

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2SB-FAGHI	IROQUOIS	14	1

## INDEX OF SHEETS

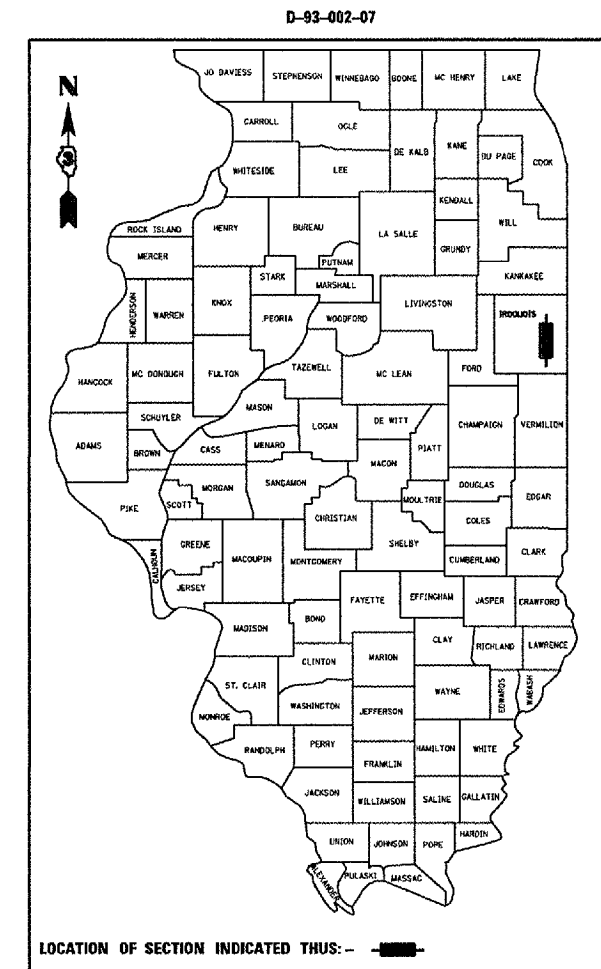
1. COVER SHEET
2. GENERAL NOTES
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4. GENERAL SITE PLAN
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14. ELECTRICAL SCHEMATIC

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

# PROPOSED HIGHWAY PLANS

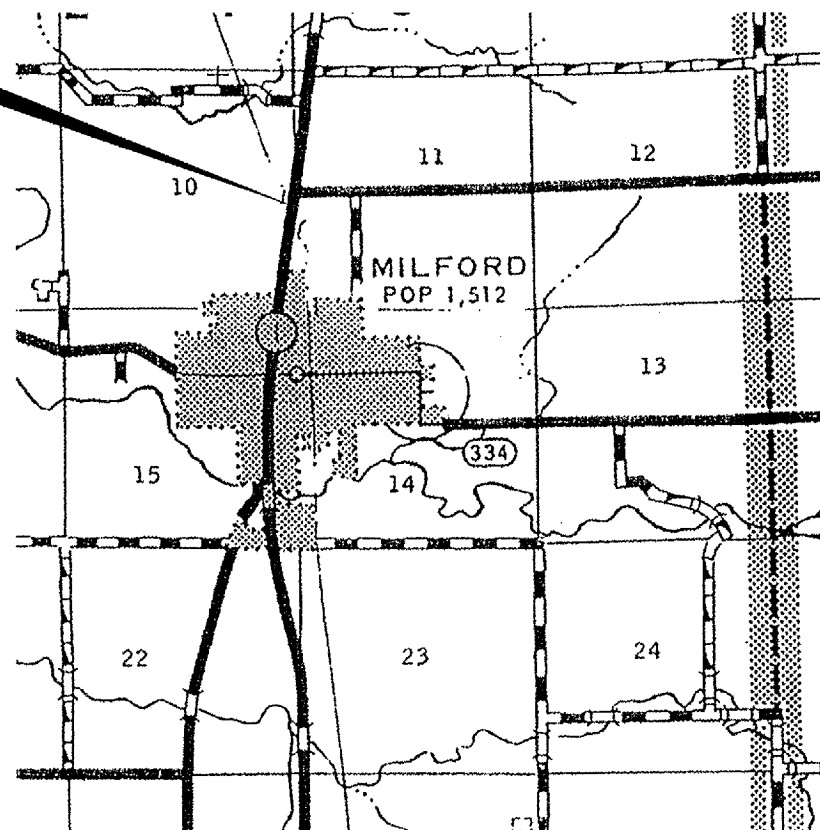
FAP ROUTE 332 (IL 1)  
SECTION (2SB-FAGHI)

IROQUOIS COUNTY  
C-93-050-07  
PUMP STATION REPAIR



FUNCTIONAL CLASSIFICATION  
URBAN - OTHER PRINCIPAL ARTERIAL  
F.A.P. ROUTE 332 (IL 1)  
2005 ADT = 2750  
P.V. = 87.3% M.U. = 9.1% S.U. = 3.6%

**PROJECT LOCATION**  
MILFORD PUMP HOUSE  
S.N. 038-0024 R.R. VIADUCT



**LOCATION MAP**  
NOT TO SCALE  
POINT LOCATION

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123

I.D.O.T. DISTRICT NO. 3 1-815-434-6131

PROJECT ENGINEER: JOE KANNEL  
UNIT CHIEF: RON WOODSHANK  
TOWNSHIP: MILFORD

CONTRACT NO. 66712

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED April 2, 2007  
*George P. Ryan*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

June 29, 2007  
*Eric E. Harm*  
ENGINEER OF DESIGN AND ENVIRONMENT

June 29, 2007  
*Milton R. Sees, P.E.*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(2SB-FAGH)I	IROQUOIS	14	2
FED. ROAD DIST. NO. - ILLINOIS		STATE AID PROJECT		

## GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING ROADWAY OR STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND TO MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT BID FOR THE WORK.

THE CONTRACTOR SHALL VERIFY "ALL" DIMENSIONS IN THE FIELD PRIOR TO ORDERING OF MATERIALS AND BEGINNING CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE "JULIE" NUMBER IS 1-800-892-0123. A MINIMUM OF FORTY-EIGHT (48) HOURS ADVANCE NOTICE IS REQUIRED.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE PRESENCE OF DEPARTMENT-OWNED UNDERGROUND ELECTRICAL CABLE WITHIN THE LIMITS OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR SHALL REQUEST THE ILLINOIS DEPARTMENT OF TRANSPORTATION IN OTTAWA (815-434-8417) TO LOCATE THE UNDERGROUND FACILITIES, PROVIDING A MINIMUM OF 72 HOURS NOTICE. THE DEPARTMENT IS NOT A MEMBER OF THE JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (JULIE) SYSTEM.

ALL DAMAGE TO DEPARTMENT OWNED UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE. THIS SHALL INCLUDE ALL TEMPORARY REPAIRS REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS. SPLICING OF ELECTRIC CABLE SHALL NOT BE ALLOWED. ELECTRIC CABLE SHALL BE REPLACED FROM POLE TO POLE OR CONTROLLER.

DATE:

4.2.07

PREPARED BY:

*Rich Pavell*

DISTRICT STUDIES & PLANS ENGINEER

EXAMINED BY:

*Hubert J. [Signature]*

DISTRICT CONSTRUCTION ENGINEER

*[Signature]*  
DISTRICT MATERIALS ENGINEER

*[Signature]*  
DISTRICT OPERATIONS ENGINEER

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**GENERAL NOTES**  
FAP ROUTE 322 (IL 1) SECTION (2SB-FAGH)I  
IROQUOIS COUNTY  
MILFORD PUMP STATION  
S.N. 038-0024

DATE: JANUARY 7, 2007  
FILE: c:/projects/cmain08/cm309/details.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(2SB-FAGH)I	IROQUOIS	14	3
FED. ROAD DIST. NO.	ILLINOIS	STATE AID PROJECT		

# SUMMARY OF QUANTITIES

CONSTRUCTION CODE TYPE: Y007

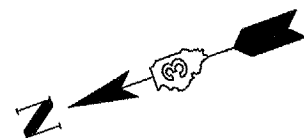
100% STATE  
TOTAL  
QUANTITY

CODE NO.	ITEM	UNIT	100% STATE TOTAL QUANTITY
67100100	MOBILIZATION	L SUM	1
X0301578	REMOVE EXISTING EQUIPMENT	L SUM	1
X0323880	COMPLETE SPARE MAIN PUMP ASSEMBLY	L SUM	1
X0324582	PLUMBING EQUIPMENT, ACCESSORIES AND RELATED SYSTEMS	L SUM	1
X0335700	PUMP STATION GENERAL WORK	L SUM	1
X0393750	HEATING, VENTILATING AND AIR CONDITIONING WORK COMPLETE	L SUM	1
X0783300	PUMP STATION ELECTRICAL WORK	L SUM	1

DATE: JANUARY 7, 2007  
FILE: c:/projects/cm309/details.dgn

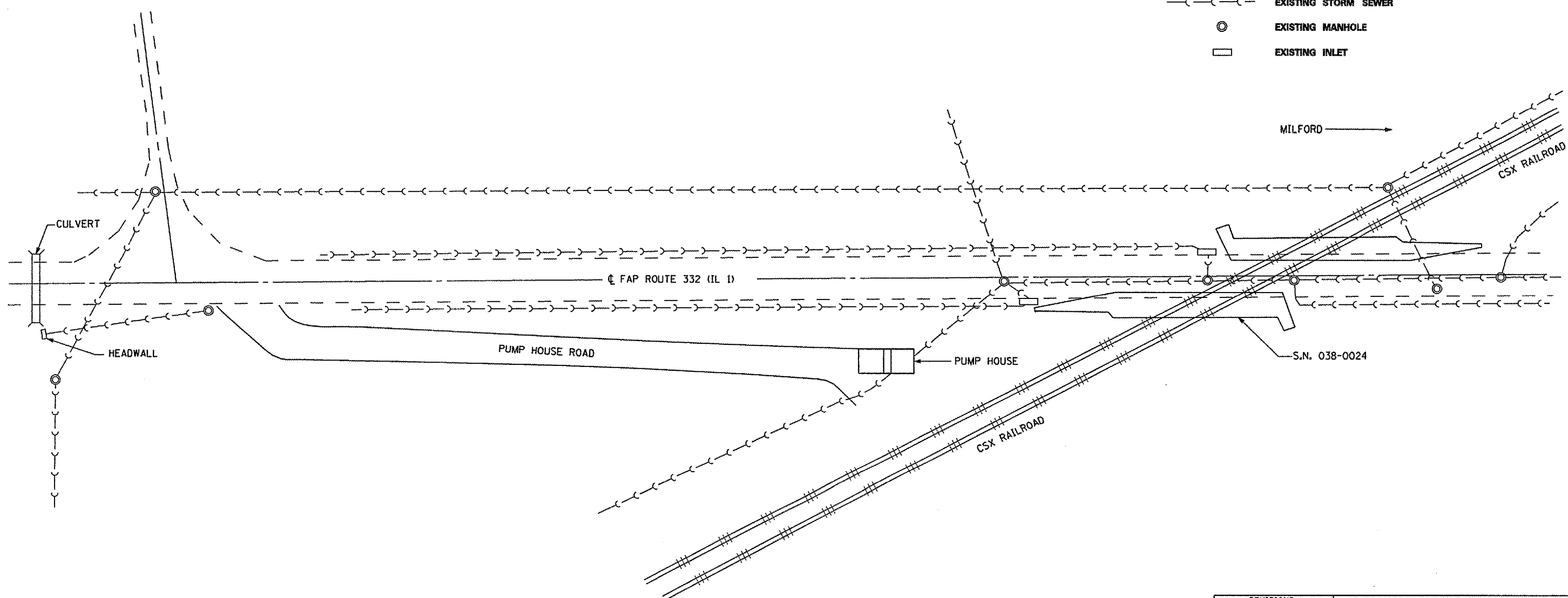
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<b>SUMMARY OF QUANTITIES</b> FAP ROUTE 322 (IL 1) SECTION (2SB-FAGH)I IROQUOIS COUNTY MILFORD PUMP STATION S.N. 038-0024

