SPECIAL INSPECTIONS

THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR THE INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. THE SPECIAL INSPECTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO THE BUILDING OFFICIAL DEMONSTRATING HIS OR HER COMPETENCE AND RELEVANT EXPERIENCE OR TRAINING. EXPERIENCE OR TRAINING SHALL BE CONSIDERED RELEVANT WHEN THE DOCUMENTED EXPERIENCE OR TRAINING IS RELATED IN COMPLEXITY TO THE SAME TYPE OF SPECIAL INSPECTION ACTIVITIES FOR PROJECTS OF SIMILAR COMPLEXITY AND MATERIAL QUALITIES. THESE QUALIFICATIONS ARE IN ADDITION TO QUALIFICATIONS SPECIFIED IN OTHER SECTION OF THE OHIO & INTERNATIONAL BUILDING CODES.

SPECIAL INSPECTIONS ARE PROVIDED FOR CONTRACTOR'S INFORMATION. THE CITY WILL PAY FOR ALL SPECIAL INSPECTION REQUIRED. THE CONTRACTOR SHALL NOT INCLUDE ANY COST FOR THE INSPECTIONS IN THE BID.

SPECIAL INSPECTION REPORT REQUIREMENTS:

SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF WORK. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED AT A POINT IN TIME AGREED UPON PRIOR TO THE START OF THE WORK BY THE APPLICANT AND THE BUILDING OFFICIAL.

BELOW IS A LIST OF THE SPECIAL INSPECTION REQUIREMENTS FOR THIS PROJECT :

CONCRETE:
- SEE "REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION TABLE" FOR CONCRETE ITEMS REQUIRING SPECIAL INSPECTION.

STEEL:
- WELDING INSPECTION SHALL BE IN ACCORDANCE WITH AWS D1.1.
- THE BASIS FOR WELDING INSPECTOR QUALIFICATION SHALL BE AWS D1.1
- SEE "REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION" TABLE FOR STEEL ITEMS REQUIRING SPECIAL INSPECTION.

MASONRY:
- SEE "TMS 402-13/ACI 530-13/ASCE-13 TABLE 3.1.2 - LEVEL B QUALITY ASSURANCE FOR MASONRY CONSTRUCTION"

SOILS:
- SEE "REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS" TABLE

ALL MASONRY SHEAR WALLS AND X-BRACING SHOWN ON THE STRUCTURAL DRAWINGS ARE CONSIDERED MAIN-WIND-FORCE AND SEISMIC-FORCE RESISTING SYSTEMS.

REQUIRED SERVICES AND DUTIES FOR EACH PARTY (TESTING AGENCY, INSPECTION AGENCY AND CONTRACTOR) SHALL BE PER THE MOST RECENT EDITION OF ACI530.1/ASCE 6/TMS 602

PER IBC & OBC SECTION 1706:

EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN-WIND-FORCE OR SEISMIC-FORCE RESISTING SYSTEM LISTED IN THE STATEMENT OF SPECIAL INSPECTION SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN THE FOLLOWING:

1) ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS
2) ACKNOWLEDGMENT THAT THE CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE BUILDING OFFICIAL
3) PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION, THE METHOD AND FREQUENCY OF REPORTING AND THE DISTRIBUTION OF THE REPORTS
4) IDENTIFICATION AND QUALIFICATIONS OF THE PERSON(S) EXCERCISING SUCH CONTROL AND THEIR POSITION(S) IN THE ORGANIZATION

REQUIRED VERIFICATION AND INSPECTION OF WIND RESISTING COMPONENTS

ROOF CLADDING - PERIODIC INSPECTION
WALL CLADDING - PERIODIC INSPECTION

REFERENCED STANDARDS:

1) AISC 360 - 2010
2) AWS D1.4/D1.4M - 2011
3) ACI 318 - 2014
4) ACI 530 - 2013
5) ASTM
6) IBC 2015
7) OBC 2017
8) AWC NDS
9) AWC SDPWS

IBC & OBC TABLE 1705.6 REQUIRED SPECIAL INSPECTION AND TESTS OF SOILS

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	-	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	-	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	-	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	-
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	-	X

REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD	OBC & IBC REFERENCE
1. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS:				
A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	-	X	AISC 360, SECTION A3.3 AND APPLICABLE ASTM MATERIAL STANDARDS	
B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	-	X	-	-
2. INSPECTION OF HIGH-STRENGTH BOLTING:				
A. SNUG-TIGHT JOINTS.	-	X	AISC 360, N5.6-1	1705.2.1
B. PRETENSIONED JOINTS USING TURN-OF-NUT WITH MATCHMARKING, TWIST-OFF BOLT OR DIRECT TENSION INDICATOR METHODS OF INSTALLATION.	-	X	AISC 360, N5.6-2	
C. PRETENSIONED JOINTS USING TURN-OF-NUT WITHOUT MATCHMARKING OR CALIBRATED WRENCH METHODS OF INSTALLATION.	X	-	AISC 360, N5.6-3	
3. MATERIAL VERIFICATION OF STRUCTURAL STEEL AND COLD-FORMED STEEL DECK:				
A. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO CONFORM TO AISC 360.	-	X	SDI QA/QC	1705.2.1 & 1705.2.2
B. FOR OTHER STEEL, IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	-	X		
C. MANUFACTURER'S CERTIFIED TEST REPORTS.	-	X		
4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS:				
A. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.	-	X	AISC 360, SECTION A3.5 AND APPLICABLE AWS A5 DOCUMENTS	-
B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	-	X	-	-
5. INSPECTION OF WELDING:				
A. STRUCTURAL STEEL AND COLD-FORMED STEEL DECK:				
1) COMPLETE AND PARTIAL JOINT PENETRATION GROOVE WELDS.	X	-	AWS D1.1	1704.3.1
2) MULTIPASS FILLET WELDS.	X	-		
3) SINGLE-PASS FILLET WELDS >5/16"	X	-		
4) PLUG AND SLOT WELDS.	X	-		
5) SINGLE-PASS FILLET WELDS ≤5/16"	-	X		
6) FLOOR AND ROOF DECK WELDS.	-	X	AWS D1.3	
B. REINFORCING STEEL:				-
1) SHEAR REINFORCEMENT.	X	-	AWS D1.4 ACI 318:SECTION3.5.2	
2) OTHER REINFORCING STEEL.	-	X		
6. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE:				
A. DETAILS SUCH AS BRACING AND STIFFENING.	-	X	-	1704.3.2
B. MEMBER LOCATIONS.	-	X		
C. APPLICATION OF JOINT DETAILS AT EACH CONNECTION.	-	X		

IBC & OBC TABLE 1705.3 REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD	OBC & IBC REFERENCE
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	-	X	ACI 318 Ch.20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
2. REINFORCING BAR WELDING: A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706; B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND C. INSPECT ALL OTHER WELDS.	-	X	AWS D1.4 ACI 318: 26.6.4	-
3. INSPECT ANCHORS CAST IN CONCRETE.	-	X	ACI 318: 17.8.2	-
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS A. ADHESIVE ANCHORS. B. MECHANICAL ANCHORS.	X	X	ACI 318: 17.8.2.4 ACI 318: 17.8.2	-
5. VERIFY USE OF REQUIRED DESIGN MIX.	-	X	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2 1908.2, 1908.3
6. PRIOR TO CONCRETE PLACEMENT FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-	ASTM C 172 ASTM C 31 ACI 318: 26.4, 26.12	1908.10
7. INSPECT OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	-	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	X	ACI 318: 26.5.3-26.5.5	1908.9
9. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	-	X	ACI 318: Ch. 26.8	-
10. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	-	X	ACI 318: 26.11.2	-
11. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	X	ACI 318: 26.11.1.2(b)	-

TMS 402-13/ACI 530-13/ASCE-13 TABLE 3.1.2 - LEVEL B QUALITY ASSURANCE FOR MASONRY CONSTRUCTION

INSPECTION TASK	CONTINUOUS	PERIODIC	REFERENCE FOR CRITERIA: TMS 402/ACI 530/ASCE 5	REFERENCE FOR CRITERIA: TMS 602/ACI 530.1/ASCE 6
1. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS.	-	X	-	1.5
2. VERIFICATION OF f'm PRIOR TO CONSTRUCTION AND FOR EVERY 5,000 SQUARE FEET DURING CONSTRUCTION.	-	X	-	1.4B
3. VERIFICATION OF PROPORTIONS OF MATERIALS IN PREMIXED OR PREBLENDED MORTAR AND GROUT AS DELIVERED TO THE SITE.	-	X	-	1.5B
4. VERIFICATION OF SLUMP FLOW AND VSI AS DELIVERED TO THE SITE FOR SELF-CONSOLIDATING GROUT.	X	-	-	1.5B.1.B.3
5. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. PROPORTIONS OF SITE-PREPARED MORTAR	-	X	-	2.1, 2.6A
B. CONSTRUCTION OF MORTAR JOINTS.	-	X	-	3.3B
C. LOCATION OF REINFORCEMENT AND CONNECTIONS.	X	-	-	3.4, 3.6 A
6. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. GROUT SPACE	-	X	-	3.2 D, 3.2 F
B. GRADE, TYPE AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS	-	X	6.1	2.4, 3.4
C. PLACEMENT OF REINFORCEMENT AND CONNECTORS	-	X	6.1, 6.2.1, 6.2.6, 6.2.7	3.2 E, 3.4, 3.6 A
D. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	-	X	-	26 B, 2.4 G.1.B
E. CONSTRUCTION OF MORTAR JOINTS	-	X	-	3.3 B
7. VERIFY DURING CONSTRUCTION:				
A. SIZE AND LOCATION OF STRUCTURAL ELEMENTS	-	X	-	3.3 F
B. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION	-	X	1.2.1(e), 6.1.4.3, 6.2.1	-
C. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°F)	-	X	-	1.8 C, 1.8 D
D. PLACEMENT OF GROUT IS IN COMPLIANCE	X	-	-	3.5, 3.6 C
E. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS	-	X	-	1.4 B.2.a.3, 1.4 B.2.b.3, 1.4 B.2.c.3, 1.4 B.3, 1.4 B.4

STATE OF OHIO
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LAKELAND COMMUNITY COLLEGE
7601 CLOCKTOWER DR., KIRTLAND, OH 44094

SPECIAL INSPECTIONS

PROJECT NO. 18050002
DISCIPLINE: STRUCTURAL
SHEET NAME: S-03
SHEET 39 OF 55