

APPLICANT INFORMATION

1.	Applicant (Legal name of organization): Stetson University, Inc.
2.	Address (mailing): 421 N. Woodland Blvd., Unit 8274
	City: DeLand
	State: FL
	Zip Code: 32723
3.	Type of Organization:
	☐ Municipal government ☐ Volusia County Government
	Not-for-Profit Corporation classified as a 501(c) (3)
4.	Federal ID #: 59-0624416
	Florida Not-for-Profit Corporation Charter # (if applicable): Document #N27521
	Florida Dept. of Agriculture & Consumer Services Registration # (if applicable):
5.	County Council District of Project: $\square 1$ $\square 2$ $\square 3$ $\square 4$ $\square 5$
6.	Is the project in a Community Redevelopment District (CRA)? ☐Yes ☒No
7.	Contact Person:
	Name: Jason Evans, Ph.D.
	Title: Executive Director, Institute for Water and Environmental Resilience and
	Associate Professor of Environmental Science and Studies
	Telephone #: 386-822-7910
	E-Mail: jevans1@stetson.edu
8.	Provide the Mission Statement for your organization:
Our m	ission at Stetson University is to provide an excellent education in a creative community where
learnir	ng and values meet.



PROJECT INFORMATION

1.	Project Title: Lake Be	eresford Shoreline Rest	oration and Public Acc	ess E	Enhancements at the
	Sandra Stetson Aqua	atic Center			
	Project Location Add	dress: 2636 Alhambra A	ave.		
	City: DeLand				
	State: FL				
	Zip Code: 32720				
2.	Type of Project:				
	☐ Renovation	☐ Restoration	⋈ New Construction	l	\square Acquisition
3.	ECHO Category – Se	lect One (review ECHO	Guidebook pages 3 - 4	·):	
	⊠ Environmental	☐ Cultural	☐ Historic		\square Outdoor Recreation
4.	The Project Site of F	acility is (select one):			
	$oxed{\boxtimes}$ Owned by Applic	cant Leased by App	olicant (length of lease)): <u>Len</u>	gth of lease
5.	Is the Project Site/Fa	acility mortgaged or wil	l it be? 🗌 Yes	\boxtimes	No

PROJECT DESCRIPTION

1. Describe the project and explain how it will achieve the goals of Resolution 2020-79 to plan for the future growth of Volusia and enhance the quality of life for its residents (use factual information/documentation to show how this project will accomplish these goals):

The Lake Beresford Shoreline Restoration and Public Access Enhancements project at the Sandra Stetson Aquatic Center provides the first ECHO living shoreline restoration project in West Volusia. It is a showcase site of the emerging green infrastructure field, which incorporates nature as a tool to provide community resilience, protect against storm surge, encourage habitat restoration, and ensure clean water. This project will provide additional needed public access to Lake Beresford via a new dock. These design elements enable the public to access Lake Beresford while learning about the environmental building blocks of healthy aquatic habitat.

Stetson's feasibility study (see attached) determined that additional public access at the Stetson Aquatic Center will enhance the quality of life for Volusia County residents by providing unique environmental education opportunities and outdoor recreation opportunities to the public. The project



will foster the public memory and community identity by promoting and providing access to destinations associated with past events and people.

The objectives are to showcase green infrastructure (nature's pollution filter/buffer), educate the public about the value of living shoreline restoration, and expand ADA access and outreach opportunities to the public.

Stetson University is honored to have been a prior ECHO grant recipient and intends to continue to enhance the value ECHO brings to the county. The first ECHO grant on this site provided a public nature trail, pavilion, restrooms, and access to Lake Beresford. There is a clear need to enhance public access to the lake, so this phase will actively restore a peninsula that is being eroded and degraded by invasive plants. This project will restore native plants and habitats that will protect the peninsula and create a focal point for public awareness of the value of Volusia County's ecological gems.

The target outreach area is Central Florida and the Southeast United States. The project will extend the public's access to a restored living shoreline on Lake Beresford, plant thousands of native plants, install aquatic reef structures to serve as fish and wading bird habitat, and construct a viewing dock with educational signage describing the value of healthy shoreline and clean water. The project will create an educational conservation model that can be replicated by other communities.

The Stetson Institute for Water and Environmental Resilience is operated from the Sandra Stetson Aquatic Center building and will lead the restoration and public outreach efforts of this project. The Institute is a go-to entity in the implementation of ecological engineering projects across the region, state, and nation, and is a partner to the East Central Florida Regional Planning Council on restorations of regional significance.

Visioning for this project began several years ago as a way to expand the ecological outreach efforts of the Institute and honor the memory of Matthew Oyler, a 2005 Stetson graduate and avid fisherman. The living shoreline and adjacent pier will honor the heritage of outdoorsmanship and provide the public with access and educational opportunities not offered anywhere in West Volusia.

In advance of the Volusia ECHO and Volusia Forever ballot initiatives in 2020, the Trust for Public Lands conducted a poll of likely Volusia County voters and found that clean river water and healthy wildlife were top priorities to improving and maintaining a high quality of life. This is clear in the context that Volusia County's St. Johns River and tributaries are eco-tourism destinations and that for generations, nature enthusiasts, birders, fishers, and the general public have traveled to the area to see manatees



and other rare species. Having a living shoreline project in West Volusia will demonstrate how native plants along shorelines absorb and filter pollutants from rainwater runoff before they enter the river.

Having a natural vegetated buffer along the shoreline serves the dual benefits of 1) improving aquatic habitat for fish, marine mammal, and bird species and 2) maintaining nature's ability to minimize the impact of pollution. The immeasurable value of enjoying nature at its best contributes to the health, well-being, and high quality of life of Volusia County residents. Further, public access to these areas and the opportunity for year-round public education programs ensures that this project will fulfill the goals of the county's Resolution 2020-79, which ensures provision of a broad geographical distribution of environmental, cultural, historic, and outdoor recreation projects.

According to the <u>ECHO transparency dashboard</u>, only 7.51% of ECHO awards have gone to environmental projects (19 out of 253 grants). This project will help create more equity in the distribution of grant funding across the four project types. Additionally, this project will help balance the number of environmental projects on the west and east sides of the county.

As the region continues to grow, this ECHO project will be a destination for future residents and visitors and will provide ecological enhancement and public access to nature that improves the quality of life for all those who call Volusia County home.

According to the Florida Chamber Foundations's <u>Florida 2030 report</u>, "Quality of Life & Quality Places" means creating the best places to live, learn, work, play, and do business. It also notes that, "Florida's quality of life is one of our greatest assets in the global competition to attract and retain talent. We must continually refresh and sustain our great places and spaces to provide quality choices."

