2007 OREGON STRUCTURAL SPECIALTY CODE (OSSC)

DESIGN CRITERIA FOR NEW CONSTRUCTION, U.N.O.

FLOOR PARTITION ALLOWANCE 20 PSF 4. WIND LATERAL LOADS:
DESIGN SPEED (FASTEST MILE): BO MPH

EXPOSURE CATEGORY: B 5. SEISMIC LATERAL LOADS: SEISMIC DESIGN CATEGORY: D SEISMIC SITE CLASS: C

Fa = 1.0 SI = 0.80 Fy = 1.40 SdI = 0.34 SEISMIC FORCE RESISTING SYSTEM:

SPECIAL REINFORCED CONCRETE SHEARWALLS R = 5.0

THESE STRUCTURAL NOTES ARE A SUPPLEMENT TO THE SPECIFICATIONS.

SPECIFICATIONS AND CODES REFERENCED IN THESE NOTES ARE THE VERSIONS MOST RECENTLY ADOPTED BY THE PERMITTING AUTHORITY. VERIFY DIMENSIONS AND CONDITIONS WITH THE ARCHITECTURAL. DRAWINGS. VERIFY DIMENSIONS AND ELEVATIONS RELATIVE TO THE EXISTING STRUCTURE PRIOR TO FABRICATION OF MATERIALS. FOR FEATURES OF CONSTRUCTION NOT FULLY SHOWN, PROVIDE THE SAME TYPE AND CHARACTER AS SHOWN FOR SIMILAR CONDITIONS, SUBJECT TO REVIEW BY THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD.

OF RECORD.

5. APPLY, PLACE, ERECT OR INSTALL ALL PRODUCTS AND MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

6. ADEQUATELY BRACE STRUCTURE AND ALL STRUCTURAL COMPONENTS AGAINST WIND, LATERAL EARTH AND SEISMIC FORCES UNTIL THE PERMANENT LATERAL-FORCE RESISTING SYSTEMS HAVE BEEN INSTALLED.

7. PERMANENTLY ATTACH FIRST FLOOR TO WALLS OR SHORE WALLS PRIOR TO BACK-FILLING, AGAINST STRUCTURE.

8. TEMPORARY SHORING AND BRACING OF THE STRUCTURE AND PROVIDING A SAFE WORK ENVIORNMENT IS THE RESPOSIBILITY OF THE CONTRACTOR.

I. SUBMIT SHOP DRAWINGS FOR: REINFORCING STEEL STRUCTURAL STEEL

C. METAL DECK

SUBMIT SHOP DRAWINGS, STAMPED BY A REGISTERED STRUCTURAL
ENGINEER LICENSED IN THE STATE OF OREGON FOR:
A. POST-TENSIONED CONCRETE

CONTRACTOR DESIGNED ITEMS: SUBMIT SHOP DRAWINGS AND DESIGN
CALCULATIONS, STAMPED BY A REGISTERED ENGINEER LICENSED IN
THE STATE OF OREGON, TO THE ENGINEER OF RECORD AND THE PERMITTING AUTHORITY FOR:

JTHORITY FOR:
METAL/PRECAST CONCRETE STAIRS
MINDONS & STOREFRONT SYSTEM
TEMPORARY SHORING/BRACING SYSTEM
UNDER PINNING OF (E) FOUNDATION
GUARDRAILS

E. GUARDRAIDS
SUBMIT SHOP DRAWINGS PRIOR TO FABRICATION OF MATERIAL.
SUBMIT A SHOP DRAWING SCHEDULE THAT ALLOWS SUFFICIENT TIME
FOR REVIEW AND APPROVAL. MINIMUM TWO WEEKS FROM THE DELIVERY DATE OF THE SUBMITTAL WILL BE REQUIRED.

SITE PREPARATION

REMOVE AREAS OF SOIL, AS REQUIRED, THAT EXHIBIT EXCESSIVE WEAVING OR DEFLECTION UNDER THE WEIGHT OF THE ROLLER OR DUMP TRUCK. BACK-FILL EXCAVATED AREAS WITH STRUCTURAL FILL AS DESCRIBED BELOW.

3. CONSULT THE FOUNDATION INVESTIGATION REPORT, INCLUDED AS

STRUCTURAL FILL OR BACK-FILL

I. STRUCTURAL FILL MATERIAL:
A. ACCEPTABLE MATERIAL:
I. SAND AND GRAVEL MIXTURE

CRUSHED ROCK
OTHER MATERIAL ACCEPTABLE TO PROJECT GEOTECHNICAL

ENGINEER

B. SAND AND GRAVEL MIXTURE: WELL GRADED FROM COARSE-TO-FINE
WITH LESS THAN 5% BY WEIGHT OF THE MINUS 9/4" FRACTION
PASSING THE NO. 200 SIEVE.

C. ALL MATERIAL FREE OF ORGANICS, RUBBISH, CLAY BALLS AND

ROCKS LARGER THAN 4".

ROCKS LARGER THAN 4".

2. PLACE STRUCTURAL FILL IN LOOSE LIFTS, MAXIMUM OF 8" IN THICKNESS.

3. COMPACT STRUCTURAL FILL TO A MINIMUM DENSITY OF 95% OF MAXIMUM DRY DENSITY, AS DETERMINED BY ASTM D 1557.

4. VERIFY ADEQUACY OF STRUCTURAL FILL COMPACTION WITH RANDOM FIELD DENSITY TESTS. PROVIDE ACCORDING TO REQUIREMENTS DETAILED IN THE "SPECIAL TESTING SCHEDULE" AND THE "SPECIAL INSPECTION SCHEDULE" INCLUDED WITH THESE DRAWINGS.

5. COMPACT STRUCTURAL FILL WITHIN 5"-0" OF RETAINING OR BASEMENT WALLS WITH LIGHT-WEIGHT, HAND-HELD EQUIPMENT. EXERCISE CARE TO AVOID DATINGE TO WALLS.

6. CONSULT THE FOUNDATION INVESTIGATION REPORT, INCLUDED AS APPENDIX TO THE SPECIFICATIONS.

FOUNDATIONS

1. FOUNDATIONS

1. FOUNDATION SIZES BASED ON AN ALLOWABLE SOIL BEARING PRESSURE OF 6000 PSF. PER GEOTECHNICAL INVESTIGATION.

REPORT PREPARED BY GEO DESIGN, INC. (DATED FEB. 24, 2006)

2. FOUNDATION ELEVATIONS SHOWN ARE TO TOP OF FOOTINGS.

3. PLACE FOOTINGS ON STRUCTURAL FILL SEE "STRUCTURAL FILL OR BACK-FILL" NOTES FOR STRUCTURAL FILL INFORMATION.

4. LOCATE BOTTOM OF FOOTINGS AT A MINIMUM OF 1-6" BELOW FINAL GRADE OR 1-0" BELOW EXISTING GRADE, WHICHEVER IS LOWER.

5. PRIOR TO PLACEMENT OF CONCRETE, REMOVE ALL DISTURBED SOIL FROM FOOTING EXCAVATION TO NEAT LINES.

6. STEP BOTTOM OF FOOTINGS FROM ELEVATION TO ELEVATION AT A RATIO OF I VERTICAL TO 2 HORIZONTAL, WITH A MAXIMUM VERTICAL STEP OF 2'-0".

CONSULT THE FOUNDATION INVESTIGATION REPORT, INCLUDED AS APPENDIX TO THE SPECIFICATIONS.

CONCRETE REINFORCING STEEL

REINFORCING STEEL (TYPICAL, U.N.O.): ASTM A 615, GRADE 60 MELDED REINFORCEMENT: ASTM A 706, GRADE 60 MELDED MIRE FABRIC: ASTM A 185, FLAT SHEETS ONLY MELDED CONNECTIONS, MELDED METAL INSERTS.: AWS DI.4. REINFORCEMENT MECHANICAL COUPLERS: DEVELOP 125% OF REINFORCEMENT MECHANICAL COUPLERS: DEVELOP 125% OF REINFORCEMENT SPECIFIED YIELD STRENGTH.

7. TTPICAL REINFORCING (HINITUDI, U.N.O. ON DRAWINGS);
A. CORNERS AND INTERSECTIONS OF WALLS, FOUNDATIONS CORNER BARS EGUAL IN SIZE AND NUMBER TO HORIZONTAL REINFORCING. LEG LENGTH: 48 BAR DIAMETER (2'-O" MINIMUM).

DIAMETER (2'-0' MINIMUM).

B. WALL OPENINGS:
(2) NO. 5 X OPENING WIDTH, 4'-0" TOP AND BOTTOM
(2) NO. 5 X FULL HEIGHT EACH SIDE
(2) NO. 5 X 4'-0" DIAGONAL BARS AT CORNERS

C. SLAB OPENINGS:
(2) NO. 5 X OPENING DIMENSIONS PLUS 4'-0" EACH SIDE
(2) NO. 5 X 4'-0" DIAGONAL BARS AT EACH CORNER
DO NOT FIELD BEND, DISPLACE, WELD, HEAT OR CUT REINFORCING
UNLESS INDICATED ON THE DRAWINGS, OR APPROVED BY STRUCTURAL
ENGINEER OF RECORD.

UNLESS INDICATED ON THE DRAWINGS, OR APPROVED BY STRUCTURAL ENGINEER OF RECORD.

9. CHAIR WELDED WIRE FABRIC TO PROPER POSITION. LAP ONE (1) FULL MESH PLUS 2' ON SIDES AND ENDS.

10. PLACE ELECTRICAL CONDUIT NEAR CENTER OF SLAB.

11. SPLAY REINFORCING AROUND SLAB OPENINGS WITH 1' IN 10' SPLAY, UNO.

12. MINIMUM COVER AND TOLERANCE FROM CONCRETE SURFACES TO REINFORCING;

2' + 1/4' TO EARTH FACE OF WALL

1" + 1/4' TO INSIDE FACE OF WALL

2' + 1/4' MAIN STEEL BEAMS AND COLUMNS

3/4' + 1/4' SLAB TO TOP AND BOTTOM SURFACES

13. REINFORCING LAP SPLICES; SEE "REBAR SPLICE SCHEDULE", TYPICAL

U.N.O. CONFORM WITH ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.

CAST-IN-PLACE CONCRETE

PROVIDE CONCRETE MATERIALS, FORM WORK, MIXING, PLACING AND CURING ACCORDING TO ACI 301, "STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE".

CONCRETE CLASS CONCRETE TYPE EXTERIOR SLAB ON GRADE WALLS ELEVATED SLABS AND BEAMS (NOT EXPOSED) MAX W/C RATIO FLY TARGET ASH SLUMP (LB/YD) (IN) MIX f¹c DESIGN (PSI) AIR (%) TARGET COARSE NOTES 4000 80 0.48 1-1/2 80 1-1/2 (3) 1-1/2 3/4 3/4

MIX DESIGN NOTES:

(1). FLY ASH IS SPECIFIED AS OPTIONAL CEMENT REPLACEMENT - THE

AMOUNTS ARE MAXIMUM ALLOWED.

PROVIDE 1'c = 3000 PSI AT TIME OF POST-TENSIONING STRESSING,

PROVIDE HR WATER REDUCER AT 12 OZ / HUNDRED WEIGHT CEMENT

(MINIMUM).

3. CONCRETE MIX PROPORTIONS:
A. PROPORTION ACCORDING TO ACI 318, 'BUILDING CODE REQUIREMENTS
FOR STRUCTURAL CONCRETE'.
B. PROVIDE TARGET SLUMP AT POINT OF PLACEMENT, +/- 1%,
C. SUBMIT MIX DESIGNS, WITH COMPLETE STATISTICAL BACKUP, FOR REVIEW.
4. SAMPLING, TESTING AND INSPECTION OF CONCRETE: PROVIDE ACCORDING TO
REQUIREMENTS DETAILED IN THE 'SPECIAL TESTING SCHEDULE' AND THE
"SPECIAL INSPECTION SCHEDULE" INCLUDED WITH THESE DRAWINGS.

NTS:
CONSTRUCTION JOINTS BETWEEN FOOTINGS AND WALLS, COLUMNS OR
PILASTERS AND THE SLABS THEY SUPPORT AND WALL CONSTRUCTION
JOINTS: ROUGHEN CONTACT AREA TO A FULL AMPLITUDE OF
APPROXIMATELY I/4", LEAVING THE CONTACT SURFACE CLEAN AND FREE

OF LAITANCE
CONSTRUCTION JOINTS KEYWAYS: PROVIDE WHERE SHOWN ON DRAWINGS

B. CONSTRUCTION JOINTS RETWATS: PROVIDE WHERE SHOWN ON DRAWINGS.
C. SUBMIT LOCATIONS AND DETAILS OF PROPOSED CONSTRUCTION JOINTS
NOT DETAILED ON THE DRAWINGS FOR REVIEW.
SHORE ALL SELF-SUPPORTING SLABS AND BEAMS UNTIL COMPRESSIVE
STRENGTH IS A MINIMUM OF 3000 PSI.
DEPRESSIONS IN SLABS AND BEAMS: PROVIDE SAME DEPTH AS FOR ADJACENT

AREAS, U.N.O.

B. DO NOT PLACE CONCRETE ON FROZEN GROUND.

G. CHAMFER EXPOSED CORNERS 3/4, U.N.O.

ANCHORS IN CONCRETE AND MASONRY

1. INSTALL ACCORDING TO MANUFACTUREN'S RECOMMENDATIONS.
2. INSTALL MITH IBC SPECIAL INSPECTION ACCORDING TO THE "SPECIAL INSPECTION SCHEDULE" AND THE PRODUCT'S ICC EVALUATION SERVICE REPORT.
3. EXPANSION ANCHORS (CONCRETE).
A. ICC-APPROVED; CONFORM WITH FF-S-325, GROUP II, TYPE 4, CLASS I.
B. MATERIAL: ZINC PLATED ACCORDING TO ASTM B 633
C. ACCEPTABLE ANCHORS:
I. "TRUBOLT", BY ITM RAMSET/RED HEAD.
2. "POWER-STUD", BY POWERS FASTENING INC.
3. "KMIK-BOLT II", BY HILTI FASTENING SYSTEMS, INC.
4. SLEEVE ANCHORS (GROUTED MASONRY):
A. CONFORM WITH FF-S-325, GROUP II, TYPE 3, CLASS 3.
B. MATERIAL: ZINC PLATED ACCORDING TO ASTM B 633,
C. ACCEPTABLE ANCHORS:

ACCEPTABLE ANCHORS:

"SLEEVE ANCHOR", BY HILTI FASTENING SYSTEMS, INC.
"DYNABOLT", BY ITW RAMSET/RED HEAD.
"LOK/BOLT", BY POWERS FASTENING.

5. ADHESIVE ANCHORS

NON-SHRINK GROUT

CC-APPROVED

ANCHOR COMPONENTS: ALL-THREAD ROD, NUT, WASHER AND ADHESIVE INJECTION GEL SYSTEM.

INJECTION GEL SYSTEM.

C. ANCHOR RODS:

I. RODS WITH ROLLED THREADS.

2. ANCHOR ROD NUTS: CONFORM WITH ASTM A 194.

3. ROD MATERIAL:

A-36 MATERIAL; ZINC PLATED ACCORDING TO ASTM B-633,

D. ACCEPTABLE ADDIESIVE INJECTION GEL SYSTEMS:

I. "HIT HY-150", BY HILT! FASTENING SYSTEMS, INC.

2. "SET", BY SIMPSON STRONG-TIE COMPANY, INC.

3. "CIA-GEL 7000", BY COVERT OPERATIONS, INC.

4. "POWER-FAST", BY POWERS FASTENING COMPANY, INC.

CONFORM WITH ASTM C 1107 AND C.R.D.-621, CORPS OF ENGINEERS
 "SPECIFICATIONS FOR NON-SHRINK GROUT".
 SPECIFIED 28 DAY COMPRESSIVE STRENGTH: 5000 PSI.
 DO NOT PRE-GROUT BASE PLATES.

CONCRETE MASONRY CONSTRUCTION:
A. HOLLOW CONCRETE MASONRY UNITS: MEDIUM WEIGHT, 1000 PSI
MIN. ON GROSS SECTION, 2 CELL UNITS. CONFORM WITH ASTM C 90.
B. 28 DAY COMPRESSIVE STRENGTH, F'M OF 1500 PSI.

GROUT:
A. 3/8" AGGREGATE.
B. 26 DAY STRENGTH OF 2500 PSI.
C. APPLY INTRUSION AID EXPANDER ADMIXTURE AT RATE OF 4 OUNCES PER

C. APPLY INTRUSION AID EXPANDER ADMIXTURE A SACK OF CEMENT.
D. SLUMP: 7" +/- I"

3. STRUCTURAL MASONRY MORTAR:
A. TYPE '5". CONFORM WITH IBC TABLE 2103.7(1).
B. MORTAR PROPORTIONS:

CEMENT: 1 PART LIME: 1/2 PART SAND: 4 PARTS MAXIMUM

SAND: 4 PARTS MAXIMUM
C. 28 DAY COMPRESSIVE STRENGTH OF 1800 PSI.
D. PROPORTION MORTAR MATERIALS BY ACCURATE MEASUREMENT. DO
NOT USE SHOVEL MEASUREMENT.
E. MIX MORTAR BY MECHANICAL MEANS.
4. SAMPLING, TESTING AND INSPECTION OF MASONRY: PROVIDE ACCORDING TO
REQUIREMENTS DETAILED IN THE "SPECIAL TESTING SCHEDULE" AND THE
"SPECIAL INSPECTION SCHEDULE" INCLUDED WITH THESE DRAWINGS.
5. REINFORCING MATERIAL:
A. TYPICAL REINFORCING (U.N.O.): ASTM A 615, GRADE 60.
B. MELDED REINFORCING, ASTM A 706, GRADE 60.
6. TYPICAL MINIMUM WALL REINFORCING, U.N.O. ON DRAWINGS:
8' NOMINAL THICKNESS
NO. 5 @ 48% VERTICAL AT CENTER OF GROUTED VOIDS.
THO (2) NO. 4 HORIZONTAL IN BOND BEAMS @ 48°CC
7. TYPICAL REINFORCING DETAILING (U.N.O.):
A. LAP SPLICES: #4 31"

TYPICAL REINFORCING DETAILING (U.N.O.):

A. LAP SPLICES: #4 3!"
#5 39"
#6 7!"

B. CORNERS AND INTERSECTIONS OF WALLS: HORIZONTAL CORNER BARS WITH LEGS EQUAL IN LENGTH TO SPLICE LENGTH SHOWN ABOVE, EQUAL IN SIZE AND NUMBER TO HORIZONTAL REINFORCING.

C. ENDS AND INTERSECTIONS OF WALLS: ONE VERTICAL BAR EQUAL IN SIZE TO TYPICAL VERTICAL REINFORCING.

SIZE TO TYPICAL VERTICAL REINFORCING.

D. MALL OPENINGS:
HEAD: 2 HORIZONTAL BARS, EQUAL IN SIZE TO TYPICAL HORIZONTAL REINFORCING, OPENING WIDTH PLUS 4'-0" IN LENGTH.

JAMBS: 1 VERTICAL BAR, EQUAL IN SIZE TO TYPICAL VERTICAL REINFORCING, FULL HEIGHT OF MALL.

E. FOUNDATION MALL DOMELS: EQUAL IN SIZE TO VERTICAL REINFORCING, AT EACH VERTICAL BAR, MITH A MINIMUM SPLICE LENGTH IN THE MASONY EQUAL TO THE LAP SPLICE LENGTH SHOWN ABOVE.
F. PROVIDE BAR POSITIONING DEVICES FOR ALL VERTICAL REINFORCING.

B. COMPLETE GROUTING OF ANY SECTION OF WALL IN I DAY MITH NO INTERRUPTIONS GREATER THAN I HOUR BETWEEN GROUT POURS. FORM A HORIZONTAL CONSTRUCTION JOINT BY STOPPING ALL MYTHES AT THE SAME ELEVATION AND STOPPING THE GROUT A MINIMUM OF I-1-2" BELOW THE MORTAR JOINT. STOP GROUT POUR A MINIMUM OF I-1-2" BELOW THE TOP OF THE MASONRY AT BOND BEAMS.

STRUCTURAL STEEL

I. FABRICATE, ERECT, IDENTIFY AND PAINT STRUCTURAL STEEL ACCORDING TO AISC SPECIFICATIONS. 2. MATERIAL:

IERIAL:
MIDE FLANGE SHAPES: ASTM A 992.
ANGLES, TEES, CHANNELS AND PLATE: ASTM A 36.
STRUCTURAL TUBES: ASTM A 500, GRADE B, FY = 46 KSI.
STRUCTURAL PIPE: ASTM A 53, GRADE B, TYPE E OR TYPE S, FY=35 KSI.
HEADED STUDS AND SHEAR CONNECTORS: COLD-DRAWN BAR STOCK.
CONFORMING MITH ASTM A 108, GRADES 1010 THROUGH 1018 INCLUSIVE.
THREADED ROD: ASTM A 36. 3. FINISH:

COAT MATERIAL WITH SHOP PRIMER, TYP, U.N.O HOT DIP GALVANIZE MATERIAL ACCORDING TO ASTM A 123, FOR ALL EXTERIOR APPLICATION. PROVIDE ARCHITECTURALLY EXPOSED CONNECTION QUALITY FOR ALL

C. PROVIDE ARCHITECTURALLY EXPOSED CONNECTION QUALITY FOR ALL
EXPOSED CONNECTIONS.

4. TESTING AND INSPECTION OF STRUCTURAL STEEL; PROVIDE ACCORDING TO
REQUIREMENTS DETAILED IN THE "SPECIAL TESTING SCHEDULE" AND THE
"SPECIAL INSPECTION SCHEDULE" INCLUDED WITH THESE DRAWINGS.

5. CONNECT ALL MEMBERS WITH SEMI-FINISHED MACHINE BOLTS, ASTM A 307,
GRADE A, UN.O. ON DRAWINGS.

6. GALVANIZED BOLTS (ALL BOLTS EXPOSED TO ELEMENTS OR WHERE SHOWN ON DRAWINGS):
HOT-DIPPED GALVANIZED ACCORDING TO ASTM A 163, CLASS C.

HOT-DIPPED GALVANIZED ACCORDING TO ASTM A 153, CLASS C.

ANCHOR BOLTS:

A. ASTM F 1654, Fy = 36 KSI, U.N.O.

B. PROVIDE MITH INTEGRAL HEAD, STANDARD MASHERS AND NUTS.

C. GALVANIZE BOLTS (WHERE NOTED ON DRAWINGS) ACCORDING TO ASTM A 153, CLASS C. OVER-TAP NUTS TO CLASS 2A FIT BEFORE GALVANIZING, ACCORDING TO ASTM A 563.

B. PROVIDE BEVELED MASHERS AT BOLT HEADS OR NUTS BEARING ON SLOPING SUBPRAFES

SURFACES

SURFACES.

9. WELDING:
A. CONFORM WITH AWS SPECIFICATIONS.
B. MELDERS TO BE QUALIFIED UNDER AMS SPECIFICATIONS.
C. MELDS MATERIAL: 70 KSI FILLER METAL, U.N.O. PROVIDE LOW-HYDROGEN FILLER METALS AT COMPLETE OR PARTIAL PENETRATION WELDS INCLUDED IN THE LATERAL SEISMIC FORCE RESISTING SYSTEM.
D. MELDS TO METAL DECK, METAL STUDS OR OTHER LIGHT GAUGE METALS:
COMPORM TO AWS DI.3.

D. WELDS TO METAL DECK, METAL STUDS OR OTHER LIGHT GAUGE METALS: CONFORM TO ANS DIS.

E. WELDING OF REINFORCING STEEL: AS NOTED IN "CONCRETE REINFORCING STEEL! PORTION OF STRUCTURAL NOTES.

F. WELDS TO GALVANIZED STEEL AND AREAS DAMAGED BY WELDING, FLAME CUTTING OR HANDLING: CLEAN, DRY AND REMOVE OIL, GREASE, SALT AND CORPOSIVE PROPUCTS. APPLY ORGANIC COLD GALVANIZING COMPOUND WITH A MINIMUM OF 94% ZINC DUST IN THE DRY FILM, APPLY IN MULTIPLE COATS TO ACHIEVE AN B MIL THICKNESS.

10. CONTRACTOR TO DESIGN AND PROVIDE ERECTION AIDS (BOLTS, CLIPS, SHIMS, SEATS, ETC.) REQUIRED TO FACILITATE CONSTRUCTION.

11. INSTALL AND INSPECT HEADED STUDS AND SHEAR CONNECTORS ACCORDING TO CHAPTER 7 OF AWS DIJ "STRUCTURAL WELDING CODE-STEEL".

CONFORM WITH THE PROVISIONS OF THE AMERICAN IRON AND STEEL INSTITUTE'S "SPECIFICATIONS FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS".

METAL ROOF DECKING:

A. MATERIAL: VERCO TYPE HSB, 18 GA., 36 WIDE SHEETS,
GALVANIZED DECK OR APPROVED EQUAL.

B. CONNECTIONS:

CONNECTIONS:

1. DECKING TO SUPPORTING MEMBERS:
3/4/9 FUSION WELDS WITH 7 WELDS PER SHEET.
2. DECKING TO BEAMS OR WALLS (WHERE DECKING SPAN IS PARALLEL

2. DECKING TO BEAMS OR WALLS (WHERE DECKING SPAN IS PARALLEL TO MEMBER!):

3/4'\$ PUSION WELDS & 12"0c.

3. DECK TO DECK SIDE LAPS:

1-1/2" TOP OR SIDE SEAM WELD \$ 12"0c.

PROVIDE DECKING CONTINUOUS OVER 3 OR MORE SPANS, WHERE 1 OR 2 SPAN CONDITIONS ARE REQUIRED, PROVIDE DECKING WITH SUFFICIENT SECTION PROPERTIES TO EQUAL LOAD AND DEFLECTION CAPACITY OF A 3 SPAN CONDITION

PROPERTIES TO EQUAL LOAD AND DEFLECTION CAPACITY OF A 3 SMAN CONDITION.

4. FURNISH ALL ACCESSORIES (OPENING REINFORCING ANGLES, CLOSURES, ETC.) TO PROVIDE A COMPLETE DIAPHRAGM.

5. QUALIFY ALL WELDERS UNDER AWS SPECIFICATIONS FOR LIGHT GAUGE METAL WELDING.

6. EXTEND DECKING A MINIMUM OF 2' ONTO SUPPORTS.

LIGHT GAUGE STEEL FRAMING

I. CONFORM WITH AIS! "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" FOR FABRICATION, ERECTION AND IDENTIFICATION OF LIGHT GAUGE STEEL FRAMING. 2. MATERIAL:

B. SHEAR WALL STUDS, XC
C. STUD WALL TRACKS: IU
MEMBER CONNECTIONS:
A. CONNECT MEMBERS WITH SELF-DRILLING SCREWS, UNLESS NOTED OTHERWISE.
B. CONNECT MEMBERS WITH WELDS, WHERE NOTED ON DRAWINGS:
I. CONFORM WITH AWS SPECIFICATIONS FOR LIGHT GAUGE METAL
WELDING, TOUCH UP WELDS WITH ZINC-RICH PAINT.
2. CERTIFY WELDERS ACCORDING TO AWS SPECIFICATIONS FOR LIGHT
GAUGE METAL MELDING.
3. WELDING ELECTRODES: E60XX.
PROVIDE ALL ACCESSORIES INCLUDING, BUT NOT LIMITED TO, TRACKS,
CLIPS, WEB STIFFENERS, ANCHORS, FASTENING DEVICES AND OTHER
ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION.
PROVIDE BND BLOCKING WHERE JOIST ENDS ARE NOT OTHERWISE RESTRAINED

PROVIDE END BLOCKING WHERE JOIST ENDS ARE NOT OTHERWISE RESTRAINED FROM ROTATION.

