

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
Project Directorate (ADB)
Implementing Agency : DOR, DCID

Project Preparatory Consultants
Under
SASEC Highway Improvement Project (SHIP-PPC)
(ADB Loan No: 3722 Nep)
Contract No. SHIP/PPC/2020/02

Vehicular Underpass

Detailed Drawing

Butwal - Goringhe Sector

November, 2022

GENERAL NOTES

General

- Metric system of measurement is used in all drawings. Elevation and Stations are shown in Meter and all other dimensions are in Millimeters, except indicated otherwise.
- In case of contradictions, specific notes on respective sheet shall supersede the General Notes
- No dimensions shall be scaled from the drawings. Only written dimensions shall be followed. Any doubtful matter in the drawings shall be brought to the attention of the engineer-in-charge for any corrections before the execution of the works.

Design Notes

The design codes followed:

For RCC and PSC concrete - IRC:112-2020

For loads and stresses - IRC:6-2017

For substructure and foundations - IRC:78-2014

For seismic design - IRC:SP:114-2018. Seismic zone V. Importance factor 1.2

Design live loads:

For urban area bridges

Case 1 - 3 lanes of class A + pedestrians; 1 lane of class A + 1 lane of class 70R + pedestrians

Case 2 - 4 lanes or class A; 2 lanes of class A + 1 lane of class 70R. No pedestrians

For non-urban area bridges

Case 1 - 2 lanes of class A + pedestrians; 1 lane of class 70R + pedestrians

Case 2 - 3 lanes of class A; 1 lane of class A + 1 lane of class 70R. No pedestrians.

Notes on Concrete

In General the grade of concrete to be used shall be as follows:

(unless otherwise specified in the respective drawing sheets)

For superstructure deck slab, wearing course, crash barriers:

M30

For raised footpaths:

M25

For main girders and cross girders of superstructure with PSC girders:

M45

For main girders and cross girders of superstructure with RCC girders:

M30

For substructure: Abutment stem, ballast wall, stoppers, bearing pedestals, pier cap, pier stem and pile caps:

M30

For bored and cast in situ piles:

M35

For leveling course:

M15

The maximum size of aggregate shall be as per IRC:112-2020, clause 18.4.4.2

Admixture to the concrete

To improve workability and/or increase initial setting time of concrete and cement grout, admixture conforming to IS:9103 and ASTM C-494, (Type F - High Range Water Reducing admixture) can be added in appropriate dosage, subject to their satisfactory proven use.

Clear Cover to reinforcement (unless otherwise specified in the respective drawing sheets)

Reinforcement bars of all components of the superstructure:

40mm

Prestressing ducts or strands in superstructure:

75mm

All components of abutment, pier, pile caps and piles

(except stoppers and bearing pedestals):

75mm

Bearing pedestals and Stoppers:

50mm

Cover shall be ensured with the use of properly sized cement concrete blocks which can be secured to the re-bars or other devices approved by the engineer-in-charge. Use of loose stones or wooden pieces is not permitted.

Notes on Reinforcement

- All reinforcing steel bars shall be High Strength Deformed bars with grade Fe500 conforming to IS:1786
- Laps and Splices shall conform to IRC:112-2020, Clause 15.2.5. Use of mechanical coupler is permitted upon approval by the engineer.

Notes on Prestressing

- Prestressing strands shall be Class-2, uncoated 7 ply, low relaxation type with ultimate tensile stress 1862 N/mm², conforming to IS:14268.
- The diameter of strands, their number in a tendon and the total jacking force to be applied is specified in the respective drawing sheet. All the initial and long term losses are already incorporated in design.
- Corrugated HDPE Sheathing ducts shall be used with the minimum internal diameter not less than three times the cross sectional area of the tendon. The wall thickness and other properties of the sheathing shall be as per IRC:112-2020, clause 13.4.3
- The specified profile and the alignment of the ducts shall be strictly maintained by properly securing the ducts to the re-bars. If required, pieces of re-bars can be added or the re-bars slightly repositioned or bent to maintain the profile and alignment, with approval of the engineer-in-charge.
- The jacking equipment shall be fitted with appropriate force measuring device and shall be regularly checked and calibrated as prescribed by the manufacturer.
- Jacking shall be done from both ends simultaneously and gradually, recording the elongation both sides. The expected final elongation mentioned in the respective drawings sheet is based on modulus of elasticity of the strands (Es) equal to 1.95x10⁵ MPa. If the Es of supplied strands is different then the elongation values shall be recalculated by multiplying the Design values of elongation by the ratio of Design Es / Actual Es.
- In case the total elongation is not achieved at the prescribed jacking force, the jacking operation can be continued until the force reaches the maximum allowable value. If the required elongation is achieved at jacking force lower than the prescribed value, the jacking operation shall continue until the prescribed force is reached, provided the Sum of the additional elongations thus achieved is not more than 5% of the sum of the prescribed elongations.
- In adverse condition to any of the cases above, the jacking operation shall be stopped, the tendons removed and this matter reported to the engineer-in-charge for further instruction. The jacking force should NEVER exceed the Maximum allowable value.

Grouting

- The tendons which satisfy the above conditions shall be grouted properly, ensuring the duct is free of any foreign material and there is no leak or damage around the joints between the anchors and the ducts. Grouting can be normally done immediately after successful completion of tensioning operations and shall not be delayed by more than 5 days of tensioning of the cables.
- The grout shall be prepared with Ordinary Portland cement with suitable expansive admixture approved by the engineer. Admixture containing chloride and nitrate are not permitted. The water/cement ratio shall not be more than 0.48. Retempering of the grout shall not be permitted. The grout shall be mixed with mechanical mixers and shall be continuously kept agitated until pumped in.

Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Project Directorate Office (ADB) SASEC Highway Improvement Project- Project Preparatory Consultant (SHIP-PPC) ADB Loan No: 3722-NEP	CONSULTANT:  Soosung Engineering Co. Ltd, Korea in association with ERM P (Ltd) and  JTE-Tech Studio of Engineering Nepal	IMPLEMENTING AGENCY:	SHEET TITLE:	SCALE:		NAME	SIGNATURE	REV NO.	DESCRIPTION	DATE:
		DOR, DCID	General Notes - 1 of Vehicular Underpass	As Shown						November,2022
		ROAD NAME:			Designed by:	Saroj Bhattarai				DWG.NO.:
		East West Highway (H01)			Checked by:	P. Upadhyaya				Vehicular Underpass
		Butwal - Gorusinghe Section			Approved by:	Dr. T.H.Choi				SHEET NO.: 01/14

Stages and sequence of Prestressing

- The Precast composite girders shall be prestressed in two stages. The specified number of the tendons shall be tensioned in the prescribed sequence shown in the respective drawing sheet.
- The remaining tendons shall be tensioned after specified days after casting of the deck slab, in the sequence shown in the respective drawing sheet.
- The prestressing of the precast girder shall be started only after confirming that the cube specimen has achieved 100% of the prescribed compressive strength. No early prestressing allowed.

