

CEDAR RIDGE WATER SYSTEM

PROPERTY OF
CURTIS O. SIMMONS
BOTETOURT COUNTY, VIRGINIA



SUMMARY OF ESTIMATED QUANTITIES

WATER DISTRIBUTION

8 INCH CLASS 200, SDR-21 PVC PIPE	550 L.F.
12 INCH CLASS 200, SDR-21 PVC PIPE	4200 L.F.
8 INCH GATE VALVES WITH BOXES	4 EA.
12 INCH GATE VALVES WITH BOXES	1 EA.
TYPE B FLUSH VALVES	5 EA.
WORM ASSEMBLIES	4 EA.
81616 TEES	1 EA.
81614 TEES	1 EA.
81612 CROSS	1 EA.

MISCELLANEOUS

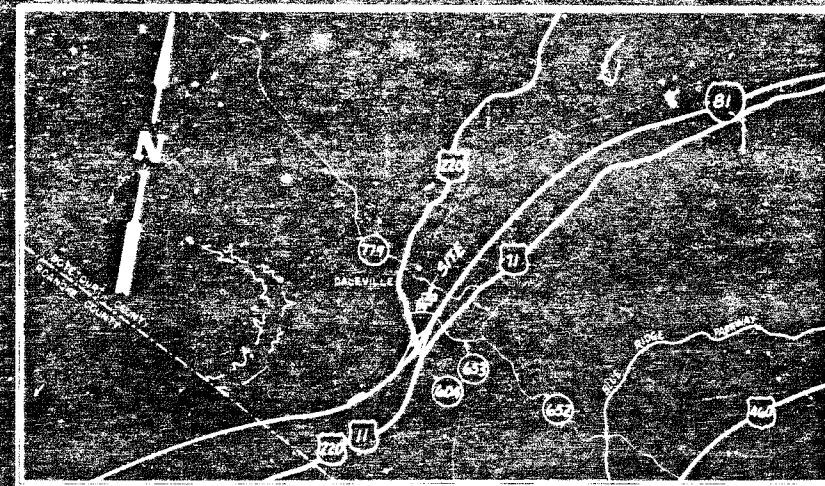
DOUBLE METER CONNECTIONS WITH METER & BOXES	29 EA.
SINGLE METER CONNECTIONS WITH METER & BOXES	4 EA.
20,000 GALLON METAL STORAGE TANK	1 EA.

WELL DEVELOPMENT

2 INCH GATE VALVES (WELL HOUSE)	4 EA.
2 INCH CHECK VALVES (WELL HOUSE)	1 EA.
WATER METER	1 EA.
HOSE BIB CONNECTION	1 EA.
DRAWDOWN GAUGE (0-100 PSI)	1 EA.
WELL VENT	1 EA.
SANITARY SEAL	1 EA.
WELL HEATERS	2 EA.
WELL ENCLOSURE	1 EA.
WELL PUMP	1 EA.

ENGINEERS NOTE

QUANTITIES SHOWN ARE ESTIMATED AND ARE FOR INFORMATION TO THE CONTRACTOR. THE ENGINEER DOES NOT EXPRESSLY OR BY IMPLICATION GUARANTEE THAT THE ACTUAL QUANTITIES INVOLVED WILL CORRESPOND EXACTLY WITH THE QUANTITIES SHOWN. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN.



VICINITY MAP
SCALE: 1 inch = 2 miles

LEGEND

EXIST. CONTOUR INTERVAL	10'
PROPERTY LINE	---
CENTERLINE OF ROW	---
6" WATER LINE	---
12" WATER LINE	---
WATER VALVE	---
FIRE HYDRANT	---
DOUBLE METER CONNECTION	---
SINGLE METER CONNECTION	---
FLUSH VALVE	---

INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	DISTRIBUTION SYSTEM LAYOUT
3	WELL ENCLOSURE & WELL DIAGRAM
4	SITE PLAN, WELL & STORAGE FACILITIES
5	STORAGE TANK DETAILS
6	STANDARD DETAIL SHEET

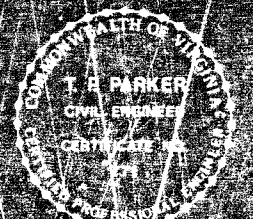
VIRGINIA DEPARTMENT OF HEALTH
Approved by: *Allen R. H. H. H.* Director
Date: 2/27/61

