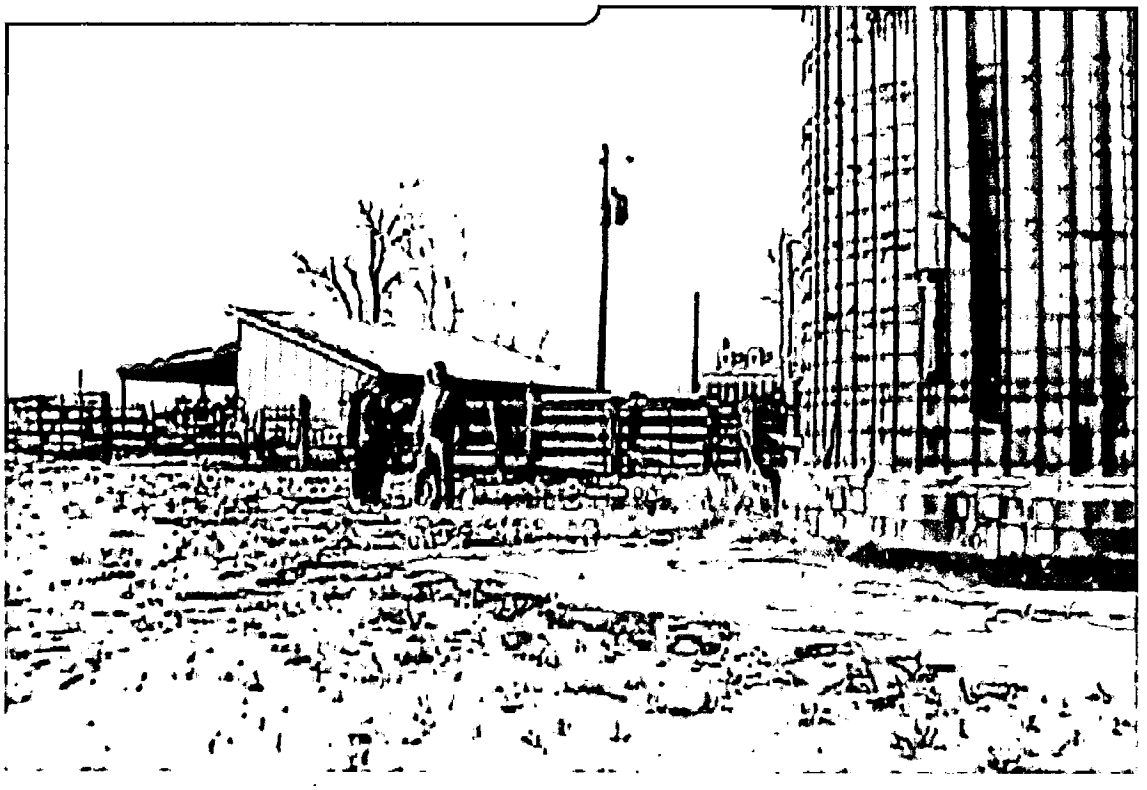
#22/17-01A 17800 Bowie Mill Road
(MP #22/17 Flint Hill II)

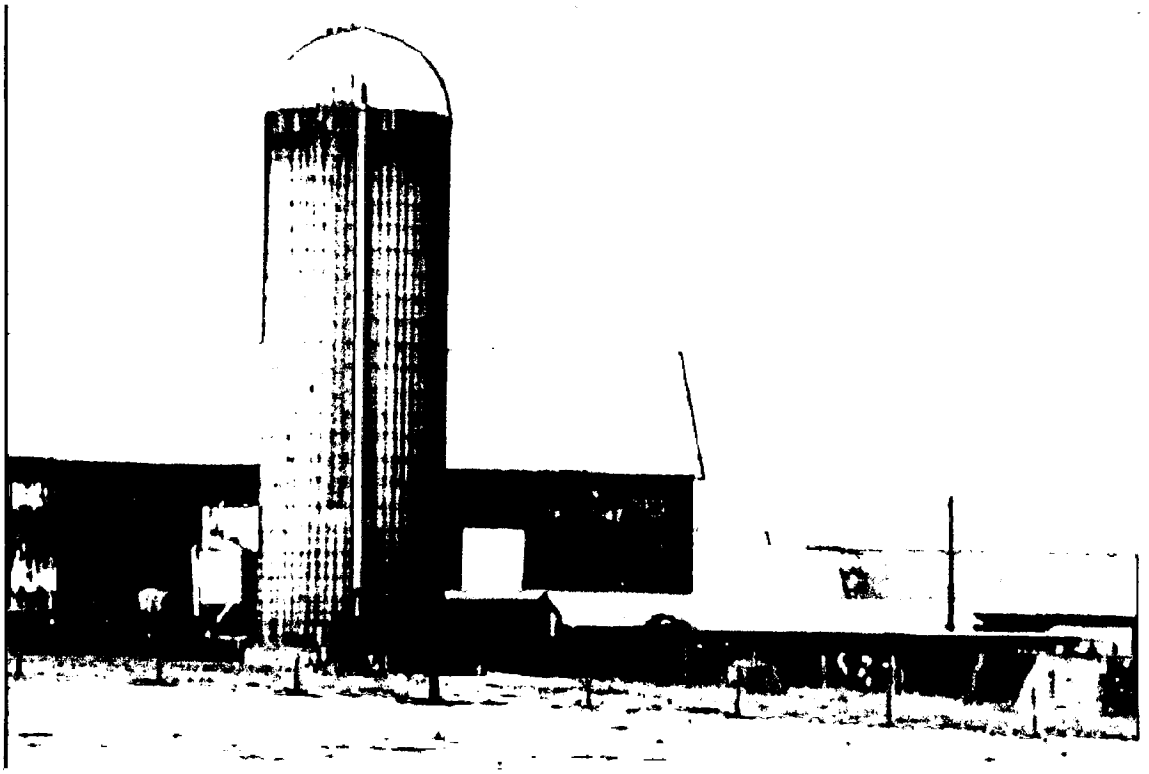
Deane Mellander
Zoning Associate
Independent Contractor
TH, Inc.

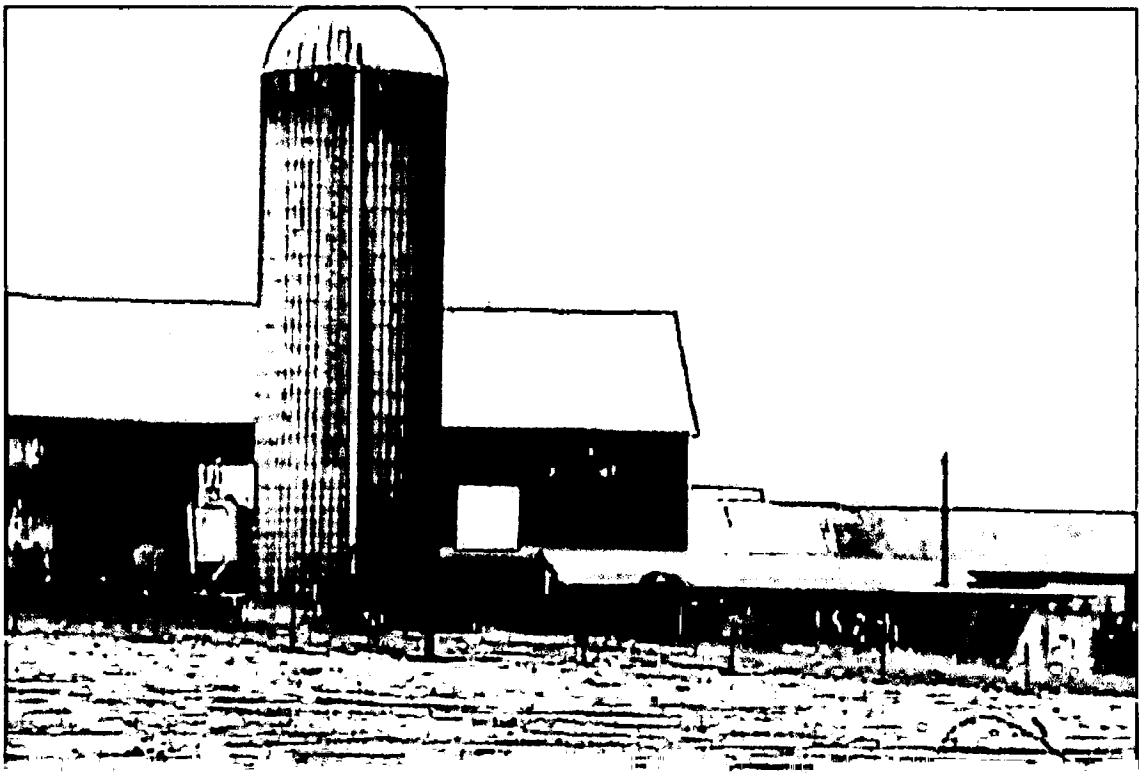
Office (240) 264-8658
PCS (301) 793-0255
Fax (240) 264-8610
12050 Baltimore Avenue
Beltsville, MD 20705
deane.mellander@voicestream.com

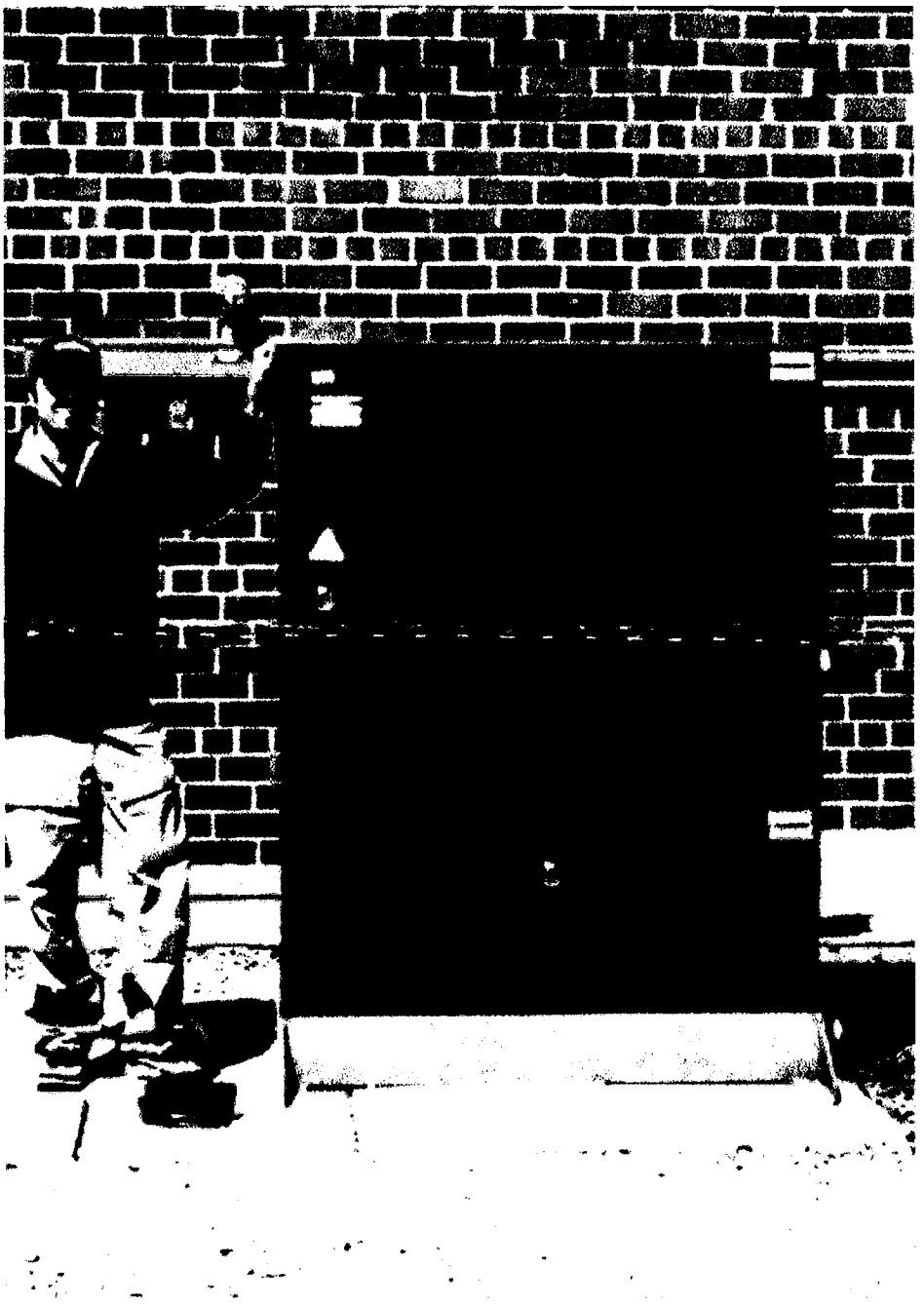
Fraley Farm Silo—Site of Proposed Shelter



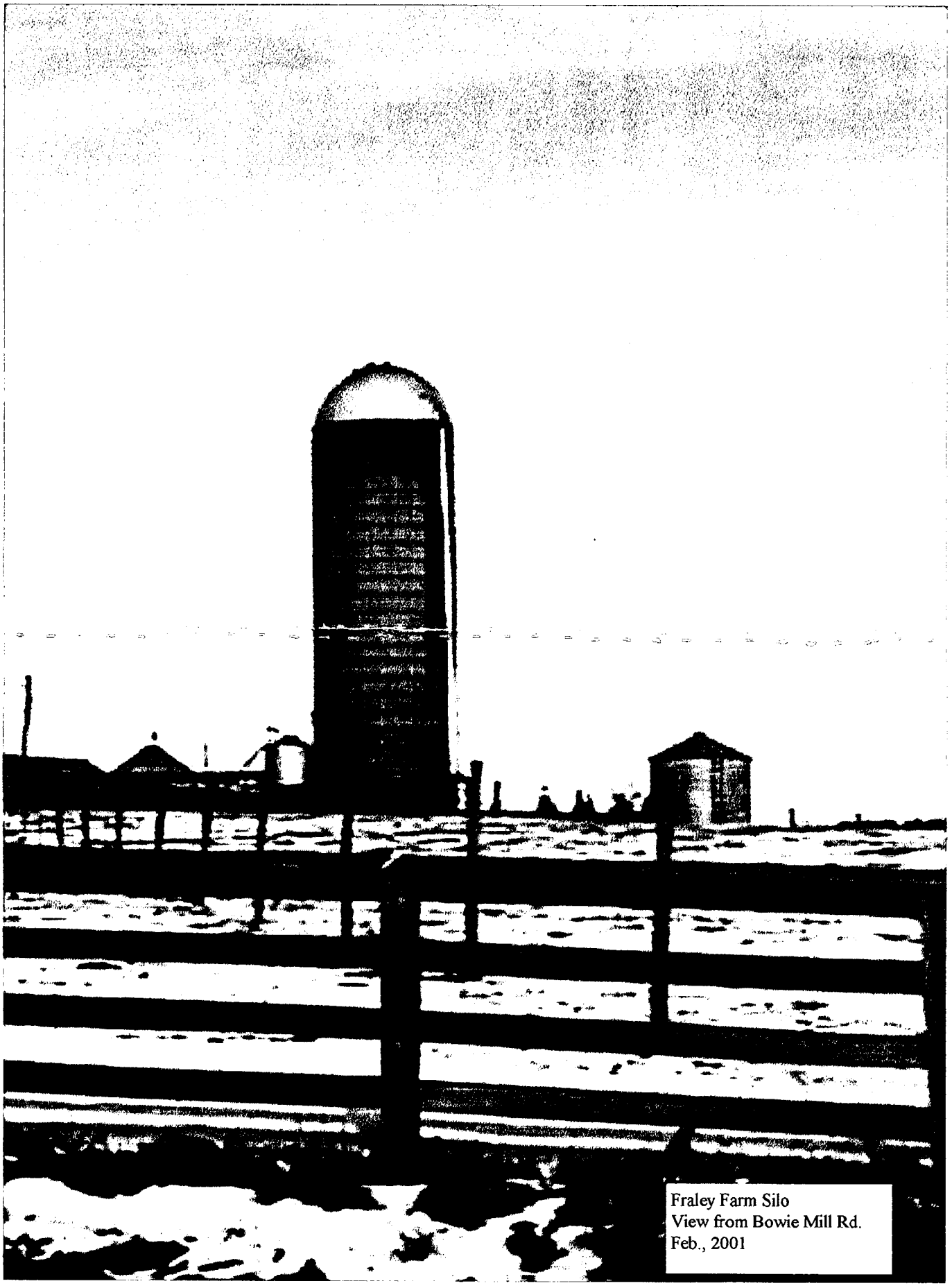
Fraley Farm Silo—Overall View of Buildings



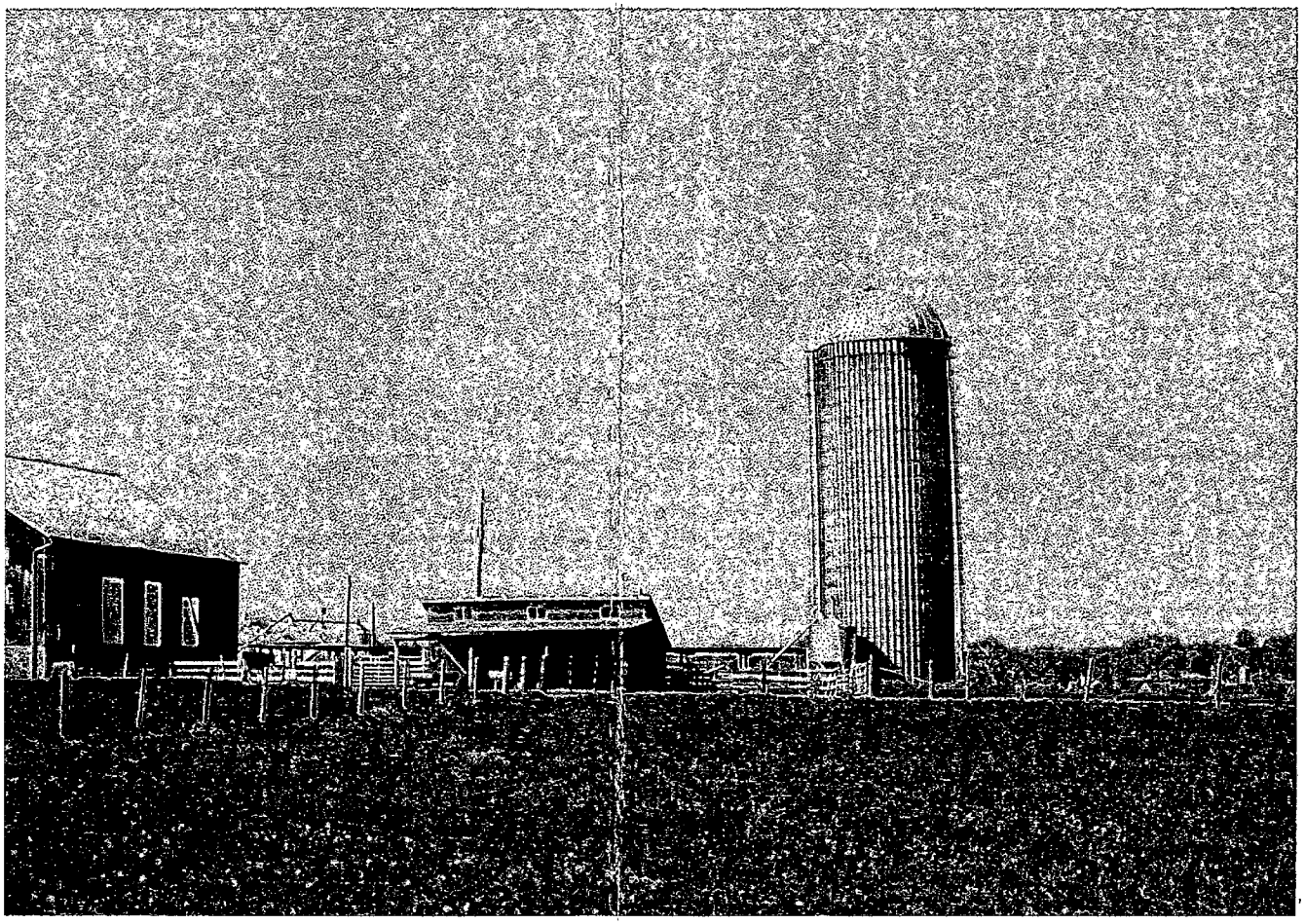




EQUIPMENT CABINENTS
TO BE HOUSED IN
LEAN-TO SHELTER



Fraley Farm Silo
View from Bowie Mill Rd.
Feb., 2001

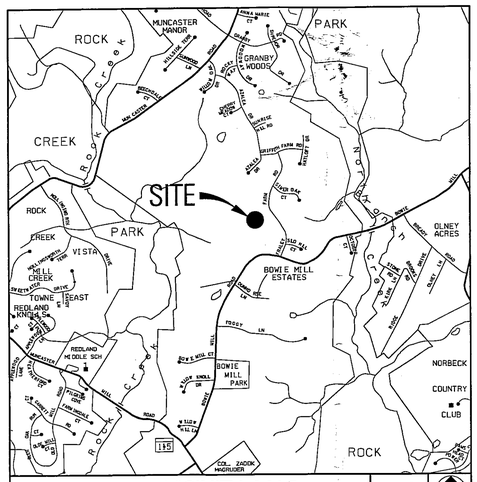


VIEW FROM ROAD

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC

PROPOSED UNMANNED WIRELESS COMMUNICATION SITE
SITE WAN 162B
REDLAND – FRALEY FARM

17800 BOWIE MILL ROAD DERWOOD, MD 20855



VICINITY MAP SCALE: 1" = 2000' NORTH

FROM THE OMNIPOINT OFFICES IN BELTSVILLE, TAKE RT. 1 NORTH TO RT. 198 WEST. FOLLOW PAST RT. 29 AND TO THE END AT RT. 650 (NEW HAMPSHIRE AVE.) TURN RIGHT ON RT. 650. FOLLOW UP TO RT. 108 AND TURN LEFT ONTO RT. 108. FOLLOW TO BOWIE MILL ROAD AND TURN LEFT. FOLLOW TO FRALEY FARM ROAD AND TURN RIGHT. ENTRANCE TO SITE IS ON THE LEFT.

DRIVING DIRECTIONS

SHEET	DESCRIPTION	REV.
T1	TITLE SHEET	
C1	SITE PLAN	
C2	COMPOUND DETAIL AND SILO ELEVATION	
C3	COMPOUND DETAILS	
GC1	SILO ELEVATION AND DETAILS	
GC2	ANTENNA MOUNTING PLAN, SECTIONS AND DETAILS	
E1	POWER AND TELCO PLAN	
E2	GROUNDING PLAN	
E3	DETAILS	

SHEET INDEX

EQUIPMENT LOCATION: [X] OUTDOOR [ ] INDOOR

EQUIPMENT TYPE: [X] RBS 2102 [ ] NORTEL S-8000 [ ] ISM / WCS

ANTENNA LOCATION:
- [ ] GUY TOWER
- [ ] SELF SUPPORT TOWER
- [ ] MONOPOLE
- [ ] ROOF TOP
- [ ] EXISTING TOWER
- [X] OTHER

JURISDICTION: MONTGOMERY COUNTY

ZONING: RE-1

THE PROPOSED FACILITIES WILL CONSIST OF A 10' X 15' CONCRETE PAD WITH 1 BTS EQUIPMENT CABINET ENCLOSED IN A SHELTER THAT IS OPEN ON ONE SIDE FOR ACCESS. IN ADDITION, 6 TELECOMMUNICATIONS ANTENNAS AND 12 COAX CABLES WILL BE MOUNTED ON THE EXISTING 68.4' SILO.

PROJECT SUMMARY

TITLE	SIGNATURE	DATE
RF ENGINEER		
REAL ESTATE		
OMNIPOINT AREA MANAGER		
PROPERTY OWNER		
ZONING APPROVAL		
CONSTRUCTION MANAGER		
ADDITIONAL APPROVAL		

APPROVAL LIST

APPROVED
Montgomery County
Historic Preservation Commiss
6/22/01

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

1. UNIFORM BUILDING CODE (UBC) 1997
2. BUILDING OFFICIALS AND CODE ADMINISTRATORS (BOCA) 1996
3. UNIFORM MECHANICAL CODE (UMC) 1997
4. NATIONAL ELECTRIC CODE (NEC) WITH LOCAL AMMENDMENTS 1999
5. ANSI / EIA-222-F
6. LIFE SAFETY CODE NFPA-101-1990
7. AMERICAN INSTITUE OF STEEL CONSTRUCTION SPECIFICATIONS (AISC)
8. UNDERWATER LABORATORIES APPROVED ELECTRICAL PRODUCTS
9. LOCAL BUILDING CODE
10. CITY / COUNTY ORDINANCES

CODE COMPLIANCE

STATE OF MARYLAND — CARLOS SEVILLANO — No. 16995 — REGISTERED PROFESSIONAL ENGINEER

DRAWING TITLE: TITLE SHEET
DRAWN BY: AWW DRAWING NO. T1
CHECKED BY: TA
SURVEYOR: KCI TECHNOLOGIES
PROJECT NO.: 9600013-74 SCALE: AS SHOWN
CAD FILE: 9600013-74-T1.DGN

SITE WAN 162B
REDLAND–
FRALEY FARM

UNMANNED WIRELESS COMMUNICATION SITE
17800 BOWIE MILL ROAD
DERWOOD, MD 20855

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
12050 BALTIMORE AVENUE
BELTSVILLE, MD 20705
(240) 264-8600 FAX: (240) 264-8610

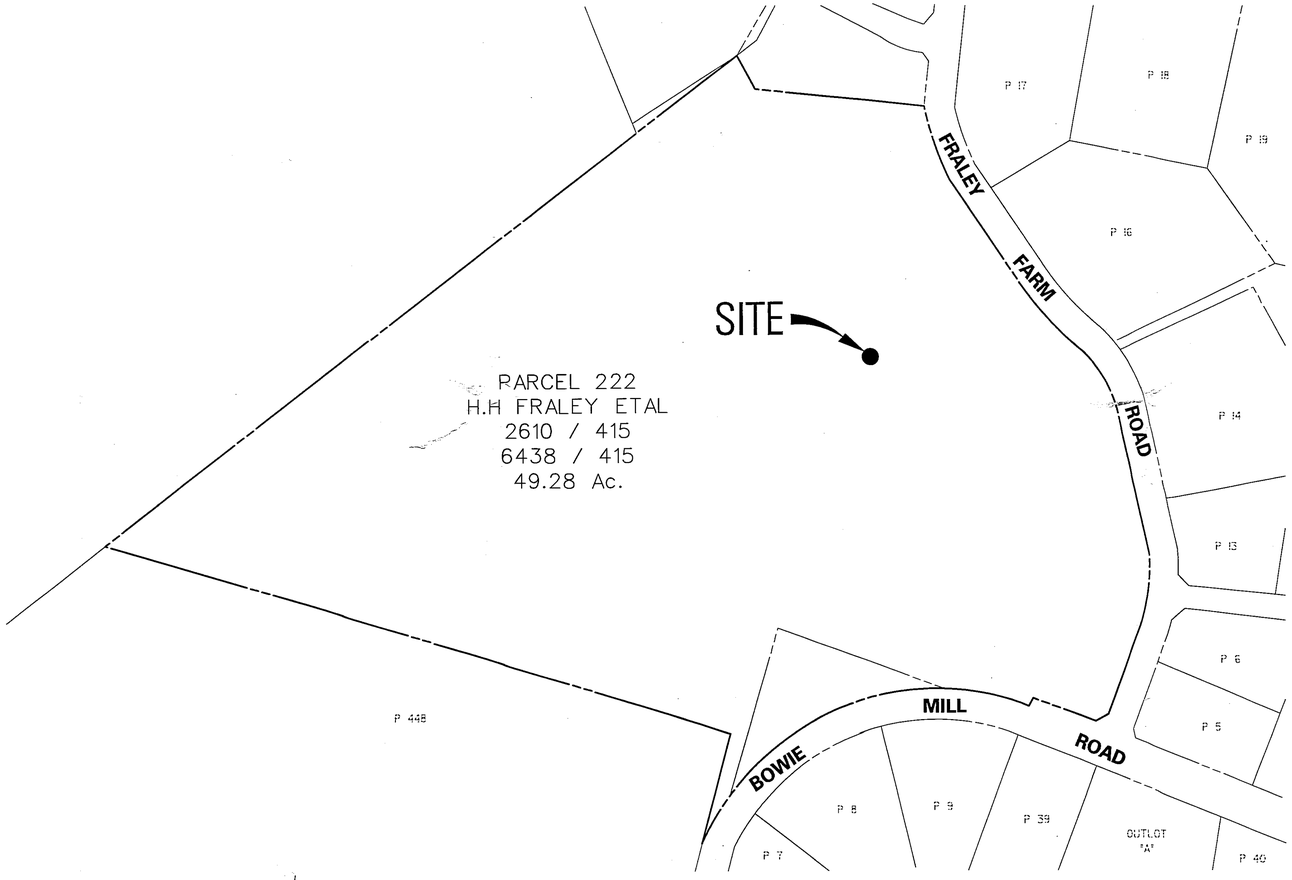
ISSUE DATE
95% SUBMISSION 05-31-01
100% SUBMISSION 06-21-01, 06-27-01
PERMIT SUBMISSION

NO.	SCHEDULE OF REVISIONS	DRAWN BY:	AUTH. REV.	ISSUE STATUS
3				
2		AKS	MK	100%
1	REVISED ZONING			
0				

KCI TECHNOLOGIES
ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS
14400 Greenview Drive, Suite 102
Laurel, Maryland 20708
(301) 953-1182 (410) 792-9086
fax: (410) 792-7419
www.kci.com

1600013-74

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
SITE WAN 162B
REDLAND–
FRALEY FARM
17800 BOWIE MILL ROAD
DERWOOD, MD 20855



PROPERTY SKETCH
SCALE: 1"=100'

300 200 100 0 50 100

SITE NOTES

1. Applicant: Omnipoint Communications CAP Operations LLC
12050 Baltimore Avenue
Beltsville, MD 20817
Local Contact: Tom Ryall
(240) 264-8600

2. Property Owner: Harry H. Fraley
17800 Bowie Mill Road
Derwood, MD 20855
Contact: Kenny Fraley

3. Site Data: Tax Map HT122 & GT 562, Parcel 222
Tract area: 49.28 Ac.
Election District No. 08
L. 9596/ F. 33
ADC Map 20, Grid H-7
Tax ID# 08-00706980
Address: 17800 Bowie Mill Road
Derwood, MD 20855
Montgomery Co., MD

4. Current Use: Agricultural/Residential

5. The proposed facilities will consist of a 10' x 15' concrete pad with 1 BTS Equipment Cabinet enclosed in a shelter that is open on one side for access. In addition, 6 telecommunications antennas and 12 coax cables will be mounted on the existing 68.4' silo.

