


State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary
Gloria L. McCutcheon, Regional Director

Southeast Region Headquarters
2300 N Dr ML King Drive
Milwaukee, WI 53212
Telephone (414) 263-8500
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June 13, 2006

Michael Lewis
 City of West Allis
 7525 W. Greenfield Ave
 West Allis, WI 53214

SUBJECT: Coverage Under WPDES General Permit No. WI-S067831-2: Storm Water Discharges Associated with Construction Activities

Permittee Name: City of West Allis
 Site Name: Lime Pit Property
 FIN: 34414

Dear Mr. Lewis:

The Department of Natural Resources (Department) received your Notice of Intent (NOI), Form 3400-161, on May 17 2006, for the Lime Pit Property site and has evaluated the information provided regarding storm water discharges from your construction site. We have determined that your construction site activities will be regulated under ch. 283, Wis. Stats., ch. NR 216, Wis. Adm. Code, and in accordance with Wisconsin Pollutant Discharge Elimination System (WPDES) General Permit No. WI-S067831-2, Storm Water Discharges Associated with Construction Activities. All erosion control and storm water management activities undertaken at the site must be done in accordance with the terms and conditions of the enclosed general permit.

To ensure compliance with the general permit, please read it carefully and be sure you understand its contents. We emphasize that you be sure to take the following actions (This is not a complete list of the terms and conditions of the general permit):

- 1) The Construction Site Erosion Control Plan and Storm Water Management Plan that you completed prior to submitting your NOI must be implemented and maintained throughout construction. Failure to do so may result in enforcement action by the Department.
- 2) The general permit requires that erosion and sediment controls be routinely inspected at least every 7 days, and within 24 hours after a rainfall event of 0.5 inches or greater. Weekly written reports of all inspections must be maintained. The reports must contain the following information:
 - a) Date, time, and exact place of inspection;
 - b) Name(s) of individual(s) performing inspection;
 - c) An assessment of the condition of erosion and sediment controls;
 - d) A description of any erosion and sediment control implementation and maintenance performed;
 - e) A description of the site's present phase of construction.

- 3) When construction activities have ceased and the site has undergone final stabilization, a Notice of Termination (NOT) of coverage under the general permit must be submitted to the Department. A copy of the NOT form is enclosed for your use.

Chapter 283.35, Wis. Stats., authorizes the Department to issue a general permit for discharge from categories or classes of point sources. It is important that you read and understand the terms and conditions of the general permit because they are enforceable. The general permit can also be withdrawn if you do not remain in compliance with the terms and conditions of the general permit. The Department may also withdraw a storm water discharge from coverage under the general permit and require an individual WPDES permit on the Department's own motion, upon the filing of a written petition by any person, or upon your request.

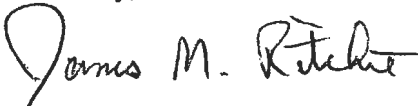
If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to ss. 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to s. 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with s. NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with s. NR 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the 30 day period for filing a petition for judicial review.

The Department construction site storm water web page is:

<http://dnr.wi.gov/org/water/wm/nps/stormwater/const.htm>. Additional storm water information, including permit forms, is accessible via this site. Thank you for your cooperation with the Construction Site Storm Water Discharge Permit Program. If you have any questions concerning the contents of this letter or the general permit, please contact me at (414) 263-8586.

Sincerely,



James M. Ritchie
Southeast Region
Storm Water Management Specialist

Enclosures: WPDES General Permit No. WI-S067831-2
Fact Sheet
DNR Form 3400-162: Notice of Termination
Construction Site Inspection Report

c: Ben Verburg, Arcadis
Andy Boettcher, DNR – Milwaukee

5/24/04 23500

**Notice of Intent - Storm Water Discharges Associated With
 Land Disturbing Construction Activities General Permit**

Form 3400-161 (R 8/05)

\$140 – \$350 Application Fee

This Notice of Intent form (NOI) is authorized by s. 283.37, Wis. Stats. Submittal of a completed NOI to the Department is mandatory for any landowner who intends to discharge storm water from a construction site to waters of the state and who must apply for permit coverage in accordance with 40 CFR Part 122, Chapter 283, Wis. Stats., and Chapter NR 216, Wis. Adm. Code. Failure to submit a completed NOI to the Department at least 14 working days prior to the date on which land disturbing construction activities commence may result in forfeitures up to \$10,000 per day, pursuant to s. 283.91(2), Wis. Stats. Personally identifiable information on this NOI may be used for other water quality program purposes.

Submission of this NOI constitutes notice that the landowner identified in Section I intends to be authorized by a general WPDES permit issued for storm water discharges associated with land disturbing construction activities in the State of Wisconsin. Becoming a permittee obligates the landowner to comply with the terms and conditions of the general permit. **An erosion control plan and a storm water management plan meeting the requirements of Chapter NR 216, Wis. Adm. Code, must be completed before submitting this NOI.**

All necessary information must be provided on this NOI. Failure to complete this NOI correctly may result in its rejection by the Department. Please read all instructions before completing.

Section I: Landowner Information

Name City of West Allis			Contact Person Michael Lewis
Mailing Address 7525 W. Greenfield Avenue			Title City Engineer
City West Allis	State WI	ZIP Code 53214-4688	Telephone Number 414-302-8372

Section II: Contractor Information (if currently known)

Name ARCADIS			Contact Person Ben Verburg
Mailing Address 126 N. Jefferson Street, Suite 400			Title Engineer
City Milwaukee	State WI	ZIP Code 53202	Telephone Number 414-276-7742

Section III: Construction Site Information

Site Name Lime Pit Property	County Milwaukee
Location Description Address: 1960 67th Place	<input checked="" type="checkbox"/> City of West Allis <input type="checkbox"/> Village of <input type="checkbox"/> Township of

Section III: Geolocational Information

Township	Range	Direction	Section	Quarter		Quarter-Quarter		Longitude		
6 N	R.21	<input checked="" type="checkbox"/> E	3	<input type="checkbox"/> NW	<input type="checkbox"/> NE	<input checked="" type="checkbox"/> NW	<input type="checkbox"/> NE	Degrees 43	Minutes 47	Seconds 62
		<input type="checkbox"/> W		<input type="checkbox"/> SW	<input checked="" type="checkbox"/> SE	<input type="checkbox"/> SW	<input type="checkbox"/> SE	Latitude		

If this site is not wholly contained on the above quarter-quarter section, provide additional description:	Degrees 88	Minutes 04	Seconds 19
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Total Area of Site 11.46 Acres		Total Estimated Disturbed Area 6.074 Acres		Percent of Site Impervious: (including rooftops and paved areas)	
				Before Construction <10 %	After Construction <10 %

Type of Construction (check all that apply)

- Residential Commercial Industrial Reconstruction
 Utility Transportation (streets, roads, non-WisDOT highway projects, etc.)

Other (describe) Redevelopment of Property (This NOI for grading & erosion control/storm water.)

