GENERAL

1. SCOPE THE GENERAL NOTES AND TYPICAL DETAILS ARE GENERAL AND APPLY TO THE ENTIRE PROJECT EXCEPT WHERE THERE ARE SPECIFIC INDICATIONS TO THE CONTRARY.

2. APPLICABLE SPECIFICATIONS AND CODES CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE UNIFORM BUILDING CODE. THE ABOVE SHALL GOVERN EXCEPT WHERE OTHER APPLICABLE CODES OR THE FOLLOWING NOTES ARE MORE RESTRICTIVE.

3. <u>DIMENSIONS</u> STRUCTURAL DIMENSIONS CONTROLLED BY OF RELATED TO MECHANICAL OR ELECTRICAL EQUIPMENT SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

4. PROVISIONS FOR EQUIPMENT MECHANICAL AND ELECTRICAL EQUIPMENT SUPPORTS, ANCHORAGES, OPENINGS, RECESSES AND REVEALS NOT SHOWN ON THE STRUCTURAL DRAWINGS BUT REQUIRED BY OTHER CONTRACT DRAWINGS SHALL BE PROVIDED PRIOR TO CASTING CONCRETE.

5. CONSTRUCTION LOADS STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ON COMPLETED STRUCTURES, DURING CONSTRUCTION, STRUCTURES SHALL BE PROTECTED BY BRACING WHEREVER EXCESSIVE CONSTRUCTION LOADS MAY OCCUR.

6. DRAINAGE SURFACES SLOPE DRAINAGE SURFACES UNIFORMLY TO DRAIN. SLOPE SHALL BE 1/4" PER FOOT EXCEPT WHERE NOTED OTHERWISE ON THE PLANS.

ALUMINUM

1. APPLICABLE CODE ALUMINUM CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE ALUMINUM CONSTRUCTION MANUAL OF THE ALUMINUM ASSOCIATION.

2. MATERIAL UNLESS OTHERWISE INDICATED, STRUCTURAL ALUMINUM SHALL BE ALLOY 6061-T6 AS SPECIFIED IN ASTM B-308, EXCEPT HANDRAILS WHICH SHALL BE 6063-T6.

3. ALUMINUM IN CONTACT WITH OR EMBEDDED IN CONCRETE ALUMINUM IN CONTACT WITH OR EMBEDDED IN CONCRETE SHALL BE COATED IN ACCORDANCE WITH THE SPECIFICATIONS.

4. BOLTS ALL BOLTS USED IN CONNECTION WITH ALUMINUM MEMBERS SHALL BE STAINLESS STEEL AISI 316, UNLESS OTHERWISE NOTED.

CONCRETE

1. APPLICABLE CODE CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE ACI BUILDING CODE (ACI-318).

2. REINFORCING STEEL DETAILS ALL DETAILING, FABRICATION, AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED SHALL BE IN ACCORDANCE WITH MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI-315), LATEST EDITION.

3. <u>DESIGN STRESSES</u> A. CONCRETE, ULTIMATE COMPRESSIVE STRESS AS SPECIFIED. B. ALL REINFORCING STEEL SHALL BE ASTM A615, GRADE 60

4. CONCRETE COVER CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS WITH MINIMUM COVER OF ONE BAR DIAMETER. A. FOOTINGS AND FOUNDATION MATS CAST ON GROUND - 3".

B. CONCRETE TO BE IN CONTACT WITH GROUND OR WEATHER. (1) BARS GREATER THAN *5 - 2-1/2" (2) BARS *5 OR LESS - 2"

C. CONCRETE NOT TO BE EXPOSED TO GROUND, WEATHER, OR LIQUID. (1) BEAMS - 2" TO SPIRALS

VERTICAL CONSTRUCTION JOINTS IN SLABS AND BEAMS SHALL BE PERMITTED NEAR MIDSPAN

6. PENETRATIONS PENETRATIONS OTHER THAN SHOWN SHALL NOT BE ALLOWED WITHOUT ENGINEERS APPROVAL. 7. EXTRA ACCESSORY BARS IN ADDITION TO NORMAL ACCESSORIES USED TO HOLD REINFORCING STEEL FIRMLY IN

POSITION, EXTRA ACCESSORY BARS SHALL BE USED AS FOLLOWS: A. IN SLABS *5 BARS AT 36" O/C MAXIMUM TO SUPPORT TOP REINFORCING STEEL. B. IN WALLS WITH TWO CURTAINS *3 U OR Z SHAPE SPACERS AT 6'-0" O/C E.W. 8. BAR LAP SPLICE LOCATIONS FOR GRAVITY LOADS

ALL BOTTOM BARS MAY BE SPLICED @ SUPPORTS ONLY. TOP BARS MAY BE SPLICED & CENTER OF SPAN ONLY.

