



**GENERAL NOTES**

- THE NOTES ON THESE DRAWINGS ARE NOT INTENDED TO SUPPLANT SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES OR INCONSISTENCIES BETWEEN THESE DRAWINGS AND THE PROJECT SPECIFICATIONS. CONSULT THESE DRAWINGS FOR CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK.
- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL DIMENSIONS, EXISTING CONDITIONS, AND AS-BUILT CONDITIONS MUST BE ATTENDED TO BY THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE ATTENDED PART OF THE WORK.
- THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE ONLY AFTER THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, BRACING, TEMPORARY BRACING, CHAINS, WEDGES, REQUESTS, LOCATIONS, DEPRESSIONS AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.
- ALL DIMENSIONS, EXISTING CONDITIONS, AND AS-BUILT CONDITIONS MUST BE ATTENDED TO BY THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE ATTENDED PART OF THE WORK.
- THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE ONLY AFTER THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, BRACING, TEMPORARY BRACING, CHAINS, WEDGES, REQUESTS, LOCATIONS, DEPRESSIONS AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.
- SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWING SHALL BE THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
- THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS FOR ALL PARTS OF THE WORK, INCLUDING DESCRIPTION OF SHOPPING AND CONSTRUCTION METHODS AND DIMENSIONS TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ERECTION OF THE STRUCTURE AND SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS AND ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ERECTION OF THE STRUCTURE AND SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS AND ORDINANCES.
- IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE (2009 EDITION), SECTION 1704.1, A STATEMENT OF SPECIAL INSPECTIONS IS REQUIRED AS A CONDITION FOR THE ERECTION OF THE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A COMPLETE LIST OF MATERIALS AND WORK REQUIRING SPECIAL INSPECTIONS, THE SPECIAL INSPECTIONS TO BE PERFORMED AND A LIST OF THE INDIVIDUALS ASSIGNED TO PERFORM THEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FOR ALL TESTING REQUIREMENTS.

**DESIGN LOADS**

- BUILDING CODE: INTERNATIONAL BUILDING CODE AND ENERGY CODE (2009 EDITION)
- DESIGN FLOOR LIVE LOADS: 40 PSF CONCENTRATED VEHICLE LOAD 3000 LB
- DESIGN ROOF SNOW LOAD (PSF): 60 PSF
- DESIGN WIND LOAD: 100 MPH BASIC WIND SPEED: 100 MPH WIND LOAD IMPROVEMENT FACTOR (I): 1.1 WIND EXPOSURE FACTOR (K<sub>e</sub>): 1.0 WIND PROTECTION FACTOR (K<sub>d</sub>): 1.1 FLAT ROOF SNOW LOAD (PSF): 48 PSF + DWFT
- DESIGN SEISMIC LOADS: EQUIVALENT LATERAL FORCE PROCEDURE SEISMIC WEIGHT FACTOR (W): 1.1 SEISMIC WEIGHT FACTOR (W): 1.1 SEISMIC SITE CLASS: E SEISMIC RESPONSE COEFFICIENT: 0.18 BASIC SEISMIC DESIGN SYSTEM: STRUCTURAL STEEL SYSTEM NOT SPECIFICALLY RESPONSE MODIFICATION FACTOR (R) = 3.0 SEISMIC RESPONSE COEFFICIENT (C<sub>s</sub>) = 0.16

