

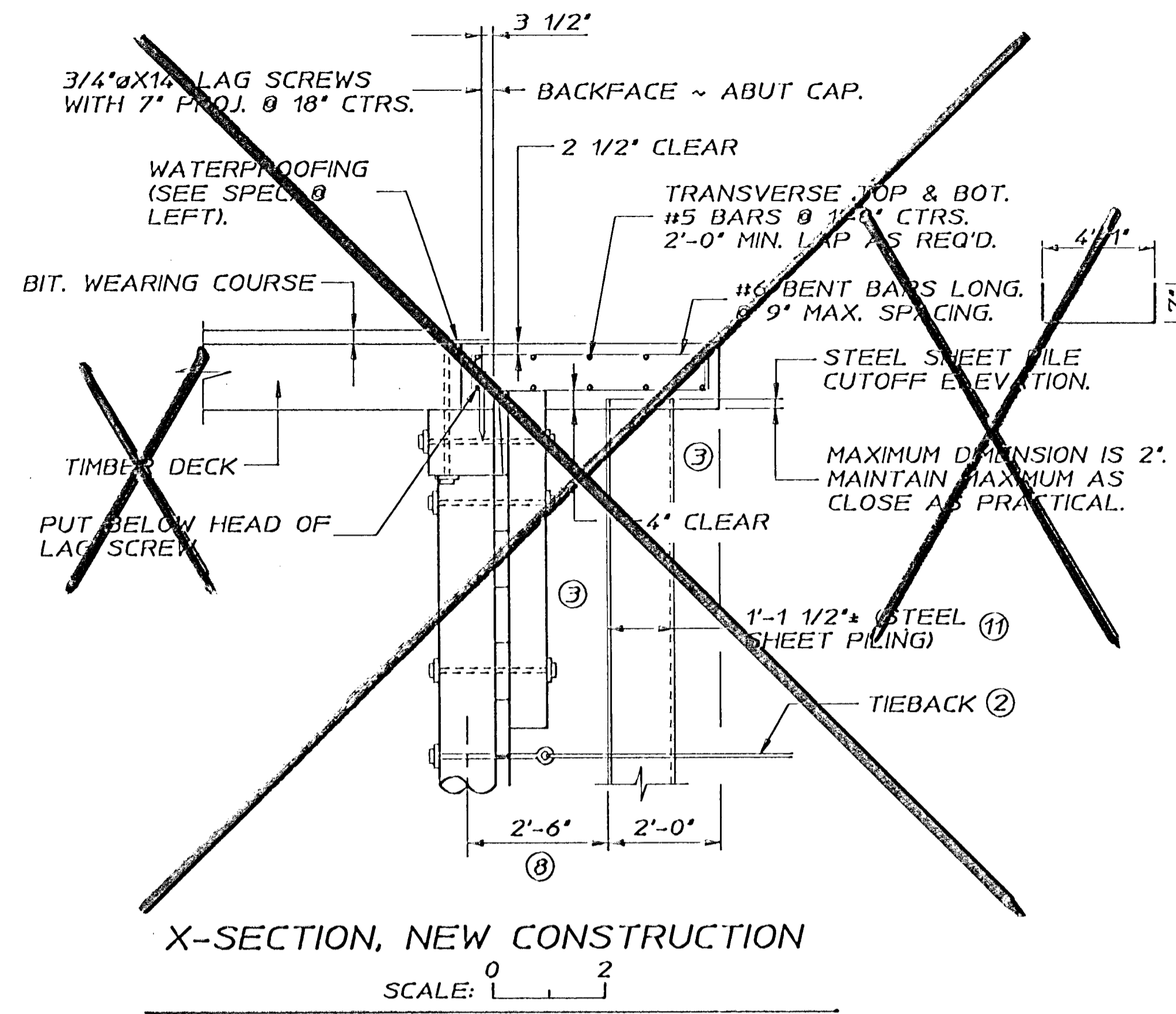
