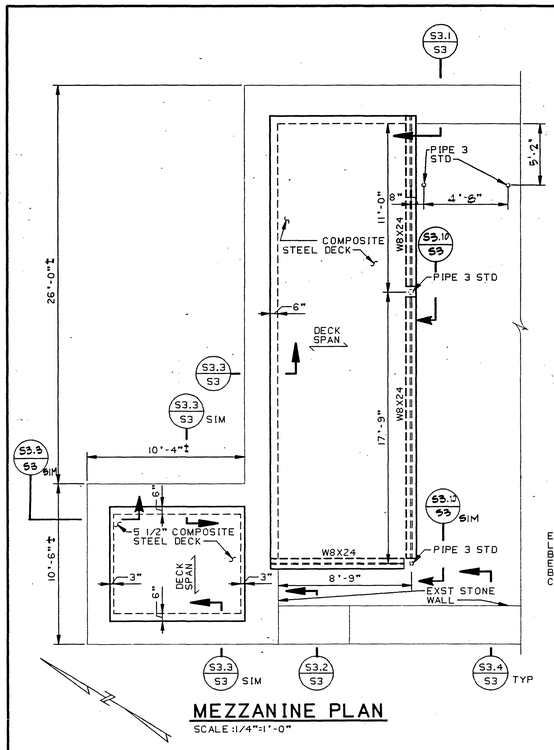
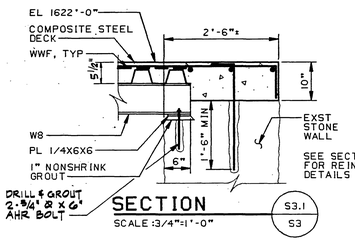


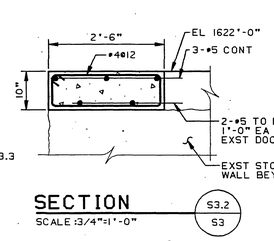
MEZZANINE PLAN

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



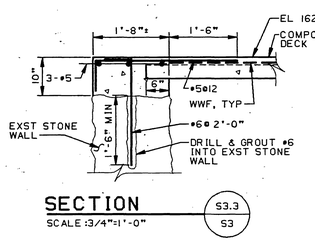
SECTION S3.1 / S3

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



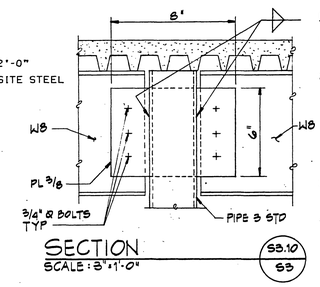
SECTION S3.2 / S3

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



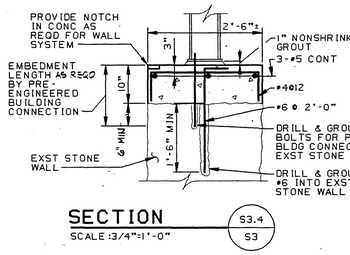
SECTION S3.3 / S3

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



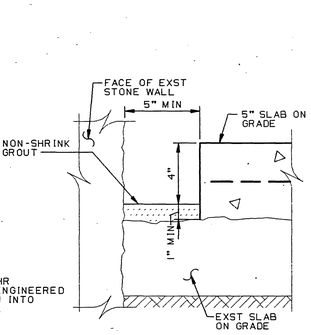
SECTION S3.10 / S3

SCALE: 3"=1'-0"



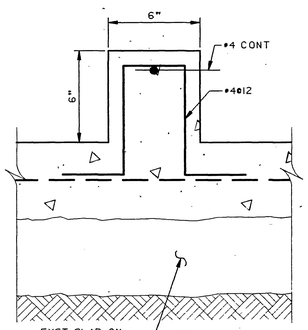
SECTION S3.4 / S3

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



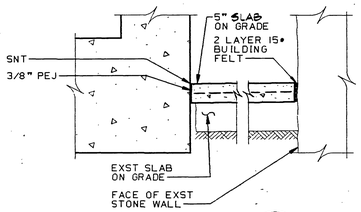
SECTION S3.5 / S2

SCALE: 3"=1'-0"



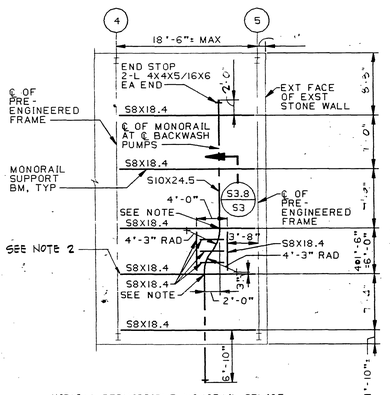
SECTION S3.6 / S2

SCALE: 3"=1'-0"



