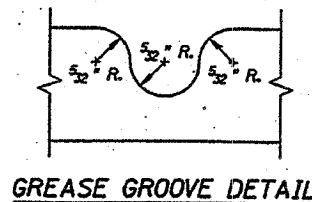
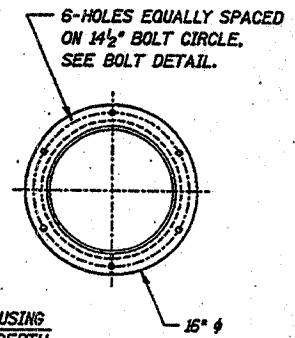


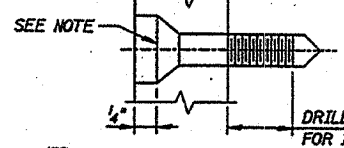
ROUTE NO.	SECT.	COUNTY	SHEET NO.	TOTAL SHEETS
FAP 607	*	W/J/L	5	10
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



GREASE GROOVE DETAIL

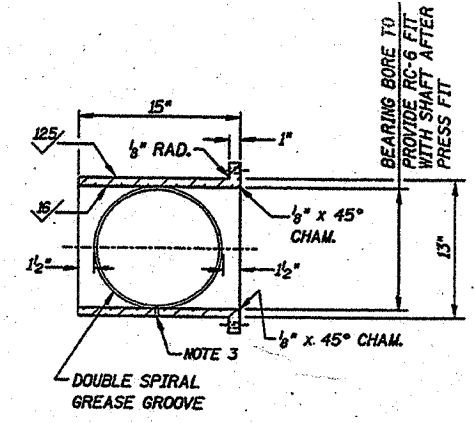


6-HOLES EQUALLY SPACED ON 1 1/2" BOLT CIRCLE. SEE BOLT DETAIL.

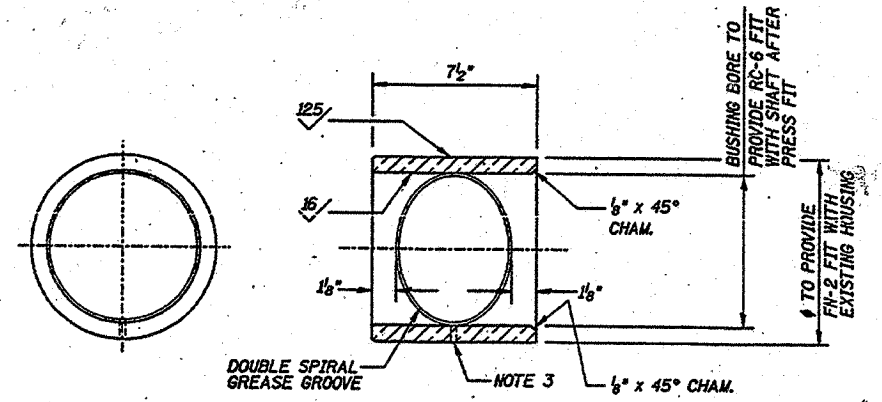


BOLT DETAIL

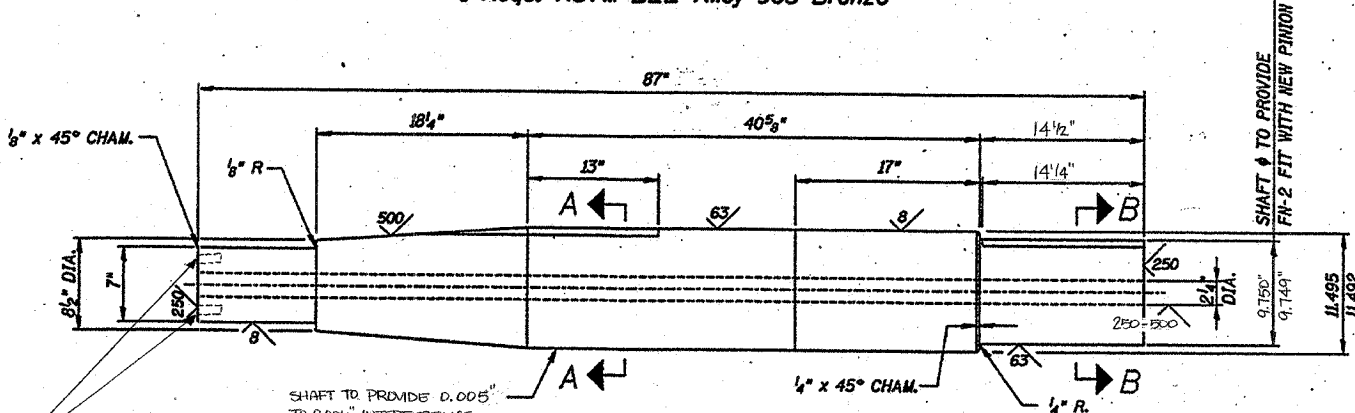
NOTE: COUNTERSUNK 1/2" x 1/2"-13 A449 SOCKETHEAD BOLT COUNTERBORED 1/4"



