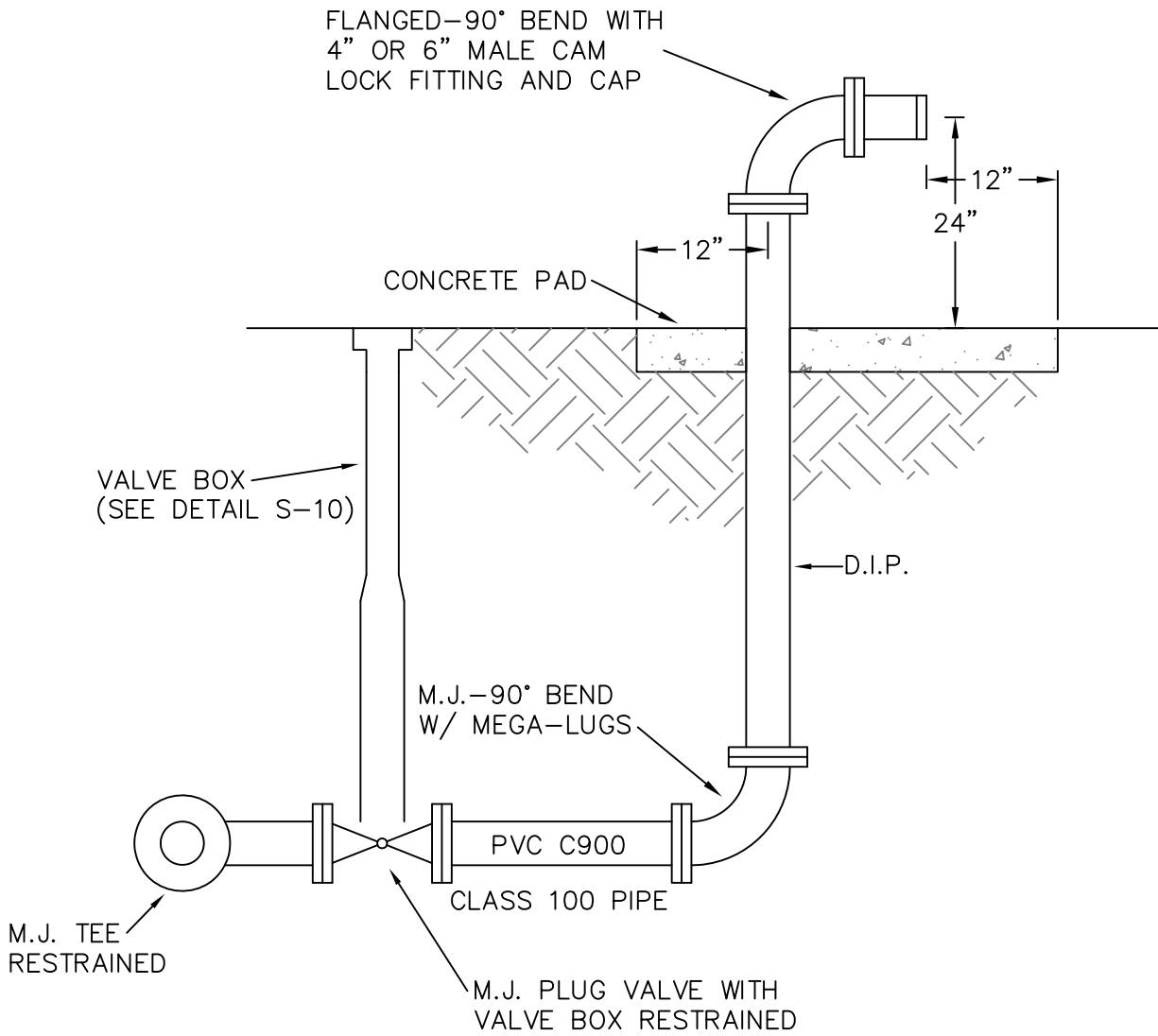


CITY OF NORTH MYRTLE BEACH STANDARD DETAILS
ENGINEERING DIVISION



PUMP STATION:

- PS-1 EMERGENCY CONNECTION
- PS-2 6'-0" GALVANIZED CHAIN LINK FENCE AND GATE
- PS-3 PUMP STATION METER AND DISCONNECT
- PS-4 PUMP STATION YARD HYDRANT
- PS-5 PRESSURE GAUGE
- PS-6 SUBMERSIBLE DUPLEX PUMP STATION SECTION AND NOTES
- PS-7 SUBMERSIBLE DUPLEX PUMP STATION PLAN AND SCHEDULE
- PS-8 TYPICAL SPLASH DEFLECTOR PLATE
- PS-9 CONCRETE PUMP STATION HATCH
- PS-10 CONCRETE WETWELL RISER SECTION
- PS-11 CONCRETE WETWELL MONOLITHIC BASE SECTION
- PS-12 CONCRETE WETWELL FLAT SLAB TOP SECTION



NOTE:

4" CONNECTION FOR 500 GPM OR LESS

6" CONNECTION FOR STATIONS ABOVE 500 GPM

EMERGENCY CONNECTION

CITY OF NORTH MYRTLE BEACH
ENGINEERING DIVISION

APPROVED BY: KDB
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DATE:
1/24/08

