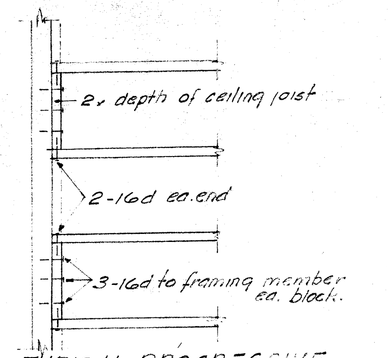
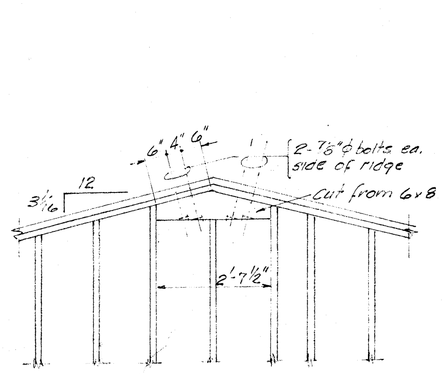
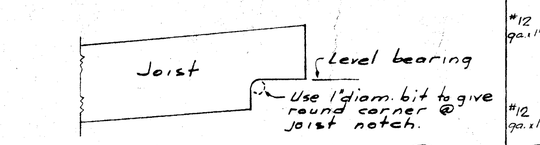


