2020
AMBIENT AIR MONITORING NETWORK PLAN

Jefferson County Department of Health
Air and Radiation Protection Division
1400 Sixth Avenue South
Birmingham, AL 35233

Table Of Contents

1.0 Definitions and Acronyms

Appendix D	Volume 40, Code of Federal Regulations, part 58, Appendix D
AQI	Air Quality Index
AQS	Air Quality System
CASTNET	Clean Air Status and Trends Network
CBSA	Core Based Statistical Area
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CSA	Combined Statistical Area
FEM	Federal Equivalent Method
FRM	Federal Reference Method
JCDH	Jefferson County Department of Health
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards
NCore	National Core Multipollutant Monitoring Station
NO	Nitric Oxide
NO_x	Oxides of Nitrogen
NO_y	Total Reactive Nitrogen
NO_2	Nitrogen Dioxide
O_3	Ozone
PAMS	Photochemical Assessment Monitoring Station
PM	Particulate matter
$PM_{2.5}$	Particulate matter ≤2.5 micrometers diameter
PM_{10}	Particulate matter ≤10 micrometer diameter
$PM_{10-2.5}$	Particulate matter ≤10 microns but > 2.5 microns
QAPP	Quality Assurance Project Plan
QMP	Quality Management Plan
SLAMS	State or Local Air Monitoring Station
SO_2	Sulfur Dioxide
SPM	Special Purpose Monitor
STN ($PM_{2.5}$)	Speciation Trends Network
USEPA	United States Environmental Protection Agency
≥	greater than or equal to
>	greater than
≤	less than or equal to
<	less than

2.0 Types of Monitoring Stations

CASTNET - *Clean Air Status and Trends Network*: is a national air quality monitoring network designed to provide data to assess trends in air quality, atmospheric deposition, and ecological effects due to changes in air pollutant emissions. CASTNET provides long-term monitoring of air quality in rural areas to determine trends in regional atmospheric nitrogen, sulfur, and ozone concentrations and deposition fluxes of sulfur and nitrogen pollutants in order to evaluate the effectiveness of national and regional air pollution control programs. USEPA-sponsored CASTNET ozone monitors are Part 58 compliant, therefore the data can be used for regulatory purposes. CASTNET ozone data is now reported to AQS.

NCore – *National Core multi-pollutant monitoring station*: Sites that measure multiple pollutants at trace levels in order to provide support to integrated air quality management data needs. Each state is required to operate one NCore site.

PAMS– *Photochemical Assessment Monitoring Station*: PAMS are established to obtain more comprehensive data in areas with high levels of ozone pollution by also monitoring oxides of nitrogen (NOx) and volatile organic compounds (VOCs). PAMS monitoring requirements were revised in the 2016 ozone NAAQS rule and a PAMS site is required in the state of Alabama in Jefferson County.

SLAMS- *State or Local Ambient Monitoring Station*: The SLAMS make up ambient air quality monitoring sites that are primarily needed for NAAQS comparisons.

STN– *PM2.5 Speciation Trends Network*: A $PM_{2.5}$ speciation station designated to be part of the speciation trends network. This network provides chemical species data of fine particulates. There is currently two STN sites located in Jefferson County.

Supplemental Speciation- Any $PM_{2.5}$ speciation station that is used to gain supplemental data and is not dedicated as part of the speciation trends network.

3.0 Background

Federal Regulations (40 CFR 58.10) require that State and Local Agencies operating an ambient air quality monitoring network shall review their air quality monitoring network on an annual basis. Any needed modifications to the network should be identified. A detailed monitoring network description should also be included. In addition, the plan shall be available for public comment. The Jefferson County Department of Health's (JCDH) Ambient Air Monitoring Network Plan is available on the JCDH website at:
https://www.jcdh.org/SitePages/Programs-Services/Scores-Lists/Air/AirPollutionControl.aspx?AQTab=Notices

The JCDH's Ambient Air Monitoring Network Plan was placed on the website on May 15, 2020 for a 30-day public review and comment period.

The Monitoring Network review that is specified in *40 CFR 58.10* contains the following elements that apply to each monitoring site:

- The USEPA Air Quality System (AQS) site identification number.
- The location, including street address and geographical coordinates.
- The sampling and analysis method(s) for each measured parameter.
- The operating schedules for each monitor.
- Any proposals to remove or move a monitoring station within a period of 18 months following plan submittal.
- The monitoring objective and spatial scale of representativeness for each monitor as defined in Appendix D of Part 58.
- The identification of any sites that are suitable and sites that are not suitable for comparison against the annual $PM_{2.5}$ and Ozone National Ambient Air Quality Standards (NAAQS) as described in part 58.30.
- The MSA, CBSA, CSA or other area represented by the monitor.
- The annual monitoring network plans and or periodic network assessments are subject to Regional approval according to part 58.14.

4.0 Proposed Changes for CY2021

- Fairfield Site (01-073-1003) - The JCDH requests to shut down the Fairfield site. This site operates one O_3 monitor, one SO_2 monitor, and one CO monitor.
- Near Road Site (01-073-2059) – The manual $PM_{2.5}$ FRM monitor at the JCDH Near Road site began operating July 1, 2020 on a 1-in-3 day sampling schedule per 40 CFR §58.12(d)(1). Historically this instrument operated on a 1-in-6 day sampling schedule.

5.0 Overview

The ambient air monitoring network for Jefferson County, Alabama is operated by the Jefferson County Department of Health. Ambient air monitors in Jefferson County, Alabama are operated for a variety of monitoring objectives. These objectives include determining if an area of the County meets the NAAQS, for public information such as USEPA's AirNow data mapping website, Air Quality Index (AQI) reporting for public information, background data collection, spatial considerations, and special projects. The AQI forecast for Jefferson County, Alabama is reported on the JCDH website at:

https://www.jcdh.org/SitePages/Programs-Services/EnvironmentalHealth/Air-RadiationProtectionDivision/AirQualForecast.aspx

In addition, hourly Ozone (O_3), continuous Particulate Matter (PM_{10} and $PM_{2.5}$), Nitrogen Dioxide (NO_2), Sulfur Dioxide (SO_2), and Carbon Monoxide (CO) data is reported to the USEPA AirNow site. 40 CFR 58 has set minimum monitoring requirements for the pollutants that are to be compared with the NAAQS. These minimum requirements are based on population, the level of monitored pollutants, and Metropolitan Statistical Areas (MSA) as defined in the latest US Census information. The JCDH air monitoring site data are suitable for NAAQS comparisons per appendices A, C, D, and E. The JCDH's Quality Management Plan (QMP) is current with an approval date of June 28, 2019. The JCDH Quality Assurance Project Plan (QAPP) for Ambient Air Quality Monitoring of Criteria and Multi-Pollutants is current with an approval date of December 14, 2018.

Based on 40 CFR part 58, Appendix D, air monitoring agencies are required to begin making Photochemical Assessment Monitoring (PAMS) measurements at their NCore sites. USEPA has established a begin date of June 1, 2021. While the JCDH has received most of the instrumentation to operate PAMS, additional equipment is still needed. The JCDH will work with USEPA to begin measurements on or before the 2021begin date.