LOCATE JOISTS DIRECTLY OVER BEARING STUDS, U.N.O.

DO NOT SPLICE AXIALLY LOADED STUDS.

ATTACH EACH FLANGE OF STUDS TO FLANGES OF BOTH UPPER AND LOWER TRACKS.

10. FIT METAL STUDS TIGHTLY INTO TOP AND BOTTOM TRACKS AT BEARING WALL CONSTRUCTION, END GAPS ARE NOT ALLOWED.

LIST OF DEFERRED SUBMITTALS

1. STEEL STAIRS 2. WINDOW & STOREFRONT SYSTEM

3. TEMPORARY SHORING/BRACING
4. UNDER PINNING OF EXISTING FOUNDATION

DRAWING INDEX GENERAL STRUCTURAL NOTES GENERAL STRUCTURAL NOTES GENERAL STRUCTURAL NOTES MISC DETAILS BASEMENT/FOUNDATION PLAN FIRST FLOOR - PT PLAN FIRST FLOOR - DB PLAN SECOND FLOOR - PT PLAN 52.2-2 52.3-1 52.3-2 52.4 52.5 52.6 52.7 52.8 52.9 53.1 SECOND FLOOR - DB PLAN
THIRD FLOOR - PT PLAN
THIRD FLOOR - DB PLAN
FORTH FLOOR - PT \$ DB PLAN FORTH FLOOR - PT \$ DB PLAN
SIXTH FLOOR - PT \$ DB PLAN
SIXTH FLOOR - PT \$ DB PLAN
EVENTH FLOOR - PT \$ DB PLAN
EIGHTH FLOOR - PT \$ DB PLAN
ROOF PLAN - PT \$ DB PLAN
FOUNDATION DETAILS FOUNDATION DETAILS FOUNDATION DETAILS FOUNDATION DETAILS COLUMN SCHEDULE & DETAILS

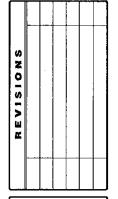
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STRUCTURAL DETAILS

WALL ELEVATIONS







COND FRONT AVENU LEM, OREGON RIVERS

PROJECT NO. 06-113

DATE: 12-13-2006 DFLAWN BY : RHA CHECKED BY I BA

GENERAL **STRUCTURAL** NOTES

- A. NO REVISIONS WILL BE ALLOWED REGARDING FOST-TENSIONING FORCES, PROFILES, REINFORCING STEEL OR CONCRETE SLAB THICKNESS AND STRENGTH. POST-TENSIONING FORCE REQUIREMENTS ARE TO BE ROUNDED UPWARD TO THE NEAREST WHOLE NUMBER OF
- TENDONS,

 5. FABRICATE, PLACE AND STRESS ALL POST-TENSIONING TENDONS
 USING ONLY EXPERIENCED PERSONNEL WHO CAN SHOW EVIDENCE OF AT
 LEAST FIVE (5) YEARS OF EXPERIENCE IN SATISFACTORILYCOMPLETED SIMILAR PROJECTS.

 C. ALL LABOR, MATERIALS, EQUIPMENT, SUPERINTENDENCE AND
 SERVICES NECESSARY TO FURNISH AND INSTALL ALL POST-TENSIONED
 REINFORCEMENT AND TO PERFORM POST-TENSIONING OF ALL TENDONS
 TO BE PROVIDED BY THE POST-TENSIONING SUB-CONTRACTOR.

 POST-TENSIONED

- 2. POST-TENSIONED REINFORCEMENT:
 A. POST-TENSIONED REINFORCEMENT:
 A. POST-TENSIONED REINFORCEMENT CONSISTS OF SHEATHED, 1/2"
 DIAMETER HIGH-STRENGTH, LOW-RELAXATION, STRESS-RELIEVED,
 SEVEN-WIRE STRAND CONFORMING TO ASTIM A 416, AND HAVING A
 MINIMUM ULTIMATE STRENGTH OF 270 KSI.
 B. CABLES ARE TO BE COATED WITH AN APPROVED, PROTECTIVE
 LUBRICATING COMPOUND. SHEATHING IS TO BE PLASTIC OF A TYPE
 ENSURING FREE SLIPPAGE OF STRAND DURING TENSIONING.
 C. ANCHORAGES MUST DEVELOP A MINIMUM OF ONE HUNDRED PERCENT
 (100%) OF THE ULTIMATE STRENGTH OF THE TENDONS.
 3. SHOP DRAWINGS.
 COMPLETE SHOP DRAWINGS.

 - SHOP DRAWINGS.

 COMPLETE SHOP DRAWINGS AND PRE-STRESS LOSS CALCULATIONS ARE REQUIRED TO BE SUBMITTED FOR REVIEW. SHOP DRAWINGS AND CALCULATIONS MUST BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF OREGON. BEGIN NO FABRICATION UNTIL THE SUBMITTAL HAS BEEN REVIEWED. THE SUBMITTAL HUST INCLUDE THE FOLLOWING INFORMATION:
 - TENDON PROFILES WITH ELEVATIONS SHOWN AT 4'-0' MAXIMUM
 - B. PLAN LAYOUT OF TENDONS WITH DIMENSIONS LOCATING TENDONS IN
 - B. PLAN LAYOUT OF TENDONS WITH DIMENSIONS LOCATING TENDONS IN THE HORIZONTAL PLANE.
 C. HORIZONTAL CURVATURE OF TENDONS. NOTE THAT ANY NECESSARY CURVATURE MORE SEVERE THAN A 24'-0' RADIUS OR A SPLAY OF ONE (1) IN TEN (6) MUST BE SPECIALLY DETAILED AND MAY BE SUBJECT TO CHANGE PENDING THE STRUCTURAL ENGINEER'S REVIEW.
 D. DIMENSIONAL TOLERANCES FOR LOCATING TENDONS.
 E. LAYOUT OF CHAIRS AND SUPPORT BARS, SHOWING CHAIR HEIGHTS, LOCATION OF TYING STEEL AND OTHER INFORMATION REGARDING METURE A SUPPORTING TENDONS.

 - LOCATION OF TTING STEEL AND OTHER INFORMATION REGARDING METHOD OF SUPPORTING TENDONS.

 F. INITIAL ANCHORING FORCES AND TEMPORARY JACKING FORCES.
 G. EFFECTIVE FORCES AFTER LOSSES AND REQUIRED ELONGATIONS.
 FINAL EFFECTIVE FORCES AFTER IMMEDIATE AND LONG TERM LOSSES MUST BE GREATER THAN OR EQUAL TO THOSE INDICATED IN THE DESIGN DRAWINGS.
 FORCE AND ELONGATION CALCULATIONS WITH PROPER ACCOUNTING FOR
 - PRE-STEES LOSSES DUE TO ANCHORAGE SET, ELASTIC SHORTENING OF CONCRETE, CREEP AND SHRINKAGE OF CONCRETE, RELAXATION OF TENDON STRESS AND FRICTION LOSSES DUE TO INTENDED AND UNINTENDED CURVATURE OF TENDONS. RELAXATION VALUES AND WOBBLE COEFFICIENTS ARE TO BE OBTAINED FROM THE MANUFACTURER. LOSS CALCULATIONS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE POST-TENSIONING INSTITUE
- (PTI).

 4. FORM WORK:
 ALL FORM WORK IS TO CONFORM TO THE REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTE (ACI) MANUAL, "FORM WORK FOR CONCRETE (SP-4)" AND TO THE REQUIREMENTS SPECIFIED HEREIN,
 A. PLACE STRESSING ASSEMBLIES AT TENDON ANCHORAGES EXACTLY AT RIGHT ANGLES TO THE TENDON AND SECURE THEM ACCURATELY TO THE
- FORM WORK
- DESIGN FORM WORK FOR GRAYITY LOADS, INCLUDING CONSTRUCTIONS LOADS, AND FOR MIND AND SEISMIC LOADS. UNDER NO CIRCUMSTANCES REPOVE SHORMS ON ANY LEVEL BEFORE STRESSING OF TENDONS IN BOTH DIRECTIONS IS COMPLETED ON THAT
- LEVEL.
 5. FABRICATION AND PLACING:
- TOLERANCES ARE TO CONFORM TO THE REQUIREMENTS OF CHAPTER IS OF THE AMERICAN CONCRETE INSTITUTE'S DOCUMENT "ACI-30!" OF THE AMERICAN CONCRETE INSTITUTE'S DOCUMENT "ACI-301" EXCEPT THAT TENDONS, SHEATHING AND ANCHORAGES ARE TO BE PLACED WITH A TOLERANCE OF I/A". THIS TOLERANCE APPLIES SEPARATELY TO BOTH VERTICAL AND HORIZONTAL DIMENSIONS. THE HORIZONTAL MISALIGNMENT OF TENDONS IS NOT TO EXCEED ONE (1) INCH IN FIFTEEN (15) FEET OF TENDON LENGTH. PLACE POST-TENSIONING TENDONS WITH A PARABOLIC PROFILE, UNLESS OTHERWISE NOTED. CONFORM TO THE CONTROL. POINTS SHOWN, VERTICAL DIMENSIONS DEFINING THE PROFILE REFER TO THE CENTER! USE OF TENDONS THE PROFILE REFER TO THE
- SHOWN, VERTICAL DIMENSIONS DEFINING THE PROFILE REFER TO THE CENTRELINE OF THE TENDON.

 C. BANDED TENDONS MAY BE BUNDLED IN THE INTERIOR OF THE SLAB WITH NO MORE THAN FOUR (4) TENDONS PER BUNDLE. UNIFORM TENDONS MAY BE GROUPED IN THE INTERIOR OF THE SLAB WITH NO MORE THAN THREE (3) TENDONS PER GROUP. TENDONS IN BUNDLES AND GROUPS ARE TO LIE FLAT, BE SECURELY TIED TOGETHER AND DO NOT CROSS EACH OTHER.

 D. WHERE SMOOTH TRANSITIONS BETWEEN TENDON PROFILES ARE INDICATED. TENDON LODGONAL AND VERTICAL POSITIONING. APE TO
- INDICATED, TENDON HORIZONTAL AND VERTICAL POSITIONING ARE TO BE MADE TO VARY UNIFORMLY BETWEEN THE TWO (2) PROFILES MARKING THE BOUNDARIES OF THE TRANSITION ZONE. THIS MAY BE ACCOMPLISHED BY ANGLING TENDON SUPPORT BARS IN THE HORIZONTAL PLANE AND BY VARYING THE HEIGHT OF CHAIRS UPPORTING THESE BARS.
- E. LOW POINTS OF TENDONS ARE TO OCCUR AT MID-BAY, UNLESS
- E. LOW POINTS OF TENDONS ARE TO OCCUR AT MID-BAY, UNLESS OTHERWISE NOTED.

 F. SECURE IN PLACE AND HOLD TENDONS IN ALIGNMENT AT SUPPORTS. THE POST-TENSIONING TENDONS AT MID-SPAN, I/4 POINTS, COLUMN LINES AND AT ADDITIONAL POINTS SUCH THAT THE MAXIMUM DISTANCE BETHEEN SUPPORTS IS NO MORE THAN FOUR (4) FEET.

 G. DEVICES FOR SUPPORTING REINFORCEMENT, SUCH AS CHAIRS AND
- DEVICES FOR SUPPORTING REINFORCEMENT, SUCH AS CHAIRS AND CONTINUOUS BOLSTERS, MUST HAVE SUPFICIENT STRENGTH AND BE SUPPLIED IN SUFFICIENT GUANTITY TO HOLD REINFORCEMENT IN CORRECT ALIGNMENT THROUGHOUT ALL PHASES OF WORK ON THE SLAB AND DURING CONCRETE PLACEMENT. DATAGED DEVICES MUST BE REPLACED AS THEY ARE DISCOVERED. IF MORE THAN THREE PERCENT (3%) OF SUCH DEVICES ARE OBSERVED TO BREAK OR BECOME FLATTENED, THE QUANTITY OR QUALITY OF SUPPORT DEVICES MUST BE DISCOVERED.

- H. METAL CHAIRS AND CONTINUOUS BOLSTERS ARE TO HAVE PLASTIC
- H. METAL CHAIRS AND CONTINUOUS BOLSTERS ARE TO HAVE PLASTIC TIPPED FEET WHERE SLAB SOFFIT WILL BE EXPOSED.

 1. IN ORDER TO PROVIDE SUFFICIENT RICH BE EXPOSED.

 1. IN ORDER TO PROVIDE SUFFICIENT RICH BE EXPOSED.

 EQUIPMENT, A MINIMUM LATERAL DISTANCE BETWEEN THE CENTERLINE OF A STRESSING ANCHORAGE AND ANY OBSTRUCTION MUST BE OBSERVED. CONFIRM THE REQUIRED DIMENSION, GENERALLY EIGHT INCHES (8"), AND ARRANGE TO PROVIDE ADEQUATE CLEARANCE.

 J. PLACE ANCHORAGES AT RIGHT ANGLES WITH EORE FORMS BOTH HORIZONTALLY AND VERTICALLY, UNLESS OTHERWISE NOTED.

 K. TAKE PRECAUTIONS TO ASSURE COMPLETE CONSOLIDATION AND DENSIFICATION OF CONCRETE BEHIND TENDON ANCHORAGES.

 L. AT CORNERS OF SLABS, INSTALL CONFINEMENT REINFORCEMENT CONSISTING OF TWO (2) 4X 3 3 -6 MAIRPINS (TOTAL LENGTH OF T'-0' EACH) CLOSER THAN 1'-0" FROM A CORNER, UNLESS ADDITIONAL CONFINEMENT REINFORCING IS SPECIALLY DETAILED.

 M. IN ZONES WHERE GROUPS OF SLEEVED SLAB PENETRATIONS (FOR

- ADDITIONAL CONFINEMENT REINFORCING IS SPECIALLY DETAILED.

 IN ZONES WHERE GROUPS OF SLEEVED SLAB PENETRATIONS (FOR PLUMBING AND ELECTRICAL LINES) OCCUR, SLEEVES ARE TO BE PLACED WITH A CLEAR DISTANCE BETWEEN TWO ADJACENT SLEEVES AT LEAST EGUAL TO THE DIAM'ETER OF THE LARGER OF THE TWO WHERE SUCH SLEEVE GROUPS CONSIST OF SLEEVES HAVING DIAM'ETERS OF FIVE INCHES (5°) OR MORE, PROVIDE REINFORCEMENT BETWEEN AND ON EACH SIDE OF SUCH SLEEVES CONISTING OF TWO (2) %5 BARS TOP AND BOTTOM. PROVIDE REINFORCEMENT FARALLEL TO AND ON EACH SIDE OF A GROUP OF SLEEVES ORIENTED IN A ROW CONSISTING OF TWO (2) %5 BARS TOP AND BOTTOM. WHERE PARALLEL TO AND ON EACH SIDE OF A GROUP OF SLEEVES ORIENTED IN A ROW CONSISTING OF TWO (2) %5 BARS TOP AND BOTTOM ARE TO BE PLACED BETWEEN ROWS. EXTEND ALL OF SUCH BARS AT LEAST 2'-O' PAST THE SLEEVES IN EACH DIRECTION. CLEAR SPACING BETWEEN ROWS. EXTEND ALL OF SUCH BARS AT LEAST 2'-O' PAST THE SLEEVES AND BARS IS TO BE AT LEAST ONE AND ONE-HALF INCHES (I-I/2"). SPECIAL OR CETTENSIVE SLEEVE ARRANGEMENTS AND DECEPTIONAL CASES NOT COVERED HEREIN ARE TO BE CALLED TO THE STRUCTURAL ENGINEER'S ATTENTION FOR REVIEW IN THE FIELD.

 CAREFULLY REPAIR DAMAGE TO TENDON SHEATHING PRIOR TO
- CAREFULLY REPAIR DAMAGE TO TENDON SHEATHING PRIOR TO CONCRETE PLACEMENT. SHEATHING MUST BE IN DIRECT CONTACT WITH STRESSING ANCHORAGES.
- WITH STRESSING ANCHORAGES.

 DISCARD AND REPLACE TENDONS THAT HAVE BEEN KINKED OR BENT DURING HANDLING.

 IF CONCRETE IS PUMPED INTO PLACE, PUMP HOSE MUST BE SUPPORTED ABOVE THE LEVEL OF THE SLAB REINFORCEMENT SO THAT AS THE PUMP HOSE IS MOVED THE REINFORCEMENT AND REINFORCEMENT SUPPORTS ARE NOT DAMAGED OR DISPLACED. A THOROUGH INSPECTION OF POST-TENSIONED SLAB REINFORCEMENT BY THE GENERAL CONTRACTOR IS REQUIRED PRIOR TO EACH PLACEMENT OF CONCRETE

- BY THE GENERAL CONTRACTOR IS REQUIRED PRIOR TO EACH
 PLACEMENT OF CONCRETE.

 TESTING OF POST TENSIONING COMPONENTS:

 A. A TENDON SAMPLE FROM EACH REEL OF MATERIAL USED IS TO BE
 TESTED WITH AN ANCHORAGE. FORWARD TEST RESULTS CONSISTING
 OF SIX (6) COPIES OF STATIC AND DYNAMIC TEST REPORTS SHOWING
 COMPLIANCE WITH CHAPTER IS OF ACI 301 TO THE ARCHITECT.
 TESTING IS TO BE DONE BY AN APPROVED INDEPENDENT TESTING
 LABORATORY. THE TENDON MANUFACTURER IS TO PAY FOR THESE
 TESTS. TAG TENDONS FOR IDENTIFICATION.

 B. AN INDEPENDENT TESTING AGENCY HIRED BY THE ONNER IS TO KEEP
 A DAILY RECORD OF JACK GAGE PRESSURES (OR DYNAMOMETER
- AN INDEPENDENT TESTING AGENCY HIRED BY THE OWNER IS TO KEEP A DAILY RECORD OF JACK GAGE PRESSURES (OR DYNAMONIETER READINGS) MEASURED TENDON LEJORGATICNS AND CONPUTED FORCES BASED ON EACH OF THESE PARAMETERS FOR EACH TENDON. SUBMIT SUCH RECORDS TO THE STRUCTURAL ENGINEER FOR REVIEW AT THE END OF EACH DAY OF STRESSING OPERATIONS. THE RECORDS ARE TO BE KEYED TO THE SHOP DRAWING TO CLEARLY IDENTIFY EACH TENDON. THE JACKING PROCEDURE AND STRESSING ORDER ARE TO BE RECORDED FOR EACH SLAB. CLEAN ALL GREASE AND LAITANCE OFF THE TAILS OF THE TENDONS PRIOR TO MARKING THEM. THE SPECIAL INSPECTOR IS TO MARK ALL TENDONS FOR ELONGATION MEASUREMENTS.

 APPLICATION OF PRE-STRESS FORCE:
- MEASUREMENTS.

 APPLICATION OF PRE-STRESS FORCE:

 PERFORM NO TENSIONING UNTIL THE CONCRETE HAS DEVELOPED A STRENGTH OF 3000 PSI AND HAS BEEN IN PLACE FOR NOT LESS THAN THREE (3) DAYS DURING WHICH TIME THE TEMPERATURE OF THE AIR SURROUNDING THE CONCRETE IS ABOVE SO F. THE THREE (3) DAY PERIOD MAY BE CUMULATIVE (NEED NOT BE CONSECUTIVE). IN ACCORDANCE WITH THE SPECIFICATIONS, THE CONTRACTOR IS TO PRESENT EVIDENCE SATISFACTORY TO THE ENGINEER THAT THE IN SITU STRENGTH OF THE CONCRETE EXCEEDS 3000 PSI PRIOR TO BEGINNING STRESSING OPERATIONS.

 THE PRE-STRESSING FORCE IS TO BE DETERMINED BY:

 MEASURED TENDON ELONGATIONS, AND

 JACK GAGE PRESSURE READINGS USING A RECENTLY CALIBRATED GAGE OR USE OF A RECENTLY-CALIBRATED DYNAMOMETER ANY DISCREPANCY IN EXCESS OF SEVEN PERCENT (7%) IS TO BE CORRECTED. ELONGATION REQUIREMENTS ARE TO BE BASED ON LOAD ELONGATION CURVES DEVELOPED FOR THE SPECIFIC STEEL SUPPLIED.

 IN THE EVENT THAT A DISCREPANCY BETWEEN GAGE PRESSURE AND ELONGATION USINGED DEVELOPED FOR THE SPECIFIC STEEL SUPPLIED.

 IN THE EVENT THAT A DISCREPANCY BETWEEN GAGE PRESSURE AND RESTRESSING WITHIN ALLONABLE GAGE PRESSURES HAVE FAILED, STOP WORK ON THAT TENDON AND SUMITIT THE PERTINENT DATA TO THE ENGINEER FOR RESOLUTION.

- ENGINEER FOR RESOLUTION.
- THE TOTAL LOSS OF PRE-STRESS DUE TO UN-REPLACED BROKEN
 TENDONS IS NOT TO EXCEED TWO PERCENT (2%) OF THE TOTAL PRE
- ENIODS IS NOT TO EACED TWO FERGUL (29) OF THE TOTAL TO EACED TWO FERGUL (29) OF THE TOTAL TO EACED TWO FERGUL (29) OF THE TOTAL TO EACED THE START OF THE MORK AND AT INTERVALS THEREAFTER. RE-CALIBRATE GAGES THAT HAVE BEEN DROPPED OR SUBJECT TO DAMAGING SHOCKS. SUBJECT TO DAMAGING SHOCKS. SUBJECT TO THE ENGINEER AND RE-CALIBRATE AS REQUIRED BY THE SPECIFICATIONS AND UPON THE ENGINEER'S REQUEST.

 F. IF TENDON SLIPPAGE GREATER THAN ONE-GUARTER (1/4) INCH OCCURS AFTER RELEASE OF JACKING FORCES, NOTIFY THE STRUCTURAL ENGINEER. THE ENGINEER MAY REQUIRE RE-STRESSING OF THE TENDON, DEPENDING ON CIRCUMSTANCES.

 G. IF PROPER ELONGATION IS NOT REACHED AT THE SPECIFIED FORCE, RE-STRESS EQUALIZATION.
- TIME FOR STRESS EQUALIZATION,
 STRESS UNIFORMLY SPACED TENDONS IN THE SLAB PRIOR TO
 STRESSING BANDED TENDONS.
- CRACK REPAIR ALLOWANCE: THE GENERAL CONTRACTOR IS TO BUDGET AN ALLOWANCE OF \$0.1 PER SQ FT FOR THE GENERAL CONTRACTOR IS TO BUDGET AN ALLOMANCE OF \$0.1 PER GENERAL REPAIR OF CRACKS IN CONCERTE THAT MAY DEVELOP DURING CONSTRUCTION. THE GENERAL CONTRACTOR IS ALSO TO GUOTE A UNIT PRICE IN DOLLARS PER LINEAR FOOT OF EPOXY INJECTION CRACK REPAIR, REPAIR OF SUCH CRACKS IS TO BE MADE AT THE DISCRETION AND IN ACCORDANCE WITH THE INSTRUCTIONS OF THE STRUCTURAL ENGINEER,
- MISCELLANEOUS:
 DO NOT CUT OFF TENDON TAILS ON ANY LEVEL PRIOR TO THE
 CONTRACTOR'S RECEIPT OF WRITTEN AUTHORIZATION FROM THE
- CONTRACTOR'S RECEIPT OF WRITTEN AUTHORIZATION FRONT THE STRUCTURAL ENGINEER.

 UPON RECEIPT OF AUTHORIZATION, BURN OFF TENDON TAILS APPROXIMATELY ONE-HALF INCH (1/2") INSIDE THE FINISHED FACE OF THE SLAB. TAKE EXTREME CARE NOT TO HEAT ANY OF THE
- ADJACENT COMPONENTS,
 DO NOT WELD TENDONS, DO NOT WELD NEAR TENDONS, DO NOT
 GROUND WELDING EQUIPMENT TO TENDONS OR ANCHORAGES.

- D. TENDON STRESSING ANCHORAGES AND WEDGES ARE TO BE CORROSION PROTECTED BY PAINTING WITH Z.R.C. COLD GALVANIZING COMPOUND, OR BY AN APPROVED EQUIVALENT, BEFORE THE ANCHORAGE POCKET IS GROUTED. EXERCISE CARE TO AVOID EXCESSIVE OVER PAINTING OF THE SURROUNDING CONCRETE WITHIN THE POCKET SO AS NOT TO INTERFERE WITH THE BOND OF THE PATCHING GROUT TO THE POCKET

- SIDES.

 FILL ANCHORAGE POCKETS WITH NON-SHRINK GROUT CONFORMING TO THE SPECIFICATION AND CHEMICALLY SUITABLE FOR USE WITH POST TENSIONING COMPONENTS.

 MARK TENDON LOCATIONS USING AN APPROVED MARKING SYSTEM. MARKERS ARE TO BE AFFIXED TO EVERY TENDON GROUP OR BUNDLE AT EVERY HIGH POINT AND LOW POINT IN THE PROFILE.

 INSERTS AND SLEEVES FOR THE VARIOUS TRADES ARE TO BE CAST INTO THE SLAB WHEREVER POSSIBLE. CONTINUOUS CHANNEL-STYLE INSERTS (AS MANUFACTURED BY UNISTRUT, OR SIMILAR) OVER 1'-0' IN LENGTH ARE NOT ALLOWED. DRILLED-IN ANCHORS AND LOW VELOCITY FASTENERS MAY BE USED ONLY WHERE IT CAN BE SHOWN THAT THEY ARE LOCATED SO THEY WILL NOT DAMAGE OR COME IN CONTACT WITH TENDONS OR ANCHORAGES AND WILL NOT CAUSE CONTACT WITH TENDONS OR ANCHORAGES AND WILL NOT CAUSE
- CONTACT MITH TENDORS OR ANCHORAGES AND WILL NOT CAUSE SPALLING OF CONCRETE.
 POUR STRIPS ARE TO BE PLACED NINETY (90) DAYS AFTER POSTTENSIONED SLABS ARE STRESSED.
- CONCRETE COVER FOR FLOOR SLABS ARE BASED ON THE REQUIREMENTS OF TABLES 2.2 \$ 2.3 OF ACI MANUAL OF CONCRETE PRACTICE.







0 COND FRONT AVENU LEM, OREGON VER 95 SA 2

PROJECT NO.

