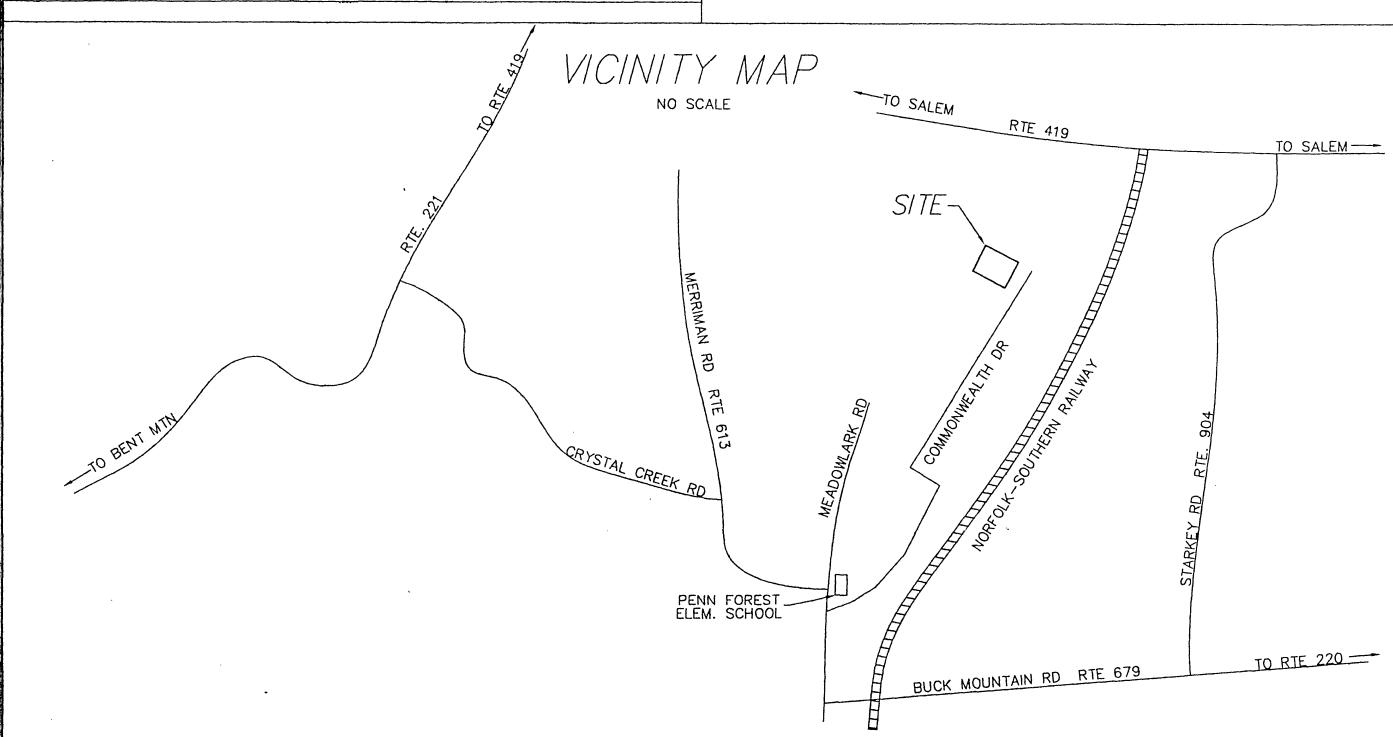
QUANTITY AND COST ESTIMATE									
Item	Quantity	Unit	Unit Price	Bondable Cost					
		,							
EXCA VA TION	900	CY	\$ 3.50	\$3,150.00					
CURB INLET DI—3B	1	EACH	\$1,250.00	\$1,250.00					
CURB & GUTTER, CG-2	257	LF	\$ 9.00	\$2,313.00					
LANDSCAPING	1	LS	\$3,600.00	\$3,600.00					
6' WOODEN SCREENING FENCE	70	LF	\$ 12.00	\$840.00					
STANDARD DUTY BITUMINOUS PAVEMENT	1000	SY	\$ 12.00	\$12,000.00					
STORMWATER MANAGEMENT FACILITY	1	LS	\$16,810.00	\$ 16,810.00					
SUBTOTAL .				\$39,963.00					
CONTINGENCY-10%				\$ 3,996.30					
ESTIMATED TOTAL				\$43,960.00					
I hereby certify that the foregoing estimate reflects	the current	improvem	ents of this						

I hereby certify that the foregoing estimate reflects the current improvements of this project. SIGNED:

DATE:



VDOT NOTES

ALL NECESSARY UTILITY LATERALS WILL BE PLACED PRIOR TO PAVEMENT SURFACING, OR CONDUIT PROVISIONS BE MADE FOR THE SAME (i.e. WATER, SEVER, GAS AND TELEPHONE.)

