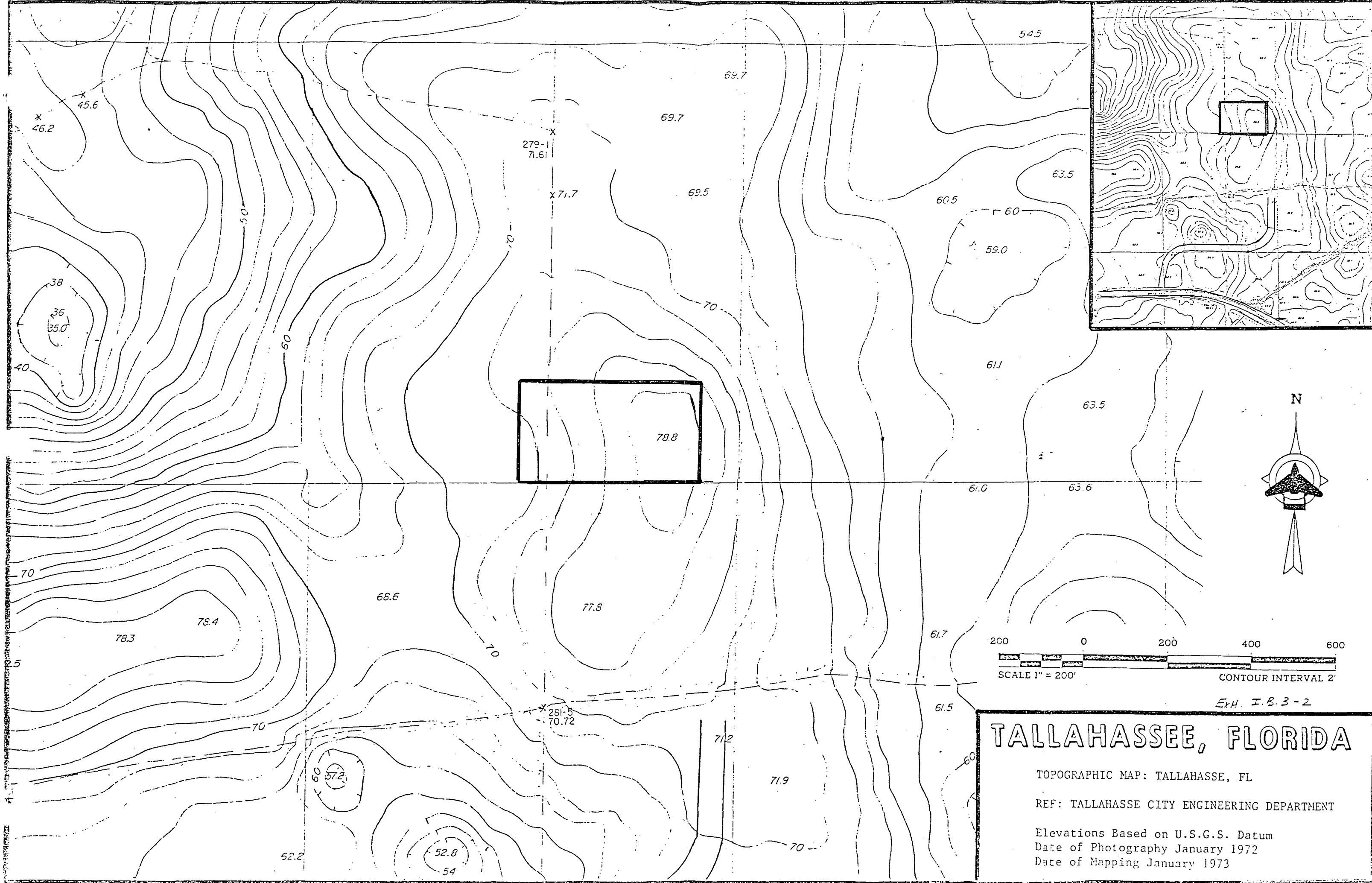




TALLAHASSEE, FLORIDA

TOPOGRAPHIC MAP: TALLAHASSEE, FL

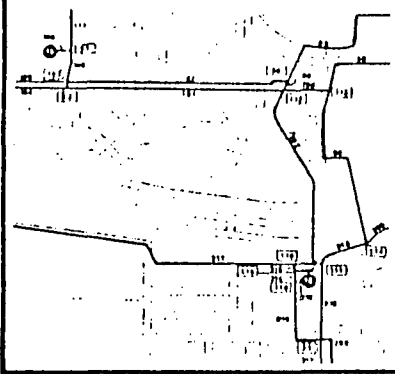
REF: TALLAHASSEE CITY ENGINEERING DEPARTMENT

Elevations Based on U.S.G.S. Datum

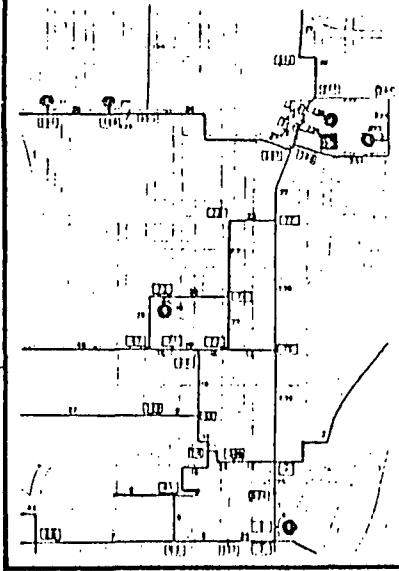
Date of Photography January 1972

Date of Mapping January 1973

INSET A

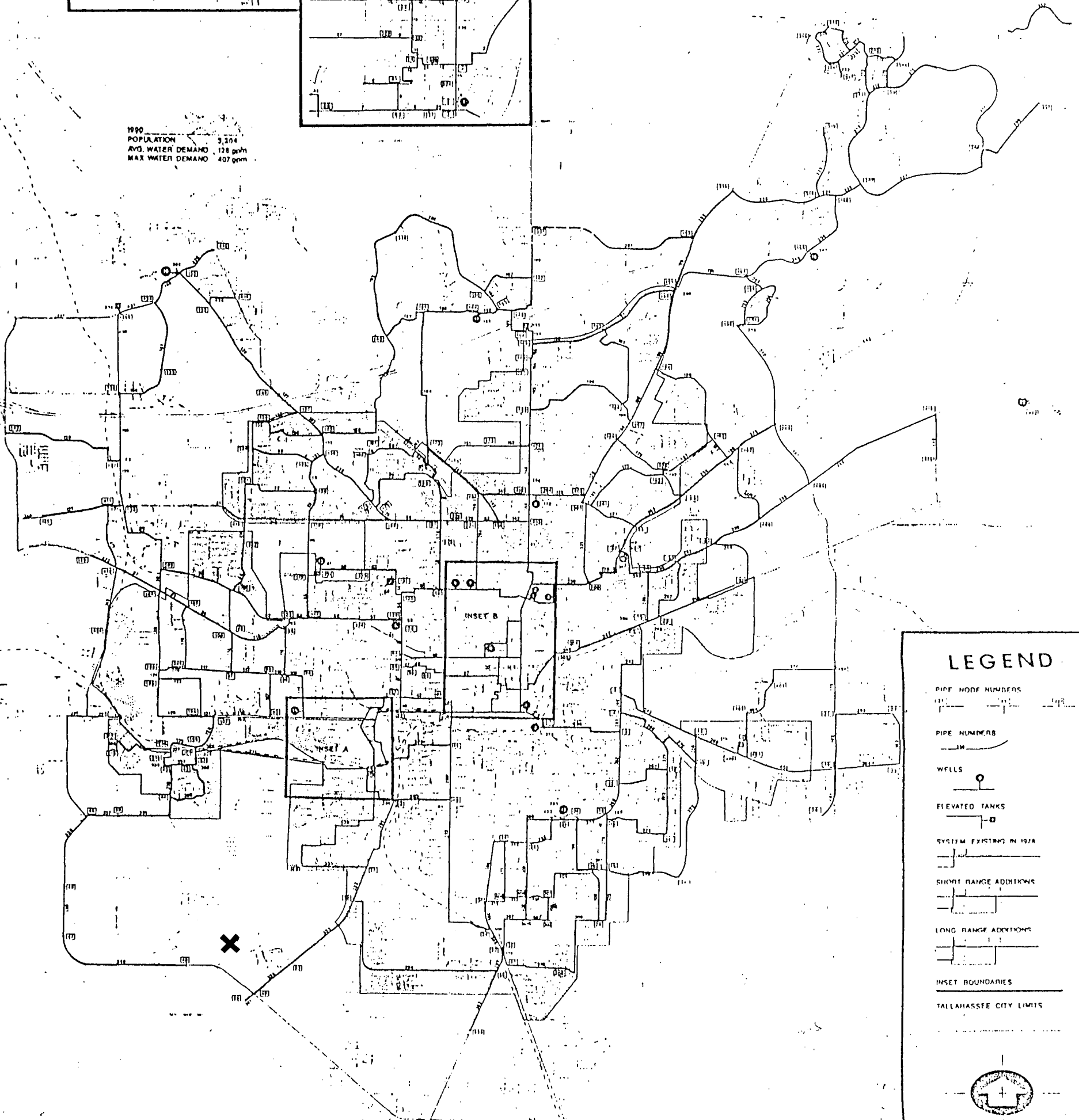


INSET B



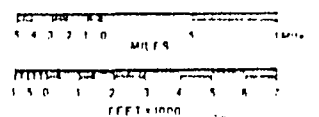
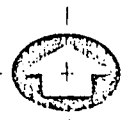
1990
POPULATION 8,815
AVG. WATER DEMAND 640 gpm
MAX. WATER DEMAND 2,810 gpm

1990
POPULATION 3,204
AVG. WATER DEMAND 128 gpm
MAX. WATER DEMAND 407 gpm



LEGEND

- PIPE NODE NUMBERS
- PIPE NUMBERS
- WELLS
- ELEVATED TANKS
- SYSTEM EXISTING IN 1978
- SHORT RANGE ADDITIONS
- LONG RANGE ADDITIONS
- INSET BOUNDARIES
- TALLAHASSEE CITY LIMITS



