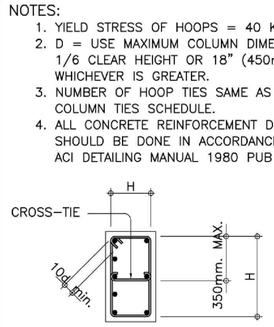
TABLE OF LAP SPLICE & ANCHORAGE LENGTH

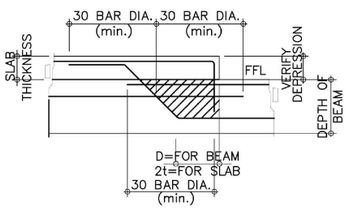
BAR SIZES (MM)	LAP SPLICES LENGTH		ANCHORAGE LENGTH (M)
	TYPE "A"	TYPE "B"	
ø10	0.40	0.30	0.60
ø12	0.45	0.35	0.60
ø16	0.61	0.40	0.60
ø20	0.76	0.56	0.60
ø25	1.10	0.90	0.68
ø28	1.40	1.20	0.86
ø32	1.90	1.40	1.12
ø36	2.41	1.84	1.43

NOTES:
1. TYPE "A" BUNDLED BARS
   TYPE "B" INDIVIDUAL BARS
2. NOT MORE THAN 33% OF THE BARS SHALL BE SPLICED WITHIN THE REQUIRED LAP LENGTH

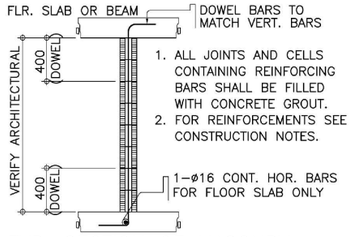
NOTES:
1. YIELD STRESS OF HOOPS = 40 KSI
2. D = USE MAXIMUM COLUMN DIMENSION, 1/6 CLEAR HEIGHT OR 18" (450mm) WHICHEVER IS GREATER.
3. NUMBER OF HOOP TIES SAME AS PER COLUMN TIES SCHEDULE.
4. ALL CONCRETE REINFORCEMENT DETAIL SHOULD BE DONE IN ACCORDANCE WITH ACI DETAILING MANUAL 1980 PUB SP-66