358-2348.1

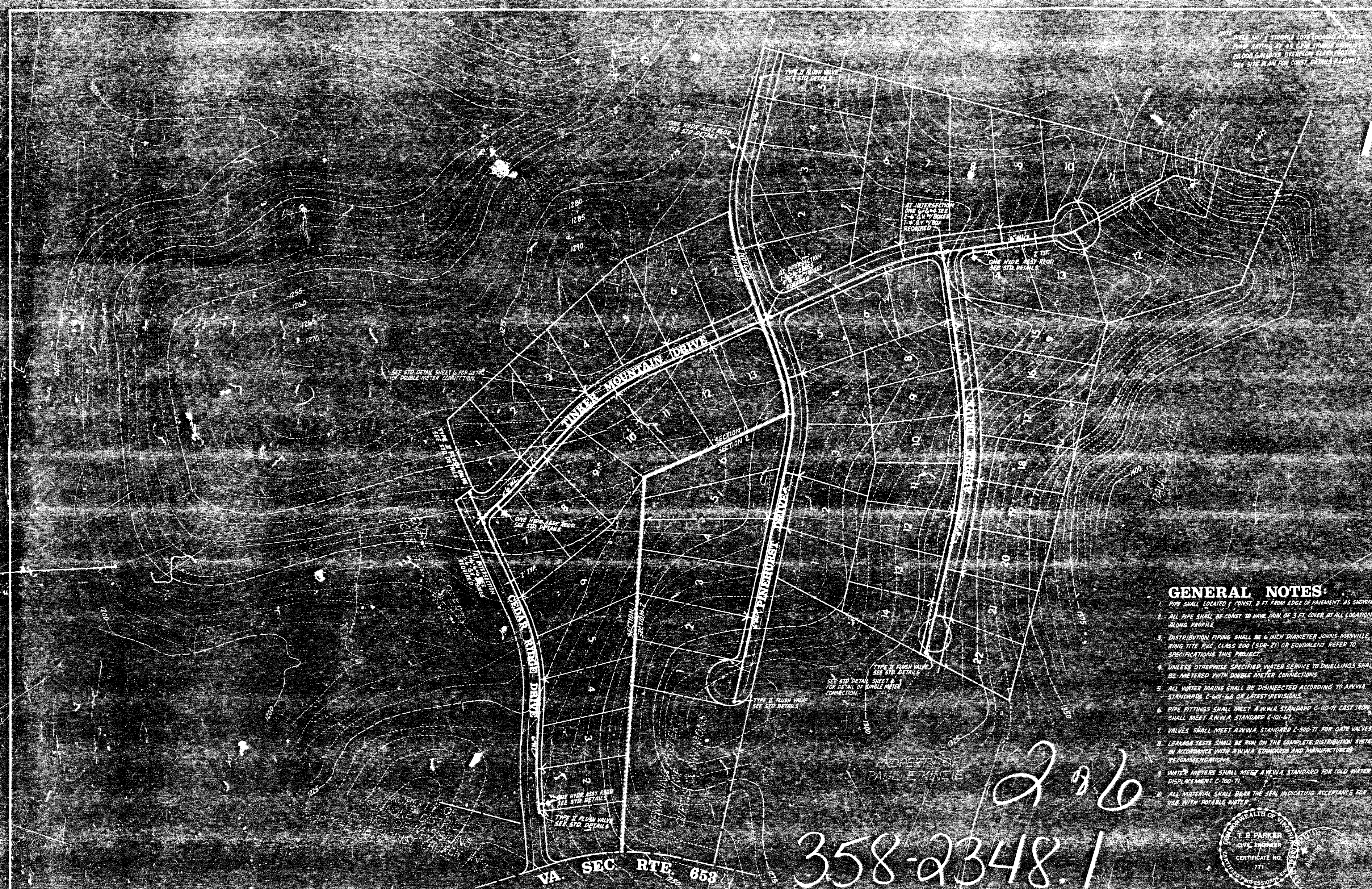
186

T. P. PARKER & SON
engineers & surveyors, Inc.

TELEPHONE: 444-1111
P.O. BOX 100, BOTETOURT COUNTY, VIRGINIA

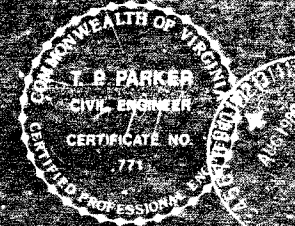


SHEET 1



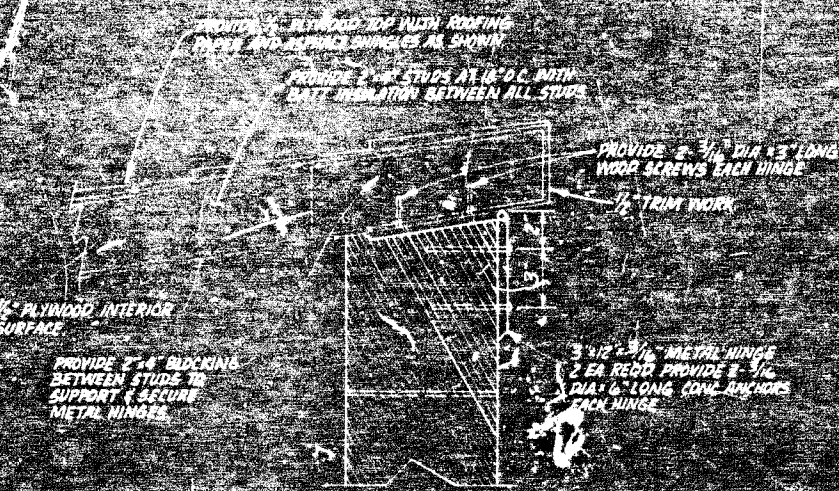
GENERAL NOTES:

1. PIPE SHALL BE LOCATED 1' CONST. 2' FT FROM EDGE OF PAVEMENT AS SHOWN.
2. ALL PIPE SHALL BE CONST. TO HAVE MIN. OF 3' FT COVER AT ALL LOCATIONS ALONG PROFILE.
3. DISTRIBUTION PIPING SHALL BE 6" INCH DIAMETER JOHNS-MANVILLE RING TYPE PVC, CLASS 200 (SDR-21) OR EQUIVALENT, REFER TO SPECIFICATIONS THIS PROJECT.
4. UNLESS OTHERWISE SPECIFIED, WATER SERVICE TO DWELLINGS SHALL BE METERED WITH DOUBLE METER CONNECTIONS.
5. ALL WATER MAINS SHALL BE DISINFECTED ACCORDING TO AWWA STANDARDS C-601-6.8 OR LATEST REVISIONS.
6. PIPE FITTINGS SHALL MEET AWWA STANDARD C-100-71 CAST IRON SHALL MEET AWWA STANDARD C-101-67.
7. VALVES SHALL MEET AWWA STANDARD C-500-71 FOR GATE VALVES.
8. LEAKAGE TESTS SHALL BE RUN ON THE COMPLETE DISTRIBUTION SYSTEM IN ACCORDANCE WITH AWWA STANDARDS AND MANUFACTURERS RECOMMENDATIONS.
9. WATER METERS SHALL MEET AWWA STANDARD FOR COLD WATER DISPLACEMENT C-100-71.
10. ALL MATERIAL SHALL BEAR THE SEAL INDICATING ACCEPTANCE FOR USE WITH POTABLE WATER.

