

February 13, 2015

Via Email and First Class Mail

Mr. Justin Bragg
Michigan Department of Environmental Quality
Water Resources Division, Gaylord Field Office
2100 W. M-32
Gaylord, Michigan 49735-9282

Re: **Response to January 29, 2015
Notice of Violation VN-005987 (“NOV”) Addressing Storm Water
Runoff and Track-Out at Grand Traverse Town Center Site**

Dear Mr. Bragg:

This firm represents The Village at Grand Traverse, L.L.C. (“VGT”) in connection with the above-referenced NOV. This letter responds to the NOV, which documents your November 24, 2014 inspection of the Grand Traverse Town Center construction site (the “Site”) on behalf of the Michigan Department of Environmental Quality (the “Department”). The NOV concludes that discharges of stormwater runoff from the Site on that date violated Parts 31 and 91 of the Michigan Natural Resources and Environmental Protection Act (“NREPA”). As explained further below, neither your inspection nor four other inspections of the Site conducted that day documented any significant impacts to Acme Creek attributable to storm water runoff from the Site. Accordingly, no violations of Parts 31 and 91 of NREPA occurred in conjunction with the November 24th wet-weather event.

Background

The NOV summarizes your inspection of the Site on November 24, 2014. The NOV alleges violations of Parts 31, 91, their implementing rules and VGT’s National Pollutant Discharge Elimination System (“NPDES”) Notice of Coverage (“NOC”) (No. MIR112950). The alleged violations relate to “sediment-laden water” allegedly leaving the Site, and “track-out” from the main entrance of the Site on M-72. You direct VGT to maintain compliance with Parts 31, 91, and the terms and conditions of the NOC. The NOV further directs VGT to provide a written response by February 12, 2015. The Department requests that the written response include an updated Corrective Action Plan (CAP) identifying any steps taken to date, and those planned for the future, to address sediment-laden water leaving the Site as alleged in the NOV, as well as any further discharge of sediment-laden water from the Site to regulated wetlands or

waters of the state. The NOV acknowledges that on January 22, 2015, the Department received from VGT an up-to-date CAP, implying that the updated CAP did not address the areas of concern noted in the NOV.¹

In correspondence dated February 4, 2015, the Department extended the deadline for VGT to respond to the NOV until February 27, 2015.

Regulatory Background

As VGT explained in its October 31, 2014 letter to the Department (incorporated here by reference), the laws and regulations governing wet-weather discharges from active construction sites clearly recognize that some level of turbid runoff is inevitable. *Nothing in these laws mandates a “zero-discharge” standard from construction sites.* Instead, Part 31 prohibits such discharges only to the extent that they impair designated uses of the receiving stream. And Part 91 does not prohibit such discharges at all: it requires use of best management practices to “effectively reduce” the amount of soil migrating from construction sites.² Accordingly, and as the Department has implicitly acknowledged, the fact that some turbidity or sediment is observed on or leaving a site, either through runoff or track-out, does not itself constitute a Part 31 or Part 91 violation.

Specific VGT Responses to NOV

As you know, certified stormwater operators Mike Potter (#C-14399) (from Horizon Environmental), and Mark Walters (#C-15908) (from Gourdie Fraser, Inc.) each conducted inspections of the Site contemporaneously with yours. Mike Potter is VGT’s on-site coordinator for storm water related issues and Mark Walters is VGT’s certified stormwater operator for the Phase I development project.³

¹ The NOV is actually not clear on this point. If past Department turnaround time is any guide, it seems exceedingly unlikely that the Department actually reviewed the updated CAP within the four-day time frame between the Department’s receipt of the CAP and issue of the NOV.

² Indeed, the very title of the statute codified in Part 91—the Soil Erosion and Sedimentation *Control* Act—recognizes that complete elimination of sediment-containing runoff from construction sites is, in most cases, a practical impossibility.

³ Mark Walters notes in his inspection report (see Photo #5 in Exhibit A) that two people joined the inspection along the western perimeter of the Site. One of those individuals was the Grand Traverse County Drain Commissioner, who has no regulatory authority over Site erosion control. The other identified himself as Brian Kelly, who has trespassed on the Site before and who has met you at the Site on prior occasions to accompany you in aspects of your inspections. Both men were asked to sign in at the trailer, refused, and admitted that they were trespassing on the Site. (See Walter Field Notes, Exhibit A Photo No. 5). VGT has had recurring problems with certain members of the public repeatedly trespassing on the Site (even damaging silt fences in doing so) to document “violations” of unspecified erosion control regulations. Because these incursions themselves exacerbate erosion issues at the Site, VGT is implementing additional site security measures in conjunction with the CAP.

