# **TAYLOR HALL MASONRY AND ENTRY IMPROVEMENTS**

## MONTANA STATE UNIVERSITY, BOZEMAN, MONTANA





TAYLOR HALL IN 1894 (MSU HISTORICAL PHOTOGRAPH COLLECTION, No. hres-parc-000211 Taylor Hall, 1894)

## **GENERAL NOTES**

ALL WORK INCLUDED IN THIS CONTRACT, SHALL COMPLY WITH THE LATEST EDITION OF INTERNATIONAL BUILDING CODE, INTERNATIONAL PLUMBING CODE, INTERNATIONAL MECHANICAL CODE, ICC ELECTRICAL CODE, AND ALL OTHER LAWS, CODES, OF LOCAL, COUNTY, STATE, AND LOCAL JURISDICTION INVOLVED.

THE GENERAL CONTRACTOR SHALL VISIT THE SITE PRIOR TO STARTING THE WORK. THE CONTRACTOR SHALL VERIFY GRADES, SITE CONDITIONS, AND COMPARE THAT WITH THE DIMENSIONS SHOWN ON THE DRAWINGS. WHERE CONFLICT EXISTS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT UPON RECOGNITION OF ANY DISCREPANCY.

THE CONTRACTOR SHALL CAREFULLY STUDY ALL PLANS AND DRAWINGS, AND SHALL REPORT IMMEDIATELY TO THE ARCHITECT ANY ERRORS, INCONSISTENCIES OR OMISSIONS THEY MAY DISCOVER. THE CONTRACTOR SHALL NOT WORK WITHOUT DRAWINGS. THE CONTRACTOR SHALL CONSULT THE ARCHITECT OR SUBMIT SHOP DRAWINGS AND/OR LITERATURE TO THE ARCHITECT FOR APPROVAL PRIOR TO STARTING THE WORK.

THE GENERAL CONTRACTOR SHALL GIVE ALL NOTICES AND SHALL COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND ORDERS OF PUBLIC AUTHORITY BEARING ON THE PERFORMANCE OF THE WORK. IF THE CONTRACTOR OBSERVES THAT ANY OF THE CONTRACT DOCUMENTS ARE AT VARIANCE THEREWITH IN ANY RESPECT THEY SHALL PROMPTLY NOTIFY THE ARCHITECT OF ANY CHANGES REQUIRING ADJUSTMENT WITH APPROPRIATE MODIFICATION.

ONLY APPROVED 'CONSTRUCTION SET' MARKED DRAWINGS INCORPORATING ALL ADDENDUM AND DIMENSION CLARIFICATIONS SHALL BE USED DURING THE EXECUTION OF THE WORK.

THE CONTRACTOR SHALL USE WRITTEN DIMENSIONS ONLY, OR AS DIRECTED BY ARCHITECT. THE CONTRACTOR SHALL NOT SCALE DRAWINGS.

CROSS REFERENCES SHOWN ON DRAWINGS DO NOT NECESSARILY INDICATE ALL LIKE CONDITIONS AND DO NOT LIMIT APPLICATION OF ANY DRAWING OR DETAIL. THEY MAY APPLY TO OTHER, SAME, OR SIMILAR CONDITIONS NOT REFERENCED.

INTERIOR WALL DIMENSIONS (FOR NEW WALLS ONLY) ARE TO FACE OF STUD FRAMING UNLESS OTHERWISE NOTED. SECTION AND INTERIOR ELEVATION DIMENSIONS ARE TO THE TOP OF CONCRETE OR METAL DECKING UNLESS

OTHERWISE NOTED. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION AND COORDINATION OF SUBCONTRACTORS WORK TO

SECURE COMPLIANCE OF DRAWINGS AND SPECIFICATIONS, THE ACCURATE LOCATION OF STRUCTURE MEMBERS, AND OPENINGS FOR MECHANICAL, ELECTRICAL, STAIRS, ELEVATORS, AND MISCELLANEOUS EQUIPMENT. CONTRACTOR SHALL VERIFY SIZES AND LOCATIONS OF ALL OPENINGS FOR MECHANICAL AND ELECTRICAL

EQUIPMENT WITH RESPECTIVE SUB-CONTRACTORS, AS WELL AS SHOP DRAWINGS REVIEWED BY THE ARCHITECT. CONTRACTOR SHALL VERIFY ALL ROUGH-IN DIMENSIONS FOR EQUIPMENT AND PROVIDE ALL BUCK-OUT BLOCKING

AND BACKING REQUIRED BY THIS CONTRACT AND OTHERS.

WHERE PIPING, CONDUIT, AND/OR DUCTS PASS THROUGH FIRE RATED WALLS, PACK AROUND OPENINGS WITH SAFING OR SPRAY INSULATION. PROVIDE FIRE DAMPERS WHERE NECESSARY.



## ABBREVIATIO

| ALUM.  | ALUMINUM   |
|--|--|
| ANN.   | ANNUNCIATOR  |
| BD.  | BOARD  |
| BLCK'G.  | BLOCKING   |
| CAB.   | CABINET  |
| CER.   | CERAMIC  |
| CLR.   | CLEARANCE  |
| COMP.  | COMPOSITE  |
| CONC.  | CONCRETE   |
| INSTALLED<br>CONF.<br>CORR.<br>C.M.U.<br>C.T.<br>CUST. | CONFERENCE<br>CORRIDOR<br>CONCRETE MASONR'<br>CERAMIC TILE<br>CUSTOM |
| D.F.   | DRINKING FOUNTAIN  |
| DISP.  | DISPENSER  |
| D.M.   | DRYMARK BOARD  |
| DR.  | DRAWER   |
| E.I.F.S.   | EXTERIOR INSULATIO<br>FINISH SYSTEM                                  |
| E.P.S.<br>ELEV.  | EXTRUDED POLYSTY   |
| F.D.   | FLOOR DRAIN  |
| F.E.   | FIRE EXTINGUISHER  |
| F.F.   | FINISH FLOOR   |
| F.S.   | FLOOR SINK   |
| FLR.   | FLOORING   |
| FDN.   | FOUNDATION   |
| F.O.   | FACE OF  |
| G.B.   | GYPSUM WALLBOARI   |
| GWB  | GYPSUM WALLBOARI   |
| GYP. BD.   | GYPSUM WALLBOARI   |
| HC.  | HANDICAPPED  |
| H.M.   | HOLLOW METAL   |
| INSUL.   | INSULATION   |
| JAN.   | JANITOR  |

| ) | Ν | S        |
|---|---|----------|
|   |   | <u> </u> |

|                   | MECH.<br>MFG.<br>M.R.<br>MTL.                          | MECHANICAL<br>MANUFACTURER<br>MOISTURE RESISTANT<br>METAL   |
|-------------------|--|---|
|                   | N.I.C.   | NOT IN CONTRACT   |
|                   | O.C.<br>O.S.B.   | ON CENTER<br>ORIENTED STRAND  |
|                   | 0.F.C.I.   | OWNER FURNISHED<br>CONTRACTOR   |
|                   | 0.F.O.I.   | OWNER FURNISHED<br>OWNER INSTALLED  |
| AIN               | P.<br>P. LAM.<br>P.T.<br>PRE-FIN.<br>PVC.              | PAINT<br>PLASTIC LAMINATE<br>PAPER TOWEL<br>PRE-FINISHED<br>POLYVINYLCHLORIDE                           |
|                   | R.<br>REC.<br>REST.<br>REQ'D.                          | RADIUS<br>RECESSED<br>RESTROOM<br>REQUIRED  |
| ER                | S.<br>S.C.<br>S.F.<br>S.V.<br>SIM.<br>SPECS.<br>STOR.  | STAIN<br>SOLID CORE<br>SQUARE FEET<br>SHEET VINYL<br>SIMILAR<br>SPECIFICATIONS<br>STORAGE               |
| ARD<br>ARD<br>ARD | T.B.<br>T.O.<br>T.P.<br>TYP.<br>V.B.<br>V.C.T.<br>VER. | TACK BOARD<br>TOP OF<br>TOILET PAPER<br>TYPICAL<br>VAPOR BARRIER<br>VINYL COMPOSITION<br>TILE<br>VERIFY |
|                   | W/<br>W/O  | WITH<br>WITHOUT   |
|                   |  |   |

## **NOTES AND SYMBOLS**

C.M.U.



GYP. BD.

## **SCHEDULE OF DRAWINGS:**

SITE ACCESS / PROJECT INFO

DRAWING SHEET

DRAWING SHEET

DRAWING SHEET

**GENERAL NOTES** 

GENERAL NOTES

GENERAL NOTES

DEMO ALT #2

DEMO BASE BID / ALT #1

COVER SHEET

CODE SHEET

ARCHITECTURAL DEMO

GENERAL

NO.

A0.0

A0.1

A0.2

NO

A0.3

A0.4

NO.

S0.1

S0.2

A2.5

A5.0

A5.1

A5.2

A5.3

STRUCTURAL

MONTANA STATE UNIVERSITY; CPDC

**PROJECT TEAM:** 



#### S0.3 S0.4 GENERAL NOTES S0.5 GENERAL NOTES S1.1 PLANS S2.1 CONCRETE DETAILS S3.1 STEEL DETAILS ARCHITECTURAL DRAWING SHEET NO. A1.0 ENTRY CANOPY PLAN CANOPY ELEVATIONS A1.1 A1.2 CANOPY DETAILS LANDSCAPE PLAN L1.0 A2.1 **EXTERIOR ELEVATION - W** A2.1a **EXISTING PHOTOS - WEST EXTERIOR ELEVATIONS - N** A2.2 **EXISTING PHOTOS - NORTH** A2.2a A2.3 **EXTERIOR ELEVATION - E** A2.3a **EXISTING PHOTOS - EAST** A2.4 **EXTERIOR ELEVATION - S EXISTING PHOTOS - SOUTH** A2.4a

DETAILS

WINDOW DETAILS

WINDOW DETAILS

WINDOW REPLACEMENT ELEVATIONS

DOOR & WINDOW SCHEDULES



## FIRST FLOOR PLAN - CODE PLAN A0.1 1/8" = 1'-0"

## CODE CHECK

CODES: BUILDING FIRE ACCESSIBILITY

MECHANICAL PLUMBING ELECTRICAL

PERMITS

OCCUPANCY CONSTRUCTION TYPE CLASSIFICATION OF WORK

INTERNATIONAL BUILDING CODE (2021) INTERNATIONAL EXISTING BUILDING CODE (2021) INTERNATIONAL FIRE CODE (2021) ANSI 117.1 (2017) INTERNATIONAL MECHANICAL CODE (2021) UNIFORM PLUMBING CODE (2021) NATIONAL ELECTRICAL CODE (2020) CODE SOURCE:

LOCAL JURISDICTION IBC CH. 3 IBC CH. 6 IEBC

REQUIREMENTS: LOCAL JURISDICTION B V-B REPAIR - MASONRY REPAIR LEVEL 1 ALTERATION - WINDOW REPLACEMENT

- STAIR & CANOPY RECONSTRUCTION

FIRE PROTECTION: BUILDING HAS BEEN EQUIPED WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH IBC CHAPTER 9

NEW CANOPY IS NON-COMBUSTABLE AND THERE WILL BE NO STORAGE BELOW. PER 2019 NFPA 13 SECTION 9.2.3.2 SPRINKLER PROTECTION IS NOT REQUIRED.

NEW ENTRY STAIR IS NON-COMBUSTABLE, NO EXTERIOR WALLS AND NO STORAGE BELOW. PER 2019 NFPA 13 SECTION 9.2.12 SPRINKLER PROTECTION IS NOT REQUIRED





### KEYED NOTES FOR DRAWING 1/A0.2

- CONSTRUCTION STAGING AREA, CONTRACTOR SHALL (1)PROVIDE FENCING AS REQUIRED TO PREVENT ACCESS FROM UNAUTHORIZED PERSONNEL. CONTRACTOR SHALL RESTORE AREAS USED FOR CONSTRUCTION STAGING THAT ARE DAMAGED DURING CONSTRUCTION TO PRE-CONSTRUCTION CONDITIONS ALL WORK PERFORMED ON EAST ELEVATION WILL HAVE TO
- (2 OCCUR OVER TOP OF THE EAST ADDITION ROOF. CONTRACTOR IS TO PROVIDE NECESSARY ROOF PROTECTION SO AS TO NOT DAMAGE ROOF DURING CONSTRUCTION OPERATIONS
- GROUND PROTECTION IS REQUIRED FOR ALL LIFTS AND/OR (3) SCAFFOLDING AROUND BUILDING EXCEPT FOR AREAS IN THE GRAVEL EQUIPMENT YARD
- (4 SERVICE DRIVE, DO NOT BLOCK ACCESS
- BUILDING ENTRY AND CANOPY
- GRAVEL EQUIPMENT YARD. (6
- (7 EXISTING GENERATOR / MECHANICAL EQUIPMENT
- (8) EXISTING FENCE
- EXISTING GATE ACCESS
- (10) EXISTING BUILDING SIGN
- (11) EXISTING TREES

#### **GENERAL NOTES:**

1. CONTRACTOR SHALL RESTORE ALL AREA EFFECTED BY CONSTRUCTION OPERATIONS TO ORIGINAL CONDITIONS. THIS SHALL INCLUDE BUT IS NOT LIMITED TO SIDEWALKS, ADJACENT BUILDINGS, GRAVEL AND GRASS YARDS

2. THE CONTRACTOR SHALL VERIFY THE EXISTENCE, LOCATION, DEPTH AND SIZE OF THE UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE EXISTING FACILITIES DUE TO THE FAILURE TO LOCATE OR PROPERLY PROVIDE PROTECTION WHEN LOCATION IS KNOW.

3. A HAZARDOUS MATERIALS REPORT HAS BEEN PROVIDED IN THE PROJECT MANUAL. ALL HAZARDOUS MATERIAL ABATEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.

4. BASE BID AND ALTERNATE SCOPES OF WORK.

BASE BID: ALL DEMOLITION, NEW CONSTRUCTION AND LANDSCAPING ASSOCIATED WITH THE NEW ENTRY CANOPY, STAIR AND ENTRY DOOR. THIS WORK IS DESCRIBED ON THE FOLLOWING SHEETS UNLESS SPECIFICALLY NOTED OTHERWISE;

A0.3 A1.0 A1.1 A1.2 L1.0

ALTERNATE #1: ALL DEMOLITION, AND NEW CONSTRUCTION ASSOCIATED WITH THE MASONRY RESTORATION. THIS WORK IS DESCRIBED ON THE FOLLOWING SHEETS UNLESS SPECIFICALLY NOTED OTHERWISE;

- A0.3 A2.1 A2.1a A2.2 A2.2a A2.3a A2.3a A2.4

A2.4a ALTERNATE #2: ALL DEMOLITION AND NEW CONSTRUCTION ASSOCIATED WITH THE WINDOW REPLACEMENT. THIS WORK IS DESCRIBED ON THE FOLLOWING SHEETS UNLESS SPECIFICALLY NOTED OTHERWISE;

- A0.4 A5.0 A5.1 A5.2

CONT.

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DOCUMENT

RUCTION

CONSTF



03/10/25



EXISTING KNOX BOX TO BE SALVAGED AND REINSTALLED. COORDINATE REMOVAL WITH MSU FIRE MARSHAL

**EXISTING PHOTO - KNOX BOX** 5 A0.3 12" = 1'-0"



**EXISTING PHOTO - SPRINK HEADS** A0.3 12" = 1'-0"

REMOVE EXISTING WOOD CANOPY IN ITS ENTIRETY

TYPICAL OF (2). REMOVAL RÈQUIRES LICENSED FIRE SPRINKLER FITTER. FIRE ALARM TECHS.

### NOTES:

1. ALL DEMO WORK DESCRIBED ON THIS SHEET IS BASE BID SCOPE UNLESS SPECIFICALLY NOTED OTHERWISE

2. HAZARDOUS MATERIALS REPORT HAS BEEN PROVIDED IN THE PROJECT MANUAL. ALL HAZARDOUS MATERIAL ABATEMENT IS TO BE DONE BY THE CONTRACTOR.

- CAULKING BETWEEN DOOR/WINDOW AND BUILDING IS ANTICIPATED TO BE ASBESTOS CONTAINING. ABATEMENT MUST BE PERFORMED BY A MONTANA ACCREDITED ASBESTOS ABATEMENT CONTRACTOR ACCORDING TO LOCAL, STATE, AND FEDERAL REGULATIONS. - EXTERIOR PAINT IS EXPECTED TO BE LEAD CONTAINING. ALL

DEMOLITION OF LEAD BASED PAINT **CONTAINING ITEMS MUST BE DONE** ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS.





- EXISTING SPRINKLER HEAD TO BE REMOVED. COORDINATE WITH MSU







## EXISTING PHOTO - NORTH ELEVATION DEMO A0.3 12" = 1'-0"



### KEYED DEMOLITION NOTES FOR DRAWINGS 1,2,3,4 / A0.4

- REMOVE EXISTING CONCRETE APRON IN ITS ENTIRETY. CLEAN SURFACE OF STONE FOUNDATION OF ALL REMAINING CONCRETE DEBRIS. REPOINT ALL (1) MASONRY JOINTS IN THIS AREA.
- REMOVE EXISTING WINDOW UNIT IN ITS ENTIRETY. (2) CAULKING AROUND WINDOW IS EXPECTED TO BE ASBESTOS CONTAINING. REFER TO HAZARDOUS MATERIAL REPORT AND GENERAL NOTES BELOW.
- CAREFULLY REMOVE EXISTING WINDOW TRIM AS REQUIRED FOR WINDOW DEMOLITION. SALVAGE TRIM TO BE REINSTALLED. IF UNABLE TO REINSTALL DOCUMENT EXISTING PROFILE SO NEW TRIM CAN MATCH

#### NOTES:

(3

**1. ALL DEMO WORK DESCRIBED ON THIS SHEET** IS ALTERNATE #2 UNLESS SPECIFICALLY NOTED OTHERWISE

2. HAZARDOUS MATERIALS REPORT HAS BEEN PROVIDED IN THE PROJECT MANUAL. ALL HAZARDOUS MATERIAL ABATEMENT IS TO BE DONE BY THE CONTRACTOR.

- CAULKING BETWEEN DOOR/WINDOW AND **BUILDING IS ANTICIPATED TO BE ASBESTOS CONTAINING. ABATEMENT MUST BE PERFORMED** BY A MONTANA ACCREDITED ASBESTOS ABATEMENT CONTRACTOR ACCORDING TO

LOCAL, STATE, AND FEDERAL REGULATIONS. - EXTERIOR PAINT IS EXPECTED TO BE LEAD CONTAINING. ALL DEMOLITION OF LEAD BASED PAINT CONTAINING ITEMS MUST BE DONE ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS.

3. IT IS THE CONTRACTORS RESPONSIBILITY TO SUPPORT EXISTING MASONRY AS REQUIRED DURING DEMO OPERATIONS

|                        | <b>MONT ANA</b>  | STATE UNIVERSITY           |
|------------------------|--|----------------------------|
|                        | THE STATE  | OF MON                     |
|                        | MSU-CPE<br>Montana state univ<br>Bozeman, monta<br>Phone: 406.994.54<br>FAX: 406.994.565 | DC<br>VERSITY<br>ANA<br>13 |
| CONSTRUCTION DOCUMENTS | TAYLOR HALL MASONRY AND<br>ENTRY IMPROVEMENTS  | MONTANA STATE UNIVERSITY   |
| 100%                   | Think <mark>.</mark> .   | NE                         |
|                        | DRAWN BY: <b>Author</b><br>REVIEWED BY <b>Checke</b>                                     | r                          |
|                        | REV. DESCRIPTION   | DATE                       |
|                        | PPA#22-05<br>A/E#00-0-<br>CONSULTANT #2  | 522<br>00<br>308<br>LE     |
|                        | DEMO - ALT   | #2                         |
|                        | A0.4   | ŀ                          |
|                        | DATE   |                            |

03/10/25

## STRUCTURAL SHEET LIST

| SHEET NUMBER   |                  | SHEET TIT |
|----------------|------------------|-----------|
| S0.1           | GENERAL NOTES    |           |
| S0.2           | GENERAL NOTES    |           |
| S0.3           | GENERAL NOTES    |           |
| S0.4           | GENERAL NOTES    |           |
| S0.5           | GENERAL NOTES    |           |
| S1.1           | PLANS            |           |
| S2.1           | CONCRETE DETAILS |           |
| S3.1           | STEEL DETAILS    |           |
| Sheet Total: 8 |                  |           |

ET TITLE

|          | ABBREVIATION           |           |                               |                |                         |                          |            |
|----------|------------------------|-----------|-------------------------------|----------------|-------------------------|--------------------------|------------|
| L        | Angle                  | EXCAV     | Excavation                    | PLF            | Pounds Per Linear Foot  | MARK                     |            |
| AB       | Anchor Bolt            | FB        | Factory-Built                 | PLWD           | Plywood                 | IVIALIN                  |            |
| ADDL     | Additional             | FD        | Floor Drain                   | PREFAB         | Prefabricated           |                          | FOOTING    |
| ADH      | Adhesive               | FDN       | Foundation                    | PSF            | Pounds per Square Foot  | F2.0                     | FOOTING    |
| ALT      | Alternate              | FIN       | Finish                        | PSI            | Pounds Per Square Inch  |                          | FOOTING    |
| ARCH     | Architectural          | FLR       | Floor                         | PSL            | Parallel Strand Lumber  |                          |            |
| B or BOT | Bottom                 | FRP       | Fiberglass Reinforced Plastic | P-T            | Post-Tensioned          | (P1)                     | PILE CAP   |
| B/       | Bottom Of              | FRT       | Fire Retardant Treated        | PT             | Pressure Treated        |                          | PILE CAP   |
| BLDG     | Building               | FTG       | Footing                       | R              | Radius                  |                          |            |
| BLKG     | Blocking               | F/        | Face of                       | RD             | Roof Drain              | (1)                      |            |
| BMU      | Brick Masonry Unit     | GA        | Gage                          | REF            | Refer/Reference         | $\cup$                   |            |
| BP       | Baseplate              | GALV      | Galvanized                    | REINF          | Reinforcing             |                          | CONNECT    |
| BRBF     | Buckling Restrained    | GEOTECH   | Geotechnical                  | REQD           | Required                | 014/4                    | SHEAR W    |
|          | Braced Frame           | GL        | Glue Laminated Timber         | RET            | Retaining               | 2004                     | SHEAR W    |
| BRG      | Bearing                | GWB       | Gypsum Wall Board             | SB             | Site-Built              |                          | 02,        |
| BTWN     | Between                | HDR       | Header                        | SCBF           | Special Concentric      | $\wedge$                 |            |
| С        | Camber                 | HF        | Hem-Fir                       |                | Braced Frame            |                          | REVISION   |
| СВ       | Castellated Beam       | HGR       | Hanger                        | SCHED          | Schedule                | RFI 00                   |            |
| C'BORE   | Counterbore            | HD        | Hold-down                     | SER            | Structural Engineer of  |                          | TILT-UP/PF |
| CL or Ç  | Centerline             | HORIZ     | Horizontal                    |                | Record                  | 1                        | PANEL NU   |
| CLT      | Cross-Laminated Timber | HP        | High Point                    | SFRS           | Seismic Force-          |                          | PRECAST    |
| CIP      | Cast in Place          | HSS = TS  | (Hollow Structural Section)   |                | Resisting System        |                          |            |
| CFS      | Cold Formed Steel      | IBC       | International Building Code   | SHTHG          | Sheathing               | (1)                      | (REFER TC  |
| CJ       | Construction or        | ID        | Inside Diameter               | SIM            | Similar                 |                          | SCHEDIII   |
|          | Control Joint          | IE        | Invert Elevation              | SLBB           | Short Leg Back-to-Back  |                          | SCHEDUE    |
| CJP      | Complete Joint         | IF        | Inside Face                   | SMF            | Special Moment Frame    |                          | CONTINUI   |
|          | Penetration            | INT       | Interior                      | SOG            | Slab on Grade           | (°)                      | (REFER TC  |
| CLR      | Clear                  | k         | Kips                          | SP             | Southern Pine           |                          |            |
| CLG      | Ceiling                | KSF       | Kips Per Square Foot          | SPEC           | Specification           |                          |            |
| CMU      | Concrete Masonry Unit  | IF        | Lineal Foot                   | SO             | Square                  | < ds >                   | CONNECT    |
| COL      | Column                 |           | Live Load                     | SR             | Studrail                |                          | SHEAR PL   |
| CONC     | Concrete               | LI BB     | Long Leg Back-to-Back         | SF             | Square Foot             |                          | INDICATES  |
| CONN     | Connection             | 11 H      | Long Leg Horizontal           | SST            | Stainless Steel         | 00TB                     | (REFER TC  |
| CONST    | Construction           |           | Long Leg Vertical             | STAGG          | Stagger/Staggered       |                          | SCHEDUL    |
| CONT     | Continuous             | I P       | Low Point                     | STD            | Standard                |                          | INDICATES  |
| C'SINK   | Countersink            |           |                               | STIFF          | Stiffener               | (SR)                     | REQUIRED   |
| CTBD     | Centered               | I SI      | Laminated Strand Lumber       | STI            | Steel                   |                          | STUD RAII  |
| DIA      | Diameter               | I VI      | Laminated Veneer Lumber       | STRUCT         | Structural              | Δ.                       | BOOF/ELC   |
| DB       | Drop Beam              | MAS       | Masonry                       | SW/W/J         | Solid Web Wood Joist    | $\langle 1 \rangle$      | SYMBOL (   |
| DBA      | Deformed Bar Anchor    | MAX       | Maximum                       | SYM            | Symmetrical             |                          | NAILING S  |
| DBL      | Double                 | MECH      | Mechanical                    | Т              | Top                     |                          |            |
|          | Demolish               | MEON      | Mechanical Electrical         | т,             | Top Of                  | C1                       | STEEL/CO   |
| DEV      | Development            | IVILI     | Plumbing                      | T&B            | Top & Bottom            |                          |            |
|          | Douglas Fir            | MF77      | Mezzanine                     |                | Top Chord Axial Load    |                          | COLUIVIN   |
| DIAG     | Diagonal               | MFR       | Manufacturer                  | TCX            | Top Chord Extension     |                          | ELEVATIO   |
|          | Distributed            | MIN       | Minimum                       | TOX            | Tie Down System         | T/FTG = X'-X''           | TO COMP    |
|          | Dead Load              | MISC      | Miscellaneous                 | T&G            |                         | •                        | ELEVATIO   |
|          | Down                   | NIC       | Not In Contract               |                | Thickened               |                          | STUD BUE   |
|          | Ditto                  |           | Nail-I aminated Timber        | THRD           | Threaded                |                          | OF STUDS   |
| DP       | Denth/Deen             | NTS       | Not To Scale                  | THRU           | Through                 |                          | NUMBER     |
|          | Drawing                |           | On Center                     |                | Transverse              |                          | INDICATES  |
|          | Existing               | OCBE      | Ordinary Concentric Braced    | TVP            | Typical                 | <u></u>                  | (REFER TC  |
|          | Each                   | ОСЫ       | Framo                         |                | Lipless Noted Otherwise |                          | FOOTING    |
| FF       | Each Face              |           | Autside Diameter              | LIRM           | Unreinforced Masonry    |                          |            |
| FI       |                        | OF        | Outside Face                  | UTIVI          | l Init                  |                          | DETAILS C  |
|          | Electrical             |           | Onening                       |                | Vertical                | SXXX /                   | (DETAIL N  |
|          | Elevator               |           |                               |                |                         |                          |            |
|          |                        |           | Open Web Steel Leist          | V V<br>\ \ / / |                         |                          | DETAILS C  |
|          | Empeament              | OVVSJ     | Open Web Steel Joist          |                | VVILII                  |                          | VIEW (DFT  |
| EQ       | ⊨quai                  | OVVVVJ    | Open vveb Vvood Joist         |                |                         | <b>•••</b> • <u>50.0</u> |            |
| EQUIP    | Equipment              | PL<br>DAF | Plate                         | WHS            | vvelded Headed Stud     |                          | INDICATES  |
| EVV      | Each VVay              | PAF       | Powder Actuated Fastener      | VVP            | Working Point           |                          | WALLS, SI  |
| EXP      | Expansion              | PC        | Precast                       | WWVF           | VVelded Wire Fabric     |                          | FRAME EL   |
| EXP JT   | Expansion Joint        | PERP      | Perpendicular                 | ±              | Plus or Minus           |                          | t          |
| EXT      | Exterior               | PJP       | Partial Joint Penetration     |                |                         |                          | STRUCTUR   |

