



CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO THE FOLLOWING MINIMUM STANDARDS:

MS-1: THOUGH TS / PS LABELS ARE SHOWN GENERICALLY ON THE PLANS, THE CONTRACTOR SHALL STABILIZE ALL AREAS NOT INDICATED TO BE OTHERWISE STABILIZED WITH PERMANENT SEED MIXTURE WITHIN 7 DAYS OF REACHING FINAL GRADE OR WITH TEMPORARY SEED MIXTURE ANY AREA YET TO REACH FINAL GRADE BUT THAT IS NOT PROPOSED TO BE ACTIVELY INVOLVED IN THE WORK WITHIN 30 DAYS. THESE SEED MIXTURES AND APPLICATION SPECIFICATIONS ARE SHOWN HEREON. THE CONTRACTOR SHALL HONOR THE CLEARING AND GRADING LIMITS SHOWN ON THE PLAN.

MS-2: THE CONTRACTOR SHALL STABILIZE WITH TS AND PROTECT FROM EROSION, WITH ANY APPLICABLE METHOD. ALL STOCKPILES AND ANY ON-SITE OR OFF-SITE BORROW OR SPOIL AREAS, AS APPLICABLE, OF THIS PLAN DOES NOT COVER OFF-SITE BORROW OR SPOIL AREAS. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.

MS-3: WHERE TS/PS ARE NOT APPLICABLE PROVIDE OTHER MEANS OF STABILIZATION (CRS, ETC.) WITHIN 7 DAYS OF REACHING FINAL GRADE OR WITHIN 30 DAYS WHERE THE AREA IS YET TO REACH FINAL GRADE BUT IS NOT PROPOSED TO BE ACTIVELY INVOLVED IN THE WORK.

MS-4: ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED IN ADVANCE OF THE WORK THEY ARE INTENDED TO PROTECT.

MS-5: EARTHEN CONTROLS AND STRUCTURES SHALL BE STABILIZED IMMEDIATELY UPON INSTALLATION.

NOT APPLICABLE; NO EARTHEN CONTROLS OR STRUCTURES ARE PROPOSED ON THIS PROJECT.

MS-6: WHERE A SEDIMENT TRAP (<3 ACRES OF DRAINAGE) OR SEDIMENT BASIN (>3 ACRES OF DRAINAGE) ARE INDICATED CALCULATIONS SHOWN ARE BASED ON OUTLINED DRAINAGE AREAS. CONTRACTOR SHALL HONOR INDICATED DRAINAGE DIVIDES AND CONFORM TO VOLUMES, DETAILS, ETC. PROVIDED ON PLANS.

EXISTING SEDIMENT TRAPS AND BASINS CONSTRUCTED WITH THE EROSION AND SEDIMENT CONTROL PLAN FOR "OPPIDAN RETAIL CENTER" WILL SERVE THE PROPOSED GANDER MOUNTAIN / CAMPING WORLD SITE. NO ADDITIONAL SEDIMENT TRAPS OR BASINS ARE PROPOSED WITH THIS PLAN SET.

MS-7: CARE HAS BEEN TAKEN IN DESIGN OF THIS PROJECT TO MINIMIZE DRAINAGE OVER SLOPES AND PROVIDE A SUITABLE PROTECTIVE STABILIZATION METHOD. CONTRACTOR SHALL PROTECT SLOPE AREAS DURING AND AFTER CONSTRUCTION FROM CONCENTRATED RUNOFF AND THE EROSION EFFECTS OF WIND AND RAIN. STABILIZE AS SOON AS PRACTICAL TO MINIMIZE EROSION.

MS-8: WHERE CONCENTRATED RUNOFF HAS BEEN ROUTED DOWN SLOPES CARE HAS BEEN TAKEN TO DESIGN AN ADEQUATE CHANNEL OR DRAIN. CONTRACTOR SHALL INSTALL THESE MEASURES ALONG WITH THEIR STABILIZATION AS SOON AS PRACTICAL TO PROTECT SLOPE.

SEE THE APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR "OPPIDAN RETAIL CENTER".

