

**WARNING:** ALL INDIVIDUALS INTERESTED IN BIDDING ON THIS PROJECT MUST OBTAIN THE FINAL PLANS AND SPECIFICATIONS FROM THE DEPARTMENT MANAGING THE PROJECT OR AS OTHERWISE STATED IN THE ADVERTISEMENT FOR BIDS FOR THE PROJECT. DO NOT USE THE PLANS AND SPECIFICATIONS POSTED ON THE CLERK OF THE BOARD'S WEBSITE FOR BIDDING ON THIS PROJECT.

# SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS SOLID WASTE MANAGEMENT DIVISION

## UNIT 5 PRE-DEVELOPMENT INVESTIGATION AT THE MID-VALLEY SANITARY LANDFILL



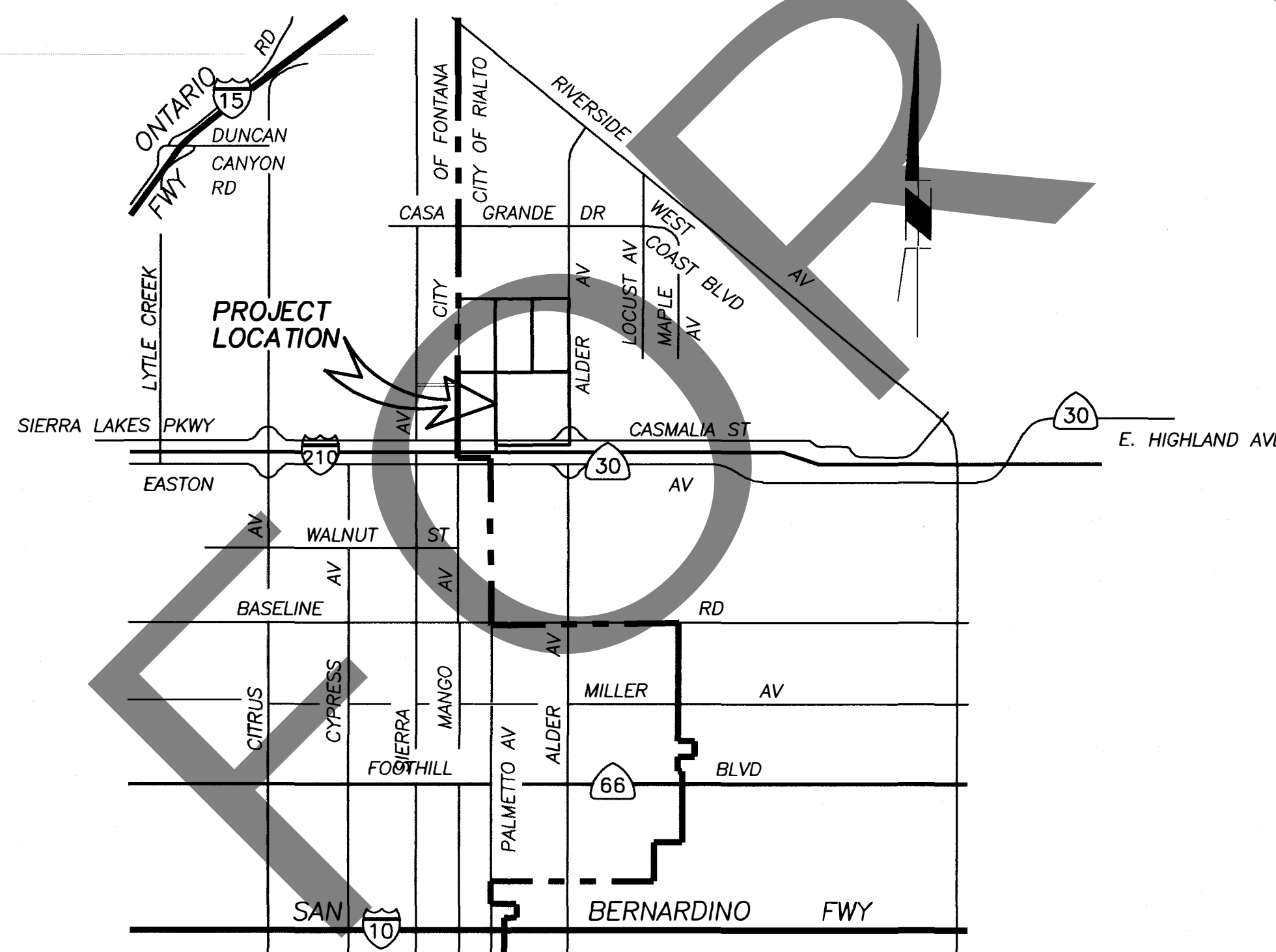
SAN BERNARDINO  
**COUNTY**  
PUBLIC WORKS

### BENCHMARK

SEE SHEET NO. 2 FOR HORIZONTAL AND VERTICAL CONTROL

### NOTICE TO CONTRACTOR

1. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THESE LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE IN ALIGNMENT AND/OR GRADE OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE EXACT DETERMINATION AS THE LOCATION OF ALL EXISTING UTILITIES. FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT AT 811 AND SHALL PROVIDE THE CONSTRUCTION MANAGER WITH VERIFICATION NUMBERS ISSUED.
3. THE FACT THAT ANY UTILITY FACILITY IS SHOWN OR NOT SHOWN UPON THE PLANS SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY UNDER SECTION 8-1.10 "UTILITY AND NON-HIGHWAY FACILITIES," OF THE STATE STANDARD SPECIFICATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY, PURSUANT THERETO, TO ASCERTAIN THE LOCATION OF ANY UTILITY FACILITY WHICH MAY BE SUBJECT TO DAMAGE BY REASON OF THE CONTRACTOR'S OPERATIONS.
4. REGARDING SIGNED DRAWING VERSUS ELECTRONIC COPY: SHOULD THE CONTRACTOR OR CONTRACTOR'S SURVEYOR FIND A CONTOUR LABEL OR ELEVATION DISCREPANCY BETWEEN THE SIGNED DRAWING AND THE ELECTRONIC VERSION (WHICH HAS BEEN PROVIDED AS A COURTESY FOR EASE OF CONSTRUCTION STAKING), THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE DISCREPANCY SO THAT THE DISCREPANCY MAY BE RESOLVED, PRIOR TO CONSTRUCTION.



LOCATION MAP  
NOT TO SCALE

SAN BERNARDINO COUNTY

APPROVED BY:

*Brendon Biggs*  
BRENDON BIGGS, PE C57127 DIRECTOR OF PUBLIC WORKS

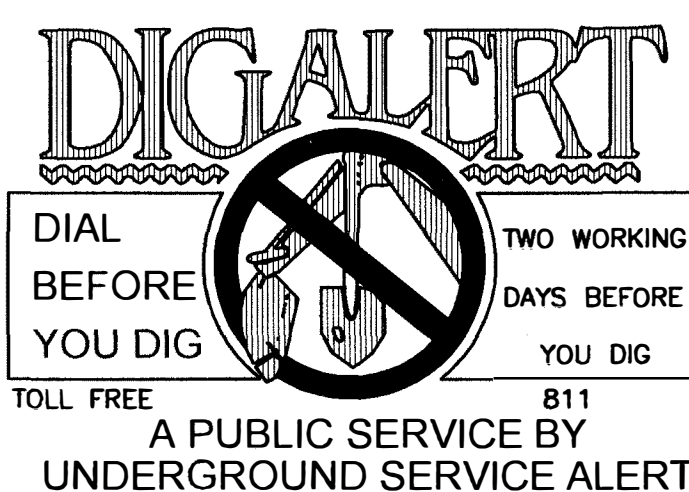
7-7-22  
DATE

### INDEX OF SHEETS

SHEET	DESCRIPTION
1	TITLE SHEET
2	SITE PLAN
3	DETAIL SHEET

### GENERAL NOTES

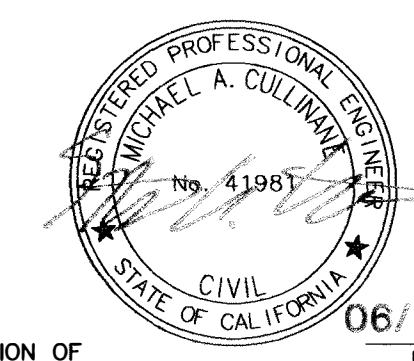
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2. ALL CONSTRUCTION TO BE IN CONFORMANCE WITH THE REGULATIONS OF CAL-OSHA.
3. ALL ELEVATIONS ARE SHOWN IN FEET AND DECIMALS THEREOF BASED ON U.S.C. AND G.S. DATUM.
4. ELEVATIONS OF UTILITIES ARE APPROXIMATE UNLESS OTHERWISE NOTED.
5. PROTECT ALL UTILITIES, POLES, SIGNS, AND EXISTING IMPROVEMENTS IN PLACE UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR NOTED ON THESE PLANS. WHERE RELOCATION OF THESE UTILITIES ARE REQUIRED, THE CONTRACTOR SHALL COORDINATE CONSTRUCTION AS NECESSARY AND AS APPROVED BY THE ENGINEER. CONTRACTOR SHALL SUBMIT A PLAN FOR HAUL ROUTES AND STAGING AREAS INSIDE THE LIMITS OF WORK TO SWMD FOR APPROVAL.
7. THE CONTRACTOR SHALL NOT INTERFERE WITH DAILY WASTE DISPOSAL OPERATIONS.
8. THE CONTRACTOR SHALL NOT INTERFERE WITH OFFSITE AGGREGATE RECOVERY OPERATIONS.



MARK	CHANGES	RESIDENT ENGINEER	DATE
	NO CHANGES		

FIELD CHANGES

PREPARED BY:  
**SWT** Civil & Environmental Engineering  
800-C SOUTH ROCHESTER AVENUE  
ONTARIO, CALIFORNIA 91761