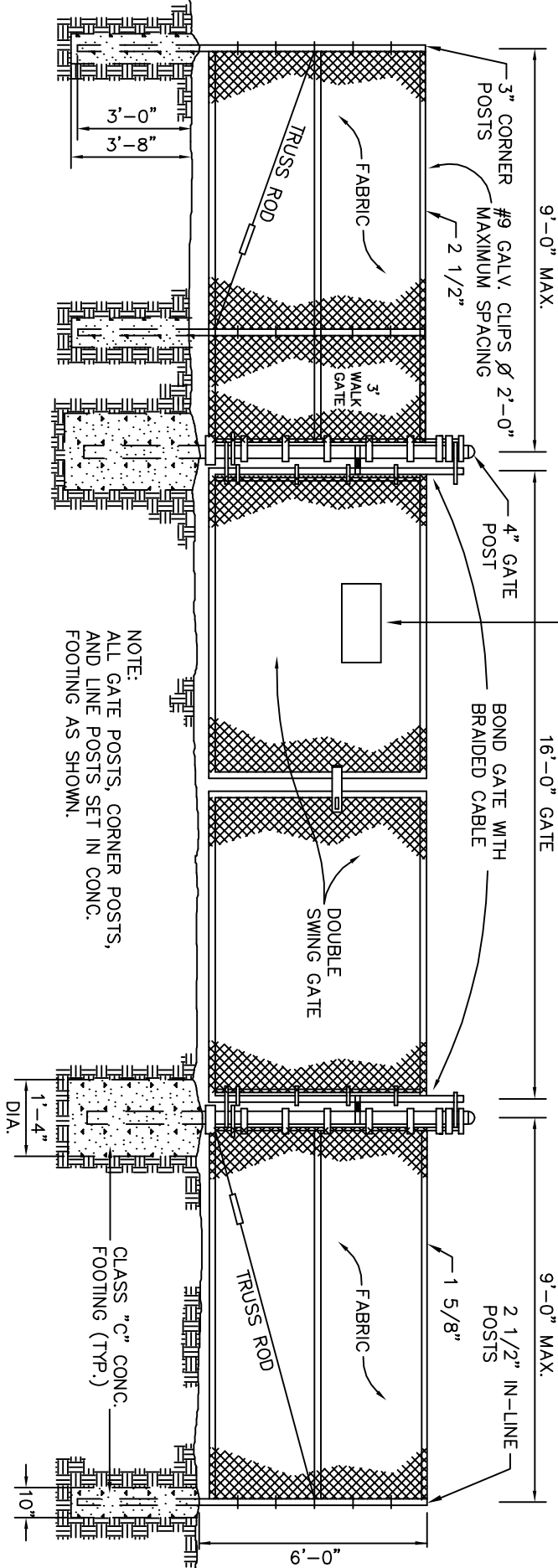
SHEET NO.
PS-1



NOTE:
FINAL SITE FENCING DIMENSIONS
DETERMINED BY THE CITY
OF NORTH MYRTLE BEACH.

WEATHER DURABLE SIGN
WITH 24 HOUR EMERGENCY
TELEPHONE NUMBER &
PUMP STATION NUMBER

IN THE EVENT OF AN
EMERGENCY CALL THE
CITY OF NORTH MYRTLE BEACH
1-843-266-5500 OR
1-843-266-5511
PUMP STATION
111111111



NOTE:
ALL GATE POSTS, CORNER POSTS,
AND LINE POSTS SET IN CONC.
FOOTING AS SHOWN.