NEW BUSHING FOR PINION SHAFT  
1 Reqd. ASTM B22 Alloy 905 Bronze

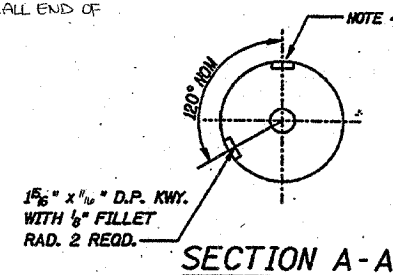


NEW BUSHING FOR SMALL END OF PINION SHAFT  
1 Reqd. ASTM B22 Alloy 905 Bronze

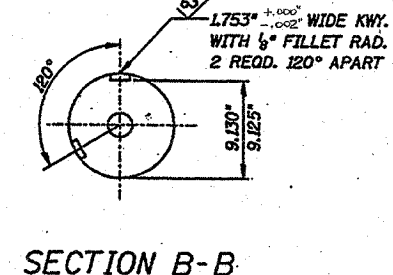


NEW PINION SHAFT

1 Reqd. ASTM A668 Class G FORGING, 180-207 BHN; 25 FT-LBS @ 40°F MIN. AVG CVN TOUGHNESS REQUIRED AT 1/4 RADIUS POSITION OF TEST PROLONGATION SAMPLES.

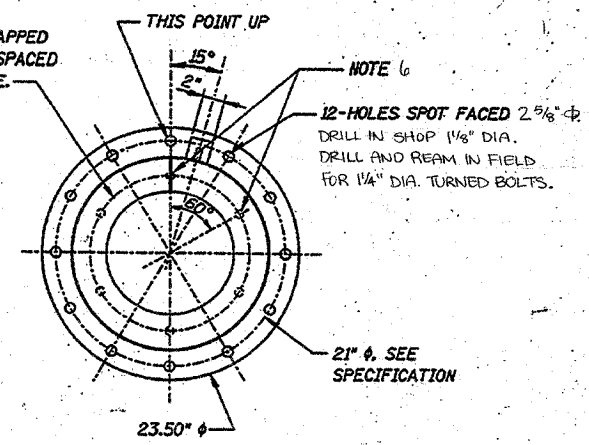


SECTION A-A

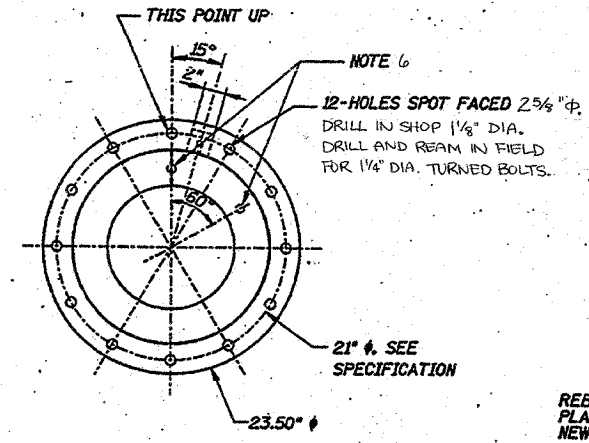


SECTION B-B

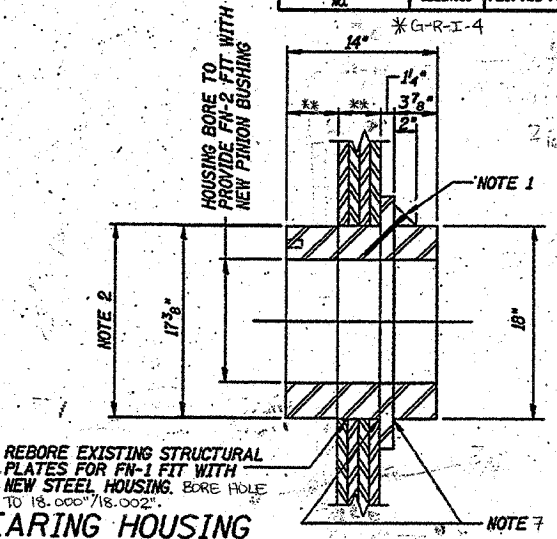
6-HOLES DRILLED AND TAPPED FOR 1/2" BOLTS EVENLY SPACED ON 1 1/2" DIA. BOLT CIRCLE.



