

Pennsylvania ANS Management Program

Final Report to the U.S. Fish and Wildlife Service for Fiscal Year 2020 Funding

ANS 2020 (F20AP12095)

Grant Period: June 1, 2021 – August 31, 2023

Reporting Period: October 1, 2022 – August 31, 2023

Cooperative Agreement #4100089233 – Aquatic Invasive Species Management Plan Implementation - Pennsylvania 2020

1.0 Summary

Pennsylvania Fish and Boat Commission has contracted with Penn State University/ Pennsylvania Sea Grant to support implementation of the Pennsylvania AIS Management Plan.

Funding through this grant was used for five tasks:

1. Pennsylvania Sea Grant will participate in the Pennsylvania Invasive Species Council, which meets approximately four times per year, and brings together representatives from agencies, nongovernmental organizations, and industry to communicate and coordinate on invasive species issues in Pennsylvania. Pennsylvania Sea Grant is leading or participating in at least three PISC subcommittees in the next year – rapid response, legislative, and PRISMs. Pennsylvania Sea Grant will participate in two regional AIS panels – the Great Lakes and Mid-Atlantic - to coordinate with regional partners, identify AIS efforts that could be replicated in Pennsylvania, and share examples from Pennsylvania. Each Panel meets twice per year or as needed. Pennsylvania Sea Grant will participate in national forums when possible, such as ANS Task Force meetings or regional or national conferences, as they also provide opportunities to collaborate and identify AIS efforts from other locations that would be beneficial to Pennsylvania and a chance to highlight Pennsylvania activities that may be applicable elsewhere. Pennsylvania Sea Grant will look for opportunities to facilitate participation by state agencies in the panels, as they present a tremendous opportunity for learning and coordination.
2. Pennsylvania Sea Grant will work with Pennsylvania Invasive Species Council members and other stakeholders (such as watershed associations, angling groups, boating organizations, water gardeners, field staff and researchers) to conduct programs and develop outreach materials to prevent the AIS introduction and spread. PASG will conduct 4-5 presentations (guest talks, seminars, meetings, or staffing events) on AIS prevention. A December 2009 Pennsylvania Fish and Boat Commission survey of anglers in Pennsylvania found that anglers felt that signs at boat launches; signs at bait and tackle shops or sporting goods stores; and brochures, species identification cards or factsheets are extremely effective ways for anglers to receive information that could actually change how they handle their boat and gear. These efforts will be coordinated with state agencies and organizations to implement a consistent, statewide message based on the national campaigns “Stop

Aquatic Hitchhikers” and “Habitattitude”, so that anyone visiting a water body in Pennsylvania will be better able to understand, remember, and act upon the message to prevent the introduction and spread of AIS in Pennsylvania.

3. Pennsylvania Sea Grant will develop an Android version of the ‘PA AIS’ smart phone application to complement the iOS app version. The apps mirror the content in Pennsylvania’s Field Guide to Aquatic Invasive Species and provides a method for reporting new species and including images and GPS points directly from within the app. The development of this app would make the field guide information even more accessible, and relevant because printed materials can quickly go out of date. This application would allow the field guide to be downloaded to any smart phone for free and used by field and agency staff, students, watershed groups, and anyone working in the field to identify and report potential AIS quickly and easily.
4. Pennsylvania Sea Grant will work with Pennsylvania Fish and Boat Commission staff, Pennsylvania Invasive Species Council members, and other stakeholders (such as watershed associations, angling groups, boating organizations, water gardeners, field staff and researchers) to develop a monitoring plan for round gobies in northwest Pennsylvania, specifically focusing on the French Creek watershed and Lake LeBoeuf, PASG will facilitate 1-2 meetings (in person or online depending on travel limitations), to bring together scientists, natural resource agency staff, and other experts to provide expertise in the French Creek watershed and round goby life history, movement, and dispersal to identify possible options for monitoring this round goby population. Pennsylvania Sea Grant will look for opportunities to share results at local, regional and/or national AIS meetings as timing and funding allow.
- 5A. Pennsylvania Sea Grant will work with Pennsylvania Fish and Boat Commission to design pilots to retrofit the Walnut Creek Access Area in Fairview Township, Erie, PA and the North East Marina in North East Township, North East, PA with designated aquatic invasive species prevention clean and drain areas. While recreational boating and fishing are important economic drivers for local and state economies, infestation of water bodies by aquatic invasive species can impede recreational boating and fishing activities and, in some instances interfere with water delivery and power production.
- 5B. The Pennsylvania Fish and Boat Commission will work in consultation with Pennsylvania Sea Grant to design, construct, and install pilots to retrofit the Walnut Creek Marina Area in Fairview Township, Erie, PA and the North East Marina in North East Township, North East, PA with designated aquatic invasive species prevention clean and drain areas. While recreational boating and fishing are important economic drivers for local and state economies, infestation of water bodies by aquatic invasive species can impede recreational boating and fishing activities and, in some instances interfere with water delivery and power production. Boats are considered one of the major vectors of spread for AIS, and therefore aquatic invasive species prevention has become a concern for managers of publicly accessible waters and boater access facilities, as well as businesses associated with water delivery, and power production.

2.0 Major Accomplishments

(P) To support statewide and regional AIS planning efforts, PASG staff participated in the following state and regional AIS meetings:

PISC quarterly meetings (virtual): December 7, 2021, March 8, 2022, and September 8, 2022. Served on legislative, grant, communications, and PRISM subcommittees.

Mid Atlantic AIS Panel Meeting (virtual): December 1-2, 2021, and April 25-26, 2022.

Great Lakes AIS Panel Meeting (virtual): November 1-3, 2022.