TALLAHASSEE WATER SYSTEM STUDY

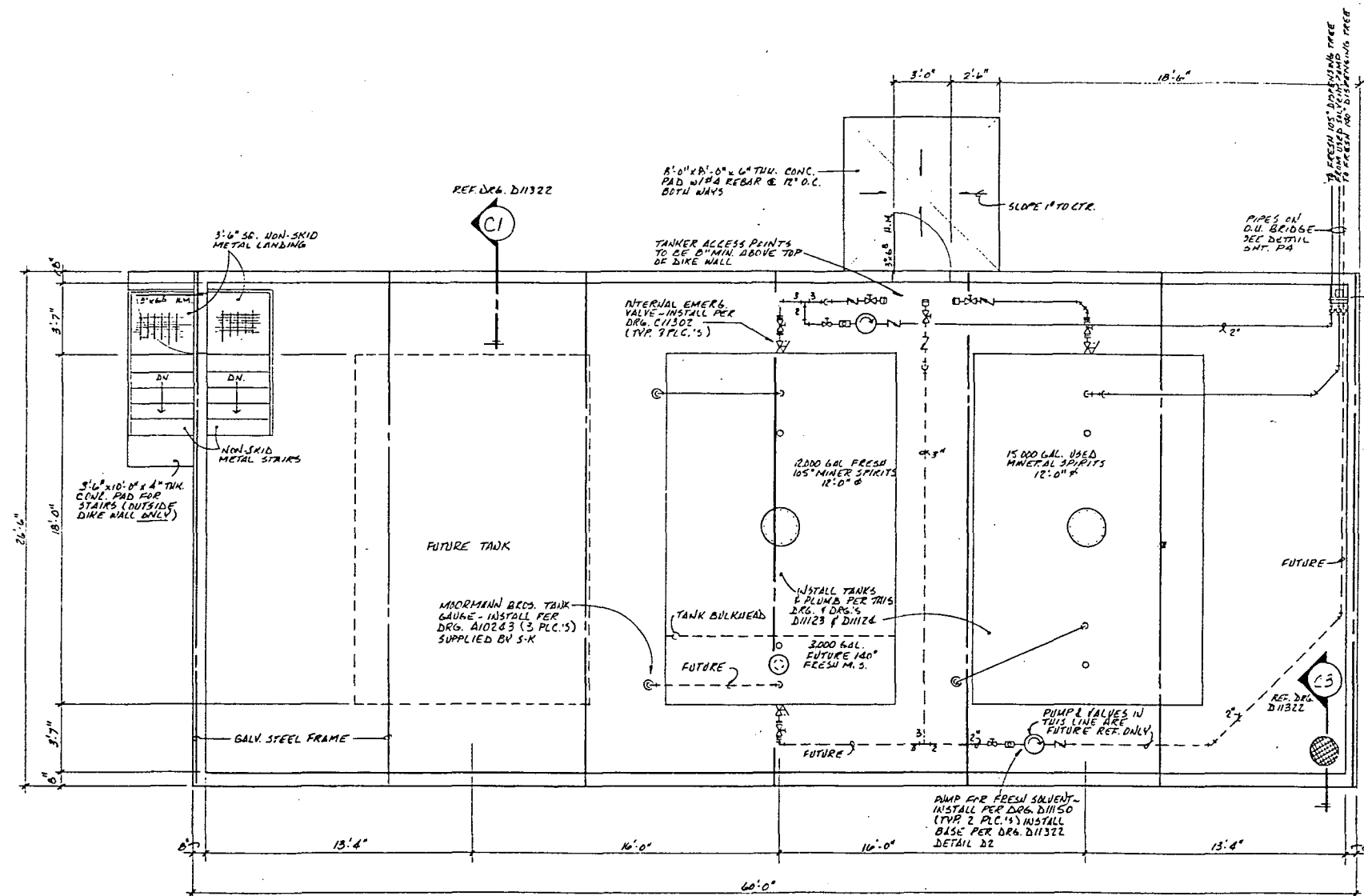
Ex I B 3-3

EXISTING SYSTEM AND RECOMMENDED ADDITIONS

PREPARED BY

WILLIAM M. BISHOP CONSULTING ENGINEERS, INC.,

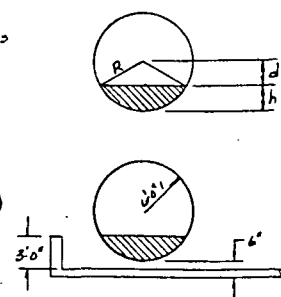
PO BOX 3407, TALLAHASSEE, FLORIDA 32301



NOTE:
ALL PIPE JOINT CONNECTIONS BEYOND THIS POINT (OUTSIDE CONTAINMENT AREA) ARE TO BE WELDED. FOR DISTANCE BETWEEN CONTAINMENT AREAS, REFER TO SITE PLAN.

DIKE VOLUME CALCULATION

DIKE VOLUME = $25'2" \times 58'8" \times 3'0" = 4,429 \text{ ft}^3 \times 7.48 \text{ GAL./ft}^3 = 33,130 \text{ GAL.}$
TANK DISPLACEMENT VOLUME
AREA OF THE SEGMENT (A) $\times$ LENGTH OF TANK (18'0")
 $A = R^2 \cos^{-1} \frac{d}{R} - d \sqrt{R^2 - d^2}$
 $R = 6'0"$
 $h = (3'0") - (0'6") = 2'6"$
 $d = (6'0") - (2'6") = 3'6"$
 $A = 17.032 \text{ ft}^2$
DISPLACEMENT VOLUME = $(17.032 \text{ ft}^2)(2 \text{ TANKS})(18'0") = (613.15 \text{ ft}^3)(7.48 \text{ GAL./ft}^3) = 4,586 \text{ GAL.}$
VOLUME LARGEST TANK = 15,000 GAL.
DIKE CONTAINMENT VOLUME 33,130 GAL.
DISPLACEMENT VOLUME - 4,586
28,544
VOLUME LARGEST TANK - 15,000
TOTAL EXCESS 13,544 GAL.