One hour after your inspection, Grand Traverse County inspector Pete Bruski inspected the Site. Four hours after your inspection, Township inspector Bernie Jacobson from Gosling Czubak (#C-10523) inspected the site.

Of the five Site inspections carried out that day, only yours concluded that observed conditions rose to the level of a “violation” of applicable laws. These alleged violations, and VGT’s responses, follow below.

1. A channelized discharge of sediment-laden storm water was observed entering Acme Creek to the north of the slow release channel of basin two. This is a violation of Part 31, Part 91, and the Site's NOC.

VGT Response: The water entering the creek was slightly turbid in this location (see Photos #1 and #2, attached in Exhibit A, taken at the time of the inspection). Mike Potter characterized this water as slightly turbid, not sediment-laden, and noted that any turbidity dissipated within 10 feet of entry into the creek. This de minimis condition is clearly documented in the attached photographs. You and Mike Potter agreed that the stream did not look any more turbid downstream of the Site at M-72 than it did upstream of the Site (see Department Inspection Form Photos #3 and #4, attached in Exhibit A).

Approximately two hours *prior* to your inspection, VGT collected samples from the Creek as part of VGT’s Acme Creek Interim (Construction Phase) Monitoring program. VGT voluntarily initiated this monitoring in late November in response to Township concerns. The samples, which were tested for Turbidity (field measured), Total Suspended Solids (TSS), and Temperature (field measured), were collected during active rain when runoff was observed. The rain event, which had started the prior night, had stopped by the time of your inspection. The results of VGT’s sampling that morning are as follows:

November 24, 2014 Wet Weather Event Rain Start Time 11/23/14, 5 pm (approx.) Rain Stop Time 11/24/14, 8 am Total rainfall = 1.06 inch				
Acme Creek Sampling Location	Sample Time	Temp (°C)	TSS (mg/L)	Turbidity (NTU)
Upstream @ property line	7:55 am	5.7	8	19
Downstream @ property line	8:05 am	5.7	<5.0	22
Downstream @ M-72	8:15 am	5.7	12	23

The sampling locations are depicted on Exhibit B. Sampling results are set forth in Exhibit C.

These data demonstrate that there was no significant difference between the upstream and downstream sampling locations. The Department has previously identified in several TMDL evaluations that water with <25 mg/L TSS is “optimum” for support of fisheries.⁴ In these same publications, the Department notes that water with a TSS concentration of <20 mg/L TSS is considered to be visually clear. Also instructive is the fact that the U.S. EPA has proposed (and withdrawn) a turbidity standard of 280 NTUs for stormwater runoff from construction sites.

Accordingly, while your observations at the Site suggest there was de minimis turbidity in a small spot in Acme Creek at this location, it does not conclusively document that it was attributable to runoff from the Site⁵ and the collected hard data demonstrates that any turbid runoff was not significant enough (in quantity or duration) to impair a designated use of the stream.

⁴ See MDEQ TMDL evaluations for Plaster Creek in Kent County (2002) and Brownstown Creek/Blakely Drain in Wayne County (2007), *relying on*, J.S. Alabaster & R. Lloyd, *Water Quality Criteria for Freshwater Fish* (2d ed. 1982); EIFAC, *Water Quality Criteria for European Freshwater Fish: Report on Combined Effects on Freshwater Fish and Other Aquatic Life of Mixtures of Toxicants in Water*, SH328.E85, No. 37 (1980).

⁵ The presence of foreign footprints was observed along the bank in the exact location of the alleged discharge indicating that there had been someone traversing the bank in this area prior to the inspection. Given the consistency of the clay soils along the creek bank, this foot traffic likely generated the observed small quantity of turbid discharge entering the creek, since there is no clear visual evidence of channelized discharge evident in attached photographs 1 and 2.

Further, as stated above, County and Township inspectors conducted inspections 1 and 4 hours, respectively, after your inspection. Neither of these inspectors observed any discharge of sediment-laden water at this location or any other condition at the Site warranting additional follow-up. Thus, the de minimis turbid discharge event was transient in nature. Similarly, Mike Potter conducted follow-up inspections later that day and noted no evidence of turbid discharge at this location.

2. There was also a discharge of sediment-laden storm water to an adjacent property owner's storm water pond. The pond is located northwest of the Site, this discharge results in a violation of Part 91.

The adjacent property referenced in the NOV is the dinner theater property. As a threshold matter, it is important to emphasize that the dinner theatre stormwater retention pond does not qualify as a "surface waters of the state," and is not, therefore, a compliance point for discharges of stormwater runoff under Parts 31 or 91. (*See* MACR § 323.1044(u).)