Construction methodology and sequence for Precast Prestressed Composite superstructure

- The main girders are be precast near the bridge site at suitable location (approach road or dry river bed, if available) on well prepared casting yard. The choice of location also depends upon the equipment available for lifting or launching the girders. After completion of the prestressing works the girders are either lifted by suitable cranes or pushed/launched with the help of rails and jacks or launching girders and placed carefully over the already completed substructure. Care shall be taken that all the preparatory works for the bearings are done properly before the launching/placing of the girders.
- Lifting shall be done only by the hooks provided at both ends. In case of jacking the jacking points shall be only just under the location of the hooks. No support, lifting or jacking is allowed at any other section of the girder
- After placing all the main girders and finishing the works on the bearings, the formwork for deck slab and cross girders are prepared. All the formwork for deck slab and cross girders shall be supported by the main girders. The main girders shall remain un-propped during casting of the deck slab. Similarly there shall be no false-work or props from the ground or part of substructure during casting of the deck slab.
- The Contractor shall ensure stability of the girders during all stages of construction.
- Dimensional tolerances for the precast girders shall be as per IRC:SP:71-2018, Clause 4.10. If not prescribed otherwise, transportation and handling operation shall follow the guidelines in Clause 4.9 of the same documents.
- The prescribed time-line for construction of the superstructure is as follows

Prestressing of Precast Girder only (Stage 1)	After 28 days of casting or confirming 100% compressive strength of concrete
Lifting/Launching of the Girder	Within 14 days of first stage prestressing
Casting of the Deck Slab	Within 14 days of placing of girder over substructure
Prestressing of Girder (Stage 2)	After 14 days of casting of deck slab
Casting of Footpath, Crash Barrier, Wearing Course etc	Preferably within 7 days but not later than 14 days of Second stage prestressing

Deviation from the above time-line is subject to approval by the engineer. No other vehicle except the concreting apparatus are allowed on the deck until the deck slab has attained its full specified strength.

Construction methodology for Cast-in-situ RCC superstructure

- Construction of Monolithic cast in situ RCC superstructure shall follow the standard practices. The falsework for the girders and deck slab are supported on the ground and removed after specified time period.

Notes on Bearings

- The contractor shall supply, provide and install the bearings designed according to the loadings and other relevant information provided in the drawings or BOQ.
- The dimension and number of layers of the Elastomeric bearings shown in the drawings are tentative. The bearings shall be designed, fabricated, tested and installed as per IRC:83 - 2018, Part-2 for elastomeric bearing and Part-3 for Pot-PTFE bearings, as the case applies.

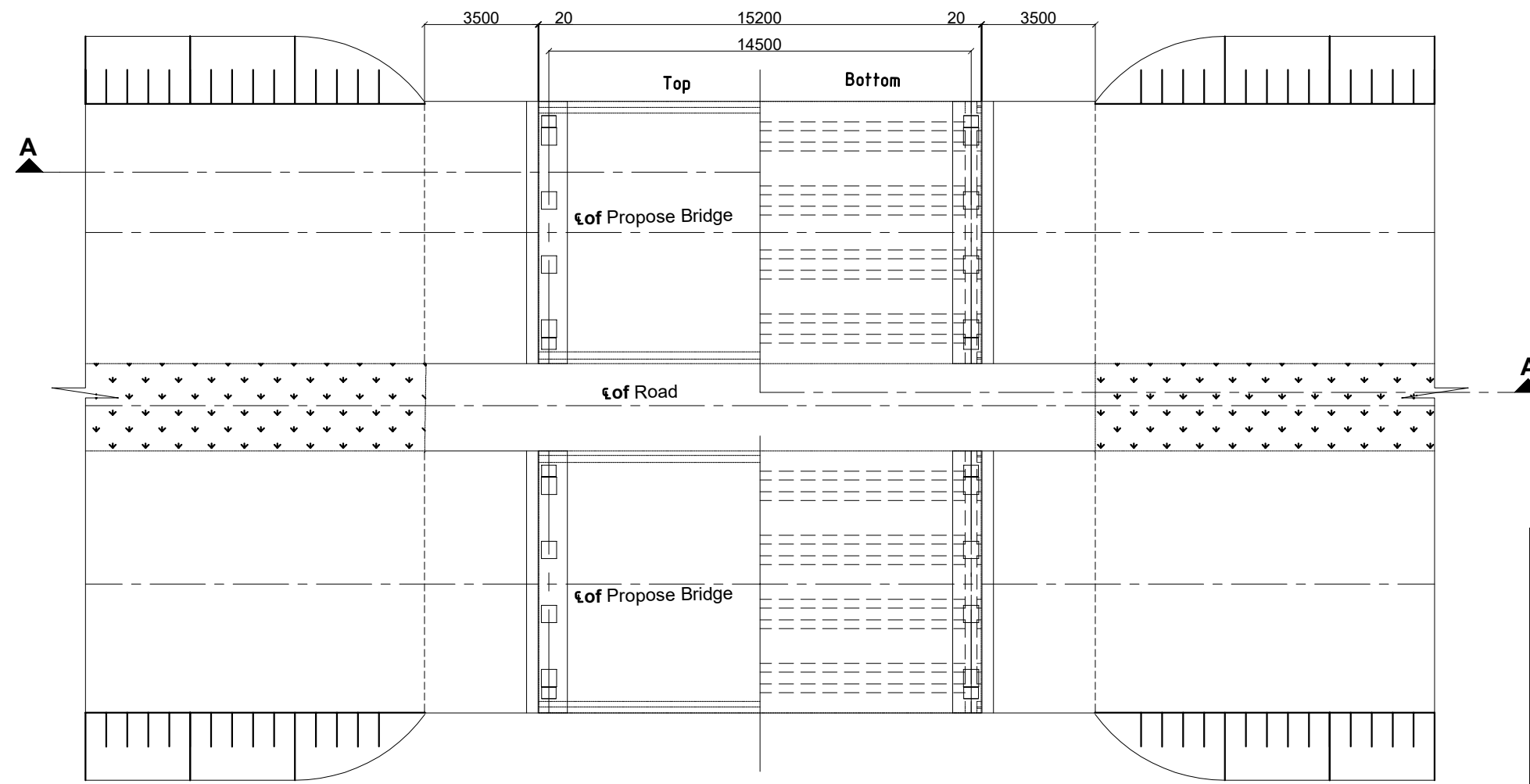
Notes on Foundation and Substructure

- Standard Specifications and Special provisions to the Standard Specifications (if any) and specific notes on the drawings shall be followed for the construction of the abutments, piers and foundations.
- Backfill behind the abutment shall be places only after the concrete has achieved full 28 days strength. Heavy compaction equipment weighing more than 10 Ton shall not be used within 2.0 meters from the back of the abutment until all the works on superstructure is completed.
- The graded backfill behind the abutment shall be at a slope not steeper than 62 degrees, starting from the back of the footing. The back fill material dry density shall be within 1900 to 2200 kN/m³ and moisture content between 9 to 15%
- In case of new bridge adjacent to the existing bridge, care shall be taken not to render any damage to the elements of the existing bridge. Particular attention shall be paid to the foundation of the existing bridge. The contractor shall ensure that excavation for the foundation of the new bridge does not cause instability or settlement of the foundation of the existing bridge.
- If the existing bridge has a shallow foundation, the contractor shall protect the existing foundation by sheet piling or any other suitable means to the satisfaction of the engineer, before excavating for the foundation of the new bridge.