Discharge: Does your construction site's storm water discharge to: (check all that apply)

- Storm drain system - infiltrates to groundwater
 Storm drain system to surface water - enter system owner's name and receiving waters:
 Directly or indirectly to waters of the state - enter name of river, lake, wetland:
 Infiltration to groundwater occurs on site

Notice of Intent - Storm Water Discharges Associated With Land Disturbing Construction Activities General Permit

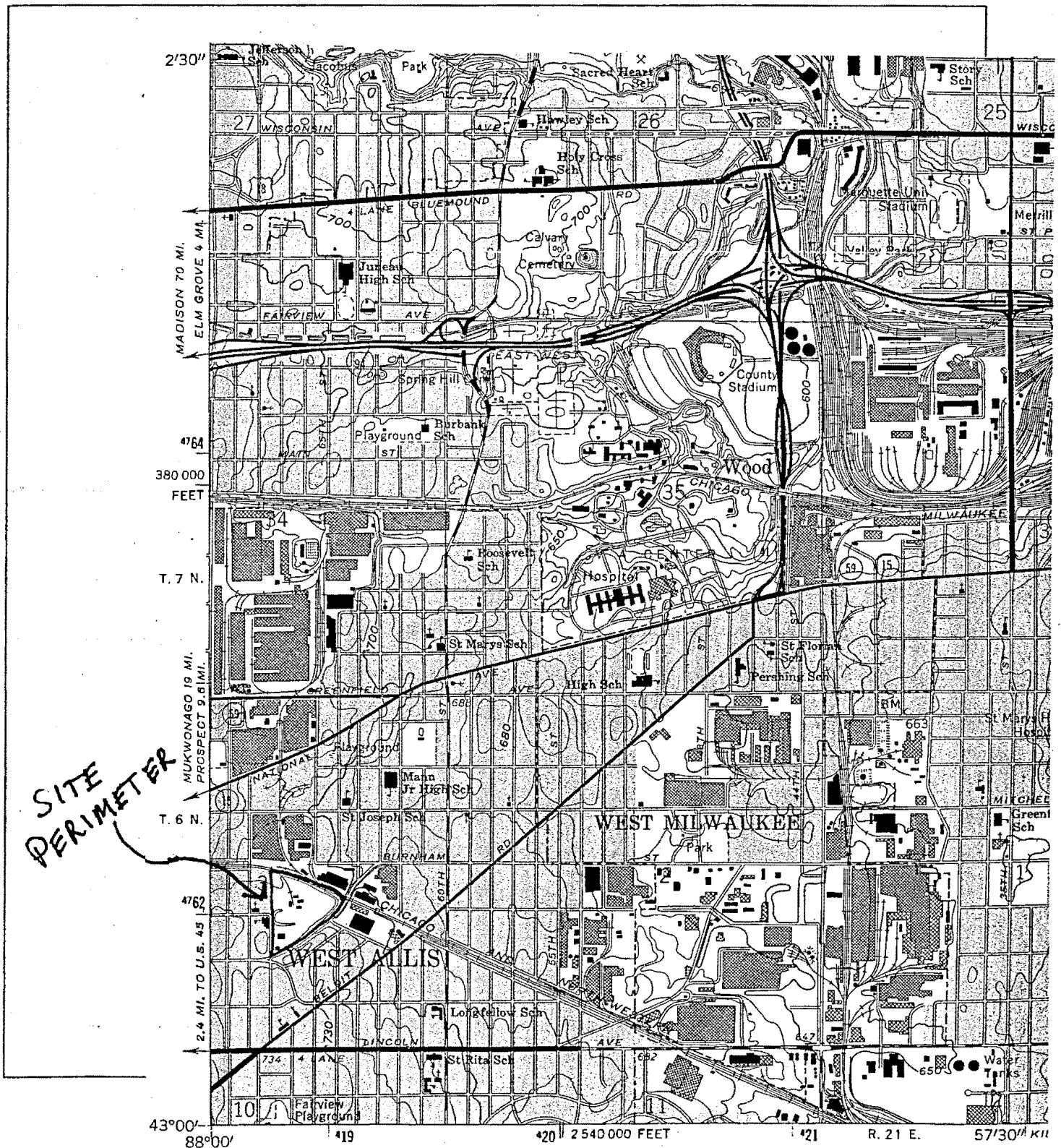
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Section IV: Site Location Map

Attach a legible photocopy from the appropriate USGS 7.5 minute series topographic map (not a plat map), with the perimeter of the construction site clearly identified.

Name of Quadrangle Milwaukee



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Section V: Additional Information

Project Start Date (month/day/year) May 15, 2006	Approximate Project End Date (month/day/year) May 15, 2007
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Management Practices: Identify planned erosion and sediment control practices to reduce impacts during construction (check all that apply)

<input type="checkbox"/> Phasing of Construction	<input checked="" type="checkbox"/> Diversion of Clean Water	<input checked="" type="checkbox"/> Phased Revegetation	<input type="checkbox"/> Dewatering Sediment Control
<input type="checkbox"/> Sediment Basin(s) and/or Trap(s)	<input type="checkbox"/> Stabilizing Channelized Flow	<input checked="" type="checkbox"/> Silt Fencing Vehicle	<input checked="" type="checkbox"/> Tracking Control
<input checked="" type="checkbox"/> Erosion Control Matting and/or Mulch	<input type="checkbox"/> Other (specify)		

Identify planned storm water management practices to reduce impacts following construction (check all that apply)

<input type="checkbox"/> Storm Water Pond(s)	<input checked="" type="checkbox"/> Infiltration Practice(s)	<input type="checkbox"/> Infiltrate Rooftop Runoff	<input type="checkbox"/> Oil/Water Separator(s)
<input type="checkbox"/> Clean Water Diversion(s)	<input type="checkbox"/> Covered Storage Area(s)	<input type="checkbox"/> Other (specify)	

Plans: Has the construction site erosion control plan been completed for this site in conformance with s. NR 216.46, Wis. Adm. Code?	Yes	No
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Has the storm water management plan been completed for this site in conformance with s. NR 216.47, Wis. Adm. Code?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Note: These plans must be completed before submitting this NOI.

Local Requirements: Are the construction site erosion control and storm water management plans in compliance with applicable local requirements? Yes No

If Yes, Local Agency Name: City of West Allis

Wetlands: Are you aware of any wetlands at the construction site or any wetlands that may be affected by the storm water discharge from the construction site? Please be aware that the Department shall, pursuant to s. NR 103.06(1)(b), Wis. Adm. Code, require that the storm water discharge comply with the water quality standards provisions in ch. NR 103. The presence of wetlands may affect certain aspects of the construction site project under the requirements of this code. Yes No

Threatened or Endangered: Are you aware of any listed threatened or endangered species at the construction site? Please be aware that the Department shall, pursuant to s. 29.604(6r), Wis. Stats., consult with the Bureau of Endangered Resources on whether approval of general permit coverage may affect a listed threatened or endangered species. The presence of a listed threatened or endangered species may affect certain aspects of the construction site project under the requirements of this statute. Yes No

Cultural or Historical: Are you aware of any listed cultural or historical resources at the construction site? Please be aware that the Department shall, pursuant to s. 44.40, Wis. Stats., consult with the State of Wisconsin Historic Preservation Officer on whether approval of general permit coverage may have an adverse affect upon history property. The presence of historic property may affect certain aspects of the construction site project under the requirements of this statute. Yes No

Section VI: Certification

I certify under penalty of law this document and attachments were prepared under my direction or supervision in accordance with a system designed to assure qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person, or persons, who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify the provisions of the permit, including development and implementation of the construction site erosion control and storm water management plan, will be complied with. **Important: The person signing immediately below must be a representative of the landowner as defined in s. NR 216.43(3), Wis. Adm. Code. "Landowner" for purposes of this NOI is defined in s. NR 216.002(15), Wis. Adm. Code. Failure to have this NOI properly signed will result in its rejection and may delay the project.**

Landowner Printed Name City of West Allis	Title <i>City Engineer</i>	Telephone Number 414-302-8372
Landowner Signature <i>[Signature]</i>	Date Signed <i>5/15/2006</i>	

Complete below if NOI was prepared by a consultant or someone other than the landowner or an employee of the landowner. However, to be valid, the certification above must be signed by the landowner of the construction site.

