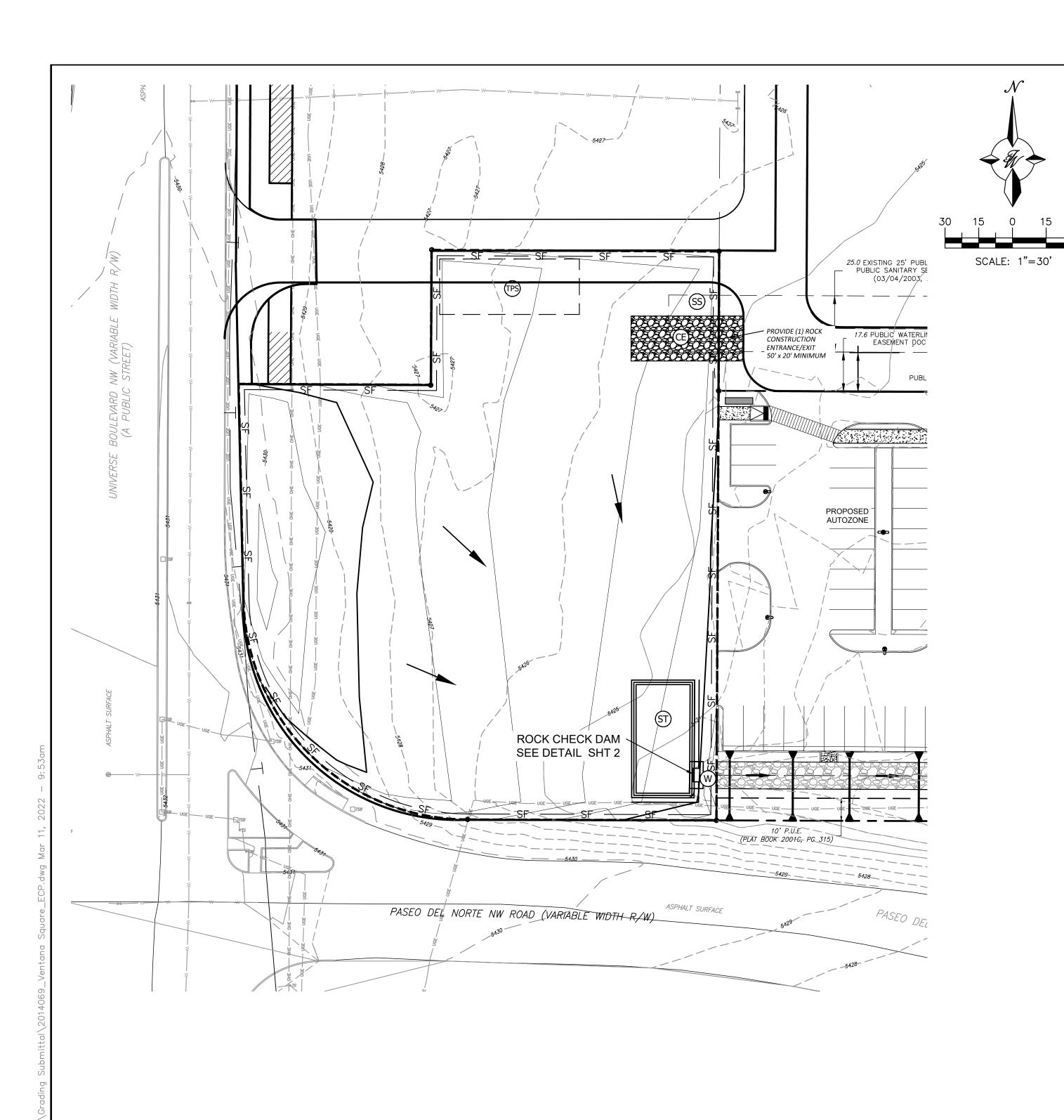
# Stormwater Quality Plan Information Sheet

