SPRING MEADOW GOLF COURSE

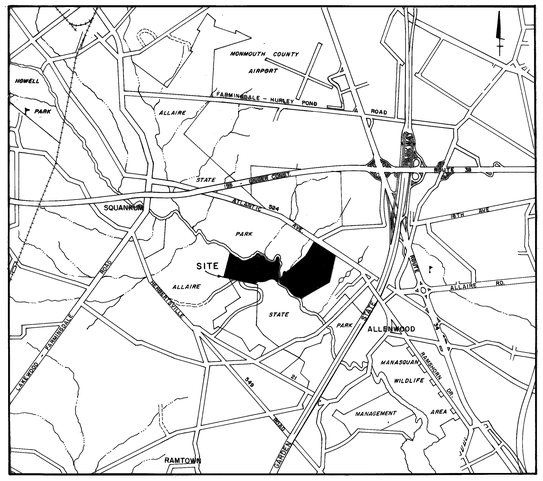
IRRIGATION SYSTEM
AND
WATER STORAGE IMPROVEMENTS

WALL TOWNSHIP

MONMOUTH COUNTY, NEW JERSEY

RECORD DRAWINGS

DRAWING INDEX	
DWG. No.	DESCRIPTION
1	TITLE SHEET
2	PIPING PLAN (FRONT NINE)
3	PIPING PLAN (BACK NINE)
4	PROGRAMING SEQUENCE PLAN (FRONT NINE)
5	PROGRAMING SEQUENCE PLAN (BACK NINE)
6	CONTROL WIRING PLAN (FRONT NINE)
7	CONTROL WIRING PLAN (BACK NINE)
8	SITE PLAN - CLUB HOUSE
9	SITE PLAN - PUMP HOUSE AND MISCELLANEOUS DETAILS
10	PUMP HOUSE - ARCHITECTURAL & STRUCTURAL PLANS, SECTIONS & DETAILS
11	PUMP HOUSE - MECHANICAL PLAN, SECTIONS & DETAILS
12	POND EXCAVATION AND MISCELLANEOUS DETAILS
13	PUMP HOUSE - ELECTRICAL PLAN



KEY MAP

SCALE: 1"= 4000'

STATE OF NEW JERSEY

DEPARTMENT OF THE TREASURY
MICHAEL M. HORN TREAS.

DIVISION OF BUILDING AND CONSTRUCTION
JAMES G TON DIRECTOR
AW WENSLEY STATE ARCHITECT

DEPARTMENT OF ENVIRONMENTAL PROTECTION
COMMISSIONER
ROBERT E. HUGHEY

DIVISION OF PARKS AND FORESTRY
DIRECTOR
RUSSELL W. MYERS

DBC P403

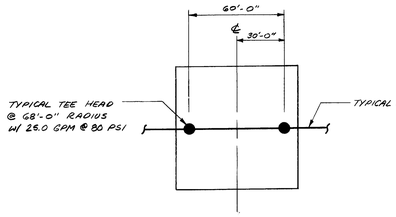
PREPARED BY

FELLOWS READ & ASSOCIATES

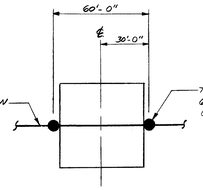
CONSULTING ENGINEERS

310 MAIN STREET

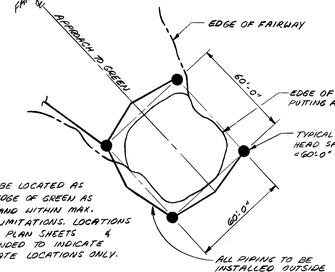
TOMS RIVER, N.J.



TYPICAL TEE
GREATER THAN 60'-0" IN LENGTH



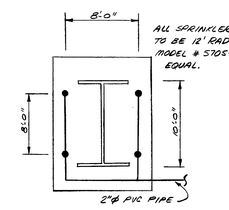
TYPICAL TEE
LESS THAN 60' IN LENGTH



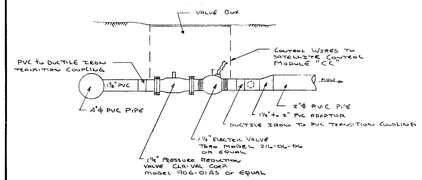
NOTE:
HEADS TO BE LOCATED AS FAR OFF EDGE OF GREEN AS POSSIBLE AND WITHIN MAX. SPACING LIMITATIONS. LOCATIONS SHOWN ON PLAN SHEETS 4 ARE INTENDED TO INDICATE APPROXIMATE LOCATIONS ONLY.

TYPICAL GREEN

RT. # 524



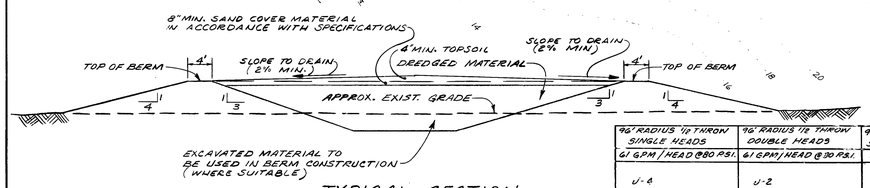
ENTRANCE SIGN DETAIL



PRESSURE REDUCTION VALVE DETAIL
N.T.S.

SPOIL SITE NOTES

1. Existing material to be excavated, within spoil site area to be used in the berm construction.
2. Dikes and spoil containment structures to be so constructed as to guarantee no leakage or erosion of spoil material.
3. Berms, dikes, and soil surfaces denuded of veletation outside of the immediate area of spoil placement shall be seeded immediately. Seeding mixtures are specified in section 02821.
4. Chemical soil stabilizers, mulches, or mulch tacks shall be used to stabilize erosion prone areas when seasonal factors preclude seed germination.
5. When and where indicated by the director, additional hay or straw bales shall be placed around the spoil site to intercept flows of silt-laden water.
6. When indicated by the director, additional lime shall be spread on the surface of the spoil material to mitigate objectionable odors.
7. Upon completion of the soil operation the site shall be graded to drain, fertilized, seeded, and mulched in accordance with the specifications.



TYPICAL SECTION
THRU SPOIL SITE
NOT TO SCALE

VALVE BOX DETAIL
N.T.S.

LEGEND

SPRINKLER HEAD SCHEDULE

96' RADIUS ½ THROW SINGLE HEADS	96' RADIUS ½ THROW DOUBLE HEADS	96' RADIUS (FAIRWAYS) SINGLE HEADS	85' RADIUS (FAIRWAYS) DOUBLE HEADS	68' RADIUS (GREENS) DOUBLE HEADS	68' RADIUS DOUBLE HEADS	68' RADIUS (FAIRWAYS) SINGLE HEADS	68' RADIUS ½ THROW DOUBLE HEADS	68' RADIUS ½ THROW SINGLE HEAD
61 G.P.M./HEAD @ 80 P.S.I.	61 G.P.M./HEAD @ 80 P.S.I.	61 G.P.M./HEAD @ 80 P.S.I.	49.5 G.P.M./HEAD @ 80 P.S.I.	25.0 G.P.M./HEAD @ 80 P.S.I.	25.0 G.P.M./HEAD @ 80 P.S.I.	25.0 G.P.M./HEAD @ 80 P.S.I.	25.0 G.P.M./HEAD @ 80 P.S.I.	12.5 GPM/HEAD @ 80 P.S.I.
U-6 V-5 BB-8	U-2 O-1 R-2 R-4 - R-5 S-1, S-3, S-7 T-2, T-4, T-7, T-9 U-3, U-4 Z-2, Z-5, Z-7 AA-2	D-5 - D-7 J-10 K-3 L-7 M-1 - M-3 N-5 R-1, R-7, R-8 U-5 V-1, V-9, Y-2 Z-1 BB-7	J-1, J-3, J-5 - J-9 K-1, K-2, K-4 - K-8 L-1 - L-6, L-8, L-9 M-4 - M-9 N-1 - N-4 O-2 - O-10 Q-5 - Q-10 R-3, R-6, R-9, R-10 S-2, S-4 - S-6, S-8, S-9 T-1, T-3, T-5, T-6, T-8 U-1, U-2, U-5 V-2 V-3, V-4, V-6 - V-8 W-1 - W-9 Y-1 - Z-9 Y-1 - Y-4 Z-3, Z-4, Z-6 AA-1, AA-3 - AA-6 BB-1 - BB-6	A-1, A-2, A-4, A-5 B-1, B-2, B-5, B-4 C-1, C-2 D-2, D-3 E-1 - E-4, E-6, E-7 F-2, F-3, F-4, F-5 G-2, G-3, G-5, G-6 H-1, H-2, H-4, H-5 N-7, H-8 I-1, I-2, I-4, I-5	A-3, A-6 B-3, C-3, D-4 E-5, E-8 F-1, F-6 G-1, G-4, H-3, H-6 I-3 P-1 - P-9 Q-1 - Q-6 Y-5	P-10 Y-1 C-4 B-6	D-1 G-7	C-5 G-7
TORO MODEL NO. 692-06-91 OR APPROVED EQUAL	TORO MODEL 692-06-91 OR APPROVED EQUAL	TORO MODEL NO. 696-06-91 OR APPROVED EQUAL	TORO MODEL NO. 674-06-71 OR APPROVED EQUAL	TORO MODEL NO. 658-06-56 OR APPROVED EQUAL	TORO MODEL NO. 654-06-56 OR APPROVED EQUAL	TORO MODEL NO. 654-06-56 OR APPROVED EQUAL	TORO MODEL NO. 652-06-56 OR APPROVED EQUAL	

NOTES
1. FOR TYPICAL FAIRWAY DIMENSIONS SEE PROGRAMING SEQUENCE PLANS
2. FORCE MAIN SHALL FOLLOW EDGE OF EXISTING GRAVEL ROAD
3. CONTRACTOR TO STAKE ALL SPRINKLER HEAD LOCATIONS PRIOR TO CONSTRUCTION FOR LOCATION APPROVAL BY THE DIRECTOR PRIOR TO INSTALLATION OF ANY PIPING OR HEADS.
4. HEAD LOCATION DIMENSIONS ARE SHOWN ON SHEETS 4 OF 13 AND 5 OF 13.
5. CONTRACTOR TO STAKE OUTER LIMITS OF SPOIL SITE BERMS PRIOR TO CONSTRUCTION FOR REVIEW & APPROVAL BY THE DIRECTOR PRIOR TO INITIATION OF SPOIL SITE PREPARATION.

"The "Record" information added to this drawing has been supplied by the contractor. The Architect/Engineer does not assume the responsibility for its accuracy other than conformity with the design concept and general adequacy of the "Record" information to the best of the Architect/Engineer's knowledge."

NO.	DATE	DESCRIPTION OF REVISION	BY	DRWG BOOK	FIELD BOOK
5	8-7-84	REV. DWG PER D.B.C. COMMENTS	AGS		
4	7/19/84	ADD SPOIL SITES, TYPICAL SECTION & SPOIL SITE NOTES	AGS		
3	4/4/84	REV. AS PER D.B.C. COMMENTS DT 2-22-84 & 3-13-84	AGS		
2	1/10/84	REV. AS PER D.B.C. REQUEST	AGS		
1	11-7-83	REVISED SPRINKLER HEAD LOCATION, DESIGNATION & SCHEDULE, PIPE SIZE AND ADDED ANGLE VALVE	SD		

FELLOWS, READ & ASSOC., INC.
CONSULTING ENGINEERS
310 MAIN STREET
TOMS RIVER, NEW JERSEY 08753
JOSEPH R. READ, P.E & L.S.
PROFESSIONAL ENGINEER & LAND SURVEYOR N.J. LIC. NO. 10301
DATE 12/2/83

IRRIGATION SYSTEM
SPRING MEADOW GOLF COURSE
PIPING PLAN
WALL TOWNSHIP
MONMOUTH COUNTY NEW JERSEY

FIELD BOOK	DRAWN BY	SCALE	PROJECT NO	FILE DRAWING NO.
	J.W.	1"=100'		
SET DWG NO.	CALC. BY	DATE		
2 / 13	CHECKED BY J.R.R.	OCT. 1983		

N

EDGE OF FAIRWAY (TYP.)

X-1 LIMIT OF FAIRWAY AREA (TYP.)

LIMIT OF IRRIGATION AREA (TYP.)

EXIST. PUMP HOUSE

SPRING #4

6" ø PVC PIPE TO BE LOCATED 1'N ℄ OF CARTWAY

MATCH LINE

LEGEND

SPRINKLER HEAD PIPE SIZE

SPRINKLER HEAD DESIGNATION

- FULL THROW HEAD
- ½ THROW HEAD
- 6" FORCE MAIN
- SHUT-OFF VALVE IN VALVE BOX
- LOCATION OF QUICK COUPLING VALVE

NOTE

SEE SHEET 2 OF 13 FOR NOTES.

"The "Record" information added to this drawing has been supplied by the contractor. The Architect/Engineer does not assume the responsibility for its accuracy other than conformity with the design concept and general adequacy of the "Record" information to the best of the Architect/Engineer's knowledge."

