STATE OF CALIFORNIA – THE RESOURCES AGENCY

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PETE WILSON, *Governor*

CALIFORNIA COASTAL COMMISSION

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STAFF REPORT AND RECOMMENDATION

ON CONSISTENCY CERTIFICATION

Consistency Certification No.	**CC-054-96**
Staff:	JRR-SF
File Date:	5/9/96
3 Months:	8/9/96
6 Months:	11/9/96
Commission Meeting:	7/10/96

APPLICANT: **CALIFORNIA STATE COASTAL CONSERVANCY**

DEVELOPMENT LOCATION: Tijuana River National Wildlife Refuge. (Exhibit 1)

DEVELOPMENT DESCRIPTION: Construction of a connector channel between the northern end of the Oneonta Slough and existing tidal lagoons. (Exhibit 2)

SUBSTANTIVE FILE DOCUMENTS:

1. Consistency Determination by the Fish and Wildlife Service for the Tijuana River National Estuarine Research Reserve management plan
2. Application to the Corps Engineers for an 404 permit for construction of a connector channel
3. NE-115-95, No-Effects Determination by Pacific Estuarine Research Laboratory for removal of wetland vegetation
4. Pre-application Report, Tijuana Estuary Tidal Restoration Program, December 1994, State Coastal Conservancy

EXECUTIVE SUMMARY:

The California State Coastal Conservancy (Conservancy) has submitted a consistency certification for the construction of a connector channel within the Tijuana River National Wildlife Refuge. The purpose of the channel is to increase tidal circulation in the upper reaches of the northern part of the

purpose of the channel is to increase tidal circulation in the upper reaches of the northern part of the estuary. The channel will also increase tidal prism in the estuary and result in an increase of aquatic habitat. The applicant will dispose of the material excavated for the channel into the intertidal zone for purposes of maintaining sand supply.

The project is consistent with the requirements of Section 30233 because it is a restoration project that will significantly benefit to habitat resources. Although the project requires dredging of existing wetlands, the impact is fully mitigated by the increase in wetland habitat created by the project.

The material excavated and dredged for the purpose of creating the proposed connector channel will be used to replenish beach sand. Although the material contains a high percentage of fines, the disposal methods will prevent any impacts to the marine environment.

Although the project is located in an area that provides habitat for several federally and state listed endangered species, the project is designed to avoid impacts on these sensitive species. Additionally, the project will improve the wetland and estuarine resources of the area, which will also benefit habitat for these endangered species.

Although the project will isolate a portion of the estuary from public use, this limitation is necessary to protect natural resources. Access to existing trails will be maintained through the construction of a pedestrian bridge over the channel.

STAFF SUMMARY AND RECOMMENDATION:

I. Project Description:

The Conservancy proposes to construct a connector channel between the northern portion of the Oneonta Slough and the tidal lagoons southeast of the Tijuana Estuary Visitor Center. The channel will be narrow at either end (10 feet). At its connection point with the existing channels, the Conservancy designed the new channel with a 1:1 slope to minimize impacts. The channel will widen to approximately 100 feet at its widest point at the center of the site. Irregular intertidal benches will adjoin the channel on each side. The channel will have a bottom elevation of -2 feet NGVD and 2:1 sideslopes from the channel bottom to the top bank. The Conservancy designed the channel with sinuous curves through its central area and to be approximately 1,060 feet long. The project includes the construction of a timber bridge to allow pedestrian access over the channel.

The Conservancy proposes to use a hydraulic cutterhead dredge to excavate the channel. The Conservancy will discharge excavated material, via pipeline, into the surf zone near the mouth of the Tijuana River. If necessary, the Conservancy will use a small front end loader to supplement the hydraulic dredge. The applicant proposes to place the slurry pipe along the trail edge to minimize habitat impacts. The Conservancy estimates that the project will take 65 days to complete, and will be conducted during the winter season.

II. Status of Local Coastal Program.

The standard of review for federal consistency determinations is the policies of Chapter 3 of the Coastal Act, and not the Local Coastal Program (LCP) of the affected area. If the Commission certified the LCP and incorporated it into the CCMP, the LCP can provide guidance in applying Chapter 3 policies in light of local circumstances. If the Commission has not incorporated the LCP into the CCMP, it cannot guide the Commission's decision, but it can provide background information. The Commission has incorporated the San Diego LCP into the CCMP.