## and Inspection Fee Schedule

Project Name: Tract 10 Ventana Ranch			
Project Location: (address or major cross streets/arroyo) TR H-10 PLAT OF TRACTS H-1 THRU H-11 VENTANA SQUARE AT VENTANA RANCH A REPLAT OF TRACT H-A VENTANA RANCH			
Plan Preparer Inform	ation:		
Company: Tierra West, LLC			
Contact: JON NISKI			
Address: 5571 MIDWAY PARK PLACE NE, ALBUQUERQUE, NM 87109			
Phone Number: (O) (505) 858-3100 (Cell (optional))			
e-Mail: JNISKI@TIERRAWESTLLC.COM			
Owner Information:			
Company:			
Contact: Julian Garza			
Address: PO BOX 45688 Rio Rancho NM 87174			
Phone: (505) 269-1179			
e-Mail:			
I am submitting the ESC plan to obtain approval for:			
X GradingBuilding PermitWork Order Construction Plans			
Note: More than one item can be checked for a submittal			
		development type and disturbed	1
Commercial	< 2 acres \$300 X	2 to 5 acres \$500	>5 acres \$800
Land/Infrastructure	< 5 acres \$300   \tau	5 to 40 acres \$500	>40 acres \$800
Multi - family	< 5 acres \$500   \qu	≥5 acres \$800 □	40 01500
Single Family Residential	<5 acres \$500	5 to 40 acres \$1000 🗖	> 40 acres \$1500 <b></b>
Plan Review fee is \$105	5 for the first submittal	and \$75.00 for a resul	bmittal 🗖
Total due equals the plan review fee plus the Stormwater Quality Inspection fee.			
<b>Total Due \$</b> \$405.00			
If you have questions, please	e contact Curtis Cherne, Stor	mwater Quality 924-3420, cche	erne@cabq.gov
Rev May 2019		•	



#### NATURE AND EXTENT OF CONSTRUCTION ACTIVITIES:

NATURE OF CONSTRUCTION ACTIVITIES: MASS GRADE SITE AND STABILIZE WITH GRAVEL FOR CONTRACTOR LAY DOWN YARD.

PROPERTY SIZE: 1.19 ACRES

DISTURBED AREA SIZE: 1.19 ACRES

MAXIMUM DISTURBED AREA SIZE: 1.19 ACRES

PROJECT SCHEDULE; SCHEDULE LENGTHS ARE TBD, SEE SEQUENCE

OF CONSTRUCTION THIS SHEET FOR SCHEDULE TASKS DESCRIPTION.

GRADING PHASE: THE FIRST PHASE OF CONSTRUCTION. THIS

CONSISTS OF EARTHWORK TO ESTABLISH THE DRAINAGE MASTER

FINAL STABILIZATION PHASE: GRAVEL MULCH

PLAN DISCHARGE FLOW CONVEYANCE.

INSPECTIONS: INSPECTION FREQUENCY AS REQUIRED BY THE CGP.

#### BMP MAINTENANCE:

ALL MEASURES STATED IN THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR UNTIL FINAL STABILIZATION OF THE SITE IS ACHIEVED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AT THE END OF THE WORKDAY BY A QUALILIFIED MEMBER OF THE SWPPP COMPLIANCE TEAM.

THE OPERATOR WITH CONTROL OF THE SITES DAILY ACTIVITIES IS RESPONSIBLE TO MAINTAIN, CLEAN AND REPAIR EROSION CONTROLS IN ACCORDANCE WITH THE

- 1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED, IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION. SEDIMENT SHALL BE REMOVED TO INSURE PROPER FLOWS. INLET PROTECTION TYPES MAY NEED TO BE MODIFIED DURING THE CONSTRUCTION PROGRESS.
- 2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND OF VEGETATION IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RE—SEEDED AS NEEDED.
- 3. SILT FENCES, WADDLES OR OTHER CONTROLS SHALL BE REPLACED OR REPAIRED TO PROPER FUNCTIONING CONDITION, IF DAMAGED. SEDIMENT AND SOIL SHALL BE REMOVED WHEN REACHES ONE—HALF THE HEIGHT OF THE CONTROL.
- 4. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADWAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING, EXTENDING OR OTHERMODIFICATIONS TO THE CONSTRUCTION EXITS AS CONDITIONS DEMAND. SITE TRAFFIC SHOULD BE LIMITED TO THE CONTROLLED EXITS ONLY.
- 5. SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%.
- 6. REFERENCE THE SWPPP BOOK FOR ALL EROSION CONTROL MAINTENANCE PROCEDURES AND FREQUENCIES. CONSULT THE SWPPP PREPARER WITH ANY QUESTIONS REGARDING THIS SWPPP AND ITS REQUIREMENTS.

