Government of the People's Republic of Bangladesh
Office of the Chief Engineer
Roads and Highways Department
Sarak Bhaban, Tejgaon, Dhaka-1208
Tel : 02-8879299, Fax : 02-8879199
Email: cerhd@gov.bd

Memo No: 628-CE Date : 15/10/18

**Subject: "First Periodic Bridge Inspection and BMS Data Input Program" at all field divisions**

This is to inform you that The Bridge Management Capacity Development Project -BMCDP has completed Training programs about bridge inspection, evaluation, Bridge Management System Software and Bridge Strengthening. This project has already created 75 master trainers out of which 65 are field executive engineers. BMCDP project has also arranged seminars for SDEs and Short Training for newly promoted executive engineers. Moreover, Field EEs also conducted Divisional Training Course with all the concerned officers and staffs. Furthermore, Bridge Inspection tools (Camera, Binocular-for each Zone, Laser Distance Meter, Crack Scale, Step Ladder and Long Hammers) and four Necessary Manuals of Bridge Management have already been distributed to Field Divisions.

Now, The Executive Engineers along with their trained workforce are instructed to start their bridge inspection and input the inspected data to BMS Software (using ID and Password attached) which has already been incorporated in RHD website. They may take help from Bridge Inspection and Evaluation Manual and also from the instruction attached with this letter.

Additional Chief Engineer, RHD each Field Zone is requested to send a progress report (Sample Attached) to Additional Chief Engineer, RHD, Bridge Management Wing and confirm that each division has completed bridge inspection and data input to BMS for at least 30 bridges/culverts per month. In this connection, for an accurate new database of Bridges of RHD and with a view to setting priority of Bridge Maintenance he is requested to direct the concerns to start bridge inspection and data input and report accordingly.

For any technical assistance the EEs may contact the following personnel.

**01.Mr. A.K. Shamsuddin Ahmed, Executive Engineer, RHD, Planning & Design Division,**
**Cell-01730782567,** Email-shams.nannu@gmail.com

**02.Mr. Santanu Palit, Executive Engineer, RHD, Environment Division,**
**Cell-01730782583, Email-santubuet02@yahoo.com**

**Enclosed:** 1. EE's User ID and Password
2. Instruction for Bridge Inspection
3. Instruction for BMS Data Input
4. Progress Report Format

15/10/18

(Ebne Alam Hasan)
ID No-001033
Chief Engineer
Roads and Highways Department
Sarak Bhaban, Tejgaon, Dhaka.

Additional Chief Engineer, RHD
Dhaka/Cumilla/Chattogram/Mymensingh/
Sylhet/Rajshahi/Khulna/Rangpur/Barishal/
Gopalganj Zone

Copy to:

1. Additional Chief Engineer, RHD, Bridge Management Wing & Project Director, Sarak Bhaban, Tejgaon, Dhaka.
2. Mr. Yoshimitsu Hiyama, Team Leader, BMCDP, Paikpara, Mirpur, Dhaka
3. Superintending Engineer, RHD, Planning & Programming/Bridge Cons. & Maintenance/Bridge Design/ Dhaka/Mamensingh/Jamalpur/Cumilla/Noakhali/Sylhet/Moulavibazar/Chattogram/Rangamati/ Khagrachari/Rajshahi/Pabna/Rangpur/Bogura/Dinajpur/Khulna/Jashore/Barishal/Patuakhali/Gopalgonj/ Faridpur Circle Office.
4. Senior System Analyst, MIS, RHD. You are requested to publish the letter with attachment in RHD website. In addition to that you are requested to cooperation in the implementing of BMS Software.

18.10.18

Attachment- 01

| Sr. | Road Division | Designation | Name and Employee ID | Official Cell No: | Official Telephone No | Official Email | BMS ID | Password |
|---|---|---|---|---|---|---|---|---|
| 1 | Jhalokati, (Division Office) | Executive Engineer | | 01730782787 | 49863529 | eejha@rhd.gov.bd | Same as Employee ID | changeme |
| 2 | Pirojpur, (Division Office) | Executive Engineer | Masud Mahmud Sumon [ID: 602165] | 01730782798 | 46162576 | eepird@rhd.gov.bd | Same as Employee ID | changeme |
| 3 | Barishal, (Division Office) | Executive Engineer | - | 01730782784 | 43164185 | eebar@rhd.gov.bd | Same as Employee ID | changeme |
| 4 | Barguna, (Division Office) | Executive Engineer | A.H.M. Javed Hossain Talukdar [ID: 602211] | 01730782789 | 44862844 | eebargu@rhd.gov.bd | Same as Employee ID | changeme |
| 5 | Bhola, (Division Office) | Executive Engineer | Pankaj Bhowmik [ID: 602209] | 01730782795 | 49162762 | eebho@rhd.gov.bd | Same as Employee ID | changeme |
| 6 | Patuakhali, (Division Office) | Executive Engineer | Mir Nizam Uddin Ahmed [ID: 602156] | 01730782792 | 44162216 | eepat@rhd.gov.bd | Same as Employee ID | changeme |
| 7 | Satkhira, (Division Office) | Executive Engineer | Md. Monzurul Karim [ID: 602000] | 01730782762 | 47162657 | eesatd@rhd.gov.bd | Same as Employee ID | changeme |
| 8 | Khulna, (Division Office) | Executive Engineer | Tapashi Das [ID: 005347] | 01730782756 | 41813815 | eekhu@rhd.gov.bd | Same as Employee ID | changeme |
| 9 | Bagerhat, (Division Office) | Executive Engineer | Md. Anisuzzaman Masud [ID: 601952] | 01730782759 | 46862485 | eebeg@rhd.gov.bd | Same as Employee ID | changeme |
| 10 | Magura, (Division Office) | Executive Engineer | Md. Nazrul Islam [ID: 602142] | 01730782772 | 48862518 | eemag@rhd.gov.bd | Same as Employee ID | changeme |
| 11 | Jashore, (Division Office) | Executive Engineer | Md. Abdur Rahim [ID: 005111] | 01730782767 | 42168416 | eejes@rhd.gov.bd | Same as Employee ID | changeme |
| 12 | Narail, (Division Office) | Executive Engineer | Md. Farid Uddin [ID: 602218] | 01730782776 | 48162508 | eenar@rhd.gov.bd | Same as Employee ID | changeme |
| 13 | Meherpur, (Division Office) | Executive Engineer | | 01730782780 | 79162932 | | | |
| 14 | Jhenaidah, (Division Office) | Executive Engineer | S.M. Moazzem Hossain [ID: 602176] | 01730782770 | 45162816 | eejhe@rhd.gov.bd | Same as Employee ID | changeme |
| 15 | Chuadanga, (Division Office) | Executive Engineer | Mohammed Ziaul Haider [ID: 601933] | 01730782778 | 76163539 | eechu@rhd.gov.bd | Same as Employee ID | changeme |
| 16 | Naogaon, (Division Office) | Executive Engineer | Mohammad Hamidul Huq [ID: 601970] | 01730782708 | 74162593 | eenao@rhd.gov.bd | Same as Employee ID | changeme |
| 17 | Nawabganj, (Division Office) | Executive Engineer | A.Z.M. Farhan Daud [ID: 602190] | 01730782711 | 78155101 | eenaw@rhd.gov.bd | Same as Employee ID | changeme |
| 18 | Kushtia, (Division Office) | Executive Engineer | Md. Rafiqul Islam [ID. 601951] | 01730782774 | 7162135 | eekus@rhd.gov.bd | Same as Employee ID | changeme |
| 19 | Sirajganj, (Division Office) | Executive Engineer | Dr. Mohammad Ahad Ullah [ID: 602136] | 01730782718 | 75162294 | eeshid@rhd.gov.bd | Same as Employee ID | changeme |
| 20 | Natore, (Division Office) | Executive Engineer | Md. Ashraful Islam Pk [ID: 602162] | 01730782722 | 77166870 | eenat@rhd.gov.bd | Same as Employee ID | changeme |
| 21 | Rajshahi, (Division Office) | Executive Engineer | Md. Shamsuzzoha [ID: 602202] | 01730782705 | 721812215 | eerajs@rhd.gov.bd | Same as Employee ID | changeme |
| 22 | Rangpur, (Division Office) | Executive Engineer | Md. Shazedur Rahman [ID: 602167] | 01730782727 | 52163655 | eeran@rhd.gov.bd | Same as Employee ID | changeme |
| 23 | Lalmonirhat, (Division Office) | Executive Engineer | Ali Noor Aine [ID: 602187] | 01730782730 | 59161770 | eelal@rhd.gov.bd | Same as Employee ID | changeme |
| 24 | Pabna, (Division Office) | Executive Engineer | Samiran Roy [ID: 005099] | 01730782715 | 73165853 | eepab@rhd.gov.bd | Same as Employee ID | changeme |
| 25 | Nilphamari, (Division Office) | Executive Engineer | A.K.M. Hamidur Rahman [ID: 602131] | 01730782752 | 55161403 | eenil@rhd.gov.bd | Same as Employee ID | changeme |
| 26 | Panchgarh, (Division Office) | Executive Engineer | Shah Mohammad Shams mokaddas [ID: 601930] | 01730782750 | 56861205 | eepan@rhd.gov.bd | Same as Employee ID | changeme |
| 27 | Kurigram, (Division Office) | Executive Engineer | Amir Hossain [ID: 602205] | 01730782732 | 58161658 | eekur@rhd.gov.bd | Same as Employee ID | changeme |
| 28 | Bogura, (Division Office) | Executive Engineer | Md. Ashrafuzzaman [ID: 602164] | 01730782736 | 5166304 | eebog@rhd.gov.bd | Same as Employee ID | changeme |
| 29 | Joypurhat, (Division Office) | Executive Engineer | Md. Tanvir Siddique [ID: 601972] | 01730782739 | 57151332 | eejoy@rhd.gov.bd | Same as Employee ID | changeme |
| 30 | Thakurgaon, (Division Office) | Executive Engineer | A.K.M. Shafiquzzaman [ID: 602189] | 01730782748 | 56152079 | eetha@rhd.gov.bd | Same as Employee ID | changeme |
| 31 | Bandarban, (Division Office) | Executive Engineer | Md. Sajib Ahamed [ID: 602184] | 01730782695 | 36162566 | eeban@rhd.gov.bd | Same as Employee ID | changeme |
| 32 | Gaibanda, (Division Office) | Executive Engineer | Md. Asaduzzaman [ID: 602153] | 01730782741 | 54151674 | eegai@rhd.gov.bd | Same as Employee ID | changeme |
| 33 | Dinajpur, (Division Office) | Executive Engineer | Suniti Chakma [ID: 602147] | 01730782745 | 53165141 | eedin@rhd.gov.bd | Same as Employee ID | changeme |

