

CITY OF FRANKLIN
QUARRY MONITORING COMMITTEE*
MEETING AGENDA

Franklin City Hall, **COUNCIL CHAMBERS**
9229 West Loomis Road, Franklin, Wisconsin 53132
Thursday, May 28, 2020, 6:30 p.m.

- I. Call to Order and Roll Call
- II. Approval of Minutes
 - a. Regular meeting of February 27, 2020.
- III. Citizen Comment Period
PLEASE NOTE: Due to the anticipated number of citizens who may attend, each speaker may need to be limited to three minutes, allowing everyone who wishes the opportunity to speak.
- IV. Hearings
- V. Business (Action may be taken on any item)
 - a. Selection of non-voting member (Ordinance 2020-2425).
 - b. Payne and Dolan bi-annual report 2018-2019.
 - c. Quarterly presentation by Stantec Consulting Services (1 of 4).
 - d. Review and discussion on matters pertaining to citizen complaints, blasting data from Payne & Dolan, and on Stantec's (the City's consultant) quarry monitoring activities and information, including exceptional report for the April 9, blast event.
 - e. Annual aerial photos (2018-2019).
 - f. Survey of the quarry extraction area.
 - g. Annual reclamation report (2019).
- VI. Schedule Next Meeting
- VII. Adjournment

** Notice is given that a majority of the Common Council may attend this meeting to gather information about an agenda item over which the Common Council has decision-making responsibility. This may constitute a meeting of the Common Council per State ex rel. Badke v. Greendale Village Board, even though the Common Council will not take formal action at this meeting.*

Notice is further given that upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information, please contact the Franklin City Clerk's office at (414) 425-7500.

City of Franklin
Quarry Monitoring Committee Meeting
February 27, 2020
Minutes

unapproved

I. CALL TO ORDER

Alderwoman Wilhelm called the February 27, 2020 Quarry Monitoring Committee meeting to order at 6:01 p.m. in the Council Chambers at Franklin City Hall, 9229 West Loomis Road, Franklin, Wisconsin.

Present were Alderwoman Kristen Wilhelm, Alderman Mike Barber, Members Margie Shore and Fred Knueppel. Also present were Clint Weninger and Associate Planner Régulo Martínez.

II. APPROVAL OF THE MINUTES

- a. Regular meeting of December 12, 2019.

All present voted 'aye'; motion carried.

III. CITIZEN COMMENT PERIOD

Citizen comment period opened at 6:03 p.m. and closed at 6:17 p.m. 2 citizen comments.

V. HEARINGS

- a. None.

No action needed. None taken.

V. BUSINESS

- a. Review of the proposed amendments to the Municipal Code Section 10-19 Quarry Monitoring Committee, specifically: A. Composition, B. Appointment and C. Term.

Alderman Barber moved and Member Knueppel seconded:

A motion to recommend the proposed amendments to the Municipal Code Section 10-19 "Quarry Monitoring Committee" for Common Council approval. Specifically: A. Composition, B. Appointment and C. Term, as discussed in the December 12, 2019, Quarry Monitoring Committee meeting.

All present voted 'aye'; motion carried.

- b. Update on Professional Services Agreement to provide quarry monitoring services for calendar year 2020.

Associate Planner Martínez informed that the Professional Services Agreement was signed and executed in early February. No action taken.

- c. Update on the survey of the quarry extraction area.

Associate Planner Martínez noted that a draft survey is expected for this week or next week.

d. Annual aerial photos (2019).

Alderman Barber recommended to include previous year's aerial photos to next meeting's packet, for comparison purposes.

e. Annual reclamation report (2019).

Associate Planner Martínez noted that staff shall transmit the annual reclamation report to the Department of Natural Resources (DNR) by March 31, 2020.

f. Review and discussion on matters pertaining to citizen complaints, blasting data from Payne & Dolan, and on Stantec's (the City's consultant) quarry monitoring activities and information, including 2019 annual report prepared by Stantec.

Member Knueppel moved and Alderman Barber seconded:

A motion to accept the 2019 Franklin Aggregates Quarry Monitoring Summary report, as presented by Stantec.

All present voted 'aye'; motion carried.

VI. SCHEDULE NEXT MEETING

It was agreed that the next meeting of the Quarry Monitoring Committee would tentatively be on March 26, 2020, based on quorum.

VII. ADJOURNMENT

Alderwoman Wilhelm moved and Member Knueppel seconded to adjourn the February 27, 2020, Quarry Monitoring Committee meeting at 6:39 p.m. All present voted 'aye'; motion carried.

ORDINANCE NO. 2020-2425

AN ORDINANCE TO AMEND THE MUNICIPAL CODE, §10-19. QUARRY MONITORING COMMITTEE, AS IT PERTAINS TO COMMITTEE MEMBERSHIP

WHEREAS, the Quarry Monitoring Committee having review the Municipal Code as it pertains to the membership of the Committee and having recommended its amendment to provide for an additional non-voting citizen member; and

WHEREAS, the Common Council having determined the recommendation to be reasonable.

NOW, THEREFORE, the Mayor and Common Council of the City of Franklin, Wisconsin, do ordain as follows:

SECTION 1: §10-19. of the Municipal Code of Franklin, Wisconsin, is hereby amended to read as follows *[note deletions appear in strike-through text, additions appear in double-underlined text, unchanged text is not highlighted]*:

“§10-19. Quarry Monitoring Committee.

A. Composition. The Quarry Monitoring Committee shall consist of ~~six~~five members, two of whom shall be Aldermen and ~~four~~three of whom shall be citizens. One of the four citizen members will be a non-voting member.

B. Appointment. The members of the Committee shall be appointed as follows: the Aldermen members and one citizen member shall be appointed by the Mayor and confirmed by the Common Council, ~~and each of the other~~ Two citizen members shall be separately appointed by the two Aldermen within whose districts the quarry is located, each of the two Aldermen separately appointing one citizen, which appointments shall be confirmed by the Common Council. One citizen non-voting member shall be selected by the Committee and confirmed by the Common Council, for a term of 3 years. At least one of the citizen members shall not be a member of any other City board, commission or committee.

C. Term. The initial appointment shall be made as follows: one citizen member shall serve for one year; one citizen member shall serve for two years; and ~~two~~one citizen members shall serve for three years; the Aldermen members shall serve for ~~three~~two years and only during his or her tenure in office, from ~~May~~June 1, in the year of his or her appointment. Thereafter, each citizen appointment shall be made for a term of three years, and each Aldermen appointment shall be for a term of ~~three~~two years.

D. Duties. The Committee shall undertake all actions reasonably necessary to assist the City in reviewing the monitoring of the operations and activities of the quarry operators for compliance with the regulations set forth under Planned Development District No. 23 and Planned Development District No. 24, and matters related thereto, and shall review and provide comment and recommendation to the Common Council on performance and monitoring data, reports, and complaints related to quarry extraction operations and control procedures.

E. Common Council retains jurisdiction. The Committee shall be subject to the authority of the Common Council. All determinations of the Committee shall be advisory only to the Common Council.

F. The Planning Department, operating under the general direction and supervision of the Mayor, shall provide staff support to the Quarry Monitoring Committee.

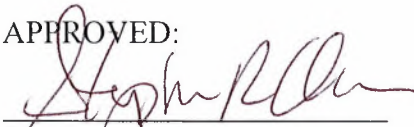
SECTION 2: The terms and provisions of this ordinance are severable. Should any term or provision of this ordinance be found to be invalid by a court of competent jurisdiction, the remaining terms and provisions shall remain in full force and effect.

SECTION 3: All ordinances and parts of ordinances in contravention to this ordinance are hereby repealed.

SECTION 4: This ordinance shall take effect and be in force from and after its passage and publication.

Introduced at a regular meeting of the Common Council of the City of Franklin this 17th day of March, 2020, by Alderman Barber.

Passed and adopted at a regular meeting of the Common Council of the City of Franklin this 17th day of March, 2020.

APPROVED:


Stephen R. Olson, Mayor

ATTEST:



Sandra L. Wesolowski, City Clerk

AYES 6 NOES 0 ABSENT 0



PAYNE & DOLAN
INCORPORATED
A WALBEC GROUP COMPANY

January 24, 2020

Mr. Regulo Martinez-Montilva
Department of City Development
9229 W. Loomis Road
Franklin, WI 53132

Subject: Biannual Report

Dear Mr. Martinez-Montilva:

As required by PDD #97-1456 & PDD #97-1457 (or PDD #23 and PDD #24), I have enclosed the Biannual Report to the Plan Commission for the Franklin Aggregates quarry located on Rawson Avenue.

Please do not hesitate to contact me in the office at (262) 524-1258, if you have any additional questions and/or would like some additional information.

Sincerely,

Payne & Dolan, Inc.

Clint Weninger, P.G.
Land Resources Manager

Franklin
JAN 27 2020
City Development

I. Site History

- Franklin Aggregate has been in operation since the mid 1940's.
- Payne & Dolan has owned and operated the Franklin Aggregate location since 1983.
- The quarry was operated by Payne & Dolan and Vulcan Materials until June of 2013, when the Vulcan Franklin quarry was purchased by Payne & Dolan. Payne & Dolan is now the sole operator.
- Payne & Dolan operates the quarry in accordance with two (2) Planned Development Districts (PDD), PDD #23 (#97-1456) and PDD #24 (#97-1457), approved by the City Common Council in 1997.

II. Quarry Operations

- Quarry operations include stripping, blasting, crushing, washing and load out of material.
- Limestone was extracted in two areas of the quarry as shown in Figure 3 below.
- Crushing continues to utilize both the crushing plants and typically occurs from approx. early March and to mid-December. However, due to the high demand in the local area, crushing did not shut down for the winter of 2018 - 19 and continued thru the end of the year.
- Quarry operations may be conducted from 6:30 AM – 7:00 PM Monday thru Friday, 7:00 AM – 4:00 PM on Saturdays and no operations on Sundays or various holidays as specified in the PDDs. Hours of operation for blasting and the asphalt plants are different and listed later in other sections.
- Majority of the load out of materials utilized the west entrance along Rawson Avenue, with limited use of the east entrance. Load out occurs throughout the year with reduced hours in the construction off-season.
- Quarry operations will continue to utilize both crushing plants and most of the load out will be through the west entrance.

