

EXHIBIT A
Bon Permit



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

MAR 07 2014

In Reply Refer to:
MSM:A032212

Lauren Bon
c/o Mark Hanna
Geosyntec Consultants
3415 S Sepulveda Blvd.
Los Angeles, CA 90034

Dear Mr. Hanna:

WATER RIGHT PERMIT 21342 (APPLICATION 32212) TO APPROPRIATE WATER FROM THE LOS ANGELES RIVER IN LOS ANGELES COUNTY

Your water right permit and any associated documents are enclosed. You should carefully read the permit and determine what requirements must be met: (1) before you begin building your project, (2) after building the project but prior to diverting water, (3) on an ongoing basis, such as monitoring the bypass flow, and (4) at a specified time after receiving the permit. It is your responsibility to keep accurate records of the diversion and use of water and keep the Division of Water Rights (Division) informed of your ongoing compliance with the water right terms. To do so, you should attach information (photographs, reports, monitoring data, etc.) showing that you are in compliance with your permit terms to the annual report that is required to be filed electronically with the Division. The Division will send you notifications and instructions for filing before the annual reports are due.

Every permit includes terms and conditions limiting the diversion of water. These terms and conditions may include, but are not limited to, a season of diversion, a diversion rate, and a maximum diversion volume and/or storage quantity. You should carefully monitor construction to ensure that your diversion works and/or reservoir do not exceed these limits. Water can only be diverted under this right while complying with all permit terms. It is a violation to divert water without meeting the terms and conditions of the right, and violations may be subject to enforcement.

There may be times when water is flowing in the stream, but you are not able to divert under the permit. In each watershed, the right holders must divert in accordance with the priority of their rights. The priority of the permit is the date that the application was filed, and is listed near the top of the permit. In times of water shortage, a junior right holder must stop diverting if there is not enough water to serve a more senior right. The water availability analysis prepared for your application likely describes conditions when there is either limited or no water for your use. You can determine the rates or quantities of water diverted under other rights in your watershed by reviewing the eWRIMS Web Mapping Application tab at the link:

http://www.waterboards.ca.gov/water_issues/programs/ewrims/

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

1001 I Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, Ca 95812-0100 | www.waterboards.ca.gov

Lauren Bon
c/o Mark Hanna
A032212

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All right holders are required to pay annual water right fees. Notification of the fee is sent out by the California Board of Equalization. The fee bill is called a Notice of Determination, and must be paid promptly. Nonpayment of the fee may result in revocation of your water right.

Prior to making any changes in your point of diversion, place of use, purpose of use, or other conditions of water diversion, you must obtain the Division's approval. This is done by filing a change petition. If the change is approved, the Division will issue an amended permit. Then, the change can be implemented.

The permit contains a complete use date to complete construction and place water to beneficial use. Once the time to develop the water right has ended, you should plan on obtaining a license. A license confirms that the project was developed in compliance with the terms and conditions of the permit and the quantities of water put to beneficial use. Only water used in accordance with the conditions of the permit, or any amended permit, can be credited for licensing purposes. If the project has not been fully developed, a time extension may be requested. However, an extension can only be approved under specific, limited conditions. If you decide not to build the project, you should request revocation of the water right. Once a water right is revoked, it is not subject to annual fees.

Please inform the Division of any changes in address or ownership. The Division will mail all notices, including fee notices, to the most recent address supplied for the primary contact. The regulations require a right holder to immediately inform the Division of any change in ownership of the right. (Cal. Code Regs., tit. 23, § 830 et seq.) If you need to make these changes, please visit this web site: http://www.waterboards.ca.gov/waterrights/publications_forms/forms/index.shtml#addchange

The following web sites may contain information related to this water right:

(a) The permit may be viewed at:

http://www.waterboards.ca.gov/water_issues/programs/ewrims/license_search.shtml

(b) Division Decisions issued pursuant to a Field Investigation may be viewed at:


http://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/division_decisions/

(c) State Water Board Decisions issued pursuant to a hearing are found at:

http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/decisions/

If you require further assistance, please contact Mitchell Moody at (916) 341-5383. Written correspondence or inquiries should be addressed as follows: State Water Resources Control Board, Division of Water Rights, Attn: Mitchell Moody, PO Box 2000, Sacramento, CA, 95812-2000.