SECTION S3.7 / S2

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

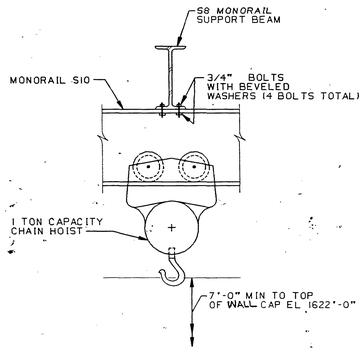


NOTES: 1. PERMISSIBLE MONORAIL SPLICE SHALL BE FULL PENETRATION WELD OF WEB & FLG, AND THE MONORAIL SHALL BE CONNECTED TO THE SUPPORT BM BY 2-3/4" Ø BOLTS ON EA SIDE OF SPLICE.

2. REACTION OF EA MONORAIL SUPPORT BM IS 5.2 KIPS, TYP.

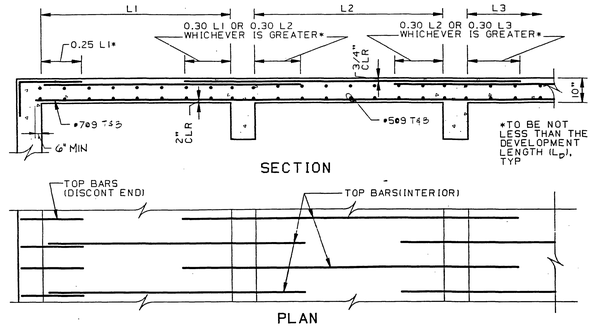
MONORAIL PLAN

SCALE: 1/8"=1'-0"



SECTION S3.8 / S3

SCALE: 1 1/2"=1'-0"

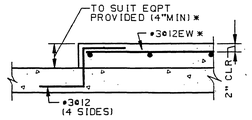


SECTION

PLAN

TYPICAL SLAB DETAIL

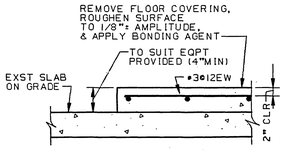
NO SCALE



*PROVIDE #4@12 EW AND 6" MIN PAD FOR CIRCULAR EQUIP PADS

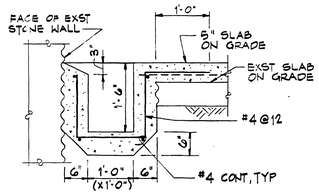
EQUIPMENT PAD DETAIL ON NEW SLAB ON GRADE

NO SCALE



EQUIPMENT PAD DETAIL ON EXST SLAB ON GRADE

NO SCALE

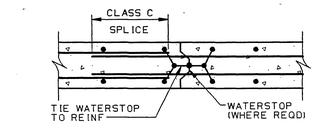


SECTION S3.9 / S2

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

TYPICAL REINFORCING DETAIL AT EXTERIOR CORNER OF CONRETE SLAB

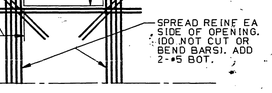
NO SCALE



NOTE: CONCRETE 10" AND OVER IN THICKNESS TO HAVE KEY 2 1/2" DEEP BY APPROXIMATELY 1/3 THICKNESS OF CONCRETE

CONC CONSTRUCTION JT

NO SCALE



REINF AT OPENING AND DEPRESSIONS IN SLAB

NO SCALE

GENERAL NOTES

1. CLASSIFICATION OF CONSTRUCTION - TYPE - 2C UNPROTECTED NONCOMBUSTIBLE, IN ACCORDANCE WITH THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (SECTION 401.0/BOCA 1987).

2. DESIGN LOADS
   FILTER BUILDING:
   ROOF LIVE LOAD 25 PSF
   COLLATERAL LOAD 5 PSF
   MEZZANINE:
   LIVE LOAD 100 PSF
   SUPERIMPOSED DEAD LOAD 5 PSF
   INTAKE TOWER BRIDGE:
   UNIFORM DISTRIB LL 60 PSF
   SUPERIMPOSED DL 5 PSF

3. WIND LOADS ARE BASED ON A BASIC WIND SPEED OF 80 MPH, EXPOSURE B, IN ACCORDANCE WITH THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (SECTION 1112.0/BOCA 1987).

