# CITY OF FRANKLIN QUARRY MONITORING COMMITTEE\* MEETING AGENDA

Franklin City Hall, <u>Council Chambers</u> 9229 West Loomis Road, Franklin, Wisconsin 53132 Tuesday, April 22, 2025, <u>6:00 p.m.</u>

- I. Call to Order, Roll Call and Pledge of Allegiance
- II. Approval of Minutes
  - a. Regular meeting of January 28, 2025.
- III. Citizen Comment Period

PLEASE NOTE: Each speaker may need to be limited to three minutes, allowing everyone who wishes the opportunity to speak

- IV. Business (Action may be taken on any item)
  - a. Welcome Alderman Salous.
  - b. Selection of Chair and Vice-Chair.
  - c. Quarterly presentation by Stantec Consulting Services, Inc., 1st quarter of calendar year 2025 (Jan-Mar).
  - d. Discussion about including confidential complaints in monitoring reports. [The Committee tabled this item at the previous meeting pending draft language for the monitoring report, such draft language is attached to the meeting packet for consideration of the Committee].
- V. Meeting scheduling discussion
- VI. Adjournment

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.

<sup>\*</sup> 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.

# City of Franklin Quarry Monitoring Committee Meeting January 28, 2025 Minutes

#### I. Call to Order and Roll Call

Chair Alderman Mike Barber called the January 28, 2025 Quarry Monitoring Committee to order at 6:00 p.m. in the Council Chambers at Franklin City Hall, 9229 W. Loomis Road, Franklin, Wisconsin.

Present was Chair Alderman Mike Barber, Vice Chair Dina Swanson, Alderman Yousef Hasan and members Edward Pings and Jon TenHaken. Also present were Planning Manager Régulo Martínez-Montilva, Kristen Gunderson-Inden of Stantec Consulting Services and Bryanna Bucholtz and Wes Hineline of Payne & Dolan. Mayor John Nelson was present for the citizen comment period.

# **II.** Approval of Minutes

Alderman Hasan moved and Member TenHaken seconded a motion to approve the minutes of the October 29, 2024. On voice vote, all voted 'aye;' motion carried (5-0-0).

#### **III.** Citizen Comment

The Citizen Comment period opened at 6:02 pm and closed at 6:03 pm.

#### IV. Business

# a. Quarterly presentation by Stantec Consulting Services, Inc., 4th quarter of calendar vear 2024 (Oct-Dec).

Kristen Gunderson-Inden presented the quarterly report.

Alderman Hasan moved and Member Pings seconded a motion to accept and place on file. On voice vote, all voted 'aye'; motion carried (5-0-0).

# b. Discussion about including confidential complaints in monitoring reports.

Bryanna Bucholtz of Payne & Dolan presented this item.

Alderman Hasan moved and Member Pings seconded a motioned to table to the next meeting pending draft language. On voice vote, all voted 'aye'; motion carried (5-0-0).

# V. Schedule next meeting

Next meeting is scheduled for April 22, 2025

# VI. Adjournment

Member Pings moved and Member TenHaken seconded to adjourn the January 28, 2025 Quarry Monitoring Committee meeting at 6:43 pm. On voice vote, all voted 'aye;' motion carried (5-0-0).





#### Stantec Consulting Services Inc. 12308 North Corporate Parkway, Suite 600 Meguon WI 53092-2661

April 14, 2025

Project/File: 193710393

Regulo Martinez-Montilva

Planning Manager - Department of City Development City of Franklin 9229 West Loomis Road Franklin, Wisconsin 53132 RMartinez-Montilva@franklinwi.gov

Dear Regulo Martinez-Montilva,

Reference: City of Franklin, WI - Franklin Aggregates Quarry Monitoring Summary, Period: 1<sup>st</sup>
Quarter 2025

The enclosed information summarizes monitoring activities completed during the first quarter of 2025 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. Separate descriptions of services and project background are provided in **Attachments A and B**, respectively. This letter summarizes the results.