6. Current Zoning: RE-1

7. Latitude: 39° 09' 01" N
Longitude: 77° 06' 55" W

8. Total disturbed area: 150 square feet

9. If the antennas are no longer used for telecommunications purposes for a continuous period of one (1) year, they shall be removed by the antenna owner at owner's expense.

10. No water or sanitary utilities are required for the operation of this facility.

11. This site is exempt from Stormwater Management Requirements.

12. No parking spaces are required for the proposed Omnipoint equipment cabinet.

13. This site is exempt from the Montgomery County Woodland Conservation and Tree Preservation Ordinance.

14. Project to comply with all conditions required by Montgomery County Historic Preservation Commission.

GENERAL NOTES

1. Contractor shall contact a subsurface utility locator for location of existing utilities prior to commencement of any construction activities. Contractor shall verify existing utility locations by test pit as necessary. Location of utilities shown on this plan are approximate and for planning purposes only.

2. Contractor to provide temporary toilet facilities for duration of project.

3. All work shall be completed in accordance with all State and Local codes and ordinances, the latest edition thereof.

4. Contractor shall secure all necessary permits for this project from all applicable Governmental agencies.

5. Any permits which must be obtained shall be the contractor's responsibility. The contractor shall be responsible for abiding by all conditions and requirements of the permits.

6. Contractor shall coordinate all utility connections with appropriate utility owners.

7. In any excavated area, backfill will be placed with dry material free of rock or stones larger than 1", in 12" lifts, compacted to 95% dry density. All disturbed areas to be restored to match surrounding conditions.

8. These plans are not for recordation or conveyance.

9. Existing pavement and other surfaces disturbed by contractor (which are not to be removed) shall be repaired to preconstruction conditions by the contractor.

10. Damage to utilities or property of others by the contractor during construction shall be repaired to preconstruction conditions by the contractor.

11. Notify "Miss Utility" at 1-800-257-7777 - 48 hours prior to doing any excavation in this area.

The locations of existing underground utilities are shown in an approximate way only and have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

ANTENNA CONTRACTOR'S SCOPE OF WORK

1. Antenna contractor shall coordinate cable routing with Omnipoint contruction coordinator.

2. All antenna pipe mounts and hardware shall be hot-dip galvanized in accordance with ASTM A123 and A 153.

3. Use ½" Dia. coaxial jumper cable between antenna connection and coaxial cable termination. Attach ½" Dia. cable to pipe mount to minimize visibility.

4. Contractor shall furnish and install all supports, including ice bridge as shown on the drawings.

5. Contractor shall install all antennas and coaxial cables furnished by Omnipoint as shown on the drawings.

APPROVED
Montgomery County
Historic Preservation Commission

STATE OF MARYLAND
CARLOS EDUARDO PINO
No. 16895
PROFESSIONAL ENGINEER
12/15

DRAWING TITLE: SITE PLAN
DRAWN BY: ARW
CHECKED BY: PA
DRAWING NO. C1
SURVEYOR NOT DISCLOSED
PROJECT NO. 1600013-74
SCALE: AS SHOWN
CAD FILE: 1600013-74-1-COVER

SITE WAN 162B
REDLAND–
FRALEY FARM
UNMANNED WIRELESS COMMUNICATION SITE
17800 BOWIE MILL ROAD
DERWOOD, MD 20855

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
12050 BALTIMORE AVENUE
BELTSVILLE, MD 20705
(240) 264-8600 FAX: (240) 264-8610

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS
KCI TECHNOLOGIES
14408 Greenview Drive, Suite 102
Laurel, Maryland 20708
(301) 953-1821 (410) 792-0088
fax (410) 792-2719
www.kci.com

NO.	ISSUE/REVISION	DRAWN BY	APP'D BY	ISSUE STATUS	ISSUE DATE
3					
2					
1	REVISED ZONING	ARS	MK	100%	06-29-01
0					

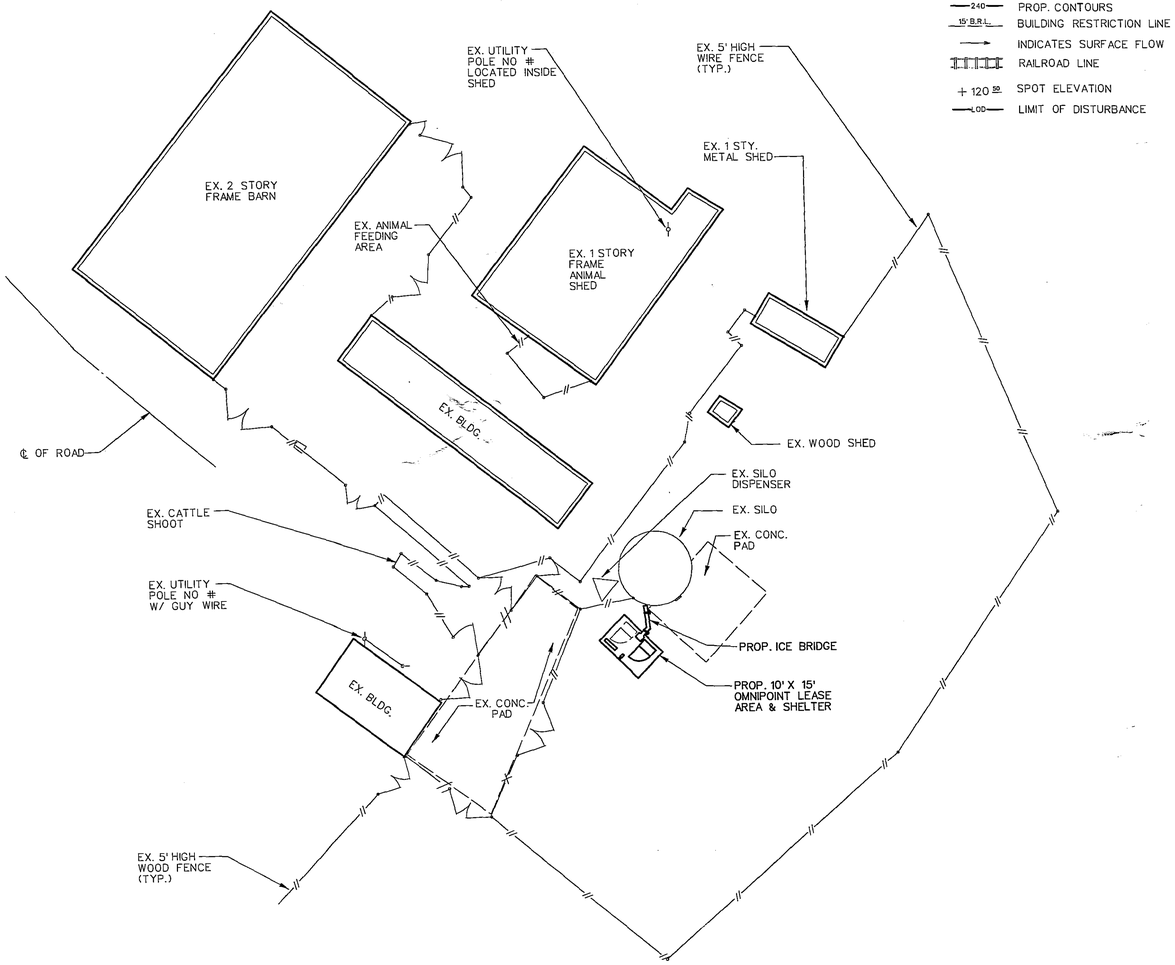
ISSUE DATE
95% SUBMISSION 05-31-01
100% SUBMISSION 06-21-01, 06-27-01
PERMIT SUBMISSION
SCHEDULE OF REVISIONS

1600013-74

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
SITE WAN 162B
REDLAND–
FRALEY FARM
17800 BOWIE MILL ROAD
DERWOOD, MD 20855

LEGEND

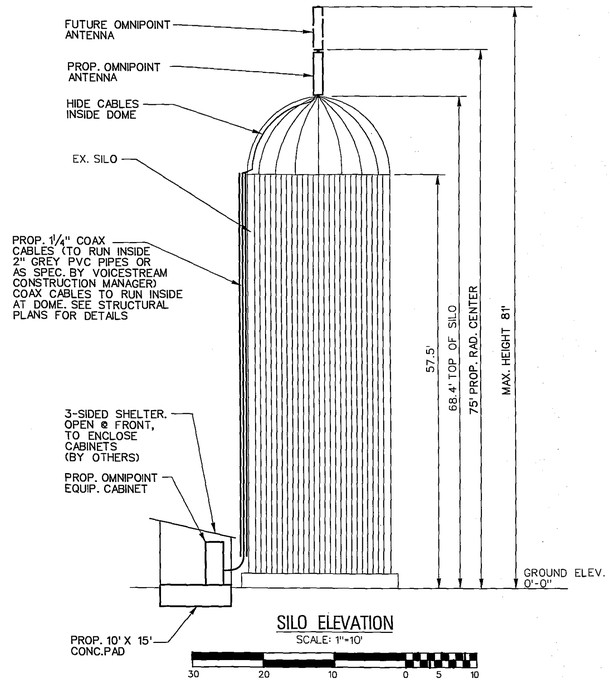
- PROP. TREE LINE
- EX. TREE LINE
- FIRE HYDRANT
- POLE
- POLE WITH LIGHT
- EVERGREEEN TREE
- OAK
- EX. FENCE
- PROP. FENCE
- 240 EX. CONTOURS
- 240 PROP. CONTOURS
- 15' B.R.L. BUILDING RESTRICTION LINE
- INDICATES SURFACE FLOW
- RAILROAD LINE
- + 120.00 SPOT ELEVATION
- LOD LIMIT OF DISTURBANCE



SITE PLAN

SCALE: 1"=20'

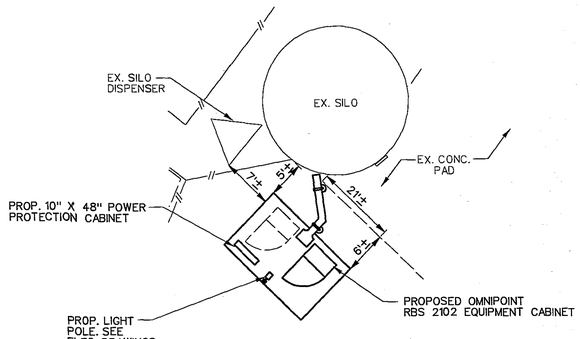
60 40 20 0 10 20



SILO ELEVATION

SCALE: 1"=10'

30 20 10 0 5 10



COMPOUND DETAIL

SCALE: 1"=0'

30 20 10 0 5 10

APPROVED
Montgomery County
Historic Preservation Commission

STATE OF MARYLAND — CHARLES EDWARD GRAF — No. 19995 — REGISTERED PROFESSIONAL ENGINEER

DRAWING TITLE: SITE PLAN COMPOUND DETAIL AND SILO ELEVATION
DRAWING NO. C2
DRAWN BY: AWR
CHECKED BY: TA
SURVEYOR: KCI TECHNOLOGIES
PROJECT NO. 1600013-74
SCALE: AS SHOWN
CAD FILE: 1600013/74/74-C2.DGN

SITE WAN 162B
REDLAND–FRALEY FARM

UNMANNED WIRELESS COMMUNICATION SITE
17800 BOWIE MILL ROAD
DERWOOD, MD 20855

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
10050 BALTIMORE AVENUE
BELTSVILLE, MD 20705
(240) 264-8600 FAX: (240) 264-8610

ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS
KCI TECHNOLOGIES
14409 Greenview Drive, Suite 102
Laurel, Maryland 20708
(301) 953-1182 (410) 792-9086
fax: (410) 792-7419
www.kci.com

NO.	SCHEDULE OF REVISIONS	DRAWN BY	WITH 'A'	ISSUE DATE
3				
2				
1				
0	85% SUBMISSION			05-31-01
	100% SUBMISSION			06-21-01, 06-27-01
	PERMIT SUBMISSION			

1600013-74

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
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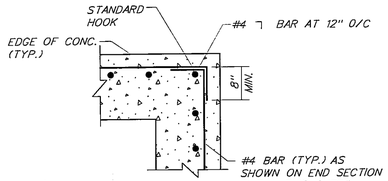
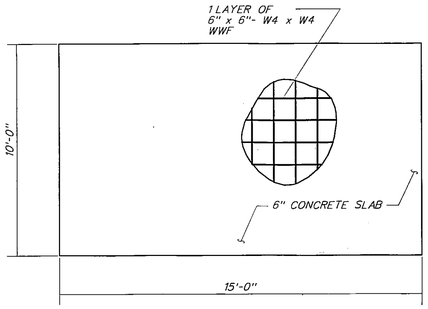
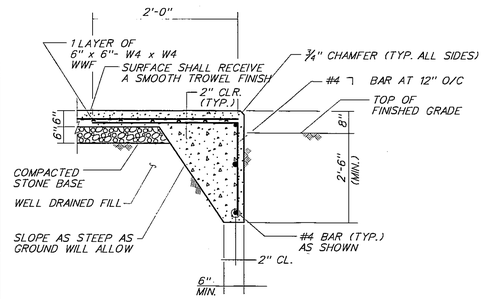


CORNER REINFORCING DETAIL
NOT TO SCALE



PLAN
NOT TO SCALE



END SECTION
NOT TO SCALE

CONCRETE EQUIPMENT SLAB DETAILS
NOT TO SCALE

GENERAL STRUCTURAL NOTES

1. SPECIFICATIONS / CODES:

- CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE ACI CODE.
- STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH AISC STEEL CONSTRUCTION MANUAL, 9th EDITION.
- WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.1-92 "STRUCTURAL WELDING CODE-STEEL.
- REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI), "MANUAL OF STANDARD PRACTICE".

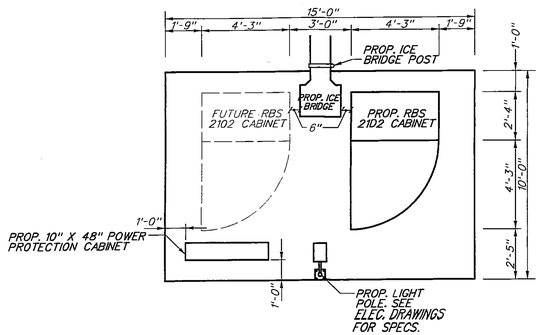
2. MATERIALS:

- CONCRETE: fc' = 3000 psi
- REINFORCING STEEL: ASTM A 615, GRADE 60.
- WIRE MESH: ASTM A 185
- STRUCTURAL STEEL: ASTM A 36
- ELECTRODES FOR WELDING: E 70xx
- GALVANIZING: ASTM A 153
- EXPANSION BOLTS: HILTI KWIK BOLT II, STAINLESS STEEL, 3/4" DIA. x 4 3/4" EMBEDMENT, OR AN APPROVED EQUAL.

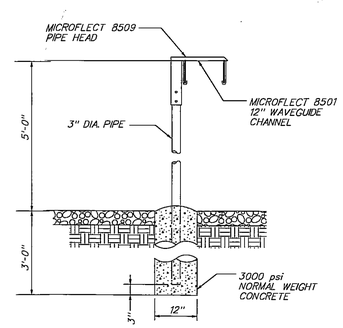
3. GEOTECHNICAL:

- CONCRETE SLAB DESIGN IS BASED ON 2000 PSF SOIL BEARING CAPACITY. IF OTHER CONDITIONS EXIST, FOUNDATION SHALL BE REDESIGNED. CONTRACTOR SHALL HAVE SOIL BEARING CAPACITY VERIFIED BY A LICENSED PROFESSIONAL GEOTECHNICAL ENGINEER PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES. DL=8,100 LBS.; LL=100 PSF.

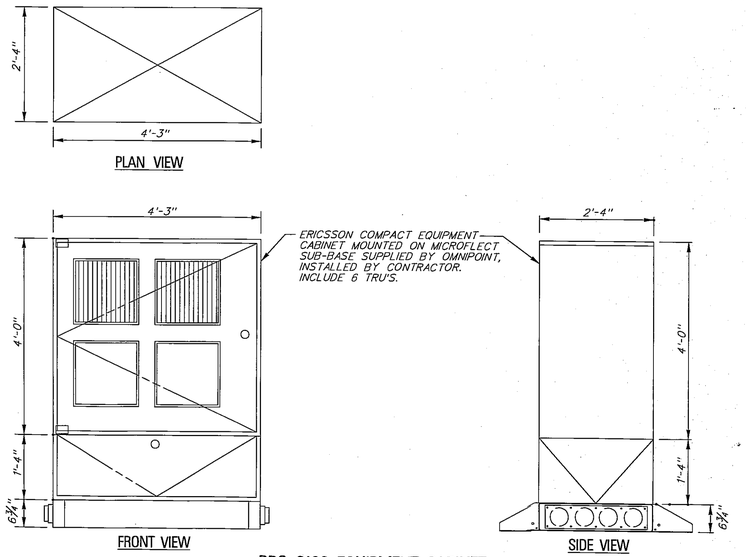
- ALL BACKFILL SHALL BE THOROUGHLY COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DENSITY.



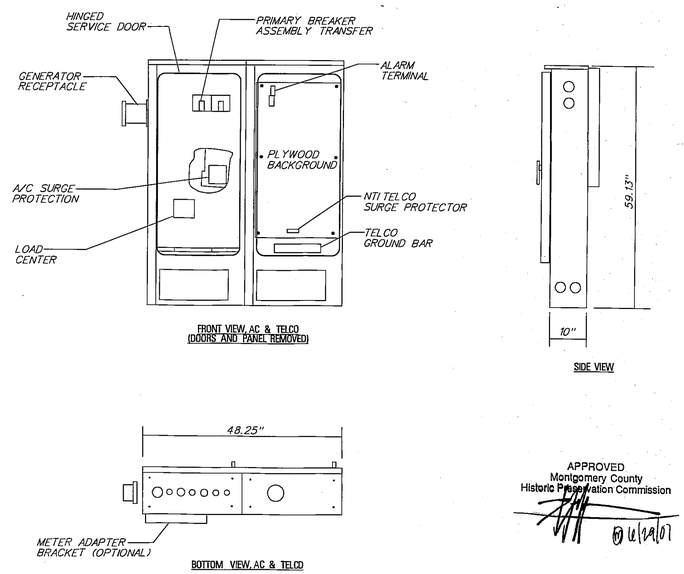
10' X 15' EQUIPMENT PAD LAYOUT
NOT TO SCALE



ICE BRIDGE DETAIL
NOT TO SCALE



RBS 2102 EQUIPMENT CABINET
NOT TO SCALE



APPROVED
Montgomery County
Historic Preservation Commission
6/14/01

POWER PROTECTION CABINET DETAIL
NOT TO SCALE

STATE OF MARYLAND
CARLOS EDUARDO GARAY
No. 16895
REGISTERED PROFESSIONAL ENGINEER

DRAWING TITLE: COMPOUND DETAILS
DRAWN BY: RPM
CHECKED BY: MK
DRAWING NO. C3
DRAWING NO.: 1600013-74
PROJECT NO.: 1600013-74
SCALE: AS SHOWN
ZAI-TILE: 1600013-74-03.DWN

SITE WAN 162B
REDLAND–FRALEY FARM
UNMANNED WIRELESS COMMUNICATION SITE
TIRED BOWIE MILL ROAD
DERWOOD, MD 20855

OMNIPOINT COMMUNICATIONS, LLC
OPERATIONS CAP
12050 BALTIMORE AVENUE
BELTSVILLE, MD 20705
(240) 264-8600 FAX: (240) 264-8610

ISSUE DATE
95% SUBMISSION 05-31-01
100% SUBMISSION 06-21-01, 06-27-01
PERMIT SUBMISSION

SCHEDULE OF REVISIONS

NO.	DESCRIPTION	DRAWN BY	APPR BY	ISSUE STATUS	ISSUE DATE
3					
2					
1					
0					

1600013-74

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
SITE WAN 162B
REDLAND–FRALEY FARM
TIRED BOWIE MILL ROAD
DERWOOD, MD 20855

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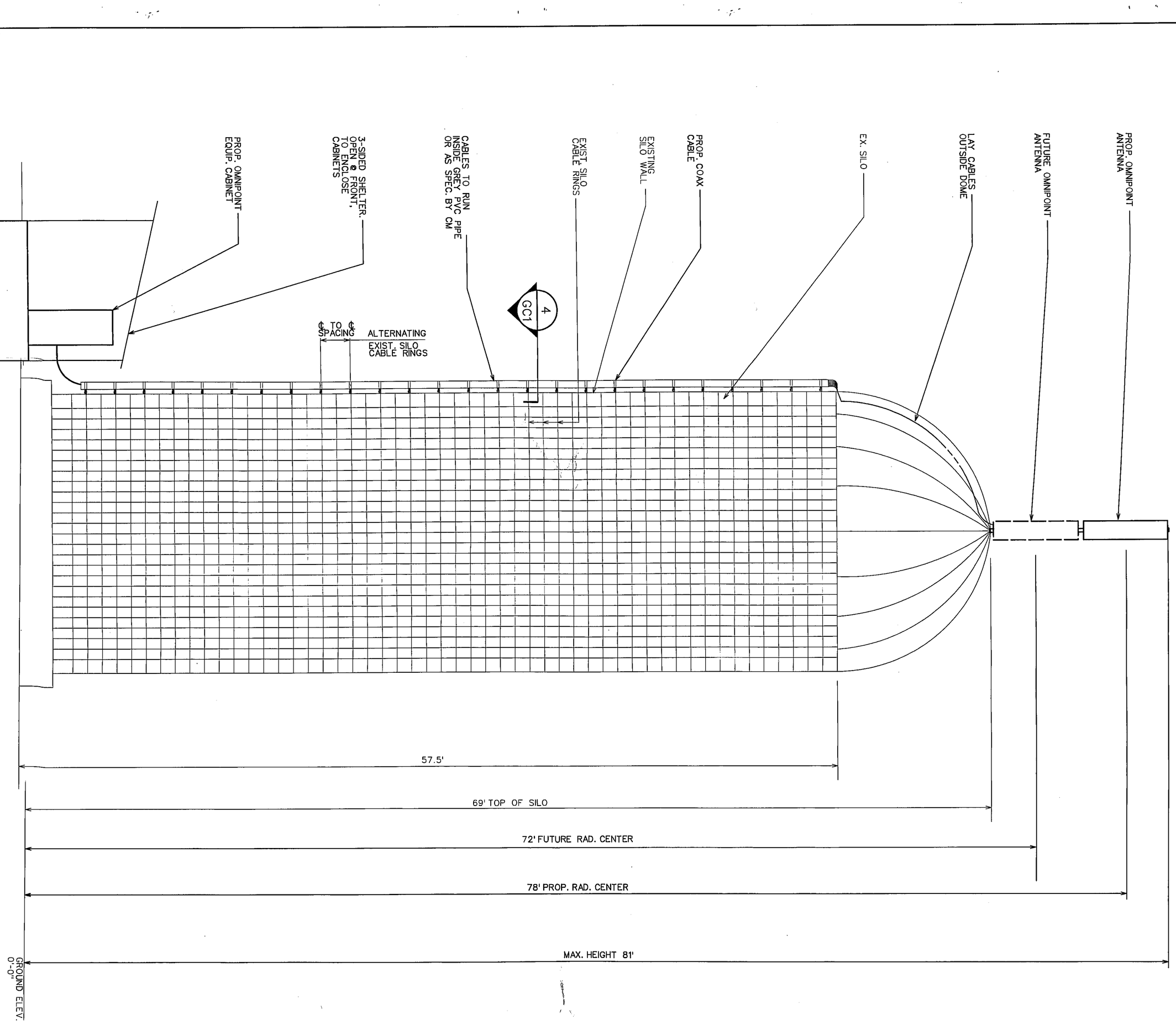
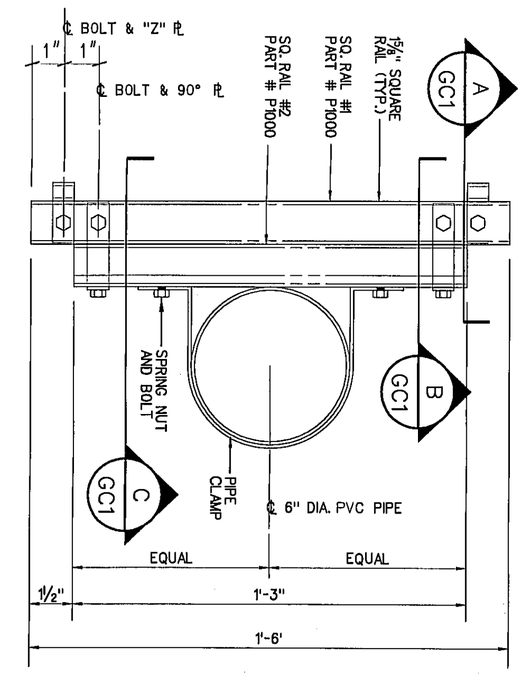
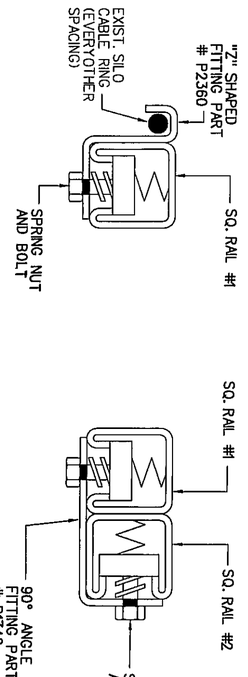


SILO ELEVATION
SCALE: 1/4" = 1'-0"