6.0 Site Discussion

The JCDH's ambient air monitoring network has been reviewed based on the historic monitoring data, air quality monitoring regulations, data representation based on spatial considerations, special data needs, and changes needed based on the monitoring regulations. The items used in the evaluation were the following: AQS database, the 40 CFR parts 53 and 58 documents, and the census data and maps. The JCDH monitors are classified as either SLAMS (State or Local Air Monitoring Station) or SPM (Special Purpose Monitor).

The following sections describe the purposes and any changes related to each in the ambient air monitoring network in Jefferson County based on the review of the existing monitoring efforts.

1. **Corner** (01-073-5003) – The JCDH operates one O_3 monitor and one continuous non-FEM $PM_{2.5}$ monitor at this site. This site is the background site for the JCDH and no changes are proposed for this site.

    - **Site Approval Status:** Site and monitors meet all design criteria for the monitoring network. The ozone sample inlet is approximately 6.1 meters above ground level, and the continuous $PM_{2.5}$ is approximately 6.4 meters above ground level. A tree is located north of the site, approximately 10 meters. There are no other trees or obstacles that would impact the siting criteria for this site.

2. **Fairfield** (01-073-1003) – The JCDH operates one O_3 monitor, one SO_2 monitor, and one CO monitor at this site. Due to historical data collected at this site and spatial considerations, the JCDH proposes to shut this site down December 31, 2020.

    - **Site Approval Status:** Site and monitors meet all design criteria for the monitoring network. The sample inlets for the three monitors are approximately 5 meters above ground level.

No trees or obstacles impact the siting criteria for this site.

3. **Leeds** (01-073-1010) – The JCDH operates one O_3 monitor, one continuous non-FEM $PM_{2.5}$ monitor, two FRM manual $PM_{2.5}$ monitors, and two FRM manual PM_{10} monitors at this site. No changes are proposed for this site.

    - **Site Approval Status:** Site and monitors meet all design criteria for the monitoring network. The sample inlet for the O_3 is approximately 4.6 meters above ground level, the continuous $PM_{2.5}$ monitor is approximately 4.8 meters above ground level, and the particulate manual monitors are approximately 4.9 meters above ground. No trees or obstacles impact the siting criteria for this site.

4. **McAdory** (01-073-1005) – The JCDH operates one O_3 monitor, one continuous non-FEM $PM_{2.5}$ monitor, and one FRM manual $PM_{2.5}$ monitor. No changes are proposed for this site.

    - **Site Approval Status:** Site and monitors meet all design criteria for the monitoring network. The sample inlet for the O_3 is approximately 4.6 meters above ground level, the continuous $PM_{2.5}$ monitor is approximately 4.7 meters above ground level, and the particulate manual monitors are approximately 5 meters above ground. No trees or obstacles impact the siting criteria for this site.

5. **NCore** (01-073-0023) – The JCDH operates an NCore site which contains a full complement of instruments, including: meteorological, IMPROVE, RADNET, and PAMS. The ambient air monitoring parameters currently include O_3, SO_2, CO, Nitric Oxides as NO_x and NO_y, one FRM manual $PM_{2.5}$ monitor, speciated $PM_{2.5}$, continuous FEM $PM_{2.5}$, continuous FEM PM_{10}, FEM $PM_{10-2.5}$, wind speed, wind direction, ambient temperature, barometric pressure, and relative humidity. No changes are proposed for this site.

    - **Site Approval Status:** Site and monitors meet all design criteria for the monitoring network. The meteorological tower is approximately 30 meters above ground level. The NO_x, CO, and SO_2 sample inlets are approximately 4.3 meters above ground level. The O_3 sample inlet is approximately 4.6 meters above ground level, and PAMS is approximately 4.7 meters above ground level. The continuous particulate monitor is approximately 4.6 meters above ground level, while the manual particulate monitors and speciated $PM_{2.5}$ monitors are approximately 4 meters above ground level. IMPROVE and RADNET are operated at ground level. No trees or obstacles impact the siting criteria for this site.

6. **Near Road** (01-073-2059) – The JCDH operates one NO_x monitor, one CO monitor, and one FRM manual $PM_{2.5}$ monitor at this site. Beginning July 1, 2020, the FRM manual $PM_{2.5}$ monitor will operate on a 1 in 3 day sampling schedule. Meteorological data is also collected at this site, which includes the following: wind speed, wind direction, ambient temperature, barometric pressure, and relative humidity.

No changes are proposed for this site.

- **Site Approval Status:** Site and monitors meet all design criteria for the monitoring network. The meteorological tower is approximately 30 meters above ground level. The NO_x and CO sample inlets are approximately 4.2 meters above ground level. The manual particulate monitor is approximately 4.8 meters above ground level. A tree is located west of the site, approximately 10.7 meters. There are no other trees or obstacles that would impact the siting criteria for this site.

7. **Shuttlesworth** (01-073-6004) – The JCDH operates one continuous non-FEM $PM_{2.5}$ monitor and one continuous FEM PM_{10} monitor at this site. An SO_2 monitor was shutdown at this site on December 31, 2019 and is currently being evaluated. No changes are proposed for this site.

    - **Site Approval Status:** The continuous particulate monitors are approximately 4.4 meters above ground level. A tree is located north of the site, at approximately 11 meters. Another tree is located northeast of the site, at approximately 10 meters. There are no other trees or obstacles that would impact the siting criteria for this site.

8. **Tarrant** (01-073-6002) – The JCDH operates one O_3 monitor and one continuous FEM PM_{10} monitor at this site. No changes are proposed for this site.

    - **Site Approval Status:** The O_3 monitor sample inlet is approximately 4.3 meters above ground level. The continuous particulate monitor is approximately 4.4 meters above ground level. A tree is located north of the site, at approximately 11 meters. Another tree is located northeast of the site, at approximately 10 meters. No trees or obstacles impact the siting criteria for this site.

9. **Wylam** (01-073-2003) – The JCDH operates one continuous FEM PM_{10} monitor, one continuous non-FEM $PM_{2.5}$ monitor, three FRM manual $PM_{2.5}$ monitors, and speciated $PM_{2.5}$ at this site. No changes are proposed for this site.

    - **Site Approval Status:** The sample inlets for the continuous particulate monitors are approximately 4.5 meters above ground level. The manual particulate monitors are approximately 5 meters above ground level, and the sample inlet for the speciated $PM_{2.5}$ is approximately 4.8 meters above ground level.
      No trees or obstacles impact the siting criteria for this site.

7.0 CBSA/MSA

Minimum monitoring requirements vary for each pollutant and can be based on a combination of factors such as population, the level of monitored pollutants, and Core Based Statistical Area boundaries as defined in the latest US Census information. The term "Core Based Statistical Area" (CBSA) is a collective term for both Metropolitan Statistical Areas (MSA) and Micropolitan Statistical Areas (μSA). Jefferson County has a 2018 MSA population estimate of 659,300[1]. The population of the CBSA which includes the counties of Jefferson, Bibb, Blount, Chilton, Shelby, St. Clair, and Walker has a 2016 population estimate of 1,151,801[1].