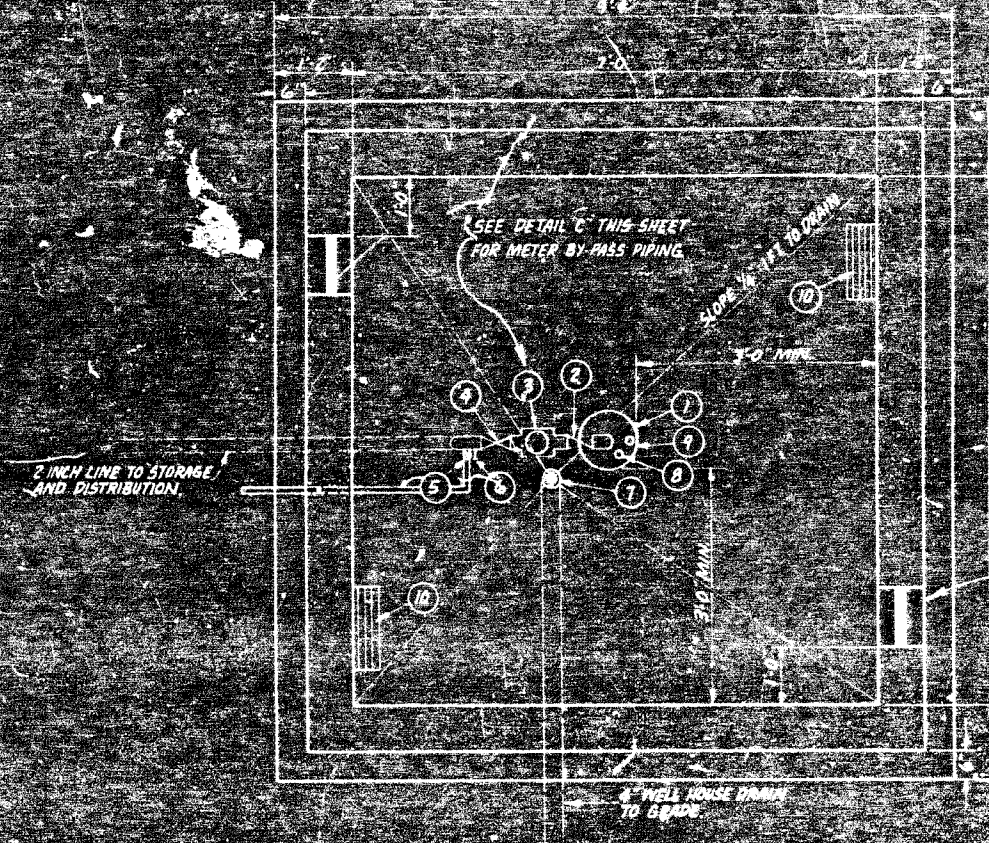


REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>REVISION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>7/28/80</td> <td>T.P.P.</td> <td>ISSUED FOR CONSTRUCTION</td> </tr> </tbody> </table>	NO.	DATE	BY	REVISION	1	7/28/80	T.P.P.	ISSUED FOR CONSTRUCTION	T. P. PARKER & SON engineers & surveyors, ltd. TELEPHONE 47031-287-1153 P.O. BOX 367, SALEM, VIRGINIA 24153	DISTRIBUTION SYSTEM LAYOUT SECTIONS NO 1&2 CEDAR RIDGE WATER SYSTEM SCALE 1"=100' JULY 28, 1980	SHEET 2 OF 6
NO.	DATE	BY	REVISION								
1	7/28/80	T.P.P.	ISSUED FOR CONSTRUCTION								