Sincerely,


Amanda Montgomery, Manager
Permitting and Licensing Section
Division of Water Rights

Enclosures: (1) Permit; (2) Map

cc: See next page.

Lauren Bon
c/o Mark Hanna
A032212

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MAR 07 2014

cc (w/enclosure): Lauren Bon
Metabolic Studio
1745 N Spring Street, Unit 4
Los Angeles, CA 90012

cc (w/o enclosures): The Honorable Eric Garcetti
Mayor of Los Angeles
200 N Spring Street, Room 303
Los Angeles, CA 90012

Regional Water Quality Control Board
Los Angeles Region
c/o Deborah Smith
320 W 4th Street, Suite 200
Los Angeles, CA 90013

California Department of Fish and Wildlife
South Coast Region
c/o Scott Harris
3883 Ruffin Road
San Diego, CA 92123

California Department of Fish and Wildlife
Water Branch
c/o James Rosauer
830 S Street
Sacramento, CA 95811



STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

RIGHT TO DIVERT AND USE WATER

APPLICATION 32212

PERMIT 21342

Right Holder: Lauren Bon
1745 N. Spring Street, Unit 4
Los Angeles, CA 90012

The State Water Resources Control Board (State Water Board) authorizes the diversion and use of water by the right holder in accordance with the limitations and conditions herein SUBJECT TO PRIOR RIGHTS. The priority of this right dates from **October 24, 2013**. This right is issued in accordance with the State Water Board delegation of authority to the Deputy Director for Water Rights (Resolution 2012-0029) and the Deputy Director for Water Rights re-delegation of authority dated July 6, 2012.

The Deputy Director for Water Rights finds that the State Water Board and/or the Applicant have met the following requirements for permit issuance: (a) demonstrated the availability of unappropriated water; (b) resolved protests in compliance with Water Code section 1330 et seq. and included appropriate permit conditions; (c) demonstrated that the water will be diverted and used without injury to any lawful user of water; (d) demonstrated that the intended use is beneficial; and (e) demonstrated that the requirements of the California Environmental Quality Act (CEQA) have been met or that the project is exempt from CEQA.

The State Water Board has complied with its independent obligation to consider the effect of the proposed project on public trust resources and to protect those resources where feasible. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419 [189 Cal.Rptr. 346, 658 P.2d 709].)

Right holder is hereby granted a right to divert and use water as follows:

1. Source of water: (1) Los Angeles River

tributary to: (1) Pacific Ocean

within the County of Los Angeles.

2. Location of point of diversion

By California Coordinate System of 1983 in Zone 5	40-acre subdivision of public land survey or projection thereof	Section (Projected)*	Township	Range	Base and Meridian
Inflatable Dam (1) North 1,848,272 feet and East 6,493,341 feet	SW ¼ of NE ¼	22*	1S	13W	SB

3. Purpose of use	4. Place of use					
	40-acre subdivision of public land survey or projection thereof	Section (Projected)*	Township	Range	Base and Meridian	Acres
Irrigation	NE ¼ of SW ¼	22*	1S	13W	SB	6
	SE ¼ of NE ¼					4.5
	SW ¼ of NE ¼					10
	NW ¼ of SE ¼					2.5
	SE ¼ of NW ¼					2.0
	NE ¼ of SW ¼					17
	NW ¼ of SW ¼					0.5
						Total:

The place of use is shown on map dated October 24, 2013 on file with the State Water Board.

5. The water appropriated under this right shall be limited to the quantity which can be beneficially used and shall not exceed **0.22 cubic foot per second** by direct diversion to be diverted from January 1 to December 31 of each year. The maximum amount diverted under this right shall not exceed **106 acre-feet per year**.

(0000005A)

6. Construction work and complete application of the water to the authorized use shall be prosecuted with reasonable diligence and completed by December 31, 2029.

(0000009)

7. No debris, soil, silt, cement that has not set, oil, or other such foreign substance will be allowed to enter into or be placed where it may be washed by rainfall runoff into the waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area.