#### EROSION CONTROL NOTES:

- 1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL
  DISTURBANCE PERMIT FROM THE LOCAL JURISDICTIONAL AUTHORITY
  PRIOR TO BEGINNING WORK.
- 2. THE OPERATOR WITH CONTROL OF THE DAILY SITES ACTIVITIES IS RESPONSIBLE FOR MAINTAINING RUN-OFF and RUN ON OF SITE DURING CONSTRUCTION.
- 3. THE OPERATOR WITH CONTROL OF THE DAILY SITES ACTIVITIES IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 4. ALL EXPOSED EARTH SURFACES MUST HAVE APPROPRIATE CONTROLS TO PROTECT FROM WIND AND WATER EROSION DURING ALL PHASES OF THE PROJECT.
- STOCKPILES INACTIVE FOR 14 DAYS ARE REQUIRED TO HAVE TEMPORARY STABILIZATION OR APPROPRIATE COVER TO CONTROL WIND AND WATER EROSION.
- 6. THE OPERATOR WITH CONTROL OF THE DAILY SITES ACTIVITIES IS REQUIRED TO MAINTAIN ALL SITE BMP'S IN GOOD CONDITION FOR THE DURATION OF THE PROJECT UNTIL A NOTICE OF TERMINATION IS ACCEPTED BY THE EPA.
- 7. IF SITE EARTH DISTURBANCES EXCEED 5 ACRES AT ANY ONE TIME, TEMPORARY AND/OR PERMANENT STABILIZATION MUST BE COMPLETED WITHIN 7 DAYS WHEN AREA BECOMES INACTIVE OR EARTH DISTURBING ACTIVITIES ARE COMPLETE. SITE EARTH DISTURBANCES OF LESS THAN 5 ACRES, HAVE 14 DAYS TO PROVIDE TEMPORARY OR PERMANENT STABILIZATION WHEN AREA BECOMES INACTIVE OR EARTH DISTURBING ACTIVITIES ARE COMPLETE.

## LEGEND

BOUNDARY LINE
RIGHT OF WAY LINE
LIMITS OF DISTURBANCE
XXX CONTOUR ELEVATIONS

——— SF ——— TEMPORARY SILT FENCE

----- TEMPORARY PARKING AND STORAGE

#### EROSION DETAILS

(CE) CE TEMPORARY STONE CONSTRUCTION EXIT

- ST TEMPORARY SEDIMENT TRAP W/ EMERGENCY OVERFLOW
- SS SWPPP SIGN
- (W) W WATTLES

#### EROSION NOTES

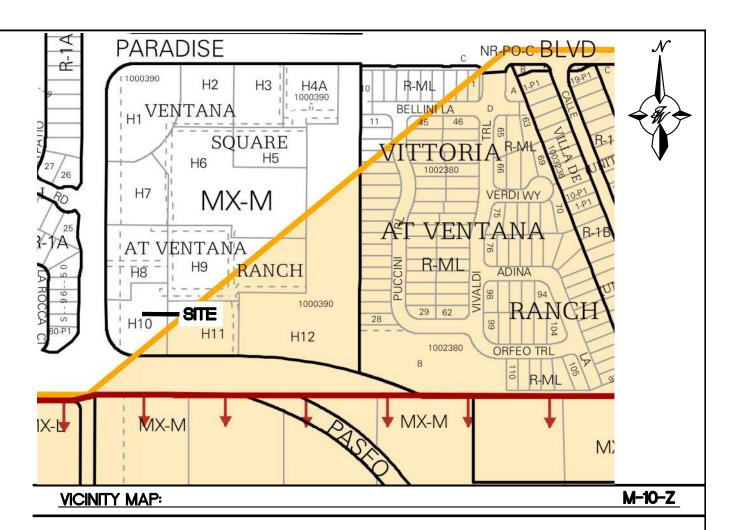


TPS TEMPORARY PARKING AND STORAGE

N.O.T. TERMINATION: PARCELS ARE EXPECTED TO BE PERMANENTLY STABILIZED PRIOR TO ANY SALES. IF A SALE IS TO OCCUR PRIOR TO FINAL STABILIZATION AND PRIOR TO A SITE—WIDE N.O.T. BEING FILED, THE NEW OWNERS WILL BE REQUIRED TO FILE A NEW N.O.I. OR TRANSFER AN EXISTING N.O.I. AND BECOME THE OPERATOR RESPONSIBLE TO MAINTAIN THE BMP'S AND BECOME RESPONSIBLE FOR THOSE PROPERTIES.

STABILIZATION MEASURES: LOCALLY, NON-VEGETATIVE CONTROLS MAY CONSIST OF 2" OR \$\frac{3}{2}" GRAVEL MULCH MIXED WITH COA WESTSIDE SEED MIX PLACED TO COVER THE PARCEL OR VEGETATIVE CONTROLS MAY BE CRIMP STRAW OR HYDRO-SEED APPLIED WITH THE INTENT OF PROVIDING 70% OR MORE COVERAGE THAT IS PROVIDED BY VEGETATION NATIVE TO LOCAL UNDISTURBED AREAS WITHIN (3) THREE YEARS, TO THE EXTENT NECESSARY TO PREVENT EROSION ON THE SEEDED AREA, NON-VEGETATIVE EROSION CONTROLS HAVE BEEN APPLIED THAT PROVIDE COVER AT LEAST FOR THREE YEARS WITHOUT ACTIVE MAINTENANCE. VEGETATIVE CONTROLS SHOULD BE APPLIED FROM JUNE TO AUGUST TO TAKE ADVANTAGE OF THE AREA'S RAIN SEASON.

