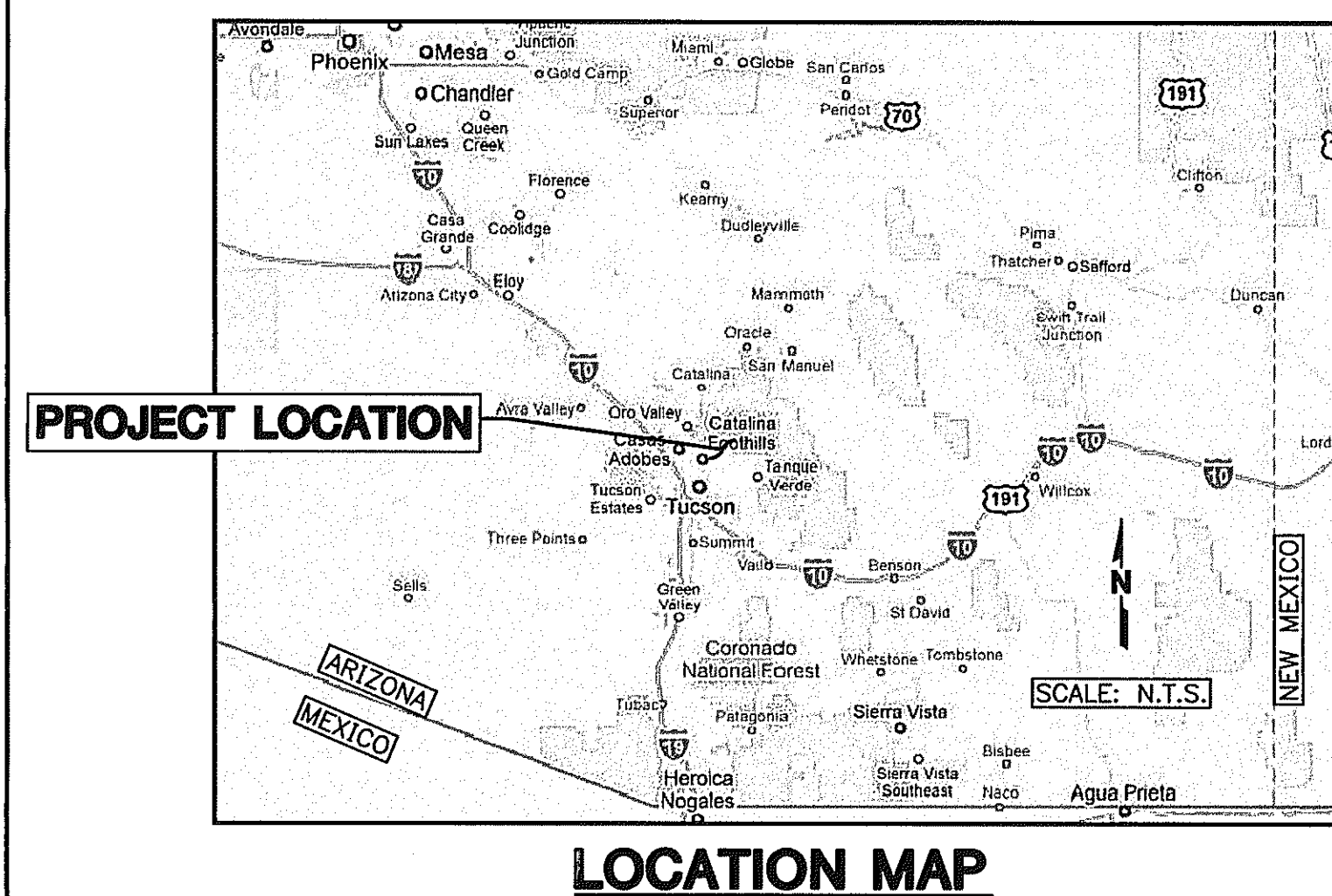
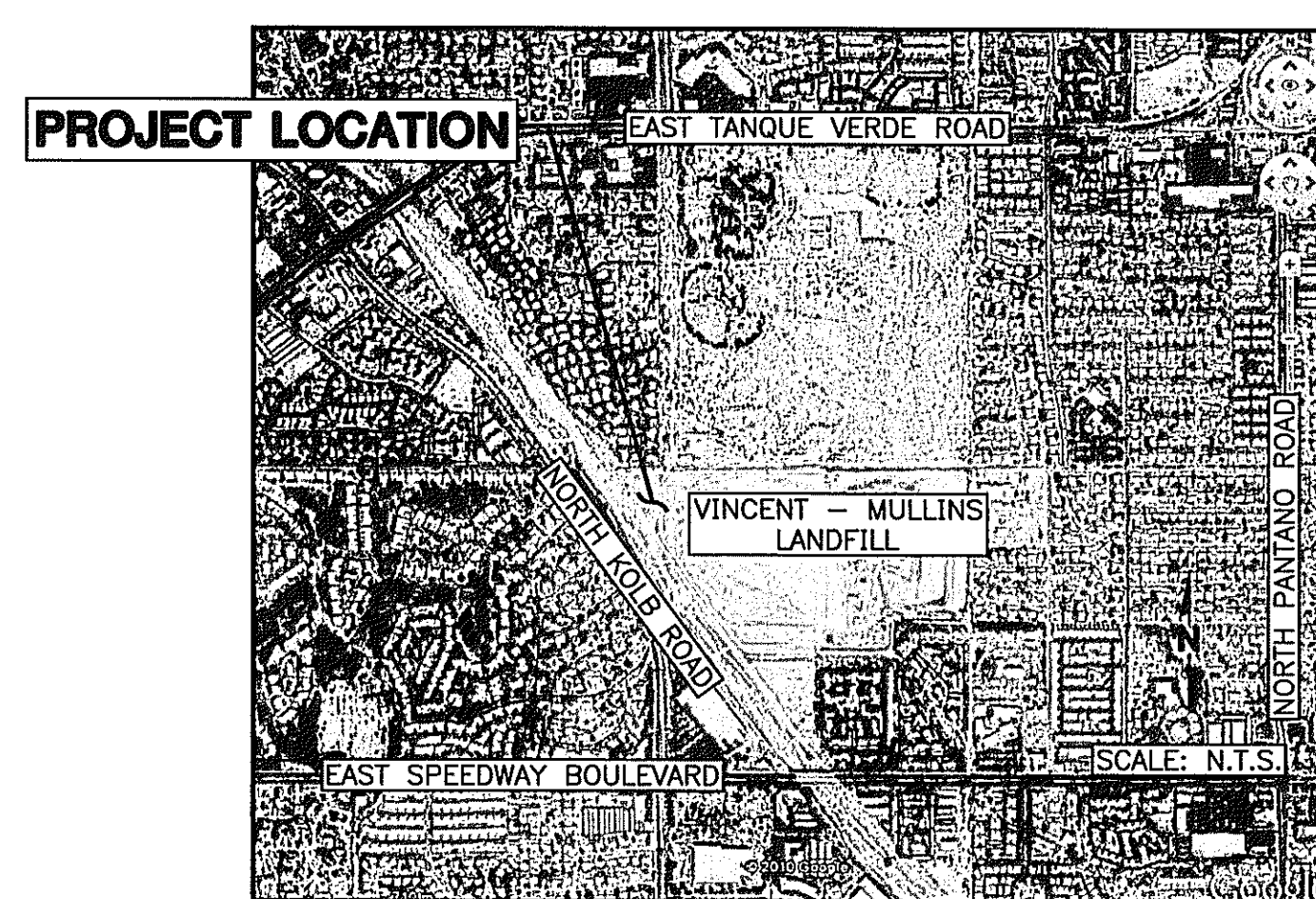


