

LAKEWATCH PLANTATION WATER AND SEWER EXTENSION FRANKLIN COUNTY, VIRGINIA

ACS DESIGN

ENGINEERING • SURVEYING
LANDSCAPE ARCHITECTURE
CONSTRUCTION MANAGEMENT

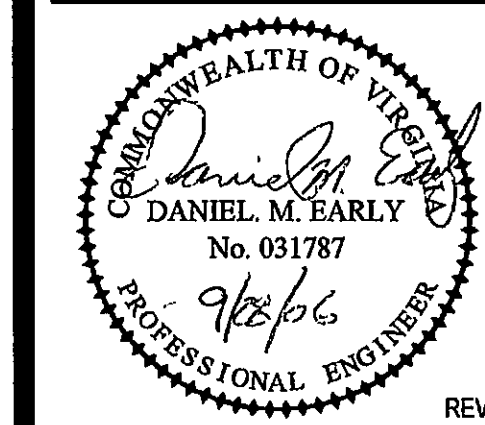
2203 PETERS CREEK ROAD
ROANOKE, VIRGINIA 24017
P 540.562.2345 F 562.2344
INFO@ACSDSIGNLLC.COM
WWW.ACSDSIGNLLC.COM

SHEET INDEX:
C1.0 COVER SHEET
C1.1 SITE PLAN
C2.1 WATER & SEWER
PLAN & PROFILE
C2.2 WATER & SEWER
PLAN & PROFILE
C3.2 GRINDER PUMP DETAILS
C4.1 WATERLINE DETAILS
C4.2 FORCEMAIN DETAILS
C5.1 EROSION & SEDIMENT
NOTES & DETAILS

APPROVED

SEP 29 2006

BY: *Daniel M. Early*



DRAWN BY:		CEK	No. 1	8/31/06
CHECKED BY:		DME	No. 2	9/28/06
DATE:		31 AUG 2006	ADDED GRINDER PUMP DETAILS	
JOB NUMBER:		05050a	No. 3	
SHEET NUMBER:		C1.0	No. 4	

