National Mapping Program
Technical Instructions

Part 5
Typography

Standards for 1:100,000-Scale Quadrangle Maps

U.S. Department of the Interior
U.S. Geological Survey
National Mapping Division

CONTENTS

Page

5. Typography

Appendix 5-A Style Sheet

Standards for 1:100,000-Scale Quadrangle Maps
Part 5: Typography

CONTENTS

FEATURE CATEGORY	PLATE	PAGE
Populated Places	114	1
Buildings and Related Features	114	1
Railroads and Related Features	114	2
Ruins and Sites	114	2
Caves, Mines, Oil and Gas Fields, Pits and Lava Flows	114	2
Sand and Gravel Areas	114	3
Transmission Lines, Pipelines and Related Features	114	3
Dams and Locks	114	3
Piers and Docks	114	3
Cemeteries	114	4
Boundaries	114	4
Civil Township Names	114A	4
Bathymetric Contours	114	4
Bathymetric Features	114	5
	114A	5
Highways, Roads and Related Features	114	5
Highway and Road Route Markers	124	5
Airports	114	6
Offshore Platforms and Pipelines	114	6
	114A	6
Miscellaneous Culture	114	6
Hypsographic Features		
Spot, Areal and Broad Features	114	7
Narrow, Canyon-like Linear Features	114	7
Public Land Survey System and other Land Lines	124	8
Offshore Protraction Survey Data	126	8
Contours and Related Features	136	8
	114	8
Hydrographic Features		
Canals and Aqueducts	142	9
Wells and Springs	142	9
Glaciers	142	9
Rapids and Waterfalls	142	9
Submerged Areas and Bogs	142	9
	114	10
Land Subject to Innundation	142	10
Oceans, Lakes, Ponds, Reservoirs and other Areas	142	10
Rivers and Streams	142	11
Index		12-15

Standards for 1:100,000-Scale Quadrangle Maps
Part 5: Typography

FEATURE CATEGORY: POPULATED PLACES

NAME	PLATE NO. 114	TYPE	
Over 500,000 population		SM-16 CAPS	WASHINGTON
100,000-500,000 pop.		SM-14 CAPS	ATLANTA
50,000-100,000 pop.		SM-14 C&L	Wilmington
25,000-50,000 pop.		SM-12 C&L	Annandale
5,000-25,000 pop.		SM-10 C&L	Salisbury
1,000-5,000 pop.		SM-8 C&L	Cape Charles
Less than 1,000 pop.		SM-7 C&L	Arvonia
Rural (unpopulated)		SM-6 C&L	Evergreen
Remote area (not in Rand McNally)		SM-6 C&L	Cheapside

Where a populated area is listed as a part of a larger locality, the name is shown with SM-7 type, Caps and Lower Case

FEATURE CATEGORY: BUILDINGS AND RELATED FEATURES

NAME/LABEL	PLATE NO. 114	TYPE
Landmark buildings (such as hospital, university, college)		SL 6,7 or 8 C&L
Stadium		UL-6 C&L

LABEL

Beacon	UL-6 C&L
Fish hatchery	UL-6 C&L
Lookout	UL-6 C&L
Masonry reservoir	UL-6 C&L
Other landmark object	UL-6 C&L
Pumping station	UL-6 C&L
Radio tower	UL-6 C&L
Sewage disposal plant	UL-6 C&L
Tank	UL-6 C&L
Tank farm	UL-6 or 8 CAPS or C&L
Water filtration plant	UL-6 C&L
Wind generator	UL-6 C&L

Standards for 100,000-Scale Quadrangle Maps
Part 5: Typography

FEATURE CATEGORY: RAILROADS AND RELATED FEATURES

NAME	PLATE NO. 114	TYPE
Railroads		UI-6 CAPS
Railroad bridge		UI-4.5 CAPS
Railroad tunnel		UI-4.5 CAPS
LABEL		
Abandoned railroad		UI-4.5 CAPS
Cog railway		UI-6 CAPS
Incline railway		UI-6 CAPS
Number of tracks (when more than 2 tracks)		UI-4.5 CAPS
Rapid transit		UI-6 CAPS
Railroad ferry		UI-4.5 CAPS

FEATURE CATEGORY: RUINS AND SITES

NAME/LABEL	PLATE NO. 114	TYPE
Archaeological site		UL-6 C&L
Cliff dwelling		UL-6 C&L
Ruins		UL-6 C&L