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(2SB-FAGH)I	IROQUOIS	14	4
FED. ROAD DIST. NO. ILLINOIS		STATE AID PROJECT		



**LEGEND**

- — — — — EXISTING STORM SEWER
- ⊙ EXISTING MANHOLE
- EXISTING INLET

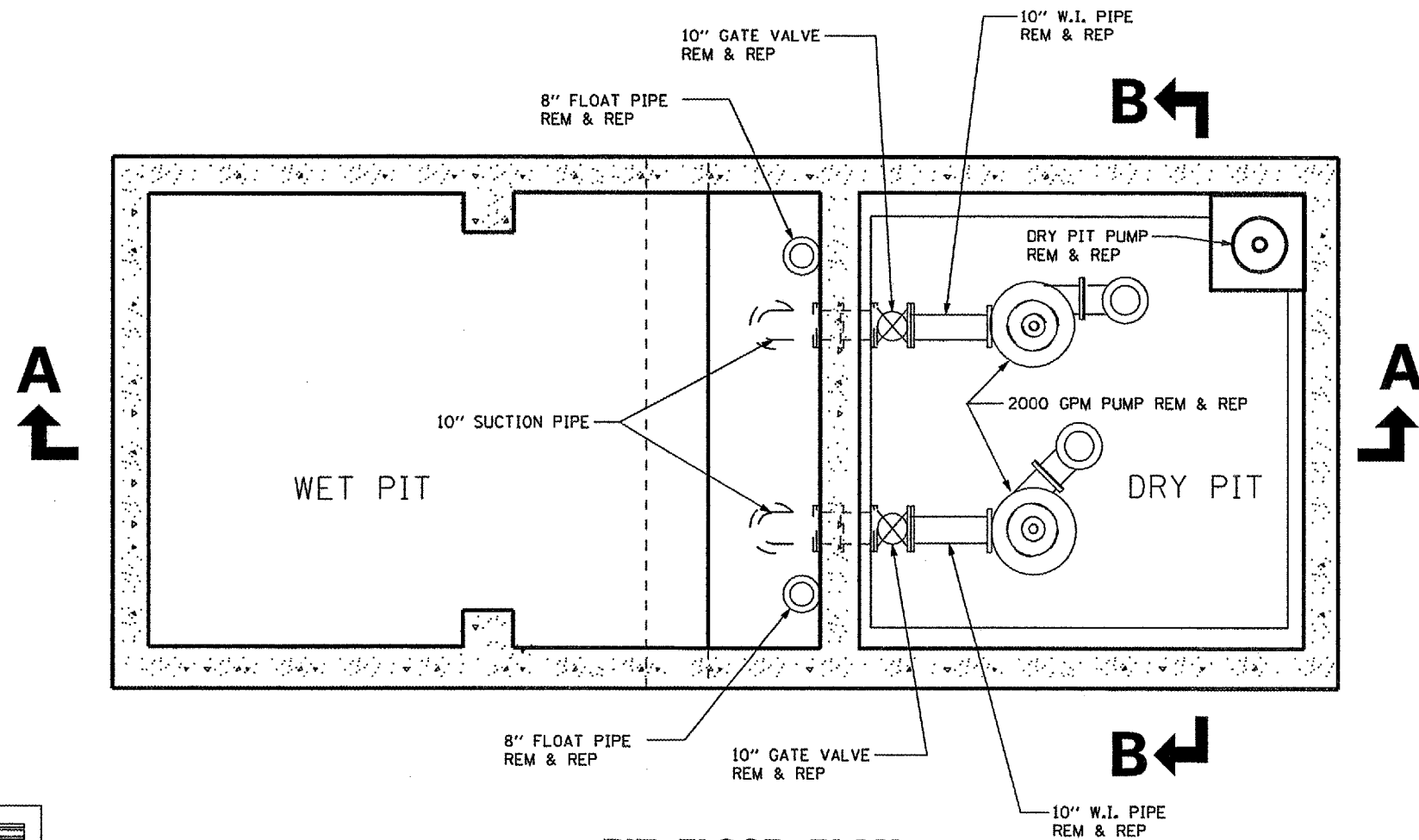


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FILE: c:/projects/cm309/details.dgn

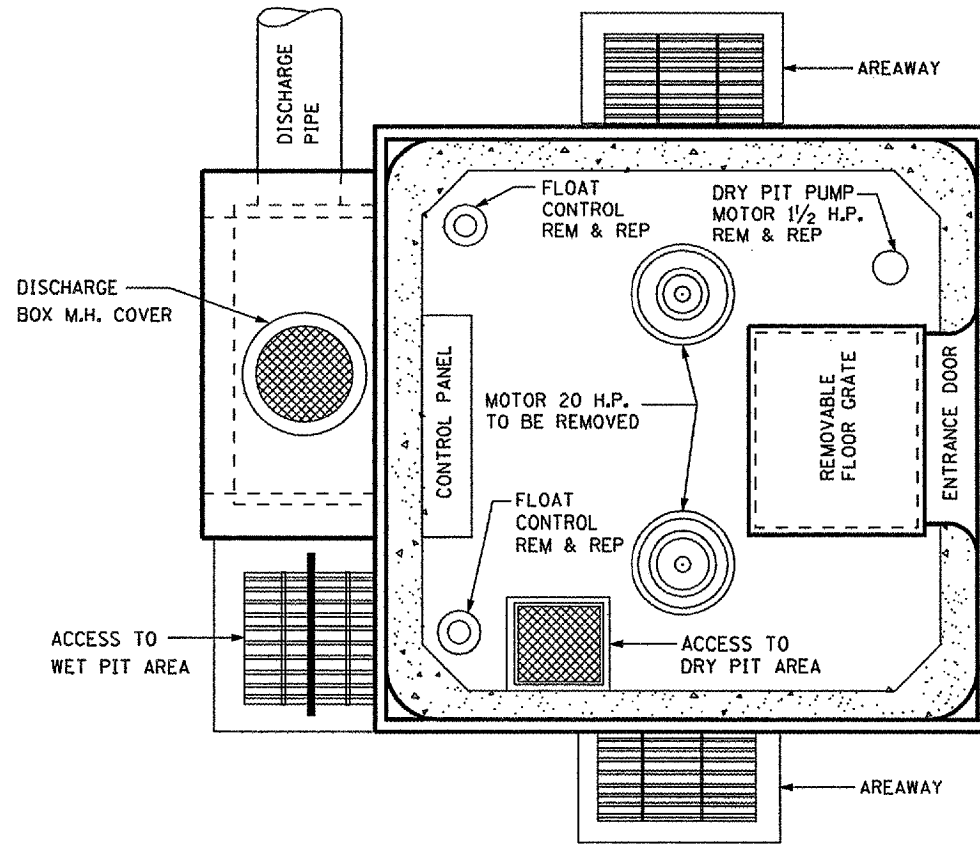
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**GENERAL SITE PLAN**  
FAP ROUTE 332 (IL 1) SECTION (2SB-FAGH)I  
IROQUOIS COUNTY  
MILFORD PUMP STATION  
S.N. 038-0024

F.A.P. RYE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(2SB-FAGH)I	IROQUOIS	15	5
FED. ROAD DIST. NO. _		ILLINOIS	STATE AID PROJECT	



