

MEMORANDUM OF UNDERSTANDING

BY AND BETWEEN

THE HARBOR DEPARTMENT AND

THE PUBLIC WORKS DEPARTMENT

THIS MEMORANDUM OF UNDERSTANDING ("MOU") is made by and between the City of Long Beach Harbor Department ("Harbor") and the City of Long Beach Department of Public Works ("Public Works") with regard to a grant award under the Community Grants Program Community Infrastructure Grant to support the construction of the City of Long Beach's Municipal Urban Storm Water Treatment ("LB-MUST") Project.

1. This MOU is made with reference to the following facts and objectives which the parties hereby acknowledge to be true and correct:

(a) City has developed the Community Infrastructure Grant Program to provide funding for projects that will mitigate the environmental impacts of operations associated with the Port of Long Beach.

(b) Harbor has developed guidelines for the Community Infrastructure Grant Program that describe the types of projects for which grant funding will be available and the criteria that will be applied to determine how grant funds will be awarded.

(c) Public Works submitted a project proposal for which it seeks grant funding from the Community Infrastructure Grant Program to acquire and install CUF and PhotoCat process piping, fittings, and accessories, and break tanks, in the City of Long Beach.

(d) Harbor wishes to provide grant funds for the project described in this MOU under the terms set forth in this MOU, and Public Works wishes to use these funds for such project.

2. Public Works shall use the grant funds provided by this MOU to acquire and install CUF and PhotoCat process piping, fittings, and accessories, and break

OFFICE OF THE CITY ATTORNEY  
CHARLES PARKIN, City Attorney  
333 West Ocean Boulevard, 11th Floor  
Long Beach, CA 90802-4664

1 tanks, in accordance with the Community Grant Scope of Work set forth in Exhibit "A" which  
2 is incorporated herein by reference as though set forth in full ("Project"). Public Works shall  
3 complete the Project in accordance with Exhibit "A", Milestones and Disbursement  
4 Schedule, set forth in Exhibit "B" which is incorporated herein by reference, as well as  
5 generally accepted professional and technical standards currently in effect.

6 3. Public Works shall use its best efforts to complete the Project no later  
7 than December 31, 2022. If Public Works is unable to complete the Project by the date set  
8 forth in this paragraph 3, Public Works shall so notify Harbor, and Harbor shall agree to  
9 any reasonable extension of time that will allow Public Works to complete the Project;  
10 provided, however, that Harbor shall have the right to terminate this MOU in accordance  
11 with paragraph 9 if the Project is not completed within three (3) years after Harbor executes  
12 this MOU.

13 4. The term of this MOU shall be deemed to have commenced on the  
14 date Harbor executes this MOU and, subject to the provisions of paragraph 9, shall  
15 terminate upon receipt by Harbor of the final report required by Exhibit "B", except that the  
16 requirements set forth in paragraph 7(b) shall survive the termination of this MOU.

17 5. All disbursements of funds pursuant to this MOU shall be made in  
18 accordance with the schedule set forth in Exhibit "B" to this MOU. In connection with each  
19 disbursement, Public Works shall submit to Harbor a detailed statement with supporting  
20 documentation of all expenses incurred by Public Works in connection with the Project.  
21 Before Harbor processes such statement for payment, Harbor shall have the right to verify  
22 the amounts requested and that the portion of the Project for which the disbursement is  
23 requested has been completed as provided in this MOU. All funds received by Public  
24 Works shall be used only for the Project in the manner set forth in Exhibit "B" and in  
25 accordance with the terms of this MOU.

26 6. The total amount which shall be payable by Harbor to Public Works  
27 for the Project during the term of this MOU shall not exceed \$1,000,000.

28 ///

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

7. Public Works shall:

(a) as set forth in Exhibit "B", submit to Harbor progress reports with payment disbursement requests and supporting documentation or, if a reimbursement request does not occur within the given quarter, a progress report shall be submitted quarterly each January 15 for the period October 1 through December 31, April 15 for the period January 1 through March 31, July 15 for the period April 1 through June 30, and October 15 for the period July 1 through September 30, until Project is completed and all funds due pursuant to the contract have been disbursed, and a final report on the Project no later than thirty (30) days following Project completion; and

(b) maintain all records related to the Project for at least one (1) year following the expiration or termination of the MOU. During this period, Harbor or a third party designee shall have the right to conduct an audit of the Project and all records related to the Project.

8. Public Works agrees that all public work (as defined in California Labor Code Section 1720) performed pursuant to this contract (the "work") shall comply with the requirements of California Labor Code Sections 1720 et seq. In all bid specifications, contracts and subcontracts for the work, Recipient (or its general contractor, in the case of subcontracts) shall obtain the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in this locality for each craft, classification or type of worker needed to perform the work, and shall include such rates in the bid specifications, contract or subcontract. Such bid specifications, contract or subcontract must contain the following provision:

It shall be mandatory for the contractor to pay not less than the said prevailing rate of wages to all workers employed by the contractor in the execution of this contract. The contractor expressly agrees to comply with the penalty provisions of California Labor

1 Code Sections 1775, 1776, and 1813, and the payroll record keeping  
2 requirements of California Labor Code Section 1771.4.

