

**SECTION 905 -- PROPOSAL (CONTINUED)**

I (We) further propose to execute the attached contract agreement (Section 902) as soon as the work is awarded to me (us), and to begin and complete the work within the time limit(s) provided for in the Specifications and Advertisement. I (We) also propose to execute the attached contract bond (Section 903) in an amount not less than one hundred (100) percent of the total of my (our) part, but also to guarantee the excellence of both workmanship and materials until the work is finally accepted.

I (We) enclose a certified check, cashier's check or bid bond for **five percent (5%) of total bid** and hereby agree that in case of my (our) failure to execute the contract and furnish bond within Ten (10) days after notice of award, the amount of this check (bid bond) will be forfeited to the State of Mississippi as liquidated damages arising out of my (our) failure to execute the contract as proposed. It is understood that in case I am (we are) not awarded the work, the check will be returned as provided in the Specifications.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

ADDENDUM NO.   1   DATED   8/14/2013   ADDENDUM NO.   3   DATED   08/22/2013    
 ADDENDUM NO.   2   DATED   08/19/2013   ADDENDUM NO.            DATED           

Number	Description
1	Revised Table of Contents, replace same; Revised NTB Nos. 2382 & 4587, replace same; Add SP 907-829-2; Revised BidItems, replace same; Revised or Added Plan Sht. Nos. 2-5, 13, 15, 16, 19, 20, 31, 61, 127-132, & 1007; Amendment EBS Download Required.
2	Wage Rates, replace same; Amendment EBS Download Required.
3	Revised SP 907-829-2, replaces same; Amendment EBS Download Required.

TOTAL ADDENDA:   3    
 (Must agree with total addenda issued prior to opening of bids)

Respectfully Submitted,

DATE \_\_\_\_\_

\_\_\_\_\_ Contractor

BY \_\_\_\_\_ Signature

TITLE \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

PHONE \_\_\_\_\_

FAX \_\_\_\_\_

E-MAIL \_\_\_\_\_

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of \_\_\_\_\_ and the names, titles and business addresses of the executives are as follows:

_____	President	_____	Address
_____	Secretary	_____	Address
_____	Treasurer	_____	Address

The following is my (our) itemized proposal.

Revised 09/21/2005

NHS-0010-01(145) / 105281302

Harrison County(ies)

# MISSISSIPPI DEPARTMENT OF TRANSPORTATION

**SPECIAL PROVISION NO. 907-829-2**

**CODE: (SP)**

**DATE: 08/22/2013**

**SUBJECT: Noise Barrier Walls**

**PROJECT: NHS-0010-01(145) / 105281302 – Harrison County**

Section 907-829, Noise Barrier Walls, is added to and becomes a part of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows.

## **SECTION 907-829 - NOISE BARRIER WALLS**

**907-829.01--Description.** This work consists of furnishing and erecting the noise walls in accordance with these specifications and in reasonably close conformity with the dimensions, lines, and grades indicated on the plans. The walls are to be designed as post-supported. The wall shall be designed according to Chapter 15 AASHTO LRFD Bridge Design Specifications.

**907-829.01.1--Wall Unit Design, Performance Requirements and Submittals.** Detailed layout, fabrication drawings, and complete engineering calculations based on the general layout in the MDOT plans shall be submitted for approval prior to construction. The submittals shall include and meet, but not to be limited to the following requirements:

- 1) The drawings shall include all information necessary for prefabricating or field constructing wall sections and posts. Drawings shall show shape, dimensions and layout of wall components and details of reinforcing steel, as well as quantity, type size and details of connection and lifting hardware, and any additional details necessary for a complete review.
- 2) The drawings shall include a complete elevation view of each wall section indicating top and bottom elevations as well as roadway grade. The Contractor shall design the top of the barrier to be horizontal and at or above the wall profiles shown on the plan drawings. Change in elevation shall be accomplished by stepping sections at post. Step shall allow for a smooth transition in wall height as determined by the Engineer, and shall not exceed two (2) feet in height. The drawings shall include a numbered wall component layout, and shall show horizontal and vertical alignment of the wall. Panels may be cast in sections and stacked to achieve the design height. All joints shall be lined up and horizontal alignment shall be maintained for the joints continuously for as many bays as practical.
- 3) The drawings shall also include all information needed to erect the wall, including the proposed drill shaft elevations and depths, the details and construction procedure for connecting panels, panels to posts, and posts to foundation shafts, details necessary to account for change of grade, details for any additional drainage structures, details for

spanning or integrating with any existing or new drainage structures or ditches, and any additional details necessary to complete the work.