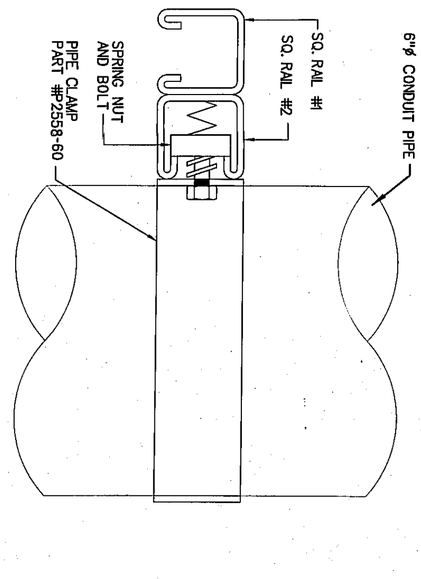
DETAIL
SCALE: 3"=1'-0"
1 GC1



SECTION
SCALE: 6"=1'-0"
A GC1

SECTION
SCALE: 6"=1'-0"
B GC1

SECTION
SCALE: 6"=1'-0"
C GC1



NOTE TO CONTRACTOR:
SQUARE RAILS & HARDWARE TO BE OF "UNISTRUT" QUALITY OR EQUAL, VERIFY ALL PART NO.S.--CONTACT TOMMY THOMAS
PH. NO. (704) 522-0369
FAX NO. (704) 522-0474
CORP. PH. NO. (313) 721-4040

APPROVED
Montgomery County
Historic Preservation Commission

STATE OF MARYLAND — CARLOS SUAREZ — No. 18886 — REGISTERED PROFESSIONAL ENGINEER

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
SITE No. WAN 162-B
FRALEY FARM
17800 BOWIE MILL ROAD
DERWOOD, MARYLAND 20855
1600013.74

REV. NO.	DESCRIPTION OF CHANGES	DRAWN BY	AUTH. BY	ISSUE STATUS	ISSUE DATE
	ISSUE DATE				
	95% SUBMISSION				
	100% SUBMISSION				
	PERMIT SUBMISSION				
	SCHEDULE OF REVISIONS				
3					
2					
1					
0					

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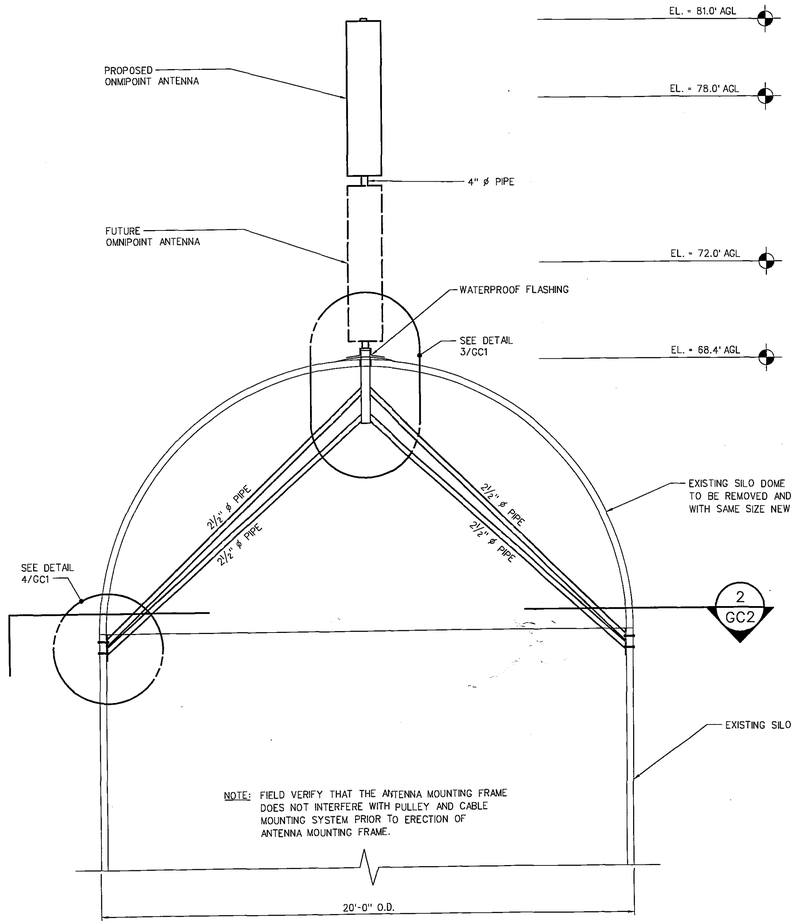
PROJECT:
SITE No. WAN 162-B
FRALEY FARM
UNMANNED WIRELESS COMMUNICATION SITE
17800 BOWIE MILL RAOD
DERWOOD, MARYLAND 20855

DRAWING TITLE:
SILO ELEVATION AND DETAILS

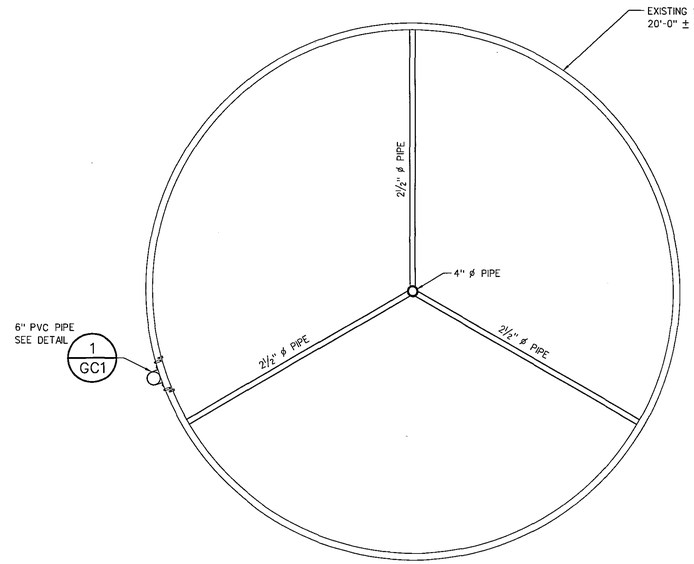
DRAWN BY: TNW	DRAWING NO. GC1
CHECKED BY: SHC	
SURVEYOR: KCI TECHNOLOGIES	
PROJECT NO. 1600013-74	SCALE: 'AS SHOWN
CAD FILE: I1600/1600013/074_FRALEY FARM/ GC1	



ANTENNA MOUNTING DETAIL

1 GC2

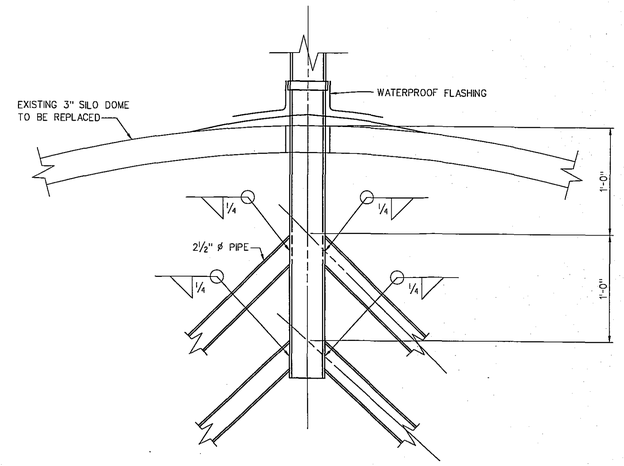
SCALE: ⅜" = 1'-0"



ANTENNA MOUNTING PLAN

2 GC2

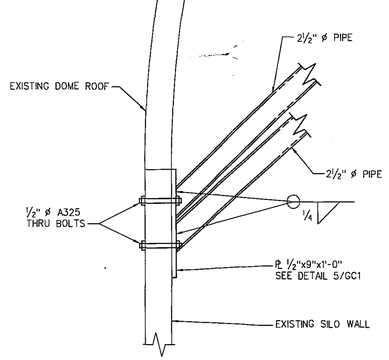
SCALE: ⅜" = 1'-0"



DETAIL

3 GC2

SCALE: 1½" = 1'-0"



DETAIL

4 GC2

SCALE: 1½" = 1'-0"

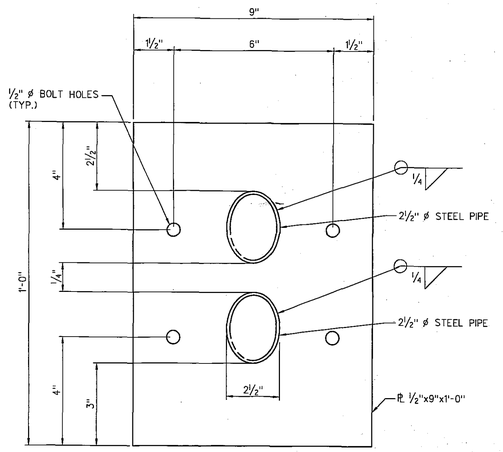


PLATE DETAIL

5 GC2

SCALE: ⅜" = 1"

APPROVED
Montgomery County
Historic Preservation Commission
6/29/01

RF SYSTEM SCHEDULE

SITE NUMBER: WAN 169-C			CABLE SCHEDULE							
ANTENNA POSITION	ANTENNA SECTOR	TYPE OF ANTENNA	COAX SIZE	RAD CENTER	EST. LENGTH	TAPE COLOR	ANTENNA DIRECTION	BEAM WIDTH	ELEC. DOWN TILT	SERIAL NUMBER
1-A(1rxD)	15 DEGREE	ACCELLERATOR	⅞"	78'0"	110'-0"	RED	RECEIVE	90 DEGREE	0 DEGREE	*
*	*	*	*	*	*	RED A WHITE	TRANSMIT	90 DEGREE	0 DEGREE	*
2-A(1tx)	15 DEGREE	ACCELLERATOR	⅞"	72'0"	110'-0"	RED W RED	RECEIVE	90 DEGREE	0 DEGREE	*
(FUTURE)	*	*	*	*	*	RED/RED/YELLOW	TRANSMIT	90 DEGREE	0 DEGREE	*
1-B(2rxD)	135 BEGREE	ACCELLERATOR	⅞"	78'0"	110'-0"	GREEN	RECEIVE	90 DEGREE	0 DEGREE	*
*	*	*	*	*	*	GREEN W WHITE	TRANSMIT	90 DEGREE	0 DEGREE	*
2-B(1rxD)	135 BEGREE	ACCELLERATOR	⅞"	72'0"	110'-0"	GREEN W GREEN	RECEIVE	90 DEGREE	0 DEGREE	*
(FUTURE)	*	*	*	*	*	GREEN/GREEN/YELLOW	TRANSMIT	90 DEGREE	0 DEGREE	*
1-C(3rxD)	255 BEGREE	ACCELLERATOR	⅞"	78'0"	110'-0"	BLUE	RECEIVE	90 DEGREE	0 DEGREE	*
*	*	*	*	*	*	BLUE W WHITE	TRANSMIT	90 DEGREE	0 DEGREE	*
2-C(1tx)	255 BEGREE	ACCELLERATOR	⅞"	72'0"	110'-0"	BLUE W BLUE	RECEIVE	90 DEGREE	0 DEGREE	*
(FUTURE)	*	*	*	*	*	BLUE/BLUE/YELLOW	TRANSMIT	90 DEGREE	0 DEGREE	*

NOTES: 1. MECHANICAL DOWNTILT WILL BE FURNISHED LATER AS SYSTEM IS DEVELOPED.
2. ERICSSON WILL PROVIDE ANTENNA SERIAL NUMBER AFTER INSTALLATION.
3. ALL CHANGES TO THIS SCHEDULE SHOULD BE APPROVED BY OMNIPOINT RF ENGINEERING.
4. CONTRACTOR TO PROVIDE A TOTAL OF 4 CABLE RUNS PER SECTOR.
5. CONTRACTOR TO PROVIDE (4) TMA'S - ERICSSON KRY 112 13/3, 2 PER SECTOR.

ANTENNA CONTRACTOR'S SCOPE OF WORK

1. ALL ANTENNA PIPE MASTS AND HARDWARE SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A 123 AND A 153. PAINT TO MATCH EXTERIOR OF BUILDING.
2. ANTENNA CONTRACTOR SHALL FURNISH AND INSTALL ALL SUPPORTS AS SHOWN ON THE DRAWINGS.
3. ANTENNA CONTRACTOR SHALL INSTALL ALL ANTENNAS AND COAXIAL CABLES FURNISHED BY OMNIPOINT AS SHOWN ON THE DRAWINGS.
4. USE ½" DIA COAXIAL JUMPER CABLE BETWEEN ANTENNA CONNECTION AND COAXIAL CABLE TERMINATION. ATTACH CABLE TO PIPE MAST TO MINIMIZE VISIBILITY.
5. EXISTING CABLE ROUTING IS SCHEMATIC. ANTENNA CONTRACTOR SHALL DETERMINE THE SIMPLEST ROUTING AND PROVIDE SUPPORTS ON THE ROOF AT 4'-0" MAX. SPACING.
6. CONNECTION BETWEEN ANTENNA AND PIPE MOUNT SHALL BE DESIGNED AND FURNISHED BY THE CONTRACTOR.

GENERAL STRUCTURAL NOTES:

1. ALL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC MANUAL OF STEEL CONSTRUCTION (ALLOWABLE STRESS DESIGN), 9th EDITION. MATERIALS SHALL BE AS FOLLOWS:

   SHAPES AND PLATES: ASTM TUBE: ASTM A500, GRADE C
   PIPE: ASTM A 53, GRADE B
   BOLTS: ASTM A 325

2. DESIGN LOADS:

   WIND SPEED = 80 MPH
   EXPOSURE = C

3. ALL WELDING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF AWS D1.1 STRUCTURAL WELDING CODE - STEEL, USING E70XX ELECTRODES. ALL WELDERS SHALL BE CERTIFIED IN ACCORDANCE WITH AWS REQUIREMENTS.
4. STEEL ANTENNA SUPPORTS AND STRUCTURAL STEEL, INCLUDING ALL BOLTS AND ACCESSORIES, SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A 123 OR ASTM 153 AS APPLICABLE. ALL AREAS OF FIELD WELDING AND BOLTING AND ANY OTHER AREAS WITH DAMAGED COATING SHALL BE FIELD REPAIRED WITH SSPC PAINT 20 GALVANIZING. REPAIR PAINT APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
5. ALL DIMENSIONS AFFECTED BY THE GEOMETRICS AND/OR LOCATION OF THE EXISTING STRUCTURE ARE TO BE CHECKED IN THE FIELD BY THE CONTRACTOR BEFORE ANY CONSTRUCTION IS DONE AND BEFORE ANY MATERIAL IS ORDERED OR FABRICATED. NOTIFY THE ENGINEER WHERE OBSTRUCTIONS TO NEW CONSTRUCTION OCCUR BEFORE ANY CONSTRUCTION IS DONE AND BEFORE ANY MATERIAL IS ORDERED OR FABRICATED.
6. SUBMIT SHOP DRAWINGS FOR ALL STEEL WORK TO OMNIPOINT PRIOR TO FABRICATION.
7. CONTRACTOR SHALL VERIFY CONSTRUCTABILITY AND DELIVERABILITY OF ALL MATERIALS PRIOR TO START OF WORK. ANY REQUESTS FOR REVISIONS MUST BE SUBMITTED TO OMNIPOINT BEFORE ANY MATERIAL IS ORDERED OR FABRICATED.
8. CONTRACTOR SHALL PREPARE AND SUBMIT TO OMNIPOINT, AS-BUILT, MARKED-UP DRAWINGS FOR ALL APPLICABLE CHANGES OR DEVIATIONS FROM CONTRACT DRAWINGS.
9. CONTRACTOR IS RESPONSIBLE FOR CARRYING OUT THE PROJECT IN A SAFE MANNER SO THAT THE EXISTING STRUCTURE IS NOT DAMAGED IN ANY WAY. CONTRACTOR SHALL PERFORM ANY NECESSARY TESTING AND ENGAGE A QUALIFIED PROFESSIONAL TO PROVIDE CONSTRUCTION GUIDANCE. ALL DAMAGE SHALL BE REPAIRED TO THE OWNER'S SATISFACTION ENTIRELY AT THE CONTRACTOR'S EXPENSE.

STATE OF MARYLAND — LAURA EDWARDS-STOUT — No. 19885 — REGISTERED PROFESSIONAL ENGINEER

DRAWING TITLE: ANTENNA MOUNTING PLAN, SECTIONS AND DETAILS
DRAWN BY: SHM | CHECKED BY: SMC | DRAWING NO. GC2
SURVEYOR: KCI TECHNOLOGIES | SCALE: AS SHOWN
PROJECT NO: 1600013.74
CAD FILE: 1600013\DWG\SITE\FRALEY FINAL.DGN

PROJECT:
SITE No. WAN 162-B
FRALEY FARM
UNMANNED WIRELESS COMMUNICATION SITE
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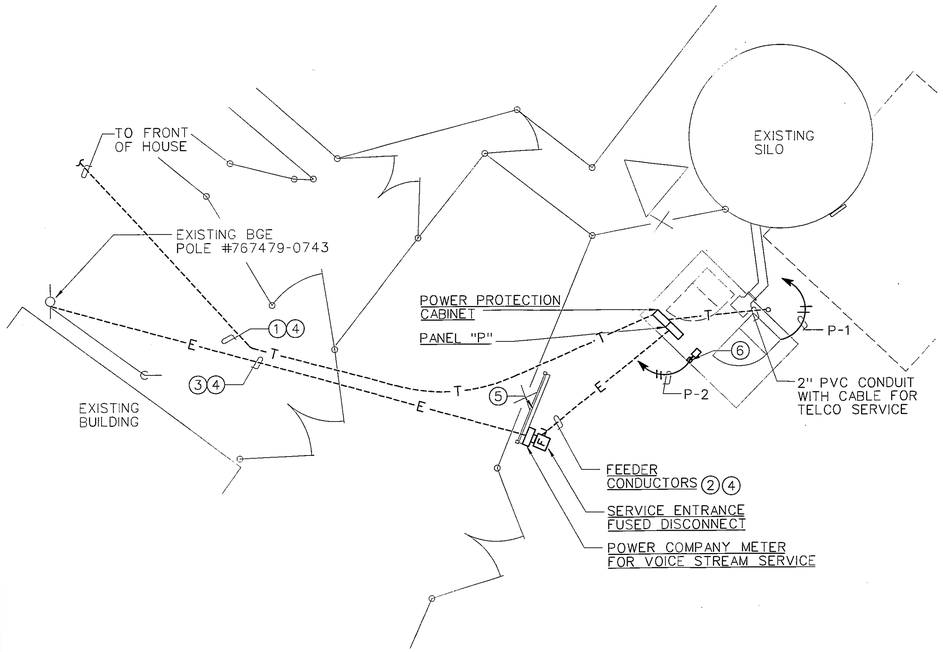
ISSUE DATE
95% SUBMISSION
100% SUBMISSION
PERMIT SUBMISSION
SCHEDULE OF REVISIONS

ISSUE	DESCRIPTION OF CHANGES	DRAWN BY	AUTH. BY	ISSUE STATUS	ISSUE DATE
0					

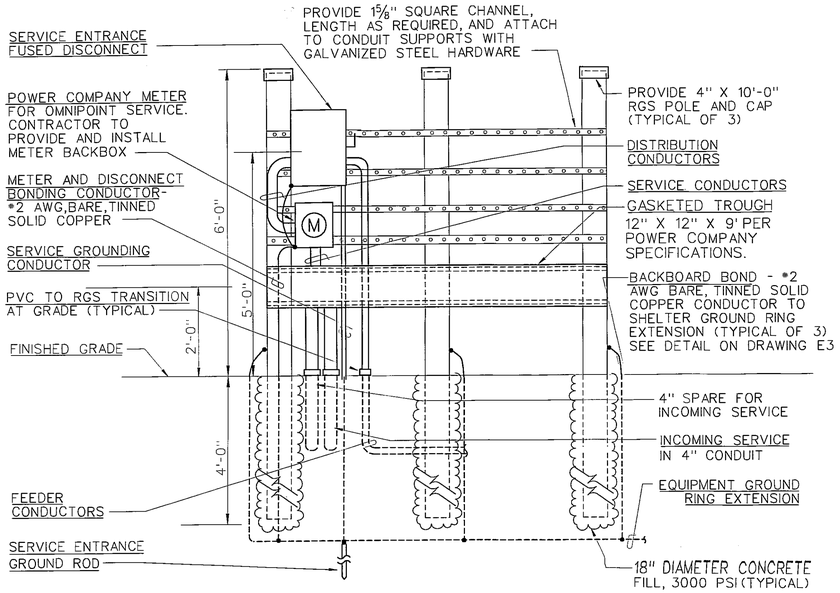
1600013.74

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
SITE No. WAN 162-B
FRALEY FARM
17800 BOWIE MILL ROAD
DERWOOD, MARYLAND 20855



POWER AND TELCO PLAN

SCALE=1/8" : 1'-0"



ELEVATION - MULTIPLE METER BACKBOARD

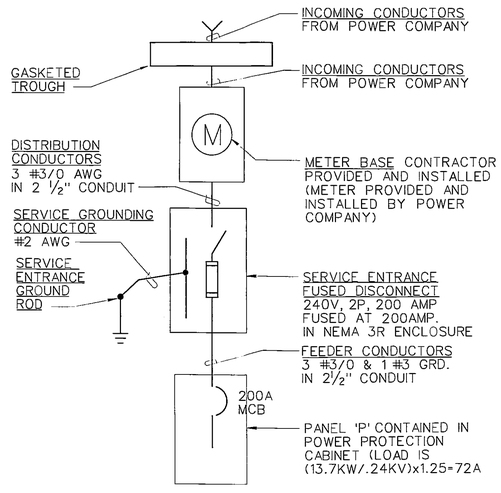
NOT TO SCALE

LEGEND

- CONDUCTOR AS INDICATED IN PLAN
- BURIED GROUND/BONDING CONDUCTOR-SIZED AS INDICATED IN PLAN
- GROUND ROD
- BELOW GRADE OR EXPOSED BONDING CONNECTION (SEE GENERAL NOTE 8)
- GROUND TEST PIT
- -E-----E-----E- UNDERGROUND ELECTRICAL CONDUIT
- -T-----T-----T- UNDERGROUND TELEPHONE CONDUIT
- (1) SEE DRAWING NOTE OF SAME NUMBER
- POWER COMPANY METER

ABBREVIATIONS

AC	-	ALTERNATING CURRENT
AFG	-	ABOVE FINISHED GRADE
AWG	-	AMERICAN WIRE GAUGE
AIC	-	AMPERES INTERRUPTING CAPACITY
BFG	-	BELOW FINISHED GRADE
BKR	-	BREAKER
CAT.	-	CATALOG
C, COND	-	CONDUIT
CKT	-	CIRCUIT
EMT	-	ELECTRICAL METALLIC TUBING
EST.	-	ESTIMATED
GRD	-	GROUND
MCB	-	MAIN CIRCUIT BREAKER
MGB	-	MASTER GROUND BAR
NEC	-	NATIONAL ELECTRICAL CODE
NEMA	-	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
No.	-	NUMBER
PVC	-	POLYVINYL CHLORIDE
RGS	-	RIGID GALVANIZED STEEL
UL	-	UNDERWRITERS LABORATORIES



ONE-LINE DIAGRAM

NOT TO SCALE

ELECTRICAL SPECIFICATIONS

A. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR AND INCIDENTAL TO THE COMPLETE INSTALLATION AND OPERATION OF ALL ELECTRICAL WORK.

B. CONFORM TO THE REQUIREMENTS OF ALL RULES, REGULATIONS, AND CODES OF LOCAL, STATE, AND FEDERAL AUTHORITIES HAVING JURISDICTION. CONFORM TO THE NATIONAL ELECTRICAL CODE, THE NATIONAL ELECTRICAL SAFETY CODE, AND NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION LATEST EDITIONS.

C. COORDINATE THE WORK OF ALL TRADES.

D. THE CONTRACT DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ALL OFFSETS, BENDS AND FITTINGS AND ACCESSORIES ARE NOT NECESSARILY SHOWN. PROVIDE ALL SUCH ITEMS AS MAY BE REQUIRED TO FIT THE WORK TO THE CONDITIONS.

E. MATERIAL AND EQUIPMENT INSTALLED AS A PART OF THE PERMANENT INSTALLATION SHALL BE NEW, UNLESS OTHERWISE INDICATED OR SPECIFIED, AND SHALL BE LISTED BY THE UNDERWRITER'S LABORATORY INC., FOR INSTALLATION IN EACH PARTICULAR CASE, WHERE STANDARDS HAVE BEEN ESTABLISHED.

F. WIRE, UNLESS OTHERWISE INDICATED SHALL BE 600 VOLTS, TYPE THWN INSULATION. CONDUCTORS SHALL BE SIZED AND RUN AS INDICATED. CONDUCTORS SHALL BE SOFT DRAWN COPPER OF NOT LESS THAN 98% CONDUCTIVITY.

G. GUARANTEE THE COMPLETE ELECTRICAL SYSTEM FREE FROM ALL MECHANICAL AND ELECTRICAL DEFECTS FOR THE PERIOD OF ONE YEAR BEGINNING FROM THE DAY OF FINAL ACCEPTANCE OF THE WORK OR BENEFICIAL USE BY THE OWNER, WHICHEVER OCCURS FIRST.

H. OBTAIN, PAY FOR, AND DELIVER ALL PERMITS, CERTIFICATES OF INSPECTION, ETC., REQUIRED BY THE AUTHORITIES HAVING JURISDICTION. DELIVER CERTIFICATES TO THE OWNER PRIOR TO FINAL ACCEPTANCE OF THE WORK.

I. CONTRACTOR SHALL COORDINATE ALL GROUNDING, POWER AND TELCO TERMINATIONS AT EQUIPMENT WITH EQUIPMENT INSTALLER PRIOR TO ROUGHING IN.

J. PRIOR TO BEGINNING WORK CONTRACTOR SHALL COORDINATE ALL POWER AND TELEPHONE WORK. ALL CONTRACTOR WORK SHALL COMPLY WITH THE RULES AND REGULATIONS OF UTILITIES INVOLVED.

K. ALL DIRECT BURIED CONDUITS SHALL BE SCHEDULE 40 PVC. ALL EXTERIOR CONDUITS SHALL BE ELECTRICAL METALLIC TUBING (EMT). OR RIGID GALVANIZED STEEL (RGS). WHERE NOTED.

L. TRENCHING FOR ALL CONDUITS SHALL BE MINIMIZED.

DRAWING NOTES

(1) EXTEND A 2" CONDUIT FROM TELCO BOX LOCATED IN FRONT OF THE FARMHOUSE (APPROXIMATELY 500'). CONTRACTOR SHALL PROVIDE AND INSTALL 2-6 PAIR, INDIVIDUALLY SHIELDED 24 GAUGE COPPER CABLE FOR TELCO SERVICE, PER OMNIPOINT SPECIFICATIONS, FROM TELCO BOX TO EQUIPMENT VIA POWER PROTECTION CABINET. PROVIDE PULL BOXES AS REQUIRED.

(2) PROVIDE UNDERGROUND 1-2 ½" CONDUIT WITH CONDUCTORS FROM SERVICE ENTRANCE DISCONNECT ON MULTIPLE METER BACKBOARD TO THE POWER PROTECTION CABINET. SEE "ONE-LINE DIAGRAM", ON THIS DRAWING, FOR NO. AND SIZE OF WIRES.

(3) EXTEND 2 - 4" UTILITY CONDUITS FROM EXISTING BGE POLE #767479-0743 (APPR. 60') TO METER AND TERMINATE ACCORDING TO THE UTILITY COMPANY'S SPECIFICATIONS. ALL CONNECTIONS AND TERMINATIONS BY UTILITY COMPANY. SEE "ELEVATION EXISTING BACKBOARD", THIS DRAWING, FOR SERVICE REQUIRMENTS.

(4) CONTRACTOR SHALL COORDINATE ALL TRENCHING ACTIVITIES WITH EXISTING BURIED GROUND AND UTILITY SYSTEMS. ANY CONTRACTOR CAUSED DAMAGE SHALL BE REPAIRED AT NO ADDITIONAL COST TO OMNIPOINT. ALL UNDERGROUND CONDUITS SHALL BE A MINIMUM OF 30" BFG. CONTRACTOR SHALL FIELD COORDINATE OMNIPOINT UTILITIES TO EQUIPMENT PRIOR TO TRENCHING.

(5) SEE "ELEVATION - MULTIPLE METER BACKBOARD" ON THIS DRAWING.

(6) PROVIDE QUARTZ FIXTURE QL1505-L15 WITH S302 SLIP FITTER ON POLE NUMBER SSP4101POM51 AS MANUFACTURED BY HUBBELL. ATTACH MOTION DETECTOR PSWM-140-B @ 6' AFG AS MANUFACTURED BY HUBBELL.