**CONCRETE NOTES**

- CONCRETE WORK SHALL CONFORM TO THE MINIMUM OF CONCRETE PRACTICE. LATEST EDITION. THIS PUBLICATION IS AVAILABLE THROUGH THE AMERICAN CONCRETE INSTITUTE (248 948-3000).
- ALL CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI U.L.O. EXCEPT WHERE NOTED OTHERWISE. CONCRETE SHALL BE PLACED AND FINISHED IN ACCORDANCE WITH ACI 308.3, LATEST EDITION.
- CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
- REINFORCING BARS SHALL CONFORM TO ASTM A631 GRADE 60 DEFORMED BARS OR SLABS.
- REINFORCING BARS SHALL CONFORM TO ASTM A631 GRADE 60 DEFORMED BARS AT DISCONTINUOUS ENDS. PROVIDE TENSION LAP SPICES PER ACI 308.3, LATEST EDITION.
- MINIMUM CONCRETE PROTECTIVE COVERING FOR REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:  
 a) SURFACES IN CONTACT WITH EARTH OR EXPOSED TO WEATHER: #6 BARS, 5/8" DIAMETER WIRE, AND SMALLER, 1.5"  
 b) SURFACES IN CONTACT WITH WEATHER: #6 BARS, 5/8" DIAMETER WIRE, AND SMALLER, 1.5"  
 c) SURFACES NOT IN CONTACT WITH EARTH OR EXPOSED TO WEATHER: #6 BARS, 5/8" DIAMETER WIRE, AND SMALLER, 1.5"
- REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS AND AT INTERSECTIONS. PROVIDE LAPPED BARS AT NECESSARY SPICES OR HOOKED BARS AT DISCONTINUOUS ENDS. PROVIDE TENSION LAP SPICES PER ACI 308.3, LATEST EDITION.
- WELDING OF REINFORCEMENT IS NOT PERMITTED.
- FOR ALL OPENINGS IN CONCRETE WALLS AND SLABS, PROVIDE SUPPLEMENTAL REINFORCING AROUND OPENINGS AS SHOWN ON THE CONTRACT DOCUMENTS WITH WRITTEN PERMISSION FROM ENGINEER.
- CONSTRUCTION JOINTS SHOWN ON DRAWINGS ARE MANDATORY. QUESTIONS, ADDITIONS, OR CHANGES SHALL NOT BE MADE EXCEPT WITH THE SIGNATURE OF A WRITTEN REQUEST TOGETHER WITH DRAWINGS OF THE PROPOSED JOINT LOCATION. JOINTS ARE NOT SHOWN, OR WHEN AT TENTATIVE LOCATIONS ARE PROPOSED, DRAWINGS SHOWING LOCATION OF CONSTRUCTION AND CONTROL JOINTS AND CONCRETE POURING ORDER SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR REVIEW AND APPROVAL. CONSTRUCTION JOINTS SHALL BE PLACED WITHOUT HORIZONTAL CONSTRUCTION JOINTS EXCEPT WHERE SHOWN OR NOTED. VERTICAL CONSTRUCTION JOINTS AND STOPS OF MINIMUM SHEAR, UNLESS NOTED OTHERWISE.
- SPACING OF CONSTRUCTION JOINTS, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:  
 a) FOOTINGS AND WALLS: MAX LENGTH 40'-0" OR 15'-0"  
 b) SLABS ON GRADE: SEE FOUNDATION PLAN
- EXCEPT WHERE INDICATED OTHERWISE, MINIMUM REINFORCING SHALL BE PROVIDED FOR ALL CONCRETE. PROVIDE MINIMUM 12 ANCHOR RODS SHALL BE HEADED RODS CONFORMING TO ASTM F1554 GRADE 36 KSI TENSILE STRENGTH. PROVIDE MINIMUM 12 ANCHOR RODS SHALL BE HEADED RODS CONFORMING TO ASTM F1554 GRADE 36 KSI TENSILE STRENGTH. PROVIDE MINIMUM 12 ANCHOR RODS SHALL BE HEADED RODS CONFORMING TO ASTM F1554 GRADE 36 KSI TENSILE STRENGTH. PROVIDE MINIMUM 12 ANCHOR RODS SHALL BE HEADED RODS CONFORMING TO ASTM F1554 GRADE 36 KSI TENSILE STRENGTH.
- ALL GROUT BENEATH BASE PLATES & BEARING PLATES SHALL BE "S-SHAP" 5000-PSI NON-SHINKING GROUT BY U.S. GROUT CORP.
- SLAB THICKNESSES INDICATED ON THE DRAWINGS ARE MINIMUMS. PROVIDE SUFFICIENT CONCRETE TO ACCOUNT FOR STRUCTURE DEFLECTION, SUBGRADE AND LENGTHS INDICATED.

**CONCRETE NOTES CONT.**

- INSTALLATION OF REINFORCEMENT SHALL BE COMPLETED AT LEAST 24 HOURS PRIOR TO THE SCHEDULED CONCRETE PLACEMENT. NOTIFY ARCHITECT AND STRUCTURAL ENGINEER OF COMPLETION AT LEAST 24 HOURS PRIOR TO THE SCHEDULED CONCRETE PLACEMENT.
- ALL ITEMS TO BE EMBEDDED INTO CONCRETE SHALL BE INSTALLED PRIOR TO PLACEMENT OF CONCRETE. PROVIDE ADDITIONAL REINFORCEMENT AND/OR TEMPLATES AS REQUIRED AND CONCRETE IS PROHIBITED.