3 Recipient shall indemnify and hold City harmless from and  
4 against any and all claims, demands, causes of action, obligations,  
5 damages, liabilities, costs and expenses, including reasonable  
6 attorneys' fees, that may be asserted against or incurred by City with  
7 respect to or in any way arising from Recipient's compliance with  
8 or failure to comply with applicable laws, including all applicable  
9 federal and state labor standards including, without limitation, the  
10 prevailing wage requirements in Labor Code Sections 1720 and  
11 1771, certified payroll requirements in Labor Code Section 1771.4,  
12 and Department of Industrial Relation's contractor registration  
13 requirement in Labor Code Sections 1725.5 and 1771.1.

14 9. Public Works must apply for any and all rebates available for the  
15 Project from any governmental agency or utility. Any rebate funding received by Public  
16 Works in connection with the Project shall be used to install CUF and PhotoCat process  
17 piping, fittings, and accessories, and/or break tanks, in addition to what is included in the  
18 Project.

19 10. If Public Works fails to comply with any term or provision of this MOU,  
20 including but not limited to the requirements of Exhibits "A" and "B" within the time specified  
21 by this MOU, Harbor shall have the right to terminate this MOU, effective immediately, upon  
22 written notice to Public Works. If the MOU is so terminated prior to completion of the  
23 Project, Public Works shall be reimbursed for expenses incurred but not yet disbursed  
24 through the effective date of termination. In no event shall this amount exceed the amount  
25 set forth in paragraph 6. Public Works agrees to accept such amount, plus all amounts  
26 previously paid, as full payment and satisfaction of all obligations of Harbor to Public  
27 Works.

28 11. Public Works represents and warrants that the Project is not a

1 mitigation measure specified in an environmental impact report or mitigated negative  
2 declaration prepared pursuant to the California Environmental Quality Act, nor is it required  
3 by any law, regulation, permit, court order, order issued by an administrative agency,  
4 memorandum of understanding or other legally binding document.

5           12. Any notification to be given hereunder by Public Works to Harbor shall  
6 be given to the Executive Director of Harbor. Any notification to be given hereunder by  
7 Harbor to Public Works shall be given to the Director of Public Works. Any notification from  
8 one party to the other shall be in writing.

9           13. Public Works may not, unless it has first obtained the written  
10 permission of Harbor, assign or otherwise alienate any of its rights hereunder, including  
11 the right to payment, or delegate, subcontract or otherwise transfer any of its duties  
12 hereunder. Any attempted assignment or delegation without such consent shall be void,  
13 and any assignee or delegate shall acquire no right or interest by reason of such attempted  
14 assignment or delegation.

15           14. In the event of any conflict or ambiguity between this MOU and any  
16 exhibit hereto, the provisions of this MOU shall govern, and in the event of any conflict or  
17 ambiguity between Exhibits "A" and "B" or any other documents incorporated by reference  
18 in this MOU, the provisions of Exhibits "A" and "B" shall govern.

19 ///  
20 ///  
21 ///  
22 ///  
23 ///  
24 ///  
25 ///  
26 ///  
27 ///  
28 ///

OFFICE OF THE CITY ATTORNEY  
CHARLES PARKIN, City Attorney  
333 West Ocean Boulevard, 11th Floor  
Long Beach, CA 90802-4664

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

15. This MOU shall not be amended except in an amendment prepared by the City Attorney and executed by Harbor and Public Works.

12/3, 2019

CITY OF LONG BEACH, Public Works  
Department

By:

  
Director of Public Works Department

PUBLIC WORKS

The foregoing document is hereby approved as to form.

CHARLES PARKIN, City Attorney

11-21, 2019

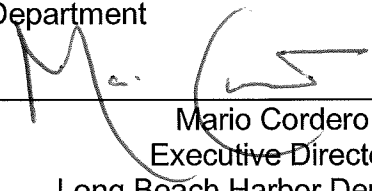
By:

  
Amy R. Webber, Deputy City Attorney

CITY OF LONG BEACH, Harbor  
Department

Dec 16, 2019

By:

  
Mario Cordero  
Executive Director  
Long Beach Harbor Department

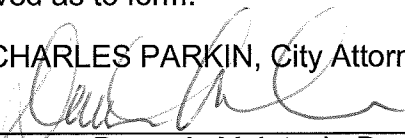
HARBOR

The foregoing document is hereby approved as to form.