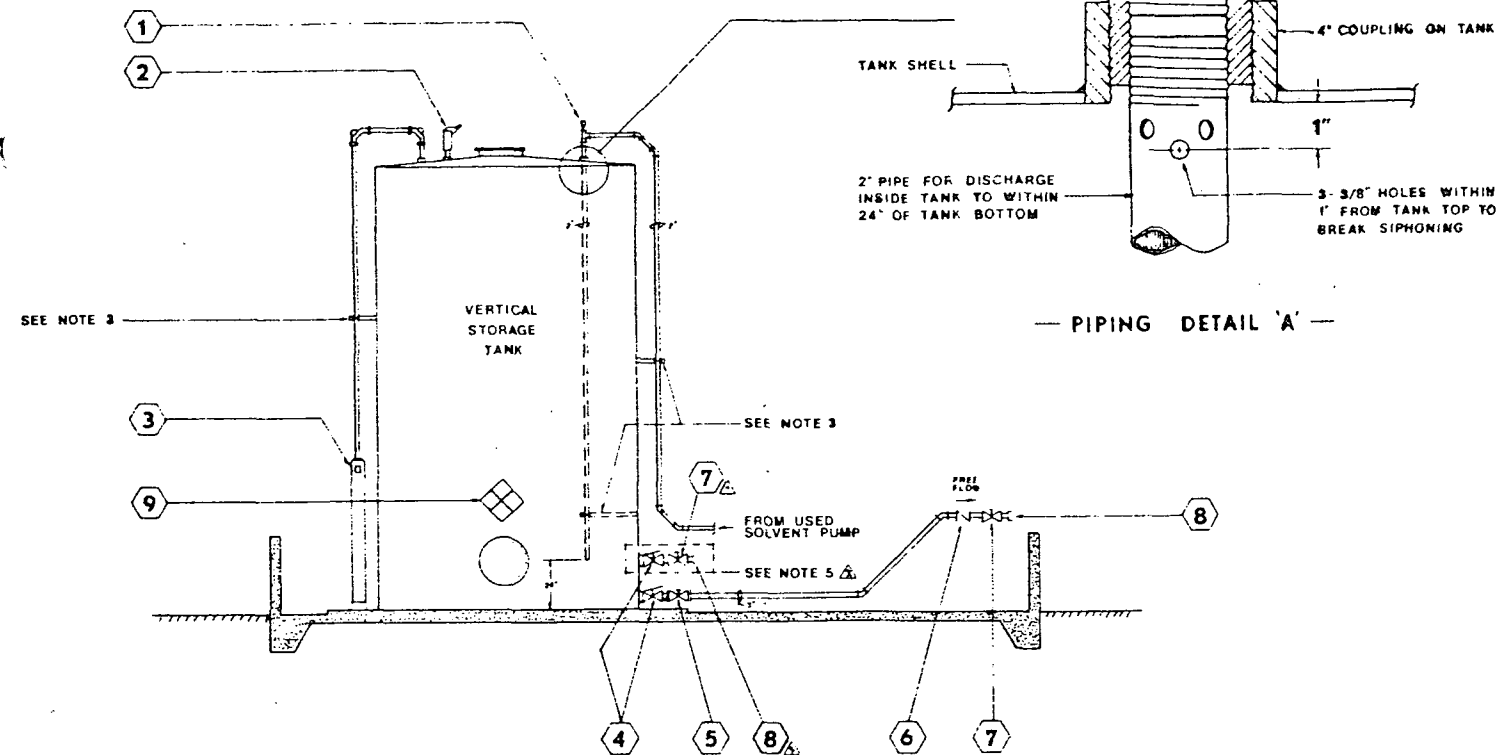


TANKFARM PLAN

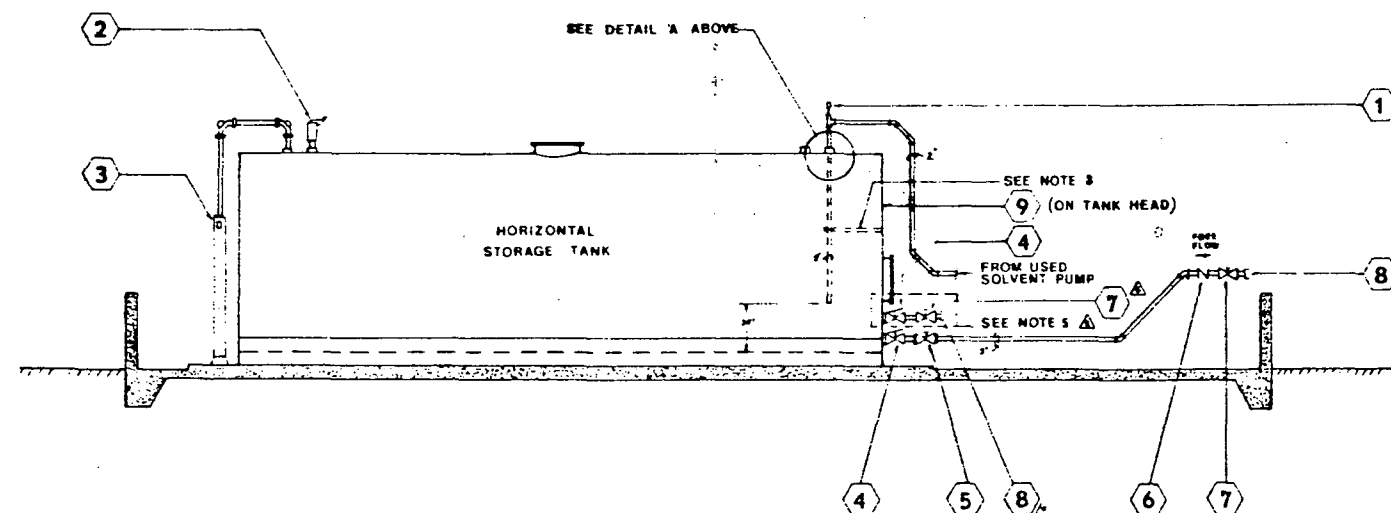
SCALE: 1/4" = 1'-0"

NOTE:
ALL DRG.'S SUPPLIED TO CONTRACTOR CONTAINING S.K. PART REFERENCES, THOSE ITEMS WILL BE SUPPLIED BY SAFETY-KLEEN.

Safety-Kleen Corp. 777 BIG TIMBER ROAD • ELGIN, ILLINOIS 60120 PHONE: 708/897-8466			
TANKFARM PLAN			
SCALE	1/4" = 1'-0"	DATE	5-22-87
BY	RD	ADDED NOTE	C.S. 10/14
TITLE FOR: SERVICE CENTER BRANCH			



— VERTICAL INSTALLATION —



— HORIZONTAL INSTALLATION —

— EQUIPMENT / FIXTURE SCHEDULE —				
MARK	SIZE	DESCRIPTION	SK PART NO	REMARKS
①	3/8"	3/8" AUTOMATIC VACUUM BREAKERS MORRISON BROS. FIG. 134-A	5274	—
②	2"	2" SCREWED PRESSURE/VACUUM VENT MORRISON BROS. FIG. 548 (2 OZ. PRESSURE - 1 OZ. VACUUM)	5273	—
③		TANK GAUGE - MOORMAN BROS. MODEL NO. 7-S	5277	SEE INSTALLATION DETAILS ON SAFETY- KLEEN DWG. A10243
④	3"	3" INTERNAL EMERGENCY VALVE MORRISON BROS. FIG. 272-H0 W/212 F FUSIBLE LINK	5267	SEE INSTALLATION DETAILS ON SAFETY- KLEEN DWG. C11302
⑤	3"	3" DUCTILE IRON GATE VALVE W/ROUND FLANGED ENDS - MORRISON BROS. FIG. 234-D1	5276	SEE INSTALLATION DETAILS ON SAFETY- KLEEN DWG. C11302
⑥	3"	3" BRONZE CHECK VALVE - MORRISON BROS. FIG. 246-A	5266	—
⑦	3"	3" BRONZE GATE VALVE - MORRISON BROS. FIG. 235-B LOCKING TYPE	5265	—
⑧	3"	3" ALUMINUM CAMLOCK QUICK COUPLING - MORRISON BROS. MALE ADAPTER PART F W/DUST CAP & CHAIN	5264	COUPLING TO BE INSTALLED SIX (6) INCHES ABOVE & SIX (6) INCHES INSIDE TOP OF DIKE WALL.
⑨	—	NFPA MATERIAL IDENTIFICATION PLACARD	2452	DISPLAY IN PLAIN SIGHT ABOVE DIKE WALL