This living shoreline and enhanced public access project will fulfill the local, regional, and statewide goal of improving quality of life and resident well-being. By tracking visitors, programs, and visitor feedback, and providing regular maintenance to project enhancements, Stetson University will ensure that the public will have access to healthful outdoor environmental activities that are ADA accessible. Stetson is committed to providing increased access and visitation by 10% each year and will document progress in its annual reports to ECHO and social media outreach. Metrics of the following will be documented annually: number of visitors, organizations, partnerships, videos, articles, and earned media.



The desired outcomes are as follows:

- Educate the public about water, resource conservation and sustainability through special events, non-credit programming, and online resources.
- Provide world-class learning opportunities related to water, resource conservation, and sustainability.
- Shift the behaviors of millions of people to conserve valuable, clean water resources and associated ecosystems.

The Lake Beresford Shoreline Restoration and Public Access Enhancements at the Sandra Stetson



Aquatic Center project will help residents, visitors and future generations understand that a healthy community relies on harmony between its citizens and the nature around them. Program participants will learn in the field and continue their knowledge through citizen science research opportunities and annual events.

 If applying for an exceptional grant, describe how the project meets the requirements of an exceptional project. An exceptional project means a project of paramount and crucial countywide importance which provides for receipt of services by significantly large numbers of people in all areas of the county. For more information on exceptional projects see page 8 of the ECHO Guidebook.

N.A.



3. Describe the project and construction timeline:

The project will extend the public's access to a restored living shoreline on Lake Beresford, plant thousands of native plants, install aquatic reef structures to serve as fish and wading bird habitat, and construct a viewing dock with educational signage describing the value of healthy shoreline and clean water.

The timeline is as follows:

2024

Q1: Final approval and execution of ECHO Grant Award, Restrictive Covenants, and Conservation Easement.

Q2-Q3: Install temporary ECHO sign, execute continuing contracts with GMC and YBE (design, engineering, and construction); hire dock construction company, begin removal of invasive plants.

Q4: Design educational signage and finalize state and federal permits.

2025

Q1: Begin construction of pier/dock structure and order educational signage.

Q2: Complete living shoreline restoration and reef enhancements.

Q3: Complete ADA access, install educational signage. Order final ECHO sign.

Q4: Install permanent ECHO sign and complete project.

Description	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025	Q4 2025
General Requirements								
Architectural and Engineering Services								
Construction: Living Shoreline, ADA Access, and Dock								
Educational Signage								
Permanent ECHO Sign								



4. Describe how the green infrastructure and sustainability standards will be used in the project (Green Building Standards | US EPA).

This project will demonstrate the value of green infrastructure and sustainable design standards by restoring living shoreline and aquatic fish habitat. Green building design standards encourage the use of native plants and environmentally friendly construction materials into new and retrofit construction. According to the US EPA, green infrastructure can reduce the risks associated with flooding, storm surge, and water pollution. Using nature as a design tool (green infrastructure) vs hardened/impervious surfaces (grey infrastructure) can decrease cost and ecological impact of future development while improving quality of life and ecosystem services.

Section 502 of the Clean Water Act defines green infrastructure as "...the range of measures that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspirate stormwater and reduce flows to sewer systems or to surface waters."

The native planting area and educational signage will show how green infrastructure can be used as design tools and flood protection elements of future development. US EPA guidance shows that green infrastructure builds resiliency and helps reduce community risk to flooding and storm surge. Sustainability design standards support a healthy community, environment, and economy. The Lake Beresford Shoreline Restoration and Public Access Enhancements at the Sandra Stetson Aquatic Center project will meet all these goals by incorporating habitat restoration into its green infrastructure component, supporting a high quality of life for Volusia County residents and visitors, promoting eco-tourism, and restoring healthy ecosystems for generations to come.





5. How will the project conserve water and/or promote water efficiency?

The Lake Beresford Shoreline Restoration and Public Access Enhancements at the Sandra Stetson Aquatic Center project will not require any irrigation and will demonstrate that by retaining water on site, native plants help water penetrate into the soil and ultimately to the aquifer rather than flowing into the waterway. This demonstration project will help educate the public about how living shorelines and other green infrastructure techniques can save thousands of gallons of water per year, per property.

6. How will the project conserve energy and/or promote renewable energy?

The project will not require a heavy energy load.

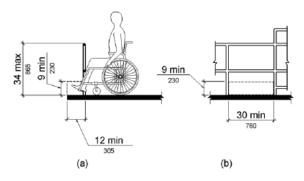
7. How will the project, if a new facility, meet the green building standards or certifications?

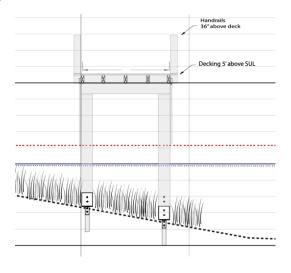
While the project will not create a new building, it meets the Florida Green Builders Association standards by incorporating living shoreline into the design.

8. Describe how the project will comply with the ADA accessibility requirements:

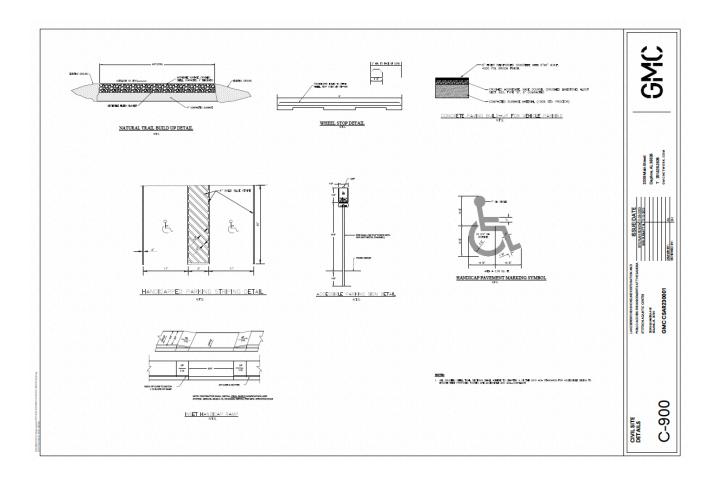
The project will provide ADA parking and there will be an ADA path leading to the dock. People with special needs will be able to access the pathway and dock, which will be at least four feet wide with an expanded terminal platform. The dock length will be approximately 150 feet and will follow ADA Standards for Accessible Design | ADA.gov. Section 1005. The path and dock will be wheelchair accessible.