(0000208)

8. Should any buried archeological materials be uncovered during project activities, such activities shall cease within 100 feet of the find. Prehistoric archeological indicators include: obsidian and chert flakes and chipped stone tools; bedrock outcrops and boulders with mortar cups; ground stone implements (grinding slabs, mortars and pestles); and locally darkened midden soils containing some of the previously listed items plus fragments of bone and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic and metal objects; milled and split lumber; structure and feature remains such as building foundations, privy pits, wells, and dumps; and old trails. The Deputy Director for Water Rights shall be notified of the discovery and a professional archeologist shall be retained by the right holder to evaluate the find and recommend appropriate mitigation measures. Proposed mitigation measures shall be submitted to the Deputy Director for Water Rights for approval. Project-related activities shall not resume within 100 feet of the find until all approved mitigation measures have been completed to the satisfaction of the Deputy Director for Water Rights.

(0000215)

9. If human remains are encountered, right holder shall comply with Section 15064.5 (e) (1) of the State CEQA Guidelines and the Health and Safety Code Section 7050.5. All project-related ground disturbance within 100 feet of the find shall be halted until the county coroner has been notified. If the coroner determines that the remains are Native American, the coroner will notify the Native American Heritage Commission to identify the most-likely descendants of the deceased Native Americans. Project-related ground disturbance in the vicinity of the find shall not resume until the process detailed under Section 15064.5 (e) has been completed and evidence of completion has been submitted to the Deputy Director for Water Rights.

(0380500)

10. Right holder shall comply with the following provisions which are derived from the Final Initial Study/Mitigated Declaration (SCH # 2013101041) as filed by the City of Los Angeles:

Consistent with the requirements of the statewide Construction General Permit, the project applicant shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) designed to reduce potential adverse impacts on surface water quality through the project construction period. The SWPPP shall be designed based on the assessed Project Risk Level to address the following objectives: (1) all pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction activity are controlled; (2) where not otherwise required to be under a Regional Water Quality Control Board permit, all non-stormwater discharges are identified and eliminated, controlled, or treated; (3) site Best Management Practices (BMPs) are effective and result in the reduction or elimination of pollutants in storm water discharges and authorized non-stormwater discharges from construction activity to the Best Available Technology/Best Conventional Pollutant Control Technology (BAT/BCT) standard; (4) calculations and design details as well as BMP controls for site run-on are complete and correct; and (5) stabilization BMPs installed to reduce or eliminate pollutants after construction are completed.

(0400500)

11. No water shall be directly diverted under this right unless right holder is monitoring and reporting said diversion of water. This monitoring shall be conducted using devices and methods satisfactory to the Deputy Director for Water Rights. The devices shall be capable of monitoring the rate and quantity of water diverted and shall be properly maintained.

Right holder shall provide the Division of Water Rights with evidence that the devices have been installed with the first annual report submitted after device installation. Right holder shall provide the Division of Water Rights with evidence that substantiates that the devices are functioning properly every five years after device installation as an enclosure to the current annual report or whenever requested by the Division of Water Rights.

Right holder shall maintain a record of all diversions under this right that includes the date, time, rate of diversion, and the amount of water diverted. The records shall be submitted with the annual report or whenever requested by the Division of Water Rights.

(000000R)

THIS RIGHT IS ALSO SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

- A. Right holder is on notice that: (1) failure to timely commence or complete construction work or beneficial use of water with due diligence, (2) cessation or partial cessation of beneficial use of water, or (3) failure to observe any of the terms or conditions of this right, may be cause for the State Water Board to consider revocation (including partial revocation) of this right. (Cal. Code Regs., tit. 23, § 850.) (0000016)
- B. Right holder is on notice that when the State Water Board determines that any person is violating, or threatening to violate, any term or condition of a right, the State Water Board may issue an order to that person to cease and desist from that violation. (Wat. Code, § 1831.) (0000017)
- C. Right holder is not authorized to make any modifications to the location of diversion facilities, place of use or purposes of use, or make other changes to the project that do not conform with the terms and conditions of this right, prior to submitting a change petition and obtaining approval of the State Water Board. (0000018)
- D. Once the time to develop beneficial use of water ends under this permit, right holder is not authorized to increase diversions beyond the maximum annual amount diverted or used during the authorized development schedule prior to submitting a time extension petition and obtaining approval of the State Water Board. (0000019)
- E. The amount of water for consideration when issuing a license shall be limited to only the amount of water diverted and applied to beneficial use in compliance with the terms and conditions of this right, as determined by the State Water Board. (Wat. Code, § 1610.) (0000006)
- F. Right holder shall maintain records of the amount of water diverted and used under this right to enable the State Water Board to determine the amount of water that has been applied to beneficial use. (0000015)
- G. Right holder shall promptly submit any reports, data, or other information that may reasonably be required by the State Water Board, including but not limited to documentation of water diversion and use under this right and documentation of compliance with the terms and conditions of this right. (0000010)
- H. No water shall be diverted under this right unless right holder is operating in accordance with a compliance plan, satisfactory to the Deputy Director for Water Rights. Said compliance plan shall specify how right holder will comply with the terms and conditions of this right. Right holder shall comply with all reporting requirements in accordance with the schedule contained in the compliance plan. (0000070)
- I. Right holder shall grant, or secure authorization through right holder's right of access to property owned by another party, the staff of the State Water Board, and any other authorized representatives of the State Water Board the following:
1. Entry upon property where water is being diverted, stored or used under a right issued by the State Water Board or where monitoring, samples and/or records must be collected under the conditions of this right;

