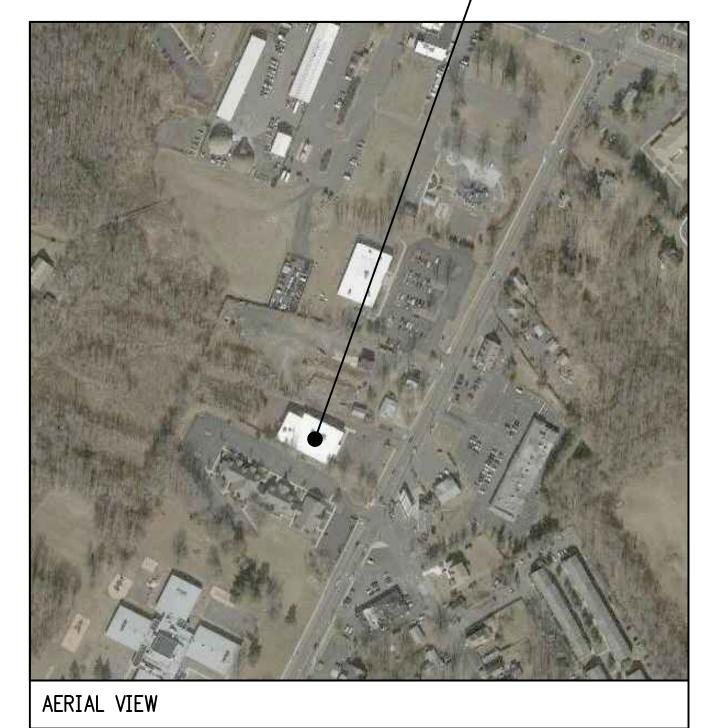
3700 HULMEVILLE RD BENSALEM, PA 19020 LOCATION MAP



BENSALEM BOROUGH BUILDING CODES

PA UCC — ADOPTED

2015 INTERNATIONAL EXISTING BUILDING CODE (IEBC) LEVEL 2
ALTERATION

PROJECT DESCRIPTION:

EXISTING BUILDING

LEVEL 2 - TENANT IMPROVEMENT ±85 S.F. OCCUPANT LOAD: UNAFFECTED 'B' - BUSINESS USE:

EXISTING
CONSTRUCTION TYPE: 2B NONCOMBUSTIBLE UNPROTECTED HEIGHT: EXISTING 1—STORY BUILDING

FIRE PROTECTION: NON-SPRINKLERED

CODE SUMMARY

**DRAWING ENUMERATION** 

<u>ARCHITECTURAL</u>

RHJ ASSOCIATES, P.C.

