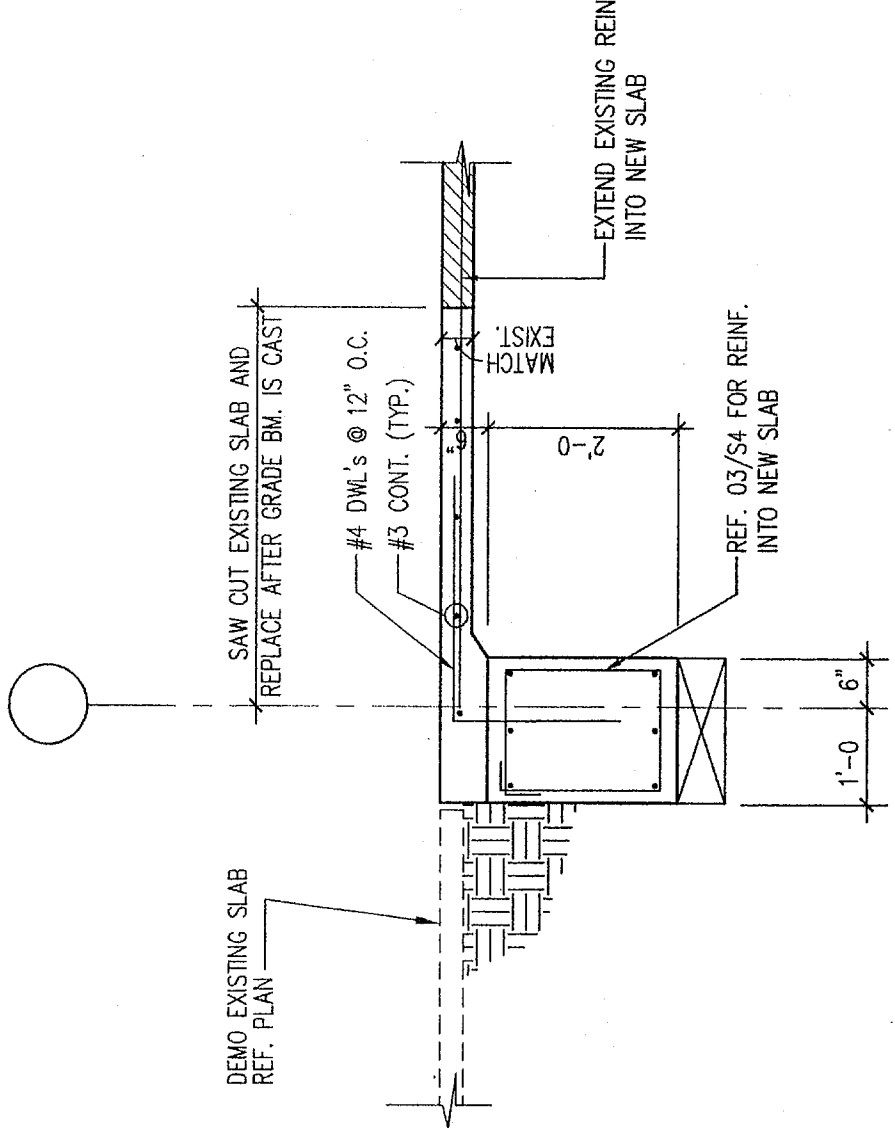
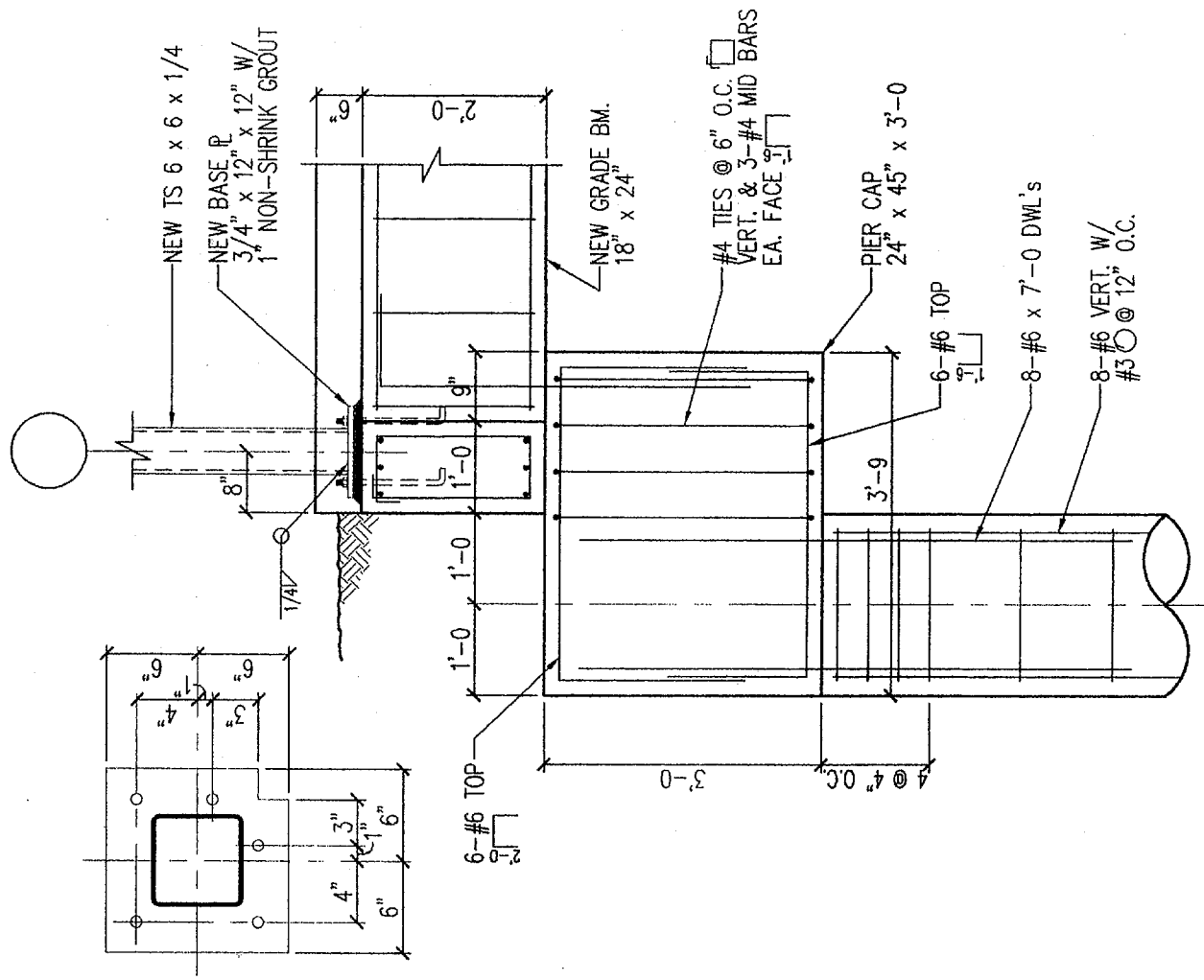


