## Oklahoma State Highway Dept.

Date

JUNE 9, 1977

MR. RICHARD L. SHEPHEARD, SURVEY ENGINEER

From

DEWAYNE WALDEN, LOCATION ENGINEER

EXTREME HIGHWATER IN WESTERN OKLAHOMA



ON MAY 19, 1977 ASSISTANT SURVEY ENGINEER OSCAR CURNUTT OF THE SURVEY DIVISION CENTRAL OFFICE ADVISED ME THAT RECORD HIGHWATER HAD OCCURRED ALONG THE NORTH FORK OF THE RED RIVER IN THE SAYRE AREA AND THAT WE WOULD NEED INFORMATION PERTAINING TO SUCH. IN-CLUDING ANY OTHER HIGHWATER THAT MIGHT HAVE OCCURRED IN WESTERN OKLAHOMA.

ON MAY 19, 1977 THE FOLLOWING INFORMATION WAS OBTAINED BY THE CLINTON BASED SURVEY CREW.

- 1. SAYRE NEWSPAPER DATED MAY 17, 1977 REPORTED THE FOLLOWING:
  - A. SAYRE REPORTED 3" TO 5.25" OF RAIN OVERNIGHT ON MAY 16, 1977.
  - B. ERICK REPORTED 3" TO 4.5" OF RAIN OVERNIGHT ON MAY 16, 1977.

  - C. TEXOLA RECEIVED 3.5" TO 5" OF RAIN OVERNIGHT ON MAY 16, 1977.

    D. ELK CITY RECEIVED 3.04" OF RAIN OVERNIGHT ON MAY 16, 1977.
  - E. IN 1922 OR 1923 RIVER WATER RAN DOWN MAIN STREET OF SAYRE. SAYRE NEWSPAPER DATED MAY 18, 1977 REPORTED THE FOLLOWING:
  - A. CARMICHAEL BRIDGE ON U.S. 66 SOUTH OF SAYRE WAS CLOSED BECAUSE U.S. 66 SOUTH OF BRIDGE WAS UNDER WATER.
  - B. RIVER CRESTED AT 15 FOOT MARK AT NOON ON MAY 17, 1977.
  - C. RIVER CRESTED 1.5 FEET ABOVE PREVIOUS RECORD SET IN MAY 1959. (SEE PHOTOGRAPH OF HIGHWATER AT SAYRE CITY PARK)
- 2. EXTREME HIGHWATER WAS OBTAINED AND RECORDED ON FLOOD INFORMATION FORMS AT THE FOLLOWING LOCATIONS ON THE NORTH FORK OF RED RIVER ON MAY 19, 1977.
  - A. COUNTY ROAD 5 MILES NORTH OF TEXOLA.
  - B. S.H. 30 BRIDGE 5.5 MILES NORTH OF ERICK.
  - c. old u.s. 66 bridge AT s.w. edge of sayre.
  - D. U.S. 66 BRIDGE (CARMICHAEL BRIDGE) AT SOUTH EDGE OF SAYRE.
  - E. I-40 BRIDGE S.E. OF SAYRE.
  - F. S.H. 34 BRIDGE 3.8 MILES SOUTH OF CARTER (GAUGE STATION).
  - G. S.H. 9 BRIDGE 3 MILES EAST OF GRANITE.
  - H. S.H. 19 BRIDGE 3 MILES EAST OF WARREN.
- -- I. U.S. 62 BRIDGE 9 MILES WEST OF SNYDER.
  - J. S.H. 5 BRIDGE 5 MILES WEST OF TIPTON.
- 3. HIGHWATER WAS OBTAINED AND RECORDED AT MANY CREEKS AND STREAMS IN WESTERN OKLAHOMA. SEE FLOOD INFORMATION FORMS ATTACHED.

- 4. ALL FLOOD INFORMATION FORMS WERE DISCUSSED WITH MR. CURNUTT ON JUNE 7, 1977, AND HE SUGGESTED THAT MORE DETAILED INFORMATION SHOULD BE GIVEN ON FORMS AND A WRITTEN REPORT FURNISHED, ALSO.
- 5. ON MAY 8, 1977 THE U.S.G.S. WATER RESOURCES BRANCH IN OKLAHOMA CITY WERE CONTACTED AND THEY FURNISHED THE FOLLOWING INFORMATION ON THE NORTH FORK OF THE RED RIVER.
  - A. S.H. 34 BRIDGE SOUTH OF CARTER (GAUGE STATION). MAY 17. 1977 8:00PM GAUGE HEIGHT 14.98 FEET (ELEV. \68.69) PEAK DISCHARGE 35,000 C.F.S.

MAY 26, 1959 PREVIOUS RECORD GAUGE HEIGHT 13.42 FEET PEAK DISCHARGE 53,400 C.F.S.

- B. S.H. 44 BRIDGE JUST BELOW LAKE LUGERT DAM (GAUGE STATION). MAY 22, 1977 GAUGE HEIGHT NOT RECORDED PEAK DISCHARGE APPROX. 15.000 C.F.S.
- C. U.S.62 BRIDGE 9 MILES WEST OF SNYDER (GAUGE STATION). GAUGE HEIGHT (POSSIBLE RECORD HEIGHT PUBLISHED MAY 22, 1977 LATER) PEAK DISCHARGE (PUBLISHED LATER).

THESE ARE THE ONLY 3 GAUGE STATIONS IN OKLAHOMA ON THE NORTH FORK OF THE RED RIVER.

A PHOTOGRAPH OF THE S.H. 34 BRIDGE SOUTH OF CARTER, DEPICTING PEAK HIGHWATER ON MAY 17, 1977 WILL BE FORTHCOMING FROM U.S.G.S. IN THE VERY NEAR FUTURE.

MR. MITCHELL OF THE U.S.G.S. WATER RESOURCES OFFICE SHOWED ME GRAPHS AND RECORDS ON THE NORTH FORK OF THE RED RIVER AND HE STATED THAT HE HAD BEEN IN CONTACT WITH U.S.G.S. TEXAS WATER RESOURCES OFFICE AND LEARNED THAT THE RECORD HIGHWATER AT THE CARTER GAUGE STATION WAS CAUSED FROM GENERAL 3" TO 5" RAINS UPSTREAM IN OKLAHOMA AND LESSER AMOUNTS OF RAIN UPSTREAM IN TEXAS. HIS GRAPHS DEPICTED THAT THE UPSTREAM WATERSHED WAS PROBABLY SATURATED FROM GENERAL RAINS PRIOR TO MAY 16, 1977.

6. HIGHWATER IN KINGFISHER OKLAHOMA WAS DESCRIBED IN THE KINGFISHER FREE PRESS NEWSPAPER (DATED MAY 23, 1977) AS THE WORST FLOOD IN FIFTEEN YEARS. 4 INCHES OF RAIN FELL IN KINGFISHER OVERNIGHT ON MAY 20, 1977 AND 4" TO 8" RAINS WERE REPORTED SOUTH AND WEST OF KINGFISHER CAUSING S.H. 33 WEST AND U.S. 81 NORTH TO BE CLOSED ON MAY 21, 1977. SEE PHOTOGRAPHS OF HIGHWATER IN DOWNTOWN KINGFISHER AND FLOOD INFORMATION FORMS ON DEAD INDIAN CREEK, KINGFISHER CREEK AND UNCLE JOHN'S CREEK FOR ADDITIONAL HIGHWATER INFORMATION IN AND AROUND KINGFISHER.

> Niwagne Walden DEWAYNE WALDEN LOCATION ENGINEER

MC: SURVEY DIVISION FILES

COPY: HIGHWATER FILE