2. Access to copy any records at reasonable times that are kept under the terms and conditions of a right or other order issued by State Water Board;
3. Access to inspect at reasonable times any project covered by a right issued by the State Water Board, equipment (including monitoring and control equipment), practices, or operations regulated by or required under this right; and,
4. Access to photograph, sample, measure, and monitor at reasonable times for the purpose of ensuring compliance with a right or other order issued by State Water Board, or as otherwise authorized by the Water Code.

(000011)

- J. This right shall not be construed as conferring right of access to any lands or facilities not owned by right holder.

(000022)

- K. All rights are issued subject to available flows. Inasmuch as the source contains treated wastewater, imported water from another stream system, or return flow from other projects, there is no guarantee that such supply will continue.

(000025)

- L. This right does not authorize diversion of water dedicated by other right holders under a senior right for purposes of preserving or enhancing wetlands, habitat, fish and wildlife resources, or recreation in, or on, the water. (Wat. Code, § 1707.) The Division of Water Rights maintains information about these dedications. It is right holders' responsibility to be aware of any dedications that may preclude diversion under this right.

(0000212)

- M. No water shall be diverted or used under this right, and no construction related to such diversion shall commence, unless right holder has obtained and is in compliance with all necessary permits or other approvals required by other agencies. If an amended right is issued, no new facilities shall be utilized, nor shall the amount of water diverted or used increase beyond the maximum amount diverted or used during the previously authorized development schedule, unless right holder has obtained and is in compliance with all necessary requirements, including but not limited to the permits and approvals listed in this term.

Within 90 days of the issuance of this right or any subsequent amendment, right holder shall prepare and submit to the Division of Water Rights a list of, or provide information that shows proof of attempts to solicit information regarding the need for, permits or approvals that may be required for the project. At a minimum, right holder shall provide a list or other information pertaining to whether any of the following permits or approvals are required: (1) lake or streambed alteration agreement with the Department of Fish and Wildlife (Fish & G. Code, § 1600 et seq.); (2) Department of Water Resources, Division of Safety of Dams approval (Wat. Code, § 6002); (3) Regional Water Quality Control Board Waste Discharge Requirements (Wat. Code, § 13260 et seq.); (4) U.S. Army Corps of Engineers Clean Water Act section 404 permit (33 U.S.C. § 1344); and (5) local grading permits.

Right holder shall, within 30 days of issuance of any permits, approvals or waivers, transmit copies to the Division of Water Rights.

(0000203)

- N. Urban water suppliers must comply with the Urban Water Management Planning Act (Wat. Code, § 10610 et seq.). An "urban water supplier" means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually.

Agricultural water users and suppliers must comply with the Agricultural Water Management Planning Act (Act) (Water Code, § 10800 et seq.). Agricultural water users applying for a permit from the State Water Board are required to develop and implement water conservation plans in accordance with the Act. An "agricultural water supplier" means a supplier, either publicly or privately owned, supplying more than 50,000 acre-feet of water annually for agricultural purposes. An agricultural water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers.

(0000029D)

- O. Pursuant to Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this right, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.

The continuing authority of the State Water Board may be exercised by imposing specific requirements over and above those contained in this right with a view to eliminating waste of water and to meeting the reasonable water requirements of right holder without unreasonable draft on the source. Right holder may be required to implement a water conservation plan, features of which may include but not necessarily be limited to (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this right and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the State Water Board also may be exercised by imposing further limitations on the diversion and use of water by right holder in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution, article X, section 2; is consistent with the public interest; and is necessary to preserve or restore the uses protected by the public trust.