The following sections provide the ambient air monitoring site addresses and coordinates in the JCDH network, in addition to a detailed table of each monitor operated by the JCDH. The JCDH evaluated each site type and scale, along with each monitor objective and type, as part of the assessment for this plan. Some changes were made, and can be found in Section 9.0.

[1]Population estimates for July 1, 2018 found at www.census.gov

8.0 Site Location Coordinates

Site Name/ID: Address	Latitude	Longitude
Corner 01-073-5003: 1005 Corner School Road, Empire, AL	33.8016	-86.9425
Fairfield 01-073-1003: 5229 Ct B, Fairfield, AL	33.4855	-86.9156
Leeds 01-073-1010: 201 Ashville Road Southeast, Leeds, AL	33.5452	-86.5491
McAdory 01-073-1005: Route 8, McAdory, AL	33.3311	-87.0036
NCore 01-073-0023: 3009 28th Street North, Birmingham, AL	33.5530	-86.8150
Near-Road 01-073-2059: 1110 5th Street West, Birmingham, AL	33.5214	-86.8441
Shuttlesworth 01-073-6004: 4113 Shuttlesworth Drive, Birmingham, AL	33.5652	-86.7963
Tarrant 01-073-6002: 1269 Portland St, Tarrant, AL	33.5783	-86.7738
Wylam 01-073-2003: 1242 Jersey St, Birmingham, AL	33.4997	-86.9241

9.0 Network Table

2020 NETWORK ASSESSMENT									
Corner 073-5003									
Parameter	**Code**	**POC**	**Method**	**Method Description**	**Manual/Continuous**	**Site Type**	**Siting Scale**	**Monitor Objective**	**Monitor Type**
O3	44201	1	087	UltraViolet Absorption	Continuous	General/Background	Regional	General/Background	SLAMS
PM2.5	88502	3	701	PM2.5 SCC w/No Correction Factor	Continuous	General/Background	Regional	General/Background	SPM
Fairfield 073-1003									
Parameter	**Code**	**POC**	**Method**	**Method Description**	**Manual/Continuous**	**Site Type**	**Siting Scale**	**Monitor Objective**	**Monitor Type**
CO	42101	1	054	NonDispersive Infrared	Continuous	Population Oriented	Neighborhood	Population Exposure	SLAMS
SO2	42401	1	100	UltraViolet Fluorescence	Continuous	Population Oriented	Neighborhood	Population Exposure	SLAMS
O3	44201	1	087	UltraViolet Absorption	Continuous	Population Oriented	Neighborhood	Population Exposure	SLAMS
Leeds 073-1010									
Parameter	**Code**	**POC**	**Method**	**Method Description**	**Manual/Continuous**	**Site Type**	**Siting Scale**	**Monitor Objective**	**Monitor Type**
O3	44201	1	087	UltraViolet Absorption	Continuous	Population Oriented	Neighborhood	Population Exposure	SLAMS
PM2.5	88101	1	142	VSCC Gravimetric	Manual	Population Oriented	Neighborhood	Population Exposure	SLAMS
PM2.5	88101	2	142	VSCC Gravimetric	Manual	Population Oriented	Neighborhood	Population Exposure	SLAMS
PM10	81102	1	125	Gravimetric	Manual	Population Oriented	Neighborhood	Population Exposure	SLAMS
PM10	81102	2	125	Gravimetric	Manual	Population Oriented	Neighborhood	Population Exposure	SLAMS
PM2.5	88502	3	701	PM2.5 SCC w/No Correction Factor	Continuous	Population Oriented	Neighborhood	Population Exposure	SPM
McAdory 073-1005									
Parameter	**Code**	**POC**	**Method**	**Method Description**	**Manual/Continuous**	**Site Type**	**Siting Scale**	**Monitor Objective**	**Monitor Type**
O3	44201	1	087	UltraViolet Absorption	Continuous	Population Oriented	Neighborhood	Population Exposure	SLAMS
PM2.5	88101	1	142	VSCC Gravimetric	Manual	Population Oriented	Neighborhood	Population Exposure	SLAMS
PM2.5	88502	3	701	PM2.5 SCC w/No Correction Factor	Continuous	Population Oriented	Neighborhood	Population Exposure	SPM
NCore 073-0023									
Parameter	**Code**	**POC**	**Method**	**Method Description**	**Manual/Continuous**	**Site Type**	**Siting Scale**	**Monitor Objective**	**Monitor Type**
CO	42101	2	174	NonDispersive Infrared Photometry	Continuous	Population Oriented	Neighborhood	Population Exposure	SLAMS
SO2	42401	2	100	UltraViolet Fluorescence	Continuous	Population Oriented	Neighborhood	Population Exposure	SLAMS
NO2	42602	2	200	Photolytic Chemiluminescence	Continuous	Population Oriented	Neighborhood	Population Exposure	SLAMS
O3	44201	1	087	UltraViolet Absorption	Continuous	Population Oriented	Neighborhood	Population Exposure	SLAMS
PM2.5	88101	1	142	VSCC Gravimetric	Manual	Population Oriented	Neighborhood	Highest Concentration/Pop Exp	SLAMS
PM10	81102	4	239	Broadband Spectroscopy	Continuous	Population Oriented	Neighborhood	Population Exposure	SLAMS
PM2.5	88101	3	238	Broadband Spectroscopy	Continuous	Population Oriented	Neighborhood	Highest Concentration/Pop Exp	SLAMS

2020 NETWORK ASSESSMENT									
Near Road 073-2059									
Parameter	**Code**	**POC**	**Method**	**Method Description**	**Manual/Continuous**	**Site Type**	**Siting Scale**	**Monitor Objective**	**Monitor Type**
CO	42101	1	593	Gas Filter Correlation	Continuous	Population Oriented	Microscale	Source Oriented	SLAMS
NO2	42602	1	200	Photolytic Chemiluminescence	Continuous	Population Oriented	Microscale	Source Oriented	SLAMS
PM2.5	88101	1	142	VSCC Gravimetric	Manual	Population Oriented	Microscale	Source Oriented	SLAMS
Shuttlesworth 073-6004									
Parameter	**Code**	**POC**	**Method**	**Method Description**	**Manual/Continuous**	**Site Type**	**Siting Scale**	**Monitor Objective**	**Monitor Type**
PM10	81102	1	079	FDMS Gravimetric	Continuous	Source Oriented	Microscale	Highest Concentration	SLAMS
PM2.5	88502	3	701	PM2.5 SCC w/No Correction Factor	Continuous	Source Oriented	Microscale	Source Oriented	SPM
Tarrant 073-6002									
Parameter	**Code**	**POC**	**Method**	**Method Description**	**Manual/Continuous**	**Site Type**	**Siting Scale**	**Monitor Objective**	**Monitor Type**
O3	44201	1	087	UltraViolet Absorption	Continuous	Population Oriented	Neighborhood	Highest Concentration	SLAMS
PM10	81102	3	208	FDMS Gravimetric	Continuous	Population Oriented	Neighborhood	Population Exposure	SLAMS
Wylam 073-2003									
Parameter	**Code**	**POC**	**Method**	**Method Description**	**Manual/Continuous**	**Site Type**	**Siting Scale**	**Monitor Objective**	**Monitor Type**
PM2.5	88101	1	142	VSCC Gravimetric	Manual	Population Oriented	Neighborhood	Population Exposure	SLAMS
PM2.5	88101	2	142	VSCC Gravimetric	Manual	Population Oriented	Neighborhood	Population Exposure	SLAMS
PM2.5	88101	1	142	VSCC Gravimetric	Manual	Population Oriented	Neighborhood	Population Exposure	SLAMS
PM10	81102	2	208	FDMS Gravimetric	Continuous	Population Oriented	Neighborhood	Population Exposure	SLAMS
PM2.5	88502	3	701	PM2.5 SCC w/No Correction Factor	Continuous	Population Oriented	Neighborhood	Population Exposure	SPM