|                     | DRAWING   |                     | )  |  |
|---------------------|---|---------------------|--|--|
| MARK                | DESCRIPTION   | MARK                | DESCRIPTION  |  |
| F2.0                | FOOTING SYMBOL (REFER TO SPREAD<br>FOOTING SCHEDULE)  | I                   | INDICATES WIDE FLANGE COLUMN   | Bozeman, Montana 59718<br>P: (406) 556-8600 www.dci-engineers.com  |
| <p1></p1>           | PILE CAP SYMBOL (REFER TO<br>PILE CAP SCHEDULE)   |                     | INDICATES HOLLOW STRUCTURAL<br>SECTION (HSS) COLUMN OR<br>TUBE STEEL (TS) COLUMN   | © Copyright D'Amato Conversano Inc. All Rights Reserved<br>This document, and the ideas and designs may not be reused, in whole or<br>in part, without written permission from D'Amato Conversano Inc.<br>D'Amato Conversano Inc. disclaims any responsibility for its unauthorized use. |
| 1                   | TILT-UP/PRECAST CONCRETE WALL<br>CONNECTION SYMBOL (REFER TO<br>CONNECTION DETAIL)                    | 0                   | INDICATES HOLLOW STRUCTURAL<br>SECTION (HSS) COLUMN OR<br>STEEL PIPE COLUMN        |  |
| 2W4                 | SHEAR WALL SYMBOL (REFER TO<br>SHEAR WALL SCHEDULE)   |                     | INDICATES WOOD POST  |  |
| 20<br>RFI 00        | REVISION TRIANGLE   | •                   | INDICATES BUNDLED STUDS  |  |
| 1                   | TILT-UP/PRECAST CONCRETE WALL<br>PANEL NUMBER (REFER TO TILT-UP/<br>PRECAST CONCRETE WALL ELEVATIONS) |                     | INDICATES CONCRETE COLUMN  |  |
| $\langle 1 \rangle$ | CMU WALL REINFORCING SYMBOL<br>(REFER TO CMU WALL REINFORCING<br>SCHEDULE)                            |                     | INDICATES PRECAST<br>CONCRETE COLUMN   |  |
| <u>8</u> "          | CONTINUITY PLATE LENGTH<br>(REFER TO TYPICAL DETAIL)  | ►                   | INDICATES MOMENT FRAME<br>CONNECTION   |  |
|                     | INDICATES DOUBLE SHEAR<br>CONNECTION (REFER TO THE DOUBLE<br>SHEAR PLATE CONNECTIONS DETAIL)          |                     | INDICATES PARTIALLY RESTRAINED<br>MOMENT FRAME CONNECTION                          |  |
| 00TB                | INDICATES REINFORCING TYPE<br>(REFER TO THE REINFORCING<br>SCHEDULE)                                  |                     | INDICATES CANTILEVER<br>CONNECTION   |  |
| (SR_)               | INDICATES NUMBER OF STUD RAIL<br>REQUIRED AT COLUMN (REFER TO<br>STUD RAIL DETAILS)                   | •                   | INDICATES DRAG CONNECTION  |  |
| $\langle 1 \rangle$ | ROOF/FLOOR DIAPHRAGM NAILING<br>SYMBOL (REFER TO DIAPHRAGM<br>NAILING SCHEDULE)                       | <u> </u>            | INDICATES A LEDGER   |  |
| C1<br>COLUMN SIZE   | STEEL/CONCRETE COLUMN<br>SYMBOL (REFER TO STEEL<br>COLUMN SCHEDULE)                                   | ÷•••••              | INDICATES WOOD OR STEEL STUD<br>BEARING WALL LINE<br>PER KEY ON SHEET              |  |
|                     | ELEVATION SYMBOL (T/ REFERS<br>TO COMPONENT THAT THE<br>ELEVATION REFERENCES)                         |                     | INDICATES WOOD OR STEEL STUD<br>SHEAR WALL LINE AND HOLD-DOWNS<br>PER KEY ON SHEET |  |
| 3                   | STUD BUBBLE (INDICATES NUMBER<br>OF STUDS REQUIRED IF EXCEEDS<br>NUMBER SPECIFIED IN PLAN NOTE)       | \$ <u>777777</u> \$ | INDICATES MASONRY/CMU WALL   |  |
| <u></u>             | INDICATES STEP IN FOOTING<br>(REFER TO TYPICAL STEP IN<br>FOOTING DETAIL)                             |                     | INDICATES CONCRETE/TILT-UP<br>CONCRETE WALL  |  |
| XX<br>SXXX          | DETAILS OR SECTION CUT<br>(DETAIL NUMBER/SHEET NUMBER)  | \$\$                | INDICATES BEARING WALL BELOW   |  |
| 00<br>S0.0          | DETAILS OR SECTION CUT IN PLAN<br>VIEW (DETAIL NUMBER/SHEET NUMBER)                                   | <b>↓</b>            | INDICATES EXISTING WALL  |  |
| XX/SXX.XX           | INDICATES LOCATION OF CONCRETE<br>WALLS, SHEAR WALLS OR BRACED<br>FRAME ELEVATIONS                    | <b>þ</b> ;          | POST-TENSION DEAD END (PLAN)   |  |
|                     | STRUCTURAL EXTENT SYMBOL<br>SINGLE ARROW - END OF EXTENT<br>DOUBLE ARROW - CONTINUOUS                 | <b>├</b>            | POST-TENSION STRESSING END (PLAN)  |  |
| _ ~                 | EXTENT ALONG THE ELEMENT LINE<br>UNTIL THE ELEMENT IS INTERRUPTED                                     | $\xrightarrow{3}$   | POST-TENSION PROFILE (PLAN)<br>(IN INCHES)   |  |
|                     | INDICATES DIRECTION OF DECK SPAN  | è ◀ ╡ ╊ ᠠ           | INTERMEDIATE STRESSING (PLAN)  |  |
| <u>; ₹</u>          | INDICATES AN OPENING IN A STEEL<br>OR WOOD BEAM   |                     | INDICATES REQUIRED SHORING (PLAN)  |  |

MONTANA STATE UNIVERSITY OF THE STATES MSU-CPDC MONTANA STATE UNIVERSIT BOZEMAN, MONTANA PHONE: 406.994.5413 FAX: 406.994.5665 5 TION HAI MONTANA STATE UNIVERSITY **100% CONSTRUCTION DOCUMENTS** TAYLOR  $\mathbf{\nabla}$  $\mathbf{\Sigma}$ REL THINK DRAWN BY: WCG REVIEWED BY: JAL REV. DESCRIPTION DATE JONATHANA LOVGREN No. 48847 PE PPA#17-0190 A/E#18-02-03 CONSULTANT #1805 SHEET TITLE **GENERAL NOTES** SHEET **S0.1** DATE 3/10/2025

| <u>01.00.00</u>   | GENERAL   | <u>. REQUIREMEN</u>   | <u>NTS</u>  |  |  | <u>(</u> | 01.10.00  | DESIC  | <u> SN CR</u>   |  |
|---|---|---|---|--|--|----------|---|--|---|--|
| 1. GOVERNING<br>BUILDING CO<br>OF BOZEMA  | G CODE: THE DESIG<br>ODE (IBC)," 2021 ED<br>N, MT UNDERSTOC   | 3N AND CONSTRUCTIO<br>DITION, HEREAFTER RE<br>DD TO BE THE AUTHOF   | ON OF THIS PROJECT IS<br>EFERRED TO AS THE IB<br>RITY HAVING JURISDICT  | GOVERNED BY THE "I<br>C, AS ADOPTED AND M<br>ION (AHJ).  | NTERNATIONAL<br>IODIFIED BY THE CITY   | 1.       | . OCCUPANCY<br>RISK CATEG   | ':<br>ORY OF BU  |   |  |
| 2. REFERENCE<br>DRAWINGS,<br>SPECIFIC SE<br>STANDARD.   | E STANDARDS: REF<br>USE THE LATEST E<br>ECTION IN A CODE  | ER TO CHAPTER 35 O<br>EDITION OF THE STANI<br>DOES NOT RELIEVE TH   | F THE 2021 IBC. WHERE<br>DARD UNLESS A SPECII<br>HE CONTRACTOR FROM   | E OTHER STANDARDS<br>FIC DATE IS INDICATEI<br>I COMPLIANCE WITH T  | ARE NOTED IN THE<br>D. REFERENCE TO A<br>THE ENTIRE  | 2.       | WIND DESIGI<br>ULTIMATE DI<br>EXPOSURF (  | 1: MAIN WII<br>ESIGN WINI<br>CATEGORY                                      | ND FORCE  |  |
| <ol> <li><b>DEFINITION</b></li> <li>3.1. "ARCH</li> <li>3.2. "STRUE<br/>SIGN T<br/>PRIMA</li> </ol>       | <b>S</b> : THE FOLLOWING<br>ITECT/ENGINEER" -<br>CTURAL ENGINEER<br>THE STRUCTURAL E<br>RY STRUCTURAL S   | GEFINITIONS COVER<br>THE ARCHITECT OF R<br>OF RECORD" (SER) - <sup></sup><br>OCUMENTS FOR THE<br>SYSTEM.  | THE MEANINGS OF CER<br>RECORD AND THE STRU<br>THE STRUCTURAL ENG<br>PROJECT. THE SER IS   | RTAIN TERMS USED IN<br>JCTURAL ENGINEER O<br>INEER WHO IS LICENS<br>RESPONSIBLE FOR TH   | THESE NOTES:<br>F RECORD.<br>ED TO STAMP AND<br>IE DESIGN OF THE   | 3.       | INTERNAL PE<br>TOPOGRAPE<br>WIND ANALY  | RESSURE C<br>IIC FACTOF<br>SIS PROCE                                       | ;OEFFICIEI<br><, K <sub>zt</sub><br>:DURE USI<br>IENTS ANI    |  |
| 3.3. "SUBM<br>CONST   | IIT FOR REVIEW" - S<br>TRUCTION.  | SUBMIT TO THE ARCHI   | TECT/SER FOR REVIEW   | PRIOR TO FABRICATI   | ON OR  |          |   | -<br>  | •••    ••<br>39: 20 ]3:                                       |  |
| 3.4. "PER F<br>NOTES  | PLAN" - INDICATES F<br>S.   | REFERENCES TO THE   | STRUCTURAL PLANS, E   | ELEVATIONS, AND STR  | JCTURAL GENERAL  |          |   |  |   |  |
| 3.5. SPEC<br>WHICH<br>ENGIN<br>DOCUI<br>BY THI  | IALTY STRUCTURAL<br>THE PROJECT IS L<br>EERING SERVICES<br>MENTS AND WHO H<br>E SSE SHALL BE CO   | LENGINEER (SSE) - A<br>LOCATED (TYPICALLY N<br>FOR SELECTED SPEC<br>IAS EXPERIENCE AND<br>DMPLETED BY, OR UNE   | PROFESSIONAL ENGIN<br>NOT THE SER), WHO PE<br>IALTY-ENGINEERED EL<br>TRAINING IN THE SPEC<br>DER, THE DIRECT SUPE   | EER (PE OR SE), LICE<br>ERFORMS SPECIALTY S<br>EMENTS IDENTIFIED IN<br>ALTY. DOCUMENTS S<br>RVISION OF THE SSE.  | STRUCTURAL<br>I THE CONTRACT<br>TAMPED AND SIGNED  |          |   | (  | 29 (1) (2)  |  |
| 3.6. "BIDDE<br>SUBCC<br>SPECI<br>AN SSI   | ER-DESIGNED" - CO<br>ONTRACTOR, OR SI<br>ALTY-ENGINEERED<br>E. SUBMITTALS OF  | MPONENTS OF THE ST<br>JPPLIER WHO IS RESP<br>ELEMENTS IDENTIFIEI<br>"BIDDER-DESIGNED" E   | TRUCTURE THAT REQU<br>PONSIBLE FOR THE DES<br>D IN THE CONTRACT DO<br>ELEMENTS SHALL BE ST  | IRE THE GENERAL CO<br>SIGN, FABRICATION, AN<br>OCUMENTS TO RETAIN<br>TAMPED AND SIGNED E   | NTRACTOR,<br>ID INSTALLATION OF<br>I THE SERVICES OF<br>3Y THE SSE.  |          |   |  | <u>39</u> (b) (3)   |  |
| 4. SPECIFICAT   | TIONS: REFER TO TI<br>ON SUPPLEMENTAL   | HE PROJECT SPECIFIC<br>_ TO THESE DRAWING\$   | CATIONS ISSUED AS PAI<br>S.   | RT OF THE CONTRACT   | DOCUMENTS FOR  |          |   |  | PLAN  |  |
| 5. OTHER DRA<br>ADDITIONAL<br>OPENINGS,<br>STRUCTURA  | WINGS: REFER TO<br>INFORMATION INC<br>NON-BEARING WAI<br>AL ITEMS.  | THE ARCHITECTURAL<br>LUDING, BUT NOT LIMI<br>LLS, STAIRS, FINISHES  | ., MECHANICAL, ELECTF<br>ITED TO, DIMENSIONS,<br>, DRAINS, WATERPROC  | RICAL, CIVIL AND PLUN<br>ELEVATIONS, SLOPES<br>FING, RAILINGS, AND (   | IBING DRAWINGS FOR<br>, DOOR AND WINDOW<br>OTHER NON-  |          | a = 3'-0<br>ZONE<br>ZONE 2<br>ZONE 2<br>ZONE 2  | ı"<br>1<br>2e<br>2n<br>2r  | <u>10</u><br>-38 / +16<br>-38 / +16<br>-52 / +16<br>-52 / +16 |  |
| 6. STRUCTUR/<br>EXTENT OF<br>AND SPECIF<br>ON ENTIRE  | AL DETAILS: THE S<br>THE PROJECT AND<br>FIC DETAILS REFER<br>SHEETS WITH "TYP   | TRUCTURAL DRAWING<br>) ARE NOT INTENDED 1<br>ENCED IN THE PLANS<br>'ICAL" IN THE NAME WH  | SS ARE INTENDED TO S<br>TO SHOW ALL DETAILS<br>AS "TYPICAL" WHEREVI<br>HEREVER THEY APPLY.  | HOW THE GENERAL C<br>OF THE WORK. USE EI<br>ER THEY APPLY. SIMIL   | HARACTER AND<br>NTIRE DETAIL SHEETS<br>ARLY, USE DETAILS   |          | ZONE 3<br>ZONE 3<br>ZONE<br>ZONE<br>ZONE  | ie<br>3r<br>4<br>5   | -52 / +16<br>-61 / +16<br>-23 / +22<br>-27 / +22              |  |
| 7. STRUCTUR   | AL RESPONSIBILITI   | ES: THE SER IS RESPO  | DNSIBLE FOR THE STRE  | ENGTH AND STABILITY  | OF THE PRIMARY   |          | 3.1. COMPC<br>BUILDIN   | NENTS AN<br>IGS."  |   |  |
| B. COORDINAT<br>CONFIRMING<br>TECHNIQUE   | TI <b>ON:</b> THE CONTRA<br>G AND CORRELATII<br>S OF ASSEMBLY, A  | CTOR IS RESPONSIBL  | LE FOR COORDINATING<br>ND DIMENSIONS, SELEC<br>RK IN A SAFE AND SECU  | DETAILS AND ACCURA<br>CTING FABRICATION PE<br>JRE MANNER.  | ACY OF THE WORK,<br>ROCESSES,  |          | <ul> <li>3.2. COMPC</li> <li>&lt; Θ ≤ 20</li> <li>3.3. COMPC</li> </ul>   | NENTS AN<br>)°.<br>)NENTS AN   | D CLADDII   |  |
| 9. EXISTING CO<br>THE PRESE<br>CONTRACT<br>WRITTEN DI<br>FIELD VERIF                                      | ONDITIONS: INFOR<br>NT KNOWLEDGE BU<br>DOCUMENTS TO TI<br>RECTION FROM TH<br>FIED PRIOR TO FAB  | MATION SHOWN ON TH<br>JT WITHOUT GUARANT<br>HE ARCHITECT OR SEF<br>IE ARCHITECT AND/OR<br>RICATION AS REQUIRE   | HE DRAWINGS RELATE<br>TEE OF ACCURACY. RE<br>R. DO NOT DEVIATE FR<br>SER. ALL EXISTING DIN<br>ED TO COORDINATE WI   | D TO EXISTING CONDI<br>PORT CONDITIONS TH<br>OM THE CONTRACT DO<br>MENSIONS AND INFOR<br>TH NEW CONSTRUCTION   | FIONS REPRESENT<br>AT CONFLICT WITH<br>DCUMENTS WITHOUT<br>MATION SHALL BE<br>ON.  | 4.       | <ul> <li>3.3. COMPONENTS AND C</li> <li>3.4. ALL PARAPET COMPC<br/>FIGURE 30.6-2.</li> <li>4. SEISMIC DESIGN:</li> </ul>  |  |   |  |
| 10. NEW CONST<br>SHALL REPA<br>ARCHITECT<br>CURRENT IE  | <b>FRUCTION:</b> THE CO<br>AIR OR REPLACE AI<br>URAL DRAWINGS. N<br>3C AS ALLOWED BY  | NTRACTOR SHALL REI<br>LL REMOVED ITEMS TO<br>NEW CONSTRUCTION I<br>( THE IBC.   | MOVE ALL INTERFERING<br>O MATCH THE EXISTING<br>ELEMENTS SHALL BE D   | G ITEMS FOR NEW CO<br>CONDITIONS IN ACCC<br>ESIGNED AND INSTALI  | NSTRUCTION AND<br>ORDANCE WITH THE<br>LED PER THE  |          | SEISMIC DESIGN CATEGO<br>SITE CLASS PER IBC SEC<br>SEISMIC IMPORTANCE FA<br>SPECTRAL RESPONSE A<br>SPECTRAL RESPONSE A<br>DESIGN RESPONSE ACC   |  |   |  |
| 11. PRE-CONST<br>MEETINGS F<br>THE START<br>STRUCTURA<br>SUBCONTRA<br>REQUIRED.<br>THE WORK,              | RUCTION MEETING<br>PRIOR TO COMMEN<br>OF THE RELEVANT<br>AL STEEL, ATTENDE<br>ACTORS, FABRICAT<br>MEETING AGENDA<br>CONTACT INFORM                                      | <b>3S:</b> THE CONTRACTOR<br>ICING WORK. PRE-CON<br>WORK, ARE REQUIRE<br>EES FOR PRE-CONSTR<br>FORS, INSPECTORS, AI<br>S ARE TO INCLUDE RE<br>IATION OF RESPONSIB   | R IS RESPONSIBLE FOR<br>N MEETINGS, SCHEDUL<br>D FOR THE FOLLOWING<br>RUCTION MEETING ARE<br>RCHITECT/SER, AND A I<br>VIEW OF THE WORK SO<br>LE PARTIES, INSPECTIO              | COORDINATING PRE-C<br>ED APPROXIMATELY T<br>O PHASES OF CONSTR<br>TO INCLUDE THE CON<br>REPRESENTATIVE OF<br>COPE, PROJECT SCHE<br>DN POINTS, REVIEW OI                      | CONSTRUCTION<br>WO WEEKS PRIOR TO<br>UCTION:<br>TRACTOR, RELEVANT<br>THE AHJ WHERE<br>DULE RELEVANT TO<br>MATERIALS AND                        | 5.       | <ul> <li>DESIGN RESPONSE ACCEL</li> <li>DESIGN RESPONSE ACCEL</li> <li>COMPONENT RESPONSE N</li> <li>13.5-1 Rp</li> <li>COMPONENT AMPLIFICATION</li> <li>SEISMIC ANALYSIS PROCE</li> <li>5. SNOW LOAD:</li> </ul> |  | CELERATION<br>SE MODIFION<br>ATION FAC                        |  |
| ANY SPECIA<br>METHODS C<br>OF OCCUPA<br>REGARDING<br>FIELD WELD<br>THE HOISTII<br>BRACING AN<br>STRUCTURE | THODS, AND SAFE<br>THODS, AND SAFE<br>F CONSTRUCTION<br>TIONAL SAFETY AN<br>STEEL ERECTION<br>DING AT ALL MEMBE<br>NG MECHANISM UN<br>ND/OR SHORING DE<br>THE CONTRACTO | IS, PROCEDURES FOR<br><b>FY REQUIREMENTS:</b> TH<br>AND ALL JOB-RELATE<br>ND HEALTH). THE CON <sup>T</sup><br>ITEMS SPECIFICALLY<br>AR CONNECTIONS IS TH<br>ILESS REVIEWED AND<br>ESIGN ENGINEER. THE<br>DR IS RESPONSIBLE FO | HE CONTRACTOR IS RE<br>D SAFETY STANDARDS<br>TRACTOR IS RESPONSI<br>ADDRESSED IN THE LA<br>O BE COMPLETED PRIC<br>APPROVED BY THE GE<br>CONSTRUCTION DOCL<br>DR MEANS AND METHO | SOURED, TESTING AND<br>SUCH AS OSHA AND I<br>BLE TO ADHERE TO O<br>TEST OSHA REGULATI<br>OR TO THE RELEASE O<br>INERAL CONTRACTOR<br>JMENTS REPRESENT T<br>DS OF CONSTRUCTIO | MEANS AND<br>DOSH (DEPARTMENT<br>SHA REGULATIONS<br>ONS. BOLTING AND<br>F THE MEMBER FROM<br>'S TEMPORARY<br>'HE COMPLETED<br>N RELATED TO THE |          | FLAT ROOF SNOW LOAD, Pf<br>SNOW DRIFT LOADING REQU<br>SNOW LOAD IMPORTANCE FA<br>GROUND SNOW LOAD, Pg<br>SNOW EXPOSURE FACTOR, C<br>THERMAL FACTOR, Ct<br>5.1. SNOW LOAD IS UN-REDI<br>IS 20 PSF OR LESS, BUT     | J, Pf<br>REQUIREE<br>ICE FACTO<br>Pg<br>TOR, Ce<br>I-REDUCIB<br>S, BUT NOT |   |  |
| INTERMEDIA<br>EFFECTS, C  | ATE STRUCTURAL (<br>ONSTRUCTION SEC   | CONDITIONS (I.E., MOV<br>QUENCE, TEMPORARY  | 'EMENT OF THE STRUC'<br>' BRACING, ETC.).   | TURE DUE TO MOISTU   | RE AND THERMAL   | 6.       | 5.2. SNOW I   | _OAD IMPO<br><b>D LOADS</b> :  | RTANCE F  |  |
| 13. BRACING/SI<br>DESIGN OF<br>FOR REVIEV   | H <b>ORING DESIGN EN</b><br>ANY TEMPORARY E<br>V.   | JGINEER: THE CONTRA<br>3RACING AND SHORIN   | ACTOR SHALL, AT THEIF<br>G. SUBMIT CONSTRUCT  | R DISCRETION, EMPLC<br>FION SEQUENCE TO AI   | Y AN SSE FOR THE<br>RCHITECT/ENGINEER  |          | ROOF DEAD<br>ROOFI  | load (in a<br>Ng   | DDITION T   |  |
| 14. TEMPORAR<br>STRUCTURE<br>REQUIRED<br>TO BE FAMII<br>EXECUTING   | Y SHORING, BRACI<br>E DURING CONSTRI<br>TO MAINTAIN STABI<br>LIAR WITH THE WO<br>IT PROPERLY.   | NG: THE CONTRACTOR<br>UCTION AND SHALL PF<br>ILITY UNTIL THE STRU(<br>RK REQUIRED IN THE  | R IS RESPONSIBLE FOR<br>ROVIDE TEMPORARY SH<br>CTURE IS COMPLETE. IT<br>CONSTRUCTION DOCU   | R THE STRENGTH AND<br>HORING, BRACING, AN<br>F IS THE CONTRACTOF<br>MENTS AND THE REQU   | STABILITY OF THE<br>D OTHER ELEMENTS<br>2'S RESPONSIBILITY<br>JIREMENTS FOR  | 7.       | DEFLECTION<br>VERTICAL [N<br>ROOF MEMB<br>ROOF, LIVE/S  | LIMITS FO<br>OTE 7.1]<br>ERS, DEAD<br>SNOW/WINI                            | R SSE / BI<br>+ LIVE/SN<br>D LOAD (R                          |  |
| 15. CONSTRUC<br>LOADS AS N<br>PARTIALLY (   | TION LOADS: LOAD<br>IOTED IN DESIGN C<br>COMPLETED CONS   | S ON THE STRUCTURE<br>RITERIA AND LOADS S<br>TRUCTION AS DETERN   | E DURING CONSTRUCT<br>SECTION OF THESE GEN<br>MINED BY THE CONTRA   | ION SHALL NOT EXCE<br>NERAL NOTES OR THE<br>CTOR'S SSE FOR BRA   | ED THE DESIGN<br>CAPACITY OF<br>CING/SHORING.  |          | HORIZONTAL<br>MEMBERS S<br>MEMBERS S<br>MEMBERS S<br>INTERSTOR  | <u>. [Note: 7.2</u><br>JPPORTING<br>UPPORTING<br>UPPORTING<br>( DRIFT      | 2]<br>3 BRITTLE<br>3 FLEXIBL<br>3 MASONF                      |  |
| 16. CHANGES II<br>MECHANICA<br>NOT DOCUM<br>ELECTRICAL<br>OF ALL UND<br>LOCATIONS<br>PPIOR TO IN          | N LOADING: THE CO<br>AL, ELECTRICAL, OF<br>MENTED ON, THE O<br>L, OR PLUMBING DF<br>OCUMENTED LOAD<br>OF ANY NEW EQUI   | ONTRACTOR HAS THE<br>PLUMBING LOAD IMPO<br>RIGINAL CONTRACT DO<br>RAWINGS). PROVIDE D<br>OS IN EXCESS OF 400 L<br>IPMENT OR LOADS. SU   | RESPONSIBILITY TO NO<br>OSED ONTO THE STRU<br>OCUMENTS (ARCHITEC<br>OCUMENTATION OF TH<br>.B. PROVIDE MARKED-U<br>IBMIT THESE PLANS TO  | OTIFY THE SER OF ANY<br>CTURE THAT DIFFERS<br>TURAL, STRUCTURAL,<br>IE LOCATION, LOAD, SI<br>IP STRUCTURAL PLAN<br>THE ARCHITECT/ENG   | ARCHITECTURAL,<br>FROM, OR THAT IS<br>MECHANICAL,<br>ZE, AND ANCHORAGE<br>S INDICATING THE<br>INEER FOR REVIEW                                 |          | 7.1. MAXIMU<br>LENGTH<br>7.2. WIND L<br>F.  | JM VERTIC/<br>1 IN INCHES<br>OAD IS REE                                    | AL DEFLEC<br>3.<br>DUCIBLE T                                  |  |
| 17. NOTE PRIOF<br>DETAIL DRA  | RITIES: PLAN AND E<br>WINGS SUPPLEME  | DETAIL NOTES AND SP   | ECIFIC LOADING DATA I<br>THESE GENERAL NOTE   | PROVIDED ON INDIVID  | UAL PLANS AND  | <u>(</u> | )1.20.00  | SUBN   | <u>IITTAL</u>   |  |
| 18. DISCREPAN<br>REFERENCE  | <b>CIES:</b> IN CASE OF E<br>E STANDARDS, THE   | DISCREPANCIES BETW<br>ARCHITECT/ENGINEE   | EEN THE GENERAL NO  | TES, SPECIFICATIONS<br>/HICH SHALL GOVERN  | , PLANS/DETAILS, OR<br>. DISCREPANCIES   | 1.       | SUBMIT FOR<br>THE INDIVIDU  | <b>REVIEW:</b> S<br>JAL MATER  | UBMITTAL  |  |
| SHALL BE BI<br>SHOULD AN<br>INCLUDED II<br>OF THE PRIC<br>ACCORDING                                       | ROUGHT TO THE A<br>Y DISCREPANCY B<br>N THE PRICE THE M<br>CE, THE CONTRACT<br>GLY, ANY CONFLICT  | TTENTION OF THE ARC<br>E FOUND IN THE CONT<br>40ST EXPENSIVE WAY<br>FOR ASKS FOR A DECI<br>IN OR BETWEEN THE  | CHITECT/ENGINEER BEI<br>TRACT DOCUMENTS, TH<br>OF COMPLETING THE<br>SION FROM THE ARCHI<br>CONTRACT DOCUMEN   | FORE PROCEEDING W<br>IE CONTRACTOR WILL<br>WORK UNLESS PRIOR<br>TECT AS TO WHICH SI<br>TS SHALL NOT BE A BA  | ITH THE WORK.<br>BE DEEMED TO HAVE<br>TO THE SUBMISSION<br>HALL GOVERN.<br>ASIS FOR  | 2.<br>3. | SUBMITTAL I<br>WORKING DA   | <b>REVIEW PE</b><br>AYS FOR RE<br><b>DNTRACTO</b>                          | RIOD: SUE<br>Eview by<br>R's priof                            |  |
| ADJUSTMEN<br>19. SITE VERIFI<br>BETWEEN T<br>ARCHITECT  | <b>CATION:</b> THE CONTRAC<br>THE DRAWINGS AND<br>ENGINEER BEFOR  | CT PRICE.<br>RACTOR SHALL VERIF<br>DACTUAL SITE CONDI<br>E PROCEEDING WITH  | TY ALL DIMENSIONS AND<br>TIONS SHALL BE BROUG<br>THE WORK.  | D CONDITIONS AT THE<br>GHT TO THE ATTENTIC   | SITE. CONFLICTS  |          | THEREFORE<br>NECESSARY<br>AND SIGNAT  | , THEY MUS<br>DIMENSIOI<br>URE BEFOF                                       | ST BE VER<br>NAL DETA<br>RE FORWA                             |  |
| 20. ADJACENT<br>UTILITIES PF<br>SHOWN ON  | <b>UTILITIES</b> : THE CON<br>RIOR TO EARTHWO<br>THE DRAWINGS AN  | NTRACTOR SHALL DET<br>IRK, FOUNDATION WOI<br>ND DETAILS IS APPRO>   | TERMINE THE LOCATION<br>RK, SHORING AND EXC,<br>KIMATE AND NOT NECE   | N OF ALL ADJACENT U<br>AVATION. ANY UTILITY<br>SSARILY COMPLETE.   | NDERGROUND<br>INFORMATION  | 4.       | SHOP DRAW<br>SUBMITTAL F<br>BUILDING AN<br>RELIEVING T<br>DEPARTURE   | ING REVIEV<br>OR GENER<br>D WILL STA<br>HE CONTRA<br>S THERE F             | ¥: ONCE T<br>{AL CONF(<br>↓MP THE S<br>ACTOR FR<br>ROM. THE   |  |
| 21. ALTERNATE<br>SUBMITTED<br>ARCHITECT,<br>DOCUMENT<br>RETURNED<br>REVIEWED                              | ES: ALTERNATE PRO<br>WITH ADEQUATE 1<br>/ENGINEER FOR RE<br>ATION OR THAT SIG<br>WITHOUT REVIEW.<br>UNLESS AUTHORIZ   | DUCTS OF SIMILAR S<br>FECHNICAL DOCUMEN<br>VIEW. ALTERNATE MA<br>SNIFICANTLY DEVIATE<br>ALTERNATES THAT RI<br>ED BY THE OWNER.  | TRENGTH, NATURE, AN<br>TATION (PROPER TEST<br>ATERIALS THAT ARE SU<br>FROM THE DESIGN INT<br>EQUIRE SUBSTANTIAL I   | ID FORM FOR SPECIFI<br>REPORT, ETC.) TO TH<br>BMITTED WITHOUT AD<br>ENT OF MATERIALS SI<br>EFFORT TO REVIEW W  | ED ITEMS MAY BE<br>E<br>EQUATE TECHNICAL<br>PECIFIED MAY BE<br>ILL NOT BE  | 5.       | (EITHER HAR<br>SUBMITTING<br>SHOP DRAW<br>THE REQUIR<br>RESPONSIBL  | d Copy of<br>The Requ<br>Ing Deviat<br>Ements of<br>.e SSE.                | ₹ ELECTR(<br>IRED NUM<br>FI <b>ONS</b> : WH<br>F THE STR      |  |
| 22. Additions/.<br>22.1. Additi   | ALTERATIONS/REP   | Y <b>AIRS:</b><br>S, AND/OR REPAIRS T(  | D THE EXISTING STRUC  | TURE HAVE BEEN ANA   | ALYZED FOR   |          |   |  |   |  |
| ADDITI<br>22.2. ALL AF<br>22.3. ALL DE  | IONAL LOADING AN<br>FECTED EXISTING<br>EMOLITION OR REM   | D/OR MODIFICATION D<br>MEMBERS HAVE BEEN<br>IOVAL OF ARCHITECTU   | DUE TO THE ADDITION, ANALYZED OR REINFO<br>JRAL, MECHANICAL, OR   | ALTERATION, OR REPA<br>DRCED AS REQUIRED<br>& STRUCTURAL ELEME   | AIR.<br>PER THE IEBC.<br>NTS SHALL NOT   |          |   |  |   |  |

