NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Office of the Director
625 Broadway, 12th Floor, Albany, New York 12233-7011
P: (518) 402-9706 | F: (518) 402-9020
www.dec.ny.gov

M E M O R A N D U M

TO: Michael Cruden, Remedial Bureau Director

FROM: Eugene Melnyk, Project Manager
Chad Staniszewski, RHWRE

SUBJECT: **P Site IRM Completion Determination and Site Reclassification**
Special Metals Corporation
907031
City of Dunkirk, Chautauqua County

DATE: October 6, 2017

This memorandum serves to document the actions taken to remediate the Special Metal, Inc. Site and the basis for the reclassification from a class P to a class C.

Description of the Site

Location: The Special Metals Corporation (SMC) facility is located at 100 Willowbrook Avenue, City of Dunkirk, Chautauqua County. The site is located in a mixed industrial/residential section of the City. The site is bordered to the west, north and east by Dunkirk Specialty Steel (formerly Al-Tech Specialty Steel - Inactive Hazardous Waste Disposal Site 907022). Willowbrook Avenue borders the site to south beyond which are residential homes.

Site Features: The site is 2.0 acres in size and comprises a western portion of an industrial parcel that is approximately 8.2 acres in size. The site is mostly covered with asphalt pavement for access, parking and storage for the industrial facility. Remaining areas of the site are covered with turf grass. The site also contains a lean-to metal building addition attached to the high bay industrial structure and a small standalone guard shack that is used for security and access control to the industrial parcel. The entire industrial parcel is secured with a chain link fence and driveway gate. The topographic land feature is relatively flat as developed for industrial use. The southern side of the site contains turf grass area with a landscaped berm to obscure the view of the facility. Local topography is flat to slightly rolling and generally slopes to the northwest toward Lake Erie. The balance of the industrial property beyond the site limits contains a single high bay industrial use building for alloy forging operations, paved roadways and a turf lawn area.

The site and local area is serviced with public water and sanitary sewer utilities.

Adjacent to the southwest corner of the site is an approximate 1.65 acre man-made

industrial cooling pond known as Willowbrook Pond on the Dunkirk Specialty Steel site. A tributary to Crooked Brook flows southeast to northwest toward Lake Erie through the southwest corner of the Dunkirk Specialty Steel site.

Current Zoning and Land Use: The site is zoned Industrial and the industrial zoning extends to the north, east and to the west in areas occupied by Dunkirk Specialty Steel. An R1-residential district is adjacent to the south across Willowbrook Avenue.

Past Use of the Site: The industrial facility is operated by SMC and manufactures specialty alloy metal shapes typically used in the aerospace industry. The tracts of land which make up the SMC facility and the Al-Tech site were formerly owned and operated by Allegheny Ludlum Industries, Inc. where steel and alloy products were manufactured. Allegheny Ludlum conveyed the Al-Tech site (Site No. 907022) in 1976 and retained the forging facility until it was sold to SMC in 1983. SMC has operated the forging facility since that time. SMC filed a Chapter 11 bankruptcy petition in 2002, and emerged from bankruptcy in 2003. Precision Castparts Corporation (PCC) acquired this SMC facility and another SMC facility in New Hartford, NY in 2006. PCC is the current owner of the SMC facilities and business.

The existing building was expanded several times during the ensuing years. A 2006 plant expansion at the western end of the existing building revealed several areas of petroleum spillage and discovery of an abandoned underground storage tank (UST). Analytical testing of stained soils in a utility trench revealed polychlorinated biphenyls (PCBs) were present in the stained soils. An investigation to determine the extent of PCB contaminated soil delineated the area of concern (approximately 0.25 acres).

