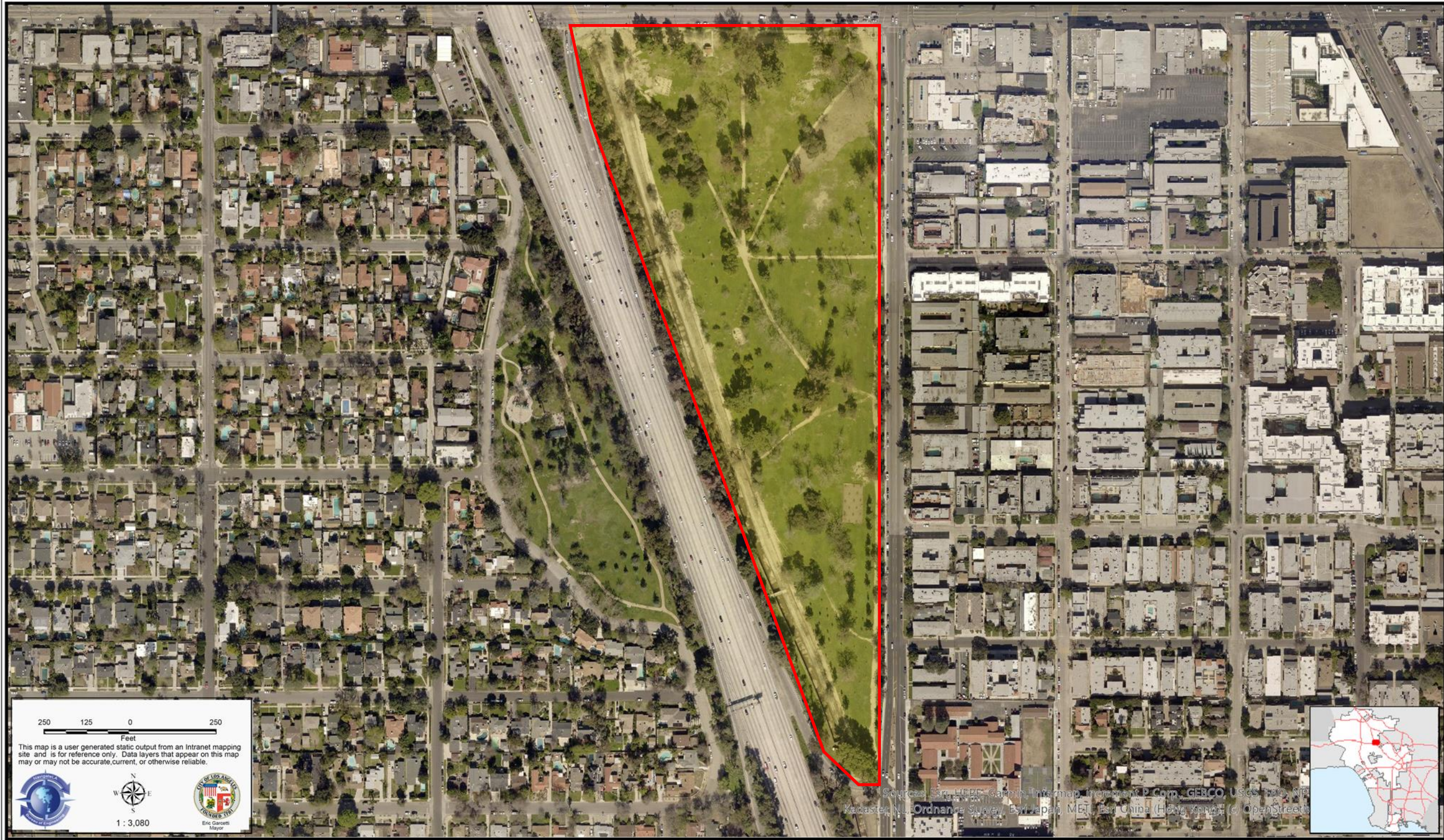


NavigateLA Map



Project Site

March 28, 2021



Safe, Clean Water Program
North Hollywood Park Stormwater Capture Project
StormTunnel Alternative



Single Storm Event Capacity: 320 cfs Peak Flow, 132 AF Volume equals 100% of the 85th P. 24-hr Storm
Annual Stormwater Capture: 1,538 AF/YR (10-YR Modeling Average)

Proposed StormTunnel System	SEITec		MM/DD/YY	REMARKS	01
	N. Hollywood Park Stormwater Capture Project StormTunnel Alternative		1	...	
			2	...	
			3	...	
			4	...	
			5	...	

INDEX OF DRAWINGS

- A1 Plan
- A2 Profile
- A3 Section
- A4 Hydraulic Grade Line
- A5 Tunnel Perspective
- A6 Tunnel Details
- A7 Drywall Details
- A8 Treatment System
- A9 Diversion Perspective
- A10 Diversion Plan and Sections
- A11 Hydrodynamic Separator
- A12 Sediment Filter
- A13 Stormwater Modeling Results - 85th P. 24-Hr Storm
- A14 Stormwater Modeling Results - Daily and Annual Stormwater Capture

EARTHWORK

Description	Unit	Quantity
Excavation	CY	75,028
Hauling	CY	67,069
Backfill & Compaction	CY	16,946
Gravel Backfill	CY	6,842
Total	CY	165,885

SCOPE OF WORK

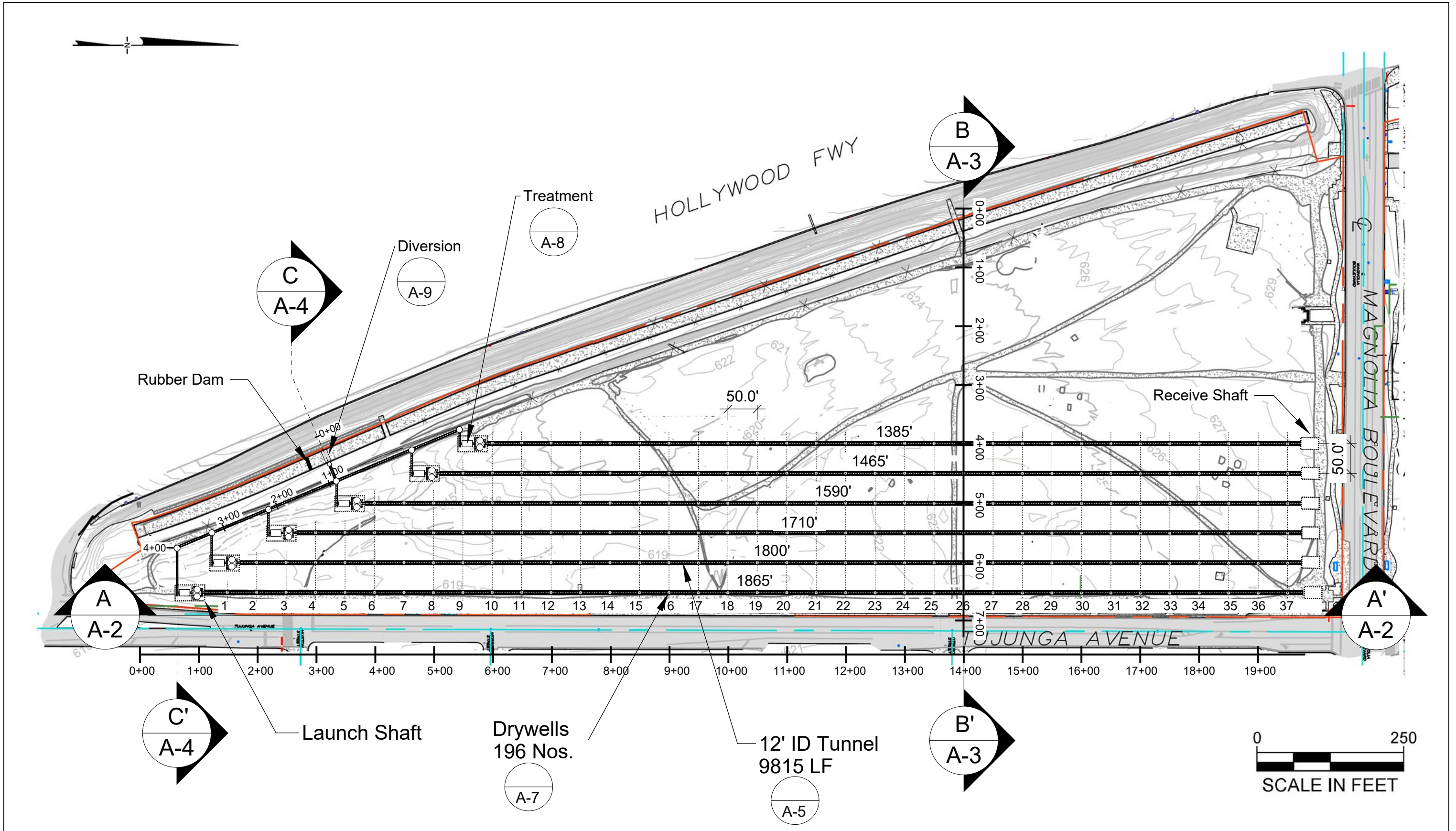
Item	Description	Unit	Quantity	Drawings
1	Tunnel - 12' ID with segmental concrete liners	LF	9815	A1, A2, A3, A5, and A6
2	Drywells - Embedded in tunnel @ 50-ft spacing with surface access	EA	196	A1, A7
3	Obermeyer Gate - 22' W x 4.5' H steel gate operated by inflatable bladder	EA	1	A9
4	Diversion Channel - 20' W x 10' L x 2' D concrete with trash screen	EA	1	A9, A10
5	Side Channel Inlet - 4.5' H x 10' W opening in channel wall with trash screen	EA	1	A9, A10
6	Transition Structure - 8' W x 12' L x 8' H concrete box with coned 4' diameter access	EA	1	A9, A10
7	Manholes - Six manholes; one 10-ft, one 8-ft, and four 6-ft diameter each with coned 4-ft diam access	EA	6	A1, A9
8	RCP Piping: 30 LF of 72", 260 LF of 66", 200 LF of 54", and 360 LF of 42"	LF	850	A1
9	Hydrodynamic Separator - 12' diam. Hydro International "Downstream Defender"	EA	12	A11
10	Sediment Filter - 10'-W x 16' L Hydro International "Hydro Dry Screen"	EA	6	A12
11	Park Components - Restoration to original plus planting of 500 new trees, educational signage, and 4 hydration stations	LS	1	N/A
12	Instrumentation and Lighting - Solar powered flow and level meter at diversion structure, plus level meter for each tunnel	LS	1	N/A
13	Methane Mitigation - Industry standard equipment to prevent methane emissions during construction	LS	1	N/A

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Index and Scope	SEITec	MM/DD/YY	REMARKS	02 G
	N. Hollywood Park Stormwater Capture Project	1	...	
	StormTunnel Alternative	2	...	
		3	...	
		4	...	



