRIM
- GRANULAR FILL
- GYPSUM WALL BOARD
- INSULATED GLASS: (DETAIL)
- INSULATED GLASS: (SMALL SCALE)
- MEMBRANE: WATERPROOF, ROOF, DAMPPROOFING
- METAL: ROLLED SHAPES
- METAL: TYPE AS NOTED
- PARTICLEBOARD
- PLYWOOD
- RIGID INSULATION: THERMAL, ACOUSTICAL, OR SAFING
- SAND, GROUT AS NOTED
- SHEATHING: GYPSUM, OR AS NOTED
- SPRAYED FIREPROOFING SHOWN ON ROLLED SHAPE
- STONE: LIMESTONE, GRANITE, MARBLE OR AS NOTED
- TERRA COTTA, STRUCTURAL CLAY TILE
- TILE: CERAMIC, QUARRY, UNO
- WOOD/ENGINEERED: GLUE LAMINATED
- WOOD/FINISHED, SHOWN CUT AND ELEVATION
- WOOD FLOOR, WOOD SHINGLES, OR SIDING
- WOOD FRAMING / BLOCKING: CONTINOUS
- WOOD SHIM

NOTE: PATTERNS SHOWN REPRESENT CUT MATERIALS IN PLAN OR SECTION, UNLESS NOTED OTHERWISE.

GRAPHIC LEGEND

- A / 1 — COLUMN GRID EXISTING / COLUMN GRID NEW
- N — NORTH ARROW
- X / XX — WALL SECTION CUT REFERENCE: DRAWING NUMBER / SHEET NUMBER
- X / XX — BUILDING SECTION CUT REFERENCE: DRAWING NUMBER / SHEET NUMBER
- 1 Ref / XX — EXTERIOR ELEVATION REFERENCE: DRAWING NUMBER / SHEET NUMBER
- SIM / 1 / A101 — ENLARGED DRAWING REFERENCE
- Room / 101 — ROOM NAME AND NUMBER
- SF27 — STOREFRONT/CURTAINWALL/WINDOW TAG
- 101 — DOOR TAG
- x / x — KEYED NOTE
- ELEVATION DATUM REFERENCE
- 1 — REVISION REFERENCE
- W3 — WALL TYPE REFERENCE (REFERENCE INTERIOR PARTITION LEGEND)

NOBLE COUNTY INDIANA

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY

NOBLE COUNTY HIGHWAY DEPTARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

NICHOLAS PETERSON REGISTERED LAA#12200085 STATE OF INDIANA ARCHITECT
3/27/26

CERTIFIED BY

ISSUANCE INDEX
DATE:
03.27.2026
PROJECT PHASE:
BID DOCUMENTS

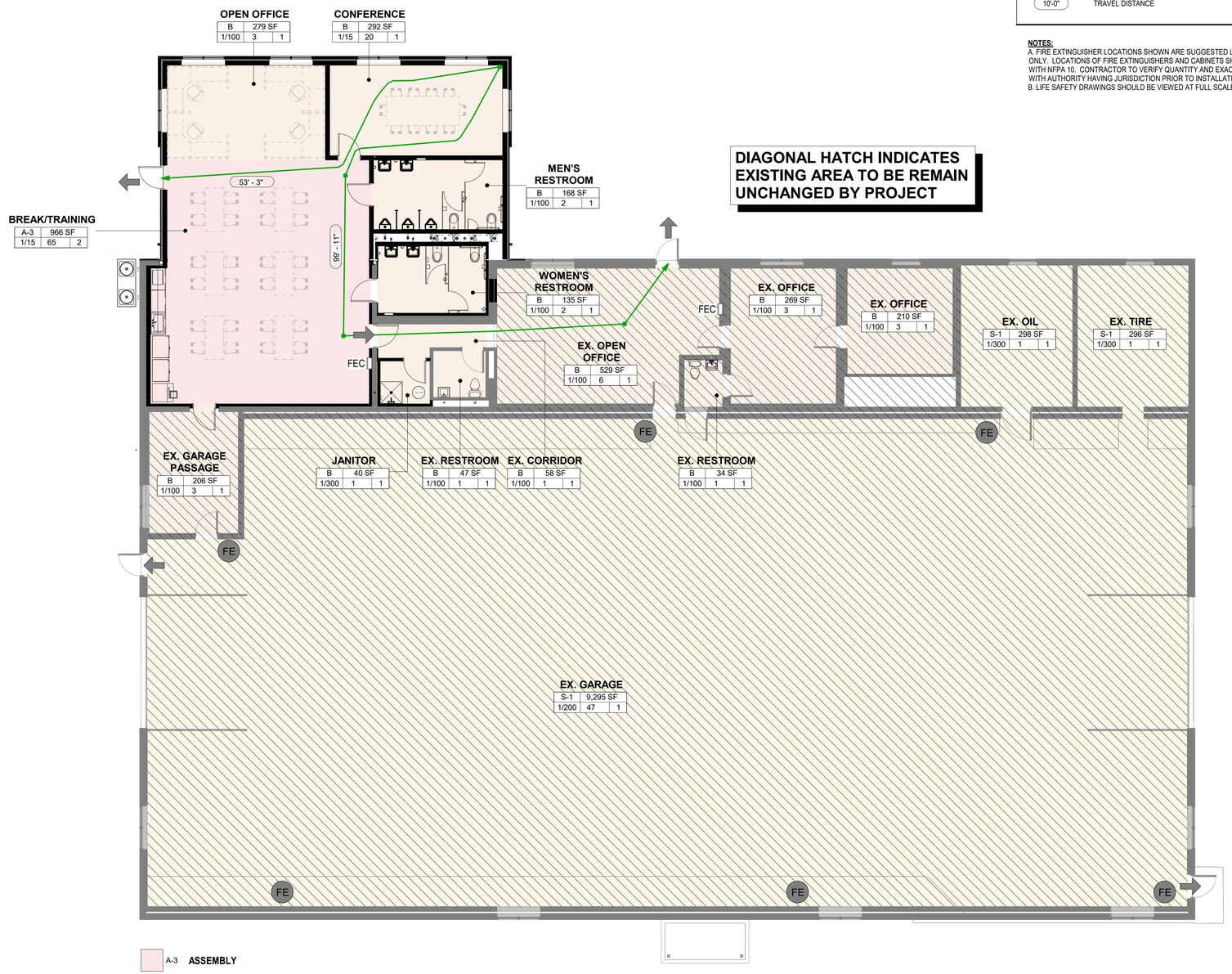
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2025.02329

SHEET INDEX

G001

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N

1 G101

FIRST FLOOR LIFE SAFETY PLAN

1/8" = 1'-0"

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CODE LEGEND

EXIT	
FEC	SEMI RECESSED FIRE EXTINGUISHER CABINET W/ FIRE EXTINGUISHER. VERIFY LOCATIONS AND QUANTITIES W/ APPLICABLE CODES, OWNER AND FIRE MARSHAL.
FE	BRACKET MOUNTED PORTABLE FIRE EXTINGUISHER. VERIFY LOCATIONS AND QUANTITIES W/ APPLICABLE CODES, OWNER AND FIRE MARSHAL.
10'-0"	TRAVEL DISTANCE

NOTES:

A. FIRE EXTINGUISHER LOCATIONS SHOWN ARE SUGGESTED LOCATIONS ONLY. LOCATIONS OF FIRE EXTINGUISHERS AND CABINETS SHALL COMPLY WITH NFPA 10. CONTRACTOR TO VERIFY QUANTITY AND EXACT LOCATIONS WITH AUTHORITY HAVING JURISDICTION PRIOR TO INSTALLATION.

B. LIFE SAFETY DRAWINGS SHOULD BE VIEWED AT FULL SCALE AND IN COLOR.

LIFE SAFETY / BUILDING CODE SUMMARY

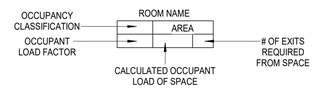
APPLICABLE BUILDING CODES	2014 Indiana Building Code; comprised of: -2012 International Building Code -675 IAC 13-2.6
BUILDING USE	This facility will serve as the Noble county highway department building.
CODE STRATEGY	This project is designed in accordance with the 2014 Indiana Building Code (based on the 2012 IBC). The existing building contains mixed occupancies consisting of A-3 (Assembly), B (Business), S-1 (Moderate Hazard Storage), and S-2 (Low Hazard Storage). The structure is Type IIB (unprotected noncombustible) construction. The building is treated as a nonseparated mixed-occupancy structure per IBC Section 508.3, with allowable height and area governed by the most restrictive occupancy. The project includes partial renovation of the existing facility and a small addition expanding A-3 and B occupancies; existing occupancy classifications and overall building use remain unchanged.
OCCUPANCY CLASSIFICATION	B - Business, A-3 - Assembly, S-1 - Storage
CONSTRUCTION TYPE	Type IIB (Unprotected Noncombustible)
FIRE RESISTANCE RATING REQ'TS FOR BUILDING ELEMENTS	Structural Frame 0 HR Bearing Walls Exterior 0 HR Interior 0 HR Non Bearing Walls Exterior 0 HR Interior 0 HR Floor Construction N/A - Slab on Grade Roof Construction 0 HR
SPRINKLER SYSTEM	The existing building is not equipped with an automatic sprinkler system and no new system will to be installed.

ALLOWABLE HEIGHT AND AREA

TABULAR VALUES:	Construction Type: Type IIB (Unprotected Noncombustible) Mixed Occupancy: Nonseparated (IBC 2012 Section 508.3) Governing Occupancy: A-3 (Most Restrictive Occupancy) **2 Stories (55' tall) 9,500 SF***
HEIGHT INCREASE:	Sprinkler: Not Applicable
AREA INCREASE:	Frontage Increase (IBC 2012 Section 506.2): Building qualifies for frontage increase due to open space surrounding the structure. Allowable frontage increase up to **75%.** **0.75 × 9,500 SF = 7,125 SF**
TOTALS:	**Allowable: 9,500 SF + 7,125 SF = 16,625 SF** **Actual: 14,359 SF**
ACTUAL HEIGHT AND BUILDING AREA	1 story, 21 ft **14,359 SF**
REQ'D SEPARATIONS	In accordance with IBC 2012 Section 508.3 fire-resistance-rated separation between occupancies is not required for nonseparated mixed occupancies.
TRAVEL DISTANCE RESTRICTIONS	• Dead-end Corridor Limit: 20 ft • Common Path of Travel: 75 ft • Exit Travel Distance: 200 ft to exit access or exit
MISCELLANEOUS REQUIREMENTS	• Maximum travel distance to fire extinguishers: 75 feet • Panic Hardware required on doors when Occupancy is A AND occupant load ≥ 50 • Two exits are required from spaces with Occupant load ≥ 50 OR travel distance limits exceeded
RATED CONSTRUCTION	Not applicable. The building is classified as Type IIB (unprotected noncombustible) construction per IBC 2012 Section 602.2. In accordance with Table 601, no fire-resistance rating is required for structural elements. The building is designed as a nonseparated mixed-occupancy structure per Section 508.3; therefore, occupancy separations are not required. Exterior walls do not require fire-resistance ratings due to adequate fire separation distance per Table 602.
PLUMBING FIXTURE CALCULATIONS	Occpant Load: **161 occupants** S-1 = 49 occupants B = 47 occupants A-3 = 65 occupants Water Closets: 3 Male / 3 Female Lavatories: 3 Male / 3 Female

ENERGY CODE SUMMARY

APPLICABLE ENERGY CODE	2010 Indiana Energy Conservation Code; comprised of: -ASHRAE 90.1 2007 -675 IAC 19.3 The project complies with the 2010 Indiana Energy Conservation Code (ASHRAE 90.1-2007). The building addition and any new envelope components are designed to meet the prescriptive requirements for Climate Zone 5. Work within the existing building consists of repair and replacement in kind of existing envelope components, including roof membrane and exterior walls finish material. Existing envelope assemblies are not being thermally upgraded; therefore, they are not required to be brought into compliance with current prescriptive insulation values in accordance with the alterations provisions of ASHRAE 90.1-2007.
CLIMATE ZONE	ZONE 5 (Ablion, Noble County, Indiana)
BUILDING ENVELOPE REQ'TS	ROOF: R-20 c.i. METAL BLDG WALL: R-13 STEEL FRAMED WALL: U-0.064 (R-13 + R-7.5 c.i.) OPAQUE DOORS: U-0.70 (SWING) U-0.50 (NON-SWING) FENESTRATION (SHGC-0.40) METAL FRAMING: U-0.45 (CW/SF) U-0.80 (ENTRANCE DOOR)



LIFE SAFETY TAG KEY

NOBLE COUNTY INDIANA

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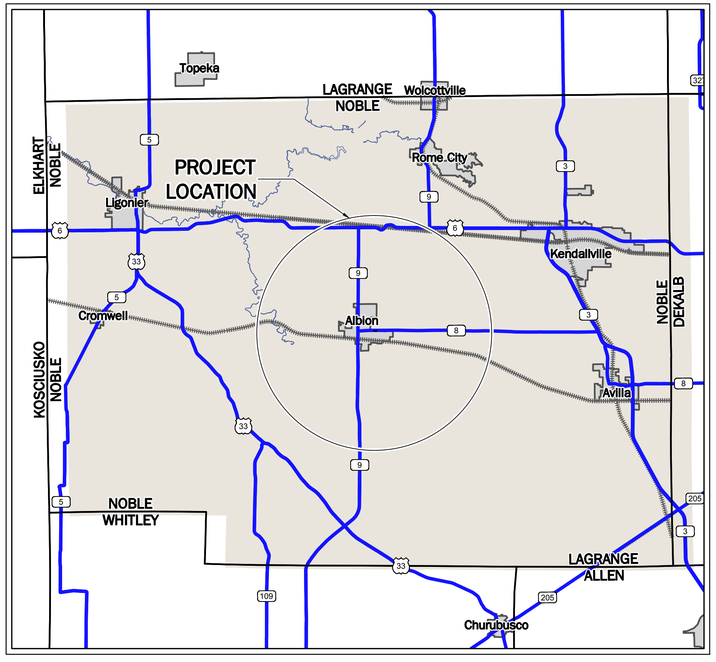
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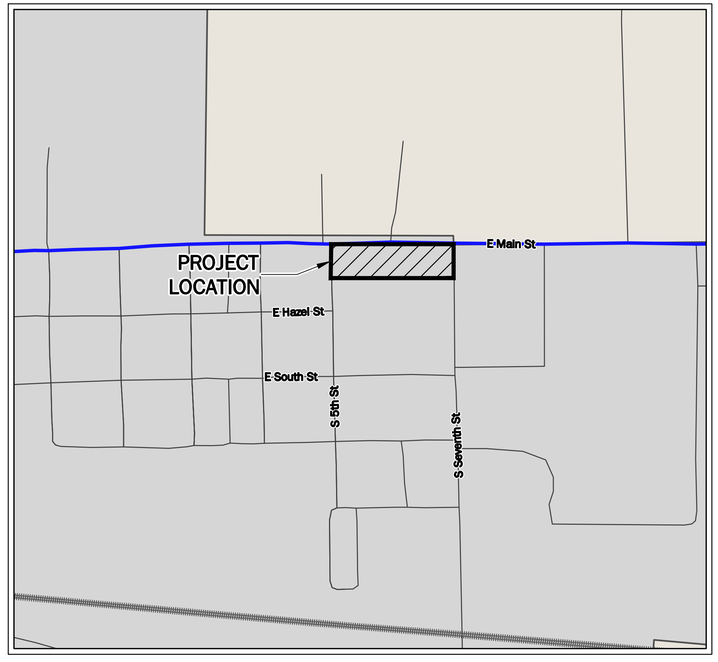
FIRST FLOOR LIFE SAFETY PLAN

G101

CONSTRUCTION PLANS
FOR
NOBLE COUNTY HIGHWAY DEPARTMENT RENOVATION
1118 E MAIN ST
ALBION, IN 46701

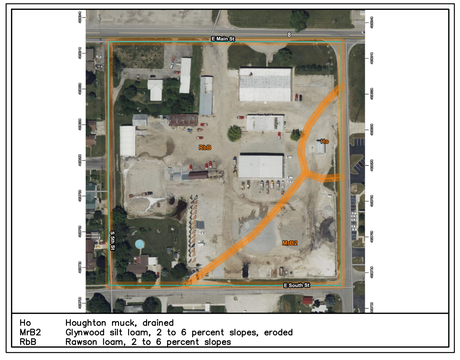


LOCATION MAP
NOT TO SCALE



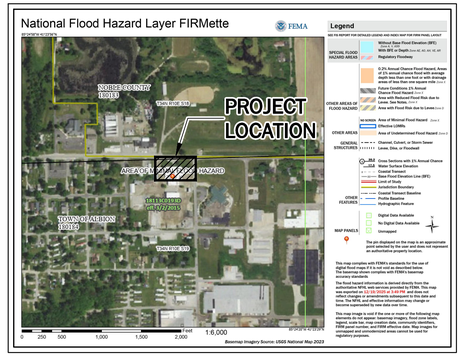
VICINITY MAP
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EROSION CONTROL PLAN	C500
EROSION CONTROL DETAILS	C520
EROSION CONTROL DETAILS	C521
SITE DETAILS	C600



Ho Houghton muck, drained
MrB2 Glynwood silt loam, 2 to 6 percent slopes, eroded
RbB Rawson loam, 2 to 6 percent slopes

SOILS MAP
NOT TO SCALE



FEMA MAP
NOT TO SCALE

UTILITY CONTACTS (REV. 02/10/26)			
UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	LIGTEL COMMUNICATIONS	BUD DURHAM	(260) 894-7161
ELECTRIC	NIPSCO	DEAN GARRETT	(219) 647-6260
FIBER OPTIC	LIGTEL COMMUNICATIONS	BUD DURHAM	(260) 894-7161
GAS	NIPSCO	DEAN GARRETT	(219) 647-6260
SANITARY SEWER	TOWN OF ALBION	TERRY FORKER	(260) 636-2246
STORM SEWER	TOWN OF ALBION	TERRY FORKER	(260) 636-2246
TELEPHONE	FRONTIER	JOE SARLL	(260) 461-3324
WATER	TOWN OF ALBION	TERRY FORKER	(260) 636-2246

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
– INDIANA UNDERGROUND –

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
tel. 317.547.5580 web www.structurepoint.com

HEAPY

NOBLE COUNTY HIGHWAY DEPARTMENT RENNOVATION

1118 E MAIN ST,
ALBION, IN 46701

MICHAEL E. JONES
REGISTERED
No. 12400867
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
03.27.2026
PROJECT PHASE:
BID DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2025.02329

TITLE SHEET

C001

PLOT DATE: 3/27/2026 3:16 PM
PLOT SCALE: 1:2.3849
EDIT DATE: 3/27/2026
EDITED BY: GMENDIS
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GENERAL NOTES

1. ALL WORK TO CONFORM TO STATE AND LOCAL REGULATIONS.
2. CONTRACTOR SHALL KEEP ADJOINING PROPERTIES CLEAN OF CONSTRUCTION DEBRIS AND CONSTRUCTION TRAFFIC AT ALL TIMES.
3. THE CONTRACTOR SHALL PROTECT AND NOT DESTROY THE BASE SURVEY CONTROL POINTS DURING DEMOLITION AND CONSTRUCTION.
4. ALL UTILITY INFORMATION SHALL BE VERIFIED BY THE CONTRACTOR. CONTACT ENGINEER IMMEDIATELY IF ANY VARIATION EXISTS.
5. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT AGAINST DAMAGE DURING DEMOLITION AND CONSTRUCTION OPERATIONS.
6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS. IF ANY DISCREPANCIES ARE FOUND IN THESE PLANS FROM ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.

EXISTING TOPOGRAPHY NOTES

1. EXISTING TOPOGRAPHY IS PROVIDED BY: AMERICAN STRUCTUREPOINT, INC., PROJECT: 2025.02329, DATED: 2025-12-04

DEMOLITION NOTES

1. CLEAR AND GRUB ALL TREES AND VEGETATION NECESSARY FOR CONSTRUCTION.
2. PROTECT TREES TO REMAIN DURING CONSTRUCTION.
3. PLANT MATERIALS TO REMAIN, TO BE PROTECTED BY TREE FENCE WHICH ENCOMPASSES IT'S DRIP LINE. NO CONSTRUCTION EQUIPMENT, MATERIALS OR DEBRIS SHALL BE LOCATED WITHIN TREE PROTECTION BOUNDARIES. NO DEMOLITION CAN OCCUR UNTIL TREE PROTECTION IS APPROVED BY THE OWNER.
4. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, FENCES, CONCRETE, ASPHALT PAVEMENT AND OTHER MISCELLANEOUS APPURTENANCES OFF SITE, UNLESS NOTED TO REMAIN ON THE CONTRACT DRAWINGS.
5. DEMOLISH FOUNDATIONS AND OTHER BELOW-GRADE CONSTRUCTION, INCLUDING CONCRETE SLABS, TO A DEPTH OF NOT LESS THAN 48 INCHES BELOW LOWEST FOUNDATION LEVEL.
6. COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION OF STRUCTURES, WITH COMPACTED GRANULAR BACKFILL.
7. THE USE OF ANY TYPE OF EXPLOSIVES WILL NOT BE PERMITTED.
8. CONDUCT DEMOLITION AND CONSTRUCTION OPERATIONS TO ENSURE MINIMAL INTERFERENCE WITH STREETS, WALKS AND OTHER ADJACENT OCCUPIED FACILITIES.
9. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED FACILITIES WITHOUT PERMISSION FROM THE LOCAL AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS, IF REQUIRED BY GOVERNING AUTHORITIES.
10. ENSURE SAFE PASSAGE OF PERSONS AROUND AREAS OF DEMOLITION AND CONSTRUCTION. CONDUCT OPERATIONS TO PREVENT DAMAGE TO ADJACENT STRUCTURES AND OTHER FACILITIES AND INJURY TO PERSONS.
11. PROMPTLY REPAIR DAMAGE TO ADJACENT FACILITIES CAUSED BY DEMOLITION AND CONSTRUCTION OPERATIONS.
12. ALL UTILITIES TO BE REMOVED SHALL BE DISCONNECTED AND CAPPED AT THE NEAREST CONNECTION POINT.
13. NO ON-SITE BURNING IS PERMITTED.
14. CONTRACTOR SHALL USE MEASURES TO CONTROL DUST AT ALL TIMES.
15. DEMOLITION ITEMS INCLUDE BUT ARE NOT LIMITED TO DEMOLITION ITEMS INDICATED ON THIS PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE OR RELOCATE ITEMS WHICH INTERFERE WITH NEW CONSTRUCTION.
16. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING DEMOLITION.

SITE NOTES

1. ALL DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR FACE OF CURB, UNLESS NOTED OTHERWISE.
2. ALL DIMENSIONS ARE TO FACE OF BRICK OR FACING MATERIAL, WHERE APPLICABLE.
3. ALL DIMENSIONS ARE PARALLEL WITH, OR PERPENDICULAR TO BASE LINES, PROPERTY LINES OR BUILDING LINES, UNLESS OTHERWISE NOTED.
4. PROVIDE SMOOTH TRANSITIONS FROM NEW AREAS TO EXISTING FEATURES AS NECESSARY.
5. RESURFACE OR RECONSTRUCT AT LEAST TO ORIGINAL CONDITIONS ALL AREAS WHERE THE EXISTING PAVEMENT OR LAWNS ARE DAMAGED DURING CONSTRUCTION FROM TRAFFIC BY CONTRACTORS, SUBCONTRACTORS OR SUPPLIERS AFTER CONSTRUCTION WORK IS COMPLETE.
6. EXISTING PAVEMENT TO BE SAW CUT IN ALL AREAS WHERE INDICATED NEW PAVEMENT TO JOIN EXISTING.
7. CONCRETE SAW CUTTING SHALL BE DONE AS SOON AS POURED CONCRETE HAS CURED AND CAN SUPPORT WEIGHT. PROVIDE A NEAT CUT WHICH IS TRUE IN ALIGNMENT.
8. ALL JOINTS ARE TO CONTINUE THROUGH THE CURB.
9. RADIAL JOINTS SHALL BE NO SHORTER THAN 1.5'.
10. CONTRACTOR SHALL USE A THICKENED EXPANSION JOINT AROUND THE PERIMETER OF ANY BLOCK OUT IN THE CONCRETE PAVING.
11. ALL CONSTRUCTION JOINTS SHALL BE SAWN, CLEANED OF DEBRIS, BLOWN DRY AND IMMEDIATELY SEALED WITH THE APPROPRIATE SEALANT ACCORDING TO MANUFACTURER'S DIRECTIONS.
12. ALL MATERIALS TO BE IN ACCORDANCE WITH LOCAL DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS RELATIVE TO MATERIAL, MIX, PLACEMENT AND WORKMANSHIP.
13. ALL SIDEWALKS SHALL COMPLY WITH ADA STANDARDS. MAXIMUM CROSS SLOPE OF 1:50 AND MAXIMUM LONGITUDINAL SLOPE OF 1:20.
14. CHAMFER ALL ENDS OF CURBS.

GRADING NOTES

1. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
2. THE EXCAVATING CONTRACTOR MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. VERIFY COVER REQUIREMENTS BY UTILITY CONTRACTORS AND/OR UTILITY COMPANIES SO AS NOT TO CAUSE DAMAGE.
3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 72 HOURS BEFORE CONSTRUCTION IS TO START TO VERIFY IF ANY UTILITIES ARE PRESENT ON SITE. ALL VERIFICATIONS (LOCATION, SIZE AND DEPTH), SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES. WHEN EXCAVATING AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THAT UTILITY COMPANY CAN BE PRESENT TO INSTRUCT AND OBSERVE DURING CONSTRUCTION. SUBCONTRACTORS ARE RESPONSIBLE FOR LOCATIONS OF UTILITIES FOR THEIR OWN WORK.
4. CONTRACTOR TO ADJUST ALL EXISTING SURFACE INFRASTRUCTURE (HYDRANTS, VALVES, HANDHOLES, CASTINGS, IRRIGATION SYSTEM, UTILITY PEDESTALS, ETC.) AS REQUIRED TO MEET PROPOSED GRADE AT HIS/HER OWN COST.
5. AFTER STRIPPING TOPSOIL MATERIAL, PROOFROLL SHALL BE PERFORMED BY A LOADED TANDEM PNEUMATIC TIRE DUMP TRUCK MINIMUM GROSS VEHICLE WEIGHT OF 15 TONS. THE TIRES SHALL BE OPERATED AT INFLATION PRESSURES BETWEEN 70-80 PSI UNLESS OTHERWISE NOTED BY THE GEOTECHINICAL ENGINEER. THE TIRES SHALL BE INFLATED WITH AIR ONLY, NO LIQUID SHALL BE USED. THE PROOFROLL SHALL BE COMPLETED UNDER INSPECTION OF SOILS FIRM TO DETERMINE LOCATIONS OF ANY POCKETS OF UNSUITABLE MATERIAL. THE NECESSITY FOR SUBDRAINS AND/OR REMOVAL OF ANY UNSUITABLE MATERIAL WILL BE DETERMINED AT THE TIME OF CONSTRUCTION.
6. PROVIDE POSITIVE DRAINAGE WITHOUT PONDING IN ALL AREAS. AFTER INSTALLATION, CONTRACTOR TO TEST FOR, AND CORRECT, IF ANY, STANDING WATER CONDITIONS.
7. ALL PROPOSED SPOT ELEVATIONS OR CONTOURS ARE THE FINAL PAVEMENT AND FINAL GRADE ELEVATIONS. THIS INCLUDES UNPAVED, GRASS, OR LANDSCAPED AREAS, WHERE THE FINAL GRADE SHALL REPRESENT THE TOP OF MULCH, TOPSOIL, OR OTHER MATERIAL AS SPECIFIED.
8. SEE APPROPRIATE DETAILS TO DETERMINE SUBGRADE ELEVATIONS BELOW FINISH GRADE ELEVATIONS INDICATED. THIS INCLUDES ADJUSTING THE SUBGRADE ELEVATIONS IN UNPAVED AREAS TO ACCOUNT FOR THE ANTICIPATED TOPSOIL, MULCH, OR OTHER MATERIALS SPECIFIED.
9. TRENCHES FOR ALL STORM DRAIN LINES SHALL BE BACKFILLED COMPLETELY WITH SELECT GRANULAR MATERIAL IF WITHIN 5 FEET OF PAVEMENT.
10. CONTRACTOR TO PERPETUATE ANY SUBSURFACE DRAIN TILES OR PIPES ENCOUNTERED DURING CONSTRUCTION AND PROVIDE POSITIVE OUTLET TO DOWNSTREAM RECEIVING SYSTEM. CONTRACTOR TO NOTIFY THE ENGINEER WITH ANY CIRCUMSTANCES WHERE THIS CANNOT BE ACCOMPLISHED.
11. DUE TO SITE CONSTRAINTS, THE EARTHWORK FOR THE SITE AS DESIGNED MAY OR MAY NOT BALANCE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE EXISTING CONDITIONS AND INCLUDE IN THEIR BID ALL EARTHWORK COSTS INCLUDING IMPORTS AND/OR EXPORTS NECESSARY TO MAKE THE SITE BALANCE.
12. CONTRACTOR TO STABILIZE EXPOSED EARTH AS INDICATED BY THE STORMWATER POLLUTION PREVENTION PLAN OR GOVERNING AUTHORITY.

UTILITY NOTES

1. SITE UTILITIES SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
2. THE EXCAVATING CONTRACTOR MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. VERIFY COVER REQUIREMENTS BY UTILITY CONTRACTORS AND/OR UTILITY COMPANIES SO AS NOT TO CAUSE DAMAGE.
3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 72 HOURS BEFORE CONSTRUCTION IS TO START TO VERIFY IF ANY UTILITIES ARE PRESENT ON SITE. ALL VERIFICATIONS (LOCATION, SIZE AND DEPTH), SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES. WHEN EXCAVATING AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THAT UTILITY COMPANY CAN BE PRESENT TO INSTRUCT AND OBSERVE DURING CONSTRUCTION. SUBCONTRACTORS ARE RESPONSIBLE FOR LOCATIONS OF UTILITIES FOR THEIR OWN WORK.
4. CONTRACTOR TO ADJUST ALL EXISTING SURFACE INFRASTRUCTURE (HYDRANTS, VALVES, HANDHOLES, CASTINGS, IRRIGATION SYSTEM, UTILITY PEDESTALS, ETC.) AS REQUIRED TO MEET PROPOSED GRADE.
5. ALL UTILITY MATERIALS AND INSTALLATION SHALL CONFORM TO LOCAL STANDARDS FOR EACH UTILITY AGENCY HAVING JURISDICTION.
6. TRENCHES FOR ALL UTILITY LINES SHALL BE BACKFILLED COMPLETELY WITH SELECT GRANULAR MATERIAL IF THE TOP OF THE TRENCH IS WITHIN 5 FEET OF PAVEMENT.
7. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES AND CONDUITS TO AVOID CONFLICTS AND PROVIDE REQUIRED MINIMUM DEPTHS OF COVER. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL BENDS WITH THRUST BLOCKS REQUIRED TO ASSURE PROPER INSTALLATION OF WATER MAINS AND LATERALS.
8. IN THE EVENT OF A CONFLICT BETWEEN WATER LINES AND STORM DRAINS, THE CONTRACTOR SHALL EITHER ADJUST THE WATER LINE DOWNWARD IN SUCH A MANNER SO THAT THE PIPE MANUFACTURER'S RECOMMENDATIONS ON PIPE DEFLECTION AND JOINT STRESS ARE NOT EXCEEDED OR THE CONTRACTOR SHALL PROVIDE APPROPRIATE BENDS AND CROSSINGS.
9. ALL COORDINATES AND DIMENSIONS ARE TO THE CENTERLINE OF UTILITIES AND STRUCTURES.
10. ALL PROPOSED STORM SEWER AND DRAINAGE APPURTENANCES SHALL BE IN CONFORMANCE WITH THE NOBLE COUNTY STORMWATER SPECIFICATIONS, LATEST EDITION. DISCREPANCIES BETWEEN THE PLANS AND THE STORMWATER SPECIFICATIONS SHALL NOT ALLEVIATE THE CONTRACTOR FROM ADHERING TO THE REQUIREMENTS AS SET FORTH IN THE STORMWATER SPECIFICATIONS.

EROSION CONTROL NOTES

1. CONTRACTOR SHALL INSTALL ALL PERIMETER SILT FENCE AND SEDIMENT CONTROL BARRIERS PRIOR TO CLEARING AND GRADING.
2. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
3. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
4. LAND ALTERATION WHICH STRIPS THE LAND OF VEGETATION, INCLUDING RE-GRADING, SHALL BE DONE IN A WAY THAT WILL MINIMIZE EROSION.
5. SEDIMENT LADEN WATER SHALL BE DETAINED BY EROSION CONTROL PRACTICES AS NEEDED TO MINIMIZE SEDIMENTATION IN RECEIVING WATER. NO STORM WATER SHALL BE DISCHARGED FROM THE SITE IN A MANNER THAT CAUSES EROSION AT THE POINT OF DISCHARGE.
6. WASTE AND UNUSED BUILDING MATERIALS SHALL NOT BE ALLOWED TO BE CARRIED FROM THE SITE BY STORM WATER RUNOFF. PROPER DISPOSAL OF ALL WASTE AND UNUSED BUILDING MATERIALS IS REQUIRED.
7. SEDIMENT BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS SHALL BE MINIMIZED. CLEARING OF ACCUMULATED SEDIMENT SHALL NOT INCLUDE FLUSHING WITH WATER. CLEARED SEDIMENT SHALL BE RETURNED TO THE SITE FOR DISPOSAL.
8. SOIL WHICH HAS ACCUMULATED NEXT TO EROSION CONTROL DEVICES SHALL BE COLLECTED AND RE-DISTRIBUTED ON SITE AFTER EACH RAINFALL EVENT, AND AT LEAST ONCE A WEEK.
9. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
10. THE SITE IS NOT LOCATED WITHIN ANY FLOODPLAIN, FLOODWAY OR FLOODWAY FRINGE AS INDICATED ON THE FLOOD INSURANCE RATE MAP (FIRM) FOR NOBLE COUNTY, IN, MAP NUMBER 18113C0193D, DATED MARCH 02, 2015.
11. SCHEDULE OF EARTHWORK ACTIVITIES:
    a. THE DURATION OF TIME WHICH AN AREA REMAINS EXPOSED SHALL BE KEPT TO A PRACTICAL MINIMUM. THE AREA SHALL BE STABILIZED AS SOON AS POSSIBLE. UN-VEGETATED AREAS THAT ARE SCHEDULED OR LIKELY TO BE LEFT INACTIVE FOR FIFTEEN (15) DAYS OR MORE MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITH MEASURES APPROPRIATE FOR THE SEASON TO MINIMIZE EROSION POTENTIAL. ALTERNATIVE MEASURES TO SITE STABILIZATION ARE ACCEPTABLE IF THE PROJECT SITE OWNER OR THEIR REPRESENTATIVE CAN DEMONSTRATE THEY HAVE IMPLEMENTED EROSION AND SEDIMENT CONTROL MEASURES ADEQUATE TO PREVENT SEDIMENT DISCHARGE.
    b. TOPSOIL REPLACEMENT SHALL TAKE PLACE FROM MARCH 1 TO OCTOBER 31. STOCKPILE TOPSOIL AT ALL OTHER TIMES OF THE YEAR. PERMANENT AND FINAL VEGETATION AND STRUCTURAL EROSION CONTROL DEVICES SHALL BE INSTALLED WITHIN SEVEN (7) DAYS AFTER FINAL GRADING OR AS SOON AS POSSIBLE.
    c. INSTALL INLET PROTECTION AROUND INLETS IMMEDIATELY UPON COMPLETION OF THE STRUCTURE. REMOVE INLET PROTECTION FOR PAVING OPERATION. REPLACE INLET PROTECTION AFTER PAVING IS COMPLETE. INLET PROTECTION SHALL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED ON SEEDED AREAS BEHIND THE CURB.
12. PRIOR TO COMPLETION OF THE PROJECT, CONTRACTOR SHALL CLEAN OUT ALL STORM DRAINAGE STRUCTURES AND RESTORE ALL DITCHES AND PONDS TO DESIGNED GRADES.
13. CONTRACTOR SHALL REMOVE ALL SEDIMENT CONTROL BARRIERS ONCE CONSTRUCTION IS COMPLETE AND THE SITE HAS BEEN STABILIZED.
14. ALL PROPOSED EROSION AND SEDIMENT CONTROL SHALL BE IN CONFORMANCE WITH THE NOBLE COUNTY STORMWATER SPECIFICATIONS, LATEST EDITION. DISCREPANCIES BETWEEN THE PLANS AND THE STORMWATER SPECIFICATIONS SHALL NOT ALLEVIATE THE CONTRACTOR FROM ADHERING TO THE REQUIREMENTS AS SET FORTH IN THE STORMWATER SPECIFICATIONS.
15. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY THE INSPECTOR.

UTILITY CONTACTS

(REV. 02/10/26)

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	LIGTEL COMMUNICATIONS	BUD DURHAM	(260) 894-7161
ELECTRIC	NIPSCO	DEAN GARRETT	(219) 647-6260
FIBER OPTIC	LIGTEL COMMUNICATIONS	BUD DURHAM	(260) 894-7161
GAS	NIPSCO	DEAN GARRETT	(219) 647-6260
SANITARY SEWER	TOWN OF ALBION	TERRY FORKER	(260) 636-2246
STORM SEWER	TOWN OF ALBION	TERRY FORKER	(260) 636-2246
TELEPHONE	FRONTIER	JOE SARLL	(260) 461-3324
WATER	TOWN OF ALBION	TERRY FORKER	(260) 636-2246

GEOTECHNICAL & ENVIRONMENTAL NOTE:

1. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL ENGINEERING REPORT FOR INFORMATION ABOUT SOIL CONDITIONS.
2. CONTRACTOR SHALL REFER TO THE ENVIRONMENTAL REPORT FOR INFORMATION ON ENVIRONMENTAL FINDINGS ON THE SITE.

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
- INDIANA UNDERGROUND -

EXISTING LEGEND

AC	Air Conditioner	MH	Manhole
CO	Clean Out	S	Sign
DS	Down Spout	SP	Stand Pipe
DI	Drainage Inlet	TH	Telephone Handhole
EB	Electric Box	T	Tree
EM	Electric Meter Box	PT	Pine Tree
FH	Fire Hydrant	-g-	Buried Gas Line
FP	Flag Pole	- -	Buried Sanitary Line
GM	Gas Meter	-w-	Buried Water Line
•	Guard Post/Post		

BENCHMARK DATA

BENCHMARK INFORMATION (NAVD 88 DATUM)

BENCHMARK ELEVATIONS WERE ESTABLISHED FROM GPS OBSERVATIONS ON THE IDENTIFIED BASE STATION DESCRIBED WITHIN. AN NGS OPUS SOLUTION (FILE #TR364218I.306272) WAS PROCESSED AND RELIED ON TO CONTROL THE PROJECT'S VERTICAL DATUM. THE ELEVATIONS WERE THEN TRANSFERRED TO THE SITE USING DIFFERENTIAL LEVELING.

TBM #30
MAG SPIKE SET IN S FACE OF PWP #305192, LOCATED 40' N OF STATE ROAD #8 & 150' E OF THE ENTRANCE TO THE HIGHWAY DEPARTMENT BLDG.
ELEV: 968.59'

TBM #31
CUT "X" SET ON THE WEST-NORTHWEST BOLT OF FIRE HYDRANT LOCATED ± 40' E OF 7TH STREET & ±60' S OF STATE ROAD #8.
ELEV: 961.50

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
tel. 317.547.5580 web www.structurepoint.com

HEAPY

MICHAEL E. JONES
REGISTERED
No. 12400867
STATE OF INDIANA
PROFESSIONAL ENGINEER

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NOBLE COUNTY HIGHWAY DEPARTMENT RENNOVATION

1118 E MAIN ST,
ALBION, IN 46701

Project Number 2025.02329

GENERAL NOTES

C002

PLOT DATE: 3/27/2026 3:16 PM
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EARTHWORK:

A. GENERAL

1. EARTHWORK INCLUDES CLEARING, GRUBBING, SUBGRADE PREPARATION, REMOVAL OF TREES AND VEGETATION (INCLUDING STUMPS), PROTECTION OF TREES TO REMAIN, STRIPPING AND STORAGE OF TOPSOIL, FILL COMPACTION AND ROUGH GRADING OF ENTIRE SITE AS INDICATED ON DRAWINGS.
2. THE CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING OF ANY CHANGES, ERRORS, OR OMISSIONS FOUND ON THE PLANS OR IN THE FIELD, BEFORE WORK IS STARTED OR RESUMED.
3. CONTRACTOR SHALL PROVIDE AND PLACE ANY ADDITIONAL FILL MATERIAL FROM OFF THE SITE AS MAY BE NECESSARY TO PRODUCE THE GRADES REQUIRED AS SHOWN ON THE DRAWINGS. FILL OBTAINED FROM OFF SITE MUST BE SUITABLE SOIL AS DEFINED IN THE SPECIFICATIONS OR AS OTHERWISE APPROVED BY OWNER.
4. THE CONTRACTOR SHALL ACCEPT THE SITE IN ITS CURRENT STATE AND SHALL REMOVE ALL TRASH, RUBBISH, AND DEBRIS FROM THE SITE PRIOR TO STARTING EXCAVATION.
5. EXCEPT FOR STRIPPED TOPSOIL AND OTHER MATERIALS INDICATED TO BE STOCKPILED OR OTHERWISE REMAIN OWNER'S PROPERTY, CLEARED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM PROJECT SITE.
6. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, DRIVES, FACILITIES, ETC. WITHOUT OWNER PERMISSION OR AUTHORITY HAVING JURISDICTION.
7. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING EARTHWORK AND CLEARING OPERATIONS. EROSION CONTROL MEASURES SHOULD BE PROTECTED AND MAINTAINED THROUGHOUT CONSTRUCTION.
8. CONTRACTOR SHALL CAREFULLY MAINTAIN ALL BENCHMARKS, MONUMENTS, AND OTHER REFERENCE POINTS. IF DISTURBED, CONTRACTOR SHALL ENGAGE LICENSED LAND SURVEY FOR REPLACEMENT OF REFERENCE POINTS.
9. WHERE THESE SPECIFICATIONS CONFLICT WITH NOBLE COUNTY STANDARDS, THE STANDARDS OF THE JURISDICTION HAVING AUTHORITY SHALL PREVAIL.

B. MATERIALS

1. CONTRACTOR TO PROVIDE BORROW SOIL MATERIALS WHEN SUFFICIENT SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE FROM EXCAVATIONS.
2. SATISFACTORY (OR SUITABLE) SOILS: SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, AND SM ACCORDING TO ASTM D2487, OR A COMBINATION OF THESE GROUPS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION AND OTHER DELETERIOUS MATERIAL.
3. UNSATISFACTORY (OR UNSUITABLE) SOILS: SOIL CLASSIFICATION GROUPS GC, SC, CL, ML, OL, CH, MH, OH, AND PT ACCORDING TO ASTM D 2487, OR A COMBINATION OF THESE GROUPS. UNSATISFACTORY SOILS ALSO INCLUDES SATISFACTORY SOILS NOT MAINTAINED WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT AT TIME OF COMPACTION.

C. EXECUTION

1. CONTRACTOR SHALL LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP UTILITIES INDICATED TO BE REMOVED OR ABANDONED IN PLACE. DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER UNLESS PERMISSION IS GRANTED. NOTIFY OWNER AT LEAST TWO DAYS IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS.
2. REMOVE OBSTRUCTIONS, TREES, SHRUBS, AND OTHER VEGETATION AS REQUIRED FOR NEW CONSTRUCTION. STRIP TOPSOIL TO DEPTH AS REQUIRED IN THE FIELD TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS. STOCKPILE TOPSOIL AWAY FROM EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL AND GRADE STOCKPILES TO DRAIN SURFACE WATER.
3. REMOVE EXISTING ABOVE AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND NECESSARY TO FACILITATE NEW CONSTRUCTION.
4. PROTECT SUBGRADES AND FOUNDATION SOILS FROM FREEZING TEMPERATURES, FROST, AND PONDING WATER.
5. EXCAVATE TO INDICATED ELEVATIONS AND DIMENSIONS FOR ALL STRUCTURES, WALKS, PAVEMENTS, AND UTILITY TRENCHES.
6. CONTRACTOR SHALL FURNISH AND OPERATE ALL DEWATERING MEASURES REQUIRED TO FACILITATE NEW CONSTRUCTION AND IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
6. PROOF ROLL SUBGRADE BELOW BUILDING PAVEMENTS WITH A PNEUMATIC-TIRED DUMP TRUCK TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. DO NOT PROOF ROLL WET OR SATURATED SUBGRADES. RECONSTRUCT SUBGRADES DAMAGED BY FREEZING TEMPERATURES, FROST, RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES AS DIRECTED BY ENGINEER OR OWNER REPRESENTATIVE, WITHOUT ADDITIONAL COMPENSATION.
7. BACKFILL ALL UTILITY TRENCHES BENEATH PAVEMENT (AND WITHIN 5') WITH GRANULAR MATERIAL.
8. SOIL FILL: USE SATISFACTORY SOIL MATERIAL UNDER ALL WALKS, PAVEMENTS, STEPS, RAMPS, BUILDING SLABS, FOOTINGS, AND FOUNDATIONS.
9. UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL SOIL LAYER BEFORE COMPACTION TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT. DO NOT PLACE BACKFILL OR FILL SOIL MATERIAL ON SURFACES THAT ARE MUDDY, FROZEN, OR CONTAIN FROST OR ICE. REMOVE AND REPLACE, OR SCARIFY AND AIR DRY, OTHERWISE SATISFACTORY SOIL MATERIAL THAT EXCEEDS OPTIMUM MOISTURE CONTENT BY 2 PERCENT AND IS TOO WET TO COMPACT TO SPECIFIED UNIT WEIGHT.
10. NO GEOTECHNICAL REPORT IS AVAILABLE FOR THIS SITE. COMPACTION OF SOIL BACKFILLS AND FILLS ARE TO BE IN ACCORDANCE WITH OWNER'S GEOTECHNICAL CONSULTANT RECOMMENDATIONS. ALL FILL MATERIALS TO BE COMPACTED IN MAXIMUM 8-INCH LIFTS.
11. SITE ROUGH GRADING: SLOPE GRADES TO DIRECT WATER AWAY FROM BUILDINGS AND TO PREVENT PONDING. FINISH SUBGRADES TO REQUIRED ELEVATIONS WITHIN THE FOLLOWING TOLERANCES:
    i. TURF OR UNPAVED AREAS: PLUS OR MINUS 1 INCH
    ii. WALKS: PLUS OR MINUS 1/2 INCH.
    iii. PAVEMENTS: PLUS OR MINUS 1/2 INCH
    iv. INSIDE BUILDING LINES: FINISH SUBGRADE TO A TOLERANCE OF ½ INCH WHEN TESTED WITH A 10-FOOT STRAIGHTEDGE.
12. QUALITY CONTROL: QUALIFIED GEOTECHNICAL ENGINEER TO BE ENGAGED AS TESTING AGENCY AS DIRECTED BY OWNER.
13. REPAIR AND REESTABLISH GRADES TO SPECIFIED TOLERANCES WHERE COMPLETED OR PARTIALLY COMPLETED SURFACES BECOME ERODED, RUTTED, SETTLED, OR WHERE THEY LOSE COMPACTION DUE TO SUBSEQUENT CONSTRUCTION OPERATIONS OR WEATHER

STORM SEWER:

A. GENERAL

1. STORM SEWER INCLUDES ALL PIPES, FITTINGS, MANHOLES, CLEANOUTS, TRANSITION COUPLINGS, CATCH BASINS, INLETS, END SECTIONS, AND OUTLETS.
2. THE CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING OF ANY CHANGES, ERRORS, OR OMISSIONS FOUND ON THE PLANS OR IN THE FIELD, BEFORE WORK IS STARTED OR RESUMED.
3. CONTRACTOR SHALL LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP UTILITIES INDICATED TO BE REMOVED OR ABANDONED IN PLACE. DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER UNLESS PERMISSION IS GRANTED. NOTIFY OWNER AT LEAST TWO DAYS IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS.

B. PRODUCTS

1. PE PIPE AND FITTINGS: PE DRAINAGE PIPE AND FITTINGS NP 3 TO NPS 10, AASHTO M 252M, TYPE S, WITH SMOOTH WATERWAY FOR COUPLING JOINTS. PE DRAINAGE PIPE AND FITTINGS NPS 12 TO NPS 60, AASHTO M 294M, TYPE S, WITH SMOOTH WATERWAY FOR COUPLING JOINTS.
2. PVC PIPE AND FITTINGS: PIPE: ASTM F 949, PVC, OR ASTM D-3034, F-1336, F-679, CORRUGATED PIPE WITH BELL AND SPIGOT ENDS FOR GASKETED JOINTS. FITTINGS: ASTM 949, PVC MOLDED OR FABRICATED, SOCKET TYPE. GASKETS: ASTM F 477, ELASTOMERIC SEALS.
3. CONCRETE PIPE AND FITTINGS: REINFORCED CONCRETE SEWER PIPE AND FITTINGS MEETING ASTM C 76 WITH BELL AND SPIGOT ENDS AND GASKETED JOINTS WITH ASTM C 443 RUBBER GASKETS. PIPE TO BE CLASS III UNLESS OTHERWISE INDICATED ON PLANS.
4. COMPLY WITH ASTM C 1173, ELASTOMERIC SLEEVE-TYPE REDUCING OR TRANSITION COUPLING, FOR JOINTING UNDERGROUND NON-PRESSURE PIPING. INCLUDE ENDS OF SAME SIZES AS PIPING TO BE JOINED, AND CORROSION-RESISTANT METAL TENSION BAND AND TIGHTENING MECHANISM ON EACH END.
5. CLEANOUTS: CAST IRON CLEANOUTS: ASME A112.36.2M ROUND, GRAY-IRON HOUSING WITH CLAMPING DEVICE AND ROUND, SECURED, SCORIATED, GRAY-IRON COVER. HEAVY DUTY TOP LOADING IS REQUIRED. PLASTIC CLEANOUTS: PVC BODY WITH PVC THREADED PLUG.
6. MANHOLES AND CATCH BASINS: STANDARD REINFORCED PRECAST CONCRETE MANHOLES MEETING ASTM C 478. MINIMUM 48-INCH DIAMETER UNLESS OTHERWISE INDICATED. BASE SECTION TO BE MINIMUM 6-INCH THICKNESS AND 4-INCH THICKNESS FOR WALLS AND BASE RISER SECTION. REINFORCED CONCRETE GRADE RINGS, 6-9 INCH TOTAL THICKNESS, TO MATCH DIAMETER OF MANHOLE FRAME AND COVER. MANHOLE FRAMES AND COVERS AS INDICATED ON DRAWINGS. PIPE CONNECTORS SHOULD BE PROVIDED TO MEET ASTM C293, RESILIENT, OF SIZE REQUIRED, FOR EACH PIPE CONNECTING TO THE BASE SECTION.
7. CONCRETE: CAST-IN-PLACE CONCRETE ACCORDING TO ACI 318 AND ACI 350/350R AND IN ACCORDANCE WITH THE FOLLOWING:
    i. CEMENT: ASTM C 150, TYPE III
    ii. FINE AGGREGATE: ASTM C 33, SAND
    iii. COARSE AGGREGATE: ASTM C 33, CRUSHED GRAVEL
    iv. WATER: POTABLE
8. PORTLAND CEMENT DESIGN MIX: 4,000 PSI MINIMUM WITH 0.45 MAXIMUM WATER/CEMENTIOUS MATERIALS RATIO. REINFORCING FABRIC TO MEET ASTM A 185/A 185M, STEEL, WELDED WIRE FABRIC, PLAIN. REINFORCING BARS TO MEET ASTM A 615/A 615M, GRADE 60 DEFORMED STEEL.
9. MANHOLE CHANNELS TO BE FORMED WITH AN INVERT SLOPE OF 2 PERCENT THROUGH THE MANHOLE AND BENCHES AT 4 PERCENT, SLOPED TO DRAIN INTO CHANNEL.
10. INLETS: PROVIDE INLETS WITH HEAVY DUTY CASTINGS AS SHOWN ON DRAWINGS.
11. OUTLETS: CONCRETE END SECTION SHOULD BE PROVIDED AT ALL PIPE ENDS AND AS INDICATED ON DRAWINGS. RIP RAP APRONS TO BE INSTALLED AT ALL END SECTIONS TO DIMENSIONS INDICATED. AVERAGE RIP-RAP SIZE TO BE 6-INCHES UNLESS OTHERWISE INDICATED ON DRAWINGS.

STORM SEWER (CONT.):

C. EXECUTION

1. INSTALL PIPING BEGINNING AT LOW POINT, TRUE TO GRADES AND ALIGNMENT INDICATED WITH UNBROKEN CONTINUITY OF INVERT. PLACE BELL ENDS OF PIPING FACING UPSTREAM. INSTALL GASKETS, SEALS, SLEEVES, AND OTHER COUPLINGS ACCORDING TO MANUFACTURERS WRITTEN INSTRUCTIONS.
2. WHEN INSTALLING PIPE UNDER STREETS OR OTHER OBSTRUCTIONS THAT CANNOT BE DISTURBED, USE PIPE-JACKING PROCESS OF MICRO-TUNNELING.
3. INSTALL PIPING PITCHED DOWN IN DIRECTION OF FLOW. INSTALL PE CORRUGATED SEWER PIPING IN ACCORDANCE WITH ASTM D 2231. INSTALL PVC PIPING ACCORDING TO ASTM D 2321 AND ASTM F 1668. INSTALL REINFORCED CONCRETE SEWER PIPING IN ACCORDANCE WITH ASTM C 1479 AND ACPA'S "CONCRETE PIPE INSTALLATION MANUAL."
4. PIPE JOINT CONSTRUCTION: JOIN CORRUGATED PE PIPE ACCORDING TO ASTM D 3212 FOR PUSH ON JOINTS. JOIN PVC CORRUGATED SEWER PIPING IN ACCORDANCE WITH ASTM D 2321 FOR ELASTOMERIC-SEAL JOINTS. JOIN REINFORCED CONCRETE PIPE ACCORDING TO ACPA'S "CONCRETE PIPE INSTALLATION MANUAL" FOR RUBBER-GASKETED JOINTS. JOIN DISSIMILAR PIPE MATERIALS WITH NON-PRESSURE TYPE FLEXIBLE COUPLINGS.
5. CONTRACTOR TO INSPECT INTERIOR OF PIPING AND MANHOLES FOR DEFECTS. DEFECTS REQUIRING CORRECTION INCLUDE THE FOLLOWING:
    i. ALIGNMENT: LESS THAN FULL DIAMETER OF INSIDE OF PIPE IS VISIBLE BETWEEN STRUCTURES.
    ii. DEFLECTION: FLEXIBLE PIPING WITH DEFLECTION THAT PREVENTS PASSAGE OF BALL OR CYLINDER OF SIZE NOT LESS THAN 92.5 PERCENT OF PIPING DIAMETER.
    iii. DAMAGE: CRUSHED, BROKEN, CRACKED, OR OTHERWISE DAMAGED PIPING.
    iv. INFILTRATION: WATER LEAKAGE INTO PIPING.
    v. EXFILTRATION: WATER LEAKAGE FROM OR AROUND PIPING
    REPLACE DEFECTIVE PIPING USING NEW MATERIALS, AND REPEAT INSPECTION UNTIL DEFECTS ARE WITHIN ALLOWANCES SPECIFIED.
6. TEST NEW PIPING SYSTEMS, AND PARTS OF EXISTING SYSTEMS THAT HAVE BEEN ALTERED, EXTENDED, REPAIRED, FOR LEAKS AND DEFECTS. FOR GRAVITY FLOW STORM DRAINAGE PIPING: TEST ACCORDING TO REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION, UNI-B-6, AND THE FOLLOWING:
    i. EXCEPTION: PIPING WITH SOILTIGHT JOINTS UNLESS REQUIRED BY AUTHORITIES HAVING JURISDICTION.
    ii. OPTION: TEST PLASTIC PIPING ACCORDING TO ASTM F 1417
    iii. OPTION: TEST CONCRETE PIPING ACCORDING TO ASTM C 924
7. SUBMIT TESTING REPORTS AS REQUIRED BY OWNER OR AUTHORITY HAVING JURISDICTION.

CONCRETE PAVING:

A. GENERAL

1. CONCRETE PAVING SECTION INCLUDES DRIVEWAYS, ROADWAYS, PARKING LOTS, CURBS AND GUTTERS, WALKS, AND CONCRETE APRONS.
2. ACTION SUBMITTALS
    i. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
    ii. OTHER ACTION SUBMITTALS
        a. DESIGN MIXTURES: FOR EACH CONCRETE PAVING MIXTURE. INCLUDE ALTERNATE DESIGN MIXTURES WHEN CHARACTERISTICS OF MATERIALS PROJECT CONDITIONS, WEATHER, TEST RESULTS, OR OTHER CIRCUMSTANCES WARRANT ADJUSTMENTS.
        b. MATERIAL TEST REPORTS: FROM A QUALIFIED TESTING AGENCY INDICATING AND INTERPRETING TEST RESULTS FOR COMPLIANCE OF THE FOLLOWING WITH REQUIREMENTS INDICATED, BASED ON COMPREHENSIVE TESTING OF CURRENT MATERIALS.
3. QUALITY ASSURANCE
    i. READY-MIX-CONCRETE MANUFACTURER QUALIFICATIONS: A FIRM EXPERIENCED IN MANUFACTURING READY-MIXED CONCRETE PRODUCTS AND THAT COMPLIES WITH ASTM C 94/C 94M REQUIREMENTS FOR PRODUCTION FACILITIES AND EQUIPMENT.
    ii. ACI PUBLICATIONS: COMPLY WITH ACI 301 (ACI 301M) UNLESS OTHERWISE INDICATED.
    iii. HANDICAP STANDARDS: PROVIDE RAMPS INDICATED FOR HANDICAP ACCESS IN ACCORDANCE WITH ANSI A117 AND FEDERAL AMERICANS WITH DISABILITIES ACT (ADA).

B. PRODUCTS

1. STEEL REINFORCEMENT
    i. RECYCLED CONTENT: POST CONSUMER RECYCLED CONTENT PLUS ONE-HALF OF PRECONSUMER RECYCLED CONTENT NOT LESS THAN 25 PERCENT.
    ii. PLAIN-STEEL WELDED WIRE REINFORCEMENT: ASTM A 185/A 185M, FABRICATED FROM AS-DRAWN STEEL WIRE INTO FLAT SHEETS.
    iii. DEFORMED-STEEL WELDED WIRE REINFORCEMENT: ASTM A 497/A 497M, FLAT SHEET.
    iv. REINFORCING BARS: ASTM A 615/A 615M, GRADE 60 (GRADE 420); DEFORMED.
    v. PLAIN-STEEL WIRE: ASTM A 82/A 82M, AS DRAWN.
    vi. DEFORMED-STEEL WIRE: ASTM A 496/A 496M.
    vii. DOWEL BARS: ASTM A 615/A 615M, GRADE 60 (GRADE 420) PLAIN-STEEL BARS; ZINC COATED (GALVANIZED) AFTER FABRICATION ACCORDING TO ASTM A 767/A 767M, CLASS I COATING. CUT BARS TRUE TO LENGTH WITH ENDS SQUARE AND FREE OF BURRS.
    viii. BAR SUPPORTS: BOLSTERS, CHAIRS, SPACERS, AND OTHER DEVICES FOR SPACING, SUPPORTING, AND FASTENING REINFORCING BARS, WELDED WIRE REINFORCEMENT, AND DOWELS IN PLACE. MANUFACTURE BAR SUPPORTS ACCORDING TO CRSI'S "MANUAL OF STANDARD PRACTICE" FROM STEEL WIRE, PLASTIC, OR PRECAST CONCRETE OF GREATER COMPRESSIVE STRENGTH THAN CONCRETE SPECIFIED.
2. CONCRETE MATERIALS
    i. CEMENTITIOUS MATERIAL: USE THE FOLLOWING CEMENTITIOUS MATERIALS, OF SAME TYPE, BRAND, AND SOURCE THROUGHOUT PROJECT:
        a. PORTLAND CEMENT: ASTM C 150, PORTLAND CEMENT TYPE I.
        b. FLY ASH: ASTM C 618, CLASS C OR CLASS F.
        c. GROUND GRANULATED BLAST-FURNACE SLAG: ASTM C 989, GRADE 100 OR 120.
    ii. NORMAL-WEIGHT AGGREGATES: ASTM C 33,UNIFORMLY GRADED, AND AS FOLLOWS:
        a. COMBINED AGGREGATE GRADATION: WELL GRADED FROM COARSEST TO FINEST WITH NOT MORE THAN 18 PERCENT AND NOT LESS THAN 8 PERCENT RETAINED ON A INDIVIDUAL SIEVE, EXPECT THAT LESS THAN 8 PERCENT MAY BE RETAINED ON COARSEST SIEVE AND ON NO. 50 SIEVE, AND LESS THAN 8 PERCENT MAY BE RETAINED ON SIEVES FINER THAN NO. 50.
        b. USE CRUSHED LIMESTONE COARSE AGGREGATE FOR CONCRETE EXPOSED TO WEATHER.
    iii. WATER: POTABLE AND COMPLYING WITH ASTM C 94/C 94M.
    iv. AIR-ENTRAINING ADMIXTURE: ASTM C 260.
    v. CHEMICAL ADMIXTURES: ADMIXTURES CERTIFIED BY MANUFACTURER TO BE COMPATIBLE WITH OTHER ADMIXTURES AND TO CONTAIN NOT MORE THAN 0.1 PERCENT WATER-SOLUBLE CHLORIDE IONS BY MASS OF CEMENTITIOUS MATERIAL.
    vi. NOTE: WHERE CLASS A, B, OR C CONCRETE IS REFERENCE IN PLANS OR SPECIFICATIONS, THE CLASS IS AS DEFINED IN ACI 347-04.
3. CURING MATERIALS
    i. ABSORPTIVE COVER: AASHTO M 182, CLASS 3, BURLAP CLOTH MADE FROM JUTE OR KENAF, WEIGHING APPROXIMATELY 9 OZ./SQ. YD. (305 G/SQ. M) DRY.
    ii. MOISTURE-RETAINING COVER: ASTM C 171, POLYETHYLENE FILM OR WHITE BURLAP-POLYETHYLENE SHEET.
    iii. WATER: POTABLE.
    iv. EVAPORATION RETARDER: WATERBORNE, MONOMOLECULAR, FILM FORMING, MANUFACTURED FOR APPLICATION TO FRESH CONCRETE.
    v. CLEAR, WATERBORNE, MEMBRANE-FORMING CURING COMPOUND: ASTM C 309, TYPE 1, CLASS B, DISSIPATING.
    vi. WHITE, WATERBORNE, MEMBRANE-FORMING CURING COMPOUND: ASTM C 309, TYPE 2, CLASS B, DISSIPATING.
4. FIBER REINFORCEMENT
    i. FIBROUS REINFORCEMENT: 100% VIRGIN HOMOPOLYMER POLYPROPYLENE MULTIFILAMENT FIBERS FOR SECONDARY REINFORCEMENT OF CONCRETE, ASTM C 116, TYPE III. SHALL CONTAIN NO REPROCESSED OLEFIN MATERIALS.
        a. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING: FIBERMESH 150; PROPEX CONCRETE SYSTEMS CORP., STEALTH FIBER MICRO REINFORCEMENT; SI CONCRETE SYSTEMS, OR APPROVED EQUAL
5. RELATED MATERIALS
    i. JOINT FILLERS: ASTM D 1751, ASPHALT-SATURATED CELLULOSIC FIBER OR ASTM D 1752, CORK OR SELF-EXPANDING CORK IN PREFORMED STRIPS.
    ii. PENETRATING ANTI-SPALLING SEALER: THE SEALER SHALL BE A SILANE WATER BASED COMPOUND WHICH HAS A 96% CHLORIDE-ION SCREEN AND A REPELLENCY FACTOR OF 92% WHEN TESTED IN ACCORDANCE WITH NCHRP #244, TEST METHOD. IN ADDITION, THE SEALER-TREATED CONCRETE MUST EXHIBIT NO SCALING WHEN EXPOSED TO 120 CYCLES OF FREEZING-AND-THAWING IN ACCORDANCE WITH ASTM C 672.
        a. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING: "WEATHER WORKER HEAVY-DUTY WB (+-27 WB)"; DAYTON SUPERIOR CORP., "ENVIROSEAL 20"; HYDROZO INCORP., "PENTANE WB"; L & M CONSTRUCTION CHEMICALS, INC.
6. CONCRETE MIXTURES
    i. PREPARE DESIGN MIXTURES, PROPORTIONED ACCORDING TO ACI 301 (ACI 301M), WITH THE FOLLOWING PROPERTIES:
        a. COMPRESSIVE STRENGTH (28 DAYS): 4000 PSI (27.6 MPA).
        b. MAXIMUM WATER-CEMENTITIOUS MATERIALS RATIO AT POINT OF PLACEMENT: 0.45.
        c. SLUMP LIMIT: 5 INCHES (125 MM), PLUS OR MINUS 1 INCH (25 MM).
        d. AIR CONTENT: 6.5 PERCENT PLUS OR MINUS 1.5 PERCENT.
    ii. CHEMICAL ADMIXTURES: USE ADMIXTURES ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
7. CONCRETE MIXING
    i. READY-MIXED CONCRETE: MEASURE, BATCH, AND MIX CONCRETE MATERIALS AND CONCRETE ACCORDING TO ASTM C 94/C 94M. FURNISH BATCH CERTIFICATES FOR EACH BATCH DISCHARGED AND USED IN THE WORK.

B. EXECUTION

1. EXAMINATION AND PREPARATION
    i. PROOF-ROLL PREPARED SUBBASE SURFACE BELOW CONCRETE PAVING TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING.
    ii. REMOVE LOOSE MATERIAL FROM COMPACTED SUBBASE SURFACE IMMEDIATELY BEFORE PLACING CONCRETE.
2. EDGE FORMS AND SCREED CONSTRUCTION
    i. SET, BRACE, AND SECURE EDGE FORMS, BULKHEADS, AND INTERMEDIATE SCREED GUIDES TO REQUIRED LINES, GRADES, AND ELEVATIONS. INSTALL FORMS TO ALLOW CONTINUOUS PROGRESS OF WORK AND SO FORMS CAN REMAIN IN PLACE AT LEAST 24 HOURS AFTER CONCRETE PLACEMENT.
    ii. CLEAN FORMS AFTER EACH USE AND COAT WITH FORM-RELEASE AGENT TO ENSURE SEPARATION FROM CONCRETE WITHOUT DAMAGE.

CONCRETE PAVING (CONT.):

3. STEEL REINFORCEMENT
    i. GENERAL: COMPLY WITH CRSI'S "MANUAL OF STANDARD PRACTICE" FOR FABRICATING, PLACING, AND SUPPORTING REINFORCEMENT.
4. JOINTS
    i. GENERAL: FORM CONSTRUCTION, ISOLATION, AND CONTRACTION JOINTS AND TOOL EDGES TRUE TO LINE, WITH FACES PERPENDICULAR TO SURFACE PLANE OF CONCRETE. CONSTRUCT TRANSVERSE JOINTS AT RIGHT ANGLES TO CENTERLINE UNLESS OTHERWISE INDICATED.
    ii. CONSTRUCTION JOINTS: SET CONSTRUCTION JOINTS AT SIDE AND END TERMINATIONS OF PAVING AND AT LOCATIONS WHERE PAVING OPERATIONS ARE STOPPED FOR MORE THAN ONE-HALF HOUR UNLESS PAVING TERMINATES AT ISOLATION JOINTS.
    iii. ISOLATION JOINTS: FORM ISOLATION JOINTS OF PREFORMED JOINT-FILLER STRIPS ABUTTING CONCRETE CURBS, CATCH BASINS, MANHOLES, INLETS, STRUCTURES, OTHER FIXED OBJECTS, AND WHERE INDICATED.
    iv. CONTRACTION JOINTS: FORM WEAKENED-PLANE CONTRACTION JOINTS, SECTIONING CONCRETE INTO AREAS AS INDICATED. CONSTRUCT CONTRACTION JOINTS FOR A DEPTH EQUAL TO AT LEAST ONE-FOURTH OF THE CONCRETE THICKNESS.
    v. EDGING: AFTER INITIAL FLOATING, TOOL EDGES OF PAVING, GUTTERS, CURBS, AND JOINTS IN CONCRETE WITH AN EDGING TOOL TO A 1/4-INCH (6-MM) RADIUS. REPEAT TOOLING OF EDGES AFTER APPLYING SURFACE FINISHES. ELIMINATE EDGING-TOOL MARKS ON CONCRETE SURFACES.
5. CONCRETE PLACEMENT
    i. MOISTEN SUBBASE TO PROVIDE A UNIFORM DAMPENED CONDITION AT TIME CONCRETE IS PLACED.
    ii. COMPLY WITH ACI 301 (ACI 301M) REQUIREMENTS FOR MEASURING, MIXING, TRANSPORTING, PLACING, AND CONSOLIDATING CONCRETE.
    iii. DEPOSIT AND SPREAD CONCRETE IN A CONTINUOUS OPERATION BETWEEN TRANSVERSE JOINTS. DO NOT PUSH OR DRAG CONCRETE INTO PLACE OR USE VIBRATORS TO MOVE CONCRETE INTO PLACE.
    iv. SCREED PAVING SURFACE WITH A STRAIGHTEDGE AND STRIKE OFF.
    v. COMMENCE INITIAL FLOATING USING BULL FLOATS OR DARBIES TO IMPART AN OPEN-TEXTURED AND UNIFORM SURFACE PLANE BEFORE EXCESS MOISTURE OR BLEED WATER APPEARS ON THE SURFACE. DO NOT FURTHER DISTURB CONCRETE SURFACES BEFORE BEGINNING FINISHING OPERATIONS OR SPREADING SURFACE TREATMENTS.
6. CONCRETE PROTECTION AND CURING
    i. GENERAL: PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES.
    ii. COMPLY WITH ACI 306.1 FOR COLD-WEATHER PROTECTION.
    iii. EVAPORATION RETARDER: APPLY EVAPORATION RETARDER TO CONCRETE SURFACES IF HOT, DRY, OR WINDY CONDITIONS CAUSE MOISTURE LOSS APPROACHING 0.2 LB/SQ. FT. X H (1 KG/SQ. M X H) BEFORE AND DURING FINISHING OPERATIONS. APPLY ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AFTER PLACING, SCREEDING, AND BULL FLOATING OR DARBYING CONCRETE BUT BEFORE FLOAT FINISHING.
    iv. BEGIN CURING AFTER FINISHING CONCRETE BUT NOT BEFORE FREE WATER HAS DISAPPEARED FROM CONCRETE SURFACE.
    v. CURING METHODS: CURE CONCRETE BY MOISTURE CURING, MOISTURE-RETAINING-COVER CURING, CURING COMPOUND, OR A COMBINATION OF THESE.
    vi. PENETRATING, ANTI-SPALLING SEALER TREATMENT: APPLY COMPOUNDS TO CLEAN, DRY CONCRETE SURFACES FREE OF OIL, DIRT, AND OTHER FOREIGN MATERIAL ACCORDING TO MANUFACTURER'S SPECIFICATIONS. SEALER TO BE APPLIED TO ALL EXTERIOR CONCRETE PAVING AND CURBS AFTER CONCRETE HAS CURED 28 DAYS.
7. PAVING TOLERANCES
    i. COMPLY WITH TOLERANCES IN ACI 117 AND AS FOLLOWS:
        a. ELEVATION: 3/4 INCH (19 MM).
        b. THICKNESS: PLUS 3/8 INCH (10 MM), MINUS 1/4 INCH (6 MM).
        c. SURFACE: GAP BELOW 10-FOOT- (3-M-) LONG, UNLEVELED STRAIGHTEDGE NOT TO EXCEED 1/2 INCH (13 MM).
        d. JOINT SPACING: 3 INCHES (75 MM).
        e. CONTRACTION JOINT DEPTH: PLUS 1/4 INCH (6 MM), NO MINUS.
        f. JOINT WIDTH: PLUS 1/8 INCH (3 MM), NO MINUS.
    ii. APPLY PAINT WITH MECHANICAL EQUIPMENT TO PRODUCE MARKINGS OF DIMENSIONS INDICATED WITH UNIFORM, STRAIGHT EDGES. APPLY AT MANUFACTURER'S RECOMMENDED RATES TO PROVIDE A MINIMUM WET FILM THICKNESS OF 15 MILS (0.4 MM).
8. REPAIRS AND PROTECTION
    i. REMOVE AND REPLACE CONCRETE PAVING THAT IS BROKEN, DAMAGED, OR DEFECTIVE OR THAT DOES NOT COMPLY WITH REQUIREMENTS IN THIS SECTION. REMOVE WORK IN COMPLETE SECTIONS FROM JOINT TO JOINT UNLESS OTHERWISE APPROVED BY ENGINEER.
    ii. PROTECT CONCRETE PAVING FROM DAMAGE. EXCLUDE TRAFFIC FROM PAVING FOR AT LEAST 14 DAYS AFTER PLACEMENT. WHEN CONSTRUCTION TRAFFIC IS PERMITTED, MAINTAIN PAVING AS CLEAN AS POSSIBLE BY REMOVING SURFACE STAINS AND SPILLAGE OF MATERIALS AS THEY OCCUR.
    iii. MAINTAIN CONCRETE PAVING FREE OF STAINS, DISCOLORATION, DIRT, AND OTHER FOREIGN MATERIAL. SWEEP PAVING NOT MORE THAN TWO DAYS BEFORE DATE SCHEDULED FOR SUBSTANTIAL COMPLETION INSPECTIONS.

DEMOLITION:

A. GENERAL

THE CONTRACTOR SHALL REMOVE AND DISPOSE OFF SITE, ALL EXISTING STRUCTURES, FENCES, CONCRETE AND PAVEMENT ON SITE, UNLESS NOTED TO REMAIN ON THE CONTRACT DRAWINGS.

THE CONTRACTOR SHALL PROTECT AND NOT DESTROY PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.

B. SUMMARY

THIS SECTION REQUIRES REMOVAL AND DISPOSAL, OFF SITE, OF THE FOLLOWING:
1. ASPHALT PARKING LOT.
2. MISCELLANEOUS CONCRETE, STORM SEWER, PLANT MATERIAL, UNDERGROUND CONDUITS, SITE LIGHTS, ETC., LOCATED ON SITE.

C. SUBMITTALS

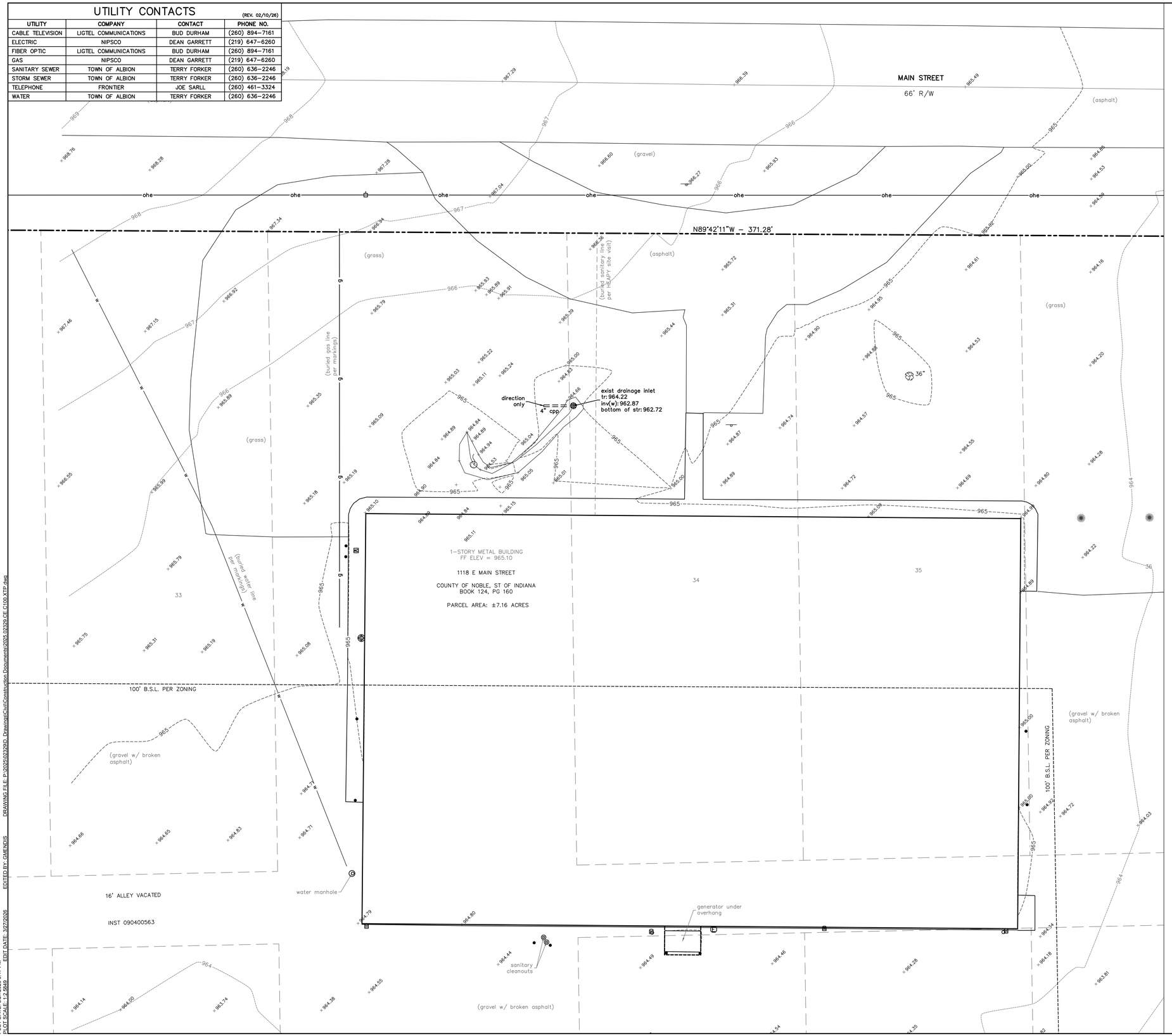
SUBMIT THE FOLLOWING IN ACCORDANCE WITH CONDITIONS OF CONTRACT AND DIVISION 1 SPECIFICATION SECTIONS.
1. A PROPOSED SCHEDULE OF OPERATIONS COORDINATION FOR SHUTOFF, CAPPING, AND CONTINUATION OF UTILITY SERVICES AS REQUIRED.
2. PROVIDE A DETAILED SEQUENCE AND SCHEDULE OF DEMOLITION AND REMOVAL WORK TO BE COMPLETED.

D. JOB CONDITIONS
1. SALVAGED MATERIALS: ITEMS OF SALVAGEABLE VALUE TO CONTRACTOR MAY BE REMOVED FROM STRUCTURE AS WORK PROGRESSES. TRANSPORT SALVAGED ITEMS FROM THE SITE AS THEY ARE REMOVED.
    i. STORAGE OR SALE OF REMOVED ITEMS WILL NOT BE PERMITTED ON SITE.
2. EXPLOSIVES: USE OF ANY TYPE OF EXPLOSIVES WILL NOT BE PERMITTED.
3. TRAFFIC: CONDUCT DEMOLITION OPERATION

UTILITY CONTACTS

(REV. 02/10/26)

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	LIGTEL COMMUNICATIONS	BUD DURHAM	(260) 894-7161
ELECTRIC	NIPSCO	DEAN GARRETT	(219) 647-6260
FIBER OPTIC	LIGTEL COMMUNICATIONS	BUD DURHAM	(260) 894-7161
GAS	NIPSCO	DEAN GARRETT	(219) 647-6260
SANITARY SEWER	TOWN OF ALBION	TERRY FORKER	(260) 636-2246
STORM SEWER	TOWN OF ALBION	TERRY FORKER	(260) 636-2246
TELEPHONE	FRONTIER	JOE SARLL	(260) 461-3324
WATER	TOWN OF ALBION	TERRY FORKER	(260) 636-2246



0' 10' 20'

SCALE: 1"=10'

EXISTING LEGEND

Air Conditioner	Manhole
Clean Out	Sign
Down Spout	Stand Pipe
Drainage Inlet	Telephone Handhole
Electric Box	Tree
Electric Meter Box	Pine Tree
Fire Hydrant	Buried Gas Line
Flag Pole	Buried Sanitary Line
Gas Meter	Buried Water Line
Guard Post/Post	

BENCHMARK DATA

BENCHMARK INFORMATION (NAVD 88 DATUM)

BENCHMARK ELEVATIONS WERE ESTABLISHED FROM GPS OBSERVATIONS ON THE IDENTIFIED BASE STATION DESCRIBED WITHIN. AN NGS OPUS SOLUTION (FILE #TR364218130627 2) WAS PROCESSED AND RELIED ON TO CONTROL THE PROJECT'S VERTICAL DATUM. THE ELEVATIONS WERE THEN TRANSFERRED TO THE SITE USING DIFFERENTIAL LEVELING.

TBM #30
MAG SPIKE SET IN S FACE OF PWP #305192, LOCATED 40' N OF STATE ROAD #8 & 150' E OF THE ENTRANCE TO THE HIGHWAY DEPARTMENT BLDG.
ELEV: 968.59'

TBM #31
CUT "X" SET ON THE WEST-NORTHWEST BOLT OF FIRE HYDRANT LOCATED ± 40' E OF 7TH STREET & ±60' S OF STATE ROAD #8.
ELEV: 961.50

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

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CALL TOLL FREE
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– INDIANA UNDERGROUND –

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
tel. 317.547.5580 web www.structurepoint.com

HEAPY

NOBLE COUNTY HIGHWAY DEPARTMENT RENNOVATION

1118 E MAIN ST,
ALBION, IN 46701

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ISSUANCE INDEX
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03.27.2026
PROJECT PHASE:
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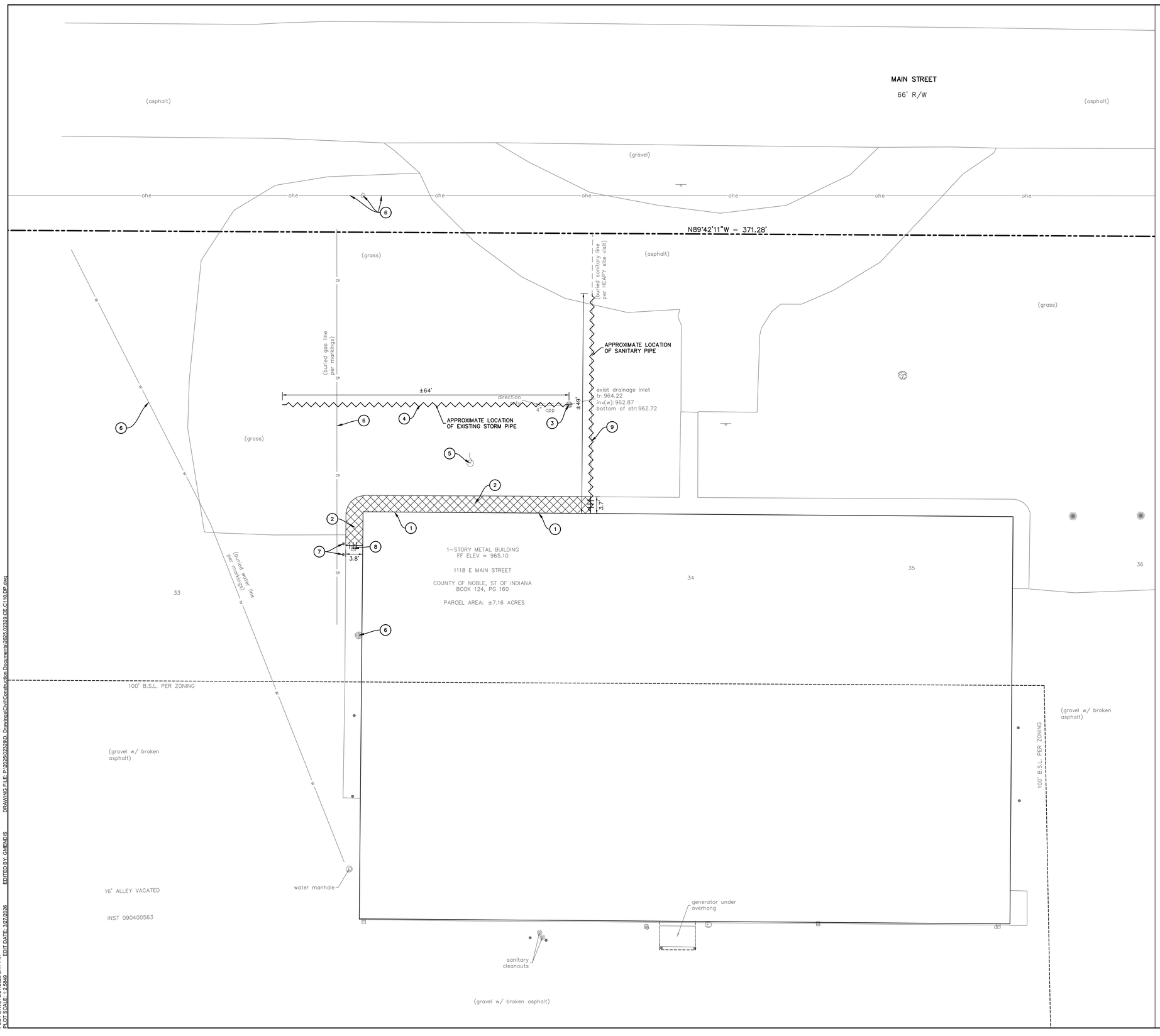
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NO.	DESCRIPTION	DATE

Project Number 2025.02329

EXISTING TOPOGRAPHY

C100

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0' 10' 20'

SCALE: 1"=10'

EXISTING LEGEND

Air Conditioner	Manhole
Clean Out	Sign
Down Spout	Stand Pipe
Drainage Inlet	Telephone Handhole
Electric Box	Tree
Electric Meter Box	Pine Tree
Fire Hydrant	Buried Gas Line
Flag Pole	Buried Sanitary Line
Gas Meter	Buried Water Line
Guard Post/Post	

DEMOLITION LEGEND

- EXISTING UTILITY TO BE REMOVED
- PAVEMENT TO BE SAWCUT
- EXISTING CONCRETE AND BASE TO BE REMOVED

KEYNOTES

1. PARTIAL DEMOLITION OF EXISTING BUILDING AND ASSOCIATED FOUNDATION. REFER TO ARCHITECTURAL PLANS FOR EXTENDS OF SELECTIVE BUILDING DEMOLITION. EXTENDS AS SHOWN ON CIVIL DOCUMENTS RE APPROXIMATE
2. REMOVE EXISTING CONCRETE, BASE, CONCRETE PADS AND OTHER MISCELLANEOUS CONCRETE MATERIAL (SAWCUT FOR CLEAN EDGE)
3. REMOVE EXISTING STORM STRUCTURE
4. REMOVE EXISTING STORM PIPE TO PROPOSED STORM STRUCTURE LOCATION PER UTILITY PLAN C400
5. REMOVE AND RELOCATE EXISTING FLAG POLE BASE, FLAG POLE, AND FLAG PER SITE PLAN SHEET C200. REFER TO ARCHITECTURAL PLANS FOR DETAILS AND SPECIFICATIONS. CONTRACTOR TO COORDINATE WITH OWNER REGARDING TYPE, SIZE, AND HEIGHT PRIOR TO INSTALLATION
6. PROTECT EXISTING UTILITY THROUGHOUT DURATION OF CONSTRUCTION
7. REMOVE EXISTING BOLLARDS
8. REMOVE AC UNIT, BASE, CONCRETE PADS AND OTHER MISCELLANEOUS CONCRETE MATERIAL (SAWCUT FOR CLEAN EDGE). RELOCATE AC UNIT PER MEP PLANS
9. REMOVE EXISTING SANITARY PIPE

GENERAL NOTES:

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REGISTERED
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STATE OF INDIANA
PROFESSIONAL ENGINEER

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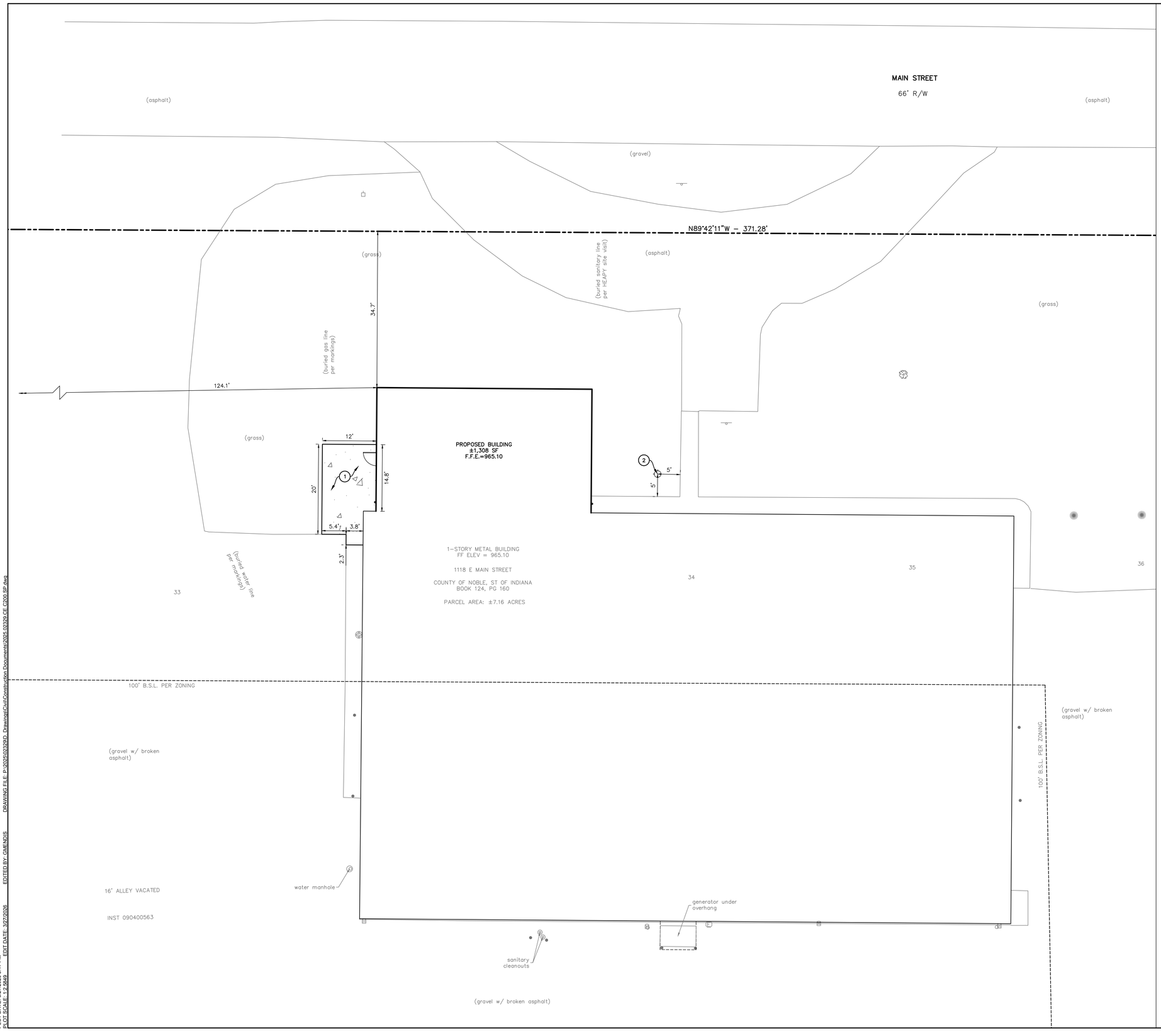
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DEMOLITION PLAN

C110

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0' 10' 20'

SCALE: 1"=10'

EXISTING LEGEND

Air Conditioner	Manhole
Clean Out	Sign
Down Spout	Stand Pipe
Drainage Inlet	Telephone Handhole
Electric Box	Tree
Electric Meter Box	Pine Tree
Fire Hydrant	Buried Gas Line
Flag Pole	Buried Sanitary Line
Gas Meter	Buried Water Line
Guard Post/Post	

SITE LEGEND

CONCRETE PAVEMENT

SITE DATA TABLE

SITE ZONING:	IL
PROJECT AREA:	0.09±ACRES
BUILDING AREA:	1,308 SF
SITE IMPERVIOUS AREA:	0.03± ACRES

KEYNOTES

1. CONCRETE SIDEWALK
2. RELOCATED EXISTING FLAG POLE BASE, FLAG POLE, AND FLAG. REFER TO ARCHITECTURAL PLANS FOR DETAILS AND SPECIFICATIONS. CONTRACTOR TO COORDINATE WITH OWNER REGARDING TYPE, SIZE, AND HEIGHT PRIOR TO INSTALLATION.

GENERAL NOTES:

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SITE PLAN

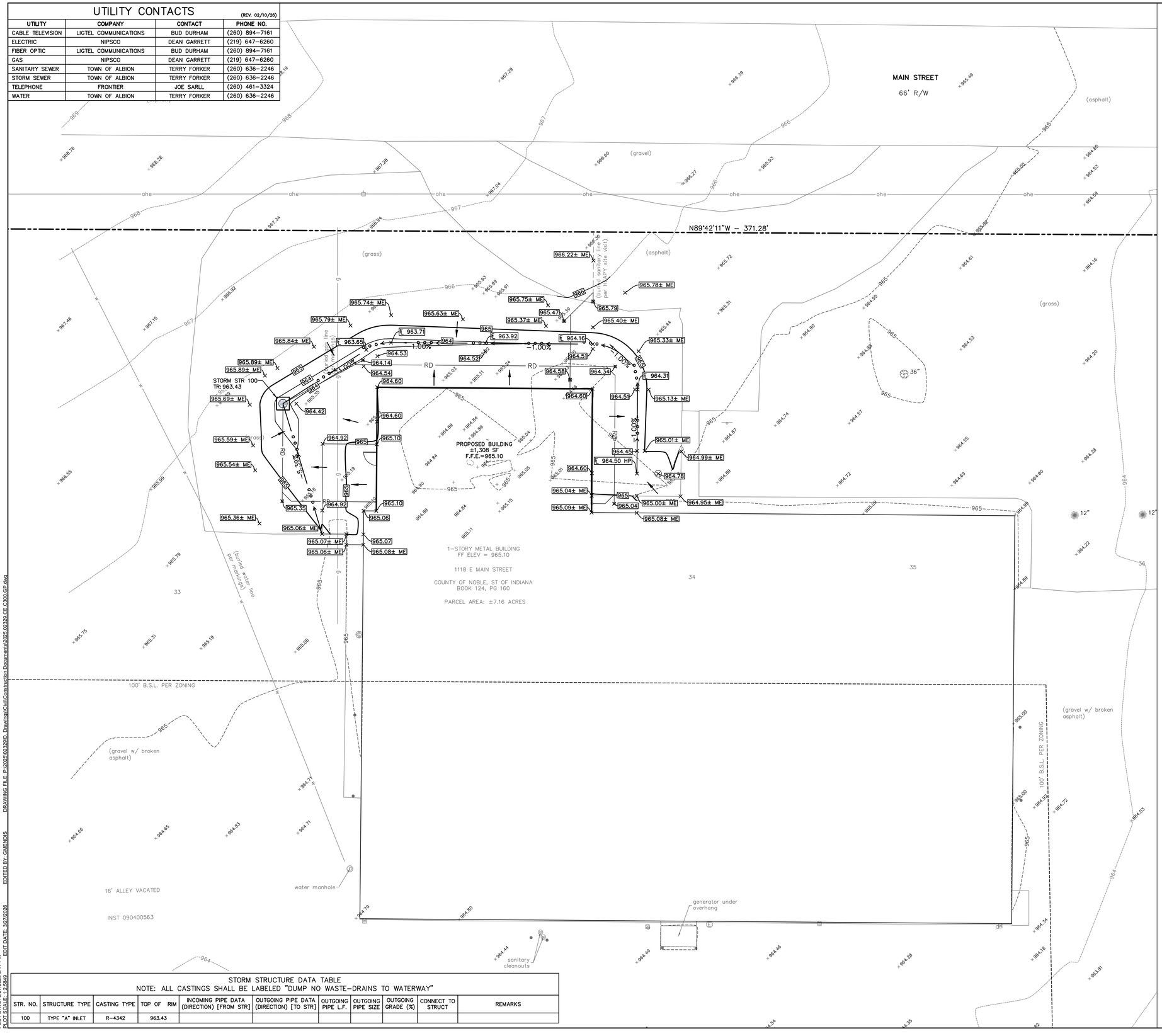
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UTILITY CONTACTS

(REV. 02/10/26)

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	LIGTEL COMMUNICATIONS	BUD DURHAM	(260) 894-7161
ELECTRIC	NIPSCO	DEAN GARRETT	(219) 647-6260
FIBER OPTIC	LIGTEL COMMUNICATIONS	BUD DURHAM	(260) 894-7161
GAS	NIPSCO	DEAN GARRETT	(219) 647-6260
SANITARY SEWER	TOWN OF ALBION	TERRY FORKER	(260) 636-2246
STORM SEWER	TOWN OF ALBION	TERRY FORKER	(260) 636-2246
TELEPHONE	FRONTIER	JOE SARLL	(260) 461-3324
WATER	TOWN OF ALBION	TERRY FORKER	(260) 636-2246



STORM STRUCTURE DATA TABLE

NOTE: ALL CASTINGS SHALL BE LABELED "DUMP NO WASTE–DRAINS TO WATERWAY"

STR. NO.	STRUCTURE TYPE	CASTING TYPE	TOP OF RIM	INCOMING PIPE DATA (DIRECTION) [FROM STR]	OUTGOING PIPE DATA (DIRECTION) [TO STR]	OUTGOING PIPE L.F.	OUTGOING PIPE SIZE	OUTGOING GRADE (%)	CONNECT TO STRUCT	REMARKS
100	TYPE "A" INLET	R-4342	963.43							

N

0' 10' 20'

SCALE: 1"=10'

EXISTING LEGEND

AC	Air Conditioner	MH	Manhole
CO	Clean Out	SN	Sign
DS	Down Spout	SP	Stand Pipe
DI	Drainage Inlet	TH	Telephone Handhole
EB	Electric Box		Tree
EM	Electric Meter Box		Pine Tree
FH	Fire Hydrant	–g–	Buried Gas Line
FP	Flag Pole	– –	Buried Sanitary Line
GM	Gas Meter	–w–	Buried Water Line
	Guard Post/Post		

BENCHMARK DATA

BENCHMARK INFORMATION (NAVD 88 DATUM)

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TBM #31
CUT "X" SET ON THE WEST–NORTHWEST BOLT OF FIRE HYDRANT LOCATED ± 40' E OF 7TH STREET & ±60' S OF STATE ROAD #8.
ELEV: 961.50

GRADING LEGEND

ME	MATCH EXISTING
FL	FLOWLINE
HP	HIGH POINT
000	CONTOURS
	SWALE
000.00	SPOT ELEVATIONS
	FLOW ARROW
	STORM SEWER LINE
	STRUCTURES

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GRADING PLAN

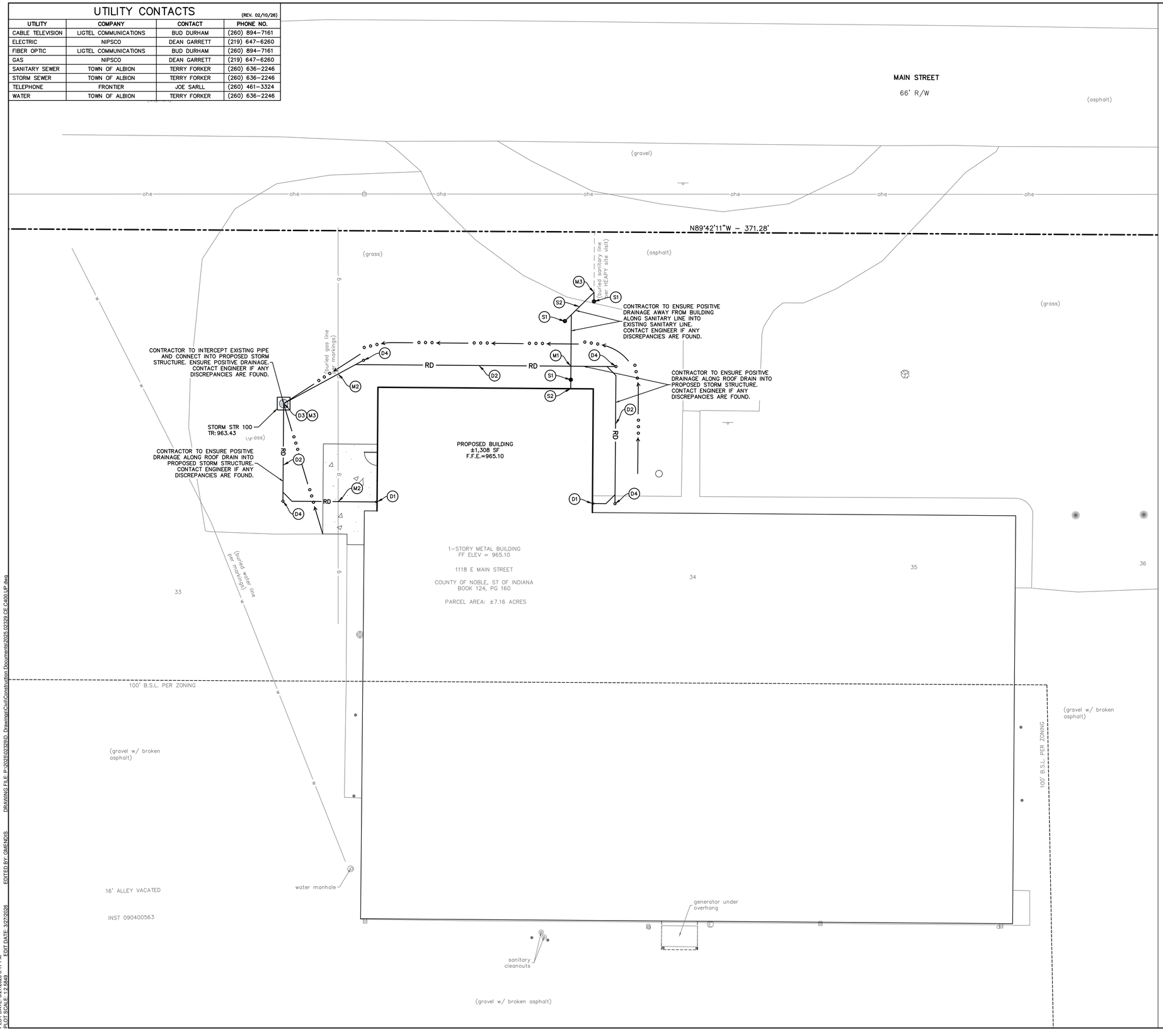
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UTILITY CONTACTS

(REV. 02/10/26)

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	LIGTEL COMMUNICATIONS	BUD DURHAM	(260) 894-7161
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0' 10' 20'

SCALE: 1"=10'

EXISTING LEGEND

AC	Air Conditioner	MH	Manhole
CO	Clean Out	S	Sign
DS	Down Spout	SP	Stand Pipe
DI	Drainage Inlet	TH	Telephone Handhole
EB	Electric Box		Tree
EM	Electric Meter Box		Pine Tree
FH	Fire Hydrant	-g-	Buried Gas Line
FP	Flag Pole	- -	Buried Sanitary Line
GM	Gas Meter	-w-	Buried Water Line
GP	Guard Post/Post		

UTILITY LEGEND

ETC	ELECTRIC / TELECOMMUNICATIONS LINE
W	WATER LINE
FP	FIRE PROTECTION LINE
RD	ROOF DRAIN LINE
G	GAS LINE
SS	SANITARY SEWER LINE
	STORM SEWER LINE
	PAVEMENT UNDERDRAIN
GM	GAS METER
EM	ELECTRICAL TRANSFORMER
	VALVE
	WATER FITTINGS
WM	WATER METER PIT
	FIRE HYDRANT W/ ASSEMBLY

KEYNOTES

DRAINAGE/STORM SEWER

D1. DOWNSPOUT BOOT CONNECTION

D2. 4" HDPE ROOF DRAIN @ 1.00% MIN. SLOPE

D3. ROOF DRAIN CONNECTION TO STRUCTURE

D4. ROOF DRAIN CLEANOUT

SANITARY SEWER

S1. SANITARY CLEANOUT

S2. SANITARY LATERAL @ 1.04% MIN. SLOPE, CONTRACTOR TO FIELD VERIFY AND MATCH EXISTING PIPE SIZE AND MATERIAL.

MISCELLANEOUS

M1. POTENTIAL UTILITY CONFLICT (ALL WATER / SANITARY / STORM CROSSINGS TO HAVE A MINIMUM OF 18" VERTICAL CLEARANCE. CONTACT ENGINEER IF CONFLICTS EXIST. RELOCATE EXISTING UTILITIES AS REQUIRED.

M2. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH AND SIZE OF EXISTING UTILITIES TO ENSURE CONFLICTS DO NOT EXIST WITH PROPOSED UTILITIES.

M3. CONTRACTOR TO COORDINATE UTILITY CONNECTION WITH UTILITY PROVIDER.

