STRUCTURAL INSPECTION PLAN

PART I

1.01 SCOPE OF WORK

THIS PLAN DESCRIBES WORK REQUIRED TO COMPLY WITH THE THRESHOLD LAW; CHAPTER 553 OF THE FLORIDA STATUTES. THE OWNER SHALL RETAIN A QUALIFIED SPECIAL INSPECTOR TO PERFORM THE WORK DESCRIBED HEREIN. PROPOSALS FOR SPECIAL INSPECTION SERVICES SHALL BE SEPARATE AND INDEPENDENT FROM ALL OTHER PROPOSALS FOR MATERIALS TESTING AND OTHER QUALITY ASSURANCE SERVICES. THE SPECIAL INSPECTOR SHALL VERIFY THAT THE PRIMARY STRUCTURAL FRAME (ALL THOSE MEMBERS WHICH TRANSMIT LOADS TO THE GROUND) IS CONSTRUCTED IN SUBSTANTIAL ACCORDANCE WITH THE PERMITTED OFFICIAL CONTRACT DOCUMENTS, EXCEPT AS VARIATIONS THERE FROM ARE PERMITTED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD. THIS PLAN MAY BE SUPPLEMENTED BY ADDITIONAL REQUIREMENTS OF THE MUNICIPALITY OR BY THE OWNER AS DEEMED NECESSARY DURING THE COURSE OF THE WORK. THIS DOES NOT INCLUDE INSPECTION OF ANY SAFETY PROVISIONS AS REQUIRED BY OSHA OR OTHER SAFETY STANDARDS WHICH APPLY DURING THE CONSTRUCTION PERIOD, TO ELEMENTS SUCH AS RAILINGS, FIRE PROTECTION, ROOFING, GLAZED WINDOW SYSTEMS, ARCHITECTURAL PRECAST PANELS, MECHANICAL/ELECTRICAL SYSTEMS, ARCHITECTURAL COMPONENTS, SITE WORK AND OTHER ELEMENTS NOT CONTRIBUTING TO THE CAPACITY OF THE PRIMARY STRUCTURAL BUILDING FRAME. THE OFFICIAL CONTRACT DOCUMENTS ARE DEFINED AS THE PERMITTED PLANS, RECORDED ADDENDA, PROJECT SPECIFICATIONS, AMENDMENTS AND THE STRUCTURAL INSPECTION PLAN.

1.02 QUALIFICATIONS OF THE SPECIAL INSPECTOR

A. SPECIAL INSPECTOR SHALL BE A FLORIDA REGISTERED ENGINEER EXPERIENCED IN STRUCTURAL ENGINEERING AND CERTIFIED AS REQUIRED BY CURRENT LEGISLATION. SPECIAL INSPECTOR MUST BE CURRENTLY ACTIVE IN THE DESIGN OF BUILDING STRUCTURES.

B. SPECIAL INSPECTOR SHALL NOT PERFORM THE MATERIAL TESTING FOR THE PROJECT.

C. THE SPECIAL INSPECTOR MAY SEND A FULL-TIME EMPLOYEE AS HIS AUTHORIZED REPRESENTATIVE TO THE PROJECT, BUT THAT PERSON SHALL BE EXPERIENCED AND KNOWLEDGEABLE IN THE STRUCTURAL SYSTEM BEING USED AND THE APPROPRIATE PORTIONS OF THE GOVERNING CODES AND STANDARDS. AUTHORIZED REPRESENTATIVE SHOULD HAVE AS A MINIMUM AN ENGINEERING DEGREE FROM AN ACCREDITED COLLEGE.

D. THE SPECIAL INSPECTOR SHALL HAVE A MINIMUM OF SEVEN (7) YEARS OF EXPERIENCE IN DESIGN AND INSPECTION OF SIMILAR STRUCTURES AND SHALL HAVE BEEN ENGINEER OF RECORD IN AT LEAST (4) SIMILAR STRUCTURES. THE SPECIAL INSPECTOR'S REPRESENTATIVE SHALL HAVE ENGINEERING COLLEGE DEGREE AND OBTAINED HIS "EI", SHALL HAVE DESIGN AT LEAST (1) SIMILAR STRUCTURE AND HAVE AT LEAST (3) YEARS OF EXPERIENCE IN INSPECTION OF SIMILAR STRUCTURES. RESUMES OF BOTH THE SPECIAL INSPECTOR AND SPECIAL INSPECTOR'S REPRESENTATIVE SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE, THE ENFORCING AGENCY HAVING JURISDICTION AND THE STRUCTURAL ENGINEER OF RECORD FOR REVIEW AND ACCEPTANCE. AS USED HEREIN THE TERM

SPECIAL INSPECTOR INCLUDES THE AUTHORIZED REPRESENTATIVE, UNLESS OTHERWISE INDICATED. IN SO FAR AS POSSIBLE, THE SPECIAL INSPECTOR SHALL NOT BE CHANGED THROUGHOUT THE DURATION OF THE PROJECT.