An Order on Consent was executed February 2007 for the investigation and remediation of this area. In February 2007, an Interim Remedial Measure (IRM) Work Plan for PCB removal for the 0.25 acre area was submitted and approved. IRM activities were completed July 2007. During the course of the PCB IRM, confirmatory sampling and additional investigation borings revealed that the PCB area extended beyond the initial project boundary within the site. The eventual PCB IRM area expanded to 2 acres in size. A site wide Site Investigation (SI) of the entire industrial parcel was conducted during summer 2007. The site wide SI was not associated with the order. An SI and IRM report was completed in 2008.

Site Geology and Hydrogeology: The site is located on broad glacio-lacustrine sedimentary deposits. Native subsoil are tight silty, clayey soils and silt loams and is covered with imported fill and some urban of varying thickness. Groundwater is about ten feet below the ground surface and is limited due to the tight nature of the bedrock and soils, however localized ponding may occur. Groundwater presently flows generally to the north toward Lake Erie but is strongly influenced by topographic features and man-made pathways. Bedrock is Upper Devonian shale.

Lake Erie is located approximately 1.2 miles to the northwest of the site. The nearest surface water body west of the site is a tributary to Crooked Brook which flows southeast

to northwest toward Lake Erie through the southwest corner of the Dunkirk Specialty Metals industrial site.

Storm water runoff enters on-site catch basins and is directed through a storm drains to a storm sewer pump station. Storm water is pump via a buried pipe that discharges to a storm drain swale along the property line adjacent to Willowbrook Avenue. The drainage swale flows in a westerly direction and discharges to the Crooked Brook tributary on the Dunkirk Specialty Steel site

Nature and Extent of Contamination

PRE-REMDIATION:

Incidental excavations and subsequent subsurface investigations revealed PCBs contamination at the site along the western side of the industrial facility. PCBs were found at levels exceeding hazardous waste level of 50 parts per million (ppm). PCB contamination was primarily situated in a fill soil layer approximately 0.25 acres in size. The data suggested limited vertical migration of PCBs with higher PCBs level in fill soils.

Prior to implementing the PCB removal IRM to remove PCBs to 10 ppm or less, a site wide characterization was completed in February 2007, and several additional areas containing PCB contamination were discovered adjacent to the site. PCB contamination was found throughout a parking and roadway area along an interface layer between native soil and imported structural fill. An addendum to the IRM work plan was submitted to include the removal of PCB contamination above 10 ppm from these areas. The expanded PCB removal IRM was completed in 2007.

Groundwater does not appear to be significantly impacted. Groundwater at the northwest corner of the industrial parcel is impacted with low levels of chlorinated VOCs that appear to have migrated from the adjoining Altech Steel site (Site No. 907022). These contaminant levels diminish to water quality guideline levels at the western side of the site. A groundwater well on the northeast corner of the site is marginally impacted with a chlorinated solvent breakdown product (cis-1,2-Dichloroethene at 8.7 parts per billion (ppb)) and petroleum contaminants (benzene at 5.1 ppb; toluene at 8.2 ppb; and total xylenes at 23 ppb).

POST REMDIATION:

An IRM work plan was implemented in 2007 to remove PCB contaminated soil in excess of 10 ppm. Some soils with PCB contamination above 10 ppm, but below 50 ppm were left in-place in an area adjacent to the guard shack and adjacent to the high bay industrial structure so as to not compromise the structural integrity of these structures. These areas were identified on the record plan and will be managed through the implementation of a Site Management Plan. Clean imported fill (crushed quarried limestone) was used to backfill excavated areas. Excavation area surfaces were primarily restored with asphalt pavement, while some minor areas received topsoil and were seeded for establishment of turf grass. These measures are protective human health and environment.

Confirmation samples of excavation sidewalls at the property line adjacent to a state

superfund inactive hazardous waste (Altech Steel Willowbrook Pond Site No. 907022) revealed PCB contamination of soils above hazardous waste limits (50 ppm). The Altech site and the Special Metals site were previously a single business entity where the Special Metals site was subdivided and sold off as a separate entity. The remediation plan for the Altech Steel Willowbrook Pond site included the removal and appropriate disposal of this material. PCBs removal work from the Willowbrook Pond site extended up to the property border with SMC and SMC AOC. The Willowbrook Pond PCB remediation was completed in 2016. The remaining PCB contamination along this border area was less than 10 ppm.