III. Applicant's Consistency Certification:

California State Coastal Conservancy certifies that the proposed project is consistent with the California Coastal Management Program.

IV. Staff Recommendation:

The staff recommends that the Commission adopt the following resolution:

A. Concurrence.

The Commission hereby **concurs** with the consistency certification made by California State Coastal Conservancy for the proposed project, finding that the project is consistent with the California Coastal Management Program.

V. Findings and Declarations:

The Commission finds and declares as follows:

A. Marine, Wetland, and Estuarine Resources. Section 30230 of the Coastal Act provides that:

> *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 30231 of the Coastal Act provides that:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30233 of the Coastal Act provides, in part, that:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

...

(7) Restoration purposes.

...

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary.

1. Wetland and Estuarine Impacts. The Conservancy proposes to construct a connector channel between the northern end of Oneonta Slough and the tidal lagoons southeast of the Tijuana Estuary Visitor Center. The Conservancy will excavate most of the channel from upland areas. However, the project requires dredging of approximately 0.43 acres of wetlands and mudflats. Despite this impact, the project will improve the biological productivity and functional capacity of the wetland and estuary in a manner consistent with Sections 30230, 30231, and 30233(c) of the Coastal Act. The connector channel will improve tidal circulation to 200 acres of wetlands resulting in improved water quality, fisheries habitat, and wetland values. Additionally, the project will result in the creation 1.74 acres of wetlands, which is over four times the amount of habitat affected by the

project. Finally, the proposed project will improve tidal prism of the estuary. (Tidal prism is the volume of water that cycles in and out of an estuary on a daily basis.) This improvement will benefit water quality of the estuary and help maintain an open channel between the ocean and the estuary. Therefore, the Commission finds that the project will improve biological productivity and functional capacity in a manner consistent with Sections 30230, 30231, and 30233(c) of the Coastal Act.

Additionally, the project is consistent with the requirements of Section 30233(a) of the Coastal Act. The project is an allowable because it is for restoration purposes, as described in Section 30233(a)(7). In determining if the activity is consistent with the alternative and mitigation tests of Section 30233(a), the Commission must determine if there are adverse effects requiring a less damaging alternative or additional mitigation. One potential adverse effect is associated with increased tidal prism. In most cases, increasing tidal prism improves wetland and estuarine values by increasing tidal circulation and water quality. Additionally, one of the main benefits to an increase in tidal prism is to improve the scour at the mouth of the estuary, which insures that the mouth will not close because of accretion of sediment in the entrance channel. One possible adverse effect from increased tidal prism is to cause too much scour within the estuary, leading to erosion of intertidal wetland habitat throughout the estuary. In this case, however, historic sedimentation into the estuary has significantly reduced its tidal prism. According to the Conservancy's pre-application report, the estuary's total tidal prism has been reduced from an estimated 1500 acre feet in 1852 to 250 acre feet today. The proposed connector channel will partially restore the estuary's historic tidal prism, and the Conservancy does not expect the increase in tidal prism to have any adverse effects. Therefore, the Commission finds that the increase in tidal prism will not adversely affect coastal zone resources.

Another concern is the potential adverse effect from construction techniques on wetland resources. The Conservancy, however, has designed the project to minimize construction related impacts. For example, the Conservancy designed the project to maximize the removal of upland areas and to avoid, where possible, impacts to wetland habitat. Additionally, the Conservancy will limit impacts to adjacent habitat by concentrating the use and storage of equipment on upland areas, especially those proposed for channel excavation. Finally, related to this project is a proposal by the Pacific Estuarine Research Laboratory (PERL) to remove wetland vegetation from habitat areas directly affected by the construction of channel, which the Commission has already approved (NE-115-95). With these measures, the Commission finds that the construction techniques will not adversely affect wetland resources.

Finally, the proposed project requires dredging of 0.43 acres of wetland and estuarine resources. However, in constructing the project, the Conservancy will create 1.74 acres of new estuarine and wetland resources. The habitat created by the Conservancy results in a mitigation ratio slightly greater than 4:1. In addition, the channel project will increase tidal circulation to over 200 acres of wetland and estuarine resources and will improve the tidal prism into the estuary. Therefore, the Commission finds that the proposed project will significantly benefit estuarine and wetland resources, despite impacts to existing habitat.