PLOT DATE: 8:28-2007 RESPONSE TO PLAN CHE DATE : 12-13-2008

CHECKED BY : BA

CONT. **GENERAL STRUCTURAL** NOTES



| TYPES OF HORK | INSPECTION | | ECTION PROGRAM | |
|--|------------|---------------------------------------|--|---|
| TIFES OF MORK | INSPECTION | COMMENTS | REFERENCE STANDARDS | IBC REFERENCE |
| SOILS | | | | |
| EXCAVATION, FOUNDATION SUBGRADE | P | BY GEOTECHNICAL ENGINEER | PER SPECS & GEOTECH REPORT | 1704.7.1 |
| STRUCTURAL FILL PLACEMENT | P | BY GEOTECHNICAL ENGINEER | PER SPECS & GEOTECH REPORT | 1704.7.2, 1803.6 |
| PILING | c | BY GEOTECHNICAL ENGINEER | PER SPECS & GEOTECH REPORT | 1704.7.2, 1803.8 |
| | | | The state of the s | |
| CONCRETE | | | | |
| REINFORCING PLACEMENT | P | | ACI 318: 3.5, 7.1-7.7 | 1903.5, 1907.1, 1907.7, 1914.4 |
| WELDING OF A706 REINF. BARS IN INT. \$ SPECIAL MOMENT FRAMES, SHEAR WALL | c | | AWS DI.4 & ACI 318: 3.5.2 | 1903.5.2 |
| BOUNDRY ELEMENTS, SHEAR REINF. | | |] | |
| WELDING OF A706 REINF. BARS, TYP UNO | Р | | AMS DI.4 \$ ACI 318: 3,5,2 | 1000 |
| CAST IN PLACE BOLTS & ANCHORS | c | | AND DIA 4 ACT 518: 5.5.2 | 1903.5.2 |
| MONITORING USE OF REQUIRED DESIGN MIX | P | SEE NOTE 7 | ACI 210 CIL 1/ E.F. 5 1 | 1912.5 |
| SAMPLING FRESH CONCRETE; TAKING OF | | SEE NOTE / | ACI 318: CH. 4, 5.5-5.4 | 1904, 1905.2-1905.4, 1914.2,1914.3 |
| TEST SPECIMENS | ٦ | | ASTM C 172, ASTM C 31, ACI 318: 5.6, 5.8 | 1905.6, 1914.10 |
| CONCRETE PLACEMENT | c | | ACI 318: 5.9, 5.10 | 1905 0 1905 10 1914 (1914 7 1914 9 |
| MAINTENANCE OF SPECIFIED CURING | Р | · · · · · · · · · · · · · · · · · · · | ACI 318: 5,11-5,13 | 1905.9, 1905.10, 1914.6, 1914.7, 1914.8 |
| TECHNIQUES | ' | | A01 310. 3,11-3,13 | 1905.11, 1905.13, 1914.9 |
| VERIFICATION OF IN-SITU CONCRETE | Р | | ACI 318: 6.2 | |
| STRENGTH PRIOR TO REMOVAL OF SHORES | | | [| |
| AND FORMS FOR STRUCTURAL MEMBERS | | | | <u> </u> |
| REINFORCING MECH, SPLICES | P | REQUIREMENTS PER ICC REPORT | | |
| | i | • | | |
| POST-TENSION / PRECAST CONCRETE | ļ | | | l |
| TENDON PLACEMENT | Р | | ACI 318: 3.5, 7.1-7.7 | 1903.5, 1907.1, 1907.7, 1914.4 |
| TENDON STRESSING | c | ··· | ACI 318: 18.20 | , |
| BONDED TENDON GROUTING | С | | ACI 318: 18.18.4 | |
| VERIFICATION OF IN-SITU CONCRETE | P | | ACI 318: 6.2 | 1906.2 |
| STRENGTH PRIOR TO TENDON STRESSING | | <u>-</u> | | |
| ERECTION OF PRECAST MEMBERS | Р | | ACI 318; CH. 16 | |
| | | | | |
| ANCHORS INSTALLED INTO HARDENED | 1 | | | |
| CONCRETE / MASONRY | | | | |
| ADHESIVE ANCHORS | C | REQUIREMENTS PER ICC REPORT | | |
| EXPANSION ANCHORS | P | REQUIREMENTS PER ICC REPORT | | |
| STRUCTURAL STEEL MEMBERS | i | | | |
| STRUCTURAL MATERIAL VERIFICATION | P | | ASTM A 6 OR ASTM A 568 | lines in the second |
| INSPECTION OF AS-BUILT FRAME JOINTS FOR | P | | ASITI A 6 OR ASITI A 506 | 1708.4 |
| COMPLIANCE W/ CONST. DOCS. | , , | | | 1704.3.2 |
| FIELD ERECTION | | | | |
| FABRICATION | | | | |
| | | | | |
| STRUCTURAL WELDING | | | | 1 |
| WELD MATERIAL VERIFICATION | P | | AISC LRFD: SECTION A3.5 | |
| SINGLE PASS FILLET WELDS 5 5/16" | P | | AMS DI.I | 1704.3.1 |
| SINGLE PASS FILLET WELDS > 5/16" | С | | AWS DI.1 | 1704.3,1 |
| MULTIPLE PASS FILLET WELDS | С | | AWS DI.1 | 1704,3,1 |
| FULL PEN GROOVE WELDS | c | | AMS DI.1 | 1704.3.1 |
| PARTIAL PEN GROOVE WELDS | c c | | AMS DI.1 | 1704,3,1 |
| WELDED STUDS | P | · · · · · · · · · · · · · · · · · · · | | |
| WELDED STAIR AND RAILING SYSTEMS | Р | L | ··· | · |
| | | | | |
| LIGHT GAUGE STEEL FRAMING | <u> </u> | | | |
| VERIFY MEMBER SIZES | Р | | | 1707,4 |
| DEFLECTION HEAD INSTALLATION | Р | | | 1707.4 |
| WELD INSTALLATION | Р | | | 1707.4 |
| SHEARWALL HOLDOWN INSTALLATION | Р | | | 1707,4 |
| | | | | |
| STRUCTURAL MASONRY: | | | | |
| NONESSENTIAL FACILITIES | <u>-</u> - | | Let Book Age Add | |
| SITE PREPARED MORTAR MIX | P | | ACI 530.I: ART. 2.6A | |
| SITE PREPARED GROUT MIX | P | | ACI 530,I: ART. 2.6B | |
| MASONRY UNIT PLACEMENT | P | | ACI 530,1: ART. 3.3B | |
| SIZE & LOCATION OF STRUCTURAL ELEMENTS | Р | | ACI 530,1: ART. 3,3G | |
| SIZE, GRADE AND PLACEMENT OF | P | CITY INSPECTOR TO VERIFY | ACI 530.I: ART. 2.4, 3.4, 3.6A | |
| REINFORCING STEEL & CONNECTORS | | REINF'G PRIOR TO GROUTING | ACI 530: SEC. 1.12 | |
| TYPE, SIZE AND LOCATION OF ANCHORS | Р | | ACI 530: SEC. 1.2.2(E), 2.1.4, 3.1.6 | |
| ATTACHED TO MASONRY | | | ACLEON AND AND AND | |
| MASONRY PROTECTION DURING COLD OR | Р | | ACI 530,1: ART, 1,8C, 1,8D | 2104.3, 2104.4 |
| HOT WEATHER | | | | |
| COOLT COACE | | | | |
| GROUT SPACE GROUT PLACEMENT | P C | | ACI 530.1: ART, 3.2D ACI 530.1: ART, 3.5 | |

I. C = CONTINUOUS P = PERIODIC

2. INSPECTIONS SHOWN TO BE REQUIRED SHALL BE ACCOMPLISHED IN ACCORDANCE WITH IBC CHAPTER IT BY A CERTIFIED SPECIAL INSPECTOR FROM AN ESTABLISHED TESTING AGENCY. SPECIAL INSPECTION TESTING REQUIREMENTS APPLY EQUALLY TO ALL BIDDER DESIGN COMPONENTS.

3. CONTINUOUS SPECIAL INSPECTION MEANS THAT THE SPECIAL INSPECTOR IS ON THE SITE AT ALL TIMES OBSERVING THE WORK REQUIRING SPECIAL INSPECTON (IBC 1702.1). PERIODIC SPECIAL INSPECTION MEANS THAT THE SPECIAL INSPECTOR IS ON SITE AT TIME INTERVALS NECESSARY TO CONFIRM THAT ALL WORK REQUIRING SPECIAL INSPECTION IS IN COMPLIANCE.

4. SPECIAL INSPECTION NOT REQUIRED FOR WORK PERFORMED BY AN APPROVED FABRICATOR PER IBC SECTION 1704.2.

5. ALL (IF APPLICABLE) WELDS SHALL BE VISUALLY INSPECTED.

6. NOT USED

7. VERIFY DEVIATION FROM MIX DESIGN BY SITE ADDITIONS OF WATER OR OTHER ADDITIVES.

7. VERIFI DEVIATION FROM THAT DESIGN BY THE ADDITIONS OF WATER OR OTHER ADDIT S. CONTINUOUS INSPECTION IS REQUIRED AS FOLLOWS:

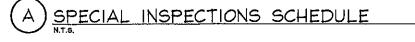
A. WHEN WELDING (S. NOT DONE IN AN APPROVED FABRICATION SHOP PER IBC 1704.2.

B. WHERE SINGLE PASS FILLET WELDS EXCEED % IN SIZE.

C. AT ALL PARTIAL OR COMPLETE JOINT PENETRATION WELDS.

9. LFRS: LATERAL FORCE RESISTING SYSTEM.

10. HIGH STREETH BOLTS REQUIRING PRETENSIONING THAT ARE INSTALLED USING THE TURN-OF-NUT METHOD WITH MATCHMARKING TECHNIQUES, THE DIRECT TENSION INDICATOR METHOD, OR THE ALTERNATE DESIGN FASTENINER (TWIST-OFF BOLT) METHOD MAY BE INSPECTED ON A PERIODIC BASIS.



| | SPECI | AL TESTING | PROGR | AM |
|----------------------------|----------------------------------|---|------------------------|--|
| TYPE OF MATERIAL | TYPE OF TEST | FREQUENCY | REFERENCE | NOTES |
| STRUCTURAL FILL / BACKFILL | FIELD DENSITY | SEE NOTE 2 | | SEE STRUCTURAL FILL NOTES FOR TESTING METHOD. |
| CONCRETE | CYLINDER COMPRESSIVE STRENGTH | 4 CYLINDERS / 100 CY / DAY / EA MIX DESIGN | ASTM C 31 ASTM C 39 | TEST I CYCLINDER AT 7 DAYS, 2 AT 28 DAYS. |

- TESTING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH IBC CHAPTER 17 BY A CERTIFIED TESTING LABORATORY. SAMPLES SHALL BE OBTAINED BY CERTIFIED SPECIAL INSPECTORS AND TESTED BY QUALIFIED PERSONNEL.
- 2. STRUCTURAL FILL / BACKFILL DENSITY TESTING FREQUENCY: WALL BACKFILL & FOOTINGS: I PER 100 FT OF LENGTH PER BACKFILL LAYER, MINIMUM OF 2 TESTS. SLAB FILL: 1 EVERY 2000 SQ. FT. PER FILL LAYER,
- 3. OTHER NON-DESTRUCTIVE METHODS PER AWS DI.1, ANNEX K MAY BE ACCEPTABLE WITH ENGINEER'S APPROVAL
- 4. APPLIES TO BASE METAL THICKER THAN 1.5' SUBJECTED TO THROUGH-THICKNESS WELD SHRINKAGE STRAINS. AFTER COMPLETION OF WELDS, ULTRASONICALLY TEST FOR DISCONTINUITIES BEHIND AND ADJACENT TO WELDS. ACCEPTANCE OR REJECTION OF MATERIAL DISCONTINUITIES WILL BE BASED ON THE DEFECT RATING ACCORDING TO THE LARGER REFLECTOR CRITIERIA OF APPROVED NATIONAL STANDARDS, WITH THE CONCURRENCE OF THE STRUCTURAL ENGINEER OF RECORD.
- PROVIDE REPORT OF TESTS INCLUDING, AS A MINIMUM, TEST LOCATIONS, BRICK/MORTAR CONDITION, BOLT MOVEMENT/ELONGATION, EMBEDMENT DEPTH AND APPLIED LOAD.
- 6. URM: UN-REINFORCED MASONRY



QUALITY ASSURANCE PROGRAM FOR LATERAL FORCE RESISTING SYSTEMS

- 1. THE LATERAL FORCE RESISTING SYSTEM (LRFS) RESISTING SEISMIC AND WIND FORCES CONSISTS OF CONCRETE SHEARWALL.

 2. PROVIDE SPECIAL INSPECTION, FOR THE TYPES OF WORK SHOWN IN THE "SPECIAL INSPECTION SCHEDULE", ACCORDING TO REPORTING AND COMPLIANCE PROCEDURES INCLUDED IN SECTION 1704 OF THE IBC, AND AS DETAILED IN THESE NOTES.

 3. PROVIDE SPECIAL TESTING, FOR THE TYPES OF WORK SHOWN IN THE "SPECIAL TESTING SCHEDULE", ACCORDING TO REPORTING AND COMPLIANCE PROCEDURES INCLUDED IN SECTION 1704 OF THE IBC, AND AS DETAILED IN THESE NOTES.

 4. THE STRUCTURAL ENGINEER OF RECORD SHALL PROVIDE STRUCTURAL OBSERVATION AT DESIGNATED STAGES OF CONSTRUCTION.

SPECIAL INSPECTION AND TESTING PROGRAMS:

- PROVIDE SPECIAL INSPECTION, SPECIAL TESTING, REPORTING AND COMPLIANCE PROCEDURES ACCORDING TO IBC CHAPTER 17.
 SEE "SPECIAL INSPECTION SCHEDULE" FOR WORK REQUIRING SPECIAL INSPECTION.
- 3. SEE "SPECIAL TESTING SCHEDULE" FOR WORK REQUIRING SPECIAL
- SEE SPECIAL LESTING SOURCE TESTING.
 SPECIAL INSPECTOR GUALIFICATIONS: DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION IN CONSTRUCTION.
- OF THE PARTICULAR TITE OF CONSTRUCTION, REVIEW THE SPECIAL MSPECTION REQUIREMENTS WITH THE ARCHITECT, ENGINEER, BUILDING OFFICIAL, CONTRACTOR AND SPECIAL INSPECTORS.

 DUTIES OF THE SPECIAL INSPECTOR INCLUDE, BUT ARE NOT LIMITED
- TO:

 A. OBSERVE THE WORK FOR CONFORMANCE WITH THE APPROVED FERMIT DRAWINGS AND SPECIFICATIONS. BRING DISCREPANCIES TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE ENGINEER AND TO THE BUILDING OFFICIAL.
- THE BUILDING OFFICIAL.

 5. FURNISH INSPECTION REPORTS FOR EACH INSPECTION TO THE BUILDING OFFICIAL, ARCHITECT, ENGINEER, CONTRACTOR AND CHINER IN A TIMELY MANNER.

 5. SUBMIT A FINAL REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS INSPECTED, AND WHETHER THE WORK IS IN CONFORTANCE WITH THE APPROVED PERMIT DRAWINGS AND SPECIFICATIONS.
- 7. DUTIES OF THE CONTRACTOR INCLUDE, BUT ARE NOT LIMITED TO:
 A. NOTIFY SPECIAL INSPECTOR THAT WORK IS READY FOR INSPECTION AT LEAST 24 HOURS BEFORE INSPECTION IS
- REQUIRED.

 B. MAINTAIN ACCESS TO WORK REQUIRING SPECIAL INSPECTION UNTIL IT HAS BEEN OBSERVED AND INDICATED TO BE IN CONFORMANCE BY THE SPECIAL INSPECTOR AND APPROVED BY THE BUILDING OFFICIAL.
- DUILDING OFFICIAL.

 PROVIDE THE SPECIAL INSPECTOR WITH ACCESS TO APPROVED PERMIT DRAWINGS AND SPECIFICATIONS AT THE JOB SITE.

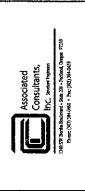
 D. MAINTAIN JOB-SITE COPIES OF ALL REPORTS SUBMITTED BY THE SPECIAL INSPECTOR.

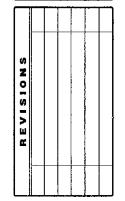
STRUCTURAL OBSERVATION:

- STRUCTURAL OBSERVATIONS BY THE ENGINEER OF RECORD (EOR) OR THEIR REPRESENTATIVE SHALL BE REQUIRED AT THE FOLLOWING STAGES DURING CONSTRUCTION:

 A. PRIOR TO THE COMMENCEMENT OF THE PLACING OF CONCRETE IN THE
- A. FRIOR TO THE CONTINENCEMENT OF THE PLACING OF CONCRETE IN THE FOUNDATION WALLS, FOOTINGS, AND SLAB-ON-GRADE.
 C. DURING INSTALLATION OF THE STEEL FRAMING,
 D. DURING THE INSTALLATION OF THE HORIZONTAL FLOOR AND ROOF SLABS OF THE UPPER LEVEL.
 2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD (EOR) AT LEAST FOUR (4) CALENDAR DAYS IN ADVANCE OF COMPLETION REQUIRING SITE OVERWATION SITE OVSERVATION.
- IF ADDITIONAL SITE VISITS OR DESIGN WORK IS REQUIRED BY THE ENGINEER BECAUSE OF INCOMPLETE OR UNACCEPTABLE WORK, THE ENGINEER SHALL BE REIMBURSED FOR ALL TIME AND EXPENSES INVOLVED.







CONDO 56 FRONT AVENU SALEM, OREGON RIVERS

PROJECT NO. 06-113

PLOT DATE: 9-29-2007 RESPONSE TO PLAN CO DATE: 12-13-2008 DRAWN BY : KHA

CHECKED BY : BA

CONT. **GENERAL STRUCTURAL** NOTES

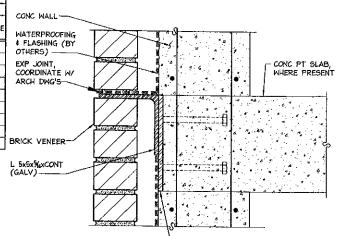
| | REBAR | DEVELO | PMEN | T # LAP | SPLICE | LENGT | HS (IN | INCHES) | |
|-------------|--------------------------|----------------------------|--------|----------|----------------------------|---------|--------|----------------------------|--------|
| | | | | CONCRETE | STRENG | TH (fc. |) | | |
| | 3 | 000 PSI | | 4 | 000 PSI | | 5 | 000 PSI | |
| BAR SIZE | DEVELOPME TOP BARS | NT LENGTH OTHER BARS | SPLICE | | NT LENGTH OTHER BARS | SPLICE | | NT LENGTH OTHER BARS | SPLICE |
| #3 | 21 | 16 | 28 | 18 | 14 | 24 | 17 | 13 | 22 |
| #4 | 28 | 22 | 37 | 25 | 19 | 32 | 22 | 17 | 29 |
| #5 | 36 | 27 | 47 | 31 | 24 | 40 | 28 | 21 | 36 |
| #6 | 43 | 33 | 56 | 37 | 28 | 48 | 33 | 25 | 43 |
| #7 | 62 | 48 | 81 | 54 | 42 | 70 | 48 | 37 | 63 |
| #8 | 71 | 55 | 43 | 62 | 47 | 80 | 55 | 42 | 72 |
| #9 | 80 | 62 | 105 | 69 | 53 | 91 | 62 | 48 | 81 |
| #10 | 89 | 68 | 118 | 77 | 59 | 102 | 69 | 53 | 91 |
| #11 | 98 | 75 | 131 | 85 | 65 | 113 | 76 | 5A | 101 |

NOTES:

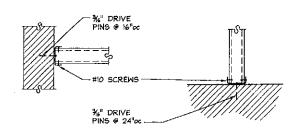
1. CONFORM WITH ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AS SHOWN IN TABLE AND DRAWINGS.

- TOP BARS ARE DEFINED AS HORIZONTAL BARS PLACED SUCH THAT MORE THAN 12" OF CONCRETE IS PLACED BELOW THE BARS.
- SPLICE LENGTHS ARE: CLASS B SPLICE, W/ BAR CENTER TO CENTER SPACING OF GREATER THAN 3 BAR DIAMETERS.
- 4. SEE PLANS AND DETAILS FOR ANY SPECIAL REQUIREMENTS
- 5. THESE VALUES ARE FOR NORMAL WEIGHT CONCRETE,



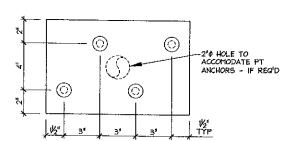


| APPLICABLE LEVEL(S) | WALL CONDITION * | MAX STUD HEIGHT | STUD SIZE # SPACING | VENEER | Ix MIN (in4) | 5x MIN (in3) |
|------------------------|---------------------|-----------------------|------------------------|--------|-----------------|-----------------|
| LEVEL 1 | TYPICAL WALL | 12'-6" | 6"x16 GA @ 12"oc | YE5 | 2.385 | 0,788 |
| LEVEL 2 - LEVEL 7 | TYPICAL WALL | 10'-5" | 6"x16 GA @ 16"oc | YES | 2,385 | 0.788 |
| LEVEL 8 | TYPICAL WALL | 14'-6" | 6"x16 GA @ 16"oc | YES | 2,385 | 0.788 |



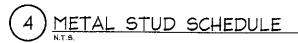
TO CMU WALL

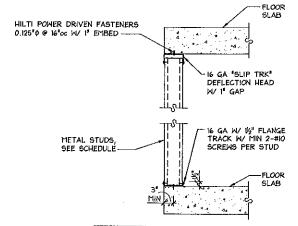
TO CONC FLOOR



└PL %x8x12" W/ 4-%"\$x5"

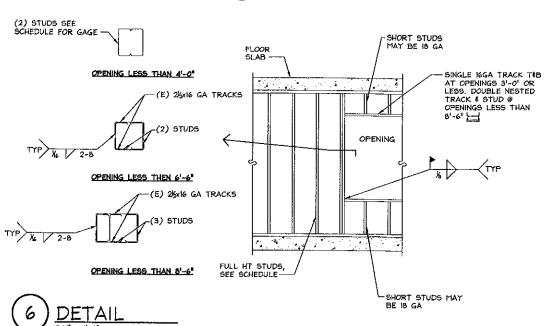




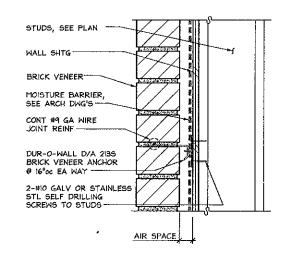


| TYP STUD | FASTENERS | SPACING |
|----------------|-----------|---------|
| | _ + (1) | |
| 0-4' OPENING | 2 (2) | 3 |
| 4'-10' OPENING | 3 (2) | 3 |

DETAI () = EXP ANCHOR SUBSTITUTE



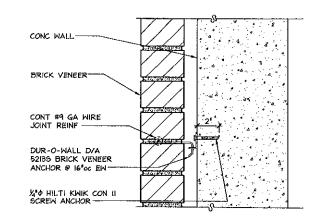
TYPICAL ATTACHMENT



NOTES

I. SIMILAR WIRE OR PLATE LINTEL ANCHORS MAY BE ACCEPTABLE W/ APPROVAL OF ENGINEER.

2. THIS STYLE OF ANCHOR REQUIRES SPECAL INSPECTION.

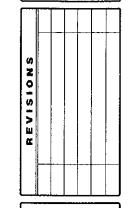


- 1. SIMILAR WIRE OR PLATE LINTEL ANCHORS MAY BE ACCEPTABLE W/ APPROVAL OF ENGINEER.
- 2. THIS STYLE OF ANCHOR REQUIRES SPECAL INSPECTION.