General Note: (For all Pile Foundation)

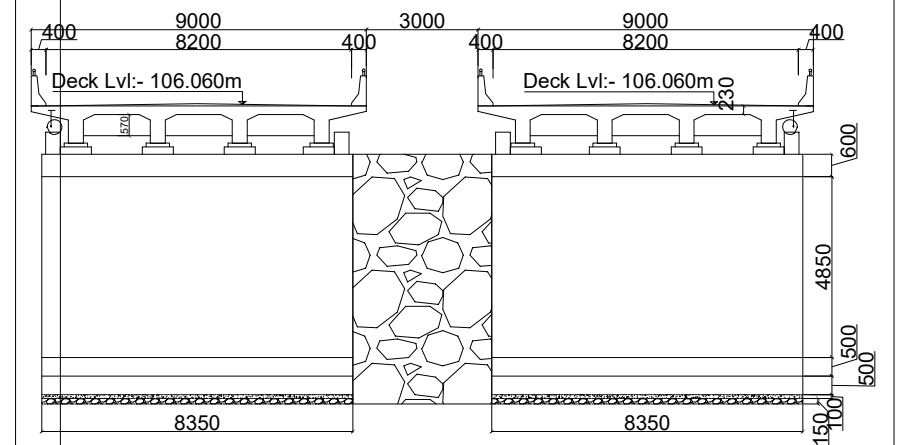
- Drilling/Boring works for pile is allowed only with rotary or oscillator type drilling equipment.No percussion method is allowed .Stability of borehole shall be ensured by the use of temporary casing.Use of other methods of borehole stability is subject to approval by the engineer, but in such case use of water/air/chemical jetting for boring process shall not be allowed.
- In case of drilling/boring without temporary casing,the contractor should ensure the stability and uniformity of the borehole before lowering the reinforcement cage and during concreting.
- Boring/Drilling of the piles is preferred in a staggered pattern.Boring/Drilling for any pile shall not commence before 24 hours of completion of concreting of any pile within a radius of 6 meters from its center.
- In case of drilling/boring without temporary casing , the pile shall be lined with 6mm thick permanent casing from the bottom of the pile cap down to 0.5 m below the maximum scour depth or 1.5 m whichever is larger.

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					Designed by:	Saroj Bhattarai				November,2022
					Checked by:	P. Upadhyaya				DWG.NO.: Vehicular Underpass
					Approved by:	Dr. T.H.Choi				SHEET NO.: 02/14

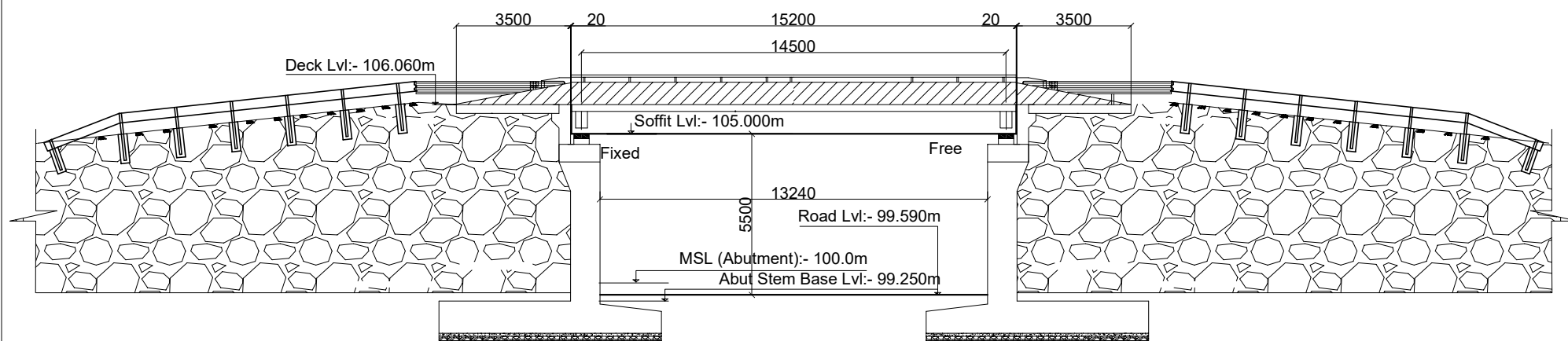


Half Sectional Plan
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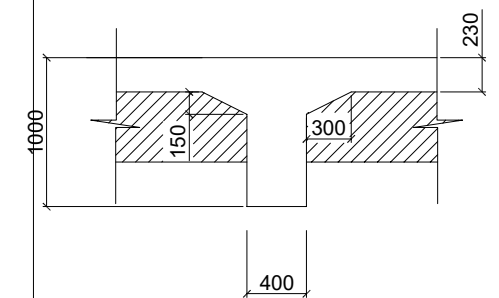
Overpass Type - 1			
S.N	Chainage	Span	Remarks
1	592+302	13	
2	594+450	13	
3	597+100	13	
4	602+715	13	
5	604+235	13	
6	620+362	13	