Measures to address the residual chlorinated VOCs migrating onto the site at the northwest corner of the site were not warranted. At the northeast corner of the site, the petroleum contaminants diminished to non-detect levels, and the cis-1,2-Dichloroethene was detected at 5.5 ppb. No further action is warranted for groundwater at this location of the site.

Description of the Remedy

Contamination was identified by the Site Characterization of this site, which resulted in the remedial program identified below.

1. INTERIM REMEDIAL MEASURE
An Interim Remedial Measure (IRM) consisting of excavation and off-site disposal of PCB impacted soil/fill to a soil cleanup objective of 10 ppm total PCBs pursuant to the Order on Consent. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) was brought in to complete the backfilling of the excavation and restore previous grades at the site. DOH concurred with the IRM work plan.

2. SITE COVER
A site cover was installed to allow for commercial/industrial use of the site. The cover consists either of existing structures such as buildings and new or existing pavement comprising the site and soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d). In areas where building foundations or building slabs preclude contact with the soil, the requirements for a site cover will be deferred until such time that they are removed.

3. ENGINEERING AND INSTITUTIONAL CONTROLS
Imposition of an institutional controls in the form of an environmental easement and a Site Management Plan, as described below, were implemented. The remedy achieved a Track 4 commercial cleanup at a minimum and includes imposition of a site cover, an environmental easement and site management plan as described below.

- Institutional Control
  Imposition of an institutional control in the form of environmental easement for the controlled property that will:
  - ❖ require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
  - ❖ allow the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
  - ❖ restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
  - ❖ require compliance with the Department approved Site Management Plan.

- Site Management Plan
  A Site Management Plan which includes the following:
  - ❖ an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:
  - ❖ Institutional Controls: (ICs) discussed above.
  - ❖ Engineering Controls: The site cover discussed in Paragraph 2.

  This plan includes, but may not be limited to:
    - ▪ an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
    - ▪ a provision for further investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based on the investigation results and the Department determination of the need for a remedy, a Remedial Action Work Plan (RAWP) will be developed for the final remedy for the site, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment. This includes the areas under existing buildings;
    - ▪ descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
    - ▪ a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 2 above will be placed in any areas where the upper one foot of exposed surface soil exceed the applicable soil cleanup objectives (SCOs)
    - ▪ provisions for the management and inspection of the identified engineering controls;
    - ▪ maintaining site access controls and Department notification; and

- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

DOH concurs with the SMP.

After considering the remedial action(s) taken and the current site conditions, we believe the site does not rise to the class 2 standard and that reclassification from a class P to a class C is appropriate. If you approve, please sign below.