VENEER ANCHOR DETAIL





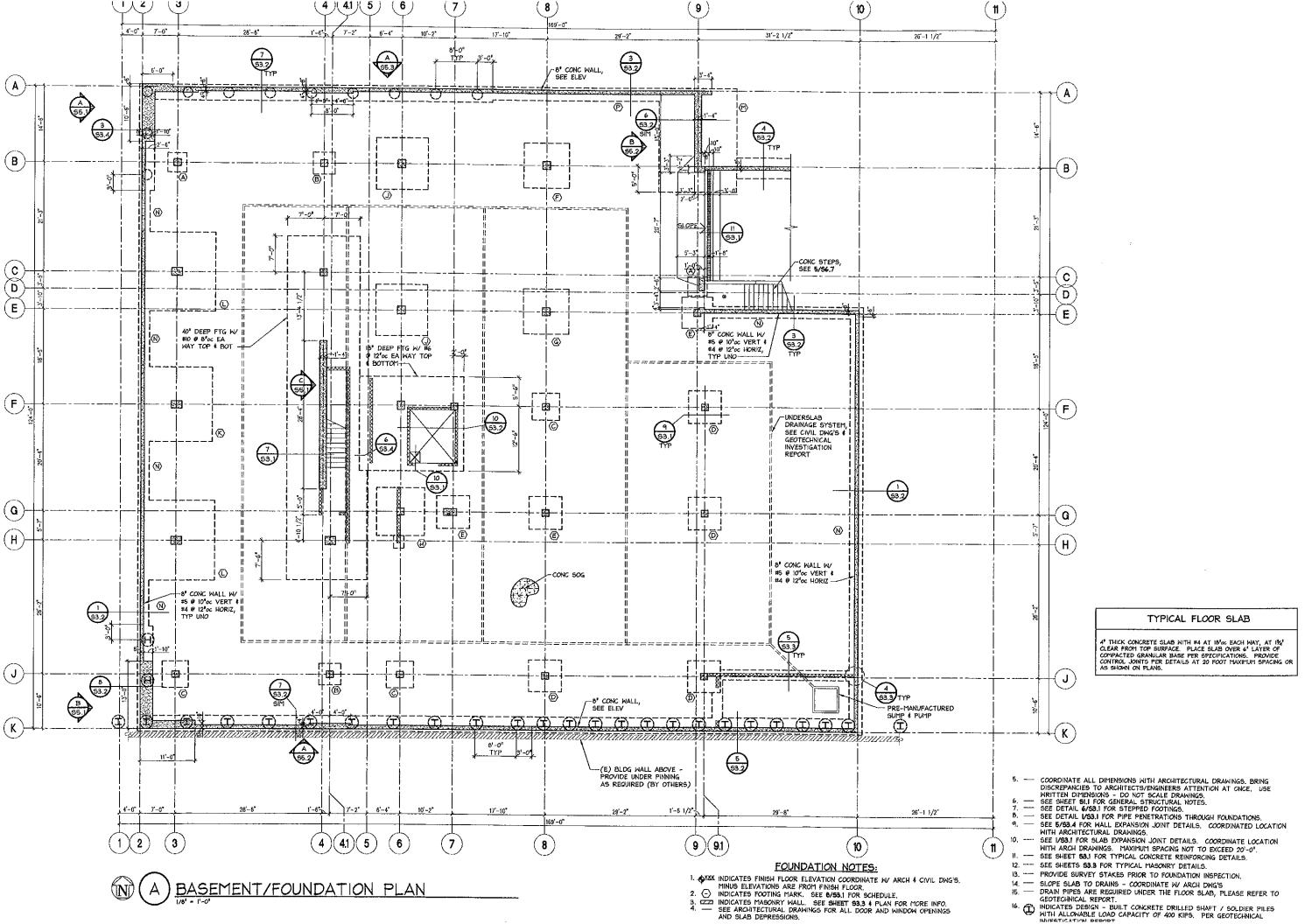




PROJECT NO. 06-113

PLOT DATE: 9:28-2007 RESPONSE TO PLAN CH DATE: 12-13-2008 DRAWN BY : KHA CHECKED BY : DA

MISC. **DETAILS**



EXPIRES: 12-S1-O7





RIVERS CONDOS
156 FRONT AVENUE
SALEM, OREGON

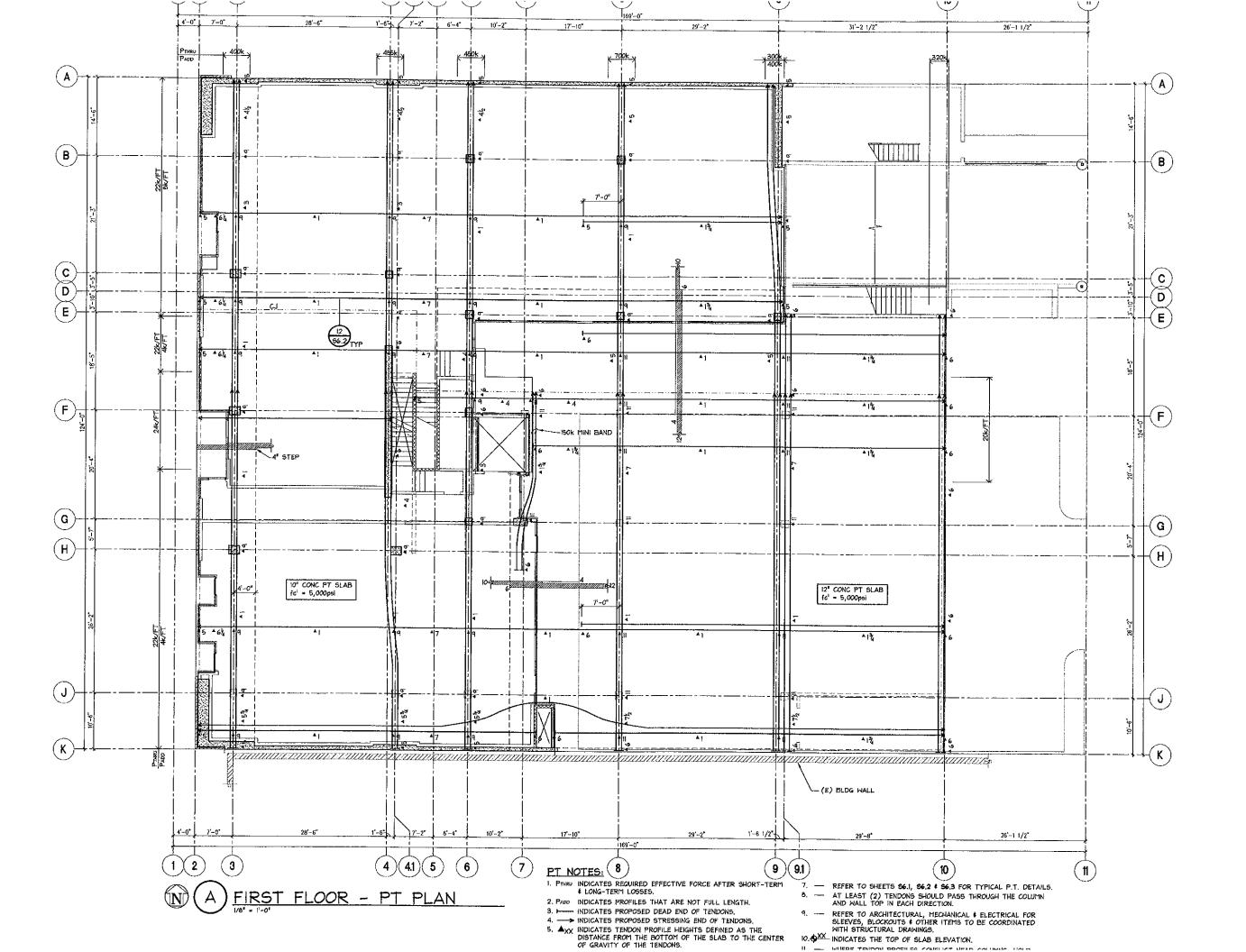
PROJECT NO.

06-113

DATE : 12:13:2000 DRAWN BY : KHA

CHECKED BY : SA

BASEMENT/ FOUNDATION PLAN







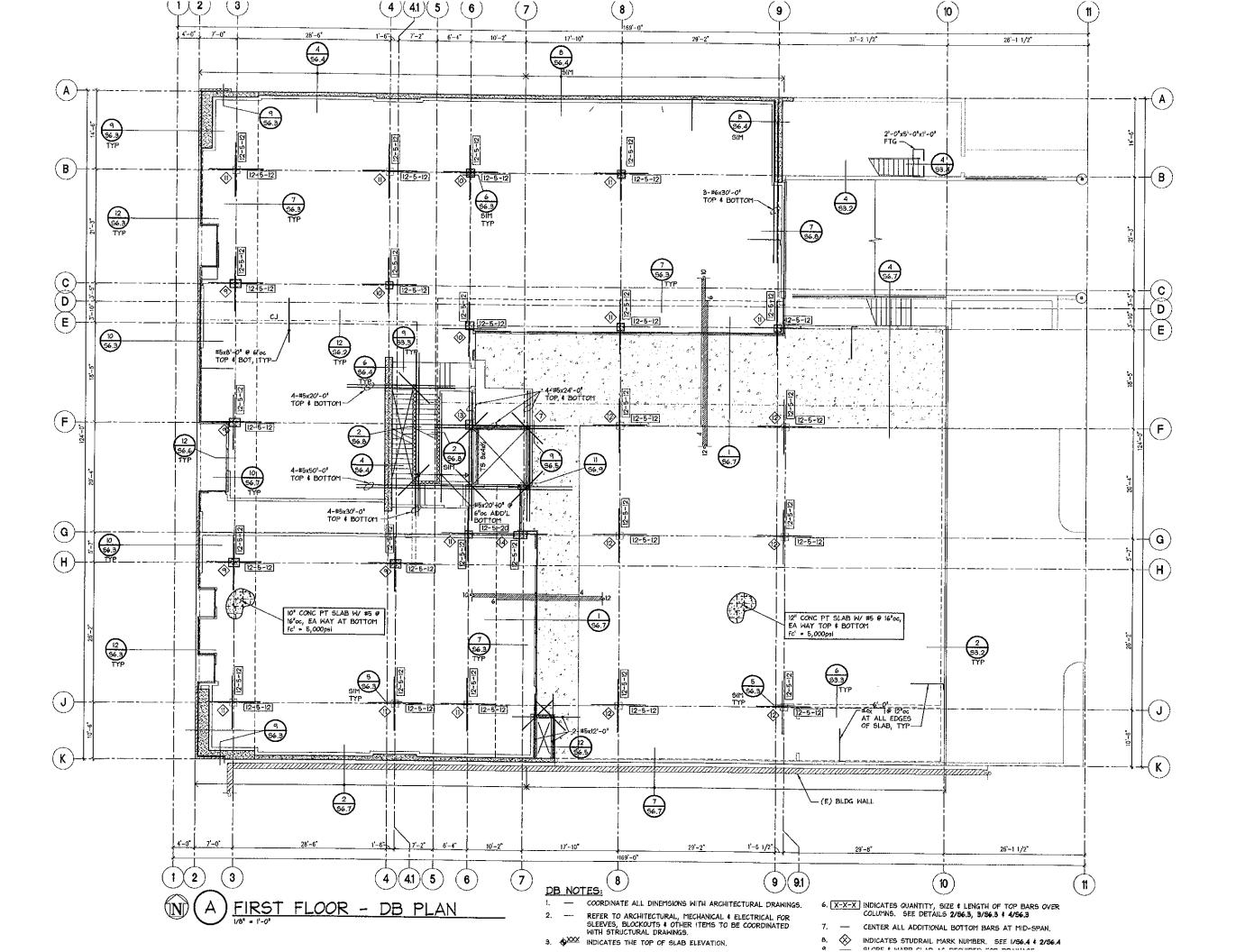


PROJECT NO. 06-113 PLOT DATE: 9-20-2007 RESPONSE TO PLAN CHECK DATE: 12-13-2006

RESPONSE TO PLAN CH DATE: 12-13-2006 DRAWN BY: KHA CHECKED BY: BA

1st FLOOR PT PLAN

\$2.1-1







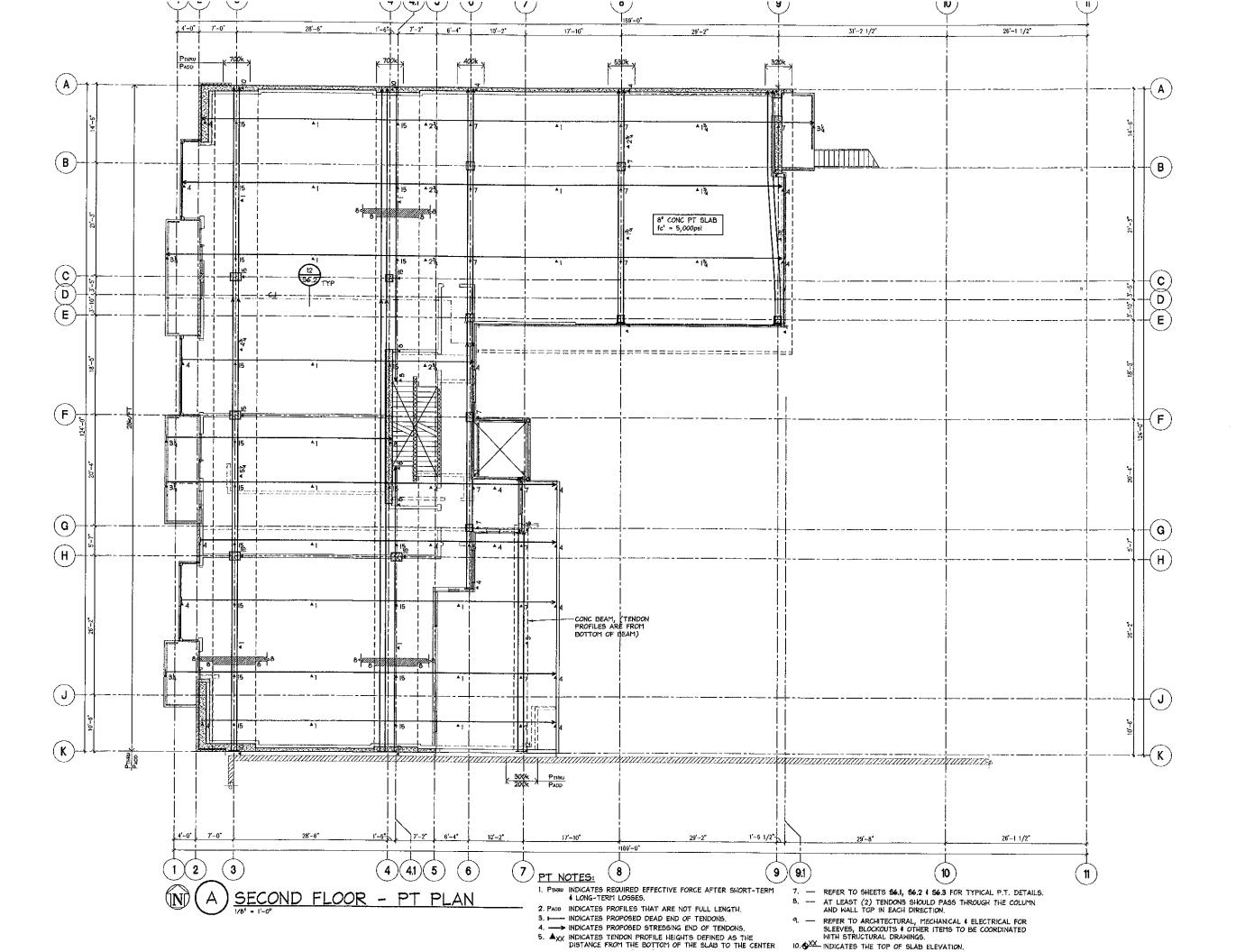


PROJECT NO. 06-113 PLOT DATE: 9-26-2007 RESPONSE TO PLAN CHEC DATE: 12-13-2008

DRAWN BY : KHA CHECKED BY : BA

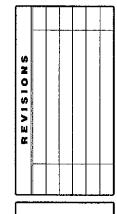
1st FLOOR DB PLAN

S2.1.2







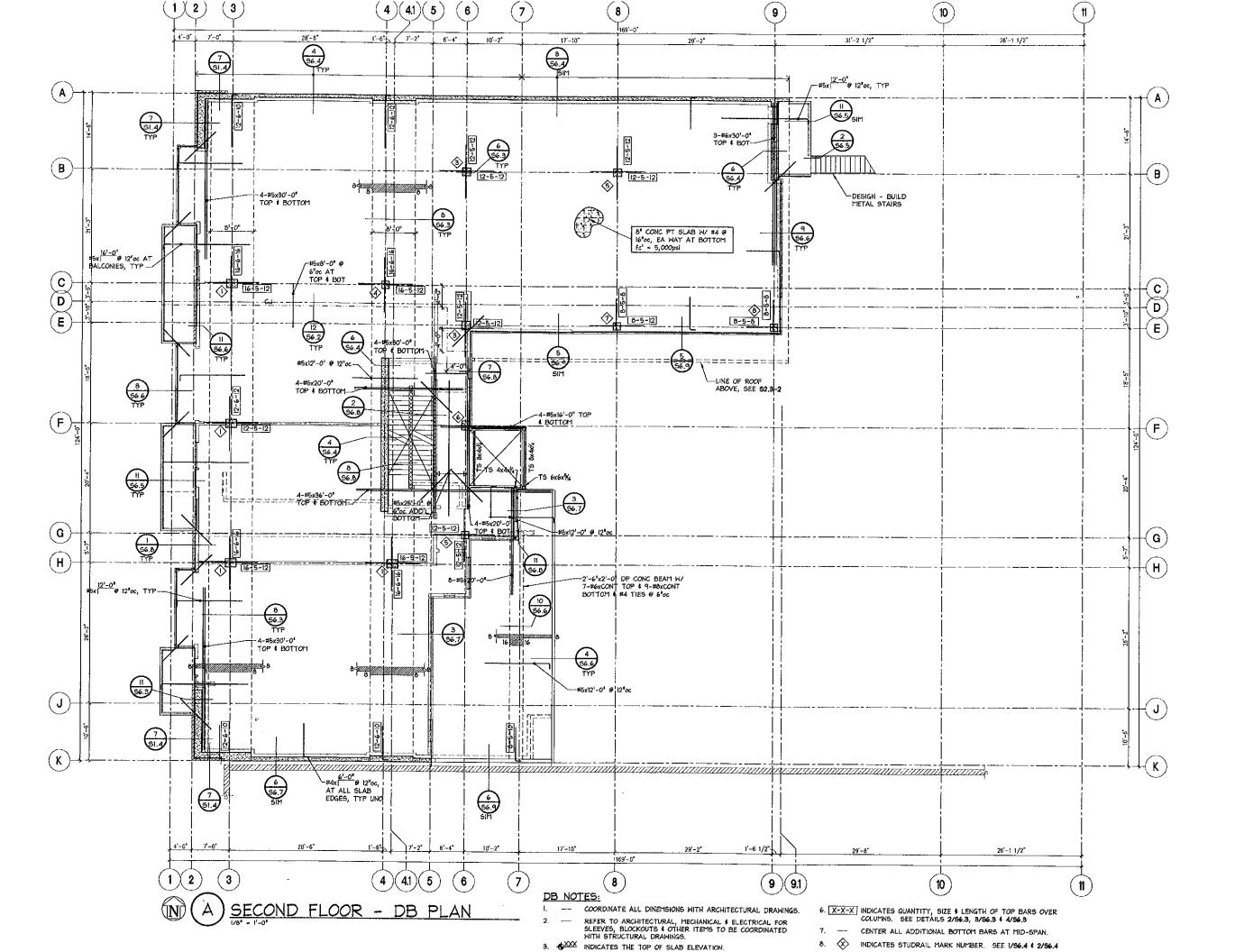


PROJECT NO. 06-113

PLOT DATE: 9:28-2007 RESPONSE TO PLAN CH DATE: 12-13-2009 DRAWN BY: KHA

2nd FLOOR PT PLAN

S2.2-1





Associated
Consultants,
Inc. sonaulsepor

RIVERS CONDOS
156 FRONT AVENUE
SALEM, OREGON

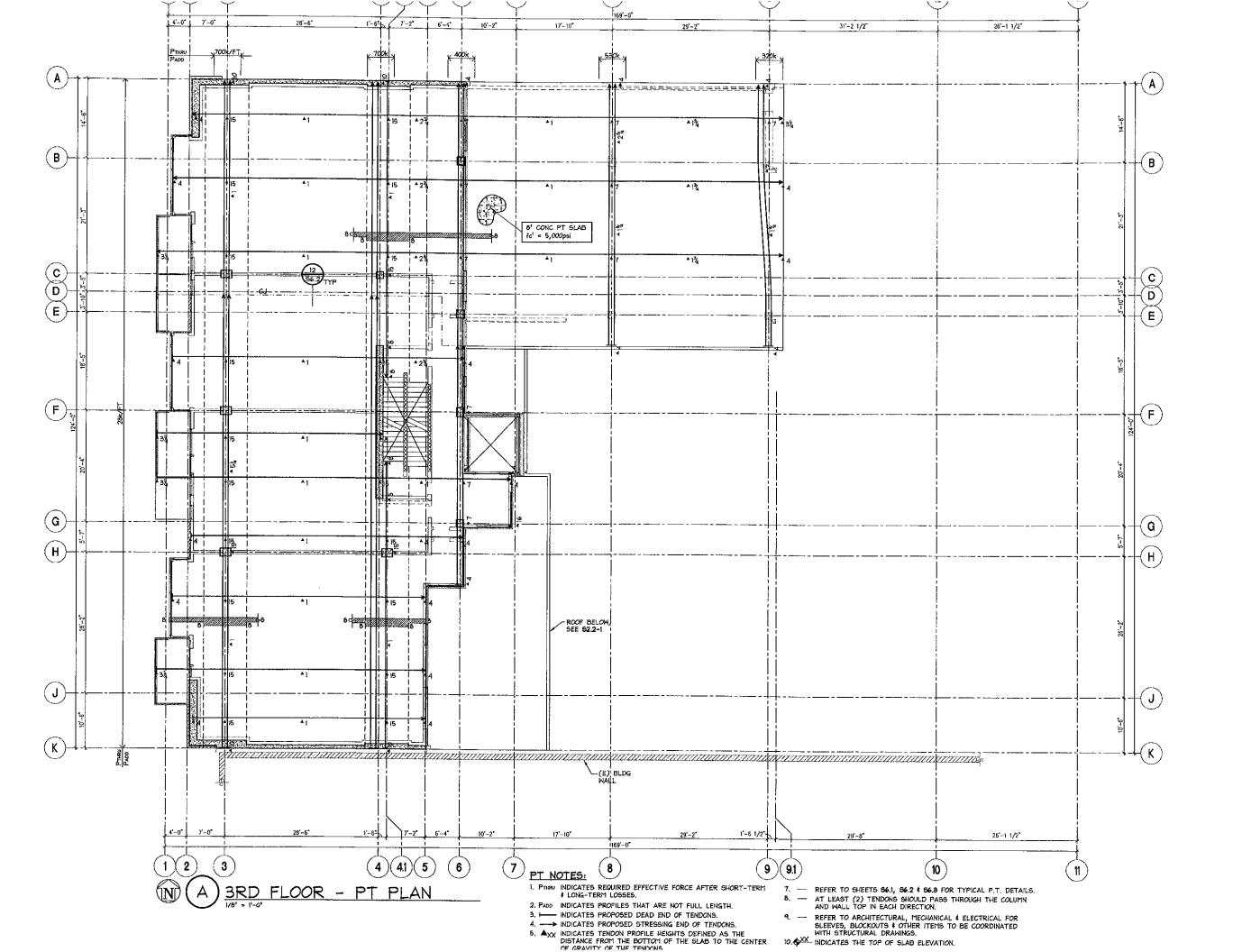
PROJECT NO. 06-113

PLOT DATE; \$48.20 RESPONSE TO PLAN DATE: 12-13-2006 DRAWN BY; KHA

DRAWN BY : KHA CHECKED BY : BA

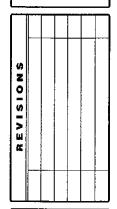
2nd FLOOR DB PLAN

\$2 2.2









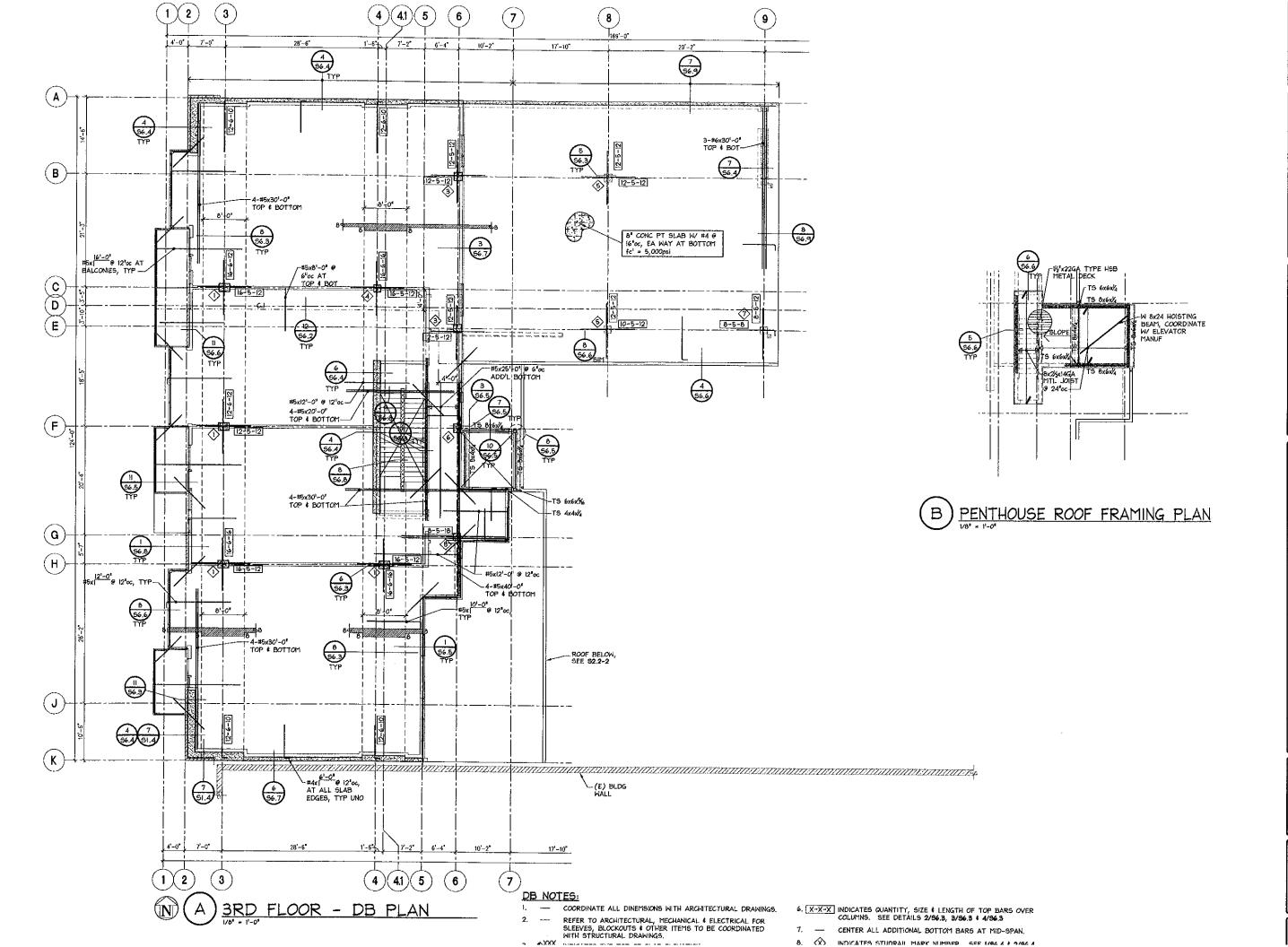
PROJECT NO.
06-113

PLOT DATE: 8-29-2007
RESPONSE TO PLAN CHEC
DATE: 12-12-2006

DRAWN BY: IQHA

3rd FLOOR PT PLAN

S2.3-1







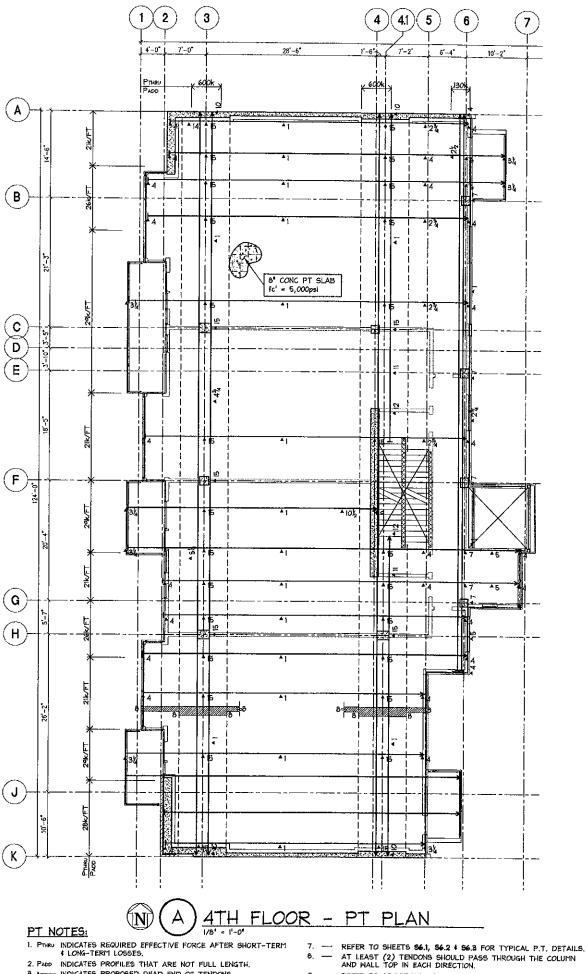


PROJECT NO. 06-113

PLOT DATE: \$.26.200 RESPONSE TO PLAN DATE: 12-13-2006 DRAWN BY: NHA CHECKED BY: BA

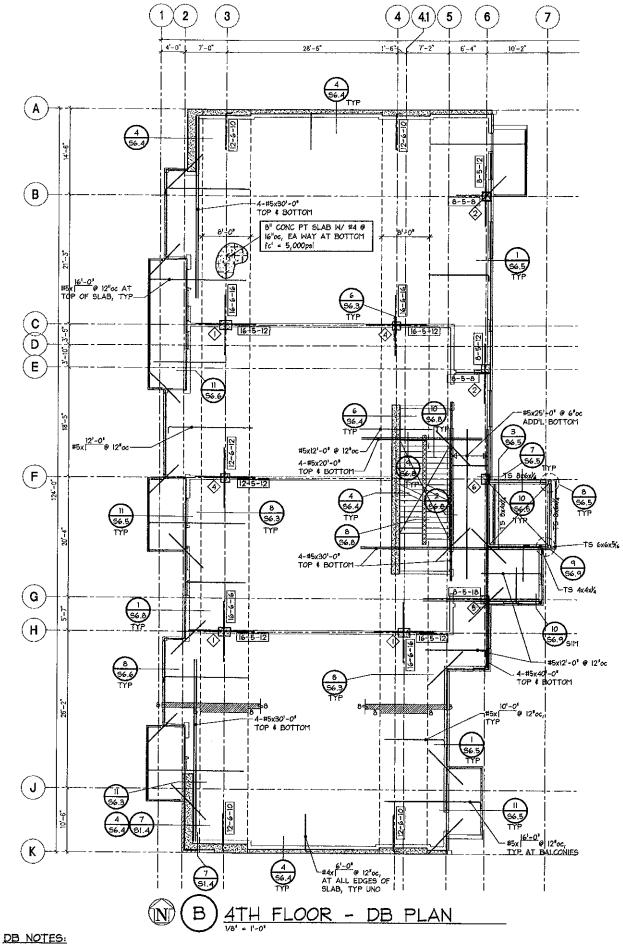
3rd FLOOR DB PLAN

62 3.9



- 3. ---- INDICATES PROPOSED DEAD END OF TENDONS.
- 4. INDICATES PROPOSED STRESSING END OF TENDONS.