## N CRITERIA AND LOADS

### DING PER IBC TABLE 1604.5

| RESISTING SYSTEM:   |             |
|---------------------|-------------|
| Vult                | 115 MPH     |
|                     | В           |
| NT, C <sub>pi</sub> | ±0.55       |
|                     | 1.0         |
| ED                  | DIRECTIONAL |

NTS AND CLADDING (C&C) PRESSURES FOR DESIGN (PSF, ULTIMATE):

![](_page_6_Figure_5.jpeg)

CLADDING WIND PRESSURES ARE BASED ON ASCE 7 CHAPTER 30 PART 1 "LOW-RISE

CLADDING ZONE LOCATIONS ARE BASED ON ASCE 7 FIGURE 30.3-2B FOR GABLE ROOFS 7 $^\circ$ 

CLADDING ZONE LOCATIONS ARE BASED ON ASCE 7 FIGURE 30.3-1 FOR WALLS. ONENTS AND CLADDING WIND PRESSURES SHALL BE DETERMINED THROUGH ASCE 7

| DRY, SDC<br>TION 1613.3.2 AND ASCE 7 CHAPTER 20<br>CTOR PER ASCE 7 TABLE 1.5-2, Ie<br>CCELERATION (SHORT PERIOD), Ss<br>CCELERATION (SHORT PERIOD), SD<br>ELERATION (SHORT PERIOD), SD<br>ELERATION (SHORT PERIOD), SD<br>MODIFICATION FACTOR PER ASCE 7 TABLE | D<br>D<br>1.0<br>0.6 g<br>0.2 g<br>0.528 g<br>0.293 g<br>2.5        |
|--|---|
| EDURE USED   | EQUIVALENT LATERAL FORCE  |
| Pf<br>EQUIRED BY AHJ?<br>E FACTOR, Is<br>PR, Ce  | 41 PSF [NOTE 5.1]<br>YES<br>1.00 [NOTE 5.2]<br>46 PSF<br>1.1<br>1.0 |
| EDUCIBLE AND INCLUDES 5 PSF RAIN-ON-SN<br>BUT NOT ZERO, PER ASCE 7 SECTION 7.10.   | OW SURCHARGE WHERE GROUND SNOW LOAD                                 |
| TANCE FACTOR PER ASCE 7 TABLE 1.5-2.   |   |
| DITION TO STRUCTURE SELF-WEIGHT)   | 5 PSF   |
| SSE / BIDDER-DESIGNED ELEMENTS:  |   |
| LIVE/SNOW/WIND, TOTAL LOAD (TL)<br>_OAD (RLL)  | <u>LIMIT</u><br>L / 240<br>L / 360                                  |
| BRITTLE FINISHES<br>FLEXIBLE FINISHES<br>MASONRY   | L / 240<br>L / 180<br>L / 600 AT 0.7E OR 0.7 * C&C WIND LOAD        |

DEFLECTION IS WHICHEVER CRITERIA YIELDS LESS DEFLECTION. L IS THE CLEAR SPAN

CIBLE TO 0.42 \* THE COMPONENT AND CLADDING (C&C) LOADS PER TABLE 1604.3 FOOTNOTE

0.020 \* STORY HEIGHT

### **TTALS**

3MITTALS OF SHOP DRAWINGS AND PRODUCT DATA ARE REQUIRED FOR ITEMS NOTED IN LS SECTIONS OF THESE GENERAL NOTES AND FOR BIDDER-DESIGNED ELEMENTS.

**OD**: SUBMITTALS SHALL BE MADE IN TIME TO PROVIDE A MINIMUM OF TWO WEEKS OR TEN IEW BY THE ARCHITECT/ENGINEER PRIOR TO THE ONSET OF FABRICATION.

SPRIOR REVIEW: PRIOR TO SUBMISSION TO THE ARCHITECT/ENGINEER, THE CONTRACTOR IITTAL FOR COMPLETENESS. DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE SER; BE VERIFIED BY THE GENERAL CONTRACTOR. THE CONTRACTOR SHALL PROVIDE ANY L DETAILS REQUESTED BY THE DETAILER AND PROVIDE THE CONTRACTOR'S REVIEW STAMP FORWARDING TO THE ARCHITECT/ENGINEER.

ONCE THE CONTRACTOR HAS COMPLETED THEIR REVIEW, THE SER WILL REVIEW THE L CONFORMANCE WITH THE DESIGN CONCEPT AND THE CONTRACT DOCUMENTS OF THE IP THE SUBMITTAL ACCORDINGLY. MARKINGS OR COMMENTS SHALL NOT BE CONSTRUED AS TOR FROM COMPLIANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, NOR DM. THE SER WILL RETURN SUBMITTALS IN THE FORM IN WHICH THEY ARE SUBMITTED ELECTRONIC). FOR HARD COPY SUBMITTALS, THE CONTRACTOR IS RESPONSIBLE FOR ED NUMBER OF COPIES TO THE SER FOR REVIEW.

**INS:** WHEN SHOP DRAWINGS (COMPONENT DESIGN DRAWINGS) DIFFER FROM OR ADD TO THE STRUCTURAL DRAWINGS, THEY SHALL BE DESIGNED AND STAMPED BY THE

## 01.30.00 DEFERRED SUBMITTALS

- 1. BIDDER-DESIGNED ELEMENTS: SUBMIT "BIDDER-DESIGNED" DEFERRED SUBMITTALS TO THE ARCHITECT AND SER FOR REVIEW. THE DEFERRED SUBMITTALS SHALL ALSO BE SUBMITTED TO THE CITY FOR APPROVAL IF REQUIRED BY THE CITY. DESIGN OF PREFABRICATED, "BIDDER-DESIGNED," MANUFACTURED, PRE-ENGINEERED, OR OTHER FABRICATED PRODUCTS SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:
- 1.1. DESIGN CONSIDERS TRIBUTARY DEAD, LIVE, WIND, AND EARTHQUAKE LOADS IN COMBINATIONS REQUIRED BY THE IBC.
- 1.2. DESIGN WITHIN THE DEFLECTION LIMITS NOTED IN THESE GENERAL NOTES AND AS SPECIFIED OR REFERENCED
- IN THE IBC. 1.3. DESIGN SHALL CONFORM TO THE SPECIFICATIONS AND REFERENCE STANDARDS OF THE GOVERNING CODE.
- 1.4. SUBMITTAL SHALL INCLUDE: 1.4.1. CALCULATIONS PREPARED, STAMPED, AND SIGNED BY THE SSE DEMONSTRATING CODE CONFORMANCE.
- 1.4.2. ENGINEERED COMPONENT DESIGN DRAWINGS ARE PREPARED, STAMPED, AND SIGNED BY THE SSE. 1.4.3. PRODUCT DATA, TECHNICAL INFORMATION AND MANUFACTURER'S WRITTEN REQUIREMENTS, AND
- AGENCY APPROVALS AS APPLICABLE. 1.4.4. THE SSE MAY SUBMIT TO THE ARCHITECT/ENGINEER A REQUEST TO UTILIZE RELEVANT ALTERNATE DESIGN CRITERIA OF SIMILAR NATURE AND GENERAL EQUIVALENCY WHICH IS RECOGNIZED BY THE CODE AND ACCEPTABLE TO THE AHJ. SUBMIT ADEQUATE DOCUMENTATION OF DESIGN.
- 2. GENERAL CONTRACTOR'S PRIOR REVIEW:
- 2.1. ONCE THE CONTRACTOR HAS COMPLETED THEIR REVIEW OF THE SSE COMPONENT DRAWINGS, THE SER WILL REVIEW THE SUBMITTAL FOR GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING AND WILL STAMP THE SUBMITTAL ACCORDINGLY.
- 2.2. REVIEW OF THE SSE'S SHOP DRAWINGS (COMPONENT DESIGN DRAWINGS) IS FOR COMPLIANCE WITH DESIGN CRITERIA AND COMPATIBILITY WITH THE DESIGN OF THE PRIMARY STRUCTURE AND DOES NOT RELIEVE THE SSE OF RESPONSIBILITY FOR THAT DESIGN.
- 2.3. ALL NECESSARY BRACING, TIES, ANCHORAGE, AND PROPRIETARY PRODUCTS SHALL BE FURNISHED AND INSTALLED PER MANUFACTURER'S INSTRUCTIONS OR THE SSE'S DESIGN DRAWINGS AND CALCULATIONS.
- 2.4. BIDDER-DESIGNED ELEMENTS INCLUDE BUT ARE NOT LIMITED TO: 2.4.1. STEEL STAIRS
- 2.4.2. HANDRAILS AND GUARDRAILS

## 01.40.00 INSPECTIONS, QUALITY ASSURANCE, AND TEST REQUIREMENTS

- 1. INSPECTIONS: FOUNDATIONS, FOOTINGS, AND UNDER SLAB SYSTEMS AND FRAMING ARE SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL IN ACCORDANCE WITH IBC SECTION 110.3. THE CONTRACTOR SHALL COORDINATE ALL REQUIRED INSPECTIONS WITH THE BUILDING OFFICIAL.
- 2. SPECIAL INSPECTIONS, VERIFICATIONS, AND TESTS: SPECIAL INSPECTIONS, VERIFICATIONS, AND TESTING SHALL BE DONE IN ACCORDANCE WITH IBC CHAPTER 17, THE STATEMENT AND SCHEDULES OF SPECIAL INSPECTIONS LISTED IN THESE DRAWINGS, AND THE AHJ STATEMENT OF SPECIAL INSPECTION AND/OR STATEMENT OF STRUCTURAL OBSERVATIONS.
- 3. STRUCTURAL OBSERVATION:
- 3.1. STRUCTURAL OBSERVATION FOR THIS PROJECT IS REQUIRED PER IBC SECTION 1704.6. THE CONTRACTOR SHALL NOTIFY THE SER IN A TIMELY MANNER TO ALLOW REQUIRED STRUCTURAL OBSERVATIONS TO OCCUR. REPORTS WILL BE DISTRIBUTED TO THE ARCHITECT, CONTRACTOR, SPECIAL INSPECTOR, AND AHJ. 3.1.1. THE FREQUENCY AND EXTENT OF OBSERVATIONS IS AT THE DISCRETION OF THE STRUCTURAL
- OBSERVER. 3.1.2. ONLY SIGNIFICANT STAGES OF CONSTRUCTION IDENTIFIED BY THE STRUCTURAL OBSERVER REQUIRE
- OBSERVATION. 3.1.3. FOR REPETITIVE OR SIMILAR STRUCTURAL ELEMENTS IDENTIFIED AS SIGNIFICANT, ONLY THE FIRST
- ELEMENT OF A STAGE REQUIRES OBSERVATION UNLESS NOTED OTHERWISE. 3.1.4. THE FOLLOWING SIGNIFICANT STAGES OF CONSTRUCTION REQUIRE OBSERVATION:
  - 3.1.4.1. PRIOR TO FOUNDATION CONCRETE PLACEMENT
  - 3.1.4.2. PRIOR TO MAT FOUNDATION TOP BAR PLACEMENT
  - 3.1.4.3. PRIOR TO FIRST MILD REINFORCED SLAB PLACEMENT
  - 3.1.4.4. DURING THE FIRST ELEVATED FLOOR FRAMING
  - 3.1.4.5. DURING ROOF FRAMING
  - 3.1.4.6. AFTER ROOF DIAPHRAGM IS COMPLETE PRIOR TO ROOFING
- 4. CONTRACTOR RESPONSIBILITY: PRIOR TO ISSUANCE OF THE BUILDING PERMIT, THE CONTRACTOR IS REQUIRED TO PROVIDE THE AHJ A SIGNED, WRITTEN ACKNOWLEDGEMENT OF THE CONTRACTOR'S RESPONSIBILITIES ASSOCIATED WITH THE STATEMENT OF SPECIAL INSPECTIONS, PREVIOUSLY REFERENCED, ADDRESSING THE REQUIREMENTS LISTED IN IBC SECTION 1704.4. THE CONTRACTOR IS REFERRED TO IBC SECTIONS 1705.13.5 AND 1705.13.6 FOR ARCHITECTURAL AND MEP BUILDING SYSTEMS THAT MAY BE SUBJECT TO ADDITIONAL INSPECTIONS (BASED ON THE BUILDING'S DESIGNATED SEISMIC DESIGN CATEGORY LISTED IN THE DESIGN CRITERIA AND LOADS SECTION OF THESE GENERAL NOTES), INCLUDING ANCHORAGE OF HVAC DUCTWORK CONTAINING HAZARDOUS MATERIALS, PIPING SYSTEMS AND MECHANICAL UNITS CONTAINING FLAMMABLE, COMBUSTIBLE, OR HIGHLY TOXIC MATERIALS, ELECTRICAL EQUIPMENT USED FOR EMERGENCY OR STANDBY POWER, EXTERIOR WALL PANELS, AND SUSPENDED CEILING SYSTEMS.