— GENERAL NOTES —

- ① THIS DRAWING SUPERCEDES SAFETY-KLEEN CORP. DRAWINGS C10235 & C10236.
- ② SEE INDIVIDUAL SERVICE CENTER SITE PLANS FOR DIKE DIMENSIONS AND RELATED INFORMATION AND ALSO LOCATION AND ARRANGEMENT OF THESE PIPING DETAILS.
- ③ ALL PIPING TO BE SCHEDULE 40 GALVANIZED AND BE SUPPORTED EVERY EIGHT (8) RUNNING FEET - CONTRACTOR TO SUPPLY ALL BRACKETS, CLAMPS, ETC. AS REQUIRED FOR SUPPORTING PIPE - ALL EXPOSED THREADS AT JOINTS TO BE PAINTED WITH A RUST RESISTANT EXTERIOR GRADE PAINT. PIPE SUPPORT HARDWARE TO BE UNISTRUT BRAND OR APPROVED EQUIVALENT.
- ④ ALL DIRECTION CHANGES IN DIRTY SOLVENT LINES TO BE MADE USING A COMBINATION OF 45° ELBOWS OR LONG SWEEP 90° ELBOWS.
- ⑤ THIS INSTALLATION TO BE MADE WHERE NEW TANKS ARE TO BE INSTALLED AT ANY LOCATIONS PRONE TO FREEZING. SEE INSTALLATION DETAILS ON SAFETY-KLEEN DWG. C11302.
- ⑥ ALL ITEMS WITH SAFETY-KLEEN PART NO. REFERENCES WILL BE SUPPLIED TO CONTRACTOR.

THIS DRAWING CONTAINS INFORMATION PROPRIETARY TO SAFETY-KLEEN CORP. ANY REPRODUCTION, DISCLOSURE OR USE OF THIS DRAWING IS EXPRESSLY PROHIBITED EXCEPT BY SAFETY-KLEEN OR AS SAFETY-KLEEN MAY AGREE IN WRITING.