NO	DATE	DESCRIPTION OF REVISION	BY	PROJ MGR	PUBLIC WORKS
3	6-7-89	REV. DWG PER OBC COMMENTS	MGJ		
2	1/24/89	REV. AS PER O & C ISSUES	MGJ		
1	11/17/88	REVISED SPRINKLER HEAD LOCATION DESIGNATION & SCHEDULE, PIPE SIZE AND ADDED FORCE MAIN	MGJ		

FELLOWS, READ & ASSOC., INC.
CONSULTING ENGINEERS
310 MAIN STREET
TOMS RIVER, NEW JERSEY 08753

JOSEPH R. READ, P.E & L.S.
PROFESSIONAL ENGINEER & LAND SURVEYOR N.J. LIC. NO. 10301

DATE 10/11/88

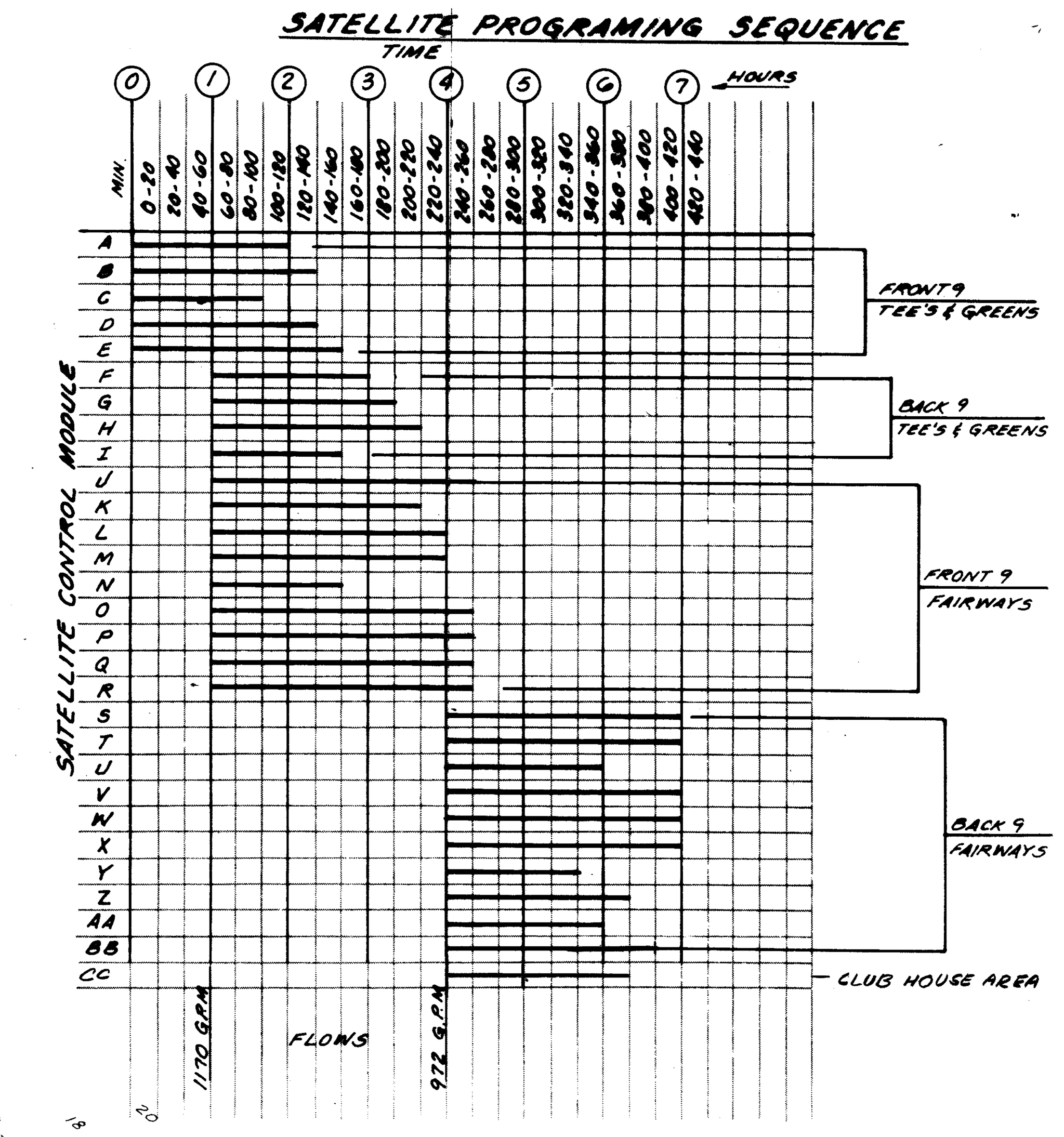
IRRIGATION SYSTEM
SPRING MEADOW GOLF COURSE
PIPING PLAN

WALL TOWNSHIP

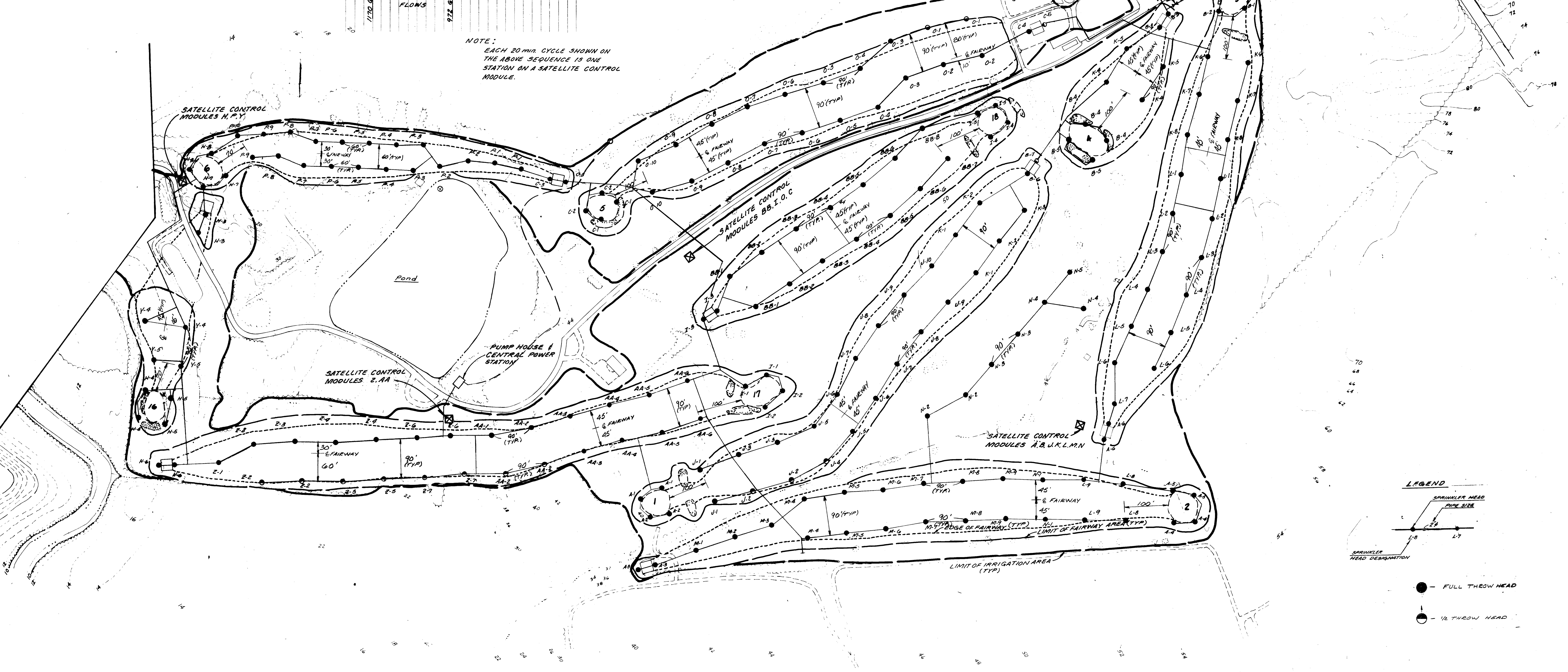
MONMOUTH COUNTY NEW JERSEY

FIELD BOOK	DRAWN BY MW	SCALE 1"=100'	PROJECT NO	FILE DRAWING NO.
SET DWG NO. 3 of 13	CALC BY T.K.	DATE		
	CHECKED BY J.A.S.	OCT. 1988		

SATELLITE PROGRAMING SEQUENCE



NOTE:
EACH 20 min. CYCLE SHOWN ON THE ABOVE SEQUENCE IS ONE STATION ON A SATELLITE CONTROL MODULE.



NOTES
LOCATION OF THE ADVANCED LARGE - TURF CENTRAL CONTROL UNIT TO BE INSTALLED IN MAINTENANCE BLDG.

FAIRWAY HEADS TO BE LAID OUT STARTING AT THE INDICATED DISTANCE FROM THE GREEN

NO.	DATE	DESCRIPTION OF REVISION	BY
2	3/6/84	REV. AS PER D.E.C. COMMENTS ON [illegible]	[illegible]
1	11-29-83	REVISED SPRINKLER [illegible] AND PROGRAM SEQUENCE [illegible]	[illegible]

"The "Record" information added to this drawing has been supplied by the contractor. The Architect/Engineer does not assume the responsibility for its accuracy other than conformity with the design concept and general adequacy of the "Record" information to the best of the Architect/Engineer's knowledge."

FELLOWS, READ & ASSOC., INC.
CONSULTING ENGINEERS
310 MAIN STREET
TOMS RIVER, NEW JERSEY 08753

JOSEPH R. READ, P.E & L.S.
PROFESSIONAL ENGINEER & LAND SURVEYOR N.J. LIC. NO. 10301

DATE 12/8/83

IRRIGATION SYSTEM
SPRING MEADOW GOLF COURSE
PROGRAMING SEQUENCE PLAN
WALL TOWNSHIP
MONMOUTH COUNTY NEW JERSEY

FIELD BOOK	DRAWN BY	SCALE	PROJECT NO.	FILE DRAWING NO.
	J.W.	1"=100'		
SET DWG NO.	CALC BY	DATE		
4 / 13	T.H.	OCT. 1983		
	CHECKED BY J.F.S.			

N

SATELLITE CONTROL MODULES E, S, T, U

SATELLITE CONTROL MODULES W, V, G, X

SATELLITE CONTROL MODULES R, Q

SATELLITE CONTROL MODULES F, I

EDGE OF FAIRWAY (TYP.)

LIMIT OF FAIRWAY AREA (TYP.)

LIMIT OF IRRIGATION AREA (TYP.)

E. FAIRWAY

E. FAIRWAY OLD HOLE #12

MATCH LINE

LEGEND

SPRINKLER HEAD — PIPE SIZE — SPRINKLER HEAD DESIGNATION

- FULL THROW HEAD
- ½ THROW HEAD

SATELLITE PROGRAMING SEQUENCE

TIME — HOURS

SATELLITE CONTROL MODULE

MIN. 0-10, 10-40, 40-60, 60-80, 80-100, 100-120, 120-140, 140-160, 160-180, 180-200, 200-220, 220-240, 240-260, 260-280, 280-300, 300-320, 320-340, 340-360, 360-380, 380-400, 400-420, 420-440

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z AA BB CC

FRONT 9 TEES & GREENS

BACK 9 TEES & GREENS

FRONT 9 FAIRWAYS

BACK 9 FAIRWAYS

CLUBHOUSE AREA

FLOWS

170 G.P.M.

922 G.P.M.

NOTE:
EACH 20 min. CYCLE SHOWN ON THE ABOVE SEQUENCE IS ONE STATION ON A SATELLITE CONTROL MODULE.

NOTE:
FAIRWAY HEADS TO BE LAID OUT STARTING AT THE INDICATED DISTANCE FROM THE GREEN

NO.	DATE	DESCRIPTION OF REVISION	BY	PRINT BOOK	FIELD BOOK
1	11-29-89	REV. SPRINKLER HEAD LOCATION RADIUS AND PROG. SEQ. ADDED FAIRWAY DIMENSIONS		50	

"The "Record" information added to this drawing has been supplied by the contractor. The Architect/Engineer does not assume the responsibility for its accuracy other than conformity with the design concept and general adequacy of the "Record" information to the best of the Architect/Engineer's knowledge."

