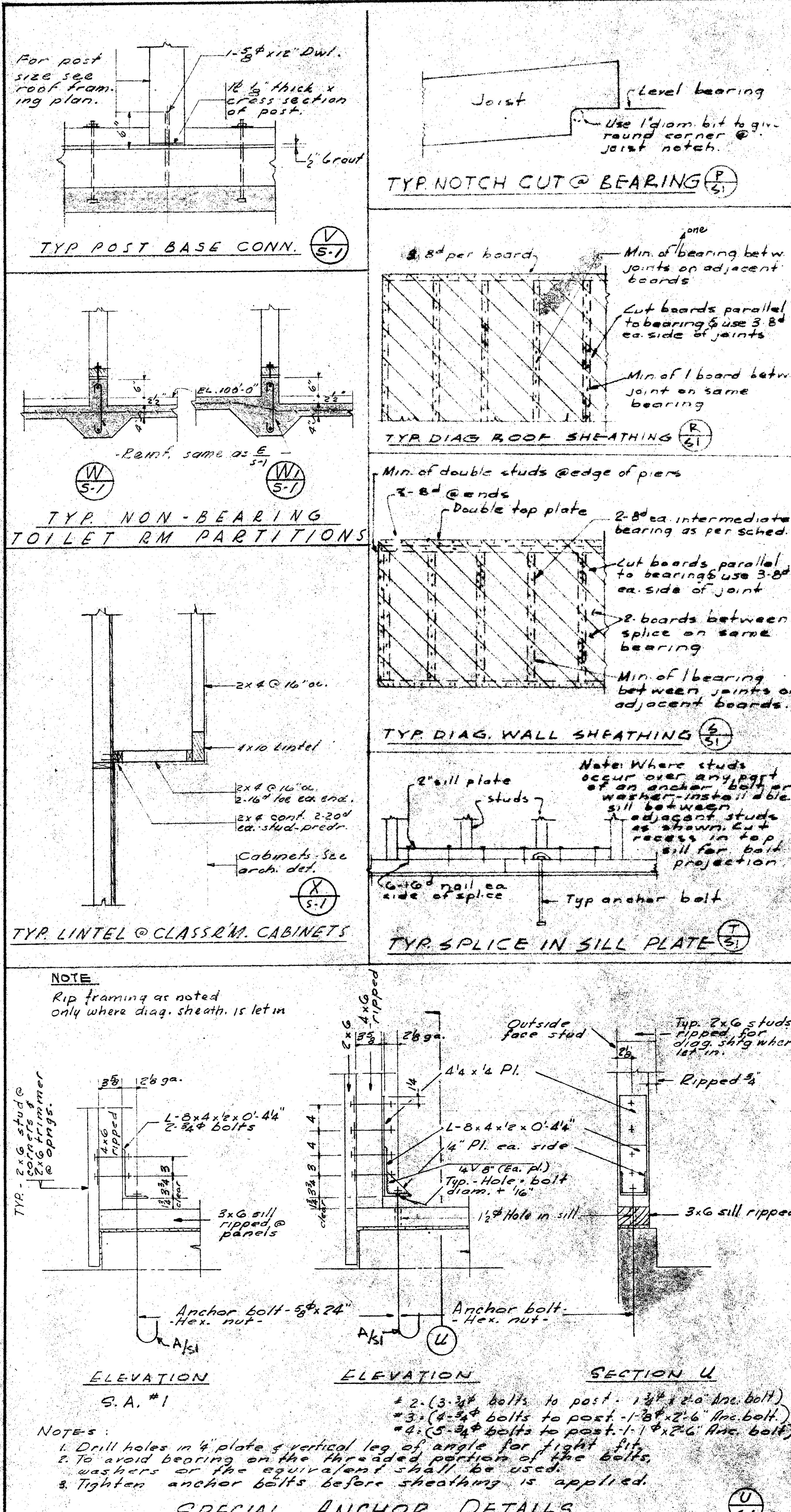
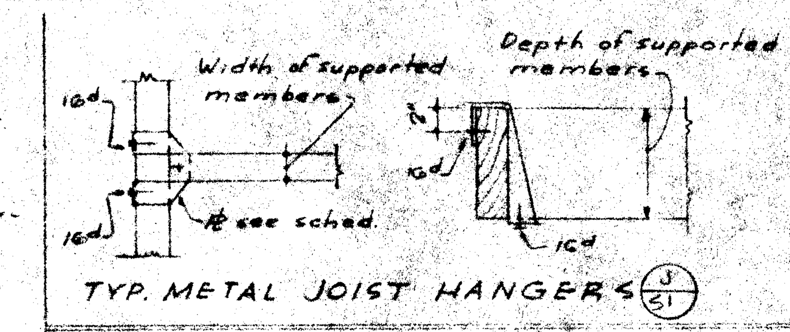
