

SECOND AMENDMENT TO OPERATING AGREEMENT NO. 15-3354
BETWEEN THE CITY OF LOS ANGELES
AND
HECATE ENERGY HARBORSIDE LLC.
FOR THE PHOTOVOLTAIC SOLAR POWER SYSTEMS

THIS SECOND AMENDMENT ("Second Amendment") to Operating Agreement No. 15-3354 ("Agreement"), is made and entered into this _____ day of _____, 2016, by and between the CITY OF LOS ANGELES, a municipal corporation, acting by and through its Board of Harbor Commissioners ("Board") of the Harbor Department (collectively referred to as "City" or "Harbor Department") and HECATE ENERGY HARBORSIDE, LLC., a Delaware limited liability company, 115 Rosa Parks Blvd., Nashville, TN 37203 ("Operator").

RECITALS

WHEREAS, City and Operator entered into the Agreement on October 15, 2015 for the development, construction, installation, management, and maintenance of photovoltaic solar power systems at the Port of Los Angeles ("POLA"); and

WHEREAS, the Board has authority to approve site location modifications in the event substitutionary sites are necessary and both City and Operator have identified and agreed upon substitutionary site locations and in which Operator shall develop, construct, install, manage and maintain photovoltaic solar power systems on said sites on the same terms and conditions as set forth in the Agreement; and

WHEREAS, City and Operator entered into the First Amendment on April 4, 2016 to modify site locations ("First Amendment"); and

WHEREAS, City and Operator desire to amend the Agreement to further modify certain locations for placement of said systems;

NOW, THEREFORE, in consideration of the covenants, terms, and conditions contained herein, the parties do hereby mutually agree that the AGREEMENT BE AMENDED AS FOLLOWS:

Section 1. Pages 45 to 57 titled Attachment 3.1, "Site Descriptions and Proposed Site Plans" referred to and found in Exhibit B of the Agreement and Exhibit B-1 of the First Amendment is hereby deleted in its entirety and replaced with Exhibit B-2 which is attached to this Second Amendment.

Section 2. Exhibit F of the Agreement and Exhibit F-1 of the First Amendment is hereby deleted in its entirety and replaced with Exhibit F-2 which is attached to this Second Amendment.

Section 3. Except as specifically provided herein, this Second Amendment shall not in any manner alter, change, modify, or affect any of the rights, privileges, duties or obligations

of either of the parties hereto under or by any reason of said Agreement, and except as expressly exercised herein, all of the terms, covenants, and conditions of said Agreement, as exercised, shall remain in full force and effect.

[signature page follows]

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IN WITNESS WHEREOF, the parties hereto have executed this Second Amendment on the date to the left of their signatures.

THE CITY OF LOS ANGELES, by its Board of Harbor Commissioners

Dated: _____

By _____
EUGENE D. SEROKA
Executive Director

Attest: _____
Secretary

HECATE ENERGY HARBORSIDE, LLC.

Dated: 6/9/16

By [Signature]
Chris Bullinger / Managing Member
(Print/type name and title)

Attest [Signature]
Julie J. Ohnstad / Authorized Person
(Print/type name and title)

APPROVED AS TO FORM AND LEGALITY

June 9, 2016
MICHAEL N. FEUER, City Attorney
Janna B. Sidley, General Counsel

By [Signature]
Helen J. Sok, Deputy/Assistant

Account #	_____	W.O. #	_____
Ctr/Div #	_____	Job Fac. #	_____
Proj/Prog #	_____		
Budget			
FY:	_____	Amount:	_____
TOTAL			
For Acct/Budget Div. Use Only:			
Verified by:	_____		
Verified Funds Available:	_____		
Date Approved:	_____		

EXHIBIT B-2
(ATTACHED)

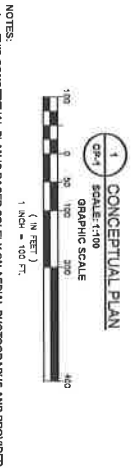
SITE INFORMATION

SITE NAME/ADDRESS: MINER STREET
 SAN PEDRO, CA 90731
 PARCELS: 7483-027-821, 7440-007-803 & 7440-029-810
 APPROX. GPS LOCATION: LAT: 33°43'24.72"N
 LONG: 118°18'54.22"W
 APPLICANT: HECATE
 515 ROSA PARKS BOULEVARD
 NASHVILLE, TN 37203
 SYSTEM SPECIFICATIONS
 INVERTER(S): (3) 350V CHINT POWER SYSTEMS STRINGS INVERTER
 SOLAR MODULE: (4,800) 350W HANJINDA SOLAR MODULE
 RACKING: BALL BEARING RACKING 44' TILT
 MODULE MOUNTED ON RAILE

KEY MAP



APPROXIMATE PV SYSTEM SIZING				
SOLAR MODULE		ARRAY SIZE		
ARRAY AREA	AZIMUTH	TILT	SIZE	COUNT
BERTH 54-55	VARIABLES	0-10°	330	4800
TOTAL				1584.00



- NOTES:**
1. THIS CONCEPTUAL PLAN IS BASED SOLELY ON AERIAL PHOTOGRAPHS AND PROVIDED
 2. EXISTING ROOF EQUIPMENT LOCATIONS ARE APPROXIMATE
 3. GROUND MOUNTED ELECTRICAL EQUIPMENT NOT SHOWN ON THIS PLAN, MAY INCLUDE
 4. INVERTERS, SWITCHGEAR, AND/OR TRANSDUCERS BASED ON DISBURSEMENT CODE
 5. LAYOUT AND SYSTEM SIZE SUBJECT TO CHANGE BASED ON ACTUAL ROOF SURVEY
 6. LOCATION OF GROUND MOUNTED EQUIPMENT, MAY BE SET LOCATION OF WALKWAYS
 7. NO VERIFICATION OF SOIL CAPACITY WAS CONDUCTED. A FULL GEOTECHNICAL ANALYSIS IS SUGGESTED.



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 Structural & Mechanical Electrical
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 SAN PEDRO, CA 90731
 TEL: (714) 306-5248
 FAX: (714) 306-5249

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 HECCATE ENERGY
 515 ROSA PARKS BOULEVARD
 NASHVILLE, TN 37203
 www.heccateenergy.com

NO.	DATE	REVISION/DESCRIPTION
1		ISSUED FOR PERMITTING

PROJECT:
 41,584kW (DC), 41,000kW (AC)
 GROUND MOUNTED
 PHOTOVOLTAIC SYSTEM
 PORT OF LOS ANGELES
 BERTH 54-55
 MINER STREET
 SAN PEDRO, CA 90731
 LOS ANGELES COUNTY

DESIGNED BY:
 CONCEPTUAL PLAN

DATE:
 11/11/15

SCALE:
 1:1

SHEET NO.:
 1 OF 1

SITE INFORMATION

SITE NAME/ADDRESS: PIER A STREET
SAN PEDRO, CA 90731

PARCEL ID: 7448-018-001, 7448-018-004 & 7448-018-007

APPROX. GPS LOCATION: LAT: 33°42'28.34"N
LONG: 118°18'10.51"W

APPLICANT: HECATE
415 ROSA PARKS BOULEVARD
NASAVILLE, TN 37220

SYSTEM SPECIFICATIONS

INVERTERS: (8) 38kW CHINT POWER SYSTEMS STRING INVERTER

SOLAR MODULE: (1,440) 330W HYNUDA SOLAR MODULE

RACKING: BALUSTED ROOF MOUNT 10° TILT
RAIL ROOF MOUNT @ ROOF PITCH

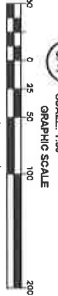
KEY MAP



APPROXIMATE PV SYSTEM SIZING

ARRAY AREA	SOLAR MODULE			ARRAY SIZE (KW dc)
	AZIMUTH	TILT	SIZE	
BERTH 153	VARIABLE	0-10°	330	475.20
TOTAL				475.20

CONCEPTUAL PLAN



- NOTES:**
- THIS CONCEPTUAL PLAN IS BASED SOLELY ON AERIAL PHOTOGRAPHS AND PROVIDED PLANS. NO SITE VISITS WERE CONDUCTED.
 - EXISTING ROOF EQUIPMENT LOCATIONS ARE APPROXIMATE.
 - GROUND MOUNTED ELECTRICAL EQUIPMENT NOT SHOWN ON THIS PLAN MAY INCLUDE: TRANSFORMERS, METERS, AND OTHER ELECTRICAL EQUIPMENT.
 - LAYOUT SPACING AND LOCATION OF ARRAY AREAS BASED ON CURRENT FINE CODE. LAYOUT AND SYSTEM SIZE SUBJECT TO CHANGE BASED ON ACTUAL ROOF SURVEY.
 - LAND SYSTEM DESIGN TO INCLUDE GABLES, TRUSS AND OR CONDUCT LOCATIONS AND SYSTEM DESIGN TO INCLUDE EQUIPMENT AND BEST LOCATION OF WALKWAYS AND ARRAY AREAS.
 - NO VERIFICATION OF STRUCTURAL CAPACITY WAS CONDUCTED. A FULL STRUCTURAL ANALYSIS IS SUBMITTED.