(0000012)

- P. The quantity of water diverted under this right is subject to modification by the State Water Board if, after notice to right holder and an opportunity for hearing, the State Water Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to Division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the State Water Board finds that (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges.

(0000013)

- Q. This right does not authorize any act which results in the taking of a candidate, threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & G. Code, § 2050 et seq.) or the federal Endangered Species Act (16 U.S.C. § 1531 et seq.). If a "take" will result from any act authorized under this right, right holder shall

obtain any required authorization for an incidental take prior to construction or operation of the project. Right holder shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this right.

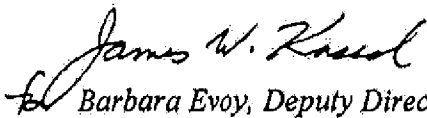
(0000014)

This right is issued and right holder takes it subject to the following provisions of the Water Code:

Section 1390. A permit shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code), but no longer.

Section 1392. Every permittee, if he accepts a permit, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any permit granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any permittee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any permittee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

STATE WATER RESOURCES CONTROL BOARD


Barbara Evoy, Deputy Director
Division of Water Rights

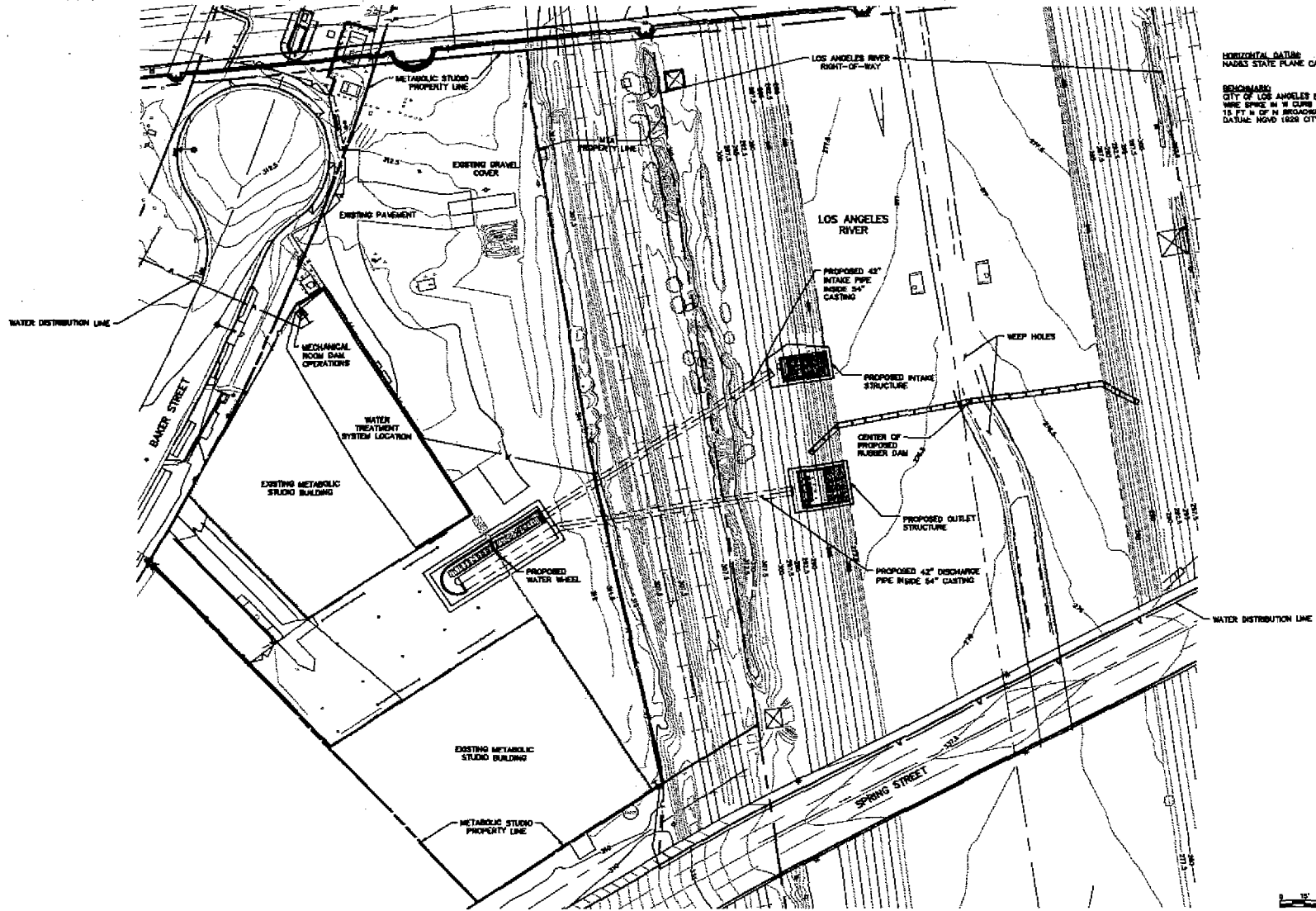
Dated: **MAR 07 2014**