COVER SHEET

ABBREVIATIONS AND ACRONYMS

ABAN	ABANDONED	MAS	MASONRY
AC	ACRES	MAT	MATERIAL
ADJ	ADJACENT	MAX	MAXIMUM
AGGR	AGGREGATE	MB	MAIL BOX
ALUM	ALUMINUM	MBL	MINIMUM BUILDING LINE
ANC	ANCHOR	MECH	MECHANICAL
BC	BACK OF CURB	MFR	MANUFACTURER
BCPSA	BEDFORD COUNTY PUBLIC SERVICE AUTHORITY	ME	MANHOLE
BEG	BEGINNING	MIN	MINIMUM
BEG	BEGINNING	MJ	MECHANICAL JOINT
BIT	BITUMINOUS	MON	MONUMENT
BJ	BELL JOINT	MNL	METAL
BL	BASE LINE	N&C	NAIL AND CAP
BLDG	BUILDING	NBL	NORTHBOUND LANE
BM	BENCH MARK	NC	NOT IN CONTRACT
BO	BLOW-OFF VALVE	NO	NUMBER
BSP	BLACK STEEL PIPE	NPW	NON-POTABLE WATER
BV	BUTTERFLY VALVE	NTS	NOT TO SCALE
BVCE	BEGIN VERTICAL CURVE ELEVATION	OC	ON CENTER
BVCS	BEGIN VERTICAL CURVE STATION	OD	OUTSIDE DIAMETER
C&G	CURB AND GUTTER	OHE	OVERHEAD ELECTRIC
CB	CATCH BASIN	OHU	OVERHEAD UTILITIES
CI	CAST IRON	PC	POINT OF CURVE
CL	CENTER LINE	PCC	POINT OF COMPOUND CURVE
CMF	CORRUGATED METAL PIPE	PER	PERMITTER
CMU	CONCRETE MASONRY UNITS	PERF	PERFORATED
CO	CLEANOUT	PERP	PERPENDICULAR
COE	U.S. ARMY CORPS OF ENGINEERS	PI	POINT OF INTERSECTION
COL	COLUMN	PL	PROPERTY LINE
COMB	COMBINATION	POL	POINT ON LINE
CONC	CONCRETE	PP	POWER POLE
CONSTR	CONSTRUCTION	PRC	POINT OF REVERSE CURVE
CONV	CONVEYOR	PSI	POUNDS PER SQUARE INCH
COR	CORNER	PT	POINT OF TANGENT
CTR	CENTER	PUE	PUBLIC UTILITY EASEMENT
CTV	CABLE TELEVISION	PUPPE	PUBLIC UTILITY & PEDESTRIAN PATHWAY EASEMENT
CULV	CULVERT	PVC	POLYVINYL CHLORIDE
D	DEPTH	PVC	PVC
D/W	DRIVEWAY	PVI	POINT OF VERTICAL INTERSECTION
DE	DRAINAGE EASEMENT	PVM	PAVEMENT
DEQ	VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY	R	RADIUS
DI	DROP INLET	R/W	RIGHT OF WAY
DIA. Ø	DIAMETER	RCF	REINFORCED CONCRETE PIPE
DIM	DIMENSION	RD	ROAD
DIP	DUCTILE IRON PIPE	RDCR	REDUCER
DISC	DISCONNECT	REF	REFERENCE
DMH	DROP MANHOLE	REINF	REINFORCEMENT
DOC	DEGREE OF CURVE	REL	RELOCATED
DTL	DETAIL	REQD	REQUIRED
DWG	DRAWING	REV	REVISION
E	EACH	RK	RAILROAD
EAL	EASTBOUND LANE	RTE	ROUTE
ELEC	ELECTRICAL	SAW	SIDEWALK
ELEV	ELEVATION	SAN	SANITARY
ENGR	ENGINEER	SBL	SOUTHBOUND LANE
ENTR	ENTRANCE	SD	STORM DRAIN
EOL	END OF LINE	SE	SLOPE EASEMENT
EP	EDGE OF PAVEMENT	SEC	SECTION
EQ	EQUAL	SF	SQUARE FEET
EQPT	EQUIPMENT	SH	SHIELD
EVCE	END VERTICAL CURVE ELEVATION	SIM	SIMILAR
EVCS	END VERTICAL CURVE STATION	SMH	SEWER MANHOLE
EW	END WALL	SPEC	SPECIFICATION
EXST	EXISTING	SQ	SQUARE
EXT	EXTERIOR	SS	SANITARY SEWER
FC	FACE OF CURB	SSSD	SAFE STOPPING SIGHT DISTANCE
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY	ST	STREET
FF	FINISHED FLOOR ELEVATION	STA	STATION
FIG	FIGURE	STD	STANDARD
FIN	FINISH	SUR	SURVEY
FM	FORCE MAIN	SVC	SERVICE
FT	FOOT, FEET	TEL	TELEPHONE
FTG	FOOTING	TEMP	TEMPORARY
FUT	FUTURE	TP	TELEPHONE POLE
G	GALLON	TRTD	TREATED
GALV	GALVANIZED	TW	TOP OF WALL
GAR	GARAGE	TYP	TYPICAL
GND	GROUND	UE	UNDERGROUND ELECTRIC
GPD	GALLONS PER DAY	UG	UNDERGROUND GAS
GPM	GALLONS PER MINUTE	UGD	UNDERGROUND
GR	GRATING	UL	UNDERWRITER'S LABORATORY
GRG	GATE VALVE	UN	UNLESS OTHERWISE NOTED
H&T	HUB AND TAC	US	U.S. GEOLOGIC SURVEY
HM	HOLLOW METAL	UT	UNDERGROUND TELEPHONE
HOR	HORIZONTAL	VAL	VALVE
HPT	HIGH POINT	VAR	VARIABLE
HR	HOUR	VC	VERTICAL CURVE
HYD	HYDRANT	VDH	VIRGINIA DEPARTMENT OF HEALTH
ID	INSIDE DIAMETER	VDT	VIRGINIA DEPARTMENT OF TRANSPORTATION
IN	INCH	VERT	VERTICAL
INSL	INSULATION	VESCH	VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK
INT	INTERIOR	VNL	VINYL
INV	INVERT	VOL	VOLUME
IPF	IRON PIN FOUND	W	WATER
IPS	IRON PIN SET	W/O	WITHOUT
L	LENGTH, LONG	WBL	WESTBOUND LANE
LF	LINEAR FOOT	WL	WATER LINE
LP	LIGHT POLE	WM	WATER METER
LPQ	LIQUID PETROLEUM	WMH	WATER MANHOLE
		WS	WATER SURFACE
		WT	WEIGHT
		WTT	WATERTIGHT
		WV	WATER VALVE

