



SUSITNA HYDROELECTRIC PROJECT

TRANSMISSION LINE SELECTED ROUTE

FINAL DRAFT
MARCH 1982
FIGURES

Prepared by:



ALASKA POWER AUTHORITY

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1 - TRANSMISSION LINE SELECTED ROUTE

Development of the proposed Susitna project will require a transmission mechanism to deliver electric power to the Railbelt area. The pre-building of the Intertie system will result in a corridor and route for the Susitna transmission lines between Willow and Healy. Therefore, three areas require study for corridor selection: the northern area to connect Healy with Fairbanks, the central area to connect the Watana and Devil Canyon damsites with the Intertie, and the southern area to connect Willow with Anchorage.

The corridor selection methodology followed the Susitna study plan formulation and selection methodology. Previous studies, existing data, aerial reconnaissance, and limited field studies formed the data base. Using certain selection criteria, corridors 3 to 5 miles wide which met these criteria were selected in each of the three study areas. These corridors were then evaluated to determine which ones met the more specific screening criteria. This screening process resulted in one corridor in each area being designated as the recommended corridor for the transmission line. For a more detailed discussion of study methodology and the selection and screening criteria, refer to the Transmission Line Corridor Screening Closeout Report, prepared by Acres American Incorporated, September, 1981.

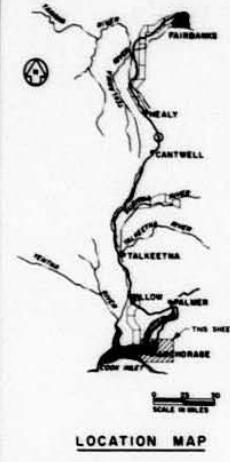
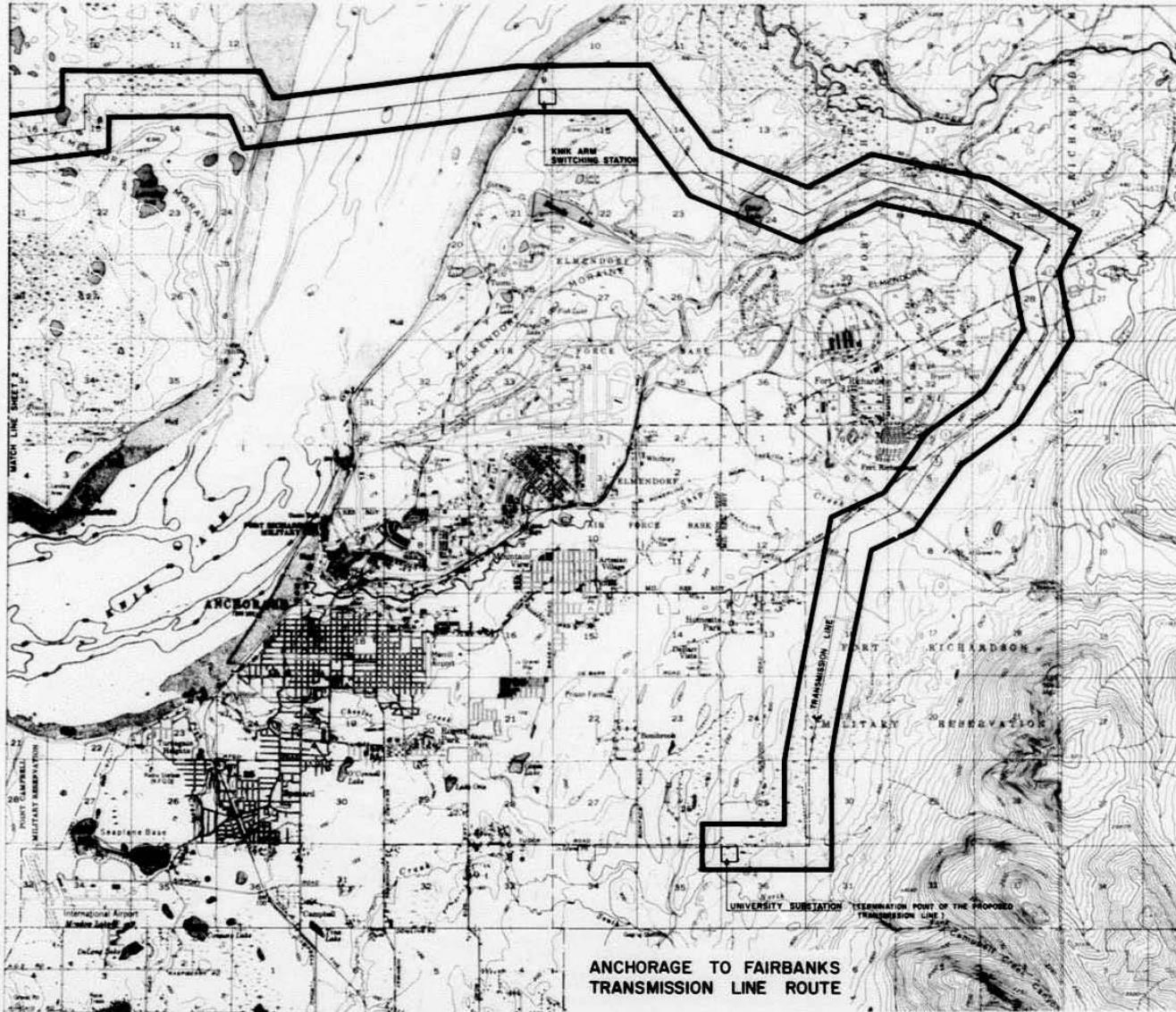
A study of existing information and aerial overflights, together with additional aerial coverage, was used to locate the recommended route in each of the southern, central, and northern study areas.

Additional environmental information and land status studies made it possible to align the routes to avoid any restraints.

Terrain unit maps describing the general material expected in the area were prepared specifically for transmission line studies and were used to locate the routes away from unfavorable soil conditions whenever possible.

Figures 1 through 14 (as discussed in Section 14.3 of the Feasibility Report) are believed to best meet the technical, economical, and environmental criteria as discussed in the Transmission Line Corridor Screening Closeout Report. A half-mile-wide corridor is located in these figures; within this width, the centerline of the proposed route is located. The centerline represents a 400-foot-width right-of-way for the entire length of the transmission line, except in the segment of the line between Devil Canyon and the Intertie where the right-of-way is 700 feet. This segment has five single-circuit lines parallel to each other.

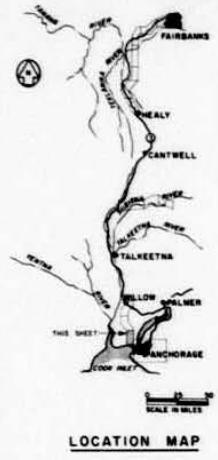
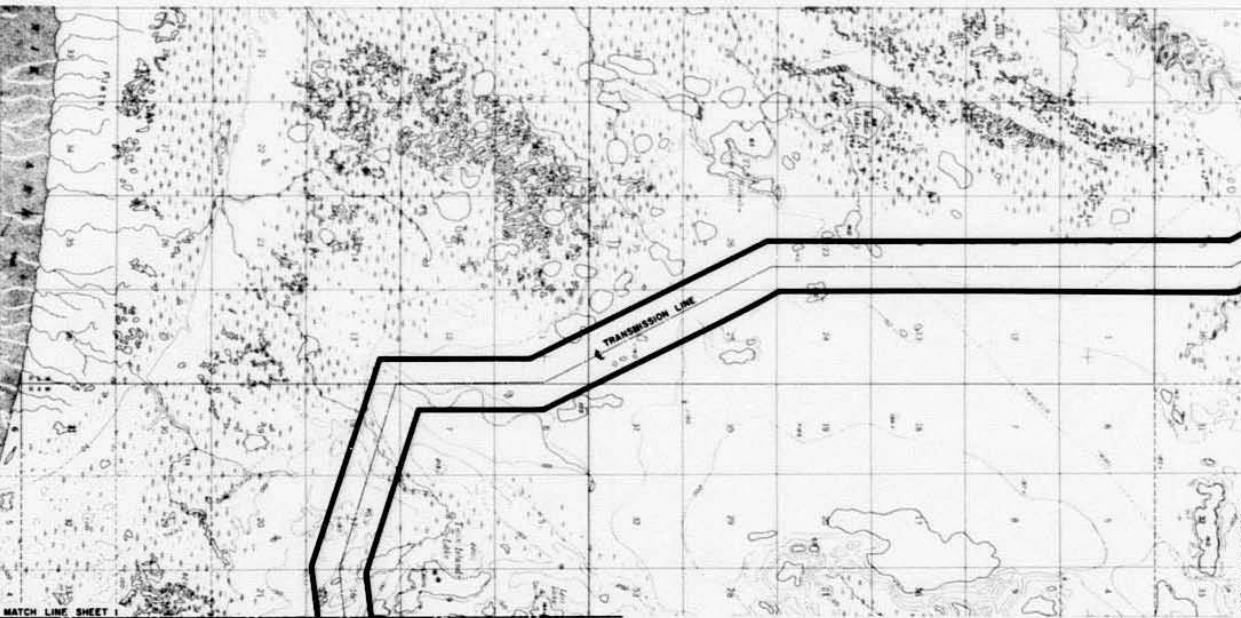
Appendix A contains the environmental constraint maps.



LEGEND

- [Solid line] 1/2 MILE WIDE TRANSMISSION LINE CORRIDOR
- [Centerline line] CENTERLINE OF PROPOSED TRANSMISSION LINE ROUTE
- [Square] PROPOSED SUBSTATION OR SWITCHING YARD
- [Dashed line] EXISTING TRANSMISSION LINE
- [Open square] EXISTING SUBSTATION

SCALE 0 1 MILE



LEGEND

- 1/2 MILE WIDE TRANSMISSION LINE CORRIDOR
- CENTERLINE OF PROPOSED TRANSMISSION LINE ROUTE
- PROPOSED SUBSTATION OR SWITCHING YARD
- EXISTING TRANSMISSION LINE
- EXISTING SUBSTATION

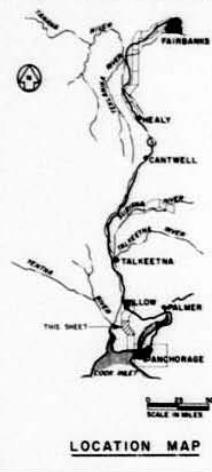
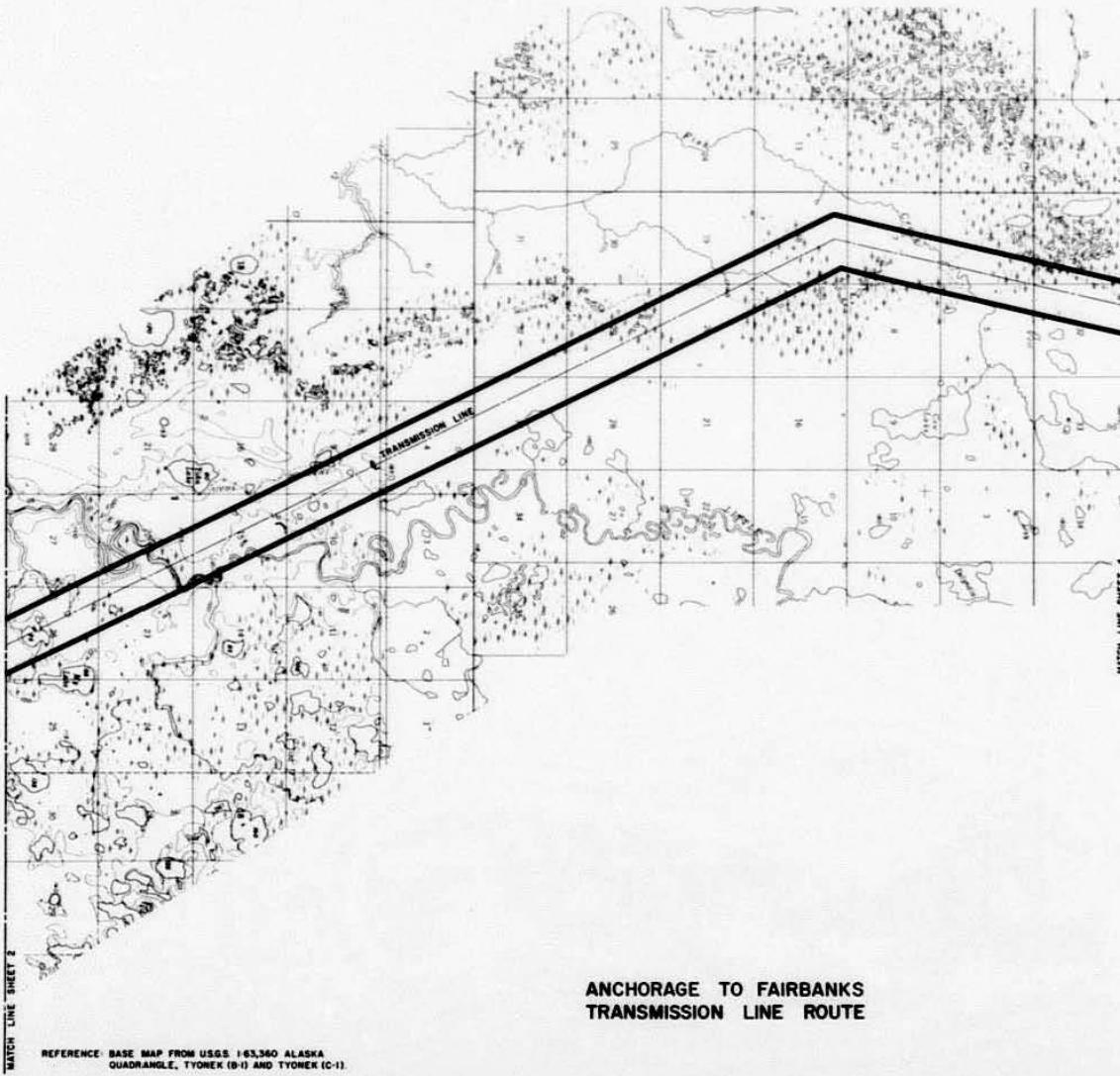
SCALE 0 1 MILE

ANCHORAGE TO FAIRBANKS
TRANSMISSION LINE ROUTE

REFERENCE: BASE MAP FROM USGS 1:63,360 ALASKA
QUADRANGLE, TYONEK (B-I).

FIGURE 20F14

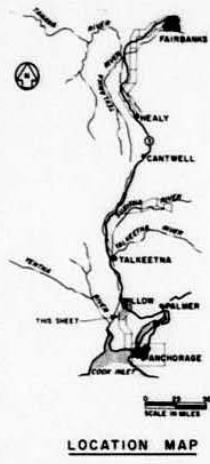
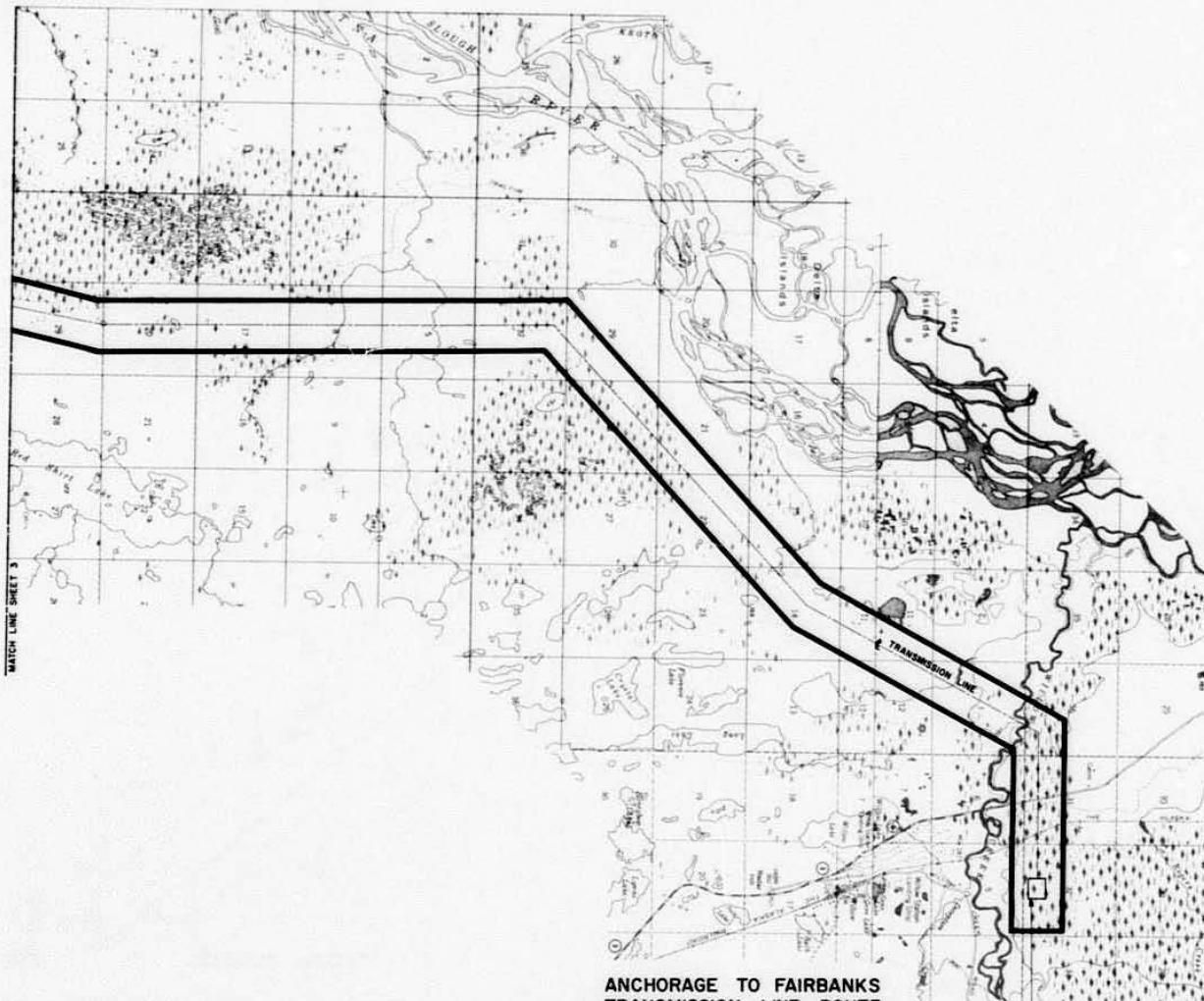




LEGEND

- 1/2 MILE WIDE TRANSMISSION LINE CORRIDOR
- CENTERLINE OF PROPOSED TRANSMISSION LINE ROUTE
- PROPOSED SUBSTATION OR SWITCHING YARD
- EXISTING TRANSMISSION LINE
- EXISTING SUBSTATION

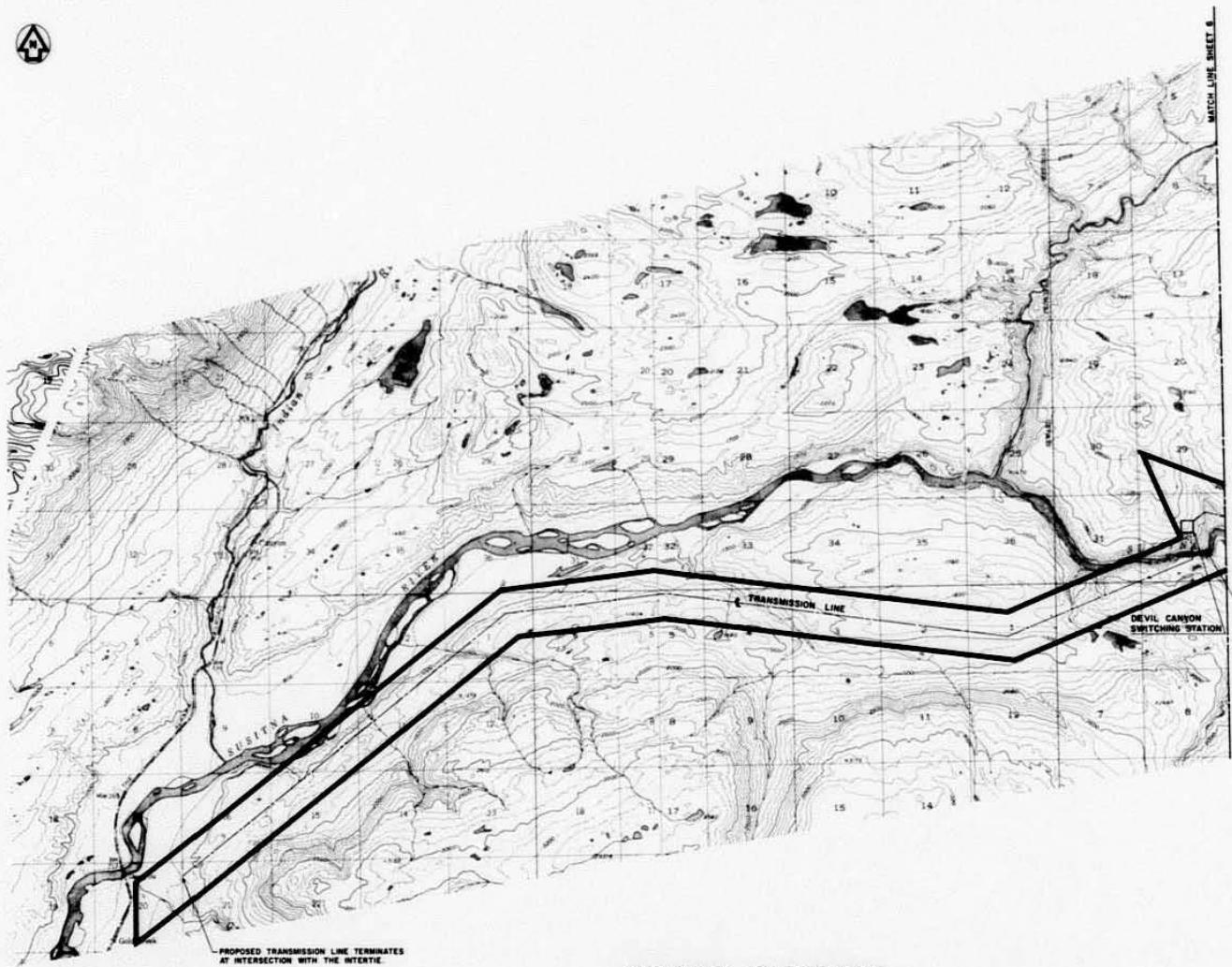
SCALE 0 1 MILE



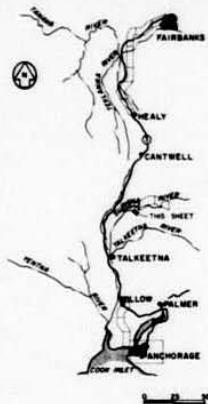
LEGEND

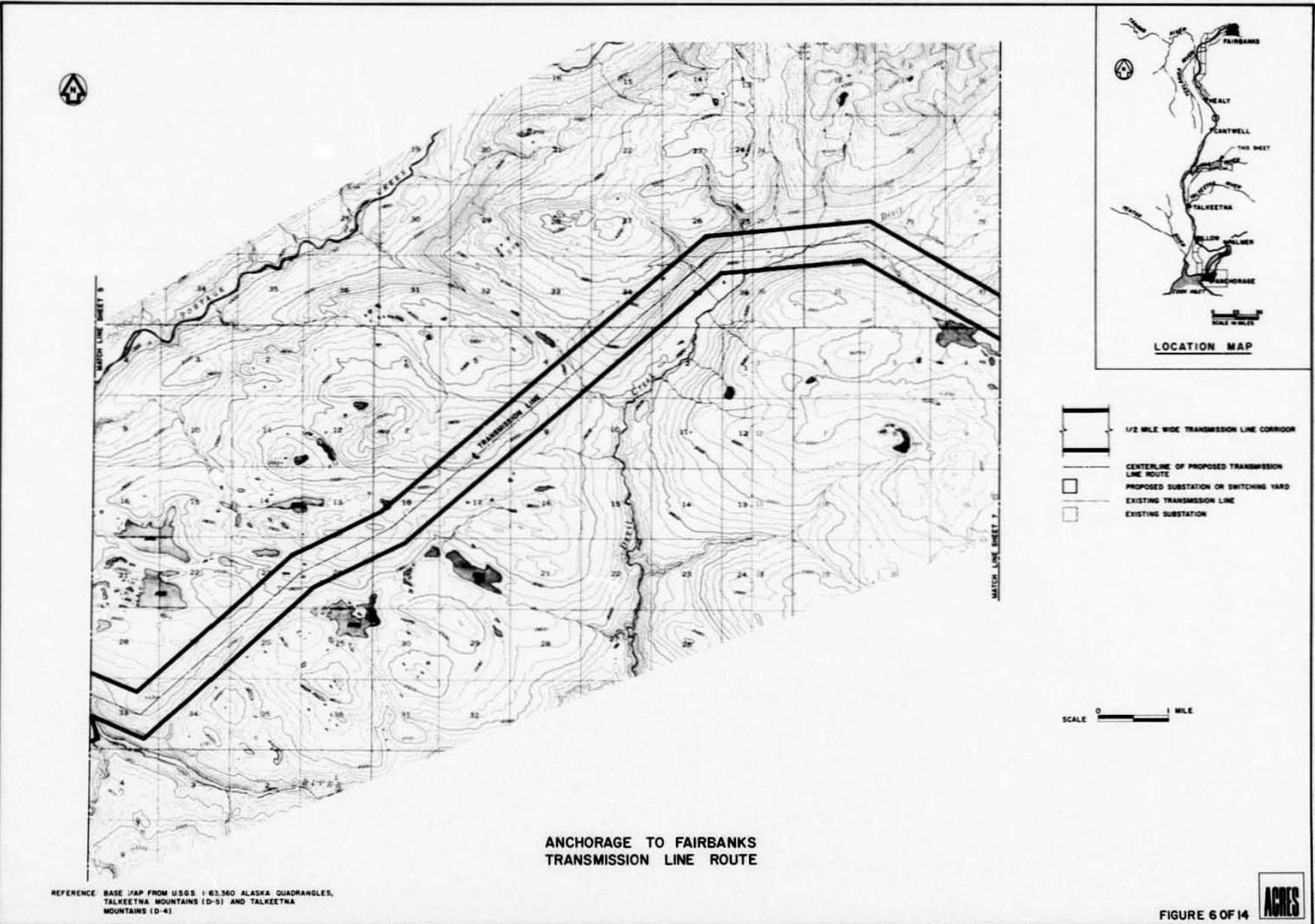
- 1/2 MILE WIDE TRANSMISSION LINE CORRIDOR
- CENTERLINE OF PROPOSED TRANSMISSION LINE ROUTE
- PROPOSED SUBSTATION OR SWITCHING YARD
- EXISTING TRANSMISSION LINE
- EXISTING SUBSTATION

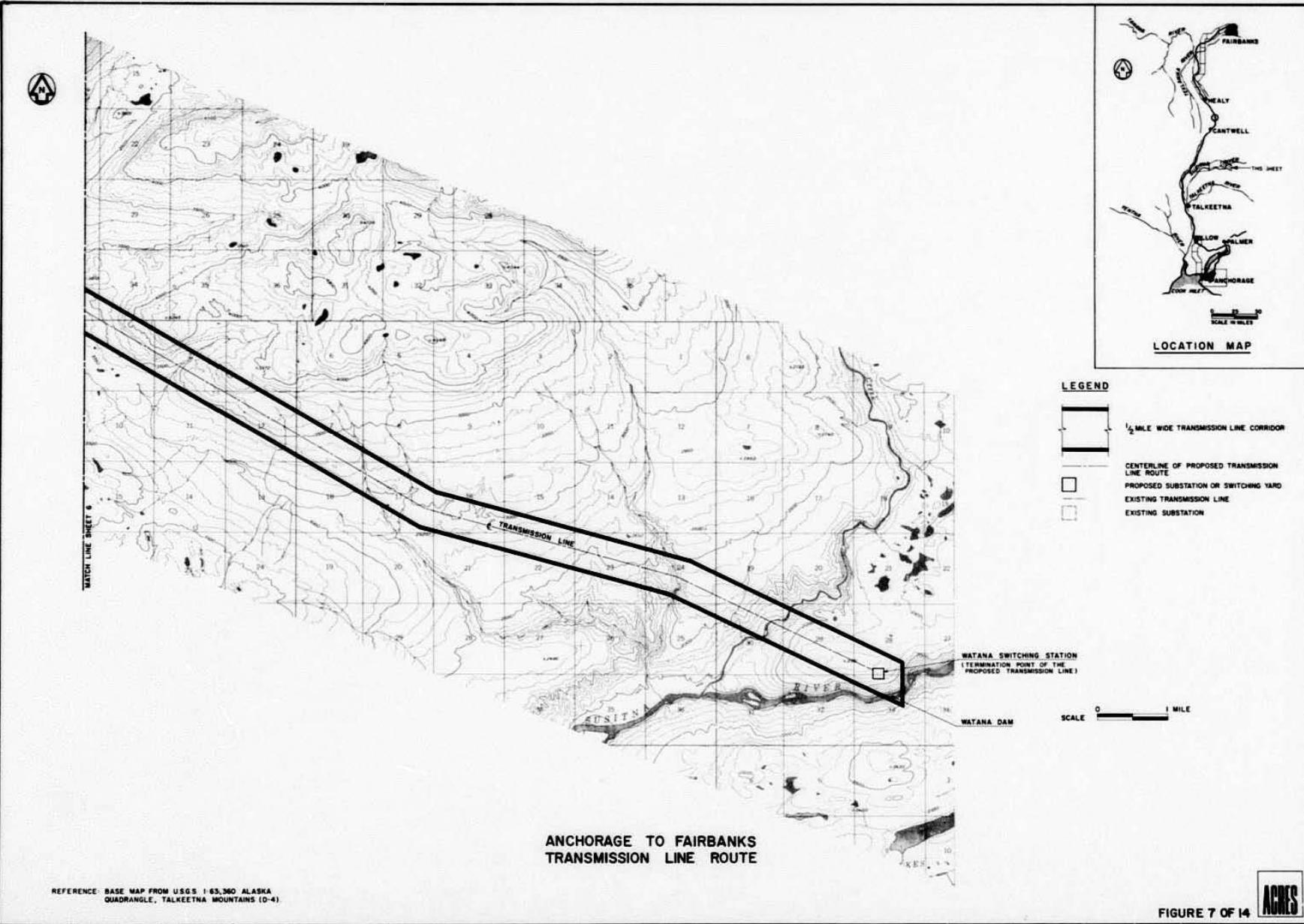
SCALE 0 1 MILE

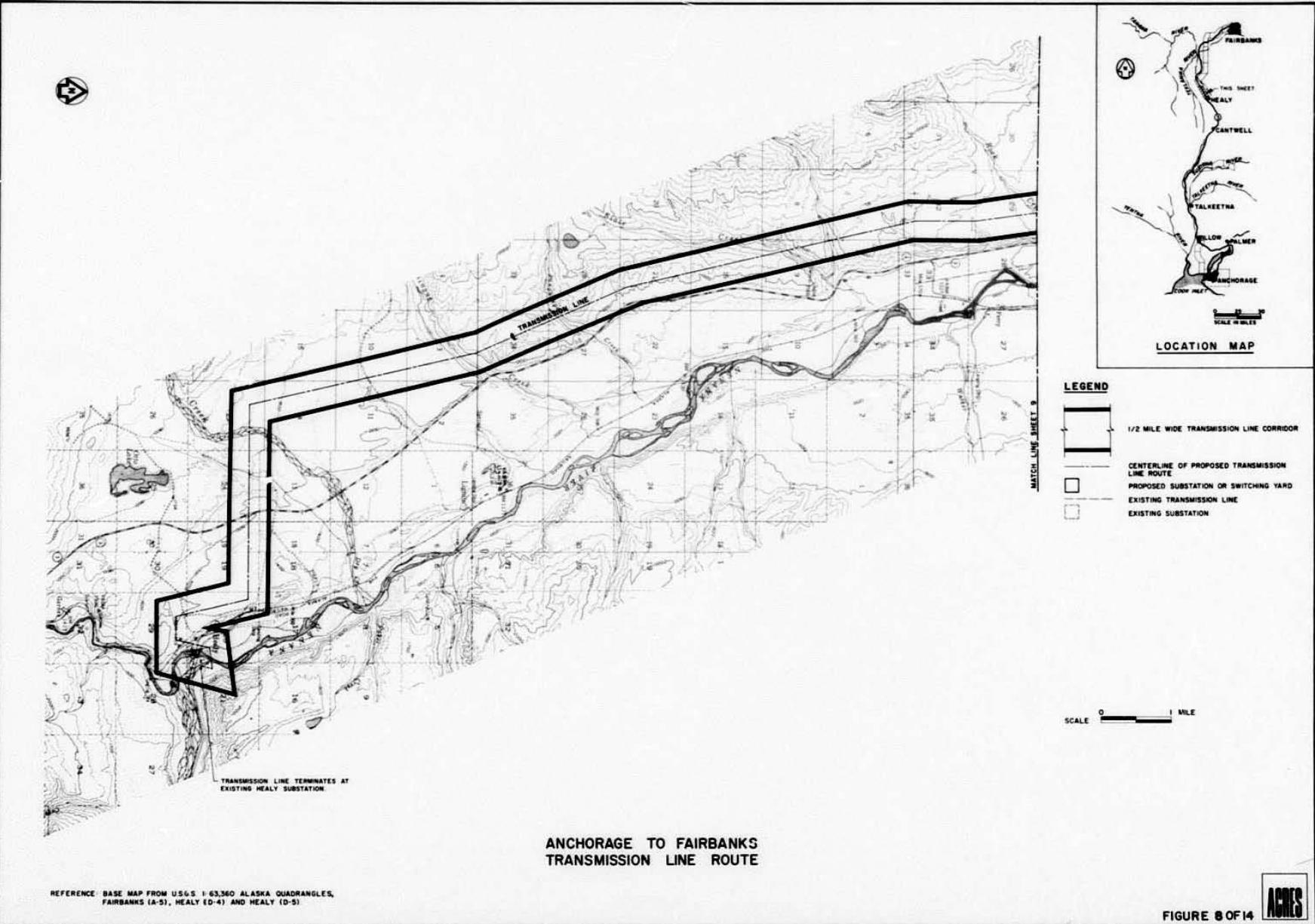


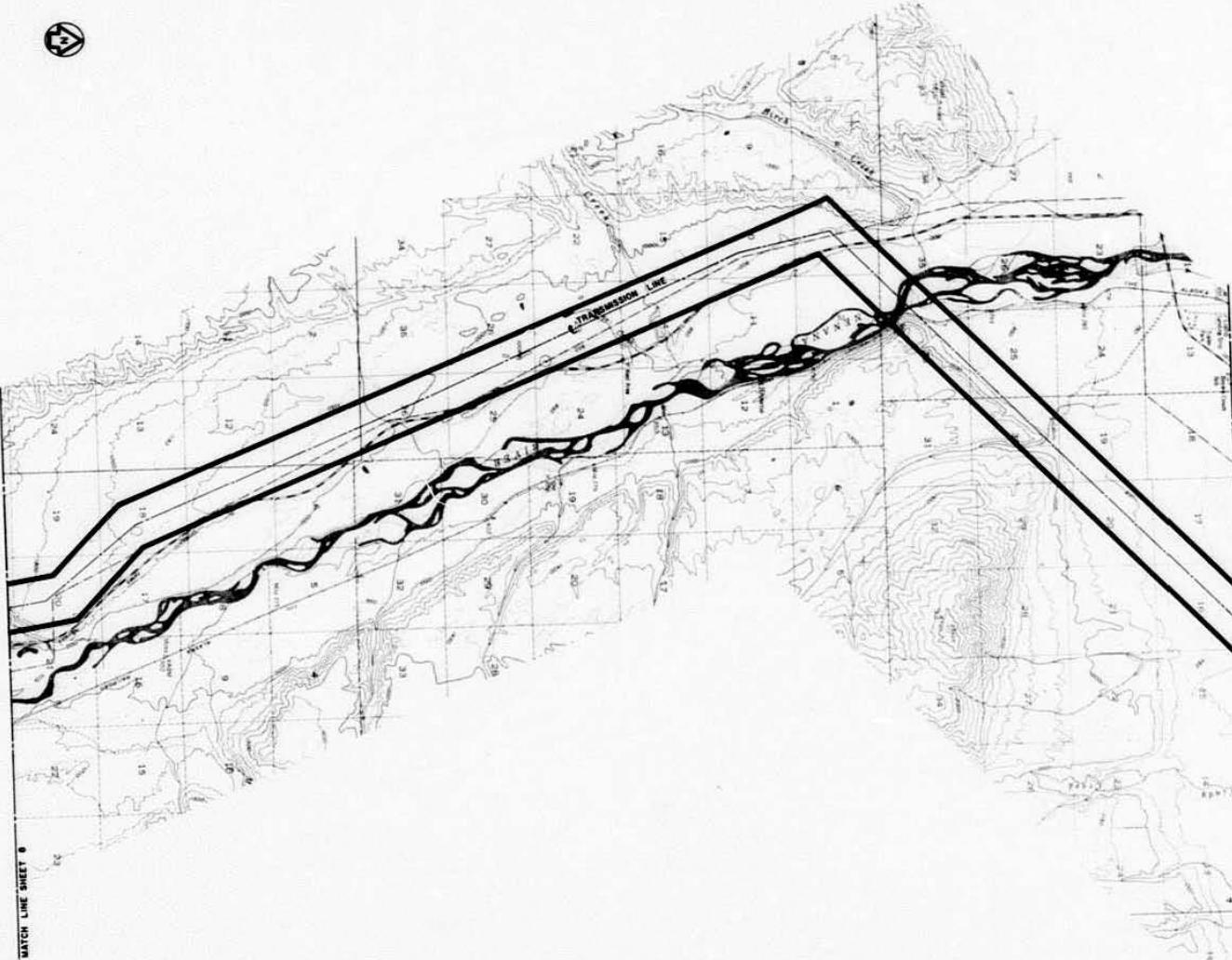
REFERENCE BASE MAP FROM USGS 1:63,360 ALASKA QUADRANGLES,
TALKEETNA MOUNTAINS (D-6) AND TALKEETNA
MOUNTAINS (D-5).









