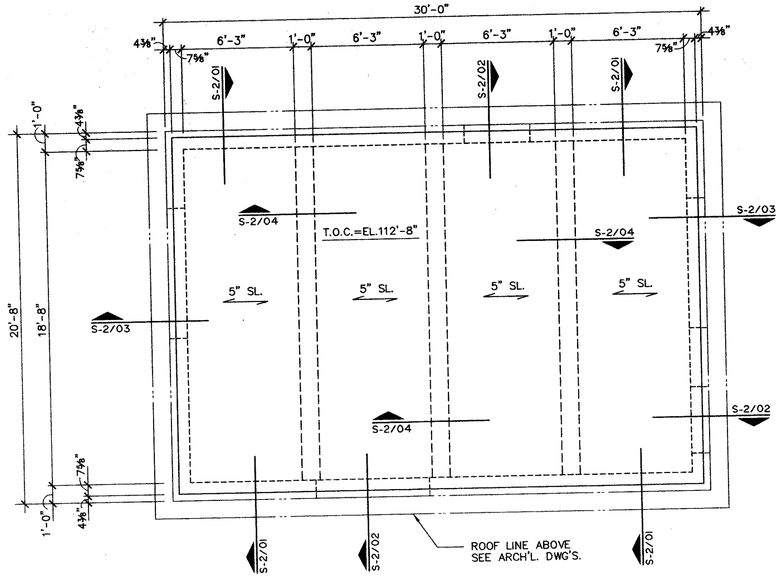
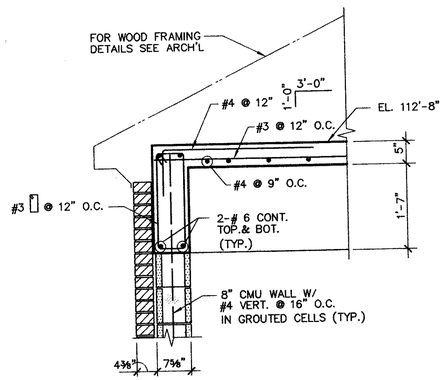


ROOF FRAMING PLAN

SCALE: 1/4"=1'-0"

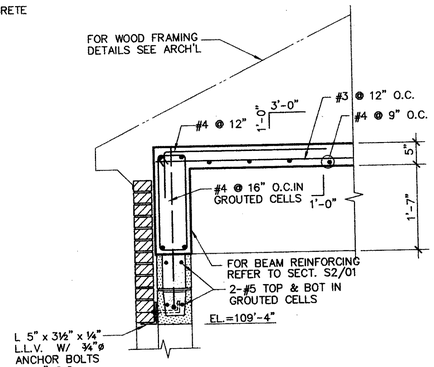
PLAN NORTH

T.O.C.= TOP OF CONCRETE



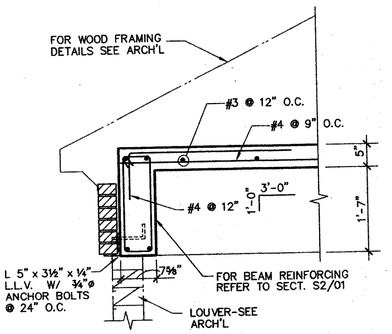
01 SECTION

SCALE: 3/4"=1'-0"



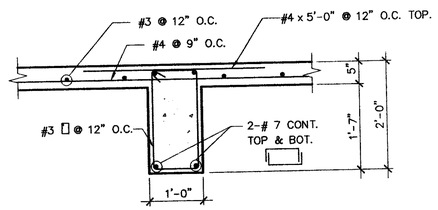
02 SECTION

SCALE: 3/4"=1'-0"



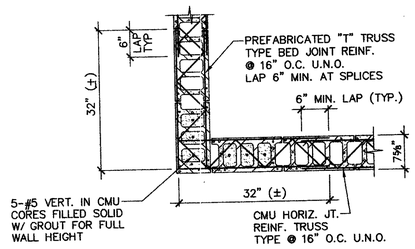
03 SECTION

SCALE: 3/4"=1'-0"