| Sr. | Road Division | Designation | Name and Employee ID | Official Cell No: | Official Telephone No | Official Email | BMS ID | Password |
|---|---|---|---|---|---|---|---|---|
| 34 | Cox's Bazar, (Division Office) | Executive Engineer | Pintu Chakma [ID: 602219] | 01730782686 | 34152160 | eecox@rhd.gov.bd | Same as Employee ID | changeme |
| 35 | Chattogram, (Division Office) | Executive Engineer | Zulfiquar Ahmed [ID: 602138] | 01730782679 | 312863232 | eechi@rhd.gov.bd | Same as Employee ID | changeme |
| 36 | Rangamati, (Division Office) | Executive Engineer | - | 01730782691 | 35162101 | eeranga@rhd.gov.bd | Same as Employee ID | changeme |
| 37 | Chandpur, (Division Office) | Executive Engineer | Subrata Datta [ID: 601979] | 01730782644 | 84163310 | eecha@rhd.gov.bd | Same as Employee ID | changeme |
| 38 | Dohazari, (Division Office) | Executive Engineer | Md. Tofail Miah [ID: 601996] | 01730782683 | 31635022100 | eedoh@rhd.gov.bd | Same as Employee ID | changeme |
| 39 | Khagrachari, (Division Office) | Executive Engineer | Sakil Mohammad Faysal [ID: 602216] | 01730782699 | 37161730 | eekha@rhd.gov.bd | Same as Employee ID | changeme |
| 40 | Noakhali, (Division Office) | Executive Engineer | Binoy Kumar Paul [ID: 602170] | 01730782651 | 32161124 | eenoa@rhd.gov.bd | Same as Employee ID | changeme |
| 41 | Cumilla, (Division Office) | Executive Engineer | Mofazzal Haider [ID: 601966] | 01730782641 | 8164725 | eecom@rhd.gov.bd | Same as Employee ID | changeme |
| 42 | Brahmanbaria,(Division Office) | Executive Engineer | Abu Ehtesham Rashed [ID: 001021] | 01730782647 | 85159632 | eebra@rhd.gov.bd | Same as Employee ID | changeme |
| 43 | Feni, (Division Office) | Executive Engineer | Mohammad Jahid Hossain [ID: 602183] | 01730782654 | 33174039 | eefen@rhd.gov.bd | Same as Employee ID | changeme |
| 44 | Laxmipur, (Division Office) | Executive Engineer | Zahirul Islam [ID: 602150] | 01730782657 | 38161500 | eelax@rhd.gov.bd | Same as Employee ID | changeme |
| 45 | Manikganj, (Division Office) | Executive Engineer | Md. Amdad Hossen [ID: 612155] | 01730782610 | 65161377 | eeman@rhd.gov.bd | Same as Employee ID | changeme |
| 46 | Dhaka, (Division Office) | Executive Engineer | Mohammad Mahade Iqbal [ID: 601956] | 01730782594 | 9880827 | eedha@rhd.gov.bd | Same as Employee ID | changeme |
| 47 | Gazipur, (Division Office) | Executive Engineer | Dewan Abul Kashem Md. Nahin Reza [ID: 602143] | 01730782599 | 9252275 | eegaz@rhd.gov.bd | Same as Employee ID | changeme |
| 48 | Narsingdi, (Division Office) | Executive Engineer | Md. Moniruzzaman [ID: 601961] | 01730782603 | 628613222 | eenar@rhd.gov.bd | Same as Employee ID | changeme |
| 49 | Narayanganj, (Division Office) | Executive Engineer | Md. Alul Hossain [ID: 601977] | 01730782606 | 7693468 | eenary@rhd.gov.bd | Same as Employee ID | changeme |
| 50 | Munshiganj, (Division Office) | Executive Engineer | Md. Mamunur Rashid [ID: 602140] | 01730782613 | 27611259 | eemun@rhd.gov.bd | Same as Employee ID | changeme |
| 51 | Netrokona, (Division Office) | Executive Engineer | Md. Didarul Alam Tarafder [ID: 601978] | 01730782636 | 95161359 | eenet@rhd.gov.bd | Same as Employee ID | changeme |
| 52 | Tangail, (Division Office) | Executive Engineer | Mohammad Amimul Ehsan [ID: 602197] | 01730782628 | 92154043 | eetan@rhd.gov.bd | Same as Employee ID | changeme |
| 53 | Kishoreganj, (Division Office) | Executive Engineer | Md. Rashedul Alam [ID: 601958] | 01730782632 | 94161805 | eekis@rhd.gov.bd | Same as Employee ID | changeme |
| 54 | Mymensingh, (Division Office) | Executive Engineer | Md. Masud Khan [ID: 601926] | 01730782618 | 91542277 | eemym@rhd.gov.bd | Same as Employee ID | changeme |
| 55 | Jamalpur, (Division Office) | Executive Engineer | Md Mostafizur Rahman [ID: 602158] | 01730782622 | 98163691 | eejam@rhd.gov.bd | Same as Employee ID | changeme |
| 56 | Sherpur, (Division Office) | Executive Engineer | Ahsan Uddin Ahmed [ID: 601944] | 01730782625 | 93161821 | eeshed@rhd.gov.bd | Same as Employee ID | changeme |
| 57 | Rajbari, (Division Office) | Executive Engineer | Khairul Basar Mohammad Saddam Hossain [ID: 602201] | 01730782816 | 64165721 | eeraj@rhd.gov.bd | Same as Employee ID | changeme |
| 58 | Gopalganj, (Division Office) | Executive Engineer | K.M. Shariful Alam [ID: 602210] | 01730782803 | 26685377 | eegopal@rhd.gov.bd | Same as Employee ID | changeme |
| 59 | Madaripur, (Division Office) | Executive Engineer | Md Nurun Nabi Tarafdar [ID: 601927] | 01730782807 | 66162451 | eemad@rhd.gov.bd | Same as Employee ID | changeme |
| 60 | Shariatpur, (Division Office) | Executive Engineer | Zakir Hossain [ID: 602186] | 01730782810 | 60161406 | eesard@rhd.gov.bd | Same as Employee ID | changeme |
| 61 | Faridpur, (Division Office) | Executive Engineer | Mohammad Jahangir Alam [ID: 601929] | 01730782813 | 63163256 | eefar@rhd.gov.bd | Same as Employee ID | changeme |
| 62 | Moulavi Bazar,(Division Office) | Executive Engineer | Sheikh Sohel Ahmed [ID: 602145] | 01730782670 | 86152245 | eemou@rhd.gov.bd | Same as Employee ID | changeme |
| 63 | Sunamganj, (Division Office) | Executive Engineer | Md. Shafikul Islam [ID: 601938] | 01730782666 | 87161631 | eesun@rhd.gov.bd | Same as Employee ID | changeme |
| 64 | Sylhet, (Division Office) | Executive Engineer | Utpal Samanta [ID: 005045] | 01730782662 | 821716339 | eesyl@rhd.gov.bd | Same as Employee ID | changeme |
| 65 | Habiganj, (Division Office) | Executive Engineer | Mohammed Zahirul Islam [ID: 601992] | 01730782674 | 83163269 | eehab@rhd.gov.bd | Same as Employee ID | changeme |

Attachment - 02

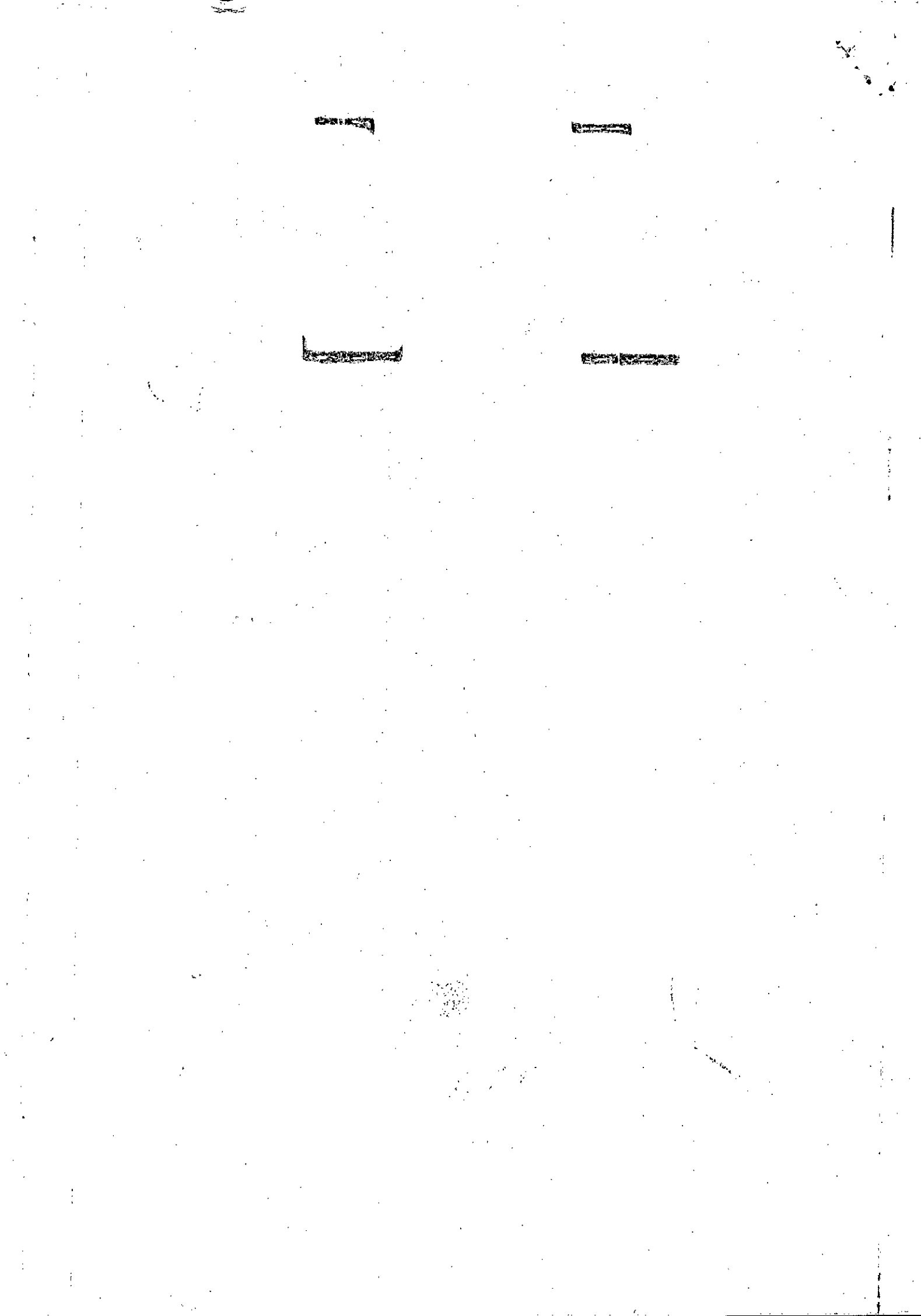
## [Instruction for Inspection]

1. Input basic data of the bridges into BMS. A basic data input manual is attached. BMS is already incorporated in RHD website.

2. Print the inspection sheets of each bridge in which basic data are already filled and bring them to the inspection site.
   Or
   you can go to field without inspection sheet, collect the basic data(to have the basic data please log in to BMS with your user id and password and have an idea by adding a new bridge) and draw field sketch of bridges and defect of bridges. After returning from field you can simultaneously input basic data, then create inspection sheets and input inspection data.

3. Carry inspection and recording tools such as binoculars, step ladders, inspection hammers, measuring tapes, lights, clack gauges, GPSs-use smart phone's gps, laser range finders, digital cameras, white boards, marker pens, field notebooks, safety goods including the goods for traffic safety etc. when going to the site.

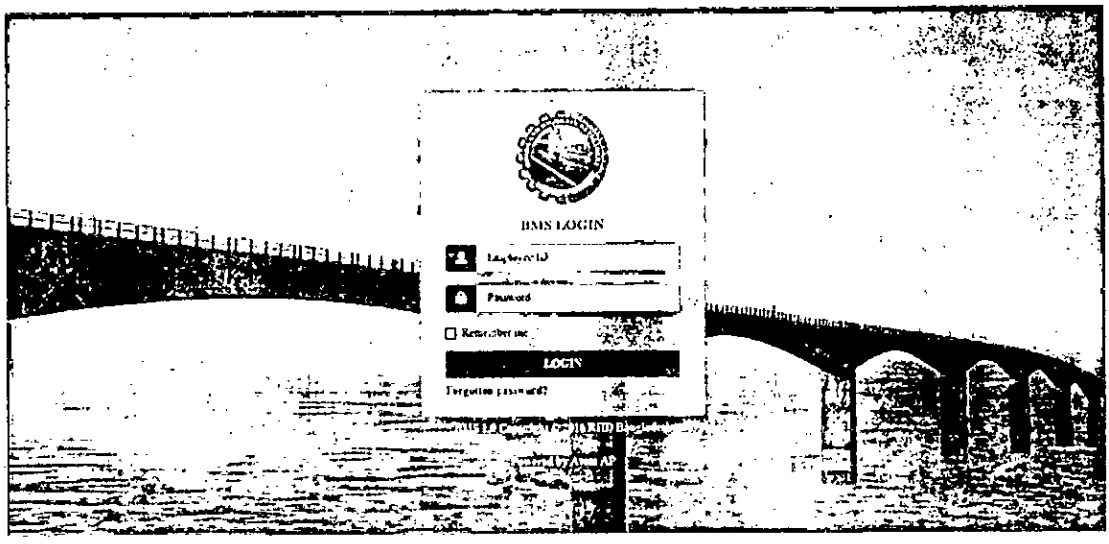
4. After inspection, input the results into BMS at BMS Division Office or each Division Office. You can take help from Inspection and BMS manuals also.



Attachment – 3

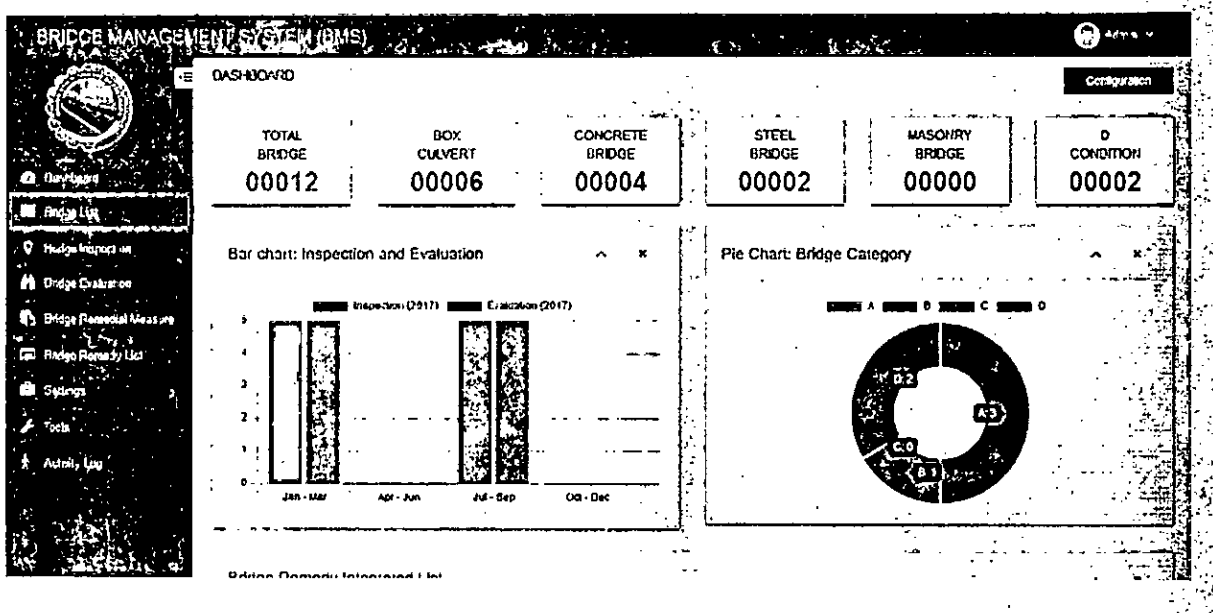
# Bridge Basic Data Input Step by Step Guide

1. Open your Mozilla Firefox / Google Chrome browser.
2. In the address bar type "43.243.207.170:81" and press Enter button. Then you will see the below page.