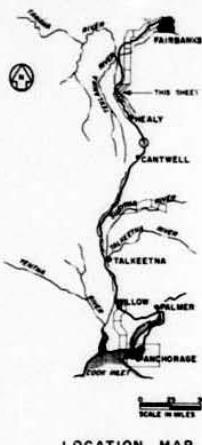


ANCHORAGE TO FAIRBANKS
TRANSMISSION LINE ROUTE

REFERENCE: BASE MAP FROM USGS 1:63,360 ALASKA QUADRANGLES,
FAIRBANKS (A-5).

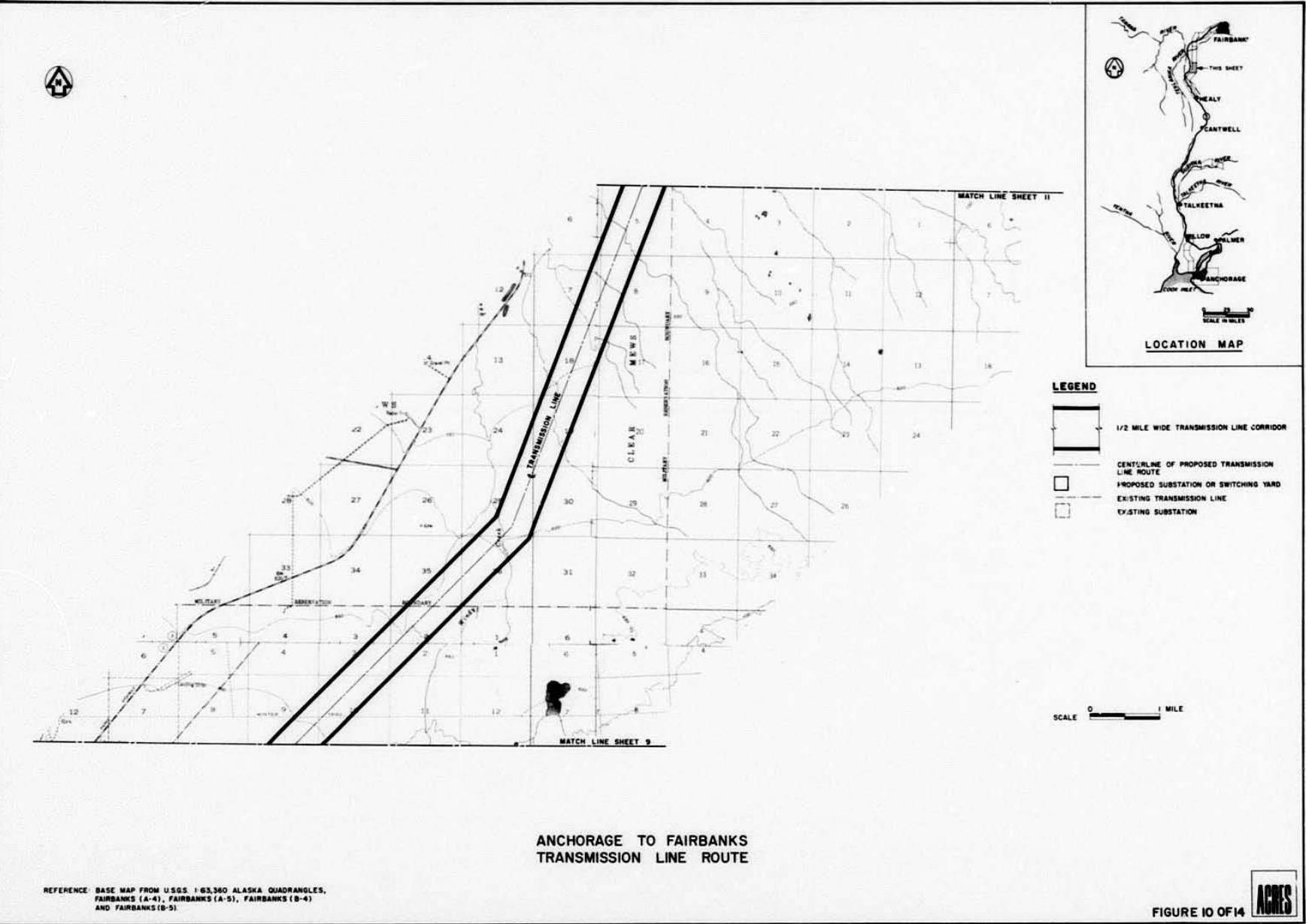
MATCH LINE SHEET 10

SCALE 0 1 MILE

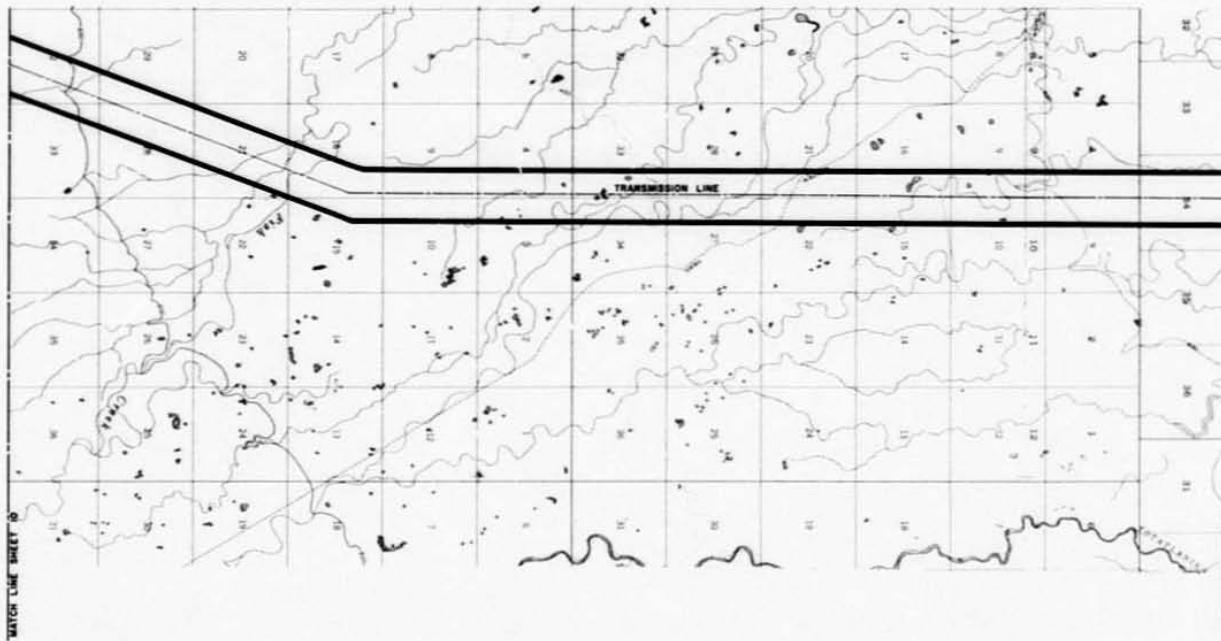


LEGEND

- 1/2 MILE WIDE TRANSMISSION LINE CORRIDOR
- CENTERLINE OF PROPOSED TRANSMISSION LINE ROUTE
- PROPOSED SUBSTATION OR SWITCHING YARD
- EXISTING TRANSMISSION LINE
- EXISTING SUBSTATION

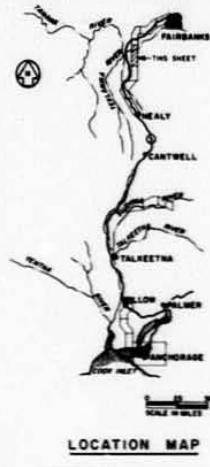


(2)



ANCHORAGE TO FAIRBANKS
TRANSMISSION LINE ROUTE

REFERENCE: BASE MAP FROM USGS 1:63,360 ALASKA QUADRANGLES,
FAIRBANKS (B-4) AND FAIRBANKS (C-4)



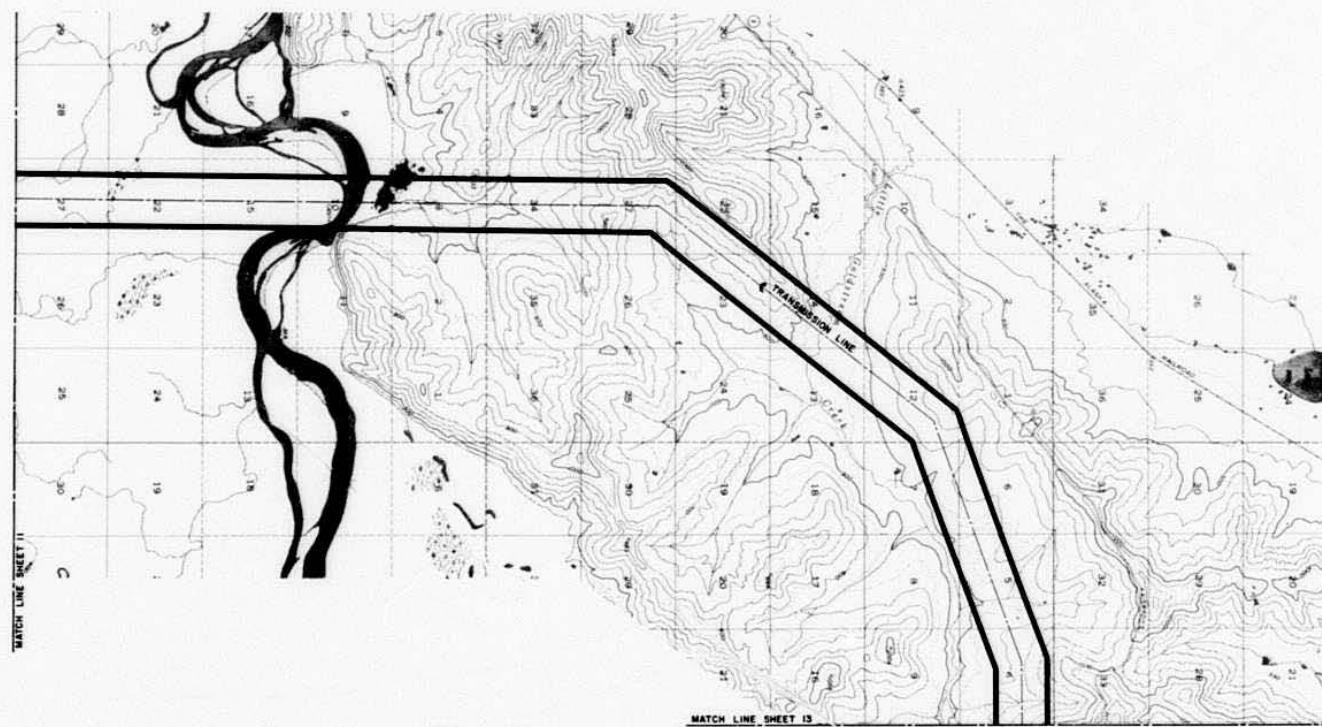
LEGEND

- [Solid black rectangle] 1/2 MILE WIDE TRANSMISSION LINE CORRIDOR
- [Thin black line with arrowhead] CENTER LINE OF PROPOSED TRANSMISSION LINE ROUTE
- [Thin black line] PROPOSED SUBSTATION OR SWITCHING YARD
- [Thin black line] EXISTING TRANSMISSION LINE
- [Thin black square] EXISTING SUBSTATION

SCALE 0 1 MILE

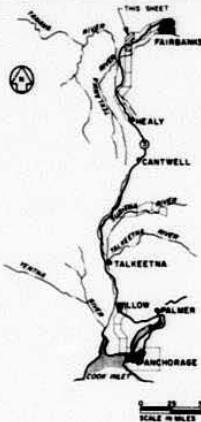
FIGURE II OF 14

ACRES



ANCHORAGE TO FAIRBANKS TRANSMISSION LINE ROUTE

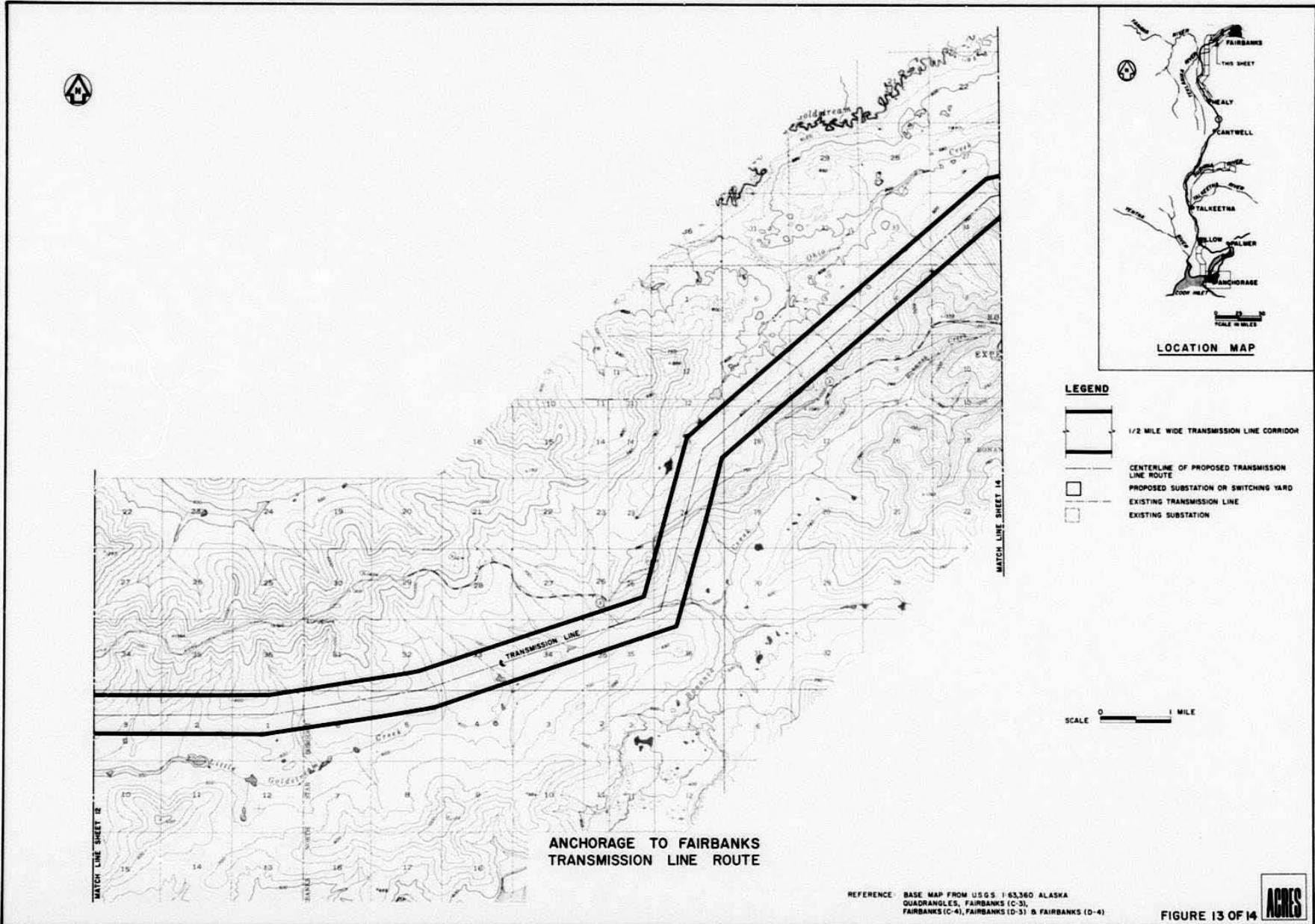
REFERENCE: BASE MAP FROM USGS 1:63,360 ALASKA
QUADRANGLE, FAIRBANKS (C-4)



LOCATION MAP

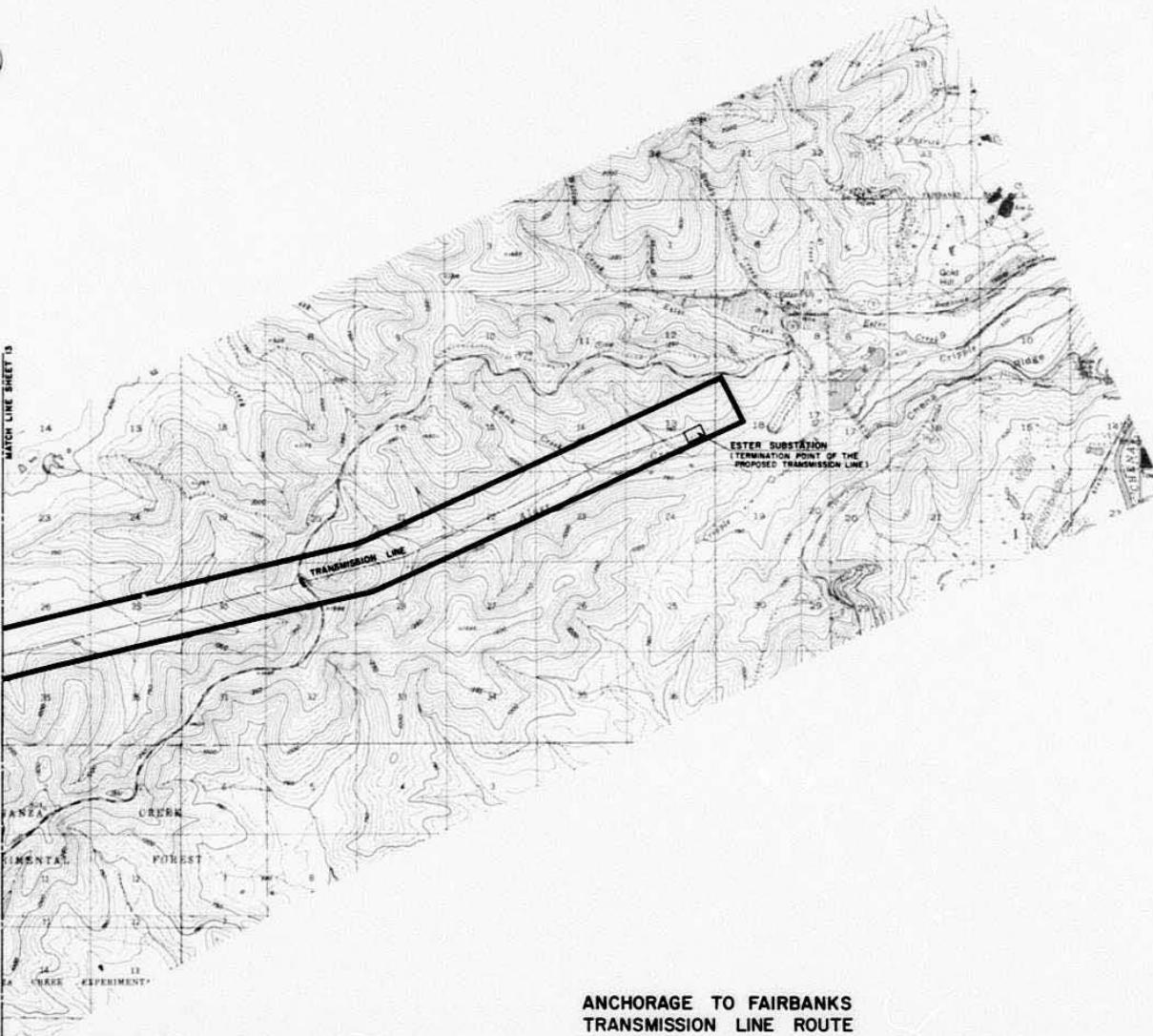
LEGEND

- 1/2 MILE WIDE TRANSMISSION LINE CORRIDOR
- CENTERLINE OF PROPOSED TRANSMISSION LINE ROUTE
- PROPOSED SUBSTATION OR SWITCHING YARD
- EXISTING TRANSMISSION LINE
- EXISTING SUBSTATION



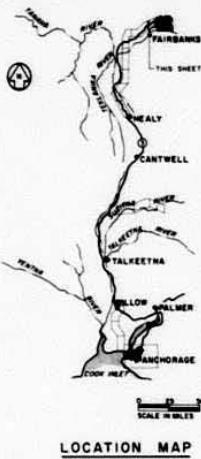


MAP SHEET 1



ANCHORAGE TO FAIRBANKS
TRANSMISSION LINE ROUTE

REFERENCE: BASE MAP FROM USGS 1:63,360 ALASKA QUADRANGLES,
FAIRBANKS (D-2) & FAIRBANKS (D-3).



LOCATION MAP

LEGEND

- 1/2 MILE WIDE TRANSMISSION LINE CORRIDOR
- CENTERLINE OF PROPOSED TRANSMISSION LINE ROUTE
- PROPOSED SUBSTATION OR SWITCHING YARD
- EXISTING TRANSMISSION LINE
- EXISTING SUBSTATION

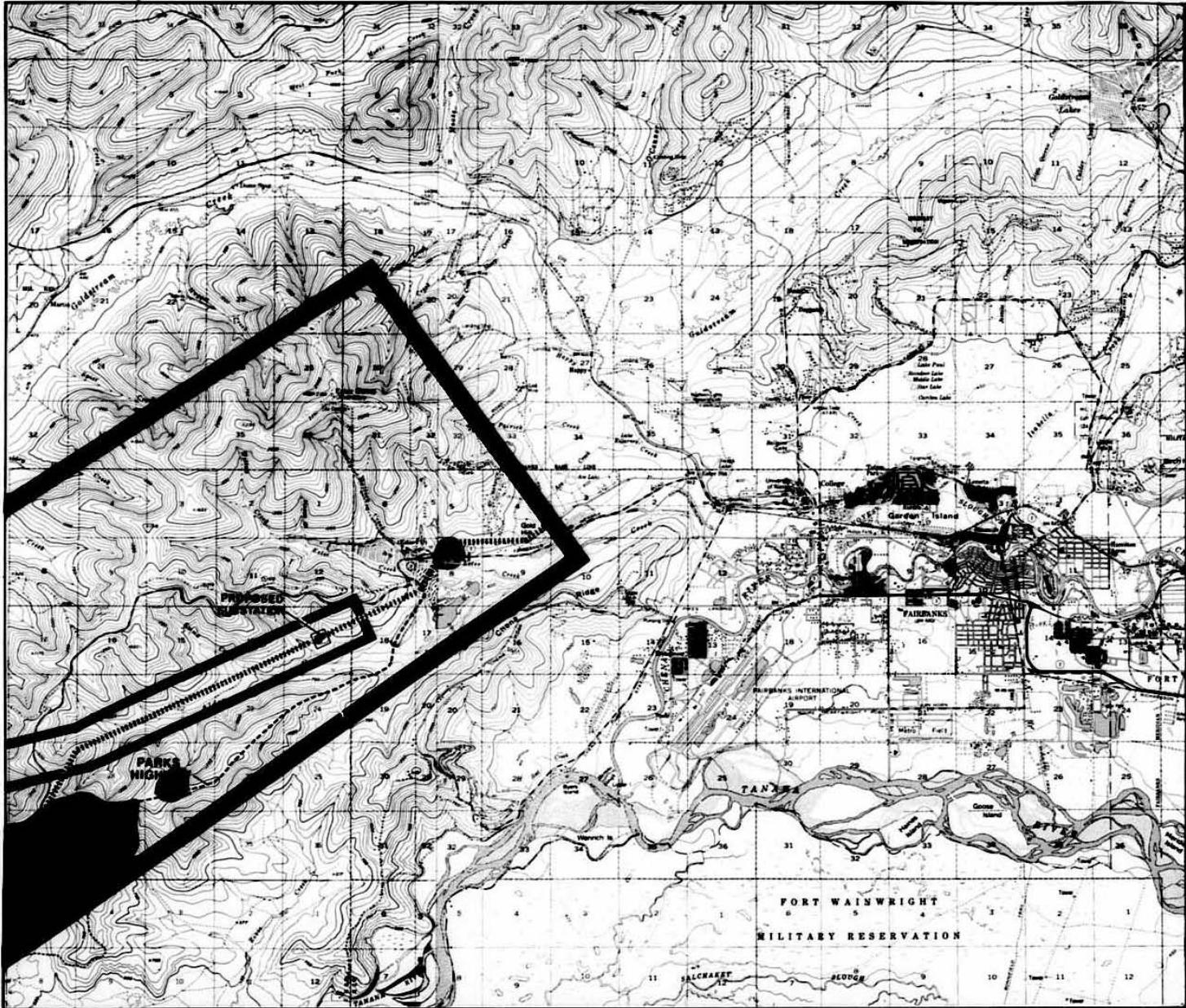
SCALE 0 1 MILE

APPENDIX A

1 - CONSTRAINT MAPS

Constraint analysis information was placed on the base maps, (Figures 1 through 48). Constraints were identified and presented on overlays to the base map. This mapping process involved using both existing information and that acquired through related Susitna project studies. This information was first categorized as to its potential for constraining the development of a transmission line route within the preferred corridors. Environmental constraints were identified and recorded directly onto the base maps in rough form. Overlays to the base map were prepared indicating the type and extent of the encountered constraints. Three overlays were prepared for each map; one for man-made constraints, one for visual constraints, and one for biological constraints.

Base maps include such information as topographic features, roads, rivers, streams, communities, etc. Environmental constraints were mapped on separate overlays to the base map, with the final overlay consisting of a composite of all environmental constraints. Using the composite overlay, alternative routes were evaluated, with establishment of a primary route as the objective of the evaluation process.