Whitman is a Consulting & Civil Engineering Firm
7700 SANITARY HILL ROAD
CHATTANOOGA, TN 37410
TEL: (423) 299-9444
FAX: (423) 299-9444

REVIEW

DESIGNING AGENTS:
HECATE ENERGY
415 ROSA PARKS BOULEVARD
NASAVILLE, TN 37220
hecateenergy.com

NO.	DATE	REVISION/DESCRIPTION
1	11/11/2014	ISSUED FOR PERMIT
2	11/11/2014	ISSUED FOR PERMIT
3	11/11/2014	ISSUED FOR PERMIT
4	11/11/2014	ISSUED FOR PERMIT
5	11/11/2014	ISSUED FOR PERMIT
6	11/11/2014	ISSUED FOR PERMIT
7	11/11/2014	ISSUED FOR PERMIT
8	11/11/2014	ISSUED FOR PERMIT
9	11/11/2014	ISSUED FOR PERMIT
10	11/11/2014	ISSUED FOR PERMIT

PROJECT:
4475.2kW (DC) / 432kW (AC)
ROOF MOUNTED
PHOTOVOLTAIC SYSTEM
PORT OF LOS ANGELES
BERTH 153
PIER A STREET
SAN PEDRO, CA 90731
LOS ANGELES COUNTY

DRAWING TITLE:
CONCEPTUAL PLAN

DRAWING NO.:
CP-1

SHEET NO.:
1 OF 1

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SITE INFORMATION

SITE NAME/ADDRESS:	PIER A STREET SAN PEDRO, CA 90731
PARCEL ID:	7440-014-904
APPROX GPS LOCATION:	LAT: 33°42'43.97"N LONG: 118°19'39.97"W
APPLICANT:	HEGATE ENERGY HOLDINGS 115 ROSA PARKS BOULEVARD NASHVILLE, TN 37203
INVERTERS:	(P7) 38kW OHM POWER SYSTEMS STRING INVERTER
SOLAR MODULE:	(A320) 330W HYUNDAI SOLAR MODULE
RACKING:	PARKING GARAGE "UP" TILT

KEY MAP

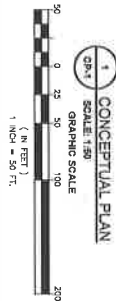


APPROXIMATE PV SYSTEM SIZING

ARRAY AREA	SOLAR MODULE			ARRAY SIZE (KW dc)
	AZIMUTH	TILT	SIZE	
CANOPY	130°	0-5°	330	1425.60
TOTAL			4320	1425.60

NOTES:

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- LOCATION OF GROUND MOUNTED EQUIPMENT MAY EFFECT LOCATION OF WALKWAYS AND ARRAY AREAS.
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115 ROSA PARKS BOULEVARD
NASHVILLE, TN 37203
hecateenergy.com

NO.	DATE	REVISION/DESCRIPTION
1	11/11/15	CONCEPTUAL PLAN

2015-05-27
E: 425.6kW (DC), 497.2kW (AC)
GROUND MOUNTED
PHOTOVOLTAIC SYSTEM
PORT OF LOS ANGELES
BERTH 101 CAM PARKING LOT
PIER A STREET
SAN PEDRO, CA 90731
LOS ANGELES COUNTY

DATE: 11/11/15
SCALE: 1" = 50' FT.
DRAWN BY: J. B. BROWN
CHECKED BY: J. B. BROWN

DESIGNING FIRM:
CONCEPTUAL PLAN
CP-1

SHEET NO.: 1 OF 1

SITE INFORMATION

SITE NAME/ADDRESS: 3RD STREET
SAN PEDRO, CA 90731

PARCEL(S): 7455-07-932

APPROX GPS LOCATION: LAT: 33°44'28.65"N
LONG: 118°16'59.81"W

APPLICANT: HECATE
415 ROSA PARKS BOULEVARD
NASHVILLE, TN 37203

SOLAR MODULE: (854) 33W HYUNDAI SOLAR MODULE

RACKING: PARKING CANOPY 0.6° TILT

KEY MAP



APPROXIMATE PV SYSTEM SIZING

ARRAY AREA	SOLAR MODULE		ARRAY SIZE (KW DC)
	AZIMUTH	TILT	
CANOPY VARIES	0.5°	330	954
TOTAL			954
			314.82



- NOTES:**
1. THIS CONCEPTUAL PLAN IS BASED SOLELY ON AERIAL PHOTOGRAPHS AND PROVIDED PLANS. NO SITE VISITS WERE CONDUCTED.
 2. GROUND MOUNTED ELECTRICAL EQUIPMENT NOT SHOWN ON THIS PLAN. MAY INCLUDE INVERTERS, SWITCHGEAR, AND/OR TRANSFORMERS.
 3. INVERTER, SWITCHGEAR, AND/OR TRANSFORMERS SIZE SUBJECT TO SINGLE PHASE AND SYSTEM DESIGN.
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Engineering, Planning
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SUITE 1000
DENVER, CO 80202
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hecateenergy.com

REVISIONS

NO.	DATE	REVISION DESCRIPTION
1	11/14/14	ISSUED FOR PERMITTING
2	11/14/14	REVISIONS TO PERMITTING
3	11/14/14	REVISIONS TO PERMITTING
4	11/14/14	REVISIONS TO PERMITTING
5	11/14/14	REVISIONS TO PERMITTING
6	11/14/14	REVISIONS TO PERMITTING
7	11/14/14	REVISIONS TO PERMITTING
8	11/14/14	REVISIONS TO PERMITTING
9	11/14/14	REVISIONS TO PERMITTING
10	11/14/14	REVISIONS TO PERMITTING

PROJECT: 4314 E 3RD STREET
GROUND MOUNTED PHOTOVOLTAIC SYSTEM
PORT OF LOS ANGELES
PARKING LOT AT LIBERTY HILL
3RD STREET
SAN PEDRO, CA 90731
LOS ANGELES COUNTY

DESIGNING FIRM: HECATE ENERGY

DATE: 11/14/14

SCALE: 1" = 20 FT.

PROJECT NO.: 14-11-08T

SHEET NO.: 1 OF 1

SITE INFORMATION

SITE NAME/ADDRESS: E WATER STREET
LOS ANGELES, CA 90731

PARCEL(S): 7440-010-910

APPROX GPS LOCATION: LAT: 33°46' 57"N
LONG: 118°19'23.32"W

APPLICANT: HECATE
416 ROSA PARKS BOULEVARD
NASHVILLE, TN 37203

SYSTEM SPECIFICATIONS

INVERTERS: (17) 36kW GHIPT POWER SYSTEMS STRING INVERTER

SOLAR MODULE: (2,720) 330W HANJINDI SOLAR MODULE

RACKING: BALLASTED ROOF MOUNT 10° TILT

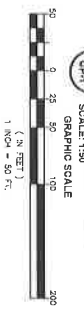
KEY MAP



APPROXIMATE PV SYSTEM SIZING

ARRAY AREA	AZIMUTH	TILT	SIZE	COUNT	ARRAY SIZE (KW DC)
ROOFTOP	220°	10°	330	2720	897.60
TOTAL				2720	897.60

1 CONCEPTUAL PLAN



- NOTES:**
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 - EXISTING ROOF EQUIPMENT LOCATIONS ARE APPROXIMATE.
 - GROUND MOUNTED ELECTRICAL EQUIPMENT NOT SHOWN ON THIS PLAN MAY INCLUDE.
 - LAYOUT SPACING AND LOCATION OF ARRAY AREAS BASED ON CURRENT PINE CODE. LAYOUT AND SYSTEM SIZE SUBJECT TO CHANGE BASED ON ACTUAL ROOF SLOPE AND SYSTEM DESIGN TO INCLUDE CABLE TRAY AND OR CONDUIT LOCATIONS.
 - NO TRAY AREAS AND MOUNTED EQUIPMENT. MAY EFFECT LOCATION OF WALKWAYS. NO VERIFICATION OF STRUCTURAL CAPACITY WAS CONDUCTED. A FULL STRUCTURAL ANALYSIS IS SUGGESTED.