Remedial Bureau Director Approval	**11-21-2017** Date

Attachment
ec: File/DecDocs

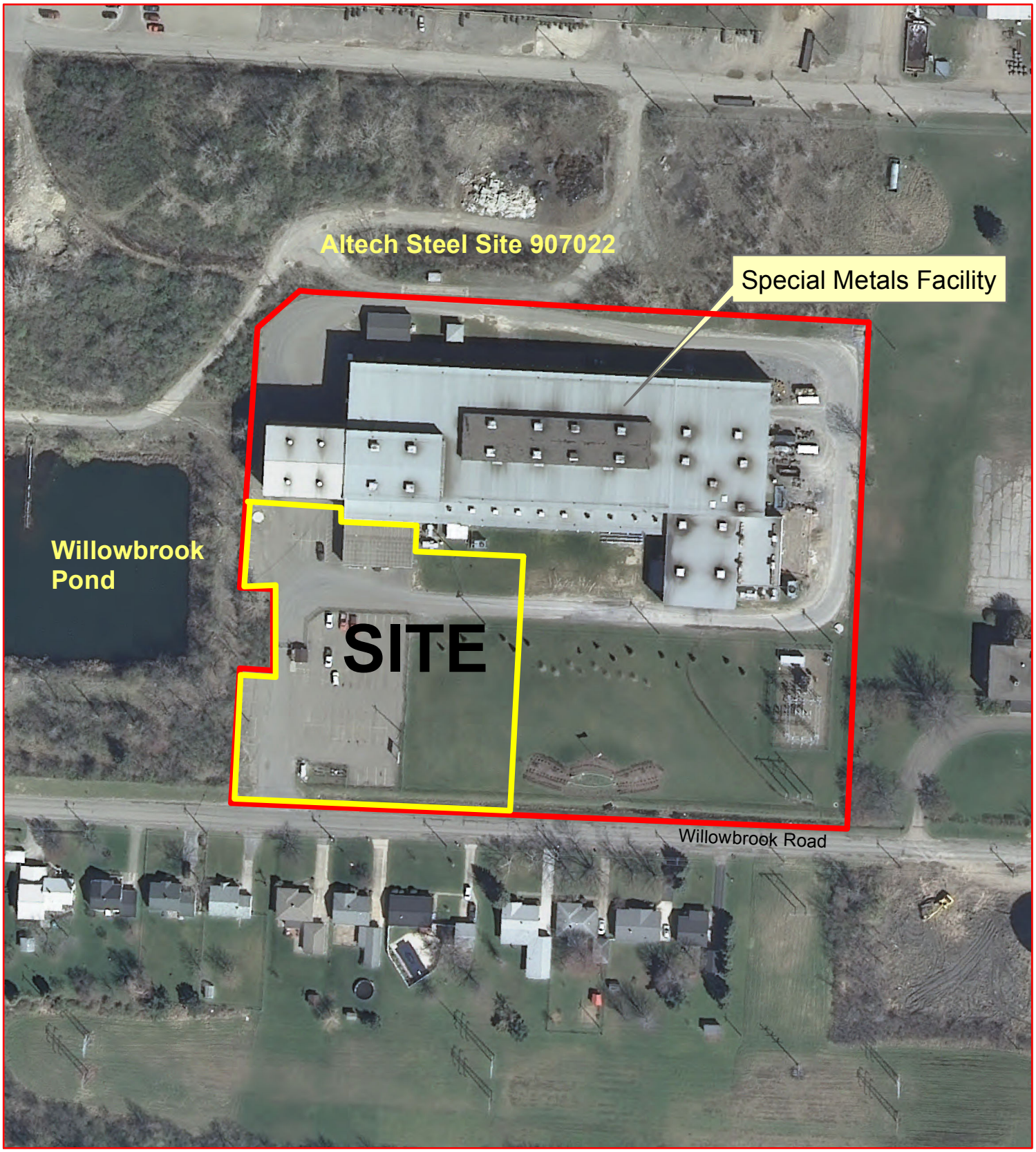
Site Location Map

Special Metals Corporation
City of Dunkirk, Chautauqua Co.
Site No. 907031

SBL: 96.10-1-2

DEPARTMENT OF ENVIRONMENTAL CONSERVATION · NEW YORK STATE ·

Figure 1



Site Plan

Special Metals Corporation
City of Dunkirk, Chautauqua Co.
Site No. 907031

SBL: 96.10-1-2

DEPARTMENT OF ENVIRONMENTAL CONSERVATION · NEW YORK STATE ·

Figure 2

APPROXIMATE PROPERTY/FENCE LINE

APPROXIMATE BUILDING ADDITION FOOTPRINT

EXISTING BUILDING

APPROXIMATE AREA OF EXCAVATION

EXCAVATION #1

EXCAVATION #2

EXCAVATION #3

EXCAVATION #4

EXCAVATION #5

APPROXIMATE LIMITS OF EXCAVATION #6

APPROXIMATE AREA OF EXCAVATION

APPROXIMATE AREA OF CONCERN

APPROXIMATE LIMITS OF BEAUTIFICATION BERM

GUARD HOUSE

WILLOWBROOK AVENUE

NORTH

LEGEND:

- APPROXIMATE AREA OF GRASS RESORATION
- APPROXIMATE AREA OF ASPHALT RESORATION
- APPROXIMATE LIMIT OF IRM EXCAVATION
- APPROXIMATE LIMIT OF AREA OF CONCERN

NOTES:

1. BASE MAP ADAPTED FROM A 2004 AERIAL PHOTOGRAPH DOWNLOADED FROM http://www.nysgis.state.ny.us/gateway/mg/interactive_main.html, AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

DRAWN BY: DEW

DATE: JUNE 2009

GZA GeoEnvironmental of New York

APPROXIMATE SCALE IN FEET

0 30 60 120

SPECIAL METALS CORPORATION

DUNKIRK FACILITY

100 WILLOWBROOK AVENUE

DUNKIRK, NEW YORK

IRM / RI / FS REPORT

SURFACE RESTORATION OF EXCAVATION AREAS PLAN

PROJECT No. 21.0056196.20

FIGURE No. 16

© 2009 GZA GeoEnvironmental of New York

G:\ZA-T:\PROJECTS\56100s\56196.2 SPECIAL METALS RI-FS\IRM-RI-FS REPORT\FIGURE 16.dwg [Figure 16] June 18, 2009 - 3:22pm daniel.wulf

SURVEYOR'S CERTIFICATE
May 19, 2009

This survey is made for the benefit of: (1) New York State – Department of Environmental Conservation.
(2) Special Metals Corporation.

I, Wendy J. Woodbury Straight, Professional Land Surveyor do hereby certify to the aforesaid parties, as of the date set forth above that I have made a careful survey of a tract of the premises shown hereon:

I further certify that:

1. The accompanying survey was made on the ground and shows the location of buildings, structures and other improvements situated on the premises and within at least five feet of the boundaries thereof.

2. This map or plat and the survey on which it is based were made in accordance with laws regulating surveying in the State of New York, and with the "Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys," jointly established and adopted by ALTA and ACSM in 2005. Pursuant to the Accuracy Standards as adopted by ALTA and NSPS and in effect on the date of this certification, the undersigned further certifies, that in my professional opinion, as a land surveyor registered in the State of New York, the Relative Positional Accuracy of this survey conforms to that which is specified therein.

3. The property described hereon is a portion of the property covered in Deed 2624/596. NOTE (a) This survey was prepared without the benefit of a current abstract of title and is subject to any state of facts that may be revealed by an examination of such.

4. Easements and utilities are shown from field survey or from records provided by the client. For further information on underground facilities contact utility companies and U.F.P.O (1–800–962–7962). The following underground items may be located within the surveyed area: (a) communication lines, (b) gas lines, (c) abandoned storm lines, (d) sanitary sewer lines, and (e) water lines.

5. WARNING: STATEMENTS AS TO THE STATUS OF A SURVEY (CHANGE OR NO CHANGE) CAN BE MADE ONLY BY A PRACTICING, LICENSED SURVEYOR WHO HAS SUPERVISED A FIELD CREW TO INSPECT PREMISES AND COMPARE SAME WITH THE CURRENT DEED OF RECORD. UNAUTHORIZED ALTERATION HERETO OR PLAGIARISM HEREOF, MAY BE A VIOLATION OF NEW YORK STATE LAW OR REGULATION. ORIGINAL SURVEYOR'S PRINTS OF THIS DRAWING BEAR (1) THE SURVEYOR'S SIGNATURE (2) THE SURVEYOR'S CIRCULAR STAMP AND (3) THE SURVEYOR'S CIRCULAR, EMBOSSED SEAL.

