3.5 Engineering

Structural Engineering

	Design Criteria
	Shared via email during gate review, signed.
	Concept Design
	Not available in GR Folder.
	AFC Drawings
	Drawing number : 'TNPA/2020-SE-001':
	Confirmation required on whether bearing capacity of the in-situ material (approximately 1.5 metre below ground floor level) is adequate to sustain the applied bearing pressures - Will 'Imported engineered layerworks' be required below bases?.
	'Section E': Support details for the 'mentis' grating (over trenches) have not been shown (will a 'seat' be created within the concrete slab? , will an additional skin of brickwork be required within trenches?)
	Technical specification for the 'Mentis' grating not provided.
	'Section E' : The portions of floor slab that bear over trench walls may need to be thickened – this will facilitate a 'seat' to be created within the slab for grating support.
	'Section E': No 'bondbreaker'/'slip-joint' shown between underside of floor slab and top of brick wall.
	Drawing Number : 'TNPA/2020-SE-002':
	'Engineered Layerworks' (if any) & compaction specifications below floors slabs have not been indicated.
	Extent of 'Mentis' Grating not shown.
	Drawing Number : 'TNPA/2020-SE-003'
	'Section E' : specification for 'compressible' filler not provided.
	General
	Architectural Dimension 9060 inconsistent with Structure's 9026
	Dimension for Aprons and ramps are missing
	Architectural cable trench layout varies from that of Structure's
	Cable entry and culverts interface are missing/incorrect
	Cable Trench Cover & Detail missing or not referred
	Cavity Wall details missing
	Roof Detail missing
	Cable Trench - Culvert interface detail is missing
	Cable Trench Cover & Detail missing or not referred
	Cavity Wall details missing
	Roof Detail missing
	Cable Trench - Culvert interface detail is missing
	AFC Approvals
	User: Not available
	Sponsor: Not available
	Municipality: Not done

ALL REPORTS SUBMITTED PREVIOUSLY TO TNPA

YES! THE BEARING PRESSURE IS ADEQUATE AT 1.5m BGFL . IMPORTED ENGINEERED LAYERWORKS ARE NOT REQUIRED. BASE OF FOUNDATION EXCAVATIONS COMPATED TO 93% MODASSHTO DENSITY AT -1% TO 2% OMC

YES A 'SEAT' (50x50x5 ANGLE WITH FISHTAIL ANCHORS) WILL BE CREATED WITHIN THE SLAB. NO ADDITIONAL BRICKWORK. A SHELF 50x50x5 ANGLE WITH TABS @ 450mm CRS TO WALLS
REFER TO SECTION B ,DETAIL 1 & 2

SPECIFICATIONS PROVIDED REFER TO SECTION B, DETAIL 1 & 2

NOTE ADDED

NOTES FOR LAYERWORKS ADDED

EXTENT OF GRATING SHOWN USING HATCH PATTERN

SPECIFICATIONS PROVIDED

DIMENSIONS ADDED

DIMENSIONS CORDINATED

DRAWINGS COORDINATED

DETAILS STILL OUTSTANDING . TO BE FINALISED ONCE CABLE ROUTE DETAILS ARE FINALISED

COMMENTS REPEATED

CABLE TRENCH COVER DETAILS ADDED TO DWG TNPA/2020-SE-001

CAVITY WALL & ROOF DETAILS ADDED & UPDATED