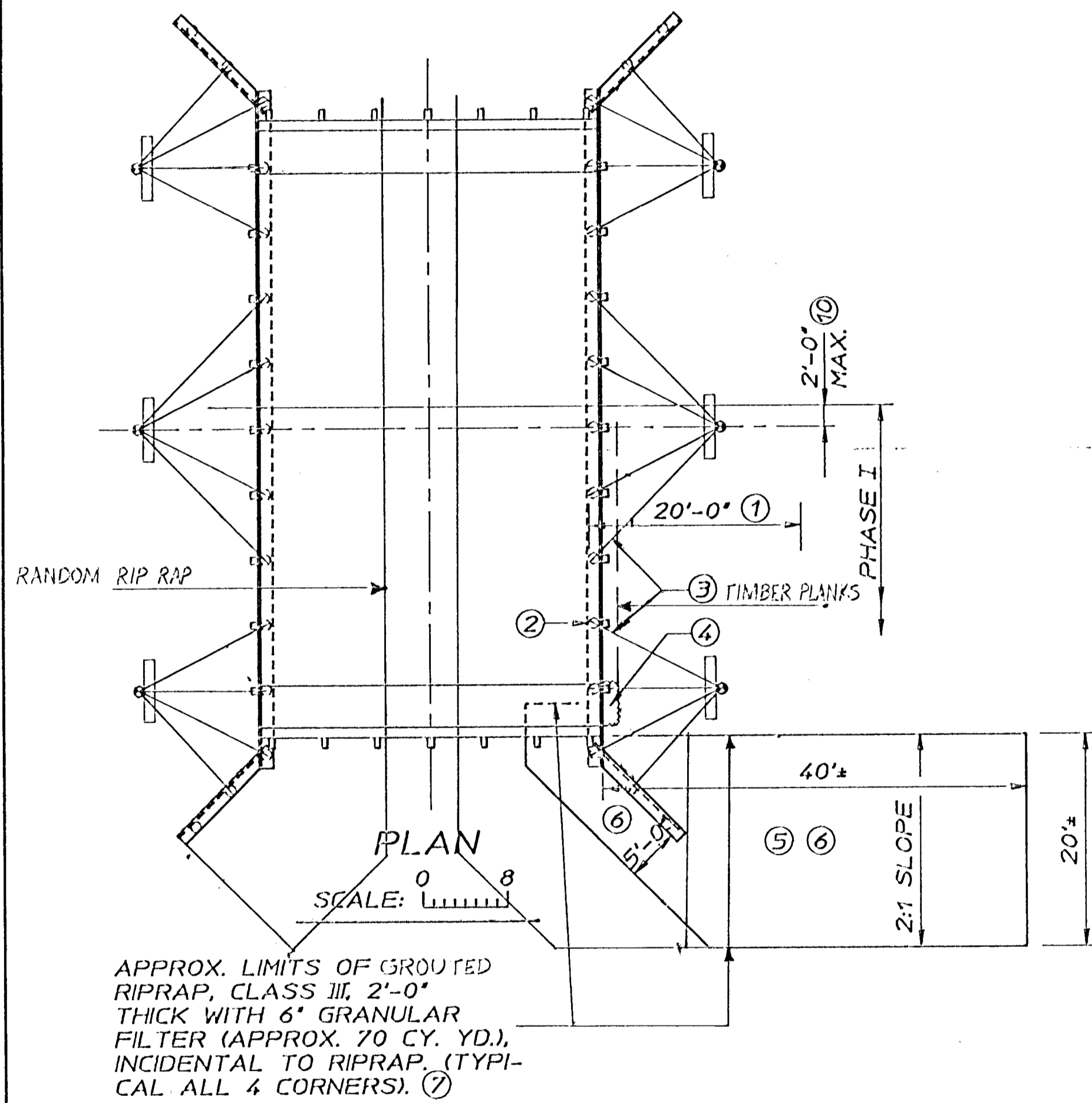
GOVERNING SPECIFICATIONS