Further, an inspection contemporaneous with yours contradicts your conclusion that there was any runoff from the Site to the dinner theatre basin. Specifically, Mike Potter noted that although water was present on both sides of the silt fence along the perimeter of the VGT and dinner theater properties, the water appeared to be at the same elevation on both sides of the silt fence and there was no discernable flow observed between the two properties (see Potter Field Notes, Exhibit D). Nonetheless, VGT pumped the water accumulated in the depression at this location to Basin #2 for management, once again going beyond what is required.

Additionally, you and Mike Potter inspected the outlet from the retention pond on the dinner theater parking lot (see Photo #6, attached in Exhibit A). This outlet discharges to a ditch along M-72, which then drains to Acme Creek. Mike Potter observed the water exiting the pond at the outlet structure to be visibly clear. Mr. Potter noted your concurrence in his notes, although this observation does not appear to be recorded in your notes.

3. You also observed significant track-out from the main entrance of the site on M-72. This is a violation of Part 31, Part 91, and the Site's NOC.

The NOV fails to articulate how the observed "track-out" from a construction site implicates Part 31, 91, or the Site's NOC. "Track-out" in and of itself is not regulated under these authorities, and the NOV provides no documentation of sediments associated with the track-out impacting Acme Creek or other surface waters of the state.

VGT acknowledges that on November 24, 2015, there was track-out from the Site present on M-72 at the Site's truck entrance. The track-out was not extensive and was largely confined

to the shoulder of the road where the trucks merged into the travel lane of M-72. Ironically, this track-out was attributable to VGT's tanker truck hauling of water that had occurred over the weekend in response to the rain event to manage storm water from the basins.⁶

In response to observations made by the MDEQ and County inspectors, VGT immediately took the following actions to address all concerns:

(1) VGT blocked the M-72 entrance to the Site with large boulders to prevent all traffic from entering the site from M-72. Traffic was re-routed for the remainder of the construction season to the Lautner Road entrance, which is entirely paved.

(2) VGT swept the travel lane and shoulder of M-72 to remove the tracked-out material.

(3) VGT reconstructed the construction entrance, which had become rutted by heavy truck traffic, to the specifications described in the SESC plan. VGT re-graded the entrance, overlaid it with fabric, and covered it with 8 inches of stone to create an 85 X 25 feet wide entry way (see Photos #7 - #10, attached in Exhibit A).

(4) VGT completed all work associated with this issue by December 4, 2014.

Updated CAP

VGT initially installed and maintained the erosion control measures required by its Part 91 permit and NOC. VGT immediately and comprehensively augmented these measures as Site conditions dictated during and after the heavy rain events in the Fall of 2014. These additional measures included use of flocculent materials in its stormwater basins, additional silt fencing, use of PAM blocks to capture sediments in water flowing through the swales, check dams and other measures. VGT even took the unprecedented step of sequestering stormwater on site and treating it on-site prior to discharge or hauling it by truck for discharge at an off-site location under permit.

⁶ Frankly, this is yet another example of the Department's repeated "no good deed will go unpunished" approach to the Site. On several occasions, the Department has declined to regulate in context and apply various exemptions and procedures available in the applicable rules to the Site in a way that allows VGT to fashion solutions to unique Site conditions. Instead, the Department has repeatedly opted to apply these regulations in a way that needlessly creates additional complexity and enormous expense. VGT remains committed to working with the Department to work through the challenges at the Site, but it is not clear what policy objective is being served by this approach.

VGT submitted a CAP to the Department on October 31, 2014, and submitted amendments to the CAP on November 17 and December 3, 2014, as well as on January 22, 2015.

VGT believes the conventional and enhanced SESC measures outlined in the October 31, 2014 CAP, and subsequent amendments, have been effective in managing conditions on the Site and will continue to effectively manage conditions on the Site in the future. Specific corrective actions described in the CAP that will supplement existing SESC measures in the Spring include: (1) preparation and implementation of a Vegetation Augmentation Plan describing modifications to the seeding and planting plans that will serve to hasten the pace at which vegetative cover is re-established at the Site; and (2) construction of a diversion berm/swale structure upslope of the hay field to redirect storm water from disturbed areas from the eastern part of watershed #2 into basin #2. Construction of this measure, which will reduce runoff to the western perimeter during the Spring, was completed on January 21, 2015. Photos of this project were submitted to the Department with the January 22, 2015 CAP update and are also included here (see Photos #11 - #15, attached in Exhibit A).

Additionally, VGT's implementation of corrective actions to address vehicle track-out at M-72 are detailed above. VGT also notes that the reconstructed M-72 entrance is not likely to be utilized during the Spring because traffic will continue to be diverted to the Lautner Road entrance due to planned road construction work on M-72. And at some future point, the reconstructed temporary M-72 entrance will be replaced by a paved access offset to the west of the present temporary entrance.

