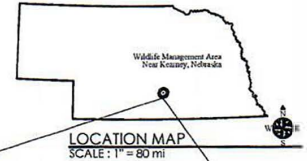


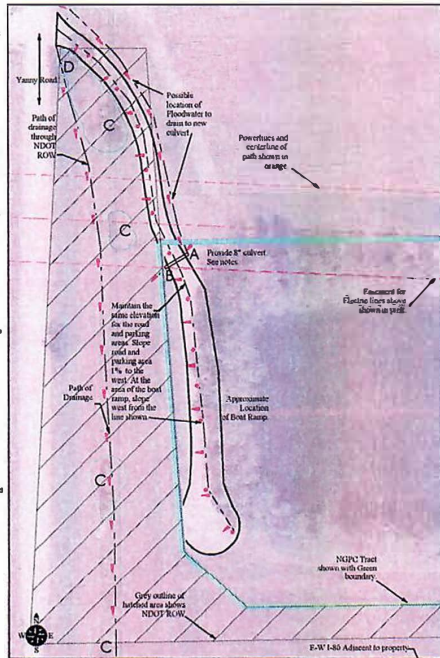
6350 Z1
ATTACHMENT A



ROAD & BOAT REPAIRS
KEA WEST WILDLIFE MANAGEMENT AREA



- **Damage:** Boat ramp/ access road and parking lot @ Kea West WMA
- **General Facility Information for Nebraska Game and Parks Commission (NGPC) property:**
 - Location Description: 301-331 Kea West Avenue S Kearney, NE 68845
 - Start GPS latitude/longitude: 40.67206, -99.10241
 - End GPS latitude/longitude: 40.67106, -99.10260
- **Facility Damage:**
 - Boat Ramp, 18 CY of Concrete, 25 FT long x 20 FT wide x 0.83 FT deep.
 - Boat Ramp, 75 CY of Sand Deposit (Dobra), 25 FT long x 20 FT wide x 4 FT deep.
 - Surface, 250 CY of Access Road and Parking lot Surface (3-4 inch aggregate), 675 FT long x 30 FT wide x 0.333 FT deep.
 - Gravel Base, 303 CY of Access Road and Parking lot Surface (3/4 inch - 1 inch), 675 FT long x 30 FT wide x 0.87 FT deep.
 - FR, 4,500 CY of Access Road and Parking lot, 675 FT long x 30 FT wide x 6 FT deep.
- **Boat Ramp Repair Scope:**
 - Repair damage noted above and return site to pre flood existing conditions. This includes the removal of the existing boat ramp prior to the installation of the new ramp. Note, NGPC will provide the concrete bottom for the marine feature needed on the new poured boat ramp. New ramp shall use the pour and push technique.
- **Add Alternate Scope to Improve Site:**
 - Raise the Access Road starting 18' above up to Yanny Road (ELEV. 2131) rising along 30 feet of Access Road with a gradual slope up 3' above the ground road (to ELEV 2164). Continue road at same elevation with a 1% cross slope to the west for the entire Access Road and Parking area.
 - After the extreme flood, debris was seen on the north side of the access road. Provide an 8" curtain of 4 to 8 ft at elevation 2150. Side below and around the curtain to be clay with proper compaction.
 - At the access to the boat ramp, begin sloping portion of road at the same slope on the ramp to the new ramp maintaining the west portion of the access road at the elevation 2154 with a 1% slope to the west as shown on plan at boat ramp location.
 - The Access Road and Parking lot sides to be built at a maximum allowable side slope of 3:1 with a preferred side slope of 4:1.
 - Calculated approximately 15,344 sq-ft access road and parking area and 1384 ft. of outland area. Estimated 3' of FR at 2500 CY, considering the volume of a 4:1 side slope.
 - Provide base removal at the areas of areas noted at C unless forbidden by the NGPC FRP.
 - Obtain the boat ramp concrete bottom stone from NGPC prior to the boat ramp concrete pour. Ramp to be 6" wide using the pour and push method.
 - Do the lowering if allowed by NGPC stone locate a path for drainage as noted. Provide the drainage under, using the sand removed to build up the road. The sand shall be graded with a minimum 2% fall bottom with and 2:1 sloped sides maximum with, raise if possible. Develop a drainage area with proper slope for the entire area west of the access and parking area without low portions that hold water.
 - At location D remove concrete buried item (See photo B, Sheet 2).



Kea West Wildlife Management Area
SCALE: 1" = 50'



Kea West WMA AERIAL PHOTO
SCALE: 1" = 1000'



INDEX OF DRAWINGS	
ITEM	PAGE
Subarea Location Map	
Area of Work Location Aerial	
Index of Drawings	
Scale Aerial Map	
Scale for New Work	
Site Photos	
Photo Key Plan	

APPROVED	NEBRASKA GAME AND PARKS COMMISSION	ENGINEERING DIVISION
Signature line for Deputy Director	SHEET NUMBER	PROJECT: Road & Boat Ramp Repairs
DATE	1	LOCATION: Kea West Wildlife Management Area
Signature line for Division Administrator	2 of 2	DRAWING CONTAINS: NE Location Map, Area of Work Location Aerial Photo, Kea WMA Scope Plan, Notes for New Work
DATE		DESIGNED BY: A M D DATE: April 16, 2020