FELLOWS, READ & ASSOC., INC.
CONSULTING ENGINEERS
310 MAIN STREET
TOMS RIVER, NEW JERSEY 08753

JOSEPH R. READ, P.E & L.S.
PROFESSIONAL ENGINEER & LAND SURVEYOR N.J. LIC NO. 10304

DATE 7/4/13

IRRIGATION SYSTEM
SPRING MEADOW GOLF COURSE
PROGRAMING SEQUENCE PLAN

WALL TOWNSHIP
MONMOUTH COUNTY NEW JERSEY

FIELD BOOK	DRAWN BY	SCALE	PROJECT NO	FILE
	J.N.	1"=100'		
SET DWG NO.	CALC BY			
5 / 19	CHECKED BY J.R.S.	DATE Oct, 1989		

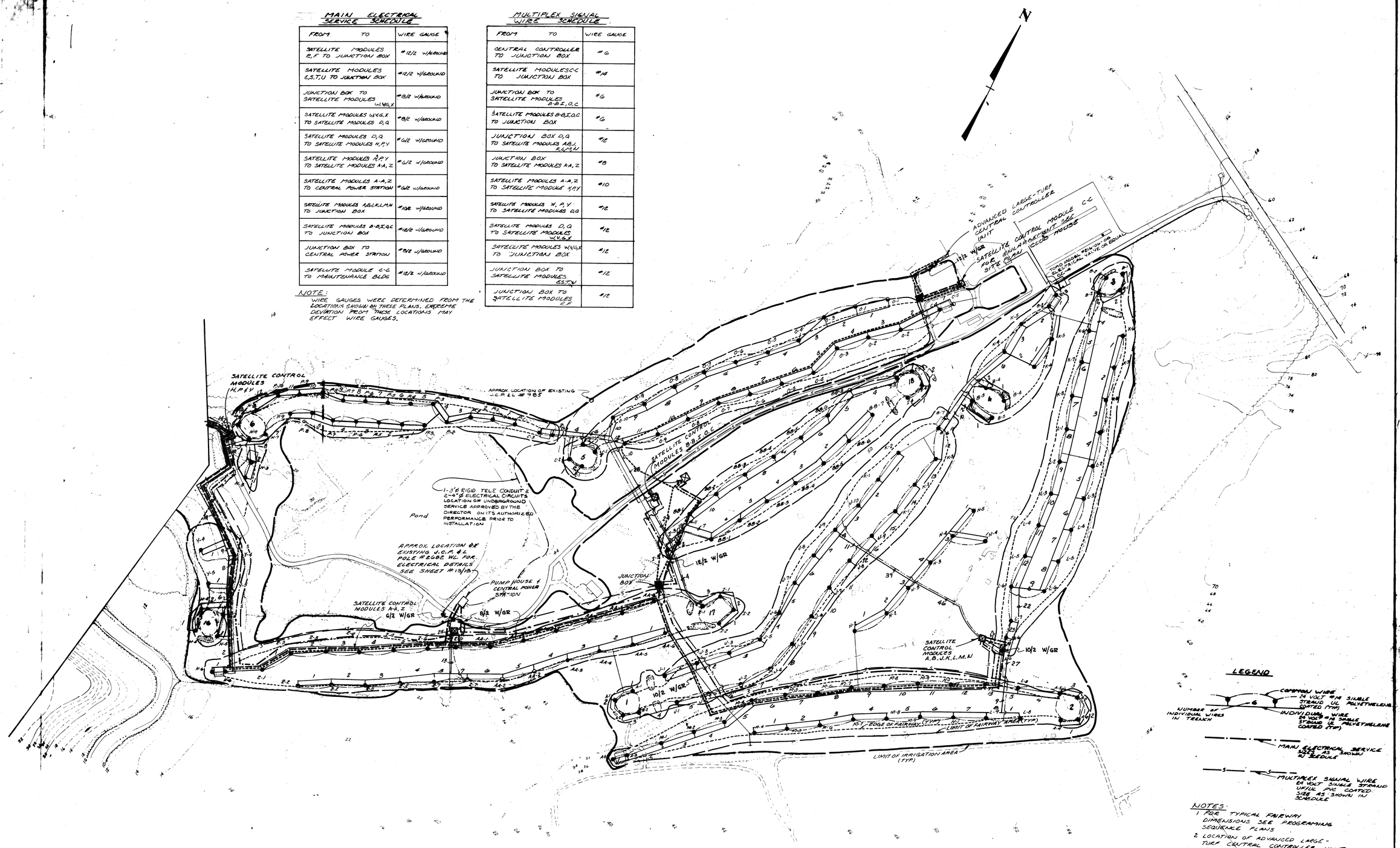
MAIN ELECTRICAL SERVICE SCHEDULE

FROM TO	WIRE GAUGE
SATELLITE MODULES E,F TO JUNCTION BOX	#12/2 W/GROUND
SATELLITE MODULES G,S,T,U TO JUNCTION BOX	#12/2 W/GROUND
JUNCTION BOX TO SATELLITE MODULES W,V,G,X	#8/2 W/GROUND
SATELLITE MODULES W,V,G,X TO SATELLITE MODULES D,Q	#8/2 W/GROUND
SATELLITE MODULES D,Q TO SATELLITE MODULES H,P,Y	#6/2 W/GROUND
SATELLITE MODULES H,P,Y TO SATELLITE MODULES A-A,Z	#6/2 W/GROUND
SATELLITE MODULES A-A,Z TO CENTRAL POWER STATION	#6/2 W/GROUND
SATELLITE MODULES A,B,J,K,L,M,N TO JUNCTION BOX	#10/2 W/GROUND
SATELLITE MODULES B-B,I,Q,C TO JUNCTION BOX	#12/2 W/GROUND
JUNCTION BOX TO CENTRAL POWER STATION	#8/2 W/GROUND
SATELLITE MODULE C-C TO MAINTENANCE BLDG	#12/2 W/GROUND

NOTE:
WIRE GAUGES WERE DETERMINED FROM THE LOCATIONS SHOWN ON THESE PLANS. EXCREME DEVIATION FROM THESE LOCATIONS MAY EFFECT WIRE GAUGES.

MULTIPLEX SIGNAL WIRE SCHEDULE

FROM TO	WIRE GAUGE
CENTRAL CONTROLLER TO JUNCTION BOX	#6
SATELLITE MODULES C-C TO JUNCTION BOX	#14
JUNCTION BOX TO SATELLITE MODULES B-B,I,Q,C	#6
SATELLITE MODULES B-B,I,Q,C TO JUNCTION BOX	#6
JUNCTION BOX D,Q TO SATELLITE MODULES A,B,J,K,L,M,N	#12
JUNCTION BOX TO SATELLITE MODULES A-A,Z	#8
SATELLITE MODULES A-A,Z TO SATELLITE MODULE H,P,Y	#10
SATELLITE MODULE H,P,Y TO SATELLITE MODULES Q,D	#12
SATELLITE MODULES D,Q TO SATELLITE MODULES W,V,G,X	#12
SATELLITE MODULES W,V,G,X TO JUNCTION BOX	#12
JUNCTION BOX TO SATELLITE MODULES E,S,T,U	#12
JUNCTION BOX TO SATELLITE MODULES E,F	#12



NOTES:
1 FOR TYPICAL FAIRWAY DIMENSIONS SEE PROGRAMING SEQUENCE PLANS
2 LOCATION OF ADVANCED LARGE-TURF CENTRAL CONTROLLER UNIT TO BE INSTALLED IN MAINTENCE BLDG.

---------- CENTRAL/SATELLITE SIGNAL WIRE
———————— POWER WIRE

NO.	DATE	DESCRIPTION OF REVISION	BY
4	6-2-82	R.E.K. PER OPC COMMENTS	
3	4-6-82	[illegible]	
2	1-25-82	[illegible]	
1	1-20-82	[illegible]	SD

FELLOWS, READ & ASSOC., INC.
CONSULTING ENGINEERS
310 MAIN STREET
TOMS RIVER, NEW JERSEY 08753

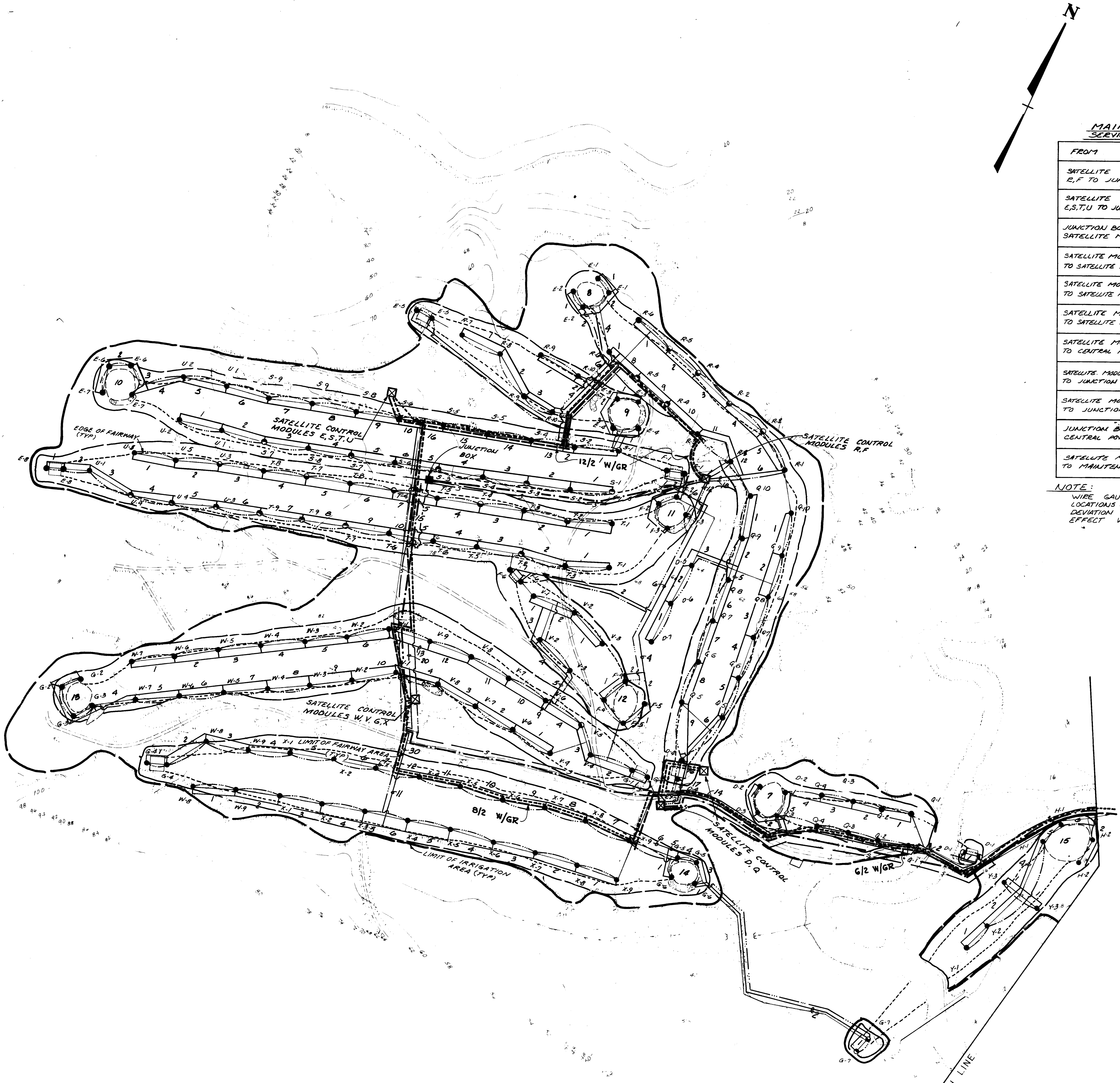
JOSEPH R. READ, P.E & L.S.
PROFESSIONAL ENGINEER & LAND SURVEYOR N.J. LIC. NO. 10304

DATE 10/26/82

"The "Record" information added to this drawing has been supplied by the contractor. The Architect/Engineer does not assume the responsibility for its accuracy other than conformity with the design concept and general adequacy of the "Record" information to the best of the Architect/Engineer's knowledge."

IRRIGATION SYSTEM
SPRING MEADOW GOLF COURSE
CONTROL WIRING PLAN
WALL TOWNSHIP
MONMOUTH COUNTY — NEW JERSEY

FIELD BOOK	DRAWN BY	SCALE	PROJECT NO.	W.O. NUMBER
	LCH	1" = 100'		
SHT. REFS. NO.	CALC BY	DATE		
5/13	CHECKED BY	OCT. 1982		



------------- CENTRAL / SATELLITE SIGNAL WIRE
———————— POWER WIRE

MAIN ELECTRICAL SERVICE SCHEDULE

FROM TO	WIRE GAUGE
SATELLITE MODULES R,F TO JUNCTION BOX	#12/2 W/GROUND
SATELLITE MODULES E,S,T,U TO JUNCTION BOX	#12/2 W/GROUND
JUNCTION BOX TO SATELLITE MODULES W,V,G,X	#8/2 W/GROUND
SATELLITE MODULES W,V,G,X TO SATELLITE MODULES D,Q	#8/2 W/GROUND
SATELLITE MODULES D,Q TO SATELLITE MODULES H,P,Y	#6/2 W/GROUND
SATELLITE MODULES H,P,Y TO SATELLITE MODULES A-A, Z	#6/2 W/GROUND
SATELLITE MODULES A-A,Z TO CENTRAL POWER STATION	#6/2 W/GROUND
SATELLITE MODULES A,B,J,K,L,M,N TO JUNCTION BOX	#10/2 W/GROUND
SATELLITE MODULES B-B,I,O,C TO JUNCTION BOX	#12/2 W/GROUND
JUNCTION BOX TO CENTRAL POWER STATION	#8/2 W/GROUND
SATELLITE MODULE C-C TO MAINTENANCE BLDG	#12/2 W/GROUND

NOTE:
WIRE GAUGES WERE DETERMINED FROM THE LOCATIONS SHOWN ON THESE PLANS. EXTREME DEVIATION FROM THESE LOCATIONS MAY EFFECT WIRE GAUGES.