6'-0" GALVANIZED CHAIN LINK FENCE & GATE

CITY OF NORTH MYRTLE BEACH
ENGINEERING DIVISION

DATE:
10/23/03

APPROVED BY: KDB
DRAWN BY: KJG

SHEET NO.
PS-2

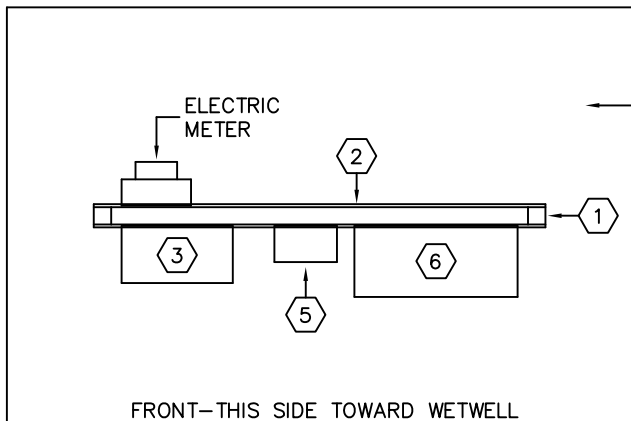


ELECTRICAL KEY NOTES

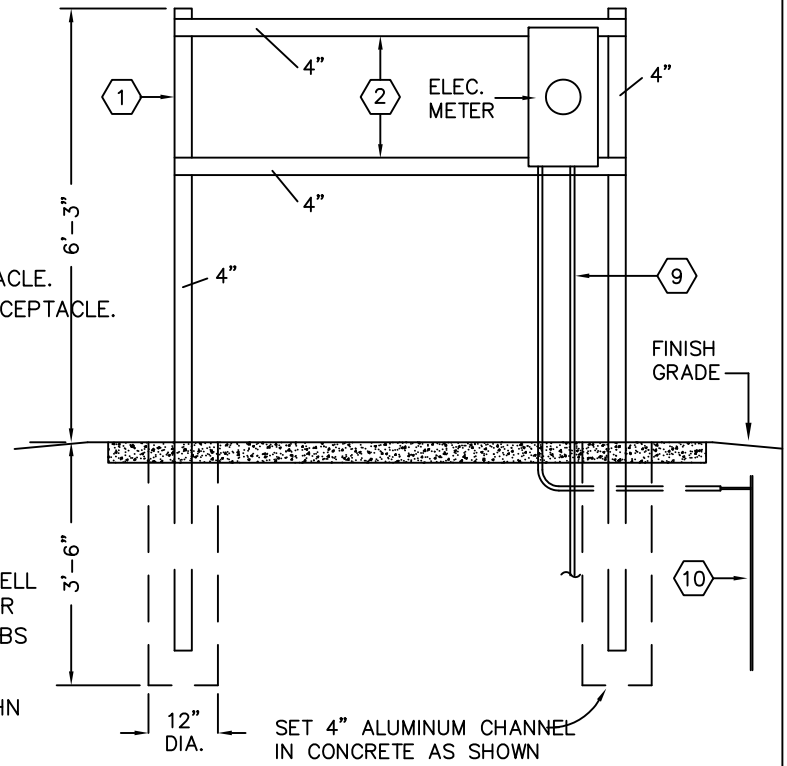
- ① 4" ALUMINUM CHANNEL SET IN CONCRETE.
- ② ALUMINUM CHANNEL 4". ALL BOLTS, NUTS, WASHERS, ETC., NECESSARY TO FABRICATE RACK AND INSTALL EQUIPMENT SHALL BE STAINLESS STEEL.
- ③ SQUARE D NEMA 3R DOUBLE THROW SWITCH.
- ④ CROUSE HINDS AR2031S-22 480V/3PH/3 WIRE RECEPTACLE. CROUSE HINDS AR4041-S22-M80 230V/3PH/4 WIRE RECEPTACLE.
- ⑤ NEMA TYPE 4X STAINLESS STEEL ENCLOSURE. SQUARE D FA KA OR QBI CIRCUIT BREAKERS.
- ⑥ PUMP CONTROLLER MOUNT TOP SIX FEET ABOVE SLAB. NEMA 4X STAINLESS STEEL.
- ⑦ EYS SEALOFF FITTINGS WITH CHICO.
- ⑧ 2-2" (MINIMUM) PVC CONDUITS TO WETWELL FOR PUMP POWER CABLES. 1-2" (MINIMUM) PVC CONDUIT TO WETWELL FOR FLOAT CABLES. LOCATE CONDUITS TO RIGHT CORNER OF CONTROL PANEL. ALL CONDUITS TO HAVE MYERS HUBS AT CONNECTIONS TO BOXES OR PANELS.
- ⑨ 2" SCHEDULE 80 (MINIMUM) PVC CONDUIT WITH 4 #2THHN CONDUCTORS TO UTILITY COMPANY TRANSFORMER.
- ⑩ GROUND ROD AND CLAMP.
- ⑪ TELEMETRY TO BE LOCATED PER SITE PLAN.
- ⑫ PUMP CONTROL PANEL TO BE STA-CON PER N.M.B. STANDARD ON FILE WITH STA-CON.
- ⑬ IF SITE FENCING IS OTHER THAN CHAIN LINK ALARM LIGHT MUST BE VISABLE ABOVE FENCE LINE.

GENERAL ELECTRICAL NOTES

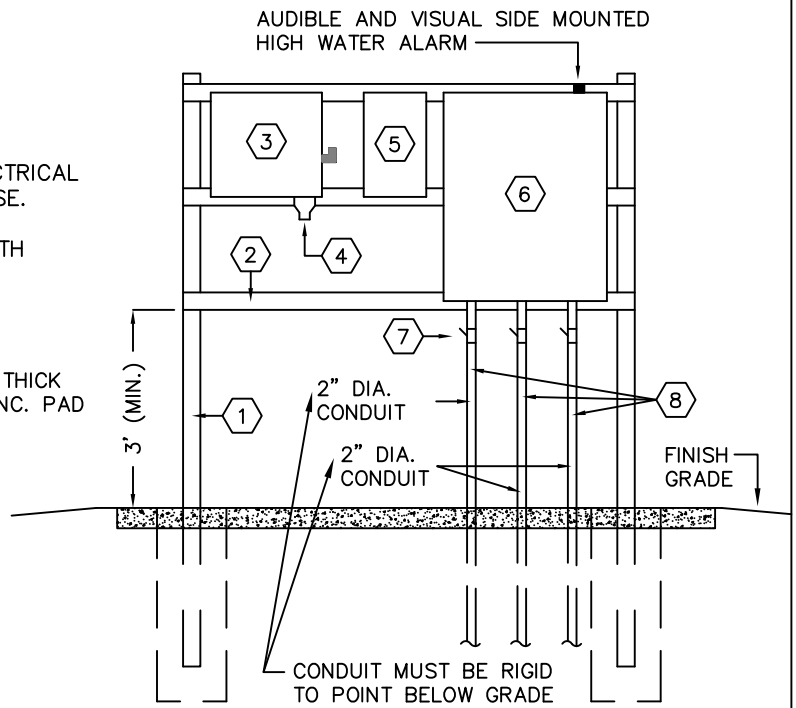
- 1. ELECTRICAL WORK SHALL BE PERFORMED BY AN ELECTRICAL CONTRACTOR WITH AN APPROPRIATE BUSINESS LICENSE.
- 2. ELECTRICAL PERMITS SHALL BE APPLIED FOR AT NORTH MYRTLE BEACH BUILDING INSPECTION OFFICE.