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1720 W. 17TH AVENUE
DENVER, CO 80202

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Hecate Energy
HECATE ENERGY
416 ROSA PARKS BOULEVARD
NASHVILLE, TN 37203
hecateenergy.com

NO.	DATE	REVISION/DESCRIPTION
1		Initial Submission

PROJECIT:

4897.6KW (DC) 4012KW (AC)
ROOF MOUNTED
PHOTOVOLTAIC SYSTEM
PORT OF LOS ANGELES
AUTO TERMINAL
E WATER STREET
LOS ANGELES, CA 90731
LOS ANGELES COUNTY

DESIGNING FIRM:

CONCEPTUAL PLAN
CP-1

SITE INFORMATION

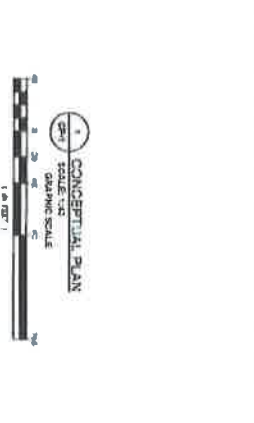
PROJECT:	7444242-000
APPROX. GRID LOCATION:	7444242-000
APPLICANT:	HECATE ENERGY
SYSTEM SPECIFICATIONS:	(1) 3kW CHINESE POWER SYSTEMS STRING INVERTER (1) 15kW INVERTER SOLAR MODULE 6x15x10 FT ROOF SLAB FOR 15x7 FT

KEY MAP



APPROXIMATE PV SYSTEM SIZING

ARRAY AREA	AMOUNT	TILT	SIZE	COUNT	ARRAY SIZE (KW/DC)
ROOF TOP	155'	10°	330	1760	580 DC
TOTAL				1760	580 DC



- NOTES:**
1. THIS CONCEPTUAL PLAN IS BASED ON A VISUAL INSPECTION AND PHOTOGRAPHY OF THE SITE. NO SITE VISITS WERE CONDUCTED.
 2. APPROXIMATE ARRAY AREA IS BASED ON VISUAL INSPECTION AND PHOTOGRAPHY OF THE SITE. APPROXIMATE ARRAY AREA IS BASED ON VISUAL INSPECTION AND PHOTOGRAPHY OF THE SITE.
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 5. APPROXIMATE ARRAY AREA IS BASED ON VISUAL INSPECTION AND PHOTOGRAPHY OF THE SITE. APPROXIMATE ARRAY AREA IS BASED ON VISUAL INSPECTION AND PHOTOGRAPHY OF THE SITE.



Whitman Energy Services, Inc.
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San Pedro, CA 90731
Tel: 310.440.1000
www.whitmanenergy.com

Hecate Energy
115 BROADWAY, SUITE 200
MILWAUKEE, WI 53202
www.hecateenergy.com

REVISIONS

NO.	DATE	DESCRIPTION
1	08/11/2011	ISSUED FOR PERMITTING

DESIGNED BY: HECATE ENERGY
 PROJECT: ROOF MOUNTED PHOTOVOLTAIC SYSTEM
 PROJECT ADDRESS: 1000 N. 10TH STREET, SAN PEDRO, CA 90731
 PROJECT NO.: 1000 N. 10TH STREET
 SHEET NO.: CP-1
 OF 1

SITE INFORMATION

SITE NAME/ADDRESS: MINER STREET
SAN PEDRO, CA 90731

PARCEL ID: 7487-071-021, 7487-071-022 & 7487-071-010

APPROX GPS LOCATION: LAT: 33°43'24.73"N
LONG: 118°03'24.27"W

APPLICANT: HEGATE
115 ROSA PAINS BOULEVARD
NASHVILLE, TN 37203

SYSTEM SPECIFICATIONS

SOLAR MODULE: (1.86) 330W PERUDA SOLAR MODULE

RACKING: PARKING GAROPY 0.6° TILT

KEY MAP



APPROXIMATE PV SYSTEM SIZING

ARRAY AREA	SOLAR MODULE			ARRAY SIZE (KW dc)
	AZIMUTH	TILT	SIZE	
MARGINA S	VARIES	0.5°	330	3960
TOTAL				1306.80



- NOTES:**
1. THIS CONCEPTUAL PLAN IS BASED SOLELY ON AERIAL PHOTOGRAPHS AND PROVIDED PLANS. NO SITE VISITS WERE CONDUCTED.
 2. GROUND MOUNTED ELECTRICAL EQUIPMENT NOT SHOWN ON THIS PLAN. MAY INCLUDE INVERTERS, SWITCHGEAR, AND/OR TRANSFORMERS.
 3. ARRAY SIZE IS SUBJECT TO CHANGE BASED ON ACTUAL SURVEY AND SYSTEM DESIGN.
 4. NO VERIFICATION OF SOIL CAPACITY WAS CONDUCTED. A FULL GEOTECHNICAL ANALYSIS IS SUGGESTED.



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Environmental & Geotechnical / Civil
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FAX: (615) 296-8446

Hecate Energy
HEGATE ENERGY
115 ROSA PAINS BOULEVARD
NASHVILLE, TN 37203
hecateenergy.com

DESIGNED BY: ZACHARY MCGEE

PROJECT: #1,306.8KW (DC) GROUND MOUNTED PHOTOVOLTAIC SYSTEM PORT OF LOS ANGELES MARINA SOUTH

ADDRESS: MINER STREET, SAN PEDRO, CA 90731, LOS ANGELES COUNTY

DATE: 11/14/16

SCALE: 1" = 100' FT.

PROJECT TITLE: CONCEPTUAL PLAN

SHEET NO.: 1 OF 1

NO.	DATE	REVISION DESCRIPTION
1	11/14/16	ISSUED FOR PERMITTING
2	11/14/16	ISSUED FOR PERMITTING
3	11/14/16	ISSUED FOR PERMITTING
4	11/14/16	ISSUED FOR PERMITTING
5	11/14/16	ISSUED FOR PERMITTING
6	11/14/16	ISSUED FOR PERMITTING
7	11/14/16	ISSUED FOR PERMITTING
8	11/14/16	ISSUED FOR PERMITTING
9	11/14/16	ISSUED FOR PERMITTING
10	11/14/16	ISSUED FOR PERMITTING

SITE INFORMATION

SITE NAME/ADDRESS: BERTH 95
SAN PEDRO, CA 90731

PARCEL(S): 7440-02-9-11

APPROX. GPS LOCATION: LAT: 33°44'59.69"N
LONG: 118°16'30.90"W

APPLICANT: HECATE
115 ROSA PARKS BOULEVARD
NASHVILLE, TN 37203

SOLAR MODULE: (3.88) 330W HYBRID SOLAR MODULE

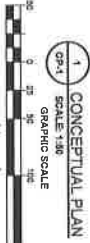
RACKING: PARKING CANOPY 0.6° TILT

KEY MAP



APPROXIMATE PV SYSTEM SIZING

ARRAY AREA	SOLAR MODULE		ARRAY SIZE (KW dc)
	AZIMUTH	TILT	
CANOPY	190°	0.5°	3960
TOTAL			1306.80



- NOTES:**
1. THIS CONCEPTUAL PLAN IS BASED SOLELY ON AERIAL PHOTOGRAPHS AND PROVIDED PLANS. NO SITE VISITS WERE CONDUCTED.
 2. GROUND MOUNTED ELECTRICAL EQUIPMENT NOT SHOWN ON THIS PLAN. MAY INCLUDE INVERTERS, SWITCHES, AND/OR TRANSFORMERS.
 3. THE APPROXIMATE PV SYSTEM SIZES SHOWN ARE BASED ON ACTUAL SURVEY AND SYSTEM DESIGN.
 4. NO VERIFICATION OF SOIL CAPACITY WAS CONDUCTED. A FULL GEOTECHNICAL ANALYSIS IS SUGGESTED.



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Hecate Energy
HECATE ENERGY
115 ROSA PARKS BOULEVARD
NASHVILLE, TN 37203
hecateenergy.com

DESIGNING NOTES:

1. THIS DRAWING DOES NOT CONTAIN THE ORIGINAL SEAL OF THE PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR SURVEYOR. ANY SUCH SEAL IS ASSUMED TO BE THE SEAL OF THE PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR SURVEYOR WHO HAS REVIEWED AND APPROVED THIS DRAWING FOR THE PROJECT.
2. THIS DRAWING HAS BEEN PREPARED AS A DESIGN DOCUMENT. IT DOES NOT CONSTITUTE A CONTRACT. ANY CONTRACT SHALL BE THE CONTRACT BETWEEN THE CLIENT AND THE DESIGNER.

NO.	DATE	REVISION/DESCRIPTION
1		CONCEPTUAL PLAN

DESIGNER: J.L. BROWN

PROJECT: #1,066,88W (DC) GROUND MOUNTED PHOTOVOLTAIC SYSTEM FOR THE PORT OF LOS ANGELES CATALINA EXPRESS PARKING LOT 4

CLIENT: BERTH 95
SAN PEDRO, CA 90731
LOS ANGELES COUNTY

DESIGNING FIRM: WHITMAN & ASSOCIATES
115 ROSA PARKS BOULEVARD
NASHVILLE, TN 37203

PROJECT NO.: CP-1

SHEET NO.: 1 OF 1

SITE INFORMATION

SITE NUMBER/OWNER:	N FRONT STREET SAN PEDRO, CA 90731
PARCEL ID:	744-028-803
APPROX. GPS LOCATION:	LAT: 33.74239° LONG: -118.277018°
APPLICANT:	HECAE 115 ROSA PARKS BOULEVARD NASHVILLE, TN 37203
SYSTEM SPECIFICATIONS	SOLAR MODULE: RACKING: CARPORT

KEY MAP



APPROXIMATE PV SYSTEM SIZING

ARRAY AREA	AZIMUTH	TILT	SIZE	COUNT	ARRAY SIZE (KW dc)
LOT	121°/211°	5°	330	3636	1199.88
TOTAL				3636	1199.88



- NOTES:**
- THIS CONCEPTUAL PLAN IS BASED SOLELY ON AERIAL PHOTOGRAPHS AND PROVIDED PLANS. NO SITE VISITS WERE CONDUCTED.
 - EXISTING POOR EQUIPMENT LOCATIONS ARE APPROXIMATE.
 - INVERTERS, SWITCHGEAR, AND/OR TRANSFORMERS.
 - LAYOUT SPACING AND LOCATION OF ARRAY AREAS BASED ON CURRENT FIRE CODE. LAYOUT AND SYSTEM SIZE SUBJECT TO CHANGE BASED ON ACTUAL ROOF SURVEY.
 - LOCATION OF GROUND MOUNTED EQUIPMENT MAY EFFECT LOCATION OF WALKWAYS AND ARRAY AREAS.
 - NO VERIFICATION OF SOIL CAPACITY WAS CONDUCTED. A FULL GEOTECHNICAL.
 - QUANTITY, SIZE, AND LOCATION OF CONCRETE FOUNDATIONS ARE APPROXIMATIONS ONLY. A STRUCTURAL ANALYSIS IS SUGGESTED FOR FOUNDATION DESIGN.
 - CONCRETE FOUNDATIONS SHALL BE PLACED WITHIN CROSSHairs OF PARKING STRIPES WHENEVER POSSIBLE.