FEATURE CATEGORY: CAVES, MINES, OIL AND GAS FIELDS, PITS AND LAVA FLOWS

NAME/LABEL	PLATE NO. 114	TYPE
Gas field		UL-6 or 8 C&L
Oil field		UL-6 or 8 C&L
NAME		
Cave		UL-6 C&L
Mine shaft		UL-6 C&L
Mine tunnel		UL-6 C&L
LABEL		
Clay pit		UL-6 C&L
Gravel pit Not labeled		UL-6 C&L
Lava		UL-6 C&L
Mine dump		UL-6 C&L
Open pit mine		UL-6 C&L
Sandpit		UL-6 C&L
Strip mine Not labeled		UL-6 C&L
Tailings		UL-6 C&L
Quarry Not labeled		UL-6 C&L

Standards for 1:100,000-Scale Quadrangle Maps
Part 5: Typography

FEATURE CATEGORY: SAND AND GRAVEL AREAS

LABEL	PLATE NO. 114	TYPE
Mud		UL-6 to 10 C&L
Sand area		UL-6 to 10 C&L
Sand dunes		UL-6 C&L
Shifting sand		UL-6 C&L
Tailings pond		UL-6 C&L

FEATURE CATEGORY: TRANSMISSION LINES, PIPELINES AND RELATED FEATURES

LABEL	PLATE NO. 114	TYPE
Aboveground pipeline		UI-5 CAPS
Monorail		UI-5 CAPS
Power substation		UL-6 CAPS
Ski lift		UI-5 CAPS
Telephone-telegraph line		UI-5 CAPS
Tramway		UI-5 CAPS

FEATURE CATEGORY: DAMS AND LOCKS

NAME	PLATE NO. 114	TYPE
Masonry dam		UL-6 C&L
Weir		UL-6 C&L

LABEL	
Canal lock	UL-6 C&L
Dam with lock (navigable waterways)	UL-6 C&L
Sluice gate	UL-6 C&L

FEATURE CATEGORY: PIERS AND DOCKS

LABEL	PLATE NO. 114	TYPE
Drydock		UL-6 C&L

Standards for 1:100,000-Scale Quadrangle Maps
Part 5: Typography

FEATURE CATEGORY: CEMETERIES

NAME	PLATE NO. 114	TYPE
National Cemetery		UL-6 or 8 C&L
NAME/LABEL		
Other cemetery		UL-6 C&L

FEATURE CATEGORY: BOUNDARIES

NAME/LABEL	PLATE NO. 114	TYPE
County, parish, Alaska boundary. municipio, judicial division		SM-8 CAPS
National, State or territorial		SM-8 CAPS
National or State forest, monument, park, or reservation		SL-6 to 18 CAPS
County, regional or city park		UL-6 to 10 CL
LABEL		
Indefinite boundary or clarification label		SL-6 CAPS

FEATURE CATEGORY: CIVIL TOWNSHIP NAMES

LABEL	PLATE NO. 114A	TYPE
Civil township name		SL-6 to 16 CAPS

FEATURE CATEGORY: BATHYMETRIC CONTOURS

LABEL	PLATE NO. 114	TYPE
Approximate primary		ULI-6
Approximate supplementary		ULI-6
Depression primary		ULI-6
Index primary		ULI-6
Primary		ULI-6
Rise primary inside depression		ULI-6
Supplementary		ULI-6
Supplementary depression		ULI-6
Supplementary rise in depression		ULI-6

Standards for 1:100,000-Scale Quadrangle Maps
Part 5: Typography

FEATURE CATEGORY: BATHYMETRIC FEATURES

LABEL	PLATE NO. 114	TYPE
Coral reef		UL-6 C&L
Gas well		UL-6 C&L
Holiday area		UI-4.5 to 9 C&L
Inadequate survey area		UI-4.5 to 9 C&L
Light		UL-6 C&L
Oil well		UL-6 C&L
Rock reef		UL-6 C&L
Spoil area		UI-4.5 to 9 C&L
Submerged jetty		UI-4.5 to 9 C&L

NAME	PLATE NO. 114A	TYPE
Banks, shoals, ledges, shelves and other submarine features		UI-8 C&L

FEATURE CATEGORY: HIGHWAYS, ROADS AND RELATED FEATURES

NAME/LABEL	PLATE NO. 114	TYPE
Class 5 road, trail		UI-4.5 CAPS
Parkway, expressway		UI-5 CAPS
Racetrack		UL-6 C&L
Raceway		UL-6 C&L
Toll road		UI-4.5 CAPS

