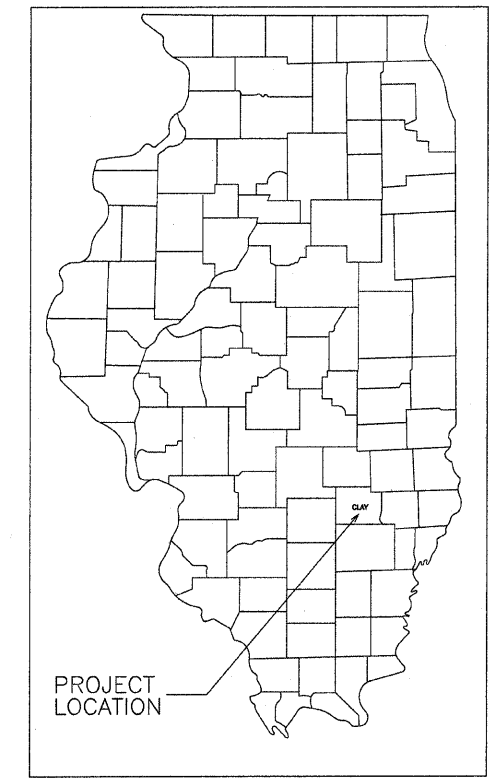


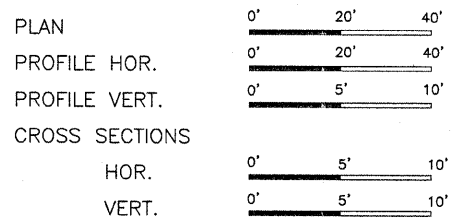
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**PLANS FOR PROPOSED  
 STU AND EDP PROJECT**  
 SECTION 10-00054-00-PV CITY OF FLORA  
 JOB NO. C-97-072-12  
 PROJECT NO. M-5023(011)  
 WORTHEY STREET - F.A.U. 8526

ROUTE	SECTION	CITY	TOTAL SHEETS	SHEET NO.
F.A.U. 8526	10-00054-00-PV	FLORA	34	1
CONTRACT NO. 95672		ILLINOIS	PROJECT M-5023(011)	