E. THE SPECIAL INSPECTOR IS TO PROVIDE TO THE OWNER INSURANCE CERTIFICATES FOR ALL APPLICABLE COVERAGES, INCLUDING PROFESSIONAL LIABILITY, SPECIFICALLY COVERING SUCH SPECIAL INSPECTION ASSIGNMENTS: GENERAL LIABILITY; AUTOMOBILE COVERAGE; WORKMEN'S COMPENSATION AND ANY OTHER APPROPRIATE COVERAGE.

1.03 RESPONSIBILITIES AND LIMITATIONS OF THE SPECIAL INSPECTOR

A. THE SPECIAL INSPECTOR IS RESPONSIBLE TO THE ENFORCING AGENCY HAVING JURISDICTION FOR THIS PROJECT. THE PRESENCE OF THE SPECIAL INSPECTOR DOES NOT RELIEVE THE ENFORCING AGENCY, THE ARCHITECT OR THE STRUCTURAL ENGINEER OF RECORD OF THEIR RESPONSIBILITIES.

B. PRIOR TO STARTING WITH THE WORK, THE SPECIAL INSPECTOR AND THE AUTHORIZED REPRESENTATIVE SHALL BECOME FAMILIAR WITH THE SPECIFIC STRUCTURAL COMPONENTS AND SYSTEMS WHICH THE SPECIAL INSPECTOR WILL BE RESPONSIBLE FOR INSPECTING. HE IS RESPONSIBLE FOR A THOROUGH KNOWLEDGE OF THE INTENT AND CONTENT OF THE CONTRACT DOCUMENTS AND ACCEPTED SUBMITTAL RELATING TO HIS INSPECTION RESPONSIBILITIES APPROPRIATE PORTIONS OF THE GOVERNING CODES, AND THE EXERCISE OF GOOD JUDGEMENT.

C. THE SPECIAL INSPECTOR SHALL THEN PROVIDE A CERTIFIED AFFIDAVIT TO THE OWNER AND STRUCTURAL ENGINEER OF RECORD ATTESTING TO THE FOLLOWING:

1. HE HAS REVIEWED THE CONTRACT DOCUMENTS AND UNDERSTANDS THEIR CONTENT AND THE CONCEPT WITH ITS REQUIREMENTS.

2. HE HAS READ THE STRUCTURAL INSPECTION PLAN, UNDERSTANDS ITS INTENT AND INTENDS TO COMPLY WITH ITS REQUIREMENTS.

D. THE SPECIAL INSPECTOR IS RESPONSIBLE FOR OBSERVING THE CONSTRUCTION OF THE PRIMARY STRUCTURAL COMPONENTS AND REPORTING TO THE CONCERNED PARTIES THAT THOSE PORTIONS OF THE STRUCTURE ARE BEING BUILT IN GENERAL CONFORMANCE WITH THE STRUCTURAL DOCUMENTS, AND IF NOT, THE LOCATION AND DESCRIPTIONS OF THOSE VARIATIONS.

E. THE SPECIAL INSPECTOR IS NOT TO MAKE DESIGN DECISIONS OR INTERPRETATIONS OF THE CONTRACT DOCUMENTS.

F. THE SPECIAL INSPECTOR SHALL COOPERATE WITH THE CONTRACTOR, BUT SHALL NOT DIRECT THE CONTRACTOR'S WORK NOR BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS.

1.04 REPORTING

A. THE SPECIAL INSPECTOR SHALL MAINTAIN A RECORD OF THE PROGRESS, WORKING CONDITIONS, OBSERVATIONS, TESTING, ANY REQUIRED ACTION BY THE CONTRACTOR, AND DEVIATIONS FROM THE OFFICIAL CONTRACT DOCUMENTS. SUCH RECORDS ARE TO BE KEPT BY THE SPECIAL INSPECTOR FOR A MINIMUM OF SEVEN YEARS AFTER COMPLETION OF THE PROJECT.

B. IT IS THE DUTY OF THE SPECIAL INSPECTOR TO IMMEDIATELY NOTIFY THE CONTRACTOR IN PERSON, AND THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD BY TELEPHONE, OF THE FOLLOWING:

1. THE USE OF MATERIALS, TESTS, EQUIPMENT, WORKMANSHIP OR CONSTRUCTION NOT CONFORMING TO THE OFFICIAL CONTRACT DOCUMENTS.

2. CONSTRUCTION PERFORMED WITHOUT INSPECTION AND NOT CAPABLE OF BEING INSPECTED OR TESTED IN PLACE. THESE EXCEPTIONS SHALL THEN BE ISSUED IN WRITING IMMEDIATELY TO THOSE LISTED ABOVE AND ATTACHED TO THE DAILY FIELD REPORTS.