Elevation of Abutment
Scale:-1:200

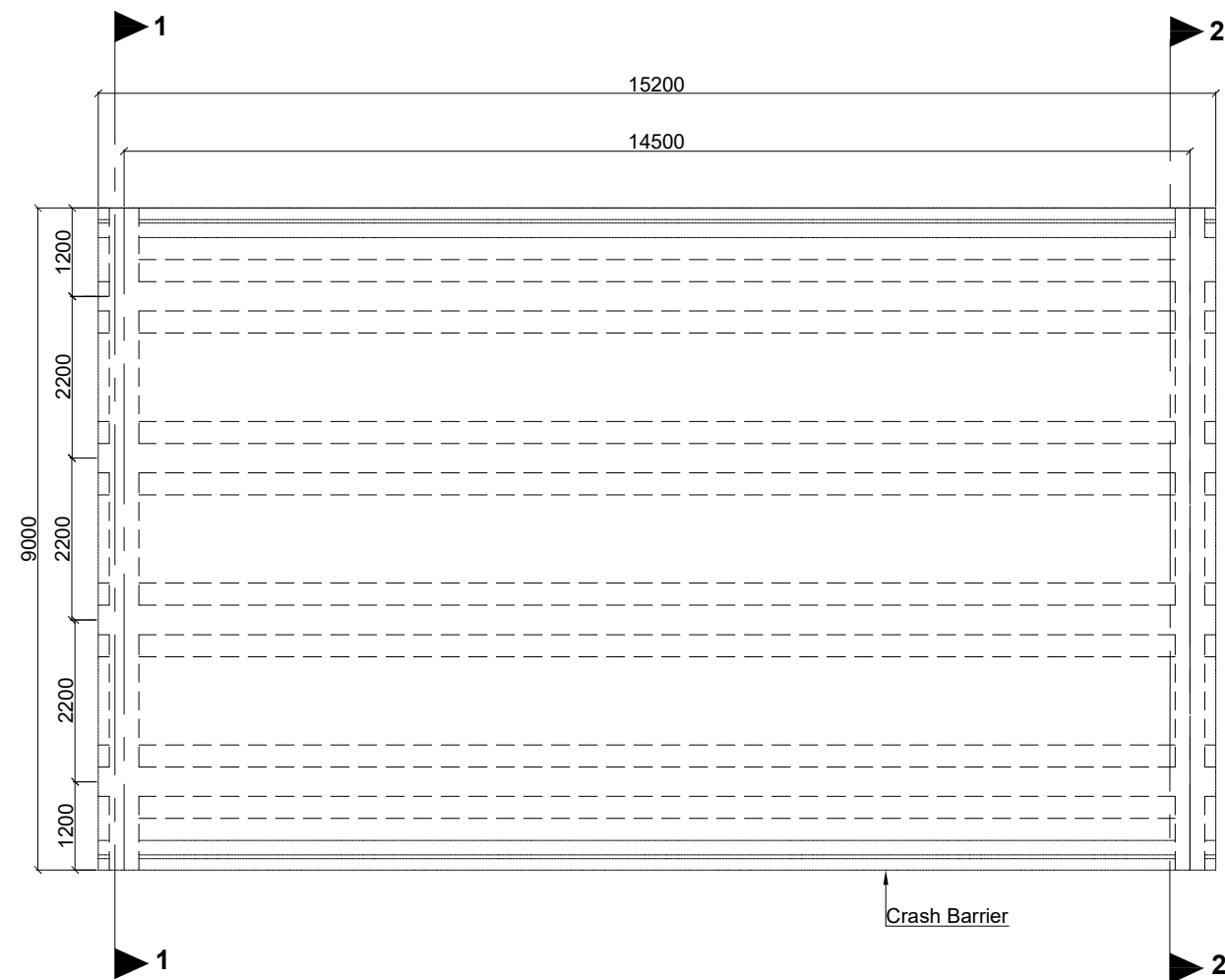


Half Sectional Elevation
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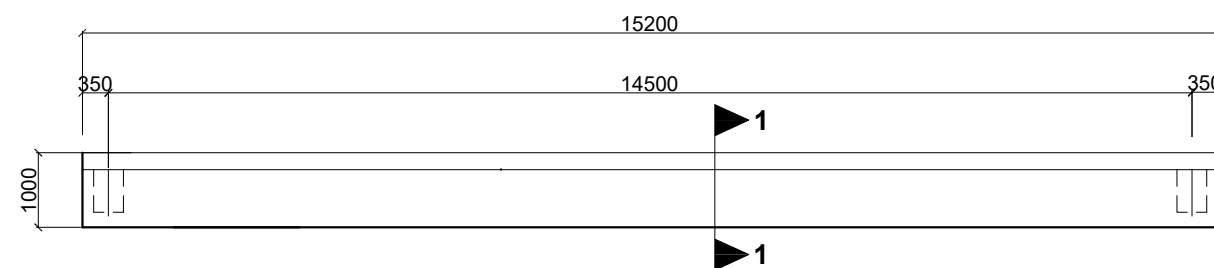


Section 1-1 Main Girder
Scale:-1:50

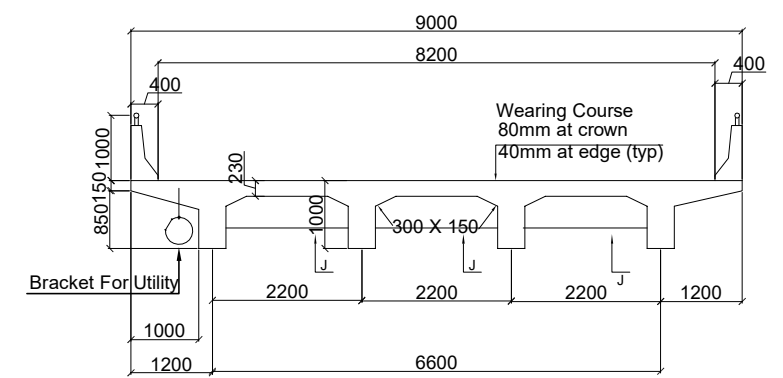
Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Project Directorate Office (ADB) SASEC Highway Improvement Project- Project Preparatory Consultant (SHIP-PPC) ADB Loan No: 3722-NEP	CONSULTANT: Soosung Engineering Co. Ltd, Korea in association with ERM P (Ltd) and JTC-Tech Studio of Engineering Nepal	IMPLEMENTING AGENCY: DOR, DCID ROAD NAME: East West Highway (H01) Butwal - Gorusinghe Section	SHEET TITLE: General Arrangement of Vehicular Underpass	SCALE: As Shown	Designed by:	Saroj Bhattarai	Signature	REV NO.	DESCRIPTION	DATE:
					Checked by:	P. Upadhyaya	Signature			DWG.NO.:
					Approved by:	Dr. T.H.Choi	Signature			Vehicular Underpass
										SHEET NO.:
										03/14



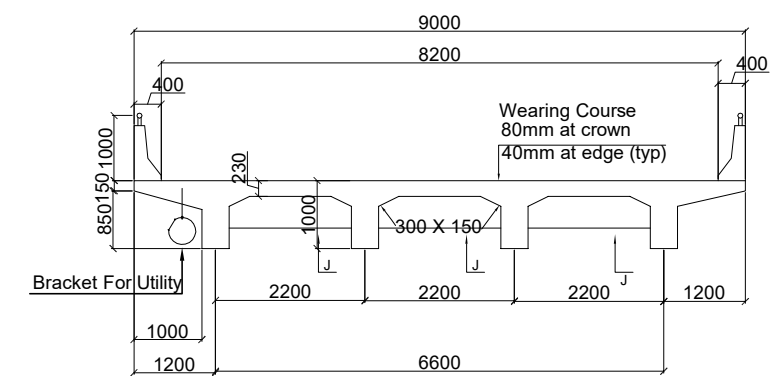
Plan of Deck
Scale:-1:100



Longitudinal Sectional Elevation
Scale:-1:100

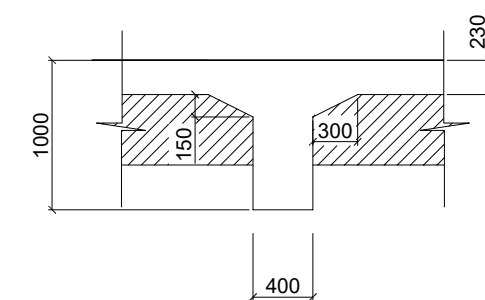


Section at 1-1



Section at 2-2

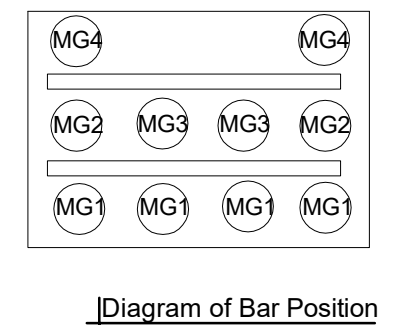
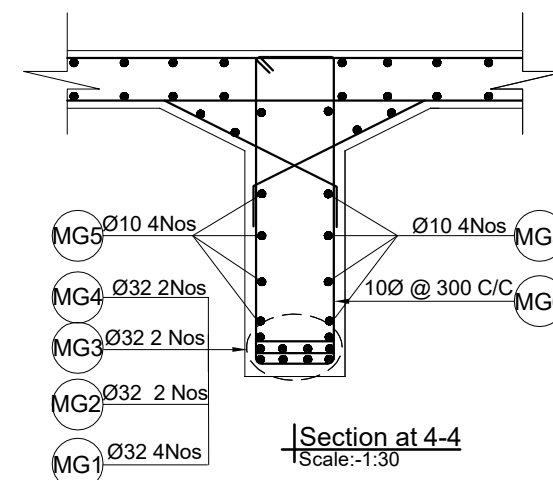
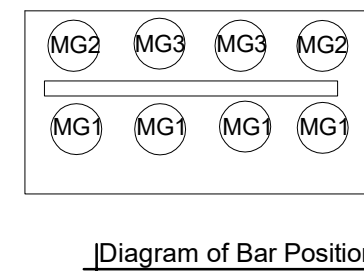
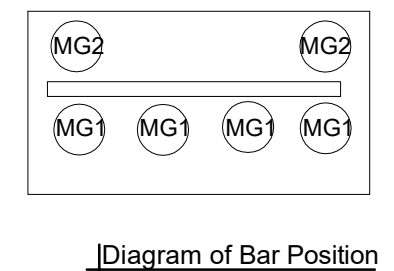
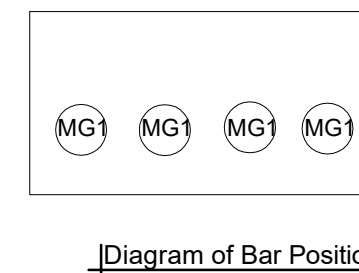
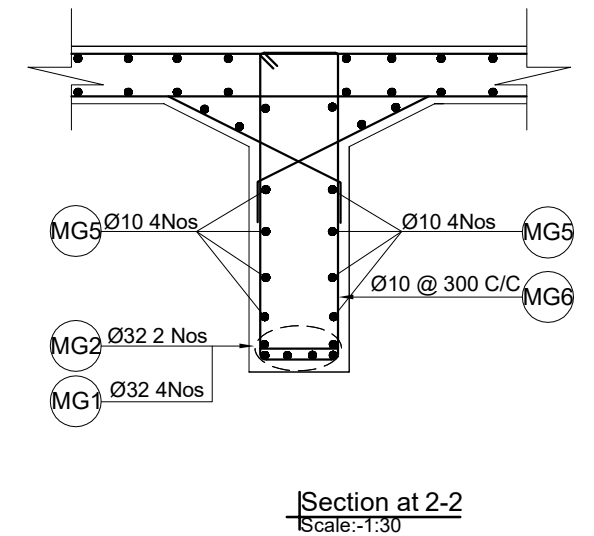
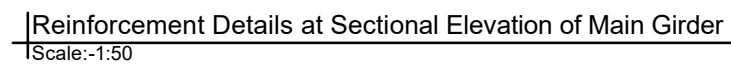
Note:
For maintenance the Deck shall be simultaneously jacked up at the locations marked "J"