OWNER	LAUREN BON	STATE OF CALIFORNIA CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY	
SOURCE	LOS ANGELES RIVER	STATE WATER RESOURCES CONTROL BOARD DIVISION OF WATER RIGHTS	
POINT OF DIVERSION		APPLICATION NO.	A032212
WITHIN	SW 1/4 OF NE 1/4 OF	PERMIT NO.	21342
SECTION	PROJECTED SECTION 22, T1S, R13W, SB		
COUNTY OF	LOS ANGELES		
U.S.G.S. QUAD:	LOS ANGELES	DATE:	2-5-14
	DATE:	PH. RE. 1981	SCALE: 1:24,000
		DRAWN:	MSM
			MJM

Note: This map does not constitute a public land survey as defined by California Business & Professions Code section 8726. It has been prepared for descriptive purposes only.

EXHIBIT B
Site Map



HORIZONTAL DATUM:
 NAD83 STATE PLANE CALIFORNIA ZONE 8
 BENCHMARK:
 CITY OF LOS ANGELES BENCHMARK #12-28850
 NINE INCH 14 IN CURB CASAMONVA ST.
 18 FT. N. OF N. BROADWAY
 DATUM: NVD 1928 CITY OF LA 1988 ADJUSTMENT



P:\Projects\Exteriors\Metabolic Studio\LA0257 - Metabolic Water Wheel\CAD\Sheet\DWG - EXTERIOR PLAN.dwg
 March 20, 2017 - 11:30am
 #100000

REV	DATE	BY	CHK	APP	DESCRIPTION

METABOLIC STUDIO
 1788 N BAKER ST, LOS ANGELES, CA 90012

Geosyntec[®]
 consultants
an geacohm | a geacohm | a geacohm

BENDING THE RIVER BACK INTO THE CITY
**METABOLIC STUDIO SITE PLAN AND
 RUBBER DAM LOCATION**

JOB NO.	LA0257
DRAWING NO.	EXHIBIT B
SCALE	1" = 30'
SHEET NO.	1 OF 1

EXHIBIT C
Scope of Services

Exhibit C

Scope of Work – March 2017

Rubber Dam and Auxiliary Structures

Bending the River Back into the City

Metabolic Studio will install a rubber dam using Obermeyer Hydro Inc. (Obermeyer) products, and other appurtenances as described below. This document details the anticipated scope of work for inspection, operation, and maintenance activities.