KOLB ROAD REALIGNMENT VINCENT - MULLINS LANDFILL LFG HEADER REALIGNMENT

EAST SPEEDWAY BOULEVARD AND NORTH KOLB ROAD TUCSON, ARIZONA 85715



LOCATION MAP

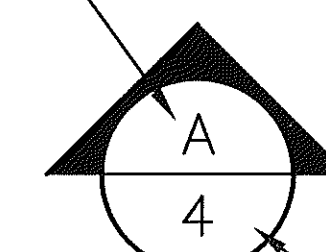


VICINITY MAP

GENERAL NOTES:

1. EXPLANATION OF 'SECTION' OR 'DETAIL' SYMBOL.

'SECTION' OR 'DETAIL' IDENTIFICATION NUMBER OR LETTER



SHEET NUMBER ON WHICH 'SECTION' OR 'DETAIL' IS DRAWN

END OF SECTION LINE

INDEX TO SHEETS

SHEET	TITLE
1	TITLE SHEET
2	EXISTING CONDITIONS
3	REALIGNMENT PLAN
4	SUMP DETAIL
5	LFG WELL DETAIL

DEVELOPER

PSOMAS
800 EAST WETMORE ROAD
SUITE 110
TUCSON, ARIZONA 85719
PHONE: (520) 292-2300
FAX: (520) 292-1290

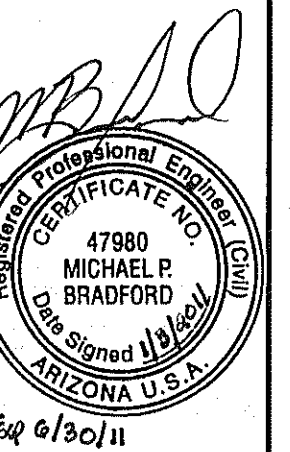
ENGINEER:

SCS ENGINEERS
MICHAEL P. BRADFORD, P.E.
4222 EAST THOMAS ROAD, SUITE 310
PHOENIX, ARIZONA 85018
PHONE: (602) 840-2596
FAX: (602) 224-0572

OWNER

CITY OF TUCSON
TUCSON, ARIZONA

REV.	DATE	DESCRIPTION
1		
2		
3		
4		
5		



TITLE SHEET
KOLB ROAD REALIGNMENT
VINCENT - MULLINS LANDFILL
LFG HEADER REALIGNMENT

SHEET TITLE
PROJECT TITLE

PSOMAS
800 EAST WETMORE ROAD, SUITE 110
TUCSON, ARIZONA 85719
PHONE: (520) 292-2300
FAX: (520) 292-1290

CLIENT

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
PHOENIX, AZ 85018
TEL: (602) 840-2596 FAX: (602) 224-0572
P.L.L.C.
REG. NO. 01-2009042.00
TUCSON, ARIZONA

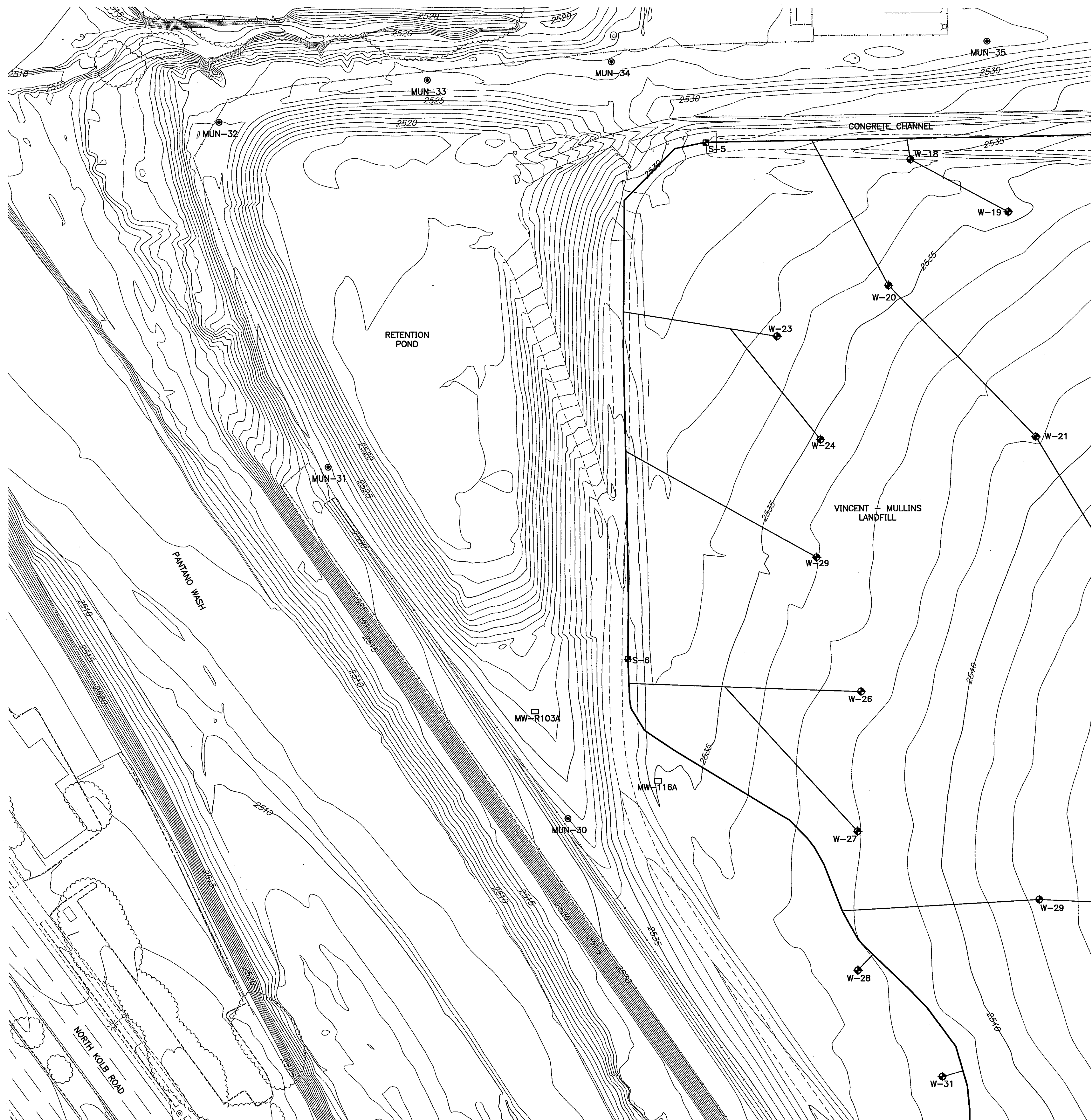
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KOLB RD 01-02