_____
Professional Land Surveyor No. 49520

LEGAL DESCRIPTION FOR AREA OF CONCERN:

All that tract or parcel of land situate in the City of Dunkirk, County of Chautauqua and State of New a York, and more particularly described as follows:

Beginning in the northerly line of Willowbrook Avenue (50 feet wide) as now laid out and occupied at the iron pin located 892.36 feet easterly along said northerly line of Willowbrook Avenue from the intersection thereof with the centerline of Brigham Road as now laid out and occupied; thence continuing easterly along said northerly line of WIllowbrook Avenue a distance of 297.1 feet to an iron pin; thence northerly at an interior angle of 90 degrees 02 minute 20 seconds a distance of 274.4 feet to an iron pin; thence westerly at an interior angle of 90 degrees 23 minutes a distance of 115 feet to a point; thence northerly at an interior angle of 269 degrees 36 minutes a distance of 34.4 feet to a point; thence westerly at an interior angle of 90 degrees 00 minutes a distance of 75.3 feet to a point; thence northerly at an interior angle of 270 degrees 00 minutes a distance of 11.2 feet to a point; thence westerly at an interior angle of 90 degrees 00 minutes a distance of 106.8 feet to an iron pin; thence southerly at an interior angle of 90 degrees 00 minutes a distance of 110 feet to a point; thence easterly at an interior angle of 89 degrees 57 minutes 40 seconds a distance of 32.5 feet to a point; thence southerly at an interior angle of 270 degrees 02 minutes 20 seconds a distance of 70 feet to a point; thence westerly at anterior angle of 269 degrees 57 minutes 40 seconds a distance of 32.5 feet to an existing iron pin; thence southerly at an interior angle of 90 degrees 02 minutes 20 seconds a distance of 140 feet to the point or place of beginning, and containing 2 acres of land more or less.

GRAPHIC SCALES

0 5 10
METERS

0 20 40
FEET

AREA OF CONCERN

K E Y
● = EXISTING IRON PIN
○ = IRON PIN SET
= POLE
× = CYCLONE FENCE
= MANHOLE
= STORM RECEIVER
= HYDRANT
P.O.B. = POINT OF BEGINNING

RECORD NORTH

DRAWING OF
ALTA/ACSM LAND TITLE SURVEY
PORTION OF PROPERTY FOR
SPECIAL METALS CORPORATION
CITY OF DUNKIRK
CHAUTAUQUA COUNTY NEW YORK
SCALE: 1" = 40' MAY 19, 2009

LAND SURVEYOR, NYS LIC. NO. 49520

R1

PORTION OF 2624/596
±6.34 AC. PARCEL REMAINING
PORTION OF TAX MAP PARCEL 96.10–1–2
(FORMERLY CDUN 67–1–2.1)

PROPOSED ±2 AC. EASEMENT PARCEL
PORTION OF TAX MAP PARCEL 96.10–1–2
(FORMERLY CDUN 67–1–2.1)

PORTION OF 2624/596
±6.34 AC. PARCEL REMAINING
PORTION OF TAX MAP PARCEL 96.10–1–2
(FORMERLY CDUN 67–1–2.1)

STEEL BUILDING
ASPHALT
MONITORING WELL
PUMP STATION
STORM SEWER
TRENCH DRAIN
106.8'
90°00'
11.2'
270°00'
75.3'
90°00'
33.4'
269°36'
TRANSFORMER ON CONC.
GUY
UNDERGROUND UTILITY
WATER COOLING TOWER
5'
LAWN
115'
90°23'
O/H UTILITY
UNDERGROUND ELEC.
110'
89°57'40"
270°02'20"
32.5'
70'
GUY
BRUSH
GATE
23.4'
GUARD SHED
90°02'20"
269°57'40"
140'
LIGHT POLE
SIGN
LAWN AND LANDSCAPE BERM
WATER SERVICE APPARATUS
GAS APPARATUS
METER PIT
GAS VALVE
WATER VALVE
CULVERT
DITCH
297.1'
274.4'
90°02'20"
P.O.B.
892.36'
BRIGHAM ROAD
EXISTING ASPHALT PAVEMENT
WILLOWBROOK AVENUE (50')
23'