PG0164 AP 1719

Return to:

John Hopkins
USEPA Region III
1650 Arch Street (3LC10)
Philadelphia, PA 19103

Tax Map No.: 2620101
EPA Site ID No.: VAD003122553

ENVIRONMENTAL COVENANT

This environmental covenant is made and entered into as of the 27th day of November, 2018, by and between **ROANOKE ELECTRIC STEEL CORPORATION, d/b/a STEEL DYNAMICS ROANOKE BAR DIVISION,** whose address is 102 Westside Boulevard, Roanoke, Virginia 24017 (hereinafter referred to as the "Grantor" or "Owner"), and **ROANOKE ELECTRIC STEEL CORPORATION, d/b/a STEEL DYNAMICS ROANOKE BAR DIVISION,** whose address is 102 Westside Boulevard, Roanoke, Virginia 24017 (hereinafter referred to as the "Grantee" or "Holder"). The **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION III,** whose address is 1650 Arch Street, Philadelphia, PA 19103 (hereinafter referred to as the "Agency" or "EPA"), also joins in this environmental covenant.

This environmental covenant is executed pursuant to the Virginia Uniform Environmental Covenants Act, § 10.1-1238 *et seq*. of the Code of Virginia ("UECA"). This environmental covenant subjects the Property identified in Paragraph 1 to the activity and use limitations in this document.

1. Property Affected. The property affected by this environmental covenant is located at 102 Westside Boulevard, Roanoke, Virginia 24017, (hereinafter referred to as the "Property") and is further described as:

> Tract 1, 61.2708 Acres, bounded by corners 1, 2, 3, 6, 17, 18, 19, 20, 21, 22, 29, 30, 60, 61, 62, 63, 64, 59, 31, 32, 33, 35, 36, 37, 40, 41, 42, 44 through 53 inclusive, 4, 5 to 1 as shown on plat entitled Resubdivision Plat for Roanoke Electric Steel Corporation & Norfolk Southern Railway Company originally dated December 4, 2007, and last revised on October 10, 2017, and previously recorded in the Clerk's Office of the Circuit Court of Roanoke City, Virginia, beginning at Map Book 1, Page 3332 on March 24, 2008. See Sheets 1-8 of Exhibit A attached. Exhibit A, is a duplicate of this Resubdivision Plat with revisions as noted.
>
> and
>
> Locations 1, 2 and 3. See Sheets 9, 10, 11, and 12 of Exhibit A.

2. Description of Contamination and Remedy.

a. The Administrative Record pertaining to the environmental response project on the Property that is described in this environmental covenant is located at:

U.S. Environmental Protection Agency, Region III
Land and Chemicals Division (3LC20)
1650 Arch Street
Philadelphia, PA 19103

b. The contamination and remedy relating to the Property, including descriptions of the Property before remedy implementation; contaminants of concern; pathways of exposure; limits on exposure; location and extent of contamination; and the remedy/corrective action undertaken are described in the Final Decision and Response to Comments ("Final Decision") for the Steel Dynamics Roanoke Bar Division facility ("Facility"), 102 Westside Boulevard, Roanoke, Virginia, EPA ID No.: VAD003122553, dated August 13, 2015, attached hereto as Exhibit B.

A brief overview of the present environmental conditions summarized in the portion of the administrative record entitled Statement of Basis ("SB"), dated June 18, 2015, is as follows:

(i) Steel Dynamics, Inc., Roanoke Bar Division (formerly Roanoke Electric Steel Corporation) operates an electric arc furnace steel mill facility on parcel of property about 63 acres in size. Roanoke Electric Steel Corporation began operating the steel mill on this property in 1955. Prior to 1955 the site was used as farmland. Surrounding land uses include residential properties to the north and Norfolk Southern Railroad line and rail yard to the west, south and east.

(ii) In 1999, EPA issued an Administrative Order on Consent ("Consent Order") under Section 3008(h) of RCRA, 42 U.S.C. §6928 to Roanoke Electric Steel Corporation which requires that the Facility perform a Resource Conservation and Recovery Facility Investigation (RFI), a Corrective Measurement Study (CMS), and any interim measures at the Facility necessary to protect human health and the environment. All work requirements under the Consent Order have been met.

(iii) Under the RFI, five areas of the Facility were targeted for surface soil sampling: (1) a portion of the northwest Facility property boundary in an electric utility power easement (Power Line Right-of-Way); (2) an undeveloped residential tract located on Cherry Hill Circle owned by SDI (which abuts the residential properties located to the northwest of the Facility); (3) the Baghouse Area; (4) the power substation located at the north end of the property; and (5) the closed Aboveground Storage Tank (AST) perimeter.

(iv) For the Baghouse Area, soil contaminant concentrations above the Regional Screening Levels (RSLs) for residential soil included: aluminum, antimony, cadmium, copper, iron, lead, manganese, thallium, and vanadium. Arsenic was the only metal that exceeded its RSL for industrial soils at a maximum detection of 23.60 mg/kg (RSL for industrial soils of 3 .0 mg/kg). The Power Line Right-of-Way also contained an arsenic concentration of 8.8 mg/kg above the RSL for industrial soil. While these numbers are higher than the industrial RSL of 3.0 mg/kg for

arsenic, they still fall within background soil ranges for arsenic, which typically range from 1 to 40 mg/kg. Arsenic is not used in the making of steel, therefore concentrations in soil would be from natural occurring conditions. Manganese concentrations exceeded the RSL for residential soil, but did not exceed the industrial level and were further investigated (Section 3.3). The Cherry Hill Circle parcel had one soil sample (SS42) for manganese (1870 mg/kg) that exceeded the residential RSL of 1,800 mg/kg.

(v) Under the RFI, two additional groundwater monitoring wells were installed at the Facility in March of 2001. One well (MW-12) was installed in the vicinity of a closed former settling pond, south of where Peters Creek and Miller Street intersect at the southeastern boundary of the Facility. A monitoring well, MW-13, was also installed near the former maintenance shop which is southeast of the melt shop. Eight existing monitoring wells, numbered MW-1, MW-2, MW-3, MW-4, MW-7, MW-9, MW-10 and MW-11 were installed prior to the EPA Consent Order.

(vi) For groundwater, manganese was the primary Constituent of Concern (COCs), exceeding the RSL of 430 ug/L for tap water for MW-11 at 3,280 ug/L and MW-12 at 1,020 ug/L. In September 2002, a second round of sampling was conducted at monitoring wells MW-3, MW-7, MW-11, MW-12 and MW-13. Manganese concentrations in MW-11 and MW-12 exceeded the RSL for tap water at 1,600 ug/L and 2,400 ug/L respectively.

(vii) In 2015, EPA issued a Final Decision and Response to Comments, in which it selected a remedy for the Property. The final remedy for the Property consists of the following components: 1) natural attenuation; 2) performance and maintenance of a groundwater monitoring program; and 3) land and groundwater use restrictions implemented through institutional controls (ICs).

3. Activity and Use Limitations

a. The Property is subject to the following activity and use limitations, which shall run with the land and become binding on Grantor and any successors, assigns, tenants, agents, employees, and other persons under its (their) control, until such time as this covenant may terminate as provided by law:

(i) The Property use shall be restricted to commercial and/or industrial purposes and shall not include residential purposes unless it is demonstrated to EPA, in consultation with the Virginia Department of Environmental Quality ("DEQ"), that such use will not pose a threat to human health or the environment or adversely affect or interfere with the selected remedy and EPA, in consultation with DEQ, provides prior written approval for such use;

(ii) All earth-moving activities, including excavation, drilling, and construction activities, in known contaminated areas at the Property, described as Locations 1, 2 and 3, in Exhibit A, where any contaminants remain in soils above EPA Region III's Screening levels for Industrial Soils or in groundwater above their maximum contaminant levels (MCLs) or EPA Region III's Tap Water Regional Screening Levels shall be conducted in accordance with the Materials Management Plan (MMP) approved by the EPA, in consultation with DEQ, specifying protocols for soil and groundwater which will be created for all earth moving activities. The approved MMP can be found within the EPA's Administrative Record.

(iii) Groundwater at the Property shall not be used for any purpose other than for the facility's operation and maintenance and in addition for monitoring activities required by DEQ and/or EPA, unless it is demonstrated to EPA in consultation with DEQ, that such use will not pose a threat to human health or the environment or adversely affect or interfere with the final remedy and EPA provides prior written-approval for such use.

(iv) No new wells shall be installed on Property unless it is demonstrated to EPA, in consultation with DEQ, that such wells are necessary to implement the final remedy and EPA provides prior written approval to install such wells, except for those wells that may be required to maintain facility operations related to non-potable groundwater use and are allowed under the preceding paragraph.

(v) The Property shall not be used in a way that will adversely affect or interfere with the integrity and protectiveness of the remedy selected in the Final Decision.

b. Geographic coordinate lists and polygons defining the boundary of activity and use restrictions listed above in as i, iii, iv and v are set forth in Exhibit A, as shown below:

Location ID	Latitude	Longitude
1	37.2720188	-80.0066537
2	37.2722170	-80.0063416
3	37.2709333	-80.0036877
6	37.2710791	-80.0024035
17	37.2728200	-80.0003384
18	37.2730507	-80.0006384
19	37.2731102	-80.0005667
20	37.2734447	-80.0002753
21	37.2735163	-80.0000553
22	37.2738290	-79.9996673
29	37.2742560	-79.9998510
30	37.2744297	-80.0003496
60	37.2745609	-80.0003560

Location ID	Latitude	Longitude
33	37.2749943	-79.9997783
35	37.2768065	-79.9981156
36	37.2761172	-79.9978387
37	37.2761381	-77.9977569
40	37.2759307	-79.9976736
41	37.2760758	-79.9972458
42	37.2758195	-79.9971364
44	37.2762458	-79.9958686
45	37.2766032	-79.9947631
46	37.2767984	-79.9941709
47	37.2776372	-79.9938425
48	37.2756854	-79.9928483
49	37.2753863	-79.9935791

61	37.2746164	-80.0005856
62	37.2748080	-80.0005953
63	37.2748308	-80.0007032
64	37.2749635	-80.0006592
59	37.2749030	-80.0003727
31	37.2750609	-80.0003804
32	37.2749830	-80.0001450

50	37.2741855	-79.9963248
51	37.2740246	-79.9966318
52	37.2713526	-79.9992097
53	37.2708424	-79.9997497
4	37.270115	-80.002008
5	37.2702606	-80.003019
1	37.2720188	-80.0066537

And the three (3) boundaries of activity and use restrictions listed above as ii are set forth in Exhibit A, as shown below:

Location 1

Point	Latitude	Longitude
A	37.2734011	-79.9972334
B	37.2732896	-79.9970524
C	37.2731838	-79.9971996
D	37.2730738	-79.9973417
E	37.2729595	-79.9974785

Point	Latitude	Longitude
F	37.2728206	-79.9976296
G	37.2726786	-79.9977762
H	37.2725337	-79.9979183
J	37.2719286	-79.9985021
K	37.2719873	-79.9985974

Location 2

Point	Latitude	Longitude
A	37.2710791	-80.0024035
B	37.2716173	-80.0017651

Point	Latitude	Longitude
C	37.2714567	-80.0015531
D	37.2709185	-80.0021915

Location 3

Point	Latitude	Longitude
B	37.2735857	-80.0000055
C	37.2737210	-80.0001763

Point	Latitude	Longitude
D	37.2738575	-80.0000070
E	37.2737222	-79.9998361

4. Notice of Limitations in Future Conveyances. Each instrument hereafter conveying any interest in the Property subject to this environmental covenant shall contain a notice of the activity and use limitations set forth in this environmental covenant and shall provide the recorded location of this environmental covenant.

5. Compliance and Use Reporting.

a. By the end of March 2019 and every five (5) years thereafter, following the Agency's approval of this environmental covenant until the specified remediation standards are met and the Agency agrees in writing that reporting is no longer required and whenever else requested in writing by the Agency, the then current owner of the Property shall submit, to the Agency, DEQ, and any Holder listed in the Acknowledgments below, written documentation stating whether or not the activity and use limitations in this environmental covenant are being observed. This documentation shall be signed by a licensed professional engineer who has inspected and investigated compliance with this environmental covenant.

b. In addition, within one (1) month after any of the following events, the then current owner of the Property shall submit, to the Agency, DEQ, and any Holder listed in the Acknowledgments below, written documentation describing the following: noncompliance with the activity and use limitations in this environmental covenant; transfer of the Property; changes in use of the Property; or filing of applications for building permits for the Property and any proposals for any site work, if such building or proposed site work will affect the contamination on the Property subject to this environmental covenant.

6. Access by the Agency and Holder. In addition to any rights already possessed by the Holder and the Agency, this environmental covenant grants to the Holder, the Agency, and the DEQ a right of reasonable access to the Property in connection with implementation, inspection, or enforcement of this Environmental Covenant.

7. Recording and Proof & Notification.

a. Within ninety (90) days after the date of the Agency's approval of this UECA environmental covenant, the Owner shall record, or cause to be recorded, this environmental covenant with the Clerk of the Circuit Court of Roanoke City, Virginia, wherein the Property is located. The Owner shall likewise record, or cause to be recorded, any amendment, assignment, or termination of this UECA environmental covenant with the applicable Clerk(s) of the Circuit Court within 90 days of their execution. Any UECA environmental covenant, amendment, assignment, or termination recorded outside of these periods shall be invalid and of no force and effect.

b. The Owner shall send a file-stamped or certified copy of this environmental covenant, and of any amendment, assignment, or termination, to the Agency and DEQ within sixty (60) days of recording. Within that time period, the Owner also shall send a file-stamped copy to the chief administrative officer of each locality in which the Property is located, any persons who are in possession of the Property who are not the Owners, any signatories to this covenant not previously mentioned, and any other parties to whom notice is required pursuant to the Uniform Environmental Covenants Act.

8. Termination or Amendment. This environmental covenant shall run with the land and be binding on the owner(s) thereof until such time as it is terminated or amended (including assignment) in accordance with UECA.

9. Enforcement of Environmental Covenant. This environmental covenant shall be enforced in accordance with § 10.1-1247 of the Code of Virginia.

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PG 0171 AP 1719

ACKNOWLEDGEMENTS:

GRANTOR

ROANOKE ELECTRIC STEEL CORPORATION d/b/a Steel Dynamics Roanoke Bar Division, Grantor

Date

By (signature): T. Joe Crawford

Name (printed): T. JOE CRAWFORD

Title: VP + GM

COMMONWEALTH OF VIRGINIA

CITY OF ROANOKE

On this 22 day of March, 2019, before me, the undersigned officer, personally appeared Roanoke Electric Steel Corporation, d/b/a Steel Dynamics Roanoke Bar Division, a Virginia corporation, who acknowledged himself/herself to be the person whose name is subscribed to this environmental covenant, and acknowledged that s/he freely executed the same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

My commission expires: March 31ST 2021

Registration #: 364846

W. HEYDON LEWIS NOTARY REG. #364846 PUBLIC COMMONWEALTH OF VIRGINIA

Notary Public

HOLDER

ROANOKE ELECTRIC STEEL CORPORATION d/b/a Steel Dynamics Roanoke Bar Division, Grantee

Date

By (signature): T. Joe Crawford

Name (printed): T. JOE CRAWFORD

Title: VP + GM

COMMONWEALTH OF VIRGINIA

CITY OF ROANOKE

On this 22 day of March, 2019, before me, the undersigned officer, personally appeared Roanoke Electric Steel Corporation, d/b/a Steel Dynamics Roanoke Bar Division, a Virginia corporation, who acknowledged himself/herself to be the person whose name is subscribed to this environmental covenant, and acknowledged that s/he freely executed the same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

My commission expires: March 31ST 2021

Registration #: 364846

Notary Public

W. HEYDON LEWIS NOTARY REG. #364846 PUBLIC COMMONWEALTH OF VIRGINIA

AGENCY

APPROVED by the U.S. Environmental Protection Agency, Region III as required by § 10.1-1238 et seq. of the Code of Virginia.

Date

By (signature): John A Armstead
Name (printed): John A Armstead
Title: Director, LCD

SEEN AND RECEIVED by the Department of Environmental Quality

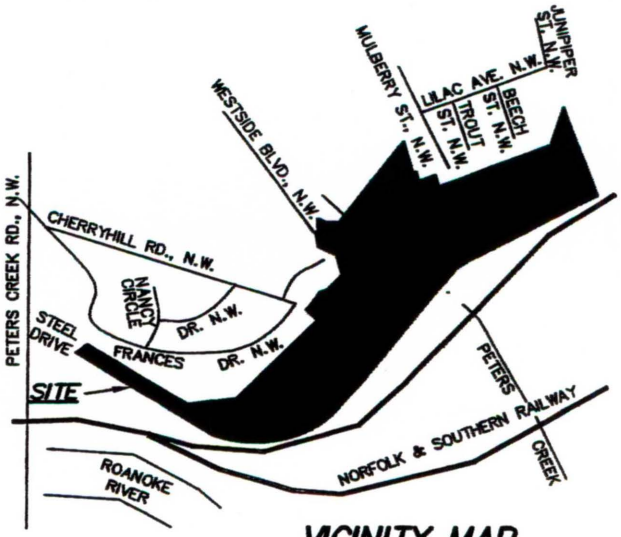
Date 4/10/2019

By (signature):
Name (printed): Brett Fisher
Title: CERCLA Program Manager

EXHIBIT A

Exhibit for Steel Dynamics, Inc.
Last revised October 10, 2017

PG 0176 AP 1719



VICINITY MAP
NO SCALE

COMMONWEALTH OF VIRGINIA
FRANK B. CALDWELL,III
LIC. NO. 1335
10 OCT 17
LAND SURVEYOR

EXHIBIT
FOR

STEEL DYNAMICS INC.