**PIT FLOOR PLAN**



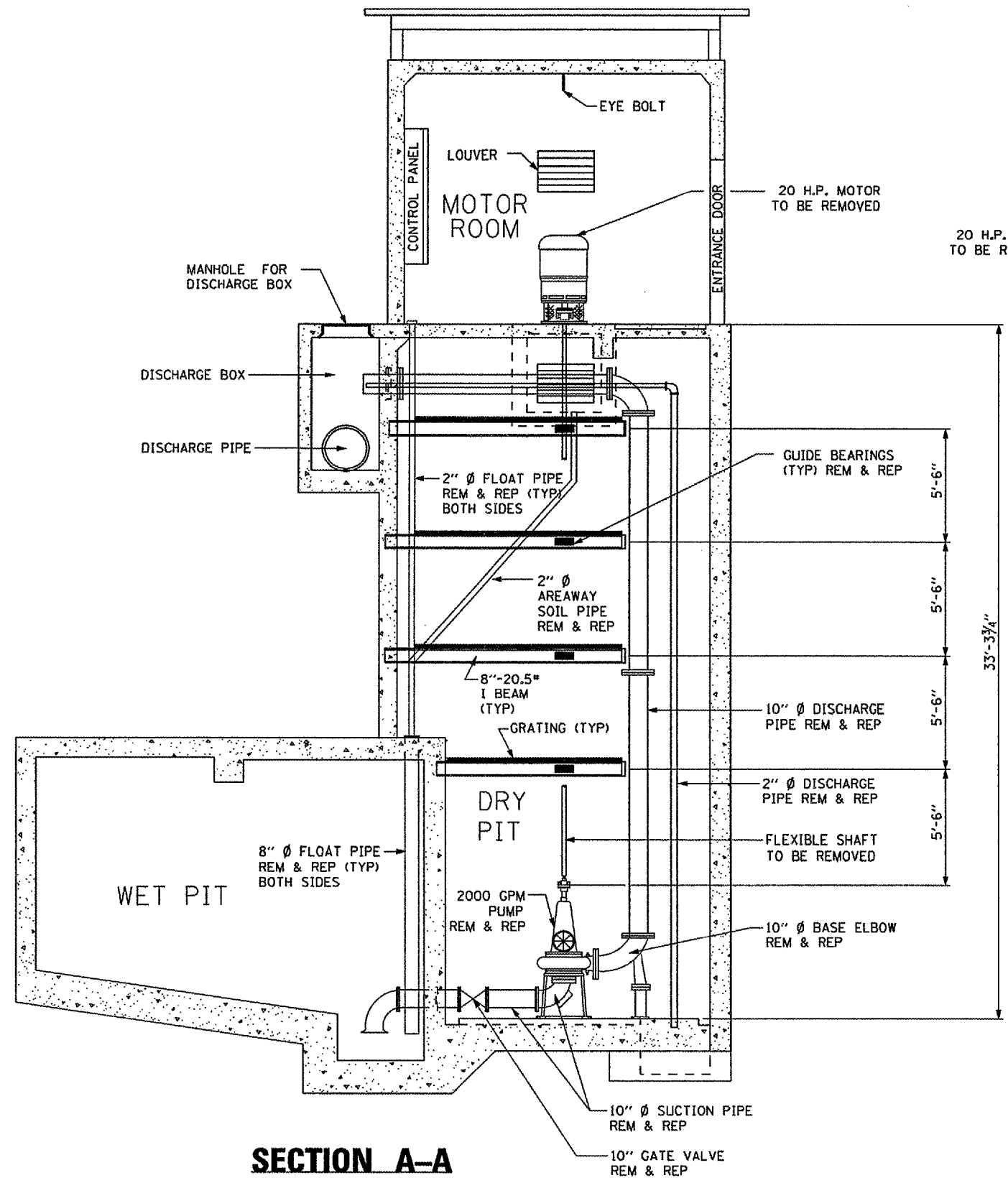
**MOTOR ROOM FLOOR PLAN**

DATE: JANUARY 7, 2007  
 FILE: c:/projects/cmain08/cm309/details.dgn

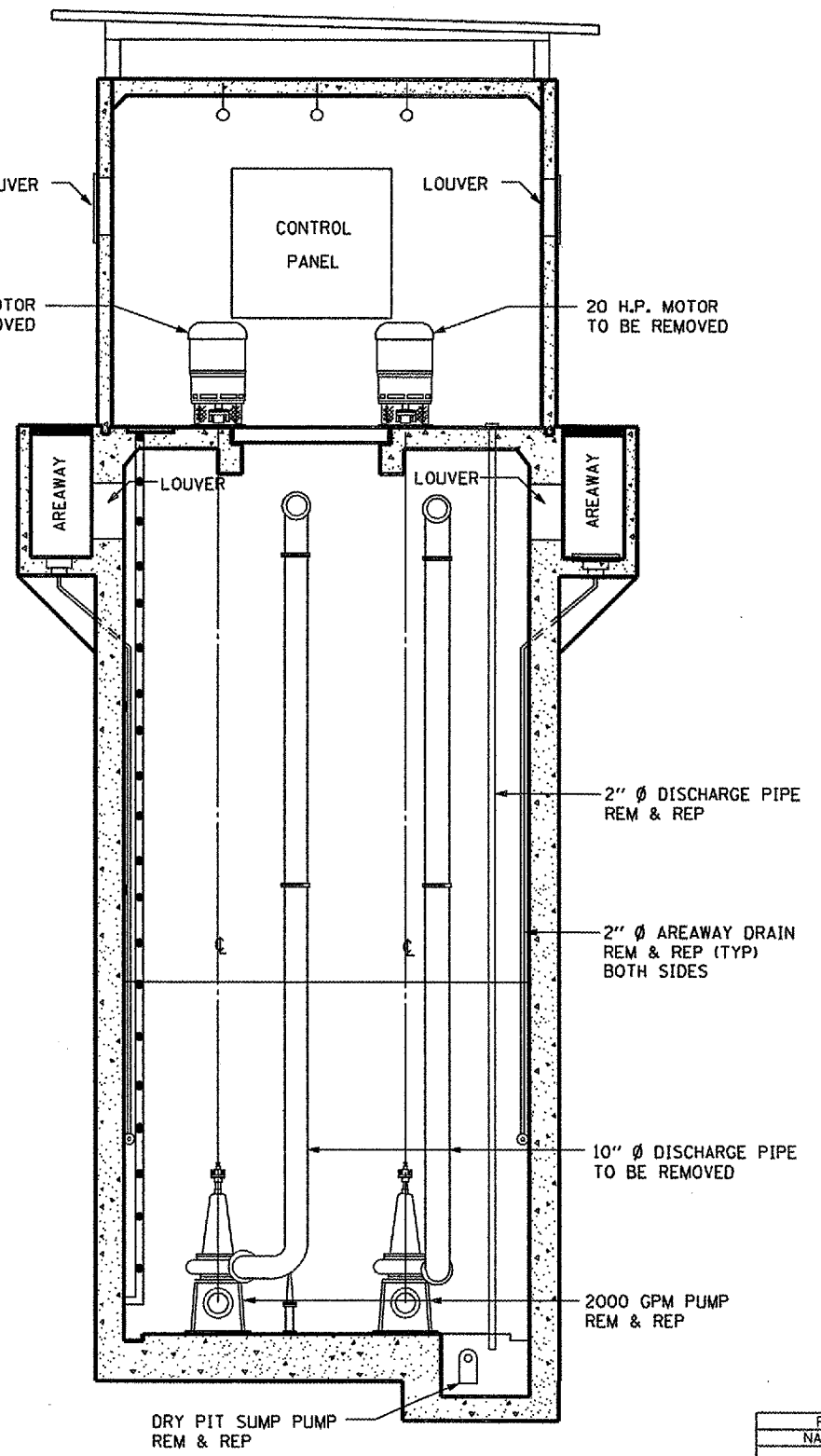
REVISIONS	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**EXISTING PUMP HOUSE**  
**DETAILS**  
 FAP ROUTE 322 (IL 1) SECTION (2SB-FAGH)I  
 IROQUOIS COUNTY  
 MILFORD PUMP STATION  
 S.N. 038-0024

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(2SB-FAGH)I	IROQUOIS	15	6
FED. ROAD DIST. NO. ILLINOIS		STATE AID PROJECT		



**SECTION A-A**



**SECTION B-B**

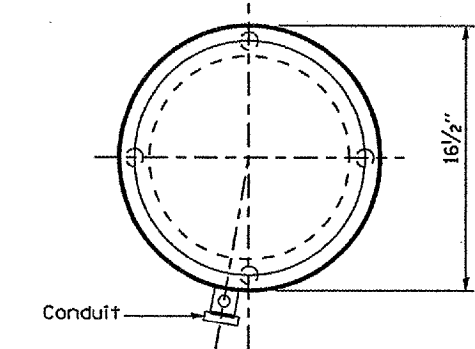
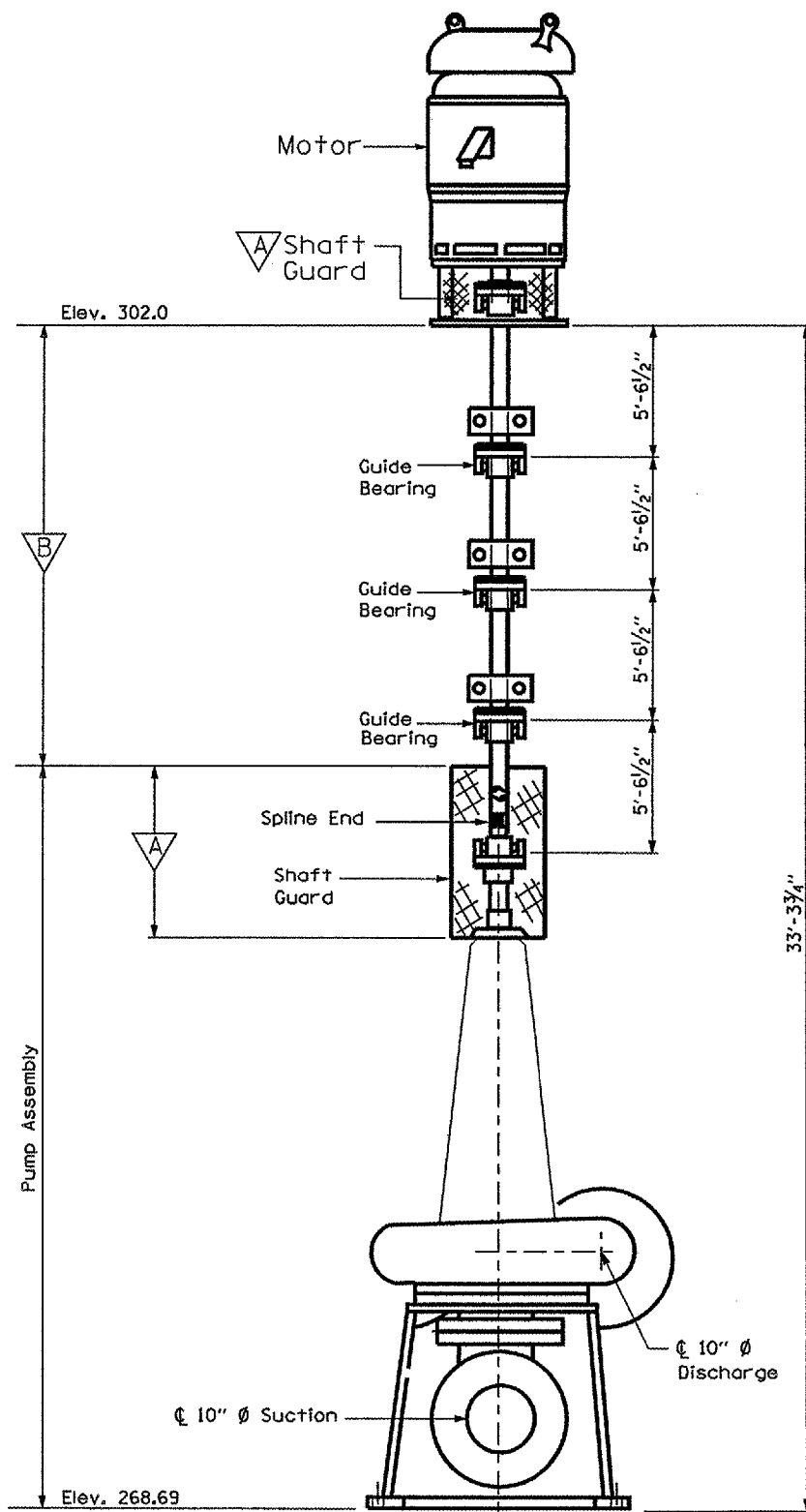
NOTE: THE CONTRACTOR SHALL VERIFY ALL DIMENSION IN THE FIELD PRIOR TO ORDERING OF MATERIALS OR REMOVAL OF EQUIPMENT.  
 ANY EXISTING SUCTION OR DISCHARGE PIPE PENETRATING THE CONCRETE WALL SHALL REMAIN IN PLACE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**EXISTING PUMP HOUSE  
 DETAILS**  
 FAP ROUTE 322 (IL 1) SECTION (2SB-FAGH)I  
 IROQUOIS COUNTY  
 MILFORD PUMP STATION  
 S.N. 038-0024