C. THE SPECIAL INSPECTOR SHALL KEEP AN EXCEPTION FILE FOR FOLLOW-UP. THIS FILE SHALL BE REVIEWED ON A DAILY BASIS AND UPDATED AS EXCEPTIONS ARE RECTIFIED. ANY UNCORRECTED EXCEPTIONS SHALL BE REPORTED AT AN APPROPRIATE TIME, USING A NON-COMPLIANCE NOTICE, TO THE CONTRACTOR, ENFORCING AGENCY, OWNER'S REPRESENTATIVE AND ARCHITECT/ENGINEER.

D. THE SPECIAL INSPECTOR SHALL WRITE AND SIGN A REPORT EACH DAY AN INSPECTION IS MADE. THE REPORT SHALL CONSIST OF THE FOLLOWING:

1. IDENTIFY NAME AND LOCATION OF PROJECT, NAME OF SPECIAL INSPECTOR AND SPECIAL INSPECTOR REPRESENTATIVE, PERMIT NUMBER, DATE, WORKING CONDITIONS INCLUDING WEATHER AND TEMPERATURE, AND TYPE AND LOCATION OF WORK BEING PERFORMED.

2. A DETAILED REPORT OF EACH INSPECTION, INCLUDING THE PRESENCE AND ACTIVITIES OF THE TESTING AGENCY. NOTE CHANGES IN WORKING SEQUENCE OR MATERIALS AND ANY UNUSUAL CIRCUMSTANCES AFFECTING THE PERFORMANCE OF WORK. PLACE EMPHASIS ON THOSE AREAS WHERE DEFICIENCIES RECUR.

3. REVIEW AND COMMENT ON THE MATERIALS TESTING REPORTS PRIOR TO THAT DAY'S INSPECTION.

E. THE REPORT WILL BE SUPPLEMENTED WITH THE FOLLOWING, WHERE APPLICABLE:

1. SPECIAL RECORDS (WELD TESTS, WELDERS CERTIFICATES, CONCRETE TESTS, ETC.).

2. INSPECTION REPORTS OF THE SHORING AND RE-SHORING ENGINEER.

3. INSPECTION REPORTS OF THE GEOTECHNICAL ENGINEER.

4. DOCUMENTATION OF CHANGES MADE IN THE FIELD.

5. PHOTOGRAPHS.

F. DAILY FIELD REPORTS SHALL BE SUBMITTED ON A WEEKLY BASIS TO THE ENFORCING AGENCY, OWNER'S REPRESENTATIVE, ARCHITECT AND STRUCTURAL ENGINEER OF RECORD, UNDER A COVER LETTER SIGNED AND SEALED BY THE SPECIAL INSPECTOR.

G. AN INSPECTION LOG SUMMARIZING ALL INSPECTIONS SHALL BE POSTED AT THE JOB SITE AND FILLED OUT EACH DAY AN INSPECTION IS MADE. IT SHALL CONTAIN, AS A MINIMUM: PROJECT NAME, LOCATION, PERMIT NUMBER, SPECIAL INSPECTOR'S NAME, OWNER, CONTRACTOR, DATE OF INSPECTION, CONSTRUCTION PHASE, WORK DESCRIPTION, COMMENTS, APPROVED OR REJECTED AND BE SIGNED BY THE SPECIAL INSPECTOR.

H. UPON COMPLETION OF THE BUILDING AND PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE SPECIAL INSPECTOR SHALL SUBMIT TO THE ENFORCING AGENCY, OWNER, ARCHITECT AND STRUCTURAL ENGINEER OF RECORD A SIGNED AND SEALED STATEMENT STATING THAT THE PART OF THE PROJECT UNDER HIS INSPECTION RESPONSIBILITIES HAS BEEN CONSTRUCTED IN SUBSTANTIAL ACCORDANCE WITH THE OFFICIAL CONTRACT DOCUMENTS. THIS STATEMENT SHALL BE IN ACCORDANCE WITH SECTION 553.79(7)a OF THE FLORIDA STATUTES.

I. SINCE THE SPECIAL INSPECTOR DOES NOT CERTIFY THAT THE OFFICIAL CONTRACT DOCUMENTS ARE IN COMPLIANCE WITH THE GOVERNING CODES, ALL STATEMENTS ISSUED WILL REFER TO COMPLETED WORK IN SUBSTANTIAL ACCORDANCE WITH THE OFFICIAL CONTRACT DOCUMENTS.

1.05 CONTRACTOR REQUIREMENTS

A. THE CONTRACTOR SHALL COOPERATE WITH AND ASSIST THE SPECIAL INSPECTOR IN PERFORMING HIS INSPECTION DUTIES AS SPECIFIED HEREIN. THE SPECIAL INSPECTOR SHALL HAVE FREE ACCESS TO THE PROJECT AT ALL TIMES.