SCHEDULE OF PANEL 'P'

MINIMUM 22,000 AIC* — 120/240 VOLTS, 1 PHASE, 3 WIRE — NEMA 3R 200A MCB

CKT. NO.	EQUIPMENT SERVED	PHASE &VOLTS	CKT. BKR. POLES	CKT. BKR. TRIP	WIRING NO.	WIRING SIZE	WIRING COND.
1	CABINET NO.1	1Ø240V	2	40	3/1	8/10	1"
2	LIGHT FIXTURE	1Ø120V	1	20	2/1	12/12	¾"
3	SPARE	1Ø120V	1	20	-	-	-
4	FUTURE CABINET NO. 2	1Ø240V	2	40	-	-	-
5	SPARE	1Ø120V	1	20	-	-	-
6-28	SPACE	-	1	-	-	-	-

APPROVED
Montgomery County
Historic Preservation Commission
6/19/01

STATE OF MARYLAND — CARLOS EDUARDO OLIVA — No. 16895 — PROFESSIONAL ENGINEER — REGISTERED

DRAWING TITLE: POWER AND TELCO

DRAWN BY: AJC | DRAWING NO. E1
CHECKED BY: AMD
SURVEYOR/ KCI TECHNOLOGIES | SCALE: AS SHOWN
PROJECT NO. 1600013-74
CAD FILE: 1600013-74-ELDWG

SITE WAN 162B
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NO.	SCHEDULE OF REVISIONS	DRAWN BY	AUTH. BY	ISSUE STATUS	ISSUE DATE
3	95% SUBMISSION 05-31-01				
2	100% SUBMISSION 06-21-01, 06-27-01				
1	PERMIT SUBMISSION				
0					

1600013-74

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
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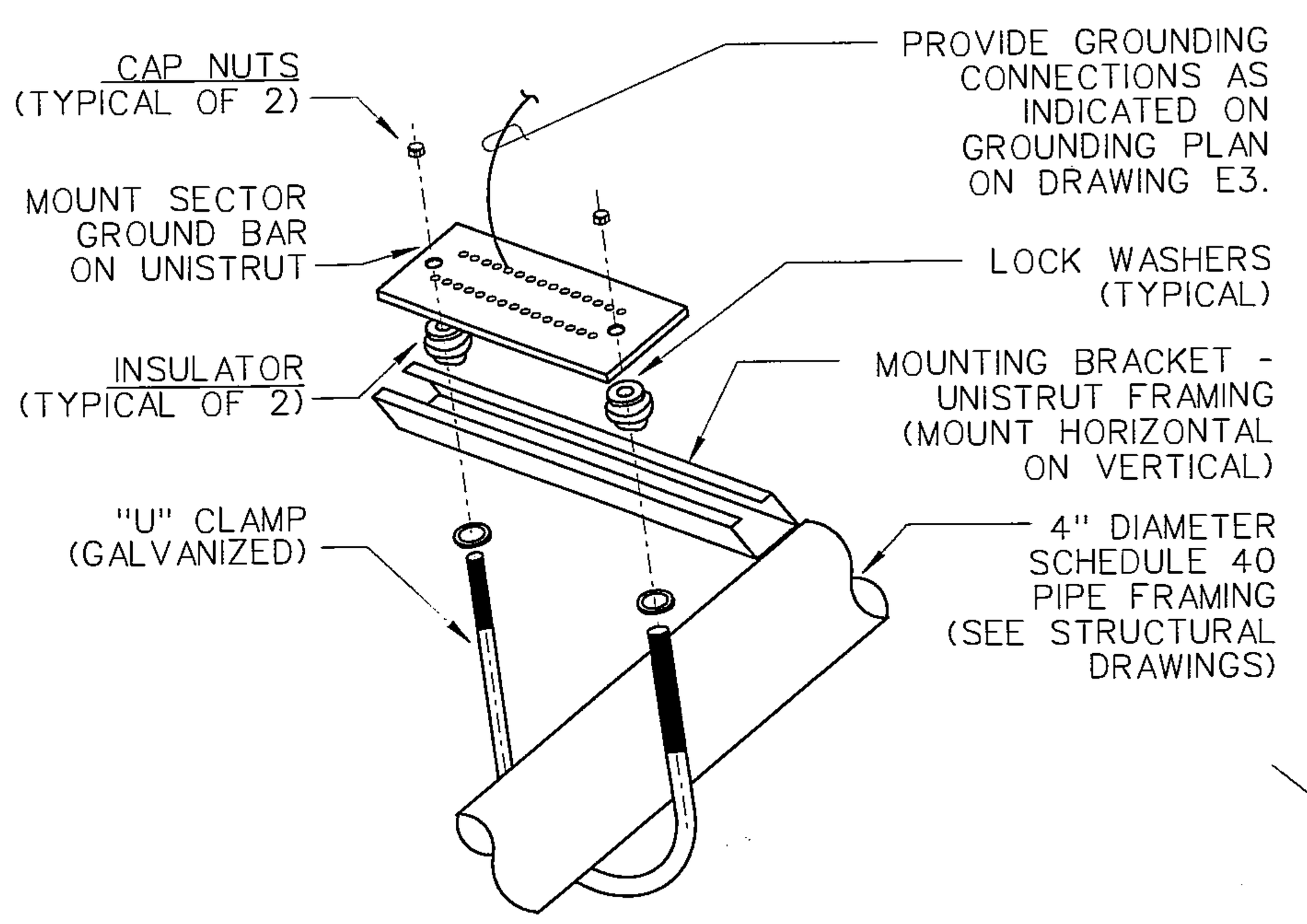
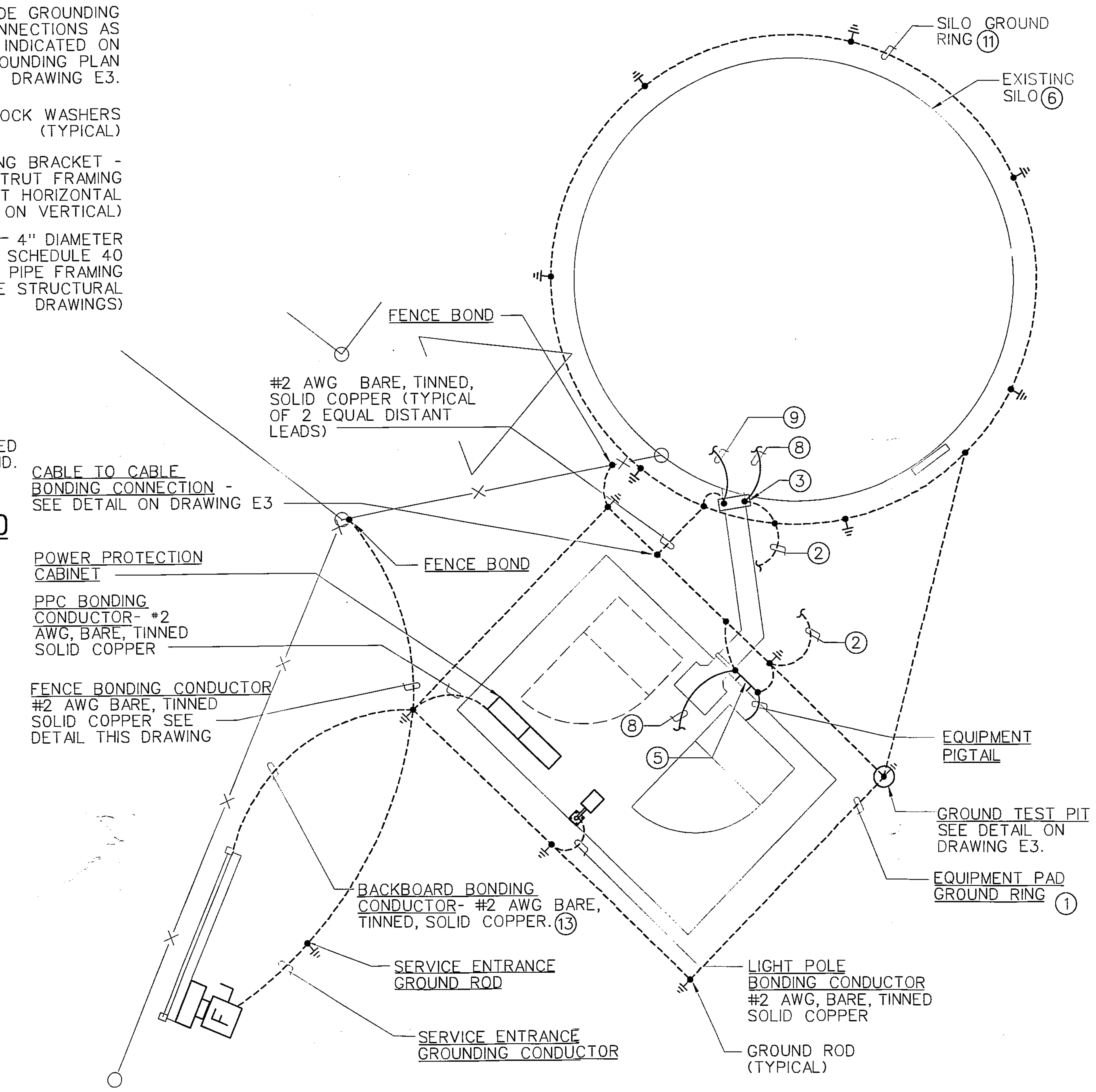


NOTE: DISSIMILAR METALS MUST BE PROTECTED WITH A COATING OF NO-OX COMPOUND.

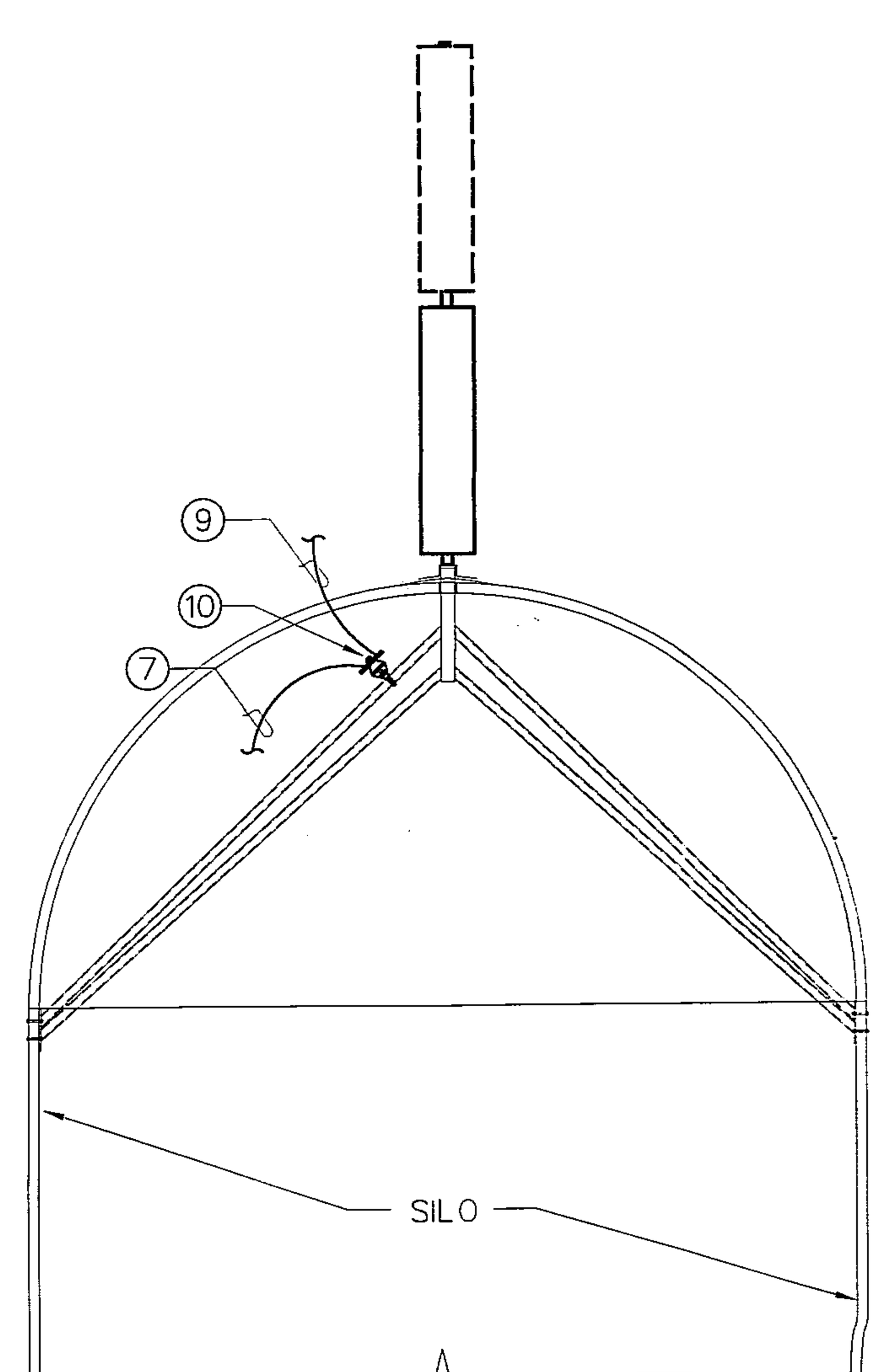
DETAIL – ANTENNA GROUND BAR MOUNTING IN SILO

NOT TO SCALE



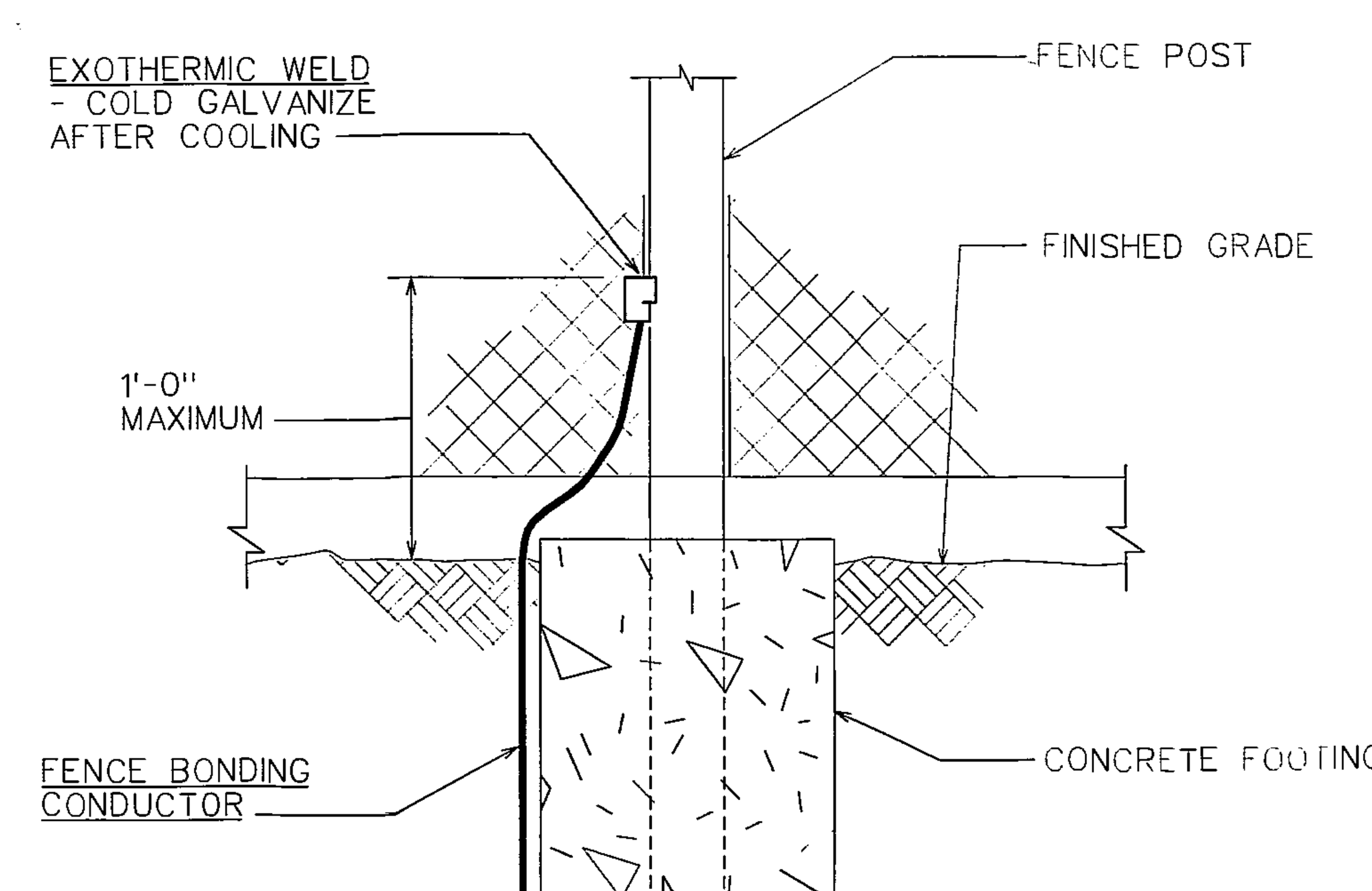
GROUNDING PLAN

SCALE: 1/4" = 1'-0"



DETAIL– ANTENNA GROUND BAR MOUNTING

NOT TO SCALE



NOTE:
INSTALLATION SHALL BE SIMILAR FOR BONDING TO ICE BRIDGE POST, AND ELECTRICAL BACKBOARD.

DETAIL – FENCE BONDING

NOT TO SCALE

GENERAL GROUNDING NOTES:

1. COAXIAL ANTENNA CABLES SHALL BE GROUNDED BY PROVIDING ANDREW CORPORATION 36" GROUNDING CABLE REQUIRING FIELD ATTACHABLE CRIMP ON TWO HOLE LUGS. GROUNDING CABLE SHALL BE FIELD CUT TO SHORTEST LENGTH POSSIBLE WHILE MAINTAINING THE STRAIGHTEST POSSIBLE ROUTE TO GROUND BUS. CONNECTIONS TO GROUND BAR SHALL NOT BE DOUBLED-UP OR STACKED. BACK-TO-BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BAR ARE PERMITTED.
2. ALL BENDS IN PROTECTION GROUNDING CONDUCTORS SHOULD BE MADE WITH THE GREATEST PRACTICAL RADIUS AND SHOULD NOT BE LESS THAN ONE (1) FOOT. WHEN THE ONE (1) FOOT MINIMUM IS NOT PRACTICAL, THE MINIMUM SHALL NOT BE LESS THAN SIX (6) INCHES.
3. USE OF 90° BENDS IN PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
4. ALL CONNECTIONS TO SECTOR AND MGB GROUND BAR SHALL BE MADE INCORPORATING LONG BARREL TWO(2) HOLE CRIMP TYPE LUG CONNECTORS. ALL BONDING CONNECTIONS SHALL BE MADE USING STAINLESS STEEL NUTS AND BOLTS. CORROSION INHIBITOR SHALL BE APPLIED BETWEEN NUTS AND BOLTS AND GROUND BUS.
5. GROUND RODS SHALL BE 5/8" x 10'-0" MINIMUM COPPER CLAD STEEL. GROUND RODS SHALL BE LOCATED ON 10'-0" CENTERS.
6. ALL BELOW-GRADE CONNECTIONS SHALL BE EXOTHERMIC WELD TYPE. EXOTHERMIC WELD CONNECTIONS SHALL ALSO BE REQUIRED WHERE INDICATED. ALL BELOW-GRADE EXOTHERMIC WELD CONNECTIONS SHALL BE MADE USING ERICO CADWELD "ONE-SHOT" CONNECTIONS. ALL EXPOSED EXOTHERMIC WELD CONNECTIONS SHALL BE SPRAYED WITH COLD-GALVANIZED AFTER COOL DOWN.
7. WHEN A BELOW-GRADE CONNECTION IS REQUIRED AT A LOCATION IN WHICH A 10'-0" GROUND ROD HAS NOT BEEN PROVIDED, A 1'-0" SECTION OF GROUND ROD SHALL BE USED. THIS METHOD WILL ASSURE THAT ALL BELOW-GRADE CONECTIONS CAN BE ACCOMPLISHED USING ERICO CADWELD "ONE SHOT" MOLDS. REFER TO "DETAIL - CABLE TO CABLE BONDING CONNECTION".
8. GROUND ROD SHIELD SHALL BE USED WHEN DRIVING GROUND RODS TO PREVENT THE ENDS FROM "MUSHROOMING." GROUND RODS SHALL BE DRIVEN STRAIGHT DOWN (90° FROM FINISHED GRADE). WHEN SOIL CONDITIONS PREVENT DRIVING GROUND RODS STRAIGHT, RODS MAY BE DRIVEN AT A 45° ANGLE FROM FINISHED GRADE. TOPS OF GROUND RODS SHALL BE THE SAME DEPTH AS GROUND RINGS (A MINIMUM OF 30" BELOW FINISHED GRADE).
9. ALL CONNECTIONS TO THE GROUND BAR SHALL BE MADE SO THAT THE BOLT HEAD IS ON THE FRONT FACE OF THE BUS. THE FRONT FACE OF THE BAR SHALL BE CONSIDERED THE SIDE AWAY FROM THE SILO OR THE SIDE CLOSEST TO THE ICE BRIDGE.
10. THE MAXIMUM RESISTANCE OF THE COMPLETED GROUNDING SYSTEM SHALL NOT EXCEED 5 OHMS ON ANY PART OF THE SYSTEM. IF, DUE TO SOIL CONDITIONS OR THE OTHER PARAMETERS, THIS MAXIMUM VALUE IS EXCEEDED, CONTACT THE ENGINEER FOR ADDITIONAL INSTRUCTIONS.

DRAWING NOTES:

(1) EQUIPMENT PAD GROUND RING. #2 AWG, BARE, TINNED, SOLID COPPER 30" BFG. . PROVIDE GROUND RING AT 2'-0" OUTSIDE EQUIPMENT PAD AND 30" BFG.

(2) PROVIDE BONDING CONNECTION TO ICE BRIDGE POST. SEE "DETAIL - ICE BRIDGE MOUNTED GROUND BAR" DETAIL ON DRAWING E3. PROVIDE AT EACH ICE BRIDGE POST. (TWO SHOWN). #2 AWG, BARE, TINNED, SOLID COPPER. (30" BFG).

(3) COORDINATE INSTALLATION OF ICE BRIDGE MOUNTED GROUND BAR WITH COAXIAL ANTENNA CABLE EXIT FROM SILO. PROVIDE MGB BONDING CONDUCTORS - #2 AWG, BARE, TINNED, SOLID COPPER GROUND TO SILO GROUND RODS (2 PLACES) AND CONNECT.

(4) NOT USED

(5) EQUIPMENT GROUND BAR. FOR MOUNTING SEE "DETAIL - MGB GROUND BAR MOUNTING" ON DRAWING E3.

(6) FOR ANTENNA PROTECTION GROUNDING REQUIREMENTS, SEE "DETAIL - COAXIAL ANTENNA CABLE GROUNDING AND GROUND BAR CONNECTIONS", ON DRAWING E3. FOR ROUTING, LOCATION, AND CONNECTION SEE "ANTENNA GROUND BAR MOUNTING" ON DRAWING E3.

(7) PROVIDE BONDING CONNECTION OF ANTENNA GROUNDING SYSTEM TO ICE BRIDGE MOUNTED GROUND BAR. ROUTE #2 INSULATED, STRANDED COPPER DOWN SILO LEG WITH COAX CABLES. FOR CONTINUATION SEE DRAWING NOTE 8 ON THIS DRAWING. FOR INSTALLATION SEE "ANTENNA GROUND BAR MOUNTING", ON DRAWING E3.

(8) #2 AWG INSULATED STRANDED COPPER BONDING CONDUCTOR CONTINUED FROM DRAWING NOTE 7, ON THIS DRAWING. FOR INSTALLATION SEE "ANTENNA GROUND BAR MOUNTING", ON DRAWING E3.

(9) PROVIDE BONDING CONNECTION TO OUTER CONDUCTOR OF COAXIAL ANTENNA CABLE (TYPICAL OF 3 AT ICE BRIDGE MOUNTED GROUND BARS AND AT ANTENNA GROUND BAR, WITH PROVISION FOR 3 FUTURE.). SEE GENERAL GROUNDING NOTE NO. 1. PROVIDE CONNECTION PRIOR TO CABLES TURNING HORIZONTAL AT BASE OF SILO AND AT ANTENNA GROUND BAR PROVIDE CONNECTION WITHIN 10'-0" OF ANTENNA.

(10) COORDINATE EXACT ANTENNA GROUND BAR MOUNTING AND LOCATION WITH STRUCTURAL DRAWINGS. MOUNT ANTENNA GROUND BAR ON MOLDED POLYESTER FIBERGLASS INSULATORS. SEE DETAIL "ANTENNA GROUND BAR MOUNTING" ON YHIS DRAWING.

(11) SILO GROUND RING - PROVIDE AT 30" BFG AND 2'-0" OUTSIDE OF FOUNDATION CAISSON.

(12) SILO BOND- SEE DETAIL THIS DRAWING.

(13) MULTIPLE-METER BACKBOARD BONDING - FOR ELECTRICAL COMPONENTS AND BONDING DETAILS SEE "ELEVATION - MULTIPLE METER BACKBOARD" ON DRAWING E1.

APPROVED
Montgomery County
Historic Preservation Commission

STATE OF MARYLAND — REGISTERED PROFESSIONAL ENGINEER

ISSUE	DATE
95% SUBMISSION	05-31-01
100% SUBMISSION	06-21-01
PERMIT SUBMISSION	06-27-01

SCHEDULE OF REVISIONS

1600013-74

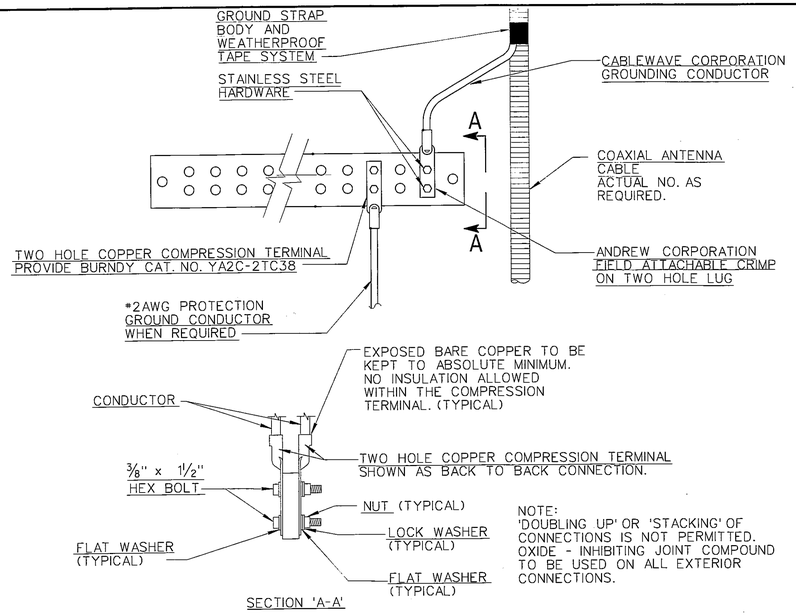
OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
SITE WAN 162B
REDLAND-FRALEY FARM
17800 BOWIE MILL ROAD DERWOOD, MD 20855

ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS
14409 Greenview Drive, Suite 102 Laurel, Maryland 20708
(301) 953-1821 (410) 792-8086 fax: (410) 792-7419
www.kci.com
KCI TECHNOLOGIES

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
12050 BALTIMORE AVENUE BELTSVILLE, MD 20705
(240) 264-8600 FAX: (240) 264-8610

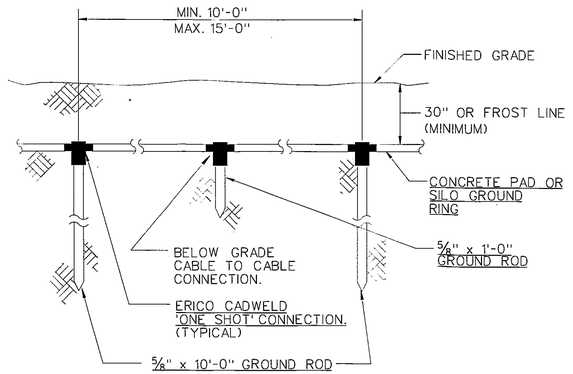
SITE WAN 162B
REDLAND-FRALEY FARM
UNMANNED WIRELESS COMMUNICATION SITE
17800 BOWIE MILL ROAD DERWOOD, MD 20855

DRAWING TITLE: GROUNDING
DRAWING NO. E2
DRAWN BY: ATC
CHECKED BY: JMD
PROJECT NO. 1600013-74
SCALE AS SHOWN

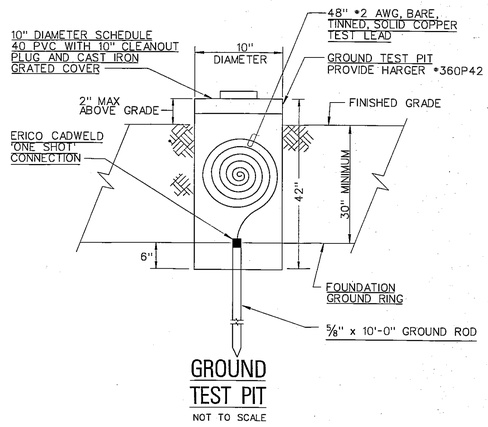


NOTE:
'DOUBLING UP' OR 'STACKING' OF CONNECTIONS IS NOT PERMITTED. OXIDE - INHIBITING JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.