ADA design elements are shown in the following images.









9. If applicable, describe any additional phases:

A future phase may consist of a Low Impact Development retrofit for the entire property to capture stormwater within the basin and increase the capacity for public access.

PROJECT TEAM

1. List the name and address of the architect, engineer, design consultants and/or general contractor selected. Include the information for the persons signing the Certification of Information and Compliance Form:

Goodwyn Mills Cawood (GMC) - Architecture, Engineering, and Design

Scott Hutchinson, PE, Design Engineer 2039 Main St., Daphne, AL 36526

Tel: (251) 626-2626



Jof Mehaffey, PWS – Executive Vice President, Environmental Jessie Wheeler, PWS - Senior Biologist, Environmental 3310 West End Avenue, Suite 420 Nashville, TN 37203

Tel: (615) 333-7200

Ed DiTommaso, AICP, GISP - Vice President, Environmental 7 East Congress Street, Suite 504 Savannah, GA 31401

Tel: (912) 226-1667

Young Bear Environmental Consultants – living shoreline design, permitting, and construction. 1848 Date Palm Drive, Edgewater, FL 32141 Daniel Young and Chris Schlageter

Stetson University

421 N. Woodland Blvd., Unit 8274, DeLand, FL 32723

President Christopher F. Roellke, Ph.D. and Mr. Jeremy DiGorio, CFO

Project Team:

Jason Evans, Scott Thacker, Sean Proctor, Michele Couturier, Melanie Laboy, and Sidney Johnston

2. List the person/persons who created the budget and describe their experience with this type of project:

The budget was created by the Stetson University Office of Finance (https://www.stetson.edu/administration/finance/), Office of Grants, Sponsored Research & Strategic Initiatives (https://www.stetson.edu/administration/grants/staff-directory.php), and Office of Development (https://www.stetson.edu/administration/grants/staff-directory.php). Coordinators include Dr. Jason Evans, Scott Thacker, Sean Proctor, Michele Couturier, Melanie Laboy, and Sidney Johnston. The Stetson team combined has more than 80 years of project development and administration experience. Scott Thacker and Michele Couturier have managed millions in building and property development at Stetson, with Michele Couturier managing a previous ECHO grant. Evans and Johnston have administered multiple federal, state, and local grants.

3. If a complete list is not available, explain why (include when the project team will be selected): N.A.



PROJECT MANAGEMENT TEAM

1. List the name of staff dedicated to this project (include their responsibilities and the amount of time each will be spending on the project per week):

Jason Evans, Project Lead, 5 hours per week
Scott Thacker, Associate Vice President of Facilities Management, .5 hour per week
Sean Proctor, Manager, Facilities Management - Buildings, 1.5 hours per week
Michele Couturier, Manager - Administrative Services, 1 hour per week
Melanie Laboy, Director of Strategic Initiatives, 5 hours per week
Sidney Johnston, Associate Director, Grants & Sponsored Research, .5 hour per week

PERFORMANCE MEASURES

1. Explain the project's goals and objectives:

The goal is to provide public access to a world-class green infrastructure project that stimulates critical thinking, imaginative inquiry, creative expression, and scientific excellence. The Lake Beresford Shoreline Restoration and Public Access Enhancements project at the Sandra Stetson Aquatic Center will provide the first ECHO living shoreline restoration project in West Volusia. This includes providing ADA public access to Lake Beresford and construction of a new dock (see attached drawings).

The objectives of this project are to:

- 1. Construct a living shoreline (up to 600 linear feet of green infrastructure).
- 2. Provide a dock structure for public ADA accessibility (150 linear feet).
- 3. Establish an outdoor location for educational programs.
- 4. Honor the "Spirit of Stetson" by providing access to nature and a space for reflection.

This project will create spaces for: Outdoor environmental education and recreation, field trips, scientific research, and lifelong learning. The project fosters community participation and resilience, environmental outreach, and access for all.

2. Elaborate on how these goals and objectives will be measured for the length of the restrictive covenants:

In addition to the restrictive covenants (lasting 20 years), Stetson University will convey a conservation easement to Volusia County to establish a sustainable living shoreline habitat. The goals and objectives will be measured by documenting:

- 1. The construction and planting of living shoreline and aquatic reefs.
- 2. ADA accessibility.



- 3. Increased educational outreach and community participation by 10% (baseline established in 2023).
- 4. Public and community visitations (annually).
- 5. Participation at the site (annually).
- 6. Water quality results and habitat surveys (annually).
- 7. Any natural disasters or storms and their impact on the shoreline (annually).
- 8. Longitudinal studies of the shoreline from aerial photos and shoreline surveys (every five years).

FUNDING REQUEST

1. Project Funding (Grant Request Amount and Match Amount):

a. Standard Grant Request (up to \$600,000.00) \$ 600,000

b. Exceptional Grant Request (up to \$2,500,000.00) \$0

c. Confirmed Match Funds \$ 600,000

d. Total Project Cost (ECHO + Match) \$ 1,200,000

2. Mandatory Workshop was attended by: Melanie Laboy and Kelli McGee

Date of Workshop: September 28, 2023

3. List any prior year grants received from ECHO (include year, project name and amount of grant):

2016 \$400,000 Public Access Enhancements at the Stetson Aquatic Center

2008 \$600,000 Homer and Dolly Hand Art Center

2007 \$325,000 Rinker Environmental Learning Center

BUDGET INFORMATION

- 1. A complete project budget must be submitted in the format provided by the county. Budget must be accurate and realistic (projects will be implemented within the budget set at the time of application).
- 2. The budget should be presented by each type of funding:
 - a. UC = Unencumbered Cash
 - b. LM = Land Match
 - c. IK = In-kind
 - d. PSC = Previously Spent Cash
- 3. The budget must include temporary and permanent ECHO signage (signs may not be funded with ECHO funding).