NAME	
Bridge	UI-5 CAPS
Tunnel	UI-5 CAPS

LABEL	
Ferry	UI-4.5 CAPS
Under construction	UI-4.5 CAPS
Old railroad grade (dismantled railroad)	UI-4.5 CAPS

FEATURE CATEGORY: HIGHWAY AND ROAD ROUTE MARKERS

NAME	PLATE NO. 124	TYPE
Highway and road route markers		Plates 9, 9A, and 9K

Standards for 1:100,000-Scale Quadrangle Maps
Part 5: Typography

FEATURE CATEGORY: AIRPORTS

NAME/LABEL	PLATE NO. 114	TYPE
Airport		UL-6 to 8 CAPS or C&L
Landing field		UL-6 C&L
Landing strip		UL-6 C&L
Large heliport		UL-6 C&L

FEATURE CATEGORY: OFFSHORE PLATFORMS AND PIPELINES

LABEL	PLATE NO. 114	TYPE
Gas platform		UL-6 C&L
Oil platform		UL-6 C&L

LABEL	PLATE NO. 114A	TYPE
Submerged pipeline		UI-5 CAPS
Submerged sewerline		UI-5 CAPS

FEATURE CATEGORY: OTHER MISCELLANEOUS CULTURE

LABEL	PLATE NO. 114	TYPE
Campground		UL-6 C&L
Corral		UL-6 C&L
Gaging Station		UL-6 C&L
Picnic area		UL-6 C&L
Port of entry		UL-6 C&L
Spot elevation		UI-5
U.S. Location Monument		UL-6 CAPS
U.S. Mineral Monument		UL-6 CAPS

Standards for 1:100,000-Scale Quadrangle Maps
Part 5: Typography

FEATURE CATEGORY: HYPSOGRAPHIC FEATURES--SPOT, AREAL OR BROAD FEATURES

NAME	PLATE NO. 114	TYPE
Large regional features		UI-12 TO 16 CAPS
Features 9.5 miles or more in length		UI-12 CAPS
Features 6.0-9.5 miles in length		UI-11 CAPS
Features 4.5-6.0 miles in length		UI-11 or 12 CAPS
Features 2.5-4.5 miles in length		UI-11 C&L
Features 0.5-2.5 miles in length		UI-9 C&L
Islands, gaps, points, knobs, tops, balds; also features less than 0.5 miles in length		UI-6 to 9 C&L

Note: Letter space for large features as necessary

FEATURE CATEGORY: HYPSOGRAPHIC FEATURES--NARROW, CANYON-LIKE LINEAR FEATURES

NAME	PLATE NO. 114	TYPE
Large regional features		UI-12 to 14 CAPS
Features 12.5 miles or more in length		UI-12 CAPS
Features 9.5 to 12.5 miles in length		UI-11 CAPS
Features 6.0 to 9.5 miles in length		UI-12 C&L
Features 4.5 to 6.0 miles in length		UI-11 C&L
Features 2.5 to 4.5 miles in length		UI-9 C&L
Features up to 2.5 miles in length		UI-6 C&L

Note: Letter space for large features as necessary

FEATURE CATEGORY: PUBLIC LAND SURVEY SYSTEM AND OTHER LAND LINES

NAME	PLATE NO. 124	TYPE
Base line		SL-6 CAPS
Donation land claim		SL-6 to 12 CAPS
Land grant line		SL-6 to 12 CAPS
Principal meridian		SL-6 CAPS
LABEL		
Old Indian reservation boundary		SL-6 to 12 CAPS
Old Indian treaty line		SL-6 to 12 CAPS
Township numbers		U-6
Range numbers		U-6
Section numbers		U-6

FEATURE CATEGORY: OFFSHORE PROTRACTION SURVEY DATA

LABEL	PLATE NO. 126	TYPE
Offshore protraction survey labels		U-10

FEATURE CATEGORY: CONTOURS AND RELATED FEATURES

LABEL	PLATE NO. 136	TYPE
Approximate		UI-5
Index		UI-5
Intermediate		UI-5
Supplementary		UI-5

NAME/LABEL	PLATE NO. 114	TYPE
Dike		UI-4.5 CAPS
Levee		UI-4.5 CAPS
Continental Divide		UI-7 CAPS
Tennessee Valley Divide		UI-7 CAPS