CONTACT: MICHAEL HENRETTY 302.528.4406

CS - COVER SHEET A.1 - PLAN, ELEVATION, AND SECTIONS

<u>STRUCTURAL</u>

**STRUCTURELABS** 

CONTACT: STEVE LaBRIOLA 484.467.7413

S-001 - NOTES

BIDS ONLY NOT FOR CONSTRUCTION

FOR PREPARING

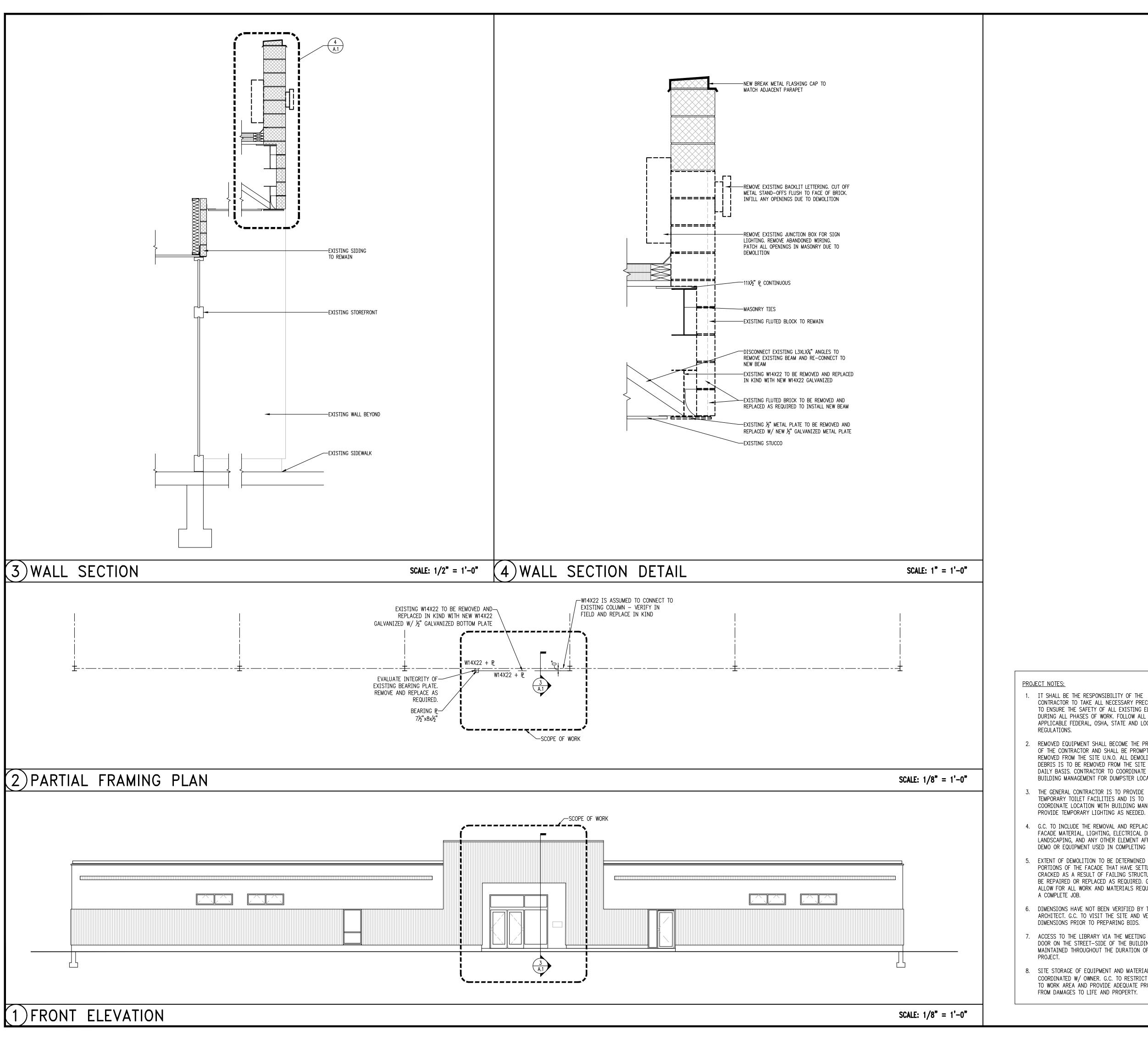
PRELIMINARY

IBR,

DATE: AUG. 19, 2019 REVISIONS

ISSUE INFORMATION
2019-08-09 OWNER REVIEW SET
2019-08-19 BID SET

PN# 2019-0043



- 1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF ALL EXISTING ELEMENTS DURING ALL PHASES OF WORK. FOLLOW ALL APPLICABLE FEDERAL, OSHA, STATE AND LOCAL
- REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM THE SITE U.N.O. ALL DEMOLITION DEBRIS IS TO BE REMOVED FROM THE SITE ON A DAILY BASIS. CONTRACTOR TO COORDINATE WITH BUILDING MANAGEMENT FOR DUMPSTER LOCATION.
- THE GENERAL CONTRACTOR IS TO PROVIDE TEMPORARY TOILET FACILITIES AND IS TO COORDINATE LOCATION WITH BUILDING MANAGEMENT.
- 4. G.C. TO INCLUDE THE REMOVAL AND REPLACEMENT OF FACADE MATERIAL, LIGHTING, ELECTRICAL DEVICES, LANDSCAPING, AND ANY OTHER ELEMENT AFFECTED BY DEMO OR EQUIPMENT USED IN COMPLETING THE WORK.
- 5. EXTENT OF DEMOLITION TO BE DETERMINED BY G.C. PORTIONS OF THE FACADE THAT HAVE SETTLED OR CRACKED AS A RESULT OF FAILING STRUCTURE IS TO BE REPAIRED OR REPLACED AS REQUIRED. G.C. TO ALLOW FOR ALL WORK AND MATERIALS REQUIRED FOR
- 6. DIMENSIONS HAVE NOT BEEN VERIFIED BY THE ARCHITECT. G.C. TO VISIT THE SITE AND VERIFY
- ACCESS TO THE LIBRARY VIA THE MEETING ROOM DOOR ON THE STREET-SIDE OF THE BUILDING TO BE MAINTAINED THROUGHOUT THE DURATION OF THE
- 8. SITE STORAGE OF EQUIPMENT AND MATERIAL TO BE COORDINATED W/ OWNER. G.C. TO RESTRICT ACCESS TO WORK AREA AND PROVIDE ADEQUATE PROTECTION FROM DAMAGES TO LIFE AND PROPERTY.