B. THE CONTRACTOR SHALL ADVISE THE SPECIAL INSPECTOR, IN ADVANCE, OF CONSTRUCTION SCHEDULES AND PLANNED OPERATIONS IN ORDER TO ASSURE TIMELY AND APPROPRIATE OBSERVATION AND INSPECTION OF ITEMS SPECIFIED HEREIN. THE MINIMUM NOTICE GIVEN THE SPECIAL INSPECTOR SHALL BE 24 HOURS PRIOR TO THE TIME OF THE INSPECTION. FURTHER, THE SCHEDULED INSPECTION TIME FOR REINFORCING STEEL SHALL BE NOT LESS THAN ONE HOUR PRIOR TO THE SCHEDULED CONCRETE PLACEMENT.

C. THE CONTRACTOR SHALL FURNISH IN A TIMELY MANNER TO THE SPECIAL INSPECTOR, COPIES OF ALL REVIEWED AND ACCEPTED SUBMITTALS (EXCLUDING CALCULATIONS) FOR THE STRUCTURAL ELEMENTS OF THE PROJECT.

D. THE CONTRACTOR SHALL PROVIDE THE SPECIAL INSPECTOR WITH OFFICE FACILITIES AT THE CONSTRUCTION SITE TO ACCOMMODATE HIS NEEDS. AS A MINIMUM, THIS OFFICE, IS TO BE EQUIPPED WITH THE FOLLOWING ITEMS: DESK, CHAIR, PLAN TABLE, PLAN RACK, FILING CABINET, TELEPHONE, UTILITIES, AIR CONDITIONING AND JANITORIAL SERVICES.

E. SPECIAL INSPECTIONS DO NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO COMPLY WITH THE CONTRACT DOCUMENTS, ANY STATUTORY OR CONTRACTUAL OBLIGATIONS, NOR HIS RESPONSIBILITIES TO CARRY OUT HIS QUALITY CONTROL INSPECTIONS AND TESTING. THE CONTRACTOR HAS THE SOLE RESPONSIBILITY FOR ANY DEVIATIONS FROM THE OFFICIAL CONTRACT DOCUMENTS AND THE COSTS OF RECTIFYING THOSE DEVIATIONS.

F. WORK WHICH IS IN NON-COMPLIANCE WITH THE OFFICIAL CONTRACT DOCUMENTS MAY BE CORRECTED BY THE CONTRACTOR OR THE CONTRACTOR MAY SUBMIT TO THE ARCHITECT/ENGINEER A REQUEST FOR ACCEPTANCE OF THE DEVIATION.

G. CONSTRUCTION PERFORMED WITHOUT INSPECTION AND THAT IS UNABLE TO BE INSPECTED MAY REQUIRE TESTING OR REMOVAL AS DETERMINED BY THE STRUCTURAL ENGINEER OF RECORD.

H. THE SPECIAL INSPECTOR CAN NOT MAKE THE REQUIRED COMPLETION STATEMENT AND THE BUILDING WILL NOT RECEIVE A CERTIFICATE OF OCCUPANCY IF WORK IS NOT IN SUBSTANTIAL ACCORDANCE WITH THE OFFICIAL CONTRACT DOCUMENTS, OR IF CONSTRUCTION IS PERFORMED WITHOUT INSPECTION AND IS UNABLE TO BE INSPECTED.

I. INSTALLATION OF ALL SHORING AND RE-SHORING SHALL BE IN ACCORDANCE WITH THE SIGNED AND SEALED SHORING AND RE-SHORING DRAWINGS PREPARED BY THE DELEGATED SHORING ENGINEER. THE DELEGATED SHORING ENGINEER OR HIS AUTHORIZED REPRESENTATIVE SHALL INSPECT AND ENSURE THAT THE DRAWING REQUIREMENTS AND SPECIFICATIONS ARE ADHERED TO, AND PROVIDE HIS WRITTEN REPORT TO THE SPECIAL INSPECTOR PRIOR TO ALL CONCRETE POURS. THE SPECIAL INSPECTOR IS TO VERIFY THAT THE INSPECTION IS PERFORMED AND IS TO OBSERVE THAT THE WORK APPEARS TO BE IN COMPLIANCE WITH THE DRAWINGS.

1.08 REQUIREMENTS OF THE OWNER

A. THE OWNER SHALL ARRANGE FOR ALL NECESSARY CONTRACT DOCUMENTS, INCLUDING TWO COMPLETE SETS OF ARCHITECTURAL AND STRUCTURAL DOCUMENTS FOR THE PROJECT, INCLUDING ALL DRAWINGS AND SPECIFICATIONS, THE GEOTECHNICAL REPORT AND MATERIALS TEST REPORTS, TO BE FURNISHED TO THE SPECIAL INSPECTOR DURING THE PROGRESS OF THE WORK IN A TIMELY MANNER. PROVIDE THE SPECIAL INSPECTOR WITH TWO COPIES OF ALL STRUCTURAL CHANGES, REVISIONS, ADDENDA, ETC.