PLAN VIEW



REAR VIEW



FRONT VIEW

PUMP STATION METER
AND DISCONNECT

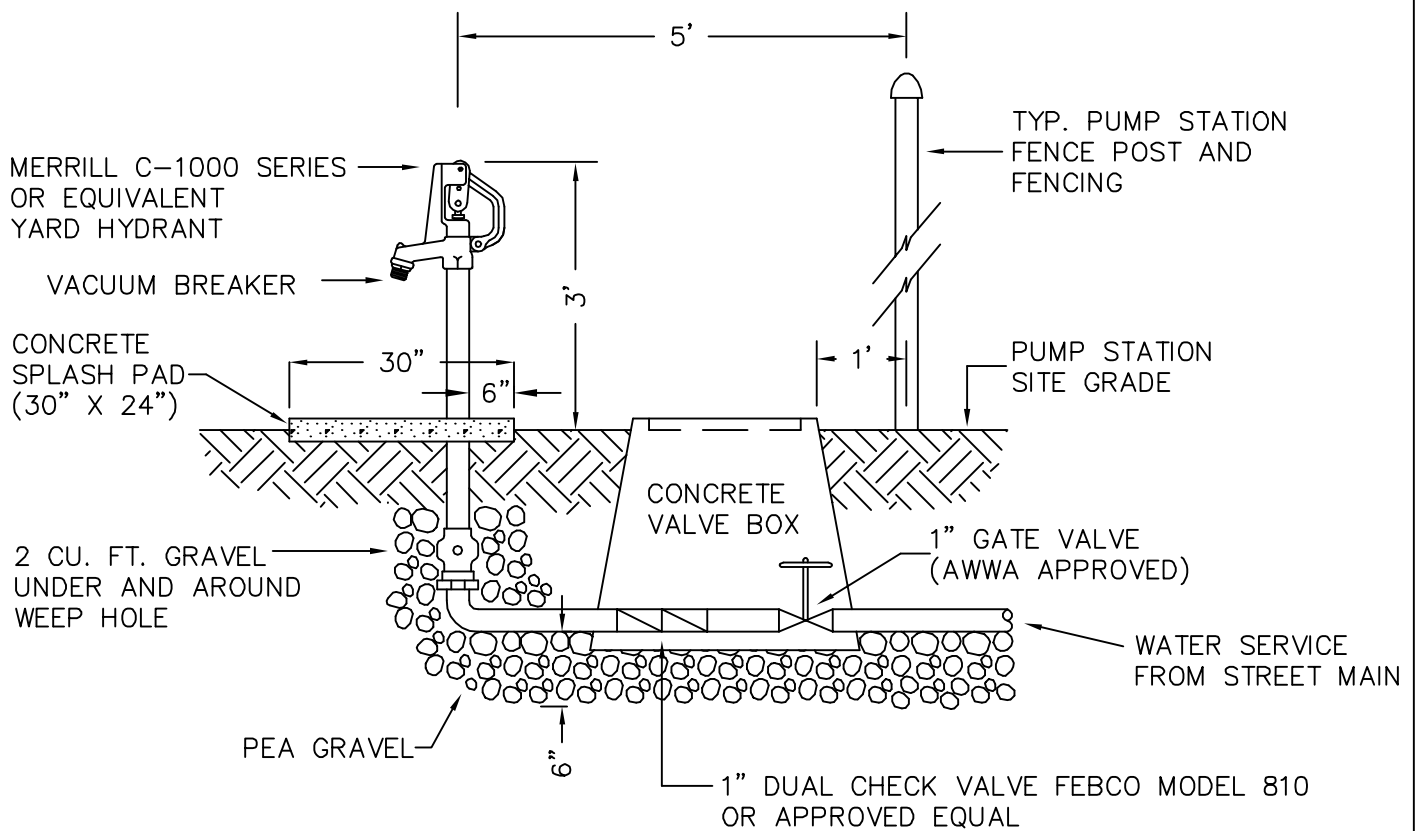
CITY OF NORTH MYRTLE BEACH
ENGINEERING DIVISION

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DATE:
1/24/08

SHEET NO.
PS-3





PUMP STATION YARD HYDRANT

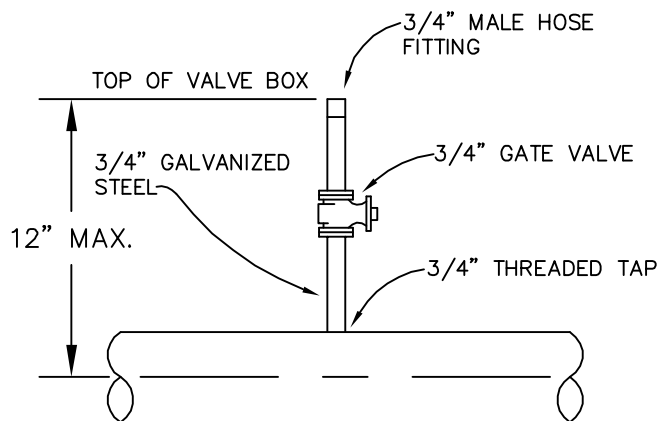
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ENGINEERING DIVISION