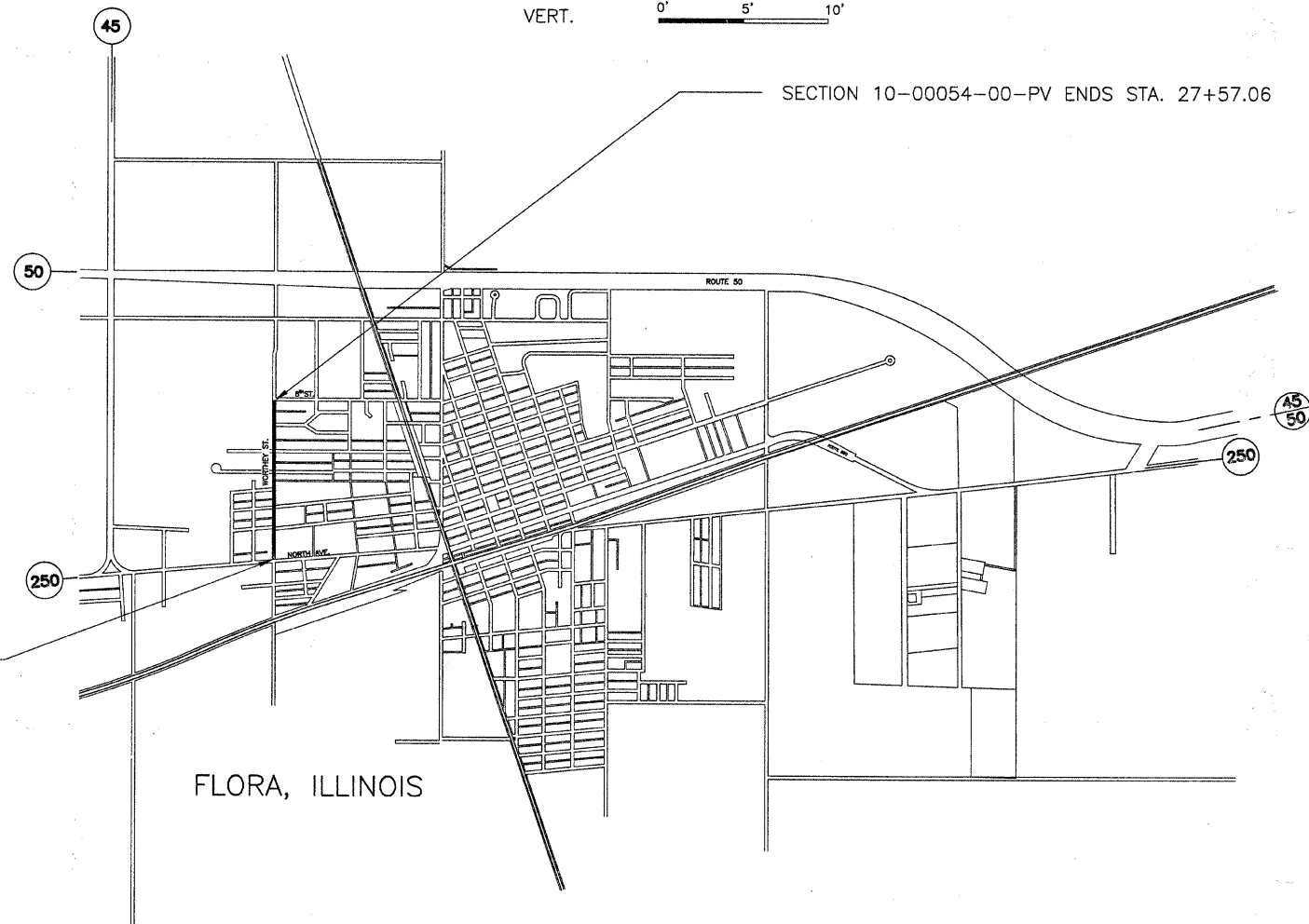


INDEX OF SHEETS

SHEET	ITEM
1	COVER SHEET
2	TYPICAL SECTIONS
3	SUMMARY OF QUANTITIES
4-6	DRAINAGE STRUCTURES / STORM SEWER
7-11	PLAN & PROFILE
12-14	INTERSECTION DETAILS
15-16	EROSION CONTROL
17, 17A, 17B	PUMP STATION DETAIL
18-34	CROSS SECTIONS
	STANDARD 000001-06
	STANDARD 280001-06
	STANDARD 420001-07
	STANDARD 424001-06
	STANDARD 424011
	STANDARD 424021
	STANDARD 424026
	STANDARD 602301-03
	STANDARD 602306-03
	STANDARD 602401-03
	STANDARD 602406-05
	STANDARD 602601-02
	STANDARD 602701-02
	STANDARD 604001-03
	STANDARD 604006-04
	STANDARD 604011-04
	STANDARD 604036-02
	STANDARD 604086-02
	STANDARD 606001-04
	STANDARD 701006-03
	STANDARD 701301-04
	STANDARD 701311-03
	STANDARD 701501-06
	STANDARD 701801-05
	STANDARD 701901-02
	STANDARD 780001-03
	STANDARD BLR 10-6
	STANDARD BLR 21-9
	STANDARD BLR 22-7



Joint Utility Locating Information for Excavators  
 JULIE 1-800-892-0123



REVISED 4-18-12  
 SECTION 10-00054-00-PV BEGINS STA. 1+08.73

CONTRACT NO. 95672  
 URBAN COLLECTOR  
 ADT = 2075  
 DESIGN SPEED = 30 M.P.H.

NET LENGTH SECTION 10-00054-00-PV = 2648.33 FEET = 0.502 MILE

*Tom A. Charleston*  
 Ill. Reg. Prof. Eng. # 29178  
 Lic. Expires 11/30/13

**CHARLESTON ENGINEERING, INC.**  
 CONSULTING ENGINEERS  
 105 NORTH KITCHELL  
 P.O. BOX 397  
 OLNEY, ILLINOIS 62450  
 (618) 392-0736  
ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION REGISTRATION #184.003513