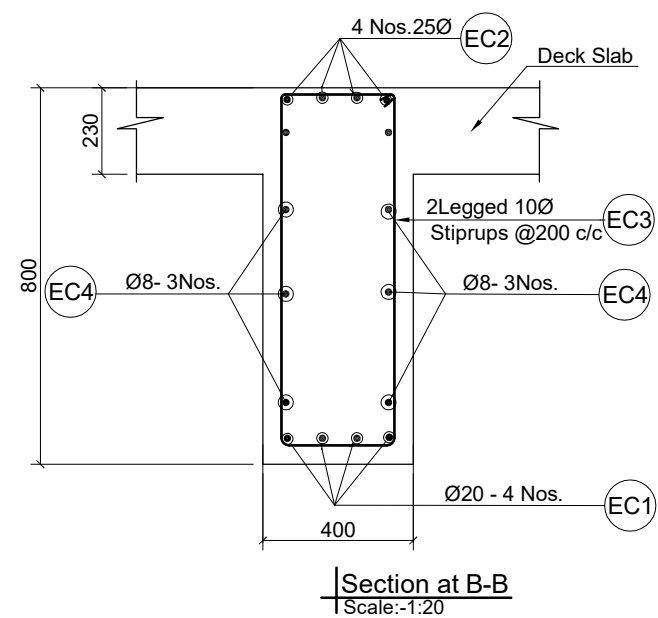
Section 1-1 Main Girder
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	 Soosung Engineering Co. Ltd, Korea in association with ERM C P (Ltd) and  JFE-Tech Studio of Engineering Nepal	DOR, DCID		Details of Superstructure of Vehicular Underpass	As Shown		Designed by:	Saroj Bhattarai				November,2022
		ROAD NAME:									DWG.NO.:	
		East West Highway (H01)									Vehicular Underpass	
		Butwal - Goringhe Section									SHEET NO.:	
						Checked by:	P. Upadhyaya					
						Approved by:	Dr. T.H.Choi					

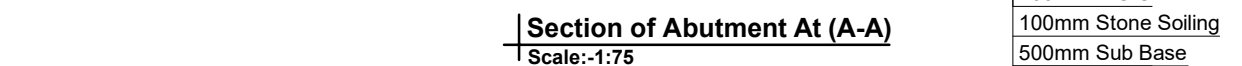
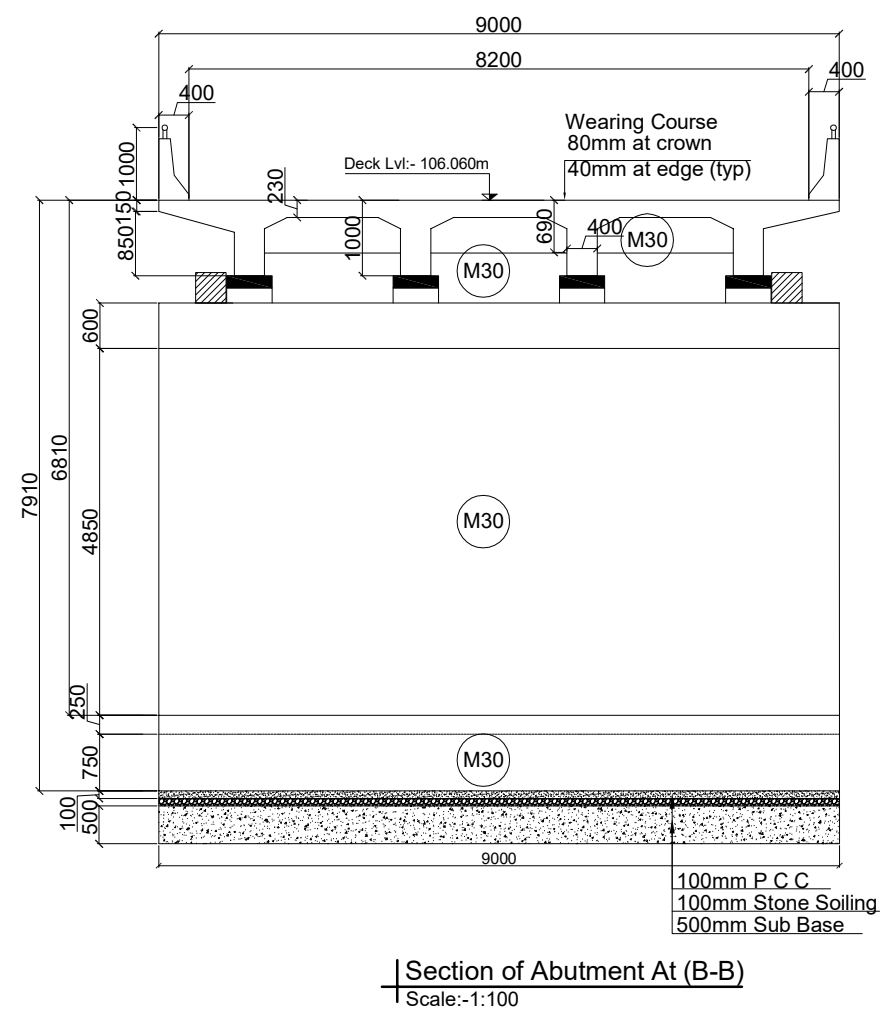
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Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Project Directorate Office (ADB) SASEC Highway Improvement Project- Project Preparatory Consultant (SHIP-PPC) ADB Loan No: 3722-NEP	CONSULTANT:		IMPLEMENTING AGENCY:	SHEET TITLE:	SCALE:		NAME	SIGNATURE	REV NO.	DESCRIPTION	DATE:			
	 Soosung Engineering Co. Ltd, Korea in association with ERMC P (Ltd) and  TTC-Tech Studio of Engineering Nepal			DOR, DCID	Reinforcement Details of Cross Girders of Vehicular Underpass	As Shown	Designed by:	Saroj Bhattarai				November, 2022		
				ROAD NAME:				Checked by:	P. Upadhyaya				DWG.NO.:	Vehicular Underpass
				East West Highway (H01)				Approved by:	Dr. T.H.Choi				SHEET NO.:	07/14
		Butwal - Gorusinghe Section												



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			ROAD NAME: East West Highway (H01)			Checked by: P. Upadhyaya				DWG.NO.: Vehicular Underpass
			Butwal - Gorusinghe Section			Approved by: Dr. T.H.Choi				SHEET NO.: 09/14

