



Summary Report

Port of Los Angeles, Planning and Economic Development Division

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Summary Report

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1 INTRODUCTION

The City of Los Angeles Harbor Department (Harbor Department) organized the Terminal Island Plan Working Group (TIPWG), a land use planning team, to study long-term land use and facility improvements for Terminal Island. The TIPWG, which consisted of existing tenants, proposed tenants, government agencies with operations on the island, and Harbor Department staff members, guided the consultant team through the process. The work included an extensive outreach to existing and possible tenants of the area. The resulting criteria and needs were the basis for seven initial options. These options ranged from extensive to modest infrastructure and land use change. A subsequent review and refinement process by the TIPWG resulted in a proposed Terminal Island Land Use Plan (proposed Plan). The proposed Plan meets the majority of needs with a practical approach to expansion and redevelopment. The proposed Plan includes a 30% increase in container berth and land use areas, expands rail capacity by a similar measure, and provides for the redevelopment of Fish Harbor for many smaller industrial and water-dependent tenants. Lastly, the proposed Plan allows for development of truck service facilities and possible expansion of the boatyard service industry in the Port. Non-maritime dependent and recreational facilities are removed from the Terminal Island Study Area (Study Area) which is defined below and the boundary is shown in Appendix A.

This report is intended to accompany and explain the proposed Plan. The TIPWG contributed to update of the Land Use Plan. A summary of the study and the final plans are described in this report. The Harbor Department arranged for the work to be conducted at this time as a precursor to a future comprehensive update to the Port Master Plan. The Port's current Master Plan became effective in April 1980, and has not had a comprehensive update since that time. The last project-specific update was approved by the California Coastal Commission in June 2011.

The Study Area includes 2,230 acres and an aggregate berth length of 8.3 miles. The area currently supports a variety of cargo handling operations including container, liquid bulk, dry bulk, commercial fishing, seafood processing, and maritime support. The long-term objectives for the Terminal Island District include providing adequate space for expected growth of these uses, as well as space for a centralized trucking support center, a relocated fueling facility, and possibly a second boatyard.

The enclosed report and supporting studies were prepared by the Cargo Velocity consultant team including the following firms: Cargo Velocity LLC (port planning), Lisa Wise Consulting, Inc. (commercial fish processing input); Jensen Maritime Consultants (boat yard input), Owen Lang Consulting LLC (land use input), MBI Media (public involvement input) and Economic & Planning Systems, Inc. (economic review).

2 PLANNING PROCESS

This report is presented in advance of a presentation to the Board of Harbor Commissioners (Board). The planning process was as follows:

- Collect and document stakeholder input through interviews, site visits, workshops and surveys.
- 2. Develop a summary of planning criteria and discuss during TIPWG 1.
- 3. Discuss seven high-level options and obtain feedback from team in TIPWG 2.
- 4. Select and refine three options, and obtain feedback from Team in TIPWG 3.
- 5. Select a preferred option and present it in TIPWG. 4.
- 6. Present the proposed Terminal Island Land Use Plan to the Board.

This report steps through a summary of this process in sequential order.

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3 INPUT TO PLANNING PROCESS

The project was structured so that stakeholders including Harbor Department, the community, tenants, and potential tenants of the Study Area had opportunities for input into the planning process. The Harbor Department defined the study goals noted below, while the potential and current tenants defined their immediate and long-term needs, also noted in this section.



3.1 Study Goals

The Harbor Department presented a summary of the following study goals to the Board. These goals included the drivers for initiating the study.

- Ensure sufficient land/facilities to accommodate forecasted container demand.
- Protect commercial fishing and fish processing industries.
- Preserve waterfront property for water-dependent uses.
- Identify a potential location for additional boatyard capacity.
- Address the needs of truck drivers.
- Maximize on-dock rail throughput capacity.
- Minimize impact to tenants.
- Consider existing historic resources in the Study Area.

3.2 Stakeholder Input

A major directive from the Harbor Department was that stakeholder input should drive the planning process. Much time and attention was dedicated to assuring that stakeholders had multiple and substantive opportunities for input. The value of stakeholder participation cannot be underestimated, as it generates a stronger buy-in to the preferred alternatives, a greater appreciation of the planning challenges faced by the Port, and the balance required to meet needs of multiple tenants.

Table 3-1 summarizes the requests made by the TIPWG stakeholders during several individual and TIPWG meetings held throughout the project, organized by industry group. All groups wanted to maintain, at a minimum, their existing acreage and berth length, while several requested additional space and berth area to allow for growth. The improvement of railway operations is a main concern of the container and rail industry groups.

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Table 3-1: Summary of Stakeholder Requests

Industry Group	Growth	Request
Container	High	More land, berths, more rectangular CY areas, on-dock loading track, enable more grounding
Rail	High	Depart full trains from island, one A&D per CY, possible to turn trains, avoid stub-end tracks
Liquid Bulk	Low/Med	Retain existing and planned facilities ("product" low growth, crude – med growth)
Dry Bulk	Low	+ 10 acres and new berth if possible
Commercial Fishing	Low	Similar berth capacity + 2-3 acres for parking and a building
Fish Processing	Low	Retain existing + add 2 acres
Maritime Support	Low	 Retain existing berth/land capacity Add truck parking, toilets, restaurant Retain marina Add one large fueling facility
Boatyard(s)	Low	Retain existing but add 2 acres, improve shape of site, provide for possible second boatyard



Note: In the table above, CY = Container Yard; A&D = Arrival and Departure tracks

3.3 Initial Planning Criteria

The following is a summary of the specific site planning criteria developed from the goals and stakeholder input above. These criteria were then applied to develop the initial seven land use options.

- 1. The Harbor Department should satisfy their tenants' need for adequate facilities, within practical development limits.
- 2. An important role of the Terminal Island Study Area is container cargo movement, and the plans should enable the area to meet expected cargo handling capacity demands. This demand in the study timeframe is approximately 2.5 times current volumes.
- 3. The best way to satisfy efficient cargo expansion is to enable each developable deep-water berth to have adequate backland, intermodal facilities, truck access, and if possible, a rectangular shape. A rectangular shape is important to allow for a high-density rail-mounted gantry crane (RMG) storage yard near the berths. Should another container operating mode become popular, a rectangular shape also provides for the greatest flexibility. In addition, we anticipate that chassis storage on terminal will be reduced or eliminated. This change further marginalizes inefficient shapes in the terminal backlands.
- 4. After support for berths, rail planning is required to permit the transfer of up to triple the volume of intermodal cargo vs. current levels. The physical changes anticipated assume that the increase is enabled through high-density and efficient facilities, and an increase in the rate of cargo turnover (throughput). A physical tripling of rail yard areas is not required.
- 5. After rail planning, an efficient roadway network with grade-separated access to all terminals and facilities is needed.
- 6. After the development planning noted above, the planning team drafted options that not only met the goals that affected large areas, but also allowed for objectives with a small footprint. A part of this work included reduction of orphaned areas where possible.

3.4 Additional Criteria

The following additional criteria were noted after TIPWG 2. These criteria were developed jointly by the planning team to further define requirements for the next round of planning for TIPWG 3. It can be summarized in three main items: Cargo Terminals, Rail, and Fish Harbor Area.

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Cargo Terminals

- Show one option with State Route 47 realigned to improve backland for YTI and to allow for additional future throughput.
- Options should show the location of important truck gates and grade separations to give an idea of required investments in the roadway network.
- At least two options should show a dry bulk land use at Berth 206. Relocating dry bulk from its existing spot would increase the cargo terminal area currently leased to YTI.
- Avoid closing roadways that provide useful truck circulation.
- The land east of Ferry Street should be accessible by container terminals if converted to cargo land use.
- If the 9-acre parcel that is currently the urban forest north of the LAXT loop is not suitable for any other use, show as an open area/green space.
- Add a fourth berth at Berths 206-226 to show the opportunity of adding more berth to cargo terminal currently operated by YTI; show as secondary on all options.

Rail

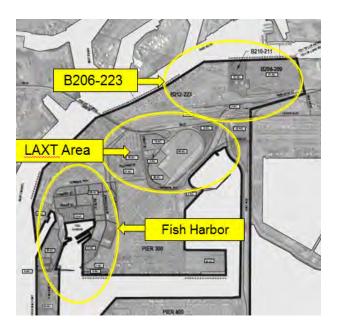
- Avoid using concepts that have tracks that cross terminal areas because they will be effectively unavailable.
- Target a one-to-one ratio of working to storage rail tracks.
- Note arrival and departure track locations for each terminal and clarify that they are outside terminal boundaries.

Fish Harbor Area

- At least two options should show commercial fishing/fish processing in the northeast corner of Fish Harbor. Grouping these two land uses better satisfies their needs.
- Keep fish processors in Fish Harbor to allow continued use of existing facilities where possible.
- Open-water sailboat mooring need not be specifically retained, since it is not an industrial use.

Three Primary Areas of Study

The three sub-areas within the Study Area that required the greatest degree of change are noted in the graphic below. In the consideration of alternatives, the focus was primarily upon these three areas.



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3.5 Fish Harbor Study Area Needs

The goal for the planning of the Fish Harbor area is to provide a long-term home for water-dependent, industrial tenants. These include: commercial fishing, seafood processing, barges and tug boats, fueling depots, and relevant institutional users such as fire stations. The land use planning process included an outreach to existing and proposed tenants of the area. As part of the assignment, our team effort included a special focus on the needs of the commercial fishing and boatyard businesses.





Needs of Commercial Fishing and Fish Processors

The approach to engaging the commercial fishing industry, both seafood processors and commercial fishermen, included: site visits, written surveys, personal interviews, sub-group meetings, and workshops. The following is a summary of the key issues that are the resulting inputs to the land use planning process.

- **General:** The fishing industry seeks stability for its businesses, has a strong sense of place, and believes that it has built something unique and valuable on Terminal Island (infrastructure and social).
- **Spatial needs:** The incremental land needs of the commercial fishing industry are modest compared to the scale of the Study Area. The processors are seeking approximately 1.8 additional acres, and the fishermen seek one to two additional acres.
- **Boat berthing needs:** Current levels of waterfront boat berthing are sufficient and important to maintain; planning outcomes should allow for more boat berths/tie-ups if the need arises.
- Backland needs: The industry needs backland to accommodate a processing plant, vehicle access,
 parking, storage, space for gear repair, other activities like direct sales, and amenities such as a meeting
 facility and showers.
- **Special access and equipment needs:** These include placements of hoists, cranes, and pumps to offload catch as well as options for a fishermen-owned or public hoist.
- **Longer lease terms:** Commercial seafood processing is capital intensive and the processors have asked for longer term leases to justify future investment in their businesses on Terminal Island.
- **Relocation:** Overall, fishermen and seafood processors have expressed a preference to minimize relocation.

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4 SUMMARY OF INITIAL SEVEN OPTIONS

Once the major criteria for physical development of Terminal Island were established, seven "broad brush" conceptual alternatives were developed. They focused on large-scale allocations of land and major elements of traffic flow and connectivity. Issues that were explored included:

- Possible fills and cuts, new channels, slips and basins.
- Freight distribution between marine terminals and intermodal terminals.
- Freight movements to and from nearby support facilities, and facility location alternatives.
- Freight movements between the Port and hinterland areas.
- Infrastructure improvement possibilities.
- Security, "Port Gateways", the Port's emergency response plans, and new Customs issues.
- Shifting regulatory environment, including recent and upcoming trucker initiatives.
- New port technologies for cargo handling.
- Public views and perception of cargo handling areas.

The seven initial concepts are illustrated in Appendix F. The key areas of change at this early stage are the arrangement of berths, rail yards, and container yard areas. The planning in Fish Harbor at this stage was preliminary.

The TIPWG input was taken by the Harbor Department and three options were then developed, bringing together preferred aspects of the various plans. The three refined options were based on Options 5, 2, and 6 but were effectively new options due to the needed adjustments, and so were renamed Options 1, 2, and 3, respectively. The main changes and the reasons for them were:

- The rail loop was removed after a preliminary determination that it was in conflict with the rail storage yard and rail volume that was required.
- The container yard areas at Berths 206-236 were combined into a single terminal area for simplicity and to satisfy the preference of the terminal operators for larger terminals.
- A fifth berth at Pier 300 was decided to be a part of all options.
- The rail loop through Berths 226-236 was removed in all options by request of rail and CY operators.
- Options 1, 3, and 4 were rejected in part because their rail arrangements were considered impractical or undesirable by tenants and rail road operators. For example, on Option 4 the tenants preferred not to have storage tracks between working tracks. On Option 1 and 3, the rail operators did not like the stubend tracks at Berths 206-209.
- Plains All American Pipeline (PAA) was kept whole because it was thought that the Harbor Department could keep the commitment to the project as planned and still meet the other objectives of the study, with the exception of the rail loop. It was not possible to have the rail loop, expanded rail storage track, and the PAA project as planned. So, the rail loop was removed.

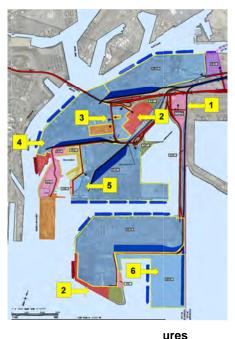
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5 SUMMARY OF REMAINING THREE OPTIONS

In this section, the features of the land use plans presented in TIPWG 3 are summarized. The following drawings are provided at a larger scale in Appendix G. General features of all options are presented first, followed by features specific to each option in terms of "defining features" and "flexible features" (or toggles – features that can be removed or added to other options). Benefits and disadvantages are also discussed.

5.1 Features of All Three Options

In the planning process, a number of features became standard in all options. Some standard features were the result of Port requests, and others resulted from practicality. All options were developed with the intent to improve container throughput capacity, to increase land use area, and to increase berth length.



The Main Features of All Options

- 1. A trucking support and chassis storage area is provided in the location shown in all options.
- 2. A new liquid bulk storage and berth area is provided to meet the needs of PAA. However, the shape of the tank area varies in Option 3.
- 3. The tank storage yard (ExxonMobil SA Inland Tanks) is redeveloped for use as container terminal storage area. The existing LAXT rail loop is removed to provide for expanded rail storage track.
- 4. Each terminal has its own rail working yard, and a new dedicated rail working track area is added for Berths 226-236.
- 5. The eastern part of Fish Harbor is filled in each case to provide backland to support a new western berth for Pier 300. The area of the fill varies.
- 6. All options assume that Pier 500 is created by adding fill south of Pier 400 as previously planned.

Other Areas

For all options, the team considered Fish Harbor as the target location for maritime support and commercial fishing tenants requiring berth and land space. In general, the target was to provide for growth of the non-cargo tenants per their requests, and in excess of that to the extent practical.

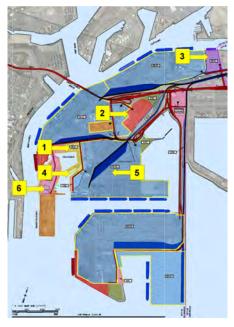
In the Berths 206-223 area, we assume that the area is developed as a single container terminal; however it could also be subdivided.

No land use changes were made to institutional areas, including the two fire stations, the Terminal Island Treatment Plant, and the United States Coast Guard and Federal Prison at Reservation Point.

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5.2 Option 1

Features



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Option 1 provides for desired Port and tenant improvements but assumes the least aggressive redevelopment plans of the three options. For example, this option does not relocate rail yards for Pier 300 and the Berths 206-223 area, and leaves Seaside Ave. in the current location.

Defining Features

- 1. In this option, the NE corner of Fish Harbor is reserved for seafood processing, in consideration of the relatively large capital investment of Tri-Marine in its current facility.
- 2. The PAA project area is shown per the existing plan.

Flexible Features

- 3. The dry bulk land use (conceptually, SA Recycling) is relocated and improved. Container areas are consolidated.
- 4. Commercial fishing piers remain in their current location; however, some adjustments are needed as described in the Fish Harbor sections of the report (5.5 and 5.6).
- 5. TICTF and APL intermodal working track areas are not relocated.
- 6. In Fish Harbor, Seaside Avenue is not relocated.

Benefits

Option 1 provides fewer benefits than the other two options in terms of rail operations and container throughput capacity. However, since fewer construction changes are planned, this option also has the lowest expected capital cost.

Has least aggressive changes in Fish Harbor and Berths 226-236 areas.

Satisfies the container operator and fishing community expectations.

Requires building of only one working track/rail yard plus associated storage track, and no rail yard working track demolition.

Does not require relocation of Seaside Ave.

As in all options, Pier 300 includes five "full-size" berths with expanded backland on the west side of the terminal.

Disadvantages

This option has lower flexibility than the other options.

Berth 218 backland area is narrow.

Seaside Ave. limits leasable waterfront space.

Berths 225-226 yard area will be much less productive and efficient as compared to Option 3.

There are many orphaned land areas around planned tank farm.

Pier 300 and Berths 206-226 areas have large yard areas that are not ideal for high-density storage.

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5.3 Option 2

Features



*l*lap

Defining Features

- 1. The PAA project is included per the existing plan, and the adjacent rail storage yard area is expanded to allow for increased rail volumes.
- 2. The Pier 300 Rail working yard is relocated and northern Fish Harbor is filled.

Flexible Features

- 3. Like Option 1, the dry bulk area is relocated, but with more backland behind the expanded berth area.
- 4. There is limited change to the commercial fishing area.

Benefits

Increased rail throughput capacity.

Pier 300 has a 5-berth capacity; expanded backland.

Relocated and improved dry bulk area; consolidated Berths 206-226 container areas.

Limited change to the commercial fishing pier area.

New berth and backland provided in the western portion of Fish Harbor, plus the fish processing area is relocated to a new area on Seaside Ave. This location has a possible benefit of being insulated from possible future container terminal redevelopment disturbances.

Enlarged Berths 226-236 container yard area, and effective rail yard.

Leaves PAA tank farm in place.

Disadvantages

Narrow Berth 218 area.

Fragmented Berths 226-236 area.

Relocating the utilities that coincide with Seaside Ave. is expected to be a large expense, and a phasing issue.

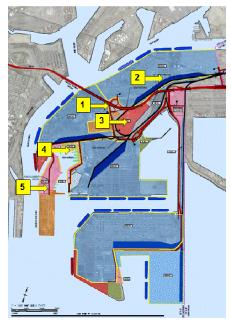
In a relative sense, there is an excess of container yard in relation to berth capacity for Berths 226-236, and a shortage for Pier 300 – consider shifting pair of track sets northward.

Removal of Tri-Marine building; split of seafood processing and commercial fishing areas.

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5.4 Option 3

Features



Option 3 Land Use Map

Defining Features

Highest potential container throughput capacity.

- 1. Realign SR 47, remove TICTF, and add two grade separations.
- 2. Develop new half-train rail yard.
- 3. Reconfigure PAA storage tanks.

Flexible Features

- 4. Retain most of fish processing infrastructure; reconstruct commercial fishing area.
- 5. Relocate Seaside Ave.

Benefits

Highest potential throughput capacity of the three options.

Uniform backland depth and increased berth capacity for Berths 206-223.

Matched half-train working and storage rail track at Berths 206-223.

Seafood processing and commercial fishing are adjacent.

New berth and backland in western Fish Harbor.

Creates better shape for high density RMG storage.

Modernized/more space-efficient rail yards in three of five terminals.

Retain Tri-Marine building, yet retain option to relocate APL rail later.

Improved commercial fishing vessel facilities.

Disadvantages

SR 47 relocation and new rail yard mean high construction cost.

Re-configured PAA project site.

Pier 300 working tracks not relocated.

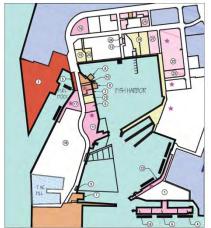
No location for scrap metal.

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5.5 Fish Harbor: Existing Land Use Issues

This section describes the existing land uses at Fish Harbor. The referenced drawings are provided at a larger scale in Appendix G.





Notes on Existing Land Use

White areas on the map are vacant properties or roadways. The seafood processing and commercial fishing areas are currently physically separated.

The harbor is currently too shallow for larger vessels.

The harbor entrance and piers make access difficult for larger vessels.

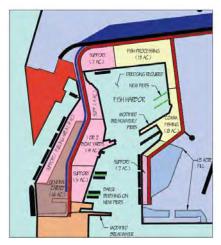
Roadways and parcel sizes generally constrain land use.

Historic buildings requiring a special development process are present.

Fish Harbor, Existing

5.6 Fish Harbor: Features of Options 1-3 vs. Proposed Terminal Island Land Use Plan

The following drawings are provided at a larger scale in Appendix G. All options assume dredging, further changes from a navigation/engineering study, and adjustments to jetties.