EXISTING

PROPOSED

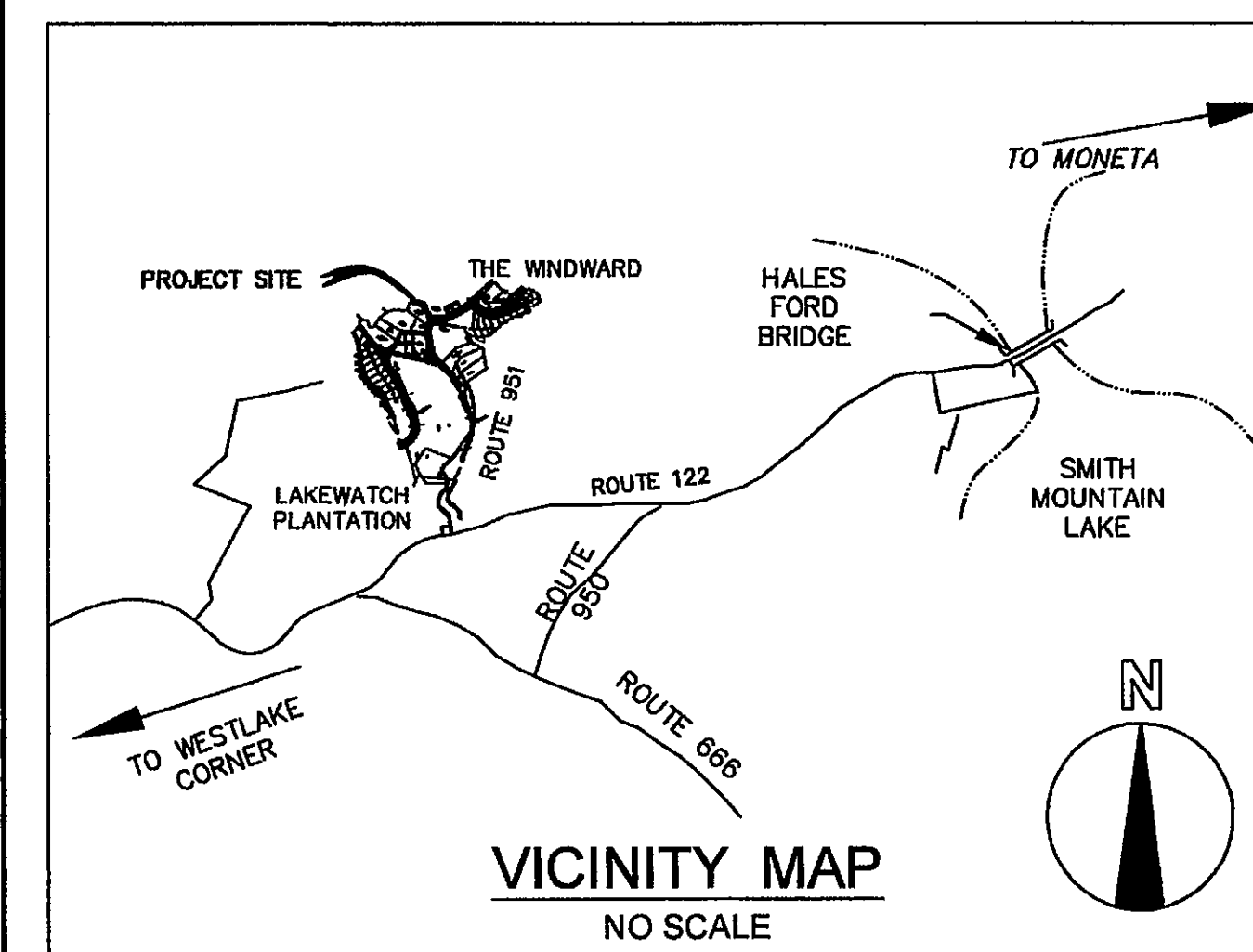
DESCRIPTION

GENERAL NOTES:

- ALL CONSTRUCTION DESIGN, METHODS AND MATERIALS MUST BE IN ACCORDANCE WITH ARTICLES VII AND VIII OF CHAPTER 22 OF THE FRANKLIN COUNTY CODE. THE CONTRACTOR OR DEVELOPER IS REQUIRED TO NOTIFY FRANKLIN COUNTY ENGINEERING DIVISION IN WRITING AT LEAST THREE (3) DAYS PRIOR TO ANY CONSTRUCTION, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - INSTALLATION OF APPROVED EROSION CONTROL DEVICES.
 - CLEARING AND GRUBBING.
 - SUBGRADE EXCAVATION.
 - PLACING CONCRETE.
 - PLACING GRAVEL BASE.
 - PLACING BITUMINOUS SURFACE.
 - INSTALLING WATER LINES.
 - INSTALLING FIRE HYDRANTS AND VALVES.
 - INSTALLING SERVICE LINES AND METER VALVES.
 - BACKFILLING AND COMPACTION.
- UTILITY LINE CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS INCLUDED HEREIN AS WELL AS THOSE SET FORTH BY THE VIRGINIA DEPARTMENT OF HEALTH AND FRANKLIN COUNTY. THE CONTRACTOR SHALL OBTAIN THE LATEST EDITION OF SUCH STANDARDS AND HAVE THEM AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY FACILITIES SUCH AS PORTABLE TOILETS, TEMPORARY ELECTRICAL HOOK-UPS, AND WATER FACILITIES AS REQUIRED FOR THE PROJECT. THE CONTRACTOR SHALL CLOSELY EXAMINE THE SCOPE OF WORK REQUIRED HEREIN AND PROVIDE ANY AND ALL TEMPORARY FACILITIES AS MAY BE DEEMED NECESSARY.
- THE CONTRACTOR SHALL PROVIDE PROJECT CLOSE-OUT SERVICES INCLUDING FINAL GRADING, FINAL SEEDING, FINAL PAVING, CLEAN-UP, AND RESTORATION OF EXISTING FACILITIES AND TERRAIN TO A CONDITION SIMILAR TO THE START OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND PROVIDING FINAL TESTING OF THE WASTEWATER UTILITIES IN CONFORMANCE WITH APPLICABLE TESTING AND INSPECTION GUIDELINES.
- FINAL INSPECTION SHALL BE PROVIDED BY AN ENGINEER LICENSED IN THE STATE OF VIRGINIA OR BY A PUBLIC AGENT WHO RETAINS THE RESPONSIBILITY TO MONITOR CONSTRUCTION AND OVERSEE INSPECTIONS.
- THE CONTRACTOR SHALL PROVIDE THREE COPIES OF SHOP DRAWINGS FOR THE EQUIPMENT AND MATERIAL SLATED FOR INSTALLATION. THE SHOP DRAWINGS SHALL BE REVIEWED BY THE CONSULTING ENGINEER AND RETURNED AS REVIEWED, APPROVED AS NOTED, OR REJECTED. THE CONTRACTOR MAY PRESENT EQUIPMENT AND MATERIAL ALTERNATES TO THE CONSULTING ENGINEER FOR APPROVAL PRIOR TO USE DURING CONSTRUCTION.
- CONSTRUCTION DEBRIS SHALL BE CONTAINED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT. NO LESS THAN ONE LITTER RECEPTACLE SHALL BE PROVIDED ON-SITE.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING MUD FROM TRUCKS AND/OR OTHER EQUIPMENT PRIOR TO ENTERING PUBLIC STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE STREETS ARE IN A CLEAN, MUD AND DUST FREE CONDITION AT ALL TIMES.
- THE DEVELOPER AND/OR CONTRACTOR SHALL SUPPLY ALL UTILITY COMPANIES WITH COPIES OF APPROVED PLANS, ADVISING THEM THAT ALL GRADING AND INSTALLATION SHALL CONFORM TO APPROVED PLANS.
- CONTRACTORS SHALL NOTIFY UTILITIES OF PROPOSED CONSTRUCTION AT LEAST TWO, BUT NOT MORE THAN TEN WORKING DAYS IN ADVANCE. AREA PUBLIC UTILITIES MAY BE NOTIFIED THROUGH MISS UTILITY AT (800) 552-7001.
- GRADE STAKES SHALL BE SET FOR ALL WATERLINE LOCATIONS.
- LOCATION OF UNDERGROUND UTILITIES IS BASED ON FIELD SURVEYS, AS SHOWN BY AVAILABLE RECORDS, AND AS LOCATED BY THE UTILITY LOCATOR SERVICE. CONTRACTOR SHALL VERIFY LOCATION OF UTILITIES PRIOR TO CONSTRUCTION.
- THE SITE WORK AND LANDSCAPING CONTRACTOR(S) SHALL COMPLY WITH LOCAL CODES IN OBSERVING EROSION CONTROL MEASURES, BOTH ON AND OFF THE SITE. REFER TO THE VIRGINIA UNIFORM CODING SYSTEM CONTAINED IN THE VIRGINIA SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION, FOR DETAILS AND SPECIFICATIONS OF EROSION CONTROL ITEMS SHOWN ON THESE PLANS.
- ALL TRAFFIC CONTROL MUST BE IN ACCORDANCE WITH 2003 VIRGINIA WORK AREA PROTECTION MANUAL.