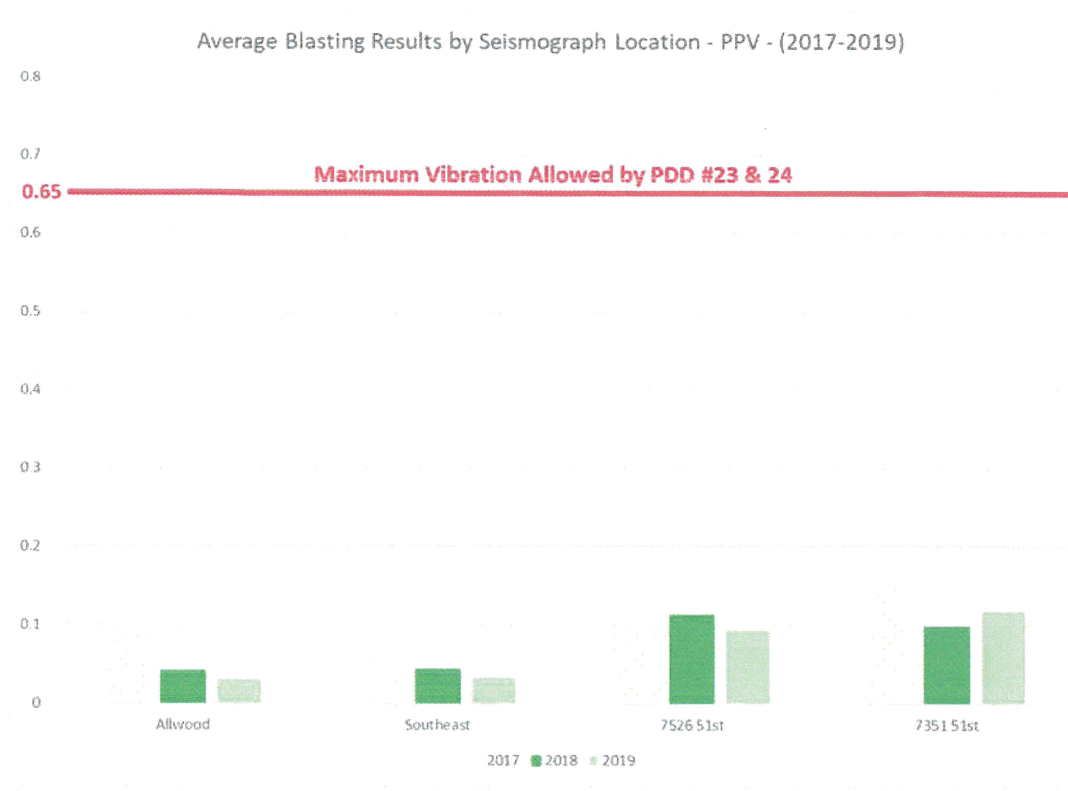
III. Asphalt Plant Operations

- There are two asphalt plants on site currently owned and operated by Payne & Dolan. The east asphalt plant was purchased by Payne and Dolan from Black Diamond in 2014.
- The west asphalt plant operates on PDD #23 and utilizes the west entrance. The east asphalt plant operates on PDD #24 and utilizes the east entrance.
- Asphalt plant operations may be conducted from 6:00 AM – 7:00 PM Monday thru Friday, 6:00 AM – 4:00 PM on Saturdays and no operation on Sundays per their permit use approvals as specified in the PDDs.
- Asphalt plants typically operate from mid-April thru mid-November, but may vary with market conditions.

IV. Blasting Operations

- Payne & Dolan supervises, implements, and conducts its drilling and blasting program specifically designed for this site. Blasting events are designed at conservative levels and kept well within the limits established by the PDDs.
- All blasting is conducted by experienced personnel licensed with the State of Wisconsin.
- Hours of blasting are restricted to 8:00 AM to 4:00 PM – Monday thru Friday with no blasting taking place on Saturday, Sunday or holidays as listed in the PDDs.

- All blasting events are monitored by four (4) independently calibrated seismographs – operated by Vibra-Tech, a third party vendor.
- City of Franklin personnel and quarry monitoring consultant (Stantec) have access to Vibra-Tech’s seismograph information via a website.
- Stantec, the City of Franklin’s quarry monitoring consultant, has done independent blast monitoring of the quarry and their monitoring results are consistent with Payne & Dolan’s results and confirm that all blasting operations are within the PDD limits.



V. Other

- Stantec continues to conduct quarry monitoring at the discretion of the City of Franklin Quarry Monitoring Committee.
- Payne & Dolan personnel regularly attends the Quarry Monitoring Committee meetings.
- Payne & Dolan personnel continues to provide site visits and tours of its operations to City officials and representatives from Stantec.
- Numerous quarry tours and site visits were conducted with neighbors and members of the community including 90 people (children and parents) of Cub Scout Pack 538 from Pleasant View Elementary School and over 750 people during the Franklin Civic Celebrations in 2017 and 2019.
- At the request of neighbors, Payne & Dolan has started a preblast notification process to provide advance notice to neighbors of a blast. The notification process entails sending interested parties a

message the day of the blast by either test or email, informing them that blasting would be occurring that day. Currently, there are 39 people on the notification list.

- Arranged for an industry expert in vibration monitoring and analysis to make a presentation at the February Quarry Monitoring Committee meeting for committee members and neighbors. Mike Spors with Vibra-Tech discussed what the vibrations are from blasting, how vibrations are measured, how and why the State blasting limits are set where they are (Z-curve), how conservative the blasting limits within the PDDs are to the State blasting limits, and why there is no potential impact on nearby residences and structures when blasting at these conservative levels. Mr. Spors also answered questions from neighbors and committee members.

Figure 1. Site Map showing Property Lines, PDD Locations and Extraction Limits



Figure 2. Current Aerial Photo - (September 2019)



Figure 3. Limestone Extraction Areas (2017 – 2019 and 2020 – 2021)

*2020-2021 is a Projection only – subject to change and may vary at discretion of P&D





Stantec Consulting Services Inc.
 1165 Scheuring Road
 De Pere, Wisconsin 54115
 Tel: (920) 592-8400
 Fax: (920) 592-8444

May 6, 2020

Régulo Martínez-Montilva, AICP
 Associate Planner - Department of City Development
 City of Franklin
 9229 W. Loomis Road
 Franklin, Wisconsin 53132
RMartinez-Montilva@franklinwi.gov

REFERENCE: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary
Period: 1st Quarter 2020
Stantec Project: 193707487

Dear Mr. Martínez-Montilva:

The enclosed information summarizes monitoring activities completed during the first quarter of 2020 by Stantec Consulting Services Inc. (Stantec) pertaining to the Franklin Aggregates, Inc. quarry (owned by Payne & Dolan, Inc.) located at 6211 W. Rawson Avenue, Franklin, Wisconsin (the quarry). Stantec was retained by the City of Franklin to conduct a combination of direct observation (visual) monitoring, seismic monitoring of the quarry operations, and evaluation of citizen complaints. A description of services is presented in Attachment A and the background of the project is provided in Attachment B. This letter summarizes the results.

Direct Observation (Visual) Monitoring

Copies of completed observation forms are prepared and posted to the project FTP site for review by City representatives. Copies of individual reports are not provided with this summary report.

No qualitative observation site visits at the quarry during the first quarter of 2020. These monthly site visits are scheduled to begin in April.

Seismic Monitoring

As contracted by the City, Stantec provided remote vibration monitoring using two seismographs co-located with two existing Payne & Dolan (Vibra-Tech) monitors at 7301 S. 51st Street (VT1 and S1) and 5800 W. Allwood Drive (VT4 and S2). The monitoring provides continuous (24/7) remote monitoring. Payne & Dolan also has monitors at 7526 S. 51st Street (VT2) and southeast of the quarry (VT3). Summaries of blasting data, comparing the Payne & Dolan unit recordings, to the Stantec (Sauls Seismic) unit recordings, were prepared for the first quarter and are presented in Attachment C. Note that there were no blasting events in January or February. Figure 1 illustrates the locations of the blasts in the first quarter.

Summaries of the seismic data are provided in Attachment C. Highlights include the following:

- Between January 1 and March 31, 2020, a total of 11 blasting events occurred. A total of 10 (91%) of these blasts were confirmed by the Stantec monitors.
- Per the Planned Development District agreements (PDD), 85% of the quarry's blasts within any calendar year must be below the maximum permissible vibration (of 0.30 inches per second (in/sec), measured at the closest residence or inhabited structure not owned or controlled by the quarry. This is more stringent than State of Wisconsin regulations which require quarry operators to report any ground vibration levels to the Wisconsin Department of Natural Resources that are above 0.75 in/sec.
 - None of the blasting events measured by Payne & Dolan or Stantec had a vibration greater than 0.30 in/sec; thus 100% of the quarry's blasts were below this level.

Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary
Period: 1Q2020

- Per the PDD, airblast resulting from P&D blasting shall not exceed 123 dB on at least 85% of its blasts within any single calendar year, measured at the residence or inhabited structure closest to the site of the blast which is not owned or controlled by the Operator. Notwithstanding any other provision in this subsection, the Operator shall not exceed the airblast limitation imposed by Wis. Adm. Code, SPS Ch. 307.
 - None of the blasting events measured by Payne & Dolan or Stantec had an air overpressure (AO) greater than 123dB; thus 100% of the quarry's blasts were below this level. This is in conformance with the PDD.
- The corresponding blast data measured by Stantec with the Sauls Seismic monitors, closely aligned with the readings at each Payne & Dolan sponsored Vibra-Tech monitors. However, the PPV readings were consistently measured slightly higher by the Payne & Dolan monitor compared to the Stantec monitor, indicating the Payne & Dolan monitors may be providing a slightly more conservative PPV measurement. It should be noted that in addition to the fact the monitors are produced by different manufacturers, there are a variety of variables that can influence actual PPV readings.
- In general, the largest blast readings at each monitor appear to correlate with the proximity of the nearest adjacent blast location.