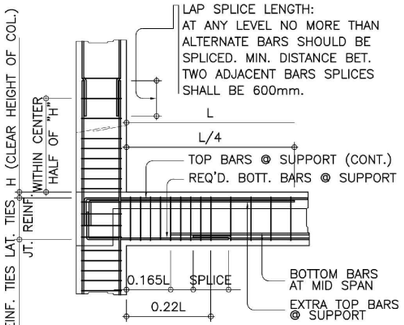
TYPICAL CONNECTION DETAIL OF R.C. WALL AT CORNERS



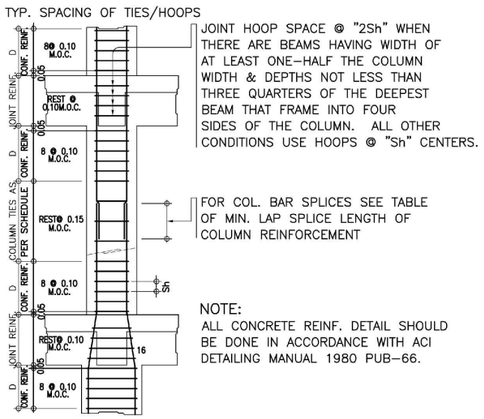
TYPICAL DETAIL FOR BEAM OR SLAB CHANGE SOFFIT



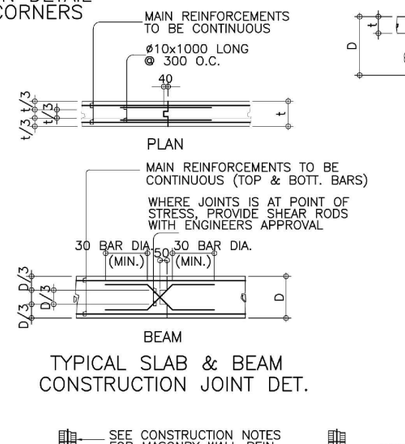
TYP. SECTION OF MASONRY PARTITION REINFORCEMENTS



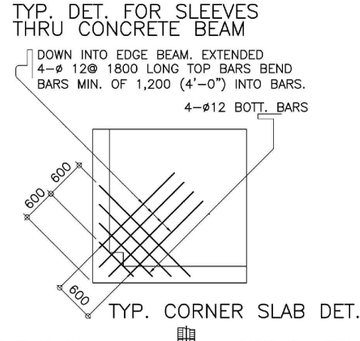
TYP. DETAIL OF COL. LAP SPLICE & EXT. GIRDER TO COL. CONNECT.



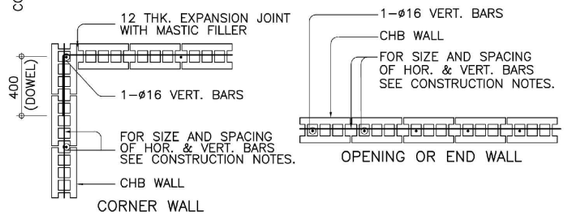
TYPICAL COLUMN ELEV. SHOWING DOWELS AND TIES SPACING

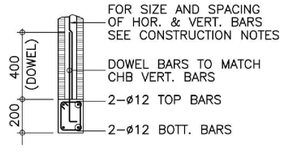


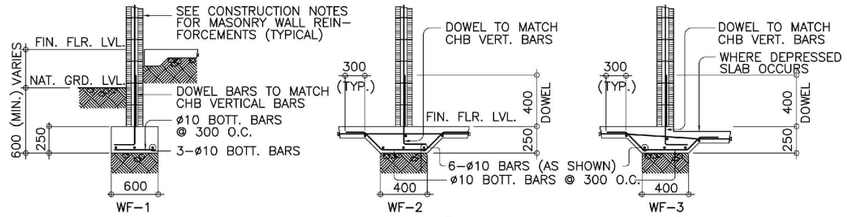
TYPICAL SLAB & BEAM CONSTRUCTION JOINT DET.



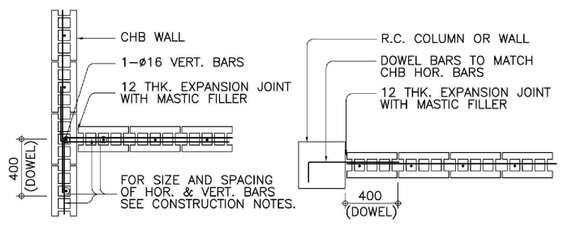
TYP. CORNER SLAB DET.



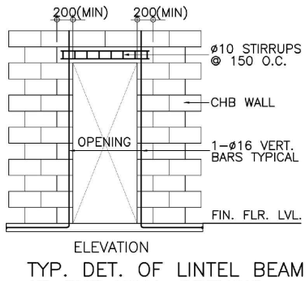




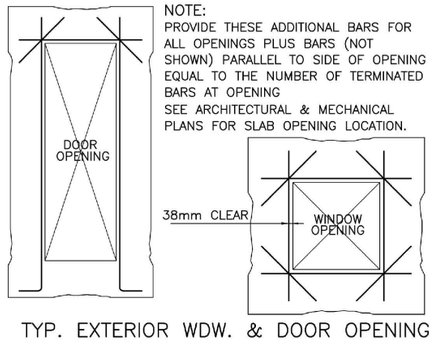
TYPICAL CHB FOOTING DETAILS (WHERE APPLICABLE)



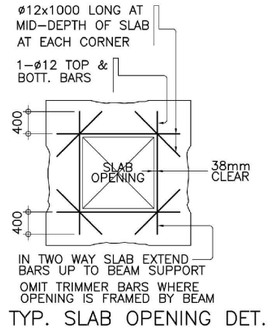
TYPICAL CONNECTION DETAIL OF MASONRY WALL



TYP. DET. OF LINTEL BEAM AT CHB WALL OPENING



TYP. EXTERIOR WDW. & DOOR OPENING



TYP. SLAB OPENING DET.

