

Request for Proposal

of

Design and Development of Deepor Beel on EPC Mode at
Jalukbari in Guwahati, Assam

**Volume II: Scope of Works, Technical
Specifications and Drawings**



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Tender No:

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3	Vol-III	General Condition of Contracts (GCC) & Special Conditions of Contracts (SCC)
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DELIVERABLES- ITEMWISE-

1. The Car/Bike parking space (double Decker for bikes)-

It is estimated that about 500 visitors will have foot falls in the proposed arena every day. Since the location is on the outskirts of the city, the visitors will go by bikes and cars only. So a heavy congregation of two wheelers and four wheelers are expected. Considering a working plan that the facility will be kept open from 10 am to dusk, i.e for 8 hrs on an average, a parking provision for about 60 bikes and 20 cars need to be created. Since the average weight of the bikes is estimated to be 350 kg, it is desirable that the bikes are parked over head. This will reduce cost as well as save space. The free space will be utilized for other meaningful purposes.

The estimated floor area provided for this purpose is 2500 sq ft at the ground level and another 2500 sq ft at an elevation of 8 ft.

2. The Cafeteria with bio toilets-

The cafeteria is designed to accommodate about 50 persons at a time. The Assam Science & Technology University, The Guwahati University, The Assam Engineering College, The Ayurvedic College, The Tata Institute of Social Sciences are prominent institutions in the vicinity and the student strength runs into thousands –all combined together. Moreover, with proper visibility campaign, this unique addition to the Guwahati landscape will surely induce hundreds of visitors daily. In fact with proper entrepreneurial effort, it can be one of the destination points of the city. Adequate fire safety equipment will also be in place.

So the Cafeteria is planned with a 2000 sq ft covered space and about 1000 sq ft open space.

Modern kitchen, robust yet elegant furniture, bio toilets, covered drains, solar lighting, clean & hygienic ambience will be its trade mark feature.

3. The pavers block open yard & approach path-

The assembly arena and the get together arena will be an open pavers block covered open yard from where the visitors will move along the designated pathways to the viewing platforms, to the floating pathway or for boating.

This area is estimated to cover an area of 2000 sq ft.

4. The Aquarium with an artificial flowing river-

The aquarium will be natural water body based. Water into and out of it will be provided by a suitable pump. It will have different sections for different types of fish-which will be mostly local. There will be an exclusive section for ornamental fish for commercial purpose separately.

The natural aquarium will occupy an area of about 100 ft x 30 ft. and the other will be of 40 ft x 20 ft.

5. The Information Kiosk and rest lounge-

The Kiosk will be housed adjacent to the cafeteria and facing the pavers block open yard. It will house a hard copy based information desk and a computer based audio visual system. The salient information will be on the aquatic life of the Deepar beel, The aviatory life of the Deepar Beel, The social life around the Deepar beel- in video film format too.

6. The floating bridge/ pathway-

It will be a 600 ft floating pathway built over floating tanks which are structurally bound. The pathway will be one way. There will be resting and viewing provisions also at a few places. Movement over this will be restricted by numbers. Floating decks and community hub to be accommodated around this bridge.

7. Watchtowers

There will be 2 viewing towers . The first one will be tall of 50 ft height for those who enjoy thrill.

This will have a lower deck at 30 ft.

- The second one will be small of 30 ft height for children. This will have a lower deck at 20 ft.

These platforms will be made of structural steel- wooden/ bamboo platform with safety railings all around and with a CGI roof. The climb up and down will be via steel stair cases.

8.The pleasure boating arrangements-

There will be boats made of steel and fibre glass of 4 and 6 person capacity and paddle type. There will also be rubber rafts, sail boats, canoes, speed boats etc for catering to different tastes. These will have adequate safety provisions including safety vests/ life jackets as required under law.

9.Solar Lighting & battery back up system-

These will be of the latest design type. Since solar energy is the most “in thing” in the country, there is need to be eco friendly. There are innumerable new products coming to the market almost regularly. So the most modern and latest designs are to be provided . A stand by generator will also be needed.