BUDGET DETAIL CHART Construction Phase Expenditures Add rows as needed	UC+	LM +	IN-KIND +	PSC	= MATCH	ЕСНО	TOTAL
General Requirements:	55,000	150,000			205,000	0	205,000
Mobilization, Waste Collection, etc.							
Contractor Fees							
Professional Services:	30,000			150,000	180,000	0	180,000
Consultant Services							
Construction:	200,00				200,000	600,000	800,000
Earthwork/Excavation		1					
Concrete, Stucco, Paving							
Interior Construction							
Wiring, Smoke Detectors, Security							
Alarms							
Plumbing							
HVAC							
Landscaping							
Specialties					0	0	0
Playground Equipment							
Picnic tables, grilles							
Signage:	15,000				15,000	0	15,000
Educational Signage							
ECHO Temp Sign							
ECHO Permanent Sign							
PROJECT TOTALS	300,000	150,000	0	150,000	600,000	600,000	1,200,000

Line items should be made to match your project (some examples are Equipment, Metals, Finishes, Wood, and Plastic, Thermal, Plumbing). Budgeted match amounts should be placed in the corresponding description column (Unencumbered Cash, Land Match, In-kind Services/Items or Previously Spent Cash).

Request amounts should be compromised of all line items and entered in the detail category heading.



MATCH DOCUMENTATION

1. All documentation for match must be included in the application as outlined in the ECHO Guidebook pages 9-11.

Stetson University is providing match of \$600,000 consisting of \$150,000 in land match, \$150,000 previously spent cash, and \$300,000 unencumbered cash match. **See attached.**

RESTRICTIVE COVENANTS

Volusia County Clerk of Court if ECHO Grant is awarded? ☑ Yes □ No
Δ If the project of the application is mortgaged or leased property, other than those applying
for trails in the County Master Plan or projects on land not owned by the applicant, a letter from
the Mortgagee or Lessor, stating that they agree to sign the Restrictive Covenants must be
provided with the application.
Δ Applicants with projects on State or Federal owned lands are automatically exempt from this
requirement but are held to the same liquidated damages cited within the Restrictive Covenants
through language found in the final ECHO agreement for which the grantee is held responsible.

1. Do you agree to comply with the requirement to file a 20-year Restrictive Covenant with the

OPERATING FORECAST DETAIL

 Outline how the facility or project will operate once complete. The narration should include such items (as applicable) as staffing, maintenance requirements, increased programming, fees, and memberships. Include a detailed maintenance and replacement plan for the 20-year compliance period:

The living shoreline will be open for observation during daylight hours (excluding special events and inclement weather). Educational programming will be provided monthly. Public and programmatic access will be documented as follows:

- a. Increased educational outreach and community participation by 10% (baseline established in 2023).
- b. Public and community partner organization visitations annually.
- c. Participation at the site (annually).
- d. Any natural disasters or storms and their impact on the shoreline (annually).
- e. Longitudinal studies of the shoreline from aerial photos and shoreline surveys (every five years).



The Stetson Institute for Water and Environmental Resilience will provide staffing of the site, including at least one full-time employee, multiple part-time employees, and volunteers.

There will be no entrance fees for public access, but capacity will be managed for safety. Entrance fees may be established on a case-by-case basis for reservations/events.

The conservation easement will be inspected annually by Institute for Water and Environmental Resilience staff. Stetson University will fund annual maintenance of the project area, which is anticipated at \$10,000 per year.

Facilities and Maintenance Plan

Stetson Facilities Management has lead responsibility for maintenance, grounds, and repairs across the Stetson University campus, including the Stetson Aquatic Center. Facilities Management staff undertakes regular annual inspection and review of structures open to the public to determine whether maintenance or replacement is appropriate. Facilities Management staff also respond to any reports of damage and/or requested repairs made by other Stetson University staff or, for public use facilities, the general public. Any minor to moderate repairs or regular maintenance (e.g., cleaning of boardwalk, regrading of shell paths, etc.) that are required to maintain the facility for public safety and ADA compliance will commence immediately upon reports made to Stetson Facility Management.

The new living shoreline plantings will be intensively managed through selective weeding of invasive plants on at least a bi-weekly basis (once every two weeks) during a 1-year establishment period. These intensive weeding activities will be directed and supervised by faculty and staff at the Institute for Water and Environmental Resilience who are knowledgeable in plant identification, in coordination with Stetson Facilities Management and landscaping contractors responsible for overall grounds management at the Stetson Aquatic Center.

Native plant survival in the living shoreline will be documented by faculty, staff, student researchers, and community volunteers working through the Institute for Water and Environmental Resilience, with replanting of native plants undertaken, as needed, to ensure at least 80% littoral zone and shoreline coverage by desirable native wetland plants at the end of year 1. Following the one-year establishment period, control of invasive plants will be maintained through regular weeding events and, as needed, annual maintenance control by a landscape contractor with specialized knowledge and certifications in aquatic plant management.

Shoreline erosion and accretion rates at the living shoreline restoration site will also be monitored by the Institute for Water and Environmental Resilience using field surveys and aerial photography methods. While it is anticipated that the living shoreline will greatly reduce erosion rates and promote sediment accretion in the project area, any unanticipated discovery of continued shoreline erosion will



be reported to Stetson Facilities Management and Volusia County ECHO for the purpose of developing an enhanced erosion mitigation plan to be implemented by Stetson University.

Maintenance, repairs, and replacement costs at the Sandra Stetson Aquatic Center are supported by an endowment fund specifically dedicated to this facility and general university funds, including operational budgets for the Institute for Water and Environmental Resilience and the Stetson Rowing Team. Stetson University also annually sets aside funds for future renewal-and-replacement projects for buildings and facilities. This budgeting process is key to Stetson's ability to support and, if required in the event of a natural disaster or other unforeseen event, replace this facility over the twenty-year grant commitment.

Employees at Stetson's Institute for Water and Environmental Resilience and the Rowing Team will manage logistics and scheduling of special events that optimize the site for public use and enjoyment. Stetson Public Safety maintains and oversees a security camera system at the site to support the safety needs of users at the Stetson Aquatic Center. In the event of any security situation or other emergency at the site, Stetson Public Safety and/or other on-site Stetson employees will immediately alert the Volusia County Sheriff's Office.

2. Submit a business plan, feasibility study and marketing plan. These plans must be specific to Volusia County and the proposed project:

See attached Business Plan, Feasibility Study, and Marketing Plan.