MID-VALLEY SANITARY LANDFILL

UNIT 5 PRE-DEVELOPMENT INVESTIGATION

TITLE SHEET

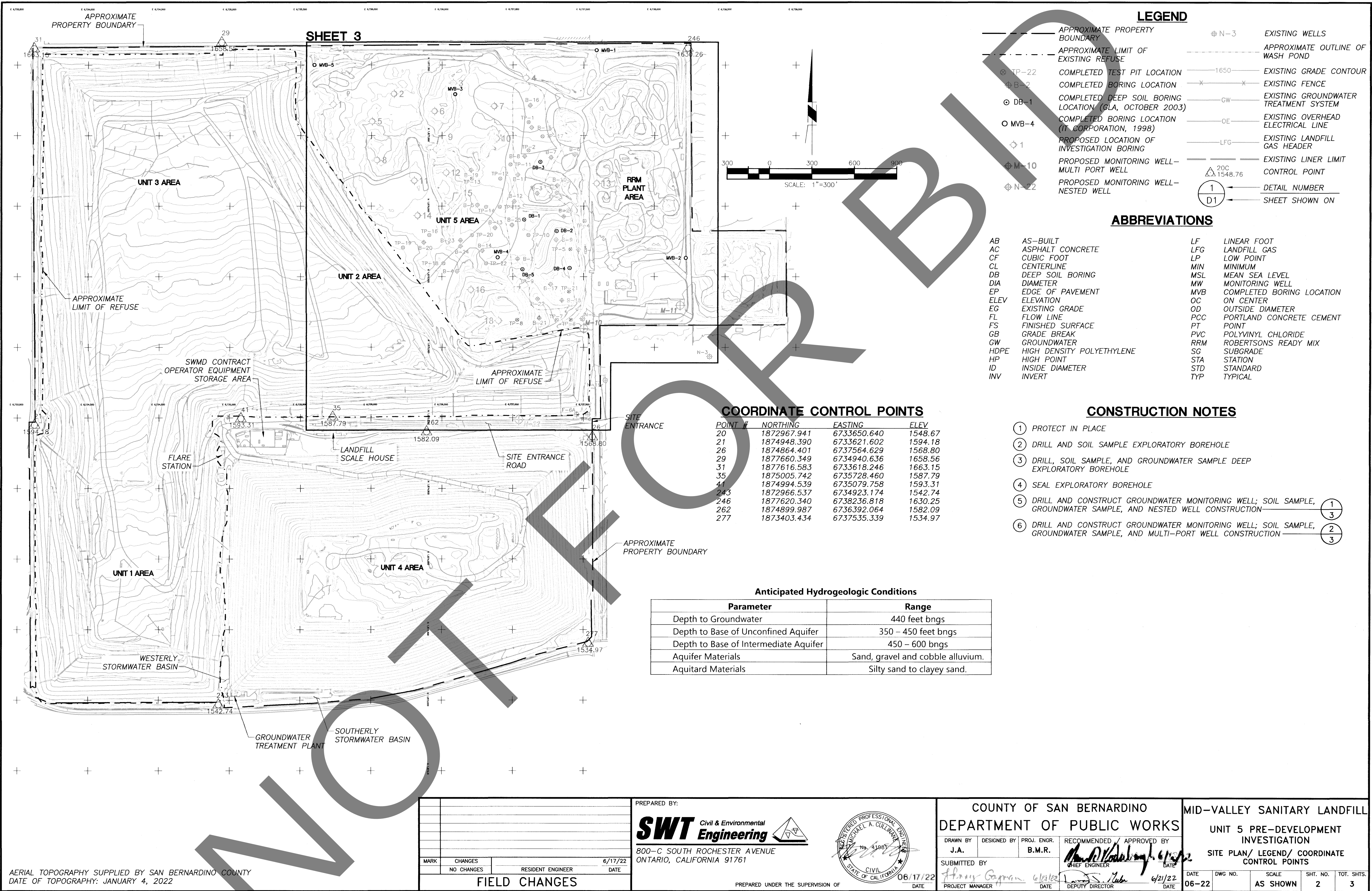
DATE	DWG NO.	SCALE	SHT. NO.	TOT. SHTS.
06-22		AS SHOWN	1	3

PREPARED UNDER THE SUPERVISION OF

06/17/22

DATE

2:\PROJECTS\SAN\_BERNARDINO\_SWMD\MID-VALLEY\UNIT 5 PRE-DEVELOPMENT INVESTIGATION\CAD\3 SHEET SET\01-TITLE SHEET



**SHEET 3**

**LEGEND**

- APPROXIMATE PROPERTY BOUNDARY
- - - APPROXIMATE LIMIT OF EXISTING REFUSE
- ⊗ TP-22 COMPLETED TEST PIT LOCATION
- ⊗ B-2 COMPLETED BORING LOCATION
- ⊗ DB-1 COMPLETED DEEP SOIL BORING LOCATION (GLA, OCTOBER 2003)
- ⊗ MVB-4 COMPLETED BORING LOCATION (IT CORPORATION, 1998)
- ⊗ 1 PROPOSED LOCATION OF INVESTIGATION BORING
- ⊗ M-10 PROPOSED MONITORING WELL - MULTI PORT WELL
- ⊗ N-22 PROPOSED MONITORING WELL - NESTED WELL
- ⊗ N-3 EXISTING WELLS
- - - APPROXIMATE OUTLINE OF WASH POND
- 1650 EXISTING GRADE CONTOUR