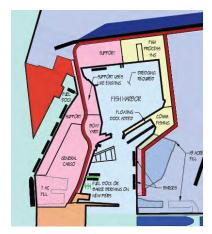


Selected Option

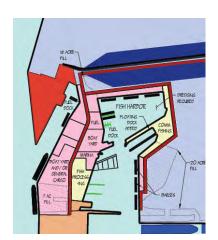
Proposed Terminal Island Land Use Plan

The selected land use plan advises the proximity of fish processing and commercial fishing land uses. This organization allocates additional area (+13 acres) to the industry while maintaining their current berth length. Existing commercial fishing piers are shortened to improve barge operations and new piers are added to offset the reduction. On the SE corner of Fish Harbor, 18 acres are filled and allocated to Pier 300 container land use. A space dedicated to the support/fueling land use is allocated on the NW side of Fish Harbor. Seaside Avenue is relocated to improve harbor side space. A general cargo area accessible by rail is added on the West side of Fish Harbor.

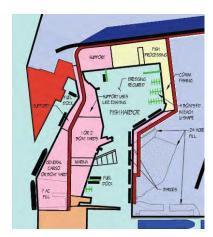
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Option 1



Option 2



Option 3

Option 1

As in the overall Terminal Island land use plan, Option 1 for the Fish Harbor area minimizes the amount of redevelopment required. This will translate into a lower capital cost than the other two options but will lessen the overall optimization of the available land.

Option 1 proposes 18 acres of fill on the east side of Fish Harbor, as in all options. Commercial seafood processing will be contained in the northeast corner and maritime support will be located primarily on the west side of Fish Harbor on both sides of Seaside Avenue. A new fuel facility is proposed in the southwest corner of the harbor, just south of the existing marina. Seaside Avenue is not relocated in this option. This will minimize construction cost but does not optimize the west side of Fish Harbor to its maximum potential for tenants.

Option 2

In Option 2, Pier 300 rail working yard is shifted to the north of Fish Harbor. This major change requires 16 acres to be filled on the north side of Fish Harbor, and consequently decreases the space allocated to its land use. As well as Option 1, this option proposes 20 acres of fill on the west side of Fish Harbor to allocate more backland to Pier 300. Commercial fishing and fish processing land uses are spatially disconnected. Existing commercial fishing piers remain; and a floating dock is added to the northern pier to accommodate for the berth lost to Pier 300 development. A new fuel facility is planned on the northwest side of Fish Harbor. Seaside Avenue is relocated to improve harbor side space.

Option 3

In Option 3, 24 acres are filled on the west side of Fish Harbor to allocate more backland to Pier 300. Existing commercial fishing piers are removed. This assumes new piers construction with same berth capacity. Commercial fishing and fish processing land uses are located side by side on the northeast side of Fish Harbor. Fuel dock is added to the southwest side of Fish Harbor.

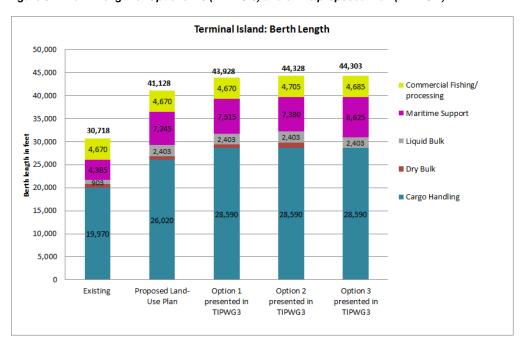
6 COMPARISON OF OPTIONS 1-3

This section compares the land area and berth lengths of the three options presented in TIPWG 3 with the existing conditions and the proposed Plan from TIPWG 4.

Terminal Island: Land Use Area 2,500 2,316 2,304 2,299 2,290 2,250 315 297 299 318 ■ Roadways, vacant 1,980 2,000 Open space/green 1,750 space Institutional 1,500 = 1,250 Commercial Fishing/ processing ■ Maritime Support **월** 4 1,000 ■ Liquid Bulk 1,710 1,657 1,670 1,603 750 ■ Dry Bulk 1,252 500 ■ Cargo Handling 250 0 Existing Option 2 Proposed Option 1 Option 3 Land-Use Plan presented in presented in presented in TIPWG3 TIPWG3 TIPWG3

Figure 6-1: Land Use Area of Options 1-3 (TIP Compared to the proposed Plan (TIPWG 4)

Figure 6-2: Berth Length of Options 1-3 (TIPWG 3) and of the proposed Plan (TIPWG 4)



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These charts demonstrate that overall, all options improve the existing condition by increasing acreage and berth length. The overall expansion in leasable land can be attributed to landfills and conversion of vacant roadway, and orphaned areas to targeted uses.

All options allow for requested land and berth area expansions. The cases where tenant's requests are not met are summarized here:

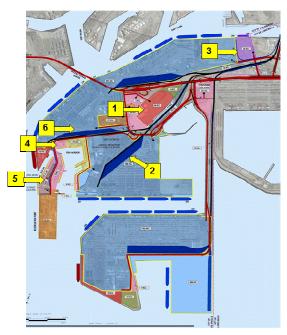
- The proposed Plan, and Options 1 and 3, do not show APL's requested rail yard relocation.
- All options remove ExxonMobil's SW Area 2 inland tank yard.
- Option 3 does not include a dry-bulk area, in conflict with SA Recycling's request to remain.
- No option provides a large break-bulk facility per Pasha Stevedoring & Terminals LP request.
- Option 3 reconfigures the PAA storage yard site in conflict with their request to leave it as is.
- Option 2 relocates Tri-Marine's operation in conflict with their desire to stay in the current location and separates commercial fishing and seafood processing.
- All options remove the LAXT loop track in conflict with the wishes of BNSF, UPRR and PHL.

Table 6-1: Summary of Option Features vs. Tenant Requests

Meet tenant's requests ?	Selected Option	Option 1	Option 2	Option 3
Retain space for all fisheries tenants	YES	YES	YES	YES
Retain space for all marine support tenants	YES	YES	YES	YES
5 berths at Pier 300	YES	YES	YES	YES
Allow all container facilities to grow	YES	YES	YES	YES
Add B212-223 rail yard	YES	YES	YES	YES
Allow second fueling dock + second boatyard	YES	YES	YES	YES
Relocate Pier 300 Rail	NO	NO	YES	NO
Retain Tri-Marine in current location	YES	YES	NO	YES
Commercial fishing near processing	YES	YES	NO	YES
Retain PAA project per plan	YES	YES	YES	Adjusted
Retain dry bulk facility - optional, any plan	YES	YES	YES	NO

7 SUMMARY OF PROPOSED LAND USE PLAN

This section presents the features of the proposed land use plan and a summary of how it meets the planning criteria defined in Section 3 of this report. A larger plan can be referenced in Appendix H. The proposed land use plan balances the needs of many tenants, and addresses all of the study goals noted in Section 3.1.



Defining Features



Study Decisions

- 1. The 46-acre liquid bulk project (red) is shown without modification to the currently approved plan. Adjacent rail storage yard is added.
- 2. The Pier 300 rail working yard remains in place. On the west side of Pier 300, a fifth berth is added along with additional supporting backland. A new street bounding Pier 300 and the fish harbor area is added.
- 3. Dry bulk is relocated between Berths 206-208 with the same land and berth features.
- 4. Commercial fishing and fish processing uses (yellow) are consolidated in Fish Harbor: more land is provided.
- 5. Marine support uses (pink) are expanded in Fish Harbor, with an increase in land and berth areas. Vacant areas are utilized.
- 6. A new on-dock intermodal rail facility (dark blue) is added to cargo land use located south of Vincent Thomas Bridge (Berths 226-236).

Study Decisions

The proposed Plan addresses a few key decisions that arose during the planning process. The TIPWG chose to:

- 1. Improve the Berths 208-224 cargo handling area, through the relocation of the dry bulk area further east. The TICTF rail yard remains in place in consideration of adequate expected support of this terminal area. Note that the TICTF yard can have additional tracks added to increase capacity within the same land use footprint.
- 2. Include new rail and add cargo and support areas in the central area. In this area, the PAA project is retained, a tankage area is removed, rail tracks are added to expand capacity, Ferry Street is retained to enable traffic circulation, and a support area is provided east of Ferry St.
- 3. Support commercial fishing and industrial needs in Fish Harbor. In this area the proposed Plan consolidates industrial and water-dependent non-cargo uses. The uses include commercial fishing, fish processing, boatyard(s), fueling, barge/tug support operators, and a possible general cargo area. S. Seaside Ave. is shifted to the center of the land area to provide additional leasable

waterfront property. The berth and land areas for these uses are expanded to allow for growth.

The proposed Plan has the following specific features.

LAXT Loop Track: It was decided not to retain the existing LAXT/intermodal rail loop track because it was in conflict with the needed expansion of support track. The new support track is needed on the south side of the loop area to support the proposed new intermodal yard for the Berths 226-236 area. Note that the loop track may remain for a significant portion of the study period until another project generates a need for a change to it.

Pier 400 and 500: The Pier 500 area is shown on the proposed Plan as described in the earlier Land Use Plan, with an addition of 200 acres, two berths, and a new on-dock rail yard. Pier 500 amounts to the majority of the increase in cargo land and berth. Pier 400 includes the already permitted liquid bulk project, the cargo terminal without change, and a new support area with a berth.

Cargo Density and Velocity: The study included a review of cargo throughput capacity vs. land area. The team concluded that a much higher volume of cargo can be handled on the cargo land areas on a per unit area basis. We assume that the majority of cargo volume growth is accommodated through higher density of cargo storage, rather than by a proportional increase in land areas. Likewise, the rail yard land areas are expected to sustain a higher throughput through densification and handling velocity. For the other land uses, we assume that the available lands will be used much more efficiently during the study period, and that the currently vacant and underutilized lands will be converted for efficient use.

Phasing: The study assumes that the changes envisioned will occur in many steps as individual tenant requests and projects arise. Initial steps include a revision to the Master Plan and an environmental permitting process. Design projects and new facility construction would follow on a project-by-project basis many years in the future. Any tenant relocations implied by the proposed Terminal Island Land Use Plan will likewise be driven by projects in the relevant areas.

Changes in Land Use Areas and Berth Lengths by Industry Group

The proposed Plan includes a significant increase in land and berth areas for all industry group categories. Tables 7-1 and 7-2 below compare the areas and berth lengths of the existing condition vs. the proposed Plan.

Overall, the Terminal Island Study Area gained 310 acres of land and about 10,410 feet of berth length. The proposed Plan includes a land use area increase of +34% and a berth length increase of +38% (excluding institutional, environmentally protected, roadway and vacant areas). This increase is due to landfills and improved utilization of vacant areas. The container cargo land use and berth length increase by about 30%. The marine support group gains 50% of berth length while more than tripling its acreage. The commercial fishing and fish processing group gain 13 acres while keeping about the same berth length, assuming that piers can be added in Fish Harbor as needed to achieve needed fishing berths. The liquid bulk allocation doubles in both acreage and berth area.

LAND USE BY INDUSTRY GROUP		EXISTING AREA (AC.)	PROPOSED PLAN AREA (AC.)
	CONTAINER	1,252	1,603
	DRY BULK	27	30
	LIQUID BULK	32	78
	MARITIME SUPPORT (BERTH)	30	37
	MARITIME SUPPORT (NO BERTH)	0	73
	GENERAL CARGO	0	16
	COMMERCIAL FISHING / PROCESSING	8	21
	INSTITUTIONAL	84	84
	ENVIRONMENTALLY PROTECTED/ OPEN AREA	27	27
	ROADWAYS, VACANT	605	321
	TOTAL	2,065	2,290*

CONTAINED	19,970	
CONTAINER	13,370	26,020
DRY BULK	790	790
LIQUID BULK	900	2,400
MARITIME SUPPORT (BERTH)	4,385	6,610
MARITIME SUPPORT (NO BERTH)	-	-
GENERAL CARGO	0	635
COMMERCIAL FISHING / PROCESSING	4,670	4,670
INSTITUTIONAL	-	-
ENVIRONMENTALLY PROTECTED/ OPEN AREA	-	-
ROADWAYS, VACANT	-	-
TOTAL 3	30,715	41,125

Table 7-1: Existing vs. Proposed Land Use Areas

Table 7-2: Existing vs. Proposed Berth Lengths

^{*} INCLUDES 225 AC OF FILL

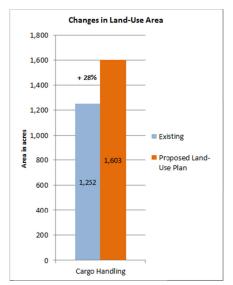
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Percent Changes in Land Use by Industry

The following charts provide percent in land and berth area by industry. Note that each use shows an expansion, except Dry Bulk which remains in a similar but relocated footprint.

The cargo group gained 351 acres of land and 6050 feet of berth. The liquid bulk area increased by 46 acres and 1500 feet of berth were added (PAA- ExxonMobil SW Area 1 = 46+16-18=44 acres). The maritime support group shows large gains in backland (+277%), and small gains in berth lengths (+51%). Commercial fishing and seafood processing gained 13 extra acres and their berth length remain the same as in existing condition. Note that the "general cargo" land use was included in the "support" group in Option 1-3 prior to refinement.

Figure 7.1: Changes in Area



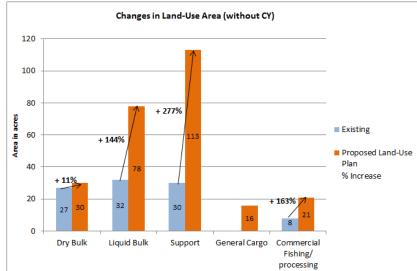
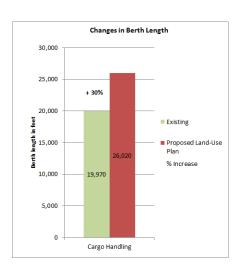
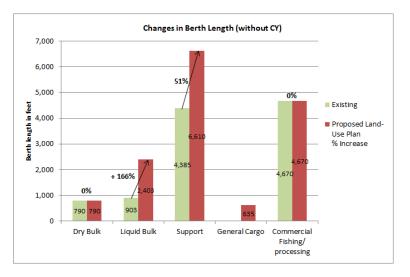


Figure 7.2: Changes in Berth Length





Summary Report

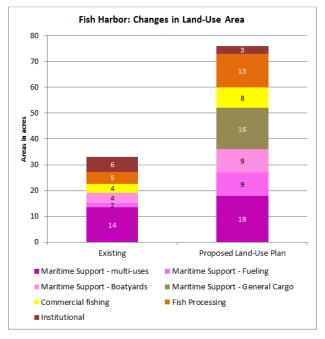
Fish Harbor Area

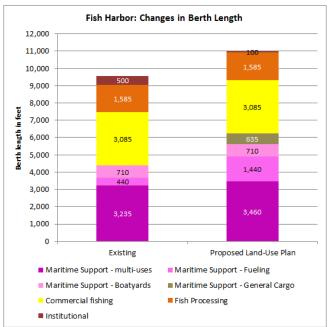
The proposed Plan provides a contiguous and expanded area for the fish processing and commercial fishing industry. Land and berth areas allocated are sufficient to allow for the future developments requested by the tenants and stakeholders. The specific changes in land and berth space in the Fish Harbor area are indicated in the charts below.

Figure 7-3 shows that all existing industrial uses noted in the legend in the proposed Plan as compared to the existing use. The expansions respond to both specific requests as well as practical opportunities of the land area arrangement. The chart breaks down the different "support" categories, and differentiates commercial fishing and fish processing land uses.

Figure 7-4 shows that overall, the available berth length increases by 15%. Marine support berth length increases, and commercial fishing and fish processing berth length remain the same. An additional 1,000 feet of berth is provided for support and fueling.

Figures 7-3 and 7-4: Changes in Land Use Area and Berth Length in Fish Harbor





Summary Report

7.1 Evaluation of the Proposed Terminal Island Land Use Plan

In this section, we provide a review of how the proposed Land Use Plan meets the land use planning goals and why the proposed Plan was chosen. Comments are ordered by the goals indicated in Section 3.1.

GOAL: ENSURE SUFFICIENT LAND/FACILITIES TO ACCOMMODATE FORECASTED CONTAINER DEMAND

The proposed Plan evaluated growth, and provides land and berth areas adequate to provide for the possible tripling of Study Area container volumes in the study period.

GOAL: PROTECT COMMERCIAL FISHING & FISH PROCESSING INDUSTRIES

The proposed Plan provides a contiguous and expanded area for the fish processing and commercial fishing industry. Land and berth areas allocated are sufficient to allow for the future developments requested by the tenants and stakeholders.

GOAL: PRESERVE WATERFRONT PROPERTY FOR WATER-DEPENDENT USES

The proposed Plan focuses on water-dependent industrial uses, and provides space for expected growth. Vacant lands, non-industrial, and non-water dependent uses are removed.

GOAL: IDENTIFY A POTENTIAL LOCATION FOR ADDITIONAL BOATYARD CAPACITY

The proposed Plan carefully considered the needs of the existing boatyard for growth, and considered the possible arrival of a new boatyard to the Study Area. Areas are set-aside inside Fish Harbor for expansion of these uses. The current approximate four-acre boatyard area is expanded to approximately nine acres both in width and depth of the land footprint.

GOAL: ADDRESS THE NEEDS OF TRUCK DRIVERS

A 33-acre support area is allocated at the foot of the Pier 400 causeway. This area is envisioned to provide a central location for the development of possible truck driver support uses such as fueling, fast-food, parking, and toilets. Additional support areas (40-acres) are set aside for undefined needs which may include chassis and empty container depots.

GOAL: MAXIMIZE ON-DOCK RAIL THROUGHPUT CAPACITY

Two new on-dock intermodal facilities are included in the proposed Plan (Pier 500 and at Berths 226-236), and an expanded storage track area is added in the central LAXT area (dark blue on the plan). Additional arrival and departure tracks are shown in black on the plan; however, the specific counts and geometry are not yet determined. An additional grade separation is indicated on the south side of the LAXT area to allow efficient use of the proposed new rail yard, and to provide for continuous roadway access to areas south of the yard. This is critical for commercial and emergency access.

GOAL: MINIMIZE IMPACT TO TENANTS

The proposed Land Use Plan, where possible, provided opportunities for tenants to remain in their current locations. The allocated land use areas allow for no relocation of most cargo, rail, fish industry, and existing fish harbor tenants. Study time-frame relocation is implied for dry-bulk, two large water-dependent barge/tug/fuel operators, and the sailboat marina area. The barge operator relocations result from large-scale landfill and container expansions to the Pier 300 area. These changes are not requested by the Pier 300 tenant within their current lease period, and so impacts to the barge operators are expected to be well into the future.

GOAL: CONSIDER EXISTING HISTORIC RESOURCES IN THE STUDY AREA

The study team took as input the concurrent study of historic resources within the Study Area. These resources are shown on the Fish Harbor Map. The proposed Terminal Island Land Use Plan does not make any specific changes with respect to these resources. Specific changes will be considered as new projects arise during the study period.

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APPENDICES

The Appendices provide supporting material that is used within the context of the work.

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A EXISTING CONDITIONS

The existing conditions of the Study Area are mapped on the Opportunities and Constraints Map. This map indicates existing leases as well as major land and water areas that are likely to affect the planning. These include long-term entitlements opportunity areas (i.e. vacant or to be available in soon) and constraints such as expected project boundaries of infrastructure projects. The map will be updated as new issues arise.

Process

The study team collected electronic drawings and aerials from the Harbor Department and other sources describing the configuration of major existing facilities and leased properties. The study team used lease boundaries provided by the Harbor Department where available, and approximated boundaries otherwise. The study team arranged a set of keynotes organized by Land Use, in alignment with the sub-group designations. For the Fish Harbor Area, Appendix A.3 as developed earlier by AECOM and the Harbor Department, was a valuable reference for existing conditions.

Table A-1 below provides a summary of relevant information on each of the areas noted on the Opportunities and Constraints Map in Appendix A.1. The preferences of tenants are not included in this table. They can be found in Appendix B. Buildings with potential historic status are located on the Fish Harbor Existing Conditions Map, Appendix H.