 5. AXX INDICATES TENDON PROFILE HEIGHTS DEFINED AS THE DISTANCE FROM THE BOTTOM OF THE SLAB TO THE CENTER OF GRAVITY OF THE TENDONS.
- 6. REFER TO SHEET SI.1 4 SI.2 FOR GENERAL STRUCTURAL NOTES.
- REFER TO ARCHITECTURAL, MECHANICAL & ELECTRICAL FOR SLEEVES, BLOCKOUTS & OTHER ITEMS TO BE COORDINATED WITH STRUCTURAL DRAWINGS.
- 10. XXX INDICATES THE TOP OF SLAB ELEVATION. WHERE TENDON PROFILES CONFLICT NEAR COLUMNS, HOLD BANDED TENDONS TO THE INDICATED PROFILE AND LOWER THE TRANSVERSE TENDONS THE MINIMUM PRACTICAL AMOUNT, AS NECESSARY TO RESOLVE CONFLICT.



- COORDINATE ALL DINEMSIONS WITH ARCHITECTURAL DRAWINGS.
- REFER TO ARCHITECTURAL, MECHANICAL & ELECTRICAL FOR SLEEVES, BLOCKOUTS & OTHER ITEMS TO BE COORDINATED WITH STRUCTURAL DRAWINGS.
- 3. SXXX INDICATES THE TOP OF SLAB ELEVATION.
- 4. ALL BARS SHOWN ARE TOP BARS UNLESS SHOWN OTHERWISE. 5. - REFER TO SHEETS 56.1, 56.2 \$ 56.3 FOR TYPICAL P.T. DETAILS.
- 6. X-X-X INDICATES QUANTITY, SIZE & LENGTH OF TOP BARS OVER COLUMNS. SEE DETAILS 2/56.3, 3/96.3 & 4/96.3
- CENTER ALL ADDITIONAL BOTTOM BARS AT MID-SPAN.

INDICATES STUDRAIL MARK NUMBER. SEE 1/56.4 \$ 2/56.4





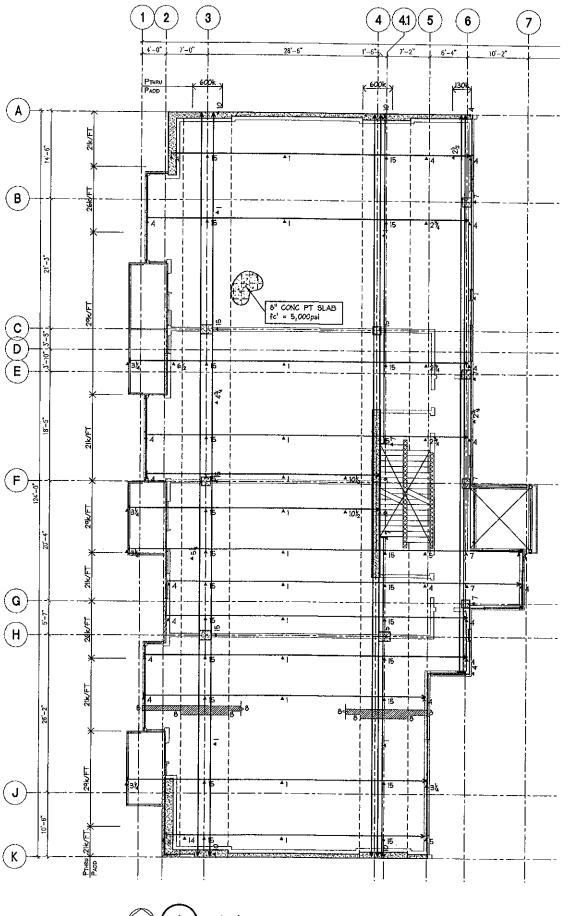


CONDO SALEM, OREGON

PROJECT NO. 06-113

PLOT DATE: 9-28-2007 RESPONSE TO PLAN CHI DATE: 12-13-2006 DRAWN BY 1 KHA CHECKED BY : BA

4th FLOOR PT & DB PLAN



5TH FLOOR - PT PLAN

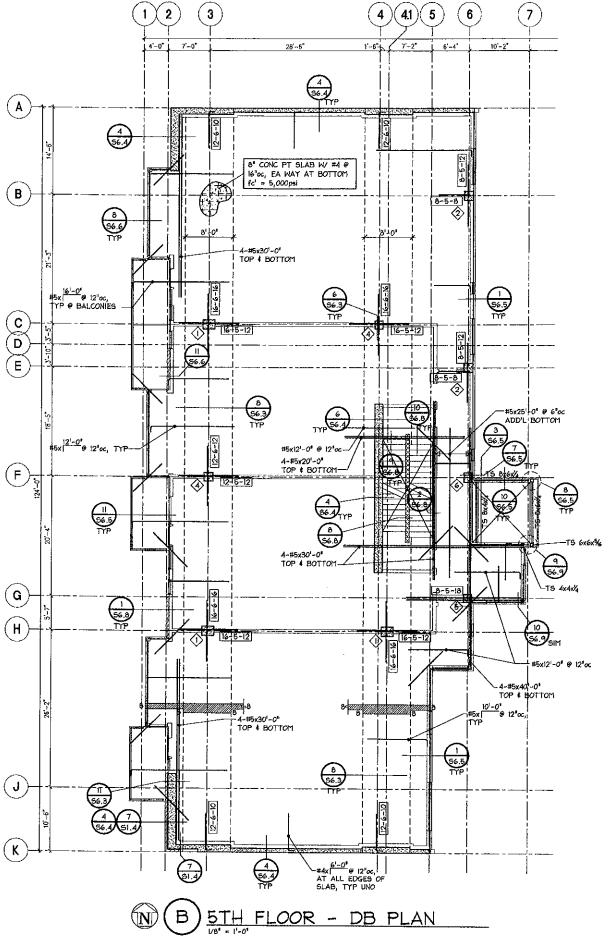
- 1. PTHRU INDICATES REQUIRED EFFECTIVE FORCE AFTER SHORT-TERM \$ LONG-TERM LOSSES.
- 2. PADD INDICATES PROFILES THAT ARE NOT FULL LENGTH

PT NOTES:

- 3. INDICATES PROPOSED DEAD END OF TENDONS.

 4. INDICATES PROPOSED STRESSING END OF TENDONS.

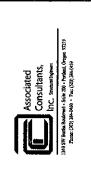
 5. AXX INDICATES TENDON PROFILE HEIGHTS DEFINED AS THE DISTANCE FROM THE BOTTOM OF THE SLAB TO THE CENTER OF GRAVITY OF THE TENDONS.
- 6. -- REFER TO SHEET SI, \$1.2 FOR GENERAL STRUCTURAL NOTES.
- REFER TO SHEETS 56.1, 56.2 \$ 56.3 FOR TYPICAL P.T. DETAILS. AT LEAST (2) TENDONS SHOULD PASS THROUGH THE COLUMN AND WALL TOP IN EACH DIRECTION.
- REFER TO ARCHITECTURAL, MECHANICAL & ELECTRICAL FOR SLEEVES, BLOCKOUTS & OTHER ITEMS TO BE COORDINATED WITH STRUCTURAL DRAWINGS.
- 10. 💠 XX INDICATES THE TOP OF SLAB ELEVATION.
 - WHERE TENDON PROFILES CONFLICT NEAR COLUMNS, HOLD BANDED TENDONS TO THE INDICATED PROFILE AND LOWER THE TRANSVERSE TENDONS THE MINIMUM PRACTICAL AMOUNT, AS NECESSARY TO RESOLVE CONFLICT.

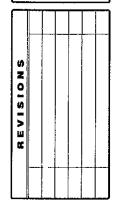


DB NOTES:

- COORDINATE ALL DINEMSIONS WITH ARCHITECTURAL DRAWINGS.
- REFER TO ARCHITECTURAL, MECHANICAL & ELECTRICAL FOR SLEEVES, BLOCKOUTS & OTHER ITEMS TO BE COORDINATED WITH STRUCTURAL DRAWINGS.
- 3. *XXX INDICATES THE TOP OF SLAB ELEVATION.
- ALL BARS SHOWN ARE TOP BARS UNLESS SHOWN OTHERWISE.
- REFER TO SHEETS S6.1, S6.2 4 S6.3 FOR TYPICAL P.T. DETAILS.
- 6. X-X-X INDICATES QUANTITY, SIZE & LENGTH OF TOP BARS OVER COLUMNS. SEE DETAILS 2/56.3, 3/56.3 & 4/56.3
- CENTER ALL ADDITIONAL BOTTOM BARS AT MID-SPAN.
- INDICATES STUDRAIL MARK NUMBER. SEE 1/56.4 \$ 2/56.4







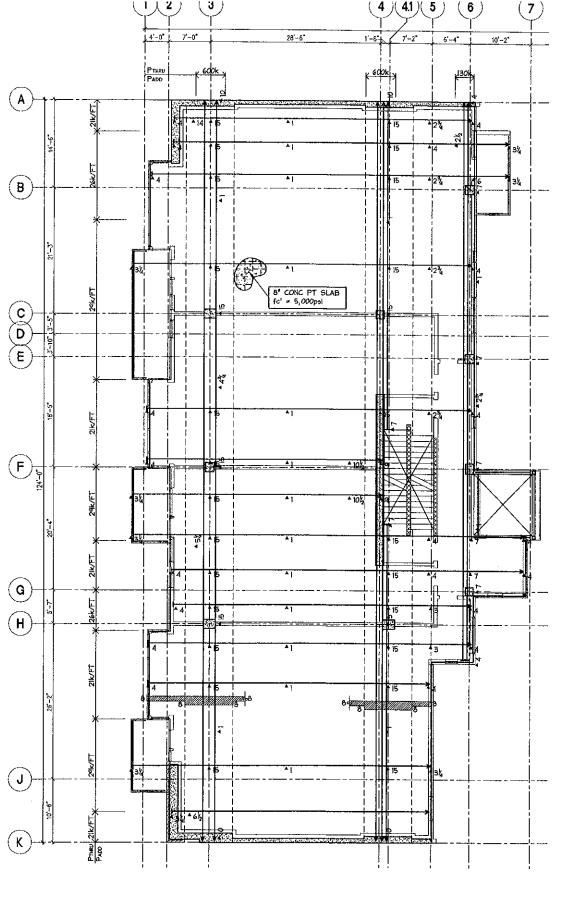
CONDOS 56 FRONT AVENUE SALEM, OREGON RIVERS

PROJECT NO. 06-113

PLOT DATE: 9:29:2007 RESPONSE TO PLAN CHI DATE: 12:13:2006 DRAWN BY : KHA CHECKED BY I BA

5th FLOOR PT & DB **PLAN**

\$2.5



(N) (A) 6TH FLOOR - PT PLAN

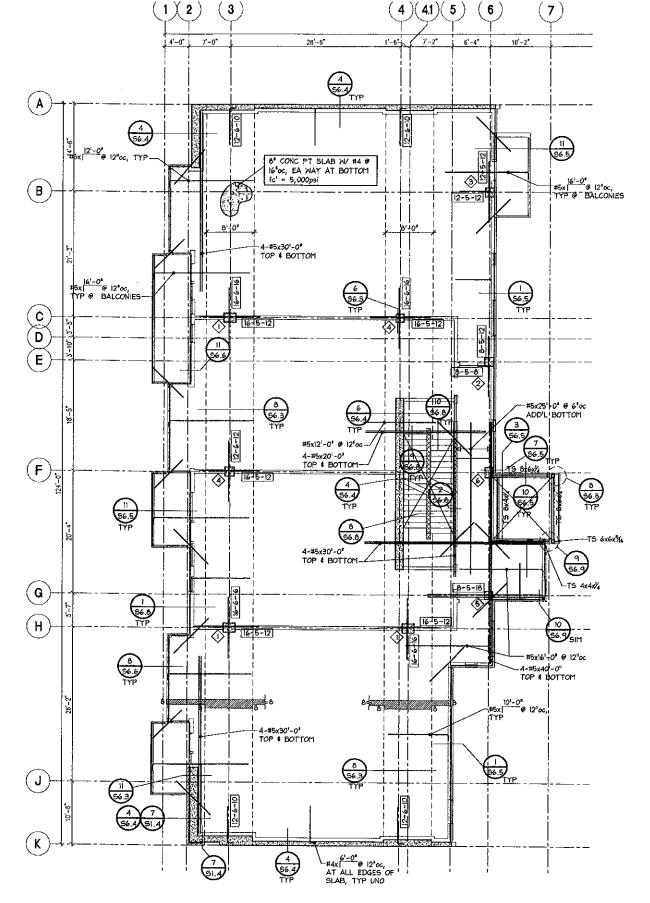
PT NOTES:

- 1. PTHRU INDICATES REQUIRED EFFECTIVE FORCE AFTER SHORT-TERM \$ LONG-TERM LOSSES.
- * LONG-TERT LOSSES.
- 2. PADD INDICATES PROFILES THAT ARE NOT FULL LENGTH.
- 3. → INDICATES PROPOSED DEAD END OF TENDONS.
 4. → INDICATES PROPOSED STRESSING END OF TENDONS.
 5. ▲XX INDICATES TENDON PROFILE HEIGHTS DEFINED AS THE
- DISTANCE FROM THE BOTTOM OF THE SLAB TO THE CENTER OF GRAVITY OF THE TENDONS.

 6. REFER TO SHEET SI.1 \$ SI.2 FOR GENERAL STRUCTURAL NOTES.
- REFER TO SHEETS 56.I, 56.2 4 96.3 FOR TYPICAL P.T. DETAILS.
 AT LEAST (2) TENDONS SHOULD PASS THROUGH THE COLUMN AND WALL TOP IN EACH DIRECTION.
- REFER TO ARCHITECTURAL, MECHANICAL & ELECTRICAL FOR SLEEVES, BLOCKOUTS & OTHER ITEMS TO BE COORDINATED WITH STRUCTURAL DRAWINGS.
- WITH STRUCTURAL DRAWINGS.

 10.

 XX. INDICATES THE TOP OF SLAB ELEVATION.
 - WHERE TENDON PROFILES CONFLICT NEAR COLUMNS, HOLD BANDED TENDONS TO THE INDICATED PROFILE AND LOWER THE TRANSVERSE TENDONS THE MINIMUM PRACTICAL



(N) (B) 6TH FLOOR - DB PLAN

DB NOTES:

- --- COORDINATE ALL DINEMSIONS WITH ARCHITECTURAL DRAWINGS,
- 2. REFER TO ARCHITECTURAL, MECHANICAL & ELECTRICAL FOR SLEEVES, BLOCKOUTS & OTHER ITEMS TO BE COORDINATED WITH STRUCTURAL DRAWINGS.
- 3. SXXX INDICATES THE TOP OF SLAB ELEVATION.
- 4. ALL BARS SHOWN ARE TOP BARS UNLESS SHOWN OTHERWISE.

 5. REFER TO SHEETS 56.1, 56.2 4 56.3 FOR TYPICAL P.T. DETAILS.
- 6. X-X-X INDICATES QUANTITY, SIZE & LENGTH OF TOP BARS OVER COLUMNS. SEE DETAILS 2/56.3, 3/56.3 & 4/56.3
 - . -- CENTER ALL ADDITIONAL BOTTOM BARS AT MID-SPAN.
 - NDICATES STUDRAIL MARK NUMBER. SEE 1/56.4 \$ 2/56.4







RIVERS CONDOS

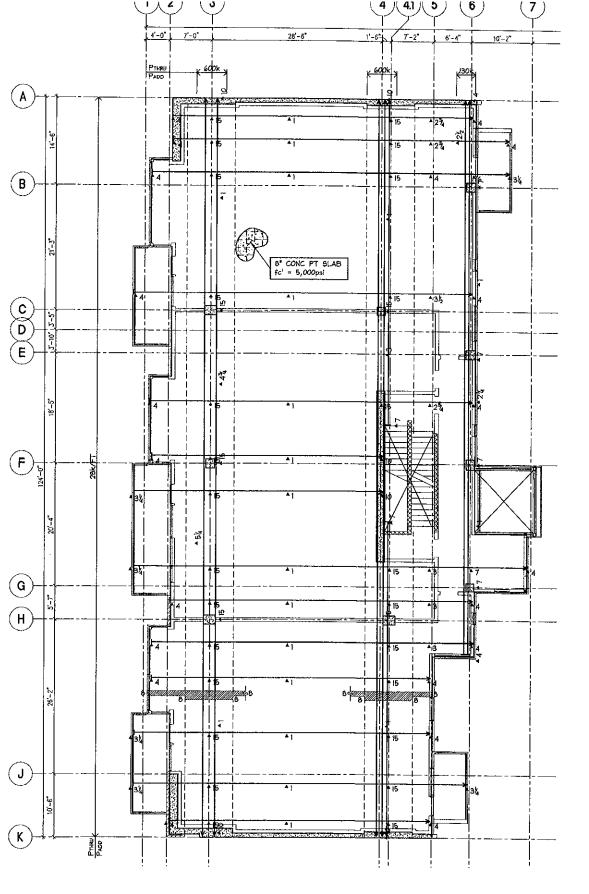
156 FRONT AVENUE
SALEM, OREGON

PROJECT NO.
06-113

PLOT DATE: \$28-2007
RESPONSE TO PLAN CHEC

HECKED BY : BA

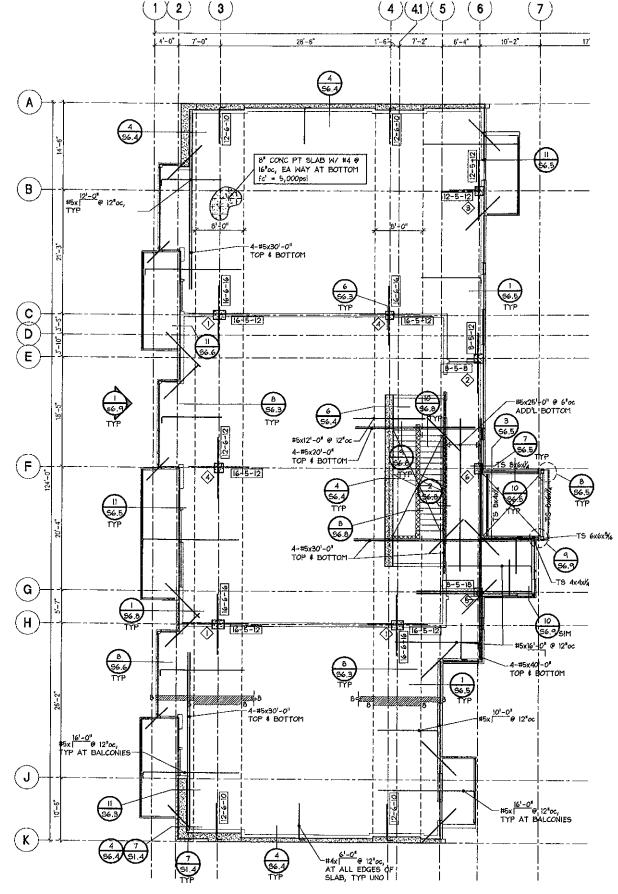
6th FLOOR PT & DB PLAN



A) 8TH FLOOR - PT PLAN

- PT NOTES: 1. PTURN INDICATES REQUIRED EFFECTIVE FORCE AFTER SHORT-TERM # LONG-TERM LOSSES.
- 2. PADD INDICATES PROFILES THAT ARE NOT FULL LENGTH.
- 3. --- INDICATES PROPOSED DEAD END OF TENDONS.
- 4. -- INDICATES PROPOSED STRESSING END OF TENDONS.
- 5. AX INDICATES TENDON PROFILE HEIGHTS DEFINED AS THE
 DISTANCE FROM THE BOTTOM OF THE SLAB TO THE CENTER
 OF GRAVITY OF THE TENDONS.

 11. WHERE TENDON PROFILES CONFLICT MEAN
- 6. -- REFER TO SHEET SI.I \$ SI.2 FOR GENERAL STRUCTURAL NOTES.
- REFER TO SHEETS 56.1, 56.2 \$ 96.3 FOR TYPICAL P.T. DETAILS.
 AT LEAST (2) TENDONS SHOULD PASS THROUGH THE COLUMN AND WALL TOP IN EACH DIRECTION.
- REFER TO ARCHITECTURAL, MECHANICAL & ELECTRICAL FOR SLEEVES, BLOCKOUTS & OTHER ITEMS TO BE COORDINATED WITH STRUCTURAL DRAWINGS.
- WHERE TENDON PROFILES CONFLICT NEAR COLUMNS, HOLD BANDED TENDONS TO THE INDICATED PROFILE AND LOWER THE TRANSVERSE TENDONS THE MINIMUM PRACTICAL AMOUNT, AS NECESSARY TO RESOLVE CONFLICT.



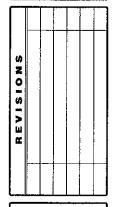
(N) (B) 8TH FLOOR - DB PLAN

DB NOTES:

- COORDINATE ALL DINEMSIONS WITH ARCHITECTURAL DRAWINGS.
- REFER TO ARCHITECTURAL, MECHANICAL & ELECTRICAL FOR SLEEVES, BLOCKOUTS & OTHER ITEMS TO BE COORDINATED WITH STRUCTURAL DRAWINGS.
- 3. XXX INDICATES THE TOP OF SLAB ELEVATION,
- ALL BARS SHOWN ARE TOP BARS UNLESS SHOWN OTHERWISE.
- --- REFER TO SHEETS S6.1, S6.2 & S6.3 FOR TYPICAL P.T. DETAILS.
- 6. X-X-X INDICATES QUANTITY, SIZE & LENGTH OF TOP BARS OVER COLUMNS. SEE DETAILS 2/56.3, 3/56.3 & 4/56.3
- CENTER ALL ADDITIONAL BOTTOM BARS AT MID-SPAN
- 8. NDICATES STUDRAIL MARK NUMBER. SEE 1/56.4 \$ 2/56.4







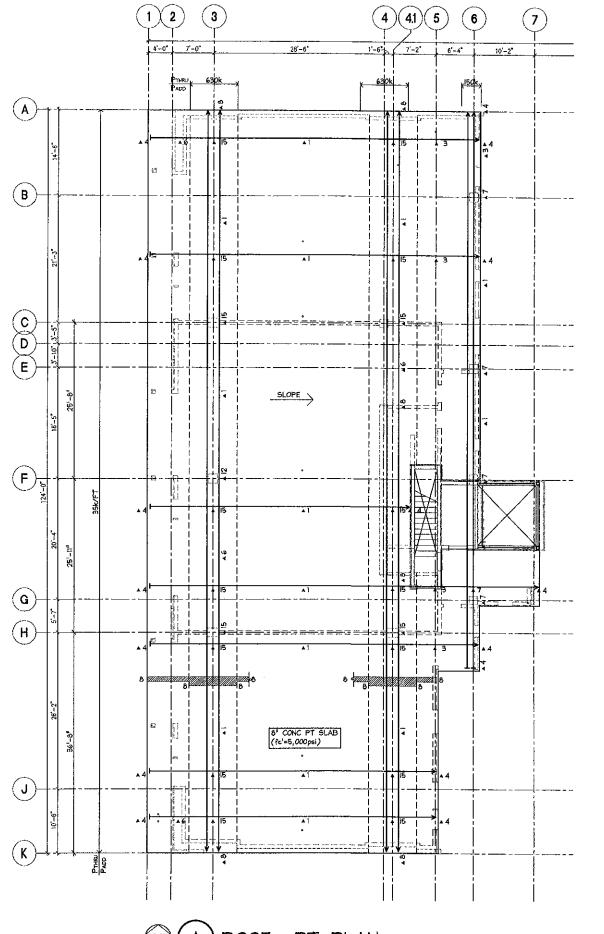
CONDO **56 FRONT AVENU SALEM, OREGON**

PROJECT NO. 06-113

PLOT DATE: 9:28-2007 RESPONSE TO PLAN CHEC DATE: 12:13-2006

DRAWN BY : KHA CHECKED BY : BA

8th FLOOR PT & DB PLAN

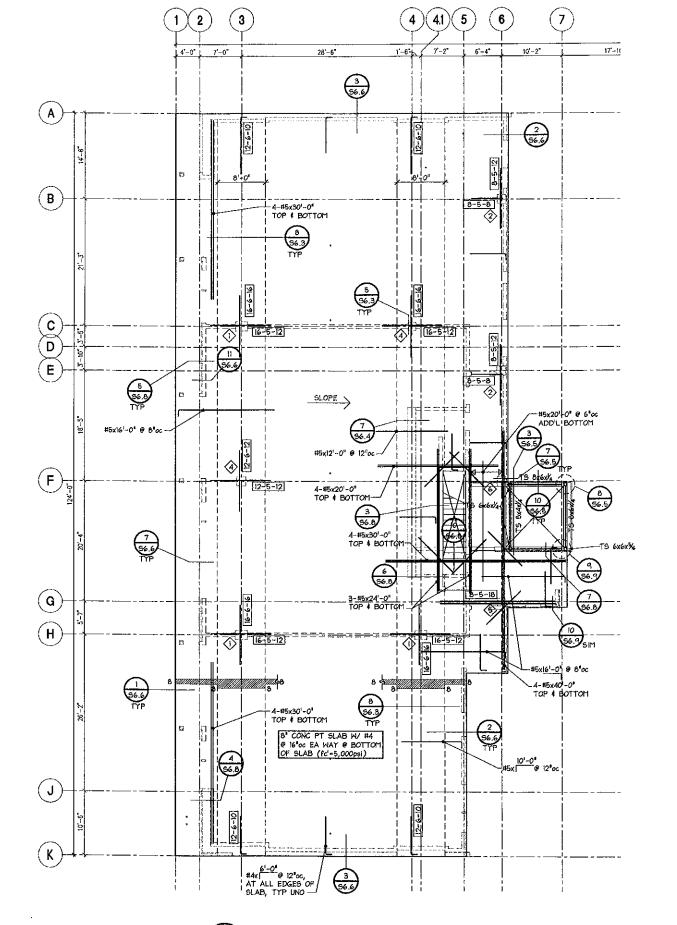


ROOF- PT PLAN

PT NOTES:

- I. Priku INDICATES REQUIRED EFFECTIVE FORCE AFTER SHORT-TERM \$ LONG-TERM LOSSES.