ADDITIONAL NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROCURING NECESSARY CONSTRUCTION PERMITS INCLUDING BUT NOT LIMITED TO LAND DISTURBING, VDOT ENTRANCE, BUILDING PERMITS, AND CERTIFICATES TO CONSTRUCT. SHOULD ANY PUBLIC AGENCY REQUIRE A CONSTRUCTION BOND PRIOR TO THE ISSUANCE OF A PERMIT, THE CONTRACTOR SHALL DULY NOTIFY THE OWNER SO THAT BOTH PARTIES CAN DETERMINE PROPER RESPONSIBILITY FOR BOND PROCUREMENT AND PAYMENT.
- PRIOR TO SUBMITTAL OF THE CONSTRUCTION BID, THE CONTRACTOR SHALL REVIEW THE EXISTING SITE UTILITIES AND IDENTIFY POTENTIAL CONSTRUCTION CONFLICTS. SHOULD ANY UTILITY REQUIRE RELOCATION, THE CONTRACTOR SHALL NOTIFY THE CONSULTING ENGINEER SO THAT APPROPRIATE PLAN ADJUSTMENTS CAN BE MADE.
- WORK IN AND NEAR THE PUBLIC RIGHT-OF-WAY SHALL ADHERE TO THE STANDARDS AND PRACTICES OF THE VIRGINIA WORK AREA PROTECTION MANUAL, LATEST EDITION.
- SOURCE OF MAPPING AND ROADWAY DESIGN PROVIDED BY BEN SHRAIDER, I.S., BEDFORD, VIRGINIA.
- UPON COMMENCING CONSTRUCTION, THE COUNTY SHALL BE PROVIDED ADEQUATE NOTICE TO MONITOR CONSTRUCTION. COUNTY PERSONNEL OR ITS DESIGNEE SHALL HAVE ACCESS TO THE SITE AT ALL TIMES DURING CONSTRUCTION.
- DEVELOPER SHALL PROVIDE NOTICE TO COUNTY PRIOR TO ANY TESTING. COPIES OF ALL TEST REPORTS SHALL BE SUBMITTED TO THE COUNTY FOR RECORD. COUNTY PERSONNEL WILL NOT BE RESPONSIBLE FOR PERFORMING ANY TESTING OR PROVIDING ANY MATERIALS FOR TESTING. COUNTY WILL NOT BE RESPONSIBLE FOR ANY COSTS ASSOCIATED WITH TESTING.



VICINITY MAP

OWNER/DEVELOPER CERTIFICATION

the person responsible for carrying out the plan certifies that he will properly perform the erosion and sediment control measures included in the plan and will comply with all provisions of this chapter.

The Owners/Developers certify that they understand the site design requirements imposed by the site development plans and applicable County codes, as shown hereon, and agrees to comply with these plans during construction, unless modifications to plans are approved by Bedford County.

OWNER REPRESENTATIVE

STATE OF VIRGINIA

I, _____ OF _____ A NOTARY PUBLIC IN AND FOR THE AFORESAID COUNTY AND STATE DO HEREBY CERTIFY THAT _____, WHOSE NAME IS SIGNED TO THE FOREGOING WRITING DATED _____, 2006, HAS PERSONALLY APPEARED BEFORE ME IN MY AFORESAID COUNTY AND STATE AND ACKNOWLEDGED THE SAME ON _____, 2006. MY COMMISSION EXPIRES _____.

NOTARY PUBLIC

DEVELOPER:
SMLGP Development, LLC 16430
Booker T. Washington Highway; Unit 5
Moneta, Virginia 24121
Ph. 540-721-4594
Fax 540-721-4594

OWNER:
James G. Petrine
Booker T. Washington Highway; Unit 5
Moneta, Virginia 24121
Ph. 540-721-4594
Fax 540-721-4594