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

LEGEND

- EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERTIE
- RECOMMENDED ROUTE
- CORRIDOR BOUNDARY

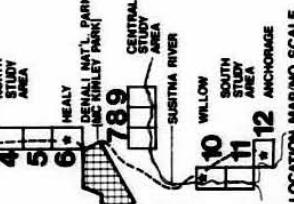


SENSITIVE VIEWSHEDS AND PROPOSED SCENIC HIGHWAY AREA

PSH PROPOSED SCENIC HIGHWAY AREA

SENSITIVE VIEWSHEDS

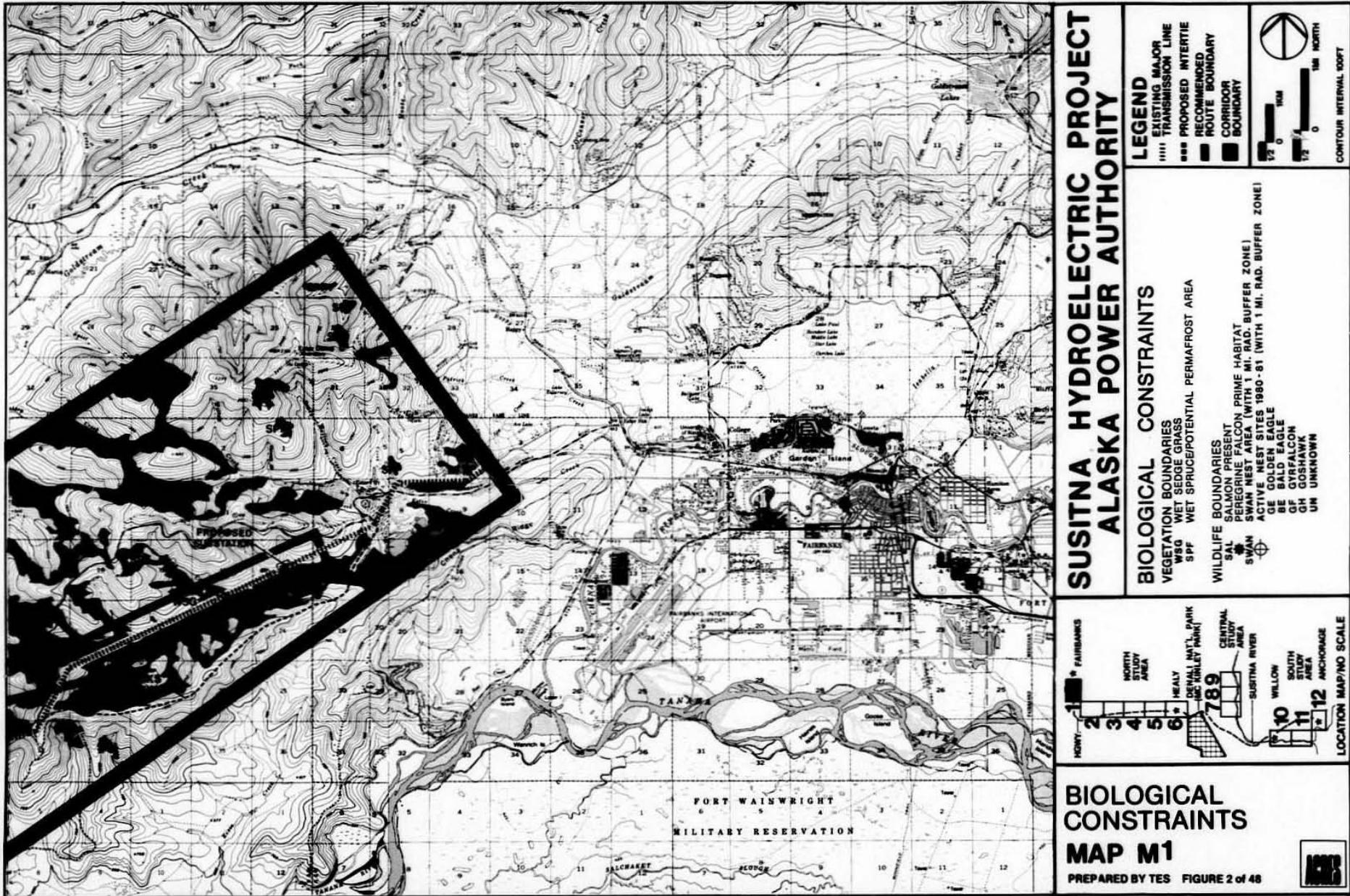
HIGHWAY
RAILROAD
PRIVATE LANDS
WATER COURSE
RECREATION AREA

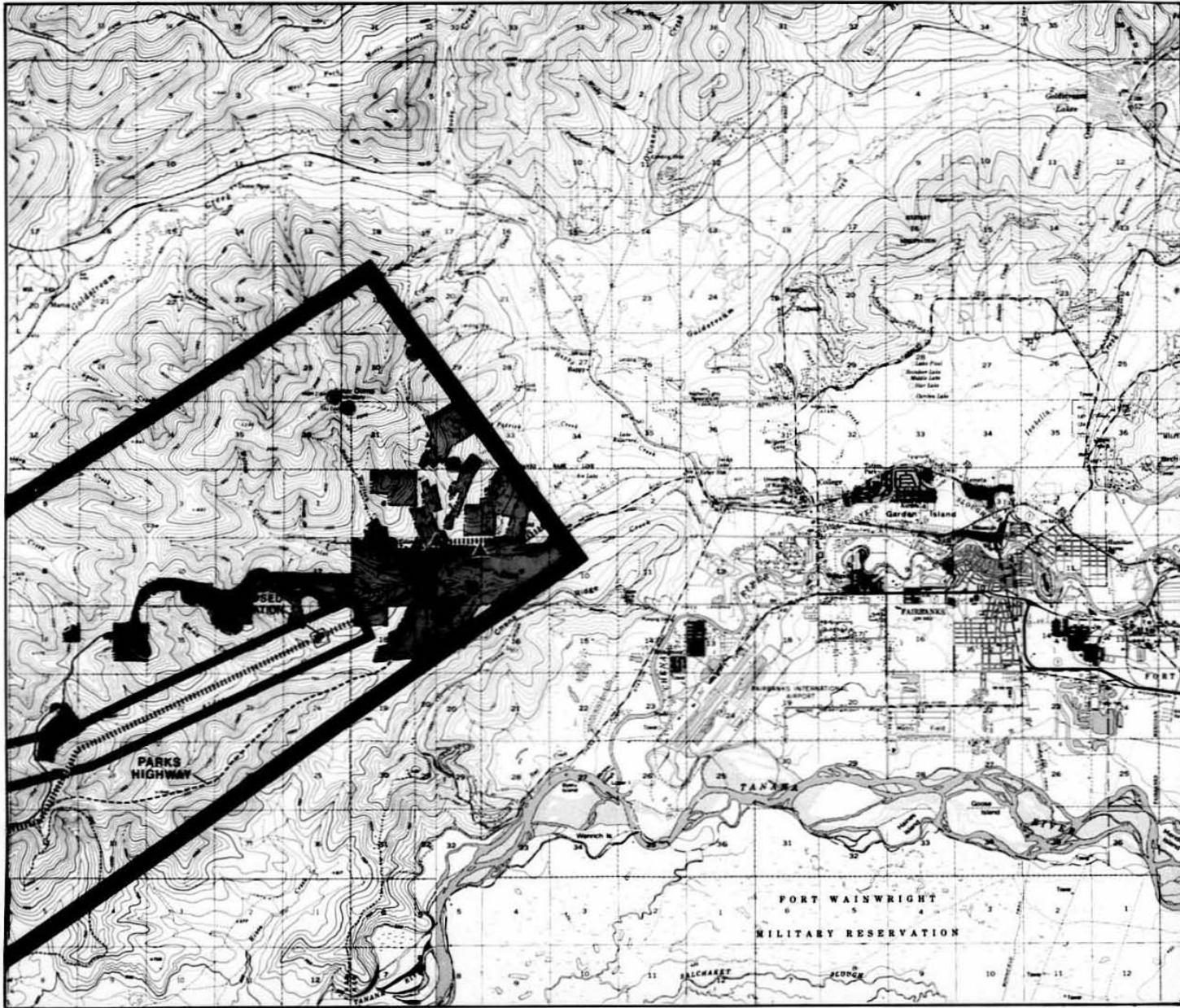


VISUAL CONSTRAINTS MAP M1

PREPARED BY TES FIGURE 1 of 48



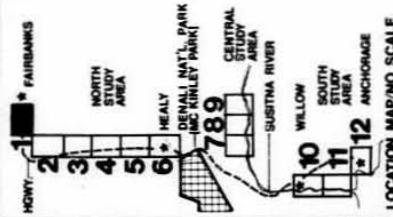




SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

MANMADE CONSTRAINTS

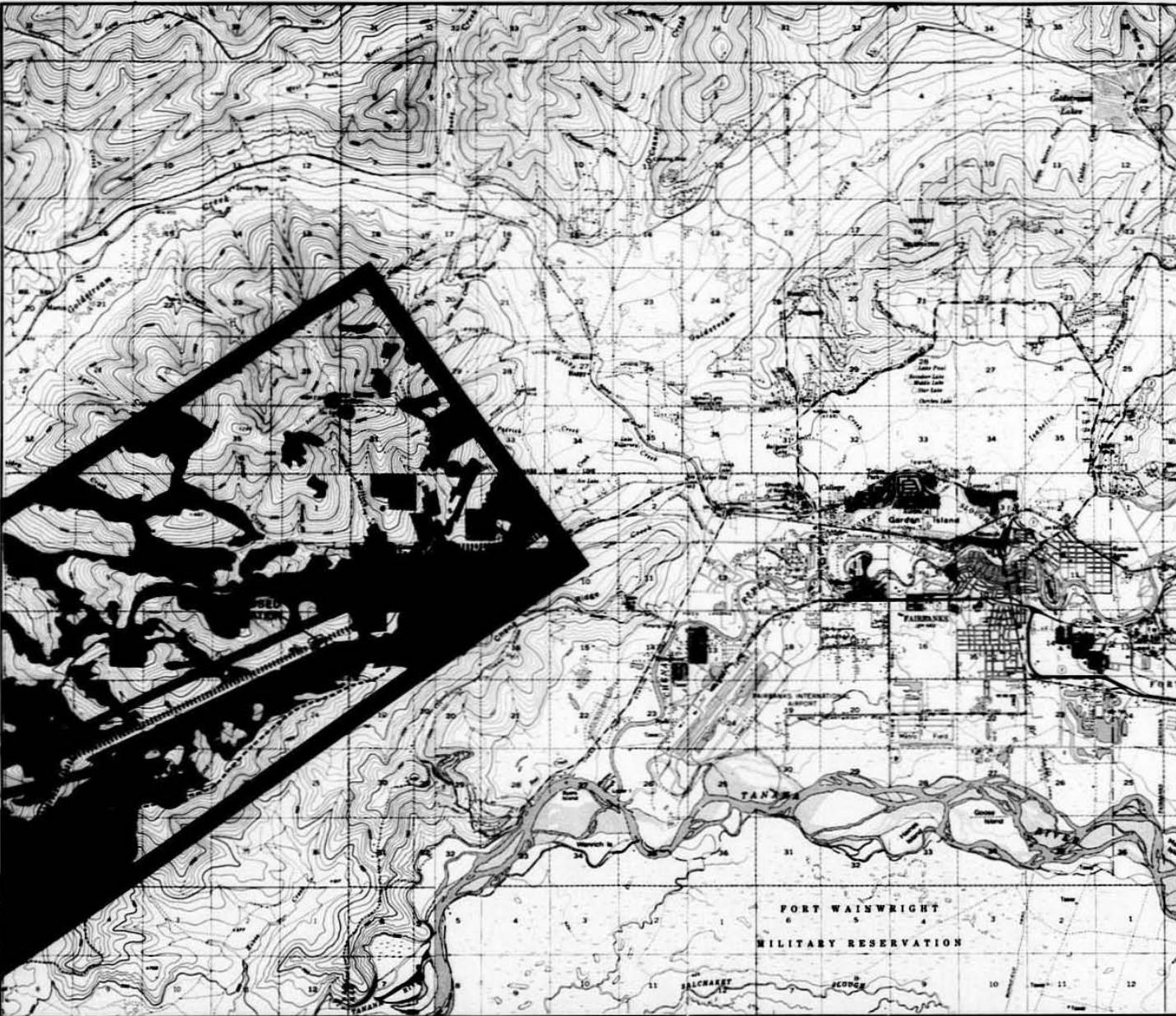
- RECREATION BOUNDARIES**
- CAMP SITE
 - RECREATION TRAIL
 - NAME
 - GAME REFUGE AREA
- LAND USE AND LAND OWNERSHIP BOUNDARIES**
- EXISTING PRIVATE LAND
 - DISPENSAL AREA
 - AGRICULTURAL LAND
 - KNOWN ARCHAEOLOGICAL SITE
 - AREA OF HIGH ARCHAEOLOGICAL POTENTIAL
 - DAM IMPOUNDMENT AREA
 - CABINS, STRUCTURE
 - TRANSPORTATION BOUNDARIES
 - PORT AND LANDING STRIP
 - FLOAT PLANE LANDING SITE
- FPL**



MANMADE CONSTRAINTS MAP M1

PREPARED BY TES FIGURE 3 of 48





SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

LEGEND

- EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERIEU ROUTE
- RECOMMENDED ROUTE
- CORRIDOR BOUNDARY



CONTOUR INTERVAL 10 FT

VISUAL CONSTRAINTS

- X SENSITIVE VIEWSHEDS & PROPOSED SCENIC HIGHWAY

BIOLOGICAL CONSTRAINTS

- X VEGETATION
- X WILDLIFE HABITAT
- X RECREATION
- X LAND USE AND LAND OWNERSHIP
- X TRANSPORTATION

X DENOTES CONSTRAINT PRESENT

MANMADE CONSTRAINTS

- FARMLANDS
- HEAVY INDUSTRY AREA
- NORTH STUDY AREA
- HEAVILY INDUSTRIAL PARK
- CENTRAL STUDY AREA
- SUSITNA RIVER
- WILLOW SOUTH STUDY AREA
- ANCHORAGE

LOCATION MAP/NO SCALE

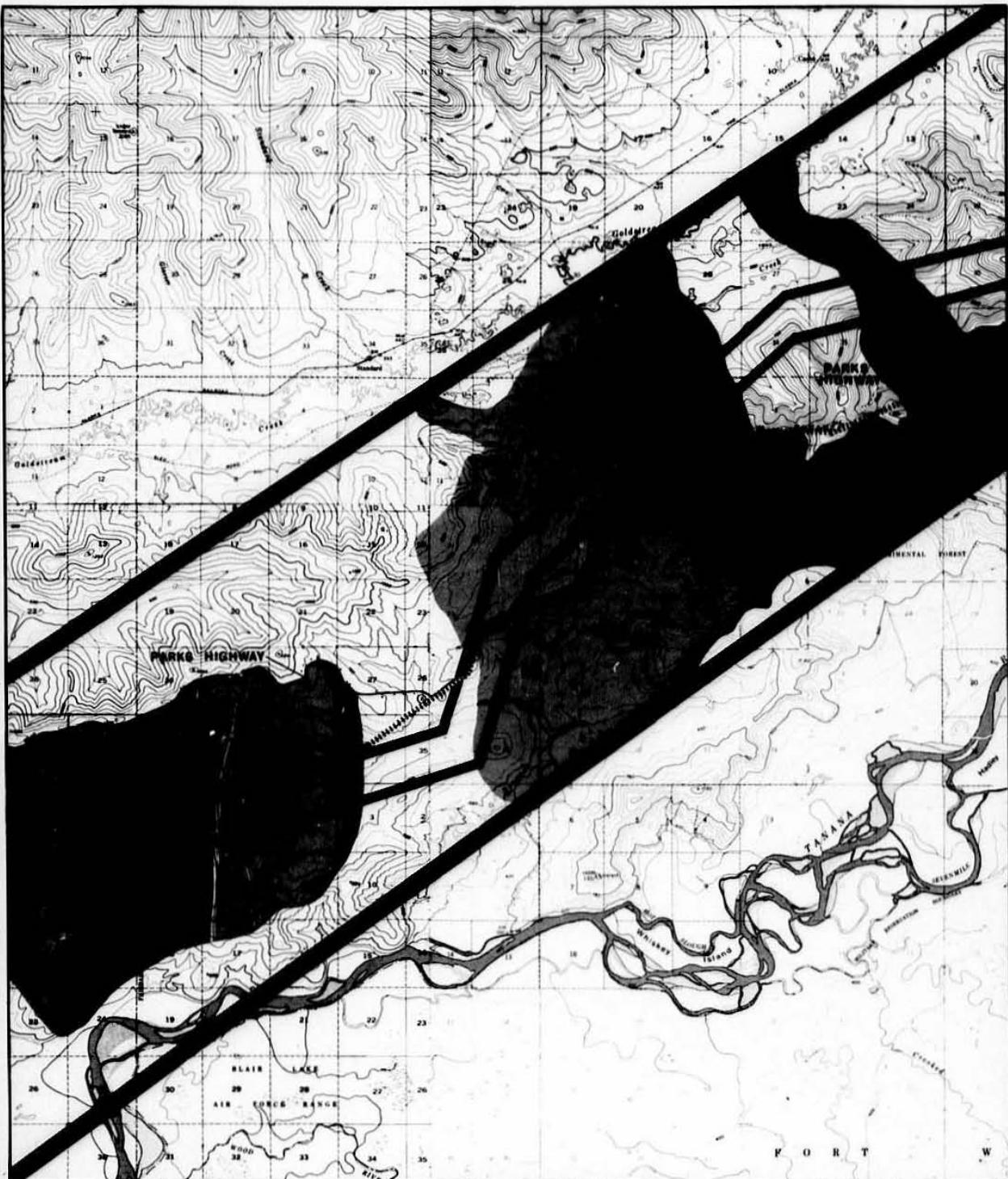
THIS MAP SUPERIMPOSES THE THREE PREVIOUS MAPS.
IT ILLUSTRATES ALL CONSTRAINTS SIMULTANEOUSLY.

COMPOSITE CONSTRAINTS

MAP M1

PREPARED BY TES FIGURE 4 of 48

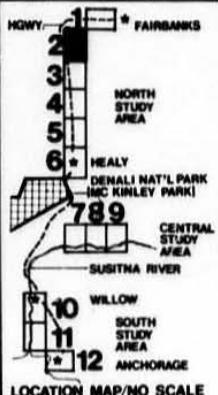




VISUAL CONSTRAINTS MAP M2

PREPARED BY TES

FIGURE 5 of 48



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

SENSITIVE VIEWSHEDS AND PROPOSED SCENIC HIGHWAY AREA

PSH PROPOSED SCENIC HIGHWAY AREA

SENSITIVE VIEWSHEDS

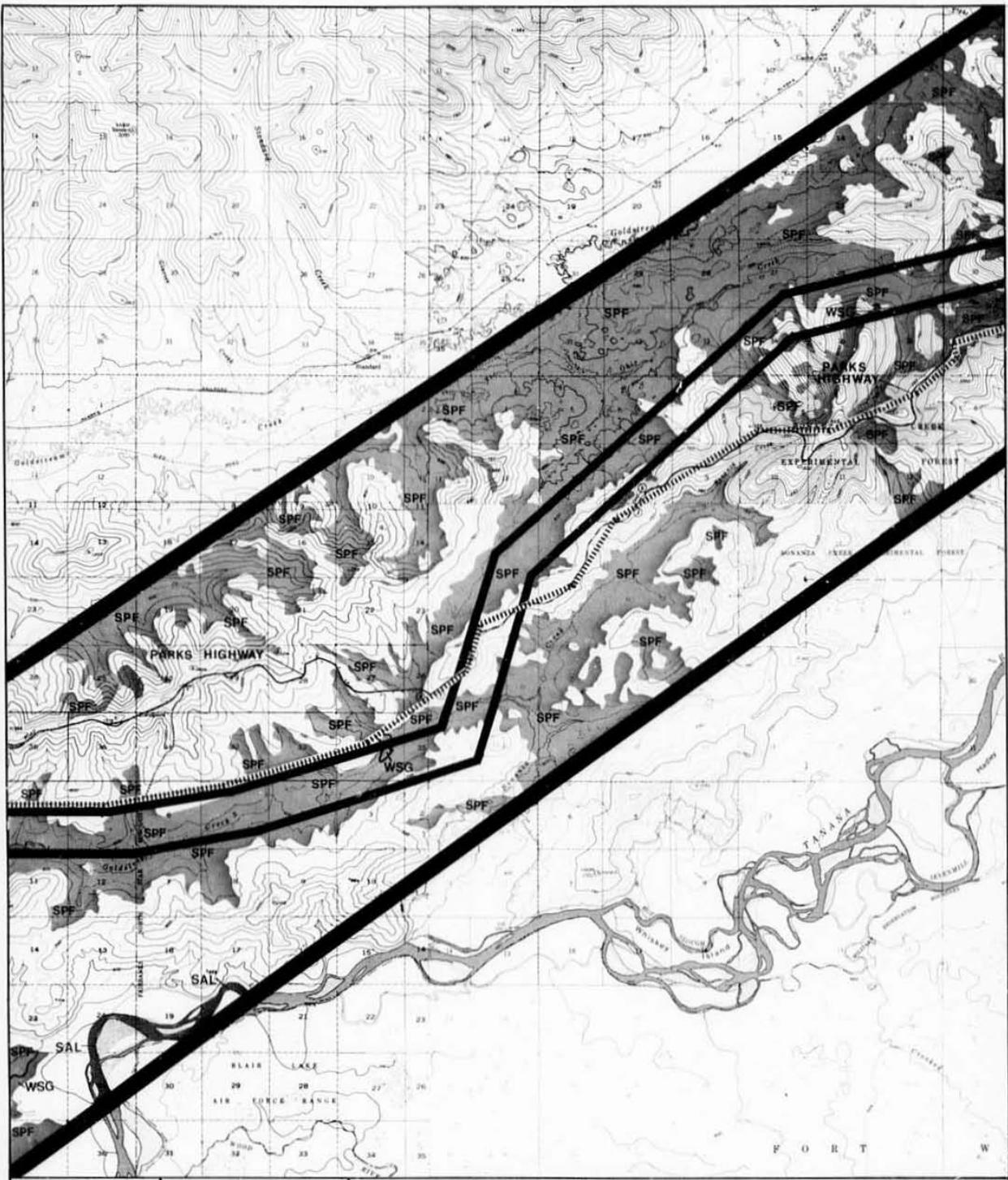
HW	HIGHWAY
RR	RAILROAD
PL	PRIVATE LANDS
WC	WATER COURSE
RA	RECREATION AREA

LEGEND

- EXISTING MAJOR TRANSMISSION LINE
- *** PROPOSED INTERIE
- ROUTE BOUNDARY
- CORRIDOR BOUNDARY



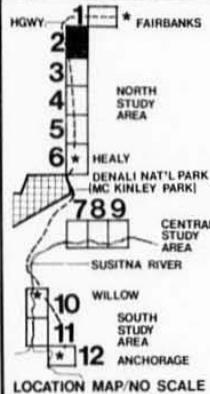
CONTOUR INTERVAL 100FT



**BIOLOGICAL
CONSTRAINTS
MAP M2**

PREPARED BY TES

FIGURE 6 of 48



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

BIOLOGICAL CONSTRAINTS

VEGETATION BOUNDARIES

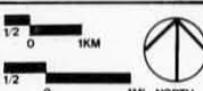
WSG WET SEDGE GRASS
SPF WET SPRUCE/POTENTIAL PERMAFROST AREA

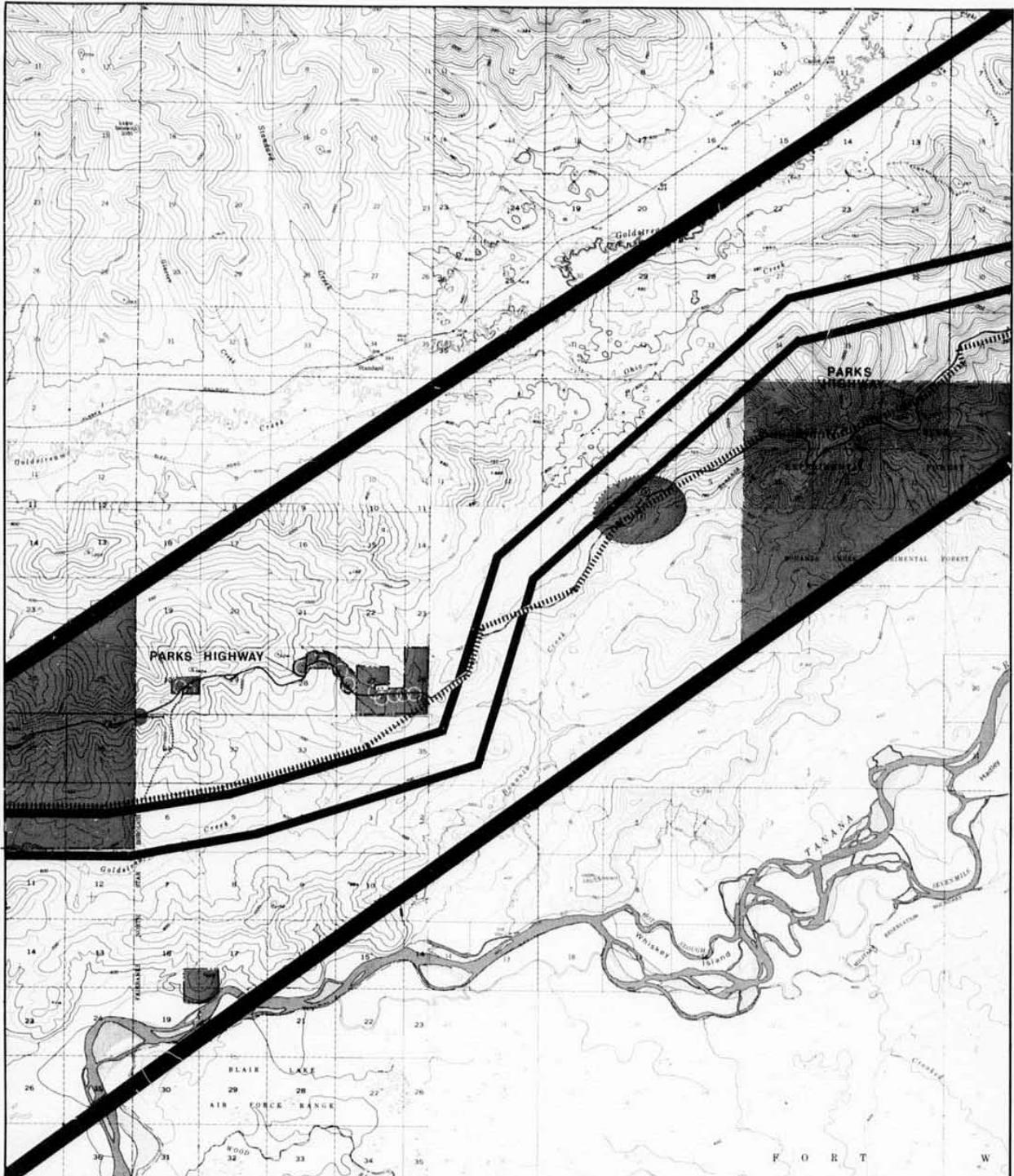
WILDLIFE BOUNDARIES

SAL SALMON PRESENT
SWAN PEREGRINE FALCON PRIME HABITAT
SWAN NEST AREA [WITH 1 MI. RAD. BUFFER ZONE]
ACTIVE NEST SITES 1980-81 [WITH 1 MI. RAD. BUFFER ZONE]
GE GOLDEN EAGLE
BE BALD EAGLE
GF GYRFALCON
GH GOSHAWK
UN UNKNOWN

LEGEND

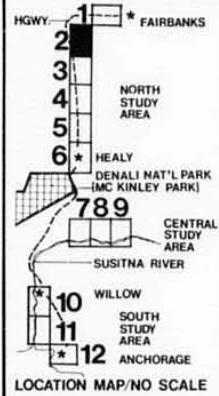
- |||| EXISTING MAJOR TRANSMISSION LINE
- :::: PROPOSED INTERTIE
- RECOMMENDED ROUTE
- CORRIDOR BOUNDARY





MANMADE CONSTRAINTS MAP M2

PREPARED BY TES FIGURE 7 of 48



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

MANMADE CONSTRAINTS

RECREATION BOUNDARIES

- CAMPsite
- RECREATION TRAIL
- NAME GAME REFUGE AREA

LAND USE AND LAND OWNERSHIP BOUNDARIES

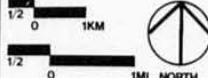
- EXISTING PRIVATE LAND
- DEVELOPMENT AREA
- DISPOSAL AREA
- AGRICULTURAL LAND
- KNOWN ARCHEOLOGICAL SITE
- AREA OF HIGH ARCHEOLOGICAL POTENTIAL
- DAM IMPOUNDMENT AREA
- CABINS, STRUCTURE

TRANSPORTATION BOUNDARIES

- AIRPORT AND LANDING STRIP
- FPL FLOAT PLANE LANDING SITE

LEGEND

- EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERTIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY



CONTOUR INTERVAL 100FT



MAP M2

PREPARED BY TES FIGURE 8 of 48

THIS MAP SUPERIMPOSES THE THREE PREVIOUS MAPS IT ILLUSTRATES ALL CONSTRAINTS SIMULTANEOUSLY.

COMPOSITE CONSTRAINTS

HGHWY 1 * FAIRBANKS
2
3
4
5
6 * HEALY
DENALI NAT'L PARK (MC KINLEY PARK)
789
CENTRAL STUDY AREA
SUSITNA RIVER
WILLOW
SOUTH STUDY AREA
10
11
12 * ANCHORAGE
LOCATION MAP/NO SCALE

SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

X SENSITIVE VIEWSHEDS & PROPOSED SCENIC HIGHWAY

BIOLOGICAL CONSTRAINTS

X VEGETATION

X WILDLIFE HABITAT

MANMADE CONSTRAINTS

RECREATION

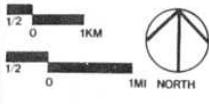
X LAND USE AND LAND OWNERSHIP

TRANSPORTATION

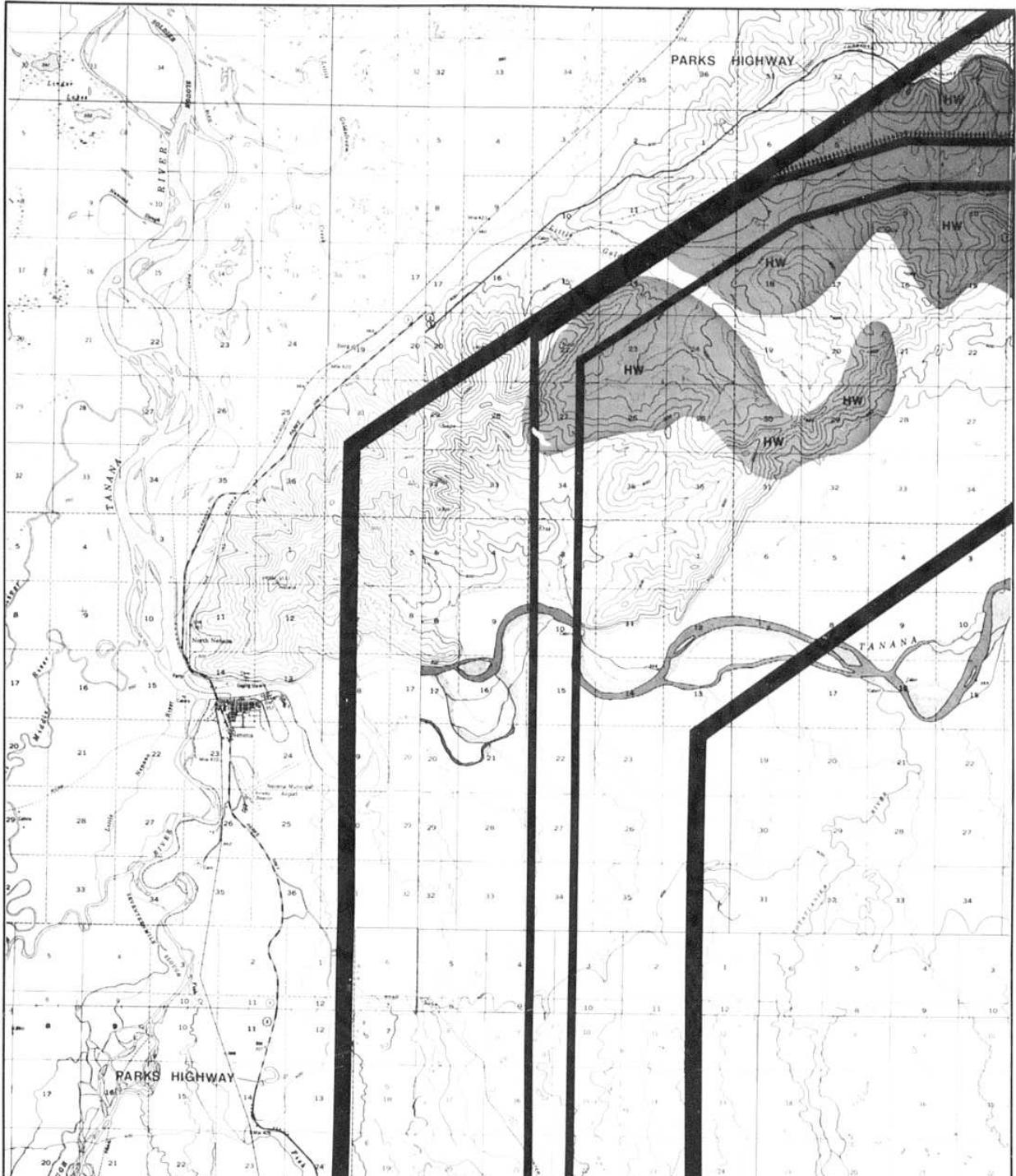
X DENOTES CONSTRAINT PRESENT

LEGEND

- EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERTIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY



CONTOUR INTERVAL 100FT



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

SENSITIVE VIEWSHEDS AND PROPOSED SCENIC HIGHWAY AREA

PSH PROPOSED SCENIC HIGHWAY AREA

SENSITIVE VIEWSHEDS

HW	HIGHWAY
RR	RAILROAD
PL	PRIVATE LANDS
WC	WATER COURSE
RA	RECREATION AREA

LEGEND

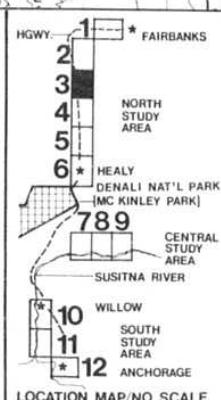
- EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERTIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY

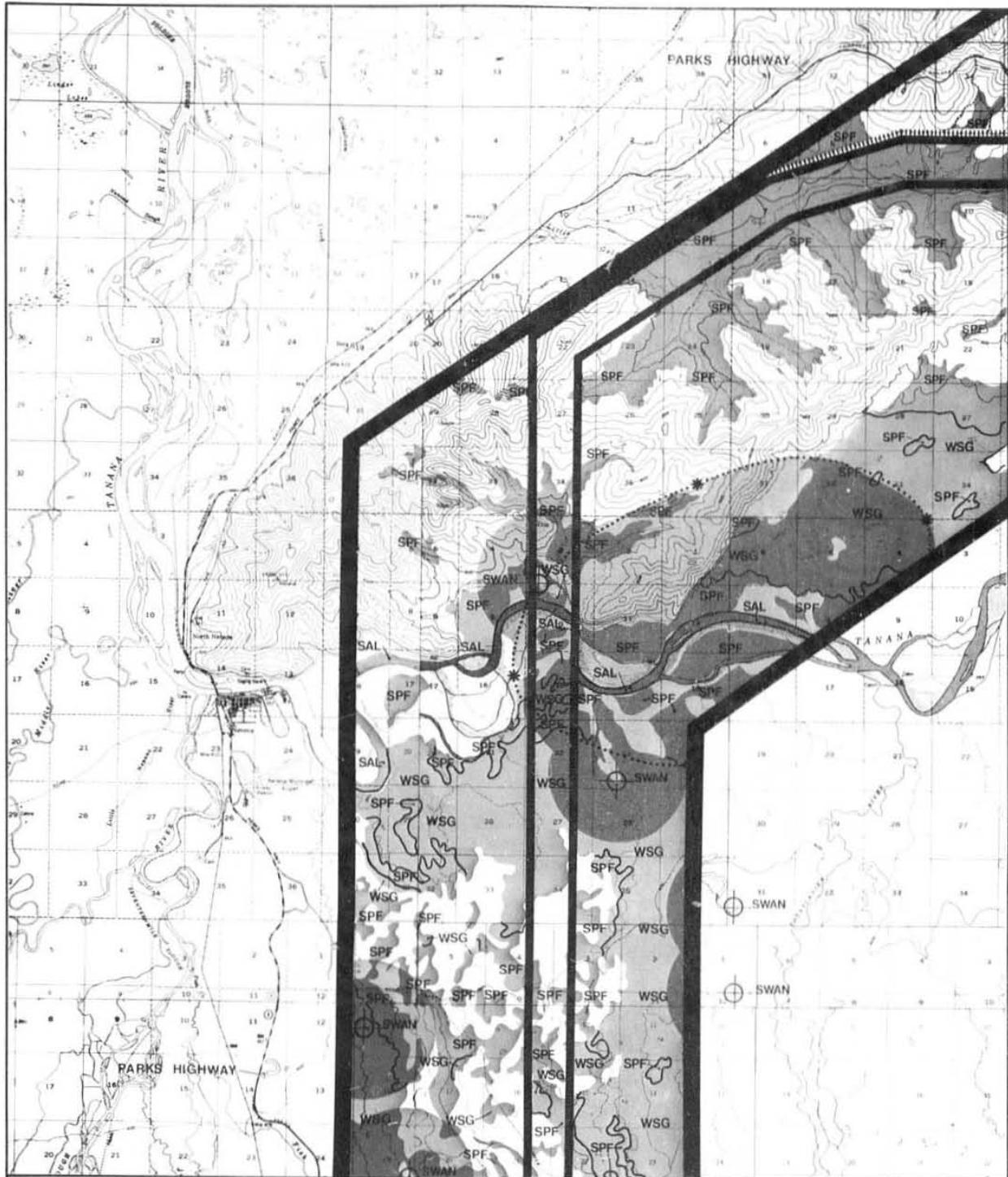


CONTOUR INTERVAL 100FT

VISUAL CONSTRAINTS MAP M3

PREPARED BY TES FIGURE 9 of 48

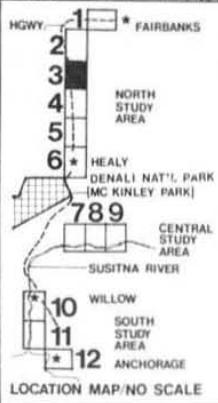




**BIOLOGICAL
CONSTRAINTS**

PREPARED BY TES

FIGURE 10 of 48



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

BIOLOGICAL CONSTRAINTS

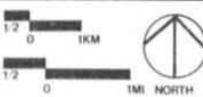
VEGETATION BOUNDARIES
WSG WET SEDGE GRASS
SPF WET SPRUCE POTENTIAL PERMAFROST AREA