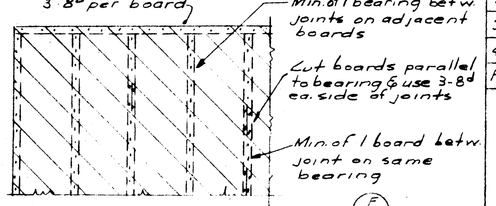
A S1 TYPICAL PROGRESSIVE NAILING INTO WOOD



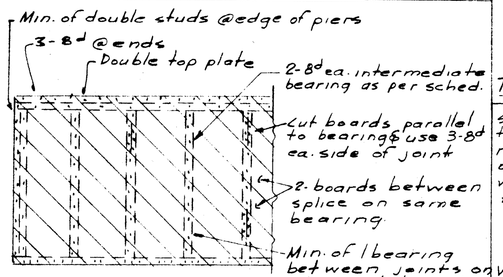
RIDGE PLATE SPLICE B S1



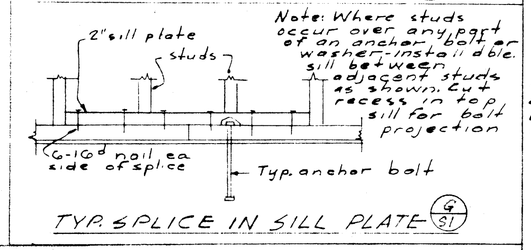
TYP. NOTCH CUT @ BEARING D S1



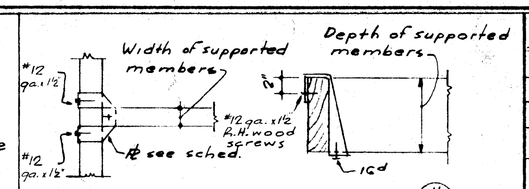
TYP. DIAG. ROOF SHEATHING E S1



TYP. DIAG. WALL SHEATHING F S1

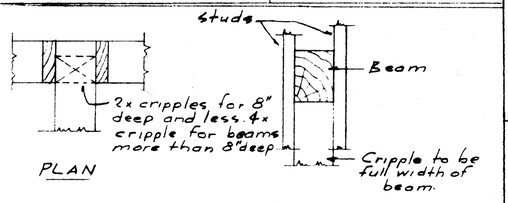


TYP. SPLICE IN SILL PLATE G S1

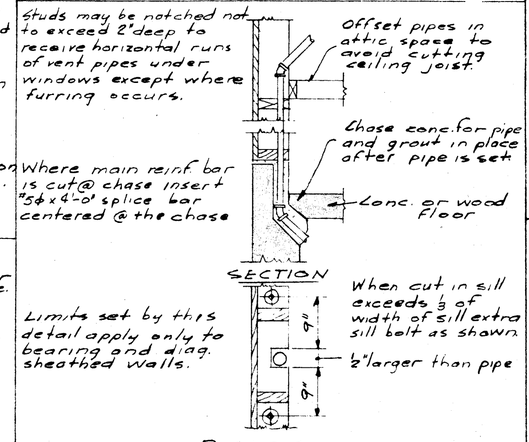


TYP. METAL JOIST HANGERS H S1

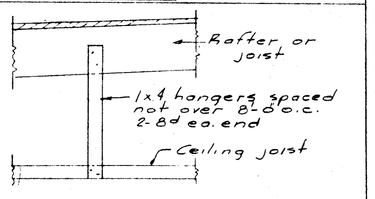
METAL HANGER SCHEDULE	
SIZE OF SUPPORTED MEMBER	SIZE OF MATERIAL
2x14 or 3x10 or less	2" x 9 1/16" ft
3x14 or 4x10 or less	2 1/8" x 3 1/16" ft
4x14 or 6x10 or less	2 1/8" x 1/4" ft
For ceiling joist only use 16 ga. material 2" wide	



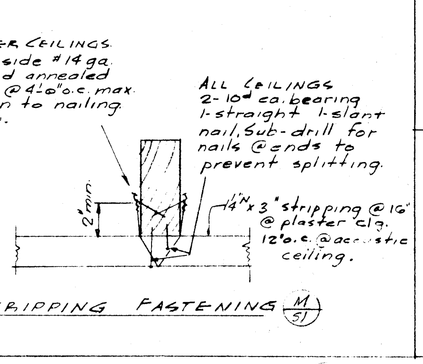
TYP. SUPPORT OF BEAM AT WALL J S1



PIPES IN STUD WALL K S1

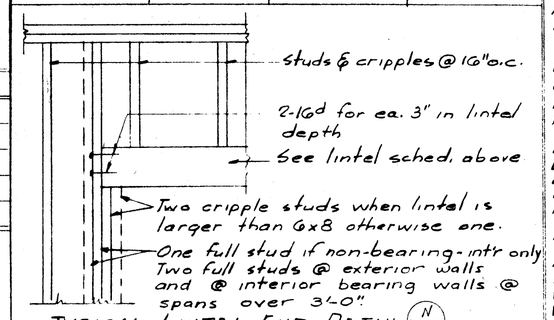


TYP. WOOD CEILING JOIST HANGERS L S1

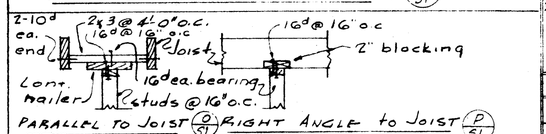


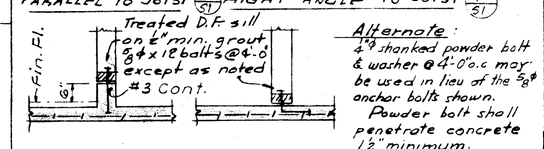
STRIPPING FASTENING M S1

LINTEL SCHEDULE			
BEARING WALLS		NON-BEARING WALLS	
OPENING SIZE	LINTEL SIZE	OPENING SIZE	LINTEL SIZE
3'-0" or less	2-2x6	3'-0" or less	2-2x4
4'-0" to 7'-2"	6x6	3'-6" to 6'-6"	2-2x6