10. Viewing points/platforms -

- a. For shops
- b. For open air performances
- c. for angling
- d. for fish feeding

This platform will be connected from the main floating pathway by a floating bridge.

11.Waste disposal system/arrangements-

Modern and new compact waste compacting/ collecting/ segregating bins and machine will be installed to remain at par with the stipulations of the National Green Tribunal and SWM -2016 policy of the government.

12.Manpower Training and Development

Experience shows in such projects dealing with tourists, the people involved must be adequately trained to be sensitive to visitors' sensibilities. Unless proper manpower is trained and groomed they will not be able to live up to the expectations of a modern tourism project. Such training need to be at a higher level of performance and for that training outside the state is a must. Therefore considering the special features of the project under reference, it is proposed that the successful bidder will make the necessary arrangements to train up such people as recruited by the authority. The successful bidder will submit a detailed program for manpower development along with the bid.

13. Advertisement and publicity

For a project of this nature to gain an effective ground right from the beginning, it is absolutely necessary that the project is highlighted in both print and electronic media. A well thought out and a well-designed publicity strategy is to be devised and put into operation by the successful bidder. Necessary publicity material and advertisement campaigns will be the responsibility of the successful bidder. The bidder will submit a detailed program and campaign material along with the bid.

ITEMS TO BE QUOTED-

1. The Car/Bike parking space (double Decker for bikes)

- a. steel structure
 - b. CGI roof
 - c. Base floor of pavers block
 - d. concrete slab in the bike floor and ramps.
 - e. fittings, paintings etc.
 - f. ramp – 6ft wide
- a) 2500 sq ft at the ground level and 2500 sq ft at an elevation of 8 ft.
- b) The base floor is to be made of pavers block with 3 ft extra floor on 3 sides and 20 ft extra floor on the front side.
- c) The bike floor, at 8 ft height, to be made of 2.5 inch thick precast concrete slab on steel support structure having a 4 ft high protective steel railing on all sides.
- d) The roof is to be made of painted corrugated CGI sheet on an appropriate structure.
- e) The climbing and descending ramps (separate)- each 6 ft wide – made of 2.5 inch thick precast concrete slab on an appropriate structure.

The bidders to quote with own concept & drawings.

2. The Cafeteria with bio toilets-

2000 sq ft covered and 1000 sq ft open.

Complete with shelves, robust yet elegant furniture and fixtures, lights, earthing , fan, fridge, kitchen appliances, bio toilets, septic tanks, soak pits, covered drains, connected piping, water tank, water purifier, water piping, firefighting equipment – complete up to painting, vitrified flooring etc.- for 50 persons at a time

The bidders to quote with own concept & drawings.

3. The pavers block open yard & approach path-

Pavers block open yard and approach path- 2000 sq. ft pathways to be 4' wide.

The assembly arena and the get together arena will be an open pavers block covered open yard from where the visitors will move along the designated pathways to the viewing platforms, to the floating pathway or for boating .

This arena is estimated to cover an area of 2000 sq ft. The pavers blocks are to be laid as per norms with proper base preparation.

The bidders will furnish details with drawings.

4. The Aquarium with an artificial flowing river-

Natural Aquarium, Artificial River, Ornamental fish aquarium-

- a. natural aquarium – 100ft x30ft (=3000 sq ft) Stone masonry wall at some places erected from below ground level.
- b. Ornamental fish aquarium –made of glass of adequate thickness (40ft x20ft) complete with all accessories.

- c. Artificial River – made of river pebbles, stone, brick, sand bed- water flow to be maintained with adequate capacity pump.
River width 8 ft and maximum length 45 ft, maximum depth 3 ft.
Adequate and appropriate number of fishes are also to be provided.

The aquarium will be natural water body based. Water into and out of it will be provided by a suitable pump. It will have different sections for different types of fish-which will be mostly local.

The bidders to quote with own concept & drawings.

