SECTION 320190

OPERATION AND MAINTENANCE OF PLANTING

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***NOTE TO SPECIFIER***

*Use this Specification Section for Mail Processing Facilities.*

***This is a Type 2 Specification with primarily editable text; therefore, most of the text can be edited, but there is some required text which is noted within the Section with a “Note to Specifier.” Do not revise these paragraphs without an approved Deviation from USPS Headquarters, Facilities Program Management, through the USPS Project Manager.***

*For Design/Build projects, do not delete the Notes to Specifier in this Section so that they may be available to Design/Build entity when preparing the Construction Documents.*

*For the Design/Build entity, this specification is intended as a guide for the Architect/Engineer preparing the Construction Documents.*

*The MPF specifications may also be used for Design/Bid/Build projects. In either case, it is the responsibility of the design professional to edit the Specifications Sections as appropriate for the project.*

*Text shown in brackets must be modified as needed for project specific requirements.* *See the “Using the USPS Guide Specifications” document in Folder C for more information.*

*The last date that USPS revised this standard specification section occurs in two places, at the end of this section and in the Table of Contents. If the date in this section matches the date in the Table of Contents, then you are using the latest version. Do not delete or revise the “last revised” date at the end of the section during the development of the Project Manual.*

*The footer in this section should be edited to replace the text, “USPS MPF SPECIFICATION” with the project name, and the blank date in the center should be replaced with the submission date, for interim design reviews, or the issue date of the completed Project Manual.*

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1. GENERAL
	1. SUMMARY
		1. Section Includes:
			1. Contractor maintenance of exterior plants, lawns, and grasses.
			2. Contractor maintenance of irrigation system.
		2. Related Documents: The Contract Documents, as defined in Section 011000 - Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other Documents.
		3. Related Sections:
			1. Section 017704 - Closeout Procedures and Training: Maintenance data and Maintenance Manuals.
			2. Section 329200 - Turf and Grasses: Grass, sod, and sprigs.
			3. Section 329300 - Plants: Planting materials.
	2. SUBMITTALS
		1. Section 013300 - Submittal Procedures: Procedures for submittals.
			1. Operation and Maintenance Data:
				1. Instructions indicating procedures to be used by United States Postal Service personnel for maintenance of plants and groundcover during one typical year including variations of maintenance for climatic conditions throughout the year. Include instructions and procedures including but not limited to the following:

Watering.

Promotion of growth.

Fertilizing.

Mowing.

Pruning.

Pesticides.

Maintenance of irrigation system components.

* + - * 1. Submit in conformance with requirements for maintenance data specified in Section 017704.
				2. Include approved Maintenance Instructions into Operation and Maintenance Manual prepared as part of requirements specified in Section 017704.
			1. Application Records: Maintain record of chemical applications, indicating the following. Include records as part of maintenance data specified in Section 017704.
				1. Dates of application.
				2. Type of chemical applied.
				3. Location and planting area applied.
				4. Application rate.
			2. Assurance/Control Submittals:
				1. Qualification Documentation: Submit planting and irrigation maintenance provider documentation of experience indicating compliance with specified requirements.
	1. QUALITY ASSURANCE
		1. Qualifications: Company specializing in performing the Work of this Section with minimum 5 years documented experience.
		2. Pre-Installation Meetings:
			1. Convene a pre-installation meeting one week prior to commencing start of plant maintenance period.
			2. Require attendance of parties directly affecting Work of this Section.
			3. Review conditions of operations, procedures and coordination with related Work.
			4. Agenda:
				1. Tour, inspect, and discuss conditions of exterior plants, lawns, grasses, and irrigation system.
				2. Review plant maintenance, irrigation system maintenance, and their requirements.
				3. Review required inspections.
				4. Review environmental procedures.
	2. ENVIRONMENTAL REQUIREMENTS
		1. Resource Management:
			1. Renewable Resources: Plants specified are indigenous, low maintenance varieties, tolerant of site's existing soils and climate without supplemental irrigation or fertilization once established.
				1. Soil amendments: No chemical fertilizers; use organic matter to support establishment of indigenous plants; use inorganic materials such as sand or gypsum to improve workability and drainage of soil as appropriate to indigenous plants.
				2. Mulch: Provide organic mulch products.
			2. Recycled Content:
				1. Wood fiber mulch: Provide products manufactured from 100 percent post-consumer paper content and yard trimming composts.
				2. Mulch from recycled site debris: Coordinate with Section 311000 - Site Clearing to identify and prepare suitable organic debris for use as mulch on site.
				3. Soil amendment from recycled scrap gypsum: Coordinate with Section 092900 - Gypsum Board to prepare scrap gypsum board for use as soil amendment.
	3. WARRANTY
		1. Section 017704 - Closeout Procedures and Training: Procedures for closeout submittals.
		2. Special Warranty:
			1. Warrant to remove defective plants, including those that have died, have unsatisfactory growth, and have lost their original form, and replace with new healthy plants of same genus, species, variety, and size, within 10 days of discovery.
			2. Warranty does not include plants damaged by vandalism or severe weather.
			3. Warranty Period: 1 year maintenance period.
1. PRODUCTS
	1. MATERIALS
		1. Specified in Section 329200 and Section 329300.
		2. Indicated on Drawings.
2. EXECUTION
	1. ESTABLISHMENT PERIOD
		1. Specified in Section 329200 and Section 329300.
	2. MAINTENANCE PERIOD
		1. One year from date of initial acceptance. Maintenance Period end date established by Contracting Officer.

