

**TOTAL BILL OF MATERIAL**

Item	Unit	Total
Concrete Structures	Cu. M	301.2
Reinforcement Bars, Epoxy Coated	kg	14,240
Structure Excavation	Cu. M	185.2
Permanent Steel		
Sheet Piling	Sq. M	1933
Pipe Handrail	Meter	358
Slope Wall Removal	Sq. M	135

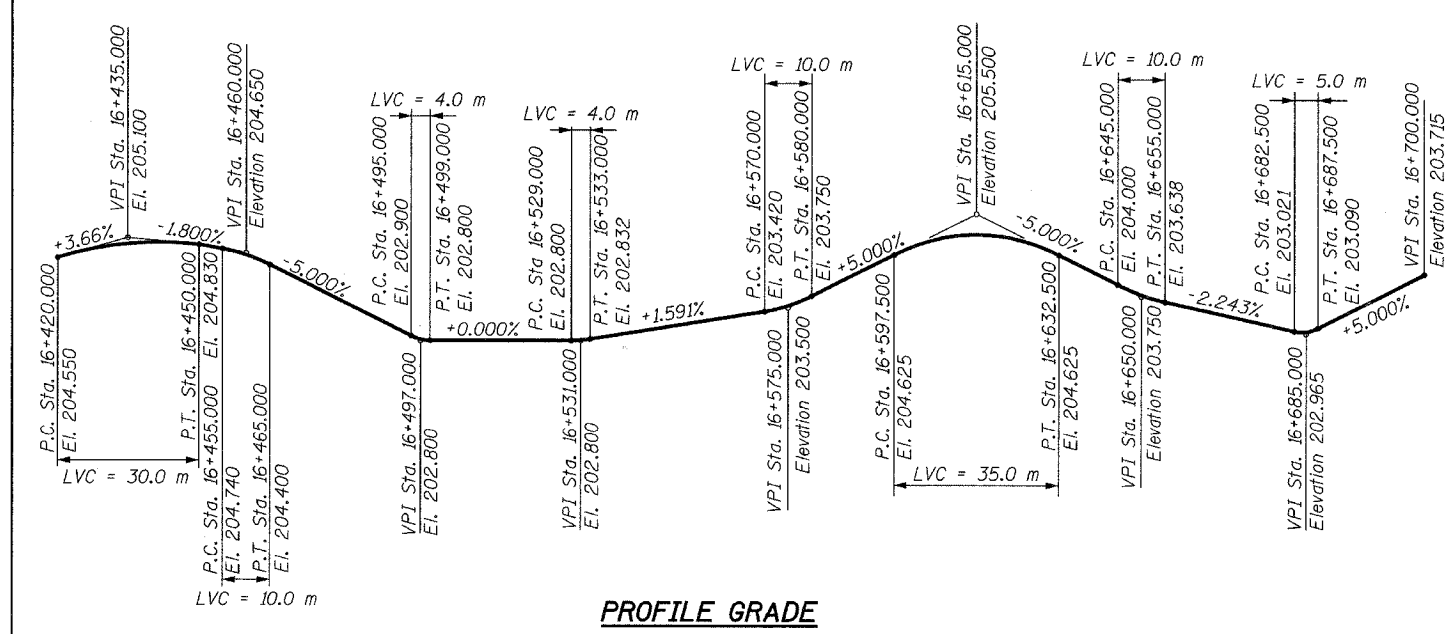
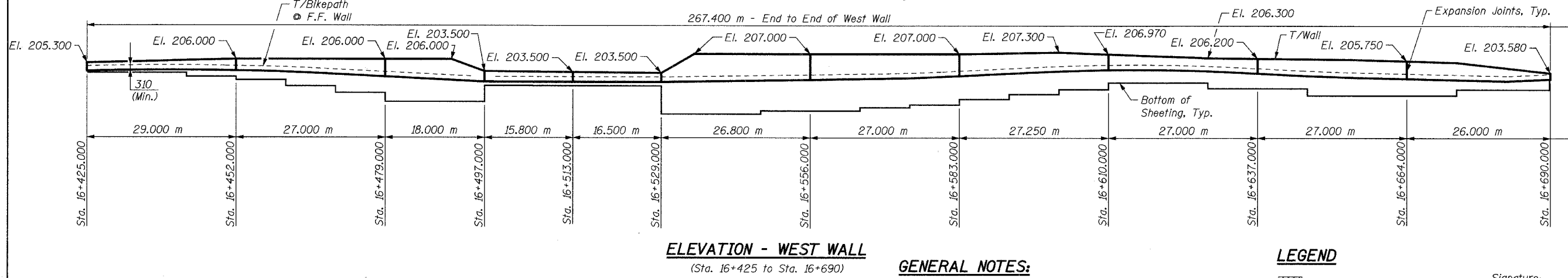
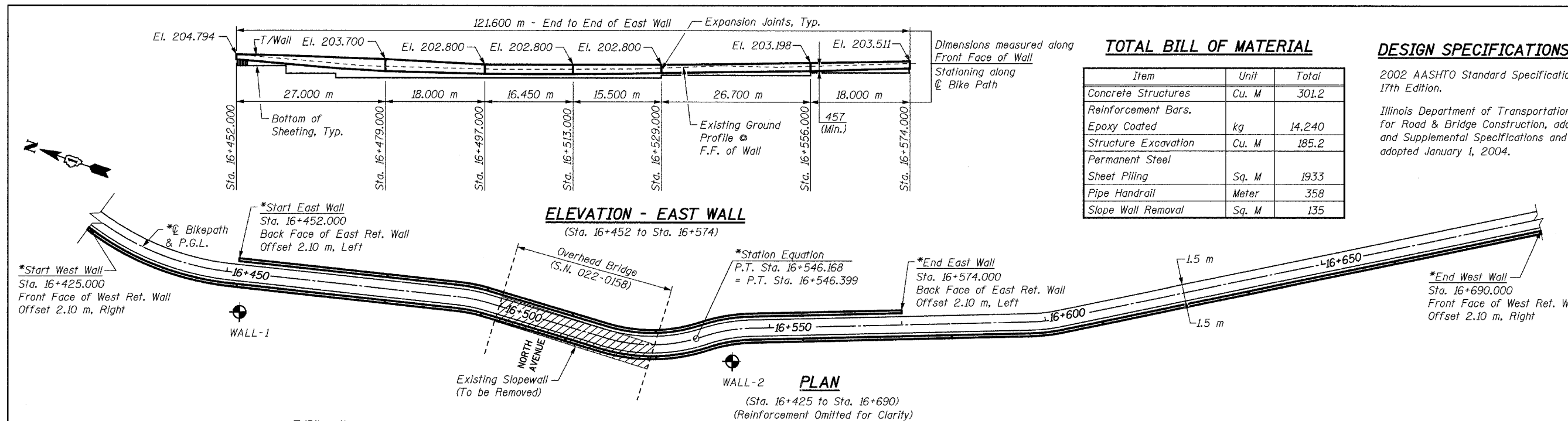
**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition.  
 Illinois Department of Transportation Standard Specifications for Road & Bridge Construction, adopted January 1, 2002 and Supplemental Specifications and Recurring Special adopted January 1, 2004.