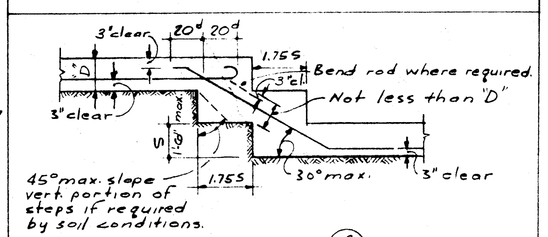
TYPICAL LINTEL END DETAIL N S1



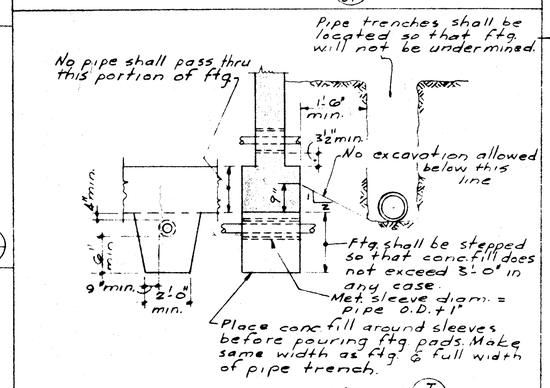


Q S1 R S1

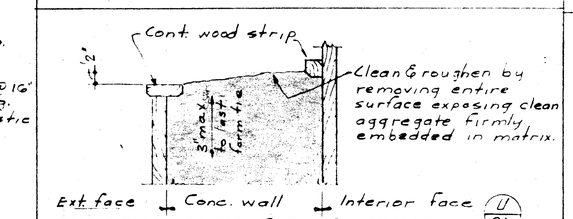
TYP. NON-BEARING PARTITIONS



FOOTING STEP S S1



PIPE & TRENCH LOCATION T S1

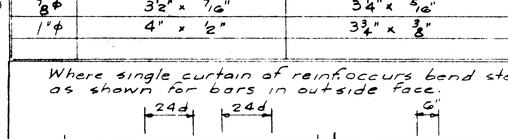


TYP. FORM DETAIL @ POUR JOINT U S1

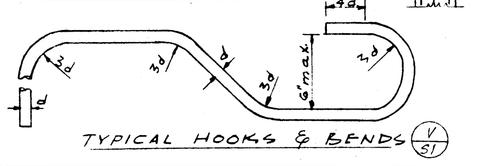
NAILING SCHEDULE	
DETAIL	**NAILING
Joists or rafters to sides of studs -	
Joist depth, 8" or less	3-10d
For ea. additional 4" in depth of joist	1-10d
Joist or rafters to sill bearings - toe nail ea. side	2-10d
Studs, to bearings - toe nails ea. side	2-10d
Blocking between joist or rafters - To joist or rafters - toe nail ea. side	
ea. end	2-10d
To bearings - toe nails ea. side	2-10d
1x6 sheathing at all bearings	2-8d
Cross bridging - toe nails ea. end	2-8d
Herringbone blocking	2-10d
1x3 ceiling strips to underside of joist. per bearing	2-8d
1/4" N (min.) x stripping per bearing	2-10d
Double top plates	
Lower plate to top of studs	2-20d
Upper plate to lower plate - staggered	16d @ 18" o.c.
Multiple studs staggered for width more than 4"	16d @ 12" o.c.
Built up beams 8" or less in depth staggered	10d @ 12" o.c.
More than 8" deep - staggered	5/8" bolts @ 24" o.c.
Double joists under partitions -	
Where not blocked apart - staggered	16d @ 12" o.c.
Where blocked apart - at ea. block	2-20d
Jack studs to studs	2-8d

* Covers min. permissible conns. only. Refer to details for special nailing.
** All nails shall be common wire nails. Where possible, nails driven perpendicular to the grain shall be used instead of toe nails.

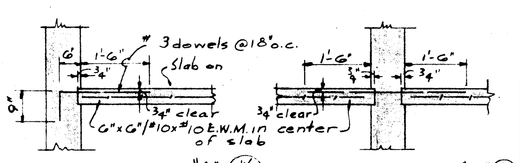
WASHER SCHEDULE		
BOLT DIAM	ROUND WASHER DIAM. MALLEABLE IRON	SQUARE WASHER OR CUT STEEL - SIZE AND THICKNESS
1/2 ø	2 1/2" x 1/4"	2 1/2" x 1/4"
5/8 ø	2 3/8" x 5/16"	2 1/2" x 1/4"
3/4 ø	3" x 7/16"	2 3/4" x 5/16"
7/8 ø	3 1/2" x 7/16"	3 1/4" x 5/16"
1" ø	4" x 1/2"	3 3/4" x 3/8"