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DATE:
10/23/03

SHEET NO.
PS-4





PRESSURE GAUGE

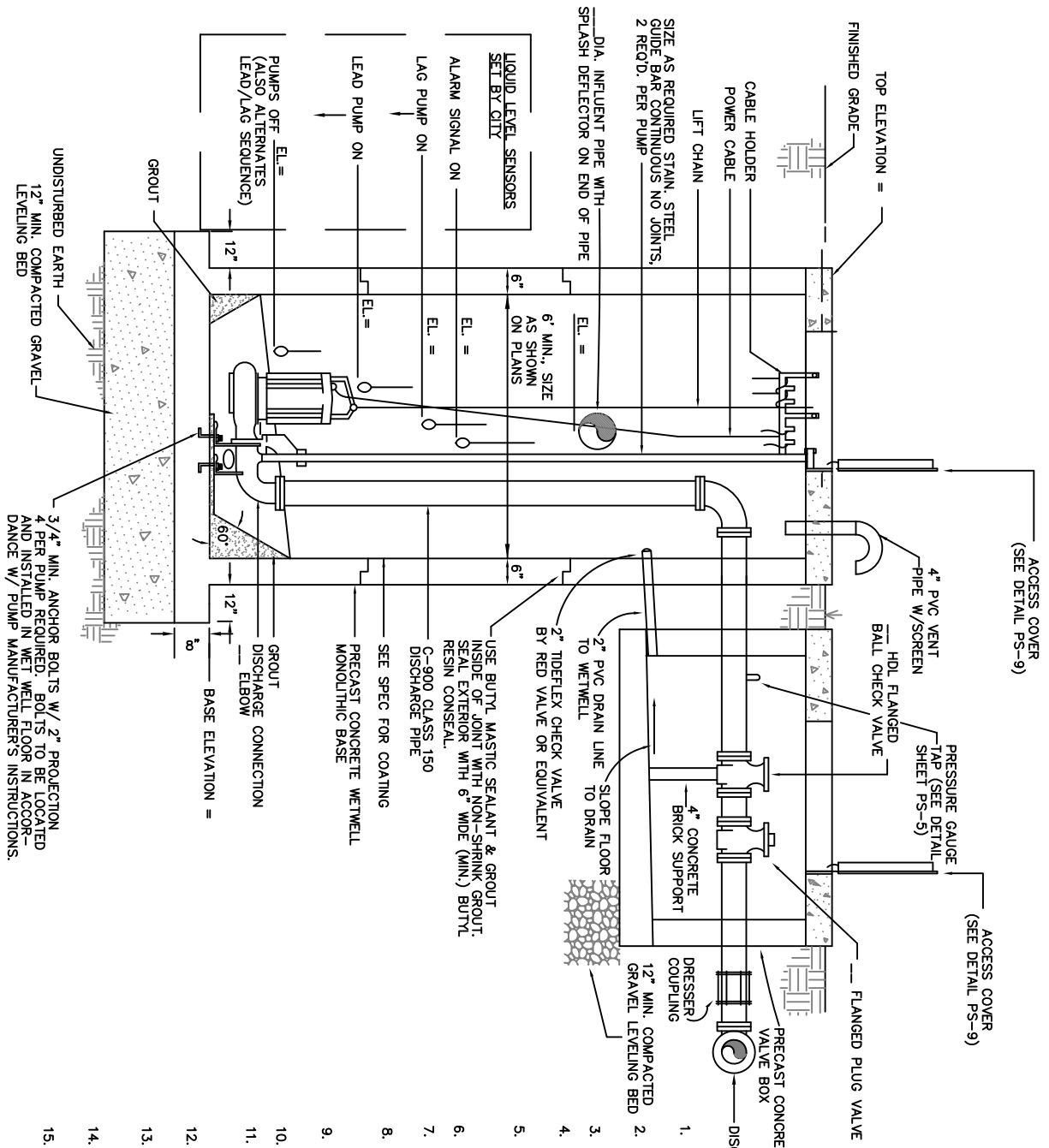
CITY OF NORTH MYRTLE BEACH
ENGINEERING DIVISION

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DATE:
10/23/03

SHEET NO.
PS-5





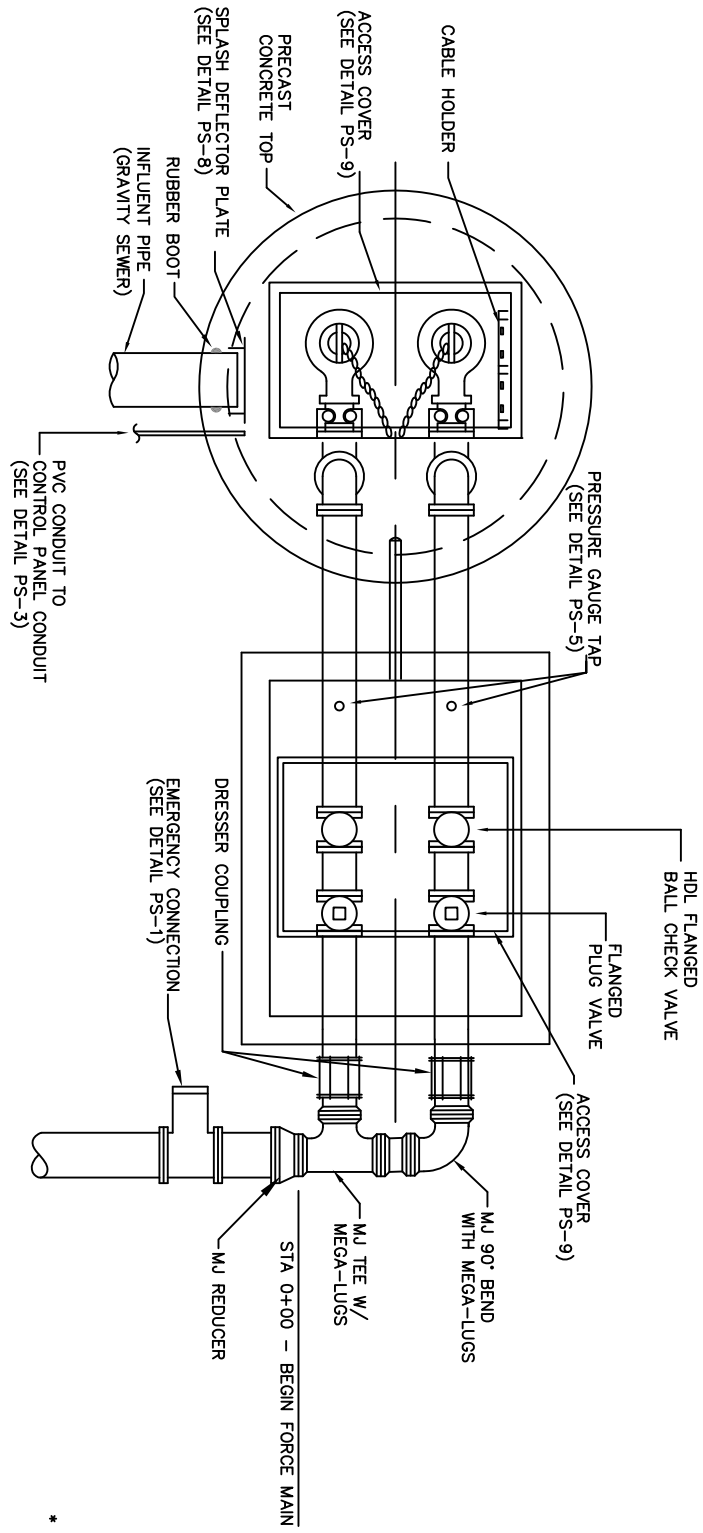
EMERGENCY OPERATION PLAN:
 A TRANSFER SWITCH IS PROVIDED FOR CONNECTION TO A PORTABLE GENERATOR IN THE EVENT OF A POWER FAILURE. (61-67.300.C.16.e) THE CITY OF NORTH MYRTLE BEACH WILL BE RESPONSIBLE FOR PROVIDING THE GENERATOR.