MS-9: NOT APPLICABLE; SEEPAGE THROUGH SLOPES IS NOT ANTICIPATED TO BE ENCOUNTERED ON THIS PROJECT.

MS-10: INLET OR CULVERT INLET PROTECTION IS PROPOSED FOR THE INLETS OF ALL STORM SEWERS OR CULVERTS ON-SITE. RLD SHALL INSURE PROPER INSTALLATION AND ASSURE ADEQUATE SIZING BASED ON DRAINAGE AREA OF EACH INLET.

GANDER MOUNTAIN / CAMPING WORLD SITE SPECIFIC EROSION AND SEDIMENT CONTROL MEASURES ARE INCLUDED AS PART OF THIS PLAN SET, INCLUDING INLET PROTECTION. OUTLET PROTECTION FOR OUTFALLS IS PROVIDED BY THE APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR "OPPIDAN RETAIL CENTER".

MS-11: RLD SHALL VERIFY THAT ADEQUATE CHANNEL LININGS AND PROPER OUTLET PROTECTION IS IN PLACE PRIOR TO OPERATION OF STORM SEWER SYSTEM.

MS-12: WHEN WORKING IN AND AROUND A LIVE WATERCOURSE, THE CONTRACTOR SHALL TAKE GREAT CARE TO MINIMIZE IMPACT ON THE STREAM. ASSURE THAT PROPER PERMITS FROM DEQ / COE ARE IN HAND PRIOR TO COMMENCING SUCH WORK.

LIVE WATERCOURSE PROTECTION AND PERMITS ARE NOT APPLICABLE; NO LIVE WATERCOURSES EXIST WITHIN OR ADJACENT TO THIS PROJECT.

MS-13: WHERE MORE THAN 2 TRIPS IN 6 MONTHS ARE EXPECTED ACROSS A LIVE WATERCOURSE OBTAIN THE NECESSARY PERMIT AND INSTALL A TEMPORARY STREAM CROSSING.

STREAM CROSSING IS NOT APPLICABLE; NO LIVE WATERCOURSES EXIST WITHIN OR ADJACENT TO THIS PROJECT.

MS-14: OTHER FEDERAL, STATE, AND LOCAL REGULATIONS MUST BE MET WHEN WORKING IN LIVE WATERCOURSES. REGULATIONS PERTAINING TO LIVE WATERCOURSES ARE NOT APPLICABLE; NO LIVE WATERCOURSES EXIST WITHIN OR ADJACENT TO THIS PROJECT.

MS-15: THE BED AND BANKS OF DISTURBED WATERCOURSES MUST BE STABILIZED IMMEDIATELY. LIVE WATERCOURSE BED AND BANK STABILIZATION ARE NOT APPLICABLE; NO LIVE WATERCOURSES EXIST WITHIN OR ADJACENT TO THIS PROJECT.

MS-16: REGARDING UTILITY INSTALLATIONS, NO MORE THAN 500 LF OF TRENCH MAY BE OPEN AT A GIVEN TIME. EXCAVATED MATERIAL SHALL BE PLACED ON UPHILL SIDE OF TRENCH. UTILITY TRENCH AND SEDIMENT TRAP/BASIN DEWATERING (FOR CLEANOUT, REPAIR, OR REMOVAL) MAY ONLY BE DONE WITH THE COUNTY OF ROANOKE INSPECTOR'S PERMITTED METHOD. THE INSPECTOR MUST APPROVE THE DEWATERING METHOD FOR EACH APPLICATION. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER UNDISTURBED VEGETATED AREAS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVE THE CAPACITY OF THE BMP SELECTED (BASED ON PUMP SIZE, VOLUME OF WATER TO BE TREATED, ETC.). THE PUMP INTAKE MUST BE FLOATED TO PREVENT AGITATION OR SUCTION OF DEPOSITED SEDIMENTS. THE BMP DISCHARGE MUST BE INTO AN UNDISTURBED AREA THROUGH A NON-EROSIVE OUTLET. TYPICALLY ACCEPTABLE ALTERNATIVES ARE A DISPOSABLE DIRT BAG (A HIGH STRENGTH NON-WOVEN GEOTEXTILE FABRIC FROM ACENVIRONMENTAL.COM, STANTON WAREHOUSE, 600 HAYES AVE., STANTON, VA 24401), REUSABLE DEWATERING BAG (FROM STORMWATERWORKS.COM), OR OTHER APPROVED BMP FROM THE VESC HANDBOOK. TRENCHES SHALL BE PROPER BACKFILLED AND COMPACTED PER DETAIL AND SPEC. COMPLETED INSTALLATION SHALL BE RE-STABILIZED IMMEDIATELY.