- 4) All drawings shall be clear and complete, and shall be thoroughly checked before submittal. The Contractor shall be solely responsible for the content of the design plans and shall ensure the details of the wall conform to all requirements of the contract plans and specifications. Six sets of prints of the completed wall design plans shall be submitted for distribution. The prints submitted shall be legible and have distinct details of sufficient contrast to be suitable for reproduction. The electronic CADD files for all drawings shall be submitted with the reproducible drawings on 3½-inch floppy disks or CD with the filenames contained thereon listed on the exterior of the disk to the primary Roadway Design Division contact. The CADD files shall be developed with MICROSTATION and shall be in a compressed zipped (.ZIP) format.
- 5) Design calculations shall include a summary of all design parameters used, including material types, strength values and allowable stresses, soil parameters, assumed loads and load combinations. Calculations shall be submitted covering the full range of heights and loading conditions of the noise wall.
- 6) All drawings and design plans submitted for distribution shall be signed, sealed and stamped in accordance with the laws relating to Mississippi State Board of Registration for Professional Engineers and Land Surveyors. The Contractor shall verify the design by the wall system supplier. Information to be verified shall include, but not be limited to soils, ground topography, design loads, location of utilities and other obstructions.
- 7) A sample wall section shall be submitted prior to construction of any wall panels. The section shall be constructed using the identical process for casting the permanent wall panels, including the installation of any hardware that will be used. If changes such as wall texture or color are required, a new sample panel shall be constructed before final approval can be made. The minimum sample panel shall be 4'x4' and include two sample posts and be erected at a location specified by the Engineer. The Engineer will reject wall units and posts not conforming to the approved sample wall section.
- 8) Submit construction sequence and scheme showing method and sequence of assembly of the noise wall, including drilling of shafts, placement of posts, reinforcement and concrete, excavation, bracing for excavation if required, installation of wall units, and placement of backfill.
- 9) Submit manufacturer's color samples for selection by the Engineer.
- 10) The wall shall be designed to limit the deflection in inches at the top of the wall due to wind load to not exceeding height of wall in feet divided by 50.
- 11) Working Stress Design shall be used in the analysis and design.

**907-829.01.2--Qualifications.** The installer of the wall shall have a minimum of five years of experience in the design and construction of noise walls, documented in a list of at least five (5) projects, which substantiate experience in noise walls. Include a brief description of each project and the name and phone number of owner's representative knowledgeable in each project listed.

**907-829.02--Blank.**

**907-829.03--Construction Requirements.**

**907-829.03.1--Ground Mounted Noise Wall.**

**907-829.03.1.1--Foundation Design Parameters.** The following design parameters for the soil shall be used in design of ground mounted noise wall foundations.

**LPILE Design Parameters for Noise Walls**

Internal <i>p-y</i> model	$\gamma'$ Effective Unit Weight (pci)	$c_u$ Undrained Cohesion (psi)	$\epsilon_{50}$ Strain Factor -	$\phi$ Friction Angle (degrees)	$k$ Soil Modulus (pci)
Soft CLAY	0.026	2.43	0.020	--	30
SAND (Reese, 1974)	0.032	--	--	30	60

**907-829.03.1.2--Noise Barrier Walls and Posts.** Noise wall panels and posts shall be constructed of pre-cast concrete in accordance with the plans and these specifications and approved shop drawings.

- 1) **General:** Fabricate, transport, and erect panels and posts in such a manner as to prevent damage thereto. Fabricate the panels and posts in accordance with Sections 804, 805 and 806, except as modified below,
  - (a) Use form that is true to the dimensions shown in the approved shop drawings.
  - (b) Place the concrete in one continuous lift resulting in no cold joint.
  - (c) Provide all accessories, materials, and methods which are not specifically specified in the plans and these specifications, but which are essential for installation or construction of the walls and posts commensurate with the best standard practice of the industry, subject to the approval of the Engineer.
- 2) **Materials:** Furnish the Engineer with certification that the pre-cast concrete supplied for the construction of the walls and posts meet the concrete class and strength requirements specified in the plans.
- 3) **Construction:** Noise wall panels and posts shall be constructed as follows.