5. The Information Kiosk and rest lounge-

- a. front desk room (10ft x15ft)
- b. video room (10ftx20ft)
- c. static object display room (10ftx10ft)
- d. Verandah -6 ft wide
- e. Light, fan, furniture (chair, sofa, centre table, desk, almirah etc. and computer system)
- f. 3 videos (one on social life and history of the Beel, one on aviatory life of Deepor Beel, One on aquatic life and animals/ elephants)

The Kiosk will be housed adjacent to the cafeteria and facing the pavers block open yard. It will house a hard copy based information desk and a computer based audio visual system. It will have LED display of the audio visuals at regular intervals or as needed.

The bidders to quote with own concept & drawings.

6. The floating bridge/ pathway-

It will be a 600 ft floating pathway built over floating tanks which are structurally bound. The pathway will be one way. There will be resting and viewing provisions also at a few places. Movement over this will be restricted by numbers.

For the 600 ft length of a pontoon type floating bridge of 6 ft width with 2 ramps at both ends (Boarding & Unboarding) at the proposed & given location, the items involved are-

- Floatation tanks with internal support frame-40 nos
- Ramps with railings- 2 nos
- Structural binders for fastening the floatation tanks-60 pcs
- Structure for supporting walking platform
- Platform -3 mm MS plate/ shera board/ recycled board - 600 ft x 6 ft = 3600 sq ft
- Railings- 4 ft high x600 ft x 2 sides
- other fixtures- brackets, holders, nuts & bolts etc=
- Anchoring Posts with concrete base- 4 nos-
- Anchoring ropes

- Freight, loading & Unloading, Site preparatory work,
 - erection& fitting, solar light etc-

Floataction tank specifications- 4 mm thick MS plate

- a) Top- Length- 6 ft
Bottom- length- 4 ft
Height- 4 ft
Width- 4 ft

- b) Support Structure, railings etc made of MS angle , 1.5 inch x 1 inch rectangular pipe, 1 inch x 1 inch square pipe, 1.5 inch x 1.5 inch square pipe, 2 inch x 2 inch square pipe etc-

Bidders are to quote for the entire floating bridge / pathway based on drawings furnished.

7. **The pleasure boating arrangements-**
 - a. 4/6 Boats of 4/6 persons capacity – paddle type.
 - b. 2 speed boats for emergency rescue operations.
 - c. 2 rubber rafts/ inflatable type for stand by duty.
 - d. 2 oar type canoe.
 - e. 2 sail boats
 - f. Docking platform (concrete posts and wooden platform)
 - g. Life jackets, ropes, other necessary safety devices.

8. Watch Tower:

concrete foundation, structural steel construction- CGI roof- 1” thick timber plank for staircase landings, protective/safety railings in staircases and on the viewing platforms- 2/3 light points.

There will be 2 watchtowers –

- one tall of 50 ft height for those who enjoy thrill. This will have a lower deck at 30 ft.
- one small of 30 ft height for children. This will have a lower deck at 20 ft.

The bidders to quote with own concept & drawings.

9. Viewing points/platforms -

- a. For shops
- b For open air performances
- c for boating dock
- d for fish feeding

This platform will be connected from the main floating pathway by a floating bridge. Please refer to the drawing. The bidders may quote for different size and shape to accommodate a, b, c and d above each of 20 ft x 15 ft size with own concepts and designs also.

10. Solar Lighting & battery backup system-

Solar lighting (minimum 40 points), battery backup, solar panels, structure for solar panels, control panel- Total power to be generated 10KW.

A silent D.G set of 12.5 HP (10 KW) rating also is to be provided along with its foundation, change over switch etc.

The bidders are to submit the solar lighting scheme based on the master plan that they will submit along with the offer/ quotation.

11. Waste disposal system/arrangements-

- a. Sufficient bins for segregated waste collection.
- b. Compactor for bundling polythene and plastic.
- c. Crusher for plastic bottles and cans.
- d. Organic and inorganic waste separators.
- e. Organic waste packing platform with heaters and blowers.

Modern and new compact waste compacting/ collecting/ segregating machine will be installed to remain at par with the stipulations of the National Green Tribunal and SWM -2016 policy of the government. There will be waste collection bins at all necessary points.