- 3. --- INDICATES PROPOSED DEAD END OF TENDONS. 4. --- INDICATES PROPOSED STRESSING END OF TENDONS.
- 5. AXX INDICATES TENDON PROFILE HEIGHTS DEFINED AS THE DISTANCE FROM THE BOTTOM OF THE SLAB TO THE CENTER OF GRAVITY OF THE TENDONS.
- REFER TO SHEET SI.! 4 SI.2 FOR GENERAL STRUCTURAL NOTES.
- 7. REFER TO SHEETS **96.1, 56.2 \$ 96.3** FOR TYPICAL P.T. DETAILS, 8. AT LEAST (2) TENDONS SHOULD PASS THROUGH THE COLUMN AND WALL TOP IN EACH DIRECTION,
- REFER TO ARCHITECTURAL, MECHANICAL & ELECTRICAL FOR SLEEVES, BLOCKOUTS & OTHER ITEMS TO BE COORDINATED WITH STRUCTURAL DRAWINGS.
- 10. XX INDICATES THE TOP OF SLAB ELEVATION.
 - II. --- WHERE TENDON PROFILES CONFLICT NEAR COLUMNS, HOLD RANDED TENDONS TO THE INDUCATED BROKELE AND CHIEF



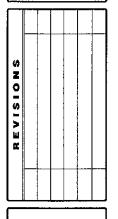
ROOF- DB PLAN

DB NOTES:

- COORDINATE ALL DINEMSIONS WITH ARCHITECTURAL DRAWINGS.
- REFER TO ARCHITECTURAL, MECHANICAL & ELECTRICAL FOR SLEEVES, BLOCKOUTS & OTHER ITEMS TO BE COORDINATED WITH STRUCTURAL DRAWINGS.
- 3. \$XXX INDICATES THE TOP OF SLAB ELEVATION.
- ALL BARS SHOWN ARE TOP BARS UNLESS SHOWN OTHERWISE. REFER TO SHEETS S6.1, S6.2 \$ 56.3 FOR TYPICAL P.T. DETAILS.
- 6. X-X-X INDICATES QUANTITY, SIZE & LENGTH OF TOP BARS OVER COLUMNS. SEE DETAILS 2/56.3, 3/56.3 \$ 4/56.3
- - CENTER ALL ADDITIONAL BOTTOM BARS AT MID-SPAN.
- INDICATES STUDRAIL MARK NUMBER. SEE 1/56.4 \$ 2/56.4 SLOPE ROOF SLAB TO DRAINS. COORDINATE W/ ARCH \$





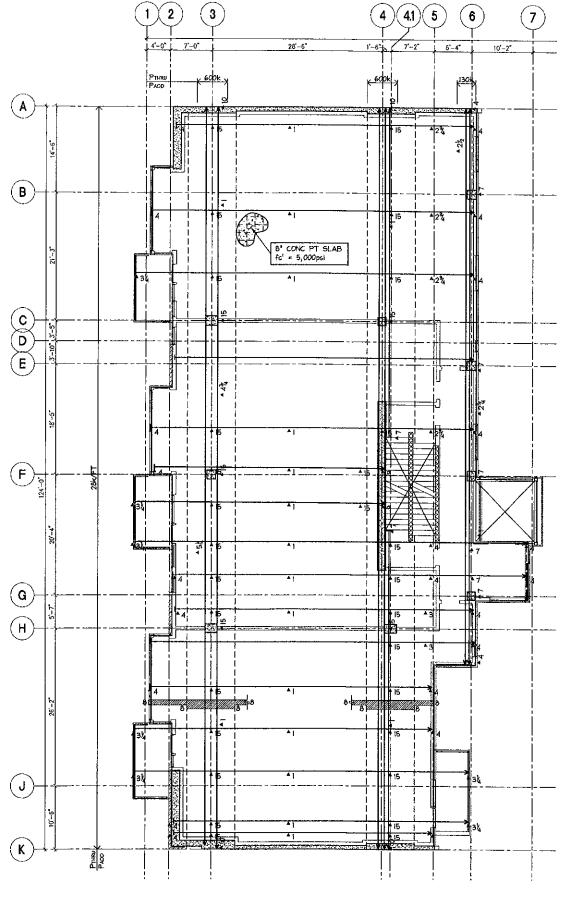


CONDO 56 FRONT AVENU SALEM, OREGON

PROJECT NO. 06-113

PLOT DATE: 9-28-2007 RESPONSE TO PLAN CHEE DATE: 12-13-2008 CHECKED BY : BA

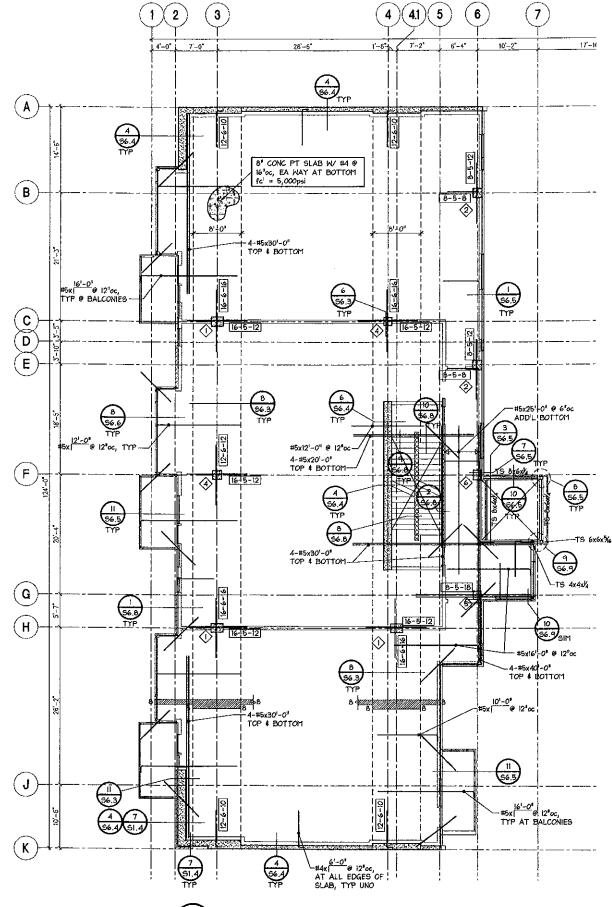
ROOF PT & DB PLAN



7TH FLOOR - PT PLAN

PT NOTES:

- 1. PTHRU INDICATES REQUIRED EFFECTIVE FORCE AFTER SHORT-TERM \$ LONG-TERM LOSSES.
- 2. PADD INDICATES PROFILES THAT ARE NOT FULL LENGTH.
- 3. --- INDICATES PROPOSED DEAD END OF TENDONS. 4. --- INDICATES PROPOSED STRESSING END OF TENDONS,
- 5. AXX INDICATES TENDON PROFILE HEIGHTS DEFINED AS THE DISTANCE FROM THE BOTTOM OF THE SLAB TO THE CENTER OF GRAVITY OF THE TENDONS.
- 6. REFER TO SHEET \$1.1 \$ \$1.2 FOR GENERAL STRUCTURAL NOTES.
- 7. REFER TO SHEETS S6.1, S6.2 4 S6.3 FOR TYPICAL P.T. DETAILS. AT LEAST (2) TENDONS SHOULD PASS THROUGH THE COLUMN AND WALL TOP IN EACH DIRECTION.
- REFER TO ARCHITECTURAL, MECHANICAL & ELECTRICAL FOR SLEEVES, BLOCKOUTS & OTHER ITEMS TO BE COORDINATED WITH STRUCTURAL DRAWINGS.
- 10. NDICATES THE TOP OF SLAB ELEVATION.
- WHERE TENDON PROFILES CONFLICT NEAR COLUMNS, HOLD BANDED TENDONS TO THE INDICATED PROFILE AND LOWER THE TRANSVERSE TENDONS THE MINIMUM PRACTICAL AMOUNT, AS NECESSARY TO RESOLVE CONFLICT.



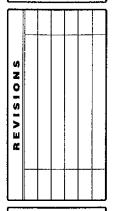
7TH FLOOR - DB PLAN В

DB NOTES:

- --- COORDINATE ALL DINEMSIONS WITH ARCHITECTURAL DRAWINGS.
- REFER TO ARCHITECTURAL, MECHANICAL & ELECTRICAL FOR SLEEVES, BLOCKOUTS & OTHER ITEMS TO BE COORDINATED WITH STRUCTURAL DRAWINGS.
- 3. SXXX INDICATES THE TOP OF SLAB ELEVATION.
- --- ALL BARS SHOWN ARE TOP BARS UNLESS SHOWN OTHERWISE.
- REFER TO SHEETS 66.1, S6.2 \$ 56.3 FOR TYPICAL P.T. DETAILS.
- 6. X-X-X INDICATES QUANTITY, SIZE & LENGTH OF TOP BARS OVER COLUMNS. SEE DETAILS 2/56.3, 3/56.3 & 4/56.3
- CENTER ALL ADDITIONAL BOTTOM BARS AT MID-SPAN,
- 8. 🗴 INDICATES STUDRAIL MARK NUMBER. SEE 1/56,4 \$ 2/56,4







CONDOS 56 FRONT AVENU SALEM, OREGON

PROJECT NO. 06-113

PLOT DATE: 9:26-2007 RESPONSE TO PLAN CHEC DATE: 12-13-2006 DRAWN BY : KHA CHECKED BY : BA

7th FLOOR PT & DB PLAN

\$2.7

NOTES

CENTER ALL FOOTINGS ON COLUMN ABOVE EXCEPT AS SHOWN OTHERWISE.

REINF 'C' PARALLEL TO DIM 'A' (EQ SPACED)

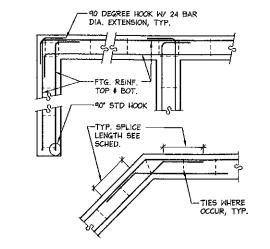
-REINF (D' PARALLEL TO

DIM 'B' (EQ SPACED)

DIM 'A'

<u>PLAN</u>

2. FOOTINGS SHALL BEAR ON UNDISTURBED NATIVE SOIL COMPACTED ENGINEERED FILL, SEE STRUCTURAL NOTES.



SAWCUT, FILL SAWN JOINTS W/ SEMIRIGID EPOXY (SHORE "A' HARDNESS OF A-80 OR D-50, ASTM D2240) FULL DEPTH WITHOUT BACKING ROD REINF, CONT. THRU JOINT CONCRETE SLAB ON GRADE, SEE SAWCUT CONTROL JOINT CONCRETE SLAB ON GRADE, SEE



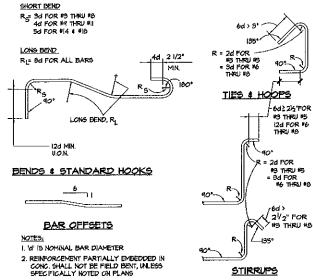
NOTE: SEE FOUNDATION PLAN AND GENERAL STRUCTURAL NOTES FOR JOINT LOCATIONS.

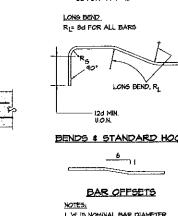
TYPICAL REINF AT CORNERS \$ INT

CONCRETE OR BLOCK FOUNDATION WALL, SEE

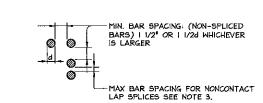
FOOTING-

SLAB JOINT DETAILS

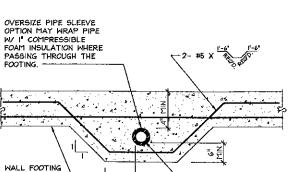


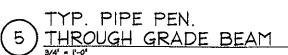


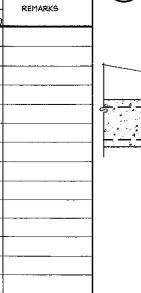




- I. COLUMN DOWELS, TYPICAL HORIZONTAL WALL STEEL AND TYPICAL WALL STEEL DOWELS MAY BE WIRED TOGETHER INSTEAD OF SPACING AS SHOWN ABOVE.
- 2. CLEAR DISTANCE LIMITATION BETWEEN BARS SHALL APPLY ALSO TO THE CLEAR DISTANCE BETWEEN A CONTACT LAP SPLICE AND ADJACENT SPLICES OF BARS.
- 3. BARS SPLICED BY NONCONTACT LAP SPLICES SHALL NOT BE SPLICED TRANSVERSELY FURTHER APART THAN ONE-FIFTH THE REQUIRED LAP SPLICE LENGTH, NOR 6".

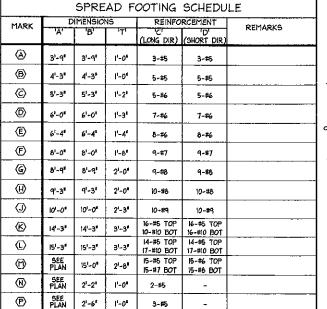


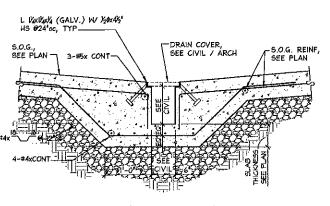




SECTION







CONTRACTOR TO COORDINATE WITH ARCH, MECH, \$ CIVIL DWG'S

FOUNDATION DETAIL

GRATING, SEE ARCH

ELEVATOR PIT

-ELEV SUMP IF REQ'D, BY ARCH DWG'S

EA. WAY.

1. VERIFY DIMENSIONS W/ ELEVATOR MANUF, 2. SEE 10/53.2 FOR INFO NOT SHOWN

SPREAD FTG SCHEDULE (6)

FOOTING DETAIL

Z-BAR TO MATCH SIZE AND SPACING OF TYP FOOTING REINF.

TYPICAL FOOTING REINF.

'A' = 'B'+8"

BAR SPACING

EXPIRES; 12-81-07



56 FRONT AVENU SALEM, OREGON

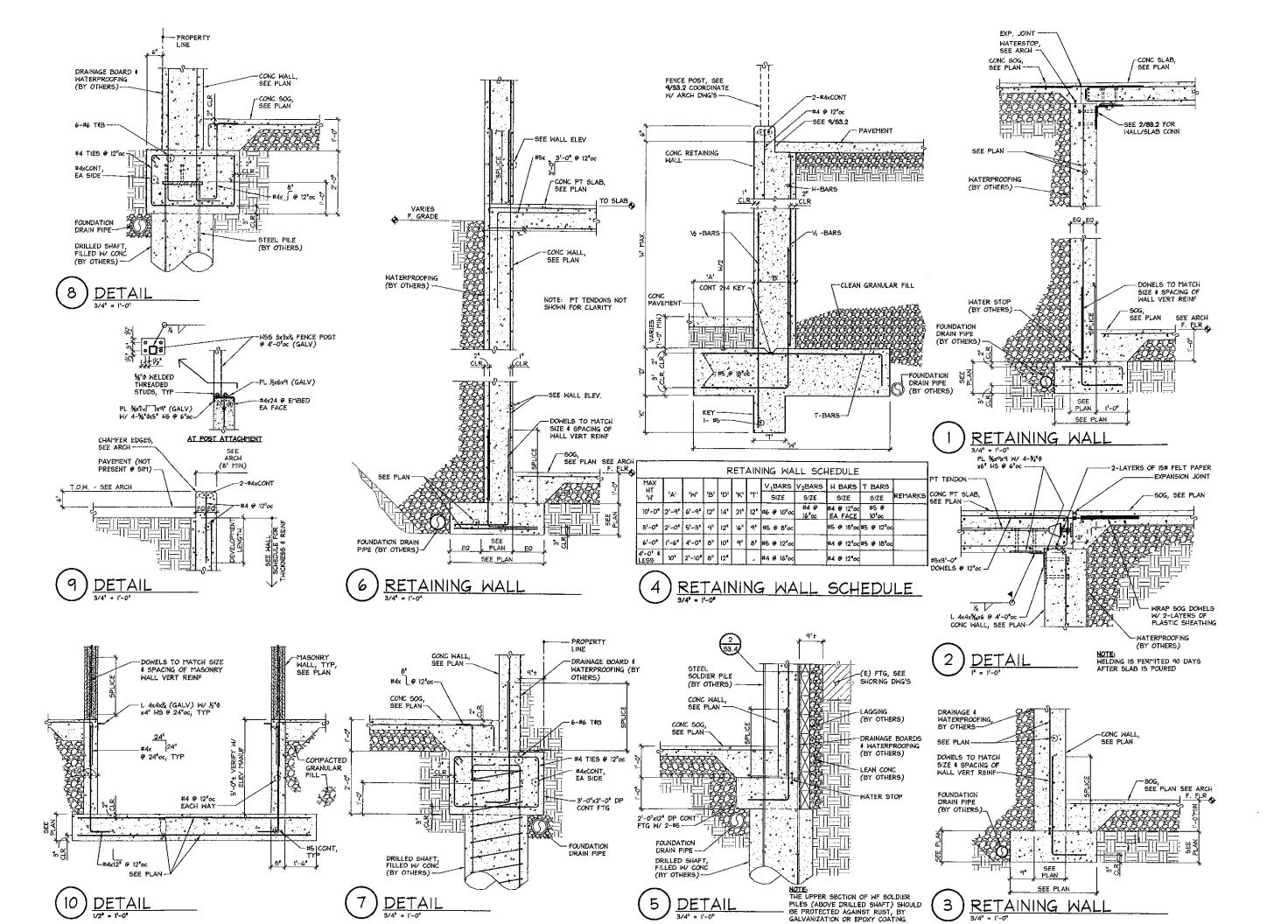
CONDO

PROJECT NO. 06-113

PLOT DATE: 9-29-2007 RESPONSE TO PLAN CHES DATE: 12-13-2006 DRAWN BY : KHA

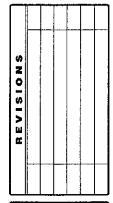
FOUNDATION **DETAILS**

S3.1







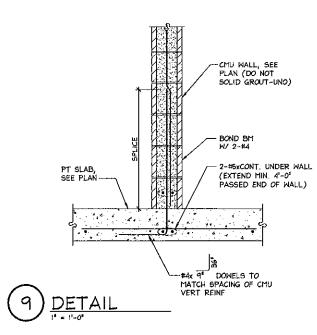


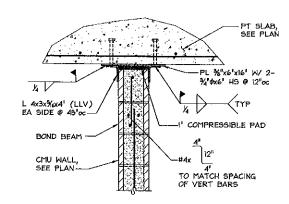
PROJECT NO. 06-113

PLOT DATE: 9-28-200 RESPONSE TO PLAN (DAYE : 12-13-2008 DRAWN BY: KHA CHECKED BY: BA

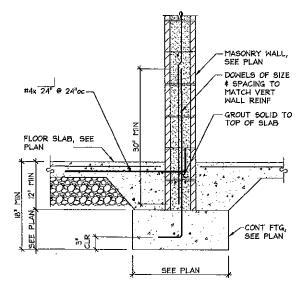
FOUNDATION DETAILS

S3.2

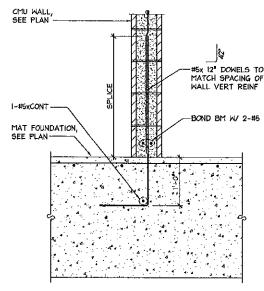




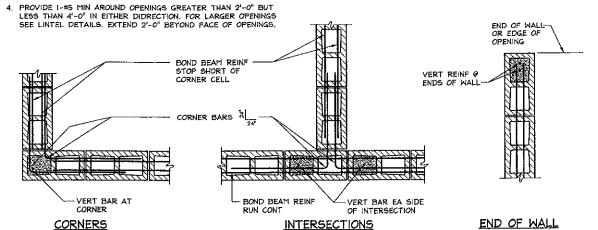
DETAIL



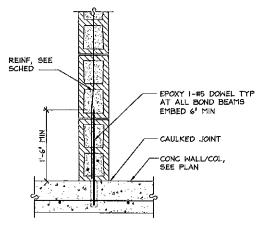
MASONRY WALL DETAIL



- NOTES
 1. HOOK ALL REINF THAT CANNOT BE EXTENDED FULL 21-0"
- 2. GROUT ALL CELLS THAT CONTAIN REINF, ANCHOR BOLTS OR OTHER EMBEDDED ITEMS.
- 3. TYP REINF SHOWN, USE ADD'L REINF IF REO'D BT OTHER DETAILS.



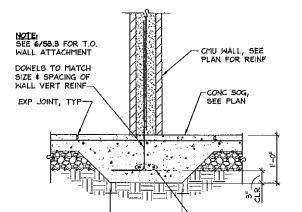
WALL REINFORCEMENT



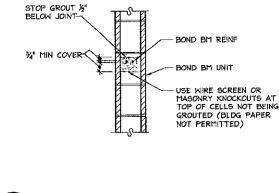


-- 2-#5 x CONT

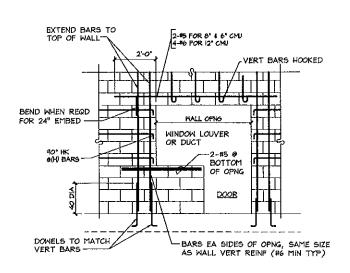






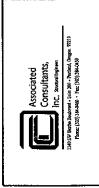












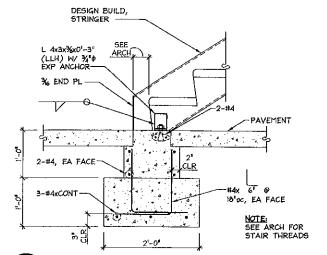


CONDOS 56 FRONT AVENU SALEM, OREGON RIVERS

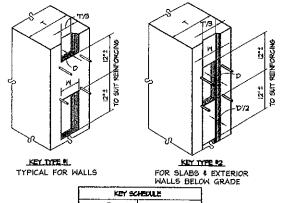
PROJECT NO. 06-113

DATE : 12-13-2006 AHA : YE HWARD CHECKED BY : BA

FOUNDATION **DETAILS**



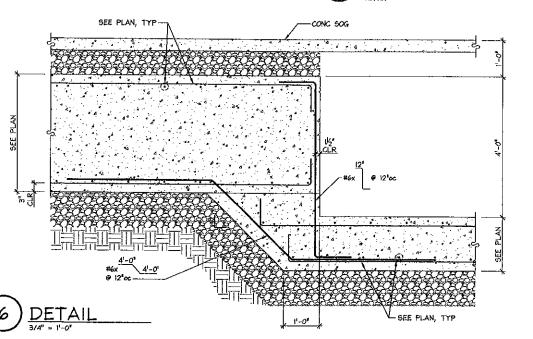
STRINGER BASE DETAIL

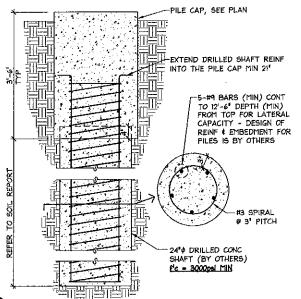


| | KEY 90 | HEDULE |
|------|--------|--------|
| | T | D |
| ſ | €.12° | l 1/2" |
| TES: | → I2' | 2* |

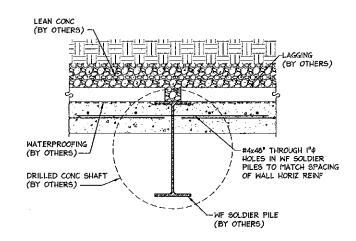
- 1. BEFORE PLACING 2ND POUR, ALL SURFACES ARE TO BE ROUGHENED AND THOROUGHLY CLEANED, SEE SPECIFICATIONS.
 2. DETAILS APPLY TO BOTH HORIZONTAL & VERTICAL CONSTRUCTION JOINTS.