#### **Direct Observation (Visual) Monitoring**

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

Two observation events were completed during the monitoring period. Unannounced inspections were completed on February 5 and March 10; no announced inspections were performed on this quarter. The street sweeper was observed in use on Rawson Avenue during both visits; water was not used by the street sweeper during the February inspection since temperatures were below freezing. Typically, minor dust was observed from trucks exiting to the east on Rawson Avenue during the visits. No other issues were observed. The northwest gate was closed duding both visits due to construction at scale building; the northeast gate was in use instead.

#### **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 quarter, and are presented in **Attachment C**. **Figure 1** illustrates the locations of the blasts in the quarter.

Reference: City of Franklin, WI - Franklin Aggregates Quarry Monitoring Summary, Period: 1st Quarter 2025

Highlights of the seismic data include the following:

- Between January 1 and March 31, 2025, a total of 18 blasting events occurred; 4 of 18 (22%) 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 (WDNR) 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 this quarter. 100% of the quarry's blasts year to date were below this level. This is in conformance with the PDD.
- Per the PDD, air blast resulting from P&D blasting shall not <u>exceed</u> 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 this quarter. 100% of the quarry's blasts year to date were below this level. This is in conformance with the PDD.
  - The corresponding blast data measured by Stantec with the Sauls Seismic monitors generally aligned with the readings at each Payne & Dolan sponsored Vibra-Tech monitor. However, the Stantec monitors confirmed a small percentage (4 of 18 = 22) of the actual blasts. This may be due to a variety of reasons. However, Stantec will contact Sauls Seismic during Q2 to ensure the units are properly calibrated, which typically occurs annually prior to summer.
- 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 blast events and complaints received by Stantec for the period January 1 through March 31, 2025, 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 in this report. However, complainant identity may be released upon public records request to the City of Franklin. The locations of all blasts and complaints are shown on **Figure 1**. The following highlights the results of the complaint evaluation:

# Complaints - General

- 1 complaint (formally submitted)
- 0 complaints (informally submitted phone call only)
- 0 complaints regarding material in the road
- 1 complaint regarding vibration/noise

# Complaints - Blast Related

Reference: City of Franklin, WI - Franklin Aggregates Quarry Monitoring Summary, Period: 1st Quarter 2025

- 1 complaint corresponding to actual blast events
- 0 complaints not corresponding to specific blast events
- 0 complaints complainant requested location not be identified
  - o 0 identified with general location of Marquette Avenue area (east)
  - o 0 identified with general location of Root River Heights (south)
- 1 complaints complainant location identified

## Complaints (non-anonymous or general location given; confirmed blast related) - Locations

- 0 complaints east of 51st Street
- 1 complaint south of Drexel Avenue
- 0 complaints west of Root River

#### Summary of Complaint Comments - Blast Related

- March 4, 2025 (highest readings at the SE of Quarry monitor 0.1125 in/sec PPV, 7301 S. 51st
   St. monitor 114 dB AO) one complaint to the south blast in central pit.
  - o "Felt like a rolling blast."

#### Summary of Complaint Comments - Non-Blast Related

There were no non-blast related complaints this quarter.

#### **Blast Events**

- 18 blast events during monitoring period 1Q2025 (shot numbers 1 through 18)
- 1 blast event corresponding to complaints
  - o 0 weather: rain or light rain
  - o 1 weather: haze, partly to mostly cloudy, or cloudy
  - o 0 weather: clear, fair, or scattered clouds
  - o 0 time: prior to 12:00 pm (noon)
  - o 1 time: after 12:00 pm
- 1 blast event with one complaint

# **Quarry Blast Locations Producing Complaints**

0 southern area of quarry
1 central area of quarry
0 northern area of quarry

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

- No complaints were identified in the Marquette Avenue area to the east of South 51st Street.
- No complaints came from west of the Root River.

Please feel free to contact Mike Roznowski or Kristen Gunderson-Inden if you have any questions.