THE 1988 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AS AMENDED BY THE MAY 2, 1994 SUPPLEMENTAL SPECIFICATIONS SHALL GOVERN.

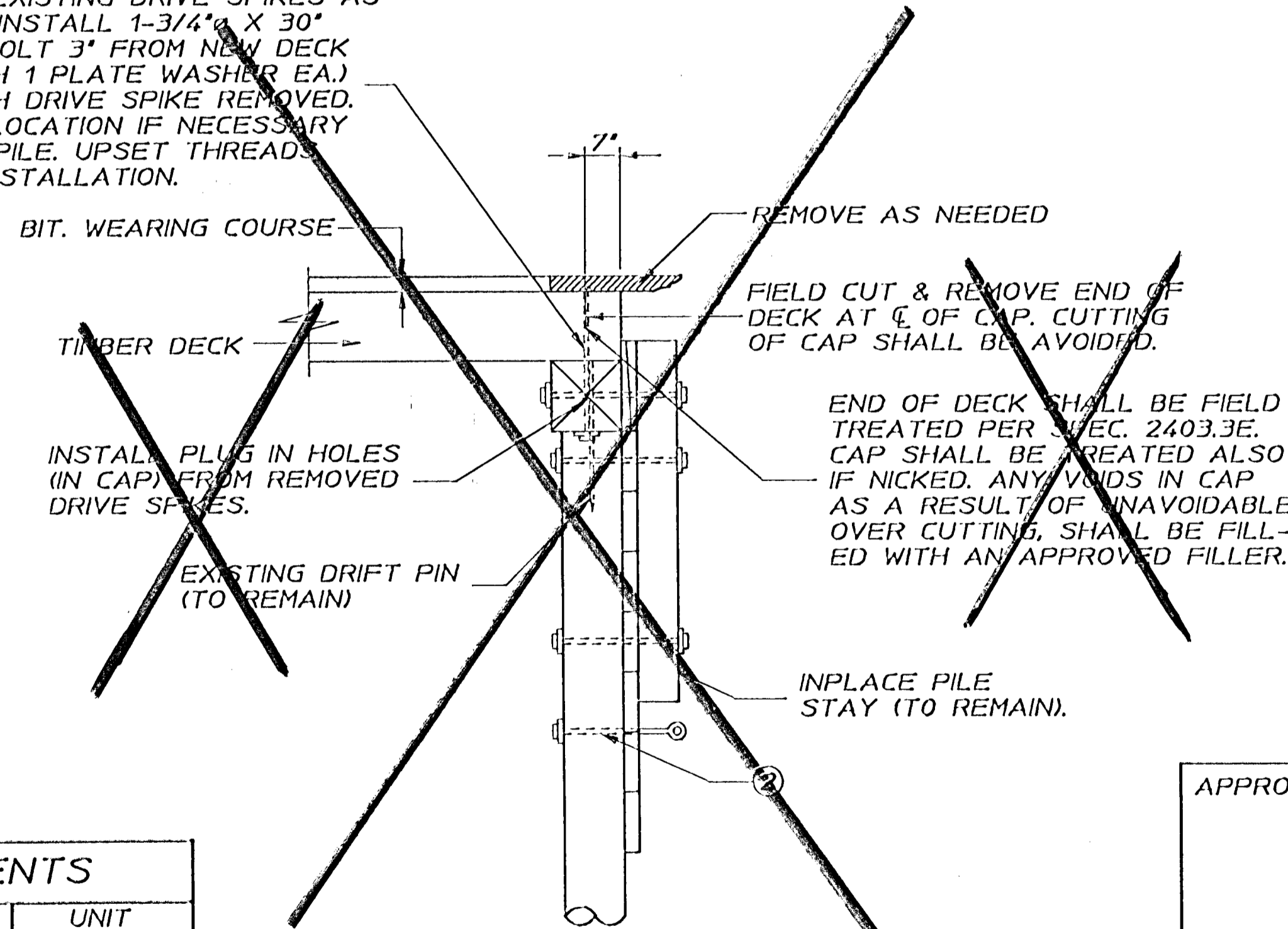
JOINT WATERPROOFING SPECIFICATIONS

THIS WORK SHALL CONSIST OF WATERPROOFING THE JOINTS INDICATED IN THE PLANS AS FOLLOWS:
 A ONE FOOT WIDE STRIP OF APPROVED MEMBRANE SHALL BE CENTERED ON THE JOINT ON A SURFACE THAT HAS BEEN PRIMED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 THE MEMBRANE SHALL CONSIST OF POLYPROPYLENE MESH OF 0.003 INCHES MINIMUM THICKNESS, SURFACE COATED WITH 0.005 INCHES OF WAX ASPHALT LAYED OVER 0.060 INCHES OF RUBBERIZED COVERING, WHICH SHALL REMAIN ON THE MEMBRANE UNTIL IT IS READY FOR PLACEMENT.
 SPEEDS IN THE JOINT WATERPROOFING MEMBRANE MAY BE MADE ONLY WHEN PERMITTED BY THE ENGINEER AND SHALL CONSIST OF A LAYER OF NOT LESS THAN SIX INCHES.
 FURNISHING AND PLACING THE WATERPROOFING AS SPECIFIED ABOVE WILL BE CONSIDERED TO BE AN INCIDENTAL EXPENSE FOR WHICH NO DIRECT COMPENSATION WILL BE MADE.

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REMOVE EXISTING DRIVE SPIKES AS NEEDED, INSTALL 1-3/4" x 30" DM. HD. BOLT 3" FROM NEW DECK END (WITH 1 PLATE WASHER EA.) FOR EACH DRIVE SPIKE REMOVED. ADJUST LOCATION IF NECESSARY TO MISS PILE. UPSET THREADS AFTER INSTALLATION.



NOTE: REMOVALS, CUTTING OF DECK AND FIELD TREATING TO BE INCLUDED IN PRICE BID FOR STRUCTURE REMOVALS.

X-SECTION, REMOVALS
SCALE: 0 2

CONSTRUCTION NOTES

- 1 REMOVE EXISTING BITUMINOUS PAVEMENT AS DIRECTED BY THE ENGINEER.
 - 2 DISCONNECT EXISTING CABLE FROM TIMBER PILE BY REMOVING EYE-BOLT. AFTER SHEET PILING IS DRIVEN, CUT HOLE JUST LARGER THAN DIAMETER OF CABLE & EYEBOLT IN SHEET PILING AND RECONNECT EYEBOLT TO TIMBER PILE MATCHING ORIGINAL CONDITIONS. TIGHTEN NUT UNTIL TIE-BACK CABLE IS TIGHT, WITH SLACK REMOVED. ONLY 1 OR 2 TIE BACKS SHALL BE DISCONNECTED AT ANY ONE TIME. INCLUDED IN PRICE BID FOR STRUCTURE REMOVALS.
 - 3 ~~EXISTING DRIVE SPIKES TO BE DISCONNECTED FROM DECK AND DRIVE SHEET PILING BACK PILE WHEN ALL STRUCTURE WORK IS COMPLETED. INCLUDED IN PRICE BID FOR STRUCTURE EXCAVATION.~~