FOR PREPARING **PRELIMINARY** 

BIDS ONLY

NOT FOR CONSTRUCTION

DATE: AUG. 19, 2019 REVISIONS

PN# 2019-0043

#### GENERAL CONSTRUCTION NOTES:

1. THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE AS WELL AS STANDARDS REFERENCED WITHIN.

2. WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE "2015 INTERNATIONAL BUILDING CODE" AND ALL FEDERAL, STATE AND CITY LAWS, BYLAWS, ORDINANCES AND REGULATIONS IN ANY MANNER AFFECTING THE CONDUCT OF THIS WORK AS WELL AS ALL ORDERS OR DECREES WHICH HAVE BEEN PROMULGATED OR ENACTED BY ANY LEGAL BODIES OR TRIBUNALS HAVING AUTHORITY OR JURISDICTION OVER THE WORK, MATERIALS, EMPLOYEES OR CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PERSONNEL SAFETY ON THE JOBSITE. GUIDELINES FOR CONSTRUCTION SAFETY SHALL BE IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE CONSTRUCTION INDUSTRY OSHA SAFETY AND HEALTH STANDARDS (1926 STANDARDS), AND ANY LOCAL ORDINANCES OR CODES WHICH MAY BE APPLICABLE.

3. ALL COSTS OF INVESTIGATION AND/OR REDESIGN DUE TO THE CONTRACTOR IMPROPER INSTALLATION OF STRUCTURAL ELEMENTS OR OTHER ITEMS NOT IN CONFORMANCE WITH THE CONTRACT DOCUMENTS SHALL BE AT THE CONTRACTORS EXPENSE.

4. IF THE FIELD CONDITIONS DO NOT PERMIT THE INSTALLATION OF THE WORK IN ACCORDANCE WITH THE DETAILS SHOWN, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY AND PROVIDE A SKETCH OF THE CONDITION WITH HIS PROPOSED MODIFICATION OF THE DETAILS GIVEN ON THE CONTRACT DOCUMENTS. DO NOT COMMENCE WORK UNTIL CONDITION IS RESOLVED AND MODIFICATION IS APPROVED BY THE ARCHITECT.

5. THE CONTRACTOR SHALL COORDINATE PRINCIPAL OPENINGS IN THE STRUCTURE AS INDICATED ON THE CONTRACT DOCUMENTS. REFER TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR SLEEVES, CURBS, INSETS, ETC. NOT INDICATED. THE LOCATION OF SLEEVES OR OPENINGS IN STRUCTURAL MEMBERS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER.

6. THE CONTRACTOR SHALL PROVIDE BRACING AS REQUIRED TO MAINTAIN PLUMBNESS AND STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE SHORING TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE. EVALUATION AND COMPLIANCE WITH LOADING RESTRICTIONS FOR MEANS AND METHODS OF CONSTRUCTION AS WELL AS STAGING FOR OTHER TRADES ARE THE RESPONSIBILITY OF THE CONTRACTOR.

7. METHODS, PROCEDURES AND THE SEQUENCES (OTHER THAN THAT NOTED ON THE DRAWINGS) OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTION TO MAINTAIN AND INSURE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION AND COORDINATION OF WORK WITH MECHANICAL AND ELECTRICAL WORK.

8. WORK NOT INDICATED ON A PART OF THE DRAWINGS BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES SHALL BE PROVIDED BY THE

9. MINOR DETAILS OR INCIDENTAL ITEMS NOT SHOWN OR SPECIFIED, BUT NECESSARY FOR A PROPER AND COMPLETE INSTALLATION SHALL BE INCLUDED AS REQUIRED.

10. MISCELLANEOUS WOOD OR COLD FORMED STEEL BLOCKING, FRAMING MEMBERS, ANCHORS, FASTENERS, ETC. SHALL BE PROVIDED AS REQUIRED WHETHER OR NOT SPECIFICALLY INDICATED ON DRAWINGS.

11. THE BUILDING STRUCTURE HAS BEEN DESIGNED FOR THE IN-SERVICE LOADS ONLY. ALL WORK RELATED TO THE STAGING, CONSTRUCTION PRACTICES, AND SAFETY OF THE PROJECT'S WORKERS AND PROPERTY SHALL BE CONSIDERED MEANS AND METHODS AND SHALL BE COMPLETED BY THE CONTRACTOR IN ACCORDANCE WITH STANDARD INDUSTRY PRACTICE AND ALL CODES AND STANDARDS. VISITS TO THE SITE MADE BY THE ENGINEER ARE FOR THE REVIEW OF THE STRUCTURAL WORK FOR GENERAL CONFORMANCE WITH THE DRAWINGS AND SPECIFICATIONS AND ARE NOT FOR THE REVIEW OF CONTRACTOR RESPONSIBILITIES, INCLUDING BUT NOT LIMITED TO PROJECT SAFETY AND MEANS AND METHODS OF CONSTRUCTION.