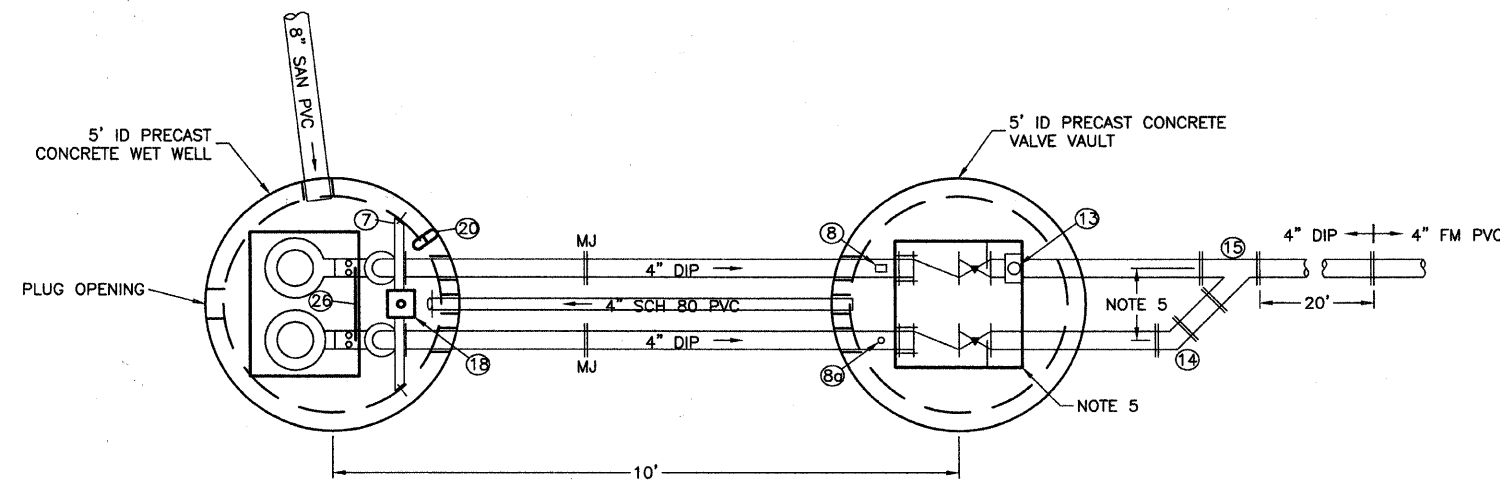
APPROVED 1-9 2012  
*Bob Dickel*  
 MAYOR - CITY OF FLORA

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PASSED 1-19 2012  
*Maureen Kavel*  
 DISTRICT SEVEN ENGINEER OF  
 LOCAL ROADS AND STREETS

Releasing For Bid Based on Limited Review  
1-19 2012  
*Tom A. Charleston*  
 DEPUTY DIRECTOR OF HIGHWAYS  
 REGION FOUR ENGINEER