4. MATERIALS
   CONCRETE CLASS A f'_c = 4000 PSI FOR ALL CONCRETE
   REINFORCING BARS
   ASTM A 615 GRADE 60, DEFORMED f_y = 60 KSI
   STRUCTURAL STEEL
   STEEL PIPE
   ASTM A 53 GRADE B F_y = 35 KSI
   ASTM A 501 F_y = 36 KSI
   ALL OTHER STRUCTURAL STEEL ASTM A 36 F_y = 36 KSI
   FOUNDATION BEARING CAPACITY 2000 PSF

5. ~~1630~~ INDICATES ELEVATION OF TOP OF FOOTING. FOOTING ELEVATIONS SHOWN REPRESENT THE MINIMUM DEPTH TO WHICH FOOTINGS SHALL BE CARRIED. FOOTING SHALL BE LOWERED AS REQUIRED TO OBTAIN SUITABLE BEARING. ALL UNSUITABLE FOUNDATION MATERIAL SHALL BE REMOVED WITH FOOTINGS RESTING ON UNDISTURBED SOIL WITH A MINIMUM BEARING CAPACITY OF 2000 PSF UNLESS OTHERWISE SHOWN OR INDICATED.

6. WHERE ROCK IS ENCOUNTERED IN ANY FOOTING EXCAVATION, UNDERCUT TO A DEPTH OF NOT LESS THAN 6 INCHES BELOW ELEVATION OF BOTTOM OF FOOTING AND BACKFILL WITH THOROUGHLY COMPACTED #10 FINES.

7. NO FOUNDATION CONCRETE SHALL BE INSTALLED UNTIL ALL FOUNDATION WORK HAS BEEN COORDINATED WITH UNDERGROUND UTILITIES. FOOTINGS SHALL BE LOWERED WHERE REQUIRED TO AVOID UTILITIES.

8. ALL REINFORCEMENT SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315-80 UNLESS OTHERWISE SHOWN. MINIMUM SPLICE LENGTHS AND EMBEDMENT LENGTHS SHALL BE AS TABULATED THEREIN.

9. UNLESS OTHERWISE SHOWN, REINFORCEMENT AT WALL CORNERS AND INTERSECTIONS SHALL BE DETAILED AS SHOWN ON FIGURE 11 OF ACI 315-80. CORNER REINF SHALL BE DETAILED AS SHOWN FOR INSIDE AND OUTSIDE LOADED CORNERS. INTERSECTIONS AND CORNERS SHALL BE DETAILED WITHOUT DIAGONAL REINF. ALL LAP SPLICES SHALL BE CLASS C.

10. MAJOR CONSTRUCTION JOINTS ARE SHOWN ON THE DRAWINGS. INTERMEDIATE JOINTS IN WALLS, SLABS, AND FLOOR FRAMING ARE NOT SHOWN. CONSTRUCTION JOINTS MAY BE ADDED, OMITTED OR RELOCATED IF PROPERLY DETAILED ON SHOP DRAWINGS AND APPROVED BY THE ARCHITECT-ENGINEER.

11. CONTINUOUS REINFORCING IN WALLS AND SLABS MAY BE SPLICED, AS REQUIRED, PROVIDING BARS ARE OF THE LONGEST PRACTICABLE LENGTH AND ALL SPLICES ARE SHOWN ON REINFORCING SHOP DRAWINGS. WHEREVER POSSIBLE, SPLICES SHALL BE STAGGERED. FIELD CUTTING OF REINFORCEMENT WILL NOT BE PERMITTED.

12. UNLESS OTHERWISE NOTED, PROVIDE CONCRETE PROTECTION FOR ALL REINFORCING IN ACCORDANCE WITH PARAGRAPH 7.7 OF BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-83). CONC PROTECTION FOR CONC TANK SHALL BE BASED ON CONCRETE "EXPOSURE TO WEATHER".

13. PROVIDE DOWELS TO MATCH REINFORCEMENT IN ALL FOOTINGS, WALLS, AND SLABS.

14. SPREAD REINFORCEMENT AT OPENINGS AND SLEEVES UNLESS OTHERWISE SHOWN. DO NOT CUT REINFORCEMENT.

15. SLABS AND BEAMS SHALL BE CAST MONOLITHICALLY.

16. PROVIDE ADEQUATE INSPECTION PANELS IN WALL FORMING TO FACILITATE CONCRETE PLACEMENT, TO ENSURE THAT ADEQUATE COMPACTION IS OBTAINED AND NO VOIDS OCCUR.

17. PROVIDE WATERSTOPS IN CONSTRUCTION JOINTS IN WALLS AND BASE SLAB OF LIQUID-CONTAINING STRUCTURES.

18. REINFORCE ALL FLOOR SLABS ON GRADE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE, UNLESS OTHERWISE NOTED. CENTER REINFORCEMENT IN SLAB UNLESS OTHERWISE NOTED.