PERMITS WILL BE REQUIRED FOR ALL UTILITIES WITHIN STREET RIGHT OF WAY PRIOR TO ACCEPTANCE INTO THE SECONDARY HIGHWAY SYSTEM.

CARE MUST BE TAKEN DURING CONSTRUCTION TO PREVENT EROSION, DUST, AND MUD FROM DAMAGING ADJACENT PROPERTY, CLOGGING DITCHES, TRACKING PUBLIC STREETS, AND OTHERWISE CREATING A PUBLIC OR PRIVATE NUISANCE TO SURROUNDING AREAS.

THE ENTIRE CONSTRUCTION AREA BACK OF CURBS, AND/OR PAVEMENT IS TO BE BACK—FILLED AND SEEDED TOGETHER WITH DITCHES AND CHANNELS, AT THE EARLIEST POSSIBLE TIME FOLLOWING FINAL GRADING.

DRAINAGE EASEMENTS MUST BE DEFINED BY EXCAVATED DITCHES OR CHANNELS FOR THEIR FULL LENGTH TO WELL-DEFINED NATURAL WATERCOURSES.

IF EROSION IS ENCOUNTERED IN ANY DRAINAGE EASEMENT, IT WILL BE THE RESPONSIBILITY OF THE DEVELOPER TO SOD, RIP-RAP, GROUT, PAVE, OR TO DO WHATEVER IS NECESSARY TO CORRECT THE PROBLEM.

ENGINEER'S NOTES

CALDWELL WHITE ASSOCIATES ASSUMES NO RESPONSIBILITY FOR ADEQUACY OF PLANS OR FOR INFORMATION ON PLANS UNTIL SUCH PLANS HAVE BEEN APPROVED BY THE REQUIRED PUBLIC AGENCIES.

ANY WORK COMMENCED ON A PROJECT PRIOR TO PLAN APPROVAL IS AT SOLE RISK OF THE DEVELOPER.

CALDWELL WHITE ASSOCIATES DOES NOT GUARANTEE THE COMPLETION OR QUALITY OF PERFORMANCE OF THE CONTRACTS BY CONTRACTORS OR OTHER THIRD PARTIES.

SOURCE OF TOPOGRAPHIC MAPPING IS FIELD SURVEY BY CALDWELL WHITE ASSOCIATES. DATED: DECEMBER 8, 2003.

BOUNDARY DATA TAKEN FROM PLAT PREPARED BY LUMSDEN ASSOCIATES DATED: MARCH 25, 1994.

SEWER NOTES

A MINIMUM COVER OF THREE (3) FEET IS REQUIRED OVER PROPOSED LINES.

CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING ALL

MANHOLES AFTER PAVING. MANHOLE TOPS SHALL BE ADJUSTED TO GRADE

IF NECESSARY.

ALL EXISTING UTILITIES MAY NOT BE SHOWN, OR MAY NOT BE SHOWN IN THE EXACT LOGATION. THE CONTRACTOR SHALL COMPLY WITH STATE WATER WORKS REGULATIONS, SECTION 12.05.03, WHERE LINES CROSS.

HOUSE CONNECTIONS ARE TO BE MADE WITH 4" PIPE INSTALLED ON A MINIMUM GRADE OF 1/4 INCH TO 1 FOOT IN THE RIGHT OF WAY.

LATERALS FROM MANHOLES SHALL BE P.V.C. OR DUCTILE IRON OF SUFFICIENT LENGTH TO PROVIDE TWO (2) FEET OF BEARING ON NATURAL GROUND. THE TRANSITION FROM DUCTILE IRON TO ASBESTOS CEMENT OR CONCRETE PIPE SHALL BE MADE WITH AN ADAPTOR COUPLING IN THE RIGHT OF WAY.

ALL TRENCHES IN EXISTING OR FUTURE HIGHWAY RIGHT OF WAYS SHALL BE COMPACTED ACCORDING TO VDOT STANDARDS.