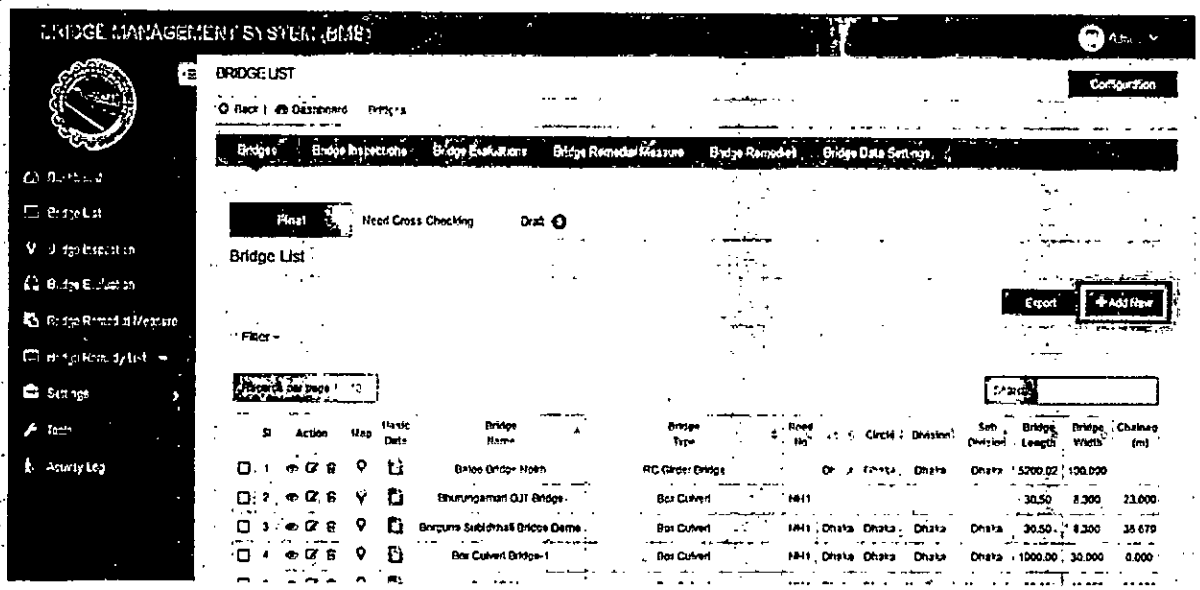



To login into BMS -

3. Enter valid Employee ID. Example: RHD-123
4. Enter Password: Example: mypassword
5. Click Login. If Employee ID or Password is invalid, then an error message will show.
6. If login successful, then you will see the below page.

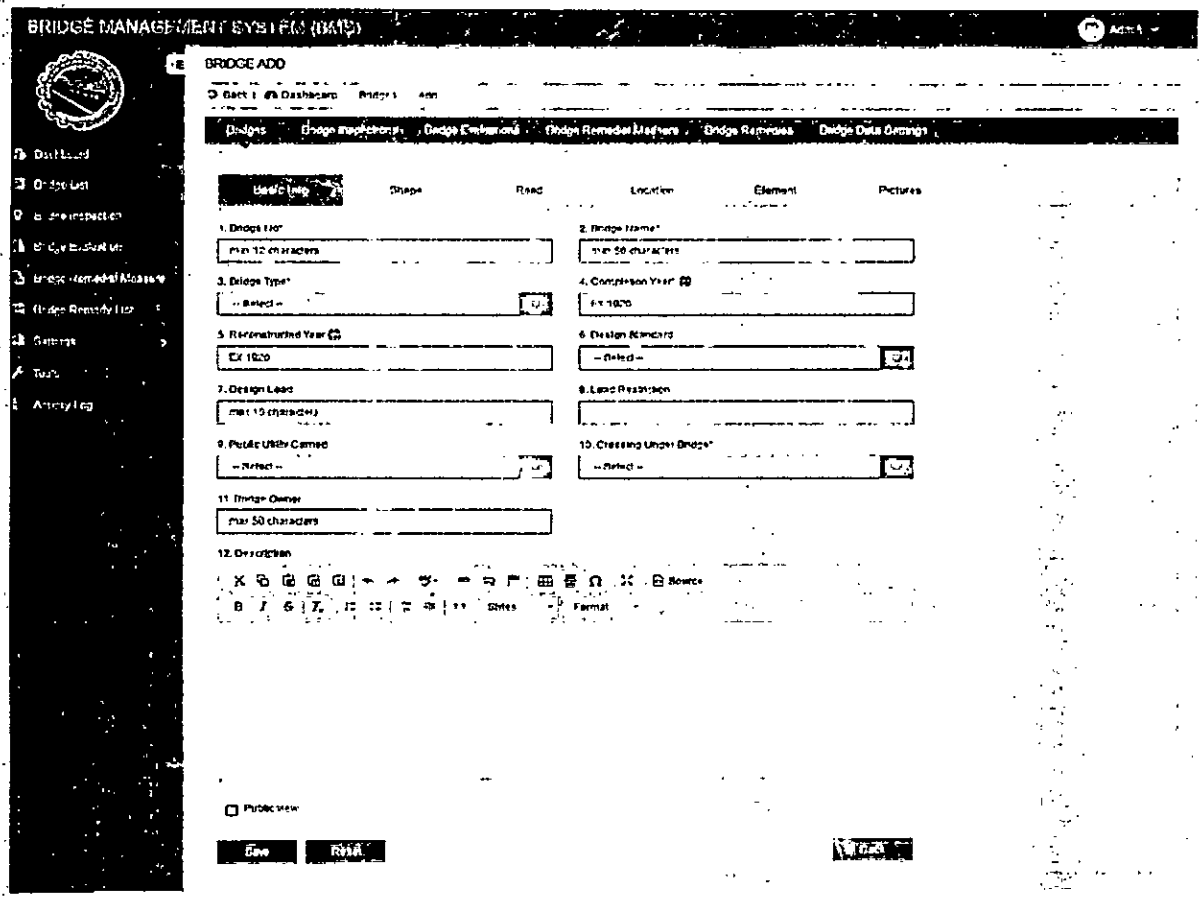



7. Click "Bridge List" (the red mark menu) from the left side menu. Then you will see the below page.




8. Click "Add New" button (red mark at the right of the above screen) to add new bridge. Then you will see the below page.

**1st Section Data Input: "Basic Info" data**

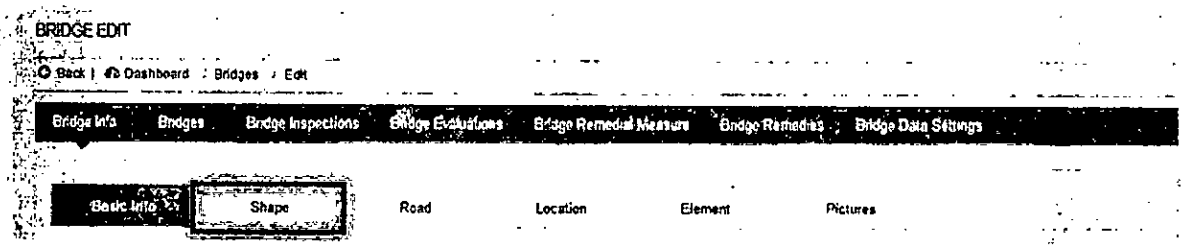


| Tab | Serial | Field | Required/ Mandatory | Details |
|---|---|---|---|---|
| Basic Data | 1 | Bridge No* | Yes | Give input. Bridge No is made with GPS (Coordinate):<br>Lat : ab.cdefg; Long : AB.CDEFG; Bridge No : cdefgCDEFG (10 letters)<br>Example, Lt : 24.12957; Long : 91.89245; Bridge No : 1295789245 (10 letters). |
| | 2 | Bridge Name* | Yes | Give input. First letter of each word is capital letter. Example, Test River Bridge-1. |
| | 3 | Bridge Type* | Yes | Select from dropdown. Example, Box Culvert. |
| | 4 | Completion Year* | Yes | Click the calendar icon. Example, 1995 |
| | 5 | Reconstructed Year | No | Click the calendar icon. Example, 1997 |
| | 6 | Design Standard | No | Select from dropdown. Design Standard to design the bridge. Example, AASHTO. |
| | 7 | Design Load | No | Give input. Maximum load of vehicles in design the bridge. Example, Load-1. |
| | 8 | Load Restriction | No | Give input. Set to control heavy vehicles because of damage of the bridge. Example, 10000. |
| | 9 | Public Utility Carried | No | Select from dropdown. Example, Gas. |
| | 10 | Crossing Under Bridge* | Yes | Select from dropdown. Example, Railway. |
| | 11 | Bridge Owner | No | Give input. Like as RHD office name. Example, RHD. |
| | 12 | Description | No | Give input. Explanation of the bridge. If there is no description, you can ignore it. |

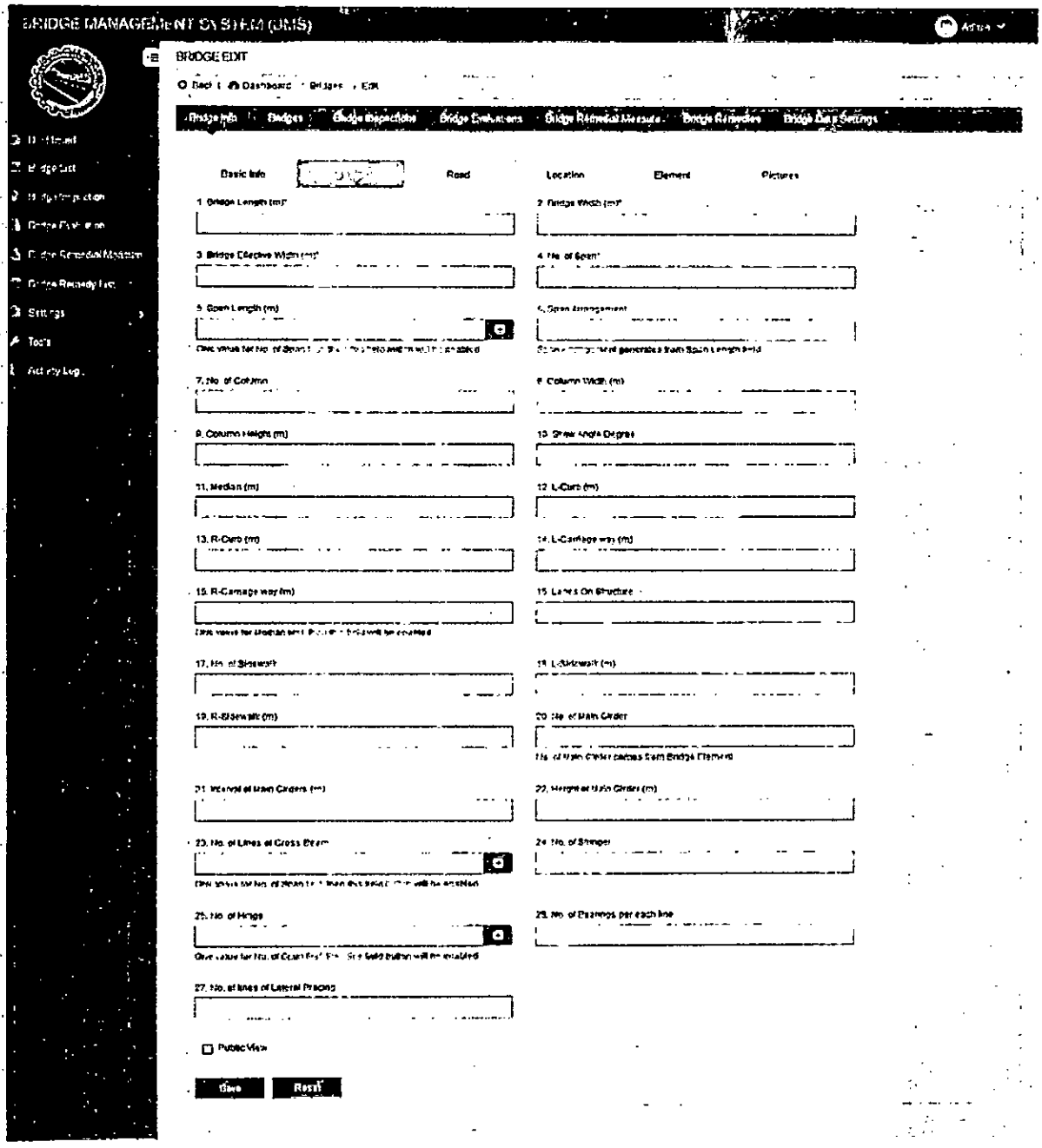
9. Click "Save" button at the bottom of the page to save this data into database.

