

ERIE COUNTY WATER AUTHORITY INTEROFFICE MEMORANDUM

March 18, 2019



To: Commissioners Schad, Carney and Jones

From: Robert J. Lichtenthal, Jr., Deputy Director *RJL*

Subject: National Grid Substation Replacement at ECWA Service Center
ECWA Project No. 201800181

The outstanding issues relating to the proposed replacement of the National Grid Substation located at the ECWA Service Center, 3030 Union Road, Cheektowaga, NY need to be dealt with and should not be delayed further. I have attached previous memos written by Mr. Scott A. Aiple, Electrical Engineer to Mr. Russell J. Stoll, Executive Engineer and from Mr. Stoll to Terrence D. McCracken, Secretary to the Authority. Both of these memos were presented as Staff Items by Mr. Stoll at the Board of Commissioner's meeting on September 20, 2018.

I have had an opportunity to re-review these memos and to re-interview a number of staff members regarding this issue. What I have detected from both these interviews and my recollection of the discussion at the Board meeting mentioned above is how does this decision impact future plans for utilization or redevelopment on the Union Road footprint.

It is my opinion that any of the perceived improvements to traffic flow or building utilization that may be gained by the relocation of this substation from its current location to the northwest corner of the property will be overtaken by the expense to the Authority of relocating Authority electrical infrastructure (emergency generators, service panels, etc.), the impingement on current and future Line Maintenance operations at this site and security issues related to moving a private installation within the security fence at this location. The aforementioned perceived improvements are in concept only at this time. Major decisions as to whether or not the Authority will ever consolidate its operations currently located at the Ellicott Square Building in downtown Buffalo with the Service Center in Cheektowaga have never been finalized. Planning, renovation and construction would take 3-5 years. The current lease at the Ellicott Square runs into the second quarter of 2022. Given all the other issues facing the Authority and the infrastructure needs at this time, a major building project rather than a systematic renovation of the current Service Center may not be feasible nor prudent. And, any perceived gains to traffic flow or building utilization can be still be realized through a modified approach to Service Center improvements.

National Grid Substation 66 appears to be in very poor condition and any refurbishment in place or replacement has been delayed several years due to indecision. Therefore, Commissioners, I am asking that the Authority notify National Grid that there is no further interest in the relocation of this electrical substation and that they may commence the proposed replacement of Substation 66 within its current easement.



ERIE COUNTY WATER AUTHORITY
INTEROFFICE MEMORANDUM

September 11, 2018

To: Terrence D. McCracken, Secretary to the Authority
From: Russell J. Stoll, Executive Engineer *R. Stoll*
Subject: National Grid Substation Replacement at ECWA Service Center
ECWA Project No. 201800181

National Grid is proposing to replace their electrical substation located at ECWA Service Center. This substation is located inside the security fence in an existing easement adjacent to the truck/vehicle entrance alongside the building (see attached Figure 1). The existing easement is 45ft x 28ft and the replacement substation, if completed at this location, will fit the existing space. It is the opinion of the engineering staff that this is the preferred location for the substation. Alternative locations will require additional space as codes have changed requiring a larger area for the equipment. In addition, an alternative site will require an easement that does not currently exist.

The current substation is adjacent to other electrical equipment including the Service Center generator, transformer and switch gear. Replacing the electrical equipment in the current location will result in existing electrical equipment be clustered in the same general area. The supporting technical memorandum from Scott A. Aiple describes these considerations in more detail.

The current substation is proposed for replacement by National Grid because it has utility poles that are in poor condition and misaligned. These poles with equipment mounted on them deflect in normal wind condition. In addition, the electrical equipment is in aging and poor condition, and in need of upgrading. The upgrade/replacement costs will be the responsibility of National Grid.