## 02.00.00 SOILS AND FOUNDATION

- 1. REFERENCE STANDARDS: CONFORM TO IBC CHAPTER 18 "SOILS AND FOUNDATIONS"
- 2. GEOTECHNICAL REPORT: NO GEOTECHNICAL REPORT WAS OBTAINED PRIOR TO DESIGN. DESIGN BASED ON ALLOWABLE MINIMUM VALUES PER IBC CHAPTER 18.
- 3. DESIGN SOIL VALUES: ALLOWABLE FOUNDATION BEARING PRESSURE 1500 PSF - NATIVE
- 4. FOUNDATIONS AND FOOTINGS: FOUNDATIONS SHALL BEAR ON COMPETENT NATIVE SOIL.
- 5. FOOTING DEPTH: TOPS OF FOOTINGS SHALL BE AS SHOWN ON PLANS WITH VERTICAL CHANGES AS INDICATED WITH STEPS IN THE FOOTINGS. LOCATIONS OF STEPS SHOWN ARE APPROXIMATE AND SHALL BE COORDINATED WITH THE CIVIL GRADING PLANS.
- 6. SLABS-ON-GRADE: ALL SLABS-ON-GRADE SHALL BEAR ON COMPETENT NATIVE SOIL.

## 03.20.00 CONCRETE REINFORCEMENT

- 1. **REFERENCE STANDARDS:** CONFORM TO:
- 1.1. ACI 301 "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE," SECTION 3 "REINFORCEMENT AND REINFORCEMENT SUPPORTS"
- 1.2. ACI SP-66 "ACI DETAILING MANUAL" 1.3. CRSI MSP "MANUAL OF STANDARD PRACTICE"
- 1.4. ANSI/AWS D1.4 "STRUCTURAL WELDING CODE REINFORCING STEEL"
- 1.5. IBC CHAPTER 19 "CONCRETE"
- 1.6. ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"
- 1.7. ACI 117 "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS" 2. SUBMITTALS:
- 2.1. CONFORM TO ACI 301 SECTION 3.1.2. SUBMIT PLACING DRAWINGS SHOWING FABRICATION DIMENSIONS AND PLACEMENT LOCATIONS OF REINFORCEMENT AND REINFORCEMENT SUPPORTS.
- 3. MATERIALS: REINFORCING BARS [NOTE 3.1] ASTM A615, GRADE 60, DEFORMED BARS ASTM A706, GRADE 60, DEFORMED BARS BAR SUPPORTS **CRSI MSP CHAPTER 3** 16 GAGE OR HEAVIER, BLACK ANNEALED TIE WIRE
- 3.1. ASSUME GRADE 60 REINFORCEMENT UNLESS NOTED OTHERWISE ON PLAN. REFERENCE PLANS FOR HIGH STRENGTH REINFORCING LOCATIONS, INDICATED BY (GR 80) OR (GR 100).
- 4. FABRICATION: CONFORM TO ACI 301 SECTION 3.2.2 AND ACI SP-66.
- 5. WELDING: BARS SHALL NOT BE WELDED UNLESS AUTHORIZED. WHEN AUTHORIZED, CONFORM TO ACI 301 SECTION 3.2.2.2 AND AWS D1.4, AND PROVIDE ASTM A706, GRADE 60 REINFORCEMENT.

![](_page_6_Picture_91.jpeg)

![](_page_6_Picture_92.jpeg)

| <ul> <li><b>PLACING:</b> CONFORM TO ACI 301 SECTION 3.3.2. PLACING TO</li> <li><b>CONCRETE COVER:</b> CONFORM TO THE FOLLOWING COVER</li> </ul>  | LERANCES SHALL CONFORM TO ACI 117.<br>REQUIREMENTS UNLESS NOTED OTHERWISE ON PLAN:   | 15. SHRINKAGE: CONVENTIONAL AND POST-TENSIONED CO<br>PLACEMENT AND STRESSING OF CONCRETE. CONTRAC<br>AND INTERIOR MATERIAL FINISHES TO PROVIDE ADEQU  | ONCRETE SLABS WILL CONTINUE TO SHRINK AFTER INIT<br>CTOR AND SUBCONTRACTOR SHALL COORDINATE JOIN<br>JATE TOI FRANCE FOR EXPECTED STRUCTURAL FRAME   |
|--|--|---|---|
| CONCRETE CAST AGAINST EARTH  | 3"   | SHRINKAGE AND SHALL INCLUDE, BUT NOT BE LIMITED<br>FINISH, AND CEILING SUPPLIERS. CONTACT ENGINEER  | TO, CURTAIN WALL, DRYVIT, STOREFRONT, SKYLIGHT,<br>FOR EXPECTED RANGE OF SHRINKAGE.   |
| TIES IN COLUMNS AND BEAMS<br>BARS IN SLABS   | 2<br>1-1/2"<br>3/4"  | 16. CONCRETE PLACEMENT TOLERANCE: CONFORM TO A  | CI 117 FOR CONCRETE PLACEMENT TOLERANCE.  |
| BARS IN WALLS<br>EXTERIOR BARS IN TILT-UP PANELS   | 3/4"<br>1"   | 05.05.19 POST-INSTALLED ANCHO   | ORS (INTO CONCRETE AND MASON  |
| 3. SPLICES: CONFORM TO ACI 301 SECTION 3.3.2.7. REFER TO<br>SCHEDULE IN THESE DRAWINGS FOR TYPICAL REINFORCEM  | TYPICAL LAP SPLICE AND DEVELOPMENT LENGTH<br>IENT SPLICES.   | 1. <b>REFERENCE STANDARDS:</b> CONFORM TO:  |   |
| 9. FIELD BENDING: CONFORM TO ACI 301 SECTION 3.3.2.8. BAR<br>FIRST TIME. SUBSEQUENT BENDS AND OTHER BAR SIZES RE<br>NOT BE BENT PAST 45°.  | SIZES #3 THROUGH #5 MAY BE FIELD BENT COLD THE<br>EQUIRE PREHEATING. DO NOT TWIST BARS. BARS SHALL   | <ul> <li>1.1. IDE CHAFTER 19 CONCRETE</li> <li>1.2. ACI 318 "BUILDING CODE REQUIREMENTS FOR STR</li> <li>1.3. IBC CHAPTER 21 "MASONRY"</li> <li>1.4. TMS 403 "BUILDING CODE REQUIREMENTS FOR MASONRY"</li> </ul>  | RUCTURAL CONCRETE"  |
| 03.30.00 CAST-IN-PLACE CONCRETE  |  | <ol> <li>POST-INSTALLED ANCHORS: INSTALL ONLY WHERE SP</li> </ol>   | ECIFICALLY SHOWN IN THE DETAILS OR ALLOWED BY TH  |
| <ol> <li>REFERENCE STANDARDS: CONFORM TO:         <ol> <li>ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRET</li> <li>IBC CHAPTER 19 "CONCRETE"</li> <li>ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCT</li> <li>ACI 117 "SPECIFICATIONS FOR TOLERANCES FOR CONCRET</li> </ol> </li> <li>FIELD REFERENCE: THE CONTRACTOR SHALL KEEP A COPY</li> <li>CONCRETE MIXTURES: CONFORM TO ACI 301 SECTION 4 AN</li> <li>MATERIALS: CONFORM TO ACI 301 SECTION 4.2.1 FOR REQUARGREGATES, MIXING WATER, AND ADMIXTURES.</li> </ol>  | "E"<br>"URAL CONCRETE"<br>CRETE CONSTRUCTION AND MATERIALS"<br>" OF ACI FIELD REFERENCE MANUAL SP-15.<br>D IBC SECTION 1904.1.<br>JIREMENTS FOR CEMENTITIOUS MATERIALS,  | CURRENT ICC-ESR THAT PROVIDES RELEVANT DESIGN<br>EXCEEDS THE REQUIRED STRENGTH. SUBMIT CURREN<br>APPROVAL REGARDLESS OF WHETHER OR NOT IT IS A<br>STRICT ACCORDANCE WITH ICC-ESR AND THE MANUFA<br>CONJUNCTION WITH EDGE DISTANCE, SPACING, AND E<br>CONTRACTOR SHALL ARRANGE FOR A MANUFACTUREI<br>TRAINING FOR ALL PRODUCTS TO BE USED PRIOR TO T<br>SHALL PERFORM POST-INSTALLED ANCHOR INSTALLAT<br>MADE AVAILABLE TO THE SER AS REQUESTED. ADHESI<br>INCLINED ORIENTATIONS SHALL BE PERFORMED BY A (<br>THROUGH ACI/CRSI OR AN APPROVED EQUIVALENT. PF<br>THE ENGINEER FOR APPROVAL PRIOR TO COMMENCEN<br>DAMAGED DURING INSTALLATION OF POST-INSTALLED<br>AND INSPECTIONS SECTION OF THESE GENERAL NOTE<br>INDICATED ON DRAWINGS.   | VALUES NECESSARY TO VALIDATE THE AVAILABLE TRAVE A<br>VALUES NECESSARY TO VALIDATE THE AVAILABLE STR<br>T MANUFACTURER'S DATA AND ICC-ESR TO THE SER FO<br>PRE-APPROVED ANCHOR. ANCHORS SHALL BE INSTALL<br>CTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPI<br>MBEDMENT DEPTH AS INDICATED ON THE DRAWINGS. T<br>R'S FIELD REPRESENTATIVE TO PROVIDE INSTALLATION<br>THE COMMENCEMENT OF WORK. ONLY TRAINED INSTAL<br>TON. A RECORD OF TRAINING SHALL BE KEPT ON SITE A<br>VE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARI<br>CERTIFIED ADHESIVE ANCHOR INSTALLER (AAI) AS CERT<br>ROOF OF CURRENT CERTIFICATION SHALL BE SUBMITTE<br>MENT OF INSTALLATION. NO REINFORCING BARS SHALL<br>ANCHORS. SPECIAL INSPECTION SHALL BE PER THE TE<br>S. ANCHOR TYPE, DIAMETER, AND EMBEDMENT SHALL B  |
| <ul> <li>5.1. PROVIDE ALL SUBMITTALS REQUIRED BY ACI 301 SECT<br/>TABLE BELOW. SUBSTANTIATING STRENGTH RESULTS<br/>MONTHS PER ACI 318 SECTION 26.4.3.1(B).</li> <li>5. MIX DESIGN REQUIREMENTS [NOTES 7.1 TO 7.10, TYPICAL U<br/>FOOTINGS &amp; PIERS<br/>STRENGTH 4</li> </ul>  | ION 4.1.2. SUBMIT MIX DESIGNS FOR EACH MIX IN THE<br>FROM PAST TESTS SHALL NOT BE OLDER THAN 24<br><b>NO]</b>  | AND SHALL BE USED FOR ANCHORAGE TO CONCE<br>THE CORRESPONDING CURRENT ICC ESR REPOR<br>MINIMUM AGE OF CONCRETE, CONCRETE TEMPER<br>CONCRETE, AND HOLE DRILLING AND PREPARATION<br>LENGTHS SHALL BE AS SHOWN ON DRAWINGS OF<br>DIAMETER (7D). ADHESIVE ANCHORS ARE TO BE IN<br>OTHERWISE SPECIFIED IN THE ICC-ESR.   | RETE OR MASONRY AS APPLICABLE AND IN ACCORDANC<br>T. REFERENCE THE CORRESPONDING ICC-ESR FOR REC<br>RATURE RANGE, MOISTURE CONDITION, LIGHT WEIGHT<br>ON REQUIREMENTS. DRILLED-IN ANCHOR EMBEDMENT<br>R NOT LESS THAN SEVEN TIMES THE ANCHOR NOMINAL<br>NSTALLED IN CONCRETE AGED A MINIMUM OF 21 DAYS  |
| STRENGTH, f°<br>TEST AGE<br>NOMINAL MAXIMUM AGGREGATE  | 3,000 PSI<br>28 DAYS<br>1"   | HILTI "HIT-HY 200-R V3" - ICC-ESR 4868 FOR<br>HILTI "HIT-RE 500 V3" - ICC-ESR 3814 FOR A  | ANCHORAGE TO CONCRETE<br>NCHORAGE TO CONCRETE   |
| EXTERIOR SLABS ON GRADE & SIDEWALKS<br>STRENGTH, fc<br>TEST AGE  | 4,500 PSI<br>28 DAYS   | 2.2. SCREW ANCHORS: THE FOLLOWING SCREW TYPE<br>OR MASONRY IN ACCORDANCE WITH CORRESPON   | ANCHOR IS PRE-APPROVED FOR ANCHORAGE TO CON<br>NDING CURRENT ICC-ESR:   |
| NOMINAL MAXIMUM AGGREGATE<br>EXPOSURE CLASS<br>MAX W/C RATIO   | 1"<br>F2<br>0.45   | ONLY, IAPMO 493 FOR STAINLESS STEEL TO  | OCONCRETE   |
|  | 0%   | 05.12.00 STRUCTURAL STEEL   |   |
| <ul> <li>7.1. WC RATIO: WATER-CEMENTITIOUS MATERIAL RATIOS. CEMENTITIOUS MATERIALS. MAXIMUM RATIOS ARE CODESIGN REQUIREMENTS AND DURABILITY REQUIREME EXCEEDED WITH APPROVAL OF SER AS LONG AS POTE</li> <li>7.2. CEMENTITIOUS MATERIALS:</li> <li>7.2.1. DCI ENCOURAGES THE REDUCTION OF CEMENT CEMENTITIOUS MATERIALS. WHERE REQUIREMENT THESE MIXES, CONTACT DCI FOR FURTHER COD</li> <li>7.2.2. CEMENTITIOUS MATERIALS SHALL CONFORM TO SECTION 26.4.1.1.1(A).</li> <li>7.2.3. FOR CONCRETE USED IN ELEVATED FLOORS, M CONFORM TO ACI 301 TABLE 4.2.1.1(B). ACCEPT PROVIDING SUPPORTING DATA TO THE SER FOF</li> <li>7.3. GENERAL CONTRACTOR SHALL COORDINATE MEANS A AGES INCLUDING, BUT NOT LIMITED TO, DELAYED STRIELASTICITY REQUIREMENTS, DEFLECTION, AND APPEA</li> <li>7.4. AIR CONTENT: CONFORM TO ACI 318 SECTION 19.3.3.1. IN THE TABLE. IF FREEZING AND THAWING CLASS IS NC SER. TOLERANCE IS ±1-1/2%. AIR CONTENT SHALL BE N.</li> <li>7.5. AGGREGATES SHALL CONFORM TO ACI 318 TABLE 19.3</li> <li>7.6. SLUMP: CONFORM TO ACI 301 SECTION 4.2.2.1. SLUMP</li> <li>7.7. CHLORIDE CONTENT: CONFORM TO ACI 318 TABLE 19.3</li> <li>7.8. ACI 318 SECTION 19.3.1.1 EXPOSURE CLASS SHALL BE A CLASSES ARE LISTED IN THE TABLE OF MIX DESIGN RE</li> <li>7.9. RECYCLED CARBON DIOXIDE (CO2) IS PERMISSIBLE TO MIXING, SUCH THAT CO2 IS CHEMICALLY MINERALIZED POST-INDUSTRIAL CO2 SOURCED FROM AN EMITTER.</li> <li>7.10. SHRINKAGE LIMIT: CONCRETE USED IN ELEVATED SLAL CONCRETE USED IN SLAB-ON-GRADE SHALL HAVE A SI INDUSTRIAL APPLICATIONS AND A SHRINKAGE LIMIT OI SUBMIT LABORATORY TEST RESULTS AT 28 DAYS MEA APPROVAL PRIOR TO CONSTRUCTION.</li> <li>7.11. MODULUS OF ELASTICITY SHALL BE A MINIMUM OF 57,0</li> <li>7.12. STRENGTH TESTING AND ACCEPTANCE:</li> <li>8.1.1. TESTING: OBTAIN SAMPLES AND CONDUCT TESTS IN A SAMPLES MAY BE REQUIRED TO OBTAIN CONCRETE SELOW AND SHOULD BE STADARD CURED PER ACI SE BELOW AND SHOLD DONE CYLINDERS INDICATED ABOVE TO BE USED, ADDITIONAL CYLINDERS MUST BET PER THE TABLE OF MIX DESIGN REGUIREMENTS</li> <li>8.2. ACCEPTANCE:</li> <li>8.2.1. STRENGTH</li></ul>      | SHALL BE BASED ON THE TOTAL WEIGHT OF<br>NITROLLED BY STRENGTH NOTED IN THE TABLE OF MIX<br>NTS GIVEN IN ACI 318 SECTION 19.3. W/C RATIOS MAY BE<br>INTIAL SHRINKAGE IMPACTS ARE ACCOUNTED FOR.<br>CONTENT AND/OR THE USE OF ALTERNATE<br>ENTS OF THIS SECTION PROHIBIT INCLUSION OF ANY OF<br>DRINATION.<br>D THE RELEVANT ASTM STANDARDS LISTED IN ACI 318<br>INIMUM CEMENTITIOUS MATERIALS CONTENT SHALL<br>ANCE OF LOWER CEMENT CONTENT IS CONTINGENT ON<br>REVIEW AND ACCEPTANCE.<br>MINIMUM STANDARDS FOR EXPOSURE CLASS ARE NOTED<br>DT NOTED, AIR CONTENT GIVEN IS THAT REQUIRED BY THE<br>MEASURED AT POINT OF PLACEMENT.<br>SHALL BE DETERMINED AT POINT OF PLACEMENT.<br>3.2.1.<br>SHALL BE DETERMINED AT POINT OF PLACEMENT.<br>D E INJECTED INTO THE MIX AS AN INGREDIENT DURING<br>INTO CONCRETE. CO2 INJECTED INTO THE MIX MUST BE<br>BS AND BEAMS SHALL HAVE A SHRINKAGE LIMIT OF 0.045%.<br>HRINKAGE LIMIT OF 0.040% WHEN EXPOSED OR USED IN<br>F 0.045% FOR ALL OTHER CONDITIONS AND APPLICATIONS.<br>SURED IN ACCORDANCE WITH ASTM C157 TO SER FOR<br>200 * √f <sub>6</sub> FOR ALL MIX DESIGNS.<br>100 PSI; THEREFORE, IT DOES NOT REQUIRE SPECIAL<br>IGTH IS SPECIFIED FOR SERVICEABILITY.<br>CCORDANCE WITH ACI 301 SECTION 1.7.3.3. ADDITIONAL<br>TRENGTHS AT ALTERNATE INTERVALS THAN SHOWN<br>ECTION 26.5.3.2.<br>TEST ONE CYLINDER AT 7 DAYS, TEST TWO CYLINDERS AT<br>FOR USE AS THE ENGINEER AT 7 TMAY. STAY CYLINDERS ARE<br>CURED FOR SERVICEABILITY.<br>CCORDANCE WITH ACI 301 SECTION 1.7.3.3. ADDITIONAL<br>TRENGTHS AT ALTERNATE INTERVALS THAN SHOWN<br>ECTION 26.5.3.2.<br>TEST ONE CYLINDER AT 7 DAYS, TEST TWO CYLINDERS AT<br>FOR USE AS THE ENGINEER TO IRCETS. AFTER 56 DAYS,<br>NITRARY, THE RESERVE CYLINDER MAY BE DISCARDED<br>ING 28-DAY STRENGTH REQUIRES DIRECTS. AT TEST AGE<br>IN THESE GENERAL NOTES.<br>AGES OF ALL SETS OF THREE CONSECUTIVE TESTS EQUAL<br>INDIVIDUAL TEST FALLS BELOW THE SPECIFIED<br>2. REMOVAL OF FORMS SHALL CONFORM TO SECTION | <ol> <li>IBC CHAPTER 22 "STEEL"</li> <li>ANSI/AISC 303 "CODE OF STANDARD PRACTICE FC</li> <li>AISC "MANUAL OF STEEL CONSTRUCTION"</li> <li>ANSI/AISC 360 "SPECIFICATION FOR STRUCTURAL</li> <li>AWS D1.1 "STRUCTURAL WELDING CODE - STEEL"</li> <li>RCSC "SPECIFICATION FOR STRUCTURAL JOINTS</li> <li>SUBMITTALS: SUBMIT THE FOLLOWING DOCUMENTS TT</li> <li>SHOP DRAWINGS COMPLYING WITH AISC 360 SEC</li> <li>ERECTION DRAWINGS COMPLYING AISC 360 SECT</li> <li>WELD PROCEDURE SPECIFICATIONS (WPS'S) FOR</li> <li>MANUFACTURER'S CERTIFICATES OF CONFORMA CONSUMABLES).</li> <li>COPIES: MAKE COPIES OF THE FOLLOWING DOCUMENT INSPECTION AGENCY IN ELECTRONIC OR PRINTED FOR REQUIREMENTS:</li> <li>FABRICATOR'S WRITTEN QUALITY CONTROL MANU 3.1.1. MATERIAL CONTROL PROCEDURES</li> <li>S.1.2. INSPECTION PROCEDURES</li> <li>S.1.3. NON-CONFORMANCE PROCEDURES</li> <li>S.2. STEEL AND ANCHOR ROD SUPPLIERS' MATERIAL "SPECIFICATIONS.</li> <li>FASTENER MANUFACTURER'S CERTIFICATION DO</li> <li>FILLER METAL MANUFACTURER'S PRODUCT DATA 34.1. PRODUCT SPECIFICATION COMPLIANCE 34.2. RECOMMENDED WELDING PARAMETERS 3.4.3. RECOMMENDED WELDING PARAMETERS 3.4.3. RECOMMENDED STORAGE AND EXPOSURE 3.4.4. LIMITATIONS OF USE</li> <li>WELDDE HEADED (SHEAR) STUD ANCHORS MANU SPECIFICATIONS.</li> <li>WPS'S FOR SHOP AND FIELD WELDING.</li> <li>MANUFACTURER'S CERTIFICATES OF CONFORMA CONSUMABLES).</li> <li>WELDING PERSONNEL PERFORMANCE QUALIFICA CONSUMABLES).</li> <li>WELDING PERSONNEL PERFORMANCE QUALIFICA CO 360 SECTION A3 INCLUDING, BUT NOT LIMITED TO: SHAPE</li> <li>ANGLE (L) SHAPES PLATE (PL) SQUARE/RECT HSS HIGH-STRENGTH, HEAVY HEX BOLTS HEAVY HEX NUTS</li> </ol> | AR STEEL BUILDINGS AND BRIDGES"<br>STEEL BUILDINGS"<br>USING HIGH-STRENGTH BOLTS"<br>D THE SER FOR REVIEW:<br>TIONS M1 AND N3 AND AISC 303 SECTION 4.<br>ISHOP AND FIELD WELDING.<br>NCE FOR ELECTRODES, FLUXES, AND GASES (WELDING<br>TS AVAILABLE UPON REQUEST TO THE SER OR OWNER?<br>M PRIOR TO FABRICATION PER AISC 360 SECTION N3.2<br>JAL THAT INCLUDES, AS A MINIMUM:<br>TEST REPORTS (MTRS) INDICATING COMPLIANCE WITH<br>CUMENTING CONFORMANCE WITH THE SPECIFICATION<br>IF FOR SMAW, FCAW, AND GMAW INDICATING:<br>E REQUIREMENTS INCLUDING BAKING<br>FACTURER'S CERTIFICATION INDICATING THEY MEET<br>NCE FOR ELECTRODES, FLUXES, AND GASES (WELDING<br>DR WPS'S THAT ARE NOT PREQUALIFIED IN ACCORDANCE<br>ITION RECORDS (WPQRS) AND CONTINUITY RECORDS<br>DNFORM TO MATERIALS AND REQUIREMENTS LISTED IN<br>TYPE<br>ASTM A36, Fy = 36 KSI<br>ASTM A50, GRADE A325/F1852, TYPE 1<br>OR 3, PLAIN<br>ASTM A503, GRADE AND FINISH PER |
| 9. FORMWORK & RESHORING: CONFORM TO ACI 301 SECTION<br>2.3.2 EXCEPT THE STRENGTH INDICATED IN SECTION 2.3.2.4<br>SECTION 2.3.3. IN ADDITION, MILD REINFORCED (NON-POST-<br>(BACKSHORED) FOR A MINIMUM OF 14 DAYS FOLLOWING PL<br>HAS REACHED 0.75 * f <sup>°</sup> <sub>c</sub> , WHICHEVER IS LONGER. CONTRAC <sup>°</sup><br>INSTALLATION PROCEDURE AND DRAWINGS, AS APPLICABL   | 2. REMOVAL OF FORMS SHALL CONFORM TO SECTION<br>SHALL BE $0.75 * f_c$ . RESHORING SHALL CONFORM TO<br>TENSIONED) SLABS SHALL BE CONTINUOUSLY SHORED<br>ACEMENT OF CONCRETE OR 7 DAYS AFTER CONCRETE<br>FOR SHALL SUBMIT FORMWORK REMOVAL AND RESHORE<br>E, SEALED BY A PROFESSIONAL ENGINEER LICENSED IN   | WASHERS (HARDENED FLAT OR BEVELED)  | ASTM A563, GRADE AND FINISH PER<br>RCSC TABLE 2.1<br>ASTM F436, GRADE AND FINISH PER<br>RCSC TABLE 2.1  |
| THE STATE IN WHICH THE PROJECT IS LOCATED, FOR THE S<br>10. MEASURING, MIXING, AND DELIVERY: CONFORM TO ACI 301  | SER'S INFORMATION.<br>SECTION 4.3.   | <ul> <li>5. STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS:</li> <li>5.1. ASTM F3125 GRADE A325-N BOLTS - "THREADS NO</li> <li>5.2. HIGH STRENGTH POLITED JOINTS HAVE DEEN DEEN</li> </ul>   | T EXCLUDED IN THE SHEAR PLANE."   |
| I1. HANDLING, PLACING, CONSTRUCTING AND CURING: CONFO<br>CONCRETING SHALL CONFORM TO ACI 305R AND COLD WEA   | RM TO ACI 301 SECTION 5. IN ADDITION, HOT WEATHER<br>ATHER CONCRETING SHALL CONFORM TO ACI 306R.   | 5.3. PROVIDE ASTM BOLT GRADE AND TYPE AS SPECI<br>5.4. PROVIDE WASHERS OVER OUTER PLY OF SLOTTE   | FIED IN THE MATERIALS SECTION OF THESE GENERAL N<br>TO HOLES AND OVERSIZE HOLES PER RCSC TABLE 6.1  |
| <ul> <li>12. EMBEDDED ITEMS: POSITION AND SECURE IN PLACE EXPAN<br/>STRUCTURAL AND NON-STRUCTURAL EMBEDDED ITEMS BE<br/>TO MECHANICAL, ELECTRICAL, PLUMBING, AND ARCHITECTU<br/>ITEMS.</li> <li>13. CROUT: USE 7 000 DOL NON OUR INVESTOR OF COMMUNICATION OF COMMUNICATINA OF COMMUNICATION OF COMMUNICATICOM OF COMUNICATI</li></ul> | ISION JOINT MATERIAL, ANCHORS, AND OTHER<br>FORE PLACING CONCRETE. CONTRACTOR SHALL REFER<br>JRAL DRAWINGS AND COORDINATE OTHER EMBEDDED   | <ul> <li>5.5. PROVIDE NUT AND WASHER GRADES, TYPES, AND</li> <li>5.6. PROVIDE FASTENER ASSEMBLIES FROM A SINGLE</li> <li>5.7. JOINT TYPES SHALL BE:</li> <li>5.7.1. ST - "SNUG TIGHT." FOR TYPICAL BEAM END</li> </ul>  | ) "SHEAR" CONNECTIONS UNLESS NOTED OTHERWISE  |
| <b>13. GROUT:</b> USE 7,000 PSI NON-SHRINK GROUT UNDER COLUMN<br><b>14. POST-INSTALLED ANCHORS TO CONCRETE:</b> ANCHOR LOCA  | N BASE PLATES<br>TION, TYPE, DIAMETER, AND EMBEDMENT SHALL BE AS   | 5.8. INSTALL BOLTS IN JOINTS IN ACCORDANCE WITH I   | RCSC SECTION 8 AND TABLE 4.1.   |
| INDICATED ON DRAWINGS. REFERENCE THE POST-INSTALLE<br>APPLICABLE POST-INSTALLED ANCHOR ADHESIVES. ANCHO<br>ACCORDANCE WITH THE APPLICABLE ICC-EVALUATION SER<br>THE TESTS AND INSPECTIONS SECTION OF THESE GENERAI   | ED ANCHORS SECTION OF THESE GENERAL NOTES FOR<br>RS SHALL BE INSTALLED AND INSPECTED IN STRICT<br>VICE REPORT (ESR). SPECIAL INSPECTION SHALL BE PER<br>_ NOTES.   | 6. ANCHORAGE TO CONCRETE:   |   |
|  |  |   |   |