MULTIPLEX SIGNAL WIRE SCHEDULE

FROM TO	WIRE GAUGE
CENTRAL CONTROLLER TO JUNCTION BOX	#6
SATELLITE MODULES C-C TO JUNCTION BOX	#14
JUNCTION BOX TO SATELLITE MODULES B-B I,O,C	#6
SATELLITE MODULES B-B,I,O,C TO JUNCTION BOX	#6
JUNCTION BOX D,Q TO SATELLITE MODULES A,B,J, K,L,M,N	#12
JUNCTION BOX TO SATELLITE MODULES A-A, Z	#8
SATELLITE MODULES A-A,Z TO SATELLITE MODULE H,P,Y	#10
SATELLITE MODULES H, P, Y TO SATELLITE MODULES D,Q	#12
SATELLITE MODULES D, Q TO SATELLITE MODULES W,V,G,X	#12
SATELLITE MODULES W,V,G,X TO JUNCTION BOX	#12
JUNCTION BOX TO SATELLITE MODULES E,S,T,U	#12
JUNCTION BOX TO SATELLITE MODULES R,F	#12

LEGEND

COMMON WIRE
24 VOLT #14 SINGLE STRAND UL POLYETHELENE COATED (TYP)

NUMBER OF INDIVIDUAL WIRES IN TRENCH

INDIVIDUAL WIRE
24 VOLT #14 SINGLE STRAND UL POLYETHELENE COATED (TYP)

MAIN ELECTRICAL SERVICE
SIZES AS SHOWN IN SCEDULE

MULTIPLEX SIGNAL WIRE
24 VOLT SINGLE STRAND UF/UL PVC COATED SIZE AS SHOWN IN SCHEDULE

NOTES
1 FOR TYPICAL FAIRWAY DIMENSIONS SEE PROGRAMING SEQUENCE PLANS
2 LOCATION OF ADVANCED LARGE-TURF CENTRAL CONTROLLER UNIT TO BE INSTALLED IN MAINTENCE BLDG.

"The "Record" information added to this drawing has been supplied by the contractor. The Architect/Engineer does not assume the responsibility for its accuracy other than conformity with the design concept and general adequacy of the "Record" information to the best of the Architect/Engineer's knowledge."

NO.	DATE	DESCRIPTION OF REVISION	BY		
2	3-7-84	REV DWG PER DEC COMMENTS	[illegible]		
1	11-29-83	REVISED SPRINKLER HEAD LOCATIONS, DESIGNATIONS AND WIRING	S.D.		

FELLOWS, READ & ASSOC., INC.
CONSULTING ENGINEERS
310 MAIN STREET
TOMS RIVER, NEW JERSEY 08753

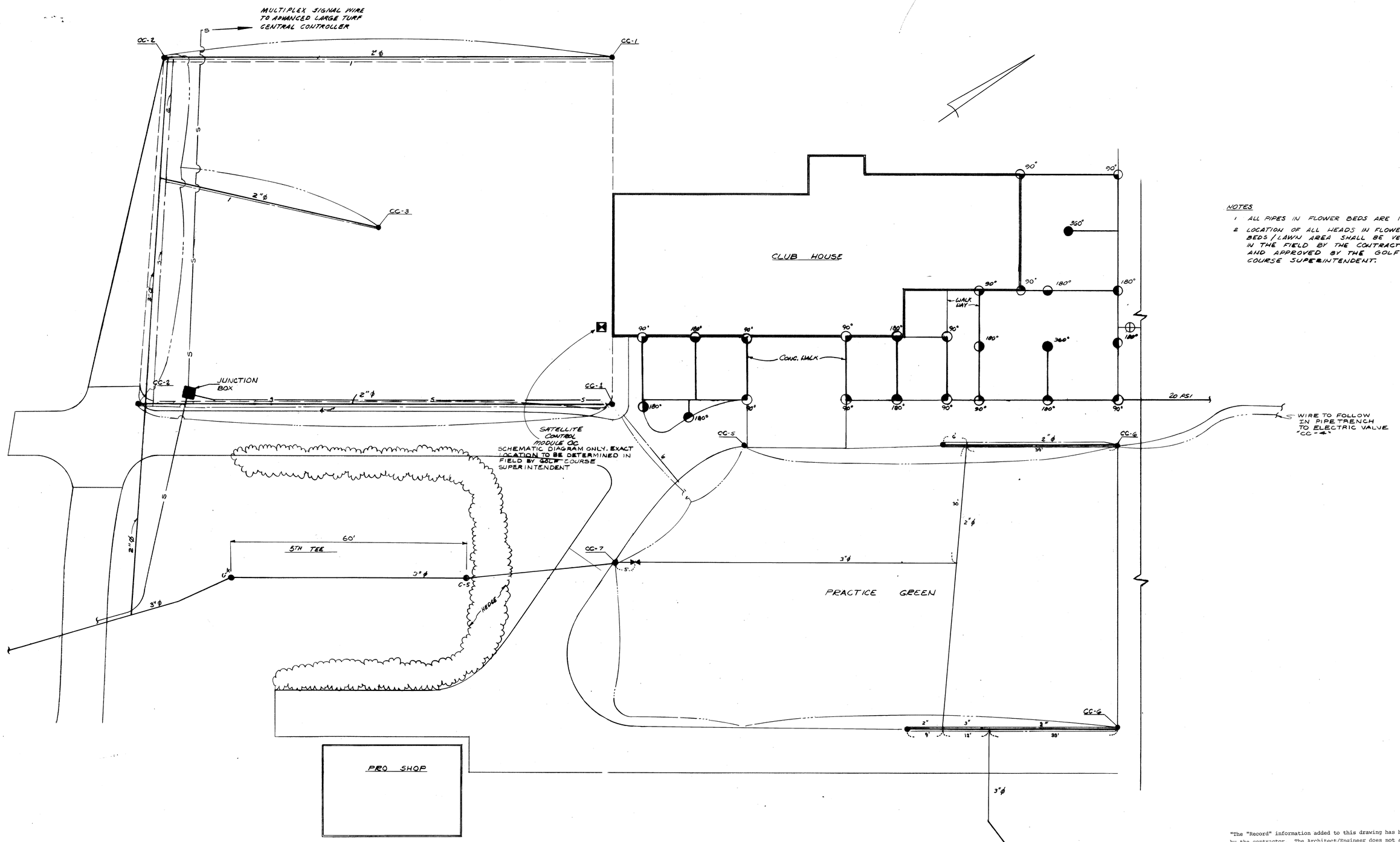
JOSEPH R. READ, P.E & L.S.
PROFESSIONAL ENGINEER & LAND SURVEYOR N.J. LIC. NO. 10301

DATE 12/8/83

IRRIGATION SYSTEM
SPRING MEADOW GOLF COURSE
CONTROL WIRING PLAN

WALL TOWNSHIP
MONMOUTH COUNTY NEW JERSEY

FIELD BOOK	DRAWN BY	SCALE	PROJECT NO	FILE
	J.W. S.D.	1" = 100'		
SET DWG NO.	CALC BY	DATE		
7 / 13	CHECKED BY J.F.S.	OCT. 1983		



NOTES

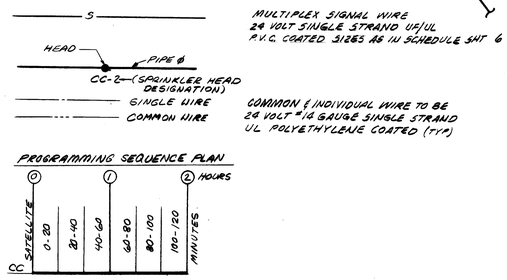
1. ALL PIPES IN FLOWER BEDS ARE 1"ϕ
2. LOCATION OF ALL HEADS IN FLOWER BEDS / LAWN AREA SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR AND APPROVED BY THE GOLF COURSE SUPERINTENDENT.

SPRINKLER HEAD SCHEDULE (MAIN SYSTEM)

68' RADIUS GREENS 360° THROW	68' RADIUS GREENS 180° THROW	68' RADIUS GREEN 120° THROW	68' RADIUS GREENS 90° THROW
25.0 GPM/HEAD @ 80 PSI	25.0 GPM/HEAD @ 80 PSI	25.0 GPM/HEAD @ 80 PSI	25.0 GPM/HEAD @ 80 PSI
TORO MODEL NO. 654-06-56 OR APPROVED SUBSTITUTED GEAR DRIVEN TYPE SPRINKLER HEAD	TORO MODEL NO. 652-06-56 OR APPROVED SUBSTITUTED GEAR DRIVEN TYPE SPRINKLER HEAD	TORO MODEL NO. 656-06-56 OR APPROVED SUBSTITUTED GEAR DRIVEN TYPE SPRINKLER HEAD	TORO MODEL NO. 651-06-56 OR APPROVED SUBSTITUTED GEAR DRIVEN TYPE SPRINKLER HEAD
CC-3	CC-7	CC-5	CC-1, CC-2 & CC-6

FLOWER BED SPRINKLER HEAD SCHEDULE

12' RADIUS 360° THROW ●	12' RADIUS 180° THROW ◐	12' RADIUS 90° THROW ◔
3.4 GPM/HEAD @ 20 PSI	1.7 GPM/HEAD @ 20 PSI	0.8 GPM/HEAD @ 20 PSI
TORO MODEL NO. 570S-12-F OR APPROVED EQUAL	TORO MODEL NO. 570S-12-180° OR APPROVED EQUAL	TORO MODEL NO. 570S-12-Q OR APPROVED EQUAL



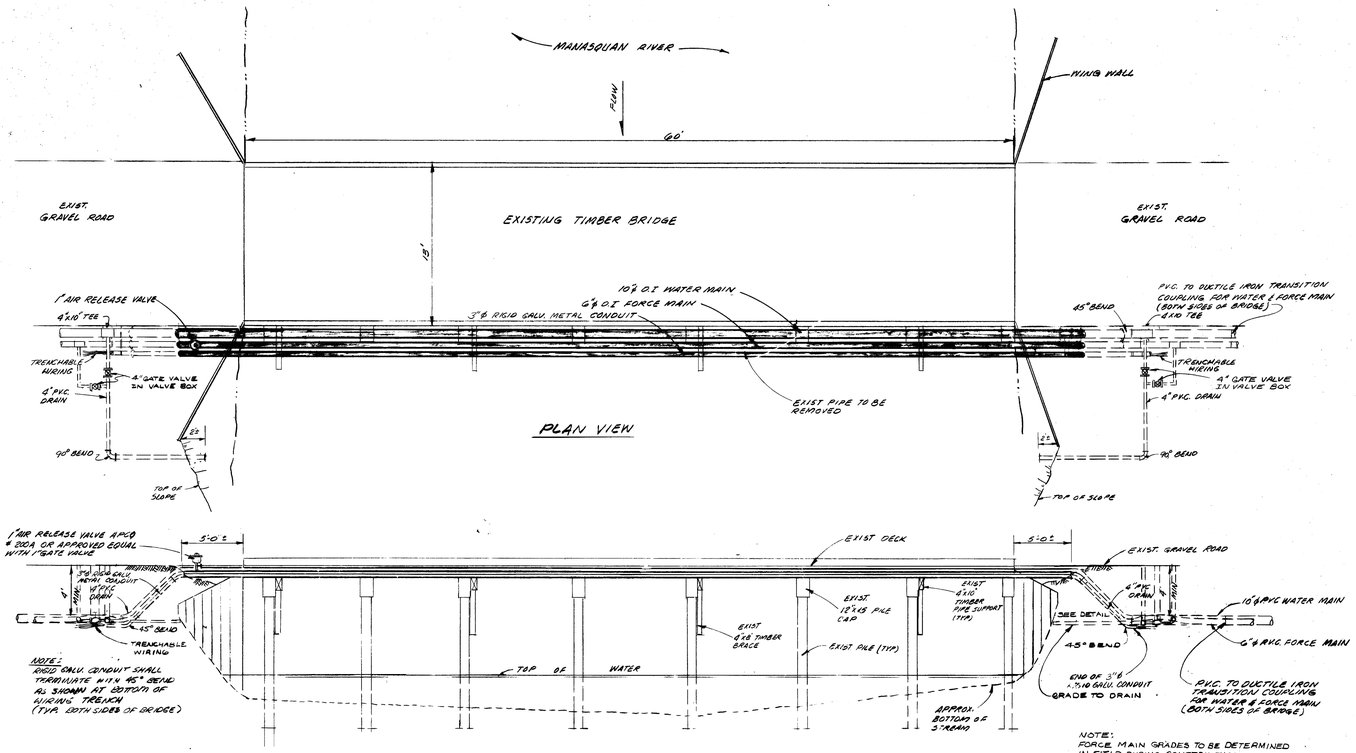
"The "Record" information added to this drawing has been supplied by the contractor. The Architect/Engineer does not assume the responsibility for its accuracy other than conformity with the design concept and general adequacy of the "Record" information to the best of the Architect/Engineer's knowledge."