April 14, 2025 Regulo Martinez-Montilva Page 4 of 9

Reference: City of Franklin, WI - Franklin Aggregates Quarry Monitoring Summary, Period: 1st Quarter 2025

Sincerely,

#### STANTEC CONSULTING SERVICES INC.

Kristen Gunderson-Inden

Senior Environmental Scientist

Phone: (262) 643-9156 Mobile: (262) 665-3447

kristen.gunderson-inden@stantec.com

Businspulle

Mike Roznowski, CHMM

Misa B. Royande

Senior Principal

Phone: (920) 278-3200 Mobile: (920) 655-1852 mike.roznowski@stantec.com

Attachments: A - Franklin Quarry Seismic Monitoring Description of Services

B - Franklin Quarry Seismic Monitoring Project Background

C - Summary of Seismic Data - 1st Quarter 2025

Figure 1 - Seismic Monitoring, Blasting, and Complaint Locations, 1st Quarter 2025

**Attachment A** Franklin Quarry Seismic Monitoring Description of Services



#### **DESCRIPTION OF SERVICES**

## **Direct Observation (Visual) Monitoring**

During 2025, Stantec will conduct a total of fifteen (15) 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 are planned to 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:
  - o 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 SharePoint 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 SharePoint 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 is polemounted 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:
  - o seismic data from both Stantec and Payne & Dolan placed monitors
  - o weather conditions (wind direction and speed) the day of the complaint
  - o 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 polemounted 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 for 2025, Stantec is providing 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 monitors provided continuous (24/7) remote monitoring. Quarterly summaries of blasting data, comparing the Payne & Dolan (Vibra-Tech) unit recordings to the Stantec (Sauls Seismic) unit recordings, will be prepared for the calendar year.

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 51<sup>st</sup> Street, and one just south of West Drexel Avenue. This independently monitored data was compared to the Stantec-obtained data.

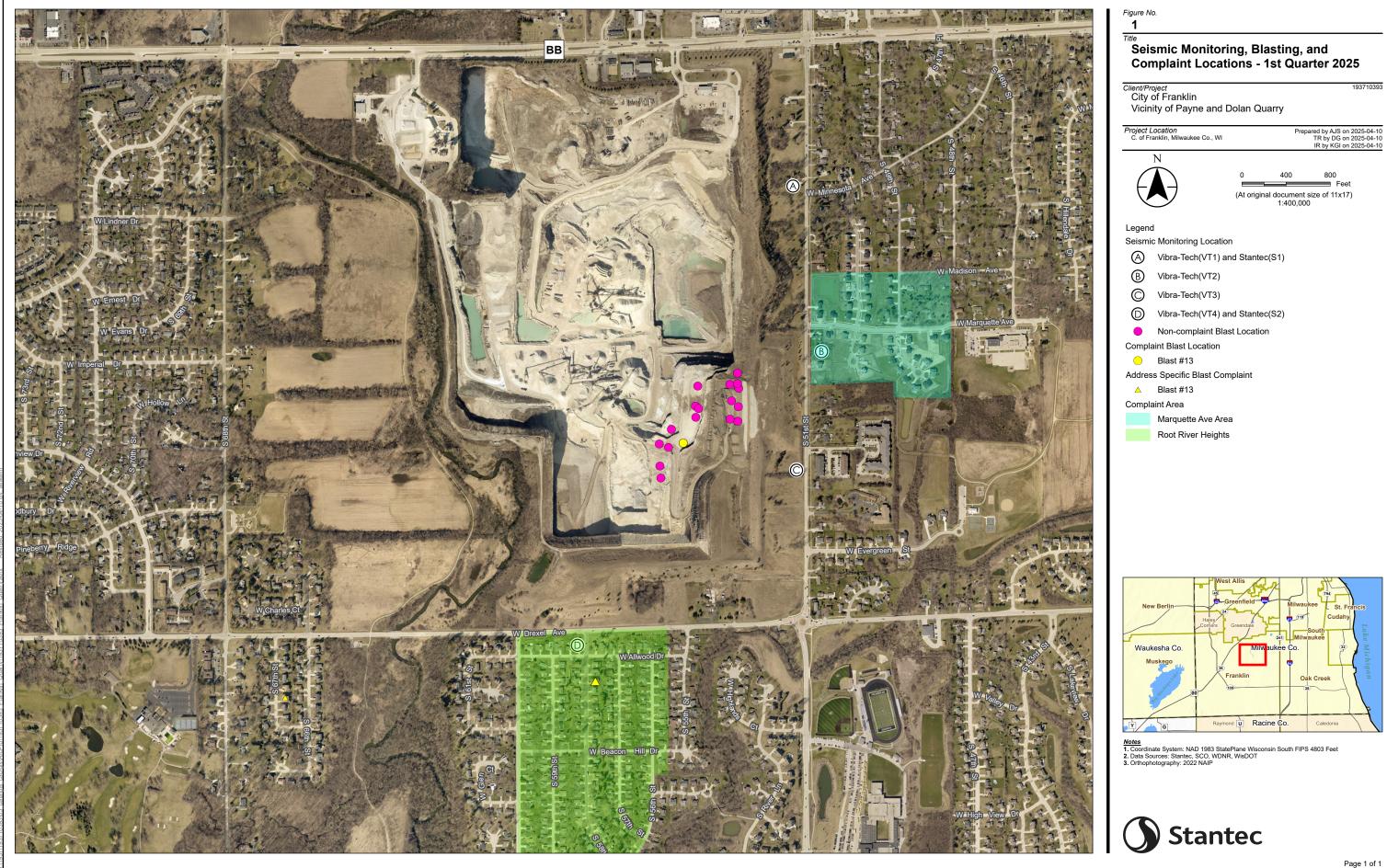
**Attachment C** Summary of Seismic Data – 1st Quarter 2025