MS-17: 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.

MS-18: SEE MAINTENANCE UNDER ESC NARRATIVE FOR REMOVAL OF TEMPORARY MEASURE.

MAINTENANCE REQUIREMENTS ARE GIVEN ON THE ROANOKE COUNTY EROSION AND SEDIMENT CONTROL SHEET. IN PARTICULAR THE RLD SHALL OBSERVE OFF-SITE RECEIVING CHANNEL REGULARLY AND CORRECT ANY PROBLEMS (EVEN DOWNSTREAM) RESULTING FROM THIS DEVELOPMENT.

MS-19: SEE APPROVED PLANS FOR EROSION AND SEDIMENT CONTROL AND GRADING FOR "OPPIDAN RETAIL CENTER". INCREASES IN STORMWATER VOLUME, VELOCITY, AND PEAK RUNOFF HAVE BEEN ADDRESSED IN THE PLAN PER CALCULATIONS SUBMITTED FOR REVIEW UNDER SEPERATE COVER.

RESPONSIBLE LAND DISTURBER SHALL PAY PARTICULAR ATTENTION TO OFF-SITE AREAS CONTRIBUTING RUNOFF TO THE SITE, OFF-SITE LOCATIONS RECEIVING RUNOFF FROM THIS PROJECT, AND PROPER OPERATION OF STORMWATER MANAGEMENT PRACTICES ON-SITE. ALL DITCHES, SWALES, AND NATURAL WATERCOURSES DOWNSTREAM OF THIS PROJECT SHALL BE FIELD INSPECTED DURING AND AFTER CONSTRUCTION BY THE RLD TO ENSURE COMPLIANCE WITH COE'S MS-19. IF EROSION OR SCOUR IS OCCURRING THE DEVELOPER SHALL BE RESPONSIBLE FOR ALL CORRECTIVE MEASURES.

NOTES:

1. DIMENSIONS SHOWN ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

2. TC=TOP OF CURB, TP=TOP OF PAVEMENT, TW=TOP OF WALL, BW=BOTTOM OF WALL, FG=FINISHED GROUND, SW=SIDEWALK.

LEGEND

ITEM	EXISTING	PROPOSED
PAVEMENT (STANDARD)		
PAVEMENT (HEAVY DUTY)		XXXX
CONCRETE CURB		
STORM DRAIN LINE	EA 537	
SANITARY SEWER MANHOLE		
SANITARY SEWER LINE		0" SS
WATERLINE		
LIGHT POLE		*
OVERHEAD ELECTRIC LINE	EA 134	ONE
OVERHEAD TELEPHONE LINE	CP 347	ONE
INDEX CONTOURS	1020	1020
INTERMEDIATE CONTOURS	1016	1016
UNDERGROUND GAS		GAS
UNDERGROUND COMMUNICATIONS	EX COMM UG	COMM
SPOT ELEVATION	1021.5	1021.5

THIS PLAN IS FOR EROSION AND SEDIMENT CONTROL PURPOSES ONLY. FOR ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AND INFORMATION SEE PLANS FOR "OPPIDAN RETAIL CENTER", PREPARED BY LUMSDEN ASSOCIATES, P.C.

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10-19-07
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EROSION AND SEDIMENT CONTROL PLAN

GANDER MOUNTAIN
AT THE OPPIDAN RETAIL CENTER
PREPARED FOR
OPPIDAN INVESTMENT COMPANY
HOLLIS MAGISTERIAL DISTRICT
ROANOKE COUNTY, VIRGINIA

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		

DATE: October 19, 2007
SCALE: 1" = 40'
COMMISSION NO.: 2006-224G
SHEET 9 OF 16