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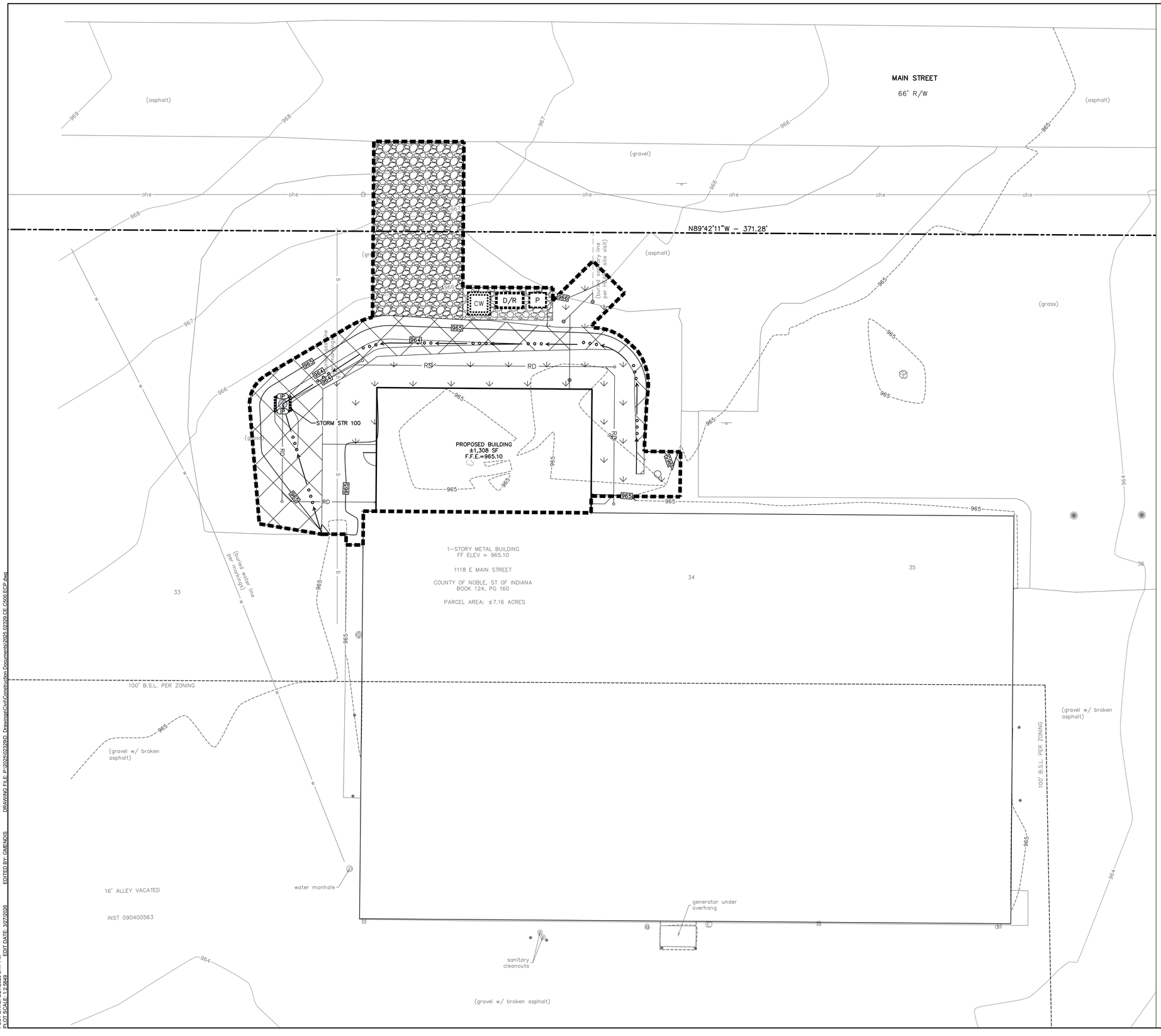
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UTILITY PLAN

C400

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0' 10' 20'

SCALE: 1"=10'

EXISTING LEGEND

Air Conditioner	Manhole
Clean Out	Sign
Down Spout	Stand Pipe
Drainage Inlet	Telephone Handhole
Electric Box	Tree
Electric Meter Box	Pine Tree
Fire Hydrant	Buried Gas Line
Flag Pole	Buried Sanitary Line
Gas Meter	Buried Water Line
Guard Post/Post	

EROSION CONTROL LEGEND

- SF — SILT FENCE (SILT FENCE AT BOUNDARY OF THE SITE IS THE CONSTRUCTION LIMITS)
- CONSTRUCTION LIMITS
- IP — INLET PROTECTION
- AREA SUBJECT TO TEMPORARY SEEDING DURING CONSTRUCTION AND PERMANENT SEEDING AFTER CONSTRUCTION IS COMPLETE
- EROSION CONTROL BLANKET WITH SEEDING
- GRAVEL CONSTRUCTION ENTRANCE
- STAGING AREA
- CW — CONCRETE WASHOUT
- D/R — DUMPSTER / RECYCLING AREA
- P — PORT-O-LET

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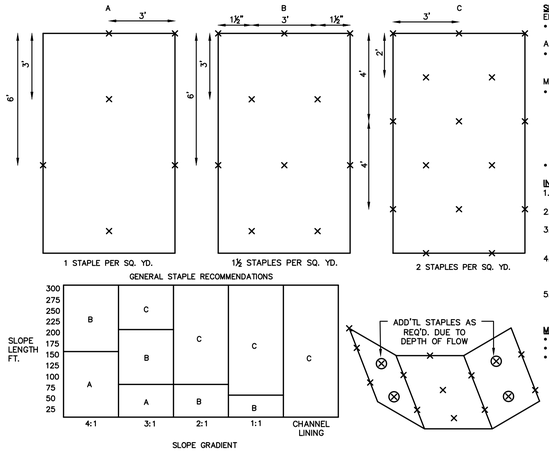
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EROSION CONTROL PLAN

C500

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EROSION CONTROL BLANKET

NOT TO SCALE (REV. 01/17)

SPECIFICATIONS

EFFECTIVE LIFE
- THE FUNCTIONAL LIFE OF AN EROSION CONTROL BLANKET IS DEPENDENT ON THE MATERIALS USED.

ANCHORING
- STAPLES, PINS OR STAKES USED TO PREVENT MOVEMENT OR DISPLACEMENT OF BLANKET. (FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR SPECIFIC APPLICATIONS.)

MATERIALS
- ORGANIC (STRAW, EXCELSIOR, WOVEN PAPER, COCONUT FIBER, ETC.) OR SYNTHETIC MULCH INCORPORATED WITH A POLYPROPYLENE, NATURAL FIBER OR SIMILAR NETTING MATERIAL. (THE NETTING MAY BE BIODEGRADABLE, PHOTODEGRADABLE OR PERMANENT.)

NOTE: SOME EROSION CONTROL BLANKET NETTINGS MAY POSE A THREAT TO CERTAIN SPECIES OF WILDLIFE IF THEY BECOME ENTANGLED IN THE NETTING MATRIX.

- SIX TO 12-INCH STAPLES, PINS, OR STAKES.

INSTALLATION
1. SELECT THE TYPE AND WEIGHT OF EROSION CONTROL BLANKET TO FIT THE SITE CONDITIONS (E.G., SLOPE, CHANNEL, FLOW VELOCITY) PER THE MANUFACTURER'S RECOMMENDATIONS.
2. PREPARE THE SEEDBED, ADD SOIL AMENDMENTS, AND PERMANENTLY SEED THE AREA IMMEDIATELY FOLLOWING SEEDBED PREPARATION.
3. LAY EROSION CONTROL BLANKETS ON THE SEEDED AREA SO THAT THEY ARE IN CONTINUOUS CONTACT WITH THE SOIL WITH EACH UP-SLOPE OR UP-STREAM BLANKET OVERLAPPING THE DOWN-SLOPE OR DOWN-STREAM BLANKET BY AT LEAST EIGHT INCHES, OR FOLLOW MANUFACTURER'S RECOMMENDATIONS.
4. TUCK THE UPPERMOST EDGE OF THE UPPER BLANKETS INTO A CHECK SLOT (SLIT TRENCH), BACKFILL WITH SOIL AND TAMP DOWN. IN CERTAIN APPLICATIONS, THE MANUFACTURER MAY REQUIRE ADDITIONAL CHECK SLOTS AT SPECIFIC LOCATIONS DOWN SLOPE FROM THE UPPERMOST EDGE OF THE UPPER BLANKETS.
5. ANCHOR THE BLANKETS IN PLACE BY DRIVING STAPLES, PINS, OR STAKES THROUGH THE BLANKET AND INTO THE UNDERLYING SOIL. FOLLOW AN ANCHORING PATTERN APPROPRIATE FOR THE SITE CONDITIONS AND AS RECOMMENDED BY THE MANUFACTURER.

MAINTENANCE
- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- CHECK FOR EROSION OR DISPLACEMENT OF THE BLANKET.
- IF ANY AREA SHOWS EROSION, PULL BACK THAT PORTION OF THE BLANKET COVERING THE ERODED AREA, ADD SOIL AND TAMP, RESEED THE AREA, REPLACE AND STAPLE THE BLANKET.

NOTES

CHANNEL LININGS UTILIZE STAPLE PATTERN "C" WITH ADDITIONAL STAPLES ON SIDE SLOPES AT PROJECTED WATER LINE.

STAPLE PATTERNS APPLY TO ALL NORTH AMERICAN GREEN EROSION CONTROL BLANKETS. STAPLE PATTERNS MAY VARY DEPENDING UPON SOIL TYPE AND AVERAGE RAINFALL.

AT SLOPE LENGTHS GREATER THAN 300 FEET OR WHERE DRAINAGE OVER LARGE AREAS IS DIRECTED ONTO THE BLANKETS, STAPLE PATTERN "C" SHOULD BE UTILIZED.

SPECIFICATIONS

NOTE: ALTERNATIVE SUPPORT SYSTEMS MAY BE SUBSTITUTED FOR HARDWOOD POSTS AND CROSS BRACES.

CONTRIBUTING DRAINAGE AREA
- ONE ACRE MAXIMUM.

EFFECTIVE LIFE
- SIX MONTHS (MAXIMUM).

CAPACITY
- RUNOFF FROM A TWO-YEAR FREQUENCY, 24-HOUR STORM EVENT ENTERING A STORM DRAIN WITHOUT BYPASS FLOW.

GEOTEXTILE STRUCTURE
- HEIGHT – 12 TO 18 INCHES, MEASURED FROM THE TOP OF STORM DRAIN INLET.
- POST SPACING – 36-INCH MAXIMUM SPACING BETWEEN POSTS.
- FRAME SUPPORT – BRACING TO STRENGTHEN INTEGRITY OF THE STRUCTURE. (STRUCTURE MUST WITHSTAND 1½-FOOT HEAD OF WATER AND SEDIMENT WITHOUT COLLAPSING OR WITHSTANDING.)

MATERIALS
- SUPPORT POSTS
  - ** 2 x 2 INCH OR 2 x4 INCH HARDWOOD POSTS.
  - ** THREE FEET LENGTH, MINIMUM.
- 1 x 2 INCH OR 1 x 3 INCH HARDWOOD CROSS BRACING LUMBER.
- LATHE.
- STAPLES OR NAILS.
- GEOTEXTILE FABRIC.

TABLE 2. GEOTEXTILE FABRIC SPECIFICATIONS FOR SILT FENCE (MINIMUM)

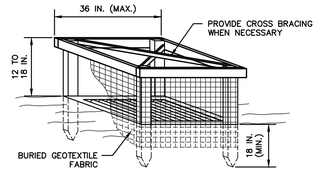
PHYSICAL PROPERTY	WOVEN GEOTEXTILE FABRIC	NON-WOVEN GEOTEXTILE FABRIC
FILTERING EFFICIENCY	85%	85%
UV RESISTANCE (INHIBITORS AND STABILIZERS TO ENSURE SIX MONTH MINIMUM LIFE AT TEMPERATURES 0° TO 120° F)	70%	85%
TEXTILE STRENGTH AT 20% ELONGATION STANDARD STRENGTH EXTRA STRENGTH	30 LBS. PER LINEAL INCH 50 LBS. PER LINEAL INCH	50 LBS. PER LINEAL INCH 70 LBS. PER LINEAL INCH
SLURRY FLOW RATE	0.3 GAL./MIN./SQUARE FOOT	4.5 GAL./MIN./SQUARE FOOT
WATER FLOW RATE	15 GAL./MIN./SQUARE FOOT	220 GAL./MIN./SQUARE FOOT

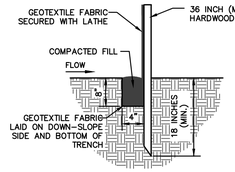
INSTALLATION
1. DIG AN EIGHT-INCH DEEP, FOUR-INCH WIDE TRENCH AROUND THE PERIMETER OF THE INLET.
2. IF USING PRE-ASSEMBLED GEOTEXTILE FABRIC AND POSTS, DRIVE THE POSTS INTO THE SOIL, TIGHTLY STRETCHING THE GEOTEXTILE FABRIC BETWEEN POSTS AS EACH IS DRIVEN. (POSTS MUST BE PLACED ON THE INLET SIDE OF THE ANCHOR TRENCH WITH THE GEOTEXTILE FABRIC ON THE SIDE OF THE TRENCH FARTHEST FROM THE INLET.)

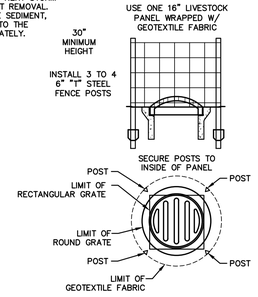
   NOTE: IF ASSEMBLING THE GEOTEXTILE FABRIC AND POSTS ON-SITE, DRIVE THE POSTS INTO THE SOIL AND THEN SECURE THE GEOTEXTILE FABRIC TO THE POSTS BY PLACING A PIECE OF LATHE OVER THE FABRIC AND FASTENING IT TO THE POST (STRETCHING THE FABRIC BETWEEN POSTS AS IT IS FASTENED).
3. USE THE WRAP JOIN METHOD WHEN JOINING POSTS.
4. PLACE THE BOTTOM 12 INCHES OF GEOTEXTILE FABRIC INTO THE EIGHT-INCH DEEP TRENCH, LAYING THE REMAINING FOUR INCHES IN THE BOTTOM OF THE TRENCH AND EXTENDING AWAY FROM THE INLET.
5. BACKFILL THE TRENCH WITH SOIL MATERIAL AND COMPACT IT IN PLACE.
6. BRACE THE POSTS BY NAILING BRACES INTO EACH CORNER POST OR UTILIZE RIGID PANELS TO SUPPORT FABRIC.

NOTE: IN SITUATIONS WHERE STORM WATER MAY BYPASS THE STRUCTURE, EITHER:
- SET THE TOP OF THE GEOTEXTILE FABRIC FILTER AT LEAST SIX INCHES LOWER THAN THE GROUND ELEVATION ON THE DOWN-SLOPE SIDE OF THE STORM DRAIN INLET,
- BUILD A TEMPORARY DIKE, COMPACTED TO SIX INCHES HIGHER THAN THE FABRIC, ON THE DOWN-SLOPE SIDE OF THE STORM DRAIN INLET, AND/OR
- USE IN CONJUNCTION WITH EXCAVATED DROP INLET PROTECTION.

MAINTENANCE
- INSPECT DAILY.
- INSPECT GEOTEXTILE FABRIC AND MAKE NEEDED REPAIRS IMMEDIATELY.
- REMOVE SEDIMENT FROM POOL AREA TO PROVIDE STORAGE FOR THE NEXT STORM EVENT. AVOID DAMAGING OR UNDERCUTTING FABRIC DURING SEDIMENT REMOVAL.
- WHEN CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE SEDIMENT, PROPERLY DISPOSE OF ALL CONSTRUCTION MATERIAL, GRADE AREA TO THE ELEVATION OF THE STORM DRAIN INLET TOP, THEN STABILIZE IMMEDIATELY.







NOTE: THIS MEASURE IS NOT RECOMMENDED FOR PAVED SURFACES DUE TO INABILITY TO ENTRENCH THE FABRIC AND LACK OF AN ANCHORING SYSTEM.

SILT FENCE INLET PROTECTION

NOT TO SCALE (REV. 01/17)

SEEDING SPECIFICATIONS

SEEDBED PREPARATION
- GRADE AND APPLY SOIL AMENDMENTS.

SEEDING FREQUENCY
- SEED FINAL GRADED AREAS DAILY WHILE SOIL IS STILL LOOSE AND MOIST.

DENSITY OF VEGETATIVE COVER
- NINETY PERCENT OR GREATER OVER THE SOIL SURFACE.

MATERIALS
- SOIL AMENDMENTS – SELECT MATERIALS AND RATES AS DETERMINED BY A SOIL TEST (CONTACT YOUR COUNTY SOIL AND WATER CONSERVATION DISTRICT OR COOPERATIVE EXTENSION OFFICE FOR ASSISTANCE AND SOIL INFORMATION, INCLUDING AVAILABLE SOIL TESTING SERVICES) OR 400 TO 600 POUNDS OF 12-12-12 ANALYSIS FERTILIZER, OR EQUIVALENT. CONSIDER THE USE OF REDUCED PHOSPHOROUS APPLICATION WHERE SOIL TESTS INDICATE ADEQUATE PHOSPHOROUS LEVELS IN THE SOIL PROFILE.
- SEED – SELECT APPROPRIATE PLANT SPECIES SEED OR SEED MIXTURES ON THE BASIS OF SOIL TYPE, SOIL pH, REGION OF THE STATE, TIME OF YEAR, AND INTENDED LAND USE OF THE AREA TO BE SEEDED (SEE TABLE 1).
- MULCH – STRAW, HAY, WOOD FIBER, ETC. (TO PROTECT SEEDBED, RETAIN MOISTURE, AND ENCOURAGE PLANT GROWTH). ANCHORED TO PREVENT REMOVAL BY WIND OR WATER OR COVERED WITH PREMANUFACTURED EROSION CONTROL BLANKETS.

SEEDING APPLICATIONS

SITE PREPARATION
1. GRADE THE SITE TO ACHIEVE POSITIVE DRAINAGE.
2. ADD TOPSOIL TO ACHIEVE NEEDED DEPTH FOR ESTABLISHMENT OF VEGETATION. (COMPOST MATERIAL MAY BE ADDED TO IMPROVE SOIL MOISTURE HOLDING CAPACITY, SOIL FRIABILITY, AND NUTRIENT AVAILABILITY.)

SEEDBED PREPARATION
1. TEST SOIL TO DETERMINE pH AND NUTRIENT LEVELS.
2. APPLY SOIL AMENDMENTS AS RECOMMENDED BY THE SOIL TEST AND WORK INTO THE UPPER TWO TO FOUR INCHES OF SOIL. IF TESTING IS NOT DONE, APPLY 400 TO 600 POUNDS PER ACRE OF 12-12-12 ANALYSIS FERTILIZER, OR EQUIVALENT.
3. TILL THE SOIL TO OBTAIN A UNIFORM SEEDBED. USE A DISK OR RAKE, OPERATED ACROSS THE SLOPE, TO WORK THE SOIL AMENDMENTS INTO THE UPPER TWO TO FOUR INCHES OF THE SOIL.

SEEDING
OPTIMUM SEEDING DATES ARE MARCH 1 TO MAY 10 AND AUGUST 10 TO SEPTEMBER 30. PERMANENT SEEDING DONE BETWEEN MAY 10 AND AUGUST 10 MAY NEED TO BE IRRIGATED. SEEDING OUTSIDE OR BEYOND OPTIMUM SEEDING DATES IS STILL POSSIBLE WITH THE UNDERSTANDING THAT RESEEDING OR OVERSEEDING MAY BE REQUIRED IF ADEQUATE SURFACE COVER IS NOT ACHIEVED. RESEEDING OR OVERSEEDING CAN BE EASILY ACCOMPLISHED IF THE SOIL SURFACE REMAINS WELL PROTECTED WITH MULCH.
1. SELECT A SEEDING MIXTURE AND RATE FROM TABLE 1. SELECT SEED MIXTURE BASED ON SITE CONDITIONS, SOIL pH, INTENDED LAND USE, AND EXPECTED LEVEL OF MAINTENANCE.
2. APPLY SEED UNIFORMLY WITH A DRILL OR CULTIPACKER SEEDER OR BY BROADCASTING. PLANT OR COVER THE SEED TO A DEPTH OF ONE-FOURTH TO ONE-HALF INCH. IF DRILLING OR BROADCASTING THE SEED, ENSURE GOOD SEED-TO-SOIL CONTACT BY FIRMING. THE SEEDBED WITH A ROLLER OR CULTIPACKER AFTER COMPLETING SEEDING OPERATIONS. (IF SEEDING IS DONE WITH A HYDROSEEDER, FERTILIZER AND MULCH CAN BE APPLIED WITH THE SEED IN A SLURRY MIXTURE.)
3. MULCH ALL SEEDED AREAS AND USE APPROPRIATE METHODS TO ANCHOR THE MULCH IN PLACE. CONSIDER USING EROSION CONTROL BLANKETS ON SLOPING AREAS AND CONVEYANCE CHANNELS.

SEEDING MAINTENANCE
- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS UNTIL THE VEGETATION IS SUCCESSFULLY ESTABLISHED.
- CHARACTERISTICS OF A SUCCESSFUL STAND INCLUDE VIGOROUS DARK GREEN OR BLUISH-GREEN SEEDLINGS WITH A UNIFORM VEGETATIVE COVER DENSITY OF 90 PERCENT OR MORE.
- CHECK FOR EROSION OR MOVEMENT OF MULCH.
- REPAIR DAMAGED, BARE, GULLIED, OR SPARSELY VEGETATED AREAS AND THEN FERTILIZE, RESEED, AND APPLY AND ANCHOR MULCH.
- IF PLANT COVER IS SPARSE OR PATCHY, EVALUATE THE PLANT MATERIALS CHOSEN, SOIL FERTILITY, MOISTURE CONDITION, AND MULCH APPLICATION; REPAIR AFFECTED AREAS EITHER BY OVERSEEDING OR PREPARING A NEW SEEDBED AND RESEEDING. APPLY AND ANCHOR MULCH ON THE NEWLY SEEDED AREAS.
- IF VEGETATION FAILS TO GROW, CONSIDER SOIL TESTING TO DETERMINE SOIL pH OR NUTRIENT DEFICIENCY PROBLEMS. (CONTACT YOUR SOIL AND WATER CONSERVATION DISTRICT OR COOPERATIVE EXTENSION OFFICE FOR ASSISTANCE.)
- IF ADDITIONAL FERTILIZATION IS NEEDED TO GET A SATISFACTORY STAND, DO SO ACCORDING TO SOIL TEST RECOMMENDATIONS.
- ADD FERTILIZER THE FOLLOWING GROWING SEASON. FERTILIZE ACCORDING TO SOIL TEST RECOMMENDATIONS.
- FERTILIZE TURF AREAS ANNUALLY. APPLY FERTILIZER IN A SPLIT APPLICATION. FOR COOL-SEASON GRASSES, APPLY ONE-HALF OF THE FERTILIZER IN LATE SPRING AND ONE-HALF IN EARLY FALL. FOR WARM-SEASON GRASSES, APPLY ONE-THIRD IN EARLY SPRING, ONE-THIRD IN LATE SPRING, AND THE REMAINING ONE-THIRD IN MIDDLE SUMMER.

TABLE 1. PERMANENT SEEDING RECOMMENDATIONS

THIS TABLE PROVIDES SEVERAL SEED MIXTURE OPTIONS. ADDITIONAL SEED MIXTURES ARE AVAILABLE COMMERCIALLY. WHEN SELECTING A MIXTURE, CONSIDER INTENDED LAND USE AND SITE CONDITIONS, INCLUDING SOIL PROPERTIES (E.G., SOIL pH AND DRAINAGE), SLOPE ASPECT, AND THE TOLERANCE OF EACH SPECIES TO SHADE AND DROUGHT.

OPEN LOW-MAINTENANCE AREAS
(REMAINING IDLE MORE THAN SIX MONTHS)

SEED MIXTURES	RATE PER ACRE PURE LIVE SEED	OPTIMUM SOIL pH
1. PERENNIAL RYEGRASS WHITE CLOVER*	70 LBS. 2 LBS.	5.6 TO 7.0
2. PERENNIAL RYEGRASS TALL FESCUE**	70 LBS. 50 LBS.	5.6 TO 7.0
3. TALL FESCUE** WHOOD CLOVER*	70 LBS. 2 LBS.	5.5 TO 7.5

STEEP BANKS AND CUTS, LOW-MAINTENANCE AREAS
(NOT MOWED)

SEED MIXTURES	RATE PER ACRE PURE LIVE SEED	OPTIMUM SOIL pH
1. SMOOTH BROME GRASS RED CLOVER*	35 LBS. 20 LBS.	5.5 TO 7.0
2. TALL FESCUE** WHITE CLOVER*	50 LBS. 2 LBS.	5.5 TO 7.5
3. TALL FESCUE** RED CLOVER*	50 LBS. 20 LBS.	5.5 TO 7.5
4. ORCHARD GRASS RED CLOVER* WHITE CLOVER*	30 LBS. 20 LBS. 2 LBS.	5.6 TO 7.0
5. CROWNVETCH* TALL FESCUE**	12 LBS. 30 LBS.	5.6 TO 7.0

LAWNS AND HIGH-MAINTENANCE AREAS

SEED MIXTURES	RATE PER ACRE PURE LIVE SEED	OPTIMUM SOIL pH
1. BLUEGRASS	140 LBS.	5.5 TO 7.0
2. PERENNIAL RYEGRASS (TURF TYPE)	60 LBS. 90 LBS.	5.6 TO 7.0
3. TALL FESCUE (TURF TYPE)** BLUEGRASS	170 LBS. 30 LBS.	5.6 TO 7.5

SEED MIXTURES	RATE PER ACRE PURE LIVE SEED	OPTIMUM SOIL pH
1. PERENNIAL RYEGRASS WHITE*	150 LBS. 2 LBS.	5.5 TO 7.0
2. KENTUCKY BLUEGRASS SMOOTH BROMEGRASS SWITCHGRASS TIMOTHY PERENNIAL RYEGRASS WHITE CLOVER**	20 LBS. 10 LBS. 3 LBS. 4 LBS. 10 LBS. 2 LBS.	5.5 TO 7.5
3. TALL FESCUE* WHITE CLOVER**	150 LBS. 2 LBS.	5.5 TO 7.5
4. TALL FESCUE** PERENNIAL RYEGRASS KENTUCKY BLUEGRASS	150 LBS. 20 LBS. 20 LBS.	5.5 TO 7.5

*FOR BEST RESULTS: (A) LEGUME SEED SHOULD BE INOCULATED; (B) SEEDING MIXTURES CONTAINING LEGUMES SHOULD PREFERABLY BE SPRING-SEEDED, ALTHOUGH THE GRASS MAY BE FALL-SEEDED AND THE LEGUME FROST-SEEDED; AND (C) IF LEGUMES ARE FALL-SEEDED, DO SO IN EARLY FALL.

**TALL FESCUE PROVIDES LITTLE COVER FOR, AND MAY BE TOXIC TO SOME SPECIES OF WILDLIFE. THE INDIANA DEPARTMENT OF NATURAL RESOURCES RECOGNIZES THE NEED FOR ADDITIONAL RESEARCH ON ALTERNATIVES SUCH AS BUFFALOGRASS, ORCHARDGRASS, SMOOTH BROMEGRASS, AND SWITCHGRASS. THIS RESEARCH, IN CONJUNCTION WITH DEMONSTRATION AREAS, SHOULD FOCUS ON EROSION CONTROL CHARACTERISTICS, WILDLIFE TOXICITY, TURF DISABILITY, AND DROUGHT RESISTANCE.

NOTES:
1. AN OAT OR WHEAT COMPANION OR NURSE CROP MAY BE USED WITH ANY OF THE ABOVE PERMANENT SEEDING MIXTURES, AT THE FOLLOWING RATES:
   A. SPRING OATS – ONE-FOURTH TO THREE-FOURTHS BUSHEL PER ACRE
   B. WHEAT – NO MORE THAN ONE-HALF BUSHEL PER ACRE
2. A HIGH POTENTIAL FOR FERTILIZER, SEED, AND MULCH TO WASH EXISTS ON STEEP BANKS, CUTS, AND IN CHANNELS AND AREAS OF CONCENTRATED FLOW.

MULCH SPECIFICATIONS

MATERIALS

TABLE 1. SLOPE STEEPNESS RESTRICTIONS

MATERIAL*	RATE PER ACRE	COMMENTS
STRAW OR HAY	2 TONS	SHOULD BE DRY, FREE OF UNDESIRABLE SEEDS. SPREAD BY HAND OR MACHINE. MUST BE CRIMPED OR ANCHORED (SEE TABLE 2).
WOOD FIBER OR CELLULOSE	1 TON	APPLY WITH A HYDRAULIC MULCH MACHINE AND USE WITH TACKING AGENT.

*MULCHING IS NOT RECOMMENDED IN CONCENTRATED FLOWS. CONSIDER EROSION CONTROL BLANKETS OR OTHER STABILIZATION METHODS.

COVERAGE
- THE MULCH SHOULD HAVE A UNIFORM DENSITY OF AT LEAST 75 PERCENT OVER THE SOIL SURFACE.

ANCHORING

TABLE 2. MULCH ANCHORING METHODS

ANCHORING METHOD*	HOW TO APPLY
MULCH ANCHORING TOOL OR FARM DISK (DULL, SERRATED, AND BLADES SET STRAIGHT)	CRIMP OR PUNCH THE STRAW OR HAY TWO TO FOUR INCHES INTO THE SOIL. OPERATE MACHINERY ON THE CONTOUR OF THE SLOPE.
CLEATING WITH DOZER TRACKS	OPERATE DOZER UP AND DOWN SLOPE TO PREVENT FORMATION OF RILLS BY DOZER CLEATS.
WOOD HYDROMULCH FIBERS	APPLY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
SYNTHETIC TACKIFIERS, BINDERS, OR SOIL STABILIZERS	APPLY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
NETTING (SYNTHETIC OR BIODEGRADABLE MATERIAL)	INSTALL NETTING IMMEDIATELY AFTER APPLYING MULCH. ANCHOR NETTING WITH STAPLES. EDGES OF NETTING STRIPS SHOULD OVERLAP WITH EACH UP-SLOPE STRIP OVERLAPPING FOUR TO SIX INCHES OVER THE ADJACENT DOWN-SLOPE STRIP. BEST SUITED TO SLOPE APPLICATIONS. IN MOST INSTANCES, INSTALLATION DETAILS ARE SITE SPECIFIC, SO MANUFACTURER'S RECOMMENDATIONS SHOULD BE FOLLOWED.

*ALL FORMS OF MULCH MUST BE ANCHORED TO PREVENT DISPLACEMENT BY WIND AND/OR WATER.

MULCH APPLICATION
1. APPLY MULCH AT THE RECOMMENDED RATE SHOWN IN TABLE 1.
2. SPREAD THE MULCH MATERIAL UNIFORMLY BY HAND, HAYFORK, MULCH BLOWER, OR HYDRAULIC MULCH MACHINE. AFTER SPREADING, NO MORE THAN 25 PERCENT OF THE GROUND SHOULD BE VISIBLE.
3. ANCHOR STRAW OR HAY MULCH IMMEDIATELY AFTER APPLICATION. THE MULCH CAN BE ANCHORED USING ONE OF THE METHODS LISTED BELOW:
   a. CRIMP WITH A MULCH ANCHORING TOOL, A WEIGHTED FARM DISK WITH DULL SERRATED BLADES SET STRAIGHT, OR TRACK CLEATS OF A BULLDOZER.
   b. APPLY HYDRAULIC MULCH WITH SHORT CELLULOSE FIBERS,
   c. APPLY A LIQUID TACKIFIER, OR
   d. COVER WITH NETTING SECURED BY STAPLES.

MULCH MAINTENANCE
- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- CHECK FOR EROSION OR MOVEMENT OF MULCH; REPAIR DAMAGED AREAS, RESEED, APPLY NEW MULCH AND ANCHOR THE MULCH IN PLACE.
- CONTINUE INSPECTIONS UNTIL VEGETATION IS FIRMLY ESTABLISHED.
- IF EROSION IS SEVER OR RECURRING, USE EROSION CONTROL BLANKETS OR OTHER MORE SUBSTANTIAL STABILIZATION METHODS TO PROTECT THE AREA.

PERMANENT SEEDING WITH MULCH

NOT TO SCALE (REV. 01/17)

SEEDING SPECIFICATIONS

SEEDBED PREPARATION
- GRADE AND APPLY SOIL AMENDMENTS.

SEEDING FREQUENCY
- SEED ROUGH GRADED AREAS DAILY WHILE SOIL IS STILL LOOSE AND MOIST.

DENSITY OF VEGETATIVE COVER
- EIGHTY PERCENT OR GREATER OVER THE SOIL SURFACE.

MATERIALS
- SOIL AMENDMENTS – SELECT MATERIALS AND RATES AS DETERMINED BY A SOIL TEST (CONTACT YOUR COUNTY SOIL AND WATER CONSERVATION DISTRICT OR COOPERATIVE EXTENSION OFFICE FOR ASSISTANCE AND SOIL INFORMATION, INCLUDING AVAILABLE SOIL TESTING SERVICES) OR 400 TO 600 POUNDS OF 12-12-12 ANALYSIS FERTILIZER, OR EQUIVALENT. CONSIDER THE USE OF REDUCED PHOSPHOROUS APPLICATION WHERE SOIL TESTS INDICATE ADEQUATE PHOSPHOROUS LEVELS IN THE SOIL PROFILE.
- SEED – SELECT APPROPRIATE PLANT SPECIES SEED OR SEED MIXTURES ON THE BASIS OF QUICK GERMINATION, GROWTH, AND TIME OF YEAR TO BE SEEDED (SEE TABLE 1).
- MULCH – STRAW, HAY, WOOD FIBER, ETC. (TO PROTECT SEEDBED, RETAIN MOISTURE, AND ENCOURAGE PLANT GROWTH). ANCHORED TO PREVENT REMOVAL BY WIND OR WATER OR COVERED WITH MANUFACTURED EROSION CONTROL BLANKETS.

TABLE 1. SLOPE STEEPNESS RESTRICTIONS

SEED SPECIES*	RATE PER ACRE	PLANTING DEPTH	OPTIMUM DATES**
WHEAT OR RYE	150 LBS.	1 TO 1-1/2 INCHES	SEPT. 15–OCT. 30
SPRING OATS	100 LBS.	1 INCH	MARCH 1–APRIL 15
ANNUAL RYEGRASS	40 LBS.	1/4 INCH	MARCH 1–MAY 1 AUG. 1–SEPT. 1
GERMAN MILLET	40 LBS.	1 TO 2 INCHES	MAY 1–JUNE 1
SUDANGRASS	35 LBS.	1 TO 2 INCHES	MAY 1–JULY 30
BUCKWHEAT	60 LBS.	1 TO 2 INCHES	APRIL 15–JUNE 1
CORN (BROADCAST)	300 LBS.	1 TO 2 INCHES	MAY 11–AUG. 10
SORGHUM	35 LBS.	1 TO 2 INCHES	MAY 1–AUGUST 15

*PERENNIAL SPECIES MAY BE USED AS A TEMPORARY COVER, ESPECIALLY IF THE AREA TO BE SEEDED WILL REMAIN IDLE FOR MORE THAN ONE YEAR.
**SEEDING DONE OUTSIDE THE OPTIMUM SEEDING DATES INCREASES THE CHANCES OF SEEDING FAILURE. DATES MAY BE EXTENDED OR SHORTENED BASED ON THE LOCATION OF THE PROJECT WITHIN THE STATE.

NOTES:
MULCH ALONE IS AN ACCEPTABLE TEMPORARY COVER AND MAY BE USED IN LIEU OF TEMPORARY SEEDING, PROVIDED THAT IT IS APPROPRIATELY ANCHORED.

A HIGH POTENTIAL FOR FERTILIZER, SEED, AND MULCH TO WASH EXISTS ON STEEP BANKS, CUTS, AND IN CHANNELS AND AREAS OF CONCENTRATED FLOW.

SEEDING APPLICATION

SEEDBED PREPARATION
1. TEST SOIL TO DETERMINE pH AND NUTRIENT LEVELS.
2. APPLY SOIL AMENDMENTS AS RECOMMENDED BY THE SOIL TEST. IF TESTING IS NOT DONE, APPLY 400 TO 600 POUNDS PER ACRE OF 12-12-12 ANALYSIS FERTILIZER, OR EQUIVALENT.
3. WORK THE SOIL AMENDMENTS INTO THE UPPER TWO TO FOUR INCHES OF THE SOIL WITH A DISK OR RAKE OPERATED ACROSS THE SLOPE.

SEEDING
1. SELECT A SEED SPECIES OR AN APPROPRIATE SEED MIXTURE AND APPLICATION RATE FROM TABLE 1.
2. APPLY SEED UNIFORMLY WITH A DRILL OR CULTIPACKER SEEDER OR BY BROADCASTING. PLANT OR COVER SEED TO THE DEPTH SHOWN IN TABLE 1.

   NOTES:
   1. IF DRILLING OR BROADCASTING THE SEED, ENSURE GOOD SEED-TO-SOIL CONTACT BY FIRMING THE SEEDBED WITH A ROLLER OR CULTIPACKER AFTER COMPLETING SEED OPERATIONS.
   2. DAILY SEEDING WHEN THE SOIL IS MOIST IS USUALLY MOST EFFECTIVE.
   3. IF SEEDING IS DONE WITH A HYDROSEEDER, FERTILIZER AND MULCH CAN BE APPLIED WITH THE SEED IN A SLURRY MIXTURE.
3. APPLY MULCH AND ANCHOR IT IN PLACE.

SEEDING MAINTENANCE
- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- CHECK FOR EROSION OR MOVEMENT OF MULCH AND REPAIR IMMEDIATELY.
- MONITOR FOR EROSION DAMAGE AND ADEQUATE COVER (80 PERCENT DENSITY); RESEED, FERTILIZE, AND APPLY MULCH WHERE NECESSARY.
- IF NITROGEN DEFICIENCY IS APPARENT, TOP-DRESS FALL SEEDED WHEAT OR RYE SEEDING WITH 50 POUNDS PER ACRE OF NITROGEN IN FEBRUARY OR MARCH.

MULCH SPECIFICATIONS

MATERIALS

TABLE 1. SLOPE STEEPNESS RESTRICTIONS

MATERIAL*	RATE PER ACRE	COMMENTS
STRAW OR HAY	2 TONS	SHOULD BE DRY, FREE OF UNDESIRABLE SEEDS. SPREAD BY HAND OR MACHINE. MUST BE CRIMPED OR ANCHORED (SEE TABLE 2).
WOOD FIBER OR CELLULOSE	1 TON	APPLY WITH A HYDRAULIC MULCH MACHINE AND USE WITH TACKING AGENT.

*MULCHING IS NOT RECOMMENDED IN CONCENTRATED FLOWS. CONSIDER EROSION CONTROL BLANKETS OR OTHER STABILIZATION METHODS.

COVERAGE
- THE MULCH SHOULD HAVE A UNIFORM DENSITY OF AT LEAST 75 PERCENT OVER THE SOIL SURFACE.

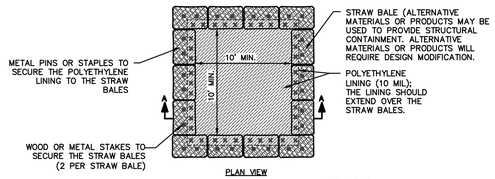
ANCHORING

TABLE 2. MULCH ANCHORING METHODS

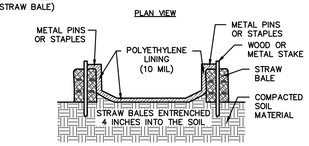
ANCHORING METHOD*	HOW TO APPLY
MULCH ANCHORING TOOL OR FARM DISK (DULL, SERRATED, AND BLADES SET STRAIGHT)	CRIMP OR PUNCH THE STRAW OR HAY TWO TO FOUR INCHES INTO THE SOIL. OPERATE MACHINERY ON THE CONTOUR OF THE SLOPE.
CLEATING WITH DOZER TRACKS	OPERATE DOZER UP AND DOWN SLOPE TO PREVENT FORMATION OF RILLS BY DOZER CLEATS.
WOOD HYDROMULCH FIBERS	APPLY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
SYNTHETIC TACKIFIERS, BINDERS, OR SOIL STABILIZERS	APPLY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
NETTING (SYNTHETIC OR BIODEGRADABLE MATERIAL)	INSTALL NETTING IMMEDIATELY AFTER APPLYING MULCH. ANCHOR NETTING WITH STAPLES. EDGES OF NETTING STRIPS SHOULD OVERLAP WITH EACH UP-SLOPE STRIP OVERLAPPING FOUR TO SIX INCHES OVER THE ADJACENT DOWN-SLOPE STRIP. BEST SUITED TO SLOPE APPLICATIONS. IN MOST INSTANCES, INSTALLATION DETAILS ARE SITE SPECIFIC, SO MANUFACTURER'S RECOMMENDATIONS SHOULD BE FOLLOWED.

*ALL FORMS OF MULCH MUST BE ANCHORED TO PREVENT DISPLACEMENT BY WIND AND/OR WATER.

MULCH APPLICATION
1. APPLY MULCH AT THE RECOMMENDED RATE SH

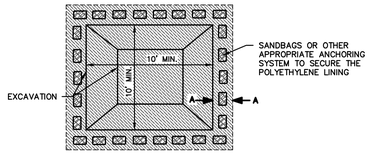


PLAN VIEW

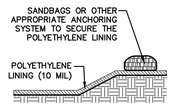


SECTION A–A

ABOVE GRADE SYSTEM



PLAN VIEW



SECTION A–A

BELOW GRADE SYSTEM

MATERIALS
- MINIMUM OF TEN MIL POLYETHYLENE SHEETING THAT IS FREE OF HOLES, TEARS, AND OTHER DEFECTS. THE SHEETING SELECTED SHOULD BE OF AN APPROPRIATE SIZE TO FIT THE WASHOUT SYSTEM WITHOUT SEAMS OR OVERLAP OF THE LINING (DESIGNED AND INSTALLED SYSTEMS).
- SIGNAGE.
- ORANGE SAFETY FENCING OR EQUIVALENT.
- STRAW BALES, SANDBAGS (BAGS SHOULD BE ULTRAVIOLET–STABILIZED GEOTEXTILE FABRIC), SOIL MATERIAL, OR OTHER APPROPRIATE MATERIALS THAT CAN BE USED TO CONSTRUCT A CONTAINMENT SYSTEM (ABOVE GRADE SYSTEMS).
- METAL PINS OR STAPLES AT A MINIMUM OF SIX INCHES IN LENGTH, SANDBAGS, OR ALTERNATIVE FASTENER TO SECURE POLYETHYLENE LINING TO THE CONTAINMENT SYSTEM.
- NON–COLLAPSING AND NON–WATER HOLDING COVER FOR USE DURING RAIN EVENTS (OPTIONAL).

INSTALLATION

PREFABRICATED WASHOUT SYSTEMS/CONTAINERS
- INSTALL AND LOCATE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

DESIGNED AND INSTALLED SYSTEMS
- UTILIZE AND FOLLOW THE DESIGN IN THE STORM WATER POLLUTION PREVENTION PLAN TO INSTALL THE SYSTEM.
- DEPENDENT UPON THE TYPE OF SYSTEM, EITHER EXCAVATE THE PIT OR INSTALL THE CONTAINMENT SYSTEM.
- A BASE SHALL BE CONSTRUCTED AND PREPARED THAT IS FREE OF ROCKS AND OTHER DEBRIS THAT MAY CAUSE TEARS OR PUNCTURES IN THE POLYETHYLENE LINING.
- INSTALL THE POLYETHYLENE LINING. FOR EXCAVATED SYSTEMS, THE LINING SHOULD EXTEND OVER THE ENTIRE EXCAVATION. THE LINING FOR BERMED SYSTEMS SHOULD BE INSTALLED OVER THE POOLING AREA WITH ENOUGH MATERIAL TO EXTEND THE LINING OVER THE BERM OR CONTAINMENT SYSTEM. THE LINING SHOULD BE SECURED WITH PINS, STAPLES, OR OTHER FASTENERS.
- PLACE FLAGS, SAFETY FENCING, OR EQUIVALENT TO PROVIDE A BARRIER TO CONSTRUCTION EQUIPMENT AND OTHER TRAFFIC.
- PLACE A NON–COLLAPSING, NON–WATER HOLDING COVER OVER THE WASHOUT FACILITY PRIOR TO A PREDICTED RAINFALL EVENT TO PREVENT ACCUMULATION OF WATER AND POSSIBLE OVERFLOW OF THE SYSTEM (OPTIONAL).
- INSTALL SIGNAGE THAT IDENTIFIES CONCRETE WASHOUT AREAS.
- POST SIGNS DIRECTING CONTRACTORS AND SUPPLIERS TO DESIGNATED LOCATIONS.
- WHERE NECESSARY, PROVIDE STABLE INGRESS AND EGRESS OR ALTERNATIVE APPROACH PAD FOR CONCRETE WASHOUT SYSTEMS.

MAINTENANCE
- INSPECT DAILY AND AFTER EACH STORM EVENT.
- INSPECT THE INTEGRITY OF THE OVERALL STRUCTURE INCLUDING, WHERE APPLICABLE, THE CONTAINMENT SYSTEM.
- INSPECT THE SYSTEM FOR LEAKS, SPILLS, AND TRACKING OF SOIL BY EQUIPMENT.
- INSPECT THE POLYETHYLENE LINING FOR FAILURE, INCLUDING TEARS AND PUNCTURES.
- ONCE CONCRETE WASTES HARDEN, REMOVE AND DISPOSE OF THE MATERIAL.
- EXCESS CONCRETE SHOULD BE REMOVED WHEN THE WASHOUT SYSTEM REACHES 50 PERCENT OF THE DESIGN CAPACITY. USE OF THE SYSTEM SHOULD BE DISCONTINUED UNTIL APPROPRIATE MEASURES CAN BE INITIATED TO CLEAN THE STRUCTURE. PREFABRICATED SYSTEMS SHOULD ALSO UTILIZE THIS CRITERION, UNLESS THE MANUFACTURER HAS ALTERNATE SPECIFICATIONS.
- UPON REMOVAL OF THE SOLIDS, INSPECT THE STRUCTURE. REPAIR THE STRUCTURE AS NEEDED OR CONSTRUCT A NEW SYSTEM.
- DISPOSE OF ALL CONCRETE IN A LEGAL MANNER. REUSE THE MATERIAL ON SITE, RECYCLE OR HAUL THE MATERIAL TO AN APPROVED CONSTRUCTION/DEMOLITION LANDFILL SITE. RECYCLING OF MATERIAL IS ENCOURAGED. THE WASTE MATERIAL CAN BE USED FOR MULTIPLE APPLICATIONS INCLUDING BUT NOT LIMITED TO ROADBEDS AND BUILDING. THE AVAILABILITY FOR RECYCLING SHOULD BE CHECKED LOCALLY.
- THE PLASTIC LINER SHOULD BE REPLACED AFTER EVERY CLEANING; THE REMOVAL OF MATERIAL WILL USUALLY DAMAGE THE LINING.
- THE CONCRETE WASHOUT SYSTEM SHOULD BE REPAIRED OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE.
- CONCRETE WASHOUT SYSTEMS ARE DESIGNED TO PROMOTE EVAPORATION. HOWEVER, IF THE LIQUIDS DO NO EVAPORATE AND THE SYSTEM IS NEAR CAPACITY IT MAY BE NECESSARY TO VACUUM OR REMOVE THE LIQUIDS AND DISPOSE OF THEM IN AN ACCEPTABLE METHOD. DISPOSAL MAY BE ALLOWED AT THE LOCAL SANITARY SEWER AUTHORITY PROVIDED THEIR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS ALLOW FOR ACCEPTANCE OF THIS MATERIAL. ANOTHER OPTION WOULD BE TO UTILIZE A SECONDARY CONTAINMENT SYSTEM OR BASIN FOR FUTURE DEWATERING.
- PREFABRICATED UNITS ARE OFTEN PUMPED AND THE COMPANY SUPPLYING THE UNIT PROVIDES THIS SERVICE.
- INSPECT CONSTRUCTION ACTIVITIES ON A REGULAR BASIS TO ENSURE SUPPLIERS, CONTRACTORS, AND OTHERS ARE UTILIZING DESIGNATED WASHOUT AREAS. IF CONCRETE WASTE IS BEING DISPOSED OF IMPROPERLY, IDENTIFY THE VIOLATORS AND TAKE APPROPRIATE ACTION.
- WHEN CONCRETE WASHOUT SYSTEMS ARE NO LONGER REQUIRED, THE CONCRETE WASHOUT SYSTEMS SHALL BE CLOSED. DISPOSE OF ALL HARDENED CONCRETE AND OTHER MATERIALS USED TO CONSTRUCT THE SYSTEM.
- HOLES, DEPRESSIONS AND OTHER LAND DISTURBANCES ASSOCIATED WITH THE SYSTEM SHOULD BE BACKFILLED, GRADED, AND STABILIZED.

SPECIFICATIONS

SITE MANAGEMENT
- COMPLETE CONSTRUCTION/INSTALLATION OF THE SYSTEM AND HAVE WASHOUT LOCATIONS OPERATIONAL PRIOR TO CONCRETE DELIVERY.
- DO NOT WASH OUT CONCRETE TRUCKS OR EQUIPMENT INTO STORM DRAINS, WETLANDS, STREAMS, RIVERS, CREEKS, DITCHES, OR STREETS.
- NEVER WASH OUT INTO A STORM SEWER DRAINAGE SYSTEM. THESE SYSTEMS ARE TYPICALLY CONNECTED TO A NATURAL CONVEYANCE SYSTEM.
- WHERE NECESSARY, PROVIDE STABLE INGRESS AND EGRESS.
- IT IS RECOMMENDED THAT WASHOUT SYSTEMS BE RESTRICTED TO WASHING CONCRETE FROM MIXER AND PUMP TRUCKS AND NOT USED TO DISPOSE OF EXCESS CONCRETE OR RESIDUAL LOADS DUE TO THE POTENTIAL TO EXCEED THE DESIGN CAPACITY OF THE WASHOUT SYSTEM. SMALL AMOUNTS OF EXCESS OR RESIDUAL CONCRETE (NOT WASHOUT WATER) MAY BE DISPOSED OF IN AREAS THAT WILL NOT RESULT IN FLOW TO AN AREA THAT IS TO BE PROTECTED.
- INSTALL SYSTEMS AT STRATEGIC LOCATIONS THAT ARE CONVENIENT AND IN CLOSE PROXIMITY TO WORK AREAS AND IN SUFFICIENT NUMBER TO ACCOMMODATE THE DEMAND FOR DIPOSAL.
- INSTALL SIGNAGE IDENTIFYING THE LOCATION OF CONCRETE WASHOUT SYSTEMS.

LOCATION
- LOCATE CONCRETE WASHOUT SYSTEMS AT LEAST 50 FEET FROM ANY CREEKS, WETLANDS, DITCHEST, KARST FEATURES, OR STORM DRAINS/MANMADE CONVEYANCE SYSTEMS.
- TO THE EXTENT PRACTICAL, LOCATE CONCRETE WASHOUT SYSTEMS IN RELATIVELY FLAT AREAS THAT HAVE ESTABLISHED VEGETATIVE COVER AND DO NOT RECEIVE RUNOFF FROM ADJACENT LAND AREAS.
- LOCATE IN AREAS THAT PROVIDE EASY ACCESS FOR CONCRETE TRUCKS AND OTHER CONSTRUCTION EQUIPMENT.
- LOCATE AWAY FROM OTHER CONSTRUCTION TRAFFIC TO REDUCE THE POTENTIAL FOR DAMAGE TO THE SYSTEM.

GENERAL DESIGN CONSIDERATIONS
- THE STRUCTURE OR SYSTEM SHALL BE DESIGNED TO CONTAIN THE ANTICIPATED WASHOUT WATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- THE SYSTEM SHALL BE DESIGNED, TO THE EXTENT PRACTICAL, TO ELIMINATE RUNOFF FROM ENTERING THE WASHOUT SYSTEM.
- RUNOFF FROM A RAINSTORM OR SNOWMELT SHOULD NOT CARRY WASTES AWAY FROM THE WASHOUT LOCATION.
- WASHOUT WILL NOT IMPACT FUTURE LAND USES (I.E., OPEN SPACES, LANDSCAPED AREAS, HOME SITES, PARKS).
- WASHOUT SYSTEMS/CONTAINMENTS MEASURES MAY ALSO BE UTILIZED ON SMALLER INDIVIDUAL BUILDING SITES. THE DESIGN AND SIZE OF THE SYSTEM CAN BE ADJUSTED TO ACCOMMODATE THE EXPECTED CAPACITY.

PREFABRICATED WASHOUT SYSTEMS/CONTAINERS
- SELF–CONTAINED STURDY CONTAINMENT SYSTEMS THAT ARE DELIVERED TO A SITE AND LOCATED AT STRATEGIC LOCATIONS FOR CONCRETE DISPOSAL.
- THESE SYSTEMS ARE MANUFACTURED TO RESIST DAMAGE FROM CONSTRUCTION EQUIPMENT AND PROTECT AGAINST LEAKS OR SPILLS.
- MANUFACTURER OR SUPPLIER PROVIDES THE CONTAINERS. THE PROJECT SITE MANAGER MAINTAINS THE SYSTEM OR THE SUPPLIER PROVIDES COMPLETE SERVICE THAT INCLUDES MAINTENANCE AND DISPOSAL.
- UNITS ARE OFTEN AVAILABLE WITH OR WITHOUT RAMPS. UNITS WITH RAMPS LEND THEMSELVES TO ACCOMMODATE PUMP TRUCKS.
- MAINTAIN ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

DESIGNED AND INSTALLED UNITS

THESE UNITS ARE DESIGNED AND INSTALLED ON SITE. THEY TEND TO BE LESS RELIABLE THAN PREFABRICATED SYSTEMS ARE OFTEN PRONE TO FAILURE. CONCRETE WASHOUT SYSTEMS CAN BE CONSTRUCTED ABOVE OR BELOW GRADE. IT IS NOT UNCOMMON TO HAVE A SYSTEM THAT IS PARTLY BELOW GRADE WITH AN ADDITIONAL CONTAINMENT STRUCTURE ABOVE GRADE.
- WASHOUT SYSTEMS SHALL UTILIZE A PIT OR BERMED AREA DESIGNED AND MAINTAINED AT A CAPACITY TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- THE VOLUME OF THE SYSTEM MUST ALSO BE DESIGNED TO CONTAIN RUNOFF THAT DRAINS TO THE SYSTEM AND RAINFALL THAT ENTERS THE SYSTEM FOR A TWO–YEAR FREQUENCY, 24–HOUR STORM EVENT.

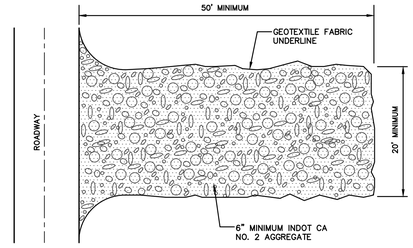
BELOW GRADE SYSTEM
- A WASHOUT SYSTEM INSTALLED BELOW GRADE SHOULD BE A MINIMUM OF TEN FEET WIDE BY TEN FEET LONG, BUT SIZED TO CONTAIN ALL LIQUID AND WASTE THAT IS EXPECTED TO BE GENERATED BETWEEN SCHEDULED CLEANOUT PERIODS. THE SIZE OF THE PIT MAY BE LIMITED BY THE SIZE OF THE POLYETHYLENE AVAILABLE. THE POLYETHYLENE LINING SHOULD BE ADEQUATE SIZE TO EXTEND OVER THE ENTIRE EXCAVATION.
- INCLUDE A MINIMUM 12–INCH FREEBOARD TO REASONABLY ENSURE THAT THE STRUCTURE WILL NOT OVERTOP DURING A RAIN EVENT.
- LINE THE PIT WITH TEN MIL POLYETHYLENE LINING TO CONTROL SEEPAGE.
- THE BOTTOM OF EXCAVATED PIT SHOULD BE ABOVE THE SEASONAL HIGH WATER TABLE.

ABOVE GRADE SYSTEM
- A SYSTEM DESIGNED AND BUILT ABOVE GRADE SHOULD BE A MINIMUM OF TEN FEET WIDE BY TEN FEET LONG, BUT SIZED TO CONTAIN ALL LIQUID AND WASTE THAT IS EXPECTED TO BE GENERATED BETWEEN SCHEDULED CLEANOUT PERIODS. THE SIZE OF THE CONTAINMENT SYSTEM MAY BE LIMITED BY THE SIZE OF POLYETHYLENE AVAILABLE. THE POLYETHYLENE LINING SHOULD BE OF ADEQUATE SIZE TO EXTEND OVER THE BERM OR CONTAINMENT SYSTEM.
- THE SYSTEM DESIGN MAY UTILIZE AN EARTHEN BERM, STRAW BALES, SANDBAGS, OR OTHER ACCEPTABLE BARRIERS THAT WILL MAINTAIN ITS SHAPE AND INTEGRITY AND SUPPORT THE POLYETHYLENE LINING.
- INCLUDE A MINIMUM FOUR–INCH FREEBOARD AS PART OF THE DESIGN.

WASHOUT PROCEDURES
- DO NOT LEAVE EXCESS MUD IN THE CHUTES OR HOPPER AFTER THE POUR. EVERY EFFORT SHOULD BE MADE TO EMPTY THE CHUTES AND HOPPER AT THE POUR. THE LESS MATERIAL LEFT IN THE CHUTES AND HOPPER, THE QUICKER AND EASIER THE CLEANOUT. SMALL AMOUNTS OF EXCESS CONCRETE (NOT WASHOUT WATER) MAY BE DISPOSED OF IN AREAS THAT WILL NOT RESULT IN FLOW TO AN AREA THAT IS TO BE PROTECTED.
- AT THE WASHOUT LOCATION, SCRAPE AS MUCH MATERIAL FROM THE CHUTES AS POSSIBLE BEFORE WASHING THEM. USE NON–WATER CLEANING METHODS TO MINIMIZE THE CHANCE FOR WASTE TO FLOW OFF SITE.
- REMOVE AS MUCH MUD AS POSSIBLE WHEN WASHING OUT.
- STOP WASHING OUT IN AN AREA IF YOU OBSERVE WATER RUNNING OFF THE DESIGNATED AREA OR IF THE CONTAINMENT SYSTEM IS LEAKING OR OVERFLOWING AND INEFFECTIVE.
- DO NOT BACK FLUSH EQUIPMENT AT THE PROJECT SITE. BACK FLUSHING SHOULD BE RESTRICTED TO THE PLANT AS IT GENERATES LARGE VOLUMES OF WASTE THAT MORE THAN LIKELY WILL EXCEED THE CAPACITY OF MOST WASHOUT SYSTEMS. IF AN EMERGENCY ARISES, BACK FLUSH SHOULD ONLY BY PERFORMED WITH THE PERMISSION OF AN ON–SITE MANAGER FOR THE PROJECT.
- DO NOT USE ADDITIVES WITH WASH WATER. DO NOT USE SOLVENTS OR ACIDS THAT MAY BE USED AT THE TARGET PLANT.

CONCRETE WASH OUT

NOT TO SCALE (REV. 01/17)



SPECIFICATIONS

LOCATION
- AVOID LOCATING ON STEEP SLOPES OR AT CURVES IN PUBLIC ROADS.

DIMENSIONS
- WIDTH: TWENTY (20) FEET MINIMUM OR FULL WIDTH OF ENTRANCE/EXIT DRIVE, WHICHEVER IS GREATER.
- LENGTH: FIFTY (50) FEET MINIMUM OR FULL LENGTH OF DRIVE, WHICHEVER IS GREATER.
- THICKNESS: SIX (6) INCHES MINIMUM.

MATERIALS
- ONE (1) TO TWO AND ONE–HALF (2–1/2) INCH DIAMETER WASHED AGGREGATE (INDOT CA NO. 2).
- ONE–HALF (1/2) TO ONE AND ONE–HALF (1–1/2) INCH WASHED AGGREGATE (INDOT CA NO. 53); OPTIONAL, USED PRIMARILY WHERE THE PURPOSE OF THE PAD IS TO KEEP SOIL FROM ADHERING TO VEHICLE TIRES.
- GEOTEXTILE FABRIC UNDERLAYMENT (USED AS A SEPARATE LAYER TO PREVENT INTERMIXING OF AGGREGATE AND THE UNDERLYING SOIL MATERIAL AND TO PROVIDE GREATER BEARING STRENGTH WHEN ENCOUNTERING WET CONDITIONS OR SOILS WITH SEASONAL HIGH WATER TABLE LIMITATIONS).

INSTALLATION
1. REMOVE ALL VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA.
2. GRADE THE FOUNDATION AND CROWN FOR POSITIVE DRAINAGE.
3. INSTALL A CULVERT PIPE UNDER THE PAD IF NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.
4. IF WET CONDITIONS ARE ANTICIPATED, PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY.
5. PLACE AGGREGATE (INDOT CA NO. 2) TO THE DIMENSIONS AND GRADE SHOWN IN THE CONSTRUCTION PLANS, LEAVING THE SURFACE SMOOTH AND SLOPED FOR DRAINAGE.
6. WHERE POSSIBLE, DIVERT ALL STORM WATER RUNOFF AND DRAINAGE FROM THE TEMPORARY CONSTRUCTION INGRESS/EGRESS PAD TO A SEDIMENT TRAP OR BASIN.

MAINTENANCE
- INSPECT DAILY.
- RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
- TOP–DRESS WITH CLEAN AGGREGATE AS NEEDED.
- IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS.
- FLUSHING SHOULD ONLY BE USED IF THE WATER FROM THE CONSTRUCTION DRIVE CAN BE CONVEYED INTO A SEDIMENT TRAP OR BASIN.

GRAVEL CONSTRUCTION ENTRANCE (SITES LESS THAN TWO ACRES)

NOT TO SCALE (REV. 01/17)

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY

NOBLE COUNTY HIGHWAY DEPARTMENT RENNOVATION

1118 E MAIN ST,
ALBION, IN 46701

MICHAEL E. JONES
REGISTERED
No. 12400867
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

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03.27.2026
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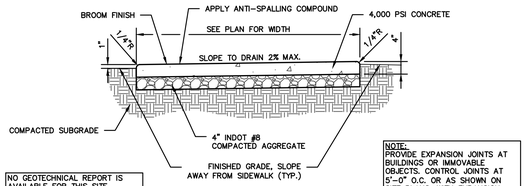
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2025.02329

EROSION CONTROL DETAILS

C521

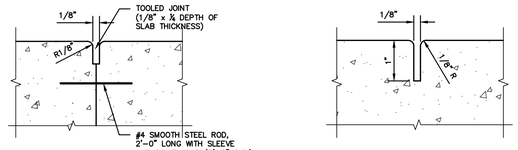
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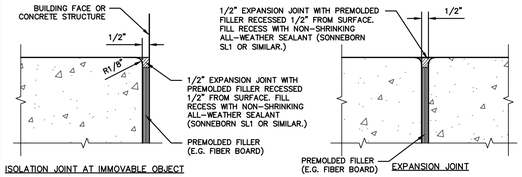


NO GEOTECHNICAL REPORT IS AVAILABLE FOR THIS SITE. COMPACTION OF SOIL BACKFILLS AND FILLS ARE TO BE IN ACCORDANCE WITH OWNER'S GEOTECHNICAL CONSULTANT RECOMMENDATIONS.

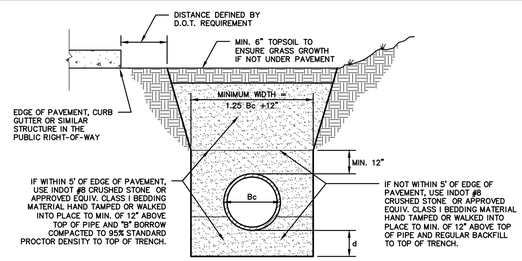
NOTE:
PROVIDE EXPANSION JOINTS AT BUILDINGS OR IMMOVABLE OBJECTS. CONTROL JOINTS AT 5'-0" O.C. OR AS SHOWN ON SITE PLANS, WITH EXPANSION JOINTS AT 30'-0" O.C. MAX.

CONCRETE SIDEWALK
NOT TO SCALE (REV. 10/17)





TYPICAL CONCRETE JOINT DETAILS
NOT TO SCALE (REV. 01/17)



LEGEND
Bc= OUTSIDE DIAMETER
D= INSIDE DIAMETER
d= DEPTH OF BEDDING MATERIAL BELOW PIPE

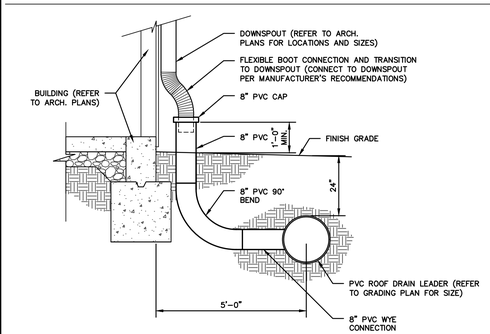
NOTE:
ALL INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS.

A MINIMUM 9" OF CLEARANCE SHALL BE PROVIDED ON EACH SIDE OF THE INSTALLED PIPE.

DEPTH OF BEDDING MATERIAL BELOW PIPE

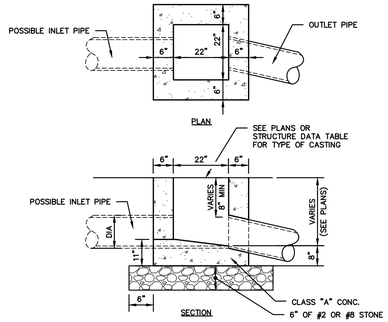
D	d (MIN)
27" & SMALLER	4"
30" TO 60"	4"
66" & LARGER	4"

PLASTIC PIPE (PVC & HDPE) BEDDING DETAIL
NOT TO SCALE (REV. 12/17)

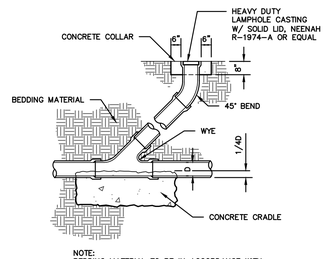


NOTE: KEEP ALL PIPES OUTSIDE FOUNDATION BEARING AREAS (INDICATED BY CROSSHATCH ABOVE)

DOWNSPOUT BOOT CONNECTION DETAIL
NOT TO SCALE (REV. 06/17)



INLET TYPE "A" DETAIL
NOT TO SCALE (REV. 06/18)



NOTE:
BEDDING MATERIAL TO BE IN ACCORDANCE WITH PLASTIC PIPE (PVC AND HDPE) BEDDING DETAIL.

CLEANOUT DETAIL
NOT TO SCALE (REV. 01/17)

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SITE DETAILS

C600

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EDITED BY: GMEANDS
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STEEL SYMBOLS

- STEEL DECK
- STEEL DECK MARK AND SPAN DIRECTION (D#)
- SLAB-ON-DECK MARK AND SPAN DIRECTION (S#)
- BEAM SPLICE CONNECTION (OR)
- BEAM SHEAR CONNECTION AT COLUMN
- BEAM CONTINUOUS OVER COLUMN
- BEAM MOMENT CONNECTION AT COLUMN
- SIDE PLATE CONNECTION AT COLUMN
- BRACED FRAME LOCATION
- COLUMN ABOVE (CA)
- COLUMN BELOW (CB)
- SLAB ON STEEL DECK (WWR)
- SLAB ON STEEL DECK
- COLUMN STARTS HERE
- HANGER OR POST
- HANGER OR POST BELOW FLOOR
- COLUMN MARK (C#)
- FULL DEPTH FITTED STIFFENER AT CONNECTION
- 3/4 DEPTH STIFFENER AT CONNECTION (3/4)
- BOTTOM FLANGE KICKER BRACE

STEEL MEMBERS

SHAPE	SECTION	ELEVATION	PLAN VIEW
W-SHAPE BEAM			
CHANNEL			
ANGLE			
DOUBLE ANGLE	LLV LLH		
HOLLOW STRUCTURAL SECTION -RECTANGULAR			
HOLLOW STRUCTURAL SECTION -CIRCULAR (PIPE)			
OPEN WEB STEEL JOIST			

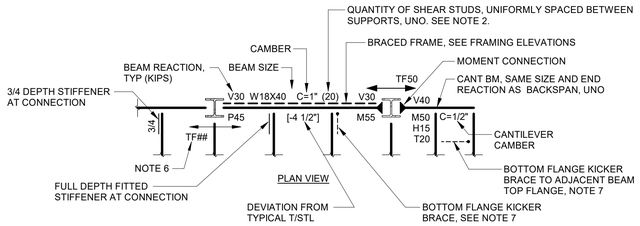
CONNECTORS

CONNECTOR	SECTION	END/ALT VIEW
CAST-IN ANCHOR ROD		
POST-INSTALLED MECHANICAL ANCHOR		
POST INSTALLED ADHESIVE ANCHOR		
HEADED STUD		
BOLT		

MISCELLANEOUS SYMBOLS

- NORTH ARROW (N)
- SECTION NUMBER / SHEET NUMBER (1 / S101)
- CALLOUT NUMBER / SHEET NUMBER (1 / S101)
- SOIL
- GRANULAR FILL
- LIMIT OF EXTENT
- CONTINUOUS EXTENT
- ELEVATION REFERENCE (Name / Elevation)
- GRIDLINES (A, 1)
- KEYED PLAN NOTE (#)
- COLUMN NOTATION (C#)
- PRECAST/ BRICK SUPPORT (Z#)
- LINTEL NOTATION (L#)
- F ## COLUMN FOOTING NOTATION
- WF ## WALL FOOTING NOTATION
- TS ## THICKENED SLAB NOTATION
- GB ## GRADE BEAM NOTATION
- P ## PIER NOTATION
- B ## CONCRETE BEAM NOTATION
- PB ## POST-TENSIONED CONCRETE BEAM NOTATION
- PC ## PILE CAP NOTATION
- BW ## BEARING WALL NOTATION
- SW ## SHEAR WALL NOTATION
- W ## WALL NOTATION
- WP ## WALL PIER NOTATION

STEEL BEAM LEGEND (LRFD)



NOTES:

1. REACTION VALUE IS LOAD AND RESISTANCE FACTOR DESIGN (LRFD) IN KIPS, UNO. WHERE NO SHEAR VALUE IS SHOWN, DESIGN CONNECTION FOR A MINIMUM END REACTION OF 15 KIPS.
2. ON COMPOSITE FRAMED LEVELS, PROVIDE A MINIMUM NUMBER OF SHEAR STUDS EQUIVALENT TO ONE STUD PER FOOT, UNLESS STUD-COUNT IS LISTED AS "(NC)", INDICATING NON-COMPOSITE BEAM WITH NO SHEAR STUDS.
3. POSITIVE CAMBER UPWARDS, NEGATIVE CAMBER DOWNWARDS. CAMBER SHOWN ON CANTILEVERS IS AT END OF CANTILEVER.
4. BEAMS ARE PRIMARY MEMBERS FOR FIREPROOFING UNLESS NOTED AS SECONDARY.
5. "WF" IN PLACE OF BEAM SIZE INDICATES W8X15.
6. LATERAL FORCE TO BE TRANSFERRED THROUGH SUPPORT BY CONNECTIONS IN ADDITION TO VERTICAL REACTION FORCES. FORCE MAY ACT IN EITHER DIRECTION. FORCE IS GREATER OF 1.0W OR 1.0E, UNO.
7. DOT ON BOTTOM FLANGE BRACE DENOTES WHICH END OF THE BRACE IS ATTACHED TO THE BEAM BOTTOM FLANGE.
8. CONNECTION FORCE MARKS (IN KIPS OR KIP-FT)
   - V## = FACTORED VERTICAL SHEAR AT END OF MEMBER
   - M## = FACTORED VERTICAL BENDING END MOMENT
   - P## = FACTORED AXIAL FORCE IN END OF MEMBER
   - TF## = FACTORED AXIAL FORCE TRANSFERRED THRU THE JOINT
   - H## = FACTORED HORIZONTAL SHEAR AT END OF MEMBER
   - T## = FACTORED TORSIONAL END MOMENT

SEE FRAMING ELEVATIONS FOR ANY OMITTED REACTIONS AT MOMENT FRAMES AND BRACED FRAMES.

STRUCTURAL DRAWINGS ABBREVIATIONS

&	AND
A/E	ARCHITECT/ENGINEER
ACI	AMERICAN CONCRETE INSTITUTE
ADDL	ADDITIONAL
ADJ	ADJACENT
AGGR	AGGREGATE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APA	AMERICAN PLYWOOD ASSOCIATION
APPROX	APPROXIMATE
AR	ANCHOR ROD
ARCH	ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
B/	BOTTOM OF
BAL	BALANCE
BC	BOTTOM CHORD
BD	BOARD
BF	BRACED FRAME
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BOT	BOTTOM
BRG	BEARING
BRKT	BRACKET
BTWN	BETWEEN
BU	BUILT UP
C	STANDARD CHANNEL
CANT	CANTILEVER
CC	CENTER TO CENTER
CF	COLD FORMED
CG	CENTER OF GRAVITY
CIP	CAST-IN-PLACE
CJ	CONTROL, CONTRACTION OR CONSTRUCTION JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTERLINE
CLR	CLEARANCE, CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CTR	CENTER
CTRD	CENTERED
CU FT	CUBIC FEET
CU IN	CUBIC INCH
CYD	CUBIC YARD
DBA	DEFORMED BAR ANCHOR
DBL	DOUBLE
DEG	DEGREE
DEMO	DEMOLITION, DEMOLISH
DEPT	DEPARTMENT
DET	DETAIL
DIA	DIAMETER
DIAG	DIAGONAL
DIAPH	DIAPHRAGM
DIM	DIMENSION
DN	DOWN
DO	DITTO
DP	DEEP
DWG	DRAWING
DWL	DOWELS
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
EL, ELEV	ELEVATION
ELEC	ELECTRICAL
ENCL	ENCLOSURE
ENGR	ENGINEER
EOD	EDGE OF DECK
EOJ	EDGE OF JOIST
EOS	EDGE OF SLAB
EQ	EQUAL
EQPT	EQUIPMENT
ES	EACH SIDE
EW	EACH WAY
EX	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FD	FLOOR DRAIN
FDN	FOUNDATION
FIN	FINISH
FLG	FLANGE
FLR	FLOOR
FS	FAR SIDE
FT	FEET
FTG	FOOTING
FTGD	FOOTING DRAIN
FV	FIELD VERIFY
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GL	GLUED LAMINATED TIMBER (GLULAM)
GRND	GROUND
GT	GIRDER TRUSS
HAS	HEADED ANCHOR STUD
HORIZ	HORIZONTAL
HP	HIGH POINT
HSS	HOLLOW STRUCTURAL SECTION
HT	HIP TRUSS
HVAC	HEATING, VENTILATION, AIR CONDITIONING
ID	INSIDE DIAMETER
IF	INSIDE FACE
IN	INCH
INCL	INCLUDE
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
J/BRG	JOIST BEARING
JST	JOIST
JT	JOINT
KB	KNEE BRACE
KIP, K	1,000 POUNDS
KO	KNOCK-OUT
KSI	KIPS PER SQUARE INCH
L	ANGLE OR LENGTH
LAB	LABORATORY
LB	POUND
LF	LINEAL FOOT
LIN	LINEAL, LINEAR
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONGIT	LONGITUDINAL
LP	LOW POINT
LSL	LAMINATED STRAND LUMBER
LSLT	LONG SLOTTED HOLE
LTWT	LIGHT WEIGHT
LVL	LAMINATED VENEER LUMBER
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MC	MISCELLANEOUS CHANNEL
MECH	MECHANICAL
MEMB	MEMBRANE
MEP	MECHANICAL/ ELECTRICAL/ PLUMBING
MF	MOMENT FRAME
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MULT	MULTIPLE
N/A	NOT APPLICABLE
NO	NUMBER
NOM	NOMINAL
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OFD	OVERFLOW DRAIN
OH	OVERHEAD
OPNG	OPENING
OPP	OPPOSITE
OPPHD	OPPOSITE HAND
ORIG	ORIGINAL
OVS	OVERSIZED HOLE
OWJ	PRE-MANUFACTURED OPEN WEB JOIST
PAF	POWDER ACTUATED FASTENER
PC	PRECAST CONCRETE
PEMB	PRE-ENGINEERED METAL BUILDING
PERIM	PERIMETER
PERM	PERMANENT
PERP	PERPENDICULAR
PJP	PARTIAL JOINT PENETRATION
PL	PLATE
PLF	POUNDS PER LINEAL FOOT
PLYWD	PLYWOOD
PREFAB	PREFABRICATED
PRELIM	PRELIMINARY
PREP	PREPARATION, PREPARE
PROJ	PROJECTION
PS	PRESTRESSED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PT	POST-TENSIONED
R	RADIUS
RD	ROOF DRAIN
REF	REFERENCE
REINF	REINFORCEMENT, REINFORCE
REQD	REQUIRED
RO	ROUGH OPENING
RTU	ROOFTOP MECHANICAL UNIT
S	SLOPE
SCHED	SCHEDULE
SECT	SECTION
SF	SQUARE FEET
SHT	SHEET
SIM	SIMILAR
SIP	STRUCTURAL INSULATED PANEL
SOG	SLAB-ON-GRADE
SOMD	SLAB ON METAL DECK
SPA	SPACES, SPACE
SPECS	SPECIFICATIONS
SQ	SQUARE
SS	STAINLESS STEEL
SSLT	SHORT SLOTTED HOLE
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STRUC	STRUCTURAL
SYM	SYMMETRICAL
T & B	TOP AND BOTTOM
T/	TOP OF
T/GB	TOP OF GRADE BEAM
TBS	MECHANICAL TENSION BUTT SPLICE
TC	TOP CHORD
TEMP	TEMPERATURE
THRU	THROUGH
TJI	PREFABRICATED WOOD I-JOIST
TRANS	TRANSVERSE
TYP	TYPICAL
UL	UNDERWRITERS' LABORATORY INC.
UNO	UNLESS NOTED OTHERWISE
UT	ULTRA-SONIC TEST
VERT	VERTICAL
W	WIDE FLANGE
W/	WITH
W/O	WITHOUT
WD	WOOD
WH	WEEP HOLE
WP	WORK POINT
WT	WEIGHT, STRUCTURAL T
WWF, WWR	WELDED WIRE REINFORCEMENT
XS	EXTRA STRONG (PIPE)
XXS	DOUBLE EXTRA STRONG (PIPE)

STRUCTURAL INDEX

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S521	STEEL FRAME ELEVATIONS

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY

NOBLE COUNTY HIGHWAY DEPTARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

NICHOLAS TINE REGISTERED PE12000671 STATE OF INDIANA PROFESSIONAL ENGINEER

03/27/2026

CERTIFIED BY

ISSUANCE INDEX
DATE:
03.27.2026
PROJECT PHASE:
BID DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2025.02329

ABBREVIATIONS AND SYMBOLS

S001

3/27/2026 8:15:33 AM

GENERAL

STRUCTURES INDICATED ON THESE DRAWINGS HAVE BEEN DESIGNED FOR THE IN-SERVICE LOADS ONLY. THE METHODS, MEANS, PROCEDURES, AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE STRUCTURES ARE DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER CONSTRUCTION IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE CONSTRUCTION PROCEDURES AND SEQUENCE TO ENSURE SAFETY OF THE STRUCTURES AND RELATED COMPONENTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS, TIEDOWNS, ETC.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT CONSTRUCTION LOADS DO NOT EXCEED THE CAPACITY OF ANY STRUCTURAL ELEMENT AT THE TIME THE LOADS ARE APPLIED, INCLUDING BUT NOT LIMITED TO: WEIGHTS OF MATERIALS, WEIGHTS OF EQUIPMENT AND WORKERS, AND ALL LOADS APPLIED FROM TEMPORARY LIFTS, HOISTS AND CRANES, ETC.

THE STRUCTURAL DRAWINGS AND SPECIFICATIONS SHALL BE USED IN CONJUNCTION WITH THE DRAWINGS AND SPECIFICATIONS OF ALL OTHER DISCIPLINES, TRADES, AND DELEGATED DESIGN ELEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE STRUCTURAL WORK WITH ALL OTHER APPLICABLE TRADES.

THE GENERAL NOTES ON THE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH THE FULL WRITTEN MATERIAL SPECIFICATIONS (IF ANY) FOR THE PROJECT.

DO NOT SCALE THE DRAWINGS. REFER TO THE WRITTEN DIMENSIONS AND INFORMATION.

IF A DISCREPANCY IS NOTED ON THE DRAWINGS, GENERAL NOTES, OR SPECIFICATIONS, THE CONTRACTOR SHALL SUBMIT TO THE STRUCTURAL ENGINEER A WRITTEN REQUEST FOR CLARIFICATION AND SHALL NOT PROCEED WITH THE AFFECTED WORK WITHOUT DOCUMENTED RESOLUTION OF THE DISCREPANCY. ALL COSTS RESULTING FROM THE CONTRACTOR IMPROPERLY PROCEEDING WITH THE AFFECTED WORK PRIOR TO DOCUMENTED RESOLUTION OF THE DISCREPANCY, INCLUDING COST OF REMOVAL AND REPLACEMENT OF NON-CONFORMING WORK, SHALL BE BORNE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

PENETRATIONS AND EMBEDDED ITEMS

CONTRACTOR SHALL COORDINATE WITH ALL AFFECTED TRADES THE REQUIRED SIZES, TYPES, AND LOCATIONS OF ALL EMBEDDED ITEMS IN, AND ALL PENETRATIONS THROUGH, STRUCTURAL ELEMENTS PRIOR TO CONSTRUCTION.

NO PENETRATIONS THROUGH STRUCTURAL ELEMENTS, OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS, SHALL BE MADE WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER.

NO ITEMS (INCLUDING, BUT NOT LIMITED TO, CONDUIT, PIPING, ETC.), OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS, SHALL BE EMBEDDED IN STRUCTURAL ELEMENTS WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER.

ALL EMBEDDED ITEMS IN EXPOSED EXTERIOR CONCRETE SHALL BE GALVANIZED, PLASTIC, OR EPOXY-COATED.

CONTRACTOR SHALL ENGAGE A PROFESSIONAL ENGINEER, LICENSED IN THE STATE WHERE THE PROJECT IS CONSTRUCTED, TO DESIGN TEMPORARY SUPPORTS AS FOLLOWS: SHORING FOR EXISTING STRUCTURE AS REQUIRED TO CREATE NEW MASONRY OPENINGS AS INDICATED ON THE DRAWINGS.

CONCRETE MIX DESIGN SUBMITTAL

THE CONTRACTOR SHALL SUBMIT FOR THE REVIEW OF THE STRUCTURAL ENGINEER A MIX DESIGN FOR EACH PROPOSED CLASS OF CONCRETE. EACH MIX DESIGN SHALL BE IDENTIFIED BY A MIX NUMBER OR OTHER UNIQUE IDENTIFICATION. THE CONTRACTOR SHALL NOT VARY FROM THE MIX DESIGNS NOR USE ANY CONCRETE OTHER THAN THE APPROVED MIX DESIGNS WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER. MIX DESIGN SUBMITTALS SHALL INCLUDE THE FOLLOWING INFORMATION:

1. MIX DESIGN NUMBER OR UNIQUE IDENTIFICATION AND INTENDED LOCATION OF PLACEMENT.
2. CEMENT TYPE, PROPORTION AND NAME OF MANUFACTURER.
3. FLY ASH PROPORTION (WHEN USED), LABORATORY ANALYSIS CERTIFICATION, AND NAME AND LOCATION OF SUPPLIER.
4. COARSE AGGREGATE PROPORTION, GRADATION REPORT, NAME AND LOCATION OF SUPPLIER.
5. FINE AGGREGATE PROPORTION, GRADATION REPORT, NAME AND LOCATION OF SUPPLIER.
6. MIXING WATER PROPORTION AND SOURCE.
7. ADMIXTURE DOSAGES, PRODUCT NAME(S) AND MANUFACTURER NAME(S).
8. FIBER REINFORCEMENT DOSAGE (WHEN USED), PRODUCT NAME AND MANUFACTURER NAME.
9. DESIGN 28-DAY COMPRESSIVE STRENGTH (F'C).
10. DESIGN SLUMP RANGE.
11. DESIGN AIR-ENTRAINMENT (FOR CONCRETE REQUIRING ENTRAINED AIR).
12. STATISTICAL ANALYSIS OF LABORATORY STRENGTH TEST DATA IN ACCORDANCE WITH "STANDARD DEVIATION" DETERMINATION OUTLINED IN ACI 318.

DELEGATED DESIGN

FOR ALL SUBMITTALS INDICATED AS "DELEGATED DESIGN," THE CONTRACTOR SHALL ENGAGE A SPECIALTY STRUCTURAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED TO DESIGN AND DETAIL THE ITEMS NOTED IN THE STRUCTURAL SUBMITTALS AND SPECIFICATIONS AS A DELEGATED DESIGN.

DELEGATED DESIGN CALCULATIONS AND RELATED DRAWINGS SHALL CONTAIN THE FOLLOWING, AS A MINIMUM:

1. COVER PAGE SIGNED AND SEALED BY THE SPECIALTY STRUCTURAL ENGINEER INCLUDING A STATEMENT OF CERTIFICATION THAT THE SUBMITTED CALCULATIONS ARE IN CONFORMANCE WITH THE DESIGN CRITERIA PROVIDED IN THE CONTRACT DOCUMENTS AND THAT THE RELATED SHOP DRAWINGS ARE IN CONFORMANCE WITH THE SUBMITTED CALCULATIONS.
2. TABLE OF CONTENTS, PLACED ON, OR IMMEDIATELY FOLLOWING THE COVER SHEET.
3. SUMMARY OF APPLICABLE CODE CRITERIA, LOAD DATA AND PERFORMANCE CRITERIA AS OUTLINED IN THE CONTRACT DOCUMENTS.
4. CLEAR DEFINITION OF THE LOCATION(S) IN THE STRUCTURE WHERE EACH CALCULATION APPLIES.
5. LOCATION, TYPE, MAGNITUDE AND DIRECTION OF ALL LOADS IMPOSED ON THE STRUCTURE BY THE DELEGATED DESIGN SYSTEM/COMPONENTS.

SUBMITTALS THAT DO NOT CONTAIN THE INFORMATION NOTED ABOVE MAY, AT THE STRUCTURAL ENGINEER'S DISCRETION, BE REJECTED WITHOUT COMMENT.

THE STRUCTURAL ENGINEER'S REVIEW OF DELEGATED DESIGN SUBMITTALS WILL BE FOR GENERAL CONFORMANCE WITH THE DESIGN LOADING, DESIGN INTENT AND LOADS IMPOSED.

DELEGATED DESIGN CALCULATIONS SHALL BE SUBMITTED PRIOR TO, OR INCLUDED WITH, THE ASSOCIATED SHOP DRAWING SUBMITTAL. DELEGATED DESIGN SHOP DRAWINGS SUBMITTED WITHOUT APPLICABLE REQUIRED CALCULATIONS WILL BE REJECTED.

PRODUCT DATA SUBMITTALS

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL PRODUCT DATA FOR THE SPECIFIC ITEMS LISTED BELOW. CONTRACTOR SHALL NOT USE PRODUCTS OTHER THAN THOSE SUBMITTED WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER.

SUBMIT HARD COPIES OR ELECTRONIC VERSIONS OF PRODUCT DATA. FOR HARD COPY OPTION, SUBMIT A MINIMUM OF TWO COPIES OF PRODUCT DATA TO THE STRUCTURAL ENGINEER FOR REVIEW (ONE COPY SHALL BE RETAINED BY THE STRUCTURAL ENGINEER). FOR ELECTRONIC OPTION, SUBMIT PRODUCT DATA IN ADOBE PDF FORMAT.

1. FIBER REINFORCEMENT FOR CONCRETE
2. CONCRETE CURING COMPOUND
3. CONCRETE JOINT SEALANT
4. MASONRY JOINT REINFORCEMENT
5. ADHESIVE ANCHORS
6. NON-SHRINK GROUT
7. VAPOR BARRIER
8. BUILDING EXPANSION JOINT(S)

SHOP DRAWING SUBMITTALS

THE CONTRACTOR SHALL PREPARE DETAILED SHOP DRAWINGS TO ENABLE ALL PARTS OF THE WORK TO BE FABRICATED AND CONSTRUCTED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS. THESE SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT ONLY. THE CONTRACTOR IS RESPONSIBLE FOR ALL DIMENSIONS, ACCURACY AND FIT OF WORK.

ALL SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE STRUCTURAL ENGINEER. DRAWINGS SUBMITTED WITHOUT CONTRACTOR'S REVIEW WILL BE RETURNED UNCHECKED.

PROVIDE ALL SUBMITTALS IN ELECTRONIC PDF FORMAT.

WORK REQUIRING SUBMITTALS FOR STRUCTURAL ENGINEER REVIEW SHALL NOT BE STARTED BY THE CONTRACTOR WITHOUT APPROPRIATE REVIEWED SUBMITTALS. WORK PERFORMED BY THE CONTRACTOR PRIOR TO RECEIVING APPROPRIATE REVIEWED SUBMITTALS SHALL BE SUBJECT TO REMOVAL AND REPLACEMENT AS DEEMED NECESSARY BY THE STRUCTURAL ENGINEER, AT THE CONTRACTOR'S EXPENSE, AND WITH NO COST TO THE OWNER.

SUBMIT SHOP DRAWINGS FOR EACH OF THE FOLLOWING ITEMS:

1. CONCRETE REINFORCEMENT
2. CONCRETE MASONRY REINFORCEMENT (INCLUDING PLANS AND ELEVATIONS FOR EACH WALL INDICATING ALL CMU REINFORCING REQUIREMENTS, INCLUDING SHEAR WALLS)
3. STRUCTURAL STEEL
4. STEEL DECK
5. CONTRACTOR'S PROPOSED CONTROL/CONSTRUCTION JOINT LAYOUT FOR FLOOR SLABS ON GRADE. CONTRACTOR SHALL UTILIZE ROUND OR DIAMOND SHAPE ISOLATION JOINTS AT BUILDING COLUMNS PER THE TYPICAL DETAILS. SEE THE GENERAL NOTES AND SPECIFICATIONS FOR JOINT SPACING LIMITS AND ADDITIONAL INFORMATION.

SUBMIT DELEGATED DESIGN SHOP DRAWINGS FOR EACH OF THE FOLLOWING ITEMS:

1. STRUCTURAL STEEL CONNECTIONS (INCLUDING DESIGN CALCULATIONS AND SUMMARY PAGE FOR CONNECTIONS NOT SPECIFICALLY DETAILED IN THE CONTRACT DRAWINGS)
2. STRUCTURAL PRECAST CONCRETE (INCLUDING DESIGN CALCULATIONS, FRAMING LAYOUTS, MEMBER SIZES, MATERIALS AND CONNECTION DETAILS INCLUDING BUT NOT LIMITED TO:
   a. PRECAST CHANNEL SLABS

OMISSION OF ANY MATERIALS REQUIRED BY THE CONTRACT DOCUMENTS FROM SHOP DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR FURNISHING THESE MATERIALS REGARDLESS OF WHETHER THE SUBMITTALS HAVE BEEN REVIEWED.

THE USE OF ELECTRONIC FILES OR REPRODUCTIONS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR SIGNIFIES CONTRACTOR'S ACCEPTANCE OF ALL THE INFORMATION SHOWN "AS IS". CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING THE ACCURACY AND COMPLETENESS OF THE INFORMATION PROVIDED. ISSUED DRAWINGS AND SPECIFICATIONS TAKE PRECEDENCE OVER ANY ELECTRONIC INFORMATION PROVIDED. ADDENDA, CHANGE ORDERS, SUPPLEMENTAL INSTRUCTIONS ARE NOT NECESSARILY INCLUDED IN THE ELECTRONIC FILES.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL CONTRACT DOCUMENTS, INCLUDING LATEST ADDENDA, AND TO DISTRIBUTE TO ALL SUBCONTRACTORS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS.

NON-STRUCTURAL COMPONENTS

NON-STRUCTURAL COMPONENTS AND THEIR SUPPORTS, BRACING, AND ANCHORAGE TO STRUCTURE (INCLUDING SEISMIC BRACING WHEN REQUIRED) SHALL BE DESIGNED BY THE SUPPLYING CONTRACTOR'S REGISTERED PROFESSIONAL ENGINEER, UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS. NON-STRUCTURAL COMPONENTS INCLUDE, BUT ARE NOT LIMITED TO: M/E/P COMPONENTS, FIRE PROTECTION SYSTEMS, SOLAR/PV SYSTEMS, CLADDING SYSTEMS, PREFABRICATED CANOPIES AND AWNINGS, ARCHITECTURAL COMPONENTS, ELEVATORS, ESCALATORS, STAIRS, LADDERS, RAILINGS, HANDRAILS, CRANES, HOISTS, EQUIPMENT, FURNISHINGS, CABINETS, SHELVING, STORAGE RACKS, APPENDAGES, ORNAMENTATION, ETC.

SEE THE SUBMITTALS GENERAL NOTES FOR ITEMS REQUIRED TO BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW, INCLUDING DELEGATED DESIGN ITEMS REQUIRING SEALED DESIGN CALCULATIONS PROVIDED BY THE CONTRACTOR'S REGISTERED SPECIALTY STRUCTURAL ENGINEER.

RENOVATION (EXISTING CONDITIONS)

WORK SHOWN ON THESE PLANS ASSUMES THAT THE ORIGINAL CONSTRUCTION WAS PERFORMED IN ACCORDANCE WITH THE ABOVE INDICATED ORIGINAL DRAWINGS INCLUDING (BUT NOT LIMITED TO) DIMENSIONS, ELEVATIONS, MEMBER SIZES, MATERIALS, DETAILS, ETC. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE CONDITIONS RELATING TO THE EXISTING STRUCTURE AND TO NOTIFY THE STRUCTURAL ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR CONFLICTS.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF DEMOLITION REQUIRED TO COMPLETE THE WORK, INCLUDING MAINTAINING THE SAFETY AND INTEGRITY OF THE EXISTING STRUCTURE. DEMOLISHED MATERIALS SHALL BE DISPOSED OF SAFELY AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS AND ALL APPLICABLE LAWS, CODES AND REGULATIONS.

WHERE ELEMENTS ARE INDICATED TO BE CUT AND REMOVED, DO NOT CUT BEYOND THE EXTENTS OF THE ELEMENTS INDICATED TO BE REMOVED AND DO NOT EXTEND CUTS INTO ELEMENTS THAT ARE TO REMAIN.

WHERE NEW WORK IS TO BE FITTED TO OLD WORK, THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND CONDITIONS IN THE FIELD, AND REPORT ANY ERRORS OR DISCREPANCIES TO THE STRUCTURAL ENGINEER PRIOR TO THE FABRICATION AND ERECTION OF ANY NEW MEMBERS.

EXISTING MATERIALS TO BE REMOVED AND REINSTALLED AS PART OF THIS PROJECT, THAT BECOME DAMAGED, SHALL BE REPLACED WITH NEW MATERIAL OF EQUAL QUALITY AND APPEARANCE, AT THE CONTRACTOR'S EXPENSE.

ALL WORK SHALL BE PERFORMED WITHOUT DAMAGE OR DISRUPTION TO ADJACENT RETAINED WORK. ADJACENT EXISTING CONSTRUCTION SHALL BE PROTECTED FROM DUST, DIRT AND DEBRIS ACCUMULATION AT ALL TIMES.

INSULATION

ANY INSULATION SHOWN ON THE STRUCTURAL DRAWINGS IS FOR GENERAL VISUAL REFERENCE ONLY, UNLESS NOTED OTHERWISE. SEE THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR EXACT LOCATION, PLACEMENT, THICKNESS AND MATERIAL REQUIREMENTS.

FOUNDATIONS

FOUNDATIONS HAVE BEEN DESIGNED BASED ON ASSUMED ALLOWABLE SOIL BEARING PRESSURES INDICATED BELOW. CONTRACTOR SHALL ENGAGE A LICENSED GEOTECHNICAL ENGINEER TO REVIEW THE SOIL CONDITIONS AT THE SITE AS NECESSARY TO CONFIRM THE ALLOWABLE BEARING PRESSURES PRIOR TO PLACEMENT OF THE FOUNDATIONS. CONFIRMATION OF THE ACCEPTABILITY OF THE SOILS SHALL BE REPORTED IN WRITING TO THE STRUCTURAL ENGINEER.

IF ACTUAL ALLOWABLE PRESSURES ARE FOUND TO BE LESS THAN THE ASSUMED VALUES, THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER IMMEDIATELY AND SHALL NOT PROCEED WITH FOUNDATION CONSTRUCTION WITHOUT REVIEW BY THE STRUCTURAL ENGINEER.

DESIGN NET SOIL PRESSURE:

SPREAD FOOTINGS:	1000 PSF
CONTINUOUS WALL FOOTINGS:	1000 PSF

FOUNDATIONS AND SOILS RELATED WORK SHALL BE INSPECTED BY A LICENSED GEOTECHNICAL ENGINEER. WRITTEN FIELD REPORTS SHALL BE FORWARDED TO THE STRUCTURAL ENGINEER AS SOON AS THEY BECOME AVAILABLE.

SOIL CONDITIONS NOTED DURING CONSTRUCTION, WHICH DIFFER FROM ASSUMPTIONS, SHALL BE REPORTED TO THE STRUCTURAL ENGINEER AND GEOTECHNICAL ENGINEER BEFORE FURTHER CONSTRUCTION IS ATTEMPTED.

THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND MAINTAIN APPROPRIATE EXCAVATION PROTECTION, INCLUDING ALL NECESSARY LAYBACKS, SHORING, SHEETING, TIE-BACKS AND OTHER MEASURES AS DETERMINED BY THE CONTRACTOR'S ENGINEER.

EXCAVATIONS FOR SPREAD FOOTINGS, COMBINED FOOTINGS, CONTINUOUS FOOTINGS AND MAT FOUNDATIONS SHALL BE CLEANED AND COMPACTED TO UNIFORM SURFACE AND SHALL BE PROTECTED AND MAINTAINED UNIFORM UNTIL CONCRETE IS PLACED.

FROST DEPTH: 36 INCHES

CONCRETE

REINFORCED CONCRETE HAS BEEN DESIGNED IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318) AND COMMENTARY (ACI 318R).

MIXING, TRANSPORTING, AND PLACING OF CONCRETE SHALL CONFORM TO THE LATEST EDITION OF THE SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301). READY-MIXED CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ASTM C94. IN CASE OF A DISCREPANCY, THE PLANS AND SPECIFICATIONS SHALL GOVERN.

CEMENT SHALL CONFORM TO ASTM C150, TYPE I OR ASTM C595 TYPE IL, UNO.

FLY ASH SHALL CONFORM TO ASTM C618, CLASS C OR F.

NORMAL WEIGHT AGGREGATES SHALL CONFORM TO ASTM C33.

WATER-REDUCING ADMIXTURES SHALL CONFORM TO ASTM C494.

AIR-ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C260 AND SHALL BE CERTIFIED BY THE MANUFACTURER TO BE COMPATIBLE WITH OTHER ADMIXTURES.

CALCIUM CHLORIDE ADMIXTURES OR ADMIXTURES CONTAINING MORE THAN 0.1 PERCENT CHLORIDE IONS SHALL NOT BE USED.

IN COLD WEATHER CONDITIONS, MIXING, PLACING, FINISHING, CURING AND PROTECTION OF CONCRETE SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF ACI 306R, COLD WEATHER CONCRETING.

IN HOT WEATHER CONDITIONS, MIXING, PLACING, FINISHING, CURING AND PROTECTION OF CONCRETE SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF ACI 305R, HOT WEATHER CONCRETING.

USE OF JOINTS IN CONCRETE ELEMENTS AT LOCATIONS OTHER THAN THOSE INDICATED ON THE DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW.

SLUMP FOR PUMPED CONCRETE SHALL BE MEASURED AT POINT OF DISCHARGE.

NORMAL WEIGHT CONCRETE SHALL HAVE THE PROPERTIES AS INDICATED IN THE CONCRETE MIX SCHEDULE AND SPECIFICATIONS.

DO NOT INSTALL OR EMBED ALUMINUM ITEMS, INCLUDING BUT NOT LIMITED TO ALUMINUM CONDUIT, INTO OR IN CONTACT WITH CONCRETE.

WHERE NEW CONCRETE IS PLACED AGAINST HARDENED/EXISTING CONCRETE, VERIFY SOUNDNESS OF EXISTING CONCRETE AND REMOVE ALL LOOSE MATERIAL, SNOW, ICE, FROST, WATER, SOIL, DEBRIS AND OTHER DETRIMENTAL MATERIALS PRIOR TO PLACEMENT OF NEW CONCRETE.

CONCRETE SLABS ON GRADE

SLABS ON GRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION (ACI 302.1R).

PLACE CONCRETE IN A MANNER SO AS TO PREVENT SEGREGATION OF THE MIX. DELAY FLOATING AND TROWELING OPERATIONS UNTIL THE CONCRETE HAS LOST SURFACE WATER SHEEN OR ALL FREE WATER. DO NOT SPRINKLE FREE CEMENT ON THE SLAB SURFACE.

PROVIDE CURING OF CONCRETE SLABS ON GRADE AS REQUIRED TO ACCOMMODATE FLOOR FINISHES AND FINISH MATERIALS PER THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. REVIEW ALL FLOOR FINISH REQUIREMENTS PRIOR TO PLACEMENT OF CONCRETE SLABS AND COORDINATE SLAB MIX, PLACEMENT AND CURING TO COMPLY WITH FINISH FLOORING MATERIAL MANUFACTURER'S REQUIREMENTS.

CURING PROCEDURES SHALL COMPLY WITH ACI 302.1R AND USE OF CURING MATERIALS SHALL BE APPLIED IN STRICT ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. MOISTURE RETENTION COVERS, IF USED, SHALL BE APPLIED FLAT AND SMOOTH TO RESULT IN A UNIFORM APPEARANCE AND MINIMIZE SURFACE MARKINGS AND BLEMISHES.

UNLESS NOTED OTHERWISE, OR UNLESS MORE STRINGENT REQUIREMENTS APPLY, CURE AND FINISH SLABS ON GRADE IN ACCORDANCE WITH THE SLAB FINISH REQUIREMENTS SCHEDULE.

PROVIDE SLABS ON GRADE WITH A SMOOTH TROWEL FINISH UNLESS NOTED OTHERWISE.

CONTRACTOR SHALL REVIEW ALL REQUIRED FLOOR FINISH MATERIAL REQUIREMENTS PRIOR TO PLACEMENT OF CONCRETE AND SHALL PROVIDE FLOOR SLAB FLATNESS AND LEVELNESS MEETING THE FINISH MATERIAL SUPPLIER'S WRITTEN REQUIREMENTS.
FLATNESS AND LEVELNESS SHALL BE THE MORE STRINGENT OF THE FINISH MATERIAL REQUIREMENTS AND THE FOLLOWING:

ALL SLABS, UNO:

OVERALL VALUES:	FF=25	FL=20
LOCAL VALUES:	FF=20	FL=15

CONTRACTOR SHALL PROVIDE ALL NECESSARY REPAIR, GRINDING AND/OR LEVELING OF THE CONCRETE SLAB TO ACCOMMODATE ALL FLOOR FINISHES PRIOR TO INSTALLATION OF THE FINISH MATERIALS WITH NO ADDITIONAL COST TO THE PROJECT.

THE MINIMUM LOCAL AREA SHALL BE ANY BAY DEFINED BY COLUMN LINES.

UNLESS SHOWN OR NOTED OTHERWISE, PROVIDE CONTROL OR CONSTRUCTION JOINTS IN SLABS-ON-GRADE AT A MAXIMUM SPACING NOT EXCEEDING THE LESSER OF 30 TIMES THE SLAB THICKNESS OR 15 FEET. PROVIDE JOINTS AT ALL COLUMN LOCATIONS. LOCATE JOINTS TO ELIMINATE RE-ENTRANT CORNERS AND TO CREATE SQUARE OR RECTANGULAR SECTIONS WITH MAXIMUM LONG SIDE TO SHORT SIDE RATIO OF 1.5 TO 1.

CONTROL JOINTS IN SLABS ON GRADE SHALL NOT RECEIVE JOINT FILLER MATERIAL UNLESS NOTED OTHERWISE.

VAPOR BARRIER

VAPOR BARRIER SYSTEM SHALL HAVE A PERMEANCE OF 0.01 PERMS OR LESS WHEN TESTED IN ACCORDANCE WITH ASTM E1745 SECTION 7. INSTALL, SEAL, INSPECT AND REPAIR IN STRICT CONFORMANCE TO THE MANUFACTURER'S WRITTEN REQUIREMENTS. INSTALL VAPOR BARRIER ONLY AT LOCATIONS SPECIFICALLY INDICATED.

REINFORCING STEEL

REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 AND SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI, UNO.

REINFORCING BAR DETAILING, FABRICATING, AND PLACING SHALL CONFORM TO THE LATEST EDITION OF THE FOLLOWING STANDARDS: ACI 301, ACI 315, ACI 318, ACI DETAILING MANUAL (SP66), AND CRSI MANUAL OF STANDARD PRACTICE.

THE CONTRACTOR SHALL PROVIDE BAR SUPPORTS AND SPACERS AS REQUIRED TO MAINTAIN PROPER SUPPORT AND POSITIONING OF THE REINFORCING STEEL THROUGHOUT CONCRETE PLACEMENT OPERATIONS. DESIGN OF THE SUPPORT SYSTEM SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

UNLESS A GREATER AMOUNT OF COVER IS INDICATED ON THE DRAWINGS, PROVIDE THE FOLLOWING MINIMUM CONCRETE COVER OVER REINFORCEMENT AS FOLLOWS:

CONCRETE CAST AGAINST EARTH:	3 INCHES
FOUNDATION TOP REINFORCEMENT:	2 INCHES
FOUNDATION BOTTOM AND SIDE REINFORCEMENT:	3 INCHES
WALL REINFORCEMENT - #5 AND SMALLER:	1-1/2 INCHES
WALL REINFORCEMENT - #6 AND LARGER:	2 INCHES
ELEVATED SLAB TOP REINFORCEMENT:	2 INCHES
ELEVATED SLAB BOTTOM REINFORCEMENT:	1 INCH
BEAM TOP REINFORCEMENT:	2-1/2 INCHES
BEAM BOTTOM REINFORCEMENT:	2 INCHES
BEAM STIRRUPS AT TOP:	2 INCHES
COLUMN LONGITUDINAL REINFORCEMENT:	2 INCHES
COLUMN TIES:	1-1/2 INCHES
SLAB ON METAL DECK REINFORCEMENT:	SEE DETAILS

REINFORCING STEEL SHALL NOT BE TACK WELDED, WELDED, HEATED OR CUT UNLESS INDICATED ON THE CONTRACT DOCUMENTS OR APPROVED BY THE STRUCTURAL ENGINEER.

LAP SPLICES SHALL BE TENSION LAPS IN ACCORDANCE WITH SPLICE/EMBEDMENT TABLES, UNO.

ALL 90 DEGREE AND 180 DEGREE BENDS SHOWN ON THE DRAWINGS SHALL BE STANDARD HOOKS, UNLESS NOTED OTHERWISE.

PROVIDE CORNER BARS OF SAME SIZE AND SPACING AS HORIZONTAL BARS AT CORNERS OF ALL WALLS, WALL FOOTINGS AND GRADE BEAMS. LAP SPLICE CORNERS BARS WITH STRAIGHT BARS.