Blast Complaint Evaluation

A compilation of all complaints received by Stantec for the period January 1 through March 31, 2020 is provided as Attachment C. Note that Attachment C does not provide the actual complainant details (name, address, and phone number) if known; it was decided to have this information remain confidential. The locations of all blasts and complaints are shown on Figure 1. The following highlights the results of the complaint evaluation:

Complaints - General

- 9 complaints – total (Note: one complaint was for multiple reasons)
- 1 complaint – regarding noise
- 0 complaints – regarding dust
- 0 complaints – miscellaneous
- 9 complaints – regarding blast events

Complaints – Blast Related

- 9 complaints – corresponding to actual blast events
- 0 complaints – corresponding to possible blast events
- 0 complaints – not corresponding to actual blast events
- 9 complaints – complainant location identified
 - 5 households that complained once each
 - 2 household that complained two (2) times
- 0 complaints – no name and address provided

Complaints (non-anonymous; confirmed blast related) - Locations

- 0 complaints – east of 51st Street
- 9 complaints – south of Drexel Avenue
- 0 complaints – west of Root River

Blast Events

- 11 blast events - during monitoring period 1Q2020 (shot numbers 1 through 11)

May 6, 2020

Page 3 of 4

Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary
Period: 1Q2020

- 2 blast events - corresponding to complaints
 - 0 weather: rain
 - 1 weather: partly to mostly cloudy, or cloudy
 - 1 weather: fair or scattered clouds
 - 2 time: prior to 12:00 pm (noon)
 - 0 time: after 12:00 pm
- 1 blast events with two (2) complaints (March 17, 2020)
- 1 blast events with seven (7) complaints (March 23, 2020)

Quarry Blast Locations Producing Complaints

- 1 northeastern area of quarry
- 1 southern area of quarry

Upon review of these results outlined above, on Figure 1, and in Attachment C, the following observations are made:

1. Very few, if any, quarry operational complaints are made regarding noise, dust, or truck traffic. Most complaints focus on quarry blasting and resulting ground vibrations.
2. All of the complaints in this quarter originate from residences south of Drexel Avenue. Most of these were related to blast number 6 which occurred on March 23. This was the only blast identified in the southern portion of the quarry during the monitoring period.
3. No complaints came from households directly east of the quarry, adjacent the majority of blast events.
4. No complaints came from west of the Root River.
5. Blasts along the eastern area of the quarry correspond to the highest readings on monitors in that vicinity; however, no complaints are directly adjacent this area, the complaints are all south of Drexel Avenue.
6. Complaints were made on days with varying types of weather (fair or cloudy).



May 6, 2020
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Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary
Period: 1Q2020

Please feel free to contact Mike Roznowski at 920.278.3200 or mike.roznowski@stantec.com or Kristen Gunderson-Inden at 262-643-9156 or kristen.gunderson-inden@stantec.com if you have any questions or concerns.

Respectfully,

STANTEC CONSULTING SERVICES INC.

A handwritten signature in blue ink, appearing to read 'Kristen Gunderson-Inden'.

Kristen Gunderson-Inden
Environmental Scientist

A handwritten signature in blue ink, appearing to read 'David Boyd'.

David Boyd, PE
Senior Engineer

A handwritten signature in blue ink, appearing to read 'Michael B. Roznowski'.

Michael B. Roznowski, CHMM
Senior Principal

Attachments A - Franklin Quarry Seismic Monitoring Description of Services
 B - Franklin Quarry Seismic Monitoring Project Background
 C – Summary of Seismic Data – 1st Quarter 2020
 Figure 1 - Seismic Blasting and Complaint Locations ,1st Quarter 2020

ATTACHMENT A

FRANKLIN QUARRY SEISMIC MONITORING DESCRIPTION OF SERVICES

DESCRIPTION OF SERVICES

Direct Observation (Visual) Monitoring

During 2020, Stantec will conduct a total of ten (10) qualitative site visits at the quarry to observe and document whether the site was compliant with operational parameters defined in the existing Planned Development District (PDD) agreements, and to evaluate whether the quarry's general operations are consistent with best management practices employed by other similar quarries. Site visits are a combination of announced and unannounced, but all are conducted during normal business hours. The days of the week and times of the day for the visits vary. The observations will be completed between April and October, when quarry operations are occurring, and airborne dust is more likely. Qualitative data to be collected includes the following:

- Visual observation of all aspects of the mining operation, including but not limited to:
 - Trucking operations, in particular pertaining to dust issues along Rawson Avenue
 - Operational issues that may affect local citizens in some form of adverse off-site impact
- Direct air quality observations, including:
 - General site and surrounding visual air quality, including opacity, in particular along Rawson Avenue
 - Dust control measures and issues on-site that may affect off-site receptors
 - Dust control issues directly adjacent off-site
 - Any other dust issues that may affect local citizens
- Quarry operations review (for announced visits), including:
 - Review of quarry records pertaining to dust control measures and recordkeeping, ensuring that the operator is following standard protocol to minimize off-site impacts, and evaluating how well and how quickly they respond to potential of actual off-site impact situations
 - Comparison of records to stated performance objectives and respective PDD compliance, only as they pertain to dust in general, and along Rawson Avenue in particular

The findings of each visit will be documented on a standard form previously approved by the City. The form will be filled out by hand during each site visit, and then scanned/posted to a project file transfer protocol (FTP) site for review by City representatives. Stantec also will obtain photos to document site or directly adjacent off-site conditions, and short-duration video clips (e.g., showing dust impacts). These photos and videos are also uploaded to the project FTP site.

In addition to the observations and record review, Stantec also will obtain and document on the inspection forms local meteorological conditions that were relevant to the observations (e.g., temperature, wind speed, wind direction, humidity, and precipitation).

Stantec also will notify the City Planning Manager of any condition (pertaining to air or dust monitoring, or other PDD condition) that we become aware of that exceeds the allowances outlined in the PDD. This communication will be completed prior to noon the business day following the day we become aware of any such event.

Seismic Monitoring

Stantec provides remote vibration monitoring by using Nomis Seismographs. Sauls Seismic is subcontracted to operate two separate seismographs, each co-located with two existing Payne & Dolan (Vibra-Tech) monitors located at: 7301 S. 51st Street, and 5800 W. Allwood Drive. Each monitor was pole-mounted and provided with a weatherproof enclosure. Power is provided via an internal battery and an external battery connected to a solar panel. This type of configuration provides continuous (24/7) remote monitoring, allowing Stantec to have access to data anytime via the Internet.

Stantec also will notify the City Planning Manager of any condition (pertaining to blasting, noise or other PDD condition) that we become aware of that exceeded the allowances outlined in the PDD. This communication will be completed prior to noon the business day following the day we become aware of any such event.

Blast Complaint Evaluation

Periodically the City forwards to Stantec specific information pertaining to quarry complaints received. Stantec evaluates each one on a quarterly basis to determine the following corresponding collaborative conditions:

- Off-site dust complaints: weather conditions (wind direction and speed) the day of the complaint
- Off-site seismic complaints: seismic data from both Stantec (if monitoring at the time) and Payne & Dolan placed monitors
- On occasion, the City may request an exceptional blast complaint evaluation if a blast event receives an unusually high number of complaints. A letter report will be issued by Stantec within approximately one week of the request that describes:
 - seismic data from both Stantec and Payne & Dolan placed monitors
 - weather conditions (wind direction and speed) the day of the complaint
 - a figure showing location of blast and complaints

ATTACHMENT B

FRANKLIN QUARRY SEISMIC MONITORING PROJECT BACKGROUND

Background Summary

Seismic monitoring was completed to document whether the site was compliant with operational parameters defined in the existing Planned Development District (PDD) agreements. Prior to 2018, Stantec completed a variety of 2, 4, and 8-week seismic monitoring periods. During 2018, Stantec completed one 4-week period and one 16-week period of monitoring. Monitoring consisted of placing a city owned and maintained Instantel MiniMate Plus fixed seismograph equipped with an external geophone at one of two city-established blast monitoring sites or vaults for each period. Seismic data was downloaded once every two weeks. Due to equipment limitations the data could not be downloaded remotely as it occurs (i.e., real time).

In 2019, Stantec provided remote vibration monitoring by using Nomis Seismographs. Sauls Seismic was subcontracted to install two separate seismographs, each co-located with two existing Payne & Dolan (Vibra-Tech) monitors located at: 7301 S. 51st Street, and 5800 W. Allwood Drive. Each monitor was pole-mounted and provided with a weatherproof enclosure. Power was provided via an internal battery and an external battery connected to a solar panel. This type of configuration provided continuous (24/7) remote monitoring, allowing Stantec to have access to data anytime via the Internet.

As contracted by the City, Stantec provided remote vibration monitoring using two seismographs co-located with two existing Payne & Dolan (Vibra-Tech) monitors at 7301 S. 51st Street and 5800 W. Allwood Drive. The monitor provided continuous (24/7) remote monitoring. Monthly summaries of blasting data, comparing the Payne & Dolan (Vibra-Tech) unit recordings, to the Stantec (Sauls Seismic) unit recordings, were prepared for the months April through December.

Per the PDD #23 and #24 Ordinances, 85% of the quarry's blasts within any calendar year must be below the maximum permissible vibration (also referred to as particle or ground velocity) of 0.30 inches per second (in/sec), measured at the closest residence or inhabited structure not owned or controlled by the quarry. This is more stringent than State of Wisconsin regulations (Wisconsin Department of Industry, Labor and Human Relations in ch.ILHR 7, Wis. Adm. Code on any blast [new reference now Wis. Adm. Code, Safety and Professional Services (SPS) Chapter 307]) which require quarry operators to report any ground vibration levels to the Wisconsin Department of Natural Resources that are above 0.75 in/sec.