- (a) Fill any and all holes on the panels resulting from their fabrication or installation with an approved mortar grout.
- (b) Cut all exposed bars, etc., used in lifting or assembling the panels and posts flush with the surface. Then clean the bars, and coat the opening with an approved epoxy.
- (c) Paint all exposed metal fasteners in the finished work with an approved galvanized paint.
- (d) Do not use panels and posts damaged by improper storing or handling.
- (e) Posts shall be either pre-cast, reinforced concrete or pre-cast, pre-stressed concrete. Final color shall be as directed by the Engineer. Post attachment to the panels shall be tongue-and-groove connection. Post attachment to the footing may be steel anchor plate or by embedment in poured concrete. Post construction and connection details shall be specified in the shop drawings.
- (f) Use anchor bolts made of steel meeting the requirements of ASTM Designations: A 305 and A 325 and galvanized in accordance with ASTM Designation: A 153. All structural steel and plates shall be A 36 steel. All exposed metal shall be hot dip galvanized in accordance with ASTM Designation: A 123.

**907-829.03.1.3--Cast-In-Place Concrete.**

**907-829.03.1.3.1--General.** All Cast-In-Place concrete shall be in accordance with the plans and these specifications.

**907-829.03.1.3.2--Materials.** Materials for Cast-In-Place concrete shall meet the following.

- (a) Provide concrete of the class specified in the plans.
- (b) Provide reinforcing steel of deformed bars meeting the requirements of ASTM Designation: A 615, Grade 60.
- (c) Use anchor bolts made of steel meeting the requirements of ASTM Designations: A 305 and A325 and galvanized in accordance with ASTM Designation: A 153. All structural steel and plates shall be A36 steel. All exposed metal shall be hot dip galvanized in accordance with ASTM Designation: A 123

**907-829.03.1.4--Drilled Shafts.**

**907-829.03.1.4.1--Drilled Shaft Design.** Design of drilled shafts shall be performed by a qualified representative knowledgeable of the design and construction process. The software for analysis and design of drilled shafts under lateral load such as LPile developed by Ensoft, Inc., LCAP and PYSHEET by Virginia Transportation Research Council (VTRC), or any other program approved by the Engineer may be used in the design of drilled shafts.

**907-829.03.1.4.2--Installation of Drilled Shafts.** Installation of drilled shafts shall be in accordance with Section 803 of the Standard Specifications, except modified below:

- (a) Drilled Shaft Load Tests will not be required.
- (b) Drilled Shafts will not be measured and paid as a separate pay item.

**907-829.03.1.5--Appearance of Wall System.** Architectural aesthetic treatment shall be applied to both sides of panels. A form liner shall be used to create an architectural feature of fractured texture on roadway side and brick texture on non-roadway side. The fractured texture shall be similar to Saint Mary's and the brick texture shall be similar to Old Brick by the Scott System, Inc. or approved equal. Color of panels will be selected from an approved manufacturer's standard color selection chart.

**907-829.03.1.6--Construction Methods.** Construction methods shall meet the following.

- 1) Prior to beginning earthwork on the project, stake the wall location in the field and establish the final ground line elevations at the noise walls after the roadway has been graded to its final elevation. Use these elevations to develop the shop plans, including a complete elevation view of each wall indicating top and bottom elevations as well as roadway grade. Protect the final ground elevations established in the field for the duration of the project, and do not adjust without prior approval of the Engineer. Keep to a minimum the clearing and grubbing, and trimming of trees as necessary to construct the walls. Any tree trimming or tree removal required shall be considered to be included in the wall contract.
- 2) Secure joints and connections in such a manner as to be structurally sound with no visible openings for sound transmission or light leaks.
- 3) Repair marred, chipped, scratched, or spalled areas of walls at no expense to the Department in accordance with the manufacturer's recommendations or at the Engineer's direction.
- 4) Place trench backfill for wall constructions in accordance with Subsection 203.03.8.6.
- 5) Dispose of all excess excavation in a manner satisfactory to the Engineer.
- 6) Tolerances:
  - (a) Ensure that vertical alignment for walls and posts is:
    - ½ inch for wall heights to 10 feet;
    - 1 inch for wall heights greater than 10 feet to 20 feet; and 1½ inches for wall heights greater than 20 feet.
  - (b) Ensure that horizontal alignment for walls is in reasonably close alignment to that shown in the plans so as to prevent panels from slipping out of the post joints.
  - (c) Set post spacing  $\pm\frac{1}{2}$  inch of their intended location.

**907-829.03.1.7--Coating for Ground Mounted Noise Walls.** The coating for ground mounted noise walls shall meet the following.