- \* \* \* EXISTING FENCE
- GW EXISTING GROUNDWATER TREATMENT SYSTEM
- OE EXISTING OVERHEAD ELECTRICAL LINE
- LFG EXISTING LANDFILL GAS HEADER
- - - EXISTING LINER LIMIT
- △ 20C 1548.76 CONTROL POINT
- ① DETAIL NUMBER
- D1 SHEET SHOWN ON

**ABBREVIATIONS**

- AB AS-BUILT
- AC ASPHALT CONCRETE
- CF CUBIC FOOT
- CL CENTERLINE
- DB DEEP SOIL BORING
- DIA DIAMETER
- EP EDGE OF PAVEMENT
- ELEV ELEVATION
- EG EXISTING GRADE
- FL FLOW LINE
- FS FINISHED SURFACE
- GB GRADE BREAK
- GW GROUNDWATER
- HDPE HIGH DENSITY POLYETHYLENE
- HP HIGH POINT
- ID INSIDE DIAMETER
- INV INVERT
- LF LINEAR FOOT
- LFG LANDFILL GAS
- LP LOW POINT
- MIN MINIMUM
- MSL MEAN SEA LEVEL
- MW MONITORING WELL
- MVB COMPLETED BORING LOCATION
- OC ON CENTER
- OD OUTSIDE DIAMETER
- PCC PORTLAND CONCRETE CEMENT
- PT POINT
- PVC POLYVINYL CHLORIDE
- RRM ROBERTSON'S READY MIX
- SG SUBGRADE
- STA STATION
- STD STANDARD
- TYP TYPICAL