12. ALL WORK SHALL BE INSPECTED IN ACCORDANCE WITH CHAPTER 17 OF THE REFERENCED BUILDING CODE. SUBMIT ALL REPORTS TO THE ENGINEER OF RECORD FOR REVIEW. AT THE COMPLETION OF THE PROJECT, THE SPECIAL INSPECTION REPORT SHALL BE COMPLETED, SIGNED BY THE SPECIAL INSPECTOR, AND SUBMITTED TO THE ENGINEER OF RECORD FOR RECORD PURPOSES.

13. ALL REQUESTED CHANGES IN WORK BY THE CONTRACTOR ARE SUBJECT TO THE APPROVAL OF THE DESIGN TEAM AND OWNER AND ARE CONSIDERED TO BE COMPLETED AT NO ADDITIONAL COST UNLESS SPECIFICALLY APPROVED. APPROVAL OF REQUESTED CHANGES DOES NOT CONSTITUTE APPROVAL OF AN INCREASE IN PROJECT COSTS.

#### **SHOP DRAWING NOTES:**

STEEL FRAMING

1. SHOP DRAWINGS SHALL BE SUBMITTED FOR THE FOLLOWING ITEMS IN ADDITION TO ITEMS REQUIRED BY ARCHITECTURAL SPECIFICATIONS. REQUIRED SHOP DRAWINGS SHALL INCLUDE, BUT ARE NOT LIMITED TO: FOR THIS THE PROJECT:

ANCHOR BOLT AND CONCRETE EMBEDDED ASSEMBLIES

2. SHOP DRAWINGS SHALL BEAR THE CONTRACTOR'S STAMP OF APPROVAL WHICH SHALL CONSTITUTE CERTIFICATION THAT THE CONTRACTOR HAS VERIFIED ALL CONSTRUCTION CRITERIA, MATERIALS, AND SIMILAR DATA AND HAS CHECKED EACH DRAWING FOR COMPLETENESS, COORDINATION, AND COMPLIANCE WITH THE CONTRACT DOCUMENTS

3. THE ENGINEER HAS THE RIGHT TO APPROVE OR DISAPPROVE ANY CHANGES TO CONTRACT DOCUMENTS AT ANYTIME BEFORE OR AFTER SHOP DRAWING REVIEW. ANY REPRODUCTION OF THE ORIGINAL STRUCTURAL DOCUMENTS ON THE SHOP DRAWINGS IS PROHIBITED AND WILL BE AN AUTOMATIC DISAPPROVAL

4. THE SHOP DRAWINGS DO NOT REPLACE THE CONTRACT DOCUMENTS. ITEMS OMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER OR ARCHITECT ARE NOT TO BE CONSIDERED CHANGES TO CONTRACT DOCUMENTS. IT IS THE CONTRACTORS RESPONSIBILITY TO MAKE SURE ITEMS ARE CONSTRUCTED TO CONTRACT DOCUMENTS.

5. ALL SHOP DRAWINGS NOTED ABOVE SHALL BE SUBMITTED IN A TIMELY MANNER TO ALLOW FOR A 10 BUSINESS DAY REVIEW PERIOD BY THE DESIGN TEAM.

6. SHOP DRAWINGS MAY BE SUBMITTED ELECTRONICALLY, HOWEVER, A MINIMUM OF ONE (1) HARD COPY SHALL BE PROVIDED FOR ALL SHOP DRAWINGS. IF NO HARD COPY IS PROVIDED, PRINTING AND TIME COSTS WILL BE CHARGED TO ORGANIZE AND PRINT SHOP DRAWINGS.

7. SHOP DRAWINGS WILL BE MARKED AS NOTED ON THE REVIEW STAMP. SHOP DRAWINGS MARKED "APPROVED AS NOTED" ARE TO BE RE-SUBMITTED FOR RECORD PURPOSES AND WILL

8. SUBMITTALS REQUIRING THE SEAL OF A PROFESSIONAL ENGINEER (I.E. PRECAST CONCRETE, ETC) SHALL BE SUBMITTED WITH CALCULATIONS AND SEALED DRAWINGS PRIOR TO

# **EXISTING CONSTRUCTION**

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, COORDINATION AND INSTALLATION OF SHORING AND STABILIZATION OF EXISTING CONSTRUCTION AS REQUIRED TO PERFORM THE WORK CONTAINED IN THE DRAWINGS AND SPECIFICATIONS.