04 SECTION

SCALE: 3/4"=1'-0"



CMU BED JOINT REINF. AT WALL CORNERS

05 TYPICAL DETAIL

NO SCALE

GENERAL NOTES

DESIGN LOADS

1. GRAVITY LOADS:
   A. DESIGN UNIFORM LIVE LOADS ARE AS LISTED BELOW.

   UNIFORM LIVE LOADS
   ROOF = 20 PSF

   UNIFORM SUPERIMPOSED DEAD LOADS
   ROOF = 10 PSF WOOD FRAMING + 5 PSF ROOFING

2. WIND LOADS
   A. IN ACCORDANCE WITH UNIFORM BUILDING CODE, BASED ON A WIND SPEED OF 70 MPH AND EXPOSURE CLASS C.

FOUNDATION

1. FOUNDATION DESIGN IS BASED ON THE SOILS REPORT PREPARED BY JOHN H. HAYNES & ASSOCIATES, INC., JOB NO. 2882, DATED APRIL 24, 1985.

3. DESIGN END BEARING PRESSURE IS 50 KSF FOR DRILLED STRAIGHT-SHAFT PIERS WITH AT LEAST 7'-0" PENETRATION INTO FIRM GRAY LIMESTONE. DESIGN SKIN FRICTION IS 16 KSF FOR THE PORTION OF THE SHAFT EMBEDDED MORE THAN 4 FEET INTO FIRM GRAY LIMESTONE.

4. CAST CONCRETE WITHIN 8 HOURS OF DRILLING PIER SHAFT INTO BEARING STRATUM, AND IN NO CASE SHALL THE PIER EXCAVATION REMAIN OPEN OVERNIGHT.

5. SUBGRADE PREPARATION UNDER BUILDING SLAB ON GROUND:

   A. REMOVE THE UPPERMOST 6" OF SOIL AND STOCKPILE FOR USE ONLY AS TOP SOIL FOR FINAL GRADING.

   B. EXCAVATE AS REQUIRED FOR PLACEMENT OF SELECT FILL.

   C. BACKFILL BENEATH THE BUILDING WITH 2 FEET OF SELECT FILL. THE SELECT FILL SHALL BE LAYER COMPACTED IN 8 INCH MAXIMUM LOOSE THICKNESS TO A DRY DENSITY OF NOT LESS THAN 95% OF STANDARD PROCTOR (ASTM D-698) MAXIMUM DRY DENSITY. THE SOIL MOISTURE AT TIME OF COMPACTION SHALL BE WITHIN 3% OF THE MATERIAL'S OPTIMUM MOISTURE CONTENT. PLACE SELECT FILL AS SOON AS POSSIBLE OVER SUBGRADE TO LIMIT MOISTURE LOSS WITHIN THE UNDERLYING SOILS.

   D. SELECT FILL SHALL BE A UNIFORMLY BLENDED CLAYEY SAND HAVING A LIQUID LIMIT LESS THAN 30 AND A PLASTICITY INDEX (PI) BETWEEN 4 AND 15.

6. UNLESS SPECIFIED OTHERWISE, VAPOR BARRIER SHALL CONSIST PROVIDE 8 MIL POLYETHYLENE SHEET. TURN DOWN AT GRADE BEAMS AND PIERS. PROVIDE LAP AND SEAL AT ALL JOINTS. PATCH ALL TEARS PRIOR TO PLACING CONCRETE.

7. PROVIDE 6" CARTON FORMS UNDER ALL GRADE BEAMS.

8. ALL GRADE BEAMS SHALL BE FORMED ON BOTH SIDES. EARTH-FORMING IS NOT ACCEPTABLE.

9. IT MAY BE NECESSARY TO USE TEMPORARY CASING WHILE DRILLING THE PIERS IF UNDERGROUND WATER IS ENCOUNTERED.

10. IF TEMPORARY CASINGS ARE NECESSARY, EXTRACTION OF THE CASINGS SHALL BE DONE IN A MANNER THAT MAINTAINS A POSITIVE HEAD OF PLASTIC CONCRETE SO AS TO MINIMIZE THE POTENTIAL FOR INFILTRATION OF WATER SEEPAGE OR SLOUGHING SOILS.