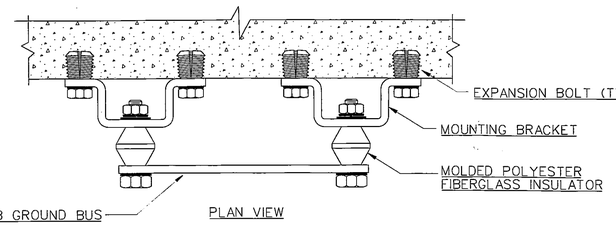
DETAIL
COAXIAL ANTENNA CABLE GROUNDING AND GROUND BAR CONNECTIONS
NOT TO SCALE



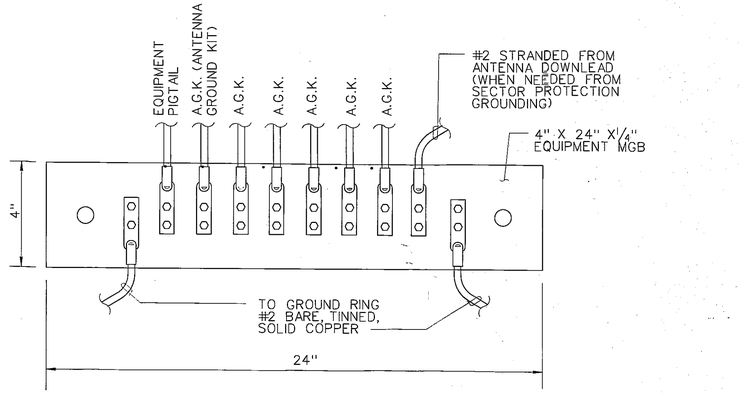
DETAIL
CABLE TO CABLE BONDING CONNECTION
NOT TO SCALE



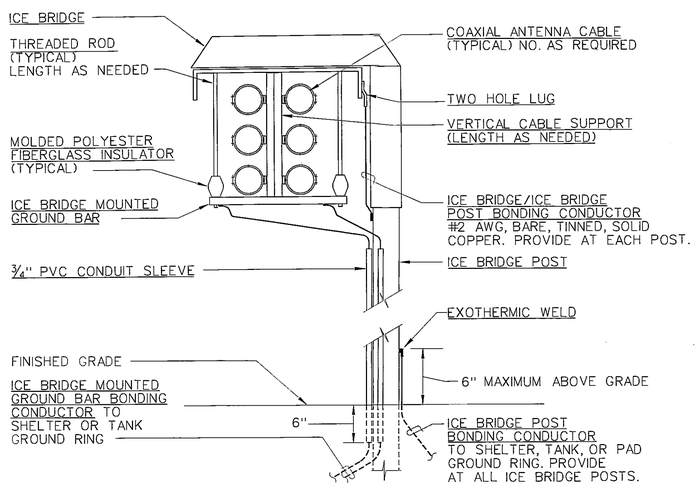
GROUND TEST PIT
NOT TO SCALE



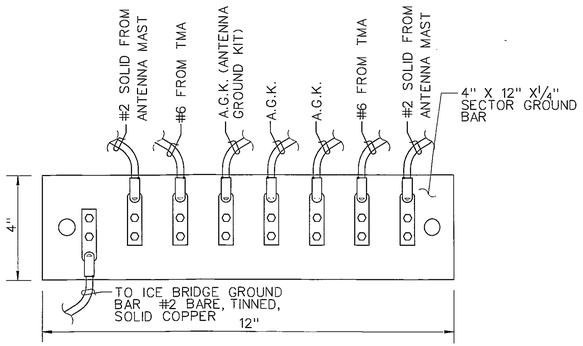
DETAIL
MGB GROUND BAR MOUNTING
NOT TO SCALE



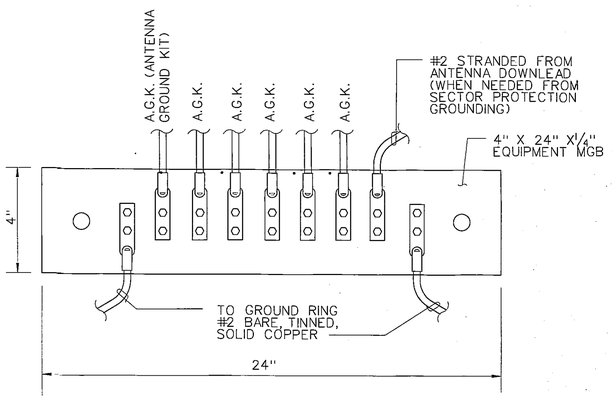
EQUIPMENT MGB CONNECTIONS
NOT TO SCALE



DETAIL – ICE BRIDGE MOUNTED GROUND BAR
NOT TO SCALE



SECTOR GROUND BAR CONNECTIONS
NOT TO SCALE



ICE BRIDGE MGB CONNECTIONS
NOT TO SCALE

APPROVED
Montgomery County
Historical Preservation Commission

STATE OF MARYLAND
CHRISTOPHER EDUARDO GERMAN
No. 16885
REGISTERED PROFESSIONAL ENGINEER

DRAWING TITLE: DETAILS
DRAWING NO. E3
DRAWN BY: ATC
CHECKED BY: JMD
SURVEYOR: KCI TECHNOLOGIES
PROJECT NO. 1600013.74
SCALE: AS SHOWN
CAD FILE: 1600013.74-T43.DGN

SITE WAN 162B
REDLAND–FRALEY FARM
UNMANNED WIRELESS COMMUNICATION SITE
17850 SOUTH LAKE ROAD
DERWOOD, MD 20855

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
12050 BALTIMORE AVENUE
BELTSVILLE, MD 20705
(240) 264-8600 FAX: (240) 264-8610

ISSUE DATE
95% SUBMISSION 05-31-01
100% SUBMISSION 06-21-01, 06-27-01
PERMIT SUBMISSION

NO.	SCHEDULE OF REVISIONS	DRAWN BY:	PROJ. MGR.	CHK'D BY:	CONST. MGR.
3					
2					
1					
0					

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS
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14400 Greenview Drive, Suite 102
Laurel, Maryland 20708
(301) 953-1821 (410) 792-8086
fax: (410) 792-7419
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1600013-74

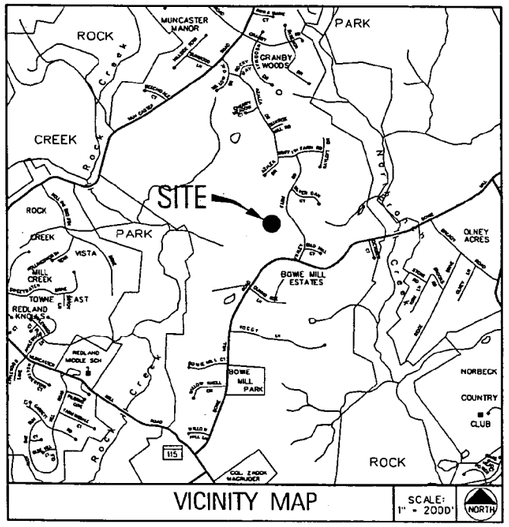
OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
SITE WAN 162B
REDLAND–FRALEY FARM
17850 SOUTH LAKE ROAD
DERWOOD, MD 20855

22/17-01A

OMNIPOINT
COMMUNICATIONS CAP
OPERATIONS, LLC

PROPOSED UNMANNED WIRELESS COMMUNICATION SITE
SITE WAN 162B
REDLAND – FRALEY FARM

17800 BOWIE MILL ROAD DERWOOD, MD 20855



VICINITY MAP — SCALE: 1" = 2000' — NORTH

FROM THE OMNIPOINT OFFICES IN BELTSVILLE, TAKE RT. 1 NORTH TO RT. 198 WEST. FOLLOW PAST RT. 29 AND TO THE END AT RT. 650 (NEW HAMPSHIRE AVE.) TURN RIGHT ON RT. 650. FOLLOW UP TO RT. 108 AND TURN LEFT ONTO RT. 108. FOLLOW TO BOWIE MILL ROAD AND TURN LEFT. FOLLOW TO FRALEY FARM ROAD AND TURN RIGHT. ENTRANCE TO SITE IS ON THE LEFT.

DRIVING DIRECTIONS

SHEET	DESCRIPTION	REV.
T1	TITLE SHEET	
C1	SITE PLAN	
C2	COMPOUND DETAIL AND SILO ELEVATION	
C3	COMPOUND DETAILS	
GC1	SILO ELEVATION AND DETAILS	
GC2	ANTENNA MOUNTING PLAN, SECTIONS AND DETAILS	
E1	POWER AND TELCO PLAN	
E2	GROUNDING PLAN	
E3	DETAILS	

SHEET INDEX

EQUIPMENT LOCATION: [X] OUTDOOR [ ] INDOOR

EQUIPMENT TYPE: [X] RBS 2102 [ ] NORTEL S-8000 [ ] ISM / WCS

ANTENNA LOCATION:
- [ ] GUY TOWER
- [ ] SELF SUPPORT TOWER
- [ ] MONOPOLE
- [ ] ROOF TOP
- [ ] EXISTING TOWER
- [X] OTHER

JURISDICTION: MONTGOMERY COUNTY

ZONING: RE-1

THE PROPOSED FACILITIES WILL CONSIST OF A 10' X 15' CONCRETE PAD WITH 1 BTS EQUIPMENT CABINET ENCLOSED IN A SHELTER THAT IS OPEN ON ONE SIDE FOR ACCESS. IN ADDITION, 6 TELECOMMUNICATIONS ANTENNAS AND 12 COAX CABLES WILL BE MOUNTED ON THE EXISTING 68.4' SILO.

PROJECT SUMMARY

TITLE	SIGNATURE	DATE
RF ENGINEER		
REAL ESTATE		
OMNIPOINT AREA MANAGER		
PROPERTY OWNER		
ZONING APPROVAL		
CONSTRUCTION MANAGER		
ADDITIONAL APPROVAL		

APPROVAL LIST

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

1. UNIFORM BUILDING CODE (UBC) 1997
2. BUILDING OFFICIALS AND CODE ADMINISTRATORS (BOCA) 1996
3. UNIFORM MECHANICAL CODE (UMC) 1997
4. NATIONAL ELECTRIC CODE (NEC) WITH LOCAL AMMENDMENTS 1999
5. ANSI / EIA-222-F
6. LIFE SAFETY CODE NFPA-101-1990
7. AMERICAN INSTITUE OF STEEL CONSTRUCTION SPECIFICATIONS (AISC)
8. UNDERWATER LABORATORIES APPROVED ELECTRICAL PRODUCTS
9. LOCAL BUILDING CODE
10. CITY / COUNTY ORDINANCES

CODE COMPLIANCE

APPROVED
Montgomery County
Historic Preservation Commission
8/14/02

RECEIVED
3-28-02

DRAWING TITLE: TITLE SHEET
DRAWN BY: APW | DRAWING NO. T1
CHECKED BY: TA
SURVEYOR: KD TOWNS.DGS
PROJECT NO. 1600013.74
SCALE: AS SHOWN
CAD FILE: 1600013.74.T1.DGN

SITE WAN 162B
REDLAND–
FRALEY FARM
UNMANNED WIRELESS COMMUNICATION SITE
17800 BOWIE MILL ROAD DERWOOD, MD 20855

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
12050 BALTIMORE AVENUE
BELTSVILLE, MD 20705
(240) 264-8600 FAX: (240) 264-8610

ISSUE DATE
95% SUBMISSION 05-31-01
100% SUBMISSION 06-21-01, 06-27-01, 09-14-02, 09-28-02
PERMIT SUBMISSION

SCHEDULE OF REVISIONS						
3	REVISED ZONING	1	APS	MK	1003	06-28-01
2						
1						
0						
NO.			DRAWN BY	APVD. BY	ISSUE DATE	

1600013-74

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS
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14502 Greenview Drive, Suite 424
Laurel, Maryland 20708
(301) 953-1821 (410) 792-9086
fax: (410) 792-7418
www.kci.com

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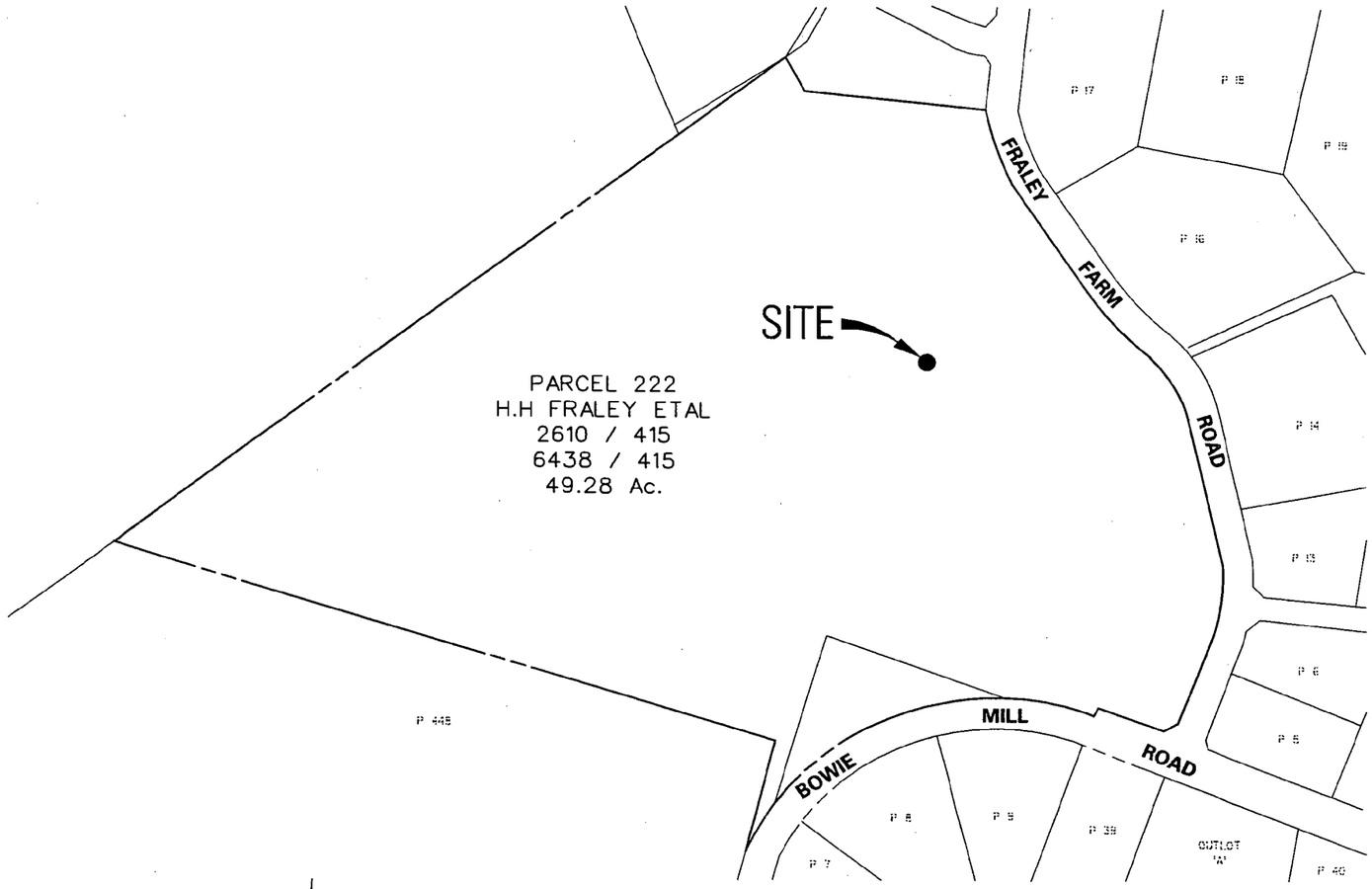
SITE WAN 162B
REDLAND–
FRALEY FARM
17800 BOWIE MILL ROAD
DERWOOD, MD 20855

...\Drawings\T4-11.dgn 03/28/02 02:42:56 PM



PROPERTY SKETCH

SCALE: 1"=100'

300 200 100 0 50 100

APPROVED
Montgomery County
Historic Preservation Commission

SITE NOTES

1. Applicant: Omnipoint Communications CAP Operations LLC
12050 Baltimore Avenue
Beltsville, MD 20817
Local Contact: Tom Ryall
(240) 264-8600

2. Property Owner: Harry H. Fraley
17800 Bowie Mill Road
Derwood, MD 20855
Contact: Kenny Fraley

3. Site Data: Tax Map HT122 & GT 562, Parcel 222
Tract area: 49.28 Ac.
Election District No. 08
L. 9596/ F. 33
ADC Map 20, Grid H-7
Tax ID# 08-00706980
Address: 17800 Bowie Mill Road
Derwood, MD 20855
Montgomery Co., MD

4. Current Use: Agricultural/Residential

5. The proposed facilities will consist of a 10' x 15' concrete pad with 1 BTS Equipment Cabinet enclosed in a shelter that is open on one side for access. In addition, 6 telecommunications antennas and 12 coax cables will be mounted on the existing 68.4' silo.

6. Current Zoning: RE-1

7. Latitude: 39° 09' 01" N
Longitude: 77° 06' 55" W

8. Total disturbed area: 150 square feet

9. If the antennas are no longer used for telecommunications purposes for a continuous period of one (1) year, they shall be removed by the antenna owner or owner's expense.

10. No water or sanitary utilities are required for the operation of this facility.

11. This site is exempt from Stormwater Management Requirements.

12. No parking spaces are required for the proposed Omnipoint equipment cabinet.

13. This site is exempt from the Montgomery County Woodland Conservation and Tree Preservation Ordinance.

14. Project to comply with all conditions required by Montgomery County Historic Preservation Commission.

GENERAL NOTES

1. Contractor shall contact a subsurface utility locator for location of existing utilities prior to commencement of any construction activities. Contractor shall verify existing utility locations by test pit as necessary. Location of utilities shown on this plan are approximate and for planning purposes only.

2. Contractor to provide temporary toilet facilities for duration of project.

3. All work shall be completed in accordance with all State and Local codes and ordinances, the latest edition thereof.

4. Contractor shall secure all necessary permits for this project from all applicable Governmental agencies.

5. Any permits which must be obtained shall be the contractor's responsibility. The contractor shall be responsible for abiding by all conditions and requirements of the permits.

6. Contractor shall coordinate all utility connections with appropriate utility owners.

7. In any excavated area, backfill will be placed with dry material free of rock or stones larger than 1", in 12" lifts, compacted to 95% dry density. All disturbed areas to be restored to match surrounding conditions.

8. These plans are not for recordation or conveyance.

9. Existing pavement and other surfaces disturbed by contractor (which are not to be removed) shall be repaired to preconstruction conditions by the contractor.

10. Damage to utilities or property of others by the contractor during construction shall be repaired to preconstruction conditions by the contractor.

11. Notify "Miss Utility" at 1-800-257-7777 - 48 hours prior to doing any excavation in this area.

The locations of existing underground utilities are shown in an approximate way only and have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

ANTENNA CONTRACTOR'S SCOPE OF WORK

1. Antenna contractor shall coordinate cable routing with Omnipoint contruction coordinator.

2. All antenna pipe mounts and hardware shall be hot-dip galvanized in accordance with ASTM A123 and A 153.

3. Use ½" Dia. coaxial jumper cable between antenna connection and coaxial cable termination. Attach ½" Dia. cable to pipe mount to minimize visibility.

4. Contractor shall furnish and install all supports, including ice bridge as shown on the drawings.

5. Contractor shall install all antennas and coaxial cables furnished by Omnipoint as shown on the drawings.

DRAWING TITLE: SITE PLAN
DRAWN BY: AMR | DRAWING NO. C1
CHECKED BY: TA | SURVEYOR: KOTECHNOLOGIES | SCALE: AS SHOWN
PROJECT NO. 1600013-74 | FOR FILE: 1600013-74-C1.DGN

SITE WAN 162B
REDLAND-
FRALEY FARM

UNMANNED WIRELESS
COMMUNICATION SITE
17800 BOWIE MILL ROAD
DERWOOD, MD 20855

OMNIPOINT
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Laurel, Maryland 20708
(301) 953-1021 (410) 792-6086
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ISSUE DATE
95% SUBMISSION 05-31-01
100% SUBMISSION 06-21-01, 06-27-01, 03-14-02, 03-28-02
PERMIT SUBMISSION

NO.	SCHEDULE OF REVISIONS	DRAWN BY	ISSUE INITIAL	ISSUE DATE
3				
2				
1	REVISED ZONING	AMS	MK	05-29-01
0				

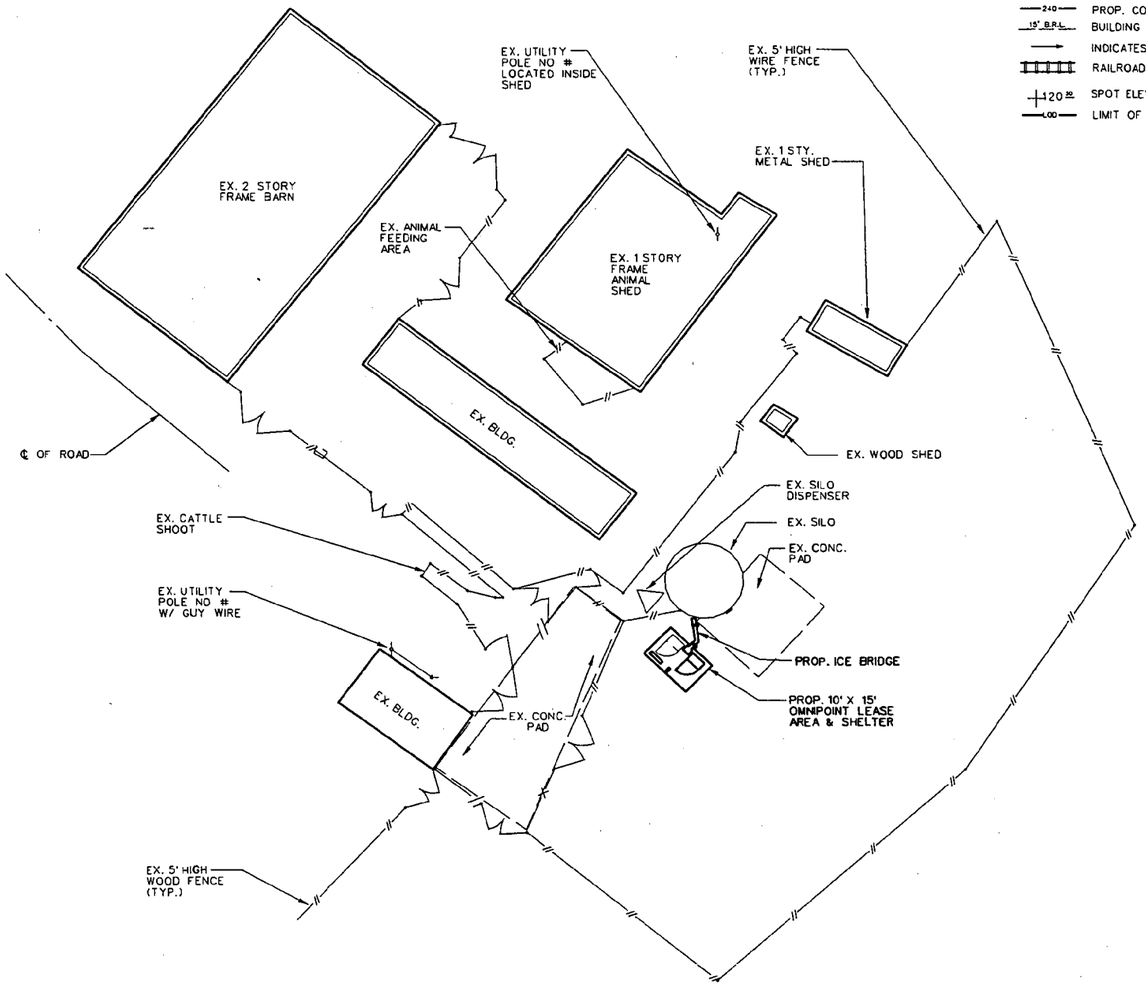
1600013-74

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
SITE WAN 162B
REDLAND-
FRALEY FARM
17800 BOWIE MILL ROAD
DERWOOD, MD 20855

...\Drawings\74-c1.dgn 03/28/02 02:43:13 PM

LEGEND

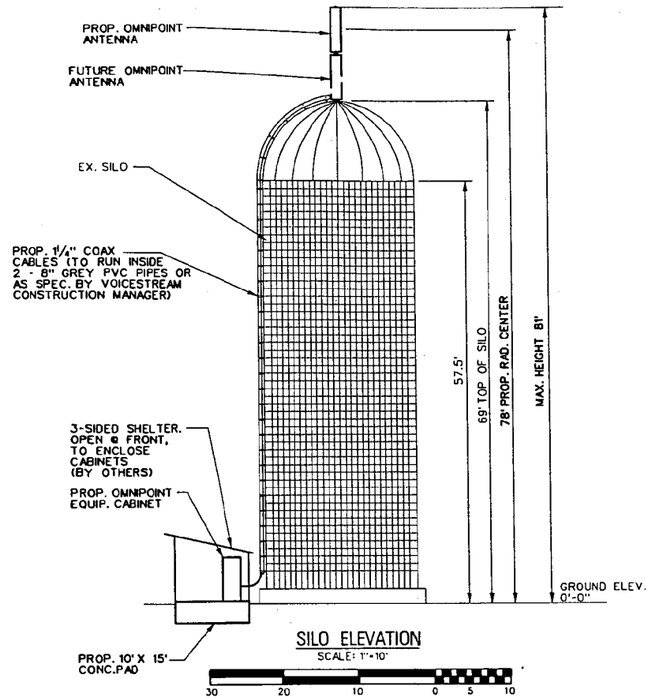
- PROP. TREE LINE
- EX. TREE LINE
- FIRE HYDRANT
- POLE
- POLE WITH LIGHT
- EVERGREEN TREE
- OAK
- EX. FENCE
- PROP. FENCE
- 240 EX. CONTOURS
- 240 PROP. CONTOURS
- 15' B.R.L. BUILDING RESTRICTION LINE
- INDICATES SURFACE FLOW
- RAILROAD LINE
- 120.00 SPOT ELEVATION
- 100 LIMIT OF DISTURBANCE



SITE PLAN

SCALE: 1"=20'

60 40 20 0 10 20

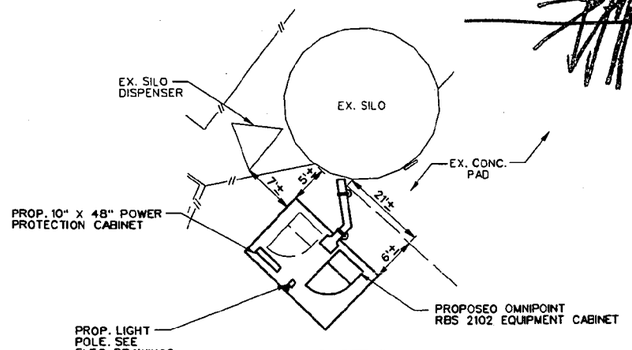


SILO ELEVATION

SCALE: 1"=10'