- 1) Description: Coating for color finishing shall be a premium, water-borne, alkali-resistant, pigmented stain formulated with styrene acrylic for concrete surface. Acceptable products shall allow moisture and vapor transmission and shall be formulated for exterior application with resistance to freeze/thaw, moisture, alkali, acid and mildew, mold or fungus, discoloration or degradation. Apply stain in accordance with the manufacturer's recommendations. The stain shall be applied by a manufacturer certified applicator.
- 2) Materials: Coating system shall be based on a high performance acrylic resin and inorganic pigments. It shall be designed to penetrate concrete surfaces while providing a

breathable, water repellent and color stable concrete protection. The materials shall be delivered in the original sealed containers, clearly marked with the manufacturer's name, brand type of material, batch number, and date of manufacture. Store materials in accordance with the manufacturer's recommendations.

- 3) Surface Preparation: Surface to which coating is to be applied must be dry and free from dirt, paint, sealers, wax, or other foreign material. In addition, glazed or glossy surfaces must be chemically, acid washed, or mechanically abraded to remove gloss before application of the coating to allow maximum penetration.
- 4) Application: Coating system on roadway side may be applied by brush or roller for small or edging work or airless spray equipment. Coating system on residential side shall be applied by roller or an approved method to produce a 2-tone painted concrete textured panel in a brick pattern. The coating system shall be applied in two coats until color uniformity, intensity, and complete hiding are achieved. Do not apply coating prior to 28-day concrete cure and surface is dry. Coating shall be applied to all exposed surfaces of units and pre-cast concrete posts.

**907-829.03.2--Bridge Mount Noise Walls.** The bridge mounted noise walls shall be Sound Zero system fabricated by Manning Company or approved equal and shall be manufactured with the following.

- 1) General: The bridge mounted noise wall panel shall be a composite, light weight wall system weighting not exceeding 12 PSF intended for structure mounted applications. The panels shall provide a passive restraint system that prevents departure from the structure in the event of an accident.
- 2) Design: The manufacturer of the noise wall system shall take full responsibility of Engineering theory and calculations correctness and ensuring that all design assumptions for the panels are validated in accordance with AASHTO Standard Specifications for Highway Bridges 1996 and 1998 Interim; and meeting the requirements of Guide Specifications for Structural Design of Sound Barriers 1989.
- 3) Material:
  - (a) Wall Posts: Wall posts shall be W shape shop fabricated from A36 steel and hot dip galvanized in accordance with the requirements of ASTM Designation: A 123.
  - (b) Wall panels:

Sound Zero or approved equal steel core: 2-inch, 18 ga. G-60 galvanized ASTM Designation: A 653, yield strength 35 - 99 ksi, ultimate strength 45 - 57 ksi, minimum I=0.679 in. as manufactured by the Manning Company or approved equal in lengths as required. J-Channel: 1½"x2"x3", 16 ga. G-60 galvanized grade steel as per ASTM Designation: A 526 in lengths as required as manufactured by the Manning Company or approved equal.
  - (c) Passive restraint cables: ¼-in diameter galvanized wire rope, ¼-inch diameter 7x19 IPS.RRL.IWRC with a flemish eye loop 3" x 6" at both ends. Cable shall have a minimum one inch of "slack" and a minimum breaking strength of 3.5 tons.
  - (d) Lifting insert: ¾-inch diameter nut, galvanized w/flat plate.
  - (e) E.P.S board: one pcf expanded polystyrene shall meet federal specification HH-I-524C Type I.