 - 4 BACKFILL EXISTING VOIDS WITH AGGREGATE BEDDING, AS APPROVED BY THE ENGINEER.
 - 5 REMOVE ALL OF EXISTING BITUMINOUS FROM EDGE OF SIDEWALK DOWNSLOPE TO WHERE BITUMINOUS TERMINATES AT WATER. INCLUDED IN PRICE BID FOR REMOVE BITUMINOUS, REGARDLESS OF DEPTH AND EXISTING BASE MATERIAL.
 - 6 CUT AND FILL AS REQUIRED TO ESTABLISH 2:1 SLOPES TO APPROXIMATE LIMITS SHOWN, AS APPROVED BY THE ENGINEER IN THE FIELD. INCLUDED IN PRICE BID FOR SLOPE PREPARATION.
 - 7 RIPRAP SHALL BE FIELD STONE, OR QUARRY RUN CONSISTING OF ST. CLOUD GRANITE OR PRAIRIE DUCHIEN DOLOSTONE (SOUTH METRO QUARRIES). OTHER QUARRY RUN MAY BE USED IF APPROVED BY THE ENGINEER.
 - 8 ~~DIMENSION SHALL BE MAINTAINED AT TOP OF SHEET PILING. VERIFY PLUMBNESS OF EXISTING TIMBER PILES BEFORE DRIVING SHEET PILING.~~
 - 9 ALL TRAFFIC CONTROL DEVICES AND LAYOUTS SHALL CONFORM TO THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL, DATED APRIL 1995.
 - 10 ~~DIMENSION SHOULD BE LIMITED TO PROVIDE 12 LANES IF POSSIBLE. MORE THAN 2' IS REQUIRED TO COMPLETE PHASE 1. ONLY 1 LANE OF TRAFFIC SHALL BE PERMITTED ACROSS THE BRIDGE TEMPORARILY FOR ONLY THE TIME NEEDED TO DISCONNECT & RECONNECT TIEBACK AT THAT LOCATION.~~
 - 11 ~~STEEL SHEET PILING SHALL BE 32' LONG BELOW CUTOFF ELEVATION. STEEL SHEET PILING TO BE TRINITY CASTEEL CZ14RD OR EQUAL. GRADE 50. MINIMUMS ARE WALL THICKNESS .028" SM/IN. FT. +22 IN.~~
 - 12 6" BITUMINOUS WEAR COURSE INCLUDES: 6" AGGREGATE BASE CLASS 5, 4" TYPE 31 BASE COURSE, 2" TYPE 41 WEAR COURSE.
- CONSTRUCTION REQUIREMENTS SHALL CONFORM TO M.H.D. 2433.
 SEE EXISTING BRIDGE PLANS FOR FURTHER INFORMATION.
 CONTRACTOR SHALL VERIFY THAT UTILITY COMPANIES HAVE BEEN NOTIFIED AND THAT THE UTILITIES WILL NOT INTERFERE WITH HIS OPERATIONS. SEE EXISTING BRIDGE PLANS FOR UTILITIES ON BRIDGE.
 WORK SHALL BE COMPLETED IN PHASES AS SHOWN. WORK FOR PHASE 1 SHALL BE COMPLETED BEFORE WORK FOR PHASE 2 IS STARTED. UNLESS NOTED OTHERWISE TWO LANES OF TRAFFIC SHALL BE MAINTAINED DURING EACH PHASE UNLESS NOTED OTHERWISE (SEE NOTE 10).