NAME	PLATE NO. 114	TYPE
Earth dam		UL-6 C&L

Standards for 1:100,000-Scale Quadrangle Maps
Part 5: Typography

FEATURE CATEGORY: HYDROGRAPHIC FEATURES--CANALS AND AQUEDUCTS

NAME/LABEL	PLATE NO. 142	TYPE
Abandoned aqueduct		UI-4.5 CAPS
Abandoned canal		UI-4.5 CAPS
Abandoned flume		UI-4.5 CAPS
Aboveground water pipeline		UI-5 CAPS
Aqueduct		UI-5 CAPS
Canal		UI-5 CAPS
Ditch		UI-5 CAPS
Flume		UI-5 CAPS

LABEL	PLATE NO. 142	TYPE
Elevated aqueduct		UI-4.5 CAPS
Elevated flume		UI-4.5 CAPS
Elevated conduit		UI-4.5 CAPS
Underground aqueduct		UI-4.5 CAPS
Underground flume		UI-4.5 CAPS
Underground penstock		UI-4.5 CAPS
Underground siphon		UI-4.5 CAPS
Underground water pipeline		UI-4.5 CAPS

FEATURE CATEGORY: WELLS AND SPRINGS

NAME/LABEL	PLATE NO. 142	TYPE
Spring		SLI-6 C&L
Water well		SLI-6 C&L; UL-6 C&L if named

FEATURE CATEGORY: GLACIERS

NAME/LABEL	PLATE NO. 142	TYPE
Glaciers		SLI-6 C&L or SLI-12 to 16 CAPS

FEATURE CATEGORY: RAPIDS AND WATERFALLS

NAME/LABEL	PLATE NO. 142	TYPE
Rapids		SLI-6 C&L
Waterfall		SLI-6 C&L

Standards for 1:100,000-Scale Quadrangle Maps
Part 5: Typography

FEATURE CATEGORY: SUBMERGED AREAS AND BOGS

LABEL	PLATE NO. 142	TYPE
Intercoastal waterway		UI-6 CAPS

LABEL	PLATE NO. 114	TYPE
Alkali flat		UL-6 C&L
Cranberry bog		UL-6 C&L

FEATURE CATEGORY: LAND SUBJECT TO INNUNDATION

LABEL	PLATE NO. 142	TYPE
Water surface elevation		UI-5

FEATURE CATEGORY: OCEANS, LAKES, PONDS, RESERVOIRS AND OTHER AREAS

NAME	PLATE NO. 142	TYPE
Large open bodies of water		SLI-12 to 18 CAPS
Lakes and reservoirs, 3 miles and over in length		SLI-10 CL to 11 CAPS
Ponds, lakes and reservoirs, 2 to 3 miles in length		SLI-9 C&L
Ponds, lakes and reservoirs, 1 to 2 miles in length		SLI-8 C&L
Ponds, lakes and reservoirs, 2,000 ft to 1 mile in length		SLI-7 C&L
Ponds, lakes and reservoirs, 500 ft to 2,000 ft in length		SLI-6 C&L
Smaller coves and bays		SLI-6 to 8 C&L
Duck pond		UL-6
Salt evaporator		UL-6
Note: Label perennial salt lake or pond "Salt"		UL-6 C&L

Standards for 1:100,000-Scale Quadrangle Maps
Part 5: Typography

FEATURE CATEGORY: RIVERS AND STREAMS

NAME	PLATE NO. 142	TYPE
Rivers over 4,000 ft in width		SLI-11 CAPS
Rivers 2,000-4,000 ft in width		SLI-10 CAPS
Rivers 1,000-2,000 ft in width		SLI-9 CAPS
Rivers 200-1,000 ft in width		SLI-8 CAPS
Channel-impounded river		SLI-8 to 11 CAPS
Single-line streams over 15 miles in length		SLI-9 TO 10 C&L
Single-line streams 8 to 15 miles in length		SLI-8 C&L
Single-line streams 4 to 8 miles in length		SLI-7 C&L
Single-line streams 2 to 4 miles in length		SLI-6 C&L