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WHITMAN
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115 ROSA PARKS BOULEVARD
NASHVILLE, TN 37203
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NO.	DATE	REVISION DESCRIPTION
1		REVISION 1: SUBMITTAL

PROJECT:
PORT OF LOS ANGELES
CRUISE TERMINAL SOLAR
N FRONT STREET
SAN PEDRO, CA 90731

DATE: 4.1.199.88kW (DC)
SYSTEM: GROUND MOUNTED PHOTOVOLTAIC SYSTEM

DESIGNED BY: CONCEPTUAL PLAN

CHECKED BY: CP-1

SHEET NO.: 1 OF 1

SITE INFORMATION

SITE NAME/ADDRESS: 860 BARRACODA STREET
LOS ANGELES, CA 90731

PARCEL ID: 744-02-935

APPROX GPS LOCATION: LAT: 33.787814°
LONG: -118.2714°

APPLICANT: HECATE
415 ROSA PARKS BOULEVARD
NASHVILLE, TN 37208

SYSTEM SPECIFICATIONS

SOLAR MODULE: (3.88) 300W HYBRID SOLAR MODULE

RACKING: BALLASTED ROOF MOUNT 10° TILT

KEY MAP



APPROXIMATE PV SYSTEM SIZING

ARRAY AREA	SOLAR MODULE AZIMUTH	TILT	SIZE	COUNT	ARRAY SIZE (KW dc)
ROOF A	180°	10°	330	3888	1283.04
TOTAL				3888	1283.04



- NOTES:**
1. THESE CONCEPTUAL PLANS ARE BASED ON AERIAL PHOTOGRAPHS AND PROVIDED PLANS. NO SITE VISITS WERE CONDUCTED.
 2. EXISTING ROOF EQUIPMENT LOCATIONS ARE APPROXIMATE.
 3. GROUND MOUNTED ELECTRICAL EQUIPMENT NOT SHOWN ON THIS PLAN. MAY INCLUDE EQUIPMENT NOT SHOWN ON THIS PLAN.
 4. LAYOUT SPACING AND LOCATION OF ARRAY AREAS BASED ON CURRENT FIRE CODE AND SYSTEM DESIGN TO INCLUDE CABLE TRAY AND OR CONDUIT LOCATIONS AND ABOVE AREAS.
 5. NO VERIFICATION OF STRUCTURAL CAPACITY WAS CONDUCTED. A FULL STRUCTURAL ANALYSIS IS SUGGESTED.
 6. NO VERIFICATION OF STRUCTURAL CAPACITY WAS CONDUCTED. A FULL STRUCTURAL ANALYSIS IS SUGGESTED TO CHANGE.



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REVISIONS

NO.	DATE	REVISION DESCRIPTION
1	11/08/14	CONCEPTUAL PLAN

PROJECT:
PORT OF LOS ANGELES
POLA BUILDING #8 SOLAR
950 BARRACODA STREET
LOS ANGELES, CA 90731

CLIENT:
HECATE ENERGY
115 ROSA PARKS BOULEVARD
NASHVILLE, TN 37208
hecateenergy.com

DESIGNED BY: [Name]
CHECKED BY: [Name]
DATE: 11/08/14

PROJECT NO.: CP-1

SHEET NO.: 1 OF 1

B-2

LEGAL DESCRIPTION

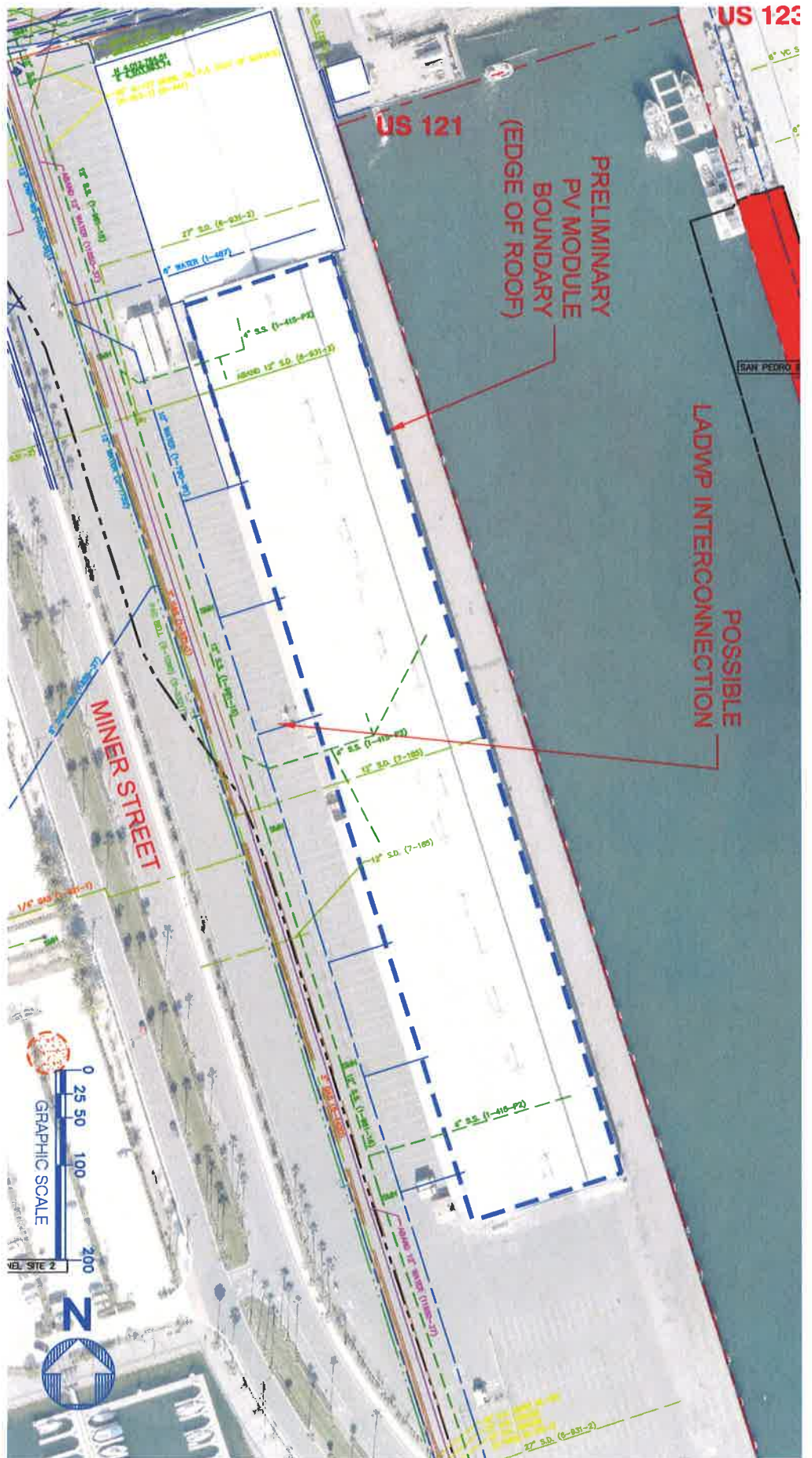
Section A. Legal Description of Specific Sites. Hecate shall provide to the Harbor Department no later than June 15, 2016 legal descriptions of the twelve (12) sites depicted in this Exhibit B-2. Harbor Department will verify such legal descriptions pursuant to Section B below.

Section B. Verification. Harbor Department will verify Hecate's legal descriptions no later than June 23, 2016 and upon verification, such legal descriptions shall become part of this Exhibit B-2 without any further action from the Board or Council. Harbor Department staff shall provide Hecate a written confirmation verifying the legal descriptions and such written confirmation shall become a part of this Exhibit B-2 without any further action from Board or Council. In the event Hecate fails to provide to City all twelve (12) legal descriptions by June 15, 2016, the Harbor Department shall be entitled to extend the June 23 deadline described herein equal to the total number of days of Operator's delay.

Section C. No Ownership or Transfer of Ownership of Fee, Title, or Possessory Interest. Operator agrees and acknowledges verification and incorporation of the legal descriptions set forth in Section A above in this Exhibit B-2 shall not convey any fee, title, possessory interest, or ownership rights, or transfer of fee, title, or ownership by City to Operator. Ownership of the Site Location and any and all fee title and possessory interest shall remain with the City at all times during the Term of this Agreement. Furthermore, said verification and incorporation shall not entitle the Operator to file any claim, lien, or notice against any real property owned by City.