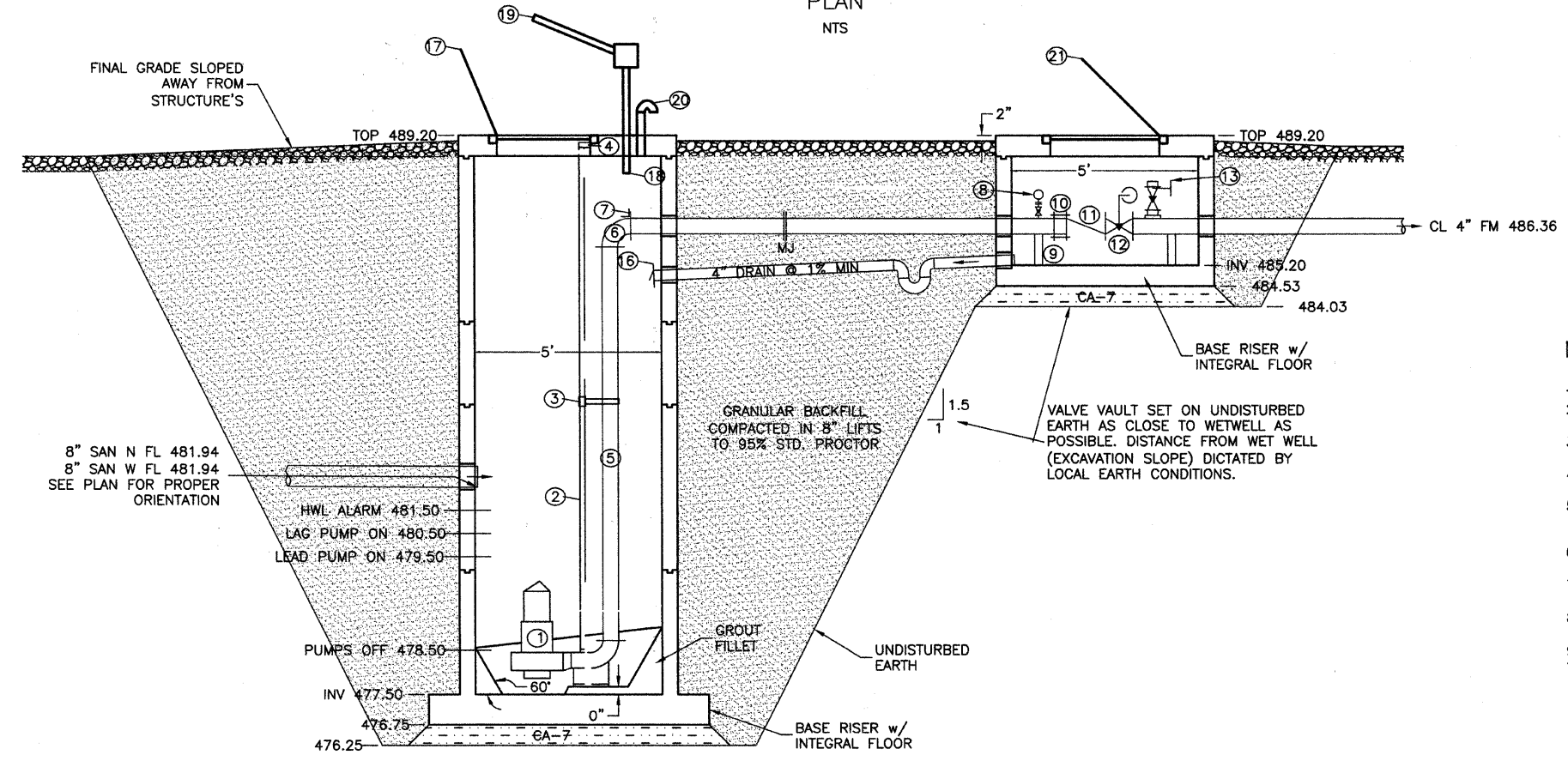
ROUTE	SECTION	CITY	TOTAL SHEETS	SHEET NO.
F.A.U. 8526	10-00054-00-PV	FLORA	34	17A
CONTRACT NO. 95672		ILLINOIS	PROJECT M-5023(011)	



LEGEND:

- 1 SUBMERSIBLE PUMP w/ DISCHARGE CONNECTION (EXPLOSION PROOF), 2
- 2 2" GUIDE RAILS (SCH 40 GALV STEEL PIPES CUT TO LENGTH), 4
- 3 INTERMEDIATE GUIDE RAIL BRACKETS (FOR RAILS OVER 20' LONG), 2
- 4 UPPER GUIDE RAIL BRACKET, 2
- 5 4" FL DIP
- 6 4" FL DIP 90° BEND
- 7 2"x2" GALV STEEL ANGLE PIPE THRUST SUPPORT w/ SS ANCHORS, 1
- 8 PRESSURE GAUGE ASSEMBLY INCLUDES 1/2" THR TAP, 1/2" PLUG VALVE, DIAPHRAGM SEAL, PRESSURE GAUGE
- 8a PRESSURE GAUGE ASSEMBLY INCLUDED 1/2" THR TAP & 1/2" PLUG VALVE
- 9 PIPE STAND SUPPORT (THR BASE STAND & ADJ SADDLE SUPPORT w/ YOKE), 2
- 10 FLANGED COUPLING ADAPTER, 2
- 11 4" FL CHECK VALVE, 2
- 12 4" FL PLUG VALVE, 2
- 13 BYPASS PUMP ASSEMBLY INCLUDES 4" TAPPING SADDLE, 4" THR NIPPLE, 4" PLUG VALVE, 4" CAM & GROOVE QUICK CONNECTION
- 14 4" MJ 45° BEND w/ RETAINER GLANDS & THRUST BLOCKED AGAINST UNDISTURBED EARTH, 1
- 15 4" MJ WYE w/ RETAINER GLANDS & THRUST BLOCKED AGAINST UNDISTURBED EARTH, 1
- 16 4" FL COPOLYMER CIRCULAR FLAP VALVE, 1
- 17 48"x30" ALUM HATCH, 1
- 18 FLUSH MOUNT SOCKET BASE, 1
- 19 PORTABLE DAVIT CRANE, 1
- 20 3" GALV STEEL VENT w/ #24 MESH SCREEN, 1
- 21 36"x36" ALUM HATCH
- 26 CABLE HOLDER

