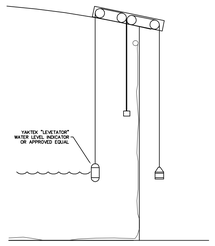
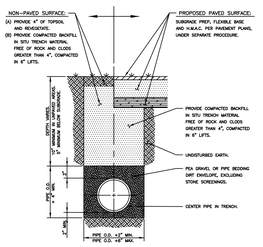
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
AVG. RAINFALL SAN MARCOS, TX*	2.05	2.21	2.09	2.85	5.31	4.84	2.12	2.65	3.46	4.03	3.17	2.41	37.19
GALLONS PER MONTH **	56,700	61,130	57,800	78,830	146,880	133,880	58,640	73,300	95,700	111,475	87,685	66,665	1,028,685

* AVERAGE RAINFALL TOTALS (INCHES) FROM NCDC – WWW.NCDC.NOAA.GOV
** BASED ON 44,400 SF OF COLLECTION SURFACE FOR SCHOOL

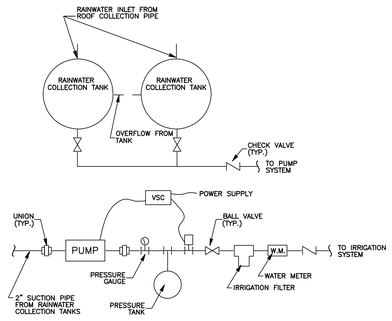
**** AC CONDENSATE WILL ADD APPROXIMATELY 2,880 GALLONS OF WATER PER 12 HOUR PERIOD. CONDENSATE AMOUNT WAS ESTIMATED BY MEP.*



