



March 15, 2023

ODOT District 12
5500 Transportation Boulevard
Garfield Heights, OH 44125

Attention: Mr. Kyle J. Dohlen, P.E.

Reference: **District 12/3 Subsurface Investigation for Pavement & Bridges
PID No. 114573 Agreement No. 36312**

**Pavement Core Exploration – Data Report
Task Order No. D12-13
CUY-480-6.12 Pavement Cores (PID 115826)**
Fairview Park, Cuyahoga County, Ohio
S&ME Project No. 216069P

Mr. Dohlen:

S&ME, Inc. (S&ME) has completed the scope of work requested in the December 13, 2022, ODOT District 12 (D12) Task Order Request for Proposal (RFP) for the above referenced CUY-480-6.19 pavement coring project. S&ME's proposal for this work, dated January 10, 2023, was authorized by D12 via email on February 8, 2023.

Scope of Work

The authorized scope of work included obtaining two (2) cores through the existing pavement along West 220th Street, north and south of the bridge over IR 480. A Vicinity Map (Plate 1 in the Attachments) presents the general project location, and Plate 2 presents a more detailed view of the approximate locations of the completed pavement cores.

Field Exploration

S&ME and our sub-consultant, Ohio Concrete Sawing and Drilling visited the site on March 8, 2023, to perform the pavement coring. The core locations were selected by ODOT D12, with X-001-0-23 located about 50 feet south of the existing rear approach slab, and X-002-0-23 about 50 feet north of the existing forward approach slab, each in the northbound travel lane. However, Core X-001-0-23 was relocated to about 25 feet south of the rear approach slab in the southbound left turn lane to avoid coring in the intersection with Mastick Road.

At each location, the pavement was cored with a nominal 4-inch diameter diamond tipped core bit. The pavement cores were retrieved, and the length of the recovered pavement cores were measured and recorded. The recovered cores were then labeled, packaged, and delivered to our laboratory for further examination. Latitude/longitude coordinates at the completed core locations were obtained using publicly available mapping and measurements from the curbs and the bridge expansion joints. Prior to demobilizing from the site, each core hole was patched with cold-patch asphalt.



Findings and Observations

Photographs of the recovered cores are presented on Plate 3 in the Attachments at the rear of this document. The coordinates of each core location, along with pavement material thicknesses, conditions, and other observations/notes are compiled and summarized in Table 1:

Table 1: Pavement Core Information Summary

Core Number	Latitude	Longitude	General Location	Concrete Thickness (in.)	Notes
X-001-0-23	41.425367°	-81.864569°	South of the IR 480 Bridge: Left turn lane from SB West 220 th Street to EB Mastick Road.	9	Reinforcing fibers were observed protruding from the bottom of the core.
X-002-0-23	41.424387°	-81.864673°	North of the IR 480 Bridge: NB right lane of West 220 th Street.	10¼	Reinforcing steel observed at 4¾ inches below the top of concrete.

We appreciate being given the opportunity to be of service. Please do not hesitate to contact our office if you have any questions concerning our report.

Sincerely,

S&ME, Inc.