SHOWING EPA RCRA RESTRICTED USE PLOTS ON TRACT 1, RESUBDIVISION PLAT FOR ROANOKE ELECTRIC STEEL CORPORATION AND NORFOLK SOUTHERN RAILWAY COMPANY (M.B. 1, PG. 3332–3337) AND LOT 9, SECTION 3, CHEERYHILL PARK (P.B. 4, PG. 54).

SITUATE WESTSIDE BOULEVARD, N.W.
CITY OF ROANOKE, VIRGINIA

CWA
CALDWELL WHITE ASSOCIATES
ENGINEERS / SURVEYORS / PLANNERS
4203 MELROSE AVENUE, NW
P.O. BOX 6260
ROANOKE, VIRGINIA 24017
(540) 366-3400 FAX: (540) 366-8702

REV: OCTOBER 10, 2017 (EPA COMMENTS)
REV: SEPTEMBER 12, 2017 (EPA COMMENTS)
REV: AUGUST 29, 2017 (ADDED STATE PLANE COORDINATES)
TAX No. 6021103, 6021009
DATE: NOVEMBER 2, 2016
CALC. JW CHK'D FBC
CLOSED: JW

SHEET 1 OF 12

SCALE: AS
N.B.: SDI
DRAWN: J
W.O.: 16–

Exhibit A

KNOW ALL MEN BY THESE PRESENTS TO WIT:

THAT ROANOKE ELECTRIC STEEL CORPORATION IS THE FEE SIMPLE OWNER OF THE PARCEL OF LAND SHOWN HEREON, BOUNDED ON THE OUTSIDE BY CORNERS 3, 6 THROUGH 16 INCLUSIVE TO 3, AND BEING ALL OF THE LAND CONVEYED TO SAID OWNER BY DEED DATED APRIL 26, 1955 AND RECORDED IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF THE COUNTY OF ROANOKE, VIRGINIA IN D.B. 529, PG. 79.

THAT ROANOKE ELECTRIC STEEL CORPORATION IS THE FEE SIMPLE OWNER OF THE PARCEL OF LAND SHOWN HEREON, BOUNDED ON THE OUTSIDE BY CORNERS 17 THROUGH 24 INCLUSIVE, 7 TO 17, AND BEING A PORTION OF THE LAND CONVEYED TO SAID OWNER BY DEED DATED DECEMBER 2, 1964 AND RECORDED IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF THE COUNTY OF ROANOKE, VIRGINIA IN D.B. 760, PG. 62.

THAT ROANOKE ELECTRIC STEEL CORPORATION IS THE FEE SIMPLE OWNER OF THE PARCEL OF LAND SHOWN HEREON, BOUNDED ON THE OUTSIDE BY CORNERS 25, 26, 27, 8, 28 TO 25, AND BEING A PORTION OF THE LAND CONVEYED TO SAID OWNER BY DEED DATED DECEMBER 2, 1964 AND RECORDED IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF THE COUNTY OF ROANOKE, VIRGINIA IN D.B. 760, PG. 62.

THAT ROANOKE ELECTRIC STEEL CORPORATION IS THE FEE SIMPLE OWNER OF THE PARCEL OF LAND SHOWN HEREON, BOUNDED ON THE OUTSIDE BY CORNERS 52, 29, 30, 54, 55, 56, 23 TO 22, AND BY CORNERS 31, 32, 33, 34, 35, 25, 57, 58, 59 TO 31, AND BEING ALL OF THE LAND CONVEYED TO SAID OWNER BY DEED DATED MARCH 4, 1965 AND RECORDED IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF THE COUNTY OF ROANOKE, VIRGINIA IN D.B. 765, PG. 457.

THAT ROANOKE ELECTRIC STEEL CORPORATION IS THE FEE SIMPLE OWNER OF THE PARCEL OF LAND SHOWN HEREON, BOUNDED ON THE OUTSIDE BY CORNERS 33, 35 THROUGH 39 INCLUSIVE, 8, 27, 34 TO 33, AND BEING ALL OF THE LAND CONVEYED TO SAID OWNER BY DEED DATED NOVEMBER 2, 1964 AND RECORDED IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF THE CITY OF ROANOKE, VIRGINIA IN D.B. 1167, PG. 445.

THAT ROANOKE ELECTRIC STEEL CORPORATION IS THE FEE SIMPLE OWNER OF THE PARCEL OF LAND SHOWN HEREON, BOUNDED ON THE OUTSIDE BY CORNERS 38, 40 THROUGH 43 INCLUSIVE TO 38, AND BEING ALL OF THE LAND CONVEYED TO SAID OWNER BY DEED DATED NOVEMBER 20, 1974 AND RECORDED IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF THE CITY OF ROANOKE, VIRGINIA IN D.B. 1362, PG. 28.

THAT ROANOKE ELECTRIC STEEL CORPORATION IS THE FEE SIMPLE OWNER OF THE PARCEL OF LAND SHOWN HEREON, BOUNDED ON THE OUTSIDE BY CORNERS 43 THROUGH 50 INCLUSIVE TO 43, PLAT OF SURVEY SHOWING THE SUBDIVISION AND CONVEYANCE OF A 18.884 ACRE TRACT, M.B. 1, PG. 476, AND BEING ALL OF THE LAND CONVEYED TO SAID OWNER BY DEED DATED FEBRUARY 13, 1985 AND RECORDED IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF THE CITY OF ROANOKE, VIRGINIA IN D.B. 1526, PG. 1577.

THAT ROANOKE ELECTRIC STEEL CORPORATION IS THE FEE SIMPLE OWNER OF THE PARCEL OF LAND SHOWN HEREON, BOUNDED ON THE OUTSIDE BY CORNERS 8, 36, 43, 50, 51, 13, 12, 11, 10, 9 TO 8, AND BEING ALL OF THE LAND CONVEYED TO SAID OWNER BY DEED DATED SEPTEMBER 15, 1965 AND RECORDED IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF THE COUNTY OF ROANOKE, VIRGINIA IN D.B. 788, PG. 480.

THAT ROANOKE ELECTRIC STEEL CORPORATION IS THE FEE SIMPLE OWNER OF THE PARCEL OF LAND SHOWN HEREON, BOUNDED ON THE OUTSIDE BY CORNERS 4, 16, 15, 14, 13, 31, 52, 53 TO 4, AND BEING ALL OF THE LAND CONVEYED TO SAID OWNER BY DEED DATED MARCH 4, 1975 AND RECORDED IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF THE COUNTY OF ROANOKE, VIRGINIA IN D.B. 1018, PG. 143.

THAT ROANOKE ELECTRIC STEEL CORPORATION IS THE FEE SIMPLE OWNER OF THE PARCEL OF LAND SHOWN HEREON, CONTAINING 18.6 ACRES, AND BEING ALL OF THE LAND CONVEYED TO SAID OWNER BY INSTRUMENT DATED AUGUST 31, 2006 AND RECORDED IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF THE CITY OF ROANOKE, VIRGINIA IN INSTRUMENT # 060013834, AND DEED OF CORRECTION AND QUITCLAIM DATED APRIL 10, 2008 AND RECORDED IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF THE CITY OF ROANOKE, VIRGINIA IN INSTRUMENT # 080004977..

THAT NORFOLK SOUTHERN RAILWAY COMPANY (FORMERLY NORFOLK & WESTERN RAILWAY COMPANY) ACQUIRED A PARCEL OF LAND SHOWN HEREON, BOUNDED ON THE OUTSIDE BY CORNERS 1 THROUGH 5 INCLUSIVE TO 1, BEING A PORTION OF PARCEL 21 AS SHOWN ON NORFOLK & WESTERN RAILWAY COMPANY VALUATION MAP V-10-10, AND WAS A PORTION OF THE LAND CONVEYED TO NORFOLK & WESTERN RAILWAY COMPANY BY DEED DATED JULY 5, 1918 AND RECORDED IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF THE COUNTY OF ROANOKE, VIRGINIA IN D.B. 90, PG. 245. SAID PARCEL WAS CONVEYED TO ROANOKE ELECTRIC STEEL CORPORATION BY DEED DATED FEBRUARY 5, 1997 BUT WAS NOT RECORDED IN THE OFFICE OF THE CLERK OF THE CIRCUIT COURT OF THE CITY OF ROANOKE UNTIL NOVEMBER 29, 2007 AS INSTRUMENT # 070018197.

THE SAID OWNERS HEREBY CERTIFY THAT THEY HAVE SUBDIVIDED THE LANDS SHOWN HEREON ENTIRELY OF THEIR OWN FREE WILL AND ACCORD AS REQUIRED BY SECTION 15.2-2240 THROUGH 15.2-2279 OF THE 1950 CODE OF VIRGINIA AS AMENDED TO DATE, AND AS REQUIRED BY THE CITY OF ROANOKE, VIRGINIA SUBDIVISION ORDINANCE AS AMENDED TO DATE.

WITNESS THE SIGNATURES AND SEALS OF SAID OWNERS:

C. William Harrison, Jr. 4/9/08
ROANOKE ELECTRIC STEEL CORPORATION - AUTHORIZED AGENT DATE
(D.B. 1167, PG. 445; D.B. 1362, PG. 28; D.B. 1526, PG. 1577; INSTRUMENT # 060013834; INSTRUMENT # 070018197; INSTRUMENT # 080004977 - CITY OF ROANOKE) - (D.B. 529, PG. 79; D.B. 760, PG. 62; D.B. 765, PG. 457; D.B. 788, PG. 480; D.B. 1018, PG. 143 - COUNTY OF ROANOKE)

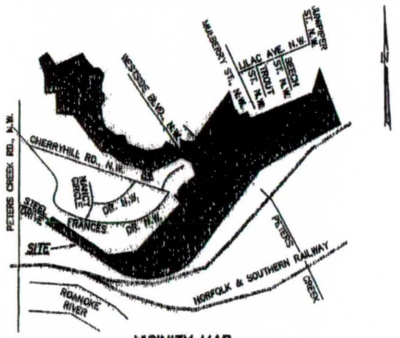
Dawn J. Walker NOTARY PUBLIC

COORDINATE LIST
(ASSUMED DATUM)

CORNER	NORTHING	EASTING
1	5000.0000	5000.0000
2	5060.5811	5088.9239
3	4502.7875	5808.6022
6	4810.0771	6185.9610
17	5086.2449	6859.4025
18	5160.2134	6888.7595
19	5179.1945	6808.3019
20	5289.7680	6905.2491
21	5307.8433	6971.9737
22	5402.1712	7097.8550
29	5567.9833	7083.6961
30	5618.3594	6927.3776
60	5696.0158	6931.3301
61	5726.1947	6887.4600
62	5793.7619	6873.1961
63	5805.8160	5805.8160
64	5852.2429	6881.5683
59	5820.2313	6941.6320
31	5877.5943	6946.3895
32	5841.0850	7010.9400
33	5832.2262	7117.3519
35	6428.3966	7677.6938
36	6169.4697	7727.1622
37	8174.7612	7751.7181
40	8098.2802	7766.8013
41	8133.8623	7898.5846
42	8037.0644	7918.8369
44	8146.3175	8301.8448
45	8236.4292	8836.6987
46	8286.0621	8818.8589
47	8577.5961	8948.4980
48	9837.0840	9148.3206
49	9784.8003	8925.0595
50	5417.8798	8078.9643
51	5370.5460	7983.1816
52	4495.9998	7120.4775
53	4330.7166	6941.9379

COORDINATE LIST
(ASSUMED DATUM)

CORNER	NORTHING	EASTING
4	4146.1299	6259.0658
5	4236.0474	5971.9778
7	5000.0080	4999.9940
7	5401.5656	7285.4285
8	5892.7808	7510.4952
9	5588.9743	7557.1283
10	5481.5834	7506.2933
11	5408.1229	7580.1149
12	5300.5114	7681.1373
13	5278.8844	7771.3961
14	4955.6979	7059.9752
15	4397.8013	6889.7374
16	4277.7583	6092.8281
23	5583.2404	7281.1219
24	5524.4359	7368.8213
25	5818.8967	7318.0281
26	5636.3632	7336.4168
27	5633.4965	7341.8352
28	5562.9218	7401.2084
34	5702.3167	7211.7988
38	6000.6298	7784.8715
39	5972.0170	7680.6581
43	6030.6656	7894.2862
54	5768.1082	8937.3092
55	5720.1147	7057.3606
56	5871.3086	7149.4742
57	5713.0408	7177.3181
58	5766.5467	7075.9078
65	5814.5289	6821.2137
66	5790.4456	6808.3514
67	5816.7039	6763.8015
68	5842.8161	6779.9157
69	5878.4689	6744.1539
70	5803.6308	6674.0201



VICINITY MAP
NO SCALE

APPROVED:

AGENT, ROANOKE CITY PLANNING COMMISSION — 5/12/08 DATE

CITY ENGINEER, ROANOKE, VIRGINIA — 5.9.08 DATE

IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF THE CITY OF ROANOKE, VIRGINIA, THIS MAP WAS PRESENTED WITH THE CERTIFICATE OF ACKNOWLEDGEMENT THERETO ATTACHED ADMITTED TO RECORD AT 2:22 O'CLOCK P M. ON THIS 12th DAY OF May, 2008.

TESTE: BRENDA HAMILTON, CLERK
BY: DEPUTY CLERK

NORFOLK SOUTHERN RAILWAY COMPANY - AUTHORIZED AGENT (D.B. 90, PG. 245 - COUNTY OF ROANOKE) — 5/9/08 DATE

William A. Gerber Property Manager
AUTHORIZED AGENT - PRINT NAME - TITLE

STATE OF VIRGINIA
City OF Roanoke
TO WIT:
I, Frank B. Caldwell, III, A NOTARY PUBLIC IN AND FOR THE AFORESAID STATE DO HEREBY CERTIFY THAT William A. Gerber, WHOSE NAME IS SIGNED TO THE FOREGOING WRITING HAS PERSONALLY APPEARED BEFORE ME AND ACKNOWLEDGED THE SAME IN MY AFORESAID JURISDICTION ON THIS 9th DAY OF May, 2008.
MY COMMISSION EXPIRES 31 March 2011
Frank B. Caldwell, III — NOTARY PUBLIC — 110696 NOTARY REGISTRATION NUMBER

COMMONWEALTH OF VIRGINIA — FRANK B. CALDWELL, III — LIC. NO. 1335 — 31 March 2011 — LAND SURVEYOR

STATE OF VIRGINIA
City OF Roanoke
TO WIT:
I, Carolyn D. Walker, A NOTARY PUBLIC IN AND FOR THE AFORESAID STATE DO HEREBY CERTIFY THAT C. William Harrison, Jr., WHOSE NAME IS SIGNED TO THE FOREGOING WRITING HAS PERSONALLY APPEARED BEFORE ME AND ACKNOWLEDGED THE SAME IN MY AFORESAID JURISDICTION ON THIS 9th DAY OF April, 2008.