RJS:jmf
Attachments
cc: L.Kowalski
M.Haendiges
S.Aiple
SCWA-639-1801

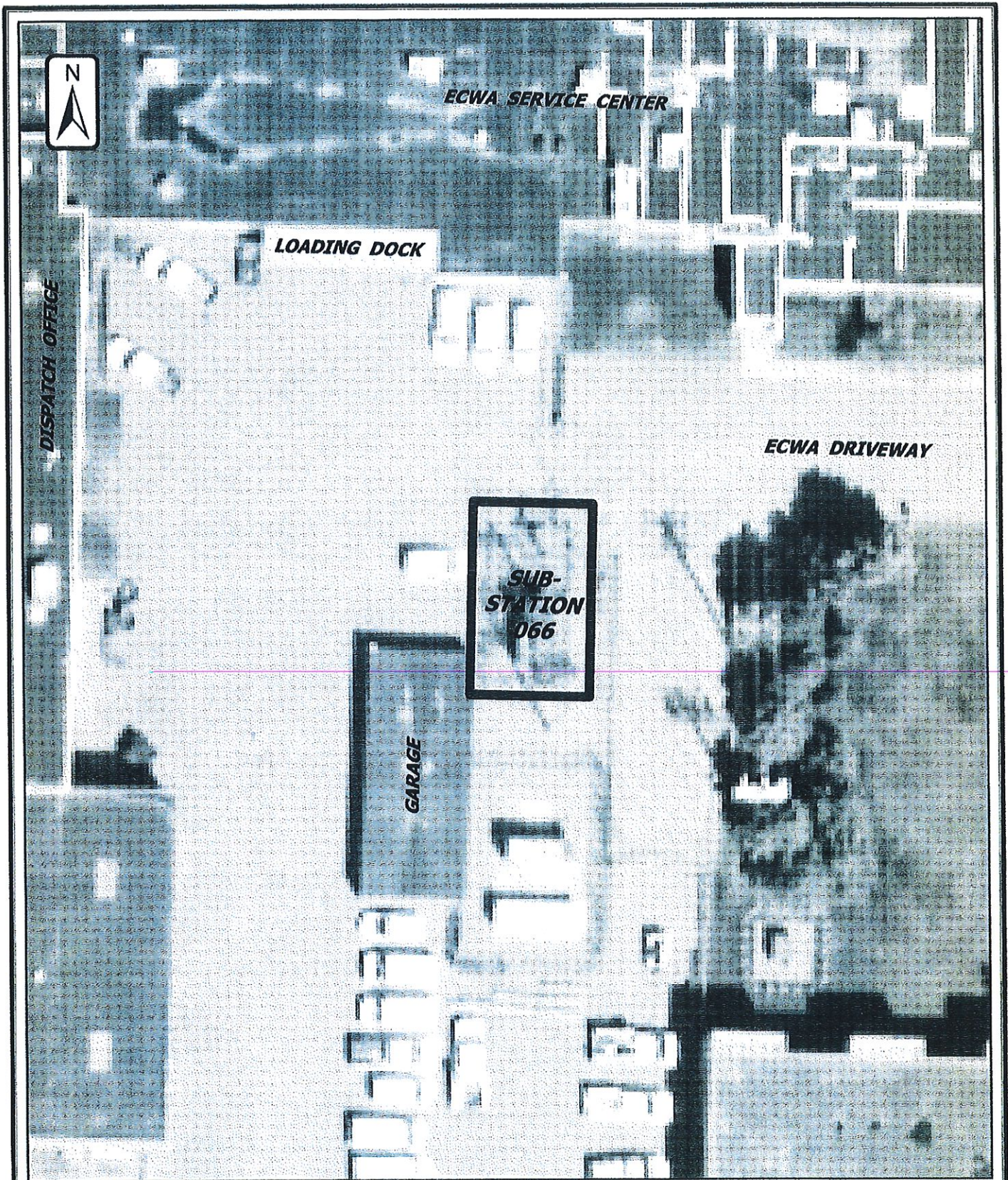


Figure 1

**Location Of Existing National Grid
Substation 066**

September 12, 2018
Scale: 1"=30'





ERIE COUNTY WATER AUTHORITY
INTEROFFICE MEMORANDUM

August 16, 2018

To: Russell J. Stoll, Executive Engineer
From: Scott A. Aiple, Electrical Engineer
Subject: National Grid Station 66 Replacement
ECWA Project No. 201800181

SAA

National Grid is proposing to replace their electrical substation (Station 66) located on ECWA property at the Service Center. The current National Grid design standards for a substation of this type and rating will require a larger footprint than the area of the existing Station 66 (45 feet x 28 feet). A re-build of Station 66 would be permitted on the existing footprint because this would be "grandfathered" under current National Grid regulations.