(EO) PASG gave presentations and staffed exhibits targeting boaters, anglers, water gardeners, and other recreational water users to increase their awareness about the AIS issue and provide information on the steps they can take to prevent the introduction and spread of AIS (4-5 presentations):

October 16, 2021 – gave presentation on AIS and stopping aquatic hitchhikers as part of the Master Watershed Steward training program. Approximately 12 people attended the presentation.

November 1, 2021 – gave presentation on AIS issues and prevention to the Watershed Coalition of the Lehigh Valley in Allentown, Pennsylvania. Approximately 15 people attended.

January 19, 2022 – gave presentation on AIS issues and prevention to fourth graders at Grandview Elementary in Erie, Pennsylvania. Approximately 66 students attended the presentation.

February 25, 2022 – gave presentation on AIS issues and prevention to fourth graders at Fort LeBoeuf in Waterford, Pennsylvania. Approximately 28 students attended the presentation.

October 6, 2022 – ran station activities and shared information about AIS issues and prevention at the Children’s Water Festival at Ashbury Woods Nature Center in Erie, Pennsylvania. Approximately 100 fifth grade students and teachers attended the sessions.

November 21, 2022 – gave presentation on AIS issues and prevention at a meeting of the fishing group Save Our Native Species (SONS) of Lake Erie. Approximately 70 people attended the presentation.

March 11, 2023 – gave presentation on AIS issues and prevention at the 2023 Great Lakes Walleye University, which is held annually in Erie, Pennsylvania. Approximately 200 people attended the presentation.

(DM) PASG will develop an Android version of the “PA AIS” smart phone application. This app mirrors the content in Pennsylvania’s Field Guide to Aquatic Invasive Species and provides a

method for reporting new species and including images and GPS points directly from within the app.

PASG worked with Skyward Apps to develop the Android version of the PA AIS smart phone application. The field guide app was released on March 31, 2023. Since that time, both the Android and the Apple versions of the app have been downloaded 129 times, and 12 species have been reported using the app. The app is available for download in the Apple and Android stores by searching for PA AIS FIELD GUIDE.

(CM) PASG will work with Pennsylvania Fish and Boat Commission staff, Pennsylvania Invasive Species Council members, and other stakeholders to develop a control plan for round gobies in northwest Pennsylvania, specifically focusing on the French Creek watershed and Lake LeBoeuf, near the town of Waterford in Erie County. PASG will facilitate 1-2 in-person meetings, to bring together scientists, natural resource agency staff, and other experts to provide expertise in the French Creek watershed and round goby control and management to identify possible options for controlling round gobies, including considering impacts to native species. Webinars and virtual meetings may also be used as a tool to bring key stakeholders together, and Pennsylvania Sea Grant will also consider sharing results at local, regional and/or national AIS meetings as timing and funding allow.

Utilized the quarterly meetings of the Round Goby workgroup, a subcommittee of the Pennsylvania Invasive Species Council, to facilitate discussions, gather input, stay current on ongoing and upcoming monitoring activities, share information, and learn about gaps and challenges for monitoring Round Gobies. Workgroup members include fisheries biologists, resource managers, and academic researchers from local and state resource agencies and academic institutions in Pennsylvania and Ohio. Meetings were held via phone or webinar due to challenges with meeting in person and scheduling. In addition, also met individually with researchers and agency staff as needed when they were not able to attend the workgroup meetings to gather input to identify monitoring needs, gaps, and opportunities.

This information and input helped shape the draft Round Goby Monitoring Plan, which has been shared with Pennsylvania Fish and Boat Commission (Sean Hartzell, AIS Coordinator). The plan will continue to be shared with additional scientists and resource agency staff (Pennsylvania Fish and Boat Commission, Pennsylvania Department of Environmental Protection, Pennsylvania Sea Grant, academic institutions, nongovernmental organizations, etc.) to gather and incorporate their input. The monitoring plan will continue to be a working document, with opportunities to update and revise. PASG will also look for opportunities to continue to share the information and facilitate discussion at various conferences and meetings.

(EO) Pennsylvania Sea Grant will work with Pennsylvania Fish and Boat Commission to design a pilot to retrofit the Walnut Creek Access Area in Fairview Township-Erie, PA with designated aquatic invasive species prevention clean and drain areas.

The PFBC organized a meeting with PASG on October 21, 2021, to discuss the project and learn from PASG about regarding elements of cleaning stations and considerations before installation based on work by Minnesota DNR. Following this meeting, PFBC staff did site

visits on November 8, 2021, at the Walnut Creek Marina and North East Marina to evaluate design and implementation options for designated aquatic invasive species prevention clean and drain areas. The PFBC organized a follow-up meeting with PASG on November 23, 2021, to further discuss project scope and implementation and it was determined, pending USFWS approval, that modifications to the scope of work would be focused on to shift from a large-scale design for an AIS retrofit of the Walnut Creek Marina to design and implementation of smaller AIS stations at both the Walnut Creek and North East Marinas. Following change of scope approval by USFWS, PFBC Engineering staff prepared and completed design plans for two AIS disposal stations, signs, and pavement decals at each marina, based on designs used in Minnesota and New York.

During 2022, the Pennsylvania Fish and Boat Commission (PFBC) utilized funding from revised Task 5B to create design plans for the installation of aquatic invasive species (AIS) composting station at the Walnut Creek and North East Marinas in Erie County, PA. Design plans are included as a deliverable and are attached to this report. The agency also developed and purchased signs to accompany the stations and purchased a “Clean. Drain. Dry.” pavement decal from a vendor for painting adjacent to stations.

