

REFERENCE STANDARDS

Illinois Department of Transportation (IDOT)
 A) Standard Specifications for Road and Bridge Construction
 (Adopted January 1, 2007)
 B) Supplemental Specifications and Recurring Special Provisions
 (Adopted January 1, 2011)

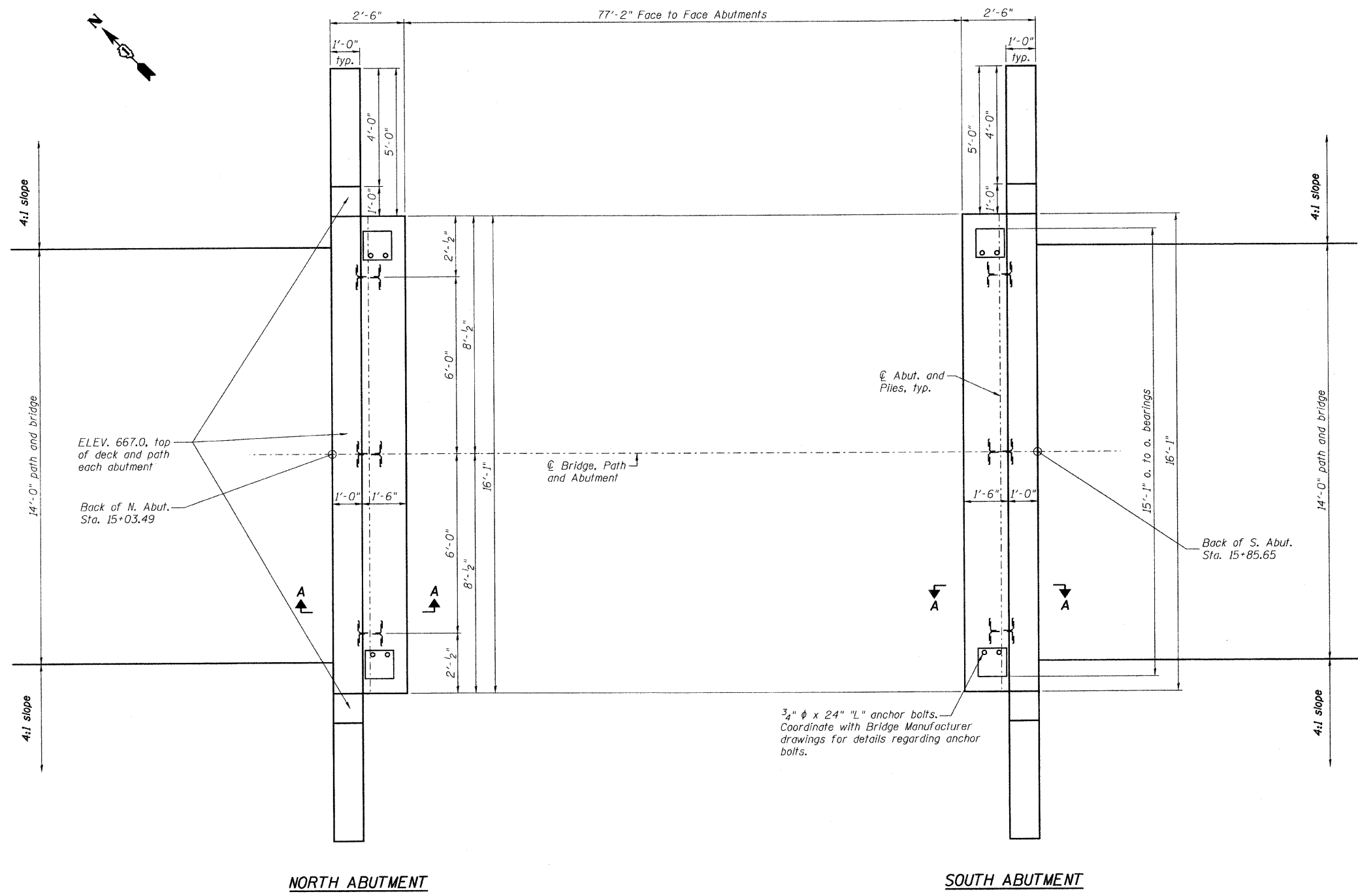
LOADS USED FOR ABUTMENT DESIGN

COMBINE REACTIONS AS PER LOCAL OR GOVERNING BUILDING CODES AS REQUIRED

BRIDGE REACTIONS	+ DOWNWARD LOAD - UPWARD LOAD		
	P (LBS)	H (LBS)	L (LBS)
DEAD LOAD	9,875		
UNIFORM LIVE LOAD	23,800		
VEHICLE LOAD	5,000		
WIND UPLIFT 20 PSF	- 9,100		
WIND	+ 1,580	7,460	
THERMAL			3,460
BRIDGE LIFTING WEIGHT: 38,500 LBS			

"P" - VERTICAL LOAD EACH BASE PLATE (4 PER BRIDGE)
 "H" - HORIZONTAL LOAD EACH FOOTING (2 PER BRIDGE)
 "L" - LONGITUDINAL LOAD AT FIXED BEARING (2 PER BRIDGE)

NOTE:
 Loads from Bridge Manufacturer are Service loads, and shall be multiplied by appropriate load factors as per design code.



NORTH ABUTMENT

SOUTH ABUTMENT

GENERAL PLAN

GENERAL NOTES

1. It shall be the Contractor's responsibility to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.
2. Any reference to standards in the plans or special provisions shall be interpreted to be the latest standard specifications of the Department listed in the plans with the latest revision numbers.
3. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
4. Reinforcement bars designated (E) shall be epoxy coated.
5. See sheet S2 of S3 for section thru abutment along with wingwall details.

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 Gr 50 Steel Piles)

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications



WHE
 WILLIAM H. EPP, S.E.
 IL. LIC. NO. 081-005150
 EXP. 11-30-12
 DATE 7-18-11
 Sheets S1 thru S3

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL
50300225	Concrete Structures	Cu. Yd.	13.9
50300280	Concrete Encasement	Cu. Yd.	2.1
50800205	Reinforcement Bars, Epoxy Coated	Pound	2520
51201400	Furnishing Steel Piles HP10x42	Foot	90
51202305	Driving Piles	Foot	90
51203400	Test Pile Steel HP10x42	Each	2
51204650	Pile Shoes	Each	6

* Specialty Items



DESIGNED - SLV	REVISIONS -
CHECKED - WHE	REVISIONS -
DRAWN - SLV	REVISIONS -
CHECKED - WHE	REVISIONS -

GREENWAYS TRAIL PEDESTRIAN BRIDGE

**GENERAL PLAN
S.N. 046-P002**

SHEET NO. S1 OF S3 SHEETS

SECTION	LOCATION	TOTAL SHEETS	SHEET NO.
08-00058-00-BT LBU	MANTENO, IL	15	12
JOB NUMBER - 439449			