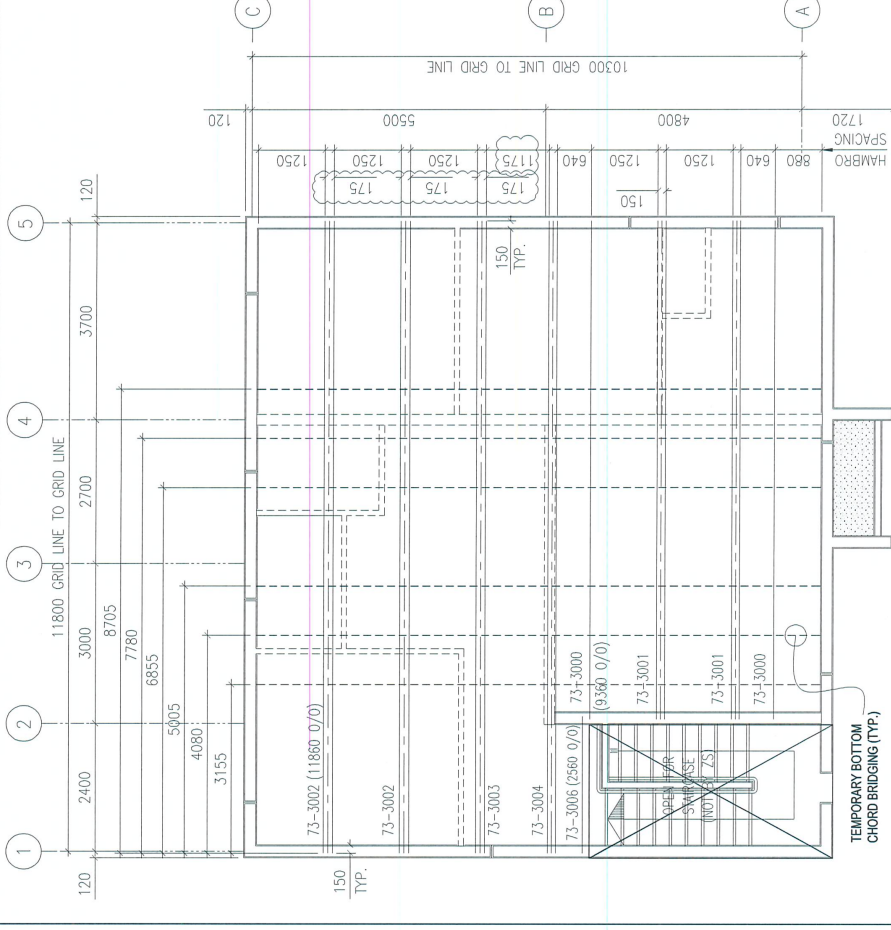


**REJECTED**  
**REVISIT**  
**RESUBMIT**  
**RESUBMIT**

**FURNISH AS SUBMITTED**  
**OR REVISE AND RESUBMIT**  
**OR FURNISH AS CORRECTED**  
**OR FURNISH AS SUBMITTED**

Connections or comments made on the shop drawings do not relieve the contractor from compliance with contract documents. This review is for general compliance with the information contained within the contract documents only. The contractor is responsible for confirming all quantities and dimensions, selecting fabrication processes and techniques of construction, coordination with other trades and performing the work in a safe and satisfactory manner.

BRUCE E. DEMAREE, P.E.  
 DATE: 4/14/17 BY: Bruce Kizer



MAXIMUM - ROLL BARS - SPACING

SLAB THICKNESS	ROLL BARS SPACING
64 to 89 (2' 1 1/2" to 3' 1 1/2")	5.33 C/C (21" C/C)
95 to 102 (3' 3/4" to 4')	5.33 C/C ** (21" C/C)
108 to 152 (4' 1/4" to 6')	3.56 C/C (14" C/C)
158 & MORE (6' 1/4" & MORE)	1.78 C/C (7" C/C)

\*\* PLYWOOD 1/2" IF IT IS LESS THAN 1/2". USE THE SPACING 14"/C/C

FIRST FLOOR LOAD TABLE

Live Load	= 1.92 KN/m <sup>2</sup>
Dead Load	= 3.60 KN/m <sup>2</sup> + SW
Collateral load	= 0.00 KN/m <sup>2</sup>
Finishing load	= 0.00 KN/m <sup>2</sup>
Total Load	= 5.52 KN/m <sup>2</sup> + SW
Partition Load:	11.40 Kn/m

NOTES:  
 SW - SELF WEIGHT OF HAMBROS.  
 REVISIONS TO THE LOADS MENTIONED ABOVE.  
 ALL OTHERS TO BE CONFIRMED BY THE DESIGN OF HAMBROS. (ANY ADDITIONAL LOAD IS SUBJECT TO MODIFICATION & PRICE CHANGE)