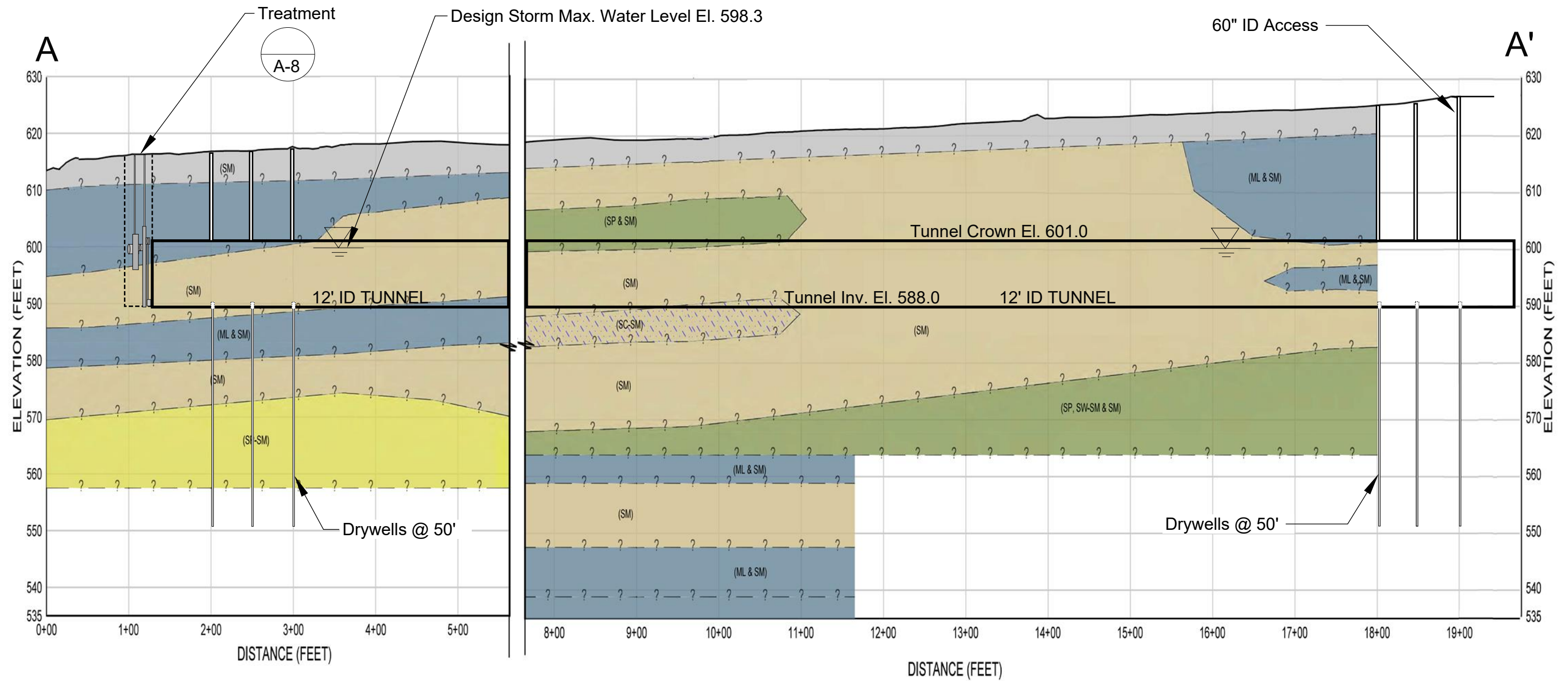
Plan

SEITec
 N. Hollywood Park Stormwater Capture Project
StormTunnel Alternative

MM/DD/YY	REMARKS
1	...
2	...
3	...
4	...
5	...

01

A



LEGEND

- ARTIFICIAL FILL (SM & SC-SM)
- SAND, SILTY SAND (SP, SW, SP-SM, SW-SM & SM) [FC<15%]
- SANDY SILT AND SILTY SAND (ML & SM)
- SILTY CLAYEY SAND (SC-SM)
- SILTY SAND (SM)

A-A'

Profile

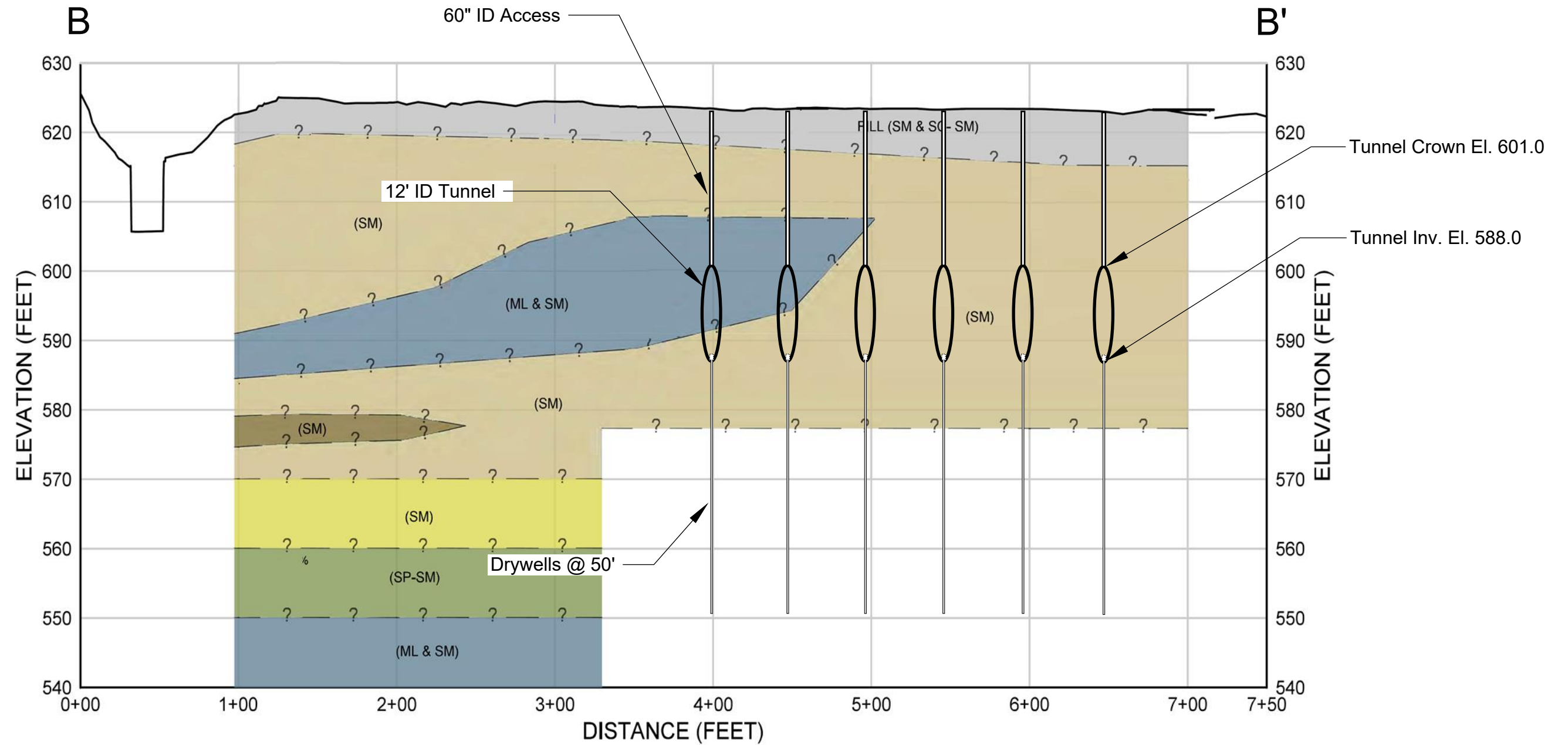


N. Hollywood Park Stormwater Capture Project
StormTunnel Alternative







MM/DD/YY	REMARKS
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02

A



LEGEND

- | | | | |
|---|--|---|-------------------------------------|
|  | ARTIFICIAL FILL (SM & SC-SM) |  | SANDY SILT AND SILTY SAND (ML & SM) |
|  | SAND, SILT AND GRAVEL (SP-SM & SW-SM) |  | SILTY SAND (SM) |
|  | SAND, SILTY SAND (SP, SW, SP-SM, SW-SM & SM)
[FC<15%] |  | SILTY SAND AND GRAVEL (SM) |

B-B'

Section

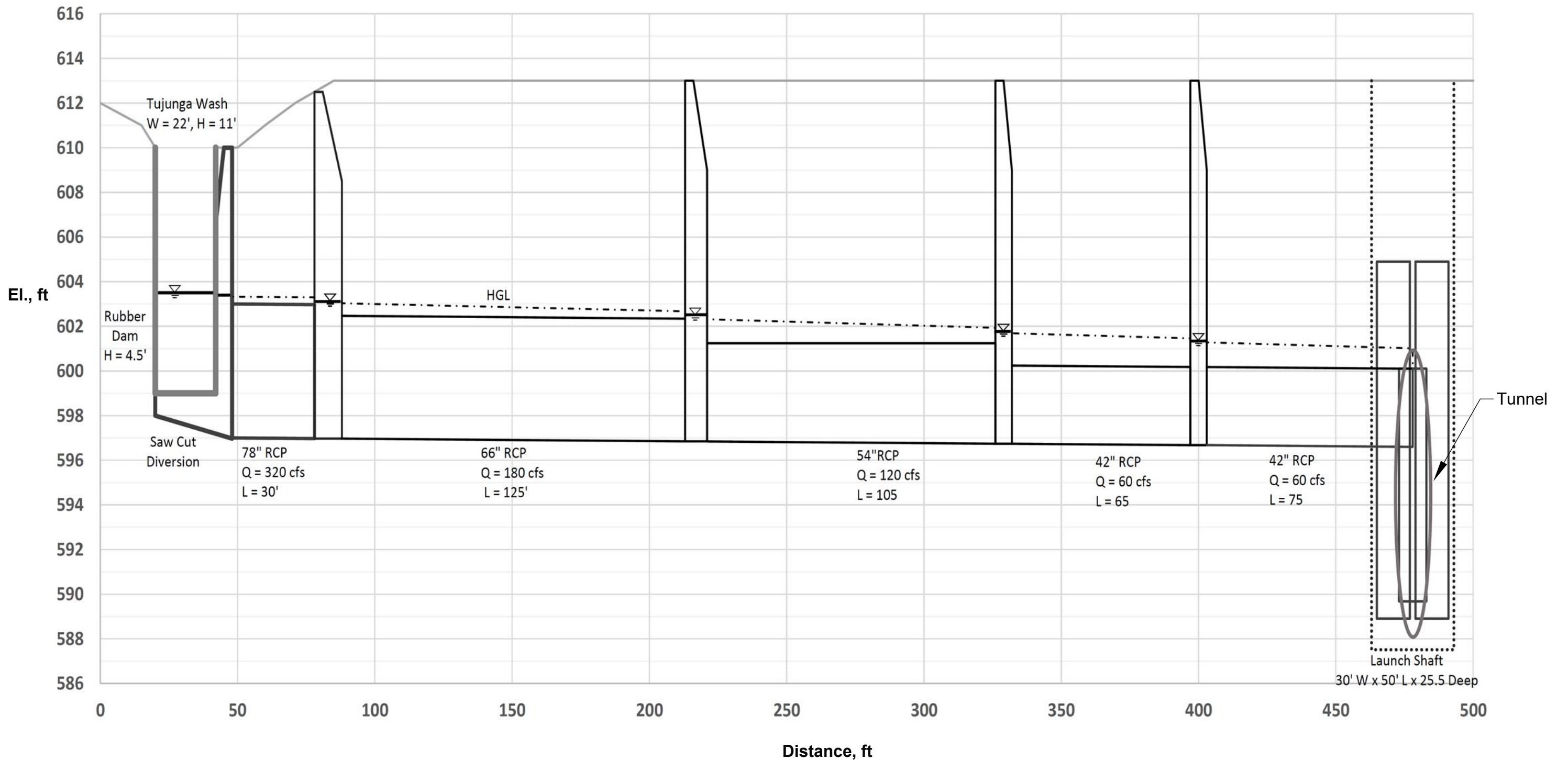


N. Hollywood Park Stormwater Capture Project
StormTunnel Alternative

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03

A



C-C'

