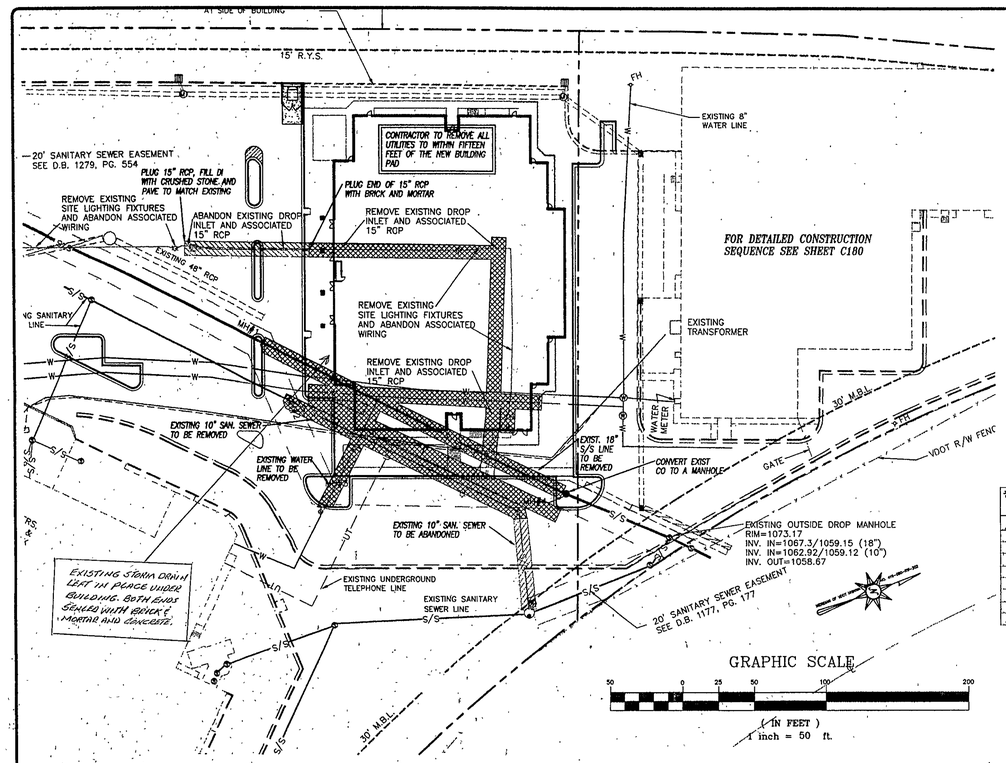


UTILITY REMOVAL AND ABANDONMENT PLAN

STANDARD UTILITY LEGEND		
DESCRIPTION	EXISTING	PROPOSED
SANITARY SEWER (W / MANHOLE)	14 LF EX. 8" PVC S/S; EX S/S; MH #4	CO; S/S; MH #1; 14 LF 8" PVC S/S
WATER LINE	EX. 8" DIP WATER LINE; EX WL	8" DIP WATER LINE; WL
WATER LINE (W / HYDRANT & METER)	EXFH; 5/8" MTR; EX WL; EX. 8" DIP WL	FH; 5/8" MTR; VALVE; 8" DIP WATER LINE; 8"x6" TEE; 8"x6" REDUCER
TRANSFORMER PAD	T	T
OVERHEAD ELECTRIC	EX.OHE; EX PP	OHE; PP
UNDERGROUND ELECTRIC	EX.UGE	UGE
TELEPHONE LINES	EX.T	T
CABLE LINES	EX.CBL	CBL
GAS LINES	EX.G	G
SITE LIGHTING		SINGLE HEAD: 1000 WATTS H.P.S. 50' HIGH ROUND ALUMINUM POLES ON A CONCRETE BASE
		DOUBLE HEAD: 1000 WATTS H.P.S. 50' HIGH ROUND ALUMINUM POLES ON A CONCRETE BASE
		QUADRUPLE HEAD: 1000 WATTS H.P.S. 50' HIGH ROUND ALUMINUM POLES ON A CONCRETE BASE
		WALL PACK LIGHTING
		EXISTING LIGHT POLE

WATER NOTES

FROM FIRE HYDT.	DISTANCE	DISTANCE FROM "CORNER" OF BUILDING
45° BEND-DOMESTIC LINE	93.0'	60.0'
45° BEND-FIRE LINE	94.0'	62.8'
8" VALVE-DOMESTIC LINE	9.5'	82.8'
8" VALVE-FIRE LINE	12.5'	84.8'
6" HYDT. VALVE	6.9'	80.4'
8" 45° BEND	11.0'	85.0'
8"TO 4" REDUCER	10.0'	83.7'