Per the PDD #23 and #24 Ordinances, airblast resulting from P&D blasting shall not exceed 123 dB on at least 85% of its blasts within any single calendar year, measured at the residence or inhabited structure closest to the site of the blast which is not owned or controlled by the Operator. Notwithstanding any other provision in this subsection, the Operator shall not exceed the airblast limitation imposed by Wis. Adm. Code, SPS Ch. 307.

In addition to obtaining and reviewing the blast data from the city-owned, fixed seismograph, Stantec also received data from Payne & Dolan's Vibra-Tech meters, which provided independently monitored Franklin Aggregate blasting data for the entire calendar year. Four monitors are used by Vibra-Tech, three along South 51st Street, and one just south of West Drexel Avenue. This independently monitored data was compared to the Stantec-obtained data.

ATTACHMENT C

SUMMARY OF SEISMIC DATA – 1ST QUARTER 2020

Payne & Dolan Blast Monitoring Data							Stantec Blast Monitoring Data		Comparison of P&D and Stantec Monitoring Data		Complaint Information			Weather (for complaints only)																	
Date and Time	Activity Number	General Quarry Blast Location	Monitor Location	Distance (feet)	PPV (in/sec)	AO (dB)	PPV (in/sec)	AO (dB)	Difference in PPV Values	Difference in AO dB Values	Com-plaints?	#	Primary direction of complaints (from quarry)	Wind Direction	Wind Speed (mph)	Wind Gusts (mph)	Pressure (in)	Humidity (%)	Conditions	Precipi-tation	Temp. (°F)										
3/5/2020 11:37	1	east	5800 ALLWOOD	3,408	N/D	N/D	N/D	N/D	--	--	No																				
3/5/2020 11:37	1	east	7301 S 51st Street	1,264	0.095	112	0.09	110	0.005	2																					
3/5/2020 11:37	1	east	7526 S. 51st Street	1,342	0.108	111																									
3/5/2020 11:37	1	east	SE of Quarry	2,060	0.045	107																									
3/12/2020 13:34	2	east	5800 ALLWOOD	3,800	N/D	N/D	N/D	N/D	--	--	No																				
3/12/2020 13:34	2	east	7301 S 51st Street	736	0.16	101	0.11	104	0.050	-3																					
3/12/2020 13:34	2	east	7526 S. 51st Street	1,105	0.06	107																									
3/12/2020 13:34	2	east	SE of Quarry	2,106	N/D	N/D																									
3/12/2020 13:37	3	east	5800 ALLWOOD	3,476	N/D	N/D	N/D	N/D	--	--	No																				
3/12/2020 13:37	3	east	7301 S 51st Street	1,097	0.113	102	0.06	107	0.053	-5																					
3/12/2020 13:37	3	east	7526 S. 51st Street	1,149	0.083	106																									
3/12/2020 13:37	3	east	SE of Quarry	1,961	0.035	104																									
3/17/2020 11:48	4	east	5800 ALLWOOD	3,836	N/D	N/D	N/D	N/D	--	--	Yes	2	south	WNW	15	22	29.53	68	Fair	0	40										
3/17/2020 11:48	4	east	7301 S 51st Street	727	0.183	108	0.12	107	0.063	1																					
3/17/2020 11:48	4	east	7526 S. 51st Street	1,172	0.078	112																									
3/17/2020 11:48	4	east	SE of Quarry	2,169	0.023	113																									
3/17/2020 11:50	5	east	5800 ALLWOOD	3,031	N/D	N/D	N/D	N/D	--	--	No																				
3/17/2020 11:50	5	east	7301 S 51st Street	1,472	0.05	103	N/D	N/D	--	--																					
3/17/2020 11:50	5	east	7526 S. 51st Street	678	0.145	103																									
3/17/2020 11:50	5	east	SE of Quarry	1,267	0.053	95																									
3/23/2020 10:57	6	south	5800 ALLWOOD	1,344	0.078	110	0.08	110	-0.002	0	Yes	7	south	WSW	3	0	29.44	79	Cloudy	0	34										
3/23/2020 10:57	6	south	7301 S 51st Street	3,147	N/D	N/D	N/D	N/D	--	--																					
3/23/2020 10:57	6	south	7526 S. 51st Street	2,179	0.06	116																									
3/23/2020 10:57	6	south	SE of Quarry	1,470	0.078	113																									
3/25/2020 10:54	7	east	5800 ALLWOOD	3,453	N/D	N/D	N/D	N/D	--	--	No																				
3/25/2020 10:54	7	east	7301 S 51st Street	1,069	0.153	113	0.11	109	0.043	4																					
3/25/2020 10:54	7	east	7526 S. 51st Street	1,010	0.113	111																									
3/25/2020 10:54	7	east	SE of Quarry	1,850	0.03	108																									
3/25/2020 10:56	8	east	5800 ALLWOOD	3,888	N/D	N/D	N/D	N/D	--	--	No																				
3/25/2020 10:56	8	east	7301 S 51st Street	660	0.14	106	0.12	104	0.020	2																					
3/25/2020 10:56	8	east	7526 S. 51st Street	1,157	0.068	109																									
3/25/2020 10:56	8	east	SE of Quarry	2,183	N/T	N/A																									
3/25/2020 13:45	9	east	5800 ALLWOOD	3,150	N/D	N/D	N/D	N/D	--	--	No																				
3/25/2020 13:45	9	east	7301 S 51st Street	1,390	0.093	103	0.06	107	0.033	-4																					
3/25/2020 13:45	9	east	7526 S. 51st Street	1,108	0.105	108																									
3/25/2020 13:45	9	east	SE of Quarry	1,722	0.035	106																									
3/31/2020 13:38	10	east	5800 ALLWOOD	3,482	N/D	N/D	N/D	N/D	--	--	No																				
3/31/2020 13:38	10	east	7301 S 51st Street	1,031	0.175	114	0.12	107	0.055	7																					
3/31/2020 13:38	10	east	7526 S. 51st Street	980	0.123	107																									
3/31/2020 13:38	10	east	SE of Quarry	1,848	0.028	108																									
3/31/2020 13:41	11	east	5800 ALLWOOD	3,716	N/D	N/D	N/D	N/D	--	--	No																				
3/31/2020 13:41	11	east	7301 S 51st Street	814	0.133	113	0.08	108	0.053	5																					
3/31/2020 13:41	11	east	7526 S. 51st Street	1,069	0.065	109																									
3/31/2020 13:41	11	east	SE of Quarry	2,040	N/T	N/A																									
Totals	11	blast events									2	9																			

Notes: Shaded cells do not have a meter in that location
N/D = not detected, meter did not detect blast

FIGURE 1

SEISMIC BLASTING AND COMPLAINT LOCATIONS, 1ST QUARTER 2020



Figure No.

1

Title
Seismic Blasting and Complaint Locations 1st Quarter 2020

Client/Project
City of Franklin
Vicinity of Payne and Dolan Quarry

93707487

Project Location
C. of Franklin, Milwaukee Co., WI

Prepared by AJS on 2020-04-21
TR by XX on 2020-04-XX
IR by XX on 2020-04-XX



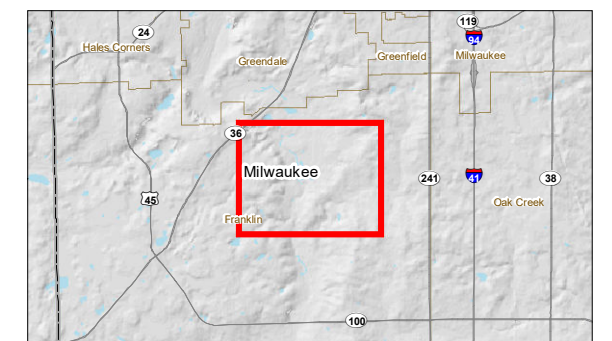
0 500 1,000 Feet
(At original document size of 11x17)
1:12,000

Legend

- Non-complaint Blast Locations
- March 17th 2020 Blast Location (Blast #4)
- March 23rd 2020 Blast Location (Blast #6)
- ◆ Blast Complaint March 17
- ◆ Blast Complaint March 23

Seismic Monitoring Location

- ☐ (A) Vibra-Tech(VT1) and Stantec(S1)
☐ (B) Vibra-Tech(VT2)
☐ (C) Vibra-Tech(VT3)
☐ (D) Vibra-Tech(VT4) and Stantec(S2)



Notes

1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
2. Data Sources: Stantec, SCO, WDNR, WisDOT
3. Orthophotography: ESRI Clarity Imagery



Vibra-Tech HomeView

Date	Time	Shot #	Seismo Loc	PPV	AO
5/12/2020	11:20 am	28	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
5/12/2020	11:19 am	28	Franklin Quarry(7301 S 51st Street)	0.263	106
5/12/2020	11:19 am	28	Franklin Quarry(7526 S. 51st Street)	0.070	112
5/12/2020	11:19 am	28	Franklin Quarry(SE of Quarry)	0.023	114
5/08/2020	12:10 pm	26	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
5/08/2020	12:10 pm	26	Franklin Quarry(7301 S 51st Street)	0.118	114
5/08/2020	12:10 pm	26	Franklin Quarry(7526 S. 51st Street)	0.078	111
5/08/2020	12:10 pm	26	Franklin Quarry(SE of Quarry)	N/T	N/T
5/08/2020	12:11 pm	27	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
5/08/2020	12:14 pm	27	Franklin Quarry(7301 S 51st Street)	0.090	111
5/08/2020	12:14 pm	27	Franklin Quarry(7526 S. 51st Street)	0.060	118
5/08/2020	12:11 pm	27	Franklin Quarry(SE of Quarry)	N/T	N/T
5/05/2020	10:30 am	25	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
5/05/2020	10:30 am	25	Franklin Quarry(7301 S 51st Street)	0.080	118
5/05/2020	10:30 am	25	Franklin Quarry(7526 S. 51st Street)	0.073	119
5/05/2020	10:30 am	25	Franklin Quarry(SE of Quarry)	0.023	116
5/01/2020	12:23 pm	24	Franklin Quarry(5800 ALLWOOD)	0.085	107
5/01/2020	12:23 pm	24	Franklin Quarry(7301 S 51st Street)	0.030	102
5/01/2020	12:23 pm	24	Franklin Quarry(7526 S. 51st Street)	0.063	110
5/01/2020	12:23 pm	24	Franklin Quarry(SE of Quarry)	0.098	112
4/28/2020	10:40 am	23	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
4/28/2020	10:38 am	23	Franklin Quarry(7301 S 51st Street)	0.058	111
4/28/2020	10:38 am	23	Franklin Quarry(7526 S. 51st Street)	0.048	118
4/28/2020	10:38 am	23	Franklin Quarry(SE of Quarry)	0.023	107
4/23/2020	12:17 pm	21	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
4/23/2020	12:17 pm	21	Franklin Quarry(7301 S 51st Street)	0.140	111
4/23/2020	12:17 pm	21	Franklin Quarry(7526 S. 51st Street)	0.070	107
4/23/2020	12:17 pm	21	Franklin Quarry(SE of Quarry)	0.023	110
4/23/2020	12:22 pm	22	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
4/23/2020	12:22 pm	22	Franklin Quarry(7301 S 51st Street)	0.095	113