CONSTRUCTION NOTES

A. GENERAL
1. CONSTRUCTION NOTES AND TYPICAL DETAILS APPLY TO ALL DRAWINGS UNLESS OTHERWISE SHOWN OR NOTED MODIFY TYPICAL DETAILS AS DIRECTED TO MEET SPECIAL CONDITIONS.
2. SHOP DRAWINGS WITH ERECTION AND PLACING DIAGRAMS OF ALL STRUCTURAL STEELS, MISCELLANEOUS IRON, PRE-CAST CONCRETE ETC. SHALL BE SUBMITTED FOR ENGINEERS APPROVAL BEFORE FABRICATION.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE ALL WORK IS TO BEGIN CHECK WITH MECHANICAL AND ELECTRICAL CONTRACTORS FOR CONDUITS PIPE SLEEVES, ETC., TO BE EMBEDDED IN CONCRETE.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE SHORING & BRACINGS OF THE STRUCTURE FOR ALL LOADS THAT MAYBE IMPOSED DURING CONSTRUCTION.

B. CONCRETE & REINFORCEMENT
1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM WITH THE LATEST BUILDING CODE OF AMERICAN CONCRETE INSTITUTE (ACI-318).
2. ALL CONCRETE SHALL DEVELOP A MIN. COMPRESSIVE STRENGTH AT THE END OF TWENTY EIGHT (28) DAYS W/ CORRESPONDING MAXIMUM SIZE AGGREGATE & SLUMPS AS FOLLOWS.

LOCATION	28 DAYS STRENGTH	MAX. SIZE AGGREGATE	MAX. SLUMP
SUSPENDED SLABS, BEAMS	3000 PSI	3/4 IN. (19 MM)	4 IN. (100 MM)
COLUMNS, SHEARWALLS	3000 PSI	3/4 IN. (19 MM)	4 IN. (100 MM)
FTGS., FTG TIE BEAMS, R.C. WALLS	3000 PSI 3000 PSI	3/4 IN. (19 MM)	4 IN. (100 MM)
SLAB ON GRADE	2500 PSI	3/4 IN. (19 MM)	4 IN. (100 MM)

3. ALL REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 40 FOR DIAMETER 12 & SMALR. BARS & GRADE 60 FOR DIA. 16 & LARGER BARS. ALL BARS SHALL BE WELDABLE.
4. IN GENERAL THE LATEST EDITION OF ACI-315, MANUAL OF STANDARD PRACTICE DETAILING REINFORCED CONCRETE STRUCTURES SHALL BE ADHERED TO UNLESS OTHERWISE SHOWN OR NOTED.
5. MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS.
   SUSPENDED SLABS ---------- 3/4 IN. (19 MM)
   SLAB ON GRADE ---------- 1 1/2 IN. (38 MM)
   WALLS ABOVE GRADE ---------- 1 IN. (25 MM)
   BEAM STIRRUPS AND COLUMN TIES ---------- 1 1/2 IN. (38 MM)
   WHERE CONCRETE IS EXPOSED TO EARTH BUT POURED AGAINST FORMS ---------- 2 IN. (50 MM)
   WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH ---------- 3 IN. (75 MM)
6. SPLICES SHALL BE SECURELY WIRED TOGETHER & SHALL LAP OR EXTEND IN ACCORDANCE W/ TABLE 1 (TABLE OF LAP SPLICE & ANCHORAGE LENGTH) UNLESS OTHERWISE SHOWN ON DRAWINGS, SPLICES SHALL BE STAGGERED WHENEVER POSSIBLE.
7. ALL ANCHOR BOLTS, DOWELS, AND OTHER INSERTS, SHALL BE PROPERLY POSITIONED & SECURED IN PLACE PRIOR TO PLACING OF CONCRETE.
8. CONTRACTOR SHALL NOTE AND PROVIDE ALL MISCELLANEOUS CURBS, SILLS, STOOLS, EQUIPMENT'S AND MECHANICAL BASES THAT ARE REQUIRED BY THE ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS.
9. ALL CONCRETE SHALL BE KEPT MOIST FOR A MINIMUM OF SEVEN CONSECUTIVE DAYS IMMEDIATELY AFTER POURING BY THE USE OF WET BURLAP FOG SPRAYING, CURING COMPOUNDS OR OTHER APPROVED METHODS.
10. STRIPPING OF FORMS AND SHORES:
    FOUNDATION ---------- 24 HRS.
    SUSPENDED SLAB EXCEPT WHEN ADDITIONAL LOADS ARE IMPOSED ---------- 14 DAYS
    WALLS ---------- 18 HRS.
    BEAMS ---------- 14 DAYS