**N.B: If save successful then "Basic Info" data input is complete.**

## 2nd Section Data Input – Bridge "Shape" data



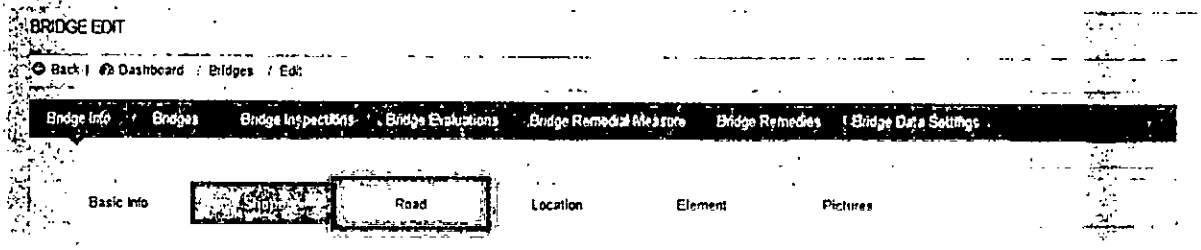

10. Click "Shape" tab at the right side of "Basic Info" tab. Then you will see the below page.



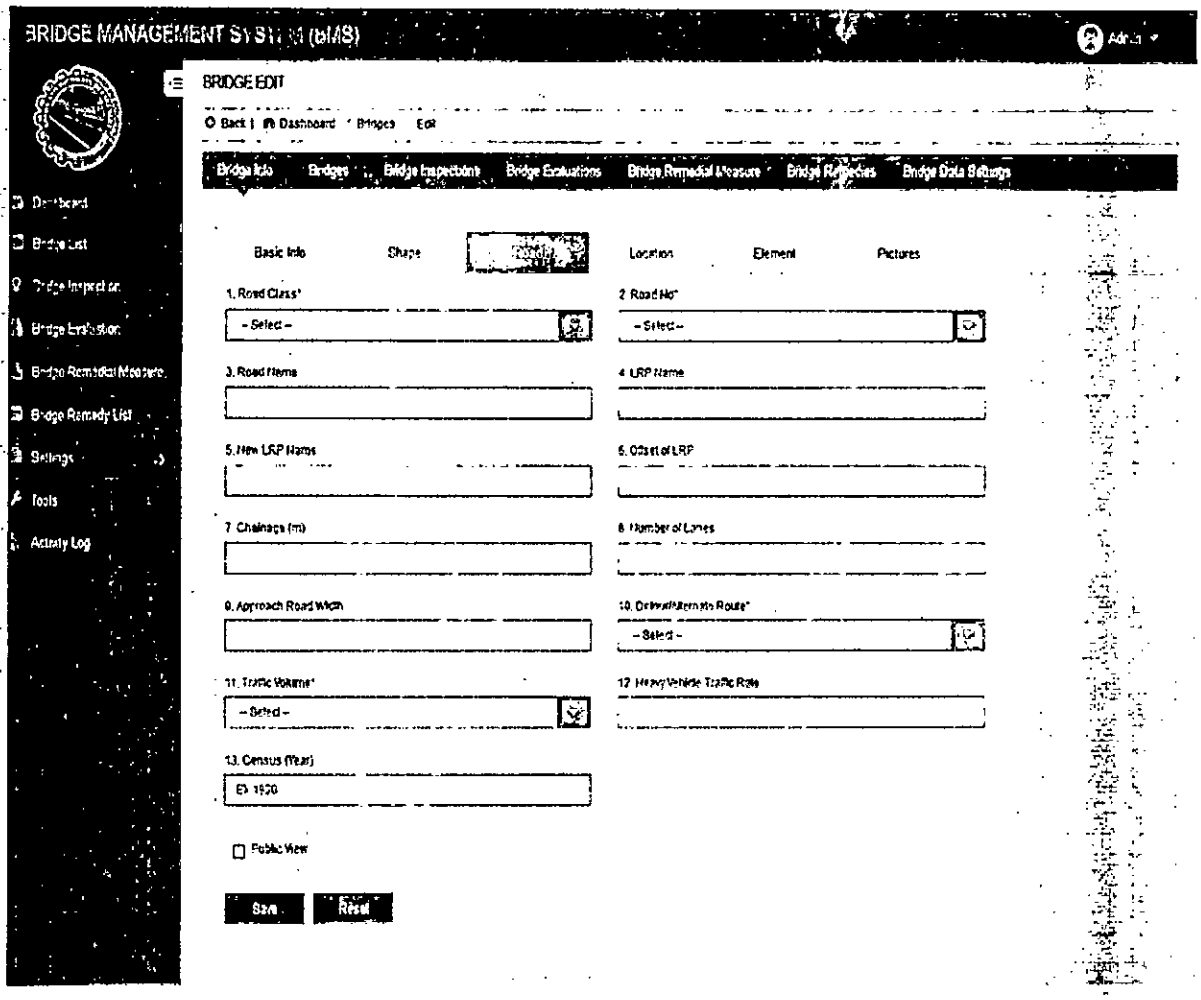
| Tab | Serial | Field | Required/ Mandatory | Details |
|---|---|---|---|---|
| Shape | 1 | Bridge Length (m)* | Yes | Give input. Example, 2000. |
| | 2 | Bridge Width (m)* | Yes | Give input. Example, 30. |
| | 3 | Bridge Effective Width (m)* | Yes | Give input. Example, 28. |
| | 4 | No. of Span* | Yes | Give input. Example, 3. |
| | 5 | Span Length (m) | No | After giving input for No. of Span field, give input for Span Length based on span. Example, (3+4+5) = 12. |
| | 6 | Span Arrangement | No | Auto generate from Span Length field. |
| | 7 | No. of Column | No | Give input. Example, 127. |
| | 8 | Column Width (m) | No | Give input. Example, 20. |
| | 9 | Column Height (m) | No | Give input. Example, 100. |
| | 10 | Skew Angle Degree | No | Give input. Example, 95. |
| | 11 | Median (m) | No | Give input. Example, 100. |
| | 12 | L-Curb (m) | No | Give input. Example, 10. |
| | 13 | R-Curb (m) | No | Give input. Example, 12. |
| | 14 | L-Carriage way (m) | No | Give input. Example, 5. |
| | 15 | R-Carriage way (m) | No | If Median is greater than zero then you can give input. Example, 4. |
| | 16 | Lanes On Structure | No | Give input. Example, 100. |
| | 17 | No. of Sidewalk | No | Give input. Example, 2. |
| | 18 | L-Sidewalk (m) | No | Give input. Example, 4. |
| | 19 | R-Sidewalk (m) | No | Give input. Example, 5. |
| | 20 | No. of Main Girder | No | Auto generate from Bridge Element. |
| | 21 | Interval of Main Girders (m) | No | Give input. Example, 0.250. |
| | 22 | Height of Main Girder (m) | No | Give input. Example, 0.75. |
| | 23 | No. of Lines of Cross Beam | No | After giving input for No. of Span field, give input for No. of Lines of Cross Beam based on span. Example, (2+3+2) = 7. |
| | 24 | No. of Stringer | No | Give input. Example, 5. |
| | 25 | No. of Hinge | No | After giving input for No. of Span field, give input for No. of Hinge based on span. Example, (3+2+3) = 8. |
| | 26 | No. of Bearings per each line | No | Give input. Example, 1. |
| | 27 | No. of lines of Lateral Bracing | No | Give input. Example, 2. |

**N.B: If save successful then "Shape" data input is complete.**

## 3rd Section Data Input – Bridge "Road" data



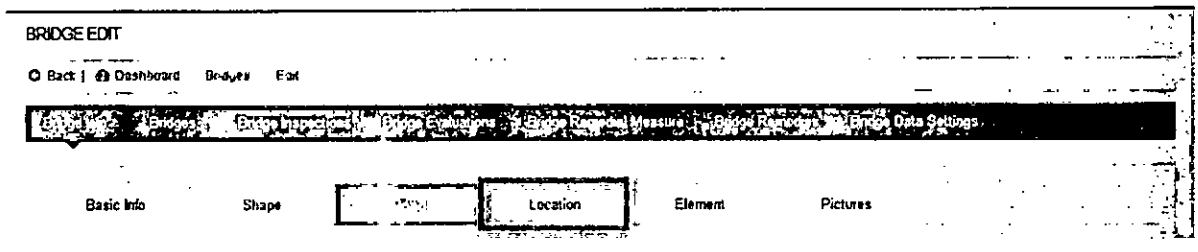

11. Click "Road" tab. Then you will see the below page.



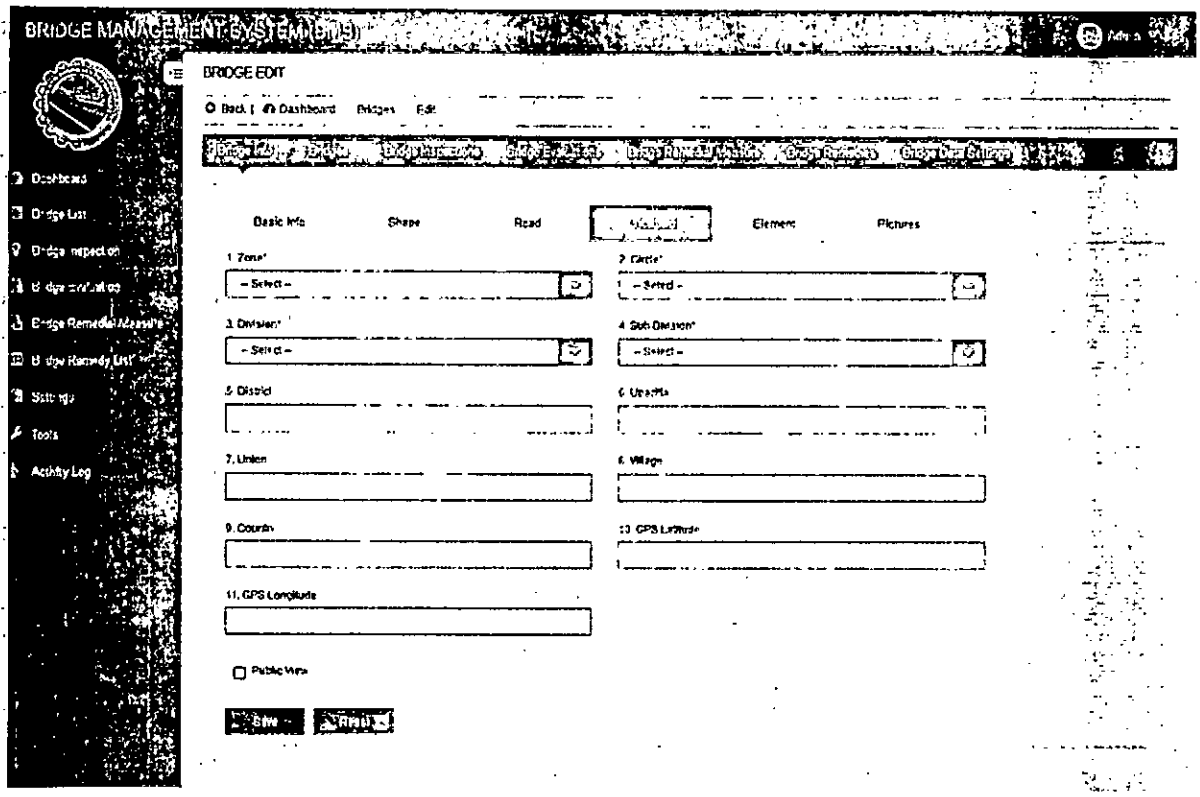
| Tab | Serial | Field | Required/ Mandatory | Details |
|---|---|---|---|---|
| Road | 1 | Road Class* | Yes | Select from dropdown. Example, National Highway. |
| | 2 | Road No* | Yes | Select from dropdown. Example, NH1. |
| | 3 | Road Name | No | Give input. Example, Dhaka-Sirajgonj. |
| | 4 | LRP Name | No | Give input. Example, LRP222. |
| | 5 | New LRP Name | No | Give input. Example, NLRP222. |
| | 6 | Offset of LRP | No | Give input. Example, OLRP222. |
| | 7 | Chainage (m) | No | Give input. Chainage is distance between start of the road and bridge location. Example, 4.450. |
| | 8 | Number of Lanes | No | Give input. Example, 2. |
| | 9 | Approach Road Width | No | Give input. Example, 14.6. |
| | 10 | Detour/Alternate Route* | Yes | Select from dropdown. If there is another road near the bridge to be able to use as substitute the bridge, select "exist". If you don't have this information, select "none" as temporary. Example, Exist. |
| | 11 | Traffic Volume* | Yes | Select from dropdown. Example, 5,000 to 10,000. |
| | 12 | Heavy Vehicle Traffic Rate | No | Give input. Example, 150. |
| | 13 | Census (Year) | No | Give input. Example, 2000. |

