****** **English -- Hydraulic Preliminary Layout Data** ******

********** For Submittal to Cadd **********

Date Submitted to Cadd: _____ Initials: ___ Target Date for Completion: _____ Date Returned from Cadd: _____ Initials: ___

Project Title: _____ over _____,
_____ County

Project #: _____	Hydraulic Designer: _____ (JKZ)
P.E. #: _____	Supervisor: _____ (KRE)
Bridge I. D. #: _____	Roadway Width: _____ ft
Bridge Length: _____ ft	Superstructure Depth: _____ ft (Finish Grade El. - Low Cord El.)
Begin Bridge Sta.: _____ (±)	Subgrade Slope: 2:1
End Bridge Sta.: _____ (±)	Pier Width: _____ ft
_____ Berm @ Abut. #1	ADT (_____yr.) _____
_____ Berm @ Abut. #2	Design Speed: _____ mph
Low Girder El. _____ ft @ Abut. # ____	Datum El. _____ ft
Rip Rap to [ ] El. _____ ft [ ] edge of shoulder	

Sub Structure Skew Angle: ___° To [ ]CL, [ ] PL CL, or [ ] Tan. to Sta. _____

[ ] _____ equal beam lengths or span lengths from Begin Bridge Sta. _____
[ ] See attached sketch for span arrangement.
[ ] Scale of Drawing _____
[ ] Ordinary High Water El. _____ ft
[ ] 100 year Bridge Backwater El. _____ ft
[ ] ___ year Bridge Backwater El. _____ ft (if less than overtopping).
[ ] Estimated design (___ yr.) scour El. _____ ft
[ ] Gravel filter blanket if required (pay item # 709-12.06).
[ ] Insert Haul Road cross-section.

Existing Groundline provided by: [ ] Bridge Grid (** MOST DESIRABLE**),
[ ] X, Y Coordinates, [x] Profile Sheet.

Hydraulic Data

Drainage Area ---------- _____ mi^2
Design Discharge (_____ yr) ---------- _____ cfs
[ ] Total Design Discharge------- _____ cfs
Water area provided below El. _____ ---------- _____ ft^2
_____ yr Velocity ---------- _____ fps
_____ yr Bridge Backwater ---------- _____ ft @ El. _____ ft
Roadway Overtopping Elevation ---------- _____ ft
[ ] 100 year Discharge _____ cfs @ El. _____ ft
[ ] ___ year Discharge _____ cfs @ El. _____ ft
[ ] For overflow data see attached.

[ ] Machined Rip-Rap shall be class "___" in accordance with Section 709 of the Standard Specifications and shall be paid for under item #: >>

	Rip- Rap Item # s	
[ ] A-1	709-05.06	1.50 ft tk.
[ ] B	709-05.08	2.50 ft tk.
[ ] C	709-05.09	3.50 ft tk.
[ ] 3" to 6" Stone (See RD-SA-1)	709-05.04	8" tk.
[ ] Hand Placed Rubble-Stone	709-07	___ ft tk.

[ ] Use STD-1-1 Bridgerail. (See STD-1-2 for Deck Drains)
[ ] Use STD-7-1 (open) Bridgerail.
[ ] Use STD-11-1 Bridgerail with structural tubing. (See STD-1-2 for Deck Drains)

[ ] Use _____ prestressed _____ beams. [ ] Type of beam is designers choice.
[ ] Use _____ inch deep steel girders.

[ ] Use solid shaft piers. [ ] Existing piers to be used.
[ ] Use _____ post piers. [ ] Use concrete pile bents.
[ ] Use Hammerhead piers. [ ] Type of pier is designer's choice.

[ ] See Drawing # _____ for similar bridge design.

[ ] Maintain traffic by stage construction.
[ ] Maintain traffic on existing structure.
[ ] Maintain traffic by temporary runaround.
[ ] Close road during construction.

[ ] Existing bridge # _____ and approaches to be removed to natural ground between stations _____ and _____.

[ ] Bridge deck drains are not required.
[ ] Bridge deck drains are required.

[ ] Parapet Type Curb Opening (STD-1-2)

[ ] Grate Type Opening (STD-1-2)
Type: _____ (1 or 2)

[ ] See Attached for Stationing.

[ ] End of bridge drains are not required.
[ ] ___ End of bridge drains are required as shown in plan view.

Drain Stations

Left of CL	Right of CL	Both

[ ] 2' x 8'-7" with end of bridge pavement (see STD-1-6, 7, and 8).
[ ] 4' x 8'-7" with end of bridge pavement (see STD-1-6, 7, and 9).

[ ] 2' x 8'-7" without end of bridge pavement (see STD-1-10, 11, and 12).
[ ] 4' x 8'-7" without end of bridge pavement (see STD-1-10, 11, and 13).
Note: End of Bridge Drains only to be used with STD-1-1 or STD-11-1 Bridge Rail

[ ] The structural designer shall discuss footing placement with the hydraulic designer when foundation data becomes available.
[ ] See SMO #27 and foundation report recommendations for footing placement.
[ ] Any excavation of the stream channel area (e.g. for rip-rap or pier placement) shall be separated from flowing water during low-flow conditions. This shall be accomplished by the use of flumes, lined diversion channel with sand bag berm, diversion pipe with sand bag dam at pipe inlet or in some cases cofferdams.