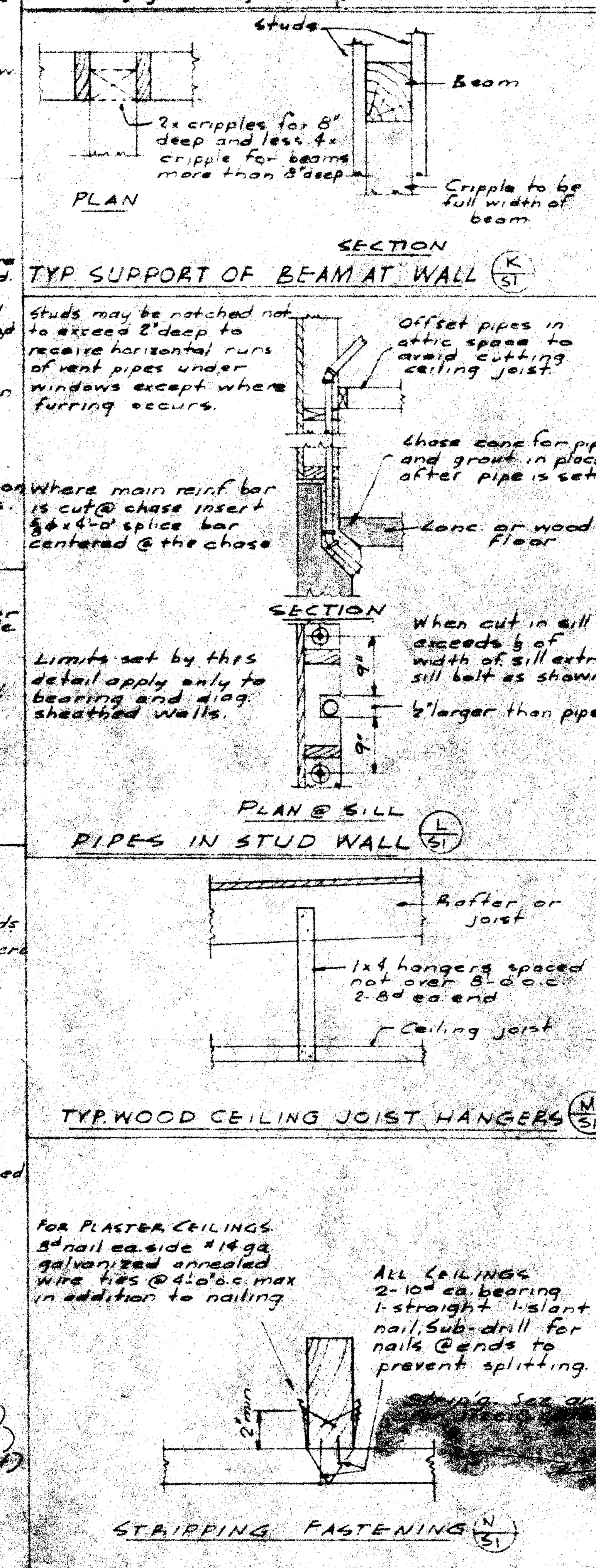