NO.	DATE	DESCRIPTION OF REVISION	BY	APPR'D
3	9-7-84	REV. PER D&C COMMENTS	AEJ	
2	6-12-84	REV. PER D&C COMMENTS OF 2-28-84 & 3-13-84	AEJ	
1	1/15/84	REV. AS PER D&C REQUEST	AEJ	

FELLOWS, READ & ASSOC. INC.
CONSULTING ENGINEERS
310 MAIN STREET
TOMS RIVER, NEW JERSEY 08753
JOSEPH R. READ, P.E. & L.S.
PROFESSIONAL ENGINEER & LAND SURVEYOR N.J. LIC. NO. 19004
DATE 9/20/82

IRRIGATION SYSTEM
SPRING MEADOW GOLF COURSE
SITE PLAN - CLUB HOUSE
WALL TOWNSHIP
MONMOUTH COUNTY NEW JERSEY

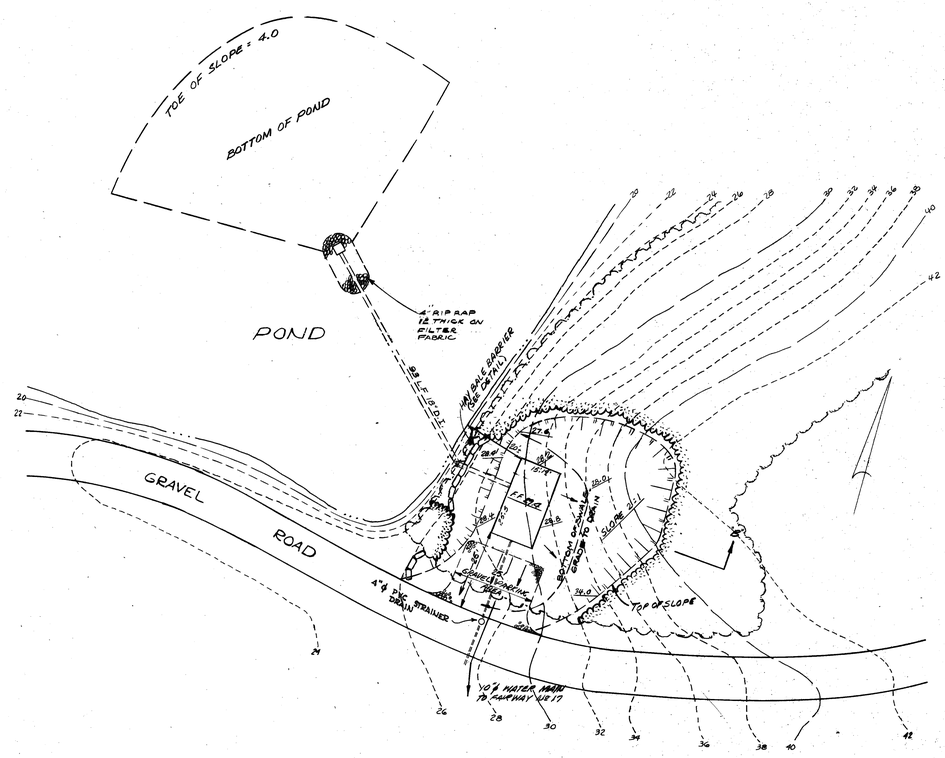
FIELD BOOK	DRAWN BY	SCALE	PROJECT NO.	FILE REFERENCE NO.
	A.P.	1"=10'		
KEY SHEET NO.	CALC. BY	DATE		
8 / 19	CHECKED BY	SEPT. 1983		



EXISTING BRIDGE DETAIL

SCALE 1"=5'

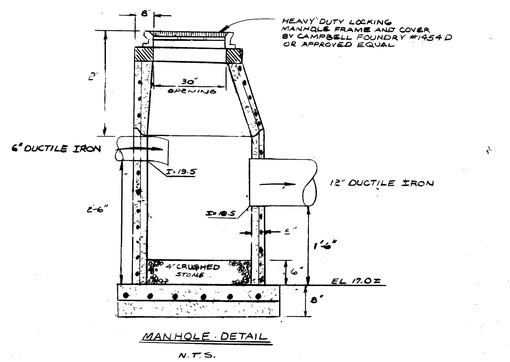
NOTE: FORCE MAIN GRADES TO BE DETERMINED IN FIELD DURING CONSTRUCTION
DRAINS FOR 6"ϕ & 10"ϕ FORCE MAINS TO BE SIDE MOUNTED



PUMP HOUSE SITE PLAN

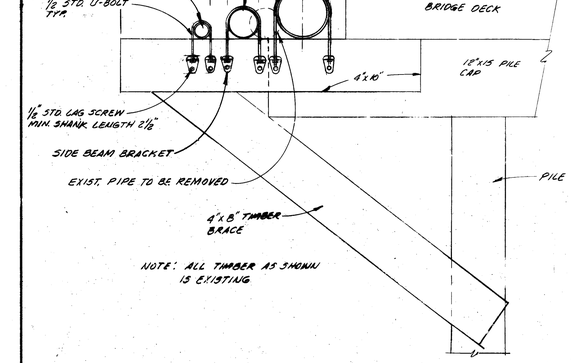
SCALE 1"=20'

NOTE: FOR PUMP HOUSE DETAILS SEE SHTS 11 & 12



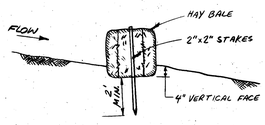
MANHOLE DETAIL

N.T.S.

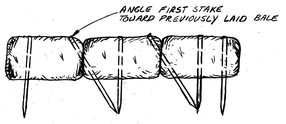


PIPE SUPPORT DETAIL

SCALE 1"=1'-0"



SECTION

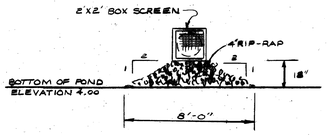


BALE SEDIMENT BARRIER

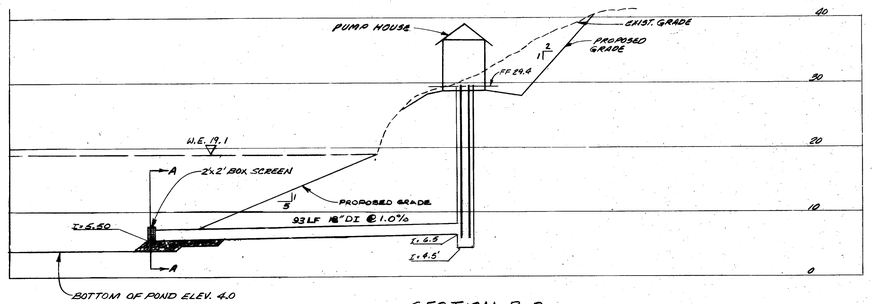
N.T.S.

DRAIN DETAIL

N.T.S.

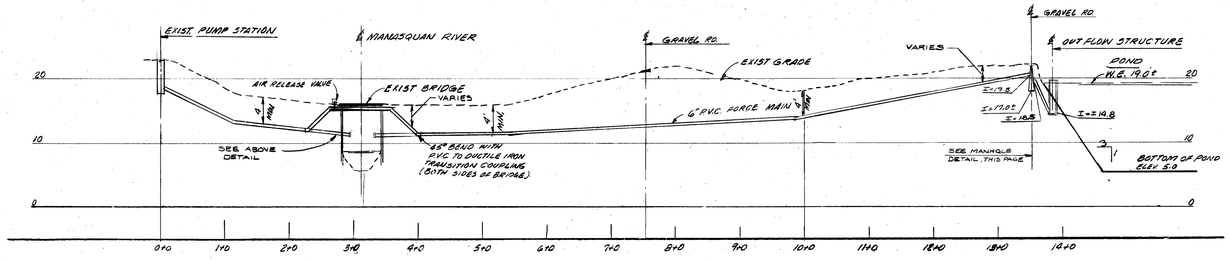


VIEW 'A-A'



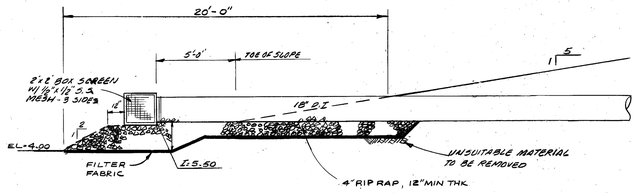
SECTION B-B

SCALE: 1" = 20' HORZ.
1" = 10' VERT.



PROFILE FORCE MAIN

HOR. = 1"=100
VERT 1"=10



PUMP HOUSE INFLUENT PIPE DETAIL

SCALE 1"=5'

"The "Record" information added to this drawing has been supplied by the contractor. The Architect/Engineer does not assume the responsibility for its accuracy other than conformity with the design concept and general adequacy of the "Record" information to the best of the Architect/Engineer's knowledge."

NO.	DATE	DESCRIPTION OF REVISION	BY
2	7/10/84	REVISE PUMP HOUSE SITE PLAN, DETAIL & SECTIONS	A.C.S.
1	10/28/83	REV. AS PER O.B.C. REQUEST	A.C.S.

FELLOWS, READ & ASSOC. INC.
CONSULTING ENGINEERS
310 MAIN STREET
TOMS RIVER, NEW JERSEY 08753

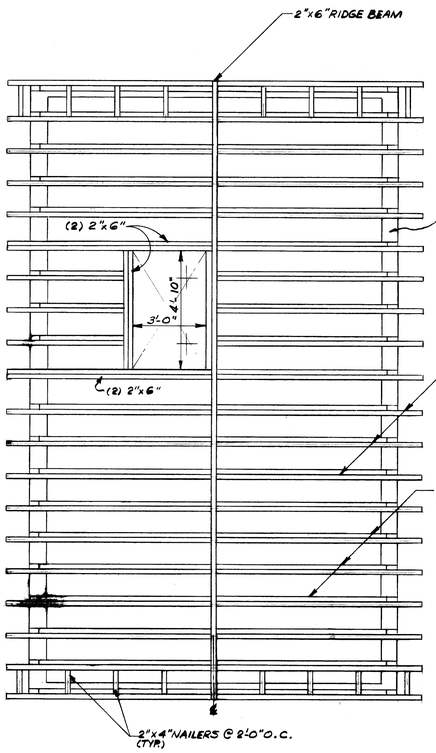
JOSEPH R. READ, P.E & L.S.
PROFESSIONAL ENGINEER & LAND SURVEYOR N.J. LIC. NO. 11,701

DATE 10/17/83

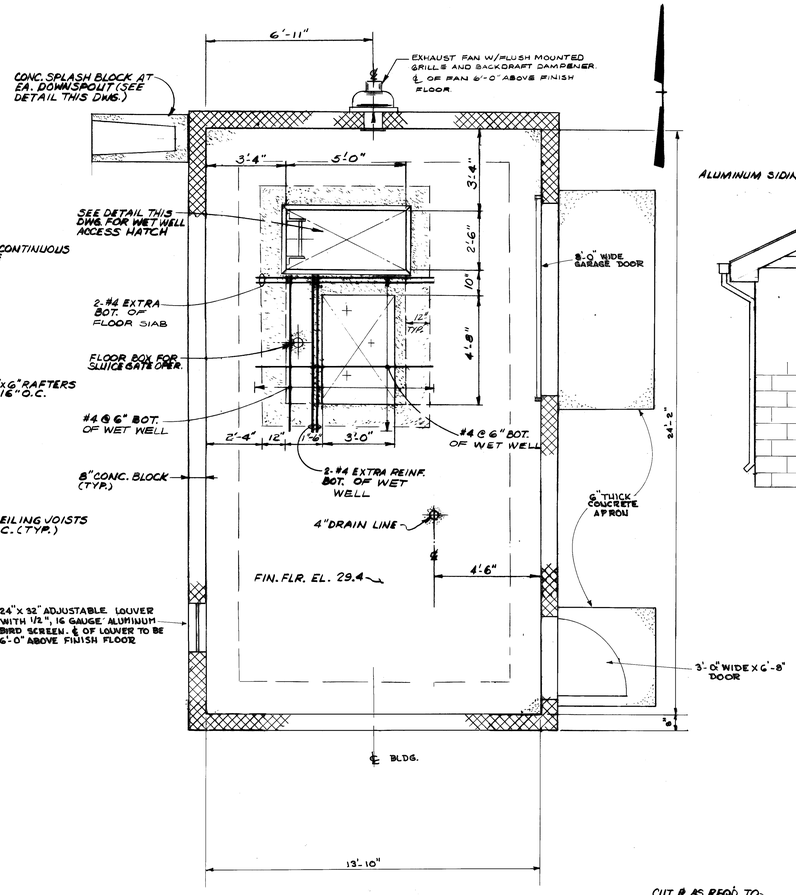
IRRIGATION SYSTEM
SPRING MEADOW GOLF COURSE
SITE PLAN - PUMP HOUSE AND MISCELLANEOUS DETAILS

WALL TOWNSHIP
MONMOUTH COUNTY NEW JERSEY

FIELD BOOK	DRAWN BY	SCALE	PROJECT NO	FILE DRAWING NO.
	J.W.	AS SHOWN		
SEE DWG. NO.	CALC. BY	DATE		
13	CHECKED BY	DEC 1983		



ROOF PLAN
SCALE: 3/8"=1'-0"



GRADE FLOOR PLAN
SCALE: 3/8"=1'-0"

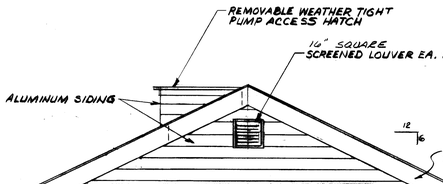
NOTE:
FIELD CUT REINFORCING FOR FLOOR OPENING AS REQ'D.