The bidders will quote price specifying the equipment / system that they propose in maximum detail including composting/disposal and storage.

The bidders to quote with own concept & drawings.

12. Manpower Development-

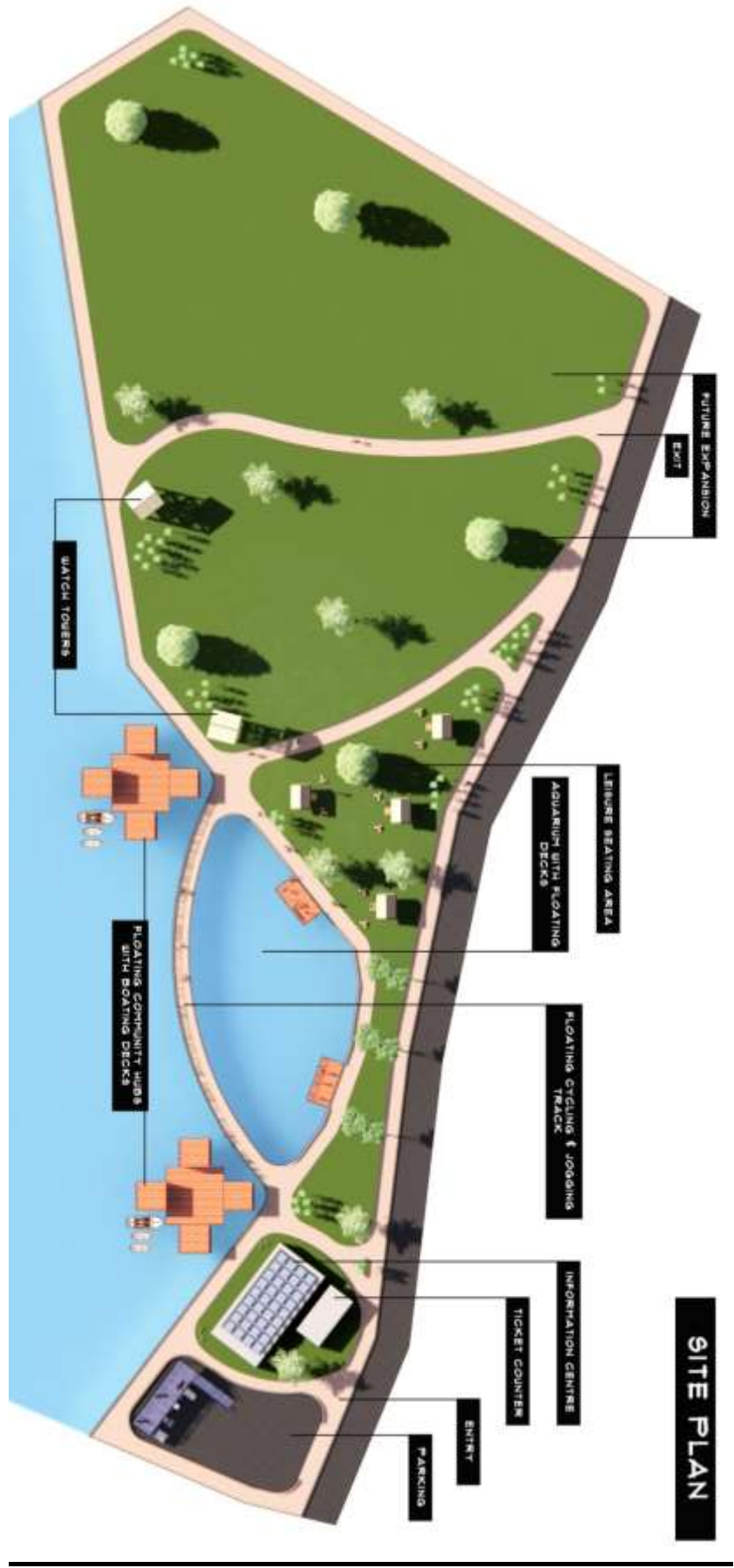
The bidders to quote with detailed break up.