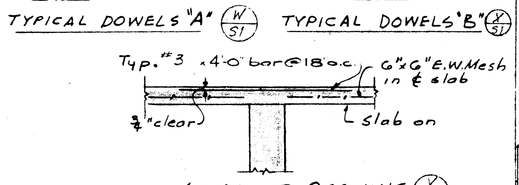
REINFORCING IN WALLS & FOOTING PADS @ CORNERS & INTERSECTIONS



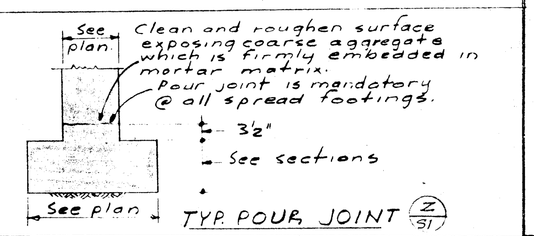
TYPICAL HOOKS & BENDS V S1



TYPICAL DOWELS "A" W S1 TYPICAL DOWELS "B" X S1



SLAB @ OPENING Y S1



TYP. POUR JOINT Z S1

GENERAL NOTES

REINFORCED CONCRETE -

1. Soil supporting footing is sandy loam.
2. Soil bearing value used in design assumed to be 1200# DL+LL
3. Footings shall extend at least 1'-8" below finished grade.
4. No brick or porous material shall be used to support footing steel off the ground.
5. All concrete shall have a minimum ultimate compressive strength of 2000 #/in.² at 28 days unless otherwise noted.
6. Anchor bolts and dowels shall be securely held in place before concrete is poured.
7. Splices in reinforcing steel shall lap 30 bar diam. min. also column dowels shall lap 30 bar diam. min. unless otherwise noted. Separate bars and bar laps at splices 2½ diam. o.c. min. but in no case less than 1½" clear, except for column bar splices or dowels, which shall be separated 1" min. clear. Wall steel may be wired together.
8. Reinforcing steel shall have the minimum protective conc. covering indicated below:

Footing pads	3"	Wall steel above grade	1"
Tie columns (main steel)	2"	Slabs on forms	¾"
Spiral wrapped cols. (face of spiral)	1½"	Beams sides, top & soffits	1½"
Wall steel below grade	2"	Joists sides, top & soffits	1"

9. Slabs on fill other than walks shall be reinforced with 6"x6"/10x10 W.M. at slab ½.
10. Dowel slabs to wall as per typical details.
11. See Architectural and/or Mech. drawings for location of pipe vents, conduits and other similar openings.
12. All walls shall be doweled to supporting footing beams or pads with bars of the same size and spacing as vertical bars in walls.
13. Anchorage of dowels shall be equivalent to bar splice.
14. If not provided for in details wall footing pad shall be 10" thick and 1'-2" in width and reinf. as per typical details.
15. Deformation requir. for reinf. shall conform with ASTM Spec'n A305-50T

STRUCTURAL STEEL -

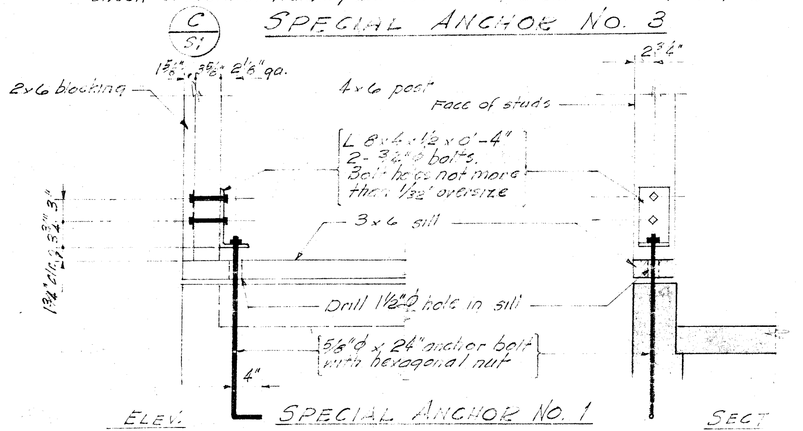
1. When stress is not given or details not shown design connections for members carrying direct stress to develop the strength of the members.
2. A.I.S.C. standard beam connections or connections of equal strength shall be used for all beam connections not shown.
3. Base plates shall be bedded on dry pack (minimum thickness 1").
4. All welding shall be done by electric shielded arc process.
5. Fireproofing of steel requires testing. Joists, steel joists, & 3" std. pipe cols.
6. No thread bearing will be permitted on bolted connections, to avoid such bearing washers or the equivalent shall be used.