CEILING OPENING DETAIL
NO SCALE

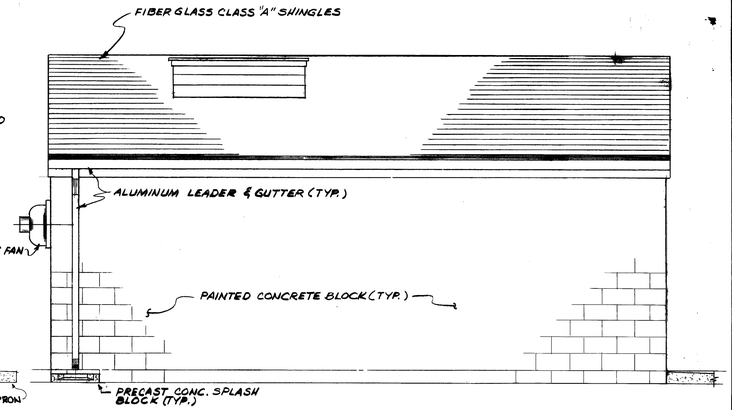
CONCRETE APRON DETAIL
NO SCALE

REMOVABLE ROOF HATCH
NO SCALE

CONCRETE SPLASH BLOCK DETAIL
NO SCALE

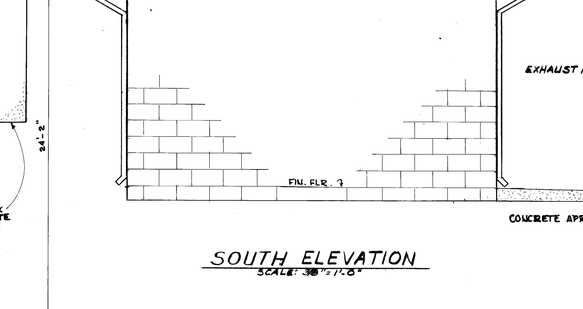


SOUTH ELEVATION
SCALE: 3/8"=1'-0"

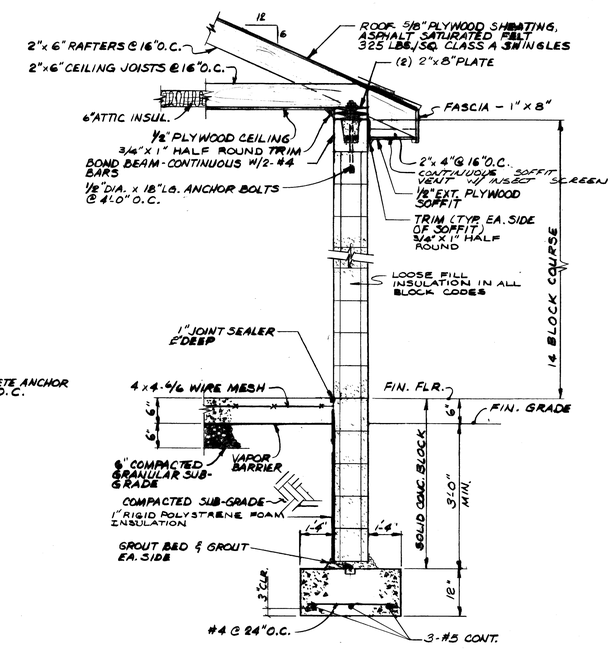


WEST ELEVATION
SCALE: 3/8"=1'-0"

WET WELL ACCESS HATCH DETAIL
NO SCALE



PIPE THRU FOOTING DETAIL
NO SCALE



DETAIL - WALL & FOUNDATION SECTION
NO SCALE

"The "Record" information added to this drawing has been supplied by the contractor. The Architect/Engineer does not assume the responsibility for its accuracy other than conformity with the design concept and general adequacy of the "Record" information to the best of the Architect/Engineer's knowledge."

NO.	DATE	DESCRIPTION OF REVISION	BY
2	8-9-84	REV PER DBC COMMENTS	AGS
1	5/18/84	REV PER DBC COMMENTS ON 4/26/84 & 3/13/84	AGS

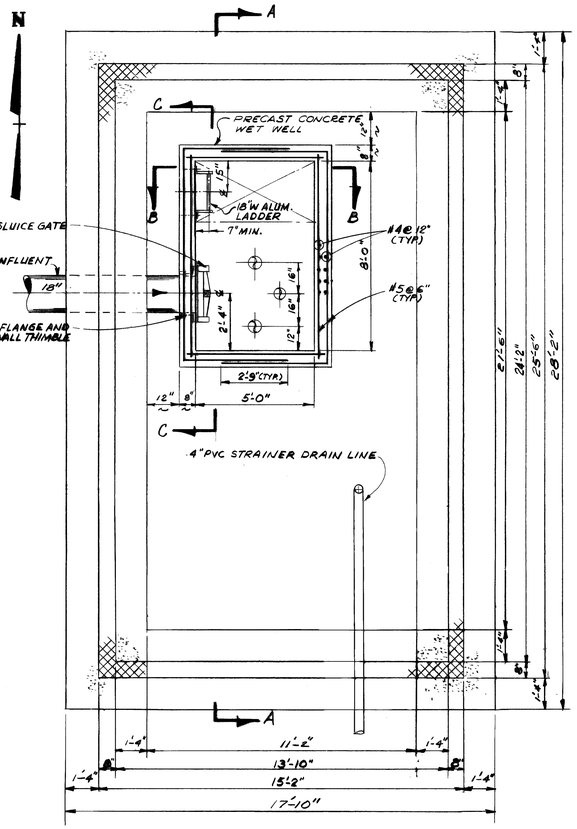
FELLOWS, READ & ASSOC. INC.
CONSULTING ENGINEERS
310 MAIN STREET
TOMS RIVER, NEW JERSEY 08753

JOSEPH R. READ, P.E. & L.S.
PROFESSIONAL ENGINEER & LAND SURVEYOR N.J. LIC. NO. 10304

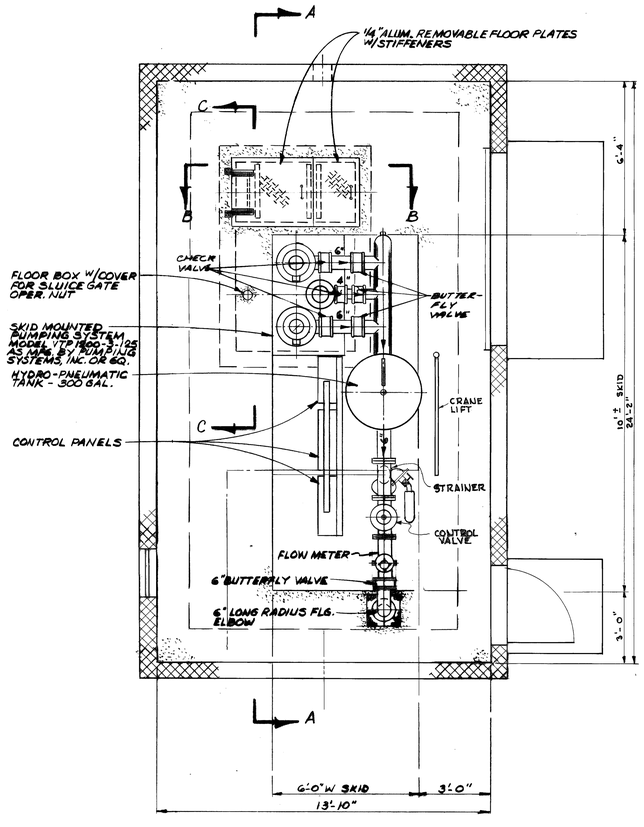
DATE 4/84

IRRIGATION SYSTEM
SPRING MEADOW GOLF COURSE
PUMP HOUSE
ARCHITECTURAL & STRUCTURAL PLANS, SECTIONS & DETAILS
WALL TOWNSHIP
MONMOUTH COUNTY NEW JERSEY

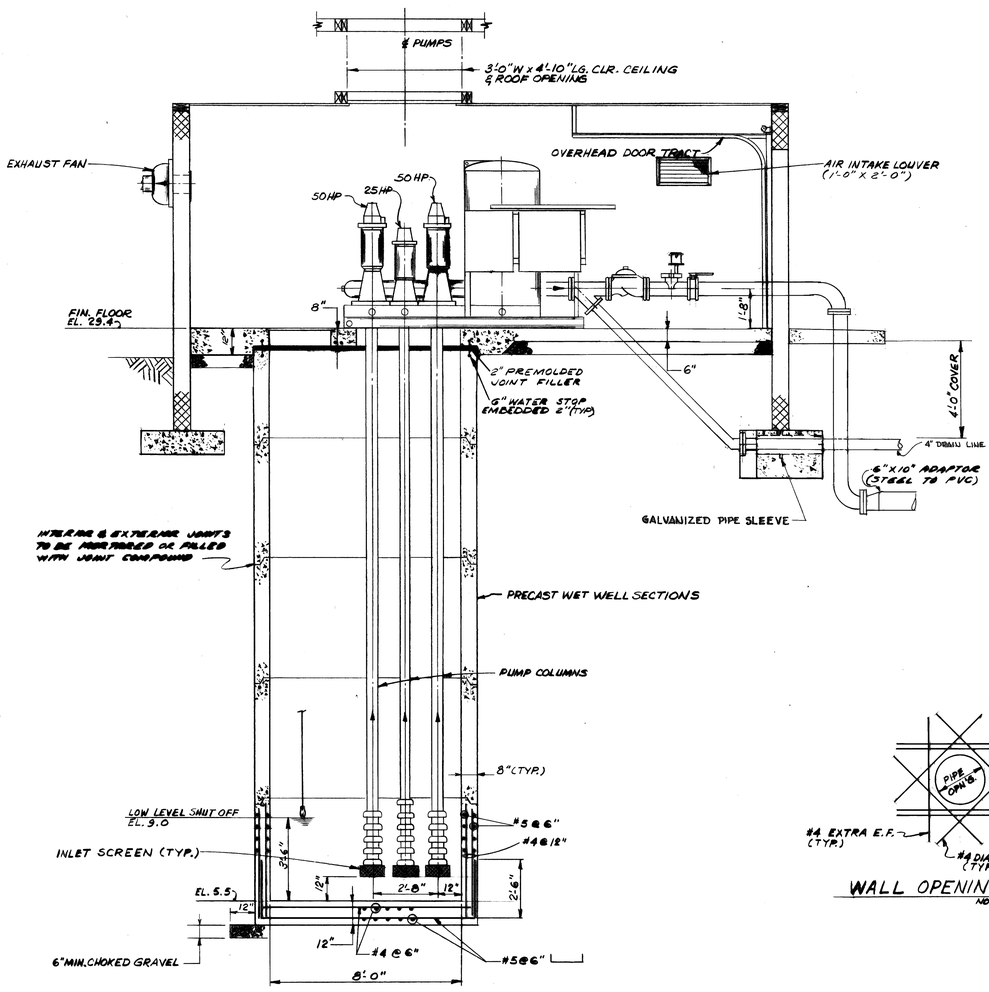
FIELD BOOK	DRAWN BY	SCALE	PROJECT NO.	FILE DRAWING NO.
	AGS	AS NOTED		
SET DWG NO.	CALC. BY	DATE		
10 / 19	CHECKED BY	DEC 1983		



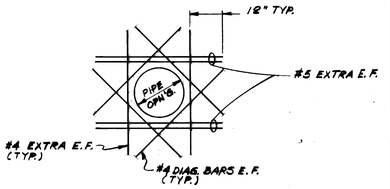
FOUNDATION PLAN
SCALE: 3/8"=1'-0"



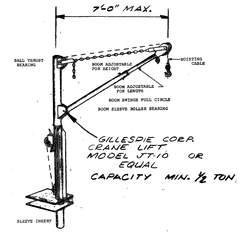
GRADE FLOOR PLAN
SCALE: 3/8"=1'-0"