01

TYPICAL PIER DETAIL



02



05

- GENERAL NOTES**
- FOUNDATION DESIGN AND SUBSURFACE INFORMATION IS BASED ON THE SOIL INVESTIGATION PREPARED BY SOUTHWESTERN LABOR REPORT NO. 91-0178. ALL REVISIONS TO THIS REPORT SHALL BE MADE BY THE ORIGINAL ENGINEER. EXCAVATED STRATA AT APPROXIMATELY TWELVE (12'-0") FEET BELOW FINISH GRADE ARE INDICATED BY A DASHED LINE. IF THESE STRATA ARE FOUND TO BE LARGER OR TO CONTAIN MORE LIMESTONE STRATA THAN SHOWN ON THE INVESTIGATION REPORT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ADDITIONAL DETAILS AND AN ALLOWABLE SOIL FRICTION OF 6000 P.S.F. PIERS SHALL PENETRATE THE GRAY LIMESTONE STRATA A MINIMUM OF FOUR (4'-0") FEET.
 - PROVIDE 6" VOID BOXES BELOW ALL GRADE BEAMS.
 - THE STRUCTURAL SECTION IS IN ACCORDANCE WITH THE PROVISIONS OF THE UNIFORM BUILDING CODE, 1988 EDITION.
 - DESIGN LOADS ARE AS LISTED BELOW.