TIMBER -

1. All framing lumber to be grade marked D.F. see specs.
2. All sill plates to be treated D.F. All nuts & bolts to be set on 1/8" min. thick cut washers, unless otherwise noted, at all corners, intersections and door openings. Place a bolt 9" max. from end of all sill pieces. Splice sills as shown in detail G/S1 when bolts are more than 9" from each side of joint.
3. Where stud partitions join conc. or masonry walls the end stud shall be anchored thereto with ½ø bolts near top and bottom and at each row of blocking. Such bolts shall be embedded in the wall not less than 3" in thickness.
4. Studs, shall be spaced @ 16" o.c. max. and of the size shown on plans.
5. No structural members, shall be cut for pipes, vents, ducts, and other similar openings, except as detailed or specified.
6. Joist and rafters shall be spliced at supports only except as detailed. Splices shall lap not less than 1'-0" with a min. of 3-16d nails.
7. Two inch solid blocking shall be placed between all joist and rafters at all supports and under all partitions unless otherwise detailed.
8. 2x3 cross bridging shall be placed between joist or rafters where spans exceed 8'-0". The distance between lines of bridging and between bridging and wall shall not exceed 8'-0". Cross bridging may be omitted for roof and ceiling joists 8" and under in depth. Solid bridging shall be placed between joist or rafters at all points of support.
9. All bolts shall be fitted with malleable iron or steel plate washers. Holes for bolts shall be bored with a bit of the same nominal diameter as the bolt.
10. Double top plates to lap 4'-0" min. at splices and nail with 16d @ 4" o.c. except as noted on details.

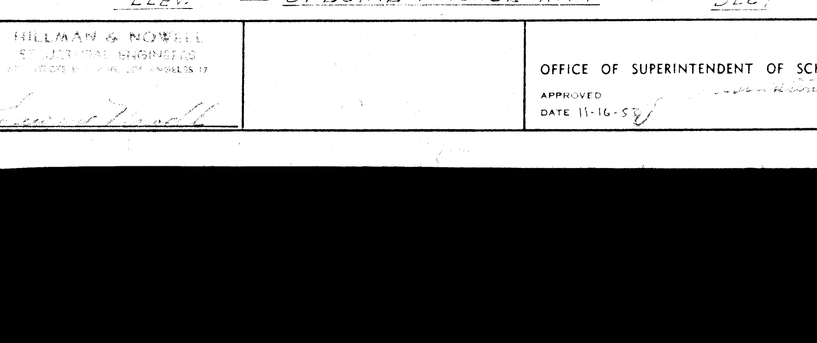
LEGEND

- Existg. conc.
- Conc. in spec.
- Wood blocking
- Cont. wood
- Brick in section
- Footing step
- 0'-0" Elev. at bottom of footing.
- A / S1 Detail on the sheet / Sheet Number
- E.W.M. Electric welded mesh
- Nominal finished floor elevation

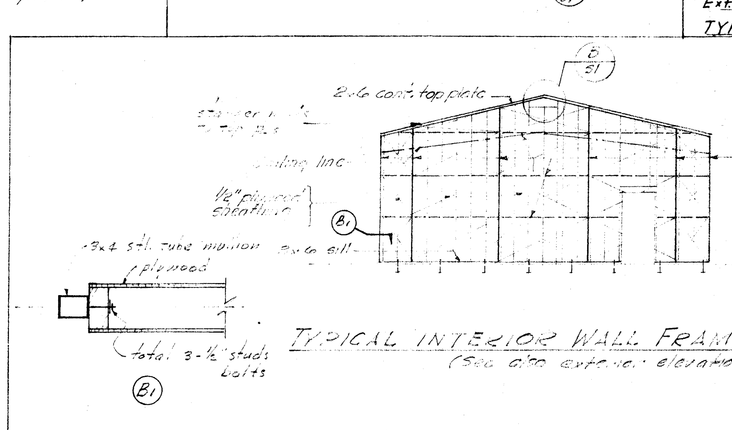


NOTE: In order to locate properly the special anchor bolts, contractor shall check structural framing and location of architectural openings before placing bolts.