WILDLIFE BOUNDARIES

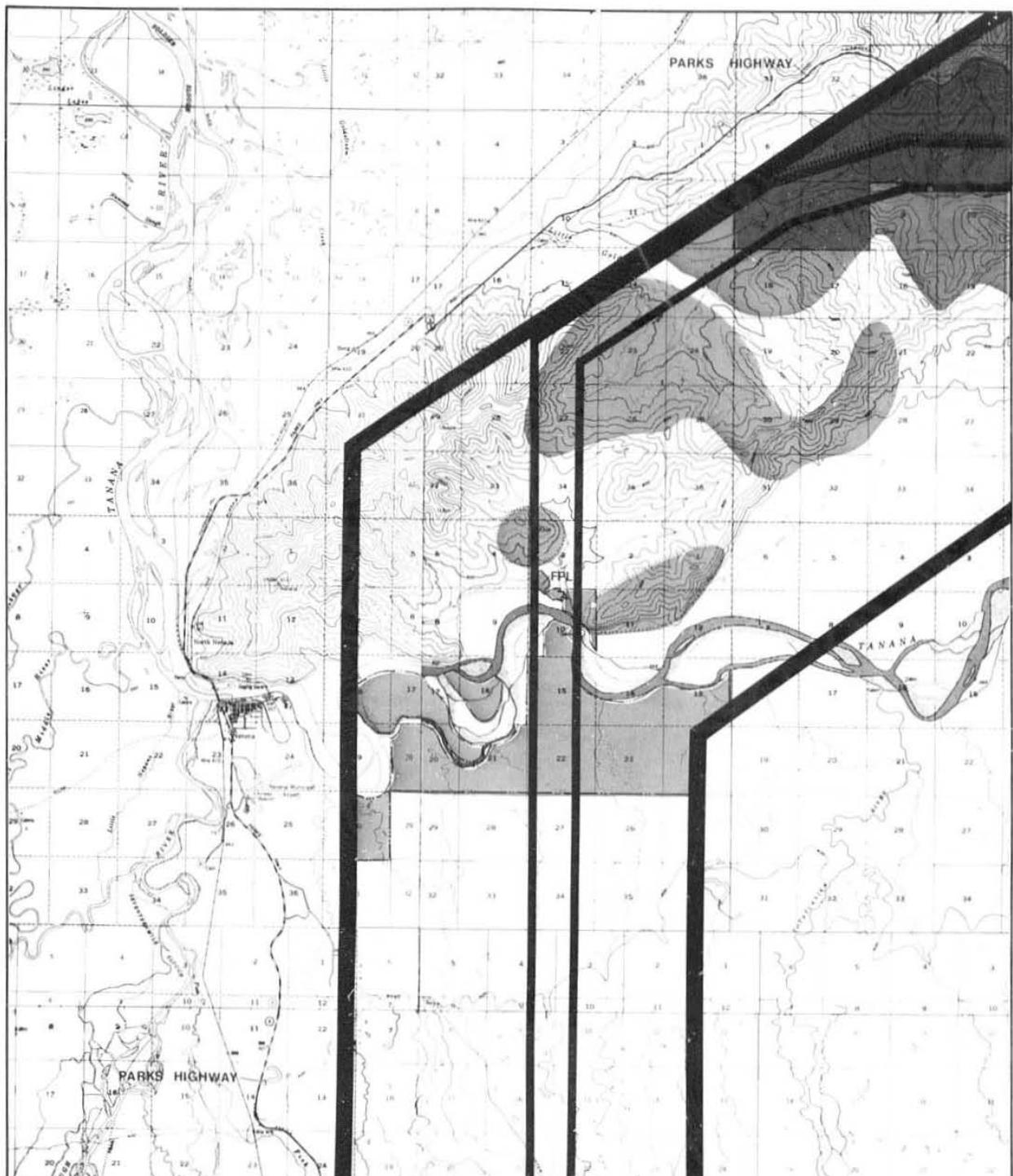
SAL SALMON PRESENT
... PEGREGRINE FALCON PRIME HABITAT
SWAN SWAN NEST AREA (WITH 1 MI. RAD. BUFFER ZONE)
ACTIVE NEST SITES 1980-81 (WITH 1 MI. RAD. BUFFER ZONE)
GE GOLDEN EAGLE
BE BALD EAGLE
GF GYRFALCON
GH GOSHAWK
UN UNKNOWN

LEGEND

- |||| EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERTIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY

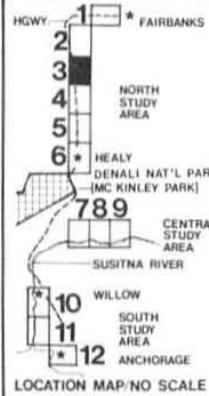


CONTOUR INTERVAL 100FT



**MANMADE
CONSTRAINTS
MAP M3**

PREPARED BY TES FIGURE 11 of 48



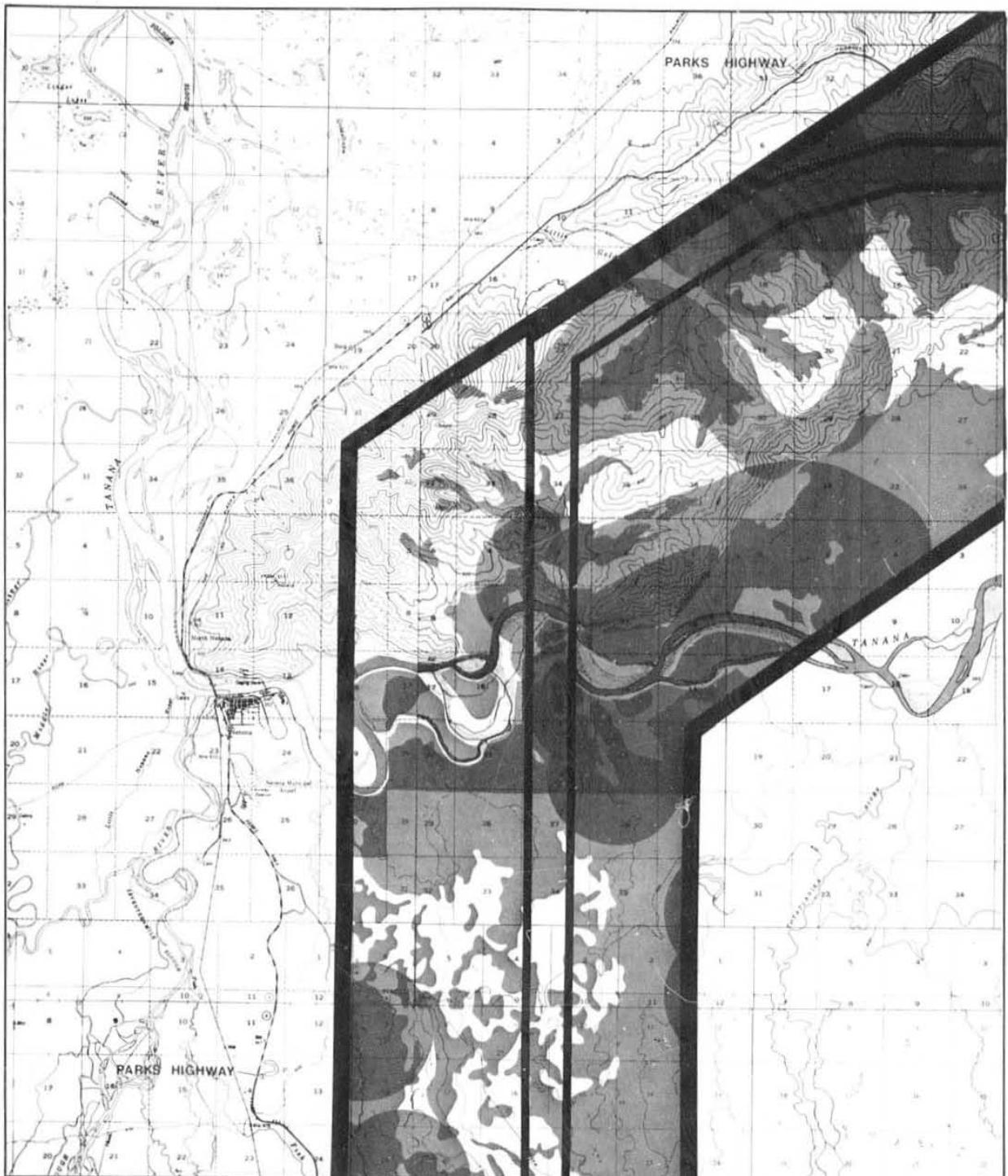
SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

MANMADE CONSTRAINTS

- RECREATION BOUNDARIES
 - CAMP SITE
 - RT -- RECREATION TRAIL
 - NAME GAME REFUGE AREA
- LAND USE AND LAND OWNERSHIP BOUNDARIES
 - EXISTING PRIVATE LAND
 - - - DEVELOPMENT AREA
 - DISPOSAL AREA
 - - AGRICULTURAL LAND
 - △ KNOWN ARCHEOLOGICAL SITE
 - AREA OF HIGH ARCHEOLOGICAL POTENTIAL
 - DIA DAM IMPOUNDMENT AREA
 - CABINS, STRUCTURE
- TRANSPORTATION BOUNDARIES
 - AIRPORT AND LANDING STRIP
 - FPL FLOAT PLANE LANDING SITE

LEGEND

- ===== EXISTING MAJOR TRANSMISSION LINE
 - PROPOSED INTERTIE
 - RECOMMENDED ROUTE BOUNDARY
 - CORRIDOR BOUNDARY
- Scale: 1:200,000
0 1KM
1:200,000
0 1MI NORTH
CONTOUR INTERVAL 100FT



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

X SENSITIVE VIEWSHEDS & PROPOSED SCENIC HIGHWAY

BIOLOGICAL CONSTRAINTS

X VEGETATION

X WILDLIFE HABITAT

MANMADE CONSTRAINTS

RECREATION

X LAND USE AND LAND OWNERSHIP

X TRANSPORTATION

LEGEND

..... EXISTING MAJOR TRANSMISSION LINE

*** PROPOSED INTERTIE

— RECOMMENDED ROUTE BOUNDARY

■ CORRIDOR BOUNDARY

1/2 0 1KM

1/2 0 1MI NORTH



X DENOTES CONSTRAINT PRESENT

THIS MAP SUPERPOSES THE THREE PREVIOUS MAPS.
IT ILLUSTRATES ALL CONSTRAINTS SIMULTANEOUSLY.

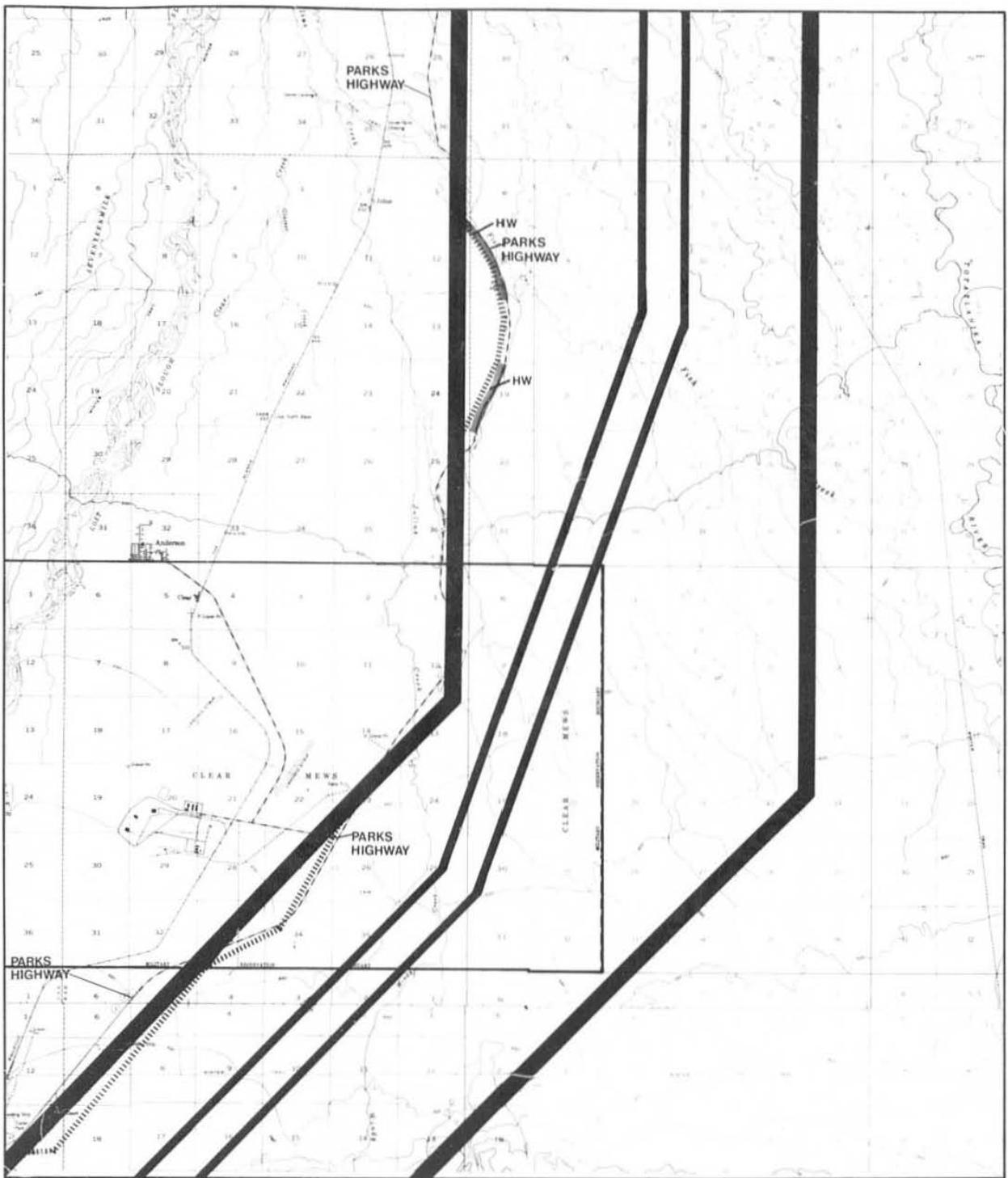
COMPOSITE CONSTRAINTS

MAP M3

PREPARED BY TES FIGURE 12 of 48

LOCATION MAP/NO SCALE

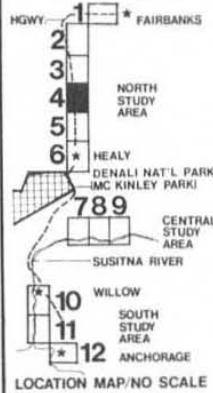
HWY 1 * FAIRBANKS
2
3
4
5
6 * HEALY
DENALI NAT'L PARK
(MC KINLEY PARK)
789
CENTRAL STUDY AREA
SUSITNA RIVER
WILLOW
SOUTH STUDY AREA
10
11
12 ANCHORAGE



**VISUAL
CONSTRAINTS
MAP M4**

PREPARED BY TES

FIGURE 13 of 48



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

SENSITIVE VIEWSHEDS AND PROPOSED SCENIC HIGHWAY AREA

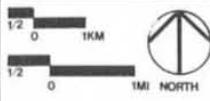
PSH PROPOSED SCENIC HIGHWAY AREA

SENSITIVE VIEWSHEDS

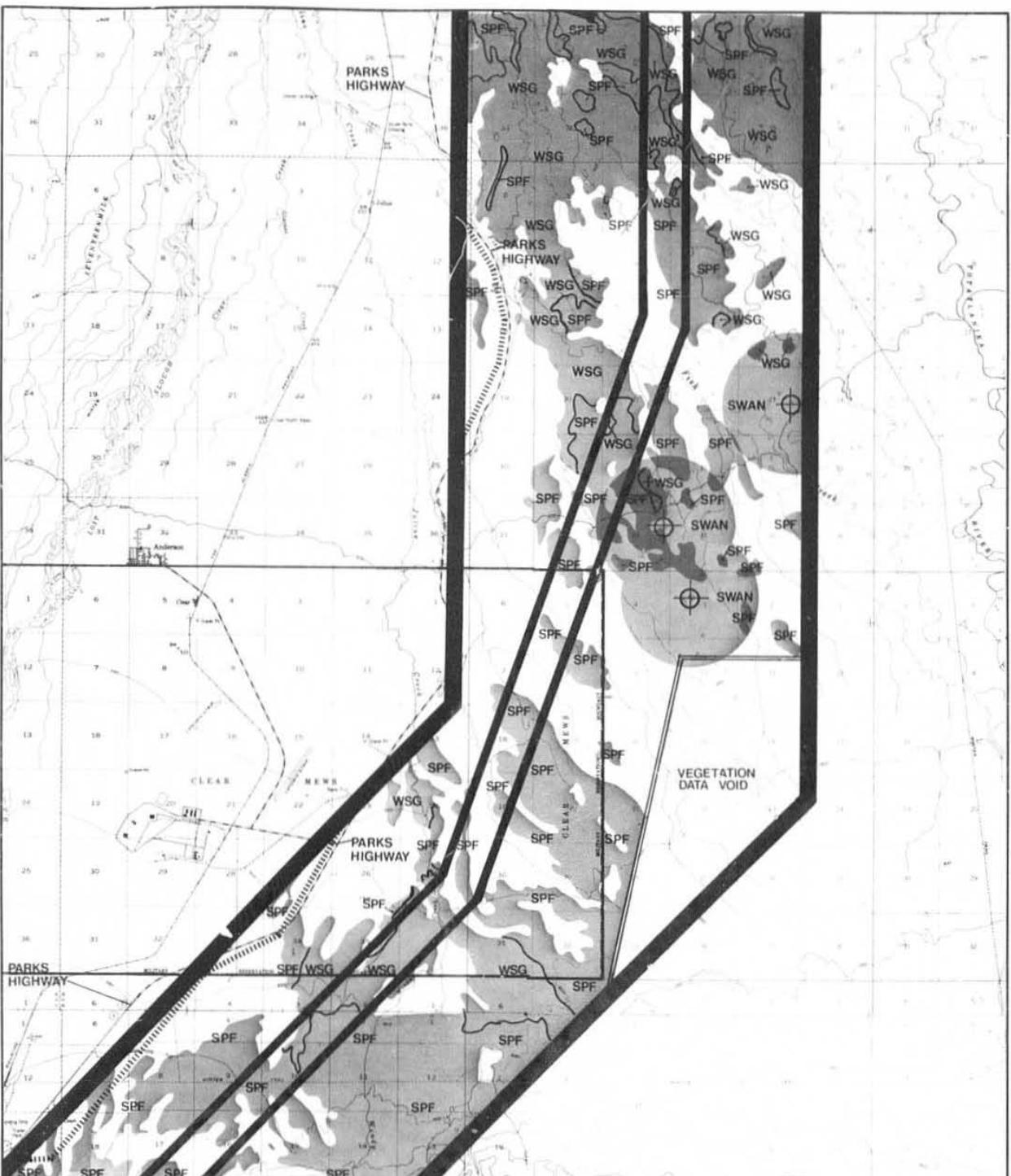
- HW HIGHWAY
- RR RAILROAD
- PL PRIVATE LANDS
- WC WATER COURSE
- RA RECREATION AREA

LEGEND

- EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERTIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY



CONTOUR INTERVAL 100FT

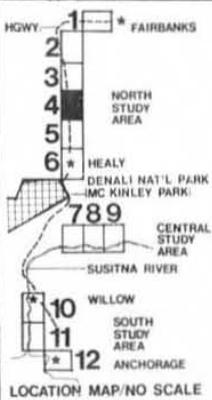


**BIOLOGICAL
CONSTRAINTS**

MAP M4

PREPARED BY TES

FIGURE 14 of 48



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

BIOLOGICAL CONSTRAINTS

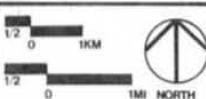
VEGETATION BOUNDARIES
WSG WET SEDGE GRASS
SPF WET SPRUCE/POTENTIAL PERMAFROST AREA

WILDLIFE BOUNDARIES

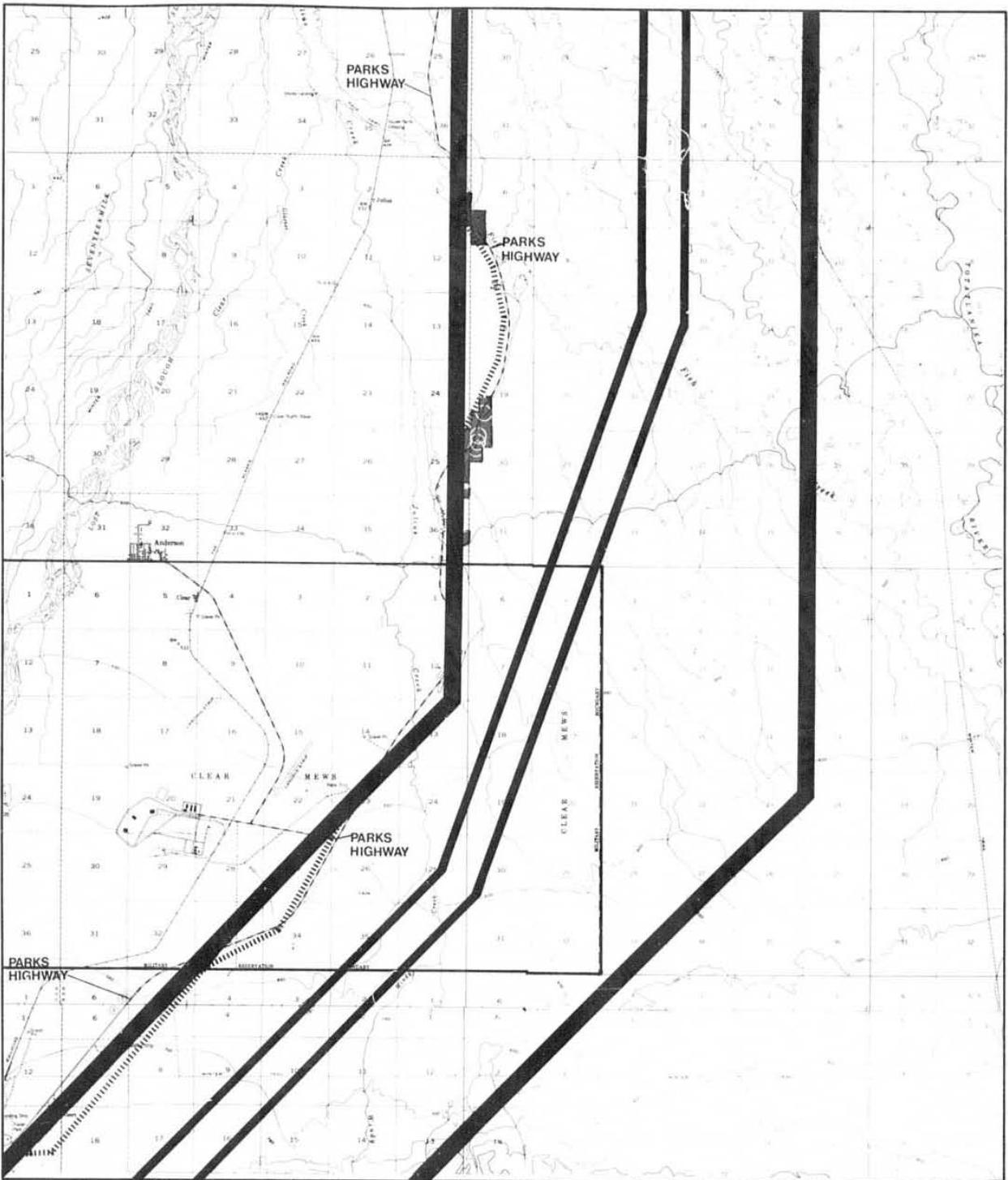
SAL SALMON PRESENT
SWAN SWAN PRIME HABITAT
SWAN NEST AREA [WITH 1 MI. RAD. BUFFER ZONE]
ACTIVE NEST SITES 1980-81 [WITH 1 MI. RAD. BUFFER ZONE]
GE GOLDEN EAGLE
BE BALD EAGLE
GF GYRFALCON
GH GOSHAWK
UN UNKNOWN

LEGEND

- |||| EXISTING MAJOR TRANSMISSION LINE
- |||| PROPOSED INTERTIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY



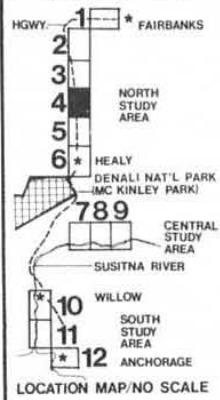
CONTOUR INTERVAL 100FT



**MANMADE
CONSTRAINTS
MAP M4**

PREPARED BY TES

FIGURE 15 of 48



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

MANMADE CONSTRAINTS

RECREATION BOUNDARIES

□ CAMPsite

- - RT RECREATION TRAIL

NAME GAME REFUGE AREA

LAND USE AND LAND OWNERSHIP BOUNDARIES

— EXISTING PRIVATE LAND

- - - DEVELOPMENT AREA

- - - DISPOSAL AREA

- - - AGRICULTURAL LAND

△ KNOWN ARCHEOLOGICAL SITE

◆ AREA OF HIGH ARCHEOLOGICAL POTENTIAL

▲ DAM IMPOUNDMENT AREA

■ CABINS, STRUCTURE

TRANSPORTATION BOUNDARIES

— AIRPORT AND LANDING STRIP

--- FPL FLOAT PLANE LANDING SITE

LEGEND

||||| EXISTING MAJOR

TRANSMISSION LINE

■■■ PROPOSED INTERTIE

RECOMMENDED

ROUTE BOUNDARY

■■■ CORRIDOR

BOUNDARY

1/2 0 1KM

1/2 0 1MI NORTH

CONTOUR INTERVAL 100FT



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

X SENSITIVE VIEWSHEDS & PROPOSED SCENIC HIGHWAY

BIOLOGICAL CONSTRAINTS

X VEGETATION

X WILDLIFE HABITAT

MANMADE CONSTRAINTS

RECREATION

X LAND USE AND LAND OWNERSHIP

TRANSPORTATION

X DENOTES CONSTRAINT PRESENT

LEGEND

EXISTING MAJOR TRANSMISSION LINE

PROPOSED INTERTIE

RECOMMENDED ROUTE BOUNDARY

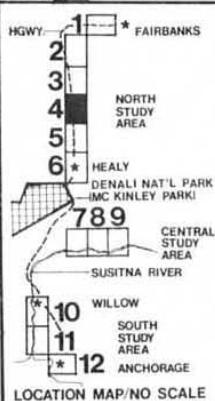
CORRIDOR BOUNDARY

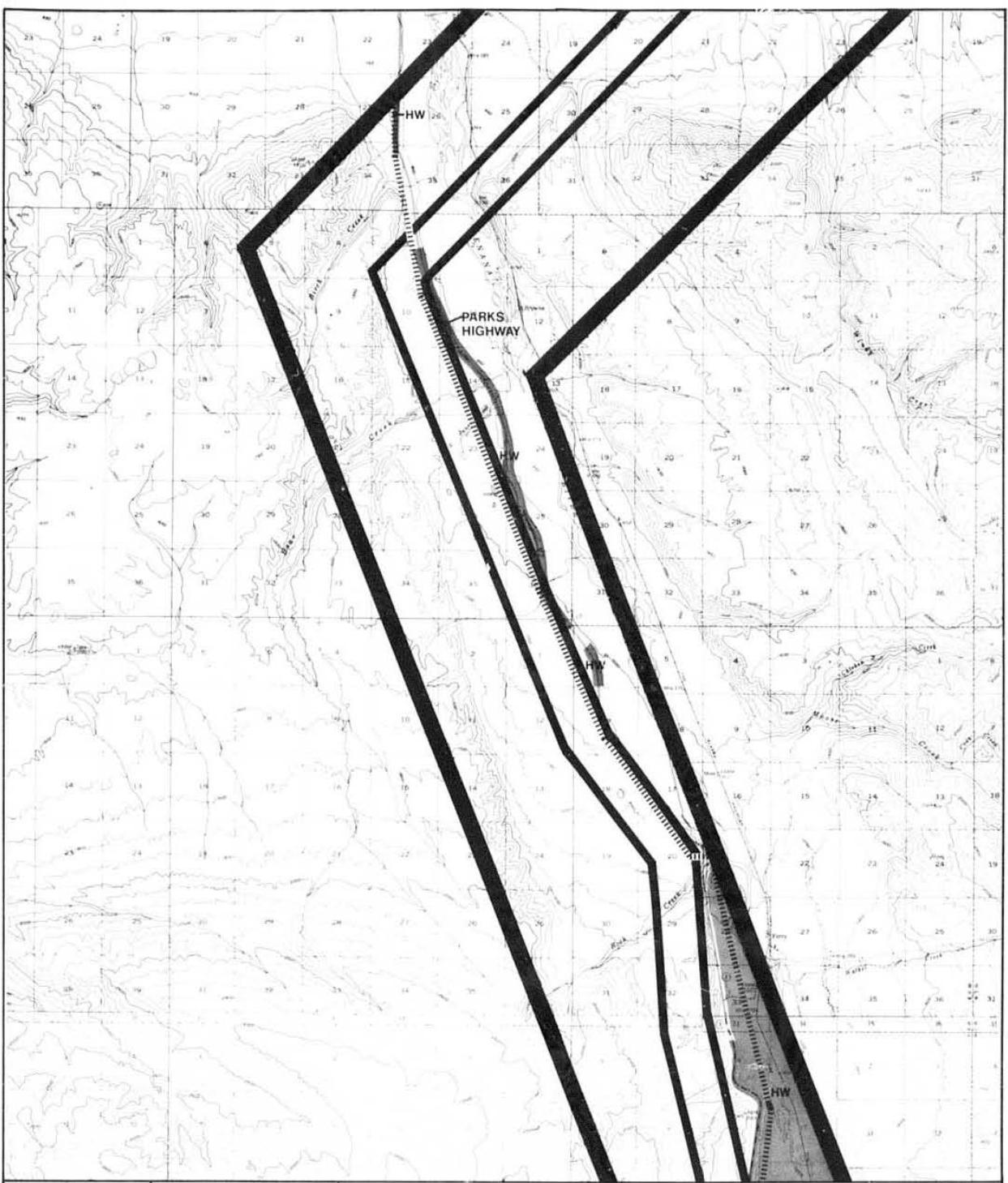


CONTOUR INTERVAL 100FT

PREPARED BY TES
MAP M4

THIS MAP SUPERIMPOSES THE THREE PREVIOUS MAPS
IT ILLUSTRATES ALL CONSTRAINTS SIMULTANEOUSLY.