In sum, VGT believes that the updated CAP, along with the prior and present actions taken to correct any track-out, address the issues raised by the Department in the NOV. VGT believes the amended CAP will effectively control turbidity in Site runoff through the balance of the Phase I construction until the Site is vegetated and construction is complete.

Conclusion

VGT strongly denies the "violations" alleged in the NOV, which are conclusively rebutted by the attached photos and inspection field notes. At worst, the NOV could be interpreted as contriving violations based on misapplication of the relevant authorities and exaggeration of observed impacts. At best, the NOV exemplifies the difficulty in applying these authorities and the subjectivity inherent in assessing the significance of wet-weather erosion from construction sites.

Accordingly, VGT desires to complete an Administrative Consent Order ("ACO") with the Department that will globally address discharge of turbid water or soil from the Site at present and in the future, including development of an objective compliance framework that

clarifies how the narrative turbidity standard specified in R323.1050 will be applied to the Site going forward. A compliance framework that supplements visual observation with the collection of quantitative monitoring data from the creek (along with a numeric standard or standards to evaluate that data) could go a long way to resolving obvious conflicts in perception about the nature and significance of turbid discharge from the Site.

To that end, VGT requests immediate further discussions with the Department over to discuss these issues and have the ACO in place prior to the onset of spring rain/snow melt.

If you have any additional questions or concerns, do not hesitate to call me at 616-752-2192.

Sincerely,



Dennis J. Donohue

DJD/seb

c: Mr. Brian Jankowski, DEQ
Mr. Joe Hass, DEQ
Ms. Robyn Schmidt, DEQ
Mr. Bill Larsen, DEQ
Mr. Barry Selden, DEQ
Mr. Pete Bruski, Grand Traverse County CEA
Mr. Steve Schooler, Director of Construction
Mr. Terry Boyd, Gourdie Fraser
Mr. T. Eric Ritchie, Team Elmer's
Mr. Steve Folkersma, Team Elmer's
Mr. Jay B. Zollinger, Acme Township Supervisor

Exhibit A

Photograph No. 1: Acme Creek north of Basin 2 Swale Outlet (11/24/14)



Photograph No. 2: Acme Creek north of Basin 2 Swale Outlet (11/24/14)



Client: Village at Grand Traverse
 Site: Grand Traverse Town Center
Acme Township
 Project No.: WNJ-1401

Photograph No. 3: Mr. Justin Bragg's Field Inspection Form Page 1

**Part 91/Construction Storm Water
Field Inspection Form**

FACILITY INFORMATION

SITE NAME: UTCL (Village at Grand Traverse) Date: 11/24/11
 SITE CONTACT: Mike Pottier, Geologist
 NPDES NO. MIL 112800 PART 91 PERMIT #:
 PART 91 AGENCY (CWA, MCA, APA): Grand Traverse CEA

INSPECTION INFORMATION

AREAS EVALUATED: Nonpoint Pollution (N) *Required (M) *Marginal (U) *Unsatisfactory (NA) *Not Evaluated (NE)

1) Overall Site Rating S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/>	11) Check Dams S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/>	19) Sediment Basins S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/> <small>* See notes</small>
2) Sediment Discharged Off-site S <input type="checkbox"/> M <input type="checkbox"/> U <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/> <small>* See notes</small>	12) Downdrilling S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/>	20) Silt Fence S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/>
3) Sediment Discharged to WaS S <input type="checkbox"/> M <input type="checkbox"/> U <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/> <small>* See notes</small>	13) Erosion Control Blankets S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/> <small>* See notes</small>	21) Spoils Piles S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/>
4) SESC Plan Compliance S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/>	14) Access Road S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/>	22) Stabilized Outlet S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/> <small>* See notes</small>
5) Inspection Logs S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/>	15) Riprap S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/>	23) Storm Sewer Inlets S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/> <small>* See notes</small>
6) SESE Plan Appropriate S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/>	16) Road/Stream Crossing S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE <input type="checkbox"/>	24) Storm Water Basins S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/> <small>* See notes</small>
7) SESE Permit Compliance S <input type="checkbox"/> M <input type="checkbox"/> U <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/>	17) Rubbish/Chemical Control S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/>	25) Vegetative Cover/Matching S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/> <small>* See notes</small>
8) SESE Plan On-site * S <input type="checkbox"/> M <input type="checkbox"/> U <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/> <small>* See plan on site</small>	18) Scheduling/Staging S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/> <small>* See notes</small>	26) Other S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/>
9) Procedures Followed ** S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/>	Areas 1-7 and adequate assessment of Impaired/Relevant BMPs are Required for a Comprehensive Inspection * is Required for Part 91 PRR, Optional for an NOC ** is Required for Part 91 and PRR if APA, Optional for an NOC *** is Optional	
10) SESE Permit On-site *** S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE <input type="checkbox"/>	Inspector Initials _____	

Areas Evaluated based on Marginal or Unsatisfactory need to have comments

Created (1/2011) SESE/CSW Program

Photograph No. 4: Mr. Justin Bragg's Field Inspection Form Page 2

**Part 91/Construction Storm Water
Field Inspection Form**

When enumerating, reference the number of the area evaluated category (e.g., #19, not attached in this Part 91 Cr.)

