



- IMPLEMENTATION OF EROSION CONTROL METHODS**
1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE WISCONSIN DNR CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS, AND THE TOWN OF EGG HARBOR REQUIREMENTS.
 2. MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE D.O.T. EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.
 3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL AT A MINIMUM BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24 HOUR PERIOD. MAINTENANCE SHALL BE COMPLETED AS SOON AS POSSIBLE WITH CONSIDERATION GIVEN TO SITE CONDITIONS.
 4. ALL SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND INSTALLED BEFORE ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL.
 5. ALL TEMPORARY SOIL EROSION PROTECTION SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREAS ARE PERMANENTLY STABILIZED AND NO LONGER SUSCEPTIBLE TO EROSION.
 6. TRACKING PADS SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE SITE. AT ALL CONSTRUCTION SITE EXITS TO PREVENT TRACKING OF SOIL OFF THE SITE. ALL OFF-SITE TRACKED SOIL ON PAVED SURFACES SHALL BE REMOVED AT THE END OF EACH WORK DAY.
 7. OVERLAND FLOW SHALL BE PREVENTED FROM LEAVING THE WORK SITE BY INSTALLING STRAW BALES OR SILT FENCE PARALLEL TO THE CONTOURS LOCATED DOWNHILL FROM THE WORK AREA.
 8. IF THERE ARE DISCREPANCIES BETWEEN THESE DETAILS AND THE DNR TECHNICAL STANDARDS FOR SEDIMENT AND EROSION CONTROL, THE MORE RESTRICTIVE REQUIREMENT SHALL BE FOLLOWED.

- GENERAL NOTES**
1. DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
 2. PRIOR TO CONSTRUCTION OF ANY IMPROVEMENTS, THE CONTRACTOR MUST CALL DIGGERS HOTLINE SERVICE AND THE TOWN OF EGG HARBOR FOR THE LOCATION AND STRIKING OF ALL EXISTING UNDERGROUND UTILITIES.
 3. ALL CONSTRUCTION SIGNING AND TRAFFIC CONTROL TO BE IN ACCORDANCE WITH TOWN OF EGG HARBOR AND WISCONSIN DEPARTMENT OF TRANSPORTATION REQUIREMENTS.
 4. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO THE ORDINANCES AND REQUIREMENTS OF THE TOWN OF EGG HARBOR AND THE STATE OF WISCONSIN DOT, DCCOM, AND DNR REQUIREMENTS.
 5. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH ENGINEERING PLANS APPROVED BY THE TOWN OF EGG HARBOR. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED IN CONSTRUCTING THE IMPROVEMENTS INDICATED ON THE ENGINEERING PLANS.
 6. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND IS TO COMPARE THE SITE CONDITIONS TO THOSE INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER AND RESOLVED PRIOR TO THE START OF CONSTRUCTION.
 7. THE CONTRACTOR SHALL NOTIFY THE MUNICIPALITY AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION INSPECTION.
 8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH AS-BUILT INFORMATION OF THE DESIGNED IMPROVEMENTS. ANY CHANGES TO THE DESIGN OR ADDITIONAL ITEMS MUST HAVE PRIOR APPROVAL FROM THE MUNICIPALITY.
 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, PERMIT COSTS, BONDS, AND ALL OTHER FEES REQUIRED FOR THE PROPOSED WORK.
 10. THE PRIME CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CONSTRUCTION WITH OTHER CONTRACTORS INVOLVED WITH CONSTRUCTION AND FOR REPORTING ANY ERRORS OR DISCREPANCIES BETWEEN THESE PLANS AND PLANS PREPARED BY OTHERS.
 11. CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING CONSTRUCTION OF IMPROVEMENTS.
 12. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ALL OF THE UTILITIES PRIOR TO THE INSTALLATION OF ANY UNDERGROUND IMPROVEMENTS.
 13. ANY UTILITIES WHICH ARE DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AND AT THE CONTRACTOR'S EXPENSE.
 14. BAY LAKE ROAD SHALL BE THE CONSTRUCTION ACCESS POINT TO THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE SURFACE OF THE ROAD FOR USE BY THE PUBLIC DURING CONSTRUCTION. BAY LAKE ROAD SHALL REMAIN IN SERVICE DURING AND AFTER CONSTRUCTION.

BEACH NOURISHMENT SAND SPECIFICATIONS

1. ALL VEGETATION AND TOPSOIL SHOULD BE REMOVED FROM THE AREA OF THE PROPOSED BEACH NOURISHMENT PRIOR TO PLACING THE SAND.
2. BEACH NOURISHMENT SAND SHALL BE NATURAL, MINED, MANUFACTURED, OR MIXTURE THEREOF. PARTICLE SIZE SHALL CONFORM TO TABLE 3. THE AMOUNT OF MATERIAL PASSING THE #200 SIEVE SHALL NOT EXCEED 5.0%.