**STRUCTURAL STEEL NOTES**

- STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC SPECIFICATION FOR THE DESIGN FABRICATION, AND ERECTION LATEST EDITION.
- STRUCTURAL STEEL SHALL CONFORM TO ASTM A572 GRADE 50 UNLESS NOTED OTHERWISE (U.L.O.). STRUCTURAL STEEL SHAPES DESIGNATED ON THE DRAWINGS FOR WIDE-FLANGE SECTIONS ASTM A992 (ASTM A572 GRADE 50) WITH SPECIAL REQUIREMENTS PER AISC TECHNICAL BULLETIN #3 DATED MARCH, 1987)
- STRUCTURAL TUBING: CONFORM TO ASTM A500 GRADE B6 F51.
- CONNECTION DESIGN FOR THIS PROJECT IS THE RESPONSIBILITY OF THE CONTRACTOR. CONNECTIONS SHALL BE DESIGNED AND SIZED BY THE CONTRACTOR AND REGISTERED IN THE STATE OF MAINE SHALL BE SUBMITTED WITH THE SHOP DRAWINGS FOR THIS PROJECT. SEE THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- FIELD CONNECTIONS SHALL BE BOLTED USING ASTM A325N HIGH STRENGTH BOLTS (U.L.O.) EXCEPT WHERE SHOWN OTHERWISE. CRITICAL (CS) CONNECTIONS SHALL BE WELDED UNLESS OTHERWISE NOTED. BRACED FRAME RELAYING CONNECTIONS AND JOINTS SHALL BE WELDED UNLESS OTHERWISE NOTED. USE A890 BOLTS WHERE INDICATED.
- WHERE WELDING IS INDICATED, ALL WELDING SHALL CONFORM TO AWS D1.1 LATEST EDITION. ELECTRODES SHALL BE CONFORM TO AWS A5.1 E70XX SERIES WITH PROPER ROD TO PRODUCE OPTIMUM WELD (LOW HYDROGEN).
- SEE CONCRETE NOTES AND DRAWINGS FOR ANCHOR BOLT INFORMATION, TYP.
- FRAMING OVER COLUMNS AND BEAMS: PROVIDE 1/4" THICK STEEL PLATES OVER BEAMS.
- PROVIDE 1/4" THICK TENSILE PLATE UNDER ALL COLUMN BASE PLATES UNLESS OTHERWISE NOTED.
- PROVIDE ALL MISCELLANEOUS ANGLES, PLATES, ANCHORS, BOLTS, ETC. SHOWN ON ARCHITECTURAL DRAWINGS FOR SUPPORT OF BRACING, PARTERS, FINISHERS, ETC. CONFORM TO ALL REQS.

**DETAILED WEB STEEL JOISTS**

- DESIGN DETAIL, FABRICATE AND ERECT STEEL JOISTS IN ACCORDANCE WITH THE LATEST EDITION OF STANDARD SPECIFICATIONS OF THE STEEL JOIST INSTITUTE (SJI).
- HANGERS FOR DUCTS, PIPES, UNITS, ETC., MUST BE ATTACHED TO JOISTS AT PANEL POINTS ONLY. EXCEPT WHERE DESIGNATED ON "S" JOISTS, IN NO CASE SHALL ANY SINGLE POINT LOAD EXCEED 300 LBS.
- PROVIDE BRACING AND BRACING ANCHORAGE IN ACCORDANCE WITH SJI SPECIFICATIONS. PROVIDE ADDITIONAL BRACING FOR UPLIFT FOR ROOF JOISTS WHERE REQUIRED BY SJI SPECIFICATIONS.

**FOOTING SCHEDULE**

FOOTING	SECTION	SLAB T.M.B.	8/8 S.W.B.	5/8 S.W.B.
F46	4'-0" x 6'-0" x 1'-0"			
F5	5'-0" x 5'-0" x 1'-0"			

**NOTES:**

- THE FOLLOWING ITEMS ARE NOT INCORPORATED IN THE FOUNDATION DESIGN:  
 1. DEALER EQUIPMENT OR MECHANICAL SYSTEMS  
 2. FLOOR DRAINS OR DEPRESSIONS  
 3. BRACING FOR PERMIT 316/2

