SCENIC ROAD DESIGN GUIDE

SECTION XIII

The following pictures and comments are not intended to be a strict limitation on road design, but rather to emphasize that scenic values must be considered along with safety, utility, and economy. The location of a road, its alignment, profile, cross section design, and other related features should be in harmony with the terrain.

Attention to design and construction practice in lands adjacent to the roadways is also important to retain scenic value. Specific areas of concern have been identified on the following illustrations.

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BUILDING LOCATION AND CONSTRUCTION

Do's

+ Locate building to preserve a maximum of existing trees and ground cover.

+ Reduce density to retain natural appearance.

+ Use pile, post or other types of open foundation to minimize impervious surfaces under buildings.

Don'ts

— Do not clear land and distrub topsoil just to facilitate construction.

— Don't interrupt natural surface or sub-surface drainage with building foundations.

— Don't use solid foundations when stepping of building levels and open type foundations will result in less disturbance to original ground and vegetation.

BUILDING LOCATION, DENSITY, AND CONSTRUCTION

Do's

+ Locate buildings to preserve a maximum of existing trees and ground cover.
+ Use hand labor, horses and mules, when heavy equipment will unnecessarily damage terrain.
+ Establish natural growth easements to screen buildings from view.
+ Centralize parking to reduce the number of paved access roads to units.
+ Reduce density to retain natural appearance.
+ Store equipment and materials only in areas to be covered by construction.

Don'ts

— Do not destroy trees, or block views to use all of allowable density.

— Do not clear land and disturb topsoil just to facilitate construction.

— Do not damage existing vegetation with stockpiles and materials storage.

MAINTENANCE

Do's

+ Schedule maintenance work for low use periods of road.
+ Stockpile materials out of view and protect from erosion and weeds.
+ Reseed construction or repair areas.
+ Level material disposal sites and waste areas daily.
+ Normal maintenance on existing cuts and fills may include slope rounding, serrating and seeding.

Don'ts

— Don't dispose of slide material by dumping it on slopes, contributing to erosion and siltation problems.

— Don't leave blade berms along roads and fences.

TREES NOT PROTECTED DURING CONSTRUCTION.

CONSTRUCTION

Do's

+ Equipment and materials storage should be screened or out of view.
+ Remove old pavements and restore old rights-of-way to natural state.
+ Scars from material sites should be avoided. If not they should be screened and replanted.
+ Remove damaged trees.
+ Remove temporary stockpiles prior to adverse weather and restore the site to natural conditions after construction season ends.

Don'ts

— Don't operate equipment near remaining trees.
— Don't allow equipment in areas to be preserved.
— Don't kill vegetation or ruin soil with drain oil and fuels.

RESIDENTIAL PARKING IN SNOW AREAS

Do's

+ Governmental entity should make it mandatory within the conditions, covenants and restrictions on each development that adequate off street parking will be provided to each parcel in conjunction with the issuance of building permits.

+ One way and narrow two way streets should be properly posted, "NO PARKING."

+ Provide for ample snow storage easements over the front of each lot.

+ Provide for adequate building setbacks within zoning restrictions.

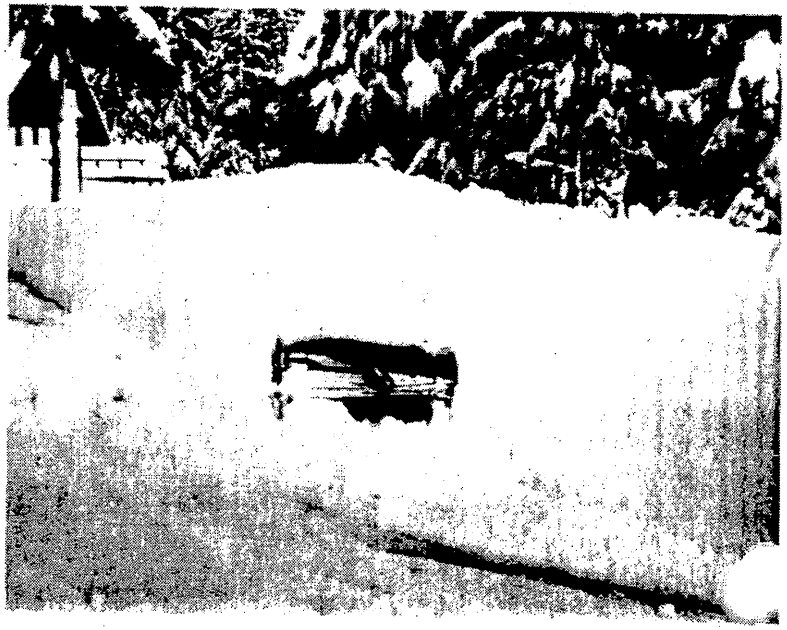
+ Consider accessibility to individual lots for fire protection during winter months in design consideration.