DATE:
JANUARY 2011

SCALE:
AS SHOWN

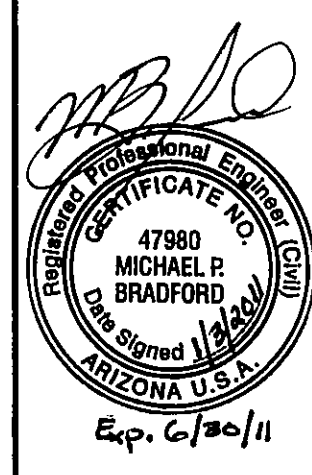
DRAWING NO.
1 of 5





- LEGEND**
- EXISTING LFG BELOW GRADE HEADER
 - EXISTING LFG BELOW GRADE LATERAL
 - MUN-33 EXISTING LFG PROBE
 - W-20 EXISTING LFG EXTRACTION WELL AND VAULT
 - S-4 EXISTING LFG SUMP AND VAULT
 - MW-R103A EXISTING GROUNDWATER MONITORING WELL AND VAULT
 - ROADS
 - X FENCE
 - 1 FOOT CONTOUR
 - 2540- 5 FOOT CONTOUR

REV.	DATE	DESCRIPTION
1		



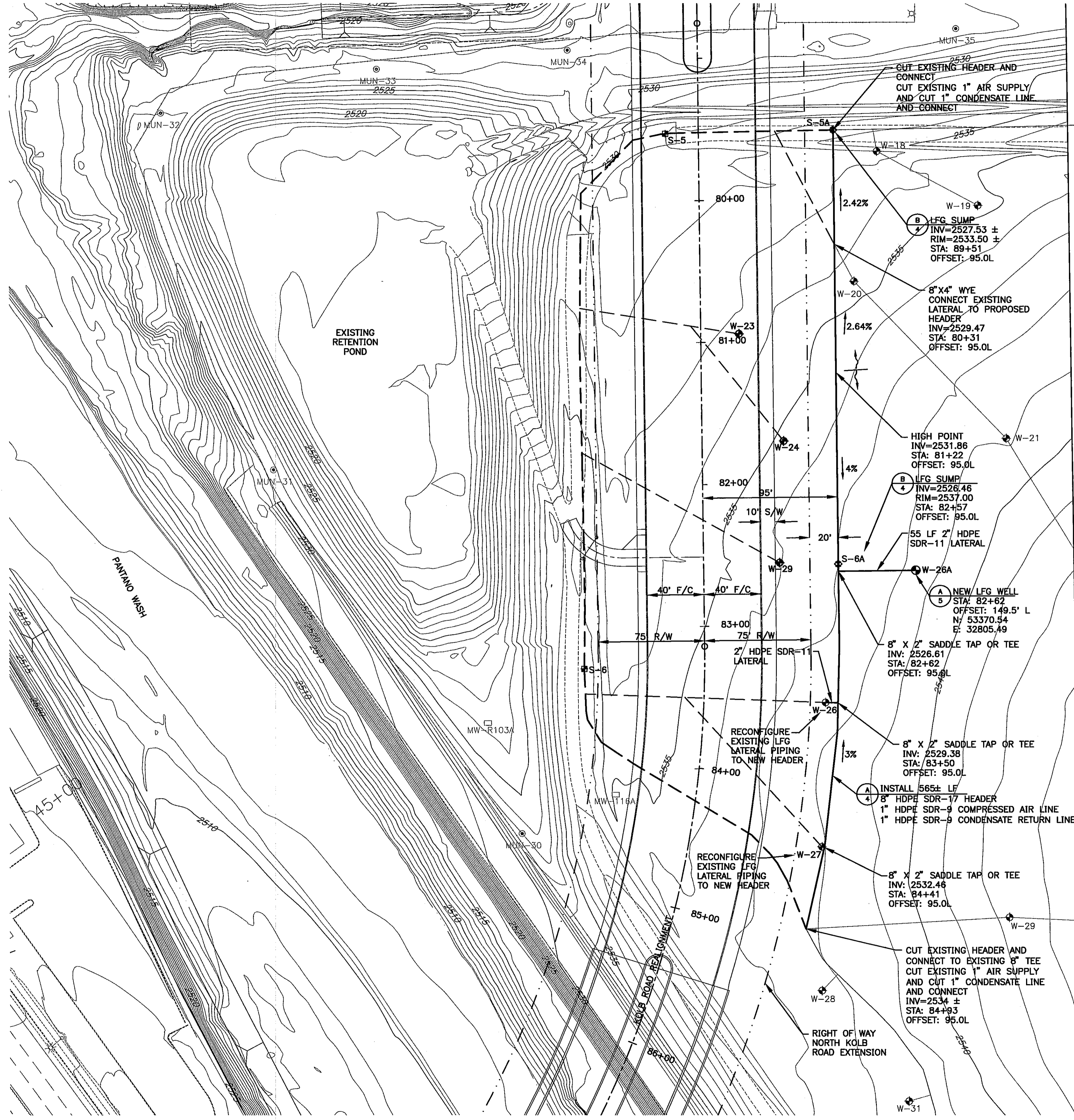
EXISTING CONDITIONS
KOLB ROAD REALIGNMENT
VINCENT - MULLINS LANDFILL
LFG HEADER REALIGNMENT

CLIENT
P S O M A S
 PSONAS
 WILSON ROAD, SUITE 110
 TOLSON, ARIZONA
 PHONE: (520) 292-2300
 FAX: (520) 292-1290

CLIENT
SCS ENGINEERS
 STEARNS, CONRAD AND SCHMIDT
 CONSULTING ENGINEERS
 2227 THOMAS SUITE 310, PHOENIX, AZ 85018
 PH: (602) 540-2585 FAX: (602) 241-0072
 PLOT: 2010042.DWG
 DATE: 1/11/11
 DRAWN BY: JDM
 CHECKED BY: JDM
 APPR. BY: JDM