<u>CITY WEED REMOVAL ORDINANCE</u>; ALL PROPERTY OWNERS ARE TO COMPLY WITH THE CITY WEED REMOVAL ORDINANCE.



#### **GENERAL EROSION NOTES:**

- A. THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS COMPRISED OF THE SWPPP BOOK, THE 2017 GENERAL CONSTRUCTION PERMIT, THIS DRAWING ("TEMPORARY EROSION CONTROL AND SEDIMENTATION PLAN"), STANDARD DETAILS ("TEMPORARY EROSION CONTROL AND SEDIMENTATION DETAILS"), EPA NOTICE OF INTENT PERMIT AND ALL SUBSEQUENT REPORTS, CORRECTIVE ACTIONS AND EROSION CONTROL RELATED DOCUMENTS.
- B. ALL OPERATORS AS DESIGNATED, CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH SITE ACTIVITIES RELATED TO STORM WATER POLLUTION PREVENTION SHALL REVIEW A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP), THE 2017 CONSTRUCTION GENERAL PERMIT, THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES), THE CLEAN WATER ACT OF 1972 AND BECOME FAMILIAR WITH THEIR CONTENTS.
- C. THE OPERATOR IN CONTROL OF DAILY SITE ACTIVITIES SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS THAT MAY OCCUR AT NO ADDITIONAL COST TO PROJECT OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- D. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO ALL FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. OPERATOR WITH CONTROL OF DAILY SITE ACTIVITIES SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY, LOCAL JURISDICTIONAL AUTHORITY OR SWPPP COMPLIANCE INSPECTOR.
- E. THE TEMPORARY EROSION CONTROL AND SEDIMENTATION PLAN IS A WORKING DOCUMENT AND IS REQUIRED TO BE UPDATED WITHIN 24 HOURS OF ANY CHANGES WHEN BMP'S ARE REPAIRED, RELOCATED OR REMOVED BY NOTING ON THE PLAN THE AREAS AND DATES OF THE REPAIRS, RELOCATIONS OR REMOVALS. AN ACTIVE COPY OF THE PLAN SHALL BE POSTED IN THE JOB SITE TRAILER ONSITE AND MUST BE MAINTAINED CURRENT AT ALL TIMES.
- F. CONTRACTOR SHALL MINIMIZE CLEARING AND EARTH DISTURBANCE TO THE MAXIMUM ACREAGE AS REQUIRED BY THE EPA CONSTRUCTION GENERAL PERMIT.
- G. CONTRACTOR SHALL DENOTE ON THIS PLAN, THE LOCATION OF TEMPORARY PARKING, STORAGE, PORTABLE SANITARY FACILITIES, OFFICE TRAILERS, AND ALL SUPPORT AREAS. RELOCATIONS OF EACH SHALL ALSO BE DOCUMENTED AS THEY OCCUR.
- H. ALL WASH OUT WATER USED FOR CONCRETE, MASONRY, PAINT AND OTHER MATERIALS SHALL HAVE ADEQUATE SIGNAGE WITH PROPER CONTAINMENT AND DISPOSED OF PROPERLY WHEN CAPACITY REACHES 50% OR PER VENDOR RECOMMENDATIONS. VENDORS AND TRADESMEN SHALL BE INFORMED OF THE REQUIREMENTS TO USE THE WASH OUT.
- I. A SPILL KIT SHALL BE READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS. A DISCHARGE OF ANY MATERIAL IN A QUANTITY THAT MAY WITHIN REASONABLE PROBABILITY CAUSE, INJURE OR BE DETRIMENTAL TO HUMAN HEALTH, ANIMAL OR PLANT LIFE, OR PROPERTY; OR INTERFERE WITH THE PUBLIC WELFARE MUST BE REPORTED TO THE NEW MEXICO ENVIRONMENTAL DEPARTMENT HOTLINE AT (505) 827-9329 FOR EMERGENCIES OR FOR NON EMERGENCIES AT (866)-428-6535.