**GENERAL NOTES**

- THE NOTES ON THESE DRAWINGS ARE NOT INTENDED TO SUPPLANT SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES OR INCONSISTENCIES BETWEEN THESE DRAWINGS AND THE PROJECT SPECIFICATIONS. CONSULT THESE DRAWINGS FOR CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK.
- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL DIMENSIONS, EXISTING CONDITIONS, AND AS-BUILT CONDITIONS MUST BE ATTENDED TO BY THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE ATTENDED PART OF THE WORK.
- ALL DIMENSIONS, EXISTING CONDITIONS, AND AS-BUILT CONDITIONS MUST BE ATTENDED TO BY THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE ATTENDED PART OF THE WORK.
- THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE ONLY AFTER THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, BRACING, TEMPORARY BRACING, CHAINS, WEDGES, REQUESTS, LOCATIONS, DEPRESSIONS AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.
- SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWING SHALL BE THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
- THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS FOR ALL PARTS OF THE WORK, INCLUDING DESCRIPTION OF SHOPPING AND CONSTRUCTION METHODS AND DIMENSIONS TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ERECTION OF THE STRUCTURE AND SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS AND ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ERECTION OF THE STRUCTURE AND SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS AND ORDINANCES.
- IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE (2009 EDITION), SECTION 1704.1, A STATEMENT OF SPECIAL INSPECTIONS IS REQUIRED AS A CONDITION FOR THE ERECTION OF THE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A COMPLETE LIST OF MATERIALS AND WORK REQUIRING SPECIAL INSPECTIONS, THE SPECIAL INSPECTIONS TO BE PERFORMED AND A LIST OF THE INDIVIDUALS ASSIGNED TO PERFORM THEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FOR ALL TESTING REQUIREMENTS.

**DESIGN LOADS**

- BUILDING CODE: INTERNATIONAL BUILDING CODE AND ENERGY CODE (2009 EDITION)
- DESIGN FLOOR LIVE LOADS: 40 PSF CONCENTRATED VEHICLE LOAD 3000 LB
- DESIGN ROOF SNOW LOAD (PSF): 60 PSF
- DESIGN WIND LOAD: 100 MPH BASIC WIND SPEED: 100 MPH WIND LOAD IMPROVEMENT FACTOR (I): 1.1 WIND EXPOSURE FACTOR (K<sub>e</sub>): 1.0 WIND PROTECTION FACTOR (K<sub>d</sub>): 1.1 FLAT ROOF SNOW LOAD (PSF): 48 PSF + DWFT
- DESIGN SEISMIC LOADS: EQUIVALENT LATERAL FORCE PROCEDURE SEISMIC WEIGHT FACTOR (W): 1.1 SEISMIC WEIGHT FACTOR (W): 1.1 SEISMIC SITE CLASS: E SEISMIC RESPONSE COEFFICIENT: 0.18 BASIC SEISMIC DESIGN SYSTEM: STRUCTURAL STEEL SYSTEM NOT SPECIFICALLY RESPONSE MODIFICATION FACTOR (R) = 3.0 SEISMIC RESPONSE COEFFICIENT (C<sub>s</sub>) = 0.16