UNLESS OTHERWISE SHOWN OR NOTED, PROVIDE 2-#5 BARS (ONE EACH FACE) AROUND UNFRAMED OPENINGS IN CONCRETE WALLS AND GRADE BEAMS. PLACE BARS PARALLEL TO THE SIDES OF THE OPENING AND EXTEND 24" BEYOND CORNERS.

FIBER REINFORCEMENT (SYNTHETIC)

BLENDED MACRO+MICRO REINFORCEMENT SHALL BE VIRGIN (NON-RECYCLED) NYLON OR POLYPROPYLENE FIBERS COMPLYING WITH ASTM C1116, WITH LONGEST MACRO-FIBERS NOT LESS THAN 1.75 INCHES AND LONGEST MICRO-FIBERS NOT LESS THAN 0.5 INCHES.

FIBERS SHALL BE INTRODUCED INTO CONCRETE MIX AT THE BATCH PLANT AND MIXED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

DOSAGE RATES SHALL BE AS INDICATED IN THE CONTRACT DOCUMENTS. USE ONLY THE FIBER TYPE INDICATED FOR EACH APPLICATION. SUBSTITUTION OF FIBER TYPES IS NOT PERMITTED.

CONCRETE TESTING

MAKE ONE SET OF TEST CYLINDERS IN ACCORDANCE WITH ASTM C31 FOR EACH DAY'S POUR AND FOR EACH 100 CUBIC YARDS FOR EACH TYPE OF CONCRETE PLACED. EACH SET SHALL INCLUDE ONE SPECIMEN TESTED AT 7 DAYS, 2 SPECIMENS TESTED AT 28 DAYS (3 SPECIMENS TESTED AT 28 DAYS IF USING 4x8 CYLINDERS) AND ONE SPECIMEN RETAINED IN RESERVE TO BE TESTED AT THE DIRECTION OF THE STRUCTURAL ENGINEER. ONE CYLINDER MAY BE DISCARDED 90 DAYS AFTER CASTING UNLESS DIRECTED OTHERWISE BY THE STRUCTURAL ENGINEER. THIS SET OF TEST CYLINDERS SHALL BE PROTECTED AGAINST FREEZING.

WHEN THE AMBIENT TEMPERATURE IS EXPECTED TO FALL BELOW 40 DEGREES DURING THE COURSE OF A CONCRETE POUR OR SUBSEQUENT CURING PROCESS, AN ADDITIONAL SET OF CONCRETE TEST CYLINDERS SHALL BE MADE AND TESTED. THESE CYLINDERS SHALL BE STORED IMMEDIATELY ADJACENT TO, AND CURED UNDER THE SAME CONDITIONS AS THE BUILDING CONCRETE. SPECIAL CURING BOXES ARE NOT PERMITTED FOR THESE TEST CYLINDERS.

FORWARD COPIES OF TEST RESULTS TO THE ARCHITECT, STRUCTURAL ENGINEER, READY-MIX SUPPLIER AND CONTRACTOR WITHIN 24 HOURS AFTER TESTING.

POTENTIALLY LOW-STRENGTH CONCRETE: WHEN 7-DAY TESTS RESULT IN CONCRETE STRENGTHS LESS THAN 70% OF THE SPECIFIED 28-DAY STRENGTH, THE CONCRETE CONTRACTOR SHALL INVESTIGATE TO DETERMINE THE VALIDITY AND LIKELY CAUSE(S) OF THE LOW STRENGTH TEST RESULTS AND SUBMIT TO THE STRUCTURAL ENGINEER FOR REVIEW. CONCRETE WHICH EXHIBITS STRENGTH BASED ON 7-DAY TESTS BELOW 70% OF THE SPECIFIED 28-DAY COMPRESSIVE STRENGTH MAY BE CONSIDERED DEFECTIVE WORK AND SHALL BE SUBJECT TO REPAIR OR REPLACEMENT BY THE CONTRACTOR AT THE DISCRETION OF THE OWNER AND STRUCTURAL ENGINEER AT NO ADDITIONAL COST TO THE OWNER.

CONCRETE UNIT MASONRY

CONCRETE MASONRY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CODE-REFERENCED EDITION OF BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES (TMS 402/602).

CONCRETE MASONRY SHALL CONSIST OF HOLLOW UNITS CONFORMING TO THE REQUIREMENTS OF ASTM C90, WITH A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 2,800 PSI, UNO. CONCRETE MASONRY ASSEMBLAGES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (F'M) OF 2,000 PSI AT 28 DAYS, UNO.

ALL MASONRY TO BE LAID IN RUNNING BOND, UNO. ALIGN CELLS TO ALLOW PROPER REINFORCEMENT PLACEMENT AND GROUTING.

MORTAR SHALL BE TYPE S PROPORTIONED IN ACCORDANCE WITH ASTM C270.

FULLY MORTAR FACE SHELLS ON HEAD AND BED JOINTS. PROVIDE FULL MORTAR COVER ON ALL WEBS AT GROUTED CELLS.

GROUT FOR REINFORCED MASONRY SHALL BE PROPORTIONED IN ACCORDANCE WITH ASTM C476 (MINIMUM 28-DAY COMPRESSIVE STRENGTH = 2,000 PSI, UNO). COARSE AND FINE AGGREGATES SHALL CONFORM TO ASTM C404. USE COARSE GROUT FOR ALL GROUTING EXCEPT HIGH-LIFT POURS DEFINED BY ACI 530, WHERE FINE GROUT SHALL BE USED.

GROUT SOLID ALL CELLS WITH REINFORCEMENT.

GROUT S

STEEL ROOF DECK

PROVIDE AND ERECT STEEL DECK IN ACCORDANCE WITH THE LATEST EDITION OF THE STEEL DECK INSTITUTE'S SPECIFICATIONS AND CODE OF STANDARD PRACTICE.

DECK MANUFACTURER SHALL PROVIDE ALL ROOF DECK ACCESSORIES, INCLUDING CLOSURES, SUPPLEMENTARY FRAMING, AND SUMP PANS, WHETHER OR NOT SUCH ITEMS ARE DETAILED ON THE CONTRACT DOCUMENTS.

FASTEN ROOF DECK TO STEEL SUPPORTS AS INDICATED ON THE DRAWINGS. PERFORM WELDING IN ACCORDANCE WITH ANSI/AWS D1.3.

ROOF DECK SHALL BE INSTALLED IN A MINIMUM THREE SPAN CONDITION WHEREVER POSSIBLE. WHERE THREE SPAN CONDITION IS NOT POSSIBLE, NOTIFY STRUCTURAL ENGINEER PRIOR TO FABRICATION OF DECK SO THAT EVALUATION OF THE LESSER SPAN CONDITION(S) CAN BE PERFORMED.

PROVIDE STEEL ROOF DECK WITH FINISH AS INDICATED ON THE DRAWINGS.

DO NOT HANG LOADS SUSPENDED FROM STEEL ROOF DECK.

DESIGN DATA

NEW STRUCTURES ON THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE 2014 INDIANA BUILDING CODE.

VIBRATION CRITERIA

THE STRUCTURE IS NOT DESIGNED TO MITIGATE VIBRATIONS FROM VIBRATING EQUIPMENT. EQUIPMENT CONTRACTOR SHALL PROVIDE AND INSTALL VIBRATION ISOLATORS AS REQUIRED TO MITIGATE EQUIPMENT VIBRATION.

ROOF LOADS

SEE LOAD MAPS

SNOW LOAD DESIGN DATA

GROUND SNOW LOAD (P_G) = 30 PSF
SNOW EXPOSURE FACTOR (C_E) = 1.0
THERMAL FACTOR (C_T) = 1.0
SNOW LOAD IMPORTANCE FACTOR (I_S) = 1.00
LOW-SLOPE ROOF SNOW LOAD (P_F) = 21 PSF
MINIMUM LOW-SLOPE ROOF SNOW LOAD (P_M) = 20 PSF

WIND LOAD DESIGN DATA

BASIC WIND SPEED (3-SECOND GUST) = 115 MPH
WIND EXPOSURE = C
WIND DESIGN PRESSURE (P) = VARIES WITH HEIGHT AND LOCATION
MWFRS ANALYSIS PROCEDURE UTILIZED = DIRECTIONAL PROCEDURE (BUILDINGS OF ALL HEIGHTS)

EARTHQUAKE DESIGN DATA

SHORT PERIOD SPECTRAL RESPONSE (S_S) = 0.102
1-SECOND SPECTRAL RESPONSE (S_1) = 0.058
SEISMIC IMPORTANCE FACTOR (I_E) = 1.0
RISK CATEGORY = II
SITE CLASSIFICATION = D (ASSUMED)
SEISMIC DESIGN CATEGORY = B
SHORT PERIOD SPECTRAL RESPONSE (S_{DS}) = 0.109
1-SECOND SPECTRAL RESPONSE (S_{D1}) = 0.093
BASIC STRUCTURAL SYSTEM / SEISMIC RESISTING SYSTEM: STEEL SYSTEMS NOT SPECIFICALLY DETAIL FOR SEISMIC RESISTANCE
ANALYSIS PROCEDURE UTILIZED = EQUIVALENT LATERAL FORCE PROCEDURE
RESPONSE MODIFICATION COEFFICIENT (R) = 3.0
SEISMIC RESPONSE COEFFICIENT (C_S) = 0.036
SEISMIC BASE SHEAR (V) = 2 KIPS

SERVICEABILITY LIMITS

LIVE LOAD DEFLECTION:	SPAN/360 UNO
TOTAL LOAD DEFLECTION:	SPAN/240 UNO
EXTERIOR EDGE BEAMS LIVE LOAD DEFLECTION:	SPAN/360 OR 3/4 INCH, UNO
EXTERIOR EDGE BEAMS TOTAL LOAD DEFLECTION:	SPAN/240 OR 3/4 INCH, UNO
LATERAL DRIFT DUE TO WIND LOADS:	H/400 UNO

LOADS SUSPENDED FROM STRUCTURE

UNLESS SPECIFICALLY NOTED OTHERWISE, THE UNIFORM MEP/CEILING LOADING ALLOWANCE SUSPENDED FROM FLOOR AND ROOF STRUCTURES SHALL BE **[10]** PSF.

CONTRACTOR SHALL COORDINATE AND PROVIDE SUFFICIENT SUPPORT FRAMING FOR ITEMS SUSPENDED FROM THE STRUCTURE (DUCTWORK, PIPING, CONDUIT, LIGHTS, CEILINGS, ETC.) TO DISTRIBUTE LOADING THROUGHOUT THE STRUCTURE SUCH THAT THE DESIGN SUPERIMPOSED LOAD ALLOWANCE IDENTIFIED IS NOT EXCEEDED FOR ANY STRUCTURAL ELEMENT.

IF THE CONTRACTOR DETERMINES THAT LOADS SUSPENDED WILL EXCEED THE IDENTIFIED LOADING LIMITS FOR ANY STRUCTURAL ELEMENT, THE CONTRACTOR SHALL CONTACT THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO INSTALLING THE LOADS.

LOADS SUSPENDED FROM HANGER TABS ON COMPOSITE STEEL FLOOR DECK SHALL NOT EXCEED 50 LBS AT ANY SINGLE LOCATION.

LOADS SHALL NOT BE SUSPENDED FROM STEEL ROOF DECK WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER EXCEPT AS SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS.

LOADS IMPOSED ON STRUCTURE

LOADS IMPOSED ON THE STRUCTURE BY EQUIPMENT AND SYSTEMS (INCLUDING BUT NOT LIMITED TO, ARCHITECTURAL PRECAST CONCRETE, GLAZING SYSTEMS, CLADDING, STAIRS, ELEVATORS, ESCALATORS, MEP EQUIPMENT, DUCTWORK, CONDUIT, LIGHTS, CEILINGS, ETC.) SHALL IMPART ONLY VERTICAL AND HORIZONTAL LOADS ON THE STRUCTURE WITHOUT INDUCING TORSIONAL LOADS ON THE SUPPORTING STRUCTURAL ELEMENTS, UNLESS SPECIFICALLY INDICATED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING (BY THE CONTRACTOR'S PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS CONSTRUCTED), SUPPLYING, AND INSTALLING ALL NECESSARY SUPPLEMENTAL BRACING, KICKERS, RELATED CONNECTIONS, ETC., AS REQUIRED TO PREVENT APPLYING TORSIONAL LOAD TO THE SUPPORTING STRUCTURE.

DESIGN CALCULATIONS AND DETAILS, SIGNED AND SEALED BY THE CONTRACTOR'S LICENSED PROFESSIONAL ENGINEER, FOR ALL SUPPLEMENTAL MATERIALS AND CONNECTIONS UTILIZED TO PREVENT APPLYING TORSIONAL LOAD TO THE STRUCTURE, SHALL BE PROVIDED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION.

FIRE-RATED ASSEMBLIES

FOR THE PURPOSES OF EVALUATING FIRE-RATED ASSEMBLIES AND APPLIED FIREPROOFING REQUIREMENTS, ASSUME THE FOLLOWING, UNO:

COMPLETE STRUCTURAL STEEL FRAMES WITH NO LOAD-BEARING WALLS AND NO STEEL JOISTS: RESTRAINED

COMPLETE CAST-IN-PLACE CONCRETE FRAMES: RESTRAINED

ALL OTHER SYSTEMS: UNRESTRAINED

LATERAL LOAD RESISTING SYSTEM

LATERAL FORCE RESISTANCE IN THE COMPLETED STRUCTURE IS PROVIDED AS FOLLOWS: ELEVATED FLOOR SLABS AND ROOF SLABS / DECKS SERVE AS HORIZONTAL DIAPHRAGMS TO TRANSFER LATERAL LOADS TO THE VERTICAL LATERAL LOAD RESISTING ELEMENTS WHICH IN TURN TRANSFER THOSE LOADS TO THE FOUNDATION SYSTEM. VERTICAL LATERAL LOAD RESISTING ELEMENTS ARE INDICATED ON THE DRAWINGS AND CONSIST OF THE FOLLOWING, UNLESS NOTED OTHERWISE:

PLAN NORTH-SOUTH DIRECTION:
STEEL BRACED FRAMES

PLAN EAST-WEST DIRECTION:
STEEL BRACED FRAMES

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY

NOBLE COUNTY HIGHWAY DEPTARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

NICHOLAS TINL REGISTERED PE12000671 STATE OF INDIANA PROFESSIONAL ENGINEER

03/27/2026

CERTIFIED BY

ISSUANCE INDEX
DATE:
03.27.2026
PROJECT PHASE:
BID DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2025.02329

GENERAL NOTES

S003

3/27/2026 8:15:34 AM

SPECIAL INSPECTION SERVICES SCHEDULE - MASONRY CONSTRUCTION LEVEL B INSPECTION

REFER TO IBC 2012 CHAPTER 17 AND ACI 530.1-11 TABLE 4

ITEM	TASK	APPLICABLE TO PROJECT (Y/N)	FREQUENCY	REFERENCE (ACI 530-11)	REFERENCE (ACI 530.1-11)
GENERAL COMPLIANCE	VERIFY MASONRY UNITS AND MATERIALS COMPLY WITH APPROVED SUBMITTALS	Y	PERIODIC		ARTICLE 1.5
TESTING OF SELF-CONSOLIDATING GROUT	VERIFY THAT SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) TESTS ARE PROVIDED FOR SELF-CONSOLIDATING GROUT	Y	PERIODIC		ARTICLE 1.5B.1.b.3
TESTING OF GROUT COMPRESSIVE STRENGTH	WHEN REQUIRED f'm EXCEEDS 2,000 PSI, VERIFY A PRISM STRENGTH TEST OF GROUT IS PERFORMED FOR EACH 5,000 SFT OR LESS OF WALL AREA	N	PERIODIC		ARTICLE 1.4B
AT START OF MASONRY CONSTRUCTION:					
SITE-PREPARED MORTAR	VERIFY PROPORTIONS OF SITE-PREPARED MORTAR ARE IN CONFORMANCE WITH CONSTRUCTION DOCUMENTS	Y	PERIODIC		ARTICLES 2.1, 2.6A
MORTAR JOINTS	VERIFY PROPER MORTAR JOINT CONSTRUCTION	Y	PERIODIC		ARTICLE 3.3B
REINFORCEMENT AND CONNECTORS	VERIFY LOCATION OF REINFORCEMENT AND CONNECTORS	Y	PERIODIC		ARTICLE 3.4
PRESTRESSING TENDONS	VERIFY GRADE, TYPE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES	N	PERIODIC		ARTICLE 2.4
PRESTRESSING TENDONS	VERIFY LOCATION OF PRESTRESSING TENDONS AND ANCHORAGES	N	PERIODIC		ARTICLES 3.4, 3.6A
PRESTRESSING TECHNIQUE	VERIFY PRESTRESSING TECHNIQUE AND MONITORING IS IN CONFORMANCE WITH CONSTRUCTION DOCUMENTS	N	PERIODIC		ARTICLE 3.6B
PRIOR TO GROUTING:					
GROUT SPACE	VERIFY GROUT SPACES ARE PREPARED AND CLEARED PRIOR TO GROUT PLACEMENT	Y	PERIODIC		ARTICLE 3.2D, 3.2F
REINFORCEMENT AND ANCHOR MATERIALS	VERIFY PROPER GRADE, SIZE, AND TYPE OF REINFORCEMENT, ANCHOR BOLTS AND EMBEDDED ITEMS	Y	PERIODIC	SECTION 1.16	ARTICLE 2.4, 3.4
REINFORCEMENT AND ANCHOR PLACEMENT	VERIFY LOCATION, SIZE, QUANTITY, TYPE AND SUPPORT FOR ALL REINFORCEMENT, ANCHOR BOLTS AND EMBEDDED ITEMS	Y	PERIODIC	SECTION 1.16	ARTICLES 3.2E, 3.4
SITE-PREPARED GROUT	VERIFY PROPORTIONS OF SITE-PREPARED GROUT	Y	PERIODIC		ARTICLE 2.6B
MORTAR JOINTS	VERIFY PROPER MORTAR JOINT CONSTRUCTION WITHOUT OBSTRUCTIONS THAT WOULD DETRIMENTALLY AFFECT GROUT PLACEMENT	Y	PERIODIC		ARTICLE 3.3B
PRESTRESSING TENDONS	VERIFY GRADE, TYPE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES	N	PERIODIC		ARTICLE 2.4
PRESTRESSING TENDONS	VERIFY LOCATION OF PRESTRESSING TENDONS AND ANCHORAGES	N	PERIODIC		ARTICLES 3.4, 3.6A
GROUT FOR BONDED TENDONS	VERIFY PROPORTIONS OF PRE-STRESSING GROUT FOR BONDED TENDONS	N	PERIODIC		ARTICLE 2.4 G.1.b
DURING CONSTRUCTION:					
STRUCTURAL ELEMENTS	VERIFY SIZE AND LOCATION OF STRUCTURAL ELEMENTS	Y	PERIODIC		ARTICLE 3.3F
ANCHORAGES	VERIFY TYPE, SIZE AND LOCATION OF ANCHORS INCLUDING DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES AND OTHER CONSTRUCTION	Y	PERIODIC	SECTIONS 1.16.4.3, 1.17.1	
WELDING OF REINFORCEMENT	WHERE SPECIFICALLY PERMITTED, VERIFY WELDING OF REINFORCEMENT CONFORMS TO INDICATED STANDARDS	N	CONTINUOUS	SECTIONS 2.1.7.7.2, 3.3.3.4 (c), 8.3.3.4 (b)	
COLD WEATHER / HOT WEATHER	VERIFY PREPARATION, CONSTRUCTION AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40F) AND HOT WEATHER (TEMPERATURE ABOVE 90F)	Y	PERIODIC		ARTICLES 1.8C, 1.8D
PLACEMENT OF GROUT	VERIFY PROPER PLACEMENT AND CONSOLIDATION OF GROUT	Y	CONTINUOUS		ARTICLE 3.5
TEST SPECIMENS	OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS	Y	PERIODIC		ARTICLES 1.4B.2.a.3, 1.4B.2.b.3, 1.4B.2.c.3, 1.4B.3, 1.4B.4
PRESTRESSING FORCE APPLICATION	VERIFY APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE IS IN CONFORMANCE WITH CONSTRUCTION DOCUMENTS	N	CONTINUOUS		ARTICLE 3.6B
PRESTRESSING GROUT PLACEMENT	VERIFY PLACEMENT OF GROUT FOR BONDED PRESTRESSING TENDONS CONFORMS TO INDICATED REQUIREMENTS	N	CONTINUOUS		ARTICLE 3.6C
AUTOCLAVED AERATED CONCRETE (AAC) MASONRY:					
COMPRESSIVE STRENGTH TEST	VERIFY AAC f'AAC PRIOR TO CONSTRUCTION AND FOR EVERY 5,000 SFT OF WALL	N	PERIODIC		ARTICLE 1.4B
AAC THIN-BED MORTAR	VERIFY PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	N	NOTE 2		ARTICLE 2.1C
AAC PLACEMENT	VERIFY PROPER PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	N	NOTE 2		ARTICLE 3.3B.8

NOTES:

1. INSPECTION REQUIREMENTS PER THIS TABLE APPLY TO ENGINEERED MASONRY IN RISK CATEGORIES I, II AND III, UNO.
2. FOR AAC MASONRY, INSPECT CONTINUOUS FOR FIRST 5,000 SFT OF AREA, PERIODIC FOR REMAINDER.

SPECIAL INSPECTIONS BASIC SERVICES - CONCRETE CONSTRUCTION

REFER TO IBC 2012 CHAPTER 17 TABLE 1705.3 AND ACI 318-11

ITEM	TASK	APPLICABLE TO PROJECT (Y/N)	FREQUENCY	REFERENCE
REINFORCEMENT	INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS (WHERE APPLICABLE) AND VERIFY CORRECT PLACEMENT	Y	PERIODIC	ACI 318 SECTIONS 3.5 AND 7.1 THROUGH 7.7; IBC 1910.4
REINFORCING BAR WELDING	VERIFY WELDABILITY OF BARS OTHER THAN ASTM A706	N	PERIODIC	AWS D1.4, ACI 318 SECTION 3.5.2
ANCHORS AND EMBEDDED ITEMS CAST IN CONCRETE	INSPECT ALL ANCHORS AND EMBEDDED ITEMS FOR PROPER SIZE, TYPE, QUANTITY, LOCATION, POSITION, PROJECTION AND EMBEDMENT	Y	PERIODIC	ACI 318 SECTIONS 3.8.6, 8.1.3, 21.2.8; IBC 1908.5, 1909.1
ANCHORS POST-INSTALLED IN HARDENED CONCRETE	INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS	Y	PERIODIC	ACI 318 SECTIONS 3.8.6, 8.1.3, 21.2.8; IBC \1909.1
CONCRETE MIX	VERIFY USE OF REQUIRED CONCRETE MIX AT EACH APPLICATION	Y	PERIODIC	ACI 318 CHAPTER 4, SECTIONS 5.2 THROUGH 5.4; IBC 1904.2, 1910.2, 1910.3
CONCRETE TESTING	VERIFY THAT CONCRETE SAMPLING AND TESTING IS PERFORMED IN ACCORDANCE WITH CONSTRUCTION DOCUMENTS	Y	CONTINUOUS	ASTM C172, ASTM C31, ACI 318 5.6, 5.8; IBC 1910.10
CONCRETE PLACEMENT	INSPECT FOR PROPER PLACEMENT TECHNIQUES	Y	CONTINUOUS	ACI 318 SECTIONS 5.9, 5.10; IBC 1910.6, 1910.7, 1910.8
SHOTCRETE PLACEMENT	INSPECT FOR PROPER APPLICATION TECHNIQUES	N	CONTINUOUS	ACI 318 SECTIONS 5.9, 5.10; IBC 1910.6, 1910.7, 1910.8
CONCRETE CURING	VERIFY MAINTENANCE OF PROPER CONCRETE TEMPERATURE AND CURING TECHNIQUES	Y	PERIODIC	ACI 318 SECTIONS 5.11 THROUGH 5.13; IBC 1910.9
PRESTRESSED CONCRETE	INSPECT FOR PROPER APPLICATION OF PRESTRESSING FORCES	N	CONTINUOUS	ACI 318 SECTION 18.20
PRESTRESSED CONCRETE	INSPECT FOR PROPER GROUTING OF BONDED PRESTRESSING TENDONS	N	CONTINUOUS	ACI 318 SECTION 18.18.4
ERECTION OF PRECAST CONCRETE MEMBERS	VERIFY WELDING PROCEDURE SPECIFICATIONS ARE FOLLOWED	N	PERIODIC	ACI CHAPTER 16
ERECTION OF PRECAST CONCRETE MEMBERS	INSPECT ALL CONNECTIONS OF THE PRECAST ELEMENTS TO THE FOUNDATIONS FOR CONFORMANCE TO THE CONTRACT DOCUMENTS	N	PERIODIC	ACI CHAPTER 16
ERECTION OF PRECAST CONCRETE MEMBERS	INSPECT ALL CONNECTIONS OF THE PRECAST ELEMENTS TO THE STRUCTURAL FRAMING FOR CONFORMANCE TO THE CONTRACT DOCUMENTS	N	PERIODIC	ACI CHAPTER 16
IN-SITU CONCRETE STRENGTH - PRE-STRESSING	VERIFY IN-PLACE CONCRETE STRENGTH PRIOR TO STRESSING TENDONS IN POST-TENSIONED CONCRETE	N	PERIODIC	ACI 318 SECTION 6.2
IN-SITU CONCRETE STRENGTH - FORMS AND SHORES	VERIFY IN-PLACE CONCRETE STRENGTH PRIOR TO REMOVAL OF FORMS AND SHORES FROM BEAMS AND STRUCTURAL SLABS	N	PERIODIC	ACI 318 SECTION 6.2
FORMWORK	INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	Y	PERIODIC	ACI 318 SECTION 6.1.1
WATER STOPS	VERIFY ALL WATER STOPS ARE PROPERLY INSTALLED AND ANCHORED INTO POSITION PRIOR TO PLACEMENT OF CONCRETE	N	PERIODIC	

SPECIAL INSPECTIONS BASIC SERVICES - SOILS AND EARTHWORK

REFER TO IBC 2012 CHAPTER 17 TABLE 1705.6

ITEM	TASK	APPLICABLE TO PROJECT (Y/N)	FREQUENCY	REFERENCE
BEARING SOILS FOR SHALLOW FOUNDATIONS	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	Y	PERIODIC	
EXCAVATIONS	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	Y	PERIODIC	
FILL MATERIALS	VERIFY CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS IS PERFORMED	Y	PERIODIC	
FILL MATERIAL PLACEMENT	VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	Y	CONTINUOUS	
SUBGRADE PREPARATION	PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	Y	PERIODIC	
BACKFILL AT BELOW-GRADE WALLS	VERIFY THAT BELOW-GRADE WALLS WITH UNEVEN BACKFILL CONDITIONS ARE NOT BACKFILLED UNTIL FLOOR CONSTRUCTION AT TOPS OF WALLS (OR OTHER PERMANENT BRACING WHERE APPLICABLE) IS COMPLETE OR TEMPORARY BRACING IS PROVIDED	N	PERIODIC	

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY

NOBLE COUNTY HIGHWAY DEPTARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

NICHOLAS TINL
REGISTERED
PE12000671
STATE OF
INDIANA
PROFESSIONAL ENGINEER

03/27/2026

CERTIFIED BY

ISSUANCE INDEX
DATE:
03.27.2026
PROJECT PHASE:
BID DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2025.02329

SPECIAL INSPECTION REQUIREMENTS

S004

3/27/2026 8:15:35 AM

SPECIAL INSPECTION SERVICES SCHEDULE - COLD-FORMED STEEL DECK

REFER TO IBC 2012, CHAPTER 17

ITEM	TASK	APPLICABLE TO PROJECT (Y/N)	FREQUENCY	REFERENCE
PRIOR TO DECK PLACEMENT:				
MATERIAL COMPLIANCE	VERIFY COMPLIANCE OF DECK AND ALL DECK ACCESSORIES WITH CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERTIES AND BASE METAL THICKNESS	Y	PERIODIC	AWS D1.3, SDI C, NC AND R (AS APPLICABLE)
MATERIAL ACCEPTANCE	DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES	Y	PERIODIC	
AFTER DECK PLACEMENT:				
STEEL DECK INSTALLATION	VERIFY PROPER INSTALLATION OF STEEL DECK AND ACCESSORIES	Y	PERIODIC	SDI C, NC AND R (AS APPLICABLE)
MATERIAL MILL CERTIFICATIONS	VERIFY DECK MATERIALS ARE REPRESENTED BY APPROPRIATE MILL CERTIFICATIONS	Y	PERIODIC	
INSTALLATION ACCEPTANCE	DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES INSTALLATION	Y	PERIODIC	
PRIOR TO WELDING:				
WELDING PROCEDURE SPECIFICATION(S)	VERIFY WELDING PROCEDURE SPECIFICATION (WPS) AVAILABLE	Y	PERIODIC	AWS D1.3, SDI C, NC AND R (AS APPLICABLE)
WELDING CONSUMABLES MANUFACTURER CERTIFICATIONS	VERIFY MANUFACTURER'S CERTIFICATIONS ARE AVAILABLE FOR WELDING CONSUMABLES	Y	PERIODIC	AWS D1.3, SDI C, NC AND R (AS APPLICABLE)
WELDING MATERIAL TYPE/GRADE	VERIFY WELDING MATERIAL TYPE/GRADE	Y	PERIODIC	AWS D1.3, SDI C, NC AND R (AS APPLICABLE)
WELDING EQUIPMENT	VERIFY WELDING EQUIPMENT IN GOOD WORKING ORDER	Y	PERIODIC	AWS D1.3, SDI C, NC AND R (AS APPLICABLE)
DURING WELDING:				
QUALIFIED WELDERS	VERIFY USE OF QUALIFIED WELDERS	Y	PERIODIC	AWS D1.3
WELDING CONSUMABLES	VERIFY PROPER CONTROL AND HANDLING OF WELDING CONSUMABLES	Y	PERIODIC	AWS D1.3
ENVIRONMENTAL CONDITIONS	DOCUMENT ENVIRONMENTAL CONDITIONS (WIND SPEED, MOISTURE, TEMPERATURE) ARE ACCEPTABLE	Y	PERIODIC	AWS D1.3
WPS FOLLOWED	VERIFY PROPER WPS IS FOLLOWED DURING WELDING	Y	PERIODIC	AWS D1.3
AFTER WELDING:				
FIELD WELDING	INSPECT FIELD WELDS FOR PROPER SIZE, LOCATION, PATTERN, AND SPACING FOR ALL WELDS	Y	PERIODIC	AWS D1.3, SDI C, NC AND R (AS APPLICABLE)
VISUAL ACCEPTANCE	VERIFY WELDS MEET VISUAL ACCEPTANCE CRITERIA	Y	PERIODIC	AWS D1.3, SDI C, NC AND R (AS APPLICABLE)
REPAIR ACTIVITIES	VERIFY DEFICIENT WELDS ARE PROPERLY REPAIRED	Y	PERIODIC	AWS D1.3, SDI C, NC AND R (AS APPLICABLE)
WELD ACCEPTANCE	DOCUMENT ACCEPTANCE OR REJECTION OF WELDS	Y	PERIODIC	AWS D1.3, SDI C, NC AND R (AS APPLICABLE)
PRIOR TO MECHANICAL FASTENING:				
MANUFACTURER INSTRUCTIONS	VERIFY MANUFACTURER INSTALLATION INSTRUCTIONS ARE AVAILABLE FOR MECHANICAL FASTENERS	Y	PERIODIC	SDI C, NC AND R (AS APPLICABLE)
PROPER TOOLS	VERIFY PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION	Y	PERIODIC	SDI C, NC AND R (AS APPLICABLE)
FASTENER STORAGE	VERIFY PROPER STORAGE FOR MECHANICAL FASTENERS	Y	PERIODIC	SDI C, NC AND R (AS APPLICABLE)
DURING MECHANICAL FASTENING:				
POSITIONING	VERIFY FASTENERS ARE POSITIONED AS REQUIRED (INCLUDING PROPER PATTERN, SPACING, ETC.)	Y	PERIODIC	SDI C, NC AND R (AS APPLICABLE)
INSTALLATION	VERIFY FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS	Y	PERIODIC	SDI C, NC AND R (AS APPLICABLE)
AFTER MECHANICAL FASTENING:				
SUPPORT FASTENERS	VERIFY PROPER PATTERN, SPACING, TYPE AND INSTALLATION	Y	PERIODIC	SDI C, NC AND R (AS APPLICABLE)
PERIMETER FASTENERS	VERIFY PROPER PATTERN, SPACING, TYPE AND INSTALLATION	Y	PERIODIC	SDI C, NC AND R (AS APPLICABLE)
SIDELAP FASTENERS	VERIFY PROPER SPACING, TYPE AND INSTALLATION	Y	PERIODIC	SDI C, NC AND R (AS APPLICABLE)
REPAIR ACTIVITIES	VERIFY DEFICIENT FASTENERS ARE PROPERLY REPAIRED	Y	PERIODIC	SDI C, NC AND R (AS APPLICABLE)
FASTENER ACCEPTANCE	DOCUMENT ACCEPTANCE OR REJECTION OF FASTENERS	Y	PERIODIC	SDI C, NC AND R (AS APPLICABLE)

NOTES:

1. "PERIODIC" REQUIRES OBSERVATION ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
2. "CONTINUOUS" REQUIRES TASKS TO BE CONTINUOUSLY PERFORMED FOR EACH OPERATION, CONNECTION OR MEMBER AS APPLICABLE.
3. INSPECT FOR CONFORMANCE WITH CONSTRUCTION DOCUMENTS, INSTALLATION DRAWINGS, SHOP DRAWINGS, DESIGN DOCUMENTS, MANUFACTURER'S INSTRUCTIONS, AND APPLICABLE REFERENCED STANDARDS.

SPECIAL INSPECTION SERVICES SCHEDULE - STEEL CONSTRUCTION

REFER TO IBC 2012 CHAPTER 17 AND AISC 360-10

ITEM	TASK	APPLICABLE TO PROJECT (Y/N)	PERFORM OR OBSERVE	REFERENCE
WELDED MEMBERS				
PRIOR TO WELDING:				
WELDING PROCEDURE SPECIFICATIONS	VERIFY CONTRACTOR MAINTAINS WELDING PROCEDURE SPECIFICATIONS READILY AVAILABLE FOR ALL WELDERS FOR ALL TYPES OF WELDS PERFORMED ON THE PROJECT	Y	PERFORM	AISC 360 TABLE N5.4-1
WELD MATERIAL CERTIFICATIONS	VERIFY MATERIAL CERTIFICATIONS ARE AVAILABLE FOR ALL CONSUMABLE WELDING MATERIALS	Y	PERFORM	AISC 360 TABLE N5.4-1
WELD MATERIAL IDENTIFICATION	VERIFY ALL WELD MATERIALS ARE PROPERLY MARKED WITH VALID TYPE/GRADE IDENTIFICATION	Y	OBSERVE	AISC 360 TABLE N5.4-1
WELDER IDENTIFICATION SYSTEM	VERIFY FABRICATOR/ERECTOR AS APPLICABLE MAINTAINS RECORDS OF WHO WELDED EVERY JOINT	Y	OBSERVE	AISC 360 TABLE N5.4-1
FIT-UP OF GROOVE WELDS	INSPECT FOR PROPER FIT-UP INCLUDING JOINT PREPARATION, DIMENSIONS, CLEANLINESS, TACKING, AND BACKING (WHERE BACKING IS APPLICABLE)	Y	OBSERVE	AISC 360 TABLE N5.4-1
ACCESS HOLES	INSPECT FOR CONFIGURATION AND FINISH OF ACCESS HOLES	Y	OBSERVE	AISC 360 TABLE N5.4-1
FIT-UP OF FILLET WELDS	INSPECT FOR PROPER FIT-UP INCLUDING DIMENSIONS, CLEANLINESS, AND TACKING	Y	OBSERVE	AISC 360 TABLE N5.4-1
DURING WELDING:				
QUALIFIED WELDERS	VERIFY USE OF QUALIFIED WELDERS	Y	OBSERVE	AISC 360 TABLE N5.4-2
WELDING CONSUMABLES	INSPECT FOR PROPER PACKAGING, STORAGE AND PROTECTION	Y	OBSERVE	AISC 360 TABLE N5.4-2
TACK WELDS	VERIFY NO WELDING OCCURS OVER CRACKED TACK WELDS	Y	OBSERVE	AISC 360 TABLE N5.4-2
FIELD CONDITIONS	VERIFY WIND SPEED WITHIN LIMITS AND PROPER PROTECTION/PREPARATION FOR PRECIPITATION AND TEMPERATURE	Y	OBSERVE	AISC 360 TABLE N5.4-2
WELDING PROCEDURE SPECIFICATION (NOTE 2 - SEE AISC 360)	VERIFY WELDING PROCEDURE SPECIFICATIONS ARE FOLLOWED	Y	OBSERVE	AISC 360 TABLE N5.4-2
WELDING TECHNIQUES	VERIFY EACH PASS MEETS PROFILE LIMITATIONS AND QUALITY REQUIREMENTS, INTERPASS AND FINAL CLEANING	Y	OBSERVE	AISC 360 TABLE N5.4-2
COMPOSITE BEAM HEADED STUD ANCHORS	INSPECT FOR PROPER PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	N	OBSERVE	
AFTER WELDING:				
WELDS CLEANED	VERIFY PROPER CLEANING OF COMPLETED WELDS	Y	OBSERVE	AISC 360 TABLE N5.4-3
SIZE, LENGTH, LOCATION, AND VISUAL ACCEPTANCE CRITERIA (NOTE 3 - SEE AISC 360)	INSPECT WELDS TO CONFIRM PROPER SIZE, LENGTH, LOCATION AND VISUAL ACCEPTANCE CRITERIA (CRACK PROHIBITION, WELD/BASE METAL FUSION, CRATER CROSS SECTION, WELD PROFILES, WELD SIZE, UNDERCUT POROSITY) AS FOLLOWS:			AISC 360 TABLE N5.4-3
	VISUALLY INSPECT AND VERIFY ULTRASONIC TESTING IS PERFORMED FOR 100% OF ALL CJP WELDS	Y	PERFORM	
	VISUALLY INSPECT 100% OF ALL CJP WELDS	Y	PERFORM	
	VISUALLY INSPECT 100% OF WELDS IN LATERAL LOAD RESISTING MOMENT FRAMES AND BRACED FRAMES	Y	PERFORM	
	VISUALLY INSPECT 20% OF ALL FILLET WELDS NOT IN LATERAL LOAD RESISTING MOMENT FRAMES AND BRACED FRAMES	Y	PERFORM	
ARC STRIKES	VISUALLY INSPECT TO CONFIRM NO ARC STRIKES	Y	PERFORM	AISC 360 TABLE N5.4-3
"K"-AREA WELDING	VISUALLY INSPECT ALL DOUBLER PLATES, CONTINUITY PLATES AND STIFFENER PLATES WHERE WELDING OCCURS WITHIN THE k-AREA OF THE STEEL SECTION TO CONFIRM NO CRACKS IN THE MEMBER WEB	Y	PERFORM	AISC 360 TABLE N5.4-3
BACKING AND WELD TABS REMOVED	VISUALLY INSPECT TO CONFIRM PROPER REMOVAL OF ALL BACKING REMOVED. VERIFY ALL WELD TABS REMOVED (IF REQUIRED)	Y	PERFORM	AISC 360 TABLE N5.4-3
REPAIRS	VERIFY APPROVED REPAIRS OF NON-CONFORMING ITEMS (WHEN REQUIRED) ARE PROPERLY COMPLETED	Y	PERFORM	AISC 360 TABLE N5.4-3
DOCUMENTATION	DOCUMENT ACCEPTANCE OR REJECTION OF WELDED CONNECTIONS	Y	PERFORM	AISC 360 TABLE N5.4-3
BOLTED MEMBERS				
PRIOR TO BOLTING:				
MATERIAL CERTIFICATIONS	VERIFY MANUFACTURER'S CERTIFICATIONS ARE AVAILABLE FOR FASTENER MATERIALS	Y	PERFORM	AISC 360 TABLE N5.6-1
FASTENER MARKINGS	VERIFY FASTENERS ARE MARKED PER ASTM STANDARDS	Y	OBSERVE	AISC 360 TABLE N5.6-1
FASTENER SELECTIONS	VERIFY CORRECT GRADE, TYPE, AND SUFFICIENT LENGTH FOR THREADS EXCLUDED FROM THE SHEAR PLANE (ONLY WHERE SPECIFICALLY INDICATED)	Y	OBSERVE	AISC 360 TABLE N5.6-1
BOLTING PROCEDURE	VERIFY PROPER BOLTING PROCEDURE FOR THE JOINT	Y	OBSERVE	AISC 360 TABLE N5.6-1
CONNECTING ELEMENTS	VERIFY CONNECTING ELEMENTS, INCLUDING FAYING SURFACES AND HOLE PREPARATION (IF SPECIFIED) MEET APPLICABLE REQUIREMENTS	Y	OBSERVE	AISC 360 TABLE N5.6-1
PRE-INSTALLATION VERIFICATION	VERIFY PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL IS OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	Y	OBSERVE	AISC 360 TABLE N5.6-1
PROPER STORAGE	VERIFY PROPER STORAGE OF BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS	Y	OBSERVE	AISC 360 TABLE N5.6-1
DURING BOLTING:				
PROPER POSITIONING	VERIFY ALL FASTENING ELEMENTS ARE PROPERLY POSITIONED IN THE JOINT PRIOR TO TIGHTENING	Y	OBSERVE	AISC 360 TABLE N5.6-2
BOLT TIGHTENING	VERIFY COMPONENT NOT TURNED BY THE WRENCH IS PREVENTED FROM ROTATING DURING TIGHTENING	Y	OBSERVE	AISC 360 TABLE N5.6-2
PRETENSIONED BOLTS SNUG TIGHTENED	VERIFY ALL BOLTS AT A CONNECTION TO BE PRETENSIONED ARE FIRST BROUGHT INTO SNUG-TIGHT CONDITION PRIOR TO START OF PRE-TENSIONING	Y	OBSERVE	AISC 360 TABLE N5.6-2
PRETENSIONED BOLTS TIGHTENING	VERIFY FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS	Y	OBSERVE	AISC 360 TABLE N5.6-2
AFTER BOLTING:				
DOCUMENTATION	DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	Y	PERFORM	AISC 360 TABLE N5.6-3
STEEL FRAMING (GENERAL)				
COLUMN BASES	INSPECT INSTALLATION OF ALL BASE PLATES FOR PROPER ANCHORAGE (INCLUDING WELDED PLATE WASHERS WHERE INDICATED) AND GROUTING BENEATH BASE PLATE	Y	PERFORM	
COLUMN SPLICES	INSPECT ALL COLUMN SPLICES TO CONFIRM THAT GAPS BETWEEN BEARING ELEMENTS DO NOT EXCEED 1/16-INCH	N	PERFORM	
BEAM, GIRDER AND COLUMN MEMBERS	INSPECT FOR CONFORMANCE WITH REQUIRED SIZE, SPACING AND CONNECTION REQUIREMENTS	Y	PERFORM	
ROOF AND FLOOR DECK/SLAB EDGE SUPPORTS	INSPECT SUPPORT MATERIALS FOR PROPER SIZE, POSITIONING AND CONNECTIONS	Y	PERFORM	
BRACED FRAMES AND MOMENT FRAMES	INSPECT INSTALLATION OF ALL MEMBERS AND CONNECTIONS IN BRACED FRAMES AND MOMENT FRAMES FOR PROPER SIZE, POSITIONING AND CONNECTIONS	N	PERFORM	
COMPOSITE STEEL FRAMING	INSPECT COMPOSITE STEEL FRAMING PRIOR TO PLACEMENT OF CONCRETE AS FOLLOWS:			
	VERIFY PROPER PLACEMENT AND INSTALLATION OF STEEL DECK	N	PERFORM	AISC 360 TABLE N6.1
	INSPECT DIAMETER, LENGTH, QUANTITY AND POSITIONING OF STEEL HEADED STUD ANCHORS	N	PERFORM	AISC 360 TABLE N6.1
	RING TEST 100% OF HEADED STUD ANCHORS WITH A 3 LB HAMMER	N	PERFORM	
	BEND TEST QUESTIONABLE HEADED STUD ANCHORS TO 15 DEGREES	N	PERFORM	
	DOCUMENT ACCEPTANCE OR REJECTION OF COMPOSITE STEEL FRAMING ELEMENTS	N	PERFORM	
STEEL GRATING	INSPECT STEEL GRATING AS FOLLOWS:			
	VERIFY PROPER SIZE, TYPE AND FINISH	N	PERFORM	
	VERIFY PROPER ATTACHMENTS TO SUPPORTING STRUCTURE(S)	N	PERFORM	

NOTES:

1. SEE CONTRACT DOCUMENTS FOR WELDING REQUIREMENTS. SEE AISC 360 FOR ADDITIONAL INFORMATION.
2. SEE AISC 360 FOR SPECIFIC REQUIRED ELEMENTS OF WELD PROCEDURE SPECIFICATION.
3. SEE AISC 360 FOR SPECIFIC REQUIRED VISUAL ACCEPTANCE CRITERIA.
4. "OBSERVE" REQUIRES OBSERVATION ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
5. "PERFORM" REQUIRES TASKS TO BE PERFORMED FOR EACH OPERATION, JOINT OR MEMBER AS APPLICABLE.

SPECIAL INSPECTION

THE **[OWNER OR OWNER'S AGENT] [GENERAL CONTRACTOR]** SHALL EMPLOY INDEPENDENT AGENCY(IES) OR INDIVIDUAL(S) TO PROVIDE SPECIAL INSPECTION FOR ITEMS AS INDICATED ON THE DRAWINGS.

SPECIAL INSPECTION IS A MANDATORY REQUIREMENT FOR VERIFYING CONFORMANCE OF THE INDICATED CONSTRUCTION. SPECIAL INSPECTION IS REQUIRED IN ADDITION TO ALL MATERIAL TESTS AND INSPECTIONS IDENTIFIED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.

THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON, WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL AND THE STRUCTURAL ENGINEER, FOR INSPECTION OF EACH PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.

"PERIODIC" SPECIAL INSPECTION IS DEFINED AS "THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK."

"CONTINUOUS" SPECIAL INSPECTION IS DEFINED AS "THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED."

SUBMIT TO THE STRUCTURAL ENGINEER FOR REVIEW A MINIMUM OF 14 DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION OF ELEMENTS REQUIRING SPECIAL INSPECTION THE FOLLOWING:

1. NAME(S), ADDRESS(ES), TELEPHONE NUMBER(S), EMAIL ADDRESS(ES), AND STATEMENT(S) OF QUALIFICATIONS OF ALL SPECIAL INSPECTOR(S) TO BE ENGAGED ON THE PROJECT.
2. A LISTING OF ALL ITEMS TO RECEIVE SPECIAL INSPECTION, DESIGNATION WHETHER INSPECTIONS WILL BE CONTINUOUS OR PERIODIC AND THE NAME OF THE INDIVIDUAL THAT WILL BE PERFORMING INSPECTION FOR EACH ITEM.

THE CONTRACTOR SHALL COORDINATE WITH THE SPECIAL INSPECTOR SUFFICIENTLY IN ADVANCE OF WORK REQUIRING SPECIAL INSPECTION AND SHALL PROVIDE ACCESS TO THE SITE AND TO THE CONSTRUCTION DOCUMENTS (CURRENT DRAWINGS AND SPECIFICATIONS) FOR THE SPECIAL INSPECTOR TO CARRY OUT THE REQUIRED OPERATIONS.

THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK REQUIRING SPECIAL INSPECTION FOR CONFORMANCE TO THE CONSTRUCTION DOCUMENTS. ALL NON-CONFORMING WORK SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE IMMEDIATE ATTENTION OF THE OWNER OR OWNER'S AGENT AND STRUCTURAL ENGINEER.

THE SPECIAL INSPECTOR SHALL SUBMIT PERIODIC PROGRESS REPORTS TO THE OWNER OR OWNER'S AGENT, CONTRACTOR AND STRUCTURAL ENGINEER IDENTIFYING ALL SPECIAL INSPECTION OPERATIONS PERFORMED. REPORTS SHALL BE SUBMITTED NO MORE THAN 7 DAYS FOLLOWING EACH SPECIAL INSPECTION OPERATION. REPORTS SHALL IDENTIFY THE ITEM(S) INSPECTED AND AN INDICATION OF WHETHER THE INSPECTED ITEMS WERE IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS.

AT THE COMPLETION OF ALL WORK REQUIRING SPECIAL INSPECTION, THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT TO THE OWNER OR OWNER'S AGENT, CONTRACTOR AND STRUCTURAL ENGINEER STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE SPECIAL INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS.

FAILURE TO PERFORM SPECIAL INSPECTION FOR THE INDICATED CONSTRUCTION OR FAILURE TO CORRECT NON-CONFORMING WORK SHALL CONSTITUTE A BASIS FOR REJECTION OF THE WORK AND REMOVAL AND REPLACEMENT BY THE GENERAL CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER, INCLUDING, BUT NOT LIMITED TO:

1. THE COST OF REMOVAL AND REPLACEMENT OF ALL WORK FOR WHICH SPECIAL INSPECTION WAS REQUIRED BUT NOT PERFORMED, INCLUDING THE COST OF TESTING AND SPECIAL INSPECTION FOR THE REPLACEMENT WORK.
2. THE COST OF ALL RELATED WORK MADE NECESSARY BY THE REMOVAL AND REPLACEMENT OF THE UNINSPECTED WORK PER ITEM 1 ABOVE.
3. THE COST FOR DESIGN PROFESSIONAL'S SERVICES RELATED TO ALL WORK FOR WHICH SPECIAL INSPECTION WAS REQUIRED BUT NOT PERFORMED AND SERVICES RELATED TO THE REPLACEMENT WORK.

PROVIDE SPECIAL INSPECTION FOR THE FOLLOWING CONSTRUCTION:

SOILS AND EARTHWORK
CONCRETE CONSTRUCTION
MASONRY CONSTRUCTION - LEVEL B INSPECTION
STEEL CONSTRUCTION
COLD-FORMED STEEL DECK
COLD-FORMED STEEL FRAMING

SEE TABLES ON THE DRAWINGS FOR SPECIAL INSPECTION PROGRAM REQUIREMENTS.

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY

NOBLE COUNTY HIGHWAY DEPTARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

NICHOLAS TINL
REGISTERED
PE12000671
STATE OF
INDIANA
PROFESSIONAL ENGINEER

03/27/2026

CERTIFIED BY

ISSUANCE INDEX
DATE:
03.27.2026
PROJECT PHASE:
BID DOCUMENTS

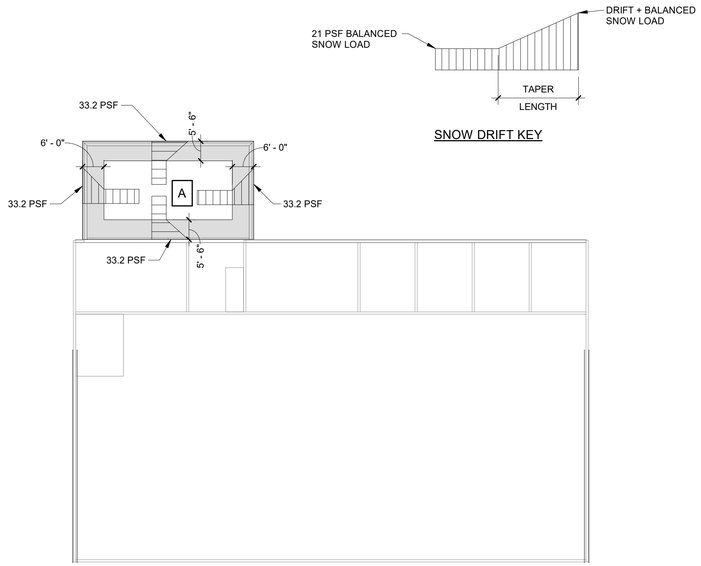
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2025.02329

SPECIAL INSPECTION REQUIREMENTS

S005

3/27/2026 8:15:37 AM



SNOW DRIFT KEY

1 S006 ROOF LOAD MAP

1" = 20'-0"

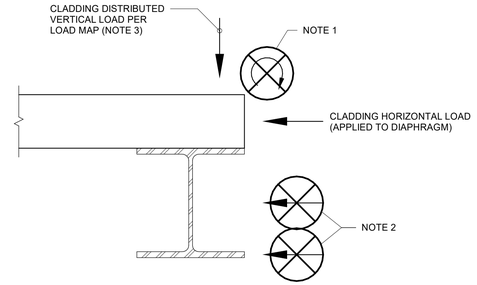
UNIFORM LOAD SCHEDULE					
MARK	DESCRIPTION	DESIGN LOADS (PSF)			
		DEAD	SUPERIMPOSED DEAD	LIVE	SNOW
A	TYPICAL ROOF	5	10	20	21 PSF MIN -OR- DRIFT PER LOAD MAPS / DIAGRAMS

NOTES:

1. DEAD LOAD (WHEN DEFINED) REPRESENTS SELF-WEIGHT ALLOWANCE OF THE PRIMARY STRUCTURAL SYSTEM. WHEN NOT DEFINED, SEE DRAWINGS FOR MEMBER MATERIALS AND SIZES.
2. SUPERIMPOSED DEAD LOAD IS PERMANENT UNIFORM DEAD LOAD ALLOWANCE SUPPORTED BY THE STRUCTURE.
3. FOR SNOW LOADS DESIGN FOR WORST CASE OF UNIFORM SNOW OR SNOW DRIFT CONDITION.
4. "NR" = NON-REDUCIBLE LIVE LOAD.

2 S006 TYPICAL UNIFORM LOAD SCHEDULE

N.T.S.

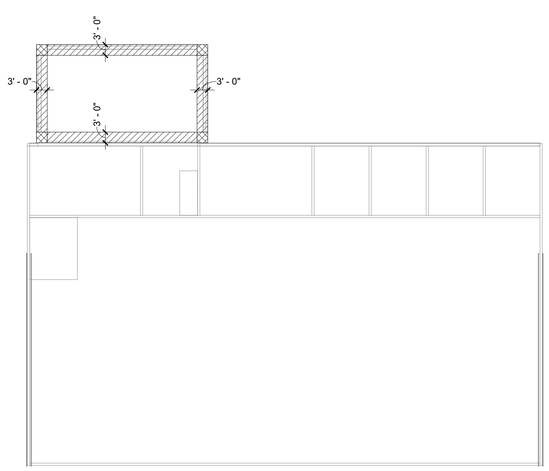


NOTES:

1. DO NOT APPLY MOMENTS TO STRUCTURE.
2. DO NOT APPLY HORIZONTAL LOADS BELOW THE STRUCTURAL DIAPHRAGM UNLESS BOTTOM CHORD BRACING (DESIGNED BY CONTRACTOR) HAS BEEN PROVIDED.
3. VERTICAL LOADS APPLIED AS POINT LOADS MUST BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO SHOP DRAWING SUBMISSION.

3 S006 TYPICAL CLADDING LOAD APPLICATION

N.T.S.



ROOF FRAMING NET UPLIFT (LRFD)			
EFFECTIVE WIND AREA	ZONE 1	ZONE 2	ZONE 3
10	-23.9	-44.1	-69.5
20	-23.1	-39.1	-56.8
50	-22.6	-31.5	-39.1
100	-21.4	-26.4	-26.4
200	-21.4	-26.4	-26.4
500	-21.4	-26.4	-26.4

NOTES:
1. INDICATED VALUES ARE 0.9D + 1.0W LRFD LOAD COMBINATION.
2. NOTED VALUES APPLY ONLY TO NEW CONSTRUCTION.

ZONE 1

ZONE 2

ZONE 3

5 S006 ROOF FRAMING NET UPLIFT LOAD MAP

1" = 20'-0"

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ALBION, IN 46701

NICHOLAS TINL REGISTERED PE12000671 STATE OF INDIANA PROFESSIONAL ENGINEER

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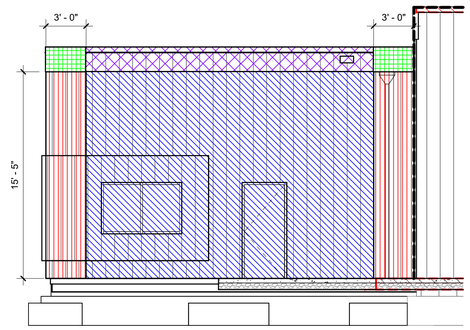
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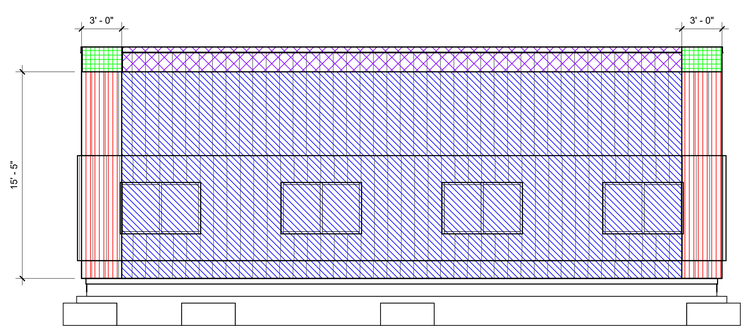
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LOAD MAPS

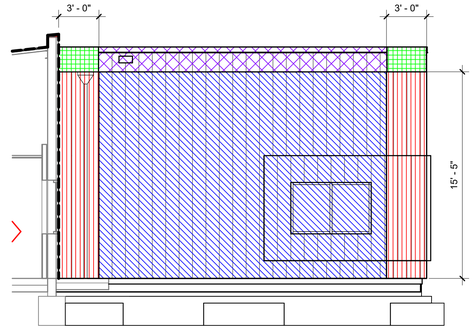
S006



1 S007 **WEST ELEVATION**
3/16" = 1'-0"



2 S007 **NORTH ELEVATION**
3/16" = 1'-0"



3 S007 **EAST ELEVATION**
3/16" = 1'-0"

COMPONENTS AND CLADDING WIND PRESSURES (LRFD)

WALLS
(WALLS, H ≤ 60 FT)

EFFECTIVE WIND AREA (ft^2)	ZONE 4		ZONE 5		ZONE 4P		ZONE 5P	
	POS. (psf)	NEG. (psf)	POS. (psf)	NEG. (psf)	POS. (psf)	NEG. (psf)	POS. (psf)	NEG. (psf)
10	26.7	-29	26.7	-35.6	77.5	-57	102.8	-63.8
20	25.6	-27.8	25.6	-33.4	71.3	-54.7	89	-60.4
50	24.1	-26.7	24.1	-30.5	62.1	-52	69.7	-55.8
100	22.7	-25.2	22.7	-27.8	55.7	-49	55.7	-51.7
200	21.8	-23.8	21.8	-25.6	54.8	-46.7	54.8	-48.5
≥ 500	20	-22.3	20	-22.3	52.9	-43.3	52.9	-43.3

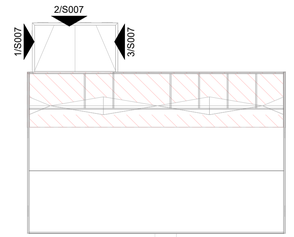
NOTES:
1. REFERENCE ASCE 7-10, FIGURE 30.4-1.

ZONE 4 ZONE 4P ZONE 5 ZONE 5P

WIND LOAD NOTES:

1. ALL LOADING VALUES LISTED ARE ULTIMATE ULTIMATE LEVEL (LRFD) COMPONENT AND CLADDING VALUES FROM CHAPTER 30 OF ASCE 7-10 UNLESS NOTED OTHERWISE.
2. IF SERVICE LEVEL PRESSURES ARE NEEDED, MULTIPLY VALUES IN TABLE BY 0.6.
3. FOR WIND LOAD USED FOR DEFLECTION CHECKS, MULTIPLY VALUES IN TABLE BY (76^2)/(115^2).
4. POSITIVE DENOTES WIND LOAD APPLIED TOWARDS THE EXTERIOR SURFACE, NEGATIVE DENOTES WIND LOAD APPLIED AWAY FROM THE EXTERIOR SURFACE
5. THE WIND LOADS FOR THE DESIGN OF ALL FASTENERS AND COMPONENTS SHALL BE BASED ON AN EFFECTIVE WIND AREA OF NOT MORE THAN 20 SQ. FT. FOR ALL OTHER COMPONENTS, LARGER EFFECTIVE WIND AREAS MAY BE USED.

4 S007 **COMPONENTS AND CLADDING WIND PRESSURES (LRFD)**
N.T.S.



5 S007 **WIND LOAD KEY PLAN**
N.T.S.

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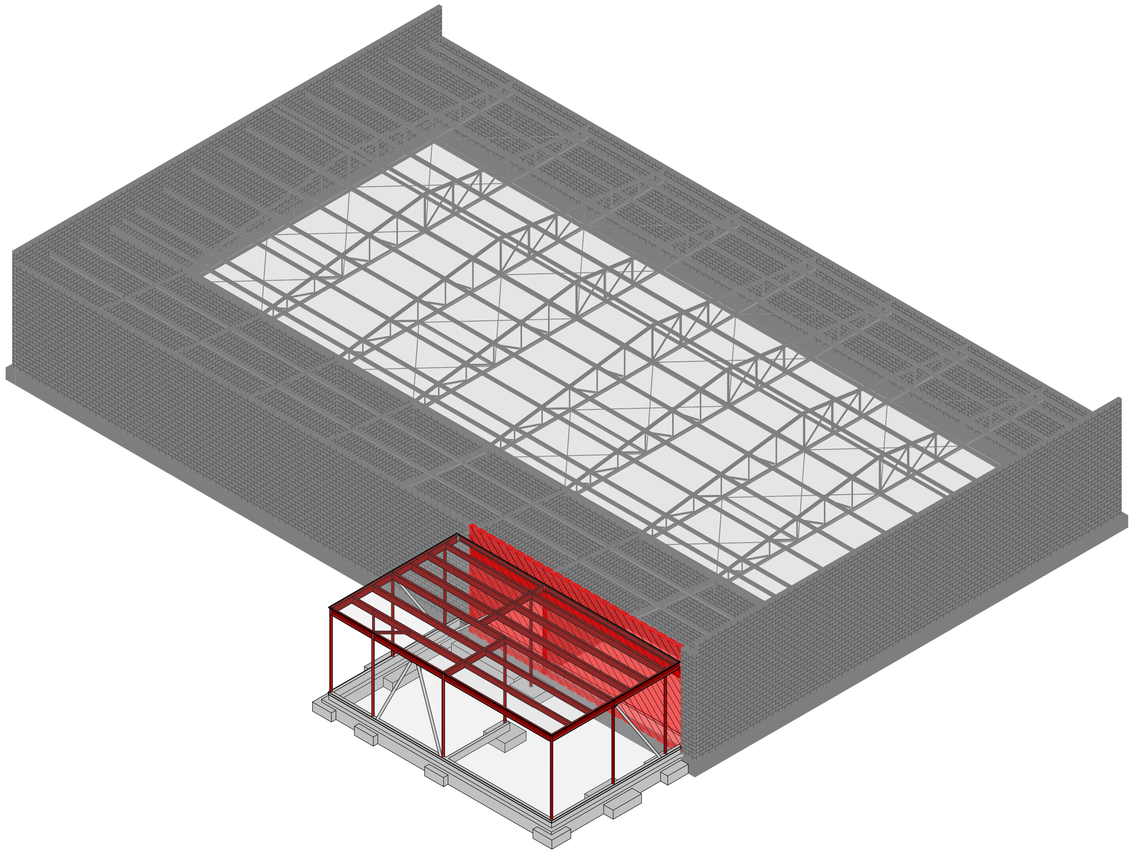
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WIND LOAD ELEVATIONS

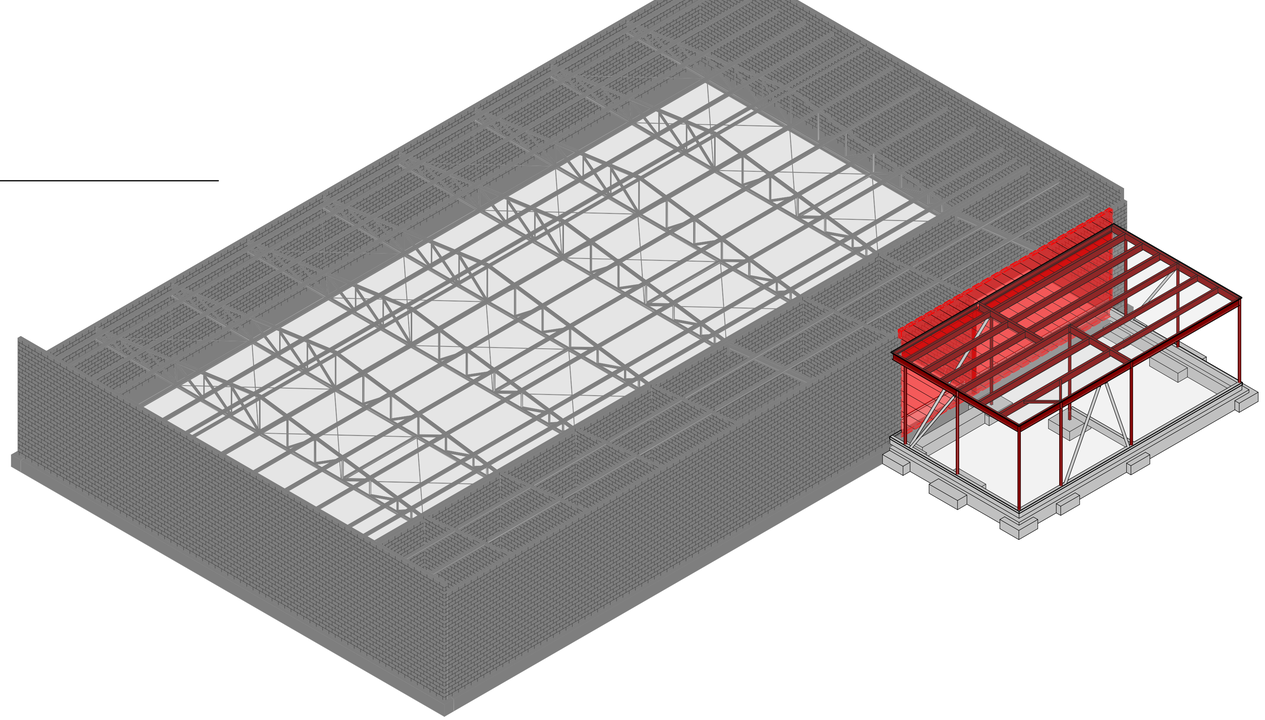
S007

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3D VIEWS ARE FOR REFERENCE ONLY



1 S008 **AXONOMETRIC VIEW FROM THE NORTHWEST**



2 S008 **AXONOMETRIC VIEW FROM THE NORTHEAST**

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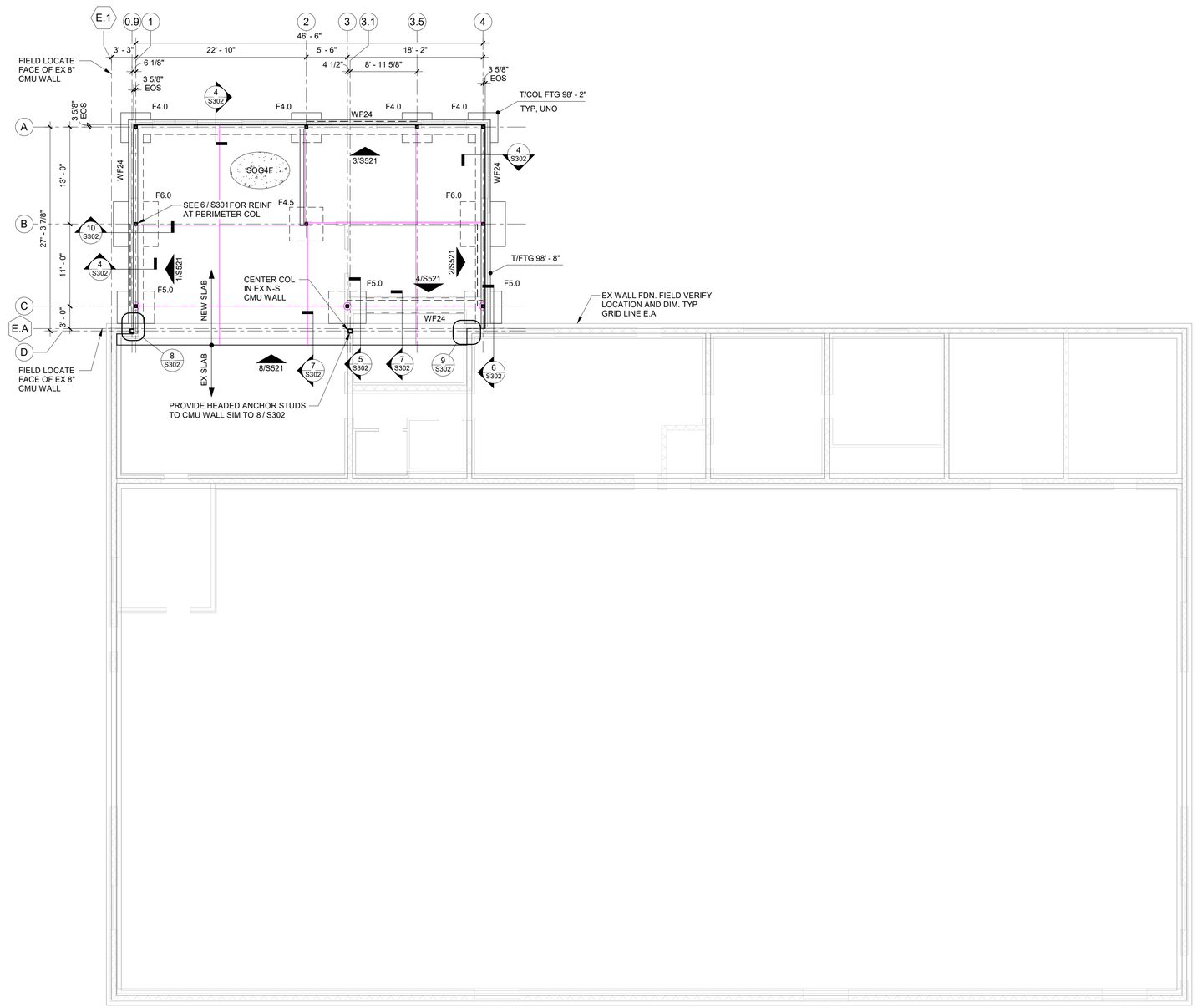
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AXONOMETRICS

S008

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N

1 S101

FOUNDATION PLAN

1/8" = 1'-0"

GENERAL PLAN NOTES:

1. REFERENCE TOP OF SLAB (T/SLAB) = 100'-0" UNO (U.S.G.S. 965.10)
2. TOP OF PERIMETER WALL FOUNDATION = 98'-8", TOP OF COLUMN FOUNDATION = 98'-2".
3. REFER TO STRUCTURAL GENERAL NOTES, LEGEND, SCHEDULES, TYPICAL DETAILS, AND SPECIAL INSPECTION REQUIREMENTS FOR ADDITIONAL INFORMATION.
4. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.
5. PROVIDE ADDITIONAL SLAB ON GRADE REINFORCEMENT AT RE-ENTRANT CORNERS PER THE "TYPICAL ADDITIONAL SLAB ON GRADE REINFORCEMENT AT RE-ENTRANT CORNERS" DETAIL.
6. COORDINATE LOCATIONS OF ALL EMBEDS / OPENINGS / SLEEVES WITH MEP, WALL SYSTEMS, EQUIPMENT SUPPLIERS, AND ALL OTHER AFFECTED TRADES PRIOR TO PLACING CONCRETE.

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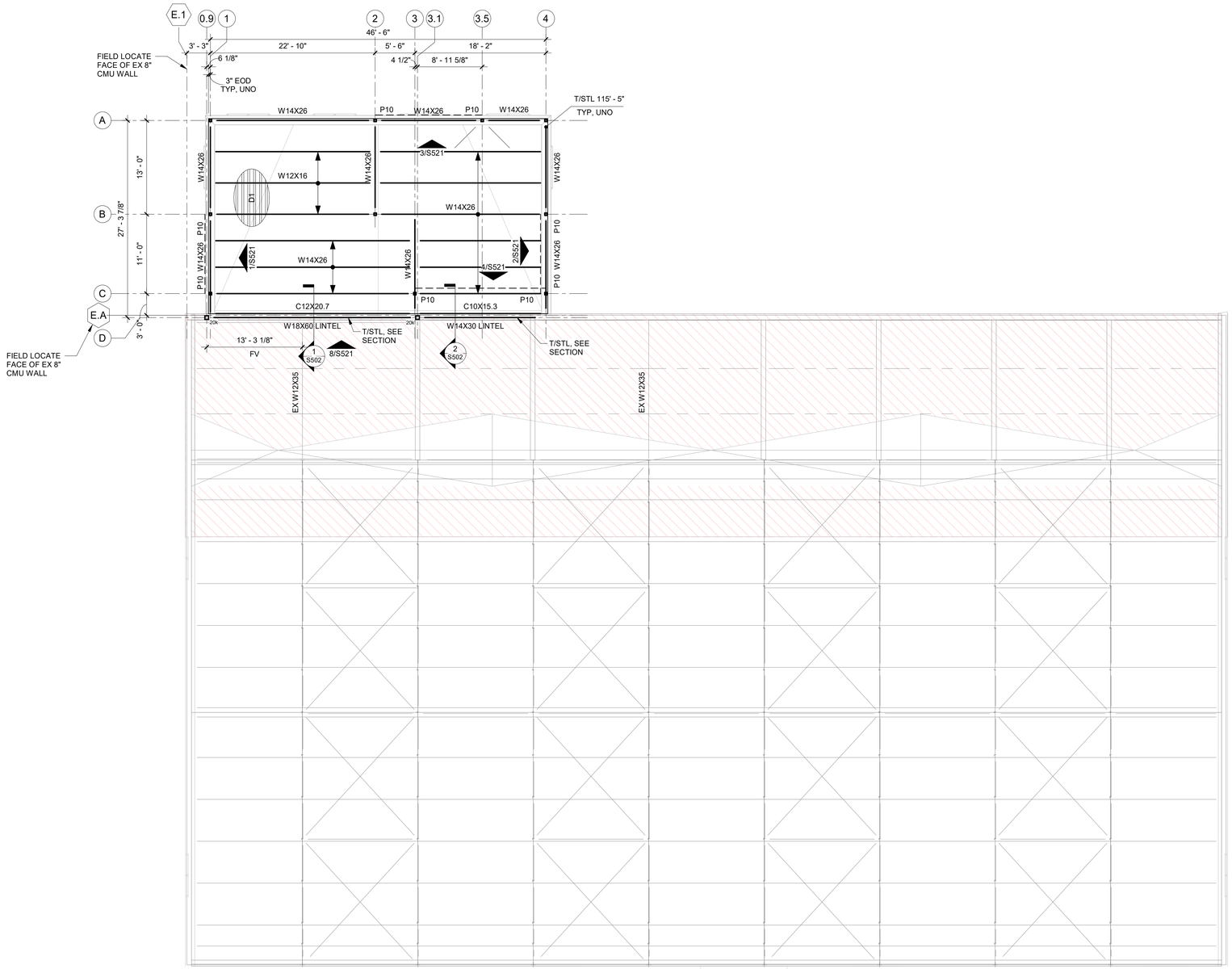
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FOUNDATION PLAN

S101

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N

1 S102

ROOF FRAMING PLAN

1/8" = 1'-0"

GENERAL PLAN NOTES:

1. TOP OF STEEL (T/STL) ELEVATION PER PLAN.
2. REFER TO STRUCTURAL GENERAL NOTES, LEGEND, SCHEDULES, TYPICAL DETAILS, AND SPECIAL INSPECTION REQUIREMENTS FOR ADDITIONAL INFORMATION.
3. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.
4. PROVIDE FRAMED/REINFORCED SUPPORTS FOR ALL ROOF TOP EQUIPMENT, HATCHES, OPENINGS AND ROOF DRAINS PER THE TYPICAL DETAILS. COORDINATE EXACT SIZES AND LOCATIONS OF ALL FRAMING WITH APPLICABLE CONTRACTOR PRIOR TO FABRICATION.

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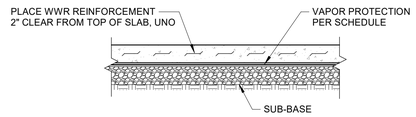
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ROOF FRAMING PLAN

S102

SLAB ON GRADE SCHEDULE

MARK	THICKNESS	REINFORCEMENT	VAPOR PROTECTION	REMARKS
SOG4F	4"	1.0 LBS/CYD MICRO-FIBER	15 MIL VAPOR BARRIER	NOTE 2



VAPOR PROTECTION AND SUB-BASE DETAIL

NOTES:

1. PROVIDE 6" COMPACTED DRAINAGE COURSE, UNO.
2. BASIS OF DESIGN MICRO-FIBER PRODUCT IS SIKA FIBERMESH 150.
3. SEE CIVIL DRAWINGS, SPECIFICATIONS FOR EARTHWORK MATERIALS, PLACEMENT AND COMPACTION REQUIREMENTS.

1 S301 SLAB-ON-GRADE SCHEDULE

N.T.S.

WALL FOOTING SCHEDULE

MARK	SIZE (W x D)		FTG REINF	REMARKS
	WIDTH	DEPTH		
WF24	2' - 0"	2' - 2"	(3) #6 CONT BOTTOM	

COLUMN FOOTING SCHEDULE

MARK	FTG SIZE			FTG REINF	REMARKS
	WIDTH	LENGTH	DEPTH		
F4.0	4' - 0"	4' - 0"	1' - 8"	(5) #6 EW, BOT	
F4.5	4' - 6"	4' - 6"	1' - 8"	(5) #6 EW, BOT	
F5.0	5' - 0"	4' - 0"	1' - 8"	(5) #6 EW, TOP AND BOT	SEE NOTE FOR N-S DIMENSION
F6.0	6' - 0"	6' - 0"	1' - 8"	(8) #6 EW, BOT	

NOTE:
1. SPECIFIED LENGTH IS MINIMUM REQUIRED N-S DIMENSION. EXTEND CONCRETE TO EXISTING FOUNDATION PER SECTION.

SLAB ON GRADE FLATNESS / LEVELNESS SCHEDULE

CLASSIFICATION	OVERALL FF	OVERALL FL	MIN LOCAL FF	MIN LOCAL FL
CONVENTIONAL	20	15	15	10
MODERATELY FLAT	25	20	20	15
FLAT	35	25	25	15
VERY FLAT	45	35	30	25
SUPER FLAT	60	40	40	25

FLOOR TYPE / LOCATION	REQUIRED SLAB
EXPOSED WAREHOUSE, MANUFACTURING AREAS, UNO	FLAT
EXPOSED UTILITY/MECHANICAL AREAS, UNO	MODERATELY FLAT
FLOORS WITH CARPET, VCT FINISH, UNO	MODERATELY FLAT
FLOORS WITH POLISHED CONCRETE OR EPOXY TERRAZZO FINISH	VERY FLAT
TILE UP TO 16" LONG DIMENSION, >=1/4" GROUT JOINTS	FLAT
TILE UP TO 16" LONG DIMENSION, 3/16" GROUT JOINTS	VERY FLAT
TILE UP TO 16" LONG DIMENSION, 1/8" GROUT JOINTS	SUPER FLAT
TILE >16" TO <36" LONG DIMENSION, >=1/4" GROUT JOINTS	VERY FLAT
TILE >16" TO <36" LONG DIMENSION, <1/4" GROUT JOINTS	SUPER FLAT
TILE >36" LONG DIMENSION	SUPER FLAT

NOTES:
1. GENERAL CONTRACTOR SHALL REVIEW ALL FLOOR FINISH REQUIREMENTS FOR THE PROJECT AND PROVIDE CONCRETE SLAB SURFACE FINISHES IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFIED FLOOR FINISH MATERIALS. WHERE TOLERANCES FOR THE FLOOR FINISH MATERIALS DIFFER FROM THIS SCHEDULE, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.
2. GENERAL CONTRACTOR SHALL COORDINATE WITH THE FINISH FLOORING SUPPLIER TO PROVIDE ALL NECESSARY REPAIR, GRINDING, AND / OR LEVELING OF THE CONCRETE SLAB TO ACCOMMODATE ALL FLOOR FINISHES PRIOR TO INSTALLATION OF FINISH MATERIALS WITH NO ADDITIONAL COST TO THE PROJECT.

2 S301 SLAB ON GRADE FLATNESS/LEVELNESS SCHEDULE

N.T.S.

CONCRETE MIX SCHEDULE

CONCRETE USAGE	28-DAY COMPRESSIVE STRENGTH (PSI)	EXPOSURE CLASS (NOTE 4)	MAX CEMENT REPLACEMENT (NOTE 5)	MAXIMUM W/CM RATIO	AIR CONTENT (PERCENT)	MAXIMUM WATER-SOLUBLE CHLORIDE ION (CL-) CONTENT (% WT)	MAXIMUM AGGREGATE SIZE (INCHES)	COMMENTS
FOOTINGS, PILE CAPS, GRADE BEAMS, MATS	3,500	F1 S0 W1 C1	50%	0.55	4.5 +/- 1.5	0.30%	1.5	
ISOLATED EXTERIOR FOOTINGS NOT FULLY BELOW FROST	4,500	F2 S0 W1 C1	50%	0.45	5.5 +/- 1.5	0.30%	1.5	INCREASE TARGET AIR TO 6.0% IF MAXIMUM AGGREGATE USED IS 1"
FOUNDATION / BASEMENT WALLS AND PIERS	4,000	F0 S0 W0 C0	50%	0.50	0-3	1.0%	1	THESE ELEMENTS MUST BE PREVENTED FROM FREEZING AND PROTECTED FROM MOISTURE IN SOIL
EXPOSED FOUNDATION / BASEMENT WALLS AND PIERS	4,500	F2 S0 W1 C1	50%	0.45	6 +/- 1.5	0.30%	1	
EXTERIOR STOOPS, PADS, AND SLABS ON GRADE	5,000	F3 S0 W1 C2	50%	0.40	5 +/- 1.5	0.15%	1	
INTERIOR SLABS ON GRADE (6 INCHES OR LESS)	4,000	F0 S0 W0 C0	50%	0.48	0-3	1.0%	1	FIBER ADDITIVE PER SOG SCHEDULE (WHERE INDICATED)

NOTES:
1. SEE GENERAL NOTES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. ALL USAGES IN THE TABLE ABOVE ARE ASSUMED TO BE DRY SERVICE CONDITIONS NOT EXPOSED TO FREEZE-THAW CYCLES, DE-ICING CHEMICALS, OR SALTS UNO.
3. ALL CONCRETE IS NORMAL WEIGHT AND CEMENT IS ASTM C150 TYPE 1 OR ASTM C595 TYPE IL, UNO. DO NOT USE LIGHTWEIGHT CONCRETE UNLESS SPECIFICALLY INDICATED.
4. EXPOSURE CLASSES AND CATEGORIES ARE AS DEFINED IN CHAPTER 19 OF THE LATEST EDITION OF ACI 318.
5. ACCEPTABLE CEMENT REPLACEMENT MATERIAL, WHERE PERMITTED MAY BE ANY COMBINATION OF ASTM C618 TYPE C OR F FLY ASH, ASTM C989 GROUND GRANULATED BLAST-FURNACE SLAG (GGBFS), OR ASTM C1240 SILICA FUME (MICROSILICA). THE FOLLOWING ADDITIONAL LIMITS ALSO APPLY TO EXPOSURE CLASS F3 CONCRETE:
   A. MAXIMUM FLY ASH: 25%
   B. MAXIMUM SLAG: 50%
   C. MAXIMUM SILICA FUME: 10%
   D. MAXIMUM COMBINED FLY ASH AND SILICA FUME: 35%
   E. MAXIMUM TOTAL SUPPLEMENTARY CEMENTITIOUS MATERIAL: 50%
   F. EXCEPTION: FOR SLABS WITH APPLIED HARDENER/DENSIFIER PRODUCTS, MAXIMUM CEMENT REPLACEMENT SHALL NOT EXCEED THE HARDENER/DENSIFIER MANUFACTURER'S WRITTEN LIMITS.
6. TARGET SLUMP SHALL BE DETERMINED BY THE CONTRACTOR AS NEEDED FOR PROPER PLACEMENT.
7. WHERE NOTED, BLENDED AGGREGATE WITH ZONE 2 COARSENESS PER ACI 302 IS MANDATORY. USE OF THE LARGEST PERMISSIBLE AGGREGATE SIZE IS ENCOURAGED TO REDUCE THE POTENTIAL FOR SHRINKAGE.
8. COORDINATE LOCATIONS OF ALL POLISHED CONCRETE SLABS (WHEN USED) AND REVIEW THE CONCRETE MIX REQUIREMENTS WITH THE POLISHED CONCRETE CONTRACTOR PRIOR TO SUBMITTAL OF CONCRETE MIXES. IF THE POLISHED CONCRETE CONTRACTOR REQUESTS TO DEVIATE FROM THE REQUIREMENTS OF THIS SCHEDULE, CONTACT THE STRUCTURAL ENGINEER TO REVIEW THE REQUESTS PRIOR TO SUBMISSION OF THE POLISHED CONCRETE MIX(ES).
9. WHEN NOTED IN SCHEDULE, PROVIDE CRYSTALLINE WATERPROOFING ADMIXTURE (XYPEX C-500 OR EQUIVALENT SUBSTITUTE APPROVED BY THE STRUCTURAL ENGINEER) AT MANUFACTURER'S RECOMMENDED DOSAGE RATE IN CONCRETE FOR THE FOLLOWING, UNO: WATER/WASTEWATER TANKS, FLUMES, CLARIFIERS, DIGESTERS, RESERVOIRS AND WET WELLS.
10. WHEN NOTED IN SCHEDULE, PROVIDE A COMBINATION OF ASTM C494 TYPE S SHRINKAGE REDUCING ADMIXTURE (SRA), SHRINKAGE COMPENSATING ADMIXTURE, OR OTHER SHRINKAGE COMPENSATING MATERIALS WITH DOSAGE RATES CALIBRATED BY THE CONCRETE PRODUCER AND ADMIXTURE SUPPLIER TO ACHIEVE TARGET LONG-TERM (ONE YEAR) CONCRETE STRAIN VALUE OF **[0.00035]**, VALIDATED BY TESTING IN ACCORDANCE WITH ASTM C157, WHILE MAINTAINING REQUIRED CONCRETE STRENGTH AND ENTRAINED AIR CONTENT (WHERE APPLICABLE).

3 S301 CONCRETE MIX SCHEDULE

N.T.S.

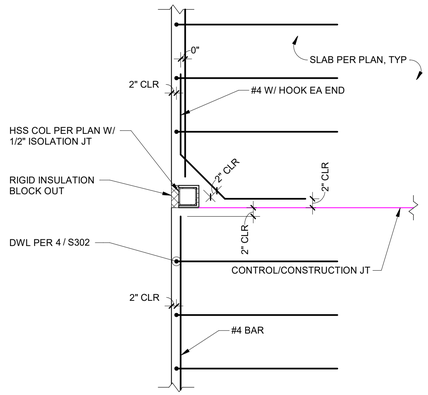
SLAB FINISH REQUIREMENTS SCHEDULE

FLOOR FINISH	SLAB CHARACTERISTICS	PRODUCTS & PROCESSES	REMARKS
APPLIED FLOOR COVERING OR COATING SYSTEM	TROWELED FINISH SUITABLE TO RECEIVE FLOOR FINISH MATERIALS IN ACCORDANCE WITH FINISH MATERIAL SUPPLIER'S REQUIREMENT'S.	7-DAY MOIST CURE OR DISSIPATING CURING COMPOUND	JOINT FILLER NOT REQUIRED, UNO.
SEALED CONCRETE	TROWELED FINISH WITH SEALED, WASHABLE, NON-DUSTING SURFACE.	CURING AND SEALING COMPOUND	JOINT FILLER NOT REQUIRED, UNO.
HARDENED, SEALED CONCRETE	TROWELED FINISH WITH SEALED, HARDENED, WASHABLE, NON-DUSTING SURFACE	PENETRATING LIQUID FLOOR TREATMENT APPLIED TO COMPATIBLY CURED SLAB	ACCEPTABLE PENETRATING LIQUID FLOOR TREATMENT: ASHFORD FORMULA OR EUCO DIAMOND HARD. JOINT FILLER NOT REQUIRED, UNO.
POLISHED CONCRETE	TROWELED FINISH WITH POLISHED, WASHABLE, NON-DUSTING SURFACE	7-DAY MOIST CURE	SEE ARCH DRAWINGS AND SPECIFICATIONS FOR AGGREGATE EXPOSURE CLASS, DOI APPEARANCE LEVEL, JOINT FILLING, AND ADDITIONAL INFORMATION.

NOTES:
1. SEE GENERAL NOTES, DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION, INCLUDING APPLICABLE FLATNESS/LEVELNESS REQUIREMENTS.
2. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR FLOOR FINISHES.
3. ALL PRODUCTS SHALL BE USED/INSTALLED IN STRICT CONFORMANCE WITH MANUFACTURER'S REQUIREMENTS.
4. DISSIPATING CURING COMPOUND, WHEN USED, SHALL BE ASTM C309, TYPE 1, CLASS B, WATERBORNE, MEMBRANE-FORMING. REMOVAL OF CURING COMPOUND, IF REQUIRED FOR PROPER INSTALLATION OF FLOOR FINISH MATERIALS, SHALL BE PERFORMED BY THE CONCRETE CONTRACTOR.
5. CURING AND SEALING COMPOUND, WHEN USED, SHALL BE ASTM C1315, TYPE 1, CLASS A, WATERBORNE, MEMBRANE-FORMING, WITH 30% SOLIDS.
6. FINISH SLABS WITH FIBER REINFORCEMENT IN ACCORDANCE WITH THE FIBER MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED TO MINIMIZE FIBER EXPOSURE AT THE SLAB SURFACE. FOR SLABS WITH APPLIED FINISHES/MATERIALS (INCLUDING POLISHED CONCRETE FINISHES WHEN USED), REMOVE ALL PROTRUDING FIBERS PER THE FIBER MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED TO INSTALL THE FINISHES/MATERIALS. FOR SLABS EXPOSED TO VIEW IN THE COMPLETED CONSTRUCTION, REMOVE ALL PROTRUDING FIBERS PRIOR TO THE COMPLETION OF CONSTRUCTION PER THE FIBER MANUFACTURER'S RECOMMENDATIONS.
7. POLISHED CONCRETE (WHEN USED) SHALL BE IN ACCORDANCE WITH ACI 310.1 "SPECIFICATION FOR POLISHED CONCRETE FINISHES".
8. "E5" PRODUCTS ARE BY SPECIFICATION PRODUCTS, NOBLESVILLE, INDIANA.

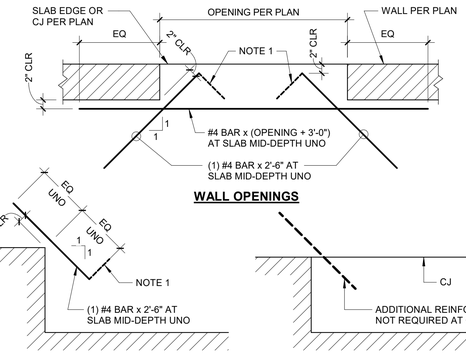
4 S301 SLAB FINISH REQUIREMENTS SCHEDULE

N.T.S.



6 S301 GROUND SLAB REINFORCEMENT AROUND PERIMETER COLUMN

3/4" = 1'-0"



NOTES:
1. WHERE THERE IS INSUFFICIENT ROOM TO INSTALL A STRAIGHT BAR AS SHOWN CENTERED WITH EQUAL LENGTH EACH SIDE OF THE RE-ENTRANT CORNER, PROVIDE BAR WITH A 90- OR 180- DEGREE HOOK INSTALLED ON THE SIDE WITH SHORTER EMBEDMENT.
2. FOR SLABS WITH 2 LAYERS OF REINFORCEMENT, INSTALL ADDITIONAL REINFORCEMENT AT ELEVATION OF TOP LAYER ONLY.

5 S301 TYPICAL ADDITIONAL SLAB ON GRADE REINFORCEMENT AT RE-ENTRANT CORNERS

N.T.S.

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NOBLE COUNTY HIGHWAY DEPTARTMENT RENOVATION

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NICHOLAS TINL REGISTERED PE12000671 STATE OF INDIANA PROFESSIONAL ENGINEER

03/27/2026

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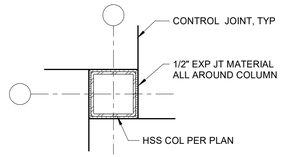
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

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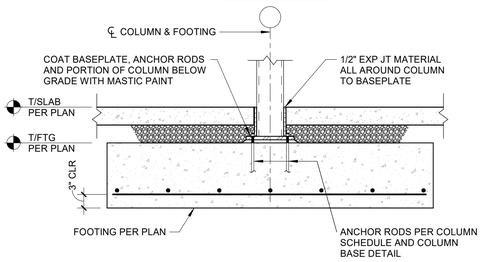
FOUNDATION SCHEDULES, SECTIONS, AND DETAILS

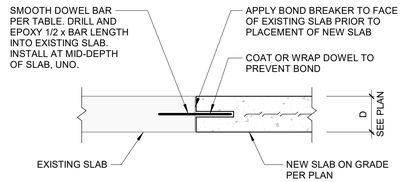
S301

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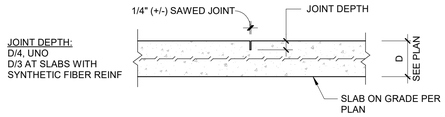
ISOLATION JOINT



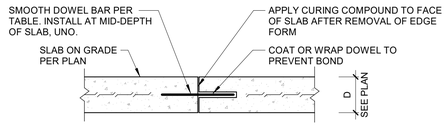


CONSTRUCTION JOINT

DOWEL SIZE AND SPACING			
SLAB DEPTH (IN)	DOWEL BAR DIAMETER (IN)	TOTAL BAR LENGTH (IN)	BAR SPACING (CTR - CTR) (IN)
4	3/4	16	24
5-6	3/4	16	12
7-8	1	18	12
9-11	1-1/4	18	12

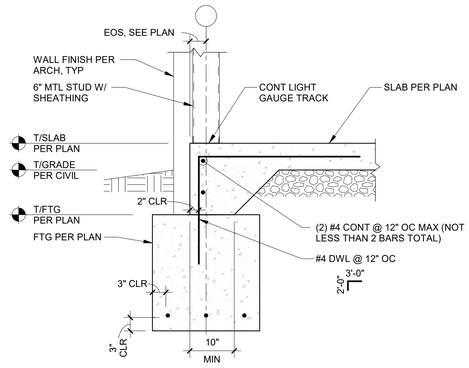


CONTROL JOINT



CONSTRUCTION JOINT

DOWEL SIZE AND SPACING			
SLAB DEPTH (IN)	DOWEL BAR DIAMETER (IN)	TOTAL BAR LENGTH (IN)	BAR SPACING (CTR - CTR) (IN)
4	3/4	16	24
5-6	3/4	16	12
7-8	1	18	12
9-11	1-1/4	18	12

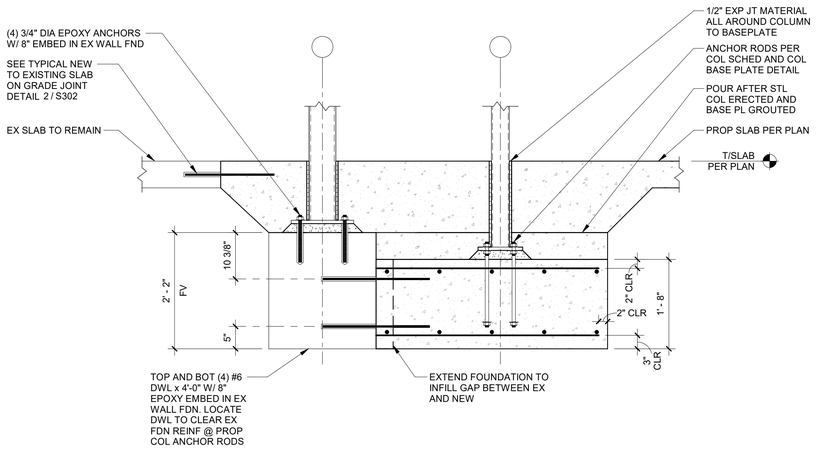


1 S302 **TYPICAL HSS COLUMN ISOLATION JOINT (PINWHEEL)**
N.T.S.

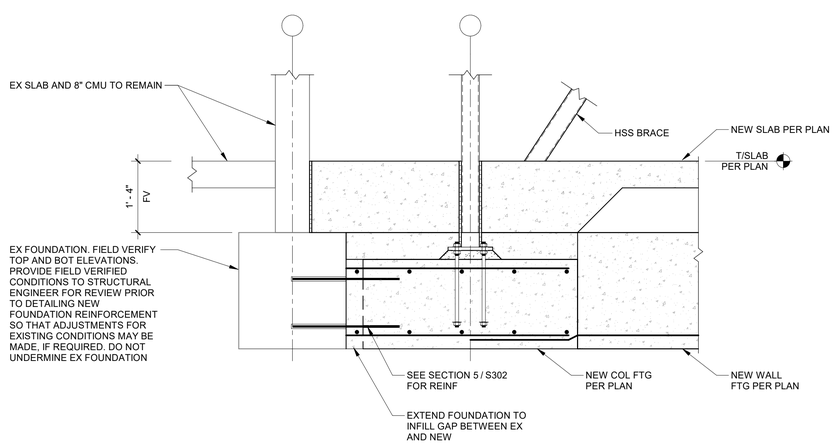
2 S302 **TYPICAL NEW-TO-EXISTING SLAB ON GRADE JOINT**
N.T.S.

3 S302 **TYPICAL SLAB ON GRADE JOINTS**
N.T.S.

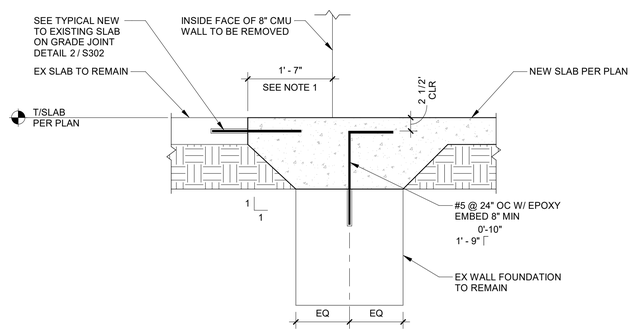
4 S302 **SECTION TYPICAL AROUND PERIMETER OF NEW ADDITION**
3/4" = 1'-0"



5 S302 **SECTION AT INTERFACE OF NEW COLUMN FOUNDATIONS**
3/4" = 1'-0"

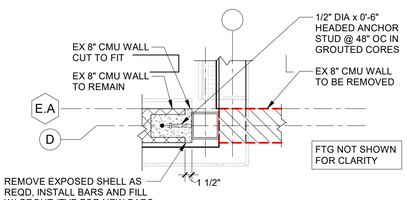


6 S302 **SECTION**
3/4" = 1'-0"

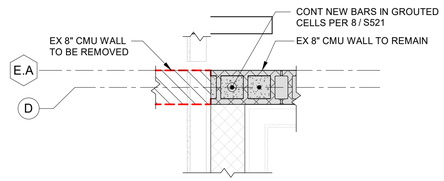


NOTE:
1. DISTANCE ASSUMED REQUIRED TO STABILIZE SUBGRADE UNDER SLAB DUE TO REMOVED WALL ASSUMING TOP OF FOUNDATION IS (-1'-4") AND WIDTH OF FOUNDATION IS 2'-0". ACTUAL DISTANCE MAY VARY DEPENDING ON FIELD CONDITIONS.

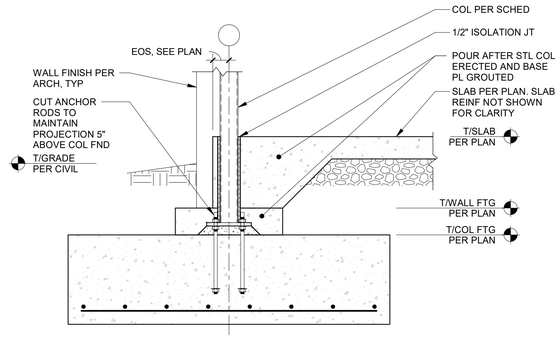
7 S302 **SECTION - SLAB AT REMOVED WALL**
3/4" = 1'-0"



8 S302 **PLAN VIEW AT HSS COLUMN LOCATION**
3/4" = 1'-0"



9 S302 **DETAIL**
3/4" = 1'-0"



10 S302 **TYPICAL SECTION AT PERIMETER COLUMN FOOTING**
3/4" = 1'-0"

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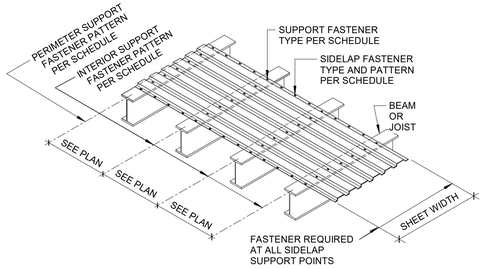
Project Number 2025.02329

FOUNDATION SECTIONS AND DETAILS

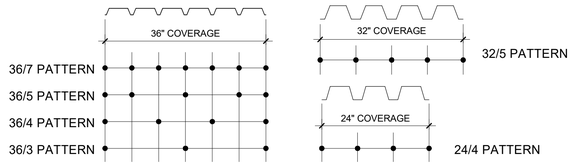
S302

STEEL DECK SCHEDULE

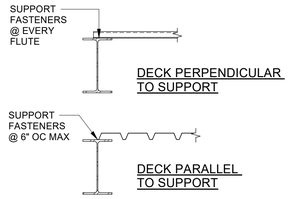
MARK	HEIGHT	GAUGE	YIELD STRENGTH Fy	TYPE	FINISH	SUPPORT FASTENER TYPE	PERIMETER SUPPORT FASTENER PATTERN	INTERIOR SUPPORT FASTENER PATTERN	SIDELAP FASTENER TYPE	SIDELAP FASTENER PATTERN	BASIS OF DESIGN DECK (NOTE 4)	NOTES
D1	1-1/2"	20 GA	50 KSI	TYPE B	PAINTED	HILTI X-HSN 24	SEE BELOW	36/4	S-SLC 02 M HWH SIDELAP CONNECTOR	2 PER SPAN	VULCRAFT 1.5B	



1-1/2" DECK FASTENER PATTERN DIAGRAM



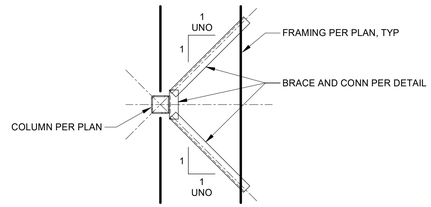
SUPPORT FASTENER PATTERN DEFINITION



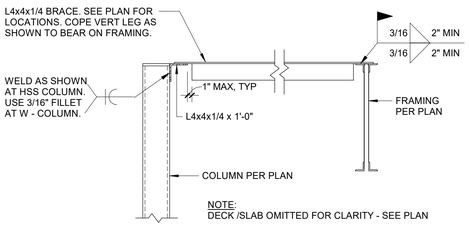
PERIMETER SUPPORT FASTENERS

NOTES:
1. FASTEN THROUGH MULTIPLE SHEETS AT ALL END AND SIDE LAPS.
2. END LAPS SHALL OCCUR ONLY AT SUPPORT POINTS.
3. DECK SHALL BE INSTALLED IN A MINIMUM THREE SPAN CONDITION WHEREVER POSSIBLE. WHERE THREE SPAN CONDITION IS NOT POSSIBLE, NOTIFY STRUCTURAL ENGINEER PRIOR TO FABRICATION OF DECK SO THAT EVALUATION OF THE LESSER SPAN CONDITION(S) CAN BE PERFORMED.
4. PROVIDE DECK WITH ALL PROPERTIES MEETING OR EXCEEDING THE INDICATED BASIS OF DESIGN DECK.

1 S501 STEEL DECK SCHEDULE
N.T.S.

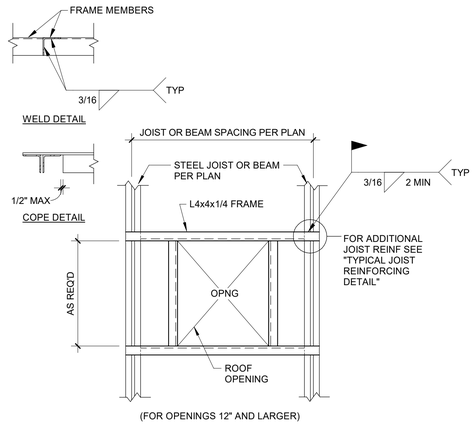


FRAMING SCHEMATIC



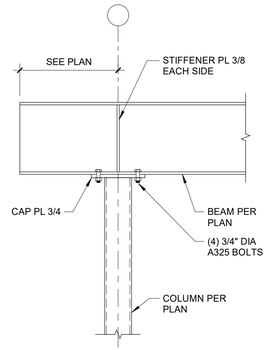
NOTE:
DECK /SLAB OMITTED FOR CLARITY - SEE PLAN

4 S501 COLUMN LATERAL BRACE DETAIL
N.T.S.



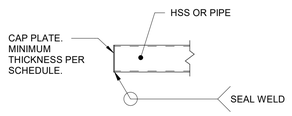
NOTE: COORDINATE OPENING SIZE AND LOCATION WITH CONTRACTOR REQUIRING THE OPENING. FASTEN DECK TO OPENING FRAME @ 6" OC MAX AROUND FRAME PERIMETER.

5 S501 TYPICAL ROOF OPENING
N.T.S.



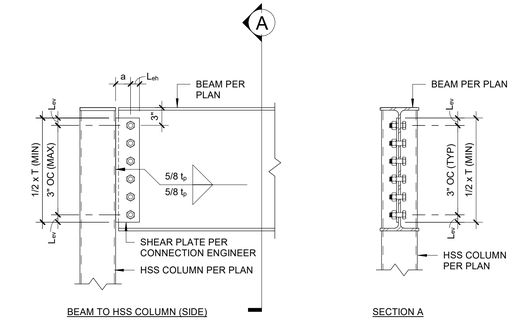
2 S501 TYPICAL CANTILEVER BEAM BEARING
N.T.S.