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(2SB-FAGH)I	IROQUOIS	14	7
FED. ROAD DIST. NO.		ILLINOIS	STATE AID PROJECT	

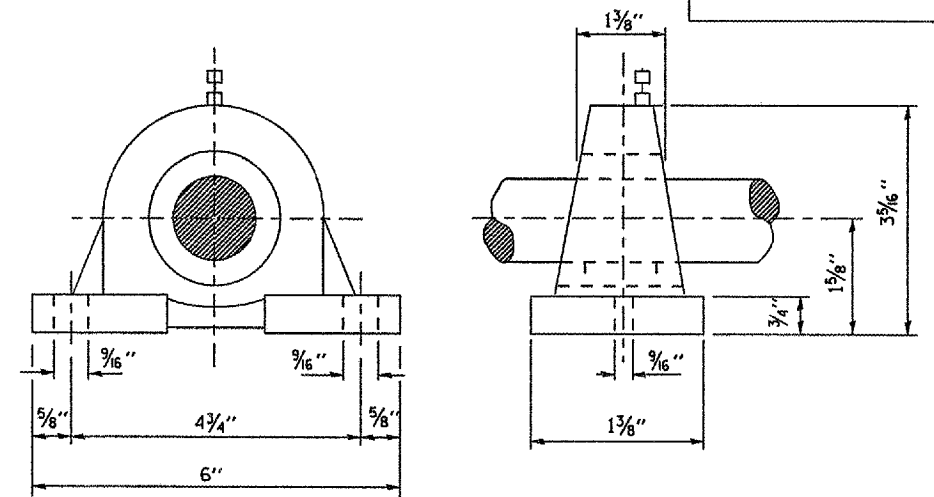


**TOP VIEW OF MOTOR BASE**

△ Area protected by shaft guard supplied by manufacturer of motor or pump.

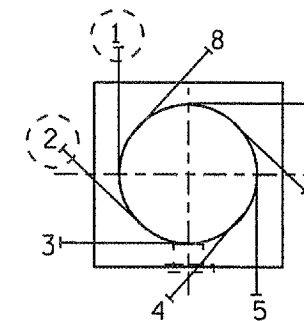
▽ Area protected by shaft guard supplied by Contractor.

NOTE: THE CONTRACTOR SHALL VERIFY ALL DIMENSION IN THE FIELD PRIOR TO ORDERING OF MATERIALS TO REMOVAL OF EQUIPMENT



**GUIDE BEARING DETAILS**

SHAFT DIA. 1 3/16"  
SHAFT SERIES V37

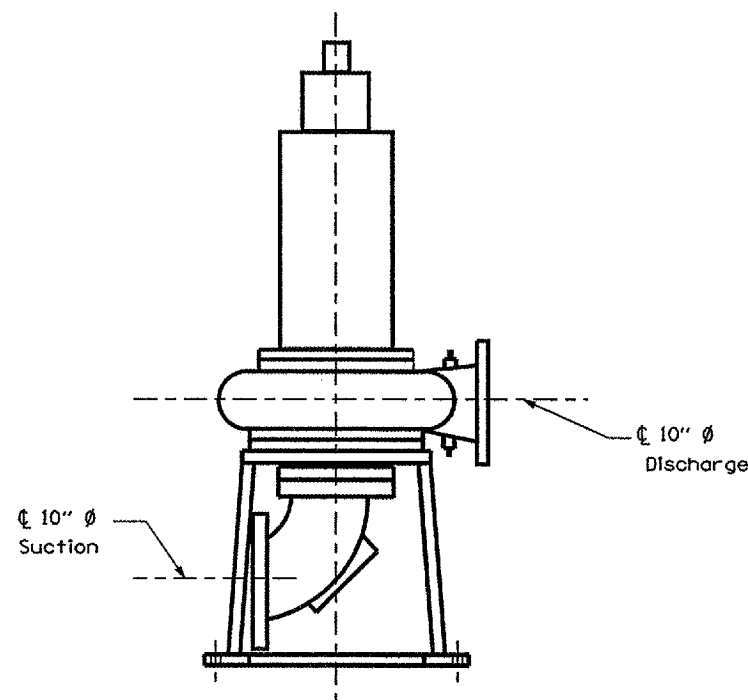


Drawings illustrates the discharge positions available for C.W. and C.C.W. Rotation when viewed from the driver end of pump. Positions 1 and 9 are considered Standard.

Position circled ( ) is position of existing pumps.

FLANGE DIMENSIONS					
	NOM. SIZE	FLG. O.D.	NO. OF BOLTS	BOLT DIA.	B.C. DIA.
DISCHARGE	10"	16"	12"	7/8"	14 1/4"
SUCTION	10"	16"	12"	7/8"	14 1/4"

All flanges shall be 125 lb. ANSI



**PUMP DETAILS**

NOTE: This Pump uses a 16" Impellar

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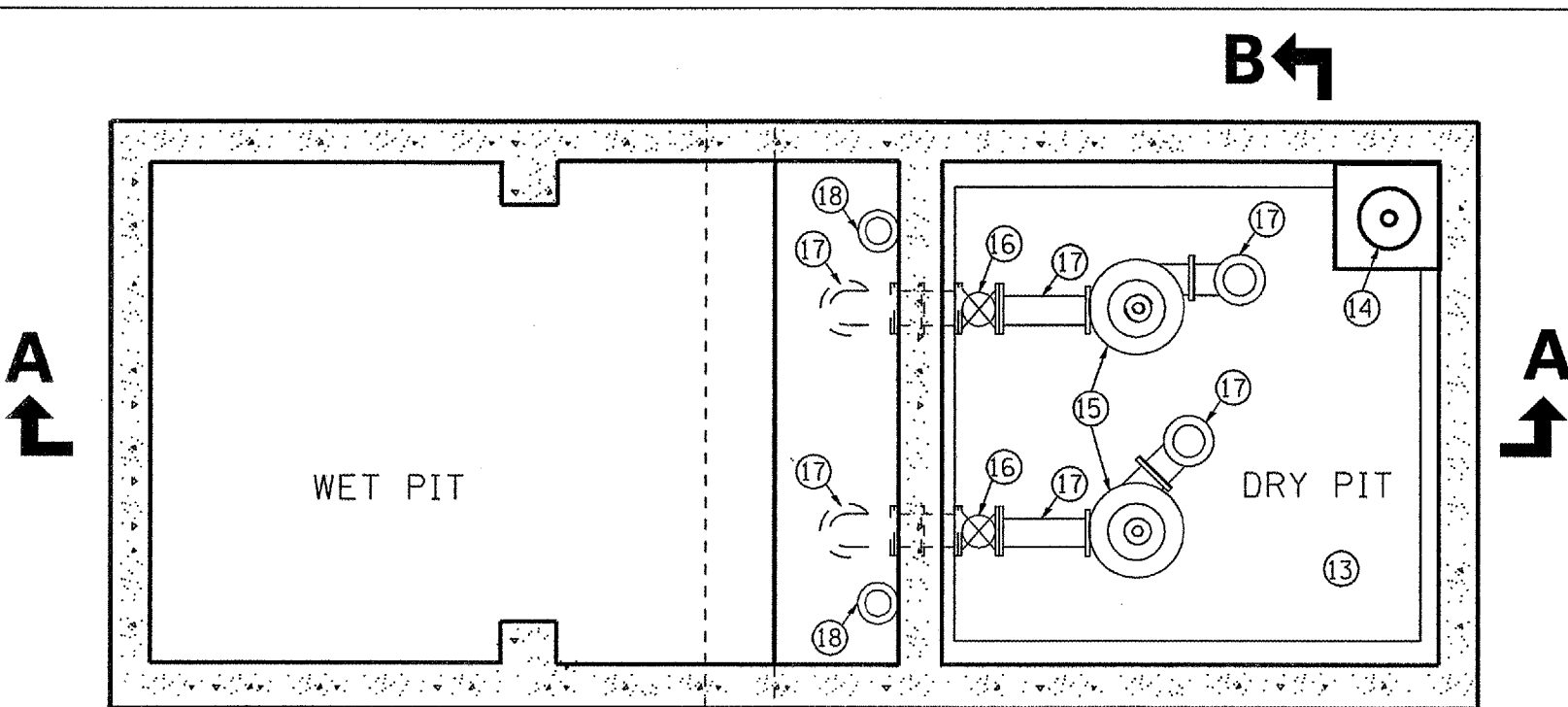
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**EXISTING PUMP HOUSE**  
**DETAILS**  
FAP ROUTE 322 (IL 1) SECTION (2SB-FAGH)I  
IROQUOIS COUNTY  
MILFORD PUMP STATION  
S.N. 038-0024

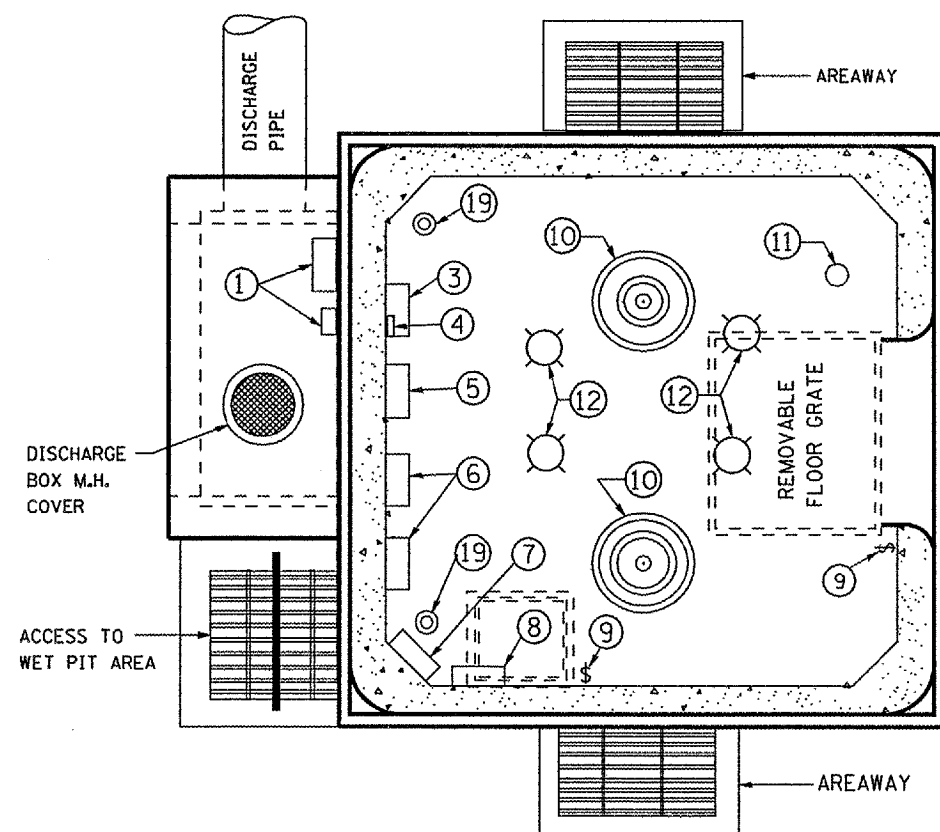
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(2SB-FAGH)I	IROQUOIS	14	8
FED. ROAD DIST. NO.		ILLINOIS	STATE AID PROJECT	