TABLE 3 - BEACH SAND PARTICLE SIZE DISTRIBUTION

SIEVE SIZE	PERCENT PASSING (BY WT.)
#10	100
#20	100-90
#40	100-50
#60	100-30
#100	100-0
#200	45-0

PERCENT PASSING (BY WT.) GRAIN SIZE DIAMETER (MILLIMETERS)

D100	0.20-0.20
D60	0.20-0.40
D30	0.12-0.30
D10	0.09-0.25

ROBUSTER SOIL MIX

A THE ROBUSTER SOIL SHALL CONSIST OF A MIXTURE OF SAND, TOPSOIL, AND MATURE COMPOST THAT IS SUITABLE FOR INITIAL AND LONG-TERM SUPPORT OF PLANT GROWTH, WHILE MAINTAINING MODERATE HYDRAULIC CONDUCTIVITY. B MIXTURE COMPONENTS SHALL BE IN ACCORDANCE WITH THE PROPORTIONS SUMMARIZED IN TABLE 1. SHALL HAVE A PH IN THE RANGE OF 6.0 TO 8.0, AND SHALL HAVE ADEQUATE NUTRIENT CONTENT TO MEET PLANT GROWTH REQUIREMENTS. C THE MIX SHALL NOT CONTAIN WEED SEED OR NOXIOUS PLANT SEED OR MATERIALS. THE MIX SHALL BE FREE OF STUMPS, ROOTS, BRUSH, OR OTHER MATERIAL OVER 1" DIAMETER.

TABLE 1 - ROBUSTER SOIL MIX

COMPONENT	ROBUSTER SOIL MIX	APPROX. 40% ADJUST AS NEEDED FOR PERFORMANCE
TOPSOIL	10 TO 15% IF LOAM TEXTURE 15 TO 20% IF SANDY LOAM TEXTURE 25 TO 25% IF LOAMY SAND TEXTURE	
COMPOST	30 TO 45%	

ADJUSTMENTS TO PROPORTIONS SHALL BE MADE TO MEET HYDRAULIC CONDUCTIVITY REQUIREMENTS. FIBRIC PEAT, COPRUM LIME, NUTRIENTS, OR CONDITIONING AGENTS MAY BE ADDED AS NEEDED TO SUPPORT PLANT GROWTH AND/OR MAINTAIN HYDRAULIC CONDUCTIVITY. MANAGEMENT SHALL BE PRESENT AT 55 LB/AC/BE. FISHPOHNS (AS P200) AT 75 LB/AC/BE, AND POTASSIUM (AS K2O) AT 65 LB/AC/BE. SOLUBLE SALTS SHALL NOT EXCEED 500 PPM. SAND SHALL BE NATURAL, MINED, MANUFACTURED, OR MIXTURE THEREOF, CONSISTING OF WATER INSOLUBLE MINERALS THAT ARE RESISTANT TO PHYSICAL AND CHEMICAL WEATHERING. PARTICLE SIZE SHALL CONFORM TO TABLE 2. THE AMOUNT OF MATERIAL PASSING THE #200 SIEVE SHALL NOT EXCEED 5.5%.

TABLE 2 - ROBUSTER AND RAIN GARDEN SAND PARTICLE SIZE DISTRIBUTION

SIEVE SIZE	PERCENT PASSING (BY WT.)
3/8"	100
#4	90-100
#10	85
#16	60-85
#20	20-80
#30	10-50
#50	2-30
#100	2-5
#200	2-1

D TOPSOIL MAY BE A USDA CLASSIFICATION LOAM SANDY LOAM, AND LOAMY SAND, AS VERIFIED BY LABORATORY ANALYSIS OR VISUAL/MANUAL CLASSIFICATION BY QUALIFIED PERSONNEL. TOPSOIL COMPONENT MAY ALSO CONSIST OF "PLANT STARTER MIX" OF PEAT AND MATURE MANURE COMPOST. CLAY LOAM OR CLAY TOPSOIL SHALL NOT BE USED.

E COMPOST SHALL MEET WORK SPECIFICATION S100 - COMPOST. MATURITY BY DEWAR SELF-HEATING FLASK (3 TO 7 DAY) OR SOLVITA CARBON-DIOXIDE AND AMMONIA EVOLUTION TEST KIT. PH, WATER HOLDING CAPACITY, ORGANIC MATTER, ASH CONTENT, CARBON: NITROGEN RATIO, SOLUBLE SALTS, AND PHYTO-TOXICITY BY WOOD'S KNOXER WATER ANALYSIS SHALL BE DETERMINED. COMPOST SHALL BE FREE OF STUMPS, ROOTS, BRUSH, OR OTHER MATERIAL OVER 1" DIAMETER. COMPOST SHALL BE SCREENED FOR PATHOGENS (BIOHAR # 204-07(9)(A)) OR SAME SOURCE AND PRODUCTION PROCESS WITHIN LAST 12 MONTHS.

GRADING PLAN

<p>DOOR COUNTY BEACH STORM WATER MANAGEMENT FRANK E. MURPHY PARK BEACH 7119 HORSESHOE BAY RD, EGG HARBOR, WISCONSIN</p>	<p>JOB 17336-E- MURPHY</p> <p>BY SCJ</p> <p>CK PGP</p>	<p>SCALE: HOR. 1"=40'</p> <p>DATE: 3-25-08</p>	<p>SHEET 2 OF 3</p>	<p>NO. 1</p> <p>DATE 5-1-2008</p> <p>DESCRIPTION UPDATED PER SWCD COMMENTS</p>	<p>BY SMW</p>	<p>MILLER ENGINEERS SCIENTISTS An Employee Owned Company</p> <p>5308 S. 12th Street Sheboygan, WI 53081-8099 Phone 920-458-6164 Fax 920-458-0369 www.startwithmiller.com</p>
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