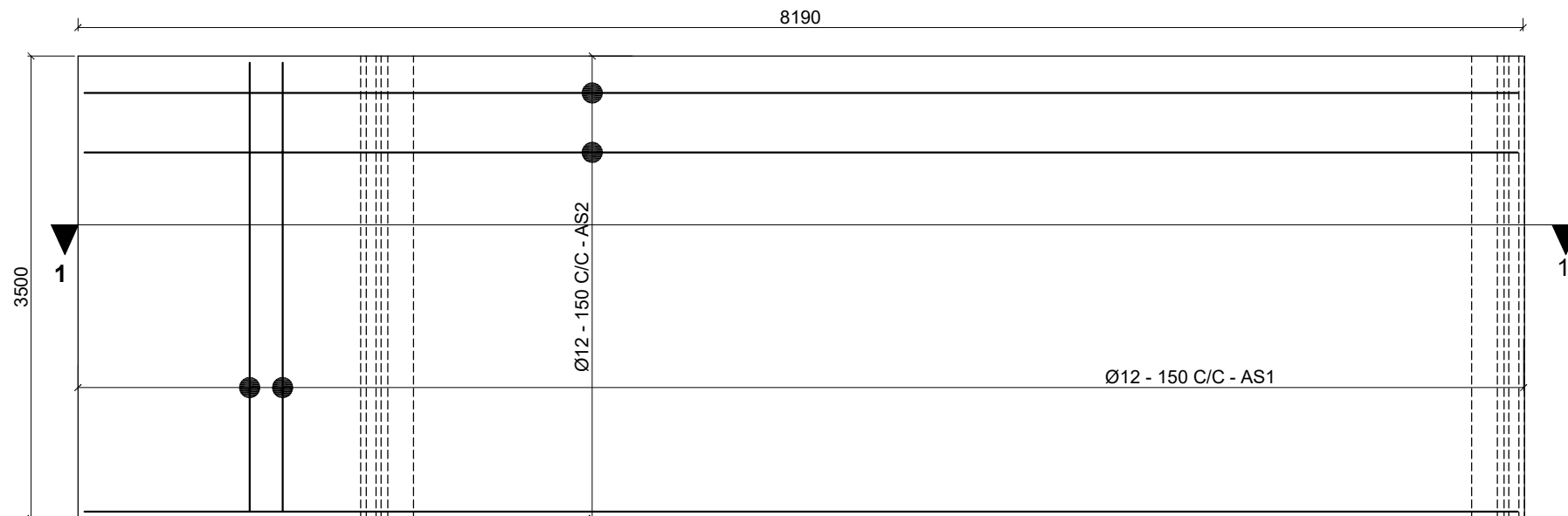
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	 Soosung Engineering Co. Ltd, Korea in association with ERM P (Ltd) and  JFE-Tech Studio of Engineering Nepal	DOR, DCID	Reinforcement Details of Abutment of Vehicular Underpass	As Shown	Designed by:	Saroj Bhattarai				November, 2022	
		ROAD NAME:			Checked by:	P. Upadhyaya				DWG.NO.: Vehicular Underpass	
		East West Highway (H01)			Approved by:	Dr. T.H.Choi				SHEET NO.: 10/14	
		Butwal - Gorusinghe Section									

BAR BENDING SCHEDULE OF ABUTMENT							
BAR ID	SHAPE OF BAR IN mm (NOT TO SCALE)	SPACING (mm)	Ø OF BARS (mm)	NO. OF BARS	LENGTH (m)	WEIGHT/LENGTH (Kg/m)	TOTAL WEIGHT (Kg)
AB1		150 mm c/c Approx	20	60	7.124	2.466	1054.134
AB1a		-	-	-	-	-	-
AB2		150 mm c/c Approx	25	120	7.324	3.853	3386.649
AB2c		At sideface 300 mm c/c	16	8	6.820	1.578	86.114
AB3		150 mm c/c Approx	16	34	19.870	1.578	1066.295
AB4		150 mm c/c Approx	12	61	3.510	0.888	190.090
AB5		150 mm c/c Approx	12	23	8.850	0.888	180.715
AB6			16	132	1.198	1.578	249.592
AB7		150 mm c/c Approx	16	60	2.520	1.578	238.645
AB8		150 mm c/c Approx	16	60	3.494	1.578	330.883
AB8a		200 mm c/c Approx	10	7	8.850	0.617	38.195
AB9		200 mm c/c Approx	10	8	18.236	0.617	89.946
AB10		200 mm c/c Approx	16	41	1.775	1.578	114.864
AB11			12	82	0.910	0.888	66.249

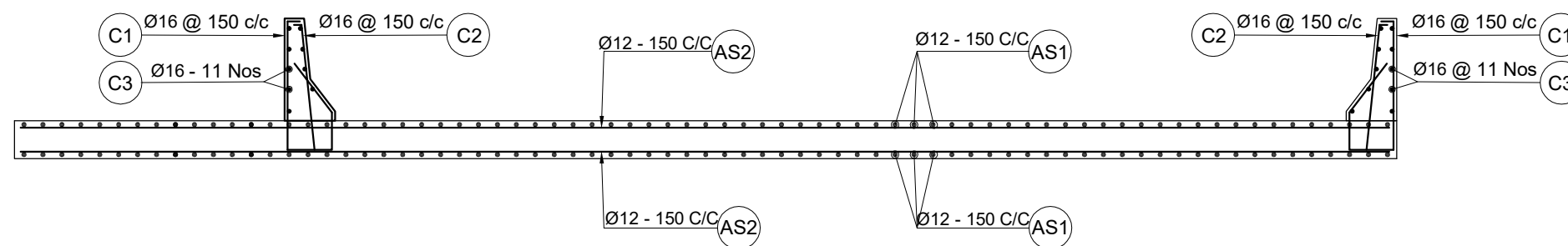
BAR BENDING SCHEDULE OF ABUTMENT							
BAR ID	SHAPE OF BAR IN mm (NOT TO SCALE)	SPACING (mm)	Ø OF BARS (mm)	NO. OF BARS	LENGTH (m)	WEIGHT/LENGTH (Kg/m)	TOTAL WEIGHT (Kg)
AB11a			12	82	0.655	0.888	47.685
AB12			20	1	8.860	2.466	21.850
AB13			16	2	8.860	1.578	27.968
AB14			20	30	0.900	2.466	66.586
TOTAL WEIGHT ABUTMENT KG							7256.459
TOTAL WEIGHT (IN METRIC TON)							7.256

BAR BENDING SCHEDULE FOR ABUTMENT FOUNDATION							
BAR ID	SHAPE OF BAR IN mm (NOT TO SCALE)	SPACIN G (mm)	Ø OF BARS (mm)	NO. OF BARS	LENGTH (m)	WEIGHT/LENGTH (Kg/m)	TOTAL WEIGHT (Kg)
AF1		400	32	24	8.658	6.313	1311.866
AF1(a)		400	32	24	4.180	6.313	633.356
AF2		400	20	24	6.440	2.466	381.169
AF3		200	25	46	6.165	3.853	1092.777
AF4		200	20	46	3.555	2.466	403.290
AF5		200	20	14	10.030	2.466	346.298
AF6		200	16	12	10.030	1.578	189.969
AF7		200	16	26	10.030	1.578	411.599
AF8		200	20	24	10.030	2.466	593.653
AF9			16	133	1.115	1.578	234.060
AF9a			16	0	1.290	1.578	0.000
AF10		0	16	2	32.600	1.578	102.908
TOTAL IN PILE OF ONE ABUTMENT							5598.037
TOTAL WEIGHT (IN METRIC TON)							5.598

