

GENERAL NOTES

- CONSTRUCTION FROM THESE DRAWINGS SHALL NOT COMMENCE UNTIL THEY ARE APPROVED BY THE RELEVANT AUTHORITIES.
- THESE DRAWINGS AND NOTES SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS, REPORTS, SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONSTRUCTION. ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- DIMENSIONS SHALL NOT BE OBTAINED FROM THE STRUCTURAL DRAWINGS BY WAY OF SCALING THE STRUCTURAL DRAWINGS. WALL, PIER, AND COLUMN THICKNESS AND STRUCTURAL MEMBER SIZES SHOWN ON THESE DRAWINGS SHALL TAKE PRECEDENCE OVER THESE SHOWN ON THE ARCHITECT'S DRAWINGS. THE BUILDER SHALL VERIFY ALL DIMENSIONS ON SITE AND BE RESPONSIBLE FOR THE SETTING OUT OF THE BUILDING
- ANY DISCREPANCIES/ SUBSTITUTION IN THESE DOCUMENTS SHALL BE REFERRED TO THE ENGINEER FOR DECISION BEFORE PROCEEDING.
- STRUCTURAL ENGINEERING DRAWINGS ARE ISSUED ON THE UNDERSTANDING THAT THE BUILDER MAINTAINS IN FORCE, PROPER AND ADEQUATE CONTRACT WORKS INSURANCE AND PUBLIC LIABILITY INSURANCE DURING THE FULL COURSE OF THE CONSTRUCTION, AND/OR ANY MAINTENANCE PERIOD. CLAIMS OF DAMAGE TO ANY ADJACENT PROPERTY OF BUILDING IS NOT THE RESPONSIBILITY OF THE ENGINEER.
- ELEMENTS INDICATED ON THESE DRAWINGS ARE SHOWN IN THEIR INTENDED COMPLETE STATE. DURING CONSTRUCTION, THE BUILDING SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED AT ANY TIME. TEMPORARY WORKS INCLUDING BRACING, PROPPING AND ANY OTHER REQUIREMENTS SHALL BE PROVIDED BY THE BUILDER AS REQUIRED. THE BUILDER SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE WORKS DURING CONSTRUCTION.
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITIONS OF THE BCA AND THERE-BY LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITY.
- THE SECTIONS / DETAILS ON THESE DRAWINGS ARE INTENDED TO GIVE THE STRUCTURAL SPECIFICATIONS ONLY.
- THESE DOCUMENTS ARE SIGNED SUBJECT TO CERTIFICATE OF INSPECTION BEING ISSUED BY HALINA CONSULTING. ALL PIERS, SLAB AND FOOTING REINFORCEMENT SHALL BE INSPECTED BY THE ENGINEER OR THE CERTIFIER PRIOR TO THE POURING OF CONCRETE. NOTICE SHALL BE GIVEN AT LEAST 24 HOURS BEFORE ALL THE REQUIRED INSPECTION.

SITE CLEARANCE & PREPARATION

- ALL TOPSOIL, ORGANIC AND DELETERIOUS MATERIAL IS TO BE STRIPPED FROM THE BUILDING SITE.
- ANY FILL USED IN THE CONSTRUCTION OF A SLAB EXCEPT WHERE THE SLAB IS SUSPENDED SHALL CONSIST OF "ROLLED OR CONTROLLED FILL". FILL MATERIAL SHALL BE PLACED IN LAYERS OF 150mm MAXIMUM IN ACCORDANCE WITH AS2870 AND THOROUGHLY COMPACTED USING AN EXCAVATOR UNLESS THIS FILL IS COMPACTED IN ACCORDANCE WITH AS2870. IT IS NOT ADEQUATE FOR THE LONG TERM STRUCTURAL SUPPORT TO THE SLAB/ FOOTING SYSTEM AND PIERS MUST BE CONSTRUCTED.
- TO BE ADEQUATE TO SUPPORT THE SLAB/FOOTING SYSTEM, CONTROLLED FILL SHALL BE PLACED, TESTED AND CERTIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER AS DEFINED IN AS3798.
- THE FILL IS TO EXTEND PAST THE EDGE OF THE SLAB BY AT LEAST ONE METRE AND SHALL BE BATTERED OFF NOT STEEPER THAN TWO HORIZONTAL TO ONE (VERTICAL) OR BY A SUITABLE RETAINING STRUCTURE PROVIDED BY THE OWNER OF BUILDER.
- THE FINISHED LEVELS SHALL ALLOW FOR THE MAIN SLAB TO BE AT LEAST 150mm ABOVE THE ADJACENT GROUND.
- SURFACE DRAINAGE SHALL BE PROVIDED AS REQUIRED TO AVOID THE POSSIBILITY OF WATER PONDING NEAR THE SLAB. A FALL OF 50mm OVER A DISTANCE OF ONE METRE AWAY FROM THE SLAB IS CONSIDERED ADEQUATE. SUBSOIL DRAINS (AGRICULTURAL DRAINS) ARE CONSIDERED DESIRABLE BUT SHOULD BE AVOIDED BEING LOCATED DIRECTLY ADJACENT TO THE FOOTING.
- ANY TREES LOCATED WITHIN 2 OF THEIR MATURE HEIGHT OF THE HOUSE ARE TO BE REMOVED AND BACKFILL WITH THE SUITABLE MATERIAL INTO THE SOFT SPOTS. COMPACT THE BACKFILL SOIL AS INDICATED ABOVE.
- CONTROLLED FILL SHALL BE CLEAN GRANULAR MATERIAL (FREE OF CLAY) COMPACTED TO 95% STANDARD COMPACTION IN LAYERS NO GREATER THAN 150