Preparer Printed Name Ben Verburg	Firm ARCADIS
Mailing Address 126 N. Jefferson Street, Suite 400	Title Engineer
City Milwaukee	State WI
ZIP Code 53202	Telephone Number 414-276-7742
Signature of Preparer <i>[Signature]</i>	Date Signed <i>5-15-2006</i>

Mail this completed Notice of Intent (NOI) with the NOI fee (below) to the appropriate Department of Natural Resources office in the region where the construction site is located.

Acres of Land Disturbance	NOI Fee
Less than 5	\$ 140
5 or more and less than 25	\$ 235
25 or greater	\$ 350

LEAVE BLANK - DNR USE ONLY	
Date Signed <i>5/17/06</i>	Construction Site ID# <i>34414</i>
<input checked="" type="checkbox"/> Application complete? <input checked="" type="checkbox"/> Historic/Endangered Checked?	

See the instructions for regional office addresses.

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Instructions

Type or clearly print your answers to all questions. Answer all questions. Incomplete NOI forms will be returned for completion.

Section I: Landowner Information

Provide the legal name of the person, firm, public organization, or any other entity that owns the construction site described in Section III of this application. The contact person should be the person completely familiar with the construction site activity and charged with compliance and oversight of the permit. The mailing address and phone number given should be for the contact person.

Section II: Contractor Information

If known at time of NOI submittal, provide the legal name of the person, firm, or any other entity that is the major contractor in charge of operating the construction site described in Section III of this application. The contact person should be the construction site manager completely familiar with the construction site activity and charged with implementation of the permit. The mailing address and phone number given should be for the contact person.

Section III: Construction Site Information

Enter the construction site's official or legal name and complete address, including county, city, state and zip code. Be sure to include the quarter, quarter, section, township and range (to the nearest quarter section) of the site. If the site is on more than one quarter, enter the quarter that best describes the location of the site. Use additional space if needed to describe the site location.

Type of Construction: Make a mark next to the line that best describes the construction activity at the site. Transportation should be checked for construction of roads, bridges and railroads. Utilities should be checked for installation of sewer, electric and telephone systems. If the type of construction activity is not listed, please write down a brief description in the line after the "other" designation.

Area of Site: Indicate the total area of the construction site, and estimate the total area to be disturbed by construction activities. Please provide the percent of site impervious before and after construction.

Discharge: Indicate where storm water discharge occurs. (There may be more than one discharge point.) If the discharge is to a storm drain system (operated by municipalities, flood control districts, utilities or other similar entities), indicate this and list the name of the receiving body of water. The operator of the storm drain system will know the ultimate receiving waters. The operator of the storm drainage system must receive a copy of the NOI. Storm water discharging directly to state waters will typically have an outfall structure directly from the site to a river, lake, wetland, etc. If the discharge is to an unnamed tributary or drainage ditch, please list the named water body to which the discharge ultimately drains. E.g., "Unnamed tributary to the Red Cedar River." Finally, please indicate if infiltration occurs on site.

Section IV: Site Location Map (Section on form is self-explanatory)

Section V: Additional Information

Dates: Enter the project's anticipated start and end dates.

Management Practices: Check all applicable management practices that will be used on site to control erosion or list other control measures that will be used to control erosion at the construction site.

Plans: Indicate whether or not a construction site erosion control and storm water management plan has been completed for the site. These plans must be completed before this NOI is submitted to the Department.

DO NOT include a copy of the construction site erosion control and storm water management plan.

Local Requirements: Indicate whether or not the construction site erosion control plan is in compliance with the local sediment and erosion control plans. DO NOT include copies of these plans. The local agency approving these plans must receive a copy of the NOI.

Section VI: Certification

State Statutes provide for severe penalties for submitting false information on this Notice of Intent form. State regulations require this form to be signed as follows:

1. For a corporation, by a responsible corporate officer including president, secretary, treasurer, vice president, manager, or a duly authorized representative having overall responsibility for the operation covered by this permit;
2. for a unit of government, by a ranking elected official, or other duly authorized representative;
3. for a partnership, by a general partner; and for a sole proprietorship, by the proprietor;
4. for a limited liability company, by a manager.

After signature provide the name of the individual signing the NOI and date of signature. If the form was prepared by a consultant or someone other than an employee of the site landowner, please provide the name and address where this person may be contacted.

There is a non-refundable NOI fee required with the submittal of the NOI. Remit a check or money order payable to the Wisconsin Department of Natural Resources (do not send cash). The NOI fee is:

Acres of Land Disturbance	NOI Fee
Less than 5	\$ 140
5 or more and less than 25	\$ 235
25 or greater	\$ 350

A NOI submitted without the required fee will be considered incomplete.

Erosion Control and Storm Water Management Standards

Department approved erosion control and storm water management technical standards and other guidance are available on the Department's Internet site at: <http://dnr.wi.gov/org/water/wm/nps/stormwater.htm>. Or, you may contact the Department's storm water program in the Bureau of Watershed Management at (608) 267-7694 to find out how to obtain such standards.

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Mailing

Unless otherwise directed, mail this completed NOI form with application fee to the DNR office listed by county as follows:

NORTHERN REGION COUNTIES			WEST CENTRAL REGION COUNTIES		
Ashland	Langlade	DNR Service Center	Adams	Marathon	DNR Service Center
Barron	Lincoln	1401 Tower Ave.	Buffalo	Monroe	5301 Rib Mountain Rd.
Bayfield	Oneida	Superior, WI 54880	Clark	Portage	Wausau, WI 54401
Burnett	Polk	Phone: (715) 392-7988	Crawford	Trempealeau	Phone: (715) 359-4522
Douglas	Price Rusk		Jackson	Vernon	
Florence	Sawyer		Juneau	Wood	
Forest	Taylor			La Crosse	
Iron	Vilas				
	Washburn		Chippewa	Pepin	DNR Service Center
			Dunn	Pierce St.	890 Spruce St.
			Eau Claire	Croix	Baldwin, WI 54002
					Phone: (715) 684-2914