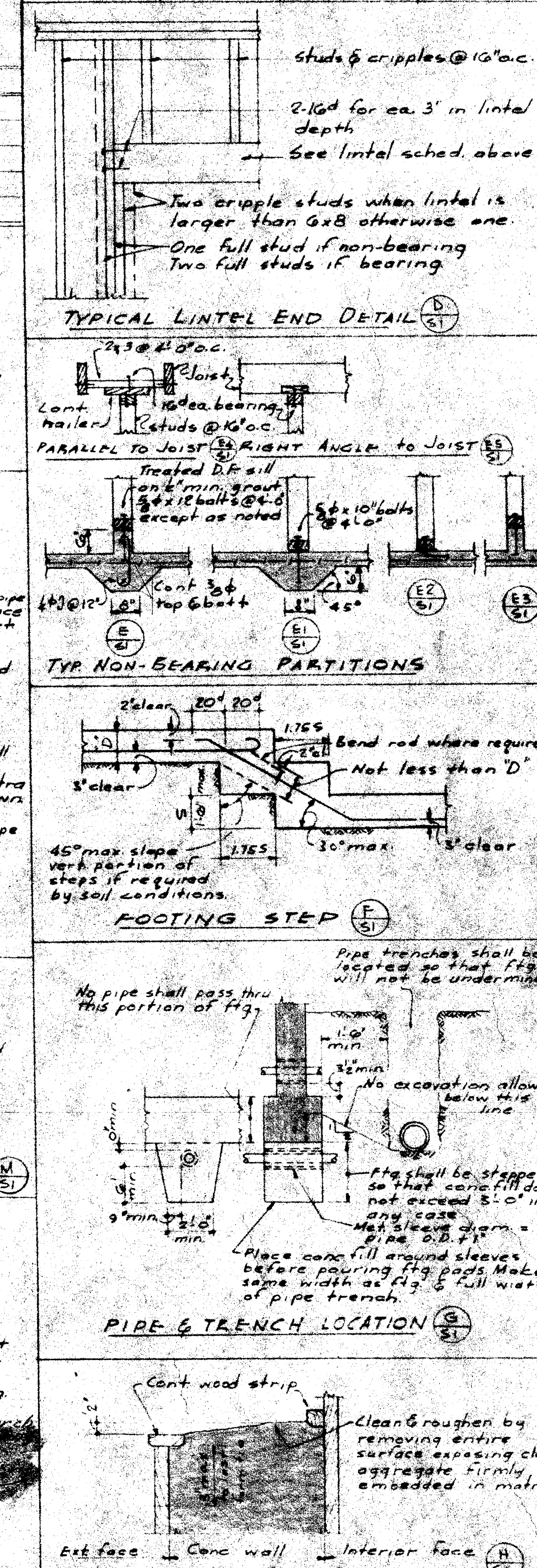
METAL HANGER SCHEDULE

SIZE OF SUPPORTED MEMBER	SIZE OF MATERIAL
2x14 or 3x10 or less	2" x 3/16" ℞
3x14 or 4x10 or less	2¼" x 3/16" ℞
4x14 or 6x10 or less	2½" x ¼" ℞
For ceiling joist only use 16 ga. material 2" wide	