2. DIMENSIONS SHOWN REFERRING TO EXISTING STRUCTURES ARE FOR REFERENCE ONLY. ALL DIMENSIONS RELATED TO EXISTING BUILDINGS AND FRAMING SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORK.

3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY INFORMATION RELATING TO THE EXISTING STRUCTURE THAT HAS BEEN UNCOVERED DUE TO DEMOLITION AND REMOVAL OF

4. PRIOR TO COMMENCEMENT OF WORK ON EXISTING STRUCTURES TO REMAIN OR ADJACENT STRUCTURES, A STRUCTURAL SURVEY SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE. REPORT SHALL INDICATE AND PHOTOGRAPH ANY EXISTING DAMAGE OR DEFICIENCIES IN THE EXISTING STRUCTURES AS WELL AS THEIR CONDITION. REPORT SHALL BE ISSUED

5. NEVER CONNECT NEW FRAMING MEMBERS TO EXISTING BRICK OR OTHER MASONRY VENEER WITHOUT APPROVAL FROM THE ENGINEER OF RECORD. REPLACE ANY REMOVED VENEER TO MATCH EXISTING AFTER WORK IS COMPLETE.

# **CAST-IN-PLACE CONCRETE**

TO THE DESIGN TEAM FOR THEIR RECORD.

1. CONCRETE SHALL BE DESIGNED AND DETAILED IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI-318-08), THE ACI DETAILING MANUAL (SP-66), AND CONSTRUCTED IN ACCORDANCE WITH THE CRSI MANUAL OF STANDARD AND THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301). PRACTICE.

2. CONCRETE IN THE FOLLOWING AREAS SHALL HAVE NATURAL SAND FINE AGGREGATE AND NORMAL WEIGHT COARSE AGGREGATES CONFORMING TO ASTM C33, TYPE 1 PORTLAND CEMENT CONFORMING TO ASTM C150, AND SHALL HAVE THE FOLLOWING COMPRESSIVE STRENGTH (FC') AT 28 DAYS:

. 3.000 PSI FOUNDATION WALLS... 3,000 PSI

3,000 PSI SLAB ON GRADE..

SLAB ON DECK.. . 3,500 PSI

AIR ENTRAINMENT 4% TO 6% IN ALL EXPOSED CONCRETE.

MAXIMUM AGGREGATE SIZE SHALL BE 1-1/2" FOR FOOTINGS AND 3/4" FOR WALLS AND SLABS CONTRACTOR IS RESPONSIBLE FOR THE PREPARATION OF DESIGN MIXTURES FOR EACH APPLICATION/LOCATION USED IN CONSTRUCTION AS NOTED ABOVE AND ON THE DRAWINGS.

3. THE CONCRETE SUPPLIER SHALL SUBMIT MIX DESIGNS FOR REVIEW. COMPRESSIVE STRENGTH MUST BE SUBSTANTIATED BY A SUITABLE EXPERIENCE RECORD OR BY THE METHOD OF LABORATORY TRIAL BATCHES. THE PERTINENT CRITERIA OF CHAPTER 4 OF ACI 318-89 SHALL APPLY TO THE PROPORTIONING OF MIX DESIGNS AND TO THE ACCEPTANCE OF CONCRETE PRODUCED FOR THE JOB. IF DURING CONSTRUCTION ANY CLASS CONCRETE FAILS TO MEET THE ACCEPTANCE CRITERIA, THE CONTRACTOR SHALL TAKE SUCH STEPS AS ARE DEEMED NECESSARY BY THE STRUCTURAL ENGINEER TO IMPROVE SUBSEQUENT TEST RESULTS AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL ALSO BEAR THE COST OF SPECIAL INVESTIGATION, TESTING, OR REMEDIAL WORK NECESSARY BECAUSE OF EVIDENCE OF LOW STRENGTH OR NON-CONFORMING CONCRETE OR WORKMANSHIP.

4. MAXIMUM WATER/CEMENT RATIOS:

A. FOUNDATIONS 0.50

B. INTERIOR SLABS 0.47

C. EXTERIOR SLABS 0.44

5. CONCRETE REINFORCEMENT BARS SHALL CONFORM TO ASTM A615-85, GRADE 60. REINFORCEMENT BARS SHALL NOT BE TACK WELDED, WELDED, HEATED OR CUT UNLESS INDICATED ON THE CONTRACT DOCUMENTS OR APPROVED BY THE STRUCTURAL ENGINEER. LAP ALL BARS MINIMUM 48 BAR DIAMETERS UNLESS OTHERWISE NOTED.

6. WELDED WIRE FABRIC WHEN USED SHALL CONFORM TO ASTM A185. FABRIC SHALL BE SUPPLIED IN FLAT SHEETS. FABRIC SHALL BE LAPPED TWO MESHES AT SPLICES.