CAP PLATE MINIMUM THICKNESS	
MAXIMUM HSS/PIPE DIMENSION	MINIMUM CAP PLATE THICKNESS
UP TO 8"	1/8"
GREATER THAN 8"	3/16"

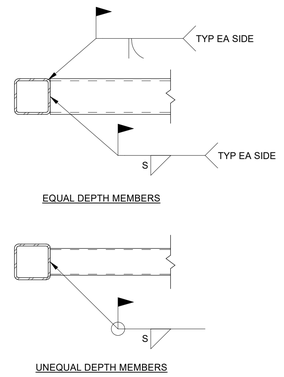


NOTES:
1. PROVIDE CAP PLATES AT ALL EXPOSED ENDS OF ALL HSS AND PIPE MEMBERS.
2. PROVIDE CAP PLATES FOR ALL COLUMNS WHETHER EXPOSED TO VIEW OR NOT.
3. CAP PLATE THICKNESS AND WELD SHALL BE AS REQUIRED BY DESIGN AND FABRICATOR'S SHOP STANDARDS BUT SHALL NOT BE LESS THAN THE MINIMUM THICKNESS AND WELD PER THIS DETAIL.

6 S501 TYPICAL HSS / PIPE CAP PLATE DETAIL
3/4" = 1'-0"



3 S501 CONVENTIONAL SHEAR PLATE (FACE MOUNTED) - BEAM TO HSS COLUMN
N.T.S.



NOTE:
1. FILLET WELD SIZE "S" = THICKNESS OF THINNER ELEMENT CONNECTED, UNO.
2. WELD SIZE SHALL BE AS REQUIRED BY DESIGN BUT SHALL NOT BE LESS THAN THE MINIMUM SIZE PER THIS DETAIL.

7 S501 TYPICAL HSS TO HSS CONNECTIONS
3/4" = 1'-0"

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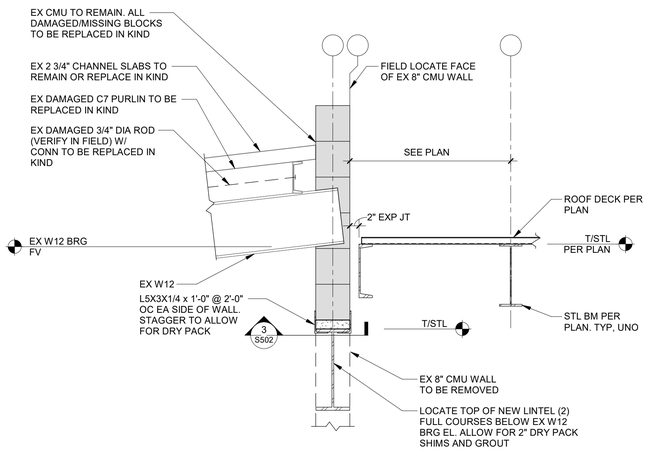
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STEEL SCHEDULES, SECTIONS, AND DETAILS

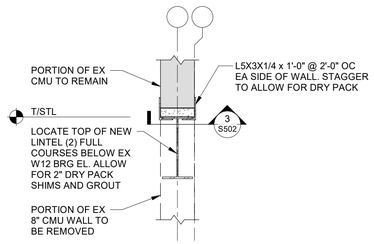
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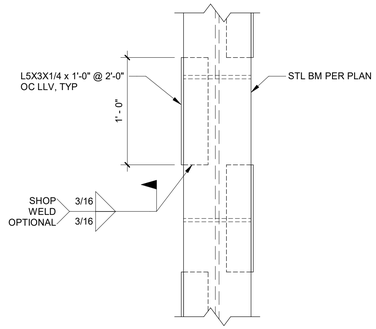


NOTE: SHORING OF EXISTING WALL AND STRUCTURE IS THE RESPONSIBILITY OF THE CONTRACTOR

1 S502 **SECTION**
3/4" = 1'-0"



2 S502 **SECTION**
3/4" = 1'-0"



3 S502 **SECTION**
N.T.S.

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STEEL SECTIONS AND DETAILS

S502

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NEW ROOF ADDITION													NEW ROOF ADDITION
115' - 5" Level 02													115' - 5" Level 02
110' - 0" Level 01	HSS4X4X1/4	HSS4X4X1/4	HSS4X4X1/4	HSS4X4X1/4	HSS4X4X1/4	HSS4X4X1/4	HSS4X4X1/4	HSS4X4X1/4	HSS4X4X1/4	HSS4X4X1/4	HSS6X6X3/8	HSS6X6X3/8	110' - 0" Level 01
100' - 0"													100' - 0"
Column Locations	A-1	A-2	A-3.5	A-4	B-1	B-2	B-4	C-1	C-3	C-4	D-0.9	D-3.1	
BASE PLATE MARK	BP2	BP2	BP2	BP2	BP2	BP2	BP2	BP2	BP2	BP2	BP1	BP1	BASE PLATE MARK
B/BASE PLATE ELEVATION	98'-4"	98'-4"	98'-4"	98'-4"	98'-4"	98'-4"	98'-4"	98'-4"	98'-4"	98'-4"	98'-10"	98'-10"	B/BASE PLATE ELEVATION
COLUMN LOAD ASD (KIPS)	6	10	10	6	16	16	16	12	16	12	10	14	COLUMN LOAD ASD (KIPS)
COLUMN LOAD LRFD (KIPS)	10	16	16	10	25	25	25	18	25	18	16	22	COLUMN LOAD LRFD (KIPS)
REMARKS											SEE NOTE 1	SEE NOTE 1	REMARKS

NOTE:
1. BOTTOM OF BASE PLATE OF COLUMNS SUPPORTED BY EXISTING WALL FOUNDATION PENDING EXISTING FOUNDATION ELEVATION VERIFICATION.

COLUMN BASE PLATE SCHEDULE

MARK	PLATE SIZE	ANCHOR RODS		EMBED LENGTH	REMARKS
	B" X N" X T"	QTY	DIA		
BP1	14" X 14" X 1"	4	3/4"	8"	SEE SECTION 5 / S302
BP2	10 X 10" X 3/4"	4	3/4"	12"	

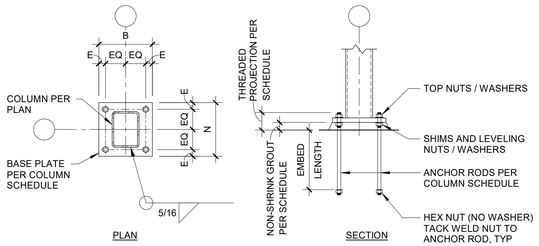
ANCHOR ROD TABLE

ANCHOR ROD DIA	BASEPLATE HOLE DIA	MINIMUM WASHER SIZE	MINIMUM WASHER THICKNESS	MINIMUM PROJ ABOVE T/CONC	NON-SHRINK GROUT BED THK	MIN EDGE DISTANCE, E
3/4"	1 5/16"	2"	1/4"	8"	2"	1 1/2"
1"	1 7/8"	3"	3/8"	8"	2"	2"
1 1/4"	2 1/8"	3 1/2"	1/2"	10"	3"	2"
1 1/2"	2 3/8"	4"	1/2"	10"	3"	2 1/2"
1 3/4"	2 7/8"	4 1/2"	3/4"	10"	3"	3"
2"	3 1/4"	5"	3/4"	10"	3"	3"
2 1/2"	3 3/4"	5 1/2"	3/4"	10"	3"	3 1/2"

NOTES:
1. ANCHOR RODS ARE ASTM F1554 GRADE 36 UNO. (NOTE: WHEN GRADE 55 IS SPECIFICALLY INDICATED, PROVIDE WELDABLE RODS PER F1554 S-1 SUPPLEMENT.)
2. PROVIDE WELDED PLATE WASHERS IN ACCORDANCE WITH TYPICAL DETAIL AT ALL STEEL BRACED FRAMES AND MOMENT FRAMES, UNO.
3. WASHER SIZES INDICATED ARE FOR GRADES 36 AND 55 ANCHOR RODS ONLY, UNO. SEE LATEST EDITION OF AISC 360 FOR ADDITIONAL REQUIREMENTS.

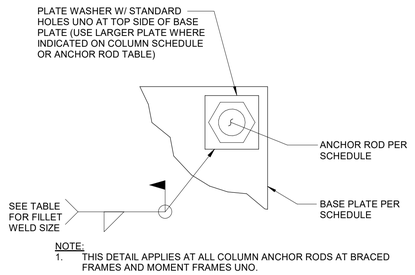
PLATE WASHER DIMENSIONS

ANCHOR ROD DIA	REQD PLATE WASHER	WELD SIZE
<= 3/4"	1/4 x 2 x 2	1/4"
1"	3/8 x 3 x 3	1/4"
1 1/4"	1/2 x 3 1/2 x 3 1/2	1/4"
1 1/2"	1/2 x 4 x 4	5/16"
1 3/4"	5/8 x 4 1/2 x 4 1/2	5/16"
2"	3/4 x 5 x 5	5/16"
2 1/2"	7/8 x 5 1/2 x 5 1/2	5/16"



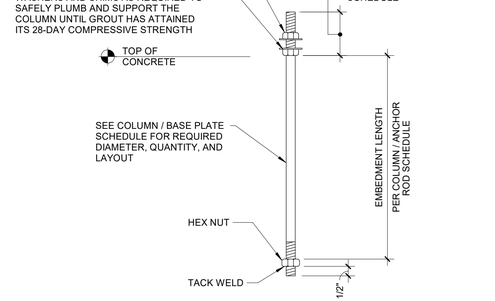
NOTES:
1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SUFFICIENT TEMPORARY SUPPORT OF COLUMN BASE PLATES USING LEVELING PLATES, LEVELING NUTS / WASHERS OR STEEL SHIMS (OR COMBINATION THEREOF) PRIOR TO PLACEMENT AND CURING OF NON-SHRINK GROUT.

2 / S511 TYPICAL HSS COLUMN BASE DETAIL
N.T.S.



NOTE:
1. THIS DETAIL APPLIES AT ALL COLUMN ANCHOR RODS AT BRACED FRAMES AND MOMENT FRAMES UNO.

3 / S511 TYPICAL WELDED PLATE WASHER DETAIL
N.T.S.



4 / S511 TYPICAL COLUMN ANCHOR ROD DETAIL
3/4" = 1'-0"

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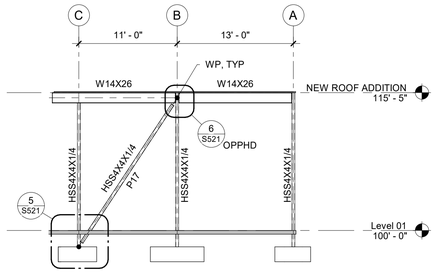
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NO.	DESCRIPTION	DATE

Project Number 2025.02329

STEEL COLUMN AND BASE PLATE SCHEDULES

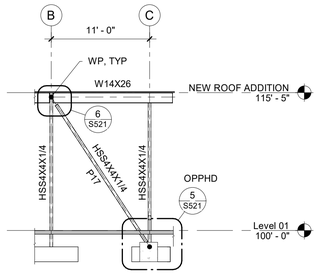
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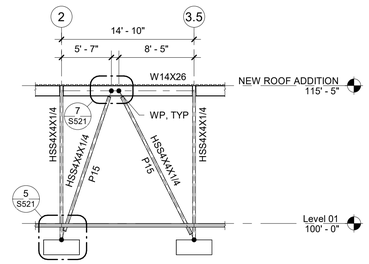
1 S521 BRACED FRAME ELEVATION - BF-#1

1/8" = 1'-0"



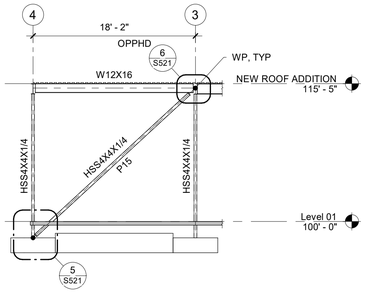
2 S521 BRACED FRAME ELEVATION - BF-#2

1/8" = 1'-0"



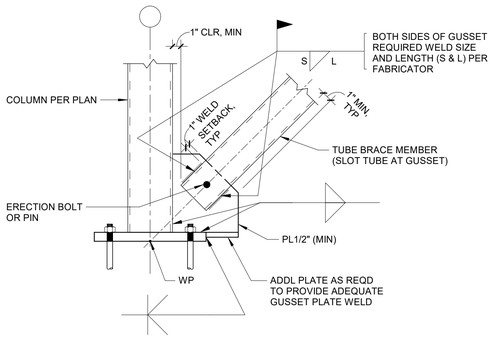
3 S521 BRACED FRAME ELEVATION - BF-#3

1/8" = 1'-0"



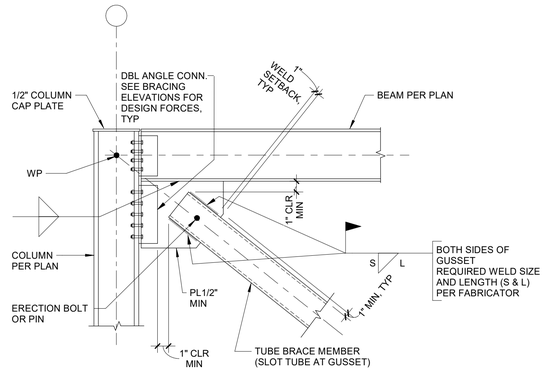
4 S521 BRACED FRAME ELEVATION - BF-#4

1/8" = 1'-0"



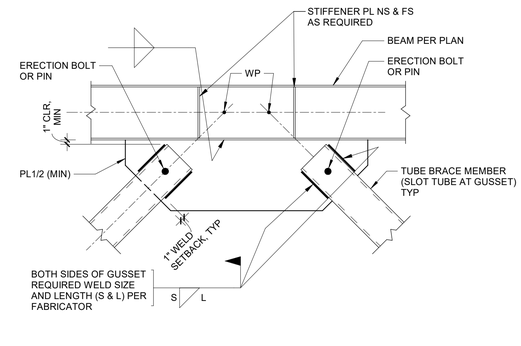
5 S521 BRACE DETAIL

3/4" = 1'-0"



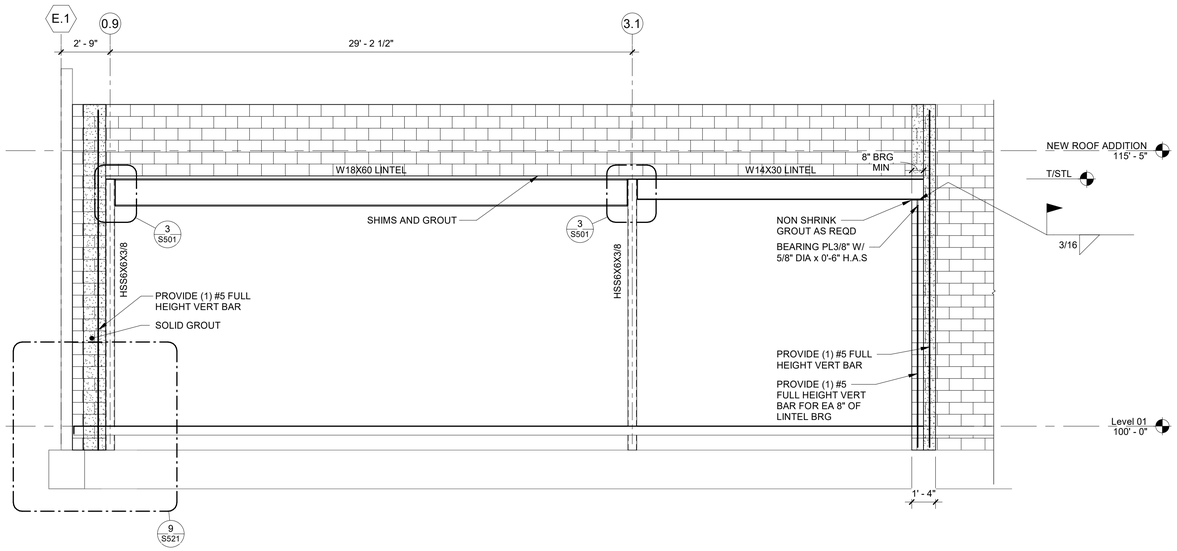
6 S521 BRACE DETAIL

3/4" = 1'-0"



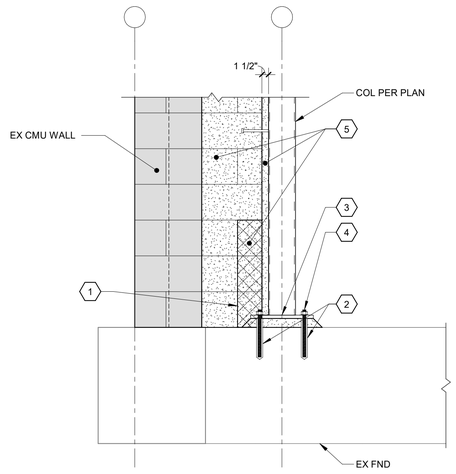
7 S521 BRACE DETAIL

3/4" = 1'-0"



8 S521 STEEL FRAME ELEVATION AT CMU DEMOLITION WALL

1/4" = 1'-0"



1. REMOVE ENOUGH CMU WALL BLOCKS TO ACCESS DRILLING HOLES.
2. DRILL HOLES IN EXISTING FOUNDATION.
3. PLACE COLUMN WITH SHOP WELDED BASE PLATE. TEMPORARILY SECURE COLUMN.
4. INSTALL POST-INSTALLED ANCHOR RODS.
5. GROUT CMU CELLS AND SPACE BETWEEN WALL AND COLUMN.

9 S521 SEQUENCE FOR INSTALLATION OF LINTEL SUPPORT COLUMNS

N.T.S.

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY

NOBLE COUNTY HIGHWAY DEPTARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

NICHOLAS TINE REGISTERED PE12000671 STATE OF INDIANA PROFESSIONAL ENGINEER

03/27/2026

CERTIFIED BY

ISSUANCE INDEX
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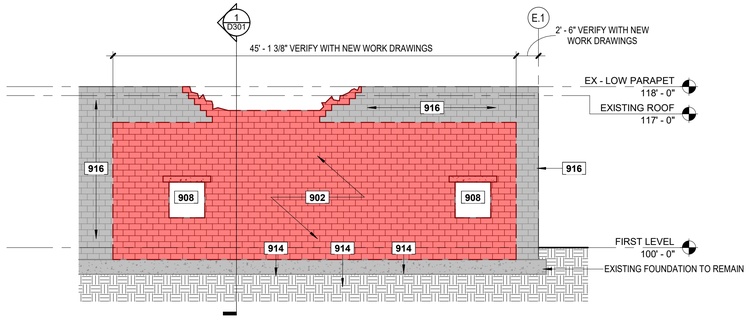
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Project Number 2025.02329

STEEL FRAME ELEVATIONS

S521

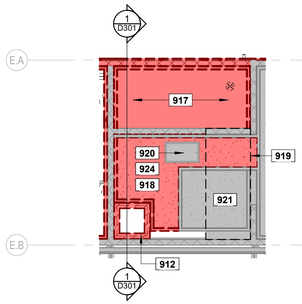
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3 EXTERIOR CMU DEMOLITION ELEVATION

3 D101

1/8" = 1'-0"

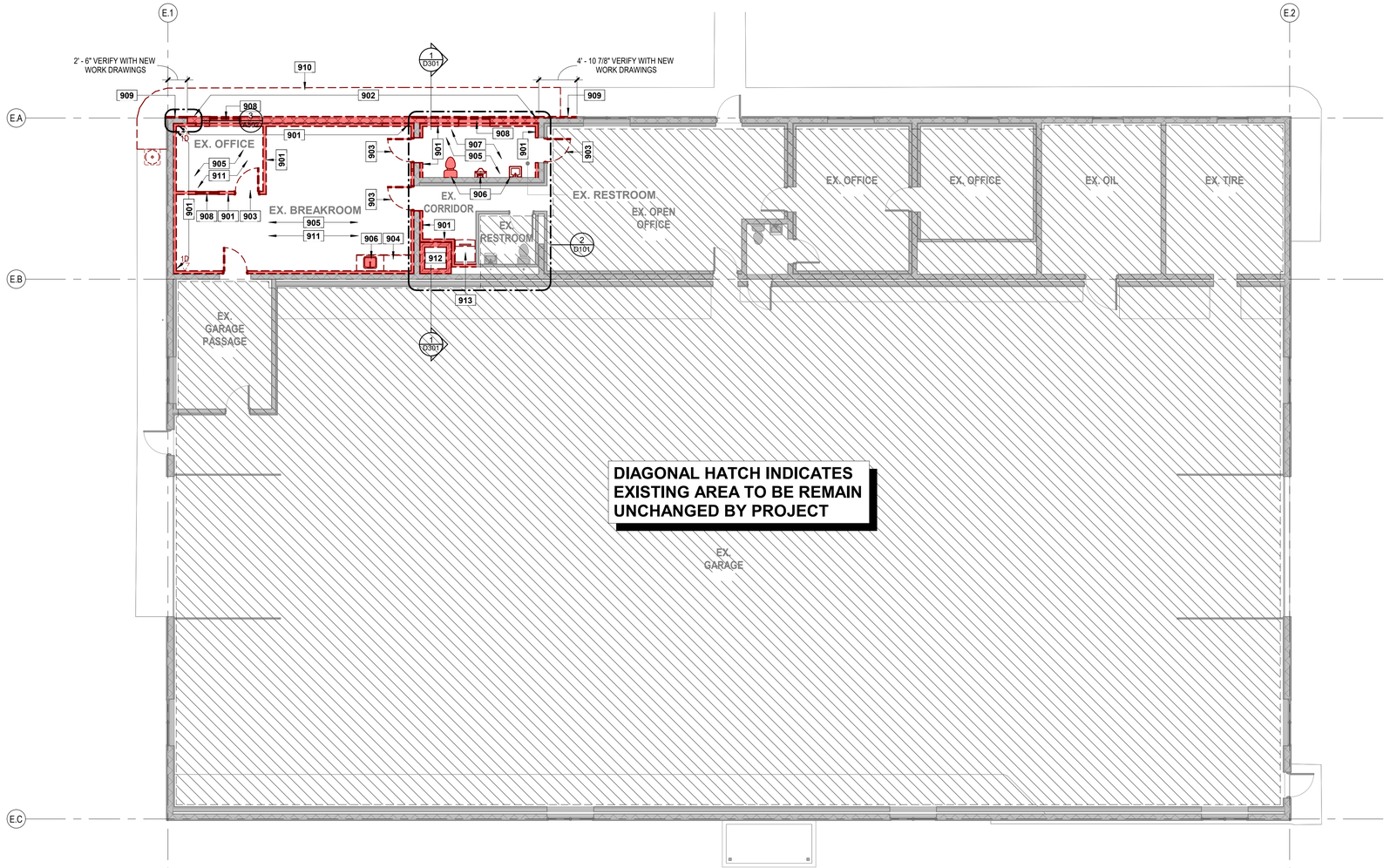


COORDINATE ALL DEMOLITION WITH *NOBLE COUNTY HIGHWAY DEPARTMENT STRUCTURAL ASSESSMENT* DATED DECEMBER 19, 2025. THE REPORT PROVIDES INFORMATION ON EXISTING CONDITIONS, DEMOLITION QUANTITIES, AND DAMAGE DISCRIPTIONS AS THEY RELATE TO THE WORK DESCRIBED IN THESE DRAWINGS.

2 REFLECTED CEILING DEMOLITION PLAN

N 2 D101

1/8" = 1'-0"



1 FIRST FLOOR DEMOLITION PLAN

N 1 D101

1/8" = 1'-0"

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GENERAL DEMOLITION NOTES

A. REMOVE EXISTING FLOOR & WALL BASE MATERIALS IN ALL AREAS SCHEDULED TO RECEIVE NEW FLOOR & BASE. U.N.O. REMOVE ALL FLOOR & WALL BASE ADHESIVES OR MORTAR COMPLETE & PREPARE SURFACES AS REQUIRED TO RECEIVE NEW FINISHES. REFER TO FINISH DRAWINGS & SCHEDULES.
B. REMOVE EXISTING CEILING TILE & GRID AS REQUIRED TO COMPLETE OVERHEAD WORK, & STORE IN A SAFE/SECURE LOCATION. U.N.O. COORDINATE WITH APPLICABLE SUBCONTRACTORS. PROTECT CEILING TILE & GRID FROM DAMAGE DURING REMOVAL & STORAGE. ONCE ALL OVERHEAD WORK IS COMPLETE, REINSTALL CEILING TILE & GRID AS REQUIRED. REPAIR / REPLACE ANY DAMAGED CEILING TILES OR GRID AS REQUIRED & FINISH TO MATCH EXISTING. REFER TO OTHER DISCIPLINES' DRAWINGS FOR EXTENT OF OVERHEAD WORK.
C. WHEN OPENINGS ARE CUT INTO AN EXISTING MASONRY WALL, OPENINGS SHALL BE A MINIMUM OF 1'-4" LONGER THAN THE FINISHED OPENING REQ'D TO ALLOW FOR 8" MIN. OF NEW MASONRY TOOTHED-IN AT THE EDGES. RUN NOTE PAST STRUCTURAL TEAM AT START OF PROJECT
D. ALL ITEMS BEING REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER UNTIL CONFIRMATION HAS BEEN MADE AS TO WHETHER THE OWNER WILL RETAIN SUCH ITEMS. CONTRACTOR SHALL COORDINATE WITH OWNER REGARDING DELIVERY OF ALL ITEMS BEING RETAINED; ALL ITEMS NOT BEING RETAINED BY THE OWNER OR DESIGNATED ON THE DRAWINGS TO BE SALVAGED, RELOCATED OR REINSTALLED SHALL BE COMPLETELY REMOVED FROM THE SITE.
E. DEMOLITION WORK SHALL BE PERFORMED DURING NORMAL WORKING HOURS UNLESS NOISE WILL EXCEED OSHA THRESHOLDS. IF NOISE IS ANTICIPATED TO EXCEED OSHA THRESHOLDS, CONTRACTOR SHALL COORDINATE WITH OWNER TO ADJUST WORK HOURS TO MORE APPROPRIATE TIMES. CONTRACTOR SHALL USE ALL METHODS TO DECREASE NOISE IMPACT.
F. CONTRACTORS SHALL COORDINATE ALL DEMOLITION WORK IN OCCUPIED SPACES & SHALL NOTIFY THE OWNER TWO WEEKS PRIOR TO COMMENCING WORK. SUCH SPACES ARE TO REMAIN OCCUPIED DURING DEMOLITION & ALL WORK SHALL BE PERFORMED IN SUCH A MANNER TO MINIMIZE DISRUPTIONS TO OCCUPANTS.
G. CONTRACTORS SHALL COORDINATE ALL DEMOLITION W/ ANY PROJECT PHASING REQUIRED TO COMPLETE THE WORK.
H. ITEMS TO BE PATCHED: REMOVE ALL LOOSE OR DAMAGED MATERIAL. REFINISH TO LIKE-NEW CONDITION, OR IF CONDITION WARRANTS, REPLACE IN ENTIRETY.
I. DURING THE ENTIRE PERIOD OF DEMOLITION AND CONSTRUCTION ACTIVITIES, ALL EXISTING EXITS, EXIT LIGHTING, FIRE PROTECTION DEVICES AND ALARMS SHALL BE CONTINOUSLY MAINTAINED IN WORKING ORDER.
J. CONTRACTOR SHALL PROVIDE A MINIMUM 44" EGRESS PATH THROUGH CORRIDORS AT CONSTRUCTION WORK IN OCCUPIED AREA OF BUILDING.
K. ALL DIMENSIONS TO EXISTING ELEMENTS ARE APPROXIMATE. CONTRACTOR TO VERIFY PRIOR TO WORK.
L. THE DEMOLITION CONTRACTOR SHALL PROVIDE AND INSTALL TEMPORARY DUST PARTITIONS, CONSTRUCTION BARRIERS, TEMPORARY DOORS, WALK-OFF MATS AND EQUIPMENT PROTECTION WHERE SHOWN ON THE DOCUMENTS OR IF NOT SHOWN, AS REQUIRED BY THE WORK BEING PERFORMED. TEMPORARY DUST PARTITION SHALL BE COMPLETELY SEALED TO PREVENT CONSTRUCTION DUST FROM ENTERING OWNER'S ADJACENT SPACES. DUST PARTITION DOOR TO BE SELF CLOSING, POSITIVE LATCHING, AND PAD-LOCKABLE. SUCH PROTECTION SHALL BE MAINTAINED AND REPAIRED PROMPTLY IF DAMAGED TO AVOID DUST INFILTRATION INTO ADJACENT AREAS. PROVIDE HEPA FILTER FILTRATION AND NEGATIVE AIR MACHINES WITH MONITORING GAGES. ALL TEMPORARY MEASURES TO BE INSTALLED BEFORE THE START OF DEMOLITION ACTIVITIES AND REMOVED AT THE CONCLUSION OF CONSTRUCTION WORK.
M. COVER ALL RETURN AIR GRILLES AND EXHAUST GRILLES IN CONSTRUCTION AREA WITH MIN. MERV 13 FILTER MEDIA, CHANGED REGULARLY.
N. IF USING A DEMOLITION CHUTE, IT SHALL BE FULLY ENCLOSED.
O. ALL DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH APPROVED METHODS, & OFF-SITE UNLESS OTHERWISE DIRECTED BY THE OWNER.
P. SHORE & BRACE ALL WORK REQUIRED TO REMAIN, U.N.O.
Q. DEMOLITION CONTRACTOR IS TO VERIFY THE SCOPE OF WORK IN THE FIELD W/ THE DEMOLITION DRAWINGS, NEW CONSTRUCTION DRAWINGS, & EXISTING FIELD CONDITIONS. REPORT ANY DISCREPANCIES TO THE A/E.
R. "FLOORING" DENOTES FLOOR COVERING MATERIALS INCLUDING BACKINGS, ADHESIVES, MORTAR, & WALL BASES, DOWN TO BUT EXCLUSIVE OF FLOOR SLABS & STRUCTURAL MATERIALS, U.N.O.
S. "CEILING" DENOTES CEILING MATERIALS INCLUDING SUSPENSION SYSTEMS, ADHESIVE RESIDUES, MOLDINGS, UP TO BUT EXCLUSIVE OF STRUCTURAL MATERIALS.
T. WHERE WALLS ARE INDICATED TO BE DEMOLISHED, REMOVE TO A POINT 2" MIN. BELOW THE EXISTING SLAB (UNLESS SETTING ON SLAB). PATCH W/ NEW CONCRETE FLUSH W/ THE EXISTING FLOOR SLAB.
U. PROTECT EXISTING FLOOR FINISHES FROM CONSTRUCTION TRAFFIC THROUGH OCCUPIED AREAS. EXISTING WALL, FLOOR & CEILING FINISHES TO REMAIN SHALL BE PROTECTED. WHEN DEMOLITION CAUSES DAMAGE TO FLOOR, WALL, OR CEILING SURFACES THAT WILL REMAIN EXPOSED IN THE FINISHED WORK, SUCH DAMAGE SHALL BE REPAIRED AS REQUIRED TO RECEIVE NEW FINISHES.
V. CONTRACTORS SHALL COVER & PROTECT OWNER'S EQUIPMENT WHICH CANNOT BE REMOVED FROM THE PROJECT AREA.
W. MAKE ALL DEMOLITION CLEAN & COMPLETE & IN A MANNER TO ACCEPT NEW FINISHES &/OR SURFACES, TYPICAL. AFTER DEMOLITION OF MATERIALS, THE RESULTING EXPOSED SURFACE SHALL BE SMOOTH & FLUSH W/ EXISTING CONDITIONS.
X. HAZARDOUS MATERIALS ARE NOT KNOWN TO EXISTING WITHIN THE EXISTING BUILDING. CONTRACTOR SHALL BRING ANY/ALL SUSPECTED HAZARDOUS MATERIALS ENCOUNTERED TO THE ATTENTION OF THE OWNER AND ARCHITECT IMMEDIATELY UPON DISCOVERY." THAT WAY IT COVERS MORE THAN ASBESTOS
Y. WHEN REMOVING ITEMS FROM WALLS, FLOORS CEILINGS OR ROOFS THAT ARE TO REMAIN, CONTRACTOR SHALL TAKE PRECAUTIONS TO LIMIT THE AMOUNT OF DAMAGE CREATED AT THE ADJACENT ASSEMBLIES. ALL NEW OPENINGS CREATED BY THIS DEMOLITION SHALL BE PREPPED FOR NEW INFILL INSTALLATION.

KEYNOTE LEGEND

901	DEMOLISH WALL IN ENTIRETY. PATCH AND REPAIR CONCRETE SLAB W/ TOPPING MATERIAL FLUSH W/ ADJACENT FLOOR. PATCH AND REPAIR EXISTING WALL(S) WHERE APPLICABLE TO MATCH SURROUNDING FINISH AND MATERIALS PER NEW WORK PLANS.
902	DEMOLISH PORTION OF EXISTING WALL FOR NEW WALL OPENING. COORDINATE WITH NEW WORK PLANS AND DEMOLITION SECTION DRAWING.
903	REMOVE DOOR, FRAME AND HARDWARE IN THEIR ENTIRETY. SALVAGE DOORS AS REQUIRED BY OWNER.
904	REMOVE CASEWORK AND HARDWARE IN THEIR ENTIRETY. SALVAGE CASEWORK AS REQUIRED BY OWNER.
905	DEMOLISH FLOORING IN ENTIRETY. REPAIR AND PREP SUB-FLOOR FOR NEW WORK.
906	DEMOLISH PLUMBING FIXTURE AND ASSOCIATED PLUMBING IN ITS ENTIRETY. SALVAGE PLUMBING FIXTURES AS REQUIRED BY OWNER.
907	REMOVE BATHROOM ACCESSORIES IN THEIR ENTIRETY. SALVAGE ACCESSORIES AS REQUIRED BY OWNER.
908	REMOVE WINDOW TREATMENTS IN THEIR ENTIRETY. SALVAGE AS REQUIRED BY OWNER.
909	REMOVE EXISTING METAL PANEL AND ASSOCIATED 2X WOOD FURRING FROM THIS PORTION OF EXTERIOR WALL - CMU TO REMAIN.
910	EXISTING SIDEWALK TO BE REMOVED - REF. CIVIL FOR ADDITIONAL INFORMATION
911	REMOVE EXISTING CEILING IN THIS ROOM IN ITS ENTIRETY, INCLUDING ALL ASSOCIATED LIGHTING, MECHANICAL, AND ELECTRICAL COMPONENTS. COORDINATE WITH NEW WORK PLANS.
912	DEMOLISH EXISTING DAMAGED CHIMNEY STRUCTURE IN ITS ENTIRETY. REMOVE ALL FOUNDATION ELEMENTS TO A DEPTH SUFFICIENT TO FACILITATE NEW CONCRETE SLAB INSTALLATION. REMOVE ALL ASSOCIATED MASONRY, FLUE COMPONENTS, AND CONNECTIONS WITHIN AREA OF WORK. REMOVE ALL FALLEN DEBRIS FROM ATTIC SPACE. TEMPORARILY SHORE ATTIC FLOOR AS REQUIRED. COORDINATE WITH NEW WORK DRAWINGS.
913	DISCONNECT EXISTING ICE MACHINE AND ASSOCIATED UTILITIES (POWER, WATER, AND DRAIN). CAP UTILITIES AS REQUIRED. STORE UNIT IN PROTECTED LOCATION AND MAINTAIN CONDITION FOR REINSTALLATION IN NEW BREAK ROOM. COORDINATE WITH MEP DRAWINGS.
914	AT TOP OF DAMAGED EXTERIOR CMU WALL, REMOVE ALL DAMAGED BLOCKS AND REPLACE IN KIND. MAINTAIN EXISTING UNDAMAGED CMU BLOCKS. COORDINATE WITH NEW WORK DRAWINGS AND EXTERIOR CMU DEMOLITION ELEVATION. SHORING OF EXISTING WALL AND GIRDERS IS THE RESPONSIBILITY OF THE CONTRACTOR.
916	EXISTING CMU WALL TO REMAIN - SHORING AND BRACING IS THE RESPONSIBILITY OF THE CONTRACTOR.
917	REMOVE EXISTING CAST-IN-PLACE CONCRETE DECK IN AREA INDICATED. VERIFY CONNECTIONS TO ADJACENT CMU WALLS AND SUPPORTING STRUCTURE PRIOR TO DEMOLITION. IF DISCREPANCIES, UNFORESEEN CONDITIONS, OR STRUCTURAL INSTABILITY ARE ENCOUNTERED, NOTIFY ARCHITECT AND STRUCTURAL FOR COORDINATION PRIOR TO PROCEEDING.
918	EXISTING ATTIC FLOOR STRUCTURE TO REMAIN. FIELD VERIFY EXISTING CONNECTIONS TO ADJACENT CMU WALLS AND CHIMNEY PRIOR TO DEMOLITION OF ADJACENT CHIMNEY AND CONCRETE DECK. PROVIDE TEMPORARY SHORING AS REQUIRED TO MAINTAIN STRUCTURAL STABILITY. IF DISCREPANCIES, DAMAGE, OR UNSTABLE CONDITIONS ARE ENCOUNTERED, NOTIFY ARCHITECT AND STRUCTURAL ENGINEER FOR COORDINATION PRIOR TO PROCEEDING.
919	DASHED LINE INDICATES EXISTING CAST-IN-PLACE CONCRETE DECK TO REMAIN. FIELD VERIFY CONDITION AND LOAD PATH PRIOR TO ADJACENT DEMOLITION. PROVIDE TEMPORARY SHORING AS REQUIRED TO MAINTAIN STRUCTURAL STABILITY DURING CONSTRUCTION.
920	EXISTING ATTIC ACCESS HATCH TO REMAIN. PROTECT DURING CONSTRUCTION. REPAIR ANY DAMAGE CAUSED BY WORK TO MATCH EXISTING CONDITIONS.
921	EXISTING CEILING TO REMAIN.
924	REMOVE EXISTING GYPSUM IN THIS ROOM IN ITS ENTIRETY. EXISTING ATTIC FLOOR STRUCTURE TO REMAIN.

NOBLE COUNTY INDIANA

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY

NOBLE COUNTY HIGHWAY DEPTARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

NICHOLAS PETERSON REGISTERED LAR19400085 STATE OF INDIANA ARCHITECT
3/27/26

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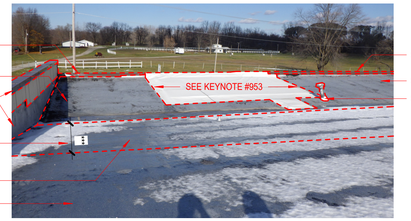
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FIRST FLOOR DEMOLITION PLAN

D101



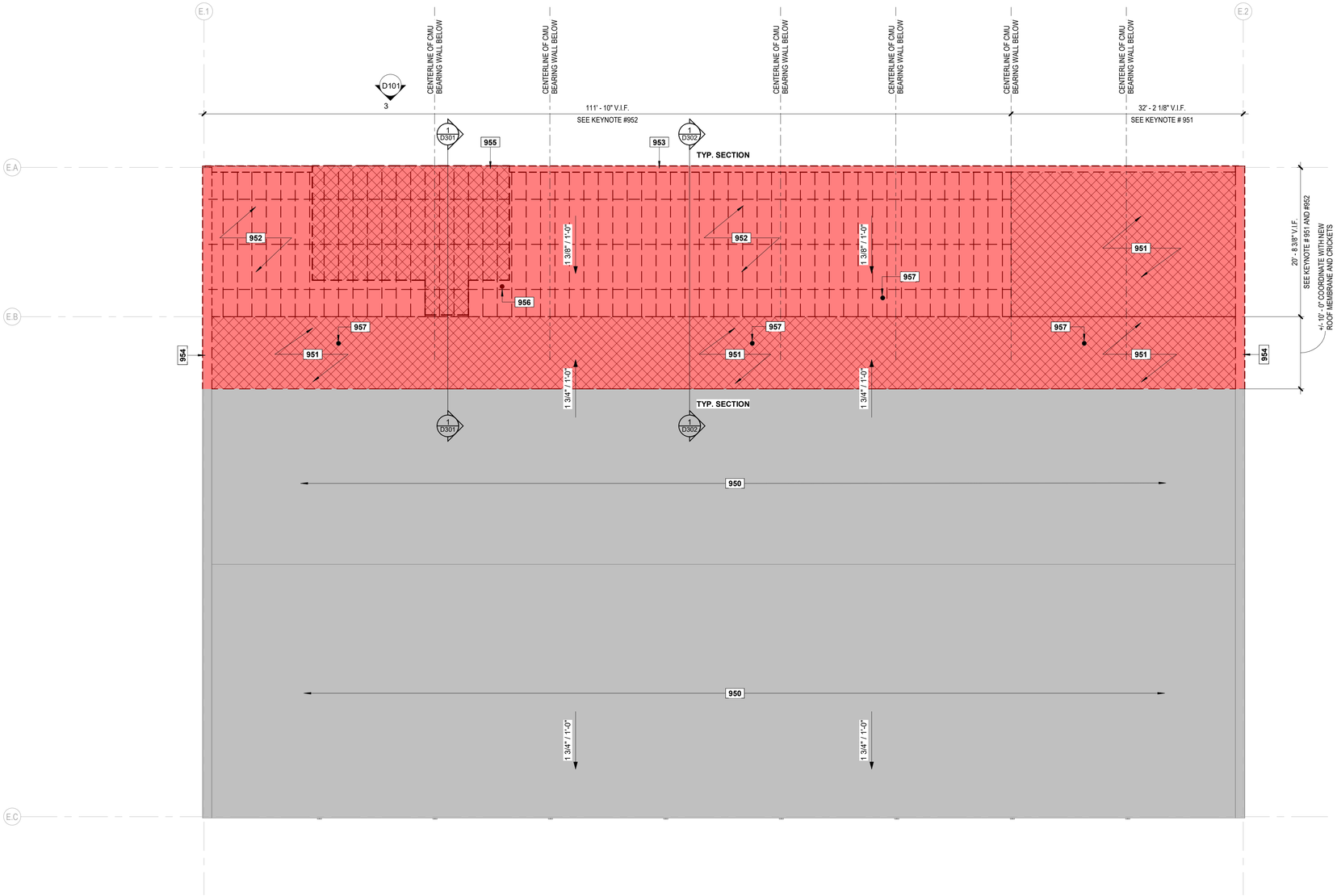
SEE KEYNOTE #953
SEE KEYNOTE #952
SEE KEYNOTE #954
+/- 10' - 0" COORDINATE WITH NEW ROOF MEMBRANE AND CRICKETS
SEE KEYNOTE #951
SEE KEYNOTE #950



SEE KEYNOTE #953
SEE KEYNOTE #952
SEE KEYNOTE #956

2 D151 ROOF DEMOLITION EXHIBITS

1" = 1'-0"



ROOF DEMOLITION PLAN

1/8" = 1'-0"

GENERAL ROOF DEMOLITION NOTES

A. ALL ITEMS BEING REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER UNTIL CONFIRMATION HAS BEEN MADE AS TO WHETHER THE OWNER WILL RETAIN SUCH ITEMS. CONTRACTOR SHALL COORDINATE WITH OWNER REGARDING DELIVERY OF ALL ITEMS BEING RETAINED; ALL ITEMS NOT BEING RETAINED BY THE OWNER OR DESIGNATED ON THE DRAWINGS TO BE SALVAGED, RELOCATED OR REINSTALLED SHALL BE COMPLETELY REMOVED FROM THE SITE.
B. DEMOLITION WORK SHALL BE PERFORMED DURING NORMAL WORKING HOURS UNLESS NOISE WILL EXCEED OSHA THRESHOLDS. IF NOISE IS ANTICIPATED TO EXCEED OSHA THRESHOLDS, CONTRACTOR SHALL COORDINATE WITH OWNER TO ADJUST WORK HOURS TO MORE APPROPRIATE TIMES. CONTRACTOR SHALL USE ALL METHODS TO DECREASE NOISE IMPACT.
C. CONTRACTORS SHALL COORDINATE ALL DEMOLITION WORK IN OCCUPIED SPACES & SHALL NOTIFY THE OWNER TWO WEEKS PRIOR TO COMMENCING WORK. SUCH SPACES ARE TO REMAIN OCCUPIED DURING DEMOLITION & ALL WORK SHALL BE PERFORMED IN SUCH A MANNER TO MINIMIZE DISRUPTIONS TO OCCUPANTS.
D. CONTRACTORS SHALL COORDINATE ALL DEMOLITION W/ ANY PROJECT PHASING REQUIRED TO COMPLETE THE WORK.
E. ITEMS TO BE PATCHED: REMOVE ALL LOOSE OR DAMAGED MATERIAL. REFINISH TO LIKE-NEW CONDITION, OR IF CONDITION WARRANTS, REPLACE IN ENTIRETY.
F. DURING THE ENTIRE PERIOD OF DEMOLITION AND CONSTRUCTION ACTIVITIES, ALL EXISTING EXITS, EXIT LIGHTING, FIRE PROTECTION DEVICES AND ALARMS SHALL BE CONTINOUSLY MAINTAINED IN WORKING ORDER.
G. ALL DIMENSIONS TO EXISTING ELEMENTS ARE APPROXIMATE. CONTRACTOR TO VERIFY PRIOR TO WORK.
H. THE DEMOLITION CONTRACTOR SHALL PROVIDE AND INSTALL TEMPORARY DUST PARTITIONS, CONSTRUCTION BARRIERS, TEMPORARY DOORS, WALK-OFF MATS AND EQUIPMENT PROTECTION WHERE SHOWN ON THE DOCUMENTS OR IF NOT SHOWN, AS REQUIRED BY THE WORK BEING PERFORMED. TEMPORARY DUST PARTITION SHALL BE COMPLETELY SEALED TO PREVENT CONSTRUCTION DUST FROM ENTERING OWNER'S ADJACENT SPACES. DUST PARTITION DOOR TO BE SELF CLOSING, POSITIVE LATCHING, AND PAD-LOCKABLE. SUCH PROTECTION SHALL BE MAINTAINED AND REPAIRED PROMPTLY IF DAMAGED TO AVOID DUST INFILTRATION INTO ADJACENT AREAS. PROVIDE HEPA FILTER FILTRATION AND NEGATIVE AIR MACHINES WITH MONITORING GAGES. ALL TEMPORARY MEASURES TO BE INSTALLED BEFORE THE START OF DEMOLITION ACTIVITIES AND REMOVED AT THE CONCLUSION OF CONSTRUCTION WORK.
I. IF USING A DEMOLITION CHUTE, IT SHALL BE FULLY ENCLOSED.
J. ALL DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH APPROVED METHODS, & OFF-SITE UNLESS OTHERWISE DIRECTED BY THE OWNER.
K. SHORE & BRACE ALL WORK REQUIRED TO REMAIN, U.N.O.
L. DEMOLITION CONTRACTOR IS TO VERIFY THE SCOPE OF WORK IN THE FIELD W/ THE DEMOLITION DRAWINGS, NEW CONSTRUCTION DRAWINGS, & EXISTING FIELD CONDITIONS. REPORT ANY DISCREPANCIES TO THE A/E.
M. EXISTING WALL, FLOOR & CEILING FINISHES TO REMAIN SHALL BE PROTECTED. WHEN DEMOLITION CAUSES DAMAGE TO FLOOR, WALL, OR CEILING SURFACES THAT WILL REMAIN EXPOSED IN THE FINISHED WORK, SUCH DAMAGE SHALL BE REPAIRED AS REQUIRED TO RECIEVE NEW ROOF MEMBRANE IN KIND.
N. CONTRACTORS SHALL COVER & PROTECT OWNER'S EQUIPMENT WHICH CANNOT BE REMOVED FROM THE PROJECT AREA.
O. MAKE ALL DEMOLITION CLEAN & COMPLETE & IN A MANNER TO ACCEPT NEW FINISHES &/OR SURFACES, TYPICAL. AFTER DEMOLITION OF MATERIALS, THE RESULTING EXPOSED SURFACE SHALL BE SMOOTH & FLUSH W/ EXISTING CONDITIONS.
P. HAZARDOUS MATERIALS ARE NOT KNOWN TO EXISTING WITHIN THE EXISTING BUILDING. CONTRACTOR SHALL BRING ANY/ALL SUSPECTED HAZARDOUS MATERIALS ENCOUNTERED TO THE ATTENTION OF THE OWNER AND ARCHITECT IMMEDIATELY UPON DISCOVERY." THAT WAY IT COVERS MORE THAN ASBESTOS
Q. WHEN REMOVING ITEMS FROM WALLS, FLOORS CEILINGS OR ROOFS THAT ARE TO REMAIN, CONTRACTOR SHALL TAKE PRECAUTIONS TO LIMIT THE AMOUNT OF DAMAGE CREATED AT THE ADJACENT ASSEMBLIES. ALL NEW OPENINGS CREATED BY THIS DEMOLITION SHALL BE PREPPED FOR NEW INFILL INSTALLATION.

COORDINATE ALL DEMOLITION WITH *NOBLE COUNTY HIGHWAY DEPARTMENT STRUCTURAL ASSESSMENT* DATED DECEMBER 19, 2025. THE REPORT PROVIDES INFORMATION ON EXISTING CONDITIONS, DEMOLITION QUANTITIES, AND DAMAGE DISCRIPTIONS AS THEY RELATE TO THE WORK DESCRIBED IN THESE DRAWINGS.

KEYNOTE LEGEND

950	EXISTING ROOF MEMBRANE, DECK, AND STRUCTURE TO REMAIN.
951	REMOVE EXISTING ROOF MEMBRANE, FLASHING, AND ALL OTHER ASSOCIATED COMPONENTS DOWN TO EXISTING PRECAST CONCRETE ROOF DECK AS REQUIRED TO FACILITATE INSTALLATION OF NEW CRICKETS AND ROOF MEMBRANE. COORDINATE EXTENT AND LIMITS OF REMOVAL WITH NEW WORK DRAWINGS.
952	DASHED VERTICAL/HORIZONTAL LINES INDICATE ROOF AREA WITH DAMAGED PRECAST CONCRETE PANELS AND STEEL ROOF STRUCTURE. REMOVE EXISTING ROOF MEMBRANE, FLASHING, AND ALL OTHER ASSOCIATED COMPONENTS DOWN TO PRECAST CONCRETE ROOF DECK. THEN REMOVE ALL DAMAGED PRECAST CONCRETE PANELS (APPROXIMATELY 123 OUT OF 216), ANY ASSOCIATED DAMAGED STEEL FRAMING, AS WELL AS ASSOCIATED DAMAGED STRUCTURAL CMU. REFER TO STRUCTURAL ASSESSMENT REPORT FOR MORE INFORMATION. FINAL LOCATIONS OF PRECAST CONCRETE PANEL, STEEL, AND CMU REMOVAL ASSOCIATED WITH THE ROOF SHALL BE COORDINATED WITH OWNER, ARCHITECT, AND STRUCTURAL ENGINEER ON SITE AFTER BID AWARD.
953	REMOVE EXISTING METAL COPING SYSTEM AND ROOF MEMBRANE LAPPING TOP OF PARAPET WALL, INCLUDING ALL ASSOCIATED CLEATS, FASTENERS, SPLICES, BLOCKING AND SEALANTS.
954	REMOVE EXISTING METAL COPING SYSTEM, ROOF MEMBRANE LAPPING TOP OF PARAPET WALL, AND SINGLE-SKIN METAL PANEL SIDING INCLUDING ALL ASSOCIATED CLEATS, FASTENERS, SPLICES, BLOCKING AND SEALANTS. EXTENTS SHOWN ARE TO BE COORDINATED WITH NEW WORK PLANS.
955	REMOVE EXISTING TEMPORARY ROOF MEMBRANE SYSTEM IN ITS ENTIRETY, INCLUDING ALL ASSOCIATED SUBSTRATE, WOOD FRAMING, FASTENERS, SEALANTS, AND TEMPORARY FLASHING.
956	REMOVE EXISTING DAMAGED ROOF VENT STACK, BOOT FLASHING, AND ASSOCIATED SEALANTS AND FASTENERS. REFER TO NEW WORK DRAWINGS FOR REPLACEMENT IN KIND
957	EXISTING ROOF VENT TO REMAIN. REMOVE EXISTING MEMBRANE, BOOT FLASHING, COUNTERFLASHING, AND ASSOCIATED SEALANTS AT PENETRATION. PROTECT VENT DURING DEMOLITION.

NOBLE COUNTY INDIANA

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY

NOBLE COUNTY HIGHWAY DEPTARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

NICHOLAS PETERSON REGISTERED LICENSED NO. 11200085 STATE OF INDIANA ARCHITECT
3/27/26

CERTIFIED BY

ISSUANCE INDEX
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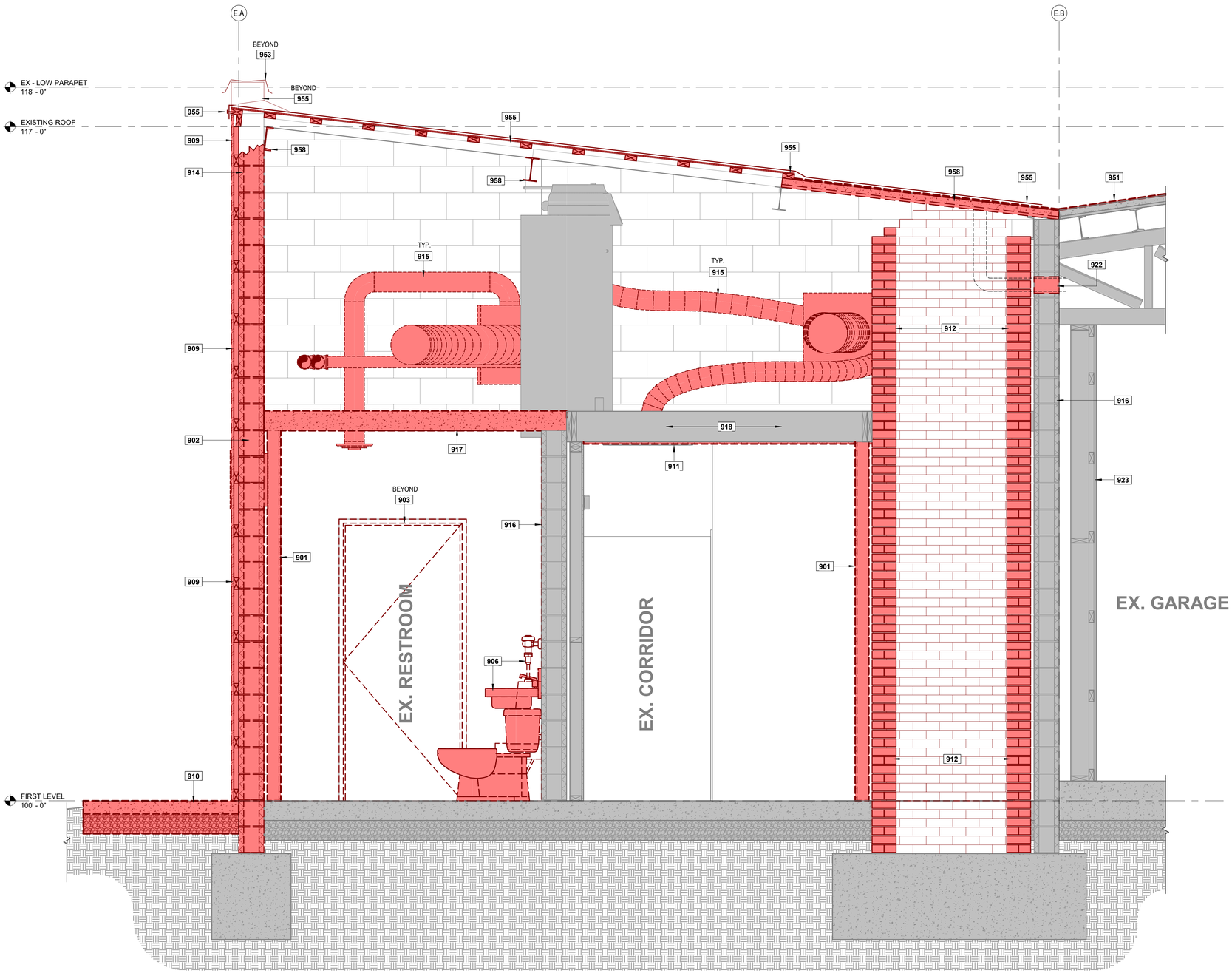
Project Number 2025.02329

ROOF DEMOLITION PLAN

D151

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COORDINATE ALL DEMOLITION WITH *NOBLE COUNTY HIGHWAY DEPARTMENT STRUCTURAL ASSESSMENT* DATED DECEMBER 19, 2025. THE REPORT PROVIDES INFORMATION ON EXISTING CONDITIONS, DEMOLITION QUANTITIES, AND DAMAGE DISCRIPTIONS AS THEY RELATE TO THE WORK DESCRIBED IN THESE DRAWINGS.



1 D301 **DEMOLITION SECTION**

3/4" = 1'-0"

GENERAL DEMOLITION NOTES

A. REMOVE EXISTING FLOOR & WALL BASE MATERIALS IN ALL AREAS SCHEDULED TO RECEIVE NEW FLOOR & BASE. U.N.O. REMOVE ALL FLOOR & WALL BASE ADHESIVES OR MORTAR COMPLETE & PREPARE SURFACES AS REQUIRED TO RECEIVE NEW FINISHES. REFER TO FINISH DRAWINGS & SCHEDULES.
B. REMOVE EXISTING CEILING TILE & GRID AS REQUIRED TO COMPLETE OVERHEAD WORK, & STORE IN A SAFE/SECURE LOCATION. U.N.O. COORDINATE WITH APPLICABLE SUBCONTRACTORS. PROTECT CEILING TILE & GRID FROM DAMAGE DURING REMOVAL & STORAGE. ONCE ALL OVERHEAD WORK IS COMPLETE, REINSTALL CEILING TILE & GRID AS REQUIRED. REPAIR / REPLACE ANY DAMAGED CEILING TILES OR GRID AS REQUIRED & FINISH TO MATCH EXISTING. REFER TO OTHER DISCIPLINES' DRAWINGS FOR EXTENT OF OVERHEAD WORK.
C. WHEN OPENINGS ARE CUT INTO AN EXISTING MASONRY WALL, OPENINGS SHALL BE A MINIMUM OF 1'-4" LONGER THAN THE FINISHED OPENING REQ'D TO ALLOW FOR 8" MIN. OF NEW MASONRY TOOTHED-IN AT THE EDGES. RUN NOTE PAST STRUCTURAL TEAM AT START OF PROJECT
D. ALL ITEMS BEING REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER UNTIL CONFIRMATION HAS BEEN MADE AS TO WHETHER THE OWNER WILL RETAIN SUCH ITEMS. CONTRACTOR SHALL COORDINATE WITH OWNER REGARDING DELIVERY OF ALL ITEMS BEING RETAINED; ALL ITEMS NOT BEING RETAINED BY THE OWNER OR DESIGNATED ON THE DRAWINGS TO BE SALVAGED, RELOCATED OR REINSTALLED SHALL BE COMPLETELY REMOVED FROM THE SITE.
E. DEMOLITION WORK SHALL BE PERFORMED DURING NORMAL WORKING HOURS UNLESS NOISE WILL EXCEED OSHA THRESHOLDS. IF NOISE IS ANTICIPATED TO EXCEED OSHA THRESHOLDS, CONTRACTOR SHALL COORDINATE WITH OWNER TO ADJUST WORK HOURS TO MORE APPROPRIATE TIMES. CONTRACTOR SHALL USE ALL METHODS TO DECREASE NOISE IMPACT.
F. CONTRACTORS SHALL COORDINATE ALL DEMOLITION WORK IN OCCUPIED SPACES & SHALL NOTIFY THE OWNER TWO WEEKS PRIOR TO COMMENCING WORK. SUCH SPACES ARE TO REMAIN OCCUPIED DURING DEMOLITION & ALL WORK SHALL BE PERFORMED IN SUCH A MANNER TO MINIMIZE DISRUPTIONS TO OCCUPANTS.
G. CONTRACTORS SHALL COORDINATE ALL DEMOLITION W/ ANY PROJECT PHASING REQUIRED TO COMPLETE THE WORK.
H. ITEMS TO BE PATCHED: REMOVE ALL LOOSE OR DAMAGED MATERIAL. REFINISH TO LIKE-NEW CONDITION, OR IF CONDITION WARRANTS, REPLACE IN ENTIRETY.
I. DURING THE ENTIRE PERIOD OF DEMOLITION AND CONSTRUCTION ACTIVITIES, ALL EXISTING EXITS, EXIT LIGHTING, FIRE PROTECTION DEVICES AND ALARMS SHALL BE CONTINOUSLY MAINTAINED IN WORKING ORDER.
J. CONTRACTOR SHALL PROVIDE A MINIMUM 44" EGRESS PATH THROUGH CORRIDORS AT CONSTRUCTION WORK IN OCCUPIED AREA OF BUILDING.
K. ALL DIMENSIONS TO EXISTING ELEMENTS ARE APPROXIMATE. CONTRACTOR TO VERIFY PRIOR TO WORK.
L. THE DEMOLITION CONTRACTOR SHALL PROVIDE AND INSTALL TEMPORARY DUST PARTITIONS, CONSTRUCTION BARRIERS, TEMPORARY DOORS, WALK-OFF MATS AND EQUIPMENT PROTECTION WHERE SHOWN ON THE DOCUMENTS OR IF NOT SHOWN, AS REQUIRED BY THE WORK BEING PERFORMED. TEMPORARY DUST PARTITION SHALL BE COMPLETELY SEALED TO PREVENT CONSTRUCTION DUST FROM ENTERING OWNER'S ADJACENT SPACES. DUST PARTITION DOOR TO BE SELF CLOSING, POSITIVE LATCHING, AND PAD-LOCKABLE. SUCH PROTECTION SHALL BE MAINTAINED AND REPAIRED PROMPTLY IF DAMAGED TO AVOID DUST INFILTRATION INTO ADJACENT AREAS. PROVIDE HEPA FILTER FILTRATION AND NEGATIVE AIR MACHINES WITH MONITORING GAGES. ALL TEMPORARY MEASURES TO BE INSTALLED BEFORE THE START OF DEMOLITION ACTIVITIES AND REMOVED AT THE CONCLUSION OF CONSTRUCTION WORK.
M. COVER ALL RETURN AIR GRILLES AND EXHAUST GRILLES IN CONSTRUCTION AREA WITH MIN. MERV 13 FILTER MEDIA, CHANGED REGULARLY.
N. IF USING A DEMOLITION CHUTE, IT SHALL BE FULLY ENCLOSED.
O. ALL DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH APPROVED METHODS, & OFF-SITE UNLESS OTHERWISE DIRECTED BY THE OWNER.
P. SHORE & BRACE ALL WORK REQUIRED TO REMAIN, U.N.O.
Q. DEMOLITION CONTRACTOR IS TO VERIFY THE SCOPE OF WORK IN THE FIELD W/ THE DEMOLITION DRAWINGS, NEW CONSTRUCTION DRAWINGS, & EXISTING FIELD CONDITIONS. REPORT ANY DISCREPANCIES TO THE A/E.
R. "FLOORING" DENOTES FLOOR COVERING MATERIALS INCLUDING BACKINGS, ADHESIVES, MORTAR, & WALL BASES, DOWN TO BUT EXCLUSIVE OF FLOOR SLABS & STRUCTURAL MATERIALS, U.N.O.
S. "CEILING" DENOTES CEILING MATERIALS INCLUDING SUSPENSION SYSTEMS, ADHESIVE RESIDUES, MOLDINGS, UP TO BUT EXCLUSIVE OF STRUCTURAL MATERIALS.
T. WHERE WALLS ARE INDICATED TO BE DEMOLISHED, REMOVE TO A POINT 2" MIN. BELOW THE EXISTING SLAB (UNLESS SETTING ON SLAB). PATCH W/ NEW CONCRETE FLUSH W/ THE EXISTING FLOOR SLAB.
U. PROTECT EXISTING FLOOR FINISHES FROM CONSTRUCTION TRAFFIC THROUGH OCCUPIED AREAS. EXISTING WALL, FLOOR & CEILING FINISHES TO REMAIN SHALL BE PROTECTED. WHEN DEMOLITION CAUSES DAMAGE TO FLOOR, WALL, OR CEILING SURFACES THAT WILL REMAIN EXPOSED IN THE FINISHED WORK, SUCH DAMAGE SHALL BE REPAIRED AS REQUIRED TO RECEIVE NEW FINISHES.
V. CONTRACTORS SHALL COVER & PROTECT OWNER'S EQUIPMENT WHICH CANNOT BE REMOVED FROM THE PROJECT AREA.
W. MAKE ALL DEMOLITION CLEAN & COMPLETE & IN A MANNER TO ACCEPT NEW FINISHES &/OR SURFACES, TYPICAL. AFTER DEMOLITION OF MATERIALS, THE RESULTING EXPOSED SURFACE SHALL BE SMOOTH & FLUSH W/ EXISTING CONDITIONS.
X. HAZARDOUS MATERIALS ARE NOT KNOWN TO EXISTING WITHIN THE EXISTING BUILDING. CONTRACTOR SHALL BRING ANY/ALL SUSPECTED HAZARDOUS MATERIALS ENCOUNTERED TO THE ATTENTION OF THE OWNER AND ARCHITECT IMMEDIATELY UPON DISCOVERY.* THAT WAY IT COVERS MORE THAN ASBESTOS
Y. WHEN REMOVING ITEMS FROM WALLS, FLOORS CEILINGS OR ROOFS THAT ARE TO REMAIN, CONTRACTOR SHALL TAKE PRECAUTIONS TO LIMIT THE AMOUNT OF DAMAGE CREATED AT THE ADJACENT ASSEMBLIES. ALL NEW OPENINGS CREATED BY THIS DEMOLITION SHALL BE PREPPED FOR NEW INFILL INSTALLATION.

KEYNOTE LEGEND	
901	DEMOLISH WALL IN ENTIRETY. PATCH AND REPAIR CONCRETE SLAB W/ TOPPING MATERIAL FLUSH W/ ADJACENT FLOOR. PATCH AND REPAIR EXISTING WALL(S) WHERE APPLICABLE TO MATCH SURROUNDING FINISH AND MATERIALS PER NEW WORK PLANS.
902	DEMOLISH PORTION OF EXISTING WALL FOR NEW WALL OPENING. COORDINATE WITH NEW WORK PLANS AND DEMOLITION SECTION DRAWING.
903	REMOVE DOOR, FRAME AND HARDWARE IN THEIR ENTIRETY. SALVAGE DOORS AS REQUIRED BY OWNER.
906	DEMOLISH PLUMBING FIXTURE AND ASSOCIATED PLUMBING IN ITS ENTIRETY. SALVAGE PLUMBING FIXTURES AS REQUIRED BY OWNER.
909	REMOVE EXISTING METAL PANEL AND ASSOCIATED 2X WOOD FURRING FROM THIS PORTION OF EXTERIOR WALL - CMU TO REMAIN.
910	EXISTING SIDEWALK TO BE REMOVED - REF. CIVIL FOR ADDITIONAL INFORMATION
911	REMOVE EXISTING CEILING IN THIS ROOM IN ITS ENTIRETY, INCLUDING ALL ASSOCIATED LIGHTING, MECHANICAL, AND ELECTRICAL COMPONENTS. COORDINATE WITH NEW WORK PLANS.
912	DEMOLISH EXISTING DAMAGED CHIMNEY STRUCTURE IN ITS ENTIRETY. REMOVE ALL FOUNDATION ELEMENTS TO A DEPTH SUFFICIENT TO FACILITATE NEW CONCRETE SLAB INSTALLATION. REMOVE ALL ASSOCIATED MASONRY, FLUE COMPONENTS, AND CONNECTIONS WITHIN AREA OF WORK. REMOVE ALL FALLEN DEBRIS FROM ATTIC SPACE. TEMPORARILY SHORE ATTIC FLOOR AS REQUIRED. COORDINATE WITH NEW WORK DRAWINGS.
914	AT TOP OF DAMAGED EXTERIOR CMU WALL, REMOVE ALL DAMAGED BLOCKS AND REPLACE IN KIND. MAINTAIN EXISTING UNDAMAGED CMU BLOCKS. COORDINATE WITH NEW WORK DRAWINGS AND EXTERIOR CMU DEMOLITION ELEVATION. SHORING OF EXISTING WALL AND GIRDERS IS THE RESPONSIBILITY OF THE CONTRACTOR.
915	REMOVE EXISTING MECHANICAL AND PLUMBING EQUIPMENT PER MEP DRAWINGS.
916	EXISTING CMU WALL TO REMAIN - SHORING AND BRACING IS THE RESPONSIBILITY OF THE CONTRACTOR.
917	REMOVE EXISTING CAST-IN-PLACE CONCRETE DECK IN AREA INDICATED. VERIFY CONNECTIONS TO ADJACENT CMU WALLS AND SUPPORTING STRUCTURE PRIOR TO DEMOLITION. IF DISCREPANCIES, UNFORESEEN CONDITIONS, OR STRUCTURAL INSTABILITY ARE ENCOUNTERED, NOTIFY ARCHITECT AND STRUCTURAL FOR COORDINATION PRIOR TO PROCEEDING.
918	EXISTING ATTIC FLOOR STRUCTURE TO REMAIN. FIELD VERIFY EXISTING CONNECTIONS TO ADJACENT CMU WALLS AND CHIMNEY PRIOR TO DEMOLITION OF ADJACENT CHIMNEY AND CONCRETE DECK. PROVIDE TEMPORARY SHORING AS REQUIRED TO MAINTAIN STRUCTURAL STABILITY. IF DISCREPANCIES, DAMAGE, OR UNSTABLE CONDITIONS ARE ENCOUNTERED, NOTIFY ARCHITECT AND STRUCTURAL ENGINEER FOR COORDINATION PRIOR TO PROCEEDING.
922	SELECTIVELY DEMOLISH EXISTING CMU BLOCK FOR PENETRATION OF NEW ROOF DRAINAGE PIPING - COORDINATE WITH NEW ROOF PLAN AND PLUMBING DRAWINGS.
923	EXISTING SINGLE SKIN METAL PANEL OVER WOOD FURRING AND 2X6 WOOD FRAMING TO REMAIN.
951	REMOVE EXISTING ROOF MEMBRANE, FLASHING, AND ALL OTHER ASSOCIATED COMPONENTS DOWN TO EXISTING PRECAST CONCRETE ROOF DECK AS REQUIRED TO FACILITATE INSTALLATION OF NEW CRICKETS AND ROOF MEMBRANE. COORDINATE EXTENT AND LIMITS OF REMOVAL WITH NEW WORK DRAWINGS.
953	REMOVE EXISTING METAL COPING SYSTEM AND ROOF MEMBRANE LAPPING TOP OF PARAPET WALL, INCLUDING ALL ASSOCIATED CLEATS, FASTENERS, SPLICES, BLOCKING AND SEALANTS.
955	REMOVE EXISTING TEMPORARY ROOF MEMBRANE SYSTEM IN ITS ENTIRETY, INCLUDING ALL ASSOCIATED SUBSTRATE, WOOD FRAMING, FASTENERS, SEALANTS, AND TEMPORARY FLASHING.
958	AREA WITH DAMAGED PRECAST CONCRETE PANELS AND STEEL ROOF STRUCTURE. REMOVE EXISTING ROOF MEMBRANE, FLASHING, AND ALL OTHER ASSOCIATED COMPONENTS DOWN TO PRECAST CONCRETE ROOF DECK. THEN REMOVE ALL DAMAGED PRECAST CONCRETE PANELS (APPROXIMATELY 123 OUT OF 216), ANY ASSOCIATED DAMAGED STEEL FRAMING, AS WELL AS ASSOCIATED DAMAGED STRUCTURAL CMU. REFER TO STRUCTURAL ASSESSMENT REPORT FOR MORE INFORMATION. FINAL LOCATIONS OF PRECAST CONCRETE PANEL, STEEL, AND CMU REMOVAL ASSOCIATED WITH THE ROOF SHALL BE COORDINATED WITH OWNER, ARCHITECT, AND STRUCTURAL ENGINEER ON SITE AFTER BID AWARD. COORDINATE WITH KEYNOTE 952 ON ROOF DEMOLITION PLAN.

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9025 River Road, Suite 200, Indianapolis, Indiana 46240
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NICHOLAS PETERSON REGISTERED ARCHITECT 12200085 STATE OF INDIANA
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DEMOLITION SECTIONS

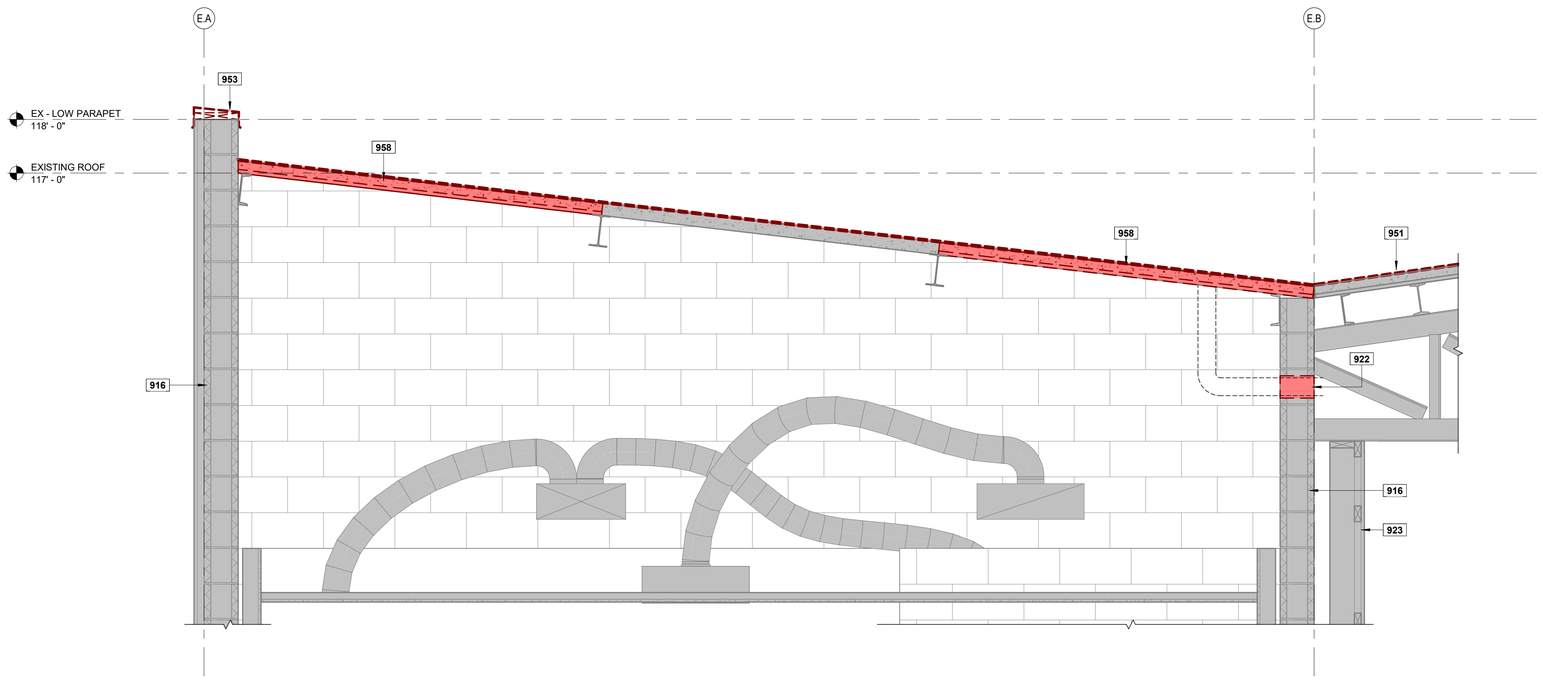
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COORDINATE ALL DEMOLITION WITH *NOBLE COUNTY HIGHWAY DEPARTMENT STRUCTURAL ASSESSMENT* DATED DECEMBER 19, 2025. THE REPORT PROVIDES INFORMATION ON EXISTING CONDITIONS, DEMOLITION QUANTITIES, AND DAMAGE DISCRIPTIONS AS THEY RELATE TO THE WORK DESCRIBED IN THESE DRAWINGS.

GENERAL DEMOLITION NOTES

A. REMOVE EXISTING FLOOR & WALL BASE MATERIALS IN ALL AREAS SCHEDULED TO RECEIVE NEW FLOOR & BASE. U.N.O. REMOVE ALL FLOOR & WALL BASE ADHESIVES OR MORTAR COMPLETE & PREPARE SURFACES AS REQUIRED TO RECEIVE NEW FINISHES. REFER TO FINISH DRAWINGS & SCHEDULES.
B. REMOVE EXISTING CEILING TILE & GRID AS REQUIRED TO COMPLETE OVERHEAD WORK, & STORE IN A SAFE/SECURE LOCATION. U.N.O. COORDINATE WITH APPLICABLE SUBCONTRACTORS. PROTECT CEILING TILE & GRID FROM DAMAGE DURING REMOVAL & STORAGE. ONCE ALL OVERHEAD WORK IS COMPLETE, REINSTALL CEILING TILE & GRID AS REQUIRED. REPAIR / REPLACE ANY DAMAGED CEILING TILES OR GRID AS REQUIRED & FINISH TO MATCH EXISTING. REFER TO OTHER DISCIPLINES' DRAWINGS FOR EXTENT OF OVERHEAD WORK.
C. WHEN OPENINGS ARE CUT INTO AN EXISTING MASONRY WALL, OPENINGS SHALL BE A MINIMUM OF 1'-4" LONGER THAN THE FINISHED OPENING REQ'D TO ALLOW FOR 8" MIN. OF NEW MASONRY TOOTHED-IN AT THE EDGES. RUN NOTE PAST STRUCTURAL TEAM AT START OF PROJECT
D. ALL ITEMS BEING REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER UNTIL CONFIRMATION HAS BEEN MADE AS TO WHETHER THE OWNER WILL RETAIN SUCH ITEMS. CONTRACTOR SHALL COORDINATE WITH OWNER REGARDING DELIVERY OF ALL ITEMS BEING RETAINED; ALL ITEMS NOT BEING RETAINED BY THE OWNER OR DESIGNATED ON THE DRAWINGS TO BE SALVAGED, RELOCATED OR REINSTALLED SHALL BE COMPLETELY REMOVED FROM THE SITE.
E. DEMOLITION WORK SHALL BE PERFORMED DURING NORMAL WORKING HOURS UNLESS NOISE WILL EXCEED OSHA THRESHOLDS. IF NOISE IS ANTICIPATED TO EXCEED OSHA THRESHOLDS, CONTRACTOR SHALL COORDINATE WITH OWNER TO ADJUST WORK HOURS TO MORE APPROPRIATE TIMES. CONTRACTOR SHALL USE ALL METHODS TO DECREASE NOISE IMPACT.
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G. CONTRACTORS SHALL COORDINATE ALL DEMOLITION W/ ANY PROJECT PHASING REQUIRED TO COMPLETE THE WORK.
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J. CONTRACTOR SHALL PROVIDE A MINIMUM 44" EGRESS PATH THROUGH CORRIDORS AT CONSTRUCTION WORK IN OCCUPIED AREA OF BUILDING.
K. ALL DIMENSIONS TO EXISTING ELEMENTS ARE APPROXIMATE. CONTRACTOR TO VERIFY PRIOR TO WORK.
L. THE DEMOLITION CONTRACTOR SHALL PROVIDE AND INSTALL TEMPORARY DUST PARTITIONS, CONSTRUCTION BARRIERS, TEMPORARY DOORS, WALK-OFF MATS AND EQUIPMENT PROTECTION WHERE SHOWN ON THE DOCUMENTS OR IF NOT SHOWN, AS REQUIRED BY THE WORK BEING PERFORMED. TEMPORARY DUST PARTITION SHALL BE COMPLETELY SEALED TO PREVENT CONSTRUCTION DUST FROM ENTERING OWNER'S ADJACENT SPACES. DUST PARTITION DOOR TO BE SELF CLOSING, POSITIVE LATCHING, AND PAD-LOCKABLE. SUCH PROTECTION SHALL BE MAINTAINED AND REPAIRED PROMPTLY IF DAMAGED TO AVOID DUST INFILTRATION INTO ADJACENT AREAS. PROVIDE HEPA FILTER FILTRATION AND NEGATIVE AIR MACHINES WITH MONITORING GAGES. ALL TEMPORARY MEASURES TO BE INSTALLED BEFORE THE START OF DEMOLITION ACTIVITIES AND REMOVED AT THE CONCLUSION OF CONSTRUCTION WORK.
M. COVER ALL RETURN AIR GRILLES AND EXHAUST GRILLES IN CONSTRUCTION AREA WITH MIN. MERV 13 FILTER MEDIA, CHANGED REGULARLY.
N. IF USING A DEMOLITION CHUTE, IT SHALL BE FULLY ENCLOSED.
O. ALL DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH APPROVED METHODS, & OFF-SITE UNLESS OTHERWISE DIRECTED BY THE OWNER.
P. SHORE & BRACE ALL WORK REQUIRED TO REMAIN, U.N.O.
Q. DEMOLITION CONTRACTOR IS TO VERIFY THE SCOPE OF WORK IN THE FIELD W/ THE DEMOLITION DRAWINGS, NEW CONSTRUCTION DRAWINGS, & EXISTING FIELD CONDITIONS. REPORT ANY DISCREPANCIES TO THE A/E.
R. "FLOORING" DENOTES FLOOR COVERING MATERIALS INCLUDING BACKINGS, ADHESIVES, MORTAR, & WALL BASES, DOWN TO BUT EXCLUSIVE OF FLOOR SLABS & STRUCTURAL MATERIALS, U.N.O.
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T. WHERE WALLS ARE INDICATED TO BE DEMOLISHED, REMOVE TO A POINT 2" MIN. BELOW THE EXISTING SLAB (UNLESS SETTING ON SLAB). PATCH W/ NEW CONCRETE FLUSH W/ THE EXISTING FLOOR SLAB.
U. PROTECT EXISTING FLOOR FINISHES FROM CONSTRUCTION TRAFFIC THROUGH OCCUPIED AREAS. EXISTING WALL, FLOOR & CEILING FINISHES TO REMAIN SHALL BE PROTECTED. WHEN DEMOLITION CAUSES DAMAGE TO FLOOR, WALL, OR CEILING SURFACES THAT WILL REMAIN EXPOSED IN THE FINISHED WORK, SUCH DAMAGE SHALL BE REPAIRED AS REQUIRED TO RECEIVE NEW FINISHES.
V. CONTRACTORS SHALL COVER & PROTECT OWNER'S EQUIPMENT WHICH CANNOT BE REMOVED FROM THE PROJECT AREA.
W. MAKE ALL DEMOLITION CLEAN & COMPLETE & IN A MANNER TO ACCEPT NEW FINISHES &/OR SURFACES, TYPICAL. AFTER DEMOLITION OF MATERIALS, THE RESULTING EXPOSED SURFACE SHALL BE SMOOTH & FLUSH W/ EXISTING CONDITIONS.
X. HAZARDOUS MATERIALS ARE NOT KNOWN TO EXISTING WITHIN THE EXISTING BUILDING. CONTRACTOR SHALL BRING ANY/ALL SUSPECTED HAZARDOUS MATERIALS ENCOUNTERED TO THE ATTENTION OF THE OWNER AND ARCHITECT IMMEDIATELY UPON DISCOVERY." THAT WAY IT COVERS MORE THAN ASBESTOS
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1 / D302 **TYPICAL DEMOLITION SECTION AT PRECAST CONCRETE PANELS**
3/4" = 1'-0"

KEYNOTE LEGEND	
916	EXISTING CMU WALL TO REMAIN - SHORING AND BRACING IS THE RESPONSIBILITY OF THE CONTRACTOR.
922	SELECTIVELY DEMOLISH EXISTING CMU BLOCK FOR PENETRATION OF NEW ROOF DRAINAGE PIPING - COORDINATE WITH NEW ROOF PLAN AND PLUMBING DRAWINGS.
923	EXISTING SINGLE SKIN METAL PANEL OVER WOOD FURRING AND 2X6 WOOD FRAMING TO REMAIN.
951	REMOVE EXISTING ROOF MEMBRANE, FLASHING, AND ALL OTHER ASSOCIATED COMPONENTS DOWN TO EXISTING PRECAST CONCRETE ROOF DECK AS REQUIRED TO FACILITATE INSTALLATION OF NEW CRICKETS AND ROOF MEMBRANE. COORDINATE EXTENT AND LIMITS OF REMOVAL WITH NEW WORK DRAWINGS.
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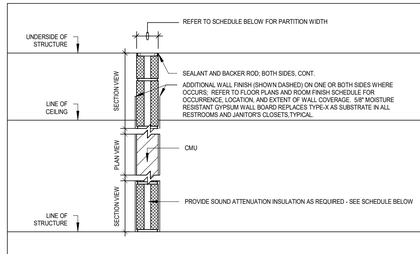
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DEMOLITION SECTIONS

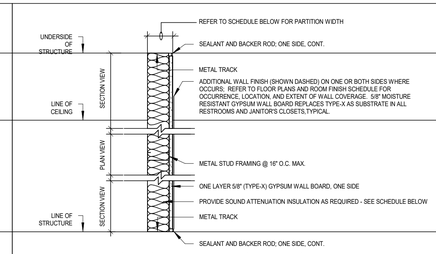
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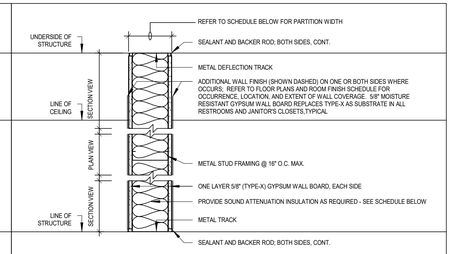
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M4	M4S	3 - 5/8"	3 - 5/8"	NON-RATED	NA		
M6	M6S	5 - 5/8"	5 - 5/8"	NON-RATED	NA		
M8	M8S	7 - 5/8"	7 - 5/8"	NON-RATED	NA		
M12	M12S	11 - 5/8"	11 - 5/8"	NON-RATED	NA		

M WALL PARTITION TYPE



NO SOUND ATTENUATION DESIGNATION	WITH SOUND ATTENUATION DESIGNATION	STUD WIDTH	PART. WIDTH	FIRE RATING	UL LISTING	STC: NO SOUND / WITH SOUND	REMARKS
G1	G1S	7/8"	1 - 1/2"	NON-RATED	NA		7/8" HAT CHANNEL ATTACHED TO ADJACENT WALL
G2	G2S	2 - 1/2"	3 - 1/8"	NON-RATED	NA		
G3	G3S	3 - 5/8"	4 - 1/4"	NON-RATED	NA		
G6	G6S	6"	6 - 5/8"	NON-RATED	NA		
G8	G8S	8"	8 - 5/8"	NON-RATED	NA		

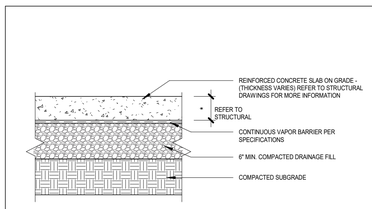
G WALL PARTITION TYPE



NO SOUND ATTENUATION DESIGNATION	WITH SOUND ATTENUATION DESIGNATION	STUD WIDTH	PART. WIDTH	FIRE RATING	UL LISTING	STC: NO SOUND / WITH SOUND	REMARKS
B1	B1S	1 - 5/8"	2 - 7/8"	NON-RATED	NA		
B2	B2S	2 - 1/2"	3 - 3/4"	NON-RATED	NA		
B3	B3S	3 - 5/8"	4 - 7/8"	NON-RATED	NA		
B6	B6S	6"	7 - 1/4"	NON-RATED	NA		
B8	B8S	8"	9 - 1/4"	NON-RATED	NA		

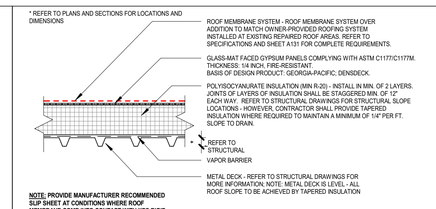
B WALL PARTITION TYPE

INTERIOR WALL TYPES



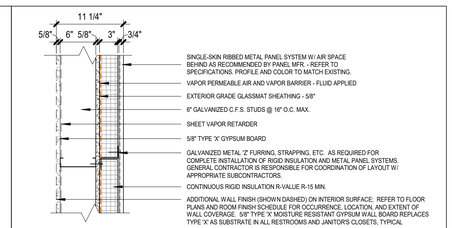
CONCRETE SLAB ON GRADE W/ VAPOR BARRIER

F1 FLOOR SYSTEM - F1



METAL ROOF DECK

R1 ROOF SYSTEM - R1



SINGLE-SKIN RIBBED METAL PANEL ON METAL STUD

EW1 EXTERIOR WALL SYSTEM

EXTERIOR BUILDING SYSTEMS

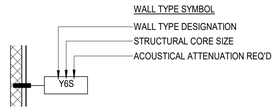
GENERAL BUILDING SYSTEMS NOTES

A. EACH BUILDING SYSTEM DESCRIBES GENERAL SYSTEM COMPONENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
B. DIMENSIONS DEPICTED ARE FOR TYPICAL COMPONENTS. REFER TO SECTIONS, DETAILS AND PLANS FOR EACH SPECIFIC COMPONENT.
C. WALL INSULATION, WHERE EXPOSED, IS TO BE FACED TO MEET REQUIRED FLAME SPREAD RATING.

GENERAL PARTITION NOTES

A. FOR FRAMED PARTITIONS INDICATED TO RECEIVE SOUND ATTENUATION (WALL TAG xxʻSʻ), EXTEND ATTENUATION TO FULL HEIGHT OF PARTITION U.N.O. FLOOR TRACK TO BE SET IN A CONTINUOUS BED OF SEALANT. PROVIDE ACOUSTICAL SEALANT AT WALL SILL, HEAD, PENETRATIONS, AND ADDITIONAL SPECIFIED SOUND ATTENUATION COMPONENTS AT SOUND RATED WALLS.
B. NON-RATED PARTITIONS SHALL USE ACOUSTICAL SEALANT.
C. ALTHOUGH WALL STUD SIZE / SPACING ARE LISTED, CONTRACTOR WILL VERIFY AND PROVIDE APPROPRIATE SIZE / GAUGE / SPACING OF STUDS REQUIRED FOR CONDITIONS INDICATED AND NOTIFY ARCHITECT OF ANY DISCREPANCY PRIOR TO FABRICATION / INSTALLATION.
D. PROVIDE SOLID, CONTINUOUS BLOCKING/STRAPPING OR EQUIVALENT BACKING SYSTEM AS REQUIRED AT ALL LOCATIONS WHERE ALL WALL-MOUNTED CABINETRY, MILLWORK, PLUMBING FIXTURES, ACCESSORIES, EQUIPMENT, ETC. ATTACHES TO WALL. ALL BLOCKING SHALL BE FIRE RETARDANT TREATED WOOD OR MADE OF NON-COMBUSTIBLE MATERIAL. COORDINATE WITH APPROPRIATE SPECIFICATION SECTIONS.
E. WHERE DRYWALL ABUTS DISSIMILAR MATERIALS, USE METAL DRYWALL EDGE BEAD.
F. PROVIDE GYPSUM CONTROL JOINTS IN WALLS OVER 30'-0 IN LENGTH. LOCATE AS INDICATED ON DRAWINGS, OR AS DIRECTED BY ARCHITECT.
G. PROVIDE MASONRY CONTROL JOINTS IN WALLS OVER 30'-0 IN LENGTH. LOCATE AS INDICATED ON DRAWINGS, OR AS DIRECTED BY ARCHITECT.
H. ALL CONCRETE MASONRY UNITS SHALL BE LAID IN RUNNING BOND UNLESS NOTED OTHERWISE.
I. IN AREAS DESIGNATED TO HAVE A RATED CEILING, BUILD WALLS THAT ARE NOT INDICATED TO GO TO DECK TO UNDERSIDE OF RATED CEILING.
J. REFER TO CONSTRUCTION ASSEMBLY NUMBER NOTED ON ARCHITECTURAL BUILDING SYSTEMS AND WALL TYPE SHEETS.
K. PROVIDE FIRE RESISTIVE JOINT SYSTEMS EQUAL TO WALL RATING AT ALL PENETRATIONS AND AT HEAD/FLOOR INTERSECTIONS WITH RATED ASSEMBLIES.
L. FIRE RESISTANCE RATED PARTITIONS SHALL USE RATED FIRE RESISTANT FILL MATERIAL IN CONJUNCTION WITH AN APPROPRIATE RATED FIRESTOPPING SYTEM.
M. MAINTAIN WALL FIRE RATING BEHIND RECESSED ACCESSORIES & EQUIPMENT.
N. PROVIDE SPECIFIED TILE BACKER BOARD AT ALL WALLS SCHEDULED TO HAVE TILE.
O. AT FIRE RATED WALLS WHERE OPENINGS ARE GREATER THAN 16 SQUARE INCHES OR WHERE TOTAL AREA OF OPENINGS EXCEEDS 100 SQUARE INCHES IN 100 SQUARE FEET, WRAP 5/8 TYPE 'X' GYPSUM BOARD BEHIND OPENINGS PER U.L. DESIGN #U510.

INTERIOR PARTITION LEGEND



REFERENCE DETAILS TO THE LEFT ON THIS SHEET FOR WALL TYPE DESCRIPTIONS

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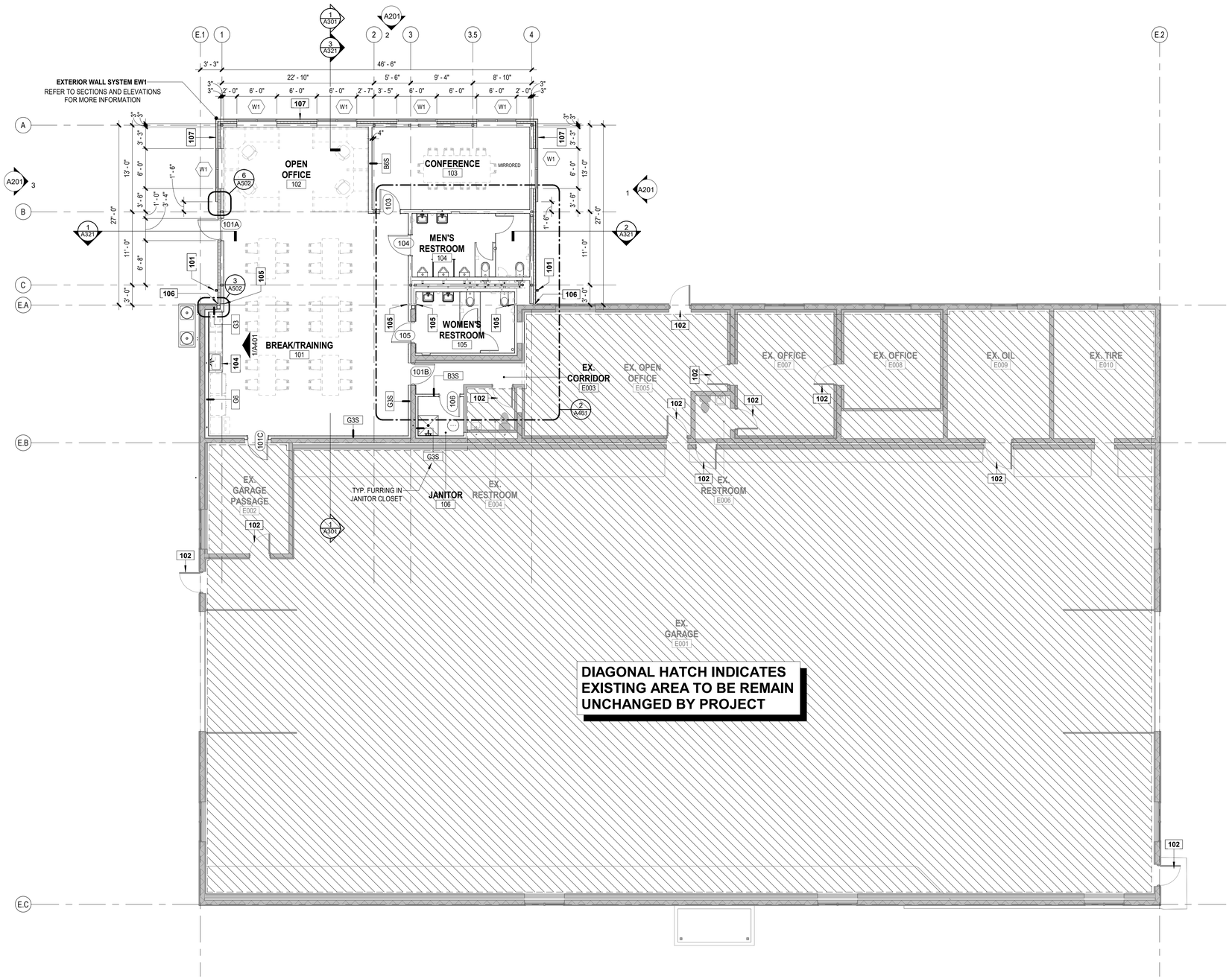
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WALL TYPES AND BUILDING SYSTEMS

A000

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FIRST FLOOR PLAN

1/8" = 1'-0"

GENERAL NOTES

A. ALL DIMENSIONS ARE TO GRID LINES, FACE OF STUD FRAMING, FINISHED FACE OF EXISTING WALL SURFACE, OR FACE OF CONCRETE / MASONRY UNITS UNLESS NOTED OTHERWISE.
B. BUILDING FIRST FLOOR IS REFERENCE ELEVATION 100'-0". REFERENCE CIVIL DRAWINGS FOR U.S.G.S. ELEVATION.
C. ALL WORK SHALL BE PERFORMED IN A SKILLED WORKMANSHIP TYPE AND MANNER AS SET FORTH IN THE CONTRACT.
D. CONFLICTS BETWEEN NOTES, DETAILS, SPECIFICATIONS, ETC., SHALL BE VERIFIED WITH THE A/E PRIOR TO CONSTRUCTION, OR THE STRICTEST PROVISIONS SHALL GOVERN.
E. CONTRACTORS ARE REQUIRED TO REVIEW THE ENTIRE SET OF CONSTRUCTION DOCUMENTS & SHALL COORDINATE THEIR RESPECTIVE WORK WITH ALL OTHER DISCIPLINES TO AVOID ANY CONFLICTS DURING CONSTRUCTION. CONTRACTORS ARE RESPONSIBLE TO COORDINATE THE ARCHITECTURAL DRAWINGS WITH ALL OTHER CONSTRUCTION DOCUMENTS.
F. DETAILS OF CONSTRUCTION NOT FULLY SHOWN SHALL BE OF THE SAME NATURE AS SHOWN FOR SIMILAR CONDITIONS. ANY UNCLEAR CONDITIONS SHALL BE VERIFIED WITH THE A/E PRIOR TO CONSTRUCTION.
G. DO NOT SCALE DRAWINGS. DIMENSIONS SHALL GOVERN EACH BUILDING COMPONENT LOCATION. BRING ANY DISCREPANCIES TO THE ARCHITECT'S ATTENTION IN WRITING IMMEDIATELY.
H. EXISTING CONDITIONS SHALL BE FIELD VERIFIED PRIOR TO BIDDING OR BEGINNING OF WORK. ANY ERRORS OR OMISSIONS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION IN WRITING IMMEDIATELY.
I. PROVIDE SEALANT BETWEEN DISSIMILAR MATERIALS PER MANUFACTURERS' RECOMMENDATION. COLOR TO BE CHOSEN BY ARCHITECT FROM MANUFACTURER'S FULL RANGE OF COLORS.
J. THE CONTRACTOR AND SUBCONTRACTORS INVOLVED IN THIS PROJECT SHALL BE RESPONSIBLE FOR MEANS AND METHODS FOR INSTALLING THEIR RESPECTIVE WORK AND SYSTEMS. WORK SHALL MEET APPLICABLE FEDERAL, STATE, AND LOCAL CODES, LAWS, SAFETY REGULATIONS, HAZARDOUS WASTE LAWS, ETC. THE CONTRACTOR SHALL FURNISH ALL NECESSARY PERMITS.
K. FOLLOWING THE DEMOLITION OF ANY M.E.P. DUCTS/PIPING/CONDUIT/ETC., THE CONTRACTOR SHALL PATCH & REPAIR ALL VOIDS/PENETRATIONS IN WALLS, CEILINGS, & FLOORS W/ NEW CONSTRUCTION TO MATCH. THE CONTRACTOR SHALL PATCH WALLS & FLOORS AS REQ'D TO RECEIVE NEW FINISHES. TOOTH-IN BRICK/BLOCK AT MASONRY CONDITIONS.

KEYNOTE LEGEND

101	PRE-FINISHED METAL 3" X 3" DOWNSPOUT CONNECTING 8" X 14" 8" X 16" COLLECTOR BOX TO STORM SEWER. REFER TO PLUMBING AND CIVIL DRAWINGS FOR MORE INFORMATION.
102	EXISTING DOOR TO REMAIN
104	CASEWORK/COUNTERTOP - REFER TO A400 SHEETS
105	PROVIDE 2" SURFACE-MOUNTED METAL INTERIOR WALL-TO-WALL EXPANSION JOINT COVER SYSTEM WITH ALUMINUM COVER PLATE. COVER PLATE SHALL SPAN JOINT AND ALLOW MOVEMENT WHILE CONCEALING FASTENERS. FINISH TO MATCH ADJACENT WALL FINISH. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND ACCOMMODATE ANTICIPATED JOINT MOVEMENT. B.O.D. CONSTRUCTION SPECIALTIES - ASM 200.
106	PROVIDE PRECOMPRESSED FOAM WALL EXPANSION JOINT SEAL WITH FACTORY-APPLIED SILICONE FACING, WATERTIGHT SEAL. INSTALL RECESSED WITH FIELD-APPLIED SILICONE FILLET BEAD AT SUBSTRATE INTERFACE. COLOR TO MATCH ADJACENT FINISH. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS. B.O.D. - SIKA COLORSEAL.
107	SINGLE-SKIN RIBBED METAL PANEL SYSTEM BUMP-OUT; PROFILE TO MATCH EW1; COLOR TO MATCH EXISTING ACCENT COLOR; REFER TO SECTIONS AND DETAILS FOR MORE INFORMATION.

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9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

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NICHOLAS PETERSON REGISTERED LICENSED ARCHITECT NO. AR12200085 STATE OF INDIANA
3/27/26

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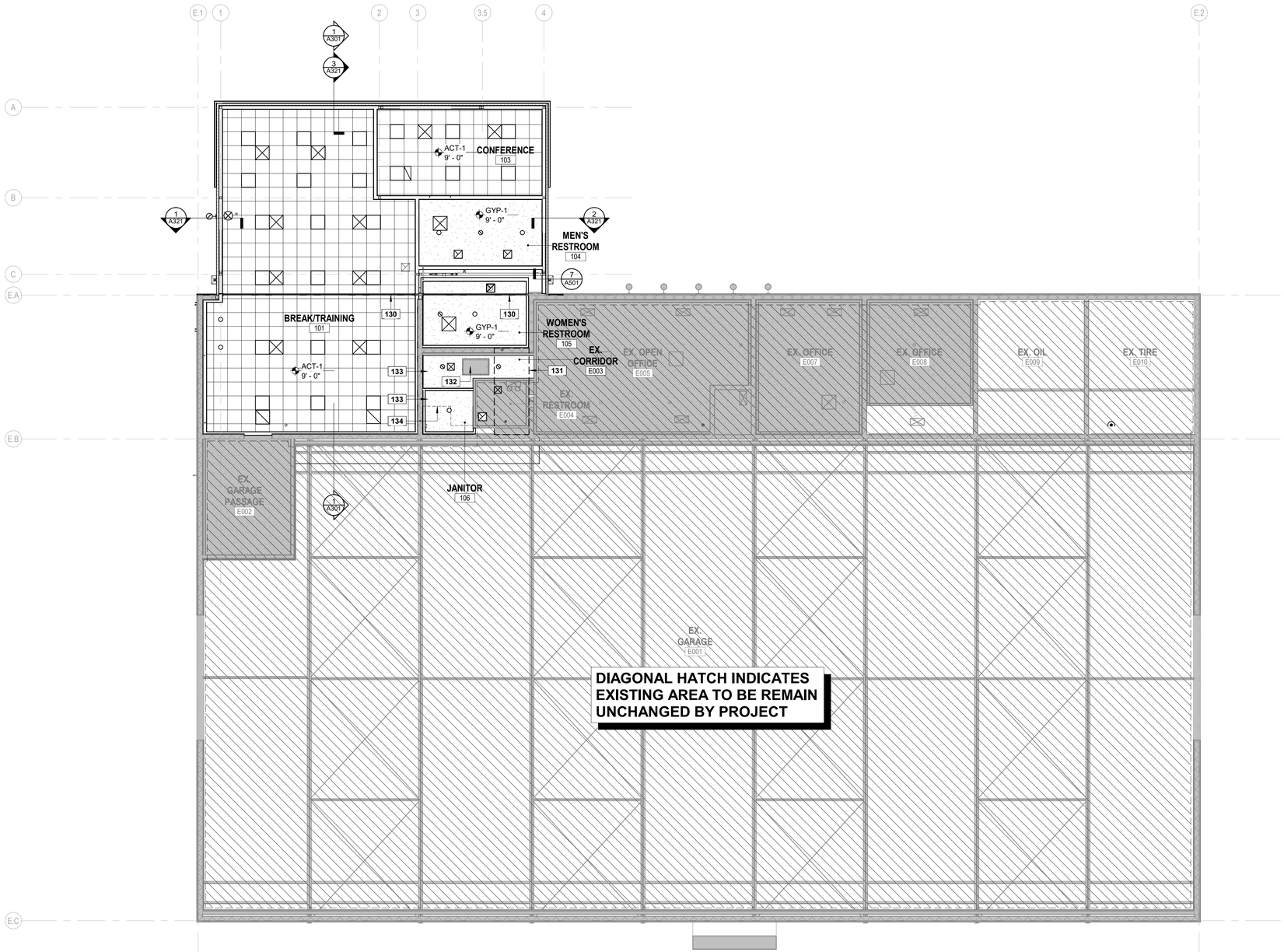
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FIRST FLOOR PLAN

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1 A121

BASE RCP_LEVEL 01

1/8" = 1'-0"

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GENERAL RCP NOTES

A. ALL CEILINGS TO BE ACT-1 U.N.O.
B. AT A.C.T. CEILINGS, EXTEND GYPSUM BOARD TO 4" ABOVE CEILING. AT GYP. BD. CEILINGS, TERMINATE GYP. BD. AT CEILING UNLESS OTHERWISE NOTED.
C. PROVIDE CONTROL JOINTS AT INTERIOR CEILINGS (WITH PERIMETER RELIEF) OVER 50'-0" IN LENGTH IN ANY DIRECTION. TOTAL AREA BETWEEN CONTROL JOINTS SHALL NOT EXCEED 2500 SQFT.
D. PROVIDE CONTROL JOINTS AT INTERIOR CEILINGS (WITHOUT PERIMETER RELIEF) OVER 30'-0" IN LENGTH IN ANY DIRECTION. TOTAL AREA BETWEEN CONTROL JOINTS SHALL NOT EXCEED 900 SQFT.
E. PROVIDE CONTROL JOINTS AT EXTERIOR CEILINGS AND SOFFITS OVER 30'-0" IN LENGTH IN ANY DIRECTION. TOTAL AREA BETWEEN CONTROL JOINTS SHALL NOT EXCEED 900 SQFT.
F. REFERENCE INTERIOR ELEVATIONS FOR GYPSUM BOARD SOFFITS ABOVE CABINETS.
G. SEE INTERIOR ELEVATION AND/OR SECTIONS FOR MOUNTING HEIGHTS OF ANY WALL MOUNTED LIGHT FIXTURES.
H. ALL A.C.T. CEILINGS TO BE X'-X" A.F.F. USING 15/16" WHITE METAL TEE GRID. U.N.O.
I. ALL GYP. BD. CEILINGS TO BE X'-X" A.F.F. UNLESS NOTED OTHERWISE.
J. IN WET AREAS WITH GYPSUM CEILINGS, USE MOISTURE RESISTANT GYPSUM BOARD U.N.O.