CHARLES PARKIN, City Attorney

December 5, 2019

By:

  
Dawn A. McIntosh, Deputy

## EXHIBIT A

### City of Long Beach Public Works LB-MUST Facility Community Grant Scope of Work

#### 1.0 PROJECT DESCRIPTION

The **Long Beach Municipal Urban Stormwater Treatment (LB-MUST)** Project is a multi-beneficial project that has exceptional potential to facilitate transformation of West Long Beach and the Los Angeles (LA) River. The LB-MUST program will intercept polluted non-stormwater runoff and a percentage of the first flush of a storm flows generated within the Long Beach urban watershed (covering/treating over 12,000 acres) thereby preventing the transportation of pollution into the LA River. The area benefiting by the project is within the **Community Grant Program Priority Funding Zone**. (See Figure 1: Project Location.) The intercepted flows will be conveyed to the LB-MUST facility that is proposed immediately north of the existing Shoemaker Bridge, on the east side of the LA River. (See Figure 2: Project Concept.)

#### Purpose and Need

The purpose and need of the LB-MUST facility are to meet the following identified objectives and goals:

- ✓ **Clean the LA River:** Water Quality Compliance for the LA River has become a major focus for the City. It is the goal of the City to use this project as an example of water quality compliance in the LA River and Reach 1 of the Estuary to encourage upstream stakeholders and agencies to take similar strides. The main focus is to prevent further pollution from entering the LA River through storm drain runoff.
- ✓ **Meet Permit Requirements:** The Federal Water Pollution Control Act Amendments of 1972 developed the National Pollutant Discharge Elimination System (NPDES) Permit Program in order to control water discharge. NPDES permits place limits on the amount of pollutants present in water discharge to existing state waters in order to protect aquatic life and human health.
  - The City is mandated to reduce stormwater pollution discharges into the LA River. Violations of the LA River Total Maximum Daily Load (TMDL) can result in fines up to \$10,000 per day per violation, in addition to other fines and required reconciliation work assessed by the LA Regional Water Quality Control Board, State Water Resource Control Board and U.S. Environmental Protection Agency.
  - To meet Order No R4-2014-0024, NPDES Permit Number CAS004003, the City needs to continue to invest capital improvements within the watershed basis tributary to the LA River to come into compliance with these requirements.

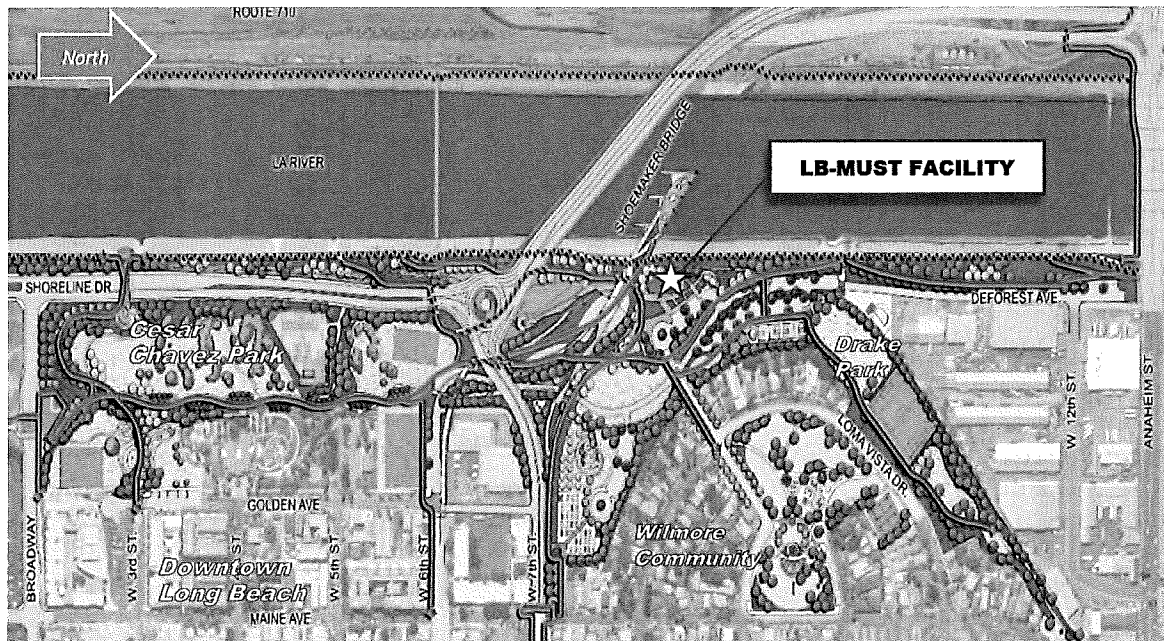
#### Scope of Work

The treatment facility will consist of an integrated treatment system consisting of ceramic ultrafiltration (CuF) and Photo-CAT ultraviolet advanced oxidation (UV/AOP) (see attached figures). Funding from the Port Community Grant Program would be used for the purchase and installation of process piping, fittings, and accessory equipment (e.g. spare parts, chemical totes, and break tanks) for the CuF and Photo-CAT. A schematic of these components are shown in Figure 3 (General Process Flow Diagram).