13. Advertisement and Publicity

The bidders to quote with detailed break up.

(NB: Please refer to Annexure A for Reference/Guidelines of Design for bidding attached herewith.)

Drawings for reference



SITE PLAN



**PARKING AREA
VIEW**



VIEW 1

LEISURE SEATING AREA

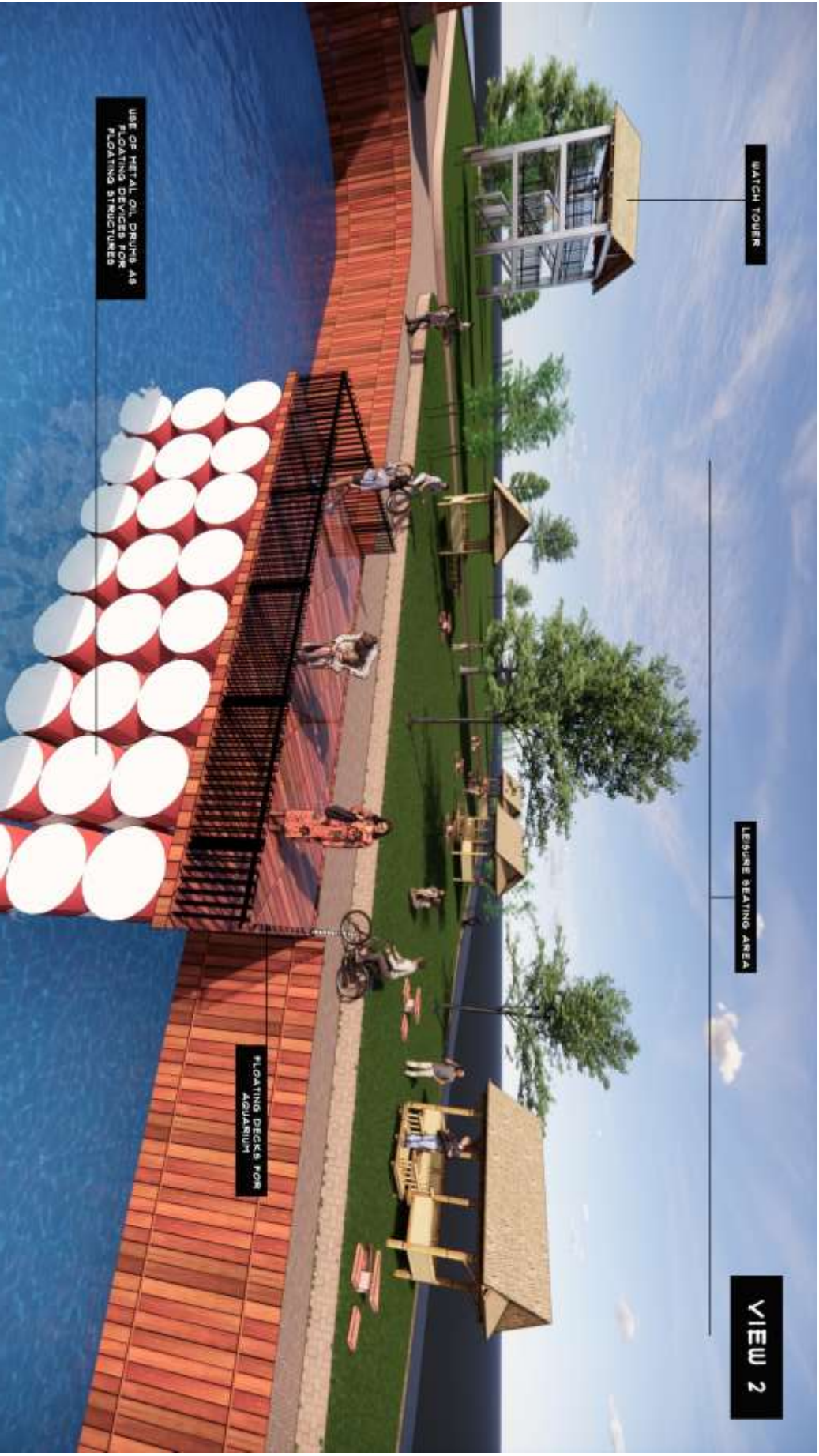