Date	Time	Shot #	Seismo Loc	PPV	AO
4/23/2020	12:22 pm	22	Franklin Quarry(7526 S. 51st Street)	0.043	111
4/23/2020	12:22 pm	22	Franklin Quarry(SE of Quarry)	N/T	N/T
4/20/2020	1:29 pm	20	Franklin Quarry(5800 ALLWOOD)	0.075	111
4/20/2020	1:29 pm	20	Franklin Quarry(7301 S 51st Street)	0.025	101
4/20/2020	1:29 pm	20	Franklin Quarry(7526 S. 51st Street)	0.105	119
4/20/2020	1:29 pm	20	Franklin Quarry(SE of Quarry)	0.173	109
4/15/2020	12:40 pm	19	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
4/15/2020	12:43 pm	19	Franklin Quarry(7301 S 51st Street)	0.043	104
4/15/2020	12:43 pm	19	Franklin Quarry(7526 S. 51st Street)	0.105	101
4/15/2020	12:43 pm	19	Franklin Quarry(SE of Quarry)	0.080	93
4/15/2020	12:35 pm	18	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
4/15/2020	12:35 pm	18	Franklin Quarry(7301 S 51st Street)	0.078	106
4/15/2020	12:35 pm	18	Franklin Quarry(7526 S. 51st Street)	0.043	109
4/15/2020	12:35 pm	18	Franklin Quarry(SE of Quarry)	0.028	108
4/14/2020	11:15 am	17	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
4/14/2020	11:19 am	17	Franklin Quarry(7301 S 51st Street)	0.065	116
4/14/2020	11:19 am	17	Franklin Quarry(7526 S. 51st Street)	0.048	116
4/14/2020	11:15 am	17	Franklin Quarry(SE of Quarry)	N/T	N/T
4/14/2020	11:15 am	16	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
4/14/2020	11:17 am	16	Franklin Quarry(7301 S 51st Street)	0.128	110
4/14/2020	11:17 am	16	Franklin Quarry(7526 S. 51st Street)	0.090	107
4/14/2020	11:15 am	16	Franklin Quarry(SE of Quarry)	N/T	N/T
4/13/2020	1:02 pm	15	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
4/13/2020	1:02 pm	15	Franklin Quarry(7301 S 51st Street)	0.050	122
4/13/2020	1:02 pm	15	Franklin Quarry(7526 S. 51st Street)	0.048	114
4/13/2020	1:02 pm	15	Franklin Quarry(SE of Quarry)	N/T	N/T
4/09/2020	11:59 am	14	Franklin Quarry(5800 ALLWOOD)	0.088	110
4/09/2020	12:00 pm	14	Franklin Quarry(7301 S 51st Street)	0.020	116
4/09/2020	11:59 am	14	Franklin Quarry(7526 S. 51st Street)	0.065	110
4/09/2020	11:59 am	14	Franklin Quarry(SE of Quarry)	0.138	113
4/08/2020	11:05 am	13	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
4/08/2020	11:07 am	13	Franklin Quarry(7301 S 51st Street)	0.060	108

Date	Time	Shot #	Seismo Loc	PPV	AO
4/08/2020	11:07 am	13	Franklin Quarry(7526 S. 51st Street)	0.045	114
4/08/2020	11:05 am	13	Franklin Quarry(SE of Quarry)	N/T	N/T
4/02/2020	11:00 am	12	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
4/02/2020	10:58 am	12	Franklin Quarry(7301 S 51st Street)	0.053	109
4/02/2020	10:58 am	12	Franklin Quarry(7526 S. 51st Street)	0.203	107
4/02/2020	10:58 am	12	Franklin Quarry(SE of Quarry)	0.065	106
3/31/2020	1:41 pm	11	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
3/31/2020	1:41 pm	11	Franklin Quarry(7301 S 51st Street)	0.133	113
3/31/2020	1:41 pm	11	Franklin Quarry(7526 S. 51st Street)	0.065	109
3/31/2020	1:41 pm	11	Franklin Quarry(SE of Quarry)	N/T	N/T
3/31/2020	1:40 pm	10	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
3/31/2020	1:38 pm	10	Franklin Quarry(7301 S 51st Street)	0.175	114
3/31/2020	1:38 pm	10	Franklin Quarry(7526 S. 51st Street)	0.123	107
3/31/2020	1:38 pm	10	Franklin Quarry(SE of Quarry)	0.028	108
3/25/2020	10:51 am	8	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
3/25/2020	10:56 am	8	Franklin Quarry(7301 S 51st Street)	0.140	106
3/25/2020	10:56 am	8	Franklin Quarry(7526 S. 51st Street)	0.068	109
3/25/2020	10:51 am	8	Franklin Quarry(SE of Quarry)	N/T	N/T
3/25/2020	1:45 pm	9	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
3/25/2020	1:45 pm	9	Franklin Quarry(7301 S 51st Street)	0.093	103
3/25/2020	1:45 pm	9	Franklin Quarry(7526 S. 51st Street)	0.105	108
3/25/2020	1:45 pm	9	Franklin Quarry(SE of Quarry)	0.035	106
3/25/2020	10:50 am	7	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
3/25/2020	10:54 am	7	Franklin Quarry(7301 S 51st Street)	0.153	113
3/25/2020	10:54 am	7	Franklin Quarry(7526 S. 51st Street)	0.113	111
3/25/2020	10:54 am	7	Franklin Quarry(SE of Quarry)	0.030	108
3/23/2020	10:57 am	6	Franklin Quarry(5800 ALLWOOD)	0.078	110
3/23/2020	10:56 am	6	Franklin Quarry(7301 S 51st Street)	N/T	N/T
3/23/2020	10:57 am	6	Franklin Quarry(7526 S. 51st Street)	0.060	116
3/23/2020	10:57 am	6	Franklin Quarry(SE of Quarry)	0.078	113
3/17/2020	11:51 am	5	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
3/17/2020	11:50 am	5	Franklin Quarry(7301 S 51st Street)	0.050	103

Date	Time	Shot #	Seismo Loc	PPV	AO
3/17/2020	11:50 am	5	Franklin Quarry(7526 S. 51st Street)	0.145	103
3/17/2020	11:50 am	5	Franklin Quarry(SE of Quarry)	0.053	95
3/17/2020	11:50 am	4	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
3/17/2020	11:48 am	4	Franklin Quarry(7301 S 51st Street)	0.183	108
3/17/2020	11:48 am	4	Franklin Quarry(7526 S. 51st Street)	0.078	112
3/17/2020	11:48 am	4	Franklin Quarry(SE of Quarry)	0.023	113
3/12/2020	1:40 pm	2	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
3/12/2020	1:34 pm	2	Franklin Quarry(7301 S 51st Street)	0.160	101
3/12/2020	1:34 pm	2	Franklin Quarry(7526 S. 51st Street)	0.060	107
3/12/2020	1:40 pm	2	Franklin Quarry(SE of Quarry)	N/T	N/T
3/12/2020	3:41 pm	3	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
3/12/2020	1:37 pm	3	Franklin Quarry(7301 S 51st Street)	0.113	102
3/12/2020	1:37 pm	3	Franklin Quarry(7526 S. 51st Street)	0.083	106
3/12/2020	1:37 pm	3	Franklin Quarry(SE of Quarry)	0.035	104
3/05/2020	11:37 am	1	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
3/05/2020	11:37 am	1	Franklin Quarry(7301 S 51st Street)	0.095	112
3/05/2020	11:37 am	1	Franklin Quarry(7526 S. 51st Street)	0.108	111
3/05/2020	11:37 am	1	Franklin Quarry(SE of Quarry)	0.045	107
12/04/2019	10:20 am	161	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
12/04/2019	10:17 am	161	Franklin Quarry(7301 S 51st Street)	0.183	106
12/04/2019	10:17 am	161	Franklin Quarry(7526 S. 51st Street)	0.113	109
12/04/2019	10:20 am	161	Franklin Quarry(SE of Quarry)	N/T	N/T
12/04/2019	10:20 am	162	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
12/04/2019	10:19 am	162	Franklin Quarry(7301 S 51st Street)	0.063	106
12/04/2019	10:19 am	162	Franklin Quarry(7526 S. 51st Street)	0.135	107
12/04/2019	10:19 am	162	Franklin Quarry(SE of Quarry)	0.058	98
12/02/2019	12:11 pm	159	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
12/02/2019	12:11 pm	159	Franklin Quarry(7301 S 51st Street)	0.058	112
12/02/2019	12:11 pm	159	Franklin Quarry(7526 S. 51st Street)	0.125	106
12/02/2019	12:11 pm	159	Franklin Quarry(SE of Quarry)	0.048	104
12/02/2019	12:13 pm	160	Franklin Quarry(5800 ALLWOOD)	N/T	N/T
12/02/2019	12:13 pm	160	Franklin Quarry(7301 S 51st Street)	0.143	114



Stantec Consulting Services Inc.
1165 Scheuring Road | De Pere, Wisconsin 54115
Phone: 920-592-8400

April 14, 2020

Régulo Martínez-Montilva, AICP
Associate Planner - Department of City Development
City of Franklin
9229 W. Loomis Road
Franklin, Wisconsin 53132
RMartinez-Montilva@franklinwi.gov

RE: **City of Franklin, WI – Franklin Aggregates Quarry Vibration Monitoring
Summary of Blast Which Occurred On: April 9, 2020**

Dear Régulo:

Stantec Consulting Services Inc. (Stantec) is pleased to present the City of Franklin this summary letter regarding a blasting event on April 9, 2020 at the Payne & Dolan (P&D) Franklin Aggregates quarry in Franklin, WI. The City requested this "exception blast complaint evaluation" on April 9, 2020, in response to the receipt of a number of complaints pertaining to a blast occurring the same day. This is the first exceptional blast complaint evaluation completed by Stantec during 2020.