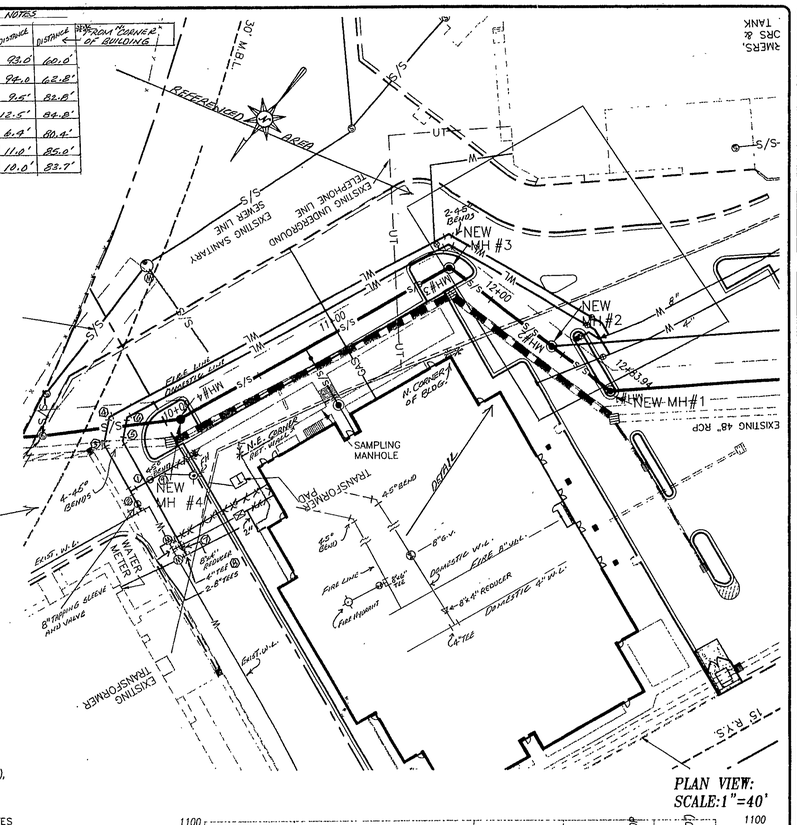
WATER NOTES

FROM N.E. RETAINING WALL CORNER	DISTANCE	DISTANCE FROM FIRE HYDRANT
FIRE HYDRANT VALVE	68.8'	4.8.1'
8" FIRE VALVE	68.9'	44.5'
45° BEND	75.0'	44.8'
45° BEND	74.0'	50.8'
45° BEND	62.0'	36.0'
45° BEND	67.8'	39.0'
8"TO 4" REDUCER	62.5'	52.5'
4" TEE	62.3'	54.5'
22½ BEND	59.8'	36.0'