The integrated treatment system will treat urban runoff of total suspended solids, turbidity, oil and grease, metals, pathogens, and dissolved organics. The CuF is a silicon carbide ceramic membrane that removes total suspended solids, metals, turbidity, pathogens, oil and grease, and various dissolved organics (Figure 4). One CuF has the capacity to be able to process 1 million gallons per day (1 MGD). The Photo-CAT (Figure 5) is another water purification treatment system that destroys dissolved chemicals such as pesticides. The ancillary processes for these treatment systems include process pumping, process storage tanks, chemical feeding, and air supply.

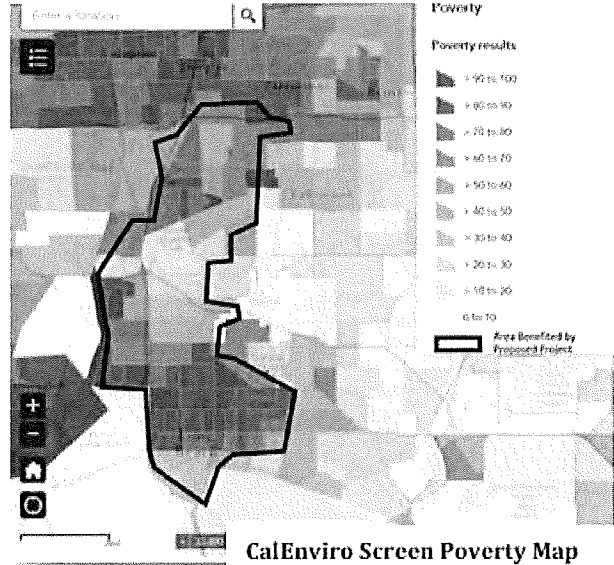
## 2.0 ENVIRONMENTAL BENEFITS

The LB-MUST Project's implementation will renovate the existing conditions of the underground storm drain systems by restoring and protecting the water quality of the LA River, the LA River estuary and the City's beaches. The area chosen for the LB-MUST Project provides relief to a densely populated area in the form of parks, wetlands and additional greening along the LA River. Treated waters produced by the project will be used to create and sustain the wetlands and to supplement potable water for irrigation of parks, parkways and riparian habitat within Cesar Chavez/Drake Park. The LB-MUST Project is one of major connections to the LA River Regional Trail as well as is compatible to the proposed Cesar Chavez/Drake Park Master Plan and Shoemaker Bridge Replacement Project. The integration of stormwater management and open space lends itself to opportunities for education about water conservation, recycling, wetlands, water quality, and the treatment process in addition to the history of Long Beach and the LA River.





The LB-MUST Project will result in benefitting communities that are disproportionately burdened by multiple sources of pollution. The area chosen for the LB-MUST Project provides relief to a densely populated area in the form of parks, wetlands and additional greening along the LA River. The relationship of this project creates the vision of the plan with linkage to the surrounding areas in a constrained urban environment. The figure to the right is the CalEnviro Screen Map depicting the various disadvantaged communities that will positively benefit from the project.



### 3.0 PROJECT STRENGTH

- ✓ **Achieves Projects Objectives.**
  - o Treat approximately 41% of the City’s watershed.
  - o Clean water compliance as mandated and enforced under the NPDES Permits, as well as under the LA River TMDL requirements.
  - o Achieve water quality level equivalent to Title 22 Recycled Water for unrestricted reuse.
- ✓ **Multi-jurisdictional.** The proposed LB-MUST Project ultimately could have the potential to divert and treat 100% of non-stormwater urban runoff that would otherwise discharge into the LA River from the tributary areas within:
  - o City of Long Beach
  - o Caltrans
  - o County of LA
  - o Signal Hill.
  - o City of Paramount
  - o City of Compton

