

## PROJECT CHECKLIST FOR GEO/HYDRO

**Project Name:** \_\_\_\_\_ **Scoped By:** \_\_\_\_\_

**Highway** \_\_\_\_\_ **MP** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Note: Unless there are specific project limitations, scope the proper solution, and not a limited design.**

### Geotechnical

- |                                                                                                   |                                                                                  |
|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| <input type="checkbox"/> 1. Bridges- widening, new, replacement                                   | <input type="checkbox"/> 12. Heaving pavement                                    |
| <input type="checkbox"/> 2. Walls: MSE, cast in place, tieback, temporary for detours, soundwalls | <input type="checkbox"/> 13. Adding new roadbed or Soft or wet subgrade          |
| <input type="checkbox"/> 3. Sign Bridges/Large Cantilever Signs                                   | <input type="checkbox"/> 14. Streambank stabilization                            |
| <input type="checkbox"/> 4. Large signal poles/ poles with unique foundations                     | <input type="checkbox"/> 15. Culvert Repair or Replacement by Trenchless methods |
| <input type="checkbox"/> 5. Cuts                                                                  | <input type="checkbox"/> 16. pH and resistivity                                  |
| <input type="checkbox"/> 6. Fills, approach embankments, sliver fills, detour embankments         | <input type="checkbox"/> 17. Culvert extensions, replacements                    |
| <input type="checkbox"/> 7. Widening, shoulder widening, adding lanes                             | <input type="checkbox"/> 18. Deep utility trenches, rock trenches                |
| <input type="checkbox"/> 8. New Alignments (temporary or permanent)                               | <input type="checkbox"/> 19. Large bridge seismic retrofit projects              |
| <input type="checkbox"/> 9. Rock cuts or rockfall areas                                           | <input type="checkbox"/> 20. Water Quality Swales or Structures                  |
| <input type="checkbox"/> 10. Landslides, Debris Flows                                             | <input type="checkbox"/> 21. Adding traffic capacity- noise study                |
| <input type="checkbox"/> 11. Sink holes, dips in pavement or guardrail                            | <input type="checkbox"/> 22. Active Faults or Seismic design-                    |
|                                                                                                   | <input type="checkbox"/> 23. Wetland mitigation                                  |
|                                                                                                   | <input type="checkbox"/> 24. Tunnels                                             |

### Material Source (CEG or experienced PE stamp required)

#### consult material source checklist for activities

- ☐ 25. Identify aggregate, rip rap or stone embankment source
- ☐ 26. Borrow source (do you need embankment materials?)
- ☐ 27. Disposal site ( is the project generating excess materials?)
- ☐ 28. Identify Right of Way, property survey, topographic survey, environmental, and permitting needs for source(s) or disposal sites.
- ☐ 29. Does project schedule reflect needed material source work

### Hazardous Materials

- ☐ 30. Right of way purchases
- ☐ 31. Any excavation (includes utility trenches, sidewalk excavation, pole or structure foundations) in suspect areas
- ☐ 32. Projects requiring worker safety or disposal of hazardous waste. (Building or electrical demolition, asbestos, lead dust in tunnels, mercury, luminaries, creosote timber removal, striping paint removal, bridge painting- leaded paint removal)

- ❑ 33. Projects using or storing hazardous materials or storing over 660 gals of fuel on site
- ❑ 34. Demolition of buildings

### **Hydraulics**

- ❑ If you touch dirt – you need an Erosion Control Plan
- ❑ Bridge work over water- replacement, widening, deck repairs, scour, revetment
- ❑ Streambank scour or stabilization needed
- ❑ Culverts smaller than 48 inches (Roadway handles, no Geo/Hydro involvement other than pH & resistivity)
- ❑ Culverts between 48” and 72” (Geo/Hydro will do Hydraulics study & report, pH & resistivity)
- ❑ Culverts >6 ft belong to Geo/Hydro unless there is a major structural component, then Bridge will need to be involved
- ❑ Temporary or permanent water management- diversions, dewatering, dams, pumping
- ❑ Water quality designs– new impervious surface
- ❑ Fish passage
- ❑ Flooding or work on flood plain; no rise certifications
- ❑ Any impact on streams, rivers, surface water runoff
- ❑ Work near adjacent streams or inlets
- ❑ Planting or seeding between edge of Right of way and shoulder or irrigation- Landscape Architect

**Detailed Notes (refer to number) and photo log:**