RESUBDIVISION PLAT
FOR

ROANOKE ELECTRIC STEEL CORPORATION & NORFOLK SOUTHERN RAILWAY COMPANY

SHOWING THE CONSOLIDATION OF TAX PARCELS 6021103 (D.B. 529, PG. 79 - ROANOKE COUNTY), 6021101 & 6021105 (D.B. 760, PG. 62 - ROANOKE COUNTY), 6021102 (D.B. 765, PG. 457 - ROANOKE COUNTY), 2720111 (D.B. 1167, PG. 445), 2720115 (D.B. 1362, PG. 28), 2820101 (D.B. 1526, PG. 1577), 6021104 (D.B. 788, PG. 480 - ROANOKE COUNTY), 6021107 (D.B. 1018, PG. 143 - ROANOKE COUNTY), 0.1077 ACRE CONVEYED FROM TAX PARCEL 6021106 (INSTRUMENT # 060013834), 3.4384 ACRES CONVEYED FROM NORFOLK & WESTERN RAILWAY COMPANY TO ROANOKE ELECTRIC STEEL CORPORATION (INSTRUMENT # 070018197) & THE CLOSURE OF A PORTION OF WESTSIDE BLVD., N.W. BY ORDINANCE # 38003-012208, AND THE DEDICATION OF 1,469 SQ. FEET FROM TAX PARCEL 6021106 (INSTRUMENT #060013834, INSTRUMENT # 080004977) TO THE CITY OF ROANOKE FOR RIGHT-OF-WAY
CREATING HEREON

TRACT 1 61.2708 ACRES
TAX PARCEL 6021106 18.4586 ACRES

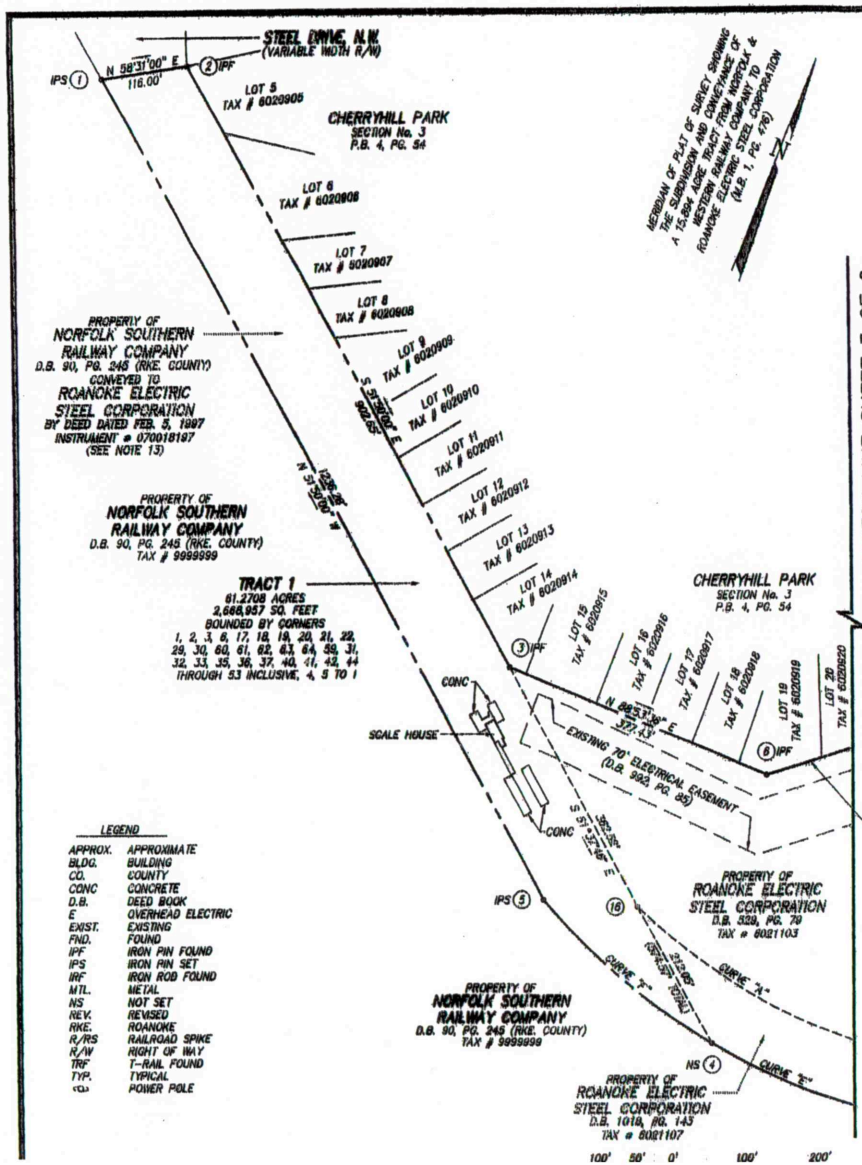
SITUATE WESTSIDE BOULEVARD, N.W.
CITY OF ROANOKE, VIRGINIA

CWA
CALDWELL WHITE ASSOCIATES
ENGINEERS / SURVEYORS / PLANNERS
4880 KIRKNER AVENUE, NW — P.O. BOX 6966
ROANOKE, VIRGINIA 24017
(540) 366-3490 — FAX: (540) 366-8702

REVISED: MAR. 24, 2008
PER CITY COMMENTS
TAX Nos. 6021101, 2, 3, 4, 5, 6, 7, 2820101, 2720111, 5

SCALE: 1"= 100'

PG 0177 AP 1719



LEGEND

APPROX.	APPROXIMATE
BLDG.	BUILDING
CO.	COUNTY
CONC	CONCRETE
D.B.	DEED BOOK
E	OVERHEAD ELECTRIC
EXIST.	EXISTING
FND.	FOUND
IPF	IRON PIN FOUND
IPS	IRON PIN SET
IRF	IRON ROD FOUND
MTL.	METAL
NS	NOT SET
REV.	REVISED
RKE.	ROANOKE
R/RS	RAILROAD SPIKE
R/W	RIGHT OF WAY
TRF	T-RAIL FOUND
TYP.	TYPICAL
	POWER POLE

NOTES:

1. THIS PLAT WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT BY A LICENSED ATTORNEY. THERE MAY EXIST ENCUMBRANCES NOT SHOWN WHICH AFFECT THE SUBJECT PROPERTY.
2. THE SUBJECT PROPERTY LIES WITHIN ZONES "AE" AND "X" AS SHOWN ON THE FEMA FLOOD INSURANCE RATE MAP NO. 51161C0163G, DATED SEPTEMBER 28, 2007.
3. REFERENCE: PLAT OF SURVEY SHOWING THE SUBDIVISION AND CONVEYANCE OF A 15.894 ACRE TRACT BEING CONVEYED FROM NORFOLK AND WESTERN RAILWAY COMPANY TO ROANOKE ELECTRIC STEEL CORPORATION BY T.P. PARKER & SON ENGINEERS AND SURVEYORS, LTD., DATED APRIL 25, 1985, RECORDED IN M.B. 1, PG. 476.
4. REFERENCE: MAP OF SECTION NO. 3 CHERRYHILL PARK BY T.P. PARKER, DATED FEBRUARY 25, 1960, RECORDED IN P.B. 4, PG. 54 (ROANOKE COUNTY).
5. REFERENCE: PLAT SHOWING PORTION OF PROPERTY OF CONCRETE READY-MIXED CORPORATION TO BE CONVEYED TO ROANOKE ELECTRIC STEEL CORPORATION BY DAVID DICK & HARRY A. WALL CIVIL ENGINEERS & SURVEYORS, DATED OCTOBER 31, 1964, RECORDED IN D.B. 1167, PG. 448.
6. REFERENCE: SURVEY PLAT FOR ROANOKE ELECTRIC STEEL CORPORATION SHOWING A PORTION OF THE PROPERTIES OF NORFOLK SOUTHERN CORPORATION BY MATTERN & CRAIG, INC., DATED NOVEMBER 19, 1998, UNRECORDED.
7. THIS PLAT IS BASED ON A CURRENT FIELD SURVEY.
8. THE RECORDATION OF THIS PLAT OF SUBDIVISION DOES NOT CONSTITUTE A CONVEYANCE OF LAND. ANY LOT, PARCEL OR TRACT OF LAND SHOWN HEREON THAT IS INTENDED FOR SALE AND/OR CONVEYANCE MUST BE CONVEYED BY DEED AND SAID DEED MUST BE RECORDED IN THE OFFICE OF THE CLERK OF CIRCUIT COURT OF THE CITY OF ROANOKE.
9. NORFOLK & WESTERN RAILWAY COMPANY WAS CHANGED TO NORFOLK SOUTHERN RAILWAY COMPANY BY CORPORATE RESOLUTION DATED SEPTEMBER 1, 1998.
10. IRON PINS ARE IN PLACE AT ALL PROPERTY CORNERS UNLESS OTHERWISE NOTED.
11. A PORTION OF WESTSIDE BOULEVARD, N.W. IS CLOSED BY ORDINANCE # 38003-012208, DATED JANUARY 22, 2008.
12. REFERENCE OF PROPERTY CONVEYANCE:
    - D.B. 329, PG. 79 (ROANOKE COUNTY), BEING TAX PARCEL 6021103 CONVEYED TO ROANOKE ELECTRIC STEEL CORPORATION
    - D.B. 760, PG. 62 (ROANOKE COUNTY), BEING TAX PARCELS 6021101 & 6021105 CONVEYED TO ROANOKE ELECTRIC STEEL CORPORATION
    - D.B. 765, PG. 457 (ROANOKE COUNTY), BEING TAX PARCEL 6021102 CONVEYED TO ROANOKE ELECTRIC STEEL CORPORATION
    - D.B. 1167, PG. 445, BEING TAX PARCEL 2720111 CONVEYED TO ROANOKE ELECTRIC STEEL CORPORATION
    - D.B. 1382, PG. 26, BEING TAX PARCEL 2720115 CONVEYED TO ROANOKE ELECTRIC STEEL CORPORATION
    - D.B. 1526, PG. 1577, BEING TAX PARCEL 2620101 CONVEYED TO ROANOKE ELECTRIC STEEL CORPORATION
    - D.B. 788, PG. 480 (ROANOKE COUNTY), BEING TAX PARCEL 6021104 CONVEYED TO ROANOKE ELECTRIC STEEL CORPORATION
    - D.B. 1018, PG. 143 (ROANOKE COUNTY), BEING TAX PARCEL 6021107 CONVEYED TO ROANOKE ELECTRIC STEEL CORPORATION
    - INSTRUMENT # 080013834 BEING TAX PARCEL 6021106 CONVEYED TO ROANOKE ELECTRIC STEEL CORPORATION
    - D.B. 90, PG. 245 CONVEYED TO NORFOLK & WESTERN RAILWAY COMPANY
13. THE PARCEL BOUNDED BY CORNERS 1 THROUGH 5 INCLUSIVE TO 1 WAS CONVEYED TO ROANOKE ELECTRIC STEEL CORPORATION BY NORFOLK & WESTERN RAILWAY COMPANY BY DEED DATED FEBRUARY 5, 1997. THIS DEED WAS RECORDED IN THE OFFICE OF THE CLERK OF THE CITY OF ROANOKE ON NOVEMBER 29, 2007. A RESUBDIVISION MAP IN ACCORDANCE WITH THE CITY OF ROANOKE SUBDIVISION ORDINANCE WAS NOT PREPARED IN 1997. NORFOLK SOUTHERN RAILWAY COMPANY (FORMERLY NORFOLK & WESTERN RAILWAY COMPANY) ENTERS INTO THIS PLAT IN ORDER TO BRING THIS CONVEYANCE INTO COMPLIANCE WITH THE CITY OF ROANOKE SUBDIVISION ORDINANCE.

RESUBDIVISION PLAT
FOR

ROANOKE ELECTRIC STEEL CORPORATION & NORFOLK SOUTHERN RAILWAY COMPANY

SHOWING THE CONSOLIDATION OF TAX PARCELS 6021103 (D.B. 329, PG. 79 – ROANOKE COUNTY), 6021101 & 6021105 (D.B. 760, PG. 62 – ROANOKE COUNTY), 6021102 (D.B. 765, PG. 457 – ROANOKE COUNTY), 2720111 (D.B. 1167, PG. 445), 2720115 (D.B. 1382, PG. 26), 2620101 (D.B. 1526, PG. 1577), 6021104 (D.B. 788, PG. 480 – ROANOKE COUNTY), 6021107 (D.B. 1018, PG. 143 – ROANOKE COUNTY), 0.1077 ACRE CONVEYED FROM TAX PARCEL 6021106 (INSTRUMENT # 080013834), 3.4384 ACRES CONVEYED FROM NOFOLK & WESTERN RAILWAY COMPANY TO ROANOKE ELECTRIC STEEL CORPORATION (INSTRUMENT # 070018197) & THE CLOSURE OF A PORTION OF WESTSIDE BLVD., N.W. BY ORDINANCE # 38003-012208, AND THE DEDICATION OF 1,469 SQ. FEET FROM TAX PARCEL 6021106 (INSTRUMENT #080013834, INSTRUMENT # 080004977) TO THE CITY OF ROANOKE FOR RIGHT-OF-WAY CREATING HEREON

TRACT 1 61.2708 ACRES
TAX PARCEL 6021106 18.4586 ACRES

SITUATE WESTSIDE BOULEVARD, N.W.
CITY OF ROANOKE, VIRGINIA

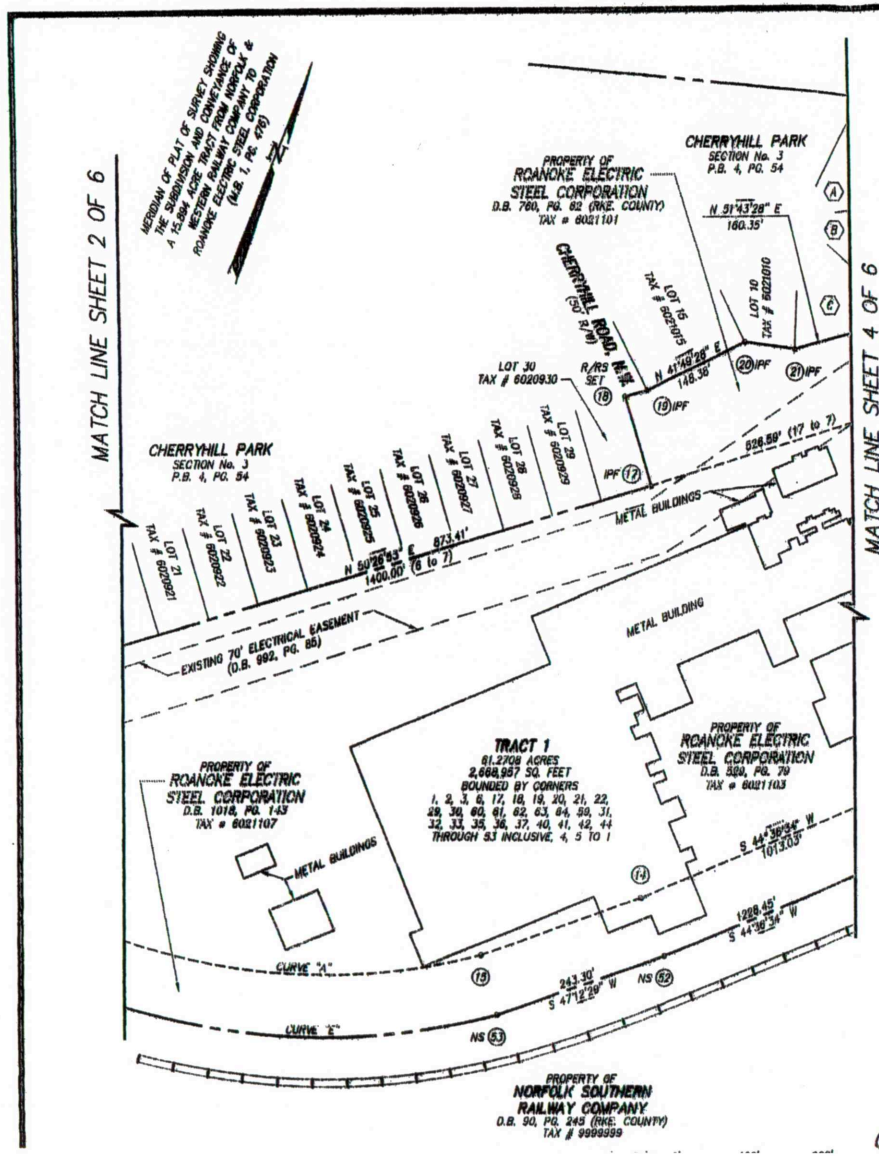
COMMONWEALTH OF VIRGINIA
FRANK H. CALDWELL, III
LIC. NO. 1335

REVISED: MAR. 24, 2008
PER CITY COMMENTS

CWA
CALDWELL WHITE ASSOCIATES
ENGINEERS / SURVEYORS / PLANNERS
SCALE: 1"= 100'

PG 0178 AP1719

M.B. 1, PG. 333A



PROPERTY LINE TABLE

LINE	BEARING	DISTANCE
7–8	N 40°04'54" E	380.61'
8–9	S 24°11'28" E	113.80'
9–10	S 15°11'28" E	111.30'
10–11	S 04°48'32" W	73.70'
11–12	S 43°11'28" E	147.80'
12–13	S 79°19'51" E	83.30'
14–15	S 47°09'14" W	232.19'
17–18	N 39°07'32" W	121.13'
18–19	N 50°52'28" E	30.08'
20–21	N 74°50'28" E	69.13'
23–24	S 56°09'29" E	105.59'
24–7	S 40°04'54" W	170.50' (DEED)
		190.59' (ACTUAL)
25–26	N 46°08'51" E	25.50'
26–27	S 62°07'04" E	8.13'
27–8	N 70°38'02" E	178.77'
8–28	S 40°04'54" W	169.72'
28–25	N 56°09'29" W	100.15'
30–31	N 04°44'28" E	230.02'
30–54	N 04°44'28" E	120.16'
30–60	N 04°44'28" E	47.82'
60–54	N 04°44'28" E	72.34'
54–55	S 68°12'29" E	129.26'
56–23	S 56°09'29" E	158.50'
31–32	S 80°30'26" E	74.16'
32–33	S 85°14'28" E	105.78'
34–26	S 62°07'04" E	141.03'
28–22	S 46°08'51" W	330.82'
25–57	N 56°09'29" W	189.41'

PROPERTY LINE TABLE

LINE	BEARING	DISTANCE
58–59	N 68°12'29" W	144.61'
59–31	N 04°44'28" E	57.56'
36–37	N 79°11'02" E	25.00'
37–38	S 10°48'58" E	176.67'
38–39	S 74°38'50" W	108.07'
27–34	N 62°07'04" W	147.16'
41–42	S 11°51'08" E	98.60'
42–43	S 74°09'28" W	23.44'
43–38	S 74°38'50" W	113.46'
38–40	N 10°48'58" W	97.38'
43–44	N 74°09'28" E	423.65'
39–43	N 74°38'50" E	221.53'
50–51	S 63°42'09" W	106.84'
51–13	S 66°08'34" W	231.59'
37–40	S 10°48'58" E	79.31'
42–46	N 74°09'28" E	400.21'
56–24	S 56°09'29" E	266.84' (DEED)
		264.09' (ACTUAL)
24–28	N 40°04'54" E	50.30'
28–57	N 56°09'29" W	271.16' (DEED)
		269.56' (ACTUAL)
58–59	N 04°44'28" E	52.30'
54–62	N 68°12'29" W	69.09'
62–63	N 68°12'29" W	32.47'
63–65	N 68°12'29" W	23.47'
58–63	N 68°12'29" W	230.84'
62–65	N 68°12'29" W	55.94'
65–66	S 31°40'46" W	28.30'
67–68	N 31°40'46" E	30.68'