APPROVED: _____
 COUNTY ENGINEER
 ANOKA COUNTY

DATE: _____

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

M.D. [Signature]
 REG. NO. 31733

DATE: 9/8/97

PLANS PREPARED BY:
 ERICKSON ENGINEERING
 3340 REPUBLIC AVENUE
 ST. LOUIS PARK, MN 55426

BRIDGE NO. 02527
 2 MILES N.W. OF CENTERVILLE BETWEEN GEORGE WATCH LAKE & PELTIER LAKE.
 1-32 FT. TREATED TIMBER PANEL SPAN
 48"-4" ROADWAY 2-5 FT. SIDEWALKS.
 SPAN IDENT. NO. 709

GENERAL PLAN & MISC. DETAILS
 SEC. 15 TWP. 31N R22W
 LINO LAKE TYP. ANOKA COUNTY

C.P. 97-73-00
 SHEET 1 OF 1 SHEETS

DES:	DWN:	02527
CHK:	CHK:	

SCHEDULE OF QUANTITIES FOR REPAIR WORK AT ABUTMENTS				
NOTE	ITEM NO.	ITEM	QUANTITY	UNIT
	2021.501	MOBILIZATION	1	LUMP SUM
	2401.501	STRUCTURAL CONCRETE (3Y33)	0	CU. YD.
	2401.541	REINFORCEMENT BARS (EPOXY COATED)	0	POUND
	2403.506	HARDWARE (GALV. PER SPEC. 3392)	0	POUND
(2)	2433.501	STRUCTURE REMOVALS	1	LUMP SUM
(1)(5)	2104.505	REMOVE BITUMINOUS PAVEMENT	5000	SQ. FT.
(7)	2511.501	RANDOM RIPRAP, CLASS III	350	TON
(12)	2340.521	6" THICK BITUMINOUS WEARING COURSE	75	SQ. YD.
	0331.601	SLOPE PREPARATION	1	LUMP SUM
	0401.601	STRUCTURE EXCAVATION	1	LUMP SUM
	0401.601	STEEL SHEET PILING (PERMANENT)	0	SQ. FT.
	0653.601	TRAFFIC CONTROL	1	LUMP SUM
	2451.509	AGGREGATE BEDDING	100	TON
ALT 2		PRECAST CABLE CONCRETE (35 LBS./SQ. FT.)	3200	SQ. FT.
ALT 1		GROUTED RIP RAP	280	CU. YD.