30 20 10 0 5 10

APPROVED
Montgomery County
Historic Preservation Commission



COMPOUND DETAIL

SCALE: 1"=0'

30 20 10 0 5 10

DRAWING TITLE: SITE PLAN COMPOUND DETAIL AND SILO ELEVATION
DRAWING NO. C2
DRAWN BY: AWW
CHECKED BY: TS
SURVEYOR/ TECHNICIAN:
PROJECT NO. 1600013-74
SCALE: AS SHOWN
CAD FILE: 1600013\74-C2.DGN

SITE WAN 162B
REDLAND–FRALEY FARM
UNMANNED WIRELESS COMMUNICATION SITE
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ISSUE DATE
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100% SUBMISSION 06-21-01, 06-27-01, 03-14-02, 03-28-02
PERMIT SUBMISSION

NO	SCHEDULE OF REVISIONS	DRAWN BY	ISSUE STATUS	ISSUE DATE
3				
2				
1				
0				

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OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
SITE WAN 162B
REDLAND–FRALEY FARM
17800 BOWIE MILL ROAD
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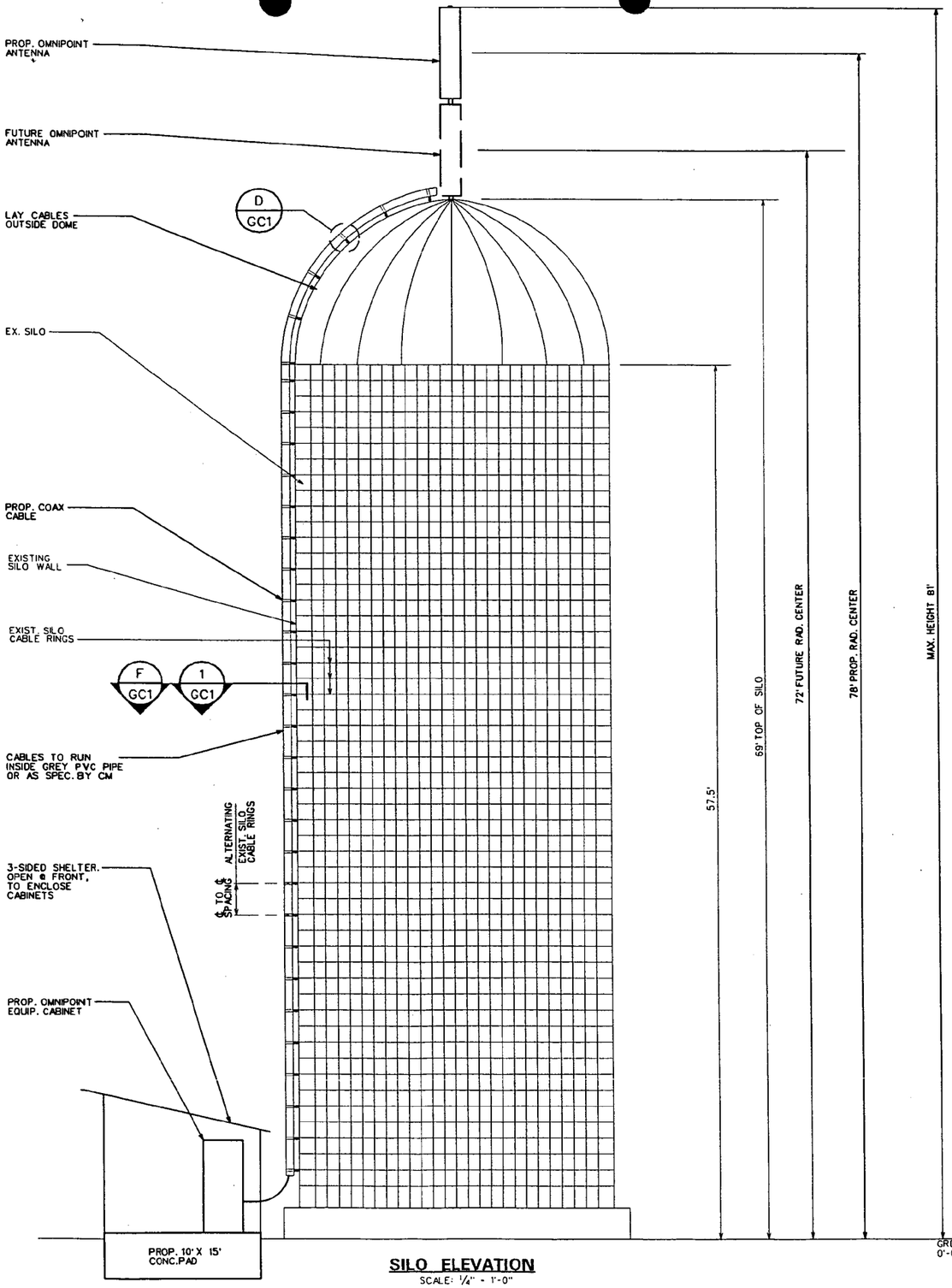
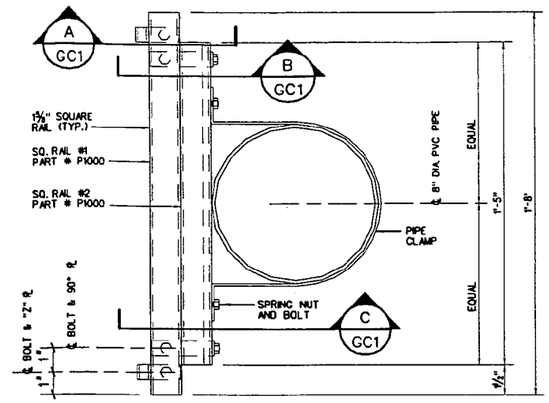
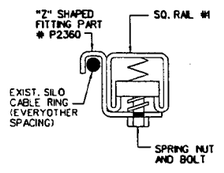
..\Drawings\74-c2.dgn 03/28/02 03:16:01 PM



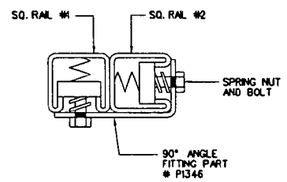
SILO ELEVATION
SCALE: 1/4" = 1'-0"



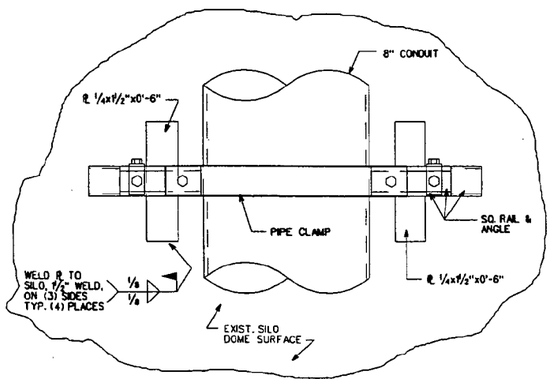
DETAIL 1 GC1
SCALE: 3"=1'-0"



SECTION A GC1
SCALE: 6"=1'-0"



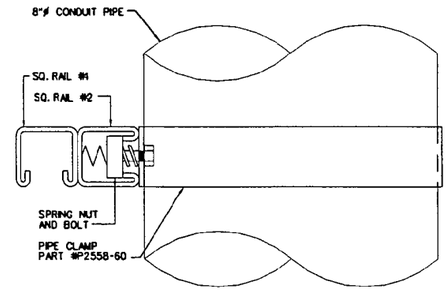
SECTION B GC1
SCALE: 6"=1'-0"



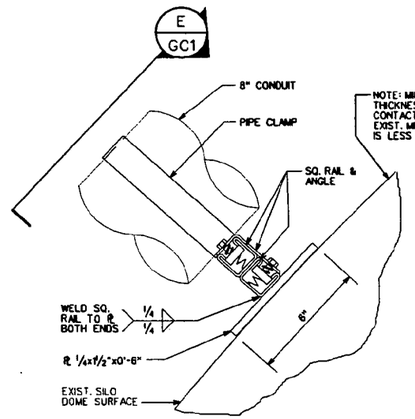
SECTION E GC1
SCALE: 3"=1'-0"

APPROVED
Montgomery County
Historic Preservation Commission

NOTE TO CONTRACTOR:
SQUARE RAILS & HARDWARE TO BE OF "UNISTRUT" QUALITY OR EQUAL, VERIFY ALL PART NO.'S.--CONTACT TOMMY THOMAS
PH. NO. (704) 522-0369
FAX NO. (704) 522-0474
CORP. PH. NO. (313) 721-4040



SECTION C GC1
SCALE: 6"=1'-0"



SECTION D GC1
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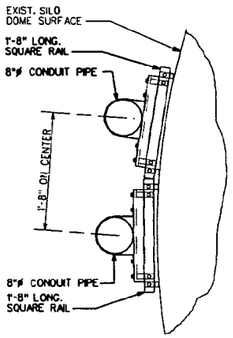

SECTION F GC1
SCALE: 1"=1'-0"

DRAWING TITLE: **SILO ELEVATION AND DETAILS**
DRAWN BY:
CHECKED BY:
SURVEYOR NOTED/LOCDES
PROJECT NO. 1600013.74
DRAWING NO. GC1
SCALE: AS SHOWN
CAD FILE: 1600013-74\GC1

SITE WAN 162B
REDLAND-FRALEY FARM
UNMANNED WIRELESS COMMUNICATION SITE
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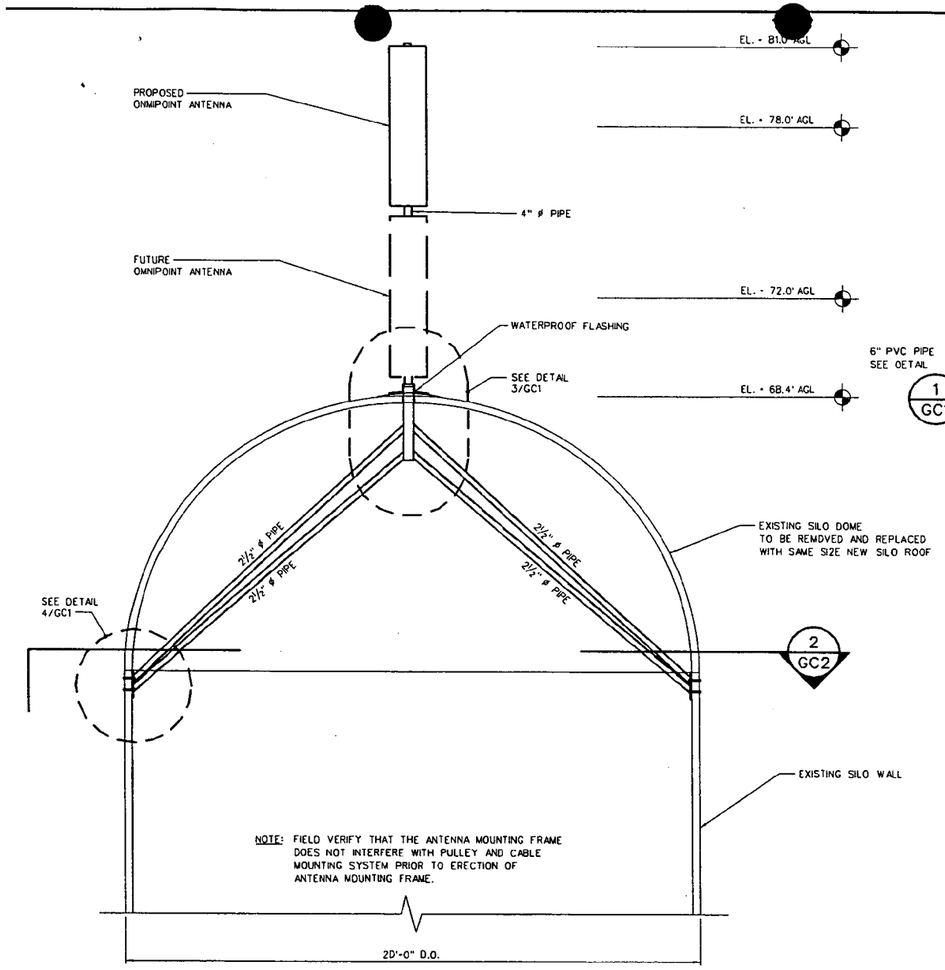
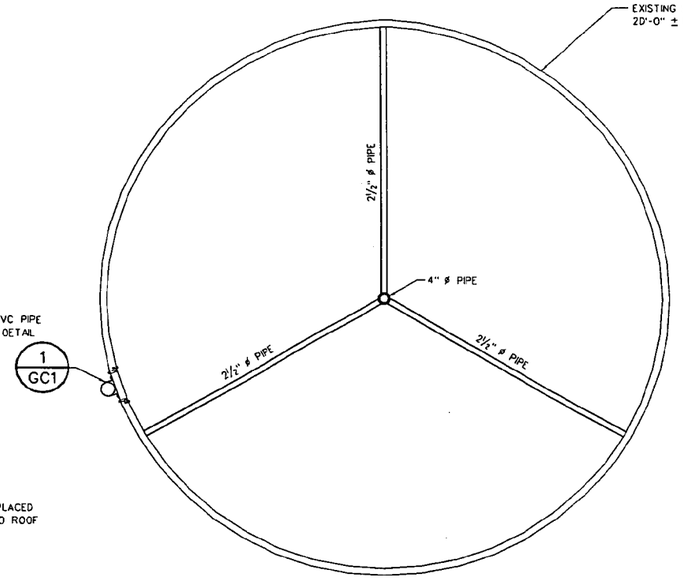


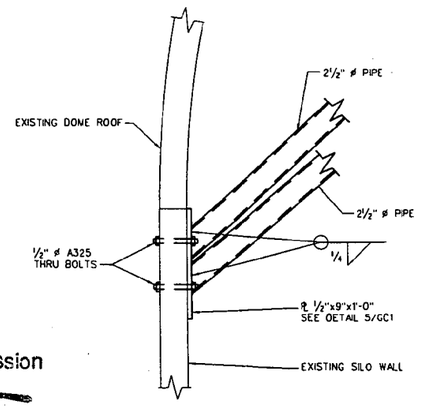
ANTENNA MOUNTING DETAIL 1 GC2

SCALE: ⅜" = 1'-0"



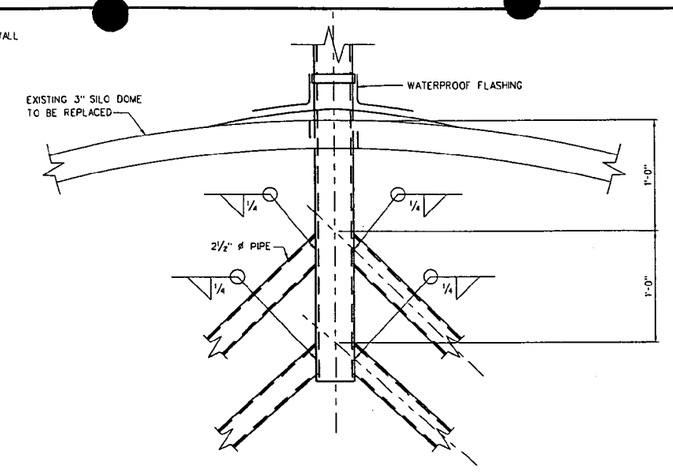
ANTENNA MOUNTING PLAN 2 GC2

SCALE: ⅜" = 1'-0"



DETAIL 4 GC2

SCALE: 1½" = 1'-0"



DETAIL 3 GC2

SCALE: 1½" = 1'-0"

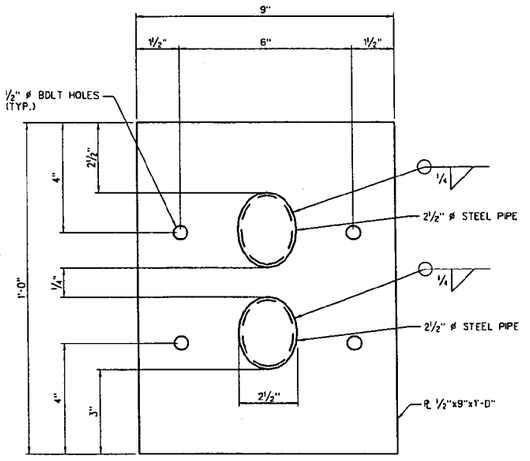


PLATE DETAIL 5 GC2

SCALE: ⅜" = 1"

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RF SYSTEM SCHEDULE

SITE NUMBER: WAN 169-C			CABLE SCHEDULE							
ANTENNA POSITION	ANTENNA SECTOR	TYPE OF ANTENNA	COAX SIZE	RAD CENTER	EST. LENGTH	TAPE COLOR	ANTENNA DIRECTION	BEAM WIDTH	ELEC. DOWN TILT	SERIAL NUMBER
1-A(1x01)	15 DEGREE	ACCELLERATOR	⅞"	78.0'	110'-0"	RED	RECEIVE	90 DEGREE	0 DEGREE	
						RED / WHITE	TRANSMIT	90 DEGREE	0 DEGREE	
2-A(1x01)	15 DEGREE	ACCELLERATOR	⅞"	72.0'	110'-0"	RED / RED	RECEIVE	90 DEGREE	0 DEGREE	
(FUTURE)						RED/RED/YELLOW	TRANSMIT	90 DEGREE	0 DEGREE	
1-B(2x01)	135 DEGREE	ACCELLERATOR	⅞"	78.0'	110'-0"	GREEN	RECEIVE	90 DEGREE	0 DEGREE	
						GREEN / WHITE	TRANSMIT	90 DEGREE	0 DEGREE	
2-B(2x01)	135 DEGREE	ACCELLERATOR	⅞"	72.0'	110'-0"	GREEN / GREEN	RECEIVE	90 DEGREE	0 DEGREE	
(FUTURE)						GREEN/GREEN/YELLOW	TRANSMIT	90 DEGREE	0 DEGREE	
1-C(3x01)	255 DEGREE	ACCELLERATOR	⅞"	78.0'	110'-0"	BLUE	RECEIVE	90 DEGREE	0 DEGREE	
						BLUE / WHITE	TRANSMIT	90 DEGREE	0 DEGREE	
2-C(3x01)	255 DEGREE	ACCELLERATOR	⅞"	72.0'	110'-0"	BLUE / BLUE	RECEIVE	90 DEGREE	0 DEGREE	
(FUTURE)						BLUE/BLUE/YELLOW	TRANSMIT	90 DEGREE	0 DEGREE	

NOTES: 1. MECHANICAL DOWNTILT WILL BE FURNISHED LATER AS SYSTEM IS DEVELOPED.
2. ERICSSON WILL PROVIDE ANTENNA SERIAL NUMBER AFTER INSTALLATION.
3. ALL CHANGES TO THIS SCHEDULE SHOULD BE APPROVED BY OMNIPOINT RF ENGINEERING.
4. CONTRACTOR TO PROVIDE A TOTAL OF 4 CABLE RUNS PER SECTOR.
5. CONTRACTOR TO PROVIDE (4) TMA'S - ERICSSON KRY 112 13/3, 2 PER SECTOR.

ANTENNA CONTRACTOR'S SCOPE OF WORK

1. ALL ANTENNA PIPE MASTS AND HARDWARE SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A 123 AND A 153. PAINT TO MATCH EXTERIOR OF BUILDING.
2. ANTENNA CONTRACTOR SHALL FURNISH AND INSTALL ALL SUPPORTS AS SHOWN ON THE DRAWINGS.
3. ANTENNA CONTRACTOR SHALL INSTALL ALL ANTENNAS AND COAXIAL CABLES FURNISHED BY OMNIPOINT AS SHOWN ON THE DRAWINGS.
4. USE ⅞" DIA. COAXIAL JUMPER CABLE BETWEEN ANTENNA CONNECTION AND COAXIAL CABLE TERMINATION. ATTACH CABLE TO PIPE MAST TO MINIMIZE VISIBILITY.
5. EXISTING CABLE ROUTING IS SCHEMATIC. ANTENNA CONTRACTOR SHALL DETERMINE THE SIMPLEST ROUTING AND PROVIDE SUPPORTS ON THE ROOF AT 4'-0" MAX. SPACING.
6. CONNECTION BETWEEN ANTENNA AND PIPE MOUNT SHALL BE DESIGNED AND FURNISHED BY THE CONTRACTOR.

GENERAL STRUCTURAL NOTES:

1. ALL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC MANUAL OF STEEL CONSTRUCTION (ALLOWABLE STRESS DESIGN), 9th EDITION. MATERIALS SHALL BE AS FOLLOWS:
   SHAPES AND PLATES: ASTM TUBE: ASTM A500, GRADE C
   PIPE: ASTM A 53, GRADE B
   BOLTS: ASTM A 325
2. DESIGN LOADS:
   WIND SPEED - 80 MPH
   EXPOSURE - C
3. ALL WELDING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF AWS D1.1, STRUCTURAL WELDING CODE - STEEL, USING E70XX ELECTRODES. ALL WELDERS SHALL BE CERTIFIED IN ACCORDANCE WITH AWS REQUIREMENTS.
4. STEEL ANTENNA SUPPORTS AND STRUCTURAL STEEL, INCLUDING ALL BOLTS AND ACCESSORIES, SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A 123 OR ASTM 153 AS APPLICABLE. ALL AREAS OF FIELD WELDING AND BOLTING AND ANY OTHER AREAS WITH DAMAGED COATING SHALL BE FIELD REPAIRED WITH SSPC PAINT 20 GALVANIZING. REPAIR PAINT APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
5. ALL DIMENSIONS AFFECTED BY THE GEOMETRICS AND/OR LOCATION OF THE EXISTING STRUCTURE ARE TO BE CHECKED IN THE FIELD BY THE CONTRACTOR BEFORE ANY CONSTRUCTION IS DONE AND BEFORE ANY MATERIAL IS ORDERED OR FABRICATED. NOTIFY THE ENGINEER WHERE OBSTRUCTIONS TO NEW CONSTRUCTION OCCUR BEFORE ANY CONSTRUCTION IS DONE AND BEFORE ANY MATERIAL IS ORDERED OR FABRICATED.
6. SUBMIT SHOP DRAWINGS FOR ALL STEEL WORK TO OMNIPOINT PRIOR TO FABRICATION.
7. CONTRACTOR SHALL VERIFY CONSTRUCTABILITY AND DELIVERABILITY OF ALL MATERIALS PRIOR TO START OF WORK. ANY REQUESTS FOR REVISIONS MUST BE SUBMITTED TO OMNIPOINT BEFORE ANY MATERIAL IS ORDERED OR FABRICATED.
8. CONTRACTOR SHALL PREPARE AND SUBMIT TO OMNIPOINT, AS-BUILT, MARKED-UP DRAWINGS FOR ALL APPLICABLE CHANGES OR DEVIATIONS FROM CONTRACT DRAWINGS.
9. CONTRACTOR IS RESPONSIBLE FOR CARRYING OUT THE PROJECT IN A SAFE MANNER SO THAT THE EXISTING STRUCTURE IS NOT DAMAGED IN ANY WAY. CONTRACTOR SHALL PERFORM ANY NECESSARY TESTING AND ENGAGE A QUALIFIED PROFESSIONAL TO PROVIDE CONSTRUCTION GUIDANCE. ALL DAMAGE SHALL BE REPAIRED TO THE OWNER'S SATISFACTION ENTIRELY AT THE CONTRACTOR'S EXPENSE.

DRAWING TITLE: ANTENNA MOUNTING PLAN, SECTIONS AND DETAILS
DRAWN BY:
CHECKED BY:
DRAWING NO. GC2
DATACOM MASTERING DOCS
PROJECT NO. 1600013-74
SCALE: AS SHOWN
CAD FILE: 1600013-74\GC2

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17800 BONE MILL ROAD
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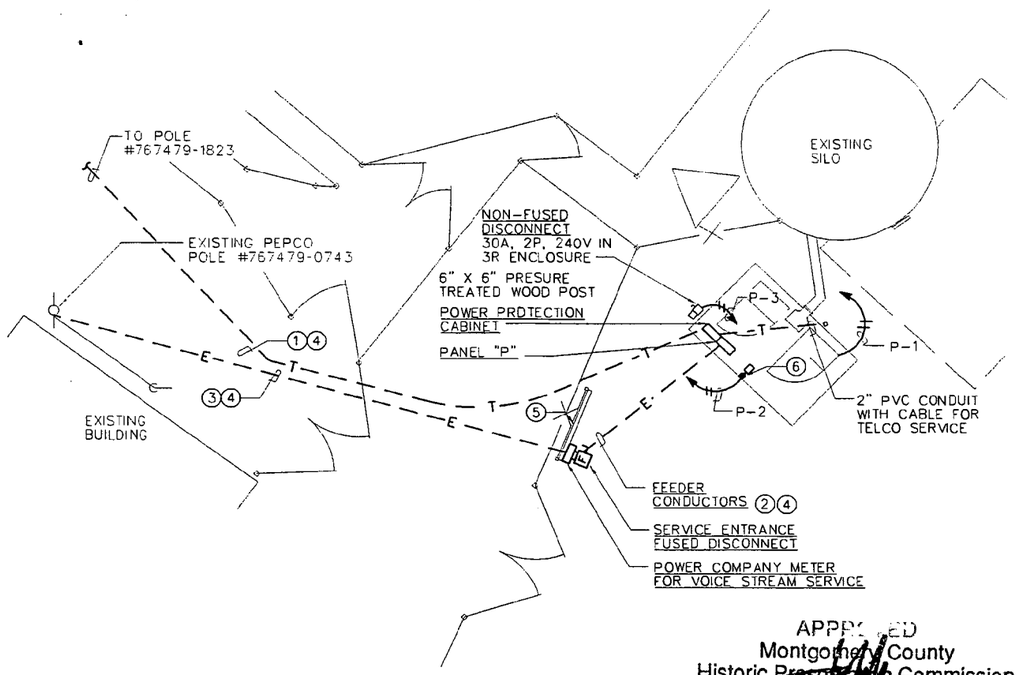

POWER AND TELCO PLAN

SCALE=*" : 1'-0"

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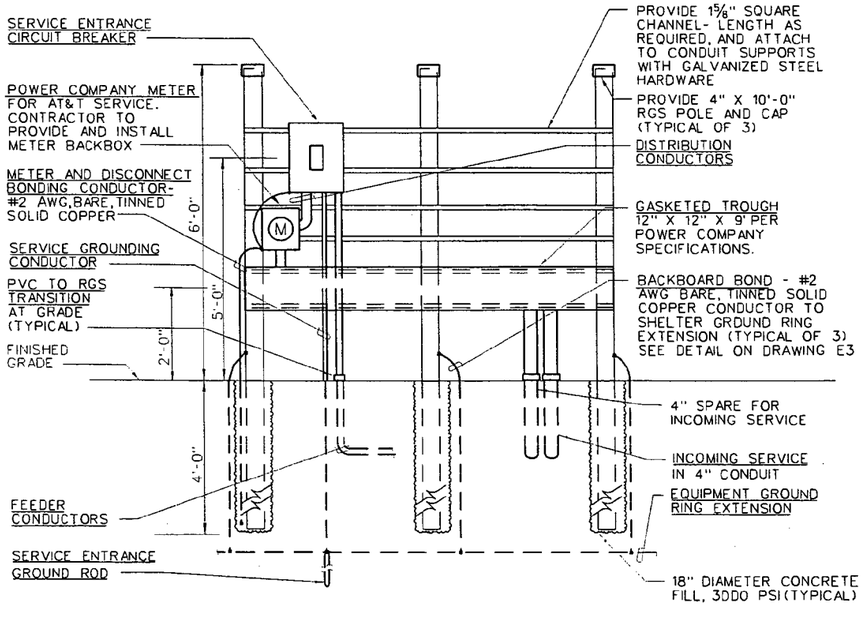
Montgomery County
Historic Preservation Commission



ELEVATION – MULTIPLE METER BACKBOARD

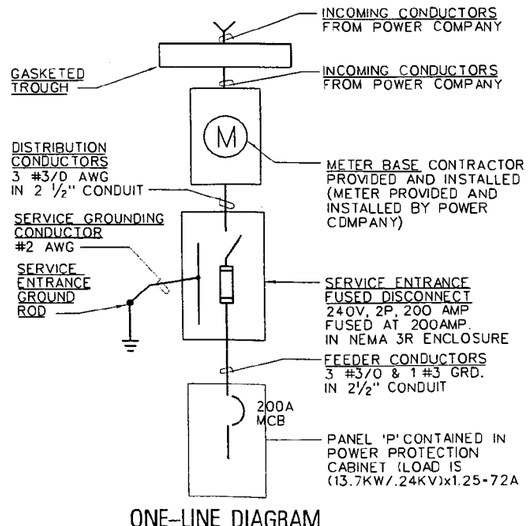
NOT TO SCALE

LEGEND

	CONDUCTOR AS INDICATED IN PLAN
	BURIED GROUND/BONDING CONDUCTOR-SIZED AS INDICATED IN PLAN
	GROUND ROD
	BELOW GRADE OR EXPOSED BONDING CONNECTION (SEE GENERAL NOTE 8)
	GROUND TEST PIT
-E- -E- -E-	UNDERGROUND ELECTRICAL CONDUIT
-T- -T- -T-	UNDERGROUND TELEPHONE CONDUIT
(1)	SEE DRAWING NOTE OF SAME NUMBER
	POWER COMPANY METER

ABBREVIATIONS

AC	- ALTERNATING CURRENT
AFG	- ABOVE FINISHED GRADE
AWG	- AMERICAN WIRE GAUGE
AIC	- AMPERES INTERRUPTING CAPACITY
BFG	- BELOW FINISHED GRADE
BKR	- BREAKER
CAT.	- CATALOG
C, COND	- CONDUIT
CKT	- CIRCUIT
EMT	- ELECTRICAL METALLIC TUBING
EST.	- ESTIMATED
GRD	- GROUND
MCB	- MAIN CIRCUIT BREAKER
MGB	- MASTER GROUND BAR
NEC	- NATIONAL ELECTRICAL CODE
NEMA	- NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
No.	- NUMBER
PVC	- POLYVINYL CHLORIDE
RGS	- RIGID GALVANIZED STEEL
UL	- UNDERWRITERS LABORATORIES



ONE-LINE DIAGRAM

NOT TO SCALE

ELECTRICAL SPECIFICATIONS

A. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR AND INCIDENTAL TO THE COMPLETE INSTALLATION AND OPERATION OF ALL ELECTRICAL WORK.