VISUAL CONSTRAINTS MAP M5

PREPARED BY TES FIGURE 17 of 48



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

SENSITIVE VIEWSHEDS AND PROPOSED SCENIC HIGHWAY AREA

PSH PROPOSED SCENIC HIGHWAY AREA

SENSITIVE VIEWSHEDS

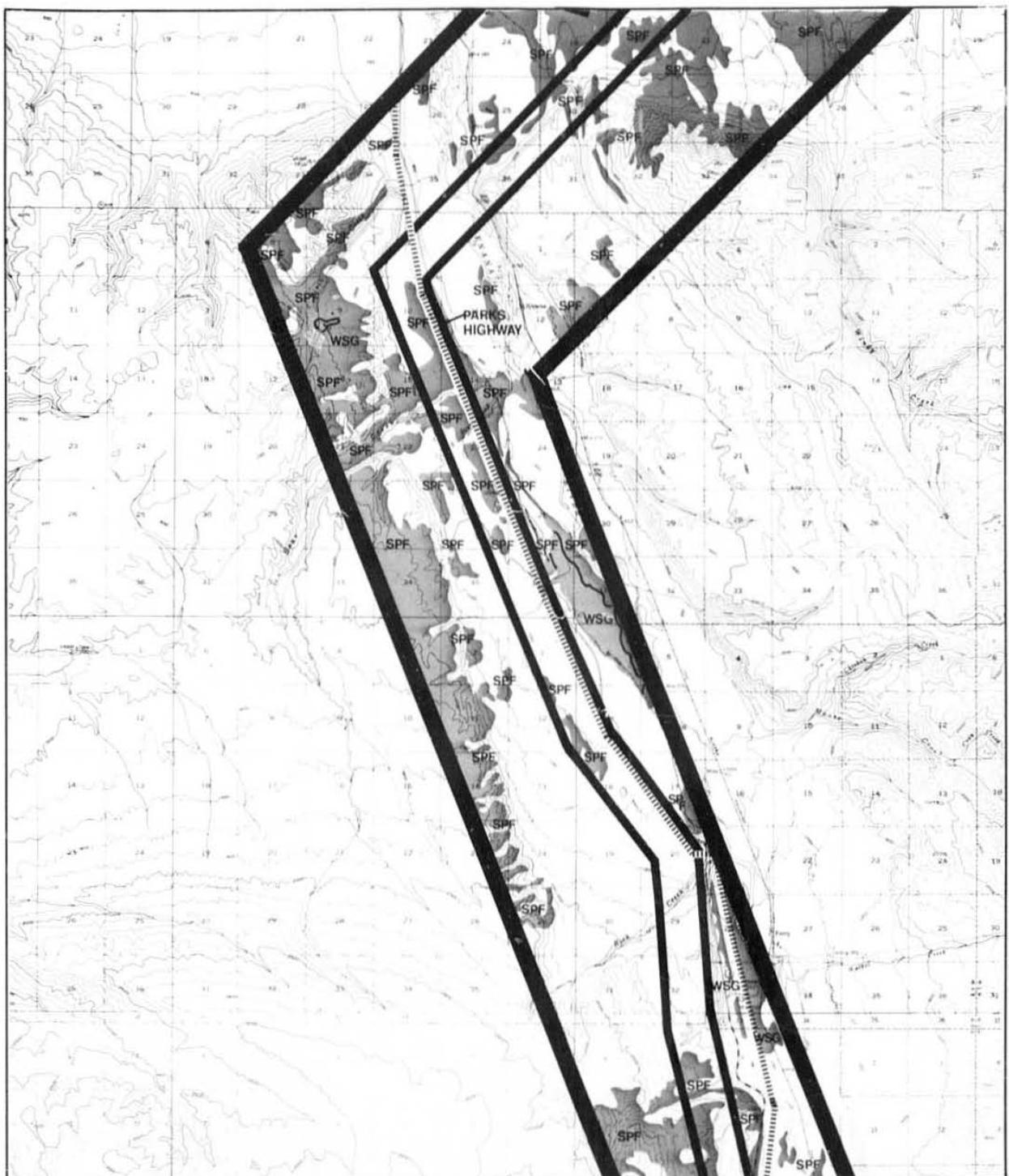
- | | |
|----|-----------------|
| HW | HIGHWAY |
| RR | RAILROAD |
| PL | PRIVATE LANDS |
| WC | WATER COURSE |
| RA | RECREATION AREA |

LEGEND

- :::: EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERTIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY

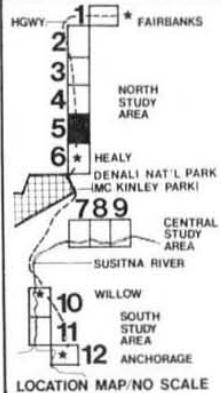


CONTOUR INTERVAL 100FT



**BIOLOGICAL
CONSTRAINTS**

MAP M5



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

BIOLOGICAL CONSTRAINTS

VEGETATION BOUNDARIES

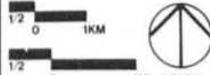
WSG WET SEDGE GRASS
SPF WET SPRUCE/POTENTIAL PERMAFROST AREA

WILDLIFE BOUNDARIES

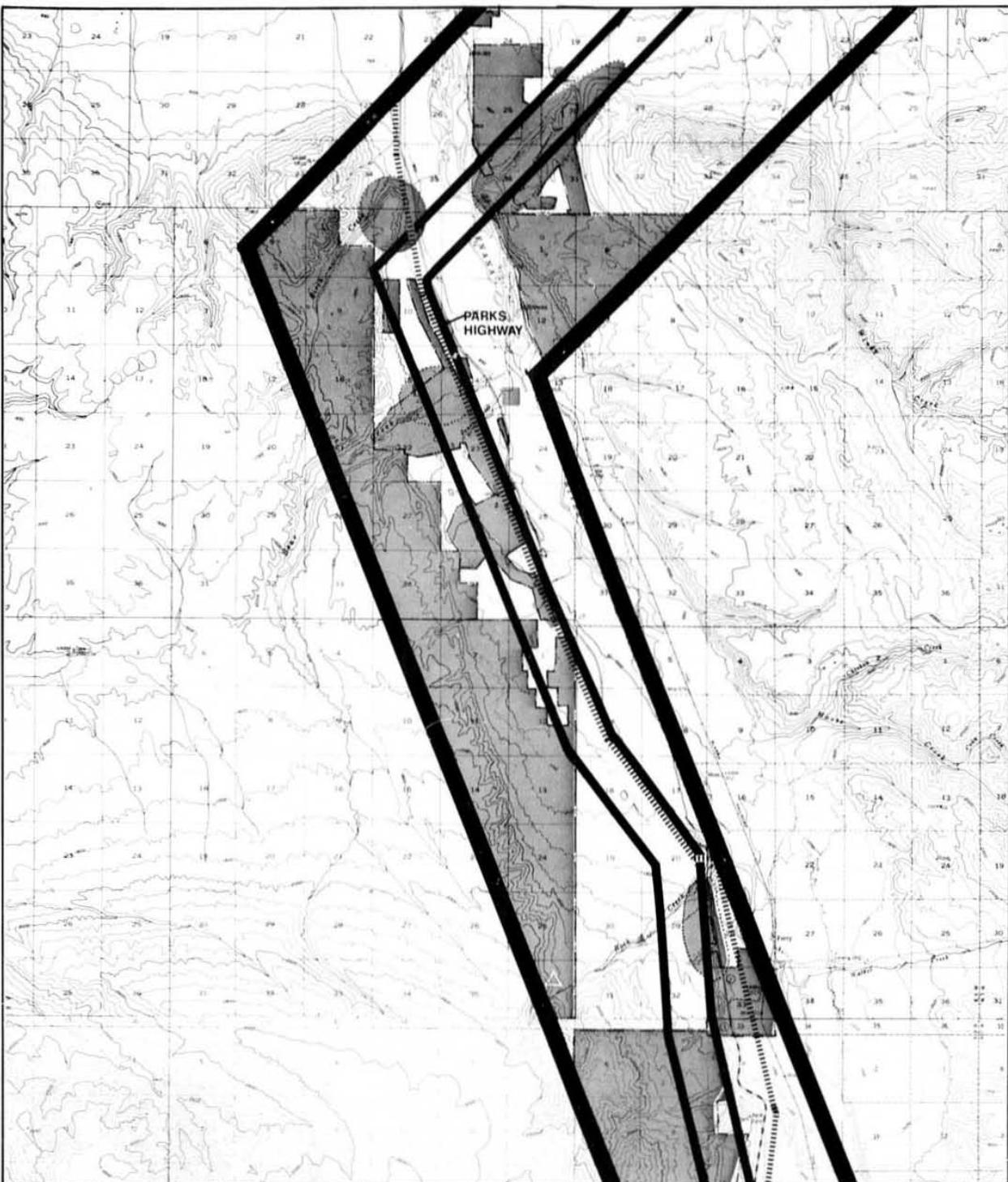
SAL SALMON PRESENT
PEREGRINE FALCON PRIME HABITAT
SWAN NEST AREA (WITH 1 MI. RAD. BUFFER ZONE)
ACTIVE NEST SITES 1980-81 (WITH 1 MI. RAD. BUFFER ZONE)
GE GOLDEN EAGLE
BE BALD EAGLE
GF GYRFALCON
GH GOSHAWK
UN UNKNOWN

LEGEND

- |||| EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERTIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY

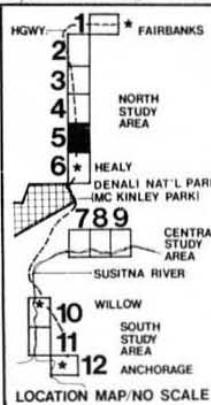


CONTOUR INTERVAL 100FT



**MANMADE
CONSTRAINTS
MAP M5**

PREPARED BY TES FIGURE 19 of 48

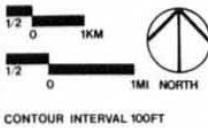


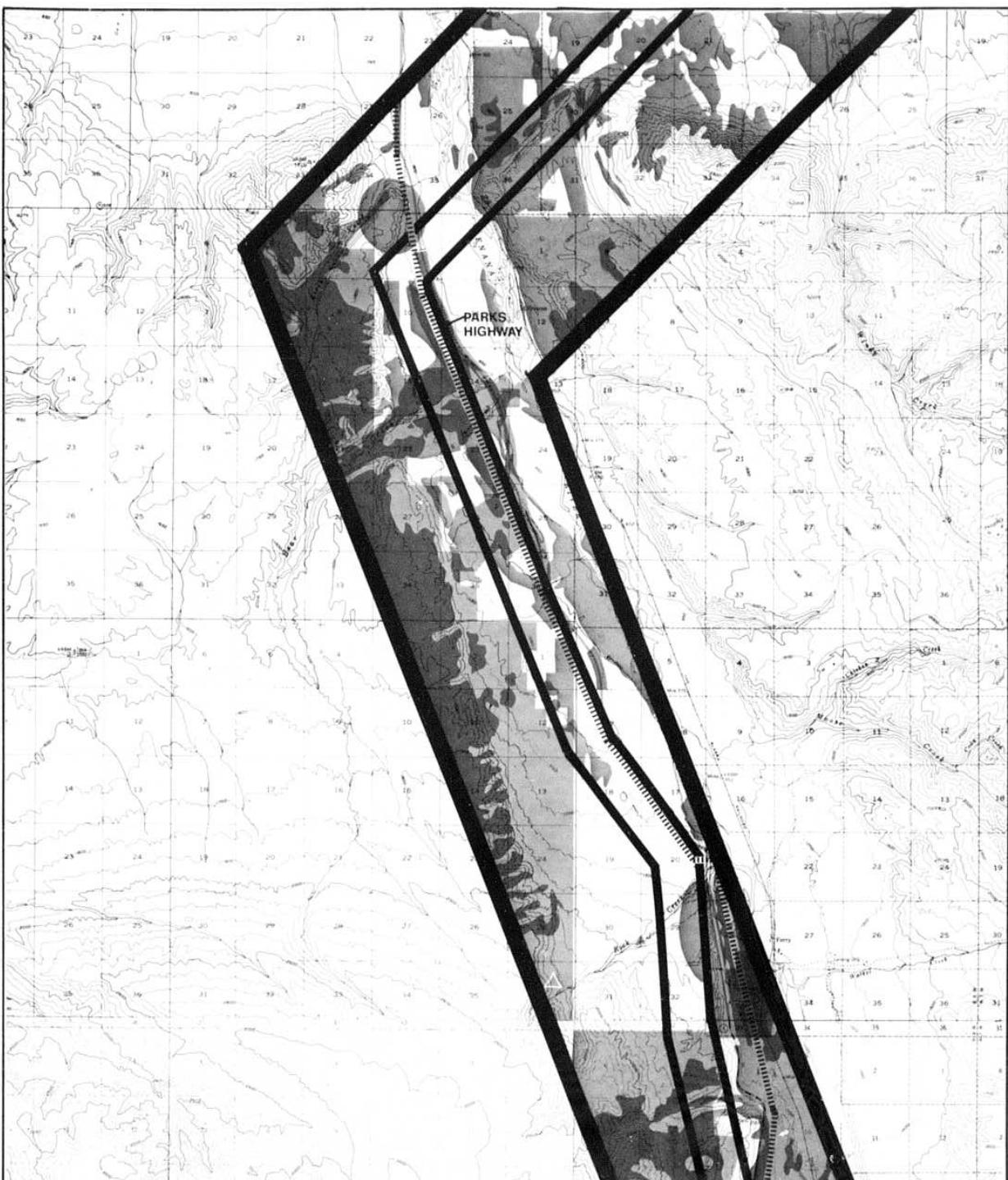
SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

MANMADE CONSTRAINTS

- RECREATION BOUNDARIES
 - CAMPsite
 - RT --- RECREATION TRAIL
 - NAME GAME REFUGE AREA
- LAND USE AND LAND OWNERSHIP BOUNDARIES
 - EXISTING PRIVATE LAND
 - - - DEVELOPMENT AREA
 - - - DISPOSAL AREA
 - - - AGRICULTURAL LAND
 - - - KNOWN ARCHEOLOGICAL SITE
 - - - AREA OF HIGH ARCHEOLOGICAL POTENTIAL
 - - - DAM IMPOUNDMENT AREA
 - - - CABINS, STRUCTURE
- TRANSPORTATION BOUNDARIES
 - AIRPORT AND LANDING STRIP
 - FPL FLOAT PLANE LANDING SITE

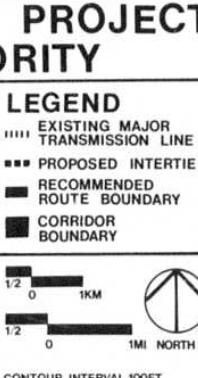
- LEGEND**
- EXISTING MAJOR TRANSMISSION LINE
 - PROPOSED INTERTIE
 - RECOMMENDED ROUTE BOUNDARY
 - CORRIDOR BOUNDARY
 - BOUNDARY





MANMADE CONSTRAINTS

- X RECREATION
 - X LAND USE AND LAND OWNERSHIP
 - TRANSPORTATION
- X DENOTES CONSTRAINT PRESENT



BIOLOGICAL CONSTRAINTS

- X VEGETATION
- WILDLIFE HABITAT

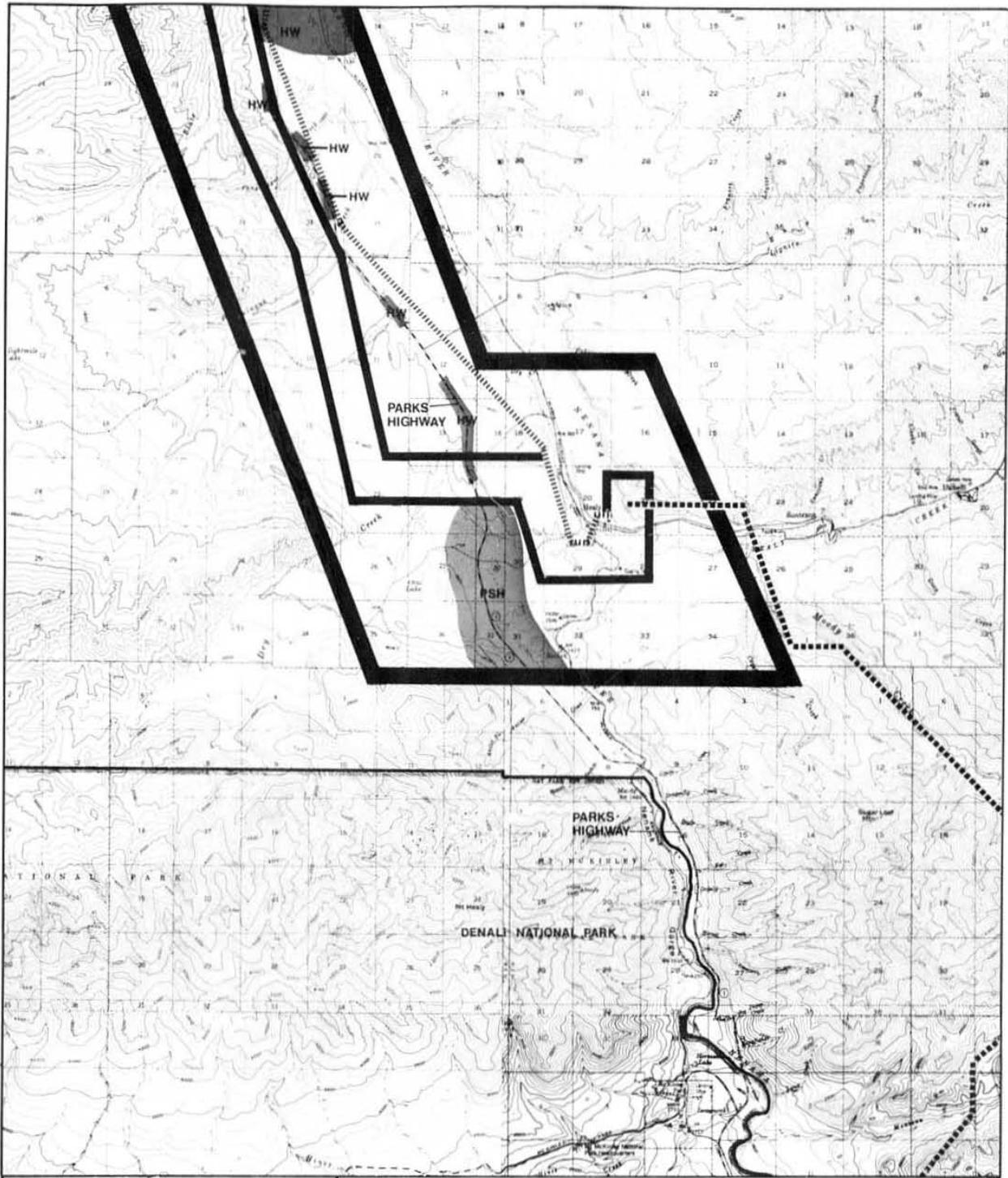
VISUAL CONSTRAINTS

- X SENSITIVE VIEWSHEDS & PROPOSED SCENIC HIGHWAY

LEGEND



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS SENSITIVE VIEWSHEDS AND PROPOSED SCENIC HIGHWAY AREA

PSH PROPOSED SCENIC HIGHWAY AREA

SENSITIVE VIEWSHEDS

HW	HIGHWAY
RR	RAILROAD
PL	PRIVATE LANDS
WC	WATER COURSE
RA	RECREATION AREA

LEGEND

===== EXISTING MAJOR TRANSMISSION LINE

■■■ PROPOSED INTERTIE

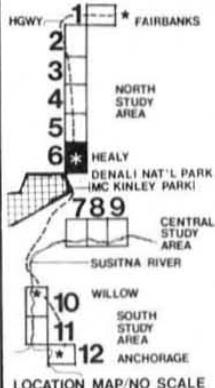
■■ RECOMMENDED ROUTE BOUNDARY

■ CORRIDOR BOUNDARY

1/2 0 1KM

1/2 0 1MI NORTH

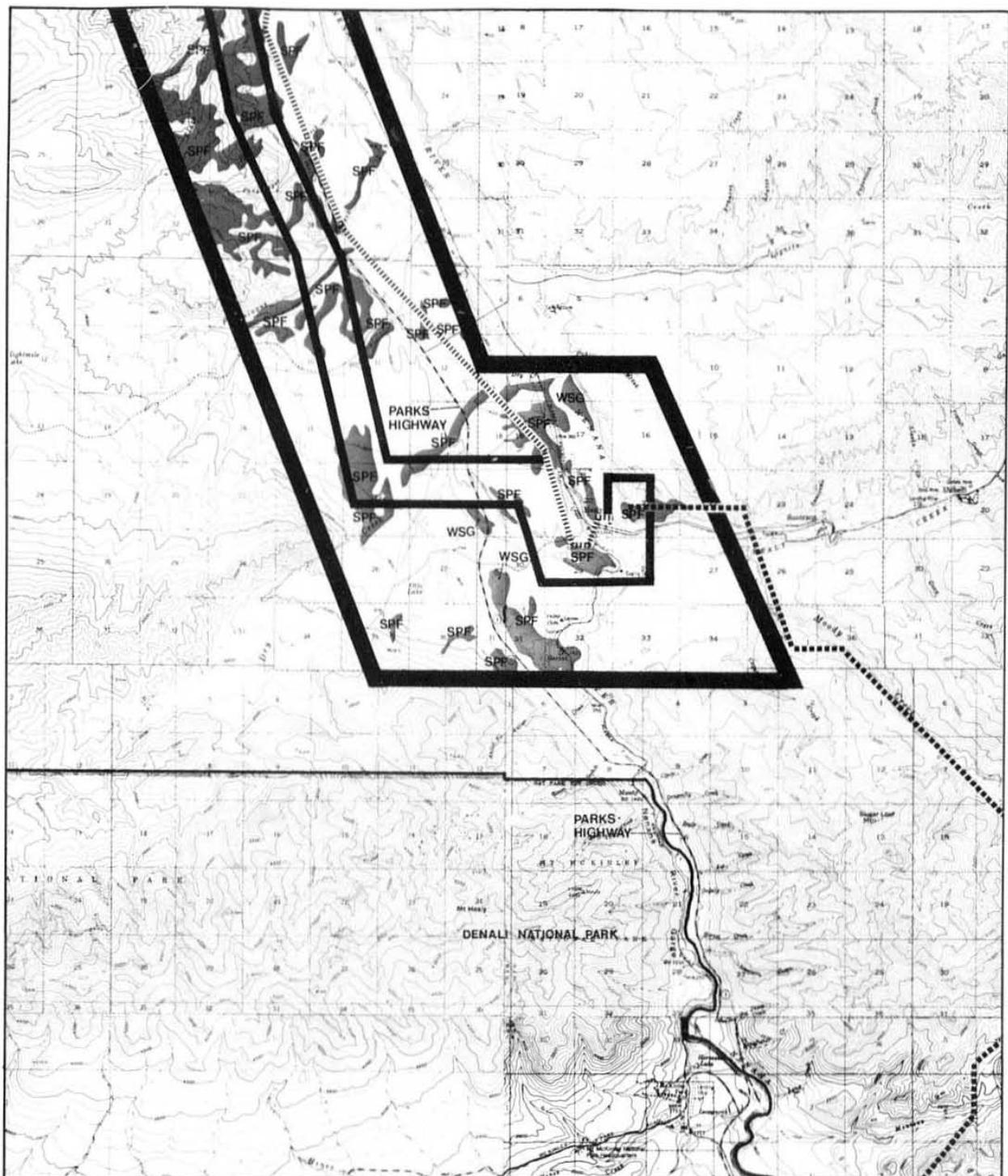
CONTOUR INTERVAL 100FT



**VISUAL
CONSTRAINTS
MAP M6**

PREPARED BY TES FIGURE 21 of 48





SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

BIOLOGICAL CONSTRAINTS

VEGETATION BOUNDARIES

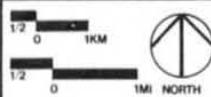
WSG WET SEDGE GRASS
SPF WET SPRUCE/POTENTIAL PERMAFROST AREA

WILDLIFE BOUNDARIES

SAL SALMON PRESENT
 SWAN PEREGRINE FALCON PRIME HABITAT
 SWAN NEST AREA (WITH 1 MI. RAD. BUFFER ZONE)
 ACTIVE NEST SITES 1980-81 (WITH 1 MI. RAD. BUFFER ZONE)
 GE GOLDEN EAGLE
 BE BALD EAGLE
 GF GYRFALCON
 GH GOSHAWK
 UN UNKNOWN

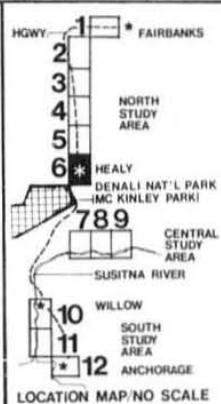
LEGEND

- |||| EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY

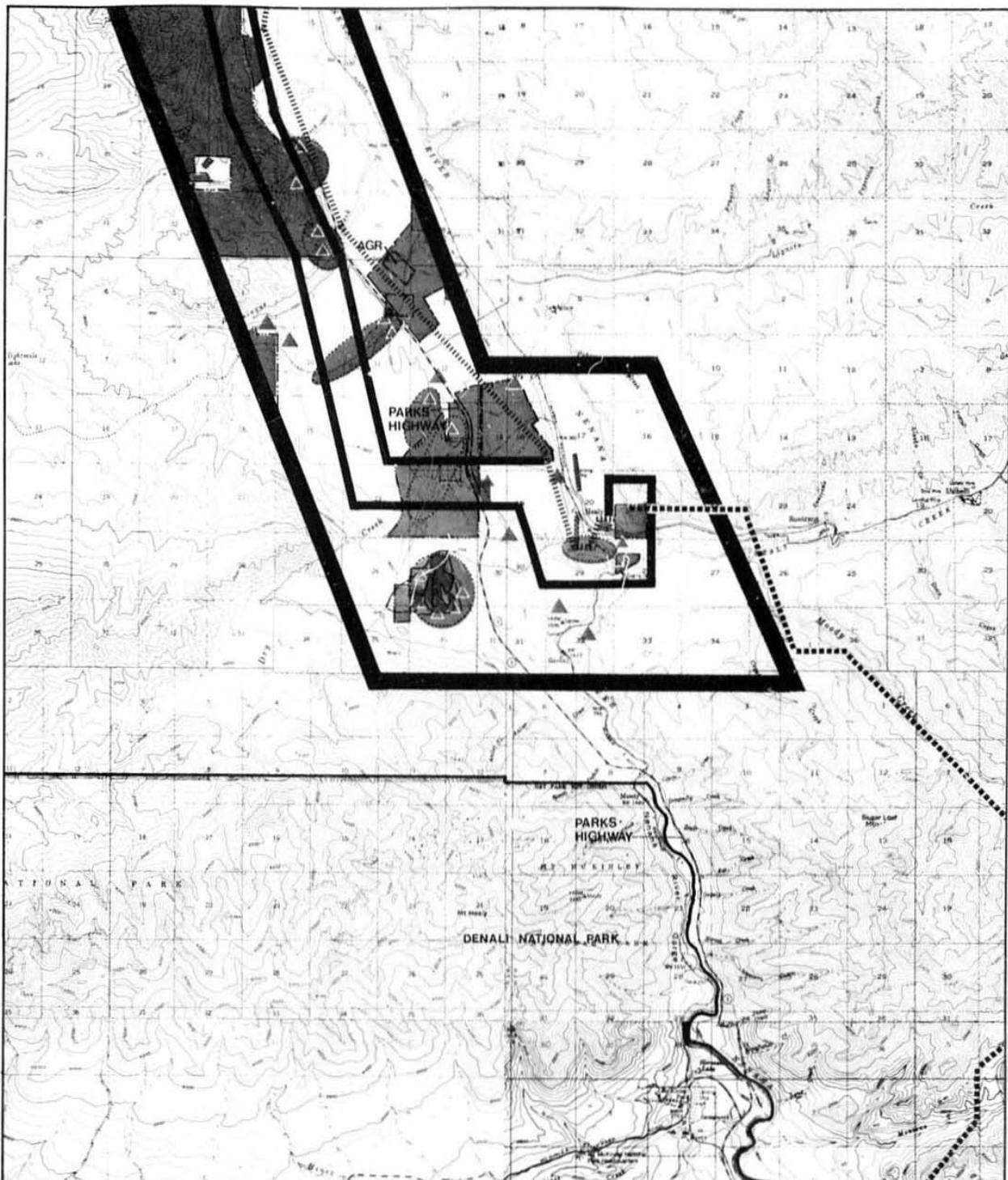


**BIOLOGICAL
CONSTRAINTS**
MAP M6

PREPARED BY TES FIGURE 22 of 48

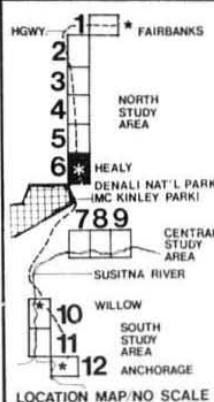


CONTOUR INTERVAL 100FT



**MANMADE
CONSTRAINTS**
MAP M6

PREPARED BY TES FIGURE 23 of 48



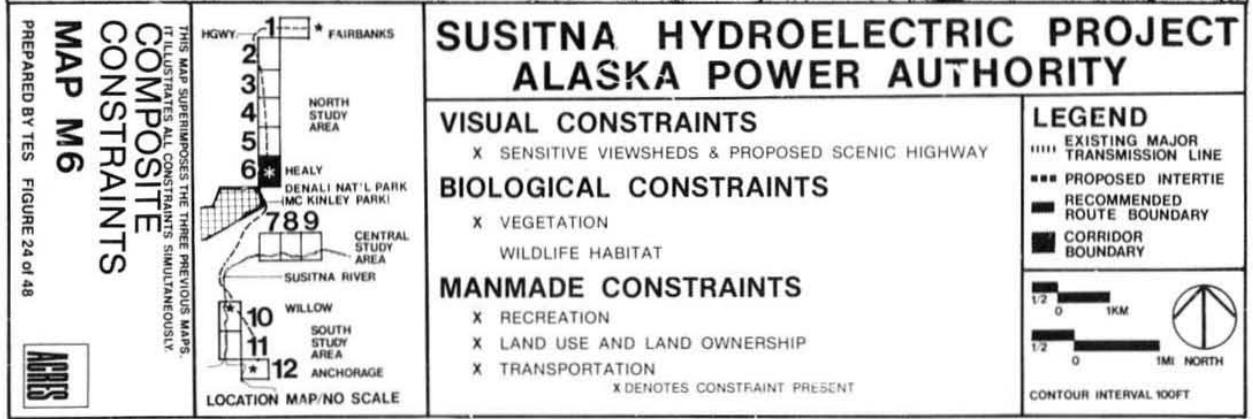
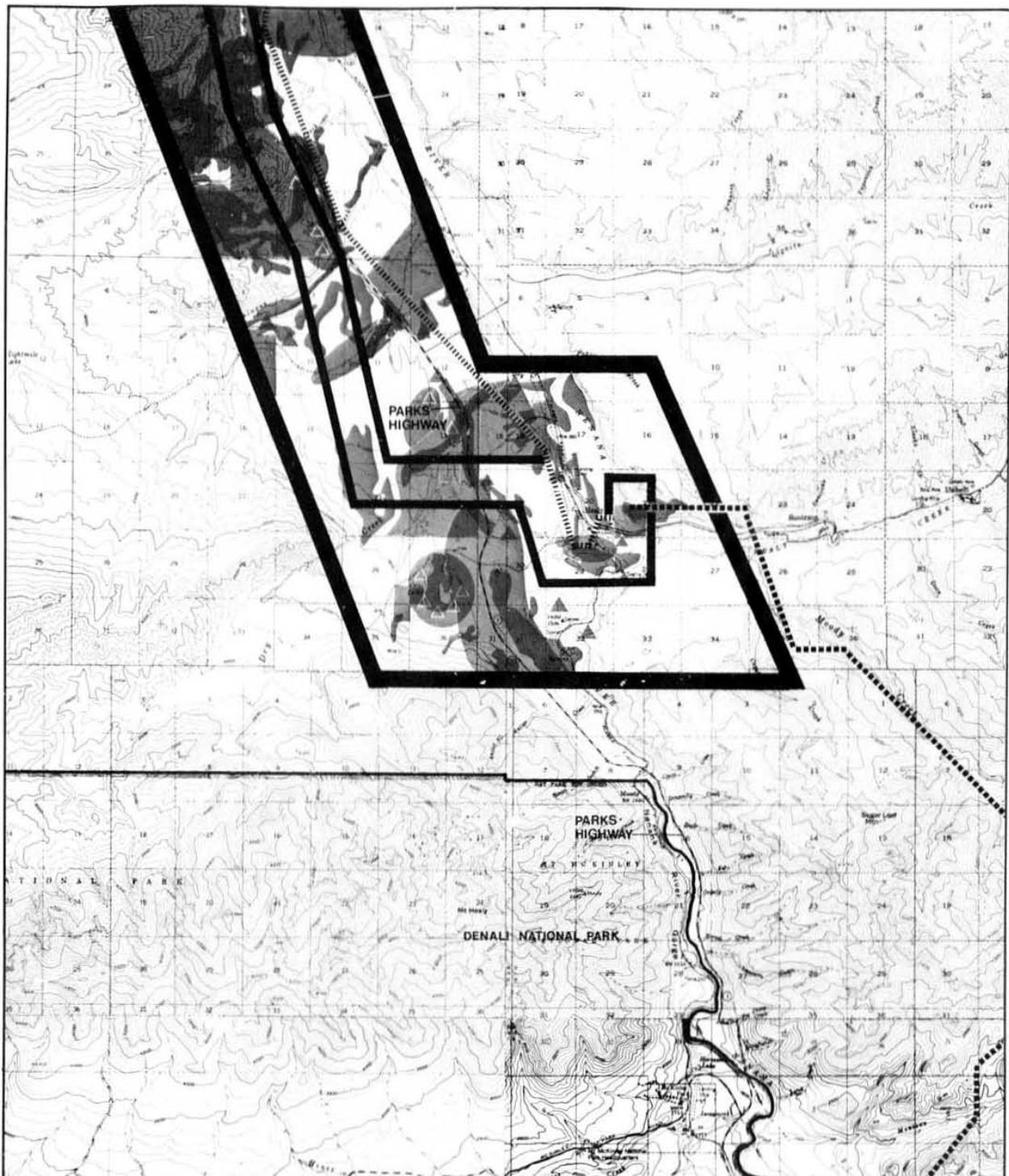
SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

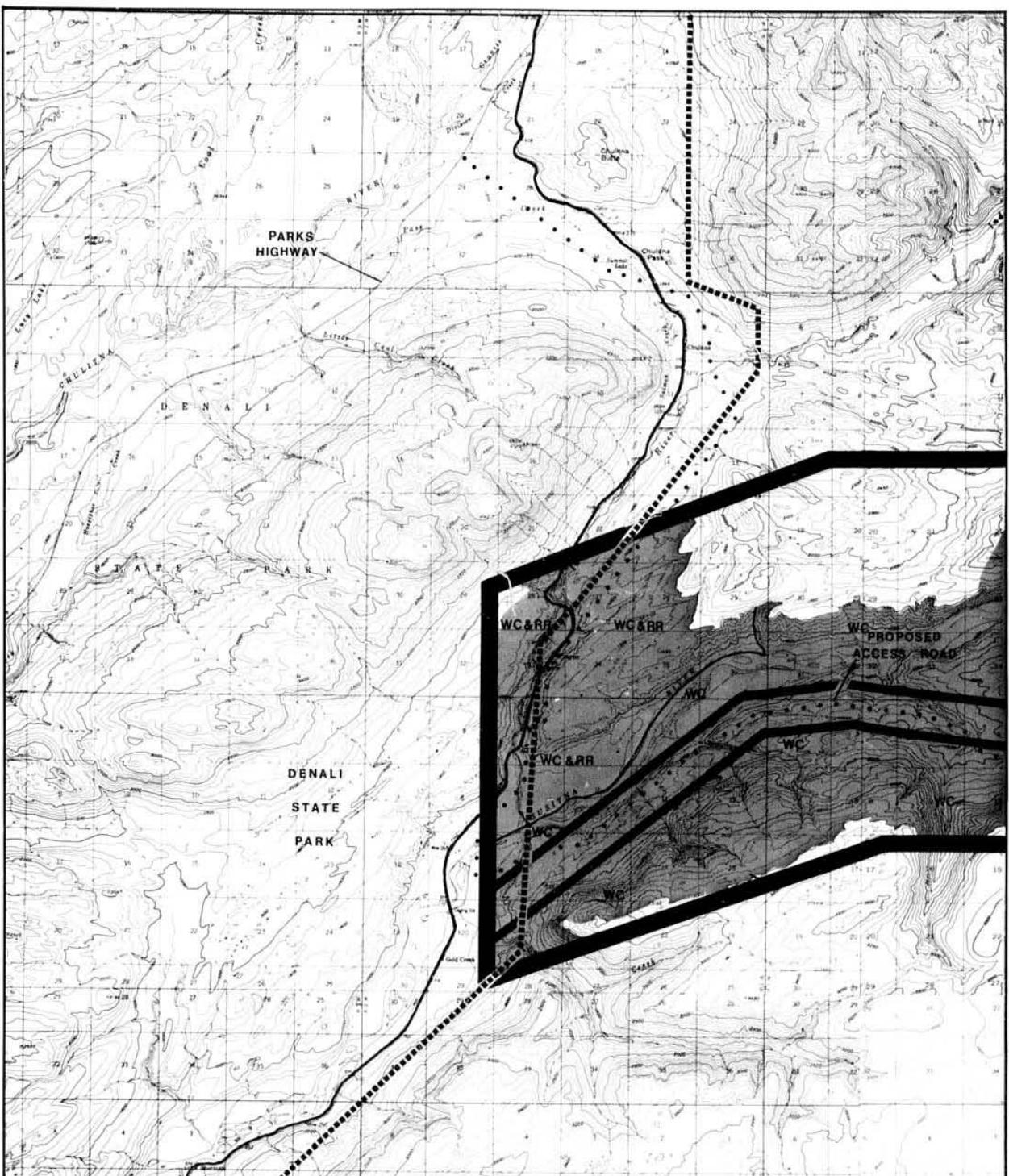
MANMADE CONSTRAINTS

- RECREATION BOUNDARIES
 - CAMP-SITE
 - RT --- RECREATION TRAIL
 - NAME GAME REFUGE AREA
- LAND USE AND LAND OWNERSHIP BOUNDARIES
 - EXISTING PRIVATE LAND
 - DEVELOPMENT AREA
 - DISPOSAL AREA
 - AGRICULTURAL LAND
 - KNOWN ARCHEOLOGICAL SITE
 - AREA OF HIGH ARCHEOLOGICAL POTENTIAL
 - DAM IMPOUNDMENT AREA
 - △ CABIN/STRUCTURE
- TRANSPORTATION BOUNDARIES
 - AIRPORT AND LANDING STRIP
 - FPL FLOAT PLANE LANDING SITE