REFLECTED CEILING PLAN LEGEND

CEILING TYPE LEGEND

ACT-1–2x2 ACOUSTICAL PANELS ("CIRRUS" BY ARMSTRONG)
GYP-1–5/8" GYPSUM BOARD ON DRYWALL SUSPENSION SYSTEM; PAINTED (P1)

ARCHITECTURAL LEGEND

- 2'x2' SUSPENDED ACOUSTICAL CEILING
- GYPSUM BOARD CEILING
- ACT-1 / 8' - 0" — CEILING TYPE / FINISH HEIGHT (AFF) — **CEILING IDENTIFICATION**

MEP LEGEND (VERIFY WITH MEP DOCUMENTS)

- 2'x2' LAY-IN LIGHT FIXTURE
- SUPPLY DIFFUSER
- RETURN DIFFUSER
- EXHAUST DIFFUSER
- EXIT SIGN
- WALL-MOUNTED LIGHT FIXTURE
- OR — RECESSED CAN LIGHT

KEYNOTE LEGEND

130	PROVIDE 2" FLUSH, SINGLE-GASKET INTERIOR CEILING EXPANSION JOINT COVER SYSTEM WITH RECESSED ALUMINUM RETAINERS AND FLEXIBLE CENTER GASKET. INSTALL FLUSH WITH ADJACENT CEILING SURFACE TO MINIMIZE VISUAL IMPACT. SECURE PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND COORDINATE WITH CORRESPONDING WALL JOINT COVERS FOR CONTINUOUS SIGHT LINE. B.O.D. CONSTRUCTION SPECIALTIES - FCF 200.
131	DASHED LINE INDICATES EXISTING CAST-IN-PLACE CONCRETE DECK TO REMAIN. FIELD VERIFY CONDITION AND LOAD PATH PRIOR TO ADJACENT DEMOLITION. PROVIDE TEMPORARY SHORING AS REQUIRED TO MAINTAIN STRUCTURAL STABILITY DURING CONSTRUCTION.
132	EXISTING ATTIC ACCESS HATCH TO REMAIN. PROTECT DURING CONSTRUCTION. REPAIR ANY DAMAGE CAUSED BY WORK TO MATCH EXISTING CONDITIONS.
133	INSTALL 5/8" GYPSUM IN THIS ROOM OVER EXISTING ATTIC FLOOR STRUCTURE AND FILL JOISTS WITH BATT INSULATION TO ACHIEVE STC 45 SOUND RATING.
134	DASHED LINE AT THIS LOCATION INDICATES ASSUMED EDGE OF ATTIC FLOOR STRUCTURE TO REMAIN. SHORE AND BRACE AS REQUIRED DURING CONSTRUCTION. INFILL VOID IN FLOOR STRUCTURE WITH WOOD FRAMING TO MATCH EXISTING FRAMING AND INSTALL 5/8" GYPSUM AND FILL JOISTS WITH BATT INSULATION TO ACHIEVE STC 45 SOUND RATING.

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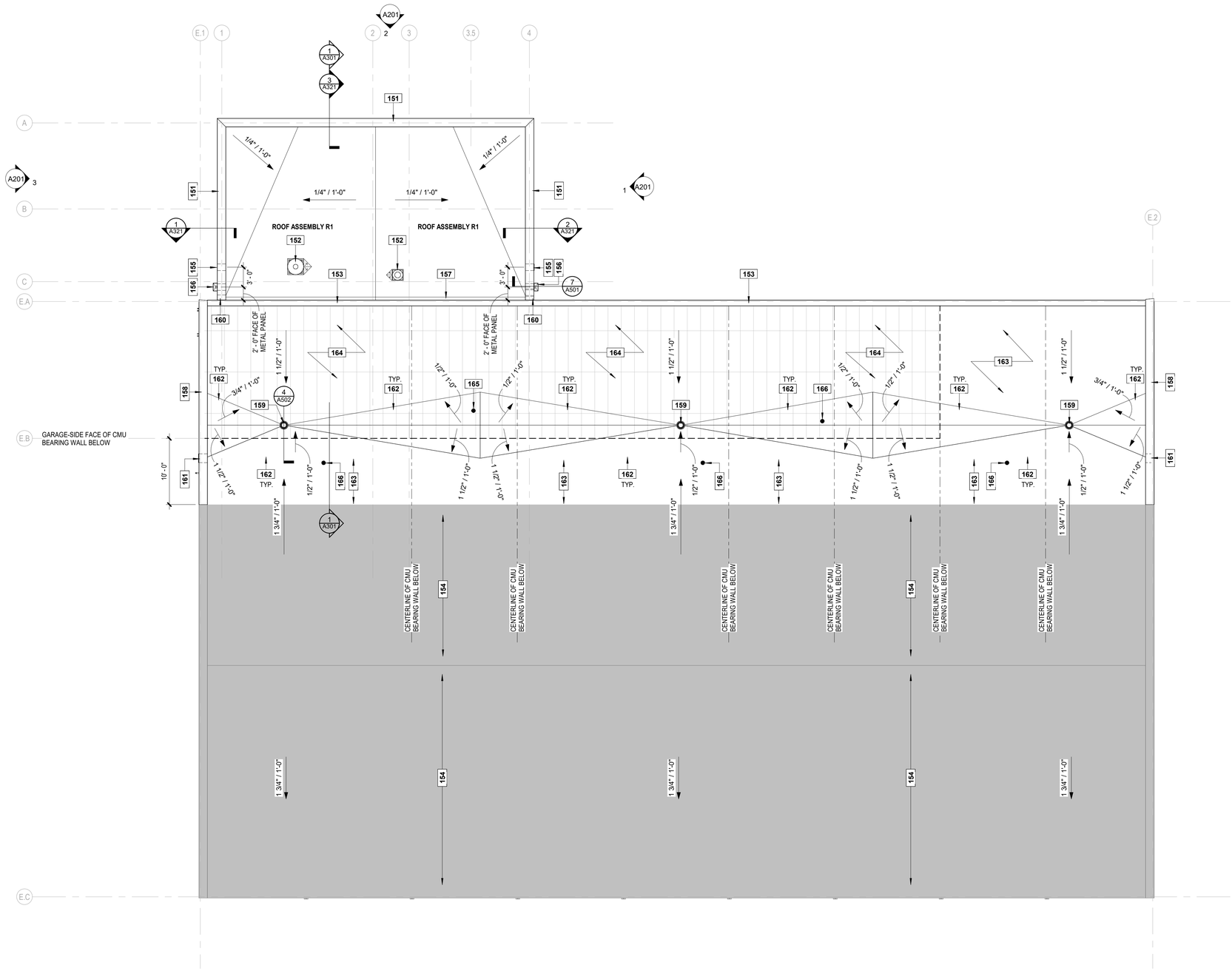
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FIRST FLOOR
REFLECTED CEILING
PLAN

A121



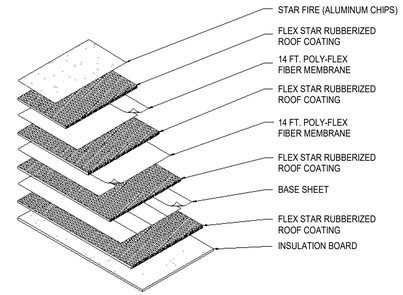
GENERAL ROOF NOTES

A. ALL PENETRATIONS OF STRUCTURAL STEEL & VENTS SHALL CONFORM WITH MANUFACTURER'S RECOMMENDED DETAILS.
B. ROOF PLAN MAY NOT SHOW ALL PENETRATIONS REQUIRED BY THE MECHANICAL, ELECTRICAL OR PLUMBING CONTRACTORS. REFER TO STRUCTURAL & M.E.P. DRAWINGS FOR ADDITIONAL EQUIPMENT & PENETRATIONS THROUGH ROOFING. ROOFING CONTRACTOR TO PROVIDE PATCHES, SPLICES, FLASHING & ALL OTHER INSTALLATION DETAILS AT ROOF PENETRATIONS PER THE MANUFACTURER'S CURRENT SPECIFICATIONS.
C. REFER TO DRAWING SHEET A000 FOR A COMPLETE DESCRIPTION OF ALL EXTERIOR WALL SYSTEMS, FLOOR SYSTEMS, & ROOF ASSEMBLIES.
D. ROOF ASSEMBLY SHALL BE TYPE R1 U.N.O. REFER TO A000 FOR ADDITIONAL INFORMATION.
E. TAPERED ROOF INSULATION SHALL SLOPE 1/4" PER FOOT MINIMUM.
F. EXTENT OF TAPERED INSULATION IS APPROXIMATE. ROOFING CONTRACTOR SHALL PROVIDE TAPERED INSULATION AS REQUIRED TO DRAIN (NO PONDING) ALL PORTIONS OF ROOF.
G. ROOF INSULATION SHALL BE THE MINIMUM R-VALUE AT ROOF DRAINS U.N.O.
H. ROOF INSULATION AT CRICKETS SHALL SLOPE 1/4" PER FOOT AS ILLUSTRATED.
I. ALL ROOF MEMBRANE TERMINATIONS & FLASHING CONDITIONS SHALL CONFORM WITH THE MANUFACTURER'S RECOMMENDATIONS.

ROOF REPLACEMENT B.O.D.

20 YEAR ROOFING SYSTEM - FIVE STAR COMMERCIAL ROOFING, INC.

OWNER-PROVIDED ROOFING SYSTEM SHOWN AS BASIS OF DESIGN AND COORDINATED WITH THE STRUCTURAL ASSESSMENT REPORT. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND COORDINATE INSTALLATION WITH STRUCTURAL RECOMMENDATIONS, MANUFACTURER REQUIREMENTS, AND ALL NEW ROOF DESIGN INDICATED IN THE DRAWINGS. PROVIDE COMPLETE, WARRANTABLE SYSTEM AND NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO INSTALLATION.



FLAT TWO PLY CHIP TEAR OFF ROOFING SYSTEM INSTRUCTIONS

1. TEAR OFF OLD ROOF.
2. INSTALL A LAYER OF RIGID INSULATION MECHANICALLY FASTENED TO THE DECKING.
3. APPLY FIRST LAYER OF FLEX STAR RUBBERIZED ROOF COATING.
4. INSTALL A LAYER OF BASE SHEET OVER STARBOND.
5. APPLY SECOND LAYER OF FLEX STAR RUBBERIZED ROOF COATING.
6. INSTALL FIRST LAYER OF POLY-FLEX FIBER MEMBRANE STAGGERING SEAMS.
7. APPLY THIRD LAYER OF FLEX STAR RUBBERIZED ROOF COATING.
8. INSTALL SECOND LAYER OF POLY-FLEX FIBER MEMBRANE STAGGERING SEAMS.
9. FLASH ALL PROTRUSIONS THROUGH ROOF, I.E.: VENTS, DRAINS, HVAC UNITS, ETC.
10. APPLY FOURTH LAYER OF FLEX STAR RUBBERIZED ROOF COATING.
11. APPLY COVER LAYER OF STARFIRE ALUMINUM CHIPS.

KEYNOTE LEGEND

151	1' - 3" PRE-FINISHED METAL COPING OVER PARAPET WALL; LAP ROOF MEMBANE UP AND OVER PARAPET WALL. REFER TO SECTIONS AND DETAILS FOR MORE INFORMATION.
152	ROOFTOP MECHANICAL EQUIPMENT COORDINATE FINAL LOCATIONS WITH MECHANICAL & STRUCTURAL DRAWINGS. CREATE CRICKET AT UNIT HIGH SIDE TO ENSURE POSITIVE DRAINAGE AROUND UNIT.
153	REPLACE EXISTING METAL COPING SYSTEM IN-KIND; FIELD VERIFY SIZE; LAP NEW ROOF MEMBRANE UP AND OVER PARAPET WALL; REFER TO SECTIONS AND DETAILS FOR MORE INFORMATION.
154	EXISTING ROOF MEMBRANE, DECK, AND STRUCTURE TO REMAIN
155	6" X 12" PREFINISHED METAL OVERFLOW SCUPPER - BOTTOM FACE TO BE LOCATED 2" ABOVE ROOF MEMBRANE
156	PRE-FINISHED METAL 6" X 12" SCUPPER, 8" X 16" COLLECTOR BOX & 3" X 3` DOWNSPOUT CONNECT INTO STORM SEWER BELOW GRADE. REFER TO PLUMBING AND CIVIL DRAWINGS FOR MORE INFORMATION.
157	2" RUBBER WATERTIGHT ROOF-TO-WALL EXPANSION JOINT WITH INSULATED CLOSURE BENEATH; BASIS OF DESIGN: EMSEAL ROOFJOINT 0200 OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
158	REPLACE EXISTING METAL COPING SYSTEM IN-KIND; FIELD VERIFY SIZE; LAP NEW ROOF MEMBRANE UP AND OVER PARAPET WALL AND INSTALL NEW SINGLE-SKIN METAL PANEL SIDING TO MATCH PREVIOUS OVER 1 1/2" METAL HAT CHANNELS. REFER TO SECTIONS AND DETAILS FOR MORE INFORMATION
159	NEW ROOF DRAIN - FLASH AND SEAL PER MANUFACTURER REQUIREMENTS; REFER TO PLUMBING DRAWINGS FOR MORE INFORMATION
160	PROVIDE PREFORMED ROOF-TO-WALL EXPANSION JOINT TRANSITION CLOSURE WITH INTEGRAL SILICONE BELLOWS FOR CONTINUOUS WATERTIGHT TRANSITION BETWEEN HORIZONTAL ROOF JOINT AND VERTICAL WALL JOINT. ROOF EXPANSION JOINT TO EXTEND UP AND OVER PARAPET WALL. BASIS OF DESIGN: EMSEAL SOLID-WALL ROOFJOINT CLOSURE.
161	8" X 16" PREFINISHED METAL OVERFLOW SCUPPER - BOTTOM FACE TO BE LOCATED 2" ABOVE ROOF MEMBRANE AT NEW VALLEY.
162	PROVIDE NEW TAPERED RIGID INSULATION CRICKETS AND NEW MULTI-PLY TEAR-OFF ROOFING SYSTEM AS INDICATED IN ROOF ASSEMBLY DETAIL. COORDINATE EXTENTS WITH DRAWINGS. SLOPE 1/4" / 1'-0" MIN. TO MAINTAIN POSITIVE DRAINAGE
163	CLEAN AND PREPARE EXISTING PRECAST CONCRETE ROOF DECK TO RECEIVE NEW MULTI-PLY TEAR-OFF ROOFING SYSTEM. REMOVE LOOSE DEBRIS, DETERIORATED MATERIAL, AND CONTAMINANTS. REPAIR MINOR SURFACE DEFECTS AS REQUIRED TO PROVIDE SOUND, SMOOTH SUBSTRATE.
164	VERTICAL AND HORIZONTAL HATCH INDICATES AREA OF DAMAGED PRECAST CONCRETE PANELS AND STEEL ROOF STRUCTURE. PROVIDE REPLACEMENT PRECAST CONCRETE PANELS (APPROXIMATELY 123 OF 216), ASSOCIATED STEEL FRAMING, AND STRUCTURAL CMU AS REQUIRED. INSTALL NEW MULTI-PLY TEAR-OFF ROOFING SYSTEM AS INDICATED IN ROOF ASSEMBLY DETAIL. REFER TO STRUCTURAL ASSESSMENT REPORT FOR ADDITIONAL INFORMATION. FINAL LOCATIONS OF PRECAST CONCRETE PANEL, STEEL, AND CMU REPLACEMENT ASSOCIATED WITH THE ROOF SHALL BE COORDINATED WITH OWNER, ARCHITECT, AND STRUCTURAL ENGINEER ON SITE AFTER BID AWARD.
165	PROVIDE NEW ROOF VENT STACK PER MEP DRAWINGS. INSTALL BOOT FLASHING, SEALANTS, AND ASSOCIATED FASTENERS PER ROOF MEMBRANE SYSTEM MANUFACTURER STANDARDS.
166	EXISTING ROOF VENT TO REMAIN. INSTALL BOOT FLASHING, SEALANTS, AND ASSOCIATED FASTENERS AT PENETRATION PER ROOF MEMBRANE MANUFACTURER STANDARDS.

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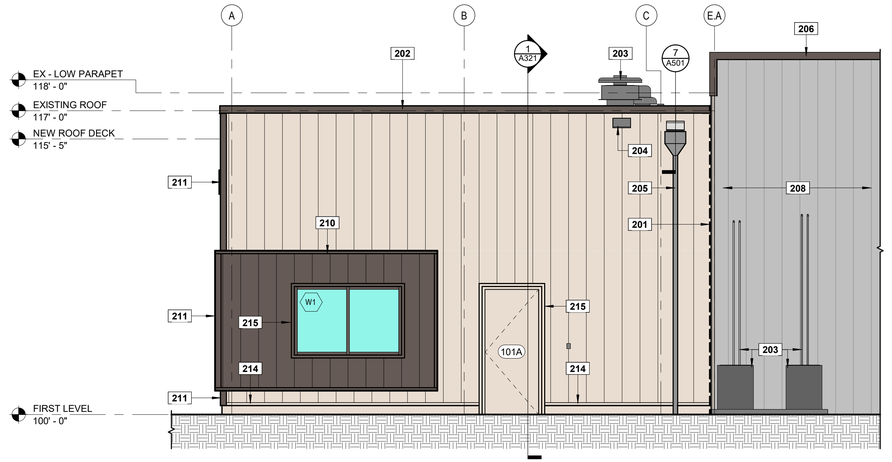
Project Number 2025.02329

ROOF PLAN

A131

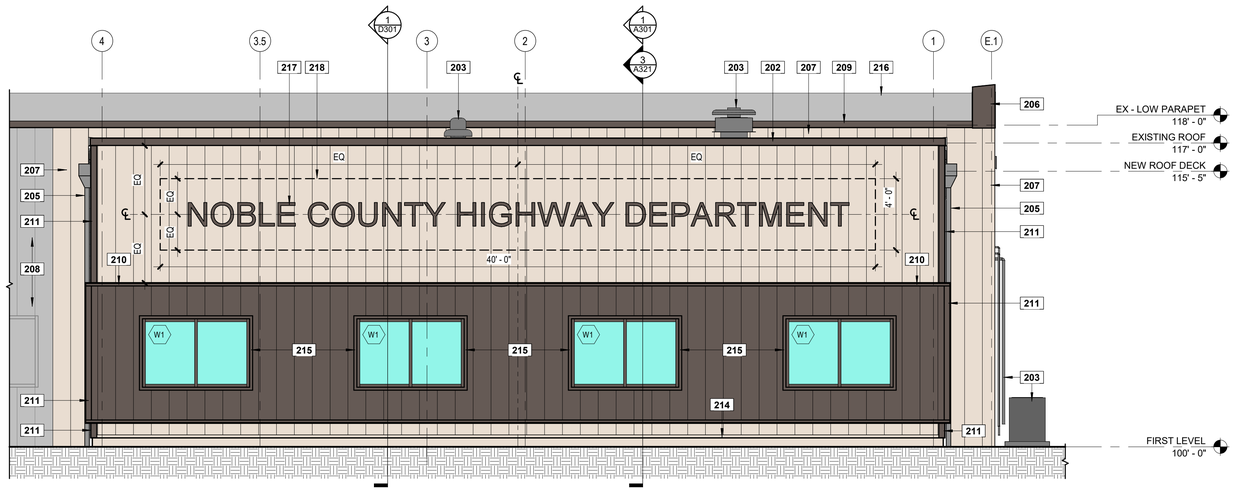
N 1 A131 **ROOF PLAN**
1/8" = 1'-0"

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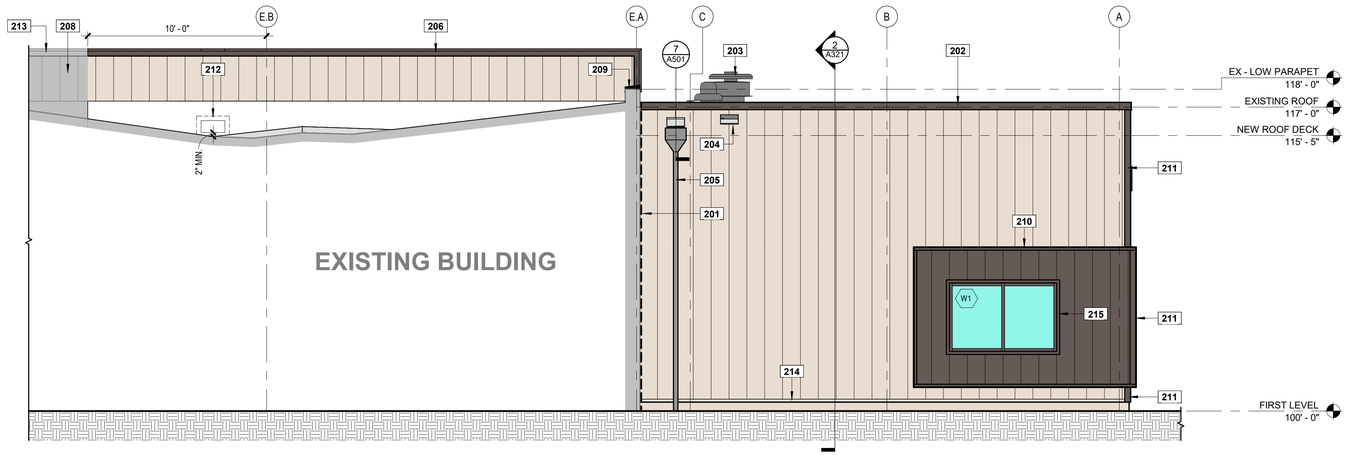
3 A201 **WEST ELEVATION**

1/4" = 1'-0"



2 A201 **NORTH ELEVATION**

1/4" = 1'-0"



1 A201 **EAST ELEVATION**

1/4" = 1'-0"

KEYNOTE LEGEND

201	PROVIDE PRECOMPRESSED FOAM WALL EXPANSION JOINT SEAL WITH FACTORY-APPLIED SILICONE FACING, WATERTIGHT SEAL. INSTALL RECESSED WITH FIELD-APPLIED SILICONE FILLET BEAD AT SUBSTRATE INTERFACE. COLOR TO MATCH ADJACENT FINISH. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS. B.O.D. - SIKA COLORSEAL.
202	1' - 3" PRE-FINISHED METAL COPING OVER PARAPET WALL; LAP ROOF MEMBANE UP AND OVER PARAPET WALL. REFER TO SECTIONS AND DETAILS FOR MORE INFORMATION.
203	MECHANICAL EQUIPMENT COORDINATE FINAL LOCATIONS WITH MECHANICAL & STRUCTURAL DRAWINGS. AT ROOFTOP EQUIPMENT, CREATE CRICKET AT UNIT HIGH SIDE TO ENSURE POSITIVE DRAINAGE AROUND UNIT.
204	6" X 12" PREFINISHED METAL OVERFLOW SCUPPER - BOTTOM FACE TO BE LOCATED 2" ABOVE ROOF MEMBRANE
205	PRE-FINISHED METAL 6" X 12" SCUPPER, 8" X 16" COLLECTOR BOX & 3" X 3` DOWNSPOUT CONNECT INTO STORM SEWER BELOW GRADE. REFER TO PLUMBING AND CIVIL DRAWINGS FOR MORE INFORMATION.
206	REPLACE EXISTING METAL COPING SYSTEM IN-KIND; FIELD VERIFY SIZE; LAP NEW ROOF MEMBRANE UP AND OVER PARAPET WALL AND INSTALL NEW SINGLE-SKIN METAL PANEL SIDING TO MATCH PREVIOUS OVER 1 1/2" METAL HAT CHANNELS. REFER TO SECTIONS AND DETAILS FOR MORE INFORMATION
207	REPLACE EXISTING SINGLE-SKIN RIBBED METAL PANEL SYSTEM IN-KIND - INCLUDING ALL BLOCKING AND TRIM: REFER TO DETAILS FOR MORE INFORMATION.
208	EXISTING CLADDING TO REMAIN - COORDINATE EXTENTS WITH DEMOLITION PLANS, FLOOR PLANS, AND DETAILS
209	REPLACE EXISTING METAL COPING SYSTEM IN-KIND; FIELD VERIFY SIZE; LAP NEW ROOF MEMBRANE UP AND OVER PARAPET WALL; REFER TO SECTIONS AND DETAILS FOR MORE INFORMATION.
210	SINGLE-SKIN RIBBED METAL PANEL SYSTEM BUMP-OUT; PROFILE TO MATCH EW1; COLOR TO MATCH EXISTING ACCENT COLOR; REFER TO SECTIONS AND DETAILS FOR MORE INFORMATION.
211	PRE-FINISHED METAL CORNER TRIM PER SINGLE SKIN METAL PANEL MANUFACTURER STANDARDS - FINISH TO MATCH ACCENT METAL PANEL COLOR.
212	8" X 16" PREFINISHED METAL OVERFLOW SCUPPER - BOTTOM FACE TO BE LOCATED 2" ABOVE ROOF MEMBRANE AT NEW VALLEY.
213	EXISTING METAL COPING TO REMAIN
214	PRE-FINISHED METAL BASE AND CLOSURE FLASHING FINISH TO MATCH METAL PANEL ABOVE; CLOSURE FLASHING TO LAP INSULATION AND CONTINUE 6" MIN. BELOW GRADE; REFER TO DETAILS FOR MORE INFORMATION.
215	PRE-FINISHED METAL PERIMETER FLASHING AROUND ALL HM DOORS AND STOREFRONT WINDOWS; FINISH TO MATCH ADJACENT METAL PANEL; REFER TO OPENING DETAILS FOR MORE INFORMATION.
216	EXISTING ROOF MEMBRANE, DECK, AND STRUCTURE TO REMAIN
217	16" BUILDING LETTERING BY OWNER
218	DASHED LINE INDICATES AREA WHERE EXTERIOR-GRADE PLYWOOD SHEATHING TO BE INSTALLED EN LIEU OF EXTERIOR GRADE GLASSMAT SHEATHING - MATCH SHEATHING THICKNESS OF WALL SYSTEM.

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HEAPY

NOBLE COUNTY HIGHWAY DEPTARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

NICHOLAS PETERSON REGISTERED LA.01.AR12200085 STATE OF INDIANA ARCHITECT
3/27/26

CERTIFIED BY

ISSUANCE INDEX
DATE:
03.27.2026
PROJECT PHASE:
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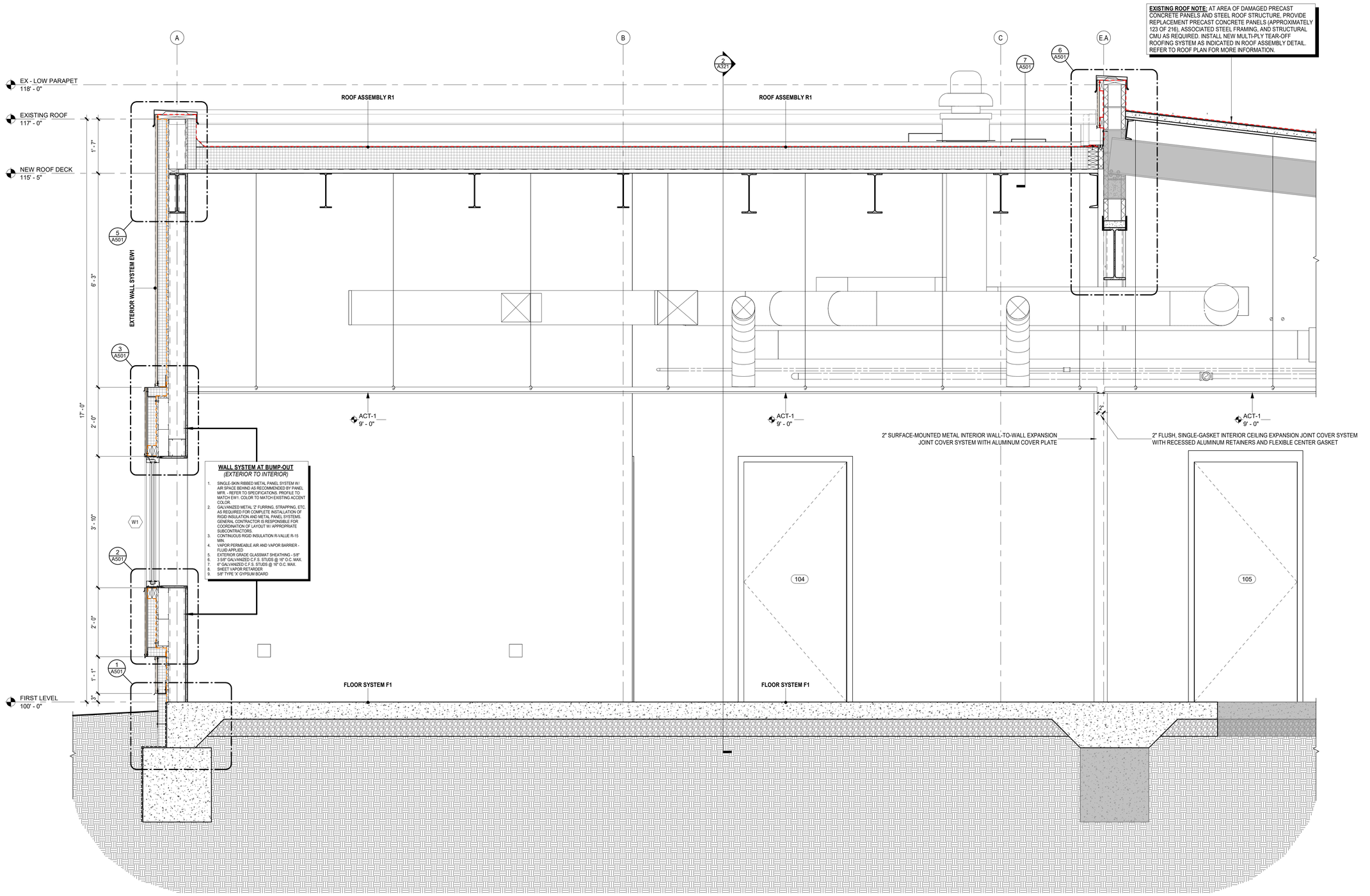
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NO.	DESCRIPTION	DATE

Project Number 2025.02329

EXTERIOR ELEVATIONS

A201

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1 A301 **NORTH/SOUTH BUILDING SECTION**

3/4" = 1'-0"

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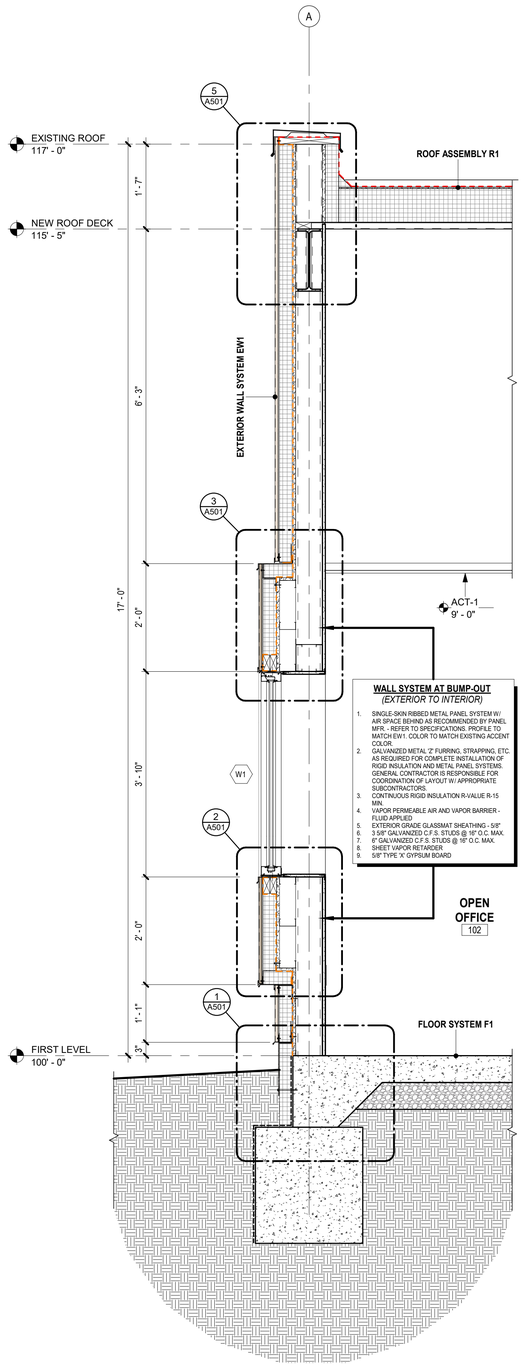
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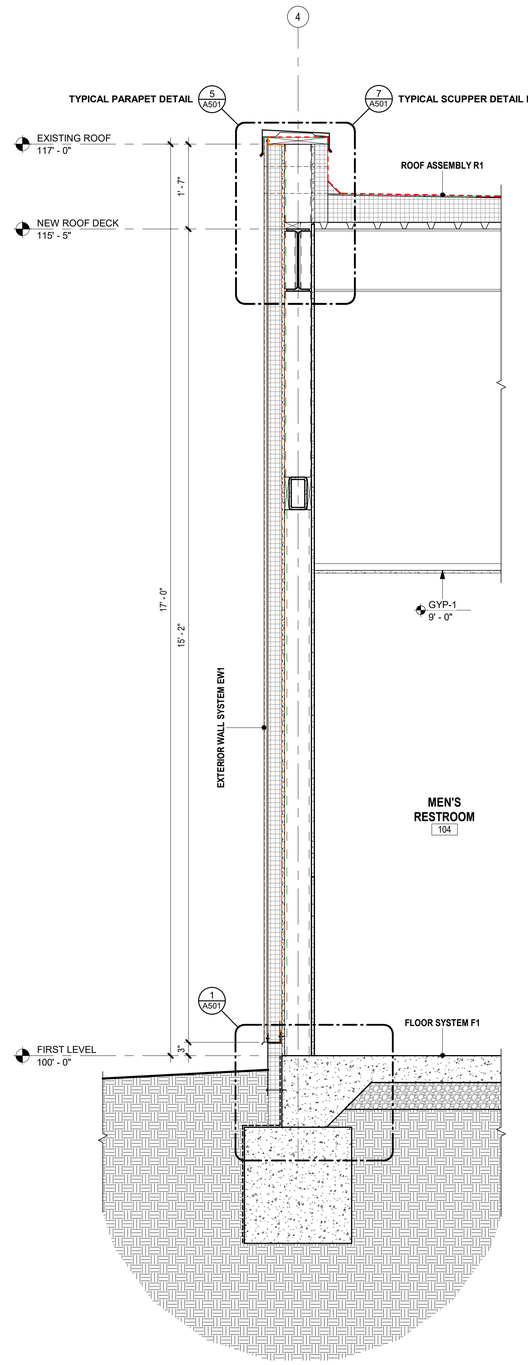
BUILDING SECTIONS

A301



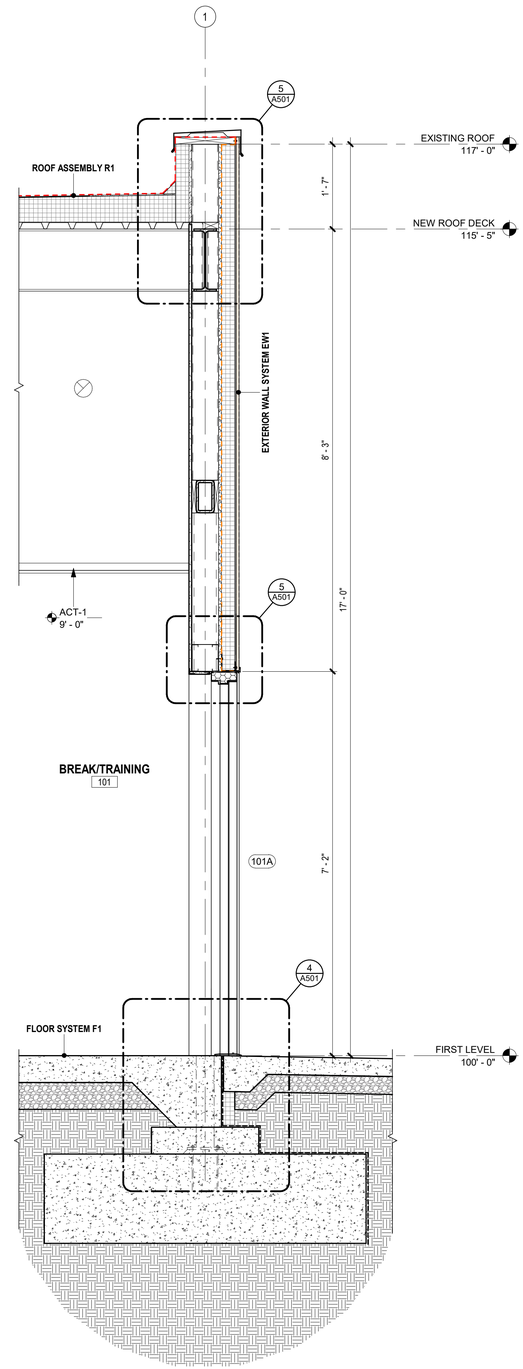
3 A321 **WALL SECTION @ WINDOW**

3/4" = 1'-0"



2 A321 **WALL SECTION @TYPICAL EXTERIOR WALL**

3/4" = 1'-0"



1 A321 **WALL SECTION @ HM DOOR**

3/4" = 1'-0"

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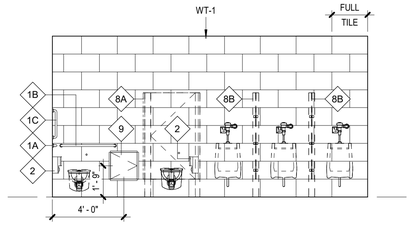
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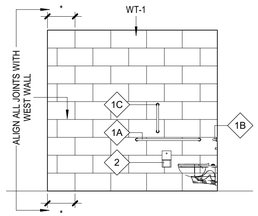
Project Number 2025.02329

WALL SECTIONS

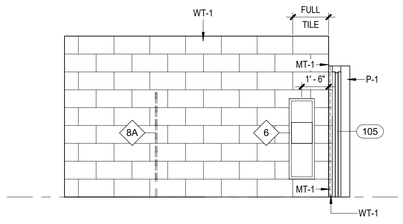
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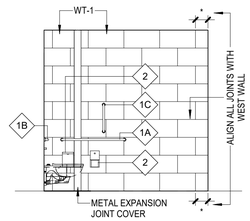
10 A401 **MEN'S RR SOUTH**
1/4" = 1'-0"



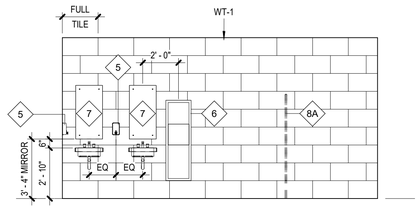
8 A401 **MEN'S RR EAST**
1/4" = 1'-0"



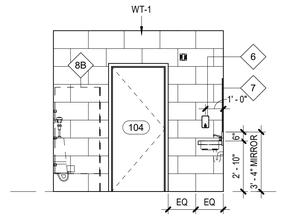
6 A401 **WOMEN'S RR SOUTH**
1/4" = 1'-0"



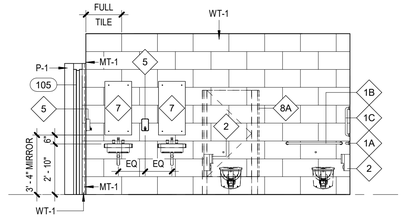
4 A401 **WOMEN'S RR EAST**
1/4" = 1'-0"



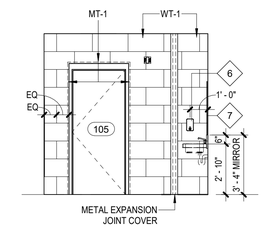
9 A401 **MEN'S RR NORTH**
1/4" = 1'-0"



7 A401 **MEN'S RR WEST**
1/4" = 1'-0"

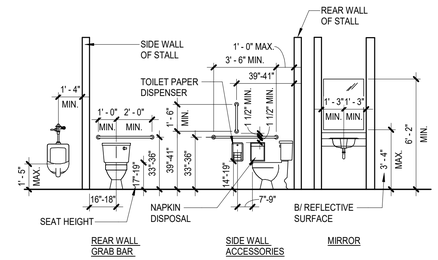


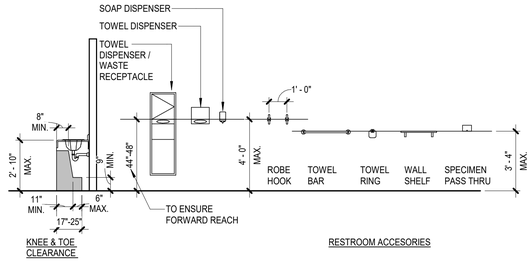
5 A401 **WOMEN'S RR NORTH**
1/4" = 1'-0"



3 A401 **WOMEN'S RR WEST**
1/4" = 1'-0"

TOILET ACCESSORY MOUNTING HEIGHTS





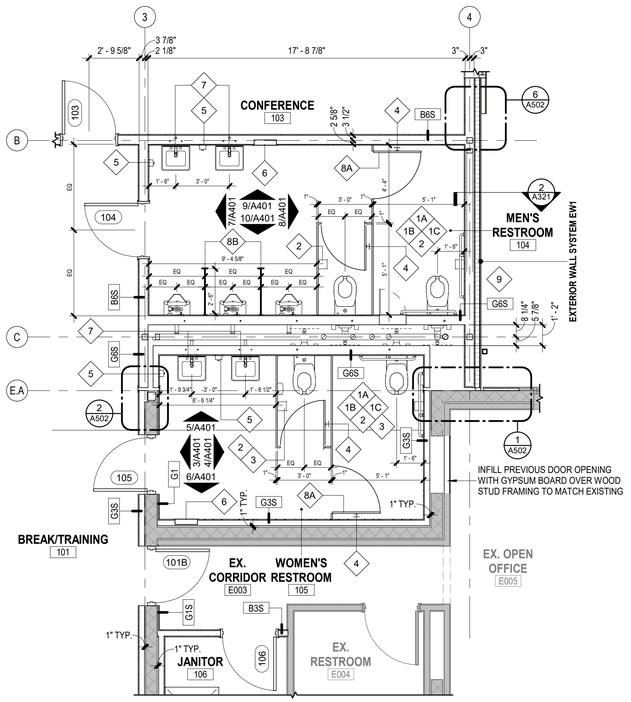
GENERAL NOTES:
A. DIMENSIONS SHOWN ARE TO FINISHED WALL
B. REFER TO MANUFACTURER'S SPECIFIC RECOMMENDATIONS FOR ADA COMPLIANCE

TOILET ACCESSORY SCHEDULE

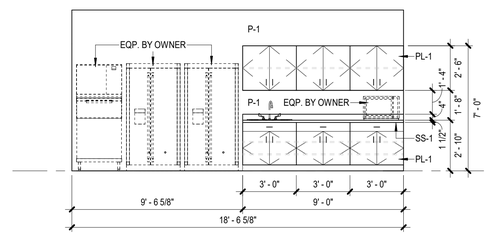
MARK	DESCRIPTION	BOD PRODUCT
1A	42" GRAB BAR	BOBRICK #B-5806
1B	36" GRAB BAR	BOBRICK #B-5806
1C	18" VERTICAL GRAB BAR	BOBRICK #B-5806
2	SURFACE MOUNTED TOILET PAPER DISPENSER	BOBRICK #B-2888
3	SURFACE MOUNTED SANITARY NAPKIN DISPOSAL	BOBRICK #B-254
4	COAT HOOK	BOBRICK #B-221
5	SURFACE MOUNTED SOAP DISPENSER	BOBRICK #B-2111
6	RECESSED WASTE RECEPTACLE/TOWEL DISPENSER	BOBRICK #B-3940
7	18"x36" MIRROR	BOBRICK #B-165
8A	FLOOR ANCHORED TOILET PARTITION	BOBRICK DURALINE SERIES 1080/1180
8B	FLOOR AND WALL ANCHORED URINAL SCREEN	BOBRICK DURALINE SERIES 1080/1180
9	18" X 18" PRE-FINISHED METAL ACCESS PANEL - LOCKABLE	ACUDOR UF-5000

GENERAL CASEWORK NOTES

A. REFER TO FLOOR PLANS & THE EQUIPMENT SCHEDULE FOR EQUIPMENT TYPES. REFER TO M.E.P. DRAWINGS TO COORDINATE CONNECTIONS.
B. ALL DIMENSIONS ARE TAKEN TO THE FACE OF FINISHED MATERIAL.
C. INSTALL BLOCKING TO STUDS TO SUPPORT ALL WALL-MOUNTED CABINETRY & EQUIPMENT AS REQUIRED
D. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATING CABINETRY.
E. CONSTRUCT GYPSUM DRYWALL BULKHEADS ABOVE UPPER CABINETRY TO BE 1" DEEPER & LONGER THAN CABINETRY BELOW (U.N.O.).
F. ALL PATTERNED LAMINATES SHALL RUN VERTICAL (U.N.O.).
G. ALL BASE CABINETS SHALL BE 2'-0" DEEP (U.N.O.).
H. ALL CASEWORK SHALL BE FINISHED IN PL-1 PLASTIC LAMINATE (U.N.O.).
I. PROVIDE FILLER PANELS AT ALL LOCATIONS WHERE CABINETRY ABUTS A WALL.
J. PROVIDE A 4" HIGH INTEGRAL BACK SPLASH ON ALL COUNTERS WITH RECESSED SINKS. INSTALL SIDE SPLASHES WHERE THESE COUNTERS ABUT A WALL.
K. PROVIDE ADJUSTABLE SHELVING WITHIN ALL WALL & BASE CABINETRY AS SHOWN BY DASHED LINE.
L. BOTTOM OF UPPER CABINETS TO BE FINISHED TO MATCH VERTICAL FACES.
M. PROVIDE A 12" CLEAR INTERIOR DIMENSION ON ALL UPPER WALL CABINETS (U.N.O.).
N. COORDINATE ALL WALL OUTLETS TO AVOID CONFLICT WITH COUNTERTOPS, CASEWORK, & WALL-MOUNTED ACCESSORIES. ALL SUCH PRODUCTS, ACCESSORIES, & CABINETRY SO NOTED & LOCATED HEREIN THESE ELEVATIONS TAKE PRECEDENT IN LOCATION OVER ANY OUTLET OR ELECTRICAL DEVICE LOCATED ON THE M.E.P. DRAWINGS.



N 2 A401 **RESTROOM ENLARGED PLAN**
1/4" = 1'-0"



1 A401 **CASEWORK ELEVATION**
1/4" = 1'-0"

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NICHOLAS PETERSON REGISTERED LICENSED ARCHITECT 12200085 STATE OF INDIANA ARCHITECT
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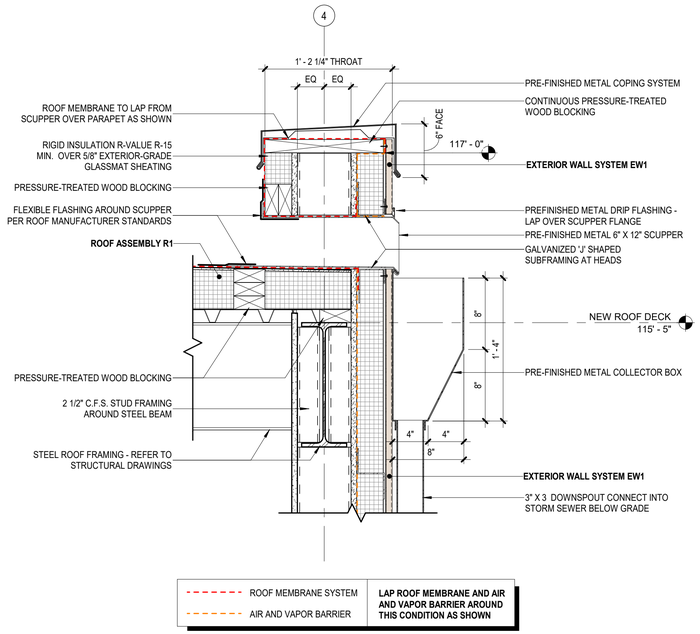
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ENLARGED PLANS AND ELEVATIONS

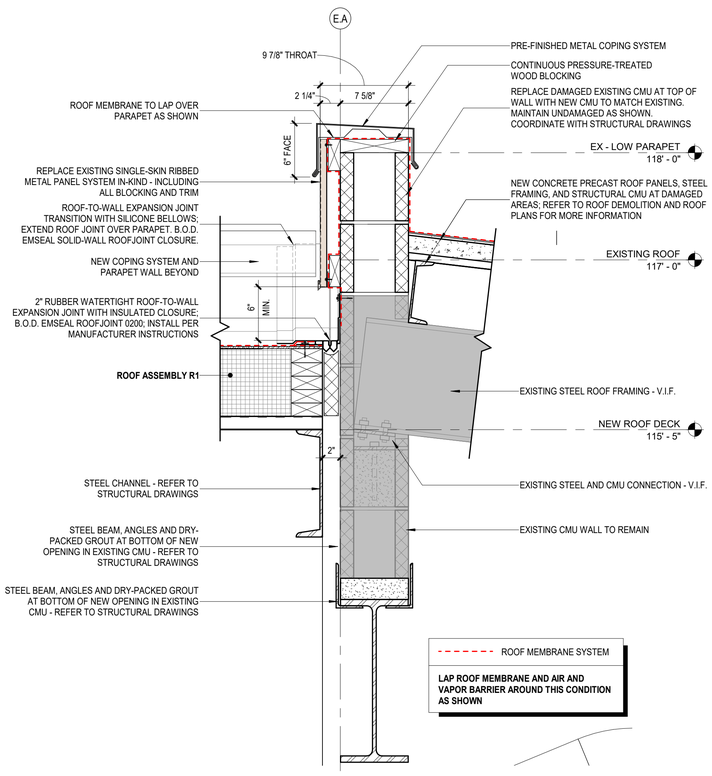
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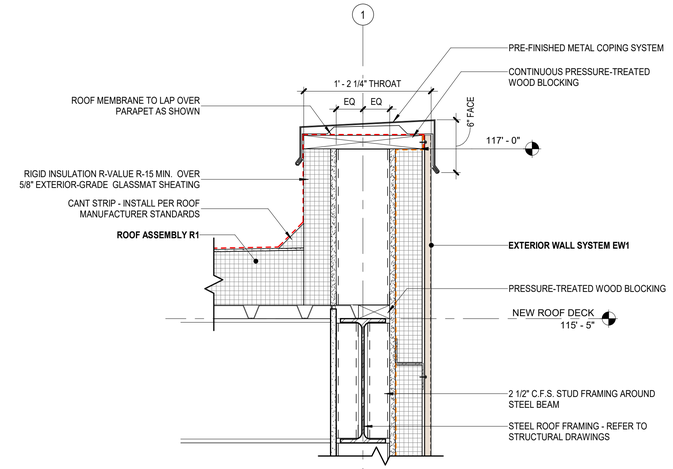
7 A501 TYPICAL SCUPPER DETAIL

1 1/2" = 1'-0"



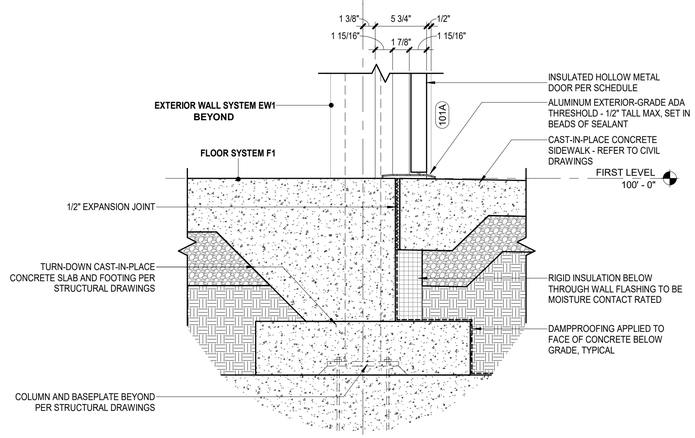
6 A501 ROOF EXPANSION JOINT DETAIL

1 1/2" = 1'-0"



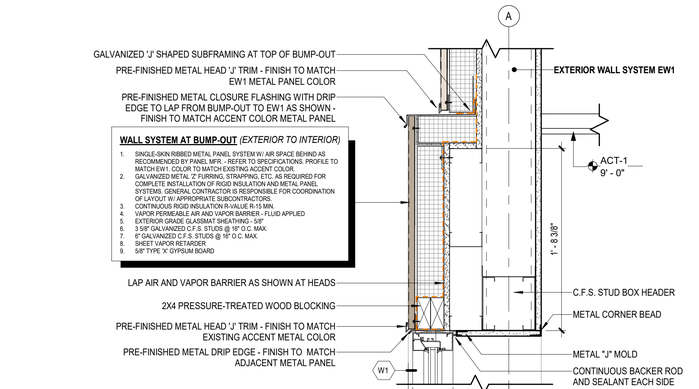
5 A501 TYPICAL PARAPET DETAIL

1 1/2" = 1'-0"



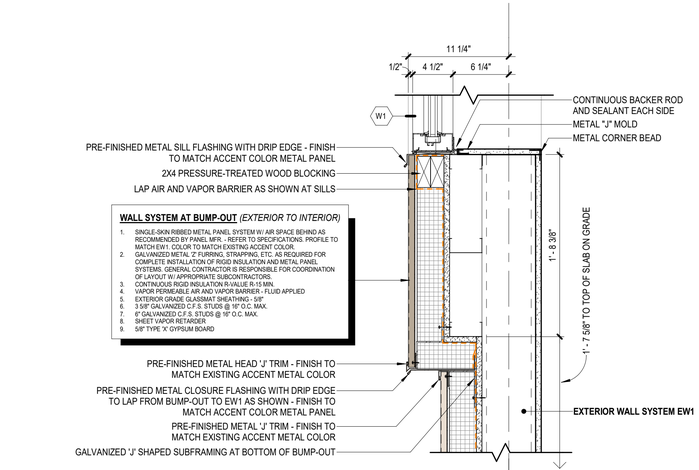
4 A501 TYPICAL THRESHOLD DETAIL

1 1/2" = 1'-0"



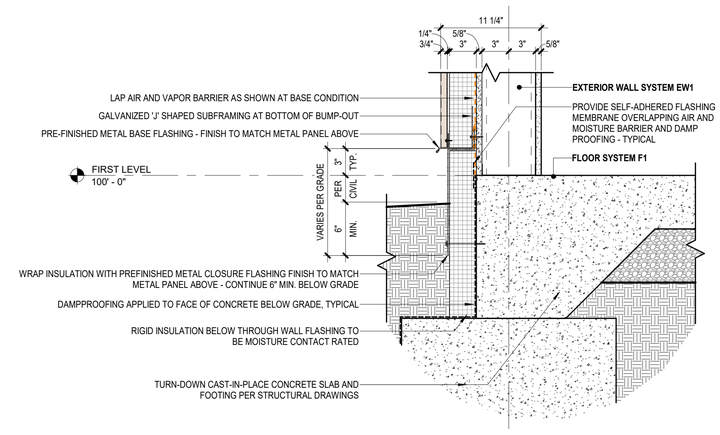
3 A501 TYPICAL HM WINDOW HEAD DETAIL

1 1/2" = 1'-0"



2 A501 TYPICAL HM WINDOW SILL DETAIL

1 1/2" = 1'-0"



1 A501 TYPICAL EXTERIOR WALL AT GRADE DETAIL

1 1/2" = 1'-0"

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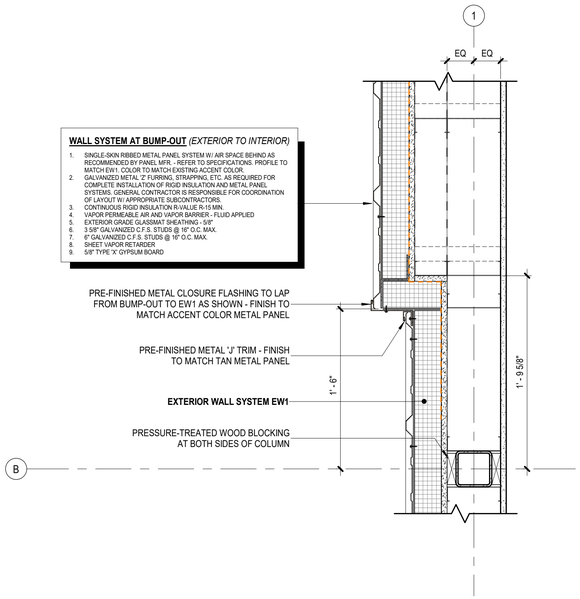
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ARCHITECTURAL DETAILS

A501



6 A502 METAL PANEL BUMP-OUT PLAN DETAIL

1 1/2" = 1'-0"



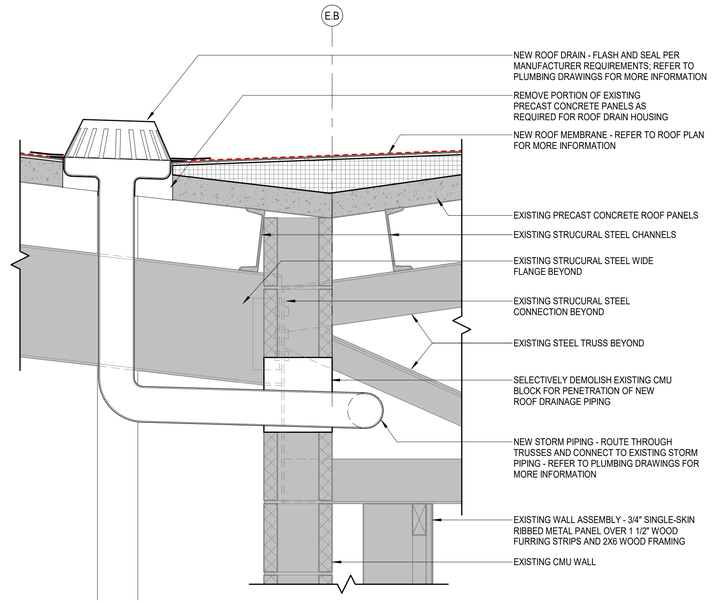
REMOVE EXISTING STORM PIPE AND FITTING ABOVE NEW CONNECTION

CAP EXISTING STORM PIPE ABOVE CONNECTION - REFERENCE PLUMBING DRAWINGS FOR MORE INFORMATION

NEW STORM PIPING - ROUTE THROUGH TRUSSES AND CONNECT TO EXISTING STORM PIPING - REFER TO PLUMBING DRAWINGS FOR MORE INFORMATION

5 A502 STORM PIPING CONNECTION

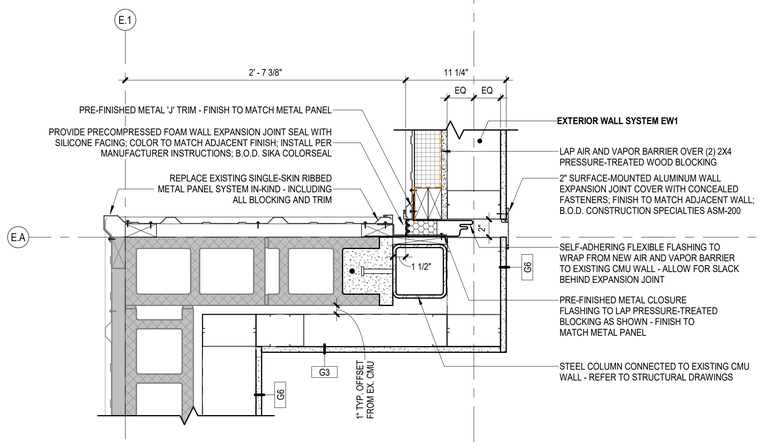
1 1/2" = 1'-0"



4 A502 TYPICAL INTERNAL ROOF DRAIN DETAIL

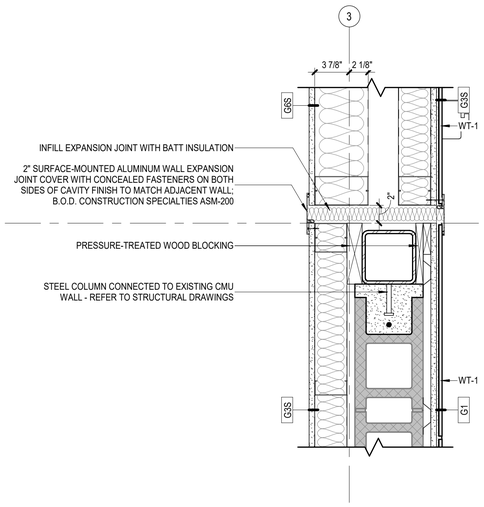
1 1/2" = 1'-0"

NEW ROOF DRAIN DETAILS



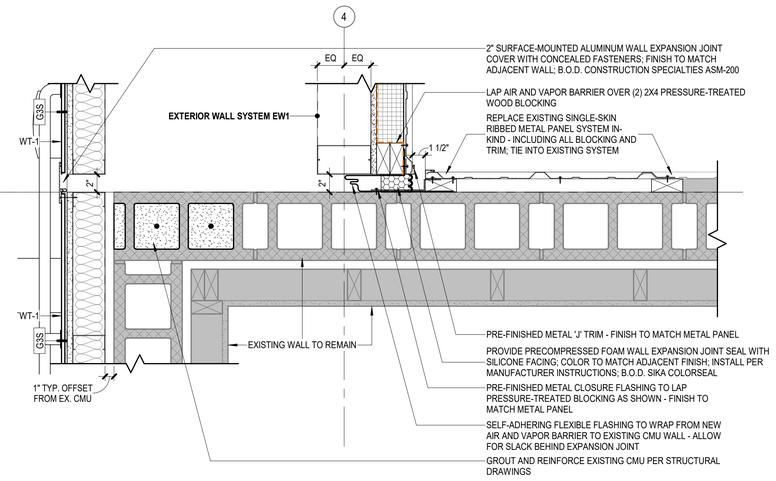
3 A502 EXTERIOR EXPANSION JOINT PLAN DETAIL

1 1/2" = 1'-0"



2 A502 INTERIOR EXPANSION JOINT PLAN DETAIL

1 1/2" = 1'-0"



1 A502 EXTERIOR EXPANSION JOINT PLAN DETAIL

1 1/2" = 1'-0"

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9025 River Road, Suite 200, Indianapolis, Indiana 46240
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ALBION, IN 46701

NICHOLAS PETERSON REGISTERED LA.AR.H12200085 STATE OF INDIANA ARCHITECT
3/27/26

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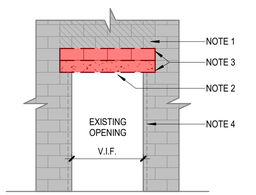
ARCHITECTURAL DETAILS

A502

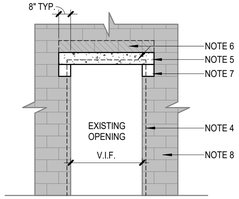
NEW CMU LINTEL NOTES

DOOR OPENING MODIFICATION – RAISE HEAD ONE CMU COURSE

1. FIELD VERIFY EXISTING CONDITIONS INCLUDING WALL THICKNESS, REINFORCEMENT, GROUTED CELLS, AND LOADS ABOVE OPENING PRIOR TO COMMENCING WORK. NOTIFY ARCHITECT/STRUCTURAL ENGINEER OF ANY DISCREPANCIES.
2. PROVIDE TEMPORARY SHORING AND BRACING AS REQUIRED TO SUPPORT EXISTING WALL AND ANY SUPERIMPOSED LOADS DURING MODIFICATION. CONFIRM NO SUBSTANTIAL CONCENTRATED LOADS BEAR DIRECTLY OVER OPENING.
3. REMOVE ONE COURSE OF CMU BLOCK ABOVE EXISTING LINTEL TO ACCOMMODATE NEW LINTEL ELEVATION. REMOVE EXISTING LINTEL IN ITS ENTIRETY.
4. VERIFY EXISTING VERTICAL REINFORCEMENT IN CELLS AT JAMB LOCATIONS. EXTEND OR ADD (2) #5 VERTICAL DOWELS AS REQUIRED TO MAINTAIN CONTINUITY. INFILL JAMB CELLS WITH GROUT IF NONE EXISTS.
5. INSTALL NEW PRECAST (OR CMU) LINTEL AT RAISED ELEVATION WITH MINIMUM BEARING AS REQUIRED BY STRUCTURAL ENGINEER.
6. PROVIDE (2) #5 HORIZONTAL BARS WITH STANDARD HOOKS AT LINTEL, FULLY GROUT LINTEL COURSE AND ONE COURSE ABOVE.
7. INFILL CMU BELOW NEW LINTEL AS REQUIRED, GROUT SOLID AT JAMB CELLS AND BELOW BEARING LOCATIONS.
8. RESTORE MASONRY TO MATCH EXISTING, INCLUDING TOOLING, JOINT PROFILE, AND FINISH.



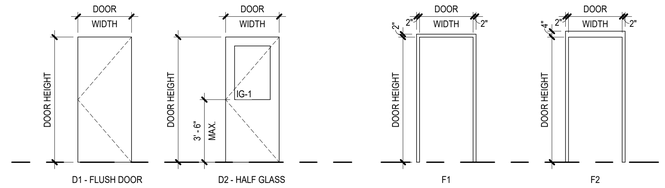
DEMOLITION WORK



NEW WORK

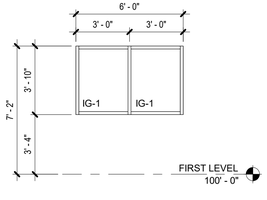
DOOR AND FRAME SCHEDULE

MARK	LOCATION	PAIR	POWER REQUIRED	DOOR			FRAME		DETAILS		FIRE RATING	COMMENTS
				WIDTH x HEIGHT x THICKNESS	MATERIAL	TYPE	MATERIAL	TYPE	HEAD	JAMB		
101A	BREAK/TRAINING 101		Yes	3' - 0" x 7' - 0" x 1 3/4"	HM	D2	HM	F1	H4	J4	NA	
101B	BREAK/TRAINING 101			3' - 0" x 7' - 0" x 1 3/4"	WOOD	D1	HM	F2	H3	J3	NA	
101C	BREAK/TRAINING 101			3' - 0" x 7' - 0" x 1 3/4"	WOOD	D1	HM	F2	H2	J2	NA	
103	CONFERENCE 103			3' - 0" x 7' - 0" x 1 3/4"	WOOD	D1	HM	F1	H1	J1	NA	
104	MEN'S RESTROOM 104			3' - 0" x 7' - 0" x 1 3/4"	WOOD	D1	HM	F1	H1	J1	NA	
105	WOMEN'S RESTROOM 105			3' - 0" x 7' - 0" x 1 3/4"	WOOD	D1	HM	F2	H2	J2	NA	
106	JANITOR 106			3' - 0" x 7' - 0" x 1 3/4"	HM	D1	HM	F1	H1	J1	NA	



DOOR ELEVATIONS

DOOR FRAME ELEVATIONS



W1 - WINDOW ELEVATION

GENERAL OPENING NOTES

DOORS

A. REFER TO SPECIFICATIONS FOR DOOR HARDWARE INFORMATION.
B. REFER TO INTERIOR FINISH DRAWINGS FOR DOOR & FRAME FINISH COLORS.
C. REFER TO ELECTRICAL & LOW VOLTAGE WIRING DIAGRAMS & DRAWINGS OF POWERED OPENINGS FOR ADDITIONAL INFORMATION.
D. ALL EXTERIOR DOOR FRAMES TO BE THERMALLY BROKEN / INSULATED HOLLOW METAL U.N.O.

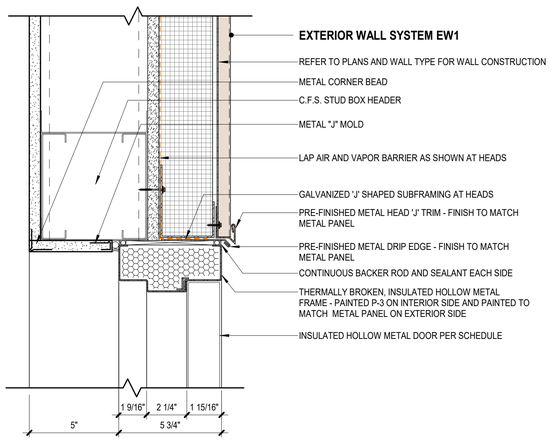
WINDOWS

A. ALL WINDOWS TO BE PREFINISHED THERMALLY BROKEN 2" X 4 1/2" ALUMINUM STOREFRONT FRAMING. FINISH TO MATCH ADJACENT METAL PANEL.
B. REFER TO WINDOW HEAD, JAMB, AND SILL DETAILS FOR FLASHING, TRIM, AND SEALANT INFORMATION.
C. WINDOW SYSTEM MANUFACTURER SHALL PROVIDE ADDITIONAL STRUCTURAL REINFORCING AS REQUIRED TO ACCOMMODATE INSTALLATION OF THEIR SYSTEM IN THE OPENINGS INDICATED.
D. PROVIDE BACKER ROD & SEALANT AROUND THE ENTIRE PERIMETER OF THE INTERIOR & EXTERIOR SURFACE OF FRAMES.

GLAZING

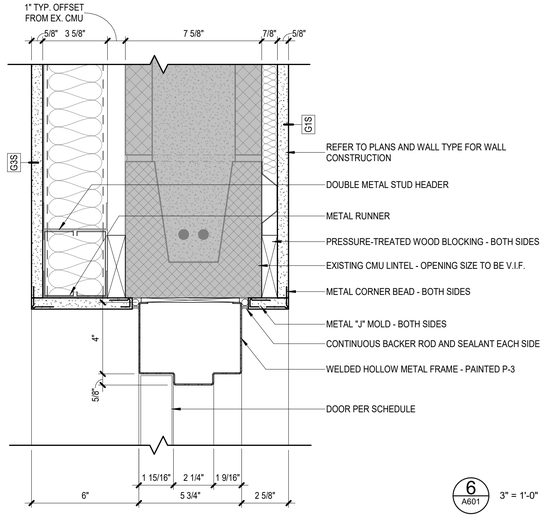
A. ALL EXTERIOR GLASS TO BE **IG-1** UNLESS NOTED OTHERWISE
B. PROVIDE WINDOW BLINDS AT ALL EXTERIOR GLAZING EXCLUDING DOORS AND SPANDRELS.
C. SAFETY GLAZING IS REQUIRED IN ALL HAZARDOUS LOCATIONS; SUCH AS IN GUARDS, IN AND ADJACENT TO DOORS, AND WHERE PANES ARE GREATER THAN 9 SF AND ADJACENT TO WALKING SURFACES ARE CLOSER THAN 18 INCHES AND GREATER THAN 36 INCHES ABOVE THE FLOOR. ALL SAFETY GLAZING SHALL BE IDENTIFIED AS SUCH BY THE MANUFACTURER.

IG-1 - 1" INSULATED GLAZING, COLOR TO MATCH EXISTING VISION PANELS



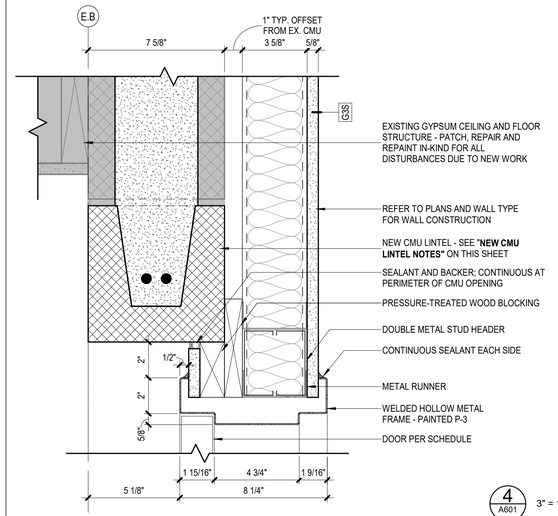
8 A601 3" = 1'-0"

HEAD DETAIL - H4



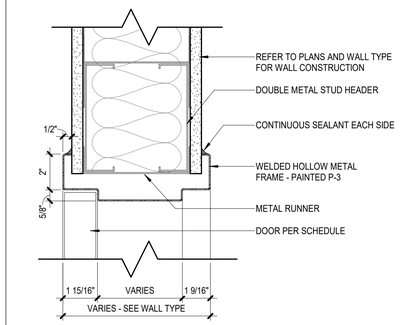
6 A601 3" = 1'-0"

HEAD DETAIL - H3



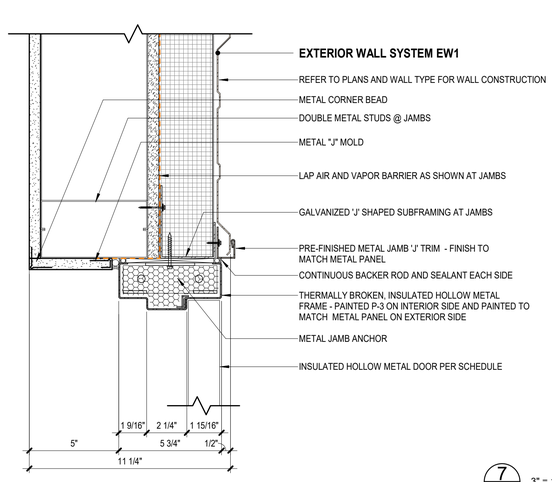
4 A601 3" = 1'-0"

HEAD DETAIL - H2



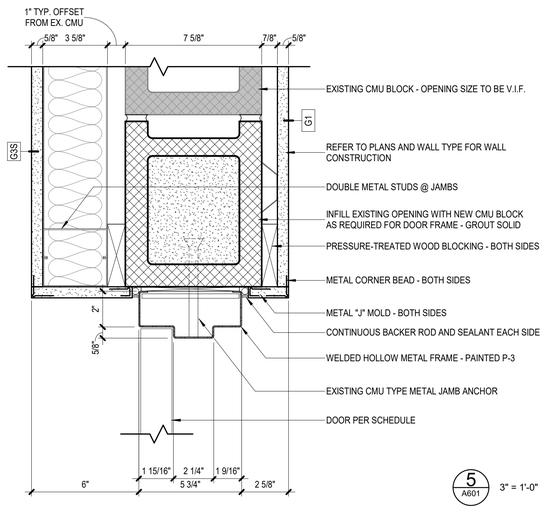
2 A601 3" = 1'-0"

HEAD DETAIL - H1



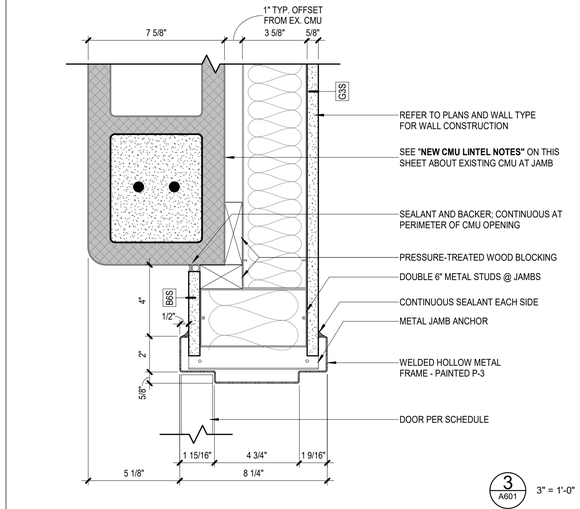
7 A601 3" = 1'-0"

JAMB DETAIL - J4



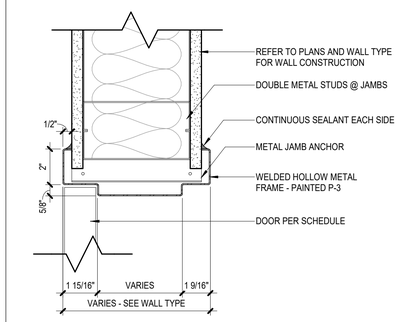
5 A601 3" = 1'-0"

JAMB DETAIL - J3



3 A601 3" = 1'-0"

JAMB DETAIL - J2



1 A601 3" = 1'-0"

JAMB DETAIL - J1

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DOOR SCHEDULES & WINDOW ELEVATIONS

A601

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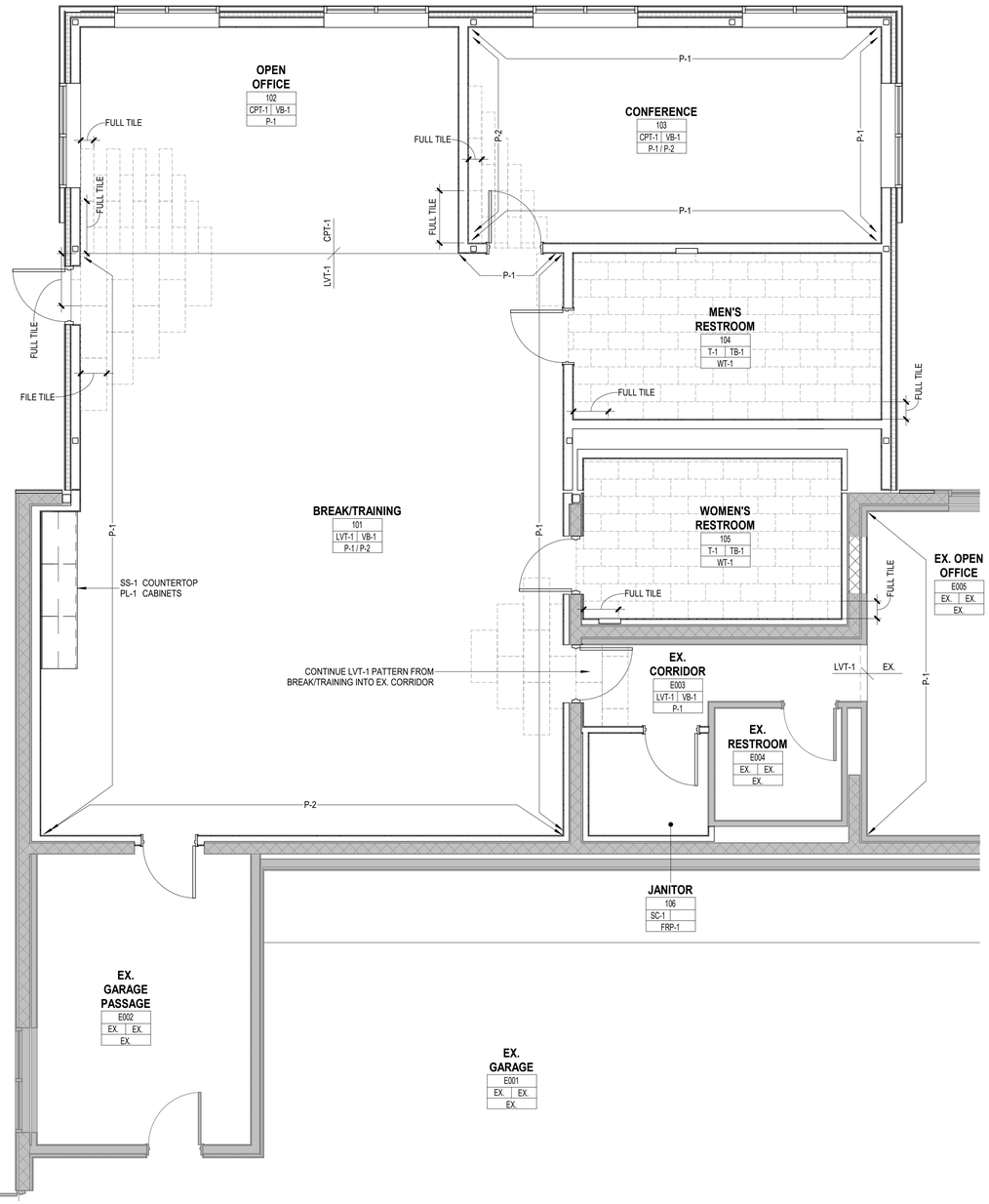
FINISH ROOM TAG KEY

ROOM NAME

ROOM #	
FLOOR	BASE
WALLS	

GENERAL FINISH NOTES

A. ALL GENERAL FINISHES ARE NOTED ON THE FINISH ROOM TAGS U.N.O. REFER TO THE FINISH MATERIAL KEY FOR ADDITIONAL INFORMATION.
B. REFERENCE REFLECTED CEILING PLAN FOR ADDITIONAL CEILING INFORMATION.
C. ALL FLOORING MATERIAL TRANSITIONS, TRANSITIONREDUCER STRIPS & OTHER THRESHOLDS TO BE LOCATED AT CENTERLINE OF OPENING WHEN IN CLOSED POSITION.
D. ALIGN FLOORING TRANSITIONS WITH FINISH BASE EXCEPT AT DOORS, U.N.O.
E. FLOOR FINISHES ARE TO EXTEND UNDER NEW BUILT-IN CABINETS.
F. PAINT ALL EXPOSED METAL SURFACES, SUCH AS GRILLES, VENTS, FIRE EXTINGUISHER CABINETS, ELECTRICAL PANELS, ACCESS PANELS, ETC. WITH PAINT TO MATCH ADJACENT SURFACE U.N.O.
G. REFER TO DRAWINGS FOR CORNER GUARD AND WALL PROTECTION LOCATIONS.
H. REFER TO INTERIOR ELEVATIONS FOR ADDITIONAL INFROMATION PERTAINING TO INTERIOR FINISHES.
I. ALL DIMENSIONS ARE TAKEN TO THE FACE OF FINISHED MATERIAL.
J. ALL M.E.P. FIXTURES & EQUIPMENT ILLUSTRATED FOR COORDINATION & REFERENCE ONLY. REFER TO M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.
K. CONTRACTOR TO SUBMIT A MINIMUM OF (3) THREE SAMPLES OF EACH FINISH TO DESIGNER FOR APPROVAL PRIOR TO ORDERING. ALTERNATES WILL NOT BE ACCEPTED WITHOUT WRITTEN APPROVAL OF ARCHITECT.
L. CONTRACTOR TO IMMEDIATELY NOTIFY ARCHITECT IF A SPECIFIED FINISH ITEM BECOMES UNAVAILABLE.
M. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL NEW INTERIOR WALL & CEILING FINISHES WILL BE CLASS B MINIMUM, WITH A FLAME SPREAD RATING OF 75 MAXIMUM & A SMOKE DEVELOPED INDEX OF 450 MAXIMUM PER IBC SECTION 803.
N. PREPARE ALL FLOOR & WALL CONSTRUCTION TO RECEIVE NEW FINISHES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED INSTALLATION METHODS & MATERIALS FOR ALL FINISHES.
O. PRIOR TO INSTALLATION OF NEW FINISHES, CONTRACTOR SHALL INSPECT ALL SUBSTRATES. IF A SUBSTRATE IS DEEMED UNACCEPTABLE, THE CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO RECTIFY THE SITUATION OR CONTACT THE ARCHITECT WITH THE CONCERN. PROCEEDING WITH THE INSTALLATION OF FINISHES WILL BE INDICATION THAT THE INSTALLER / FINISHER ACCEPTS CONDITION OF SUBSTRATE.
P. USE MANUFACTURER'S RECOMMENDED INSTALLATION METHODS & MATERIALS FOR ALL FINISHES.
Q. ALL NECESSARY TILE FLOORING UNDERLAYMENT TO BE PROVIDED & INSTALLED BY FLOORING CONTRACTOR. PROVIDE CRACK ISOLATION MEMBRANE AS REQUIRED AT ALL PORCELAIN TILE FLOORING.
R. FLOORING CONTRACTOR TO LEVEL SUBSTRATE AS REQUIRED TO ACCEPT NEW FLOORING MATERIAL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION. FOR CARPET REQUIRING SEAMING, PROVIDE SEAM DIAGRAM LAYOUT FOR DESIGNER APPROVAL PRIOR TO INSTALLATION.
S. ALL FLOORING TRANSITIONS SHALL COMPLY WITH ADA GUIDELINES. FLOORING CONTRACTOR TO SUBMIT A DIAGRAM SHOWING FLOORING TRANSITION LOCATIONS FOR DESIGNERS APPROVAL PRIOR TO INSTALLATION.
T. ALL PAINTED SURFACES SHALL RECEIVE A MINIMUM OF (1) ONE BASE COAT & (2) TWO FINISH COATS.
U. FINISH LEVEL OF GYP. BD. WALLS & SOFFITS TO BE LEVEL 4, U.N.O.
V. ALL PAINTED WALLS TO BE PAINTED P-1, U.N.O.
W. ALL GYPSUM BOARD BULKHEADS, SOFFITS, & CEILINGS TO BE PAINTED P-1, U.N.O.
X. ALL INTERIOR WINDOW SILLS TO BE SS-1, U.N.O.
Y. ALL INTERIOR METAL DOORS & FRAMES TO BE PAINTED P-3, U.N.O.
Z. PAINTED SHEEN LEVEL TO BE SATIN/EGG-SHELL FOR ALL WALLS, U.N.O. SHEEN FOR ALL WET AREAWALLS, METAL DOORS & METAL FRAMES TO BE SEMI-GLOSS.
AA. IN AREAS MARKED WITH 'EX.' FINISHES, EXISTING FINISHES SHALL REMAIN.
BB. NEW FINISHES ARE TO BE INSTALLED ONLY WHERE NOTED ON THIS PLAN.



N

1 A701

FIRST FLOOR FINISH PLAN

1/4" = 1'-0"

FINISH MATERIAL KEY

FLOORS

CPT-1 MANUFACTURER: SHAW CONTRACT
STYLE: RELIEF TILE
NUMBER: 5T152
COLOR: ELEMENT 50555
INSTALLATION: ASHLAR

T-1 MANUFACTURER: DAL TILE
STYLE: ANCHORAGE
SIZE: 12" X 24"
COLOR: MEDIUM GREY AC07
INSTALLATION: STACK BOND
GROUT: LATICRETE 78 STERLING SILVER

LVT-1 MANUFACTURER: J&J FLOORING
STYLE: TATAMI
SIZE: 18" X 36"
NUMBER: V5003
COLOR: 1018 KYOTO
THICKNESS: 5MM
INSTALLATION: ASHLAR

SC-1 SEALED CONCRETE

BASE

VB-1 MANUFACTURER: JOHNSONITE
STYLE: 4" COVE
NUMBER: 63
COLOR: BURNT UMBER

TB-1 MANUFACTURER: DAL TILE
STYLE: ANCHORAGE
SIZE: 6" X 12" COVE
COLOR: MEDIUM GREY AC07

WALLS

P-1 MANUFACTURER: SHERWIN WILLIAMS
NUMBER: SW7647
COLOR: CRUSHED ICE

P-2 MANUFACTURER: SHERWIN WILLIAMS
NUMBER: SW9150
COLOR: ENDLESS SEA

P-3 MANUFACTURER: SHERWIN WILLIAMS
NUMBER: SW7674
COLOR: PEPPERCORN

WT-1 MANUFACTURER: DAL TILE
STYLE: DIPLOMACY
SIZE: 12" X 24"
COLOR: LIGHT GREY DP01
INSTALLATION: RUNNING BOND
GROUT: LATICRETE 78 STERLING SILVER

FRP-1 MANUFACTURER: MARLITE
STYLE: STANDARD FRP PANEL
SIZE: 4' X 8'
COLOR: WHITE
FINISH: SMOOTH
THICKNESS: .090"
INSTALLATION: ADHERED WITH MATCHING DIVISION BARS AND TRIM

MILLWORK

PL-1 MANUFACTURER: FORMICA
NUMBER: 8842-WR
COLOR: WEATHERED ASH
FINISH: WOODBRUSH

SS-1 MANUFACTURER: HI-MACS
NUMBER: G160
COLOR: MOONDUST

METAL TRANSITIONS

MT-1 MANUFACTURER: SCHLUTER
STYLE: JOLLY-MC
FINISH: ACGB BRUSHED CHROME

FINISH LEGEND

AF	ACCESS FLOOR
CG	CORNER GUARD
CPT	CARPET
CT	CARPET BASE
CTB	CERAMIC FLOOR TILE
CWT	CERAMIC TILE BASE
EC	CERAMIC WALL TILE
EF	EXPOSED CONCRETE
EFB	EPOXY FLOOR
EM	EPOXY FLOOR BASE
EP	ENTRY MAT
ESD	EPOXY PAINT
FRP	ELECTROSTATIC DISCHARGE
FWC	FIBER REINFORCED PANEL
GR	FABRIC WALL COVERING
HSV	GRANITE
L	HOMOGENEOUS SHEET VINYL
M	LINOLEUM
MB	MELAMINE
P	MINI BLINDS
PL	PAINT
PT-F	PLASTIC LAMINATE
PT-B	PORCELAIN TILE - FLOOR
PT-W	PORCELAIN TILE - BASE
QT	PORCELAIN TILE - WALL
QT-B	QUARRY TILE
RB	QUARRY TILE - BASE
RF	RUBBER BASE
SAT	RUBBER FLOORING
SC	SUSPENDED ACOUSTIC TILE
SF	SEALED CONCRETE
SOV	STONE FLOORING
SS	SPRAY-ON-VINYL
ST	SOLID SURFACE
STC	DOOR STAIN
SV	STAINED CONCRETE
SVB	SHEET VINYL
TP	SHEET VINYL BASE
TS	TOILET PARTITIONS
VCT	TRANSITION STRIP
VCTPAT	VINYL COMPOSITION TILE
VWC	VCT PATTERN
WF	VINYL WALL COVERING
WB	WOOD FLOOR
WC	WOOD BASE
WBWC	WALL COVERING WHITE BOARD WALL COVERING

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FIRST FLOOR FINISH PLAN

A701

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DUCTWORK SYMBOLS

RECTANGULAR	ROUND / OVAL	
	CONICAL FITTING	ROUND BRANCH DUCTWORK
ACOUSTIC FITTING	ACOUSTIC FITTING	RECTANGULAR BRANCH DUCTWORK
		SQUARE TEE WITH TURNING VANES NOTE: ALL SQUARE ELBOWS IN RECTANGULAR AND ROUND / OVAL DUCTWORK SHALL BE PROVIDED WITH TURNING VANES. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS.
		RADIUS'D TEE
		RADIUS'D BRANCH
		UNLESS NOTED OTHERWISE ON DRAWINGS, 15° MAX FOR DIVERGING, 30° MAX FOR CONVERGING TRANSITION
		EXISTING DUCTWORK TO REMAIN
		EXISTING DUCTWORK TO REMOVED
		RETURN AIR, RELIEF AIR, OR TRANSFER AIR DUCTWORK. (UP AND DOWN) RADIUSED OR SQUARE WITH TURNING VANES.
		SUPPLY AIR OR OUTDOOR AIR DUCTWORK. (UP AND DOWN) RADIUSED OR SQUARE WITH TURNING VANES.
		EXHAUST AIR DUCTWORK. (UP AND DOWN) RADIUSED OR SQUARE WITH TURNING VANES.
		RECTANGULAR AND ROUND / OVAL DUCTWORK RISE / DROP WITH 90° RADIUSED OR SQUARE ELBOWS AND TURNING VANES.
		RADIUS ELBOW
		90° SQUARE ELBOW (WITH TURNING VANES) NOTE: ALL SQUARE ELBOWS IN RECTANGULAR AND ROUND DUCTWORK SHALL BE PROVIDED WITH TURNING VANES.
		SQUARE THROAT / RADIUS HEEL FITTINGS NOT ACCEPTABLE
AD	AD	ACCESS DOOR OR PANEL
R	R	DUCTWORK RISE IN DIRECTION OF AIR FLOW
D	D	DUCTWORK DROP IN DIRECTION OF AIR FLOW
		FLEXIBLE DUCTWORK
		DUCTWORK WITH ACOUSTICAL LINER. LISTED DUCT SIZES ARE INSIDE CLEAR DIMENSIONS.
		FLEXIBLE CONNECTION
		DUCTWORK CONSTRUCTED OF SPECIAL MATERIAL AS NOTED
		DIRECTION OF PITCH
26x20		RECTANGULAR DUCTWORK DIMENSIONS (W x H)
26ø		ROUND DUCTWORK DIMENSIONS (DIA)
26x20 OV		OVAL DUCTWORK DIMENSIONS (W x H)

DUCTWORK DEVICE SYMBOLS

A10 10ø 300	CEILING MOUNTED SUPPLY AIR DEVICE. ALL AIR DEVICES DISCHARGE 4-WAY UNLESS NOTED OTHERWISE ON PLANS WITH FLOW ARROWS. A10 = DESIGNATION (REFER TO FLOOR PLANS AND AIR DEVICE SCHEDULE FOR VARIOUS DESIGNATIONS). 10ø = NECK SIZE (IN INCHES). 300 = REQUIRED CFM.
S10-48"L 8ø 300	CEILING OR WALL MOUNTED LINEAR SLOT AIR DEVICE. S10 = DESIGNATION (REFER TO FLOOR PLANS AND AIR DEVICE SCHEDULE FOR VARIOUS DESIGNATIONS). 48"L = DEVICE LENGTH. 8ø = NECK SIZE (IN INCHES). 300 = REQUIRED CFM.
T10 20x12 300 BOG: 9'-0"	CEILING, WALL, OR DUCTWORK MOUNTED SUPPLY, RETURN, OR EXHAUST AIR DEVICE. T10 = DESIGNATION (REFER TO FLOOR PLANS AND AIR DEVICE SCHEDULE FOR VARIOUS DESIGNATIONS). 20x12 = DEVICE SIZE (IN INCHES). 300 = REQUIRED CFM. FOR NON-CEILING MOUNTED DEVICES, 9'-0" = MOUNTING HEIGHT FROM FLOOR TO BOTTOM OF GRILLE.

	MANUAL BALANCING DAMPER WITH LOCKING DEVICE
XXX	BDD = BACK DRAFT DAMPER CBD = COUNTER-BALANCED BACK DRAFT DAMPER
A-D	FIRE DAMPER A = TYPE (REFER TO FLOOR PLANS FOR VARIOUS TYPES) D OR S = DYNAMIC OR STATIC
XX	SD = SMOKE DAMPER FS = COMBINATION FIRE - SMOKE DAMPER MDD = MOTORIZED DAMPER AFMS = AIR FLOW MEASURING STATION
SD	DUCT MOUNTED SMOKE DETECTOR. COORDINATE LOCATION.
H	HUMIDITY SENSOR - DUCT MOUNTED
SP	STATIC PRESSURE SENSOR - DUCT MOUNTED
C	CARBON DIOXIDE SENSOR - DUCT MOUNTED
S	TEMPERATURE SENSOR - DUCT MOUNTED

VALVES AND FITTINGS

	CHECK VALVE
	SHUTOFF VALVE (REFER TO SPECIFICATIONS FOR REQUIRED TYPE BASED ON APPLICATIONS)
	COMBINATION SHUTOFF AND BALANCING VALVE (REFER TO SPECIFICATIONS FOR REQUIRED TYPE BASED ON APPLICATIONS)
	CONCENTRIC PIPE REDUCER
FOT FOB	ECCENTRIC PIPE REDUCER
P	PRESSURE GAUGE
T	TEMPERATURE GAUGE OR THERMOMETER
	UNION
	CLEANOUT
	STRAINER
	STRAINER WITH A BLOW DOWN VALVE AND HOSE CONNECTION
	DRAIN VALVE WITH HOSE END CONNECTION
	AUTOMATIC FLOW CONTROLLER WITH P/T PLUG IN AND OUT
	EXPANSION JOINT
	MANUAL AIR VENT
A	AUTOMATIC AIR VENT
	PRESSURE REDUCING VALVE
M	MODULATING 2 PORT AUTOMATIC CONTROL VALVE
M	2 PORT AUTOMATIC CONTROL VALVE, 2-POSITION UNLESS SPECIFIED OTHERWISE
M	MODULATING 3 PORT AUTOMATIC CONTROL VALVE
M	3 PORT AUTOMATIC CONTROL VALVE, 2-POSITION UNLESS SPECIFIED OTHERWISE
M	AUTOMATIC PRESSURE INDEPENDENT CONTROL VALVE
	QUICK OPENING MANUAL VALVE
	SAFETY RELIEF VALVE. FOR HYDRONIC SYSTEMS PIPE DISCHARGE AIR GAPPED TO FLOOR DRAIN UNLESS NOTED OTHERWISE. FOR STEAM SYSTEMS PIPE DISCHARGE TO OUTDOORS.
	VACUUM BREAKER
N	NEEDLE VALVE
	PRESSURE AND TEMPERATURE TEST PLUG
V	VACUUM GAUGE WITH STOP
	END CAP
	GLOBE VALVE
VB	SHUTOFF VALVE AND BOX
	SHUTOFF VALVE ON RISER
S	SOLENOID VALVE
M	WATER METER
F	FLOW METER
BM	BI-METALIC STEAM TRAP AND DRIP ASSEMBLY
TD	THERMODYNAMIC STEAM TRAP AND DRIP ASSEMBLY
IB	INVERTED BUCKET STEAM TRAP AND DRIP ASSEMBLY
FT	FLOAT AND THERMOSTATIC STEAM TRAP AND DRIP ASSEMBLY
TS	THERMOSTATIC STEAM TRAP AND DRIP ASSEMBLY
	PRESSURE GAUGE WITH COCK AND SIPHON LOOP

MISC SYMBOLS

C	CARBON DIOXIDE SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
CO	CARBON MONOXIDE SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
DP	DIFFERENTIAL PRESSURE SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
H	HUMIDITY SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
S	TEMPERATURE SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
S	TEMPERATURE SENSOR MOUNTED IN CEILING PLENUM.
SP	STATIC PRESSURE SENSOR.
T	SPACE TEMPERATURE SENSOR / THERMOSTAT. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
	EMERGENCY SHUTOFF STATION. 46" MOUNTING HEIGHT UNLESS NOTED OTHERWISE.

GENERAL FLOOR PLAN NOTES

3	PLAN NOTE. APPLIES ONLY TO THE SHEET WHICH IT IS SHOWN UNLESS NOTED OTHERWISE.
3	DETAIL NOTE. APPLIES ONLY TO THE ASSOCIATED DETAIL.
A1	EQUIPMENT, DEVICE, OR PLUMBING FIXTURE MARK. LETTER DESIGNATIONS REFER TO SCHEDULES.
H1 OR H1	EQUIPMENT REFERENCE. LETTER DESIGNATION VARIES. REFER TO SCHEDULES.
2	RISER OR STACK NUMBER
B / H2	DETAIL: B = DETAIL DESIGNATION H2 = SHEET WHERE DETAIL IS LOCATED
1 / H2	SECTION: 1 = SECTION DESIGNATION H2 = SHEET WHERE DETAIL IS LOCATED
A1	"UP TO" SYMBOL (ITEM ON FLOOR ABOVE)
TOE: 3' - 0" BOE: 0' - 6"	APPROXIMATE DIMENSION ABOVE FINISHED FLOOR TO TOP OR BOTTOM OF EQUIPMENT, UNLESS NOTED OTHERWISE
10" ELEV: 8' - 0" — 10" ELEV: 8' - 0"	APPROXIMATE DIMENSION ABOVE FINISHED FLOOR TO CENTERLINE OF PIPE, UNLESS NOTED OTHERWISE
20x20 TOD: 8' - 10" 20x20 BOD: 7' - 2"	APPROXIMATE DIMENSION ABOVE FINISHED FLOOR TO TOP OR BOTTOM OF DUCTWORK, UNLESS NOTED OTHERWISE
UC-X	DOOR UNDERCUT. X = HEIGHT OF UNDERCUT IN INCHES: 0.75 INCH UNDERCUT IF NO HEIGHT IS NOTED. COORDINATE WITH GC.
DL-1	DOOR LOUVER. 1 = SQUARE FEET OF LOUVER.
	CONNECT TO EXISTING
	DEMOLISH TO POINT INDICATED

PIPING SYMBOLS

DOUBLE LINE	SINGLE LINE	
		BOTTOM CONNECTION (45°)
		BOTTOM CONNECTION (90°)
		BRANCH TEE CONNECTION (NOTE: BULLHEAD TEE'S ARE NOT PERMITTED)
		DIRECTION OF PITCH
D	D	DROP
		ELBOW DOWN
		ELBOW UP
		EXISTING PIPE TO BE REMOVED
		EXISTING PIPE TO REMAIN
		FLOW DIRECTION DESIGNATION
		PIPE RISER
		PUMP
R	R	RISE
		TOP CONNECTION (45°)
		TOP CONNECTION (90°)

HVAC PIPING DESIGNATIONS

CHS	CHILLED WATER SUPPLY PIPE
CHR	CHILLED WATER RETURN PIPE
CWS	CONDENSER WATER SUPPLY PIPE
CWR	CONDENSER WATER RETURN PIPE
CHGS	CHILLED WATER GLYCOL SOLUTION SUPPLY PIPE
CHGR	CHILLED WATER GLYCOL SOLUTION RETURN PIPE
D	DRAIN LINE. PITCH IN DIRECTION INDICATED
HWR	HEATING HOT WATER RETURN PIPE
HWS	HEATING HOT WATER SUPPLY PIPE
MU	WATER MAKE-UP PIPE
V	VENT PIPE
ET	EXPANSION TANK PIPE
HG	REFRIGERANT HOT GAS LINE
RL	REFRIGERANT LIQUID LINE
RS	REFRIGERANT SUCTION LINE
10	STEAM SUPPLY PIPE - NUMBER INDICATES P.S.I.G.
HPC	HIGH PRESSURE CONDENSATE RETURN PIPE
HPS	HIGH PRESSURE STEAM SUPPLY PIPE
LPC	LOW PRESSURE CONDENSATE RETURN PIPE
LPS	LOW PRESSURE STEAM SUPPLY PIPE
MPC	MEDIUM PRESSURE CONDENSATE RETURN PIPE
MPS	MEDIUM PRESSURE STEAM SUPPLY PIPE
PC	PUMPED CONDENSATE RETURN PIPE

ABBREVIATIONS

AC	- AIR COMPRESSOR OR AIR CONDITIONER
ACCU	- AIR COOLED CONDENSING UNIT
AD	- ACCESS DOOR OR AREA DRAIN
ADJ	- ADJUSTABLE
AFF	- ABOVE FINISHED FLOOR
AFG	- ABOVE FINISHED GRADE
AFMS	- AIR FLOW MEASURING STATION
ALT	- ALTERNATE
AP	- ACCESS PANEL
APPROX	- APPROXIMATE
ARCH	- ARCHITECT OR ARCHITECTURAL
ASSY	- ASSEMBLY
ATC	- AUTOMATIC TEMPERATURE CONTROL (SYNONYMOUS WITH BAS)
BAS	- BUILDING AUTOMATION SYSTEM
BDD	- BACK DRAFT DAMPER
BFP	- BACKFLOW PREVENTER
BLDG	- BUILDING
BOB	- BOTTOM OF BEAM
BOD	- BOTTOM OF DUCT
BOE	- BOTTOM OF EQUIPMENT
BOF	- BOTTOM OF FOOTING
BOG	- BOTTOM OF GRILLE
BOP	- BOTTOM OF PIPE
BOT	- BOTTOM
BTU	- BRITISH THERMAL UNIT
BTUH	- BRITISH THERMAL UNIT PER HOUR
CBD	- COUNTER BALANCED BACKDRAFT DAMPER
CFCI	- CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CFM	- CUBIC FEET PER MINUTE
CHS	- CHILLED WATER SUPPLY
CHR	- CHILLED WATER RETURN
CHGR	- CHILLED WATER GLYCOL SOLUTION RETURN
CHGS	- CHILLED WATER GLYCOL SOLUTION SUPPLY
CLG	- CEILING
CMU	- CONCRETE MASONRY UNIT
CO	- CLEAN OUT
CO2	- CARBON DIOXIDE
CONN	- CONNECT OR CONNECTION
CONTR	- CONTRACTOR
CTR	- CENTER
CU	- COPPER
CW	- COLD WATER
CWR	- CONDENSER WATER RETURN
CWS	- CONDENSER WATER SUPPLY
D	- DRAIN LINE
DB	- DRY BULB
DDC	- DIRECT DIGITAL CONTROLS
DI	- DEIONIZED WATER
DIA	- DIAMETER
DIM	- DIMENSION
DN	- DOWN
DWG	- DRAWING
EA	- EACH OR EXHAUST AIR
EAT	- ENTERING AIR TEMPERATURE
EC	- ELECTRICAL CONTRACTOR (DIVISION 26)
EF	- EXHAUST FAN
EJ	- EXPANSION JOINT
ELEC	- ELECTRICAL
ELEV	- ELEVATOR
EQUIP	- EQUIPMENT
ET	- EXPANSION TANK
ETR	- EXISTING TO REMAIN
EQS	- EQUIPMENT SUPPLIER
EWT	- ENTERING WATER TEMPERATURE
EXH	- EXHAUST
EXP	- EXPANSION
EXT	- EXTERIOR
EX	- EXISTING
FD	- FLOOR DRAIN
FF	- FINISHED FLOOR ELEVATION
FLR	- FLOOR
FOB	- FLAT ON BOTTOM
FOF	- FUEL OIL FLOW
FOG	- FUEL OIL GAUGE
FOR	- FUEL OIL RETURN
FOS	- FUEL OIL SUPPLY
FOT	- FLAT ON TOP
FPM	- FEET PER MINUTE
FSC	- FIRE SUPPRESSION CONTRACTOR (DIVISION 21)
FT	- FEET
FTG	- FOOTING
G	- GAS OR NATURAL GAS
GA	- GAUGE
GAL	- GALLON
GALV	- GALVANIZED
GC	- GENERAL TRADES CONTRACTOR
GPM	- GALLONS PER MINUTE
HB	- HOSE BIBB
HC	- HVAC CONTRACTOR (DIVISION 23)
HD	- HUB DRAIN
HG	- REFRIGERANT HOT GAS
HP	- HORSEPOWER
HPC	- HIGH PRESSURE CONDENSATE RETURN
HPS	- HIGH PRESSURE STEAM SUPPLY
HR	- HOUR
HT	- HEAT TRACE
HTR	- HEATER
HVAC	- HEATING, VENTILATING, AND AIR CONDITIONING
HW	- HOT WATER
HWR	- HEATING HOT WATER RETURN
HWS	- HEATING HOT WATER SUPPLY
ID	- INSIDE DIAMETER
INV	- INVERT ELEVATION
IN	- INCHES
KEC	- KITCHEN EQUIPMENT CONTRACTOR
L	- LENGTH
LAT	- LEAVING AIR TEMPERATURE
LAV	- LAVATORY
LBS	- POUNDS
LPC	- LOW PRESSURE CONDENSATE RETURN
LPS	- LOW PRESSURE STEAM SUPPLY
LWT	- LEAVING WATER TEMPERATURE
MAX	- MAXIMUM
MDD	- MOTORIZED DAMPER
MEZZ	- MEZZANINE
MFR	- MANUFACTURER
MH	- MANHOLE
MIN	- MINIMUM OR MINUTE
MISC	- MISCELLANEOUS
MTD	- MOUNTED
MTG	- MOUNTING
MPC	- MEDIUM PRESSURE CONDENSATE RETURN
MPS	- MEDIUM PRESSURE STEAM SUPPLY
MU	- WATER MAKE-UP
N/C	- NORMALLY CLOSED
NIC	- NOT IN CONTRACT
N/O	- NORMALLY OPEN
NOM	- NOMINAL
NPT	- NATIONAL PIPE THREAD
NTS	- NOT TO SCALE
OA	- OUTDOOR AIR
OBD	- OPPOSED BLADE DAMPER
OD	- OUTSIDE DIAMETER
OFCI	- OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	- OWNER FURNISHED OWNER INSTALLED
P	- PROPANE GAS
PC	- PLUMBING CONTRACTOR (DIVISION 22) OR PUMPED CONDENSATE RETURN
PLBG	- PLUMBING
PRESS	- PRESSURE
PRV	- PRESSURE REGULATING VALVE
PSF	- POUNDS PER SQUARE FOOT
PSI	- POUNDS PER SQUARE INCH
PSIG	- POUNDS PER SQUARE INCH GAUGE
RA	- RETURN AIR
RAD	- RADIUS
RCP	- REFLECTED CEILING PLAN
RD	- ROOF DRAIN
REC	- RECESSED
REQD	- REQUIRED
RI	- ROUGH IN
RL	- REFRIGERANT LIQUID
ROS	- REVERSE OSMOSIS WATER SUPPLY
ROR	- REVERSE OSMOSIS WATER RETURN
RPM	- REVOLUTIONS PER MINUTE
RS	- REFRIGERANT SUCTION
S	- SPRINKLER (WET)
SA	- SUPPLY AIR
SAN	- SANITARY OR SANITARY DRAIN
SCH	- SCHEDULE
SCW	- SOFT COLD WATER
SHT	- SHEET
SPEC	- SPECIFICATIONS
SQ	- SQUARE
SR	- SUPPLY RISER
SRV	- SAFETY RELIEF VALVE
SS	- STAINLESS STEEL
STD	- STANDARD
STM	- STORM OR STORM DRAINAGE
STRUC	- STRUCTURAL OR STRUCTURE
SUC	- SITE UTILITY CONTRACTOR
TA	- TRANSFER AIR
TEMP	- TEMPERATURE
TOB	- TOP OF BEAM
TOD	- TOP OF DUCT
TOE	- TOP OF EQUIPMENT
TOF	- TOP OF FOOTING
TOJ	- TOP OF JOIST
TOP	- TOP OF PIPE
TOS	- TOP OF SLAB OR TOP OF STEEL
TYP	- TYPICAL
UH	- UNIT HEATER
UNO	- UNLESS NOTED OTHERWISE
V	- VENT
VAC	- VACUUM
VAV	- VARIABLE AIR VOLUME
VEL	- VELOCITY
VFD	- VARIABLE FREQUENCY DRIVE (ADJUSTABLE FREQUENCY MOTOR CONTROLLER)
VIB	- VALVE IN BOX
VOL	- VOLUME
VTR	- VENT THROUGH ROOF
VR	- VENT RISER
W/	- WITH
W/O	- WITHOUT
WB	- WET BULB
WCO	- WALL CLEANOUT

NOTE:
ALL SYMBOLS AND ABBREVIATIONS ARE SUBJECT TO MODIFICATIONS ON OTHER DRAWINGS.
ALL SYMBOLS OR ABBREVIATIONS MIGHT NOT NECESSARILY BE USED ON THIS PROJECT.