APPENDIX I

CORNER 01-073-5003

North

South

East

West


Attaway Rd
Corner School Rd
Yellow Jacket Dr
Yellow Jacket Dr
Yellow Jacket Dr
Corner School
Corner 01-073-5003
Corner School Rd
Corner Middle School
Yellow Jacket Dr
Bagley Rd
Bagley Rd
WARRIOR CITGO
83
Valero
Stadium Dr

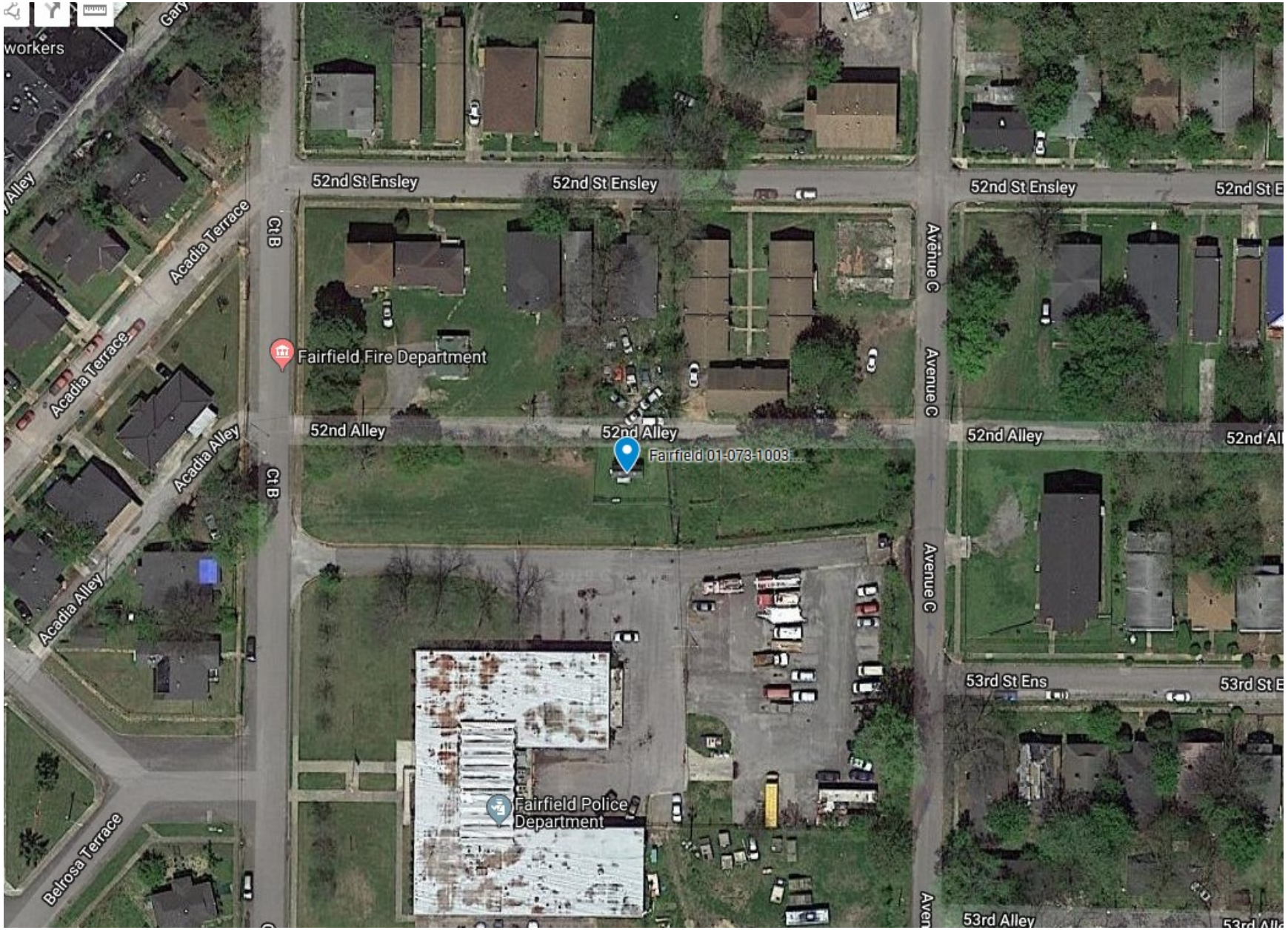
FAIRFIELD 01-073-5003

North

South

East

West


workers
52nd St Ensley
52nd St Ensley
52nd St Ensley
Acadia Terrace
Acadia Terrace
Acadia Alley
Acadia Alley
Ct B
Ct B
Avenue C
Avenue C
Avenue C
Fairfield Fire Department
52nd Alley
52nd Alley
52nd Alley
Fairfield 01-073-1003 ...
Fairfield Police Department
53rd St Ens
53rd Alley
Belrosa Terrace