B. CONFORM TO THE REQUIREMENTS OF ALL RULES, REGULATIONS, AND CODES OF LOCAL, STATE, AND FEDERAL AUTHORITIES HAVING JURISDICTION. CONFORM TO THE NATIONAL ELECTRICAL CODE, THE NATIONAL ELECTRICAL SAFETY CODE, AND NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION LATEST EDITIONS.

C. COORDINATE THE WORK OF ALL TRADES.

D. THE CONTRACT DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ALL OFFSETS, BENDS AND FITTINGS AND ACCESSORIES ARE NOT NECESSARILY SHOWN. PROVIDE ALL SUCH ITEMS AS MAY BE REQUIRED TO FIT THE WORK TO THE CONDITIONS.

E. MATERIAL AND EQUIPMENT INSTALLED AS A PART OF THE PERMANENT INSTALLATION SHALL BE NEW, UNLESS OTHERWISE INDICATED OR SPECIFIED, AND SHALL BE LISTED BY THE UNDERWRITER'S LABORATORY INC., FOR INSTALLATION IN EACH PARTICULAR CASE, WHERE STANDARDS HAVE BEEN ESTABLISHED.

F. WIRE, UNLESS OTHERWISE INDICATED SHALL BE 600 VOLTS, TYPE THWN INSULATION. CONDUCTORS SHALL BE SIZED AND RUN AS INDICATED. CONDUCTORS SHALL BE SOFT DRAWN COPPER OF NOT LESS THAN 98% CONDUCTIVITY.

G. GUARANTEE THE COMPLETE ELECTRICAL SYSTEM FREE FROM ALL MECHANICAL AND ELECTRICAL DEFECTS FOR THE PERIOD OF ONE YEAR BEGINNING FROM THE DAY OF FINAL ACCEPTANCE OF THE WORK OR BENEFICIAL USE BY THE OWNER, WHICHEVER OCCURS FIRST.

H. OBTAIN, PAY FOR, AND DELIVER ALL PERMITS, CERTIFICATES OF INSPECTION, ETC., REQUIRED BY THE AUTHORITIES HAVING JURISDICTION. DELIVER CERTIFICATES TO THE OWNER PRIOR TO FINAL ACCEPTANCE OF THE WORK.

I. CONTRACTOR SHALL COORDINATE ALL GROUNDING, POWER AND TELCO TERMINATIONS AT EQUIPMENT WITH EQUIPMENT INSTALLER PRIOR TO ROUGHING IN.

J. PRIOR TO BEGINNING WORK CONTRACTOR SHALL COORDINATE ALL POWER AND TELEPHONE WORK. ALL CONTRACTOR WORK SHALL COMPLY WITH THE RULES AND REGULATIONS OF UTILITIES INVOLVED.

K. ALL DIRECT BURIED CONDUITS SHALL BE SCHEDULE 40 PVC. ALL EXTERIOR CONDUITS SHALL BE ELECTRICAL METALLIC TUBING (EMT). OR RIGID GALVANIZED STEEL (RGS) WHERE NOTED.

L. TRENCHING FOR ALL CONDUITS SHALL BE MINIMIZED.

DRAWING NOTES

(1) EXTEND A 4" CONDUIT FROM POLE #767479-1823 (APPROX. 500' NW) CONTRACTOR SHALL PROVIDE AND INSTALL 2-6 PAIR, INDIVIDUALLY SHIELDED 24 GAUGE COPPER CABLE FOR TELCO SERVICE, PER OMNIPOINT SPECIFICATIONS, FROM TELCO BOX TO EQUIPMENT VIA POWER PROTECTION CABINET. PRDVIDE PULL BOXES AS REQUIRED.

(2) PROVIDE UNDERGROUND 1-2 ½" CONDUIT WITH CONDUCTORS FROM SERVICE ENTRANCE DISCONNECT ON MULTIPLE METER BACKBOARD TO THE PDWER PRDTECTION CABINET. SEE "ONE-LINE DIAGRAM", ON THIS DRAWING, FOR NO. AND SIZE OF WIRES.

(3) EXTEND 2 - 4" UTILITY CONDUITS FROM EXISTING BGE POLE #767479-0743 (APPR. 60') TO METER AND TERMINATE ACCORDING TO THE UTILITY COMPANY'S SPECIFICATIONS. ALL CONNECTIONS AND TERMINATIONS BY UTILITY COMPANY. SEE "ELEVATION EXISTING BACKBOARD", THIS DRAWING, FOR SERVICE REQUIRMENTS.

(4) CONTRACTOR SHALL COORDINATE ALL TRENCHING ACTIVITIES WITH EXISTING BURIED GROUND AND UTILITY SYSTEMS. ANY CONTRACTOR CAUSED DAMAGE SHALL BE REPAIRED AT NO ADDITIONAL COST TO OMNIPOINT. ALL UNDERGROUND CONDUITS SHALL BE A MINIMUM OF 30" BFG. CONTRACTOR SHALL FIELD COORDINATE OMNIPOINT UTILITIES TO EQUIPMENT PRIOR TO TRENCHING.

(5) SEE "ELEVATION - MULTIPLE METER BACKBOARD" ON THIS DRAWING.

(6) PRDVIDE QUARTZ FIXTURE QL1505-L15 WITH S302 SLIP FITTER ON POLE NUMBER SSP4101POM51 AS MANUFACTURED BY HUBBELL. ATTACH MOTION DETECTOR PSWM-140-B @ 6' AFG AS MANUFACTURED BY HUBBELL.

MINIMUM 22,000 AIC*

SCHEDULE OF PANEL 'P'

120/240 VOLTS, 1 PHASE, 3 WIRE

NEMA 3R 200A MCB

CKT. NO.	EQUIPMENT SERVED	PHASE &VOLTS	CKT. BKR. POLES	CKT. BKR. TRIP	WIRING NO.	WIRING SIZE	WIRING COND
1	CABINET NO.1	1Ø240V	2	40	3 / 1	8 / 10	1"
2	LIGHT FIXTURE	1Ø120V	1	20	2 / 1	12 / 12	¾"
3	TELCO POST	1Ø120V	1	30	2 / 1	10 / 10	¾"
4	FUTURE CABINET NO. 2	1Ø240V	2	40	-	-	-
5	SPARE	1Ø120V	1	20	-	-	-
6-28	SPACE	-	1	-	-	-	-

DRAWING TITLE: POWER AND TELCO

DRAWN BY: AJC | DRAWING NO.: E1
CHECKED BY: JAD
SURVEYOR/TECHNOLOGIES
PROJECT NO.: 1600013.74
SCALE: AS SHOWN
AS FILE: 1600013.74-ELCOM

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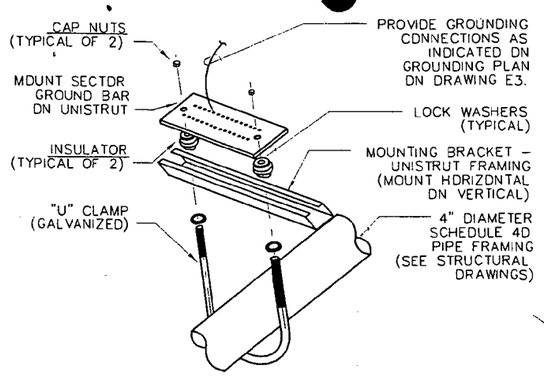
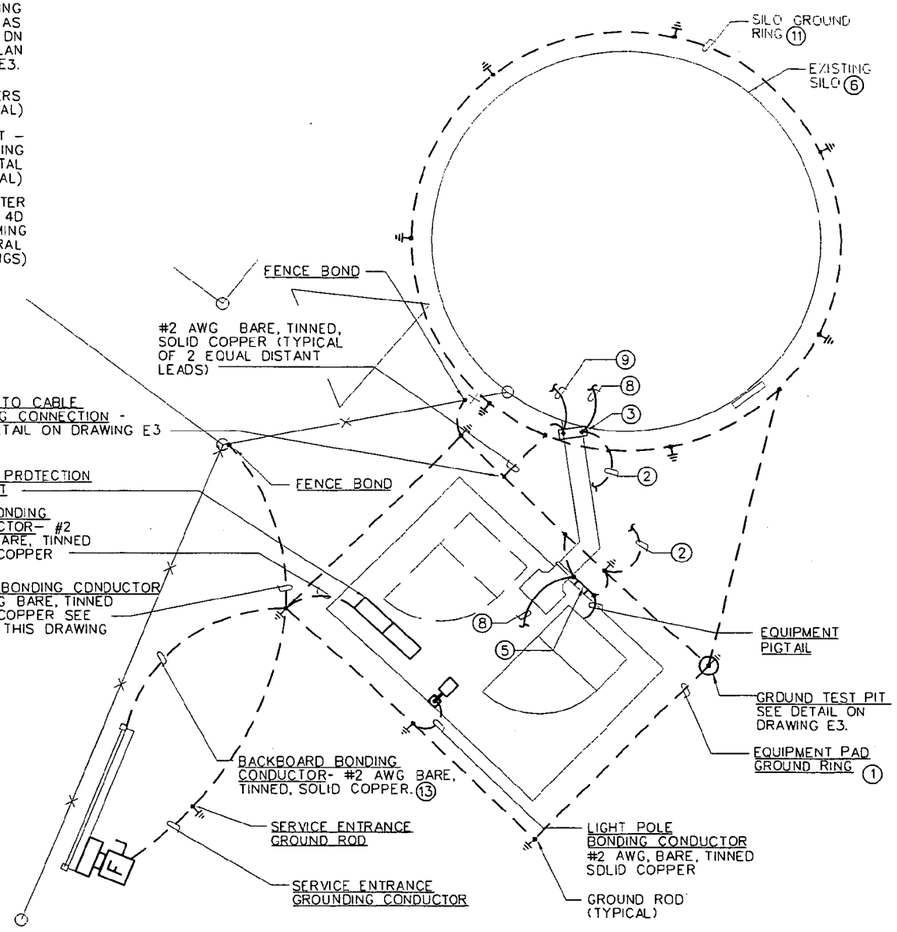


NOTE: DISSIMILAR METALS MUST BE PROTECTED WITH A COATING OF NO-OX COMPOUND.

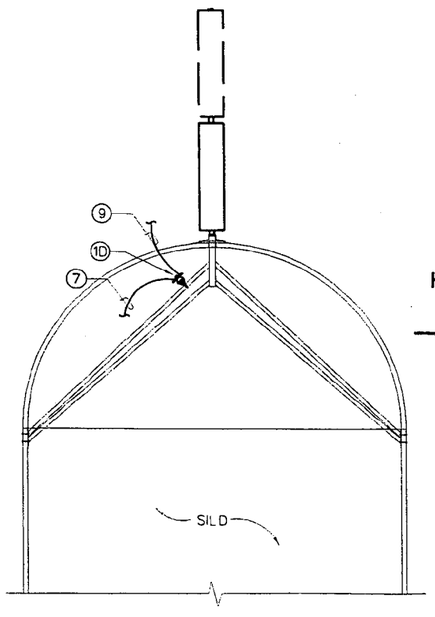
DETAIL - ANTENNA GROUND BAR MOUNTING IN SILO

NOT TO SCALE



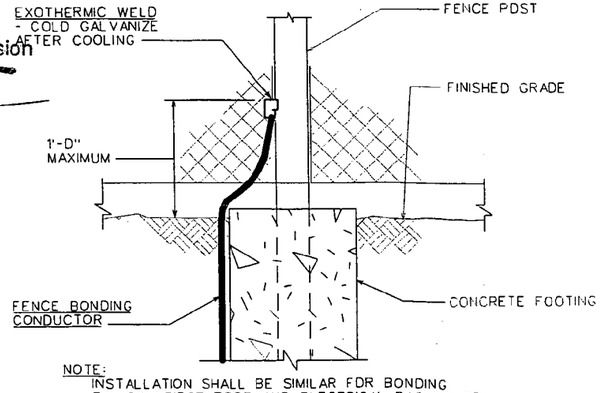
GROUNDING PLAN

SCALE: 1/4" = 1'-0"



DETAIL- ANTENNA GROUND BAR MOUNTING

NOT TO SCALE



NOTE: INSTALLATION SHALL BE SIMILAR FOR BONDING TO ICE BRIDGE POST, AND ELECTRICAL BACKBOARD.

DETAIL - FENCE BONDING

NOT TO SCALE

GENERAL GROUNDING NOTES:

1. COAXIAL ANTENNA CABLES SHALL BE GROUNDED BY PROVIDING ANDREW CORPORATION 36" GROUNDING CABLE REQUIRING FIELD ATTACHABLE CRIMP ON TWO HOLE LUGS. GROUNDING CABLE SHALL BE FIELD CUT TO SHORTEST LENGTH POSSIBLE WHILE MAINTAINING THE STRAIGHTEST POSSIBLE ROUTE TO GROUND BUS. CONNECTIONS TO GROUND BAR SHALL NOT BE DOUBLED-UP OR STACKED. BACK-TO-BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BAR ARE PERMITTED.
2. ALL BENDS IN PROTECTION GROUNDING CONDUCTORS SHOULD BE MADE WITH THE GREATEST PRACTICAL RADIUS AND SHOULD NOT BE LESS THAN ONE (1) FOOT. WHEN THE ONE (1) FOOT MINIMUM IS NOT PRACTICAL, THE MINIMUM SHALL NOT BE LESS THAN SIX (6) INCHES.
3. USE OF 90^ BENDS IN PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45^BENDS CAN BE ADEQUATELY SUPPORTED.
4. ALL CONNECTIONS TO SECTOR AND MGB GROUND BAR SHALL BE MADE INCORPORATING LONG BARREL TWO(2) HOLE CRIMP TYPE LUG CONNECTORS. ALL BONDING CONNECTIONS SHALL BE MADE USING STAINLESS STEEL NUTS AND BOLTS. CORROSION INHIBITOR SHALL BE APPLIED BETWEEN NUTS AND BOLTS AND GROUND BUS.
5. GROUND RODS SHALL BE 5/8" x 10'-0" MINIMUM COPPER CLAD STEEL. GROUND RODS SHALL BE LOCATED ON 10'-0" CENTERS.
6. ALL BELOW-GRADE CONNECTIONS SHALL BE EXOTHERMIC WELD TYPE. EXOTHERMIC WELD CONNECTIONS SHALL ALSO BE REQUIRED WHERE INDICATED. ALL BELOW-GRADE EXOTHERMIC WELD CONNECTIONS SHALL BE MADE USING ERICO CADWELD "ONE-SHOT" CONNECTIONS. ALL EXPOSED EXOTHERMIC WELD CONNECTIONS SHALL BE SPRAYED WITH COLD-GALVANIZED AFTER COOL DOWN.
7. WHEN A BELOW-GRADE CONNECTION IS REQUIRED AT A LOCATION IN WHICH A 10'-0" GROUND ROD HAS NOT BEEN PROVIDED, A 1'-0" SECTION OF GROUND ROD SHALL BE USED. THIS METHOD WILL ASSURE THAT ALL BELOW-GRADE CONNECTIONS CAN BE ACCOMPLISHED USING ERICO CADWELD "ONE SHOT" MOLDS. REFER TO "DETAIL - CABLE TO CABLE BONDING CONNECTION".
8. GROUND ROD SHIELD SHALL BE USED WHEN DRIVING GROUND RODS TO PREVENT THE ENDS FROM "MUSHROOMING." GROUND RODS SHALL BE DRIVEN STRAIGHT DOWN (90^ FROM FINISHED GRADE). WHEN SOIL CONDITIONS PREVENT DRIVING GROUND RODS STRAIGHT, RODS MAY BE DRIVEN AT A 45^ ANGLE FROM FINISHED GRADE. TOPS OF GROUND RODS SHALL BE THE SAME DEPTH AS GROUND RINGS (A MINIMUM OF 30" BELOW FINISHED GRADE).
9. ALL CONNECTIONS TO THE GROUND BAR SHALL BE MADE SO THAT THE BOLT HEAD IS ON THE FRONT FACE OF THE BUS. THE FRONT FACE OF THE BAR SHALL BE CONSIDERED THE SIDE AWAY FROM THE SILO OR THE SIDE CLOSEST TO THE ICE BRIDGE.
10. THE MAXIMUM RESISTANCE OF THE COMPLETED GROUNDING SYSTEM SHALL NOT EXCEED 5 OHMS ON ANY PART OF THE SYSTEM. IF, DUE TO SOIL CONDITIONS OR THE OTHER PARAMETERS, THIS MAXIMUM VALUE IS EXCEEDED, CONTACT THE ENGINEER FOR ADDITIONAL INSTRUCTIONS.

DRAWING NOTES:

(1) EQUIPMENT PAD GROUND RING. #2 AWG, BARE, TINNED, SOLID COPPER 30" BFG. . PROVIDE GROUND RING AT 2'-0" OUTSIDE EQUIPMENT PAD AND 30" BFG.

(2) PROVIDE BONDING CONNECTION TO ICE BRIDGE POST. SEE "DETAIL - ICE BRIDGE MOUNTED GROUND BAR" DETAIL ON DRAWING E3. PROVIDE AT EACH ICE BRIDGE POST. (TWO SHOWN). #2 AWG, BARE, TINNED, SOLID COPPER. (30" BFG).

(3) COORDINATE INSTALLATION OF ICE BRIDGE MOUNTED GROUND BAR WITH COAXIAL ANTENNA CABLE EXIT FROM SILO. PROVIDE MGB BONDING CONDUCTORS - #2 AWG, BARE, TINNED, SOLID COPPER GROUND TO SILO GROUND RODS (2 PLACES) AND CONNECT.

(4) NOT USED

(5) EQUIPMENT GROUND BAR. FOR MOUNTING SEE "DETAIL - MGB GROUND BAR MOUNTING" ON DRAWING E3.

(6) FOR ANTENNA PROTECTION GROUNDING REQUIREMENTS, SEE "DETAIL - COAXIAL ANTENNA CABLE GROUNDING AND GROUND BAR CONNECTIONS", ON DRAWING E3. FOR ROUTING, LOCATION, AND CONNECTION SEE "ANTENNA GROUND BAR MOUNTING" ON DRAWING E3.

(7) PROVIDE BONDING CONNECTION OF ANTENNA GROUNDING SYSTEM TO ICE BRIDGE MOUNTED GROUND BAR. ROUTE #2 INSULATED, STRANDED COPPER DOWN SILO LEG WITH COAX CABLES. FOR CONTINUATION SEE DRAWING NOTE 8 ON THIS DRAWING. FOR INSTALLATION SEE "ANTENNA GROUND BAR MOUNTING", ON DRAWING E3.

(8) #2 AWG INSULATED STRANDED COPPER BONDING CONDUCTOR CONTINUED FROM DRAWING NOTE 7, ON THIS DRAWING. FOR INSTALLATION SEE "ANTENNA GROUND BAR MOUNTING", ON DRAWING E3.

(9) PROVIDE BONDING CONNECTION TO OUTER CONDUCTOR OF COAXIAL ANTENNA CABLE (TYPICAL OF 3 AT ICE BRIDGE MOUNTED GROUND BARS AND AT ANTENNA GROUND BAR, WITH PROVISION FOR 3 FUTURE.). SEE GENERAL GROUNDING NOTE NO. 1. PROVIDE CONNECTION PRIOR TO CABLES TURNING HORIZONTAL AT BASE OF SILO AND AT ANTENNA GROUND BAR PROVIDE CONNECTION WITHIN 10'-0" OF ANTENNA.

(10) COORDINATE EXACT ANTENNA GROUND BAR MOUNTING AND LOCATION WITH STRUCTURAL DRAWINGS. MOUNT ANTENNA GROUND BAR ON MOLDED POLYESTER FIBERGLASS INSULATORS. SEE DETAIL "ANTENNA GROUND BAR MOUNTING" ON YHIS DRAWING.

(11) SILO GROUND RING - PROVIDE AT 30" BFG AND 2'-0" OUTSIDE OF FOUNDATION CAISSON.

(12) SILO BOND- SEE DETAIL THIS DRAWING.

(13) MULTIPLE-METER BACKBOARD BONDING - FOR ELECTRICAL COMPONENTS AND BONDING DETAILS SEE "ELEVATION - MULTIPLE METER BACKBOARD" ON DRAWING E1.

DRAWING TITLE: GROUNDING
DRAWN BY: JVC | DRAWING NO. E2
CHECKED BY: JAD
SURVEYOR NOTIFICATION DATE:
PROJECT NO. 1600013-74 | SCALE: AS SHOWN
E-911 PLT: 1600013-74 | 97-E1-004

SITE WAN 162B
REDLAND-FRALEY FARM
UNMANNED WIRELESS COMMUNICATION SITE
17900 BONE MILL ROAD DERWOOD, MD 20855

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
12050 BALTIMORE AVENUE BELTSVILLE, MD 20705
(240) 264-8600 FAX: (240) 264-8610

ISSUE DATE
95% SUBMISSION 05-31-01
100% SUBMISSION 06-27-01, 06-27-01, 03-14-02, 03-26-02
PERMIT SUBMISSION

SCHEDULE OF REVISIONS

NO.	DESCRIPTION	DRAWN	APPR.	DATE
3				
2				
1				
0				

1600013-74

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
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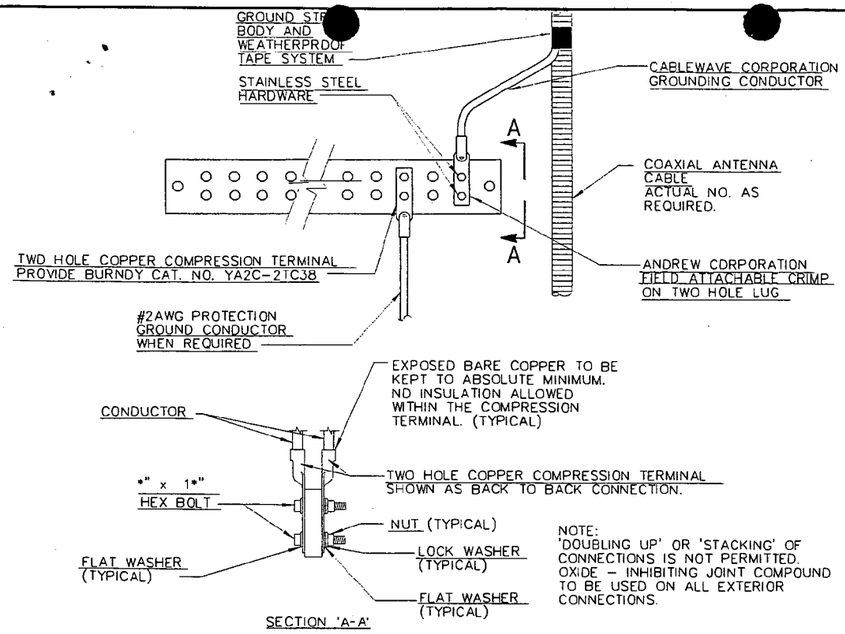
REDLAND-FRALEY FARM
17900 BONE MILL ROAD DERWOOD, MD 20855

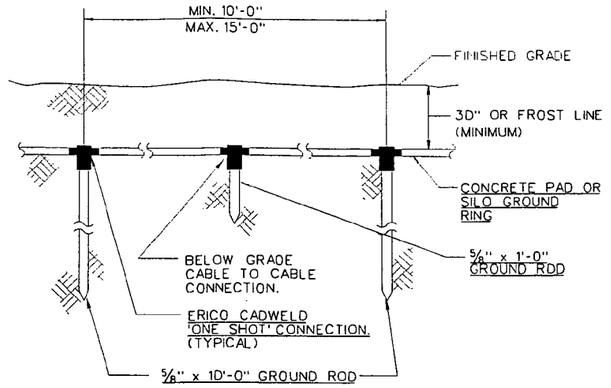
KCI TECHNOLOGIES
ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS
14502 Greenview Drive, Suite 424 Laurel, Maryland 20708
(301) 953-1821 (410) 792-8686 fax: (410) 792-7419
www.kci.com

...\Drawings\74-E2.DGN 03/28/02 02:45:10 PM

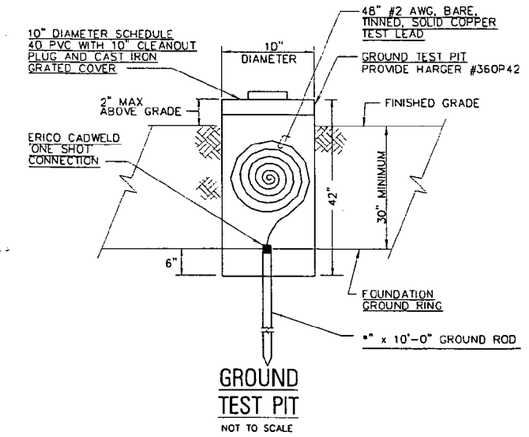


NOTE:
'DOUBLING UP' OR 'STACKING' OF CONNECTIONS IS NOT PERMITTED. OXIDE – INHIBITING JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.

