NOTES:

For General Notes, Final Quantities, and Location Sketch, See sheet No. 2

Outline of existing bridge 3310004 is indicated by light Dashed Lines. Heavy lines indicate new work.

* Concrete encasement as shown is a cutaway view in order to show the level course. Concrete encasement, as constructed shall completely enclose the level course.

INSTRUMENTATION NOTES:

The University of Missouri will provide the contractor with a detailed instrumentation plan.

University of Missouri to furnish the following items:

- Telltales (North Bent Only) - there are a total of 3 telltales, 1 installed at the footing, 1 at the lower $\frac{1}{3}$ point of the abutment and 1 at the upper $\frac{1}{3}$ point of the abutment. Telltales will be installed in-line vertically through a common casing. For locations of telltales see Sheet No. 18.

- Earth pressure cells (North Bent only) - All cells to be installed with a thin layer of fine aggregate above and below the pressure cells. For pressure cells below the superstructure backwall, cells to be installed in the Beam Seat aggregate approximately 1" below the backwall. For locations of Earth pressure cell see Sheets 15 and 18.

- Tensiometers (North Bent only) tensiometers shall be placed as shown on the plans. For locations of tensiometers see Sheet No. 15.

The above items will have cables which will run through an instrumentation trench to the NEMA box. Details of the trench will be provided in the instrumentation plan.

- Inclinometer and SAA casings (both End Bents) -Contractor is to install the casings prior to construction of the substructure. Casings should be embedded in grout 1 foot into rock. Casings will be placed outside of the pavement, if possible.

Contractor to furnish the following items:

- Type 3 NEMA box - the minimum dimensions of the NEMA box are 24" x 20" x 6" (HxWxD). No direct payment will be made for the NEMA box or associated items. Costs shall be subsidiary to the project.

- Survey Markers (both End Bents) - use angled retroreflective survey markers (targets) (approximately 120 mm wide by 75 mm tall) placed as shown on the plans. No direct payment will be made for survey markers. Costs shall be subsidiary to the project. For locations of survey markers see Sheets 16-17.

- Inclinometers will require holes to be drilled into the rock. Holes will be approximately 2" in diameter and the depth will be as directed by the University.

The items listed under Instrumentation Notes will be installed in coordination between the University and the contractor.

See Job Special Provisions for additional information associated with instrumentation.