ALL DOWEL & LAP LENGTHS, SHALL BE AS SHOWN ON TABLE FOR BARS SPACED 6" C/C OR MORE, IF SPACING IS LESS THAN 6" C/C, REFER TO ACI - 315, 1988.

TENSION BAR - LAP & EMBEDMENT LENGTHS BAR SIZE EMBEDMENT (IN.) LAP LENGTHS (IN.) CLASS A CLASS B CLASS C TOP OTHER TOP OTHER TOP OTHER 12 12 13 12 17 12 13 12 17 23 16 17 12 22 29 20 22 28 *37* 26 30 38 50 36 38 49 65 47 49 35 83 64 60 62 45 81 105 76 77 55 100 131 93

A. TOP BARS ARE HORIZONTAL REINFORCEMENT SO PLACED THAT MORE THAN 12" OF CONCRETE IS CAST IN THE MEMBER BELOW THE BARS.

B. OTHER BARS ARE ALL BARS OTHER THAN TOP BARS.

C. ALL LAP SPLICES SHALL BE TYPE C EXCEPT, CLASS B LAP-LENGTHS MAY BE USED ONLY IF NOT MORE THAN 50% OF BARS ARE LAP SPLICED WITHIN ONE LAP LENGTH.

10. RESTRICTED BAR ANCHORAGE IN CASES WHERE REINFORCING BARS CANNOT BE EXTENDED AS FAR AS REQUIRED DUE TO THE LIMITED EXTENT OF THE ADJACENT CONCRETE STRUCTURE, THE BARS SHALL EXTEND AS FAR AS POSSIBLE AND END IN STANDARD HOOKS.

11. STANDARD HOOKS BARS ENDING IN RIGHT ANGLE BENDS OR HOOKS SHALL CONFORM TO THE REQUIREMENTS OF PAR. 7.1, AC1-318.

12. SLOPING SLABS MONOLITHIC SLABS WITH TOPS THAT ARE SLOPED SHALL HAVE BOTTOMS SLOPED THE SAME AMOUNT, MAINTAINING A UNIFORM SLAB THICKNESS, UNLESS OTHERWISE SHOWN.

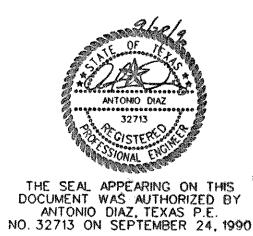
13. SIDEWALK SLABS CONCRETE SLABS SUPPORTED BY GROUND, UNLESS OTHERWISE NOTED, SHALL BE 4" THICK REINFORCED WITH WWF 6X6 - W1.4 X W1.4 AT MID-DEPTH OF SLAB.

14. CHAMFERS EXCEPT AS OTHERWISE REQUIRED, EXPOSED CONCRETE CORNERS AND EDGES SHALL HAVE 3/4" CHAMFERS.

15. ANCHOR BOLTS USE OF HEADED ANCHOR BOLTS SHALL BE GOVERNED BY THE FOLLOWING TABLE: BOLT DIAMETER 1/2" 5/8" 3/4" 7/8" 1" 1-1/8" 1-1/4" MIN. EMBEDMENT IN STRUCTURAL CONCRETE 4" 4" 5" 6" 7" 8" 9" ALLOWABLE SHEAR 2000° 3000° 3560° 4150° 4500° 5300° ALL BOLTS SHALL BE STAINLESS STEEL UNLESS OTHERWISE NOTED. EMBEDMENT LENGTH FOR BOLTS IN TENSION SHALL BE DETERMINED BY THE ENGINEER.

16. PLACING CONCRETE IN FOOTINGS WHEN CONCRETE FOOTINGS AND SLABS ARE SHOWN TO BE IN THE DIRECT CONTACT WITH SOIL, IT SHALL BE UNDERSTOOD THAT THE SOIL IS UNDISTURBED.

RECORD DRAWING



FREESE AND NICHOLS INC. NTD88047 D.A.N. DRAWN SEP. 1990 CONSULTING ENGINEERS TRACED AS NOTED SCALE CHECKED FORT WORTH - ARLINGTON - AUSTIN . TEXAS

NORTH TEXAS MUNICIPAL WATER DISTRICT WYLIE - ROCKWALL - FARMERSVILLE PIPELINE

METER VAULT - STRUCTURAL

OF 28

SH. 22

CF 88-3