**DESCRIPTION OF WORK**

- ① REMOVE ELECTRICAL SERVICE EQUIPMENT
- ② REMOVE LOUVER
- ③ REMOVE MAIN DISCONNECT
- ④ REMOVE SUMP PUMP SAFETY SWITCH
- ⑤ REMOVE TRANSFORMER, HEAT LAMP SWITCH AND LOAD CENTER
- ⑥ REMOVE SAFETY SWITCH AND COMBINATION STARTER
- ⑦ REMOVE PUMP CONTROL PANEL
- ⑧ CHATTER BOX TO REMAIN
- ⑨ REMOVE SWITCH
- ⑩ REMOVE MOTOR
- ⑪ REMOVE DRY PIT MOTOR AND MOTOR CONTROLLER
- ⑫ REMOVE LIGHT FIXTURES
- ⑬ REMOVE PIT LIGHT FIXTURES
- ⑭ REMOVE SUMP PUMP AND PIPING
- ⑮ REMOVE PUMPS
- ⑯ REMOVE GATE VALVES
- ⑰ REMOVE SUCTION AND DISCHARGE PIPING
- ⑱ REMOVE FLOAT PIPING
- ⑲ REMOVE FLOAT CONTROL
- ⑳ REMOVE MOTOR SHAFT INCLUDING BEARINGS
- ㉑ REMOVE AREAWAY DRAIN PIPING, BOTH SIDES
- ㉒ ACCESS LADDER TO REMAIN



**PIT FLOOR PLAN**



**MOTOR ROOM FLOOR PLAN**

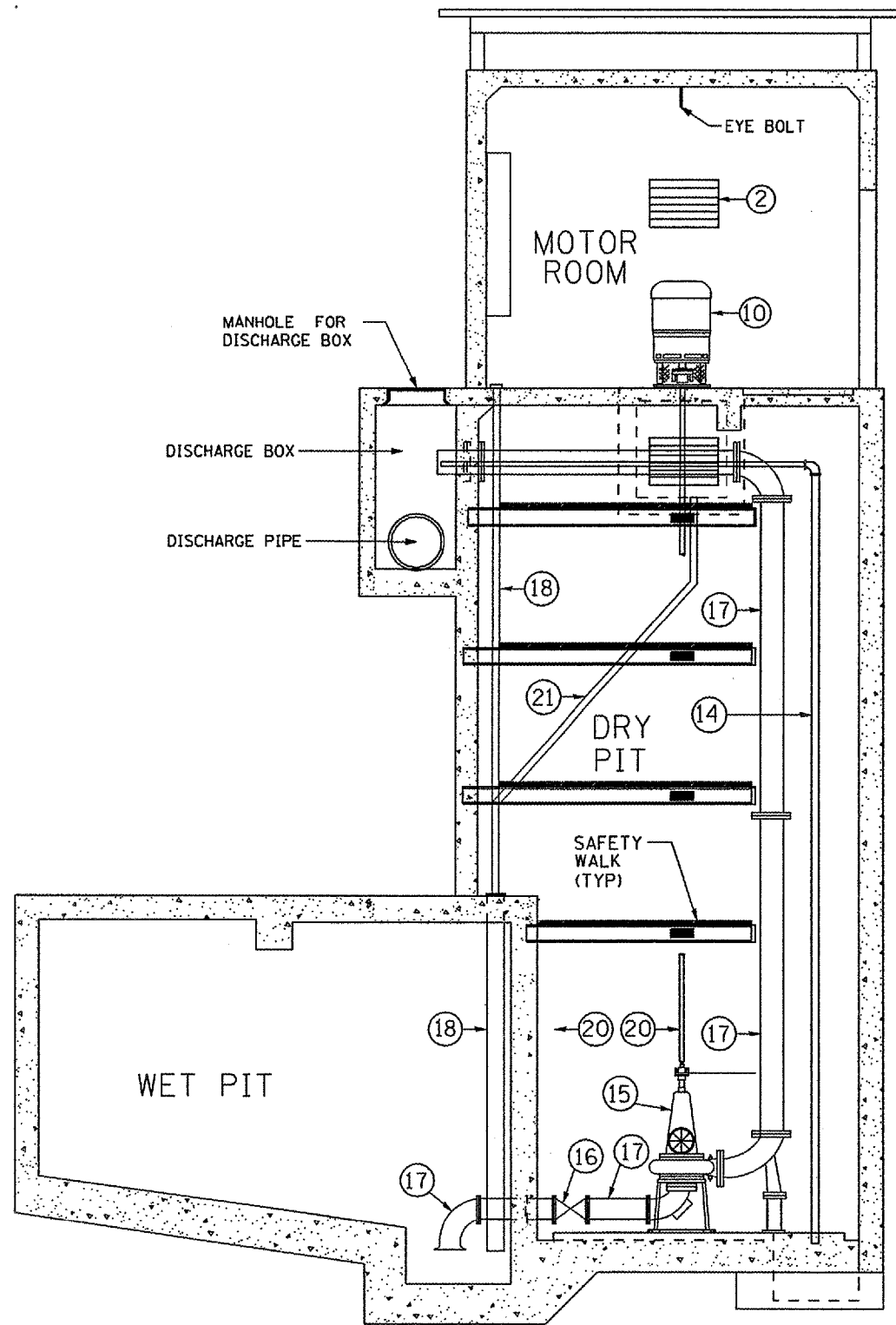
DATE: JANUARY 7, 2007  
FILE: c:\projects\cmain08\cm309\details.dgn

REVISIONS	DATE

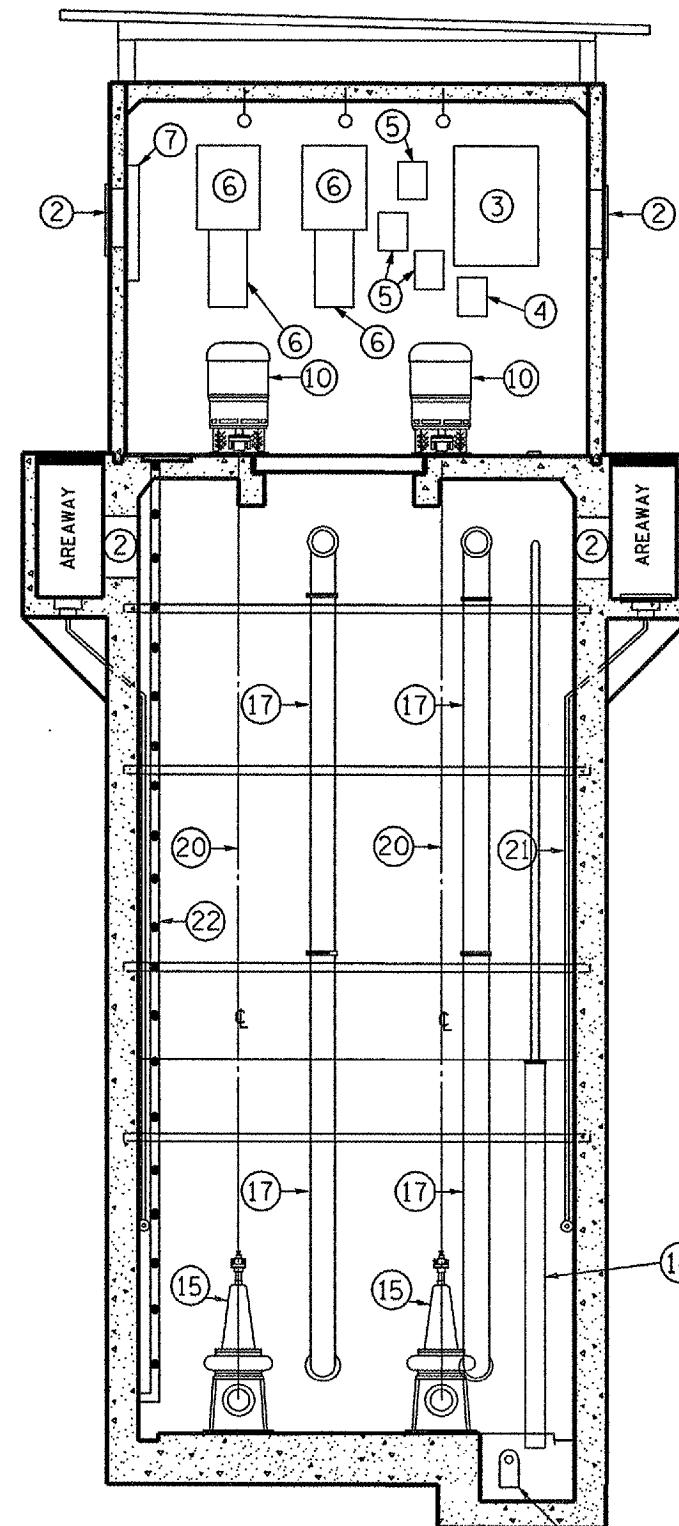
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**EQUIPMENT & ELECTRICAL  
 REMOVAL DETAILS**  
 FAP ROUTE 322 (IL 1) SECTION (2SB-FAGH)I  
 IROQUOIS COUNTY  
 MILFORD PUMP STATION  
 S.N. 038-0024



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(2SB-FAGH)I	IROQUOIS	14	9
FED. ROAD DIST. NO. ILLINOIS		STATE AID PROJECT		



**SECTION A-A**



**SECTION B-B**

**NOTE**

ANY EXISTING SUCTION, DISCHARGE OR DRAIN PIPING THAT IS CAST INTO THE CONCRETE WALL SHALL REMAIN IN PLACE. ALL OTHER PIPING SHALL BE REMOVED.