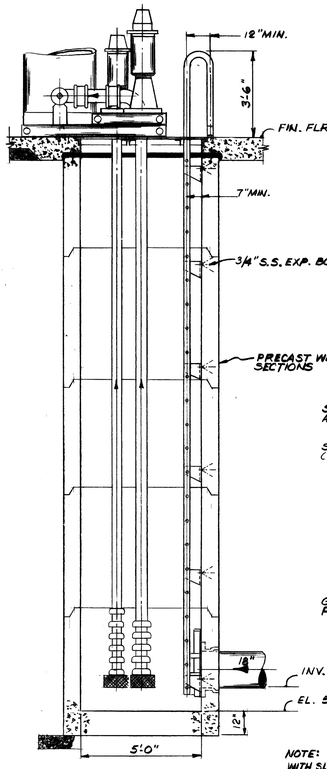
SECTION A-A
SCALE: 3/8"=1'-0"



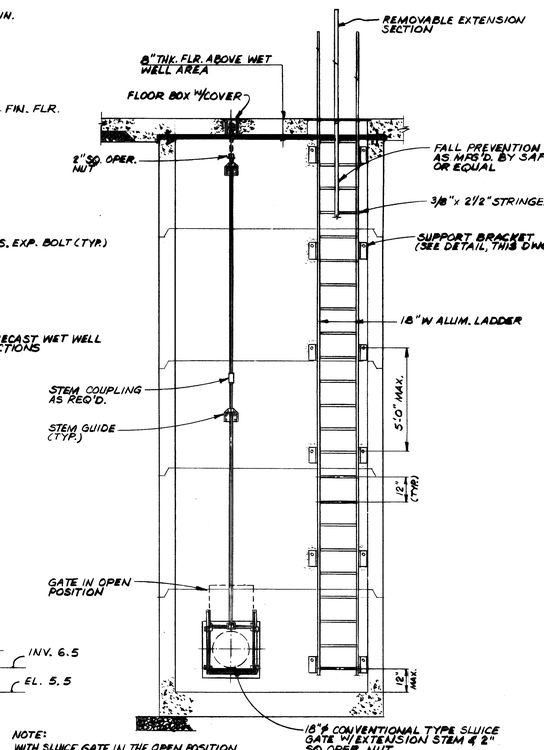
WALL OPENING REINFORCEMENT
NO SCALE



CRANE LIFT DETAIL
N. T. S.

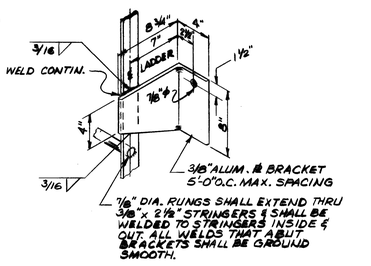


SECTION B-B
SCALE: 3/8"=1'-0"



SECTION C-C
SCALE: 3/8"=1'-0"

NOTE:
WITH SLUICE GATE IN THE OPEN POSITION TOP OF OPERATING NUT SHALL BE 1" BELOW UNDERSIDE OF FLOOR BOX COVER.



LADDER SUPPORT BRACKET DETAIL
NO SCALE

NOTE:
CONTRACTOR SHALL VERIFY WHICH EQUIPMENT WILL BE SUPPLIED BY THE PUMPING SYSTEM MANUFACTURER.

"The "Record" information added to this drawing has been supplied by the contractor. The Architect/Engineer does not assume the responsibility for its accuracy other than conformity with the design concept and general adequacy of the "Record" information to the best of the Architect/Engineer's knowledge."

NO.	DATE	DESCRIPTION OF REVISION	BY	PUBLIC WORKS	PUBLIC HEALTH
2	8-9-84	REV. PER D.B.C. COMMENTS	AGS		
1	11/20/83	REV. PER D.B.C. REQUEST	M.S.		

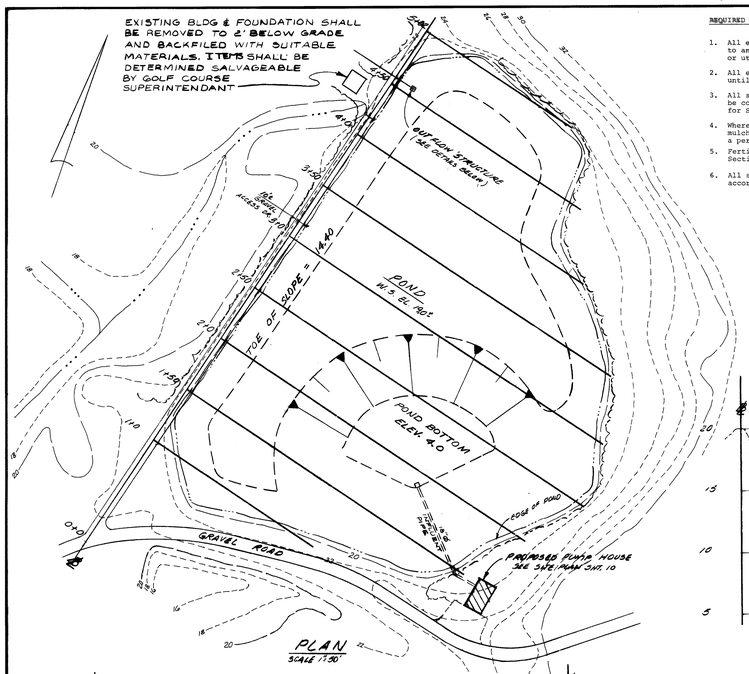
FELLOWS, READ & ASSOC., INC.
CONSULTING ENGINEERS
310 MAIN STREET
TOMS RIVER, NEW JERSEY 08753

JOSEPH R. READ, P.E. & L.S.
PROFESSIONAL ENGINEER & LAND SURVEYOR N.J. LIC. NO. 10304

DATE 12/83

IRRIGATION SYSTEM
SPRING MEADOW GOLF COURSE
PUMP HOUSE
MECHANICAL
PLANS, SECTIONS & DETAILS
WALL TOWNSHIP
MONMOUTH COUNTY NEW JERSEY

FILE CODE	DRAWN BY	SCALE	PROJECT NO.	FILE DRAWING NO.
- J. -		AS NOTED		
SHT. CODE NO.	CALC. BY	DATE		
11 / 13	CHECKED BY J.R.R.	DEC. 1983		



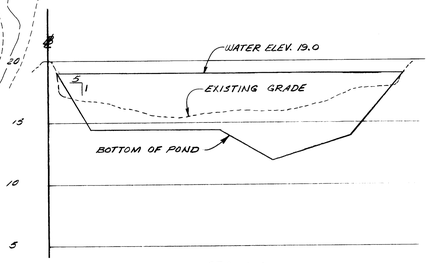
PLAN
SCALE 1"=50'

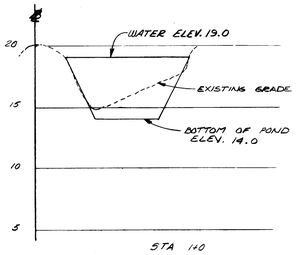
REQUIRED GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL

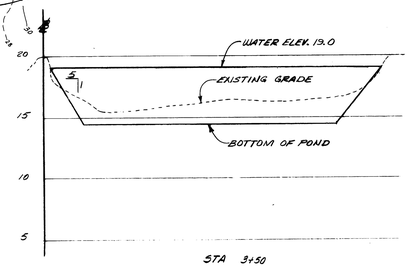
1. All erosion and sediment control practices shall be in place prior to any grading operations and installation of proposed structures or utilities.
2. All erosion and sediment control practices shall be left in place until construction is completed and/or area is stabilized.
3. All soil erosion and sediment control practices on this plan will be constructed in accordance with the "New Jersey State Standards for Soil Erosion and Sediment Control."
4. Where necessary, disturbed areas shall be temporarily seeded and/or mulched until proper weather conditions exist for establishment of a permanent vegetative cover.
5. Fertilizer, limestone and seeding shall be in accordance with Section 02821 of the specifications.
6. All soil erosion and sediment control practices shall be in accordance with Section 02540 of the specifications.

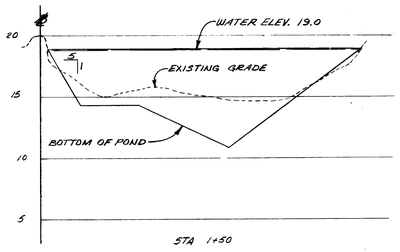
DEVELOPMENT SEQUENCE

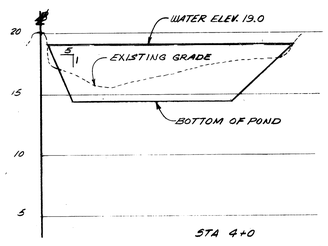
1.	Installation of all sediment and erosion control devices	3 days
2.	Clearing and grading of spoil site areas. Construction of berm.	3 weeks
3.	Pond dredging and wetwell construction.	6 weeks
4.	Installation of irrigation system and utilities.	10 weeks
5.	Building construction	6 weeks
6.	Final grading	2 weeks
7.	Seeding & landscaping	2 weeks
8.	Removal of temporary sediment and erosion control devices.	3 days

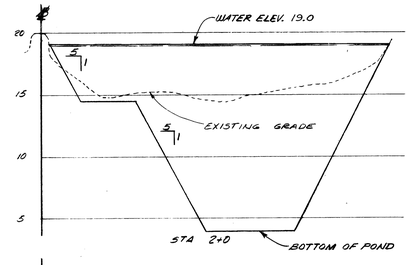


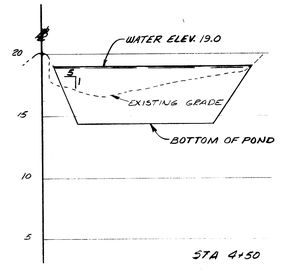


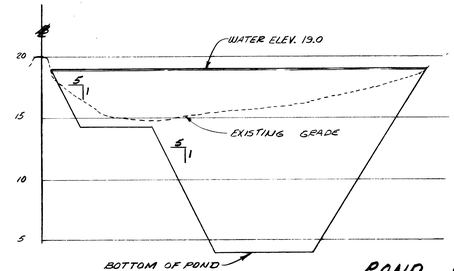


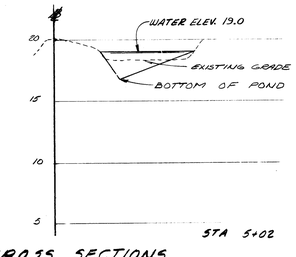




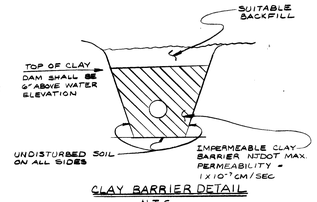




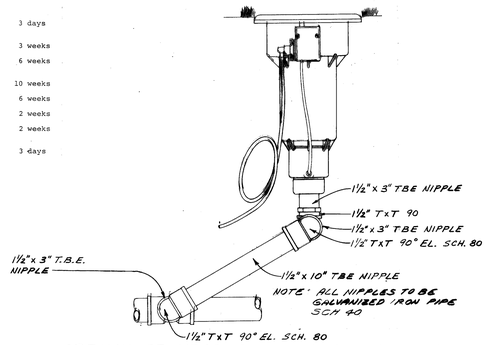




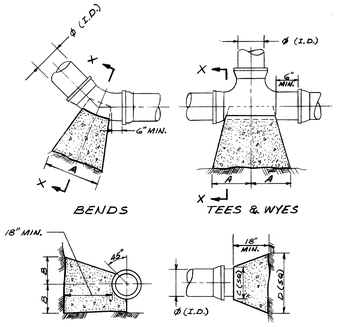
POND CROSS SECTIONS
SCALE 1"=50' HOR.
1:5 VERT.

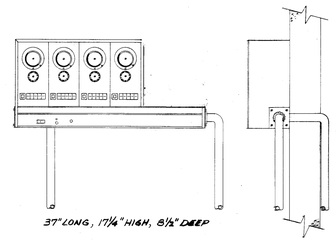


CLAY BARRIER DETAIL
N.T.S



SPRINKLER HEAD & SWING JOINT DETAIL
NOT TO SCALE





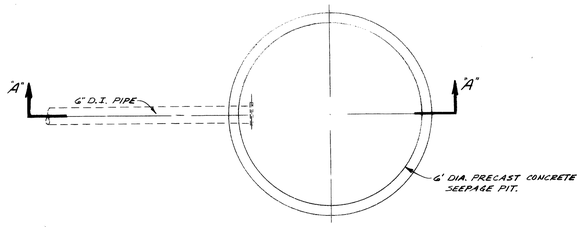
ADVANCED LARGE-TURF CENTRAL CONTROLLER DETAIL
NOT TO SCALE

THRUST BLOCK DIM. (FT.)