**CONCRETE NOTES**

- CONCRETE WORK SHALL CONFORM TO THE MINIMUM OF CONCRETE PRACTICE. LATEST EDITION. THIS PUBLICATION IS AVAILABLE THROUGH THE AMERICAN CONCRETE INSTITUTE (248 948-3000).
- ALL CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI U.L.O. EXCEPT WHERE NOTED OTHERWISE. CONCRETE SHALL BE PLACED AND FINISHED IN ACCORDANCE WITH ACI 308.3, LATEST EDITION.
- CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
- REINFORCING BARS SHALL CONFORM TO ASTM A631 GRADE 60 DEFORMED BARS OR SLABS.
- REINFORCING BARS SHALL CONFORM TO ASTM A631 GRADE 60 DEFORMED BARS AT DISCONTINUOUS ENDS. PROVIDE TENSION LAP SPICES PER ACI 308.3, LATEST EDITION.
- MINIMUM CONCRETE PROTECTIVE COVERING FOR REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:  
 a) SURFACES IN CONTACT WITH EARTH OR EXPOSED TO WEATHER: #6 BARS, 5/8" DIAMETER WIRE, AND SMALLER, 1.5"  
 b) SURFACES IN CONTACT WITH WEATHER: #6 BARS, 5/8" DIAMETER WIRE, AND SMALLER, 1.5"  
 c) SURFACES NOT IN CONTACT WITH EARTH OR EXPOSED TO WEATHER: #6 BARS, 5/8" DIAMETER WIRE, AND SMALLER, 1.5"
- REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS AND AT INTERSECTIONS. PROVIDE LAPPED BARS AT NECESSARY SPICES OR HOOKED BARS AT DISCONTINUOUS ENDS. PROVIDE TENSION LAP SPICES PER ACI 308.3, LATEST EDITION.
- WELDING OF REINFORCEMENT IS NOT PERMITTED.
- FOR ALL OPENINGS IN CONCRETE WALLS AND SLABS, PROVIDE SUPPLEMENTAL REINFORCING AROUND OPENINGS AS SHOWN ON THE CONTRACT DOCUMENTS WITH WRITTEN PERMISSION FROM ENGINEER.
- CONSTRUCTION JOINTS SHOWN ON DRAWINGS ARE MANDATORY. QUESTIONS, ADDITIONS, OR CHANGES SHALL NOT BE MADE EXCEPT WITH THE SIGNATURE OF A WRITTEN REQUEST TOGETHER WITH DRAWINGS OF THE PROPOSED JOINT LOCATION. JOINTS ARE NOT SHOWN, OR WHEN AT TENTATIVE LOCATIONS ARE PROPOSED, DRAWINGS SHOWING LOCATION OF CONSTRUCTION AND CONTROL JOINTS AND CONCRETE POURING ORDER SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR REVIEW AND APPROVAL. CONSTRUCTION JOINTS SHALL BE PLACED WITHOUT HORIZONTAL CONSTRUCTION JOINTS EXCEPT WHERE SHOWN OR NOTED. VERTICAL CONSTRUCTION JOINTS AND STOPS OF MINIMUM SHEAR, UNLESS NOTED OTHERWISE.
- SPACING OF CONSTRUCTION JOINTS, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:  
 a) FOOTINGS AND WALLS: MAX LENGTH 40'-0" OR 15'-0"  
 b) SLABS ON GRADE: SEE FOUNDATION PLAN
- EXCEPT WHERE INDICATED OTHERWISE, MINIMUM REINFORCING SHALL BE PROVIDED FOR ALL CONCRETE. PROVIDE MINIMUM 12 ANCHOR RODS SHALL BE HEADED RODS CONFORMING TO ASTM F1554 GRADE 36 KSI TENSILE STRENGTH. PROVIDE MINIMUM 12 ANCHOR RODS SHALL BE HEADED RODS CONFORMING TO ASTM F1554 GRADE 36 KSI TENSILE STRENGTH. PROVIDE MINIMUM 12 ANCHOR RODS SHALL BE HEADED RODS CONFORMING TO ASTM F1554 GRADE 36 KSI TENSILE STRENGTH.
- ALL GROUT BENEATH BASE PLATES & BEARING PLATES SHALL BE "S-SHAP" 5000-PSI NON-SHINKING GROUT BY U.S. GROUT CORP.
- SLAB THICKNESSES INDICATED ON THE DRAWINGS ARE MINIMUMS. PROVIDE SUFFICIENT CONCRETE TO ACCOUNT FOR STRUCTURE DEFLECTION, SUBGRADE AND LENGTHS INDICATED.

**CONCRETE NOTES CONT.**

- INSTALLATION OF REINFORCEMENT SHALL BE COMPLETED AT LEAST 24 HOURS PRIOR TO THE SCHEDULED CONCRETE PLACEMENT. NOTIFY ARCHITECT AND STRUCTURAL ENGINEER OF COMPLETION AT LEAST 24 HOURS PRIOR TO THE SCHEDULED CONCRETE PLACEMENT.
- ALL ITEMS TO BE EMBEDDED INTO CONCRETE SHALL BE INSTALLED PRIOR TO PLACEMENT OF CONCRETE. PROVIDE ADDITIONAL REINFORCEMENT AND/OR TEMPLATES AS REQUIRED AND CONCRETE IS PROHIBITED.