Section D. Utility Easement. The parties acknowledge and agree that Operator intends to use the legal descriptions set forth in Section A above to record a non-exclusive Utility Easement which has been granted as described in Article 1, Section 3.3.1 of this Agreement and Exhibit F only in order to obtain financing to discharge its obligations under this Agreement. Verification and incorporation of the legal descriptions shall not act as a guarantee of such recording by the Los Angeles County Recorder's Office. Operator agrees that any act to record the non-exclusive Utility Easement shall be the sole responsibility of Operator and such recording must be in accordance with the terms and conditions set forth in this Agreement. In the event Operator attempts to record the non-exclusive Utility Easement, Operator acknowledges and agrees to include in any recording, as set forth in the terms and conditions of the Agreement, the respective Utility Easement is non-exclusive and for the purposes of installing utility equipment which is reasonably necessary for Operator to operate and interconnect the PV Systems only, and at the expiration or termination of this Agreement (whichever occurs first), the non-exclusive Utility Easement, in its entirety, shall return back to the City and only the City as sole owner.

EXHIBIT F-2
(ATTACHED)



US 123

US 121

PRELIMINARY
PV MODULE
BOUNDARY
(EDGE OF ROOF)

POSSIBLE
LADWP INTERCONNECTION

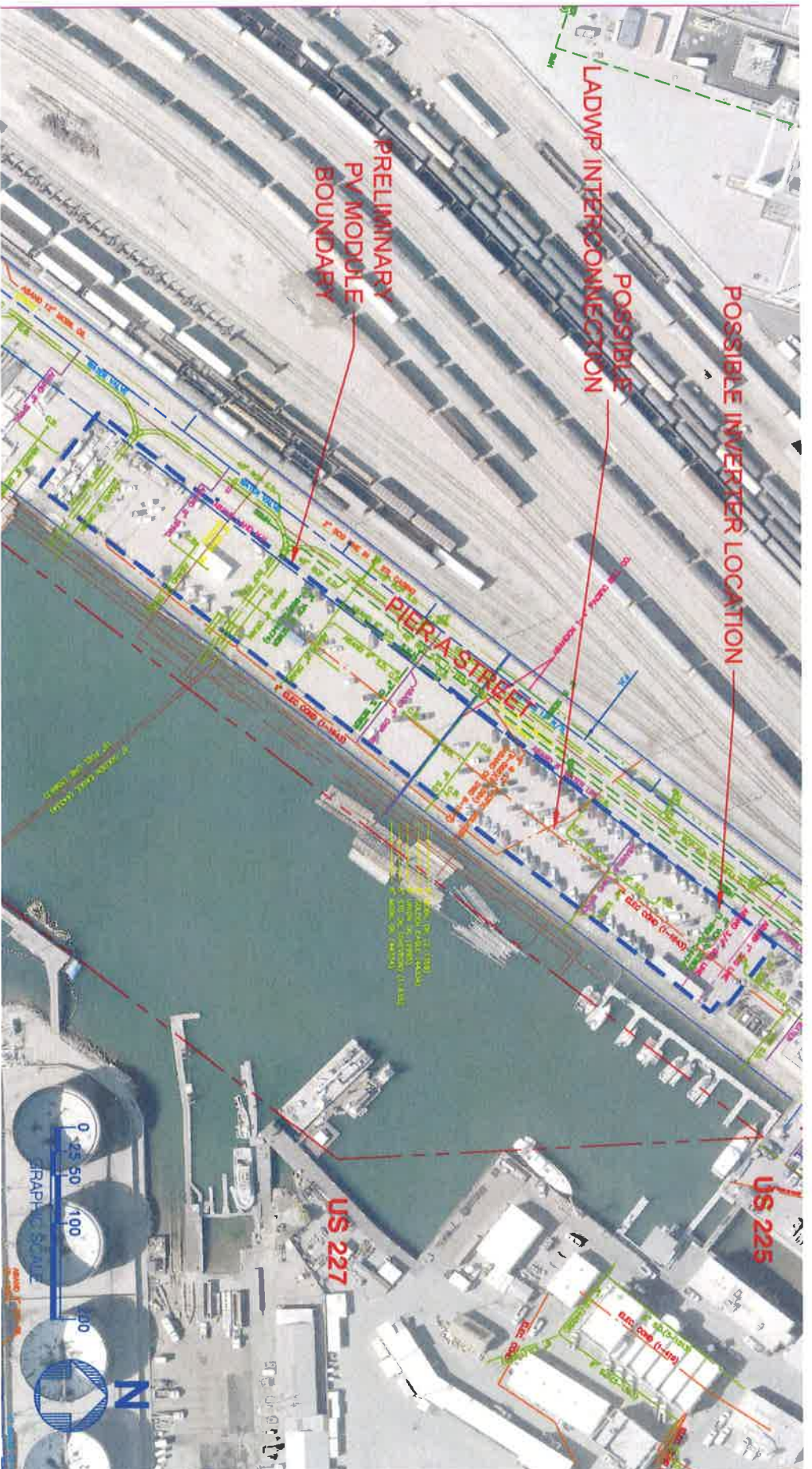
MINNER STREET



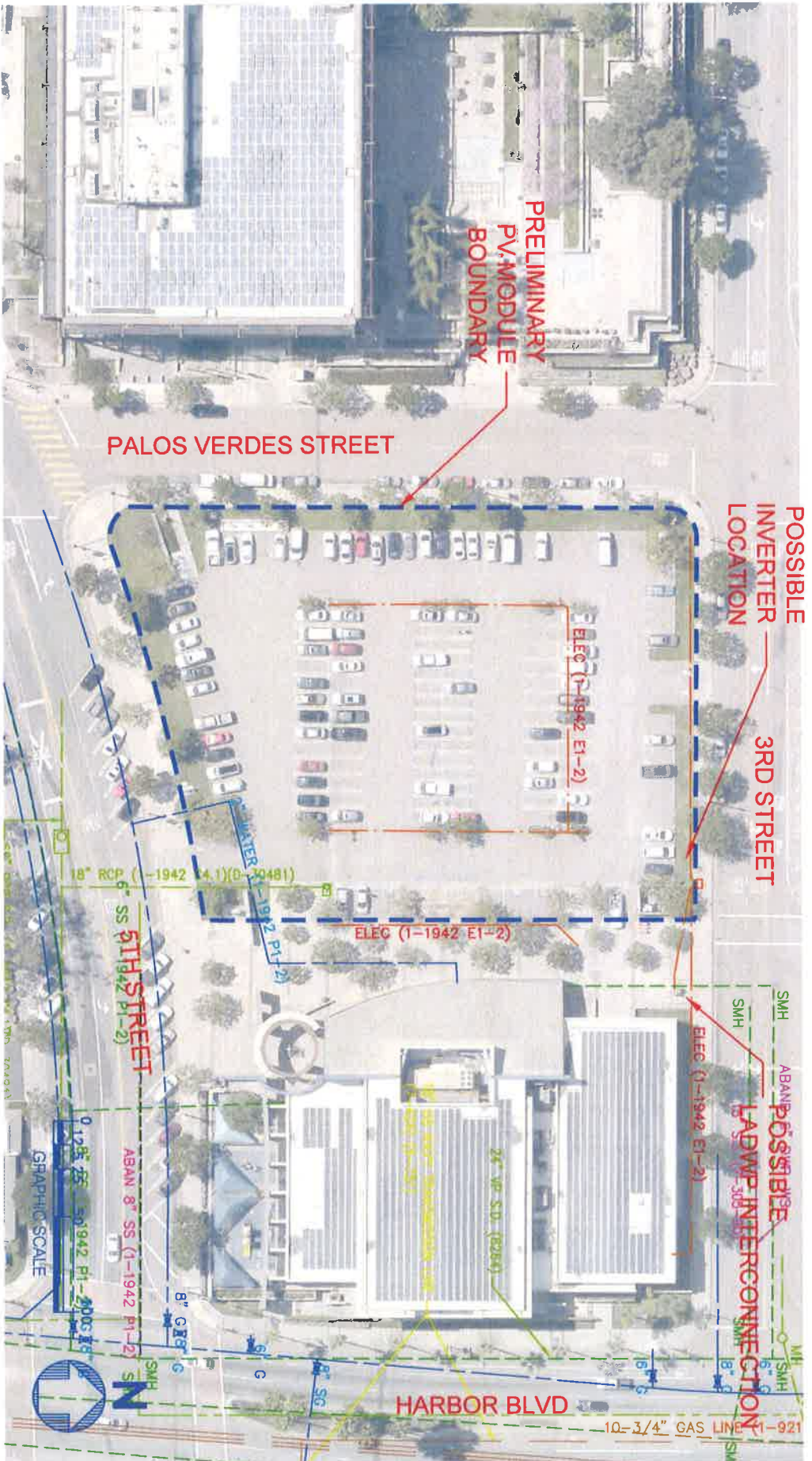
SITE LOCATION: BERTHS 54-55 CARGO SHED

EXHIBIT F-2

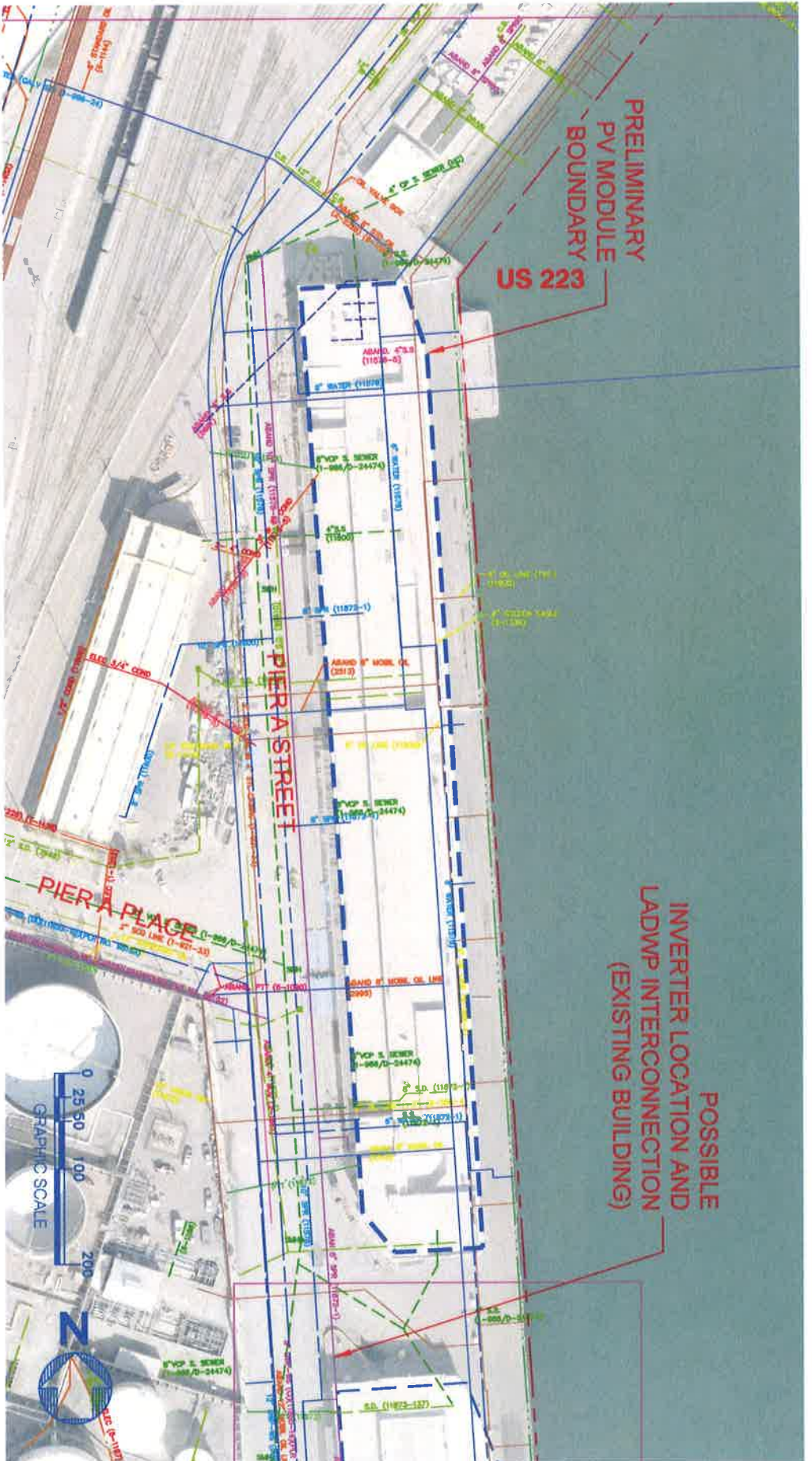
EXHIBIT F-2



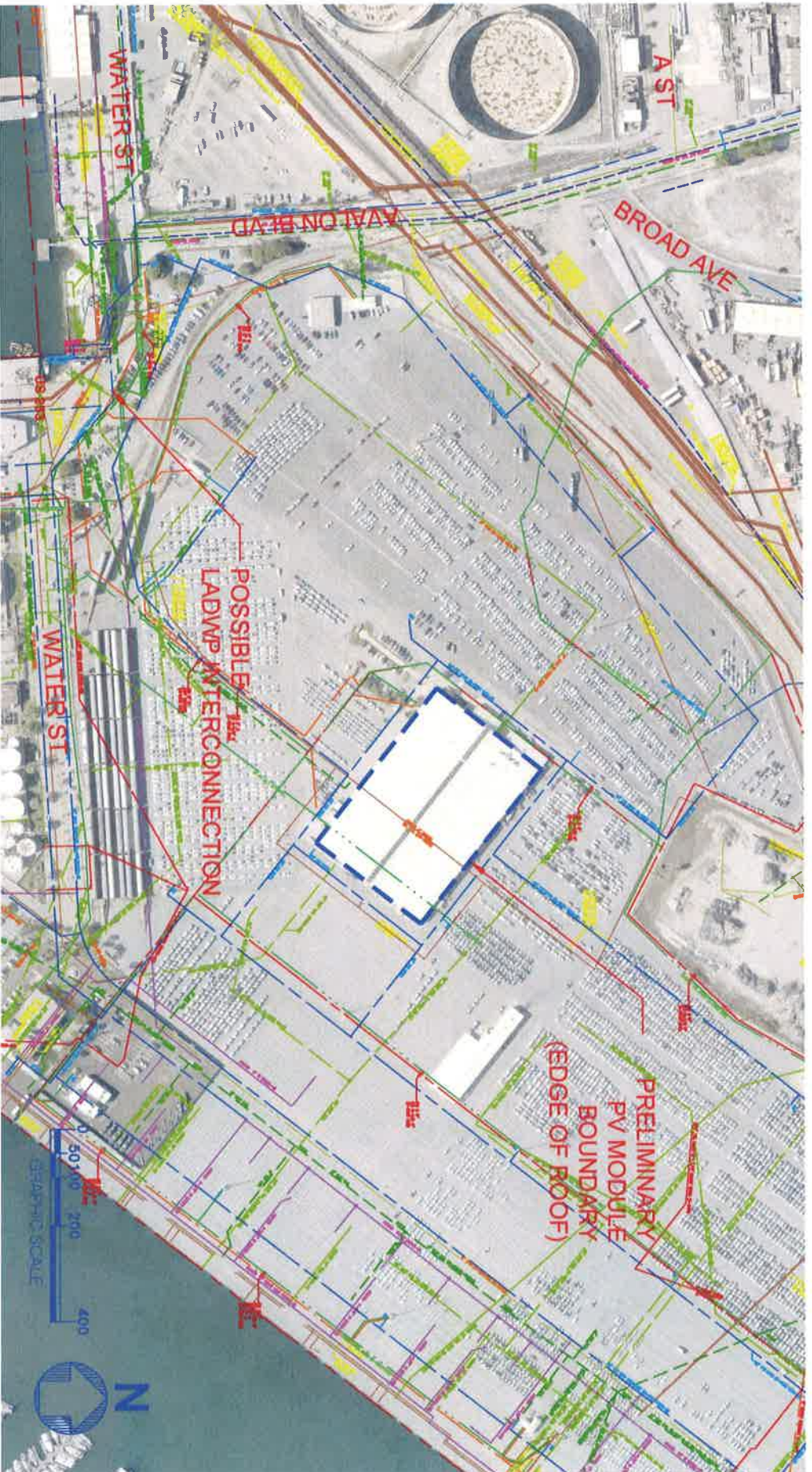
SITE LOCATION: BERTH 161 C&M EMPLOYEES PARKING LOT



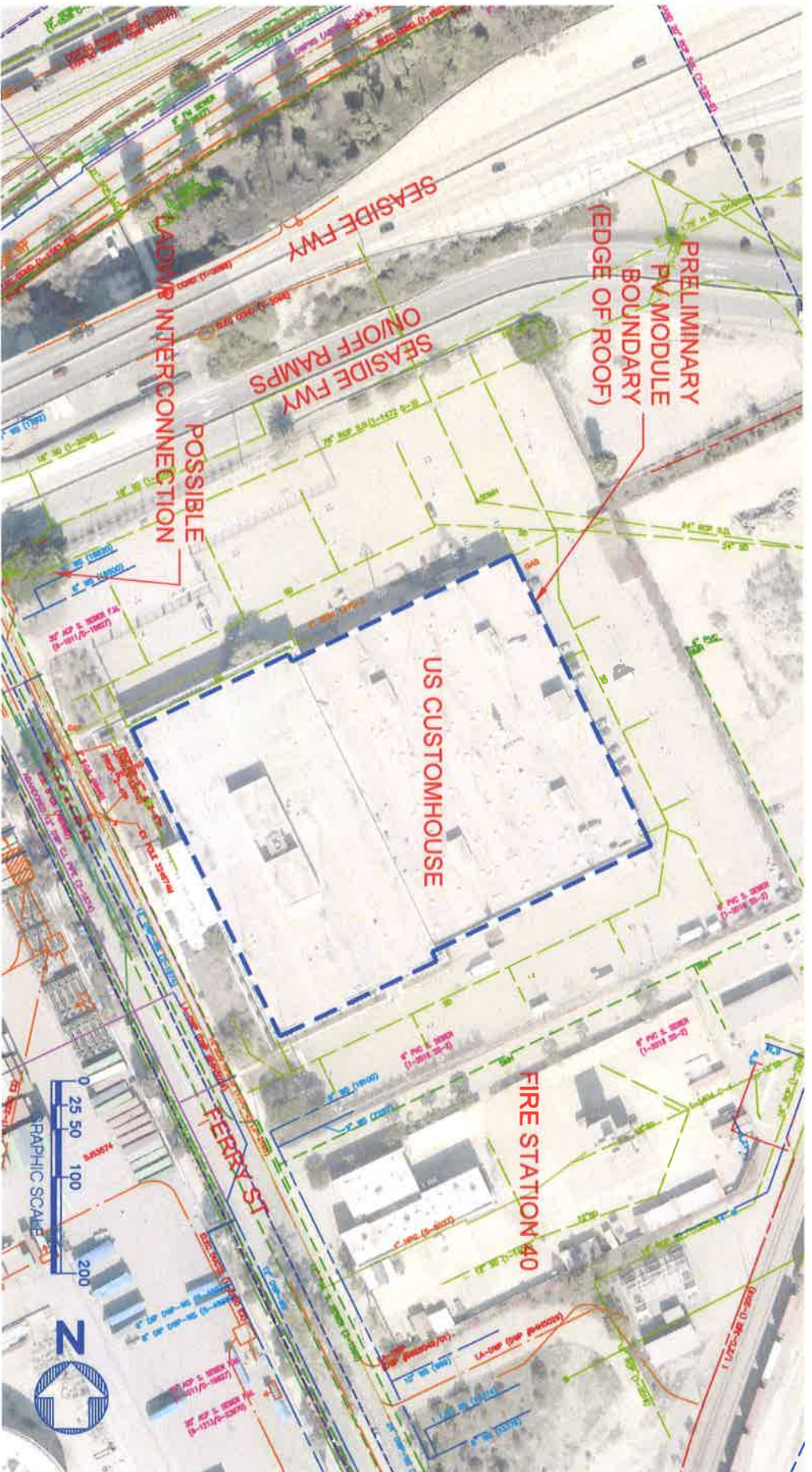
SITE LOCATION: PARKING LOT AT LIBERTY HILL PLAZA



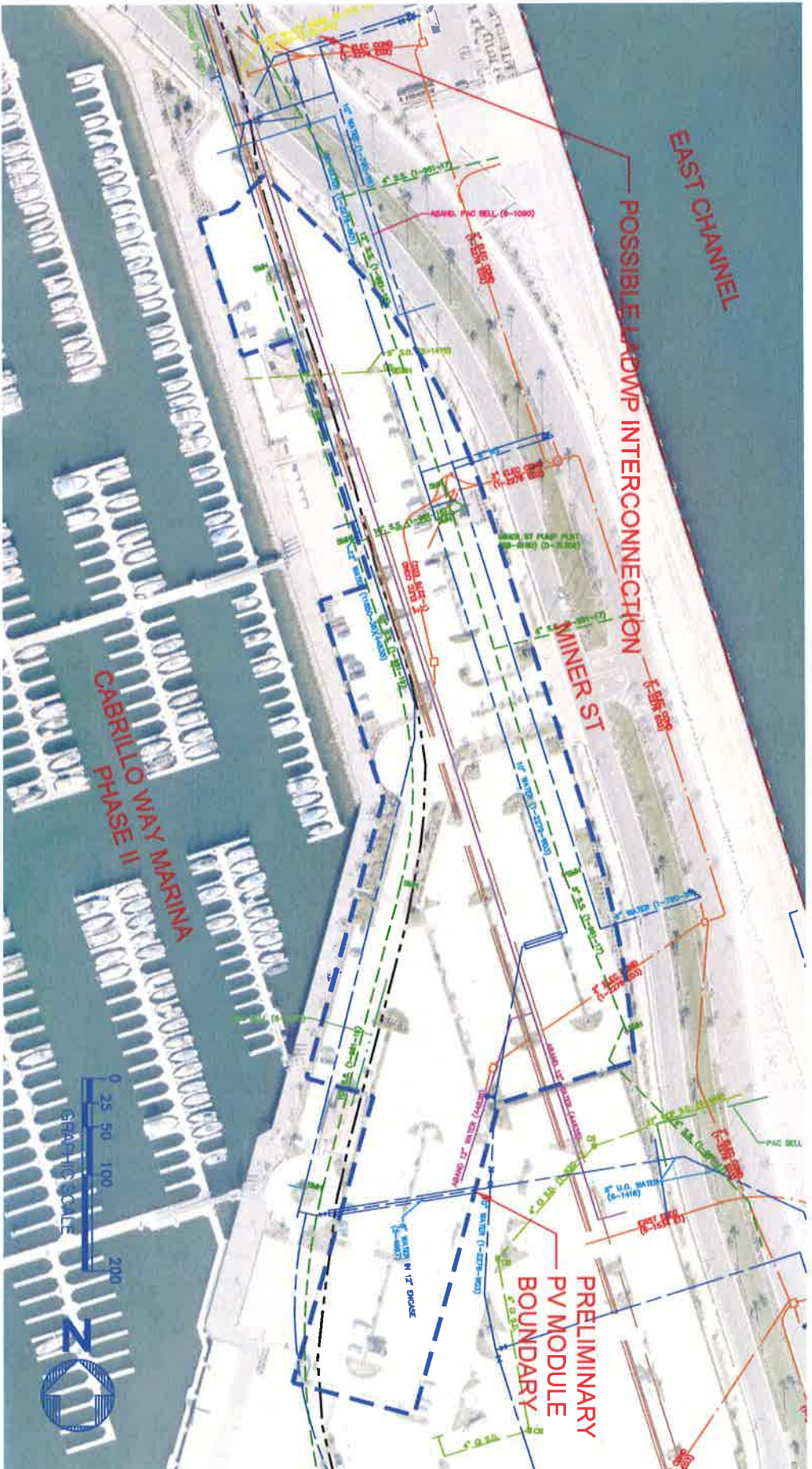
SITE LOCATION: BERTHS 154-155 CARGO SHEDS



