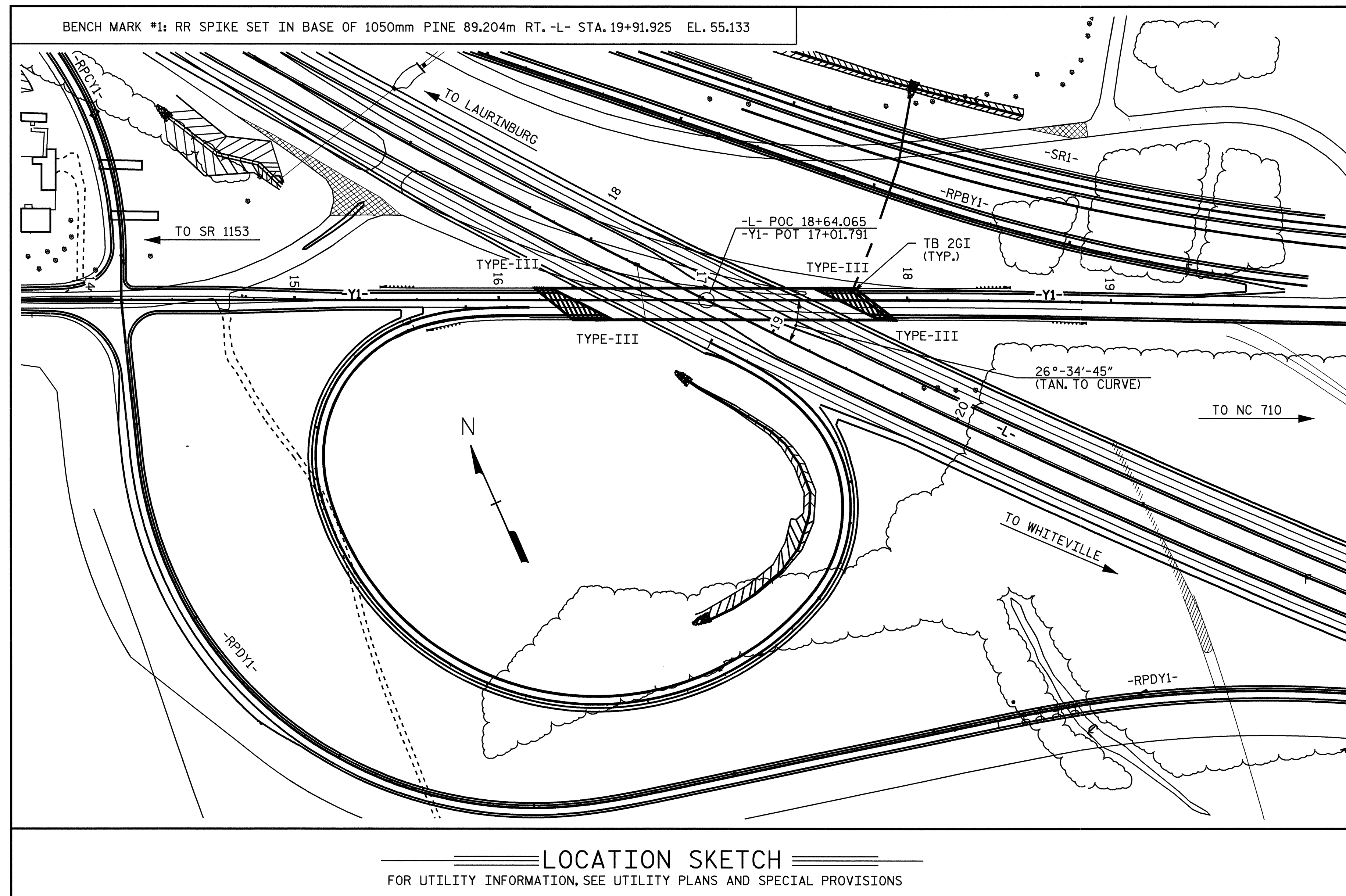


**TOTAL BILL OF MATERIAL**

	FOUNDATION EXCAVATION	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	SPIRAL COLUMN REINFORCING STEEL	STRUCTURAL STEEL	PP 305 X 9.5 STEEL PILES	CONCRETE BARRIER RAIL	100mm SLOPE PROTECTION	POT BEARINGS	EVAZOTE JOINT SEALS	
	LUMP SUM	SQ. METERS	SQ. METERS	CU. METERS	LUMP SUM	kg	kg	APPROX. kg	NO.	METERS	METERS	SQ. METERS	LUMP SUM	LUMP SUM
SUPERSTRUCTURE		2353.4	2341.0		LUMP SUM			607,555			294.360		LUMP SUM	LUMP SUM
END BENT 1				99.5		9928			34	850.0		510		
BENT 1	LUMP SUM			175.7		12893	1566		70	1785.0				
END BENT 2				112.3		10675			37	814.0		480		
TOTAL	LUMP SUM	2353.4	2341.0	387.5	LUMP SUM	33,496	1,566	607,555	141	3449.0	294.360	990	LUMP SUM	LUMP SUM

**NOTES**

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
- ALL ELEVATIONS ARE IN METERS.
- ASSUMED LIVE LOAD = MS 18 OR ALTERNATE LOADING.
- FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SNSM.
- FOR EROSION CONTROL MEASURES SEE EROSION CONTROL PLANS.
- THIS BRIDGE HAS BEEN DESIGNED BY THE STRENGTH DESIGN METHOD AS SPECIFIED IN AASHTO STANDARD SPECIFICATIONS.
- ALL STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE 345W AND PAINTED IN ACCORDANCE WITH SYSTEM 4 OF ARTICLE 442-7 OF THE STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- REMOVABLE FORMS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.
- THE USE OF NEEDLE BEAMS TO SUPPORT THE DECK SLAB WILL ONLY BE ALLOWED IN THE ACUTE CORNERS OF THE SLAB.
- THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR SEISMIC DESIGN OF HIGHWAY BRIDGES FOR SEISMIC PERFORMANCE CATEGORY A.
- ALL FALSEWORK AND FORMS FOR THE CAST-IN-PLACE DECK SLAB CONTINUOUS UNIT SHALL REMAIN IN PLACE UNTIL THE ENTIRE UNIT IS CAST AND CURED.