B. THE OWNER SHALL ENSURE THAT THE CONTRACTOR PROVIDES TO THE ENFORCING AGENCY, ARCHITECT, STRUCTURAL ENGINEER OF RECORD AND THE SPECIAL INSPECTOR A SHORING AND RE-SHORING PLAN WHICH IS SIGNED AND SEALED BY A DELEGATED ENGINEER REGISTERED IN THE STATE OF FLORIDA.

C. THE OWNER SHALL ENSURE THAT A QUALIFIED TESTING AGENCY IS RETAINED. SEE CONTRACT DOCUMENTS FOR REQUIREMENTS.

D. THE OWNER SHALL ENSURE THAT A GEOTECHNICAL CONSULTANT IS RETAINED TO CONFIRM THAT THE SPECIFIED FOUNDATION PREPARATION IS PERFORMED.

PART II

2.01 GENERAL

THE FOLLOWING IS A GENERAL INSPECTION PLAN DESCRIBING WORK TO BE PERFORMED BY THE SPECIAL INSPECTOR. THE INTENT IS TO DESCRIBE MINIMUM LEVELS NECESSARY TO CONFIRM THAT WORK COMPLIES WITH THE DESIGN DOCUMENTS. THE FOLLOWING ARE NOT INSPECTOR CHECK LISTS BUT POINT OUT SOME CRITICAL AREAS REQUIRING SPECIFIC ATTENTION BY THE SPECIAL INSPECTOR.

2.02 FOLLOWING IS A DESCRIPTION OF THE STRUCTURAL SYSTEM EMPLOYED FOR THIS PROJECT:

2.03 SPECIAL CONDITIONS/CRITICAL COMPONENTS

2.04 FOUNDATIONS

A. SHALLOW FOUNDATIONS:

1. THE GEOTECHNICAL CONSULTANT RETAINED BY THE OWNER WILL INSPECT SHALLOW EXCAVATIONS AND ALL FOOTING AREAS TO CONFIRM THAT SPECIFIED DESIGN SOIL CAPACITIES ARE MET. THE GEOTECHNICAL CONSULTANT WILL FURNISH THE SPECIAL INSPECTOR WITH DAILY REPORTS AS WELL AS A SUMMARY REPORT, SIGNED AND SEALED BY A FLORIDA P.E., STATING THAT THE FOUNDATION PREPARATION WAS COMPLETED ACCURATELY AND COMPLETELY SO AS TO ALLOW THE FOUNDATIONS TO FUNCTION AS INTENDED.

2. THE TESTING AGENCY RETAINED BY THE OWNER WILL MONITOR AND TEST BACKFILL AND COMPACTION OPERATIONS. THE TESTING AGENCY WILL SUBMIT A COPY OF REPORTS ON THESE OPERATIONS TO THE SPECIAL INSPECTOR, SIGNED AND SEALED BY A FLORIDA P.E.

B. FOOTINGS:

1. REVIEW CONFIGURATION AND PLACEMENT OF REINFORCEMENT FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. OBSERVE THAT CLEARANCES ARE PROPERLY MAINTAINED.

2. REVIEW DOWEL AND LAP SPLICE LENGTHS FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS.

3. OBSERVE CONCRETE PLACEMENT AS OUTLINED IN THE CAST-IN-PLACE CONCRETE SECTION OF THIS INSPECTION PLAN.

C. DEEP FOUNDATIONS, NOT USED

D. PILE CAPS AND GRADE BEAMS: NOT USED

1. CHECK CONFIGURATION AND PLACEMENT OF REINFORCEMENT FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. OBSERVE THAT CLEARANCES ARE PROPERLY MAINTAINED.

2. CHECK DOWEL AND LAP SPLICE STRENGTHS FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS.

3. OBSERVE CONCRETE PLACEMENT AS OUTLINED IN THE CAST-IN-PLACE CONCRETE SECTION OF THIS INSPECTION PLAN.

2.05 CAST-IN-PLACE CONCRETE

A. THE CONTRACTOR IS TO NOTIFY THE SPECIAL INSPECTOR A MINIMUM OF 24 HOURS PRIOR TO THE PLACEMENT OF ANY STRUCTURAL CONCRETE.

B. REINFORCING STEEL:

1. USING THE STRUCTURAL DRAWINGS, INSPECT GRADE, SIZE, QUANTITY, CONFIGURATION AND SPACING OF REINFORCING FOR COMPLIANCE WITH THE STRUCTURAL DRAWINGS SUPPLEMENTED WITH SHOP DRAWINGS. PRIOR TO CONCRETE PLACEMENT REPORT ANY NOTED CONFLICT AND CONFIRM THAT THE CORRECTIONS ARE MADE BEFORE CONCRETE IS POURED.