During 2023, the agency purchased construction materials (wood, nails, etc.) and the agency’s Division of Construction and Maintenance installed two AIS composting stations at the Walnut Creek Marina (see photo below of one station). Stations were installed by excavating post holes which were then filled with concrete. Signs were also installed on the stations. Paint for painting “Clean. Drain. Dry.” pavement decals on the pavement adjacent to the stations was purchased, but decals will be painted at a later date (during the off-season) to the extremely high volume of boating traffic (tow vehicle and trailers) in this area during the summer months, which prohibited painting due to traffic and wet pavement. Stain was also purchased for the wood on the stations, which will be painted on the stations after they weather for approximately one year.

The PFBC was unable to install similar stations at the North East Marina in Erie County given that, due to unforeseen circumstances, boating operations and boating use at the North East Marina may be indefinitely suspended (i.e., the Marina is pending potential closure). Thus, remaining funds will be surrendered for this portion of Task 5B.

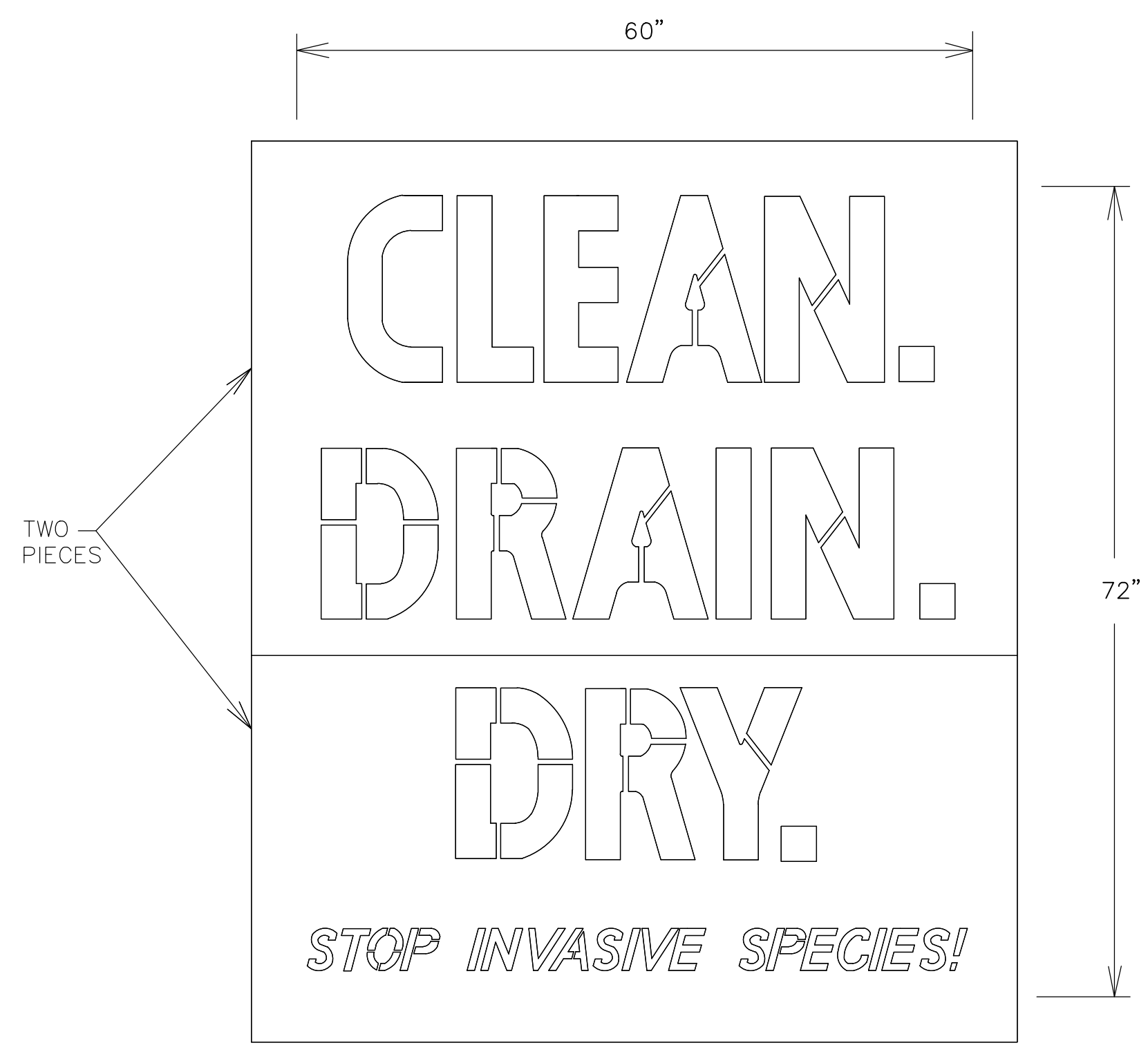
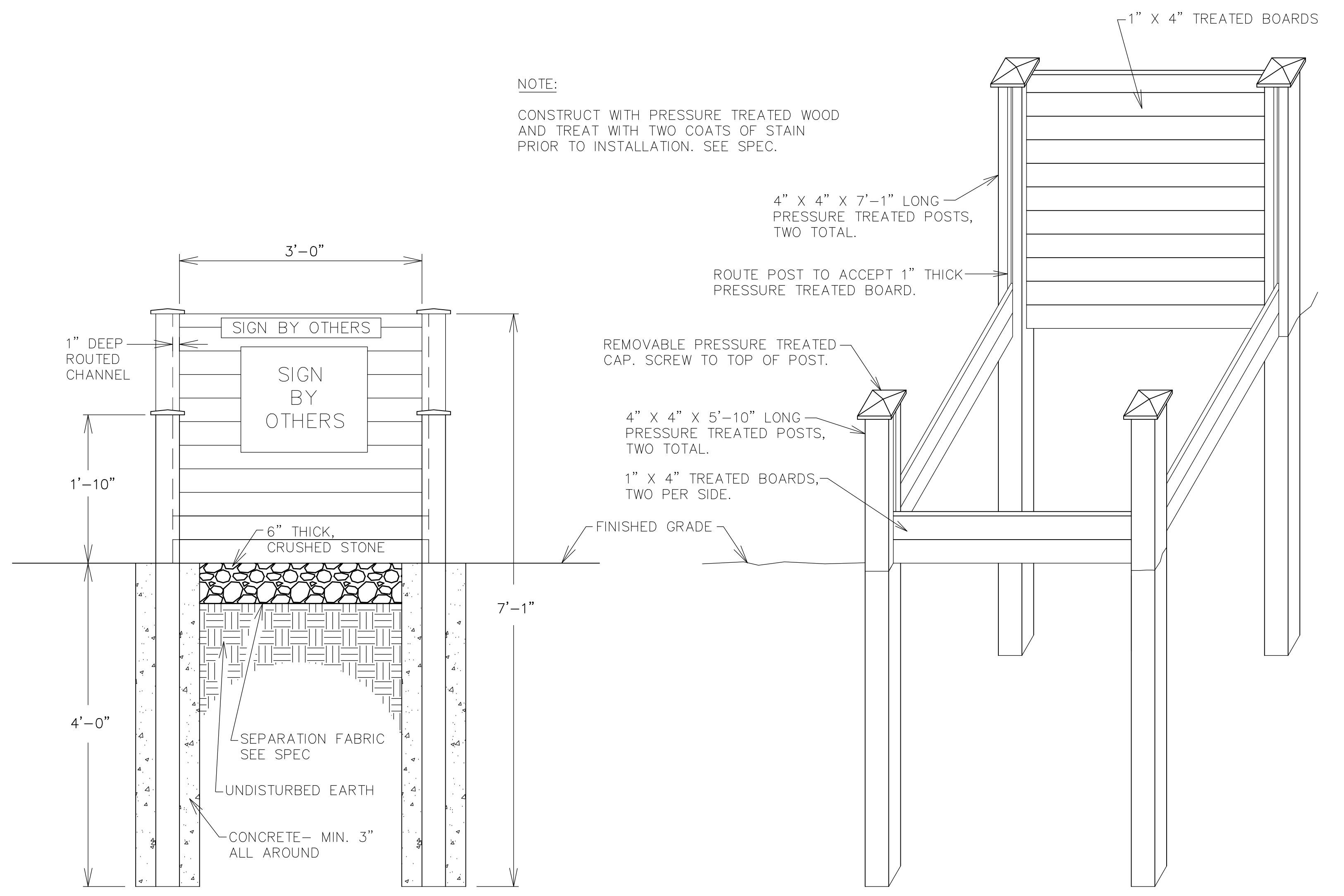
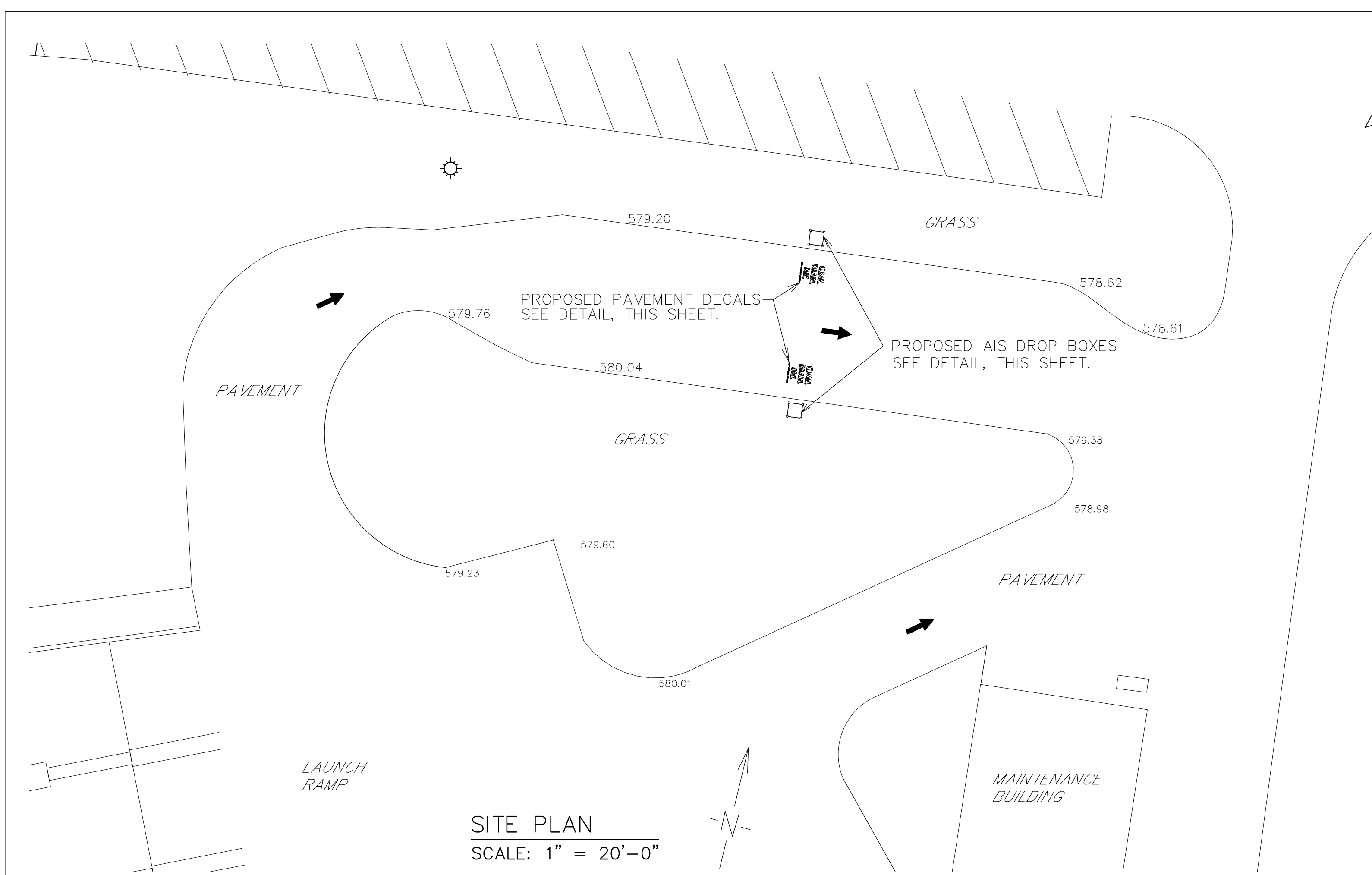