15. SHRINKAGE: CONVENTIONAL AND POST-TENSIONED CONCRETE SLABS WILL CONTINUE TO SHRINK AFTER INITIAL ND STRESSING OF CONCRETE. CONTRACTOR AND SUBCONTRACTOR SHALL COORDINATE JOINTING MATERIAL FINISHES TO PROVIDE ADEQUATE TOLERANCE FOR EXPECTED STRUCTURAL FRAME ID SHALL INCLUDE, BUT NOT BE LIMITED TO, CURTAIN WALL, DRYVIT, STOREFRONT, SKYLIGHT, FLOOR ILING SUPPLIERS. CONTACT ENGINEER FOR EXPECTED RANGE OF SHRINKAGE.

### POST-INSTALLED ANCHORS (INTO CONCRETE AND MASONRY)

### BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES"

ED ANCHORS: INSTALL ONLY WHERE SPECIFICALLY SHOWN IN THE DETAILS OR ALLOWED BY THE SER. ALLED ANCHOR TYPES AND LOCATIONS SHALL BE APPROVED BY THE SER AND SHALL HAVE A ESR THAT PROVIDES RELEVANT DESIGN VALUES NECESSARY TO VALIDATE THE AVAILABLE STRENGTH REQUIRED STRENGTH. SUBMIT CURRENT MANUFACTURER'S DATA AND ICC-ESR TO THE SER FOR GARDLESS OF WHETHER OR NOT IT IS A PRE-APPROVED ANCHOR. ANCHORS SHALL BE INSTALLED IN DANCE WITH ICC-ESR AND THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) IN WITH EDGE DISTANCE, SPACING, AND EMBEDMENT DEPTH AS INDICATED ON THE DRAWINGS. THE SHALL ARRANGE FOR A MANUFACTURER'S FIELD REPRESENTATIVE TO PROVIDE INSTALLATION ALL PRODUCTS TO BE USED PRIOR TO THE COMMENCEMENT OF WORK. ONLY TRAINED INSTALLERS RM POST-INSTALLED ANCHOR INSTALLATION. A RECORD OF TRAINING SHALL BE KEPT ON SITE AND BE LE TO THE SER AS REQUESTED. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY NTATIONS SHALL BE PERFORMED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER (AAI) AS CERTIFIED CRSI OR AN APPROVED EQUIVALENT. PROOF OF CURRENT CERTIFICATION SHALL BE SUBMITTED TO FOR APPROVAL PRIOR TO COMMENCEMENT OF INSTALLATION. NO REINFORCING BARS SHALL BE RING INSTALLATION OF POST-INSTALLED ANCHORS. SPECIAL INSPECTION SHALL BE PER THE TESTS ONS SECTION OF THESE GENERAL NOTES. ANCHOR TYPE, DIAMETER, AND EMBEDMENT SHALL BE AS

E ANCHORS: THE FOLLOWING ADHESIVE-TYPE ANCHORING SYSTEMS HAVE BEEN USED IN THE DESIGN BE USED FOR ANCHORAGE TO CONCRETE OR MASONRY AS APPLICABLE AND IN ACCORDANCE WITH RESPONDING CURRENT ICC ESR REPORT. REFERENCE THE CORRESPONDING ICC-ESR FOR REQUIRED AGE OF CONCRETE, CONCRETE TEMPERATURE RANGE, MOISTURE CONDITION, LIGHT WEIGHT E, AND HOLE DRILLING AND PREPARATION REQUIREMENTS. DRILLED-IN ANCHOR EMBEDMENT SHALL BE AS SHOWN ON DRAWINGS OR NOT LESS THAN SEVEN TIMES THE ANCHOR NOMINAL (7D). ADHESIVE ANCHORS ARE TO BE INSTALLED IN CONCRETE AGED A MINIMUM OF 21 DAYS UNLESS ISE SPECIFIED IN THE ICC-ESR.

NCHORS: THE FOLLOWING SCREW TYPE ANCHOR IS PRE-APPROVED FOR ANCHORAGE TO CONCRETE NRY IN ACCORDANCE WITH CORRESPONDING CURRENT ICC-ESR:

### <u>STRUCTURAL STEEL</u>

## COPIES OF THE FOLLOWING DOCUMENTS AVAILABLE UPON REQUEST TO THE SER OR OWNER'S

JRE QUALIFICATION RECORDS (PQRS) FOR WPS'S THAT ARE NOT PREQUALIFIED IN ACCORDANCE WITH

FRUCTURAL STEEL MATERIALS SHALL CONFORM TO MATERIALS AND REQUIREMENTS LISTED IN AISC 3 INCLUDING, BUT NOT LIMITED TO:

|          | TYPE   |
|----------|--|
|          | $\overline{\text{ASTM}}$ A36, $F_y$ = 36 KSI |
|          | ASTM A36, $F_y = 36$ KSI                     |
|          | ASTM A500, GRADE C, $F_y = 50$ KSI           |
| LTS      | ASTM F3125 GRADE A325/F1852, TYPE 1          |
|          | OR 3, PLAIN                                  |
|          | ASTM A563, GRADE AND FINISH PER              |
|          | RCSC TABLE 2.1                               |
| BEVELED) | ASTM F436, GRADE AND FINISH PER              |
|          | RCSC TABLE 2.1                               |
|          |  |

## JOINTS USING HIGH-STRENGTH BOLTS:

25 GRADE A325-N BOLTS - "THREADS NOT EXCLUDED IN THE SHEAR PLANE." RENGTH BOLTED JOINTS HAVE BEEN DESIGNED AS "BEARING" CONNECTIONS. ASTM BOLT GRADE AND TYPE AS SPECIFIED IN THE MATERIALS SECTION OF THESE GENERAL NOTES. WASHERS OVER OUTER PLY OF SLOTTED HOLES AND OVERSIZE HOLES PER RCSC TABLE 6.1. NUT AND WASHER GRADES, TYPES, AND FINISHES CONFORMING TO RCSC TABLE 2.1. FASTENER ASSEMBLIES FROM A SINGLE SUPPLIER.

- 6.1. SHEAR STUDS ON STEEL BEAMS FOR COMPOSITE CONSTRUCTION: HEADED SHEAR STUDS WELDED (WHS) TO TOPS OF WIDE FLANGE BEAMS SHALL BE 3/4" DIAMETER WITH NOMINAL STUD LENGTHS AS INDICATED. UNLESS NOTED OTHERWISE, PROVIDE MINIMUM SHEAR STUD HEIGHT EQUAL TO THE METAL DECK DEPTH + 1-1/2" AND A MAXIMUM SHEAR STUD HEIGHT THAT ALLOWS FOR 1/2" OF CONCRETE COVER OVER THE STUD.
- 6.2. COLUMN ANCHOR RODS AND BASE PLATES: ALL COLUMNS (VERTICAL MEMBER ASSEMBLIES WEIGHING OVER 300 LB) SHALL BE PROVIDED WITH A MINIMUM OF FOUR 3/4" DIAMETER ANCHOR RODS. COLUMN BASE PLATES SHALL BE AT LEAST 3/4" THICK UNLESS NOTED OTHERWISE. CAST-IN-PLACE ANCHOR RODS SHALL BE PROVIDED UNLESS OTHERWISE APPROVED BY THE ENGINEER. UNLESS NOTED OTHERWISE, EMBEDMENT OF CAST-IN-PLACE ANCHOR RODS SHALL BE 12 TIMES THE ANCHOR DIAMETER (12D).
- 6.3. EMBEDDED STEEL PLATES FOR ANCHORAGE TO CONCRETE: PL EMBEDDED IN CONCRETE WITH WHS OR DOWEL BAR ANCHORS (DBA) SHALL BE OF THE SIZES AND LENGTHS AS INDICATED ON THE PLANS WITH MINIMUM 1/2" DIA x 6" LONG WHS, BUT PROVIDE NOT LESS THAN 3/4" INTERIOR COVER OR 1-1/2" EXTERIOR COVER TO THE OPPOSITE FACE OF CONCRETE UNLESS NOTED OTHERWISE.

### 7. FABRICATION:

- 7.1. CONFORM TO AISC 360 SECTION M2 AND AISC 303 SECTION 6.
- 7.2. QUALITY CONTROL (QC) SHALL CONFORM TO: 7.2.1. AISC 360 CHAPTER N
  - 7.2.2. AISC 303 SECTION 8
  - 7.2.3. FABRICATOR AND ERECTOR SHALL ESTABLISH AND MAINTAIN WRITTEN QC PROCEDURES PER AISC 360 SECTION N3
  - 7.2.4. FABRICATOR SHALL PERFORM SELF-INSPECTIONS PER AISC 360 SECTION N5 TO ENSURE THAT THEIR WORK IS PERFORMED IN ACCORDANCE WITH CODE OF STANDARD PRACTICE, THE AISC SPECIFICATION, CONTRACT DOCUMENTS, AND THE APPLICABLE BUILDING CODE
  - 7.2.5. QC INSPECTIONS MAY BE COORDINATED WITH QUALITY ASSURANCE (QA) INSPECTIONS PER AISC 360 SECTION N5.3 WHERE FABRICATORS QA PROCEDURES PROVIDE THE NECESSARY BASIS FOR MATERIAL CONTROL, INSPECTION, AND CONTROL OF THE WORKMANSHIP EXPECTED BY THE SPECIAL INSPECTOR.

### 8. WELDING:

8.1. WELDING SHALL CONFORM TO AWS D1.1 WITH PREQUALIFIED WELDING PROCESSES EXCEPT AS MODIFIED BY AISC 360 SECTION J2 WELDERS SHALL BE QUALIFIED IN ACCORDANCE WITH AWS D1.1 REQUIREMENTS.

8.2. USE 70 KSI STRENGTH, LOW-HYDROGEN TYPE ELECTRODES (E7018) OR E71T AS APPROPRIATE FOR THE PROCESS SELECTED.

## 9. ERECTION:

9.1. CONFORM TO AISC 360 SECTION M4 AND AISC 303 SECTION 7

- 9.2. CONFORM TO AISC 360 CHAPTER N AND AISC 303 SECTION 8 9.2.1. THE ERECTOR SHALL MAINTAIN DETAILED ERECTION QC PROCEDURES THAT ENSURE THAT THE WORK IS
- PERFORMED IN ACCORDANCE WITH THESE REQUIREMENTS AND THE CONTRACT DOCUMENTS. 9.3. STEEL WORK SHALL BE CARRIED UP TRUE AND PLUMB WITHIN THE LIMITS DEFINED IN AISC 303 SECTION 7.13. 9.4. HIGH-STRENGTH BOLTING SHALL COMPLY WITH THE RCSC REQUIREMENTS INCLUDING RCSC SECTION 7.2, AS
- APPLICABLE AND AISC 360 CHAPTER J AND SECTIONS M2.5 AND N5.6. 9.5. WELDING OF HEADED STUD ANCHORS SHALL BE IN ACCORDANCE WITH AWS D1.1 CHAPTER 7.
- 9.6. PROVIDE HEADED (SHEAR) STUD ANCHORS WELDED THROUGH THE METAL DECK TO TOPS OF BEAMS DENOTED IN PLANS
- 9.7. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AND SAFETY PROTECTION REQUIRED BY AISC 360 SECTION M4.2 AND AISC 303 SECTIONS 7.10 AND 7.11.
- **10. PROTECTIVE COATING REQUIREMENTS:**
- 10.1. SHOP PAINTING: CONFORM TO AISC 360 SECTION M3 AND AISC 303 SECTION 6.5 UNLESS OTHERWISE SPECIFIED BY THE PROJECT SPECIFICATIONS. 10.2. INTERIOR STEEL
- 10.2.1. UNLESS NOTED OTHERWISE, DO NOT PAINT ANY OF THE STEEL SURFACES MEETING THE FOLLOWING CONDITIONS:
  - 10.2.1.1. CONCEALED BY THE INTERIOR BUILDING FINISHES
  - 10.2.1.2. FIREPROOFED
  - 10.2.1.3. EMBEDDED IN CONCRETE
  - 10.2.1.4. SPECIALLY PREPARED AS A "FAYING SURFACE" FOR TYPE-SC "SLIP-CRITICAL" CONNECTIONS INCLUDING BOLTED CONNECTIONS THAT FORM A PART OF THE SFRS GOVERNED BY AISC 341 UNLESS THE COATING CONFORMS TO REQUIREMENTS OF THE RCSC AND IS APPROVED BY THE ENGINEER
  - 10.2.1.5. WELDED: IF AREA REQUIRES PAINTING, DO NOT PAINT UNTIL AFTER WELD INSPECTIONS AND NON-DESTRUCTIVE TESTING REQUIREMENT, IF ANY, ARE SATISFIED.
- 10.2.2. INTERIOR STEEL EXPOSED TO VIEW SHALL BE PAINTED WITH ONE COAT OF SHOP PRIMER UNLESS OTHERWISE INDICATED IN THE PROJECT SPECIFICATIONS. FIELD TOUCH-UPS TO MATCH THE FINISH COAT OR AS OTHERWISE INDICATED IN THE PROJECT SPECIFICATIONS.
- 10.3. EXTERIOR STEEL: EXPOSED EXTERIOR STEEL SHALL BE PROTECTED BY EITHER: 10.3.1. PAINT WITH AN EXTERIOR MULTI-COAT SYSTEM AS PER THE PROJECT SPECIFICATIONS, FIELD TOUCH-UP PAINTING SHALL BE AS PER THE PROJECT SPECIFICATIONS.
- 10.3.2. GALVANIZING: UNLESS PROTECTED WITH A PAINT SYSTEM, EXPOSED STEEL (OUTSIDE THE BUILDING ENVELOPE) SHALL BE HOT-DIPPED GALVANIZED WHERE NOTED ON THE PLANS OR OTHERWISE INDICATED BY THE FINISHES SPECIFIED BY THE ARCHITECT. APPLY FIELD TOUCH-UPS PER PROJECT SPECIFICATIONS.

## 05.31.00 METAL ROOF AND FLOOR DECK

1. REFERENCE STANDARDS: CONFORM TO:

- 1.1. SDI-DDM "DIAPHRAGM DESIGN MANUAL"
- 1.2. ANSI/SDI NC "STANDARD FOR NON-COMPOSITE STEEL FLOOR DECK"
- 1.3. ANSI/SDI RD "STANDARD FOR STEEL ROOF DECK"
- 1.4. ANSI/SDI C "STANDARD FOR COMPOSITE STEEL FLOOR DECK-SLABS" 1.5. AISI S100 "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL
- MEMBERS" 1.6. AWS D1.3 "STRUCTURAL WELDING CODE - SHEET STEEL"

2. SUBMITTALS:

- 2.1. SUBMIT SHOP DRAWINGS TO THE ARCHITECT/ENGINEER FOR REVIEW. SHOP DRAWINGS SHALL INCLUDE MATERIAL TYPE, DESIGN LOADS, DIAPHRAGM CAPACITIES, SPAN LAYOUT, DECK ATTACHMENTS, METAL DECK EDGE FORM DESIGN AND CALCULATIONS, AND SHORING REQUIREMENTS. ALL OPENINGS SHALL BE INDICATED. ANY ALTERNATE DECK TYPES AND GAGES SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO FABRICATION AND SHALL INCLUDE A VALID ICC EVALUATION REPORT, CALCULATIONS, AND SHOP DRAWINGS (COMPONENT DESIGN DRAWINGS) STAMPED BY THE SSE.
- 3. PRE-CONSTRUCTION MEETING: THE CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION MEETING FOR COMPOSITE STEEL CONSTRUCTION. THE CONTRACTOR, SER, SUBCONTRACTORS INVOLVED WITH THE STEEL ERECTION AND PLACEMENT OF CONCRETE ON COMPOSITE FLOORS WORK, AND REPRESENTATIVES OF THE SPECIAL INSPECTION AGENCY SHALL ATTEND THIS MEETING. AGENDA ITEMS INCLUDE BUT ARE NOT LIMITED TO:
- 3.1. POUR SEQUENCE: POURS SHOULD START OVER THE JOISTS AND WORK TOWARDS THE GIRDERS. 3.2. CONSTRUCTION JOINT LOCATIONS AND DETAILS: DOWEL CONSTRUCTION JOINTS WITH #4 x 5'-0"@ 18" OC UNLESS NOTED OTHERWISE ON PLAN. CONSTRUCTION JOINTS SHALL BE LOCATED TO FULLY LOAD COMPOSITE STEEL FRAMING PRIOR TO ACHIEVING COMPOSITE ACTION WITH THE CONCRETE.
- 3.3. SCREED POINTS SHALL BE PLACED TO ACHIEVE A UNIFORM THICKNESS OF CONCRETE OVER THE DECK. 4. MATERIAL: ASTM A653 - SS DESIGNATION, GRADE 33 KSI. STEEL DECK AND ACCESSORIES SHALL BE GALVANIZED TO
- G60 MINIMUM IN ACCORDANCE WITH ASTM A653.
- 5. TYPE: DECK SHALL BE AS SHOWN ON THE STRUCTURAL DRAWINGS BASED ON THREE-SPAN, UNSHORED CONDITION. HEAVIER GAUGE DECK OR SHORING MAY BE REQUIRED FOR CONDITIONS OTHER THAN THREE-SPAN BASED ON MANUFACTURER CAPACITIES, ACTUAL DECK LAYOUT, AND SPAN CONDITIONS. DEVIATIONS FROM DECK GAUGES SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE SER FOR APPROVAL. MAXIMUM DEAD LOAD DEFLECTION IS 3/4" OR L/180, WHICHEVER IS LESS.
- 5.1. VERCO IAPMO ER-217
- 5.2. VULCRAFT ICC-ESR 1227 5.3. EPIC - ICC-ESR 2047
- 6. DIAPHRAGM CAPACITY: DECK AND ATTACHMENTS SHALL BE CAPABLE OF RESISTING THE DIAPHRAGM SHEARS WHERE INDICATED ON THE DRAWINGS. SUBMIT ICC ESR AS PROOF OF COMPLIANCE.