LEEDS 01-073-1010

Temporary Shelter

Old Shelter

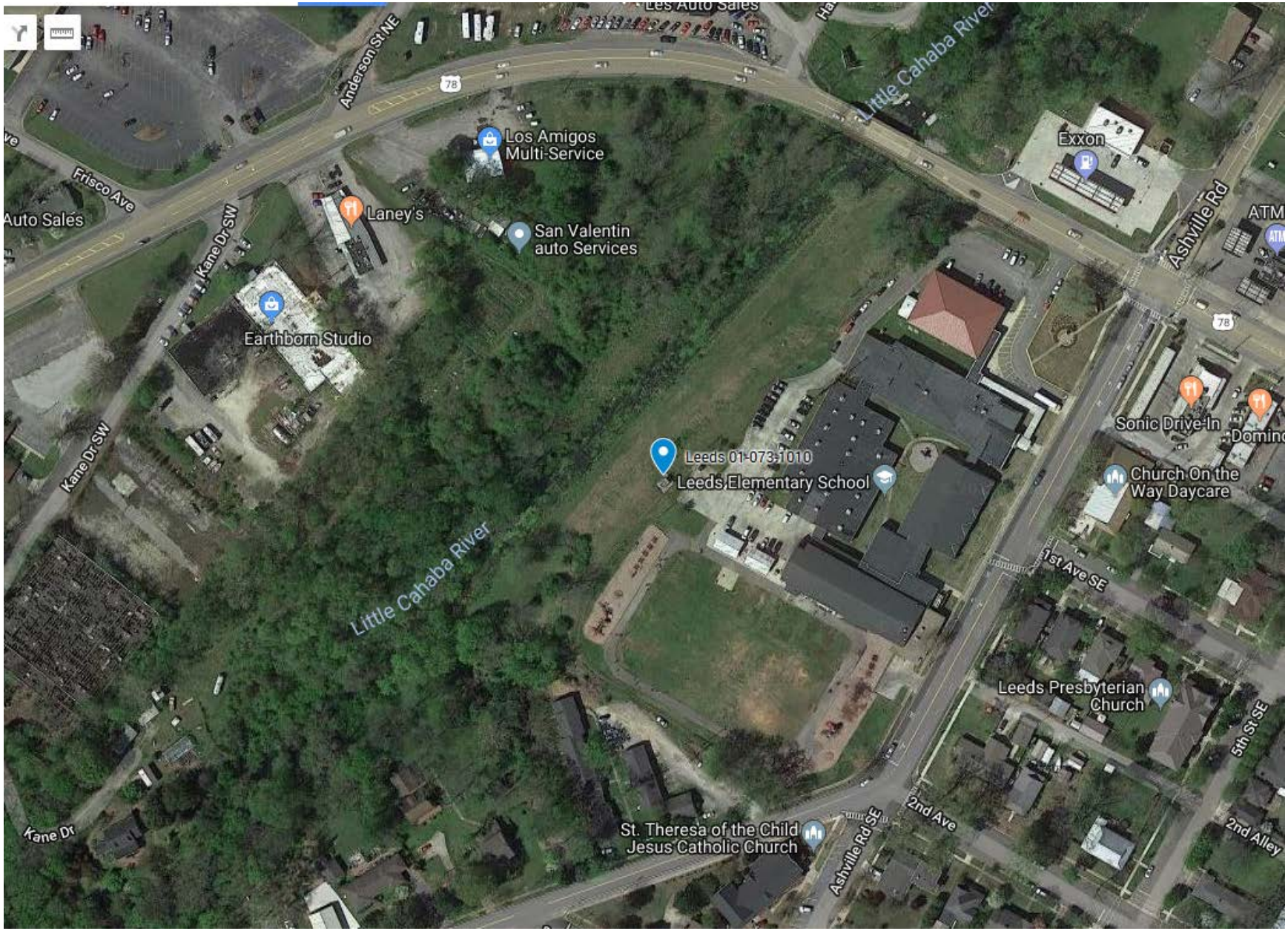
North

South

East

West

*Consolidated Analytical Systems (CAS) is currently building a new shelter for this site.


Anderson St NE
78
Little Cahaba River
Exxon
Los Amigos
Multi-Service
Frisco Ave
Auto Sales
Laney's
San Valentin
auto Services
Kane Dr SW
Ashville Rd
ATM
Earthborn Studio
Sonic Drive-In
Leeds 01-073-1010
Leeds Elementary School
Church On the
Way Daycare
Kane Dr SW
Little Cahaba River
1st Ave SE
Leeds Presbyterian
Church
5th St SE
Kane Dr
St. Theresa of the Child
Jesus Catholic Church
Ashville Rd SE
2nd Ave
2nd Alley

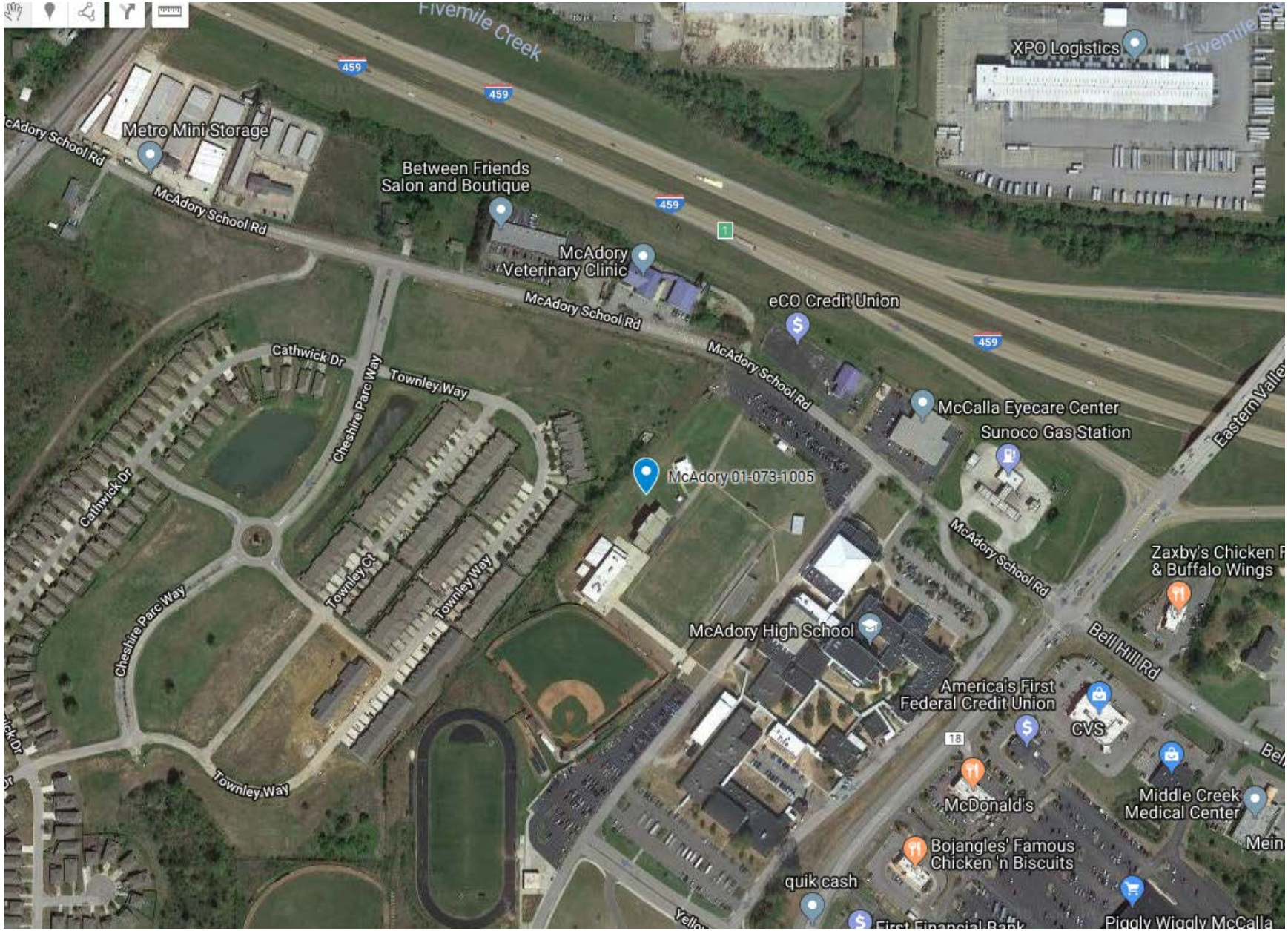
MCADORY 01-073-1005

North

South

East

West


Fivemile Creek
XPO Logistics
459
Metro Mini Storage
McAdory School Rd
Between Friends
Salon and Boutique
McAdory
Veterinary Clinic
eCO Credit Union
Cathwick Dr
Townley Way
Cheshire Parc Way
McCalla Eyecare Center
Sunoco Gas Station
McAdory 01-073-1005
Townley Ct
Zaxby's Chicken
& Buffalo Wings
McAdory High School
Bell Hill Rd
America's First
Federal Credit Union
CVS
McDonald's
Middle Creek
Medical Center
Bojangles' Famous
Chicken 'n Biscuits
quik cash
Piggly Wiggly McCalla