Background

Stantec is providing remote vibration monitoring by using two seismographs (deployed by Sauls Seismic), each co-located with existing P&D monitors (deployed by Vibra-Tech) at 7301 S. 51st Street and 5800 W. Allwood Drive. P&D also has two additional monitors located at 7526 S. 51st Street and SE of the quarry. Both the Stantec and P&D seismographs are configured to provide continuous (24/7) remote monitoring.

Stantec has prepared the attached table on the following page summarizing and comparing data from the P&D and Stantec monitor recordings. In addition, Figure 1 provides the location of the blast and associated complaints. This letter provides highlights of the data collected for this event on April 9, 2020.

Blast Information

The blast occurred in the southern portion of the active quarry. P&D indicated that the blast occurred in what they refer to as the "Top Bench" or "Racine Bench" of the quarry.

Complaint Locations

A total of 13 complaints were received for this blast. As illustrated on Figure 1, nearly all (12 of 13) complaints were located south of Drexel Avenue. One was east of S. 51st Street.

Weather

Weather at the time of the blast was about 43 degrees Fahrenheit with 42% relative humidity. The wind was from the west-northwest at 17 mph with gusts to 31 mph. The barometric pressure was 28.96 inches. The skies were mostly cloudy and there was no precipitation.



Seismograph Data Comparison

Date & Time	Monitor Location (Figure 1 Location)	Monitor Distance from Blast Location (Feet)	P&D Monitor		Stantec Monitor	
			PPV (in/sec) (Note 1)	AO (dB) (Note 2)	PPV (in/sec) (Note 1)	AO (dB) (Note 2)
4/9/2020 11:59am	7301 S 51st Street (A)	2,963	0.02	116	N/T	N/T
4/9/2020 11:59am	5800 Allwood Drive (D)	1,525	0.088	110	0.09	110
4/9/2020 11:59am	7526 S. 51st Street (B)	1,988	0.065	110	--	--
4/9/2020 11:59am	SE of quarry (C)	1,324	0.138	113	--	--

Note 1 Per the Planned Development District #23 and #24 Ordinances, ground vibration resulting from P&D blasting shall not exceed 0.30 inches per second on at least 85% of its blasts within any single calendar year, measured at the residence or inhabited structure closest to the site of the blast which is not owned or controlled by P&D. Notwithstanding any other provision in this subsection, the Operator shall not exceed the ground vibration limitation imposed by the Wisconsin Department of Industry, Labor and Human Relations in Figure 7.64 of ch. ILHR 7, Wis. Adm. Code (new reference now Wis. Adm. Code, Safety and Professional Services Chapter 307), or 0.65 inches per second, whichever is more restrictive, on any blast.

Note 2 Per the Planned Development District #23 and #24 Ordinances, airblast resulting from P&D blasting shall not exceed 123 dB on at least 85% of its blasts within any single calendar year, measured at the residence or inhabited structure closest to the site of the blast which is not owned or controlled by the Operator. Notwithstanding any other provision in this subsection, the Operator shall not exceed the airblast limitation imposed by the Wisconsin Department of Industry, Labor and Human Relations in ch. ILHR 7, Wis. Adm. Code on any blast (new reference now Wis. Adm. Code, Safety and Professional Services [SPS] Chapter 307).

The data from the seismographs shows that the blast was within the permitted operation ranges listed in the City of Franklin Planned Development District (PPD) 23 and 24 as well as Wis. Adm. Code, Chapter SPS 307 for vibration and air overpressure/sound.

Sincerely,

STANTEC CONSULTING SERVICES INC.

Kristen Gunderson-Inden
Environmental Scientist

Michael B. Roznowski, CHMM
Senior Principal

Enclosures: City of Franklin, WI, Franklin Aggregates Quarry, Figure 1
Franklin Quarry Blast and Complaint Locations - April 9, 2020 (Blast #14)



Figure No. 1

Title Franklin Quarry Blast and Complaint Locations - April 9, 2020 (Blast #14)

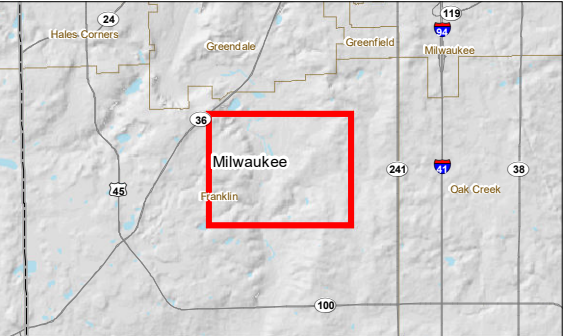
Client/Project City of Franklin
Vicinity of Payne and Dolan Quarry

Project Location C. of Franklin, Milwaukee Co., WI

Prepared by AJS on 2020-04-10
TR by MP on 2020-04-13
IR by KGI on 2020-04-14

0 500 1,000 Feet
(At original document size of 11x17)
1:12,000

- Legend
- Blast Location
 - Blast Complaint
- Seismic Monitoring Location
- Vibra-Tech(VT1) and Stantec(S1)
 - Vibra-Tech(VT2)
 - Vibra-Tech(VT3)
 - Vibra-Tech(VT4) and Stantec(S2)



Notes

- Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
- Data Sources: Stantec, SCO, WDNR, WisDOT
- Orthophotography: ESRI Clarity Imagery





V.e.

PAYNE & DOLAN
INCORPORATED
A WALBEC GROUP COMPANY

January 18, 2019

Mr. Joel Dietl
Department of City Development
9229 W. Loomis Road
Franklin, WI 53132

Subject: Annual Aerial Photos (2018)

Dear Mr. Dietl:

As required by PDD #97-1456 & PDD #97-1457 (or PDD #23 and PDD #24), I have enclosed two copies of the 2018 aerial photo of the Franklin Aggregates quarry located on Rawson Avenue. The photo was taken on October 22, 2018 and encompasses an area large enough to include both PDD #23 and PDD #24.

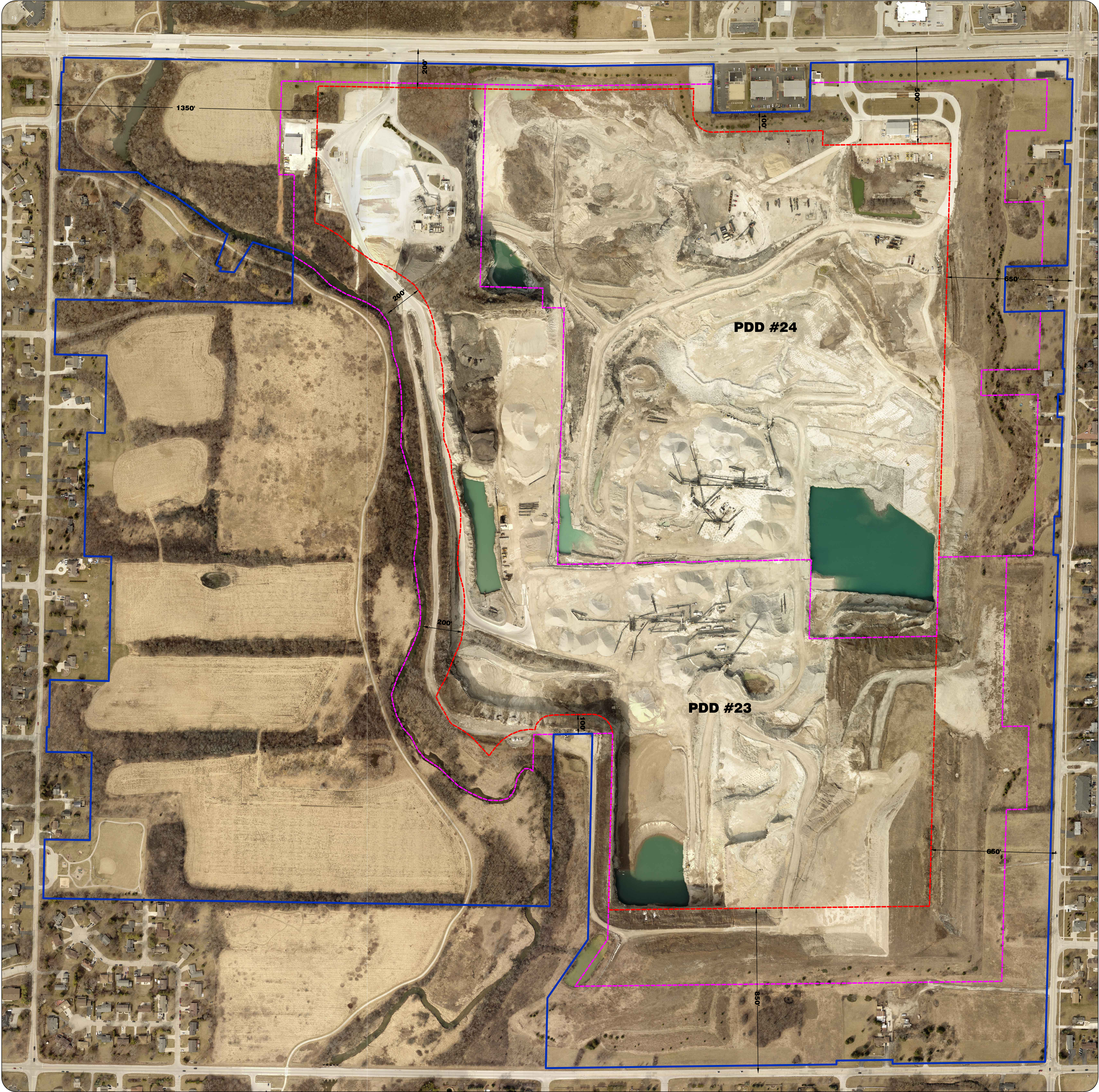
Please do not hesitate to contact me in the office at (262) 524-1258, if you have any additional questions and/or would like some additional information.