Don'ts

— Don't allow densities so high that ample snow storage space between buildings is unavailable.

— Don't allow residential developments on steep cross slopes thus creating ingress and egress problems to the residence and numberous problems to the entity which maintains the road.

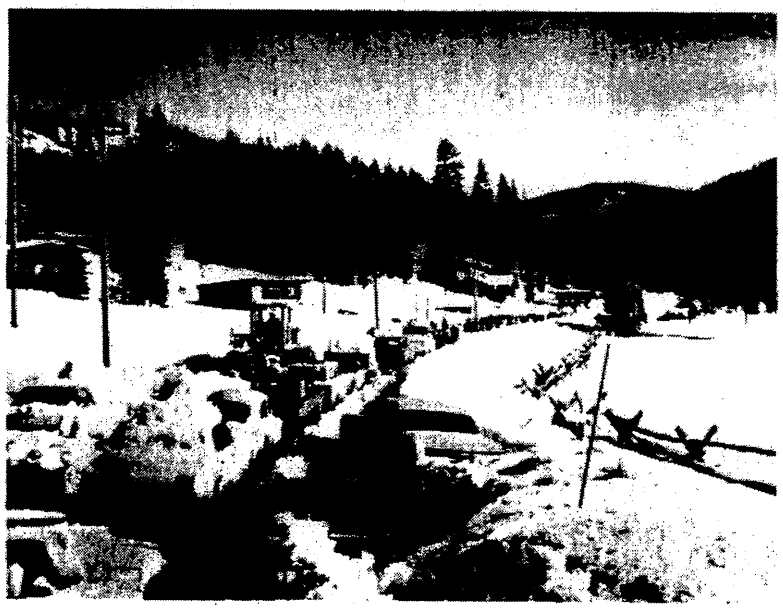
— Don't create residential developments on steep road grades.



RECREATION PARKING IN SNOW AREAS

SKI AREA – PARKING STRUCTURE

SKI AREA – INADEQUATE PARKING



Do's

+ Provide attendant parking on high use days.
+ Provide sufficient snow removal equipment to handle heavy snowfalls.
+ Provide traffic control when snow removal equipment is in operation.
+ Provide ample snow storage areas in parking areas.
+ Provide access to snow storage areas for snow removal equipment.
+ Parking and no parking areas should be signed and restrictions enforced.
+ Provide covered parking or some means of exporting snow from storage areas and parking areas.
+ Provide transit systems to and from parking areas and recreation facilities, to minimize vehicle movement.

Don'ts

— Don't allow more visitors than legal parking areas can accommodate.

— Don't allow parking in driveways or on county roads.

