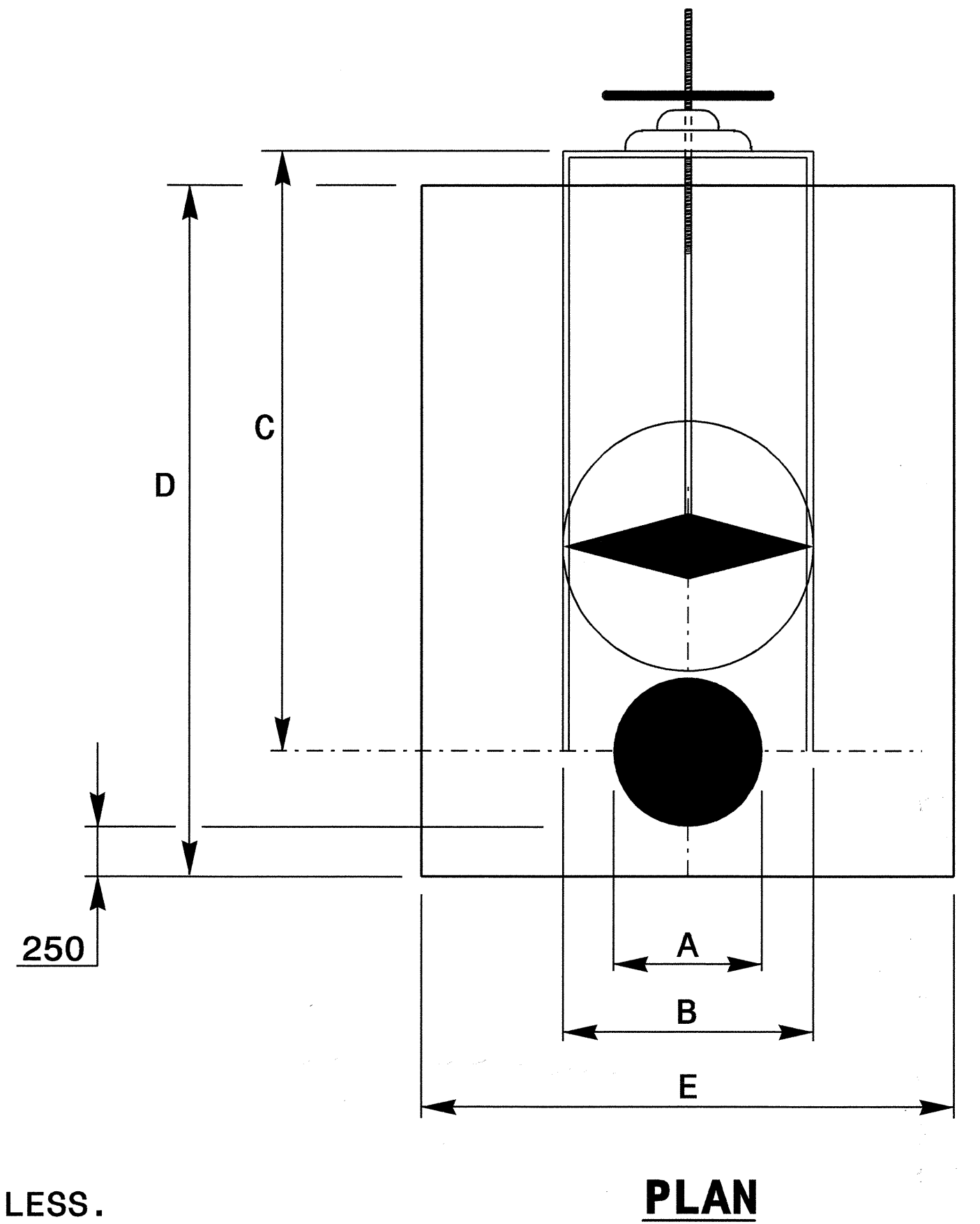


**NOTE:**  
 -THIS DETAIL FOR THE SLUICE GATE PROVIDES ONLY BASIC INFORMATION FOR PLACEMENT.  
 -INSTALL THE SLUICE GATE IN ACCORDANCE WITH THE MANUFACTURER'S DIMENSIONS AND SPECIFICATIONS.  
 -SEE PLANS FOR LOCATIONS AND PIPE SIZES