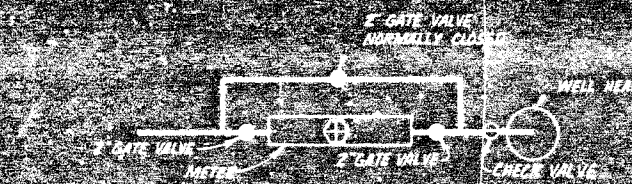
DETAIL A' ROOF HINGE DETAILS



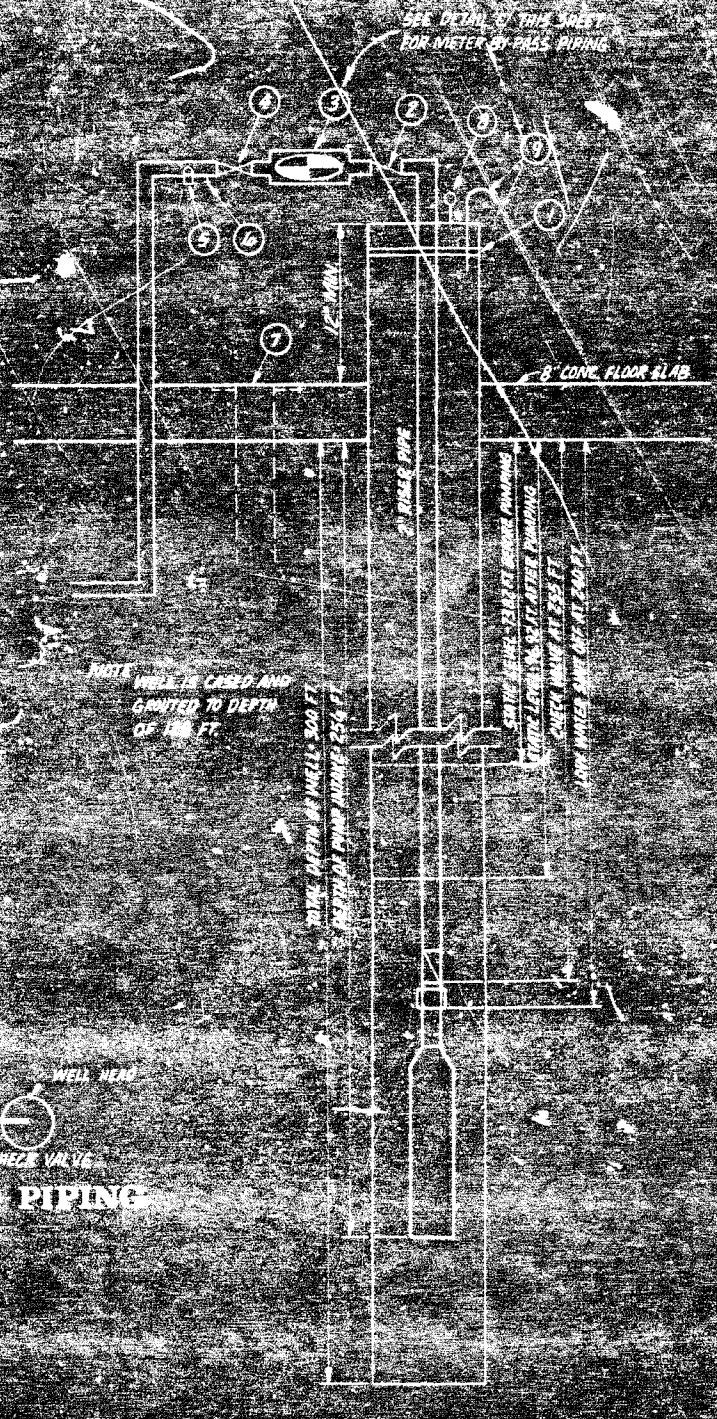
PLAN VIEW WELL ENCLOSURE



DETAIL C' METER BY-PASS PIPING



WELL DIAGRAM



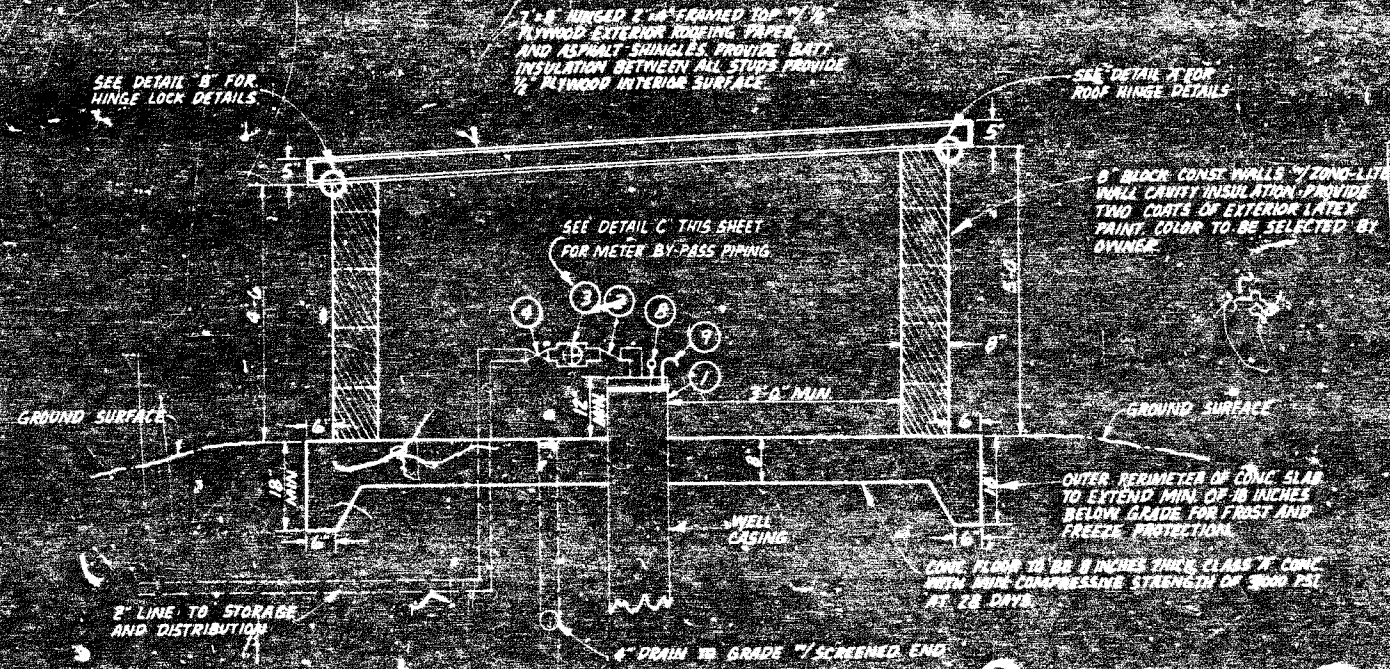
WELL PUMP DATA	
RESERVOIR OVERFLOW ELEV.	147.00
WELL HEAD ELEV.	137.00
PUMP INTAKE	137.00
STATIC HEAD DIFFERENTIAL	10.00
DESIGN PUMP RATE	40 GPM
DESIGN HEAD	25 FT
TOTAL DYNAMIC HEAD	25 FT
PUMP SELECTION	4 INCH BOLLARD SUBMERSIBLE
SHAFT 1/2 INCH	
SINGLE PHASE 230 VOLT	
DYNAMIC HEAD 25 FT	
40 GPM DELIVERY	
MODEL NO. VTS 50-112	

NOTE: PUMP OF EQUAL RATING, DESIGN AND QUALITY MAY BE APPROVED UPON SUBMITTAL OF NECESSARY SPECIFICATIONS AND PUMP CURVES TO THE ENGINEER.

DETAIL B' TOP ROOF HINGE LOCK DETAILS

1. WELL HEAD WITH "STURDY" SEAL. TOP OF WELL HEAD SHOWN OF 1/2" ABOVE CONCRETE FLOOR OF ENCLOSURE.
2. 2 INCH CHECK VALVE TO BE INSTALLED IMMEDIATELY BEHIND WATER METER.
3. TOTALIZING TYPE WATER METER RATED FOR 50 GPM.
4. 2 INCH GATE VALVE TO BE INSTALLED IMMEDIATELY AHEAD OF WATER METER.
5. PROVIDE 1/2 INCH PIPE CONN. VALVE FOR WELL DISCHARGE TO WASTE THRU WALL AS SHOWN.
6. PROVIDE SAMPLE TAP AND LOCATE IN VICINITY OF FLOOR DRAIN AS SHOWN.
7. LOCATE 4" FLOOR DRAIN IN FLOOR AS SHOWN AND PROVIDE 4" PIPE DRAIN TO GRADE, SCREEN END.
8. PROVIDE AIR LINE AND DRAW DOWN PRESSURE GAUGE ON WELL HEAD AS SHOWN. GAUGE RATED AT 0 TO 100 P.S.I.
9. PROVIDE WELL VENT PIPE WITH SCREENED END ON WELL HEAD AS SHOWN.