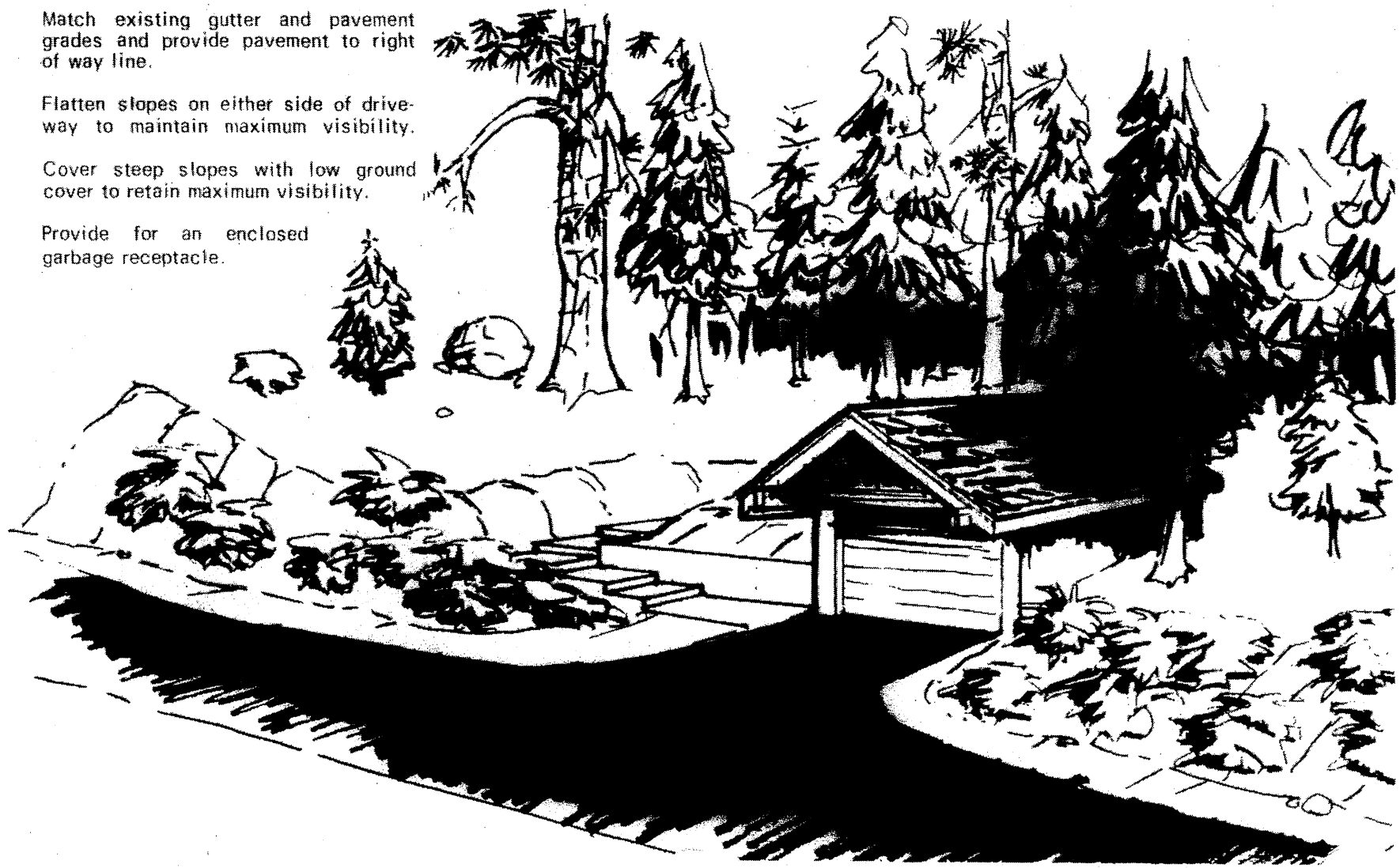
OFF .REET PARKING — CUT SIDE OF IND. JUAL LOTS GREATER THAN 15 PERCENT CROSS SLOPE

Do's

+ Check local ordinanced for building setbacks from roads and property lines.
+ Protect slopes with natural stone or vegetation.
+ Allow sufficient manuvering room off roadway.
+ Match existing gutter and pavement grades and provide pavement to right of way line.
+ Flatten slopes on either side of driveway to maintain maximum visibility.
+ Cover steep slopes with low ground cover to retain maximum visibility.
+ Provide for an enclosed garbage receptacle.