**N.B: If save successful then "Road" data input is complete.**

**4th Section Data Input – Bridge "Location" data**



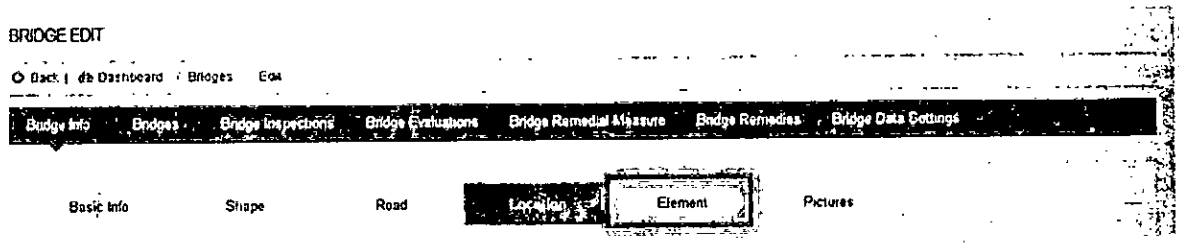

12. Click "Location" tab. Then you will see the below page.



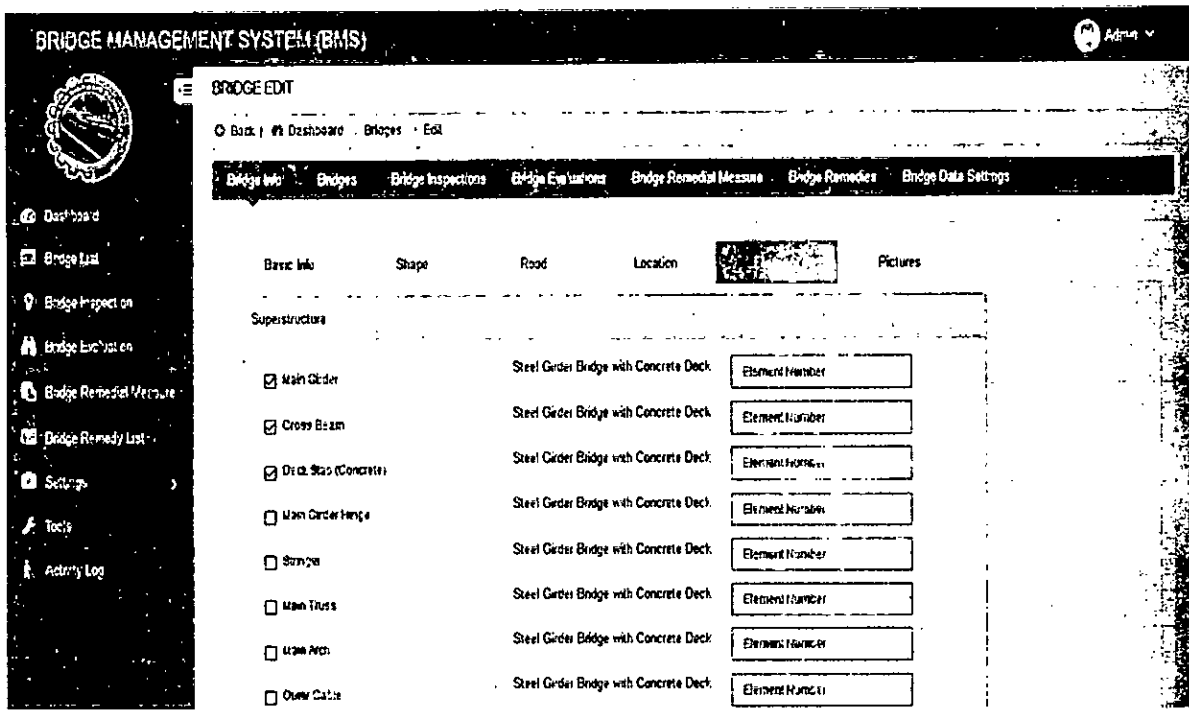

| Tab | Serial | Field | Required/ Mandatory | Details |
|---|---|---|---|---|
| Location | 1 | Zone* | Yes | Select from dropdown. Example, Dhaka. |
| | 2 | Circle* | Yes | Select from dropdown. Example, Dhaka. |
| | 3 | Division* | Yes | Select from dropdown. Example, Dhaka. |
| | 4 | Sub Division* | Yes | Select from dropdown. Example, Dhaka. |
| | 5 | District | No | Give input. First letter of each word is Capital letter. Example, Dhaka. |
| | 6 | Upazila | No | Give input. First letter of each word is Capital letter. Example, Savar. |
| | 7 | Union | No | Give input. First letter of each word is Capital letter. Example, Baipayl. |
| | 8 | Village | No | Give input. First letter of each word is Capital letter. Example, Pobnartek. |
| | 9 | Country | No | Give input. First letter of each word is Capital letter. Example, Bangladesh. |
| | 10 | GPS Latitude | No | Give input. GPS information of the bridge. Example, 24.3943000. |
| | 11 | GPS Longitude | No | Give input. GPS information of the bridge. Example, 89.7762200. |

**N.B: If save successful then "Location" data input is complete.**

## 4th Section Data Input – Bridge "Element" data




13. Click "Element" tab. Then you will see the below page.

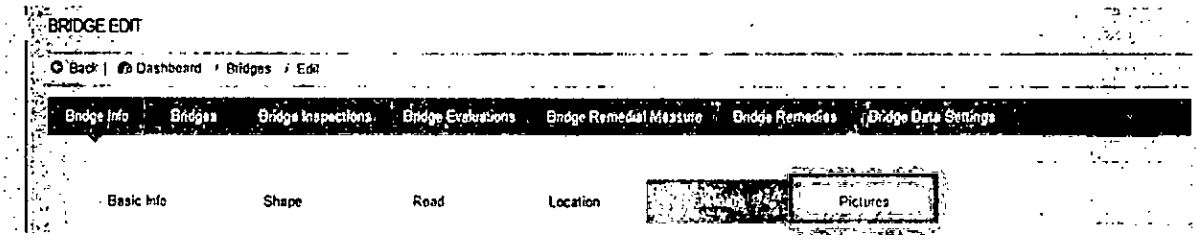



| Tab | Serial | Field | Required/ Mandatory | Details |
|---|---|---|---|---|
| Element | | Superstructure | No | Information in Element tag is necessary to make Inspection Report Sheet (Blanked) automatically. Choose and check boxes of necessary elements and input number of the elements. Each bridge type has basic elements to consist the bridge. Check in box of the elements has checked and fixed automatically. |
| | | Substructure | No | |
| | | Bearings | No | |
| | | Deck Surface | No | |
| | | Drainage System | No | |
| | | Inspection Facilities | No | |
| | | Utilities | No | |
| | | Expansion joint | No | |
| | | Others | No | |

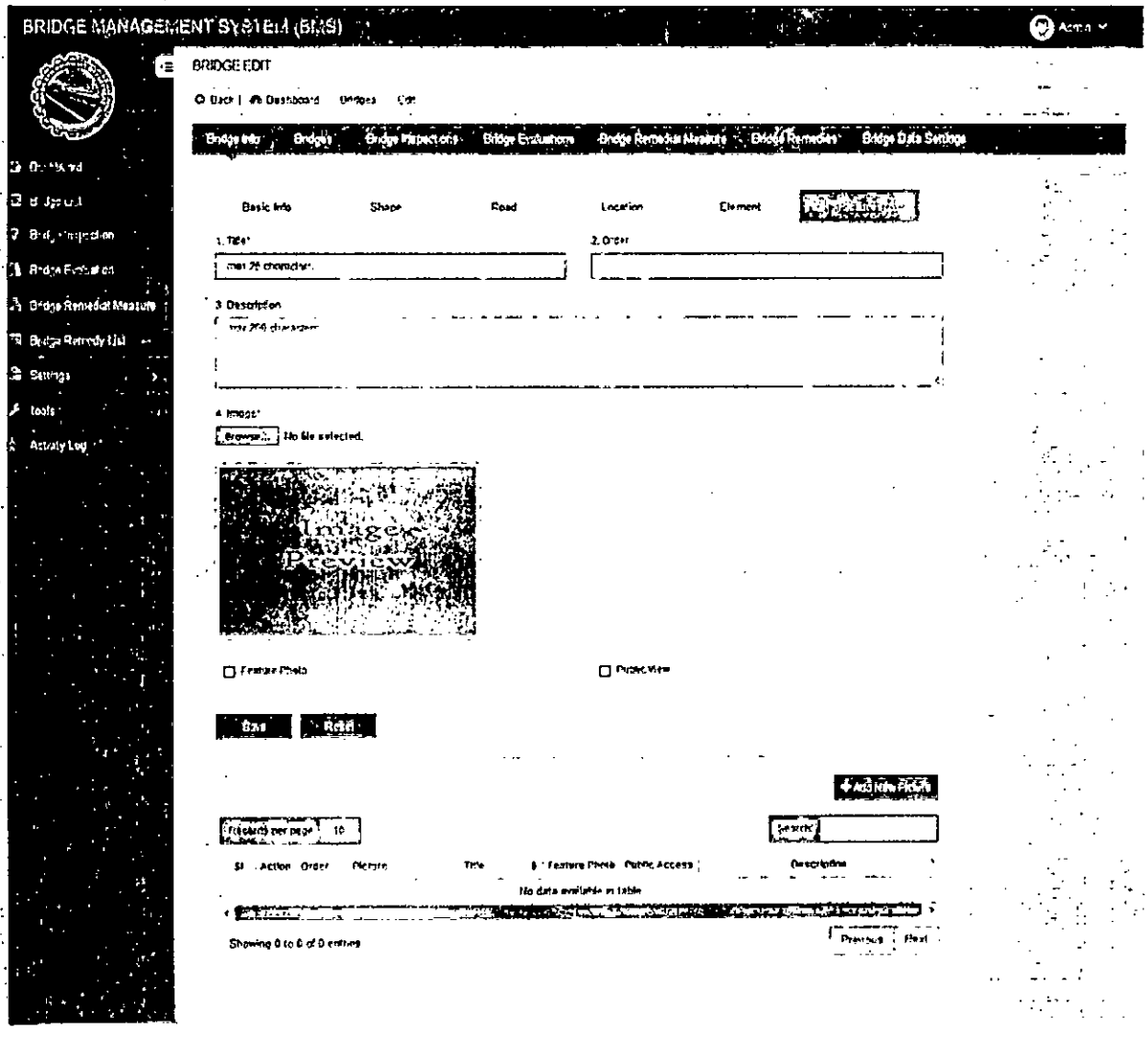
N.B: If save successful then "Location" data input is complete.

**5th Section Data Input** – Bridge "Picture" data

***N:B. If picture available then we will input picture. Otherwise no need to input any picture now. You can skip this section.***




**14.** Click "Pictures" tab. Then you will see the below page.



| Tab | Serial | Field | Required/ Mandatory | Details |
|---|---|---|---|---|
| Pictures | 1 | Title* | Yes | Give input. Example, Side view of bridge. |
| | 2 | Order | No | Auto generate. But if you want to arrange order of pictures give input. Example, 1. |
| | 3 | Description | No | Give input. Explanation of the picture. If there is no description, you can ignore it. |
| | 4 | Image* | Yes | Upload Picture. |
| | | Feature Photo | No | Give Check to make that picture Feature Photo. Feature Photo will appear when mouse cursor is taken on the name of the bridge in bridge list. |

15. Click "Save" button to save this data into database.

N.B: If save successful then "Picture" data input is complete.
After this all input is complete.

Now click on the "Bridge List" menu from the left menu bar. New bridge name show-up in the list.

Attachment - 03(i)



# *BMCDP / ~~Manikganji~~ Inspection - BMS Basic Data Temporary Input Manual ver.2*

## 1. Guideline

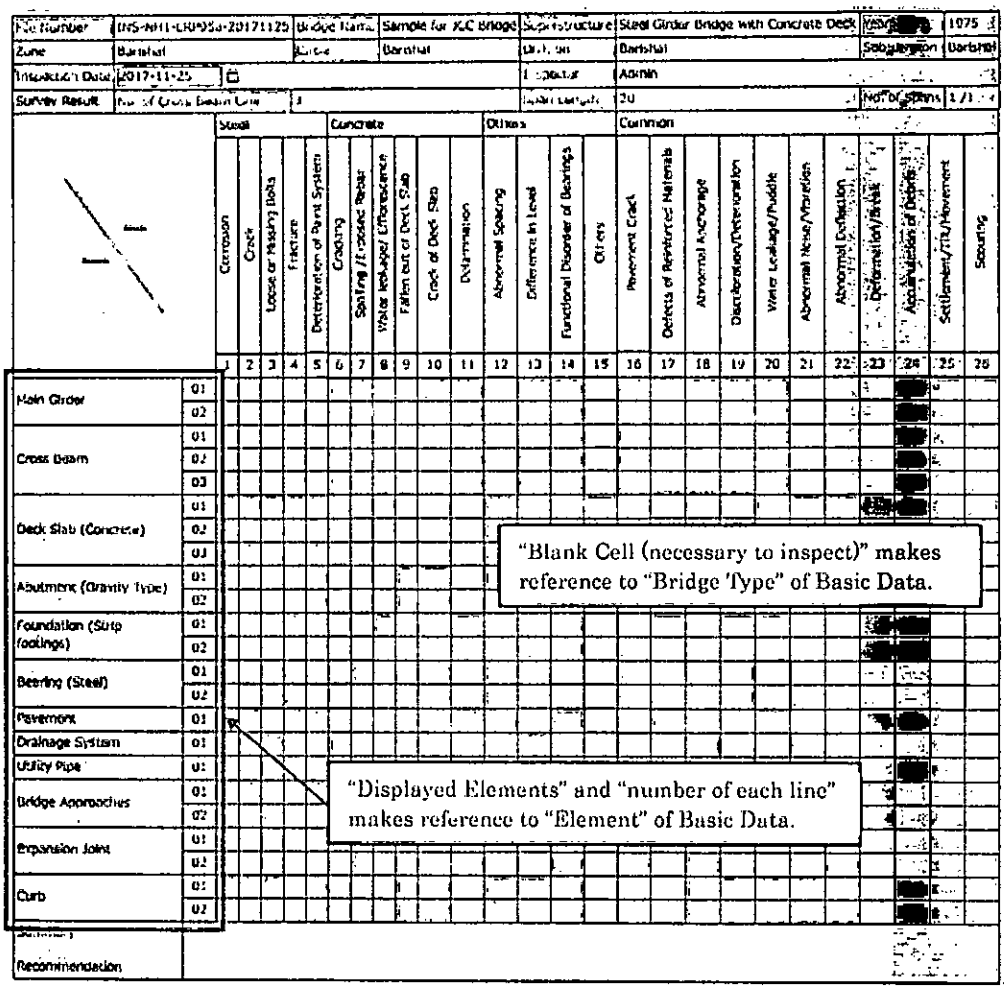
This manual is prepared for FIRST periodic inspection in Bangladesh.
Because this periodic inspection is first time and BMMS (old system) doesn't have enough information, each bridge also doesn't have "Basic Data" (especially "Shape" and "Element").