SLUICE GATE DIMENSIONS								
PIPE DIAMETER	A	375mm	450mm	600mm	750mm	900mm	1050mm	1200mm
GATE DIAMETER	B	550mm	625mm	800mm	970mm	1.15m	1.33m	1.48m
FRAME HEIGHT, MIN.	C	900mm	900mm	1.20m	1.50m	1.80m	2.10m	2.40m
H. W. HEIGHT, MIN.	D	1.34m	1.38m	1.75m	2.13m	2.50m	3.04m	3.41m
H. W. WIDTH	E	1.68m	1.93m	2.44m	2.80m	3.35m	3.80m	4.20m

**DIMENSIONS AND QUANTITIES FOR RCP OR CSP**  
 CALCULATIONS BASED ON CONCRETE PIPE

PIPE DIA.	H <sup>1</sup> MINIMUM DIMENSIONS							m <sup>3</sup>
	D	H	B	G	T	S	L	
375	991	508	838	57	241	1676	0.5	
450	1092	559	965	64	254	1930	0.8	
600	1270	635	1219	76	254	2438	1.1	
750	1524	762	1397	108	292	2794	1.8	
900	1727	813	1676	121	292	3353	2.6	
1050	1880	864	1900	160	292	3800	3.1	
1200	2057	940	2100	155	292	4200	4.2	



**REBAR IN ENDWALL (H<sup>1</sup> MIN.)**

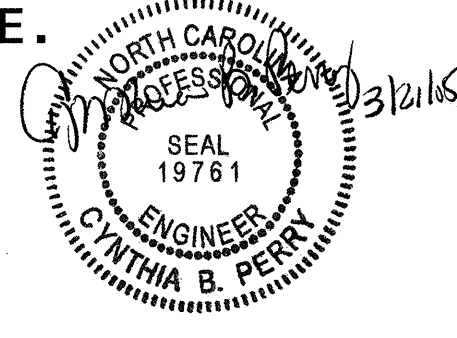
LOC.	USE WITH RC OR CS PIPE	PIPE DIA.						
		375	450	600	750	900	1050	1200
2G	X BARS	6	7	9	10	12	14	15
2G	HORZ BARS	4	4	5	6	7	8	9
TOTAL kg.		18	23	34	44	60	75	90

**H<sup>2</sup> QUANTITIES**

PIPE DIA.	PER 1.0m ADDITIONAL HEIGHT	
	STEEL kg.	CONC m <sup>3</sup>
375	10.7	0.4
450	12.4	0.4
600	15.9	0.6
750	18.0	0.6
900	21.6	0.8
1050	25.2	0.9
1200	28.9	1.0

- GENERAL NOTES:**
- LIMIT VARIABLE HEIGHT DIMENSION (H) TO FRAME HEIGHT OF SLUICE GATE, 1.0m ABOVE THE H<sup>1</sup> DIMENSION OR 3.0m WHICHEVER IS LESS.
  - ATTACHMENT OF GATE MAY REQUIRE SPECIFIC POSITIONING OF PIPE AND/OR MODIFICATION OF ENDWALL. CONFIRMATION OF GATE DIMENSIONS AND ATTACHMENT METHOD IS RECOMMENDED PRIOR TO CONSTRUCTION OF ENDWALL.
  - PLACE NO. 13 REBAR ON 300mm HORIZONTAL AND VERTICAL CENTERS WITH 50mm MINIMUM CONCRETE COVERAGE.
  - CONSTRUCT A 25mm CHAMFER OR RADIUS ON ALL EXTERIOR CORNERS.
  - USE FORMS TO CONSTRUCT THE BOTTOM SLAB.
  - WALL THICKNESS (T) IS USED TO COMPUTE QUANTITIES, NOT TO INFER SIZE.
  - WHEN THE BASE IS POURED SEPARATELY, LEAVE THE POUR ROUGH.
  - USE CLASS 'B' CONCRETE.
  - CUT OR BEND REBAR AS NEEDED TO ACCOMMODATE PIPE.

STRUCTURE NOS. 112A, 113A, 122A, 123A, 152A, 158A, 165, 185, 190, 194



**PROJECT SERVICES UNIT**  
**STANDARDS AND SPECIAL DESIGN**  
 Office 919-250-4128 FAX 919-250-4119

**DETAIL OF ENDWALL AND SLUICE GATE FOR 375mm TO 1200mm PIPE**

ORIGINAL BY: E.E. WARD DATE: 11-30-00  
 MODIFIED BY: T.S. Spell DATE: 10-28-04  
 CHECKED BY: [Signature] DATE: 1/16/05  
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