Payne & Dolan Blast Monitoring Data									Stantec Blast Monitoring Data			Comparison of P&D and Stantec Monitoring Data			Complaint Information			Weather (for complaints only)							
Date	Time	Activity Number	General Quarry Blast Location	Monitor Location	Distance (feet)	PPV (in/sec)	Freq	AO (dB)	PPV (in/sec)	Freq	AO (dB)	Difference in PPV Values	Difference in Freq Values	Difference in AO dB Values	Complaints?	#	Primary direction of complaints (from quarry)	Wind Direction	Wind Speed (mph)	Wind Gusts (mph)	Pressure (in)	Humidity (%)	Conditions	Precipi- tation	Temp.
1/7/2025	45664.55556	1	central	5800 ALLWOOD	2,709	N/D	N/D	N/D	N/D	N/D	N/D				No										
1/7/2025	45664.55347	1	central	7301 S 51st Street	1,815	0.035	11.6	100	N/D	N/D	N/D														
1/7/2025	45664.55347	1	central	7526 S. 51st Street	813	0.0875	23.8	109																	
1/7/2025	45664.55347	1	central	SE of Quarry	980	0.0575	20.8	101																	
1/7/2025	45664.55903	2	central	5800 ALLWOOD	2,701	N/D	N/D	N/D	N/D	N/D	N/D				No										
1/7/2025	45664.55694	2	central	7301 S 51st Street	1,804	0.028	35.7	103	N/D	N/D	N/D														
1/7/2025	45664.55694	2	central	7526 S. 51st Street	871	0.1325	33.3	107							- 1										
1/7/2025 1/8/2025	45664.55694 45665.46944	3	central	SE of Quarry 5800 ALLWOOD	1,058 2,826	0.075	38.5 N/D	103 N/D	N/D	N/D	N/D				No						-				
1/8/2025	45665.46944 45665.46528	3	central central	7301 S 51st Street	1,683	N/D 0.033	N/D 38.5	N/D 108	N/D	N/D N/D	N/D				No										
1/8/2025	45665.46528	3	central	7526 S. 51st Street	768	0.033	33.3	110	N/D	ואוט	IN/D														
1/8/2025	45665.46528	3	central	SE of Quarry	1,106	0.05	26.3	104							1										
1/10/2025	45667.44444	4	central	5800 ALLWOOD	2,739	N/D	N/D	N/D	N/D	N/D	N/D				No										
1/10/2025	45667.44514	4	central	7301 S 51st Street	1,779	0.035	38.5	111	N/D	N/D	N/D				- "										
1/10/2025	45667.44514	4	central	7526 S. 51st Street	803	0.18	33.3	113	,	,															
1/10/2025	45667.44514	4	central	SE of Quarry	1,018	0.065	20.8	106																	
1/17/2025	45674.47917	5	central	5800 ALLWOOD	2,570	N/D	N/D	N/D	N/D	N/D	N/D				No										
1/17/2025	45674.47778	5	central	7301 S 51st Street	1,973	0.023	5.1	107	N/D	N/D	N/D														
1/17/2025	45674.47778	5	central	7526 S. 51st Street	904	0.0925	16.7	108																	
1/17/2025	45674.47778	5	central	SE of Quarry	851	0.1075	20.0	111																	
1/23/2025	45680.46042	6	central	5800 ALLWOOD	2,579	0.020	27.8	105	N/D	N/D	N/D				No										
1/23/2025	45680.46042	6	central	7301 S 51st Street	1,942	0.035	38.5	108	N/D	N/D	N/D				- 1										
1/23/2025	45680.46042	6	central	7526 S. 51st Street	926	0.1975	33.3	114							- 1										