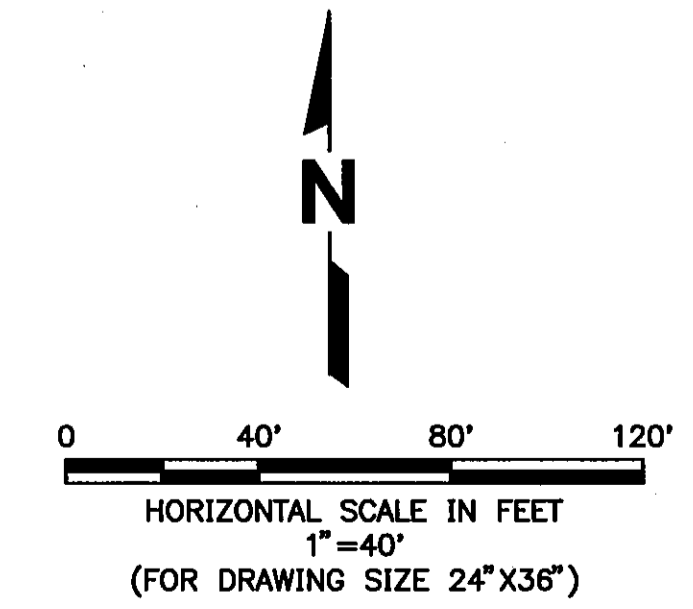
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 DATE:
 JANUARY 2011
 SCALE:
 AS SHOWN
 DRAWING NO.
2 of 5

CALL TWO WORKING DAYS BEFORE YOU DIG
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 1-800-782-5348
 BLUE STAKE CENTER
 (OUTSIDE MARICOPA COUNTY)

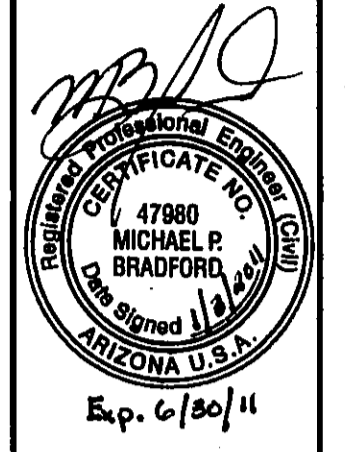


- LEGEND**
- EXISTING LFG HEADER
 - EXISTING LFG LATERAL
 - MUN-33 EXISTING LFG PROBE
 - W-20 EXISTING LFG EXTRACTION WELL
 - MW-R103A EXISTING GROUNDWATER MONITORING WELL
 - - - EXISTING LFG HEADER TO BE ABANDONED (SEE NOTE 1)
 - - - EXISTING LFG LATERAL TO BE ABANDONED (SEE NOTE 1)
 - W-23 EXISTING LFG EXTRACTION WELL TO BE ABANDONED (SEE NOTE 1)
 - S-4 EXISTING LFG SUMP TO BE ABANDONED (SEE NOTE 1)
 - PROPOSED 8" LFG HEADER
 - PROPOSED 4" LFG LATERAL
 - S-6A PROPOSED LFG SUMP
 - W-5 PROPOSED LFG WELL
 - ▲ HIGH POINT
 - 2.42% PIPE SLOPE

NOTE: CONTRACTOR TO ABANDON PORTIONS OF EXISTING LANDFILL GAS (LFG) COLLECTION AND CONTROL SYSTEMS AS INDICATED BY LEGEND SYMBOLS ON THIS SHEET. ELEMENTS TO BE ABANDONED INCLUDE 8" HDPE HEADER PIPING, 2"-4" LATERAL PIPING, LFG VERTICAL EXTRACTION WELLS, LFG CONDENSATE SUMPS. THESE ELEMENTS SHALL BE ABANDONED PER SPECIFICATIONS.



REV.	DATE	DESCRIPTION
1		
2		
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4		



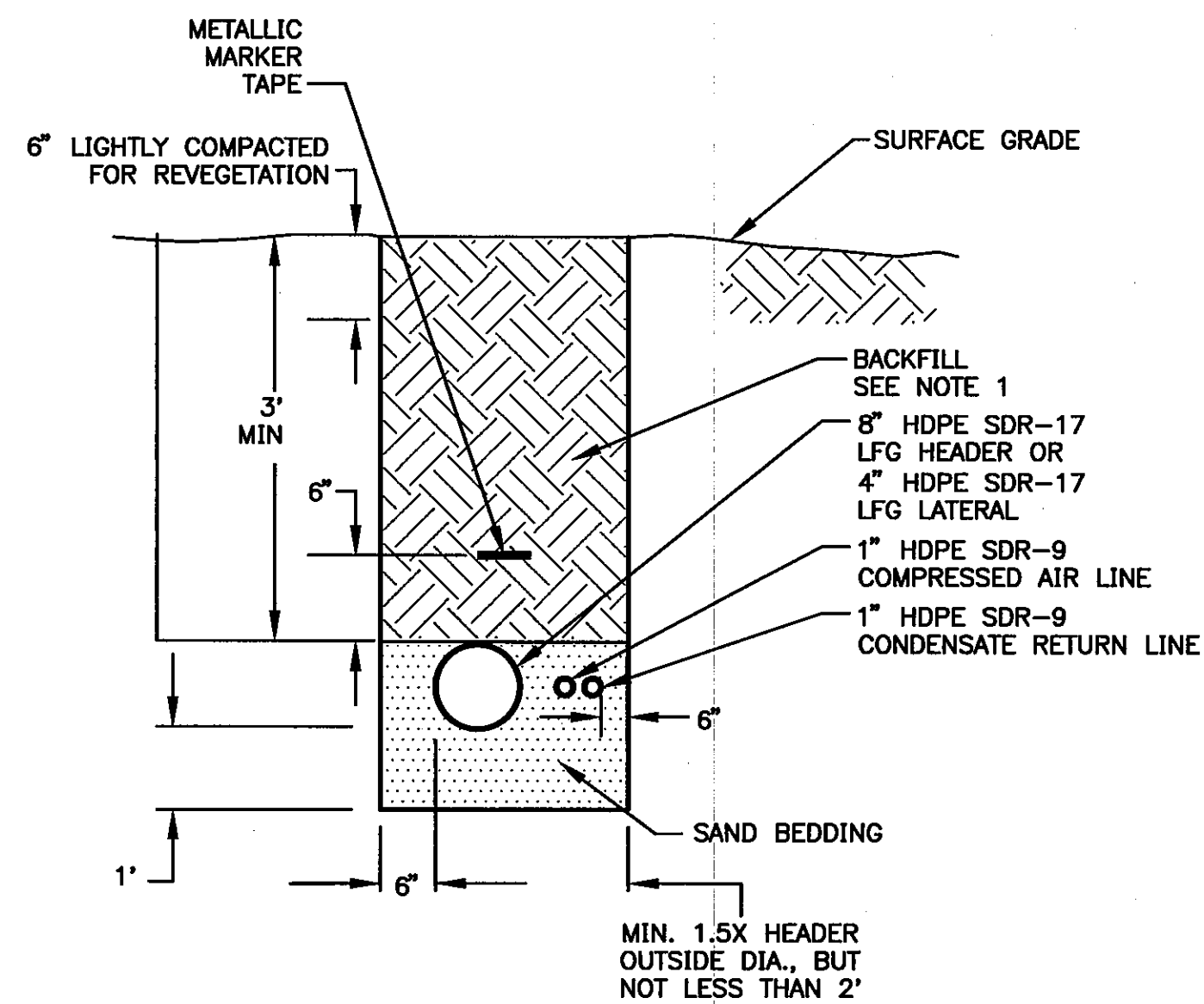
REALIGNMENT PLAN
KOLB ROAD REALIGNMENT
VINCENT - MULLINS LANDFILL
LFG HEADER REALIGNMENT

