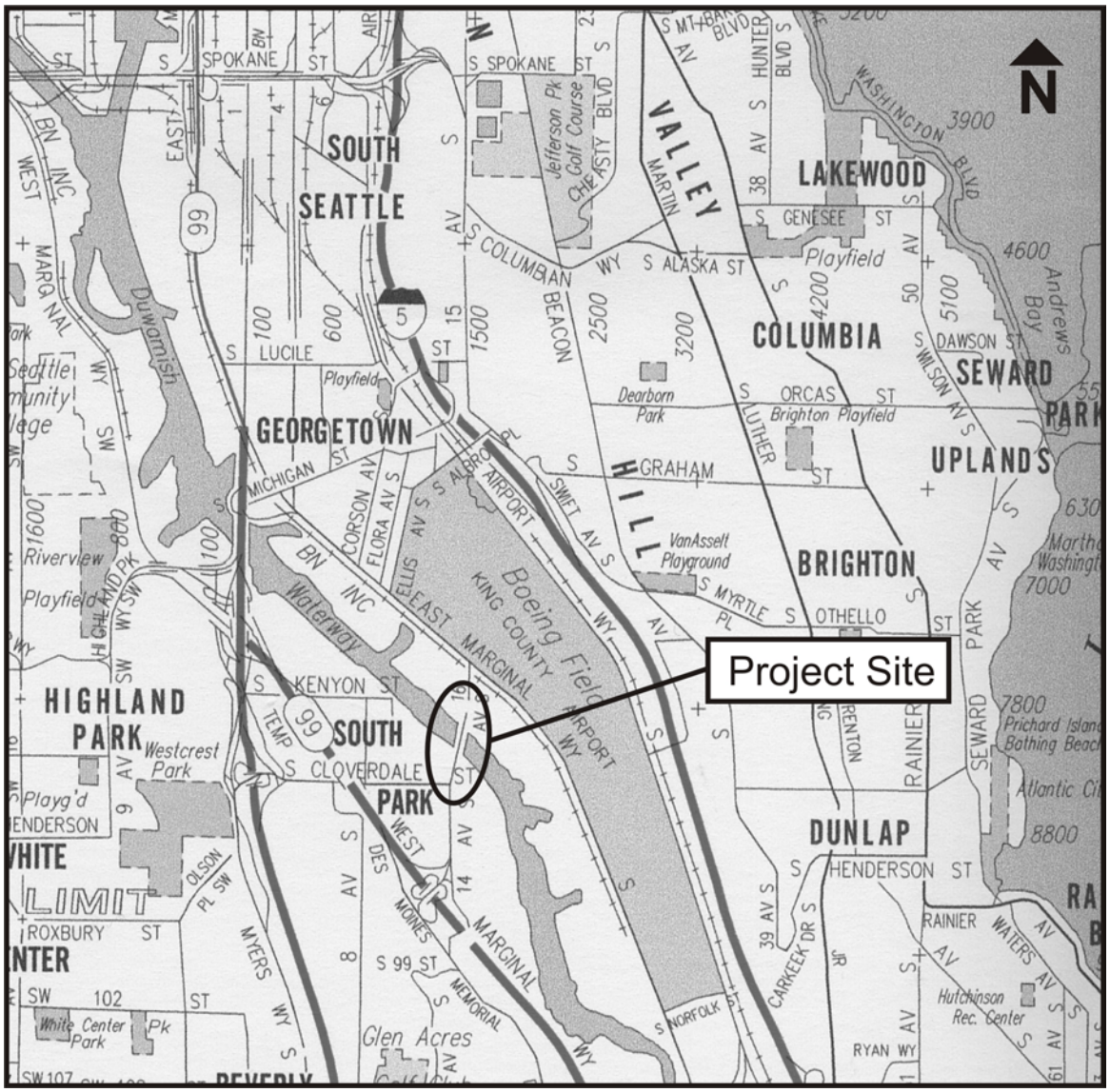



**Figure 1: Vicinity