PLAN  
NTS



NOTES:

- 1 PRECAST CONCRETE WET WELL & VALVE VAULT SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C- 478.
- 2 ALL JOINTS BETWEEN PRECAST CONCRETE ELEMENTS SHALL BE SEALED WITH AN APPROVED BITUMASTIC MATERIAL OR AN APPROVED RUBBER GASKET.
- 3 CONTRACTOR SHALL COORDINATE CONSTRUCTION OF PRECAST FLAT SLAB LIDS w/ HATCH, PUMP, & ELECTRICAL EQUIPMENT MNFRS.
- 4 ALL PIPING ENTERING & LEAVING WET WELL & VALVE VAULT SHALL BE SEALED w/FLEXIBLE RESILIENT CONNECTORS.
- 5 CONTRACTOR SHALL COORDINATE SPACING OF PUMPS & LOCATION OF HATCHES PER PUMP MNFR RECOMMENDATIONS. VALVE VAULT HATCH SHALL GENERALLY BE CENTERED IN LID EXCEPT THAT IT MAY BE OFFSET AS NEEDED TO ENSURE BYPASS PUMP ASSEMBLY IS UNDER HATCH OPENING.
- 6 PUMP DISCHARGE CONNECTION SHALL BE ANCHORED TO THE FLOOR & LEVELED USING ANCHORS PER PUMP MNFR RECOMMENDATIONS. GROUT UNDER DISCHARGE CONNECTION AS SHOWN ON THE DRAWING.
- 7 SUBMERSIBLE PUMPS, LIFT-OUT RAIL ASSEMBLYS, & ELECTRICAL SYSTEMS SHALL BE EXPLOSION PROOF IN COMPLIANCE w/ NEC REQUIREMENTS FOR CLASS 1 GROUP D DIVISION 1 LOCATIONS.
- 8 ALL PUMP DISCHARGE PIPING IN WET WELL AND VALVE VAULT SHALL BE FLANGED DIP. ALL BURIED PUMP DISCHARGE PIPING SHALL BE MECHANICAL JOINT w/ RETAINER GLANDS.
- 9 CONTRACTOR SHALL INSTALL PIPE SUPPORTS UNDER PIPING IN VALVE VAULT.
- 10 ABBREVIATIONS:

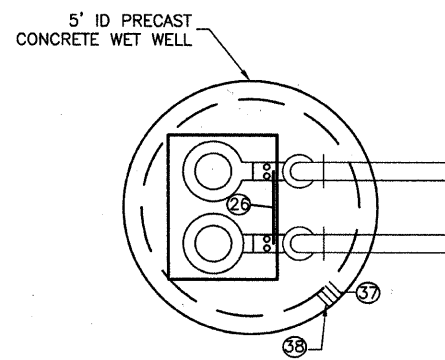
MJ MECHANICAL JOINT	ID INSIDE DIAMETER	SAN SANITARY	FM FORCEMAIN
FL FLANGED JOINT	MIN MINIMUM	FL FLOWLINE INV	INVERT
SS STAINLESS STEEL	HWL HIGH WATER LEVEL	CL CENTERLINE	DIP DUCTILE IRON PIPE

