

GENERAL NOTES

- 1-For civil work design criteria see document No. GGM CF10C0 001.
- 2-Allowable bearing capacity for foundation design is per soil consultant's recommendation, based on soil condition encountered in borings as described in soil reports. Where ever other soil conditions encountered during construction, corrective measures shall be taken by the contractor with the approval of the client representative.
- 3-Based on above mentioned soil investigation report, the cement should be Portland cement type (II) and comply with Iranian concrete code A.B.A D.I 101 or the equivalent ASTM C150 requirements.
- 4-The max size of coarse aggregate for the concrete should not be more than 38mm.
- 5-All of the structural drawings shall be read in conjunction with relevant , mechanical, electrical, equipment, arrangement and manufacturers' drawings by contractor.
- 6-All dimensions shall be checked by the contractor prior to construction.
- 7-All dimensions & sizes are in millimeters. All coordinates & elevations are in meters. Length of bars in BBS are in meter.
- 8-Deformed reinforcement used for main bars:
- 9- shall have modulus of elasticity of 2,100,000 kg/cm², and yield point stress of not less than 4000kg/cm² (AllI) (elongation Min 14%)
- 10- Deformed reinforcements used for stirrups:
- 11- shall have modulus of elasticity of 2,100,000 kg/cm², and yield point stress of not less than 4000kg/cm² (AllI) (elongation Min 14%)
- 12-For reinforced concrete use concrete class C25 (f'c=250kg/cm²) with at least 350kg cement per m³. For lean concrete use concrete class C10, with 150kg cement per m³.
- 13- Minimum permissible slump for concrete is 75mm
- 14- Maximum ratio of water to cement (w/c) should be 0.45
- 15- Top bars of foundations should be supported with approved wire chairs.
- 16- Diameter of bend measured on the inside of the bar for main bars and stirrups shall be as follows:
- 17- main bars: FOR T10 TO T28 (6 times of bar diameters)
FOR T28 TO T36 (8 times of bar diameters)
- 18- stirrups: 4 times of bar diameters
- 19- Minimum concrete cover to reinforcement, if not mentioned in drawings, shall be as follows:
- 20- 75mm for Foundations
50mm for Pedestals
- 21- Bars shall be supported in forms with sand cement blocks or plastic supports.
- 22- Unless otherwise shown, foundations & slabs shall be concreted with no construction joints. Any stop in concrete work shall have prior approval of the client representative.
- 23- All bars shall be bent cold unless otherwise permitted by client representative. No Bars partially embedded in concrete shall be field bent, except as shown on the plans or permitted by the client representative.
- 24- During the erection of formwork, appropriate forms shall be provided at the locations of holes or openings required for piping, electrical wiring, anchorage bolts and so on in order to prevent any subsequent drilling and demolition after the completion of construction. The location of holes shall be determined on the basis of mechanical utility drawings.
- 25- Length of overlaps are shown on the drawings. If not shown on drawings, bars overlap splice length must be at least equal to the following table:

BARS OVERLAP SPLICE & DEVELOPMENT LENGTH:

MINIMUM SPLICE LENGTH (mm)		MINIMUM DEVELOPMENT LENGTH (mm)	
Rebar Diameter	Top & Facing Bars*	Bottom Bars	Top & Facing Bars*
T10	650	500	500
T12	750	600	600
T16	1000	750	600
T20	1250	950	750
T25	1950	1500	1500
T28	2150	1650	1300
T32	2450	1900	1900

* Top and facing bars are horizontal bars so placed that more than 300 mm of fresh concrete is cast in the member below the splice.

† All values are according to S300 for f'c= 25 Mpa & f'y=400 Mpa

Note: Bars in one layer (all top bars, all facing bars or all bottom bars) are not permitted to be spliced at one location but 50% of bars in each layer with length exceeding 12m may be spliced alternately.