LINES SHALL BE STAKED PRIOR TO CONSTRUCTION.

ALL SANITARY SEWER WORK SHALL COMPLY WITH THE ROANOKE COUNTY WATER AND SEWER STANDARDS, LATEST EDITION.

ALL NEW CONNECTIONS TO SANITARY SEWER MAINS SHALL BE PERFORMED BY THE ROANOKE COUNTY UTILITY DEPARTMENT.

REFERENCE ROANOKE COUNTY UTILITY DEPARTMENT AVAILABILITY LETTER 04-51.

WATER NOTES

A MINIMUM COVER OF THREE (3) FEET IS REQUIRED OVER PROPOSED LINES.

CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING VALVE VAULTS AFTER PAVING AND ADJUSTMENT TO FINAL GRADE IF NECESSARY.

ALL EXISTING UTILITIES MAY NOT BE SHOWN, OR MAY NOT BE SHOWN IN THE EXACT LOCATION. THE CONTRACTOR SHALL COMPLY WITH STATE WATER WORKS REGULATIONS, SECTION 12.05.03, WHERE LINES CROSS.

ALL TRENCHES IN EXISTING OR FUTURE HIGHWAY RIGHT OF WAYS SHALL BE COMPACTED ACCORDING TO VDOT STANDARDS.

LINES SHALL BE STAKED PRIOR TO CONSTRUCTION.

ALL WATERLINE WORK SHALL COMPLY WITH THE ROANOKE COUNTY WATER AND SEWER STANDARDS, LATEST EDITION.

ALL NEW CONNECTIONS TO WATER MAINS SHALL BE PERFORMED BY THE ROANOKE COUNTY UTILITY DEPARTMENT.

REFERENCE ROANOKE COUNTY UTILITY DEPARTMENT AVAILABILITY LETTER 04-51.

GENERAL NOTES

ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE CONSTRUCTION STANDARDS AND SPECIFICATIONS OF ROANOKE CO. AND/OR THE VIRGINIA DEPARTMENT OF TRANSPORTATION.

THE CONTRACTOR OR DEVELOPER IS REQUIRED TO NOTIFY THE ENGINEERING DIVISION IN WRITING AT LEAST THREE (3) DAYS PRIOR TO ANY CONSTRUCTION. INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

A. INSTALLATION OF APPROVED EROSION CONTROL DEVICES.

B. CLEARING AND GRUBBING. C. SUBGRADE EXCAVATION.

ANY CONSTRUCTION.

D. INSTALLING STORM SEWERS OR CULVERTS.

D. INSTALLING STORM SEWERS OR CULVER'S
E. INSTALLING CURB AND GUTTER FORMS.

F. PLACING CURB AND GUTTER.

G. PLACING OTHER CONCRETE. H. PLACING GRAVEL BASE.

I. PLACING ANY ROADWAY SURFACE.

J. INSTALLING WATER LINES. K. INSTALLING SANITARY SEWER LINES.

A PRECONSTRUCTION CONFERENCE SHOULD BE SCHEDULED WITH THE ROANOKE COUNTY ENGINEERING DIVISION, TO BE HELD AT LEAST ONE DAY PRIOR TO

MEASURES TO CONTROL EROSION AND SILTATION MUST BE PROVIDED FOR PRIOR TO PLAN APPROVAL. PLAN APPROVAL IN NO WAY RELIEVES THE DEVELOPER OR CONTRACTOR OF THE RESPONSIBILITIES CONTAINED IN EROSION AND SILTATION CONTROL POLICIES.

A PERMIT MUST BE OBTAINED FROM THE VDOT RESIDENCY OFFICE, SALEM, PRIOR TO CONSTRUCTION IN THE HIGHWAY RIGHT OF WAY.

PLAN APPROVAL DOES NOT GUARANTEE THE ISSUANCE OF ANY PERMITS BY VDOT.

AN APPROVED SET OF PLANS AND ALL PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE.

FIELD CONSTRUCTION SHALL HONOR PROPOSED DRAINAGE DIVIDES AS SHOWN ON PLANS.

ALL UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE CONSTRUCTION LIMITS OF THE ROADWAY BEFORE PLACING EMBANKMENT.