G WATER LEVEL INDICATOR
SCALE: NTS



F RAINWATER COLLECTION PIPE EMBEDMENT (PAVED & NON-PAVED SURFACES)
SCALE: NTS

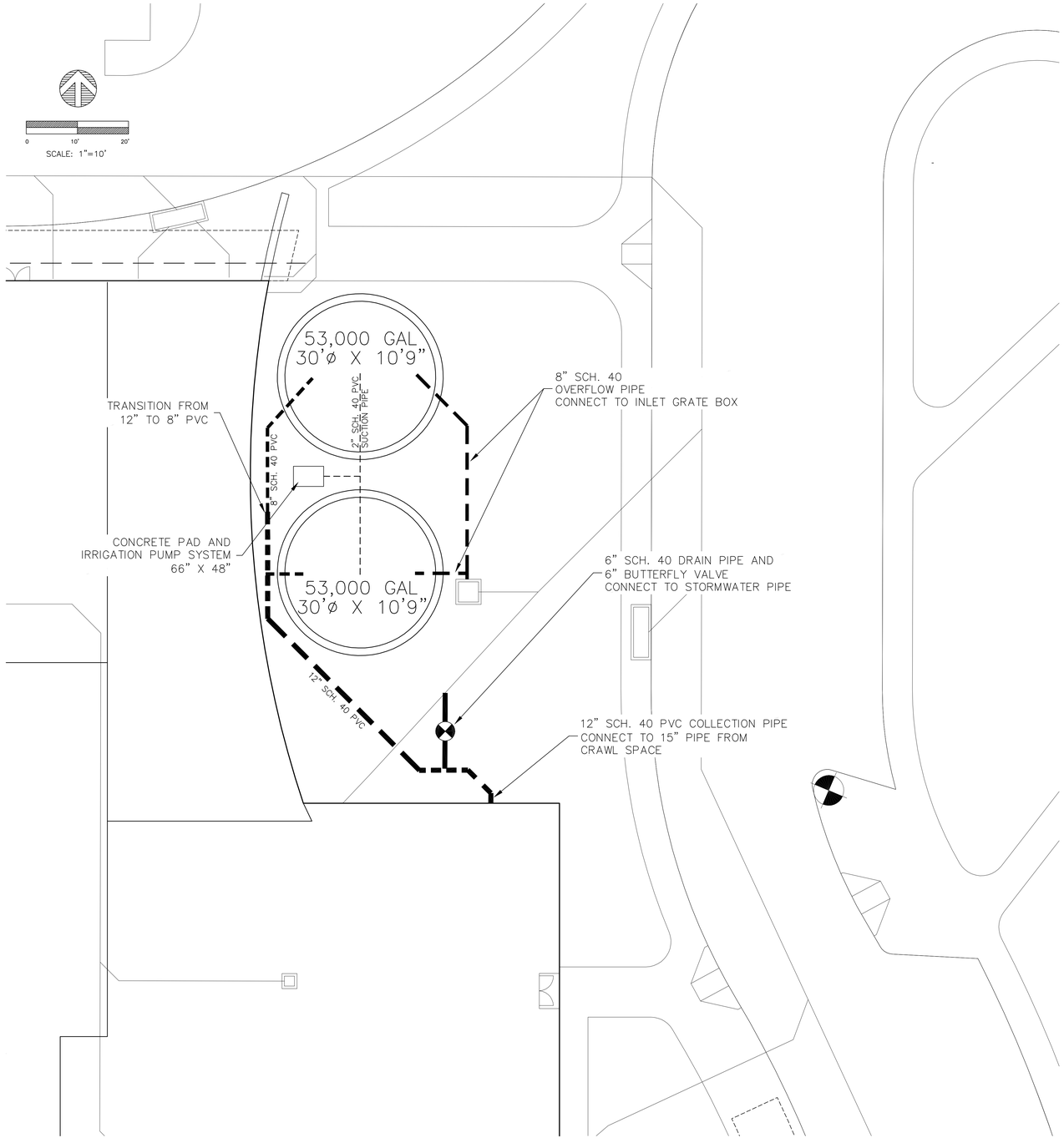


E RAINWATER COLLECTION SYSTEM AND IRRIGATION PUMP SYSTEM SCHEMATIC
SCALE: NTS

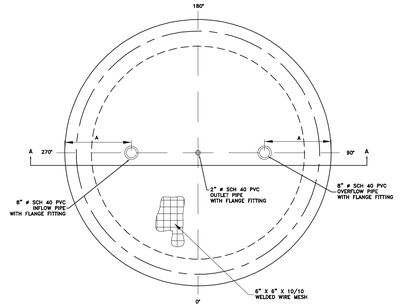
NOTES:

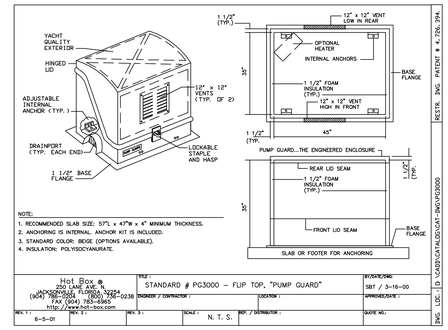
1. *RAINWATER COLLECTION SYSTEM SHALL COLLECT RAINWATER TO BE USED SOLELY FOR OUTDOOR IRRIGATION USE ONLY. NO CONNECTION TO ANY INDOOR PLUMBING SHALL BE MADE.*
2. *THIS SYSTEM WILL ALSO COLLECT CONDENSATE FROM THE HVAC UNITS.*
3. *THE RAINWATER COLLECTION PIPING AND OVERFLOW PIPING SHALL BE BURIED A MINIMUM OF 12"*
4. *OVERFLOW WATER FROM THE RAINWATER COLLECTION CISTERN SHALL BE ROUTED AS SHOWN ON PLANS TO FLOW INTO THE STORMWATER BASIN NEXT TO THE LOCATION OF THE CISTERNS.*
5. *ELECTRICAL SUPPLY FOR IRRIGATION PUMP SYSTEM SHALL BE PROVIDED BY OTHERS.*
6. *IRRIGATION PUMP SYSTEM CONNECTION TO IRRIGATION SYSTEM SHALL BE PROVIDED BY OTHERS.*
7. *THE SYSTEM SHALL BE EQUIPPED WITH AN AUTO-FILL SYSTEM FOR CISTERN MAKE-UP WATER SUPPLY. A SUPPLY LINE FROM A MUNICIPAL SOURCE SHALL BE CONNECTED TO THE CISTERN WITH AN AIR GAP. THE AIR GAP SHALL COMPLY WITH CITY OF AUSTIN CROSS CONNECTION REQUIREMENTS.*
8. *ALL IRRIGATION PIPING AND COMPONENTS SHALL BE "PURPLE PIPE" TO SHOW USE OF NON-POTABLE WATER IN THE IRRIGATION SYSTEM.*
9. *IRRIGATION CONTRACTOR SHALL ENSURE THAT A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTER IS INSTALLED ON THE MUNICIPAL WATER SUPPLY PIPE THAT CONNECTS TO THE IRRIGATION SYSTEM. THE RPZ BACKFLOW SHALL BE INSTALLED INSTEAD OF A DOUBLE CHECK VALVE ASSEMBLY.*
10. *WHEN RAINWATER / AC CONDENSATE SYSTEM HAS RUN OUT OF WATER, THE MUNICIPAL WATER SUPPLY TO THE IRRIGATION SYSTEM SHALL BE ENGAGED. THE IRRIGATION SYSTEM SHALL RUN OFF MUNICIPAL WATER SUPPLY UNTIL ENOUGH RAINWATER OR AC CONDENSATE HAS FILLED THE CISTERNS TO RUN THE IRRIGATION SYSTEM.*
11. *THE PUMP SYSTEM SHALL BE EQUIPPED WITH A PUMP KILL FLOAT SWITCH WHICH WILL PROTECT THE PUMP BY INTERRUPTING THE POWER SUPPLY TO THE PUMP ONCE THE WATER LEVEL IN THE CISTERN REACHES 12" FROM THE BOTTOM.*