#2 Two points discharge sediment-laden stormwater to the north of cullet #2. Also discharge of turbid water into stormwater pond ^{down stream}

#3 Same as #2.

#7 Missing SESC plan on site / some discharge of turbid water

#8 Same as #7.

#17 Minor areas of erosion on west side of site

#18 Has been a problem since ~~beginning~~ beginning

#19+21 water is being pumped into ~~creeks~~ ^{creeks}

#22 Outlets still lacking vegetation

#25 Site still lacking vegetation

Ground about has been paved since last visit

Continued #2 Turbidity at 10-22 looked the same as Above/upstream from the sites

Client: Village at Grand Traverse
 Site: Grand Traverse Town Center
Acme Township
 Project No.: WNJ-1401

Photograph No. 5: Gourdie Fraser, Inc. NPDES Inspection Report from 11/24/14

NPDES SOIL EROSION INSPECTION LOG

Project Name or Description:

Page 1 of 1

Grand Traverse Town Center 13400

NPDES Number: MIR112753

Date: 11-24-14 Time: 1:00 PM

Certified Operator: Mark Walters

Operator #: C-15908

Reason for Inspection: Weekly Inspection

Inspection After Storm Water Runoff

Observations: Rain in last 24 hours is 1.0" and about 0.32" on Saturday 11-22-2014. Inspected site with Justin Bragg DEQ and Mike from Horizon Environmental at 10:30 am. We inspected the area around basin #1 first and found no water being released into the slow release channel the water that is in the channel is what is picked up along the channel itself and this water at the end was pretty clear going over the rip rap and into the wetlands. We then went to the south hill where the filtration system is discharging filtered water this appeared to be clear. Then we walked to the bottom of the hill where the filtered water runs down the hill and accesses the creek and this also was clear. Up stream of this is where the wetlands empties into the creek and it was noted that this was more turbid than the creek water. The turbidity of the creek this am was 19 NTU's at Lautner Road and 22 and 23 where the wetland outlets and where the filtered water outlets and at M-72 it was 23 NTU. It should be noted that basin #2 is still not releasing any storm water because it is blocked off. At the West side theater low point it was noted that the water was to the top of the silt fence and this water looked turbid Justin suggested that this should be pumped to the east into the swale and Elmer's was going to do this afternoon. About 400 feet south of this location we ran into two people that had not signed in at the job site trailer. They were Kevin McElyea GTC Drain Commissioner and someone named Brian Kelly also not signed in. Mike from Horizon asked if they could possibility sign in and Mr. McElyea said he would not be signing in. I said that meant they could be seen as trespassing, Mr. McElyea said "good". After this I walked away with Justin and did not talk to them again. Proact has to this date filtered and released 3,609,094 gallons and Elmer's has hauled off site with tanker trucks since 11-10-2014 2,500,000 gallons.

Corrective Actions Taken/Needed: Keep monitoring filter system and repair any silt fence or any build up that might occur. Pump out water collected at silt fence by the theater back to the east into natural swale on property.

Signature: _____

Operator Number: C-15908

Print Name: Mark Walters

Photograph No. 6: Dinner Theatre storm water pond outlet structure (11/24/14)



Photograph No. 7: M-72 access road facing south (12/04/14)



Photograph No. 8: M-72 access road facing west (12/04/14)



Photograph No. 9: M-72 access road facing north (12/04/14)



Photograph No. 10: M-72 access road facing north (12/04/14)



Photograph No. 11: Surface Swale Inlet Structure Construction (1/20/15)



Photograph No. 12: Surface Swale Inlet Structure Construction (1/20/15)



Photograph No. 13: Surface Berm Construction – Matting Placement and Swale Outlet (1/20/15)