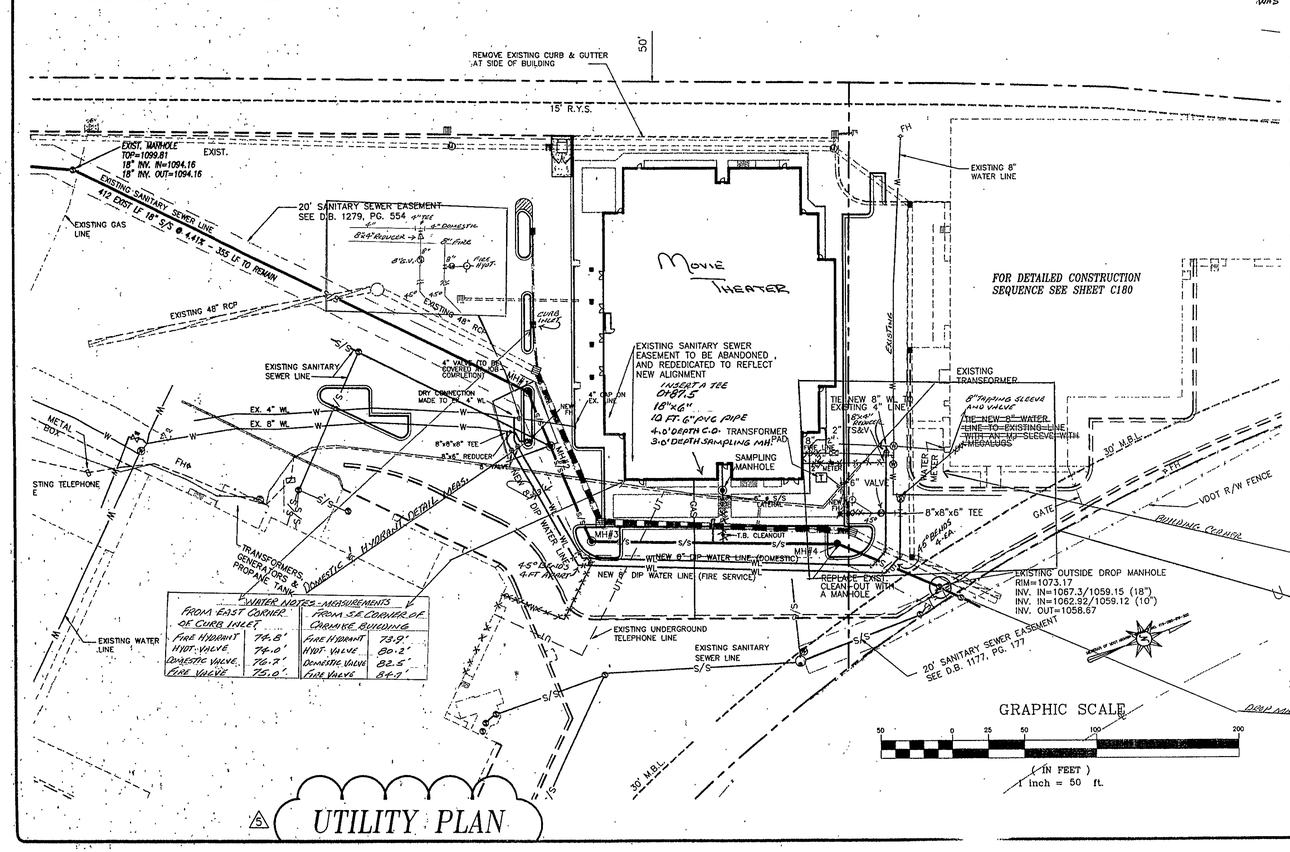
REFERENCED AREA

STRUCTURE	RIM	INVERT IN	INVERT OUT	SIZE AND MATERIAL	LENGTH OF PIPE	SLOPE %
MANHOLE 1	1089.80	1078.50-EXIST 18"	1078.40	18" ø (SEE NOTE)	35 L.F.	8.91%
MANHOLE 2 DROP MH	1088.50	1078.00-NEW 18" 1080.05-EXIST 10" 1078.00-DROP	1077.90	18" ø (SEE NOTE)	77 L.F.	0.50%
MANHOLE 3	1086.88	1075.74-NEW 18"	1075.64	18" ø (SEE NOTE)	141 L.F.	4.54%
MANHOLE 4	1076.10	1070.00-NEW 18"	1069.90	18" ø (SEE NOTE)	EXIST OUT	3.25% EX.

NOTE: THE SEWER LINE ~~WAS BE~~ WAS CONSTRUCTED OF ~~PVC (SDR 35)~~, PVC-RIBBED PIPE (STIFFNESS 46), ~~OR DIP (CLASS 51)~~, SERVICE CONNECTIONS ~~WERE~~ WAS PVC (SDR 35) ~~OR~~ AND PVC (SCHEDULE 40).



PLAN VIEW: SCALE: 1"=40'



WATER NOTES-MEASUREMENTS

FROM EAST CORNER OF CURB INLET		FROM S.E. CORNER OF CONCRETE BUILDING	
FIRE HYDRANT	74.8'	FIRE HYDRANT	73.9'
HYDT. VALVE	74.0'	HYDT. VALVE	80.2'
DOMESTIC VALVE	76.7'	DOMESTIC VALVE	82.5'
FIRE VALVE	75.0'	FIRE VALVE	84.7'

WATER NOTES-MEASUREMENTS

FROM S.E. CORNER OF EXISTING BLDG.	DISTANCE	FROM EXIST. DROP S.S. MANHOLE
8" TAPPING VALVE	57.4'	47.2'
8"x6" TEE - FIRE HYDT.	61.6'	43.5'
8" GATE VALVE - FIRE HYDT.	63.8	45.2'
6" 45° BEND - FIRE HYDT.		
45° BEND - FIRE	69.4'	36.8
45° BEND - FIRE	85.6'	41.5
45° BEND - DOMESTIC	76.6'	46.9
45° BEND - DOMESTIC	93.2	57.0

GENERAL UTILITY NOTES

A) ALL UTILITIES ARE TO BE INSTALLED IN ACCORDANCE WITH THE COUNTY OF ROANOKE STANDARDS AND SPECIFICATIONS.

B) ALL EXISTING UTILITIES LOCATIONS AND INVERTS ARE TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

C) ALL POWER, TELEPHONE, AND GAS SERVICES SHALL BE UNDERGROUND. ACCESS SERVICE ROUTES TO BE COORDINATED WITH THE UTILITY COMPANIES.

D) ADD TO THE NOT TO THE CONTRACTOR ABOUT THE EXISTING UTILTIES VERIFICATION THE FOLLOWING; ANY CHANGE \ MODIFICATION TO THE UTILITIES (WATER, SEWER, & STORM DRAIN) WILL BE REQUIRED TO BE SUBMITTED TO ROANOKE COUNTY ENGINEERING AND\OR UTILITY DEPARTMENT FOR REVIEW AND APPROVAL.