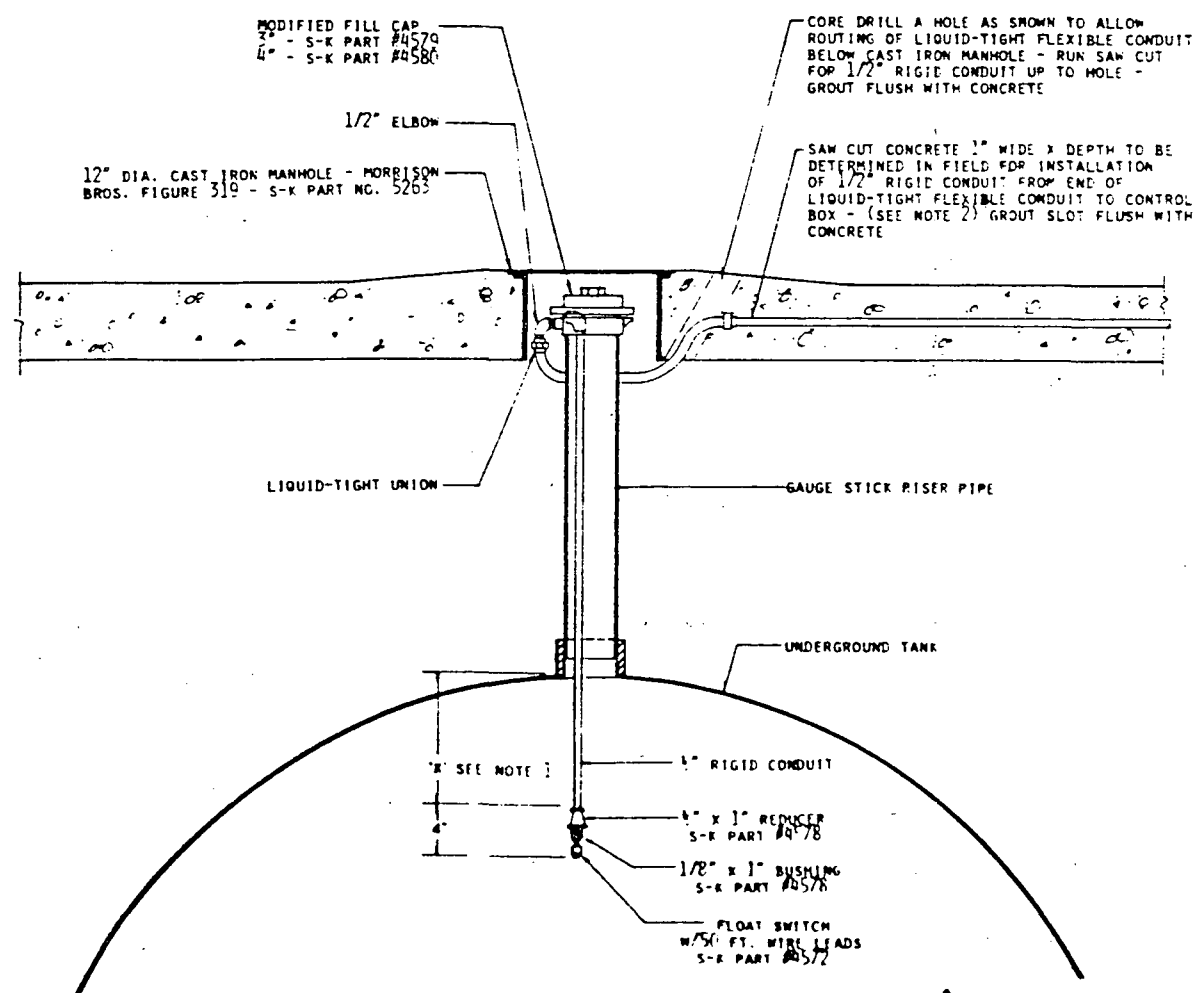
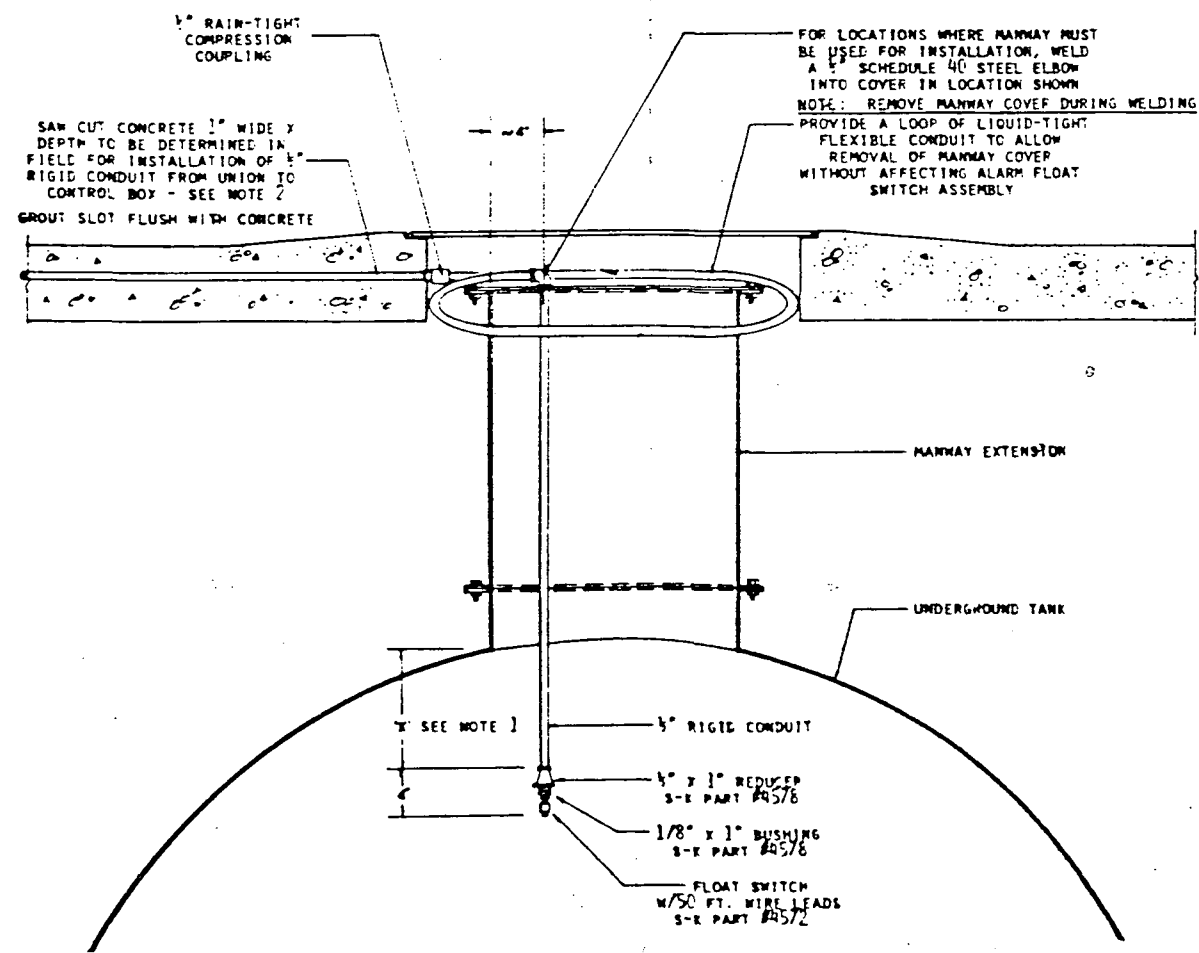
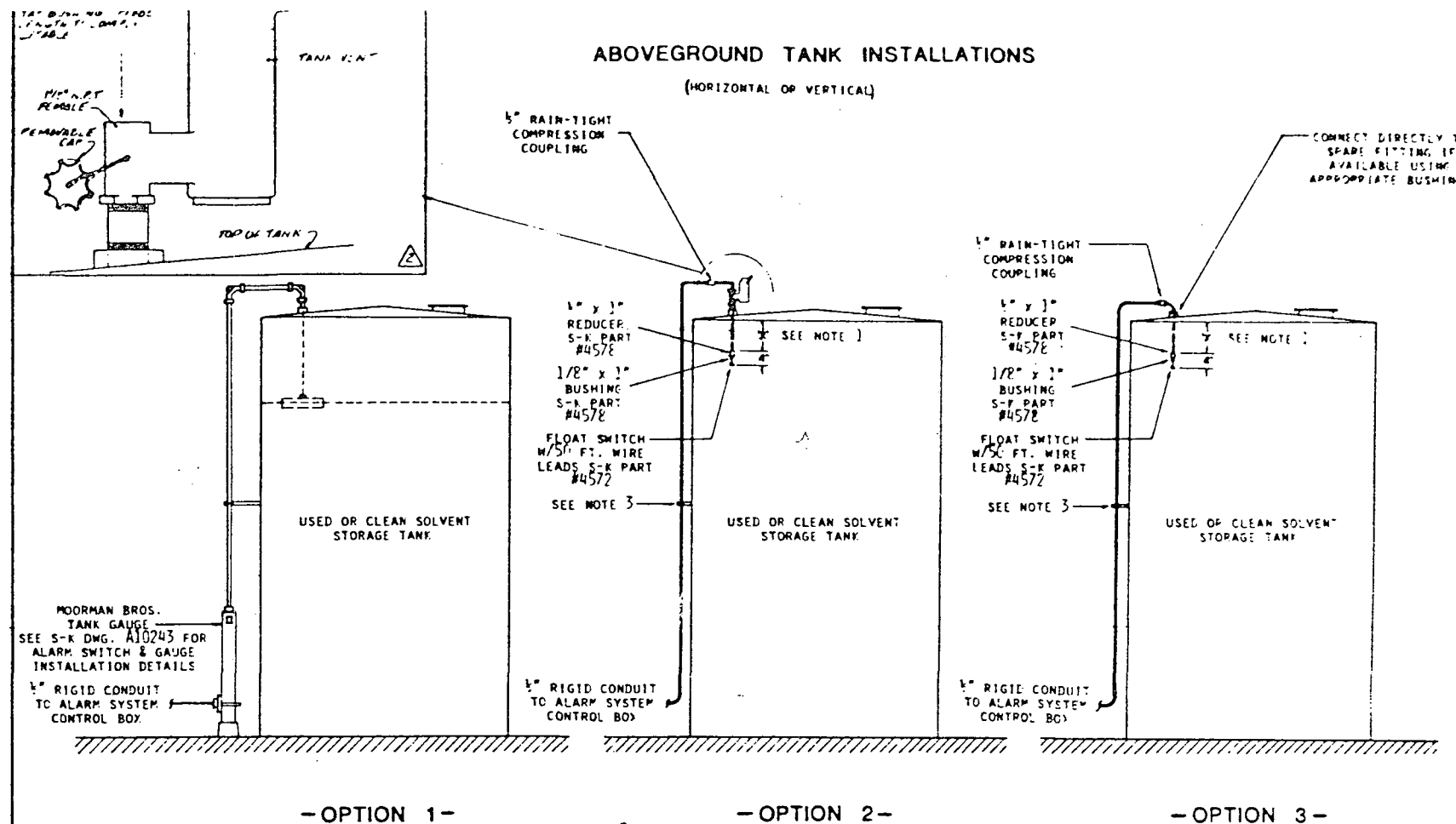
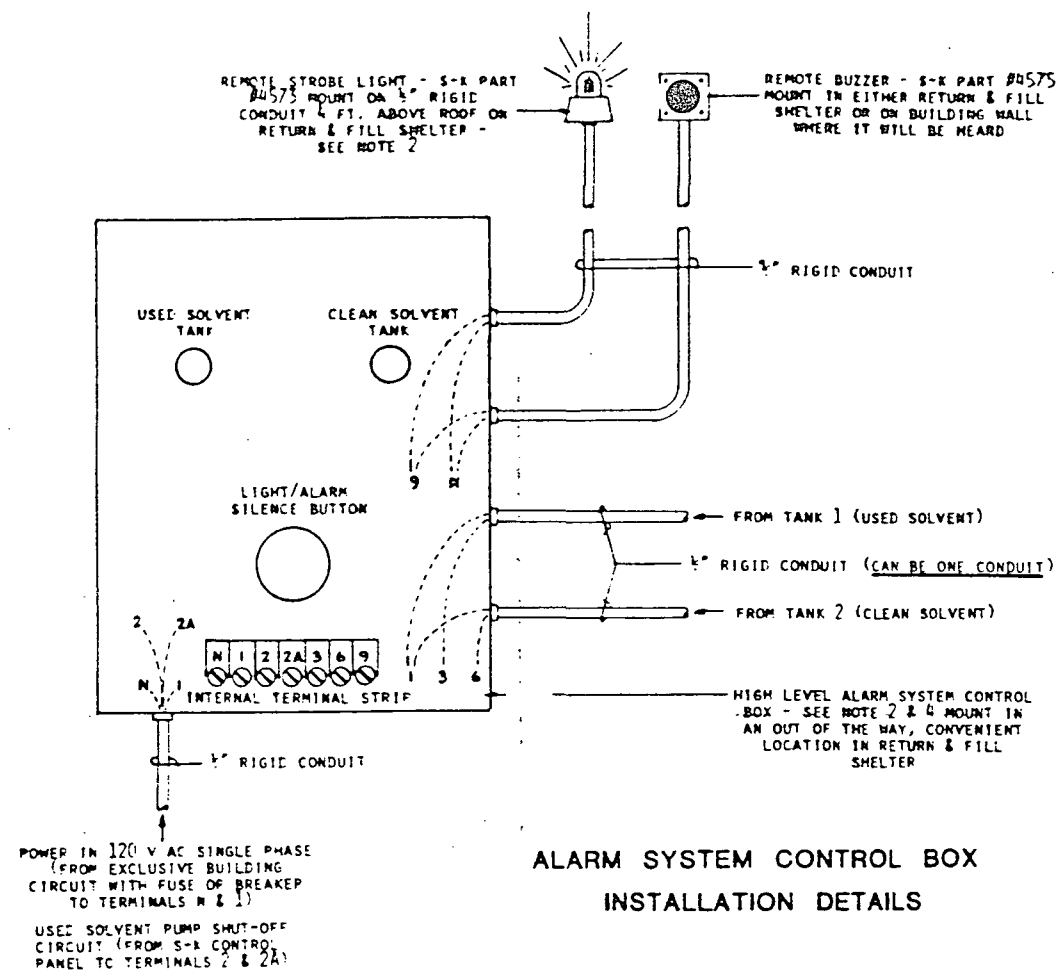
①	REMOVED 3" FLG - ADDED VALVE/CAMLOCK	WLJ	11/15/88
②	ADDED ITEM 8 TO SCHEDULE & DRAWING	WLJ	11/15/88
③	ADDED NOTE 6	WLJ	11/15/88
④	REVISED DETAIL IN NOTE 5 SHOWN ON DWG	WLJ	11/15/88
⑤	ADDED NOTE 6 TO NOTES & TO DRAWING	WLJ	11/15/88
NO.	REVISION DESCRIPTION	BY	DATE
1	REVISED DETAIL IN NOTE 5 SHOWN ON DWG	WLJ	11/15/88