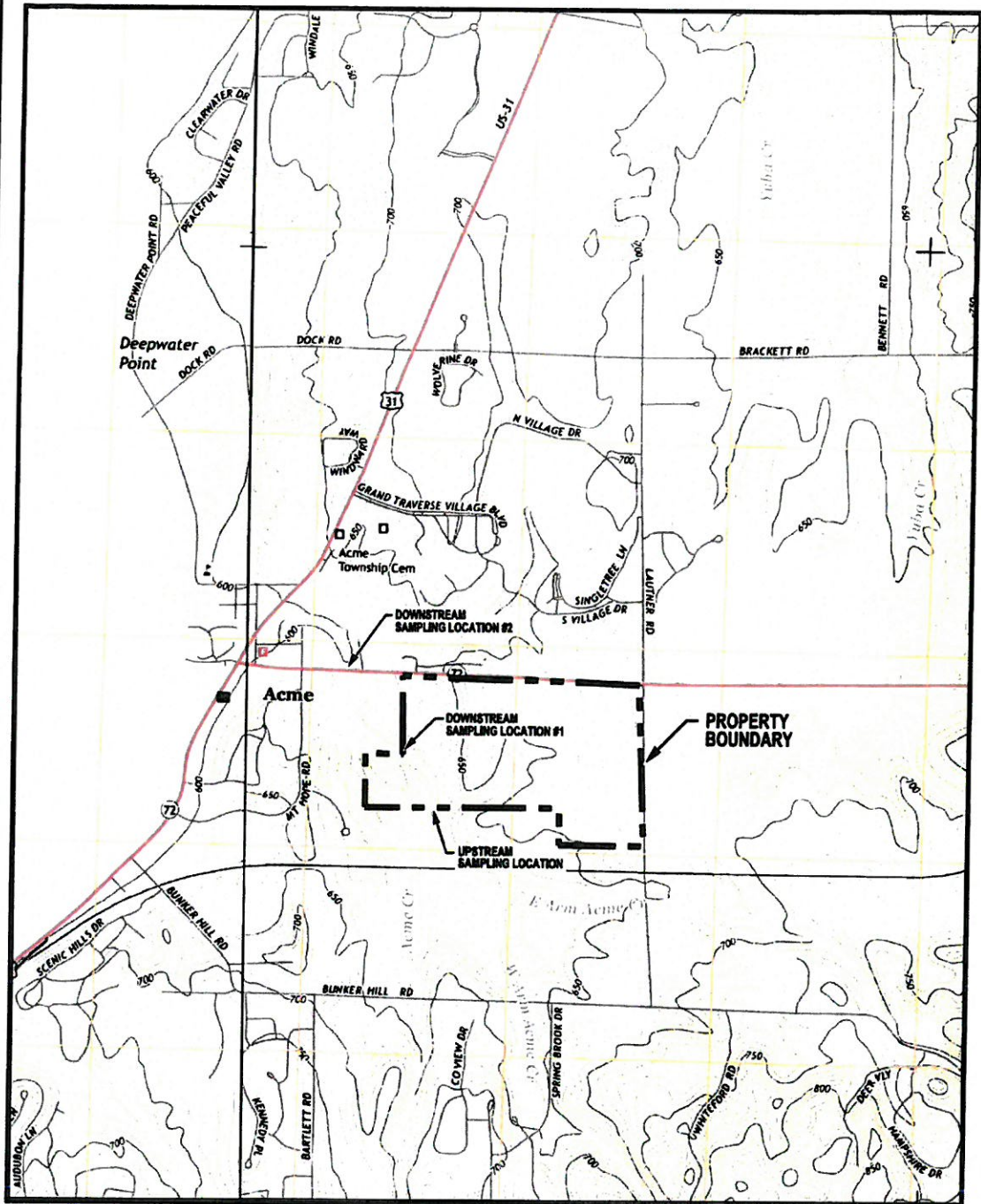
Photograph No. 14: Surface Berm and Swale Construction – Matting Placement (1/20/15)



Photograph No. 15: Surface Berm and Swale Construction – Matting Placement and Swale Outlet (1/20/15)



Exhibit B

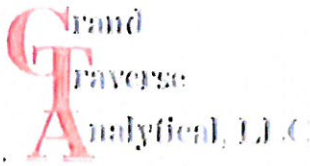


TAKEN FROM 7.5 MINUTE SERIES TOPOGRAPHIC MAP
 TRAVERSE CITY SE AND WILLIAMSBURG 2014 QUADRANGLES
 NORTH AMERICAN VERTICAL DATUM OF 1988
 NOT TO SCALE



HORIZON ENVIRONMENTAL Village at Grand Traverse Acme Township, Grand Traverse County, Michigan	PROJECT NUMBER: WNJ-1401
	FIGURE: 1 DECEMBER 2014
SITE LOCATION MAP	

Exhibit C



INDEPENDENT TESTING LAB
830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686
PH: 231-920-0905 FAX: 231-920-0904
www.gtanalytical.com

Company: HORIZON ENVIRONMENTAL Site Add: VILLAGE AT G.T.
Name:
ClientProj: WNJ-1401
GTA ProjNo: 112514-1
Sampled By: MIKE POTTER/HORIZON
Date Rec: 11/25/2014
Time Rec: 9:45 AM