2. CHECK MINIMUM CLEARANCE REQUIREMENTS FROM CONCRETE SURFACES.

3. CHECK THAT REINFORCING IS ADEQUATELY SUPPORTED AND TIED TO RESIST DISPLACEMENT OR SHIFTING DURING POUR.

4. CHECK THAT REBAR SURFACES ARE FREE OF EXCESS RUST OR OTHER COATINGS THAT MAY ADVERSELY AFFECT BONDING CAPACITY. IF OILING OF FORMS IS REQUIRED, CHECK THAT IT IS APPLIED BEFORE REINFORCING IS PLACED.

5. CHECK SPLICE LOCATIONS AND REQUIRED LENGTH OF LAP. CHECK THAT THE ACCEPTED MECHANICAL COUPLERS ARE PROPERLY INSTALLED PER MANUFACTURER'S SPECIFICATIONS. REPORT ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS BEFORE CONCRETE IS CAST AND CONFIRM THAT CORRECTIONS ARE MADE.

6. CHECK INSTALLATIONS OF HOOKED BARS FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS.

C. COLUMNS:

INSPECT REINFORCING STEEL, DOVETAIL SLOTS AND OTHER EMBEDDED ITEMS. CHECK TIE SPACING, ESPECIALLY DOUBLE TIES AND TIES AT DEEP BEAM INTERSECTIONS.

D. BEAMS:

INSPECT REINFORCING STEEL. CHECK TIE SPACING, INCLUDING LOCATION OF FIRST TIE. CHECK FOR HOOKED BOTTOM BARS. CHECK THAT HOOKED BARS EXTEND TO FAR FACE OF SUPPORT.

E. ONE WAY SLABS:

INSPECT REINFORCING STEEL, INCLUDING TEMPERATURE STEEL. CHECK THAT HOOKED BARS EXTEND TO FAR FACE OF SUPPORT.

F. TWO WAY SLABS:

INSPECT REINFORCING STEEL. CHECK FOR PROPER LAYERING. CHECK PLACEMENT OF TOP BARS THROUGH ARE PLACED WITHIN THE VICINITY OF THE COLUMNS. CHECK THAT ADDED BOTTOM BARS EXTEND TO FACE OF COLUMN, UNLESS OTHERWISE SHOWN ON CONTRACT DOCUMENTS, AND THAT THEY ARE WITHIN THE COLUMN STRIP. CHECK HOOK BAR REQUIREMENTS, BOT TOP AND BOTTOM. CHECK THAT HOOKS ARE PLACED AT FAR FACE OF SUPPORT. CHECK POSITION OF BARS AT SLAB OFFSETS AND DEPRESSIONS.

G. POST-TENSIONING: NOT USED

H. PRECAST/PRESTRESSED COMPOSITE CONCRETE: NOT USED

I. STRUCTURAL PRECAST CONCRETE:

1. IN PLANT INSPECTION:

a. THE SPECIAL INSPECTOR SHALL MAKE PERIODIC OBSERVATIONS OF PRECASTING OPERATIONS AT THE PRECASTING PLANT. OBSERVATION OF ALL ELEMENTS CAST ARE AS FOLLOWS:

DOUBLE TEES . . . . . .
COLUMN AND BEAMS . . . . . .
SHEAR WALLS, STAIRS AND OTHER UNIQUE ELEMENTS . .

b. IDENTIFY, EXAMINE AND REVIEW PLANT TESTING OF MATERIAL, SUBASSEMBLIES AND THEIR ANCHORAGE. PLANT QUALITY CONTROL PROGRAM AND PERSONNEL. VERIFY THAT ALL WELDERS ARE AWS CERTIFIED.

c. INSPECT BEDS AND FORMS PRIOR TO CONCRETING.

d. CHECK CONFIGURATION OF MEMBERS, NUMBER, SIZE AND POSITION OF TENDONS. REINFORCING STEEL, OTHER INCORPORATED MATERIALS, OPENINGS, BLOCKOUTS, EMBEDDED PLATES, ETC.

e. INSPECT CONVEYING, PLACING, CONSOLIDATING, FINISHING AND CURING OF CONCRETE.

f. VERIFY TENSIONING BY OBTAINING CERTIFIED TENSIONING RECORDS FROM DESIGNATED ENGINEER.

g. GENERALLY OBSERVE PLANT EQUIPMENT, WORKING CONDITIONS, WEATHER AND OTHER ITEMS WHICH MIGHT AFFECT THE PRODUCTS.

h. AS A GUIDE, FOLLOW THE RECORD KEEPING REQUIREMENTS OF PCI MNL 116, CHAPTER

2. ON SITE INSPECTION:

a. VERIFY THAT THE PRECAST UNITS ARE LOCATED AT THE PROPER PLACE IN THE STRUCTURE BY CONFIRMING THE MARK NUMBER WITH THAT SHOWN ON THE SHOP DRAWINGS. CHECK THAT ERECTION SEQUENCE CONFORMS WITH THE SHOP DRAWINGS AND THAT ALL BEARING, SPACING, INCLUDING BUT NOT LIMITED TO TEMPORARY BRACING AND SUPPORTS, IS INSTALLED PROPERLY AND IN ACCORDANCE WITH THE SUBMITTALS.