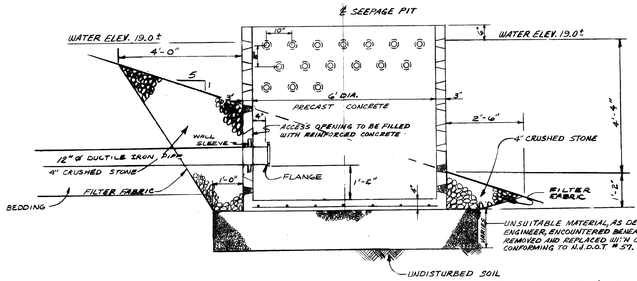
ITEM	22½° BEND		45° BEND		90° BEND		TEES		PLUGS	
DIA.	A	B	A	B	A	B	A	B	A	B
3"	0.25'	0.25'	0.25'	0.25'	0.25'	0.25'	0.25'	0.25'	—	—
4"	0.25'	0.25'	0.25'	0.25'	0.33'	0.33'	0.25'	0.25'	0.25'	0.25'
6"	0.25'	0.25'	0.33'	0.33'	0.5'	0.5'	0.42'	0.42'	—	—
10"	0.42'	0.42'	0.5'	0.67'	0.75'	0.75'	0.67'	0.67'	—	—

NOTES: 1. FOR UNSYMMETRICAL TEES USE LARGEST DIA. PIPE AND SIZE THE THRUST BLOCK FROM ABOVE CHART.
2. FOR PIPE SIZES SMALLER THAN 3" ø USE 3" ø THRUST BLOCK DIMENSIONS.
3. THRUST BLOCKS MUST BE PROVIDED AT EACH BEND, REDUCTION, TEE, WYE AND PLUG.

THRUST BLOCK DETAILS
NOT TO SCALE

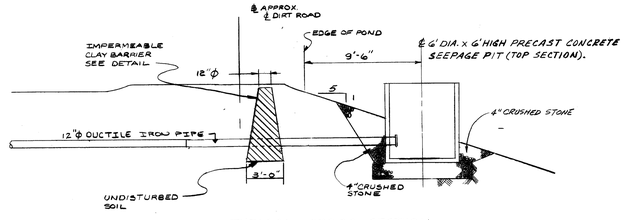


TOP VIEW
SCALE: ½"=1'-0"



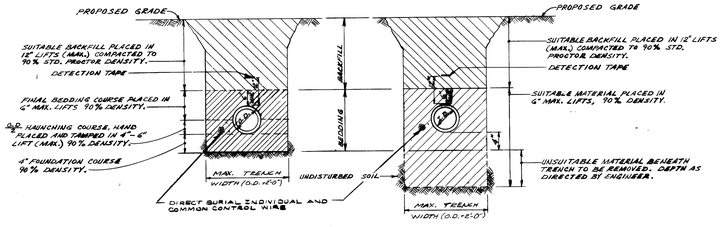
NOTES: 1. RESTRAINED JOINTS TO BE USED ALONG D.I. PIPE IN POND.
2. ALL SEEPAGE HOLES BELOW GRADE OF POND TO BE FILLED WITH CONCRETE.
3. FOR BEDDING AND BACKFILL OF DUCTILE IRON PIPE SEE DETAILS.

SECTION A-A
SCALE: ½"=1'-0"

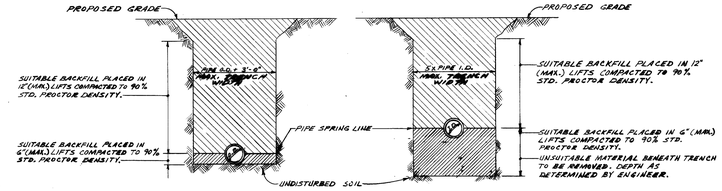


TYPICAL CROSS SECTION
SCALE: 1"=5'

OUT FLOW STRUCTURE



PVC BEDDING/BACKFILL DETAILS
NOT TO SCALE



DUCTILE IRON PIPE BEDDING/BACKFILL DETAILS
NOT TO SCALE

"The "Record" information added to this drawing has been supplied by the contractor. The Architect/Engineer does not assume the responsibility for its accuracy other than conformity with the design concept and general adequacy of the "Record" information to the best of the Architect/Engineer's knowledge."

NO.	DATE	DESCRIPTION OF REVISION	BY
5	2-7-84	REV. PER D.E.C. COMMENTS	MKS
4	12/19/83	REVISED POND PLAN AND CROSS SECTIONS & NOTES	R.E.S.
3	6/1/83	REV. PER D.E.C. COMMENTS ON 2-28-83 & 3-14-83	R.T.B.
2	7/1/82	REVISED SOIL EROSION NOTES	R.T.B.
1	7/1/82	REV. AS PER D.E.C. REQUEST	R.T.B.

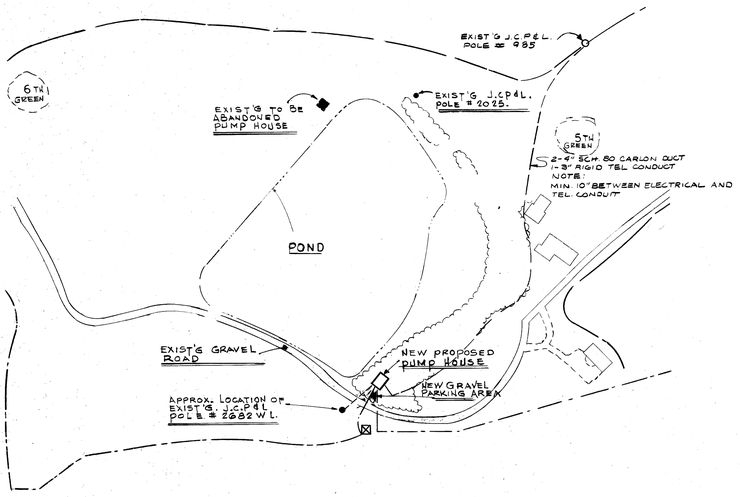
FELLOWS, READ & ASSOC. INC.
CONSULTING ENGINEERS
310 MAIN STREET
TOMS RIVER, NEW JERSEY 08753

JOSEPH R. READ, P.E. & L.S.
PROFESSIONAL ENGINEER & LAND SURVEYOR N.J. LIC. NO. 10306

DATE 4/82

IRRIGATION SYSTEM
SPRING MEADOW GOLF COURSE
POND EXCAVATION AND MISCELLANEOUS DETAILS
WALL TOWNSHIP
MONMOUTH COUNTY NEW JERSEY

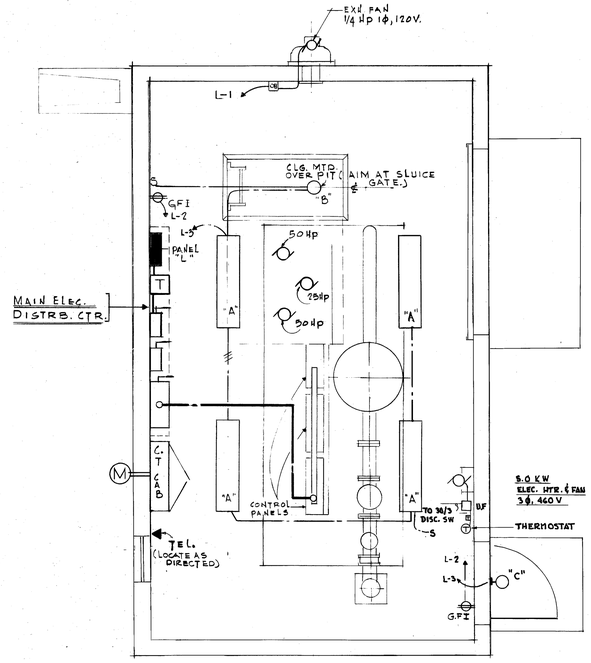
FILE NO.	DRAWN BY	SCALE	PROJECT NO.	PLT. SHEET NO.
	R.S. & J.W.	AS SHOWN		
SET SHEET NO.	CALC. BY	DATE		
10 / 13	CHECKED BY R.T.B.	DEC 1983		



PARTIAL SITE PLAN

SCALE 1"=100'

FOR CONTINUATION REFER ELEC. DWG'S 6 OF 18



PUMP HOUSE GRADE PLAN

SCALE - 3/8" = 1'-0"

LEGEND

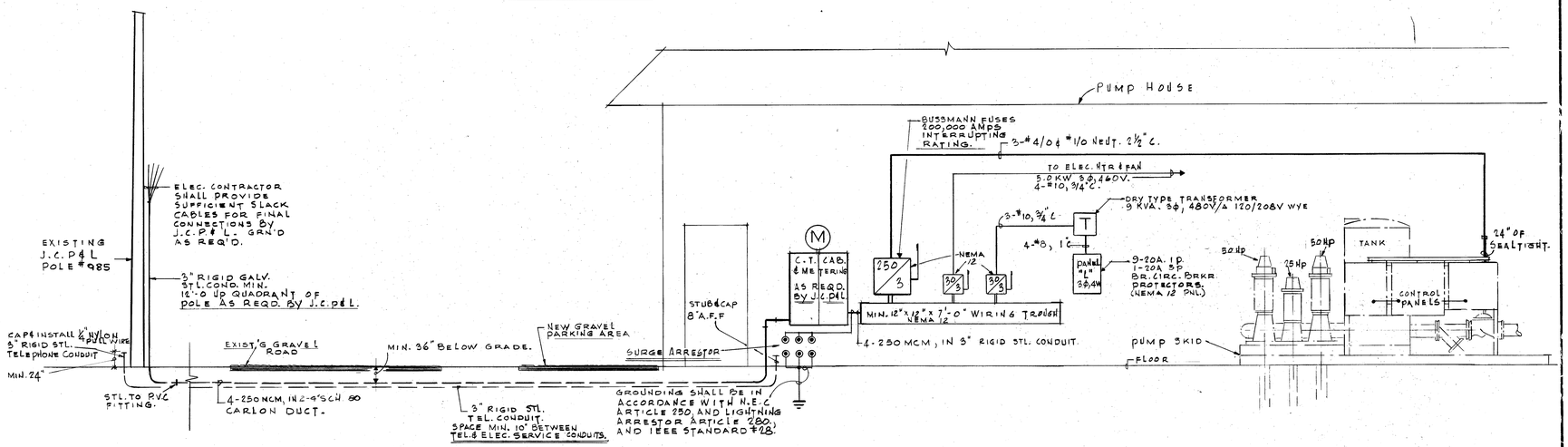
- SURFACE MOUNTED INCANDESCENT OR H.I.D LIGHTING FIXTURE - TYPE NOTED.
- WALL BRACKET LIGHTING FIXTURE - TYPE NOTED.
- S SINGLE POLE SWITCH.
- DUPLEX CONVENIENCE OUTLET - 125 VOLTS, 20 AMP, GROUNDING TYPE.
- 277/480V. PANEL
- CONDUIT EXPOSED
- DISCONNECT SWITCH - UNFUSED.
- FUSED DISCONNECT - SIZE/POLES/FUSE AMPS.
- 30/3/20
- S_M MOTOR STARTING SWITCH WITH THERMAL OVERLOAD PROTECTION.
- (3) MOTOR - NUMBER INDICATES HORSEPOWER.
- COMBINATION REDUCED VOLTAGE MOTOR STARTER/DISCONNECT.
- T DRY TYPE TRANSFORMER.

LIGHTING FIXTURE SCHEDULE

FIXTURE TYPE	MFG'S	DESCRIPTION	M.G.
"A"	KEYSTONE, LITHONIA	TITAN-V #KP-240-120 V 0 degree BALLASTS C.W. LAMPS PORCELAIN ENAMEL REFLECTORS.	SURF.
"B"	KEENE, STONCO	# V 4400, with GLARE SHIELD #4457. 300 W. PAR 38 SPOT.	SURF.
"C"	KENALL	# 3663 , 100W, & CAST SURFACE BOX # 9050 & # 9051 PHOTO CELL CONTROL.	SURF.

Notes

1. Elbows For Electric Conduit Should Be Long Radius Sweeps.
2. All Bussmann Fuses Within All Disconnect Panels Shall Have The Same Rating.



SINGLE LINE DIAGRAM

NOT TO SCALE

"The "Record" information added to this drawing has been supplied by the contractor. The Architect/Engineer does not assume the responsibility for its accuracy other than conformity with the design concept and general adequacy of the "Record" information to the best of the Architect/Engineer's knowledge."

NO	DATE	DESCRIPTION OF REVISIONS	BY	PROJ. MGR.	FIELD MGR.
1	4-6-84	REV. PER D&C COMMENTS ON 2-28-84 & 3-13-84	MJR		

FORM 27825 2019

FELLOWS, READ & ASSOC. INC.
CONSULTING ENGINEERS
310 MAIN STREET
TOMS RIVER, NEW JERSEY 08753

JOSEPH R. READ, P.E. & L.S.
PROFESSIONAL ENGINEER & LAND SURVEYOR N.J. LIC. NO. 10305

Joseph R. Read
DATE 2-2-84

CHARLES A. SCHOENBERGER
2231 OSBORN TERRACE
TOMS RIVER N.J 08753

IRRIGATION SYSTEM
SPRING MEADOW GOLF COURSE
PUMP HOUSE - ELECTRICAL PLAN
WALL TOWNSHIP

MONMOUTH COUNTY NEW JERSEY

FIELD BOOK	DRAWN BY: C.A.S.	SCALE: AS SHOWN	PROJECT NO.	FILE DRAWING NO.
SET DWG NO. 13 / 18	CALC. BY: C.A.S.	DATE: JAN. 84		
	CHECKED BY: J.R.R.			