7. GROUT SHALL BE NONSHRINK GROUT CONFORMING TO ASTM C827, AND SHALL HAVE SPECIFIED COMPRESSIVE STRENGTH AT 28 DAYS OF 4000 PSI.

8. MINIMUM CONCRETE COVER PROTECTION FOR REINFORCEMENT BARS SHALL CONFORM WITH THE "MINIMUM CONCRETE COVER FOR REINFORCING BAR" TABLE PROVIDED. (SEE ACI 318-08 SECTION 7.7 FOR CONDITIONS NOT NOTED)

9. ALL REINFORCEMENT SHALL BE SECURELY HELD IN PLACE WHILE PLACING CONCRETE. IF REQUIRED, ADDITIONAL BARS, STIRRUPS OR CHAIRS SHALL BE PROVIDED BY THE CONTRACTOR TO FURNISH SUPPORT FOR ALL BARS.

10. PIPES OR CONDUITS PLACED IN SLABS SHALL NOT HAVE AN OUTSIDE DIAMETER LARGER THAN 1/3 THE SLAB THICKNESS AND SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS ON CENTER. ALUMINUM CONDUITS SHALL NOT BE PLACED IN CONCRETE. NO CONDUITS SHALL BE PLACED IN SLABS WITHIN 12 INCHES OF COLUMN FACE OR FACE OF BEARING WALL. NO CONDUITS MAY BE PLACED IN EXTERIOR SLABS OR SLABS SUBJECTED TO FLUIDS.

11. MIXING, TRANSPORTING AND PLACING OF CONCRETE SHALL CONFORM TO ACI 301-89.

12. WELDING OF REINFORCEMENT BARS, WHEN APPROVED BY THE STRUCTURAL ENGINEER, SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STANDARD DI.1-94. ELECTRODES FOR SHOP AND FIELD WELDING OF REINFORCEMENT BARS SHALL CONFORM TO ASTM A233, CLASS E90XX.

13. HORIZONTAL JOINTING WILL NOT BE PERMITTED IN CONCRETE CONSTRUCTION EXCEPT AS SHOWN ON THE CONTRACT DOCUMENT. VERTICAL JOINTS SHALL OCCUR AT CENTER OF SPANS AT LOCATIONS APPROVED BY THE STRUCTURAL ENGINEER.

14. REPAIR CONCRETE EXHIBITING VOIDS DUE TO SNAP TIES, "HONEYCOMBS," ROCK POCKETS, AND RUNS, SPALLS OR OTHERWISE DAMAGED SURFACES WITH DRY PACK OR CEMENT GROUT, AND FINISH FLUSH WITH ADJOINING SURFACES. AT THE DISCRETION OF THE STRUCTURAL ENGINEER OR AS QUALIFIED BY LAB TESTING, EXCESSIVE HONEYCOMBS OR EXPOSED REINFORCEMENT THAT JEOPARDIZE THE DESIGN, SHALL BE REMOVED AND REPLACED AT THE EXPENSE OF THE CONTRACTOR.

15. PROVIDE TWO (2) #3 X 4'0" AT ALL RE-ENTRANT CORNERS, PLACED ON THE DIAGONAL WITH 1 1/2" CLEARANCE FROM THE CORNER AND TOP OF SLAB. REFER TO DETAIL.

16. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE INDICATED.

17. CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT FINISHED SURFACES FROM STAINS OR ABRASIONS. NO FIRE SHALL BE ALLOWED IN DIRECT CONTACT WITH CONCRETE. PROVIDE ADEQUATE PROTECTION AGAINST INJURIOUS ACTION BY SUN OR WIND. FRESH CONCRETE SHALL BE THOROUGHLY PROTECTED FROM HEAVY RAIN, FLOWING WATER, AND MECHANICAL INJURY.

18. THE SLAB-ON-GRADE SHALL BE UNDERLAIN BY A MINIMUM OF SIX INCHES OF STABLE GRANULAR MATERIAL

19. CONCRETE SLAB ON GRADE SHALL BE FINISHED TO TOLERANCE FOR FLOOR FLATNESS (Ff) OF 25 AND FLOOR LEVELNESS (FI) OF 20 UNLESS OTHERWISE MANDATED BY ARCHITECTURAL FINISH REQUIREMENTS. ALL CONCRETE SLAB ON GRADE SHALL BE TESTED FOR FLOOR FLATNESS AND LEVELNESS WITHIN 48 HOURS OF THE SLAB ON GRADE PLACEMENT. CONTRACTOR SHALL SUBMIT REPORTS TO THE ENGINEER AND ARCHITECT OF RECORD AND ALL SPECIALTY FLOORING SUB-CONTRACTORS FOR REVIEW. CONTRACTOR SHALL CONDUCT A PRE-INSTALLATION CONFERENCE WITH ALL FLOORING SUB-CONTRACTORS PRIOR TO THE PLACEMENT OF THE SLAB ON GRADE

20. PROVIDE KEYS IN CONCRETE WALLS, PIERS, GRADE BEAMS AND FOOTINGS AT INTERSECTIONS UNLESS NOTED OTHERWISE. PROVIDE CORNER BARS TO MATCH HORIZONTAL REINFORCEMENT AT WALL CORNERS AND TEE INTERSECTIONS.