WATCH TOWER

FLOATING COMMUNITY HUBS WITH BOATING DECKS

FLOATING DECKS FOR AQUARIUM

FLOATING CYCLING & JOGGING TRACK

USE OF METAL OIL DRUMS AS FLOATING DEVICES FOR FLOATING STRUCTURES



WATCH TOWER

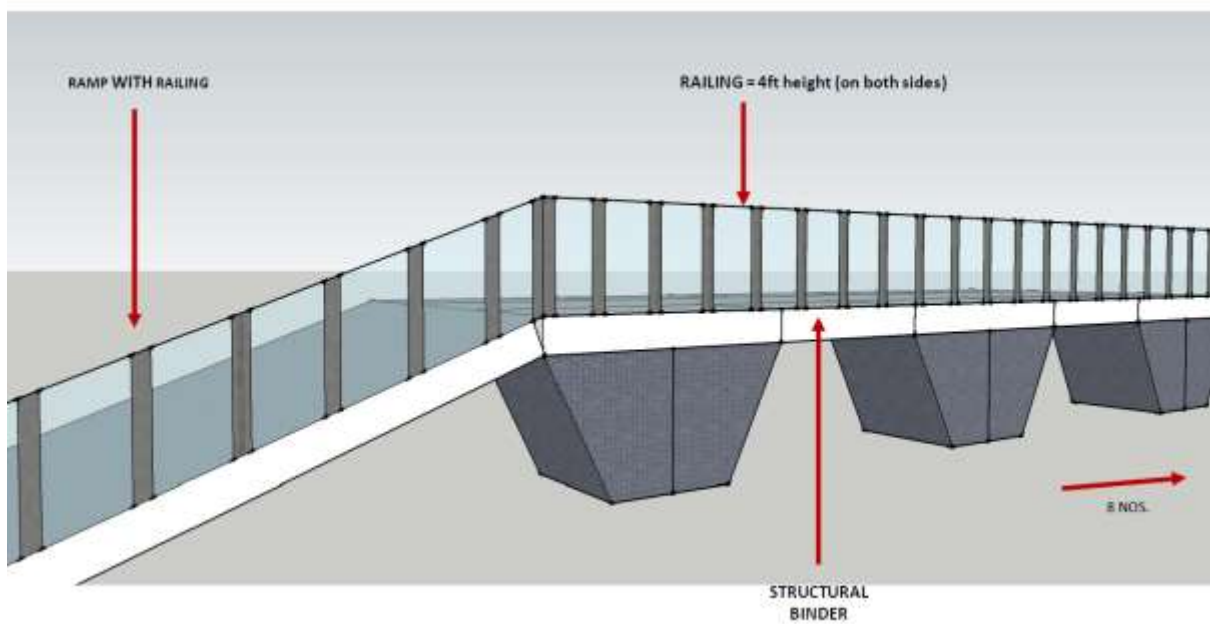
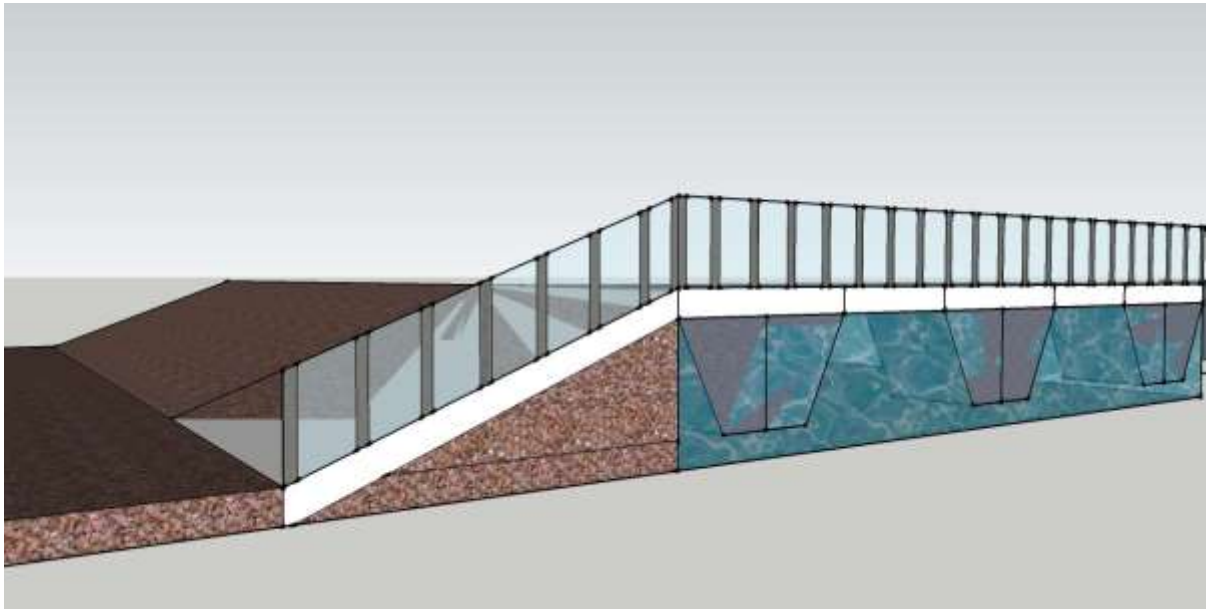
LEISURE SEATING AREA