FISCAL STABILITY

1. **BUSINESS INFORMATION** (not all line items will apply to all applicants)

Operational funding for this organization	Prior Completed Year	Current Year	Projected Year	Next Projected Year
Fundraising, Memberships, Donations, etc.	117,474,464	116,490,756	118,302,827	120,027,722
County Grants (other than ECHO)	8,924			
Grants (Non-County)	2,760,344	1,675,000	2,029,000	2,095,000
Cash Donations	17,309,813	3,700,000	3,800,000	3,800,000
TOTALS	137,553,545	121,865,756	124,131,827	125,922,722
Administrative Costs	5,001,852	6,955,861	7,025,420	7,095,674
Program Costs	55,685,127	45,724,505	46,181,750	46,643,568
Educational Outreach Programs	812,970	973,590	973,590	973,590
Contractor Services (for this project)		100,000	800,000	
Marketing & Advertising	905,352	832,613	840,939	849,348
Payroll Total Expense	86,360,606	87,093,000	89,938,000	92,360,000
TOTAL	148,765,907	141,679,569	145,759,699	147,922,180
Not-for-Profit				
Endowments	18,882,055	22,589,000	22,554,000	20,512,000
TOTALS	18,882,055	22,589,000	22,554,000	20,512,000
Number of Full-time Employees	849	854	854	854
Number of Part-time Employees	174	169	169	169
Volunteer Hours	Not collected			
Value of Volunteer Hours (@ /hr.)	Not collected			
TOTALS	1,023	1,023	1,023	1,023

۷.	Has this organ	ization defaulted on any grant in the past five years?
	☐ Yes	⊠No
	If yes, please	explain:

FINANCIAL AUDIT/REVIEW/AGREED UPON PROCEDURES

1. County of Volusia and Local Municipalities must provide a link to their Financial Statement under GASB 34.

The link should include the following documents:

- a. A Management Letter from the last fiscal year Independent Auditor's Report on the Basic Financial Statement.
- b. A Response Letter from the last fiscal year Independent Auditor's Report on the Basic Financial Statement.
- c. An Opinion Letter from the last fiscal year Independent Auditor's Report on the Basic Financial Statement.



- 2. Not-for-Profit Organizations: the required financial information is determined by the operating revenue or expenses/expenditures annual average of the three fiscal years prior to the application deadline, as outlined in the ECHO Guidebook.
 - a. Additional supporting documents for Not-for-Profit organizations:
 - i. IRS letter granting Not-for-Profit 501 (c) (3) status in Florida.
 - ii. The most recent Uniform Business Report (Annual Report) filed with the State of Florida, Division of Corporations.
 - iii. Unrestrictive ownership or undisturbed use of facility documentation (unless the project is an acquisition).
 - iv. Letter of intent to sell from the owner for Acquisition Projects.

See attached.

DRAWINGS

- 1. Drawings are required from <u>ALL</u> applicants (documents must be legible and to scale with legends):
 - a. Current drawings and/or excavation plans for the facility.

See attached.

b. Site survey with existing structures and site plans with structures.

See attached.

2. Vacant land acquisition: N/A



3. Street Locator Map (indicate the physical location of the project within the local areas; include road names and "North" for directional reference).



North



LAKE BERESFORD SHORELINE RESTORATION & PUBLIC ACCESS ENHANCEMENT AT THE SANDRA STETSON AQUATIC CENTER

2636 Alhambra Ave., DeLand, FL 32720





- 4. Site Plan should show the building footprint, travel ways, parking, landscaping, etc. This section should include:
 - a. Site Survey
 - b. Trees and topography
 - c. Civil drawing
 - d. Water retention drainage and circulation

See attached.

- 5. Preliminary and Schematic Drawings.
 - a. A general model of floor/site plans, showing the location of project elements.

See attached.

b. Florida-friendly landscape plan (The Florida Friendly Landscaping guide can be found at https://ffl.ifas.ufl.edu/pdf/FYN Plant Selection Guide 2015.pdf).

Zone 1 Plant List:	Zone 2 Plant List:	Zone 3 Plant List:	Zone 4 Plant List:	Zone 5 Plant List:
•Spartina bakeri •Tripsacum dactyloides •Muhlenbergia capillaris •Canna accida •Sagittaria lancifolia •Pontederia cordatra	 Spartina bakeri Tripsacum dactyliodes Muhlenbergia capillaris Cephalanthus occidentalis 	 Taxodium distichum Cephalanthus occidentalis Pontederia cordata Sagittaria lancifolia Helianthus angustifolius Canna accida Spartina bakeri Tripsacum dactyloides Muhlenbergia capillaris 	 Spartina bakeri Tripsacum dactyloides Muhlenbergia capillaris 	 Taxodium distichum Cephalanthus occidentalis Pontederia cordata Sagittaria lancifolia Helianthus angustifolius Canna accida Spartina bakeri Tripsacum dactyloides Muhlenbergia capillaris Scirpus Validus Eleocharis cellulosa



6. Design and Development Documents. Documents should show more detail including:

lours Available

a. Selection of materials and engineering systems involved.

The dock structure will be composed of environmentally friendly materials. Grated decking allows the maximum growth of submerged aquatic vegetation. The elevated flow through design will ensure maximum light penetration (5 feet above mean high water), and be consistent with federal, state, and local environmental resource permits. Flow-through dock decking minimizes lifting force on the walkway and provides wheelchair accessibility.

A crushed rock pathway from the parking location has been designed to be consistent with the existing trail and ADA standards.

Maple Light Grey Seafoam

Thruflow™ Impact Specification Chart

Base Material		Co-poly	mer high impact Pro	pylene		
Sizes - (L x W x H)	inch	11.56 x 35.94 x 1.2	11.58 x 47.90 x 1.2	12.0 x 60 x 1.2		
	mm	293.6 x 913 x 30.5	294.1 x 1216.7 x 30	305 x 1524 x 30		
Support Span	inch	18	16	15		
	mm	457	406	381		
Weight	lbs	3.8	4.9	6.5		
	Kg	1.7	2.3	2.9		
Load Capacity at 0.125" Mid Span Deflection ¹	lb _r	304.32	309.26	298.77		
	kN	1.354	1.376	1.329		
Load Capacity - Peak Load ¹	lb _f	1,396.36	1,651.37	2,074.76		
	kN	6.211	7.346	9.229		
Concentrated Static Load - Peak Load*	lb,	784.81	917.90	952.52		
ASTM E661	kN	3.491	4.083	4.237		
Coefficient of Friction ² Static			0.78			
ASTM D2394-83 Kinetic			0.76			
Thermal Expansion ³	1/°F		1.40 x 10 ⁻⁵			
ASTM D696-03	1/°C		2.52 x 10 ⁻⁵			
Light Availability ⁴ Surface	%		50			
18" Dock Height	%	61				
60" Dock Height	%	84				
U/V Light Properties		U	V Stabilized by Additi	ve		
Warranty		Lif	etime Limited Warran	ty		

For full test reports please contact ThruFlow Inc 700 Gillard St., Wallaceburg, ON, N8A 4L3 1-888-478-3569 / sales@thruflow.com

Shoreline components:

Maximum 600 linear feet of plantings that will extend no more than 10 feet waterward of the "Safe Upland Line", provided by FDEP as elevation 1.14'(NAVD88).