MECHANICAL SHEET LIST

SHEET NUMBER	SHEET NAME
M001	MECHANICAL INDEX, SYMBOLS AND GENERAL NOTES
M002	MECHANICAL SPECS
MD101	MECHANICAL FIRST FLOOR - DEMOLITION
M101	MECHANICAL FIRST FLOOR - NEW WORK
M501	DETAILS - MECHANICAL
M601	SCHEDULES - MECHANICAL
M700	CONTROL DIAGRAMS

GENERAL NOTES

1. THESE NOTES APPLY EQUALLY TO THE FULL SET OF DOCUMENTS.
2. SITE VISIT(S) SHALL BE AS OUTLINED IN PROJECT SPECIFICATIONS.
3. THE CONTRACTORS SHALL REFER TO ALL SPECIFICATION SECTIONS AND PLANS ON DRAWINGS FOR DETAILS OF BUILDING CONSTRUCTION TO ENSURE SPACE AND SATISFACTORY ARRANGEMENT FOR THEIR WORK. THE VARIOUS DRAWINGS COMPRISING THE SET ARE INTERDEPENDENT AND MUST BE USED JOINTLY AT ALL TIMES. EACH CONTRACTOR SHALL REFER TO THE GENERAL REQUIREMENTS OF THE CONTRACT. THE NOTES AND SYMBOLS INDICATED ON THE DRAWINGS ARE FOR THE GUIDANCE OF ALL TRADES INVOLVED IN THE PROJECT AND MUST BE FOLLOWED TO EXECUTE THE WORK AS INTENDED. IF DISCREPANCIES OCCUR, CONTACT THE PROJECT ARCHITECT/ENGINEER THRU THE GENERAL CONTRACTOR FOR CLARIFICATION BEFORE PROCEEDING.
4. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. SEE SPECIFICATIONS FOR MORE SPECIFIC DETAILS ON RESPONSIBILITIES.
5. EACH CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF OTHERS. HE SHALL KEEP HIMSELF INFORMED OF THE PROGRESS AND DETAIL DEVELOPMENT OF THE WORK OF OTHERS AND SHALL BE RESPONSIBLE FOR COORDINATING AND EXPEDITING HIS WORK WITH OTHERS SO THAT THE PROGRESS OF THE TOTAL WORK SHALL BE KEPT ON SCHEDULE.
6. ALL WORK SHALL BE PERFORMED IN COMPLETE COMPLIANCE WITH ALL GOVERNING CODES AND STANDARDS.
7. EACH CONTRACTOR AND/OR TRADE, FITTING OR PLACING HIS WORK INTO OR ON THE WORK OF OTHERS DOES SO WITH THE UNDERSTANDING THAT THE INSTALLATION OF HIS WORK CONSTITUTES HIS ACCEPTANCE OF THE SUITABILITY OF THE WORK IN PLACE. IF THE WORK OF OTHERS IS NOT ACCEPTABLE, HE SHALL NOTIFY THE PROJECT ENGINEER AND SUCH WORK SHALL BE CORRECTED. ANY NEW WORK INSTALLED IN UNSUITABLE EXISTING CONDITIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR TRADE INSTALLING THE NEW WORK. NO CLAIMS FOR ADDITIONAL COMPENSATION FOR CORRECTING WORK INSTALLED IN UNSUITABLE EXISTING CONDITIONS WILL BE CONSIDERED.
8. EXISTING CONDITIONS SHOWN HAVE BEEN BASED UPON VISUAL OBSERVATION AND/OR AVAILABLE DRAWING INFORMATION, AND MAY BE AT VARIANCE WITH ACTUAL WORK IN PLACE. THE CONTRACTOR SHALL TAKE ALL NECESSARY FIELD MEASUREMENTS AND FIELD VERIFY ALL CONDITIONS AFFECTING THE EXECUTION OF THE WORK. ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE WORK SHOWN ON THE CONTRACT DOCUMENTS WHICH MAY IMPACT THE PROGRESS OF THE WORK SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER IN WRITING FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.
9. ALL WORK MUST BE COORDINATED WITH THE GENERAL CONTRACTOR TO MAINTAIN OPERATION OF THE EXISTING FACILITY.
10. ANY REMOVED EQUIPMENT SHALL BE TURNED OVER TO THE OWNER. ITEMS NOT DESIRED BY THE OWNER SHALL BE REMOVED FROM THE PREMISES AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
11. WHERE CONTROL DEVICES ARE REMOVED, CONTROL WIRING AND CONDUIT SHALL BE REMOVED BACK TO SOURCE.
12. ALL EXISTING DUCTWORK, PIPING, EQUIPMENT, CONTROLS, ETC. SHOWN ON REMOVAL PLAN(S) SHALL BE REMOVED. THE MAJORITY OF WORK TO BE REMOVED IS SHOWN. REMOVE ALL INCIDENTAL AND/OR ABANDONED DUCTWORK, PIPING, ETC. THAT MAY NOT BE SHOWN BUT IS ASSOCIATED WITH THE REMOVAL WORK.
13. WHERE DUCTS OR PIPES ARE REMOVED THRU WALL/FLOOR/ROOF THAT IS TO REMAIN, PATCH WALL/FLOOR/ROOF OPENING TO MATCH EXISTING WHERE OPENING IS NOT REUSED.
14. ALL ABANDONED EXTRANEOUS PIPING, DUCTWORK, SUPPORTS, CONTROLS, ETC. SHALL BE REMOVED.
15. INSULATE DUCTWORK AND PIPING WHERE EXISTING INSULATION HAS BEEN DAMAGED AND/OR REMOVED IN THE PERFORMANCE OF WORK IN THIS PROJECT.
16. WHERE EXISTING HVAC UTILITIES IN SERVICE WILL BE DISRUPTED DURING THE CONSTRUCTION OF THIS PROJECT, THIS WORK SHALL BE PERFORMED ON WEEKENDS OR WEEKNIGHTS, IF REQUIRED BY THE OWNER'S PROJECT COORDINATOR. DOWNTIME SHALL BE KEPT TO A MINIMUM AND SHALL BE COORDINATED AND SCHEDULED IN WRITING ONE WEEK IN ADVANCE WITH THE OWNERS' PROJECT COORDINATOR.
17. ALL CUTTING AND PATCHING REQUIRED FOR THIS PROJECT SHALL BE INCLUDED IN THE CONTRACT. UNLESS OTHERWISE INDICATED ALL PATCHING SHALL BE ACCOMPLISHED BY THE CONTRACTOR WHO REMOVES AN ITEM RESULTING IN NECESSARY PATCHING. PATCH OPENINGS WITH LIKE MATERIALS AND FLUSH WITH ADJACENT SURFACES. FINISH AND PATCH SURFACES TO MATCH ADJACENT SURFACE.
18. WHEN NEW SUPPLY AND RETURN AIR DUCTS ARE CONNECTED TO EXISTING DUCTWORK, CLEAN BOTH NEW AND EXISTING DUCTWORK BY MOPPING AND VACUUM CLEANING INSIDE AND OUTSIDE BEFORE OPERATION. CLEANING OF EXISTING DUCTWORK SHALL BE LIMITED TO THE IMMEDIATE AREA WITHIN REACH OF THE OPEN END OF THE DUCT.
19. ANNULAR SPACE OF ALL PIPE, CONDUIT, DUCT & OTHER SIMILAR PENETRATIONS OF FIRE RATED ASSEMBLIES SHALL BE FIRESTOPPED. IN ADDITION, PENETRATIONS THROUGH 0- HOUR RATED WALLS & FLOORS SHALL BE FIRESTOPPED TO RETARD PASSAGE OF FIRE & SMOKE.
20. ALL PIPING, DUCTS, CONDUITS, ETC. IN FINISHED ROOMS, CORRIDORS, ETC. SHALL BE CONCEALED ABOVE THE SUSPENDED CEILING. IN GENERAL, KEEP DUCT AND PIPING MAINS NEXT TO UNDERSIDE OF STRUCTURE UNLESS OTHERWISE NOTED ON PLANS.
21. THE FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED. DUCT SIZES ARE NET INSIDE DIMENSIONS.
22. DIFFUSER SIZES SHOWN ON FLOOR PLANS ARE NECK SIZES. REGISTER AND GRILLE SIZES SHOWN ARE FACE SIZES.
23. TOTAL STATIC PRESSURE NOTED IN THE SCHEDULES INCLUDES DUCT SYSTEM, TERMINAL UNITS, FILTERS, COILS, ETC.
24. THE CONTRACT DRAWINGS ARE NOT INTENDED TO SHOW EVERY VERTICAL OR HORIZONTAL OFFSET, WHICH MAY BE NECESSARY TO COMPLETE THE SYSTEMS. COORDINATE WORK IN ADVANCE WITH ALL OTHER TRADES AND REPORT IMMEDIATELYANY DIFFICULTIES WHICH CAN BE ANTICIPATED.
25. RUNOUT PIPING TO TERMINAL UNITS SHALL BE 0.75" SIZE UNLESS OTHERWISE NOTED. REFER TO AIR TERMINAL UNIT SCHEDULE(S).
26. ALL INSULATED DUCTWORK SHALL HAVE DAMPER EXTENSIONS.
27. REFER TO SPECIFICATION FOR POST CONSTRUCTION TAB.

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY
P: 317.571.4795 www.heapy.com

PROJECT NO. 2025-07211

NOBLE COUNTY HIGHWAY DEPARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

EAREN E. LOHRMANN
REGISTERED
No. PE10911293
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
03.27.2026
PROJECT PHASE:
BID DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2025.02329

MECHANICAL INDEX, SYMBOLS AND GENERAL NOTES

M001

3/26/2026 9:22:21 AM

MECHANICAL SPECIFICATIONS (DIV 23)

1. PROVIDE A COMPLETE HVAC SYSTEM AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN. WORK INCLUDES, BUT IS NOT NECESSARILY LIMITED TO, THE FOLLOWING PRINCIPAL CATEGORIES:

   A. AIR DISTRIBUTION SYSTEM CONSISTING OF SUPPLY, RETURN AND EXHAUST DUCTWORK AND ASSOCIATED AIR DISTRIBUTION AND TERMINAL DEVICES.

   B. ALTERATION WORK IN THE EXISTING BUILDING.

2. OBTAIN AND PAY FOR ALL PERMITS. UPON COMPLETION, PROVIDE A CERTIFICATE OF APPROVAL FROM THE GOVERNING INSPECTION AUTHORITY.

3. DURING THE BIDDING PERIOD INSPECT THE SITE AND PREMISES OF THE PROPOSED WORK. REPORT IMMEDIATELY ANY SIGNIFICANT OBSERVED DISCREPANCIES AS RELATED TO THE PLANS OR THE REQUIRED WORK. ALL WORK SHALL COMPLY WITH INDIANA BUILDING CODE, INDIANA MECHANICAL CODE AND ALL OTHER APPLICABLE CODES, LAWS AND ORDINANCES.

4. THIS CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP, EQUIPMENT, AND MATERIAL ENTERING INTO THIS CONTRACT FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE. ANY WORK PROVEN TO BE DEFECTIVE DURING THIS PERIOD SHALL BE MADE GOOD BY THIS CONTRACTOR WITHOUT EXPENSE TO THE OWNER.

5. EQUIPMENT CONTROL PANELS CONTAINING POWER CONTROL COMPONENTS SHALL BE MARKED WITH THE MINIMUM SCCR RATING. THE RATING SHALL NOT BE LESS THAN THE AVAILABLE FAULT CURRENT. REFER TO THE ELECTRICAL DRAWINGS FOR THE CALCULATED AVAILABLE FAULT AT THE DISTRIBUTION PANEL, MCC OR PANELBOARD SERVING THE EQUIPMENT. INCLUDE CONFIRMATION OF BEING PROTECTED FROM THE FAULT CURRENT IN THE EQUIPMENT SHOP DRAWING SUBMITTAL.

6. WHERE TRADE NAMES, BRANDS OR MANUFACTURERS ARE LISTED, ANY ONE OF THE SEVERAL NAMED ARE CONSIDERED EQUALLY ACCEPTABLE. NO UNNAMED PRODUCT OR MATERIAL SHALL BE USED UNLESS APPROVED IN WRITING BY THE ENGINEER. SUBMIT ELECTRONIC SHOP DRAWINGS ON MAJOR ITEMS OF EQUIPMENT AND MATERIALS.

7. PLAN WORK AS TO PROVIDE REASONABLE CONTINUOUS SERVICE OF EXISTING SYSTEMS. SHUTDOWN OF SYSTEMS SHALL BE BID DURING NORMAL WORKING HOURS

8. WORKMANSHIP SHALL BE FIRST CLASS. THE OWNER, THE ARCHITECT, OR ENGINEER'S JUDGMENT SHALL PREVAIL IF THE QUALITY IS SUSPECT.

9. PROTECT MATERIALS AND EQUIPMENT AFTER DELIVERY TO THE JOB SITE. RESPECT OTHER TRADES AS RELATED TO PROTECTING THEIR WORK AND TO AVOID CONSTRUCTION INTERFERENCES. CALL ATTENTION TO PROBLEMS RELATING TO SPACE REQUIREMENTS SO EARLY RESOLUTION MAY BE OBTAINED. RESPECT OWNER'S PROPERTY AT ALL TIMES. TEMPORARILY REMOVE, STORE AND RE-INSTALL CEILINGS WHEN REQUIRED TO PREFORM WORK.

10. CUT AND PATCH TO INSTALL WORK OR PAY OTHERS TO PERFORM SUCH WORK. CONCRETE SHALL BE SAW CUT OR CORE DRILLED. WORKMANSHIP SHALL BE FIRST CLASS. THE ARCHITECT'S OR ENGINEER'S JUDGMENT SHALL PREVAIL IF THE QUALITY IS SUSPECT.

11. IN ALTERATION AND REMODELING WORK, PERFORM ALL REMOVAL AND RELOCATION WORK KINDRED TO THE HVAC WORK. LEAVE ALL EXISTING SYSTEMS CONTINUOUS AND FUNCTIONAL. REMOVE EXTRANEOUS PIPING AND EQUIPMENT. NO REMOVED MATERIAL SHALL BE REUSED UNLESS EXPRESSLY SHOWN.

   A. WHEN IT IS NECESSARY TO REROUTE A SECTION OF ACTIVE DUCTWORK OR PIPING THE REROUTED SECTION SHALL BE INSTALLED BEFORE REMOVING THE EXISTING IN ORDER TO MINIMIZE SYSTEM DOWN TIME. REROUTED SECTIONS SHALL BE INSULATED AS REQUIRED FOR NEW WORK. PATCH INSULATION ON EXISTING DUCTWORK AND PIPING WHICH HAS BEEN DAMAGED OR REMOVED IN THIS WORK.

12. REFINISH ANY SURFACE DISTURBED UNDER THIS WORK TO MATCH EXISTING, EXCEPT WHERE REFINISHING OF THAT SURFACE IS INCLUDED UNDER THE GENERAL CONTRACT.

13. EACH CONTRACTOR SHALL MAINTAIN A SEPARATE SET OF AS-BUILT PRINTS OF THE CONTRACT DOCUMENTS AND SHALL SHOW ANY SIGNIFICANT CHANGES OR VARIATIONS WHICH ARE MADE DURING CONSTRUCTION. UPON COMPLETION OF THE WORK, THESE DRAWINGS SHALL BE TURNED OVER TO THE ARCHITECT.

   A. ELECTRONIC COPIES OF SHOP DRAWINGS AND DESCRIPTIVE INFORMATION OF EQUIPMENT AND MATERIALS SHALL BE FURNISHED. SUBMIT TO THE ARCHITECT AND/OR ENGINEER FOR REVIEW AS STATED IN THE GENERAL CONDITIONS AND SUPPLEMENTARY CONDITIONS. THESE SHALL BE SUBMITTED AS SOON AS PRACTICABLE AND BEFORE EQUIPMENT IS INSTALLED AND BEFORE SPECIAL EQUIPMENT IS MANUFACTURED. SUBMITTAL INFORMATION SHALL CLEARLY IDENTIFY THE MANUFACTURER, SPECIFIC MODEL NUMBER, APPROVAL LABELS, PERFORMANCE DATA, ELECTRICAL CHARACTERISTICS, FEATURES, SPECIFIED OPTIONS AND ADDITIONAL INFORMATION SUFFICIENT TO EVIDENCE COMPLIANCE WITH THE CONTRACT DOCUMENTS. PRODUCT CATALOGS, BROCHURES, ETC. SUBMITTED WITHOUT PROJECT SPECIFIC ITEMS MARKED AS BEING SUBMITTED FOR REVIEW WILL BE REJECTED AND RETURNED WITHOUT REVIEW. SHOP DRAWINGS FOR EQUIPMENT, FIXTURES, DEVICES AND MATERIALS SHALL BE LABELED AND IDENTIFIED SAME AS ON THE CONTRACT DOCUMENTS. IF COMPLIANCE WITH THE ABOVE CRITERIA IS NOT PROVIDED SHOP DRAWINGS WILL BE SUBJECT TO REJECTION AND RETURNED WITHOUT REVIEW. SAMPLES SHALL BE SUBMITTED WHEN REQUESTED OR AS SPECIFIED HERE WITH-IN.

   B. ALL SHOP DRAWINGS SUBMITTED TO HEAPY SHALL BE DISTRIBUTED TO THE PROJECT MANAGER NANCY STINSON NSTINSON@HEAPY.COM) AND TEAM CONSTRUCTION ADMINISTRATION EMAIL CORPORATE-CA@HEAPY.COM).

   C. THE REVIEW OF SHOP DRAWINGS BY THE ARCHITECT OR ENGINEER SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS IN THE SHOP DRAWINGS. DEVIATIONS FROM SPECIFICATIONS AND DRAWING REQUIREMENTS SHALL BE CALLED TO THE ENGINEER'S ATTENTION IN A SEPARATE CLEARLY STATED NOTIFICATION AT THE TIME OF SUBMITTAL FOR THE ENGINEER'S REVIEW.

      1. FAILURE TO DISTRIBUTE CONSTRUCTION ADMINISTRATION ITEMS IN THIS MANNER MAY RESULT IN DELAYED RESPONSES.

      2. IT IS **HIGHLY RECOMMENDED** THAT A CONSTRUCTION ADMINISTRATION COMMUNICATION PLAN BE DEVELOPED BY THE PRIME CONTRACTOR AND SHARED WITH THE ARCHITECT, ENGINEER, AND OWNER TO ESTABLISH EXPECTATIONS FOR CONSTRUCTION ADMINISTRATION ITEM DISSEMINATION AND WHAT PLATFORM IS TO BE USED (PDFS WITH EMAIL, BIM, OTHER CM SOFTWARE, ETC.).

   D. AT A MINUMUM, SHOP DRAWINGS OF THE FOLLOWING HVAC EQUIPMENT AND MATERIALS SHALL BE SUBMITTED:

      1. PIPE HANGERS AND SADDLES.
      2. PIPE INSULATION.
      3. DUCTWORK INSULATION.
      4. DUCT ACCESSORIES
      5. SPLIT AC UNITS / CONDENSING UNITS.
      6. AIR OUTLETS AND INLETS.
      7. EXHAUST FANS.

14. TEMPORARY HEATING AND COOLING

   A. THE TEMPORARY HEATING AND COOLING FOR CONSTRUCTION IS PROVIDED BY THE CONTRACTOR.

   B. FUEL AND ELECTRIC COSTS ATTENDANT TO TEMPORARY HEATING AND COOLING ARE NOT INCLUDED IN DIVISION 23.

   C. THE USE OF THE PERMANENT HVAC SYSTEMS FOR TEMPORARY HEATING AND COOLING DURING THE LATTER STAGES OF CONSTRUCTION SHALL BE ALLOWED. EXPEDITE COMPLETION OF SYSTEM AS PRACTICABLE TO THIS END. MAINTAIN THE SYSTEM DURING THIS PERIOD, PROVIDE AND MAINTAIN TEMPORARY AIR FILTERS (SAME AS SPECIFIED PERMANENT FILTERS) TO PROTECT COILS AND DUCTS. REPLACE TEMPORARY FILTERS WITH THE CLEAN SPECIFIED FILTERS WHEN THE SYSTEMS ARE TURNED OVER TO THE OWNER. AIR FILTERS SPECIFIED FOR THE SYSTEMS AND UNITS, INCLUDING SPECIFIED SPARE FILTERS, ARE NOT TO BE USED FOR TEMPORARY SERVICE.

   D. WARRANTY PERIODS ON EQUIPMENT, MATERIALS AND SYSTEM SHALL COMMENCE UPON OWNER ACCEPTANCE OF THE BUILDING OR SYSTEMS. TEMPORARY HEATING OR COOLING USE SHALL NOT JEOPARDIZE OR ALTER THE WARRANTY REQUIREMENTS.

15. MARK ALL DUCT SYSTEMS AND PIPING SYSTEMS AND TAG ALL VALVES. ANY EXISTING DUCTWORK AND PIPING ENCOUNTERED SHALL ALSO BE MARKED. VALVE TAGS SHALL BE NON-FERROUS METAL, 1" DIAMETER AND ATTACHED BY COPPER LOOP HOOKS. PIPE MARKERS SHALL BE 1" HIGH LETTERS WITH COLOR BAND AND ARROW. MARKERS SHALL BE AT EACH VALVE AND AT LEAST ONE IN EACH ROOM, BUT NO MORE THAN 20 FT. INTERVALS. COLOR BAND SHALL MATCH EXISTING OR AS DICTATED BY OWNER. TURN OVER VALVE TAG SCHEDULE TO ARCHITECT.

16. EQUIPMENT CONTROL PANELS CONTAINING POWER CONTROL COMPONENTS SHALL BE MARKED WITH THE MINIMUM SCCR RATING. THE RATING SHALL NOT BE LESS THAN THE AVAILABLE FAULT CURRENT. REFER TO THE ELECTRICAL DRAWINGS FOR THE CALCULATED AVAILABLE FAULT AT THE DISTRIBUTION PANEL, MCC OR PANELBOARD SERVING THE EQUIPMENT. INCLUDE CONFIRMATION OF BEING PROTECTED FROM THE FAULT CURRENT IN THE EQUIPMENT SHOP DRAWING SUBMITTAL.

17. NOTE: EQUIPMENT WITH ELECTRONICALLY COMMUTATED MOTORS (ECM'S) ARE SOMETIMES FACTORY PROGRAMMED TO LIMIT CURRENT DRAW TO THE MOTOR, TO LIMIT THE AVAILABLE BRAKE HORSEPOWER TO BETTER MATCH SPECIFIED PERFORMANCE AND REDUCE REQUIRED POWER CIRCUITING. THIS REDUCED BRAKE HORSEPOWER IS LIKELY BELOW THE MOTOR'S NAMEPLATE RATING. THE ELECTRICAL DESIGN DOCUMENTS MAY BE SIZED BASED ON THE ECM'S NAMEPLATE MOTOR HORSEPOWER. THE EQUIPMENT SUPPLIER SHALL NOTIFY THE DIVISION 23 AND 26 CONTRACTORS AND THE ENGINEER IF THE MAXIMUM OVERCURRENT PROTECTION ON THE DESIGN DOCUMENTS DIFFERS FROM THEIR SELECTED EQUIPMENT'S NAMEPLATE DATA. ANY REQUIRED REVISIONS TO THE ELECTRICAL CIRCUITING, INCLUDING MAXIMUM OVER-CURRENT PROTECTION DEVICES, SHALL BE DOCUMENTED ON THE SHOP DRAWING SUBMITTAL. THE REQUIRED REVISIONS MUST BE FORWARDED TO THE DIVISION 26 CONTRACTOR WITH ENOUGH TIME TO ADJUST THE OVER-CURRENT PROTECTION AND THE ELECTRIC CIRCUIT INSTALLATION. HOWEVER, ANY ADDITIONAL COST ASSOCIATED WITH INCREASED ELECTRICAL FEEDER/BREAKER SIZES OR LACK OF COORDINATION LISTED ABOVE SHALL BE THE DIVISION 23 CONTRACTOR'S RESPONSIBILITY.

18. REFER TO THE ELECTRICAL DRAWINGS AND VERIFY ADEQUACY OF FEEDER SIZE, SETS OF CONDUCTORS AND SIZE, DISCONNECTING MEANS AND OTHER ELECTRICAL REQUIREMENTS. COMPARE THESE TO THE REQUIREMENTS OF THE EQUIPMENT TO BE FURNISHED AND REPORT DEFICIENCIES AND / OR DISCREPANCIES TO THE ENGINEER IN THE BID PERIOD FOR RESOLUTION BY ADDENDUM. BEAR ALL COSTS FOR ELECTRICAL CHANGES WHERE SUCH ISSUES ARE NOT PROPERLY RESOLVED.

19. GENERAL PURPOSE MOTORS SHALL BE INDUCTION TYPE 1750 RPM NEMA DESIGN "B" WITH COPPER WINDINGS, CLASS B OR F INSULATION, AND MOTOR ENCLOSURE TO SUIT THE APPLICATION. SERVICE FACTOR SHALL BE 1.15 MINIMUM.

20. REFER TO THE ELECTRICAL DRAWINGS AND VERIFY ADEQUACY OF FEEDER SIZE, SETS OF CONDUCTORS AND SIZE, DISCONNECTING MEANS AND OTHER ELECTRICAL REQUIREMENTS. COMPARE THESE TO THE REQUIREMENTS OF THE EQUIPMENT TO BE FURNISHED AND REPORT DEFICIENCIES AND / OR DISCREPANCIES TO THE ENGINEER IN THE BID PERIOD FOR RESOLUTION BY ADDENDUM. BEAR ALL COSTS FOR ELECTRICAL CHANGES WHERE SUCH ISSUES ARE NOT PROPERLY RESOLVED.

21. SUPPORT EQUIPMENT, DUCTWORK AND PIPING FROM STRUCTURAL STEEL MEMBERS OR CONCRETE ONLY, NOT FROM METAL DECKS. PIPE HANGERS SHALL BE CLEVIS TYPE. USE OF POWDER ACTUATED DRIVEN FASTENERS ARE NOT PERMITTED FOR AFTER SET CONCRETE INSERTS.

22. PAINT ALL UNPAINTED OR RUSTY SURFACES ON SUPPORTS, HANGERS, PIPING AND EQUIPMENT WITH ONE (1) COAT BLACK RUSTOLEUM WHERE THE ITEM WILL BE EXPOSED TO VIEW IN ITS FINAL STATE.

23. TOUCH-UP OR REFINISH EQUIPMENT WHERE FACTORY FINISH HAS DETERIORATED DUE TO EXPOSURE..

24. PAINT DULL BLACK ALL VISIBLE METAL BEHIND GRILLES AND REGISTERS.

25. INSTALL SLEEVES IN ALL FLOORS, WALLS AND CEILINGS WHERE PIPES PASS THRU. SLEEVES SHALL BE SIZED TO PROVIDE A MINIMUM CLEARANCE OF 1/4" ON ALL SIDES FROM PIPE INSULATION AND 1/2" FROM PIPES NOT REQUIRING INSULATION. PIPE INSULATION SHALL EXTEND CONTINUOUS THRU SLEEVES.

    SLEEVES MAY BE RIGID STEEL OR SHEET METAL. EXTEND SLEEVES AT LEAST 1/2" ABOVE FLOOR IN UPPER LEVEL EQUIPMENT ROOMS.

26. ROOF CURB FOR FANS SHALL BE 12" HIGH WELDED STEEL WITH 2" BEARING EDGE, INTERIOR INSULATED FOR SOUND AND THERMAL PURPOSES. BUILT-IN 45 DEGREE CAN STRIP AT ROOF LINE.

    COOLING CONDENSATE PIPING SHALL BE SOLDERED COPPER WITH SWV FITTING, AND INSULATED.

    REFRIGERANT PIPING SHALL BE TYPE "ACR" HARD SEAMLESS COPPER THOROUGHLY CLEANED AND DEHYDRATED FOR USE WITH THE REFRIGERANT USED. TUBING WHICH HAS NOT BEEN SO PREPARED AND SEALED OR WHICH HAS BEEN OPEN TO THE ATMOSPHERE FOR ANY LENGTH OF TIME SHALL NOT BE USED. ALL CHANGES IN DIRECTION OF PIPING SHALL BE MADE WITH WROUGHT COPPER FITTINGS AND SILVER BRAZED JOINTS. A FILTER-DRIER AND MOISTURE INDICATOR – SIGHT GLASS SHALL BE PROVIDED IN THE LIQUID LINE NEAR THE CONDENSING UNIT OR EVAPORATOR COIL. A THERMAL EXPANSION VALVE SHALL BE PROVIDED IN THE LIQUID LINE AT EACH EVAPORATOR COIL IF AN EXPANSION VALVE OR DEVICE IS NOT INTEGRAL WITH THE UNIT. THE EXPANSION VALVE SHALL BE DIAPHRAGM TYPE WITH EXTERNAL EQUALIZER AND EXTERNAL SUPERHEAT ADJUSTMENT. A LIQUID LINE ELECTRIC SOLENOID VALVE OR A "HARD SHUTOFF" THERMAL EXPANSION VALVE SHALL BE PROVIDED WHERE THE LIQUID LINE EXCEEDS 50 FT. IN LENGTH. PIPE SIZING AND PIPING ARRANGEMENT SHOWN ON THE DRAWINGS SHALL BE REVIEWED BY THE EQUIPMENT SUPPLIER AND HVAC CONTRACTOR TO VERIFY COMPATIBILITY WITH THE EQUIPMENT PROVIDED, AND REVISED AS NEEDED. ALL REFRIGERANT PIPING SHALL BE LEAK TESTED AT 300 PSI PRODUCED WITH DRY NITROGEN. THIS PRESSURE SHALL BE MAINTAINED FOR AT LEAST TWO HOURS AND ALL JOINTS TESTED WITH A SOAP SOLUTION. WHEN THE REFRIGERANT SYSTEM HAS BEEN PROVEN TIGHT, THE SYSTEM SHALL BE DOUBLE-EVACUATED AND CHARGED WITH THE REQUIRED AMOUNT OF REFRIGERANT.

27. SHUT OFF VALVES SHALL BE BALL TYPE, TWO PIECES, BRONZE BODY, SCREWED ENDS, CHROME PLATED FULL PORT BRONZE BALL AND STEM, TFE SEAT AND SEAL AND EXTENDED SHAFT LEVER TYPE HANDLE, NIBCO MODEL #T-580-70 OR EQUAL.

28. BALANCING SHUTOFF VALVES SHALL BE VENTURI TYPE WITH BALL OR GLOBE VALVE FOR SIZES 2" AND SMALLER, GLOBE OR BUTTERFLY VALVE FOR SIZES 2.5" AND LARGER, POSITIVE SHUTOFF DESIGN, WITH ADJUSTMENT-SHUTOFF HANDLE, MEMORY STOP, INTEGRAL VENTURI FLOW MEASUREMENT SECTION AND PRESSURE TEMPERATURE GAUGE PORTS WITH BRASS CAPS AND SECURITY BANDS.

29. PIPE INSULATION FOR REFRIGERANT PIPING AND COOLING CONDENSATE SYSTEMS SHALL BE INSULATED WITH ARMACELL/ARMAFLEX CLOSED CELL ELASTOMERIC OR CELLULAR GLASS INSULATION. INSULATION SHALL BE FORMALDEHYDE FREE, LOW VOC, DUST FREE, RESISTANT TO MOLD AND MILDEW AND 25/50 RATED PER ASTM E84. THERMAL CONDUCTIVITY SHALL BE MAXIMUM 0.27 AT 75 DEG. F MEAN RATING TEMPERATURE.

    PIPE INSULATION FOR ALL OTHER PIPING SHALL BE ARMACELL FACTORY MOLDED ELASTOMERIC TYPE OR FACTORY MOLDED TUBULAR FIBERGLASS WITH ALL SERVICE JACKET AND VAPOR BARRIER AS MANUFACTURED BY KNAUF. CERTAINTEED, JOHNS-MANVILLE OR OWENS CORNING, ALL RATED FOR 25/50 RATING AS DETERMINED BY NFPA 255. INSULATION SHALL BE OF THICKNESS IN COMPLIANCE WITH ASHRAE 90.1 LATEST PUBLISHED EDITION, GREEN GUARD CERTIFIED.

30. REFER TO DUCT CONSTRUCTION & SEALING SCHEDULE ON THE DRAWINGS.

31. PATCH ALL DUCTWORK THAT IS ALTERED DURING CONSTRUCTION AND SEAL TO MATCH SEAL CLASS OF DUCT SYSTEM AS LISTED ON THE DRAWINGS.

    DUCTWORK SHALL BE MINIMUM 24 GAUGE, G90 COATING DESIGNATION, GALVANIZED SHEET METAL, RECTANGULAR, FLAT OVAL AND ROUND AS SHOWN ON THE DRAWINGS.

    RECTANGULAR DUCTWORK: ELBOWS SHALL HAVE AN INSIDE RADIUS EQUAL TO THE DUCT WIDTH. WHERE 90° ELBOWS ARE SHOWN TO BE SQUARE ON THE DRAWINGS, THEY SHALL BE SQUARE (MITERED) WITH TURNING VANES, SINGLE VANE TYPE IN LENGTHS 32" AND LESS, DOUBLE WALL IN LONGER VANES, INSTALLED AND SUPPORTED PER SMACNA. ELBOWS LESS THAN 90° SHALL BE RADIUSED. NON-RADIUSED ELBOWS LESS THAN 90°, WITH OR WITHOUT TURNING VANES, ARE NOT PERMITTED.

    OFFSETS AND TRANSITIONS SHALL CONFORM TO SMACNA. TRANSITION ANGLES SHALL BE LIMITED TO 30 DEGREES ON CONVERGING TRANSITIONS AND 20 DEGREES ON DIVERGING TRANSITIONS.

    BRANCH TAKE-OFFS, WHERE NOT DETAILED OTHERWISE, SHALL BE WITH A STATIC BOOT (45° CLINCH COLLAR) PER SMACNA. STRAIGHT TAP TAKE-OFFS ARE NOT PERMITTED.

    DIVIDED FLOW BRANCHES SHALL CONFORM TO SMACNA. BULL HEAD TEES WITHOUT VANES ARE NOT PERMITTED.

    MANUFACTURED DUCT CONNECTORS EQUAL TO DUCTMATE INDUSTRIES "25", "35" AND "45" MAY BE USED ON RECTANGULAR DUCTWORK EXCEPT WHERE WELDING OR BRAZING IS SPECIFICALLY REQUIRED. ADHERE STRICTLY TO MANUFACTURER'S INSTRUCTIONS. SMACNA DUCT GAUGE THICKNESS SHALL BE MAINTAINED WHEN USING THIS JOINING METHOD OR ADDITIONAL CROSS BRACING AND STIFFENERS SHALL BE UTILIZED TO PREVENT DUCT "OIL CANNING". CONNECTOR COMPONENTS SHALL BE CONSTRUCTED FROM SAME MATERIAL AS THE DUCT SECTION BEING CONNECTED.

    LOW PRESSURE, ROUND, SINGLE WALL. FOLLOW SMACNA STANDARDS.

    ROUND AND FLAT OVAL DUCT: SHALL BE FACTORY OR SHOP FORMED SPIRAL LOCK SEAM, UNITED MCGILL AIR PRODUCTS "UNI SEAL" OR "UNI RIB" OR EQUAL BY SEMCO, TANGENT AIR OR APPROVED EQUAL.

    IN LIEU OF THE ABOVE, ROUND DUCT, FITTINGS AND CONNECTORS MAY BE LINDAB "SAFE" (SINGLE WALL) OR "ISOL" (DOUBLE WALL) DUCT SYSTEMS WITH FITTING ENDS FACTORY EQUIPPED WITH DOUBLE LIPPED "U" PROFILE EPDM GASKET. SPIRAL DUCTS SHALL CONFORM TO LINDAB STANDARDS AND SHALL BE CALIBRATED TO PUBLISHED DIMENSIONAL TOLERANCES OF LINDAB. INSULATION R-VALVES AND LINER TYPES SHALL BE AS SPECIFIED ABOVE.

    ELBOWS AND FITTINGS FOR SPIRAL LOCK SEAM ROUND SHALL BE FACTORY SOLID WELDED, EQUAL TO UNITED MCGILL AIR PRODUCTS "UNI SEAL" AND "ACOUSTI-K27" WITH BEADED SLEEVE TRANSVERSE JOINT CONNECTORS. ELBOWS SHALL BE LONG RADIUS TYPE AND, WHERE SHOWN, MITERED WITH TURNING VANES. BRANCH TAKE OFFS SHALL BE STREAMLINED CONICAL TYPE WITH T OR Y BRANCHES TO MINIMIZE PRESSURE LOSSES. OFFSETS AND TRANSITIONS SHALL CONFORM TO SMACNA. TRANSITION ANGLES SHALL BE LIMITED TO 30 DEGREES ON CONVERGING TRANSITIONS AND 20 DEGREES ON DIVERGING TRANSITIONS. DIVIDED FLOW BRANCHES SHALL CONFORM TO SMACNA. BULL HEAD TEES WITHOUT VANES ARE NOT PERMITTED.

    CONSTRUCTION, RE-ENFORCING, SUPPORTS, ETC. SHALL EITHER CONFORM TO SMACNA OR TO THE DUCT MANUFACTURER'S STANDARDS, WHICHEVER IS MORE STRINGENT.

    ROUND DUCT OF 1" AND LESS (POSITIVE AND NEGATIVE) STATIC PRESSURE CONSTRUCTION CLASS MAY BE LONGITUDINAL SEAM. ELBOWS FOR LONGITUDINAL SEAM ROUND DUCTWORK SHALL BE FACTORY OR SHOP FORMED SEGMENTED STANDING SEAM OR PLEATED. OTHER FITTINGS SHALL BE COMPARABLE TO THE ELBOWS.

    JOINTS SHALL BE HELD IN PLACE BY THE USE OF SCREWS OR SPOT WELDING. SOCKET TYPE, OVERLAPPING JOINTS SHALL BE USED. DUCT SEALER SHALL BEAR UL LABEL EQUAL TO CHEM-CON "HARDCAST" MINERAL FIBER TAPE.

    AIR DEVICE DUCT CONNECTIONS FOR ROUND DUCT BRANCH CONNECTIONS TO RECTANGULAR SHEET METAL DUCTS SHALL BE 24 GAUGE SHEET METAL, EQUAL TO FLEXMASTER SERIES FL, STRAIGHT SIDE, WITH AND WITHOUT MANUAL DAMPER, AS DESCRIBED ON THE DRAWINGS. AIR TERMINAL UNIT DUCT CONNECTIONS FOR ROUND DUCT BRANCH CONNECTIONS TO RECTANGULAR SHEET METAL DUCTS SHALL BE 24 GAUGE SHEET METAL CONICAL TYPE EQUAL TO FLEXMASTER SERIES CB. CONNECTORS INSTALLED ON INTERIOR LINED RECTANGULAR DUCT SHALL HAVE AN INTEGRAL INSULATION GUARD SLEEVE. RECTANGULAR TAP-TO-ROUND BRANCH CONNECTION WITH STATIC BOOT CONFIGURATION SHALL BE EQUAL TO FLEXMASTER TYPE STO. BUCKLEY "AIR-TITE" FITTINGS OR SIMILAR BY "SNAP RITE", EQUAL TO THE SPECIFIED FLEXMASTER FITTINGS, WITH NEOPRENE GASKET AND ADHESIVE FACING, ADDITIONALLY SECURED WITH MINIMUM FOUR SHEETMETAL SCREWS, MAY BE USED FOR AIR DEVICE DUCT TAPS TO RECTANGULAR SHEET METAL DUCT WHICH IS NOT INTERNALLY LINED.

    FLEXIBLE AIR DUCT CONNECTORS FOR GALVANIZED STEEL DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED STEEL SPIRAL WIRE MECHANICALLY LOCKED TO AN AIRTIGHT LAMINATED ALUMINUM FOIL, FIBERGLASS AND ALUMINIZED POLYESTER DUCT FABRIC. DUCT SHALL BE RATED AT A MINIMUM OF 10 INCHES W.C. POSITIVE PRESSURE AND 4 INCHES W.C. NEGATIVE PRESSURE. UNLESS OTHERWISE DETAILED ON THE DRAWINGS, LENGTH SHALL BE LIMITED TO 4 FEET FOR AIR TERMINAL UNITS AND 5 FEET FOR AIR DEVICES. INSULATED FLEXIBLE DUCT SHALL HAVE 1.5 INCHES THICK R-6.0 FIBROUS GLASS INSULATION AND .05 PERM REINFORCED METALIZED VAPOR BARRIER OUTER JACKET, EQUAL TO FLEXMASTER 9M. INSULATED DUCT ASSEMBLY SHALL CONFORM TO BE UL 181 AND LISTED AS CLASS I FLEXIBLE AIR CONNECTOR. NON-INSULATED FLEXIBLE DUCT SHALL BE EQUALT TO FLEXMASTER SNI-C AND SHALL CONFORM TO UL 181 AND BE LISTED AS CLASS I FLEXIBLE AIR CONNECTOR.

    DUCT AND PLENUM CONNECTIONS TO AIR SUPPLY, RETURN OR EXHAUST UNITS AND FANS SHALL BE MADE WITH A 4 INCHES WIDE INTERVENING SECTION OF FLEXIBLE INCOMBUSTIBLE FABRIC EQUAL TO VENTFABRICS "VENTGLAS", TO PREVENT THE TRANSMISSION OF FAN NOISE AND VIBRATION TO THE DUCTWORK. FASTENING SHALL CONSIST OF ANGLE CLAMPS AND BOLTS MADE UP TO BE AIR TIGHT SIMILAR TO VENTFABRICS "METALEDGE". DUCT CONNECTIONS TO TYPE I GREASE DUCT FANS SHALL BE FLANGED AND GASKETED WITH MATERIAL RATED FOR NO LESS THAN 1500 DEGF.

    SOLVENT BASED SEALERS ARE PROHIBITED, AS ARE DUCT SEALANTS CONTAINING ASBESTOS. DUCT SEALANT MATERIALS SHALL BE ONE OR MORE OF THE FOLLOWING (COMPATIBLE WITH THE APPLICATION):

    WATER BASE DUCT SEALERS AND MASTICS EQUAL TO UNITED MCGILL, WHEN THE INSTALLATION ENVIRONMENT IS ABOVE 40°F.

    ACETONE BASED DUCT SEALERS AND MASTICS, EQUAL TO PRECISION ADHESIVES, WHEN THE INSTALLATION ENVIRONMENT IS BETWEEN 0°F AND 40°F, ZERO REPORTABLE V.O.C.'S.

    MINERAL IMPREGNATED FIBER TAPE WITH LIQUID SEALANT DUCT JOINT SEALER EQUAL TO THAT MANUFACTURED BY HARDCAST, INC., TWO PART II SEALING SYSTEM, MAXIMUM V.O.C. OF 135 G/L.

    THE DUCT SYSTEM SHALL BE FREE OF CONSTRUCTION DEBRIS AND NEW DUCTWORK SHALL COMPLY WITH LEVEL "B", THE INTERMEDIATE LEVEL OF THE LATEST EDITION OF THE SMACNA DUCT CLEANLINESS FOR NEW CONSTRUCTION GUIDELINES.

    PROVIDE A LEAK TEST ON ALL DUCTWORK LOCATED IN CHASES AND SHAFTS, ON ALL OUTDOOR DUCTWORK, ON 25 PERCENT OF DUCTWORK CLASSIFIED 3 INCHES OF STATIC PRESSURE AND HIGHER BASED ON THE DUCT CONSTRUCTION AND SEALING SCHEDULE SHOWN ON THE DRAWINGS. LEAKAGE TESTING PROCEDURES SHALL FOLLOW THE OUTLINES AND CLASSIFICATIONS IN THE SMACNA HVAC DUCT LEAKAGE TEST MANUAL. WHERE CLASSIFICATIONS SPECIFIED EXCEED SMACNA STANDARDS THE SPECIFIED CLASSIFICATION SHALL BE CONSIDERED THE MINIMUM STANDARD. NEGATIVE PRESSURE DUCTWORK MAY BE TESTED WITH EQUIVALENT POSITIVE PRESSURE. THE LEAKAGE AMOUNT SHALL NOT EXCEED THE ALLOTTED AMOUNT FOR THE PRESSURE CLASS OR THE ALLOTTED AMOUNT FOR THAT PORTION OF THE SYSTEM, WHICHEVER IS APPLICABLE.

32. AIR DISTRIBUTION DEVICES ARE SPECIFIED ON THE DRAWINGS. MANUFACTURER LISTED IS INTENDED AS A STANDARD TO SUPPLEMENT THE DEVICE DESCRIPTION. DEVICES EQUAL TO THOSE CATALOG NUMBERS, AS MANUFACTURED BY TITUS, PRICE OR KRUEGER ARE ACCEPTABLE. SUPPLY AIR DEVICES IN CEILINGS SHALL HAVE THEIR BACKSIDES EXTERNALLY INSULATED FOR CONDENSATION CONTROL, UNLESS ALREADY INTERNALLY INSULATED. EXTERNAL INSULATION SHALL BE FIELD INSTALLED, SAME AS THAT SPECIFIED FOR SUPPLY AIR DUCTWORK, OR FACTORY INSTALLED, MINIMUM R-4.2 MINERAL FIBER WITH FOIL JACKET.

33. REFER TO SCHEDULE ON DRAWINGS FOR REQUIREMENTS REGARDING FINISHES, MOUNTING STYLE, AND ACCESSORIES THAT MAY BE REQUIRED.

34. BALANCING DAMPERS, IN ADDITION TO THOSE INCORPORATED IN AIR DISTRIBUTION DEVICES, SHALL BE SINGLE CROSS-BLADE UP TO 12" BLADE WIDTH AND MULTI-BLADE IN LARGER SIZES. DAMPERS MOUNTED IN DUCTS SHALL BE CONTROLLED BY A LOCKING QUADRANT POSITIONER WITH HANDLE. FOR DUCTS WITH EXTERIOR INSULATION, PROVIDE SUITABLE EXTENSIONS FOR POSITIONERS EQUAL TO VENTLOCK 637. MULTI-BLADE DAMPERS SHALL BE OPPOSED BLADE TYPE WITH ADEQUATE LOCKING MEANS FOR STABLE POSITIONING. FURNISH ACCESS PANELS WHERE REQUIRED FOR ACCESS TO DAMPERS.

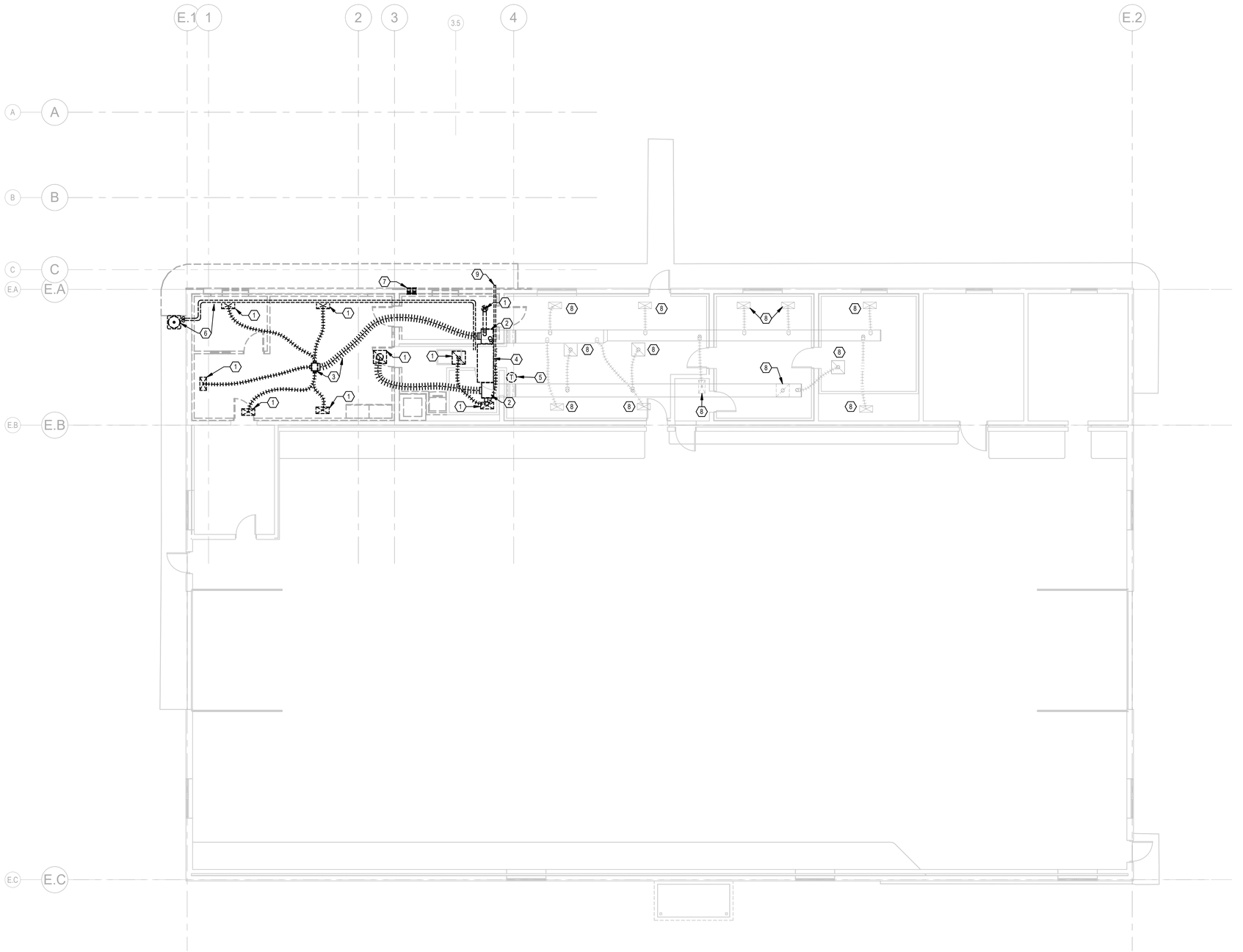
35. LOCATE DAMPERS AND ACCESS DOORS TO BE ACCESSIBLE. DEMONSTRATE TO THE OWNER THE ACCESSIBILITY TO ALL FIRE DAMPER LINKS.

36. PREPARE SHEET METAL DRAWINGS FOR REVIEW, COORDINATE DUCT LAYOUT CAREFULLY WITH OTHER TRADES TO AVOID CONFLICT WITH STRUCTURAL ELEMENTS, LIGHTING AND PLUMBING-HEATING PIPING. HAVING DUCTWORK FABRICATED AND DELIVERED IN ADVANCE SHALL NOT BE JUSTIFICATION FOR INTERFERENCE WITH OTHER TRADES.

37. DUCT INSULATION SHALL BE MANUFACTURED BY MANVILLE, OWENS-CORNING KNAUF, OR CERTAINTEED, INSTALLED BY TRAINED INSTALLERS, IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. EACH COMPOSITE INSULATION ASSEMBLY SHALL MEET NFPA 255 REQUIREMENTS, NOT EXCEEDING A FLAME SPREAD RATING OF 25, OR A SMOKE

    DEVELOPMENT OF 50. CONFORM TO CODE REQUIREMENTS REGARDING LABELING OF INSULATION AT REGULAR INTERVALS, STATING MANUFACTURER, FIRE AND SMOKE RATINGS AND THICKNESS.

    ALL SUPPLY



1 **MECHANICAL FIRST LEVEL - DEMOLITION**
SCALE: 1/8" = 1'-0"

PLAN NOTES - DEMOLITION

1. REMOVE AIR DEVICE AND ASSOCIATED DUCTWORK.
2. REMOVE BOTH SUPPLY AND RETURN PLENUM DUCTWORK.
3. REMOVE EXISTING PLENUM BOX AND ASSOCIATED DUCT BACK TO UNIT.
4. REMOVE EQUIPMENT AND ASSOCIATED DUCTWORK, PIPING, INSULATION, WIRING AND SUPPORTS ETC.
5. REMOVE THERMOSTAT AND ASSOCIATED CONTROL WIRING.
6. REMOVE CONDENSING UNIT AND ASSOCIATED REFRIGERANT PIPING, CONTROLS, ETC.
7. REMOVE EXHAUST FAN AND ASSOCATED DUCTWORK AND WIRING.
8. EXISTING DIFFUSER/GRILLE TO REMAIN. REFER TO SHEET M101 FOR REBALANCING AS NEEDED.
9. REMOVE AIR INTAKE AND VENT PIPING FOR FURNACE. PATCH WALL TO MATCH IF NOT PART OF DEMOLITION.

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY
P: 317.571.4795 www.heapy.com

PROJECT NO. 2025-07211

NOBLE COUNTY HIGHWAY DEPARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

EHREN E. LOHRMANN
REGISTERED
No. PE10911293
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
03.27.2026
PROJECT PHASE:
BID DOCUMENTS

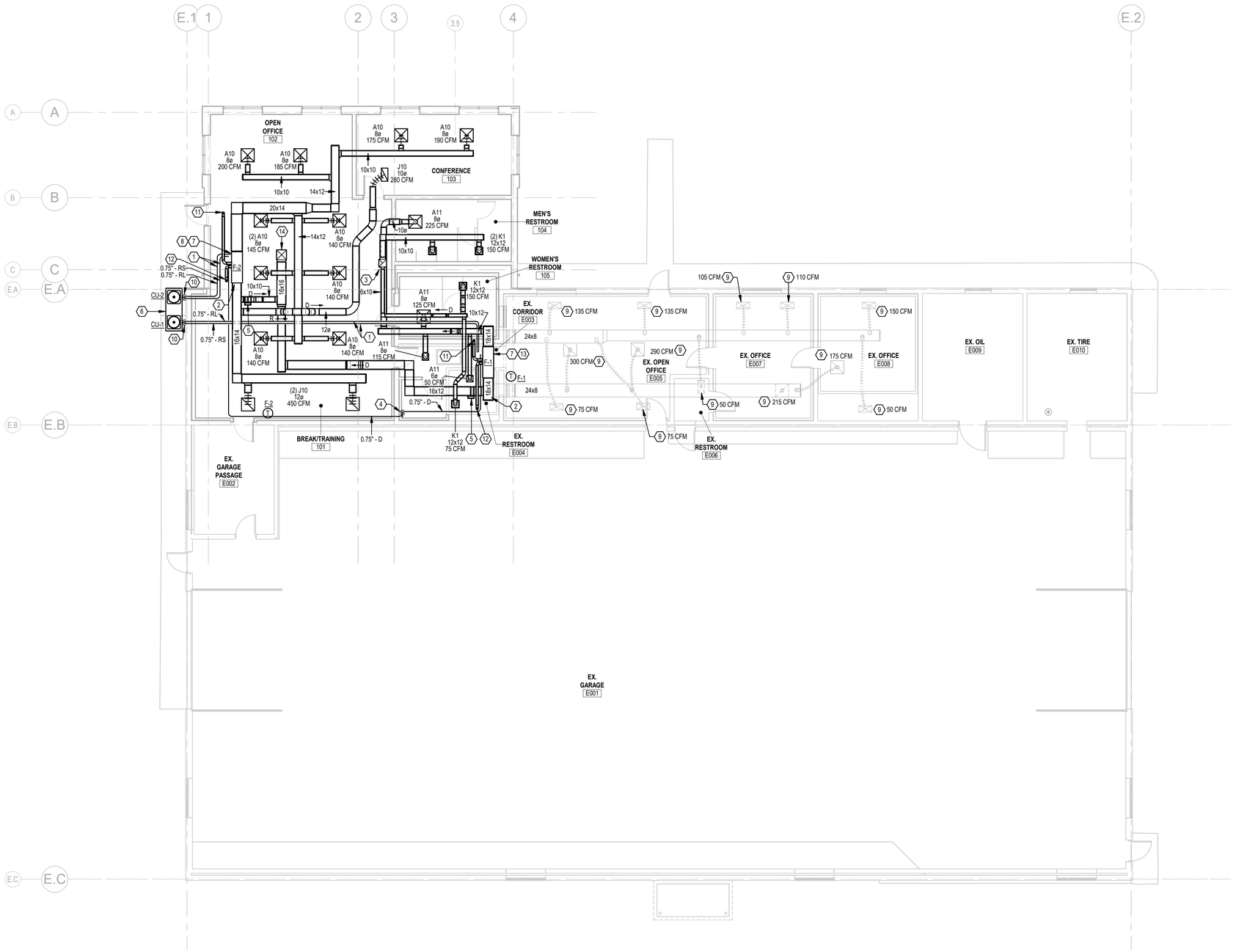
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2025.02329

MECHANICAL FIRST FLOOR - DEMOLITION

MD101

3/26/2026 9:22:23 AM



1 **MECHANICAL FIRST LEVEL - NEW WORK**
SCALE: 1/8" = 1'-0"

PLAN NOTES

1. REFRIGERANT LINES OUT TO CONDENSING UNITS. SIZE PER MANUFACTURERS RECOMMENDATIONS.
2. PROVIDE RETURN AIR FILTER BOX TO FIT 2" MERV 13 AIR FILTER. CONTRACTOR SHALL ENSURE FILTER BOX IS SEALED AND INSULATED PER RETURN AIR DUCTWORK SPECIFICATIONS. REFER TO DUCT CONSTRUCTION SCHEDULE.
3. ROUTE EXHAUST DUCTWORK UP TO EXHAUST FAN ON ROOF.
4. ROUTE CONDENSATE FROM FURNACE TO OVER MOP SINK. TERMINATE 2 INCH ABOVE RIM.
5. PROVIDE 2-POSITION MOTORIZED DAMPER TO OUTSIDE AIR DUCT. DAMPER SHALL OPEN WHEN ASSOCIATED AC UNIT OPERATES. CONNECT AND COORDINATE WITH E.C. REFER TO SCHEDULE FOR OA REQUIREMENTS.
6. PROVIDE 4" CONCRETE PAD FOR CONDENSING UNIT.
7. TERMINATE CONCENTRIC FLUE/VENT AT ROOF PER MANUFACTURER RECOMMENDATIONS.
8. COORDINATE WITH STRUCTURAL THE HANGING OF FURNACE UNIT.
9. REBALANCE DIFFUSER TO CFM LISTED
10. PROVIDE PROTECTIVE JACKETING OVER INSULATION FOR EXTERIOR PIPING.
11. 4" FLUE UP THROUGH ROOF. PROVIDE THIMBLE, ROOF PENETRATION FLASHING AND ROOF DECK TO MEET CURRENT INTERNATIONAL FLUE BASED ON MANUFACTURERS RECOMMENDATION.
12. 4" COMBUSTION AIR UP THROUGH ROOF. MATERIALS TO MEET SPECIFICATIONS. PROVIDE THIMBLE, ROOF PENETRATION FLASHING AND ROOF CAPS. TERMINATE ABOVE ROOF DECK TO MEET CURRENT INTERNATIONAL FUEL DUCT BASED ON MANUFACTURERS RECOMMENDATIONS.
13. PROVIDE ISOLATION PAD FOR F-1 FOR PREVENTING VIBRATION AND NOISE.
14. ROUTE OUTSIDE AIR FROM GRV-1 ON ROOF.

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9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY
P: 317.571.4795 www.heapy.com

PROJECT NO. 2025-07211

NOBLE COUNTY HIGHWAY DEPARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

EMREN E. LOHRMANN
REGISTERED
No. PE10911293
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

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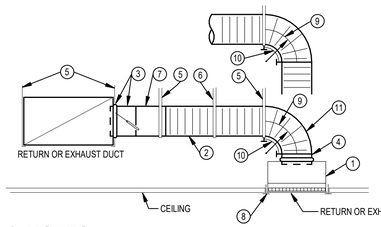
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Project Number 2025.02329

MECHANICAL FIRST FLOOR - NEW WORK

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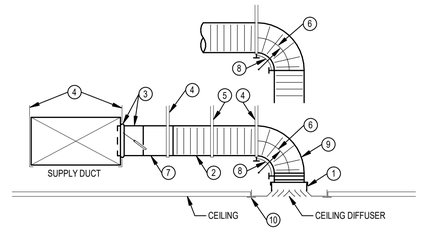
ROUND SHEETMETAL BRANCH DUCT	
BRANCH CFM	RD. DUCT SIZE
0 TO 120 CFM	6"D
121 TO 200 CFM	8"D
201 TO 400 CFM	10"D
401 TO 700 CFM	12"D
701 TO 1000 CFM	14"D

NOTES

1. SHEET METAL PLENUM, FULL SIZE OF GRILLE NECK, MINIMUM 6" TALL WITH SAME INTERNAL OR EXTERNAL INSULATION AS RETURN OR EXHAUST DUCT. CONNECT TO GRILLE. SEAL PLENUM AND CONNECTION TO GRILLE, SEAL CLASS A.
2. FLEXIBLE DUCT, SAME DIAMETER AS BRANCH DUCT (7), 5 FT. MAXIMUM TOTAL LENGTH PER AIR DEVICE. STRETCH FLEXIBLE DUCT TO AT LEAST 90% OF FULLY EXTENDED LENGTH.
3. SPIN-IN BRANCH TAP FITTING, STRAIGHT SIDE WITH MANUAL DAMPER. DAMPER SHAFT IN HORIZONTAL. INTEGRAL INSULATION GUARD SLEEVE REQUIRED FOR TAP FITTING TO MAIN DUCT WITH INTERNAL INSULATION. EXTENDED DAMPER SHAFT AND HANDLE WITH STAND-OFF REQUIRED FOR EXTERNALLY INSULATED DUCTWORK.
4. SPIN-IN TAP FITTING SIMILAR TO (3) EXCEPT NO DAMPER.
5. DUCT STRAP HANGER. ATTACH TO STRUCTURE.
6. STRAP HANGER REQUIRED IF LENGTH OF FLEXIBLE DUCT IS LONGER THAN 4 FT.
7. ROUND SHEET METAL BRANCH DUCT, SIZE AS INDICATED IN ADJACENT SCHEDULE UNLESS NOTED OTHERWISE ON PLANS.
8. CEILING T-BAR SUPPORT (FOR LAY-IN APPLICATIONS). COORDINATE AND VERIFY T-BAR TYPE FOR COMPATIBILITY WITH GRILLE.
9. MINIMUM CENTERLINE RADIUS EQUAL TO DUCT DIAMETER.
10. FLEXIBLE DUCT ELBOW SUPPORT, INSTALLED WITH NYLON BANDING PER MANUFACTURER'S INSTRUCTIONS.
11. A RADIUS'D SHEET METAL ELBOW MAY BE USED IN LIEU OF A FLEXIBLE ELBOW SUPPORT WHEN CONNECTED DIRECTLY TO AIR DEVICE.

1 RETURN/EXHAUST GRILLE DUCT CONNECTION

SCALE: NONE

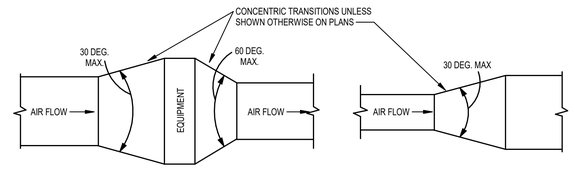


NOTES

1. SQUARE-TO-ROUND ADAPTER IF DIFFUSER NECK IS SQUARE. CONNECT ADAPTOR TO DIFFUSER. SEAL TO AIR DEVICE. SEAL CLASS A. INSULATE ADAPTOR AND EXPOSED BACKSIDE SURFACES OF AIR DEVICE.
2. INSULATED FLEXIBLE DUCT SAME DIAMETER AS BRANCH DUCT (7), 5 FT. MAXIMUM TOTAL LENGTH PER AIR DEVICE. STRETCH FLEXIBLE DUCT TO AT LEAST 90% OF FULLY EXTENDED LENGTH.
3. SPIN-IN BRANCH TAP FITTING, STRAIGHT SIDE WITH MANUAL DAMPER. DAMPER SHAFT IN HORIZONTAL. INTEGRAL INSULATION GUARD SLEEVE REQUIRED FOR TAP FITTING TO MAIN DUCT WITH INTERNAL INSULATION, AND EXTENDED DAMPER SHAFT AND HANDLE WITH STAND-OFF TO ACCOMMODATE EXTERNAL INSULATION.
4. DUCT STRAP HANGER. ATTACH TO STRUCTURE.
5. STRAP HANGER REQUIRED IF LENGTH OF FLEXIBLE DUCT IS LONGER THAN 4 FT.
6. MINIMUM CENTERLINE RADIUS EQUAL TO DUCT DIAMETER.
7. ROUND SHEET METAL BRANCH DUCT, SAME SIZE AS DIFFUSER INLET UNLESS NOTED OTHERWISE.
8. FLEXIBLE DUCT ELBOW SUPPORT, INSTALLED WITH NYLON BANDING PER MANUFACTURER'S INSTRUCTIONS.
9. A RADIUS'D SHEET METAL ELBOW MAY BE USED IN LIEU OF A FLEXIBLE ELBOW SUPPORT WHEN CONNECTED DIRECTLY TO AIR DEVICE.
10. CEILING T-BAR SUPPORT (FOR LAY-IN APPLICATIONS). COORDINATE AND VERIFY T-BAR TYPE FOR COMPATIBILITY WITH DIFFUSER.

2 CEILING DIFFUSER DUCT CONNECTION

SCALE: NONE



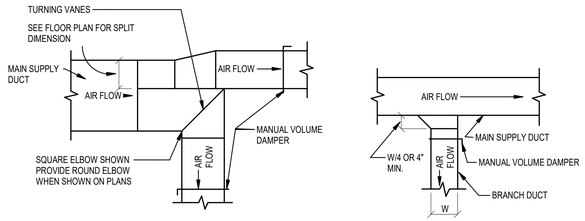
TYPICAL DUCTWORK TRANSITION WITH EQUIPMENT MOUNTED IN DUCT PLAN OR SIDE VIEW

TYPICAL DUCTWORK TRANSITION PLAN OR SIDE VIEW

NOTE:
A. UNLESS OTHERWISE INDICATED ON PLANS, MAXIMUM ANGLES SHOWN SHALL APPLY.
B. TRANSITION ANGLES IN AND OUT OF FANS SHALL BE 50% OF THOSE SHOWN ABOVE.

3 DUCTWORK TRANSITIONS

SCALE: NONE



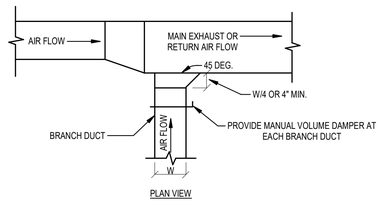
AIR SPLIT DUCT TAKE-OFF PLAN VIEW

BRANCH DUCT TAKE-OFF PLAN VIEW

THE BRANCH DUCT TAKE-OFF MAY BE USED FOR UP TO 15% OF THE MAIN DUCT CFM, AND UP TO 40% WHEN THE MAIN DUCT VELOCITY IS 1000 FPM OR LESS. THE AIR SPLIT DUCT TAKE-OFF SHALL BE USED IN ALL OTHER CASES

4 SUPPLY DUCTWORK BRANCH TAKE-OFFS

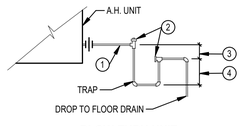
SCALE: NONE



PLAN VIEW

5 EXHAUST OR RETURN BRANCH DUCTWORK

SCALE: NONE



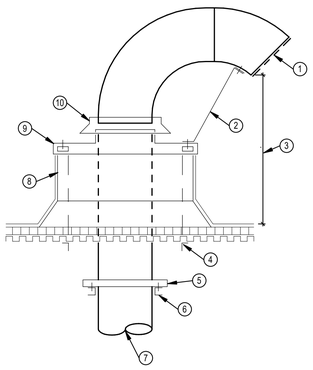
BLOW-THRU UNIT

NOTES

1. DRAIN PIPE SAME SIZE AS UNIT DRAIN PAN CONNECTION.
2. TEE WITH CLEANOUT PLUG.
3. 1" CENTERLINE - TO - CENTERLINE DIMENSION.
4. CENTERLINE - TO - CENTERLINE DIMENSION NOT LESS THAN SUPPLY FAN T.S.P. (IN W.G.) + 1/2 INCH.

6 AIR HANDLING UNIT DRAIN PIPING-SUSPENDED UNIT

SCALE: NONE



NOTES

1. 1/2" MESH BIRDSCREEN.
2. 2" WIDE x 1/8" THICK STEEL SUPPORTS.
3. 3'-0" CLEARANCE TYPICAL ALL VENTS.
4. STRUCTURAL FRAMING FOR OPENING. COORDINATE REQUIRED OPENING DIMENSIONS.
5. SUPPORT RING. FASTEN TO DUCTWORK AND CHANNEL.
6. CHANNEL SUPPORT FROM ADJACENT JOISTS.
7. FROM LAUNDRY EQUIPMENT.
8. 16" HIGH CURB.
9. FLASHING COLLAR FASTEN TO DUCTS.
10. STORM COLLAR FASTEN TO DUCT.

GENERAL NOTES

A. PAINT ALL EXTERIOR DUCTWORK AND DEVICES WITH TWO COATS OF ENAMEL. ALL EXTERIOR SHEET METAL SHALL BE "PAINT-GRIP" CONSTRUCTION.

7 VENT DUCTS THRU ROOF

SCALE: NONE

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DETAILS - MECHANICAL

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AIR DISTRIBUTION DEVICES

GENERAL NOTES:
A. ALL LAY-IN AIR DEVICES SHALL FIT IN 24"X24" LAY-IN CLG SYSTEM. VERIFY GRID TYPE AND COORDINATE AIR DEVICE COMPATIBILITY.
B. FINISH KEY: "W.B.E." - WHITE BAKED ENAMEL; "E.C.L." - ETCHED CLEAR LACQUER OR ANODIZED; "C.C.B.A." - CUSTOM COLOR SELECTED BY ARCHITECT.
C. SUPPLY AIR DIFFUSERS SHALL BE 4-WAY BLOW, UNLESS INDICATED OTHERWISE BY ARROWS ON DRAWINGS.
D. PROVIDE AUX. FRAMES FOR AIR DEVICES IN PLASTER, GYPSUM BOARD, TILE OR OTHER HARD SURFACES.

NOTES:
1.

		MOUNTING TYPE					MATERIAL			FINISH						BASIS OF DESIGN		
MARK	DESCRIPTION	LAY-IN	SURFACE	DUCT	SPLINE	SNAP-IN	STEEL	ALUMINUM	STAINLESS STEEL	W.B.E.	E.C.L.	C.C.B.A.	OPPOSED BLADE DAMPER	SQ-TO-RD NECK ADAPTOR	MANUFACTURER	MODEL	SEE NOTE
A10	STANDARD SQ. PLAQUE CEILING DIFFUSER - ROUND NECK	•					•			•					TITUS	OMNI	
A11	STANDARD SQ. PLAQUE CEILING DIFFUSER - ROUND NECK		•				•			•					TITUS	OMNI	
J10	EGGCRATE CEILING GRILLE, RETURN	•						•		•					TITUS	50F	
K1	EGGCRATE CEILING GRILL, EXHAUST		•					•		•			•		TITUS	50F	

FANS

GENERAL NOTES:
A. ALL FANS SHALL BE A.M.C.A. 211 AND 311 PERFORMANCE CERTIFIED AND SHALL BEAR THE A.M.C.A. LABEL.
B. SONES VALUES BASED ON A.M.C.A. 301 MEASURED AT 5 FT.
C. MOTOR HORSEPOWERS LISTED SHALL BE CONSIDERED MINIMUM.
D. ROOF & WALL OPENINGS ARE APPROX. VERIFY SIZE & COORDINATE.
E. COORDINATE STEEL FRAMING AROUND ROOF OPENING WHERE REQUIRED FOR DECK SUPPORT, AND WALL LINTELS FOR WALL OPENINGS.
F. WHEN APPLICABLE, REFER TO SPECIFICATIONS FOR VIBRATION ISOLATOR TYPES AND SEISMIC RESTRAINT REQUIREMENTS.
G. VFD'S SHALL BE CONSTRUCTED AND LABELED FOR REQUIRED SCCR (SHORT CIRCUIT CURRENT RATING). COORDINATE WITH DIVISION 26.
H. IF EC MOTORS ARE INDICATED OR SPECIFIED, EACH MOTOR SHALL BE PROVIDED WITH FACTORY DISCONNECTING MEANS, INTERNAL OVERLOAD PROTECTION, FIELD ADJUSTABLE SPEED CONTROL, AND REMOTE ANALOG SPEED CONTROL INPUT WHEN REMOTE CONTROL IS SPECIFIED, COORDINATED WITH THE BUILDING AUTOMATION SYSTEM.

NOTES:
1. FACTORY MOUNTED DISCONNECT.
2. ON/OFF SWITCH.
3. ROOF CURB TO MATCH ROOF SLOPE (14").

									MOTOR										BASIS OF DESIGN		
MARK	TYPE (REFER TO SPECS)	DESCRIPTION	SERVICE	CONNECTED CFM	FAN CFM	STATIC PRESSURE (IN. W.C.)	APPROX. WHEEL DIAMETER	MAXIMUM SONES	HORSEPOWER (HP)	VOLTAGE - PHASE	ELECTRONICALLY COMMUTATED	ECM MCA (AMPS, TOTAL)	ECM MOCP (AMPS, TOTAL)	VARIABLE FREQUENCY DRIVE	MINIMUM SCCR (AMPS)	APPROX. ROOF/WALL OPENING	APPROX. WEIGHT (LBS.)	VIBRATION ISOLATOR TYPE	MANUFACTURER	MODEL	SEE NOTE
EF-1		DIRECT DRIVE CENTRIFUGAL ROOF EXHAUST FAN	RESTROOMS	525	525	0.5	11	8.6	1/6	115-1	•	3.5	1.5	-	5000	12.5" X 12.5"	43		GREENHECK	G-095-VG	1,2,3

GRAVITY ROOF VENTILATORS

GENERAL NOTES:
A. ROOF OPENING SIZES ARE APPROXIMATE. VERIFY SIZE AND COORDINATE.
B. COORDINATE STEEL FRAMING AROUND ROOF OPENING, WHERE REQUIRED FOR DECK SUPPORT.

NOTES:
1. ROOF CURB TO MATCH ROOF SLOPE (14").
2. REFER TO FLOOR PLAN FOR (2) MOTORIZED BACKDRAFT DAMPERS.

					NECK SIZE		APPROX. HOOD SIZE					BACKDRAFT DAMPER		BASIS OF DESIGN		
MARK	DESCRIPTION	SERVICE	CFM	MAX. STATIC PRESSURE (IN. W.C.)	LENGTH	WIDTH	WIDTH / DIAMETER	CURB HEIGHT	APPROX. ROOF OPENING SIZE	APPROX. WEIGHT (LBS.)	MOTORIZED	GRAVITY	MANUFACTURER	MODEL	SEE NOTE
GRV-1	GAVITY INTAKE VENTILATOR	F-1 & F-2	660	0.1	22"	22"	29"	10"	14.5" X 14.5"	29	-	-	GREENHECK	GRSI-12	1,2

HVAC DESIGN DATA

GENERAL NOTES:
A. OUTDOOR DESIGN CONDITIONS:
90°F DB SUMMER
73°F WB SUMMER
0°F DB WINTER
B. DESIGN ALTITUDE: 824 FT.

NOTES:
1. LISTED RH IS MAXIMUM ANTICIPATED AT LISTED DB TEMPERATURE.
2. REFER TO ATC SEQUENCES FOR ACTUAL ROOM SETPOINTS.
3. "FLOATING" MEANS THERE IS NO ACTIVE CONTROL.

	INTERIOR DESIGN DATA				
	SUMMER		WINTER		
SPACE NAME / TYPE	°F DB	% RH (NOTE 1)	°F DB	% RH	SEE NOTE
OFFICES	74	55	72	FLOATING	2,3
ALL OTHER SPACES	74	55	72	FLOATING	3
-	-	-	-	-	-

DUCT CONSTRUCTION, SEALING, AND INSULATION

GENERAL NOTES:
A. REFER TO SPECIFICATIONS FOR DUCT CONSTRUCTION: SHEET METAL DUCT; INTERIOR LINING; EXTERIOR INSULATION; FIBERGLASS DUCTBOARD; ETC.
B. DUCT CONSTRUCTION AND SEALING SHALL BE PER LATEST S.M.A.C.N.A. STANDARDS.

NOTES:
1. RETURN DUCTWORK WITHIN 15' OF AIR HANDLING UNIT SHALL BE INTERNALLY LINED.
2. WATERTIGHT SEAL.
3. INSULATE FROM 24" UPSTREAM OF BACKDRAFT / ISOLATION DAMPER TO PENETRATION OF WALL / ROOF.
4. CONCEALED ROUND RUNOUT DUCTS TO AIR DEVICES MAY BE 1" S.P. CLASS.

	S.M.A.C.N.A. CLASS.								
			LEAKAGE CLASS						
DUCT SYSTEM	S.P. CONSTRUCT.	SEAL CLASS	RECT	RND	INTERNALLY LINED	EXTERNAL INSULATION	DOUBLE WALL INSULATED	NOT INSULATED	SEE NOTE
SUPPLY DUCTWORK DOWNSTREAM FOR SINGLE ZONE AHU-	+2"	A	16	8	•	-	-	-	-
RETURN DUCTWORK	-2"	A	16	8	-	-	-	•	1,4
RETURN DUCTWORK FOR UNITS AHU-	-2"	A	16	8	-	-	-	•	1,4
TOILET OR GENERAL EXHAUST DUCTWORK	-1"	A	16	8	-	NOTE 3	-	-	-
OUTSIDE AIR DUCTWORK AND PLENUMS	-1"	A	16	8	-	•	-	-	2

GAS FIRED-DX FURNACE / CU SPLIT SYSTEM

GENERAL NOTES:
A. COOLING CAPACITY BASED ON 95°F AMBIENT AIR TEMPERATURE.
B. GAS DELIVERY PRESSURE IS 6" W.C.
C. REFRIGERANT PIPING - SIZES LISTED ARE APPROX. CIRCUITING, SIZING, NUMBER OF PIPES AND CIRCUITS, ARRANGEMENT, ETC. SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
D. ELECTRIC SERVICES FOR OUTDOOR UNIT AND INDOOR UNIT - SINGLE POINT POWER SERVICE CONNECTIONS TO EACH UNIT. ADEQUACY OF LISTED CIRCUIT SIZES MUST BE VERIFIED BY H.C. AND UNIT SUPPLIER. COST FOR INCREASE OR CHANGE OF ELECTRIC SERVICE FOR EQUIPMENT SELECTED SHALL BE BORNE BY H.C.
E. REFER TO CONDENSING UNIT SCHEDULE FOR FURTHER OUTDOOR UNIT DATA.
F. IF EC MOTORS ARE INDICATED OR SPECIFIED, EACH MOTOR SHALL BE PROVIDED WITH FACTORY DISCONNECTING MEANS, INTERNAL OVERLOAD PROTECTION, AND FIELD ADJUSTABLE SPEED CONTROL.

NOTES:
1. OA TO BE 240 CFM.
2. OA TO BE 420 CFM
3. PROVIDE SPRING ISOLATORS FOR HANGING OF UNIT.

		INDOOR HEATING UNITS																												OUTDOOR CONDENSING UNIT - AIR COOLED													
		TYPE			FAN				DX-COOLING COIL					FURNACE						FILTERS			ELECTRICAL SERVICE					MISC.			BASIS OF DESIGN													
														TYPE																														
MARK	DESCRIPTION	VERTICAL UPFLOW	VERTICAL DOWNFLOW	HORIZONTAL	CFM	EXT. STATIC PRESSURE (IN. W.C.)	MOTOR (HP)	ELECTRONICALLY COMMUTATED MOTORS	MAXIMUM FACE VELOCITY (FPM)	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	ENTERING AIR TEMPERATURE DB / WB (°F)	LEAVING AIR TEMPERATURE DB (°F)	SEALED COMBUSTION	ATMOSPHERIC	CONDENSING	NON-CONDENSING	INPUT (MBHH)	OUTPUT CAPACITY (MBH)	ENTERING AIR TEMPERATURE DB (°F)	LEAVING AIR TEMPERATURE DB (°F)	THICKNESS	MERV	CUSTOM FILTER BOX	VOLTAGE - PHASE	MIN CIRCUIT AMPS (MCA)	MAX OVER CURRENT PROTECTION (MOCP)	MINIMUM SCCR (AMPS)	PROGRAMMABLE HTG / CLG THERMOSTAT	BOTTOM RETURN PLENUM	VIBRATION ISOLATOR TYPE	MANUFACTURER	MODEL	MARK	DESCRIPTION	NOMINAL TONS (SIZED TO MATCH COIL)	VARIABLE SPEED COMPRESSOR(S)	VOLTAGE - PHASE	FULL LOAD AMPS (FLA)	MIN CIRCUIT AMPS (MCA)	MAX OVER CURRENT PROTECTION (MOCP)	MINIMUM SCCR (AMPS)	VIBRATION ISOLATOR TYPE	IMPORTANCE FACTOR	MANUFACTURER	MODEL	HOT GAS BYPASS	SEE NOTE
F-1	TWO-STAGE GAS FURNACE	-	-	•	1,400	0.5	3/4	-		48.22	34	80 / 67	60.4 / 57.6	•	-	•	-	60	58	40	70	2	13	-	115-1	10.1	15		-	-		CARRIER	59TP6	CU-1	TWO-STAGE A/C	4	-	208/230-1	2.6	25.5	40				CARRIER	26TPA	-	2
F-2	TWO-STAGE GAS FURNACE	-	-	•	1,600	0.5	3/4	-		48.3	34	80 / 67	60.4 / 57.6	•	-	•	-	80	78	40	70	2	13	-	115-1	10.1	15		-	-		CARRIER	59TP6	CU-2	TWO-STAGE A/C	4	-	208/230-1	2.6	25.5	40				-	CARRIER	26TPA	-	1,3

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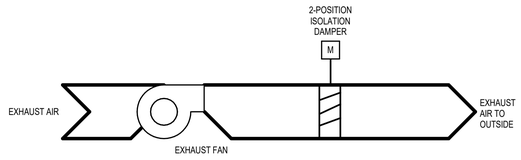
SCHEDULES - MECHANICAL

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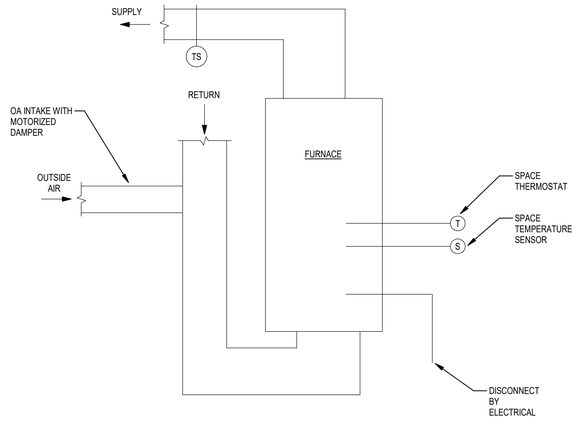
SEQUENCE OF OPERATION

1. FAN SHALL OPERATE WHEN THE OCCUPANCY SENSOR IN ANY OF THE CONNECTED RESTROOMS TURNS ON.



2 EXHAUST FAN (EF-1)

SCALE: NONE



1 PACKAGED AC UNIT CONTROLS (AC-1 & 2)

SCALE: NONE

SEQUENCE OF OPERATION:

1. ALL SEQUENCES SHALL COMPLY WITH ASHRAE STANDARD 90.1 – 2019.
2. OCCUPIED / UNOCCUPIED SCHEDULING SHALL BE DETERMINED BY THE BAS.
3. NIGHT SETBACK HEATING MODE SHALL BE INITIATED WHILE THE FURNACE IS IN UNOCCUPIED MODE TO KEEP THE REPRESENTATIVE SPACE TEMPERATURE ABOVE THE NIGHT SETBACK TEMPERATURE SETPOINT (65 DEGF, ADJUSTABLE). OA DAMPER IS TO BE CLOSED.
4. NIGHT SET-UP COOLING MODE SHALL BE INITIATED WHILE THE FURNACE IS IN UNOCCUPIED MODE TO KEEP THE REPRESENTATIVE SPACE TEMPERATURE AND HUMIDITY BELOW THE NIGHT SET-UP TEMPERATURE SETPOINT (80 DEGF, ADJUSTABLE) AND RH BELOW 60% (ADJUSTABLE). OA DAMPER IS TO BE CLOSED.
5. AN ADAPTIVE OPTIMAL START PROGRAM SHALL START THE UNIT IN ADVANCE OF THE SCHEDULED "OCCUPIED" TIME TO ENSURE PROPER SPACE TEMPERATURE AT OCCUPANCY TIME.
6. SAFETIES SPECIFIED ABOVE SHALL SHUT DOWN THE UNIT IN AN ORDERLY FASHION AND ALARM THE BAS.
7. THE FURNACE COMPONENTS (DX COIL, GAS HEATER, ETC.) SHALL BE SEQUENCED TO SATISFY THE "OCCUPIED" ZONE TEMPERATURE SETPOINT SET BY THE BAS. SUPPLY AIR TEMPERATURE SETPOINT FOR "WARM-UP" CYCLES SHALL BE 95 DEGF (ADJUSTABLE), AND 54 DEGF DURING "COOL-DOWN" CYCLES (ADJUSTABLE).
8. MINIMUM OUTSIDE AIR CONTROL SHALL CONTROL TO THE MINIMUM OUTSIDE AIR CFM SETPOINT. CFM SETPOINT SHALL BE BY THE BAS. . COORDINATE CONTROLS WITH I.O.T.
9. SUPPLY FAN SYSTEM SPEED SHALL BE CONSTANT VOLUME TO MAINTAIN ZONE TEMPERATURE SETPOINT.
10. DX COIL – IF THE FURNACE FAN SYSTEM IS "ON" AND FURNACE SUPPLY AIR TEMPERATURE IS ABOVE SETPOINT, THE SOLENOID VALVES AND COMPRESSOR SPEED SHALL BE SEQUENCED TO SATISFY THE SETPOINT. IF THE FURNACE FAN SYSTEM IS "ON" AND THE FURNACE SUPPLY AIR TEMPERATURE IS ABOVE SETPOINT, THE SOLENOID VALVES AND COMPRESSOR SPEED SHALL BE SEQUENCED TO SATISFY THE SETPOINT. PROVIDE ON AND OFF TIME DELAYS BETWEEN STEPS. PROVIDE DP SWITCH WIRED IN SERIES WITH COOLING CONTROL FOR INTERLOCK THRU SOFTWARE TO KEEP COOLING OFF UNLESS THE SUPPLY FAN SYSTEM IS OPERATING.
11. GAS HEATER – 2-STAGE GAS HEAT TO MAINTAIN ZONE TEMPERATURE SETPOINT. IF THE RTU FAN SYSTEM IS "ON: AND THE SUPPLY AIR TEMPERATURE IS BELOW SETPOINT THEN THE GAS HEAT SHALL ACTIVATE.

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY
P: 317.571.4795 www.heapy.com

PROJECT NO. 2025-07211

NOBLE COUNTY HIGHWAY DEPARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

EHREN E. LOHRMANN
REGISTERED
No. PE10911293
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
03.27.2026
PROJECT PHASE:
BID DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2025.02329

CONTROL DIAGRAMS

M700

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VALVES AND FITTINGS

DOUBLE LINE	SINGLE LINE	
		CHECK VALVE
BALL VALVE BUTTERFLY VALVE GATE VALVE		SHUTOFF VALVE (REFER TO SPECIFICATIONS FOR REQUIRED TYPE BASED ON APPLICATIONS)
		COMBINATION SHUTOFF AND BALANCING VALVE (REFER TO SPECIFICATIONS FOR REQUIRED TYPE BASED ON APPLICATIONS)
		CONCENTRIC PIPE REDUCER
	FOT / FOB	ECCENTRIC PIPE REDUCER
	P	PRESSURE GAUGE
	T	TEMPERATURE GAUGE OR THERMOMETER
		UNION
		CLEANOUT
		STRAINER
		STRAINER WITH A BLOW DOWN VALVE AND HOSE CONNECTION
		DRAIN VALVE WITH HOSE END CONNECTION
		AUTOMATIC FLOW CONTROLLER WITH P/T PLUG IN AND OUT
		EXPANSION JOINT
		PRESSURE REGULATING VALVE
		SAFETY RELIEF VALVE. PIPE DISCHARGE AIR GAPPED TO FLOOR DRAIN UNLESS NOTED OTHERWISE.
	P/T	PRESSURE AND TEMPERATURE SAFETY RELIEF VALVE. PIPE DISCHARGE AIR GAPPED TO FLOOR DRAIN UNLESS NOTED OTHERWISE.
		PRESSURE AND TEMPERATURE TEST PLUG
	TP	TRAP PRIMER
	V	VACUUM GAUGE WITH STOP
	CO	CLEANOUT TO GRADE OR FINISHED FLOOR
		END CAP
		MIXING FAUCET
		PLUG
		HOSE BIB
		WALL HYDRANT
		PLUG VALVE
	VB	SHUTOFF VALVE AND BOX
		SHUTOFF VALVE ON RISER
	S	SOLENOID VALVE
	M	WATER METER

PLUMBING AND FIRE SUPPRESSION PIPING DESIGNATIONS

	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RETURN
	EXISTING PIPE TO REMAIN
	EXISTING PIPE TO BE REMOVED
140	HOT WATER PIPE (140 DEGS. F.)
180	HOT WATER PIPE (180 DEGS. F.)
140R	HOT WATER RETURN PIPE (140 DEGS. F.)
180R	HOT WATER RETURN PIPE (180 DEGS. F.)
AR	ARGON PIPE
AV	ACID VENT PIPE
AW	ACID WASTE PIPE
CA	COMPRESSED AIR PIPE
CO2	MEDICAL CARBON DIOXIDE PIPE
CWS	COMBINATION FIRE SUPPRESSION AND DOMESTIC WATER SERVICE
DF	DIESEL FUEL PIPE
DS	SPRINKLER PIPE (DRY)
F	FIRE SUPPRESSION (STANDPIPE / SPRINKLER MAIN)
FS	FIRE SERVICE
FOF	FUEL OIL FLOW LINE
FOG	FUEL OIL GAUGE LINE
FOR	FUEL OIL RETURN LINE
FOS	FUEL OIL SUPPLY LINE
G	NATURAL GAS PIPE
GD	GARAGE DRAINAGE PIPE
GS	GAS SERVICE
H2	HYDROGEN PIPE
HE	HELIUM PIPE
IA	MEDICAL INSTRUMENT AIR PIPE
IV	INDIRECT VENT PIPE
IW	INDIRECT WASTE PIPE
K	KITCHEN WASTE PIPE
LA	LABORATORY COMPRESSED AIR PIPE
LV	LABORATORY VACUUM PIPE
LV	LABORATORY VENT PIPE
LW	LABORATORY WASTE PIPE
MA	MEDICAL COMPRESSED AIR PIPE
MAI	MEDICAL AIR INTAKE PIPE
MV	MEDICAL-SURGICAL VACUUM PIPE
MVX	MEDICAL-SURGICAL VACUUM EXHAUST PIPE
N2	MEDICAL NITROGEN PIPE
NG	GASOLINE PIPE (NON-LEAD)
NO	MEDICAL NITROUS OXIDE PIPE
NPW	NON-POTABLE
O2	MEDICAL OXYGEN PIPE
OD	(OVERFLOW) SECONDARY STORM DRAINAGE PIPE
P	PROPANE GAS PIPE
PD	PUMP DISCHARGE PIPE
PS	PRE-ACTION / DELUGE SPRINKLER PIPE
PW	PURE WATER PIPE
S	SPRINKLER PIPE (WET)
SAN	SANITARY DRAINAGE PIPE
SCW	SOFT COLD WATER
SD	SPRINKLER DRAIN PIPE
STM	STORM DRAINAGE PIPE
T	FUEL TANK VENT PIPE
TP	TRAP PRIMER DISCHARGE PIPE
TW	TEMPERED WATER PIPE
V	SANITARY SEWER VENT
WAGD	WASTE ANESTHESIA GAS DISPOSAL PIPE
WS	WATER SERVICE

GENERAL FLOOR PLAN NOTES

10" ELEV: 8' - 0" / 10" ELEV: 8' - 0"	APPROXIMATE DIMENSION ABOVE FINISHED FLOOR TO CENTERLINE OF PIPE, UNLESS NOTED OTHERWISE
TOE: 3' - 0" / BOE: 0' - 6"	APPROXIMATE DIMENSION ABOVE FINISHED FLOOR TO TOP OR BOTTOM OF EQUIPMENT, UNLESS NOTED OTHERWISE
2	RISER OR STACK NUMBER
B / P2	DETAIL: B = DETAIL DESIGNATION P2 = SHEET WHERE DETAIL IS LOCATED
1 / P2	SECTION: 1 = SECTION DESIGNATION P2 = SHEET WHERE DETAIL IS LOCATED
OH / 1	FIRE SUPPRESSION HAZARD CLASSIFICATION AND HAZARD CLASSIFICATION GROUP
P1 OR P1	EQUIPMENT REFERENCE. LETTER DESIGNATION VARIES. REFER TO SCHEDULES.
A1	EQUIPMENT, DEVICE, OR PLUMBING FIXTURE MARK. LETTER DESIGNATIONS REFER TO SCHEDULES.
	CONNECT TO EXISTING
	DEMOLISH TO POINT INDICATED
3	PLAN NOTE. APPLIES ONLY TO THE SHEET WHICH IT IS SHOWN UNLESS NOTED OTHERWISE.
3	DETAIL NOTE. APPLIES ONLY TO THE ASSOCIATED DETAIL.
A1	"UP TO" SYMBOL (ITEM ON FLOOR ABOVE)

PIPING SYMBOLS

DOUBLE LINE	SINGLE LINE	
		BOTTOM CONNECTION (45°)
		BOTTOM CONNECTION (90°)
		BRANCH TEE CONNECTION (NOTE: BULLHEAD TEE'S ARE NOT PERMITTED)
		DIRECTION OF PITCH
D	D	DROP
		ELBOW DOWN
		ELBOW UP
		EXISTING PIPE TO BE REMOVED
		EXISTING PIPE TO REMAIN
		FLOW DIRECTION DESIGNATION
		PIPE RISER
		PUMP
R	R	RISE
		TOP CONNECTION (45°)
		TOP CONNECTION (90°)

PLUMBING GENERAL NOTES

A. ALL PIPING IS ABOVE THE CEILING (AT THE UNDERSIDE OF STRUCTURE IN EXPOSED STRUCTURE AREAS), UNLESS OTHERWISE NOTED.
B. ALL SUPPLY, STORM DRAINAGE AND VENT PIPING IS ABOVE THE CEILING (AT THE UNDERSIDE OF STRUCTURE IN EXPOSED STRUCTURE AREAS), UNLESS OTHERWISE NOTED. ALL SANITARY AND STORM DRAINAGE PIPING IS IN GRADE BELOW THE FLOOR, UNLESS OTHERWISE NOTED.
C. REFER TO SCHEDULES, DETAILS AND DIAGRAMS FOR PIPING, PIPE SIZES AND PIPELINE DEVICES NOT INDICATED ON THE FLOOR PLAN.
D. ABOVE CEILING UTILITY SPACE IS LIMITED. COORDINATION WITH ALL TRADES IS CRITICAL, PRIOR TO INSTALLATION ON ANY WORK.
E. AUTOMATIC AIR VENTS SHALL BE LOCATED WHERE INDICATED ON THE PLANS AND AT ALL HIGH POINTS OF THE UPPER MOST LEVEL OF DOMESTIC COLD, DOMESTIC HOT, AND DOMESTIC HOT RETURN SYSTEMS. DISCHARGE SHALL BE TO CLOSEST WASTE RECEPTOR ON FLOOR LEVEL SHOWN ON DRAWINGS.
F. LOCATIONS AND SIZES OF EXISTING PIPING HAVE BEEN DETERMINED FROM A REVIEW OF EXISTING DRAWINGS AND/OR SITE INSPECTION, WHERE POSSIBLE. FIELD VERIFICATION OF EXACT LOCATIONS, ELEVATIONS, INVERTS, SIZES, DIRECTION OF FLOW, ETC. SHALL BE REQUIRED PRIOR TO BEGINNING NEW WORK.
G. ALL PIPING SHALL BE REMOVED BACK TO ACTIVE MAINS AND CAPPED, OR REMOVED BACK TO POINTS OF CONNECTION IN NEW WORK. INACCESSIBLE PIPING, WHERE SO NOTED, TO BE ABANDONED SHALL BE DISCONNECTED FROM ACTIVE SYSTEMS AND CAPPED OR PLUGGED IN CONCEALED LOCATIONS.
H. NEW CONNECTIONS TO EXISTING PIPING SHALL BE WITH THE SAME SIZE AS THE EXISTING PIPING, UNLESS OTHERWISE NOTED.
I. ALL REMOVED MATERIAL AND EQUIPMENT, SO DESIGNATED BY THE OWNER, SHALL BE TURNED OVER AND PLACED WHERE DIRECTED. ALL MATERIAL AND EQUIPMENT, WHICH THE OWNER DOES NOT WISH TO RETAIN, SHALL BECOME THE PROPERTY OF THE CONTRACTOR RESPONSIBLE FOR THE REMOVAL.
J. REFER TO THE ARCHITECTURAL PLANS FOR PROJECT PHASING REQUIREMENTS.

