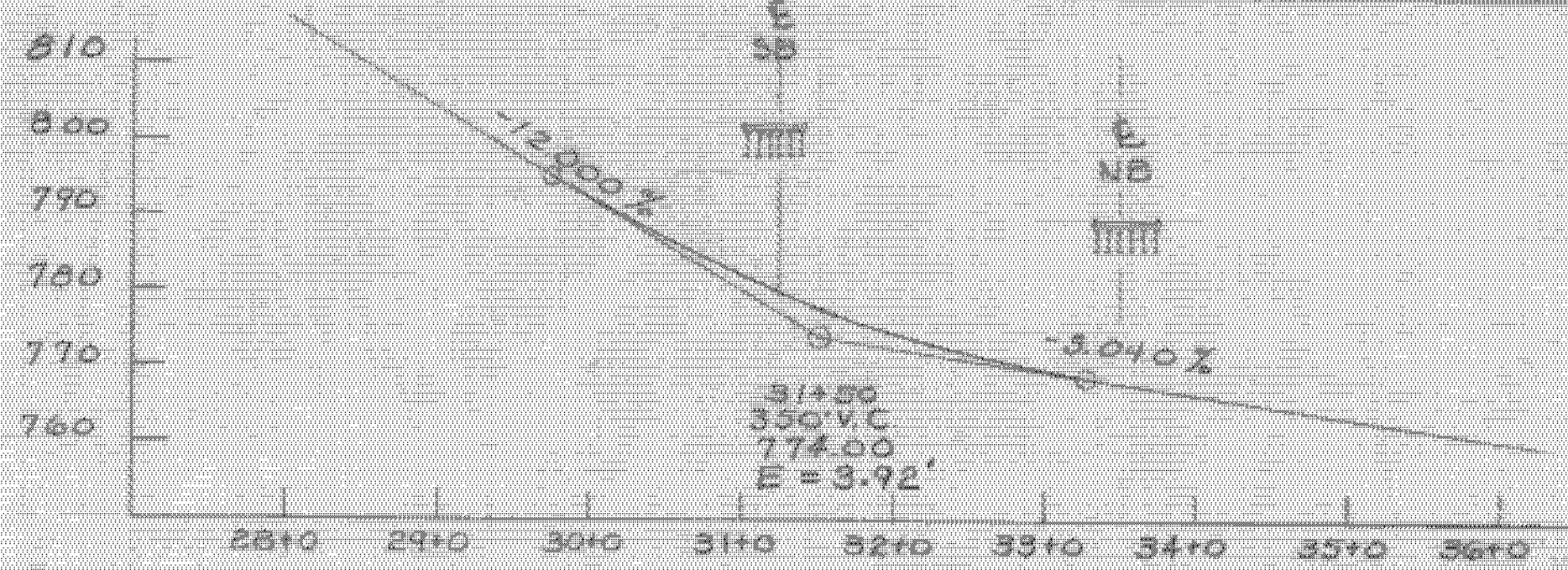


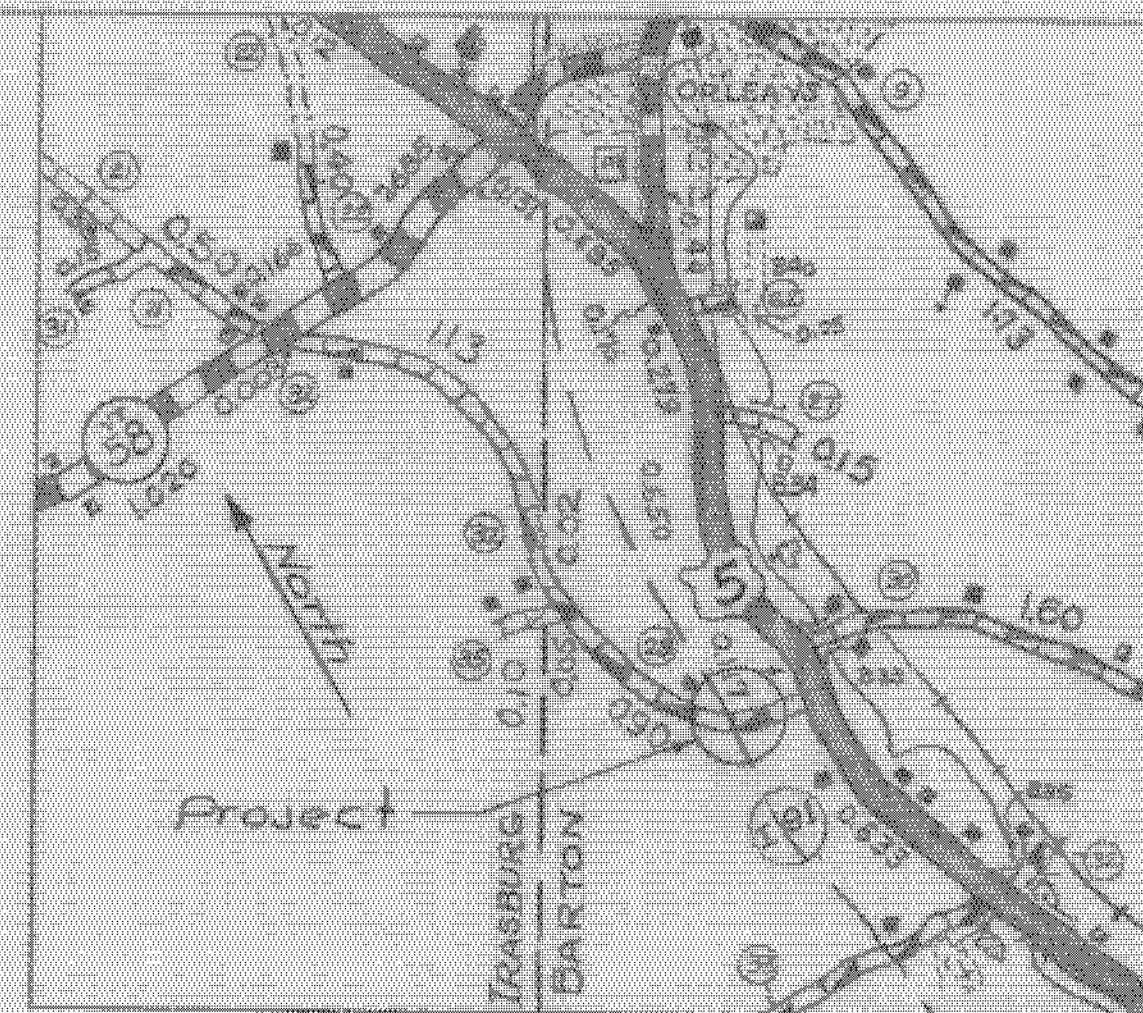
Normal Section T.H. #29  
Scale: 1"=10'-0"



