# SITE STABILIZATION SOLUTIONS

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## CO INTRO







# SITE STABILIZATION SOLUTIONS:

("BEYOND SHORT-TERM PHOTODEGRADABLE DOUBLE-NET STRAW EROSION CONTROL BLANKET")

- WINTER STABILIZATION
- TEMPORARY EROSION CONTROL BLANKETS (ECB'S)
- HYDRAULICALLY-APPLIED PRODUCTS
- SOIL AMENDMENTS (MAYBE NOT WHAT YOU THINK)
- TURF REINFORCEMENT MATS (TRM'S)
- ARMORING (BEYOND HIGH-PERFORMANCE TRM'S)



AND MORE!

#### WINTER STABILIZATION

- Polymer tackifiers + water = "crust
- Protective cover that will not blow
- Easily applied quickly over a large



- If seeding is required, upgrade to ECB's or hydraulically-applied products
- Hydromulch can be used instead of tac (e.g. Flexterra)
- Communicate expectations with city





#### WINTER STABILIZATION

- Environmentally friendly
- Strong bonds
- Will not be washed away by rain
- 250 gal/Ac for 1 Year









#### WINTER STABILIZATION

• Hydromulch may be used instead of tackifier







# TEMPORARY EROSION CONTROL BLANKETS

- Short-Term Solutions: typ. Veg. within 1 year
- STRAW: Double-Net Straw Blanket (e.g. S150)
- STRAW-COCONUT: Functional longevity 12-24 months
  - Used on 2:1 3:1 slopes
- COCONUT: Functional longevity up to 36 months
  - Used on 1:1 2:1 slopes
- + Sediment Control (e.g. wattles) on steeper slopes



# TEMPORARY ECB'S:

- Slope angle, soil conditions, time of year, vegetation expectations all factor into ECB selection
- Higher class ECB's can protect minor channels, but TRM's are typ.
   recommended
- Use wattles on long, steep slopes

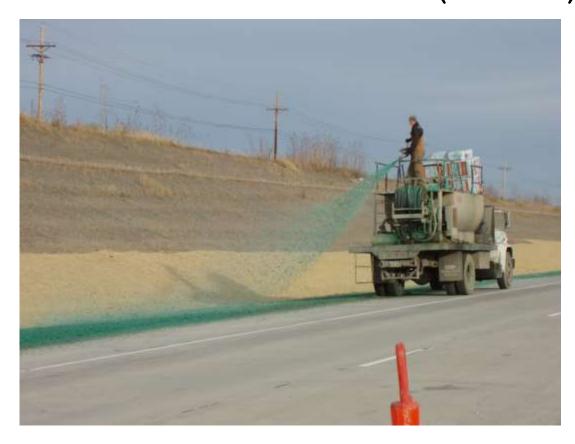


## HYDRAULICALLY-APPLIED PRODUCTS:

- Easily applied over very large areas
- Higher performance ratings than most ECB's
- WOOD FIBER: Entry-level, flattest slopes
- WOOD FIBER WITH TACKIFIER
- BONDED FIBER MATRIX
- FLEXIBLE GROWTH MEDIUM: Steepest slopes (e.g. Flexterra)



# HYDRAULICALLY-APPLIED PRODUCTS: (BFM)







### HYDRAULICALLY-APPLIED PRODUCTS: (HGM)







# HYDRAULICALLY-APPLIED PRODUCTS:

- Flexterra on steep slopes
- BNSF Railroad embankment





#### SOIL AMENDMENTS:

- Not all "Soil Amendments" are equal
- Commercially available: consistency (vs "compost")
- Soil conditions? Must start with soil test
- Construction activity on-site? Must coordinate soil efforts with schedule/phasing
- Vegetation is our best chance at success ("Ounce of prevention... pound of cure.")

What's in your soil?





# SOIL AMENDMENTS:

 Broadcast Spreader or Hydraulically-Applied



### SOIL AMENDMENT + ECB:



# TURF REINFORCEMENT MATS (TRM'S):

- More Permanent than ECB's
- Higher Performance than ECB's
- Partially Degrading vs Non-Degrading
- Performance Ratings: Unvegetated vs Vegetated
- Bank Stabilization & Channel Protection
- High-Performance TRM's: top of the class



#### TURF REINFORCEMENT MATS

- ·(TRM'S):
  Omaha
- NDOT
- Combination of Erosion Control products









### TRM's:

- Slope angle, soil conditions, time of year, vegetation expectations all factor into ECB selection
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## ECB's: Straw-Coconut

Levee project



- Beyond TRM's: can include HP TRM's + Anchoring
- Alternatives to rock rip rap
- Sheet products and Rolled products
- Includes "Transition Mats" per ASTM
- Highest erosion protection performance besides hard armor
- Outlet protection
- Channel protection
- High scour areas
- Protect critical infrastructure



• Transition Mats must include ground cover:

• TRM's for vegetated areas

• Geotextiles for unvegetated areas



Outlet protection



- Channels, Shorelines
- Some Transition Mats come with ground cover attached







But wait, there's more!

### BMP'S & SWPPP SOLUTIONS:

- Inlet Protection:
  - Curb Inlets
  - Area Inlets
- Construction Entrance
  - Reusable?



### APPLICATION/PRODUCT CATEGORY

- Bullet points
- More bullet points