However, "Basic Data" is necessary to create Blank inspection sheet for inspection. Therefore, some of missing basic data should be inputted as Temporary data to make Temporary blank inspection sheet.
Of course, after inspection, we have to modify Temporary data and add missing data.

This manual shows HOW TO OPERATE TEMPORARY INPUT.

## 2. System of creating Blank inspection sheet

Blank inspection sheet is created automatically based on "Basic Data".



## 3. How to operate Temporary input

To make blank inspection sheet for 1st inspection of each bridge, input Basic Data as following.
All temporary data can be modified after inspection. (however before input rating of defects.)
You can refer "*BMS Manual in OJT-1*" and "*Basic Data Input Step by Step Guide*" too.

### < Basic Info : for Bridge / Box Culvert>

**1. Bridge No.***

Input No. based on GPS. If you don't have GPS, you can input temporary No. like as

YYYYMMDDhhmm : Y is year, M is month, D is date, h is hour and m is minute when you input the cell like as "201707220958". (2017/22/July AM 9:58)

**2. Bridge Name***

Input Bridge Name. If you don't know the Name, input "Bridge No.".

**3. Bridge Type***

You always can choose this info as following rule.

- "RCC Girder Bridge" should be inputted as "RC Girder Bridge".
- "Bailey Bridge" should be inputted as "Bailey Bridge with Steel Deck". (Temporary deck type)
- "Slab Culvert" should be inputted as " Box Culvert".

**4. Completion Year***

Input the year. If you don't know it, input temporary year as "2050". (change from OJT-1 manual)

**10. Crossing Under Bridge***

If you don't know the info, you can input temporary figure as "Unknown".

**5./ 6./ 7./ 8./ 9./ 11./ 12**

If you don't know the info, no need to input.

---

### < Shape: for Bridge >

**1. Bridge Length* / 2. Bridge Width*/ 3. Bridge Effective Width***

If you don't know the info, you can input temporary figure as "9999".

4. No. of Span*

You always have this info.

5. Span Length / 6. Span Arrangement

If you don't know the info, you can input temporary figure as "9999" for each cell.

24. No. of Lines of Cross Beam

Almost all bridge don't have this info in 1st inspection.

You can input temporary figure as "5" for each span. (click + and input 5 for each span.)

24. No. of Stringer

If the bridge is "Truss Bridge" or "Bailey Bridge", You can input temporary figure as "5".

All truss or bailey bridges don't have this info in 1st inspection.

27. No. of Bearing per each line

If you don't know the info, you can input temporary figure same as "No. of Main Girder of each span ( = No. of Beams)".

7 / 8 / 9 / 10 / 11 / 12 / 13 / 14 / 15 / 16 / 17 / 18 / 19 / 21 / 22 / 23 / 25 / 26 / 28

If you don't know the info, no need to input.

---

< Shape: for Box Culvert >

1. Bridge Length* / 2. Bridge Width*/ 3. Bridge Effective Width*

If you don't know the info, you can input temporary figure as "9999".

4. No. of Span*

If you don't know the info, you can input temporary figure like as

- Bridge Length < 3.5 m : input temporary figure as "1".
- 3.5 m <= Bridge Length < 7.0 m : input temporary figure as "2".
- 7.0 m <= Bridge Length : input temporary figure as "Round up(Bridge Length / 3) + 1".

5. Span Length / 6. Span Arrangement

If you don't know the info, you can input temporary figure as "9999" for each cell.

10 / 11 / 12 / 13 / 14 / 15 / 16 / 17 / 18 / 19 / 21 / 22 / 23 / 24

If you don't know the info, no need to input.

<Road : for Bridge / Box Culvert>

1. Road Class* / 2. Road No.*

You always have these info.

10. Detour/Alternate Route*

If you don't know the info, you can input temporary as "None".

11. Traffic Volume*

Refer RMMS (Road Maintenance & Management System) of RHD.

http://www.rhd.gov.bd/RoadDatabase/

Heavy Vehicle Traffic Rate is calculated as "{AADT – (total number of truck and bus)} / ADTT.

Census is year of last inspection of traffic volume.

3 / 4 / 5 / 6 / 7 / 8 / 9 / 12 / 13

If you don't know the info, no need to input.

---

<Location: for Bridge / Box Culvert>

1. Zone* / 2. Circle* / 3. Division* / 4. Sub Division*

You always have these info.

5 / 6 / 7 / 8 / 9 / 10 / 11

If you don't know the info, no need to input.

< Element : for Bridge / Box Culvert>

If you don't know the info of each Element, refer following table.

"Bridge" group doesn't include "Truss, Bailey and Arch bridge".

Super-structure

| Element | Temporary Figure | Temporary Parameter | Bridge | Truss Bailery | Culvert |
|---|---|---|---|---|---|
| Main Girder | All "Bridge" has this info | - | ○ | - | - |
| Main girder Hinge | No need | - | - | - | - |
| Cross Beam | Only Check-Box | - | ○ | ○ | - |
| Stringer | Only Check-Box | - | - | ○ | - |
| Deck Slab (Concrete) | No. of Main Girder + 1 | - | ○ | - | - |
| Main Truss | 2 | - | - | ○ | - |
| Main Arch | 1 | - | - | - | - |
| Outer Cable | No need | - | - | - | - |
| Main Tower | No need | - | - | - | - |
| Head Slab | 1 | - | - | - | ○ |
| Lateral Bracing | No need | - | - | - | - |
| Deck Slab (PC) | No need | - | - | - | - |
| Deck Slab (Steel) | 1 | - | - | ○ | - |

Sub-structure

| Element | Temporary Figure | Temporary Parameter | Bridge | Truss Bailery | Culvert |
|---|---|---|---|---|---|
| Pier | Only Check-Box | Others | multiple spans | | - |
| Abutment | 2 | Others | ○ | ○ | - |
| Foundation | Only Check-Box | RC | ○ | ○ | - |
| Wing Wall | No need | - | - | - | |
| Footing | 1 | - | - | - | ○ |
| Side wall | 2 | - | - | - | ○ |

Bearings

| Element | Temporary Figure | Temporary Parameter | Bridge | Truss Bailery | Culvert |
|---|---|---|---|---|---|
| Bearings | Only Check-Box | Steel | ○ | ○ | - |
| Anchor Bolts | no need | - | - | - | - |
| Bearing Seat/Bed | Only Check-Box | Concrete | ○ | ○ | - |

Deck Surface

| Element | Temporary Figure | Temporary Parameter | Bridge | Truss Bailery | Culvert |
|---|---|---|---|---|---|
| Railing | 2 | Steel | ○ | ○ | ○ |
| Pavement | 1 | Asphalt | ○ | ○ | ○ |
| Curb | 2 | - | ○ | ○ | ○ |
| Railing (Steel) | no need | - | - | - | - |

Drainage System

| Element | Temporary Figure | Temporary Parameter | Bridge | Truss Bailery | Culvert |
|---|---|---|---|---|---|
| Drainage System | 1 | - | ○ | ○ | ○ |

Inspection Facilities

| Element | Temporary Figure | Temporary Parameter | Bridge | Truss Bailery | Culvert |
|---|---|---|---|---|---|
| Inspection Facilities | no need | - | - | - | - |

Utilities

| Element | Temporary Figure | Temporary Parameter | Bridge | Truss Bailery | Culvert |
|---|---|---|---|---|---|
| Road sign | no need | - | - | - | - |
| Utility Pipe | no need | - | - | - | - |
| Lighting Facility | no need | - | - | - | - |
| Bridge Approaches | no need | - | - | - | - |

Expansion Joint

| Element | Temporary Figure | Temporary Parameter | Bridge | Truss Bailery | Culvert |
|---|---|---|---|---|---|
| Expansion Joint | Only Check-Box | - | ○ | ○ | |

Others

| Element | Temporary Figure | Temporary Parameter | Bridge | Truss Bailery | Culvert |
|---|---|---|---|---|---|
| Retaining Wall | Only Check-Box | - | ○ | ○ | ○ |

< Pictures : for Bridge / Box Culvert>

No need to update pictures before 1st Inspection.

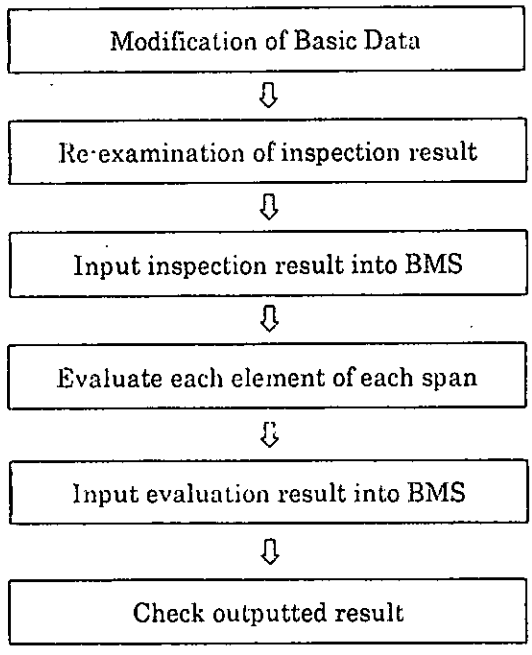
# *BMCDP / Manikganji Inspection – BMS Input Manual after Inspection*

## 1. Guideline

This manual is prepared for FIRST periodic inspection in Bangladesh.

This manual shows BMS OPERATION AFTER SITE INSPECTION.

Outline of operation after site inspection is following,




You can refer "*BMS Manual in OJT-1*" and "*Basic Data Input Step by Step Guide*" too.

## 2. Modification of Basic Data

Before site inspection, some of Basic Data was inputted as temporary to make bridge inventory and blank inspection sheet. The temporary data should be update to actual data at first.

*1) Update "No. of Span" and "Type of Bridge"*

*2) Update "Measurement information"*

Measurement information like as "width of sidewalk, carriageway", "height of main girder or culvert", "interval of main girders" etc. are necessary to grasp scale and shape of the bridge. In BMS, measurements are used to calculate remedy quantity.

However, it is very difficult or impossible to get some of measurements because of danger.

If there is unknown measurement, keep the inputted figure as "9999"*.

* This issue should be discussed after Manikganji inspection based the result.

"Bridge Length" and "Span Length" require to input a decimal places. (ex. 100.0m)

"Other measurement" require to input three decimal places. (ex. 100.0m)

*3) Update "Element information"*

Element information like as "No. of Main Girder", "Material of Bearing" etc. are necessary to finalize inspection sheet. All Element information should be finalized after 1st site inspection.

*4) Upload Pictures*

Photos of "Side View", "Front View" and "Under Bridge" are necessary to complete bridge inventory. Inspector uploads them into BMS at "Pictures" tag.

3. Re-examination of inspection result

After modification of Basic Data,

- Stock and sort photos of each bridge in each folder named the bridge name in your local PC. It is better to note "where the photo shows" in field sketch of defects.
- Take scan data of Field Sketch of Defects and upload to "Pictures" tag.
- Re-examine each rating of defects.
- If the defects is serious, choose photo of the defect to upload BMS.

4. Input inspection result into BMS

Input re-examined rating defects into BMS.

You can refer "*BMS Manual in OJT-1*" to know how to operate.

Inputting serious defects ( d or e) requires uploading a photo of the defect. If you don't have the photos, skip the step. (click out of uploading photo window.)

5. Evaluate each element of each span

Evaluate each element and each defects referring "*Bridge Inspection and Evaluation Manual*". Evaluation is required for each span.

6. Input inspection result into BMS

Input Evaluation Category into BMS.

You can refer "*BMS Manual in OJT-1*" to know how to operate.