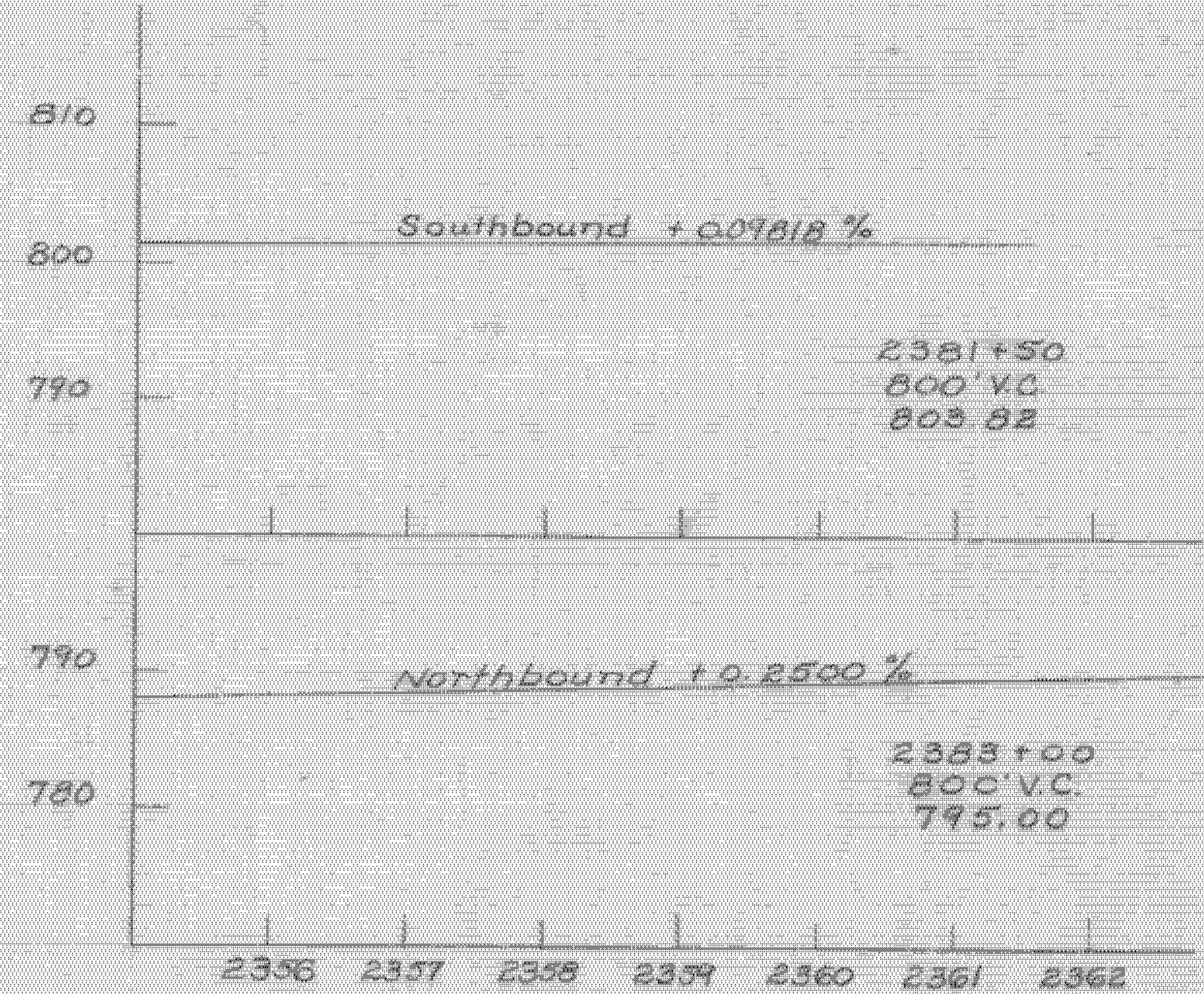
Profile of T.H. #28  
Scale: 1"=100' Horiz - 1"=20' Vert

HIGHWAY NO. **I91** NAME OF HIGHWAY **INTERSTATE**  
 STRUCTURE NO. **34-B6** COUNTY **ORLEANS** TOWN **BARTON**  
 PROJECT NO. **I91-3(1)** LOCATION **BARTON**  
**I91 OVER T.H. #29**  
**EXISTING STRUCTURE**

1. GRADED LOADING OF EXISTING STRUCTURE \_\_\_\_\_  
 2. TYPE OF EXISTING STRUCTURE **NONE**  
 3. UNDERCARRIAGE ELEVATION OF EXISTING STRUCTURE \_\_\_\_\_  
 4. WHAT DEPOSITION SHOULD BE MADE OF EXISTING STRUCTURE? **COST OF REMOVAL**  
 5. SHOULD EXISTING STRUCTURE BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION OF NEW STRUCTURE? \_\_\_\_\_  
 6. SHOULD NEW TEMPORARY STRUCTURE BE BUILT? \_\_\_\_\_  
 7. ORDINARY HIGH WATER SURFACE ELEV. AT EXISTING STRUCTURE \_\_\_\_\_ WATERWAY TO ORDINARY H.W.  
 8. EXTREME HIGH WATER AT EXISTING STRUCTURE \_\_\_\_\_ WATERWAY TO EXTREME H.W.  
 9. SPAN OF EXISTING BRIDGE UPSTREAM \_\_\_\_\_ WATERWAY TO EXTREME H.W.  
 10. SPAN OF EXISTING BRIDGE DOWNSTREAM \_\_\_\_\_ WATERWAY TO EXTREME H.W.  
 11. TYPE OF FUNDATION UNDER EXISTING ABUTMENTS \_\_\_\_\_  
 12. DOES ALL WATER AT FLOOD ELEVATION PASS THROUGH EXISTING STRUCTURE? \_\_\_\_\_  
 13. IF NOT, WHAT ELEVATION IS RELIEF PROVIDED? \_\_\_\_\_  
 14. ADDITIONAL WATERWAY AREA PROVIDED? \_\_\_\_\_



