

## ROAD AND RAILROAD DESIGN AND CONSTRUCTION

A road is a linear passageway, usually for motor vehicles, and a railroad is a surface linear passageway with tracks for train traffic. Their construction can limit access to shorelines, impair visual qualities of water-oriented vistas, expose soils to erosion, and retard the runoff of flood waters.

### A. Policies

1. Whenever feasible, major highways, freeways and railways should be located away from shorelands, except in port and heavy industrial areas, so that shoreland roads may be reserved for slow-moving recreational traffic. Public access to shorelines of particular interest should be provided.
2. Extensive loops or spurs of old highways with high aesthetic quality should be kept in service as pleasure bypass routes, especially where main highways, paralleling the old highway, must carry large traffic volumes at high speeds .
3. Since land-use and transportation facilities are so highly inter-related, the plans for each should be coordinated. The designation of potential high-use areas in master programs should be done after the environmental impacts of the transportation facilities needed to serve those areas have been assessed.
4. Road and railroad crossings of rivers and flood plain areas from one side of the floodway to the other should be built on structures rather than fill. Where a fill would impound or impede flood waters, the long axis should be parallel to the expected flood flow.
5. Abandoned road or railroad rights-of-way which contain unique shoreline amenities should be acquired for public benefit.
6. Pedestrian access should be built where access to public shorelines is desirable and has been cut off by linear transportation corridors. New linear facilities should enable pedestrian access to public shorelines where access is desirable.

## B. Regulations

1. All bridges and other water crossing structures shall be designed so as to not impede the passage of flood debris, not to alter normal stream passage, and not impede fish passage in fish bearing or potentially fish bearing water.
2. All culverts within shoreline areas shall be designed for a 50 year flooding minimum and shall be installed on natural slopes, or flumed to flow on to stable ground, or into an energy dissipater prior to entry into a stream.
3. All debris overburden and other waste material from construction shall be removed or distributed to restore a construction area to a state of natural or improved aesthetic value.
4. Road and/or bridge design, location, construction, and maintenance shall be utilized to prevent development of roads and structures which would adversely affect shoreline resources.
5. New transportation facilities in shoreline areas shall be located and designed to minimize or prevent the need for shoreline protective measures such as riprap or other bank stabilization, landfill, bulkheads, groins, jetties, or substantial site regrading.
6. Shoreline transportation facilities shall be designed to fit into the existing topography in order to minimize cuts and fills.
7. Roads located in wetland areas shall be designed and maintained to prevent erosion and to permit the natural movement of ground waters.
8. All debris, overburden, and other waste materials from construction shall be disposed of in such a way as to prevent their entry by erosion from drainage, high water, or other means into any water body.

9. Road locations shall be planned to fit into the topography so that minimum alterations of natural conditions will be necessary.
10. Scenic corridors with public roadways shall have provisions for safe pedestrian and other non-motorized travel. Also, provisions should be made for sufficient view points, rest areas and picnic areas in public shorelines where significant natural resource values and existing recreational opportunities would not be negatively affected.
11. New sidetracks shall be designed to minimize disturbance to the shoreline. Justification must be provided that the proposal is the only feasible location; furthermore, that there is no alternative sites which would have less impact on the shoreline, while still meeting the project objective. All disturbed areas shall be revegetated with native grasses, shrubs, and trees to eliminate impacts to erosion, aesthetics, and provide fish/wildlife habitat. Proposals that would impact wetlands shall comply with regulations 3 & 8 through 17 of the Environmentally Sensitive Areas Section of this plan. If fill is proposed in wetlands, the wetlands shall be replaced in accordance with the replacement ratios as listed in the WA State Wetlands Rating System for Eastern Washington.

12. Roads, bridges, and railroad design and construction use limitations in shoreline environments:

NATURAL BUFFER ZONE - New roads, bridges, and railroads - Conditional Use. Maintenance, repair, and replacement of pre-existing/non-conforming uses are permitted.

NATURAL - New roads, bridges, and railroads, - Prohibited. Maintenance, repair, and replacement of pre-existing/non-conforming uses are permitted.

CONSERVANCY - New roads permitted. New bridges - Conditional Use. New railroads - Prohibited. New side tracks and double tracks next to existing railroad tracks - Conditional Use.

RURAL - New roads and railroads - Permitted. New bridges - Conditional Use.

COMMUNITY - New roads and railroads - Permitted. New bridges - Conditional Use.

URBAN/INDUSTRIAL - New roads and railroads - Permitted. New bridges - Conditional Use.