- IF UNSURE IF THE SPILL IS OF A SIGNIFICANT QUANTITY, THE SPILL SHOULD BE REPORTED TO THE HOTLINE AND INFORMATION PROVIDED WITH DETAILS OF THE SPILL FOR FURTHER ACTIONS.
- J. DUST DURING CONSTRUCTION OPERATIONS SHALL BE FREQUENTLY CONTROLLED BY WATER SUPPRESSION METHODS ONLY, EARTH DISTURBING OPERATIONS SHALL CEASE IF HIGH WINDS ABOVE 35 MPH ARE PRESENT. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS IS STRICTLY PROHIBITED. OTHER CHEMICALS USED FOR DUST SUPPRESSION MUST BE APPROVED BY THE EPA PRIOR TO THEIR USE.
- K. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED, COVERED, LEAK PROOF CONTAINERS. CONTAINERS SHALL BE DISPOSED OF PROPERLY WHEN CAPACITY IS REACHED. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR
- L. ALL STORM WATER POLLUTION PREVENTION MEASURES AND CONTROLS PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED PER THE SEQUENCE OF CONSTRUCTION AS NOTED.
- M. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS BEEN TEMPORARILY SUSPENDED FOR 14 DAYS, SHALL HAVE TEMPORARILY STABILIZATION IN PLACE NO LATER THAN 14 DAYS FROM THE LAST DATE OF CONSTRUCTION ACTIVITY OCCURRING THESE AREAS.
- N. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL HAVE PERMANENT CONTROLS IN PLACE NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
- O. IF THE ACTION OF VEHICLES OR EQUIPMENTS TRAVELING OVER THE CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD FROM LEAVING THE SITE. THEN THE LENGTH OF THE EXIT SHOULD BE EXTENDED TO PROVIDE ADDITIONAL TIRE ROTATIONS, LARGER ROCK MAY BE USED TO CREATE A SUFFICIENT JARRING MOTION OR INSTALL A TIRE WASH OFF WITH A SEDIMENT TRAP BEFORE LEAVING THE SITE.
- P. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- Q. THE OPERATOR IN CHARGE OF THE DAILY SITES ACTIVITIES WILL BE RESPONSIBLE FOR REMOVING SEDIMENT OR SOILS ACCUMULATING MORE THAN 50% OF THE DESIGN CAPACITY IN DETENTION PONDS, SILT FENCING OR OTHER SIMILAR EROSION CONTROLS.
- R. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES, AS REQUIRED PER THE CONSTRUCTION GENERAL PERMIT. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE ESC PLAN AND PERMITTED IN ACCORDANCE WITH LOCAL AUTHORITIES HAVING JURISDICTIONAL CONTROL.
- S. SLOPES SHALL BE LEFT WITH CROSS SLOPE GRADING PATTERN AND IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION RILLS. EXCESSIVE SLOPES MAY REQUIRE ADDITIONAL INDUSTRY STANDARD CONTROLS TO PREVENT EROSION.
- T. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE OPERATOR IN CONTROL OF THE SITE'S DAILY ACTIVITIES SHALL BE RESPONSIBLE FOR ADJUSTING AND MAINTAINING ALL EROSION CONTROL TO PREVENT EROSION T.
- U. ALL DISTURBED AREAS SHALL BE SUPPRESSED BY WATER AND ALL CONTROLS LEFT IN GOOD WORKING CONDITION AT THE END OF EACH WORKING DAY, THIS INCLUDES REPLACEMENT OF SILT FENCING AND/OR OTHER SURFACE CONTROLS, TRACK OUT SWEPT CLEAN, BACKFILL OF OPEN TRENCHES AND ANY OTHER EROSION CONTROLS.