ELEVATION WELL ENCLOSURE



358-2348.1

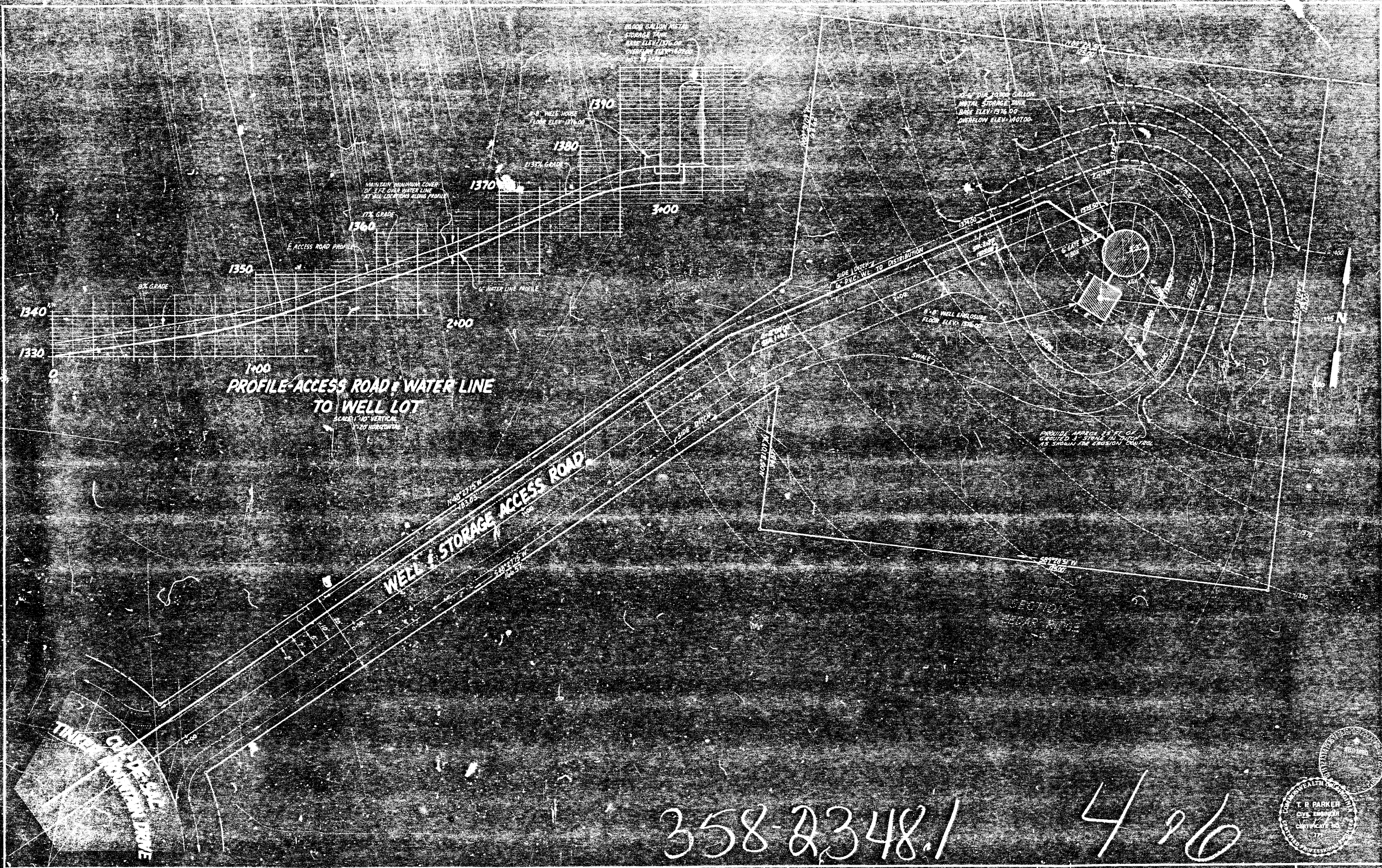
3 26

DATE	REVISIONS	BY
11/27/80	NOTE 5, WELL DISCHARGE	
11/27/80		
11/27/80		
11/27/80		
11/27/80		

T. P. PARKER & SON
engineers & surveyors, ltd.
TELEPHONE (703) 987-1153
P.O. BOX 477, SALEM, VIRGINIA 24154

WELL & ENCLOSURE LAYOUT
CEDAR RIDGE
HOTETOURT COUNTY, VIRGINIA
SCALE: NONE
JULY 29, 1980

SHEET 3
OF 6



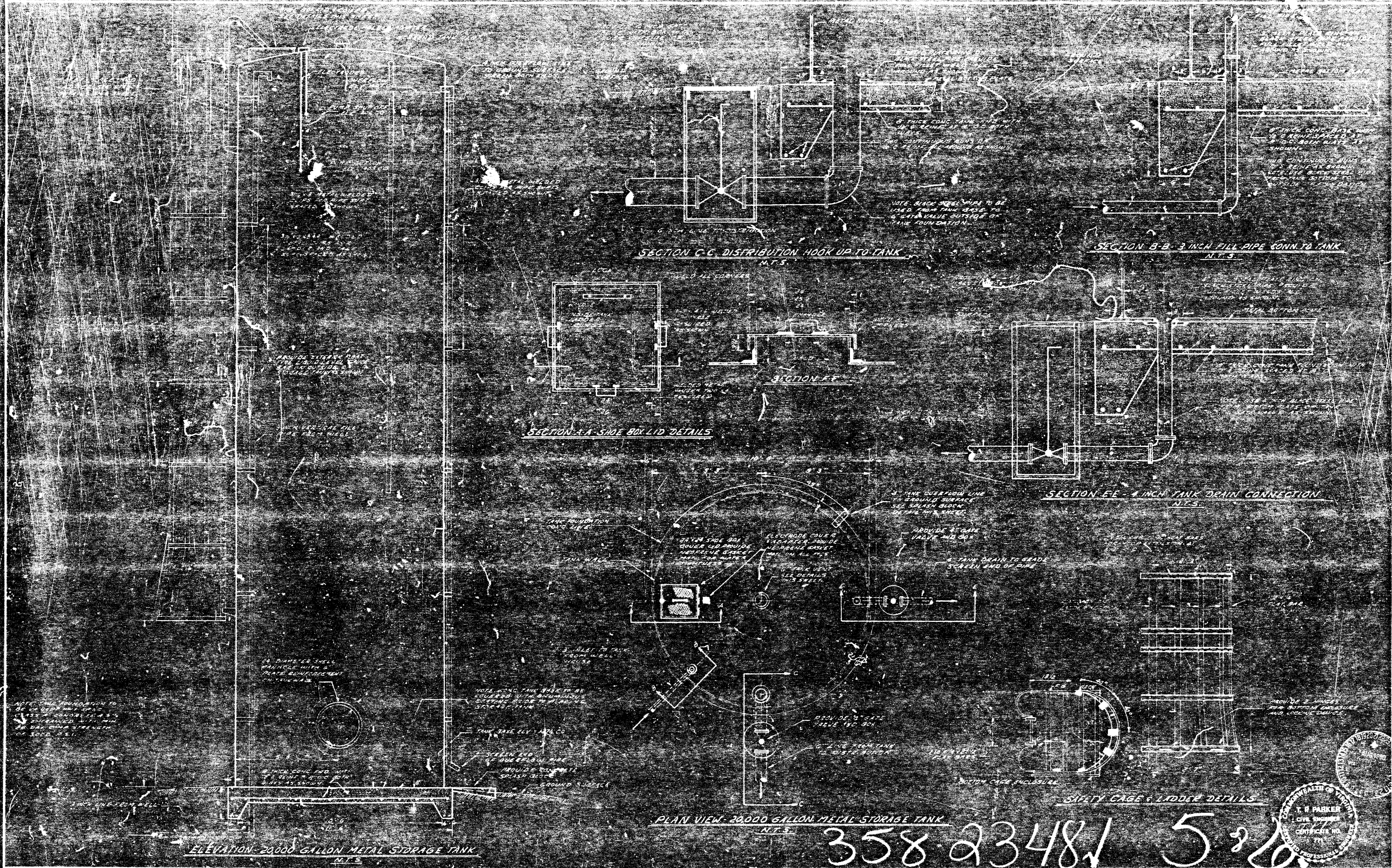
DATE	REVISIONS	BY
10-2-58	1	J.P.
10-2-58	2	J.P.
10-2-58	3	J.P.
10-2-58	4	J.P.
10-2-58	5	J.P.
10-2-58	6	J.P.
10-2-58	7	J.P.
10-2-58	8	J.P.
10-2-58	9	J.P.
10-2-58	10	J.P.

T. P. PARKER & SON
 engineers & surveyors, Ltd.
 TELEPHONE 703-28-1103
 100 N. 10th St. SALT LAKE CITY, UTAH

SITE PLAN & PROFILE
WELL, FACILITIES & ACCESS ROAD
CEDAR RIDGE
 BORTOUR COUNTY, VIRGINIA
 SCALE 1"=10' AUGUST 6, 1960

SHEET **4**
 OF **6**





REVISIONS	
DATE	REMARKS
10/1/50	REVISED
10/1/50	REVISED
10/1/50	REVISED
10/1/50	REVISED
10/1/50	REVISED
10/1/50	REVISED
10/1/50	REVISED
10/1/50	REVISED
10/1/50	REVISED
10/1/50	REVISED