- (f) Wind-Devil mechanical fastener: A polypropylene washer designed for the mechanical attachment of insulation as manufactured by Wind-Lock Corporation or approved equal.
  - (g) Fiberglass reinforcing fabric: 12 oz./sq. yd., with a minimum tensile strength of 300 lbs./in. of width.
  - (h) Basecoat: An acrylic, latex modified cement-mix ration: 1:1 by weight used to embed fiberglass reinforcing fabric.
  - (i) Finish:
    - A factory mix acrylic texture finish coating with integral color applied to both sides of all panels.
    - Stone aggregate, not greater than 3/8 inch clean and washed.
    - Painting of all structural steel shall be in accordance with the Department's Standard Specifications.
    - Color shall match the color of the ground mounted concrete noise walls.
  - (j) Anti-Graffiti Protection shall be applied to both sides of panels and posts meeting the requirements of Subsection 907-829.03.3.
  - (k) Architectural texture finish shall be applied to both sides of panels. An architectural feature of flute texture on roadway side and brick texture on residential side shall be created. The flute texture shall be similar to profile of 1-inch Deep Rib and the brick texture shall be similar to Old Brick by the Scott System.
- 4) Construction: As indicated on the design contract drawings, approved shop drawings and as follows:
- (a) Shop Drawings – Before beginning construction, submit, for approval, shop drawings showing fabrication details; and handling, transportations, and construction procedures for all wall elements including connections.
  - (b) Installation - Construct structure mounted posts and connections as indicated in the plans and in accordance with manufacturer's recommendations.
  - (c) Fabrication – Fabricate the panels in an approved plant in accordance with approved drawings and approved quality control plan.
    - Fabricate, for approval, a 4' x 4' panel and finish as specified for the full height wall system, and erect at a location specified by the Engineer. Fabricate sample wall by the same process that will be used for all production. Panels not conforming to the approved test sample will be rejected.
    - Sound Zero or approved equal steel core units shall be supplied in proper lengths. Each of these units shall be designed to allow an overlap adjustment one to the other to obtain the required overall height of assembled steel core structure. Minimum overlap  $\frac{3}{4}$  inch.
    - Pieces shall be fastened together along the overlapping seams, with screws at 24 inches o.c. max.
    - J-Channel – shall be placed on both ends to the substrate and secured by welding or screw fastening. All welds shall be “touch-up” with a zinc coating.



- Wire rope with formed loops: 1/4-inch diameter 7 x 19 IPS.RRL.IWRC galvanized wire rope with a minimum breaking strength of 3.5 tons shall be placed as shown on approved shop drawings, with the cables on the community side of the Sound Zero core. Cable shall be a minimum one foot longer than the width of the panel. Loops shall be attached securely to the core by either plastic or steel strapping.
- All surface oils and other foreign materials shall be wiped clean from the steel core structural unit prior to installing panels.
- Insulation, 1 pcf, shall be 2 feet by the full width, perpendicular to the steel core. The insulation shall be fastened using Wind-Devil Fasteners. One per sq. ft.
- Reinforcing fabric: The fiberglass reinforcing mesh shall be embedded into the wet basecoat, to encapsulate all six sides of the panel. The mesh shall be overlapped a minimum of 2½ inches on all sides.
- All edges of the panel shall be coated with an elastomeric prior to finishing either face of the panel.
- The approved finish is then applied to each face of the panel.
- Anti-graffiti primer is then applied to the entire panel, all six sides: Finish coat must be fully cured prior to primer applications.
- Fabrication Tolerances:

<u>Panels (inch)</u>	
Height	+1/4
Length	+1/2
Thickness	+1/4

- (d) Handling, storage and transportation: Employ positive means to protect panel edges from damage. Load and ship panels with care as indicated or as per manufacturer's recommendation.
- (e) Lift panels so as to minimize strain, distortion or impact loads.
- (f) Erection – Install noise barrier wall as indicated as shown on approved shop drawings, and in accordance with the manufacturer's recommendation.
  1. Install neoprene pad between base plates of the steel posts. The pad should compress sufficiently to provide uniform bearing for the full length of the panel.
    - Lift panels by the two (2) ¾-inch diameter lifting eyes located in the panel. After installation, the lifting eyes shall be removed and replaced with ¾-inch diameter x ¾-inch galvanized bolt, and washer to seal insert.
    - Once in place, panels shall be field drilled, at holes in post, to secure 5/8-inch diameter A325 bolts through wire rope loops. Passive restraint system as indicated.
    - Sealant: Use a polyurethane sealant to seal the panel to the post flange. Sealant is only required on one side of panel. Color of sealant shall match with the color of panels
  2. Erection Tolerances:
    - Vertical alignment for walls and posts to be ¼ inch for all heights to 10 feet, ½ inch for wall heights to 20 feet, and ¾ inch for wall heights greater than 20 feet.

- Posts to be set with +1/2 inch of the indicated location.
- (g) Reject individual panel for any of the following:
  1. Fractures or cracks passing through the panel. All cracked panels will be rejected either at the fabrication shop or at the construction site, even after installation, but prior to acceptance of the project.
  2. Defects that indicate proportioning, mixing and molding not in compliance with the specifications, as specified or indicated.
  3. Damaged ends, which prevent making a satisfactory joint.
- (h) Repair and repair procedures require approval by the Engineer.
- (i) Technical Assistance: Have a company representative present, full time, at the project site during erection procedures of the noise barriers to assist the fabricator, Contractor, and Engineer. Provide a technical representative to assist in the event unusual problems or special circumstances arise.