REINFORCED CONCRETE

1. ALL STRUCTURAL CONCRETE SHALL BE OF NORMAL WEIGHT AGGREGATE WITH SPECIFIED PROPERTIES AS FOLLOWS:

	28 DAY STRENGTH	SLUMP	MAX. AGGREGATE
SLABS ON GROUND	– 3000 P.S.I.	5"	1"
GRADE BEAMS	– 4000 P.S.I.	5"	1"
ROOF BEAMS AND SLAB	– 4000 P.S.I.	5"	3/4"

2. REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60, U.N.O.

3. REINFORCING STEEL SPECIFICALLY NOTED TO BE TO BE SHOP OR FIELD WELDED SHALL CONFORM TO ASTM A-706, GRADE 60. WELDING OF OTHER REINFORCING STEEL IS NOT PERMITTED.

4. ALL REINFORCING SHALL LAP 36 BAR DIAMETERS AT SPLICES UNLESS NOTED OTHERWISE. HOOK CONTINUOUS BARS AT DISCONTINUOUS ENDS.

5. DETAILING OF CONCRETE REINFORCING AND ACCESSORIES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI PUBLICATION 315.

6. UNLESS NOTED OTHERWISE, CONCRETE PROTECTION FOR MAIN REINFORCING STEEL SHALL BE AS FOLLOWS:

SLABS ON GROUND	CENTER IN SLAB
BEAMS AND WALLS ON EARTH	2" SIDES AND TOP, 3" BOTTOM
SUSPENDED BEAMS	2" SIDES, TOP AND BOTTOM
SUSPENDED SLABS	1" TOP, 3/4" BOTTOM

HOLLOW CONCRETE MASONRY

1. ALL HOLLOW CONCRETE BLOCK SHALL CONFORM WITH ASTM C90, TYPE N1, AND SHALL HAVE A COMPRESSIVE STRENGTH, BASED ON THE NET AREA AND AN AVERAGE OF 3 UNITS, OF 2000 PSI.

2. MORTAR FOR REINFORCED HOLLOW CONCRETE MASONRY SHALL BE TYPE S.

3. GROUT FOR REINFORCED HOLLOW CONCRETE MASONRY SHALL HAVE THE FOLLOWING PROPERTIES:

   A. MINIMUM STRENGTH = 3000 PSI AT 28 DAYS

   B. MAXIMUM COARSE AGGREGATE SIZE = 3/8"

   C. SLUMP = 7", +/-1".

   PLACE GROUT IN LIFTS OF 4'-0" OR LESS. GROUT ALL CELLS CONTAINING REINFORCING STEEL OR EMBEDDED METALS. DO NOT USE MORTAR AS GROUT.

4. PROVIDE HORIZONTAL JOINT REINFORCEMENT AT EVERY SECOND BLOCK COURSE UNLESS NOTED OTHERWISE.

5. PROVIDE 3-#5 VERTICALS IN GROUTED CELLS UNDER ALL CONCENTRATED LOADS.

TOWN OF ADDISON, TEXAS

CELESTIAL ROAD PUMP STATION ADDITIONS

GENERATOR BUILDING

SHIMEK, JACOBS & FINKLEA, L.L.P.
CONSULTING ENGINEERS
Dallas, Texas

CHARLES GOJER 33348 REGISTERED PROFESSIONAL ENGINEER STATE OF TEXAS 2-16-98

DESIGNED BY:	J.O.M.	PROJECT:	97 180	SHEET NO.	S-2
DRAWN BY:	J.O.M.	DATE:	FEBRUARY, 1998	OF	SHEETS