E) ALL WATER MAINS SHALL HAVE A MINIMUM OF 36" OF COVER; 10' MIN. LATERAL AND 18" VERTICAL SEPARATION FROM SEWER LINES.

F) ALL CONNECTIONS TO PUBLIC WATER AND SANITARY SEWER SHALL BE MADE BY OR UNDER THE DIRECT SUPERVISION OF ROANOKE COUNTY UTILITIES DEPARTMENT.

G) FIRE HYDRANTS SHALL BE LOCATED NO CLOSER THAN 50 FEET TO THE BUILDING.

H) CONTRACTOR TO COORDINATE LOCATION OF EXISTING WATER LINES WITH ADJACENT FACILITIES SO AS TO NOT ADVERSELY IMPACT THEIR OPERATIONS.

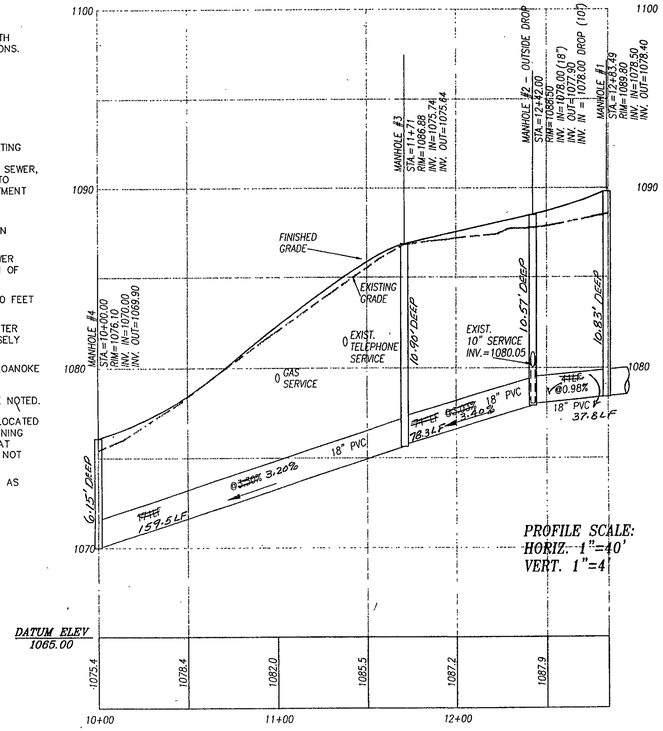
I) ABANDONMENT OF ALL UTILITIES TO BE PERFORMED TO ROANOKE COUNTY UTILITY DEPARTMENT SPECIFICATIONS.

J) ALL MANHOLES TO BE 5' DIAMETER. UNLESS OTHERWISE NOTED.

K) ALL EXTERIOR LIGHTING FIXTURES SHALL BE DESIGNED, LOCATED AND ARRANGED SO AS NOT TO DIRECT GLARE ON ADJOINING STREETS OR RESIDENTIAL PROPERTIES. THE INTENSITY AT ADJOINING STREETS OR RESIDENTIAL PROPERTIES SHALL NOT EXCEED 0.50 FOOT CANDLES.

L) ALL NEW SEWER LINES AND MANHOLES MUST BE TESTED AS REQUIRED BY ROANOKE COUNTY STANDARDS PRIOR TO PLACING IN SERVICES.

UTILITY PLAN



PROFILE SCALE: HORIZ. 1"=40' VERT. 1"=4

NEW 18" SANITARY SEWER

FILE NAME: 9712C120

No.	REVISION	BY
1	REVIEW COMMENTS JULY 14,1997	JC
2	REVIEW COMMENTS AUGUST 5,1997	TJF
3	REVIEW COMMENTS 8 OCTOBER 1997	TJF
4	COUNTY REVIEW OCTOBER 20, 1997	TJF
5	SAN. SEWER REV. 21 JANUARY 1998	GB

RLH

RL Horvath Associates, Inc.
ENGINEERS 2 CONSULTANT PLACE 27707 • P.O. BOX 51806 DURHAM, NC (919) 490-4990 FAX 490-8953 PLANNERS
J. STEWART/PERRY CO

RECEIVED FEB 10 1998

TANGLEWOOD MALL
U.S. ROUTE 220 + VIRGINIA ROUTE 419
ROANOKE, VIRGINIA

UTILITY PLAN

STATE OF VIRGINIA 15126 PROFESSIONAL ENGINEER

DRAWN	JC
CHECKED	RLH
DATE	05/13/97
SCALE	1" = 50'
JOB No.	9712
SHEET No.	C120

4 OF 11 SHEETS