Oyster Reef Breaks (ORBs) are proposed as breakwater structures for this project. Other structures, both similar to ORBs and sourced from natural materials may be used. The waterward toe of any breakwater structures or sills will extend no further than 10 feet of the "Safe Upland Line", provided by FDEP.

Breakwaters will not encroach upon nor be placed within 3 feet of any existing submerged/emergent native vegetation. Rows of ORBs will have five feet wide gaps every 75 feet to allow for safe passage of manatees and other wildlife. ORBs will be deployed using hand-carry and float methods by professional contractors. No equipment with the potential to damage shoreline will be used.

See design notations on GMC engineering documents.



b. Detailed cost estimate

OPINION OF PROBABLE COST					
GOODWYN MILLS CAWOOD					
Project # ESAV220025					
Deland, FL : IWER SITE					
Sunday, November 5, 2023					
Produced by: GMC Staff					
Item	Unit	Quantity	Unit cost	Item Total	Category Subtotal
Site Work/Earthwork					
Site prep including exotic vegetation removal	AC	1	\$4,000.00	\$4,000.00	
Incidental Repairs	AC	1	\$20,000,00	\$20,000.00	
GC - Mobilization	EA	1	\$12,000.00	\$12,000.00	
Fine Grading	AC	1	\$1,500.00	\$1,500.00	
Double Silt Fence + Removal	LF	1200	\$12.00	\$14,400.00	
Waste Collection and Removal	EA	3	\$500.00	\$1,500.00	
		Site Work/E	arthwork Total		\$53,400.00
Hardscapes					
ADA Compliant Poured Concrete space (8X96) W/paint	SF	770	\$22.00	\$16,940.00	
Crushed Aggregate Fines (compacted on fabric)	SY	600	\$32.00	\$19,200.00	
, , , , , , , , , , , , , , , , , , , ,		Har	rdscapes Total		\$36,140.00
		****	accapes rotal		V 00,110.0
Boardwalk and Wave Abatement Structures Fixed Elevated Boardwalk	SF	1700	\$165.00	\$200 E00 00	
Fixed Elevated Boardwalk Terminal Platform	SF	310	\$165.00	\$280,500.00 \$51,150.00	
Oyster Reef Break (ORB) / Reef Ball procurement & installation	LF	400	\$120.00	\$48,000.00	
Boardwall	k and Wave	Abatement St	ructures Total		\$379,650.00
Specialty Components Memorial bench	EA	1	\$1,800.00	\$1,800.00	
Educational kiosk	EA	2	\$1,500.00	\$3,000.00	
Waste receptacle	EA	2	\$800.00	\$1,600.00	
	5	pecialty Con	nponents Total		\$ 6,400.00
			Total		\$475,590.00
Con	tingency (30	% Market Vol	atility Assumed)		\$142,677.00
5511	angerroy (oo		truction Total		\$618,267.00
Professional Services			470.000.00	A70 000 00	
Engineering and Design Environmental Permitting*	LS LS	1	\$70,000.00	\$70,000.00	
Final Construction Documents	LS	1	\$18,000.00 \$40,000.00	\$18,000.00 \$40,000.00	
**assumes no substantial permitting effort	Lo	1	\$40,000.00	\$40,000.00	
dodanse no adotanda panisting allot	Pr	ofessional S	Services Total		\$128,000.0

Living shoreline cost estimate:

Zone 1 (and old 2) (Total s.f.=3,700)				
Species	Size	Spacing	Quantity	Install Price
Spartina bakeri	4"	2 ft. o.c.	265	\$2,133.25
Tripsacum dactyloides	4"	2 ft. o.c.	265	\$1,767.55
Muhlenbergia capillaris	4"	2 ft. o.c.	265	\$1,767.55
Canna flaccida	b.r.	2 ft. o.c.	40	\$138.00
Sagittaria lancifolia	b.r.	2 ft. o.c.	40	\$138.00
Pontederia cordatra	b.r.	2 ft. o.c.	40	\$184.00
Cephalanthus occidentalis	3 g.	10 ft. o.c.	4	\$184.00
Cersis canadensis	7 g.	10 ft. o.c.	4	\$515.20

Zone 2 - west peninsula (Total s.f.=2,600)				
Species	Size	Spacing	Quantity	Install Price
Spartina bakeri	4"	2 ft. o.c.	125	\$1,006.25
Tripsacum dactyloides	4"	2 ft. o.c.	125	\$833.75
Helianthus angustifolius	4"	2 ft. o.c.	125	\$1,725.00
Muhlenbergia capillaris	4"	2 ft. o.c.	125	\$833.75
Canna flaccida	b.r.	2 ft. o.c.	50	\$172.50
Sagittaria lancifolia	b.r.	2 ft. o.c.	50	\$172.50
Pontederia cordatra	b.r.	2 ft. o.c.	50	\$230.00
Cephalanthus occidentalis	3 g.	10 ft. o.c.	12	\$552.00
Myrica cerifer	3g.	10 ft. o.c.	12	\$552.00
Taxodium distichum	7 g	10 ft. o.c.	12	\$1,380.00

Zone 3 - east peninsula (Total s.f.=2,900)				
Species	Size	Spacing	Quantity	Install Price
Spartina bakeri	4"	2 ft. o.c.	140	\$1,127.00
Tripsacum dactyloides	4"	2 ft. o.c.	140	\$933.80
Helianthus angustifolius	4"	2 ft. o.c.	140	\$1,932.00
Muhlenbergia capillaris	4"	2 ft. o.c.	140	\$933.80
Canna flaccida	b.r.	2 ft. o.c.	60	\$207.00
Sagittaria lancifolia	b.r.	2 ft. o.c.	60	\$207.00
Pontederia cordatra	b.r.	2 ft. o.c.	60	\$276.00
Cephalanthus occidentalis	3 g.	10 ft. o.c.	7	\$322.00
Myrica cerifer	3g.	10 ft. o.c.	7	\$322.00
Taxodium distichum	7 g	10 ft. o.c.	7	\$805.00
Carya aquatica	7 g.	10 ft. o.c.	7	\$322.00
Scirpus validus	b.r.	2 ft. o.c.	300	\$1,656.00
Eleocharis cellulosa	b.r.	2 ft. o.c.	300	\$1,035.00
Vallisneria americana	b.r.	2 ft. o.c.	300	\$1,380.00
O.R.B.s	6"	2/l.f.	400	\$30,000.00

