

JUNCTION BOX STRUCTURAL SPECIFICATIONS AND NOTES:

- THE FOLLOWING STRUCTURAL NOTES APPLY UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS.
- THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING AND MONITORING LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC.
- OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS NOR WILL THE STRUCTURAL ENGINEER BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO.
- THE STRUCTURAL NOTES SHALL BE USED ALONG WITH THE PROJECT SPECIFICATIONS. WHERE A DIFFERENCE BETWEEN STRUCTURAL DRAWINGS, NOTES OR SPECIFICATIONS OCCUR, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN FOR CONTRACTUAL PURPOSES. THE CONTRACTOR SHALL REQUEST CLARIFICATION IMMEDIATELY UPON DISCOVERY OF DIFFERENCES AND BEFORE PROCEEDING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPENSATING THE OWNER AND/OR OWNER'S REPRESENTATIVE FOR ANY DESIGN CHANGES MADE AS A RESULT OF A DEVIATION BY THE CONTRACTOR FROM THE PLANS AND SPECIFICATIONS OR DUE TO ERRORS, FAULTY MATERIAL OR FAULTY WORKMANSHIP.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS AND CONDITIONS WITH OTHER PROJECT DRAWINGS PRIOR TO START OF CONSTRUCTION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR INCONSISTENCIES.
- THE CONTRACTOR SHALL ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING WITH APPROPRIATE TRADES, DRAWINGS, AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.
- NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON PROJECT. TYPICAL DETAILS ARE NOT CUT ON PLANS, BUT APPLY UNLESS NOTED OTHERWISE.
- WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDUM.
- ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL AND SIGNATURE OF AN ENGINEER REGISTERED IN THE STATE OF TEXAS.

DESIGN CRITERIA:

- COMPLY WITH THE 2000 INTERNATIONAL BUILDING CODE.
- SUPERIMPOSED DESIGN LOADS:

LIVE LOAD SURCHARGE	250 PSF	EITHER LOAD CAUSING GREATEST DISTRESS
LIVE WHEEL LOAD (HS20)	16,000 LBS	
- GEOTECHNICAL
 - EARTHWORK SHALL BE IN ACCORDANCE WITH THE SOILS INVESTIGATION REPORT (NO. 0702-1011), DATED AUG. 20, 2002 AND ADDITIONAL GEOTECHNICAL RECOMMENDATIONS DATED NOV. 20, 2002 (NO. 0702-1011 A), AND FEB. 28, 2003 (ADDENDUM #1) AND SEP. 29, 2003 (E-MAIL LETTER), PREPARED BY FUGRO-SOUTH, INC.
 - DESIGN LATERAL EARTH PRESSURE: SATURATED AT-REST CONDITION WITH $K_0=1.0$
 - WET UNIT WEIGHT: 120 PCF

ALIGNMENT OF ADJUSTABLE ITEMS:

- WALL SUPPORTS, CURB ANGLES, AND SIMILAR SUPPORTING MEMBERS MUST BE ACCURATELY SET WITH STRING LINES AND/OR OTHER SUITABLE METHODS.
- THESE ITEMS WILL BE CONSIDERED PROPERLY LOCATED WHEN THEIR LOCATION IS WITHIN 3/8" OF THE THEORETICAL LOCATION AND IF THE DISPLACEMENT ALONG ANY LENGTH DOES NOT EXCEED THE LENGTH DIVIDED BY 500.

WALL BACKFILL:

- EXISTING ON-SITE CLAY MATERIAL CAN BE USED AROUND ALL SIDES OF JUNCTION BOX STRUCTURE. THE BACKFILL MATERIAL SHALL BE PLACED IN MAXIMUM OF EIGHT (8)-INCH LIFTS AND COMPACTED TO A MINIMUM DENSITY OF 95 PERCENT OF ITS MAXIMUM STANDARD PROCTOR (ASTM D 698) DRY DENSITY. THE MOISTURE CONTENT FOR ON-SITE CLAY DURING COMPACTION SHOULD RANGE FROM OPTIMUM TO FIVE PERCENTAGE POINTS ABOVE OPTIMUM (0 TO +5).
- CUT, FILL AND COMPACT MATERIAL IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS.