1/23/2025	45680.46042	6	central	SE of Quarry	928	0.063	19.2	112	N/D	N/D	N/D				Na										
1/24/2025	45681.49931 45681.49931	7	central	5800 ALLWOOD 7301 S 51st Street	2,458 2,101	0.035	10.4	102 104	N/D N/D	N/D N/D	N/D N/D				No										
1/24/2025	45681.49931	7	central central	7526 S. 51st Street	992	0.02	16.7	104	N/D	N/D	IN/D				1										
1/24/2025	+	7		SE of Quarry	757	0.1075	20.0	107							1										
2/3/2025	45691.4875	8	central	5800 ALLWOOD	2,101	0.04	16.1	115	0.038	19.6	104.9	0.003	-3.500	10.1	No										
2/3/2025	45691.4875	8	central	7301 S 51st Street	2,390	0.0275	33.3	103	N/D	N/D	N/D														
2/3/2025	45691.4875	8	central	7526 S. 51st Street	1,515	0.0825	15.2	110	,	,															
2/3/2025	45691.4875	8	central	SE of Quarry	1,213	0.085	29.4	110																	
2/4/2025	45692.52083	9	central	5800 ALLWOOD	2,290	0.025	26.3	110	N/D	N/D	N/D				No										
2/4/2025	45692.52083	9	central	7301 S 51st Street	2,199	0.0325	10.2	101	N/D	N/D	N/D														
2/4/2025	45692.52083	9	central	7526 S. 51st Street	1,271	0.0825	11.6	108																	
2/4/2025		9	central	SE of Quarry	1,062	0.0875	25.0	109																	
2/5/2025	45693.48611	10	central	5800 ALLWOOD	2,436	N/D	N/D	N/D	N/D	N/D	N/D				No										
2/5/2025	45693.52917	10	central	7301 S 51st Street	2,106	0.0275	38.5	109	N/D	N/D	N/D				4										
2/5/2025	45693.52917	10	central	7526 S. 51st Street	1,025	0.1775	35.7	108																	
2/5/2025	45693.52917	10	central	SE of Quarry	802	0.1425	45.5	108	NI/D	NI/D	N/D				No						-			1	
2/7/2025 2/7/2025	45695.52778 45695.52778	11	central	5800 ALLWOOD 7301 S 51st Street	2,380 2,108	0.020 0.038	8.8	106 106	N/D N/D	N/D N/D	N/D N/D				No										
2/7/2025	45695.52778	11 11	central central	7526 S. 51st Street	1,224	0.038	9.3	110	ואוט	IN/D	IN/D				1										
2/7/2025	45695.52778	11	central	SE of Quarry	1,119	0.0723	31.3	106							1										
3/3/2025	0.531944444	12	central	5800 ALLWOOD	2,562	0.025	31.3	101	N/D	N/D	N/D				No						<u> </u>			1	
3/3/2025	0.531944444	12	central	7301 S 51st Street	1,928	0.0425	12.2	111	N/D	N/D	N/D				†										
3/3/2025	0.531944444	12	central	7526 S. 51st Street	1,152	0.085	21.7	116	,=	, =	,=				1									1	
3/3/2025	0.531944444	12		SE of Quarry	1,251	0.075	31.3	108							1										
3/4/2025	0.5375	13	central	5800 ALLWOOD	2,042	0.035	14.7	103	0.040	19.6	97.5	-0.005	-4.900	5.5	yes	1	south	SSW	13	24	28.87	71	cloudy	none	50
3/4/2025	0.5375	13	central	7301 S 51st Street	2,446	0.025	35.7	114	N/D	N/D	N/D													1	
3/4/2025	0.5375	13	central	7526 S. 51st Street	1,504	0.0575	26.3	111																	
Sta <b>B#4¢210/2/5</b> u	ment Cla <b>ssificati</b>	on: Stantec	Int <b>erena</b> tral	SE of Quarry	1,108	0.1125	26.3	109							1									1	1