Table A-1: Summary of Existing Conditions

KEYNOTE SITE NAME		EXISTING CONDITION AND POSSIBILITY FOR CHANGE		
	Rail Facilities			
1	Podgor Avo Pridgo	- 2 tracks currently, a third has been considered but is outside of the scope of this study to consider it. - The air draft is approx. 6 ft. when bridge is closed. Consider this fixed due to impracticality of raising bridge elevation. - No expansion is anticipated in study period; however open/closing control/process/limitation might change.		
1	Badger Ave. Bridge TICTF Storage Track (T. I. Container	open/closing contro/process/iimitation might change.		
2	Transfer Facility)			
3	TICTF Working Track	 The location leaves a narrow backland yard area at Berths 222-223. Densification is possible. Relocation is possible if it adds sufficient value. 		
4	Pier 400 Lead Tracks	No need for change is anticipated at this time.		
5	Pier 400 Intermodal Yard	No need for change is anticipated at this time.		
		 The location leaves a narrow backland yard area at Berth 302. Densification of tracks is possible. Relocation is possible if it adds value. 		
6	Pier 300 Rail Yard	- The tenant expects no changes in the study period.		
7	Alameda Corridor	No changes expected in study period.		
	Cargo Handling Areas			
12	Berths 206-209 - Container	Leasing discussions are on-going.		
13	Berths 210 - 211 - Dry Bulk (SA Recycling)	Lease terminates in ~ 10 years - relocation is possible.		
14	Berths 212 - 225 - Container (YTI)	Existing lease area subject to possible expansion.		
15	Berths 226 - 236 - Container (STS)	Existing lease area subject to possible expansion.		
16	Berths 302 - 305 - Container (Eagle Marine)	Existing lease area subject to possible expansion.		
17	Berths 401- 404 - Container (APMT)	Densification possible as needed, but no changes to boundary envisioned in study period.		
18	Berths 405 -406 - Container (CUT)	Current sublease area to Cal. United Terminals. Relocation of this tenant to Pier 500 is anticipated, as dictated by volume.		
	Liquid Bulk/Fueling			
22	Berths 238-240C - ExxonMobil SW Area 2	Lease expires in 2014. No major changes considered.		
23	ExxonMobil SW Area 1	- The tenant expects no changes in the study period, and prefers		

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		to retain this facility. - The site is used in part to receive liquid bulk cargo from Berths 238-240c.
24	General Petroleum	
25	Harley Marine	
26	Jankovich & Sons	- Relocation planning in underway for a possible shift to the Study Area.
27	Maxum Petroleum	
28	PAA Tank Farm	 Proposed Project. Any change to existing plan is to be avoided where possible.
29	PAA Wharf @ Pier 400	- Proposed Project. Any change to existing plan is to be avoided where possible.
30	West Oil Marine	
	Institutional Areas	
33	Bureau of Prisons, Federal property	Consider a fixed plan for study period, retain access.
35	Fire Station #111	Consider a fixed plan for study period, retain access.
36	Fire Station #40	Consider a fixed plan for study period, retain access.
38	Port Police Dive House	
39	Terminal Island Treatment Plant	Consider a fixed plan for study period, retain access.
40	Terminal Islander Monument	Consider a fixed plan for study period.Requires public access and parking.
	U.S. Coast Guard Facility, Federal	
41	property	Consider a fixed plan for study period, retain access.
	Support (Marine Services, Boatyard)	
45	Al Larson Boatyard	Requires expansion and deeper water than current, for reasonable growth.
46	American Marine Corporation	
47	Berth 258 - Al Larson Marina	
48	Harbor Light Grocery	
50	Public Service Marine	
52	San Pedro Forklift/Fumigation	- Relocation is possible, but in consideration of wind direction for fumigations. Requires truck access and large parking area.
53	So Cal Ship Services	
54	South California Marine Institute	Is to be relocated to City Dock #1.
	Under-utilized/Opportunity Areas	
42	U.S. Customs Bldg.	Opportunity for re-use or demolition.
57	Berth 301 - Former LAXT Coal Berth	- Current use is TUG and Barge berthing. Possible future Container Berth.
	Former site of LAXT Coal Terminal -	
58	Portion that is not dedicated to PAA	Opportunity for re-use, possible cargo backland area.
59	Navy Reserve Center - Former Site	Opportunity for re-use or demolition.
60	Former Southwest Marine Shipyard	Demolition and slip fill in process.
	Commercial Fishing	See Appendix D for issues and limitations.
	Del Mar Seafoods	
	Seafood Specialties	
	Western Fish	
	So Cal Seafoods	
	Tri-Marine	Valuable existing facilities, including large recent investments.

Summary Report

Table A-2: Access - Summary of Rail Facilities & Capacity

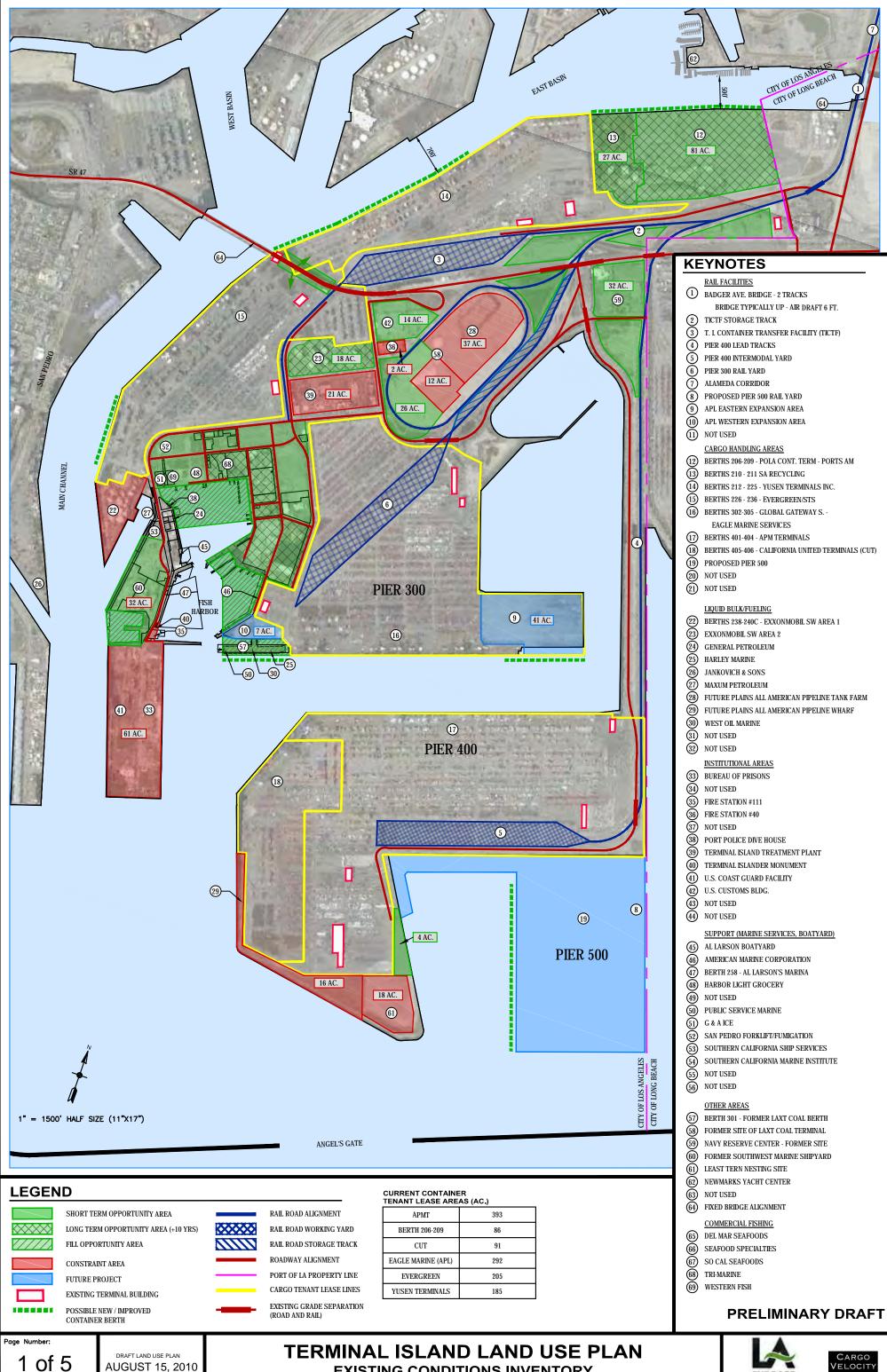
Terminal Island Intermodal Yards	Working tracks	Working track Length (ft.)	Storage Tracks	Storage Track Length (ft.)	Area of Rail yard (acres)
Pier 300 On-Dock Rail yard	8	2,700	8	2,700	26
Pier 400 On-Dock Rail yard	12	2,500	6	6,400	40
Terminal Island Container Transfer Facility	4	2,300	5	2,300	75

Boatyard Existing Conditions

- Floating dry dock capacity 1,000 tons (200' X 42' X 16')
- Barge marine railway No. 4 is 1,400 tons (265' X 60' X 5')
- Marine railway No. 3 is 400 tons (125' X 30' X 9')
- Marine railway No. 2 is 250 tons (80' X 26' X 9')
- Marine railway No. 1 is 300 tons (110' X 28' X 9')

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A.1 Existing Conditions Inventory Map



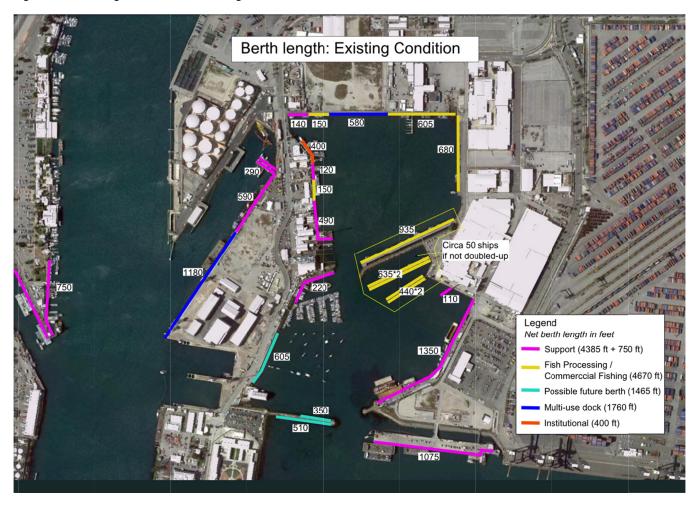
VELOCITY

Summary Report

A.2 Fish Harbor Existing Berth Lengths

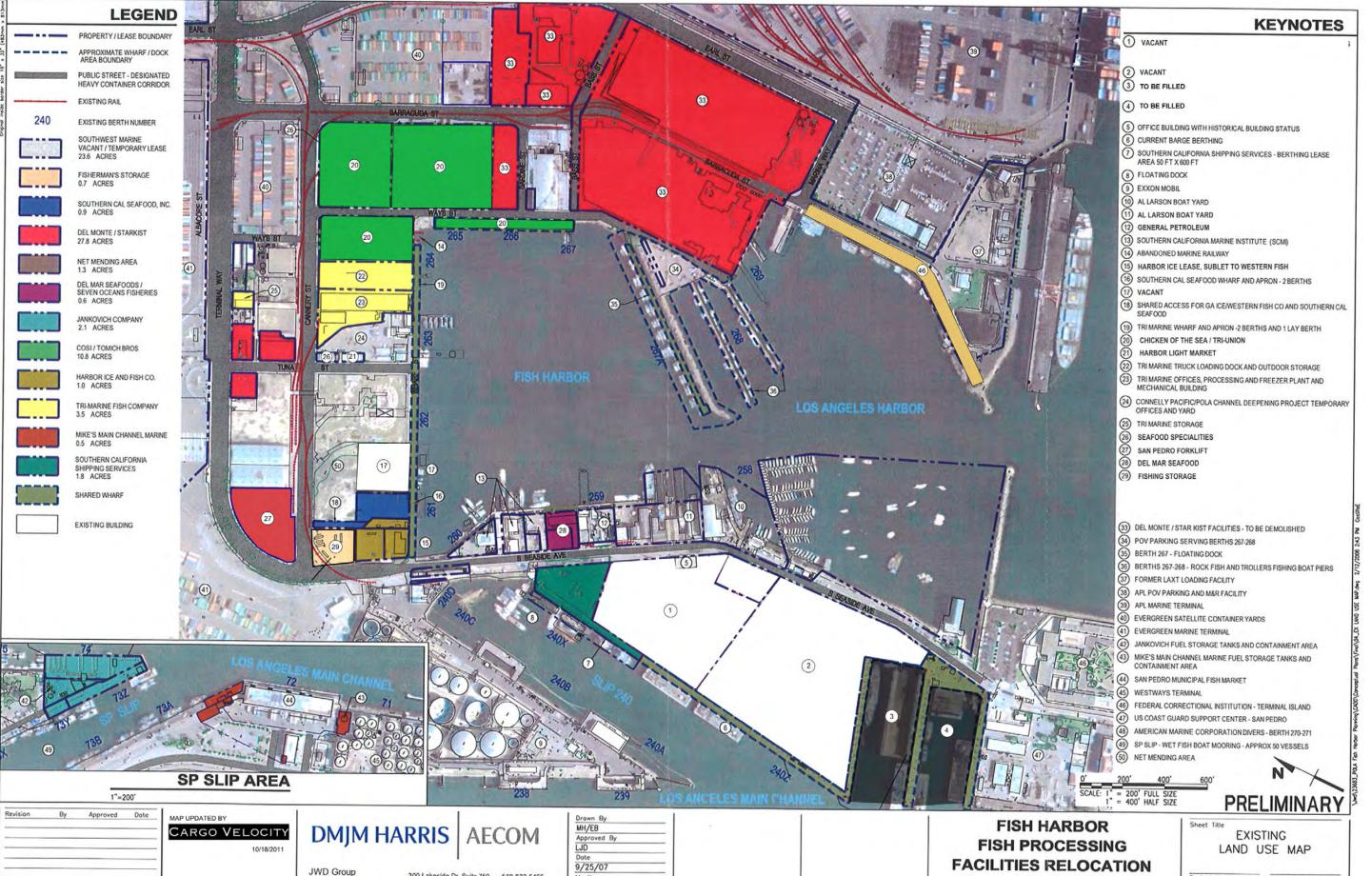
This map was used as the basis for establishing existing berth lengths in the Fish Harbor area.

Figure A2-1: Existing Fish Harbor Berth Lengths



Summary Report

A.3 Fish Harbor Existing Land Use Map



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Summary Report

B TENANT SURVEY AND MEETING RESULTS

The planning team arranged TIPWG sub-committee meetings in order to interview existing and proposed tenants. The goal of the meeting program was to collect and compare user data to enable the team to accurately assess the present and future activities and land use needs on Terminal Island (TI). In advance of the meetings, the planning team prepared a survey instrument to be distributed to the tenants. The survey included questions about the tenants' present and future activities, their prospective industries and land use needs on TI.

The following summary describes the survey responses and ensuing discussions with tenants of TI. The summary has been condensed to focus on items that will affect the long-term land requirements and infrastructure needs of TI activities.

Cargo Handling

Eagle Marine - Survey Response and Subsequent Input

- Their current lease area, wharf, and rail access are insufficient.
- Currently, is discussing an expansion with the Harbor Department that includes additional berth and backland area, to be completed within the current lease.
- There's an increasing need for on-dock rail.
- On-island drive-thru and/or sit-down restaurant would be beneficial.
- Off-island shared-user chassis yard, truck center, and rail yard would be beneficial.
- APL rail yard location limits operator flexibility.

CUT - Survey Response and Subsequent Input

• They have fixed boundaries and consider their current site at Pier 400 adequate until they relocate to Pier 500.

Ports America - Survey Response and Subsequent Input

- Relocation alternatives would be considered.
- Wharf, rail, and lay-down space at current site are near capacity. With the introduction of bigger ships, additional rail and wharf access will be required.
- Future growth may require space requirements to double from current footprint.
- Draft will need to be over 50 feet.
- On-island shared-user chassis yard and rail yard would be beneficial.
- Off-island truck center would be beneficial.

SA Recycling - Survey Response and Subsequent Input

- Their current site footprint is sufficient, and they prefer to remain at the current location. But, they see an increase in their industry that may require 10 more acres and one additional wharf.
- They need to use larger ships but the existing access to water is inadequate; water is too shallow.
- Adjacent tenants block their roadway access.
- If they are relocated, a large remediation of site would not be needed because they carefully manage run-off and pollutants.
- On-island drive-thru and/or sit-down restaurant would be beneficial.
- Off-island shared-user chassis yard would be beneficial.

STS (Evergreen) - Survey Response and Subsequent Input

Operator would prefer a more rectangular site footprint, with contiguous working areas. An expansion to the south would be valuable.

- They have a need for a sole-user on-dock rail yard.
- They might need 30-40 additional acres and a third berth (at their southern wharf) to accommodate expected growth.
- On-island drive-thru and/or sit-down restaurant would be beneficial.

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On-island shared-user chassis yard, truck center, and rail yard would be beneficial.

YTI - Survey Response and Subsequent Input

- Their current wedge-shaped footprint is not ideal for future densification.
- An area of their lease is blocked from the main terminal by TICTF and therefore underutilized.

Commercial Fisheries

General

- Commercial fishing: Remain in Fish Harbor; minimize relocation costs; provide opportunity for direct fish sales to the public.
- Desire consolidated facilities.
- Want expanded berth access and continued access to net and gear storage and repair.
- Open to consideration of new "finger" piers inside Fish Harbor as a relocation possibility.
- Commercial fishing tenants would be satisfied with an increase of area and berth length.
- Fish processing: Maintain existing facilities and provide long-term leases to justify investment in facilities.

Tri-Marine - Survey Response and Subsequent Input

- They like their current location, have invested heavily; relocation would be expensive (\$20-30 million). They plan to add a cold-storage facility, and see a need for expanding their lease area by a few acres.
- They want Wharf St. to be closed to the public to reduce the potential for accidents.
- Agreements are needed on areas for net repair and storage.

Del Mar Seafoods - Survey Response and Subsequent Input

• Current facility provides ample space for operations, and they would prefer not to be relocated. They don't see any future growth in their industry.

Seafood Specialties - Survey Response and Subsequent Input

- Do not need additional space, and have no plans to expand or make additional investments in the facility.
- Acknowledged that they are on a month to month lease and would move if and when necessary.

Others

No survey responses to date.

Institutional

General

- Prefer a "no change" scenario.
- Ask to consider security issues with the prison.

USCG - Survey Response

- They have no plans to relocate and are continuing to make investment in the current site such as wharf upgrades and office renovations.
- They feel fire coverage is insufficient due to their single roadway access point and a railroad crosses the route that fire trucks would use.
- On-island drive-thru and/or sit-down restaurant would be beneficial.

Terminal Island Treatment Plant - Survey Response and Subsequent Input

 Current lease area is sufficient. More capacity can be added to their facility without increasing the footprint.

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They are concerned about how the Pier 500 project will affect their existing outfall.

Bureau of Prisons - No Survey Response

• No issues or concerns noted relevant to study. No response to survey.

Intermodal

General (input gathered from tenant subgroup meeting)

The railroads are concerned about switching leads. Railroads desire a new facility for locomotive fueling and servicing, and need mechanical staff dispatch location.

BNSF - Survey Response and Subsequent Input

- It takes too long to double over a string of cars at the APM on-dock rail facility.
- More storage is needed outside of terminals.
- Badger Ave. bridge is main bottleneck due to bridge lifts for commercial and private vessels.
- TICTF operations are near capacity.
- APL on-dock rail yard: arrival and departure track is too short.
- APMT on-dock rail yard: arrival and departure track is too short.
- Reeves Ave. at-grade crossing negatively impacts operations.
- On-island drive-thru and/or sit-down restaurant would be beneficial.
- On-island shared-user rail facility would be beneficial.

PHL - Survey Response and Subsequent Input

- There is a critical need for increased rail storage on TI.
- TICTF operations are near capacity.
- TICTF would be more efficient if it had a single management entity instead of three.
- Evergreen on-dock rail yard: operations are near capacity.
- APL on-dock rail yard: operations are near capacity.
- LAXT loop track is being used as arrival, departure, and turning track; this is very beneficial. It must be kept.
- On--island shared-user rail facility would be beneficial.

Union Pacific - Survey Response and Subsequent Input

- Capacity increase and use of overhead cranes at TICTF would be beneficial.
- Pier 500 will put a strain on the current TI rail network.