Zone 4 - south walkway (Total s.f.=400)					
Species	Size	Spacing	Quantity	Install Price	
Spartina bakeri	4"	2 ft. o.c.	40	\$322.00	
Tripsacum dactyloides	4"	2 ft. o.c.	40	\$266.80	
Muhlenbergia capillaris	4"	2 ft. o.c.	40	\$266.80	



c. Environmentally sustainable materials

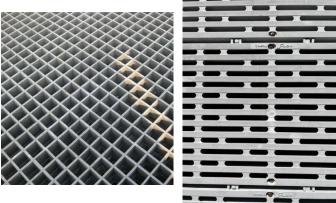
Environmentally sustainable materials used in this project include native plants, submerged reef breaks, and flow-through decking. The submerged reef breaks are locally designed and are based on oyster reef breaks used in the Indian River Lagoon. The reef breaks used in this project will be constructed of an environmentally friendly concrete blend that includes natural fibers and shell powder, components that make the reefs suitable substrates for filter feeders. These reefs will serve as habitat for dozens of aquatic species and act as wave breaks. Wave energy from Lake Beresford is eroding the existing shoreline. The new reef breaks and naturally



deep-rooted plants installed at the living shoreline restoration site will help stabilize the site and diversify the ecosystem.



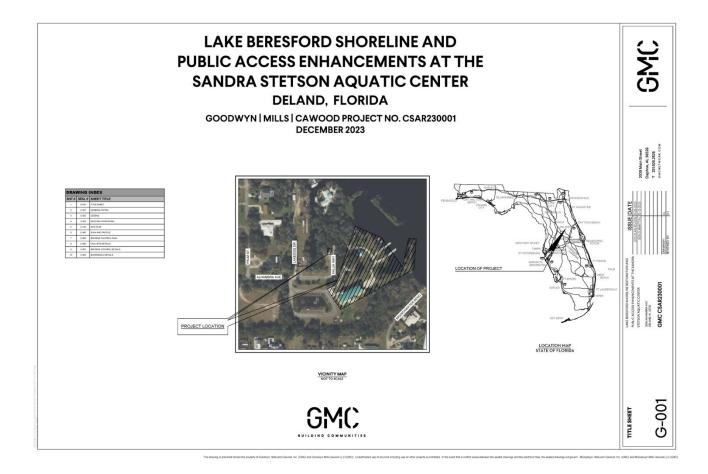
Further, the dock structure will be composed of environmentally friendly materials that may include grated decking, which allows the maximum growth of submerged aquatic vegetation. Aquatic plants form the foundation of the St. Johns River ecosystem and provide food, shelter, and oxygen for key fish species. Aquatic plants are also food for Florida Manatees and habitat for aquatic amphibians and shore birds.



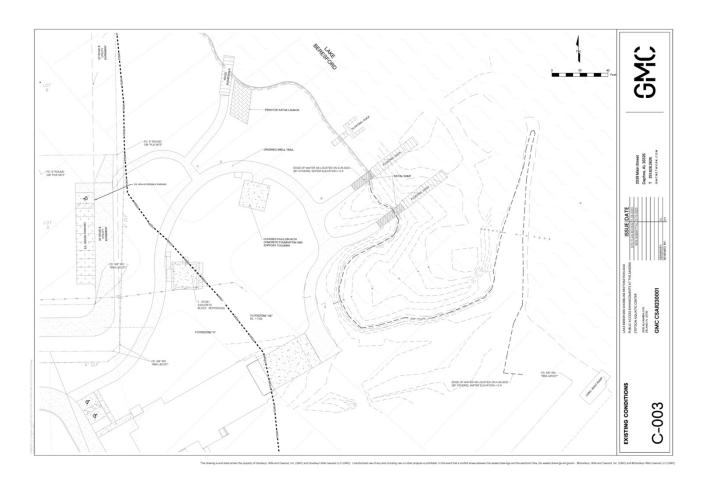


7. Construction Documents should include written and graphic instructions. These documents should be focused on specifications for the project (building systems, floor plans, elevations, etc.) and should include site utilities and ADA information.

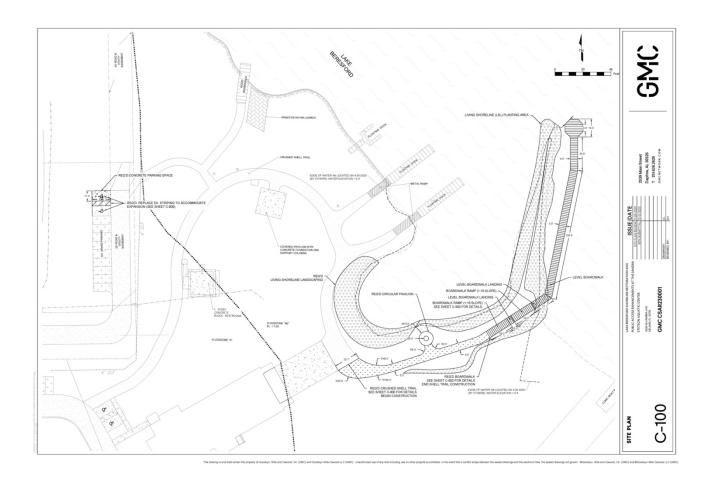
See attached full-size engineered plans and instructions.