### 4.0 COST EFFECTIVENESS

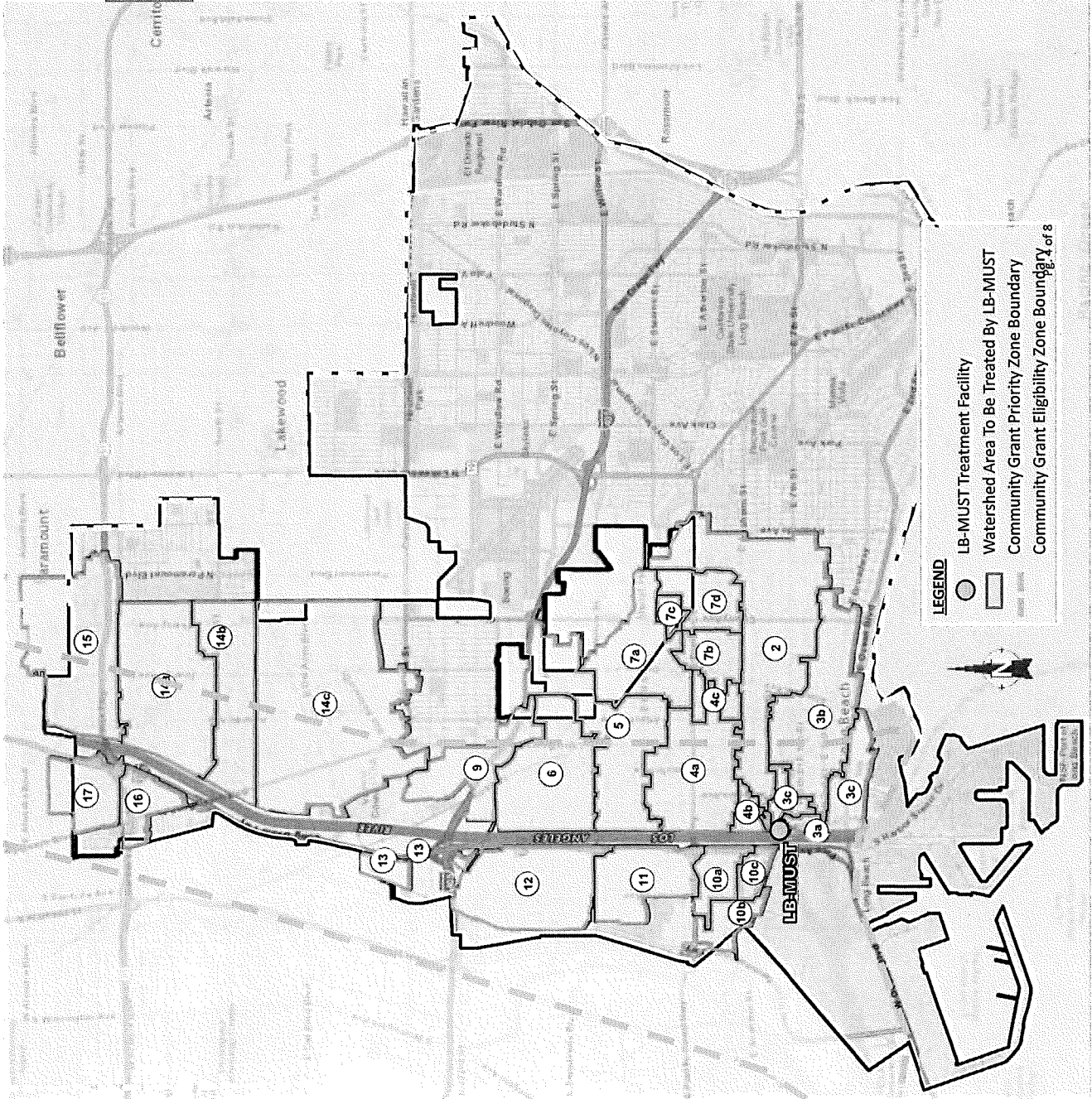
LB-MUST Project has multiple components that makeup the project. The first phase of the project is \$30M which includes building the treatment facility. The requested grant funding from the Port Community Grants Program would be used for the purchase and installation of process piping, fittings, and accessory equipment (e.g. spare parts, chemical totes, and break tanks) for the CuF and Photo-CAT that are components of the treatment facility. The project has multiple components that makeup the project. The City of Long Beach has applied for grants from numerous funding sources. The summary table below provides a listing of the total project funding to date.

Summary of Existing Funding Sources	
Funding Sources	Funding Amount
Caltrans HQ – Stormwater Quality Funds	\$28,000,000
Rivers and Mountains Conservancy – Prop 1 Grant	\$2,000,000
City of Long Beach – Local Funds	\$300,000
Total	\$30,300,000

# LB-MUST Project

- ✓ Located within Community Infrastructure Grant Priority Zone
- ✓ Stormwater Treatment Facility located near Shoemaker Bridge (6<sup>th</sup> St. and Shoreline Dr.)
- ✓ Facility to ultimately treat approximately 41% of the entire City watershed areas (over 12,000 acres) that discharge to the LA River
- ✓ Multi-Beneficial Project -
  - Clean beaches
  - Offset Potable Water Use
  - Urban Greening
  - Wetlands

Figure 1:  
Project Location



# LB-MUST Project

- ✓ Intercept Non-Stormwater Runoff and a Percentage of the “First-Flush” Storm Flows Discharging to LA River
- ✓ Convey Flows Downstream
- ✓ Treat Flows at a Centralized Terminal Facility
- ✓ Removes Trash, Metals, Pathogens, Oil and Grease, and Various Dissolved Organics.