Liquid Bulk

ExxonMobil - Survey Response and Subsequent Input

- A deeper draft is needed at the waterside facility.
- They do not want to relocate their inland tank farm; relocation might cost \$200 million.
- ExxonMobil prefers to retain Southwest Terminal Area 2 because it has value in crude service beyond the 2015 lease expiry and because it is necessary to accept deliveries of waterborne crude oil imports via Pier 400 or Southwest Terminal Area 1's marine facility. (Input gathered from TIPWG 4.)
- ExxonMobil suggests that the south end of the LAXT area that is not encumbered by PAA should
 be preserved as a site for future oil tankage to facilitate waterfront usage for hydrocarbons
 and/or biofuels. Sufficient tankage is necessary to ensure efficient oil terminal berth utilization
 and having sufficient tankage proximate to POLA's existing berth facilities could encourage
 additional utilization. The current planned use as "maritime support (no berth)" could be located
 more remotely from the berths and allow more water-dependent uses that directly impact berth

Summary Report

utilization, such as tankage, to be located adjacent to the waterfront. (Input gathered from TIPWG 4.)

Jankovich - Survey Response and Subsequent Input

- Current footprint is sufficient for their operations, and they prefer to remain at this site.
- If relocated, must have similar area/wharf-space to that of current facility.

Maxum Petroleum - Survey Response and Subsequent Input

- They have plans for extensive remediation, new tanks/pipelines, and a new building at their current facility. Prefer not to be relocated.
- Operations are near capacity at current facility; they are interested in expanding (possibly into the adjacent fish market).
- Fish Harbor draft is too shallow; limits the number of vessels that they can service.
- On-island drive-thru and/or sit-down restaurant would be beneficial.

Plains All American Pipeline - Survey Response and Subsequent Input

- They have plans for a waterside liquid-bulk terminal at Pier 400 and an inland tank farm at LAXT.
- They will experience very high costs to change the existing plans.

Support Tenants

General

In general, marine support tenants prefer not to move. If moved, they need to know where they will be moved, ensure that their specific needs are met, and that room for growth is available.

Al Larson Boat Shop - Survey Response and Subsequent Input

- Tenant feels that existing yard is too small. Tenant requests an additional 1-2 acres.
- Existing barge size limit is 265′x60′. Barges are becoming larger because of the double-hull environmental laws.
- Tenant wants more space to add a larger dry-dock that would allow them to compete for work on the larger barges.
- Tenant is planning on a \$1.3 million extension of barge rail system.
- A historic building is in the way of the Barge Marine Railway, and limits barge size. Tenant wants Port to consider removing the building.
- The existing 18-foot water depth is too shallow. 30-foot depth is desired.
- The breakwater near the prison constrains vessel access to the boatyard.

Summary of Boatyard Demand Comments

The commercial shipyard business reacts to increasing vessels size. Al Larson's core business is to serve the workboat industry, where tugs and barges are also increasing in size in proportion to the ships that they serve. It is likely that a share of the ship-assist tug fleet in Southern California will soon be replaced with higher horsepower tugs to handle the larger ships. Likewise, the operating draft required for shipyard operations is increasing. Petroleum distribution barges are growing in size in part due to new double-hull regulations. The current facility is already maximized, and needs major improvements to remain competitive.

American Marine Corporation - Survey Response and Subsequent Input

Summary Report

- Current facility is near capacity; they would like to have more backland area (approximately one additional acre).
- They need an additional roadway access point (currently only one available). Trucks have to back out onto the street and block traffic.
- A deeper Fish Harbor draft would be beneficial (from 10 to 35 feet).
- They would consider relocation alternatives, but they need to know the out-of-pocket cost.
- On-island drive-thru/sit-down restaurant and convenience store would be beneficial.
- Their facility is on the former site of the Los Angeles Yacht Club and a registered historic building is located there.

Harbor Light Grocery - Survey Response and Subsequent Input

• They are willing to relocate if new location is beneficial to them.

Harley Marine Services - Survey Response and Subsequent Input

- Their current site is adequate for their operations; however, the wharf access is insufficient (additional 500 feet are needed). They prefer not to relocate; their adjacency to shipping companies which they service is beneficial.
- On-island drive-thru and/or sit-down restaurant would be beneficial.

So Cal Ship Services - Survey Response and Subsequent Input

- Current site is near capacity. They would like to expand onto the unoccupied adjacent lot to the south, but there are environment issues with this property.
- They wish to have another access point because space is too narrow to turn around a truck.
- They prefer not to relocate.

San Pedro Forklift - Survey Response and Subsequent Input

- Their operations are federally regulated. The current site is ideal and relocation would be difficult due to the restrictions placed on them.
- The current footprint is sufficient, but it may not be able to handle the 10-year growth.

Port of Los Angeles - General Input

- The Badger Ave. Bridge arrangement is not expected to change within the timeframe of the proposed Plan.
- Relatively long lease terms should not be considered a constraint on any facility redevelopment. Leases can be amended as needed.
- Land use plan options should represent needs of all tenants and not overweight container maximization.
- The only roadway alignment constraints in the planning area are SR 47, access to Pier 400, and access to Reservation Point.
- TICTF working track need not be considered a fixed constraint if a major improvement can be achieved through relocation.

Others

Bureau of Sanitation - Survey Response and Subsequent Input

- Pier 500 could impact the outfall of the Terminal Island Water Reclamation Plant.
- Relocation of the existing outfall would be very expensive.

Summary Report

C SUMMARY OF TENANT AREA AND BERTH REQUESTS

The following table was prepared to tabulate data collected in the tenant surveys during the project. Acreages and berth lengths are approximate - consistent with the level of detail of land use planning, and were not obtained from leasing records.

Table C-1: Existing vs. Requested Acreages

	Existing Acres	Additional Acres Request
Cargo Handling	1,252	
APL Terminal	292	As available
APM Terminals/ CUT	484	As available
Port of LA	86	As available
Seaside Terminal	205	As available
Yusen Terminals Inc. (YTI)	185	As available
Commercial Fishing/Processing	8	2.83
Commercial Fishing	4	1
Del Mar Seafoods	1	0
Seafood Specialties	0	0
So. Cal Seafoods	1	0
Tri-Marine/Chicken of the Sea/ Tri- Union	3	1.83
Dry Bulk	27	10
SA Recycling	27	10
Liquid Bulk/Fueling	32	46
ExxonMobil SW	31	0
Plains All American Pipeline	0	46
West Oil Marine	1	0
Support - Boatyard	4	2
Al Larson Boatyard	4	2
Support - Multi-uses	14	1.5
American Marine Corporation	2	1.5
Harbor Ice-Western Fish	1	0
Harbor Light Groceries	0	0
Harley Marine/General Petroleum/West Oil Marine/Public Service Marine	5	0
San Pedro Forklift/Fumigation	3	0
So Cal Ship Services	2	0

Summary Report

Table C-2: Existing vs. Requested Berth Lengths

	Existing Berth	Additional Berth Request	
Cargo Handling	19,970		
APL Terminal	4,000	As Available	
APM Terminals/ CUT	5,190	As Available	
Ports America & Pasha	varies	As Available	
Seaside Terminal	2,800	As Available	
Yusen Terminals Inc. (YTI)	5,800	As Available	
Commercial Fishing/Processing	4,670	0	
Commercial Fishing	3,085	0	
Del Mar Seafoods	150	0	
Seafood Specialties	0	0	
So. Cal Seafoods	150	0	
Tri Marine/Chicken of the Sea/ Tri Union	1,285	0	
Dry Bulk	1,500	800	
SA Recycling	1,500	800	
Liquid Bulk/Fueling	903	800	
ExxonMobil SW	903	0	
Plains All American Pipeline	0	800	
West Oil Marine		0	
Support - Boatyard	710		
Al Larson Boatyard	710	As available	
Support – Multi-uses	3,675	1,700	
American Marine Corporation	1,460	1,200	
Harbor Ice/Western Fish	140	0	
Harbor Light Groceries	0	n/a	
Harley Marine/General Petroleum/West Oil Marine/Public Service Marine	1,195	500	
San Pedro Forklift/Fumigation	0	n/a	
So Cal Ship Services	880	0	

Summary Report

D FISH PROCESSING EXISTING CONDITIONS REPORT



TERMINAL ISLAND LAND USE PLAN, COMMERCIAL SEAFOOD PROCESSORS Existing Conditions and ALTERNATIVES September 6, 2011

This report focuses on the five businesses currently engaged in commercial seafood processing, receiving, or aquaculture on Terminal Island: Tri Marine Fish Company, LLC, G&A Ice and Fish Company, Southern California Seafood, Inc., Del Mar Seafoods, Inc., and Seafood Specialties. Western Fish Company is a subleasor to G&A Ice and Fish Company.

TERMINAL ISLAND COMMERCIAL SEAFOOD PROCESSOR AND RECEIVER INDUSTRY FOCUS:

The processors and receivers on Terminal Island are primarily engaged in coastal pelagic species (CPS) fisheries. CPS include: Pacific sardine, market squid, northern anchovies, Pacific (chub) mackerel, and jack mackerel. A recent amendment to the federal CPS Management Plan adds jacksmelt and Pacific herring. CPS are high volume fisheries where the processing consists mainly of de-watering, grading/sorting, boxing/packaging, blast freezing, and cold storage.

Of the five above mentioned lease holders, only Seafood Specialties is not engaged in the CPS industry but in the "development and operation of an abalone aquaculture facility" and has no associated waterfront. Seafood Specialties business focus has also included the research and development of abalone food and aquaculture systems and seafood-based pet food.

CPS is a vibrant fishery in California and catch takes place along the entire coast. Southern California and the fishery south of Pt. Conception (including the productive waters off the Channel Islands) is the State leader for CPS. Over the past twenty years (1981-2010) there were over seven billion pounds of coastal pelagic species landed along the California coast (see Figure 1). Approximately 82 percent of that total was landed at ports in southern Counties (Santa Barbara and south).

From 2006-2009, between 90%-97% of the landings (by weight) on Terminal Island were CPS. The majority of this catch is exported. For example, much of the West Coast caught squid is shipped to China for (primarily) use in soup base. The majority of sardines are used as bait for Eastern Pacific longline tuna fisheries. Very little of the product, 2%-5%, is consumed in the U.S. (personal communication and survey, July 2011). Other non-human uses include rendering for oils, agricultural fertilizers, and animal feed.

There are two authoritative sources on commercial fish landings in California; PacFIN (Pacific Fisheries Information Network) and CDF&G (Department of Fish and Game). At the time of this report, 2009 was the most current data on the CDF&G website and PacFIN had already reported 2010 data.

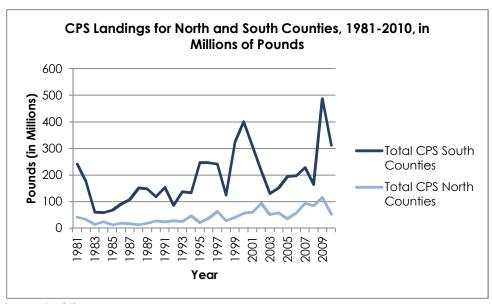


Figure 1. CPS Landings for North and South Counties, 1981-2010, in Millions of Pounds

Source: PACFin

Southern counties: Santa Barbara, Ventura, Los Angeles, Orange, and San Diego

Northern counties: Del Norte, Humboldt, Mendocino, Sonoma, San Mateo, Santa Cruz, Monterey, and San Luis

Obispo

In 2009, CPS landings on Terminal Island were approximately 51 million pounds while San Pedro recorded approximately 62 million pounds. A standard measure for earnings in the commercial fisheries is ex-vessel value or EVV, the price paid to fishermen at the dock. The total EVV for CPS on Terminal Island in 2009 was approximately \$11 million. San Pedro's EVV was nearly \$13 million (see Figure 2). This represents a significant portion of California's total commercial fishery annual earnings of approximately \$110 million. All of the CPS landings on Terminal Island were received and/or processed by one of the four processor/receivers highlighted in this report.

While there is CPS processing capacity in Ventura/Oxnard when the fish are "running" in this area, several CPS fishing operations truck their catch to Terminal Island for processing. Decisions on where fish are processed are based on relationships between the fishermen and processors, cost, and logistics. CPS are highly perishable and need to be frozen, transported quickly, and kept at low temperatures. Processors with strong markets can offer attractive and consistent terms and develop loyalty on the part of the fishermen. Relationships between the fishermen and the processors are often contractual and/or the vessels are owned by the processor. Several of the five boats that supply Tri Marine are fishing off the Ventura coast and trucking their catch to Terminal Island to be processed at Tri Marine. Tri Marine owns one vessel and contracts with several others. Western Fish Company owns two CPS vessels, which make up the core of their business. Del Mar Seafood owns all or part of several vessels that supply their facility in Terminal Island.

Total CPS EVV (in Millions), 2005-2009 \$18 \$16 otal EVV (in Millions) \$14 \$12 \$10 \$8 Terminal Island \$6 San Pedro \$4 \$2 \$0 2005 2006 2007 2008 2009 Year

Figure 2. Total CPS EVV (in Millions), for Terminal Island and San Pedro, 2005-2009

Source: California Department of Fish & Game

Tri Marine is the sole facility on Terminal Island with full "processing" capacity, including; blast freeze to -40° F and cold storage to 0° F. The Tri Marine Terminal Island facility can process up to 300 tons per day. The other processors (Southern California Seafood, G&A Ice and Fish Co., Del Mar Seafood) load catch from the boat, or from trucks, dewater, weigh, sort, package and ship to offsite facilities for blast freezing, cold storage, and export.

Due to the focus on CPS, all of the processors on Terminal Island are reliant on nearby boat berthing space, a fish pump, and a dock hoist to offload catch that is not trucked to the facility. Del Mar Seafoods is the sole facility with boat berth space (floating dock) associated with their lease. Each facility has access to a hoist and pump except Seafood Specialties, who doesn't require these amenities.

The seafood processors on Terminal Island are allowed access to boat berthing space on an informal basis by the Port. No specific amount of lineal feet of waterfront is associated with the formal agreement between the Port and the leaseholder/permit holder except for Del Mar. Del Mar Seafoods, Inc. has a floating dock of 150 feet associated with their permit(s).

Existing conditions, 2007 study, summary of 2011 survey

This Section summarizes composition of commercial seafood processing facilities as documented in permit maps, discussions with Port real estate and planning representatives, survey responses from the Tenant & Stakeholder Survey associated with the 2011 Terminal Island Land Use Study, site visits, sub group and working group meetings, and the 2007 DMJM Harris / AECOM Report (Final Summary Report Fish Harbor Fish Processing Relocation and Southwest Marine Building Re-Use Study). The assessment includes total square footage per lease site, aggregate acreage for the five facilities and comments on capacity and expansion, number of peak truck trips per day, and comments on parking (where available). Permit maps are included in this report as Appendix A.

TriMarine

Tri Marine Fish Company, LLC holds permits for four parcels: #1, #2, #3, #3B and #4. Parcel 1 is 85 square feet and represents Tri Marine's waterfront hoist and fish pump. The four parcels total 133,474 square feet or 3.06 acres. There is currently no boat berth space associated with these permits/leases. Tri Marine indicated that they had access to 230 lineal feet of berth space that could accommodate three vessels and that it was currently sufficient and would likely be sufficient 10 years from now.

2011 Survey Summary

In a response to the 2011 survey, Tri Marine identified the need for an additional 80,000 square feet, or 1.8 acres, to increase capacity for blast freezing, cold storage, additional office space, additional processing area, and to diversify their product line. Tri Marine identified current auto parking space at nearing capacity and inadequate in 10 years. They currently generate 40 truck trips per day.

Tri Marine claims that their current lease format of five years with the option for three five-year extensions does not provide sufficient certainty for the business to implement desired expansion. They claim to have requested additional space and a longer-term lease (35 years, preferred lease term) for the last five years. They also claimed that they prefer to remain at the current location, which is properly designed for their business.

Southern California Seafood, Inc.

Southern California Seafood, Inc. is currently leasing two permits: Parcel No. 1 and Parcel No. 2. Total area of those parcels is 0.9 acres. In the 2007 survey, they indicated that they had sufficient boat berthing for two vessels or approximately 110 lineal feet.

They also indicated in the 2007 interview that they needed 15-20 parking spaces and additional space for administration facilities and had plans to expand to a full service processing facility (sorting, packing, blast freeze, cold storage). The 2007 study concluded that their parking space needs were 10/50 (non-peak/peak).

2011 Survey Summary SURVEY RESPONSE NOT YET RECEIVED

Del Mar Seafoods, Inc.

DelMar Seafoods, Inc. currently holds three permits: Parcel No. 1, Parcel No. 2, and Parcel No. 3 for a total of 0.69 acres. Del Mar has one boat berth (#259) associated with their permits, a 150 foot floating dock that can accommodate one vessel. They are able offload, dewater, weigh, sort, and pack 500 tons/day. Packaged product is loaded on to semis and trucked to an offsite facility for blast freezing, cold storage and export.

2011 Survey Summary

In the survey completed by Del Mar for the 2011 LUP, they indicated that they would like to renew their lease with the Port and that they are not interested in expansion regardless of the lease terms. They also indicated that they would like to stay at the present location, which provides "ample" volume now and, as they estimate, 10 years into the future. They also claim to have no plans for improvements at this facility and have no need for additional land. Del Mar currently generates 15 truck trips per day.

G&A Ice and Fish Company (dba Harbor Ice)

G&A Ice and Fish Company dba Harbor Ice currently holds four permits: Parcel No. 1, Parcel No. 2, Parcel No. 3, and Parcel No. 4. Parcel No. 2 is 64 square feet and represents the dockside hoist and fish pump. Total current acreage for this facility is 1.05.

Western Fish Company holds a sublease on these four parcels. They operate two dockside fish pumps, a scale and dewatering tower, an ice machine, two semi bays, conveyer belts, and offices in modular trailers. They claim to be able to handle 120-130 tons per day at this facility. Once dewatered, weighed, and sorted and packed, the catch is loaded on to trucks and shipped offsite to blast freezing and cold storage facilities. Western Fish Company generates a maximum of seven truck trips per day.

2007

The 2007 DeMeglio Study determined that one-acre is appropriate for G&A Ice. The same report determines that this facility needs 8/40 (non-peak/peak) parking spaces.

2011 Survey Summary SURVEY RESPONSE NOT YET RECEIVED

Seafood Specialties

This business holds two permits: Parcel No. 1 and Parcel No. 2 for a total area of 0.08 acres or 3,600 square feet. Per their Revocable Permit No. 9-36, the premises are to be "used for the purpose of development and operation of an abalone aquaculture facility and for purposes incidental thereto". Since they are not engaged in offloading or servicing waterborne vessels, this business does not have waterfront access. Seafood Specialties focuses on abalone feed and the research and development of abalone aquaculture equipment. They are also engaged in the research and development of food additives for seafood based pet food. Parcel 2 has 2,000 square feet and is used as their office space. Parcel 1 has 1,600 square feet and houses their R&D lab.

2011 Survey Summary

In the Tenant & Stakeholder Survey submitted in August of 2011, Seafood Specialties indicated that they did not need additional space of facilities on Terminal Island and that they had no plans for expansion. They indicated that they do not seek a longer term lease. While they prefer to remain at the current site, they understand that they hold a month to month lease that can be terminated at any time. They indicated that their business was shrinking. They also claim to have remodeled their office and upgraded the roof in the last five years.

ALTERNATIVES

This section summarizes three potential alternatives for the configuration and size of the commercial seafood processing zone for the 2011 Terminal Island Land Use Plan. The alternatives take into account the types of processing that is conducted on Terminal Island, the number of and current size of each facility, and a needs assessment as identified in project surveys, interviews, and site visits. There is also an estimate on the total lineal feet of boat berth needed by the processors.

In developing alternatives for an efficient, effective, and sustainable land use plan on Terminal Island, this report acknowledges the obligations set forth in the California Coastal Act, "Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided." This report also recognizes the commitments made by the Port of Los Angeles in the Port Master Plan, "The Plan is designed to better promote and safely accommodate foreign and domestic waterborne commerce, navigation, and fisheries" in the national, state, and local public interest."

As such, the Port will consider the following configurations as part of the Terminal Island Land Use Plan as it addresses the commercial seafood processors that are currently doing business on Terminal Island.

1) Leave the current configuration as is. Commercial seafood processor/receiver tenants have, in response to a survey and in meetings and site visits, expressed the desire to remain in their current facilities and have expressed concern over relocation as a prohibitively costly and time consuming disruption of their businesses. Except for Seafood Specialties, each of the facilities has adjacent waterfront berth space, fish pumps, physical plant, parking, and truck access. There are currently a total of 5.7 acres dedicated to the fish processors and in 2007 there was 906 lineal feet of boat berth space associated with four of the facilities.