PSOMAS
 PSOMAS WILKINSON ROAD, SUITE 110
 TULSA, OKLAHOMA 74119
 PHONE: (520) 292-2300
 FAX: (520) 292-1290

CLIENT
SCS ENGINEERS
 STEARNS, CONRAD AND SCHMIDT
 CONSULTING ENGINEERS
 P.O. BOX 1000
 PH: (602) 840-2506 FAX: (602) 224-1572
 TOWN: BUTAM CIRC: BFCM CIRC: BFCM
 DATE: 01/20/2010 02:00 CIRC: BFCM APP: BFCM

CADD FILE:
 KOLB RD 03-04
DATE:
 JANUARY 2011
SCALE:
 AS SHOWN
DRAWING NO.:
 3 of 5

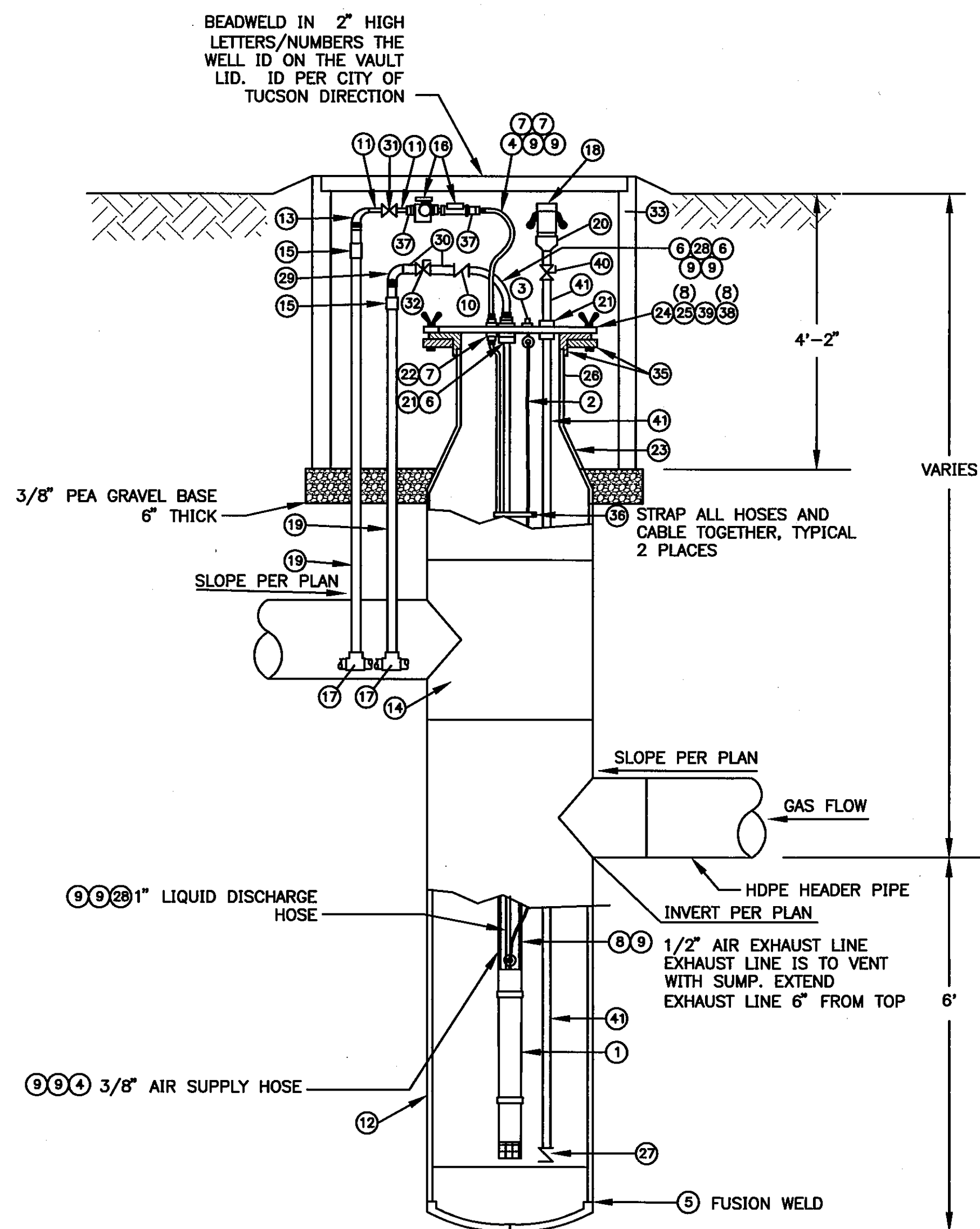
CALL TWO WORKING DAYS BEFORE YOU DIE
 1-800-STAKE-IT
 1-800-782-5348
 BLUE STAKE CENTER
 (OUTSIDE MARICOPA COUNTY)



NOTES:

- UPPERMOST 3' OF BACKFILL SHALL BE SOIL. SOIL CAN BE NATIVE AND MUST BE FREE OF BROKEN CONCRETE, WOOD, OR OTHER DELETERIOUS MATERIALS WITH PIECES NO LARGER THAN 4" IN ANY DIMENSION. UPPERMOST 6" OF COVER SHALL BE LIGHTLY COMPACTED TO ALLOW FOR REVEGETATION. REMAINING DEPTH OF 3' OF SOIL SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR.
- WARNING: TRENCHING INTO WASTE. CONTRACTOR TO USE SHORE BOXES AND/OR TRENCH LAYBACKS AS NECESSARY TO PREVENT COLLAPSE OF TRENCH. SEE SPECIFICATIONS FOR MORE INFORMATION.