**APPROVED**  
 FOR STRUCTURAL ADEQUACY ONLY

*Ralph C. Anderson*  
 ENGINEER OF BRIDGES AND STRUCTURES

**\*NOTE:**  
 For horizontal curve and alignment information, see Plan & Profile drawings.



**GENERAL NOTES:**

1. Reinforcement bars shall conform to the requirements of AASHTO M 31M, M 42M or M 53M Grade 400.
2. Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
3. Steel sheet piling shall conform to the requirements of Section 1006.05 of the Standard Specifications.
4. If the Contractor chooses to alter the sheet piling design requirements shown on the plans for lesser design requirements, then full design submittal including plan details and sealed calculations will be required for review and acceptance by the Engineer.
5. All dimensions are in millimeters (mm) except as noted.
6. For Soil Boring Logs, see Special Provisions.
7. Any pre-excavation carried out for placement of the sheet piling shall not extend below the bottom of concrete facing elevation.

**LEGEND**

- Slope Wall Removal
- Soil Boring

**DESIGN LOADING**

Equivalent Fluid Lateral Soil Pressure  
 6.3 kN/Cu. M

**DESIGN STRESSES**

$f'_c = 24 \text{ MPa}$   
 $f_y = 400 \text{ MPa (Reinf.)}$   
 $f_y = 270 \text{ MPa (Sheet Piling)}$

Signature: *[Signature]*  
 Current Date: 8/2/05  
 License Expires: 11/30/06

"I certify that to the best of my knowledge, information and belief, this retaining wall design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with the requirements of the current 'AASHTO Standard Specifications for Highway Bridges'."

SHEET S15 of S28

REVISIONS		NAME	DATE
NO.	DESCRIPTION		

**URS** 1701 GOLF ROAD, SUITE 1000 TEL (847) 228-0707  
 ROLLING MEADOWS, IL 60008 FAX (847) 228-1115

VILLAGE OF ADDISON  
**SALT CREEK GREENWAY TRAIL**  
**RET. WALL STA. 16+425 TO 16+690**  
**GENERAL PLAN AND ELEVATION**

DATE: 08/01/05 DRAWN BY: MDS  
 DESIGNED BY: MDS CHECKED BY: GAT