Alternative configurations are based on current inventory of area leased and berthing space and results from surveys, site visits and group meetings.

TABLE 1. COMMERCIAL SEAFOOD PROCESSING ACRES BY COMPANY							
FACILITY/AREA	PARCEL NO./S.F	PARCEL NO./S.F	PARCEL NO./S.F	PARCEL NO./S.F	TOTAL SQ. FT.	TOTAL ACRES	ADDITIONAL ACRES SOUGHT
Tri Marine Fish Company, LLC	1 85	2 3,730	3 60,688	3B 68,971	133,474	3.06	1.80
Del Mar Seafoods, Inc.	1 15,057	2 3,762	3 11,435	-	30,254	0.69	0.00
Southern California Seafood, Inc.	1 31,282	2 7,898	-	-	39,180	0.90	ŝ
G&A Ice and Fish Company	1 15,927	2 64	3 20,006	4 9,778	45,775	1.05	ŝ
Seafood Specialties	1 1,600	2 2,000	-	-	3,600	0.08	Ś
Subtotal							1.80
TOTAL COMMERCIAL SEAFOOD PROCESSING ACRES					5.79	7.59	

- 2) Alternative 2 would provide a total of 7.59 acres, or 1.8 acres more than the current 5.79 acres for commercial fish processing with an additional 10% or 100 feet of boat berth space augmenting the current 906 feet to approximately 1000 feet. The CF zone would also have to accommodate approximately 35 feet between the berth space and the facilities and provide sufficient truck access, and at least the equivalent infrastructure; power, water, sewer in the current facilities.
- 3) Alternative 3 includes all of the components of alternative 2 but places a 15,000 square foot cold storage/blast freeze facility at a convenient location in the CF zone to be shared by all processors on a rent as use basis. The common plant would be provided by the Port and financed by rent generated from its use. The plant would be close enough (forklift, or human powered movement of blast freeze rack distance) to the individual processing facilities for convenient access as well as to be positioned to facilitate truck loading/pick up that does not interfere with processor/receiver activity or access.

KEY ELEMENTS FOR THE COMMERCIAL FISHING ZONE

Any of the four alternatives would maintain as a priority the following key elements of an appropriate commercial fish processing facility focused on CPS (these tenets do not apply to Seafood Specialties who is focused on abalone aquaculture and R&D of seafood based pet food):

Proximity of facility to the waterfront offloading area: CPS, the key species landed and processed on Terminal Island, are typically offloaded by a pump (vacuum) from the ship's hold to the plant (where they are de-watered, graded, weighed, sorted, packed, frozen and stored). CPS cannot be pumped for great distances as they are susceptible to physical deterioration and/or heating. Proximity of the path between the facility and boat is critical.

Appropriate dock space and construction to accommodate a hoist and pump: In the CPS offloading process, the hose/chute is lifted into the ship's hold with a dock hoist. The catch, which has a high water content in the ship's hold is then pumped to the processing facility, de-watered, weighed, and sorted. Access to a hoist and pump is critical as is sufficient water and power (for lights and pump) at the dock.

Truck access: Whether catch is loaded directly into bins and trucked to an offsite facility or undergoes partial or full processing, convenient truck loading, maneuvering, and easy ingress/egress from the Island (access to arterial) is critical.



Sufficient space to repair gear: Whether they own or contract with vessels, processors need access to sufficient space to repair gear quickly. Delays and/or inconveniences can mean the difference between a successful operation and an unsuccessful one. When the weather is good, the fish are "running", and there is quota available, fishermen need to get out with all of their gear in order. These are key elements of the processor/receiver steady market/loyalty-consistency equation. The processor/receiver and fishermen are an inseparable team. Figure 3 shows workers repairing a net in front of Western Fish Company.



Figure 3. Net Repair in Front of Western Fish Company

Shared/Communal Space: Shared/communal space could be considered for several components of the CF zone in order to make the most efficient use of space and infrastructure and allow more options for future expansion of any one or more processing facilities. For privately owned businesses, sufficient set backs from parcel lines should be maintained (included in the ensuing code and/or specific plan). However, communal use could be considered for POV parking, gear repair area, dry storage, and some boat berths. While Tri Marine has blast freeze and cold storage capabilities, they did express the desire for expansion, as other processors on the Island have expressed the need for these capabilities on the Island (in the 2007 study). Cold storage enables processors to hold product for advantageous adjustments in the market or simply to coordinate more effectively with shipping, consolidations, trucking, and drayage schedules and capabilities. As such, the Port should consider the feasibility of communal or shared cold store facility with some blast freezer capabilities. Cold storage and blast freezing are valuable services and could be rented to the processors on a "use" basis to establish a cash flow and fund the construction, maintenance and management. Low-cost long-term loans and grants are available to commercial fishing communities to create such infrastructure particularly for fisheries like CPS that are managed with a Fishery Management Plan.

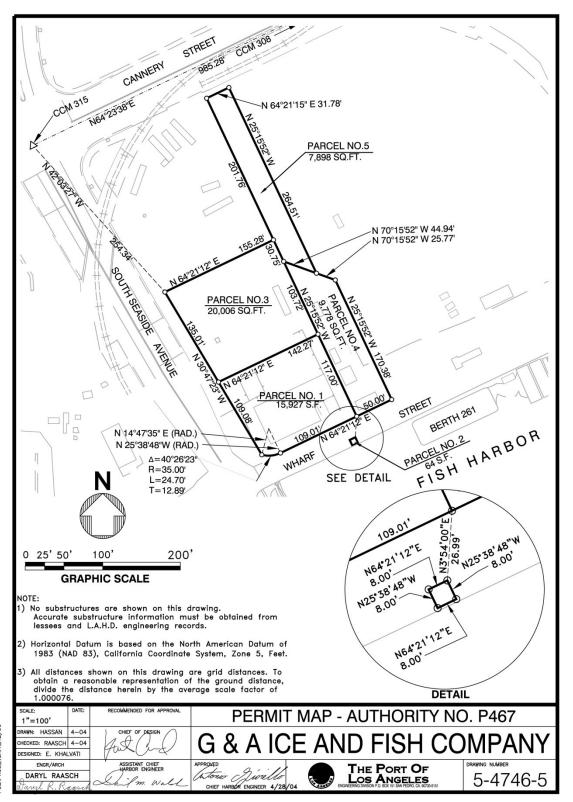
Minimal Relocation: A consistent and common request from all of the processor/receivers on Terminal Island is to be left at their current location. Each of the businesses feels that moving would be disruptive and prohibitively costly. While Tri Marine seeks physical expansion, they feel that their current site is optimally positioned (geographically) to handle current and future business demands. The remaining receiver/processors also feel that they currently occupy sites that have

ample proximity to waterfront boat berth, sufficient dockside facilities and infrastructure to handle their current and future business needs. Any options developed by the Consultant Team and the Port should consider configurations that require the least physical relocation for the processor/receivers.

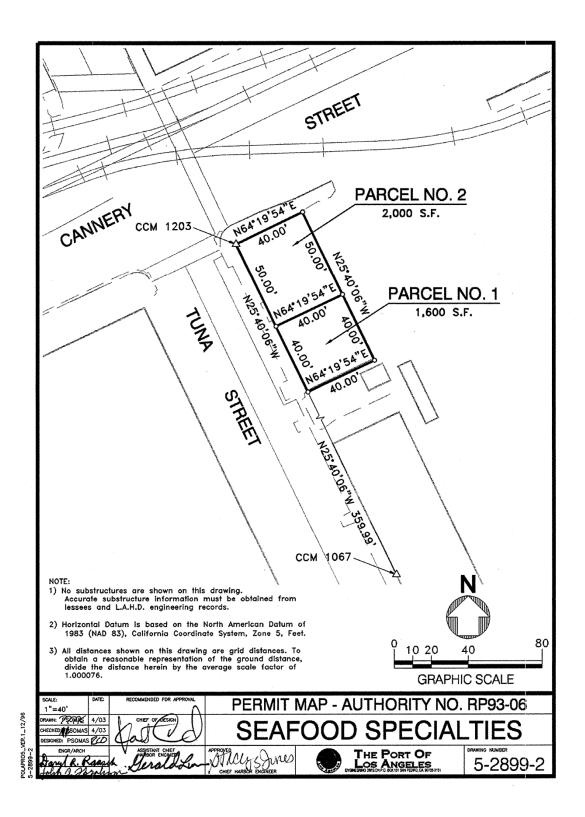
APPENDIX A. PERMIT MAPS

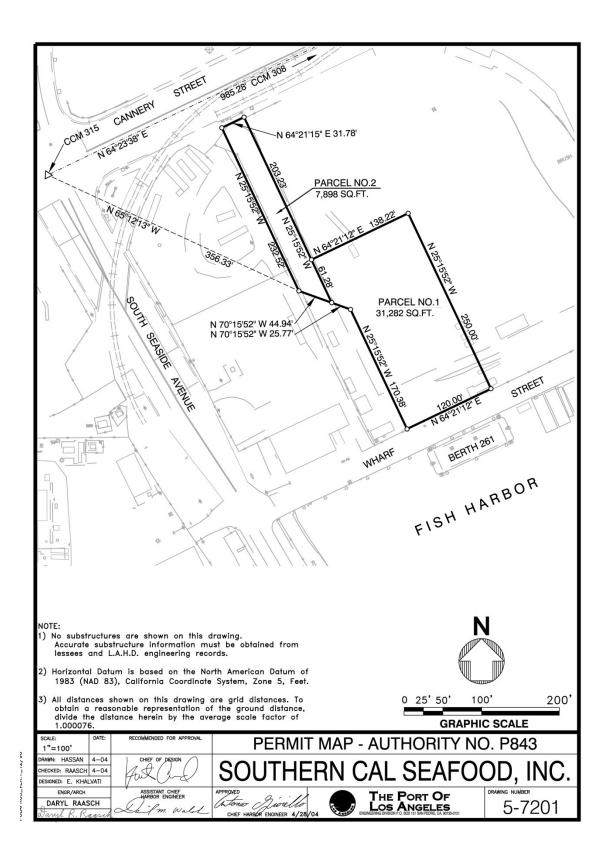
Permit Maps

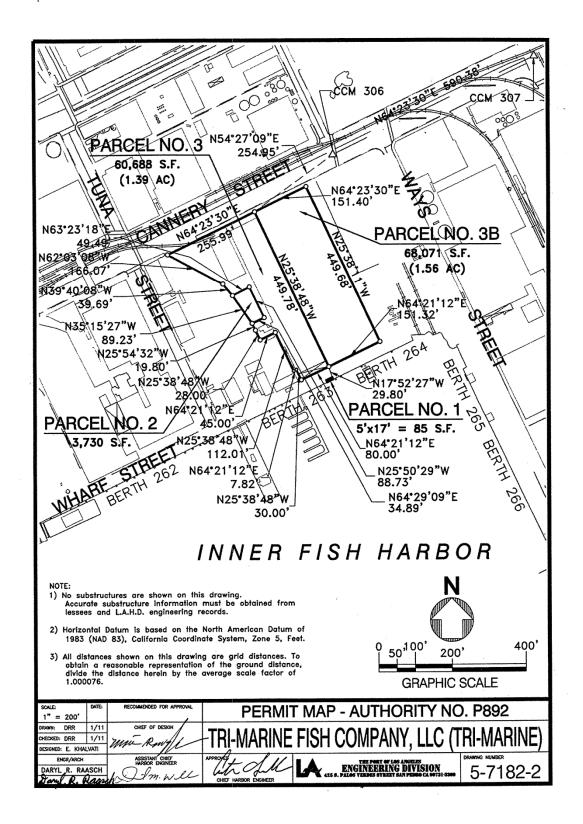
G&A Ice	10
Seafood Specialty	11
So Cal	12
Tri Marine	13



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Summary Report

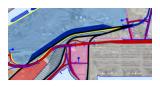
E REVIEW OF INDIVIDUAL FEATURES

After TIP WG 3, the Harbor Department considered the input of the tenants and the planning team and selected an option for refinement. Cargo Velocity then worked with the Harbor Department to consider the relative value of individual changes. Many of the most important changes considered are presented here. In this section, ten land use changes are presented along with a discussion of their features, benefits, and disadvantages. Table E-1 at the end of this section shows how the features are applied in the three options considered at TIPWG 3.

Railroad Improvements

Improvement A: TICTF Relocation

Features



This improvement includes the demolition of the existing TICTF working yard and relocating it southwest of its current location. This relocation can only occur in conjunction with **Improvement D: Realign SR47**, because that improvement would move the current SR47 alignment, making southwesterly construction of the TICTF working yard possible.

Benefits

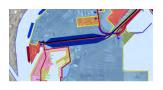
Moving the TICTF working yard southwest would create a uniform backland depth for Berths 212-223 while simultaneously increasing the berth capacity in this area. This is the only option that significantly increases the container throughput capacity of the island.

Disadvantages

The combination of moving the TICTF working yard and realigning SR47 is expensive. An extensive cost analysis should be conducted on these improvements to evaluate whether the long-term benefit would justify the cost. Phasing will be extensive and difficult.

Improvement B: Pier 300 Working Yard Relocation

Features



This improvement includes the demolition of the existing Pier 300 working yard and relocating it northwest of its current location. This is an APL tenant request for the timeframe considered.

Benefits

Moving the Pier 300 working yard would potentially improve rail throughput capacity and expand the Pier 300 backland. The shift opens up a desirable rectangular shape behind the berth areas, which is more suitable for high-density storage modes such as RMGs.

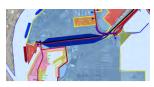
Disadvantages

Moving the Pier 300 working yard is expensive and would interfere with the current Pier 300 rail operations.

Summary Report

Improvement C: New Berths 226-236 Working Yard

Features



This improvement includes adding a working yard along the south end of Berths 226-236, just north of Fish Harbor. Two alignments are considered. The northern alignment is shown in the thumbnail image to the left and in Options 1 and 3. A more southern arrangement is indicated in Option 2.

Benefits

This change satisfies a Pier 300 tenant request for the rail yard relocation within the study timeframe.

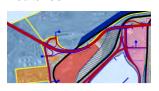
Disadvantages

The location of the yard creates a barrier for truck movements to roadways to the south. The yard has a diagonal relationship with the berth, which is not ideal but should be practical and efficient.

Roadway Improvements

Improvement D: Realign SR47

Features



This improvement includes the demolition of the existing SR47 alignment and relocating it south of its current location.

Benefits

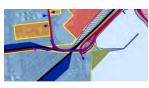
This change is required to enable the benefits of Improvement A. The change increases the value of two berths, and shifts backland to a more economically useful location behind the berths.

Disadvantages

Disadvantages include the high cost and phasing difficulty.

Improvement E: New Southern SR47 Overpass

Features



This improvement includes demolition of the existing southerly SR47 road alignment and replacing it with an overpass in this location. The overpass will only be necessary if **Improvement B: Pier 300 Working Yard Relocation** and/or **Improvement C: New Berths 226-236 Working Yard** is constructed.

Benefits

This improvement is required to provide required grade-separated access to important roadways.

Disadvantages

The cost will be high and the phasing will be difficult.

Summary Report

Improvement F: Seaside Avenue Realignment

Features



This improvement includes the demolition of the existing Seaside Avenue alignment and relocating it west of its current location.

Benefits

Shifting the roadway will open up additional berthing area with backland inside Fish Harbor.

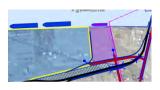
Disadvantages

The cost will be high, phasing will be difficult, and the changed access to the fire station and the fishing memorial will need to be considered.

Dry Bulk Improvements

Improvement G: Eastward Dry Bulk Relocation

Features



This improvement includes demolition of the existing dry bulk yard and relocating eastward. It is also necessary to construct a new rail spur to connect the existing rail spur to the new yard location.

Benefits

This option retains the dry bulk cargo on the island, while enabling container terminal consolidation.

Disadvantages

The location is opposite a sensitive receptor community of sail boats, and so complaints are anticipated. The berth location may require significant accommodation work on the marina side of the channel.

Summary Report

Landfill Improvements

Improvement H: North Fish Harbor Landfill

Features



This improvement includes filling 16 acres on the north side of Fish Harbor.

Benefits Filling the north side of Fish Harbor will provide additional area to the

container yards of Berths 226-236 and will provide space for **Improvement** B: Pier 300 Working Yard Relocation and **Improvement** C: New Berths 226-236 Working Yard in the event that these improvements are constructed. Also, the fill provides a location for contaminated dredge

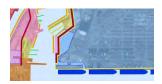
spoils from the expected dredging of Fish Harbor.

Disadvantages Reduces leasable support and commercial fishing leasable space and berth

area in Fish Harbor.

Improvement I: East Fish Harbor Landfill

Features



This improvement includes filling 18 acres on the east side of Fish Harbor.

Benefits Filling the east side of Fish Harbor will provide additional area to the

container yard on Pier 300.

Disadvantages The change will cause relocation of tenants that currently use the east side

of Fish Harbor. Also, the fill project will cause water quality issues that

will affect the fishermen in the near-term.