CONSTRUCTION JOINTS DETAIL 5

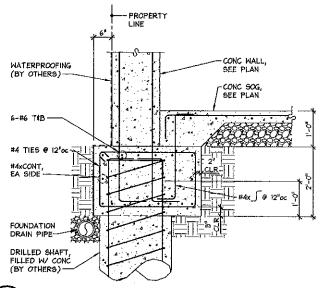




DRILLED SHAFT



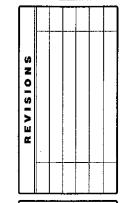
FRAMING DETAIL



DETAI





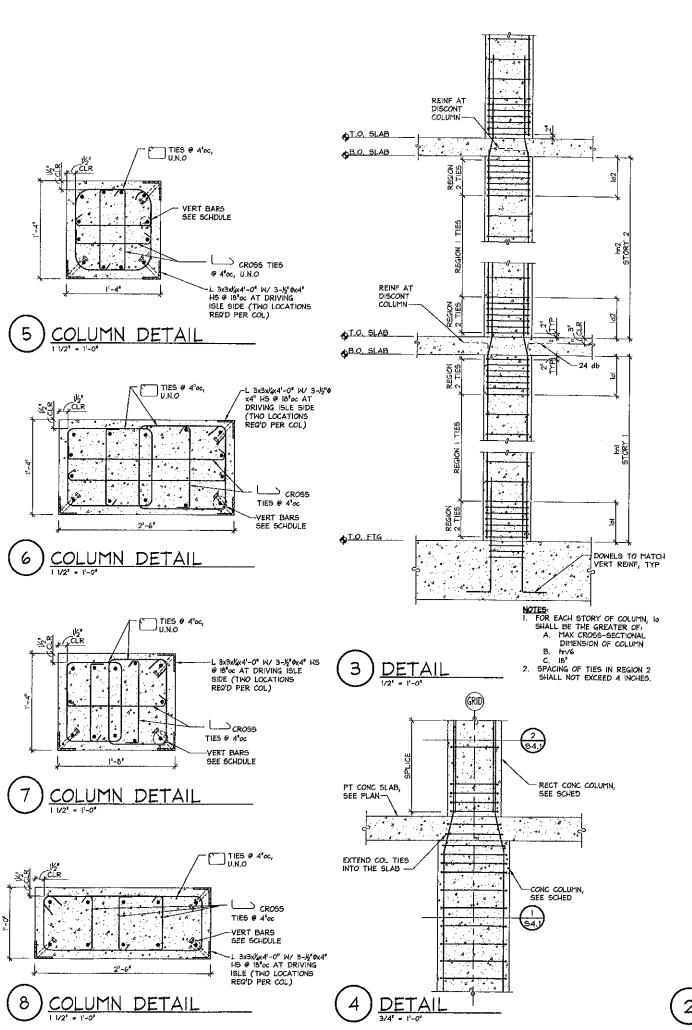


RIVERS CONDOS 56 FRONT AVENUE SALEM, OREGON

PROJECT NO. 06-113 DRAWN BY : KHA

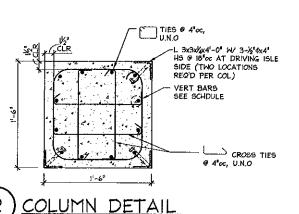
CHECKED BY : BA

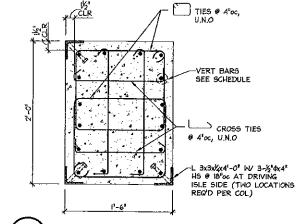
FOUNDATION DETAILS



| | | | | | | COLL | IMN SCHEDULE | i . | | | | |
|------------------|-------------------------|-------------------------|---------------------------------------|-------------|----------------|---------------------------------------|--|-------------|-------------|--|-----------------|--|
| LEVEL | DATA | H/3, H/4.1, C/3, F/3 | F/7 | E/6, B/6 | B/8, E/8, E/9 | G/8, G/9.1, J/9.1, F/9.1 | J/8, B/3, B/4, F/8, J/3, J/4.1, J/6 | F/6 | G/6 | G/7 | C/4 | C.5/9 |
| | DEAD LOAD | | | | | | | | *** | | | |
| | TOTAL LOAD | 10.10 | | | | | | | | | | |
| EIGTH FLOOR | SIZE VERT REINF | 18x18 | HSS 6x6x% | 18xIB | | | | 20x16 | 16x16 | HSS 4x4x3/4 | i8xi8 | |
| PLOOR | TIES | #4 | · · · · · · · · · · · · · · · · · · · | 12-#6 | | | | 12~#6 #4 | 12-#7 #4 | | 12-#7 | |
| | TYPE | 2 | · | 2 | 1 | - | | 7 | 5 | | 2 | |
| · | DEAD LOAD | | | | 1 | | | | | | | _ |
| | TOTAL LOAD | | | | | | | | | · · · · · · | | |
| SEVENTH FLOOR | SIZE | 18x18 | HSS 6x6x% | l8xl8 | | 1 | | 20x16 | 16x16 | H55 4x4x3/6 | 18x18 | |
| FLOOR | VERT REINF | 12-#6 | | 12-#6 | | | | 12-#6 | 12-#7 | | 12-#7 | |
| | TIES | #4 | | #4 | ļ | ļ | | #4 | #4 | | #4 | |
| | TYPE | 2 | | 2 | | 1 | | 7 | 5 | | 2 | |
| | TOTAL LOAD | | | | | ļ <u>-</u> | | | | | | ļ |
| | SIZE | 18x18 | LICE CICIBA | 18x18 | | ļ | | | | | | - |
| SIXTH FLOOR | VERT REINF | 12-#8 | HSS 6x6x% | 12-#7 | | ļ | | 20x16 | 16x16 | H55 4x4x% | 18x18 12-#8 | ļ . |
| FLOOR | TIES | #4 | · · · · · · · · · · · · · · · · · · · | #4 | | | | 12-#6 #4 | 12-#7 | | #4 | |
| | TYPE | 2 | | 2 | | | - | 7 | 5 | | 2 | + |
| | DEAD LOAD | <u>_</u> | | | | | | , | 3 | | · · · · · · | |
| | TOTAL LOAD | | | | | | ·· | | | · · | | |
| FIFTH | SIZE | 18x18 | HSS 6x6x% | 18x18 | | 1 | | 20x16 | 16x16 | HSS 4x4x% | I8x18 | |
| FLOOR | VERT REINF | 12-#8 | | 12-#7 | | · | | 12-#7 | 12-#7 | 1700 12177 | 12-#8 | |
| | TIES | #4 | | #4 | | | | #4 | #4 | | #4 | |
| | TYPE | 2 | | 2 | | | | 7 | 5 | i | 2 | |
| | DEAD LOAD | | | | | | | | | | | |
| _ | TOTAL LOAD | 18x24 | | | | | | | | | | |
| FOURTH FLOOR | VERT REINF | 16-#9 | HSS 6x6x% | 18x18 | <u> </u> | | | 20x16 | 16x16 | HSS 4x4x76 | 18x18 | |
| rwak | TIES | #4 | | 12-#7 #4 | 1 | | | 12-#7 | 12-#7 | | 12-#9 | |
| | TYPE | | | 2 | | · · · · · · | - | 7 | 5 | | 2 | |
| | DEAD LOAD | | | | † - | | | | | | | |
| | TOTAL LOAD | | | | | + | | | | | | |
| THIRD | SIZE | 18x24 | HSS 6x6x5/4 | 18x18 | | | | 20x16 | l6x16 | H55 4x4x¾ | l8x18 | |
| FLOOR | VERT REINF | 16-#9 | | 12-#8 | | | | 12-#7 | 12-#7 | | 12-#9 | |
| | TIES | #4 | | #4 | | | | #4 | #4 | | #4 | |
| | TYPE | <u> </u> | | . 2 | | | | 7 | 5 | | 2 | |
| | DEAD LOAD TOTAL LOAD | | | | ļ | | | | | | | |
| SECOND | SIZE | 18x24 | HSS 6x6x% | 18x18 | 16x16 | · · · · · · · · · · · · · · · · · · · | | 20x16 | 16x16 | UCC 4.45 | (9.76 | |
| FLOOR | VERT REINF | 16-#10 | TIOU BANANG | 12-#8 | 12-#7 | | | 12-#8 | 16×16 | H55 4x4x% | 18x18 12-#10 | |
| | TIES | #4 | | #4 | #4 | | | #4 | #4 | | #4 | |
| | TYPE | I | | 2 | 5 | - | | 7 | 5 | | 2 | · . |
| | DEAD LOAD | | | | 1 | 1 | 1 | · · · · · · | | | - | |
| | TOTAL LOAD | | | | | | | | | | | |
| FIRST | SIZE | 18x24 | HSS 6x6x% | 18x18 | 16x16 | | | 20x16 | 16x16 | 30x16 | I8x18 | |
| FLOOR | VERT REINF TIES | 16-#10 #4 | | 12-#8 | 12-#7 | | | 12-#8 | 12-#8 | 14-#6 | 12-#10 | |
| | TYPE | 1 | | #4 | #4 | | | #4 | #4 | #4 | #4 | ļ |
| | DEAD LOAD | | | | - b | | | 7 | 5 | 6 | 2 | |
| | TOTAL LOAD | | | | | | | | | | | |
| | SIZE | 18x24 | 16x16 | 18x18 | 16x16 | 16x16 | 16x16 | 20x16 | 16x16 | 30x16 | 18x18 | 30x12 |
| GARAGE | VERT REINF | 16-#10 | 8-#8 | 12-#8 | 12-#8 | 12-#7 | 12-#6 | 12-#8 | 12-#8 | 14-#6 | 12-#10 | 10-#6 |
| | TIES | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 |
| | TYPE | 1 | 5 (SIM) | 2 | 5 | 5 | 5 | 7 | 5 | 6 | 2 | В |

A COLUMN SCHEDULE

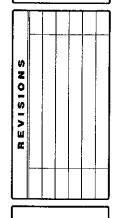




(1) COLUMN DETAIL







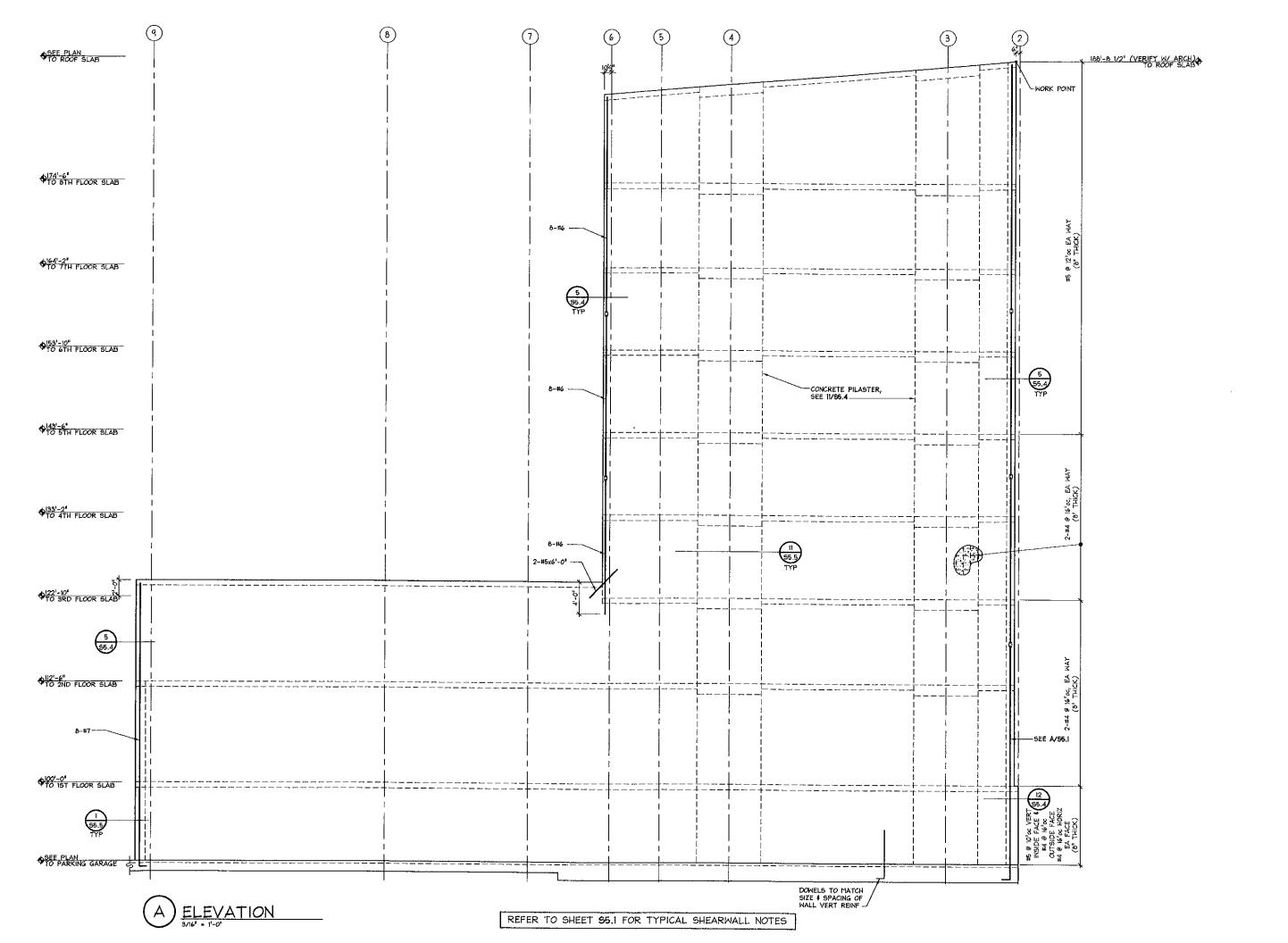
RIVERS CONDOS
156 FRONT AVENUE
SALEM, OREGON

PROJECT NO. 06-113 PLOT DATE: 9:96:2007 RESPONSE TO PLAN CHEC DATE: 12:13-2008

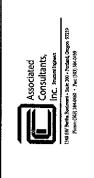
RESPONSE TO PLAN DATE: 12-13-2006 DRAWN BY: KHA CHECKED BY: BA

COLUMN SCHEDULE & DETAILS

S4.1







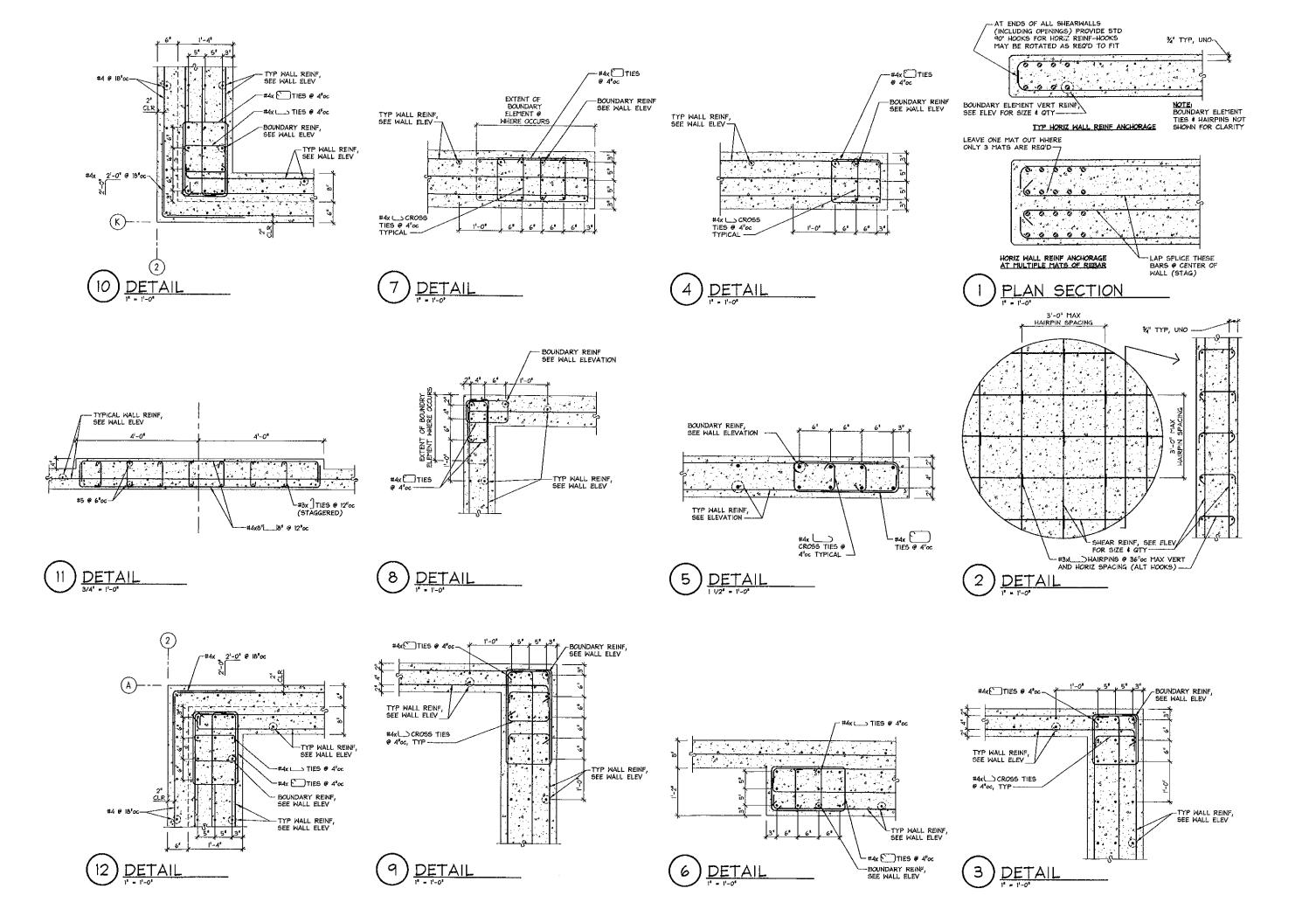


PROJECT NO. 06-113

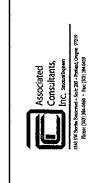
RESPONSE TO PLAN DATE: 12:13:2006 DRAWN BY: KHA

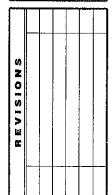
WALL PANEL ELEVATIONS

\$5.3







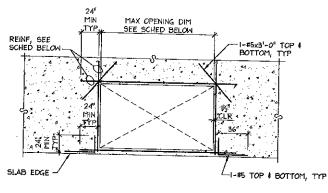


PROJECT NO. 06-113

PLOT DATE: 9:26-2007 RESPONSE TO PLAN CH DATE: 12:13-2006 DRAWN BY: KHA CHECKED BY: BA

PANEL DETAILS

\$5.4



TRIM BARS FOR OPENINGS AT SLAB EDGE

SEE ARCH DWG'S

MIN

-#4 TOP & BOTTOM, TYP

ADDED REINF, UNO

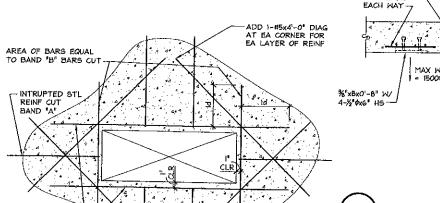
| MAX OPENING DIM | REINFORCING | | | | |
|-----------------|------------------|--|--|--|--|
| 12" TO 18" | I-#5 EA SIDE | | | | |
| IB' TO 2'-6' | 1-#5 T#B EA SIDE | | | | |
| 21-6" LARGER | 2-#5 TEB EA SIDE | | | | |

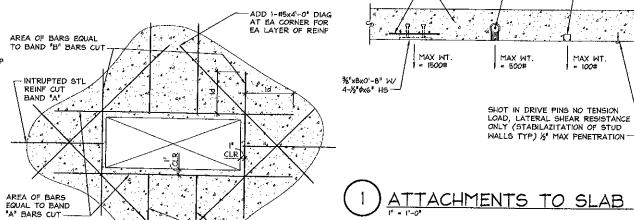
6

1-#4 TOP # BOTTOM

NOTES

 ALL OPENINGS LARGER THAN 12⁵
 SHALL BE TRIMMED AS SHOWN
 THESE BARS ARE IN ADDITION TO REBAR SHOWN ON PLANS



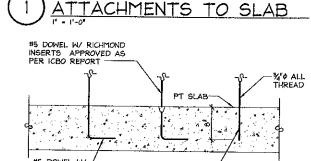


NTRUPTED REINF CUT BAND "B"

/I-#5 HOOP & OF OPNG + 8" IN EA LAYER OF

REINF FOR OPNGS LARGER THAN B"

AREA OF BARS EQUAL BAND "B" BARS CUT



UNISTRUT (1'-0" LONG MAX)

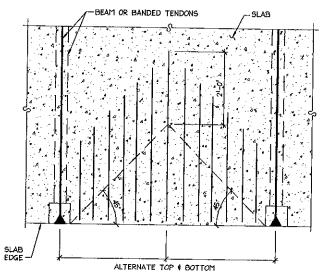
#5 DOWEL W/ STD HOOK-DRILL & EPOXY DOWEL, NOTE: SEE ARCH FOR CURB PLANS. NOTE: TENDONS MUST BE LOCATED BEFORE DRILLING

NOTES

PT SLAB -

- GENERAL CONTRACTOR TO COORDINATE ALL INSERTS INTO THE P.T. SLAB PRIOR TO POUR. ALL SUBCONTR. TO PLACE THEIR OWN REQUIRED SUPPORT INSERTS.
- DRILLED-IN ANCHORS REQUIRE X-RAY OR GROUND PENETRATIVE RADAR BEFORE DRILLING.
- 3. MARKING OF TENDON LOCATIONS WILL BE REQUIRED.

TRIM BARS AT SUPPORTED SLAB EDGES



#4 @ !4'00 FOR 8" SLAB #4 @ 10"00 FOR 10" SLAB MIN REINF BTWN TENDON BANDS (BEAM STEMS) AT SLAB EDGE

STRAIGHT

TENDON

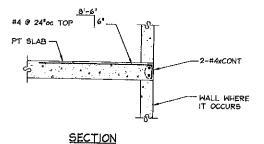
1.12 MAX UNO

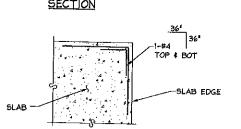
BUNDLE OF FOUR (4)
TENDONS OR LESS

BUNDLE MAX.

TRIM BARS AT CANTILEVERED SLAB

* SEE PLANS FOR ADDED REINF @ CANTILEVERED SLABS > 12"

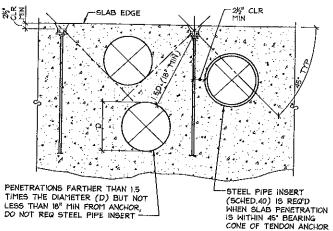




PLAN



NOTES: 1. TYP FOR ALL OPENINGS IN CONC WALLS & SLABS UNLESS NOTED OTHERWISE ON PLANS. 2. DO NOT WELD REINFORCMENT TO PIPE SLEEVES & INSERTS 3. Id - PROVIDE MIN DEVELOPMENT LENGTH UNLESS LONGER EXTENSION IS SHOWN ON PLANS, TYP TRIM BARS AT OPENING 3



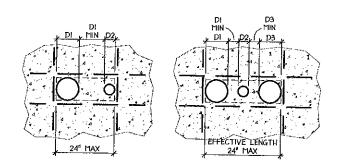
STL REINF CUT

STL REINF CUT BAND "A"

AREA OF BARS EQUAL BAND "A" BARS CUT

- I. SWEEP PT TENDONS (WHERE POSSIBLE) TO AVOID CONFLICT BETWEEN PT ANCHORS AND OPENINGS.
- 2. PENETRATION WITH DIMENSIONS GREATER THAN 12" REQUIRE TRIM REBAR, SEE 3/56.1

ATTACHMENTS TO SLAB



- NOTES:

 1. OPENINGS WHICH ARE CLOSER TO ONE ANOTHER THAN THE DIAMETER OF THE LARGER ONE, ARE CONSIDERED TO FORM A COMBINED OPENING.

 2. IF THE COMBINED OPENING IS LESS THAN 12" NO TRIM BARS ARE REGD.

 3. IF THE COMBINED OPENING IS MORE THAN 12", BUT LESS THAN 24", PROVIDE 1-15 TOP 4 BOT W/ 2'-0" DEVELOPMENT PAST THE OPENING.

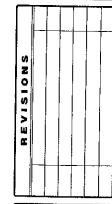
 4. NO DIAGONAL BARS ARE NECESSARY.
- 5. IF COMBINED OPENING IS LARGER THAN 24" CONTACT THE ENGINEER.



EXPIRES: 12-51-07

O SUED PROPERTY INGUNESIA 16,136





RIVERS CONDOS 56 FRONT AVENU SALEM, OREGON

PROJECT NO. 06-113

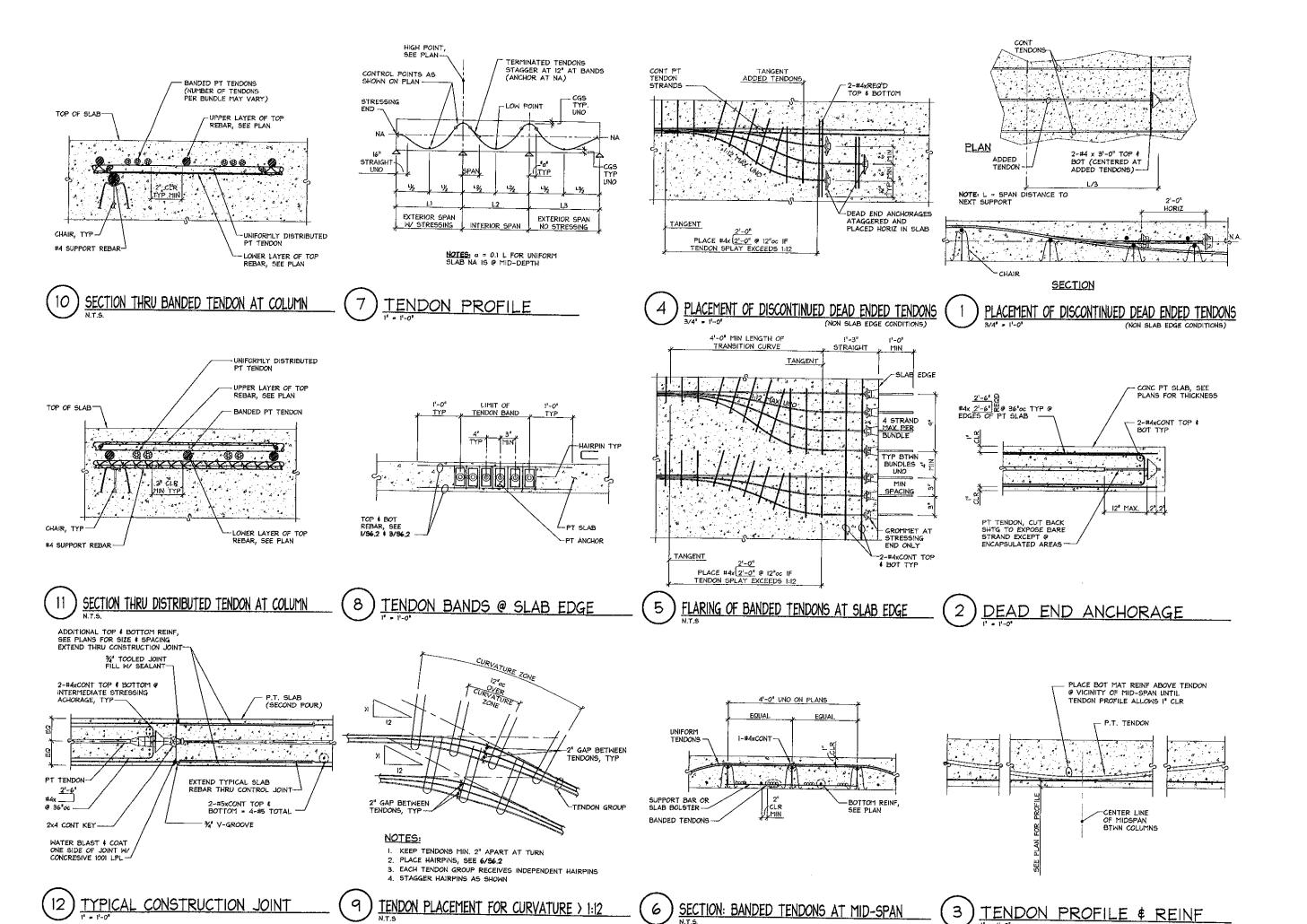
PLOT DATE: 9.26-2007 RESPONSE TO PLAN CHEC DATE: 12-13-2008 DRAWN BY : KHA CHECKED BY : BA