C. MASONRY AND CONCRETE BLOCKS
1. ALL NON-LOAD BEARING TYPE CONCRETE BLOCKS SHALL HAVE A UNIT WEIGHT NOT TO EXCEED 80 PCF. FOR LOAD BEARING TYPE, TYPE CONCRETE BLOCKS, A MINIMUM COMPRESSIVE STRENGTH OF 6.90 MPA SHALL BE DEVELOPED.
2. PROVIDE 1-ø16 VERTICAL BARS AT CORNERS, INTERSECTIONS, END OF WALLS AND EACH SIDE OF OPENINGS.
3. LINTEL BEAMS SHALL BEAR AT LEAST 8 INCHES (200 MM) ON EACH SIDE OF MASONRY WALL OPENING.
4. WALL REINFORCEMENTS SHALL BE AS FOLLOWS.

WALL THICKNESS	VERTICAL REINFORCEMENT	HORIZONTAL REINFORCEMENT
8 IN. (200 MM)	ø12 @ 400 MM	ø10 @ 600 MM
6 IN. (150 MM)	ø12 @ 400 MM	ø12 @ 600 MM
4 IN. (100 MM)	ø10 @ 400 MM	ø10 @ 600 MM

5. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 30 BAR DIAMETERS WHERE SPLICE DOWELS FROM FOOTING OR SLABS SHALL EXTEND INTO THE BLOCK WALL A MINIMUM OF 30 BAR DIAMETERS, AND DOWELS TO MATCH.
6. ALL CELLS CONTAINING REINFORCING BARS OR INSERTS SHALL BE SOLIDLY FILLED WITH CONCRETE GROUT (REFER TO SPECIFICATIONS).

D. FOUNDATION
1. ASSUME SOIL BEARING CAPACITY OF 90 KPA(1800PSF)

STRUCTURAL NOTES

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
PHILIPPINE RURAL DEVELOPMENT PROJECT
PROVINCE OF QUEZON

PROJECT TITLE :
CONSTRUCTION OF
GEN. LUNA PINEAPPLE PROCESSING CENTER
PROJECT LOCATION : BRGY. NIEVA GEN. LUNA, QUEZON

PREPARED AND SUBMITTED BY :
DANILO S. DERIQUITO, JR.
ARCHITECT

REVIEWED BY:
ROMARICO A. ALLAREY
ASSISTANT PROVINCIAL ENGINEER

RECOMMENDING APPROVAL
JOHNNY A. PASATIEMPO
PROVINCIAL ENGINEER

APPROVED :
HON. DANILO E. SUAREZ
GOVERNOR

SHEET CONTENT:
CAD BY:
DATE:
SHEET NO. S-1-4-9-17
STRUCTURAL