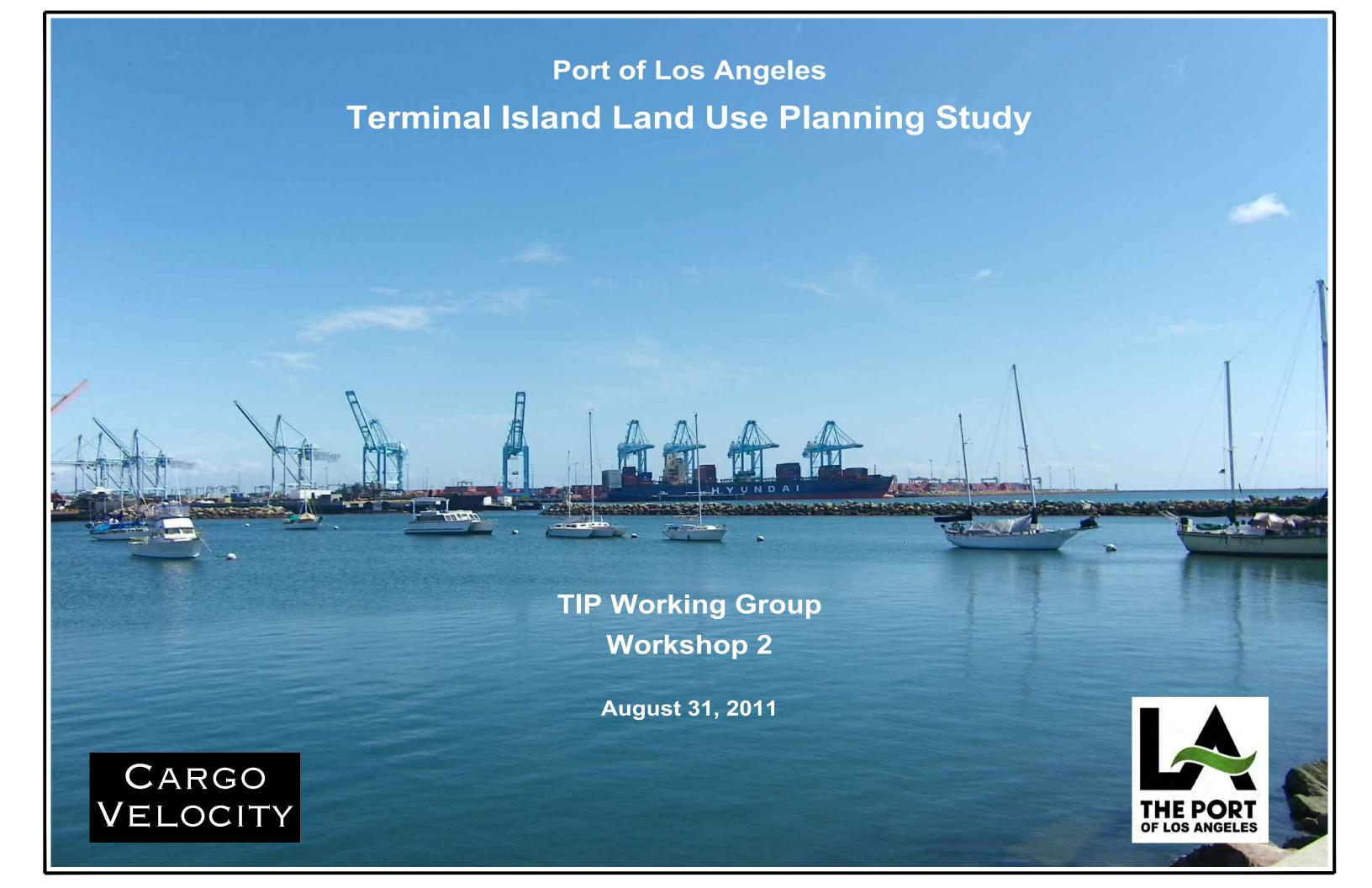
Summary Report

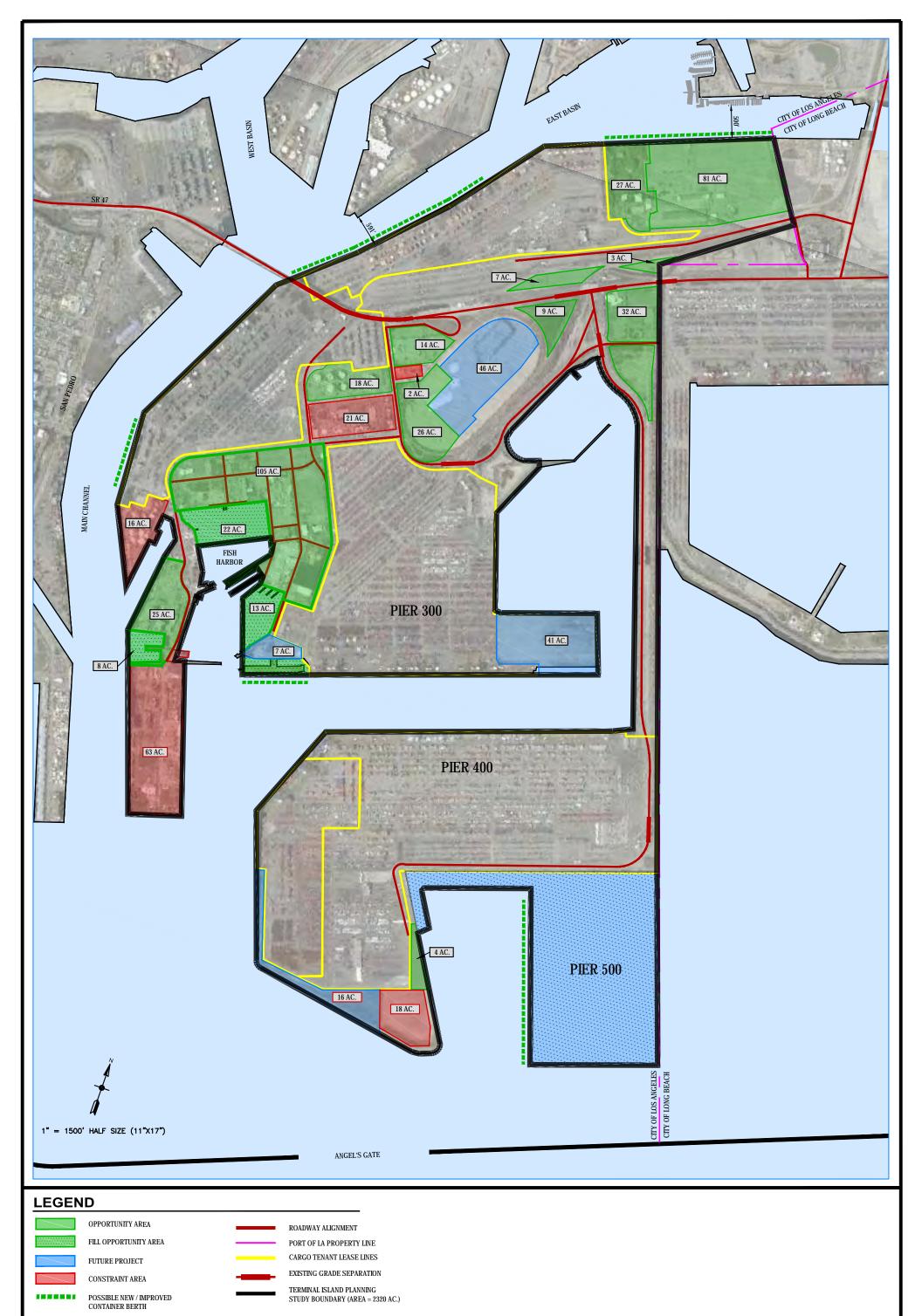
Table E-1: Options vs. Key Improvements

KEY IMPROVEMENTS	Option 1	Option 2	Option 3
Railroad Improvements			
Improvement A: TICTF Relocation			X
Improvement B: Pier 300 Working Yard Relocation		X	
Improvement C: New Berths 226-236 Working Yard	X	X	X
Roadway Improvements			
Improvement D: Realign SR47			X
Improvement E: New Southern SR47 Overpass	X	X	Х
Improvement F: Seaside Avenue Realignment		X	Х
Dry Bulk Improvements			
Improvement G: Eastward Dry Bulk Relocation	X	X	
Landfill Improvements			
Improvement H: North Fish Harbor Landfill		X	
Improvement I: East Fish Harbor Landfill	X	X	X