DATE: JANUARY 7, 2007  
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**EQUIPMENT & ELECTRICAL  
 REMOVAL DETAILS**  
 FAP ROUTE 322 (IL 1) SECTION (2SB-FAGH)I  
 IROQUOIS COUNTY  
 MILFORD PUMP STATION  
 S.N. 038-0024

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(2SB-FAGH)I	IROQUOIS	14	10
FED. ROAD DIST. NO. - ILLINOIS		STATE AID PROJECT		

DESCRIPTION OF WORK

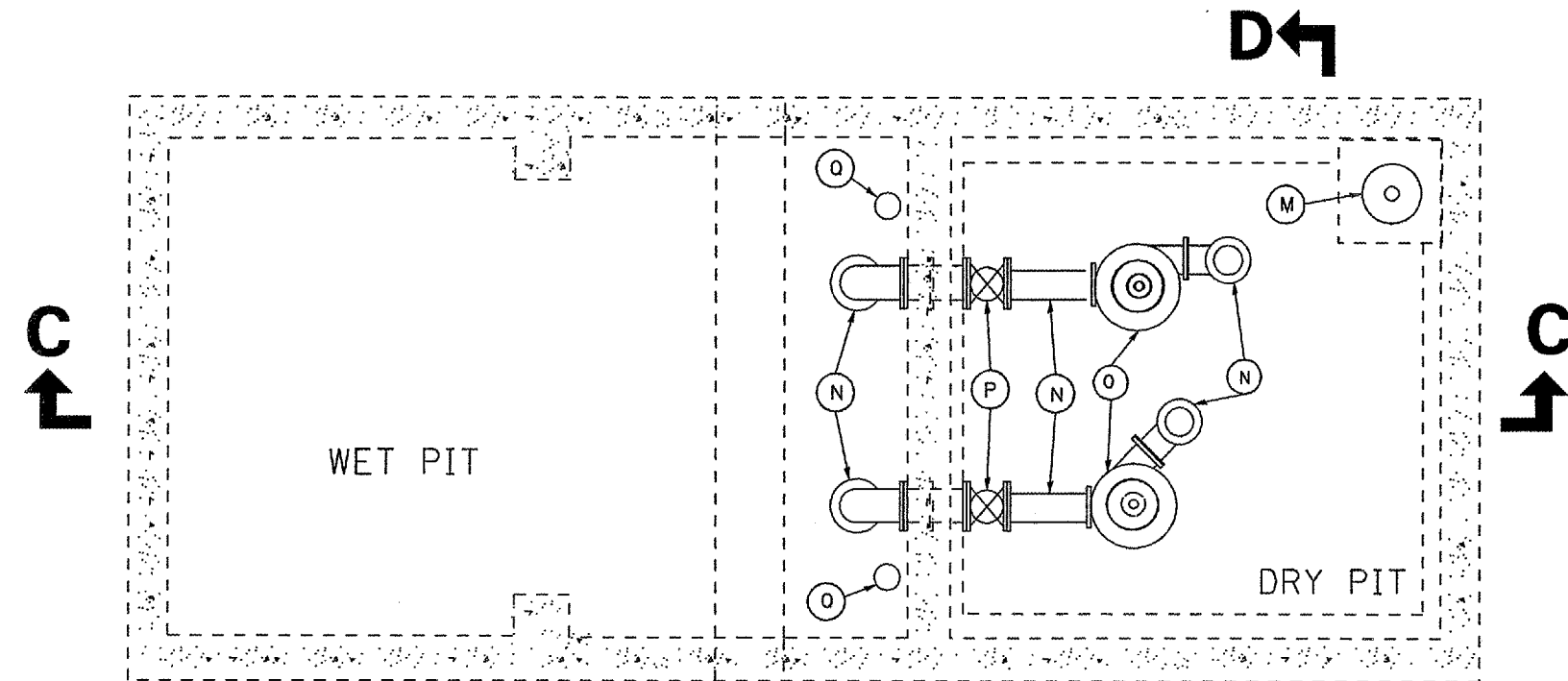
- (A) UTILITY METER, PER SERVING UTILITY REQUIREMENTS.
- (B) PANELBOARD, 250 AMP, 480Y/277 VAC, 3 PHASE, 4 WIRE, 42 POLE, 25000, AIR AT 480 VAC, SURFACE MOUNTED, BOLT-ON CIRCUIT BREAKERS, 250 AMP MAIN, 20" WIDE SOLID NEUTRAL AND GROUND BUS BARS, IN NEMA 1 ENCLOSURE, SQUARE D NF CLASS 1670 OR APPROVED EQUAL. INCLUDE ENGRAVED PHENOLIC LEGEND PLATE LABELED "480 Y/277 VAC, 3 PHASE, 4 WIRE." ALL METAL CONDUIT TERMINATIONS IN PANEL SHALL HAVE GROUNDING BUSHING WITH GROUND CONDUCTORS. CONNECT TO BUSHING AND RESPECTIVE PANEL GROUND BUS.
- (C) NEMA SIZE 2, COMBINATION MCP TYPE MOTOR STARTER, 480 VAC, 3 PHASE, RATED 14,000 AIC AT 480 VAC, IN NEMA 12 ENCLOSURE, SQUARE D CLASS 839 OR APPROVED EQUAL.
- (D) PUMP CONTROL PANEL
- (E) FLOAT CONTROL
- (F) 30 KVA DRY TYPE TRANSFORMER, 480 VAC, 3 PHASE, PRIMARY, 208Y/120- VAC, 3 PHASE, 4 WIRE, SECONDARY, 150° C RISE, 220° C INSULATION SYSTEM WITH COPPER WINDINGS, SQUARE D CLASS 7400, OR APPROVED EQUAL
- (G) PANELBOARD, 100 AMP, 208Y/120 VAC, 3 PHASE, 4 WIRE, 30 POLE, 10,000 AIC AT 240 VAC, SURFACE MOUNTED, BOLT ON CIRCUIT BREAKERS, 100 AMP MAIN CIRCUIT BREAKER, 20" WIDE WITH SOLID NEUTRAL AND GROUND BUS BARS, IN NEMA 1 ENCLOSURE, SQUARE D NQOD, CLASS 1630, OR APPROVED EQUAL. INLCUDE ENGRAVED PHENOLIC LEGEND PLATE LABELED (208Y/120 VAC, 3 PHASE, 4 WIRE.) ALL METAL CONDUIT TERMINATIONS IN PANEL SHALL HAVE GROUNDING BUSHING WITH GROUND CONDUCTORS. CONNECT TO THE BUSHING AND RESPECTIVE PANEL GROUND BUS.
- (H) DUPLEX RECEPTACLES GFCI
- (I) FLOAT SWITCHES
- (J) TOGGLE SWITCHES
- (K) SUMP PUMP 1½ HP MOTOR AND MOTOR CONTROLLER
- (L) LIGHT FIXTURE, FLUORESCENT, 2 LAMP, 32 W, T-8 LAMP, ENCLOSED FIBERGLASS HOUSE, UL LISTED FOR WET LOCATIONS, LITHONIA DMW-2-32-120 OR APPROVED EQUAL.
- (M) SUMP PUMP
- (N) 10" DIA. W.I. PIPE
- (O) 2000 GPM SUBMERSIBLE PUMP
- (P) 10" DIA. GATE VALVE
- (Q) 8" DIA. W.I. FLOAT PIPE
- (R) 2" DIA. W.I. DISCHARGE PIPE
- (S) 2" DIA. W.I. DRAIN PIPE (AREAWAY)
- (T) 2" DIA. W.I. FLOAT PIPE
- (U) 60 AMP. 480 VAC, NON-FUSED, 3 POLE, HEAVY DUTY SAFETY SWITCH IN NEMA 12 ENCLOSURE
- (V) SUMP LEAK SENSOR WITH BUNA N FLOAT AND STAINLESS STEEL STEM MOUNTING, MOUNT 2 INCHES ABOVE PIT FLOOR, GEMS LS-1700, P/N 01702, OR APPROVED EQUAL.
- (W) 14" X 14" HVAC DUCT
- (X) TRANSIENT VOLTAGE SURGE SUPPRESSOR (TVSS), 240 KA PER PHASE, 120 KA PER MODE, 12,000 IMPULSES PER MODE, LABELED UL 1449, 2ND EDITION LISTED.
- (Y) 250 CFM HVAC GRILL
- (Z) CHATTER BOX (TO REMAIN)

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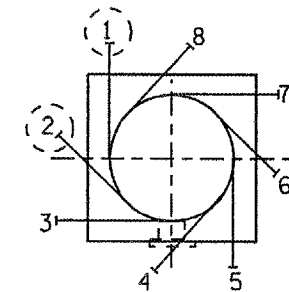
REVISIONS	
NO.	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**EQUIPMENT & ELECTRICAL  
 REPLACEMENT DETAILS**  
 FAP ROUTE 322 (IL 1) SECTION (2SB-FAGH)I  
 IROQUOIS COUNTY  
 MILFORD PUMP STATION  
 S.N. 038-0024

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(2SB-FAGH)I	IROQUOIS	14	11
FED. ROAD DIST. NO. - ILLINOIS		STATE AID PROJECT		

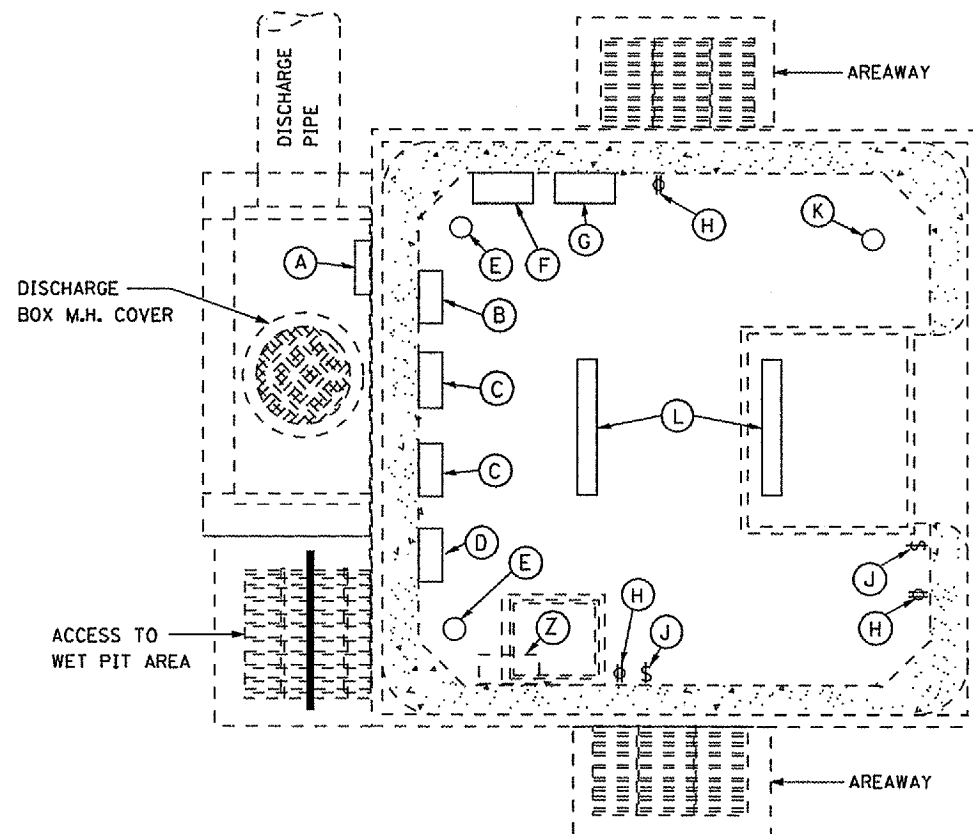


**PIT FLOOR PLAN**



Drawings illustrates the discharge positions available for C.W. and C.C.W. Rotation when viewed from the driver end of pump. Positions 1 and 9 are considered Standard.