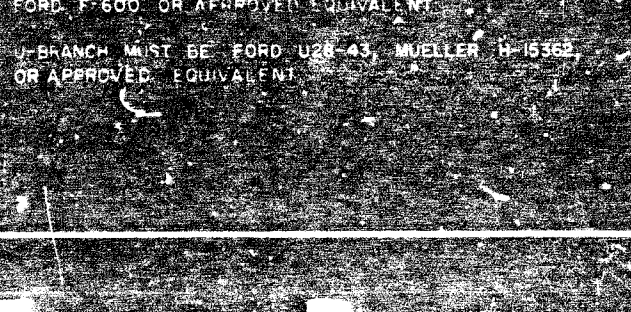
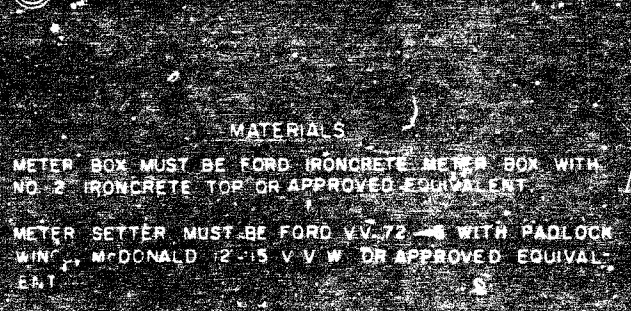
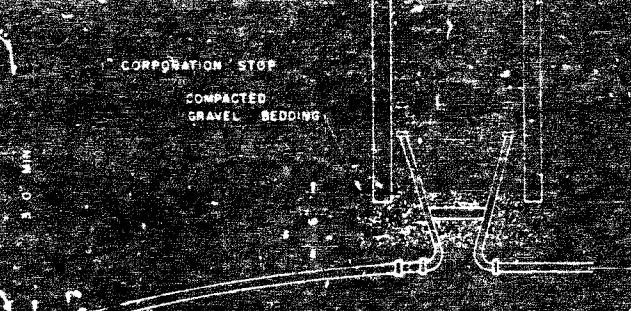
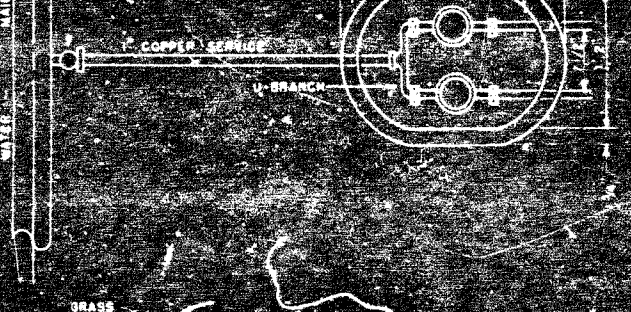
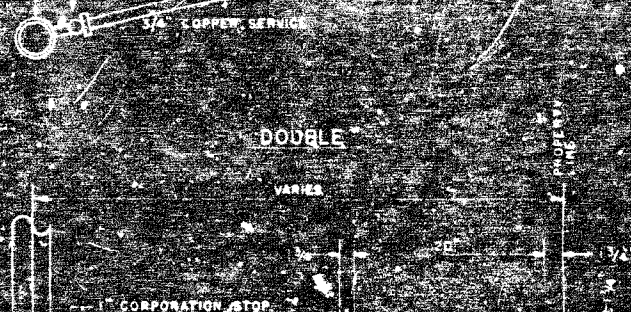
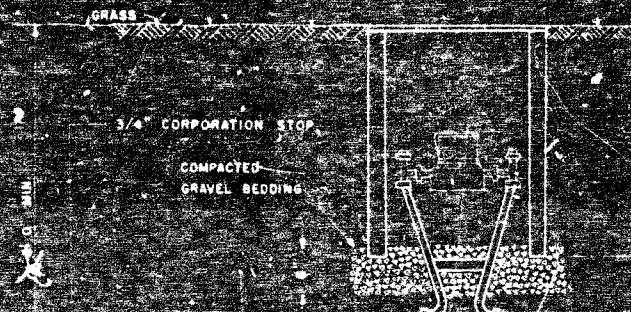
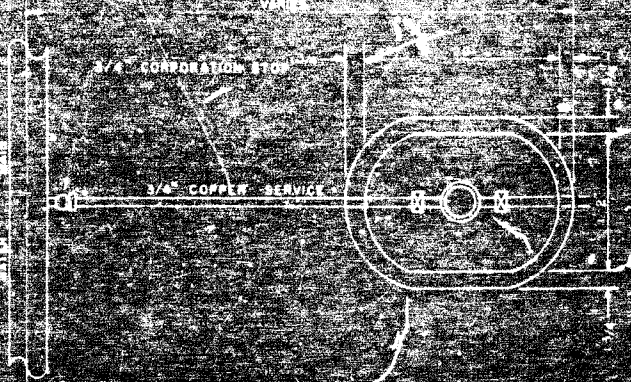
T. P. PARKER & SON
engineers & surveyors, ltd.
TELEPHONE (703) 381-1150
P.O. BOX 207, SALEM, VIRGINIA 24153

358-23481 526

SHEET 5
of 6

RESIDENTIAL WATER METER INSTALLATION

SINGLE



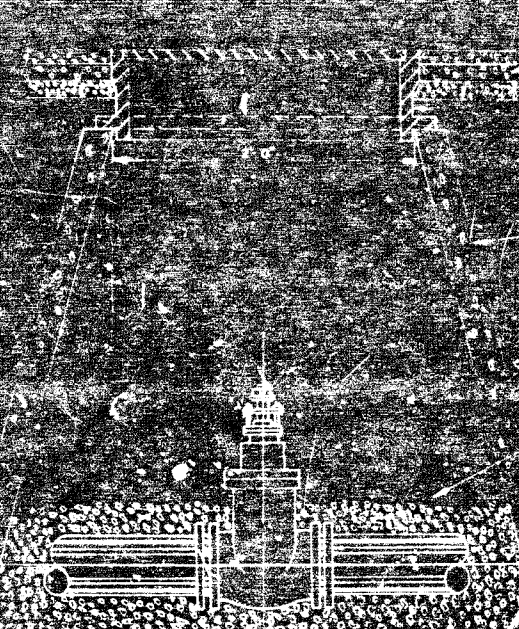
THRUST BLOCK

(CONCRETE OR CAST-IRON BLOCK)

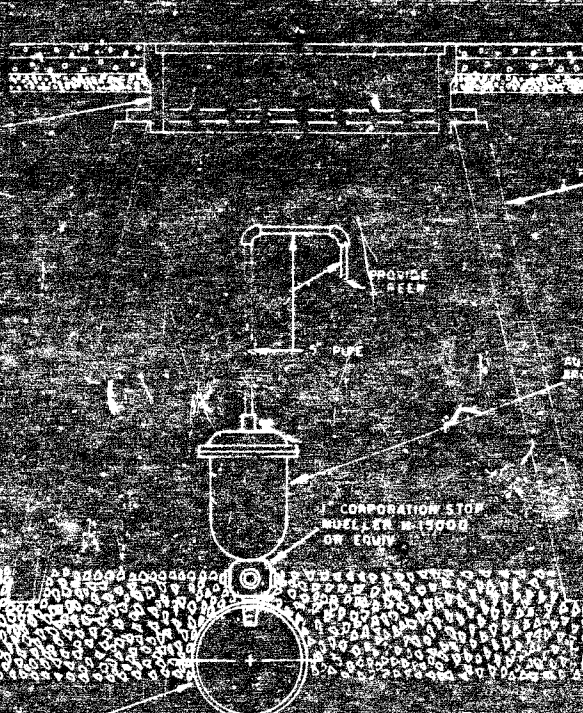
PIPE SIZE	TEE OR CROSS	90° BEND	45° BEND	22 1/2° & 11 1/4° BENDS
4"	2.0	3.0	1.5	1.0
6"	3.0	4.5	2.25	1.5
8"	4.0	6.0	3.0	2.0
10"	5.0	7.5	3.75	2.5
12"	6.0	9.0	4.5	3.0
14"	7.0	10.5	5.25	3.5
16"	8.0	12.0	6.0	4.0
18"	9.0	13.5	6.75	4.5
20"	10.0	15.0	7.5	5.0
24"	12.0	18.0	9.0	6.0
30"	15.0	22.5	11.25	7.5
36"	18.0	27.0	13.5	9.0
42"	21.0	31.5	15.75	10.5
48"	24.0	36.0	18.0	12.0
54"	27.0	40.5	20.25	13.5
60"	30.0	45.0	22.5	15.0

NOTE: CONCRETE SHALL NOT BE POURED ON JOINTS, LIMITING FLEXIBILITY.