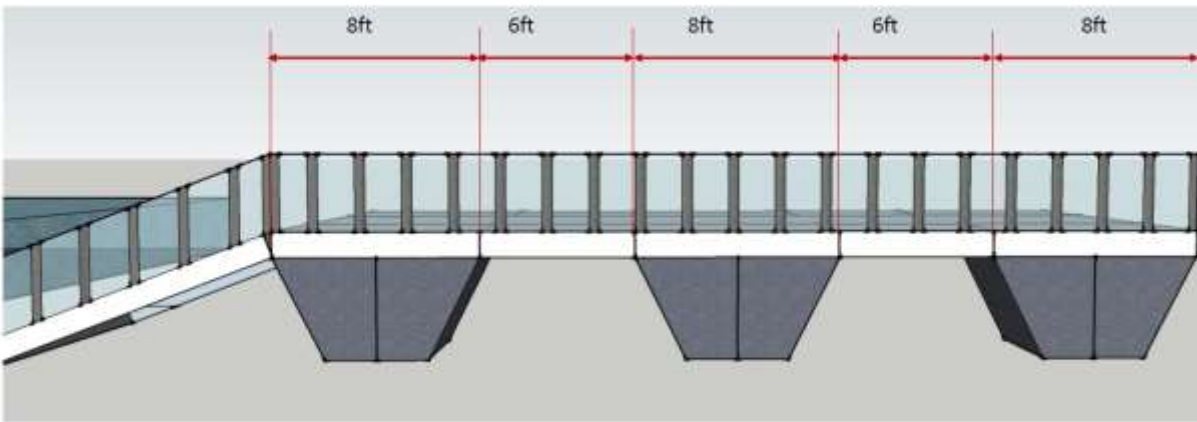
VIEW 2

USE OF METAL OIL DRUMS AS
FLOATING DEVICES FOR
FLOATING STRUCTURES

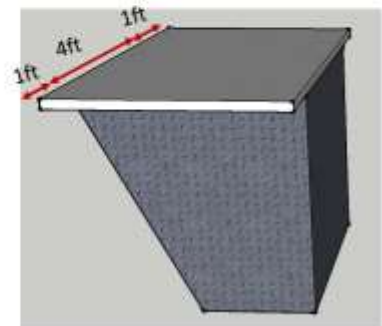
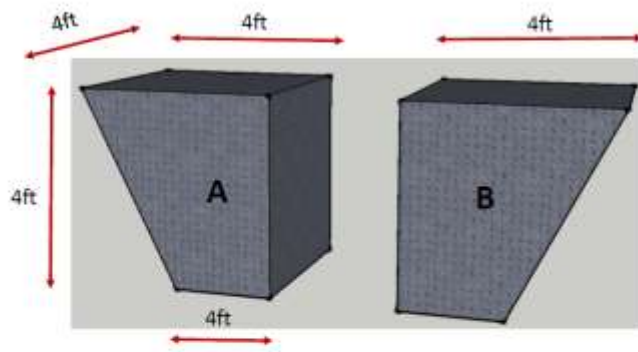
FLOATING DECKS FOR
AQUARIUM