ELEVATION  
NTS

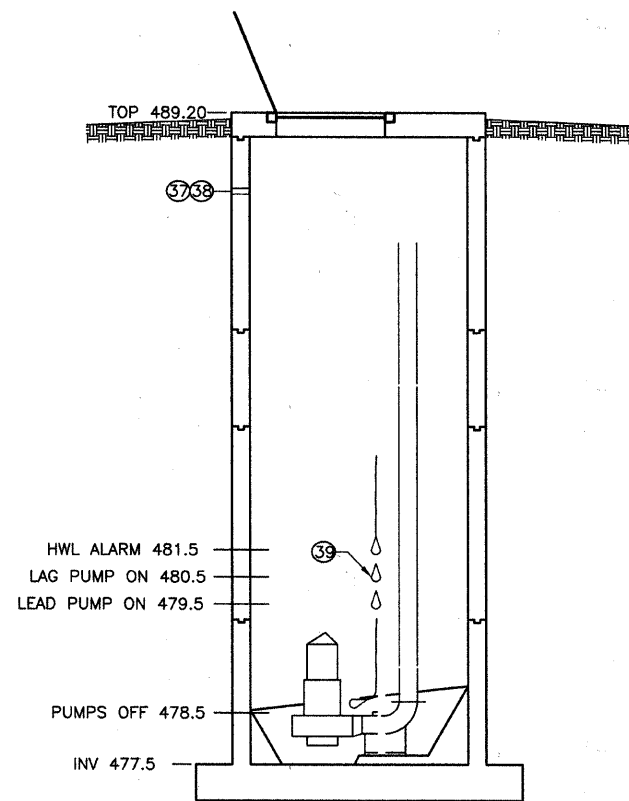
SANITARY PUMP STATION MECHANICAL DETAILS

ADDED 4-18-12

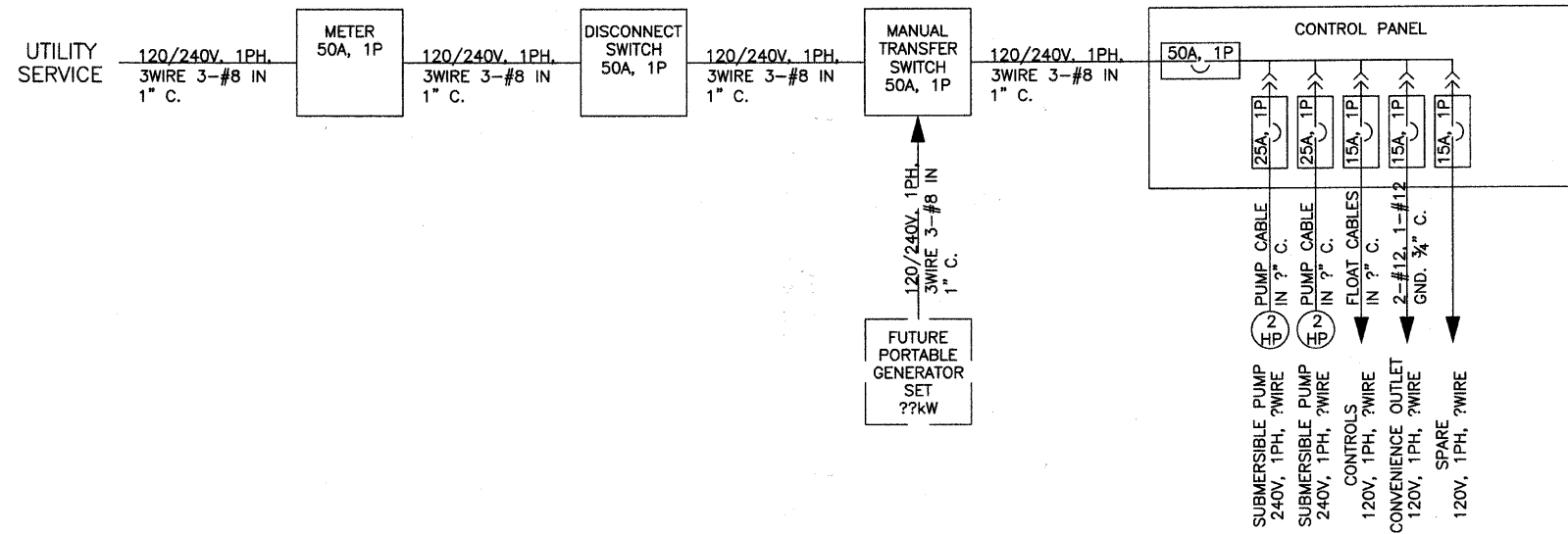
ROUTE	SECTION	CITY	TOTAL SHEETS	SHEET NO.
F.A.U. 8526	10-00054-00-PV	FLORA	34	17B
CONTRACT NO, 95672		ILLINOIS	PROJECT M-5023(011)	



