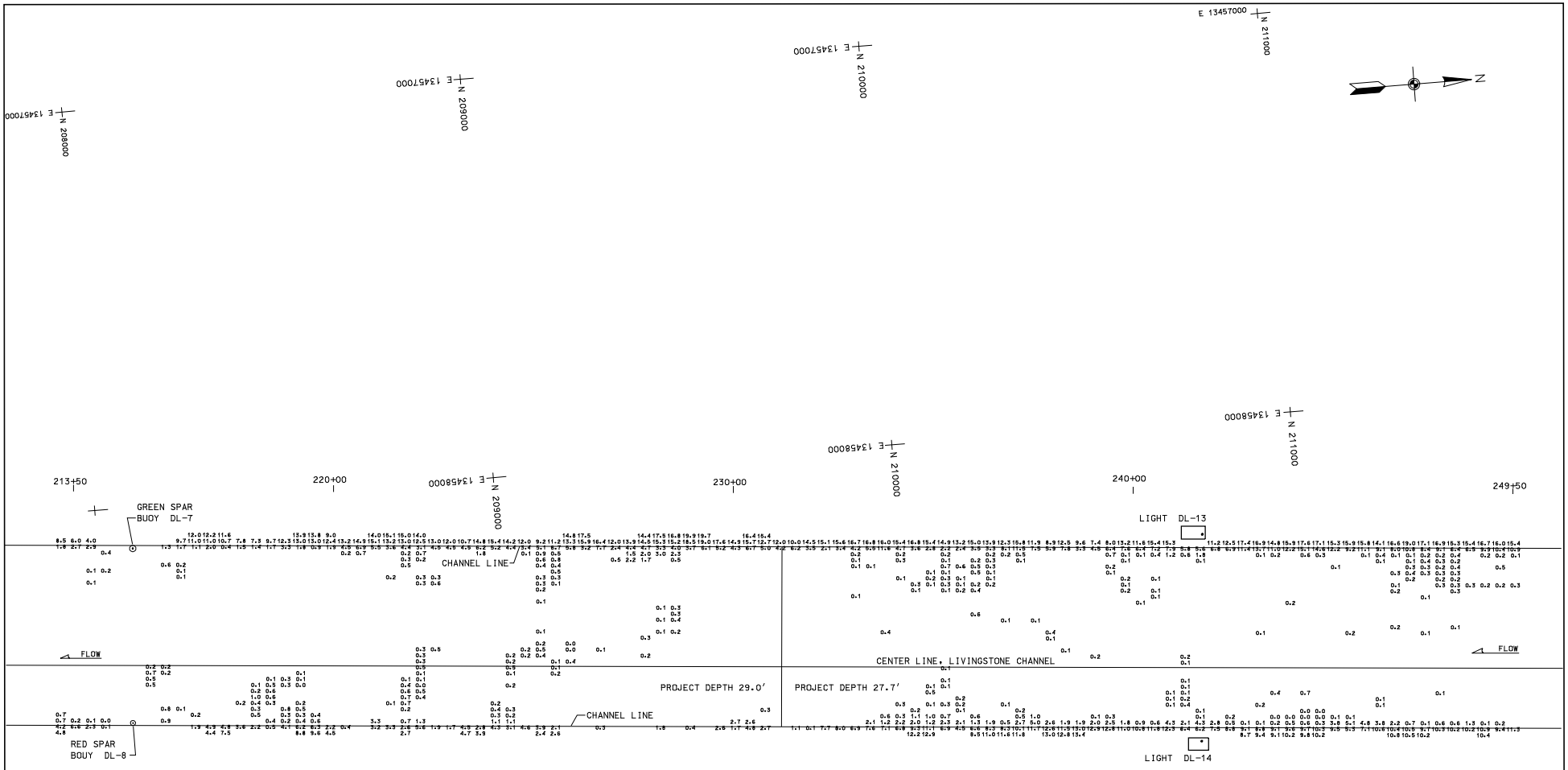

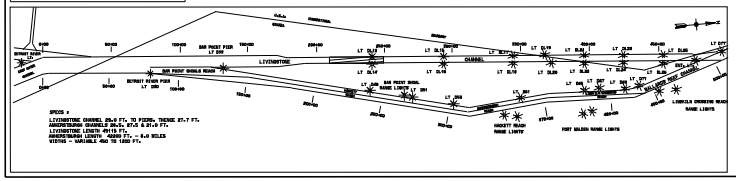

LEGEND

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THE TIME.

LOW WATER DATUM

ELEVATIONS AND PROJECT DEPTHS ARE REFERRED TO INTERNATIONAL GREAT LAKES DATUM. (1955) CORRESPONDING TO THE SLOPING SURFACE OF THE RIVER WHEN LAKE ERIE IS AT ELEVATION 568.6 AND LAKE ST. CLAIR IS AT ELEVATION 571.7 FT. ABOVE MEAN WATER LEVEL AT FATHERS POINT, QUEBEC.

GRID COORDINATES

GRIDS SHOWN ARE BASED ON NATIONAL GEODETIC SURVEY PROJECTION TABLES. STATE OF MICHIGAN, SOUTH ZONE (2113). LAMBERT PROJECTION, 1983 NORTH AMERICAN DATUM.

DIRECTIONS

ALL DIRECTIONS ARE GRID AZIMUTHS REFERRED TO NORTH ZERO.

PROJECT DEPTHS ARE AS SHOWN ON DRAWING.

THE AUTOMATED ELECTRONIC SURVEY WAS CONDUCTED BY FREDRICK J.W. DOUGLAS, PARTY CHIEF, ABOARD THE USACOE SURVEY VESSEL PAJ.

AUTOMATED EQUIPMENT USED

POSITIONING:	STARLINK DGPS
DATA PROCESSOR:	MICRON PC
SOFTWARE:	COASTAL OCEANOGRAPHICS
PLOTTER:	ENCAD, CADJET 2
SONIC SOUNDER:	ECHOSCAN RCU-32

NOTES:

1. GAGES USED WERE OBTAINED FROM DL-13
2. POSITIONS WERE DETERMINED BY GPS REFERENCE BEACON 638, LOCATED AT FORT WAYNE DETROIT, MICHIGAN - FREQUENCY 319 KHZ, 200 BPS
3. TRANSDUCER FREQUENCY USED TO MEASURE DEPTH DATA WAS 214 KHZ AND THE BEAM ANGLE WAS 16.5 DEGREES.

100' 0' 100' 200'
SCALE

NO.	DATE	REVISION	BY

U.S. ARMY ENGINEER DISTRICT, DETROIT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

DETROIT AREA OFFICE — APRIL, 2001

LIVINGSTONE CHANNEL

DETROIT RIVER PROJECTS
CS 213+50 TO CS 249+50
AUTOMATED SWEEP SURVEY RESULTS

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
SUBMITTED BY:
CHIEF, PROJ OPNS SEC — P.E.
APPROVED:
CHIEF, CONSTRUCTION - OPERATIONS DIVISION — P.E.

APPROVAL RECOMMENDED:
CHIEF, OPERATIONS TECHNICAL SUPPORT BRANCH — P.E. — DATE

SCALE AS SHOWN

SHEET 7 OF 14

DRAWING NUMBER
lc7s0401.dgn