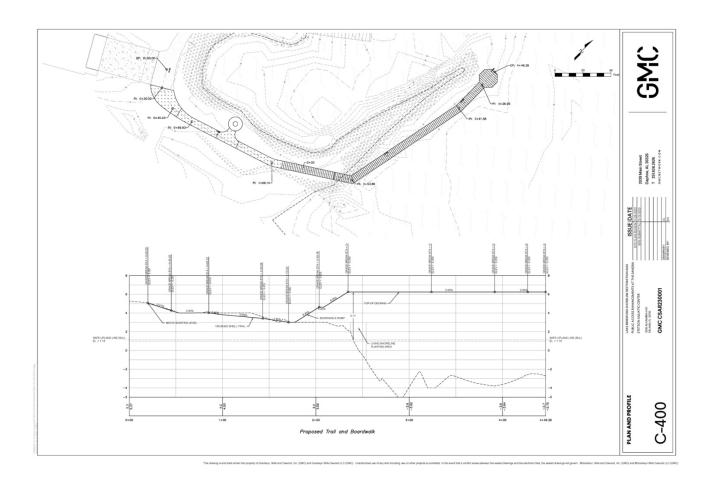




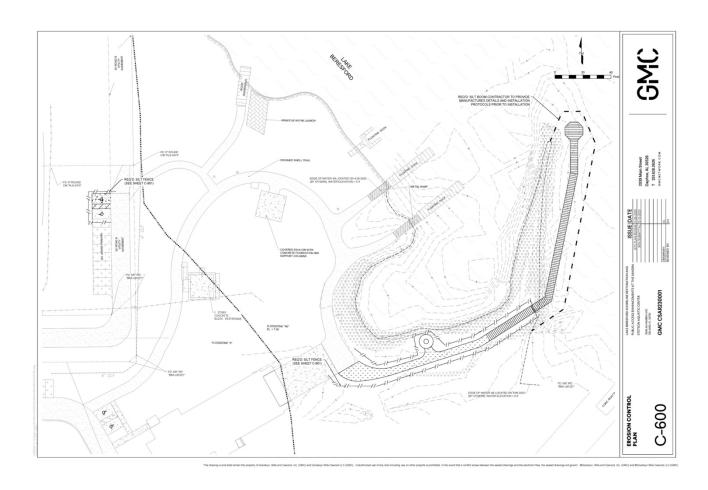




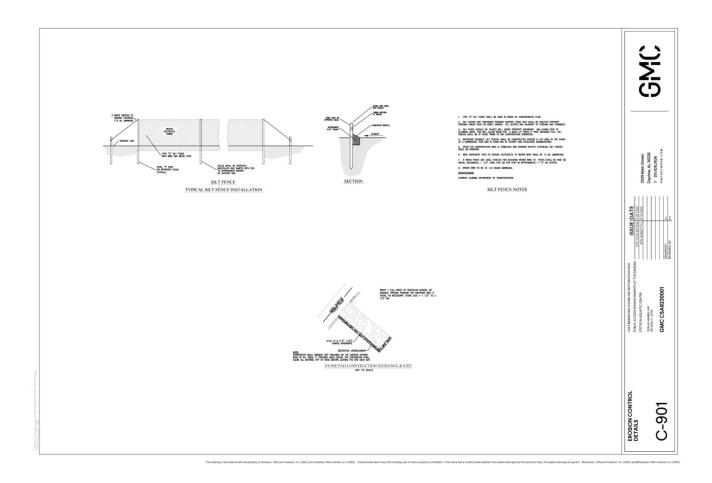




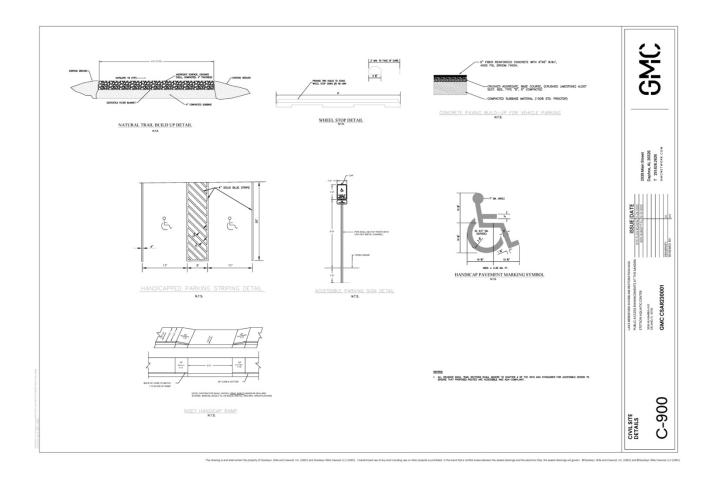




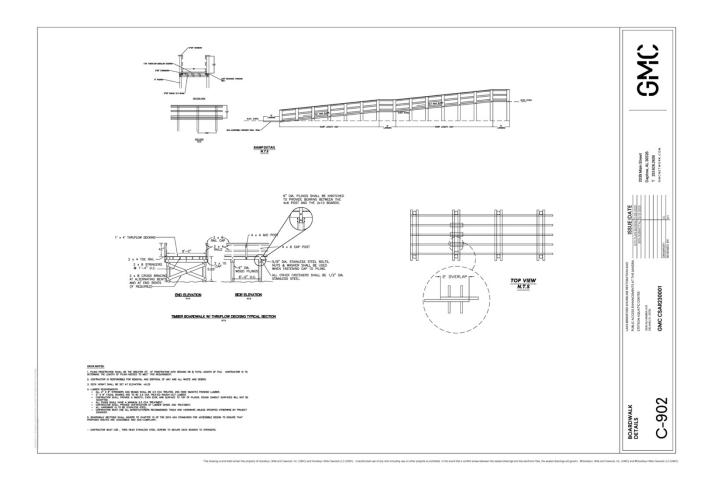














8. Permanent ECHO Sign documents should include site design, materials, and site placement.

See attached for sign location.

The Permanent ECHO monument sign will be consistent with the ECHO Grant requirements, be cast in bronze finish, and match the 2016 permanent ECHO sign design adjacent to Alhambra Avenue and near the existing ECHO public parking at the Stetson Aquatic Center, as illustrated below.





Description	April - June 2024	July - Sept 2024	Oct - Dec 2024	Jan - March 2025	April - June 2025	July - Sept 2025	Oct - Dec 2025	Jan - March 2026	April - June 2026
General Requirements /Design/ Professional Services									
Construction									
Educational Signage									
Permanent ECHO Sign									



Attachment Checklist: Please check your application before submitting

The following items/documentation <u>must</u> be included with your application or your application <u>will not</u> be scored. All match sources must be secured and proof thereof submitted by the application deadline.

APPLICANT

- ⊠ECHO Application, completed and signed
- ☑ Mission Statement for Organization
- ⊠ Restrictive Covenants or Statement agreeing to follow this requirement
- ⊠ Project Budget Detail Chart
- ☑Official Documentation of Match
- **⊠** Business Plan
- ⊠Marketing Plan
- ☑ Financial Audit Documents (listed in the ECHO Guidebook page 15)
- Not-for-Profits only: IRS Status Letter classifying Organization as a 501(c) (3)
- ⊠Completed and signed Drawings
- ⊠Site Plan
- □ Preliminary & Schematic Drawings
- ☑ Design & Development Documents
- **⊠**Construction Documents
- ☑ Permanent ECHO Sign Documents
- □ Certification of Information and Compliance
- ☑ Project/Construction Timeline Chart
- □Other