CONCRETE NOTES

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600 AND AS2870.
- UNLESS NOTED OTHERWISE, QUALITY OF CONCRETE SHALL BE USED AS FOLLOWS:

ELEMENT	SLUMP	MAX. AGG. SIZE (mm)	CEMENT TYPE	CONC. GRADE	EXPOSURE CLASSIFICATION	CONCRETE COVER
PIERS	80	20	A	N25	A1	50 MIN

- ALL CONCRETE SHALL BE VIBRATED MECHANICALLY DURING POURING.

STRUCTURAL STEELWORK NOTES

- ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS4100-2020.
- BUILDERS SHALL PREPARE WORKSHOP DRAWINGS AND SHALL SUBMIT THREE COPIES OF EACH DRAWINGS FOR CONDITIONAL APPROVAL. FABRICATION SHALL NOT COMMENCE UNTIL THIS APPROVAL HAS BEEN GIVEN.
- BOLTS NOT DESIGNATED 8.8/7F AND 8.8/7B SHALL BE HEIGHT STRENGTH STEEL BOLTS TO AS1252-1996, FULLY TENSIONED IN ACCORDANCE WITH AS4100-2020.
- THE ENGINEER IS TO INSPECT AND APPROVE PIERS BEFORE THE POURING OF CONCRETE.
- ALL WELDS SHALL BE GP (GENERAL PURPOSE) IN ACCORDANCE WITH AS1554-2011, USE NOMINAL TENSILE STRENGTH F_u=430MPa OR HIGHER TO AS4100-2020 UNLESS NOTED OTHERWISE.
- STEELWORK CONNECTIONS SHALL BE IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS UNLESS NOTED OTHERWISE:
 - ALL WELDS SHALL BE 6MM CONTINUOUS FILLET WELD ALL AROUND (6CFW).
 - ALL BOLTS SHALL BE M20-8.8/S BOLTS, WITH A MINIMUM OF 2 BOLTS PER CONNECTION.
 - ALL GUSSET AND CLEAT PLATE SHALL BE 10MM THICK.
- THE ENDS OF ALL TUBULAR MEMBERS ARE TO BE SEALED WITH NOMINAL THICKNESS PLATE AND CONTINUOUS FILLET WELD UNLESS OTHERWISE SHOWN. SUBSTITUTIONS FOR STEEL SECTIONS SHOWN ON DRAWINGS NOT BE MADE WITHOUT APPROVAL OF THE ENGINEER.
- AFTER PLUMBING AND LEVELING OF COLUMNS AND MULLIONS, INSTALL A PAD OF NON-SHRINKAGE GROUT BETWEEN THE TOP OF THE FOOTING AND THE UNDERSIDE OF THE PLATE AND STRIKE OFF 45°.
- CAMBER TO BE AS NOTED ON THE DRAWINGS.
- MEMBERS ENCASED IN CONCRETE, FIRE SPRAYED OR HSTF BOLTED CONNECTIONS MUST NOT BE PAINTED.
- CONCRETE ENCASE STEELWORK SHALL BE WRAPPED WITH SL62 MESH, UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL PROVIDE AND LEAVE IN PLACE UNTIL PERMANENT BRACING ELEMENTS ARE CONSTRUCTED SUCH TEMPORARY BRACING AS IS NECESSARY TO STABILIZE THE STRUCTURE DURING ERECTION.
- BEFORE FABRICATION IS COMMENCED, THE CONTRACTOR SHALL SUBMIT COPIES OF THE SHOP DRAWINGS TO THE ENGINEER AND CLIENT FOR REVIEW. REVIEW DOES NOT INCLUDE CHECKING OF DIMENSIONS.