ABBREVIATIONS

AAP	- AREA ALARM PANEL (MEDICAL GAS)
AC	- AIR COMPRESSOR OR AIR CONDITIONER
ACC	- ACCESS
ACOU	- AIR COOLED CONDENSING UNIT
AD	- ACCESS DOOR OR AREA DRAIN
ADB	- ACID DILUTION BASIN
ADJ	- ADJUSTABLE
AFF	- ABOVE FINISHED FLOOR
AFG	- ABOVE FINISHED GRADE
ALT	- ALTERNATE
AP	- ACCESS PANEL
APPROX	- APPROXIMATE
AR	- AIR RECEIVER OR ARGON
ARCH	- ARCHITECT OR ARCHITECTURAL
ASSY	- ASSEMBLY
AV	- ACID VENT
AW	- ACID WASTE
BDD	- BACK DRAFT DAMPER
BFP	- BACKFLOW PREVENTER
BLDG	- BUILDING
BOB	- BOTTOM OF BEAM
BOD	- BOTTOM OF DUCT
BOE	- BOTTOM OF EQUIPMENT
BOF	- BOTTOM OF FOOTING
BOG	- BOTTOM OF GRILLE
BOP	- BOTTOM OF PIPE
BOT	- BOTTOM
BT	- BATHTUB
BTU	- BRITISH THERMAL UNIT
BTUH	- BRITISH THERMAL UNIT PER HOUR
BTWN	- BETWEEN
CA	- COMPRESSED AIR
CB	- CATCH BASIN
CBD	- COUNTER BALANCED BACKDRAFT DAMPER
CFCI	- CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CFM	- CUBIC FEET PER MINUTE
CHS	- CHILLED WATER SUPPLY
CHR	- CHILLED WATER RETURN
CI	- CAST IRON
CK	- CLINICAL SINK
CLG	- CEILING
CMU	- CONCRETE MASONRY UNIT
CO	- CLEAN OUT
CO2	- MEDICAL CARBON DIOXIDE
CONN	- CONNECT OR CONNECTION
CONTR	- CONTRACTOR
CORR	- CORRIDOR
CS	- CLINICAL SINK OR COLD SOFT WATER
CTR	- CENTER
CU	- COPPER
CWS	- COMBINATION WATER SERVICE OR CONDENSER WATER SUPPLY
CWR	- CONDENSER WATER RETURN
D	- DEPTH OR DRAIN LINE
DCW	- DOMESTIC COLD WATER
DD	- DECK DRAIN
DET	- DETAIL
DF	- DRINKING FOUNTAIN OR WATER COOLER OR DIESEL FUEL
DFU	- DRAINAGE FIXTURE UNIT
DHW	- DOMESTIC HOT WATER
DHWR	- DOMESTIC HOT WATER RETURN
DI	- DEIONIZED WATER
DIA	- DIAMETER
DIM	- DIMENSION
DN	- DOWN
DS	- DOWN SPOUT OR SPRINKLER (DRY)
DT	- PERFORATED DRAIN TILE
DWG	- DRAWING
EA	- EACH
EC	- ELECTRICAL CONTRACTOR (DIVISION 26)
EEW	- EMERGENCY EYE WASH
EJ	- EXPANSION JOINT
ELEC	- ELECTRICAL
ELEV	- ELEVATOR
EQ	- EQUAL
EQUIP	- EQUIPMENT
ET	- EXPANSION TANK
ETR	- EXISTING TO REMAIN
ES	- EMERGENCY SHOWER
EQS	- EQUIPMENT SUPPLIER
EWC	- ELECTRICAL WATER COOLER
EXH	- EXHAUST AIR
EXP	- EXPANSION
EXT	- EXTERIOR
EX	- EXISTING
F	- FIRE SUPPRESSION (STANDPIPE/SPRINKLER MAIN)
FCE	- FIRE CONTROL EQUIPMENT
FCO	- FLOOR CLEANOUT
FD	- FLOOR DRAIN
FDC	- FIRE DEPARTMENT CONNECTION
FDV	- FIRE DEPARTMENT VALVE
FF	- FINISHED FLOOR ELEVATION
FHC	- FIRE HOSE CABINET
FLR	- FLOOR
FM	- FORCE MAIN
FOB	- FLAT ON BOTTOM
FOF	- FUEL OIL FLOW
FOG	- FUEL OIL GAUGE
FOR	- FUEL OIL RETURN
FOS	- FUEL OIL SUPPLY
FOT	- FLAT ON TOP
FPM	- FEET PER MINUTE
FR	- FIRE RISER
FS	- FLOOR SINK OR FIRE SERVICE
FSC	- FIRE SUPPRESSION CONTRACTOR (DIVISION 21)
FT	- FEET
FTG	- FOOTING
G	- GAS OR NATURAL GAS
GA	- GAUGE
GAL	- GALLON
GALV	- GALVANIZED
GC	- GENERAL TRADES CONTRACTOR
GD	- GARAGE DRAINAGE
GPM	- GALLONS PER MINUTE
GS	- GAS SERVICE
GW	- GREASE WASTE
H2	- HYDROGEN
HB	- HOSE BIBB
HC	- HVAC CONTRACTOR (DIVISION 23)
HD	- HUB DRAIN
HE	- HELIUM
HG	- REFRIGERANT HOT GAS
HP	- HORSEPOWER OR HIGH POINT
HPC	- HIGH PRESSURE CONDENSATE RETURN
HPS	- HIGH PRESSURE STEAM SUPPLY
HPW	- HIGH PURITY WATER
HPWR	- HIGH PURITY WATER RETURN
HR	- HOSE REEL
HT	- HEAT TRACE
HTR	- HEATER
HVAC	- HEATING, VENTILATING, AND AIR CONDITIONING
HW	- HOT WATER
IA	- MEDICAL INSTRUMENT AIR
ID	- INSIDE DIAMETER
INV	- INVERT ELEVATION
IN	- INCHES
IV	- INDIRECT VENT
IW	- INDIRECT WASTE
JS	- JANITOR SINK
K	- KITCHEN WASTE
KEC	- KITCHEN EQUIPMENT CONTRACTOR
L	- LENGTH
LA	- LABORATORY COMPRESSED AIR
LAV	- LAVATORY
LBS	- POUNDS
LCW	- LABORATORY COLD WATER
LEC	- LABORATORY EQUIPMENT CONTRACTOR
LHW	- LABORATORY HOT WATER
LHWR	- LABORATORY HOT WATER RETURN
LPC	- LOW PRESSURE CONDENSATE RETURN
LPS	- LOW PRESSURE STEAM SUPPLY
LV	- LABORATORY VACUUM OR LABORATORY VENT
LW	- LABORATORY WASTE
MA	- MEDICAL COMPRESSED AIR
MAP	- MASTER ALARM PANEL (MEDICAL GAS)
MAX	- MAXIMUM
MB	- MOP BASIN
MC	- MECHANICAL CONTRACTOR (DIVISION 23)
MEZZ	- MEZZANINE
MFR	- MANUFACTURER
MH	- MANHOLE
MIN	- MINIMUM OR MINUTE
MISC	- MISCELLANEOUS
MTD	- MOUNTED
MTG	- MOUNTING
MPC	- MEDIUM PRESSURE CONDENSATE RETURN
MPS	- MEDIUM PRESSURE STEAM SUPPLY
MU	- WATER MAKE-UP
MV	- MEDICAL SURGICAL VACUUM
N2	- MEDICAL NITROGEN
N/C	- NORMALLY CLOSED
NG	- GASOLINE (NON-LEAD)
NIC	- NOT IN CONTRACT
N/O	- NORMALLY OPEN
NO	- MEDICAL NITROUS OXIDE
NOM	- NOMINAL
NPW	- NON-POTABLE WATER
NPT	- NATIONAL PIPE THREAD
NTS	- NOT TO SCALE
O2	- MEDICAL OXYGEN
OA	- OUTDOOR AIR
OD	- OUTSIDE DIAMETER OR OVERFLOW DRAIN
OFCI	- OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	- OWNER FURNISHED OWNER INSTALLED
P	- PROPANE GAS
PC	- PLUMBING CONTRACTOR (DIVISION 22) OR PUMPED CONDENSATE RETURN
PD	- PUMP DISCHARGE OR PARAPET DRAIN
PIV	- POST INDICATOR VALVE
PLBG	- PLUMBING
PS	- PRE-ACTION/DELUGE SPRINKLER
PRESS	- PRESSURE
PRV	- PRESSURE REGULATING VALVE
PSF	- POUNDS PER SQUARE FOOT
PSI	- POUNDS PER SQUARE INCH
PSV	- PRESSURE SUSTAINING VALVE
PSIG	- POUNDS PER SQUARE INCH GAUGE
PW	- PURE WATER
RA	- RETURN AIR
RAD	- RADIUS
RCP	- REINFORCED CONCRETE PIPE
RD	- ROOF DRAIN
REC	- RECESSED
REQD	- REQUIRED
RI	- ROUGH IN
RL	- REFRIGERANT LIQUID
ROS	- REVERSE OSMOSIS WATER SUPPLY
ROR	- REVERSE OSMOSIS WATER RETURN
RPM	- REVOLUTIONS PER MINUTE
RS	- REFRIGERANT SUCTION
RV	- RELIEF VALVE
S	- SPRINKLER (WET)
SA	- SHOCK ARRESTOR OR SUPPLY AIR
SAN	- SANITARY OR SANITARY DRAIN
SCH	- SCHEDULE
SCW	- SOFT COLD WATER
SD	- SPRINKLER DRAIN OR SUBSOIL DRAIN
SH	- SHOWER
SHT	- SHEET
SK	- SINK
SPEC	- SPECIFICATIONS
SQ	- SQUARE
SR	- SUPPLY RISER
SS	- SANITARY STACK (SOIL OR WASTE) OR STAINLESS STEEL
STD	- STANDARD
STM	- STORM OR STORM DRAINAGE
STRUC	- STRUCTURAL OR STRUCTURE
SUC	- SITE UTILITY CONTRACTOR
T	- FUEL TANK VENT
TD	- TRENCH DRAIN
TEMP	- TEMPERATURE
TOB	- TOP OF BEAM
TOD	- TOP OF DUCT
TOE	- TOP OF EQUIPMENT
TOF	- TOP OF FOOTING
TOJ	- TOP OF JOIST
TOP	- TOP OF PIPE
TOS	- TOP OF SLAB OR TOP OF STEEL
TF	- TRAP FILLER
TP	- TRAP PRIMER OR TRAP PRIMER DISCHARGE
TW	- TEMPERED WATER
TYP	- TYPICAL
UR	- URINAL
UNO	- UNLESS NOTED OTHERWISE
V	- VENT OR SANITARY SEWER VENT
VAC	- VACUUM
VC	- VACUUM CLEANING
VCV	- VACUUM CLEANING VALVE
VE	- VACUUM EXHAUST
VEL	- VELOCITY
VIB	- VALVE IN BOX
VOL	- VOLUME
VP	- VACUUM PUMP
VS	- VENT STACK
VTR	- VENT THROUGH ROOF
VR	- VENT RISER
W/	- WITH
W/O	- WITHOUT
W	- WASTE
WAGD	- WASTE ANESTHESIA GAS DISPOSAL
WC	- WATER CLOSET
WCO	- WALL CLEANOUT
WH	- WALL HYDRANT OR WATER HEATER
WIV	- WALL INDICATOR VALVE
WS	- WATER SERVICE
YCO	- YARD CLEANOUT
ZVC	- ZONE VALVE CABINET

NOTE:
ALL SYMBOLS AND ABBREVIATIONS ARE SUBJECT TO MODIFICATIONS ON OTHER DRAWINGS.
ALL SYMBOLS OR ABBREVIATIONS MIGHT NOT NECESSARILY BE USED ON THIS PROJECT.

SHEET LIST

SHEET NUMBER	SHEET NAME
P001	PLUMBING INDEX, SYMBOLS, AND NOTES
P002	PLUMBING SPECS
PD101	DEMO FLOOR PLAN - PLUMBING
P100	FOUNDATION PLAN - PLUMBING
P101	FLOOR PLAN - PLUMBING
P102	ROOF PLAN - PLUMBING
P301	RISER DIAGRAMS - PLUMBING
P501	DETAILS - PLUMBING
P601	SCHEDULES - PLUMBING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240

HEAPY
P: 317-571-8700 www.heapy.com

PROJECT NO. 2025-07211

NOBLE COUNTY HIGHWAY DEPARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

EHREN E. LOHRMANN
REGISTERED
No. PE10911293
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

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PLUMBING INDEX, SYMBOLS, AND NOTES

P001

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PLUMBING/FIRE SUPPRESSION SPECIFICATIONS (DIVISION 21/22)

1. PROVIDE A COMPLETE PLUMBING SYSTEM AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN. WORK INCLUDES, BUT IS NOT NECESSARILY LIMITED TO THE FOLLOWING PRINCIPAL CATEGORIES.
   A. COMPLETE PLUMBING SYSTEMS CONSISTING OF DOMESTIC COLD WATER, HOT WATER AND HOT WATER RETURN, SANITARY WASTE AND VENT, STORM DRAINAGE AND NATURAL GAS.
   B. ALTERATION WORK IN THE EXISTING BUILDING.
2. WORK SHALL BE PERFORMED BY CONTRACTORS THAT ARE FULLY CERTIFIED BY THE STATE OR AUTHORITY HAVING JURISDICTION.
3. OBTAIN AND PAY FOR ALL PERMITS, UPON COMPLETION. PROVIDE A CERTIFICATE OF APPROVAL FROM THE GOVERNING INSPECTION AUTHORITY.
4. DURING THE BIDDING PERIOD INSPECT THE SITE AND PREMISES OF THE PROPOSED WORK. REPORT IMMEDIATELY ANY SIGNIFICANT OBSERVED DISCREPANCIES AS RELATED TO THE PLANS OR THE REQUIRED WORK. ALL WORK SHALL COMPLY WITH 2006 INTERNATIONAL PLUMBING CODE, AND ALL OTHER APPLICABLE CODES, LAWS AND ORDINANCES.
5. THIS CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP, EQUIPMENT, AND MATERIAL ENTERING INTO THIS CONTRACT FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE. ANY WORK PROVEN TO BE DEFECTIVE DURING THIS PERIOD SHALL BE MADE GOOD BY THIS CONTRACTOR WITHOUT EXPENSE TO THE OWNER.
6. WHERE TRADE NAMES, BRANDS OR MANUFACTURERS ARE LISTED, ANY ONE OF THE SEVERAL NAMED ARE CONSIDERED EQUALLY ACCEPTABLE. NO UNNAMED PRODUCT OR MATERIAL SHALL BE USED UNLESS APPROVED IN WRITING BY THE ENGINEER. SUBMIT 6 SETS/ELECTRONIC SHOP DRAWINGS ON MAJOR ITEMS OF EQUIPMENT AND MATERIALS. ALL SHOP DRAWINGS SHALL BE SUBMITTED TO HEAPY PROJECT MANAGER NANCY STINSON - NSTINSON@HEAPY.COM AND HEAPY CONSTRUCTION ADMIN - CORPORATE-CA@HEAPY.COM.
   A. FAILURE TO DISTRIBUTE CONSTRUCTION ADMINISTRATION ITEMS IN THIS MANNER MAY RESULT IN DELAYED RESPONSES.
   B. COORDINATE CONSTRUCTION ADMINISTRATION COMMUNICATON PLAN WITH GC AND ENGINEER AT ONSET OF CONSTRUCTION.
   C. SUBMIT SHOP DRAWINGS FOR THE FOLLOWING ITEMS AND MATERIALS:
      1. PIPE FITTINGS AND JOINING METHODS FOR THE VARIOUS SYSTEMS
      2. PIPE HANGERS
      3. VALVES
      4. PIPE INSULATION
      5. GAS PRESSURE REGULATOR
      6. BACKFLOW PREVENTERS
      7. WATER HEATING EQUIPMENT
      8. PLUMBING FIXTURE AND ACCESSORIES
      9. RECIRCULATION PUMP
7. PLAN WORK AS TO PROVIDE REASONABLE CONTINUOUS SERVICE OF EXISTING SYSTEMS. SHUTDOWN OF SYSTEMS SHALL BE BID DURING NORMAL WORKING HOURS.
8. ALL PIPING PROVIDED IN THIS WORK SHALL BE PRESSURE TESTED AS SPECIFIED BELOW.
   A. DOMESTIC COLD, HOT AND HOT WATER RECIRCULATING PIPING, AND NON-POTABLE WATER PIPING – HYDROSTATIC AT 125 PSI OR 1.5 TIME THE MAXIMUM SYSTEM OPERATING PRESSURE, WHICHEVER IS HIGHER, FOR 6 HOURS AT THE LOW PINT OF THE SYSTEM.
   B. SOIL WASTE AND VENT PIPING AND STORM PIPING – UNDERGROUND TEST, ROUGH TEST AND FINAL TEST IN CONFORMANCE TO THE PLUMBING CODE REQUIREMENTS.
   C. INTERIOR NATURAL GAS PIPING – 25 PSI COMPRESSED AIR FOR 4 HOURS.
9. DISINFECTION OF PIPING:
   A. ALL NEW DOMESTIC WATER SYSTEMS INCLUDING ANY EXISTING DOMESTIC WATER PIPING, TANKS AND EQUIPMENT OUT OF SERVICE FOR MORE THAN 14 DAYS SHALL BE DISINFECTED BY A COMPANY OR PERSONNEL REGULARLY ENGAGED IN THE PERFORMANCE OF THIS SERVICE.
   B. KEEP NEW SYSTEMS ISOLATED FROM THE EXISTING SYSTEMS UNTIL AFTER DISINFECTION IS COMPLETED AND PROVEN ACCEPTABLE BY BACTERIOLOGICAL TEST RESULTS. PROVIDE A SERVICE COCK AT THE POINT OF CONNECTION FOR INJECTION OF THE DISINFECTING AGENT. IF IT IS NECESSARY TO USE A POTABLE WATER SUPPLY IN THE PERFORMANCE OF THE DISINFECTION PROCEDURES, PROVIDE TEMPORARY REDUCED PRESSURE ZONE BACK FLOW PREVENTION UNTIL DISINFECTION AND ANALYSIS RESULTS ARE COMPLETE.
   C. THOROUGHLY FLUSH THE SYSTEM PRIOR TO DISINFECTION. DISINFECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE LOCAL AUTHORITIES PRESCRIBED METHOD, OR WHEN A LOCAL AUTHORITY PRESCRIBED METHOD IS NOT AVAILABLE, IN ACCORDANCE WITH THE LOCALLY ADOPTED PLUMBING CODE OR AWWA C651 STANDARDS. DISINFECTION SHALL BE BY MEANS OF A CHLORINE SOLUTION INJECTED INTO THE WATER SYSTEM NEAR THE SOURCE. EACH OUTLET SHALL BE TESTED TO PROVE PRESENCE OF MINIMUM CHLORINE CONCENTRATION. DOCUMENT THAT ADEQUATE LEVELS OF CHLORINE ARE PRESENT IN ALL PARTS OF THE SYSTEM. FOLLOWING THE APPROPRIATE RETENTION PERIOD, FLUSH OUT THE SYSTEM WITH CLEAN WATER UNTIL THE RESIDUAL FREE CHLORINE CONTENT IS EQUAL TO THE LEVEL OF THE INCOMING WATER, BUT NOT GREATER THAN 1.5 PARTS PER MILLION OR UNTIL APPROVED BY THE HEALTH DEPARTMENT.
   D. PERFORM A BACTERIOLOGICAL ANALYSIS OF THE POTABLE WATER SYSTEM IN COMPLIANCE WITH HEALTH DEPARTMENT REQUIREMENTS. ONE TEST SAMPLE SHALL BE COLLECTED FROM THE END OF THE MAIN AND ONE FROM EACH BRANCH. PROVIDE CERTIFICATION STATING THE NAME OF THE LAB PERFORMING THE TESTING, THE JOB NAME, THE DATE OF THE SAMPLE AND RESULTS OF THE TESTING.
10. ALL PIPING, FITTINGS, VALVES, SOLDERS, FLUXES, APPURTENANCES AND OTHER EQUIPMENT IN WHICH WETTED PARTS ARE IN CONTACT WITH WATER, INSTALLED IN PUBLIC DRINKING WATER SYSTEMS AND PLUMBING SYSTEMS PROVIDING POTABLE AND/OR DRINKING WATER FOR HUMAN CONSUMPTION SHALL CONFORM TO THE "LEAD FREE" REQUIREMENTS OF NSF 61 AND NSF/ANSI 372.
11. WORKMANSHIP SHALL BE FIRST CLASS. THE ARCHITECT'S OR ENGINEER 'S JUDGEMENT SHALL PREVAIL IF THE QUALITY IS SUSPECT.
12. PROTECT MATERIALS AND EQUIPMENT AFTER DELIVERY TO THE JOB SITE. RESPECT OTHER TRADES AS RELATED TO PROTECTING THEIR WORK AND TO AVOID CONSTRUCTION INTERFERENCES. CALL ATTENTION TO PROBLEMS RELATING TO SPACE REQUIREMENTS SO EARLY RESOLUTION MAY BE OBTAINED. RESPECT OWNER'S PROPERTY AT ALL TIMES. TEMPORARILY REMOVE, STORE AND RE-INSTALL CEILINGS WHEN REQUIRED TO PERFORM WORK.
13. CUT AND PATCH TO INSTALL WORK OR PAY OTHERS TO PERFORM SUCH WORK. CONCRETE SHALL BE SAW CUT OR CORE DRILLED. WORKMANSHIP SHALL BE FIRST CLASS. THE ARCHITECT'S OR ENGINEER'S JUDGEMENT SHALL PREVAIL IF THE QUALITY IS SUSPECT.
14. IN ALTERATION AND REMODELING WORK, PERFORM ALL REMOVAL AND RELOCATION WORK KINDRED TO THE PLUMBING WORK. LEAVE ALL EXISTING SYSTEMS CONTINUOUS AND FUNCTIONAL. REMOVE EXTRANEOUS PIPING AND EQUIPMENT. NO REMOVED MATERIAL SHALL BE REUSED UNLESS EXPRESSLY SHOWN. WHERE NECESSARY TO DISRUPT SERVICES FOR SHORT PERIODS OF TIME, COORDINATE AND SCHEDULE OUTAGES WITH THE OWNER.
15. PROVIDE CEILING AND WALL ACCESS PANELS WHERE INDICATED ON THE DRAWINGS, OR WHERE REQUIRED FOR ACCESS TO CONCEALED VALVES, TRAPS, DEVICES OR SERVICEABLE EQUIPMENT. ACCESS PANELS SHALL BE MINIMUM 18" X 18", OR LARGER IF REQUIRED, AND SHALL BE COMPATIBLE WITH THE MATERIALS IN WHICH THEY ARE INSTALLED. ACCESS PANELS IN FIRE RATED BUILDING ELEMENTS SHALL BE LABELED IN COMPLIANCE WITH THE RATING OF THE BUILDING ELEMENT.
16. EACH CONTRACTOR SHALL MAINTAIN A SEPARATE SET OF AS-BUILT PRINTS OF THE CONTRACT DOCUMENTS AND SHALL SHOW ANY SIGNIFICANT CHANGES OR VARIATIONS WHICH ARE MADE DURING CONSTRUCTION. UPON COMPLETION OF THE WORK, THESE DRAWINGS SHALL BE TURNED OVER TO THE ARCHITECT.
17. PAINT FERROUS METAL WHICH IS NOT FACTORY OR SHOP PAINTED OR GALVANIZED AND WHICH REMAINS EXPOSED TO VIEW IN FINISHED AREAS OF THE BUILDING. FERROUS METAL INSTALLED OUTSIDE THE BUILDING WHICH IS NOT FACTORY OR SHOP PAINTED OR GALVANIZED SHALL BE GIVEN A PRIME COAT OF PAINT.
18. MARK ALL PIPING SYSTEMS AND TAG ALL VALVES. ANY EXISTING PIPING ENCOUNTERED SHALL ALSO BE MARKED. VALVE TAGS SHALL BE NON-FERROUS METAL, 1 " DIAMETER AND ATTACHED BY COPPER LOOP HOOKS. PIPE MARKERS SHALL BE 1 " HIGH LETTERS WITH COLOR BAND AND ARROW. MARKERS SHALL BE AT EACH VALVE AND AT LEAST ONE IN EACH ROOM, BUT NO MORE THAN 20 FT. INTERVALS. COLOR BAND SHALL MATCH EXISTING OR AS DICTATED BY OWNER. TURN OVER VALVE TAG SCHEDULE TO ARCHITECT.
19. FIRESTOPPING ASSEMBLIES SHALL BE PROVIDED AT PENETRATIONS OF PIPING THRU FIRE RATED FLOORS, FIRE RATED FLOOR-CEILING AND ROOF CEILING ASSEMBLIES, FIRE & SMOKE RATED WALLS AND PARTITIONS AND FIRE & SMOKE RATED SHAFT WALLS AND PARTITIONS. IN ADDITION, FIRESTOPPING ASSEMBLIES SHALL BE PROVIDED AT PENETRATIONS THRU 0-HOUR RATED FLOORS. REFER TO THE ARCHITECTURAL DRAWINGS FOR FIRE AND SMOKE RATED BUILDING ELEMENTS AND PLUMBING DRAWINGS FOR PIPE LAYOUTS.
20. EXCAVATE FOR ALL NEW UNDERGROUND PIPING AND INCIDENTAL WORK, WHICH ARE RELATED TO THE SCOPE OF WORK. BACKFILL AND COMPACT TO FINISH GRADE OR TO LEVELS CONSISTENT WITH THE GENERAL CONTRACTOR 'S ACTIVITIES. PROVIDE COMPACTED BACKFILL OF GRADED PEA GRAVEL, GRADED COARSE SAND OR CRUSHED LIMESTONE (MAXIMUM 0.75" SIZE) UNDER ANY PAVED OR OTHER HARD SURFACED AREAS. BACKFILL MATERIAL FOR PLASTIC PIPING SHALL BE PEA GRAVEL OR SAND. EXCAVATION, TRENCH WALL SUPPORTING AND OPEN TRENCH BARRICADING AND SIGNAGE SHALL BE PER OSHA AND LOCAL REQUIREMENTS. CONTACT THE INDIANA UTILITIES PROTECTION SERVICE FOR LOCATIONS OF UNDERGROUND UTILITES IN THE EXCAVATION AREA.
10. ALL PIPING SHALL BE INSTALLED PER ACCEPTED INDUSTRY STANDARDS AND/OR PER MANUFACTURER 'S RECOMMENDATIONS. ALL INTERIOR ABOVE GRADE PIPING SHALL BE SUPPORTED BY ATTACHMENT TO BUILDING STRUCTURAL ELEMENTS. DO NOT SUPPORT PIPING FROM NON-STRUCTURAL BUILDING ELEMENTS, DUCTWORK, OTHER PIPING, ETC. HANGER ROD SIZES AND HANGER/SUPPORT SPACING SHALL BE PER THE FOLLOWING SCHEDULES. HANGERS FOR PLUMBING PIPING SHALL BE LIGHT DUTY CLEVIS TYPE, COPPER CLAD OR PLASTIC COATED FOR UNINSULATED COPPER PIPING, WITH LOCK NUT AT EACH HANGER.

PIPE SIZE	MINIMUM HANGER ROD DIAMETER
2" AND SMALLER	0.375"
2.5" TO 3"	0.5"
4" TO 5"0.625"	

PIPE MATERIAL/SIZE	MAXIMUM HANGER/SUPPORT SPACING
VERTICAL:	
STEEL	BASE AND 15 FT.
COPPER	BASE AND 10 FT.
CAST IRON	BASE AND EACH FLOOR LEVEL
PLASTIC	PER MANUFACTURER AND NO GREATER THAN 10 '
HORIZONTAL:	
STEEL / £1.5"	7 FT.
STEEL / 2" – 6"	10 FT.
COPPER / £1.25"	6 FT.
COPPER / 1.5" – 2"	8 FT.
CAST IRON	10 FT. AND EACH FITTING/JOINT
PLASTIC	PER MANUFACTURER AND NO GREATER THAN 4 "

22 INSULATE ALL NEW ABOVE GROUND DOMESTIC WATER AND INTERIOR HORIZONTAL STORM DRAINAGE PIPING (WITH FIBERGLASS PIPE INSULATION IN COMPLIANCE WITH ASHRAE 90.1. FIBERGLASS INSULATION SHALL BE FACTORY MOLDED TUBULAR FIBERGLASS WITH ALL SERVICE JACKET, INTEGRAL VAPOR BARRIER AND FACTORY ADHESIVE OVERLAPPING JOINTS. PROVIDE FACTORY MOLDED PVC COVERS AND INSULATION FOR FITTINGS, VALVES AND DEVICES. ON COLD SERVICE PIPING, SEAL ALL JOINTS AND TERMINATIONS TO MAINTAIN THE VAPOR BARRIER. COMPOSITE INSULATING SYSTEMS SHALL NOT EXCEED A MAXIMUM FLAME SPREAD OF 25 AND SMOKE DEVELOPMENT OF 50 AS ESTABLISHED BY ASTM E84 TEST METHODS. FIBERGLASS INSULATION MANUFACTURERS - OWENS-CORNING, JOHNS MANVILLE, MASON OR KNAUFF. INSULATION THICKNESS SHALL COMPLY WITH THE FOLLOWING SCHEDULE.

0.75" AND

PIPE SYSTEM	SMALLER	1.0" TO 1.25"	1.5" TO 3"	4" TO 6"
DOM. COLD &				
DOM. HOT WATER	1.0"	1.0"	1.5"	1.5"
DOM. HOT RETURN		1.0"	1.0"	1.5"
STORM				1.0"

   A. HANGERS ON INSULATED HORIZONTAL PIPING ARE TO BE OVERSIZED TO SURROUND THE PIPE INSULATION. TO PROTECT THE INSULATION FROM DAMAGE OR INORDINATE COMPRESSION DUE TO CONCENTRATED WEIGHT, THE FOLLOWING SHALL BE PROVIDED AT EACH HANGER:
      1. PIPE 2 INCHES AND SMALLER - ANVIL FIG. 168 18 GA. SHEET METAL RIB-LOCK SHIELD WITH BELLED ENDS, 12 INCHES LONG.
      2. PIPE 2.50 INCHES AND LARGER - PIPE SERVICE TEMPERATURES [210] DEGREES FAHRENHEIT AND BELOW: 360 DEGREES INSULATED SADDLES EQUAL TO BUCKAROOS TRU-BALANCE WITH PHENOLIC FOAM INSULATION, INTEGRAL ZERO-PERM VAPOR BARRIER AND SHEETMETAL RIB-LOCK SHIELD WITH BELLED ENDS. FOR PIPING SYSTEMS SPECIFIED TO BE INSULATED WITH ELASTOMERIC TYPE INSULATION, UTILIZE ARMAFEX IPH 25/50 FLAME/SMOKE RATED INSULATION PIPE HANGERS WITH POLYURETHANE INSERTS AND 30 MIL ALUMINUM JACKET, INSULATION WALL THICKNESS SHALL BE MINIMUM 1". IF REQUIRED SERVICE INSULATION IS SPECIFIED TO BE GREATER THAN 1", TRANSITION TO REQUIRED THICKNESS WITHIN 2" OF EITHER SIDE OF IPH.
   B. INSULATION SHIELDS SHALL BE COMPATIBLE WITH PIPE INSULATION MATERIALS AND THICKNESSES. VAPOR BARRIER SHALL BE CONTINUOUS.

1. REQUIREMENTS.
2. EXTERIOR SEWER PIPING SHALL BE PVC WITH BELL AND SPIGOT JOINTS HAVING ELASTOMERIC SEAL BONDED IN THE BELL, ASTM D-3034 SDR 35. WORK SHALL CONFORM TO ALL APPLICABLE LOCAL AND STATE HIGHWAY STANDARDS INCLUDING PIPE LAYING, BEDDING, BACKFILL AND CONSTRUCTION OF APPURTENANCES. CONTACT THE JURISDICTIONAL AGENCY FOR PERTINENT DETAILS AND TO OBTAIN AND PAY FOR PERMITS.
   INTERIOR NATURAL GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL, ASTM A-53, TYPE E OR F. FITTINGS SHALL BE STEEL WELDING TYPE AND THREADED MALLEABLE IRON TYPE, CONSISTENT WITH JOINT REQUIREMENTS. JOINTS SHALL BE WELDED, EXCEPT THAT THREADED JOINTS MAY BE USED ON THREADED VALVES AND UNIONS, AT FINAL CONNECTIONS TO EQUIPMENT AND ON PIPING 2 " AND SMALLER CARRYING GAS 1 PSI AND LESS. FITTINGS SHALL BE PRESS FITTING WITH HNBR NATURAL GAS COMPATIBLE SEALING ELEMENTS THAT ARE FACTORY INSTALLED. SEAL AND/OR SEAL CUP DESIGN MUST NOT ALLOW THE FITTING JOINTS TO PASS A PRESSURE TEST PRIOR TO BEING PRESSED. COMPRESSION JOINT SHALL USE FITTING MANUFACTURER APPROVED ELECTRO-HYDRAULIC CRIMPING TOOL. COMPRESSION CRIMP SHALL BE APPLIED ON UPSTREAM AND DOWNSTREAM SIDE OF EPDM SEAL BEAD. INSTALLERS SHALL BE CREDENTIALED BY FITTING MANUFACTURER WITHIN THE LAST TWO YEARS. SUBMIT CREDENTIALS FOR REVIEWPRESS FITTINGS SHALL BE APOLLO "POWERPRESS GAS" OR VIEGA LLC "MEGAPRESSG". THERE SHALL BE NO MIXING OF FITTINGS FROM DIFFERENT MANUFACTUERS. VALVES, UNIONS AND THREADED JOINTS ARE NOT PERMITTED IN INACCESSIBLE CONCEALED LOCATIONS.
   A. SHUTOFF VALVES 2" AND SMALLER SHALL BE TWO-PIECE FORGED BRASS BALL VALVE, 600 PSI NON-SHOCK WOG, SCREWED ENDS, EQUAL TO HAMMOND 8901. SHUTOFF VALVES 2.5 " AND LARGER SHALL BE IRON BODY LUBRICATED PLUG VALVE, 200 PSI, FLANGED ENDS, EQUAL TO NORDSTROM #143. VALVES SHALL NOT BE LOCATED IN AIR PLENUMS OR DUCTS. MATERIALS AND INSTALLATION SHALL CONFORM TO THE GAS COMPANY, INTERNATIONAL FUEL GAS CODE AND NFPA 54 NATIONAL FUEL GAS CODE. VENT PIPING SHALL BE EXTENDED INDIVIDUALLY FROM EACH GAS VENTING DEVICE TO OUTSIDE THE BUILDING.
1. INTERIOR DOMESTIC WATER PIPING SHALL BE TYPE "L" SEAMLESS HARD DRAWN COPPER TUBING ASTM B88 WITH WROUGHT COPPER OR CAST BRONZE FITTINGS ASME B16.22 AND SOLDERED JOINTS. SOLDER SHALL BE LEAD-FREE TIN ALLOY, 95-5 TIN-ANTIMONY OR SILVER BEARING TIN. UNDERFLOOR BURIED PIPING SHALL BE TYPE "K" SOFT COPPER TUBING WITH SILVER BRAZED JOINTS. PIPE NIPPLES EXTENDING OUT OF THE WALL TO SERVE FIXTURES SHALL BE CHROME PLATED BRASS WITH SCREWED ENDS.
   A. SHUTOFF VALVES 2" AND SMALLER SHALL BE TWO-PIECE, BRONZE BODY, BALL TYPE, 150 W.S.P. ASTM B584, EQUAL TO NIBCO T-585-66-LF. PROVIDE FULL OPEN VALVES AT LOCATIONS REQUIRED BY THE GOVERNING PLUMBING CODE.
   B. CHECK VALVES 2" AND SMALLER SHALL BE BRONZE BODY, SWING TYPE, ASTM B62, 125 W.S.P., EQUAL TO NIBCO T-413-Y-LF.
   C. BALANCING-SHUTOFF VALVES SHALL BE GLOBE TYPE, POSITIVE SHUTOFF DESIGN, 125 PSI, WITH MEMORY STOP, GAUGE PORTS AND PORTABLE GAUGE KIT, EQUAL TO ARMSTRONG CBV SERIES. THE DOMESTIC HOT WATER RECIRCULATION SYSTEM SHALL BE BALANCED TO FLOW RATES INDICATED ON THE DRAWINGS.
   D. THERMOSTATIC BALANCING VALVES SHALL BE THERMOMEGATECH CIRCUIT SOLVER SERIES OR APPROVED EQUAL. CIRCUIT SOLVER SHALL BE SELF-CONTAINED AND FULLY AUTOMATIC WITHOUT ADDITIONAL PIPING OR CONTROL MECHANISMS. CIRCUIT SOLVER SHALL REGULATE THE FLOW OF RECIRCULATED DOMESTIC HOT WATER BASED ON WATER TEMPERATURE ENTERING CIRCUIT SOLVER REGARDLESS OF SYSTEM OPERATING PRESSURE. CLOSED POSITION SHALL STILL ALLOW PARTIAL FLOW TO PREVENT STAGNANT WATER CONDITIONS. BODY AND ALL INTERNAL COMPONENTS SHALL BE CONSTRUCTED OF STAINLESS STEEL WITH MAJOR COMPONENTS CONSTRUCTED OF STAINLESS STEEL. A STRAINER UPSTREAM, CHECK VALVE, UNIONS AND ISOLATION VALVES ON EITHER SIDE OF ASSEMBLY SHALL BE PROVIDED AT EACH CIRCUIT SOLVER LOCATION. A FACTORY TESTED ASSEMBLY WITH COMPONENTS ABOVE SHALL BE ACCEPTABLE.

26 INTERIOR ABOVE GRADE SOIL, WASTE AND VENT PIPING SHALL BE CENTRIFUGALLY CAST COATED CAST IRON WITH HUBLESS ENDS, ASTM A-888 AND CISPI 301. FITTINGS SHALL BE DRAINAGE TYPE. JOINTS SHALL CONSIST OF A NEOPRENE GASKET, ASTM C564, STAINLESS STEEL SHIELD AND STAINLESS STEEL BAND. INTERIOR SOIL, WASTE AND VENT PIPING, IN GRADE BELOW THE FLOOR SLAB, SHALL BE SCHEDULE 40 PVC, ASTM D2665, FITTINGS SHALL BE DRAINAGE TYPE. JOINTS SHALL BE SOLVENT WELDED. FLOOR DRAIN TRAPS SHALL BE THE SAME MATERIAL AS THE CONNECTING PIPING. PROVIDE CLEANOUTS WHERE SHOWN ON THE DRAWINGS AND WHERE REQUIRED BY THE GOVERNING PLUMBING CODE. INTERIOR STORM DRAINAGE PIPING SHALL BE EQUIVALENT TO THAT SPECIFIED FOR SOIL, WASTE AND VENT PIPING. ABOVE GRADE CAST IRON PIPING, IN SIZES 5" AND LARGER, SHALL BE PROVIDED WITH JOINT AND BRANCH FITTING RESTRAINTS AS RECOMMENDED BY THE CISPI HANDBOOK AND MANUFACTURER 'S INSTALLATION INSTRUCTIONS.

27 PROVIDE PLUMBING FIXTURES, AS INDICATED ON THE DRAWINGS, INSTALLED IN PLACE COMPLETE WITH SUPPORTS, CARRIERS AND SUPPLY AND WASTE TRIM. SUPPLIES TO EACH FIXTURE SHALL BE INDIVIDUALLY VALVED. VALVES, SUPPLIES AND ESCUTCHEONS SHALL BE FURNISHED WITH FIXTURE SUPPLY TRIM. ALL WASTE AND SUPPLY TRIM SHALL BE CHROME PLATED BRASS. FIXTURES SHALL BE WHITE UNLESS OTHERWISE SPECIFIED. SEAL JOINTS AROUND EACH FIXTURE AT THE WALL, FLOOR AND ANY ADJACENT CONSTRUCTION. JOINT SEALANT SHALL BE ONE PART, MILDEW RESISTANT SILICONE, ASTM C-920, TYPE S, GRADE NS, CLASS 25 WITH FUNGICIDE, EQUAL TO PECORA 898. AFTER INSTALLATION OF THE FIXTURES IS COMPLETED, ALL CONNECTING PIPES SHALL BE FLUSHED OUT THROUGH THE FIXTURES TO ELIMINATE SCALE AND ALL VALVES SHALL BE PROPERLY ADJUSTED AND FIXTURES LEFT COMPLETE AND READY FOR USE. ALL FIXTURES SHALL BE CLEANED, IMMEDIATELY PRIOR TO ACCEPTANCE BY THE OWNER.ALL PLUMBING FIXTURES, EQUIPMENT AND TRIM SHALL MEET THE DIMENSIONAL AND PERFORMANCE REQUIREMENTS OF ANSI, ARI, ASME, AND ASSE AND/OR CSA STANDARDS LISTED IN THE CURRENT JURISDICTIONAL PLUMBING CODE. ALL FAUCETS AND FITTINGS SUPPLYING DRINKING WATER FOR HUMAN CONSUMPTION SHALL CONFORM TO THE REQUIREMENTS OF NSF 61, SECTION 9.
THE DRAWINGS WILL ONLY LIST BASIS OF DESIGN MANUFACTURERS. OTHER APPROVED MANUFACTURERS SHALL BE.
   WATER CLOSETS - AMERICAN STANDARD, KOHLER, TOTO, ZURN, OTHER
   FLUSH VALVES - SLOAN, DELANEY, ZURN, OTHER
   SEATS - BEMIS, BENEKE, FIXTURE MANUFACTURER, OTHER
   LAVATORIES - AMERICAN STANDARD, KOHLER, TOTO, ZURN, OTHER
   URINALS - AMERICAN STANDARD, KOHLER, TOTO, ZURN, OTHER
   FAUCETS - CHICAGO, T&S BRASS, AMERICAN STANDARD, KOHLER, ZURN, SPEAKMAN, OTHER
   MOP BASINS - FIAT, STERN WILLIAMS, CREATIVE INDUSTRIES, MUSTEE, OTHER
   STAINLESS STEEL SINKS - ELKAY, JUST, FRANKE, ACORN, OTHER
   DRINKING FOUNTAINS - ELKAY, HALSEY TAYLOR, ACORN, HAWS, OASIS, OTHER
   SUPPLY/DRAINAGE TRIM - MCGUIRE, EBC, DEARBORN BRASS, ZURN, FERGUSON, OTHER
   SUPPLY/DRAINAGE BOXES - OATEY, GUY GRAY, PLASTIC ODDITIES, OTHER
   PROTECTIVE COVERINGS - ZURN, PLUMBEREX
   HOUSEKEEPING PADS AND SUPPORT AND MOUNTING STRUCTURES UNDER EQUIPMENT AND TANKS REQUIRING SEISMIC RESTRAINT SHALL BE DESIGNED WITH DIMENSIONAL CHARACTERISTICS, REINFORCING AND ATTACHMENT TO THE STRUCTURAL SLAB TO INSURE ADEQUATE SEISMIC RESTRAINT AND SUPPORT.
28 ABATEMENT, REMOVAL OR ENCAPSULATION OF EXISTING MATERIALS CONTAINING ASBESTOS IS NOT INCLUDED IN THIS CONTRACT. NECESSARY WORK OF THIS NATURE WILL BE ARRANGED BY THE OWNER TO BE DONE OUTSIDE OF THIS PROJECT BY A COMPANY REGULARLY ENGAGED IN ASBESTOS ABATEMENT. SUCH WORK WILL BE SCHEDULED AND PERFORMED IN ADVANCE OF WORK IN THE PROJECT.IF, IN THE PERFORMANCE OF THE WORK, MATERIALS ARE OBSERVED WHICH ARE SUSPECTED TO CONTAIN ASBESTOS, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE OWNER. WORK THAT WOULD EXPOSE WORKERS TO THE INHALATION OF ASBESTOS PARTICLES SHALL BE TERMINATED. WORK MAY BE RESUMED ONLY AFTER A DETERMINATION HAS BEEN MADE AND UNSAFE MATERIALS HAVE BEEN REMOVED OR ENCAPSULATED AND THE AREA DECLARED SAFE.

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
HEAPY
P: 317-571-8700 www.heapy.com

PROJECT NO. 2025-07211

NOBLE COUNTY HIGHWAY DEPARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

EARLEN E. LOHRMANN REGISTERED No. PE10911293 STATE OF INDIANA PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
03.27.2026
PROJECT PHASE:
BID DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2025.02329

PLUMBING SPECS

P002

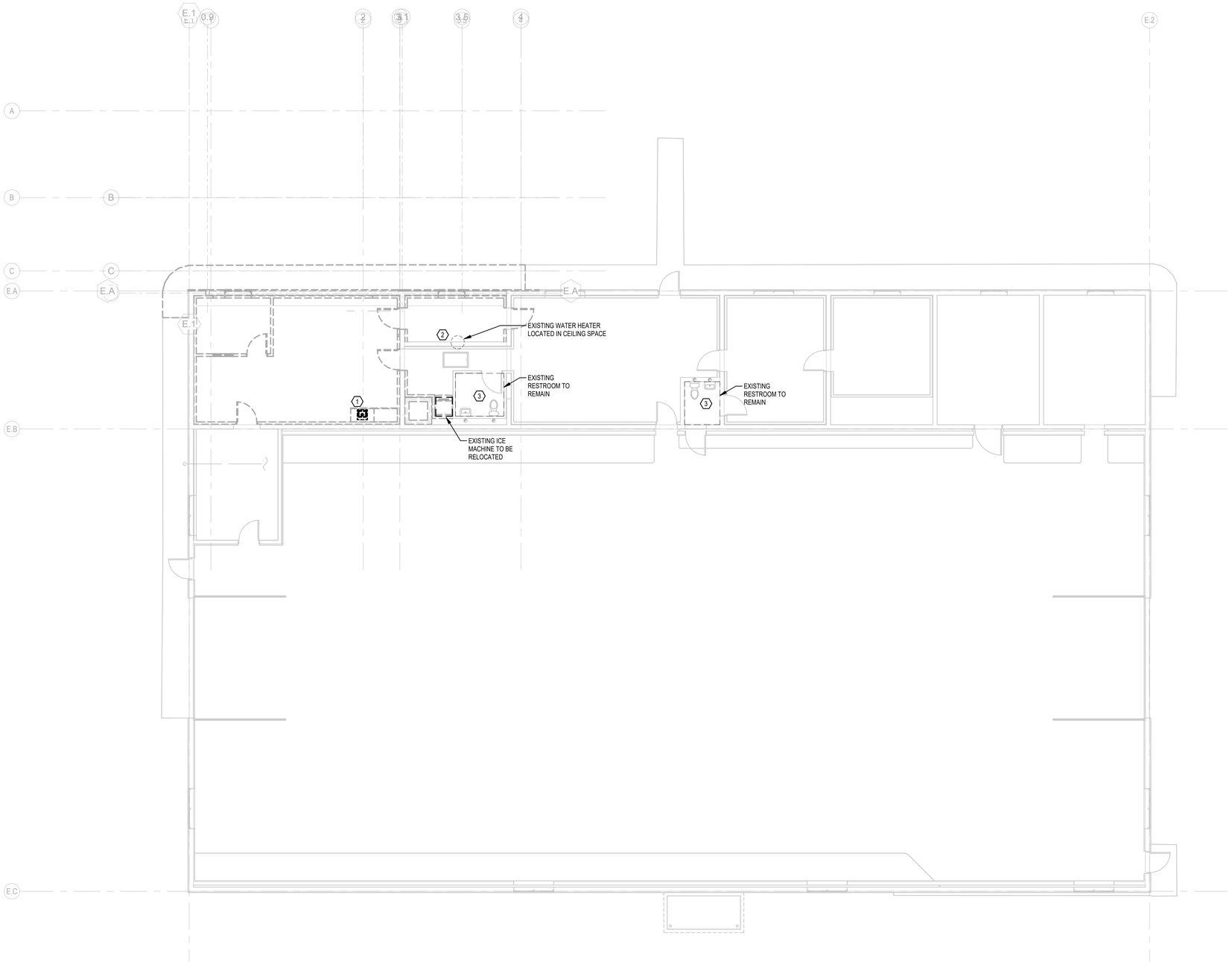
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GENERAL NOTES

A. FIELD VERIFY DOMESTIC COLD WATER, AND DOMESTIC HOT WATER PIPING LOCATION, SIZE, AND DIRECTION OF FLOW PRIOR TO CONSTRUCTION.

PLAN NOTES

1. EXISTING SINK TO BE DEMOLISHED. DEMOLISH ALL EXISTING UTILITY PIPING ABOVE GRADE BACK TO MAIN AND CAPPED BELOW GRADE
2. EXISTING WATER HEATER TO BE RELOCATED
3. EXISTING UTILITY PIPING TO BE DEMOED EXISTING UTILITY PIPING CONNECTIONS TO REMAIN. NEW UTILITY PIPING TO CONNECT TO EXISTING UTILITY PIPING CONNECTIONS



1 **DEMO FLOOR PLAN - PLUMBING**
SCALE: 1/8" = 1'-0"

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DEMO FLOOR PLAN - PLUMBING

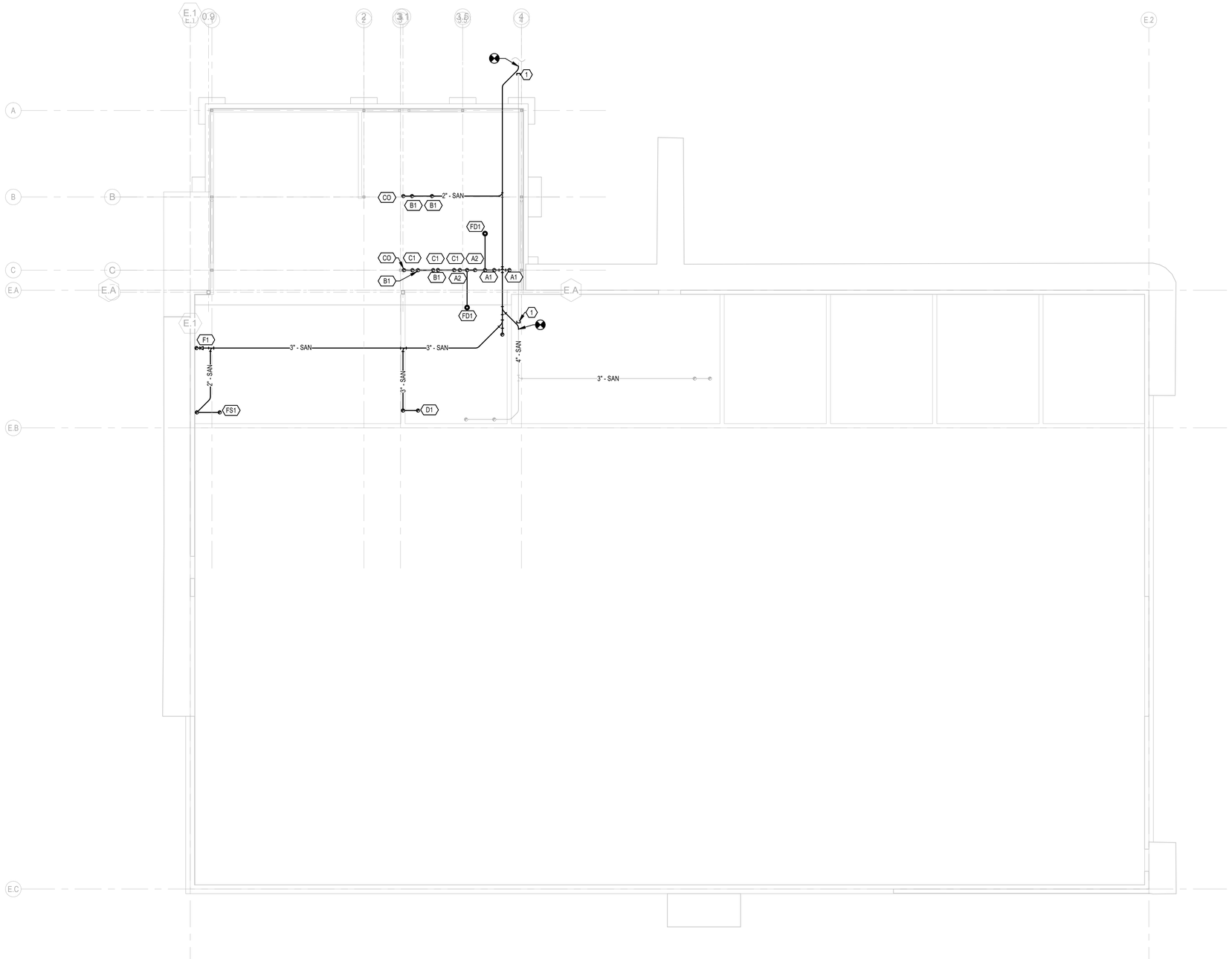
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GENERAL NOTES

A. FIELD VERIFY EXISTING SANITARY SEWER PIPING LOCATION, SIZE, DEPTH, AND DIRECTION OF FLOW PRIOR TO CONSTRUCTION.

PLAN NOTES

1. CAP AND ABANDON EXISTING SANITARY IN PLACE. UNLESS EXISTING SANITARY INTERFERES WITH NEW FOUNDATION FOOTINGS, THEN EXISTING SANITARY TO BE REMOVED.



1 **FOUNDATION PLAN - PLUMBING**
SCALE: 1/8" = 1'-0"

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9025 River Road, Suite 200, Indianapolis, Indiana 46240

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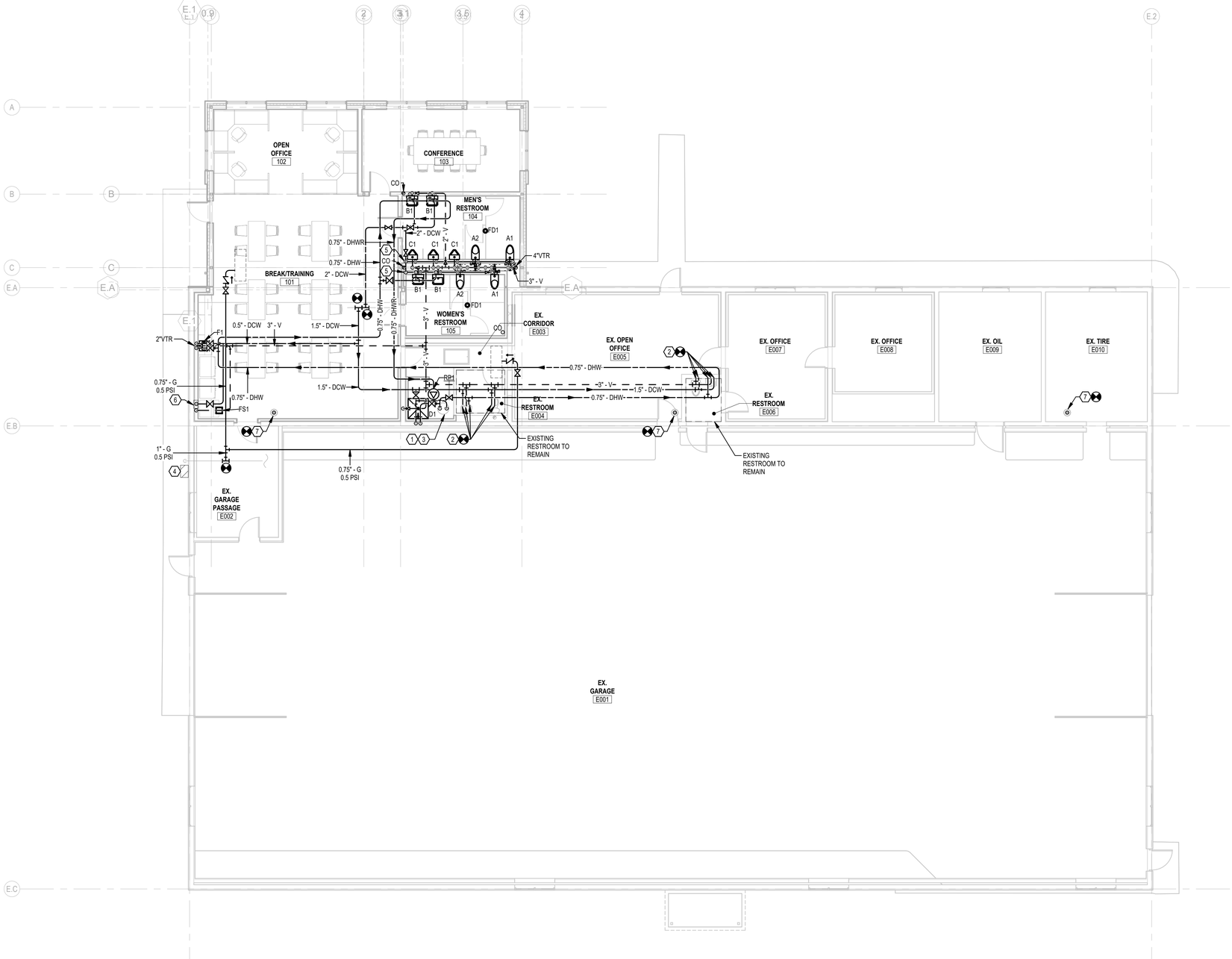
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FOUNDATION PLAN - PLUMBING

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GENERAL NOTES

A. FIELD VERIFY DOMESTIC COLD WATER, AND DOMESTIC HOT WATER PIPING LOCATION, SIZE, AND DIRECTION OF FLOW PRIOR TO CONSTRUCTION.

PLAN NOTES

1. EXISTING WATER HEATER RELOCATED. INSTALL RELOCATED WATER HEATER ON NEW FLOOR MOUNTED STEEL STAND
2. CONNECT NEW UTILITY PIPING TO EXISTING UTILITY CONNECTIONS OF EXISTING PLUMBING FIXTURES IN EXISTING RESTROOMS
3. ROUTE EXISTING WATER HEATER T&P RELIEF VALVE TO NEW MOP SINK AND TERMINATE WITH AN INDIRECT CONNECTION
4. EXISTING GAS METER
5. DOMESTIC COLD WATER DROPS IN CHASE TO SERVE PLUMBING FIXUTURES FROM A FULL SIZED MANIFOLD
6. PROVIDE WATE SUPPLY BOX FOR ICE MACHINE
7. ROUTE NEW STORM PIPING UP TO NEW ROOF DRAIN. CONNECT NEW STORM PIPING TO EXISTING VERTICAL STORM PIPING

1 **FLOOR PLAN - PLUMBING**
SCALE: 1/8" = 1'-0"

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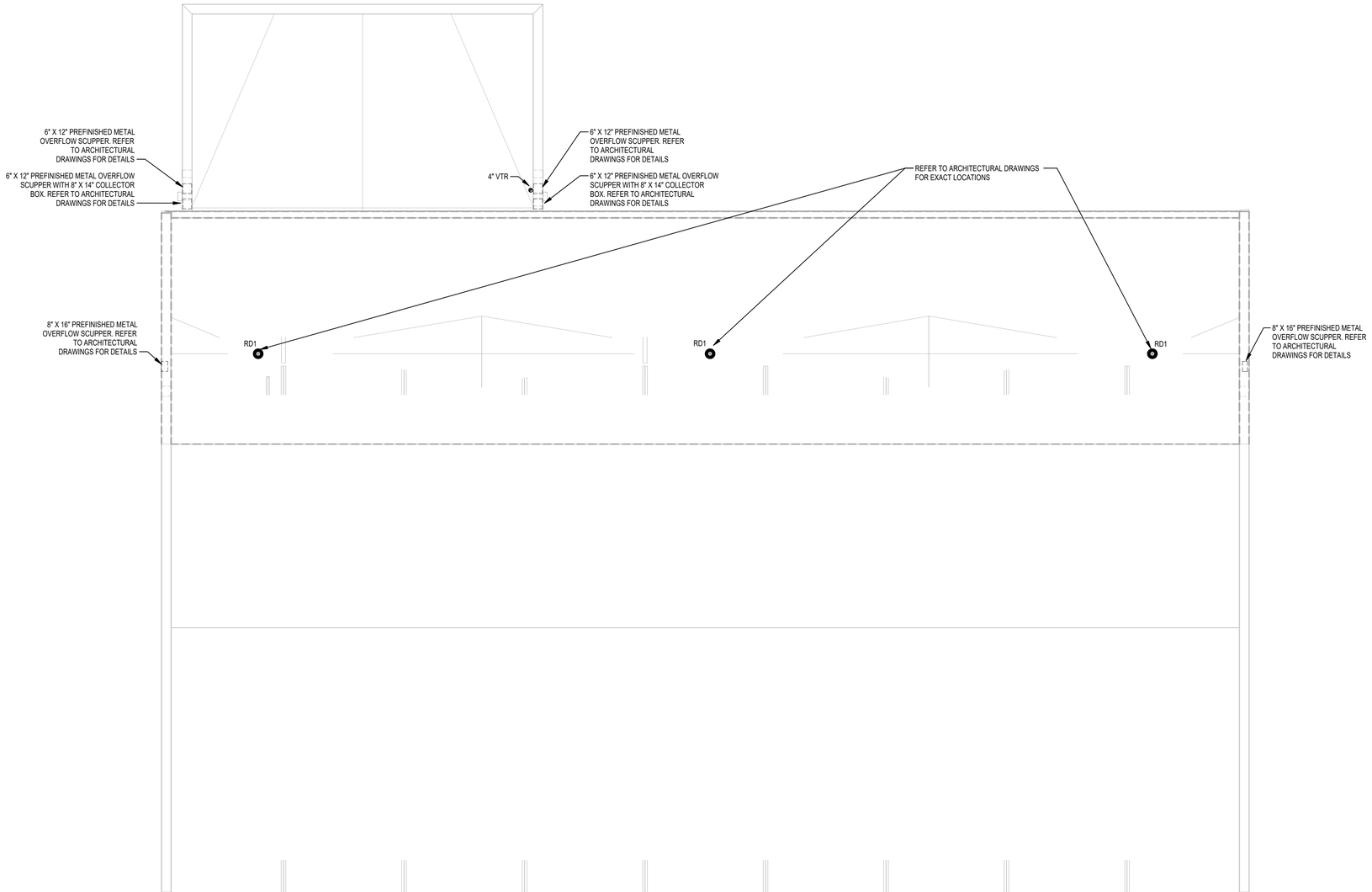
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NO.	DESCRIPTION	DATE

Project Number 2025.02329

FLOOR PLAN - PLUMBING

P101

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1 **ROOF PLAN - PLUMBING**
SCALE: 1/8" = 1'-0"

N

0 4 8 16 24

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AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240

HEAPY
P: 317-571-8700 www.heapy.com

PROJECT NO. 2025-07211

NOBLE COUNTY HIGHWAY DEPARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

EMREN E. LOHRMANN REGISTERED No. PE10911293 STATE OF INDIANA PROFESSIONAL ENGINEER

CERTIFIED BY

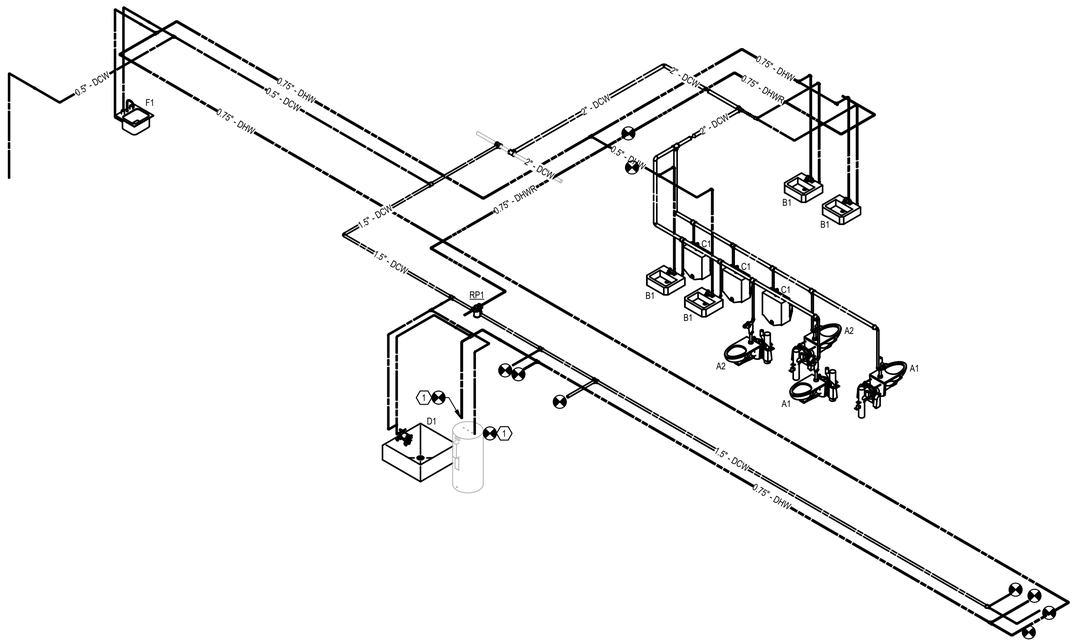
ISSUANCE INDEX
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PROJECT PHASE:
BID DOCUMENTS

REVISION SCHEDULE		
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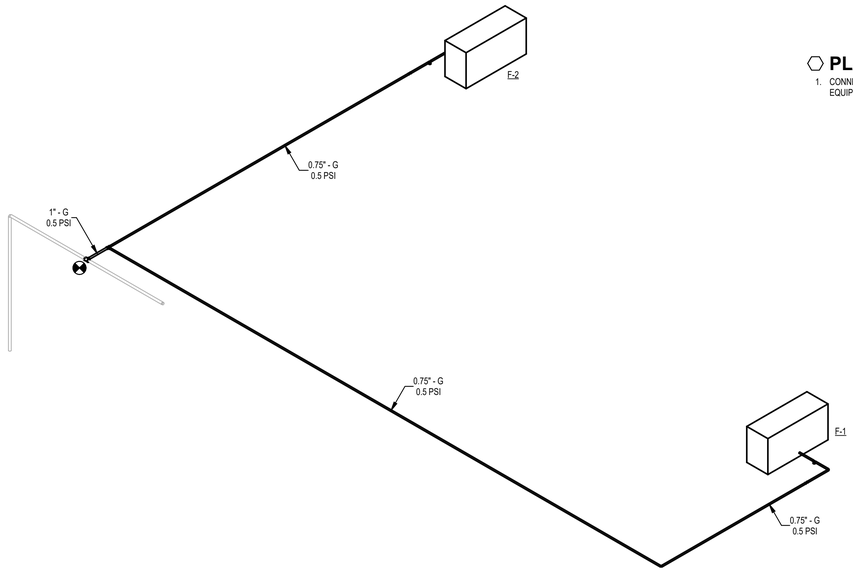
ROOF PLAN - PLUMBING

P102



2 PLUMBING RISER DIAGRAM - DISTRIBUTION

SCALE: NONE

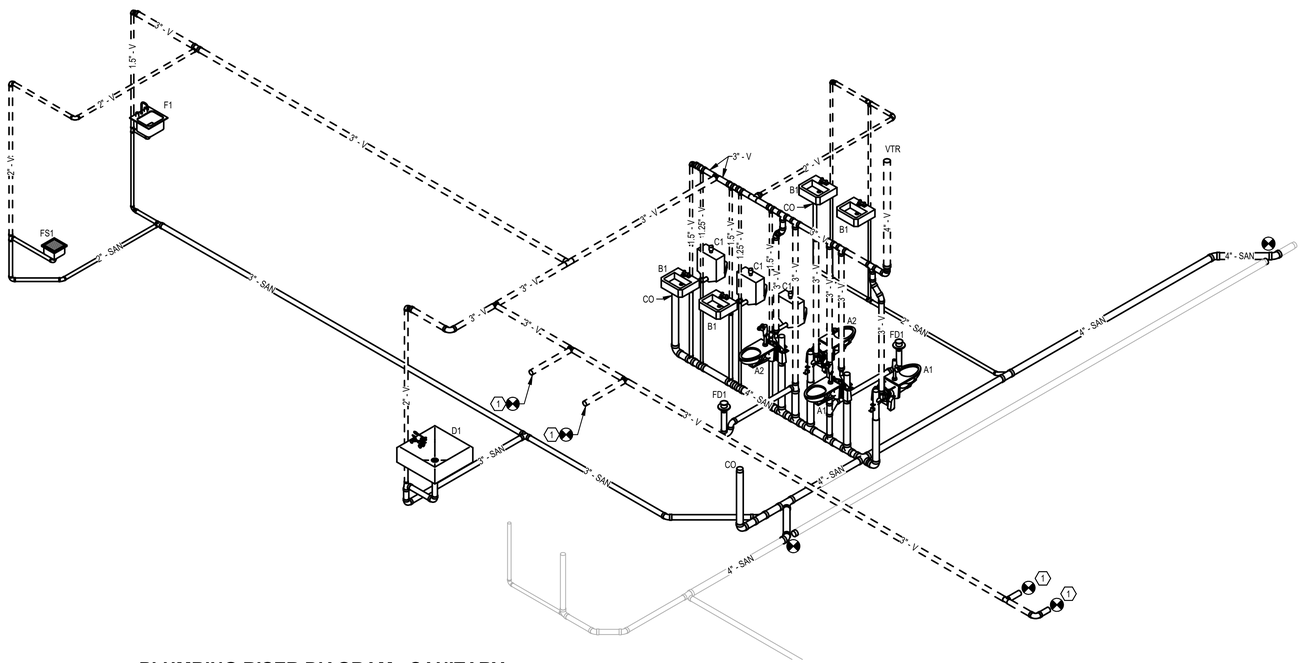


3 PLUMBING RISER DIAGRAM - NATURAL GAS

SCALE:

PLAN NOTES

1. CONNECT TO EXISTING PLUMBING FIXTURES / EQUIPMENT



1 PLUMBING RISER DIAGRAM - SANITARY

SCALE: NONE

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RISER DIAGRAMS - PLUMBING

P301

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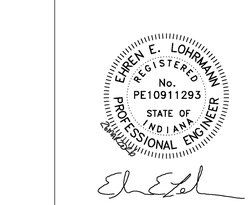
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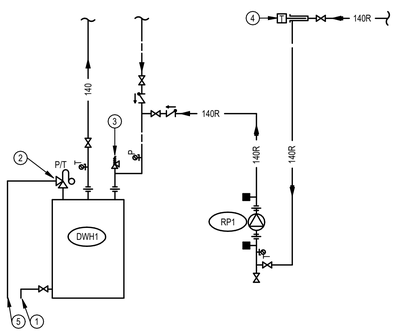
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DETAILS - PLUMBING

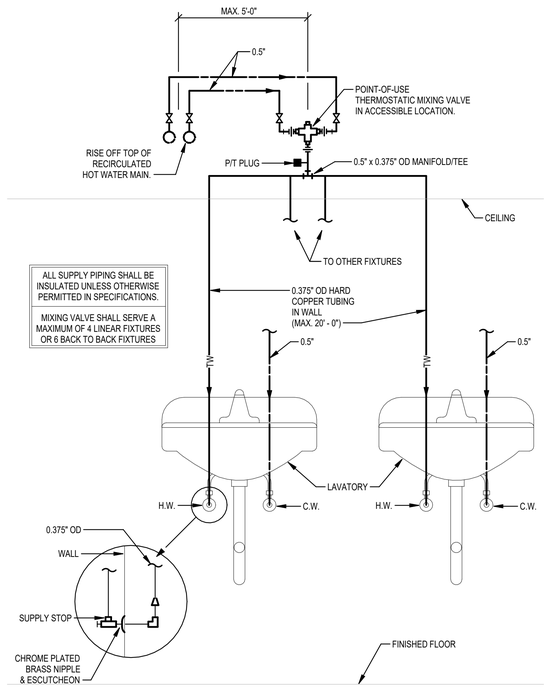
P501



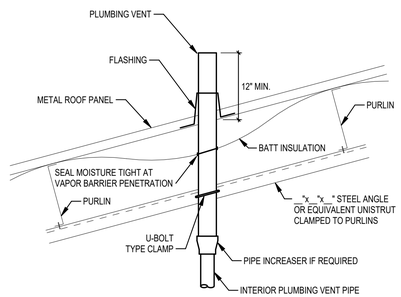
NOTES

1. AIR GAP OVER FLOOR DRAIN
2. COMBINATION TEMPERATURE-PRESSURE RELIEF VALVE.
3. VACUUM RELIEF VALVE.
4. RECIRCULATION PUMP CONTROL AQUASTAT.
5. AIR GAP OVER FLOOR.

3 DOMESTIC WATER HEATER PIPING
SCALE: 1/8" = 1'-0"



2 POINT OF USE MIXING VALVE
SCALE: NONE



1 PLUMBING VENT THRU SLOPED METAL ROOF
SCALE: NONE

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PLUMBING FIXTURES

CATALOG NUMBERS INDICATED ARE THOSE OF THE LISTED DESIGN BASIS MANUFACTURER IN EACH CATEGORY LISTED BELOW

A. KOHLER
B. SLOAN
C. BEMIS
D. SMITH
E. CHICAGO
F. GUY GRAY
G. McGUIRE
H. FIAT
J. ELKAY
K. HALSEY TAYLOR
L. LEONARD
M. AQUARIUS
N. IN-SINK ERATOR
O. GUARDIAN
P. SPEAKMAN
Q. TRUEBRO

SCHEDULE ABBREVIATIONS:

ADA	HANDICAP ACCESSIBLE	QD	QUICK DISCONNECT
BO	BACK OUTLET	SB	SINGLE BOWL
BPW	BED PAN WASHER	SST	STAINLESS STEEL
DB	DOUBLE BOWL	UCM	UNDER COUNTER MOUNT
FS	FLOOR SET	VB	VACUUM BREAKER
FT	FLUSH TANK	VR	VANDAL RESISTANT
FV	FLUSH VALVE	WB	WRIST BLADE
GN	GOOSENECK	WH	WALL HUNG
HS	HAND SHOWER		

GENERAL NOTE:
1. SUPPLY PIPE SIZES IN THIS SCHEDULE ARE FIXTURE OR SUPPLY STOP CONNECTION SIZES. DOMESTIC COLD AND HOT WATER SUPPLY PIPE SIZES SERVING FIXTURES SHALL BE, AT A MINIMUM, THE SIZES LISTED UNLESS NOTED OTHERWISE OR LABELED ON THE FLOOR PLANS. DOMESTIC COLD WATER SUPPLY PIPE SIZES SERVING FLUSH VALVES SHALL BE AT MINIMUM ONE PIPE SIZE LARGER THAN THE INDICATED CONNECTION SIZE, OR SIZED AS SHOWN ON THE FLOOR PLANS. PIPING AT THE FLUSH VALVE CONNECTION OF A SIZE EQUAL TO THE CONNECTION SIZE SHALL BE LIMITED TO A MAXIMUM 2 FEET IN DEVELOPED LENGTH AND INCLUDE A MAXIMUM OF ONE 90 DEGREE ELBOW FITTING. FULL SIZE MANIFOLDS, WHERE INDICATED ON THE FLOOR PLANS, SHALL BE PROVIDED FULL SIZE FOR THE LENGTH OF THE PIPING CHASE AND TERMINATED WITH A FULL SIZE CAP.

NOTES:
1. LAVATORY BOWL IS INTEGRAL TO MILLWORK. REFER TO ARCHITECTURAL DRAWINGS FOR LAVATORY BOWL DETAILS.
2. PROVIDE ASSE 1070 LISTED MIXING VALVE BELOW FIXTURE. SET FAUCET DISCHARGE TO 110 F.
3. PROVIDE WITH SST WALL PANEL SPLASH GUARDS, SST BUMPER GUARDS, MOP HANGER, HOSE, HOSE BRACKET BY MOP BASIN MANUFACTURER.
4. PROVIDE ADDITIONAL HOSE BIB ADJACENT TO MOP BASIN FAUCET TO SERVE HOSE REEL.
5. PROVIDE INLINE CHECK VALVES ON EACH SUPPLY.
6. PROVIDE WATER HAMMER ARRESTORS ON EACH SUPPLY DROP TO BOX.
7. PROVIDE WATER CLOSET CARRIER SIMILAR TO JOSAM SERIES 11001.

MARK	DESCRIPTION	MOUNTING HEIGHT	FLOW		CONTROL				SUPPLY					WASTE & VENT							FIXTURE		SUPPLY TRIM		SUPPLY / STOP		WASTE TRIM		TRAP / FIX. DR.		MISC.		SEE NOTE
			GPM	GPF	MANUAL	METERING	SENSOR ELECTRIC	SENSOR BATTERY	COLD WATER	HOT WATER	TEMPERED	NAT. GAS		FIX. OUTLET	TRAP	FIX. DRAIN	WASTE-MIN.	VENT-MIN.	INDIRECT	AIR GAP	AIR BREAK												
																						MFR.	CAT. NO.	MFR.	CAT. NO.	MFR.	CAT. NO.	MFR.	CAT. NO.	MFR.	CAT. NO.	MFR.	CAT. NO.	
A1	WATER CLOSET / WH / FV / ADA	17" AFF		1.28			●		1"					4"	4"	4"	4"	3"			●	A	K-84325	D	606B.121	D	UNIT	A	UNIT	A	INTEGRAL	C	1955SSSCT	1,2,6,7
A2	WATER CLOSET / WH / FV	15" AFF		1.28			●		1"					4"	4"	4"	4"	3"			●	A	K-84325	D	606B.121	D	UNIT	A	UNIT	A	INTEGRAL	C	1955SSSCT	1,2,6,7
B1	LAVATORY / RECTANGULAR / WH / ADA	34" TO RIM	0.5				●		0.5"	0.5"				1.25"	1.5"	1.5"	1.5"	2"		●		A	K-12643	B	EAF-300-PLG-ISM-CP-0.5GPM-MLM-IQ-FCT	G	LFBV2165	G	155A	G	8902			
C1	URINAL / WH / FV / ADA	17" TO LIP		0.125			●		0.75"					2"	2"	2"	2"	2"			●	A	K-4991-ET	D	606B.0.25	D	UNIT	A	UNIT	A	INTEGRAL	-	-	2
D1	MOP BASIN	FM	13		●										3"	3"	2"		●			H	TSB-600	H	830AA000								
F1	SINK	CM	0.35		●				0.5"	0.5"				1.5"	1.5"	1.5"	1.5"	2"		●		A	K-33153	A	K-22972	G	LFBV2165	G	155A	G	8902			

DRAINS

GENERAL NOTES:
1. ALL DRAINS ARE MANUFACTURED BY J.R. SMITH UNLESS NOTED OTHERWISE.
2. ADDITIONAL ACCEPTABLE MANUFACTURERS ARE ZURN,...

NOTES:
1. INSTALL FLOOR DRAINS COMPLETE WITH TRAP SEAL, SIMILAR TO JR SMITH QUAD CLOSE OR APPROVED EQUAL.

MARK	CATALOG NOS.	TYPE			BODY						OUTLET			STRAINER / GRATE									TOP FINISH						ADDITIONAL FEATURES												SEE NOTE
														SIZE																										
		FLOOR	ROOF	AREAWAY	CAST IRON	BRASS	ACID RESIST.	STAINLESS STEEL	PLASTIC		SIZE	BOTTOM	SIDE	DIAMETER / WIDTH	LENGTH	ADJUSTABLE	FLAT	DOME	RECESSED	FUNNEL	HINGED	STAINLESS STEEL	NICKLE-BRONZE	CAST IRON	ACID RESIST.	STAINLESS STEEL	PLASTIC	DUCTILE IRON	ANCHOR FLANGE	FLASHING CLAMP	DBL DRAINAGE	SED. BUCKET	TRAP PRIMER CON.	AUX. STRAINER	VARIABLE EXTENSION	SUMP RECEIVER	U'DECK CLAMP	INTERIOR WATER DAM	EXTERIOR WATER DAM	
FD1	2005	●			●						3"	●		5"		●								●					●		●								1
FS1	3009	●									2"			0"	0"																								
RD1	ROOF DRAIN		●								4"	●		15"																●									

PUMPS

GENERAL NOTES:
A. PROVIDE FLEXIBLE CONNECTIONS, AND / OR VIBRATION ISOLATION AS PER SPECIFICATIONS. WHEN APPLICABLE, REFER TO SPECIFICATIONS FOR SEISMIC RESTRAINT REQUIREMENTS.
B. COORDINATE ELECTRICAL CONNECTIONS WITH ELECTRICAL CONTRACTOR.
C. INSTALL EQUIPMENT SO ADEQUATE ACCESS TO CONTROLS AND VALVES ARE PROVIDED.
D. PROVIDE NEC WORKING SPACE CLEARANCES FOR ELECTRICAL / CONTROL PANELS.
E. INSTALL ALL "LOOSE" COMPONENTS.
F. CONNECTION SIZES SHALL BE AS LISTED. TERMINAL OUTLETS AND INLETS ON EQUIPMENT MAY BE SMALLER AND INCREASER / REDUCER FITTINGS REQUIRED.

NOTES:
1. PROVIDE PRESSURE GAUGES ON SUPPLY AND DISCHARGE OF PUMPS.

MARK	DESCRIPTION	BASIS OF DESIGN		TYPE				CAPACITY	PRESSURE HEAD	INPUT		VOLTAGE - PHASE	FLUID CONNECTIONS		APPROX. DIMENSIONS			CONCRETE PAD	SEISMIC RESTRAINTS		SEE NOTE
		MANUFACTURER	MODEL	BOOSTER	RECIRCULATION	SEWAGE EJECTOR	SUMP	FUEL			WATTS	(QTY) HP		IN	OUT	WIDTH / DIAMETER	LENGTH	HEIGHT		REQUIRED	IMPORTANCE FACTOR	
RP1	RECIRCULATION PUMP	XYLEM	NBF-9U/LW	-	●	-	-	-		7	41		115-1	0.75"	0.75"	4.375"	8.625"	6.688"	-	-	-	

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SCHEDULES - PLUMBING

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ELECTRICAL SYMBOLS

3 S	DASH SYMBOL INDICATES PARTICULAR OUTLET OR DEVICE TO BE REMOVED AND CIRCUITRY MADE CONTINUOUS WHERE REQUIRED.
3 S	EXISTING OUTLET OR DEVICE TO REMAIN. MAINTAIN EXISTING CIRCUITING.
	ELECTRICAL CONNECTION.
	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R (18" MH UNLESS NOTED OTHERWISE). WHEN ⏻ SHOWN, RECEPTACLE TO HAVE "CONTROLLED" MARKINGS.
	20A-125V SINGLE RECEPTACLE, NEMA 5-20R (18" MH UNLESS NOTED OTHERWISE).
	SPECIAL PURPOSE RECEPTACLE. REFER TO NOTE ON PLAN.
	20A-125V DOUBLE DUPLEX RECEPTACLE. NEMA 5-20R, (18" MH UNLESS NOTED OTHERWISE) TWO GANG ASSEMBLY.
	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R WITH BOTTOM OUTLET CONTROLLED BY WALL SWITCH. (18" MH UNLESS NOTED OTHERWISE).
	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R (46" MH UNLESS NOTED OTHERWISE).
	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R WITH 2 INTEGRAL USB CHARGERS (18" MH UNLESS NOTED OTHERWISE).
GF	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R, WITH GROUND FAULT CIRCUIT INTERRUPTER (18" MH UNLESS NOTED OTHERWISE).
WP	20A-125V WEATHERPROOF DUPLEX RECEPTACLE, NEMA 5-20R (HORIZONTAL 18" MH UNLESS NOTED OTHERWISE) WITH TAYMAC #MM420G EXTRA DUTY GRAY COVER, VERTICAL MOUNT.
WP/GF	20A-125V WEATHERPROOF DUPLEX RECEPTACLE, NEMA 5-20R WITH GROUND FAULT CIRCUIT INTERRUPTER (18" MH UNLESS NOTED OTHERWISE), WITH TAYMAC #MM420G EXTRA DUTY GRAY COVER, VERTICAL MOUNT.
EM	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R, ON EMERGENCY POWER (18" MH UNLESS NOTED OTHERWISE).
T	20A-125V POWERLOCK GROUNDING TYPE RECEPTACLE, HOSPITAL USE (66" MH UNLESS NOTED OTHERWISE).
	20A-125V DUPLEX PEDESTAL TYPE FLOOR RECEPTACLE, NEMA 5-20R, IN HUBBELL BA-2527 FLOOR BOX WITH SA-2525 COVERPLATE AND SC-3091 HOUSING. PROVIDE CARPET FLANGE WHERE REQUIRED.
X	FLOOR BOX, # INDICATES TYPE, REFER TO FLOOR BOX (FB) SCHEDULE. IF NO #, PROVIDE HUBBELL BA-2527 FLUSH FLOOR BOX WITH ROUND SA-3925 COVERPLATE AND ONE 20A-125V DUPLEX RECEPTACLE. PROVIDE CARPET FLANGE WHERE REQD.
X	FIRE RATED POKE-THRU, # INDICATES TYPE, REFER TO POKE-THRU (PT) SCHEDULE. IF NO #, PROVIDE HUBBELL 6 INCH RECESSED ACCESS POKE-THRU WITH TWO 20A-125V DUPLEX RECEPTACLES. PROVIDE CARPET FLANGE WHERE REQD.
IG	20-125V DUPLEX RECEPTACLE, NEMA 5-20R, WITH ISOLATED GROUND (18" MH UNLESS NOTED OTHERWISE).
20A	20A-125/250V-1PH-4W SINGLE RECEPTACLE, NEMA 14-20R (18" MH UNLESS NOTED OTHERWISE).
30A	30A-125/250V-1PH-4W SINGLE RECEPTACLE, NEMA 14-30R (18" MH UNLESS NOTED OTHERWISE).
50A	50A-125/250V-1PH-4W SINGLE RECEPTACLE, NEMA 14-50R (18" MH UNLESS NOTED OTHERWISE).
20A	20A-250V-3PH-4W SINGLE RECEPTACLE, NEMA 15-20R (18" MH UNLESS NOTED OTHERWISE).
30A	30A-250V-3PH-4W SINGLE RECEPTACLE, NEMA 15-30R (18" MH UNLESS NOTED OTHERWISE).
50A	50A-250V-3PH-4W SINGLE RECEPTACLE, NEMA 15-50R (18" MH UNLESS NOTED OTHERWISE).
J	JUNCTION BOX.
	MULTI-OUTLET RECEPTACLES ASSEMBLY, NEMA 5-15R (SINGLE OUTLETS ON 18" CENTERS) (46" MH UNLESS NOTED OTHERWISE).
	WIREMOLD RACEWAY, AS NOTED ON PLANS.
C	CLOCK HANGER OUTLET, SINGLE NEMA 5-15R RECESSED IN COVER PLATE (84" MH UNLESS NOTED OTHERWISE).
$	SINGLE POLE SWITCH (46" MH UNLESS NOTED OTHERWISE).
2 $	TWO POLE WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).
# $	MULTI-WAY WALL SWITCH, # INDICATES NUMBER OF WAYS (46" MH UNLESS NOTED OTHERWISE).
P $	SWITCH WITH NEON PILOT LIGHT. ONE-GANG ASSEMBLY (46" MH UNLESS NOTED OTHERWISE).
K $	KEY OPERATED WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).
L $	LOW-VOLTAGE MOMENTARY WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).
DM $	LIGHTING DIMMER SWITCH (46" MH UNLESS NOTED OTHERWISE) 1000 WATTS UNLESS OTHERWISE INDICATED.
R $	SWITCH WITH RECEPTACLE (46" MH UNLESS NOTED OTHERWISE) STANDARD TWO-GANG ASSEMBLY OF SWITCH AND RECEPTACLE.
M $	FLUSH FRACTIONAL HORSEPOWER MOTOR STARTER WITH NEON PILOT LIGHT. ONE-GANG ASSEMBLY (46" MH UNLESS NOTED OTHERWISE).
H $	HP RATED WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).
	ELECTRICAL PANEL OR SWITCHBOARD PER DRAWINGS.
P/B	PULL BOX.
	DISCONNECT SWITCH.
	MOTOR STARTER.
	COMBINATION MOTOR STARTER AND DISCONNECT SWITCH.
	ELECTRIC MOTOR.
UH	UNIT HEATER.
FC	FAN COIL.
AC	AIR CONDITIONER.
CU	CONDENSING UNIT.
UV	UNIT VENTILATOR.
CR	CORD REEL.
PP	POWER POLE.
PC	PHOTOELECTRIC SENSOR.
LC	LIGHTING CONTACTOR.
OS	CEILING MOUNTED OCCUPANCY SENSOR.
OS	WALL MOUNTED OCCUPANCY SENSOR.
VS	CEILING MOUNTED VACANCY SENSOR.
VS	WALL MOUNTED VACANCY SENSOR.
DS	CEILING MOUNTED DAYLIGHT SENSOR.
OP	OCCUPANCY SENSOR POWER PACK.

NOTE:
ALL SYMBOLS AND ABBREVIATIONS ARE SUBJECT TO MODIFICATIONS ON OTHER DRAWINGS.
ALL SYMBOLS OR ABBREVIATIONS MIGHT NOT NECESSARILY BE USED ON THIS PROJECT.

FIRE ALARM SYMBOLS

FACP	FIRE ALARM CONTROL PANEL.
RAP	REMOTE ANNUNCIATOR PANEL.
NAC	NOTIFICATION APPLIANCE CIRCUIT EXTENDER PANEL.
ASSD	AIR SAMPLING SMOKE DETECTOR BASE UNIT.
15 F	FIRE ALARM SPEAKER & SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
15 F	FIRE ALARM BELL & SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
15 F	FIRE ALARM CHIME & SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
15 F	FIRE ALARM HORN & SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
FP W	FIRE ALARM BELL (88" AFF UNLESS NOTED OTHERWISE). SUBSCRIPT "W" INDICATES EXTERIOR WEATHERPROOF UNIT.
15 F	FIRE ALARM SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
S 15 F	CEILING MOUNTED FIRE ALARM SPEAKER & SIGNAL LIGHT. # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
15 F	CEILING MOUNTED FIRE ALARM HORN & SIGNAL LIGHT. # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
15 F	CEILING MOUNTED FIRE ALARM SIGNAL LIGHT. # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
S F	CEILING MOUNTED FIRE ALARM SPEAKER.
B S	SURFACE MOUNTED FIRE ALARM SPEAKER (88" AFF). SUBSCRIPT "R" INDICATES RECESSED MOUNTING.
F K	FIRE ALARM MANUAL STATION (46" MH UNLESS NOTED OTHERWISE). SUBSCRIPT "K" INDICATES KEY OPERATED.
S	CEILING MOUNTED SMOKE DETECTOR.
H	CEILING MOUNTED HEAT DETECTOR.
S S/R	DUCT MOUNTED SMOKE DETECTOR. SUBSCRIPT "S" INDICATES SUPPLY. SUBSCRIPT "R" INDICATES RETURN.
H S/R	DUCT MOUNTED HEAT DETECTOR. SUBSCRIPT "S" INDICATES SUPPLY. SUBSCRIPT "R" INDICATES RETURN.
B T/R	BEAM DETECTOR. SUBSCRIPT "T" INDICATES TRANSMITTER FUNCTION. SUBSCRIPT "R" INDICATES RECEIVER FUNCTION.
C	ELECTRIC RELEASE DOOR CLOSER.
D	ELECTRO-MAGNETIC DOOR HOLDER.
FS	WATER FLOW SWITCH.
V	VALVE SUPERVISORY SWITCH.
W R	CEILING MOUNTED REMOTE TEST STATION AND ALARM INDICATOR LIGHT FOR DUCT DETECTOR. SUBSCRIPT "W" INDICATES WALL MOUNTED.
SD	SMOKE DAMPER.
FT	FIRE FIGHTER'S TELEPHONE (60" MH UNLESS NOTED OTHERWISE).
PS	PRESSURE SWITCH.
AM C/I	ADDRESSABLE MODULE. SUBSCRIPT "I" INDICATES INPUT. SUBSCRIPT "C" INDICATES CONTROL.
PIV	POST INDICATOR VALVE.
K S	KNOX BOX (46" MH UNLESS NOTED OTHERWISE). SUBSCRIPT "S" INDICATES SUPERVISED UNIT.
A	AIR SAMPLING SMOKE DETECTOR SAMPLING PORT.

TECHNOLOGY SYMBOLS WITH ELEC. REQUIREMENTS

1"	CONDUIT SLEEVE / FIRE RATED SLEEVE ASSEMBLY THRU WALL (1-2" SLEEVE UNLESS NOTED OTHERWISE) PER DIV 26.
X	WALL MOUNTED DATA OUTLET (18" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT(S) TO ABOVE ACCESSIBLE CEILING PER DIV 26. JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "X" DESIGNATES QUANTITY OF DATA CABLES. REFER TO FACEPLATE DETAILS.
	WALL MOUNTED VOICE/DATA OUTLET (18" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT(S) TO ABOVE ACCESSIBLE CEILING PER DIV 26. JACKS, FACEPLATE AND CABLING PER DIV 27. REFER TO FACEPLATE DETAILS.
	WALL MOUNTED PHONE OUTLET (46" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT TO ABOVE ACCESSIBLE CEILING PER DIV 26. JACKS, FACEPLATE AND CABLING PER DIV 27. REFER TO FACEPLATE DETAILS.
X	DATA OUTLET LOCATED ABOVE ACCESSIBLE CEILING. JACKS, PLENUM RATED SURFACE MOUNT BOX AND CABLING PER DIV 27. SUBSCRIPT "X" DESIGNATES QUANTITY OF DATA CABLES. REFER TO FACEPLATE DETAILS.
AP	WALL MOUNTED WIRELESS ACCESS POINT (96" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT TO ABOVE ACCESSIBLE CEILING PER DIV 26. WAP AND CABLING PER DIV 27. REFER TO FACEPLATE DETAILS.
X	WALL MOUNTED AV OUTLET (18" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUITS TO ABOVE ACCESSIBLE CEILING PER DIV 26. REFER TO FACEPLATE DETAILS. JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "X" INDICATES ALTERNATE CONFIGURATION.
	TELECOM BOX AND CONDUIT TO ABOVE ACCESSIBLE CEILING PER DIV 26, REFER TO PLANS. REFER TO FACEPLATE DETAILS.
X	WALL MOUNTED AV OUTLET (84" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT PER DIV 26. REFER TO FACEPLATE DETAILS. JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "X" INDICATES ALTERNATE CONFIGURATION.
X	WALL MOUNTED AV OUTLET (44" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT PER DIV 26. REFER TO FACEPLATE DETAILS. JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "X" INDICATES ALTERNATE CONFIGURATION.
	CUSTOM OUTLET IN SURFACE RACEWAY. SURFACE RACEWAY PER DIV 26. OUTLET JACKS, FACEPLATE AND CABLING PER DIV 27. REFER TO FACEPLATE DETAILS.
X	OUTLET LOCATED ABOVE ACCESSIBLE CEILING. JACKS, PLENUM RATED SURFACE MOUNT BOX AND CABLING PER DIV 27. SUBSCRIPT "X" INDICATES ALTERNATE CONFIGURATION. # INDICATES OUTLET TYPE ON THIS LEGEND, REFER TO FACEPLATE DETAILS.
X	FLOOR BOX WITH CONDUIT(S) TO ABOVE ACCESSIBLE CEILING PER DIV 26. # INDICATES TYPE, REFER TO FLOOR BOX (FB) SCHEDULE. SUBSCRIPT "X" INDICATES TECHNOLOGY DEVICE(S), REFER TO TECHNOLOGY DETAILS.
X	POKE-THRU PER DIV 26. # INDICATES TYPE, REFER TO POKE-THRU (PT) SCHEDULE. SUBSCRIPT "X" INDICATES TECHNOLOGY DEVICE(S), REFER TO TECHNOLOGY DETAILS.

LUMINAIRE SYMBOLS

A a	LIGHTING FIXTURE. CAPITAL LETTER DENOTES FIXTURE TYPE, LOWER CASE LETTER DENOTES SWITCHING ARRANGEMENT.
	LIGHTING FIXTURE ON EMERGENCY BATTERY PACK AND NIGHT LIGHT.
	EXIT LIGHTING FIXTURE, ARROWS AS INDICATED, EGRESS LIGHT PACK AS INDICATED.

SHEET LIST

SHEET NUMBER	SHEET NAME
E001	ELECTRICAL INDEX, SYMBOLS, AND LEGEND
E002	ELECTRICAL SPECS AND GENERAL NOTES
ED101	DEMO FLOOR PLAN - ELECTRICAL
E101	LIGHTING FLOOR PLAN
E102	POWER & SYSTEMS FLOOR PLAN
E501	PANEL SCHEDULE & DETAILS - ELECTRICAL
E601	SCHEDULES - ELECTRICAL

ABBREVIATIONS

AAP	- AREA ALARM PANEL - MEDICAL GAS
ACC	- ACCESS
ADJ	- ADJUSTABLE
AF	- ARC FAULT CIRCUIT INTERRUPTER
AFCI	- ARC FAULT CIRCUIT INTERRUPTER
AFF	- ABOVE FINISHED FLOOR TO BOTTOM OF ITEM
AFG	- ABOVE FINISHED GRADE TO BOTTOM OF ITEM
ALT	- ALTERNATE
AP	- ACCESS PANEL
APPROX	- APPROXIMATE
ARCH	- ARCHITECT OR ARCHITECTURAL
ASSY	- ASSEMBLY
ATS	- AUTOMATIC TRANSFER SWITCH
BLDG	- BUILDING
BOE	- BOTTOM OF EQUIPMENT
BOT	- BOTTOM
BTWN	- BETWEEN
CFCI	- CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CKT	- CIRCUIT
CLG	- CEILING
CMU	- CONCRETE MASONRY UNIT
CONN	- CONNECT OR CONNECTION
CONTR	- CONTRACTOR
CORR	- CORRIDOR
CTR	- CENTER
D	- DEPTH
DET	- DETAIL
DIA	- DIAMETER
DIM	- DIMENSION
DIV	- DIVISION
DN	- DOWN
DWG	- DRAWING
EA	- EACH
EC	- ELECTRICAL CONTRACTOR (DIVISION 26)
EJ	- EXPANSION JOINT
ELEC	- ELECTRICAL
ELEV	- ELEVATION OR ELEVATOR
EM	- EMERGENCY
EQ	- EQUAL
EQS	- EQUIPMENT SUPPLIER
EQUIP	- EQUIPMENT
E/R	- EXISTING TO BE RELOCATED
EX	- EXISTING TO REMAIN
EXP	- EXPANSION
EXT	- EXTERIOR
FCE	- FIRE CONTROL EQUIPMENT
FF	- FINISHED FLOOR ELEVATION
FLR	- FLOOR
FSC	- FIRE SUPPRESSION CONTRACTOR (DIVISION 21)
FT	- FEET
FTG	- FOOTING
GC	- GENERAL CONTRACTOR
GF	- GROUND FAULT CIRCUIT INTERRUPTER
GFCI	- GROUND FAULT CIRCUIT INTERRUPTER OR GOVERNMENT FURNISHED CONTRACTOR INSTALLED
GFFT	- GROUND FAULT FEED THRU
HC	- HVAC CONTRACTOR (DIVISION 23)
HP	- HORSE POWER OR HIGH POINT
HVAC	- HEATING, VENTILATING, AND AIR CONDITIONING
ID	- INSIDE DIAMETER
IN	- INCHES
KEC	- KITCHEN EQUIPMENT CONTRACTOR
L	- LENGTH
LBS	- POUNDS
MAP	- MASTER ALARM PANEL (MEDICAL GAS)
MAX	- MAXIMUM
MEZZ	- MEZZANINE
MFR	- MANUFACTURER
MH	- MANHOLE OR MOUNTING HEIGHT TO CENTER LINE OF ITEM
MIN	- MINIMUM OR MINUTE
MISC	- MISCELLANEOUS
MTD	- MOUNTED
MTG	- MOUNTING
NIC	- NOT IN CONTRACT
NOM	- NOMINAL
NTS	- NOT TO SCALE
OD	- OUTSIDE DIAMETER
OFCI	- OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	- OWNER FURNISHED OWNER INSTALLED
PC	- PLUMBING CONTRACTOR (DIVISION 22)
PLBG	- PLUMBING
RAD	- RADIUS
REC	- RECESSED
REQD	- REQUIRED
RI	- ROUGH-IN
S	- SURFACE MOUNTED
SC	- SECURITY CONTRACTOR
SCH	- SCHEDULE
SHT	- SHEET
SMS	- SECURITY MANAGEMENT SYSTEM
SPEC	- SPECIFICATIONS
SQ	- SQUARE
SS	- STAINLESS STEEL
STD	- STANDARD
STRUC	- STRUCTURAL OR STRUCTURE
SUC	- SITE UTILITY CONTRACTOR
TC	- TECHNOLOGY CONTRACTOR
TEMP	- TEMPERATURE
TOE	- TOP OF EQUIPMENT
TYP	- TYPICAL
UNO	- UNLESS NOTED OTHERWISE
VFD	- VARIABLE FREQUENCY DRIVE
VOL	- VOLUME
W/	- WITH
W/O	- WITHOUT
WP	- WEATHERPROOF
ZVC	- ZONE VALVE CABINET

GENERAL FLOOR PLAN NOTES

B E2	DETAIL: B = DETAIL DESIGNATION E2 = SHEET WHERE DETAIL IS LOCATED
1 E2	SECTION: 1 = SECTION DESIGNATION E2 = SHEET WHERE SECTION IS LOCATED
T2 1	ELEVATION: 1 = ELEVATION DESIGNATION T2 = SHEET WHERE ELEVATION IS LOCATED
3	PLAN NOTE. APPLIES ONLY TO THE SHEET WHICH IT IS SHOWN.
3	DETAIL NOTE. APPLIES ONLY TO THE ASSOCIATED DETAIL.
3	LIGHTING CONTROL DETAIL NOTE. APPLIES TO THE LIGHTING CONTROL SEQUENCE OF OPERATIONS SCHEDULE FOR ROOM CONTROL.
3	DEVICE QUANTITY - POWER NOTE. REFER TO DEVICE QUANTITIES - POWER SCHEDULE.
	LADDER TRAY, 12" x 4" DEEP UNLESS NOTED OTHERWISE.
	CABLE TRAY, 12" x 4" DEEP UNLESS NOTED OTHERWISE.
4"	WIRE & CONDUIT IN WALL OR ABOVE CEILING.
4"	WIRE & CONDUIT IN OR BELOW SLAB OR GRADE.
4"	CONDUIT TO BE REMOVED.
EX	EXISTING WIRE & CONDUIT TO REMAIN.
DAT	CONDUIT FOR DATA CIRCUITRY.
EM	WIRE & CONDUIT FOR EMERGENCY CIRCUITRY.
FA	WIRE & CONDUIT FOR FIRE ALARM CIRCUITRY.
I	WIRE & CONDUIT FOR INTERCOM SYSTEM CIRCUITRY.
NC	WIRE & CONDUIT FOR NURSE CALL CIRCUITRY.
NL	WIRE & CONDUIT FOR NIGHT LIGHT CIRCUITRY.
PHO	CONDUIT FOR PHONE CIRCUITRY.
S	WIRE & CONDUIT FOR SOUND SYSTEM CIRCUITRY.
SEC	WIRE & CONDUIT FOR SECURITY SYSTEM CIRCUITRY.
TV	WIRE & CONDUIT FOR TELEVISION SYSTEM CIRCUITRY.
W	WIRE RUN IN SURFACE WIREWAY.
CM	CABLE MANAGEMENT SYSTEM PATHWAY.
X - 1,2	EACH ARROWHEAD REPRESENTS ONE COMPLETE CIRCUIT; "X" DENOTES PANEL NAME; NUMBER(S) DENOTES CIRCUIT(S).

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY
P: 317.571.4795 www.heapy.com

PROJECT NO. 2025-07211

NOBLE COUNTY HIGHWAY DEPARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

DONALD H. TIMMER REGISTERED No. 10601749 STATE OF INDIANA PROFESSIONAL ENGINEER

3/26/2026

CERTIFIED BY

ISSUANCE INDEX
DATE:
03.27.2026
PROJECT PHASE:
BID DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2025.02329

ELECTRICAL INDEX, SYMBOLS, AND LEGEND

E001

3/27/2026 11:06:10 AM

GENERAL NOTES (APPLIES TO ALL DIV 26 SHEETS)

A. PROVIDE A SEPARATE NEUTRAL FOR ALL RECEPTACLE AND DIMMING CIRCUITS.

B. PROVIDE A GROUND WIRE WITH ALL FEEDERS AND BRANCH CIRCUITS.

C. CONDUITS SHALL BE SIZED FOR .75" (.50") MINIMUM.

D. PROVIDE UNISTRUT SUPPORTS FROM THE FLOOR FOR DISCONNECT SWITCHES AND MOTOR STARTERS AT EQUIPMENT IN MECHANICAL AREAS, WHERE REQUIRED.

E. ALL JUNCTION BOXES, ETC. ARE TO BE FLUSH MOUNTED UNLESS OTHERWISE NOTED.

F. FIRESTOP ALL PENETRATIONS THRU FIRE RATED WALLS.

G. VERIFY EXACT LOCATION OF ALL LIGHTING FIXTURES WITH REFLECTED CEILING PLAN AND/OR ARCHITECT PRIOR TO ROUGH-IN. COORDINATE LOCATIONS OF LIGHTING FIXTURES WITH MECHANICAL DUCTS AND SPRINKLER PIPES AND HEADS BEFORE ROUGH-IN TO PREVENT CONFLICTS.

H. REFER TO ARCHITECTURAL CASEWORK ELEVATIONS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ELECTRICAL OUTLETS AND DEVICES.

I. SIZING AND QUANTITY OF ALL SYSTEM WIRES AND CONDUITS SHALL BE PER MANUFACTURER'S OR SUPPLIER'S RECOMMENDATIONS.

J. COORDINATE OCCUPANCY SENSOR AIMING AND PLACEMENT WITH MANUFACTURER PRIOR TO INSTALLATION.

K. REFER TO THE ARCHITECTURAL DOCUMENTS FOR CONSTRUCTION PHASING SEQUENCE.

L. IF IN DOUBT ABOUT ANY ELECTRICAL OR SYSTEM ITEMS, ASK OWNER/ARCHITECT PRIOR TO ROUGH-IN.

M. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL SWITCHES, RECEPTACLES, THERMOSTATS, ETC. WITH RESPECTIVE CONTRACTORS PRIOR TO ROUGH-INS. ALL MOUNTING HEIGHTS OF DEVICES WHICH ARE MOUNTED ADJACENT TO EACH OTHER SHALL BE AT THE SAME DISTANCE MEASURED ABOVE THE FINISHED FLOOR.

N. ALL RECEPTACLE COVER PLATES SHALL BE LABELED WITH THE PANEL NAME AND CIRCUIT NUMBER. UTILIZE STANDARD TAPE MARKING SYSTEM (BROTHER P. TOUCH).

O. ALL POLE LIGHT LOCATIONS ARE TO BE STAKED AND APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION OF BASES.

P. ROOF PENETRATIONS SHALL BE KEPT TO AN ABSOLUTE MINIMUM.

Q. STAGGER RECEPTACLES AND OTHER RECESSED OUTLETS WHEN LOCATED ON OPPOSITE SIDES OF PARTITION TO ELIMINATE SOUND TRANSMISSION FROM ONE SPACE TO THE OTHER.

R. PROVIDE CONCRETE PADS FOR ALL ELECTRIC EQUIPMENT ASSOCIATED WITH DIV 26 WORK. NOT ALL CONCRETE PADS ARE INDICATED OR SPECIFIED ON THE DRAWINGS.

S. THIS CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES, MISCELLANEOUS CONDUITS AND PIPING PRIOR TO DIGGING, ANY DAMAGE TO ABOVE MENTIONED ITEMS SHALL BE HIS RESPONSIBILITY TO REPAIR.

T. COORDINATE EXACT ROUTE OF ALL UNDERGROUND CONDUITS AT THE SITE PRIOR TO EXCAVATION. UTILIZE LONG SWEEPING BENDS ON ALL UNDERGROUND CONDUITS.

U. WHERE FIXTURES ARE MOUNTED IN AREAS WHERE THERE ARE EXPOSED CEILINGS, THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE EXACT MOUNTING/LOCATION WITH THE STRUCTURAL SUPPORT MEMBERS AND WORK OF OTHER TRADES. THE EC SHALL PROVIDE ALL NECESSARY LABOR AND MATERIALS TO ACHIEVE MOUNTING HEIGHTS, LOCATIONS, ETC. AS INDICATED ON THE PLANS.

V. ELECTRICAL CONTRACTOR SHALL PERMANENTLY MARK PANEL AND CIRCUIT DESIGNATIONS ON ALL ELECTRICAL JUNCTION BOXES.

W. EXIT SIGNS ARE TO BE WIRED AHEAD OF ALL LOCAL CONTROLS (WALL SWITCHES, DDC CONTROLS, DAYLIGHTING, ETC.) FOR CONTINUOUS OPERATION.

X. PER NEC ART. 210.8, IN KITCHENS, ALL 125-VOLT THROUGH 250-VOLT RECEPTACLES SUPPLIED BY SINGLE-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 50 AMPERES OR LESS, AND ALL RECEPTACLES SUPPLIED BY THREE-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 100 AMPERES OR LESS, SHALL BE PROVIDED WITH GFCI PROTECTION.

Y. KITCHEN EQUIPMENT REQUIREMENTS, SERVICES, CONNECTIONS, ETC. AS SHOWN ON THE PLANS AND IN THE SCHEDULES ARE BASED ON THE LATEST INFORMATION AVAILABLE. A FINAL EQUIPMENT LAYOUT (SHOP DRAWINGS) WILL BE PROVIDED BY THE KEC TO REFLECT ACTUAL INSTALLATION REQUIREMENTS WHICH MAY AFFECT EQUIPMENT REQUIREMENTS AND LOCATIONS. ALL EQUIPMENT REQUIREMENTS AND LOCATIONS SHALL BE CAREFULLY COORDINATED WITH THE GC AND KEC PRIOR TO PERFORMING ROUGH-INS.

Z. ALL DUCTS EXTENDING FROM UNDER PAVEMENT SHALL BE CONCRETE ENCASED FOR A MINIMUM OF FIVE (5) FEET BEYOND THE EDGE OF THE PAVEMENT.

AA. VERIFY LOCATION OF TELEPHONE, DATA AND RECEPTACLE OUTLETS FOR EACH DESK LOCATION IN OFFICE SPACES WITH THE OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.

BB. PROVIDE WALL SLEEVE PENETRATIONS AS SHOWN ON THE DRAWINGS .

CC. ALL EMPTY CONDUITS SHALL BE INSTALLED WITH PULL WIRE.

DD. NEW WIRE AND CONDUITS SHALL NOT BE RUN EXPOSED UNLESS APPROVED BY THE ARCHITECT, ENGINEER OR OWNER.