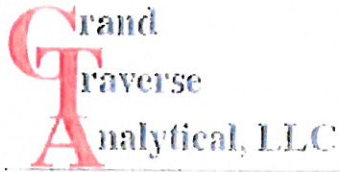
Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
2	ACME CR @ UP STREAM	11/24/2014	7:35 AM	WATER
3	ACME CR @ DOWNSTREAM	11/24/2014	8:05 AM	WATER
4	ACME CR @ M-72	11/24/2014	8:15 AM	WATER

ELECTRONIC SIGNATURE REPORT. This is a final report for the following pages of data for the samples specified above. All analysis was performed by the methods stated and all quality control measures required were completed. All quality control information is available upon request.

Kirk L. Chase

Digitally signed by Kirk L. Chase
DN: cn=Kirk L. Chase, o=Grand Traverse Analytical,
ou=Head Chemist, email=kirk@gtanalytical.com, c=US
Date: 2014.12.03 09:44:23 -05'00'

Kirk L. Chase/Chemist
Grand Traverse Analytical
830 Robinwood Court
Traverse City, MI 49686
Ph: 231-920-0905
Fx: 231-920-0894
kirk@gtanalytical.com



INDEPENDENT TESTING LAB

570 ROBINWOOD COURT, TRAVERSE CITY, MI 49606

PH: 231-929-0000

FAX: 231-929-0004

www.gtanalytical.com

COMPANY: HORIZON ENVIRONMENTAL

GTA PROJECT NO: 112514-1

PROJECT NO: WNJ-1401

GTA SAMPLE NO: 2

LOCATION: VILLAGE AT G.T.

DATE SAMPLED: 11/24/2014

TIME SAMPLED: 7:55 AM

DATE RECEIVED: 11/25/2014

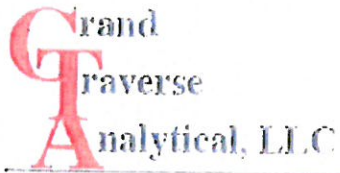
TIME RECEIVED: 9:45 AM

SAMPLED BY: MI
MIKE POTTER/HORIZON

SAMPLE RESULTS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
	SAMPLE ID: ACME CR @ UP STREAM						
	TOTAL SUSPENDED SOLIDS SM2540D	8.0	5.0	mg/L (PPM)	TR	12/2/2014	WATER

ND = NOT DETECTED, RESULT < LOD
LOD = LIMIT OF DETECTION
s.u. = STANDARD pH UNITS REPORTED AT 25 C



INDEPENDENT TESTING LAB

530 ROBINWOOD COURT, TRAVERSE CITY, MI 49606

PH: 231-929-0605

FAX: 231-929-0554

www.gtanalytical.com

COMPANY: HORIZON ENVIRONMENTAL

GTA PROJECT NO: 112514-1

PROJECT NO: WNJ-1401

GTA SAMPLE NO: 3

LOCATION: VILLAGE AT G.T.

DATE SAMPLED: 11/24/2014

TIME SAMPLED: 8:05 AM

DATE RECEIVED: 11/25/2014

TIME RECEIVED: 9:45 AM

MI

SAMPLED BY: MIKE POTTER/HORIZON

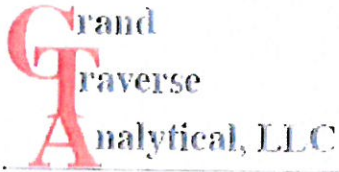
SAMPLE RESULTS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
	SAMPLE ID: ACME CR @ DOWNSTREAM						
	TOTAL SUSPENDED SOLIDS SM2540D	ND	5.0	mg/L (PPM)	TR	12/2/2014	WATER

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

s.u. = STANDARD pH UNITS REPORTED AT 25 C



INDEPENDENT TESTING LAB

590 ROBINWOOD COURT, TRAVERSE CITY, MI 49606

TEL: 231-929-0905

FAX: 231-929-0094

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COMPANY: HORIZON ENVIRONMENTAL

GTA PROJECT NO: 112514-1

PROJECT NO: WNJ-1401

GTA SAMPLE NO: 4

LOCATION: VILLAGE AT G.T.