PUMP STATION NOTES:

1. ALL WORK AND MATERIALS SHALL CONFORM TO REQUIREMENTS OF THE CITY OF NORTH MYRTLE BEACH.
2. ALL HINGES, GUIDE HOLDERS, CHAIN HOLDERS, ALL NUTS, BOLTS, WASHERS, AND OTHER FASTENERS SHALL BE 302 STAINLESS STEEL.
3. THE NEMA 4X ENCLOSURES SHALL BE STAINLESS STEEL AND RAINIGHT.
4. ALL WETWELL HARDWARE SHALL BE MOUNTED SUCH THAT ANY COMPONENT CAN BE REMOVED.
5. THE POWER CABLE IS TO BE WIRED NON-STOP FROM THE PUMP TO THE BOTTOM OF THE STARTER WITH NO JUNCTION BOXES OR SPLICES IN BETWEEN.
6. WETWELL SECTIONS SHALL CONFORM TO ASTM C-478.
7. ALL PIPING & FITTINGS WITHIN THE WETWELL & VALVE PIT SHALL BE STAINLESS STEEL OR HDPE.
8. PUMPS AND MOTORS SHALL HAVE STAINLESS STEEL CHAINS FOR LIFTING. THE LENGTH SHALL REACH TO THE TOP OF THE STATION PLUS AN ADDITIONAL SIX FEET.
9. LOCATE THE CONTROL PANEL AS SHOWN ON THE PUMP STATION SITE PLAN.
10. INFLUENT TO PUMP STATION TO BE C-900 CLASS 150 PVC.
11. PUMPS ARE TO BE FLYGT MODEL _____ WITH IMPELLER _____ VOLTS 3 PH MOTOR. EACH PUMP SHALL DELIVER _____ GPM AT _____ T.O.H. SHOP DRAWINGS WILL BE REQUIRED.
12. CONTROL PANEL IS TO CONTAIN AN AUDIO AND VISUAL HIGH LEVEL ALARM.
13. FLOATS TO BE ROTO FLOAT / ANCHOR SYNTHETIC MODEL W NO-SS STAINLESS STEEL WITH 40" CORDS. HUNG ON STAINLESS STEEL CHAIN AND SIZED ACCORDINGLY.
14. ALL CHAINS, FLOATS AND INTERIOR PIPING SHALL BE STAINLESS STEEL OR HDPE.
15. THE RADIO TELEMETRY SYSTEM SHALL BE MANUFACTURED BY DATA FLOW SYSTEMS, INC. (D.F.S.) AND SUPPLIED BY THE DFS NORTH/SOUTH CAROLINA VAR, NIX, PURSER AND ASSOCIATES, MATTHEWS, NC, PHONE (704) 847-7036.
16. FLOATS TO BE MOUNTED TO 5/16" STAINLESS STEEL CHAIN.

SUBMERSIBLE DUPLEX PUMP STATION SECTION AND NOTES

CITY OF NORTH MYRTLE BEACH ENGINEERING DIVISION		DATE: 1/24/08
APPROVED BY: KDB DRAWN BY: KJG	SHEET NO. PS-6	



PUMP STATION SCHEDULE

INFLUENT		WET WELL		ELEV.		PUMPS	
PIPE I.D.	SEE PLAN	INSIDE DIAMETER	?	LAG PUMP ON	?	IMPELLER	?
ELEVATION	SEE PLAN	TOP ELEVATION	?	LEAD PUMP ON	?	DISCHARGE PIPING	?
		HIGH WATER LEVEL	?	PUMPS OFF	?	CHECK VALVE	?
		LOW WATER LEVEL	?	MODEL	?	PLUG VALVE	?
		FLOOR ELEVATION	?			DESIGN FLOW**	?
						DESIGN HEAD* (TDH)	?
						REQUIRED FLOW**	?
						REQUIRED HEAD** (TDH)	?
						VOLTAGE	?
						PHASE	?
						HORSEPOWER	?
						RPM	?
						EFFICIENCY	??% MIN.

* DESIGN FLOW AND HEAD ARE THE CALCULATED CONDITIONS SPECIFIED BY THE LOADING. (I.E. # OF LOTS SERVED IN PHASE)
 ** REQUIRED FLOW AND HEAD ARE CALCULATED CONDITIONS BASED UPON THE PUMP CURVE.

NOTE: TELEMETRY TO BE LOCATED PER SITE PLAN.

ALL PIPING AND FITTINGS TO BE STAINLESS STEEL OR HDPE FROM BASE ELBOWS THROUGH VALVE PIT.