NCORE 01-073-0023

North

South

East

West


31st Ave N
28th St N
28th Alley N
28th Pl N
NCore 01-073-0023
30th Ave N
29th Alley N
Cook's Cleaners
Overcomers By Faith Church

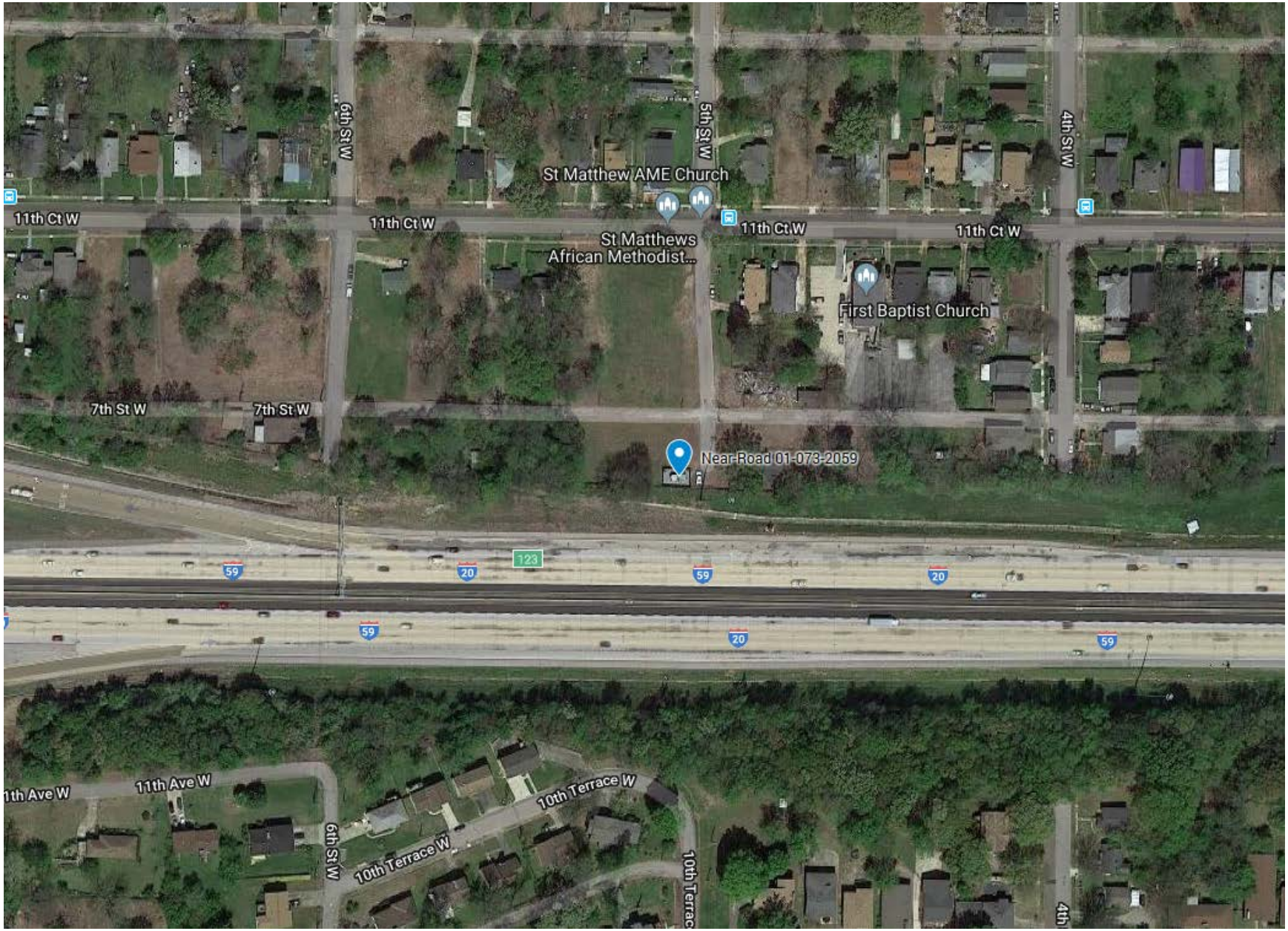
NEAR ROAD 01-073-2059

North

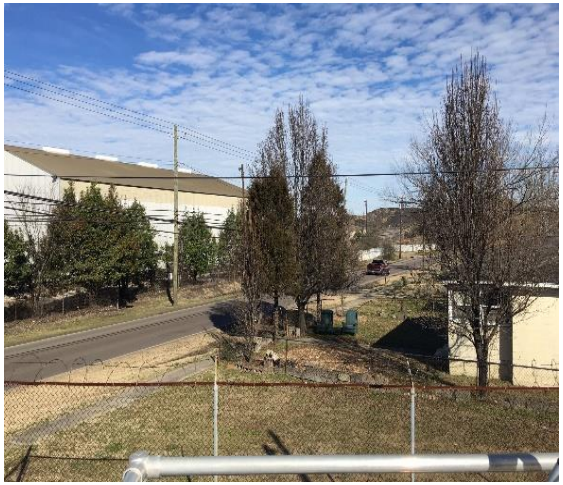
South

East

West


6th St W
5th St W
4th St W
St Matthew AME Church
11th Ct W
11th Ct W
St Matthews
African Methodist...
11th Ct W
11th Ct W
First Baptist Church
7th St W
7th St W
Near-Road 01-073-2059
59
20
123
59
20
59
20
59
11th Ave W
11th Ave W
10th Terrace W
6th St W
10th Terrace W
10th Terrac
4th