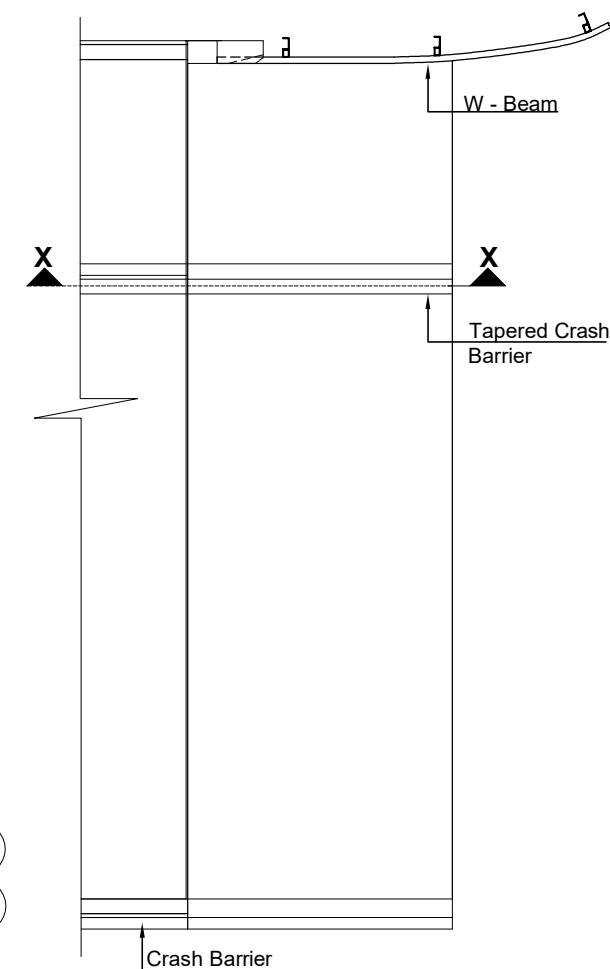
Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Project Directorate Office (ADB) SASEC Highway Improvement Project- Project Preparatory Consultant (SHIP-PPC) ADB Loan No: 3722-NEP	CONSULTANT:	IMPLEMENTING AGENCY:	SHEET TITLE:	SCALE:		NAME	SIGNATURE	REV NO.	DESCRIPTION	DATE:
	 Soosung Engineering Co. Ltd, Korea in association with  ERM P (Ltd) and  TPE-Tech Studio of Engineering Nepal	DOR, DCID	Barbending Schedule of Vehicular Underpass	As Shown	Designed by:	Saroj Bhattarai				November,2022
		ROAD NAME:			Checked by:	P. Upadhyaya				DWG.NO.:
		East West Highway (H01)			Approved by:	Dr. T.H.Choi				Vehicular Underpass
		Butwal - Gorusinghe Section								SHEET NO.:
										11/14



Plan of Reinforcement Details of Approach Slab
Scale:-1:50

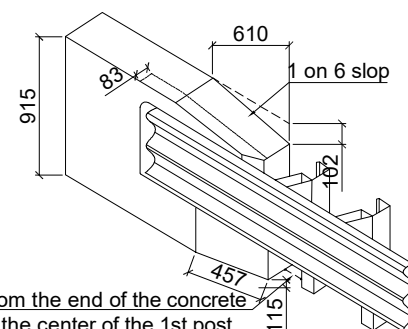


Section at 1-1
Scale:-1:50

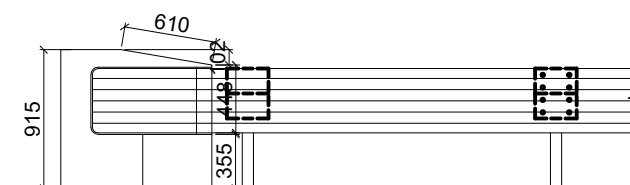


Plan of Approach Slab
Not to Scale

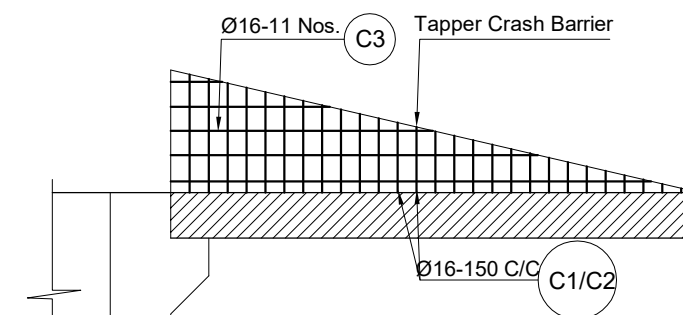
BAR BENDING SCHEDULE OF APPROACH SLAB							
BAR ID	SHAPE OF BAR IN mm (NOT TO SCALE)	SPACING (mm)	Ø OF BARS (mm)	NO. OF BARS	LENGTH (m)	WEIGHT/LENGTH (Kg/m)	TOTAL WEIGHT (Kg)
AS1	3400	150	12	110	3.400	0.888	332.043
AS2	8100	150	12	48	8.100	0.888	345.183
TOTAL IN PILE CAP OF ONE APPROACH SLAB							677.226
TOTAL WEIGHT IN METRIC TON							0.677



200 mm From the end of the concrete end wall to the center of the 1st post
Transition between concrete crash barrier and W-beam
Scale:-1:50