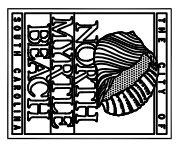
SUBMERSIBLE DUPLEX PUMP STATION PLAN AND SCHEDULE

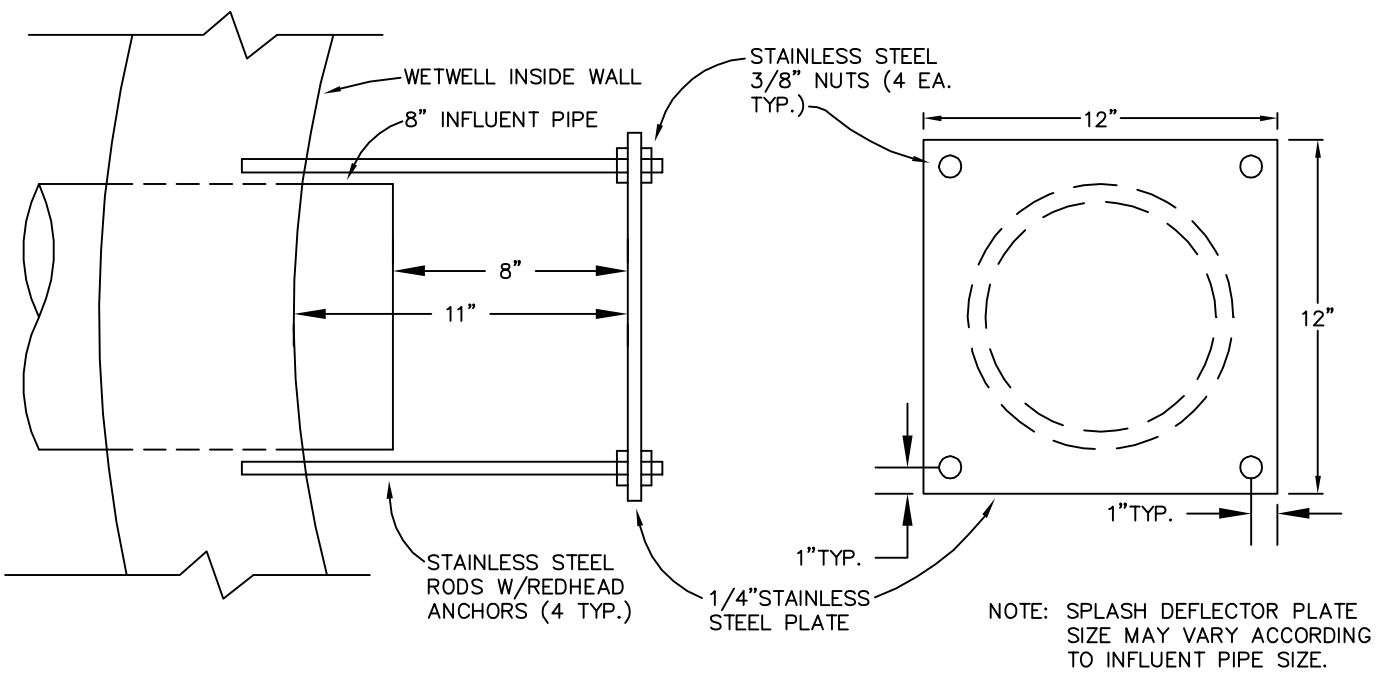
CITY OF NORTH MYRTLE BEACH ENGINEERING DIVISION

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DATE: 1/24/08

SHEET NO. PS-7





TYPICAL SPLASH DEFLECTOR PLATE

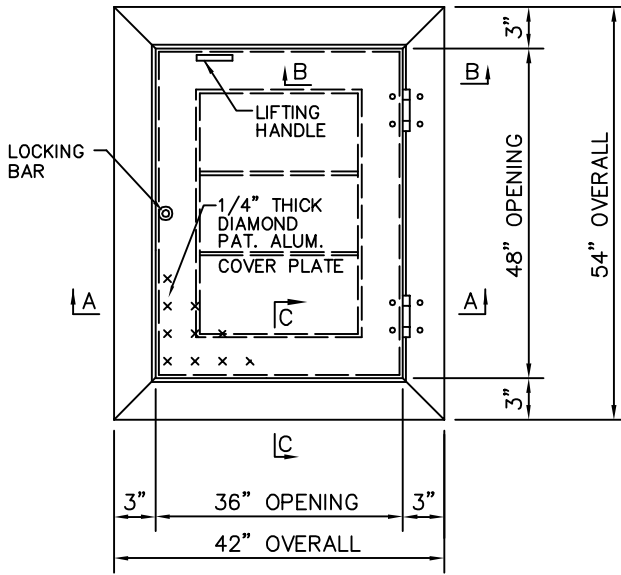
CITY OF NORTH MYRTLE BEACH
ENGINEERING DIVISION

APPROVED BY: KDB
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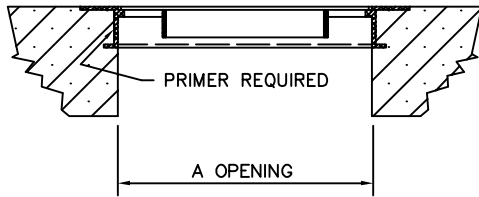
DATE:
10/23/03

SHEET NO.
PS-8





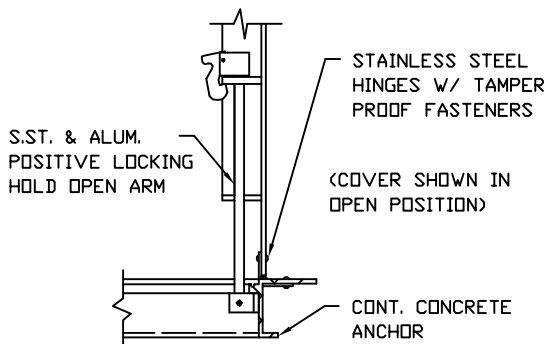
PLAN



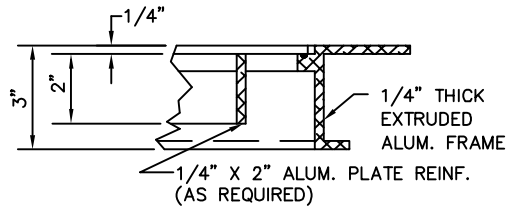
SECTION A-A

STANDARD FEATURES:

- AUTO-LOCK STAINLESS STEEL HOLD OPEN ARM WITH RELEASE HANDLE
- STAINLESS STEEL HINGES AND ATTACHING HARDWARE
- NON-CORROSIVE LOCKING BAR AND HANDLE
- SINGLE LEAF CONSTRUCTION
- 300 LBS. PER SQ. FT. LOAD RATING
- 10 YEAR GUARANTEE



SECTION B-B



SECTION C-C

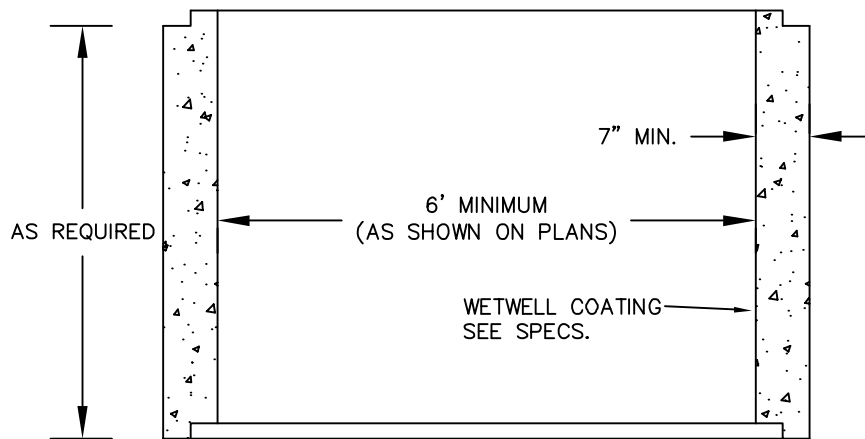
CONCRETE PUMP STATION HATCH

CITY OF NORTH MYRTLE BEACH
ENGINEERING DIVISION

APPROVED BY: KDB
DRAWN BY: KJG

DATE:
10/23/03
SHEET NO.
PS-9





NOTES:

1. ALL STANDARD SEWER MANHOLE SECTIONS TO MEET OR EXCEED THE REQUIREMENTS OF ASTM C478.
2. ALL STEPS INSTALLED IN MANHOLE SECTIONS TO HAVE SERRATED TREAD * TALL END LUGS TO PREVENT FEET FROM SLIPPING.
3. BUTYL RUBBER SEALANT IS REQUIRED FOR SEALING JOINTS. O-RING GASKETS MAY BE USED.

CONCRETE WETWELL
RISER SECTION

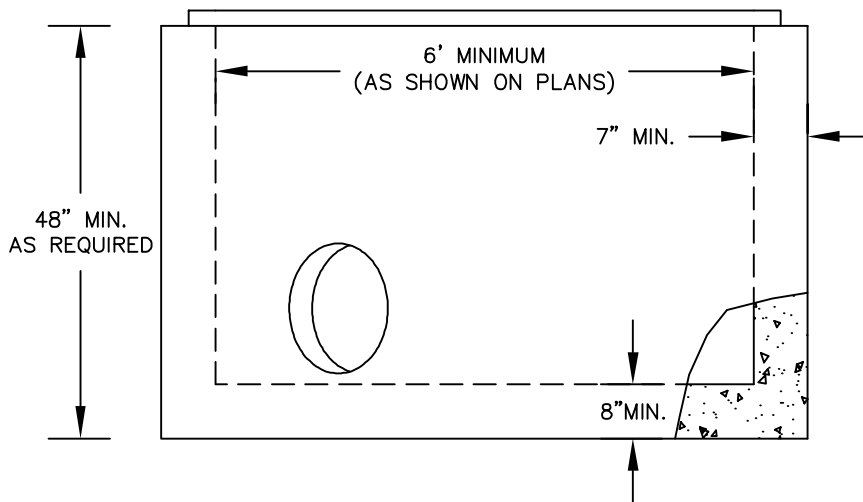
CITY OF NORTH MYRTLE BEACH
ENGINEERING DIVISION

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DATE:
10/23/03

SHEET NO.
PS-10





NOTES:

1. ALL STANDARD SEWER MANHOLE SECTIONS TO MEET OR EXCEED THE REQUIREMENTS OF ASTM C478.
2. ALL STEPS INSTALLED IN MANHOLE SECTIONS TO HAVE SERRATED TREAD * TALL END LUGS TO PREVENT FEET FROM SLIPPING.
3. BUTYL RUBBER SEALANT IS REQUIRED FOR SEALING JOINTS. O-RING GASKETS MAY BE USED.

CONCRETE WETWELL
MONOLITHIC BASE SECTION

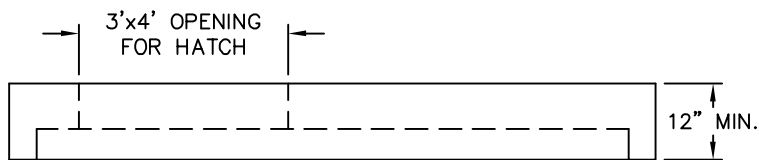
CITY OF NORTH MYRTLE BEACH
ENGINEERING DIVISION

APPROVED BY: KDB
DRAWN BY: KJG

DATE:
10/23/03

SHEET NO.
PS-11





NOTES:

1. ALL STANDARD SEWER MANHOLE SECTIONS TO MEET OR EXCEED THE REQUIREMENTS OF ASTM C478.
2. ALL STEPS INSTALLED IN MANHOLE SECTIONS TO HAVE SERRATED TREAD * TALL END LUGS TO PREVENT FEET FROM SLIPPING.
3. BUTYL RUBBER SEALANT IS REQUIRED FOR SEALING JOINTS. O-RING GASKETS MAY BE USED.

CONCRETE WETWELL
FLAT SLAB TOP SECTION

CITY OF NORTH MYRTLE BEACH
ENGINEERING DIVISION

APPROVED BY: KDB
DRAWN BY: KJG

DATE:
10/23/03

SHEET NO.
PS-12