Summary Report

F TIP MEETING 2 PLANS: SEVEN INITIAL OPTIONS

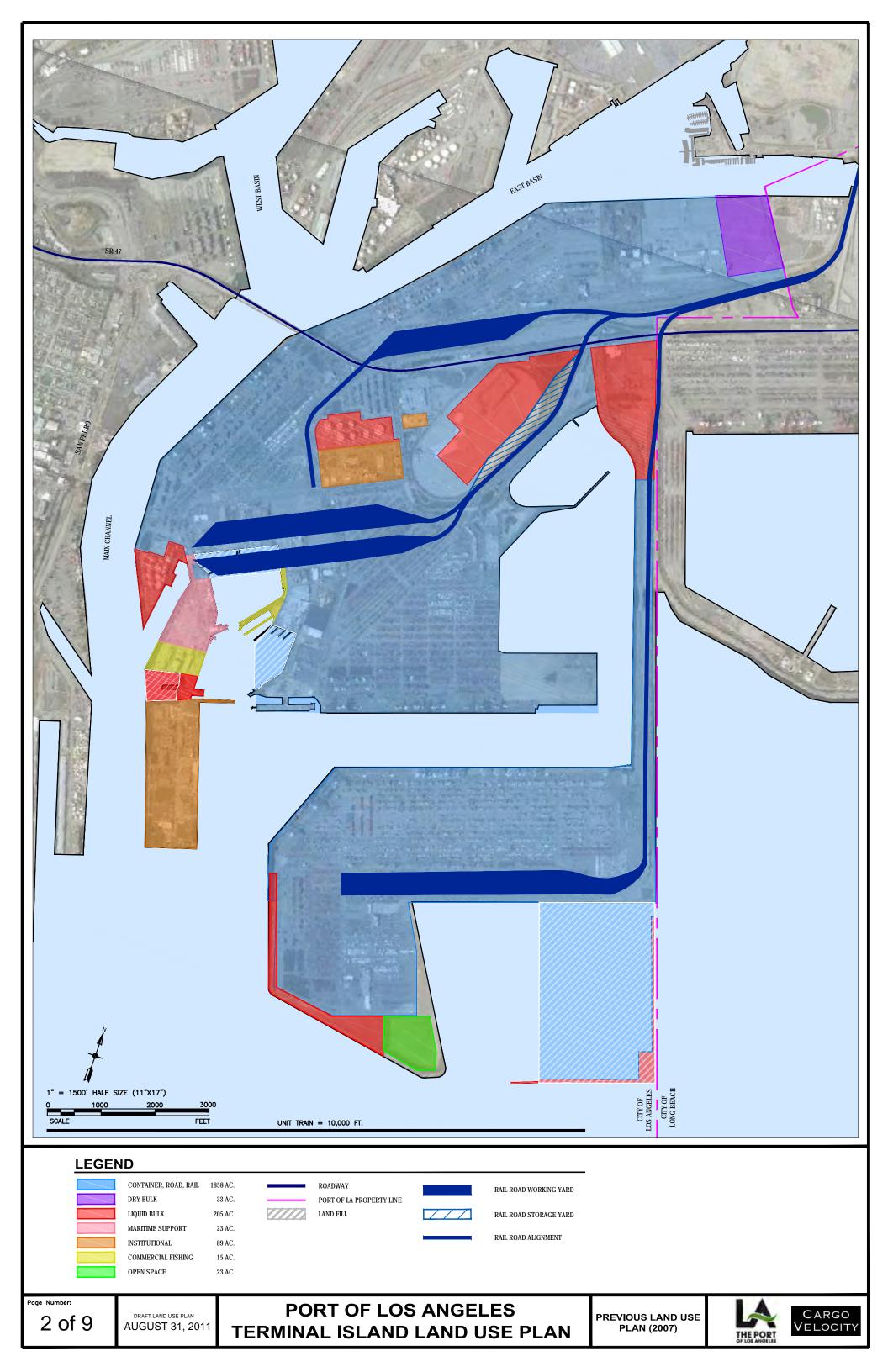


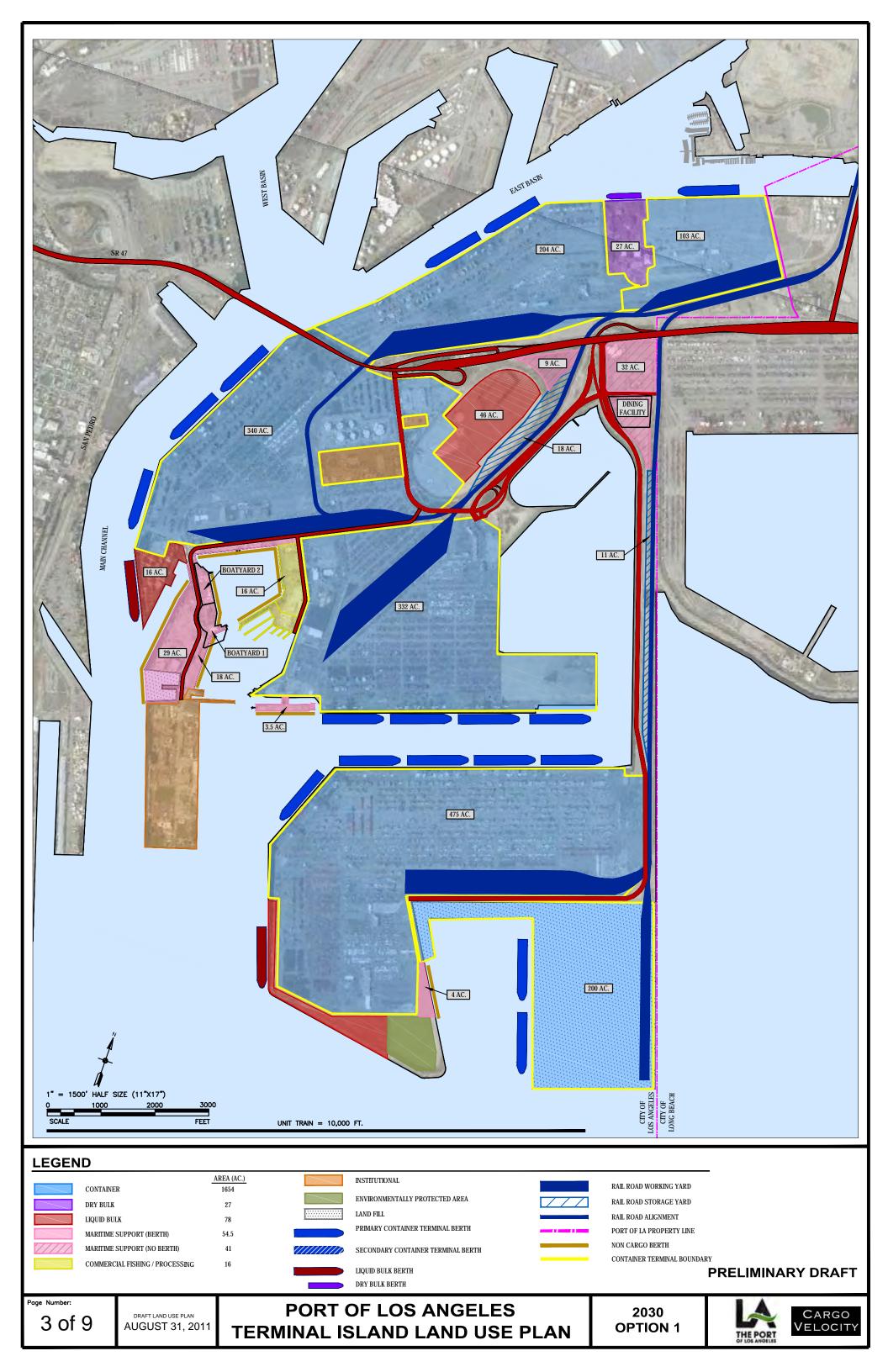


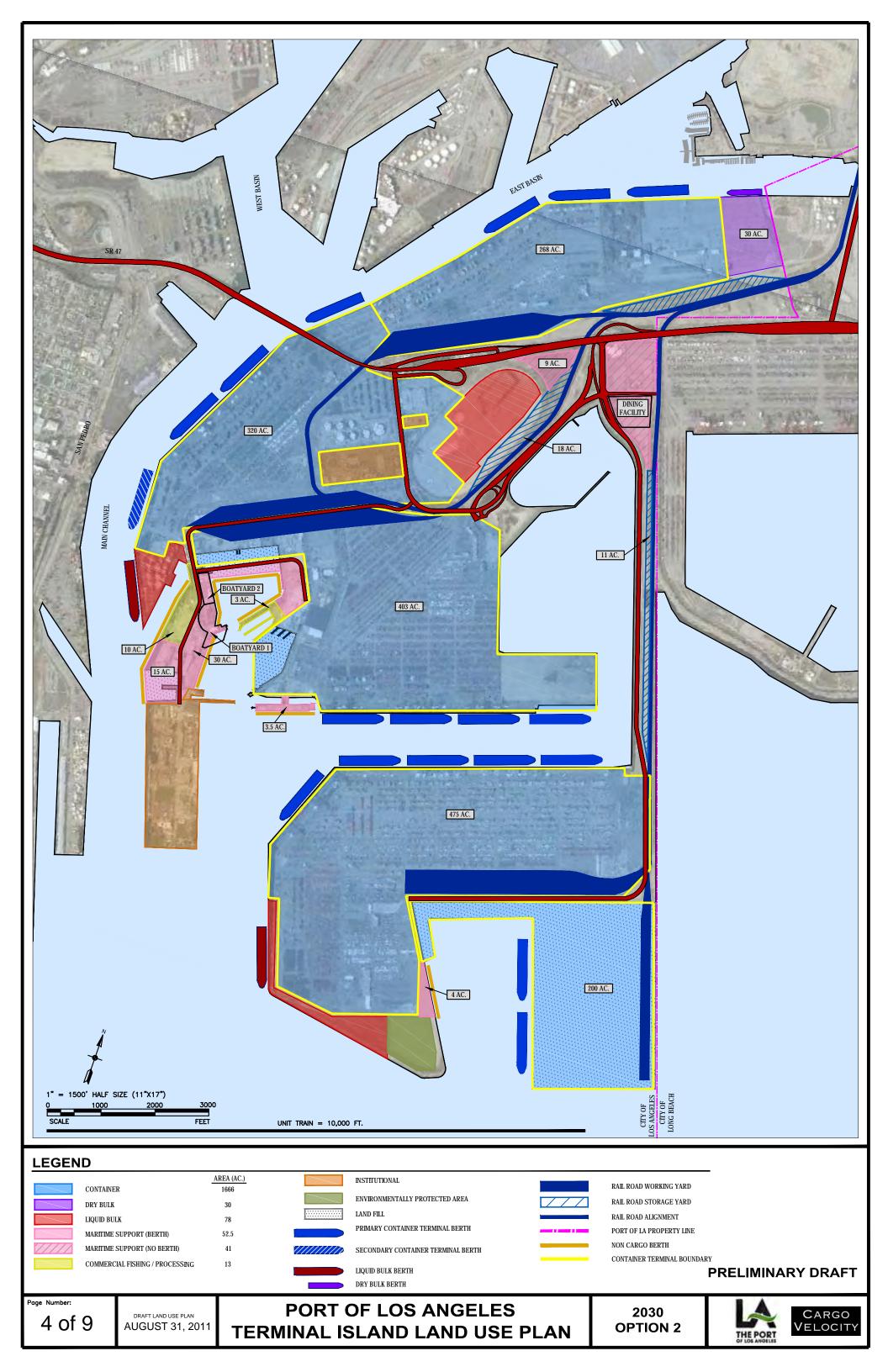


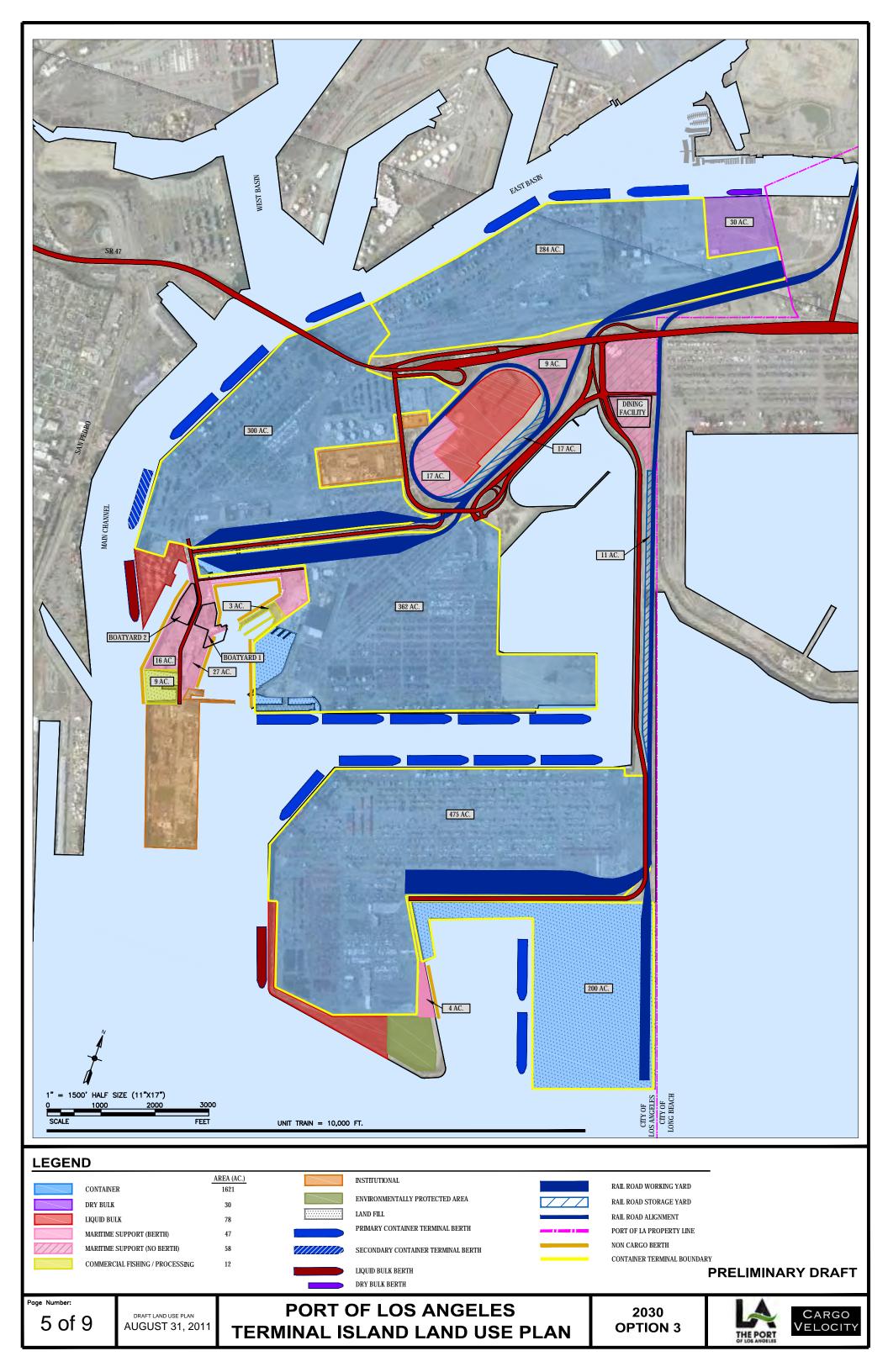


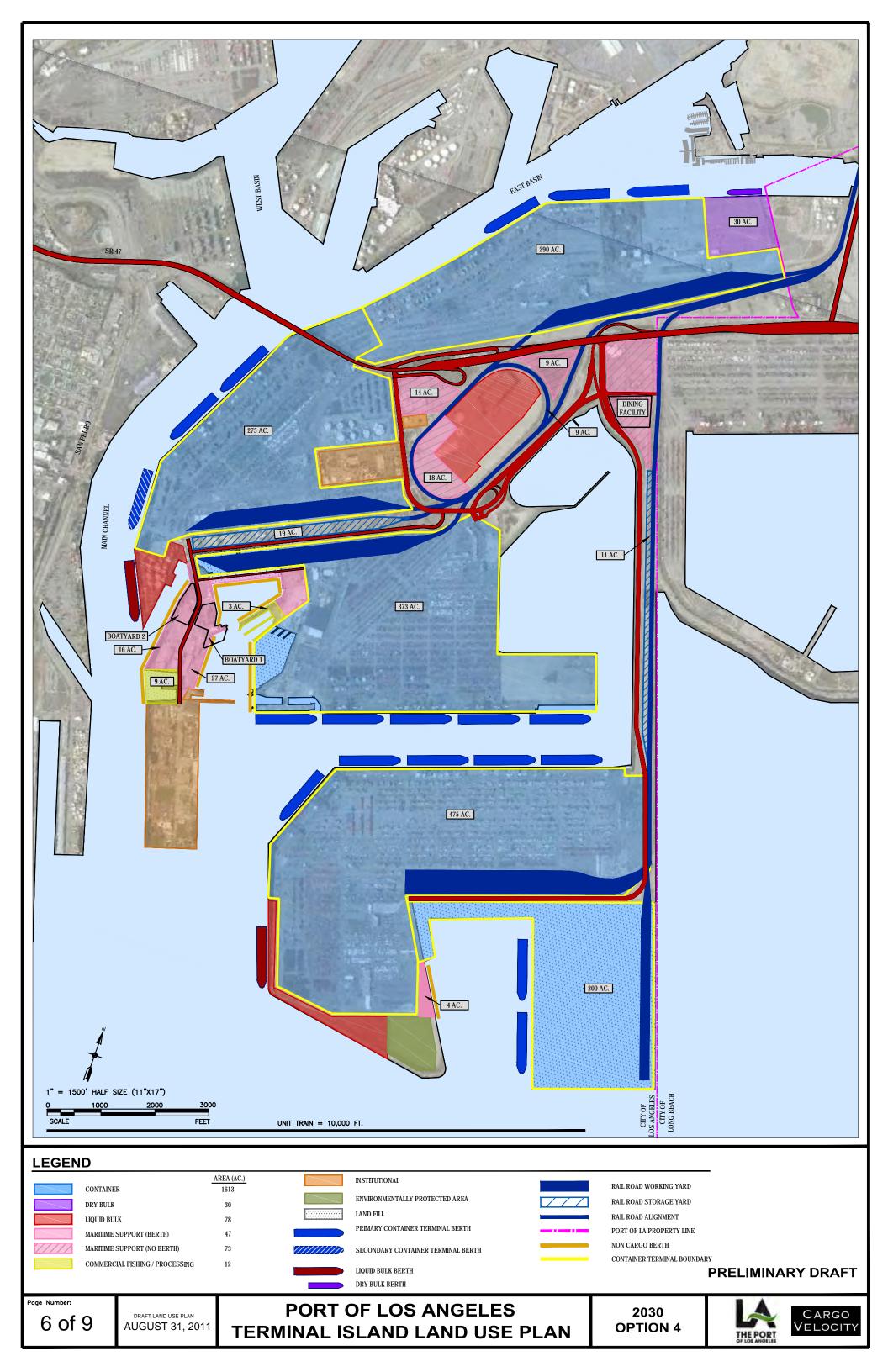


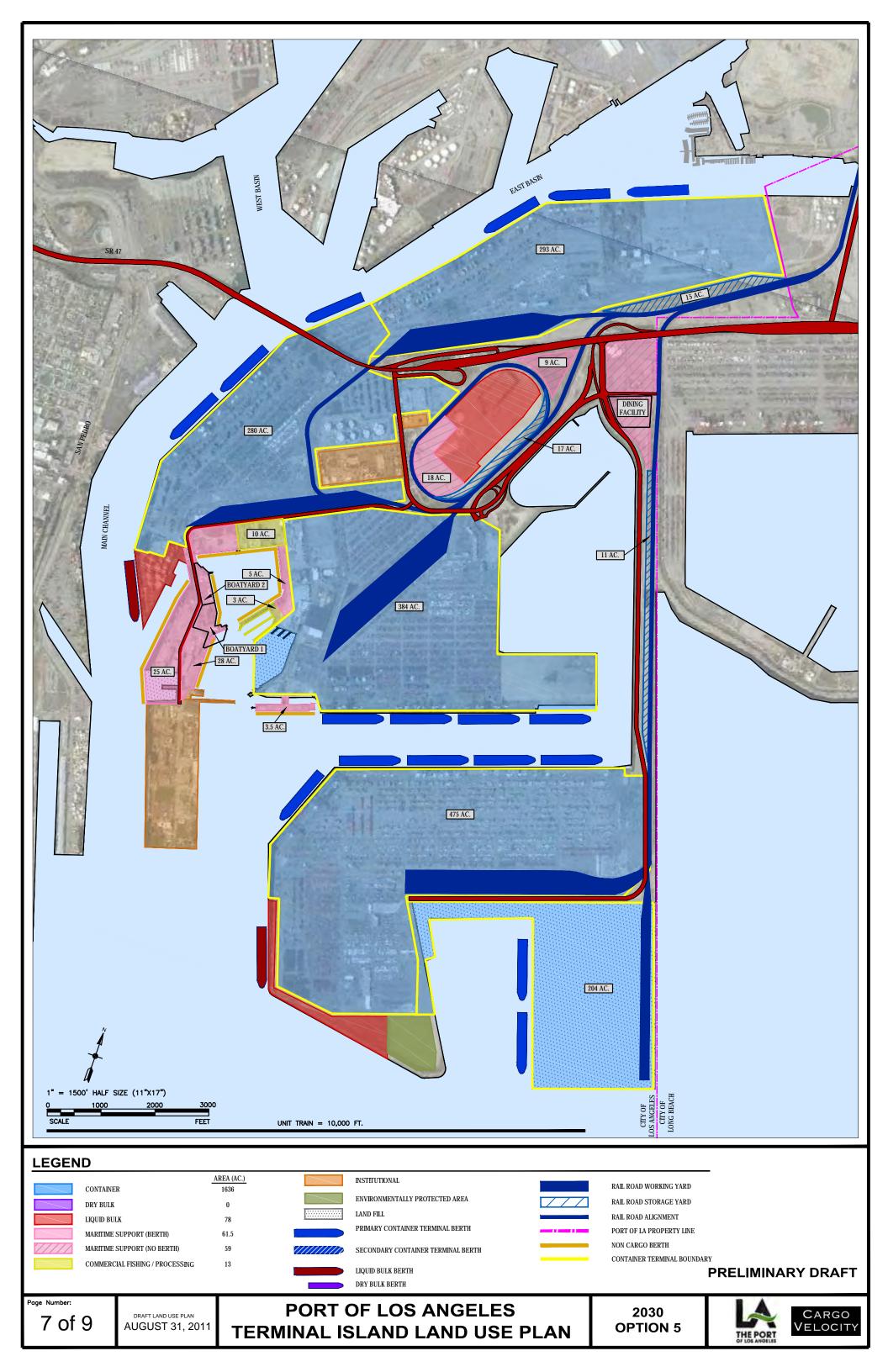


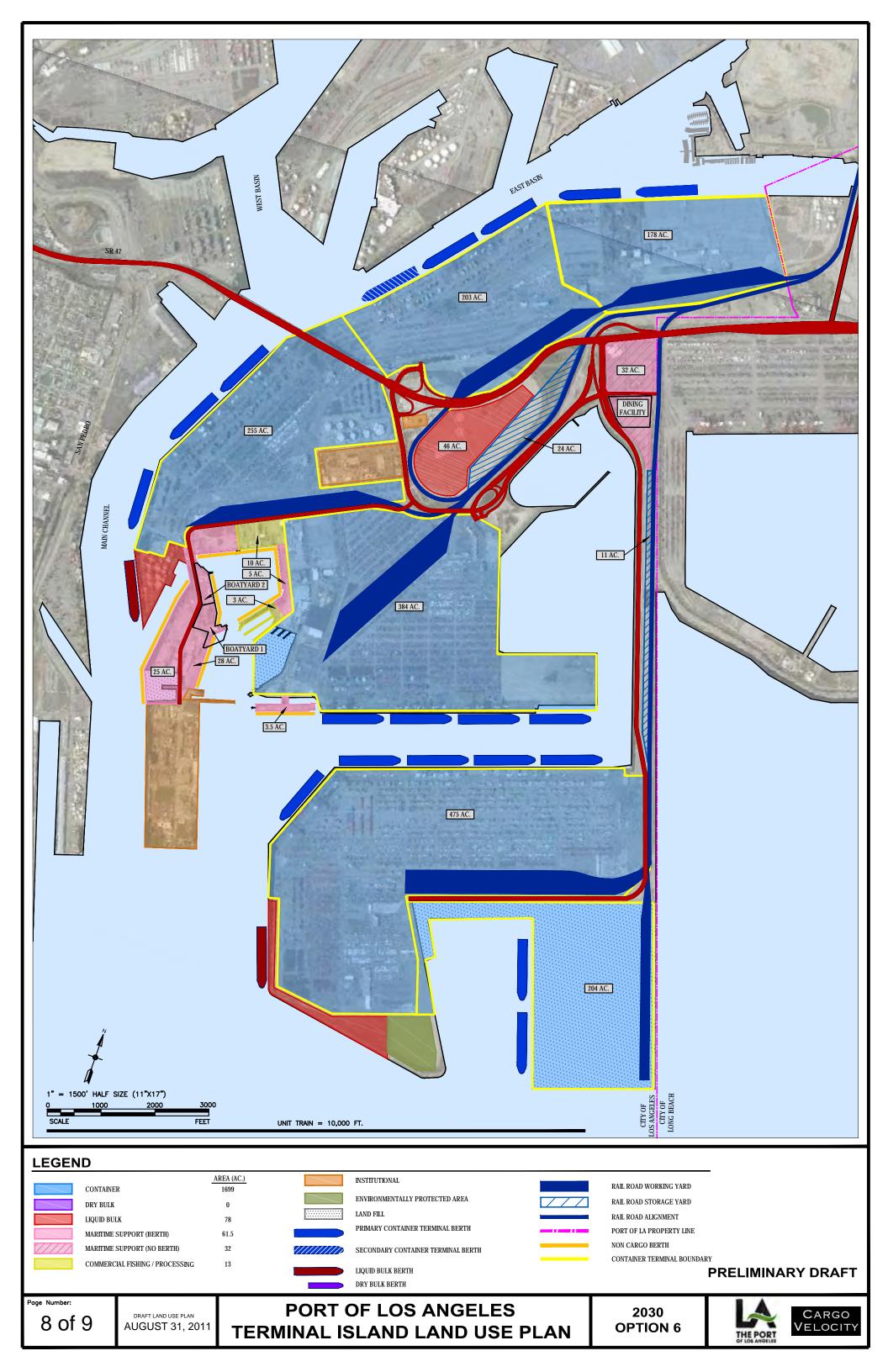


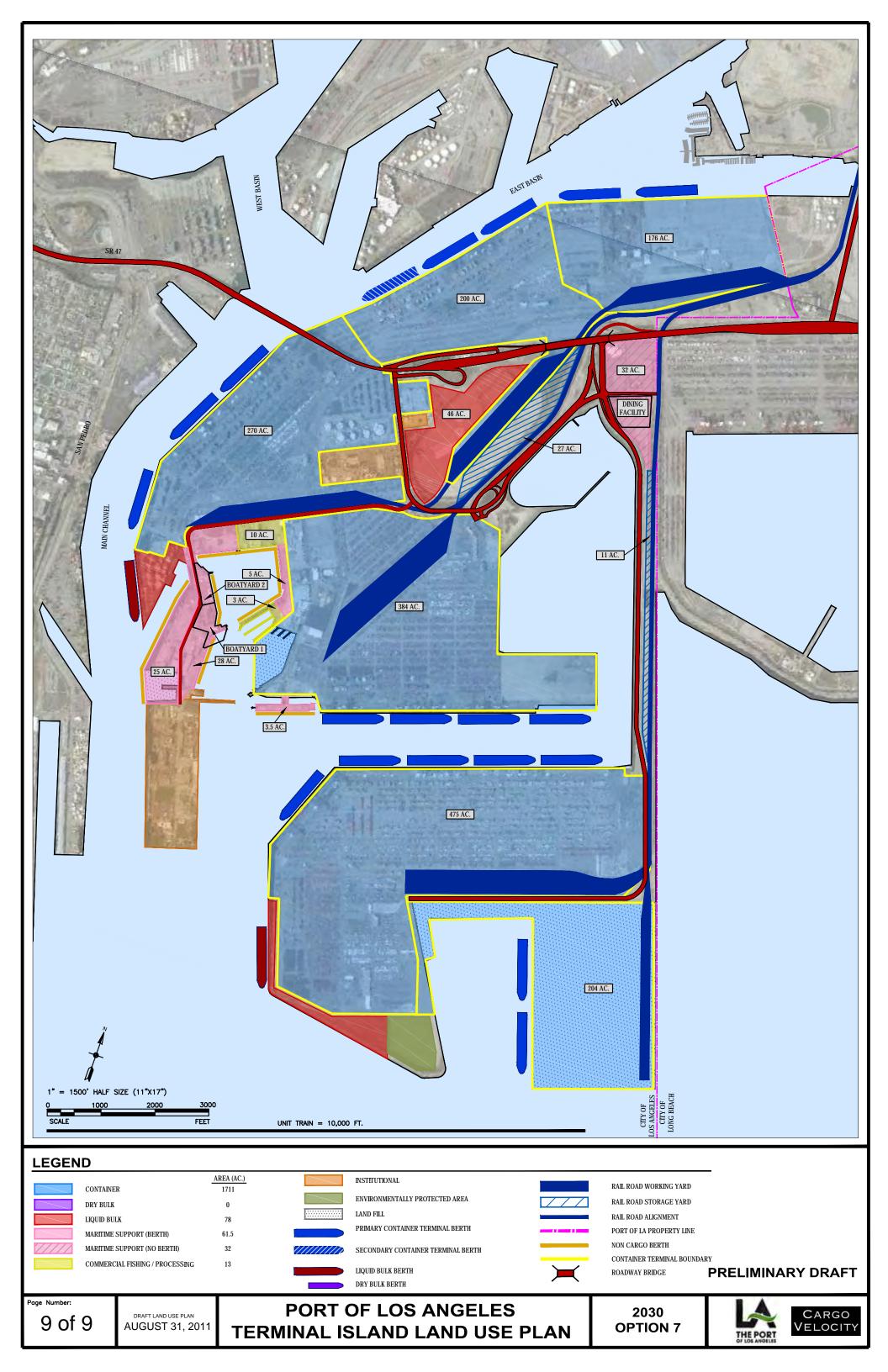








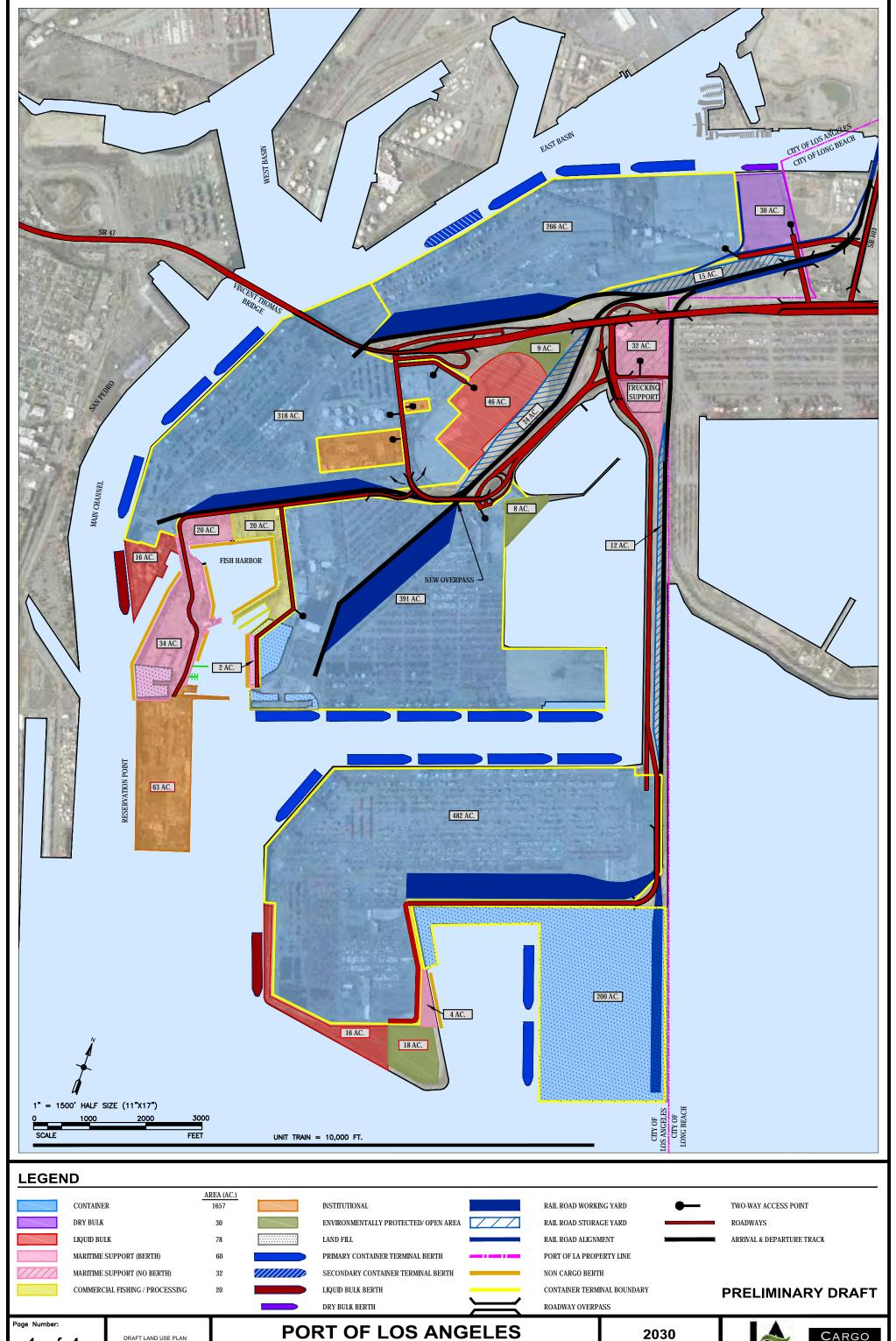




Summary Report

G TIP MEETING 3 PLANS: THREE OPTIONS REMAIN





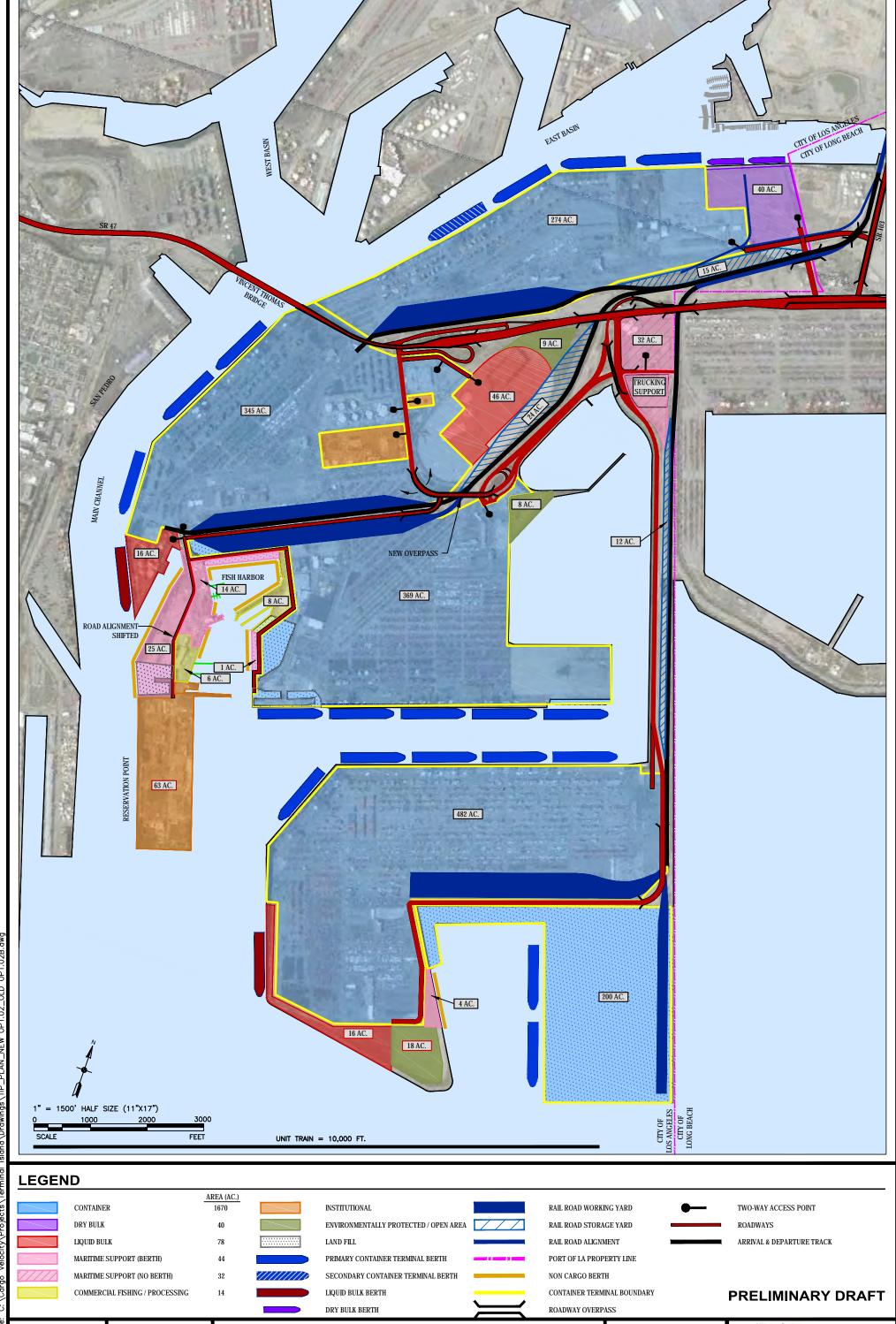
1 of 4 OCTOBER 27, 2011

PORT OF LOS ANGELES TERMINAL ISLAND LAND USE PLAN

OPTION 1







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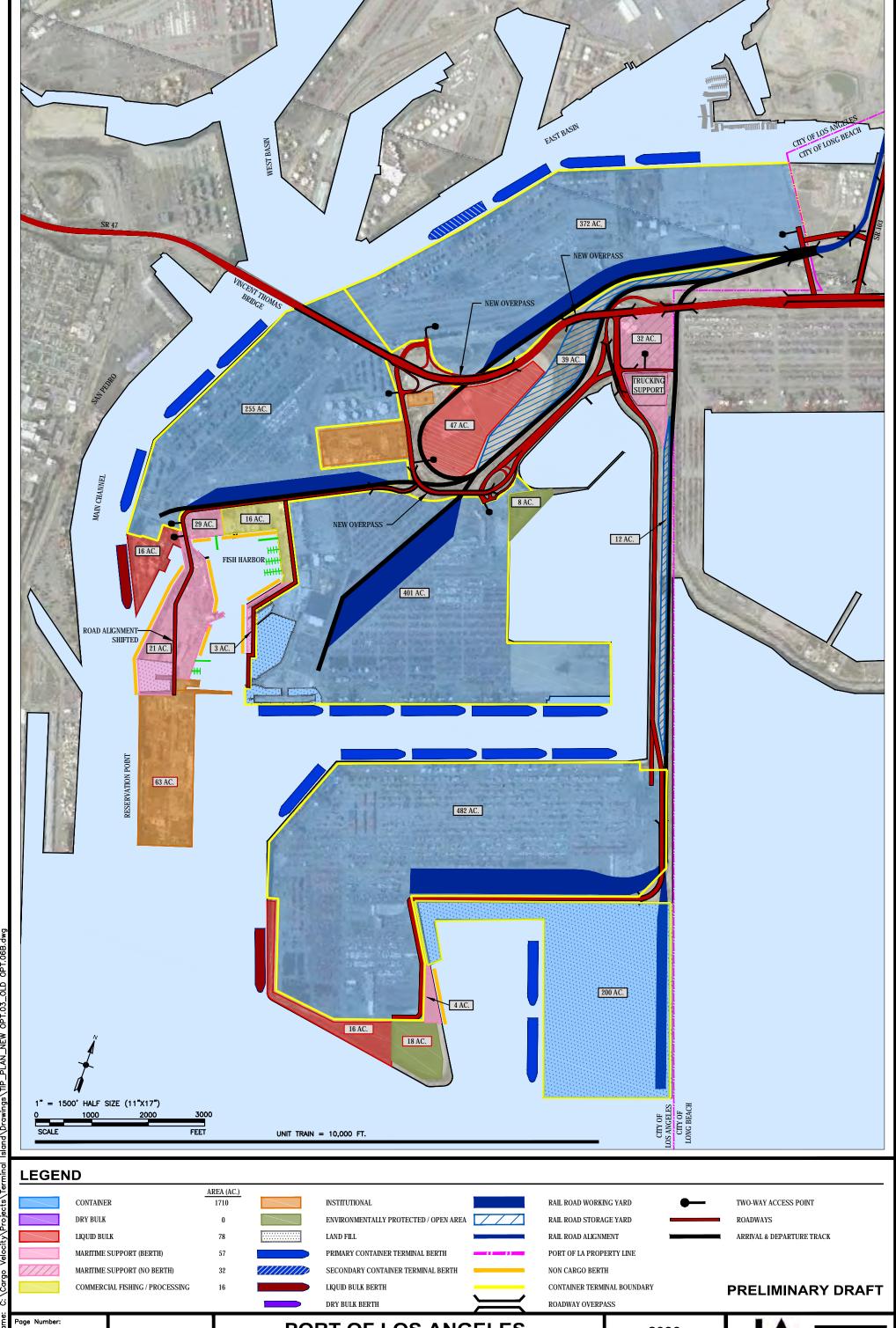
DRAFT LAND USE PLAN OCTOBER 27, 2011

PORT OF LOS ANGELES TERMINAL ISLAND LAND USE PLAN

2030 **OPTION 2**

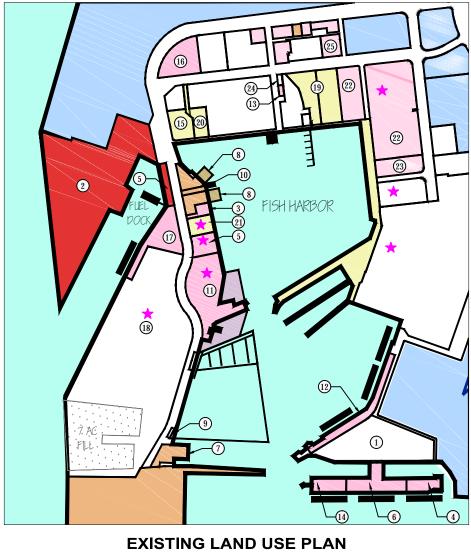


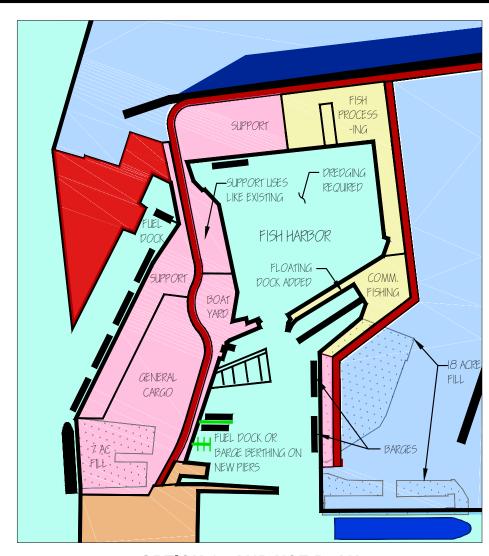




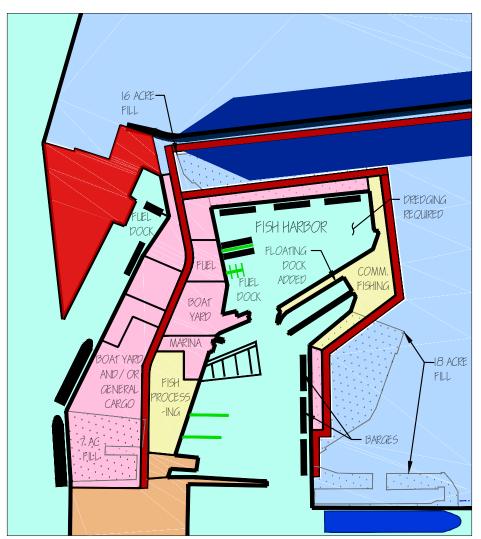




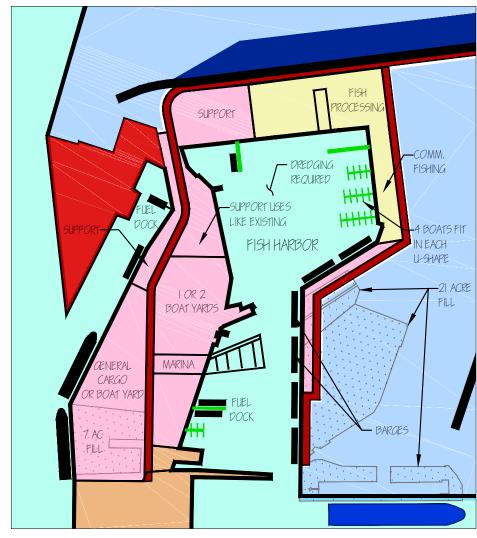




OPTION 1 LAND USE PLAN



OPTION 2 LAND USE PLAN



OPTION 3 LAND USE PLAN

KEYNOTES

- RAIL FACILITIES
- 1 FORMER LAXT BERTH
- LIQUID BULK/FUELING 2 EXXON MOBIL
- INSTITUTIONAL AREAS
- 7 FIRE STATION #111
- SOUTHERN CALIFORNIA MARINE INSTITUTE (SCMI)
- TERMINAL ISLANDER MONUMENT
- 10 PORT POLICE

- GENERAL PETROLEUM 4 HARLEY MARINE/ MILLENIUM MARITIME

 - MAXUM PETROLEUM

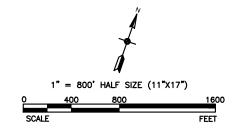
SUPPORT (MARINE SERVICES, BOATYARD)

- WEST OIL MARINE AL LARSON
- AMERICAN MARINE CORPORATION
- HARBOR LIGHT GROCERY 13 (14) PUBLIC SERVICE MARINE
- **1**5 HARBOR ICE/ WESTERN FISH
- SAN PEDRO FORKLIFT/FUMIGATION SOUTHERN CALIFORNIA SHIPPING SERVICES
- OTHER AREAS
- (18) VACANT AND AVAILABLE (FORMER SOUTHWEST MARINE SHIPYARD)

NEW PIERS

COMMERCIAL FISHING

- 19 TRI-MARINE 20 SOUTHERN CALIFORNIA SEAFOOD
- DEL MAR SEAFOOD
- (22) TRI-UNION
- 23 DEL MONTE
- **24** SEAFOOD SPECIALTIES
- 25 CANNER'S STEAM



LEGEND



CONTAINER

LIQUID BULK

MARITIME SUPPORT (BERTH)

COMMERCIAL FISHING / PROCESSING INSTITUTIONAL

LAND FILL

PRIMARY CONTAINER TERMINAL BERTH