REINFORCING STEEL:

- ALL REINFORCING STEEL FOR THE PROJECT SHALL BE DEFORMED BARS AND SHALL CONFORM TO THE FOLLOWING ASTM STANDARD DESIGNATIONS:

*3 BARS AND LARGER IN CONCRETE	A-615, GRADE 60
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- 90° HOOKS SHOWN ON DETAILS AND CONCRETE COVER SHALL BE IN ACCORDANCE WITH ACI STANDARDS.
- CHAIRS AND SUPPORT BARS SHALL BE PROVIDED IN ACCORDANCE WITH ACI STANDARDS.
- REINFORCEMENT SHALL BE DETAILED TO MEET ACI 315 STANDARDS.
- SHOP DRAWINGS SHALL BE SUBMITTED SHOWING ALL REINFORCEMENT TO BE PLACED. SHOP DRAWINGS SHALL INCLUDE PLANS AND ELEVATIONS SHOWING BAR LOCATIONS AND PLACEMENT WITHIN FOUNDATIONS, SLABS, BEAMS, COLUMNS AND WALLS.
- WELDING OF REINFORCING BARS SHALL BE DONE WITH LOW HYDROGEN ELECTRODES, IN ACCORDANCE WITH AWS D1.4, AND ONLY AFTER APPROVAL OF THE STRUCTURAL ENGINEER.

CONCRETE:

- ALL CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI.
- THE FOLLOWING MINIMUM COVER SHALL BE PROVIDED FOR REINFORCEMENT PLACED IN CONCRETE:

A. CONCRETE CAST AGAINST EARTH	3"
B. CONCRETE WALLS AND SLABS EXPOSED TO EARTH OR WEATHER	2"
C. ELEVATED CONCRETE SLABS AND BEAMS	1 1/2"
D. CONCRETE NOT EXPOSED TO EARTH OR WEATHER	2"
- CONCRETE MIX DESIGN SHALL BE SUBMITTED TO THE ENGINEER.
- ADMIXTURES MAY BE USED; HOWEVER, THEY SHALL NOT BE CONSIDERED AS REPLACING ANY PART OF THE CEMENT CONTENT FOR A SPECIFIED CONCRETE STRENGTH.
- POZZOLAN CLASS F MAY BE ADDED AT A RATIO NOT TO EXCEED 18% OF THE TOTAL WEIGHT OF CEMENT PLUS POZZOLAN.
- NO ALUMINUM CONDUITS OR PIPES SHALL BE EMBEDDED IN CONCRETE.
- COLD WEATHER AND HOT WEATHER CONCRETING SHALL BE PLACED ACCORDING TO ACI 306 AND ACI 305 RECOMMENDED PRACTICES RESPECTIVELY.
- MECHANICALLY VIBRATE ALL CONCRETE.

FORMWORK:

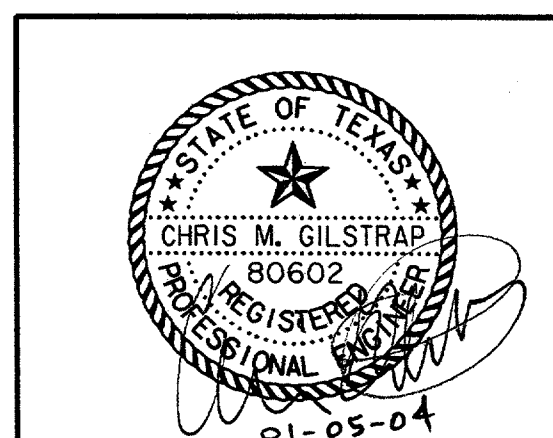
- CONCRETE FORMWORK, SHORING, FORM REMOVAL, AND RESHORING ARE CONSTRUCTION MEANS AND METHODS AND ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- NO LOAD CONCENTRATION ON FLOOR AND ROOF SLABS AND BEAMS SHALL OCCUR DURING CONSTRUCTION WITHOUT ADEQUATELY PROTECTING THE WORK.

CONCRETE JOINTS:

- SEE PLANS AND SPECIFICATIONS FOR TYPE AND LOCATION OF JOINTS IN SLABS ON GRADE.
- CONSTRUCTION JOINTS SHALL BE PLACED WHERE SHOWN ON DETAILS ONLY.
- ALL REINFORCING SHALL BE CONTINUOUS THROUGH CONSTRUCTION JOINTS.
- PROVIDE SHOP DRAWINGS SHOWING LOCATION OF CONSTRUCTION JOINTS NOT SHOWN ON CONTRACT DRAWINGS.