SYSTEM SPECIFICATIONS:
RAINWATER TANK: 53,000 GALLON CORRUGATED METAL TANK (30' DIA. x 10'9" HEIGHT)
PUMP: 3 HP FLINT & WALLING CENTRIFUGAL PUMP, MODEL #DJ101C303, 208V
PRESSURE TANK: 14 GALLON PRESSURE BLADDER, AIR-E-TRAINER MODEL #AT44
VSC: VARIABLE SPEED CONTROLLER, FLINT & WALLING ARTESIAN DRIVE, MODEL #AD096096
WATER METER: 1 1/2" DLJ EPOXY COATED BRONZE WATER METER, MODEL #DLJ150
IRRIGATION FILTER: 2" AMAD FILTER, MODEL #DLJ150
PUMP PROTECTION: RUN-DRY PROTECTION FLOAT SWITCH, SJE PUMPMASTER PLUS

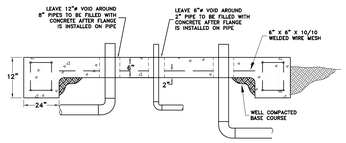


A RAINWATER COLLECTION SYSTEM SITE PLAN
SCALE: 1" = 10'





D IRRIGATION PUMP ENCLOSURE
SCALE: NTS

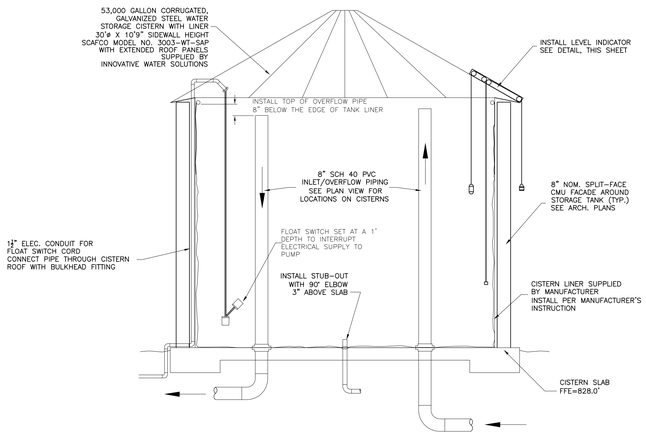


C CISTERN SLAB SECTION
SCALE: NTS

Tank Dia.	Concrete Pad Dia.	A
30'-0"	33'-0"	4'-0"

GENERAL FOUNDATION NOTES:

1. SITE MUST BE 95% COMPACTED SOIL BACK-FILL OR UNDISTURBED SOIL. SITE MUST BE FREE FROM STANDING WATER AND WELL DRAINED.
2. SOIL AROUND FOOTING RING MUST BE UNIFORM (NOT FINE SAND).
3. FOUNDATION DESIGN IS BASED ON UNIFORM SOIL BEARING CAPACITY OF 2000 LB. PER SQ. FT. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 2500 PSI.
4. REINFORCING STEEL-STANDARD DEFORMED BARS F_y = 40,000 PSI.
5. ADD (1) POUND TO REBAR REQUIREMENTS FOR EACH END LAP. LAP BARS 15.
6. THESE ARE GENERAL CONCRETE FOUNDATION REQUIREMENTS, AND SHOULD BE EVALUATED WITH RESPECT TO EACH SITE. CONSULT WITH A LOCAL ENGINEER IF SITE IS QUESTIONABLE.
7. FOUNDATION SHOULD BE POURED SMOOTH FOR PROPER WEATHER SEAL AND BIN ANCHORAGE.
8. PIPES SHOULD STUB-OUT AT LEAST ONE FOOT OUT FROM FINISHED SLAB FLOOR.



B RAINWATER CISTERN SECTION ILLUSTRATIVE VIEW
SCALE: NTS

DATE: June 15, 2009
DAI. NO.
REVISIONS
JOB NO. 20904

The seal appearing on this document was authorized by Chris Maxwell-Gaines on 07/09/2009

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Hays Consolidated Independent School District #13
New Hays Elementary School
Buda, Texas

RAINWATER / CONDENSATE COLLECTION SYSTEM

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