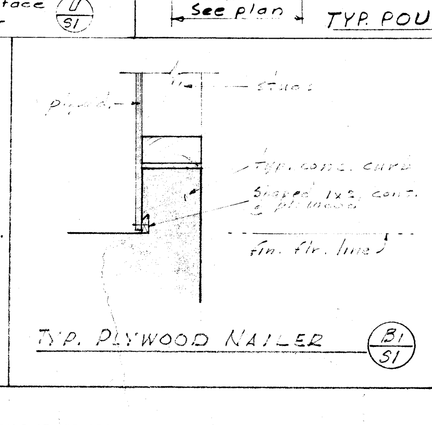
C S1 SPECIAL ANCHOR No. 3



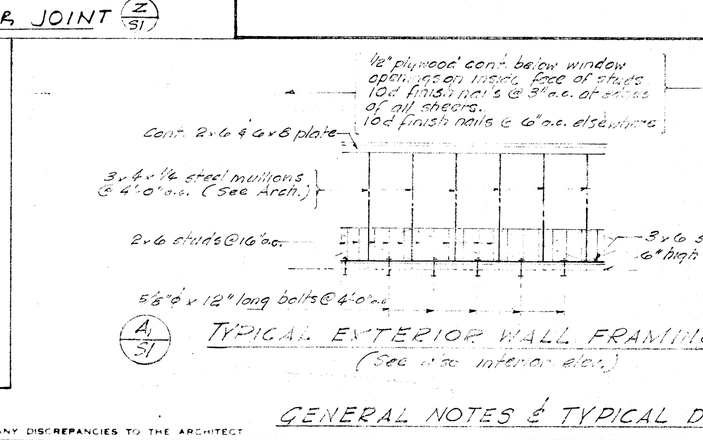
SPECIAL ANCHOR No. 1



TYPICAL INTERIOR WALL FRAMING ELEVATION A1 S1
(See also exterior elevation)



TYP. PLYWOOD NAILER B1 S1



A S1 TYPICAL EXTERIOR WALL FRAMING ELEV.
(See also interior elev.)

CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS AT JOB SITE BEFORE PROCEEDING WITH THE WORK. REPORT ANY DISCREPANCIES TO THE ARCHITECT.

GENERAL NOTES & TYPICAL DETAILS

HILLMAN & NOWELL
STRUCTURAL ENGINEERS
APPROVED BY THE LOS ANGELES CITY BOARD OF EDUCATION

OFFICE OF SUPERINTENDENT OF SCHOOLS
APPROVED
DATE 11-16-53

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ARCHITECTURE

STATE OF CALIFORNIA - DEPARTMENT OF PUBLIC WORKS
DIVISION OF ARCHITECTURE
APPLICATION NO. 11362
APPROVED NOV 12 1953
STRUCTURAL ENGINEER

BAKERSFIELD CITY SCHOOLS
1600 'K' ST., BAKERSFIELD, CALIFORNIA
BOARD OF EDUCATION

APPROVED
DATE Nov 12 1953

ROOSEVELT ELEM. SCHOOL ADDITION
BAKERSFIELD CITY SCHOOL DISTRICT
2224 VERDE ST
BAKERSFIELD CALIFORNIA

ERNEST L. McCOY A.I.A. ARCHITECT
2811 H STREET
BAKERSFIELD PHONE 4-0961 CALIFORNIA

JOB NO. 52-22
DATE Nov 10 1953
DRAWN
CHECKED

SHEET 6 OF 9 SHTS