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**NOTE TO SPECIFIER**

**REQUIRED**: Provide irrigation systems only where required by local regulations. Required irrigation systems must be water-conserving drip type, except at lawns, ground cover and seasonal planting areas where drip type systems are impractical.

See Handbook AS-503, Standard Design Criteria, Modules 1 and 2A, 1-2.6, for more information.

Modify the paragraphs below to suit project requirements. Delete below if no irrigation system is needed.

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* 1. IRRIGATION SYSTEM
		1. Remove sand and debris from irrigation piping causing restrictions within emitter discharge orifices.
		2. Program automatic electric controllers for optimum watering of plant materials while maintaining water conservation practices. Adjust irrigation program to compensate for seasonal water requirements.
		3. Operate flush valves on emitter lateral lines.
		4. Repair damage caused by maintenance work. Replace damaged irrigation components which cannot be repaired with new functioning components.
	2. WATERING
		1. Water landscaping at programmed intervals to maintain good color and sturdy growth of plant materials.
	3. CHEMICAL CONTROLS
		1. Fertilize to promote healthy plant growth without encouraging excessive top foliar growth. Do not apply high nitrogen fertilizer in late fall. Application at that time may promote frost tender foliar growth.
		2. No chemical fertilizers; use organic/natural matter to support establishment of indigenous plants; use inorganic materials such as sand or gypsum to improve workability and drainage of soil as appropriate to indigenous plants.
	4. WEED CONTROL
		1. Control weeds with use of herbicides, filter fabric weed barrier and, preferably, by manual removal of weeds.
		2. Remove noxious weeds common to the area from planting areas by mechanical means.
		3. Apply herbicide in accordance with manufacturer's published instructions.
		4. Do not apply pre-emergent herbicides in areas to be seeded for lawns or native seed areas.
	5. PEST AND DISEASE CONTROL
		1. Apply pest and disease control chemicals in accordance with manufacturer's published instructions.
		2. Spray or dust using appropriate insecticide, miticide and fungicide and as necessary to maintain plants in healthy and vigorous growing condition.
		3. No chemical pesticides; use organic/natural matter for pest and disease control.
	6. TREE STAKING AND GUYING
		1. Stake or guy trees as specified in Section 329300 and as indicated on Drawings.
		2. Inspect staking and guying at least two times per year and make necessary adjustments to prevent girdling or chafing of bark.
	7. PRUNING
		1. Prune or head back plants in keeping with nature and character of plants.
		2. Seal 1 inch or greater cuts with tree seal.
		3. Establish radial branch orientation and eliminate narrow V-shaped forks, cross-over branching, and branches that rub against each other.
	8. TOPSOIL EROSION
		1. Replace topsoil in areas experiencing noticeable soil erosion and make minor repairs necessary to avoid further erosion.
		2. Notify Contracting Officer of unusual causes of erosion immediately.
	9. CLEANING
		1. Remove litter and dead vegetation from job site within 24 hours of discove­ry.
		2. Broom clean paved surfaces at minimum 21 day intervals.
	10. END OF MAINTENANCE
		1. Within 2 weeks prior to end of maintenance period, apply an approved commercial fertilizer at rate recommended by manufacturer uniformly over planted areas.
		2. At end of maintenance period and when ground covers have established and landscaping and irrigation work is complete, request End of Maintenance Period Inspection by Contracting Officer.
		3. When landscaping work is found to be satisfactory, maintenance period will end on Date of Final Acceptance established by Contracting Officer.
		4. When work is found to be unsatisfactory, maintenance period will be extended at no additional cost to United States Postal Service until work has been completed, inspected and accepted by Contracting Officer.
		5. Contractor is to maintain plants for one year from completion.

END OF SECTION

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