**COORDINATE CONTROL POINTS**

POINT #	NORTHING	EASTING	ELEV
20	1872967.941	6733650.640	1548.67
21	1874948.390	6733621.602	1594.18
26	1874864.401	6737564.629	1568.80
29	1877660.349	6734940.636	1658.56
31	1877616.583	6733618.246	1663.15
35	1875005.742	6735728.460	1587.79
41	1874994.539	6735079.758	1593.31
243	1872966.537	6734923.174	1542.74
246	1877620.340	6738236.818	1630.25
262	1874899.987	6736392.064	1582.09
277	1873403.434	6737535.339	1534.97

**CONSTRUCTION NOTES**

- ① PROTECT IN PLACE
- ② DRILL AND SOIL SAMPLE EXPLORATORY BOREHOLE
- ③ DRILL, SOIL SAMPLE, AND GROUNDWATER SAMPLE DEEP EXPLORATORY BOREHOLE
- ④ SEAL EXPLORATORY BOREHOLE
- ⑤ DRILL AND CONSTRUCT GROUNDWATER MONITORING WELL; SOIL SAMPLE, GROUNDWATER SAMPLE, AND NESTED WELL CONSTRUCTION
- ⑥ DRILL AND CONSTRUCT GROUNDWATER MONITORING WELL; SOIL SAMPLE, GROUNDWATER SAMPLE, AND MULTI-PORT WELL CONSTRUCTION

**Anticipated Hydrogeologic Conditions**

Parameter	Range
Depth to Groundwater	440 feet bngs
Depth to Base of Unconfined Aquifer	350 - 450 feet bngs
Depth to Base of Intermediate Aquifer	450 - 600 bngs
Aquifer Materials	Sand, gravel and cobble alluvium.
Aquitard Materials	Silty sand to clayey sand.

MARK	REVISIONS	DATE

MARK	REVISIONS	DATE

MARK	CHANGES	DATE

NO CHANGES      RESIDENT ENGINEER      DATE 6/17/22

**FIELD CHANGES**

PREPARED BY:

**SWT** Civil & Environmental Engineering

800-C SOUTH ROCHESTER AVENUE  
ONTARIO, CALIFORNIA 91761

REGISTERED PROFESSIONAL ENGINEER  
MICHAEL A. CULLINAN  
No. 41987  
CIVIL  
STATE OF CALIFORNIA

6/17/22

PREPARED UNDER THE SUPERVISION OF

COUNTY OF SAN BERNARDINO  
DEPARTMENT OF PUBLIC WORKS

DRAWN BY J.A.    DESIGNED BY B.M.R.    PROJ. ENGR.    RECOMMENDED / APPROVED BY

SUBMITTED BY Henry Capron    DATE 6/21/22

PROJECT MANAGER    DATE 6/21/22    DEPUTY DIRECTOR

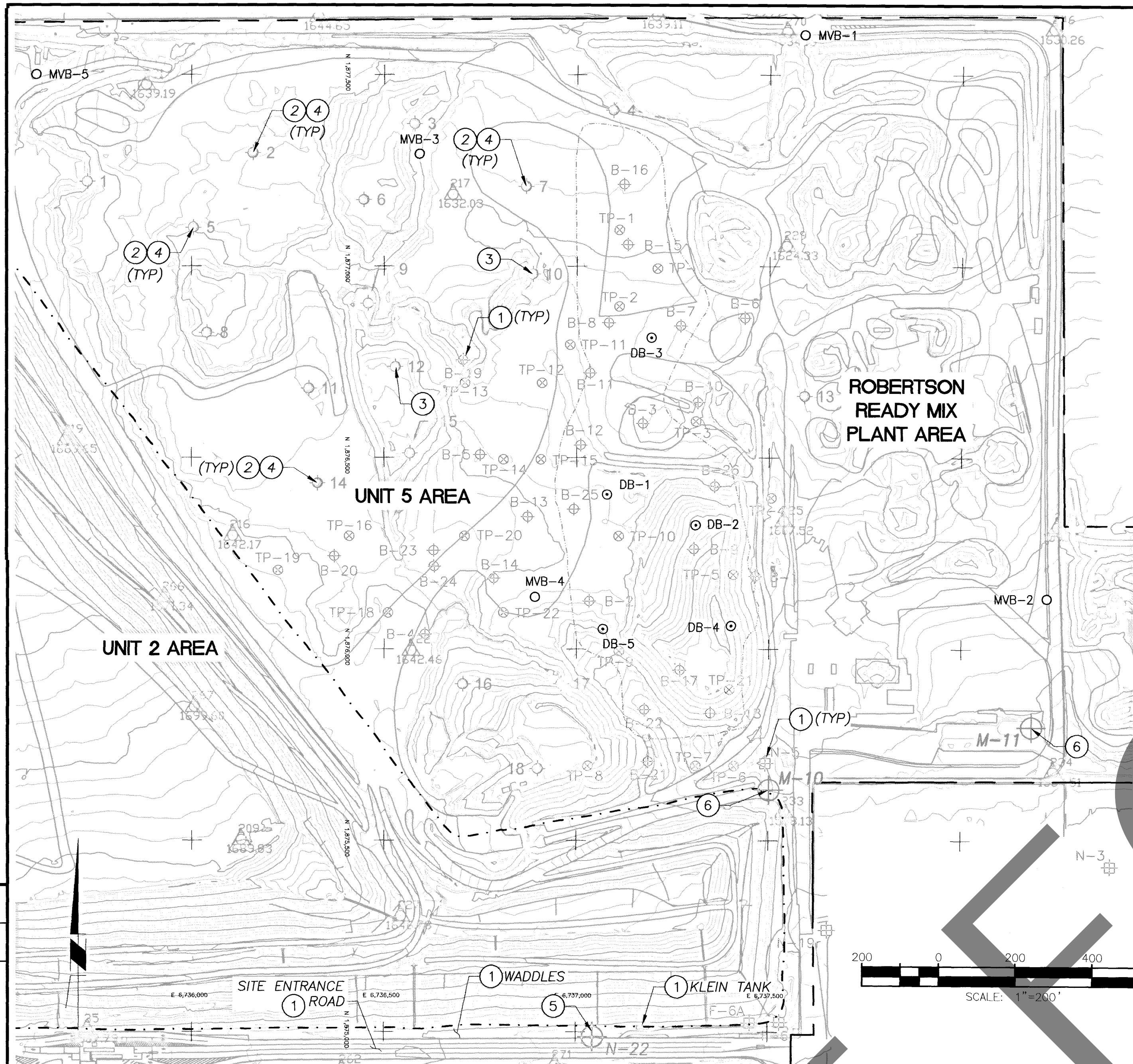
MID-VALLEY SANITARY LANDFILL

UNIT 5 PRE-DEVELOPMENT INVESTIGATION

SITE PLAN/ LEGEND/ COORDINATE CONTROL POINTS

DATE	DWG NO.	SCALE	SHT. NO.	TOT. SHTS.
06-22	AS SHOWN	2	3	3

AERIAL TOPOGRAPHY SUPPLIED BY SAN BERNARDINO COUNTY  