## ESC PLAN STANDARD NOTES:

- 1. ALL EROSION AND SEDIMENT CONTROL (ESC WORK) ON THESE PLANS, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON SHALL BE PERMITTED, CONSTRUCTED, INSPECTED, AND MAINTAINED IN ACCORDANCE WITH:
  - a. THE CITY ORDINANCE § 14-5-2-11, THE ESC ORDINANCE,
     b. THE EPA'S 2017 CONSTRUCTION GENERAL PERMIT (CGP), AND
     c. THE CITY OF ALBUQUERQUE CONSTRUCTION BMP MANUAL.
- 2. ALL BMP'S MUST BE INSTALLED PRIOR TO BEGINNING ANY EARTH MOVING ACTIVITIES EXCEPT AS SPECIFIED HEREON IN THE PHASING PLAN.

  CONSTRUCTION OF EARTHEN BMPS'S SUCH AS SEDIMENT TRAPS, SEDIMENT BASINS, AND DIVERSION BERMS SHALL BE COMPLETED AND INSPECTED PRIOR
  TO ANY OTHER CONSTRUCTION OR EARTHWORK. SELF—INSPECTION IS REQUIRED AFTER INSTALLATION OF THE BMP'S AND PRIOR TO BEGINNING
  CONSTRUCTION.
- 3. SELF-INSPECTIONS AT A MINIMUM A ROUTINE COMPLIANCE SELF-INSPECTION IS REQUIRED TO REVIEW THE PROJECT FOR COMPLIANCE WITH THE CONSTRUCTION GENERAL PERMIT ONCE EVERY 14 DAYS AND AFTER ANY PRECIPITATION EVENT OF 

  ↓ INCH OR GREATER UNTIL THE SITE CONSTRUCTION HAS BEEN COMPLETED AND THE SITE DETERMINED AS STABILIZED BY THE CITY. REPORTS OF THESE INSPECTIONS SHALL BE KEPT BY THE PERSON OR ENTITY AUTHORIZED O DIRECT THE CONSTRUCTION ACTIVITIES ON THE SITE AND MADE AVAILABLE UPON REQUEST.
- 4. CORRECTIVE ACTION REPORTS MUST BE KEPT BY THE PERSON OR ENTITY AUTHORIZED TO DIRECT THE CONSTRUCTION ACTIVITIES ON THE SITE AND MADE AVAILABLE UPON REQUEST.
- 5. STABILIZATION REPORTS MUST BE KEPT BY THE PERSON OR ENTITY AUTHORIZED TO DIRECT THE CONSTRUCTION ACTIVITIES ON THE SITE AND MADE AVAILABLE UPON REQUEST. REPORTS SHOULD INCLUDE RECORDS OF WEED REMOVAL PER CITY ORDINANCE (§ 9-8-1), STERILIZATION, SOIL TEST RESULTS AND RECOMMENDATION, MATERIALS AND MANUFACTURER'S SPECIFICATIONS FOR APPLICATION RATES, ESTIMATED FUNCTIONAL LONGEVITY, METHODS OF APPLICATION, INSPECTION AND MAINTENANCE. THE REDUCED SELF-INSPECTION SCHEDULE IN CGP 4.4.1 APPLIES TO STABILIZED AREA AND ANY DAMAGED OR WORN STABILIZATION MUST BE IDENTIFIED IN THE REPORTS ALONG WITH WEED PROBLEMS. CORRECTIVE ACTIONS FOR STABILIZATION SHALL BE DOCUMENTED IN A STABILIZATION REPORT INCLUDING ACTUAL RATES AND DATES OF STABILIZATION, AND THE MATERIALS AND MANUFACTURER'S SPECIFICATIONS USED.
- 6. BMP'S SHALL BE INSPECTED AND MAINTAINED UNTIL ALL DISTURBED AREAS ARE STABILIZED IN ACCORDANCE WITH THE FINAL STABILIZATION CRITERIA (CGP 2.2.14.b). GENERALLY, ALL DISTURBED AREAS, OTHER THAN STRUCTURES AND IMPERVIOUS SURFACES, MUST HAVE UNIFORM PERENNIAL VEGETATION THAT PROVIDES 70 PERCENT OR MORE OF THE COVER PROVIDED BY NATIVE VEGETATION OR SEED THE DISTURBED AREA AND PROVIDE NON-VEGETATIVE MULCH THAT PROVIDES COVER AT LEAST THREE YEARS WITHOUT ACTIVE MAINTENANCE. FINAL STABILIZATION MUST BE APPROVED BY THE CITY OF ALBUQUERQUE PRIOR TO REMOVAL OF BMP'S AND DISCONTINUATION OF INSPECTIONS.

#### SEQUENCE OF CONSTRUCTION:

- ESTABLISH STABILIZED CONSTRUCTION ENTRANCE/EXIT
- POST PUBLIC SWPPP NOTICE PER DETAIL
  INSTALL PERIMETER SILT FENCING AND OFFSITE INLET PROTECTION
- CONTACT SWPPP COMPLIANCE INSPECTOR FOR APPROVAL OF BMP'S
   CONSTRUCT TEMPORARY SEDIMENT BASIN. PROVIDE POSITIVE DRAINAGE
- TOWARDS TEMPORARY SEDIMENT BASIN FOR DURATION OF PROJECT 6. BEGIN GRUBBING AND MASS GRADING
- 7. PROVIDE TEMPORARY/PERMANENT STABILIZATION MEASURES AS AREAS ARE COMPLETED OR LEFT INACTIVE FOR 14 DAYS
- 8. CONTACT SWPPP COMPLIANCE INSPECTOR OF APPROVAL TO FILE NOTICE OF TERMINATION (NOT).