SLAB THICKNESS	REINFORCEMENT
5"	6X6-W2.9XW2.9 WWF

19. UNLESS OTHERWISE NOTED, PROVIDE 2-#5X4'-0" DIAGONAL BARS IN THE MIDDLE OF THE SLAB AT EACH CORNER OF ALL OPENINGS IN THE SLAB OVER 1'-0" SQUARE.

20. THE CENTERLINES OF ALL COLUMNS AND BEAMS SHALL BE LOCATED ON COLUMN LINES UNLESS OTHERWISE SHOWN.

21. ALL BOLTS SHALL BE 3/4" DIAMETER UNLESS OTHERWISE SHOWN OR NOTED. ALL MAJOR FRAMING CONNECTIONS SHALL BE MADE WITH ASTM A 325 BOLTS. CONNECTIONS FOR SECONDARY FRAMING SHALL BE MADE WITH ASTM A 325 OR ASTM A 307 BOLTS.

22. WELDING ELECTRODES SHALL CONFORM TO REQUIREMENTS SHOWN IN TABLE 4.1.1 OF AWS D1.1-88, AND FILLER METAL SHALL HAVE A MINIMUM YIELD STRENGTH OF 58 KSI.

23. SHEAR CONNECTIONS SHALL BE DESIGNED FOR REACTIONS INDICATED ON THE FRAMING PLANS. WHERE NONE ARE INDICATED, SIMPLY SUPPORTED BEAMS SHALL BE DESIGNED FOR AN END REACTION EQUAL TO WC/2, AS TABULATED IN THE BEAM TABLES OF THE AISC MANUAL, EIGHTH EDITION, PLUS 2 KIPS.

24. WHERE THE WORK OF OTHER TRADES REQUIRES CUTS, HOLES, ETC., IN STRUCTURAL STEEL MEMBERS, CUTS, HOLES, ETC., SHALL BE MADE IN THE SHOP AND SHALL BE SHOWN ON THE SHOP DRAWINGS. MAKING HOLES OR CUTS IN STRUCTURAL STEEL MEMBERS IN THE FIELD WILL NOT BE PERMITTED WITHOUT SPECIFIC APPROVAL OF THE ARCHITECT-ENGINEER.

25. THE CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES, INSERTS, ETC., WITH SHOP DRAWINGS OF THE EQUIPMENT TO BE INSTALLED.

26. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, ETC., NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW PORTIONS OF THE STRUCTURE TO THE EXISTING STRUCTURE. THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS NECESSARY FOR PROPER FABRICATION AND ERECTION OF ALL STRUCTURAL MEMBERS.

GENERAL NOTES CONTINUED

27. BEFORE PROCEEDING WITH ANY WORK WITHIN OR ADJACENT TO THE EXISTING STRUCTURE, THE CONTRACTOR SHALL BECOME FAMILIAR WITH EXISTING CONDITIONS. DURING THE PROCESS OF CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF THE EXISTING STRUCTURE WHERE THE EXISTING STRUCTURE IS MODIFIED TO ACCOMMODATE NEW CONSTRUCTION AND TO PROTECT FROM DAMAGE THOSE PORTIONS OF THE EXISTING STRUCTURE WHICH ARE TO REMAIN.

28. WELDS INDICATED "CJP" SHALL BE COMPLETE JOINT PENETRATION GROOVE WELDS. FABRICATOR SHALL PRODUCE COMPLETE JOINT PENETRATION GROOVE WELDS WHICH CONFORM TO ALL AWS D1.1 QUALIFIED WELD REQUIREMENTS AND WHICH ARE APPLICABLE TO THE SPECIFIC CONDITIONS SHOWN.

REVISION	DATE	DESCRIPTION	BY	APP
	8/93	RECORD DRAWING		

DESIGNED MJM
DRAWN CADD
CHECKED
APPROVED
SUBMITTED

FALLING CREEK WATER PLANT
CITY OF ROANOKE, VIRGINIA

GENERAL NOTES AND MISCELLANEOUS DETAILS

HAYES, SEAY, MATTERN & MATTERN
ARCHITECTS - ENGINEERS - PLANNERS
ROANOKE, VIRGINIA

SCALE: AS NOTED
COMM. NO. 4296
DATE 30 MAY 1989
SHEET S3

COMMONWEALTH OF VIRGINIA — CERTIFICATE No. 3083

4X JBB 051893 REV. C DRAW I 4296.FALLCRK.S3