Position circled ( ) is position of proposed pumps.



**MOTOR ROOM FLOOR PLAN**

**GENERAL NOTES**

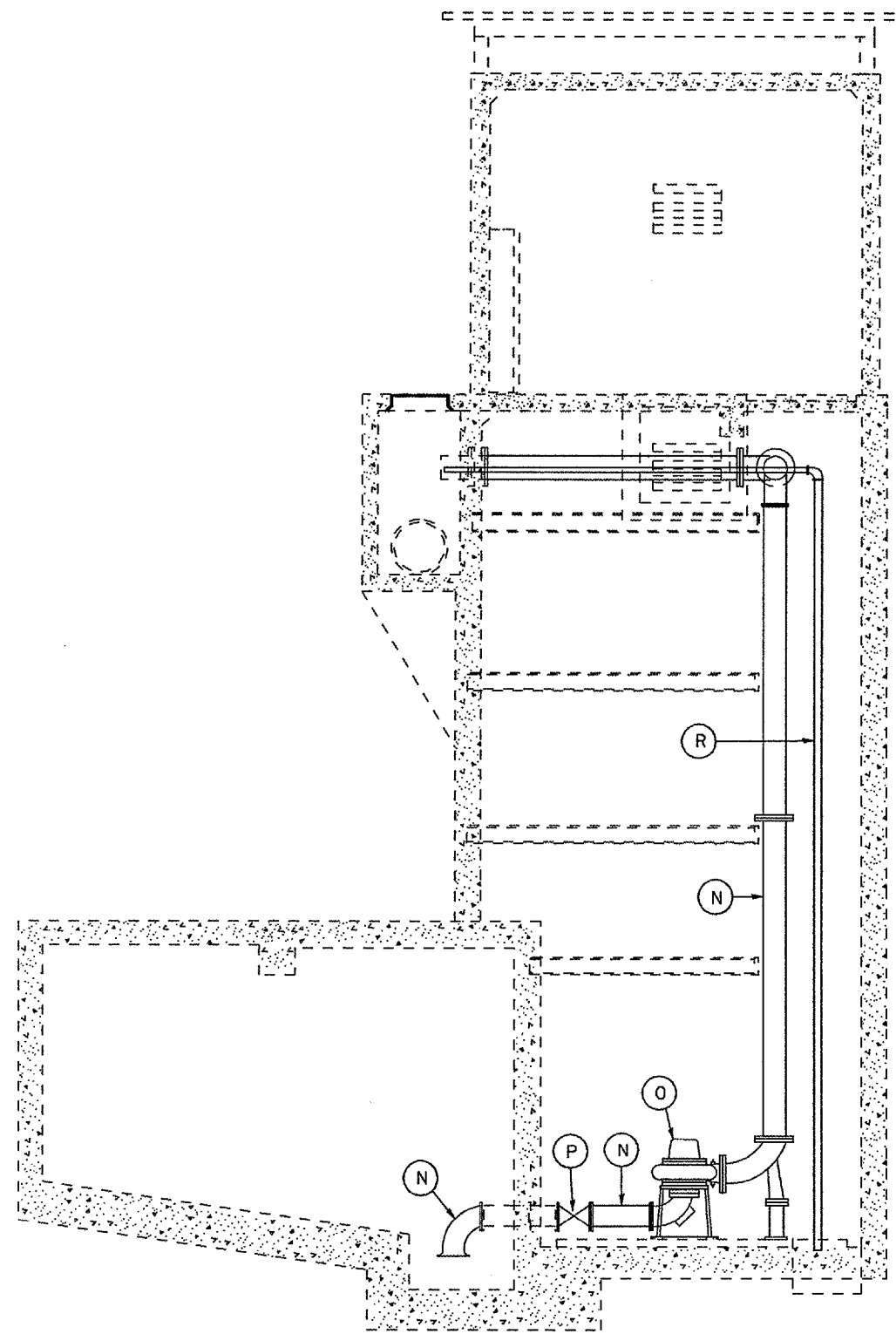
1. THE PUMPING WET WELL IS A CLASS 1 DIVISION 1, GROUP D AREA. ALL ELECTRICAL EQUIPMENT WIRING METHODS SHALL COMPLY WITH APPLICABLE SECTIONS OF ARTICLES 500 AND 501.
2. THE DRY PIT AREA AS WELL AS THE MOTOR HOUSE AREA IS NOT CLASSIFIED DUE TO THE VENTILATING TO 6 COMPLETE AIR EXCHANGES PER HOUR. THEREFORE EXHAUST FAN SHALL RUN CONTINUOUS.
3. ALL EXTERIOR AND INTERIOR CONDUIT SHALL BE GALVANIZED RIGID STEEL. WHERE CONDUIT IS IN DIRECT CONTACT WITH EARTH OR CONCRETE, IT SHALL BE COAL TAR EPOXY COATED.
4. LIQUID TIGHT FLEXIBLE METAL CONDUIT SHALL BE PROVIDED AS A CONNECTION BETWEEN EACH MOTOR JUNCTION BOX (OR ANY OTHER PIECE OF EQUIPMENT SUBJECT TO MOVEMENT OR VIBRATION) AND BALANCE OF CONDUIT SYSTEM. LIQUID-TIGHT FLEXIBLE METAL CONDUIT SHALL NOT EXCEED THREE (3') FEET IN LENGTH AND SHALL BE OZ-GEDNY, TYPE UAG, OR APPROVED EQUAL.
5. ALL MOUNTING HARDWARE AND FASTENERS FOR CONDUITS AND EQUIPMENT SHALL BE STAINLESS STEEL.

REVISIONS	DATE

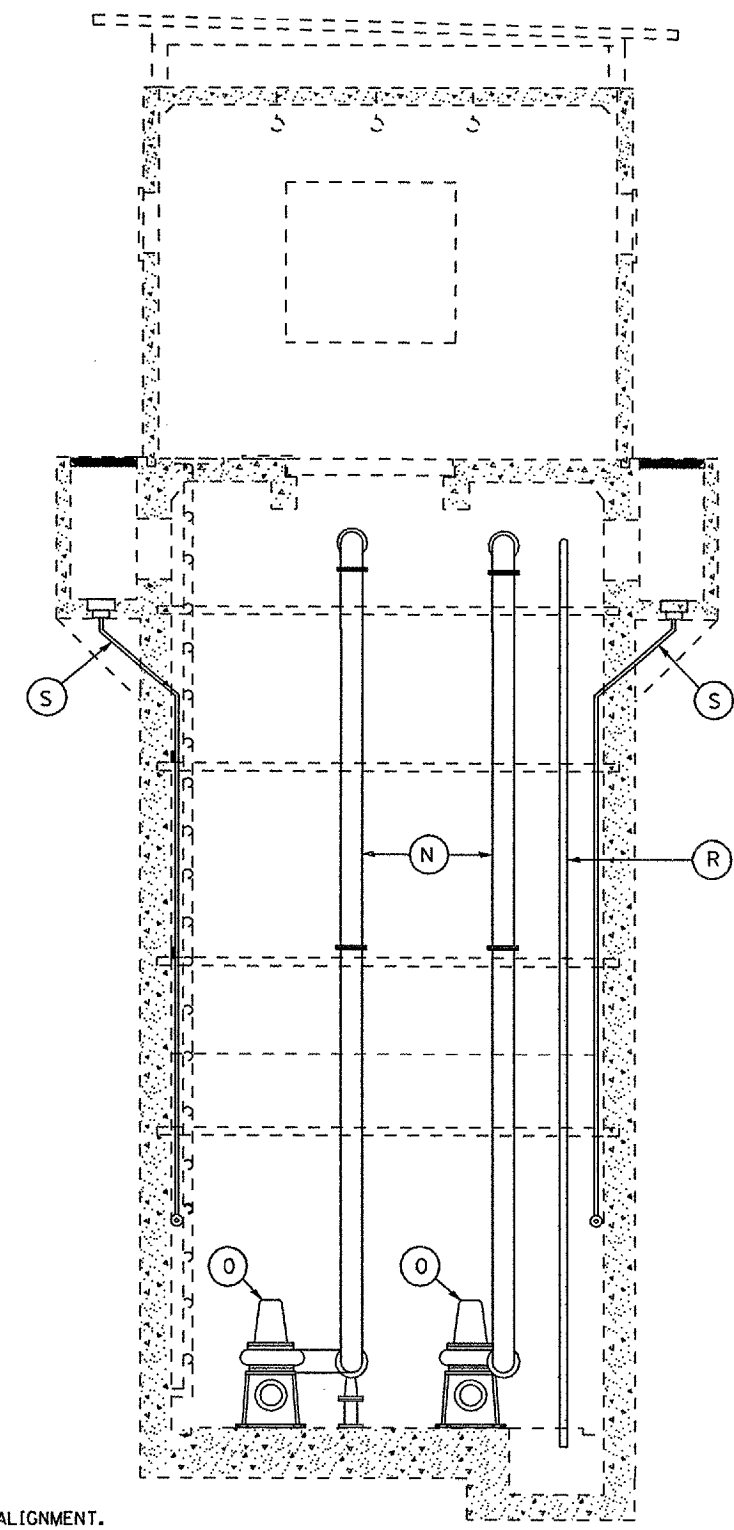
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**EQUIPMENT & ELECTRICAL  
 REPLACEMENT DETAILS**  
 FAP ROUTE 322 (IL 1) SECTION (2SB-FAGH)I  
 IROQUOIS COUNTY  
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	12SB-FAGH1	IROQUOIS	14	12
FED. ROAD DIST. NO.	ILLINOIS	STATE AID PROJECT		



**SECTION C-C**



**SECTION D-D**

**NOTE**

PROPOSED DISCHARGE PIPING WILL FOLLOW EXISTING ALIGNMENT. ANY RE-ALIGNMENT REQUIRED MUST BE APPROVED BY THE ENGINEER AND SCHEDULE 3.05 IN THE SPECIAL PROVISIONS FOR DUTY POINTS MUST BE MODIFIED.