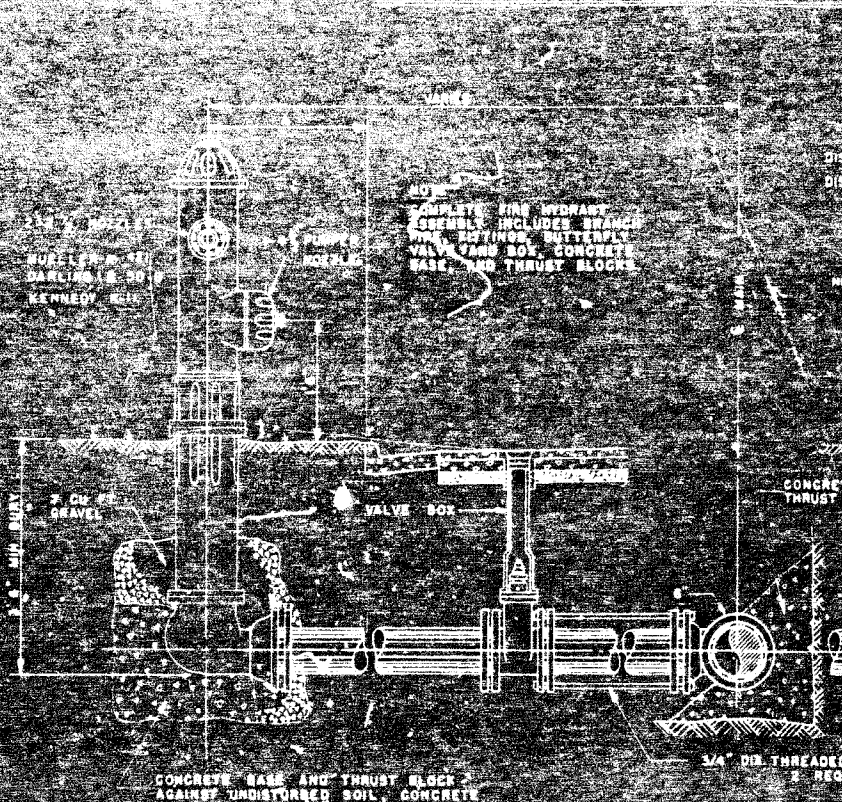
MAIN LINE VALVE INSTALLATION



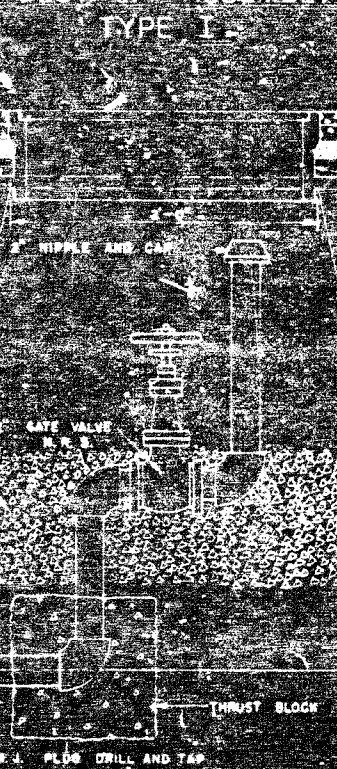
AUTOMATIC AIR RELEASE ASSEMBLY



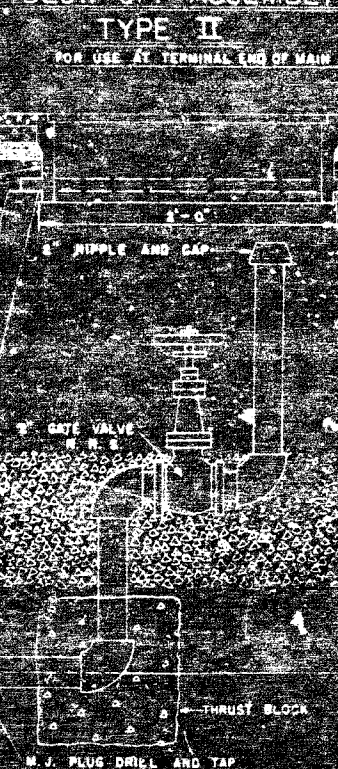
HYDRANT SETTINGS



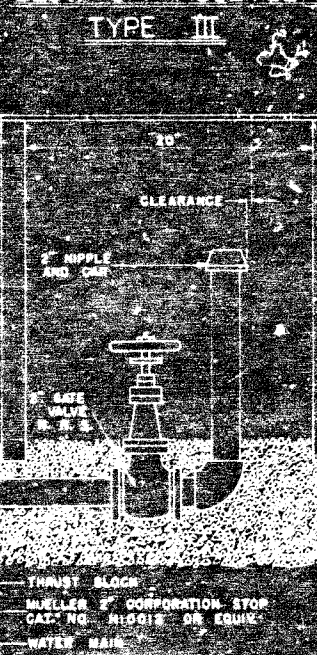
BLOW OFF ASSEMBLY TYPE I



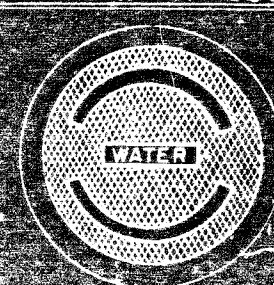
BLOW OFF ASSEMBLY TYPE II



BLOW OFF ASSEMBLY TYPE III



STANDARD WATER COVER



358-2348.1
606

STANDARD WATER DETAILS
CEDAR RIDGE
PROPERTY OF
CURTIS O. SIMMONS
NOTED BY CURTIS O. SIMMONS
T. P. PARKER & SON
ENGINEERS & SURVEYORS, LTD.
SALEM, VIRGINIA