As such, National Grid has proposed three possible locations for the proposed substation as follows:

- Existing location outside ECWA East Security Fence – Exhibit A & Photograph 1
- Median area in the Service Center North Parking Lot -- Exhibit B
- North-West Corner of Service Center Property – Exhibit C

After reviewing these options with Len Kowalski and Mike Haendiges, we recommend that National Grid re-construct the proposed substation in the existing location. Our recommendation is based on the following:

- There is an easement for the existing National Grid Station 66; any alternate location will require a new easement.
- The existing Station 66 is located outside the ECWA Security Fence.
- The existing Station 66 is visible from ECWA Dispatch, allowing monitoring of activity at this site.
- The existing Station 66 has available area on the West side of the existing easement, allowing National Grid space for construction with minimal impact to ECWA operations.
- The existing Station 66 is located adjacent to the ECWA Substation/Generator, providing infrastructure synergy between the two substations. This results in the reduction of the number of utility poles and space required to serve both substations.
- The proposed alternate location in the ECWA North parking lot (Exhibit B) would limit real estate available to increase future parking capacity.
- Construction activity for the proposed alternate location in the ECWA North parking lot would disrupt available parking for ECWA employees and could create a safety hazard.
- The proposed alternate location in the North-West corner of the ECWA property (Exhibit C) would limit real estate available for ECWA Line Crew activities.
- Construction activity for the proposed alternate location in the North-West corner of the ECWA property would disrupt available area for Line Crew activities and could create a safety hazard.
- The proposed alternate location in the North-West corner of the ECWA property would be located inside the ECWA Security Fence, presenting possible security and access issues.