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| 7. | INSTALLATION: INSTALL DECK IN ACCORDANCE WITH SUPPLIER'S INSTALTACHMENTS SHALL RESIST THE UPLIFT AND DIAPHRAGM SHEAR FOR SHALL CONFORM TO AWS D1.3. WELDERS SHALL HAVE CURRENT LIGH HAVE A MINIMUM END LAP OF 2" CENTERED OVER SUPPORTS. COMPO ONE ANOTHER, CENTERED OVER SUPPORTS, AND OBTAIN ADEQUATE UNIT SHALL BE FASTENED TO THE STEEL SUPPORT AS REQUIRED. MIN FLOOR DECK IS 2" UNITESS NOTED OTHERWISE | TRUCTIONS AND SHOP DRAWINGS.<br>DRCES SHOWN ON THE DRAWINGS. WELDING<br>IT GAGE CERTIFICATION. ROOF DECK SHALL<br>DSITE FLOOR DECK PANEL ENDS SHALL ABUT<br>EEND BEARING. WHERE TWO UNITS ABUT, EACH<br>NIMUM BEARING FOR BOTH ROOF DECK AND |
|----|---|--|
| 8. | • OPENINGS: DECK OPENINGS LESS THAN 6" DO NOT REQUIRE REINFOR   | RCEMENT. FOR LARGER OPENINGS, REFER TO   |
| 9. | ACCESSORIES: DECK MANUFACTURER SHALL FURNISH SHORING PLAT<br>PLATES, CANT STRIPS, SUMP PANS, FLASHING, AND ALL OTHER LIGHT<br>COMPLETE THE WORK.  | NS, CLOSURE PLATES, RIDGE AND VALLEY<br>GAGE STEEL MATERIAL REQUIRED TO  |
| 10 | 0. CONCRETE FILL: CONFORM TO NOTES FOR CAST-IN-PLACE CONCRET<br>GENERAL NOTES. PROVIDE MINIMUM 3,000 PSI CONCRETE AND WWF 6<br>SPLICE WELDED PLAIN WIRE REINFORCEMENT PER ACI 318 SECTION 2   | E AND CONCRETE REINFORCEMENT IN THESE<br>6X6-W1.4XW1.4 UNLESS NOTED OTHERWISE.<br>25.5.4 OR 12" MINIMUM.   |
| 11 | 1. DECK FASTENING: MINIMUM DECK FASTENING SHALL BE AS FOLLOWS<br>DIAMETER WELDED HEADED STUD WELDED THROUGH METAL DECK IN<br>PERMITTED AS A SUBSTITUTE FOR A 3/4" VISIBLE DIAMETER PUDDLE V   | S UNLESS NOTED OTHERWISE ON PLAN. A 3/4"<br>N ACCORDANCE WITH AWS SHALL BE<br>VELD.  |
|    | 11.1.1. INON-COMPOSITE METAL ROOF DECK<br>11.1.1. IHILTI' X-ENP FASTENERS EACH RIB AT TRANSVERSE AND I<br>11.1.2. IHILTI' X-ENP FASTENERS AT 12" OC AT LONGITUDINAL SUP<br>11.1.3. #10 SCREW @ 12" OC OR PUNCH LOK SUPEL AR CONNECTION  | PERIMETER SUPPORTS.<br>PPORTS.   |
|    | 05.51.00 STEEL STAIRS   |  |
|    | REFERENCE STANDARDS: CONFORM TO   |  |
|    | <ul> <li>1.1. IBC CHAPTER 10 "MEANS OF EGRESS" AND IBC TABLE 1607.1 "MIN<br/>AND MINIMUM CONCENTRATED LIVE LOADS"</li> <li>1.2. NAAMM "METALS STAIRS MANUAL"</li> <li>1.3. ANSI/AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDIN</li> </ul>   | IIMUM UNIFORMLY DISTRIBUTED LIVE LOADS   |
|    | <ol> <li>AISI S100 "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF<br/>MEMBERS"</li> <li>AWS D1.1 "STRUCTURAL WELDING CODE - STEEL"</li> </ol>  | F COLD-FORMED STEEL STRUCTURAL   |
|    | 1.6. AWS D1.3 "STRUCTURAL WELDING CODE - SHEET STEEL"   |  |
| 2. | SUBMITTALS: STEEL STAIRS ARE TO BE PREPARED BY AN SSE. REFER<br>SUBMITTALS SECTIONS OF THESE GENERAL NOTES. SUBMIT STRUCTL<br>(COMPONENT DESIGN DRAWINGS) STAMPED BY A LICENSED STRUCTL<br>MONTANA.   | RENCE DEFINITIONS AND DEFERRED<br>JRAL CALCULATIONS AND SHOP DRAWINGS<br>JRAL ENGINEER REGISTERED IN THE STATE OF  |
| 3. | MATERIALS:<br><u>SHAPE</u>  | TYPE   |
|    | STEEL CHANNELS, ANGLES, PLATES, AND BARS<br>STEEL PIPE RAIL<br>STEFL TUBING   | ASTM A36<br>ASTM A53, GRADE B<br>ASTM A500, GRADE B  |
|    | STEEL ROD<br>STEEL DECK   | ASTM A36 OR A307<br>1-1/2" COMPOSITE FLOOR DECK  |
|    | BOLTS<br>WELDS, STRUCTURAL STEEL<br>WELDS, SHEET STEEL  | ASTM F3125 GR. A307<br>AWS D1.1<br>AWS D1 3  |
|    | WELDED HEADED STUDS (WHS)<br>HEADED CONCRETE ANCHORS (HCA)  | ASTM A108, AWS D1.1<br>ASTM A108, AWS D1.1   |
| 4. | . SCOPE: THE STEEL STAIR DESIGN AND CONSTRUCTION SCOPE SHALL<br>LANDINGS, RAILINGS, AND ALL CONNECTIONS INCLUDING CONNECTIO<br>NOTED OTHERWISE. ALL INSERTS REQUIRED FOR ATTACHMENT TO TH<br>AND PROVIDED BY THE STAIR SUPPLIER.  | . INCLUDE TREADS, RISERS, STRINGERS,<br>NS TO THE PRIMARY STRUCTURE UNLESS<br>HE PRIMARY STRUCTURE SHALL BE DESIGNED   |
| 5. | ARCHITECTURAL REQUIREMENTS: CONFORM TO SHAPE AND CONFIGUE<br>DRAWINGS. CONSULT THE PROJECT SPECIFICATIONS FOR ADDITIONA<br>GREY PER PROJECT SPECIFICATIONS WITH ONE COAT OF STANDARD<br>PLAN OR IN THE PROJECT SPECIFICATIONS.  | URATION SHOWN ON THE ARCHITECTURAL<br>L INFORMATION. ALL STEEL SHALL BE PAINTED<br>SHOP PRIMER UNLESS NOTED OTHERWISE ON   |
| 6. | . CONCRETE FILL: CONFORM TO CAST-IN-PLACE CONCRETE AND CONC<br>GENERAL NOTES. PROVIDE MINIMUM 3,000 PSI CONCRETE AND WWF 6<br>OTHERWISE ON PLAN.  | RETE REINFORCEMENT SECTIONS OF THESE<br>3X6-W1.4XW1.4 OR FIBERMESH UNLESS NOTED  |
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| <u>50.00.00</u>                       | SPECIAL INSPECTIONS  |  |  | 5.2.         | TABLE 17        | 05.3 - REQUIRED SPECIAL INSPECTIONS AND  | ) TESTS OF C       | ONCRETE CC    | INSTRUCTION   |
|---------------------------------------|--|--|--|--------------|-----------------|--|--------------------|---------------|---|
| 1. THE FOLLC<br>SHALL BE I<br>CHAPTER | WING STATEMENT AND SCHEDULES OF INSPECTIONS ARE THOSE SPEC<br>PERFORMED FOR THIS PROJECT. SPECIAL INSPECTORS SHALL REFEREN<br>17 FOR ALL SPECIAL INSPECTION REQUIREMENTS. THE OWNER SHALL RE | IAL INSPECTIONS<br>ICE THESE PLANS<br>ETAIN AN "APPRO  | AND TESTS THAT<br>AND IBC<br>VED AGENCY" PER | F            | <u>NO.</u><br>1 | SPECIAL INSPECTIONCINSPECT REINFORCEMENT, INCLUDINGPRE-STRESSING TENDONS, ANDVERIFY PLACEMENT                          | ONTINUOUS<br>-     | PERIODIC<br>X | REFERENCE STANDARD<br>ACI 318 CHAPTER 20<br>ACI 318 SECTIONS 25.2,<br>25.3, & 26.6.1-26.6.3 |
| IBC SECTION<br>PERSONS                | NN 1703 TO PROVIDE SPECIAL INSPECTIONS FOR THIS PROJECT. SPECIAL<br>PER IBC SECTION 1704.2.4. SPECIAL INSPECTION REPORTS SHALL BE PRO  | . INSPECTORS SH  | ALL BE QUALIFIED<br>FKI Y BASIS.             | -            | 2               | REINFORCING BAR WELDING:   | -                  | -<br>-<br>-   |   |
| SUBMIT CO                             | PIES OF ALL INSPECTION REPORTS TO THE ARCHITECT/ENGINEER AND   | THE AUTHORITY I  |  |              | Zđ              | BARS OTHER THAN ASTM A706  | -                  | ^             | ACI 318 SECTION 26.6.4  |
| CERTIFICA                             | TES NOTED IN IBC SECTION 1704.5 TO THE AUTHORITY HAVING JURISDIC   | TION. FINAL SPEC                                       | IAL INSPECTION                               |              | 2b              | INSPECT SINGLE PASS FILLET WELD  | -                  | Х             | -   |
| REPORTS                               |  | N 1704.2.4.  |  | -            | 2c              | INSPECT ALL OTHER WELDS  | X _                | -<br>X        | -<br>ACI 318 SECTION 17.8.2   |
| 2. STATEMEN                           | IT OF SPECIAL INSPECTIONS:<br>STATEMENT OF SPECIAL INSPECTIONS HAS BEEN WRITTEN WITH THE UN  | IDERSTANDING T   | HAT THE BUILDING                             | _            |                 |  | _                  |               |   |
| 2.1.1 OFFIC<br>2.1.1.                 | REVIEW AND APPROVE THE QUALIFICATIONS OF THE SPECIAL INSPECT   |  |  | _            | 4a              | IN HARDENED CONCRETE MEMBERS:<br>ADHESIVE ANCHORS INSTALLED IN<br>HORIZONTALLY OR UPWARDLY                             | X                  | -             | ACI 318 SECTION 17.8.2.4  |
| 2.1.2.                                | INSPECTORS ARE QUALIFIED AND PERFORMING THEIR DUTY AS STATE<br>REVIEW ALL SPECIAL INSPECTION REPORTS SUBMITTED TO THEM BY T  | D ENSURE THAT S<br>D WITHIN THIS ST<br>HE SPECIAL INSP | ATEMENT.<br>ECTOR.                           | _            | 4b              | INCLINED ORIENTATIONS TO RESIST<br>SUSTAINED TENSION LOADS<br>MECHANICAL ANCHORS AND                                   | -                  | X             | ACI 318 SECTION 17.8.2  |
| 2.1.4.<br>2.2. THE F                  | PERFORM INSPECTIONS AS REQUIRED BY IBC SECTION 110.3.<br>OLLOWING SPECIAL INSPECTIONS ARE APPLICABLE TO THIS PROJECT:  |  |  | _            | 5               | 4a<br>VERIFY USE OF REQUIRED DESIGN MIX  | -                  | X             | ACI 318 CHAPTER 19<br>ACI SECTIONS 26.4.3 &   |
| SPEC<br>SPEC<br>TEST                  | IAL INSPECTIONS FOR STANDARD BUILDINGS (PER IBC SECTION 1705.1)<br>IAL INSPECTIONS FOR SEISMIC RESISTANCE (PER IBC SECTION 1705.13)<br>NG FOR SEISMIC RESISTANCE (PER IBC SECTION 1705.14)   | REQU<br>NOT I<br>NOT I                                 | JIRED<br>REQUIRED<br>REQUIRED                | _            | 6               | PRIOR TO CONCRETE PLACEMENT,   | X                  | -             | 26.4.4<br>IBC SECTION 1904.1, 1904.2<br>ASTM C172 & C31                                     |
| 3. SPECIAL IN                         | ISPECTION OF SHOP FABRICATED, GRAVITY LOAD-BEARING MEMBERS A   |  | REQUIRED                                     |              |                 | FABRICATE SPECIMENS FOR<br>STRENGTH TESTS, PERFORM SLUMP<br>AND AIR CONTENT TESTS, AND<br>DETERMINE THE TEMPERATURE OF |                    |               | ACI 318 SECTIONS 26.5 & 26.12   |
| 3.1. SPEC<br>VERIF<br>3.2. INCLU      | IAL INSPECTION OF SHOP FABRICATED, GRAVITY LOAD-BEARING MEMBE<br>IED BY THE SPECIAL INSPECTOR AS STATED IN SECTION 1704.2.5.<br>IDE THE FOLLOWING:   | RS AND ASSEMB  | LIES SHALL BE                                | -            | 7               | THE CONCRETE<br>INSPECT CONCRETE AND SHOTCRETE<br>PLACEMENT FOR PROPER   | Х                  | -             | ACI 318 SECTION 26.5  |
| 3.2.1.                                | PRIOR TO THE START OF FABRICATION: SPECIAL INSPECTOR(S), REPRETHE FABRICATOR'S SHOP(S) WHERE THE WORK IS TO BE PERFORMED,  | SENTING THE OV<br>AND VERIFY THA                       | VNER, SHALL VISIT<br>T THE                   | _            | 8               | VERIFY MAINTENANCE OF SPECIFIED<br>CURING TEMPERATURE AND  | -                  | Х             | ACI 318 SECTIONS<br>26.5.3-26.5.5   |
|                                       | FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTRO<br>BASIS FOR INSPECTION, CONTROL OF WORKMANSHIP, MATERIAL CONT<br>TO CONFORM TO APPROVED CONSTRUCTION DOCUMENTS AND REFER       | DL PROCEDURES<br>ROL, AND FABRIC<br>RENCED STANDAF     | THAT PROVIDE A<br>CATOR'S ABILITY<br>RDS.    | _            | 14              | TECHNIQUES<br>INSPECT FORMWORK FOR SHAPE,<br>LOCATION AND DIMENSIONS OF THE  | -                  | X             | ACI 318 SECTION<br>26.11.1.2(B)   |
| 3.2.2.                                | FABRICATOR SHALL HAVE AVAILABLE FOR INSPECTOR'S REVIEW DETAIL CONTROL THAT DEMONSTRATE THE FABRICATOR'S ABILITY TO MAINTA  | LED PROCEDURE<br>IN SUITABLE REC                       | S FOR MATERIAL<br>ORDS AND                   | <b>5</b> 2 J |                 |  |                    |               |   |
|                                       | PROCEDURES SUCH THAT, AT ANY TIME DURING THE FABRICATION PROSPECIFICATION, GRADE, AND APPLICABLE TEST REPORTS FOR PRIMAR   | DCESS, THE MATE<br>Y LOAD-CARRYIN                      | ₋RIAL<br>G MEMBERS ARE                       | 5.3. I       |                 |  |                    |               |   |
|                                       |  |  |  |              | NO.             | SPECIAL INSPECTION   | QC<br>S PRIOR TO W |               | REFERENCE STANDARD  |
|                                       | AL STEEL: PER IBC SECTION 1705.2.1   |  | E (QA) SPECIAL                               |              | 1               | WELDER QUALIFICATION RECORDS<br>AND CONTINUITY RECORDS   |                    | 0             | AISC 360 TABLE N5.4-1   |
| INSPE                                 | CTIONS FOR THE PROJECT SHALL REVIEW AND CONFIRM THE FABRICATION (CC) PROCEDURES FOR COMPLETENESS AND ADECUACY DELATIV  | OR AND ERECTO  | R'S QUALITY                                  |              | 2               | WELDING PROCEDURE<br>SPECIFICATIONS (WPS'S) AVAILABLE  | P                  | P             | AISC 360 TABLE N5.4-1   |
| AWS                                   | D1.1, AND 2021 IBC CODE REQUIREMENTS FOR THE FABRICATOR'S SCOP   | E OF WORK.   | n i linin, MOU 3U3,                          |              | 3               | MANUFACTURING CERTIFICATIONS<br>FOR WELDING CONSUMABLES  | P                  | P             | AISC 360 TABLE N5.4-1   |
| 4.2. REQU<br>4.2.1.                   | IREMENTS:<br>QA AGENCY PROVIDING SPECIAL INSPECTIONS SHALL PROVIDE PERSO   | NNEL MEETING T   | HE MINIMUM                                   |              | 4               | AVAILABLE<br>MATERIAL IDENTIFICATION   | 0                  | 0             | AISC 360 TABLE N5.4-1   |
|                                       | QUALIFICATION REQUIREMENTS FOR INSPECTION AND NONDESTRUCT<br>SECTION N4.   | VE TESTING (NDT  | ) PER AISC 360                               | _            | 5               | (TYPE/GRADE)<br>WELDER IDENTIFICATION SYSTEM<br>FIT-UP OF GROOVE WELDS   | 0                  | 0             | AISC 360 TABLE N5.4-1<br>AISC 360 TABLE N5.4-1  |
|                                       | 4.2.1.1. QC AGENCY SHALL SUBMIT QUALIFICATION DOCUMENTS PER A SUBJECT TO SPECIAL INSPECTIONS ON SEISMIC FORCE RESIST   | ISC 341 SECTION  | J2 ON PROJECTS<br>TH R > 3.                  |              | -               | (INCLUDING JOINT GEOMETRY)<br>JOINT PREPARATION  | -                  |               |   |
|                                       | <ul><li>4.2.1.2. NDT PERSONNEL SHALL BE QUALIFIED PER AISC 341 SECTION J</li><li>4.2.1.3. PROVIDE QC AND QA INSPECTIONS PER AISC 341 SECTION J5 T</li></ul>                                  | 4.<br>HROUGH J10 AS A                                  | APPLICABLE.                                  |              |                 | DIMENSIONS (ALIGNMENT,<br>ROOT OPENING, ROOT FACE,   |                    |               |   |
| 4.2.2.<br>4.2.3                       | VERIFY FABRICATOR AND ERECTOR QC PROGRAM PER AISC 360 SECTI<br>INSPECTION OF WELDS AND BOLTS BY BOTH OC AND OA PERSONNELS  | ON N2.<br>SHALL BE PER TH                              |  |              |                 | BEVEL)<br>CLEANLINESS (CONDITION OF  |                    |               |   |
|                                       | SPECIAL INSPECTIONS IN THESE DRAWINGS. ALL PROVISIONS OF AWS<br>STRUCTURES SHALL APPLY.  | D1.1 FOR STATIC  | ALLY LOADED                                  |              |                 | STEEL SURFACES)<br>TACKING (TACK WELDING   |                    |               |   |
| 4.2.4.                                | NONDESTRUCTIVE TESTING (NDT) OF WELDS:<br>4.2.4.1. NDT OF WELDED JOINTS PER AISC 360 SECTION N5  |  |  |              |                 | BACKING TYPE AND FIT (IF<br>APPLICABLE)  |                    |               |   |
|                                       | 4.2.4.2. RISK CATEGORY FOR DETERMINATION OF EXTENT OF NDT PER<br>DESIGN CRITERIA AND LOADS SECTION OF THESE GENERAL RE   | AISC 360 N5.5B IS<br>QUIREMENTS.                       |  |              | 7               | FIT-UP OF CJP GROOVE WELDS OF<br>HSS T-, Y-, AND K-JOINTS WITHOUT<br>BACKING (INCLUDING JOINT                          | Р                  | 0             | AISC 360 TABLE N5.4-1   |
|                                       | 4.2.4.4. FOR FIELD WORK, THE NDT REPORT SHALL IDENTIFY THE TEST  | ED WELD BY LOC   |  |              |                 | GEOMETRY)<br>JOINT PREPARATION   |                    |               |   |
| 4.2.5.                                | STRUCTURE, PIECE MARK AND LOCATION OF THE PIECE.<br>ADDITIONAL INSPECTION TASKS PER AISC 360 SECTION N5.8.   |  |  |              |                 | DIMENSIONS (ALIGNMENT,<br>ROOT OPENING, ROOT FACE,<br>BEVEL)   |                    |               |   |
| 4.2.6.<br>4.3 POST                    | INSPECTION FOR COMPOSITE CONSTRUCTION SHALL BE DONE PER AIS  | C 360 SECTION N  | 6.<br>1703                                   |              |                 | CLEANLINESS (CONDITION OF  |                    |               |   |
| INSPE<br>FVAI                         | ECTIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS SET FOR<br>JATION SERVICE REPORT (ICC-ESR) AND AS INDICATED BY THE DESIGN I   | TH IN THE APPRC  | VED ICC<br>SPECIFIED ON THE                  |              |                 | TACKING (TACK WELDING  |                    |               |   |
|                                       | /INGS. REFER TO THE POST-INSTALLED ANCHORS SECTION OF THE GEN<br>THE BASIS OF THE DESIGN SPECIAL INSPECTOR SHALL VERIES ANCHORS  | ERAL NOTES FOR   |  | _            | 8               | QUALITY AND LOCATION)  | 0                  | 0             | AISC 360 TABLE N5 4-1   |
| INST/                                 | LLED ANCHORS SECTION OF THE GENERAL NOTES OR AS OTHERWISE S  | SPECIFIED ON THI                                       | ED IN THE FOOT<br>E DRAWINGS.                | _            | 9               | ACCESS HOLES   | 0                  | 0             | AISC 360 TABLE N5 4-1   |
| CURF                                  | ENT 2021 IBC RECOGNIZED ICC-ESR. SPECIAL INSPECTOR SHALL DOCUME<br>CTION REPORT COMPLIANCE WITH EACH OF THE ELEMENTS REQUIRED  | VITHIN THE APP   | ECIAL<br>LICABLE ICC-ESR.                    |              | Ū               | DIMENSIONS (ALIGNMENT, GAPS<br>AT ROOT)  | C                  |               |   |
| 4.4. PREF                             | ABRICATED CONSTRUCTION: ALL PREFABRICATED CONSTRUCTION SHAI  | L CONFORM TO   | BC SECTION 1703.                             |              |                 | CLEANLINESS (CONDITION OF<br>STEEL SURFACES)   |                    |               |   |
| 5. SCHEDULE<br>5.1. TABI              | S OF SPECIAL INSPECTIONS:<br>E 1705.6 - REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS  |  |  |              |                 |  |                    |               |   |
|                                       | D. SPECIAL INSPECTION  | CONTINUOUS   | PERIODIC                                     |              | 10              | CHECK WELDING EQUIPMENT  | 0                  |               | AISC 360 TABLE N5.4-1   |
|                                       | VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE<br>ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY  | -  | X  |              | 1               | INSPECTION TASK  |                    |               | AISC 360 TABLE N5.4-2   |
|                                       | VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND<br>HAVE REACHED PROPER MATERIAL<br>PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL  | -  | X<br>X                                       |              | 2               | CONTROL AND HANDLING OF WELDING<br>CONSUMABLES<br>PACKAGING  | 0                  | 0             | AISC 360 TABLE N5.4-2   |
|                                       | DURING FILL PLACEMENT, VERIFY USE OF PROPER MATERIALS  | X  | -  |              | 3               | EXPOSURE CONTROL NO WELDING OVER CRACKED TACK  | 0                  | 0             | AISC 360 TABI F N5 4-2  |
|                                       | THE APPROVED GEOTECHNICAL REPORT. VERIFY DENSITIES AND   |  |  | -            | 4               | WELDS<br>ENVIRONMENTAL CONDITIONS  | 0                  | 0             | AISC 360 TARI F N5 4-2  |
|                                       | COMPACTED FILL   |  | ×  |              | т               | WIND SPEED WITHIN LIMITS   | <u> </u>           |               |   |
|                                       | AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY  |  |  | -            | 5               | PRECIPITATION AND<br>TEMPERATURE<br>WPS FOLLOWED   | 0                  | 0             | AISC 360 TABLE N5.4-2   |
|                                       |  |  |  |              |                 | SETTINGS ON WELDING<br>EQUIPMENT   |                    |               |   |
|                                       |  |  |  |              |                 | TRAVEL SPEED<br>SELECTED WELDING   |                    |               |   |
|                                       |  |  |  |              |                 | MATERIALS<br>SHIELDING GAS TYPE/<br>ELOWRATE   |                    |               |   |
|                                       |  |  |  |              |                 |  |                    |               |   |
|                                       |  |  |  |              |                 |  |                    |               |   |
|                                       |  |  |  | _            | 6               | WELDING TECHNIQUES   | 0                  | 0             | AISC 360 TABLE N5.4-2   |
|                                       |  |  |  |              |                 |  |                    |               |   |
|                                       |  |  |  |              |                 | EACH PASS MEETS QUALITY<br>REQUIREMENTS  |                    |               |   |
|                                       |  |  |  | _            | 1               | INSPECTION TASK  | KS AFTER WE<br>O   | LDING<br>O    | AISC 360 TABLE N5.4-3   |
|                                       |  |  |  | F            | 2               | SIZE, LENGTH, AND LOCATIONS OF   | P                  | P             | AISC 360 TABLE N5.4-3   |

WELDS

| 3        | WELDS MEET VISUAL ACCEPTANCE                          | Р              | Р            | A   |
|----------|---|----------------|--------------|-----|
|          | CRACK PROHIBITION                                     |                |              |     |
|          | WELD/BASE-METAL FUSION                                |                |              |     |
|          | CRATER CROSS SECTION                                  |                |              |     |
|          |   |                |              |     |
|          | WELD PROFILES   |                |              |     |
|          | WELD SIZE   |                |              |     |
|          | UNDERCUT  |                |              |     |
|          | POROSITY  |                |              |     |
| 4        | ARC STRIKES   | P              | P            |     |
| 6        | WELD ACCESS HOLES IN ROLLED                           | P              | P            | A   |
|          | HEAVY SHAPES AND BUILT-UP HEAVY                       |                |              |     |
| 7        | SHAPES<br>BACKING REMOVED AND WELD TABS               | P              | P            |     |
|          | REMOVED (IF REQUIRED)                                 |                | •            | '   |
| 8        | REPAIR ACTIVITIES                                     | Р              | Р            | A   |
| 9        |   | Р              | Р            | A   |
|          | MEMBER  |                |              |     |
| 10       | NO PROHIBITED WELDS HAVE BEEN                         | Р              | Р            | A   |
|          | ADDED WITHOUT THE APPROVAL OF                         |                |              |     |
|          | INSPECTION TA   | SKS PRIOR TO B | OLTING       |     |
| 1        | MANUFACTURER'S CERTIFICATIONS                         | 0              | P            | A   |
| 2        | AVAILABLE FOR FASTENER MATERIALS                      | 0              | 0            |     |
| _        | WITH ASTM REQUIREMENTS                                | -              |              |     |
| 3        | CORRECT FASTENERS SELECTED FOR                        | 0              | 0            | A   |
|          | I FNGTH IF THREADS ARE TO BE                          |                |              |     |
|          | EXCLUDED FROM SHEAR PLANE)                            |                |              |     |
| 4        | CORRECT BOLTING PROCEDURE                             | 0              | 0            | A   |
| 5        |   | 0              | 0            |     |
|          | THE APPROPRIATE FAYING SURFACE                        | 0              |              | '   |
|          | CONDITION AND HOLE PREPARATION,                       |                |              |     |
|          | IF SPECIFIED, MEET APPLICABLE                         |                |              |     |
| 6        | PRE-INSTALLATION VERIFICATION                         | Р              | 0            | A   |
|          | TESTING BY INSTALLATION                               |                |              |     |
|          | PERSONNEL OBSERVED AND                                |                |              |     |
|          | ASSEMBLIES AND METHODS USED                           |                |              |     |
| 7        | PROPER STORAGE PROVIDED FOR                           | 0              | 0            | A   |
|          | BOLTS, NUTS, WASHERS, AND OTHER                       |                |              |     |
|          | INSPECTION T  | ASKS DURING BC |              |     |
| 1        | FASTENER ASSEMBLIES, OF SUITABLE                      | 0              | 0            | A   |
|          | CONDITION, PLACED IN ALL HOLES                        |                |              |     |
|          | REQUIRED  |                |              |     |
| 2        | JOINT BROUGHT TO THE SNUG-TIGHT                       | 0              | 0            | A   |
|          | CONDITION PRIOR TO THE PRE-                           |                |              |     |
| 3        | FASTENER COMPONENT NOT TURNED                         | 0              | 0            | A   |
|          | BY THE WRENCH PREVENTED FROM                          |                |              |     |
| <u>A</u> | ROTATING<br>EASTENERS ARE PRE-TENSIONED IN            | 0              | 0            |     |
|          | ACCORDANCE WITH THE RCSC                              | U              | 0            | '   |
|          | SPECIFICATION, PROGRESSING                            |                |              |     |
|          | RIGID POINT TOWARD THE FREE                           |                |              |     |
|          | EDGES   |                |              |     |
|          |   | ASKS AFTER BO  |              |     |
|          | ADDED WITHOUT THE APPROVAL OF                         | P              | P            |     |
|          | THE EOR   |                |              |     |
| INSPEC   | CTION OF STEEL ELEMENTS OF COMPOS                     | TE CONSTRUCT   | ION PRIOR TO | CON |
| 1        | PLACEMENT AND INSTALLATION OF                         | P              | P            |     |
| 2        | PLACEMENT AND INSTALLATION OF                         | Р              | Р            | -   |
|          | STEEL HEADED STUD ANCHORS                             |                |              |     |
| 3        | DUCUMENT ACCEPTANCE OR<br>REJECTION OF STEEL ELEMENTS | P              | P            |     |
| L        |   | 1              | <u> </u>     | 1   |
|          |   |                |              |     |

5.3.1. (O) - OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE ÌNŚPECTIONS

5.3.2. (P) - PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER, EACH BOLTED CONNECTION, OR EACH STEEL ELEMENT

AISC 360 TABLE N5.4-3

![](_page_9_Picture_8.jpeg)

AISC 360 TABLE N5.4-3 AISC 360 TABLE N5.4-3 AISC 360 TABLE N5.4-3

AISC 360 TABLE N5.4-3

AISC 360 TABLE N5.6-1 AISC 360 TABLE N5.6-1 AISC 360 TABLE N5.6-1

AISC 360 TABLE N5.6-1 AISC 360 TABLE N5.6-1

AISC 360 TABLE N5.6-1

AISC 360 TABLE N5.6-1

AISC 360 TABLE N5.6-2

AISC 360 TABLE N5.6-2

AISC 360 TABLE N5.6-2

AISC 360 TABLE N5.6-2

AISC 360 TABLE N5.6-3

ONCRETE PLACEMENT AISC 360 TABLE N6.1

AISC 360 TABLE N6.1 AISC 360 TABLE N6.1 EDGIDEERS® 1060 Fowler Ave, Suite 202 Bozeman, Montana 59718 P: (406) 556-8600 www.dci-engineers.com CIVIL/STRUCTURAL © Copyright D'Amato Conversano Inc. All Rights Reserved This document, and the ideas and designs may not be reused, in whole or in part, without written permission from D'Amato Conversano Inc. D'Amato Conversano Inc. disclaims any responsibility for its unauthorized use.