Map**

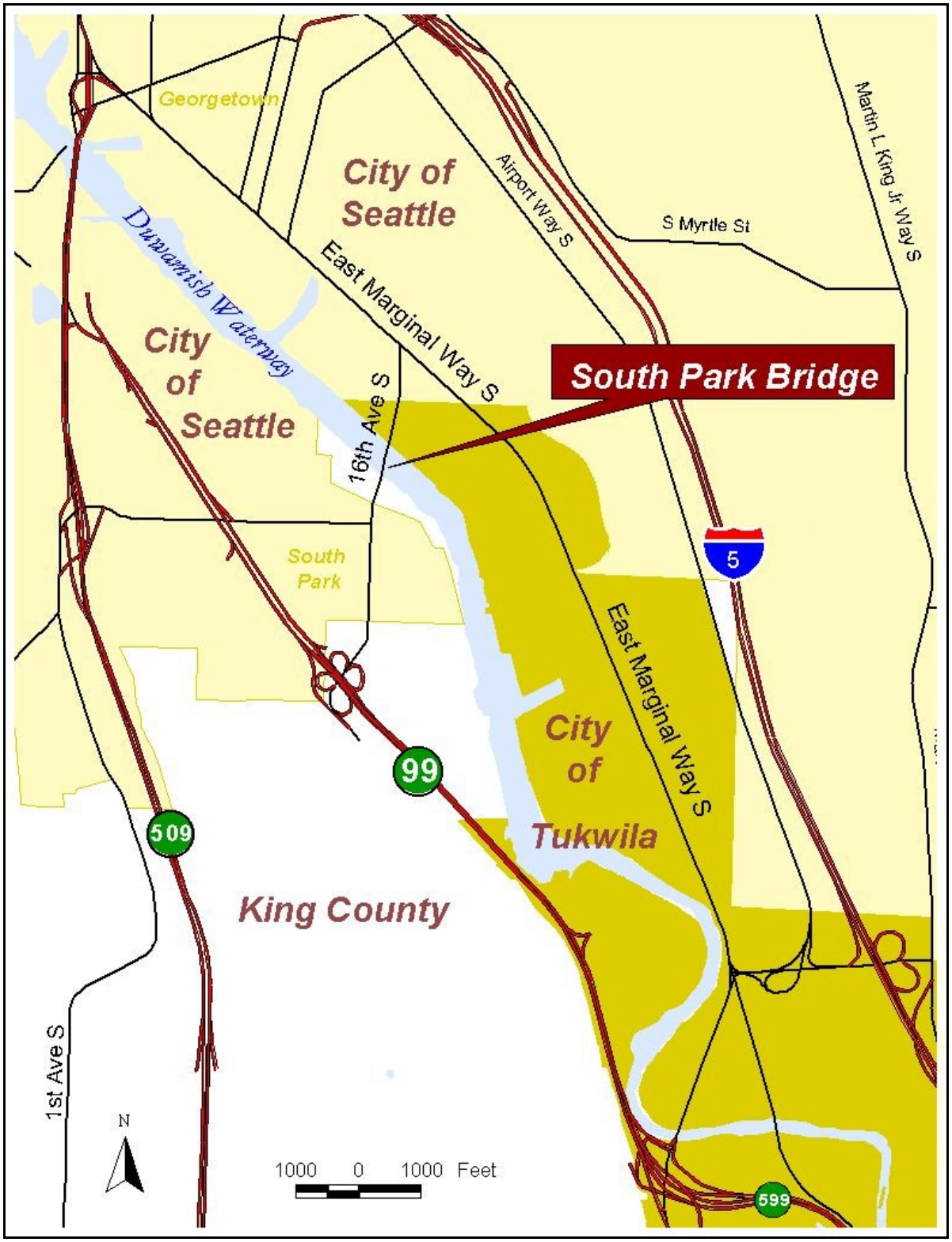