NORTHEAST REGION COUNTIES			SOUTH CENTRAL REGION COUNTIES		
Brown	Marquette	DNR Northeast Region	Columbia	Jefferson	DNR South Central Region
Calumet	Menominee	P.O. Box 10448	Dane	LaFayette	3911 Fish Hatchery Rd.
Door	Oconto	Green Bay, WI 54307	Dodge	Richland	Fitchburg, WI 53711
Fond du Lac	Outagamie	Phone: (920) 662-5100	Grant	Rock	Phone: (608) 275-3266
Green Lake	Shawano		Green	Sauk	
Kewaunee	Waupaca		Iowa		
Manitowoc	Waushara				
Marinette	Winnebago				

SOUTHEAST REGION COUNTIES		
Kenosha	Sheboygan	DNR Service Center
Milwaukee	Walworth	9531 Rayne Rd., Suite 4
Ozaukee	Washington	Sturtevant, WI 53177
Racine	Waukesha	Phone: (262) 884-2300

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Erosion Control/Stormwater Management Plan Lime Pit Property West Allis, Wisconsin May 10, 2006

This Erosion Control/Stormwater Management Plan has been completed for the Lime Pit Property (site) located at 1960 67th Place in West Allis, Wisconsin (see attached aerial photo). The purpose of this plan is to address stormwater management issues currently present at the site, and discussed in greater detail below. The site is approximately 11.46 acres in areal extent, and approximately 6.074 acres of land will be disturbed during site filling and regrading activities.

Project Description

Historically, Airco manufactured acetylene on the site. A by-product of the manufacturing activities was a residual lime material which was placed into pits along the eastern edge of the property. This lime residual material is still present at the ground surface throughout the eastern portion of the property. The DNR has recently sampled the storm water run-off leaving the site and the pH of the run-off was above storm water discharge standards. The high pH is due to stormwater coming in contact with the residual lime material present at the ground surface prior to discharge to the storm sewer.

The Lime Pit Property is currently slated to be redeveloped into a light commercial use. However, to facilitate the redevelopment activities, storm water and grading issues at the site must first be addressed. The design of the storm water controls are intended to remove the potential for direct contact of storm water run-off with the residual lime materials through the placement of a permeable soil cap over the former lime pit area, and to aid in the infiltration to limit the quantity of stormwater run-off from the site. The proposed storm water controls outlined in this document are intended to be permanent until such time that redevelopment occurs. Alternate permanent storm water controls may be installed at the time of actual redevelopment, in accordance with the requirements of the redevelopment design.

The construction of the proposed storm water controls consist of first rough grading of the existing materials on-site to prepare the subbase. This will include clearing and grubbing of trees and vegetation, removal/relocation of miscellaneous materials currently stored along the eastern edge of the property, and the backfilling of an existing ditch along the eastern edge which is currently a significant source of high pH stormwater run-off. Following preparation of the subbase, imported fill material will be brought in and placed over the residual lime material to eliminate direct contact with stormwater run-off. In addition, fill material will be placed within portions of the western part of the property to facilitate proper drainage of the site.

The fill material imported to the site will be generated during redevelopment of the Six Points/Farmers Market Area, and will be relocated to the site as generated during redevelopment activities. Currently, redevelopment activities at the Six Points/Farmers Market Area are to be completed in phases starting in 2006 and going through 2007. As such, temporary erosion controls will be maintained at the site, and fill material will be vegetated as soon as practicable to limit any potential erosion of material throughout the prolonged construction schedule. It is estimated that approximately 20,000 yards of soil will be relocated from the Six Points/Farmers Market Area to the site.

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Site Description and Adjacent Properties

The site has generally flat topography with slopes ranging from 1 to 2 percent. The site is currently used for light industrial purposes and there is no evidence of significant erosion on the site. Residual limestone materials can be seen along the eastern and southern borders of the property. There are five small buildings located on the west-central end of the property, and the remainder of the property is used for storage of roll-offs and other miscellaneous materials.

The site is bounded by residential properties to the east and west, municipal facilities to the south, and railroad tracks/industrial to the north. The residential area to the west is topographical upgradient, however, storm sewers collect stormwater run-off from the residential area before it can enter the site. Some run-off does currently flow onto the site from the parcel to the south, portions of which are at a higher elevation than the site. The areas to the north and east are topographically down gradient from the site.

The soils at the site are well-drained to somewhat poorly drained, and consist of a silty clay loam. As discussed above, portions of the soil are overlain by the residual lime material.

Planned Erosion and Sedimentation Control Practices

Erosion control practice design parameters outlined below were obtained from the Wisconsin Construction Site Best Management Practice Handbook, and S. NR 151 and NR 216, Wisconsin Administrative Code. The locations and construction details for these elements are illustrated on the attached drawings.

1. Temporary Gravel Construction Entrance/Exit (Figure 1)

Temporary gravel construction entrances will be installed to run 50 feet of the proposed construction site roadways. The construction site roadway entrances are located on the west portion of the construction site. When heavy rain events occur or when soil conditions are extremely wet, it may be necessary to wash vehicle tires on the temporary gravel entrance to prevent significant amounts of soil from tracking off-site.

2. Land Grading (Figure 2)

Grading will be performed at the site, first to prepare the subbase, and second to grade the imported fill material in a manner which allows for proper run-off from the site. The general slope across the site will be maintained near 0.5 to 2 percent.

3. Seeding and Mulching

Fill material will be seeded and mulched after placement on the site to limit any potential for erosion of the materials off the site.

4. Silt Fence (Figure 3)

Silt fence will be placed along the eastern and western areas of the site to prevent sediment from leaving the site. Additional silt fence will be placed along a portion of the northern boundary of the site.

5. Dust Control

If dust is generated during construction activities, water will be used to control the dust.

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Construction Schedule

1. Acquire necessary approvals and permits.
2. Hold a pre-construction meeting with the contractors prior to initiating site work.
3. Complete site clearing of trees along the eastern boundaries.
4. Install the gravel stabilization pads at the roadways.
5. Install silt fence across the site.
6. Grade the existing site materials (subbase) to prepare for acceptance of fill.
7. Grade material across designated fill area, with a minimum of 3 passes (for compaction) with the grader or a compactor. *— for future bedding purposes*
8. Place temporary and permanent seeding.

Maintenance Plan

1. All control measures will be inspected biweekly and immediately following any storm event of 0.5 inches or greater. Once vegetation is established, inspection will be conducted once per month.
2. All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of the inspection.
3. Silt fence will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the posts, and to confirm that posts are firmly in the ground.
4. Build up of sediment shall be removed from silt fence when it has reached one-third the height of the barrier.
5. Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth. If necessary, the seeded areas will be reseeded and mulched to maintain growth.

Vegetative Plan

The disturbed area of the site shall be graded so that it is smooth and free of all washes and gullies. After final grading, fertilizer (except that applied with a hydraulic seeding) and/or lime shall be applied uniformly across the area.