SHOP DRAWINGS AND SUBMITTALS

- SHOP DRAWINGS SHALL BE PREPARED AND SUBMITTED FOR REVIEW FOR EACH STRUCTURAL BUILDING MATERIAL AS SPECIFIED IN THE STRUCTURAL GENERAL NOTES AND THE CONTRACT SPECIFICATIONS. SEE THE CONTRACT SPECIFICATIONS FOR SUBMITTAL PROCEDURES AND ADDITIONAL INFORMATION.
- SHOP DRAWINGS SHALL USE DRAFTING LINE WORK AND LETTERING THAT IS CLEARLY LEGIBLE. SHOP DRAWINGS SHALL NOT CONTAIN REPRODUCTIONS OF THE CONTRACT DRAWING PLANS OR DETAILS.
- SHOP DRAWINGS SHALL NOT SHOW MATERIALS FOR MORE THAN ONE LEVEL ON THE SAME PLAN.
- SHOP DRAWINGS SHALL SHOW CLEAR AND COMPLETE INFORMATION FOR THE FABRICATION (DETAIL SHEETS AND/OR MATERIAL LISTS) AND INSTALLATION (ERECTION AND/OR PLACING DRAWINGS) OF MATERIALS. ERECTION AND PLACING DRAWING SHALL PROVIDE EVERY NOTE AND DETAIL REQUIRED TO CORRECTLY INSTALL MATERIALS; THEY SHALL NOT REFER TO THE CONTRACT DOCUMENTS FOR INSTALLATION INFORMATION.
- ERECTION AND PLACING DRAWING PLANS SHALL BE ORIENTED AND REFERENCED IN THE SAME MANNER AS PLANS ON THE CONTRACT DOCUMENTS.
- SHOP DRAWINGS SHALL LIST THE GRADE, CLASS AND/OR STRENGTH OF MATERIALS.
- SUBMITTALS RECEIVED BY THE ENGINEER WHICH ARE INSUFFICIENT OR INCOMPLETE MAY BE REJECTED AND RETURNED TO THE CONTRACTOR WITHOUT REVIEW. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DELAYS IN THE CONSTRUCTION SCHEDULE DUE TO REJECTED INSUFFICIENT OR INCOMPLETE SHOP DRAWING SUBMITTALS.
- SHOP DRAWINGS SHALL BE CHECKED AND INITIALED BY THE SUPPLIER PRIOR TO SUBMITTAL TO THE CONTRACTOR.
- THE CONTRACTOR SHALL THOROUGHLY CHECK, COORDINATE, STAMP, DATE AND INITIAL EACH AND EVERY SHOP DRAWING PRINT PRIOR TO SUBMITTAL TO THE ARCHITECT/ENGINEER FOR REVIEW. SHOP DRAWINGS WHICH DO NOT MEET THESE REQUIREMENTS SHALL BE CONSIDERED INCOMPLETE AND RETURNED TO THE CONTRACTOR WITHOUT REVIEW.
- CONTRACTOR'S REQUEST TO DEVIATE FROM THE CONTRACT DOCUMENTS SHALL BE CLEARLY IDENTIFIED BY "CLOUDING" ON THE SHOP DRAWINGS.
- RESUBMITTED SHOP DRAWINGS SHALL CLEARLY IDENTIFY ITEMS WHICH HAVE BEEN CORRECTED.



DATE	DESCRIPTION	REF NO.				
1/05/04	ISSUED FOR CONSTRUCTION					
11/07/03	ISSUED FOR BID					
JUNCTION BOX STRUCTURAL SPECIFICATIONS & NOTES						
SPECTRUM DRIVE EXTENSION						
TOWN OF ADDISON, TEXAS						
HUFF - Zolgers, Inc. 3131 McKinney Ave., Suite 600, Dallas, TX 75204 Phone (214) 871-3311/Fax (214) 871-0757						
DESIGN	DRAWN	APPR.	SCALE	DATE	PROJECT NO.	NO.
HZ1	HZ1	CMG	NONE	NOV 2003	01-3220-01	27