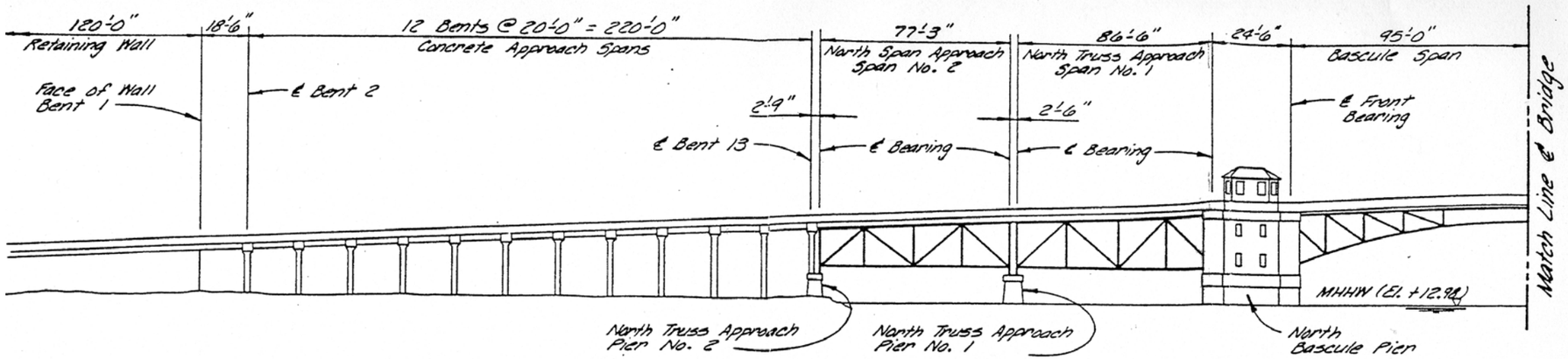
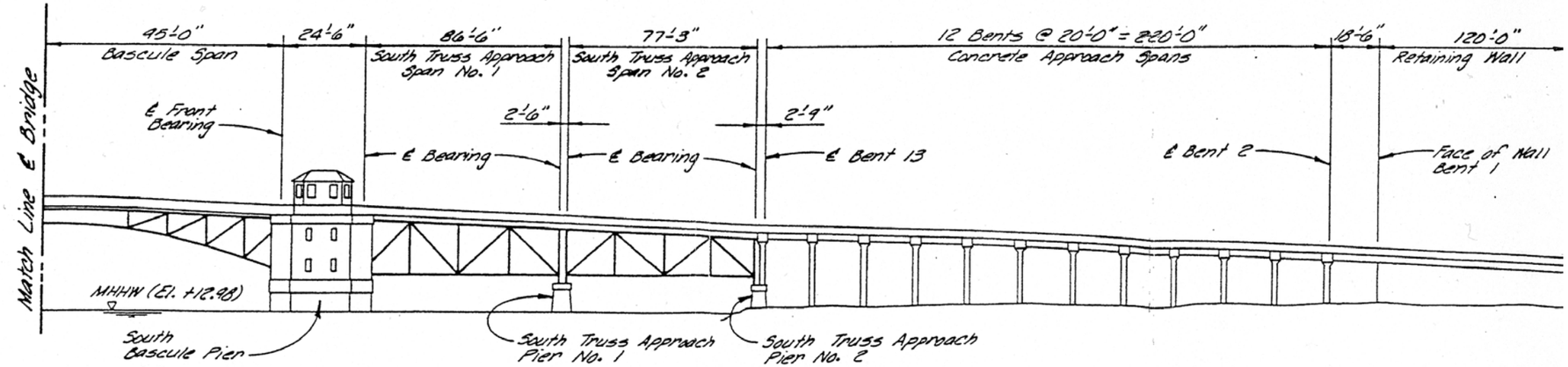