Sincerely,

Payne & Dolan, Inc.

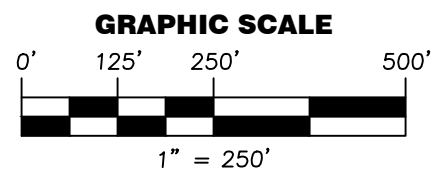
Clint Weninger, P.G.
Land Resources Manager

V.e.



2018 Aerial obtained from Milwaukee County GIS

DISCLAIMER: Some of the information shown on this maps has been obtained and compiled from various state, county, municipal and private sources that are maintained by their sources for a wide variety of purposes and are of varying age, reliability and resolution. Therefore, the contents are supplied for reference purposes only and Payne & Dolan cannot guarantee the quality, content, accuracy, completeness or currency of the information obtained from these sources and provided herein. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering or surveying purposes.



Legend

Property Boundary

Planned Development District

Extraction Setback

Purpose of this drawing is to provide a visual reference for the property owned by Payne & Dolan, the extents of PDD #23 and PDD #24, and the extraction setback outlined in PDDs #23 & #24

2018 AERIAL - w/Reference Lines

Project No. 2018	Field Book
Drawing	Field Date
Revisions	Date
Notes	Initials

Franklin Aggregate Site #80370
East of TSN-R21E, City of Franklin
Milwaukee County, Wisconsin

Scale: 1" = 250' SHEET 1 OF 1

PAYNE & DOLAN
INCORPORATED
N3 W2550 Badger Road | P.O. Box 781
Franklin, WI 53122
Phone: (262) 254-1700 | Fax: (262) 254-1845
www.paynedolan.com



V.e.

PAYNE & DOLAN
INCORPORATED
A WALBEC GROUP COMPANY

January 23, 2020

Mr. Regulo Martinez-Montilva
Department of City Development
9229 W. Loomis Road
Franklin, WI 53132

Subject: Annual Aerial Photos (2019)

Dear Mr. Martinez-Montilva:

As required by PDD #97-1456 & PDD #97-1457 (or PDD #23 and PDD #24), I have enclosed two copies of the 2019 aerial photo of the Franklin Aggregates quarry located on Rawson Avenue. The photo was taken in September 2019 and encompasses an area large enough to include both PDD #23 and PDD #24.

Please do not hesitate to contact me in the office at (262) 524-1258, if you have any additional questions and/or would like some additional information.

Sincerely,

Payne & Dolan, Inc.

Clint Weninger, P.G.
Land Resources Manager

2019



2019



PLAT OF SURVEY

December 18th, 2019

LOCATION: Franklin, Wisconsin
PREPARED FOR: City of Franklin
LEGAL DESCRIPTION:
Legal description text, County, Wisconsin.
CURRENT OWNER: Payne & Dolan, INC.
TAX ID: 7579973001



DESCRIPTION OF EXTRACTION AREA:

PART OF THE NORTHEAST 1/4, SOUTHEAST 1/4, SOUTHWEST 1/4 AND NORTHWEST 1/4 OF SECTION 11, TOWNSHIP 5 NORTH, RANGE 21 EAST, CITY OF FRANKLIN, MILWAUKEE COUNTY WISCONSIN, DESCRIBED AS FOLLOWS:

THAT PART OF THE NORTHEAST 1/4 OF SECTION 11, LYING 650 FEET WEST OF THE CENTERLINE OF S. 51st ST. AND 200 FEET SOUTH OF THE CENTERLINE OF W. RAWSON AVE.;

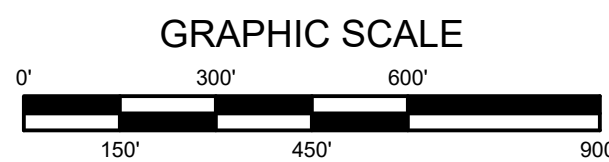
THAT PART OF THE SOUTHEAST 1/4 OF SECTION 11, LYING 650 FEET WEST OF THE CENTERLINE OF S. 51st ST., 850 FEET NORTH OF W. DREXEL AVE. AND 200 FEET EAST OF THE CENTERLINE OF THE ROOT RIVER;

THAT PART OF THE SOUTHWEST 1/4 OF SECTION 11, LYING 200 FEET NORTH AND EAST OF THE CENTERLINE OF THE ROOT RIVER;

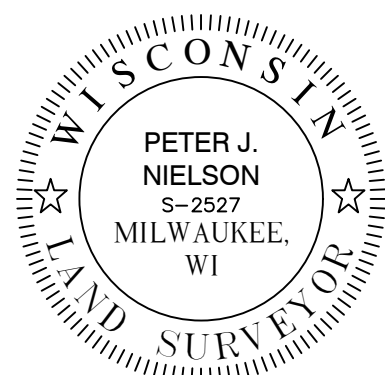
THAT PART OF THE NORTHWEST 1/4 OF SECTION 11, LYING 200 FEET EAST OF THE CENTERLINE OF THE ROOT RIVER, 1350 FEET EAST OF S. 68th ST. AND 200 FEET SOUTH OF THE CENTERLINE OF W. RAWSON AVE.

SAID EXTRACTION AREA CONTAINS 10,775,864 SQUARE FEET OR 247.389 ACRES, MORE OR LESS.

101 - SET 3/4" REBAR



BEARINGS ARE BASED ON THE WISCONSIN STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) - NAD '27, GRID NORTH



DRAWING BY:
FIELD WORK BY:

I have surveyed the above-described property and the above map is a true representation thereof and shows the size and location of the property, its exterior boundaries, the location and dimensions of all structures thereon, fences, apparent easements and roadways, and visible encroachments, if any.

No title commitment or results of a title search were provided to this office pertaining to this survey. This Plat Of Survey may not reflect essemments of record, encumbrances, restrictions, ownership, title evidence, or other facts that a current and accurate title search may disclose.

This survey is made for the exclusive use of the present owners of the property, and also those who purchase, mortgage, or insure the title thereto within one (1) year from date hereof, and as to them I warrant the accuracy of said survey map.

Peter J. Nielson
PETER J. NIELSON, PROFESSIONAL LAND SURVEYOR, S-2527

2019 City of Franklin (5507927300) Nonmetallic Mining RA Annual Report

- 1) Enter data into form.
- 2) Hit SUBMIT to finalize data entry.
- 3) Print and sign the form. A printed and signed version MUST be mailed to the department in order for the report to be considered complete.

Total number of acres approved for mining 135.37 (3)

267.70

Number of acres NEWLY approved for mining in the report year

0.00

Number of open (unreclaimed) acres actively being mined 135.37 (4)

242.70

Number of acres released from financial assurance pursuant to NR135 subchapter IV 135.37 (5)

0.00

Number of acres that have been reclaimed and are awaiting release from the financial assurance requirements of NR135 subchapter IV 135.37 (6)

25.00

Please make sure to enter a value for each textbox in grid. Enter 0 if you have no mines in a category

Size	Count	Rate	Total
1 to 5 acres	0.00	35.00	0.00
6 to 10 acres	0.00	70.00	0.00
11 to 15 acres	0.00	105.00	0.00
16 to 25 acres	0.00	140.00	0.00
26 to 50 acres	0.00	160.00	0.00
51 acres or larger	2.00	175.00	350.00
Sum of active permits	2.00		
Inactive permitted mines	0.00	15.00	0.00
		Sum of Fees	350.00

Number of alternative requirements granted

0

Nature of alternative requirements granted

Number of permit modifications

0

Nature of any permit modifications

Number of enforcement actions

0

Nature of enforcement actions (citations, stop work order, etc.)

Number of permits suspended or revoked

0

Reason(s) for suspension or revocation

Number of nonmetallic mining-related hearings

0

Nature of hearings (informational, reclamation, public, contested case, etc.)

Comments

2 active mines, 150.7 acres and 92 acres, for a total 242.7 acres.

Print this page, sign and mail it along with your payment to the address below. Don't forget to include payment in the form of a check or money order payable to "Department of Natural Resources".

Wisconsin Department of Natural Resources
Waste & Materials Mgt. Program, WA/5
P.O. Box 7921
Madison, WI 53707-7921

I hereby acknowledge that I am the duly authorized representative of the regulatory authority and that, to the best of my knowledge and belief, the information contained on this form is correct, true, complete and in accordance with the requirements of Wisconsin Administrative Code NR 135.37 and NR 135.39.

Name Régulo Martínez-Montilva Date 3/10/2020



V.g.

PAYNE & DOLAN
INCORPORATED
A WALBEC GROUP COMPANYJanuary 6th, 2020

Mr. Régulo Martinez-Montilva
Planning Manager
City of Franklin Planning Department
9229 W. Loomis Road
Franklin, WI 53132

Dear Mr. Martinez-Montilva,

Enclosed are the 2019 annual reports and associated fees in the amount of \$2,850 for Payne & Dolan's nonmetallic mineral extraction sites located in the City of Franklin that have a received reclamation permit pursuant to Chapter NR135.18 Wisconsin Administrative Code and the City of Franklin Nonmetallic Mining Ordinance. These Sites Include.