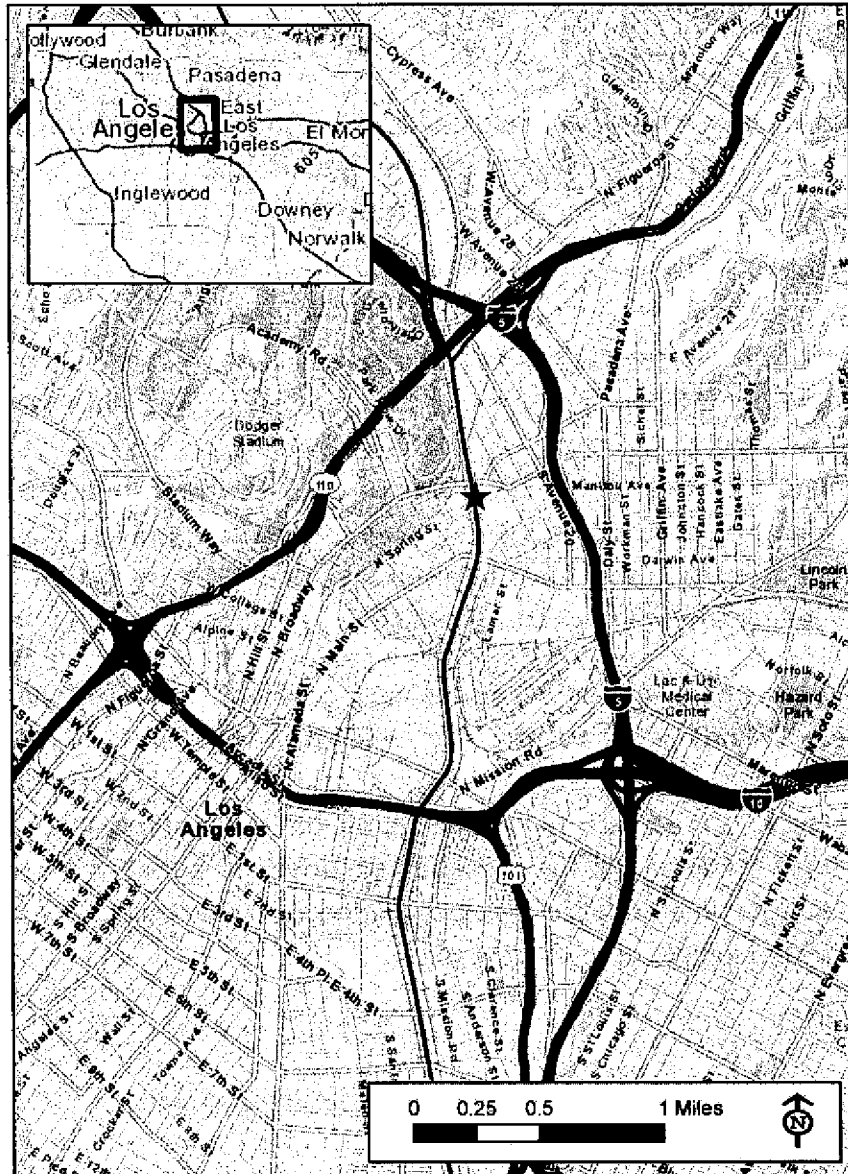
SYSTEM COMPONENTS

The Rubber Dam System and auxiliary structures consist of the following:

- **Dam assembly**
 - Air bladder
 - Anchor bolts (attach bladder to foundation)
 - Air blowers
 - Deflation valve
 - Exhaust line/valve
 - Pressure gauge/water level transducer
- **Auxiliary Structures**
 - Intake/discharge boxes, gates, trash racks
 - Intake/discharge and pipes
 - Channel and Weep holes
 - Treated water line

SYSTEM LOCATION

The system is located as shown below:



SAFETY PRECAUTIONS

Safe Operating Practices must be the first priority. Water level control equipment can cause sudden changes in water level and flow rates both upstream and downstream. Anyone using the river for any purpose is at risk when the spillway flow is changed. It is the responsibility of the operator to do the following:

- Change flow rates gradually;
- If sudden changes in water level cannot be avoided, provide a warning to people downstream to allow them time to reach safer ground; and
- Make sure there are no personnel near the spillway.

WORK DESCRIPTION

The Inflatable rubber dam assembly and auxiliary structures as defined above will be maintained to provide maximum performance and provide preventative maintenance by conducting necessary facility upkeep. Work to be accomplished consists of maintenance, inspection, and repair of the rubber dam assembly, in addition to other maintenance, inspection, and repairs services for the auxiliary structures. LASAN shall recommend maintenance tasks not listed in the if it is believed they are necessary to better operate and maintain the rubber dam and/or its auxiliary structures.

All dam assembly components shall be maintained, operated, inspected, and repaired. A general description of maintenance activities (for the dam and auxiliary structures), along with their anticipated frequencies and durations is provided in the attached O&M table. It should be noted that frequencies are subject to change based on observations made during initial maintenance sessions. Additionally, the durations of groups of activities are estimates and should be updated based on experience in field. Duration should be expected to vary based on the conditions of the equipment during inspection.

OPERATIONS

Normal Dam Inflated Operations

During normal operations, the dam is inflated and will impound non-storm low flows approximately 1,600 to 1,800 feet upstream to be directed to the intake structure and intake pipe for diversion to occur on Metabolic Studio property.