Hydraulic Grade Line



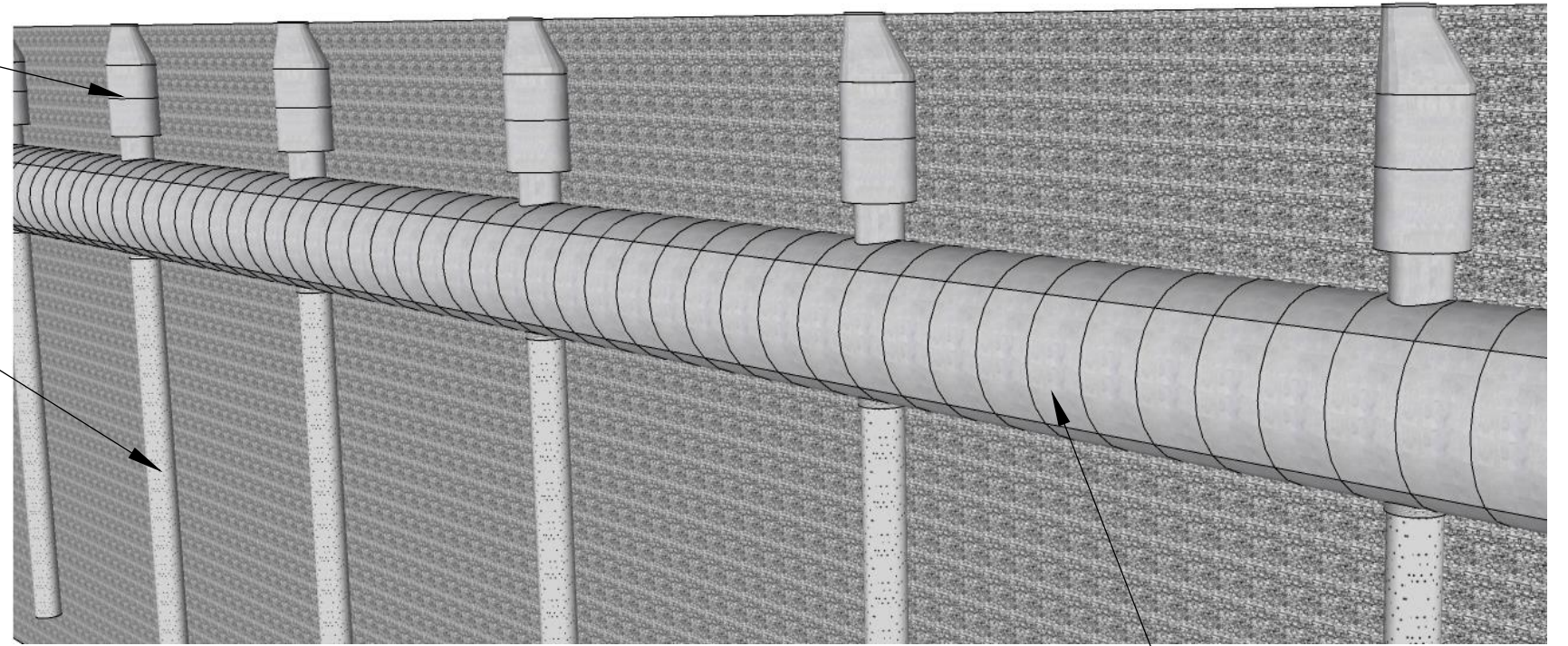
N. Hollywood Park Stormwater Capture Project
StormTunnel Alternative

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04
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60" ID Access
A-7

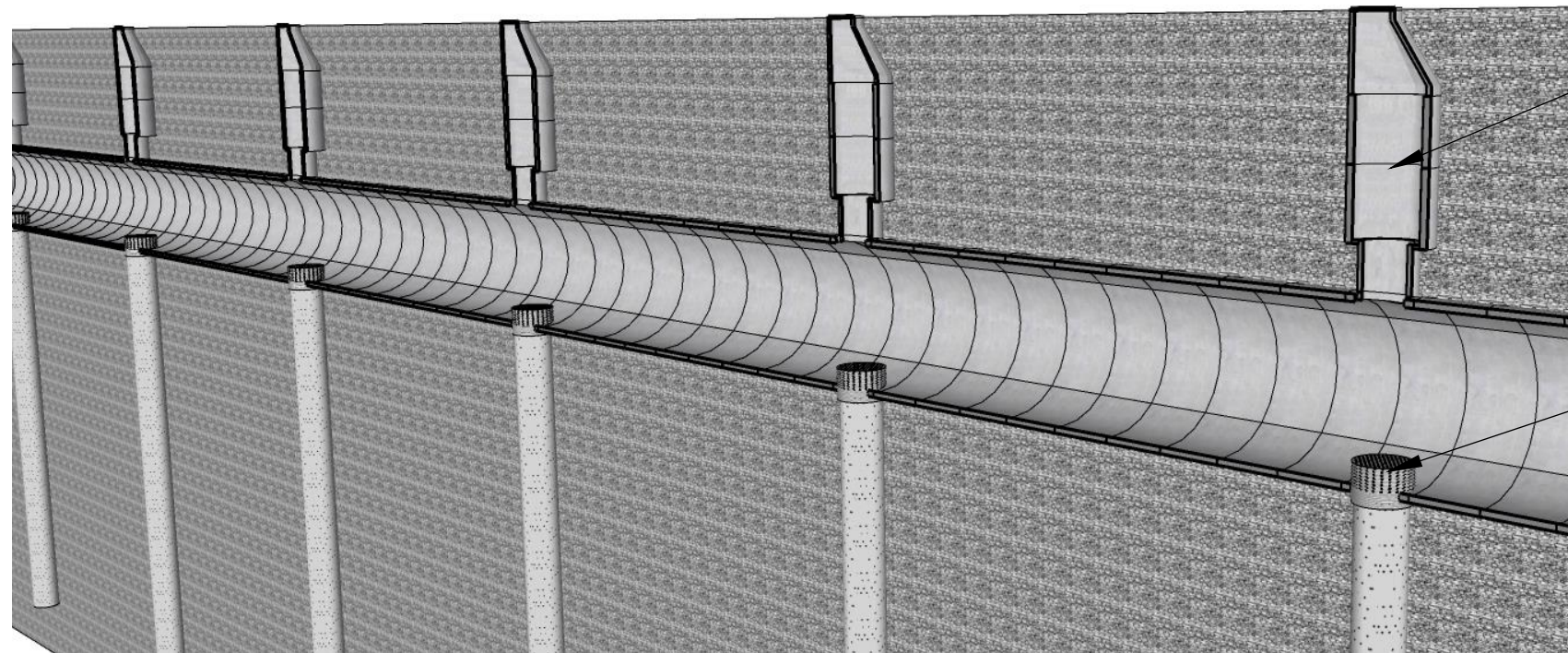
Dry Well
A-7



12' ID Tunnel
A-6

60" ID Access
A-7

Drywell Inlet
A-7



Perspective

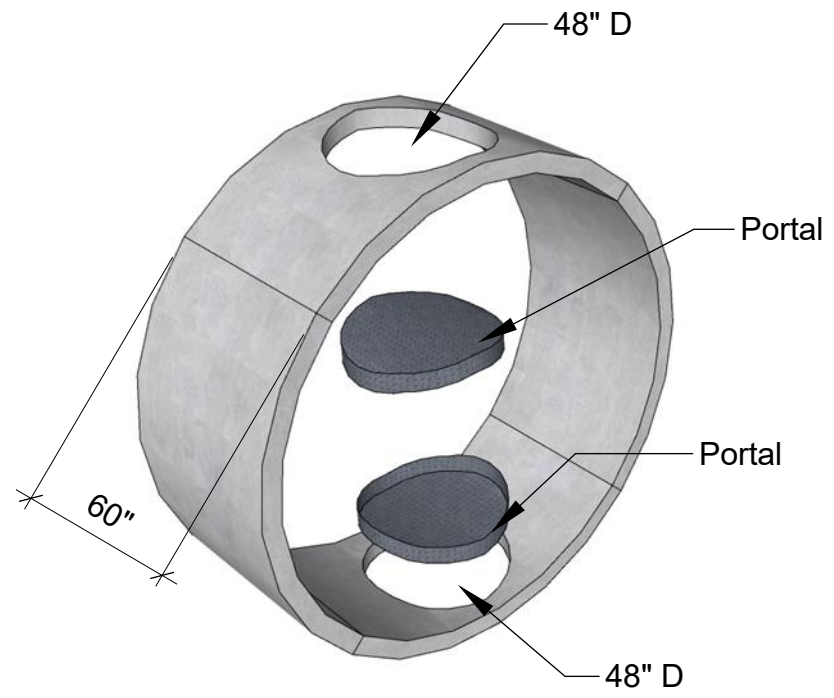
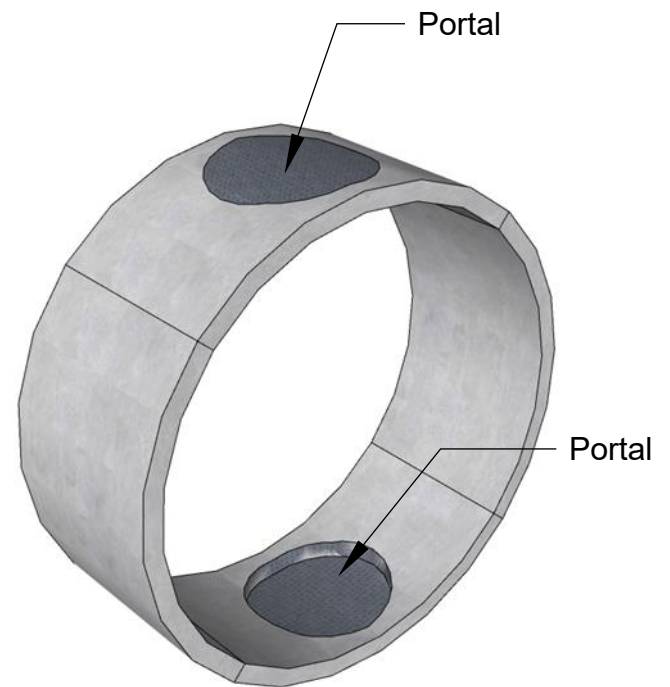
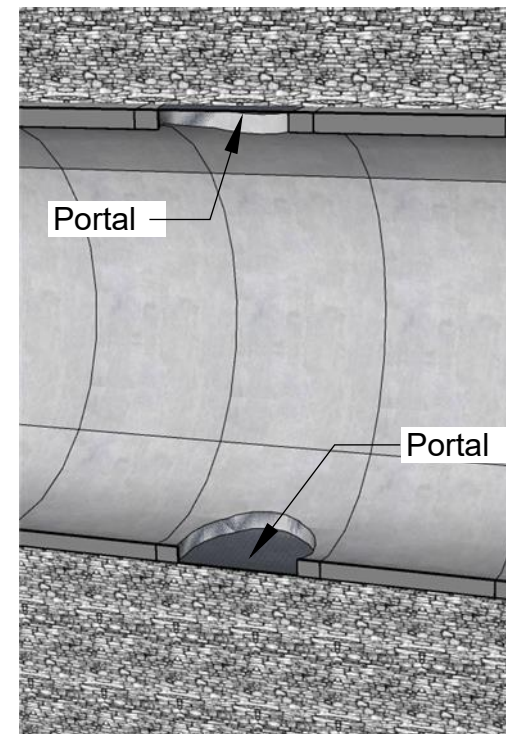
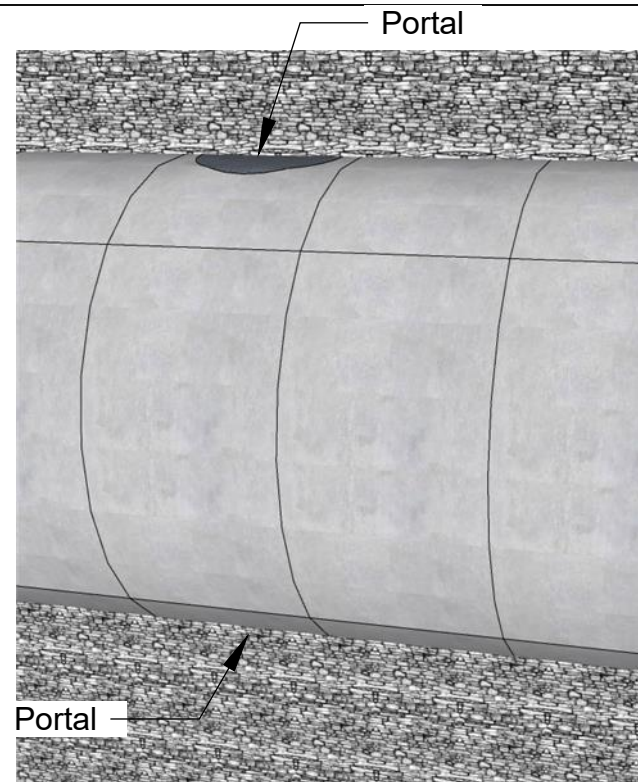
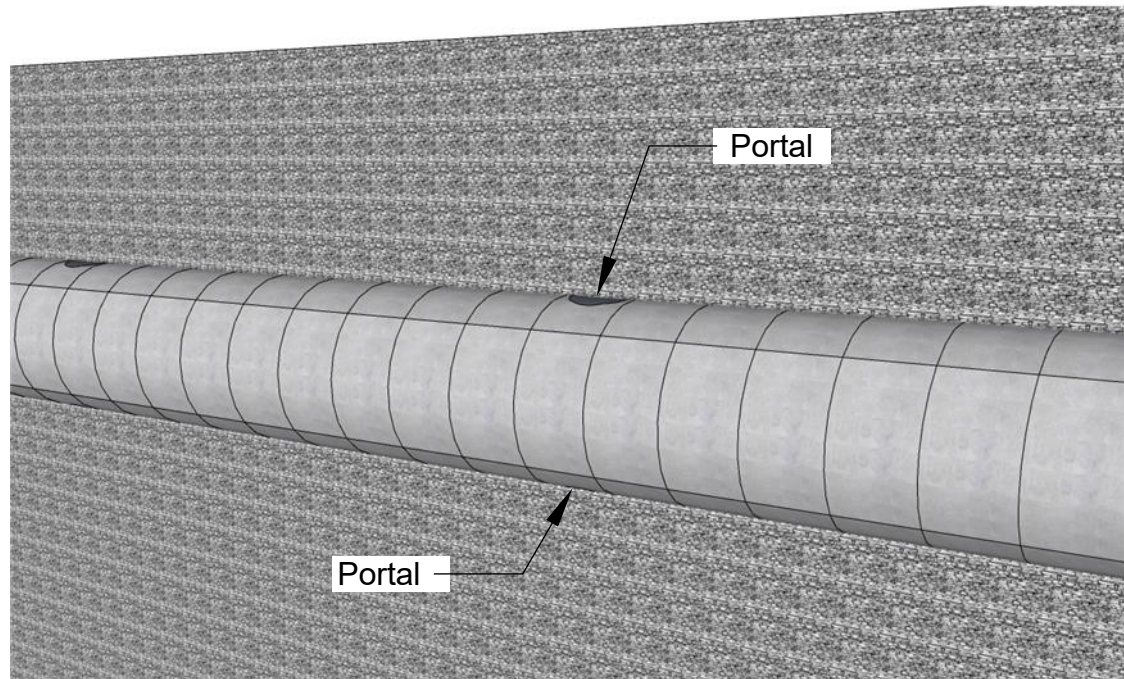