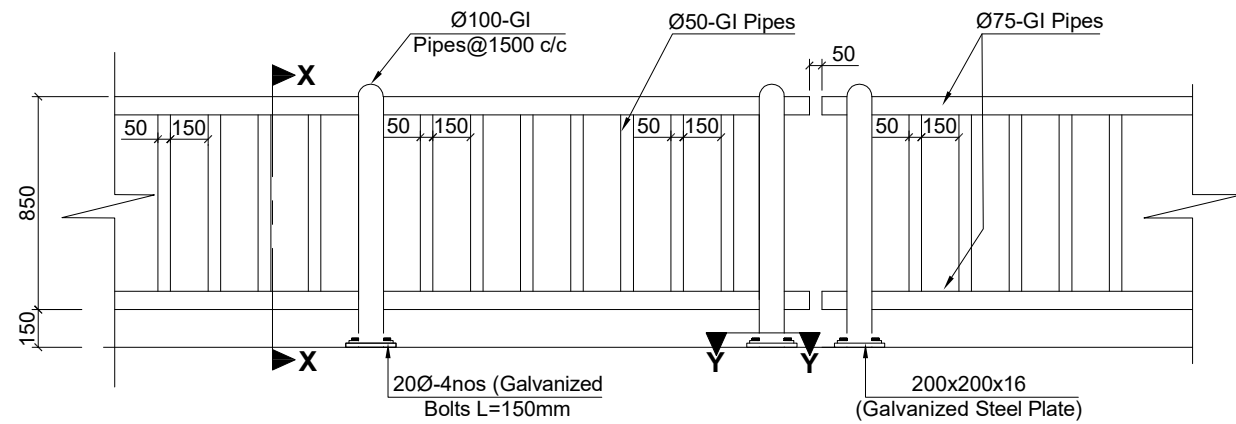


Elevation
Scale:-1:50

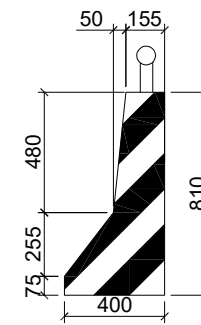


Section at X-X
Not to Scale

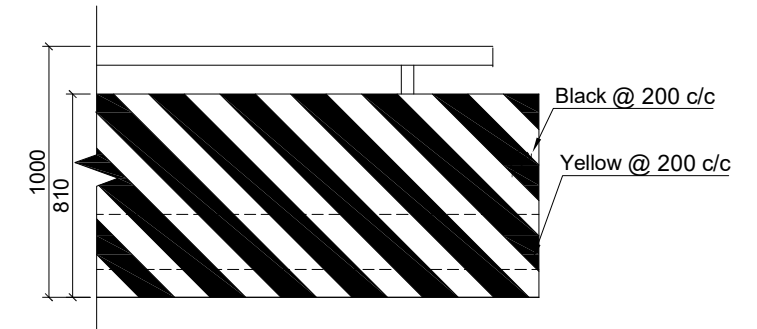
Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Project Directorate Office (ADB) SASEC Highway Improvement Project- Project Preparatory Consultant (SHIP-PPC) ADB Loan No: 3722-NEP	CONSULTANT:		IMPLEMENTING AGENCY:		SHEET TITLE:		SCALE:			NAME	SIGNATURE	REV NO.	DESCRIPTION	DATE:		
	 	Soosung Engineering Co. Ltd, Korea in association with ERM P (Ltd) and JPE-Tech Studio of Engineering Nepal		DOR, DCID		Reinforcement Details of Approach Slab of Vehicular Underpass		As Shown		Designed by:	Saroj Bhattarai				November,2022	
		ROAD NAME:		Checked by:						P. Upadhyaya				DWG.NO.: Vehicular Underpas		
		East West Highway (H01)		Approved by:						Dr. T.H.Choi				SHEET NO.: 12/14		
		Butwal - Gorusinghe Section														



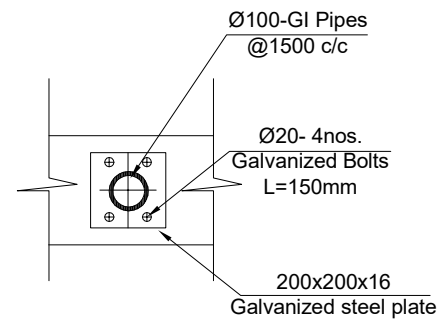
Railing Post Details
Scale:-1:30



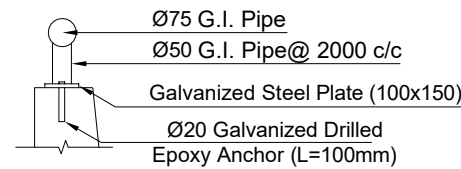
Painting Work on Crash Barrier
Scale:-1:30



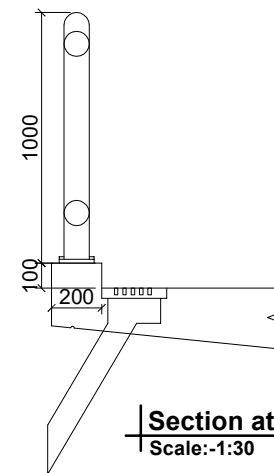
**Painting Work on Crash Barrier
on The Surface Facing Towards Carriageway**
Scale:-1:30



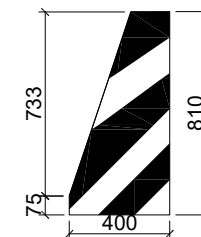
Section at Y-Y
Scale:-1:20



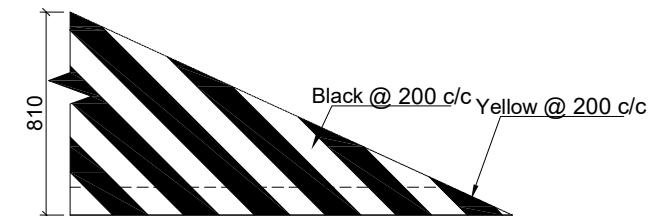
Details at A-A
Scale:-1:20



Section at X-X
Scale:-1:30



Painting Work on Tapper Crash Barrier
Scale:-1:30

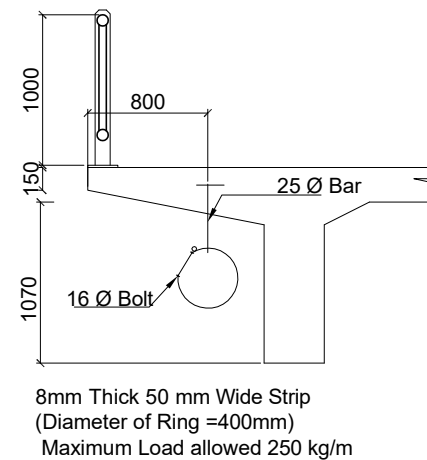


**Painting Work on Crash Barrier
on The Surface Facing Towards Carriageway**
Scale:-1:30

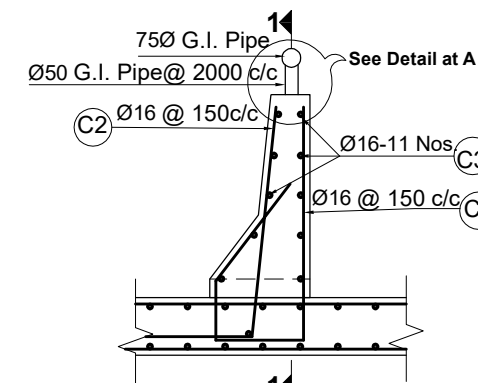
NOTES:
The crash barrier shall be sloped at both ends of the bridge as shown and the reinforcement shall be adjusted according to the slope.

BAR BENDING SCHEDULE OF CRASH BARRIER (For each 1m)

BAR ID	SHAPE OF BAR IN mm (NOT TO SCALE)	SPACING (mm)	Ø OF BARS (mm)	NO. OF BARS	LENGTH (m)	WEIGHT/LENGTH (Kg/m)	TOTAL WEIGHT (Kg)
C1		150	16	8	2.030	1.578	25.632
C2		150	16	8	1.415	1.578	17.867
C3			16	11	0.960	1.578	16.667
TOTAL FOR 1 M							60.166
TOTAL FOR 1.0M (IN METRIC TON)							0.060

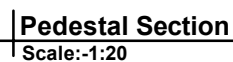


Utility hanger Detail
Scale:-1:50

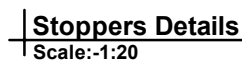
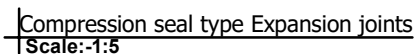


Crash Barrier Detail at The Bridge Deck
Scale:-1:30

Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Project Directorate Office (ADB) SASEC Highway Improvement Project- Project Preparatory Consultant (SHIP-PPC) ADB Loan No: 3722-NEP	CONSULTANT: Soosung Engineering Co. Ltd, Korea in association with ERM P (Ltd) and JTE-Tech Studio of Engineering Nepal	IMPLEMENTING AGENCY: DOR, DCID ROAD NAME: East West Highway (H01) Butwal - Gorusinghe Section	SHEET TITLE: Miscellaneous Details -1 of Vehicular Underpass	SCALE: As Shown	Designed by:	Saroj Bhattarai				DATE:	November,2022
					Checked by:	P. Upadhyaya				DWG.NO.:	Vehicular Underpass
					Approved by:	Dr. T.H.Choi				SHEET NO.:	13/14



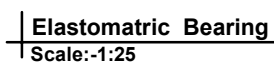
NOTE:
To match the height of ballast wall, the pedestal thickness shall be suitably modified.



Notes on Elastomeric Bearings

The dimensions and properties of the bearings shown are tentative, based on IRC:83-2018, Part II, Table B2. The actual design shall be carried out by the manufacturer on the basis of provided load & deformation data. The effective stiffness shall not exceed the shown value

Elastometric Bearing
(partially free at longitudinal direction
Fixed at Transverse direction)

14/14