SAA:jmf

Attachments

cc: L.Kowalski

M.Haendiges

SCWA-639-1801

EXHIBIT A

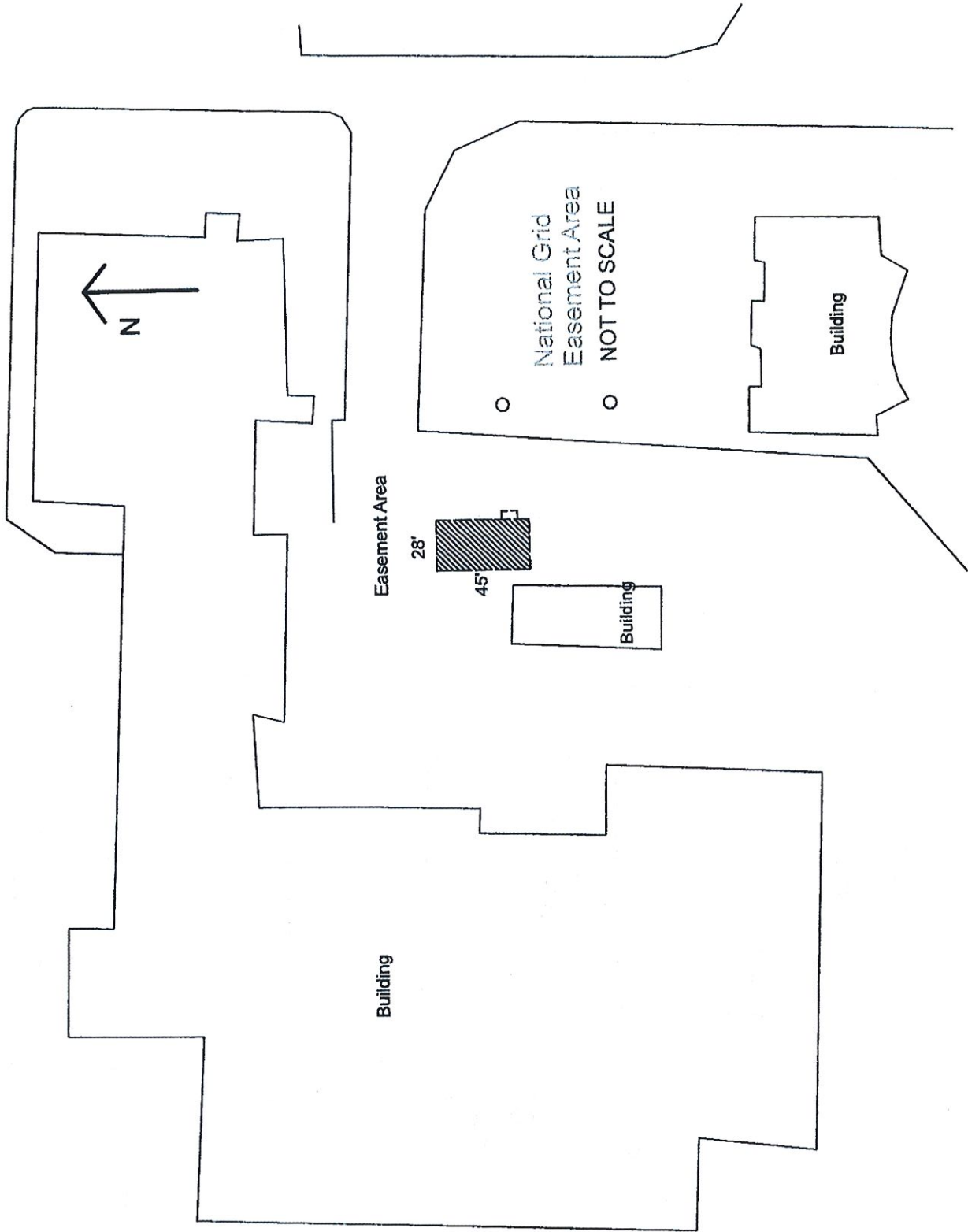
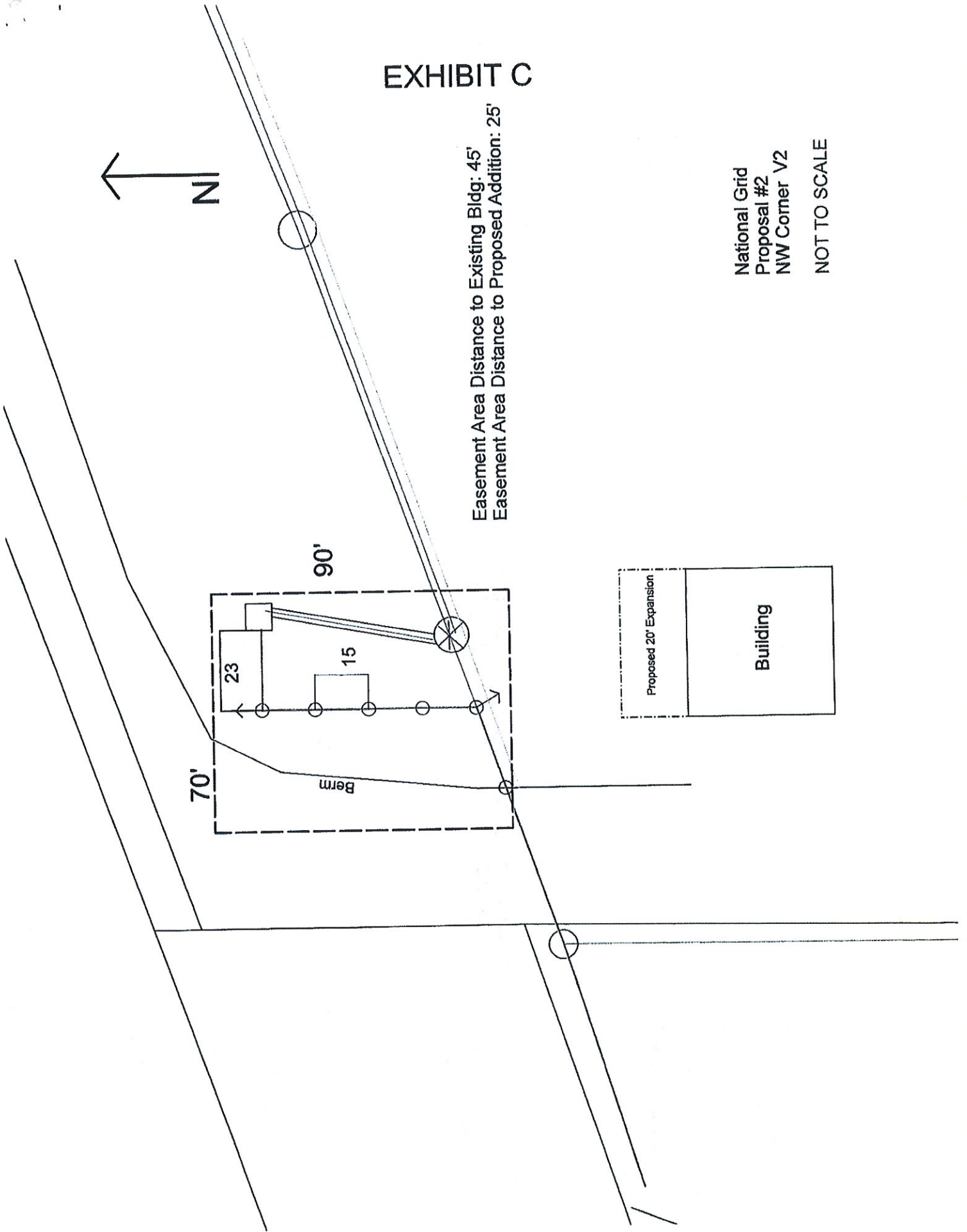


EXHIBIT C

Easement Area Distance to Existing Bldg: 45'
Easement Area Distance to Proposed Addition: 25'

National Grid
Proposal #2
NW Corner V2
NOT TO SCALE



PHOTOGRAPH 1