TENDON LAYOUT @ OPENING

EXCEEDS 1:10

5 OPENINGS AT PT ANCHORAGE

MULTIPLE OPENINGS



ORSGON OR AK ANTO EXPIRES: 12-31-07





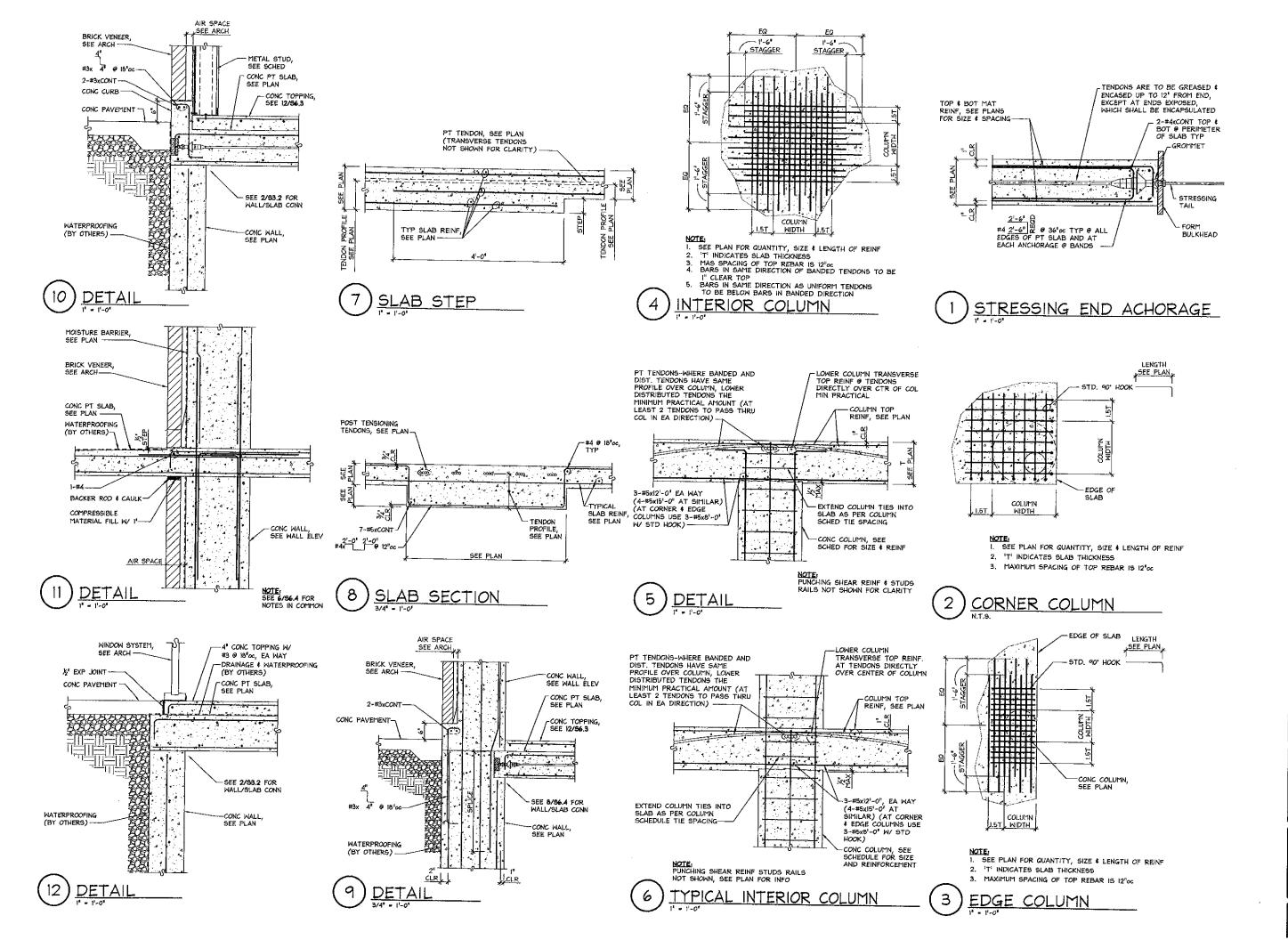
CONDOS SG FRONT AVENU SALEM, OREGON RIVERS

PROJECT NO. 06-113

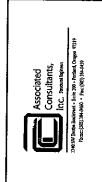
PLOT DAYE : 9-28-2007 RESPONSE TO PLAN CHEC DATE : 12-13-2008 CHECKED BY : BA

FRAMING DETAILS

S6.2



EXPIRES: 12-31-07





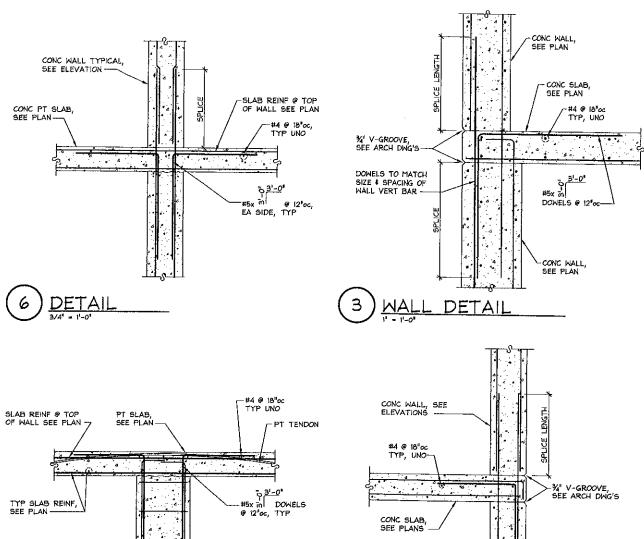
RIVERS CONDOS
156 FRONT AVENUE
SALEM, OREGON

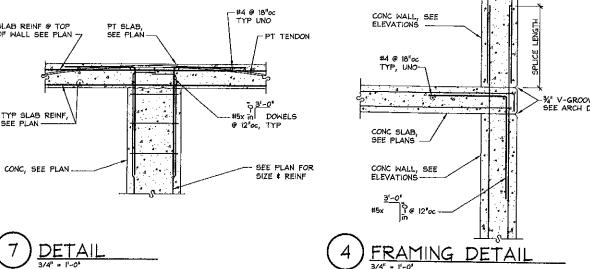
PROJECT NO. 06-113

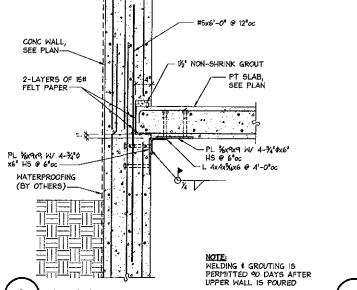
PLOT DATE: 9:28-2007 RESPONSE TO PLAN CHE DATE: 12:13-2008 DRAWN BY: KNA CHECKED BY: BA

FRAMING DETAILS

S6.3



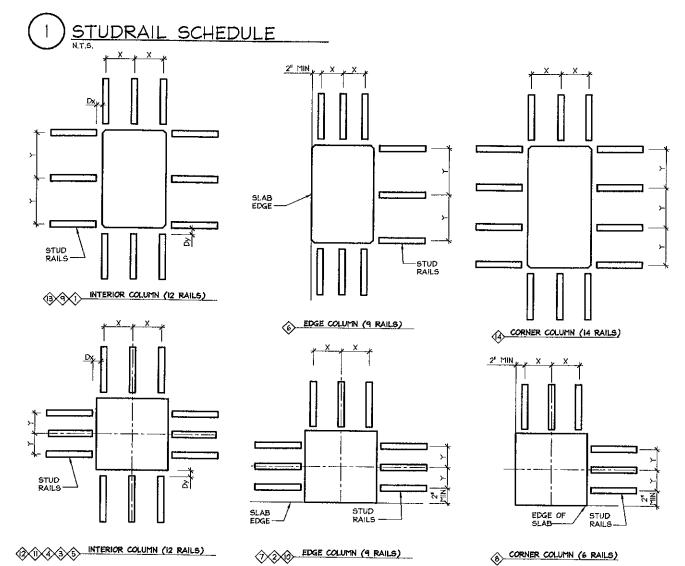




| #5x m @ 12'0c #5x m @ 12'0c 34" V-GROOVE, SEE ARCH DWG'S | PT SLAB, SEE PLAN |
|---|--|
| | CONC WALL, SEE ELEV |
| <u> </u> | NOTE: PT TENDONS NOT SHOWN FOR CLARITY |

| 1' = 1'-0' | (5) | TYPICAL | WALL | / | SLAB | DETAIL |
|------------|-----|---------|------|---|------|--------|
|------------|-----|---------|------|---|------|--------|

| | ···· | | | | | DECO | N STUD | RAIL SCHEE | DULE | | | |
|--------------------|------------------|----------------|----------------------------|---|-------------------------|------|---|-------------------------|-------------------|--------------------------|-------|-------|
| COLUMN MARK NO. | SLAB | COLUMN SIZE | NO. OF RAILS PER COLUMN | X | Dχ | ۲ | Dy | STUD # | OVERALL HT OAH | NO. OF STUDS PER RAIL | 5 | 50 |
| \Diamond | 16" | 24x18 | 12 | 8 | <i>1</i> 4* | 11 | <i>V</i> ₄ " | <i>K</i> ' | 141/2 | 12 | 7½" | 71/4" |
| ② | 8' | 18x18 | q | 8 | 14' | 8 | K" | <i>K</i> 2" | 6/2 | 13 | 31/4" | 3% |
| 3 | 8' | 18x18 | 12 | 8 | 1/4" | 8 | <i>1</i> 4° | ½ " | 61/2 | 13 | 31/4" | 31/4 |
| 4 | 16" | 18x18 | 12 | 8 | 14" | 8 | 1 /4" | Ķ, | 141/2 | 12 | 714" | 71/4 |
| ⟨\$⟩ | 8" | 16x16 | 12 | 7 | И. | 7 | KI, | <i>8</i> ' | 61/2 | 13 | 3/4" | 31/4" |
| & | 8' | 20x16 | 9 | 7 | 1/4" | 9 | Х," | <i>y</i> ₂ * | 61/2 | 13 | 34" | 31/4 |
| | 6' | 16x16 | 9 | 7 | Д. | 7 | <i>X</i> ₄ ⁿ | <i>K</i> 2' | 61/2 | 13 | 31/4" | 3½" |
| € | 81 | 16×16 | 6 | 7 | и, | 7 | <i>K</i> ," | 1/2" | 6/2 | 13 | 31/2" | 31/4" |
| (9) | 10 ¹¹ | 24x18 | 12 | 8 | <i>'</i> ' | 11 | KI" | <i>1</i> /2" | 81/2 | 13 | 44" | 414 |
| � | 10" | 18x18 | 9 | 8 | <i>Қ</i> 1 | 8 | <i>\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \</i> | <i>1</i> 5" | 81/2 | 13 | 41/4" | 41/41 |
| ₩ | IO ⁿ | 16x16 | 12 | 7 | Д" | 7 | χ," | <i>\</i> 5' | 81/2 | 13 | 4/4" | 474" |
| <₽ | 12" | 16x16 | 12 | 7 | 14" | 7 | K _a | <i>1</i> /2" | 10/2 | 13 | 5¼" | 5¼" |
| ■ | 10 ⁿ | 20x16 | 12 | 7 | <i>Y</i> ₄ * | 9 | K, | <i>1</i> 2" | 81/2 | 13 | 4/4" | 414" |
| €\$ | 10" | 30x16 | 14 | 7 | И," | 9 | ¼ " | % ' | 8½ | 13 | 41/4" | 474" |



STUD RAIL PLACEMENT DIAGRAM





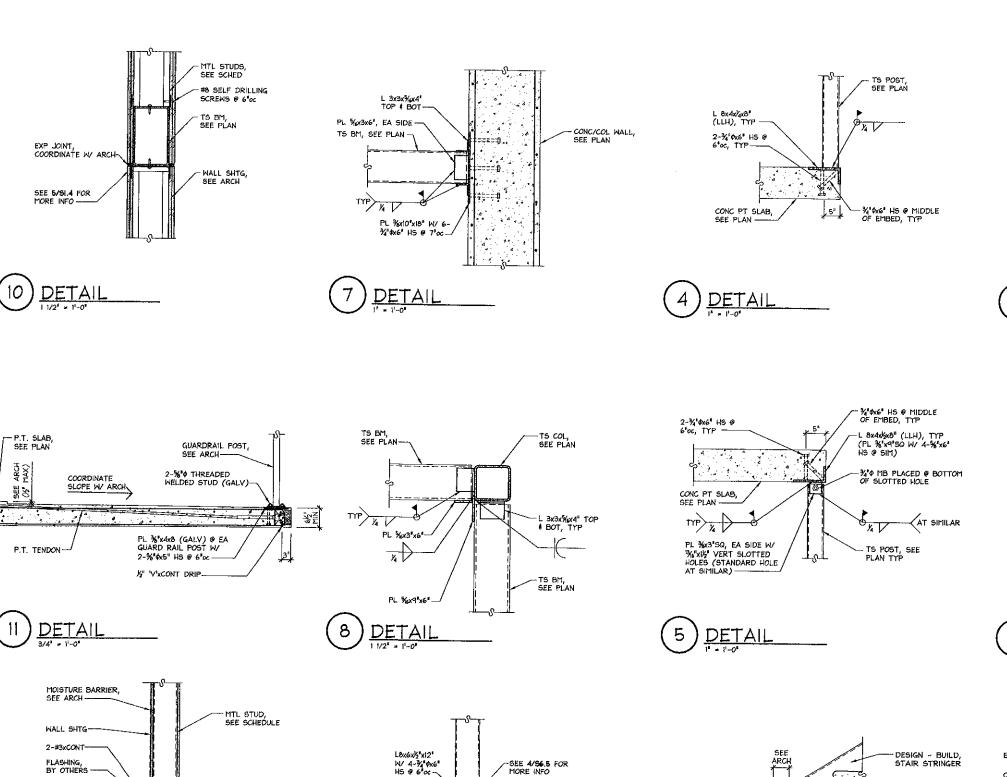


RIVERS CONDOS 56 FRONT AVENUE SALEM, OREGON

PROJECT NO. 06-113 PLOT DAYE: 9:29:2007 RESPONSE TO PLAN CHE DATE: 12:13:2008

FRAMING DETAILS

S6.4



% END PL

STAIR DETAIL

CONC PT SLAB

SEE PLAN

CONC COL, SEE PLAN -

FRAMING DETAIL

L 3x3x½x0'-3"

-EMBED PL 1/4 x9" 5Q

DETAIL

W/ 4-½"4x4 ½" HS

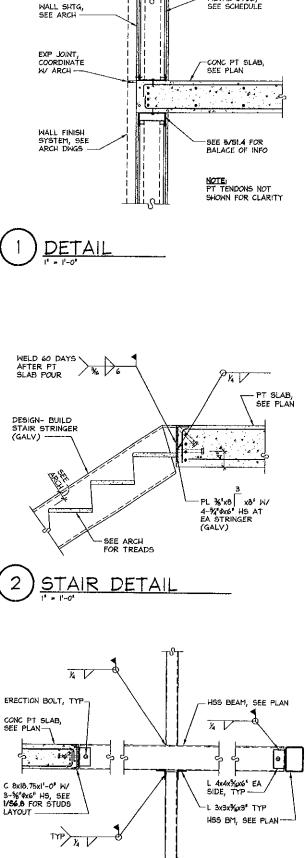
WATERSTOP,

@ 18°0c

WATERPROOFING (BY OTHERS)—

TYPICAL SLAB

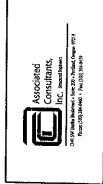
PT TENDON-



-TS 4x4x/4, ELEVATOR RAIL SUPPORT, TYP

-METAL STUD, SEE SCHEDULE







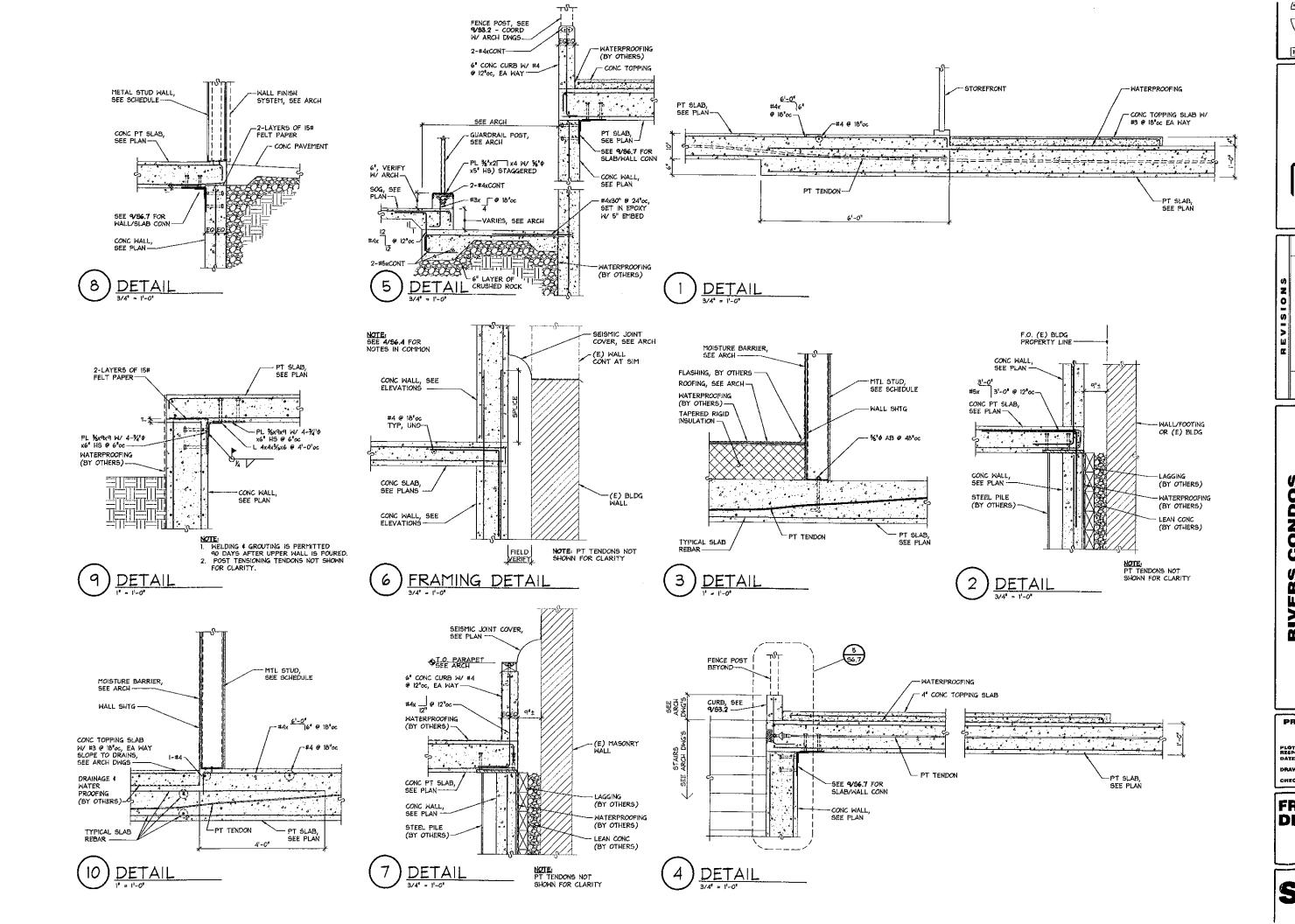
RIVERS CONDOS
156 FRONT AVENUE
SALEM, OREGON

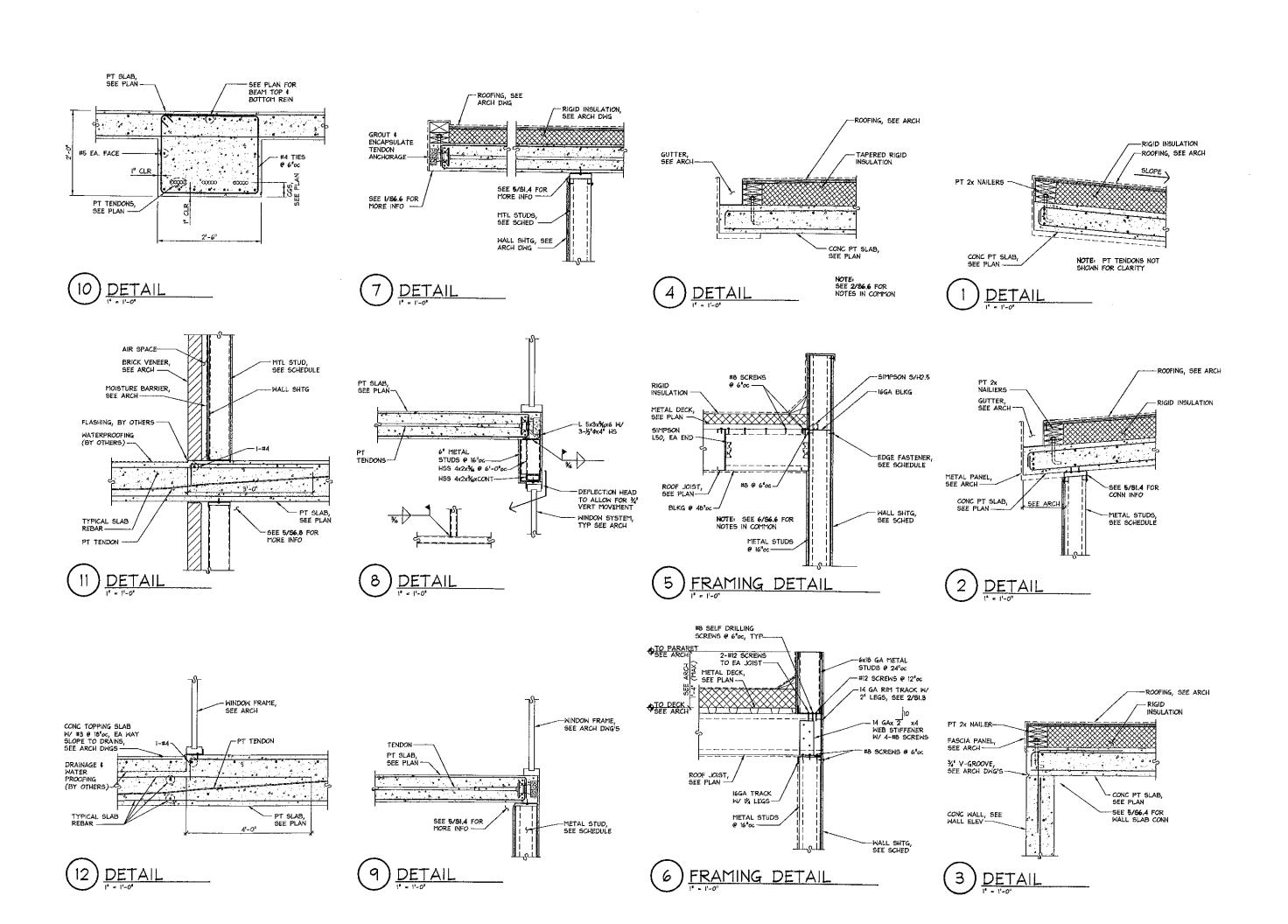
PROJECT NO. 06-113

PLOT DATE: 9:28-2007 RESPONSE TO PLAN CHE DATE: 12:13-2008 DRAWN BY: KHA CHECKED BY: BA

FRAMING DETAILS

SE F





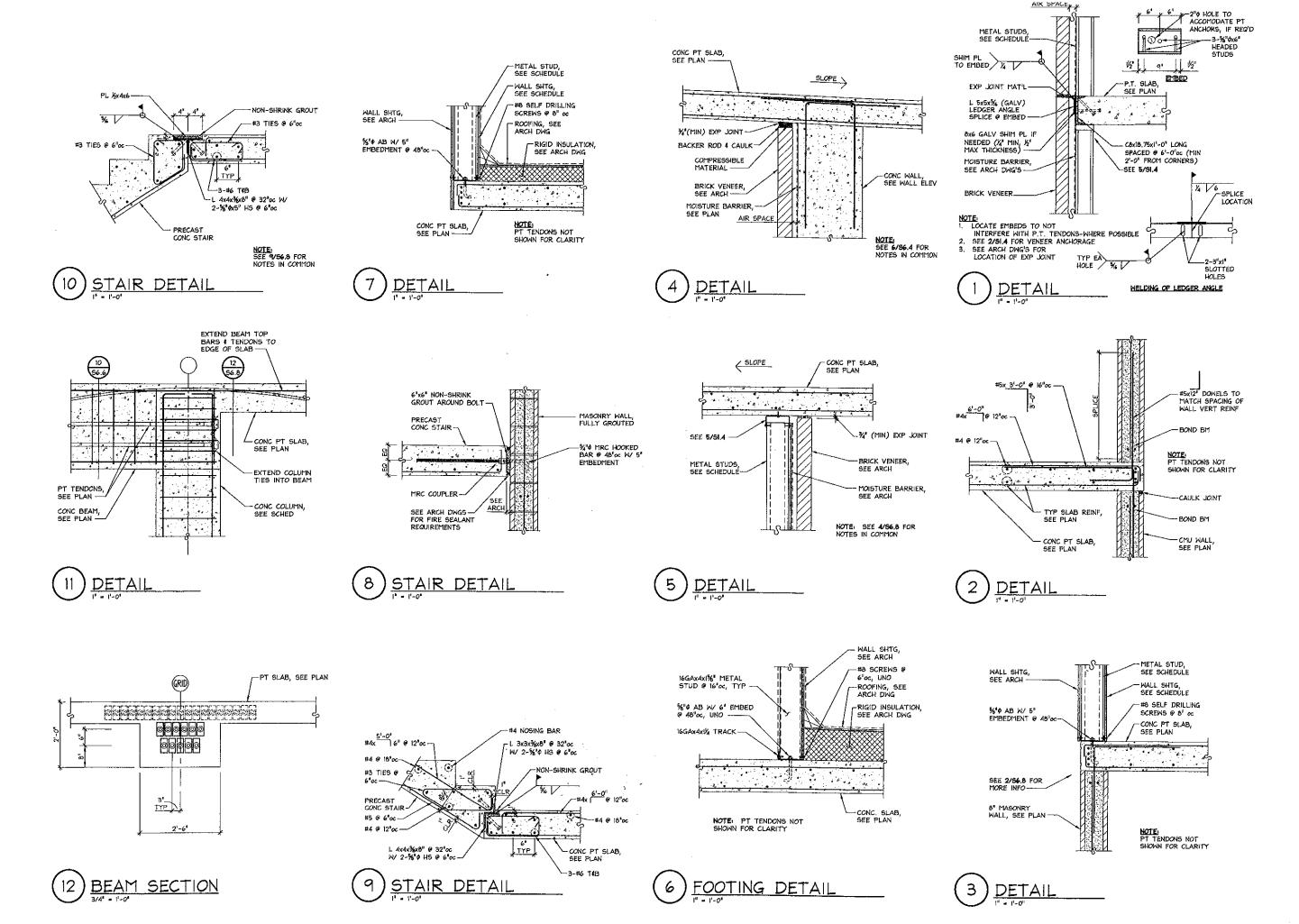
RIVERS COND

REVISIONS

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