MEETING (PROPOSED)

From

The Chief Engineer
Design & Administration

To

The Chief Engineer (Roads & Bridges/Buildings)
The Superintending Engineer (Roads & Bridges/Buildings) North Circle, Central Circle, South Circle, Judicial Buildings Circle.
The Executive Engineer(All Divisions) (Roads & Bridges/Buildings)
The Chief Architect

It is proposed to convene a meeting of all Chief Engineers, Superintending Engineers and Executive Engineers of Roads & Bridges and Buildings in the presence of the Chief Architect at 10.A.M on 24/04/2012 at IT, Training Hall, Public Office to discuss the issues related to the structural design. All Executive Engineers are directed to submit the details of the structural design of projects pending to be taken up in this office as per checklist along with priority.

Encl: check list for Bridges/Buildings

Yours faithfully

Director

For CHIEF ENGINEER

Thiruvananthapuram
16-4-2012

Copy to :-

Joint Director, Buildings/Bridges/KHRI/
Director I& QC/R&PPU for information.

CHECKLIST FOR THE DESIGN OF A BUILDING

KERALA PWD DRIQ BOARD **BUILDING DESIGN**

Name of Project :-

1.	Request from Chief Engineeer (Buildings)	
2.	Date of Administrative Sanction	
3.	Date of Technical Sanction	
4.	Whether the work is tendered or not	
5.	Priority of the Project	
6.	Architectural Drawing approved by Chief Architect authenticated by SE/EE	
7.	Priority of the Project	
8.	Detailed Soil Investigation Report with the following details	
a)	Authenticated by SE/EE	
b)	Borehole details	
c)	Recommendation on type of Foundation	
d)	Founding Strata	
e)	Depth of Foundation	
f)	Safe Bearing Capacity	
g)	If Pile foundation is recommended, then	
	i) Diameter of Piles with recommended sizes	
	ii) Safe load on Pile	
9.	Countour map of the proposed site	
10.	Layout of the Proposed building with borehole locations	
11.	Remarks	

Appendix 1500C
CHECK LIST OF DETAILS REQUIRED FOR DESIGN OF ROADS/ BRIDGE

Name of Work:

1. S.E.'s Authentication in all drawings and data:	Yes/No
2. Copy of Administrative Sanction obtained:	Yes/No
3. Investigation report:	Yes/No
4. Design Data form completely filled up:	Yes/No
5. Index map (District map):	Yes/No
6. Key map (site plan):	Yes/No
7. *Catchment area map:*	Yes/No
8. Two copies of approved Alignment plan with the following details:	Yes/No
a) Names of stations connected:	Yes/No
b) North direction:	Yes/No
c) *Name of River:*	*Yes/No*
d) Direction of flow:	*Yes/No*
e) Skew angle (if any):	*Yes/No*
f) Width of river at HFL:	*Yes/No*
g) Proposed Land width (available/to be acquired):	Yes/No
h) Social impact data sheet	Yes/No
i) table of impact by type	Yes/No
j) Continuous chainages of approach roads:	Yes/No
k) Bore hole locations with chainages:	Yes/No
9. L.S. PLOT of the road along the alignment:	Yes/No
a) Reduced levels:	Yes/No
b) Proposed formation levels:	Yes/No
c) *LWL, OFL, HFL and LTL & HTL (if any):*	*Yes/No*
d) Bore hole details with reduced levels:	Yes/No
10. Cross sections of the river	
a) At site:	*Yes/No*
b) At upstream side:	*Yes/No*
c) At downstream side:	*Yes/No*
11. List of horizontal curves with chainages:	Yes/No
12. List of gradient with chainages:	Yes/No
13. Discharge calculation sheets:	*Yes/No*
14. Vent way calculation sheets:	*Yes/No*
15. Design Details of pavement (BT/CC/WBM):	Yes/No
16. Resettlement Action plan	Yes/No

Note: 1 If any of the above items is marked as 'No', the reasons for the same shall be indicated along with this.