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'-0"	2-2x6



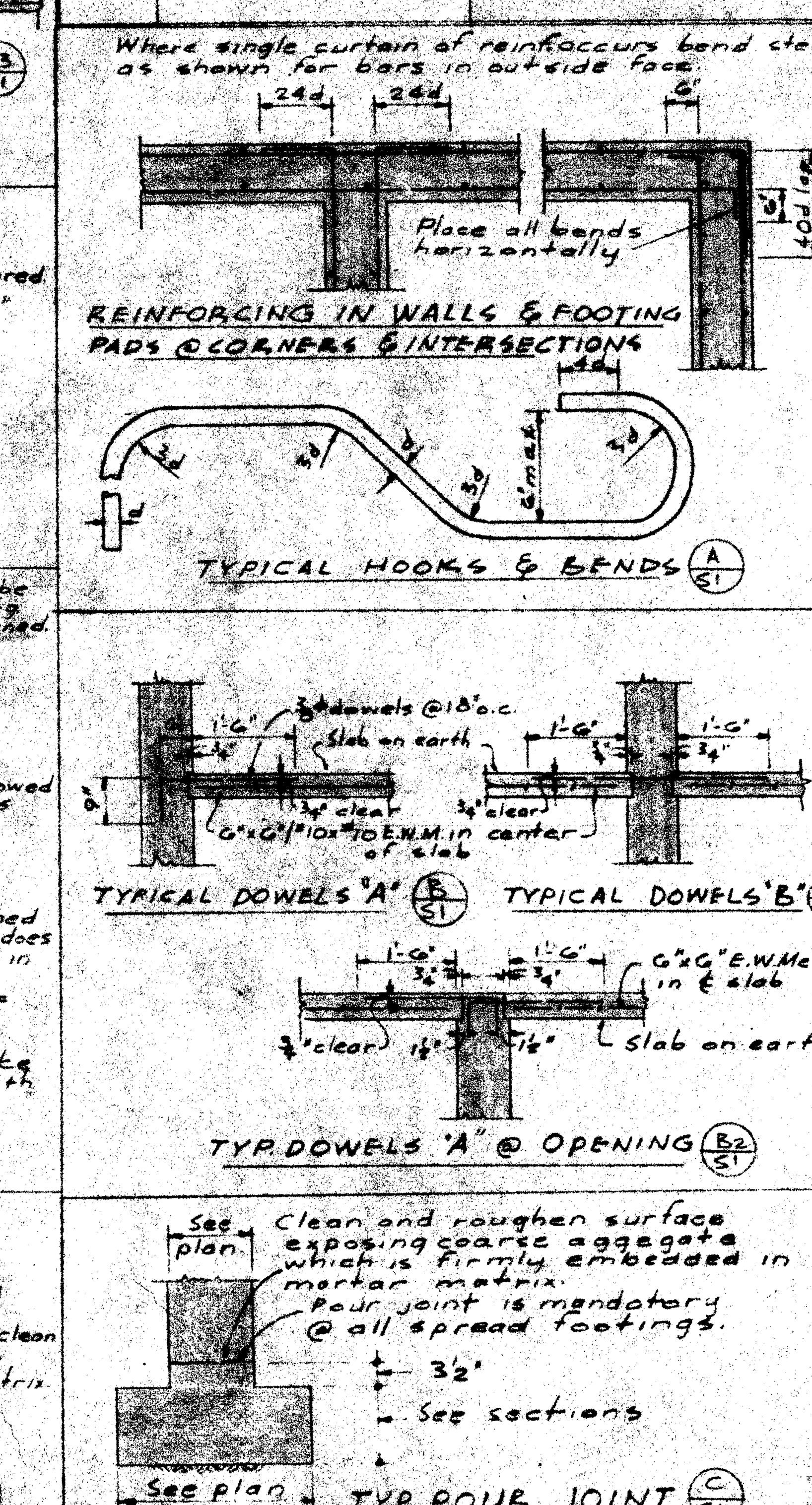
* NAILING SCHEDULE

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 all 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
Crossbridging-toe nails ea. end	2-8d
Herringbone blocking	2-10d
1x3 ceiling strips to underside of joist per bearing	2-8d
[illegible]	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	16d @ 12" o.c.
More than 8" deep-staggered	⅝" 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
1" ribbons 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
½"	2½" x ¼"	2¼" x ¼"
⅝"	2¾" x 5/16"	2½" x 5/16"
¾"	3" x 7/16"	2¾" x 5/16"
⅞"	3½" x 7/16"	3" x 5/16"
1"	4" x ½"	3½" x ⅜"