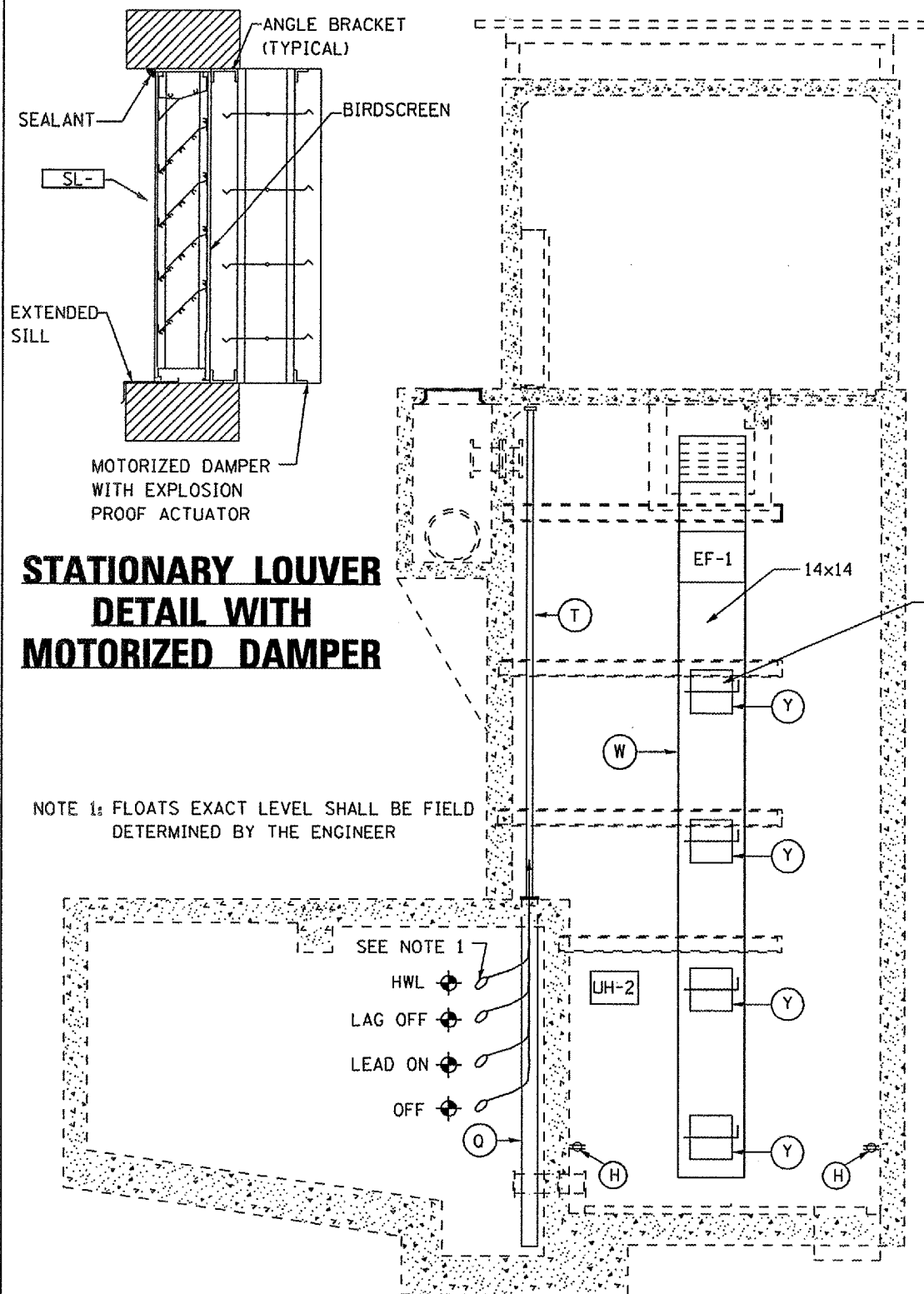
ANY EXISTING SUCTION, DISCHARGE OR DRAIN PIPING THAT IS CAST INTO THE CONCRETE WALL SHALL REMAIN IN PLACE. ALL OTHER PIPING SHALL BE REMOVED.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**EQUIPMENT & ELECTRICAL  
 REPLACEMENT DETAILS**  
 FAP ROUTE 322 (IL 1) SECTION (2SB-FAGH1)  
 IROQUOIS COUNTY  
 MILFORD PUMP STATION  
 S.N. 038-0024

DATE: JANUARY 7, 2007  
 FILE: c:/projects/cmain08/cm309/details.dgn

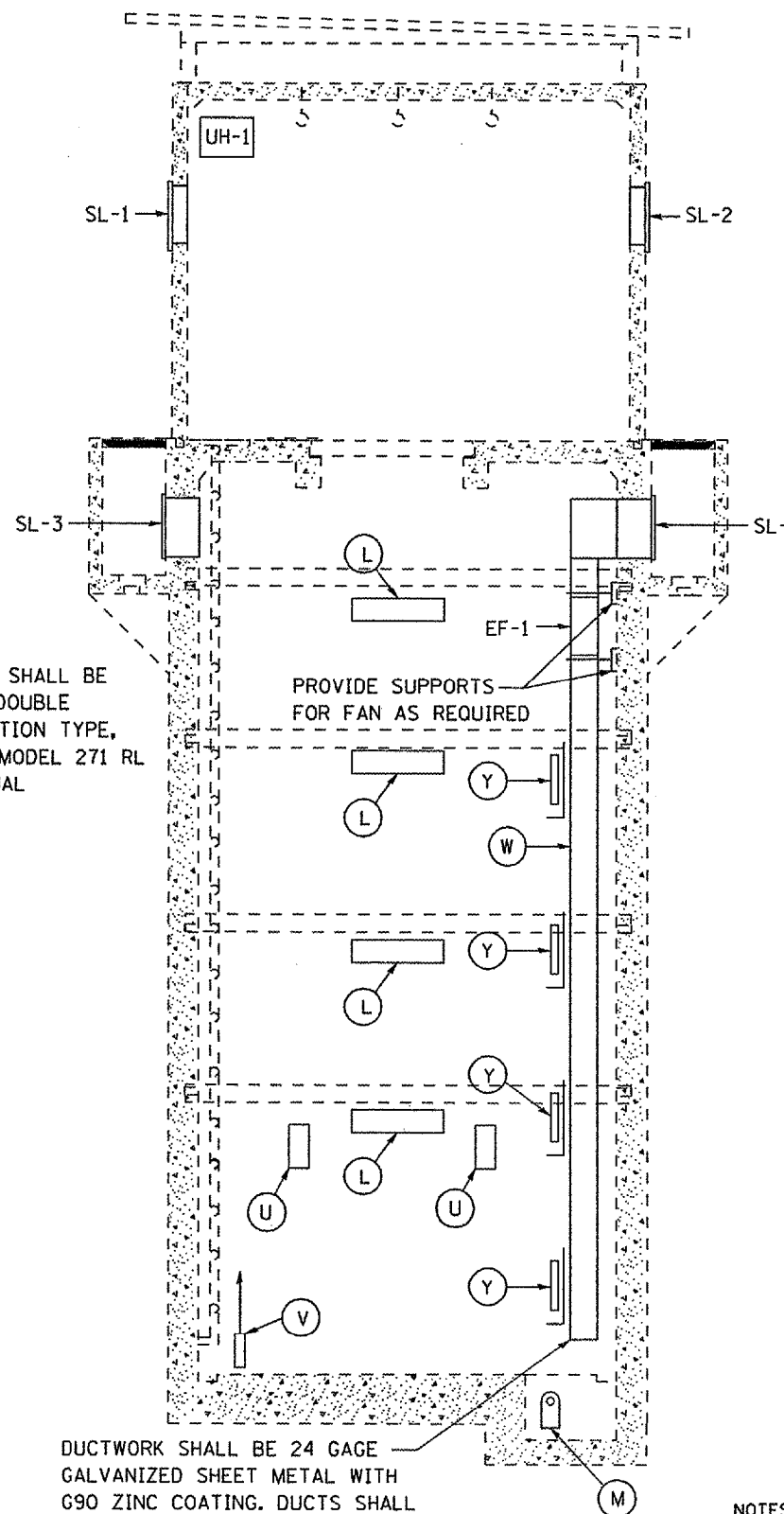
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(2SB-FAGH)I	IROQUOIS	14	13
FED. ROAD DIST. NO.		ILLINOIS	STATE AID PROJECT	



**STATIONARY LOUVER  
DETAIL WITH  
MOTORIZED DAMPER**

NOTE 1: FLOATS EXACT LEVEL SHALL BE FIELD DETERMINED BY THE ENGINEER

**SECTION C-C**



DUCTWORK SHALL BE 24 GAGE GALVANIZED SHEET METAL WITH G90 ZINC COATING. DUCTS SHALL BE CONSTRUCTED COMPLYING WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS" FOR 1" W.G. PRESSURE.

**SECTION D-D**

SCHEDULE - STATIONARY LOUVER		
MARK	SL-1,2,3,4	
MANUFACTURER	RUSKIN OR APPROVED EQUAL	
MODEL	ELF375DX	
TYPE	DRAINABLE	
CFM	1000	
MAX. S.P. (IN)	0.1	
NOM. SIZE	WIDTH	32
	HEIGHT	22
	DEPTH	2.45
AREA (SQ FT)	NET	4.88
	FREE	1.33
FRAME	FLANGE	
MATERIAL	ALUMINUM	
FINISH	KYNAR	
ACCESSORIES	SEE NOTES 1,2,3,4,5	
REMARKS	LOCATE IN EXISTING OPENINGS	

- NOTES: 1. COLOR TO BE SELECTED BY OWNER  
2. BIRD SCREEN  
3. EXTENDED SILL  
4. MOTORIZED DAMPER W/ 115 V ACTUATOR (POWER OPEN/SPRING CLOSE)  
5. INTERLOCK DAMPER OPERATION WITH EF-1

SCHEDULE - ELECTRIC UNIT HEATER		
MARK	UH-1,2	
MANUFACTURER	CHROMALOX OR APPROVED EQUAL	
MODEL	LUH-10-43-32	
TYPE	HORIZONTAL	
INPUT KW	10	
BTUH	34130	
FAN	CFM	850
	RPM	1725
	HP	1/15
ELECT.	VOLT	480
	PHASE	3
AMPS	12.9	
ACCESSORIES	SEE NOTES 1,2,3	
REMARKS		

- NOTES: 1. MOUNT KIT  
2. DISCONNECT SWITCH  
3. INTEGRAL THERMOSTAT

SCHEDULE - FAN		
MARK	EF-1	
MANUFACTURER	GREENHECK OR APPROVED EQUAL	
MODEL	SEI-12-432-D8	
TYPE	INLINE	
CFM	1000	
S.P.	0.75"	
FAN RPM	1725	
MOTOR	HP	1/4
	VOLT	115
	PHASE	1
RPM	1725	
ACCESSORIES	SEE NOTES 1,2,3	
REMARKS	6 ACH CONT. VENTILATION	

- NOTES: 1. DISCONNECT SWITCH  
2. VERTICAL MOUNT  
3. SPRING ISOLATORS

REVISIONS	
NAME	DATE

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