PROPERTY CURVE TABLE

CURVE	RADIUS	LENGTH	TAN	DELTA	CHORD	DIST
"A"	622.78'	842.19'	462.17'	86°29'01"	S 81°26'01" W	805.90'
"B"	496.17'	104.35'	52.37'	12°03'01"	S 62°10'59" E	104.16'
"C"	546.17'	114.87'	57.65'	12°03'01"	N 62°10'59" W	114.66'
"D"	4500.90'	238.91'	119.48'	3°02'28"	S 69°51'05" W	238.88'
"E"	907.78'	726.63'	384.04'	45°51'44"	S 74°52'26" W	707.38'
"F"	907.78'	302.23'	152.53'	19°04'33"	N 72°56'33" W	300.84'
"G"	244.61'	124.00'	63.36'	29°02'42"	S 53°41'08" E	122.75'
"H"	244.61'	73.42'	36.99'	17°11'18"	N 59°36'36" W	73.14'
"I"	244.61'	90.59'	25.38'	11°30'57"	N 45°05'15" W	90.50'
"K"	194.61'	115.52'	59.52'	34°00'33"	N 31°12'13" W	113.83'

RESUBDIVISION PLAT
FOR

ROANOKE ELECTRIC STEEL CORPORATION & NORFOLK SOUTHERN RAILWAY COMPANY

SHOWING THE CONSOLIDATION OF TAX PARCELS 6021103 (D.B. 529, PG. 79 – ROANOKE COUNTY), 6021101 & 6021105 (D.B. 760, PG. 62 – ROANOKE COUNTY), 6021102 (D.B. 765, PG. 457 – ROANOKE COUNTY), 2720111 (D.B. 1167, PG. 445), 2720115 (D.B. 1362, PG. 26), 2620101 (D.B. 1526, PG. 1577), 6021104 (D.B. 788, PG. 480 – ROANOKE COUNTY), 6021107 (D.B. 1018, PG. 143 – ROANOKE COUNTY), 0.1077 ACRE CONVEYED FROM TAX PARCEL 6021106 (INSTRUMENT # 060013834), 3.4384 ACRES CONVEYED FROM NOFOLK & WESTERN RAILWAY COMPANY TO ROANOKE ELECTRIC STEEL CORPORATION (INSTRUMENT # 070018197) & THE CLOSURE OF A PORTION OF WESTSIDE BLVD., N.W. BY ORDINANCE # 38003-012208, AND THE DEDICATION OF 1,469 SQ. FEET FROM TAX PARCEL 6021106 (INSTRUMENT #060013834, INSTRUMENT # 080004977) TO THE CITY OF ROANOKE FOR RIGHT-OF-WAY CREATING HEREON

TRACT 1 61.2708 ACRES
TAX PARCEL 6021106 18.4586 ACRES

SITUATE WESTSIDE BOULEVARD, N.W.
CITY OF ROANOKE, VIRGINIA

COMMONWEALTH OF VIRGINIA
FRANK B. CALDWELL, JR.
LIC. NO. 1335

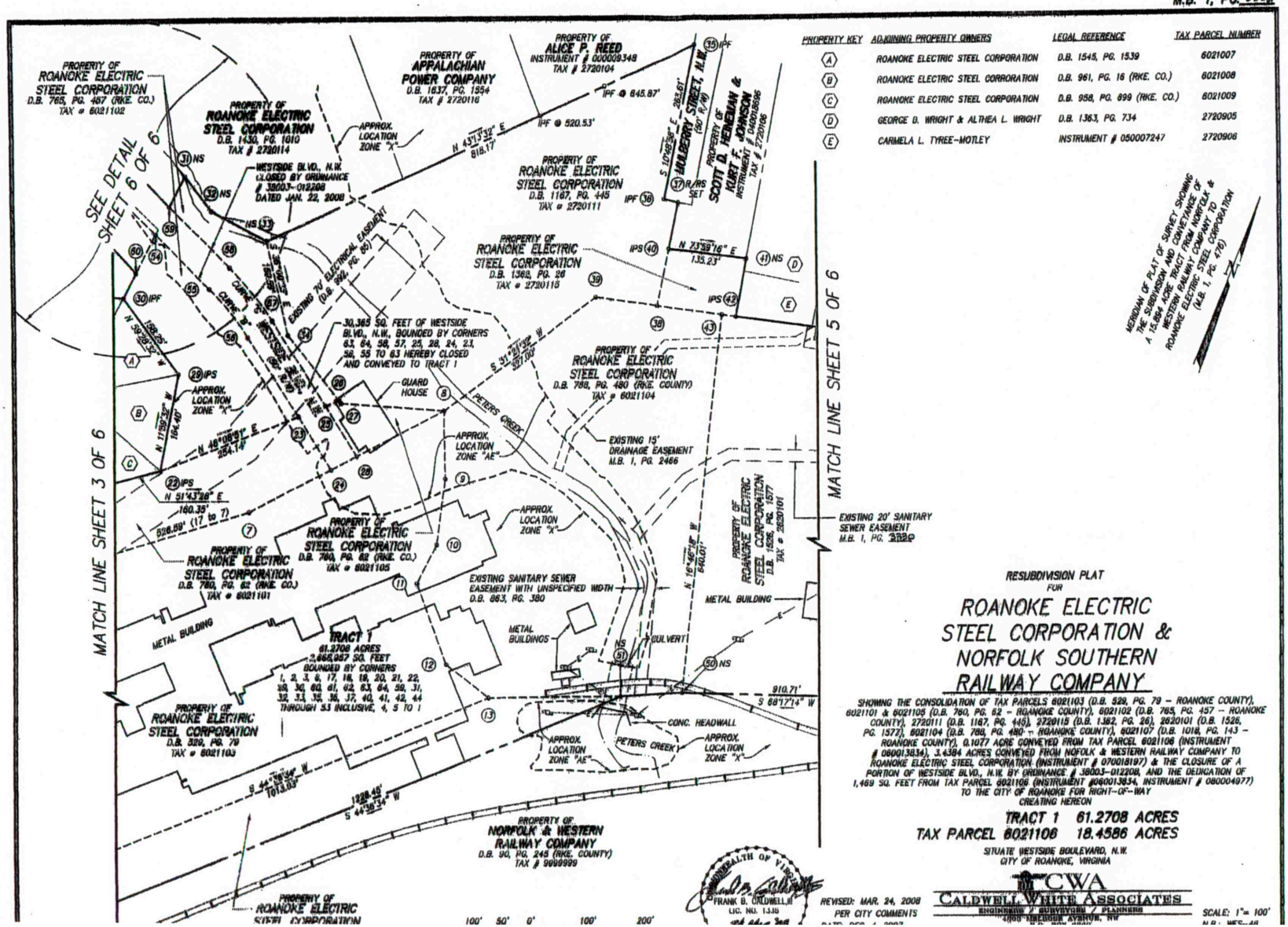
REVISED: MAR. 24, 2008
PER CITY COMMENTS

CWA
CALDWELL WHITE ASSOCIATES
ENGINEERS / SURVEYORS / PLANNERS

SCALE: 1"= 100'

PB 01 79 AP 1719

M.B. 1, PG. 3385



PROPERTY KEY	ADJOINING PROPERTY OWNERS	LEGAL REFERENCE	TAX PARCEL NUMBER
A	ROANOKE ELECTRIC STEEL CORPORATION	D.B. 1545, PG. 1539	6021007
B	ROANOKE ELECTRIC STEEL CORPORATION	D.B. 961, PG. 16 (RKE. CO.)	6021008
C	ROANOKE ELECTRIC STEEL CORPORATION	D.B. 958, PG. 699 (RKE. CO.)	6021009
D	GEORGE D. WRIGHT & ALTHEA L. WRIGHT	D.B. 1363, PG. 734	2720905
E	CARMELA L. TYREE-MOTLEY	INSTRUMENT # 050007247	2720906

RESUBDIVISION PLAT
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SHOWING THE CONSOLIDATION OF TAX PARCELS 6021103 (D.B. 329, PG. 79 – ROANOKE COUNTY), 6021101 & 6021105 (D.B. 780, PG. 62 – ROANOKE COUNTY), 6021102 (D.B. 765, PG. 467 – ROANOKE COUNTY), 2720111 (D.B. 1167, PG. 445), 2720115 (D.B. 1368, PG. 26), 2820101 (D.B. 1526, PG. 1572), 6021104 (D.B. 788, PG. 480 – ROANOKE COUNTY), 6021107 (D.B. 1016, PG. 143 – ROANOKE COUNTY), 0.1077 ACRE CONVEYED FROM TAX PARCEL 6021106 (INSTRUMENT # 080013834), 3.4384 ACRES CONVEYED FROM NOFOLK & WESTERN RAILWAY COMPANY TO ROANOKE ELECTRIC STEEL CORPORATION (INSTRUMENT # 070018197) & THE CLOSURE OF A PORTION OF WESTSIDE BLVD., N.W. BY ORDINANCE # 38003-012208, AND THE DEDICATION OF 1,469 SQ. FEET FROM TAX PARCEL 6021106 (INSTRUMENT #080013834, INSTRUMENT # 080004977) TO THE CITY OF ROANOKE FOR RIGHT-OF-WAY CREATING HEREON

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CITY OF ROANOKE, VIRGINIA

COMMONWEALTH OF VIRGINIA
FRANK B. CALDWELL, II
LIC. NO. 1335

REVISED: MAR. 24, 2008
PER CITY COMMENTS

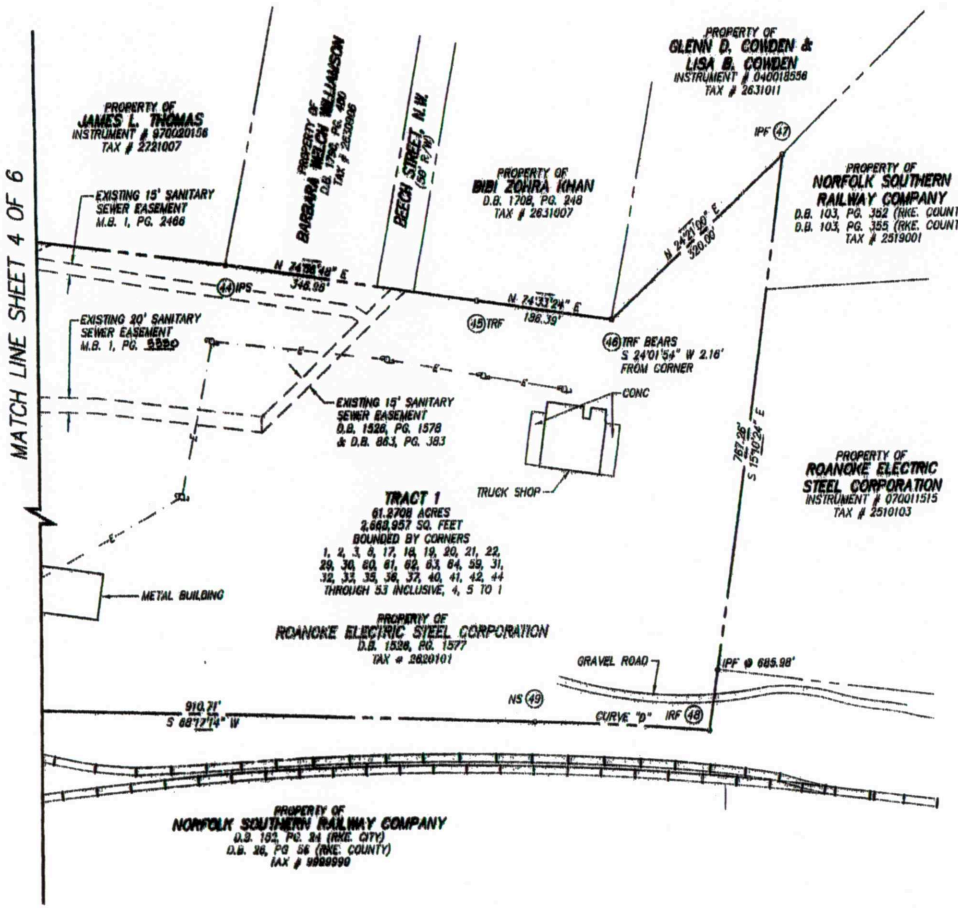
CWA
CALDWELL WHITE ASSOCIATES
ENGINEERING / SURVEYING / PLANNERS

SCALE: 1"= 100'

100' 50' 0' 100' 200'

FEB 19 2008 11:19

M.B. 1, PG. 3525



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FRANK B. CALDWELL III
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CWA
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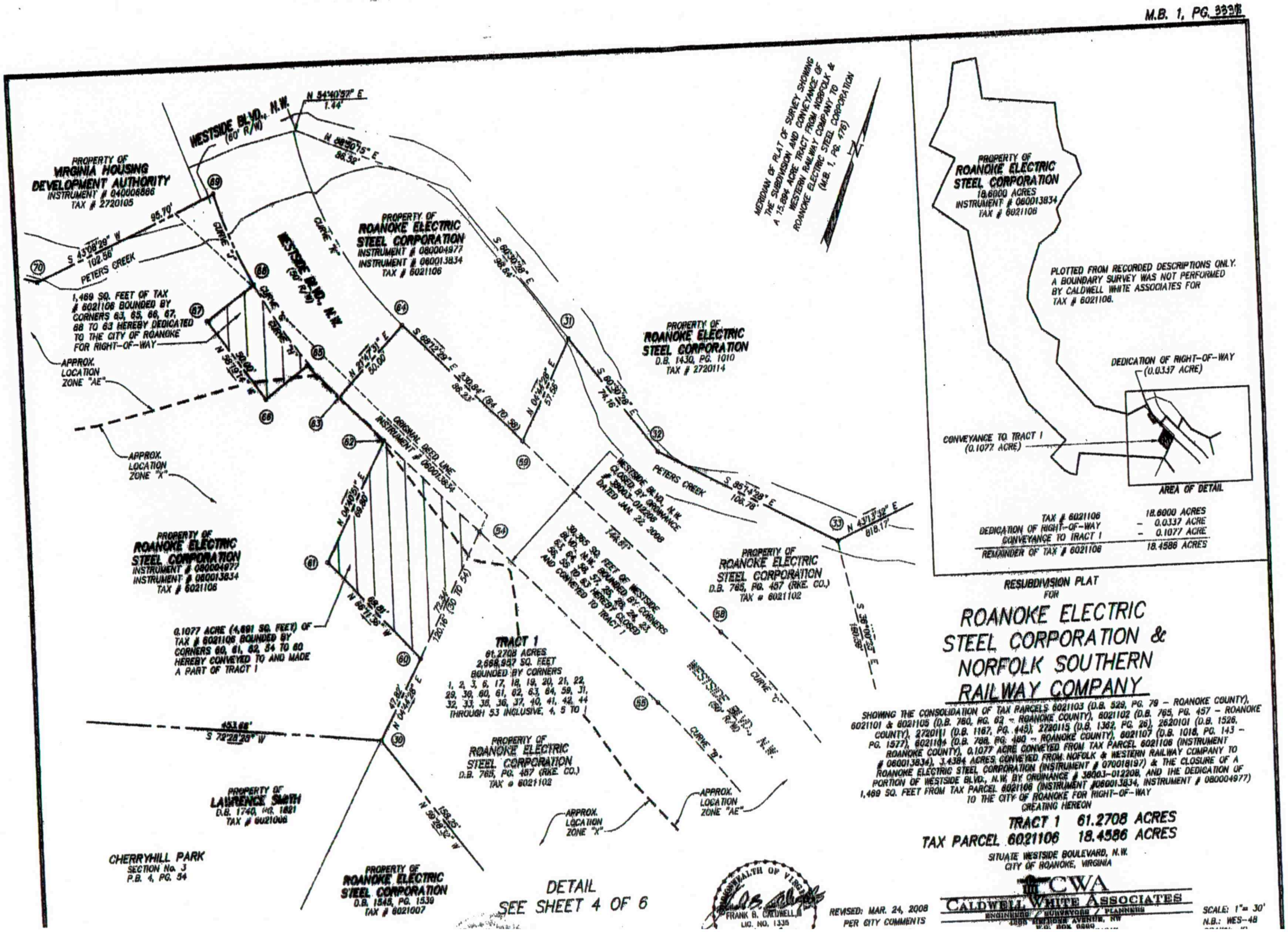
4305 SHELBOURNE AVENUE, NW

SCALE: 1"= 100'

PG 0181 AP 1719

PG0182 AP1719



PROPERTY CORNERS
COORDINATE TABLE (WGS 1984)

POINT	LATITUDE	LONGITUDE	POINT	LATITUDE	LONGITUDE
1	37.2720188	-080.0066537	40	37.2759307	-079.9976736
2	37.2722170	-080.0063416	41	37.2760758	-079.9972458
3	37.2709333	-080.0036877	42	37.2758195	-079.9971364
5	37.2702606	-080.0030190	44	37.2762458	-079.9958686
6	37.2710791	-080.0024035	45	37.2766032	-079.9947631
17	37.2728200	-080.0003384	46	37.2767984	-079.9941709
18	37.2730507	-080.0006384	47	37.2776372	-079.9938425
19	37.2731102	-080.0005667	48	37.2756854	-079.9928483
20	37.2734447	-080.0002753	49	37.2753863	-079.9935791
21	37.2735163	-080.0000553	50	37.2741855	-079.9963248
22	37.2738290	-079.9996673	51	37.2740246	-079.9966318
29	37.2742560	-079.9998510	52	37.2713526	-079.9992097
30	37.2744297	-080.0003496	53	37.2708424	-079.9997497
31	37.2750609	-080.0003804	59	37.2749030	-080.0003727
32	37.2749830	-080.0001450	60	37.2745609	-080.0003560
33	37.2749943	-079.9997783	61	37.2746164	-080.0005856
35	37.2768065	-079.9981156	62	37.2748080	-080.0005953
36	37.2761172	-079.9978387	63	37.2748308	-080.0007032
37	37.2761381	-079.9977569	64	37.2749635	-080.0006592