Don'ts

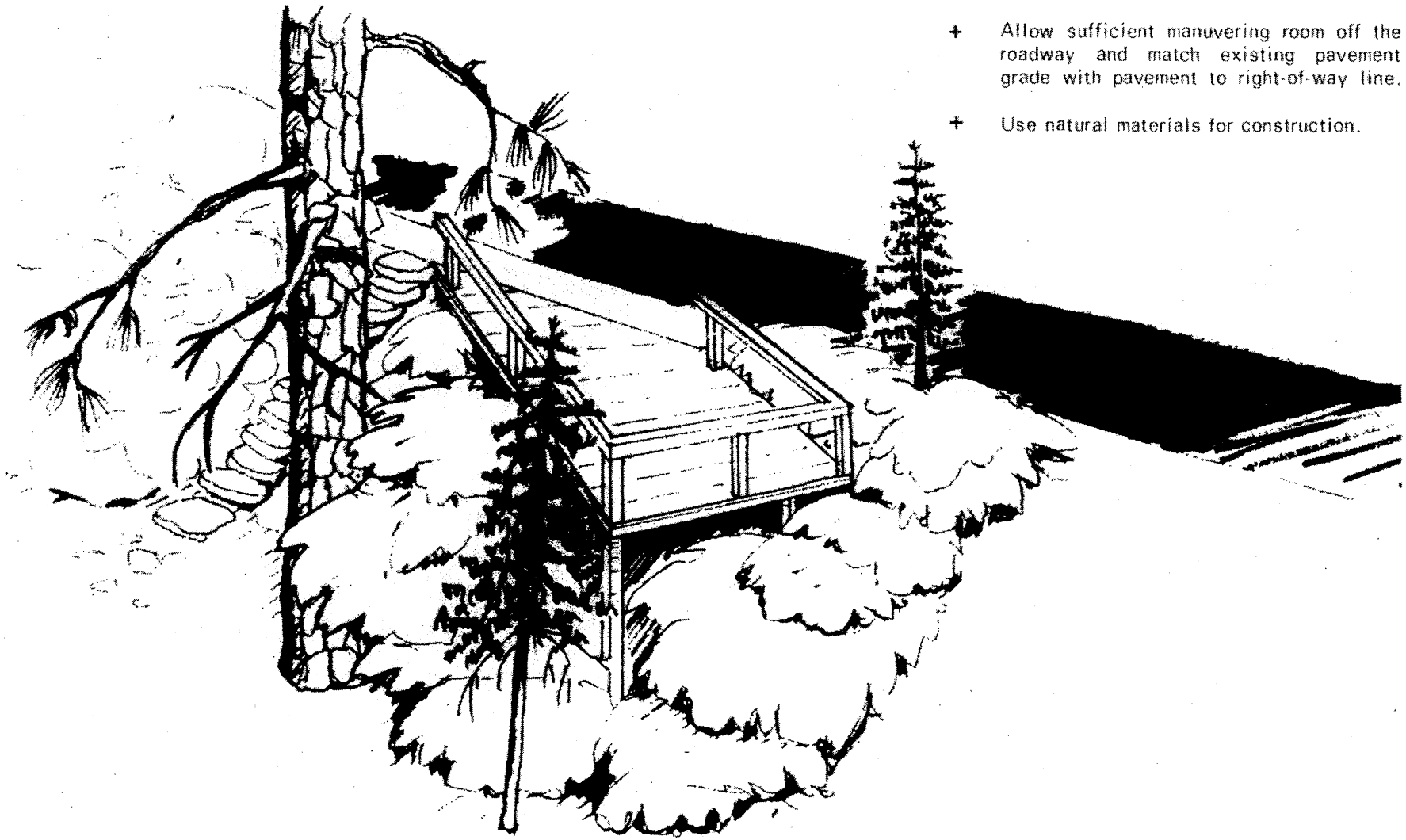
— Don't unnecessarily disturb surrounding ground.
— Don't use concrete within right of way.



OFF STREET PARKING – ON FILL SIDE OF INDIVIDUAL LOTS GREATER THAN 15 PERCENT CROSS SLOPE

Do's

+ Protect and preserve natural ground and vegetation on fill where structure is being placed.
+ Seed, and stabilize all areas of the fill disturbed by construction.
+ Provide for an enclosed garbage receptacle.
+ Check local ordinances for building setbacks from roads and property lines.
+ Allow sufficient manuvering room off the roadway and match existing pavement grade with pavement to right-of-way line.
+ Use natural materials for construction.