STRUCTURAL STEELWORK DURABILITY NOTES

- ALL STEELWORK WILL BE PROTECTED ACCORDANCE WITH AS2312 AND PER PER CLIENT'S REQUIREMENTS

PIERS

- THE ENGINEER IS TO INSPECT AND APPROVE PIERS BEFORE THE POURING OF CONCRETE.
- UNLESS NOTED OTHERWISE, MINIMUM PIER DEPTH IS 600mm BELOW FOOTING TRENCH AND WHEREVER NOMINATED SHOULD BE SOCKETED A MINIMUM 300mm INTO STIFF CLAY, 200mm INTO SHALE OR 100mm INTO ROCK DEPENDING ON THE BEARING CAPACITY.
- ALL PIER HOLES SHALL BE CLEANED AND DE-WATERED PRIOR TO THE POURING OF CONCRETE.
- ALL PIERS SHALL BE POURED SEPARATELY TO RAFT SLAB.
- IF ANY OF THE FOOTING BEAMS ENCOUNTER ROCK OR SHALE, THEN ALL BEAMS AND LOAD BEARING SPINE BEAMS SHALL BE PIERED TO ROCK OR SHALE. IF PARTIALLY PIERED TO ROCK THEN BRICK JOINTS ARE TO BE PROVIDED AT THE ROCK/ NON-ROCK INTERFACE.
- PIER DIAMETER, PIER LENGTH AND LOCATIONS ARE SHOWN ON PLAN. ONLY WITH THE PRIOR APPROVAL OF THE ENGINEER MAY THE PIER DIAMETER BE VARIED AS PER THE "PIER DIAMETER TABLE" BELOW.

GEO-TECHNICAL NOTES

- ALLOWABLE BEARING CAPACITY OF THE SOIL=100KPa MIN (IE. MEDIUM GRAVEL, STIFF CLAY OR STIFF SILTY CLAY). FOR SAND, FILLED SITES OR SOFT CLAY, PROFESSIONAL ADVICE SHOULD BE SOUGHT.
- PIER FOOTING DESIGN SUITABLE FOR CLASS "M, M-D" OR CLASS "H1, H2, H1-D" OR "H2-D" AS PER AS-2870-2011. IF SITE IS CLASS "E, E-D", THEN PIER DESIGN IS SUITABLE PROVIDED PIER DEPTH IS 2100MM MIN. FOR CLASS "H1, H1-D, H2-D" AND "E, E-D" SITES, SLABS SHOULD BE ISOLATED FROM PIERS AND SITE MAINTENANCE SHALL COMPLY WITH AS 2870-2011 RESIDENTIAL SLABS AND FOOTING SECTION 6.6. FOR CLASS "P" SITES, SPECIFIC DESIGN IS REQUIRED BY A PROFESSIONAL ENGINEER.
- FOR 'H' AND 'E' CLASS SITES, ALL PENETRATIONS THROUGH FOOTINGS AND EDGE BEAMS SHALL BE SLEAVED TO ALLOW MINIMUM 20mm ('H' CLASS) AND 40mm ('E' CLASS) MOVEMENT AS PER AS2870. PLUMBING AND DRAINAGE SERVICES ARE TO BE FITTED WITH FLEXIBLE CONNECTIONS AS PER AS2870.

LOADINGS

- SUPERIMPOSED LOADS ON FRAME ELEMENTS ARE IN ACCORDANCE WITH AS1170.1-2002 AND AS1170.2-2021.
- WIND LOADS: REGION A, B OR C TO AS1170.2-2021 AS NOTED IN SHED DRAWING TITLE BLOCK. TERRAIN CATEGORY 2 OR 3 AS NOTED IN TITLE BLOCK. STRUCTURAL IMPORTANCE LEVEL 2, M1=M6=1.0
- INTERNAL PRESSURE COEFFICIENT TO AS1170.2-2011.
- ROOF DEAD LOADS: SELF WEIGHT SHEETING, LIGHT WEIGHT INSULATION, PURLINS AND FRAME ONLY.
- ROOF LIVE LOADS: 1.8/A+0.12kPa (MIN 0.25kPa) TO AS1170.2-2002 OR 1.1kN POINT LOAD AS PER AS1170.1-2002 FOR MAINTENANCE LOAD ONLY.

STRUCTURAL DESIGN CERTIFICATION

HALINA ENGINEERS
ACN 693426414

REF. #	965-S00_B	
DATE	27/08/2024	

STRUCTURE: **STEELWORK**
 PROJECT: **STATE WIDE SHEDS**
 REGISTERED ENGINEER: **NER 418879Z ECG4096 (M.C.) RPEC02485 (OLD)**

A3

REV.	DATE	DESCRIPTION	APP.
B	FEB 2024	ISSUED FOR APPROVAL	HN
A	OCT 2020	ISSUED FOR APPROVAL	HN
			APP.

TITLE:	STEEL PORTAL FRAMED BUILDING
GENERAL NOTES	Region A -Category 2 FE, R/O OR 3-SIDED UB Columns -Parallel Chord Truss

Address.....	Drawing No.....
For..... UB Columns -Parallel Chord Truss	

DRAWING No.

STATE WIDE SHEDS

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955/00/B