Dam Deflation/Inflation Operations

The dam is deflated prior to forecasted storm events, high water levels, and power outages, to allow water flows to pass unimpeded and prevent flooding. A forecasted storm event is defined as having a 70% chance of more than 0.2 inches within 24 hours in any area tributary to the rubber dam.

The inflatable rubber dam is designed with a redundant electrical and mechanical safety control system to trigger dam deflation including:

- Automatic deflation based on high levels of water level (measured by the water level transducer), high levels of pressure on the rubber dam (measured by the pressure transmitter), or forecasted weather event information. In any of these conditions, an electronic signal is sent to the Supervisory Control and Data Acquisition (SCADA) system that opens the dam deflation valve, allowing dam deflation;
- The deflation valve is also designed to “fail open” in case of power outage or loss of control signals, which will automatically deflate the dam; and
- Authorized LASAN personnel and/or other assigns can over-ride the dam inflation controls and manually deflate the dam by actuating a switch at the control station located above the rubber dam on the west bank of the river, at 1794 Baker Street in a location readily accessible to authorized personnel.

Dam deflation will occur at a rate of about 1 hour. This deflation rate will allow authorized or unauthorized persons in the channel downstream of the dam to safely exit the river. It takes approximately three hours for non-stormwater flows to reach the top of dam after inflation.

Dam deflation and inflation will be conducted as follows:

1. LASAN will monitor weather forecast.
2. Two days before the forecasted storm event, LASAN will make the final determination as to whether the expected storm will be significant. If significant, the LASAN will inform the Metabolic Studio qualified representative that a significant storm is approaching. The Metabolic Studio qualified represented will monitor the SCADA system.
3. Water diversion will cease immediately upon determination by LASAN that a potentially significant storm has been forecasted.

4. When storm event discharge has stopped and no significant rains are forecasted, LASAN will inflate the dam and the Metabolic Studio qualified representative will open the discharge and intake gates and prepare for diversion to occur within Metabolic Studio property.

Operation and Maintenance Activity Table

Frequency	Activity	Description	Est. Time Rqmnt*
Initial: Weekly After evaluation period: Monthly	Dam, Trash rack inspection and cleaning	Dam and intake trash rack should be inspected for debris and cleaned. Frequency to be confirmed based on initial site visits establishing debris conditions.	1/4 day
Monthly	Maintain air blowers	Check for air leaks, purge condensate valve on air supply line, clean or replace filters	1/2 day
	Maintain deflation valve	Inspect, repair as needed	
	Maintain exhaust line	Remove moisture from exhaust line by opening drain valve with dam inflated	
Quarterly	Inspect treated water line	Treated water pipeline on Spring Street Bridge and crossing under Baker Street should be inspected quarterly for leaks and any other impairments and should be repaired on an as-needed basis.	1/4 day
	Inspect pressure gauge system, water level transducer	Calibrate gauges	

Frequency	Activity	Description	Est. Time Rqmnt*
Annual	Trash rack integrity inspection	The trash rack should be inspected annually upon system dewatering. The inspection should look for any compacted debris which has not been removed by normal rakings. Signs of bar movement resulting in entrainment of debris larger than the bar spacing as well as any structural deficiencies should be identified and remedied.	One to Five Days (total)
	Bladder inspection	Inflatable dam within the LA River should be inspected annually for wear and damage; dam height should be measured to determine if it successfully inflates to, and maintains, the required height to maintain the required upstream water level. Repair if necessary.	
	Sediment removal	When dam deflated, inspect, and if necessary, clean out sediment from behind dam and within intake and discharge structures and within channel. Depending on river conditions, a regular dredging plan may be required. Conversely, it may be found that entrainment rates are negligible.	
	Intake/discharge pipe inspection	Intake and exit pipes from the LA River to Metabolic Studio property should be inspected once every year during system dewatering for trash and sediment build-up, leaks, and any other impairments and should be repaired on an as-needed basis to maintain proper water pressure.	
	Weep holes	Inspect and clean weep holes	
	Main anchor bolts	Inspect, repair as needed	
	Intake/discharge gates	Inspect gate, electrical power connection affiliated with the bypass gates, mechanical aspects of the bypass gates, and repair as needed	