N. Hollywood Park Stormwater Capture Project
StormTunnel Alternative

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05

A



Tunnel Portals for Drywalls



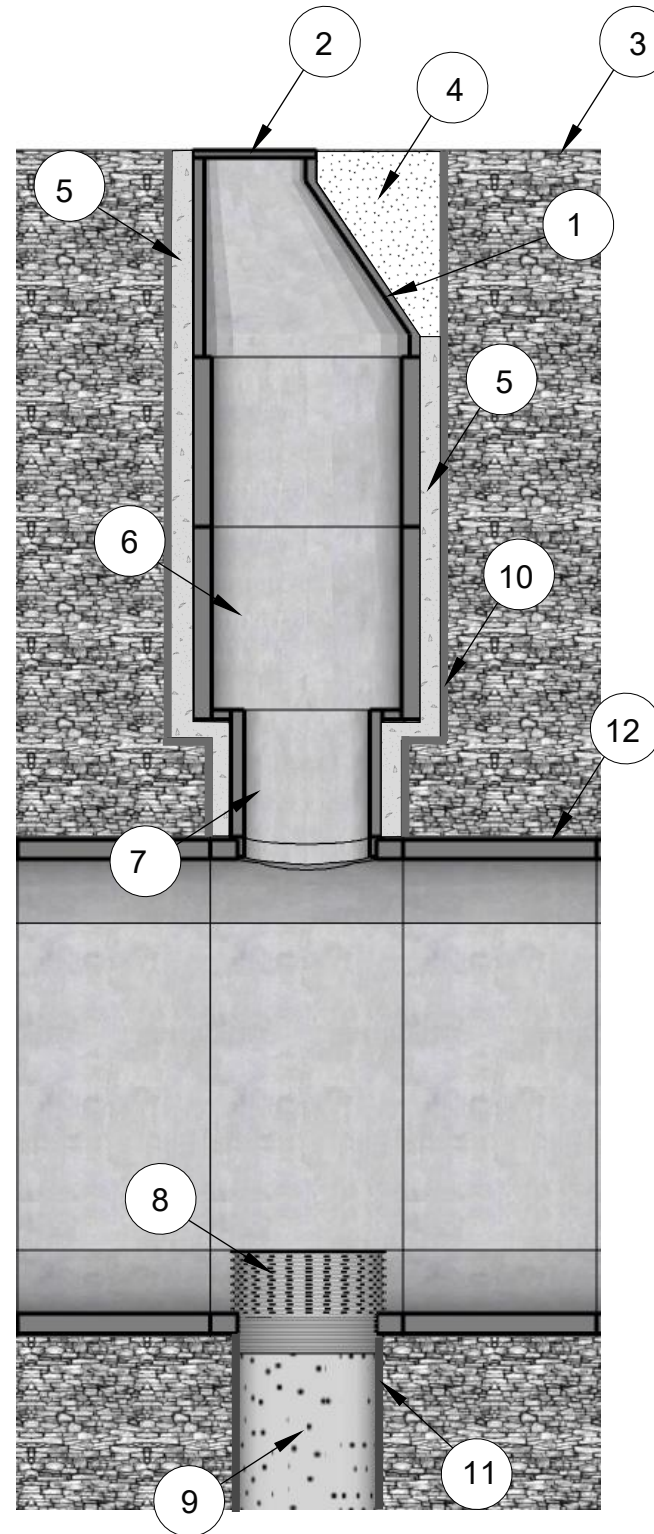
N. Hollywood Park Stormwater Capture Project
StormTunnel Alternative

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2	___/___/___	...
3	___/___/___	...
4	___/___/___	...
5	___/___/___	...



ITEM NUMBERS

- 1. 60" ID Precast Manhole Cone
- 2. Bolted Ring & Cover
- 3. Final Grade
- 4. Compacted Backfill
- 5. Poured Concrete
- 6. 60" ID Precast Manhole Shaft
- 7. 48" OD Precast Pipe Connector to Tunnel
- 8. 48" OD Slotted Corrugated HDPE Pipe, Min. 18" Tall with Filter Fabric Cover
- 9. Crushed Rock 3/8" and 1-1/2" per Native Soil
- 10. 72" Diam. Drilled Shaft
- 11. 48" Diam. Drilled Shaft, 75' Deep
- 12. Tunnel Liner Segment, 5-ft W, 12-ft ID