COMMONWEALTH OF VIRGINIA
FRANK B. CALDWELL, III
LIC. NO. 1335
10 OCT 17
LAND SURVEYOR

CWA
CALDWELL WHITE ASSOCIATES
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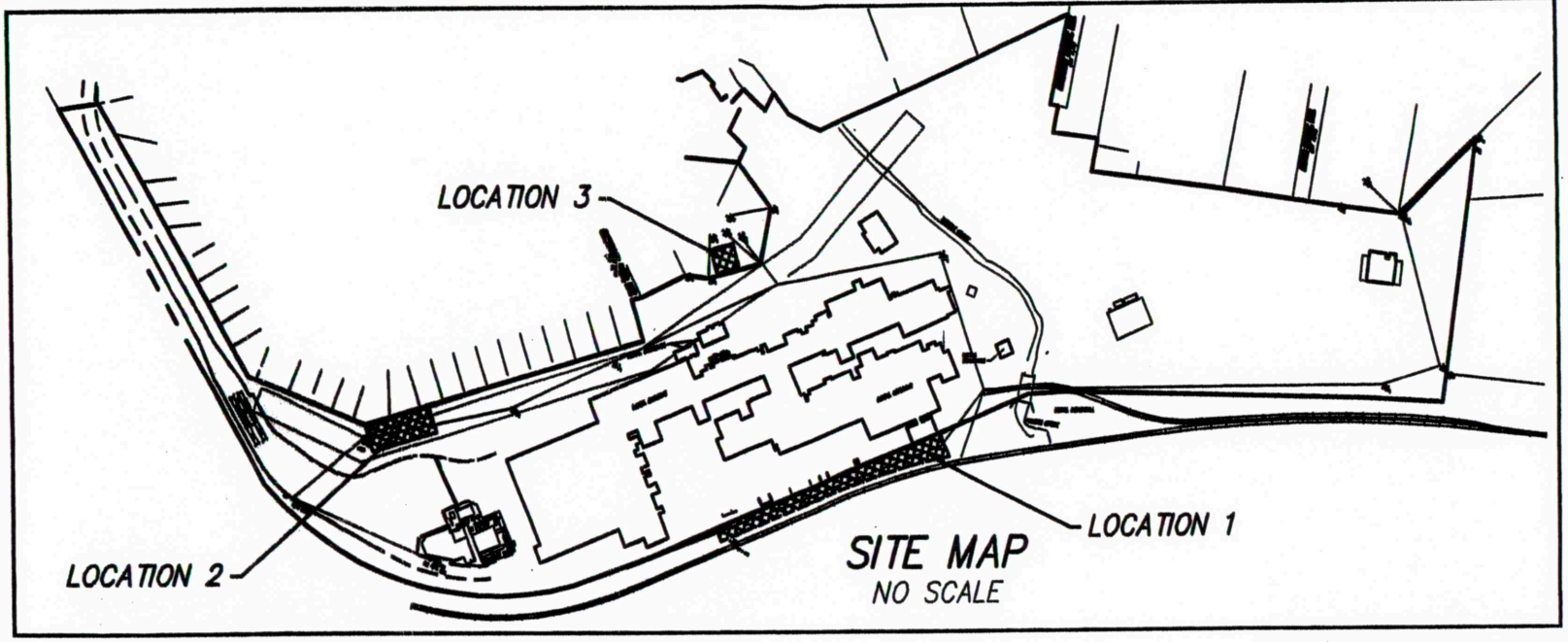
P.O. BOX 6260
ROANOKE, VIRGINIA 24017
(540) 366-3400 FAX: (540) 366-8702

REV: OCTOBER 10, 2017 (EPA COMMENTS)
REV: SEPTEMBER 12, 2017 (EPA COMMENTS)
REV: AUGUST 29, 2017 (ADDED STATE PLANE COORDINATES)
TAX No. 6021103, 6021009
DATE: NOVEMBER 2, 2016
CALC. JW CHK'D FBC
CLOSED: JW

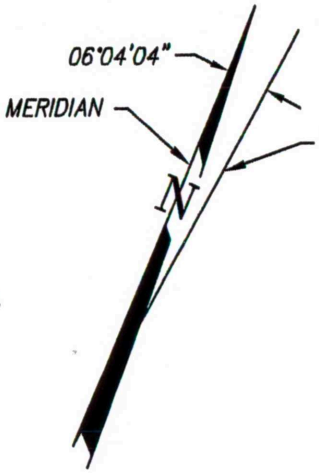
SCALE: AS NOTED
N.B.: SDI 1
DRAWN: JW
W.O.: 16-0025



SITE MAP
NO SCALE

NOTES:

1. LOCATION OF RCRA RESTRICTED USE PLOTS IS BASED ON FIELD NOTES FOR SAMPLING LOCATIONS PROVIDED BY APEX COMPANIES, LLC.
2. REFERENCE: RESUBDIVISION PLAT FOR ROANOKE ELECTRIC STEEL CORPORATION & NORFOLK SOUTHERN RAILWAY COMPANY BY CALDWELL WHITE ASSOCIATES DATED DECEMBER 4, 2007 AND REVISED MARCH 24, 2008, RECORDED IN M.B. 1, PG. 3332–3337.
3. METES AND BOUNDS SHOWN ON THESE PLATS ARE BASED ON THE RESUBDIVISION PLAT FOR ROANOKE ELECTRIC STEEL CORPORATION AND NORFOLK SOUTHERN RAILWAY COMPANY (M.B. 1, PG. 3332). ROTATE BEARINGS SHOWN 06°04'04" CLOCKWISE TO GET TO STATE PLANE MERIDIAN.



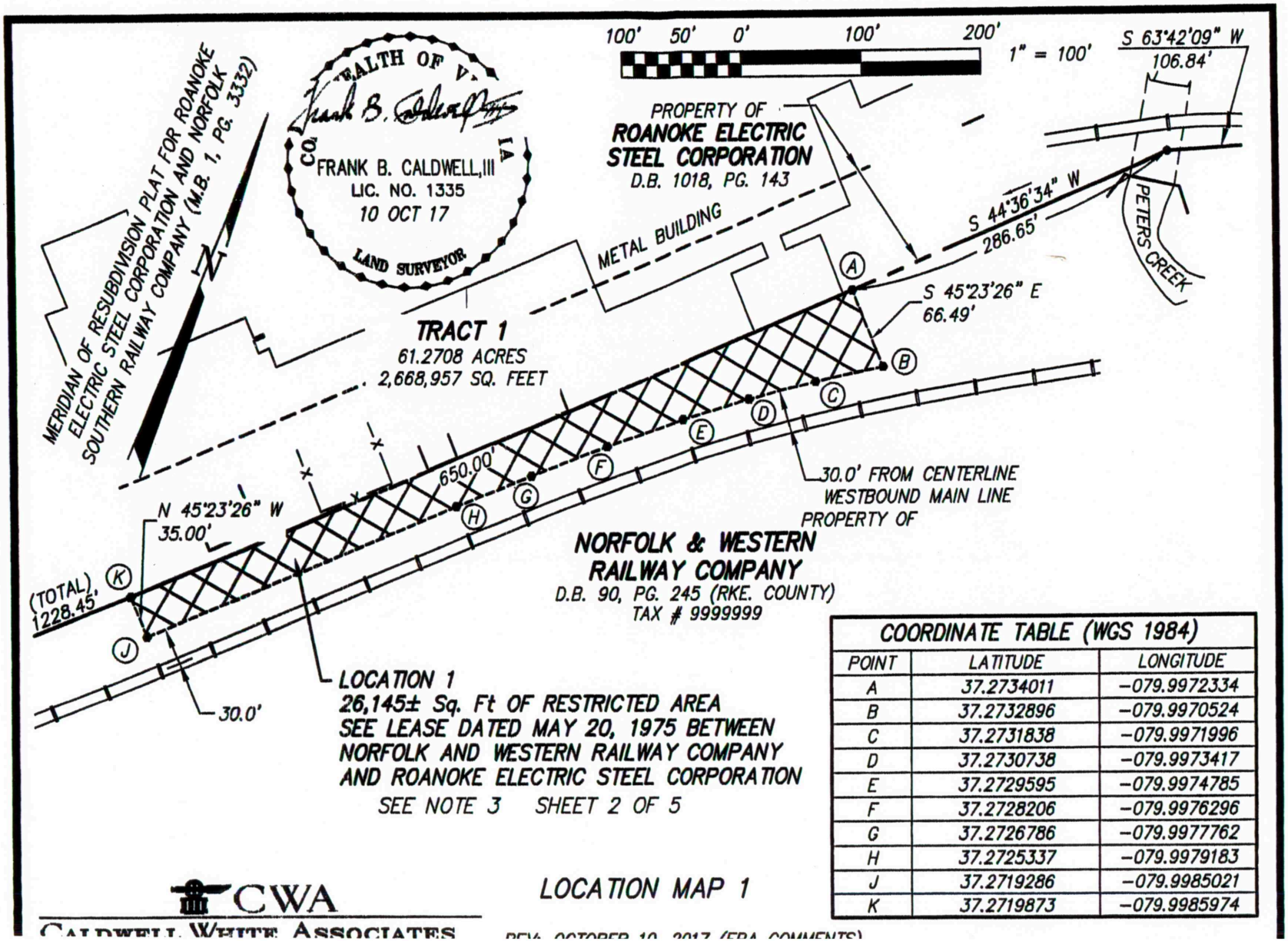
ANGULAR DEFLECTION FROM MERIDIAN TO VIRGINIA STATE PLANE COORDINATES IS 06°04'04"

COMMONWEALTH OF VIRGINIA
FRANK B. CALDWELL, III
LIC. NO. 1335
10 OCT 17
LAND SURVEYOR

CWA
CALDWELL WHITE ASSOCIATES

REV. OCTOBER 10, 2017 (EPA COMMENTS)

PG 0184 AP 1719

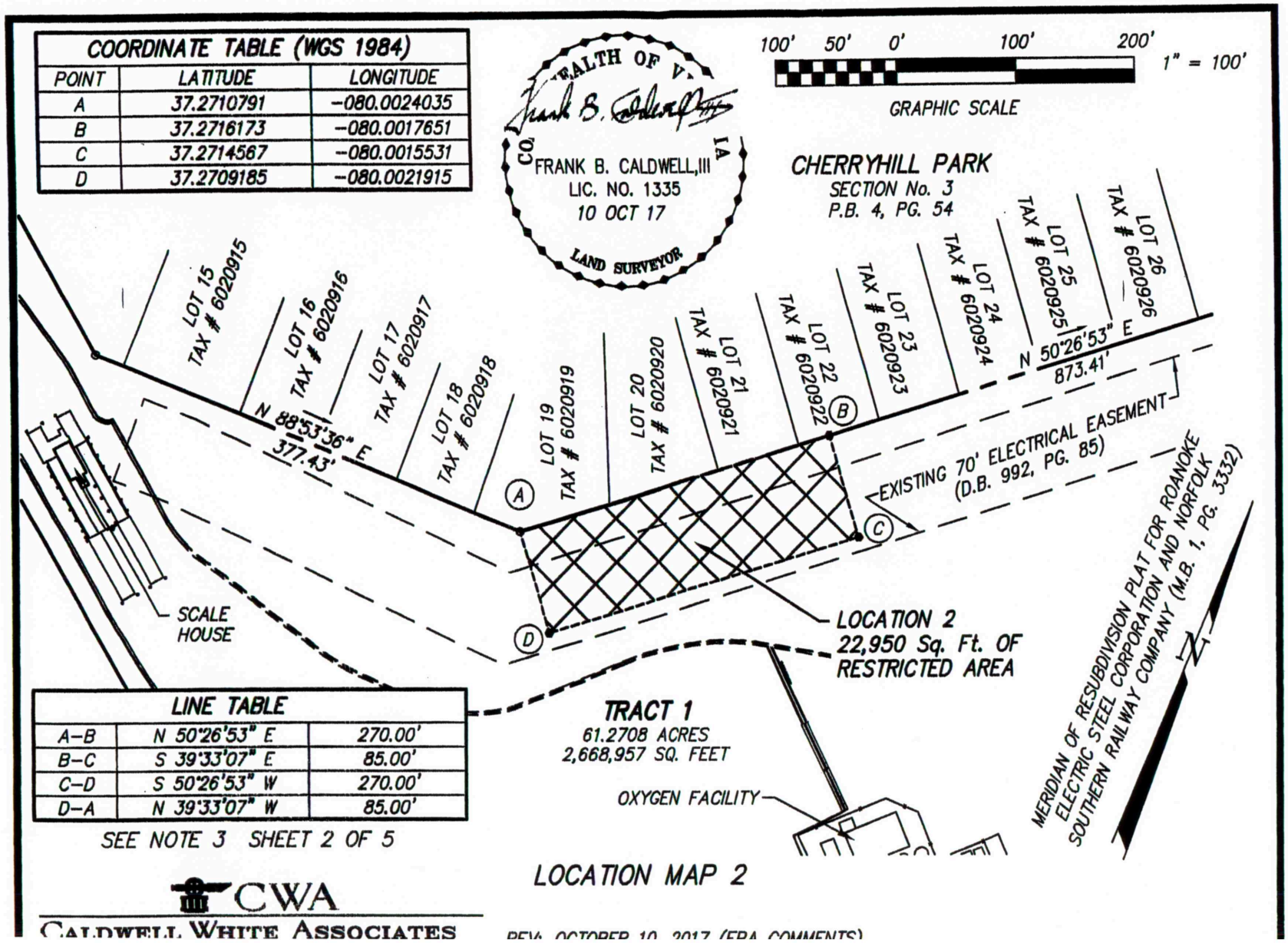


COORDINATE TABLE (WGS 1984)		
POINT	LATITUDE	LONGITUDE
A	37.2734011	-079.9972334
B	37.2732896	-079.9970524
C	37.2731838	-079.9971996
D	37.2730738	-079.9973417
E	37.2729595	-079.9974785
F	37.2728206	-079.9976296
G	37.2726786	-079.9977762
H	37.2725337	-079.9979183
J	37.2719286	-079.9985021
K	37.2719873	-079.9985974

CWA
CALDWELL WHITE ASSOCIATES

LOCATION MAP 1

REV. OCTOBER 10, 2017 (FRA COMMENTS)



COORDINATE TABLE (WGS 1984)		
POINT	LATITUDE	LONGITUDE
B	37.2735857	-080.0000055
C	37.2737210	-080.0001763
D	37.2738575	-080.0000070
E	37.2737222	-079.9998361

LINE TABLE		
A–B	N 36°19'29" E	28.24' (TIE ONLY)
B–C	N 38°16'32" W	70.00'
C–D	N 51°43'28" E	70.00'
D–E	S 38°16'32" E	70.00'
E–B	S 51°43'28" W	70.00'

SEE NOTE 3 SHEET 2 OF 5

50' 25' 0' 50' 100'

GRAPHIC SCALE

1" = 50'

MERIDIAN OF RESUBDIVISION PLAT FOR ROANOKE ELECTRIC STEEL CORPORATION AND NORFOLK SOUTHERN RAILWAY COMPANY (M.B. 1, PG. 3332)

N

CHERRYHILL CIRCLE, N.W.
(50' R/W)

LOT 7
TAX # 6021007

LOT 8
TAX # 6021008

LOCATION 3
4,900 Sq. Ft. OF
RESTRICTED AREA

164.40'
N 11°59'32" W

CHERRYHILL PARK
SECTION No. 3
P.B. 4, PG. 54

LOT 9
TAX # 6021009

LOT 10
TAX # 6021010

TAX # 6021015

LOT 15

N 41°49'28" E
148.38'

69.13'
N 74°50'28" E

N 51°43'28" E
160.35'

7.5'

7.5'

EXISTING 70' ELECTRICAL EASEMENT
(D.B. 992, PG. 85)

A

B

C

D

E

TRACT 1
61.2708 ACRES
2,668,957 SQ. FEET

COMMONWEALTH OF VIRGINIA
FRANK B. CALDWELL, III
LIC. NO. 1335
10 OCT 17
LAND SURVEYOR

CWA
CALDWELL WHITE ASSOCIATES

LOCATION MAP 3

REV: OCTOBER 10, 2017 (EPA COMMENTS)

PG 0187 AP 1719

EXHIBIT B

Final Decision and Response to Comments

and

Statement of Basis

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

STATEMENT OF BASIS

STEEL DYNAMICS
ROANOKE BAR DIVISION FACILITY
102 WESTSIDE BOULVARD

ROANOKE, VIRGINIA

EPA ID NO. VAD003122553

Table of Contents

Section 1: Introduction 1
Section 2: Facility Background 2
Section 3: Summary of Environmental Investigations 2
Section 4: Corrective Action Objectives 6
Section 5: Proposed Remedy 7
Section 6: Evaluation of Proposed Remedy 10
Section 7: Financial Assurance 132
Section 8: Public Participation 132
Section 9: Index to Administrative Record 143

List of Acronyms

AOC	Areas of Concern
AR	Administrative Record
AST	Above Ground Storage Tank
CMS	Corrective Measures Study
COIs	Contaminants of Interest
COCs	Contaminants of Concern
COPECs	Contaminants of Potential Ecological Concern
DEQ	Virginia Department of Environmental Quality
IP	Electronic Interface Probe
EPA	Environmental Protection Agency
FDRTC	Final Decision Response to Comments
HI	Hazard Index
HSWA	Hazardous and Solid Waste Amendments
HHRA	Human Health Risk Assessment
ICs	Institutional Controls
MCLs	Maximum Contaminant Levels
NWS	National Weather Service
PCBs	Polychlorinated biphenyls
RCRA	Resource Conservation and Recovery Act
RSL	Regional Screening Level
SB	Statement of Basis
SDI	Steel Dynamics, Inc.
SVOCs	Semi-Volatile Organic Compounds
UECA	Uniform Environmental Covenants Act
VOCs	Volatile Organic Compounds

Section 1: Introduction

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on its proposed remedy for the Steel Dynamics, Inc. (SDI), Roanoke Bar Division facility (hereinafter referred to as the Facility). The approximate 63 acre Facility is located at 102 Westside Boulevard in Roanoke, Virginia. Prior to 2006, the Facility was called Roanoke Electric Steel Corporation, but was bought by SDI in 2006.