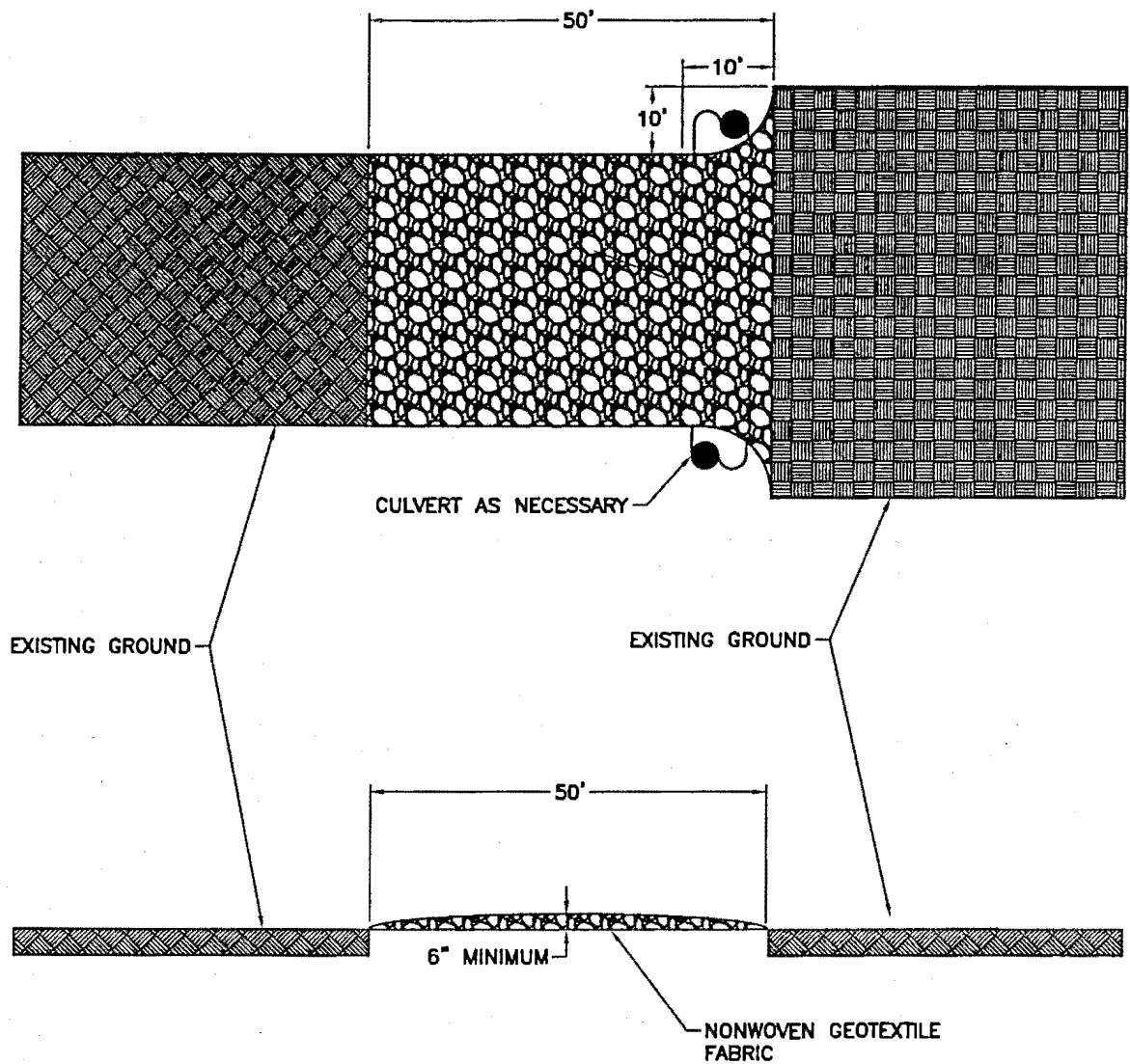
Seed immediately after preparation of the seedbed. Seedbed preparation shall be suspended when the soil is too wet or too dry. Uniform seed distribution shall be accomplished by drilling, broadcasting or hydraulically seeding. If a hydraulic seeder is used, the seed, fertilizer and mulch may be applied together with water. Apply 4 to 6 pounds of seed mixture per 1,000 square feet of turf. Grain straw shall be spread uniformly in a continuous blanket over the seeded areas. The mulch shall be spread in such manner

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as to prevent bunching. Grain straw shall be dry and spread at a rate of 2 to 2.5 tons per acre or 3 to 4 bales per 1,000 square feet.

Fertilizer shall be incorporated into the soil to a depth of 3 inches during seedbed preparation. Fertilizer shall be controlled-release, commercial grade, granular free flowing, uniform in composition, delivered in fully labeled sealed containers, and shall conform to applicable State of Wisconsin and Federal regulations. Fertilizer shall bear the manufacturer's guaranteed statement of analysis.

Erosion mats shall be placed on disturbed slopes of greater than 3:1. The erosion mats shall be secured in place with 6-inch or longer, no. 8 gauge or heavier wire staples every 3 feet along the edge and where the mats overlap.



CONSTRUCTION SPECIFICATIONS

1. STONE SIZE --- USE 2" - 3" AGGREGATE
2. LENGTH --- 50'
3. THICKNESS --- NOT LESS THAN 6"
4. WIDTH --- 7'-14', BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. NONWOVEN GEOTEXTILE FABRIC --- SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. MAINTENANCE --- THE ACCESS PAD SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED.
7. IF WARRANTED BY GROUND CONDITIONS, PLACE MORE THAN 6" OF STONE TO MAINTAIN INTEGRITY OF PAD.
8. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE COMPANY'S UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN.