In conclusion, the Commission finds that the project will not adversely affect wetland resources in a manner requiring consideration of alternatives or additional mitigation. Therefore, the Commission finds the project consistent with the alternative and mitigation tests of Sections 30233(a) of the Coastal Act.

2. Marine Impacts. The proposed project also involves the discharge of dredged material into the marine environment. The Conservancy proposes surf zone disposal of this material in order to enhance sand supply in the area. The sediment is between 65 and 75 percent sand. By placing the material into the surf zone, the waves will sort the material washing the sand size sediment onto the beach and pulling the finer sediments offshore. Although the Commission agrees that the proposed disposal will benefit sand supply resources, it is concerned about impacts associated with the amount of fine material in the sediment. In most cases, the Commission limits beach replenishment projects to sediment that contains at least 80 percent sand. The primary reason for this limitation is that the finer material can adversely affect water quality and habitat in the marine environment and it has no value for sand supply. Additionally, any contaminants in the material are more likely to bind to the finer grain sediment.

In this case, however, the Conservancy has designed the project to minimize the adverse effects from discharge of fine grained material. First, the Conservancy tested the material to determine if it is contaminated. The results of those tests indicate that the material is relative free of heavy metals, organics, hydrocarbons, and other pollutants of concern, and that the material is suitable for aquatic disposal. The Conservancy proposes to minimize impacts associated with disposal of fine grained material by disposing the sediment during the rainy season at the mouth of the Tijuana River, when flows from the river are at its highest and sediment loads in the marine environment are also at their highest. Additionally, the Conservancy will limit disposal to periods of outgoing tide. In this way the disposal operation will mimic turbidity in the flood flows of the river, and thus reduce the impact from disposal of fines in the marine environment. With these measures, the turbidity resulting from the disposal operation have an effect similar to natural occurring events. Therefore, the Commission finds that the proposed disposal will not significantly affect marine resources.

3. Conclusion. The proposed project will restore wetland and estuarine resources in the Tijuana River Estuary. The project will increase the amount of wetlands, improve tidal circulation, and increase tidal prism. As such, the proposed project is an allowable use, the least damaging feasible alternative, and includes adequate mitigation. Additionally, the project will improve the biological productivity and functional capacity of the estuary. Finally, the disposal portion of the project will not adversely affect marine resources. Therefore, the Commission finds that the project is consistent with the Marine Resource policies of the CCMP.

B. Endangered Species. Section 30240 of the Coastal Act provides that:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The Tijuana River Estuary provides habitat for five state and federally listed endangered and threatened species: the California least tern, the light-footed clapper rail, Belding's savannah sparrow, salt marsh bird's beak, and Pacific pocket mouse. The proposed project will not result in any adverse impacts to any of these species, and, in fact, will provide benefits to their habitat. The Conservancy funded field studies for identifying habitat for these species within the footprint of the connector channel. The Conservancy determined that the project site does not contain nesting light-footed clapper rails. In addition, the Pacific pocket mouse was not found in the area. The Conservancy will also avoid impacts to the California least tern by limiting construction to the winter months when the bird is not found in the area.

The Conservancy did identify habitat for the Salt Marsh Bird's Beak within the original construction footprint. However, based on its analysis, the Conservancy relocated the channel to avoid impacts to the plants. The Conservancy will also conduct pre-project surveys to ensure that this species will not be affected by the project. If this plant is found within the project footprint, the Conservancy will work with Fish and Wildlife Service to develop additional mitigation measures. Finally, the Conservancy identified several nests for the Belding's savannah sparrow within the channel footprint. The project will destroy these nesting sites. However, the impact is not significant because the Conservancy will construct the project during the non-nesting season for the sparrow. Therefore, the project will not directly affect individual birds or their nests. In addition, as described in the section above, the proposed project will result in the creation of over four times as much habitat as that affected by the project, and thus increase the amount of nesting habitat for the bird. Additionally, in coordination with the Conservancy, the Pacific Estuarine Research Laboratory will remove and replant wetland vegetation from the project site. With these measures, the project will not have a significant effect on the sparrow.

The Commission also notes that the proposed project will have significant restoration and enhancement benefits to the wetland and estuarine resources of the area. These benefits are fully described in the section above. Because the endangered species potentially affected by this project rely on these wetland and estuarine resources, the proposed restoration will also significantly benefit endangered species in the area. In conclusion, the Commission finds that the proposed project will avoid significant adverse effects on endangered species and will restore and enhance habitat supporting these species, and therefore, the Commission finds that the project is consistent with the environmentally sensitive habitat policies of the CCMP.