2 Italicised details not required for roads.

Appendix- 1500 A

DESIGN DATA FOR MAJOR AND MINOR BRIDGES

General

1. Name of Road :
2. Classification of Road : SH / MDR / ODR
3. Road chainage at centre :
4. Land width of road :
5. Formation width of road :
6. Width of Roadway :
7. Name of the Stream/Canal/Backwater :
8. What arrangement exists for crossing the river at present
   a. during monsoon :
   b. during dry season :
9. Type of Navigation
   a. (if any, whether country boat / INS / NWW) :
10. Distance of site from the sea :

Catchment area and run-off (applicable for rivers only)

11. Catchment area
    in hilly parts :
    in plains :
12. Rainfall during the year and maximum recorded intensity :
13. Nature of catchmnet :
14. Any artificial or natural storage present in the catchment :

C. Nature of Stream/Canal:

15. Is the stream
    a) alluvial with erodable banks :
    b) quasi-alluvial with fixed bed but erodable banks :
    c) rigid with inerodable bed and banks :
16. Is the stream
    a) perennial : Yes/No
    b) seasonal : Yes/No
    c) tidal : Yes/No
       if so i) High Tide Level (HTL) :
       ii)Low Tide Level (LTL) :
    d) saline : Yes/No
    e) polluted with any industrial waste : Yes/No
       if so, specify the predominant chemicals in the waste:
17. Hydraulic particulars at low water level
    a) Low Water Level (LWL) :
    b) observed water surface velocity :
    c) water surface slope :
    d) bed slope :
18. Hydraulic particulars at high flood level :
    a) High Flood Level (HFL)
       i) at site :
       ii) at u/s cross section :
       iii) at d/s cross section :
       (specify distance of u/s & d/s from site)
    b) estimated water surface velocity :
    c) water surface slope :
    e) area of cross section
       i) at site :
       ii) at u/s cross section
       iii) at d/s cross section :

f) discharge at H.F.L. :

19. R.L. and location of maximum scour recorded below HFL:
20. R.L. of maximum anticipated scour below HFL (scour depth shall be determined actually by mechanical means)
21. Nature of bed material: fine sand / loose clay /Coarse sand / fine gravel / Sandy or stiff clay / Coarse gravel / Boulders /Rock

D. Ventway Parameters:

22. Vertical clearance above HFL required for navigation:
23. Horizontal clearance required for navigation:
24. Does the stream carry drifting matter in floods? :
25. Details of training works, if needed:

E. Alignment and approaches:

26. Whether the bridge proposed is right or skew? :
    if skew, give the angle of skew :
27. Whether the approaches straight? :
    if not i) straight reach and radius of curve at side-1 :
    ii) straight reach and radius of curve at side-2 :
28. Maximum approach height possible at site:
29. Proposed gradient on approaches:
30. Do the approaches require land acquisition/in voluntary displacement:

F. Superstructure:

31. Loading to be done for (Class A / 70R):
31. Proposed clear roadway over the bridge:
32. Width of footpath, if any:
33. Formation level i) at centre of bridge:
    ii) at abutment points:
34. Number and size of span recommended:

G. Foundations:

35. Foundations recommended: Open / Well / Pile

H. Existing Structures

36. Details of each of the existing bridges on the stream/canal in the vicinity

No.	Details	Upstream	Downstream
a)	Distance from site		
b)	Number and size of spans		
c)	Year of construction		
d)	Type of structure		
e)	Width of roadway		
f)	Provision of footpath		
g)	Vertical clearance		
h)	Horizontal clearance		
i)	Type & depth of foundations		
j)	Whether the existing structure is trouble free		
k)	Any other information		

I. Miscellaneous

37. Name of town nearest to the bridge:
38. Nearest Railway station and its distance from bridge site:
39. Is the site located in an industrially or otherwise polluted area: (If so, specify the predominant air and water pollutant):
40. Nature of terrain: Plain/Rolling/Hilly