THE FLOATING WALKWAY/CYCLE TRACK/:



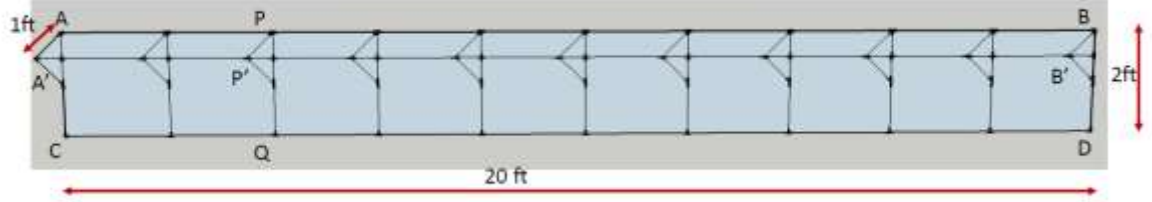


FLOATATION TANK



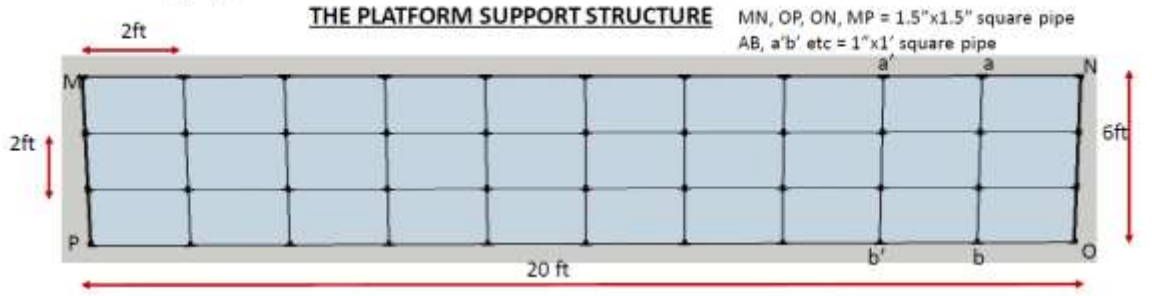
**A+B = One assembly
 (Made 2 pc for ease of handling)
 Made from 4mm thick MS plate**

STRUCTURAL BINDERS (one on each side)



- AB and CD – 2"x2" square pipe
- PQ – 1.5"x1" rectangular pipe
- AA', A'B' and BB' – 40x40x5 angle
- PP' – 1"x1.5" rectangular pipe

THE PLATFORM SUPPORT STRUCTURE



- MN, OP, ON, MP = 1.5"x1.5" square pipe
- AB, a'b' etc = 1"x1" square pipe

PROJECT COST:
(to be filled by the bidder)

Design and Development of Deepor Beel on EPC Mode at
Jalukbari in Guwahati, Assam

PROJECT COST

SL No.	ITEM	COST (in lakhs)
1	The Car/Bike parking space (double Decker for bikes)	
2	The Cafeteria with bio toilets	
3	Watchtowers	
4	The pavers block open yard & approach path	
5	The Aquarium with an artificial flowing river	
6	The Information Kiosk and rest lounge	
7	The floating bridge/ pathway	
8	The pleasure boating arrangements	
9	The viewing points / platforms	
10	Solar Lighting & battery backup system	
11	Waste disposal system/arrangements	
12	Landscaping	
13	Advertisement and publicity	
14	Manpower training and development	
	Total*	
NB:		