The Facility is subject to the Corrective Action program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. §§ 6901 et seq. The Corrective Action program is designed to ensure that certain facilities subject to RCRA have investigated and addressed any releases of hazardous waste and hazardous constituents that have occurred at or from their property. In addition, information on the Corrective Action program as well as a fact sheet for the Facility can be found at http://www.epa.gov/reg3wcmd/correctiveaction.htm.

This SB explains EPA's proposed remedy to require the Facility to develop and maintain property restrictions to be implemented through Institutional Controls (ICs), maintain the existing security fence around Facility property, and to develop, and implement, a Materials Management Plan.

The proposed ICs are detailed in Section 5 below. The proposed use restrictions will assure that there will be no human exposure to Facility-related contaminants and no interference with EPA's final remedy.

As described more fully in Section 8 below, EPA is providing a 30-day public comment period on this SB. EPA may modify its proposed remedy based on comments received during this period. EPA will announce its selection of a final remedy for the Facility in a document entitled Final Decision and Response to Comments (Final Decision or FDRTC) after the public comment period has ended.

Before EPA makes a final decision on its proposed remedy for the Facility, the public may participate in the remedy selection process by reviewing this SB and documents contained in the Administrative Record (AR) for the Facility. The AR contains the complete set of reports that document Facility conditions, including a map of the Facility, in support of EPA's proposed remedy. EPA encourages anyone interested in this matter to review the AR. The AR is available at the EPA Region III office, the address of which is provided in Section 8, below.

EPA will address all significant comments received during the public comment period. If EPA determines that new information or public comments warrant a significant modification to the proposed remedy, EPA will modify the proposed remedy or select other alternatives based on such new information and/or public comments and will solicit public comment on its modified proposed remedy. If the final remedy is substantially unchanged from the one proposed, EPA will issue a Final Decision and inform all persons who submitted written comments or requested notice of EPA's final determination.

Section 2: Facility Background

The Facility is located at 102 Westside Boulevard within the corporate limits of the City of Roanoke, Virginia. Steel Dynamics, Inc., Roanoke Bar Division (formerly Roanoke Electric Steel Corporation) operates an electric arc furnace steel mill facility on parcel of property about 63 acres in size. Roanoke Electric Steel Corporation began operating the steel mill on this property in 1955. Prior to 1955 the site was used as farmland. Surrounding land uses include residential properties to the north and Norfolk Southern Railroad line and rail yard to the west, south and east. See Figure 1.

In 1955, Roanoke Electric Steel Corporation was founded to provide steel products to manufacturers and distributors in the metal industry. In 2006, SDI acquired the Facility, which produces steel billets and high quality finished steel products, such as angles, channels, rounds, and flat bars. All finished steel products are made from a feedstock of scrap metal and alloys.

The Facility and surrounding properties are served by public utilities, including municipally supplied water provided by the Roanoke City Water Department. The source of potable water for the Facility and its vicinity is Crystal Spring, which serves the southwest area. Crystal Spring is located at the base of Mill Mountain, approximately four miles southeast from the Facility and across the Roanoke River.

The City of Roanoke has a local ordinance which prohibits the installation of private or community supply wells when municipally-supplied water is available, as is the case in the area of the Facility. SDI operates one non-potable well at the Facility, which is not required to be permitted by the Virginia Department of Health or other regulatory agencies. The well, which is completed in competent bedrock at a depth of 160 feet (well below the water table aquifer), yields up to 600 gallons per minute of flow. The well is used solely for process cooling purposes and all discharge is routed through the SDI permitted wastewater treatment facility.

In 1999, EPA issued an Administrative Order on Consent ("Consent Order") under Section 3008(h) of RCRA, 42 U.S.C. §6928 to Roanoke Electric Steel Corporation which requires that the Facility perform a Resource Conservation and Recovery Facility Investigation (RFI), a Corrective Measurement Study (CMS), and any interim measures at the Facility necessary to protect human health and the environment. All work requirements under the Consent Order have been met.

Section 3: Summary of Environmental Investigations

3.1 Environmental Investigations

For all environmental investigations under the RFI, groundwater concentrations were screened against Federal Maximum Contaminant Levels (MCLs) promulgated pursuant to Section 42 U.S.C. §§ 300f et seq. of the Safe Drinking Water Act and codified at 40 C.F.R. Part 141, or EPA Region III Screening Levels dated October 2007 for tap water for chemicals for which there are no applicable MCLs. Soil concentrations were screened against EPA Region III Screening Levels dated October 2007 for residential soil and industrial soil. The RFI Report used EPA

Region III Risk-Based Screening criteria dated October 2007, because the soil data was sampled and screened before 2008. In 2008, EPA switched to the Regional Screening Level (RSL) Table for use in screening constituents. For this SB, EPA uses the updated RSL. For the purpose of screening, the list of Constituents of Interest (COIs) would not have changed with the RSL, as compared to using Risk-Based Screening criteria.

3.2 Soil Sampling

Under the RFI, five areas of the Facility were targeted for surface soil sampling: (1) a portion of the northwest Facility property boundary in an electric utility power easement (Power Line Right-of-Way); (2) an undeveloped residential tract located on Cherry Hill Circle owned by SDI (which abuts the residential properties located to the northwest of the Facility); (3) the Baghouse Area; (4) the power substation located at the north end of the property; and (5) the closed Aboveground Storage Tank (AST) perimeter.

In the spring of 2001, a total of 25 surface soil samples were collected within the Baghouse Area, which was divided into 5 plots, with sampling locations distributed in a diagonal 2-3-2-3 pattern. An additional 4 samples were collected from a depth of two feet below the depth of surface samples in the Baghouse Area. Samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and metals (otherwise referred to as inorganic compounds). In June 2001, a total of 20 samples (surface and subsurface) were collected within the Power Line Right-of-Way (15 samples) and the Cherry Hill Circle parcel (5 samples). Soil samples from the Power Line Right-of-Way were analyzed for PCBs and metals. Soil samples taken from Cherry Hill Circle parcel were analyzed for Metals. Six soil samples from the former 500,000-gallon AST area, spaced approximately 28.5 feet apart and at a distance of four feet from the perimeter of the tank system, were analyzed for total petroleum hydrocarbons (TPH). Three soil samples collected from the SDI owned portion of the power substation area and were analyzed for PCBs. Sampling locations were selected based on topographically low areas, electrical equipment locations, and recommendations.

Results of the soil analysis can be seen in Tables 1 thru 3. For the Baghouse Area, soil contaminant concentrations above the RSLs for residential soil included: aluminum, antimony, cadmium, copper, iron, lead, manganese, thallium, and vanadium. Arsenic was the only metal that exceeded its RSL for industrial soils at a maximum detection of 23.60 mg/kg (RSL for industrial soils of 3.0 mg/kg). The Power Line Right-of-Way also contained an arsenic concentration of at 8.8 mg/kg above the RSL for industrial soil. While these numbers are higher than the industrial RSL of 3.0 mg/kg for arsenic, they still fall within background soil ranges for arsenic, which typically range from 1 to 40 mg/kg. Arsenic is not used in the making of steel, therefore concentrations in soil would be from natural occurring conditions. Manganese concentrations exceeded the RSL for residential soil, but did not exceed the industrial level and were further investigated (Section 3.3). The Cherry Hill Circle parcel had one soil sample (SS-42) for manganese (1870 mg/kg) that exceeded the residential RSL of 1,800 mg/kg.

3.3 Air Emissions Fallout Model

Manganese concentrations in soil became a subject of investigation after that constituent showed up in Baghouse Area, the Power Line Right-of- Way and the Cherry Hill Circle parcel. Past emissions from the Facility mill stacks could have contributed to higher manganese

concentrations in soil. This model assessed the potential total manganese air emission concentrations associated with mill emissions and the likelihood that previous soil sampling locations are representative of potential highest concentrations. The model predicted consistent dispersion based on meteorological data from the National Weather Service (NWS) for each year. The highest theoretical concentrations of manganese deposits are located to the immediate southeast of the stacks, which would be toward the Norfolk Southern rail yard. Also, the model confirms that previous sampling locations at Cherry Hill parcel and the Baghouse Area are ideal locations for assessing maximum manganese concentrations from air emissions to the northwest and southeast, respectively.

3.4 Sediment Sampling

Previous sampling events conducted in Peters Creek by Roanoke Electric (1992) and under the RCRA Facility Assessment (1989) were supplemented by additional assessment performed during the RFI. Sediment samples were collected from Peters Creek, which transects the Facility. Sediment samples were collected immediately upstream, downstream, and at the point of discharge of each of three outfalls. All samples were preserved and submitted for analysis of metals, pH, PCBs, VOCs, and SVOCs. Analytical results showed exceedances of the EPA's sediment quality guidelines. Contaminants identified as sediment Contaminants of Potential Ecological Concern (COPECs) were refined on the basis of frequency of occurrence, contaminant distribution, and toxicity data from literature sources. The following constituents are considered COPECs for sediment following the refinement process:

SVOCs - 4-Methylphenol, benzoic acid, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, pyrene, benzo(a)anthracene, chrysene, and total PAHS;

PCBs - total PCBs; and

Metals - arsenic, barium, cadmium, chromium, iron, lead, and nickel.

It is important to note that the potential ecological impacts associated with COPECs for sediment appears to be limited to areas associated primarily with Outfall 003, especially sample location SS-9, and, to a lesser extent, Outfall 002. The COPECs are carried further in the Ecological Risk Assessment. See Section 3.9 for Ecological Risk Assessment results.

3.5 Surface Water Sampling

Three surface water samples were collected at each outfall area from locations coincident to those described in the sediment sampling. Surface water samples were collected prior to the collection of the sediment samples. Samples were collected immediately upstream, downstream and at the point of discharge of each of three outfalls. All samples were preserved and submitted for analysis of Metals, pH, PCBs, VOCs, and SVOCs. Constituents identified as surface water COPECs were refined on the basis of frequency of occurrence, contaminant distribution, and directly measured toxicity in literature sources. The COPEC for surface water is manganese, which was carried further in the Ecological Risk Assessment. See Section 3.9 for Ecological Risk Assessment results.

3.6 Monitoring Wells Installation

Under the RFI, two additional groundwater monitoring wells were installed at the Facility in March of 2001. One well (MW-12) was installed in the vicinity of a closed former settling pond, south of where Peters Creek and Miller Street intersect at the southeastern boundary of the Facility. A monitoring well, MW-13, was also installed near the former maintenance shop which is southeast of the melt shop. Eight existing monitoring wells, numbered MW-1, MW-2, MW-3, MW-4, MW-7, MW-9, MW-10 and MW-11 were installed prior to the EPA Consent Order.

3.7 Groundwater Elevation Measurement / Sample Collection

In June 2001, all new and existing monitoring wells were gauged with an electronic interface probe (IP) which can detect the air/liquid and oil/water interfaces with an accuracy of 0.01 feet. Mapping contours of the groundwater elevations demonstrated that groundwater flows from west to east towards the Roanoke River. Selected monitoring wells MW-3, MW-7, MW-11, MW-12 and MW-13 were sampled for VOCs, SVOCs, PCBs and metals. Metals were analyze for both dissolved (filtered) and total metals.

For groundwater, manganese was the primary Constituent of Concern (COCs), exceeding the RSL of 430 ug/L for tap water for MW-11 at 3,280 ug/L and MW-12 at 1,020 ug/L. In September 2002, a second round of sampling was conducted at monitoring wells MW-3, MW-7, MW-11, MW-12 and MW-13. Manganese concentrations in MW-11 and MW-12 exceeded the RSL for tap water at 1,600 ug/L and 2,400 ug/L respectively. Additional groundwater sampling was conducted in 2004, 2008 and 2010. Several wells were found to be inadvertently destroyed in 2010, including MW-3, MW-7, MW-11 and MW-12.

In June 2011, three new off-site wells (MW-1NS, MW-2NS, and MW-3NS) were installed on the Norfolk Southern rail yard, located southeast of the Facility, to characterize the extent of the groundwater plume. In addition to those wells, two other wells were installed at the Facility property, MW-12R and MW-1A. See Figure 2 for groundwater monitoring well locations.

Waste piles of K061 hazardous waste (baghouse dust) were previously stored onsite in the early 1980s, but later removed by 1984. Currently SDI stabilizes approximately 30 tons of dust per day, five days per week, in a totally enclosed treatment system. Once stabilized, the baghouse dust is sent off to a Subtitle D landfill.

3.8 Human Health Risk Assessment and Evaluation of Exposure Pathways

Chemical compounds in soil and groundwater samples were evaluated in the 2014 EPA-approved Human Health Risk Assessment (HHRA). COCs were identified for direct contact with soil and groundwater based on a comparison of the analytical data to EPA Region III Risk-Based Screening criteria dated October 2007. The HHRA considered the following potential receptors: on-site Facility workers, current construction workers, future construction workers, and residents located in the vicinity of the Facility, including both children and adults.

- Under both current and future use, an on-site worker may be exposed to COCs via direct contact with soil (ingestion and dermal contact), and from inhalation of particulates and vapor. The HHRA demonstrates a cumulative potential cancer risk of 1×10^{-4}, which is within

the EPA acceptable risk range of 1×10^{-4} to 1×10^{-6}. The total Hazard Index (HI) for the current and future worker is 3, which exceeds the target benchmark of 1.

• Under both current and anticipated future use, a Facility resident may be exposed to chemicals of concern via direct contact with soil or from inhalation of volatiles from the subsurface into indoor air of the residence. A Facility resident was assumed to occupy a home for 30 years. Child and adult risks were evaluated separately. The total non-cancer HI (without groundwater ingestion) is equal to 1 and the potential cancer risk is 2×10^{-5}, which is within EPA acceptable risk range. While groundwater ingestion was evaluated in the risk estimates, this pathway is not complete on or near the Facility.

• Under current and anticipated future use, a construction worker may have direct contact with soil while completing construction activities involving excavation. Current construction workers were evaluated for a three-month exposure period, while future construction workers were evaluated for a twelve-month exposure period. The cumulative potential cancer risk estimate for the current construction worker was 3×10^{-6} and the total HI was 2. For the future construction worker, the cumulative potential cancer risk estimate for the current construction worker was 1×10^{-5} and the total HI was 9. Ingestion of soil was the biggest driver for the HI of both current and future construction workers. Both estimates of potential cancer risk are within the target risk range. The total HI for the current construction worker exceeds the benchmark of 1. The total HI for the future construction worker may indicate the need for protective controls (dust mask, etc.) if a long term construction project is proposed for the property in the future.

3.9 Ecological Risk Assessment and Evaluation of Exposure Pathways

The ecological Risk Assessment findings support a conclusion that no significant risk to ecological receptors exists. There are a limited number of COPECs associated with sediment and surface water at the Facility. The spatial extent of any potential impact of the chemicals is limited, primarily to Outfall 003. Additionally, risk from organic constituents present in Peters Creek sediment is driven by the presence of these constituents from upstream sources. Since ecological risks are negligible and the source of contamination is off-site, there is no need for remediation on the basis of ecological risk.

Section 4: Corrective Action Objectives

EPA's Corrective Action Objectives for the specific environmental media at the Facility are the following:

1. Soils

EPA's Corrective Action Objective for Facility soils is to attain RSLs for Industrial Soils and to control exposure to the hazardous constituents remaining in soils by requiring the compliance with and maintenance of land use restrictions.

2. Groundwater

EPA's Corrective Action Objectives for Facility groundwater are 1) to restore the groundwater to drinking water standards, otherwise known as MCLs, or to the relevant RSL for tap water for each contaminant that does not have an MCL and, 2) until such time as drinking water standards are restored, to control exposure to the hazardous constituents remaining in the groundwater by requiring the continued implementation of the groundwater monitoring program and compliance with and maintenance of groundwater use restrictions.

Section 5: Proposed Remedy

5.1 Introduction

EPA's proposed remedy is comprised of monitored natural attenuation and land and groundwater use restrictions.

1. Soils

EPA's proposed remedy for Facility soils is to prohibit residential use of the Facility and limit exposure of on-site workers to contaminants that remain in soil at the Facility. EPA's proposed remedy therefore requires compliance with and maintenance of the following land use restrictions:

1. Use of Facility property shall be restricted to commercial and/or industrial purposes and shall not include residential purposes unless it is demonstrated to EPA, in consultation with DEQ, that such use will not pose a threat to human health or the environment or adversely affect or interfere with the selected remedy and EPA, in consultation with DEQ, provides prior written approval for such use.