SHUTTLESWORTH 01-073-6004

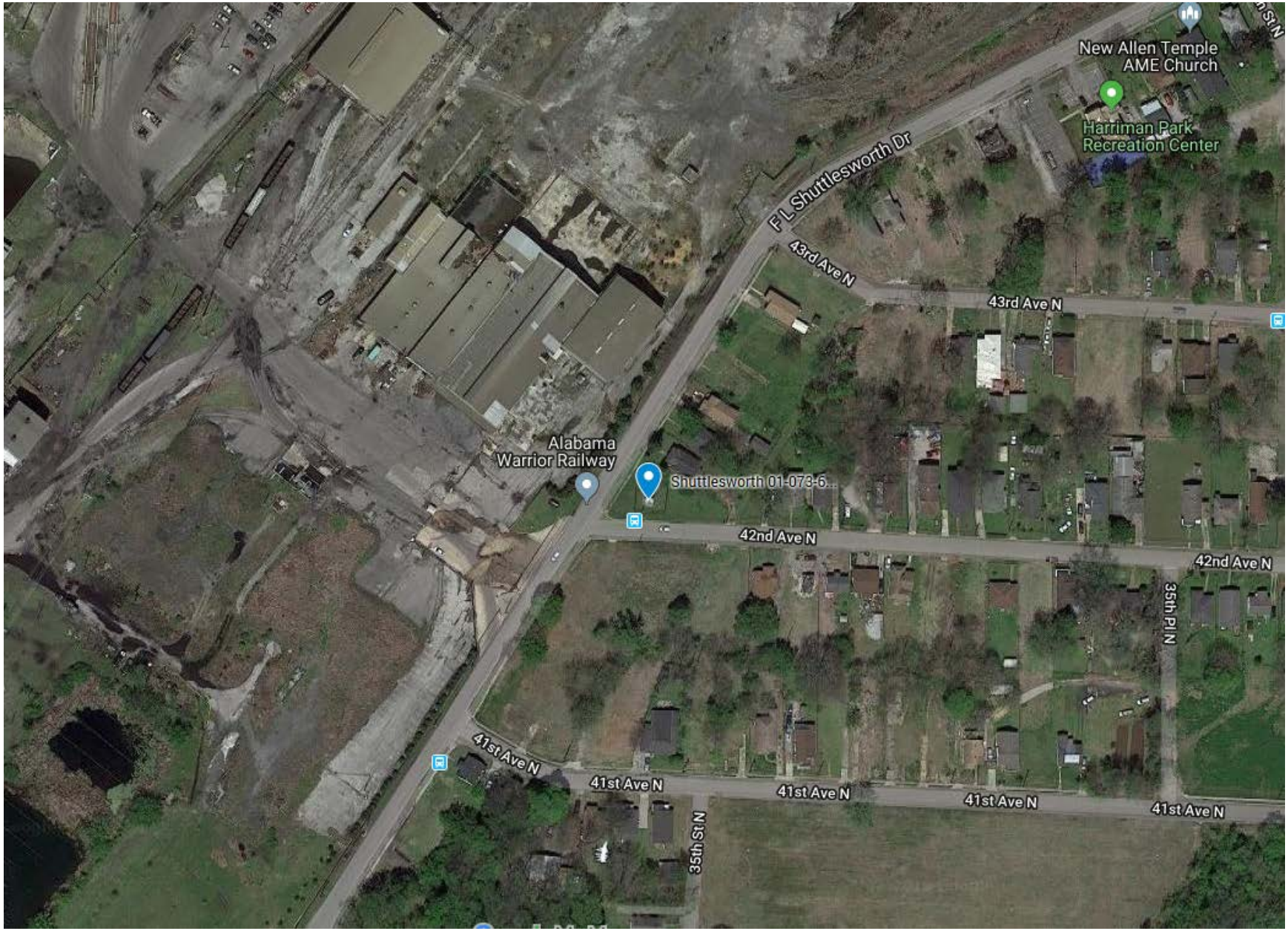


North

South

East

West


New Allen Temple
AME Church
Harriman Park
Recreation Center
F L Shuttlesworth Dr
43rd Ave N
43rd Ave N
Alabama
Warrior Railway
Shuttlesworth 01-073-6...
42nd Ave N
42nd Ave N
35th Pl N
41st Ave N
41st Ave N
41st Ave N
41st Ave N
41st Ave N
35th St N

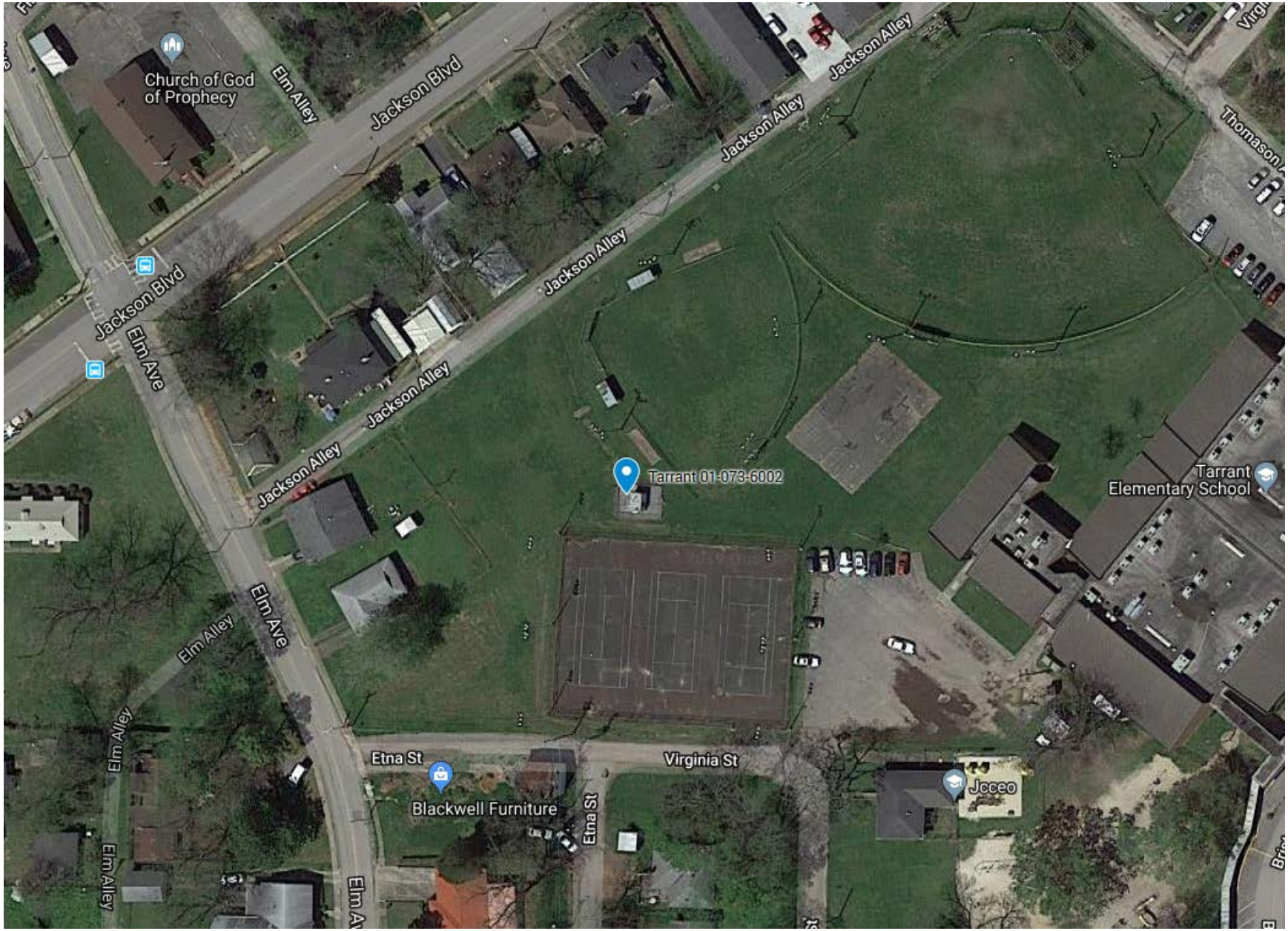
TARRANT 01-073-6002

North

South

East

West


Church of God of Prophecy
Elm Alley
Jackson Blvd
Jackson Alley
Jackson Alley
Jackson Blvd
Elm Ave
Jackson Alley
Jackson Alley
Tarrant 01-073-6002
Tarrant Elementary School
Elm Alley
Elm Ave
Elm Alley
Etna St
Virginia St
Blackwell Furniture
Etna St
Jcceo
Elm Alley