PAVEMENT SECTIONS ON APPROVED PLANS ARE BASED ON A MINIMUM CBR
OF 10. CBR TESTS ARE TO BE ACQUIRED BY THE OWNER AND SUBMITTED
TO THE VDOT AND TO THE RKE. COUNTY ENGINEERING DIVISION PRIOR TO PLACEMENT.
CBR VALUES LESS THAN 10 WILL REQUIRE REVISED PAVEMENT SECTIONS.

CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AT THE JOB SITE.

VDOT ST'D. HR-1 HANDRAIL IS REQUIRED ON ALL WALLS EXCEEDING 4.0' IN HEIGHT.

LOCATION OF GUARD RAILS SHALL BE DETERMINED AT A JOINT FIELD INSPECTION BY THE COUNTY AND THE VDOT.

ALL SPRINGS SHALL BE CAPPED AND PIPED TO THE NEAREST STORM SEWER OR NATURAL WATERCOURSE. THE PIPE SHALL BE MINIMUM OF 6" DIAMETER AND CONFORM TO VDOT STANDARD SB-1.

STANDARD STREET AND TRAFFIC CONTROL SIGNS SHALL BE ERECTED AT EACH INTERSECTION BY THE DEVELOPER PRIOR TO FINAL STREET ACCEPTANCE.

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 INSURE THAT THE STREETS ARE IN A CLEAN, MUD AND DUST FREE CONDITION AT ALL TIMES.

WITH COPIES OF APPROVED PLANS, ADVISING THEN THAT ALL GRADING AND INSTALLATION SHALL CONFORM TO APPROVED PLANS.

THE DEVELOPER AND/OR CONTRACTOR SHALL SUPPLY ALL UTILITY COMPANIES

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.

THE DEVELOPER OR CONTRACTOR SHALL PROVIDE THE COUNTY WITH CORRECT AS—BUILT PLANS BEFORE FINAL ACCEPTANCE.

ALL WORK SHALL BE SUBJECT TO INSPECTION BY ROANOKE COUNTY AND/OR VDOT INSPECTORS.

FIELD CORRECTIONS SHALL BE APPROVED BY THE ROANOKE COUNTY ENGINEERING DIVISION PRIOR TO SUCH CONSTRUCTION.

GRADE STAKES SHALL BE SET FOR ALL CURB AND GUTTER, CULVERT, SANITARY SEWER, AND STORM SEWER.

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 ALL 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 STORM DRAIN CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.

1 3/30/04 FIRST ROANOKE COUNTY REVIEW COMMENTS

2 | 5/7/04 | SECOND ROANOKE COUNTY REVIEW COMMENTS

Designed: JWK/CLW

Date: <u>FEB. 27, 2004</u>

W.O. # <u>03-0125</u>

N.B. # WES-22

REVISIONS

Remarks

SHEET INDEX

,	STILL I TINDLA
SHEET #	TITLE
1	TITLE SHEET
2	DIMENSIONAL LAYOUT AND LANDSCAPING PLAN
3	EROSION AND SEDIMENT CONTROL PLAN
4	GRADING, STORM DRAINAGE AND SITE UTILITIES
5	CONSTRUCTION AND LANDSCAPING DETAILS
6	EROSION CONTROL, SITE AND STORMWATER MGMT DETAILS