RAIL ROAD WORKING YARD RAIL ROAD STORAGE YARD RAIL ROAD ALIGNMENT

ARRIVAL & DEPARTURE TRACK

CONTAINER TERMINAL BOUNDARY

ROADWAYS ELIGIBLE FOR HISTORIC BUILDING LISTING PRELIMINARY DRAFT

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DRAFT LAND USE PLAN OCTOBER 27, 2011

PORT OF LOS ANGELES TERMINAL ISLAND LAND USE PLAN

COMMERCIAL FISHING/PROC. **ALTERNATIVES**

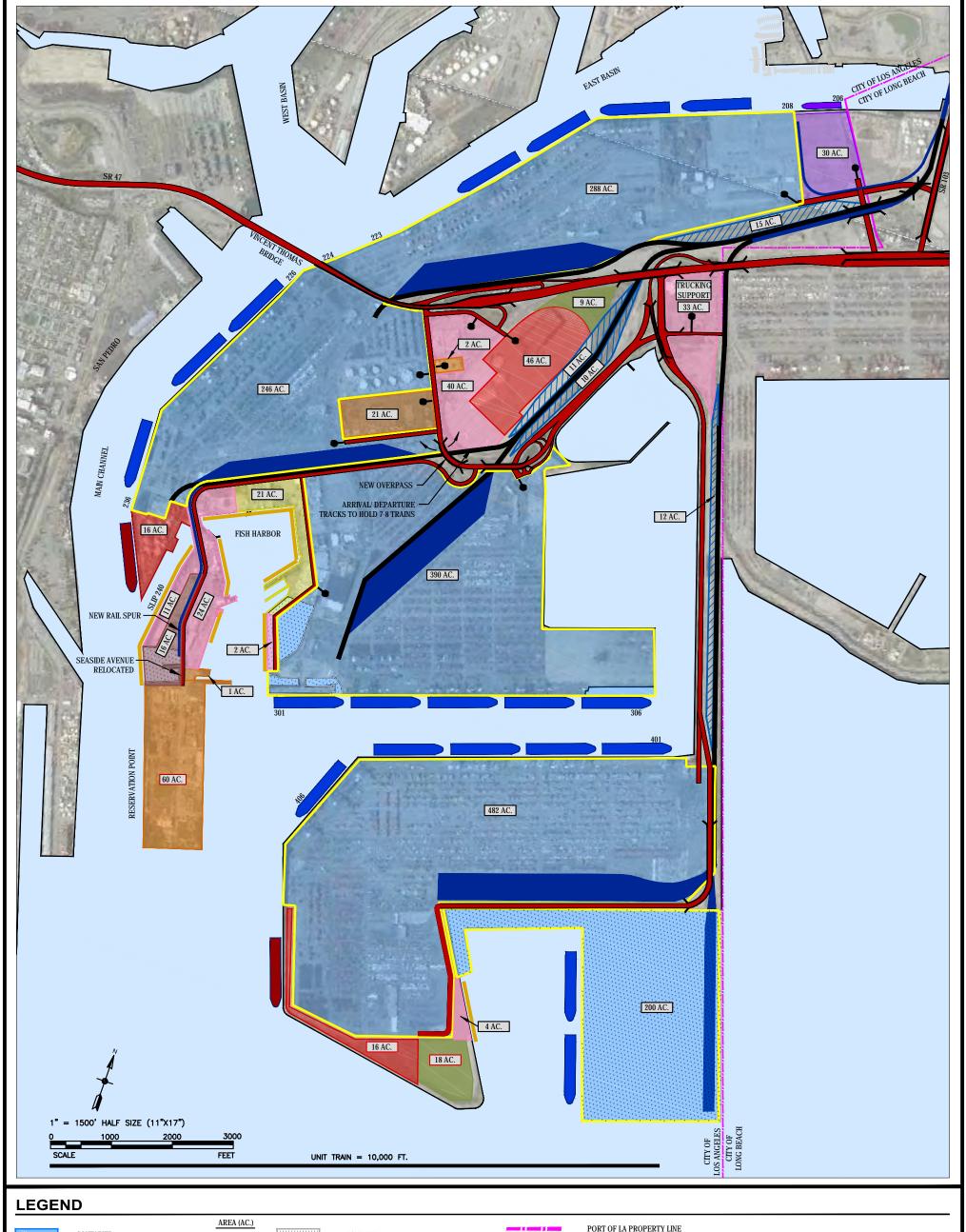


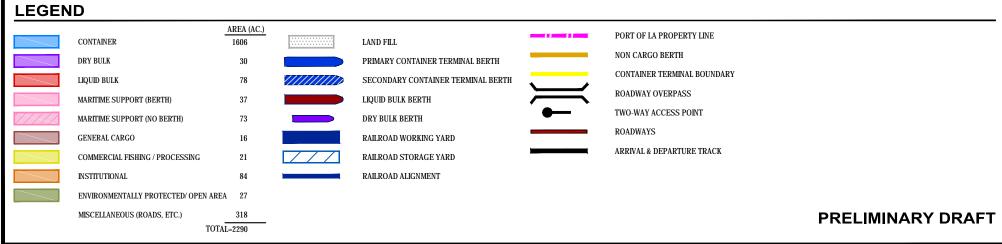


Summary Report

H PROPOSED PLAN AND FISH HARBOR ENLARGED VIEW

Port of Los Angeles PROPOSED TERMINAL ISLAND LAND USE PLAN Los Angeles Board of Harbor Commissioners Meeting **January 19, 2012** CARGO VELOCITY



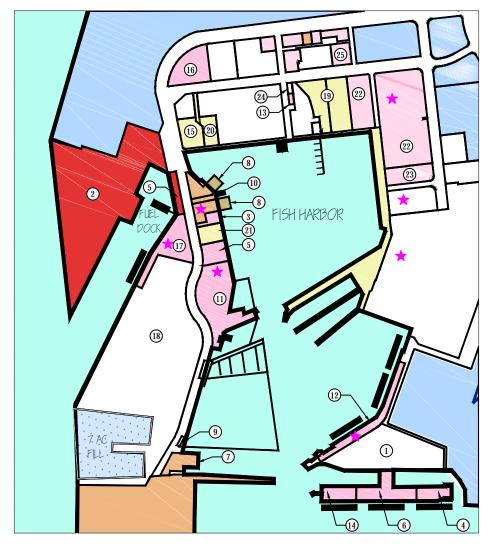


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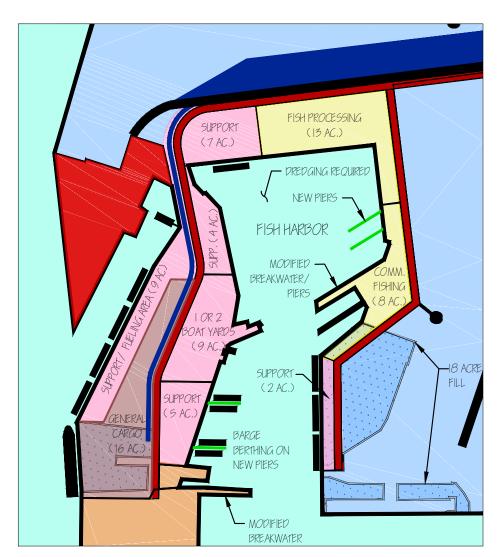
1 of 2 JANUARY 19, 2012

CARGO

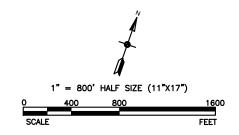
VELOCITY







PROPOSED LAND USE PLAN



KEYNOTES

- RAIL FACILITIES
- 1 FORMER LAXT BERTH
- LIQUID BULK/FUELING
- 2 EXXON MOBIL
- INSTITUTIONAL AREAS 7 FIRE STATION #111
- 8 SOUTHERN CALIFORNIA MARINE INSTITUTE (SCMI)
- 9 TERMINAL ISLANDER MONUMENT
- 10 PORT POLICE

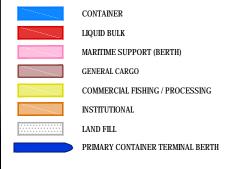
- SUPPORT (MARINE SERVICES, BOATYARD)
- 3 GENERAL PETROLEUM
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- MAXUM PETROLEUI

 WEST OIL MARINE MAXUM PETROLEUM
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- (12) AMERICAN MARINE CORPORATION 13 HARBOR LIGHT GROCERY
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- (15) HARBOR ICE/ WESTERN FISH
- (16) SAN PEDRO FORKLIFT/FUMIGATION (17) SOUTHERN CALIFORNIA SHIPPING SERVICES
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NEW PIERS

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- 21) DEL MAR SEAFOOD
- (22) TRI-UNION
- 23 DEL MONTE
- 24 SEAFOOD SPECIALTIES (25) CANNER'S STEAM

LEGEND



RAILROAD WORKING YARD RAILROAD STORAGE YARD

RAILROAD ALIGNMENT

ARRIVAL & DEPARTURE TRACK(S) CONTAINER TERMINAL BOUNDARY

ROADWAYS

ELIGIBLE FOR HISTORIC BUILDING LISTING

PRELIMINARY DRAFT

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