- LIVE LOADS
- ROOF WIND PER 1988 UNIFORM BUILDING CODE, 90 P.S.F.
- PRINCIPAL OPENINGS ARE SHOWN ON THE DRAWINGS. SEE ARCHITECTURAL MECHANICAL AND ELECTRICAL DRAWINGS FOR SECTORS, CHASIS, INSERTS AND OTHER OPENINGS NOT SHOWN. THE CONTRACTOR SHALL PROVIDE FOR ALL OPENINGS IN THE STRUCTURAL DRAWINGS OF NOTED SIZE AND LOCATION. ALL OPENINGS SHALL BE IDENTIFIED BY A DASHED LINE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ADDITIONAL DETAILS AND AN ALLOWABLE SOIL FRICTION OF 6000 P.S.F. PIERS SHALL PENETRATE THE GRAY LIMESTONE STRATA A MINIMUM OF FOUR (4'-0") FEET.
- LOADINGS FOR MECHANICAL EQUIPMENT ARE BASED ON THE UNITS SHOWN ON THE MECHANICAL DRAWINGS. ANY CHANGES IN TYPE, SIZE OR LOCATION OF EQUIPMENT SHALL BE REPORTED TO THE ARCHITECT FOR THE PLACEMENT OF SUPPORTING MEMBERS PRIOR TO THE FABRICATION OF SUCH EQUIPMENT.
- SEE ARCHITECTURAL DRAWINGS FOR ELEVATIONS NOT SHOWN AND FOR EXACT LOCATION OF MECHANICAL EQUIPMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE MECHANICAL DRAWINGS WITH THE ARCHITECTURAL SECTIONS AND REPORT ANY DISCREPANCY TO THE ARCHITECT PRIOR TO FABRICATING OR INSTALLING STRUCTURAL MEMBERS.
- THE CONTRACTOR SHALL INSURE THAT CONSTRUCTION MATERIALS WHOSE STRENGTH IS IN QUESTION ARE TESTED AND APPROVED BY THE ARCHITECT PRIOR TO FABRICATING OR INSTALLING STRUCTURAL MEMBERS.

03

- CONCRETE NOTES
- ALL CONCRETE SHALL BE LABORATORY DESIGNED AND CONTROLLED AND SHALL MEET THE REQUIREMENTS OF BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (AC308). CONCRETE SHALL ALSO CONFORM TO THE FOLLOWING REQUIREMENTS.
- COMPRESSIVE STRENGTH @ 28 DAYS AIR ENTRAINED USAGE W/C RATIO

| COMPRESSIVE STRENGTH @ 28 DAYS | AIR ENTRAINED | USAGE | W/C RATIO |
|--------------------------------|---------------------|----------------------------|-----------|
| 3000 PSI | HARD ROCK, AIR CURS | SHELVING, PAVING AND CURBS | 0.48 |
| 3000 PSI | HARD ROCK | ALL OTHER CONCRETE | 0.58 |

IN ALL DRAWINGS LENGTH SHALL BE ADDED TO THE NOTED CONCRETE TO PROVIDE 3 TO 6 PERCENT AIR BY VOLUME.

- ALL CONCRETE WORK TO BE IN ACCORDANCE WITH AC 318 AND AC 308.
- CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE AS NOTED BELOW. REFERENCE AC 318 SECTION 7.7 FOR CONDITIONS (NOTED).
- GRADE BEAMS & PLATEERS
- ALL CONCRETE PLACED AGAINST SOIL
- SLABS ON GRADE

- REINFORCING STEEL NOTES**
- ALL REINFORCING SHALL BE NEW RIBBET STEEL, ASTM A615, GRADE 60. REINFORCING SHALL BE DETAILLED AND FABRICATED IN ACCORDANCE WITH THE AC 318 AND AC 308.
 - HEADED STUDS USED IN FABRICATION OF EMBEDDED ASSEMBLIES SHALL BE WELDED TO THOSE ASSEMBLIES USING A FULL FUSION PROCESS.
 - HORIZONTAL GRADE BEAM REINFORCEMENT SHALL BE CONTINUOUS AND SHALL HAVE 90 DEGREE BENDS AND EXTENSIONS AT CORNERS AND INTERSECTIONS AS SHOWN ON THE DRAWINGS.
 - REINFORCE ALL MECHANICAL JOINTS WITH #4 AT 12" O.C. EACH WAY.