#### NOTE

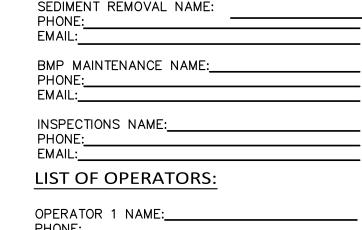
CHAIN LINK SECURITY FENCING W/SILT FENCE ATTACHED MAY BE USED AS AN ALTERNATIVE TO PERIMETER SILT DIKE, WATTLES OR SILT FENCING

## SWPPP PURPOSE:

GROUND COVER (PRE-CONSTRUCTION)

THE SITE IS COVERED BY UNDISTURBED NATURAL STATE IN UNCOMPACTED SOIL WITH 30% COVER BY NATIVE GRASSES AND SHRUBS

### STORMWATER TEAM MEMBERS:



# OPERATOR 1 NAME:\_\_\_\_\_\_ PHONE:\_\_\_\_\_ EMAIL:\_\_\_\_\_ OPERATOR 2 NAME:

OPERATOR 3 NAME:
PHONE:

# SWPPP PURPOSE:

THE PURPOSE OF THIS SWPPP IS TO APPLY SWPPP CONTROLS THAT ARE REQUIRED DURING DEVELOPMENT OF SITE.



1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES.

SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

5. ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT UNLESS INDICATED OTHERWISE

BY SIX INCHES AND FOLDED.

3' MIN.

PORTABLE TOILET

CONTAINMENT DETAIL

2. GEOTEXTILE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY

3. WHEN TWO SECTIONS OF GEOTEXTILE ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED

SEDIMENTATION/SILT FENCE WITH WIRE SUPPORT,

4. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE EROSION CONTROL PLAN. COLLECTED MATERIAL

PORTABLE TOILET

6" GRAVEL

3' MIN.

\*\* GRAVEL SHALL BE 2"-3" CLEAN STONE RIPRAP -—LENGTH (IN FEET) EQUAL OUTLET DIM (FT). 6 X DRAINAGE AREA -DIVERSION DIKE TOTOL VOLUME. — = 134 C.Y/AC 67 CU. YD./ACRE 67 CU. YD./ACRE (EXCAVATED) -RIPRAP GEOTEXTILE FABRIC, ORIGINAL-EXCAVATED-SECTION A-A OUTLET (PERSPECTIVE) TEMPORARY SEDIMENT TRAP

Chagrin River Watershed Partners, Inc. P.O. Box 229 Willoughby, Ohio 44096-0229 Phone: 440.975.3870 www.crwp.org

# **Roadside Ditch Stabilization**

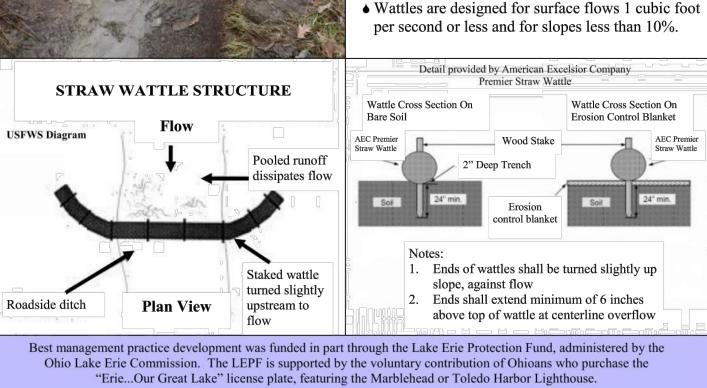
**Best Management Practice** 

Sediment continues to be the #1 pollutant by volume in Ohio's streams and rivers. Unvegetated roadside ditch side slopes and bottoms contribute tons of sediment annually to local receiving streams. Most erosion occurs during large storm events that produce high flows within roadside ditches. Check dams are a proven best management practice (BMP) that decrease runoff velocity and reduce erosion within roadside ditches. Straw wattles are an easily installed alternative BMP to rock check dams for velocity dissipation and sediment control.

## **Straw Wattles Alternative to Rock Check Dams**



- ♦ Tube-shaped erosion control devices filled with straw, flax, coconut fiber or composted material wrapped in UV-degradable polypropylene netting or 100% biodegradable material like burlap or
- ♦ Available in 9-inch or 12-inch diameter rolls of 25 feet and 10 feet, respectively. Wattles can be shaped to fit any ditch cross-section and maintain centerline flow. ♦ Reduce sediment loads to receiving waters by
- dissipating erosive flows, filtering runoff and capturing sediments.
- ♦ Wattles are designed for surface flows 1 cubic foot per second or less and for slopes less than 10%.