![](_page_9_Picture_23.jpeg)

CONSTRUCTION DOCUMENTS

![](_page_10_Figure_0.jpeg)

S2.1 FOUNDATION DETAILS

3. ALL FOOTINGS AND SLABS TO BEAR ON COMPETENT NATIVE SOIL AND/OR STRUCTURAL FILL. SUBGRADE PREPARATION, STRUCTURAL FILL, DRAINAGE SYSTEM, AND OTHER REQUIREMENTS PER GEOTECH REPORT AS NOTED IN THE STRUCTURAL GENERAL NOTES.

2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. ALL EXISTING DIMENSIONS SHALL BE FIELD VERIFIED.

1. STRUCTURAL GENERAL NOTES, DESIGN CRITERIA, ABBREVIATIONS AND LEGEND PER S0.1 - S0.5.

FOUNDATION PLAN NOTES:

4. TYPICAL DETAILS PER:

#### FLOOR FRAMING PLAN NOTES:

- 1. STRUCTURAL GENERAL NOTES, DESIGN CRITERIA, ABBREVIATIONS AND LEGEND PER S0.1 S0.5.
- 2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. ALL EXISTING DIMENSIONS SHALL BE FIELD VERIFIED.
- 3. CONCRETE OVER METAL DECK PER PLAN AND STRUCTURAL GENERAL NOTES. METAL DECK SHALL BE 3-SPAN MINIMUM. PROVIDE REINFORCING AS SHOWN IN PLAN AND DETAILS.
- 4. TYPICAL DETAILS PER:
  - S3.1 STEEL DETAILS

## ROOF FRAMING PLAN NOTES:

- SHALL BE FIELD VERIFIED.
- DRAWINGS.
- STRUCTURAL GENERAL NOTES.
- 7. TYPICAL DETAILS PER:

![](_page_10_Figure_20.jpeg)

**STAIR FRAMING PLAN** SCALE: 1/4" = 1'-0" N/

![](_page_10_Picture_22.jpeg)

![](_page_10_Picture_23.jpeg)

DATE

3/10/2025

1. STRUCTURAL GENERAL NOTES, DESIGN CRITERIA, ABBREVIATIONS AND LEGEND PER S0.1 - S0.5. 2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. ALL EXISTING DIMENSIONS

3. ALL DUCTS, CHASES AND PIPES SHALL BE PER MECHANICAL, PLUMBING, ELECTRICAL AND SPRINKLER

4. T/STL=X'-X" INDICATES TOP OF STEEL (T/STL) ELEVATION (T/STL = B/DECK) UNO.

5. METAL DECK PER PLAN AND STRUCTURAL GENERAL NOTES. DECK ATTACHMENT REQUIREMENTS PER

6. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING.

S3.1 STEEL DETAILS

![](_page_10_Figure_32.jpeg)

![](_page_11_Figure_0.jpeg)

## LAP SPLICE AND DEVELOPMENT LENGTH

8. FOR INTERMEDIATE CONCRETE STRENGTHS, USE TABLE FOR CLOSEST LOWER VALUE OF f'c

7. LAP SPLICE OF DIFFERENT GRADES OF REINFORCING TO BE THE LARGER OF Ld OF THE HIGHER GRADE BAR OR SPLICE LENGTH OF THE LOWER GRADE BAR.

OF THE SMALLER BAR.

6. LAP SPLICE OF DIFFERENT SIZED BARS TO BE THE LARGER OF Ld OF THE LARGER BAR OR SPLICE LENGTH

5. TOP BAR = HORIZONTAL BAR WITH MORE THAN 12" OF FRESH CONCRETE BELOW OR AS NOTED ON DOCUMENTS AS "TOP BAR".

4. Ldh = DEVELOPMENT LENGTH OF BAR WITH STANDARD HOOK.

3. DEVELOP ALL REINFORCING IN STRUCTURAL SLABS WITH MINIMUM DEVELOPMENT LENGTH Ld.

CLEAR COVER > db AND MINIMUM STIRRUPS OR TIES THROUGHOUT Ld OR CLEAR SPACING > 2db AND CLEAR COVER > db.

2. VALUES FOR UNCOATED REINFORCING AND NORMAL WEIGHT CONCRETE WITH CLEAR SPACING > db,

NOTES: 1. ALL TABULATED VALUES ARE IN INCHES.

| 01403B     |       | GRADE 60 R        | EINFOF     | RCING                 |                | 01403B     |       | GRADE 60 RI       | EINFOF     | INFORCING             |               |  |  |
|------------|-------|-------------------|------------|-----------------------|----------------|------------|-------|-------------------|------------|-----------------------|---------------|--|--|
| BAR        | MISCE | ELLANEOUS<br>BARS | TC<br>(see | )P BARS<br>e note #3) | HOOKED<br>BARS | BAR        | MISCE | ELLANEOUS<br>BARS | TC<br>(see | )P BARS<br>e note #5) | HOOKE<br>BARS |  |  |
| SIZE       | Ld    | Splice            | Ld         | Splice                | Ldh            | SIZE       | Ld    | Splice            | Ld         | Splice                | Ldh           |  |  |
| f'c = 3000 | )psi  |                   |            |                       |                | f'c = 4000 | psi   |                   |            |                       |               |  |  |
| #3         | 17    | 22                | 22         | 28                    | 9              | #3         | 15    | 19                | 19         | 25                    | 8             |  |  |
| #4         | 22    | 29                | 29         | 38                    | 11             | #4         | 19    | 25                | 25         | 33                    | 10            |  |  |
| #5         | 28    | 36                | 36         | 47                    | 14             | #5         | 24    | 31                | 31         | 41                    | 12            |  |  |
| #6         | 33    | 43                | 43         | 56                    | 17             | #6         | 29    | 37                | 37         | 49                    | 15            |  |  |
| #7         | 48    | 63                | 63         | 81                    | 20             | #7         | 42    | 54                | 54         | 71                    | 17            |  |  |
| #8         | 55    | 72                | 72         | 93                    | 22             | #8         | 48    | 62                | 62         | 81                    | 19            |  |  |
| #9         | 62    | 81                | 81         | 105                   | 25             | #9         | 54    | 70                | 70         | 91                    | 22            |  |  |
| #10        | 70    | 91                | 91         | 118                   | 28             | #10        | 61    | 79                | 79         | 102                   | 25            |  |  |

TIES AND CROSSTIES FOR SHEAR WALL BOUNDARY ELEMENTS SHALL BE DETAILED AS COLUMN TIES/CROSSTIES. 2 (03400)

NOTE:

![](_page_11_Figure_15.jpeg)

![](_page_11_Figure_16.jpeg)

![](_page_11_Figure_17.jpeg)

![](_page_11_Figure_18.jpeg)

![](_page_11_Picture_19.jpeg)

1060 Fowler Ave, Suite 202

Bozeman, Montana 59718

![](_page_12_Figure_0.jpeg)

![](_page_12_Figure_1.jpeg)

![](_page_12_Figure_5.jpeg)

![](_page_13_Figure_0.jpeg)

**ENLARGED CANOPY PLAN** A1.0 1/4" = 1'-0"

DOWNLIGHT BASIS-OF-DESIGN:

WF6 Series WF6 6" wafer-thin LED downlight

METAL DOWN SPOUT -LITHONIA LIGHTING; WF6, 6" WAFER-THIN LED DOWNLIGHT NEW LIGHT FIXTURE, TYPICAL OF (4). CONNECT NEW DOWNLIGHT TO NEAREST CCT/W/Lumens<sup>1</sup> CRI Finish Lamp 90CRI 90CRI UNSWITCHED LIGHTING 27K30K35K 2700K/14W/1040L MW Matte White LED LED MB Matte Black CIRCUIT. PROVIDE (3) #12 CU. 3000K/14W/1150L CONDUCTORS IN 3/4" CONDUIT BN Brush Nickel 3500K/14W/1110L AS NECESSARY. ROUTE 30K40K50K 3000K/14W/1090L ORB Oil Rubbed Bronze WIRING THROUGH BUILDING 4000K/14W/1190L MOUNTED PHOTOCELL FOR 5000K/14W/1120L CONTROL -

NORTH

![](_page_13_Picture_5.jpeg)

![](_page_13_Picture_6.jpeg)

![](_page_14_Figure_0.jpeg)

![](_page_14_Figure_1.jpeg)

A1.1 1" = 1'-0"

![](_page_14_Figure_2.jpeg)

![](_page_15_Figure_0.jpeg)

A1.2 / 1 1/2" = 1'-0"

![](_page_15_Picture_3.jpeg)

RELOCATE

EXISTING

LANDSCAPE CURB EXISTING BOULDER

![](_page_16_Picture_5.jpeg)

![](_page_16_Figure_6.jpeg)

## LANDSCAPE PLAN

LANDSCAPING LEGEND

ALL WORK DESCRIBED ON THIS SHEET IS BASE BID SCOPE UNLESS SPECIFICALLY NOTED OTHERWISE

**NA** RSITY

![](_page_17_Figure_0.jpeg)

WEST ELEVATION A2.1 1/4" = 1'-0"

#### GENERAL NEW CONSTRUCTION KEY NOTES

- (1) REMOVE EXISTING CONCRETE APRON IN ITS ENTIRETY. CLEAN SURFACE OF STONE FOUNDATION OF ALL REMAINING CONCRETE DEBRIS. REPOINT ALL MASONRY JOINTS IN THIS AREA.
- (2) PROVIDE BACKER ROD AND SEALANT AROUND PIPE PENETRATION
- (3) VERIFY STL ANGLE EXISTS IF NOT, PROVIDE STEEL LINTEL WITH AT LEAST 4" OF BEARING
- (4) NEW PRE-FINISHED 6" HALF ROUND METAL GUTTER
- (5) NEW PRE-FINISHED 4" DIA METAL DOWN SPOUT. PROVIDE WITH PRE-CAST CONC. SPLASH BLOCK
- INSTALL BACKER ROD AND SEALANT ALONG JOINT (6) BETWEEN ORIGINAL BUILDING AND ADDITION
- MAINTAIN GHOSTING OUTLINE OF PREVIOUS BUILDING ELEMENT 7
- 8 REMOVE EXISTING FIRE SPRINKLER HEAD AS REQUIRED. REPLACE DAMAGED BRICK UNITS. ASSUME (3) BRICKS
- 9 REMOVE PAINT SPLATTER FROM BRICK. SEE PHOTO 12/A2.1a

| BRICK REP | INE   | NRKS,<br>КЕҮ |               |
|-----------|---|--------------|---------------|
| CODE      | DESCRIPTION OF WORK   | AREA<br>OUTL | REMA<br>SEE K |
| B1-#      | REPLACE BRICK UNITS DAMAGED BY<br>EXISTING FASTENERS. REMOVE ANY<br>ANCHORS THAT MAY STILL EXIST        |              | 1,3,4         |
| B2-#      | REPLACE SPALLED / DAMAGED / MISSING BRICK<br>UNIT. (ASSUME STRETCHER COURSE U.N.O.)                     |              | 1,3,4         |
| B3-#      | REPLACE SPALLED / DAMAGED / MISSING BRICK<br>@ WINDOW ARCH  |              | 1,3,4         |
| B4-# SF   | REBUILD OUTER WYTHE OF WALL WITH<br>MATCHING BRICK  |              | 2,5,8         |
| B6-#      | REMOVE WOOD BOARD AND ITS FASTENERS.<br>REPLACE BRICK UNITS DAMAGE BY FASTENERS.                        |              | 1,3,4         |
| B8-# SF   | REBUILD WITH EXISTING BRICK.  |              | 2,8           |
| B8-ARC    | REBUILD BRICK ARCH WITH EXISTING BRICK.<br>RE-CAULK JOINT BETWEEN THE INTRADOS AND<br>WINDOW HEAD       |              | 8             |
| B8-BC     | REBUILD BELT COURSE WITH EXISTING BRICK.  |              | 8             |
| B9-# SF   | REMOVE EXISTING CONCRETE FROM STONE<br>MASONRY  |              | 2             |
|           |   |              |               |
| REPOINTIN | G KEY NOTES   | LINE         | ARKS,<br>KEY  |
| CODE      | DESCRIPTION OF WORK   | ARE/<br>OUTI | REM.<br>SEE   |
| REP-# SF  | REPOINT MORTAR JOINTS   |              | 2,6           |
| REP-ARC   | REPOINT ALL MORTAR JOINTS ALONG<br>BRICK ARCH INCLUDING JOINTS ALONG<br>THE INTRADOS AND SKYWARD JOINTS |              | 6,7           |

| SIDING, SO | FFIT AND FASCIA REPAIR KEY NOTES | INE          | RKS,<br>ŒY    |
|------------|----------------------------------|--------------|---------------|
| CODE       | DESCRIPTION OF WORK              | AREA<br>OUTL | REMA<br>SEE K |
| P-S        | RE-PAINT EXISTING SIDING         |              |               |
| P-SO       | RE-PAINT EXISTING SOFFIT         |              |               |
| P-F        | RE-PAINT EXISTING FASCIA         |              |               |
| P-T        | RE-PAINT EXISTING TRIM WORK      |              |               |

REPOINT MORTAR JOINTS ALONG BELT COURSE

INCLUDING ALL SKYWARD JOINTS

REP-BC#

6.7

1 # INDICATES NUMBER OF BRICK UNITS IN NEED OF REPLACEMENT.

- 2 # INDICATES SQUARE FOOTAGE OF INTENDED WORK
- CONTRACTOR OPTION TO TURN BRICK AROUND IF BACKSIDE IS IN 3 GOOD CONDITION.
- ASSUME ALL JOINTS SURROUNDING REPLACED BRICK UNITS WILL BE 4 REPOINTED
- SALVAGE AS MANY REUSABLE BRICK UNITS AS POSSIBLE TO BE 5 INCORPORATED INTO THE RE-BUILT AREA
- REFER TO TYPICAL REPOINTING DETAIL ON A2.5 6
- SKYWARD JOINTS ARE TO RECEIVE POLYURETHANE SEALANT, REFER TO SKYWARD JOINT REPOINTING DETAIL ON A2.5.
- THE CONTRACTOR IS RESPONSIBLE FOR ADEQUATELY SUPPORTING 8 MASONRY ABOVE ANY PORTIONS THAT ARE TO BE REBUILT.

|                        | MSU-CPDC<br>Montana state university<br>Bozeman, montana<br>Phone: 406.994.5413<br>FAX: 406.994.5665 |
|------------------------|--|
| CONSTRUCTION DOCUMENTS | TAYLOR HALL MASONRY AND<br>ENTRY IMPROVEMENTS<br>MONTANA STATE UNIVERSITY                            |
| 100% CC                | THINK  |
|                        | DRAWN BY: Author<br>REVIEWED BYChecker<br>REV. DESCRIPTION DATE                                      |
|                        |  |
|                        | WILLIAM A.<br>HANSON<br>1898<br>MONTANA $1000 TANA$  |
|                        | PPA#22-0522<br>A/E#00-0-00   |
|                        | CONSULTANT #2308   |
|                        | EXTERIOR<br>ELEVATION - W  |
|                        |  |
|                        | AZ.1<br>DATE   |

03/10/25

![](_page_18_Picture_0.jpeg)

![](_page_18_Picture_1.jpeg)

![](_page_18_Picture_2.jpeg)

![](_page_18_Picture_3.jpeg)

15

![](_page_18_Picture_4.jpeg)

16 WEST DETAIL PHOTO 16 A2.1a

![](_page_18_Picture_6.jpeg)

![](_page_18_Picture_7.jpeg)

![](_page_18_Picture_8.jpeg)

13 WEST DETAIL PHOTO 13

A2.1a

![](_page_18_Picture_10.jpeg)

9 \

\A2.1a/

ALL WORK DESCRIBED ON THIS SHEET IS ALTERNATE #1 UNLESS SPECIFICALLY NOTED OTHERWISE

![](_page_18_Picture_12.jpeg)

**WEST DETAIL PHOTO 8** A2.1a

![](_page_18_Picture_14.jpeg)

WEST ELEVATION PHOTO A2.1a

![](_page_18_Picture_16.jpeg)

WEST DETAIL PHOTO 9

![](_page_18_Picture_18.jpeg)

10 WEST DETAIL PHOTO 10

![](_page_18_Picture_20.jpeg)

WEST DETAIL PHOTO 6 A2.1a

![](_page_18_Picture_22.jpeg)

7 WEST DETAIL PHOTO 7

![](_page_18_Picture_24.jpeg)

WEST DETAIL PHOTO 4 4 A2.1a

![](_page_18_Picture_26.jpeg)

WEST DETAIL PHOTO 5 5 A2.1a

![](_page_18_Picture_30.jpeg)

WEST DETAIL PHOTO 2 2 A2.1a

![](_page_18_Picture_32.jpeg)

3 WEST DETAIL PHOTO 3

![](_page_18_Picture_34.jpeg)

![](_page_19_Picture_0.jpeg)

| 1 RI<br>EI<br>O   | NEW CONSTRUCTION KEY NOTES<br>EMOVE EXISTING CONCRETE APRON IN ITS<br>NTIRETY. CLEAN SURFACE OF STONE FOUNDATION<br>F ALL REMAINING CONCRETE DEBRIS. REPOINT ALL  |              |               |             | <b>ANA</b><br>ERSITY   |
|---|---|--------------|---------------|-------------|--|
| (2) PI  | ASONRY JOINTS IN THIS AREA.<br>ROVIDE BACKER ROD AND SEALANT AROUND PIPE  |              |               |             |  |
| (3) VI  | ENETRATION<br>ERIFY STL ANGLE EXISTS IF NOT, PROVIDE STEEL  |              |               |             |  |
|   | NTEL WITH AT LEAST 4" OF BEARING  |              |               |             |  |
| (4) NI<br>(5) NI  | EW PRE-FINISHED 4" DIA METAL DOWN SPOUT.  |              |               |             | N N  |
| 6 IN  | ROVIDE WITH PRE-CAST CONC. SPLASH BLOCK   |              |               |             | OF THE ST  |
| (7) M   | AINTAIN GHOSTING OUTLINE OF PREVIOUS  |              |               |             |  |
| (8) Ri<br>Ri<br>Ai  | EMOVE EXISTING FIRE SPRINKLER HEAD AS<br>EQUIRED. REPLACE DAMAGED BRICK UNITS.<br>SSUME (3) BRICKS  |              |               |             | TANK TRANSPORT   |
| (9) RI  | EMOVE PAINT SPLATTER FROM BRICK. SEE PHOTO 1  | 2/A2.1a      |               |             |  |
| BRICK REP   | AIR KEY NOTES   | UN<br>UN     | ARKS,<br>KEY  |             | MSU-CPDC<br>Montana state university   |
| CODE  | DESCRIPTION OF WORK   | ARE/<br>OUTI | REM/<br>SEE I |             | BOZEMAN, MONTANA<br>PHONE: 406.994.5413<br>FAX: 406.994.5665   |
| B1-#  | REPLACE BRICK UNITS DAMAGED BY<br>EXISTING FASTENERS. REMOVE ANY<br>ANCHORS THAT MAY STILL EXIST  |              | 1,3,4         |             | <b>A</b>   |
| B2-#  | REPLACE SPALLED / DAMAGED / MISSING BRICK<br>UNIT. (ASSUME STRETCHER COURSE U.N.O.)   |              | 1,3,4         |             | <b>TS</b>  |
| B3-#  | REPLACE SPALLED / DAMAGED / MISSING BRICK<br>@ WINDOW ARCH  |              | 1,3,4         |             | SIT SIT  |
| B4-# SF   | REBUILD OUTER WYTHE OF WALL WITH<br>MATCHING BRICK  |              | 2,5,8         |             | NER ME   |
| B6-#  | REMOVE WOOD BOARD AND ITS FASTENERS.<br>REPLACE BRICK UNITS DAMAGE BY FASTENERS.  |              | 1,3,4         |             | VEJ<br>NI  |
| B8-# SF   | REBUILD WITH EXISTING BRICK.  |              | 2,8           | S           | MA<br>NO   |
| B8-ARC  | REBUILD BRICK ARCH WITH EXISTING BRICK.<br>RE-CAULK JOINT BETWEEN THE INTRADOS AND<br>WINDOW HEAD   |              | 8             | MENT        | IPR<br>IPR   |
| B8-BC   | REBUILD BELT COURSE WITH EXISTING BRICK.  |              | 8             | SCUL        | IAI<br>VIN<br>VA S   |
| B9-# SF   | REMOVE EXISTING CONCRETE FROM STONE<br>MASONRY  |              | 2             | N<br>N<br>D | R F.   |
| REPOINTIN   | IG KEY NOTES  | ШZ           | RKS,<br>EY    | CTIC        |  |
| CODE  | DESCRIPTION OF WORK   | AREA<br>OUTL | REMA<br>SEE K | TRU         | E.   |
| REP-# SF  | REPOINT MORTAR JOINTS   |              | 2,6           | SNC         | L  |
| REP-ARC   | REPOINT ALL MORTAR JOINTS ALONG<br>BRICK ARCH INCLUDING JOINTS ALONG<br>THE INTRADOS AND SKYWARD JOINTS   |              | 6,7           | 0% C(       |  |
| REP-BC#   | REPOINT MORTAR JOINTS ALONG BELT COURSE<br>INCLUDING ALL SKYWARD JOINTS   |              | 6,7           | 10          | THINKONE   |
| SIDING, SO  | OFFIT AND FASCIA REPAIR KEY NOTES   | ШZ           | RKS,<br>EY    |             |  |
|   | DESCRIPTION OF WORK   |              | ₹ x           |             |  |
| CODE  |   | ARI          | SEE           |             |  |
| CODE<br>P-S   | RE-PAINT EXISTING SIDING  | AR           | RER           |             | DRAWN BY: <b>Author</b><br>REVIEWED BY <b>Checker</b>  |
| CODE<br>P-S<br>P-SO   | RE-PAINT EXISTING SIDING<br>RE-PAINT EXISTING SOFFIT  | AR           | S E E         |             | DRAWN BY: Author<br>REVIEWED BYChecker<br>REV. DESCRIPTION DATE  |
| CODE<br>P-S<br>P-SO<br>P-F  | RE-PAINT EXISTING SIDING<br>RE-PAINT EXISTING SOFFIT<br>RE-PAINT EXISTING FASCIA  | ARI          | RER           |             | DRAWN BY: Author<br>REVIEWED BYChecker<br>REV. DESCRIPTION DATE  |
| CODE<br>P-S<br>P-SO<br>P-F<br>P-T   | RE-PAINT EXISTING SIDING<br>RE-PAINT EXISTING SOFFIT<br>RE-PAINT EXISTING FASCIA<br>RE-PAINT EXISTING TRIM WORK   | ARI          |               |             | DRAWN BY: Author<br>REVIEWED BYChecker<br>REV. DESCRIPTION DATE  |
| CODE<br>P-S<br>P-SO<br>P-F<br>P-T<br>1 # INE<br>2 # INE<br>3 CON<br>GOC<br>4 ASSI<br>7 SALV<br>1NCC<br>3 REFE<br>7 SKYV<br>REFE<br>3 THE<br>3 THE | RE-PAINT EXISTING SIDING<br>RE-PAINT EXISTING SOFFIT<br>RE-PAINT EXISTING FASCIA<br>RE-PAINT EXISTING FASCIA<br>DICATES NUMBER OF BRICK UNITS IN NEED OF REPLA<br>DICATES SQUARE FOOTAGE OF INTENDED WORK<br>DICATES |              | T.<br>BE      |             | DRAWN BY: Author<br>REVIEWED BYChecker<br>REV. DESCRIPTION DATE<br>DESCRIPTION DATE<br>DESCR |