LEGEND

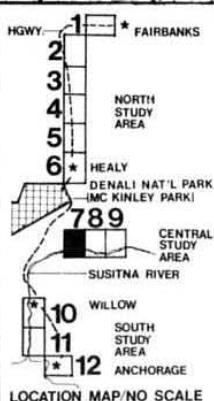
- EXISTING MAJOR TRANSMISSION LINE
 - PROPOSED INTERTIE
 - RECOMMENDED ROUTE BOUNDARY
 - CORRIDOR BOUNDARY
- Scale: 1/2 0 1KM
1/2 0 1MI NORTH
CONTOUR INTERVAL 100FT





**VISUAL
CONSTRAINTS
MAP M7**

PREPARED BY TES FIGURE 25 of 48



LOCATION MAP/NO SCALE

SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

SENSITIVE VIEWSHEDS AND PROPOSED SCENIC HIGHWAY AREA

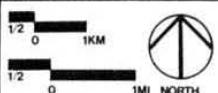
PSH PROPOSED SCENIC HIGHWAY AREA

SENSITIVE VIEWSHEDS

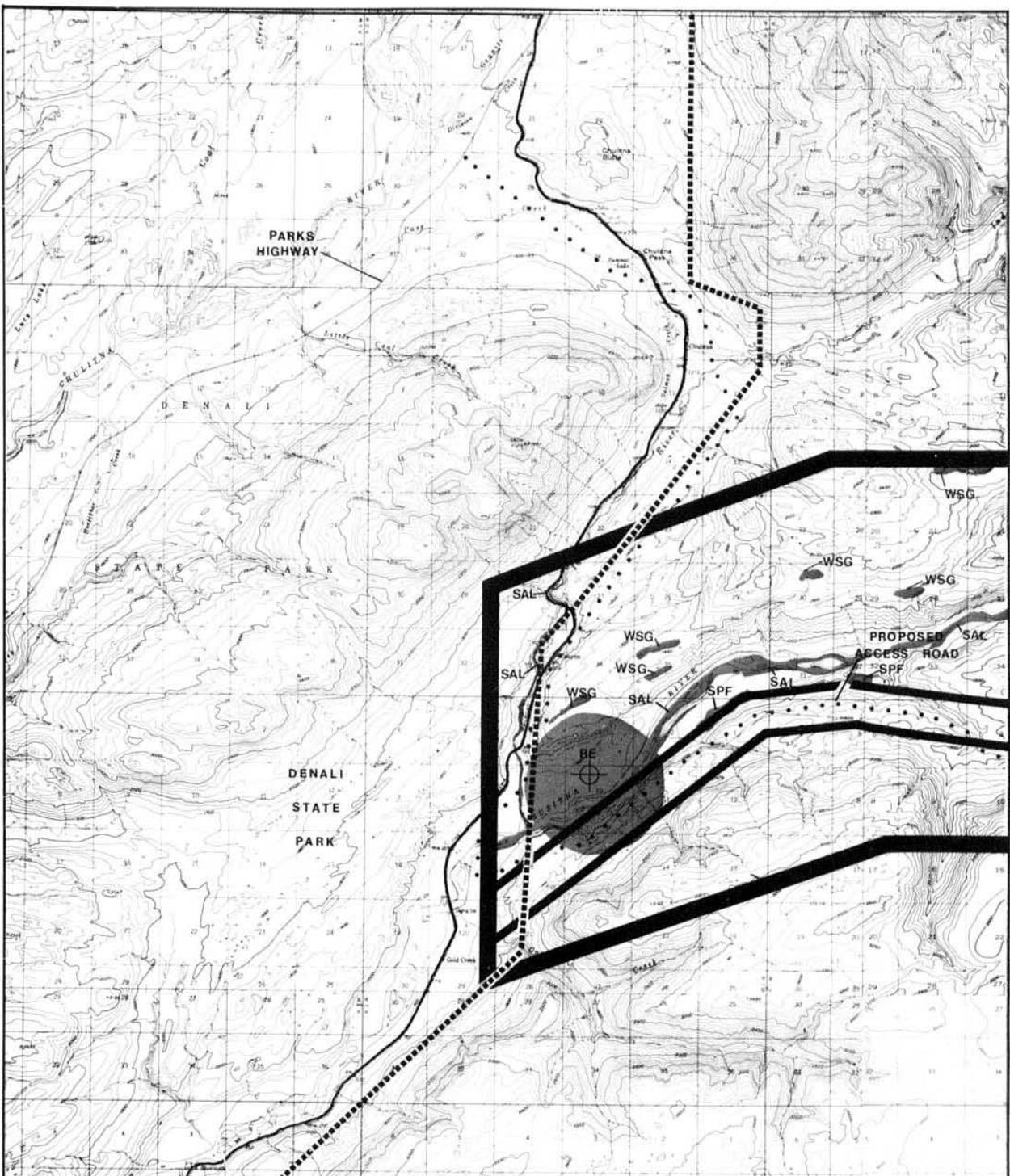
HW	HIGHWAY
RR	RAILROAD
PL	PRIVATE LANDS
WC	WATER COURSE
RA	RECREATION AREA

LEGEND

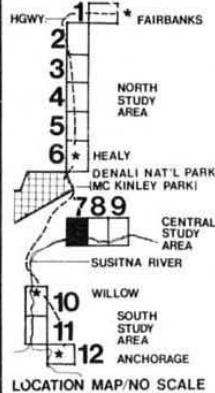
- EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERTIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY



CONTOUR INTERVAL 100FT



BIOLOGICAL CONSTRAINTS MAP M7



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

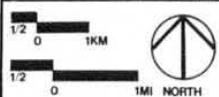
BIOLOGICAL CONSTRAINTS

VEGETATION BOUNDARIES
 WSG WET SEDGE GRASS
 SPF WET SPRUCE/POTENTIAL PERMAFROST AREA

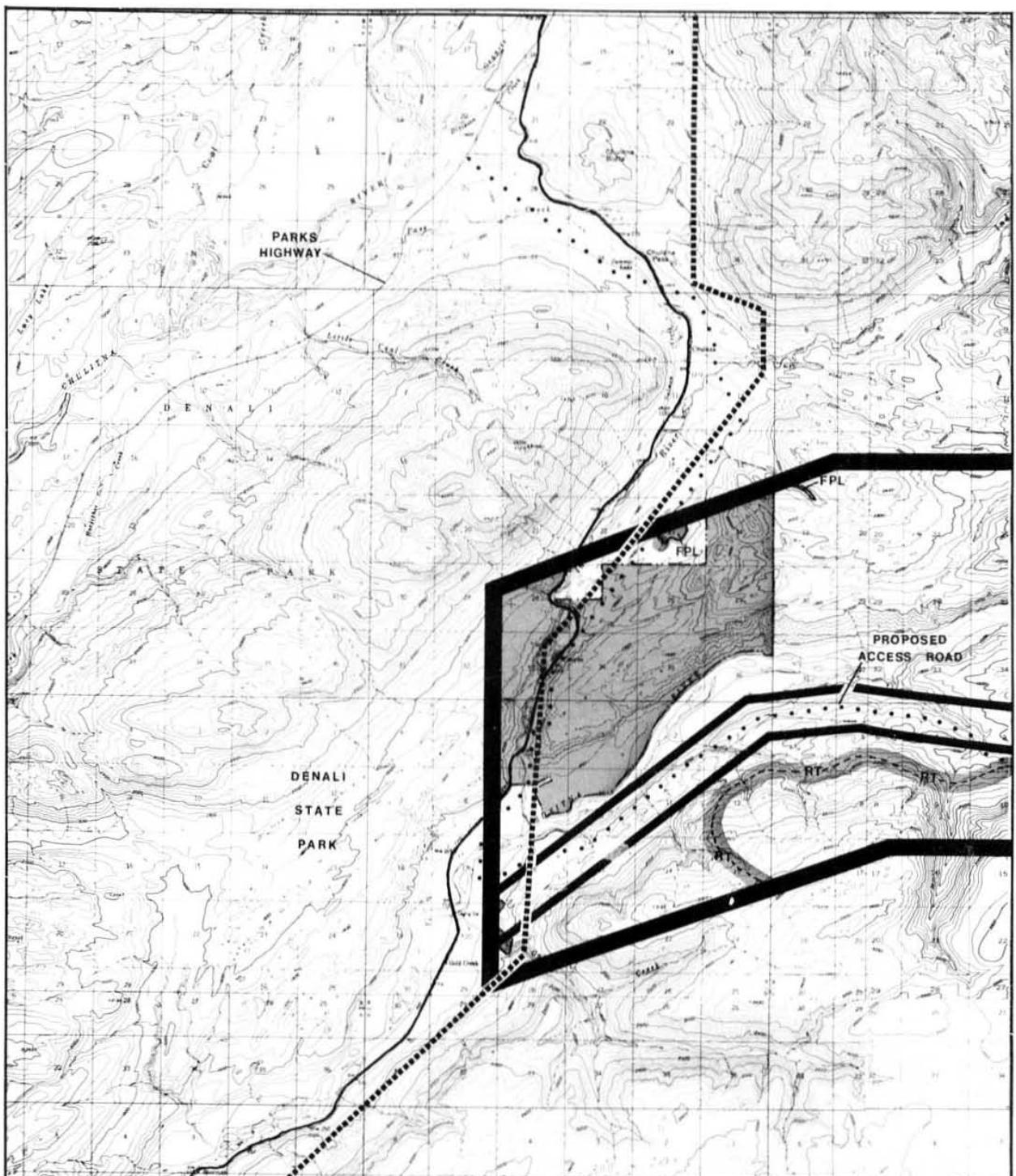
WILDLIFE BOUNDARIES
 SAL SALMON PRESENT
 SWAN PEREGRINE FALCON PRIME HABITAT
 SWAN NEST AREA (WITH 1 MI. RAD. BUFFER ZONE)
 ACTIVE NEST SITES 1980-81 (WITH 1 MI. RAD. BUFFER ZONE)
 GE GOLDEN EAGLE
 BE BALD EAGLE
 GF GYRFALCON
 GH GOSHAWK
 UN UNKNOWN

LEGEND

- |||| EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERTIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY



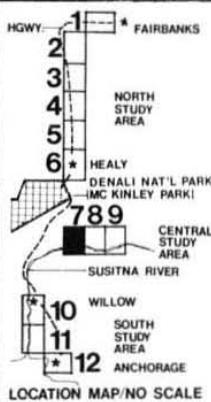
CONTOUR INTERVAL 100FT



**MANMADE
CONSTRAINTS
MAP M7**

PREPARED BY TES

FIGURE 27 of 48



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

MANMADE CONSTRAINTS

RECREATION BOUNDARIES

□ CAMPsite

- - RECREATION TRAIL

NAME GAME REFUGE AREA

LAND USE AND LAND OWNERSHIP BOUNDARIES

— EXISTING PRIVATE LAND

- - DEVELOPMENT AREA

- - - DISPOSAL AREA

- - - AGRICULTURAL LAND

- - - KNOWN ARCHEOLOGICAL SITE

- - - AREA OF HIGH ARCHEOLOGICAL POTENTIAL

- - - DAM IMPOUNDMENT AREA

- - - CABINS, STRUCTURE

TRANSPORTATION BOUNDARIES

- - - AIRPORT AND LANDING STRIP

FPL FLOAT PLANE LAI DING SITE

LEGEND

|||| EXISTING MAJOR TRANSMISSION LINE

■■■ PROPOSED INTERTIE

— RECOMMENDED ROUTE BOUNDARY

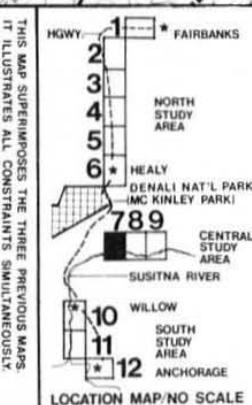
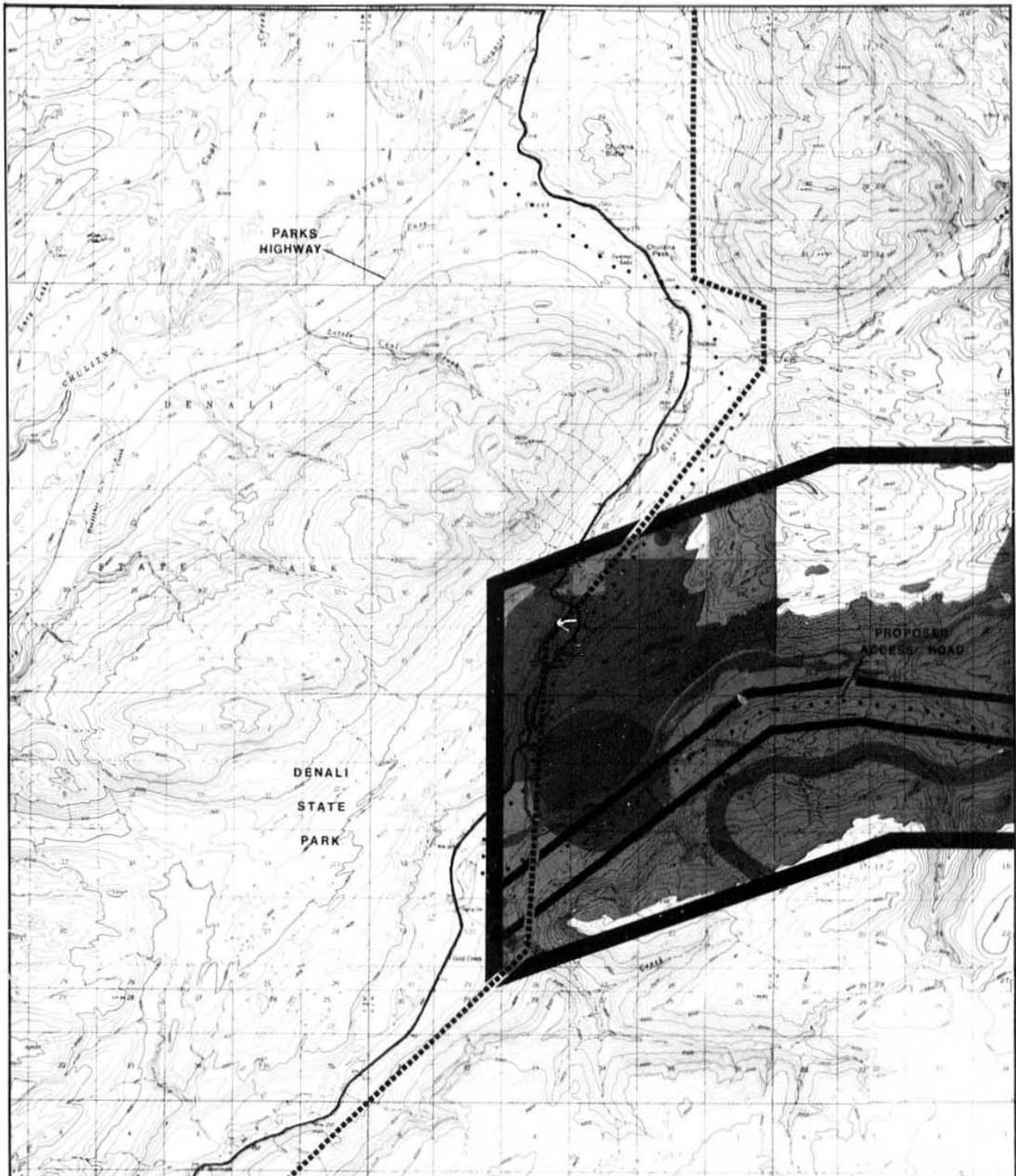
■■■ CORRIDOR BOUNDARY

1/2 0 1KM

1/2 0 1MI NORTH



CONTOUR INTERVAL 100FT



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

X SENSITIVE VIEWSHEDS & PROPOSED SCENIC HIGHWAY

BIOLOGICAL CONSTRAINTS

X VEGETATION

X WILDLIFE HABITAT

MANMADE CONSTRAINTS

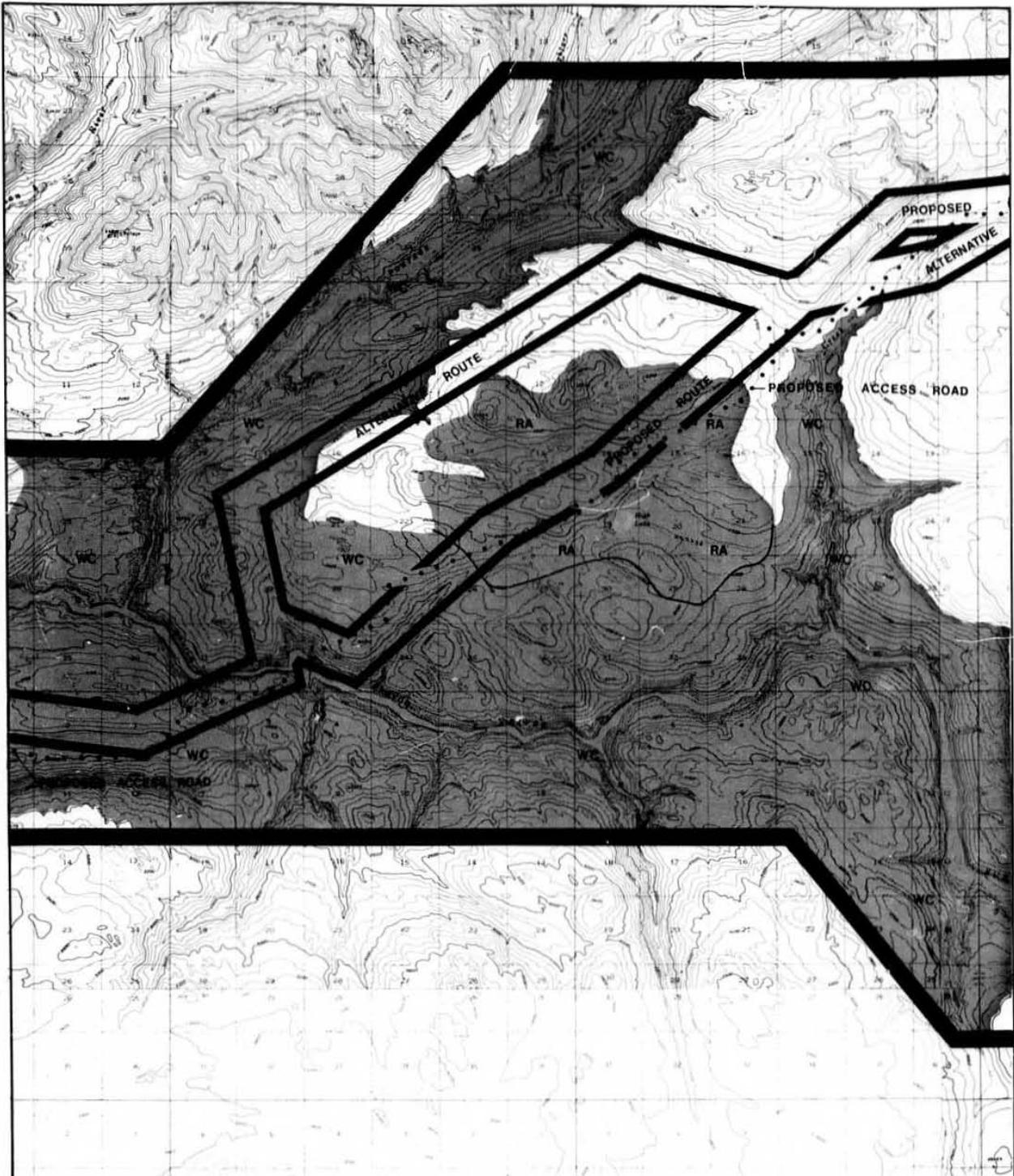
X RECREATION

X LAND USE AND LAND OWNERSHIP

X TRANSPORTATION

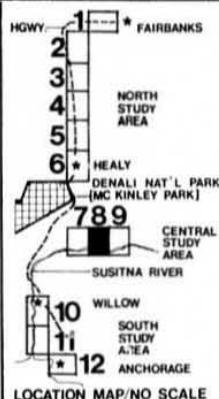
X DENOTES CONSTRAINT PRESENT





**VISUAL
CONSTRAINTS
MAP M8**

PREPARED BY TES FIGURE 29 of 48



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

SENSITIVE VIEWSHEDS AND PROPOSED SCENIC HIGHWAY AREA

PSH PROPOSED SCENIC HIGHWAY AREA

SENSITIVE VIEWSHEDS

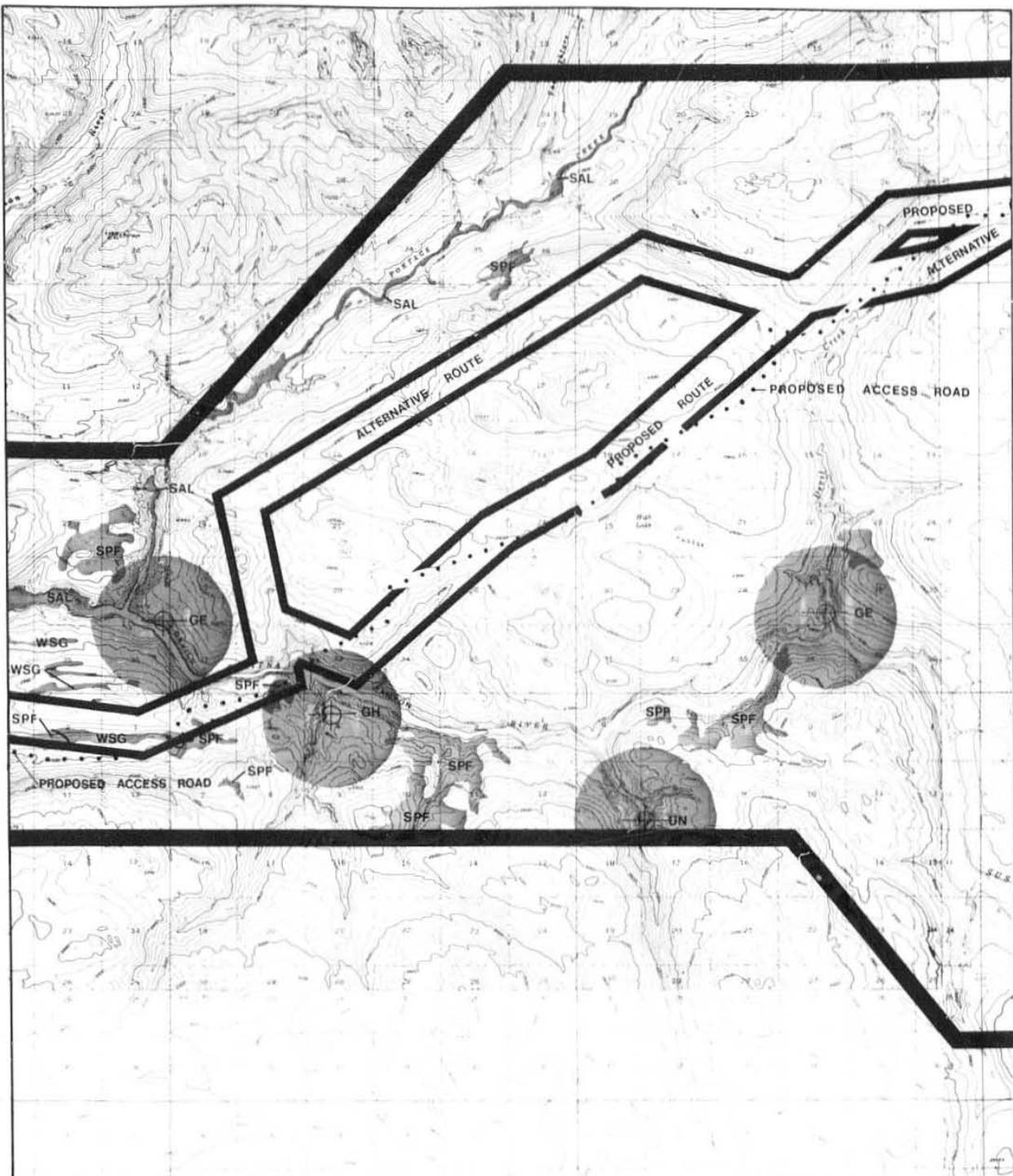
HW	HIGHWAY
RR	RAILROAD
PL	PRIVATE LANDS
WC	WATER COURSE
RA	RECREATION AREA

LEGEND

- EXISTING MAJOR TRANSMISSION LINE
- ==== PROPOSED INTERTIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY

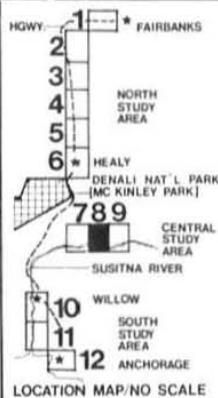


CONTOUR INTERVAL 100FT



BIOLOGICAL CONSTRAINTS MAP M8

PREPARED BY TES FIGURE 30 of 48



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

BIOLOGICAL CONSTRAINTS

VEGETATION BOUNDARIES

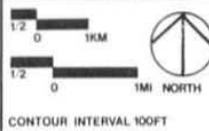
WSG WET SEDGE GRASS
SPF WET SPRUCE/POTENTIAL PERMAFROST AREA

WILDLIFE BOUNDARIES

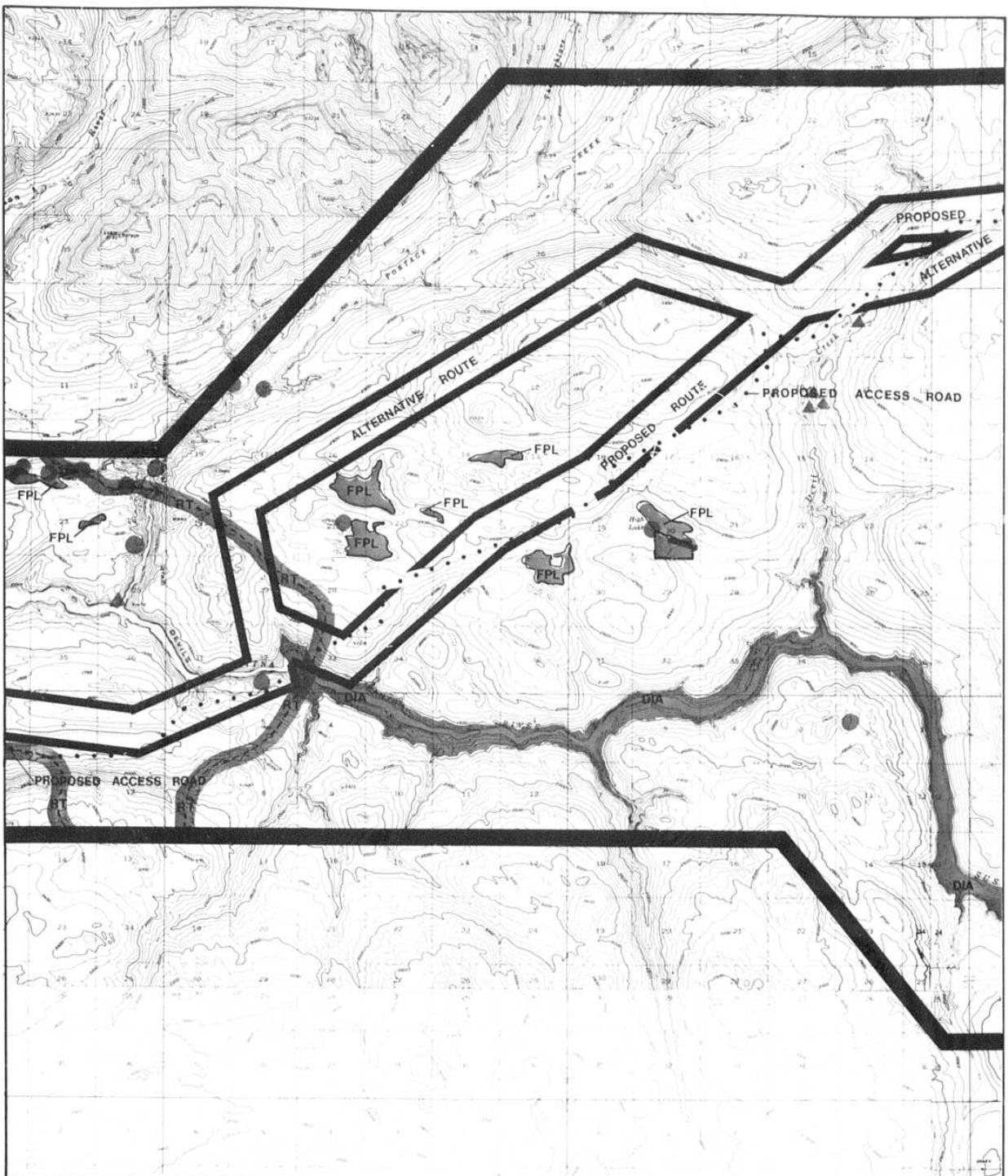
SAL SALMON PRESENT
SWAN PEREGRINE FALCON PRIME HABITAT
SWAN NEST AREA (WITH 1 MI. RAD. BUFFER ZONE)
ACTIVE NEST SITES 1980-81 (WITH 1 MI. RAD. BUFFER ZONE)
GE GOLDEN EAGLE
BE BALD EAGLE
GF GYRFALCON
GH GOSHAWK
UN UNKNOWN

LEGEND

- ===== EXISTING MAJOR TRANSMISSION LINE
- ==== PROPOSED INTERIE
- ===== RECOMMENDED ROUTE
- ===== CORRIDOR
- ===== CORRIDOR BOUNDARY

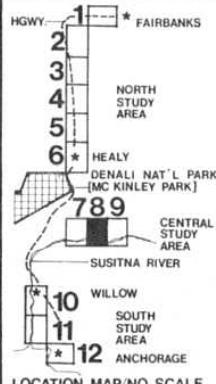


CONTOUR INTERVAL 100FT



MANMADE CONSTRAINTS MAP M8

PREPARED BY TES FIGURE 31 of 48



LOCATION MAP/NO SCALE

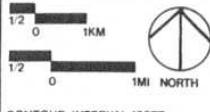
SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

MANMADE CONSTRAINTS

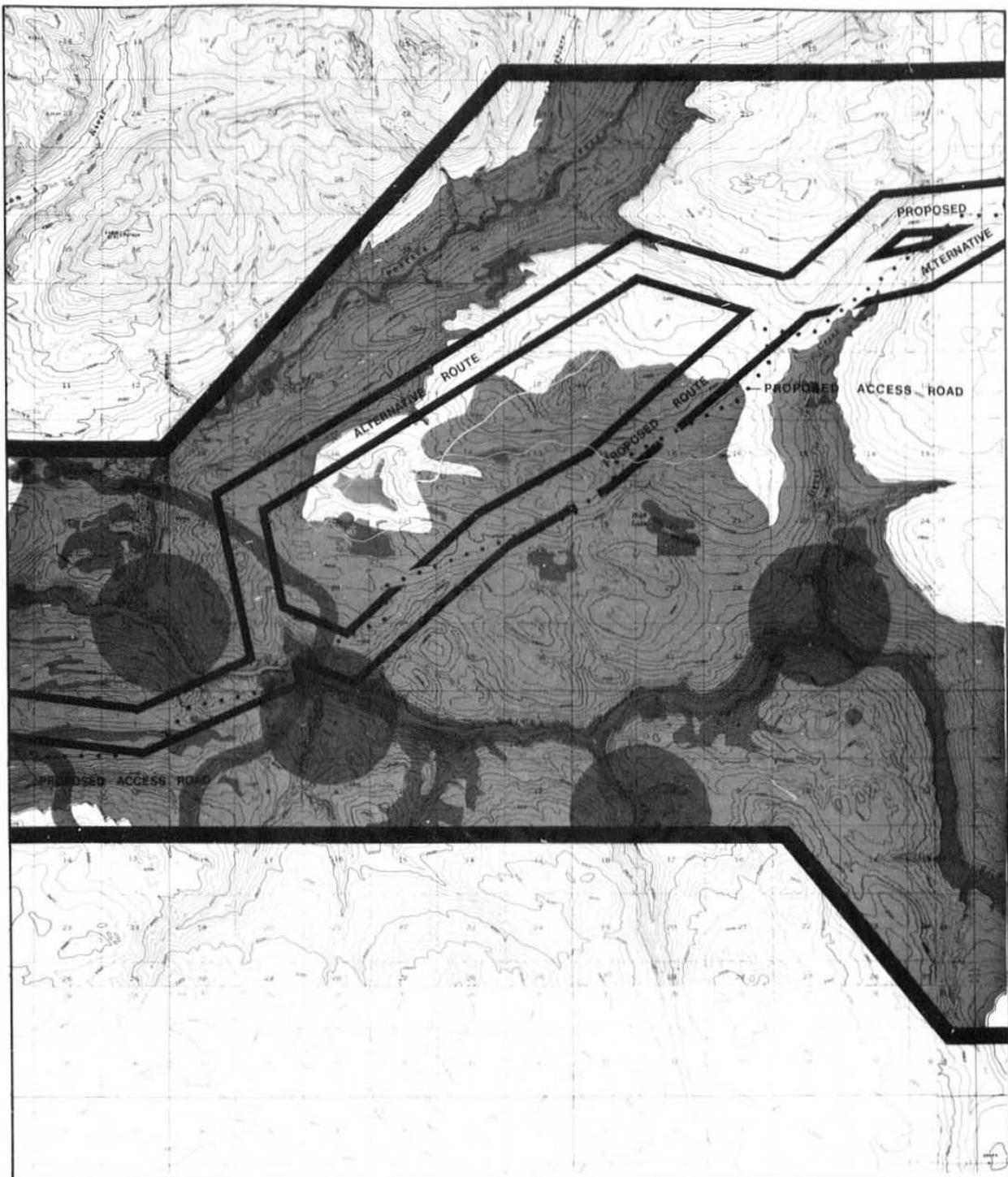
- RECREATION BOUNDARIES
 - CAMP SITE
 - RT --- RECREATION TRAIL
 - NAME GAME REFUGE AREA
- LAND USE AND LAND OWNERSHIP BOUNDARIES
 - EXISTING PRIVATE LAND
 - - - DEVELOPMENT AREA
 - - - DISPOSAL AREA
 - - - AGRICULTURAL LAND
 - - - KNOWN ARCHEOLOGICAL SITE
 - AREA OF HIGH ARCHEOLOGICAL POTENTIAL
 - DIA DAM IMPOUNDMENT AREA
 - CABINS, STRUCTURE
- TRANSPORTATION BOUNDARIES
 - AIRPORT AND LANDING STRIP
 - FPL FLOAT PLANE LANDING SITE

LEGEND

- EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERTIE
- RECOMMENDED ROUTE
- CORRIDOR BOUNDARY



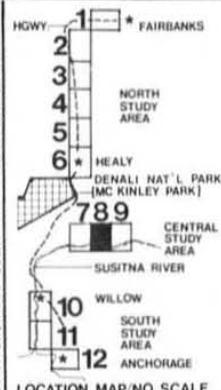
CONTOUR INTERVAL 100FT



MAP M8

CONSTRAINTS

COMPOSITE THIS MAP SUPERIMPOSES THE THREE PREVIOUS MAPS IT ILLUSTRATES ALL CONSTRAINTS SIMULTANEOUSLY.