21. CONCRETE SHALL ACHIEVE A MINIMUM OF 70 PERCENT OF THE DESIGN STRENGTH PRIOR TO STEEL ERECTION. WRITTEN CONFIRMATION OF THIS STRENGTH SHOULD BE SUBMITTED TO THE ENGINEER OF RECORD PRIOR TO THE COMMENCEMENT OF STEEL ERECTION.

22. CONSTRUCTION JOINTS IN COMPOSITE STEEL AND CONCRETE SLABS SHALL BE LOCATED AT THE MIDDLE THIRD OF BEAMS AND GIRDERS. DO NOT LOCATE JOINTS ALONG BEAMS AND GIRDERS. SEE DRAWINGS FOR ADDITIONAL INFORMATION AND LOCATIONS.

23. CONCRETE SLABS ON DECK SHALL BE PLACED TO A UNIFORM THICKNESS. LASER OR SIMILAR LEVELING INSTRUMENT IS NOT PERMITTED. SURFACE SHALL BE FINISHED TO TOLERANCE FOR FLOOR FLATNESS (Ff) OF 25. FLOOR LEVELNESS TOLERANCES ARE NOT APPLICABLE TO SLABS ON DECK.

1. MORTAR SHALL CONFORM TO ASTM C270, TYPE M OR S WITH A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI AT 28 DAYS.. ALL PORTLAND CEMENT SHALL CONFORM TO ASTM C150. TYPE1 LIME SHALL CONFORM TO ASTM C207 AND MASONRY CEMENT SHALL CONFORM TO ASTM C91. ALL MORTAR SHALL BE FIELD OBTAINED MORTAR CUBES TESTED IN ACCORDANCE

2. PROVIDE AND INSTALL TEMPORARY BRACING REQUIRED INSURING STABILITY OF ALL WALLS DURING CONSTRUCTION AND UNTIL ERECTION OF ATTACHED STRUCTURAL FRAMING IS

3. PROVIDE MASONRY ANCHORS AT 16" O.C. SET ON COURSING AND ATTACHED TO ALL BEAMS, COLUMNS, PARTITIONS, AND WALLS ABUTTING OR EMBEDDED IN MASONRY UNLESS NOTED OTHERWISE ON ARCHITECTURAL AND STRUCTURAL DRAWINGS.

4. THE CONTRACTOR SHALL VERIFY ALL OPENINGS BELOW LINTELS INDICATED ARE ADEQUATE TO ACCEPT DOORFRAMES, LOUVERS, ETC. AS SHOWN ON THE ARCHITECTURAL AND

MECHANICAL DRAWINGS. NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF ANY DISCREPANCIES PRIOR TO LINTEL INSTALLATION. 5. ALL BRICK MASONRY UNITS SHALL BE GRADE SW IN ACCORDANCE WITH ASTM C216 WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI, BONDED TOGETHER WITH TYPE S

6. ALL BRICK TIES APPLIED TO PLYWOOD SHEATHING TO BE HOHMANN & BARNARD DW-10HS ANCHORS WITH VEE TIES @ 16" o/c HORIZONTALLY AND VERTICALLY WITH HOT DIP GALVANIZED OR STAINLESS FINISH. WHERE ANCHORS WILL GO THROUGH INSULATION PROVIDE X-SEAL ANCHOR.

# **STEEL CONSTRUCTION NOTES:**

1. ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND THE AISC "ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", AND AS SUPPLEMENTED BY THESE GENERAL NOTES IN ADDITION TO THE PROJECT SPECIFICATIONS. ALL STRUCTURAL STEEL WIDE FLANGE (W) SHAPES SHALL BE ASTM A992 GRADE 50 (V50). ALL STRUCTURAL STEEL S, M, AND HP SHAPES SHALL BE ASTM A572 GRADE 50 (V50). ALL OTHER STRUCTURAL STEEL SHALL BE ASTM A36 UNLESS OTHERWISE NOTED.