EE. COORDINATE ALL WORK WITH LOCAL POWER COMPANY, TELEPHONE COMPANY AND CABLE COMPANY TO VERIFY EXISTING CONDITIONS AND EXACT REQUIREMENTS/LOCATIONS FOR ALL NEW WORK.

FF. BRANCH CIRCUIT WIRE SIZING CHART TO BE UTILIZED AS GUIDELINE FOR VOLTAGE DROP COMPENSATION, INCREASE CONDUIT SIZING PER WIRE SIZE.

A) 20A – 120V CIRCUITS:
#12 WIRE – 80FT. LENGTH MAX.
#10WIRE – 94FT. LENGTH MAX.
#8 WIRE – 137FT. LENGTH MAX
#6 WIRE – 218FT. LENGTH MAX.

B) 20A – 277V CIRCUITS:
#12 WIRE – 138FT. LENGTH MAX.
#10WIRE – 219FT. LENGTH MAX.
#8 WIRE – 318FT. LENGTH MAX.
#6 WIRE – 504FT. LENGTH MAX.

GG. WIRE SMOKE DAMPERS TO BE ACTUATED BY ASSOCIATED SMOKE DETECTORS THROUGH ADDRESSABLE FA RELAY(S) TO BREAK THE 120V CIRCUIT UPON DETECTION OF SMOKE. REFER TO MECHANICAL PLANS FOR SMOKE DAMPER LOCATIONS.

HH. COORDINATE THE LOCATION OF ALL FLOOR BOXES AND POKE-THRUS WITH THE ARCHITECT PRIOR TO ROUGH-IN. ALL FLOOR BOXES AND POKE-THRUS SHALL BE INSTALLED TO MAINTAIN THE FIRE RATING OF THE FLOOR. COORDINATE CORE DRILLING HOLES IN FLOOR WITH STRUCTURAL ENGINEER.

II. THE ELECTRICAL CONTRACTOR SHALL RE-SUPPORT ANY EXISTING WIRING OR CONDUITS REQUIRING SUPPORT.

JJ. EACH BIDDER SHALL VISIT THE SITE DURING THE BID PERIOD TO REVIEW EXISTING AND NEW FEEDER ROUTING.

KK. REMOVAL PLANS MAY NOT NECESSARILY SHOW ALL ITEMS REQUIRED TO BE REMOVED. EACH BIDDER SHALL VISIT THE SITE PRIOR TO BID TO DETERMINE THE FULL EXTENT OF REMOVALS REQUIRED. MAINTAIN CIRCUIT CONTINUITY OF EXISTING CIRCUITS CUT OFF BY REMOVALS, VERIFY CIRCUITS PRIOR TO REMOVAL.

LL. THE EXISTING CEILING SPACES MAY CONTAIN NUMEROUS EXISTING OPEN-WIRED CABLES SERVING TELEPHONE, CCTV, INTERCOM, DATA, PAGING, ETC. WHICH PRESENTLY LAY DIRECTLY ON THE EXISTING CEILINGS. THESE CABLES SHALL BE TEMPORARILY SUPPORTED FROM THE STRUCTURE TO ALLOW FOR THE REMOVAL OF THE EXISTING CEILINGS. THE CONTRACTOR SHALL THEN REQUEST THE BUILDING PERSONNEL TO REVIEW AND TAG ANY CABLES THAT ARE TO BE MAINTAINED. THE OWNER "IT" CONTRACTOR WILL REMOVE ALL UNUSED CABLE AS DIRECTED BY OWNER.

MM. REMOVAL OF ELECTRICAL ITEMS SHALL INCLUDE REMOVALS BACK TO THE EXISTING ELECTRICAL DISTRIBUTION CENTER, PANEL OR LAST ACTIVE OUTLET, FIXTURE, DEVICE REMAINING.

NN. RELAMP AND CLEAN ALL RELOCATED LIGHT FIXTURES.

OO. THIS CONTRACTOR SHALL REMOVE EXISTING CEILING TILES AS REQUIRED FOR INSTALLATION OF NEW ELECTRICAL ITEMS AND REINSTALL TILES IN A SIMILAR MANNER AS NOW EXISTS.

PP. THIS CONTRACTOR SHALL VERIFY AVAILABILITY OF SPARE BREAKERS AND SPACE FOR NEW BREAKERS WITHIN EXISTING PANELS. INCLUDE IN BID ANY MODIFICATIONS TO EXISTING PANELS REQUIRED FOR THE ADDITION OF THIS NEW CIRCUITRY WITHIN THE RENOVATED AREAS.

QQ. THIS CONTRACTOR SHALL COORDINATE WITH THE OWNER IN REGARD TO REMOVALS. CONTRACTOR SHALL SALVAGE EQUIPMENT AS DIRECTED BY THE OWNER AND STORE IN A LOCATION DESIGNATED BY OWNER. ALL OTHER EQUIPMENT AND MATERIALS NOT SALVAGED SHALL BE REMOVED FROM THE PREMISE.

RR. RELOCATE AND RECONNECT ACTIVE PORTIONS OF THE ELECTRICAL SYSTEM OUTSIDE OF THE SCOPE OF DEMOLITION, AS REQUIRED, TO MAINTAIN A COMPLETE AND OPERATIONAL SYSTEM THAT IS FUNCTIONALLY EQUIVALENT TO THE PRE-EXISTING SYSTEM PRIOR TO DEMOLITION.

SS. IF ANY ASBESTOS IS FOUND IN THE COURSE OF REMOVALS NOTIFY OWNER. ASBESTOS REMOVAL IS BY OWNER.

TT. ALL CONDUIT AND WIRING LOCATED INSIDE DEMO WALLS SHALL BE REROUTED TO ENSURE A COMPLETE AND FUNCTIONAL SYSTEM WHILE ACCOMMODATING THE WALL REMOVAL.

UU. ALL ABANDONED EXTRANEOUS CONDUITS, SUPPORTS, CONTROLS, ETC. SHALL BE REMOVED.

VV. REMOVALS OF TELEPHONE/DATA OUTLETS INCLUDE REMOVAL OF THE DEVICE, BACKBOX, CONDUIT, WIRE, ETC.

WW. IF POSSIBLE MAINTAIN EXISTING OUTLET BOX AND CONDUIT ROUGH-INS FOR NEW WORK. WHERE RECESSED DEVICE ROUGH-INS ARE ABANDONED, REMOVE ALL EXISTING CONDUCTORS AND PROVIDE NEW DEVICE AND COVERPLATE.

XX. E.C. SHALL UTILIZE THE EXISTING LIGHT FIXTURES THROUGHOUT THE BUILDING UNLESS INDICATED OTHERWISE TO BE REPLACED WITH NEW. ALL LIGHTING FIXTURES SHALL BE RELAMPED WITH NEW AS SPECIFIED BY THE OWNER AND COMPATIBLE WITH THE EXISTING LIGHTING EQUIPMENT. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO CLEAN AND REPAIR ANY AND ALL BROKEN OR DAMAGED COMPONENTS TO OBTAIN A "LIKE NEW" OPERATION AND APPEARANCE. ALL FIXTURES NOT UTILIZED SHALL BE TURNED OVER TO THE OWNER.

YY. ALL EXISTING FLUORESCENT LAMPS AND BALLASTS REMOVED UNDER THIS CONTRACT ARE TO BE PUT INTO CONTAINERS FURNISHED BY THE OWNER AND DISPOSED OF BY A QUALIFIED CONTRACTOR AT AN APPROVED DISPOSAL FACILITY.

ZZ. ALL ELECTRICAL DEVICES, LIGHTING FIXTURES, RECEPTACLES, SPEAKERS, MISCELLANEOUS EQUIPMENT, JUNCTION BOXES, WIRE, CONDUITS, ETC. WITHIN THESE BOUNDS ARE TO BE REMOVED UNLESS OTHERWISE INDICATED.

AAA. EXISTING FLUSH MOUNTED BOXES AND CONCEALED CONDUITS MAY BE REUSED IN PLACE IF FEASIBLE. EXTENSIONS ON FLUSH MOUNTED BOXES MAY BE NECESSARY TO BRING DEVICES OUT, FLUSH, TO NEW WALL SURFACES.

BBB. WHERE EXISTING WALLS ARE FURRED ON ONE SIDE, ALL NEW SERVICES SHALL BE INSTALLED IN THE WALL FROM THE FURRED OUT SIDE OF THE WALL.

CCC. ALL NEW AND EXISTING PANELBOARDS AFFECTED BY THIS PROJECT SHALL BE PROVIDED WITH A NEW TYPE WRITTEN DIRECTORY.

DDD. EXISTING CONDITIONS SHOWN ON THIS DRAWING ARE TAKEN FROM ORIGINAL DRAWINGS AND FIELD INVESTIGATION. ALL EXISTING CONDITIONS MUST BE VERIFIED PRIOR TO BID. FIELD CONDITIONS SHALL GOVERN.

EEE. LABEL ALL CIRCUIT BREAKERS MADE SPARE DUE TO REMOVALS AS "SPARE" TO SERVE FUTURE LOADS.

FFF. ALL ELECTRICAL INTERRUPTIONS OF SERVICES SHALL BE MADE WHEN THE LOAD IS AT A MINIMUM AND SHALL BE SCHEDULED FOR OTHER THAN NORMAL DAYTIME WORKING HOURS. THE ELECTRICAL CONTRACTOR SHALL INCLUDE NECESSARY COST FOR OVERTIME LABOR WITHIN ALL BIDS.

GGG. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF ASSOCIATED ELECTRICAL WORK UNDER THIS CONTRACT. ALL PATCHING SHALL MATCH EXISTING FINISHES AND BE DONE BY CRAFTSMAN SKILLED IN THE WORK. ALL CUTTING AND PATCHING SHALL BE SUBJECT TO APPROVAL BY THE ARCHITECT, ENGINEER OR OWNER.

HHH. ALL EXISTING CONDUIT, EQUIPMENT, CONTROLS, ETC. SHOWN DASHED SHALL BE REMOVED. THE MAJORITY OF ELECTRICAL WORK TO BE REMOVED IS SHOWN. REMOVE ALL INCIDENTAL ITEMS ASSOCIATED WITH THE DEMOLITION WORK.

III. ALL EXISTING FIRE ALARM EQUIPMENT AND DEVICES SHALL BE REMOVED AS NOTED. THIS CONTRACTOR SHALL SALVAGE EQUIPMENT AS DIRECTED BY THE OWNER AND STORED IN A LOCATION DESIGNATED BY THE OWNER. ALL OTHER EQUIPMENT AND DEVICES NOT SALVAGED SHALL BE REMOVED AS DIRECTED FROM THE PREMISE.

ELECTRICAL SPECIFICATIONS (DIV 26)

1. PROVIDE A COMPLETE ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN. WORK INCLUDES, BUT IS NOT NECESSARILY LIMITED TO THE FOLLOWING PRINCIPAL CATEGORIES:
   A. WIRING DEVICES.
   B. POWER WIRING.
   C. MISCELLANEOUS WIRING AND INTERLOCKS.
   D. EQUIPMENT CONNECTIONS.
   E. LIGHTING FIXTURES.
2. OBTAIN AND PAY FOR ALL PERMITS. UPON COMPLETION, PROVIDE A CERTIFICATE OF APPROVAL FROM THE GOVERNING INSPECTION AUTHORITY. ALL WORK SHALL COMPLY WITH NEC, OHIO BUILDING CODE AND OTHER APPLICABLE LAWS AND ORDINANCES.
3. DURING THE BIDDING PERIOD, INSPECT THE SITE AND PREMISES OF PROPOSED WORK. REPORT IMMEDIATELY ANY SIGNIFICANT OBSERVED DISCREPANCIES AS RELATED TO THE PLANS OR REQUIRED WORK.
4. THIS CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP, EQUIPMENT, AND MATERIAL ENTERING INTO THIS CONTRACT FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE. ANY WORK PROVEN TO BE DEFECTIVE DURING THIS PERIOD SHALL BE MADE GOOD BY THIS CONTRACTOR WITHOUT EXPENSE TO THE OWNER.
5. WHERE TRADE NAMES, BRANDS OR MANUFACTURERS ARE LISTED, ANY ONE OF THE SEVERAL NAMED ARE CONSIDERED EQUALLY ACCEPTABLE. NO UNNAMED PRODUCT OR MATERIAL SHALL BE USED UNLESS IT IS LISTED AS A SUBSTITUTE DURING BIDDING, WITH STATED CHANGE IN COST, AND APPROVED IN WRITING BY THE ARCHITECT OR ENGINEER PRIOR TO PLACEMENT OF ORDERS. SUBMIT ELECTRONIC SHOP DRAWINGS ON MAJOR ITEMS OF EQUIPMENT AND MATERIALS. THE REVIEW OF SHOP DRAWINGS BY THE ARCHITECT OR ENGINEER SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS IN THE SHOP DRAWINGS.
   A. AS EACH ELECTRICAL SYSTEM IS COMPLETED, IT SHALL BE TESTED TO ASSURE FREEDOM FROM GROUND AND THAT REQUIRED FUNCTIONS ARE PERFORMED. WORK SHALL BE INSPECTED AND APPROVED BY THE LOCAL INSPECTION AGENCY HAVING JURISDICTION. PERFORM SPECIAL RESISTANCE TESTS WHEN REQUESTED BY THE INSPECTION AGENCY OR ENGINEER TO PROVE THE SYSTEM'S INTEGRITY. FURNISH TO THE OWNER, THRU THE ARCHITECT, A FINAL INSPECTION CERTIFICATE.
   B. DEMONSTRATE FUNCTIONS PERFORMED BY DEVICES AND SYSTEMS TO THE OWNER'S REPRESENTATIVE. FURNISH TO THE OWNER DATA SHEETS INDICATING NATURE AND FREQUENCY OF MAINTENANCE REQUIRED FOR SWITCHES, DEVICES AND EQUIPMENT. ASSEMBLE AND DELIVER TWO (2) BOUND COPIES OF THIS DATA.
6. PLAN WORK TO PROVIDE REASONABLE CONTINUOUS SERVICE OF EXISTING SYSTEMS. SHUTDOWN OF SYSTEMS SHALL BE BID AS DURING NORMAL WORKING HOURS.
7. WORKMANSHIP SHALL BE FIRST CLASS. THE ARCHITECT'S JUDGMENT SHALL PREVAIL IF THE QUALITY IS SUSPECT.
8. PROTECT MATERIALS AND EQUIPMENT AFTER DELIVERY TO THE JOB SITE. RESPECT OTHER TRADES AS RELATED TO PROTECTING THEIR WORK AND TO AVOID CONSTRUCTION INTERFERENCES. CALL ATTENTION TO PROBLEMS RELATING TO SPACE REQUIREMENTS SO EARLY RESOLUTION MAY BE OBTAINED. RESPECT THE OWNER'S PROPERTY AT ALL TIMES. TEMPORARILY REMOVE, STORE AND RE-INSTALL CEILINGS WHEN REQUIRED TO PERFORM WORK.
9. CUT AND PATCH TO INSTALL WORK WHERE FAILURE TO INSTALL SLEEVES OCCURS, OR PAY OTHERS TO PERFORM SUCH WORK. THIS ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM ALL OF HIS OWN CUTTING AND PATCHING OF FLOORS AND WALLS WHERE NECESSARY TO INSTALL ELECTRICAL EQUIPMENT. CONCRETE SHALL BE SAW CUT, NEATLY AND ACCURATELY. NECESSARY HOLES SHALL BE CORE DRILLED. PATCHING SHALL BE DONE TO MATCH BOTH THICKNESS AND FINISH OF EXISTING ADJACENT MATERIAL. GENERAL CONTRACTOR SHALL DO ALL PATCHING WORK, PAID FOR BY THE ELECTRICAL CONTRACTOR.
10. THE ELECTRICAL CONTRACTOR SHALL REMOVE ALL EXISTING WORK WHICH IS KINDRED TO HIS TRADE AND WHICH WILL BE SUPERFLUOUS WHEN THE NEW SYSTEM IS INSTALLED. COOPERATE WITH THE GENERAL CONTRACTOR AND REMOVE EXISTING UNUSED CONDUIT TO BEHIND WALLS OR BELOW FLOORS AS NECESSARY OR AS DIRECTED. UPON COMPLETION NO UNUSED CONDUIT OR STUB, OR JUNCTION BOX SHALL EXTEND THRU FLOORS, WALLS OR CEILINGS. ABANDONED CONDUIT WHERE REMAINING IN PLACE SHALL HAVE ALL UNUSED WIRING REMOVED. MATERIAL AND EQUIPMENT WHICH IS REMOVED SHALL NOT BE REUSED IN THIS PROJECT.
11. EACH CONTRACTOR SHALL MAINTAIN A SEPARATE SET OF AS-BUILT PRINTS OF THE CONTRACT DOCUMENTS AND SHALL SHOW ANY SIGNIFICANT CHANGES OR VARIATIONS WHICH ARE MADE DURING CONSTRUCTION. UPON COMPLETION OF THE WORK, THESE DRAWINGS SHALL BE TURNED OVER TO THE ARCHITECT.
12. PROVIDE UL TESTED FIRESTOP MATERIALS AT ALL BUILDING PENETRATIONS OF CONDUIT, CABLES, ETC.
13. ALL CONDUCTORS SHALL BE COPPER. MINIMUM SIZE #12 AWG FOR BRANCH CIRCUITS; # 14 AWG FOR CONTROL CIRCUITS, AND INSULATED FOR 600 VOLT, TYPE THWN, XHHW, OR THHN, SUBJECT TO MOISTURE AND HEAT LIMITATIONS STATED IN CODE. USE ONLY THHN, OR XHHW CONDUCTORS FOR CONNECTIONS TO LIGHTING FIXTURES.
14. THE BUILDING NEUTRAL SHALL BE IDENTIFIED THROUGHOUT BY A WHITE CONDUCTOR. WORK INCLUDES GROUNDING OF SYSTEM NEUTRAL, EQUIPMENT AND CONDUIT SYSTEMS TO CONFORM TO NEC GROUND RODS SHALL BE COPPER CLAD, MOLTEN WELDED COPPER TO STEEL, 0.625" DIAMETER X 10 FT. LONG. RUN GREEN GROUND COPPER CONDUCTOR IN ALL CONDUITS. PROVIDE BONDING JUMPER AROUND WATER METER.
15. CONDUIT SHALL BE USED FOR ALL WIRING, MINIMUM SIZE OF 0.75". CONDUIT SYSTEMS MAY BE ANY ONE OR COMBINATION OF THE FOLLOWING, WITHIN RESTRICTING LIMITS INDICATED. CONDUIT TYPES NOT LISTED SHALL NOT BE USED.
   A. RIGID GALVANIZED CONDUIT – RESTRICTIONS (NOT TO BE USED IN): DIRECT BURIED IN CORROSIVE SOILS OR CORROSIVE ATMOSPHERES.
   B. INTERMEDIATE GRADE GALVANIZED THREADED CONDUIT - RESTRICTIONS (NOT TO BE USED IN): DIRECT BURIED IN CORROSIVE SOILS OR CORROSIVE ATMOSPHERES.
   C. THINWALL EMT CONDUIT WITH APPROVED CONNECTOR FITTINGS TO ASSURE GROUNDING CONTINUITY, SUBJECT TO THE FOLLOWING RESTRICTIONS: (NOT TO BE USED IN)
      1. HAZARDOUS OR CORROSIVE ATMOSPHERES.
      2. NOT IN POURED CONCRETE, OUTDOORS, OR UNDERGROUND.
      3. NOT EXPOSED BELOW 96".
   D. D PVC TYPE 40 (SCHEDULE 40) RIGID, CONFORMING TO ANSI, NEMA SPECIFICATIONS AND EACH LENGTH U.L. LABELED. APPLICATION - USE LIMITED TO:
      A. IN OR UNDER CONCRETE SLABS ON GRADE.
      B. EXTERIOR USE WHEN ENCASED IN 3" CONCRETE.
      C. DIRECT BURIED, UNDERGROUND WHEN INDICATED ON DRAWINGS.
   E. FLEXIBLE METAL CONDUIT (GREENFIELD TYPE) GALVANIZED. USE RESTRICTED TO THE FOLLOWING APPLICATIONS:
      1. CONNECTIONS TO LIGHTING FIXTURES, MAXIMUM LENGTH 6 FT.
   F. LIQUID TIGHT FLEXIBLE METAL CONDUIT WITH WATER TIGHT OIL RESISTANT OUTER PVC COVERING. USE REQUIRED:
      1. CONNECTIONS TO MOTORS OR CONTROLS ON DYNAMIC EQUIPMENT.
      2. CONNECTIONS TO TRANSFORMERS.
16. CONDUIT FITTINGS SHALL BE MANUFACTURED BY EFCOR, STEEL CITY, RACO, MIDWEST, ETP OR T&B.
   A. THE METALLIC CONDUIT SYSTEM SHALL BE USED AS THE EQUIPMENT GROUNDING SYSTEM, IN ADDITION TO A GROUND CONDUCTOR:
      1. RIGID CONDUIT – COUPLINGS AND CONNECTORS SHALL BE THREADED STEEL GROUNDING BUSHINGS, MALLEABLE IRON, INSULATED.
      2. EMT - FITTINGS SHALL BE ALL STEEL SET-SCREW OR COMPRESSION TYPE, CONCRETE TIGHT.
      3. FLEXIBLE CONDUIT - MALLEABLE IRON, "SQUEEZE" TYPE.
      4. LIQUID-TIGHT CONDUIT - STEEL OR MALLEABLE IRON.
17. DEVICE AND JUNCTION BOXES GALVANIZED STEEL, CODE GAUGE AND SIZE BY STEEL CITY, RACO, APPLETON OR R&S. BOXES CONNECTING MORE THAN ONE PAIR OF CONDUCTORS TO BE MINIMUM 4" X 4", OR 4" OCTAGONAL SIZE. USE ADAPTER PLATES FOR DEVICES WHERE NUMBER OF CONNECTIONS OR OTHER CONDITIONS DICTATES.
18. RUN CONDUITS AGAINST UNDERSIDE OF CONCRETE STRUCTURE OR AGAINST TOP CHORD OF JOISTS OR TRUSSES, WHETHER EXPOSED OR CONCEALED. IN NO CASE SHALL CONDUIT BE RUN IMMEDIATELY ABOVE ACCESSIBLE CEILINGS. USE ONLY METALLIC CONNECTORS AND FASTENERS. IN CONCRETE SLABS LIMIT CONDUIT SIZE TO 0.75". WHERE FEEDERS ARE TO BE RUN BELOW FLOOR SLAB ON GRADE, THEY SHALL BE INSTALLED IN CONDUIT ENCASED IN 3" CONCRETE USING GALVANIZED RIGID STEEL ELBOWS.
19. IDENTIFY THE FOLLOWING: PANELBOARD SWITCHES AND BREAKERS, INDICATING SERVICE; DISCONNECT SWITCHES AND MOTOR STARTERS: LABEL BRANCH CIRCUIT PANELS, SAME DESIGNATION AS SHOWN ON THE DRAWINGS, AND TYPE IN THE PANELBOARD CIRCUIT DIRECTORIES INDICATING THE TYPE LOAD AND GENERAL LOCATION; USE ENGRAVED, LAMINATED PLASTIC PLATES FOR LABELING SWITCHES AND PANELBOARDS.
20. MISCELLANEOUS ITEMS OF EQUIPMENT REQUIRE WIRING CONNECTIONS AS SHOWN. FURNISH POWER AND CONTROL SOURCES FOR THESE AS SHOWN. OBTAIN ROUGH-IN DRAWINGS AND INFORMATION ON FURNISHED CONTROLS FROM THE EQUIPMENT SUPPLIER. PLACE DISCONNECTS AND CONNECTION BOXES IN AN INCONSPICUOUS BUT ACCESSIBLE LOCATION. COORDINATE LOCATIONS WITH EQUIPMENT SUPPLIER AND THE ARCHITECT.
21. WIRING DEVICES AND GROUND FAULT INTERRUPTERS BY COOPER, BRYANT, HUBBELL, LEVITON OR P&S, EQUAL TO CATALOG NUMBERS SHOWN ON THE DRAWINGS. WALL PLATES NYLON OR LEXAN, NON-COMBUSTIBLE 0.100" THICK. COLOR TO MATCH DEVICE.
22. DISCONNECT SWITCHES HEAVY DUTY, NEMA1 WITH LOCKING DEVICES, FUSED WHERE USED TO PROTECT CIRCUIT WIRING BY SQUARE D, SIEMENS, G.E. OR EATON.
23. REFER TO THE DRAWINGS FOR INFORMATION ON LUMINAIRES, LAMPS AND MANUFACTURERS. ALL FIXTURES SHALL BE NEW AND U.L. LABELED. LAMPS SHALL BE MANUFACTURED BY G.E., PHILIPS OR OSRAM/SYLVANIA EXCEPT LED TYPES BY FIXTURE MANUFACTURER.
24. PROVIDE EXTENSION OF THE EXISTING FIRE ALARM SYSTEM AS REQUIRED TO ACCOMMODATE ALL NEW FIRE ALARM DEVICES AND EQUIPMENT FOR THE RENOVATED SPACE. ALL LABOR, MATERIALS, AND PROGRAMMING OF THE SYSTEM AND DEVICES REQUIRED FOR THE WORK SHALL BE INCLUDED. A FACTORY AUTHORIZED REPRESENTATIVE SHALL ASSEMBLE AND PRODUCE FULL SHOP DRAWINGS INDICATING PROPOSED WORK.
25. THE FIRE ALARM SYSTEM AND INSTALLATION SHALL BE IN COMPLIANCE WITH LOCAL, CITY, STATE, NFPA, ADAAG AND IBC CODES.
26. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, AFTER THE ARCHITECT'S AND ENGINEER'S REVIEW, TO THE STATE FIRE MARSHAL'S OFFICE WHERE APPLICABLE FOR THEIR REVIEW AND APPROVAL.
27. FIRE ALARM WIRING SHALL BE INSTALLED IN CONDUIT.
28. UPON COMPLETION AND BEFORE ACCEPTANCE, SYSTEM PERFORMANCE SHALL BE DEMONSTRATED IN THE PRESENCE OF THE ARCHITECT/OWNER. VERIFY BUILDING AREAS AND DEVICE LABELING IDENTIFICATION WITH THE OWNER PRIOR TO FINALIZATION.
29. SYSTEM SHALL BE TESTED BY AND A CERTIFICATE OF INSPECTION SHALL BE FURNISHED BY A QUALIFIED MANUFACTURER'S REPRESENTATIVE OR EQUIPMENT VENDOR; SUBMIT REPORT INDICATING RESULTS TO THE ARCHITECT/OWNER.
30. WARRANT ALL WORKMANSHIP, EQUIPMENT, MATERIAL AND SOFTWARE ENTERING INTO THIS CONTRACT FOR A PERIOD OF THREE (3) YEARS FROM DATE OF FINAL ACCEPTANCE OR DATE OF BENEFICIAL USE, AS AGREED TO BETWEEN CONTRACTOR AND ARCHITECT.

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AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY
P: 317.571.4795 www.heapy.com
PROJECT NO. 2025-07211

NOBLE COUNTY HIGHWAY DEPARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

DONALD H. TIMMER REGISTERED No. 10601749 STATE OF INDIANA PROFESSIONAL ENGINEER
3/26/2026

CERTIFIED BY

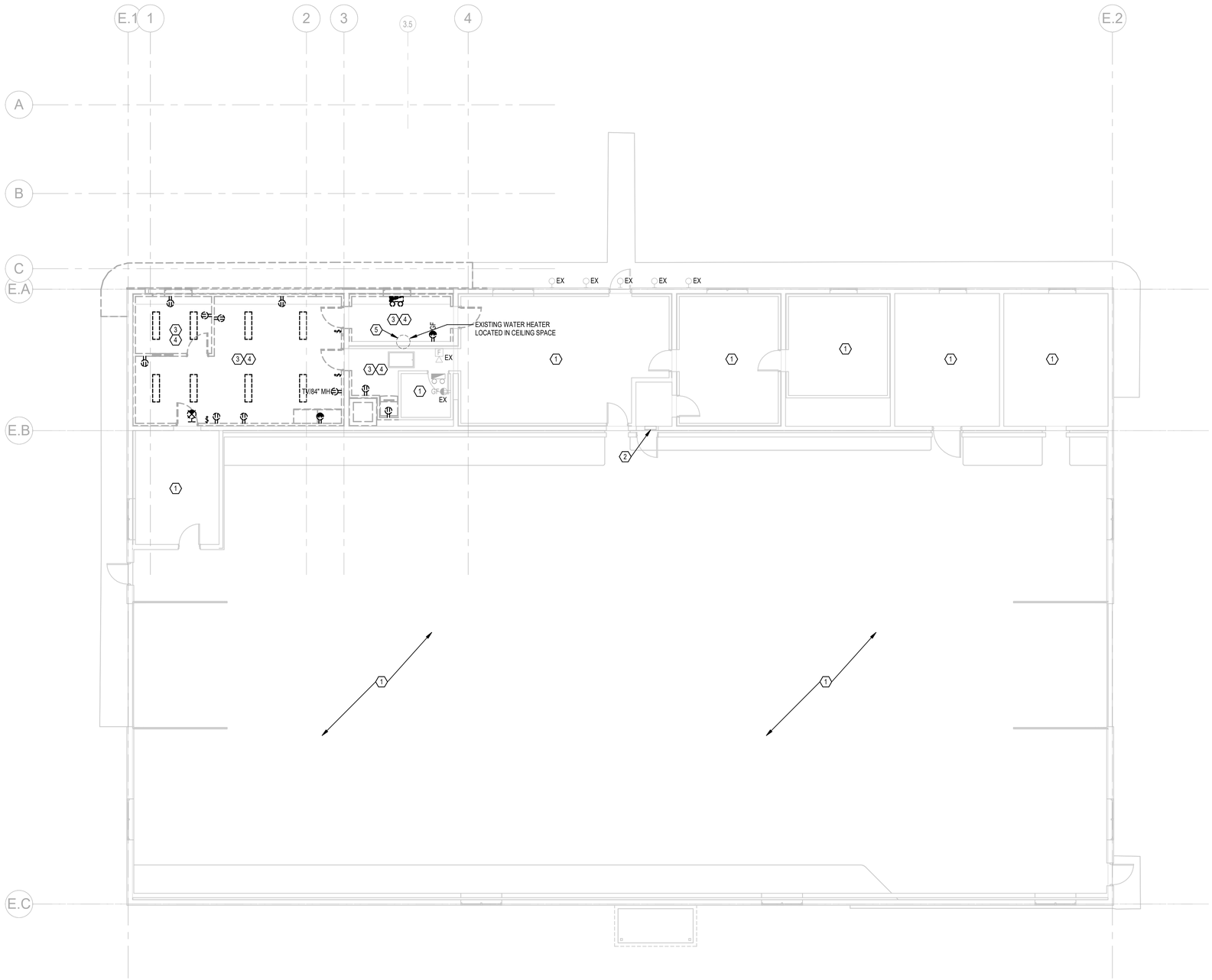
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ELECTRICAL SPECS AND GENERAL NOTES

E002



1 ELECTRICAL FIRST LEVEL DEMOLITION

SCALE: 1/8" = 1'-0"

0 4 8 16 24

N

PLAN NOTES

1. NO SCOPE IN THIS AREA. ALL EXISTING IS TO REMAIN.
2. EXISTING EATON ELECTRICAL PANEL. 200A MAIN BREAKER AT 120/240V-1PH.
3. EXISTING LIGHTING THIS AREA TO BE DEMOLISHED. LIGHTING AND LIGHTING CONTROL CONDUIT AND WIRING TO BE DEMOED BACK TO SOURCE.
4. ALL RECEPTACLES AND DEVICES IN THIS AREA SHOWN AS DEMO SHALL HAVE ASSOCIATED CONDUIT AND WIRING DEMOLISHED BACK TO NEAREST EXISTING TO REMAIN DEVICE / HOMERUN / JUNCTION BOX.
5. E.C. TO REMOVE EXISTING ASSOCIATED ELECTRICAL BOXES FOR WATER HEATER AND RELOCATE TO FIRST FLOOR. EXISTING BRANCH CIRCUIT CONDUIT AND WIRING TO BE DEMOED BACK TO FIRST FLOOR CEILING. REFER TO NEW WORK PLAN FOR FUTHER INFORMATION.

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DEMO FLOOR PLAN - ELECTRICAL

ED101

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1 LIGHTING FIRST LEVEL

SCALE: 1/8" = 1'-0"

0 4 8 16 24

PLAN NOTES

1. NEW FLAG POLE WITH FLOOD LIGHT. E.C. TO PROVIDE 2-#10, 1-#10 GND IN 1" CONDUIT TO NEW FLOOD LIGHT. EXTEND EXISTING ELECTRICAL CIRCUIT SERVING FRONT SIGN LIGHTING TO ALSO SERVE NEW LIGHT. COORDINATE EXACT LOCATION OF FLAG POLE WITH ARCHITECT / OWNER PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY.
2. EXIT SIGN TO BE WIRED AHEAD OF LOCAL SWITCHING AND CONTROLS

GENERAL NOTES

A. COORDINATE WITH ARCHITECTURAL RCP FOR LOCATION OF LIGHTS.

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9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

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P: 317.571.4795 www.heapy.com

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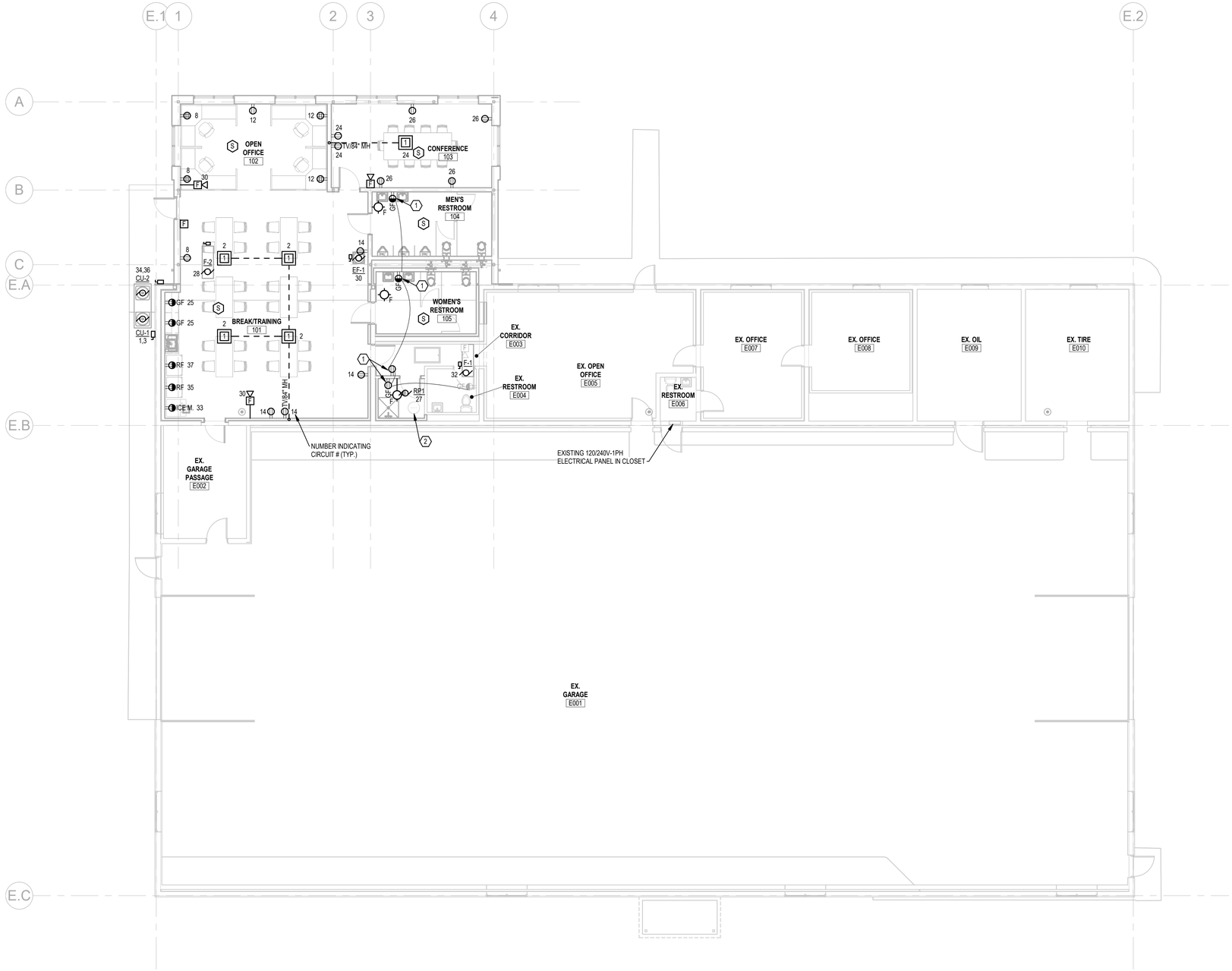
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LIGHTING FLOOR PLAN

E101

3/27/2026 11:06:16 AM



1 POWER & SYSTEMS FIRST LEVEL

SCALE: 1/8" = 1'-0"

0 4 8 16 24

PLAN NOTES

1. NEW RECEPTACLE TO BE ADDED TO EXISTING RECEPTACLE CIRCUIT. EXTEND CONDUIT AND WIRING TO NEW RECEPTACLE.
2. NEW LOCATION FOR EXISTING WATER HEATER. E.C. TO REINSTALL EXISTING ASSOCIATED ELECTRICAL BOXES FOR WATER HEATER AND COORDINATE WITH DIVISION 22 FOR A FULLY OPERATIONAL SYSTEM. EXISTING CONDUIT AND WIRING FROM CEILING TO BE EXTENDED TO NEW LOCATION.

GENERAL NOTES

A. ALL NEW FIRE ALARM DEVICES SHALL MATCH EXISTING MANUFACTURER AND SHALL BE TIED INTO THE EXISTING FIRE ALARM SYSTEM.

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TEL 317.547.5580 WEB www.structurepoint.com

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POWER & SYSTEMS FLOOR PLAN

E102

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Panel: EXISTING 200A

Construction Phase: EXISTING

Location: ELECTRICAL CLOSET
Supply From: UTILITY
Voltage: 240/120V-1PH-3W

Mounting: Surface
Enclosure: Type 1

A.I.C. Rating: EXISTING
Mains Type: MCB
Mains Rating: 200 A

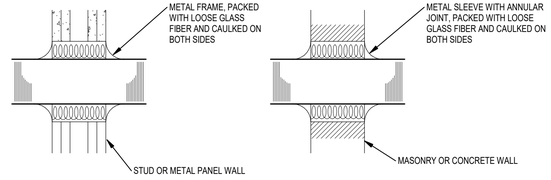
CKT	Circuit Description	SCB Type	Trip	Poles	A		B		Poles	Trip	SCB Type	Circuit Description	CKT
1	**CU-1**		40 A	2	3.06	0.72			1	20 A		**TRAIN RM - FB**	2
3	--	--	--	--			3.06	0.5	1	20 A	--	EX. RADIO RM LTG	4
5	EX. WTR HTR		30 A	2	2.1	0.9			1	20 A		EX. OLD BATH	6
7	--	--	--	--			2.1	0.9	1	20 A		**OFF ADDIT. - R**	8
9	**BREAK RM LTG**		20 A	1	0.92	0.5			1	20 A	--	EX. DRIVERS RM LTG	10
11	EX. ENGINEER LTG	--	20 A	1			0.5	0.9	1	20 A		**OFF ADDIT. - R**	12
13	EX. ENGINEER - R		20 A	1	0.72	1.04			1	20 A		**TRAIN RM - R/TV**	14
15	EX. RADIO		20 A	1			0.25	0.18	1	20 A		EX. LITTLE BATH	16
17	EX. SMOKES		20 A	1	0.3	1.5			1	20 A		EX. VEND MACH.	18
19	EX. DRAINAGE LTG	--	20 A	1			0.15	1.5	1	20 A		EX. SODA MACH.	20
21	EX. DRAINAGE - R		20 A	1	0.18	0.54			1	20 A		EX. DRIVERS RM - R	22
23	EX. MINI FRIDGE		20 A	1			0.6	0.86	1	20 A		**CONF. RM - FB/TV**	24
25	**COUNTER - R**		20 A	1	0.36	0.72			1	20 A		**CONF. RM - R**	26
27	**RP1**		20 A	1			0.12	1.212	1	15 A		***F-2**	28
29	EX. MUD RM HEAT		20 A	2	1.4	0.42			1	15 A		***EF-1**	30
31	--	--	--	--			1.4	1.212	1	15 A		***F-1**	32
33	***ICE MAKER**	**GF**	20 A	1	1.5	3.06			2	40 A		***CU-2**	34
35	***FRIDGE**	**GF**	20 A	1			1.5	3.06	--	--	--	--	36
37	***FRIDGE**	**GF**	20 A	1	1.5	--			1	--	--	Space	38
39	EX. TEMP		20 A	1			0.18	--	1	--	--	Space	40
41	EX. TEMP		20 A	1	0.18	0.146			1	20 A		EX. FRONT SIGN LTG	42
				Total Load:	21.77 kVA		20.18 kVA						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	1,066 VA	125.00%	1,333 VA		
Motor	22,504 VA	106.80%	24,034 VA	**Total Conn. Load:**	41.95 kVA
Receptacle	16,730 VA	79.89%	13,365 VA	**Total Est. Demand:**	40.38 kVA
EXISTING LIGHTING	1,650 VA	100.00%	1,650 VA	**Total Conn.:**	175 A
				Total Est. Demand:	168 A

Special Circuit Breaker (SCB) Types: GF=GFCI Breaker, ST=Shunt Trip Breaker, AF=AFCI Breaker, GP=GFPE Breaker

Notes: BOLD INDICATES NEW WORK
* INDICATES NEW BREAKER IN EXISTING PANEL. BREAKER SHALL MATCH EXISTING MANUFACTURER AND AIC RATING.

TOTAL CONNECTED		ESTIMATED DEMAND
41.95 kVA		40.38 kVA (168 A)



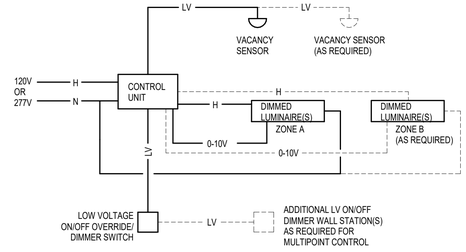
GENERAL DETAIL NOTES

A ALL PENETRATIONS FROM MECHANICAL SPACE SHALL BE SEALED IN THIS MANNER.

B ALL PENETRATIONS THRU AUDITORIUM, STUDIO AND EDIT ROOMS WALLS SHALL BE SEALED IN THIS MANNER.

C WHEN WALL IS FIRE RATED; DETAIL SHALL BE SIMILAR BUT FOLLOW MATERIAL INSTALLATION REQUIREMENTS PER MANUFACTURER AND FIRE PROOFING SPECIFICATIONS.

1 TYPICAL CONDUIT AND WALL PENETRATIONS



LV LOW VOLTAGE CABLE AS REQUIRED BY MANUFACTURER
H HOT WIRE LINE VOLTAGE
N NEUTRAL WIRE LINE VOLTAGE
0-10V DIMMING SIGNAL AS REQUIRED BY MANUFACTURER

GENERAL NOTES

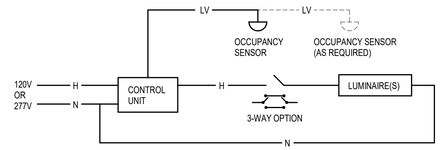
A OPERATION INTENT IS FOR LOW VOLTAGE DIMMING WITH MANUAL ON/OFF AND MULTIPLE ZONE AND AUTO-OFF OPERATION OF ALL LIGHTS (VACANCY SIGNAL). CONTROL UNIT SHALL PROVIDE AN ON/OFF FOR ALL ZONES. WALL STATION(S) TO PROVIDE ON/OFF AND DIMMER LEVEL SWITCHES. REFER TO PLANS FOR QUANTITY OF LIGHTING ZONES.

B CONTROL UNIT SHALL BE MOUNTED IN AN ENCLOSURE PER MANUFACTURER'S DIRECTION. MOUNT CONTROL UNIT ABOVE ACCESSIBLE CEILING AT ROOM ENTRY.

C CONTRACTOR SHALL COORDINATE WITH MANUFACTURER FOR EXACT QUANTITY OF OCCUPANCY SENSORS (FOR COMPLETE ROOM COVERAGE) AND PROVIDE ANY ADDITIONAL COMPONENTS FOR A COMPLETE AND OPERABLE SYSTEM. COORDINATE COMPONENT MOUNTING LOCATIONS FOR PROPER CLEARANCE AND ACCESSIBILITY PRIOR TO ROUGH-IN. COORDINATE PROGRAMMING OF ZONES AND WALL STATION CONFIGURATIONS, AS SHOWN ON DRAWINGS, WITH MANUFACTURER.

D DETAIL IS SCHEMATIC IN NATURE. REFER TO MANUFACTURER'S WIRING DIAGRAMS FOR EXACT WIRING INFORMATION.

2 VACANCY SENSING WITH DIMMING



SINGLE ZONE

LV - LOW VOLTAGE CONTROL CABLE AS REQUIRED BY MANUFACTURER
H - HOT WIRE LINE VOLTAGE
N - NEUTRAL WIRE LINE VOLTAGE

GENERAL NOTES

A OPERATION INTENT IS FOR OCCUPANCY SENSING ON/OFF WITH MANUAL OVERRIDE AND MULTIPLE ZONES OPERATION OF ALL LIGHTS. CONTROL UNIT SHALL PROVIDE AN ON/OFF FOR ALL LIGHTS. WALL STATION(S) TO PROVIDE ON/OFF AND SWITCHES.

B CONTROL UNIT SHALL BE MOUNTED IN AN ENCLOSURE PER MANUFACTURER'S DIRECTION. MOUNT CONTROL UNIT ABOVE ACCESSIBLE CEILING AT ROOM ENTRY.

C CONTRACTOR SHALL COORDINATE WITH MANUFACTURER FOR EXACT QUANTITY OF OCCUPANCY SENSORS (FOR COMPLETE ROOM COVERAGE) AND PROVIDE ANY ADDITIONAL COMPONENTS FOR A COMPLETE AND OPERABLE SYSTEM. COORDINATE COMPONENT MOUNTING LOCATIONS FOR PROPER CLEARANCE AND ACCESSIBILITY PRIOR TO ROUGH-IN. COORDINATE PROGRAMMING OF ZONES AND WALL STATION CONFIGURATIONS, AS SHOWN ON DRAWINGS, WITH MANUFACTURER.

D DETAIL IS SCHEMATIC IN NATURE. REFER TO MANUFACTURER'S WIRING DIAGRAMS FOR EXACT WIRING INFORMATION.

3 OCCUPANCY SENSOR WITH OVERRIDE CONTROL

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY
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PANEL SCHEDULE & DETAILS - ELECTRICAL

E501

3/27/2026 11:06:20 AM

LUMINAIRES

NOTES:
1. FIXTURE TO BE MOUNTED AT 8'-6" MH.

GENERAL NOTES:
A. ALL FINAL FIXTURE FINISHES TO BE SELECTED BY ARCHITECT.

MARK	LAMPS: DELIVERED LUMENS	LAMPS: COLOR	LOAD (VA)	FIXTURE VOLTAGE	MANUFACTURER	CATALOG NO.	DESCRIPTION	OTHER ACCEPTABLE MANUFACTURERS	DIFFUSING MEDIA	TRIM COLOR: WHITE	TRIM COLOR: BLACK	TRIM COLOR: ALUMINUM	TRIM COLOR: BRONZE	TRIM COLOR: STANDARD	TRIM COLOR: SEE NOTE	MOUNTING (S-SURFACE R-RECESSED SM-STEM MTD WM-WALL MTD C-CHAIN MTD UC-UNDER CAB CS-CEIL SURFACE)	SIZE: DIAMETER	SIZE: WIDTH	SIZE: LENGTH	SIZE: DEPTH	SEE NOTE
B1	3428	3500K	30	120	LITHONIA	EPANL-2X2LM-80CRI-35K-MIN10-ZT-MVOLT	2' X 2' LED RECESSED TROFFER	COLUMBIA, METALUX	ACRYLIC LENS	•						R		24"	24"	4"	
B1E	3428	3500K	30	120	LITHONIA	EPANL-2X2-3400LM-80CRI-35K-MIN10-ZT-MVOLT-E10W	2' X 2' LED RECESSED TROFFER WITH EMERGENCY BATTERY BACKUP	COLUMBIA, METALUX	ACRYLIC LENS	•						R		24"	24"	4"	
F1	1514	3500K	18	120	LITHONIA	LDN6-35/15-LO6-WR-LSS-MVOLT-GZ10	6" LED RECESSED DOWNLIGHT	PRESCOLITE, PORTFOLIO	LENSED	•						R	6"			8.75"	
F1E	1514	3500K	18	120	LITHONIA	LDN6-35/15-LO6-WR-LSS-MVOLT-GZ10-EL	6" LED RECESSED DOWNLIGHT WITH EMERGENCY BATTERY BACKUP	PRESCOLITE, PORTFOLIO	LENSED	•						R	6"			8.75"	
F2	950	3500K	10	120	LITHONIA	LDN6-35/10-LO6-WR-LSS-MVOLT-GZ10	6" LED RECESSED DOWNLIGHT	PRESCOLITE, PORTFOLIO	LENSED	•						R	6"			8.75"	
FL1	3308	4000K	26	120	BEACON	RFL2-44L-25-4K7-N-UNV-K-XX-PC	EXTERIOR GROUND-MOUNTED FLOOD LIGHT	LITHONIA, KIM						•		IN GROUND		0"	0"	3.25"	
K1	2751	4000K	20	120	MCGRAW EDISON	ISS-SA1-A-740-1-T4FT-XX-CBP-BPC	LED QUARTER SPHERE EXTERIOR WALL PACK WITH EMERGENCY BATTERY PACK AND INTEGRAL PHOTOCELL	LITHONIA, HUBBELL								WM/S		9"	18"	4.5"	1
X1		RED	2	120	LITHONIA	LE-S-1-R-ELN	LED SINGLE FACE EXIT SIGN	SURE LITES, HUBBELL	RED STENCIL	•						S/CS		9"	13"	2.375"	

LIGHTING CONTROL SEQUENCE OF OPERATIONS

CONTROL NUMBER	TYPICAL CONTROL TYPE OR SPACE NAME	OCCUPANCY SENSOR: VACANCY MODE (MANUAL ON)	OCCUPANCY SENSOR: OCCUPANCY MODE (AUTO ON)	OCCUPANCY SENSOR: SENSOR TIME OUT PERIOD (IN MINUTES)	OCCUPANCY SENSOR: HIGH / LOW OPERATION: OCCUPIED: 100% / VACANT: 30%	TIME CLOCK: SCHEDULED ON AT	TIME CLOCK: SCHEDULED OFF AT	TIME CLOCK: OCCUPIED TIME START	TIME CLOCK: UNOCCUPIED TIME START	TIME CLOCK: AFTER HOURS OVERRIDE SWITCH (2 HOURS)	WALL SWITCH: ON / OFF ONLY	WALL SWITCH: DIMMER SWITCH	WALL SWITCH: KEY SWITCH	WALL SWITCH: SCENE SWITCH	WALL SWITCH: GRAPHICAL WALL STATION	DAYLIGHT SENSOR: INDOOR - ON / OFF ONLY	DAYLIGHT SENSOR: INDOOR - DIMMING	DAYLIGHT SENSOR: LIGHT LEVEL MAINTAINED AT (IN FOOTCANDLES @ 2'-6" A.F.F.)	DAYLIGHT SENSOR: EXTERIOR PHOTOCELL - ON / OFF	SEE NOTE	DETAIL NUMBER
1	OCCUPANCY SENSOR		•	30 MIN							•										E501/3
2	VACANCY SENSING - SINGLE ZONE - DIMMING	•		30 MIN							•	•									E501/2

MOTORS, STARTERS, DISCONNECTS & CONTROLS

NOTES:
1.

MARK	NAMEPLATE	MOTOR: CHARACTERISTICS: HORSEPOWER (HP)	MOTOR: CHARACTERISTICS: LOAD (kVA)	MOTOR: CHARACTERISTICS: 120V-1PH	MOTOR: CHARACTERISTICS: 208V-1PH	MOTOR: CHARACTERISTICS: 208V-3PH	MOTOR: CHARACTERISTICS: 240V-1PH	MOTOR: CHARACTERISTICS: 240V-3PH	MOTOR: CHARACTERISTICS: 277V-1PH	MOTOR: CHARACTERISTICS: 480V-1PH	MOTOR: CHARACTERISTICS: 480V-3PH	MOTOR: LOCATION: ROOM NUMBER	MOTOR: LOCATION: ROOM NAME	STARTER: TYPE: NEMA SIZE	STARTER: TYPE: MANUAL	STARTER: TYPE: MAGNETIC	STARTER: TYPE: BUILT-IN MOTOR OIL	STARTER: TYPE: 2-SPEED	STARTER: TYPE: VFD	STARTER: TYPE: SEE NOTE	STARTER: LOCATION: NEAR MOTOR	STARTER: LOCATION: MOTOR CONT CENTER	STARTER: LOCATION: EQUIP CONT PANEL	STARTER: LOCATION: ROOM NUMBER	STARTER: LOCATION: SEE NOTE	STARTER: FURNISHED BY	DISCONNECT MEANS: TYPE: DISC SWITCH	DISCONNECT MEANS: TYPE: MANUAL STARTER	DISCONNECT MEANS: TYPE: RECEPTACLE	DISCONNECT MEANS: TYPE: FEEDER SW OR BREAKER	DISCONNECT MEANS: TYPE: NEMA TYPE	DISCONNECT MEANS: TYPE: DISC SIZE	DISCONNECT MEANS: TYPE: FUSE SIZE	DISCONNECT MEANS: LOCATION: NEAR MOTOR	DISCONNECT MEANS: LOCATION: MOTOR CONT CENTER	DISCONNECT MEANS: LOCATION: EQUIP CONT PANEL	DISCONNECT MEANS: LOCATION: PANELBOARD	DISCONNECT MEANS: LOCATION: SEE NOTE	CONTROL: FURNISHED BY	CONTROL: INTERLOCK WITH MOTOR NO. BY E.C.	CONTROL: MANUAL AT STARTER	CONTROL: INTEGRAL WITH EQUIPMENT	CONTROL: FURNISHED BY	CONTROL: SEE NOTE	FEEDER: NUMBER OF CONDUCTORS	FEEDER: WIRE SIZE	FEEDER: GROUND SIZE	FEEDER: CONDUIT SIZE	SEE NOTE
CU-1	COND. UNIT 1		6.12				•						OUTSIDE				•				•					HC	•			3R	60A	NF	•				EC			•	HC		2	8	10	1"	
CU-2	COND. UNIT 2		6.12				•						OUTSIDE				•				•					HC	•			3R	60A	NF	•				EC			•	HC		2	8	10	1"	
EF-1	EXHUAST FAN 1		0.42	•								101	BREAK/TRAINING			•					•					HC	•			1	30A	NF	•				EC			•	HC		2	12	12	0.75"	
F-1	FURNACE 1		1.21	•								E004	EX. RESTROOM				•				•					HC	•			1	30A	NF	•				EC			•	HC		2	12	12	0.75"	
F-2	FURNACE 2		1.21	•								101	BREAK/TRAINING				•				•					HC	•			1	30A	NF	•				EC			•	HC		2	12	12	0.75"	
RP1	RECIRCULATION PUMP 1		0.12	•												•					•					PC	•			1	30A	NF	•				EC			•	PC		2	12	12	0.75"	

FLOOR BOX (FB) SCHEDULE

GENERAL NOTES:
A. REFER TO DRAWINGS FOR BOX DEPTH REQUIRED.
B. PROVIDE CARPET FLANGE WHERE REQUIRED.
C. COVER FINISH TO BE BY ARCHITECT, UNLESS NOTED OTHERWISE.
D. PROVIDE 20A-125V DUPLEX RECEPTACLE FOR EACH POWER GANG, UNLESS NOTED OTHERWISE.
E. REFER TO DRAWINGS FOR LOW VOLTAGE CONDUITS QUANTITY, SIZE, AND ROUTING.

NOTES:
1. PROVIDE 1-1" C. FOR POWER AND 1-1" CONDUIT FOR DATA.

FLOOR BOX (FB) #	TYPE: BASIS OF DESIGN: MANUFACTURER	TYPE: BASIS OF DESIGN: MODEL	TYPE: RECESSED CONCRETE	TYPE: RECESSED WOOD	TYPE: RAISED FLOOR	TYPE: FIRE RATED	TYPE: TYPE NOTE	QTY. OF GANGS: POWER	QTY. OF GANGS: VOICE/DATA	QTY. OF GANGS: A/V	QTY. OF GANGS: BLANK	QTY. OF GANGS: DEVICE NOTE	LOW VOLTAGE CONDUITS: VOICE/DATA	LOW VOLTAGE CONDUITS: A/V	LOW VOLTAGE CONDUITS: SPECIAL	LOW VOLTAGE CONDUITS: CONDUIT NOTE
1	HUBBELL	CFB4G30CI	•	-	-	-		2	1				-	-	-	1

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY
P: 317.571.4795 www.heapy.com

PROJECT NO. 2025-07211

NOBLE COUNTY HIGHWAY DEPARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

DONALD H. TIMMER
REGISTERED
No. 10601749
STATE OF
INDIANA
PROFESSIONAL ENGINEER

3/26/2026

CERTIFIED BY

ISSUANCE INDEX
DATE:
03.27.2026
PROJECT PHASE:
BID DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2025.02329

SCHEDULES - ELECTRICAL

E601

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GENERAL NOTES (APPLIES TO ALL DIV 27 SHEETS)

A. CONDUITS SHALL BE SIZED FOR 1" MINIMUM.

B. EACH BIDDER DURING THE BID PERIOD SHALL WALK THE SITE TO REVIEW THE EXISTING SITE CONDITIONS. ALTERNATIVE ROUTES MAY BE UTILIZED, WHICH ARE COORDINATED WITH OWNER AND OTHER TRADES. FINAL ROUTING OF TELECOMMUNICATIONS CABLING SHALL BE APPROVED BY OWNER/ENGINEER.

C. PROVIDE ALL NECESSARY CONDUIT, CIRCUITRY, WIRING AND INSTALLATION OF DEVICES AS DIRECTED BY THE SYSTEM SUPPLIER.

D. ALL JUNCTION BOXES ARE TO BE FLUSH MOUNTED UNLESS OTHERWISE NOTED.

E. NEW SYSTEM WIRING FOR STRUCTURED CABLING SHALL BE OPEN WIRED. PROVIDE J-HOOKS ON FIVE (5) FOOT CENTERS DOWN ALL CORRIDORS AND WITHIN LARGE AREAS.

F. FIRESTOP ALL PENETRATIONS THRU WALLS.

G. VERIFY EXACT LOCATION OF ALL CEILING MOUNTED DEVICES WITH REFLECTED CEILING PLAN AND/OR ARCHITECT PRIOR TO ROUGH-IN. COORDINATE LOCATIONS OF CEILING MOUNTED DEVICES WITH LIGHT FIXTURES, MECHANICAL DUCTS, AND SPRINKLER PIPES AND HEADS BEFORE ROUGH-IN TO PREVENT CONFLICTS.

H. REMOVE EXISTING CEILING TILES AS REQUIRED FOR INSTALLATION OF NEW TECHNOLOGY ITEMS AND REINSTALL TILES IN A SIMILAR MANNER AS NOW EXISTS.

I. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF OUTLETS AND DEVICES.

J. COORDINATE EXACT LOCATION OF ALL DATA OUTLETS AND WALL BOXES WITH RESPECTIVE CONTRACTORS PRIOR TO ROUGH-INS. ALL MOUNTING HEIGHTS OF DEVICES WHICH ARE MOUNTED ADJACENT TO EACH OTHER SHALL BE AT THE SAME DISTANCE MEASURED ABOVE THE FINISHED FLOOR.

K. STAGGER RECEPTACLES AND OTHER RECESSED OUTLETS WHEN LOCATED ON OPPOSITE SIDES OF PARTITION / WALL TO ELIMINATE SOUND TRANSMISSION FROM ONE SPACE TO THE OTHER.

L. REFER TO ARCHITECTURAL SPECIFICATIONS AND DOCUMENTS FOR CONSTRUCTION PHASING SEQUENCE.

M. ALL EXISTING CONDITIONS SHALL BE VERIFIED PRIOR TO BID.

N. ALL CONDUIT SLEEVES THRU WALLS AND FLOORS NOT SPECIFICALLY SHOWN ON DRAWINGS BUT REQUIRED FOR COMPLIANT INSTALLATION OF CABLING SHALL BE PROVIDED AS PART OF THE SCOPE OF WORK.

O. COMPLETELY AND THOROUGHLY COORDINATE ALL PATHWAYS BEING PROVIDED. ANY PATHWAYS THAT ARE PROVIDED THAT CAUSE CABLING INSTALLATION TO BE NON-COMPLIANT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE INSTALLATION OF CABLING.

P. A 3.5" DEEP MASONRY BOX SHALL BE USED IN CMU WALLS.

Q. ALL CONDUITS SHALL HAVE NYLON BUSHINGS INSTALLED.

TECHNOLOGY SYMBOLS WITH ELEC. REQUIREMENTS

A	WALL MOUNTED DATA OUTLET (18" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT(S) TO ABOVE ACCESSIBLE CEILING, JACKS, FACEPLATE AND CABLING. SUBSCRIPT "A" DESIGNATES QUANTITY OF DATA CABLES.
T	TELECOM BOX AND CONDUIT TO ABOVE ACCESSIBLE CEILING, REFER TO PLANS.
R	WALL MOUNTED AV OUTLET (60" MH UNLESS NOTED OTHERWISE). PROVIDE FSR PWB-100 (OR EQUAL) WALL BOX WITH (1)-DUPLEX 110V OUTLET, (1)-CATEGORY 6A CABLE, AND (1)-HDMI CABLE FROM THE WALL BOX TO DATA FACEPLATE BELOW. LEAVE 5' HDMI CABLE IN THE WALL BOX. PROVIDE NECESSARY HDMI MODULE IN THE DATA FACEPLATE.

TECHNOLOGY SYMBOLS

AP	CEILING MOUNTED WIRELESS ACCESS POINT WITH DATA DROP ABOVE CEILING. PROVIDE 20' COIL IN DATA CABLE TO FACILITATE FUTURE RELOCATION OF WAP. PROVIDE (2)-CATEGORY 6A CABLES.
	WIREMOLD RACEWAY, AS NOTED ON PLANS.

SECURITY SYMBOLS WITH ELECTRICAL REQUIREMENTS

CR	WALL MOUNTED PROXIMITY CARD READER (46" MH UNLESS NOTED OTHERWISE). 1-GANG BOX WITH CONDUIT TO COMMON SMS JUNCTION BOX ABOVE ACCESSIBLE CEILING, CARD READER AND CABLING.

SHEET LIST

SHEET NUMBER	SHEET NAME
T001	TECHNOLOGY INDEX, SYMBOLS, LEGEND, AND GENERAL NOTES
T002	TECHNOLOGY SPECS
T101	TECHNOLOGY FLOOR PLAN
Total Count: 3	

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY
P: 317.571.4795 www.heapy.com

PROJECT NO. 2025-07211

NOBLE COUNTY HIGHWAY DEPARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Jeffrey Schloffel
BICSI ID # 102917
EXPIRES 12-31-28
RCDD

CERTIFIED BY

ISSUANCE INDEX
DATE:
03.27.2026
PROJECT PHASE:
BID DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2025.02329

TECHNOLOGY INDEX, SYMBOLS, LEGEND, AND GENERAL NOTES

T001

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TECHNOLOGY SPECIFICATIONS (DIV 27)

SECTION 27 00 00 - COMMUNICATIONS INTRODUCTORY STANDARD

PART 1 -

1.1 GENERAL REQUIREMENTS

A. THESE SPECIFICATIONS SHALL SET THE MINIMUM STANDARDS FOR ALL DIVISION 27 SCOPE OF WORK AS OUTLINED IN THESE DOCUMENTS.

1.2 DEFINITIONS/TERMINOLOGY/ABBREVIATIONS

A. AHJ: AUTHORITY HAVING JURISDICTION AS DEFINED BY THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE.

B. AS-BUILT: DOCUMENTATION THAT INCLUDES FLOOR PLAN DRAWINGS THAT INDICATE ALL STRUCTURED CABLING OUTLET LOCATIONS WITH CABLE LABELING, MAJOR CABLING PATHWAYS, AND RMER/RTR/TE LAYOUTS WITH RACK ELEVATIONS UPON JOB COMPLETION THAT REFLECTS CHANGES FROM THE PLANNED TO THE FINISHED STATE.

C. CM: CONSTRUCTION MANAGER

D. CONTRACTOR: THE STRUCTURED CABLING INSTALLATION CONTRACTOR

E. FURNISH: THE CONTRACTOR SHALL SUPPLY.

F. GC: GENERAL CONTRACTOR

G. HC: HORIZONTAL CROSS-CONNECT

H. IEC: INCUMBENT LOCAL EXCHANGE CARRIER.

I. INSTALL: TO PUT INTO PLACE OR FIX IN POSITION READY FOR USE.

J. MANDATORY: EQUIVALENT TERMS INCLUDE *MUST, SHALL, WILL, IS REQUIRED, & ARE REQUIRED.*

K. OPTIONAL: EQUIVALENT TERMS INCLUDE *CAN, MAY, SHOULD, PREFERABLY, PREFERS, DESIRED, & DESIRABLE.*

L. PROJECT DOCUMENTS: ALL DOCUMENTS THAT PERTAIN TO THE PROJECT, INCLUDING, BUT NOT LIMITED TO, PROJECT DRAWINGS, THIS STANDARD, AND PROJECT SPECIFICATIONS.

M. PROVIDE: TO FURNISH AND INSTALL.

N. SPECIFICATIONS: DIVISION 27 SPECIFICATIONS, WHICH OUTLINES GENERAL INSTALLATION REQUIREMENTS.

O. TR: TELECOMMUNICATIONS ROOM.

1.6 CODES, REGULATIONS, & STANDARDS

A. ALL ASPECTS OF CONSTRUCTION AND INSTALLATION MUST MEET APPLICABLE LOCAL, STATE, AND FEDERAL LAWS, AS WELL AS ANY REGULATIONS SPECIFIC TO A SITE. LEGALLY BINDING REQUIREMENTS MUST PREVAIL IF THERE ARE ANY CONFLICTS WITH REQUIREMENTS STATED OR IMPLIED IN THIS DOCUMENT. THE AHJ WILL BE THE ARBITER IN SITUATIONS WHERE INTERPRETATION IS NECESSARY TO CLARIFY INFORMATION, OR TO RESOLVE CONFLICTS INVOLVING LEGALLY BINDING REQUIREMENTS.

B. WORK SAFETY MUST BE IN COMPLIANCE WITH PUBLIC LAW 91-596, OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), AS APPLICABLE. REQUIREMENTS OF THE NFPA 101 LIFE SAFETY CODE MUST BE FOLLOWED.

C. CODES, REGULATIONS, STANDARDS, AND INDUSTRY PRACTICES DOCUMENTS EXPLICIT TO THIS STANDARD ARE LISTED IN SECTION 1.8 BELOW, BUT THEY ARE NOT EXHAUSTIVE. EVEN WHEN NOT EXPLICITLY CITED WITHIN THIS DOCUMENT, THERE IS AN IMPLIED REQUIREMENT OF COMPLIANCE WITH INDUSTRY NORMS REFLECTED IN RECOGNIZED STANDARDS AND PRACTICES, AS WELL AS REQUIREMENTS BASED IN LAW.

D. CODES, REGULATIONS, STANDARDS, AND INDUSTRY PRACTICES DOCUMENTS CHANGE OVER TIME. CURRENT GOVERNING CODES AND REGULATIONS AT A SITE LOCATION, AND THE MOST RECENT EDITION OF STANDARDS AND PRACTICES DOCUMENTS (INCLUDING ERRATA, ANNEXES, AND AMENDMENTS) MUST BE USED AT THE TIME FACILITIES ARE DESIGNED AND WHEN THEY ARE UTILIZED.

E. ALTHOUGH A NUMBER OF STANDARDS AND PRACTICES ARE CITED IN THIS DOCUMENT, ANSI/TIA-569 "COMMERCIAL BUILDING STANDARD FOR TELECOMMUNICATIONS PATHWAYS" HAS BOTH EXPLICIT AND IMPLICIT THREADS THROUGHOUT.

F. ADDITIONALLY INFLUENCING THIS STANDARD ARE ACCEPTED INDUSTRY PRACTICES DOCUMENTS SUCH AS THOSE IN THE NECA/BICSI-568 "STANDARD FOR INSTALLING COMMERCIAL BUILDING COMMUNICATIONS CABLING", AND THE BICSI *"TELECOMMUNICATIONS DISTRIBUTION METHODS MANUAL (TDMM)".*

1.8 REFERENCED CODES AND STANDARDS

A. UNLESS OTHERWISE SPECIFICALLY STATED IN THIS DOCUMENT, ALL WORK SHALL BE PERFORMED IN FULL COMPLIANCE WITH THE REQUIREMENTS SET FORTH IN THE FOLLOWING REFERENCE STANDARDS. IN ANY CASE WHERE REGIONAL STANDARDS DISAGREE, LOCAL CODES AND STANDARDS APPLY. EVEN WHEN NOT EXPLICITLY CITED WITHIN THIS STANDARD DOCUMENT, THERE IS AN IMPLIED REQUIREMENT OF COMPLIANCE WITH INDUSTRY NORMS REFLECTED IN RECOGNIZED STANDARDS AND PRACTICES, AS WELL AS REQUIREMENTS BASED IN LAW. CURRENT GOVERNING CODES AND REGULATIONS AT A SITE LOCATION, AND THE MOST RECENT EDITION OF STANDARDS AND PRACTICES DOCUMENTS (INCLUDING ERRATA, ANNEXES, AND AMENDMENTS) MUST BE USED.

1. AMERICANS WITH DISABILITIES ACT (ADA)
2. ASHRAE TC9.9 2011 THERMAL GUIDELINES FOR DATA PROCESSING ENVIRONMENTS
3. BICSI TELECOMMUNICATIONS DISTRIBUTION METHODS MANUAL, (CURRENT EDITION)
4. CANUS/ C115, STANDARD METHOD OF FIRE TESTS OF FIRESTOPS SYSTEMS
5. NFPA 70 NATIONAL ELECTRICAL CODE (CURRENT VERSION AS APPLICABLE TO SITE LOCATION)
6. TIA 568.0.D - GENERIC TELECOMMUNICATIONS CABLING FOR CUSTOMER PREMISES
7. TIA 568.1.D - COMMERCIAL BUILDING TELECOMMUNICATIONS CABLING STANDARD
8. TIA-568-C.2 - BALANCED TWISTED-PAIR TELECOMMUNICATIONS CABLING AND COMPONENTS STANDARDS
9. TIA 568.3.D - OPTICAL FIBER CABLING COMPONENTS STANDARD
10. TIA -569-C COMMERCIAL BUILDING STANDARD FOR TELECOMMUNICATIONS PATHWAYS AND SPACES
11. ANSI/TIA-EIA-569-D TELECOMMUNICATIONS PATHWAYS AND SPACES
12. TIA/EIA-606-C ADMINISTRATION STANDARD FOR COMMERCIAL TELECOMMUNICATIONS INFRASTRUCTURE
13. TIA-607 COMMERCIAL BUILDING GROUNDING (EARTHING) AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS
14. TIA/EIA-72 CENTRALIZED OPTICAL FIBER CABLING GUIDELINES
15. TIA/EIA-758-B CUSTOMER-OWNED OUTSIDE PLANT TELECOMMUNICATIONS CABLING STANDARD

PART 2 - PRODUCTS

2.1 STRUCTURED CABLING REQUIREMENTS

A. COPPER AND FIBER OPTIC CABLING

1. FOR UTP COPPER CABLING AND F/UTP COPPER CABLING (CATEGORY 6 AND 6A), ALL MATERIAL SHALL BE PART OF A COMPLETE CABLING SYSTEM SOLUTION. ACCEPTABLE MANUFACTURERS:
   a. CABLING: BELDEN, BERK-TEK, GENERAL CABLE, MOHAWK, COMMSCOPE, SUPERIOR ESSEX.
   b. CONNECTIVITY: BELDEN, LEVITON, PANDUIT, ORTRONICS, SIEMON.
2. FOR FIBER OPTIC CABLING, ACCEPTABLE MANUFACTURERS:
   a. CABLING: CORNING, BELDEN, BERK-TEK, COMMSCOPE, OCC, MOHAWK, SUPERIOR ESSEX
   b. CONNECTIVITY: CORNING, BELDEN, LEVITON, COMMSCOPE, OCC, ORTRONICS
3. CONTRACTOR SHALL BE A CERTIFIED INSTALLER FOR THE SELECTED SOLUTION AND SHALL SUBMIT ALL CERTIFICATIONS WITH SHOP DRAWING SUBMITTALS.

B. CABLING COLOR SCHEME

1. NETWORK CABLING: BLUE
2. WIRELESS ACCESS POINT (CATEGORY 6A): ORANGE
3. VIDEO SURVEILLANCE CAMERA: YELLOW
4. ACCESS CONTROL PANELS: GREEN
5. AV SYSTEM CABLING: PINK

C. CABLE SUPPORT & PROTECTION

1. ABOVE AN ACCESSIBLE CEILING: SUPPORTED BY J-HOOKS.
2. ABOVE A HARD CEILING: WITHIN CONDUIT.

D. MATERIAL INTERPRETATION

1. THIS SPECIFICATION CONTAINS ALL PRODUCTS CURRENTLY APPROVED BY OWNER. CONTRACTOR SHOULD NOT ASSUME THAT MATERIALS LISTED IN THIS SPECIFICATION MUST BE INSTALLED MERELY BECAUSE THEY ARE LISTED IN THIS SPECIFICATION. PROJECT-SPECIFIC DETAIL ON REQUIRED MATERIALS IS FURTHER DEFINED IN THE ACCOMPANYING PROJECT DRAWINGS. ALTERNATE MATERIALS WILL BE CONSIDERED ON A CASE-BY-CASE BASIS WITH A SUBSTITUTION REQUEST SUBMITTED BY THE CONTRACTOR FOR ENGINEER APPROVAL.

END OF SECTION

SECTION 27 05 00 - QUALITY ASSURANCE FOR STRUCTURED CABLING

PART 1 - GENERAL

1.1 DESCRIPTION

A. THIS SPECIFICATION PROVIDES THE REQUIREMENTS FOR ALL STRUCTURED CABLING INSTALLATION CONTRACTORS.

1.2 INSTALLATION CONTRACTOR REQUIREMENTS

A. CERTIFICATIONS/TRAINING

1. THE CONTRACTOR MUST HAVE FIVE YEARS MINIMUM EXPERIENCE IN STRUCTURED CABLING INSTALLATIONS.
2. THE CONTRACTOR SHALL BE A COMMSCOPE CERTIFIED CONTRACTOR IN ORDER TO PROVIDE A MINIMUM TWENTY (20) YEAR EXTENDED PRODUCT AND APPLICATIONS ASSURANCE WARRANTY ON PARTS AND LABOR ASSOCIATED WITH THE U/TP CABLING INFRASTRUCTURE.
3. THE CONTRACTOR SHALL BE A CERTIFIED CONTRACTOR OF THE SELECTED COPPER CABLING SOLUTION IN ORDER TO PROVIDE A MINIMUM TWENTY (20) YEAR-EXTENDED PRODUCT AND APPLICATIONS ASSURANCE WARRANTY ON PARTS AND LABOR ASSOCIATED WITH THE F/UTP CABLING INFRASTRUCTURE.
4. THE CONTRACTOR SHALL BE A CERTIFIED CONTRACTOR IN ORDER TO PROVIDE A MINIMUM TWENTY (20) YEAR EXTENDED PRODUCT AND APPLICATIONS ASSURANCE WARRANTY ON PARTS AND LABOR ASSOCIATED WITH THE FIBER CABLING INFRASTRUCTURE.
5. THE CONTRACTOR MUST HAVE AT LEAST ONE EMPLOYEE THAT IS A BICSI CERTIFIED INSTALLER 1, INSTALLER 2, OR TECHNICIAN ON SITE DURING THE INSTALLATION OF STRUCTURED CABLING.

B. UNION AFFILIATION

1. IF REQUIRED BASED ON THE LOCATION OF THE PROJECT, THE CONTRACTOR SHALL BE A MEMBER OF THE LOCALLY RECOGNIZED UNION. THIS MAY INCLUDE, BUT NOT LIMITED TO, IBEW OR CWA.

1.4 OTHER CONTRACTOR REQUIREMENTS

A. OMISSIONS

1. CONTRACTOR OMISSION OF ANY REQUIREMENT DESCRIBED IN PROJECT DOCUMENTS SHALL NOT BE CONSTRUED AS TO RELIEVE CONTRACTOR OF ANY RESPONSIBILITY OR OBLIGATION REQUIRED TO AFFECT THE COMPLETE AND SATISFACTORY DELIVERY, OPERATION, AND SUPPORT OF ANY AND ALL MATERIALS OR SERVICES.

PART 2 - PRODUCTS

2.1 GENERAL MATERIAL REQUIREMENTS

A. NEW MATERIALS

1. ALL CABLE AND MATERIALS SHALL BE NEW, UNLESS PREVIOUSLY APPROVED IN WRITING BY OWNER. NEW EQUIPMENT AND MATERIALS SHALL BE WITHOUT BLEMISH OR DEFECT. NEW EQUIPMENT AND MATERIALS SHALL BE UNDERWRITER'S LABORATORIES, INC. (U.L.) LABELED AND/OR LISTED WHERE SPECIFICALLY CALLED FOR, OR WHERE NORMALLY SUBJECT TO SUCH U.L. LABELING AND/OR LISTING SERVICES.

B. EQUIVALENTS

1. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL PRODUCTS INSTALLED AT THIS FACILITY ARE COMPATIBLE WITH THE APPLICATION. THE ENGINEER MAKES NO REPRESENTATION REGARDING THE ACCURACY OF THE PART NUMBERS LISTED.

C. SUBSTITUTIONS

1. MATERIALS SHALL BE AS LISTED. NO SUBSTITUTIONS ARE ALLOWED WITHOUT WRITTEN CONSENT FROM THE ENGINEER. PROPOSALS FOR EQUIVALENT PRODUCTS MUST BE PRESENTED TO THE ENGINEER VIA RFI'S, SUBMITTALS, AND/OR SHOP DRAWINGS. ENGINEER WRITTEN APPROVAL IS REQUIRED BEFORE ANY SUBSTITUTIONS ARE MADE. MATERIALS MUST BE COMPATIBLE WITH THE END-TO-END SOLUTION BEING PROPOSED

PART 3 - EXECUTION

3.1 PROTECTION OF PROPERTY

A. EXTREME CARE SHALL BE TAKEN BY CONTRACTOR TO PROTECT ALL COMPONENTS OF THE PROPERTY FROM DAMAGE. CONTRACTOR SHALL REPLACE ANY DAMAGED CEILING TILES THAT ARE BROKEN DURING CABLE INSTALLATION. CONTRACTOR SHALL PROVIDE ALL PROTECTIVE DEVICES AND COVERINGS REQUIRED TO PROTECT AREAS ADJACENT TO THE WORK AREA. CONTRACTOR SHALL REPAIR DAMAGE TO AREAS ADJACENT TO THE WORK AREA AT NO COST TO THE OWNER, OR THE OWNER SHALL MAKE THE REPAIRS AND BACK CHARGE AGAINST THE TELECOM CONTRACTOR. CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR DAMAGES TO THIRD PARTIES INCURRED AS A RESULT OF CONTRACTOR'S WORK IN THIS PROJECT. PROTECTION OF PROPERTY SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING PROTECTIVE MEASURES:

1. KEEPING THE TR FREE OF FOOD AND DRINK AT ALL TIMES.
2. LEAVING TR OR TR DOORS CLOSED AT ALL TIMES.
3. EMPLOYING HEPA VACUUM WHENEVER DRILLING, CUTTING, CORING, OR PERFORMING ANY WORK THAT WILL IMPACT AIR QUALITY.

3.2 DOCUMENTATION

A. UPON REQUEST BY ENGINEER, THE CONTRACTOR SHALL PROVIDE PROOF OF ANY CERTIFICATIONS, TRAINING, OR UNION AFFILIATIONS.

END OF SECTION

SECTION 27 05 03 - TECHNOLOGY SPACE CLEANING

PART 1 - GENERAL

1.1 DESCRIPTION

A. THIS SPECIFICATION PROVIDES THE REQUIREMENTS FOR FINAL CLEANING OF TECHNOLOGY SPACES, INCLUSIVE OF TELECOMMUNICATIONS ROOMS (TRS).

1.2 STANDARDS OF OPERATION

A. CLEANING PERSONNEL ARE REQUIRED TO OBSERVE THE TECHNOLOGY ROOM STANDARDS OF OPERATIONS AT ALL TIMES. AT A MINIMUM, THIS INCLUDES:

1. NO FOOD OR DRINK IN THE ROOM
2. NO PROPPING TECHNOLOGY ROOM DOORS
3. NO INTERFERING WITH THE OPERATION OF TECHNOLOGY ROOM EQUIPMENT
4. NO UNAUTHORIZED/UN-BADGED PERSONNEL IN TECHNOLOGY ROOM

B. WORKERS MUST WEAR CLOTHING THAT EASILY IDENTIFIES THEM AS MEMBERS OF THE CLEANING COMPANY.

C. DURING THE CLEANING, WORKERS ARE RESPONSIBLE FOR CONDUCTING THEMSELVES IN SUCH A MANNER AS TO PROTECT THE OWNER'S EQUIPMENT AND INFRASTRUCTURE AND TO AVOID CREATING HAZARDS FOR EMPLOYEES WHO ENTER THE WORK AREA.

D. SIGNAGE OR SAFETY CONES SHOULD BE USED TO SURROUND OPEN FLOOR TILES, ELECTRICAL CORDS STRUNG ALONG THE FLOOR, AND ANY AREAS THAT ARE BEING DAMP-MOPPED.

PART 2 - PRODUCTS

2.1 APPROVED EQUIPMENT & MATERIALS

A. THE CONTRACTOR WILL USE THE FOLLOWING APPROVED EQUIPMENT AND SUPPLIES:

1. TRIPLE-FILTRATION HIGH-EFFICIENCY PARTICULATE AIR (HEPA) OR S-CLASS VACUUMS, CAPABLE OF REMOVING 99.97 PERCENT OF PARTICLES 0.3 MICRONS OR LARGER.
2. CLEANING CHEMICALS THAT ARE PH NEUTRAL, STATIC DISSIPATIVE, AND APPROVED OR QUALIFIED BY COMPUTER HARDWARE MANUFACTURERS.
3. MATERIAL SAFETY DATA SHEETS MUST BE PROVIDED TO THE OWNER PRIOR TO PERFORMING WORK.
4. CANNED AIR.
5. LINT-FREE MOPS THAT ARE APPROVED OR QUALIFIED BY COMPUTER HARDWARE MANUFACTURERS. MOPS SHOULD HAVE NONMETAL HANDLES AND SEWN ENDS, TO PREVENT SNAGGING. MOP HEADS SHOULD HAVE LOOPED ENDS, NOT ENDS THAT ARE OPEN OR STRINGY OR BOTH.
6. LINT-FREE, ANTISTATIC WIPES AND TOWELS THAT ARE APPROVED OR QUALIFIED BY COMPUTER HARDWARE MANUFACTURERS.
7. LOW-SPEED FLOOR SCRUBBING MACHINES.
8. ELECTRICAL CORDS THAT ARE IN GOOD CONDITION AND POSSESS APPROPRIATE GROUND CONFIGURATION.
9. A STABLE STEPLADDER WITH NON-MARKING RUBBER FEET.

PART 3 - EXECUTION

3.1 EQUIPMENT CLEANING PROCEDURES

A. A HEPA VACUUM WILL BE USED TO CLEAN THE HORIZONTAL SURFACES OF ALL EQUIPMENT.

B. CLOTHS TREATED WITH ANTISTATIC PROPERTY CHEMICAL WILL BE USED TO WIPE DOWN ALL EXTERNAL SURFACES OF ALL CABINETS, POLYSTYRENE END-ROW SHEETS, SERVERS, NETWORKING DEVICES, AND STORAGE UNITS.

C. CHEMICALS WILL NOT BE SPRAYED DIRECTLY ONTO EQUIPMENT.

D. KEYBOARDS WILL NOT BE TOUCHED DURING CLEANINGS.

E. CLEANING ACTIVITIES SHOULD GENERALLY PROGRESS DOWNWARD FROM THE CEILING AND OUTWARD FROM THE ROOM'S AIR HANDLERS.

3.2 HIGH LEVEL CLEANING PROCEDURES

A. ALL CABLE TRAYS, LADDER RACKS, UNISTRUT, BEAMS, ETC. TO BE BLOWN THROUGH WITH COMPRESSED AIR AND WIPED DOWN WITH APPROPRIATE CLOTHS AND CHEMICALS.

3.3 LOW LEVEL CLEANING PROCEDURES

A. VACUUM SURFACE DUST AND PARTICLES FROM THE TOP OF ALL RACEWAYS AND CABLE TRAYS THAT ARE SECURED BELOW THE ROOM'S DECK OR CEILING.

B. MAKE NOTE OF ANY UNUSUAL CONDITIONS--LOOSE BRACKETS, DAMAGED CABLE BUNDLES, CONDENSATION, AND SO ON--AND INCLUDE THEM IN THE FINAL REPORT TO BE PROVIDED TO THE CM AND OWNER.

3.4 CLEANING OF TECHNOLOGY CABINETS/RACKS

A. WIPE DOWN THE EXTERNAL SURFACES OF ALL CABINETS USING LINT-FREE CLOTHS TREATED WITH ANTISTATIC CHEMICAL. AVOID DISTURBING PATCH CORDS OR POWER CABLES, TOUCHING KEYBOARDS, MOVING HARDWARE, OR SPRAYING CHEMICALS DIRECTLY ONTO EQUIPMENT.

B. USE CANNED AIR TO DISLODGE DUST IN AREAS THAT CANNOT BE REACHED BY HAND.

3.5 FLOOR SURFACE CLEANING PROCEDURES

A. WHEN CLEANING THE RAISED FLOOR, AVOID DISTURBING ANY CABLES THAT ARE ROUTED THROUGH THE NOTCHED OPENING OF FLOOR TILES.

B. VACUUM SURFACE DUST AND PARTICLES FROM THE TOP OF ALL ACCESSIBLE PORTIONS OF THE FLOOR, INCLUDING BLANK, NOTCHED, AND PERFORATED FLOOR TILES.

C. TREAT SMUDGES, STAINS, BLACK MARKS, AND SO ON, WITH AN APPROVED SOLUTION AND SCRUB WITH A MEDIUM-GRADE SCRUB PAD. USE AN APPROVED FLOOR MACHINE TO CLEAN ALL ACCESSIBLE PORTIONS OF THE FLOOR.

D. LAST, MOP THE FLOOR WITH A DAMP--NOT WET--MOP USING CLEAN, WARM WATER. USE A TWO-BUCKET SYSTEM, ONE FOR MOPPING AND ONE FOR RINSING. CHANGE WATER FREQUENTLY IN BOTH BUCKETS.

END OF SECTION

SECTION 27 05 26 - GROUNDING AND BONDING FOR STRUCTURED CABLING

PART 1 - GENERAL

1.1 DESCRIPTION

A. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH DIVISION 26 CONTRACTOR FOR PROPER INSTALLATION OF ALL REQUIRED GROUNDING AND BONDING AS OUTLINED IN THESE DOCUMENTS.

B. ALL BONDING AND GROUNDING (EARTHING) SHALL TRACK METHODS AND PROCEDURES DESCRIBED IN J-STD-607 OR EQUIVALENT REGIONAL STANDARD.

PART 2 - PRODUCTS

2.1 MATERIALS

A. CONTRACTOR SHALL PROVIDE PARTS AS INDICATED ON DRAWINGS

B. ALL GROUNDING/BONDING CONDUCTORS SHALL BE COPPER (NO ALUMINUM ALLOWED).

C. ACCEPTABLE MANUFACTURERS:

1. STORM COPPER, CHATSWORTH, EATON, HUBBELL

PART 3 - EXECUTION

3.1 SEE THE GROUNDING SCHEMATIC ON DRAWINGS FOR CONTRACTOR REQUIREMENTS.

A. DAISY-CHAINING OF GROUNDING AND/OR BONDING CONDUCTORS IS EXPLICITLY PROHIBITED.

END OF SECTION

SECTION 27 05 53 - IDENTIFICATION FOR STRUCTURED CABLING

PART 1 - GENERAL

1.1 DESCRIPTION

A. SYSTEM ACCEPTANCE SHALL BE WITHHELD UNTIL OWNER HAS REVIEWED AND APPROVED ALL LABELING AS DEFINED ELSEWHERE IN THIS SECTION.

B. BECAUSE THE CABLE INFRASTRUCTURE IS A COMPREHENSIVE, INTEGRATED DESIGN, PROPER AND COMPREHENSIVE LABELING IS CRITICAL. TO ENSURE THE SUCCESS OF THIS COMPONENT OF THE SYSTEM DESIGN, ALL LABELS SHALL BE FULLY COMPLIANT WITH THE REQUIREMENTS SET FORTH IN THIS SECTION. CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING ALL LABELS AND LABEL HOLDERS AS SPECIFIED HEREIN.

C. ALL LABELS SHALL BE INSTALLED IN ACCORDANCE WITH INFORMATION CONTAINED IN PROJECT DRAWINGS AND AS SPECIFIED IN THIS SECTION.

D. THIS SPECIFICATION SETS FORTH GENERAL REQUIREMENTS FOR INFRASTRUCTURE IDENTIFICATION, NOT SPECIFIC NUMBERING SCHEMES. BEFORE THE LABELING PROCESS BEGINS, CONTRACTOR SHALL SUBMIT A WRITTEN PLAN THAT INCLUDES SPECIFIC NUMBERING SEQUENCES FOR EACH TELECOMMUNICATIONS ELEMENT AND SHALL NOT PROCEED WITH THE PLAN UNTIL OPR FURNISHES WRITTEN APPROVAL OF SAID PLAN WHICH MAY CONTAIN STANDARDS-BASED MODIFICATIONS.

PART 2 - PRODUCTS

2.1 GENERAL MATERIAL REQUIREMENTS

A. ALL LABELS SHALL BE INDELIBLE, PRE-PRINTED (NOT HAND-WRITTEN), AND PERMANENT, USING BRADY PRINTER OR EQUIVALENT, ARIAL FONT OR EQUIVALENT. THE TEXT COLOR SHALL BE BLACK WITH A WHITE BACKGROUND, UNLESS AFFIXED ON A BLACK SURFACE, IN WHICH CASE THE LABEL BACKGROUND SHALL BE BLACK AND TEXT SHALL BE WHITE.

PART 3 - EXECUTION

3.1 SYSTEM DESCRIPTION

A. THE FOLLOWING INFRASTRUCTURE COMPONENTS SHALL BE INCLUDED AND FULLY LABELED IN THE IDENTIFICATION SCHEMA:

1. INFORMATION OUTLET FACEPLATES
2. HORIZONTAL CABLING
3. COPPER PATCH PANELS
4. BACKBONE CABLING
5. FIBER PATCH PANELS
6. RACKS
7. POWER DISTRIBUTION UNITS AND POWER STRIPS
8. IT EQUIPMENT ASSET TAGS
9. CONDUIT AND SLEEVE PATHWAYS

3.2 INFORMATION OUTLET FACEPLATES

A. EACH INFORMATION OUTLET IDENTIFIER SHALL BE NUMBERED IN ACCORDANCE WITH THE FACEPLATE LABELING CONFIGURATION DETAIL. USING PAPER LABELS AND CLEAR WINDOWS INCLUDED WITH EACH APPROPRIATE INFORMATION OUTLET FACEPLATE. WHERE CLEAR WINDOWS ARE NOT APPLICABLE, CONTRACTOR SHALL COORDINATE A COMPLIANT LABEL THAT IS RESISTANT TO DAMAGE OR DEGRADATION OVER TIME (E.G. VINYL). TEXT HEIGHT AND POSITIONING SHALL BE IN ACCORDANCE WITH THE FACEPLATE LABELING CONFIGURATION DETAIL.

B. VOICE AND DATA OUTLETS SHALL BE LOCATED IN EACH FACEPLATE IN ACCORDANCE WITH THE FACEPLATE LABELING CONFIGURATION DETAIL.

3.3 HORIZONTAL CABLING

A. LABELS TO BE AFFIXED AT EVERY USED PATCH PANEL AND ON EACH HORIZONTAL CABLE ON BOTH ENDS.

1. NOMENCLATURE: XPY##
   a. WHERE X = TR DESIGNATION, TRS SHALL BE SEQUENTIALLY NUMBERED
   b. WHERE # = RACK DESIGNATION (NUMERIC). RACKS SHALL BE SEQUENTIALLY NUMBERED, STARTING FROM THE CLOSEST TO THE DOOR AS RACK #1
   c. WHERE Y = A SINGLE SEQUENTIAL ALPHA CHARACTER, BEGINNING WITH "A", IDENTIFYING THE PATCH PANEL.
   d. WHERE ## = TWO-DIGIT SEQUENTIAL NUMBER BEGINNING WITH "01", IDENTIFYING PATCH PANEL PORT NUMBER.

B. COPPER PATCH PANEL PORT IDENTIFICATION SHALL BE FULLY COMPLIANT WITH THE FACEPLATE LABELING CONFIGURATION DETAIL.

C. IF LABEL IS AFFIXED TO A BLACK OR DARK GRAY SURFACE, LABEL INFORMATION SHALL BE WHITE IN COLOR. IF LABEL IS AFFIXED TO BEIGE OR LIGHT-COLORED SURFACE, LABEL INFORMATION SHALL BE BLACK IN COLOR.

D. COPPER PATCH PANEL LABELS SHALL EMPLOY MANUFACTURER-SUPPLIED LABELING MATERIALS AND COVERS (IF APPLICABLE), AFFIXED TO EACH PANEL IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.

E. COPPER PATCH PANEL LABELS SHALL BE WHITE IN COLOR.

3.4 BACKBONE CABLING

A. THE CABLE SHALL BE LABELED ON BOTH ENDS.

B. NOMENCLATURE: SOURCE = X-#-ZZ AND DESTINATION = X-Y-ZZ-##/##-TTT

1. WHERE X = TR DESIGNATION, TRS SHALL BE SEQUENTIALLY NUMBERED
2. WHERE # = RACK DESIGNATION (NUMERIC). RACKS SHALL BE SEQUENTIALLY NUMBERED, STARTING FROM THE CLOSEST TO THE DOOR AS RACK #1
3. WHERE ZZ = PATCH PANEL DESIGNATION (RACK UNIT # FROM UPPER LEFT CORNER WHEN PANEL IS INSTALLED).
4. WHERE ##/## = STARTING STRAND NUMBER/END STRAND NUMBER.
5. WHERE TTT = FIBER TYPE, OM2, OM3, OR OM4 FOR MULTIMODE OR OS2 FOR SINGLE MODE.

C. WHERE ROUTE DIVERSITY IS EMPLOYED DESIGNATION STRIPS LOCATED ON TERMINATION PANELS FOR EACH ROUTE SHALL BE OF DISTINCTLY DIFFERENT COLORS.

3.5 FIBER PATCH PANELS

A. THE PATCH PANEL SHALL BE LABELED ON THE FRONT DOOR.

1. NOMENCLATURE: ZZ
   a. WHERE ZZ = PATCH PANEL DESIGNATION (RACK UNIT # FROM THE UPPER LEFT CORNER WHERE THE PANEL IS INSTALLED.
   b. WITHIN THE PATCH PANEL (BEHIND THE FRONT DOOR).
   c. NOMENCLATURE: SOURCE = X-#-ZZ AND DESTINATION = ZZ-##/##-TTT
   d. WHERE X = SOURCE DESIGNATION, "M" = MAIN TECHNOLOGY ROOM, "S" = SERVICE PROVIDER
   e. WHERE # = RACK DESIGNATION. RACKS SHALL BE SEQUENTIALLY NUMBERED, STARTING FROM THE CLOSEST TO THE DOOR AS RACK #1
   f. WHERE ZZ = PATCH PANEL DESIGNATION (RACK UNIT # FROM UPPER LEFT CORNER WHEN PANEL IS INSTALLED).
   g. WHERE ##/## = STARTING STRAND NUMBER/END STRAND NUMBER.
   h. WHERE TTT = FIBER TYPE, OM2, OM3, OR OM4 FOR MULTIMODE OR OS2 FOR SINGLE MODE.

3.6 RACKS

A. LABELS TO BE AFFIXED TO TOP FRONT AND TOP REAR OF RACK

1. NOMENCLATURE: X#
   a. WHERE X = TR DESIGNATION
   b. WHERE # = RACK DESIGNATION (NUMERIC). RACKS SHALL BE SEQUENTIALLY NUMBERED, STARTING FROM THE CLOSEST TO THE DOOR AS RACK #1
   c. TYPE: 1.5 IN. (38 MM) TEXT; MACHINE PRINTED TEXT. BLACK TEXT ON WHITE BACKGROUND.

3.7 POWER DISTRIBUTION UNITS AND POWER STRIPS

A. POWER DISTRIBUTION UNITS AND STRIPS SHALL BE LABELED WITH THE BREAKER PANEL ID AND CIRCUIT NUMBER IT IS SERVED FROM.

3.8 IT EQUIPMENT ASSET TAGS

A. ALL POWERED IT EQUIPMENT, ASIDE FROM AUDIO-VISUAL OR CARRIER EQUIPMENT MUST BE LABELED WITH THE DEVICES HOSTNAME AND A YELLOW ASSET TAG ON THE FRONT (COLD AISLE) SIDE OF THE DEVICE.

A MACHINE GENERATED LABEL INDICATING THE SERIAL NUMBER OF THE DEVICE SHALL ALSO BE PLACED ON THE FRONT (COLD AISLE) SIDE OF THE DEVICE. ALL RACKS MUST HAVE A YELLOW ASSET TAG AT THE TOP FRONT IN A VISIBLE AREA THAT CAN BE EASILY ACCESSED WITH A BARCODE SCANNER.

B. THESE ASSET TAGS WILL BE PROVIDED BY SOMEONE OTHER THAN THE STRUCTURED CABLING CONTRACTOR.

3.9 CONDUIT AND SLEEVE PATHWAYS

A. CONDUIT PATHWAY LABELING SHALL BE LABELED AS FOLLOWS.

1. 1.5 IN. (38 MM) TALL TEXT PLACED IN VISIBLE LOCATION ON PLASTIC BUSHING OR ON THE CONDUIT ITSELF NEAR THE END.
2. NOMENCLATURE <SIZE>.<PATH A/B>TO<DISTANT END ROOM ID>. EXAMPLE: 4" A TO I-1

B. SLEEVE PATHWAY LABELING SHALL BE LABELED AS FOLLOWS.

1. 1.5 IN. (38 MM) TALL TEXT PLACED IN VISIBLE LOCATION ON PLASTIC BUSHING OR ON THE SLEEVE ITSELF NEAR BOTH ENDS.
2. NOMENCLATURE <SIZE>.<PATHWAY TYPE>. EXAMPLE: 4" SLEEVE

END OF SECTION

SECTION 27 05 28 - PATHWAYS FOR STRUCTURED CABLING

PART 1 - GENERAL

1.1 DESCRIPTION

A. THIS SECTION SPECIFIES TECHNOLOGY INFRASTRUCTURE EQUIPMENT INCLUDING THE FOLLOWING:

1. J-HOOKS.
2. CONDUITS AND BOXES.
3. INNERDUCT
4. PULL BOXES.
5. FIRE-RATED SLEEVES.
6. MISC. ACCESSORIES.

PART 2 - PRODUCTS

2.1 GENERAL MATERIAL REQUIREMENTS

A. NEW MATERIALS

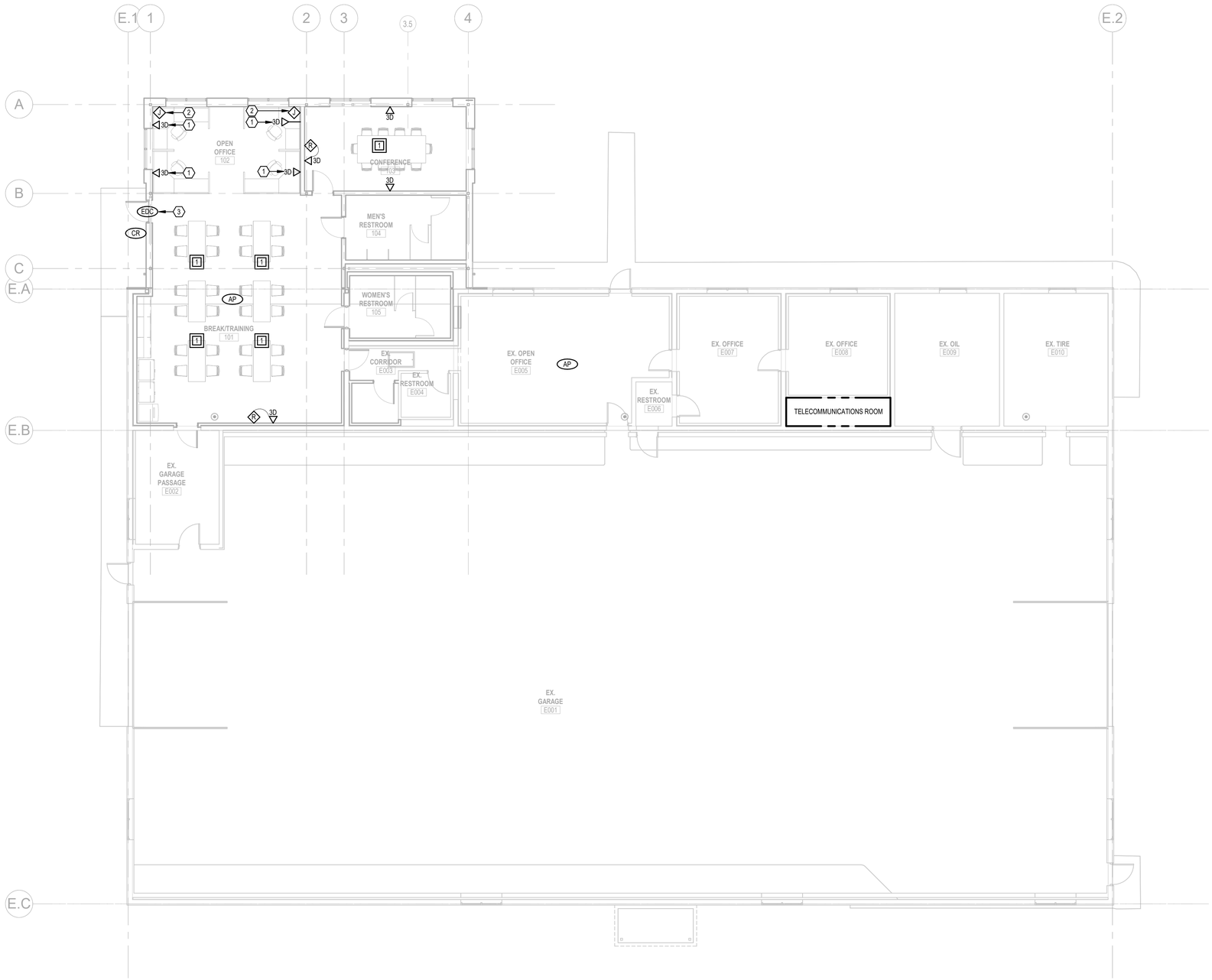
1. ALL CABLE AND MATERIALS SHALL BE NEW, UNLESS PREVIOUSLY APPROVED IN WRITING BY OWNER. NEW EQUIPMENT AND MATERIALS SHALL BE WITHOUT BLEMISH OR DEFECT. NEW EQUIPMENT AND MATERIALS SHALL BE UNDERWRITER'S LABORATORIES, INC. (U.L.) LABELED AND/OR LISTED WHERE SPECIFICALLY CALLED FOR, OR WHERE NORMALLY SUBJECT TO SUCH U.L. LABELING AND/OR LISTING SERVICES.

B. EQUIVALENTS

1. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL PRODUCTS INSTALLED AT THIS FACILITY ARE COMPATIBLE WITH THE APPLICATION. THE ENGINEER MAKES NO REPRESENTATION REGARDING THE ACCURACY OF THE PART NUMBERS LISTED.

C. SUBSTITUTIONS

1. MATERIALS SHALL BE AS LISTED. NO SUBSTITUTIONS ARE ALLOWED WITHOUT WRITTEN CONSENT FROM THE ENGINEER. PROPOSALS FOR EQUIVALENT PRODUCTS MUST BE PRESENTED TO THE OPR VIA RFI'S, SUBMITTALS, AND/OR SHOP DRAWINGS. OPR WRITTEN APPROVAL IS REQUIRED BEFORE ANY S



1 **TECHNOLOGY FLOOR PLAN**
SCALE: 1/8" = 1'-0"

0 4 8 16 24

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PLAN NOTES

1. ROUTE CATEGORY 6A CABLES FROM JUNCTION BOX THROUGH CUBICLE TO WORK AREA OUTLET LOCATION.
2. PROVIDE DOUBLE GANG 3.5" DEEP TELECOM BOX WITH 1" CONDUIT TO ACCESSIBLE CEILING.
3. PROVIDE ACCESS CONTROL CABLE FROM TELECOMMUNICATIONS ROOM TO THIS LOCATION. THE CABLE SHALL INCLUDE THE FOLLOWING CONDUCTORS: 22AWG/2C, 22AWG/4C, 18AWG/4C, AND 22AWG/6C SHIELDED.

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 WEB www.structurepoint.com

HEAPY
P: 317.571.4795 www.heapy.com

PROJECT NO. 2025-07211

NOBLE COUNTY HIGHWAY DEPARTMENT RENOVATION

1118 E MAIN ST,
ALBION, IN 46701

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Jeffrey Schloffel
BICSI ID # 102917
EXPIRES 12-31-28
RCDD

CERTIFIED BY

ISSUANCE INDEX
DATE:
03.27.2026
PROJECT PHASE:
BID DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2025.02329

TECHNOLOGY FLOOR PLAN

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