Drywells

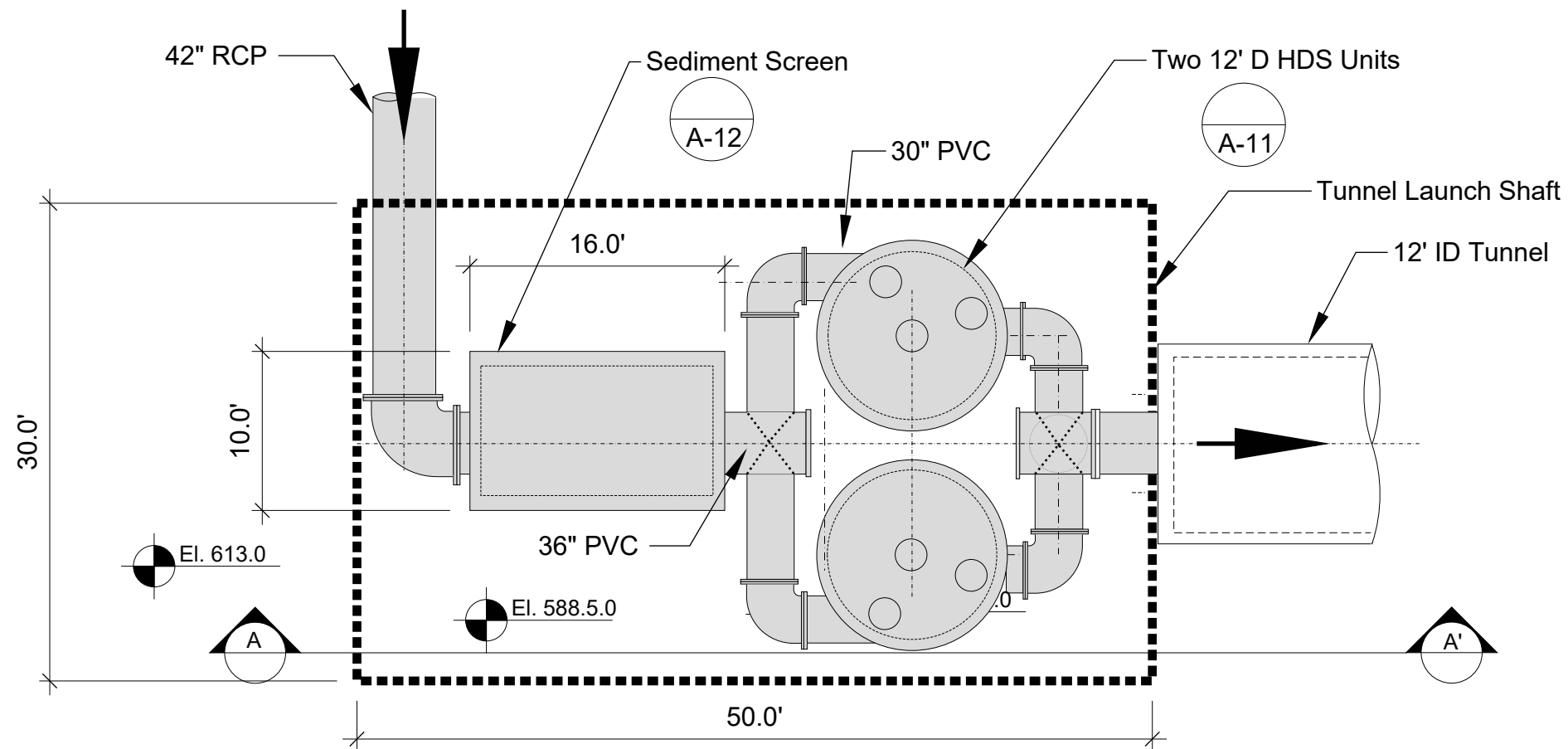


N. Hollywood Park Stormwater Capture Project
StormTunnel Alternative

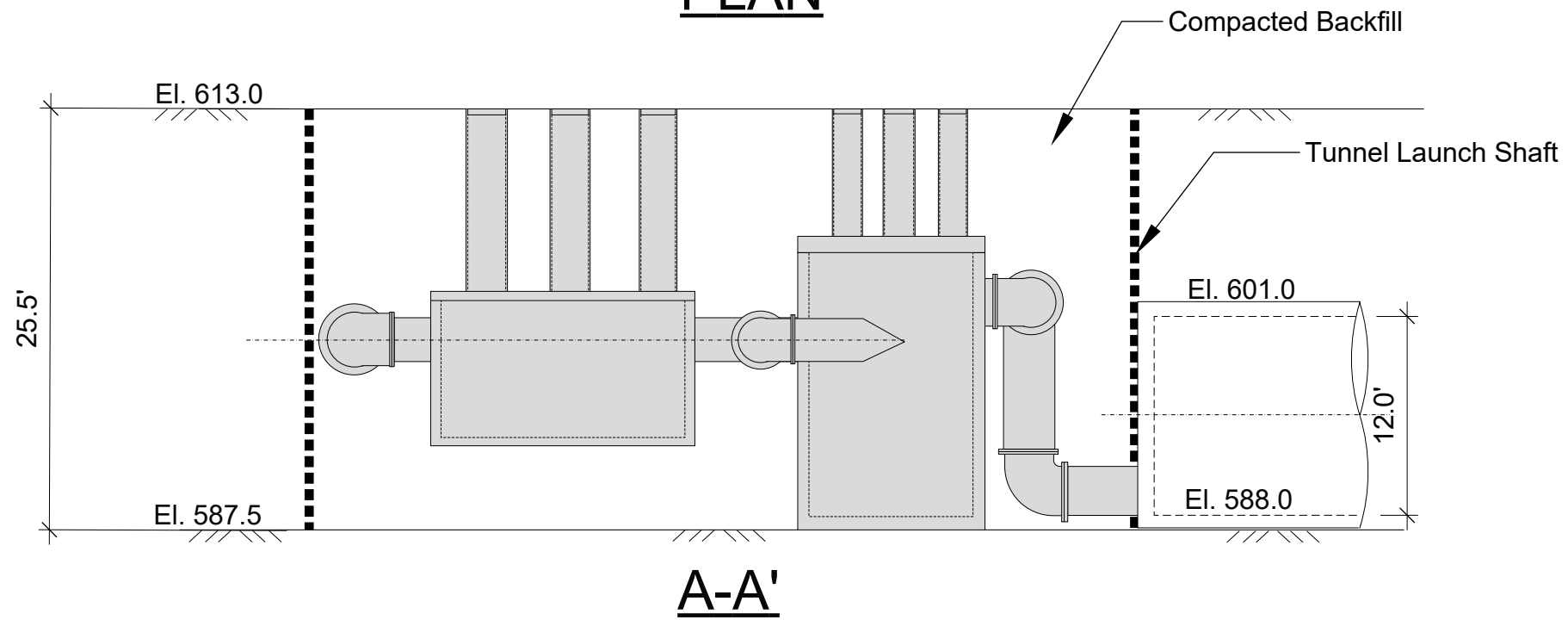
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07

A



PLAN



A-A'