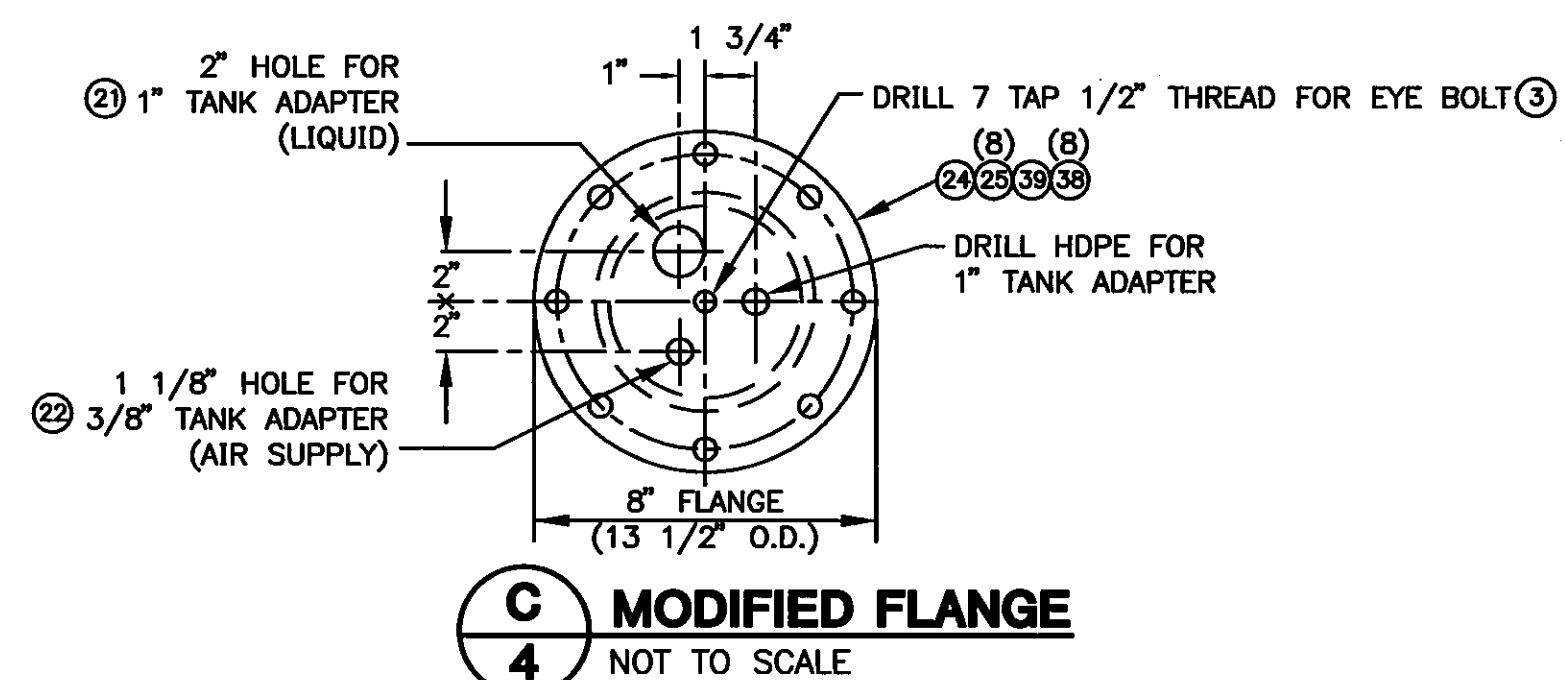
A PIPE TRENCH
4 SCALE: NTS



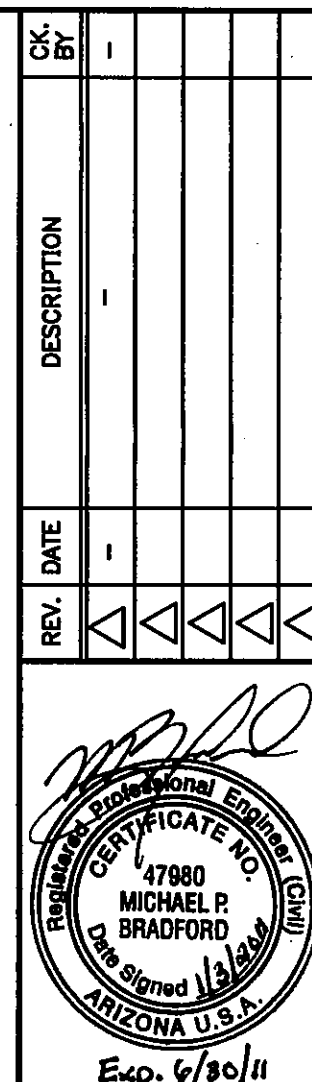
B CONDENSATE SUMP
4 NOT TO SCALE

ITEM:	QUANTITY:	DESCRIPTION:	PART/MODEL NO.:	MANUFACTURER OR EQUAL:	NOTES:
1	1	PNEUMATIC CONTROLLERLESS PUMP WITH 1" SS BARB FITTING FOR THE LIQUID DISCHARGE, 3/8" SS BARB FITTING FOR AIR INLET, 1/2" SS BARB FITTING FOR AIR EXHAUST, SS CHECK VALVE	SHORT AP-4/BL	CLEAN ENVIRONMENT EQUIP.	3" SS INTAKE SCREEN, FRP CASING
2	12'	3/16" SS SUPPORT CABLE, CRIP SLEEVE, & SADDLE	-	CLEAN ENVIRONMENT EQUIP.	SUPPLIED WITH PUMP
3	1	1/2" - 13 304 SS EYE BOLT	3069T33	McMASTER CARR	DRILL 7 TAP FLANGE
4	15'	3/8" BRAIDED HOSE	GOODYEAR	CLEAN ENVIRONMENT EQUIP.	SUPPLIED WITH PUMP
5	1	12" PIPE CAP, HDPE SDR-17	-	PLEXCO	
6	3	HOSE CONNECTOR, 1" NPT X 1" HOSE BARB	SS-16-HC-1-16	SWAGelok	316 SS
7	3	HOSE CONNECTOR, 3/8" NPT X 3/8" HOSE BARB	SS-6-HC-1-6	SWAGelok	316 SS
8	15'	1/2" BRAIDED HOSE	GOODYEAR	CLEAN ENVIRONMENT EQUIP.	SUPPLIED WITH PUMP
9	9	1" SS HOSE CLAMP	-	CLEAN ENVIRONMENT EQUIP.	SUPPLIED WITH PUMP
10	1	1" BALL CHECK VALVE, THREADED, PVC	4531-0105R	HARRINGTON PLASTICS	
11	2	PIPE NIPPLE, 3/8" NPT X 2" LG, 316 SS	4548K153	McMASTER CARR	
12	6'	12" HDPE SDR-17 PIPE	-	PLEXCO	
13	1	1" X 3/8" REDUCING ELBOW, GALVANIZED, M.I.	4638K283	McMASTER CARR	
14	1	STACKED MOLDED 12" X 12" X 8" TEES PLEASE NOTE HEADER ALIGNMENT PRIOR TO PURCHASE	-		
15	2	1" HDPE/STEEL MPT TRANSITION FITTING, SDR 11, SS	-	POLY-CAM	
16	1	PULSE COUNTER & FILTER/REGULATOR ASSY, 1/4" FNPT	FR60	CLEAN ENVIRONMENT EQUIP.	SUPPLIED WITH PUMP