PLAN  
NTS



ELEVATION  
NTS



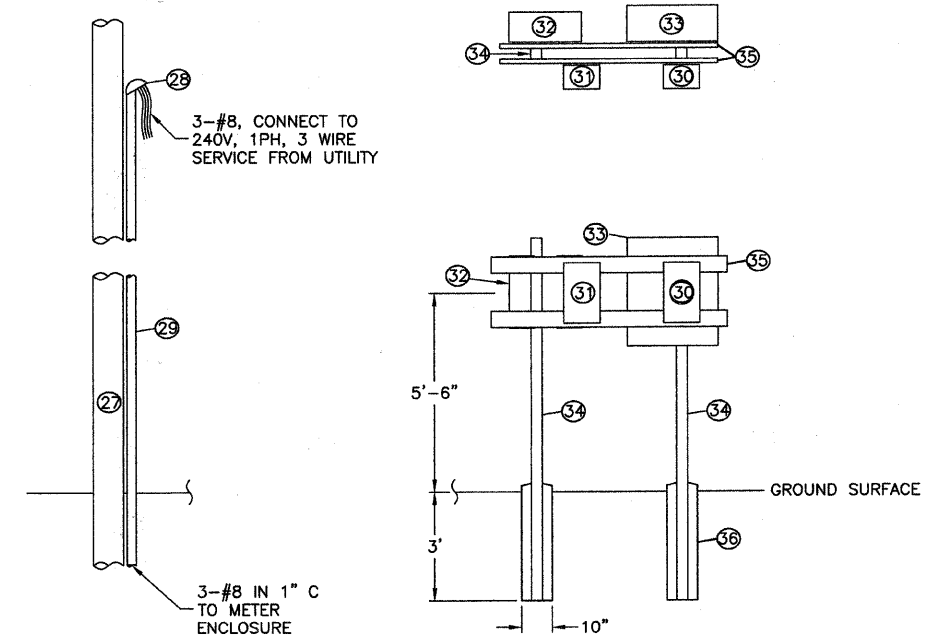
ONE LINE DIAGRAM  
NTS

LEGEND:

- 26 CABLE HOLDER
- 27 EXISTING SERVICE POLE OR PROPOSED CL 7 MIN TREATED SERVICE POLE, 25' LONG w/ 5' BURY
- 28 WEATHERHEAD
- 29 1" CONDUIT
- 30 METER ENCLOSURE
- 31 DISCONNECT SWITCH
- 32 MANUAL TRANSFER SWITCH
- 33 CONTROL PANEL
- 34 4"x4" TREATED POSTS SET IN CONCRETE, 2
- 35 2"x6" TREATED BOARDS, 2 MIN
- 36 10" DIA. CONCRETE ENCASEMENT
- 37 SLEEVE FOR PUMP CABLES IN CONDUIT
- 39 FLOAT CONTROLS

NOTES:

- 1 ALL ELECTRICAL WORK SHALL COMPLY WITH THE NEC
- 2 PROVIDE CONDUIT/GAS SEALS WHERE ELECTRICAL CABLES ENTER CONDUIT AT STRUCTURE CEILING AND/OR WALL PENETRATIONS.
- 3 ALL ELECTRICAL CONDUCTORS OUTSIDE THE WET WELL SHALL BE RAN IN CONDUIT.
- 4 PUMPS SHALL BE CONTROLLED BY FLOATS SUSPENDED FROM CABLE HOLDER.
- 5 PUMP MFR PROVIDE CONDUIT DIA'S FOR PUMP CABLES AND FLOAT CABLES.



ELECTRICAL SERVICE DETAIL  
NTS

SANITARY PUMP STATION ELECTRICAL DETAILS