Treatment System

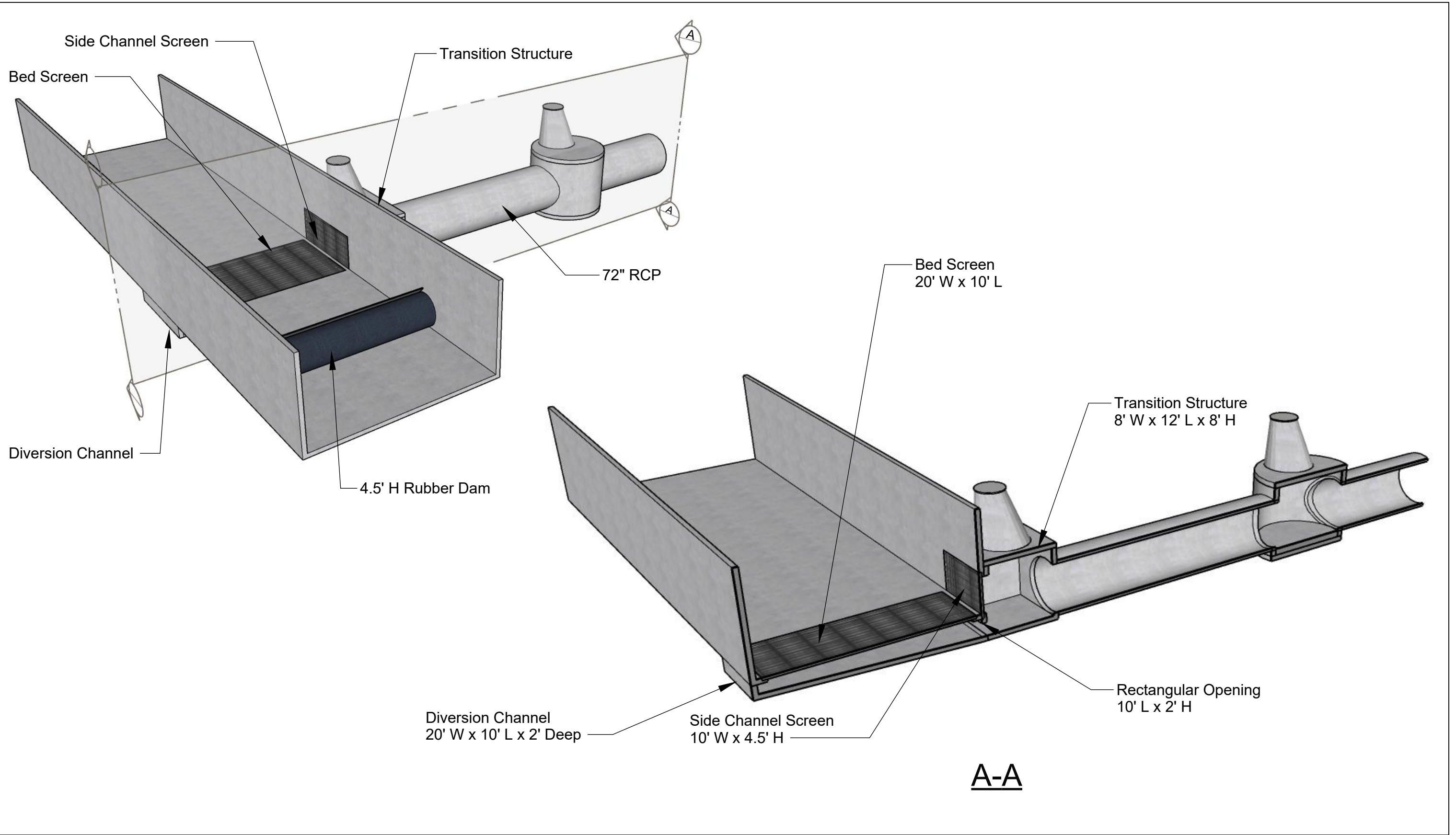


N. Hollywood Park Stormwater Capture Project
StormTunnel Alternative

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08

A



Diversion - Perspective

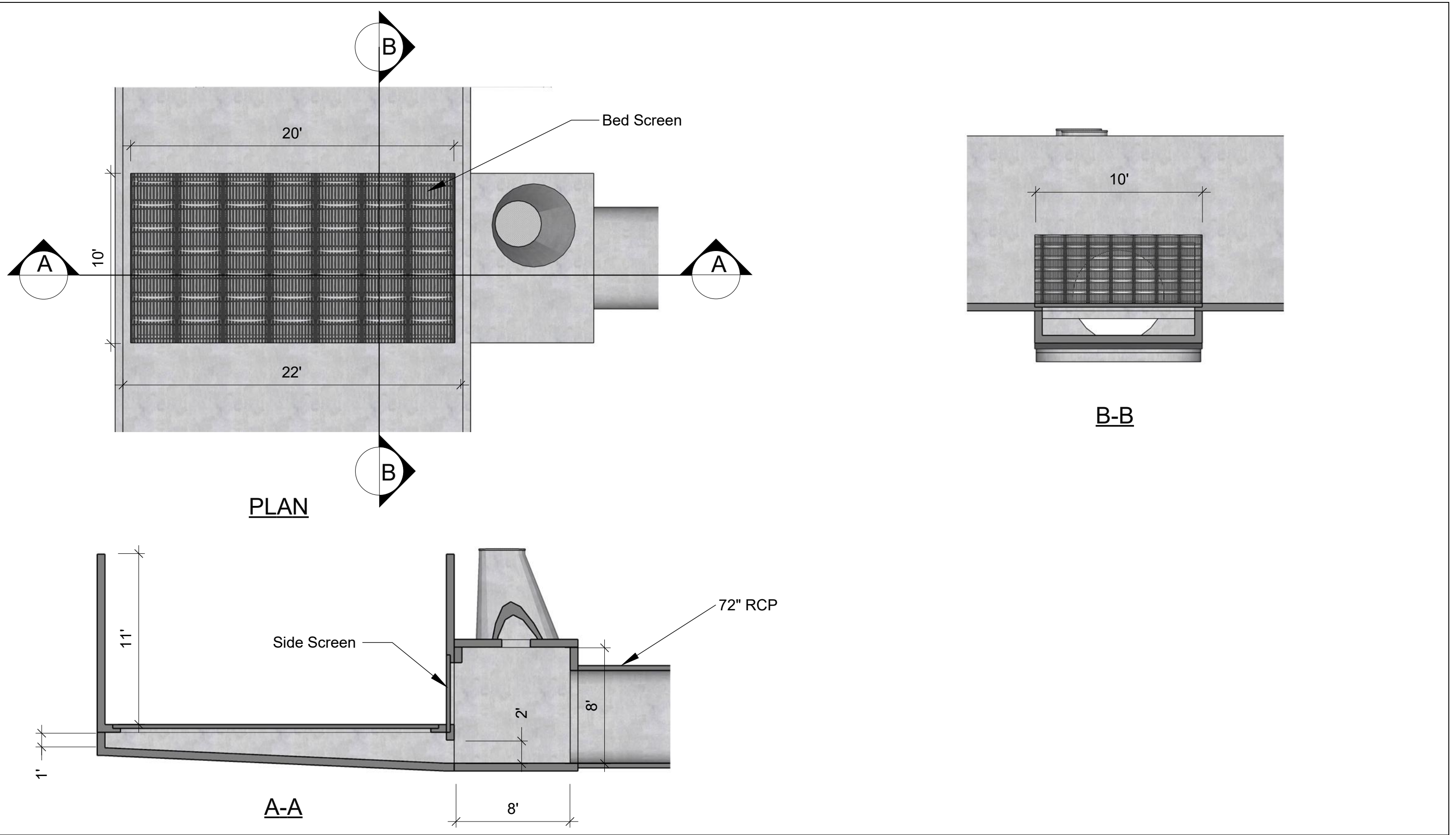


N. Hollywood Park Stormwater Capture Project
StormTunnel Alternative

MM/DD/YY	REMARKS
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09

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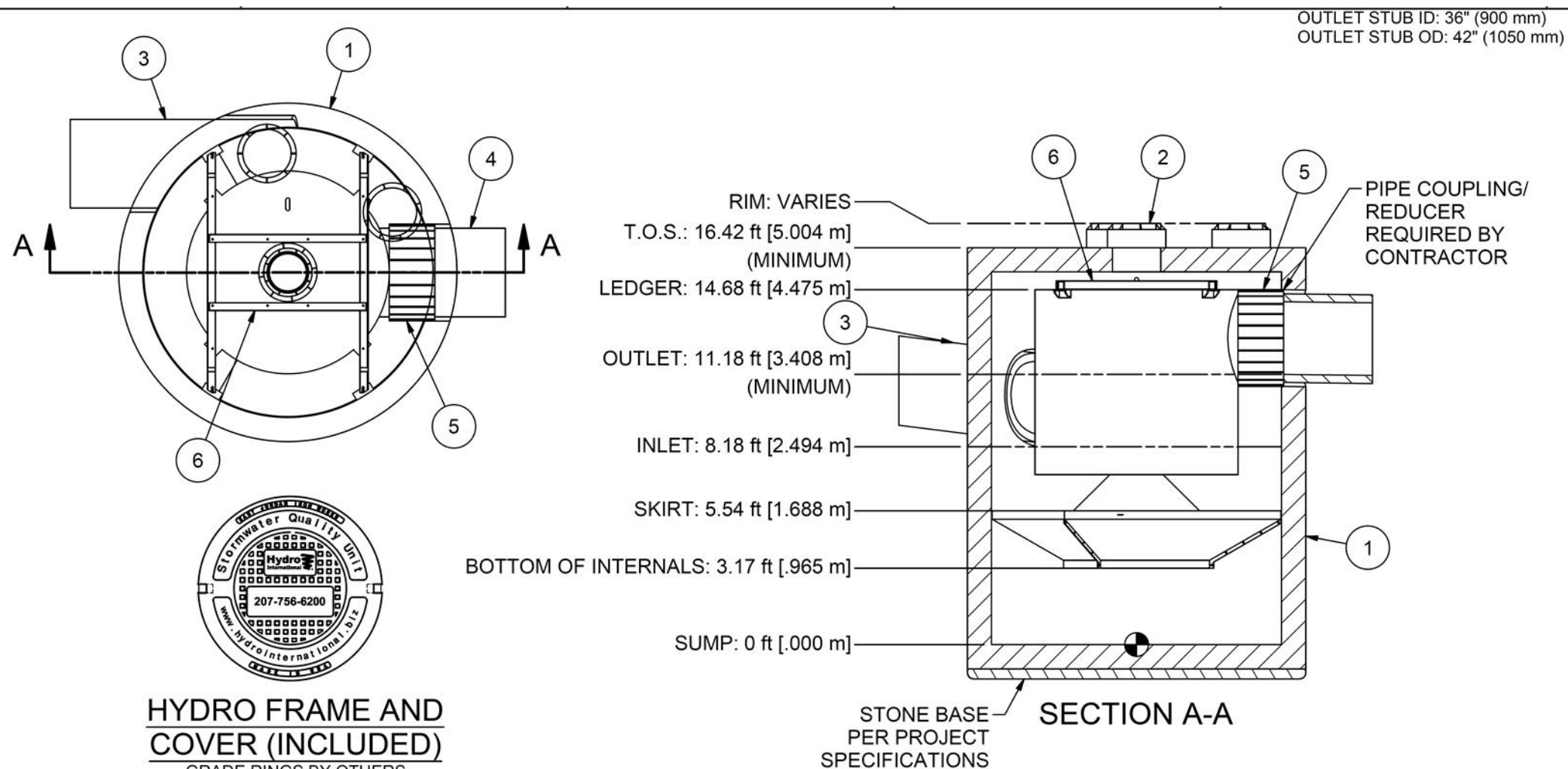


Diversion - Plan and Sections



N. Hollywood Park Stormwater Capture Project
StormTunnel Alternative

MM/DD/YY	REMARKS
1	...
2	...
3	...
4	...
5	...



OUTLET STUB ID: 36" (900 mm)
OUTLET STUB OD: 42" (1050 mm)

PROJECTION

IF IN DOUBT ASK

COMMENTS:
1. MANHOLE WALL AND SLAB THICKNESSES ARE NOT TO SCALE.
2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING DOWNSTREAM DEFENDER MANHOLE.

DATE: 11/8/2019 SCALE: NTS
DRAWN BY: GW CHECKED BY: APPROVED BY:

Title: 12ft-DIAMETER DOWNSTREAM DEFENDER

HYDRO FRAME AND COVER (INCLUDED)
GRADE RINGS BY OTHERS AS REQUIRED

NOTE: NOT FOR CONSTRUCTION.
CONTACT HYDRO FOR SITE SPECIFIC DETAIL

EQUIPMENT PERFORMANCE

The stormwater treatment unit shall adhere to the hydraulic parameters given in the chart below and provide the removal efficiencies and storage capacities as follows:

1. The treatment system shall use an induced vortex to separate pollutants from stormwater runoff.
2. Peak Hydraulic Capacity: 38.0 cfs (1076 l/s)
3. Sediment Storage Capacity: 14.70cu. yd. (11.24 cu. m)
4. Continuous Oil Storage Capacity: 1770 gal. (6700 liters)
5. Sediment shall be stored in a zone that is isolated from the main flow path and protected from reentrainment by a benching skirt.
6. For more product information including regulatory acceptances, please visit <https://hydro-int.com/en/products/downstream-defender>

PARTS LIST				
ITEM	QTY	SIZE (in)	SIZE (mm)	DESCRIPTION
1	1	144	3700	PRECAST MANHOLE (BY HYDRO VIA PRECASTER)
2	3	24	600	FRAME AND COVER (QTY 3)
3	1	36 (MAX)	900 (MAX)	INLET PIPE (BY OTHERS)
4	1	36 (MAX)	900 (MAX)	OUTLET PIPE (BY OTHERS)
5	1			PIPE COUPLING (BY OTHERS)
6	1			INTERNAL COMPONENTS (PRE-INSTALLED)



DO NOT SCALE DRAWING
STEEL FABRICATION TOLERANCES
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.
LINEAR: 000 - 012in = ±0.04in, 012 - 024in = ±0.06in, 024 - 048in = ±0.08in, 048 - 120in = ±0.12in, 120in >>> = ±0.20in
ANGULAR: 000 - 120in = ±1°, 120 - 240in = ±0.5°, 240in >>> = ±0.25°

WEIGHT: N/A MATERIAL:
REFERENCE NUMBER:
DRAWING NO.:

ANY WARRANTY GIVEN BY HYDRO INTERNATIONAL WILL APPLY ONLY TO THOSE ITEMS SUPPLIED BY IT. ACCORDINGLY HYDRO INTERNATIONAL CANNOT ACCEPT ANY RESPONSIBILITY FOR ANY STRUCTURE, PLANT, OR EQUIPMENT, (OR THE PERFORMANCE THERE OF) DESIGNED, BUILT, MANUFACTURED, OR SUPPLIED BY ANY THIRD PARTY. HYDRO INTERNATIONAL HAVE A POLICY OF CONTINUOUS DEVELOPMENT AND RESERVE THE RIGHT TO AMEND THE SPECIFICATION. HYDRO INTERNATIONAL CANNOT ACCEPT LIABILITY FOR PERFORMANCE OF ITS EQUIPMENT, (OR ANY PART THEREOF), IF THE EQUIPMENT IS SUBJECT TO CONDITIONS OUTSIDE ANY DESIGN SPECIFICATION. HYDRO INTERNATIONAL OWNS THE COPYRIGHT OF THIS DRAWING, WHICH IS SUPPLIED IN CONFIDENCE. IT MUST NOT BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SUPPLIED AND MUST NOT BE REPRODUCED, IN WHOLE OR IN PART, WITHOUT PRIOR PERMISSION IN WRITING FROM HYDRO INTERNATIONAL.

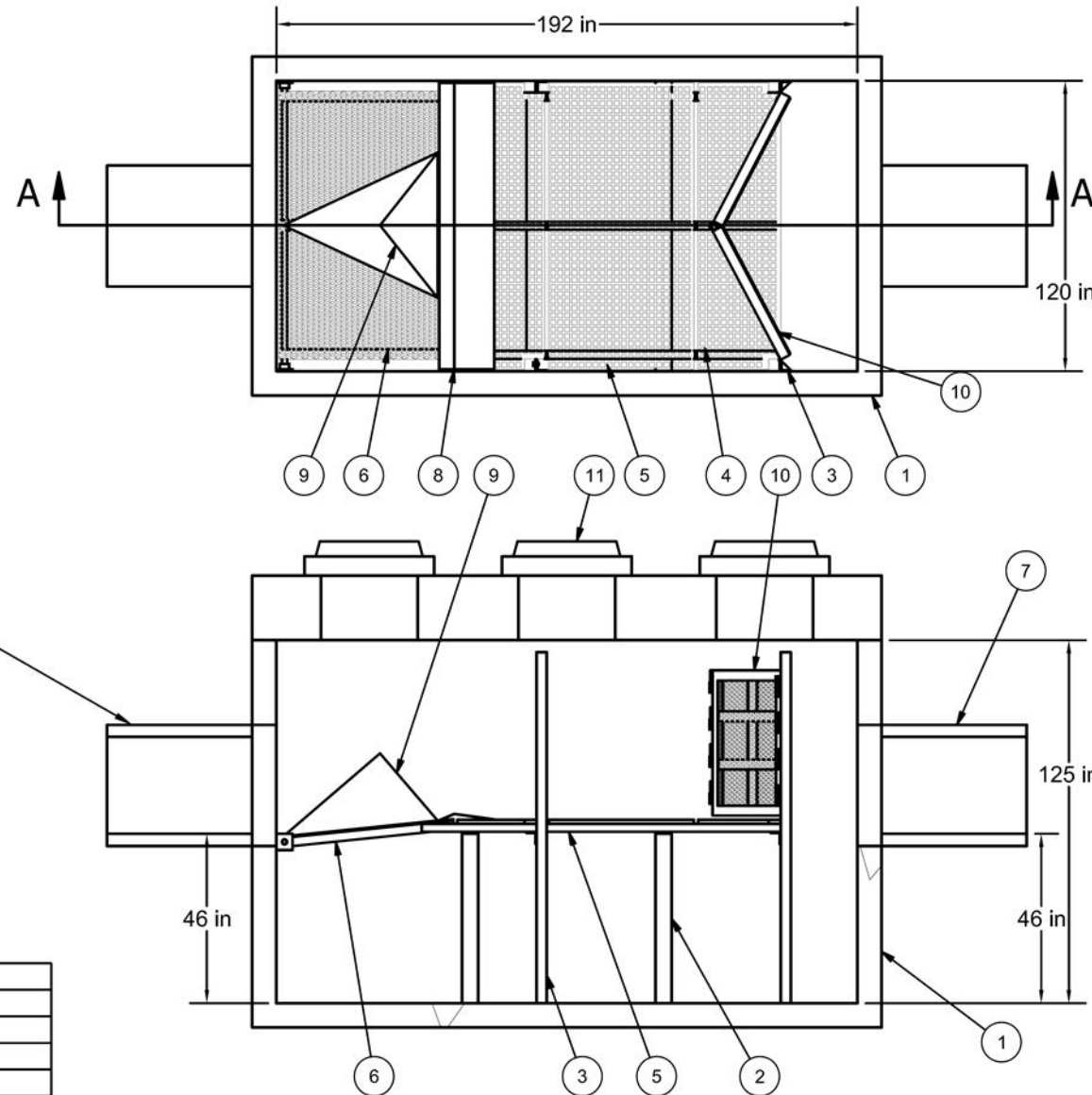
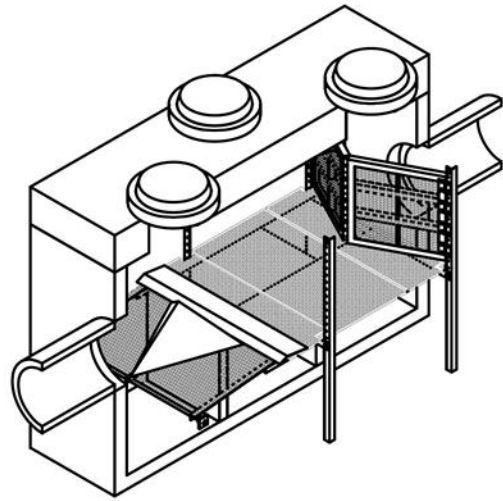
Hydrodynamic Separator



N. Hollywood Park Stormwater Capture Project
StormTunnel Alternative

MM/DD/YY	REMARKS
1	...
2	...
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11
A



MAXIMUM PIPE SIZE: 54 in

EQUIPMENT PERFORMANCE

Max. Treatment Flow Rate = 124 cfs
 Typical Treatment Flow Rate = 53 cfs
 Open orifice area of screen system = 112.0 sq.ft.
 Min. Screenings Storage capacity = 23.3 yd³
 Min. Sediment storage volume = 7.1 yd³

Parts List			
ITEM	QTY	SIZE	DESCRIPTION
1	1	10 ft x 16 ft	VAULT
2	2		BAFFLES
3	4		MOUNTING BRACKETS
4	3		HORZ. SCREEN PANELS
5	1		FRAME
6	1		INLET SCREEN PANEL
7	2	54 in	INLET/OUTLET PIPES (BY OTHERS)
8	1		TRANSITION CONNECTOR
9	1		FLOW SPREADER
10	2		VERT. SCREEN WEIR
11	3	30 in	FRAME AND COVER

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Notes

1. MANHOLE WALL AND SLAB THICKNESSES ARE NOT TO SCALE.
2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING HYDRO DRYSCREEN SYSTEMS.
3. CONTRACTOR TO CONFIRM RIM, PIPE INVERTS, PIPE DIA. AND PIPE ORIENTATION PRIOR TO RELEASE OF UNIT TO FABRICATION.

