

SECTION C
DESCRIPTION/SPECIFICATIONS/AND WORK STATEMENT

1. **BACKGROUND**

As one of the nation's principal conservation agencies, the National Park Service (NPS) has the responsibility to protect some of our most treasured natural and cultural resources. In order to preserve these treasures it is important that they be interpreted in ways that help NPS visitors experience them, understand them, and appreciate their value. It is also important that those who visit National Park sites be assured that their visits are safe and enjoyable.

Since its earliest days, the NPS has relied on a variety of interpretive media to assist in the effort to protect its resources and to assure the pleasure and safety of its visitors. Among the various media used by the NPS, wayside exhibits provide the most direct interpretation of park sites and features. Because they are located in a park's outdoor environment, "waysides" offer immediate -- and readily available -- sources of information tailored to a specific place and time. No other interpretive medium can match the power of direct association of information and resource, or the convenience of on-site location.

These contracts are designed to respond to a need to establish nationwide support services for different types of National Park Service outdoor panels. Projects range in scope of small to major.

2. **PURPOSE**

This contract is to meet the interpretive wayside exhibit panel requirements of the Department of the Interior, National Park Service, and occasionally other agencies of the government, by providing fabrication of exhibit quality fiberglass panels for outdoor use. All work performed under this contract will be directed by the issuance of Task Orders in accordance with procedures outlined in Section G of the resulting contract. In no event will the government be responsible for any work performed by the contractor that is not undertaken pursuant to a Task Order authorized by the Contracting Officer.

3. **SCOPE OF WORK**

Independently, and not as an agent of the government, the contractor shall provide all labor, materials, equipment and facilities (except as otherwise specified), necessary to fabricate interpretive wayside exhibit fiberglass panels for outdoor use.

Work under this contract will proceed according to the following order of precedence: Drawings; Scope of Work; Attachments; Supplies or Services and Prices/Costs; Contract Clauses; and Representations, Certifications, and Other Statements of Offerors.

Specifically, the following services are required:

A. **FIBERGLASS EMBEDDED PANELS**

1. **Production of fiberglass embedded panels from government-furnished digital files or production-ready materials.**

Each panel shall consist of a solid one-piece panel with 600 dpi ink jet graphic embedded in fiberglass.

Four-color CMYK images shall be printed on an ink jet printer using ultraviolet resistant pigmented inks. Images shall be printed on a specially formulated substrate capable of resin saturation to ensure a true fiberglass embedment. The print shall be full-size all the way to the edges of the panel.

Full-size proofs shall be right-reading images on embedment substrate (printed in the actual color to be used in production) and shall be submitted to the Contracting Officer's Representative (COR) for review and approval prior to embedment.

The minimum requirements for the inkjet printer shall be 600 dpi image resolution with an output width capable of printing a 36" x 48" image in a single section.

Inks shall be ultraviolet resistant pigmented ink jet inks. The substrate shall be a specially formulated substrate capable of resin saturation to ensure a true fiberglass embedment. Encapsulation is not acceptable.

All completed panels shall be trimmed 1/8" under nominal dimensions indicated in the Scope of Work with a tolerance of +/- of 1/32". The total thickness *of all assembled panel components shall not exceed 0.060"* for all panels 42"x 24" and 24"x 24" and 0.090" for panels 36" x 48" and 5-9/16" x 11 7/16" Trailside panels.

The imaged substrate shall be embedded in fiberglass according to the following specifications: Resin shall be non-yellowing R-70 clear resin or UV stabilized, acrylic modified polyester resin, reinforced with high solubility, chopped strand fiberglass mat so that the index of refraction ensures total clarity of all color, copy and graphics. Glass fibers should not be readily discernable on the panel face. The panel shall have a glass content of no less than 28% of the total panel weight. The panel shall be able to withstand temperatures from -65° f. to 350°f. The panel shall have a minimum Barcol harness factor of 50, tensile strength of 12,000 psi, compressive strength of 20,000 psi, flexural strength of 18,000 psi, and minimum impact strength shall be 6 gt lbs/in notch with a fire resistance of 500°f.

The face shall not be permanently defaced by seam, acid aromatics, scratching, inks, or paints and should be readily wiped clean with paint remover and solvents without affecting the appearance or legibility of finish or graphics.