- FOR METRIC STRUCTURAL STEEL, SEE SPECIAL PROVISIONS.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
- WHEN DRIVING PILES, THE MAXIMUM BLOW COUNT SHALL NOT BE EXCEEDED.
- PILES FOR END BENTS NO. 1 AND 2 SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 530KN EACH.
- PILES FOR INTERIOR BENT NO. 1 SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 530KN EACH.
- THE CONTRACTOR SHALL OBSERVE A ONE MONTH WAITING PERIOD BEFORE BEGINNING ANY WORK FOR END BENT CONSTRUCTION AFTER COMPLETION OF THE EMBANKMENT AT EACH END BENT. THE CONTRACTOR MAY BEGIN THE REINFORCED BRIDGE APPROACH FILL CONSTRUCTION AFTER COMPLETION OF END BENT INCLUDING WINGWALLS. NO OTHER WAITING PERIOD WILL BE REQUIRED FOR THE APPROACH SLAB CONSTRUCTION AT BOTH END BENTS.
- STEEL PILES SHALL MEET THE REQUIREMENTS OF ASTM A252 GRADE 2.
- STEEL PILES SHALL BE EXAMINED FOR DAMAGE OR COLLAPSE AFTER BEING DRIVEN. REJECTED PILES SHALL BE REMOVED OR THE CONTRACTOR SHALL SUBMIT A PROPOSAL TO REPAIR THE PILE.
- PILE SPLICES SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND AWS D1.1. A MAXIMUM OF 2 PILE SPLICES PER PILE IS ALLOWED.
- DRIVING PLATES ARE REQUIRED AT THE BOTTOM OF ALL PILES AND THE DRIVING PLATE IS CONSIDERED INCIDENTAL TO THE CONTRACT UNIT PRICE BID PER METER FOR PP 305 X 9.5 STEEL PILES.



**LOCATION SKETCH**  
FOR UTILITY INFORMATION, SEE UTILITY PLANS AND SPECIAL PROVISIONS

PROJECT NO. R-513A  
ROBESON COUNTY  
 STATION: 18+64.065 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**GENERAL DRAWING**  
**BRIDGE ON US 74 BUS.**  
**OVER US 74 BYPASS**  
**BETWEEN SR 1153**  
**AND NC 710**



*T.H. Fang*  
10/05/04

DRAWN BY : W.K. FISCHER DATE : 5/10/04  
 CHECKED BY : T.H. FANG DATE : 5/19/04

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1			3			TOTAL SHEETS
2			4			172