DRIVEWAYS ON INDIVIDUAL LOTS

Do's

+ Match existing gutters and roadways.
+ Provide safe sight distance.
+ Protect slopes against erosion with stabilization and vegetation or stone work.
+ Retain paved valley gutter and reconnect dike for proper drainage control.
+ Pave from edge of traveled way to property line.
+ Check local ordinances for building setbacks from roads and property lines.

Don'ts

— Don't obstruct roadside drainage and create flooding, icing and erosion conditions.

— Don't leave trash receptacles uncovered, unprotected and adjacent to the road.

— Don't construct buildings so close to road that they interfere with snow removal and snow storage.

EROSION CONTROL — CONSTRUCTION AREAS

✓ **Erosion potential is greatest during and immediately after construction:**

Do's

+ Stabilize fill slopes and seed with native suitable plantings immediately.
+ Place mulches, netting or synthetic slope treatments to help control erosion until plantings have taken hold.
+ Construct siltation ponds along the base of high fills.
+ Cut and fill slopes should be flat as practicable to insure better restoration with reseeding and revegetation.
+ Phase and schedule construction for completion during good weather conditions.

Don'ts

— Don't leave construction areas unprotected from erosion during bad weather.

— Don't design silt and debris collection areas that are insufficient or cannot be cleaned out.

CUT AND FILL SLOPES NOT SUFFICIENTLY PROTECTED FROM EROSION.

ROAD WIDTHS — ROADSIDE DRAINAGE

Do's

+ Locate cross culverts at each natural water course to minimize concentration of water and erosion.

+ Road width design should be flexible and held to a minimum which considers maximum density, type of development, safety, elevation, drainage and parking needs.

+ Slope road to cut side when possible.

+ Utilize asphalt dike on cut side, for drainage purposes and to reduce erosion and maintenance costs.

+ Protect, by construction techniques and enforcement, all natural vegetation adjacent and parallel to the traveled way.

+ Split roadways resulting in narrower road sections can reduce damage to terrain by allowing each lane to better fi terrain.

Don'ts

— Don't concentrate drainage in roadside drainage ditches.

— Don't over-excavate destroying natural vegetation and creating increased erosion.

EROSION CONTROL — CUT SLOPES AND ROADSIDE EROSION

ROADSIDE EROSION HAS BEEN RECOGNIZED AS ONE OF THE PRINCIPAL FACTORS IN WATER COURSE SILTATION.

Do's

+ Serrate cut banks to encourage vegetation.
+ Cut and fill slopes should be as flat as practicable without excess tree and vegetation damage.
+ Use native materials for erosion control.
+ Place erosion sumps, and debris collection areas out of view.
+ Use native plants to provide ground cover more resistant to erosion.

Don'ts

— Don't use topsoil for fill material. This should be placed on cut and fill slopes.

— Don't use concrete or mortar lining when stone protection or heavy planting would be more desirable.

NATURAL DRAINAGE SWALES AND MAN MADE DRAINAGE EASEMENTS

Do's

+ Improve and enhance, when necessary, all existing natural drainage swales.
+ Preserve and protect all natural drainage swales when within a development by a recordable meandering drainage easement.
+ Use clean native natural materials.

Don'ts

— Don't alter or realign natural drainage swales.

— Don't create man made drainage easements on side lot lines simply to increase density.

— Don't remove excessive vegetation thus creating erosion and siltation problems.

— Don't make drainage easements impervious.