GENERAL NOTES

REINFORCED CONCRETE

1. Soil supporting footing is sandy loam.
2. Soil bearing value used in design assumed to be 1200#/ft² D+L
3. Footings shall extend at least 1'-6" below natural grade or finish grade whichever is lower.
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 40 bar diam. min. except 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"/#10x#10 E.W.Mesh at mid depth of slab.
10. Dowel slabs to wall as per typical details.
11. See Architectural and/or Mech. drawings for location of pipe vents, ducts, 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.

STRUCTURAL STEEL

1. When stress are 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 Grout 2" minimum thickness.
4. All welding shall be done by electric shielded arc process.
5. See specs for steel requiring testing.

TIMBER

1. All framing lumber to be grade marked D.F. see specs.
2. All sill plates shall be treated D.F. All mudsills to be set on ½" min grout bed; when grout is partially set, tamp under sill.
3. Sill plates shall be bolted to concrete with ⅝"ø x 12" bolts @ 4'-0" o.c. max. unless otherwise noted at all corners, intersections and door openings place a bolt 9" max. from end of sill pieces. Splice sills as shown in detail when regular bolts are more than 9" from each side of joint.
4. Where stud partitions join conc. or masonry walls the end stud shall be anchored thereto with ½"ø bolts near top and bottom and at each row of blocking. Such bolts shall be embedded in the wall not less than 3" of wall thickness.
5. Studs shall be spaced @ 16" o.c. max. and of the size shown on plans.
6. No structural members shall be cut for pipes, vents, ducts, and other similar openings except as detailed or specified.
7. 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.
8. Two inch solid blocking shall be placed between all joist and rafters at all supports and under all partitions unless otherwise detailed.
9. 2x3 crossbridging 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". Crossbridging 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.
10. 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.

Typ. 8" wall reinforcing { ½ @ 24" vertical both face. ½ @ 16" Horizontal both face

LEGEND

Symbol	Meaning	Symbol	Meaning
(hatch)	Existg. conc.	(hatch)	Footing step
(hatch)	Conc. in sect.	0'-0"	Elev. at bottom of footing
(hatch)	Wood blocking	A	Detail letter
(hatch)	Cont. wood	S-1	Sheet number
(hatch)	Brick in section	E.W.M.	Electric welded mesh
(hatch)	Gravel fill	(symbol)	Nominal finished floor elevation 100'-0" = 402.25'

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

HILLMAN & NOWELL
STRUCTURAL ENGINEERS
ARCHITECTS BUILDING LOS ANGELES 13

COUNTY OF KERN
OFFICE OF SUPERINTENDENT OF SCHOOLS
JESSE D. STOCKTON — SUPERINTENDENT
APPROVED
DATE

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ARCHITECTURE
STATE OF CALIFORNIA DEPARTMENT OF PUBLIC WORKS DIVISION OF ARCHITECTURE
APPLICATION NO. 8873 APPROVED MAY 18 1951
SUPERVISING STRUCTURAL ENGINEER

BAKERSFIELD CITY SCHOOLS
1600 "L" ST. BAKERSFIELD CALIFORNIA
BOARD OF EDUCATION
APPROVED DATE 3/1/51

TYPICAL DETAILS & NOTES
JUNIOR HIGH SCHOOL
BAKERSFIELD CITY SCHOOL DISTRICT
BELLE TERRACE & "P" STREETS
BAKERSFIELD CALIFORNIA
JOB NO. C-335
ERNEST L. McCOY ·A·I·A· ARCHITECT
129 HAY BLDG. 1612 - 19th ST.
BAKERSFIELD — CALIFORNIA

DRAWN BY T.G.
S1
OF SHTS.
DATE 3/1/51