One of two AIS Composting Stations installed at the Walnut Creek Marina, Erie County, PA (prior to concrete pouring to secure posts).

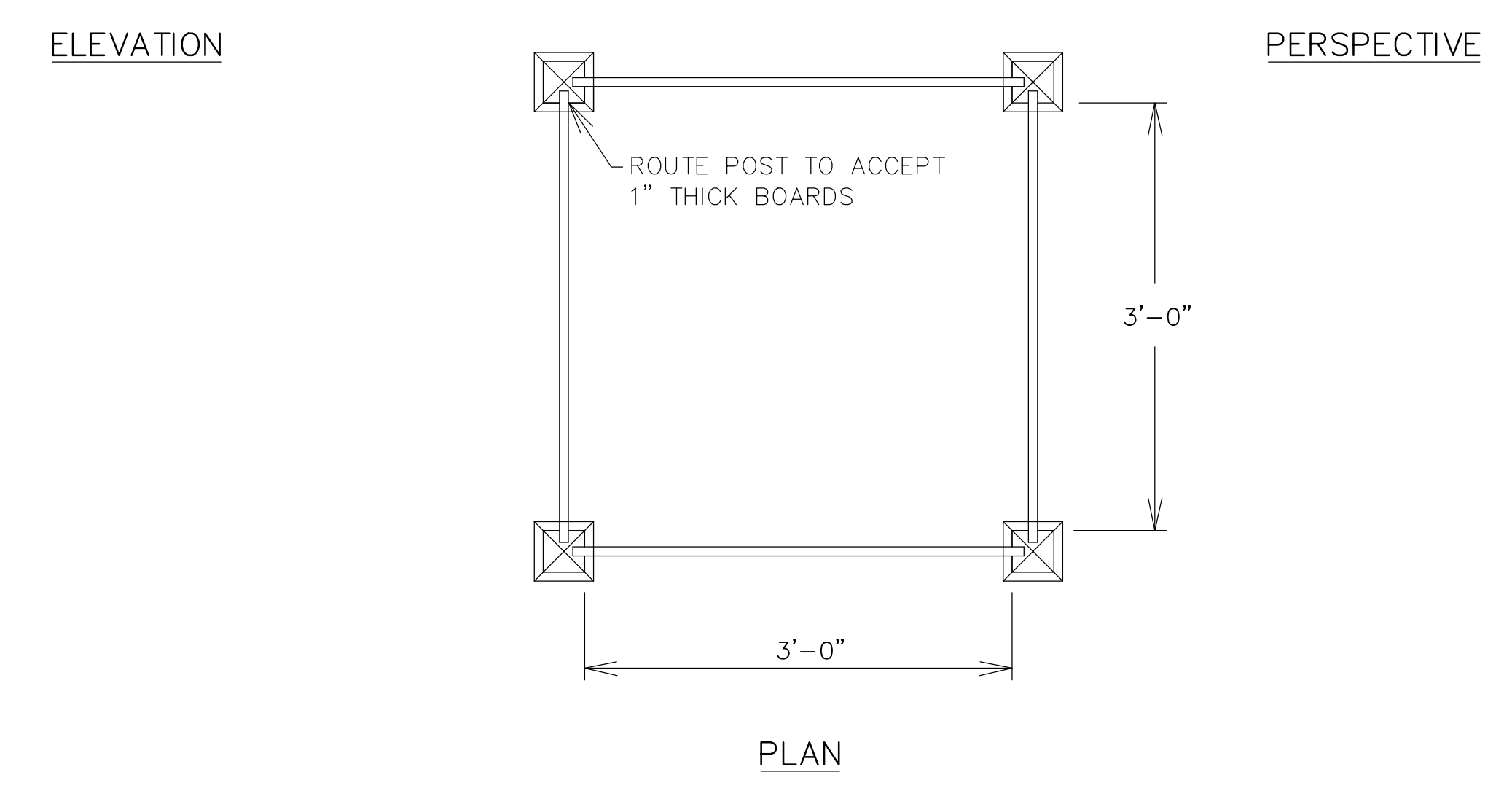
3.0 Program Expenditures

Invoice will be submitted separately.