REACTIONS (KN)

HAMBRO MARK	LEFT	RIGHT
73-3000	V1	V2
73-3001	33	44
73-3002	52	88
73-3003	92	94
73-3004	102	102
73-3006	76	74
73-3008	16	16

IMPORTANT NOTE:  
 1) RIGID MASONRY WALL ACCORDING TO THE STRUCTURAL DRAWINGS (NOT BY ZS).  
 2) REFER TO STRUCTURAL DRAWINGS FOR ALL DETAILS REGARDING THE SLAB/WALL CONNECTION.

GENERAL NOTES:  
 1. 73-300X - DENOTES HAMBRO JOIST MARK  
 2. .... - DENOTES TEMPORARY BOTTOM CHORD BRIDGING  
 3. ALL PART MARKS REPRESENTS D500 SINGLE HAMBRO JOIST UNO.  
 4. DENOTES DOUBLE HAMBRO JOIST (73-3001,3002,3003,3004)

GENERAL NOTES  
 1. No construction load shall be placed within a bay until 4 consecutive joist have been laterally braced with all roll bars and form boards in position.  
 2. CAUTION - bundles of plywood should not be placed on joist system, but rather on supporting walls or beams.  
 3. Construction joists shall not be made parallel to and 150 mm within of top chord.  
 4. Installation shall be in accordance with the Manufacturer's installation manual and the latest HAMBRO ERECTION MANUAL BROCHURE and drawing ED-0300.  
 5. All top chord Z-sections must face the same direction for proper installation of plywood forms. Meas shall extend 100 mm minimum over bearing members.  
 6. In areas where slab is thickened, roll bar spacing shall be decreased accordingly.

DESIGN NOTES  
 1. THE DESIGN OF THE COMPONENTS SHOWN ON THESE DRAWINGS IS IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL BUILDING CODE, 1994 EDITION, SUBSECTION 4.3.4.  
 2. HAMBRO ACCEPTS RESPONSIBILITY ONLY FOR THE DESIGN, FABRICATION AND PERFORMANCE OF THE COMPONENTS SHOWN ON THESE DRAWINGS. HAMBRO IS NOT RESPONSIBLE FOR ANY ERRORS, OMISSIONS OR DAMAGES INCURRED IN THE ERECTION OF THE COMPONENTS SHOWN ON THESE DRAWINGS. NOR FOR INSPECTION OF ERECTED COMPONENTS TO ASCERTAIN SAME.  
 ADJUST INSULATION  
 -direction of TOP CHORD: It is necessary that all top chord members be protected with a section of HAMBRO JOIST. The same direction as the top chord members. The top chord forms shall not be properly (like placed) forms will be too wide or too narrow to seal the joint spacing).  
 -beaming : It is important to make sure that the joist shoes are placed properly on the supporting walls or beams. The joists should be centered so there is equal bearing for the shoes. The minimum bearing on masonry and wood support is 3' 1/2". The minimum bearing on structural steel is 2' 1/2", unless noted otherwise.  
 REDUCED BEARING COULD PRESENT A SAFETY HAZARD. Be sure the minimum joist is installed in the bay shall be shown on the drawings. The contractor shall be responsible for the installation of top bearing joist, each joist shall be adequately braced with the Rubber before the next joist is installed.

THESE DRAWINGS ARE NOT FOR CONSTRUCTION

FOR APPROVAL  
 APPROVED AS IS  
 APPROVED AS NOTED

DATE: 13/04/17

IN ORDER TO SUBMIT THIS PROJECT TO THE MOST EFFICIENT, MEMORABLE, RETURN THESE DRAWINGS TO THE DESIGNER'S OFFICE WITHIN 10 BUSINESS DAYS OF THE DATE OF THE DRAWING. ANY DELAYED RETURN WILL BE AT THE CLIENT'S RISK.

REVISIONS BY: \_\_\_\_\_ NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

NO.	DATE	DESCRIPTION	BY	CHK	APP
1	13/04/17	RE-DESIGN FOR APPROVAL	MM	MM	MM
0	10/04/17	ISSUED FOR APPROVAL	MM	MM	MM

ZAMMIL STEEL ENGINEERING DEPARTMENT  
 BUILDING NO. 01  
 PROJECT NAME: BSH VILLAS - 0 DESIGN  
 CUSTOMER: AL DAMUL OF REAL ESTATE  
 OFFICE LOCATION: BRADIS, KSA

DRAWING TITLE: FIRST FLOOR PLAN (AREA-01)  
 REVISION NO: E02