BRIDGES

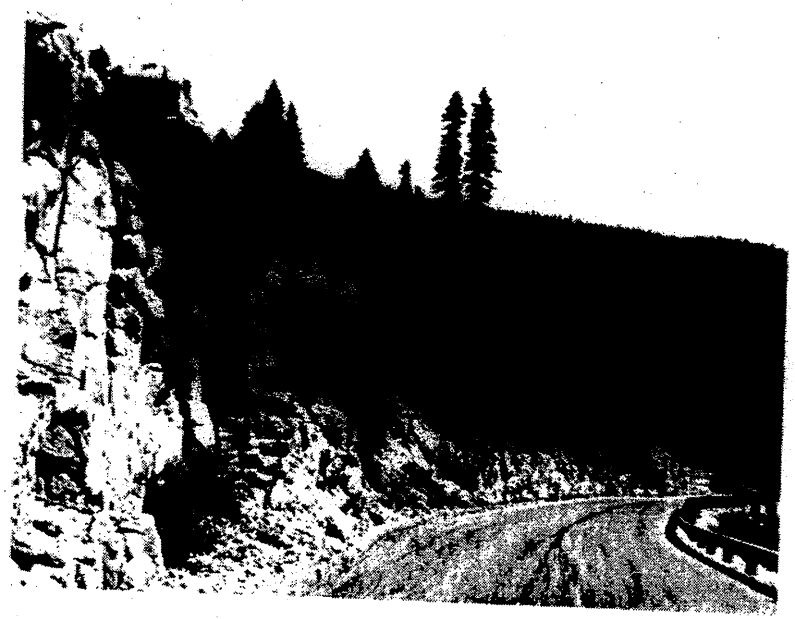
- Bridges should be used for all live stream crossings.
- Use materials native to the area to construct structure.
- Minimize supporting columns and piers.
- Guard rails should be open design cable post, chain post, or low natural rock.
- Design structures which do not require excessive maintenance.
- Provide for pedestrian, bicycle and equestrian traffic.

LANDSCAPING
ADJACENT TO ROADWAY

Do's

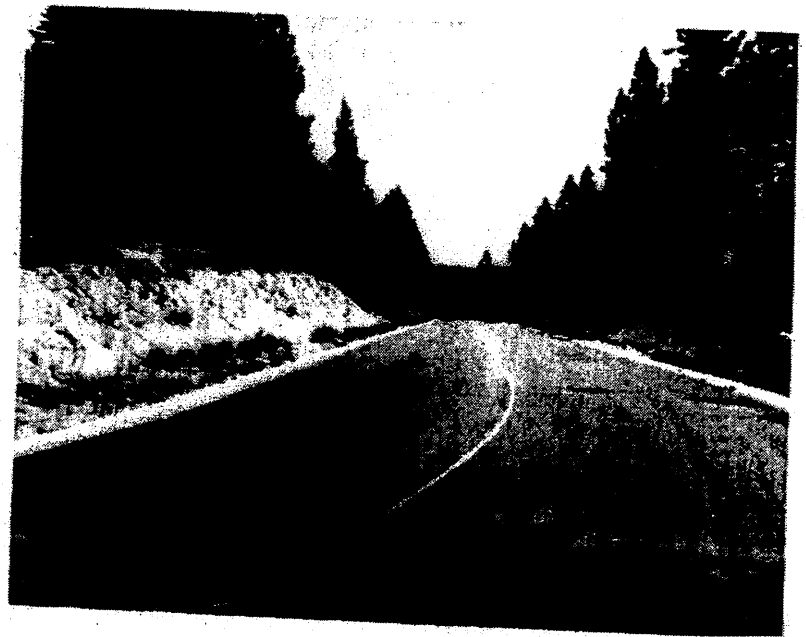
+ Landscape for erosion control as well as beauty.
+ Use a variety of native plants and materials.
+ Use selective foresting to enhance views and offer a variety of vegetation.
+ Screen existing undesirable areas with native plants and trees.
+ Locate parking, picnic, and rest areas out of drivers' view.
+ Use heavy planting on cuts and fills.
+ Provide watering system for seeded and replanted areas.

DESIGN AND ALIGNMENT



Do's

+ Consider scenic values in selecting design speed.
+ Use curviliniar horizontal alignments and gently rolling profiles to result in a more pleasing appearance.
+ Protect desirable features such as rock outcrops, timber stands, and streams.
+ Use bridges, tunnels or separate roadways to minimize cuts and fills and resulting damage to terrain.
+ Design cuts and fills to blend into natural topography.
+ Use variable slopes and slope rounding to eliminate stark appearance.

Don'ts

— Don't use sharp curves.
— Don't leave narrow cut knobs which could be daylighted to open view.
— Don't have utilities and drainage in view from roadway.
— Don't make cuts to obtain fill material
— Don't use excessive road widths or design speeds.
— Don't forget access problems in cut and fill areas.