Face shall retain legibility and finished appearance when sprayed with a 10% solution of hydrochloric, nitric, or sulfuric acid for one half-hour or when scrubbed by a brush or medium hardness using common commercial cleaning compounds such as ammonia, laundry soaps, detergents, carbon tetrachloride, or petroleum based solvents. The panel shall be opaque with a matte finish with a minimum embedment of all graphic elements of .030. The panel shall be router cut, edges shall not be crazed or cracked, and the finish shall be smooth, clean, and neat. Thickness shall be 0.060" or 0.090" as specified in each task order.

Government-furnished property will include a Comprehensive Production Package (CPP) consisting of computer files, annotated printouts, and graphic materials for each of the wayside panels to be imaged.

Each panel layout shall be created at full-size and shall be delivered on a disk, CD, or other current technological storage medium as approved by the COR.

Computer file specifications and requirements include QuarkXPress or InDesign 3.0.1 or greater; Adobe Postscript Level III RIP compatible with Adobe transparency affects; Map/Graphic files created in Adobe Photoshop CS, Adobe Illustrator 10, RGB Adobe Photoshop layered files and other current or equal technology as approved by the COR.

Each computer file will be accompanied by an 11" x 17" color annotated descriptive printout of the panel layout. Each printout will contain illustrative images, (i.e., photographs and illustrations); text, graphic devices, and background; and written production instructions including PMS and other color specifications, notes regarding any image manipulation desired, and the kind of reproduction desired, i.e., full-color, black halftone and mezzotint.

2. **Image assessment, image manipulation and editing, and high resolution scanning**

The contractor shall be responsible for the following:

Image assessment that shall include accuracy of color compared to original proofs, text sharpness, gray scale reproduction, and quality of mass tones. Images shall be free of multiplexing patterns, printed on a single section without tiling, spurious writing, pixel drop-out, and other undesirable artifacts.

Image manipulation and editing shall include creation of digital files from government-furnished text, photographs, PMIS colors, and graphics, conversion of low resolution files to high resolution files, high resolution image editing to include, but not limited to, joining photographs to create panoramic images, image clean-up and restoration, lightening and darkening of image areas for legibility, and other image editing as specified in each individual task order. Image editing for the purpose of eliminating or altering photographic historical content is prohibited. Completed files shall be delivered as high-resolution (no less than 200 dpi at actual output size) RGB layered files. The contractor shall deliver original unaltered scan for COR comparison and approval. The contractor shall utilize computer equipment and software compatible with government standards and as specified in paragraph A.1 above.

High-resolution scanning shall include high-resolution scanning services suitable for large format graphics which is no less than 200 dpi at actual output size and ability to handle a wide variety of original media including: transparencies/negatives (35mm, all sizes of 2.25, 4x5, 8x10) and prints of all sizes, including original art that may exceed 3 x 2 feet.

3. **Production of fiberglass embedded panels from government-furnished paper prints**

From government-furnished paper prints, the contractor shall embed in fiberglass in accordance with the specifications listed above.

B. **GRAPHIC ADJUSTMENTS**

Graphic adjustments include the simple image alteration, or adjustment to existing graphic files typically required before output. These shall include, but are not limited to:

1. Replacing FPO images with high resolution scans;
2. Color management required to match PMS specifications;
3. Creating masks from clipping paths attached to FPO images; and
4. Retouching photographs to eliminate scratches or blemishes.

C. **LABELS**

The contractor shall produce weatherproof labels that shall be placed on the back side of the wayside graphic panels indicating the following specific information for every panel:

Panel Identification Number (ex: GUI5-332),
Size (ex: 36x48),
Material (ex: HPL),
Date of Manufacture,
Harpers Ferry Center, 304-535-5050.

The label shall also include a box with the words “Installation Date” above it so that the park staff can indicate the date of installation on the panel sticker. One sticker shall be secured to each panel prior to delivery of the panels to the COR.

D. **CLOSEOUT**

At the conclusion of all work, the contractor shall return the government-furnished property and all other outstanding materials as specified in the individual task order to the COR. All material generated by the contractor in the process of completing a task order is the property of the government.