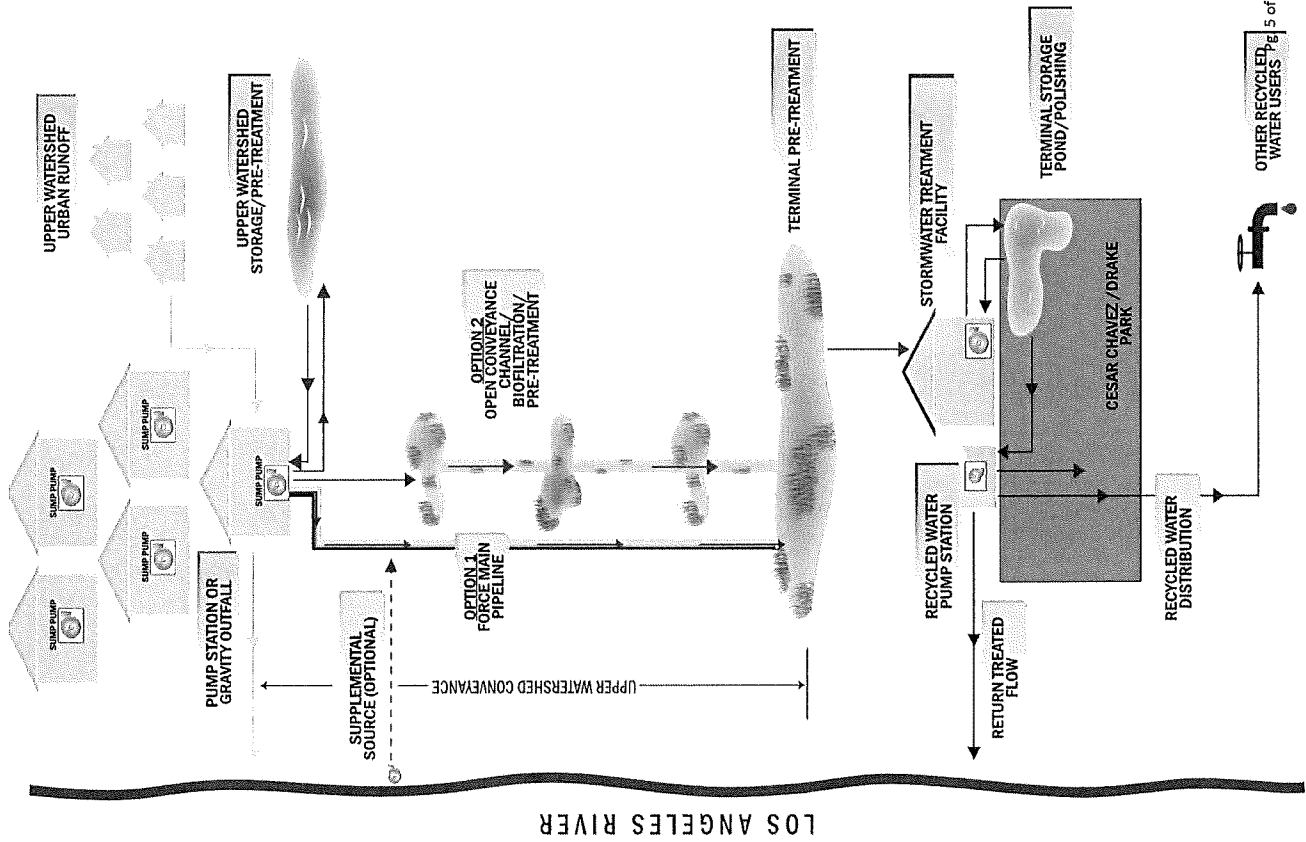


Figure 2:  
Project Concept

REVISIONS	NO.	DATE	BY	DESCRIPTION

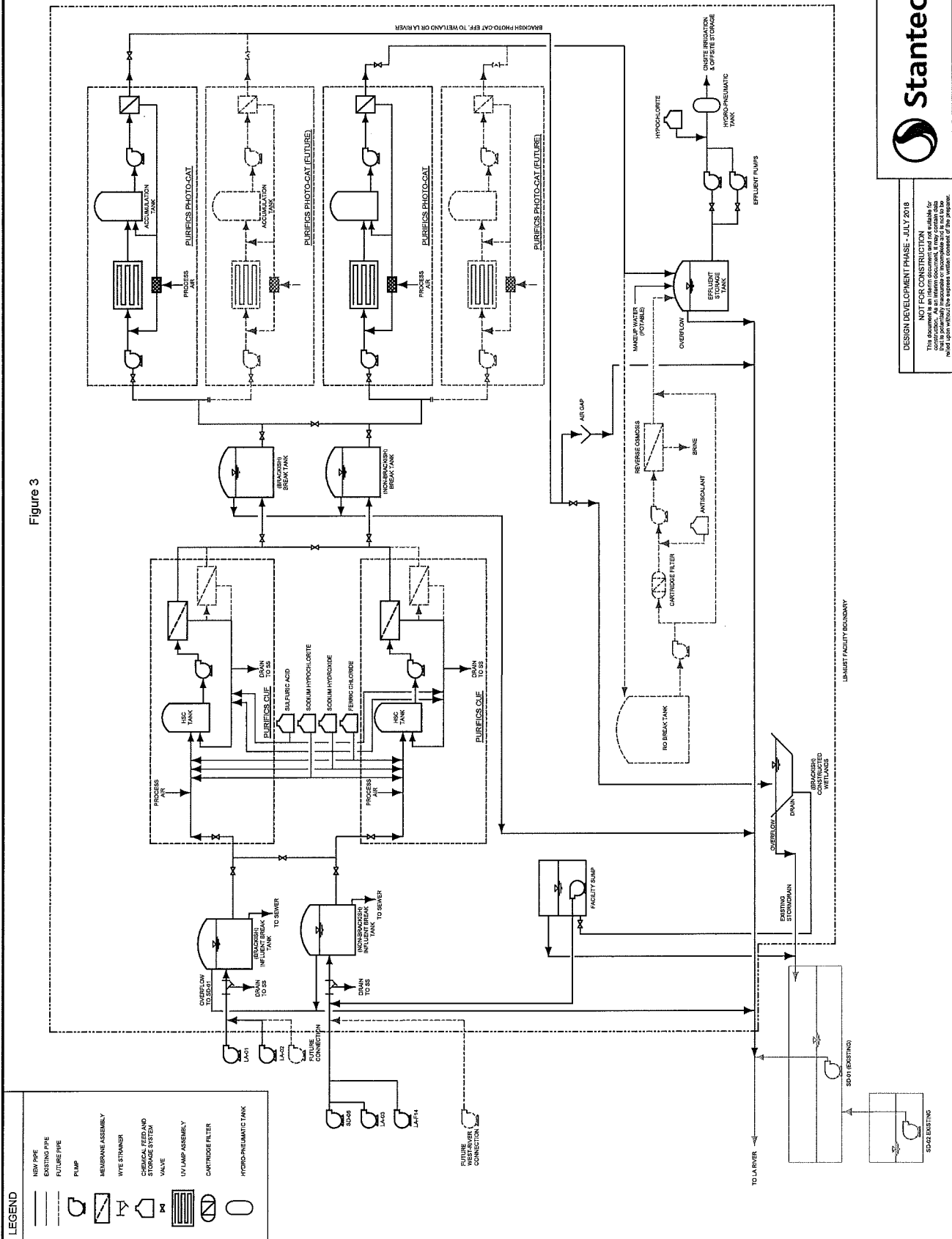


Figure 3



DESIGN DEVELOPMENT PHASE - JULY 2018  
 NOT FOR CONSTRUCTION  
 This document is an interim document and not suitable for final or preliminary procurement or incorporation of it into the design or construction of any project.

JOB NO. PROJECT 300  
 NO. R-XXXX  
 SHEET 5 of XX  
 DRAWING SCALE 1"=1'-0"

PROJECT: Long Beach Municipal Urban Stormwater Treatment - Treatment Facility  
 SHEET: 5 of XX  
 DATE: 7/17/18  
 SCALE: 1"=1'-0"