			LEGE	ND	SYMBO	OLS	
ABBRE VIA TIONS				EXISTING	NEW	and the second s	
AHFH	ARROW HEAD TOP OF	MIN	MINIMUM	100.5	100.5	SPOT ELEVATION	
APPROX	FIRE HYDRANT APPROXIMATE	MON NBL	MONUMENT NORTH BOUND LANE	100		CONTOURS	
ASPH	ASPHALT	PROP	PROPOSED	===8"SS===	8"SS	SANITARY SEWER LINE	
BC	BOTTOM OF CURB	PUE	PUBLIC UTILITY EASEMENT	4"W	4"W	WA TERLINE	
BIT	BITUMINOUS	PVMT	PAVEMENT	===8"SD===		STORM DRAIN	
BLDG BLK	BUILDING BLOCK	R RT	RADIUS RIGHT		0,40		
ВИ	BENCHMARK	R/W	RIGHT OF WAY	——— 2*G ———	2 G	GAS LINE	
BW	BOTTOM OF WALL	REQD	REQUIRED	—— Е ——	E	OVERHEAD ELECTRIC LINE	
CB	CINDER BLOCK	RR RVC	RAILROAD	T		OVERHEAD TELEPHONE LINE	
C&G CMP	CURB & GUTTER CORRUGATED METAL PIPE	RYS SAN	REAR YARD SETBACK SANITARY	CATV	CATV	OVERHEAD CABLE TELEVISION LINE	
CONC	CONCRETE	SBL	SOUTH BOUND LANE	UE UT	— UE —— UT—	UNDERGROUND TEL OR ELEC LINE	
COR DBL	CORNER DOUBLE	SD SECT	STORM DRAIN SECTION	M	™	WATER OR GAS METER	
DEFL.	DEFLECTION	SE	SLOPE EASEMENT			VALVE	
DI	DROP INLET	SS	SANITARY SEWER	٠ 	1		
DIA	DIAMETER	SSE	SANITARY SEWER EASEMENT		— ← F.H.	FIRE HYDRANT	
DE EBL	DRAINAGE EASEMENT EAST BOUND LINE	STA STD	STATION STANDARD	─ ≪	-	MANHOLE	
ELEC	ELECTRIC	570	STORAGE	O C.O.	C.O.	CLEANOUT	
ELEV	ELEVATION	SYS	SIDE YARD SETBACK			DROP INLET (CURB OR GRATE)	
ENTR EP	ENTRANCE EDGE OF PAVEMENT	TBM TC	TEMPORARY BENCHMARK TOP OF CURB	<u>1.561</u>		UTILITY POLE, GUY & ANCHOR	
EW	ENDWALL	TEL	TELEPHONE	T	7	DITCH OR SWALE	
EXIST	EXISTING	TRANS	TRANSFORMER		6 0		
FDN	· FOUNDATION	TNI TYP	TOP OF WALL	——————————————————————————————————————		CENTERLINE OR BASELINE	
FF FG	FINISHED FLOOR FINISH GRADE		TYPICAL VIRGINIA DEPARTMENT OF	——₹——	———P ———	PROPERTY LINE	
HPT	HIGH POINT	VDOT	TRANSPORTATION	◬	A	SURVEY TRAVERSE POINT	
INV	INVERT	VERT	VERTICAL	Δ	· 🛕	DEFLECTION ANGLE	
IP LT ·	IRON PIN LEFT	WBL YD	WEST BOUND LANE YARD	4	4	DIRECT ANGLE	
MBL .	MINIMUM BUILDING LINE	10	17RD	Ø Y.L.	€ Y.L.	YARD LIGHTING	
MH	MANHOLE DEV						
	APPROVED			O⇒ Y.H.	◆ Y.H.	YARD HYDRANT	
	FOR CONSTRUCTION		⊗	•	WELL		
	BY ROANOKE COUNTY			₩		BENCHMARK	
	Departm	ent	Date	x x		FENCE TENCE	
	Development Review 0 9 22 0		9/22/06			TREE LINE	
100 912		110-100			RAILROAD		
	Engineering	AND	desiden	<u>ě</u> .		HANDICAPPED SPACE	
	Water & Sew	1 \ 1	9-22-06				

NAME OF NEW 7250 SQ FT INDUSTRIAL
DEVELOPMENT OFFICE AND WAREHOUSE BUILDING

LOCATION LOT 1 COMMONWEALTH INDUSTRIAL PARK
PHASE II

OWNER

ANDRE PERDUE

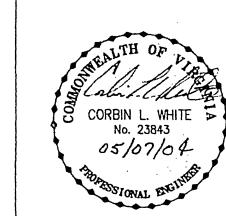
TW 9/22/03

DEVELOPER ANDRE PERDUE

Planning & Zoning

DEVELOPER, AM AWARE OF THE SITE DESIGN REQUIREMENTS IMPOSED BY THIS SITE DEVELOPMENT PLAN AND OTHER APPLICABLE COUNTY CODES.
I HEREBY CERTIFY THAT I AGREE TO COMPLY WITH THESE REQUIREMENTS, UNLESS MODIFIED IN ACCORDANCE WITH LOCAL LAW.

TAX MAP #(S) <u>087.14</u> BLOCK #(S) <u>3</u> PARCEL #(S) <u>01.05</u>



CALDWELL WHITE ASSOCIATES

ENGINEERS / SURVEYORS / PLANNERS
4203 MELROSE AVENUE, N.W.

P.O. BOX 6260 ROANOKE, VIRGINIA 24017-0260 (540) 366-3400 FAX: (540) 366-8702

FAX: (540) 386-8702