2. ALL STEEL SHALL BE THOROUGHLY CLEANED IN ACCORDANCE WITH SSPC- SP3 AND SHALL HAVE A SHOP COAT OF RUST INHIBITIVE PAINT. ALL STEEL SHALL BE UNPAINTED. ALL STEEL TO RECEIVE SPRAYED-ON FIREPROOFING OR CONCRETE ENCASEMENT SHALL REMAIN CLEANED AND UNPAINTED.

3. ALL CONNECTION PLATES, STIFFENERS, AND BOLTS SHOWN ON THE DRAWINGS ARE SCHEMATIC ONLY UNLESS ACTUAL SIZES ARE SPECIFIED. CONTRACTOR SHALL DESIGN ALL CONNECTIONS, SPLICES, PLATES, GUSSET PLATES, STIFFENERS, BOLTS, AND WELDS FOR FORCES INDICATED ON DRAWINGS IN ADDITION TO THE REQUIREMENTS OF THE AISC DESIGN

4. ALL SHOP AND FIELD WELDS SHALL BE MADE IN ACCORDANCE WITH THE ANSI/AWS "D1.1 STRUCTURAL WELDING CODE - STEEL", LATEST EDITION. ALL WELDING SHALL USE LOW HYDROGEN PROCESSES.

5. UNLESS NOTED OTHERWISE, ALL BOLTS SHALL BE ASTM A325-N WITH SUITABLE WASHERS AND NUTS. ALL BOLTS USED FOR THE ANCHORAGE TO CONCRETE AS SPECIFIED ON THE DRAWINGS SHALL CONFORM TO ASTM F1554. ALL TENSION CONTROLLED BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F1852 AND F2280.

6. PROVIDE FULL DEPTH DOUBLE ANGLE CONNECTIONS ON ALL GIRDER AND BEAM CONNECTIONS TO COLUMNS. BOLTS SHALL BE AT 3-INCH O/C VERT. ALL BEAM TO GIRDER CONNECTIONS SHALL BE AS DESIGNED BY THE FABRICATOR SUBJECT TO THE ENGINEER'S APPROVAL. FABRICATOR SHALL ADHERE TO ALL OSHA FEDERAL REGISTER STANDARDS SECTION 1926.777 WITH REGARD TO CONNECTION DESIGN. ALL TENSION CONTROLLED BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F1852 AND F2280.

7. ALL STEEL WELDING RODS SHALL BE AS FOLLOWS:

E70XX FOR STEEL CONNECTIONS E60XX FOR STEEL TO METAL STUD CONNECTIONS

8. CUTS, HOLES, COPING, ETC. REQUIRED FOR WORK OF OTHER TRADES SHALL BE SHOWN ON THE SHOP DRAWINGS AND MADE IN THE SHOP. CUTS OR BURNING OF HOLES IN STRUCTURAL STEEL MEMBERS IN THE FIELD WILL NOT BE PERMITTED.

9. ALL STRUCTURAL STEEL EMBEDDED IN CONCRETE OR EXPOSED TO THE ELEMENTS, SHALL BE HOT DIPPED GALVANIZED, UNLESS NOTED OTHERWISE. THIS INCLUDES, BUT NOT LIMITED TO, EXETERIOR LINTELS, SHELF ANGLES, DUNNAGE FRAMING, CANOPY FRAMING, SCREEN WALL FRAMING, ETC. ANY POINTS OF WELDING SHALL BE TOUCHED UP IN THE FIELD WITH A ZINC-RICH PAINT BY THE STEEL ERECTOR.

10. ALL ADDITIONAL FRAMING REQUIRED TO SUPPORT OR BRACE MECHANICAL OR ELECTRICAL EQUIPMENT OR PIPING NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE SUPPLIED BY THE MECHANICAL OR ELECTRICAL CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

11. MINIMUM 1/4" FILLET WELDS ALL AROUND SHALL BE PROVIDED FOR MAJOR CONNECTION PLATES UNLESS NOTED OTHERWISE.

SUBMIT ALL STEEL SHOP DRAWINGS FOR REVIEW PRIOR TO ANY FABRICATION.

12. STEEL FABRICATOR IS SOLELY RESPONSIBLE FOR COORDINATING WITH THE GENERAL CONTRACTOR FOR THE PURPOSE OF SURVEYING AND VERIFICATION OF EXISTING CONDITIONS INCLUDING BUT NOT LIMITED TO THE LOCATION, ELEVATION, AND DIMENSIONS OF WALLS AND FRAMING THAT EXIST AT THE TIME OF THE STEEL ERECTION.

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FOR PREPARING

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	DATI	E: AUG. 19, 2019	
		REVISIONS	

PN# 2019-0043