Shawn H. Smith, P.E.
Staff Professional II

Richard S. Weigand, P.E.
Principal Engineer/Senior Reviewer

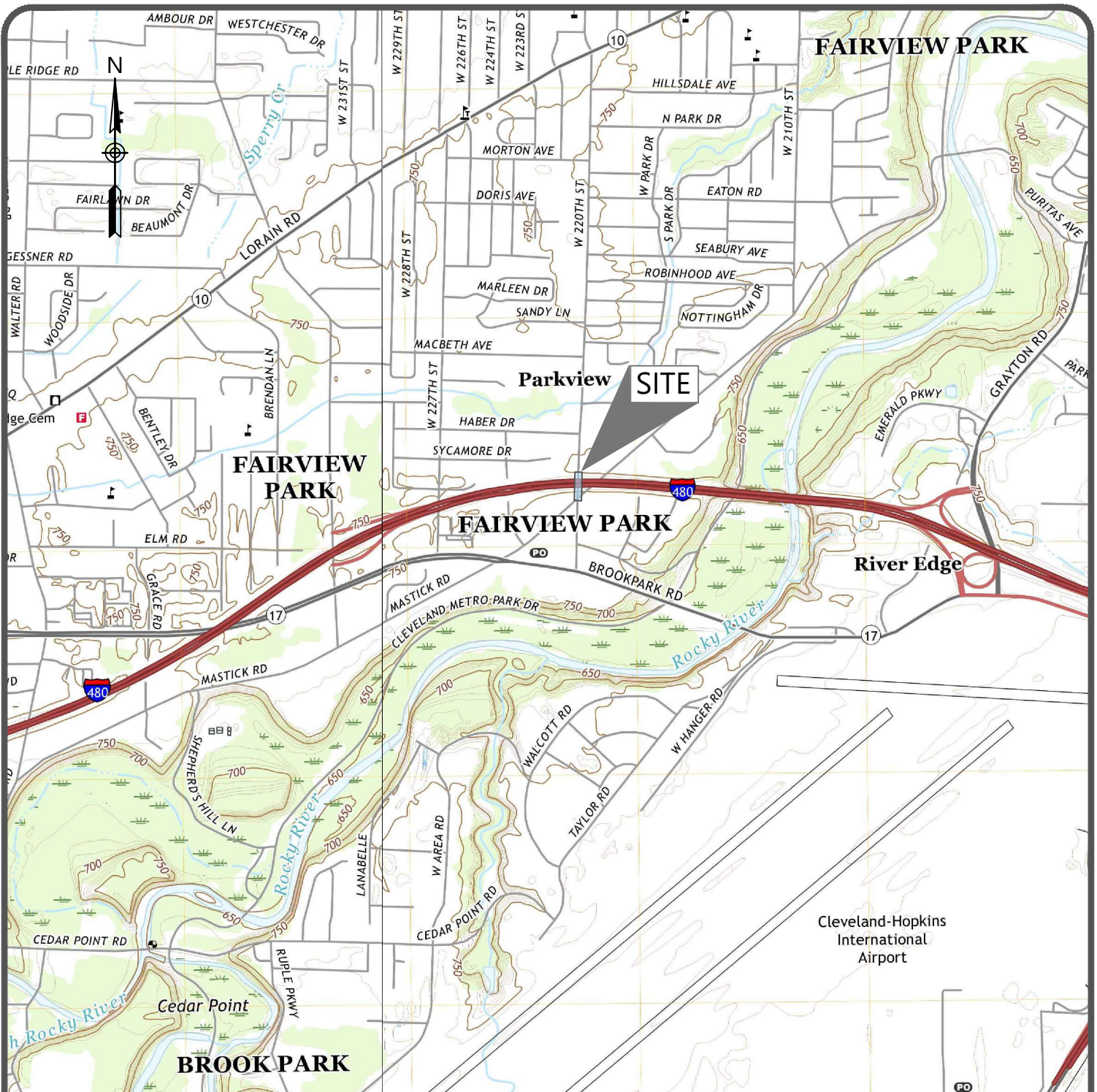
Attachments: Vicinity Map (1 sheet)
Plan of Cores (1 sheet)
Pavement Core Photo Log (1 sheet)

Submitted: Email Copy (Kyle.Dohlen@dot.ohio.gov)



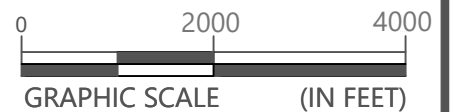
Attachments

Drawing Path: T:\Columbus-1170\Projects\2021\216069_ODOT_D12-3 GES_Ohio\216069P_CUY-480-6.12 Cores\CAD\Sketch\VMAP_Plan of Borings.dwg



Project Location
Cuyahoga County, Ohio

USGS Mapping:
North Olmsted and Lakewood USGS Quads



GRAPHIC SCALE

(IN FEET)