Safety-Kleen Corp. EXHIBIT 2-7
USED SOLVENT STORAGE TANK INSTALLATION DTL'S
 FOR SERVICE CENTER BRANCH IMPROVEMENTS & OR CONSTRUCTION
 NO SCALE
 DWG. NO. 111124

-TABLE OF VARIABLE 'X' DIMENSION-													
ABOVEGROUND HORIZONTAL CLEAN SOLVENT TANKS OR UNDERGROUND HORIZONTAL CLEAN & USED SOLVENT TANKS													
CAPACITY (GAL.)	DIAMETER (FT.)												
	4'	5'	6'	7'	8'	9'	10'	10'6"	11'	12'	13'	14'	15'
1000	20"	26"											
2000		14"											
3000		10"	11"										
4000		8"	9"	12"									
5000				10"	12"								
6000				8"	10"								
7000													
8000				6"	6"		14"						
9000													
10000					8"	6"	14"	14"					
11000													
12000					4"	4"	10"	10"					
13000													
14000							6"						
15000							8"	6"	4"				
ABOVEGROUND VERTICAL CLEAN SOLVENT TANKS													
'K' DIMENSION (REGARDLESS OF CAPACITY)	DIAMETER (FT.)												
	4'	5'	6'	7'	8'	9'	10'	10'6"	11'	12'	13'	14'	15'
					12"	8½"	6"	5"	4½"	3"	2"	1"	½"
ABOVEGROUND VERTICAL OR HORIZONTAL USED SOLVENT TANKS													
NOTE: THE 'K' DIMENSION SHOWN ON S-K DRAWING D11533 FOR ALL ABOVEGROUND VERTICAL OR HORIZONTAL USED SOLVENT TANKS WILL BE 5'.													