REV	BY	DATE	DESCRIPTION
JF	1/15/15	FIRST ISSUE	

REVISION HISTORY

Date 1/15/15	Scale NTS
Drawn JF	Checked Approved

Title
 DRYSCREEN
 10' x 16' VAULT

GENERAL ARRANGEMENT



Stormwater Solutions
 94 Hutchins Drive
 Portland, Maine 04102
 Tel: (207) 756-6200
 Fax: (207) 756-6212
 stormwaterinquiry@hydro-int.com

CAD Ref: DS-10x16
 Project No. xx-xxxx
 Drawing No. DS-10x16 Rev.

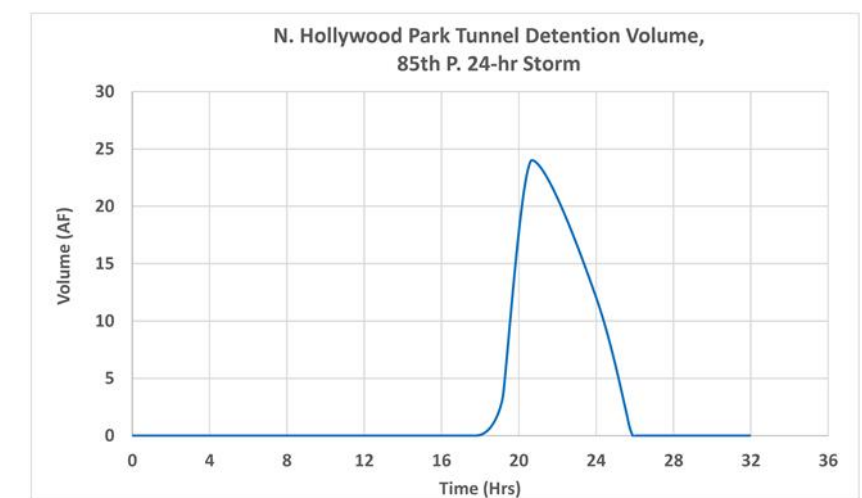
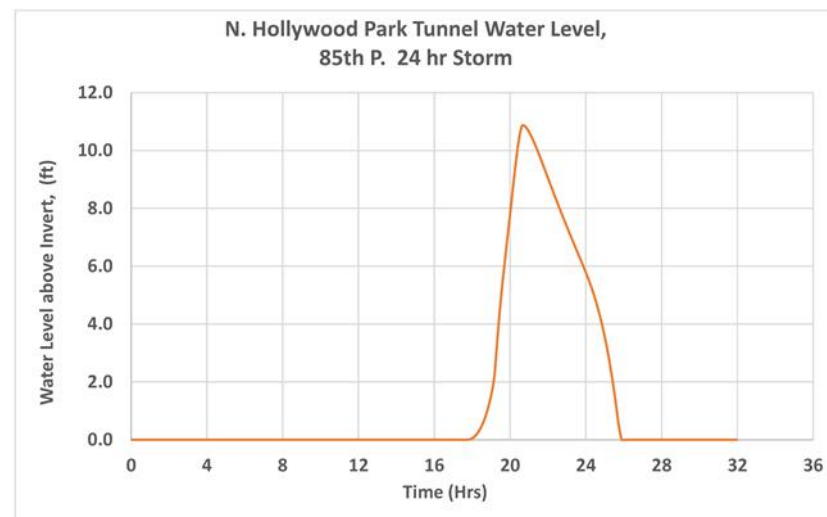
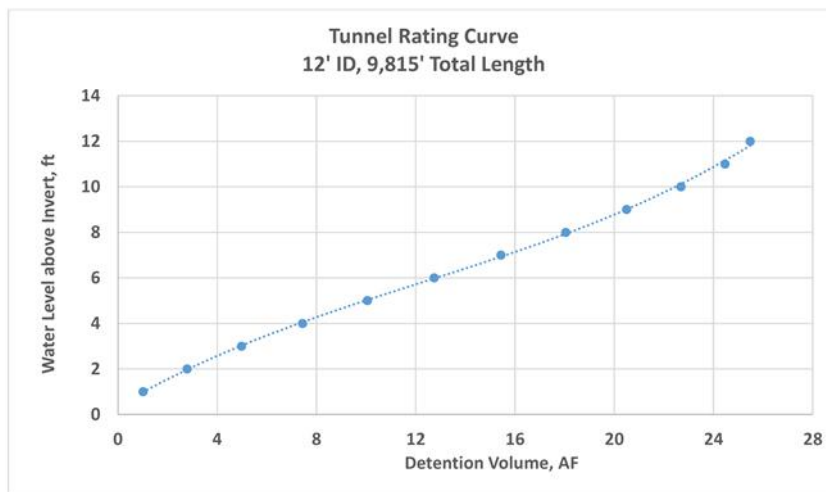
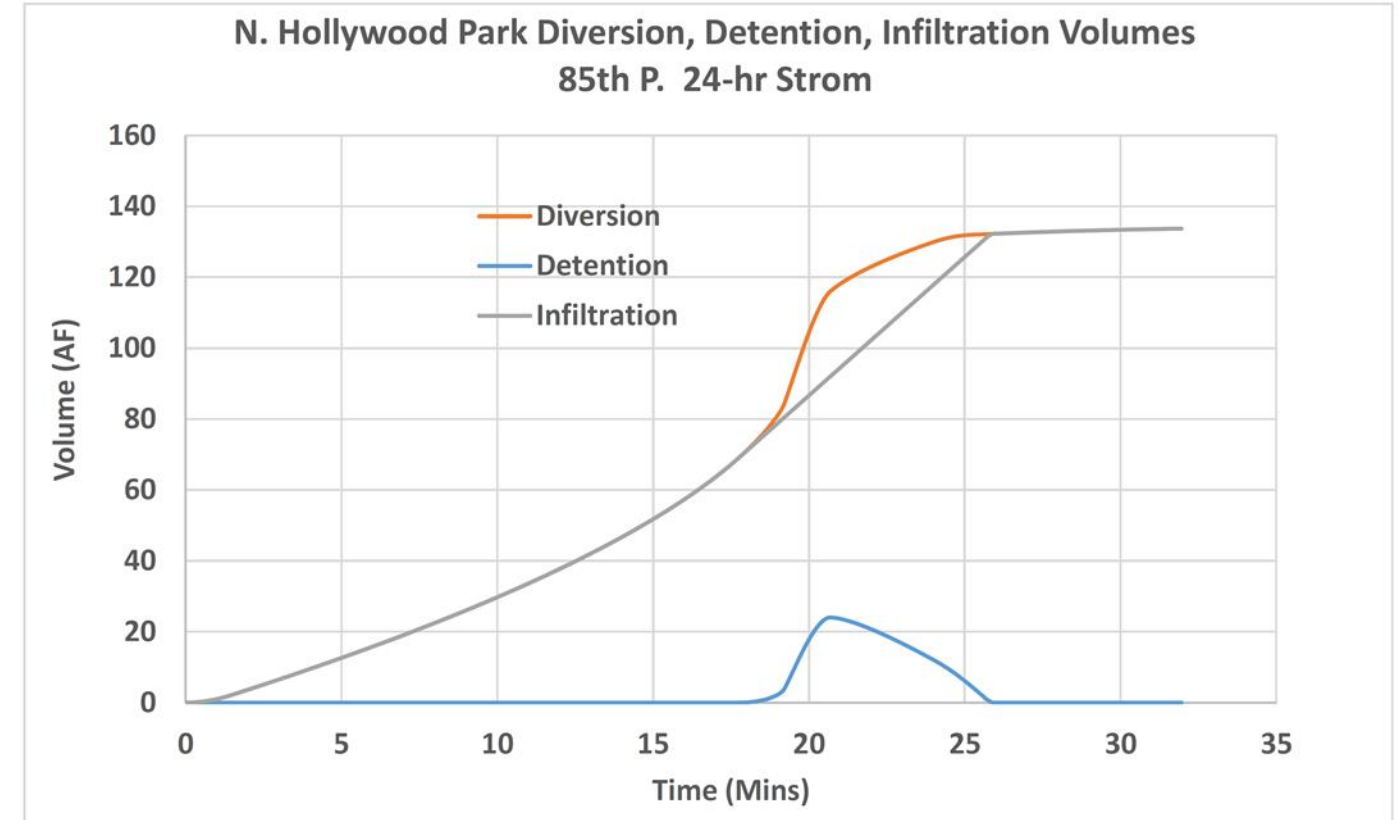
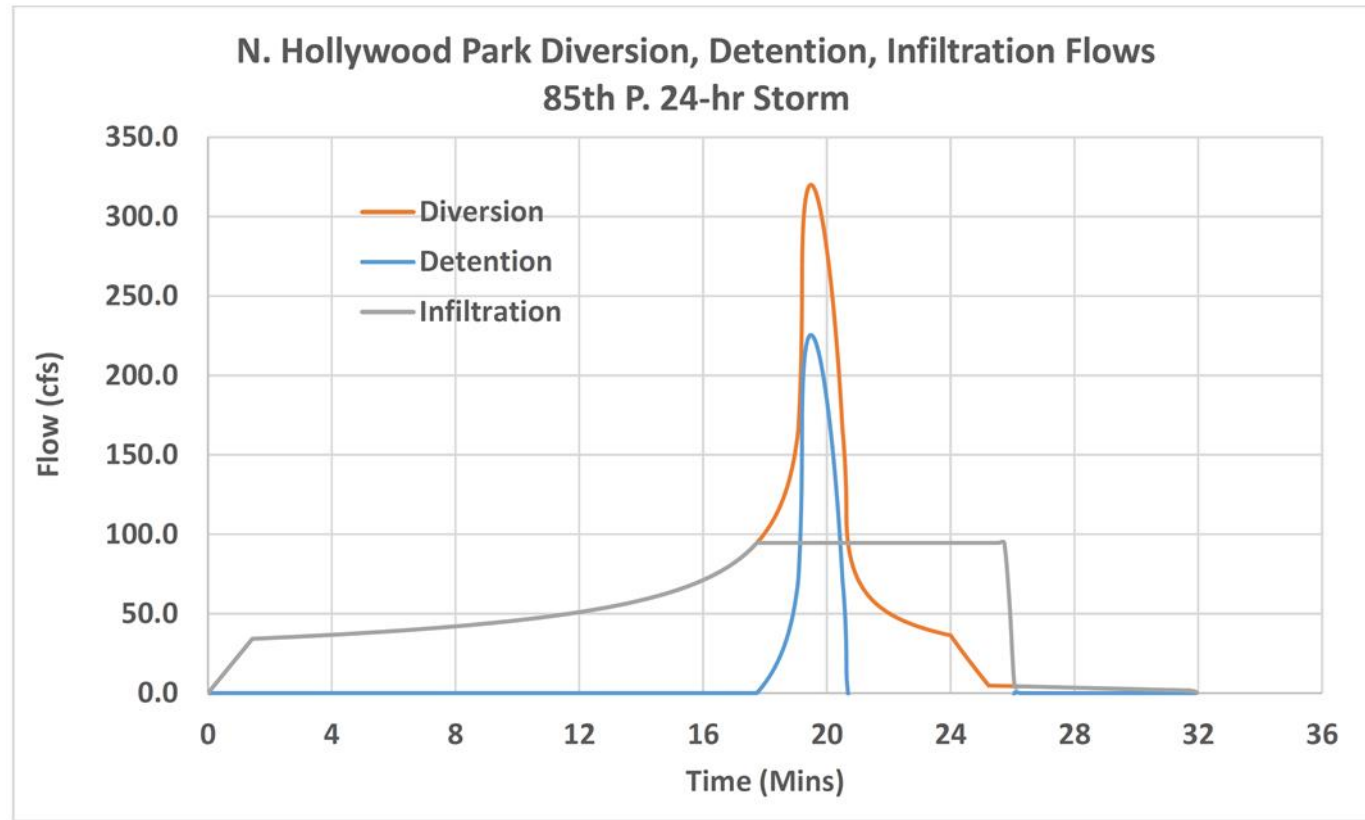
Sediment Screen