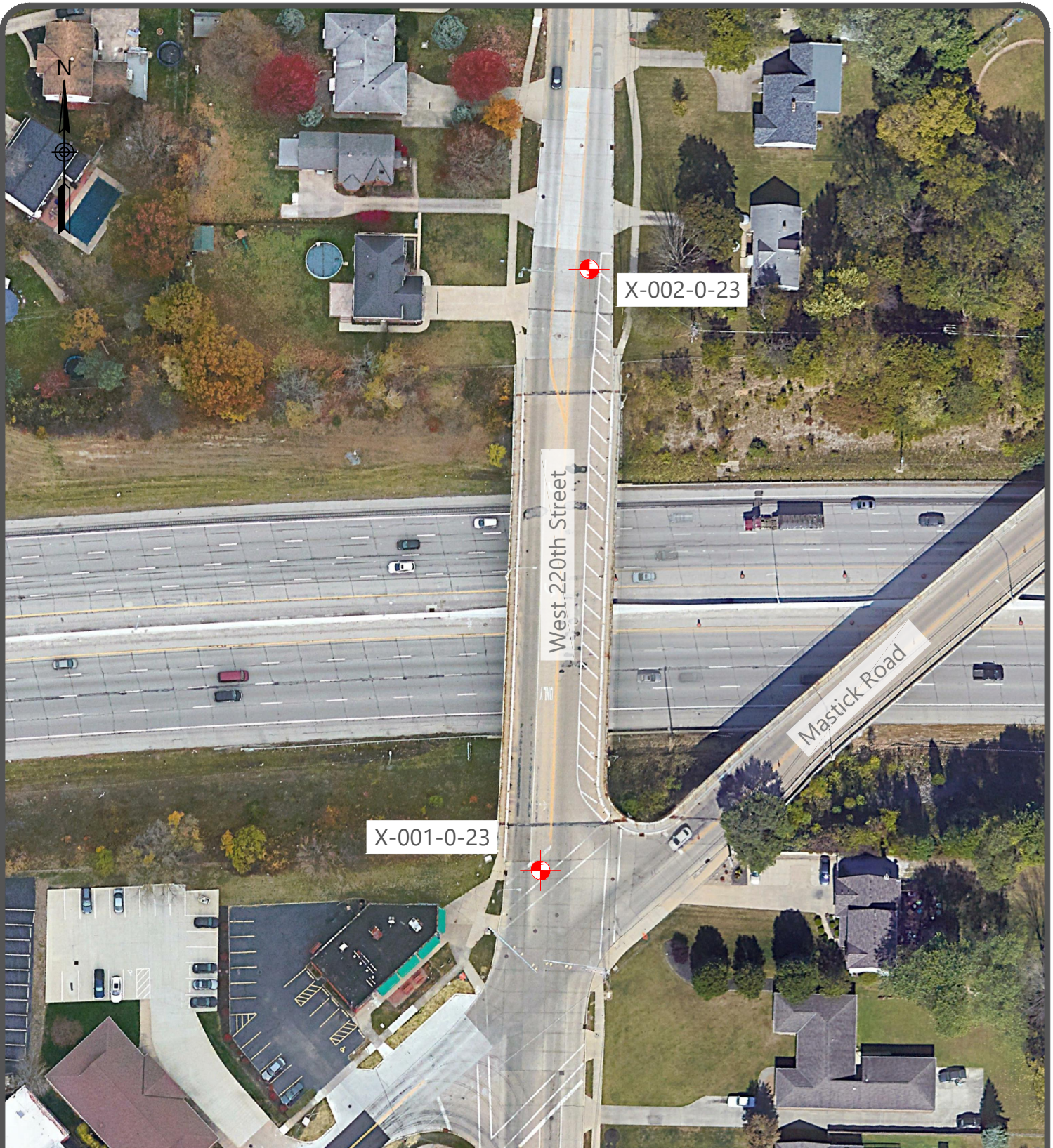
Vicinity Map

Pavement Core Exploration
CUY-480-6.12 Pavement Cores (PID 115826)
Fairview Park, Cuyahoga County, Ohio

SCALE:
GRAPHIC
DATE:
03-10-2023
PROJECT NUMBER
216069P

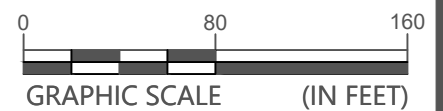
FIGURE NO.

1



LEGEND

 X-001-0-23 Core Location and Number



Plan of Cores

Pavement Core Exploration
CUY-480-6.12 Pavement Cores (PID 115826)
Fairview Park, Cuyahoga County, Ohio

SCALE:
GRAPHIC
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FIGURE NO.

2



Reinforcing Fibers

Date: 3/8/2023

Photographer: SHS

1

Core Number / Thickness

X-001-0-23 / Concrete = 9 in.

Remarks

Reinforcing fibers were observed protruding from the bottom of the core.



Reinforcing Steel

Date: 3/8/2023

Photographer: SHS

2

Core Number / Thickness

X-002-0-23 / Concrete = 10 1/4 in.

Remarks

Reinforcing steel observed at approximately 4 3/4 inches from the top of concrete.