7. Check outputted result

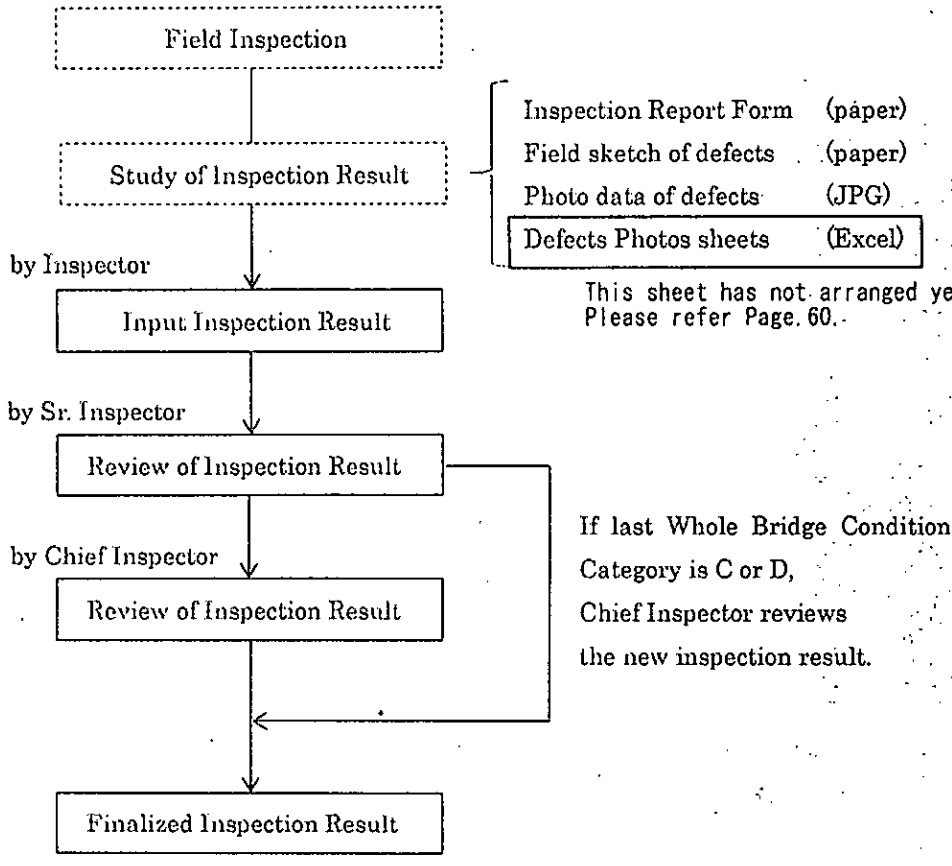
Check following result calculated by BMS automatically,

- "Damage Category", "Damage and Importance Degree" and "Priority to Remedy" in "Bridge Remedy List".
- "Remedy Measure for serious defect" in "Bridge Remedial Measure".*

*Remedy quantity may not work correctly because of lack of measurement or undiscovered bags.

## 6.2 Bridge Inspector

Following flowchart shows outline of "input" and "approval" step of Inspection result in BMS.
You can refer "3.7 Bridge Inspector" to understand types of Inspector in the chart.
This section shows explanation of "Periodic Inspection".




### 6.2.1. Preparation (for Inspector)

Bridge Inspector prepares following items to input Inspection Result.

- Inspection Report Form (paper)
- Field sketch of defects (paper)
- Photo data of defects (JPG)
- Defects Photos sheets (Excel)

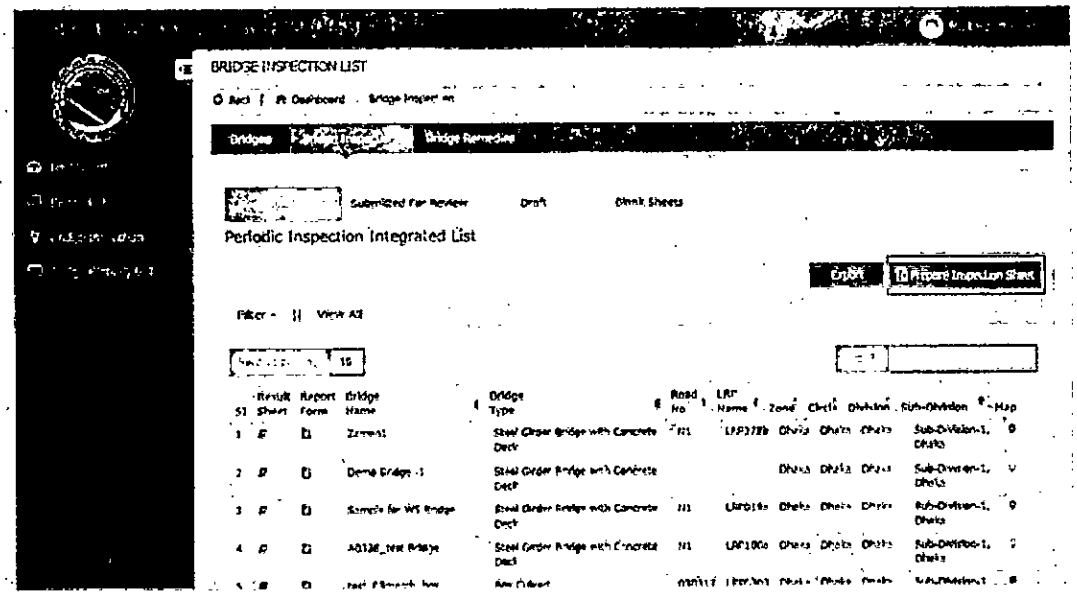
### 6.2.2. Step-by-step instruction for Bridge Inspector (Inspector)

*Note*

If you find bridge basic data to be modified during field inspection, you have to inform them to Sr. Inspector. After Sr. Inspector confirms and approve them, Sr. Inspector sends email to inform them with specified form to Data Entry Operator.

After the modification and check them, Data Cross Checker sends email to the Sr. Inspector and you. Then you can start to input inspection result.

Preparation for Field Inspection




a. Click "Bridge Inspection".

b. Choose "Targeted Bridge" in Periodic Inspection Integrated List and click "Inspection Form".

c. Click "Print". You can get the bridge inventory and last result of inspection of the bridge..

d. You bring them to field inspection and note rating of defects into the blanked sheet.

Bridge Inventory

Bridge Inventory consists of following items.

- Bridge basic data with drawings and photos of each view
- Work history
- Element Numbering system
- Field sketch of defects of last periodic inspection
- Defects photos of last periodic inspection
- Last periodic inspection result sheet

e. Click "Prepare Inspection Sheet ".

f. Choose "Periodic Inspection" and "Targeted Bridge" in Select a bridge for inspection.

g. Click "New Sheet".

h. Blanked Inspection sheet is displayed. Click "Print all sheets".
(You can also use "Print this sheet".)

*Note*

The blanked sheet has pages as same number as No. of Spans. It is necessary to print out all pages.

Preparation to input Inspection Result into BMS

This sheet has not arranged yet.
Stock and sort photos of each bridge in each folder named the bridge name in your local PC.
It is better to note "where the photo shows" in field sketch of defects.

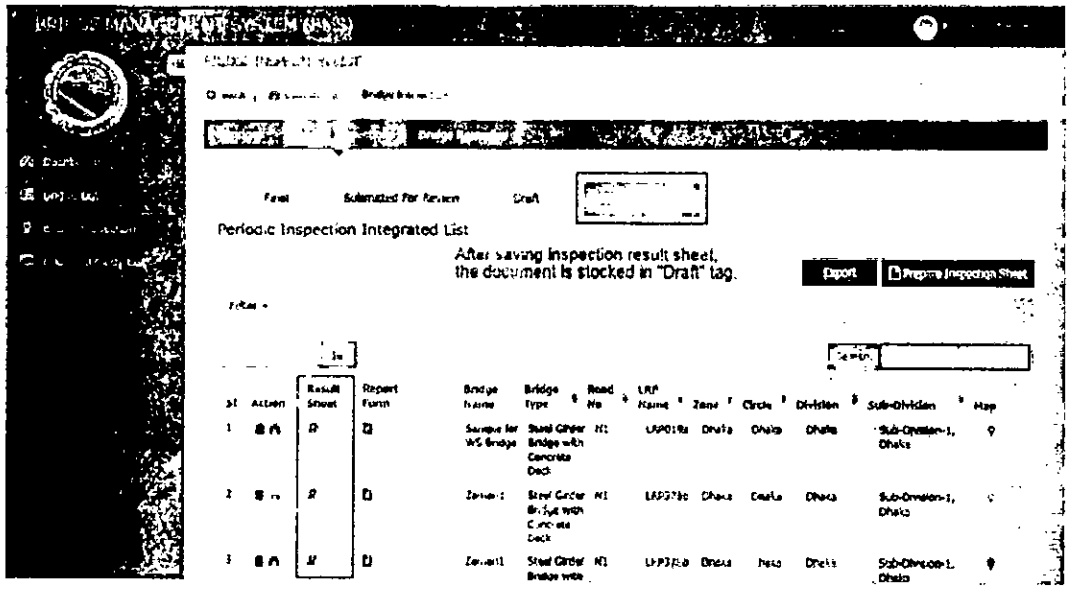
a. Complete and check the paper documents.

b. Take PDF Scan Data of Field sketch of defects.

c. Make Defects Photos sheet with Form of Excel.
You can download the form at http://xxxxxxxxxxxxxxxxxxxxxxxxxxxx. (under construction)

d. Make PDF file of completed Defects Photos sheet.

Input Inspection Result into BMS




a. Click "Bridge Inspection".

b. Click "Prepare Inspection Sheet ".

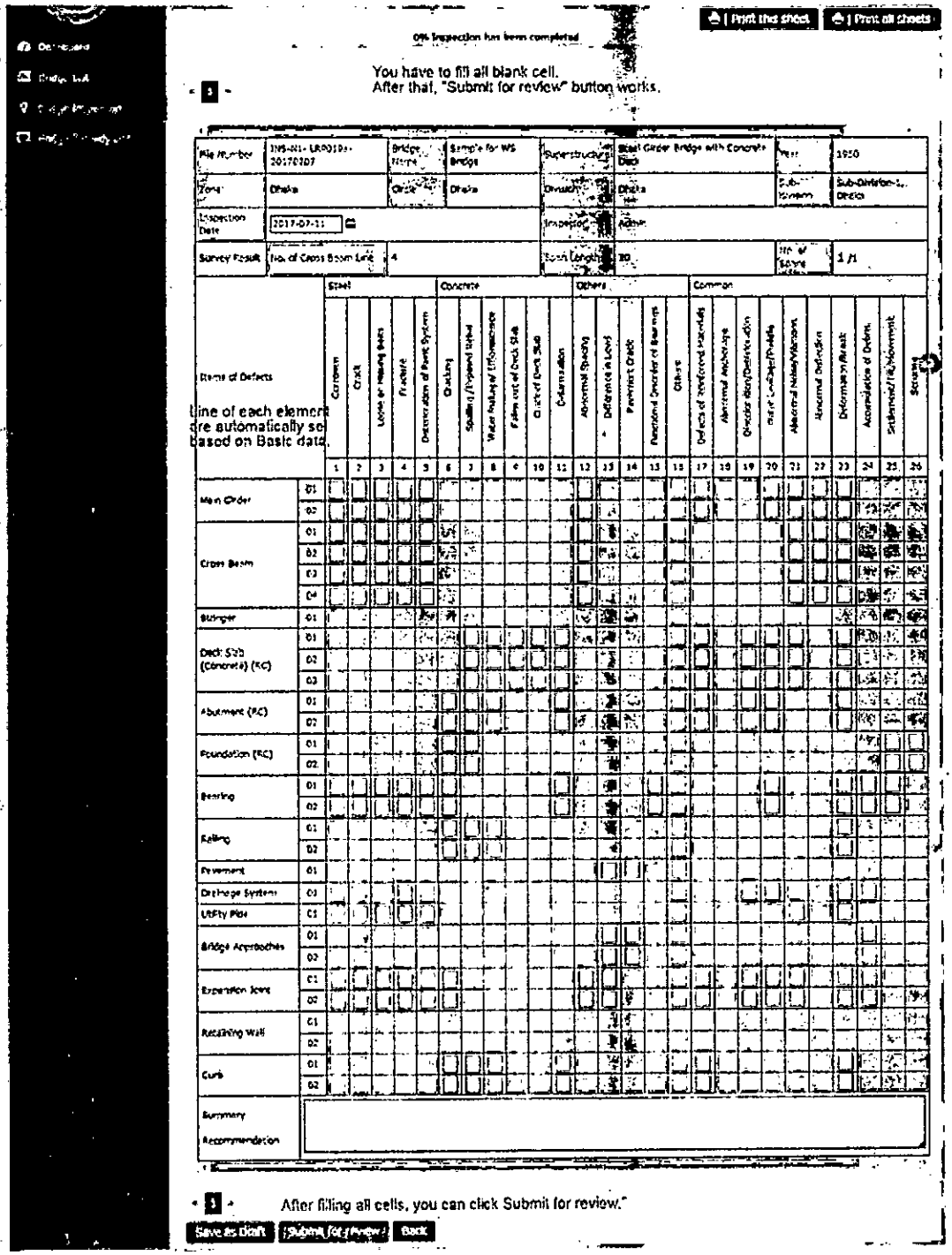
c. Choose "Periodic Inspection" and "Targeted Bridge" in Select a bridge for inspection.

d. Click "New Sheet".

e. Click "Create".

f. Click "Blank Sheets" in Bridge Inspection.

g. Click "Result Sheet" of the targeted Bridge.



h. Blanked Inspection sheet is displayed.

Input *"Rating of Defects"* and fill all cells in the sheet.

You can input following characters.

Rating of Defects

- " - " : Element doesn't exist in this bridge.
- " N " : non visible.

< case 1 >

- " a " : no defect
- " b " : small defect
- " c " : medium defect
- " d " : large defect

< case2 >

- " a " : not existing
- " e " : existing

*Note*

Rating of Defects "a" to "e" are defined by each kind of defect. You can refer them to "Appendix-6 of Bridge Inspection Manual" with photos.

*Note*

If the bridge has multiple spans, you have to input all cells of all spans.