DATE

03/10/25

![](_page_20_Picture_0.jpeg)

![](_page_20_Picture_1.jpeg)

![](_page_20_Picture_2.jpeg)

14 NORTH DETAIL PHOTO 14 A2.2a

![](_page_20_Picture_4.jpeg)

![](_page_20_Picture_5.jpeg)

12 NORTH DETAIL PHOTO 12 A2.2a

![](_page_20_Picture_7.jpeg)

ALL WORK DESCRIBED ON THIS SHEET IS ALTERNATE #1 UNLESS SPECIFICALLY NOTED OTHERWISE

![](_page_20_Picture_9.jpeg)

**NORTH DETAIL PHOTO 8** 

![](_page_20_Picture_11.jpeg)

**NORTH ELEVATION PHOTO** A2.2a

![](_page_20_Picture_13.jpeg)

<sup>9</sup> NORTH DETAIL PHOTO 9

![](_page_20_Picture_15.jpeg)

10 NORTH DETAIL PHOTO 10

![](_page_20_Picture_17.jpeg)

6 NORTH DETAIL PHOTO 6 A2.2a

![](_page_20_Picture_19.jpeg)

NORTH DETAIL PHOTO 7 7 A2.2a

![](_page_20_Picture_21.jpeg)

4 NORTH DETAIL PHOTO 4 A2.2a 1 1/2" = 1'-0"

![](_page_20_Picture_23.jpeg)

5 NORTH DETAIL PHOTO 5

NORTH DETAIL PHOTO 2 A2.2a/

![](_page_20_Picture_28.jpeg)

3 NORTH DETAIL PHOTO 3

![](_page_20_Picture_30.jpeg)

![](_page_21_Figure_0.jpeg)

![](_page_21_Picture_1.jpeg)

| THIS   |   |
|--------|---|
| NLESS  |   |
| ERWISE | - |

-

-

 $- \bullet$ 

#### GENERAL NEW CONSTRUCTION KEY NOTES

- REMOVE EXISTING CONCRETE APRON IN ITS (1) ENTIRETY. CLEAN SURFACE OF STONE FOUNDATION OF ALL REMAINING CONCRETE DEBRIS. REPOINT ALL MASONRY JOINTS IN THIS AREA.
- (2) PROVIDE BACKER ROD AND SEALANT AROUND PIPE PENETRATION
- VERIFY STL ANGLE EXISTS IF NOT, PROVIDE STEEL LINTEL WITH AT LEAST 4" OF BEARING (3)
- (4) NEW PRE-FINISHED 6" HALF ROUND METAL GUTTER
- (5) NEW PRE-FINISHED 4" DIA METAL DOWN SPOUT. PROVIDE WITH PRE-CAST CONC. SPLASH BLOCK
- (6) INSTALL BACKER ROD AND SEALANT ALONG JOINT BETWEEN ORIGINAL BUILDING AND ADDITION
- (7) MAINTAIN GHOSTING OUTLINE OF PREVIOUS BUILDING ELEMENT
- (8) REMOVE EXISTING FIRE SPRINKLER HEAD AS REQUIRED. REPLACE DAMAGED BRICK UNITS. ASSUME (3) BRICKS
- REMOVE PAINT SPLATTER FROM BRICK. SEE PHOTO 12/A2.1a (9)

| BRICK REP   | AIR KEY NOTES  | LINE                                    | 1ARKS<br>KFY   |
|---|--|---|--|
| CODE  | DESCRIPTION OF WORK  | ARE<br>OUT                              | REN<br>SFEN  |
| B1-#  | REPLACE BRICK UNITS DAMAGED BY<br>EXISTING FASTENERS. REMOVE ANY<br>ANCHORS THAT MAY STILL EXIST   |   | 1,3,4  |
| B2-#  | REPLACE SPALLED / DAMAGED / MISSING BRICK<br>UNIT. (ASSUME STRETCHER COURSE U.N.O.)  |   | 1,3,4  |
| B3-#  | REPLACE SPALLED / DAMAGED / MISSING BRICK<br>@ WINDOW ARCH   |   | 1,3,4  |
| B4-# SF   | REBUILD OUTER WYTHE OF WALL WITH<br>MATCHING BRICK   |   | 2,5,8  |
| B6-#  | REMOVE WOOD BOARD AND ITS FASTENERS.<br>REPLACE BRICK UNITS DAMAGE BY FASTENERS.   |   | 1,3,4  |
| B8-# SF   | REBUILD WITH EXISTING BRICK.   |   | 2,8  |
| B8-ARC  | REBUILD BRICK ARCH WITH EXISTING BRICK.<br>RE-CAULK JOINT BETWEEN THE INTRADOS AND<br>WINDOW HEAD  |   | 8  |
| B8-BC   | REBUILD BELT COURSE WITH EXISTING BRICK.   |   | 8  |
|   |  |   |  |
| B9-# SF   | REMOVE EXISTING CONCRETE FROM STONE<br>MASONRY   |   | 2  |
| B9-# SF   | REMOVE EXISTING CONCRETE FROM STONE<br>MASONRY<br>G KEY NOTES  | INE                                     | RKS,   |
| B9-# SF<br>REPOINTIN  | REMOVE EXISTING CONCRETE FROM STONE<br>MASONRY<br>G KEY NOTES<br>DESCRIPTION OF WORK   | AREA<br>OUTLINE                         | REMARKS,<br>SFF KFY  |
| B9-# SF<br>REPOINTIN<br>CODE<br>REP-# SF                    | REMOVE EXISTING CONCRETE FROM STONE<br>MASONRY<br>G KEY NOTES<br>DESCRIPTION OF WORK<br>REPOINT MORTAR JOINTS  | AREA<br>OUTLINE                         | 2<br>SEMARKS,<br>SFF KFY<br>5''  |
| B9-# SF<br>REPOINTIN<br>CODE<br>REP-# SF<br>REP-ARC         | REMOVE EXISTING CONCRETE FROM STONE<br>MASONRY<br>G KEY NOTES<br>DESCRIPTION OF WORK<br>REPOINT MORTAR JOINTS<br>REPOINT ALL MORTAR JOINTS ALONG<br>BRICK ARCH INCLUDING JOINTS ALONG<br>THE INTRADOS AND SKYWARD JOINTS   | AREA<br>OUTLINE                         | 2<br>SEE KEX<br>2,6<br>6,7   |
| B9-# SF REPOINTIN REP-# SF REP-ARC REP-BC#                  | REMOVE EXISTING CONCRETE FROM STONE<br>MASONRY<br>G KEY NOTES<br>DESCRIPTION OF WORK<br>REPOINT MORTAR JOINTS<br>REPOINT ALL MORTAR JOINTS ALONG<br>BRICK ARCH INCLUDING JOINTS ALONG<br>THE INTRADOS AND SKYWARD JOINTS<br>REPOINT MORTAR JOINTS ALONG BELT COURSE<br>INCLUDING ALL SKYWARD JOINTS  | AREA<br>OUTLINE                         | 2<br>SHARKS<br>2,6<br>6,7<br>6,7   |
| B9-# SF REPOINTIN REP-# SF REP-ARC REP-BC#                  | REMOVE EXISTING CONCRETE FROM STONE<br>MASONRY<br>G KEY NOTES<br>DESCRIPTION OF WORK<br>REPOINT MORTAR JOINTS<br>REPOINT ALL MORTAR JOINTS ALONG<br>BRICK ARCH INCLUDING JOINTS ALONG<br>THE INTRADOS AND SKYWARD JOINTS<br>REPOINT MORTAR JOINTS ALONG BELT COURSE<br>INCLUDING ALL SKYWARD JOINTS  | AREA<br>OUTLINE                         | 2<br>SHARKS<br>2,6<br>6,7<br>6,7   |
| B9-# SF REPOINTIN REP-# SF REP-ARC REP-BC# SIDING, SO       | REMOVE EXISTING CONCRETE FROM STONE<br>MASONRY<br>G KEY NOTES<br>DESCRIPTION OF WORK<br>REPOINT MORTAR JOINTS<br>REPOINT ALL MORTAR JOINTS ALONG<br>BRICK ARCH INCLUDING JOINTS ALONG<br>THE INTRADOS AND SKYWARD JOINTS<br>REPOINT MORTAR JOINTS ALONG BELT COURSE<br>INCLUDING ALL SKYWARD JOINTS<br>FFIT AND FASCIA REPAIR KEY NOTES  | ITLINE AREA OUTLINE                     | 2<br>WARKS, 2,6<br>6,7<br>6,7<br>6,7<br>6,7<br>6,7   |
| B9-# SF REPOINTIN REP-# SF REP-ARC REP-BC# SIDING, SO CODE  | REMOVE EXISTING CONCRETE FROM STONE<br>MASONRY<br>G KEY NOTES<br>DESCRIPTION OF WORK<br>REPOINT MORTAR JOINTS<br>REPOINT ALL MORTAR JOINTS ALONG<br>BRICK ARCH INCLUDING JOINTS ALONG<br>THE INTRADOS AND SKYWARD JOINTS<br>REPOINT MORTAR JOINTS ALONG BELT COURSE<br>INCLUDING ALL SKYWARD JOINTS<br>FFIT AND FASCIA REPAIR KEY NOTES<br>DESCRIPTION OF WORK                             | AREA<br>OUTLINE AREA<br>OUTLINE OUTLINE | REMARKS, SFF KFY SF KFY FF KFY |
| B9-# SF REPOINTIN CODE REP-# SF REP-ARC SIDING, SO CODE P-S | REMOVE EXISTING CONCRETE FROM STONE<br>MASONRY<br>G KEY NOTES<br>DESCRIPTION OF WORK<br>REPOINT MORTAR JOINTS<br>REPOINT ALL MORTAR JOINTS ALONG<br>BRICK ARCH INCLUDING JOINTS ALONG<br>THE INTRADOS AND SKYWARD JOINTS<br>REPOINT MORTAR JOINTS ALONG BELT COURSE<br>INCLUDING ALL SKYWARD JOINTS<br>FFIT AND FASCIA REPAIR KEY NOTES<br>DESCRIPTION OF WORK<br>RE-PAINT EXISTING SIDING | AREA<br>OUTLINE AREA<br>OUTLINE OUTLINE | 2<br>KEMARKS,<br>SFF KFY<br>2'6<br>2'6<br>2'6<br>2'6<br>2'6<br>2'6<br>2'6<br>2'6<br>2'6<br>2'6   |

| SIDING, SO | FFIT AND FASCIA REPAIR KEY NOTES | Ш<br>N       |
|------------|----------------------------------|--------------|
| CODE       | DESCRIPTION OF WORK              | AREA<br>OUTL |
| P-S        | RE-PAINT EXISTING SIDING         |              |
| P-SO       | RE-PAINT EXISTING SOFFIT         |              |
| P-F        | RE-PAINT EXISTING FASCIA         |              |
| P-T        | RE-PAINT EXISTING TRIM WORK      |              |

# INDICATES NUMBER OF BRICK UNITS IN NEED OF REPLACEMENT. 1

- # INDICATES SQUARE FOOTAGE OF INTENDED WORK 2
- CONTRACTOR OPTION TO TURN BRICK AROUND IF BACKSIDE IS IN GOOD CONDITION. 3
- ASSUME ALL JOINTS SURROUNDING REPLACED BRICK UNITS WILL BE 4 REPOINTED
- SALVAGE AS MANY REUSABLE BRICK UNITS AS POSSIBLE TO BE INCORPORATED INTO THE RE-BUILT AREA
- REFER TO TYPICAL REPOINTING DETAIL ON A2.5 6
- SKYWARD JOINTS ARE TO RECEIVE POLYURETHANE SEALANT, REFER TO SKYWARD JOINT REPOINTING DETAIL ON A2.5.
- THE CONTRACTOR IS RESPONSIBLE FOR ADEQUATELY SUPPORTING MASONRY ABOVE ANY PORTIONS THAT ARE TO BE REBUILT.

![](_page_21_Picture_23.jpeg)

DATE 03/10/25

![](_page_22_Picture_0.jpeg)

12 EAST DETAIL PHOTO 12 A2.3a 1 1/2" = 1'-0"

![](_page_22_Picture_2.jpeg)

![](_page_22_Picture_3.jpeg)

14 EAST DETAIL PHOTO 14 A2.3a 1 1/2" = 1'-0"

![](_page_22_Picture_5.jpeg)

<sup>9</sup> EAST DETAIL PHOTO 9 A2.3a 1 1/2" = 1'-0"

![](_page_22_Picture_7.jpeg)

10 EAST DETAIL PHOTO 10 A2.3a 1 1/2" = 1'-0"

![](_page_22_Picture_9.jpeg)

11 **EAST DETAIL PHOTO 11** A2.3a 1 1/2" = 1'-0"

![](_page_22_Picture_11.jpeg)

![](_page_22_Picture_12.jpeg)

![](_page_22_Picture_13.jpeg)

![](_page_22_Picture_14.jpeg)

and the second s

![](_page_22_Picture_16.jpeg)

5 **EAST DETAIL PHOTO 5** A2.3a 1 1/2" = 1'-0"

![](_page_22_Picture_18.jpeg)

![](_page_22_Picture_19.jpeg)

![](_page_22_Picture_20.jpeg)

![](_page_22_Picture_21.jpeg)

![](_page_22_Picture_22.jpeg)

![](_page_22_Picture_23.jpeg)

hill

Property

![](_page_22_Picture_24.jpeg)

A2.3a A2.3a 11 A2.3a

Kupper

ALL WORK DESCRIBED ON THIS SHEET IS ALTERNATE #1 UNLESS SPECIFICALLY NOTED OTHERWISE

![](_page_22_Picture_27.jpeg)

![](_page_22_Picture_29.jpeg)

3 EAST DETAIL PHOTO 3 A2.3a) 1 1/2" = 1'-0"

![](_page_22_Picture_31.jpeg)

![](_page_23_Figure_0.jpeg)

ALL WORK DESCRIBED ON THIS SHEET IS ALTERNATE #1 UNLESS SPECIFICALLY NOTED OTHERWISE

#### **GENERAL NEW CONSTRUCTION KEY NOTES**

- REMOVE EXISTING CONCRETE APRON IN ITS ENTIRETY. CLEAN SURFACE OF STONE FOUNDATION OF ALL REMAINING CONCRETE DEBRIS. REPOINT ALL MASONRY JOINTS IN THIS AREA.
- (2) PROVIDE BACKER ROD AND SEALANT AROUND PIPE PENETRATION
- VERIFY STL ANGLE EXISTS IF NOT, PROVIDE STEEL (3) LINTEL WITH AT LEAST 4" OF BEARING
- NEW PRE-FINISHED 6" HALF ROUND METAL GUTTER
- NEW PRE-FINISHED 4" DIA METAL DOWN SPOUT. PROVIDE WITH PRE-CAST CONC. SPLASH BLOCK
- INSTALL BACKER ROD AND SEALANT ALONG JOINT 6 BETWEEN ORIGINAL BUILDING AND ADDITION
- (7) MAINTAIN GHOSTING OUTLINE OF PREVIOUS BUILDING ELEMENT
- REMOVE EXISTING FIRE SPRINKLER HEAD AS (8) REQUIRED. REPLACE DAMAGED BRICK UNITS. ASSUME (3) BRICKS
- (9) REMOVE PAINT SPLATTER FROM BRICK. SEE PHOTO 12/A2.1a

| BRICK REP. | AIR KEY NOTES   | ШZ           | RKS,          |
|------------|---|--------------|---------------|
| CODE       | DESCRIPTION OF WORK   | AREA<br>OUTL | REMA<br>SFF K |
| B1-#       | REPLACE BRICK UNITS DAMAGED BY<br>EXISTING FASTENERS. REMOVE ANY<br>ANCHORS THAT MAY STILL EXIST  |              | 1,3,4         |
| B2-#       | REPLACE SPALLED / DAMAGED / MISSING BRICK<br>UNIT. (ASSUME STRETCHER COURSE U.N.O.)               |              | 1,3,4         |
| B3-#       | REPLACE SPALLED / DAMAGED / MISSING BRICK<br>@ WINDOW ARCH  |              | 1,3,4         |
| B4-# SF    | REBUILD OUTER WYTHE OF WALL WITH<br>MATCHING BRICK  |              | 2,5,8         |
| B6-#       | REMOVE WOOD BOARD AND ITS FASTENERS.<br>REPLACE BRICK UNITS DAMAGE BY FASTENERS.                  |              | 1,3,4         |
| B8-# SF    | REBUILD WITH EXISTING BRICK.  |              | 2,8           |
| B8-ARC     | REBUILD BRICK ARCH WITH EXISTING BRICK.<br>RE-CAULK JOINT BETWEEN THE INTRADOS AND<br>WINDOW HEAD |              | 8             |
| B8-BC      | REBUILD BELT COURSE WITH EXISTING BRICK.  |              | 8             |
| B9-# SF    | REMOVE EXISTING CONCRETE FROM STONE<br>MASONRY  |              | 2             |
|            |   | ,            |               |
| REPOINTIN  | G KEY NOTES   | ШЦ           | \RKS,<br>EV   |
|            |   |              | E1 Y          |

|          |   |              | L L L |
|----------|---|--------------|-------|
| CODE     | DESCRIPTION OF WORK   | AREA<br>OUTL | REMA  |
| REP-# SF | REPOINT MORTAR JOINTS   |              | 2,6   |
| REP-ARC  | REPOINT ALL MORTAR JOINTS ALONG<br>BRICK ARCH INCLUDING JOINTS ALONG<br>THE INTRADOS AND SKYWARD JOINTS |              | 6,7   |
| REP-BC#  | REPOINT MORTAR JOINTS ALONG BELT COURSE   |              | 6,7   |

| SIDING, SOFFIT AND FASCIA REPAIR KEY NOTES |                             |                      | RKS,<br>FV |
|--|-----------------------------|----------------------|------------|
| CODE                                       | DESCRIPTION OF WORK         | AREA<br>OUTL<br>REMA |            |
| P-S  | RE-PAINT EXISTING SIDING    |                      |            |
| P-SO                                       | RE-PAINT EXISTING SOFFIT    |                      |            |
| P-F  | RE-PAINT EXISTING FASCIA    |                      |            |
| P-T  | RE-PAINT EXISTING TRIM WORK |                      |            |

# INDICATES NUMBER OF BRICK UNITS IN NEED OF REPLACEMENT. 1

- # INDICATES SQUARE FOOTAGE OF INTENDED WORK 2
- CONTRACTOR OPTION TO TURN BRICK AROUND IF BACKSIDE IS IN 3 GOOD CONDITION.
- ASSUME ALL JOINTS SURROUNDING REPLACED BRICK UNITS WILL BE 4 REPOINTED
- SALVAGE AS MANY REUSABLE BRICK UNITS AS POSSIBLE TO BE INCORPORATED INTO THE RE-BUILT AREA 5
- REFER TO TYPICAL REPOINTING DETAIL ON A2.5 6
- SKYWARD JOINTS ARE TO RECEIVE POLYURETHANE SEALANT, REFER TO SKYWARD JOINT REPOINTING DETAIL ON A2.5.
- THE CONTRACTOR IS RESPONSIBLE FOR ADEQUATELY SUPPORTING MASONRY ABOVE ANY PORTIONS THAT ARE TO BE REBUILT.

![](_page_23_Figure_24.jpeg)

![](_page_24_Picture_0.jpeg)

![](_page_24_Picture_1.jpeg)

![](_page_24_Picture_2.jpeg)

15 SOUTH DETAIL PHOTO 15 A2.4a 1 1/2" = 1'-0"

![](_page_24_Picture_4.jpeg)

![](_page_24_Picture_5.jpeg)

SOUTH DETAIL PHOTO 11 A2.4a 1 1/2" = 1'-0"

A2.4a/ 1 1/2" = 1'-0"

![](_page_24_Picture_7.jpeg)

12 SOUTH DETAIL PHOTO 12 A2.4a 1 1/2" = 1'-0"

![](_page_24_Picture_9.jpeg)

![](_page_24_Picture_10.jpeg)

![](_page_24_Picture_11.jpeg)

![](_page_24_Picture_12.jpeg)

**SOUTH ELEVATION PHOTO** 

![](_page_24_Picture_14.jpeg)

**SOUTH DETAIL PHOTO 8** 

![](_page_24_Picture_16.jpeg)

<sup>9</sup> SOUTH DETAIL PHOTO 9 A2.4a 1 1/2" = 1'-0"

![](_page_24_Picture_18.jpeg)

A2.4a 1 1/2" = 1'-0"

6 **SOUTH DETAIL PHOTO 6** A2.4a 1 1/2" = 1'-0"

**SOUTH DETAIL PHOTO 3** A2.4a 1 1/2" = 1'-0"

![](_page_24_Picture_22.jpeg)

4 **SOUTH DETAIL PHOTO 4** A2.4a 1 1/2" = 1'-0"

![](_page_24_Picture_25.jpeg)

![](_page_24_Picture_27.jpeg)

![](_page_24_Picture_30.jpeg)

2 A2.4a 1 1/2" = 1'-0"

![](_page_24_Picture_32.jpeg)

![](_page_25_Picture_0.jpeg)

![](_page_25_Picture_2.jpeg)

![](_page_26_Figure_0.jpeg)

| WINDOW SCHEDULE |           |                  |   |        |  |  |  |  |
|-----------------|-----------|------------------|---|--------|--|--|--|--|
| TYPE            | SIZE      | OPERATION        | MATERIAL  | EGRESS | REMARKS                                      |  |  |  |
| А               | RE: ELEV. | DOUBLE HUNG      | ext - Pre-Fin. Alum.<br>Int - Primed, Field Paint |        |  |  |  |  |
| В               | RE: ELEV. | (2X) DOULE HUNG  | ext - Pre-Fin. Alum.<br>Int - Primed, Field Paint |        |  |  |  |  |
| С               | RE: ELEV. | DOUBLE HUNG      | ext - Pre-Fin. Alum.<br>Int - Primed, Field Paint |        | EXTERIOR IS ARCH TOP, INTERIOR IS SQUARE TOP |  |  |  |
| D               | RE: ELEV. | (2X) DOUBLE HUNG | ext - Pre-Fin. Alum.<br>Int - Primed, field paint |        | EXTERIOR IS ARCH TOP, INTERIOR IS SQUARE TOP |  |  |  |
| E               | RE: ELEV. | DOUBLE HUNG      | ext - Pre-Fin. Alum.<br>Int - Primed, field paint |        |  |  |  |  |
| F               | RE: ELEV. | (2X) DOUBLE HUNG | ext - Pre-Fin. Alum.<br>Int - Primed, field paint |        |  |  |  |  |
| G               | RE: ELEV. | DOUBLE HUNG      | ext - Pre-Fin. Alum.<br>Int - Primed, field paint |        |  |  |  |  |
| н               | RE: ELEV. | (2X) DOUBLE HUNG | ext - Pre-Fin. Alum.<br>Int - Primed, field paint |        |  |  |  |  |
| I               | RE: ELEV. | DOUBLE HUNG      | ext - Pre-Fin. Alum.<br>Int - Primed, field paint |        |  |  |  |  |
| J               | RE: ELEV. | (2X) DOUBLE HUNG | ext - Pre-Fin. Alum.<br>Int - Primed, field paint |        |  |  |  |  |
| К               | RE: ELEV. | AWNING           | EXT - PRE-FIN. ALUM.<br>INT - PRIMED, FIELD PAINT |        |  |  |  |  |
| L               | RE: ELEV. | AWNING           | EXT - PRE-FIN. ALUM.<br>INT - PRIMED, FIELD PAINT |        |  |  |  |  |

NOTE: ALL DIMENSIONS TO BE FIELD VERIFIED.

![](_page_27_Figure_2.jpeg)

![](_page_27_Figure_4.jpeg)

HISTORIC CASING OPTION

MARVIN; ULTIMATE DOUBLE HUNG G2 WITH

![](_page_28_Figure_0.jpeg)

![](_page_29_Picture_0.jpeg)

MSU-CPDC MONTANA STATE UNIVERSI'I BOZEMAN, MONTANA

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