INDEX

FEATURE	PLATE	PAGE
Abandoned aqueduct	142	9
Abandoned canal	142	9
Abandoned flume	142	9
Abandoned railroad	114	2
Aboveground pipeline	114	3
Aboveground water pipeline	142	9
Airport	114	6
Alkali flat	114	10
Aqueduct	142	9
Archaeological site	114	2
Banks (bathymetric)	114A	5
Base line	124	8
Bathymetric contours	114	4
Bays	142	10
Beacon	114	1
Boundaries	114	4
Bridge	114	5
Campground	114	6
Canal	142	9
Canal lock	114	3
Cave	114	2
Cemeteries	114	4
Civil township name	114A	4
Class 5 road, trail	114	5
Clay pit	114	2
Cliff dwelling	114	2
Cog railway	114	2
Continental Divide	114	8
Contours (bathymetric)	114	4
Contours (topographic)	136	8
Coral reef (bathymetric)	114	5
Corral	114	6
Coves	142	10
Cranberry bog	114	10
Dam with lock	114	3
Dike	114	8
Dismantled railroad	114	5
Ditch	142	9
Donation land claim	124	8
Drydock	114	3
Duck pond	114	10
Earth dam	114	8
Elevated aqueduct	142	9
Elevated conduit	142	9
Elevated flume	142	9
Expressway	114	5

Standards for 1:100,000-Scale Quadrangle Maps
Part 5: Typography

FEATURE	PLATE	PAGE
Ferry	114	5
Fish hatchery	114	1
Flume	142	9
Gaging station	114	6
Gas field	114	2
Gas platform (bathymetric)	114	6
Gas well (bathymetric)	114	5
Gravel pit	114	2
Heliport, small	114	1
Heliport, large	114	6
Highway route markers	124	5
Highway under construction	114	5
Holiday area (bathymetric)	114	5
Hypsographic features	114	7
Inadequate survey area (bathymetric)	114	5
Incline railway	114	2
Intercoastal waterway	142	9
Lakes	142	10
Land grant line	124	8
Landing field	114	6
Landing strip	114	6
Landmark building	114	1
Landmark object	114	1
Large heliport	114	6
Lava	114	2
Ledges (bathymetric)	114A	5
Levee	114	8
Light (bathymetric)	114	5
Limit of offshore protraction survey	126	8
Lookout tower	114	1
Masonry dam	114	3
Masonry reservoir	114	1
Mine dump	114	2
Mine shaft	114	2
Monorail	114	3
Mud	114	3
Number of railroad tracks	114	2
Oceans	142	10
Offshore protraction survey	126	8
Offshore protraction survey labels	126	8
Oil field	114	2
Oil platform (bathymetric)	114	6
Oil well (bathymetric)	114	5
Old Indian reservation boundary	124	8
Old Indian treaty line	124	8
Old railroad grade	114	5
Open pit mine	114	2
Parkway	114	5

Standards for 1:100,000-Scale Quadrangle Maps
Part 5: Typography

FEATURE	PLATE	PAGE
Perennial salt lake	142	10
Picnic area	114	6
Ponds	142	10
Populated places	114	1
Port of entry	114	6
Power substation	114	3
Principal meridian	124	8
Pumping station	114	1
Quarry	114	2
Racetrack	114	5
Raceway	114	5
Radio tower	114	1
Railroad bridge	114	2
Railroad ferry	114	2
Railroad tunnel	114	2
Railroads	114	2
Range numbers	124	8
Rapid transit	114	2
Rapids	142	9
Reservoirs	142	10
Rivers	142	11
Road route markers	124	5
Rock reef (bathymetric)	114	5
Ruins	114	2
Salt evaporator	142	10
Sand area	114	3
Sand dune area	114	3
Sandpit	114	2
Section numbers	124	8
Settlement	114	6
Sewage disposal plant	114	1
Shelves (bathymetric)	114A	5
Shoals (bathymetric)	114A	5
Ski lift	114	3
Sluice gate	114	3
Small heliport	114	1
Spoil area (bathymetric)	114	5
Spring	142	9
Stadium	114	1
Streams	142	11
Strip mine	114	2
Submarine features (bathymetric)	114A	5
Submerged jetty (bathymetric)	114	5
Submerged pipeline (bathymetric)	114A	6
Submerged sewerline (bathymetric)	114A	6
Surveyed section line	124	8

FEATURE	PLATE	PAGE
Tailings	114	2
Tailings pond	114	3
Tank	114	1
Tank farm	114	1
Telephone-telegraph line	114	3
Tennessee Valley Divide	114	8
Toll road	114	5
Town	114	6
Township numbers	124	8
Tramway	114	3
Tunnel	114	5
U.S. Location Monument	114	6
U.S. Mineral Monument	114	6
Underground aqueduct	142	9
Underground flume	142	9
Underground penstock	142	9
Underground pipeline	114	3
Underground siphon	142	9
Underground water pipeline	142	9
Village	114	6
Water filtration plant	114	1
Water surface elevation	142	10
Water well	142	9
Waterfall	142	9
Weir	114	3
Wind generator	114	1