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

- #### X SENSITIVE VIEWSHEDS & PROPOSED SCENIC HIGHWAY

BIOLOGICAL CONSTRAINTS

- VEGETATION
 - WILDLIFE HABITAT

MANMADE CONSTRAINTS

- RECREATION
 - LAND USE AND LAND OWNERSHIP
 - TRANSPORTATION

X DENOTES CONSTRAINT PRESENT

LEGEND

- LEGEND**
 ----- EXISTING MAJOR
 TRANSMISSION LINE
 *** PROPOSED INTERTIE
 — RECOMMENDED
 ROUTE BOUNDARY
 ■ CORRIDOR
 BOUNDARY



一、向右看齐，向左看齐

- JUNCTURE OF ALTERNATIVE AND PROPOSED ROUTES. SEE MAP 8

**PROPOSED ACCESS
ROAD**

**PROPOSED ACCESS
ROAD —**

27

110

1

Foto: UAKES

SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

SENSITIVE VIEWSHEDS AND PROPOSED SCENIC HIGHWAY AREA

PSH PROPOSED SCENIC HIGHWAY AREA

SENSITIVE VIEWSHEDS

HW HIGHWAY
RR RAILROAD
PL PRIVATE LANDS
WC WATER COURSE
RA RECREATION AREA

LEGEND

LEGEND

EXISTING MAIN TRANSMISSION LINE

*** PROPOSED INTERTIE

— RECOMMENDED
ROUTE BOUNDARY

ROUTE BOUNDARY
■ CORRIDOR

■ BOUNDARY

— 1 —

$\frac{1}{2}$ KM

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1/2 MI 0 1MI NORTH

THE HISTORY

CONTOUR INTERVAL 100FT

— 1 —

VISUAL
CONSTRAINTS
MAP M9

VISUAL CONSTRAINTS SENSITIVE VIEWSHEDS AND PROPOSED SCENIC HIGHWAY AREA

PSH PROPOSED SCENIC HIGHWAY AREA

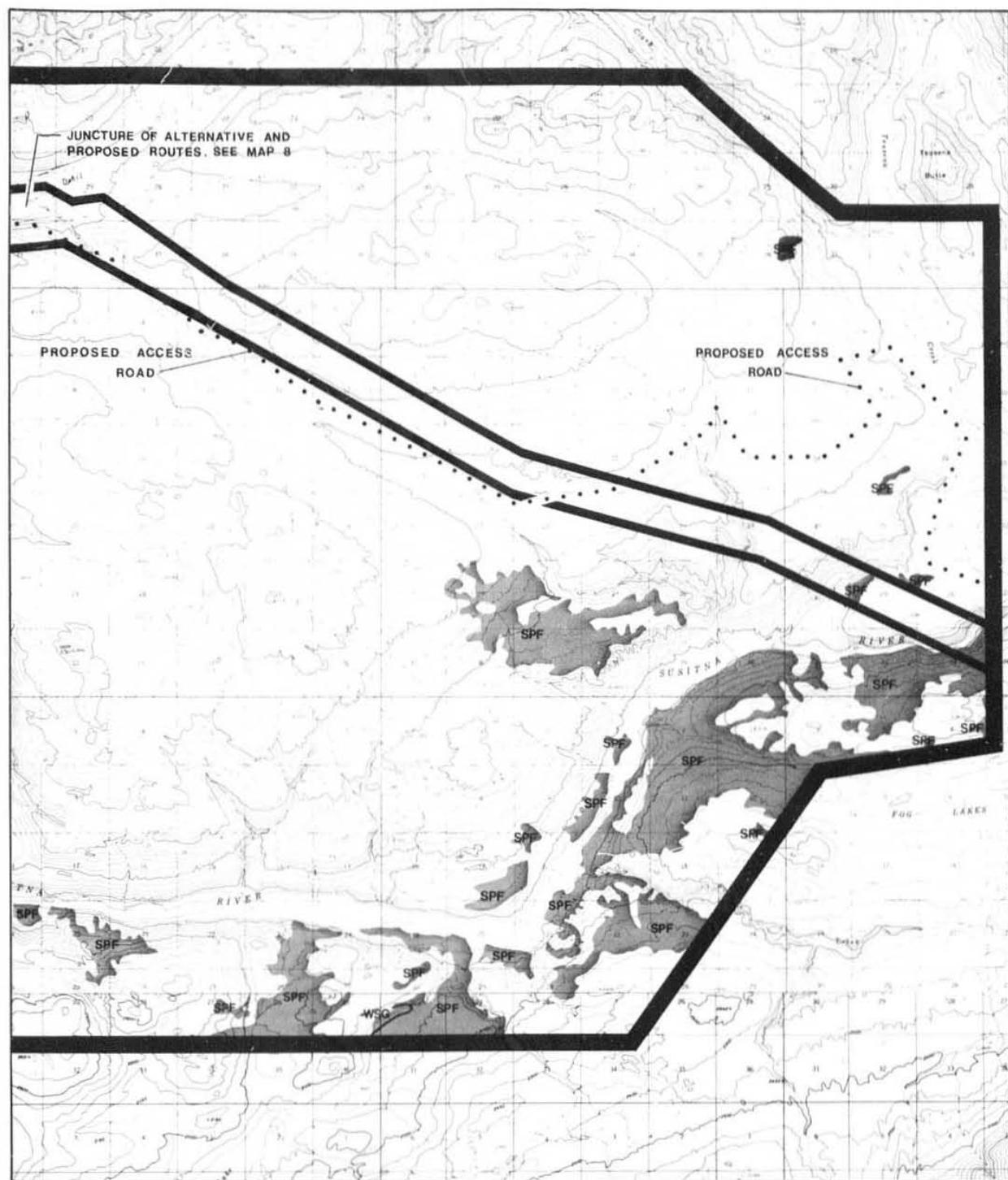
SENSITIVE VIEWSHEDS
 HW HIGHWAY
 RR RAILROAD
 PL PRIVATE LANDS
 WC WATER COURSE
 RA RECREATION AREA



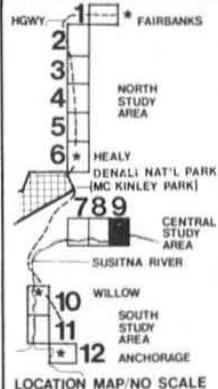
JUNCTURE OF ALTERNATIVE AND PROPOSED ROUTES. SEE MAP 8

PROPOSED ACCESS ROAD

PROPOSED ACCESS ROAD



BIOLOGICAL CONSTRAINTS MAP M9



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

BIOLOGICAL CONSTRAINTS

VEGETATION BOUNDARIES

WSG WET SEDGE GRASS

SPF WET SPRUCE/POTENTIAL PERMAFROST AREA

WILDLIFE BOUNDARIES

SAL SALMON PRESENT

SWAN PEREGRINE FALCON PRIME HABITAT

SWAN NEST AREA (WITH 1 MI. RAD. BUFFER ZONE)

ACTIVE NEST SITES 1980-81 (WITH 1 MI. RAD. BUFFER ZONE)

GE GOLDEN EAGLE

BE BALD EAGLE

GF GYRFALCON

GH GOSHAWK

UN UNKNOWN

LEGEND

||||| EXISTING MAJOR TRANSMISSION LINE

||||| PROPOSED INTERTIE

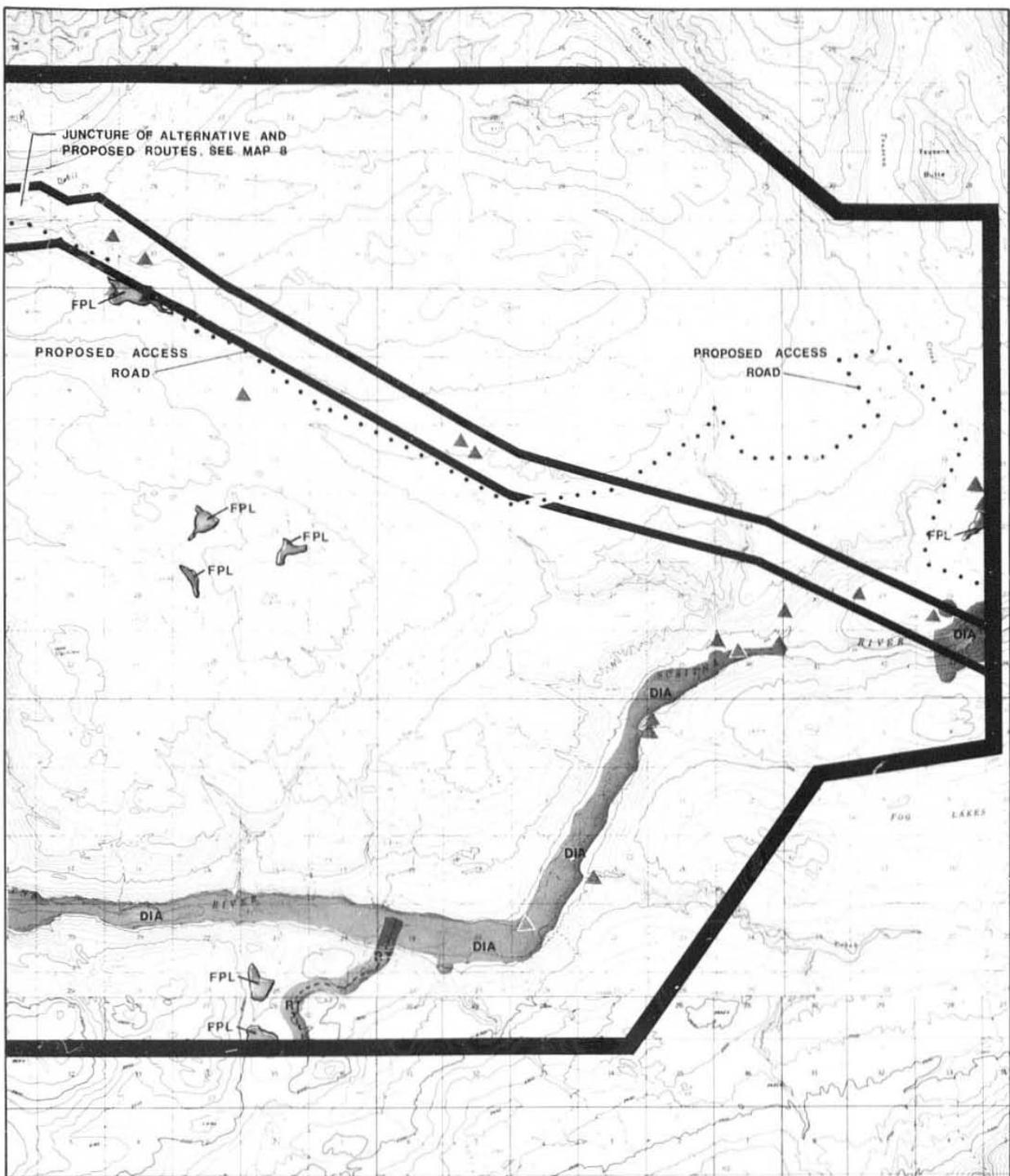
— RECOMMENDED ROUTE BOUNDARY

■ CORRIDOR BOUNDARY

1/2 0 1KM

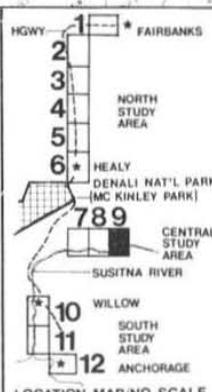
1/2 0 1MI NORTH

CONTOUR INTERVAL 100FT



MANMADE CONSTRAINTS MAP M9

PREPARED BY TES FIGURE 35 of 48



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

MANMADE CONSTRAINTS

RECREATION BOUNDARIES

CAMPsite
RECREATION TRAIL

NAME GAME REFUGE AREA

LAND USE AND LAND OWNERSHIP BOUNDARIES

EXISTING PRIVATE LAND

DEVELOPMENT AREA

DISPOSAL AREA

AGRICULTURAL LAND

KNOWN ARCHEOLOGICAL SITE

AREA OF HIGH ARCHEOLOGICAL POTENTIAL

DAM IMPOUNDMENT AREA

CABINS, STRUCTURE

TRANSPORTATION BOUNDARIES

AIRPORT AND LANDING STRIP

FLOAT PLANE LANDING SITE

LEGEND

EXISTING MAJOR TRANSMISSION LINE

PROPOSED INTERTIE

RECOMMENDED ROUTE BOUNDARY

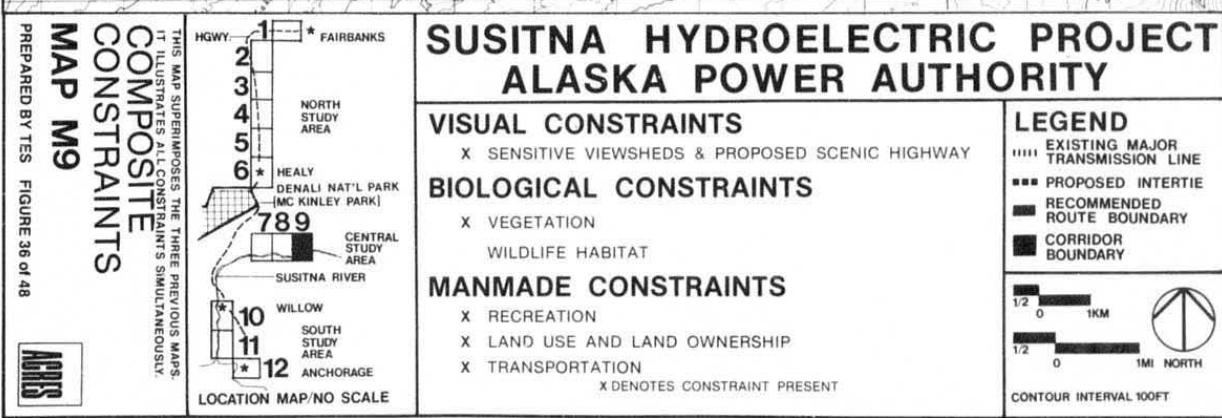
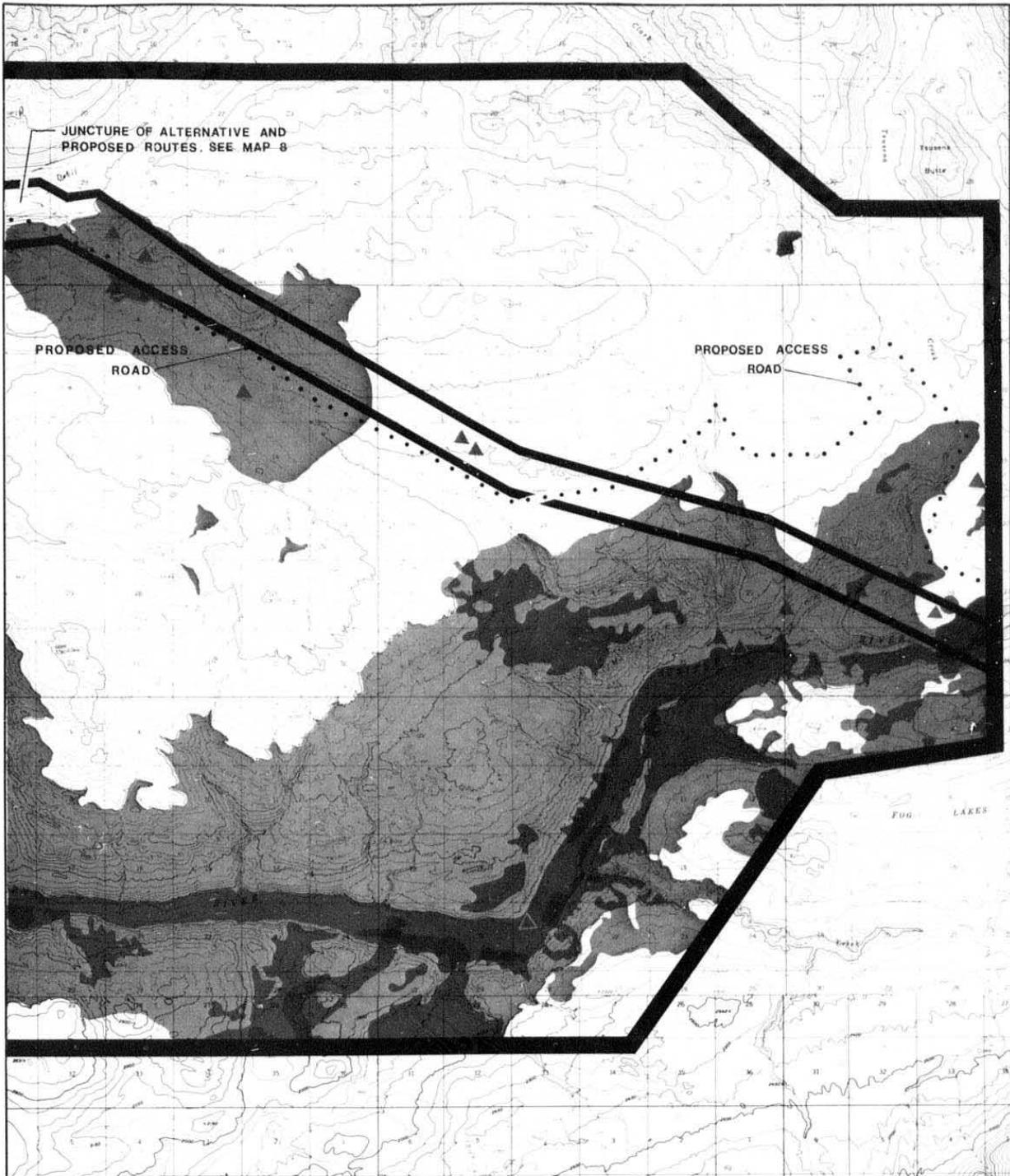
CORRIDOR BOUNDARY

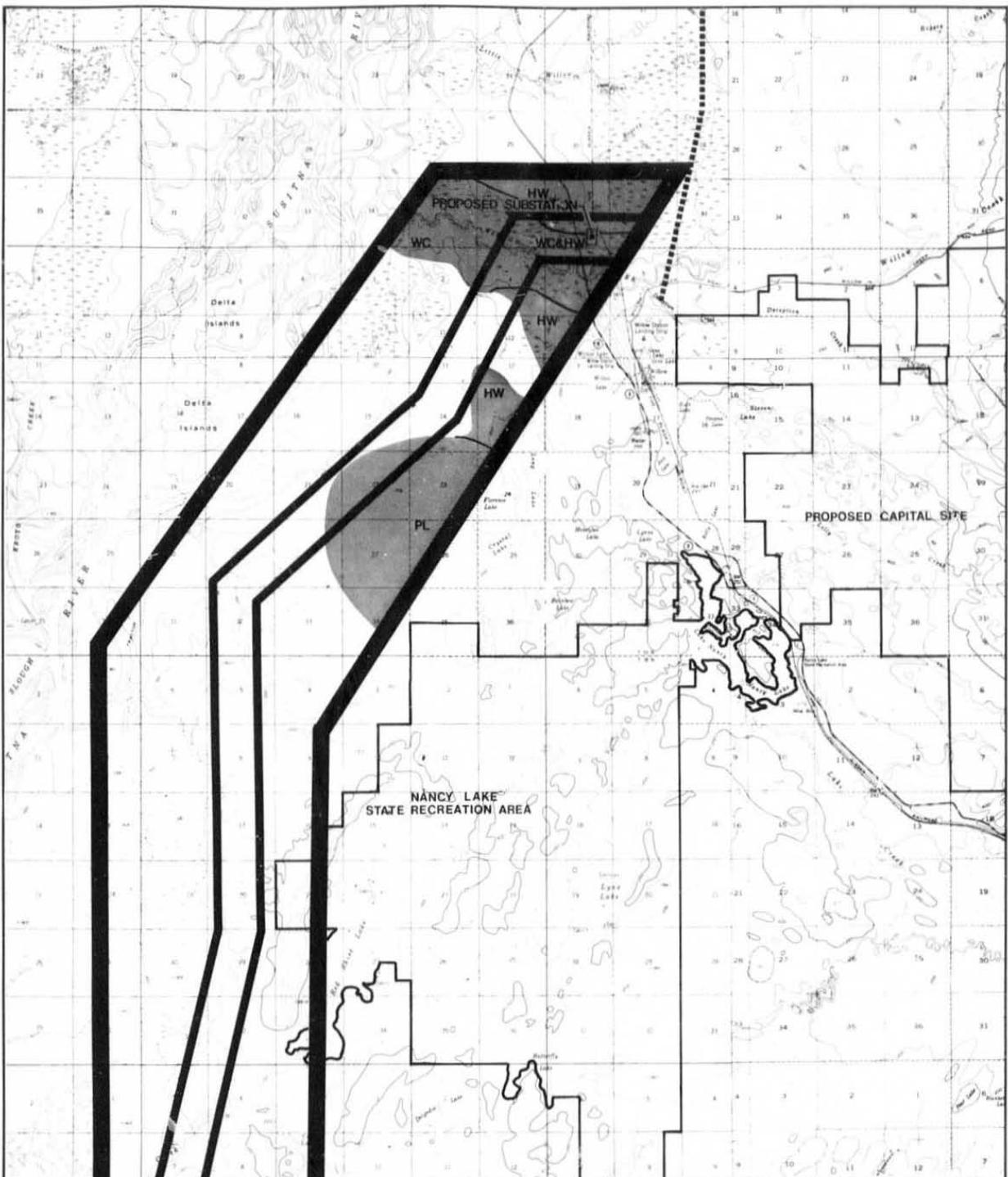
1/2 0 1KM

1/2 0 1MI NORTH



CONTOUR INTERVAL 100FT





VISUAL
CONSTRAINTS
MAP M10

PREPARED BY TES FIGURE 37 of 48

A vertical map of Alaska's coast from Fairbanks to Anchorage.
 - At the top is FAIRBANKS, marked with an asterisk (*).
 - Below it is the NORTH STUDY AREA, indicated by a vertical dashed line and labeled '1'.
 - The next six locations (2 through 6) are marked with stars and labeled vertically on the left: HEALY, DENALI NAT'L PARK (INC KINLEY PARK), and SUSITNA RIVER.
 - Between locations 6 and 789 is a central study area labeled 'CENTRAL STUDY AREA'.
 - Between locations 789 and 10 is the SUSITNA RIVER.
 - Below location 789 is WILLOW.
 - Between locations 10 and 11 is the SOUTH STUDY AREA.
 - Below location 11 is ANCHORAGE, marked with an asterisk (*).
 - A legend at the bottom states 'LOCATION MAP NO SCALE'.

SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

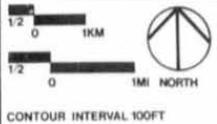
SENSITIVE VIEWSHEDS AND PROPOSED SCENIC HIGHWAY AREA

PSH PROPOSED SCENIC HIGHWAY AREA

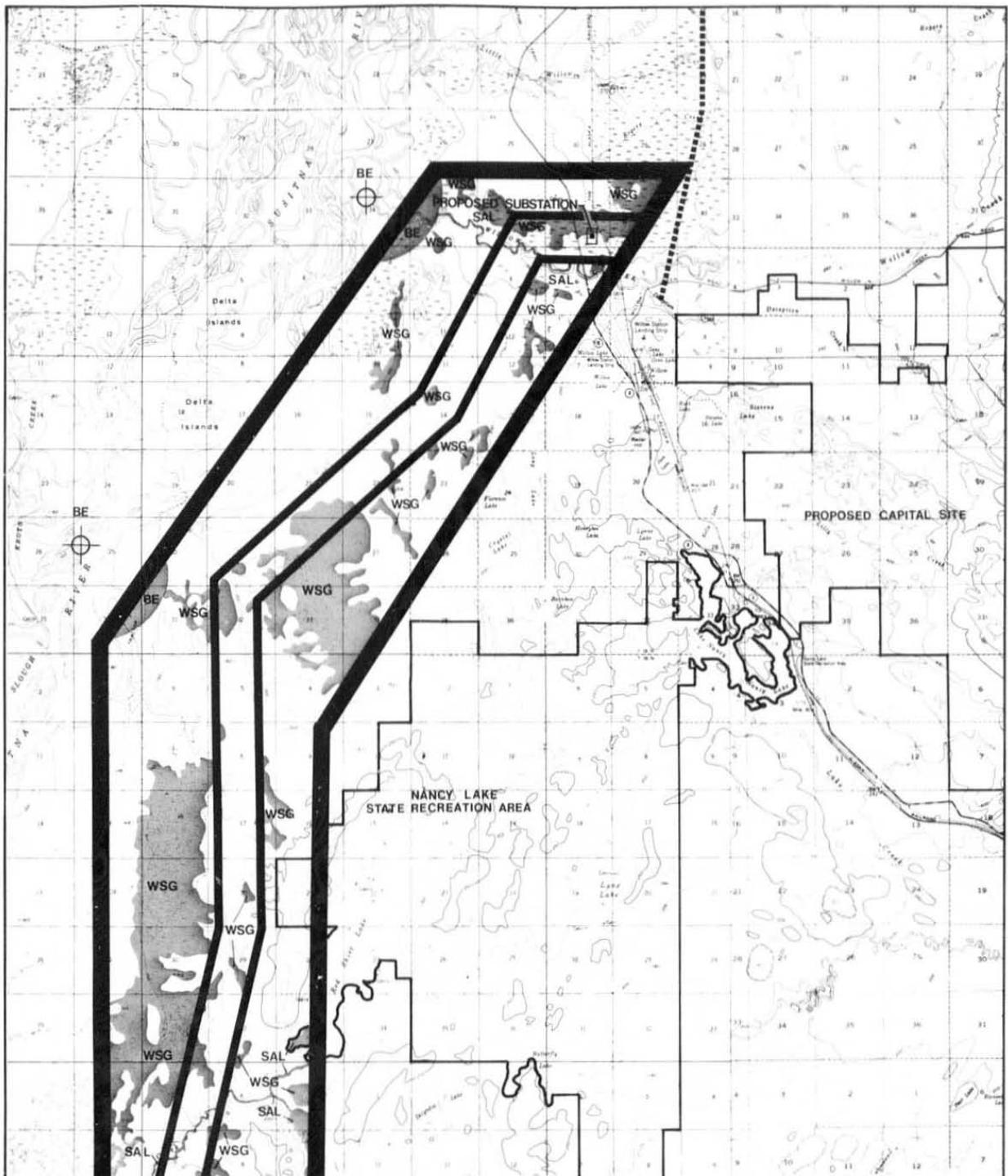
SENSITIVE VIEWSHEDS
 HW HIGHWAY
 RR RAILROAD
 PL PRIVATE LANDS
 WC WATER COURSE
 RA RECREATION AREA

LEGEND

- LEGEND**
 ***** EXISTING MAJOR
 TRANSMISSION LINE
 *** PROPOSED INTERTIE
 RECOMMENDED
 ROUTE BOUNDARY
 CORRIDOR
 BOUNDARY



CONTOUR INTERVAL 100FT



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

BIOLOGICAL CONSTRAINTS

VEGETATION BOUNDARIES

WSG WET SEDGE GRASS
SPF WET SPRUCE/POTENTIAL PERMAFROST AREA

WILDLIFE BOUNDARIES

SAL	SALMON PRESENT
SWAN	PEREGRINE FALCON PRIME HABITAT SWAN NEST AREA (WITH 1 MI. RAD. BUFFER ZONE)
	ACTIVE NEST SITES 1980-81 (WITH 1 MI. RAD. BUFFER ZONE)
	GE GOLDEN EAGLE BE BALD EAGLE GF GYRFALCON GH GOSHAWK UN UNKNOWN

LEGEND

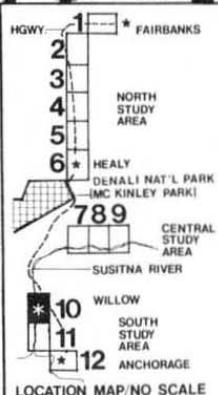
- EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY

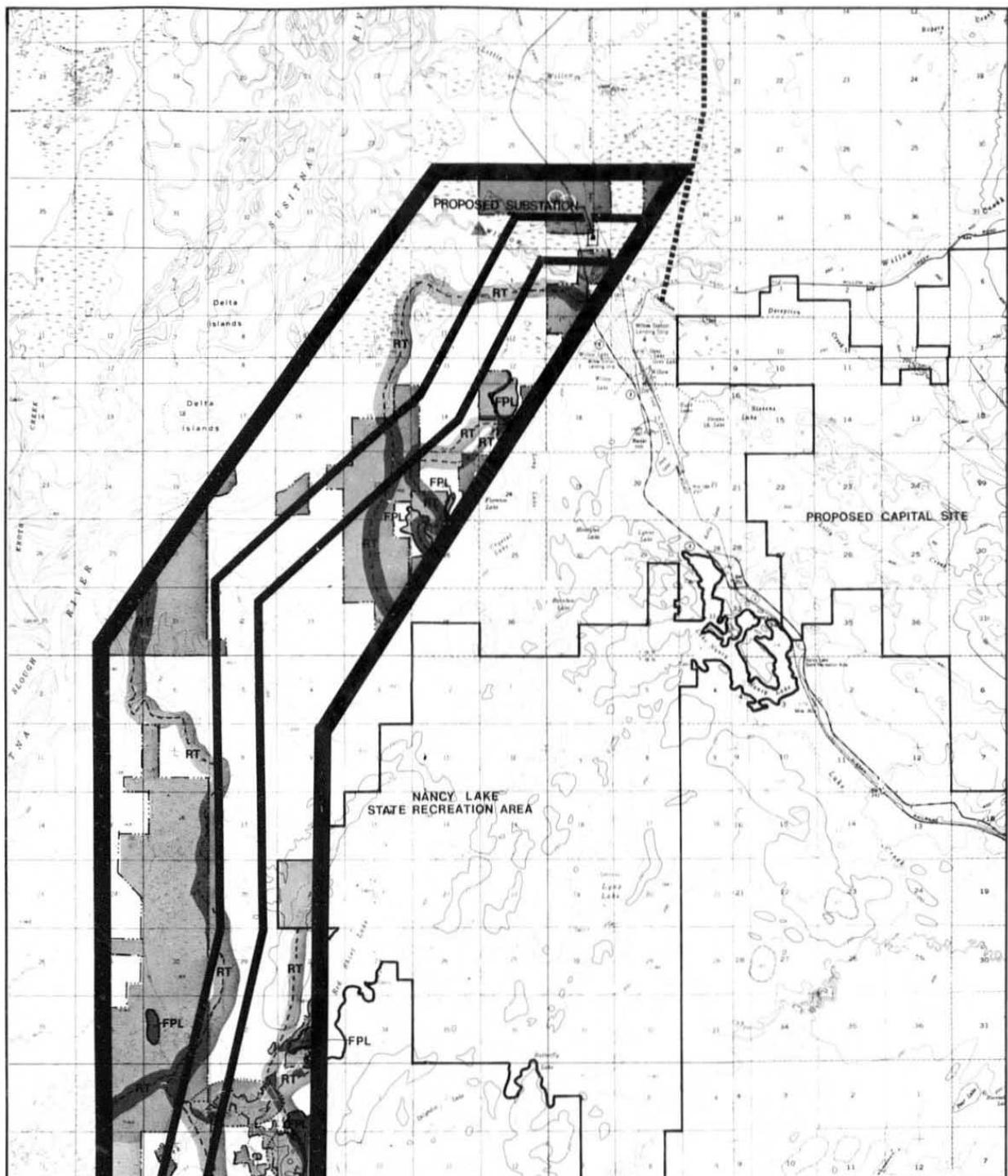


CONTOUR INTERVAL 100FT

**BIOLOGICAL
CONSTRAINTS
MAP M10**

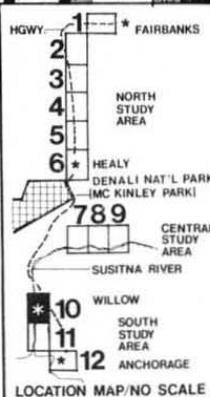
PREPARED BY TES FIGURE 38 of 48





MANMADE CONSTRAINTS MAP M10

PREPARED BY TES FIGURE 39 of 48

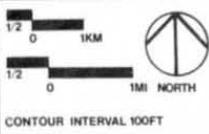


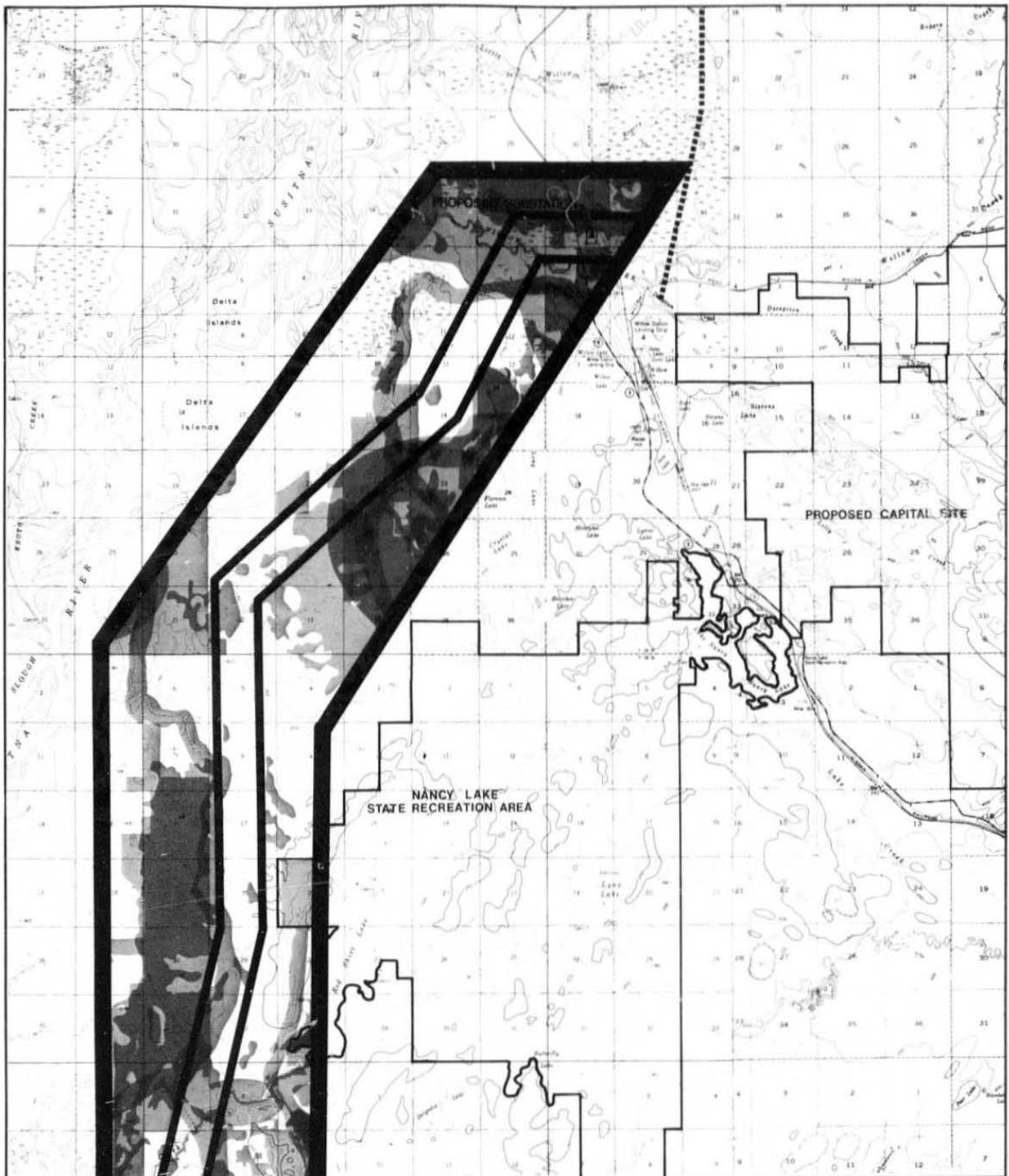
SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