**STRUCTURAL STEEL NOTES**

- STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC SPECIFICATION FOR THE DESIGN FABRICATION, AND ERECTION LATEST EDITION.
- STRUCTURAL STEEL SHALL CONFORM TO ASTM A572 GRADE 50 UNLESS NOTED OTHERWISE (U.L.O.). STRUCTURAL STEEL SHAPES DESIGNATED ON THE DRAWINGS FOR WIDE-FLANGE SECTIONS ASTM A992 (ASTM A572 GRADE 50) WITH SPECIAL REQUIREMENTS PER AISC TECHNICAL BULLETIN #3 DATED MARCH, 1987)
- STRUCTURAL TUBING: CONFORM TO ASTM A500 GRADE B6 F51.
- CONNECTION DESIGN FOR THIS PROJECT IS THE RESPONSIBILITY OF THE CONTRACTOR. CONNECTIONS SHALL BE DESIGNED AND SIZED BY THE CONTRACTOR AND REGISTERED IN THE STATE OF MAINE SHALL BE SUBMITTED WITH THE SHOP DRAWINGS FOR THIS PROJECT. SEE THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- FIELD CONNECTIONS SHALL BE BOLTED USING ASTM A325N HIGH STRENGTH BOLTS (U.L.O.) EXCEPT WHERE SHOWN OTHERWISE. CRITICAL (CS) CONNECTIONS SHALL BE WELDED UNLESS OTHERWISE NOTED. BRACED FRAME RELAYING CONNECTIONS AND JOINTS SHALL BE WELDED UNLESS OTHERWISE NOTED. USE A890 BOLTS WHERE INDICATED.
- WHERE WELDING IS INDICATED, ALL WELDING SHALL CONFORM TO AWS D1.1 LATEST EDITION. ELECTRODES SHALL BE CONFORM TO AWS A5.1 E70XX SERIES WITH PROPER ROD TO PRODUCE OPTIMUM WELD (LOW HYDROGEN).
- SEE CONCRETE NOTES AND DRAWINGS FOR ANCHOR BOLT INFORMATION, TYP.
- FRAMING OVER COLUMNS AND BEAMS: PROVIDE 1/4" THICK STEEL PLATES OVER BEAMS.
- PROVIDE 1/4" THICK TENSILE PLATE UNDER ALL COLUMN BASE PLATES UNLESS OTHERWISE NOTED.
- PROVIDE ALL MISCELLANEOUS ANGLES, PLATES, ANCHORS, BOLTS, ETC. SHOWN ON ARCHITECTURAL DRAWINGS FOR SUPPORT OF BRACING, PARTERS, FINISHERS, ETC. CONFORM TO ALL REQS.

**DETAILED WEB STEEL JOISTS**

- DESIGN DETAIL, FABRICATE AND ERECT STEEL JOISTS IN ACCORDANCE WITH THE LATEST EDITION OF STANDARD SPECIFICATIONS OF THE STEEL JOIST INSTITUTE (SJI).
- HANGERS FOR DUCTS, PIPES, UNITS, ETC., MUST BE ATTACHED TO JOISTS AT PANEL POINTS ONLY. EXCEPT WHERE DESIGNATED ON "S" JOISTS, IN NO CASE SHALL ANY SINGLE POINT LOAD EXCEED 300 LBS.
- PROVIDE BRACING AND BRACING ANCHORAGE IN ACCORDANCE WITH SJI SPECIFICATIONS. PROVIDE ADDITIONAL BRACING FOR UPLIFT FOR ROOF JOISTS WHERE REQUIRED BY SJI SPECIFICATIONS.

**NOTES:**

- THE FOLLOWING ITEMS ARE NOT INCORPORATED IN THE FOUNDATION DESIGN:  
 1. DEALER EQUIPMENT OR MECHANICAL SYSTEMS  
 2. FLOOR DRAINS OR DEPRESSIONS  
 3. BRACING FOR PERMIT 316/2

**NUDELL ARCHITECTS**  
 5180 W. Twelve Mile Road  
 Birmingham, MA, Michigan 48304  
 1-248-354-8800 / 248-824-8800  
 OFFICES IN:  
 Detroit, MI  
 972-887-8800  
 Grand Rapids  
 495-749-8800  
 Grand Haven, MI  
 616-979-0000  
 Grand Rapids, MI  
 616-979-0000  
 Grand Rapids, MI  
 616-979-0000

**BECKER**  
 2200 15th Avenue, S.E.  
 Grand Rapids, MI 49508  
 248-853-1144

**EXISTING TSL BUILDING SERVICE ADDITION**

project title

street title

FOUNDATION PLAN AND GENERAL NOTES

10/07/08 PERMITTING USE THESE DRAWINGS ONLY.

drawn: ABE  
 checked: EAS  
 approved: PEB

searched: chb  
 by: P.E. PERCIVAL 11/02/08  
 permit: 316/2  
 issued for permit: 3/16/12

project number: 2008-279

street: S11