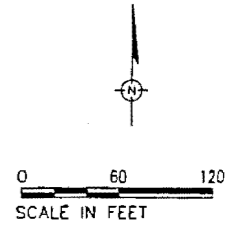
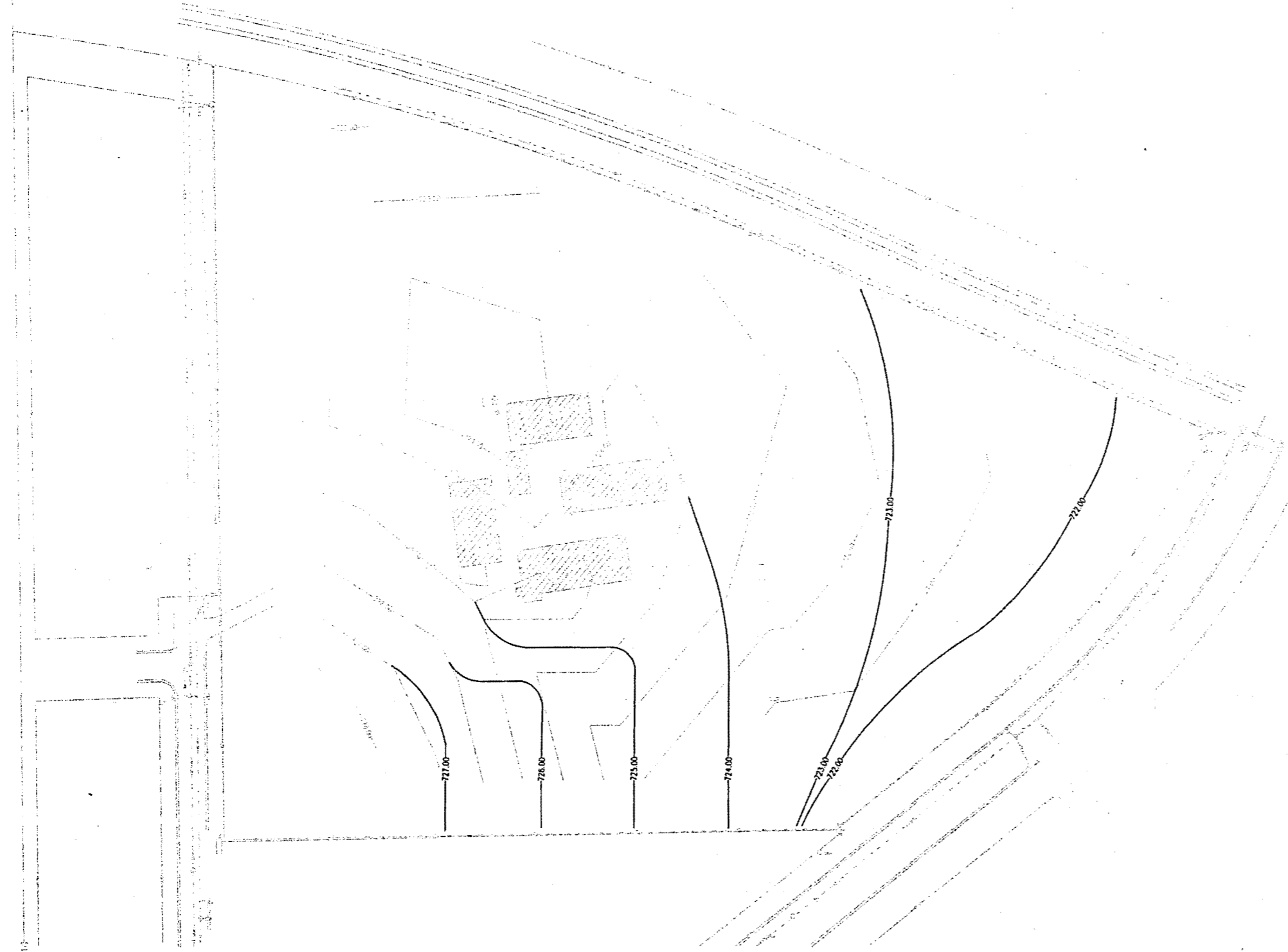
GRAVEL PAD DETAIL

LIME PIT PROPERTY
WEST ALLIS, WISCONSIN

FIGURE

1

User Name : mshattuck
 Acad Version : R16.11 (LUS Tech)
 © 2006 ARCADIS O&M, INC
 Current Plotstyle : BColor
 Date/Time : Wed, 10 May 2006 - 3:47pm
 Page Setup :
 Plot Table: A-EST-BLACKOXY-FIN.ctb
 Layout Tab: FIGURE 7
 Pen Table: A-EST-BLACKOXY-FIN.ctb
 Plot Name : C:\Project\PresSteel\W10174\ESTWMA\Lead\LinePI-CAS.dwg\Line PI Grading Plan2.dwg



LEGEND

- CONTROL POINT
- FOUND CONCRETE MONUMENT W/BRASS CAP
- FOUND 1" IRON PIPE
- FOUND CHISELED CROSS
- SET 1" IRON PIPE
- POWER POLE
- LIGHT POLE
- GUY POLE
- GUY WIRE
- ELECTRIC RISER
- MONITORING WELL
- SOIL BORING
- MISCELLANEOUS METER
- SIGN
- FIRE HYDRANT
- WATER VALVE
- ELECTRIC MANHOLE
- MANHOLE
- STORM INLET
- PVC PIPE
- BURIED STORM SEWER
- BURIED SANITARY SEWER
- BURIED WATER MAIN
- OVERHEAD ELECTRIC
- OVERHEAD TELEPHONE
- INDICATES RECORD BEARING OR DISTANCE
- 726.00 - - - - - EXISTING GRADE ELEVATION
- 726.00 - - - - - PROPOSED CONTOUR GRADE ELEVATION

REV ISSUED DATE DESCRIPTION	KEYPLAN	<p> 126 North Jefferson Street, Suite 400 Milwaukee, Wisconsin 53202 Tel: 414-276-7742 Fax: 414-276-7603 www.arcadis-us.com </p>	PROJECT MANAGER B. VERBURG	DEPARTMENT MANAGER M. MAIERLE	LEAD DESIGN PROF. W. MAY	CHECKED M. SHATTUCK
			SHEET TITLE SITE GRADING PLAN		TASK/PHASE NUMBER 0005.00001	DRAWN BY W. MAY
			PROJECT NUMBER W101074	DRAWING NUMBER 2		

DRAFTER: LMB

APPROVED:

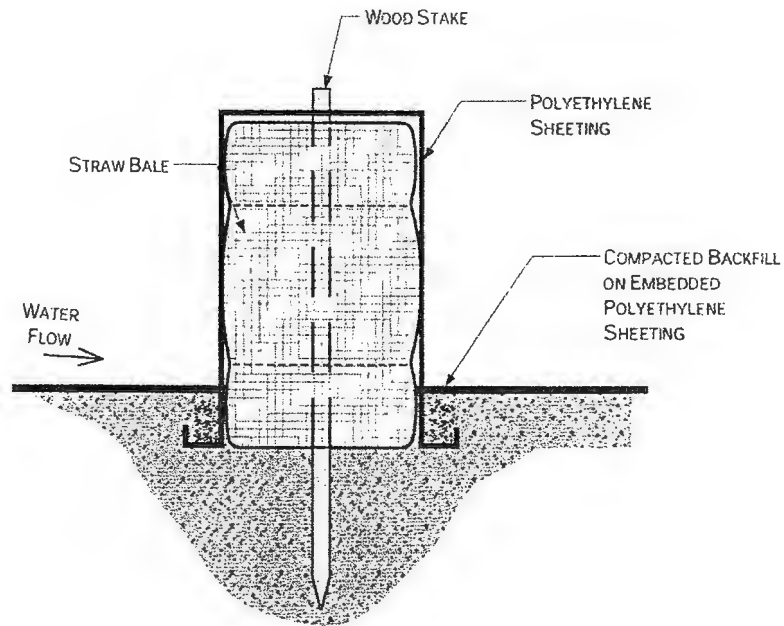
CHECKED: MS

DRAWING: DIV_FENCE.AI

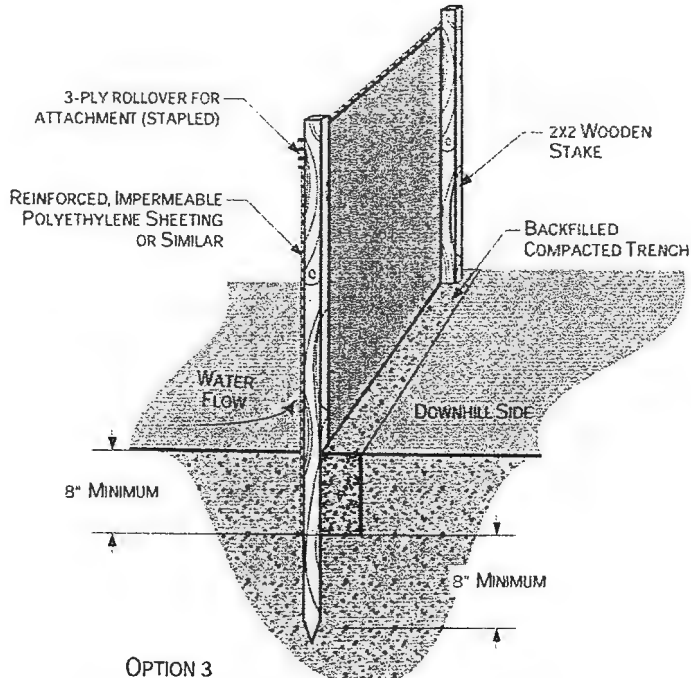
FILE NO.: GRAPHICS

PN: PRESSTEELW11074PSTWALLIS

DWG DATE: 15MAY06



OPTION 1



OPTION 3



DIVERSION FENCE DETAIL

LIME PIT PROPERTY
WEST ALLIS, WISCONSIN

FIGURE

3



SUBJECT: Press Steel-Line pit

BY: MS DATE:

CHKD: DATE:

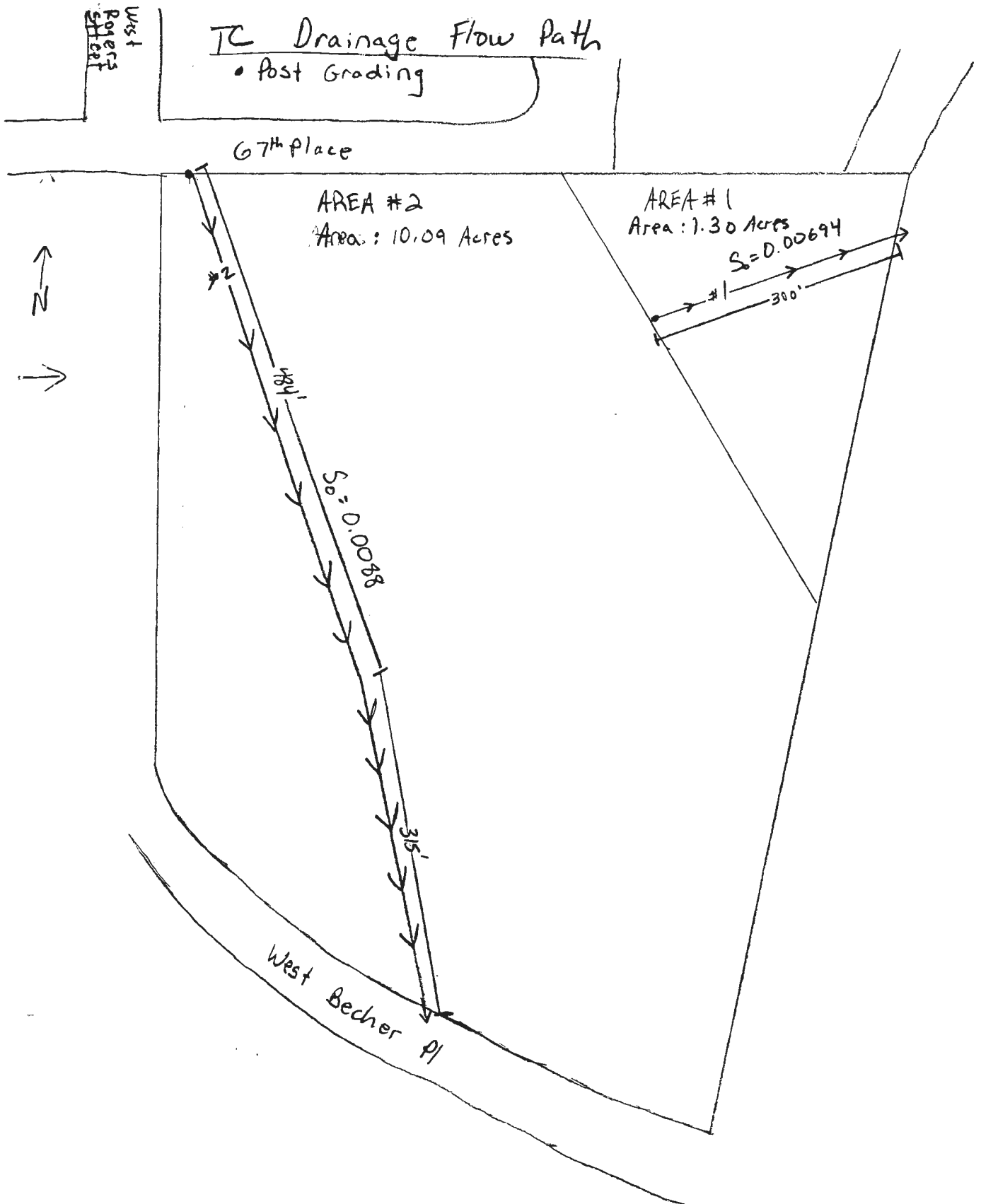
JOB NO:

PAGE

1

SHEET

/





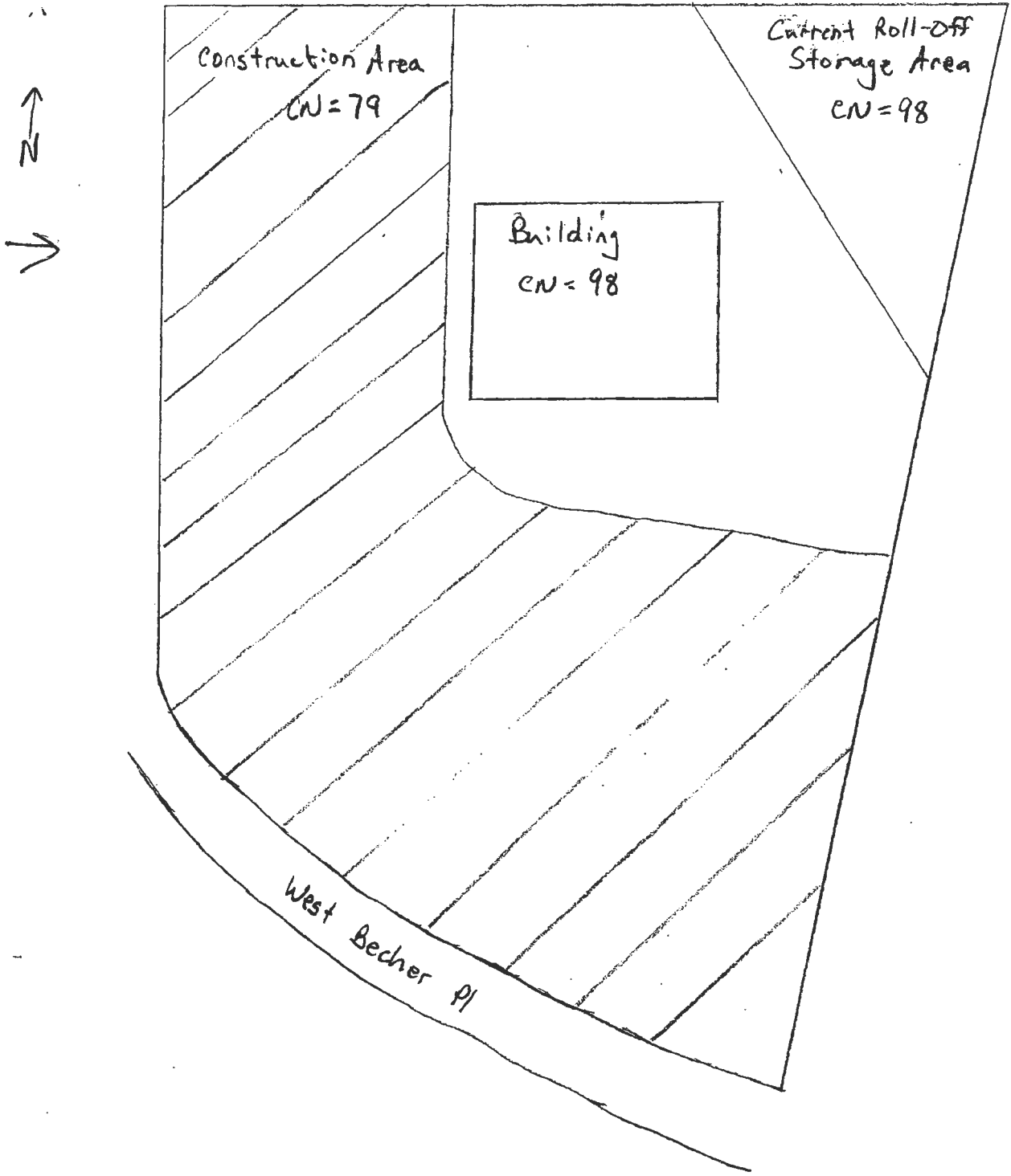
SUBJECT: Press Steel-Lime pit

JOB NO:

BY: MS DATE:

CHKD: DATE:

Stormwater Curve Number
Determination
• Post Grading





SUBJECT: Press Steel Lime Pit

JOB NO:

BY: MS DATE:

CHKD: DATE:

PAGE

3

SHEET

1

Time of Concentration and Flow for Design Purpose

Subbasin Drainage Area

#1 → 1.30 Acres or 0.00203 miles²

#2 → 10.89 Acres or 0.01576 miles²

Post Development TC: Reference Material Used TR-55

1; Sheet: Flow

Flow Length: 300 ft

Two Year 24-hr Storm: 2.57 (Rainfall Depths for Southeastern US)

Slope: 0.0694

Mannings Roughness Coefficient: 0.011 (Smooth Surfaces)

$$T_{\text{Sheet Flow}} = \frac{0.007 (0.011 \times 300)^{0.8}}{(2.57)^{0.45} (0.006944)^{0.14}} = 0.0940 \text{ hrs}$$

Shallow Concentrated Flow

Flow Length 0 feet

$T_{\text{shallow concentrated flow}} = 0 \text{ hrs}$

$$T_{\text{AREA \#1}} = 0.0829 \text{ hrs}$$

- T_c calculations were done in the same format for the remaining subbasins

-The results are as follows

$$T_{\text{Area \#2}} = \frac{\text{Post-Development } T_c}{0.7018 \text{ hrs}}$$

Notes: Mannings Roughness: 0.15

- See page #1 for Flow Path + Slopes

Post Development Peak Discharge Calculation in Construction AREA

Given Information: Drainage Area $\rightarrow A_m \rightarrow 10.09$ acres $\rightarrow 0.01576$ miles²
 Runoff Curve Number $\rightarrow CN \rightarrow 79$
 Time of Concentration $\rightarrow 0.7018$ hrs
 Rainfall Distribution $\rightarrow II$
 Frequency $\rightarrow 2$ -year storm
 Rainfall $\rightarrow P \rightarrow 2.57$ inches
 Initial Abstraction $\rightarrow I_a \rightarrow 0.532$ (TR-55W/CN-79)

$$\text{Calculation: } I_a/p = 0.532/2.57 = 0.207$$

$$\text{Unit Peak Discharge } \rightarrow q_u \rightarrow 400 \text{ (TR-55/Fig. 4-II)}$$

$$\text{Runoff, } Q = \frac{(P - (0.2)S)^2}{(P + (0.8)S)}$$

$$S = \frac{1000}{CN} - 10 = \frac{1000}{79} - 10 = 2.66$$

$$Q = \frac{(2.57 - 0.2(2.66))^2}{(2.57 + 0.8(2.66))} = \frac{4.153}{4.698}$$

$$Q = 0.884 \text{ in}$$

$$\begin{aligned}
 \text{Peak Discharge } \rightarrow q_p &= q_u A_m Q F_p \\
 &= 400 (0.01576 \text{ miles}^2) (0.884 \text{ in}) (1.0) \\
 &= 5.5727 \text{ cfs}
 \end{aligned}$$

$$\text{Post-Development Peak Discharge} = 5.5727 \text{ cfs}$$

Pre-Development Peak Discharge = Post Development Peak Discharge in the construction Area.



Infrastructure, buildings, environment, communications

ARCADIS G&M, Inc.
126 N. Jefferson Street
Suite 400
Milwaukee
Wisconsin 53202
Tel 414 276 7742
Fax 414 276 7603

Transmittal Letter

To:
DNR Service Center
9531 Rayne Road
Suite 4
Sturtevant, WI 53177

Copies:
Mr. Michael Lewis, PE - City of
West Allis
Mr. Patrick Schloss - City of West
Allis

ENVIRONMENT

From:
Ben Verburg

Date:
15 May 2006

Subject:
Notice of Intent - Storm Water Discharges
Associated with Land Disturbing
Construction Activities General Permit,
Lime Pit Property, West Allis, Wisconsin

ARCADIS Project No.:
WI001074.0005

We are sending you:

[X] Attached [] Under Separate Cover Via _____ the Following Items:

- [] Shop Drawings [] Plans [] Specifications [] Change Order
[] Prints [] Samples [] Copy of Letter [] Reports
[X] Other: Permit

Table with 6 columns: Copies, Date, Drawing No., Rev., Description, Action*. Row 1: 1, 5/15/06, Final, Notice of Intent - Storm Water Discharges... Review. Row 2: 1, 5/15/06, Check payable to WDNR (\$235, #033427).

Action*

- [] A Approved [] CR Correct and Resubmit [] Resubmit _____ Copies
[] AN Approved As Noted [] F File [] Return _____ Copies
[] AS As Requested [X] FA For Approval [] Review and Comment
[] Other:

Mailing Method

- [X] U.S. Postal Service 1st Class [] Courier/Hand Delivery [] FedEx Priority Overnight [] FedEx 2-Day Delivery
[] Certified/Registered Mail [] United Postal Service (UPS) [] FedEx Standard Overnight [] FedEx Economy
[] Other:

Comments: Please let me know at 414-277-6231 if you have any questions. Ben Verburg