b. CHECK THAT MEMBER DIMENSIONS, INCLUDING LENGTH, DEPTH, WIDTH, CAMBER AND SIDE BOW ARE WITHIN ALLOWABLE TOLERANCES. VERIFY THAT BEARING CONDITIONS COMPLY WITH SPECIFIED REQUIREMENTS.

c. REVIEW AND VERIFY ALL CONNECTION DETAILS. CHECK THAT ALL CONNECTIONS ARE COMPLETED PROPERLY. VERIFY THAT ALL WELDERS ARE AWS CERTIFIED. INSPECT WELDED CONNECTIONS FOR SIZE, CONFIGURATION AND QUALITY. VERIFY THAT ALL WELDED CONNECTIONS ARE PROPERLY CLEANED AND PROTECTED AFTER COMPLETION. CHECK ALL COLUMN BASE CONNECTIONS AND ALL GROUTED CONNECTIONS. REFER TO DETAILS ON SHOP DRAWINGS AND STRUCTURAL DRAWINGS.

CHECK ALL EXPANSION JOINT MATERIAL, ANCHORS AND OTHER EMBEDDED ITEMS ARE CORRECT AND HAVE BEEN POSITIONED AND SECURED IN PLACE SO THAT DISPLACEMENT IS NOT POSSIBLE.

VERIFY THAT CONDUITS PLACED IN THE SLAB ARE REASONABLY SPACED TO ENSURE INTEGRITY OF THE SLAB.

2. CONFIRM THAT LOAD CARRYING EMBEDDED ITEMS ARE PLACED IN COMPLIANCE WITH THE CONTRACT DOCUMENTS. RELOCATION OF EMBEDDED ITEMS IN CONFLICT WITH REINFORCING WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE ARCHITECT/ENGINEER.

K. CHECK THAT CONSTRUCTION JOINTS, INCLUDING DOWELS, KEYS AND BULKHEADS, ARE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. REVIEW THE LOCATION OF CONSTRUCTION JOINTS IN BEAMS AND SLABS FOR COMPLIANCE WITH THE CONSTRUCTION JOINT LOCATION PLAN SUBMITTED BY THE CONTRACTOR TO THE ARCHITECT/ENGINEER.

L. OPENINGS:

1. REPORT ALL SLAB OPENINGS LARGER THAN 12" AND NOT SHOWN ON THE CONTRACT DOCUMENTS TO THE ARCHITECT/ENGINEER. CHECK PLACEMENT OF ADDITIONAL REINFORCEMENT AROUND OPENINGS. NO SLEEVES OR OPENINGS WILL BE PERMITTED IN BEAMS WITHOUT PRIOR APPROVAL OF THE ARCHITECT/ENGINEER.

M. CHECK THAT ALL FOREIGN MATERIAL HAS BEEN REMOVED FROM SPACES WHICH CONCRETE IS TO OCCUPY.

N. THE SPECIAL INSPECTOR SHALL BE ON SITE WHEN CONCRETE IS BEING PLACED FOR THE PRIMARY STRUCTURAL FRAME AS NECESSARY TO ASCERTAIN THAT PROPER CONCRETING PRACTICES, AS REQUIRED BY ACI 301, ASTM C94 AND OTHER RECOGNIZED INDUSTRY STANDARDS ARE FOLLOWED. OBSERVATIONS BY THE SPECIAL INSPECTOR SHALL INCLUDE, BUT NOT BE LIMITED TO VERIFICATION OF THE FOLLOWING:

1. TESTING AGENCY IS ON SITE AND THAT MIXING TIME, TEMPERATURE, SLUMP, AND AIR CONTENT ARE AS SPECIFIED. CHECK THAT ADDITION OF WATER TO THE CONCRETE MIX IN THE FIELD IS BASED ON THE GUIDELINES SET FORTH IN THE CONTRACT DOCUMENTS.

2. THE CONCRETE AS DELIVERED TO THE PROJECT SITE IS AS SPECIFIED FOR THAT PORTION IN WHICH PLACEMENT IS TO OCCUR.

3. CONCRETE IS BEING CONVEYED FROM MIXER TO PLACE OF FINAL DEPOSIT BY RECOGNIZED INDUSTRY STANDARDS. CONCRETE IS BEING DEPOSITED CONTINUOUSLY, OR IN LAYERS OF SUCH THICKNESS THAT NO CONCRETE WILL BE DEPOSITED ON CONCRETE WHICH AS HARDENED SUFFICIENTLY TO CAUSE THE FORMATION OF SEAMS OR PLANES OF WEAKNESS WITHIN THE AREA OF PLACEMENT.