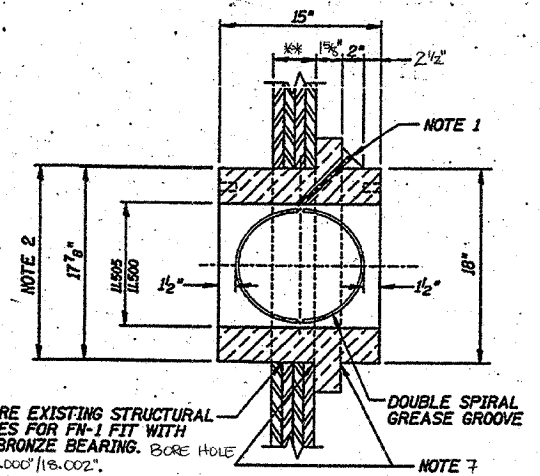
NEW MAIN PINION BEARING HOUSING  
1 Reqd. Steel Casting ASTM A148 GRADE 80-50



NEW ONE PIECE MAIN PINION BEARING  
1 REQUIRED ASTM B271 GRADE 92200 LEADED (1% MAX) TIN BRONZE CENTRIFUGAL CASTING



REBORE EXISTING STRUCTURAL PLATES FOR FN-1 FIT WITH NEW STEEL HOUSING. BORE HOLE TO 18.000" / 18.002"



REBORE EXISTING STRUCTURAL PLATES FOR FN-1 FIT WITH NEW BRONZE BEARING. BORE HOLE TO 18.000" / 18.002"

NOTES:

- TAP FOR 1/4" NPT ALEMITE GIANT BUTTON HEAD GREASE CUP.
- HOUSING OUTER DIAMETER TO PROVIDE FN-1 FIT WITH NEW HOLE BORED ON SPAN CENTER OF ROTATION BY THE CONTRACTOR IN NEW STRUCTURAL PLATES. CONTRACTOR SHALL LINE BORE, THEN MEASURE THE DIAMETER OF THE HOLE FOR FINAL MACHINING OF THE BEARING HOUSING. (BEARING O.D. TO BE 18.007" / 18.004")
- DRILL THROUGH BUSHING FROM BEARING HOUSING AT ASSEMBLY IN SHOP TO CONNECT TO SPIRAL GREASE GROOVE.
- LOCATE SECOND KEYWAY FROM EXISTING GEAR IN SHOP, INSTALL GEAR ON SHAFT AT ASSEMBLY IN FIELD. MATCH KEYWAYS ON SHAFT TO EXISTING KEYWAYS ON GEAR FOR LC-6 FIT WITH NEW KEY
- THE CONTRACTOR MAY PROVIDE EITHER THE ONE PIECE MAIN PINION BEARING OR THE BUSHING FOR PINION SHAFT AND MAIN PINION BEARING HOUSING ASSEMBLED TOGETHER IN THE SHOP.
- HOLE FOR 3/4" UNC BOLT, 1/2" THREAD DEPTH, 60° APART ON 1 1/2" BOLT CIRCLE. ON INBOARD FACE OF STEEL HOUSING ONLY, ON INBOARD AND OUTBOARD FACE OF BRONZE HOUSING. BOLT HOLES ARE FOR ATTACHMENT OF EYE BOLTS OR OTHER CONTRACTOR DESIGNED INSTALLATION FIXTURE.
- EDGE OF STRUCTURAL PLATES TO HAVE 1/4" CHAMFER ON OUTBOARD. BEARING OR HOUSING FLANGE TO HAVE 3/16" RADIUS WHERE IT MEETS THE CYLINDER. MATING SURFACES BETWEEN STRUCTURAL PLATES AND BEARING FLANGE TO BE FINISHED TO 125 MICRO-INCHES.

\*\* SEE DWG C-07 FOR DETAILS.

Designed by: ED  
Checked by: JDX  
Drafted by: SA  
Checked by: ED

REVISION	DATE	DESCRIPTION

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SHAFT AND BEARING DETAILS

CASS STREET BRIDGE OVER DESPLAINES RIVER  
U.S. 30 (WESTBOUND)  
CITY OF JOLIET, WILL COUNTY  
STRUCTURE NUMBER 099-0101

DRAWING NO. C-03	SCALE	DATE 2-05-2001	SHEET NO. 3 OF 7
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