							1		1							
3/10/2025	0.529861111	14	central	5800 ALLWOOD	1,950	0.035	26.3	109	N/D	N/D	N/D				No No	
3/10/2025	0.527777778	14	central	7301 S 51st Street	2,552	N/T	N/T	N/A	N/D	N/D	N/D					
3/10/2025	0.529861111	14	central	7526 S. 51st Street	1,694	0.0625	21.7	111								
3/10/2025	0.529861111	14	central	SE of Quarry	1,320	0.0675	20	111								
3/18/2025	0.481944444	15	south	5800 ALLWOOD	1,763	0.04	31.3	112	N/D	N/D	N/D				No No	
3/18/2025	0.486111111	15	south	7301 S 51st Street	2,728	N/T	N/T	N/A	N/D	N/D	N/D			-	7	
3/18/2025	0.481944444	15	south	7526 S. 51st Street	1,802	0.0725	23.8	113								
3/18/2025	0.481944444	15	south	SE of Quarry	1,279	0.0675	27.8	110								
3/25/2025	0.529861111	16	central	5800 ALLWOOD	1,951	0.05	18.5	111	0.055	18.9	102.8	-0.005	-0.400	8.2	No No	
3/25/2025	0.529861111	16	central	7301 S 51st Street	2,540	0.03	12.8	103	N/D	N/D	N/D				7	
3/25/2025	0.529861111	16	central	7526 S. 51st Street	1,639	0.0925	38.5	109								
3/25/2025	0.529861111	16	central	SE of Quarry	1,229	0.145	31.3	110								
3/26/2025	0.527083333	17	south	5800 ALLWOOD	1,671	0.05	14.7	111	0.048	15.5	104.9	0.003	-0.800	6.1	No No	
3/26/2025	0.527083333	17	south	7301 S 51st Street	2,817	0.035	33.3	102	N/D	N/D	N/D				7	
3/26/2025	0.527083333	17	south	7526 S. 51st Street	1,862	0.1025	33.3	108								
3/26/2025	0.527083333	17	south	SE of Quarry	1,270	0.105	17.9	104								
3/27/2025	0.510416667	18	central	5800 ALLWOOD	2,380	N/T	N/T	N/A	N/D	N/D	N/D				No No	
3/27/2025	0.510416667	18	central	7301 S 51st Street	2,108	0.04	31.3	108	N/D	N/D	N/D				7	
3/27/2025	0.510416667	18	central	7526 S. 51st Street	1,224	0.1575	23.8	112								
3/27/2025	0.510416667	18	central	SE of Quarry	1,119	0.125	23.8	112								
Totals		18	blast events	s					-						1 1	