17	2	TEE 1" HDPE SDR-9	-	PLEXCO	
18	1	2" PVC CAMLOCK AND PLUG	-	PLEXCO	
19	AR	1" HDPE SDR-9 PIPE	-	PLEXCO	
20	1	2" X 1" PVC REDUCER COUPLING	-		
21	1	TANK ADAPTER 1", PVC, FNPT	7000-010	RYAN HERCO	
22	1	TANK ADAPTER 3/8", PVC, FNPT	7000-003	RYAN HERCO	
23	1	12" X 8" HDPE SDR-17 REDUCER	-	PLEXCO	
24	1	8" PVC BLIND FLANGE (FLAT)	853-060	HARRINGTON PLASTICS	MODIFY PER DETAIL C
25	8	3/4"-10 BOLT, 3 1/2" LONG, ZINC PLATED	92865A849	McMASTER CARR	
26	1	8" HDPE SDR-17 PIPE	-	PLEXCO	
27	1	1" PVC FOOT CHECK VALVE AND SCREEN	-		
28	15'	1" LIQUID DISCHARGE HOSE	GOODYEAR	CLEAN ENVIRONMENT EQUIP.	
29	1	1" PIPE ELBOW, THREADED, 316 SS	4464K16	McMASTER CARR	
30	2	1" NIPPLE, 316 SS	4548K221	McMASTER CARR	
31	1	BALL VALVE 3/8" NPT SS, FULL PORT	46495K59	McMASTER CARR	
32	1	BALL VALVE 1" NPT SS, FULL PORT	46495K63	McMASTER CARR	
33	1	CONCRETE VAULT WITH GALVANIZED SPRING ASSISTED FRAME, COVER, AND BOLT-DOWN LOCKING MECHANISM	444-WA (VAULT) 44-332P (COVER)	UTILITY VAULT COMPANY	BEAD WELD I.D. # ON COVER
35	1	8" HDPE FLANGE ADAPTER WITH SS BACK-UP RING	-	PLEXCO	
36	2	HOSE CLAMP, SS, 1/2" WIDE	H-32SS	HARRINGTON PLASTICS	
37	2	3/8" FNPT X 1/4" MNPT BUSHING, CS	4638K652	McMASTER CARR	
38	8	3/4"-10 WING NUT, ZINC PLATED	90866A180	McMASTER CARR	(MATCH BOLT SET)
39	1	8" NEOPRENE GASKET	154700080	HARRINGTON PLASTICS	
40	1	1" TRUE-UNION PVC BALL VALVE	-		
41	AR	1" SCH 80 PVC PIPE	-		

*AR = AS REQUIRED



C MODIFIED FLANGE
4 NOT TO SCALE



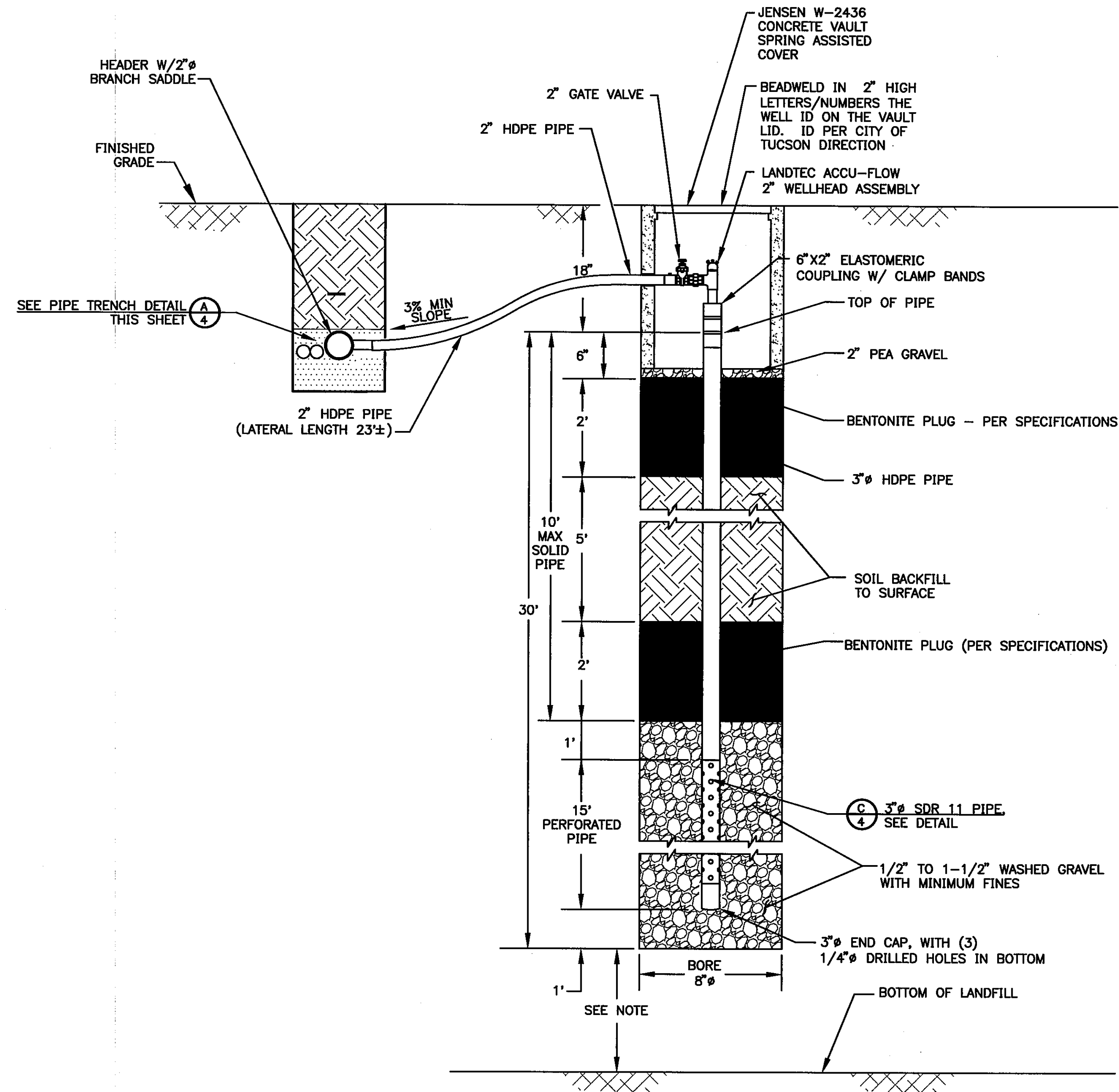
SUMP DETAILS
KOLB ROAD REALIGNMENT
VINCENT - MULLINS LANDFILL
LFG HEADER REALIGNMENT