**NEW STRUCTURE**  
 1. RECOMMENDED TYPE OF STRUCTURE **Single Span - Composite W/ Beam**  
 2. RECOMMENDED Overall Bridge Lengths **Southbound 83'-0"**, **Northbound 83'-0"**  
**Span Lengths Center to Center of Piers Southbound 86'-10"**, **Northbound 86'-10"**  
**Clear Span Lengths normal to Roadway Southbound 78'-3"**, **Northbound 79'-0"**  
 3. ARE THERE OBJECTIONS TO A PIER IN THE STREAM? ANSWER YES OR NO \_\_\_\_\_  
 4. ORDINARY HIGH WATER ELEVATION AT NEW STRUCTURE \_\_\_\_\_  
 5. EXTREME HIGH WATER ELEVATION AT NEW STRUCTURE \_\_\_\_\_ SOURCE OF INFORMATION \_\_\_\_\_  
 6. IS ALL WATER INTENDED TO PASS THROUGH NEW STRUCTURE? \_\_\_\_\_  
 7. DOES STREAM REACH ITS MAXIMUM HIGH WATER ELEVATION RAPIDLY? \_\_\_\_\_ IF ORDINARY RISE 44RFD? \_\_\_\_\_  
 8. LOW WATER ELEVATION AT NEW STRUCTURE \_\_\_\_\_  
 9. DRAINAGE AREA IN ACRES ABOVE STRUCTURE \_\_\_\_\_ CHARACTER OF TERRAIN \_\_\_\_\_  
 10. IS STREAM EVER DRY? \_\_\_\_\_  
 11. VELOCITY OF STREAM AT HIGH WATER STAGE \_\_\_\_\_ ESTIMATED CHARGE \_\_\_\_\_  
 12. AREA FILL OPENING \_\_\_\_\_ AREA BELOW ORDINARY H.W. \_\_\_\_\_  
 13. CHARACTER OF SCOUR \_\_\_\_\_ DRY? \_\_\_\_\_ ICE? \_\_\_\_\_  
 14. ESTIMATED GRASSLAND AREA ABOVE NATURAL OR ARTIFICIAL STORAGE \_\_\_\_\_  
 15. MINIMUM CLEARANCE ABOVE STREAM ELEVATION \_\_\_\_\_  
 16. ARE SIDEWALKS REQUIRED? IF SO BY WHAT CODE? **NONE** BOTH SIDES \_\_\_\_\_  
 17. RECOMMENDED TYPE OF PAVEMENT **2" Bituminous Concrete Pavement**  
 18. TRAFFIC TO BE MAINTAINED UNDER PIER NO. \_\_\_\_\_ ONE IN TWO WAYS \_\_\_\_\_ PROBABLE COST \_\_\_\_\_  
 19. PROBABLE COST OF CLEARING AND OBSTRUCTING STREAM CHANNEL AT STRUCTURE SITE \_\_\_\_\_  
 20. SHOULD PROVISIONS BE MADE FOR PUBLIC UTILITIES? **No**  
 21. ESTIMATED ALLOWABLE LOAD ON FOUNDATIONS **58 Tons** SHOULD PILES BE USED? **Yes** EST. COST **Table** **per Pile**