**Figure 2: Area Map**




NORTH BRIDGE APPROACH



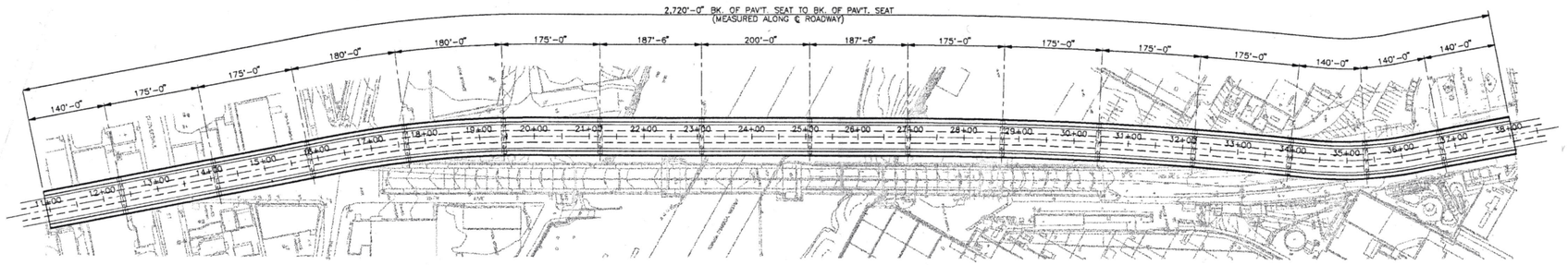

SOUTH BRIDGE APPROACH

PARSONS BRINCKERHOFF

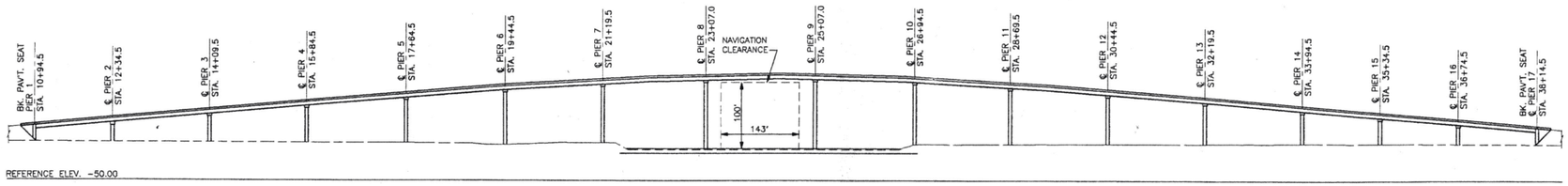
**Figure 3**
**Existing Bridge Elevation Drawing**

| Criteria | King County Standards | City of Seattle Standards | City of Tukwila | Design Report – 1994 by Sverdrup | Existing Standards |
|---|---|---|---|---|---|
| Design Speed | Posted +10 (35+10 = 45MPH) | Arterial Posted Speed 35 MPH | | 35 MPH | 35 MPH |
| Typical Roadway Type | Curb | Curb | Curb | Curb | Curb |
| Maximum Super elevation | 6% | - | | No Super elevation Specified | |
| Horizontal Curve Min. Radius | 656 ft with 6% superelevation | 410 ft with superelevation | | 1146 ft. for 60 ft and 100 ft clearance Bridge<br>1200 ft. for Moveable bridge | |
| Stopping Sight Distance | 400 ft. (+25ft for 3% Downgrade, +55' for 6% down grade and +70' for 9% downgrade) | | Per AASHTO | 241.13 ft. for 60 ft. & 100 ft. Clearance Bridge<br>282.38 ft. for movable bridge | |
| Entering/Intersection Sight Distance | 656 ft. | | Per AASHTO | | |
| Minimum Travel way width | 2/3 Lane = 34 ft.<br>4 Lane = 44 ft.<br>5 Lane = 56 ft.<br>2 ft. addition for guardrail/barrier | Through Lane = 11'<br>Curb/Turn/Bus Lane = 12'<br>Curb Lane with Bike path = 14 ft.<br>2 ft. addition for guardrail/barrier | 48' to 84' | 48 ft. (4 lanes, 12 ft. each) | 38 ft. (4, 9.5 ft. lanes) |
| Minimum ROW | 100 ft. | | 80' to 100' | 100 ft. | |
| Intersection | Minimum Angle = 85°,<br>Maximum Angle = 95°<br><br>Minimum Centerline Radius for 2 Lane Roadway = 55 ft,<br><br>Minimum Curb Radius urban street = 35 ft.<br><br>Minimum Curb Radius Residential Access = 25 ft.<br><br>Minimum ROW radius = 25 ft. | Minimum Curb Radius Arterial to Arterial = 25'<br><br>Minimum Curb Radius Arterial to Residential access = 20 ft.<br><br>Minimum Curb Radius Arterial to Commercial access = 25'<br><br>Minimum Curb Radius High Truck Volume Street = 25' | | | |
| Spacing Between Intersections | 1000 ft. | | | | |
| Maximum Grade (Arterials) | 9% | 9% | 15% | 8% for 100 ft. and 60 ft. clearance<br>5% for Movable Bridge | |
| Roadside Obstructions | 10 ft. from edge of travel lane or mountable curb<br>8.5 ft. from face of vertical curb in business area<br>5.5 ft. from face of curb in residential area | 3 ft. from face of curb<br>10 ft. from roadway edge (where no curb exists) | | | |
| Sidewalk | 6.5 ft. when next to curb | 10.5 ft. when next to curb | 6' for P-O/C-1/CM, 8' for C-1/C-2 | 8 ft. | 6 feet sidewalk |
| Vertical Clearance | | 16.5 ft. | | | 32 ft. at Mean Higher High Water |
| Bike Lane | 5 ft on both sides | 4 ft minimum (Optional) | | No bike path provided | No bike path provided |