MANMADE CONSTRAINTS

- RECREATION BOUNDARIES
 - CAMP SITE
 - - - RECREATION TRAIL
 - NAME GAME REFUGE AREA
- LAND USE AND LAND OWNERSHIP BOUNDARIES
 - EXISTING PRIVATE LAND
 - DEVELOPMENT AREA
 - DISPOSAL AREA
 - - - AGRICULTURAL LAND
 - △ KNOWN ARCHEOLOGICAL SITE
 - AREA OF HIGH ARCHEOLOGICAL POTENTIAL
 - DAM IMPOUNDMENT AREA
 - CABINS, STRUCTURE
- TRANSPORTATION BOUNDARIES
 - AIRPORT AND LANDING STRIP
 - FPL FLOAT PLANE LANDING SITE

- LEGEND**
- EXISTING MAJOR TRANSMISSION LINE
 - PROPOSED INTERTIE
 - RECOMMENDED ROUTE BOUNDARY
 - CORRIDOR BOUNDARY





SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

X SENSITIVE VIEWSHEDS & PROPOSED SCENIC HIGHWAY

BIOLOGICAL CONSTRAINTS

X VEGETATION

X WILDLIFE HABITAT

MANMADE CONSTRAINTS

X RECREATION

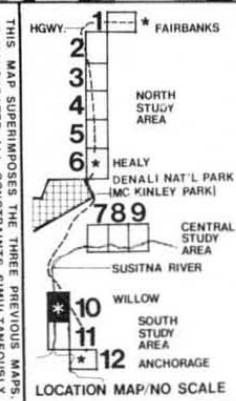
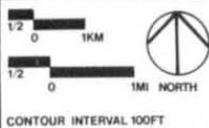
X LAND USE AND LAND OWNERSHIP

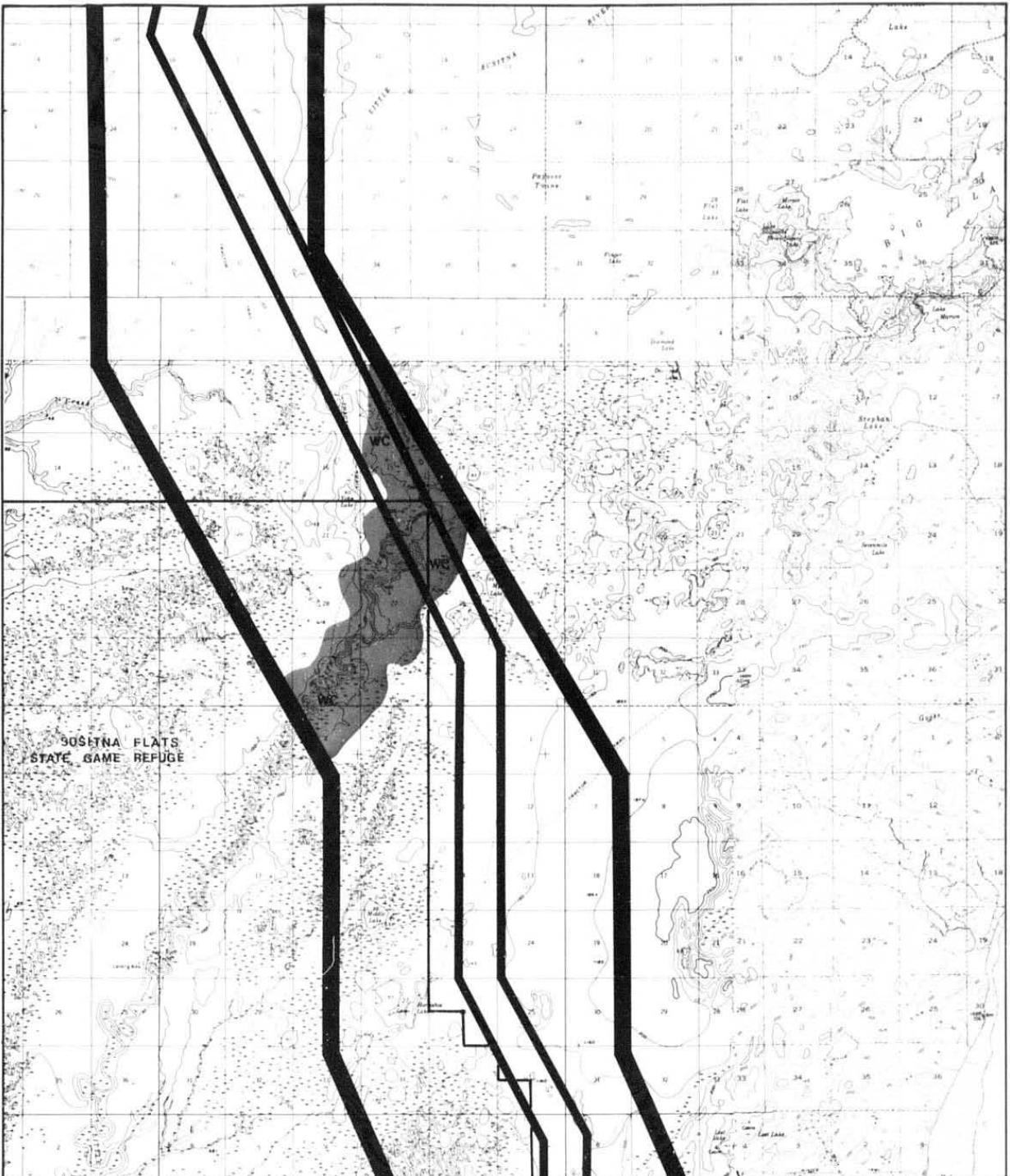
X TRANSPORTATION

X DENOTES CONSTRAINT PRESENT

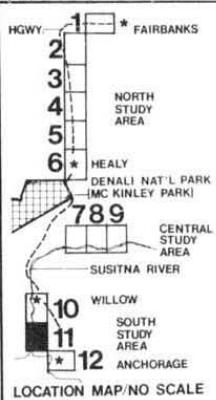
LEGEND

- |||| EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERTIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY
- BOUNDARY





VISUAL CONSTRAINTS MAP M11



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

SENSITIVE VIEWSHEDS AND PROPOSED SCENIC HIGHWAY AREA

PSH PROPOSED SCENIC HIGHWAY AREA

SENSITIVE VIEWSHEDS
HW HIGHWAY
RR RAILROAD
PL PRIVATE LANDS
WC WATER COURSE
RA RECREATION AREA

LEGEND

- |||| EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERTIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY

1/2 0 1KM
1/2 0 1MI NORTH

CONTOUR INTERVAL 100FT



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

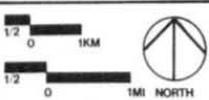
BIOLOGICAL CONSTRAINTS

VEGETATION BOUNDARIES
 WSG WET SEDGE GRASS
 SPF WET SPRUCE/POTENTIAL PERMAFROST AREA

WILDLIFE BOUNDARIES
 SAL SALMON PRESENT
 SWAN SWAN NEST AREA [WITH 1 MI. RAD. BUFFER ZONE]
 ACTIVE NEST SITES 1980-81 [WITH 1 MI. RAD. BUFFER ZONE]
 GE GOLDEN EAGLE
 BE BALD EAGLE
 GF GYRFALCON
 GH GOSHAWK
 UN UNKNOWN

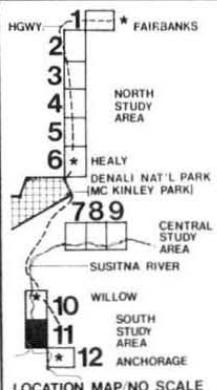
LEGEND

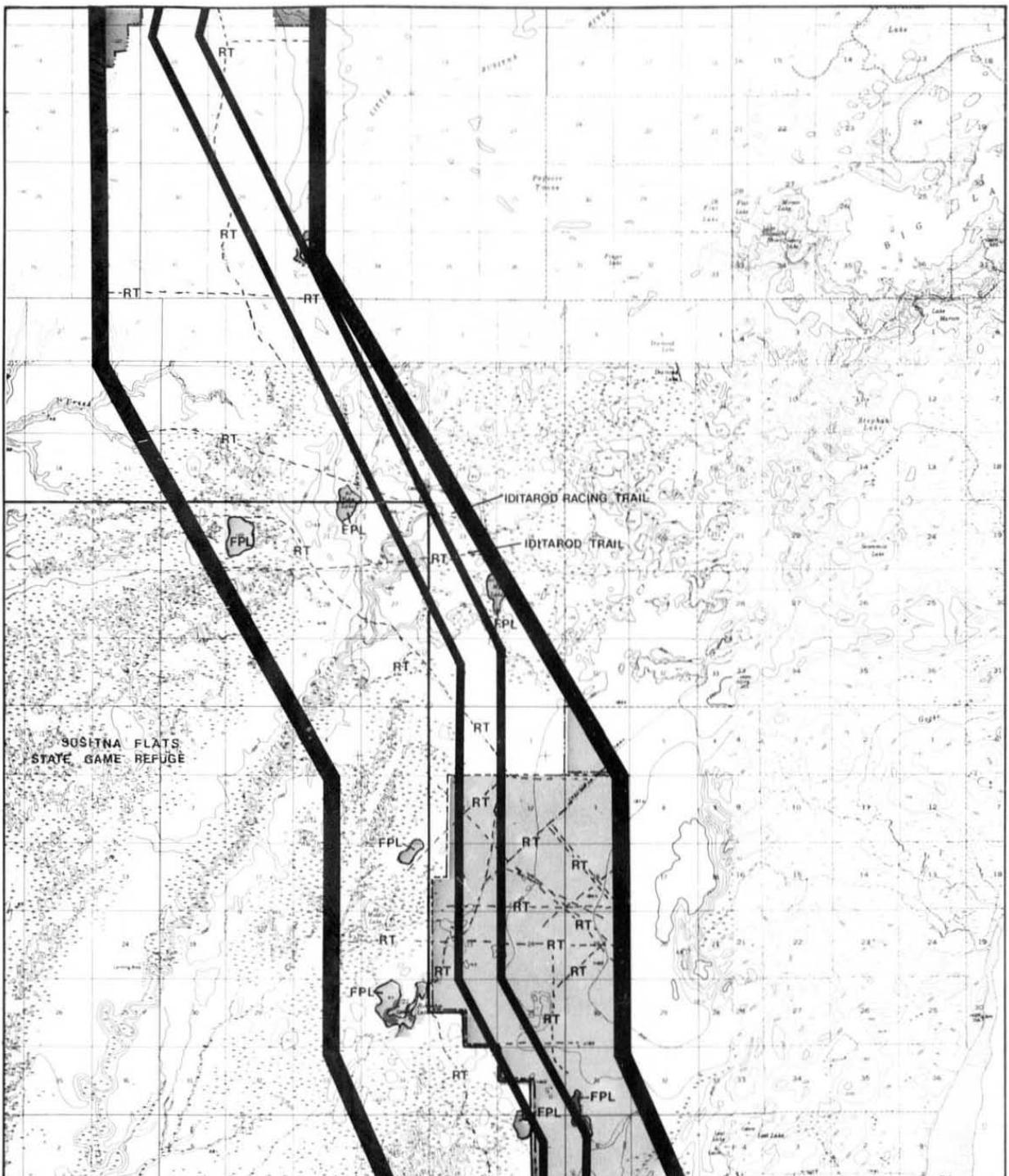
- EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INTERTIE
- RECOMMENDED ROUTE BOUNDARY
- CORRIDOR BOUNDARY



**BIOLOGICAL
CONSTRAINTS**
MAP M11

PREPARED BY TES FIGURE 42 of 48





MANMADE
CONSTRAINTS
MAP M11

PREPARED BY TES

FIGURE 43 of 48

A vertical map of Alaska's interior region. On the left, a vertical scale shows state highway numbers 1 through 12. Highway 1 is at the top, ending at a star labeled "FAIRBANKS". Highway 12 is at the bottom, ending at a star labeled "ANCHORAGE". Between these two endpoints are stars for "HEALY", "DENALI NAT'L PARK (MC KINLEY PARK)", and "SUSITNA RIVER". A dashed line connects the stars for HEALY, DENALI, and SUSITNA RIVER. To the right of the highway numbers, the words "NORTH STUDY AREA" are written vertically. To the right of the Susitna River star, the words "CENTRAL STUDY AREA" are written vertically. At the bottom, between highways 10 and 11, is a box containing a star and the word "WILLOW". Below this box, between highways 10 and 12, is another box containing a star and the words "SOUTH STUDY AREA".

SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

MANMADE CONSTRAINTS

- RECREATION BOUNDARIES**
□ CAMP SITE
---RT--- RECREATION TRAIL

NAME GAME REFUGE AREA

- LAND USE AND LAND OWNERSHIP BOUNDARIES
— Existing Private Land
— Development Area
— Disposal Area

- DISPOSAL AREA
AGRICULTURAL LAND
KNOWN ARCHAEOLOGICAL SITE

- KNOWN ARCHEOLOGICAL SITE
..... AREA OF HIGH ARCHEOLOGICAL POTENTIAL

- DIA** DAM IMPOUNDMENT AREA
CABINS, STRUCTURE

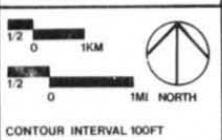
- #### **TRANSPORTATION BOUNDARIES**

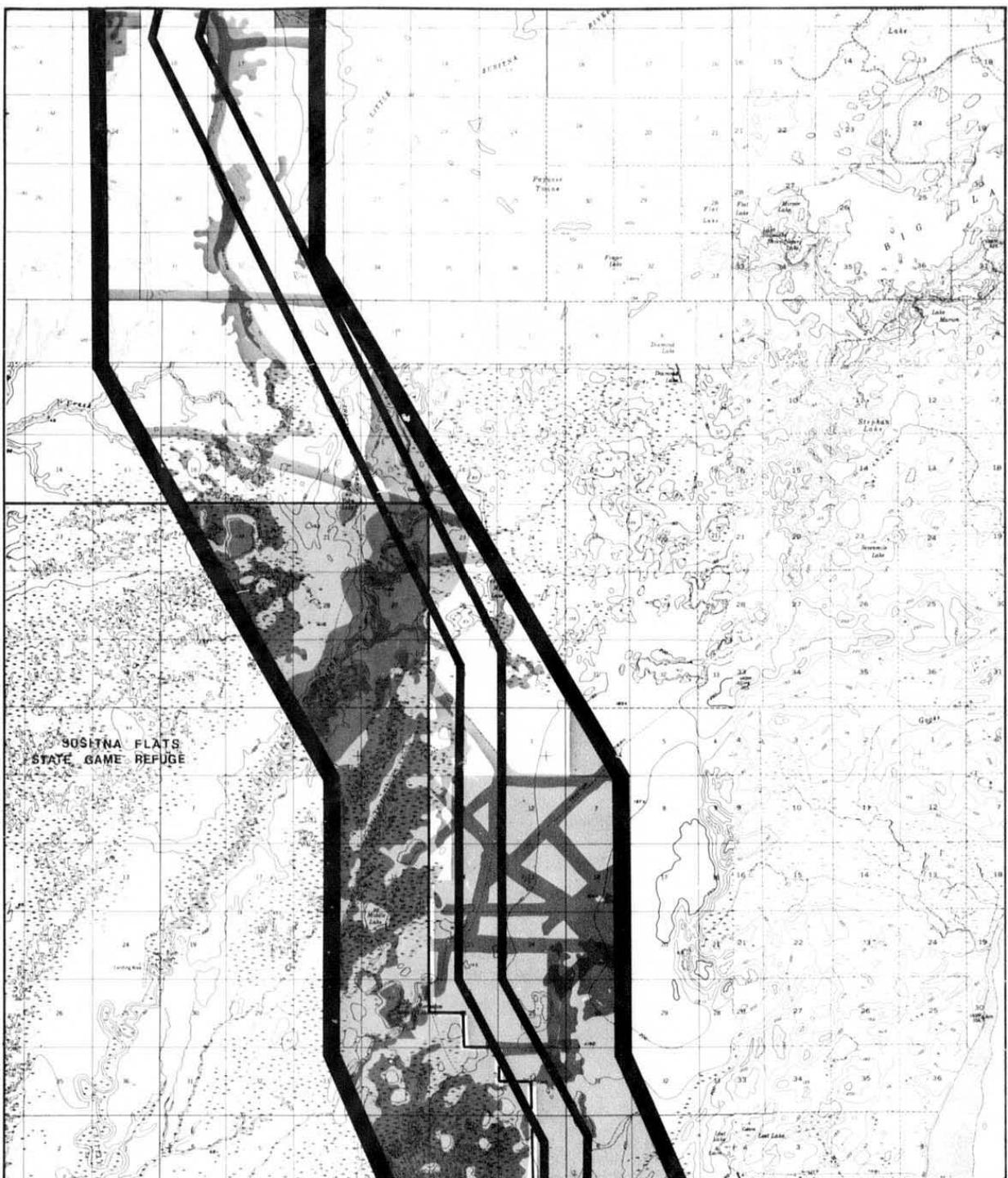
- ~~TRANSPORTATION BOUNDARIES~~
~~AIRPORT AND LANDING STRIP~~
~~FBI FLOAT PLANE LANDING SITE~~

LEGEND

- LEGEND**

 - ===== EXISTING MAJOR TRANSMISSION LINE
 - PROPOSED INTERTIE
 - RECOMMENDED ROUTE BOUNDARY
 - CORRIDOR





SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

VISUAL CONSTRAINTS

X SENSITIVE VIEWSHEDS & PROPOSED SCENIC HIGHWAY

BIOLOGICAL CONSTRAINTS

X VEGETATION

X WILDLIFE HABITAT

MANMADE CONSTRAINTS

X RECREATION

X LAND USE AND LAND OWNERSHIP

X TRANSPORTATION

LEGEND

||||| EXISTING MAJOR TRANSMISSION LINE

■■■ PROPOSED INTERTIE

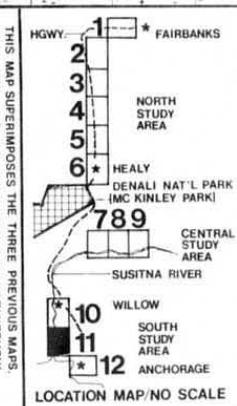
— RECOMMENDED ROUTE BOUNDARY

■ CORRIDOR BOUNDARY

1/2 0 1KM

1/2 0 1MI NORTH

CONTOUR INTERVAL 100FT

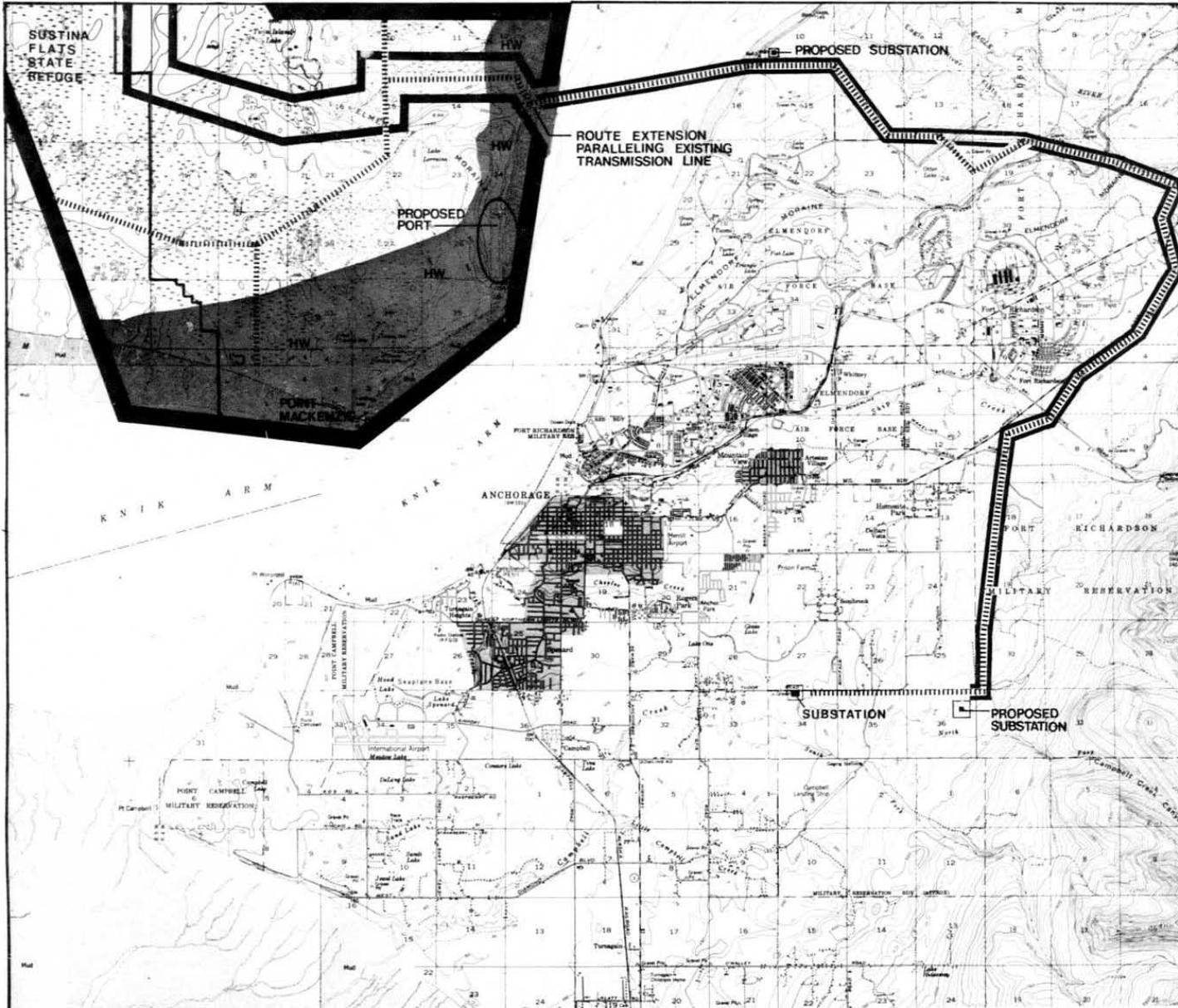


MAP M11

PREPARED BY TES

FIGURE 44 of 48

AGCIS



SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

LEGEND

VISUAL CONSTRAINTS

SENSITIVE VIEWSHEDS AND PROPOSED SCENIC HIGHWAY AREA

SENSITIVE VIEWSHEDS

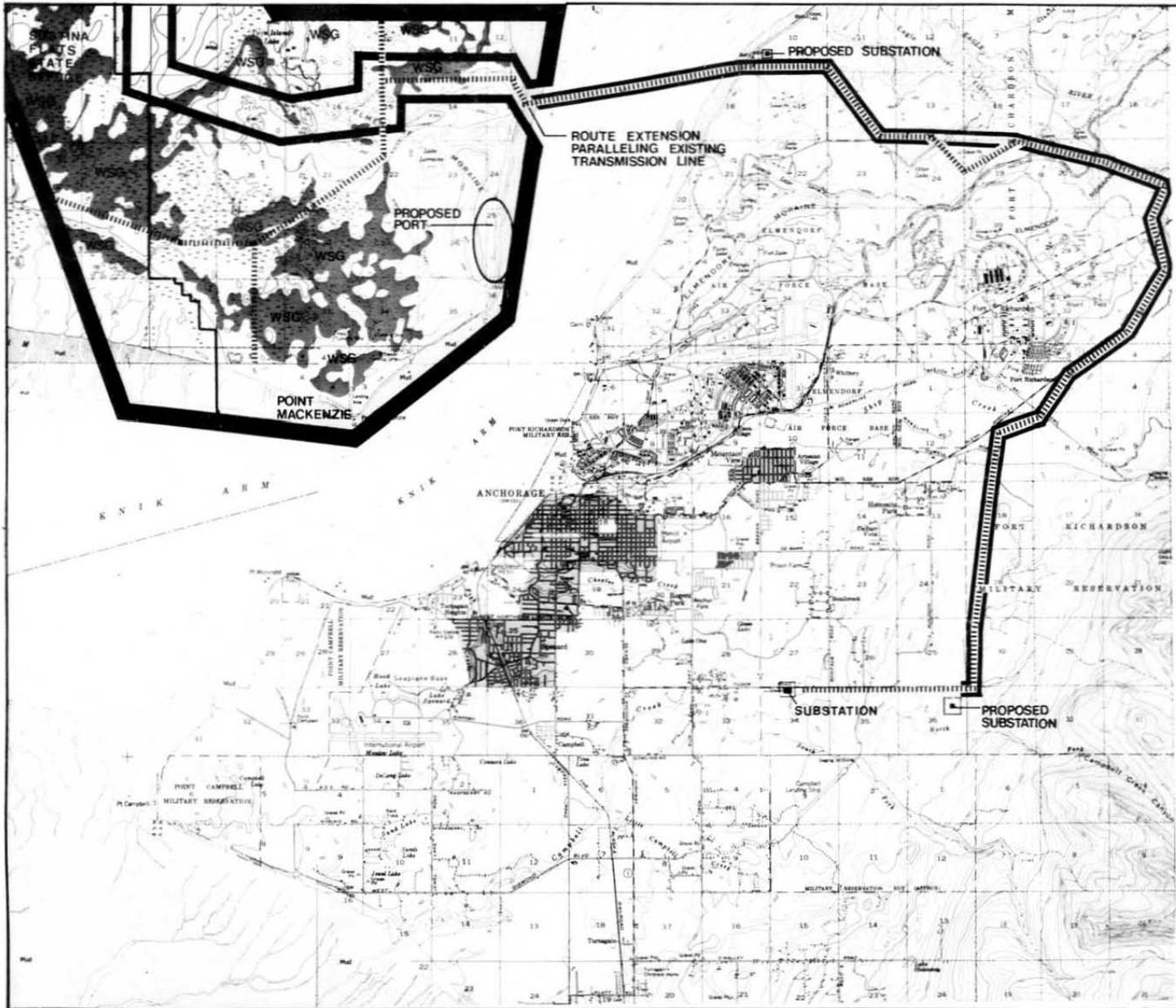
HIGHWAY	RAILROAD	PRIVATE LANDS	WATER COURSE	RECREATION AREA
HW	RR	PL	WC	RA

HW RR PL WC RA

UAL NSTRRAINTS P M12

PREPARED BY TES FIGURE 45 of 48



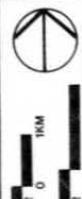


SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

LEGEND

- The legend includes:

 - EXISTING MAJOR TRANSMISSION LINE**: Represented by a solid line.
 - PROPOSED INTERTIE**: Represented by a dashed line.
 - RECOMMENDED ROUTE BOUNDARY**: Represented by a thick black line.
 - CORRIDOR BOUNDARY**: Represented by a thin black line.
 - DISTANCES**: Indicated by vertical bars with labels: 0, 1/2, 1 KM, and 1/2.



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SUSITNA HYDROEL ALASKA POWER

BIOLOGICAL CONSTRAINTS

- VEGETATION BOUNDARIES**
WSG WET SEDGE GRASS
SPF WET SPRUCE/POTENTIAL PERMAFROST AREA

WILDLIFE BOUNDARIES

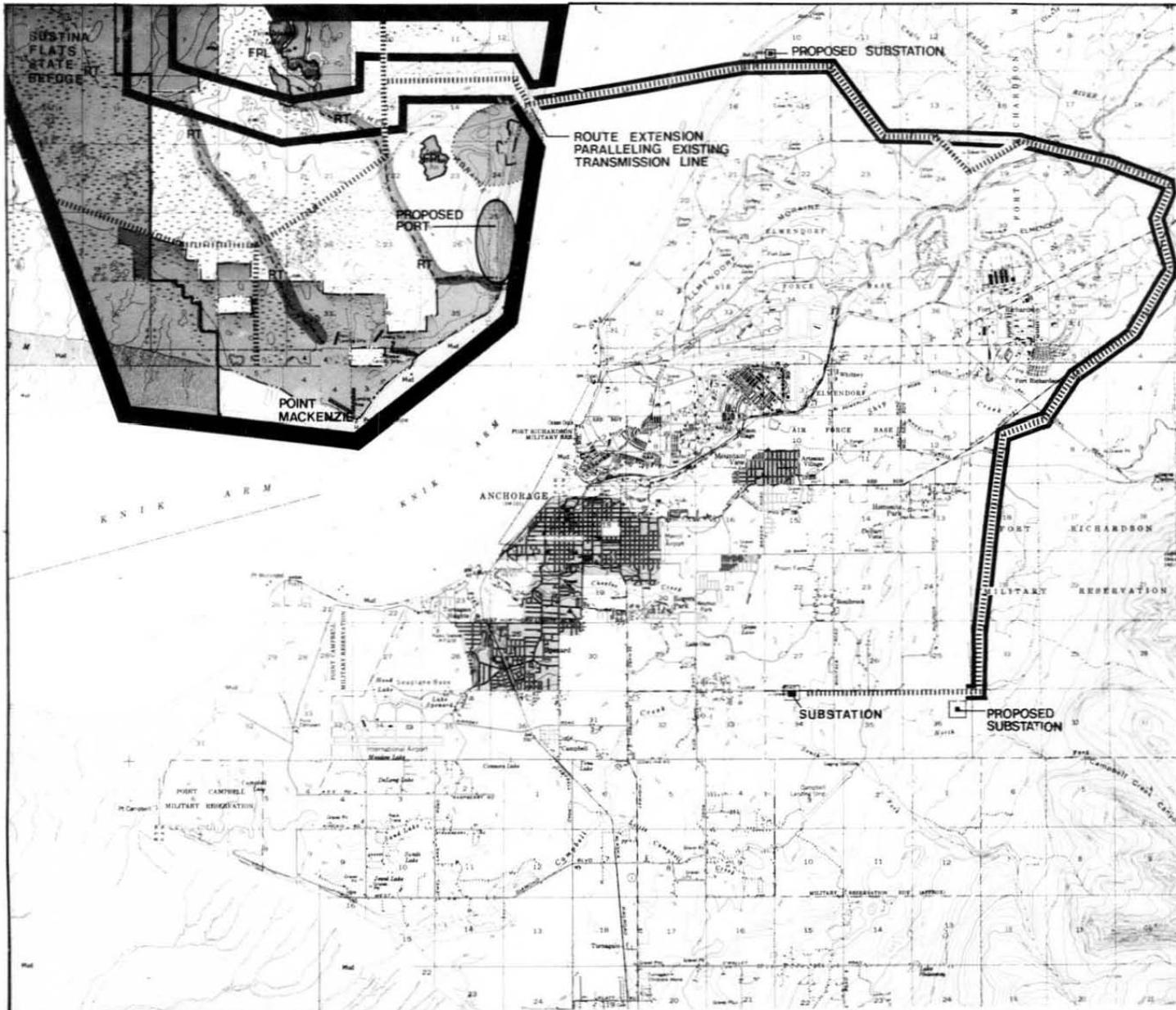
SAL	SALT MARSH PRESENT
★	PREFERRED FACON PRIME HABITAT
SWAN	SWAN NEST AREA WITH 1 MI. RAD. BUFFER
◆	ACTIVE NEST SITES 1980 - 81 (WITH 1 MI. RAD.)
GE	GOLDEN EAGLE
BE	Bald Eagle
OF	GYRFALCON
GH	GOSHAWK
UN	UNKNOWN

ANCHORAGE

**BIOLOGICAL
CONSTRAINTS**
MAP M12

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SUSITNA HYDROELECTRIC PROJECT ALASKA POWER AUTHORITY

LEGEND

- EXISTING MAJOR TRANSMISSION LINE
- PROPOSED INFERTILE CORRIDOR
- ROUTE BOUNDARY
- ROUTE
- PROPOSED SUBSTATION
- CONTOUR INTERVAL 100 FT
- 0 1 MI NORTH
- 0 12 KM

MANMADE CONSTRAINTS

- RECREATION BOUNDARIES
- CAMPSTEAD
- RT NAME
- RECREATION TRAIL
- NAME
- LAND USE AND LAND OWNERSHIP BOUNDARIES
- EXISTING PRIVATE LAND
- DISPOSAL AREA
- AGRICULTURAL LAND
- KNOWN ARCHAEOLOGICAL SITE
- AREA OF HIGH ARCHAEOLOGICAL POTENTIAL
- DAM IMPOUNDMENT AREA
- CABINS, STRUCTURE
- TRANSPORTATION BOUNDARIES
- AIRPORT AND LANDING STRIP
- FLOAT PLANE LANDING SITE
- FPL



MANMADE CONSTRAINTS MAP M12

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