Interstate Profile  
Scale: 1"=100' Horiz - 1"=10' Vert

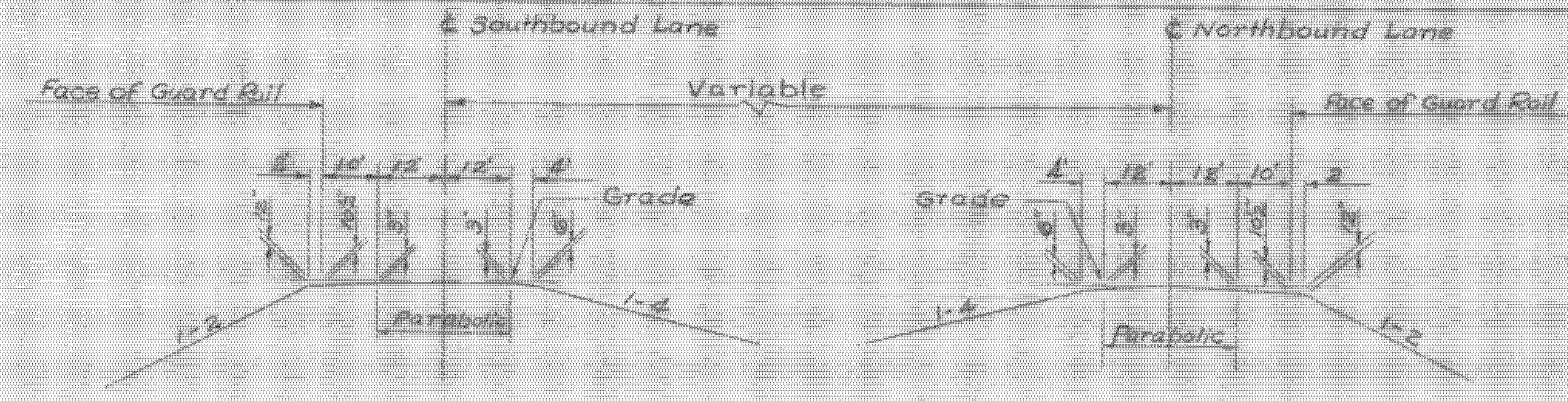
Allowable Design Stresses:  
 Concrete:  $f'_c = 3000$  psi  $f'_t = 1200$  psi  $n = 10$   
 Structural Steel: A36  $f_y = 20,000$  psi  
 Reinforcing Steel:  $f_y = 20,000$  psi tension  
 Design Loading: HS 20-44

**FOUNDATION INFORMATION**  
 OBTAINED FOR DESIGN PURPOSES ONLY, AND THE STATE ASSUMES NO RESPONSIBILITY WHATSOEVER FOR THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN. Boulders may be encountered at any pier or abutment location.

For Boring Logs see Sheets BR-603 and BR-604.

TABLE OF ESTIMATED PILE LENGTHS

LOCATION	FOOTING ELEV.		PILE LENGTH	
	Rear	Main	Rear	Main
Abutment No. 1	786.00	777.50	40'	30'
Abutment No. 2	787.00	778.50	25'	20'
Abutment No. 3	774.50	766.50	45'	35'
Abutment No. 4	775.00	767.00	40'	40'



Typical Interstate Section  
Scale: 1"=20'-0"

BARTON-COVENTRY  
 IM BPNT (11)  
 SHEET 37 OF 84  
 BRIDGES 105N&S  
 FOR REFERENCE ONLY

RECOMMENDED FOR APPROVAL \_\_\_\_\_  
 CONSTRUCTION ENGINEER  
 DATE \_\_\_\_\_  
 RECOMMENDED FOR APPROVAL \_\_\_\_\_  
 BRIDGE ENGINEER  
 DATE \_\_\_\_\_  
 RECOMMENDED FOR APPROVAL \_\_\_\_\_  
 ASST. BRIDGE ENGINEER  
 DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_  
 CHIEF ENGINEER  
 DATE \_\_\_\_\_

PROJECT: **BARTON** Stage 2 Construction  
 STATE OF VERMONT  
 DEPARTMENT OF HIGHWAYS  
 INTERSTATE \_\_\_\_\_ IN THE TOWN OF  
**BARTON** **BR 105**  
 ROUTE NO. **I91** STA. **2359+25**  
**I91 OVER T.H. #29** **105N&S**  
**PRELIMINARY INFORMATION**  
 SHEET NO. **37** OF **84**  
 PROJECT NO. **I91-3(1)** SHEET NO. **37** OF **84**  
**BR-600**