



South Carolina
Department of Transportation

DM0399

MARCH 1, 1999

MEMORANDUM TO GROUP LEADERS & CONSULTANTS

SUBJECT: CORROSION PROTECTION SYSTEMS FOR BRIDGES

This memorandum replaces the previous Design Memorandum DM0297 dated February 28, 1997.

A corrosion protection system shall be used for bridge decks on Interstate and National Highway System routes located North of a line along S. C. Route 72 from the Georgia state line to Chester, S. C. and North of S. C. Route 9 from Chester, S. C. to Interstate Route I-77 and West of a line along Interstate Route I-77 from the intersection of S. C. Route 9 and I-77 to the North Carolina state line (see attached map).

The following corrosion protection systems are approved for use on bridge decks. Prior to detailing the plans, the designer shall verify with the Bridge Design Engineer which system to use.

- 1.) Class E Concrete with uncoated steel reinforcing bars
- 2.) Class D Concrete with galvanized steel reinforcing bars
- 3.) Class D Concrete with epoxy coated steel reinforcing bars

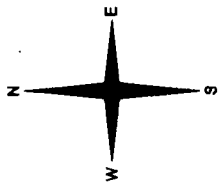
The mixing or connecting of galvanized or epoxy coated and uncoated bars within the bridge deck will not be allowed.

The Bridge Design Engineer shall determine the need for a corrosion protection system for each project located in a coastal county. The Bridge Design Engineer will determine requirements of the corrosion protection system for the bridge deck, other concrete superstructure elements and concrete substructure elements for coastal projects.

Randy R. Cannon, P.E.
Bridge Design Engineer

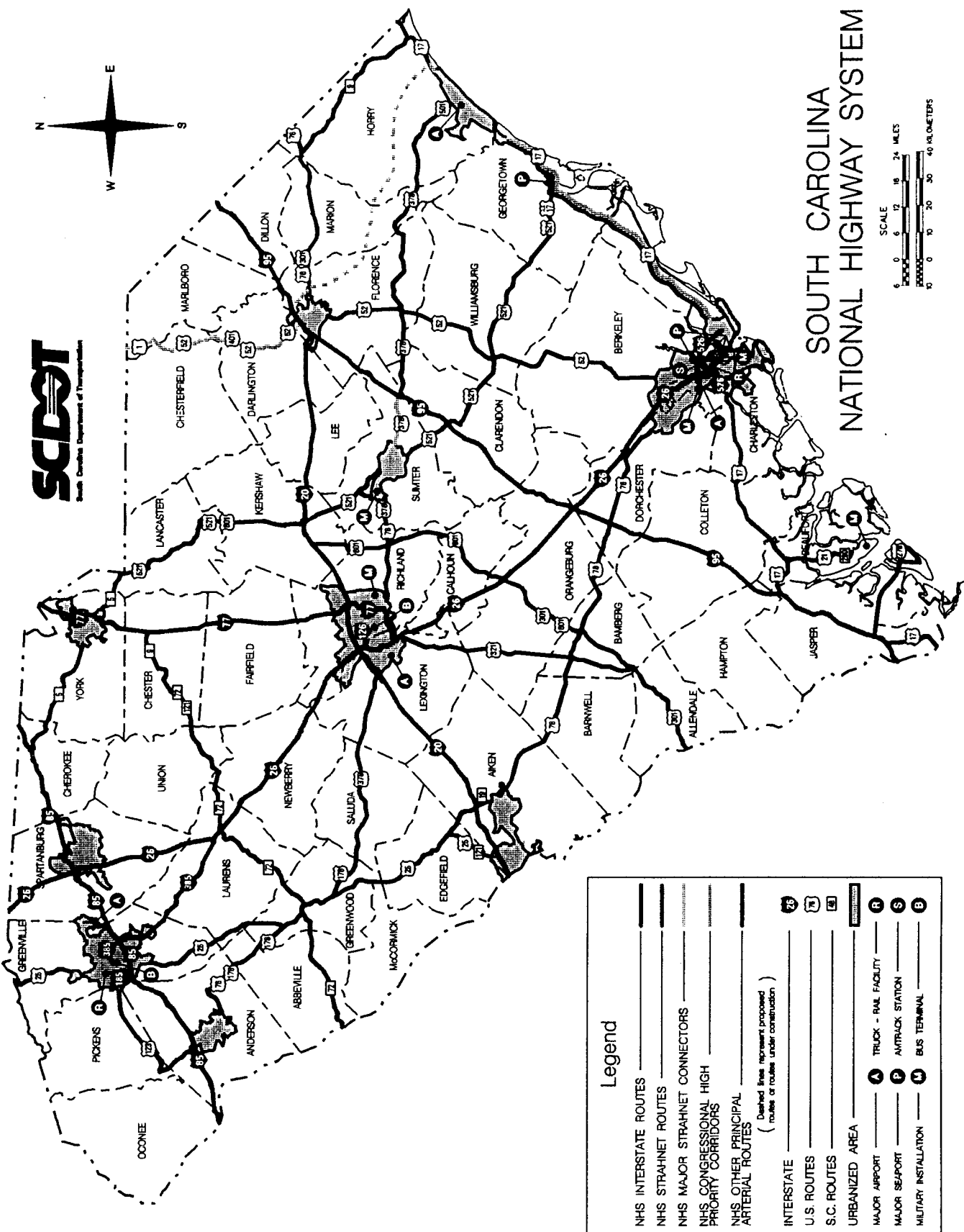
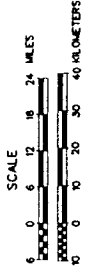
cc: Assistant Bridge Design Engineers
Attachment
File: PC/REL





SCDOT
South Carolina Department of Transportation

SOUTH CAROLINA NATIONAL HIGHWAY SYSTEM



Legend

- NHS INTERSTATE ROUTES 76
- NHS STRAHNET ROUTES 77
- NHS MAJOR STRAHNET CONNECTORS 78
- NHS CONGRESSIONAL HIGH PRIORITY CORRIDORS 79
- NHS OTHER PRINCIPAL ARTERIAL ROUTES 80
- (Dashed lines represent proposed routes or routes under construction)
- INTERSTATE 76
- U.S. ROUTES 77
- S.C. ROUTES 78
- URBANIZED AREA 79
- MAJOR AIRPORT A TRUCK - RAIL FACILITY R
- MAJOR SEAPORT P AIRTRACK STATION S
- MILITARY INSTALLATION M BUS TERMINAL B