4. CONCRETE IS BEING CONSOLIDATED AND THOROUGHLY WORKED AROUND REINFORCEMENT, EMBEDDED ITEMS AND INTO CORNERS OF FORMS, ELIMINATING AIR OR STONE POCKETS WHICH MAY CAUSE HONEYCOMBING, PITTING OR PLANES OF WEAKNESS.

5. CURING PROCEDURES ARE AS PER CONTRACT DOCUMENTS, ACI 308 "STANDARD PRACTICE FOR CURING CONCRETE" AND OTHER RECOGNIZED INDUSTRY STANDARDS.

O. AFTER THE FORMWORK HAS BEEN REMOVED, INSPECT CONCRETE SURFACES FOR HONEYCOMBING AND VOIDS.

2.06 STRUCTURAL STEEL

A. INSPECT STRUCTURAL STEEL PRIOR TO CONCEALMENT TO VERIFY GRADE, SIZES, CONNECTIONS, STRAIGHTNESS AND FINISH. CHECK WITH CONTRACT DOCUMENTS AND SHOP DRAWINGS.

B. INSPECT SETTING OF ANCHOR BOLTS, EMBEDS AND OTHER MISCELLANEOUS STRUCTURAL ITEMS PRIOR TO CONCRETING. VERIFY, SIZE, QUANTITY AND FINISH.

C. INSPECT CONNECTIONS FOR THE FOLLOWING:

1. BOLTED CONNECTIONS: TYPE, SIZE AND NUMBER OF BOLTS. CHECK THAT BOLTS ARE CLEAN AND LUBRICATED AND HAVE PROPER WASHERS AND THAT THEY CONFORM TO THE SPECIFICATIONS. CHECK THAT BOLT HOLES ARE THE SPECIFIED TYPE AND SIZE. VERIFY THAT BOLTS ARE PROPERLY TIGHTENED FOR SLIP CRITICAL BOLTS WITH LOAD INDICATOR WASHERS, CHECK ALL BOLTS VISUALLY AND 10% WITH A FEELER GAUGE. "TURN OF THE NUT" METHOD IS NOT ACCEPTABLE.

2. WELDED CONNECTIONS: VERIFY THAT WELDERS ARE AWS CERTIFIED FOR THE TYPE OF WELDS BEING MADE. VISUALLY EXAMINE ALL WELDS FOR TYPE, SIZE AND LENGTH FOR COMPLIANCE WITH THE STRUCTURAL DRAWINGS. VERIFY THAT REQUIRED NON-DESTRUCTIVE TESTING IS PERFORMED BY THE TESTING AGENCY. VERIFY THAT WELDS ARE CLEAN, FREE FROM SLAG, AND THAT RUST PROTECTION HAS BEEN APPLIED AS PER SPECIFICATIONS.

D. HEADED STUD ANCHORS CHECK FOR SIZE, LENGTH, SPACING AND WELDING.

E. REVIEW ERECTION OF TRUSSES FOR COMPLIANCE WITH CONTRACT DOCUMENTS AND ERECTION DRAWINGS.

F. OPEN WEB STEEL JOISTS:

1. INSPECT STEEL JOISTS TO VERIFY TYPE, SIZE, SPACING, CONNECTIONS, STRAIGHTNESS AND FINISH. INSPECT FIELD CONSTRUCTION DOCUMENTS AND SHOP DRAWINGS.

2. CHECK THAT BEARING CONDITIONS CONFORM TO REQUIREMENTS OF S.J.I. AND CONTRACT DOCUMENTS.

3. VERIFY THAT THE TEMPORARY BRACING AND PERMANENT CROSS-BRIDGING ARE BEING IMPLEMENTED PER REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS AND ERECTION DRAWINGS.

4. INSPECT SETTING OF SHELF ANGLES, BEARING PLATES AND MISCELLANEOUS STRUCTURAL ITEMS TO VERIFY SIZE, QUANTITY, LOCATIONS AND FINISH.

5. VISUALLY EXAMINE ALL FIELD WELDS.VERIFY THAT WELDERS ARE AWS CERTIFIED.

G. STEEL DECKS CHECK FOR TYPE, SIZE AND GAGE.CHECK CONNECTION SUPPORTS. CHECK THAT WELDING WASHERS ARE USED IF DECK IS LIGHTER THAN 22 GAGE STEEL. CHECK THAT WELDING IS IN CONFORMANCE WITH CONTRACT DOCUMENTS.

2.07 MASONRY

THE SPECIAL INSPECTOR SHALL OBSERVE INSTALLATION TECHNIQUES OF LOAD BEARING MASONRY ONLY. THIS WILL INCLUDE WORKMANSHIP; UNITS USED INCLUDING SIZE, STRENGTH AND WEIGHT; MORTAR AND GROUT TYPE AND MIXING; PLACEMENT OF REINFORCING STEEL, INCLUDING HORIZONTAL REINFORCEMENT; INSERTS;