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 - ALL CONCRETE PLACED AGAINST SOIL
 - SLABS ON GRADE

- STRUCTURAL STEEL AND METAL DECK NOTES**
- STRUCTURAL STEEL SHALL BE DOMESTIC, NEW AND SHALL CONFORM TO AISC. ALL CONNECTIONS SHALL BE SHOP WELDED UNLESS NOTED OTHERWISE.
 - ALL NON-COMPLETE BEAM CONNECTIONS SHALL BE EQUAL TO ONE-HALF OF THE SPECIFICATION. ALL NOTED OTHERWISE. CONNECTION BOLTS SHALL CONFORM TO ASTM A325-N.
 - ALL STRUCTURAL STEEL SHAPES, PLATES, ETC., SHALL CONFORM TO THE FOLLOWING DESIGNATIONS, UNLESS NOTED OTHERWISE:
ASTM A572 OR A582-----ALL STRUCTURAL STEEL UNLESS NOTED OTHERWISE
ASTM A500 OR GRADE B-----STRUCTURAL TUBE COLUMNS NOTED OTHERWISE
ASTM A500-----GRADING
 - ALL FIELD CONNECTIONS SHALL BE BOLTED WITH 3/4" DIAMETER BOLTS (ASTM A325-N UNLESS NOTED) OR WELDED AS SHOWN ON THESE DRAWINGS. ALL NOT-COMPLETE BEAM CONNECTIONS SHALL BE EQUAL TO ONE-HALF OF THE SPECIFICATION UNLESS NOTED OTHERWISE.
 - STEEL MEMBERS SHALL NOT BE SPUNDED EXCEPT WHERE SHOWN ON THE DRAWINGS UNLESS APPROVED BY THE ENGINEER.
 - ALL STRUCTURAL STEEL DETAILS AND CONNECTIONS SHALL CONFORM TO THE STANDARDS OF THE AISC.
 - ALL ANCHOR BOLTS SHALL CONFORM TO ASTM A307, UNLESS NOTED OTHERWISE.
 - FOR ALL HIGH STRENGTH BOLTS, HARDENED WASHERS SHALL BE PROVIDED AS REQUIRED BY THE SPECIFICATIONS.
 - FABRICATION AND ERECTION OF STEEL JOISTS SHALL BE IN ACCORDANCE WITH THE STANDARDS OF THE STEEL JOIST INSTITUTE, LATEST EDITION.
 - HOT DIP GALVANIZE ALL STRUCTURAL STEEL EXPOSED TO WEATHER.
 - ROOF DECK SHALL BE 1/2" WIDE RIB TYPE 8" STEEL DECK 18 GA. GALVANIZED. A MINIMUM YIELD STRENGTH OF 33,000 PSI.
 - DECK SHALL BE GALVANIZED WITH AN ASTM A-525 G-90 COATING.
 - DECK SHALL BE CONTINUOUS OVER THREE OR MORE SUPPORTS AND SHALL BE CONNECTED TO THE SUPPORTS AS FOLLOWS:
1. 5 PLACES PER 36" SHEET WITH AT EACH TRANSVERSE SUPPORT, WELDS SHALL BE 5/8" DIAMETER ARC FUDGE WELDS.
2. 5/8" DIAMETER ARC FUDGE WELDS AT 12" O.C. AT PERIMETER SUPPORTS PARALLEL TO DECK BEAMS.
3. SIZE LIPS OF ADJACENT SHEETS SHALL BE SCHEDULED TOGETHER AT THREE POINTS BETWEEN EACH PAIR OF JOISTS.
D. ROOF DECK SYSTEM SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

- WELDING NOTES**
- WELD MESH ARE NOT CALLED OUT ON THE DRAWINGS. THEY ARE MINIMUM WELDED PER AISC D11.1. WELDED JOINTS SHALL BE FULL PENETRATION.
 - UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL GROOVE WELD SHALL BE FULL PENETRATION.
 - PROVIDE FILLET WELDS AT ALL CONTACT JOINTS BETWEEN STEEL MEMBERS. THE WELDS SHALL BE IN ACCORDANCE WITH THE WELDED JOINTS OF THE STEEL JOIST INSTITUTE. THE WELDS SHALL BE OF THE FULL PENETRATION. THE WELDS SHALL BE OF THE FULL PENETRATION.
 - WELDING OF METAL FORM DECK SHALL CONFORM TO AWS D1.3.

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NO TYPED

NO TYPED

NO TYPED

NO TYPED

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NOV 18, 2003
The seal appearing on this document was authorized by me on Nov. 13, 2003. Attention of a sealed document without proper notification to the responsible engineer under the Texas Engineering Act.

REVISED BRACING
11-25-03

date: 11/13/03
job no.
sheet title
CONCRETE SECTIONS & DETAILS
Sheet no.

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BELTWAY QUORUM SHOPPING CENTER
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