CLIENT
P.S.O.M.A.S.
PSOMAS
800 E. WETMORE ROAD, SUITE 110
PHOENIX, AZ 85018
PHONE: (602) 292-2300
FAX: (602) 292-1290

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
2525 E. THOMAS RD., SUITE 310, PHOENIX, AZ 85018
PH: (602) 940-2288 FAX: (602) 221-0572
TOWN: B'PTON CRK: B'PTON
JOB: 2010042.DD
DATE: 1/20/11
SCALE: AS SHOWN

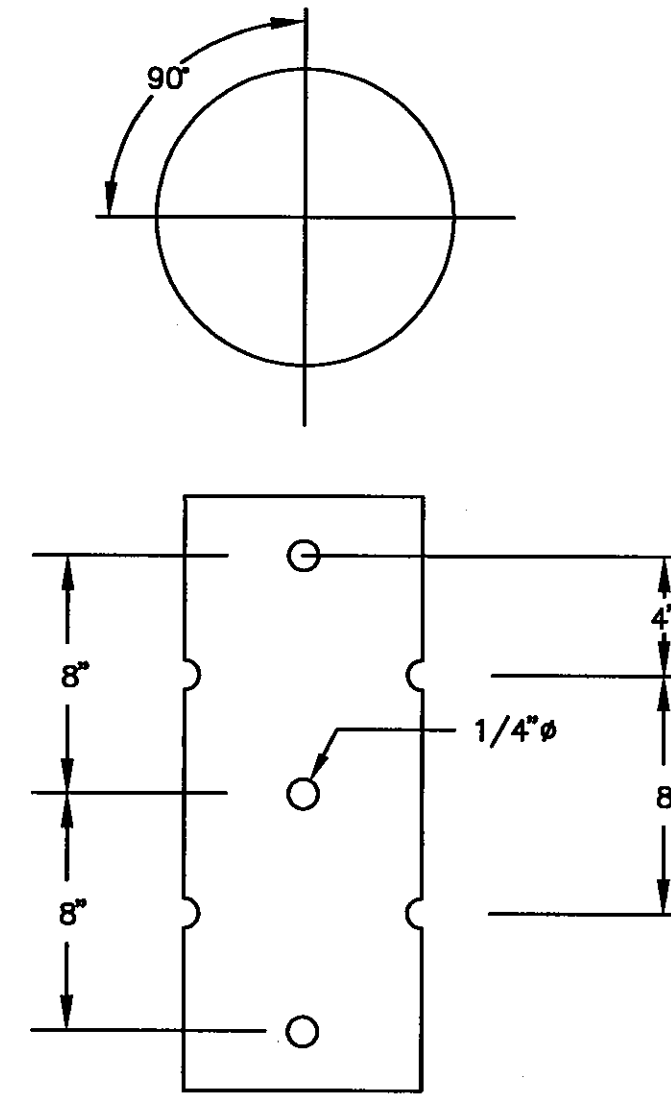
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KOLB RD 03-04
DATE:
JANUARY 2011
SCALE:
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DRAWING NO.
4 of 5

CALL TWO WORKING DAYS BEFORE YOU DIG
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1-800-782-5348
BLUE STAKE CENTER
(OUTSIDE MARICOPA COUNTY)



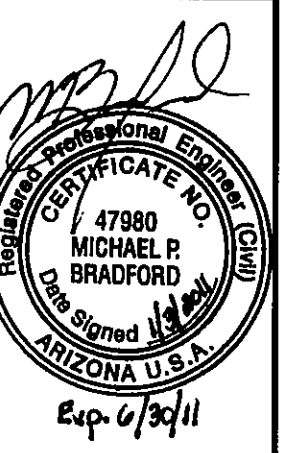
NOTE:
 1. EXACT DEPTH OF LANDFILL AT PROPOSED WELL LOCATION IS UNKNOWN. IF BOTTOM OF LANDFILL IS ENCOUNTERED PRIOR TO MEETING THE PROPOSED 30' DEPTH, CONTRACTOR SHALL BACKFILL WITH 2' OF HYDRATED BENTONITE AND A 1' LAYER 1/2" WASHED GRAVEL. BOTTOM OF THE WELL CASING SHALL REST ON TOP OF THE 1' LAYER OF ROCK. CHANGE IN WELL DEPTH SHALL BE REMOVED FROM SOLID PIPE LENGTH.

LANDFILL GAS EXTRACTION WELL
 SCALE: NTS



PIPE PERFORATION DETAIL
 NOT TO SCALE

REV.	DATE	DESCRIPTION
1		
2		
3		
4		



WELL DETAILS
KOLB ROAD REALIGNMENT
VINCENT - MULLINS LANDFILL
LFG HEADER REALIGNMENT

P S O M A S
 PROMAS ENGINEERING, INC.
 1000 W. WILSON ROAD, SUITE 110
 BOYD, ARIZONA 85901
 PHONE: (520) 292-2300
 FAX: (520) 292-1280

CLIENT
SCS ENGINEERS
 STEARNS, CONRAD AND SCHMIDT
 CONSULTING ENGINEERS
 700 N. CENTRAL AVENUE, SUITE 100
 PHOENIX, ARIZONA 85004
 TEL: (602) 944-2500 FAX: (602) 221-0572
 WWW: WWW.SCS-ENGINEERS.COM
 DATE: 01/20/2011 09:42:00
 DRAWN BY: TOM
 CHECK BY: ROU
 DATE: 01/20/2011 09:42:00
 DRAWN BY: TOM
 CHECK BY: ROU

CADD FILE:
 KOLB RD 03-04

DATE:
 JANUARY 2011

SCALE:
 AS SHOWN

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 5 of 5

CALL TWO WORKING DAYS BEFORE YOU DIG
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