**907-829.03.3--Graffiti Protection.**

**907-829.03.3.1--Description.** Graffiti protection shall be provided for entire height on both sides of noise walls. The anti-graffiti coating shall be chemically compatible with the sealer coating to be used. Apply clear coatings, unless otherwise specified in the plans or approved by the Engineer. Subject to compliance with manufacturer's recommendations use one of the following or approved equal:

Defacer Erase Graffiti Control; ProSoCo, Inc.  
Telephone Number: (913) 281-2700

ENVIROSEAL AG; Harris Specialty Chemicals, Inc.  
Telephone Number: (800) 327-1570

Graffiti Guard Tycote Clear Base Coat with Tex coat  
Graffiti Guard IIS-Finish; Texture Coatings of America, Inc.  
Telephone Number: (305) 581-0771

**907-829.03.3.2--Application.** The application process shall meet the following.

- (a) Cleaning: Thoroughly clean all surfaces and allow them to dry, according to manufacturer's recommendations, before applying any coatings. Adopt cleaning procedures that will not damage the existing surface texture or coloring.
- (b) Surface Preparation: Prepare all surfaces, including primer application, according to manufacturer's recommendations.
- (c) Application Rates: Apply all cleaning, priming, and coating products according to manufacturer's recommendations, so that the finished product meets the requirements stated herein below.

**907-829.03.3.3--Environmental Restrictions.** Use only products meeting Federal, State, and Local environmental restrictions. Do not use products containing Lead, Cadmium, or Chromium.

- (a) Volatile Organic Compounds (VOC): Do not use products with a VOC greater than 150 g/L.
- (b) Local Condition: Ensure that the humidity and temperature are within acceptable ranges specified by the manufacturer.
- (c) Wind Velocity: Protect vehicles or other property from damage resulting from dispersion of the material. Suspend operation until conditions improve enough to permit work to continue without damage.

**907-829.03.3.4--Construction.** Apply the product so that the completed product meets the following requirements:

Total product life:	Five years
Removal delay period:	Two months

Follow the application and cure time, specified by the manufacturer, to ensure that the coated surface is capable of withstanding graffiti application, spray paint, removal delay period, and cleaning without damage. Observe the proper cleaning procedures, as well as cleaning products, specified by the manufacturer. Use cleaning products that meet the requirements of the environmental restrictions. Ensure that the cleaned surface displays no sign of graffiti “shadows” or “ghosts”.

Submit a copy of the Manufacturer’s cleaning procedures and recommended cleaning products to the Engineer, before applying any anti-graffiti coating.

**907-829.03.3.5--Certification.** Furnish the Engineer with three copies of a test report certifying that the material meets all requirements specified above. The Engineer will consider any marked variation from original test values for a material or evidence of inadequate field performance of material to be sufficient evidence that the properties of the material have changed and the material will be removed from the above product list.

**907-829.04--Method of Measurement.** Noise barrier wall, of the type specified, will be measured for payment by the square foot. The area of measurement shall be calculated from the top of the wall panel to the bottom of the wall panel, and from center to center of post in accordance with the approved shop drawings. Only one side of the barrier wall will be measured for payment.

No separate payment will be made for posts, drilled shafts, testing, excavations, temporary support of excavation, backfill, cast-in-place concrete, reinforcement, joint materials, noise wall coating, graffiti protection, and other incidentals.

**907-829.05--Basis of Payment.** Noise barrier wall, measured as prescribed above, will be paid for at the contract unit price per square foot, which prices and payment will be full compensation for designing, furnishing all materials, fabricating concrete panels and posts, including all necessary connecting hardware, and constructing the noise wall in place, including any excavation and backfill needed for installing the panels and to adjust for the elevation difference between panels. Payment shall include compensation for all labor, materials, equipment and incidental required to install the wall and erect the wall complete in place to the lines and grade

shown on the approved shop drawings. No direct payment will be made for clearing and grubbing or tree removal in the areas of the noise wall. No separate measurement or payment will be made for installation of drilled shafts for ground mounted noise walls.

Payment will be made under

- 907-829-A: Ground Mounted Noise Barrier Wall, Contractor Designed -per square foot
- 907-829-B: Bridge Mounted Noise Barrier Wall, Contractor Designed -per square foot