- 18-Any changes in the number and diameter of bars, shall be with permission of client representative.
- 19- In such changes, the limitations of design codes must be considered.
- 20-All levels are to top of concrete, unless otherwise noted.
- 21-The concrete Work in general shall be constructed in accordance with the current issue including amendments of the Iranian concrete code (ABA) and above specification or the following standard if required : ACI-318 for Concrete Works and ASTM, management organization of Iran Bulletin No. 55.
- 22-An admixture is defined as a constituent material of concrete other than cementitious materials, aggregates and water.
- 23-(a)The admixtures shall comply and be used in accordance with the supplier's recommendation and client representatives verification. The admixtures shall comply with the following standards: Iranian concrete code (A.B.A), ACI-318 for Concrete Works, Iran Bulletin No. 55., ASTM C260 AND ASTM C494.
- 24-(b)The use of admixtures shall only be permitted subject to the Contractor carrying out prior testing on trial mixes in accordance with abovementioned specifications.
- 25-(c)The use of any admixture containing chlorides is prohibited.
- 26-(d)The Contractor shall submit relevant test data which demonstrates that the properties of concrete composed of the admixture meets the requirements of abovementioned specification.
- 27-Approved non-sinkage grout shall be used for all setting column base plates.
- 28-The contractor shall prepare a trial mix in the presence of client representative and in accordance with the approved concrete specifications prior to commencing any field work.
- 29-24-Concrete strength and workability test should be carried out according to Iranian concrete code (ABA).
- 30-25-Excavated soil adjacent to foundations must be filled and compacted with suitable soil mixture.
- 31-26-The top surface of foundation must be inclined toward the outer part with a 0.4% slope.
- 32-27-Soil compaction should be obtained more than 95% of the maximum dry density in accordance with modified AASHTO and all unsuitable soil shall be replaced with lean concrete after checking with client representative.
- 33-28-Ground level (= GL ±0.00) is equal to ASL +1699.900

GENERAL SYMBOLS

TITLE SYMBOLS

REF. SYMBOLS

PLAN

PLAN

SCALE
TEXT OR ADDRESS

SECTION

SECTION

SCALE
TEXT OR ADDRESS

ELEVATION

ELEVATION

SCALE
TEXT OR ADDRESS

DETAIL

DETAIL

SCALE
TEXT OR ADDRESS

CONTINUATION

MATCH LINE

DENOTES DRAWING NUMBER ON WHICH DETAIL SECTION ETC. IS DRAWING

DENOTES SECTION NUMBER (SMALL BE USED FOR SECTION ONLY)

DENOTES DETAIL SECTION ETC. NUMBER

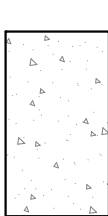
CIRCLE (FOR SECTION ONLY)

±0.000

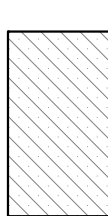
ELEVATION, LEVEL – PLAN

±0.000

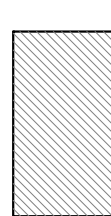
ELEVATION, LEVEL – PROFILE



MAIN CONCRETE



LEAN CONCRETE



STEEL PLATE

ABBREVIATIONS

A.S.L. :	Above Sea Level	PED. :	Pedestal
ADD. :	Additional Bar	S.O.G. :	Slab On Grade
B.P.L. :	Base Plate	T.O. :	Top Of
B.O. :	Bottom Of	T.O.C. :	Top Of Concrete
COL. :	Column	T.O.S. :	Top Of Steel
CONC. :	Concrete	T :	Deformed Bar
DET. :	Detail	TOP :	Top
DWG. :	Drawings	BOT :	Bottom
F. :	Foundation	T/B :	Top & Bottom

DRAWINGS LIST

CIVIL DRAWING FOR PURGE GAS TANK

DRAWING TITLE		DWG. NO.	REV.	DATE
SN.				
1	GENERAL NOTES FOR FOUNDATION & DRAWINGS LIST	KGMM CB 36 C2 001	Z	MAY 2019
2	FOUNDATION FORMWORK & ANCHOR BOLTS ARRANGEMENT (PED.1)	KGMM CB 36 C2 021	Z	MAY 2019
3	FOUNDATION & PED. REINFORCEMENT & ANCHOR BOLT DETAILS	KGMM CB 36 C2 041	Z	MAY 2019
4	SLAB ON GRADE	KGMM CB 36 C2 049	Z	MAY 2019

3		AS BUILT	ASB	BARMOON	TAMMO	BARMOON
2	14/07/2019	ISSUED FOR CONSTRUCTION	IFC	SABOON	MASOUM	MASOUM
1	01/07/2014	DESCRIPTION	PURPOSE OF ISSUE	PREPARE	CHECK	APPROVE
Project: KOWSAR GISD MEGA MODULE PROJECT						
Client: شرکت گسترش و توسعه گاز ایران						
Contractor: مینس و متالز تکنالوجیکال انجینیرینگ کو. لیمیتد						
Client's Project: Project Code: 7-2 Area Code: 1001 Plant Group: 7 Equipment Code: TA Document Type: 04 Est. Disign: C Serial No. 001						
SIGNATURE: DATE: 01/07/2014 designation: CIVIL DRAWING CORE AREA						
DESIGN: SIGNATURE: DATE: 01/07/2014 drawing-No: GENERAL NOTE FOR FOUNDATION & FORMWORK LIST						
PREPARED: SABOON JUL/2014 PURGE GAS TANK SCALE: REV.: AS SHOWN						
CHECKED: MASOUM JUL/2014 KGMM CB 36 C2 001 SIZE: SHEET: Z						
APPROVED: BARMOON JUL/2014 Conf. & PROJ. NO 92-5499						