C. <u>Public Access and Recreational Resources</u>. Section 30210 of the Coastal Act provides that:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and

recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

FIGURE A

TIJUANA ESTUARY TIDAL RESTORATION PROGRAM MODEL PROJECT

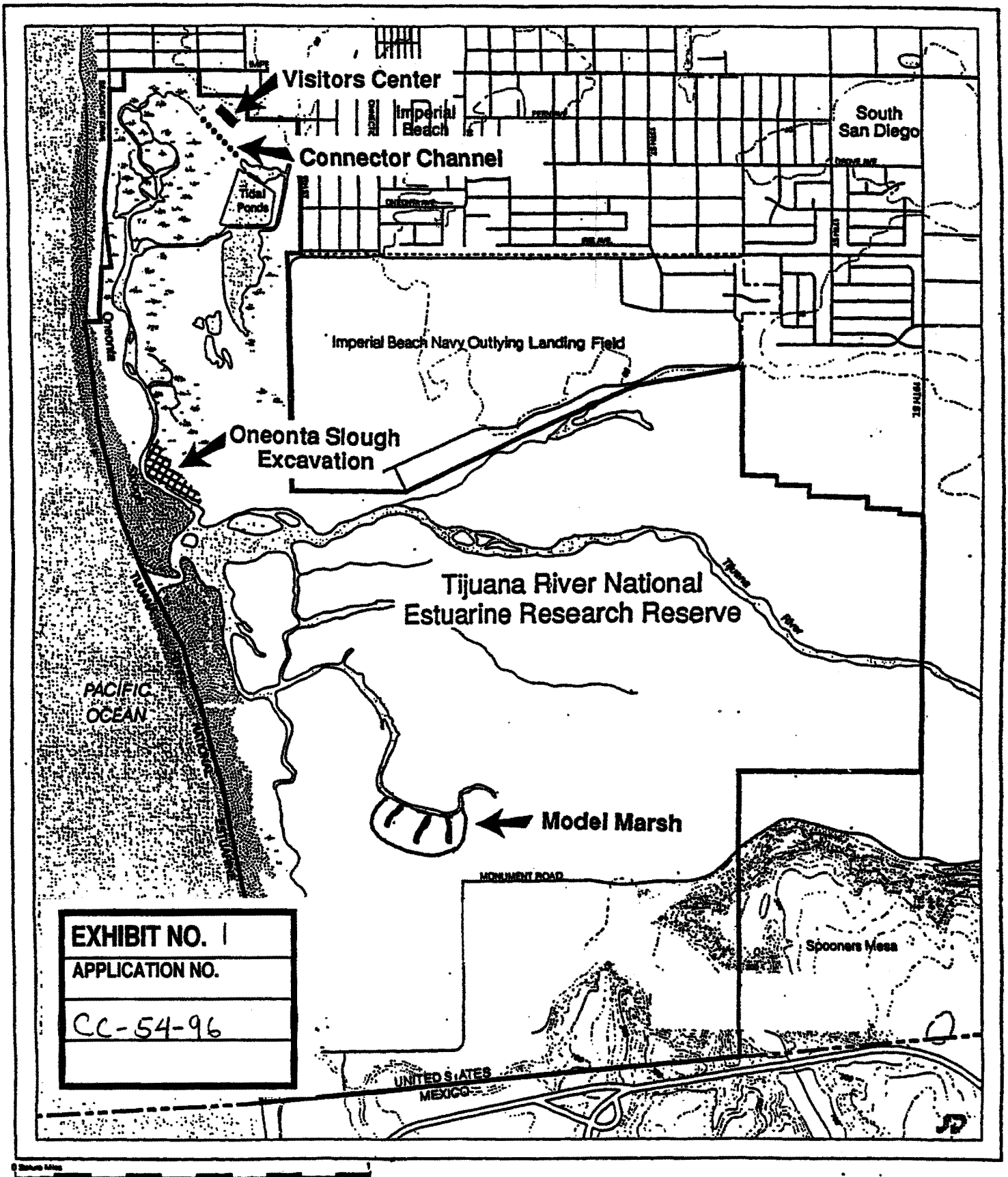

EXHIBIT NO. 1

APPLICATION NO.