Site Name	Reclamation Permit #	Location	Unreclaimed Acres	Current Fee Amount
Franklin – West (80370)	NONE	City of Franklin	92	\$1,425
Franklin – East (80370)	NONE	City of Franklin	150.7	\$1,425
		Total		\$2,850

If you have any questions and/or need additional information please do not hesitate contact me at (262) 366 -5124, bbucholtz@payneanddolan.com.

Sincerely,

Payne & Dolan, Inc.

Bryanna Bucholtz
Land Information Administrator

Nonmetallic Mining Permit Number: NONE

Site Name: Franklin (East) - 80370

Report Date: 12-27-2019

Parcel ID No: 757-9969-000, 757-9970-000, 757-9971-000, 757-9972-000, 758-9922-000, 758-9987-001, 758-9987-002, 758-9987-003, 758-9990-000, 758-9991-000, 758-9993-000, 758-9994-000, 758-9995-002, 758-9997-000, 758-9998-000, 758-9999-000

Site Address: 6211 Rawson Avenue, Franklin, WI 53132

Township: City of Franklin

Legal Description: Parts of Section 10, 11, 14, and 15 of Town 5 North, Range 21 East

Applicant / Operator

Payne & Dolan, Inc.

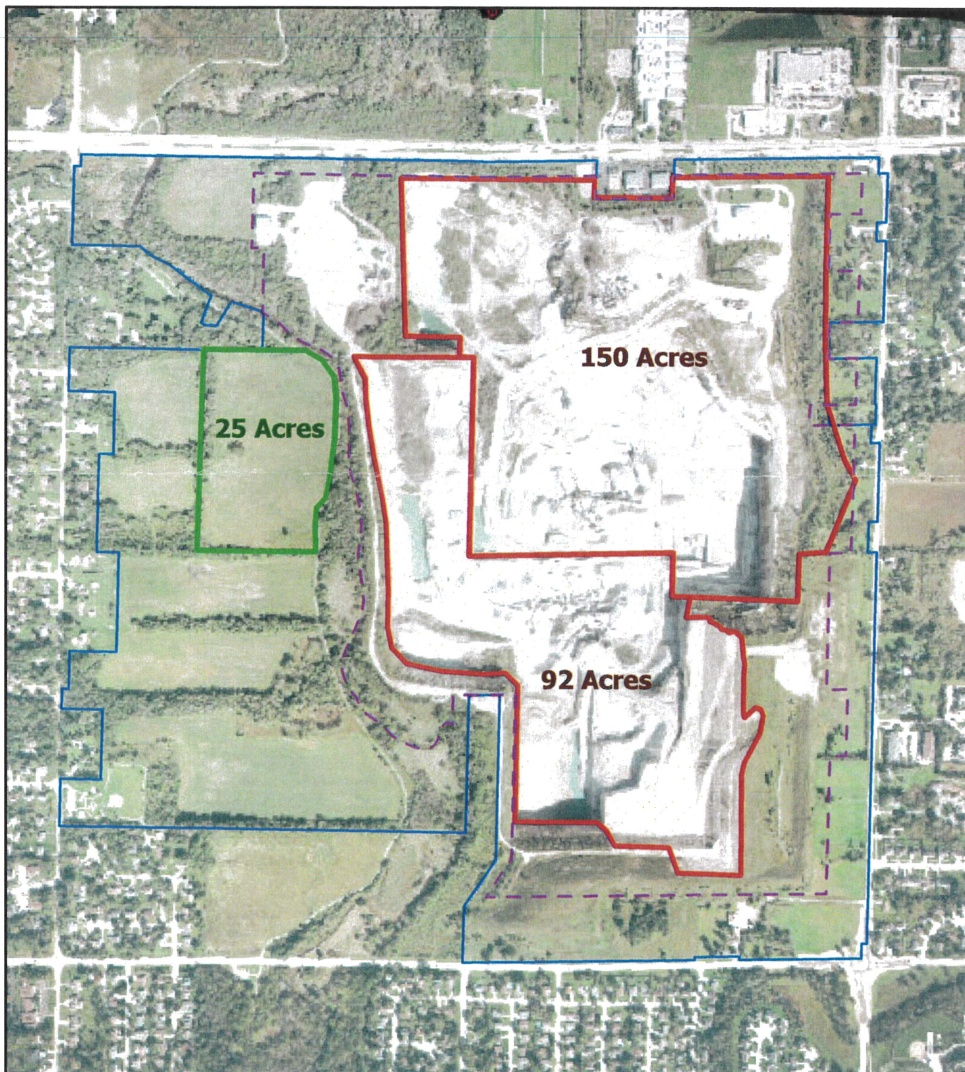
N3 W23650 Badinger Road

Waukesha, WI 53187

(262) 524-1700

bbucholtz@payneanddolan.com

SAME



Acreage of Completed Reclamation: 0

Active, Unreclaimed Acreage: 150.7

☐ Property Boundary

☐ Active

☐ Reclaimed

Nonmetallic Mine Site Certification:

"I hereby certify that this information is true and accurate and that the nonmetallic mining site described herein complies with all conditions of the applicable nonmetallic mining reclamation permit and chapter NR - 135, Wisconsin Administration Code."

Signature *Bryan Bucholtz*

Date 12-27-2019



PAYNE & DOLAN
INCORPORATED
A WALBEC GROUP COMPANY

Nonmetallic Mining Permit Number: NONE

Site Name: Franklin (West) - 80370

Report Date: 12-27-2019

Parcel ID No: 757-9969-000, 757-9970-000, 757-9971-000, 757-9972-000, 758-9922-000, 758-9987-001, 758-9987-002, 758-9987-003, 758-9990-000, 758-9991-000, 758-9993-000, 758-9994-000, 758-9995-002, 758-9997-000, 758-9998-000, 758-9999-000

Site Address: 6211 Rawson Avenue, Franklin, WI

Township: City of Franklin

Legal Description: Part of the E 1/2, NE 1/4 and the NE 1/4, SE 1/4 Section 10, lying east of the Root River and the SW 1/4 of Section 11, Town 5 North, Range 21 East

Applicant / Operator

Payne & Dolan, Inc.

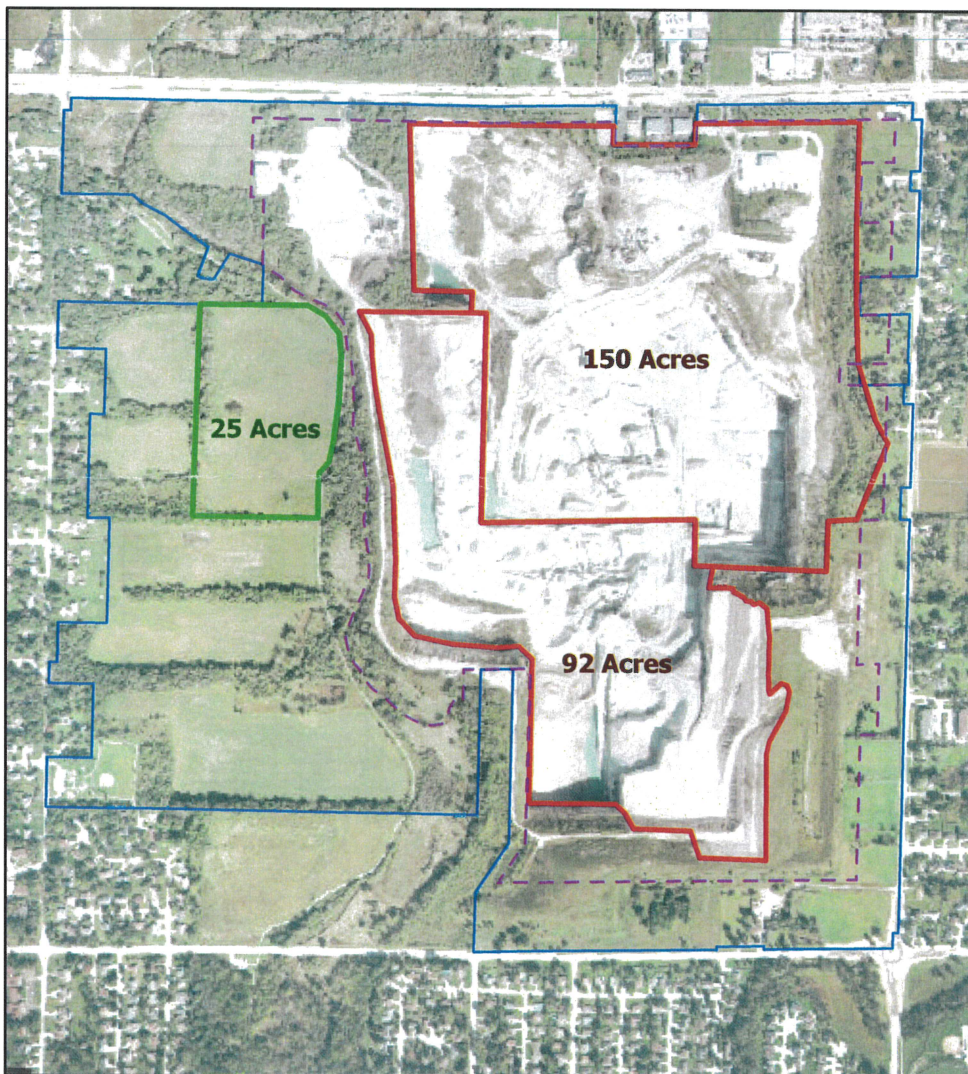
N3 W23650 Badinger Road

Waukesha, WI 53187

(262) 524-1700

bbucholtz@payneanddolan.com

SAME




Acreage of Completed Reclamation: 25

Active, Unreclaimed Acreage: 92

- Property Boundary
- Active
- Reclaimed

Nonmetallic Mine Site Certification:

"I hereby certify that this information is true and accurate and that the nonmetallic mining site described herein complies with all conditions of the applicable nonmetallic mining reclamation permit and chapter NR - 135, Wisconsin Administration Code."

Signature 
Date 12-27-2019