**¹ P = Prevention; DM = Detection & Monitoring; CM = Control & Management;
EO = Education & Outreach; R = Research**

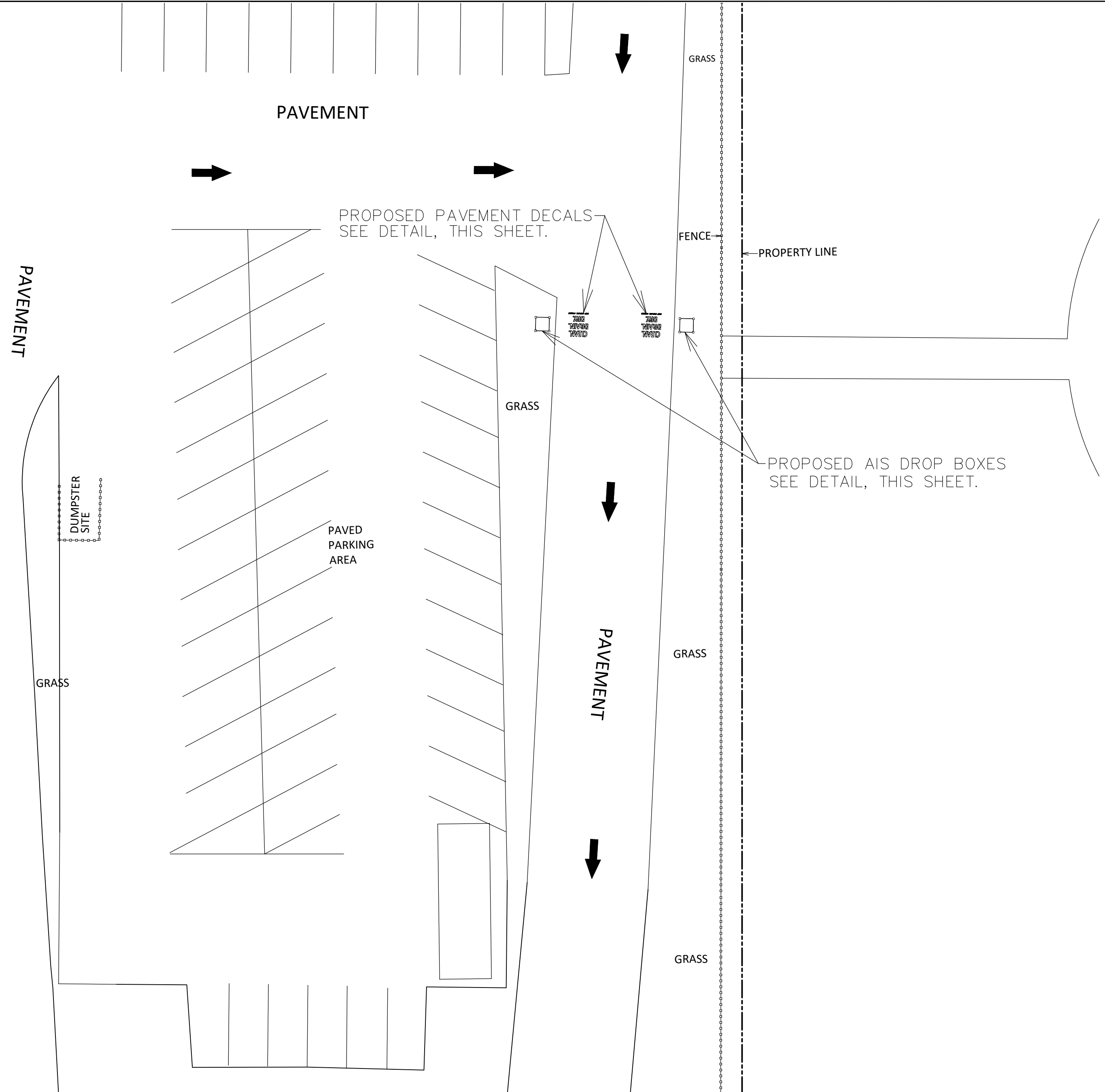


PROPOSED PAVEMENT DECAL
NO SCALE

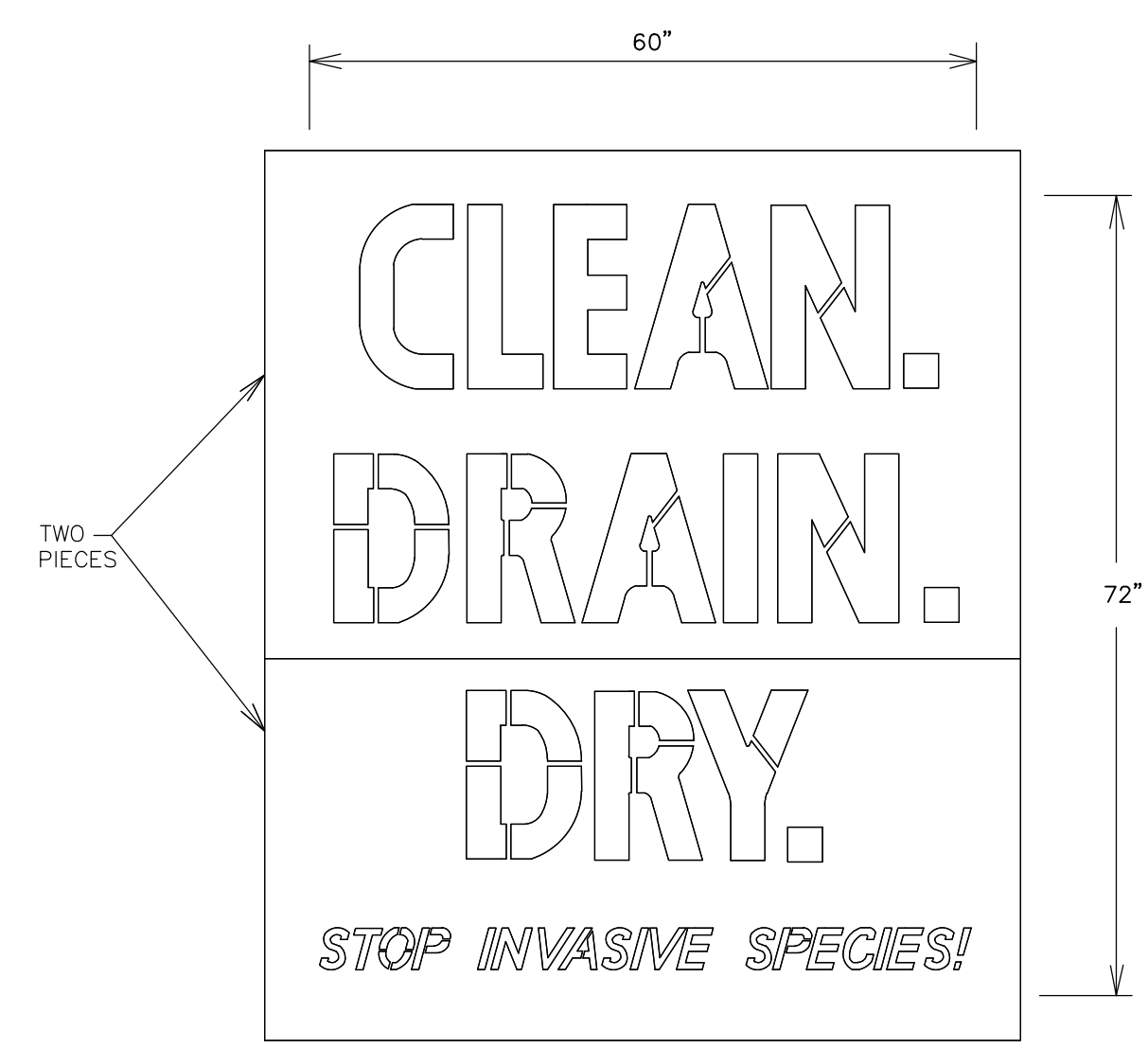


PROPOSED AIS DROP BOX DETAILS
SCALE: 1" = 1'-0"

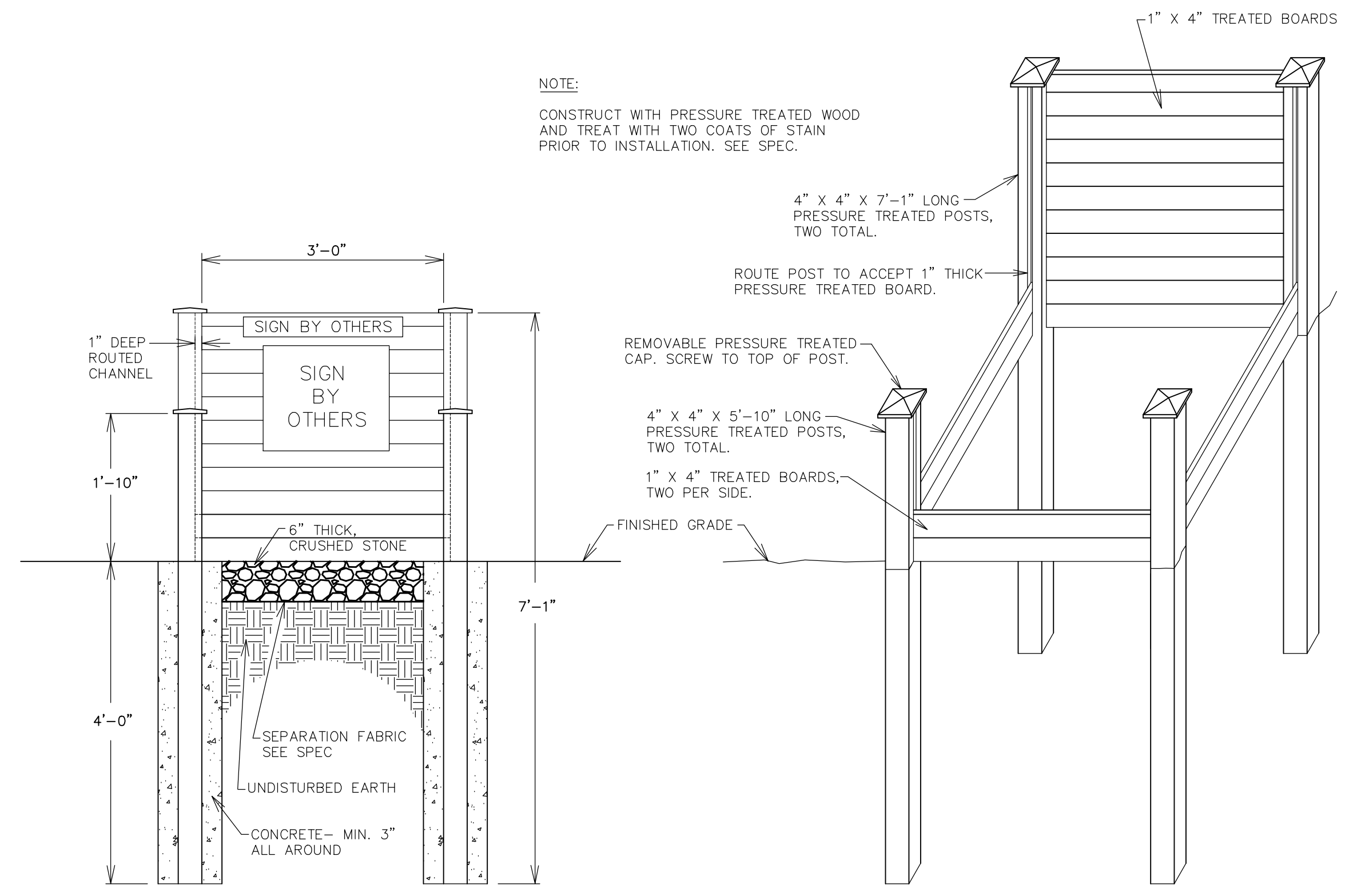
REVISIONS					PENNSYLVANIA FISH & BOAT COMMISSION BUREAU OF ENGINEERING				PROJECT NO.	
PE SEAL					SUBMITTED :				SITE PLAN, AIS DROP BOX DETAILS, PAVEMENT DECAL	
					PROJECT MANAGER, BUREAU OF ENGINEERING				AQUATIC INVASIVE SPECIES DROP BOX	
					APPROVED: <i>Don Cahagan</i>				WALNUT CREEK MARINA	
					CHIEF, DIVISION OF ENGINEERING				FAIRVIEW TOWNSHIP ERIE COUNTY	
					APPROVED: <i>John Sinclair</i>				FAIRVIEW, PENNSYLVANIA	
APPROVED: <i>Paul E. Urbanik</i>					PENNSYLVANIA FISH & BOAT COMMISSION					
DIRECTOR, BUREAU OF ENGINEERING					595 E. ROLLING RIDGE DRIVE BELLEFONTE, PA 16823					
DESIGNED BY:	ARCH.	CIVIL STRUCT.	MECH.	ELECT.	COMMONWEALTH OF PENNSYLVANIA					
DATE:	ELS				Tom Wolf Governor					
DRAWN BY:					PENNSYLVANIA FISH & BOAT COMMISSION					
DATE:					TIMOTHY SCHAFFER Executive Director					
CHECKED BY:					HARRISBURG PENNSYLVANIA					
DATE:					SCALE: AS NOTED					
					DATE 1/5/21					
					SHEET C1-1					