CC-54-96

FIGURE B

TIJUANA ESTUARY TIDAL RESTORATION PROGRAM - THE MODEL PROJECT

CONNECTOR CHANNEL COMPONENT

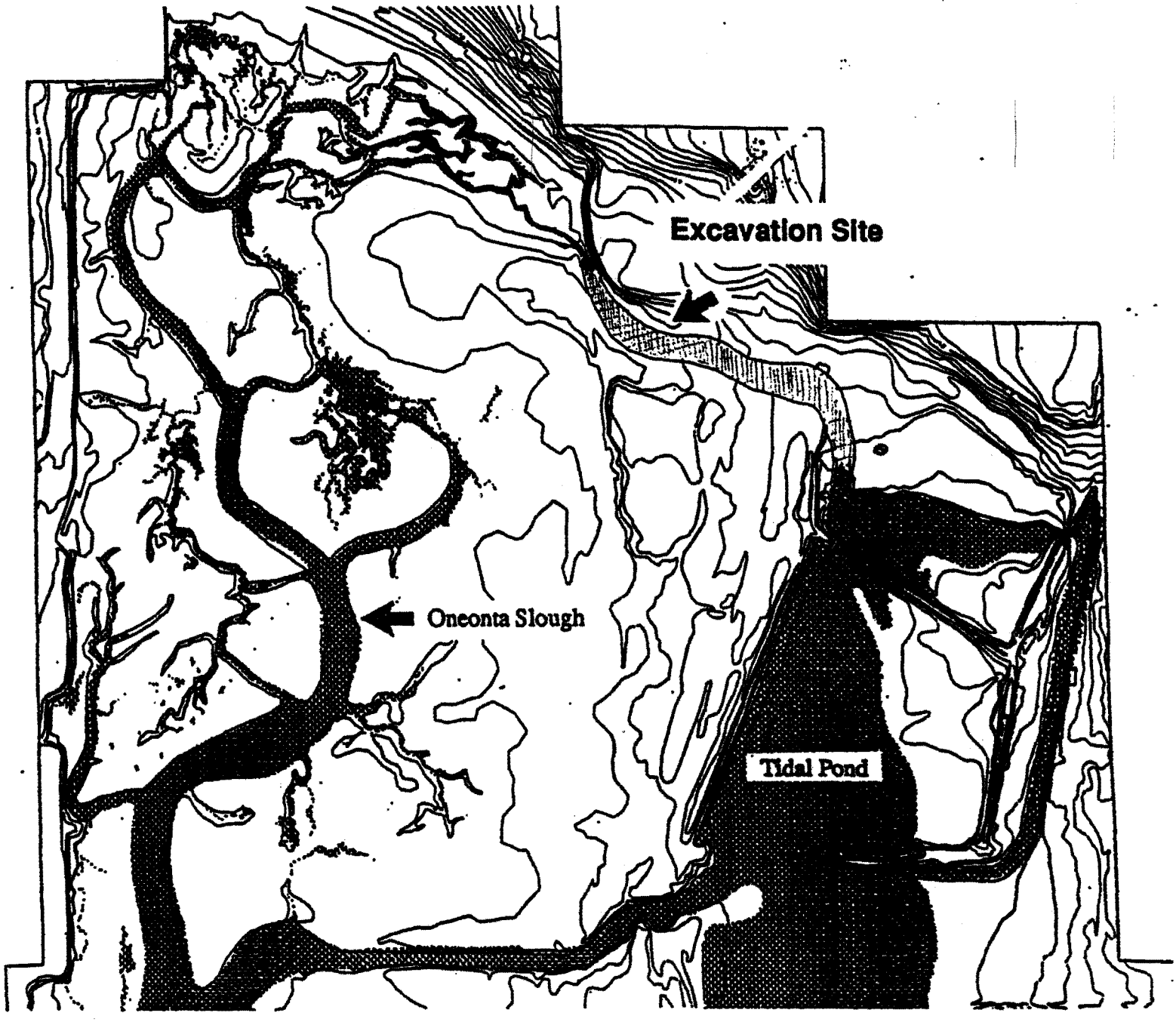

EXHIBIT NO. 2
APPLICATION NO.
CC-54-96

Scale in Feet

0 500 1000 2000 3000