#### Chagrin River Watershed Partners, Inc. P.O. Box 229 Willoughby, Ohio 44096-0229 Phone: 440.975.3870 www.crwp.org

# Straw Wattle Advantages

- Easily and quickly installed without equipment or deep trenching • Readily shaped to fit typical roadside ditch cross-sections
- ♦ Lightweight for ease of transport and field handling
- Wattles do not obstruct hydraulic mulch or seed application
- Wattles can be removed or left in place after vegetation is permanently established
- Wattles are a cost effective alternative to rock check dams



BMP Tip: Silt fence is not designed or accepted as an effective check dam practice and should not be used to treat concentrated flow, particularly in roadside ditches. Straw bales also make poor check dams due to their inflexible rectangular shape within roadside ditches.

#### **Roadside Ditch Stabilization Demonstration Site Product Application Costs** Morley Road Demonstration Site - Concord Township, Lake County

The Morley Road demonstration ditch maintenance site included an 800 linear foot section of excavated ditch. A Gradall equipped with a smooth bucket excavated an average width of 10 feet totaling 8,000 square feet of disturbed treatment area. American Excelsior Company Premier Straw Wattles were installed at the proper spacing perpendicular to flow within the ditch. Wattle length varied based on specific cross-section locations and each wattle was trenched a minimum of 2 inches with spoils tamped on the downstream side of the wattle with each wattle receiving four 30-inch long wooden stakes driven through the center of the wattle; 2 stakes within the center of the ditch line and one stake on each end of the wattle.

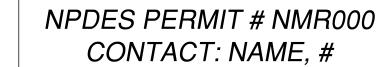
Straw Wattle (9-inch Diameter) - Application Rate:60 foot spacing for 3% slope recommended Product Cost: \$1.38 per linear foot of wattle

BMP material investment to treat 800 linear feet of ditch line with 3% slope: \$132.48

Straw wattles installed at the Morley Road demonstration site operated as effective check dams from November 2011 through May 2012 providing velocity control and sediment capture.

> For more details on project demonstration sites and results go to: http://www.crwp.org/Projects/roadside ditch sediment control.htm



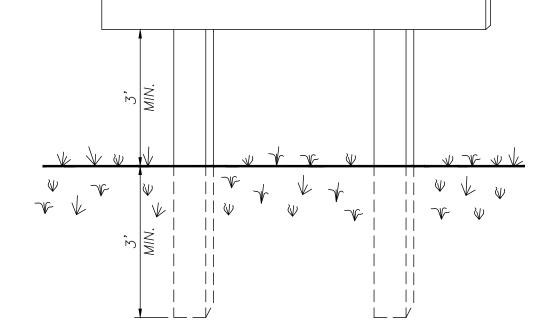


SIGN TO BE CONSTRUCTED OF A RIGID MATERIAL, SUCH AS PLYWOOD OR OUTDOOR SIGN BOARD. SIGN MUST BE CONSTRUCTED IN A MANNER TO PROTECT DOCUMENTS FROM

DAMAGE DUE TO WEATHER (WIND, SUN, MOISTURE, ETC.).

If you would like to obtain a copy of the Stormwater Pollution Prevention Plan (SWPPP) for this site, contact the EPA Region 6 office at (214) 665-7217

If you observe indicators of stormwater pollutants in the discharge or in the receiving waterbody, contact the EPA through the following website: "www.epa.gov/enforcement/report-environmental-violations"



#### **SWPPP POSTING REQUIREMENTS:**

You must post a sign or other notice of your permit coverage at a safe, publicly accessible location in close proximity to the construction site. The notice must be located so that it is visible from the public road that is nearest to the active part of the construction site, and it must use a font large enough to be readily viewed from a public right-of-way.

- At a minimum, the notice must include:
- 1) The NPDES ID (i.e., permit tracking numbers assigned to the project)
- 2) A contact name and phone number for obtaining additional construction site information; 3) A website where a copy of the SWPPP may be viewed or the following statement: "If you would like to obtain a copy of the Stormwater Pollution Prevention Plan (SWPPP) for this site, contact the EPA
- Region 6 office at (214) 665-7217" and; 4) The following statement "If you observe indicators of stormwater pollutants in the discharge or in the receiving waterbody, contact the EPA through the following website: "www.epa.gov/enforcement/report-environmental-violations."