*Note*

You can use *"Save as Draft"* function, if you want to stop and discontinue inputting halfway.

i. When you input "d" or "e", Inspection Picture Add window is displayed.

Input "Title" and "Description". And upload a *"Image file (JPG)"* of the defect.

Inspection Picture Add window

- "Title"

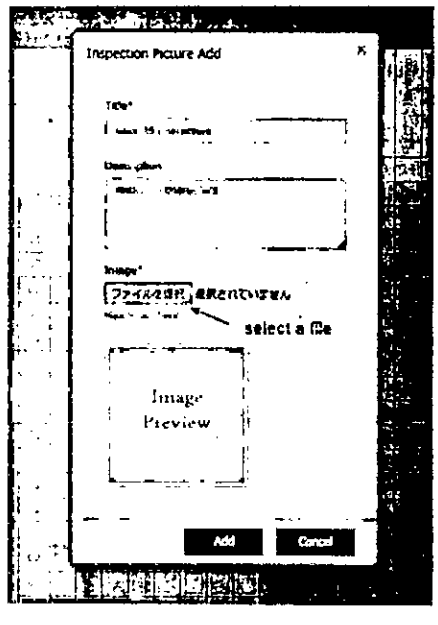
:Input *"Element No. . Kind of Defect"*.

- "Description"

: Note explanation of the situation.

- "uploading Image file"

File type : JPG or PNG



j. After completion to input result. (Display "100% inspection has been completed")
You can click "*Submit for Review*".
Click "*Submit for Review*"., then the inputted inspection result sheet is submitted to Sr. Inspector with email (automatically sending system).

Recheck and Modification of Inspection Result

If Sr. Inspector decides that it's necessary to modify or re-study of submitted Inspection Result, Sr. Inspector can require the Inspector to recheck it.

a. You get email from BMS to recheck inputted Inspection Result.
b. Click *"Bridge Inspection"*.
c. Click *"Need Recheck (x)"*. *(x)* shows number of bridges to be rechecked by you.
d. Recheck and modify if it's necessary.
e. Click "*Submit for Review*".

### 6.2.3. Step-by-step instruction for Bridge Inspector (Sr. Inspector)

Sr. Inspector reviews inputted inspection result by Inspector.
When Inspector click "*Submit for Review*", email to inform it is sent to Sr. Inspector automatically. At the same time, *"Need Review (x)"* in Bridge Inspection shows (x : number of submitted bridges to review).

a. Click *"Bridge Inspection"*.
b. Click *"Need Review (x)"*. Bridges submitted you by Inspector are displayed.
c. Choose *"Targeted Bridge"*.
d. Review the result by referring Bridge Inventory, Field sketch of defects (PDF) and Defects Photos sheet (PDF).

*Note*
Rating of defects "d" and "e" in Inspection Result Sheet shows pop-up photos of the defect by putting mouse cursor on the character.

e. Click *"Recheck"* if you find something strange result. Then email to inform it is sent to Inspector automatically. At the same time, *"Need Recheck (x)"* in Bridge Inspection shows (x : number of submitted bridges to recheck).
f. Click *"Send for Approval"* if you don't find any points to be modified.

*Note*

When you click *"Send for Approval"*,

- If last Whole Bridge Condition Category (A to D) of the bridge was "A" or "B", next step is Evaluation by Bridge Evaluator.
- If last Whole Bridge Condition Category (A to D) of the bridge was "C" or "D", Chief Inspector also reviews the Result of Inspection.

### 6.2.4. Step-by-step instruction for Bridge Inspector (Chief Inspector)

Chief Inspector reviews bridge inspection result approved by Sr. Inspector if the bridge was scored as "C" or "D" in last inspection.

a. Click *"Bridge Inspection"*.
b. Click *"Need Review (x)"*. Bridges submitted you by Sr. Inspector are displayed.
c. Choose *"Targeted Bridge"*.
d. Review the result by referring Bridge Inventory, Field sketch of defects (PDF) and Defects Photos sheet (PDF).
e. Click *"Recheck"* if you find something strange result. Then email to inform it is sent to Inspector automatically. At the same time, *"Need Recheck (x)"* in Bridge Inspection shows (x : number of submitted bridges to recheck).
f. Click *"Send for Approval"* if you don't find any points to be modified.

## 6.3 Bridge Evaluator

Following flowchart shows outline of "input" and "approval" step of Inspection result in BMS.
You can refer "3.7 Bridge Inspector" to understand types of Inspector in the chart.
This section shows explanation of "Periodic Inspection".

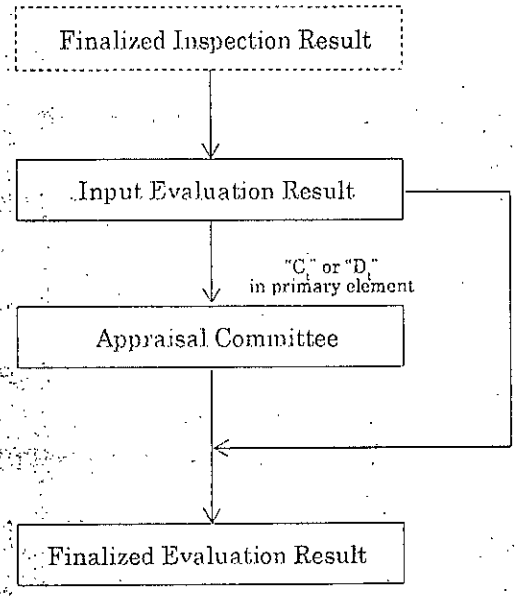


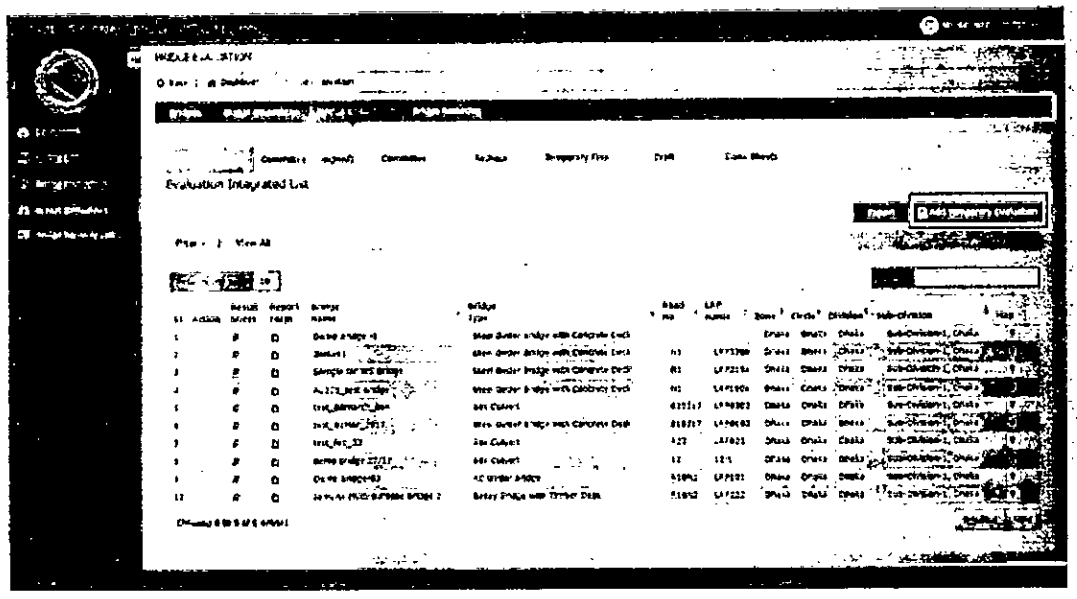

Figure 6.3-1. Flowchart of inputting Evaluation Result into BMS

### 6.3.1. Preparation (for Evaluator)

It is better to print out following items.

- Inspection Result sheets
- Field sketch of defects
- Defects Photos sheets

### 6.3.2. Step-by-step instruction for Bridge Evaluator



a. Click *"Bridge Evaluation"*.

b. Click *"Add Temporary Evaluation"*.

c. Choose *"Targeted Bridge"* in Select an inspection sheet for evaluation and click *"New Sheet"*.

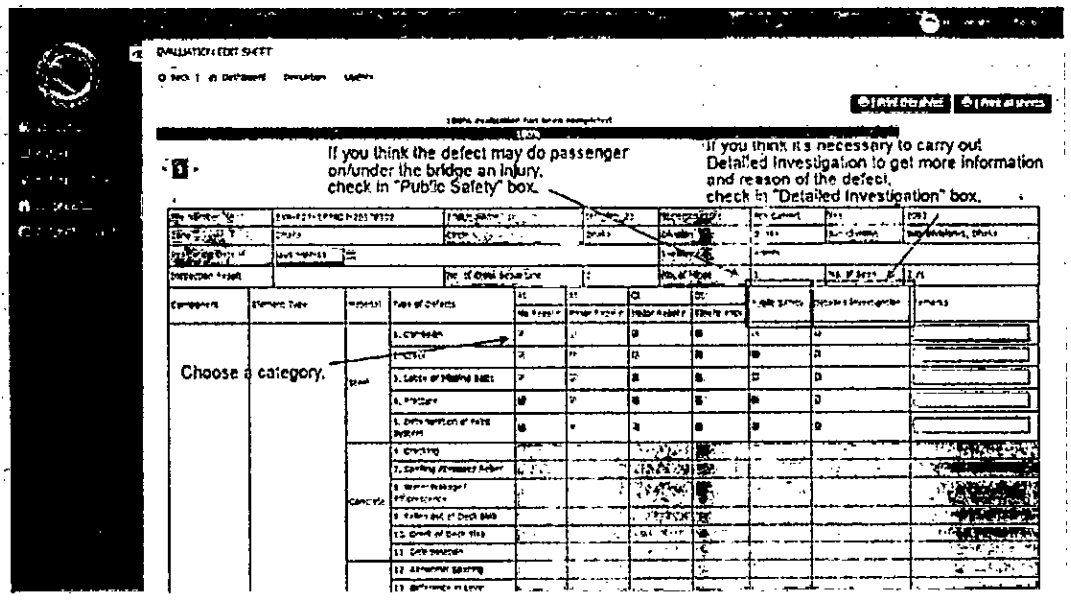
*Note*

In Select an inspection sheet for evaluation, bridges agreeing with following all condition are displayed.

- The bridge has finalized inspection result.
- The bridge has not been created Evaluation sheet after scoring above finalized inspection result.

d. Click *"Blank Sheets"*.

e. Click *"Evaluation Result"* of the targeted bridge.




f. Blanked Evaluation sheet is displayed.

Check a box of *"Evaluation Category : $A_t$, $B_t$, $C_t$ or $D_t$"* for each existing element type.

Evaluation Category

- "$A_t$" : No Repair
- "$B_t$" : Minor Repair
- "$C_t$" : Major Repair
- "$D_t$" : Emergency

g. If there are defects judged to be remedied emergency for Public safety, check a box of *"Public safety"*.

*Note*

Emergency for Public safety is serious defects to damage road users like pedestrians, vehicles, or pedestrians and passing vehicles under the bridge like as "hard broken railing", "spalling of concrete deck slab", "fallen out of concrete deck slab", "deformation of joint", "corrosion of light or traffic sign" and so on.

You can refer them to "Appendix-7 of Bridge Inspection Manual".

h. If you require Detailed investigation to get more detail information of the defects, check a box of *"Detailed investigation"*.

*Note*

There is a limit to understand the damage cause by visual inspection. Because by visual inspection, causes of the damage and future probable progress cannot be predicted all the time. In that case, the detailed investigation is carried out in order to determine the necessity of rehabilitation and strengthening of the particular bridge.
For example, in areas of airborne salt from the sea, or by long longitudinal crack along the reinforcement bar and PC steel, suspicions of chloride attack are considered.
You can refer them to "6.3 Detailed Investigation of Bridge Inspection Manual".

i. After completion to input evaluation category,

- Click "Save as Final" if "$C_t$" or "$D_t$" in primary element doesn't exist.
- Click "Submit to Committee" if "$C_t$" or "$D_t$" in primary element exists.

### 6.3.3. Step-by-step instruction for Appraisal Comittee

*Note*

Bridge it has serious damage in primary element should be discussed its evaluated result in Appraisal Committee before the evaluation result uploads to BMS as Final.

a. Click "Bridge Evaluation".
b. Click "Committee".
c. Choose *"Targeted Bridge"*.
d. Check and discuss with the EVALUATION APPROVAL SHEET.
e. Click "Recheck", "Approval But Sign Later" or "Sign & Approval".

Annexure - 3(iii)

# Manual for getting Bridge Inspection Sheet from BMS

To get bridge inspection sheet After inputting the basic data please follow the flow chart given below:

Bridge List-Draft tab-Search Bridge name-select edit icon-need to cross check-ok-cross check tab-search bridge name-select edit icon-save as final-bridge inspection-prepare inspection sheet-search bridge name-tick check box-new sheet--print all.

After you have inputs in printed inspection sheets.Input the same in BMS.

Go to

Bridge Inspection-Prepare inspection sheet-search your bridge-tick checkbox-new sheet-create -search-result sheet icon-submit for review.

Attachment - 04

# Progress Report Format

| Name of Zone | Name of Division | No of Bridges Inspected and data inputted to BMS | Total Bridge Length Inspected (m) | No of Culverts Inspected And data inputted to BMS | Total Culvert Length Inspected (m) | Comment |
|---|---|---|---|---|---|---|
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