DATE SAMPLED: 11/24/2014

TIME SAMPLED: 8:15 AM

DATE RECEIVED: 11/25/2014

TIME RECEIVED: 9:45 AM

MI

SAMPLED BY: MIKE POTTER/HORIZON

SAMPLE RESULTS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
	SAMPLE ID: ACME CR @ M-72						
	TOTAL SUSPENDED SOLIDS SM2540D	12	5.0	mg/L (PPM)	TR	12/2/2014	WATER

ND = NOT DETECTED, RESULT < LOD
LOD = LIMIT OF DETECTION
s.u. = STANDARD pH UNITS REPORTED AT 25 C



INDEPENDENT TESTING LAB

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CELEBRATING 10 YEARS ☆ 2002-2012 ☆

CHAIN OF CUSTODY

PROJECT NUMBER <i>WNJ-1401</i>	SITE NAME/ADDRESS <i>Village at G.T.</i>	COMPANY/NAME <i>Horizon Environmental</i>
SAMPLED BY <i>Mike Potter</i>	COMPANY <i>Horizon Environmental</i>	GTA PROJECT # <i>112514-1</i>

SAMPLE INFORMATION					
#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
<i>2</i>	<i>ACME ^{CR} UPSTREAM</i>		<i>0755</i>	<i>W</i>	<i>TSS</i>
<i>3</i>	<i>ACME ^{CR} DOWNSTREAM</i>		<i>0805</i>	<i>W</i>	<i>TSS</i>
<i>4</i>	<i>ACME ^{CR} EM-28</i>		<i>0815</i>	<i>W</i>	<i>TSS</i>

BILL TO: <i>Horizon Environmental</i> <i>4971 SOUTH ST. SE</i> <i>GRAND RAPIDS MI 49512</i>	REPORT TO: <i>JAMIE ZOELYN C</i> <i>JW EDLYN@HORIZONENV.COM</i>
---	---

RELEASED BY <i>[Signature]</i>	DATE/TIME <i>11-25-14 0945</i>	RECEIVED BY <i>[Signature]</i>	DATE/TIME <i>11-25-14 0945 AM</i>
-----------------------------------	-----------------------------------	-----------------------------------	--------------------------------------

REQUESTED TAT STANDARD 1 BUSINESS DAY 2 BUSINESS DAYS 3 BUSINESS DAYS

Exhibit D

Location 705, 88

Date 11.23

Project / Client

SWAY 3 hrs 32

Basin 1 Basin 2

FORST. 0.5 OUR TOP OF STAIR PIA

Basin 1 TURBIDITY 148 NTU

WATER PENNACI DOWN FROM SWALE 2

15 CLIMA. BUT our new PENNACI.

1 CLIMA OF WTR Basin 2

TOTALIZER 3,415,672

1518

UP 120,000 Gallons
SINCE 0900

Basin 1
650

645.1

650.55

650.0

645.15

645

4.95

650.10

32324

21,210,800

600,600 GALLON DAY IN Basin 1
2 TDI, RATE = 46 L/min

Location 193422

Date 11.24

Project / Client

MONDAY 0650-1730 16

0.38 inches AM in OVERNIGHT

1.06 inches TOTAL

Basin 1 Basin 2

654

652.94

1.5 Below Blvd

1.5 Below EAST Rd

652.78

651.74

CASPER ROAD

TEMP 61°C TURBIDITY: 19

UPSTREAM SG. 1.8, TURB. 19, TEMP. 5.7°C

M-72

TURB = 23 TEMP. 5.7°C

DOWNSTREAM TURB. 22, SG. 2.4, TEMP. 5.7°C

YUBA CROCK

TEMP 3.2°C TURB: 2

Basin 1

TURBIDITY 279

JUSTIN DEE Call Phons

BRAGG: 789.208 7075

Creek was VISIBLY clear AT ALL SAMPLING

LOCATIONS. Creek DID NOT flow into CROCK

DOWN FROM THEN UPSTREAM. BRAGG ABOVE.

Location _____ Date 11-24

Project / Client TC

Monday (Cont) NO FLOW OBSERVED

Traverse - began KHR and

10:30 AM McEwen Drain Occurrence

Down Hunter Road is same flow & ^{of} ^{base} level

At 10:45 AM Dole Mute occurs near Road

Traverse across that discharge from DT is clear

Basin 1 Basin 2

1' Below Beach 2.3' Below First Ebb

SE TANK

1	235	233
2	250	250
3	250	250
4	250	250
5	290	290
6	250	250
7	220	220
8	164	164
9	196	196
10	230	230
11	267	267
12	250	250

Discharges to Creek Runnings clear

Location _____ Date 11-25-14

Project / Client TC

Tuesday 11:30 AM 16

431 000 Gallon Tank - 10 AM

UP Stream s.l. = 1.2 @ 0810

Discharge to Stream Normal Clear

Basin 1 Basin 2

655	652.94
0.8 Below Sluic R	2.8 Below Tank R
654.2	650.1

3813013	INF	INT.	EFF
3609398	100	32	6.1
203,620			2000 GPM
2141 6PM			

11:30 Discharge from Boat system
to 2nd Pond looks clear, Discharge to
Basin 1 is HIGHLY TURBID BUT CLEAR
As water level rises @ Discharge