- 1 ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR EXAMINING DRAWINGS & SCOPE OF WORK TO INSURE COMPLIANCE WITH ALL LOCAL, STATE & NATIONAL CODES - ANY ALTERATIONS &/OR ADDITIONS MUST BE DELAYED TO & APPROVED BY TECHNICAL SERVICES AT CORPORATE OFFICE PRIOR TO &/OR DURING INSTALLATION. FAILURE TO COMPLY WITH THE ABOVE WILL RELIEVE SAFETY-KLEEN CORP. OF ANY & ALL RESPONSIBILITIES.
- 2 WORK THIS DRAWING WITH SAFETY-KLEEN DRAWING D11533 FOR TYPICAL INSTALLATION DETAILS - IF INDIVIDUAL SERVICE CENTER CONDITIONS ARE NOT COVERED HEREIN OR ON DRAWING D11533 PLEASE CONTACT TECHNICAL SERVICES AT THE CORPORATE OFFICE FOR ASSISTANCE.
- 3 WORK THIS DRAWING WITH SAFETY-KLEEN DRAWINGS BELOW FOR ELECTRICAL SCHEMATICS OF VARIOUS SYSTEMS AS FOLLOWS:
 - D11529 - ALARM SYSTEM ELECTRICAL SCHEMATIC FOR TWO TANKS
 - D11536 - ALARM SYSTEM ELECTRICAL SCHEMATIC FOR FOUR TANKS
- 4 LIQUID-TIGHT COMPRESSION OR FLEXIBLE CONDUIT COUPLINGS ARE USED AT CONDUIT CONNECTION TO TANK - TYPICAL - SEE S-K DWG. D11533. THESE ARE REQUIRED FOR SERVICING &/OR REPLACEMENT OF FLOAT SWITCH UNITS AFTER INITIAL INSTALLATION.

TO REPLACE A FLOAT SWITCH, THE CONTRACTOR SHOULD DISCONNECT THE CONDUIT COUPLING & CUT THE 2 WIRE LEADS. THIS WILL ALLOW REMOVAL OF MANWAY COVER, MODIFIED FILL CAP, COUPLING ADAPTER, ETC. (DEPENDING ON THE TYPE OF INSTALLATION) IN ORDER TO REMOVE OLD FLOAT SWITCH & INSTALL NEW SWITCH. THE NEW 3/4" FT. LEADS WILL BE PULLED THROUGH TO THE COUPLING AT THIS TIME & UNIT REINSTALLED ON TANK. IT IS AT THIS POINT THAT OLD WIRE LEADS FROM THE COUPLING BACK TO THE CONTROL BOX SHOULD BE TIED TO THE ENDS OF THE NEW WIRE LEADS - THE OLD WIRES WILL SERVE AS PULL WIRES FOR PULLING THE NEW LEADS THROUGH THE CONDUIT TO THE BOX WHERE THEY WILL BE ATTACHED TO THE APPROPRIATE TERMINALS.
- 5 TESTING OF THE FLOAT SWITCH & SYSTEM IS MANDATORY FOLLOWING INSTALLATION. ACTIVATING THE FLOAT SWITCH DEVICE MAY BE ACCOMPLISHED AS FOLLOWS:
 - UNDERGROUND TANKS
 - A) PRIOR TO INSTALLING MANWAY COVER ON MANWAY INSTALLATIONS.
 - B) BY DRIVING A NAIL OF APPROPRIATE LENGTH CROSSWISE THROUGH THE END OF THE GAUGE STICK OR SIMILAR PROBE AND REACHING DOWN UNDER FLOAT SWITCH ON RISER PIPE INSTALLATIONS.
 - ABOVEGROUND TANKS
 - A) REACH IN THROUGH MANWAY ON TOP OF TANKS. OTHER METHODS MAY BE USED AT THE DISCRETION OF THE ELECTRICAL CONTRACTOR.
- 6 THIS DRAWING CONTAINS INFORMATION PROPRIETARY TO SAFETY-KLEEN CORP. ANY REPRODUCTION, DISCLOSURE OR USE OF THIS DRAWING IS EXPRESSLY PROHIBITED BY SAFETY-KLEEN OR AS SAFETY-KLEEN MAY AGREE IN WRITING.



— GENERAL NOTES —

1. THE 'X' DIMENSION SHOWN IS VARIABLE & IS DIFFERENT FOR VARIOUS TANK TYPES & SIZES. FOR TABLE OF THESE VALUES REFER TO SAFETY-KLEEN DWG. 01155.
2. SEE INDIVIDUAL SERVICE CENTER SITE PLANS FOR RELATIVE LOCATIONS OF THESE DETAILS.
3. CONTRACTOR TO SUPPLY & INSTALL CONDUIT SUPPORTS &/OR BRACKETS AS REQUIRED.
4. KITS FOR INITIAL INSTALLATION OF HIGH LEVEL ALARM SYSTEMS ARE AVAILABLE FROM NEW BERLIN THROUGH THE TECHNICAL SERVICES DEPT. AS FOLLOWS:
 1. TANK ALL - S-K PART #4577
 2. FLOAT SWITCHES W/COUPLING & BUSHING
 3. CONTROL BOX (4 TANK SIZE)
 4. STROBE LIGHT
 5. BUZZER
 6. TANK ALL - S-K PART #4577
 7. FLOAT SWITCHES W/COUPLING & BUSHING
 8. CONTROL BOX (4 TANK SIZE)
 9. STROBE LIGHT
 10. BUZZER
5. THIS DRAWING CONTAINS INFORMATION PROPRIETARY TO SAFETY-KLEEN CORP. ANY REPRODUCTION, DISCLOSURE OR USE OF THIS DRAWING IS EXPRESSLY PROHIBITED BY SAFETY-KLEEN OR AS SAFETY-KLEEN MAY AGREE IN WRITING.
6. ALL ITEMS SHOWN WITH A SAFETY-KLEEN PART NUMBER WILL BE SUPPLIED BY SAFETY-KLEEN CORP.
7. IF INDIVIDUAL SERVICE CENTER CONDITIONS ARE NOT COVERED BY DETAILS SHOWN HERE, PLEASE CONTACT TECHNICAL SERVICES AT THE CORPORATE OFFICE FOR ASSISTANCE.