DATE OF TOPOGRAPHY: JANUARY 4, 2022



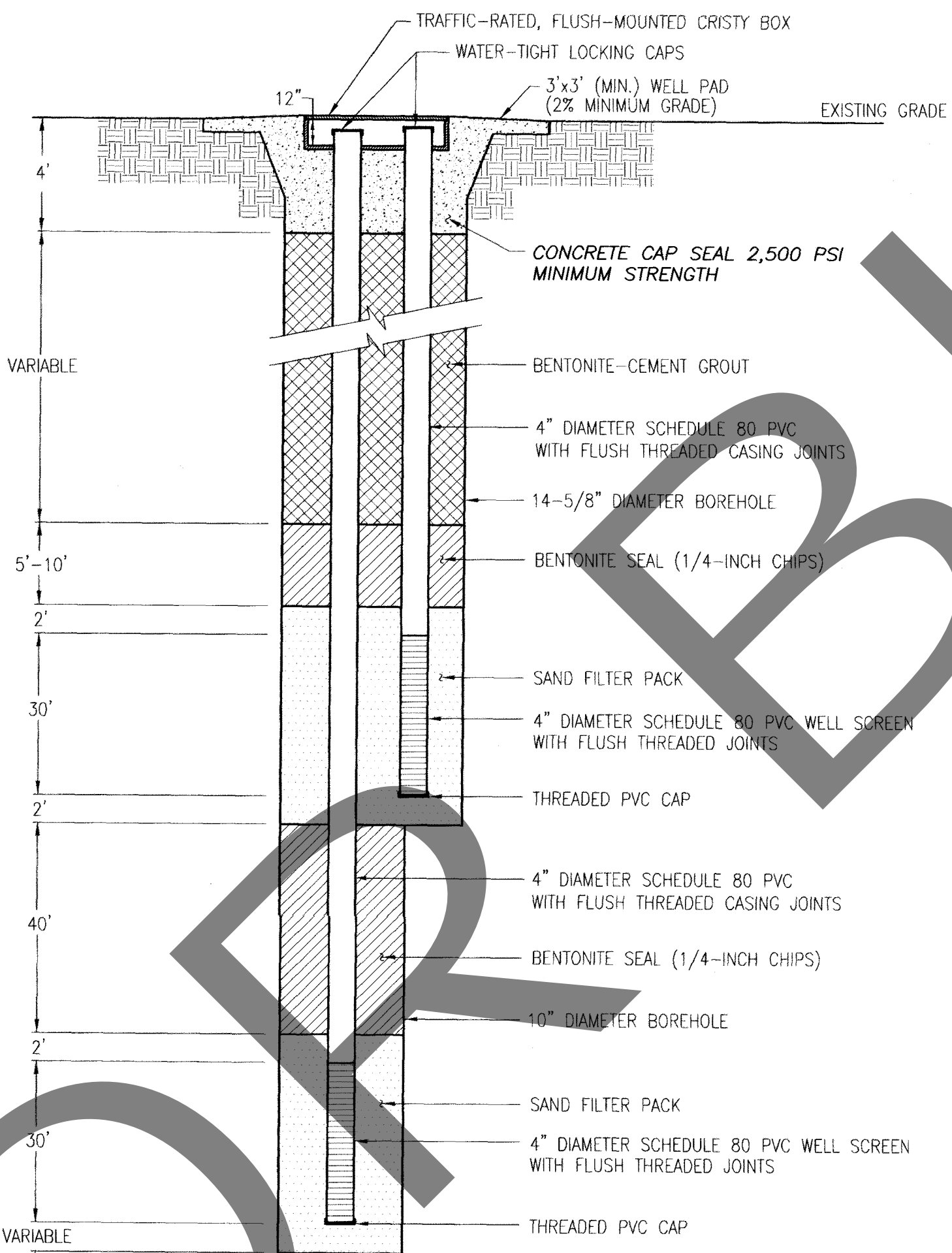
**DRILLING PLAN**  
NTS

**LEGEND**

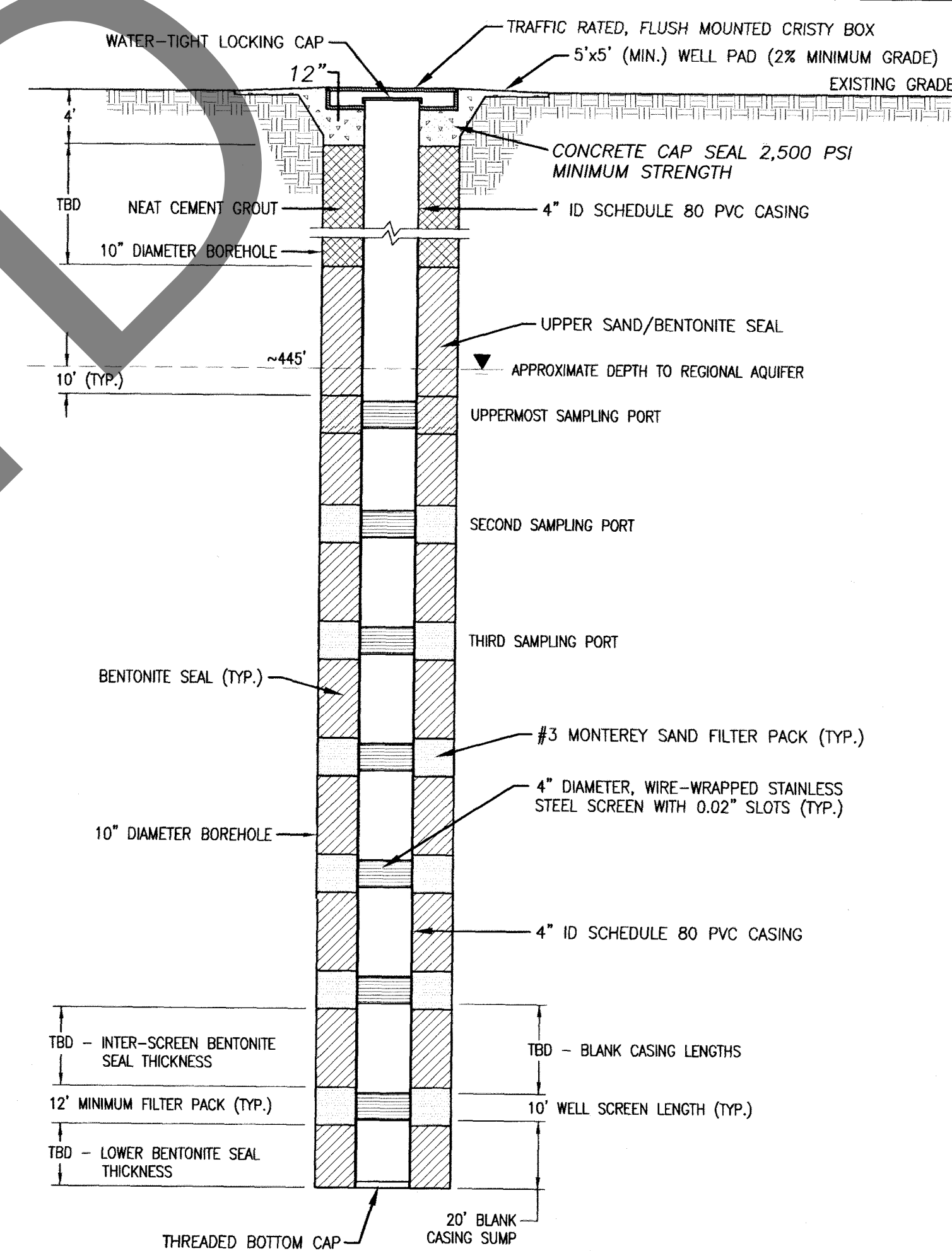
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**TYPICAL NESTED WELL CONSTRUCTION DETAIL**  
NTS



**TYPICAL MULTI-PORT WELL DETAIL**  
NTS

**Summary of Exploratory Borings**

Soil Boring	Anticipated Total footage	Anticipated ARCH footage	Soil Boring	Anticipated Boring Footage	Anticipated ARCH Footage
1	154	0	10**	526	360
2	175	0	11	265	0
3	144	0	12**	502	360
4	103	0	13	50	0
5	263	0	14	196	0
6	237	0	15	280	0
7	252	0	16	205	0
8	205	0	17	231	0
9	256	0	18	134	0
<b>TOTALS</b>	<b>4,176</b>	<b>0</b>		<b>4,176</b>	<b>720</b>

\*\* - Water table boring.

**Summary of Monitoring Well Borings**

Well Boring	Anticipated Boring Depth	Anticipated ARCH Depth
M-10	750	360
M-11	750	360
N-22	650	360
<b>TOTAL</b>	<b>2,150</b>	<b>1,080</b>

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MARK	CHANGES	RESIDENT ENGINEER	DATE
	NO CHANGES		6/17/22

**FIELD CHANGES**

PREPARED BY:  
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COUNTY OF SAN BERNARDINO  
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: J.A.  
DESIGNED BY: B.M.R.  
PROJ. ENGR.: B.M.R.  
RECOMMENDED / APPROVED BY: [Signature]  
SUBMITTED BY: [Signature]  
PROJECT MANAGER: [Signature]  
DATE: 6/21/22

MID-VALLEY SANITARY LANDFILL

UNIT 5 PRE-DEVELOPMENT INVESTIGATION

DETAIL SHEET

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