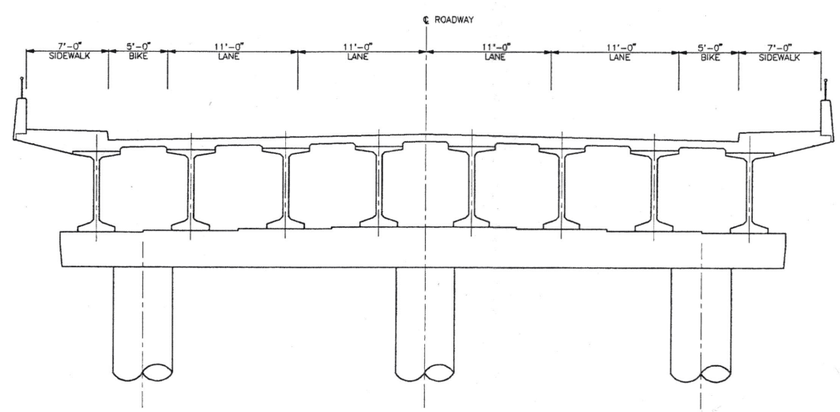
**Figure 4: Roadway Design Standards**




PLAN



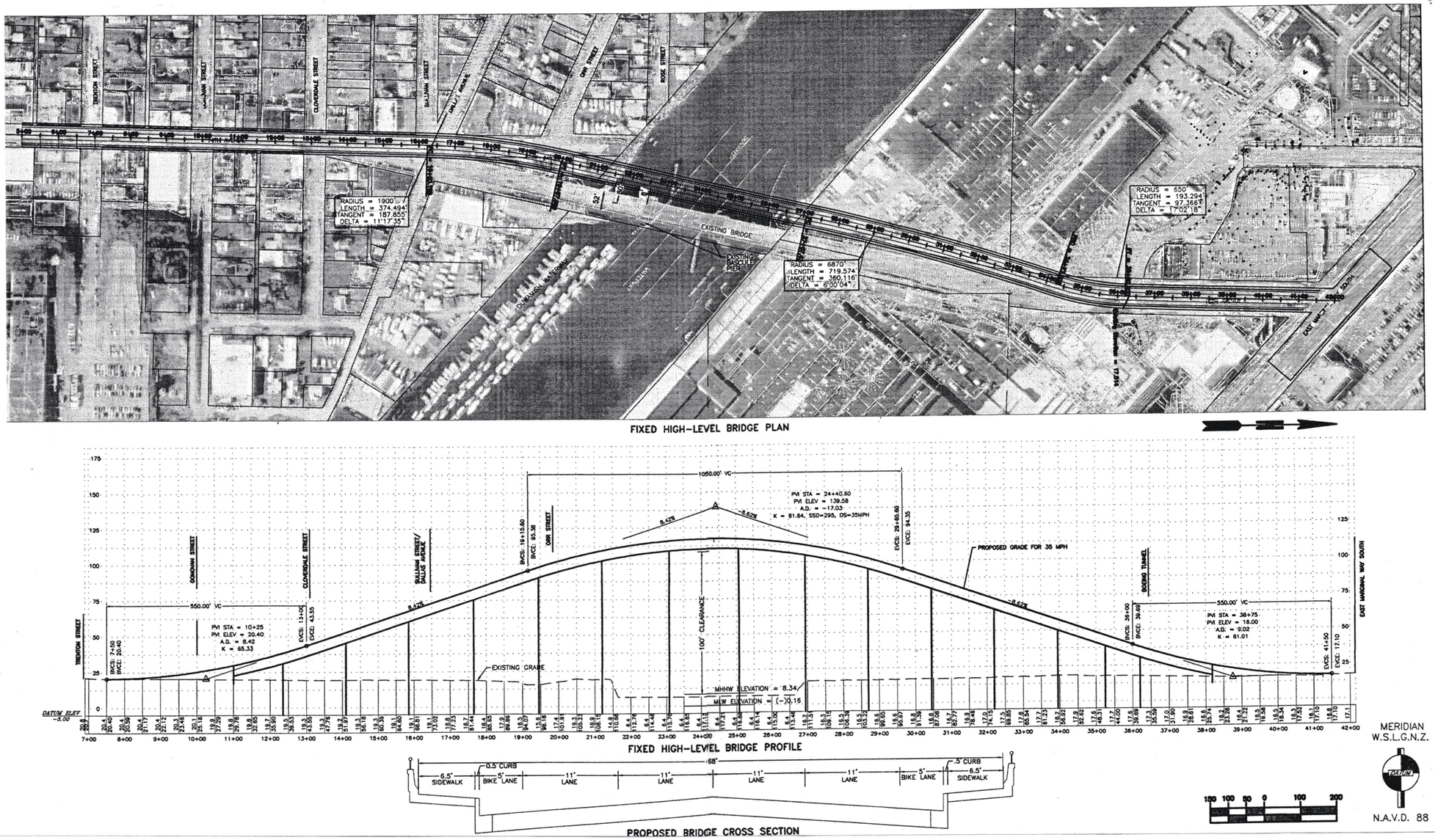

ELEVATION




TYPICAL SECTION

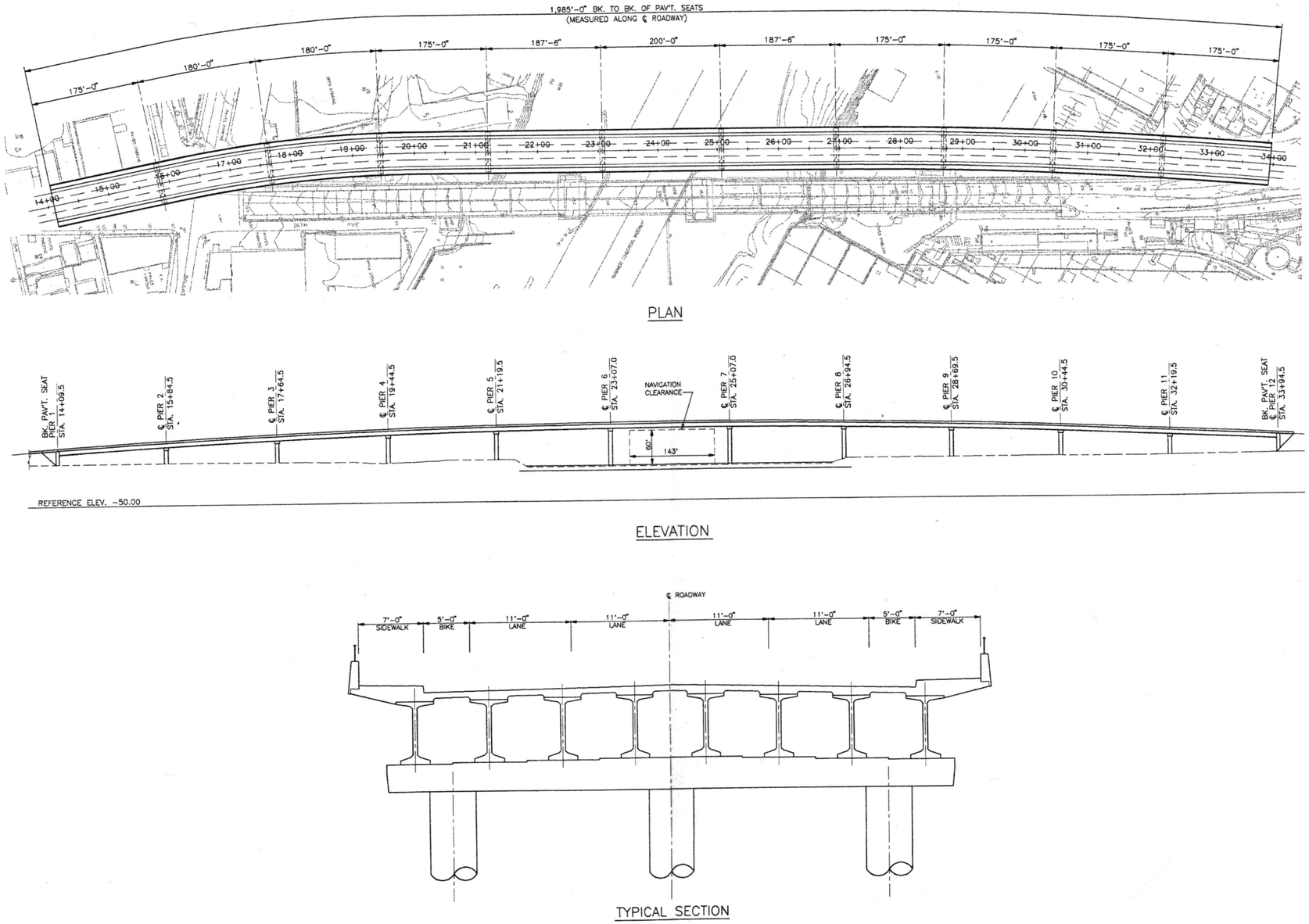