SEITec
 N. Hollywood Park Stormwater Capture Project
 StormTunnel Alternative

MM/DD/YY	REMARKS
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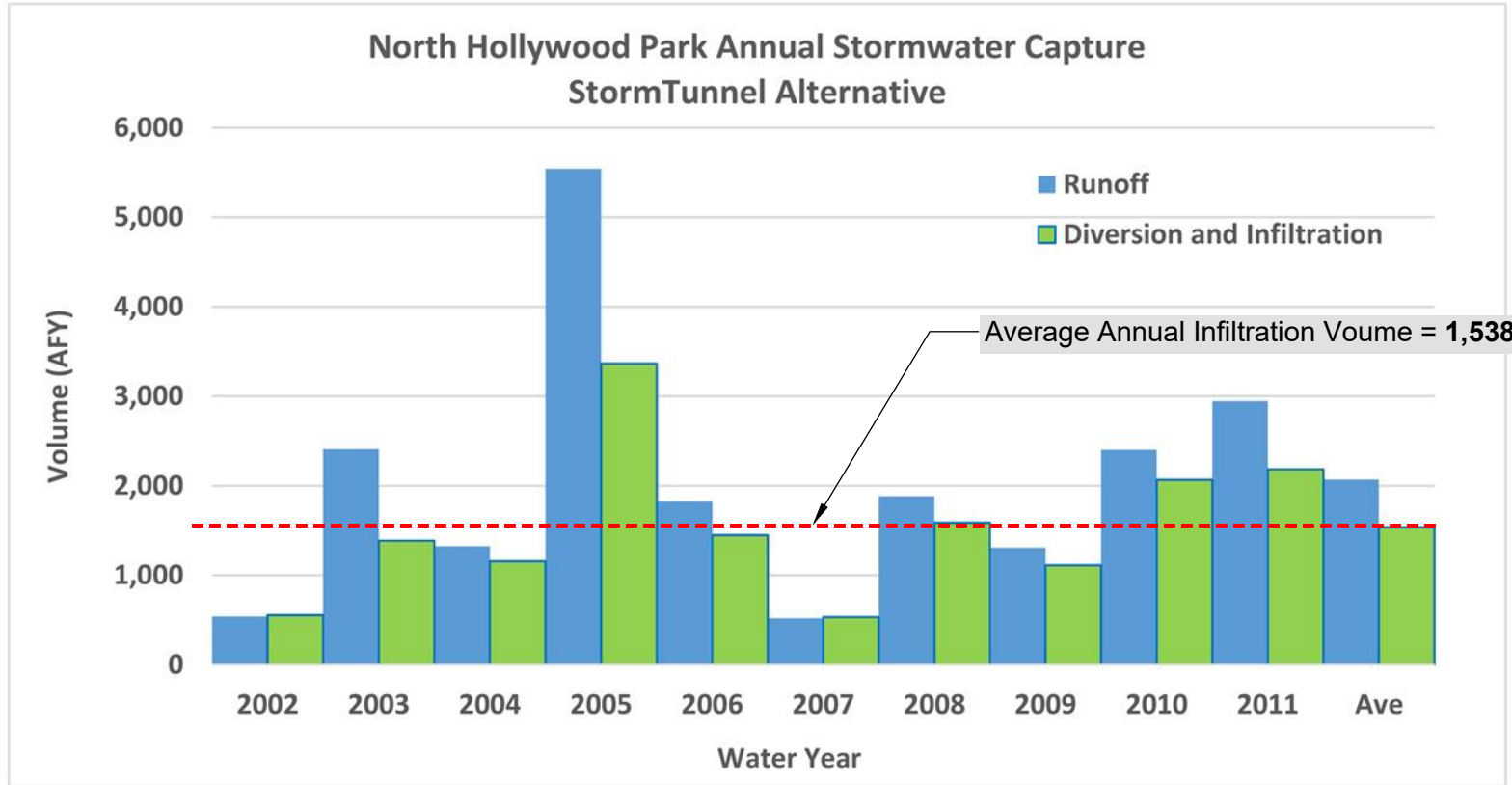
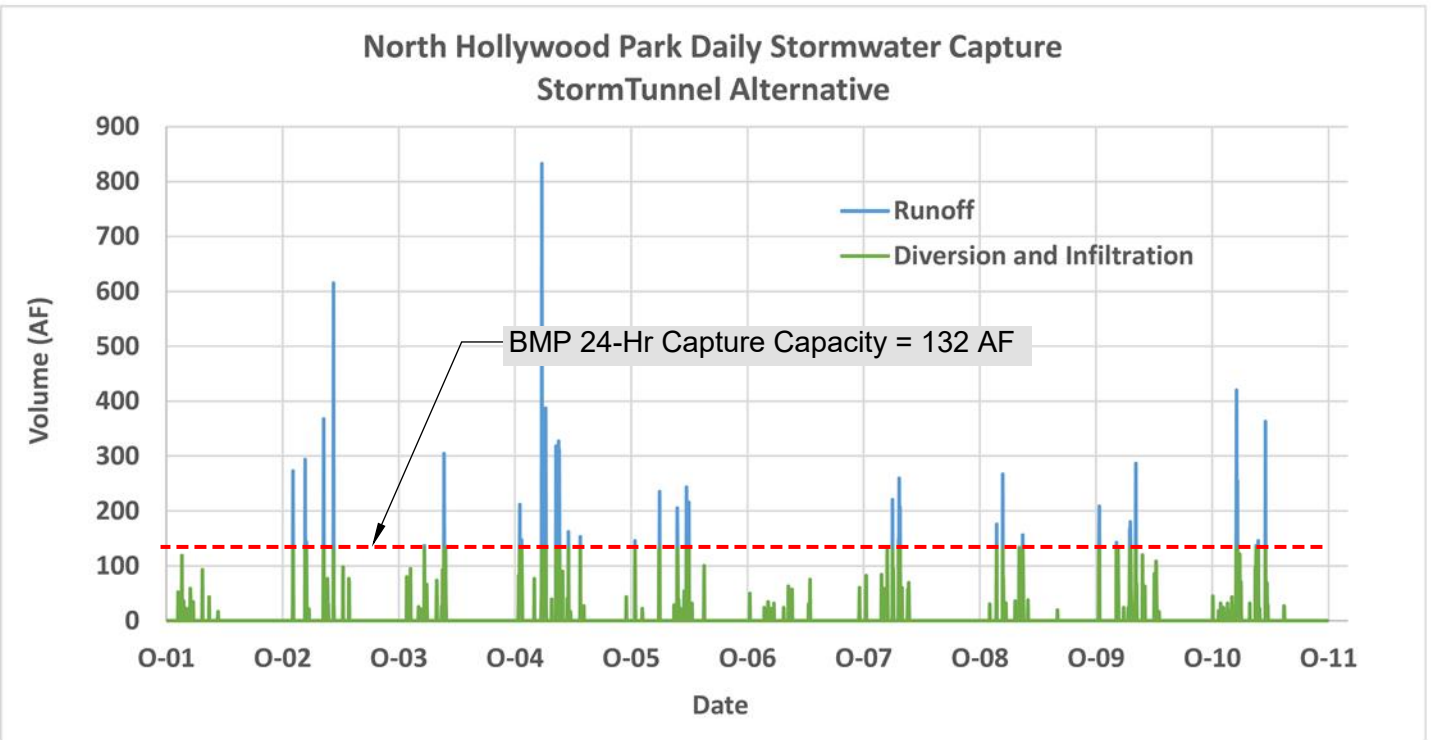
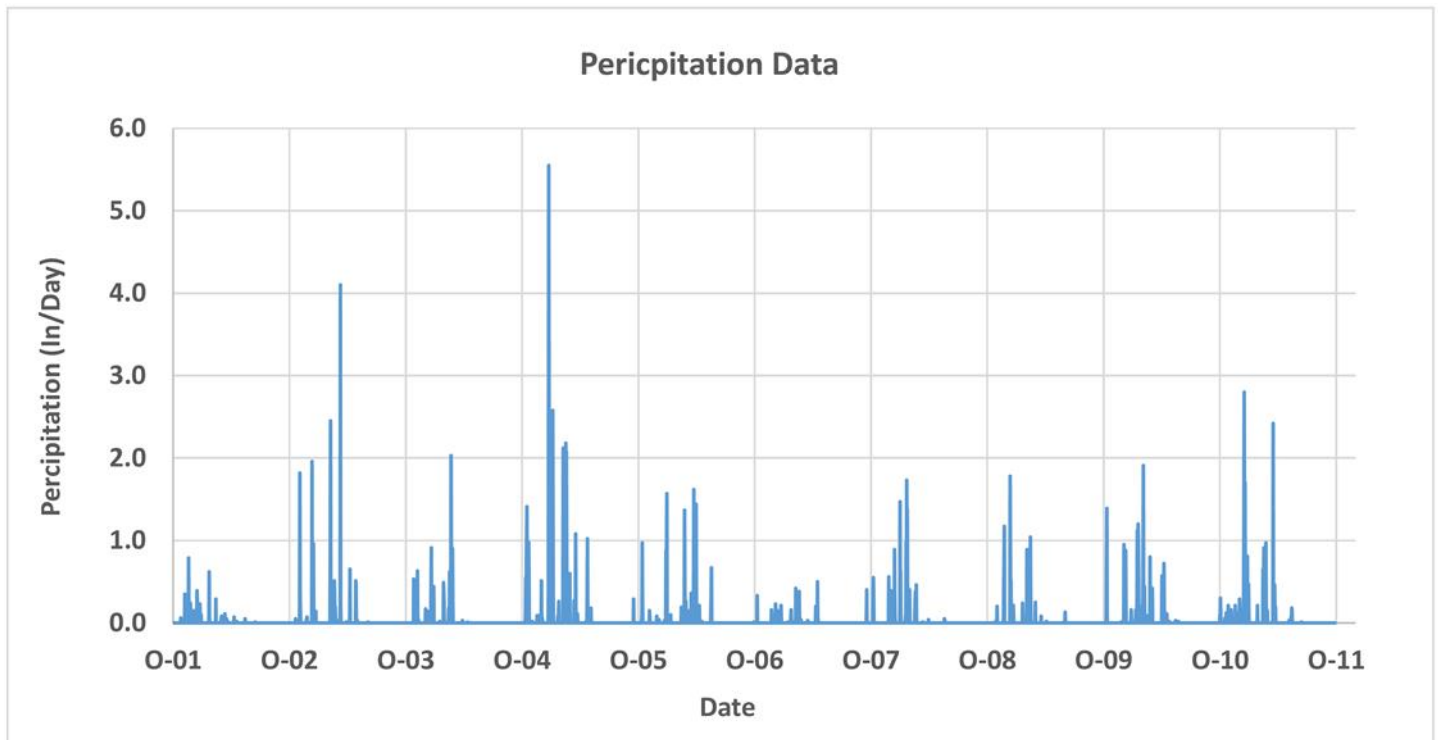


Modeling Results - 85th P. Storm



N. Hollywood Park Stormwater Capture Project
StormTunnel Alternative

MM/DD/YY	REMARKS
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MM/DD/YY	REMARKS
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