WYLAM 01-073-2003

North

South

East

West

12th Avenue Wyl
12th Avenue Wyl
12th Avenue Wyl
Jersey St
Knoxville St
Indiana St
12th Ct
Wylam, AL US
EPA CSN Site
13th Ave
13th Ave
13th Ave
14th Ave

APPENDIX II

JCDH Site Equipment List - 2020

Item Description	Manufacturer	Model	Serial Number	Condition	Location
PM Continuous Instrument	Thermo	1400A	23591	Poor	Corner
Ozone Analyzer	Teledyne	400E	2182	Fair	Corner
Zero Air Generator	Teledyne	701	4658	Good	Corner
Calibrator	Teledyne	703E	56	Good	Corner
Data Logger	ESC	8816	3548	Fair	Corner
Ozone Analyzer	Teledyne	T400	4285	Good	Fairfield
SO2 Analyzer	Teledyne	T100U	188	Good	Fairfield
CO Analyzer	Teledyne	T300U	3377	Good	Fairfield
Zero Air Generator	Teledyne	T701H	234	Good	Fairfield
Calibrator	Teledyne	T700U	168	Good	Fairfield
Data Logger	ESC	8816	2977	Fair	Fairfield
PM Manual Instrument	Mesa Labs	PQ200	1708A	Good	Leeds
PM Manual Instrument	Mesa Labs	PQ200	1497B	Good	Leeds
PM Manual Instrument	Mesa Labs	PQ200	853D	Good	Leeds
PM Manual Instrument	Mesa Labs	PQ200	864E	Good	Leeds
PM Continuous Instrument	Thermo	1405	1706	Good	Leeds
Ozone Analyzer	Teledyne	400E	1888	Fair	Leeds
Zero Air Generator	Teledyne	701	4657	Good	Leeds
Calibrator	Teledyne	703E	223	Good	Leeds
Data Logger	ESC	8832	A4690K	Good	Leeds
PM Manual Instrument	Mesa Labs	PQ200	793A	Good	McAdory
PM Continuous Instrument	Thermo	1400A	24935	Poor	McAdory
Ozone Analyzer	EcoTech	Serinus10	19-0929	Good	McAdory
Zero Air Generator	Teledyne	701	5878	Good	McAdory
Calibrator	Teledyne	703E	99	Good	McAdory
Data Logger	ESC	8816	2080	Fair	McAdory
PM Manual Instrument	Mesa Labs	PQ200	1707A	Good	NCore
PM Continuous Instrument	Teledyne	T640x	514	Good	NCore
Ozone Analyzer	Teledyne	T400	1603	Good	NCore
CO Analyzer	Teledyne	T300U	384	Good	NCore
SO2 Analyzer	Teledyne	T100U	298	Good	NCore
NOy Analyzer	Teledyne	T200U	288	Good	NCore
NOx Analyzer	Teledyne	T200UP	69	Good	NCore
Zero Air Generator	Teledyne	701H	234	Good	NCore
Calibrator	Teledyne	T700U	332	Good	NCore
Data Logger	ESC	8872	615	Good	NCore
Rain Guage	MetOne	370	P17785	Good	NCore
Ceiliometer	Vaisala	CL51	P1750410	Good	NCore
Wind Sensor	MetOne	50.5	411556	Good	NCore
Temp Sensor	MetOne	597	X11330	Good	NCore
Solar Sensor	MetOne	096-2	Py-104698	Good	NCore

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Item Description	Manufacturer	Model	Serial Number	Condition	Location
SASS	MetOne	Super Sass	A3075	Good	NCore
SASS	MetOne	Super Sass	X17961	Good	NCore
URG	MetOne	URG-300N	3N-B0160	Good	NCore
IMPROVE	-	-	BIRM1	Good	NCore
RADNET	HI-a	Hvp-4004 BL-S	16145	Good	NCore
PM Manual Instrument	BGI	PQ200	1498	Good	Near Road
CO Analyzer	Teledyne	T300U	382	Good	Near Road
NOx Analyzer	Teledyne	T200UP	83	Good	Near Road
Zero Air Generator	Teledyne	701H	750	Good	Near Road
Calibrator	Teledyne	T700U	169	Good	Near Road
Data Logger	ESC	8872	823	Good	Near Road
Wind Sensor	MetOne	50.5H	P17504	Good	Near Road
Wind Sensor	MetOne	50.5H	A5384	Good	Near Road
Solar Sensor	MetOne	LI-2001R	PY40337	Good	Near Road
Solar Sensor	MetOne	LI-2001R	PY40335	Good	Near Road
Humidity/Temp Sensor	MetOne	083D-1-35	A4745	Good	Near Road
Humidity/Temp Sensor	MetOne	083D-1-35	A4749	Good	Near Road
BP Sensor	MetOne	092	P14411	Good	Near Road
BP Sensor	MetOne	091	A5484	Good	Near Road
Rain Guage	MetOne	370	A5752	Good	Near Road
Rain Guage	MetOne	370	A5754	Good	Near Road
PM Continuous Instrument	Thermo	1400A	24075	Poor	Shuttlesworth
PM Continuous Instrument	Thermo	1405	242221809	Good	Shuttlesworth
Data Logger	ESC	8816	3552	Fair	Shuttlesworth
PM Continuous Instrument	Thermo	1405	240451712	Good	Tarrant
Ozone Analyzer	Teledyne	400E	1445	Fair	Tarrant
Zero Air Generator	Teledyne	701	5786	Good	Tarrant
Calibrator	Teledyne	703E	165	Good	Tarrant
Data Logger	ESC	8816	3550	Fair	Tarrant
PM Manual Instrument	BGI	PQ200	861A	Fair	Wylam
PM Manual Instrument	BGI	PQ200	1513B	Good	Wylam
PM Manual Instrument	BGI	PQ200	422C	Poor	Wylam
PM Continuous Instrument	Thermo	1405	441607	Good	Wylam
PM Continuous Instrument	Thermo	1405	242161809	Good	Wylam
Data Logger	ESC	8832	3604	Good	Wylam
URG	MetOne	URG-300N	B0454	Good	Wylam
SASS	MetOne	Super Sass	X22221	Good	Wylam