PARSONS BRINCKERHOFF

**Figure 5**
**Fixed High-Level Bridge Alternative**



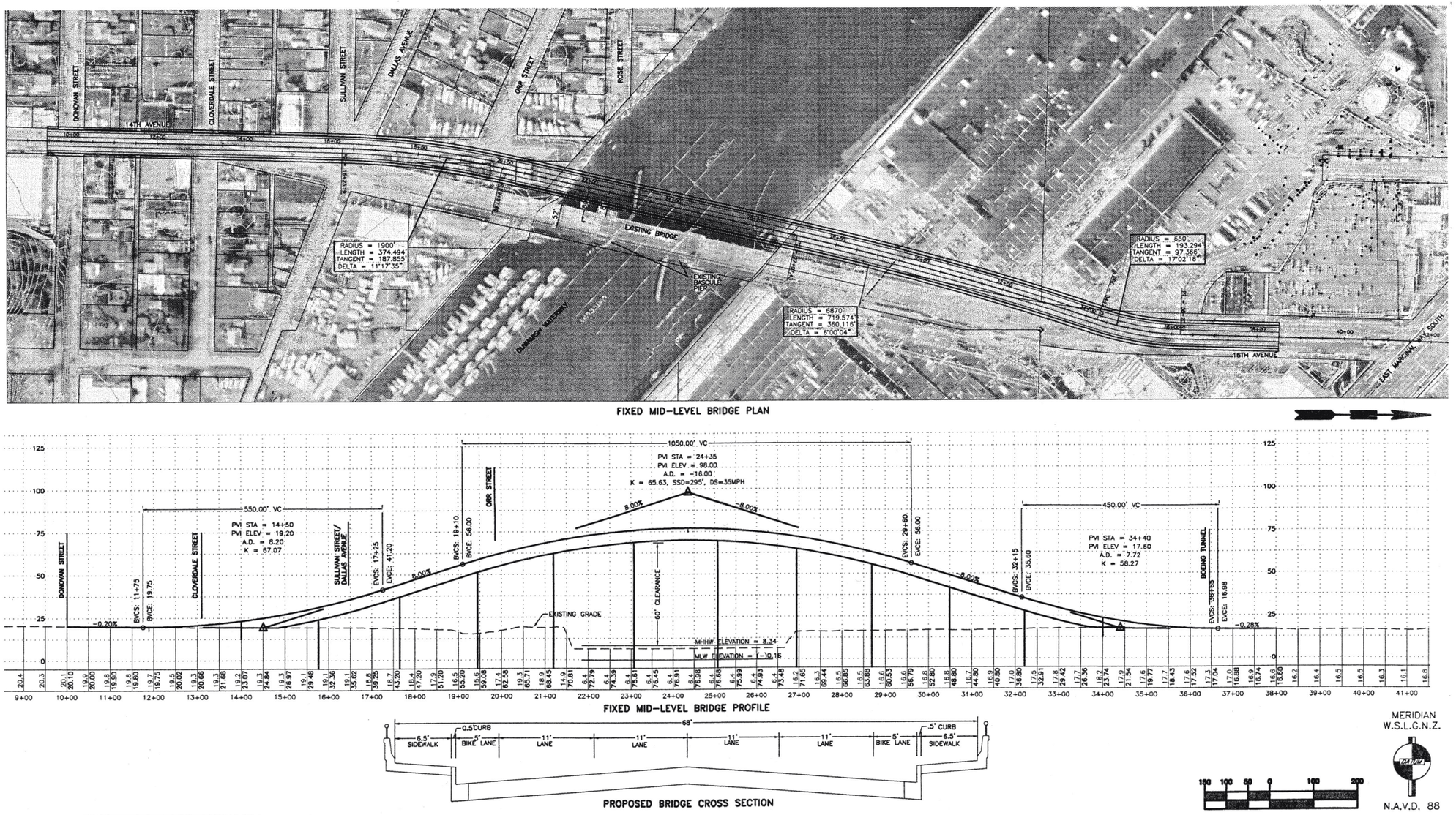

PARSONS BRINCKERHOFF

**Figure 5a**
**Fixed High-Level Bridge Alternative**



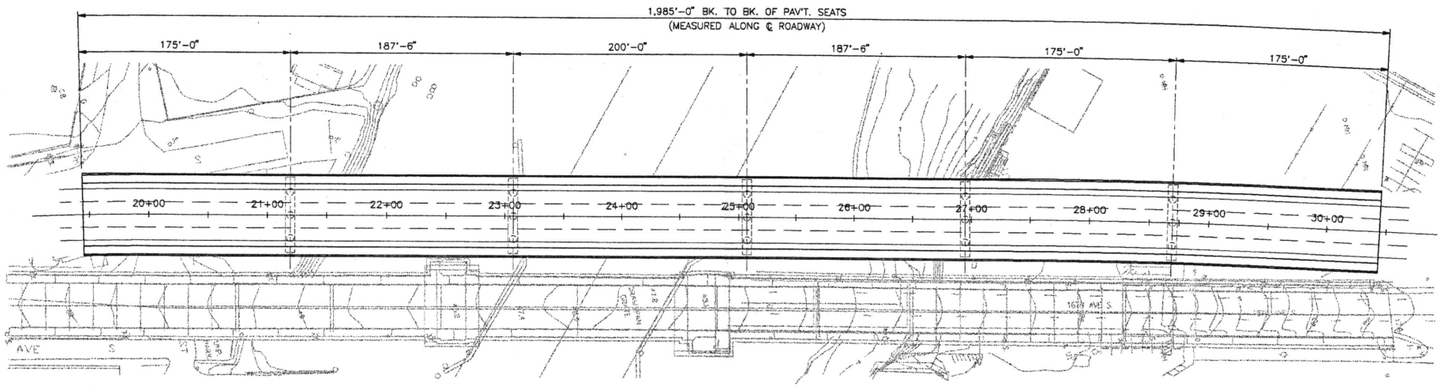