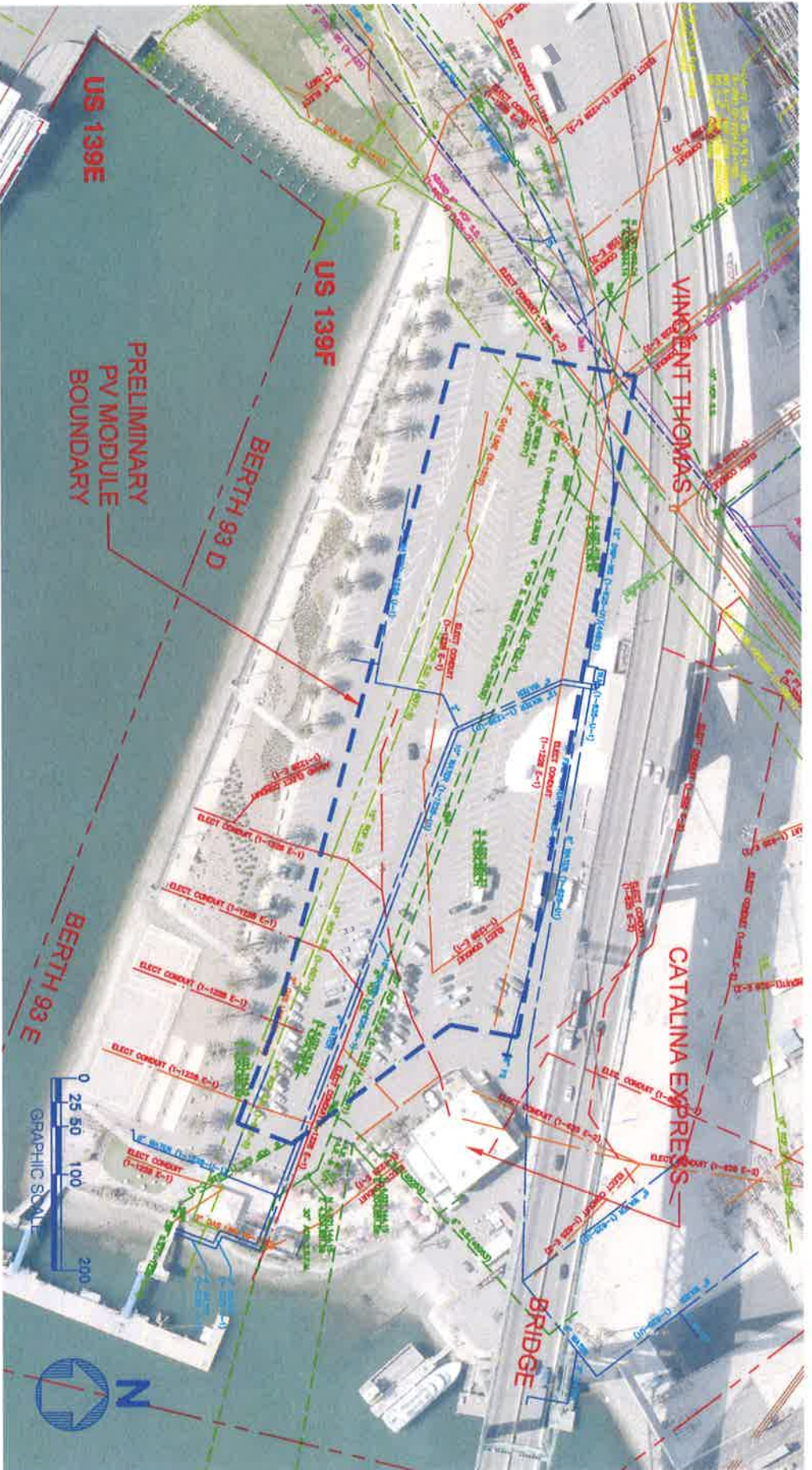
SITE LOCATION: BERTHS 195-199 OPERATIONS & PROCESSING BUILDING



SITE LOCATION: US CUSTOMHOUSE



SITE LOCATION: PARKING LOT AT CABRILLO WAY MARINA - SOUTH



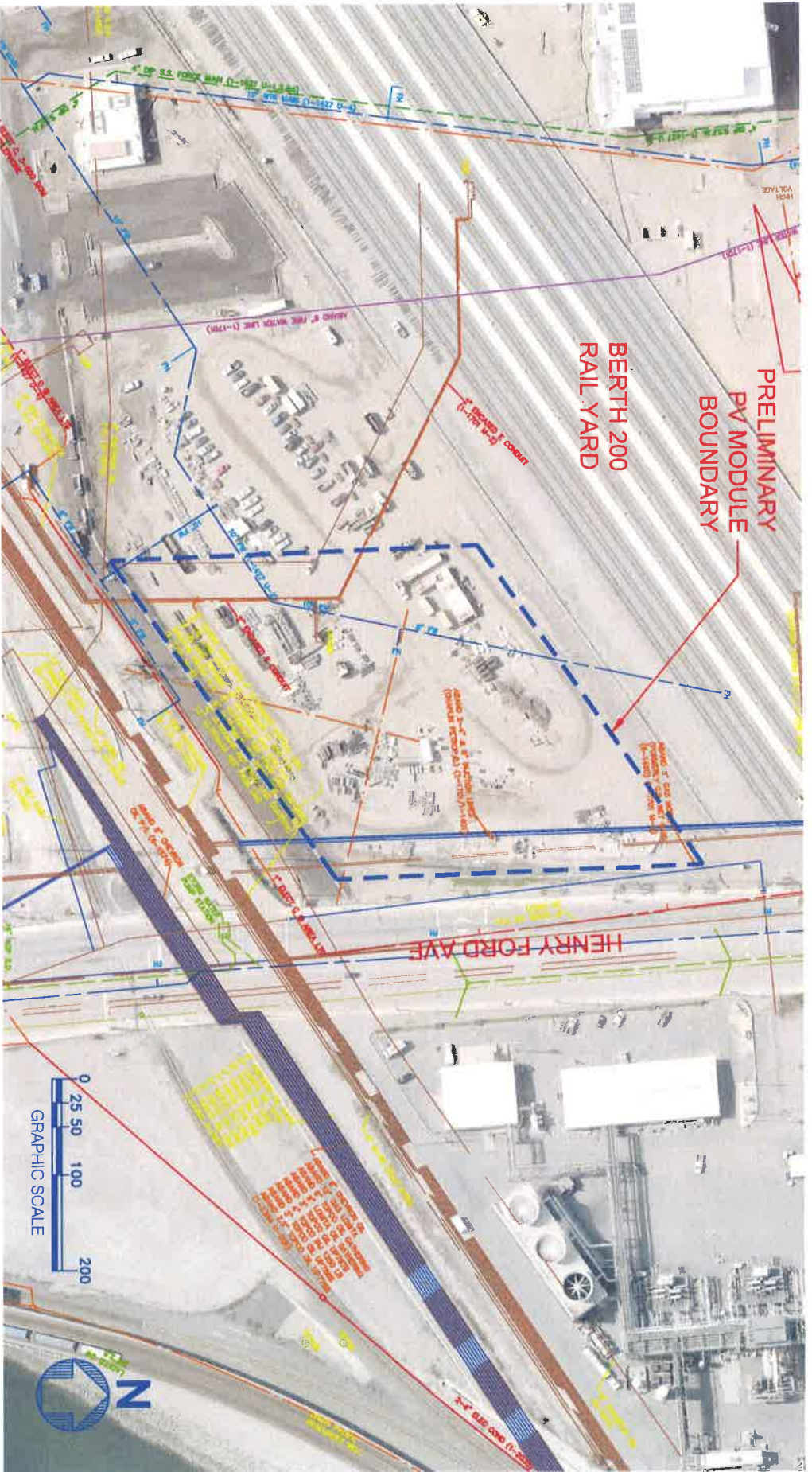
SITE LOCATION: BERTHS 93 D & E PARKING LOT



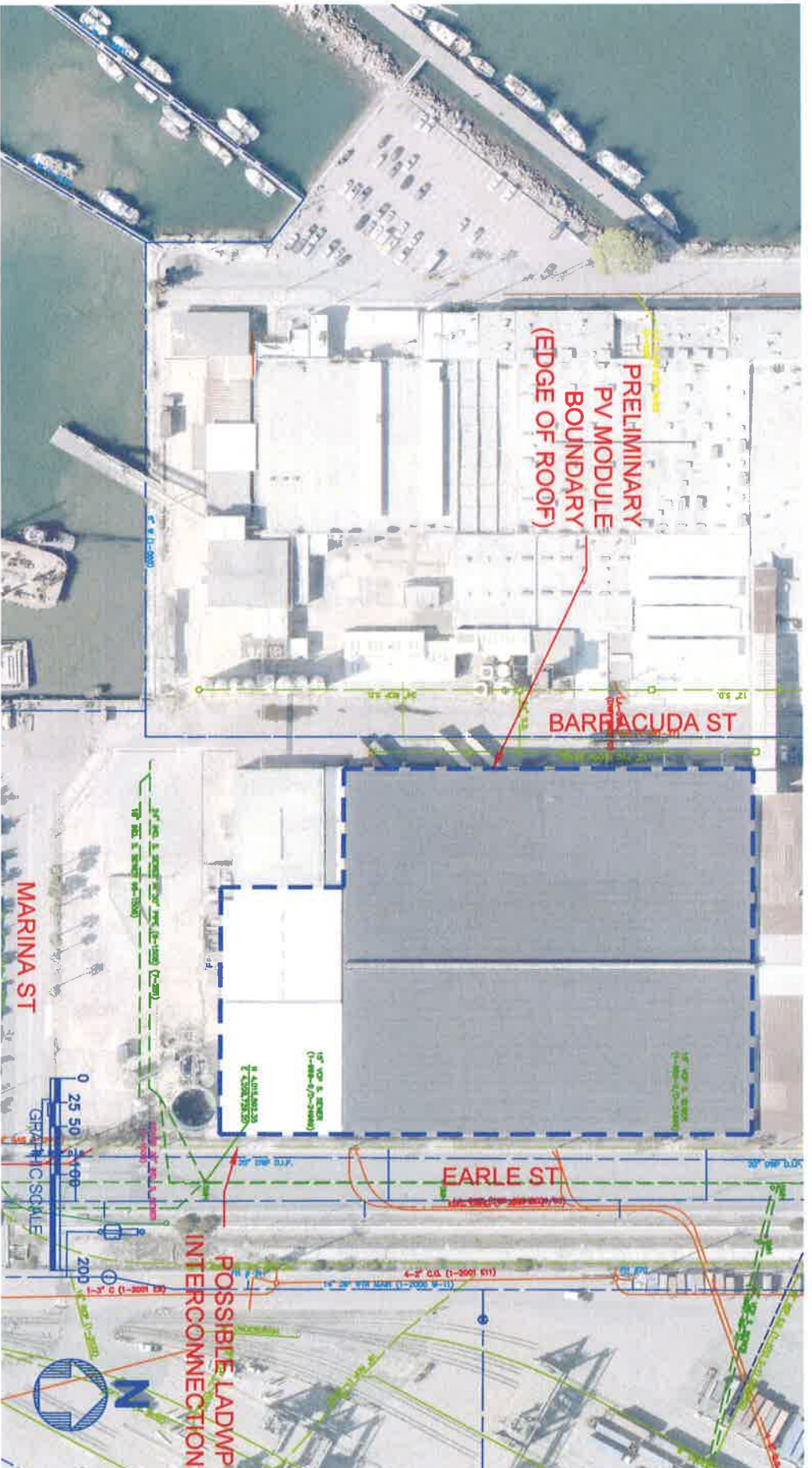
EXHIBIT F-2

SITE LOCATION: PARKING LOT AT WORLD CRUISE CENTER

EXHIBIT F-2



SITE LOCATION: ILWU LOCAL 13 DISPATCH HALL SURPLUS PARKING LOT



SITE LOCATION: BUILDING 8