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

**Figure 1** Seismic Monitoring, Blasting, and Complaint Locations, 1st Quarter 2025





Stantec Consulting Services Inc. 12080 North Corporate Parkway, Suite 200 Meguon WI 53092-2661

January 16, 2025

Project/File: 193710393

Regulo Martinez-Montilva

Planning Manager - Department of City Development City of Franklin 9229 West Loomis Road Franklin, Wisconsin 53132 RMartinez-Montilva@franklinwi.gov

Dear Regulo Martinez-Montilva,

Reference: City of Franklin, WI - Franklin Aggregates Quarry Monitoring Summary, Period: 4th Quarter 2024

The enclosed information summarizes monitoring activities completed during the fourth quarter of 2024 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. Separate descriptions of services and project background are provided in **Attachments A and B**, respectively. This letter summarizes the results.

#### **Direct Observation (Visual) Monitoring**

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

Three observations events were completed during the monitoring period. Unannounced inspections were completed on October 2, October 14, and November 6; no announced inspections were performed on this quarter. The street sweeper was observed in use on Rawson Avenue during two of the three site visits. Typically, minor dust was observed from trucks exiting to the east on Rawson Avenue during the visits. No other issues were observed.

#### 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 quarter, and are presented in **Attachment C**. **Figure 1** illustrates the locations of the blasts in the quarter.

Reference: City of Franklin, WI - Franklin Aggregates Quarry Monitoring Summary, Period: 4th Quarter 2024

Highlights of the seismic data include the following:

- Between October 1 and December 31, 2024, a total of 32 blasting events occurred. 26 of 32 (81%) 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 (WDNR) 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 this quarter. 98% of the quarry's blasts year to date were below this level. This is in conformance with the PDD.
- Per the PDD, airblast resulting from P&D blasting shall not <u>exceed</u> 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 this quarter. 99% of the quarry's blasts year to date were below this level. This is in conformance with the PDD.
- The corresponding blast data measured by Stantec with the Sauls Seismic monitors generally aligned with the readings at each Payne & Dolan sponsored Vibra-Tech monitor. There were some larger differences in the AO and frequency readings. 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 readings. The Sauls Seismic monitors were swapped out and recalibrated in July 2024 and are due for calibration in April 2025 by the equipment vendor; calibration is typically completed annually.
- 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 blast events and complaints received by Stantec for the period October 1 through December 31, 2024, is provided as **Attachment C**. Note <u>the following:</u>

Note 1: 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 in this report.

Note 2: Attachment C also includes and highlights complaints from property owners located in new housing development in the Marquette Avenue area known as Lots in Pleasant View Reserve. These property owners, by acceptance on their individual deeds for each lot, have accepted that the Quarry operation may have an effect on the use and enjoyment of their lot(s), and have waived their right to any objection(s). A summary of those complaints received this quarter is provided below:

January 16, 2025 Regulo Martinez-Montilva Page 3 of 11

Reference: City of Franklin, WI - Franklin Aggregates Quarry Monitoring Summary, Period: 4th Quarter 2024

6 blast complaintsmumber of complainants

Note 3: However, complainant identity may be released upon public records request to the City of Franklin.

Aside from any complaints received from property owners as outlined in Note 2 above, the locations of all other blasts and complaints are shown on Figure 1, and The locations of all blasts and complaints are shown on Figure 1. the following highlights this informatione results of the complaint evaluation:

#### Complaints — General

- <u>5</u><del>11</del> complaints (formally submitted)
- 1 complaints (informally submitted phone call only)
- 0 complaints regarding material in the road
- 642 complaints regarding vibration/noise

#### Complaints - Blast Related

- 642 complaints corresponding to actual blast events
- 0 complaints not corresponding to specific blast events
- 06 complaints complainant requested location not be identified
  - o 06 identified with general location: -east of the Quarryof Marquette Avenue area (east)
  - 0 identified with general location: south of the Quarry of Root River Heights (south)
  - o 0 identified with general location: west of the Quarry
- 6 complaints complainant location identified

#### Complaints (non-anonymous or general location given; confirmed blast related) - Locations

- <u>0</u>6 complaints east of 51<sup>st</sup> Street
- 6 complaints south of Drexel Avenue
- 0 complaints west of Root River

#### Summary of Complaint Comments - Blast Related

- October 11, 2024 (highest readings at the SE of Quarry monitor 0.050 in/sec PPV, 114 dB
   AO) one complaint to the south blast in southern pit.
  - "Blasting shook the whole house."
- October 14, 2024 11:52am (highest readings at the 7301 S 51<sup>st</sup> St monitor 0.098 in/sec PPV and 7526 S. 51<sup>st</sup> St - 112 dB AO) – one confidential complaint identified as a home in the Marquette Avenue area – blast in northern pit.
  - "A blast from the quarry shook the entire house and rattled the windows. The blast was very loud and shook the floor."
- October 14, 2024 12:12 pm (highest readings at the 5800 Allwood monitor 0.105 in/sec PPV and 112 dB AO) – two complaints to the south (one formal, one informal) – blast in southern pit.