PARSONS BRINCKERHOFF

**Figure 6**
**Fixed Mid-Level Bridge Alternative**




PARSONS BRINCKERHOFF

**Figure 6a**
**Fixed Mid-Level Bridge Alternative**

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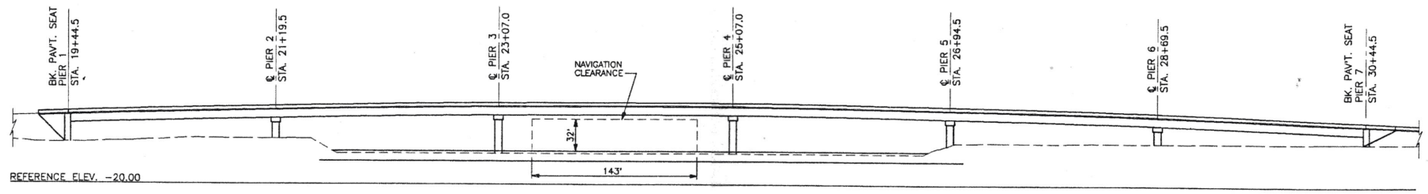
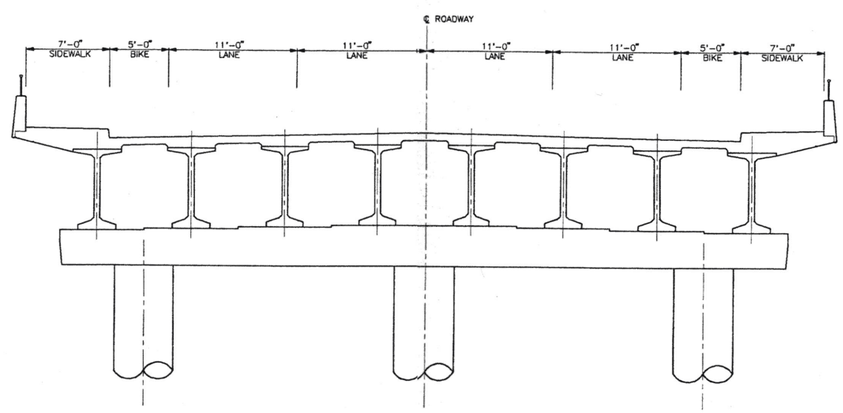



ELEVATION




TYPICAL SECTION

PARSONS BRINCKERHOFF

**Figure 7**
**Fixed Low-Level Bridge Alternative**