2. All earth moving activities, including excavation, drilling and construction activities in known contaminated areas at the Facility where any contaminants remain in soils above EPA's Screening levels for non-residential use or in groundwater above health based RSL for tap water, shall be conducted in accordance with an EPA and DEQ approved Materials Management Plan.

2. Groundwater

Historical groundwater analytical results from monitoring wells throughout the Facility and the adjoining CSX property has shown that the extent of manganese contamination in groundwater attributable to the Facility is decreasing or stable. Concentrations of total manganese are decreasing and below the RSL for tap water (430 ug/l) in CSX property wells MW-1NS, MW-2NS and MW-3NS (ranging from ND to 20.6 ug/l). In wells MW-13 and MW-1A concentrations have decreased over time. In MW-13 concentrations have decreased from a high of 3000 ug/l in 2010 to 41.2 ug/l in 2014. In MW-1A concentrations have decreased from 1920 ug/l in 2011 to 565 ug/l in 2014. Well MW-12R located downstream of the former setting pond has stable concentrations over time ranging from 980 ug/l to 759 ug/L Groundwater results

are provided in Section 4.0 Appendix D of the Final RFI Report dated July, 2014 and Groundwater Monitoring Well Sampling dated May 7, 2014.

The most contaminated groundwater is less than ten times levels appropriate for use as drinking water. Therefore, the proposed remedy for groundwater consists of natural attenuation with continued monitoring until the manganese health based RSL for tap water is met, and compliance with and maintenance of groundwater use restrictions, to be implemented through institutional controls, at the Facility to prevent exposure to manganese while levels remain above the health based RSL for tap water. EPA's proposed remedy includes the following groundwater use restrictions:

1. Groundwater at the Facility shall not be used for any purpose other than the operation, maintenance, and monitoring activities required by DEQ and/or EPA, unless it is demonstrated to EPA in consultation with DEQ, that such use will not pose a threat to human health or the environment or adversely affect or interfere with the final remedy and EPA provides prior written-approval for such use;

2. No new wells shall be installed on Facility property unless it is demonstrated to EPA, in consultation with DEQ, that such wells are necessary to implement the final remedy and EPA provides prior written approval to install such wells; and

3. Owner shall comply with the EPA-approved groundwater monitoring program.

The property will not be used in a way that will adversely affect or interfere with the integrity and protectiveness of the final remedy selected by EPA in the Final Decision and Response to Comments (FDRTC);

EPA, VADEQ, and/or their authorized agents and representatives, shall have access to the Facility property to inspect and evaluate the continues effectiveness of the final remedy and if necessary, to conduct additional remediation to ensure the protection of the public health and safety and the environment based upon the final remedy selected in the FDRTC.

EPA proposes to implement the land and groundwater use restrictions through an institutional control (IC) such as an enforceable order, permit and/or an Environmental Covenant pursuant to the Virginia Uniform Environmental Covenants Act (UECA), Title 10.1, Chapter 12.2, §§10.1-1238 – 10.1-1250 of the Code of Virginia. If an Environmental Covenant is selected, it will be recorder in the chain of the title for the Facility property and, once recorded, will be enforceable against future land owners.

In addition, the Commonwealth of Virginia State Board of Health Private Well Regulations, 12 VAC 5-630-10 et seq. (Regulations) and its implementing statue set forth at the Code of Virginia, Title 32.1 (Health), Chapter 6 (Environmental Health Services), Va. Code §32.1, is an institutional control mechanism that will reduce potential human exposure to contaminated groundwater attributable to the Facility. Pursuant to Section 12 VAC 5-630-30, the purpose of these Regulations is to "ensure that all private wells are located, constructed and

maintained in a manner which does not adversely affect groundwater resources, or the public welfare, safety and health.

Accordingly, Sections 12 VAC 5-630-230 through VAC 5-630-270 of the Regulations prescribe the process by which construction permits for the installation of private well are received and issued. Pursuant to the Regulations, if a private well is installed or modified without a permit, Section VAC 5-630-150 sets forth an enforcement mechanism which provides for the notification of violations of the Regulations, the issuance of orders requiring cessation and correction of violation, appropriate remedial action to ensure that the violation does not recur, and any appropriate corrective action to ensure compliance with the Regulations.

3. Additional Requirements

1. On an annual basis and whenever requested by DEQ and EPA, the then current owner shall submit to DEQ and EPA a written certification stating whether or not the groundwater and land use restrictions are in place and being complied with.

2. Within one month after any of the following events, the then current owner of the Facility shall submit, to DEQ and EPA written documentation describing the following: observed noncompliance with the groundwater use restrictions; transfer of the Facility; changes in use of the Facility.

3. The Facility shall not be used in a way that will adversely affect or interfere with the integrity and protectiveness of the final remedy.

4. In addition, the Facility shall provide DEQ and EPA with a coordinate survey as well as a metes and bounds survey, of the Facility boundary. Mapping the extent of the land use restrictions will allow for presentation in a publicly accessible mapping program such as Google Earth or Google Maps.

Development and Implementation of a Materials Management Plan

EPA's proposed remedy requires the development and implementation of a Materials Management Plan to be submitted for review and approval by EPA before any earth moving activities, including construction and drilling, can be conducted on areas known to contain contaminants. The Materials Management Plan will detail how soil and groundwater will be managed during any future subsurface activities conducted at the Facility. The Materials Management Plan will detail how all excavated soils will be handled and disposed. Emphasis shall be placed on preventing exposure to contaminated soil during construction activities associated with airborne dust. All soils that are to be disposed of shall be sampled and disposed of in accordance with applicable State and Federal regulations. The Materials Management Plan will require analysis of the full suite of VOCs, SVOCs, PCBs, and metals.

Soil remediation cleanup standards will be EPA's RSL for industrial soil. In addition, the Materials Management Plan will include soil stabilization requirements to minimize contact between storm water runoff and Facility soils. Soil stabilization measures may include the

construction of berms to prevent storm water from flowing onto certain areas as well as the construction of sumps with pumps to remove ponded water from low lying areas.

Section 6: Evaluation of Proposed Remedy

This section provides a description of the criteria EPA used to evaluate the proposed remedy consistent with EPA guidance. The criteria are applied in two phases. In the first phase, EPA evaluates three decision threshold criteria as general goals. In the second phase, for those remedies which meet the threshold criteria, EPA then evaluates seven balancing criteria.

Threshold Criteria	Evaluation
1) Protect human health and the environment	EPA's proposed remedy protects human health and the environment by eliminating, reducing, or controlling potential unacceptable risk through the implementation and maintenance of ICs. For Facility soils, EPA is proposing ICs to restrict land use to commercial or industrial purposes at the Facility and to require compliance with a Materials management Plan. With respect to groundwater, while low levels of manganese remain in the groundwater beneath the Facility, the contaminant are contained in the aquifer and decreasing through attenuation or are stable, depending on location, at the Facility as shown by groundwater monitoring. In addition, groundwater monitoring will continue until groundwater clean-up standards are met. With respect to future uses, the proposed remedy requires groundwater use restrictions to minimize the potential for human exposure to contamination and protect the integrity of the remedy. In addition, the existing City of Roanoke ordinance on groundwater use for potable use when municipal water is available restricts the installation of wells in contaminated water sources.
2) Achieve media cleanup objectives	EPA's proposed remedy meets the media cleanup objectives based on assumptions regarding current and reasonably anticipated land and water use(s). The remedy proposed in this SB is based on the current and future anticipated land use at the Facility as commercial or industrial. As such, industrial media cleanup objectives were selected and the Facility soils contain contaminant concentrations that are below EPA's industrial soil RSLs. The HHRA for the Facility concluded that there would be no risk associated with the soil as long as protective controls are in place for workers during long-term construction projects and the Facility remains industrial.

	The groundwater plume appears to be stable (not migrating); although manganese concentrations are above the RSL tap water value, they are either stable or declining over time. In addition, groundwater monitoring will continue until groundwater clean-up standards are met. The Facility meets EPA risk guidelines for human health and the environment. EPA's proposed remedy requires the implementation and maintenance of institutional controls to ensure that groundwater beneath Facility property is not used for any purpose except to conduct the operation, maintenance, and monitoring activities required by DEQ and EPA
3) Remediating the Source of Releases	In all proposed remedies, EPA seeks to eliminate or reduce further releases of hazardous wastes and hazardous constituents that may pose a threat to human health and the environment. Controlling the sources of contamination relates to the ability of the proposed remedy to eliminate or reduce, to the maximum extent practicable, further releases. Roanoke Electric modified its manufacturing process in early 1980s to collect and treat air emissions containing manganese, which significantly reduce further releases to on-site soils as well as the source of the groundwater contamination, with respect to prior releases. Natural attenuation processes are preventing the migration of COCs in concentrations that would pose an unacceptable risk.
Balancing Criteria	Evaluation
4) Long-term effectiveness	The long term effectiveness of the proposed remedy for the Facility will be maintained by the continuation of the groundwater monitoring program and implementation of land and groundwater use restrictions through institutional controls until the RSL for manganese is achieved though natural attenuation.
5) Reduction of toxicity, mobility, or volume of the Hazardous Constituents	The reduction of toxicity, mobility and volume of hazardous constituents will continue by attenuation at the Facility. Reduction has already been achieved, as demonstrated by the data from the *Final RFI Report* and groundwater monitoring. In addition, the groundwater monitoring program already in place will continue.

6) Short-term effectiveness	EPA's proposed remedy does not involve any activities, such as construction or excavation, which would pose short-term risks to workers, residents, and the environment. EPA anticipates that the land and groundwater use restrictions will be fully implemented shortly after the issuance of the Final Decision and Response to Comments. The groundwater monitoring program is already in place and will continue.
7) Implementability	EPA's proposed decision is readily implementable. The groundwater monitoring is already in place and operational. EPA does not anticipate any regulatory constraints in implementing its proposed remedy. EPA proposes to implement the institutional controls through an enforceable mechanism such as an Environmental Covenant.
8) Cost	EPA's proposed decision is cost effective. The costs associated with this proposed remedy and the continuation of groundwater monitoring have already been incurred and the remaining costs are minimal. The costs to record an environmental covenant in the chain of title to the Facility property are minimal. The costs associated with issuing an order are also minimal.
9) Community Acceptance	EPA will evaluate community acceptance of the proposed remedy during the public comment period, and it will be described in the Final Decision and Response to Comments.
10) State/Support Agency Acceptance	DEQ has reviewed and concurred with the proposed remedy for the Facility.

Section 7: Financial Assurance

EPA has evaluated whether financial assurance for corrective action is necessary to implement EPA's proposed remedy at the Facility. Given that EPA's proposed remedy does not require any further engineering actions to remediate soil or groundwater contamination at this time and given that the costs of implementing institutional controls at the Facility will be approximately $30,000, and are, therefore, de minimis, EPA is proposing that no financial assurance be required.

Section 8: Public Participation

Interested persons are invited to comment on EPA's proposed remedy. The public comment period will last 30 calendar days from the date that notice is published in a local newspaper. Comments may be submitted by mail, fax, e-mail, or phone to Mr. John Hopkins at the address listed below.

A public meeting will be held upon request. Requests for a public meeting should be made to Mr. John Hopkins at the address listed below. A meeting will not be scheduled unless one is requested.

The Administrative Record contains all the information considered by EPA for the proposed remedy at this Facility. The Administrative Record is available at the following location:

U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103
Contact: Mr. John Hopkins (3LC20)
Phone: (215) 814-3437
Fax: (215) 814-3113
Email: hopkins.john@epa.gov

Date: 6.18.15

John A. Armstead, Director
Land and Chemicals Division
US EPA, Region III

Section 9: Index to Administrative Record

Administrative Order on Consent for Roanoke Electric Steel Corporation, dated September 29, 1999

RCRA Facility Investigation Report for Steel Dynamics Facility, dated July 2014.

Corrective Measures Study for Steel Dynamics, dated November 2014.

Groundwater Monitoring Well Sampling Results, contained in an APEX letter dated May 7, 2014

Groundwater Monitoring Well Sampling Results, contained in an APEX letter dated July 6, 2010

Attachments:

Figure 1: Map of Facility
Figure 2: Groundwater Monitoring Well Locations
Table 1: Summary of Soil Analytical Results: Baghouse Area
Table 2: Summary of Soil Analytical Results: Power Right of Way
Table 3: Summary of Soil Analytical Results: Cherry Hill
Table 4: Summary of Groundwater Analytical Results for Manganese

PG0205 AP1719

Property Boundary
Roanoke City GIS

REV	BY	DATE	
			DR: RSW
			CK.:
			APPD.:
			SCALE: NA
			APEX PROJ. NO.: 726001.010
			www.apexcos.com

SDI Site Plan

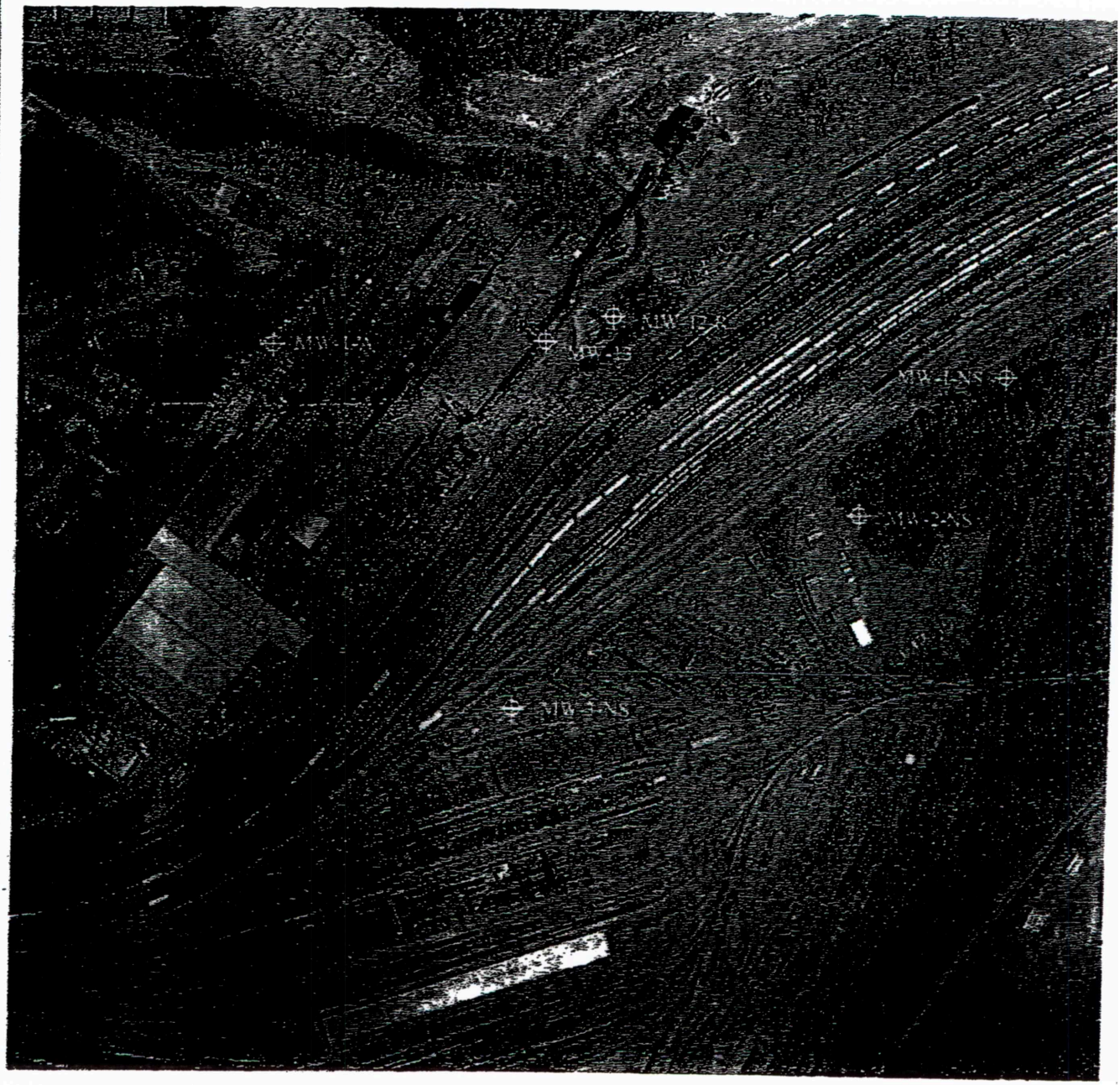
APEX
7744 Garland Circle
Roanoke, Virginia 24019
(540) 563-4920

DRAWING TITLE
SDI Aerial
Steel Dynamics, Inc.
Roanoke, Virginia

DRAWING NUMBER
FIGURE No. 1

REV
0

Groundwater Monitoring Well Locations
Steel Dynamics (Formerly Roanoke Electric Steel)
102 Westside Boulevard, N.W.
Roanoke, Virginia 24017



Apex Companies LLC
203 Wylderose Court
Midlothian, VA 23113
Telephone: (804) 897-2718
Fax: (804) 897-2794
www.apexcos.com

(Roanoke, Virginia)

Steel Dynamics
(Formerly Roanoke Electric Steel)
102 Westside Boulevard, N.W.
Roanoke, Virginia 24017

Project: Monitoring Well Installation and Sampling
Client: Steel Dynamics
Apex Job #: 726001.010
Date: 06/22/2011

PG0209 AP 1719

TABLE 1
Summary of Soil Analytical Results
Baghouse
Roanoke Electric Steel Corporation
102 Westside Boulevard
Roanoke, Virginia