SITE PLAN
SCALE: 1" = 20'-0"



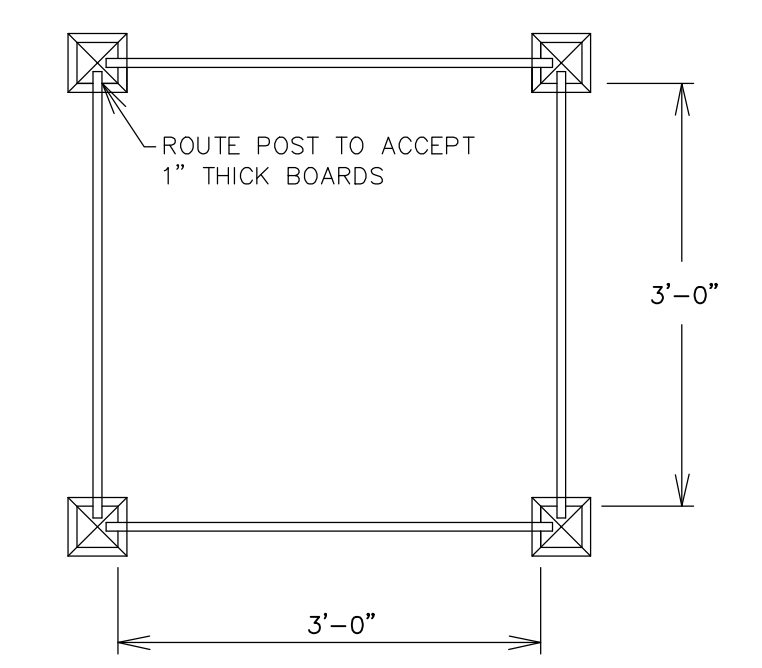
PROPOSED PAVEMENT DECAL
NO SCALE



NOTE:
CONSTRUCT WITH PRESSURE TREATED WOOD AND TREAT WITH TWO COATS OF STAIN PRIOR TO INSTALLATION. SEE SPEC.

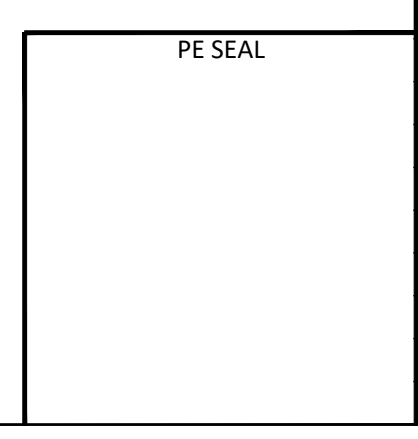
ELEVATION

PERSPECTIVE



PLAN

PROPOSED AIS DROP BOX DETAILS
SCALE: 1" = 1'-0"



REVISIONS					PENNSYLVANIA FISH AND BOAT COMMISSION			
					SUBMITTED: PROJECT MANAGER, BUREAU OF ENGINEERING			
					APPROVED: CHIEF, DIVISION OF ENGINEERING			
					APPROVED: CHIEF, DIVISION OF CONSTRUCTION AND MAINTENANCE			
					APPROVED: DIRECTOR, BUREAU OF ENGINEERING			
					ARCH.	CIVIL STRUCT.	MECH.	ELECT.
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PROJECT NO.	
SITE PLAN, AIS DROP BOX DETAILS, AND PAVEMENT DECAL	
AQUATIC INVASIVE SPECIES DROP BOX	
North East Marina NORTH EAST TOWNSHIP ERIE COUNTY PENNSYLVANIA	
PENNSYLVANIA FISH AND BOAT COMMISSION	
595 E. ROLLING RIDGE DRIVE BELLEFONTE, PA 16823	
COMMONWEALTH OF PENNSYLVANIA Tom Wolf Governor	SCALE: AS NOTED
PENNSYLVANIA FISH AND BOAT COMMISSION Timothy Schaeffer Executive Director	DATE: 7/8/22
HARRISBURG PENNSYLVANIA	SHEET 1 OF 1