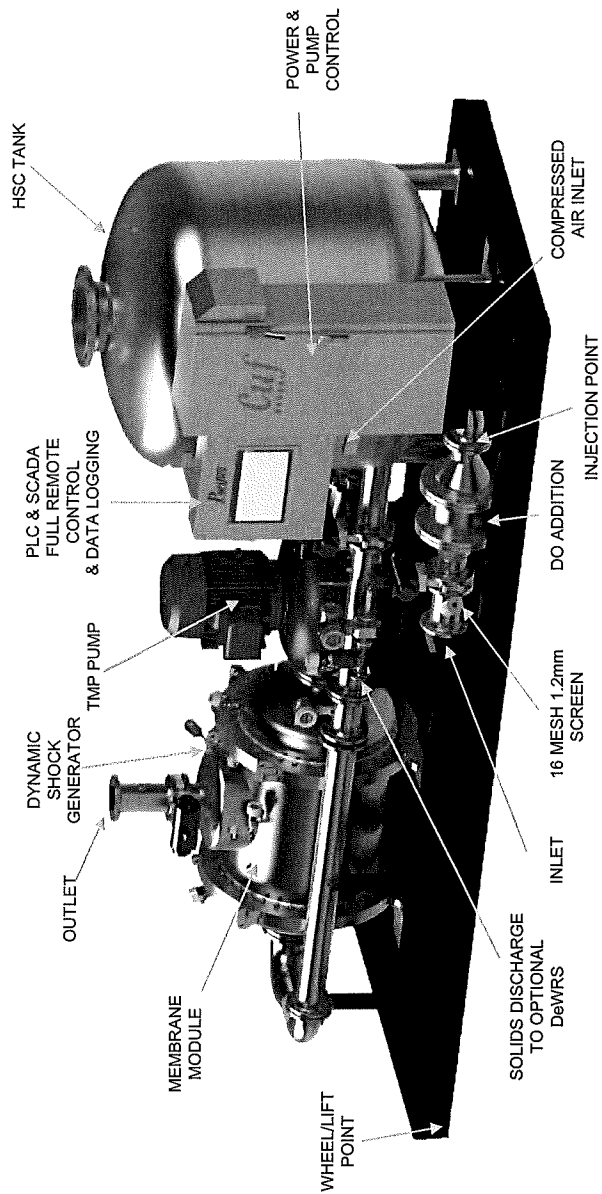
Figure 4

# Treatment Process

*Purifics*

*Cuf*

## Ceramic Ultra-Filtration Membrane



### Filters

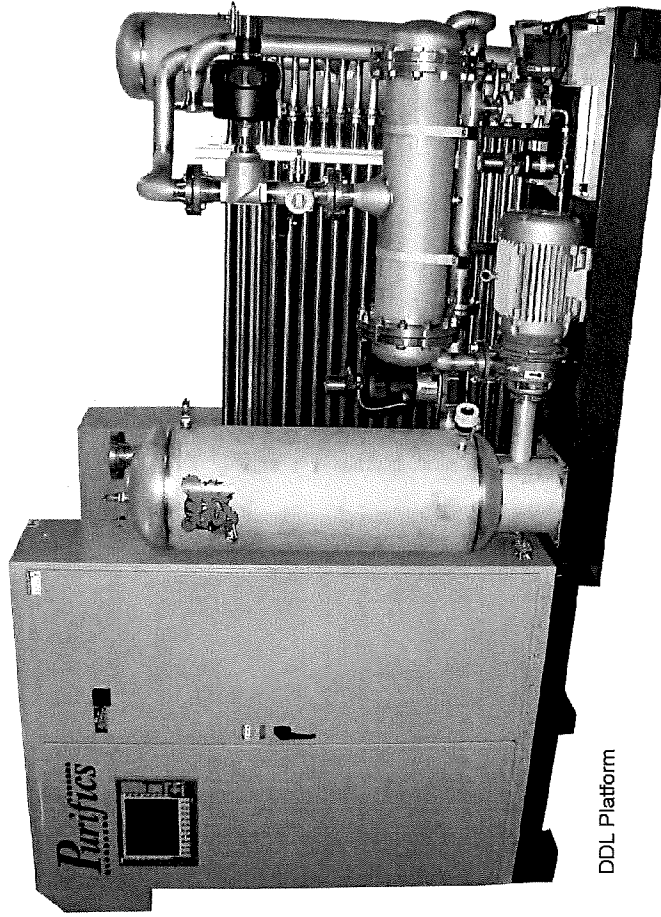
- Radium
- Pathogens
- Color
- H<sub>2</sub>S
- TSS
- Oil
- VSS
- THM
- HAA
- Hardness
- Bacteria
- Turbidity
- Metals

Figure 5

# Treatment Process

*Puriflora*

PHOTO-CAT  
AOP+



DDL Platform

## Ultra Violet Advanced Oxidation Process (UV/AOP)

### Destroys

- PPCPs
- Geosmin
- Organics
- Toxicity
- Pathogens
- Explosives
- Viruses
- Cr<sup>6</sup>
- EDCs
- cVOCs

**EXHIBIT B**  
**Milestones**  
**And Disbursement Schedule**

**Project:** City of Long Beach Public Works Department  
 LB-MUST Facility Filtration Unit

**POLB Grant Award: \$1,000,000**

**PROJECT MILESTONES**

As set forth in the Recipient’s application, the Project shall consist of the following milestones. The date in the “estimated completion date” column of this table may be adjusted as necessary during the disbursement period with Grant Manager approval.

<b>Milestones</b>	<b>Description</b>	<b>Estimated Completion Date</b>	<b>Amount (Up to)</b>
1	Purchase CUF and PhotoCat equipment (spare parts and chemical totes)	4/1/2022	\$45,267
2	Purchase break tanks		\$52,882
3	Purchase CUF and PhotoCat process piping		\$59,334
4	Purchase CUF and PhotoCat process piping fittings		\$149,445
5	Purchase CUF and PhotoCat process piping accessories		\$253,305
6	Installation of CUF and PhotoCat process piping, fittings, and accessories		\$439,767
		<b>Total</b>	<b>\$1,000,000</b>

**Reporting Requirements**

Recipient shall submit progress reports using the enclosed template (attachment 1) indicating progress towards the milestones described above and a final report (attachment 2). Document all activities and expenditures in progress reports, including work performed by contractors. Payments will be disbursed upon adequate progress towards milestones and Project Manager’s approval of progress and final reports.

1. Progress reports shall be submitted with payment disbursement requests and supporting documentation (e.g. invoices). If a reimbursement request does not occur within the given quarter, a progress report shall be submitted quarterly each January 15 for the period October 1 through December 31, April 15 for the period January 1 through March 31, July 15 for the period April 1 through June 30, and October 15 for the period July 1 through September 30, until Project is completed and all funds due pursuant to the contract have been disbursed.
2. Final report shall be due 30 days after the project completion date. It shall contain a brief summary of the Project and before and after pictures.

### **Grant Disbursements**

Recipient may request partial reimbursement of Project milestone tasks by submitting a detailed statement of expenses required by paragraph 4 of the contract. The City shall disburse to Recipient an amount equal to the expenses incurred for each milestone up to a maximum total of \$1,000,000. Payments shall be disbursed based on costs incurred or as reimbursements only. Disbursement of grant funds will occur upon receipt and approval of a disbursement request, supporting documentation (e.g. copies of invoices), and progress reports by the Project Manager.

Regardless of amount of expenses incurred by Recipient, in no event shall the funds disbursed pursuant to this contract exceed the amount of the grant award which is \$1,000,000.