Compound	Number of Detects	Number of Samples (a)	Frequency of Detect	Minimum Detect (mg/kg)	Location of Minimum	Maximum Detect (mg/kg)	Location of Maximum	EPA Region III Risk-Based Criteria (b)			Notes	Chemical of Potential Concern (c)
								Residential (mg/kg)	Industrial (mg/kg)	20 DAF Soil to Groundwater (mg/kg)		
Volatile Organic Compounds (VOCs)												
Methylene Chloride	4	4	100%	0.003	BH-19, 24"	0.011	BH-6, 24"	85	380	0.019		no
Acetone	4	4	100%	0.019	BH-19, 24"	0.045	BH-14, 24"	7,000	92,000	2.2		no
Carbon Disulfide	2	4	50%	0.0008	BH-22, 24"	0.006	BH-14, 24"	780	10,000	1.9		no
Chloroform	4	4	100%	0.0006	BH-6, 24"	0.005	BH-14, 24"	78	1,000	0.0009		yes
2-Butanone	3	4	75%	0.003	BH-19, 24"	0.013	BH-14, 24"	4,700	61,000	2.9		no
Benzene	2	4	50%	0.0005	BH-19, 24"	0.002	BH-14, 24"	12	52	0.0019		yes
4-Methyl-2-Pentanone	1	4	25%	0.010	BH-14, 24"	0.010	BH-14, 24"	--	--	5.9		no
Toluene	3	4	75%	0.0009	BH-22, 24"	0.004	BH-19, 24"	630	8,200	2.7		no
Ethylbenzene	1	4	25%	0.002	BH-19, 24"	0.002	BH-19, 24"	780	10,000	1.5		no
Xylene (total)	2	4	50%	0.0005	BH-14, 24"	0.003	BH-19, 24"	1,600	20,000	0.3		no
Semi-Volatile Organic Compounds (SVOCs)												
Naphthalene	1	4	25%	0.014	BH-19, 24"	0.014	BH-19, 24"	160	2,000	0.015		no
2-Methylnaphthalene	2	4	50%	0.019	BH-19, 24"	0.022	BH-22, 24"	31	410	0.44		no
Phenanthrene	3	4	75%	0.043	BH-22, 24"	0.056	BH-14, 24"	310	4,100	630	e	no
Fluoranthene	2	4	50%	0.012	BH-22, 24"	0.034	BH-19, 24"	310	4,100	630		no
Pyrene	1	4	25%	0.050	BH-19, 24"	0.050	BH-19, 24"	230	3,100	68		no
bis(2-Ethylhexyl)phthalate	2	4	50%	0.100	BH-19, 24"	0.130	BH-22, 24"	46	200	2,900		no
Polychlorinated Biphenyls (PCBs)												
Aroclor-1242	4	4	100%	0.007	BH-6, 24"	0.800	BH-19, 24"	0.32	1.40	---		yes
Aroclor-1254	1	4	25%	0.032	BH-14, 24"	0.032	BH-14, 24"	0.32	1.40	1.10		no
Aroclor-1260	3	4	75%	0.061	BH-14, 24"	0.760	BH-19, 24"	0.32	1.40	---		yes
Inorganics												
Aluminum	25	25	100%	6,330	BH-11, 6"	27,100	BH-13, 6"	7,800	100,000	---		yes
Antimony	4	25	16%	0.81	BH-24, 6"	1.80	BH-21, 6"	3.1	41	1.3		yes
Arsenic	25	25	100%	4.40	BH-12, 6"	23.60	BH-17, 6"	0.43	1.90	0.026		yes
Barium	25	25	100%	62.90	BH-3, 6"	536	BH-23, 6"	1,600	20,000	600		no
Beryllium	6	25	24%	0.44	BH-25, 6"	0.54	BH-23, 6"	16	200	120		no
Cadmium	6	25	24%	0.46	BH-20, 6"	8.30	BH-23, 6"	7.8	100	5.5		yes
Calcium	25	25	100%	1,780	BH-18, 6"	211,000	BH-23, 6"	---	---	---		no (EN)
Chromium (total)	25	25	100%	26.60	BH-20, 6"	1,880	BH-19, 6"	23	310	4.2		yes
Cobalt	25	25	100%	2.10	BH-4, 6"	19.70	BH-11, 6"	---	---	---		yes
Copper	25	25	100%	15.50	BH-20, 6"	667	BH-11, 6"	310	4,100	1,100		yes
Iron	25	25	100%	30,800	BH-4, 6"	199,000	BH-11, 6"	5,500	72,000	---		yes
Lead	25	25	100%	14.30	BH-3, 6"	859	BH-11, 6"	400	400	---	(d)	yes
Magnesium	25	25	100%	1,430	BH-3, 6"	86,200	BH-4, 6"	---	---			no (EN)
Manganese	6	25	24%	245	BH-20, 6"	24,100	BH-23, 6"	160	2,000	950		yes

TABLE 1
Summary of Soil Analytical Results
Baghouse
Roanoke Electric Steel Corporation
102 Westside Boulevard
Roanoke, Virginia

Compound	Number of Detects	Number of Samples (a)	Frequency of Detect	Minimum Detect (mg/kg)	Location of Minimum	Maximum Detect (mg/kg)	Location of Maximum	EPA Region III Risk-Based Criteria (b)			Notes	Chemical of Potential Concern (c)
								Residential (mg/kg)	Industrial (mg/kg)	20 DAF Soil to Groundwater (mg/kg)		
Inrganics (continued)												
Mercury	25	25	100%	0.0041	BH-4, 6"	0.28	BH-11, 6"	2.30	31	---		no
Nickel	25	25	100%	11.30	BH-20, 6"	224	BH-11, 6"	160	2,000	---		yes
Potassium	25	25	100%	243	BH-19, 6"	2,250	BH-3, 6"	---	---	---		no (EN)
Silver	4	25	16%	0.26	BH-25, 6"	3.20	BH-11, 6"	39	510	3		yes
Sodium	25	25	100%	69	BH-18, 6"	1,020	BH-23, 6"	---	---	---		no (EN)
Thallium	1	25	4%	8.10	BH-24, 6"	8.10	BH-24, 6"	0.55	7.2	0.36		yes
Vanadium	25	25	100%	27.10	BH-25, 6"	219	BH-19, 6"	7.8	100	5,100		yes
Zinc	23	25	92%	50	BH-3, 6"	4,590	BH-11, 6"	2,300	31,000	1,400		yes

Notes:
mg/kg = milligrams per kilogram
--- = not available
Only detected compounds shown above.
(a) = Includes samples SS-41 to SS-45 taken 6/25/01.
(b) = EPA Region III RBC Table (October 2007). Noncancer-based RBCs adjusted by 0.1 to reflect a hazard index of 0.1.
(c) = Selected as a chemical of potential concern (COPC) if maximum detect was higher than lowest RBC.
(d) = Interim soil lead action level residential (EPA, August 1994, OSWER Directive #9355.4-12. Memorandum, OSWER Directive: Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities. Office of Solid Waste and Emergency Response, Washington, D.C.).
(e) = Value for fluoranthene substituted.
Bold indicates that constituent was selected as a COPC. EN = Constituent ruled out as a COPC as it is an essential nutrient.

This table is copied from Table 1 of the July 2014 RCRA Facility Investigation Report prepared by Apex Companies, LLC.

PG 0211 AP 1719

TABLE 2
Summary of Soil Analytical Results
Power Right of Way
Roanoke Electric Steel Corporation
102 Westside Boulevard
Roanoke, Virginia

Compound	Number of Detects	Number of Samples (a)	Frequency of Detect	Minimum Detect (mg/kg)	Location of Minimum	Maximum Detect (mg/kg)	Location of Maximum	EPA Region III Risk-Based Criteria (b)			Notes	Chemical of Potential Concern (c)
								Residential (mg/kg)	Industrial (mg/kg)	20 DAF Soil to Groundwater (mg/kg)		
Polychlorinated Biphenyls (PCBs)												
Aroclor-1248	1	1	100%	0.065	SS-26, 2"	0.065	SS-26, 2"	0.32	1.40	---		no
Aroclor-1254	1	1	100%	0.022	SS-26, 2"	0.022	SS-26, 2"	0.32	1.40	1.10		no
Aroclor-1260	1	1	100%	0.012	SS-26, 2"	0.012	SS-26, 2"	0.32	1.40	---		no
Inorganics												
Aluminum	23	23	100%	11,400	SS-30, 2"	19,200	SS-38, 2"	7,800	100,000	---		yes
Arsenic	23	23	100%	4.7	SS-30, 12"	8.8	SS-31, 12"	0.43	1.90	0.026		yes
Barium	23	23	100%	102	SS-34, 2"	225	SS-33, 6"	1,600	20,000	600		no
Beryllium	23	23	100%	0.55	SS-27/40, 2"	0.8	SS-37, 2"	16	200	120		no
Cadmium	18	23	78%	0.20	SS-36, 2"	10	SS-31, 12"	7.8	100	5.5		yes
Calcium	23	23	100%	347	SS-30, 12"	16,500	SS-31, 12"	---	---	---		no (EN)
Chromium (total)	23	23	100%	18.1	SS-32, 6"	153	SS-31, 12"	23	310	4.2		yes
Cobalt	23	23	100%	8.3	SS-40, 2"	18	SS-31, 6"	---	---	---		yes
Copper	23	23	100%	9.1	SS-30, 12"	83	SS-31, 12"	310	4,100	1,100		no
Iron	23	23	100%	17,800	SS-32, 6"	44,200	SS-31, 12"	5,500	72,000	---		yes
Lead	23	23	100%	22.3	SS-30, 12"	297	SS-31, 12"	400	400	---	d	no
Magnesium	23	23	100%	660	SS-30, 12"	6,280	SS-31, 12"	---	---	---		no (EN)
Manganese	23	23	100%	1,240	SS-27, 2"	4,960	SS-31, 12"	160	2,000	950		yes
Mercury	23	23	100%	0.03	SS-32, 12"	0.10	SS-30, 2"	2.30	31.00	---		no
Nickel	23	23	100%	7.3	SS-30, 12"	26	SS-31, 12"	160	2,000	--		no
Potassium	23	23	100%	874	SS-30, 12"	2,180	SS-38, 2"	---	---	---		no (EN)
Selenium	2	23	9%	1.2	SS-39/40, 2"	1.20	SS-39/40, 2"	39	510	1.9		no
Silver	4	23	17%	0.27	SS-35, 2"	0.68	SS-31, 12"	39	510	3.1		no
Sodium	23	23	100%	17	SS-32, 12"	407	SS-40, 2"	---	---	---		no (EN)
Vanadium	23	23	100%	28.9	SS-32, 6"	53	SS-31, 12"	7.8	100	5,100		yes
Zinc	23	23	100%	43.9	SS-30, 12"	1,470	SS-31, 12"	2,300	31,000	1,400		yes

Notes:
mg/kg = milligrams per kilogram
--- = not detected or not applicable
(a) = Includes samples SS-26 for PCBs and SS-26 through SS-40 for inorganics.
(b) = EPA Region III RBC Table (October 2007) unless otherwise noted. Noncancer-based RBCs adjusted by 0.1 to reflect a hazard index of 0.1.
(c) = Selected as a chemical of potential concern (COPC) if maximum detect was higher than lowest RBC.
(d) = Interim soil lead action level residential (EPA, August 1994. OSWER Directive #9355.4-12. Memorandum, OSWER Directive: Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities. Office of Solid Waste and Emergency Response, Washington, D.C.).

Bold indicates that constituent was selected as a COPC. EN = Constituent ruled out as a COPC as it is an essential nutrient.

This table is copied from Table 4 of the July 2014 RCRA Facility Investigation Report prepared by Apex Companies, LLC.

PG 0213 AP 1719

TABLE 3
Summary of Soil Analytical Results
Cherry Hill
Roanoke Electric Steel Corporation
102 Westside Boulevard
Roanoke, Virginia

Compound	Number of Detects	Number of Samples (a)	Frequency of Detect	Minimum Detect (mg/kg)	Location of Minimum	Maximum Detect (mg/kg)	Location of Maximum	EPA Region III Risk-Based Criteria (b)			Notes	Chemical of Potential Concern (c)
								Residential (mg/kg)	Industrial (mg/kg)	20 DAF Soil to Groundwater (mg/kg)		
Inorganics												
Aluminum	6	6	100%	10,900	SS-41, 2"	18,500	SS-43, 6"	7,800	100,000	---		yes
Arsenic	6	6	100%	6	SS-41, 2"	8.5	SS-43, 6"	0.43	1.90	0.026		yes
Barium	6	6	100%	127	SS-41, 2"	174	SS-45, 2"	1,600	20,000	600		no
Beryllium	6	6	100%	0.37	SS-42, 2"	0.63	SS-45, 2"	16	200	120		no
Cadmium	6	6	100%	1.3	SS-43, 2"	2.8	SS-45, 2"	7.8	100	5.5		no
Calcium	6	6	100%	2,700	SS-43, 2"	6,090	SS-45, 2"	---	---	---		no (EN)
Chromium (total)	6	6	100%	25.8	SS-43, 2"	62	SS-45, 2"	23	310	4.2		yes
Cobalt	6	6	100%	7.4	SS-41, 2"	15	SS-43, 6"	---	---	---		yes
Copper	6	6	100%	26	SS-43, 2"	49.4	SS-45, 2"	310	4,100	1,100		no
Iron	6	6	100%	23,300	SS-41, 2"	32,300	SS-45, 2"	5,500	72,000	---		yes
Lead	6	6	100%	75.1	SS-43, 2"	161	SS-45, 2"	400	400	---	d	no
Magnesium	6	6	100%	944	SS-43, 2"	1,420	SS-45, 2"	---	---	---		no (EN)
Manganese	6	6	100%	1,010	SS-41, 2"	1,870	SS-43, 6"	160	2,000	950		yes
Mercury	5	6	83%	0.09	SS-43, 2"	0.29	SS-45, 2"	2.30	31.00	---		no
Nickel	6	6	100%	12.2	SS-43, 2"	18.2	SS-45, 2"	160	2,000	--		no
Potassium	6	6	100%	1,540	SS-41, 2"	2,300	SS-43, 6"	---	---	---		no (EN)
Selenium	5	6	83%	1.2	SS-44, 2"	1.70	SS-43, 6"	39	510	1.9		no
Silver	3	6	50%	0.21	SS-42, 2"	0.32	SS-45, 2"	39	510	3.1		no
Sodium	6	6	100%	31	SS-41, 2"	477	SS-44, 2"	---	---	---		no (EN)
Thallium	3	6	50%	2.5	SS-43, 6"	2.8	SS-45, 2"	0.55	7.2	0.36		yes
Vanadium	6	6	100%	29.3	SS-41, 2"	47.9	SS-43, 6"	7.8	100	5,100		yes
Zinc	6	6	100%	187	SS-43, 6"	489	SS-45, 2"	2,300	31,000	1,400		no

Notes:
mg/kg = milligrams per kilogram
--- = not detected or not applicable
(a) = Includes samples SS-41 to SS-45 taken 6/25/01.
(b) = EPA Region III RBC Table (October 2007) unless otherwise noted. Noncancer-based RBCs adjusted by 0.1 to reflect a hazard index of 0.1.
(c) = Selected as a chemical of potential concern (COPC) if maximum detect was higher than lowest RBC.
(d) = Interim soil lead action level residential (EPA, August 1994. OSWER Directive #9355.4-12. Memorandum, OSWER Directive: Revised Interim Soil Lead Guidance CERCLA Sites and RCRA Corrective Action Facilities. Office of Solid Waste and Emergency Response, Washingt

Bold indicates that constituent was selected as a COPC. EN = Constituent ruled out as a COPC as it is an essential nutrient.

This table is copied from Table 5 of the July 2014 RCRA Facility Investigation Report prepared by Apex Companies, LLC.

OFFICIAL RECEIPT
ROANOKE CITY CIRCUIT COURT
DEED RECEIPT

DATE : 04/17/2019 **TIME :** 14:07:26 **CASE # :** 770CLR190003584
RECEIPT # : 19000009397 **TRANSACTION # :** 19041700054
CASHIER : CAB **REGISTER # :** B666 **FILING TYPE :** OTHER **PAYMENT :** FULL PAYMENT
INSTRUMENT : 190003584 **BOOK :** **PAGE :** **RECORDED :** 04/17/2019 **AT :** 14:07
GRANTOR : ROANOKE ELECTRIC STEEL CORPORATION **EX :** N **LOC :** CI
GRANTEE : ROANOKE ELECTRIC STEEL CORPORATION **EX :** N **PCT :** 100%
RECEIVED OF : GENTRY LOCKE
ADDRESS : 102 WESTSIDE BOULEVARD ROANOKE, VA 24017
DATE OF DEED : 11/27/2018
CHECK : $61.00 **CHECK NUMBER :** 222622
DESCRIPTION 1 : TRACT 1, 61.2708 ACRES **PAGES :** 051 **OP :** 0
NAMES : 0
CONSIDERATION : $0.00 **A/VAL :** $0.00 **MAP :** 6021103 **PIN :**

ACCOUNT CODE	DESCRIPTION	PAID
035	VOF FEE	$1.00
106	(TTF) TECHNOLOGY TRUST FUND FEE (CIRCUIT COURT)	$5.00
145	VSLF	$1.50

ACCOUNT CODE	DESCRIPTION	PAID
301	DEEDS	$48.50
423	E-RECORDING DEED PAPER FILING	$5.00

TENDERED : $ 61.00
AMOUNT PAID : $ 61.00