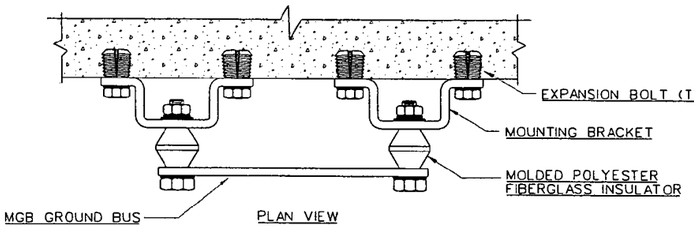
DETAIL
COAXIAL ANTENNA CABLE GROUNDING AND GROUND BAR CONNECTIONS
NOT TO SCALE



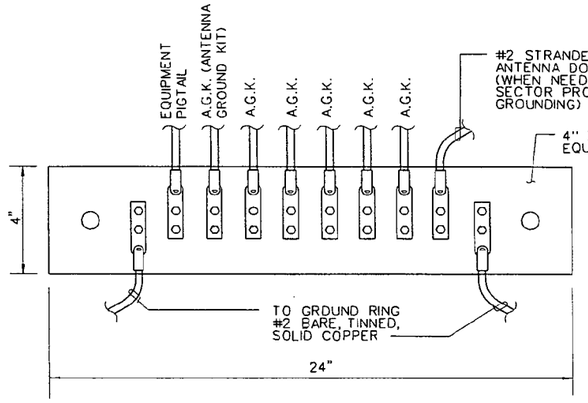
DETAIL
CABLE TO CABLE BONDING CONNECTION
NOT TO SCALE



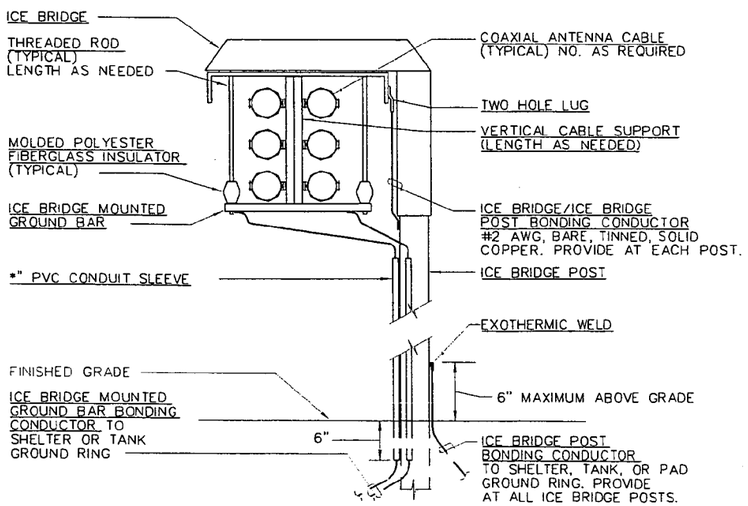
GROUND TEST PIT
NOT TO SCALE



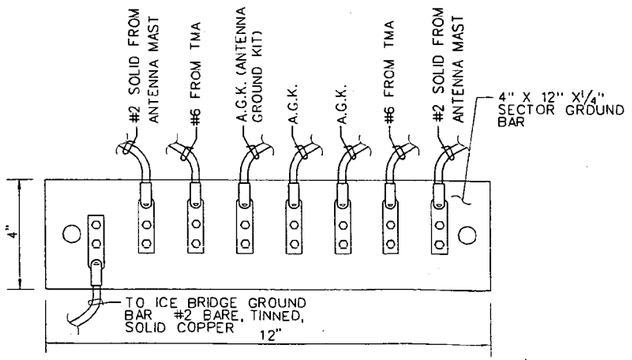
DETAIL
MGB GROUND BAR MOUNTING
NOT TO SCALE



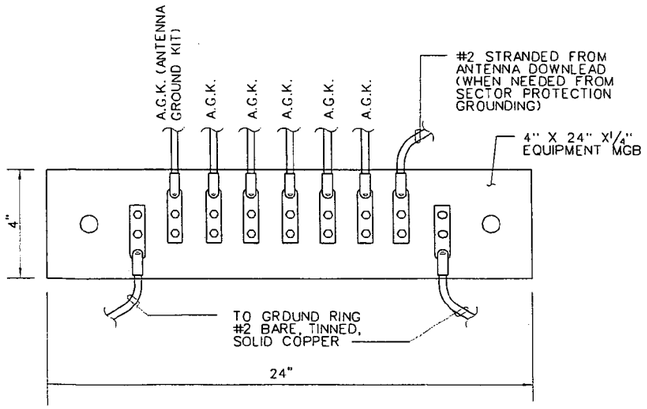
EQUIPMENT MGB CONNECTIONS
NOT TO SCALE



DETAIL –
ICE BRIDGE MOUNTED GROUND BAR
NOT TO SCALE



SECTOR GROUND BAR CONNECTIONS
NOT TO SCALE



ICE BRIDGE MGB CONNECTIONS
NOT TO SCALE

Montgomery County Historic Preservation Commission

DRAWING TITLE: DETAILS
DRAWING NO. E3
DRAWN BY: STC
CHECKED BY: JMD
SUBSTRUCTURE/DOCKS
PROJECT NO. 160013-74
SCALE: AS SHOWN
CAD FILE: C:\DOCUMENTS\T74-E3.DGN

SITE WAN 162B
REDLAND–FRALEY FARM
UNMANNED WIRELESS COMMUNICATION SITE
17800 BOWIE MILL ROAD DERWOOD, MD 20855

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ISSUE DATE
95% SUBMISSION 05-31-01
100% SUBMISSION 06-21-01, 06-27-01, 09-14-02, 09-28-02
PERMIT SUBMISSION

SCHEDULE OF REVISIONS

NO.	DESCRIPTION	DRAWN BY	CHECKED BY	ISSUE DATE
3				
2				
1				
0				

1600013-74

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
SITE WAN 162B
REDLAND–FRALEY FARM
17800 BOWIE MILL ROAD DERWOOD, MD 20855

FILE

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 Georgia Avenue • Silver Spring, Maryland 20910-3760

Date: 6/20/01

MEMORANDUM

TO: Robert Hubbard, Director
Department of Permitting Services

FROM: Gwen Wright, Coordinator
Historic Preservation

SUBJECT: Historic Area Work Permit HPC# 22/17-01A DPS# 249172

The Montgomery County Historic Preservation Commission has reviewed the attached application for an Historic Area Work Permit. This application was:

_____ Approved

X Approved with Conditions: ① SHERWIN WILLIAMS EXTERIOR SKYLARK SW2460 ANTENNA CASING AT TOP OF DOME TO BE A MATTE BLUE COLOR TO BE APPROVED AT STAFF LEVEL. ② PVC HOUSING WILL BE ATTACHED CLOSE TO EXISTING LOADING TUBE + WILL MATCH SILO COLOR. SHED COLOR TO MATCH EXISTING SHED.

and HPC Staff will review and stamp the construction drawings prior to the applicant's applying for a building permit with DPS; and

THE BUILDING PERMIT FOR THIS PROJECT SHALL BE ISSUED CONDITIONAL UPON ADHERENCE TO THE APPROVED HISTORIC AREA WORK PERMIT (HAWP).

Applicant: H. H. FRAVEY (DEANE MELLANDER, AGENT)

Address: 17800 BOWIE MILL RD, DERWOOD

and subject to the general condition that, after issuance of the Montgomery County Department of Permitting Services (DPS) permit, the applicant arrange for a field inspection by calling the Montgomery County DPS Field Services Office at 240-777-6210 or online @ **permits.emontgomery.org** prior to commencement of work and not more than two weeks following completion of work.

HISTORIC PRESERVATION COMMISSION
301/563-3400

APPLICATION FOR HISTORIC AREA WORK PERMIT

Contact Person: Deane Mellander

Daytime Phone No.: 240-264-8658

Tax Account No.: 08-00706980

Name of Property Owner: H. H. Fraley, etal (Kenneth Fraley) Daytime Phone No.: 301-963-0021

Address: 17800 (Street Number) Derwood (City) Bowie Mill Rd (Street) 20855 (Zip Code)

Contractor: Omnipoint Communications Cap, LLC Phone No.: 240-264-8658

Contractor Registration No.:

Agent for Owner: Maureen K. Smith Daytime Phone No.: 240-264-8611

Address: 12050 Baltimore Avenue, Beltsville, MD 20705

LOCATION OF BUILDING/PREMISE

House Number: 17800 Street: Bowie Mill Rd.

Town/City: Derwood Nearest Cross Street: Fraley Farm Rd.

Lot: Block: Subdivision:

Liber: 2610 Folio: 415 Parcel: 222

PART ONE: TYPE OF PERMIT ACTION AND USE

1A. CHECK ALL APPLICABLE:

☒ Construct ☐ Extend ☑ Alter/Renovate

☐ Move ☐ Install ☐ Wreck/Raze

☐ Revision ☐ Repair ☐ Revocable

CHECK ALL APPLICABLE:

☐ A/C ☑ Slab ☐ Room Addition ☐ Porch ☐ Deck ☑ Shed

☐ Solar ☐ Fireplace ☐ Woodburning Stove ☐ Single Family

☐ Fence/Wall (complete Section 4) ☐ Other: Telecommunications Facility

1B. Construction cost estimate: $ 45,000

1C. If this is a revision of a previously approved active permit, see Permit #

PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTEND/ADDITIONS

2A. Type of sewage disposal: 01 ☐ WSSC 02 ☐ Septic 03 ☐ Other: N/A

2B. Type of water supply: 01 ☐ WSSC 02 ☐ Well 03 ☐ Other: N/A

PART THREE: COMPLETE ONLY FOR FENCE/RETAINING WALL

3A. Height feet inches

3B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:

☐ On party line/property line ☐ Entirely on land of owner ☐ On public right of way/easement

I hereby certify that I have the authority to make the foregoing application, that the application is correct, and that the construction will comply with plans approved by all agencies listed and I hereby acknowledge and accept this to be a condition for the issuance of this permit.

Deane E. Mellander
Signature of owner or authorized agent

5/24/01
Date

Approved: W/CONDITIONS for Chairperson, Historic Preservation Commission

Disapproved: Signature: Date: 6/20/01

Application/Permit No.: 24972 Date Filed: Date Issued:

Edit 6/21/99

SEE REVERSE SIDE FOR INSTRUCTIONS

1. **WRITTEN DESCRIPTION OF PROJECT**

a. Description of existing structure(s) and environmental setting, including their historical features and significance:

The site is identified as Flint Hill II, Atlas #22/17. The primary resource is the farmhouse, which dates to the early 19th century. An environmental setting of approx. 8 acres is included, which encompasses all of the farm outbuildings, including the subject silo. The silo is approximately 400' from the house. It is of modern concrete construction. The silo is approximately 450' from Bowie Mill Rd.

b. General description of project and its effect on the historic resource(s), the environmental setting, and, where applicable, the historic district:

Voicestream proposes to install a telecommunications antenna array at the top of the silo. The array will be about 12' tall and 18" in diameter. The coaxial cables will be run down the side of the silo in one or two grey PVC pipes. At the base, a 10' x 15' 3-sided lean-to shelter will enclose 2 equipment cabinets. The shelter will be compatible in style and color to the existing outbuildings. As per Code, all items must be removed at applicant's expense if the facility ceases to function.

2. **SITE PLAN**

Site and environmental setting, drawn to scale. You may use your plat. Your site plan must include:

a. the scale, north arrow, and date;

b. dimensions of all existing and proposed structures; and

c. site features such as walkways, driveways, fences, ponds, streams, trash dumpsters, mechanical equipment, and landscaping.

3. **PLANS AND ELEVATIONS**

You must submit 2 copies of plans and elevations in a format no larger than 11" x 17". Plans on 8 1/2" x 11" paper are preferred.

a. *Schematic construction plans*, with marked dimensions, indicating location, size and general type of walls, window and door openings, and other fixed features of both the existing resource(s) and the proposed work.

b. Elevations (facades), with marked dimensions, clearly indicating proposed work in relation to existing construction and, when appropriate, context. All materials and fixtures proposed for the exterior must be noted on the elevations drawings. An existing and a proposed elevation drawing of each facade affected by the proposed work is required.

4. **MATERIALS SPECIFICATIONS**

General description of materials and manufactured items proposed for incorporation in the work of the project. This information may be included on your design drawings.

5. **PHOTOGRAPHS**

a. Clearly labeled photographic prints of each facade of existing resource, including details of the affected portions. All labels should be placed on the front of photographs.

b. Clearly label photographic prints of the resource as viewed from the public right-of-way and of the adjoining properties. All labels should be placed on the front of photographs.

6. **TREE SURVEY**

If you are proposing construction adjacent to or within the dripline of any tree 6" or larger in diameter (at approximately 4 feet above the ground), you must file an accurate tree survey identifying the size, location, and species of each tree of at least that dimension.

7. **ADDRESSES OF ADJACENT AND CONFRONTING PROPERTY OWNERS**

For **ALL** projects, provide an accurate list of adjacent and confronting property owners (not tenants), including names, addresses, and zip codes. This list should include the owners of all lots or parcels which adjoin the parcel in question, as well as the owner(s) of lot(s) or parcel(s) which lie directly across the street/highway from the parcel in question. You can obtain this information from the Department of Assessments and Taxation, 51 Monroe Street, Rockville, (301/279-1355).

PLEASE PRINT (IN BLUE OR BLACK INK) OR TYPE THIS INFORMATION ON THE FOLLOWING PAGE.
PLEASE STAY WITHIN THE GUIDES OF THE TEMPLATE, AS THIS WILL BE PHOTOCOPIED DIRECTLY ONTO MAILING LABELS.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 Georgia Avenue • Silver Spring, Maryland 20910-3760

Date: 6/20/01

MEMORANDUM

TO: Historic Area Work Permit Applicants

FROM: Gwen Wright, Coordinator
Historic Preservation Section

SUBJECT: Historic Area Work Permit Application - Approval of Application/Release of Other Required Permits HPC# 22/17-01A DPS# 249172

Enclosed is a copy of your Historic Area Work Permit application, approved by the Historic Preservation Commission at its recent meeting, and a transmittal memorandum stating conditions (if any) of approval.

You may now apply for a county building permit from the Department of Permitting Services (DPS) at 255 Rockville Pike, second floor, in Rockville. Prior to your permit submission, you must present Historic Preservation staff with 3 permit sets of drawings for review and stamping. In addition, please note that although your work has been approved by the Historic Preservation Commission, it must also be approved by DPS before work can begin.

When you file for your building permit at DPS, you must take with you the enclosed forms, as well as the Historic Area Work Permit that will be mailed to you directly from DPS. These forms are proof that the Historic Preservation Commission has reviewed your project. For further information about filing procedures or materials for your county building permit review, please call DPS at 240-777-6370.

If your project changes in any way from the approved plans, either before you apply for your building permit or even after the work has begun, please contact the Historic Preservation Commission staff at 301-563-3400.

Please also note that you must arrange for a field inspection for conformance with your approved HAWP plans. Please inform DPS/Field Services at 240-777-6210 or online @ **permits.emontgomery.org** of your anticipated work schedule.

Thank you very much for your patience and good luck with your project!

C:\hawpapr.wpd

HISTORIC PRESERVATION COMMISSION STAFF REPORT

Address:	17800 Bowie Mill Road, Derwood	**Meeting Date:**	06/13/01
Resource:	Master Plan Site # 22/17 **Flint Hill II**	**Report Date:**	06/06/01
Review:	HAWP	**Public Notice:**	05/30/01
Case Number:	22/17-01A	**Tax Credit:**	None
Applicant:	H.H. Fraley (Deane Mellander, Agent)	**Staff:**	Michele Naru
PROPOSAL:	Antenna Installation	**RECOMMEND:**	Approve w/ CONDITIONS.

PROJECT DESCRIPTION

SIGNIFICANCE:	Master Plan Site # 22/17, Flint Hill II
STYLE:	Italianate
DATE:	E 1800

The subject site is identified in the Master Plan for Historic Preservation as Site 22/17, Flint Hill II. The environmental setting is approximately 8 acres and includes the house, a large bank barn and almost all the other outbuildings, including the silo that is the subject of this proposal.

PROPOSAL:

The applicant proposes to install a telecommunications transmission facility, which entails:

1. Mounting 6 antennae above the top of the existing silo.

2. Running coaxial cables from the antennae, inside the silo dome to the top of the silo structure and through grey, PVC pipes affixed to the side of the silo to the ground equipment.

3. Constructing a 10 x 15, 3-sided, lean-to shelter to house the facility's equipment cabinets. The lean-to shelter will be of frame construction clad in embossed aluminum, painted red with a corrugated metal roof.

STAFF DISCUSSION

This application is a unique proposal for the Commission. Generally, these towers are very obtrusive and impact negatively on our historic landscapes. In this case, staff feels that the applicant has addressed these concerns and has submitted an application that is more sensitive to the existing historic structures and their environmental setting. Staff notes that the silo itself is out of the period of significance for this site, being about 30 years old according to the property owner, Mr. Fraley. It is of concrete construction with a sheet metal dome. Additionally, this silo is unusually tall, which in staff's opinion, aids in the success of this proposal. Staff recognizes that this type of project may not be successful in every case.

These antennas are removable and do not pose any negative effects on the existing structure. In addition, the proposed antenna installation will not affect the current farming operations. The silo will be actively used while the facility is operational.

Futhermore, this proposed facility will generate additional revenue for the property owner, which will only serve to be beneficial for the maintenance of the historic structures on the property.

Staff recommends approval.

STAFF RECOMMENDATION

Staff recommends that the Commission ***approve*** the HAWP application as being consistent with Chapter 24A-8(b)2:

> The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter,

and with the Secretary of the Interior Guidelines #2 and #9:

> The historic character of a property shall be retained and preserved. The removal of historic materials or alterations of features and spaces that characterize a property shall be avoided.
>
> New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

With the general condition that **the applicant shall present the 3 permit sets of drawings to HPC staff for review and stamping prior to submission for building permits**, and that, after issuance of the Montgomery County Department of Permitting Services (DPS) permit, the applicant will arrange for a field inspection by calling the DPS Field Services Office at (240) 777-6210 or online at www.permits.emontgomery.org prior to commencement of work and not more than two weeks following completion of work.

HISTORIC PRESERVATION COMMISSION
·301/563-3400

APPLICATION FOR HISTORIC AREA WORK PERMIT

Contact Person: Deane Mellander

Daytime Phone No.: 240-264-8658

Tax Account No.: 08-00706980

Name of Property Owner: H. H. Fraley, etal (Kenneth Fraley) Daytime Phone No.: 301-963-0021

Address: 17800 (Street Number) Derwood (City) Bowie Mill Rd (Street) 20855 (Zip Code)

Contractor: Omnipoint Communications Can, LLC Phone No.: 240-264-8658

Contractor Registration No.:

Agent for Owner: Maureen K. Smith Daytime Phone No.: 240-264-8611

Address: 12050 Baltimore Avenue, Beltsville, MD 20705

LOCATION OF BUILDING/PREMISE

House Number: 17800 Street: Bowie Mill Rd.

Town/City: Derwood Nearest Cross Street: Fraley Farm Rd.

Lot: Block: Subdivision:

Liber: 2610 Folio: 415 Parcel: 222

PART ONE: TYPE OF PERMIT ACTION AND USE

1A. CHECK ALL APPLICABLE:

☒ Construct ☐ Extend ☑ Alter/Renovate ☐ A/C ☑ Slab ☐ Room Addition ☐ Porch ☐ Deck ☑ Shed

☐ Move ☐ Install ☐ Wreck/Raze ☐ Solar ☐ Fireplace ☐ Woodburning Stove ☐ Single Family

☐ Revision ☐ Repair ☐ Revocable ☐ Fence/Wall (complete Section 4) ☐ Other: Telecommunications Facility

1B. Construction cost estimate: $ 45,000

1C. If this is a revision of a previously approved active permit, see Permit #

PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTEND/ADDITIONS

2A. Type of sewage disposal: 01 ☐ WSSC 02 ☐ Septic 03 ☐ Other: N/A

2B. Type of water supply: 01 ☐ WSSC 02 ☐ Well 03 ☐ Other: N/A

PART THREE: COMPLETE ONLY FOR FENCE/RETAINING WALL

3A. Height feet inches

3B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:

☐ On party line/property line ☐ Entirely on land of owner ☐ On public right of way/easement

I hereby certify that I have the authority to make the foregoing application, that the application is correct, and that the construction will comply with plans approved by all agencies listed and I hereby acknowledge and accept this to be a condition for the issuance of this permit.

Deane E. Mellander
Signature of owner or authorized agent

5/24/01
Date

Approved: *For Chairperson, Historic Preservation Commission*

Disapproved: Signature: Date:

Application/Permit No.: 24972 Date Filed: Date Issued:

Edit 6/21/99

SEE REVERSE SIDE FOR INSTRUCTIONS

(3)

Mailing List of Property Owners as of 5/7/01

Property Owner

Kenneth Fraley
17800 Bowie Mill Rd.
Derwood, MD 20855

Owner's Agent

VoiceStream Wireless
12050 Baltimore Avenue
Beltsville, MD 20705

Adjoining and Confronting Property Owners

John Baun
18405 Azalea Dr.
Derwood, MD 20855

Barbara Hendry
18601 Muncaster Rd.
Derwood, MD 20855

Steven White
17801 Fraley Farm Rd.
Rockville, MD 20855

Patrick Seig
5612 Silo Hill Ct.
Rockville, MD 20855

James Dooley
5617 Silo Hill Ct.
Rockville, MD 20855

Samuel Yeh
17813 Fraley Farm Rd.
Derwood, MD 20855

Nakul Goyal
17815 Fraley Farm Rd.
Derwood, MD 20855

Arvind Sitapara
17817 Fraley Farm Rd.
Derwood, MD 20855

Jerel Zlotnick
17821 Fraley Farm Rd.
Derwood, MD 20855

Brian Gallant
5612 Silver Oak Ct.
Derwood, MD 20855

Myron Wolowitz
17705 Bowie Mill Rd.
Derwood, MD 20855

Louis Miller
17709 Bowie Mill Rd.
Derwood, MD 20855

David Moldover
17801 Bowie Mill Rd.
Derwood, MD 20855

David Healy
17805 Bowie Mill Rd.
Derwood, MD 20855

Bowie Mill Civic Assn.
c/o Thomas Welch
17500 Bowie Mill Rd.
Derwood, MD 20855

May 24, 2001

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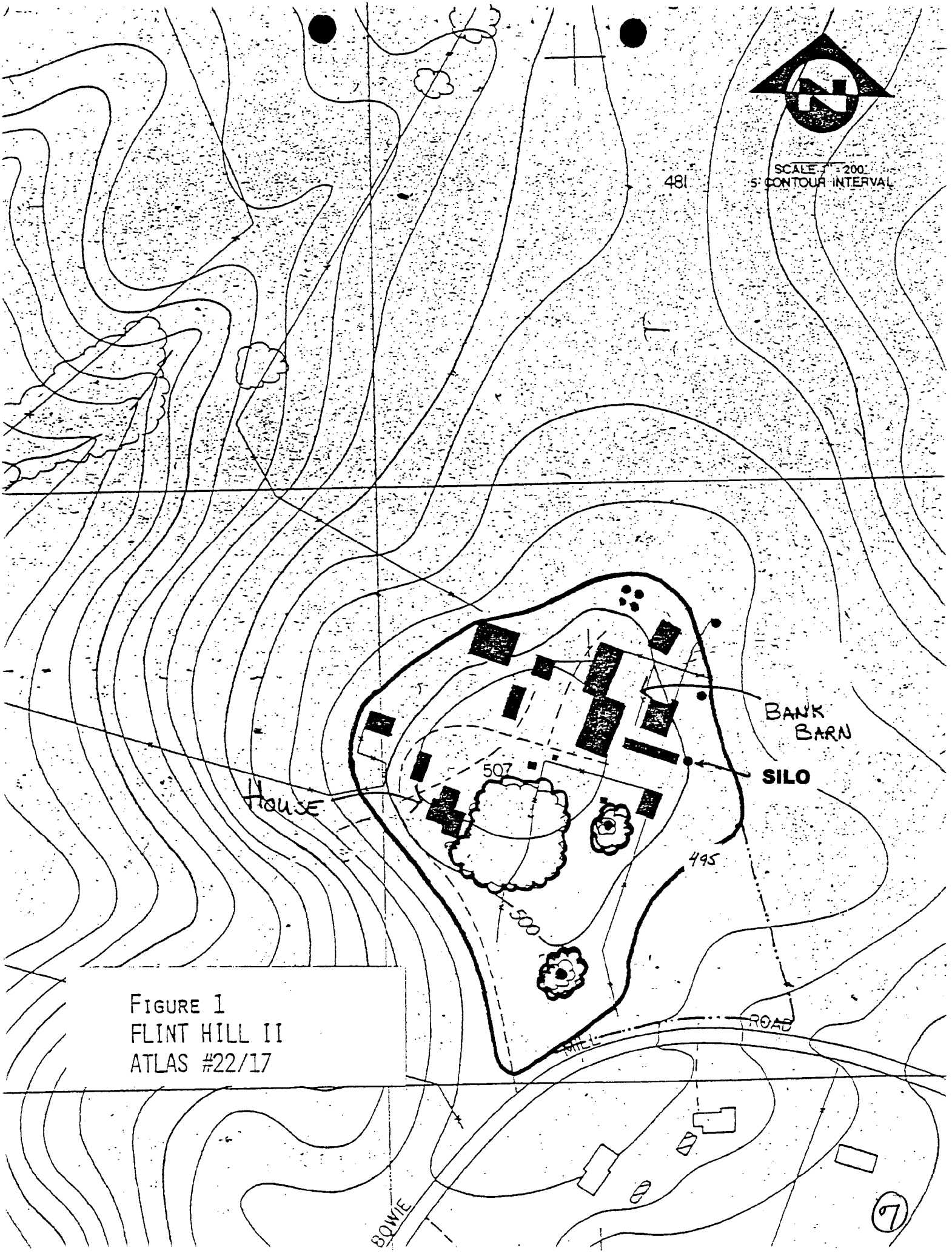
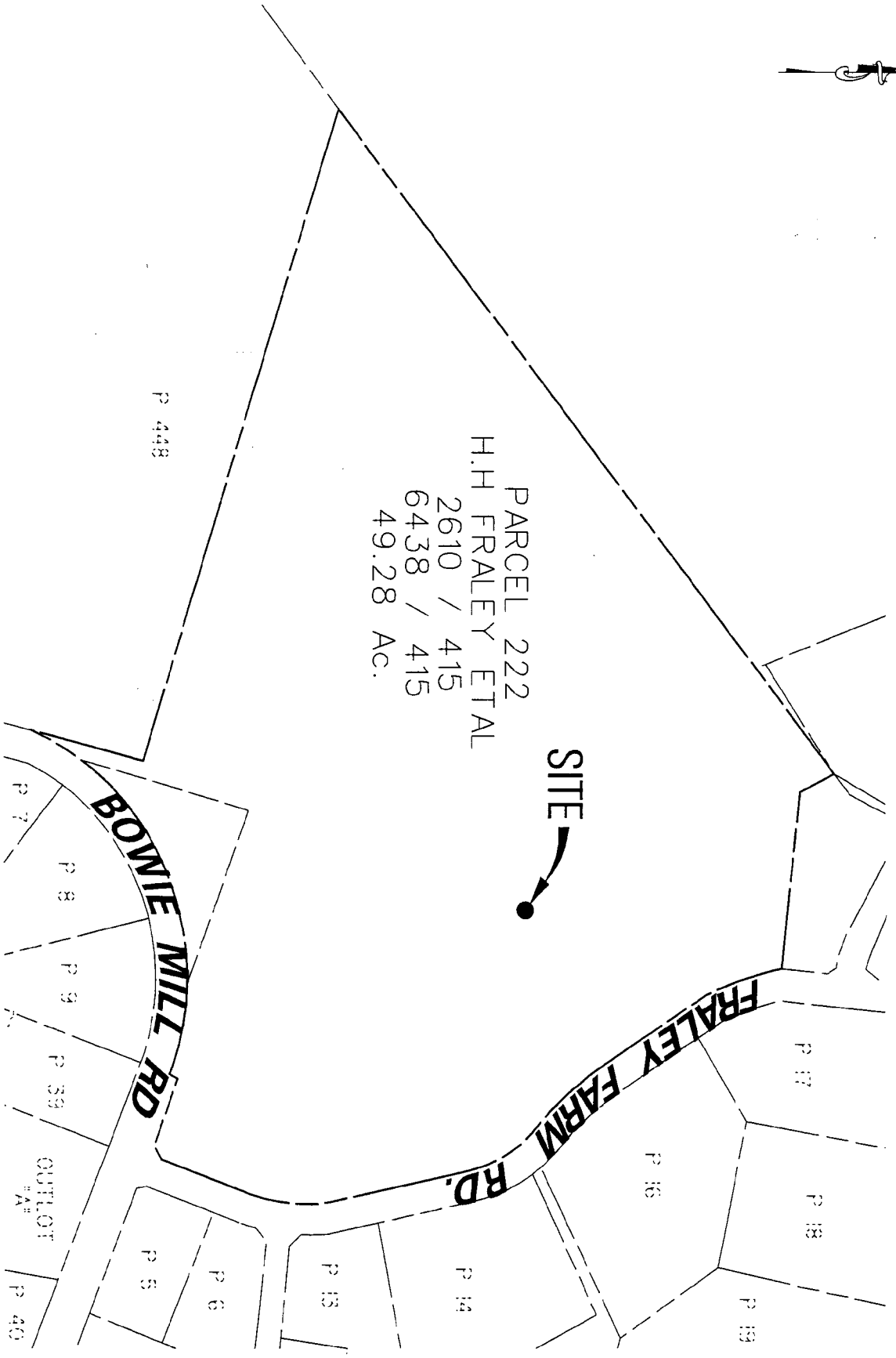


FIGURE 1
FLINT HILL II
ATLAS #22/17

(2)

PROPERTY SKETCH

SCALE: 1" = 200'



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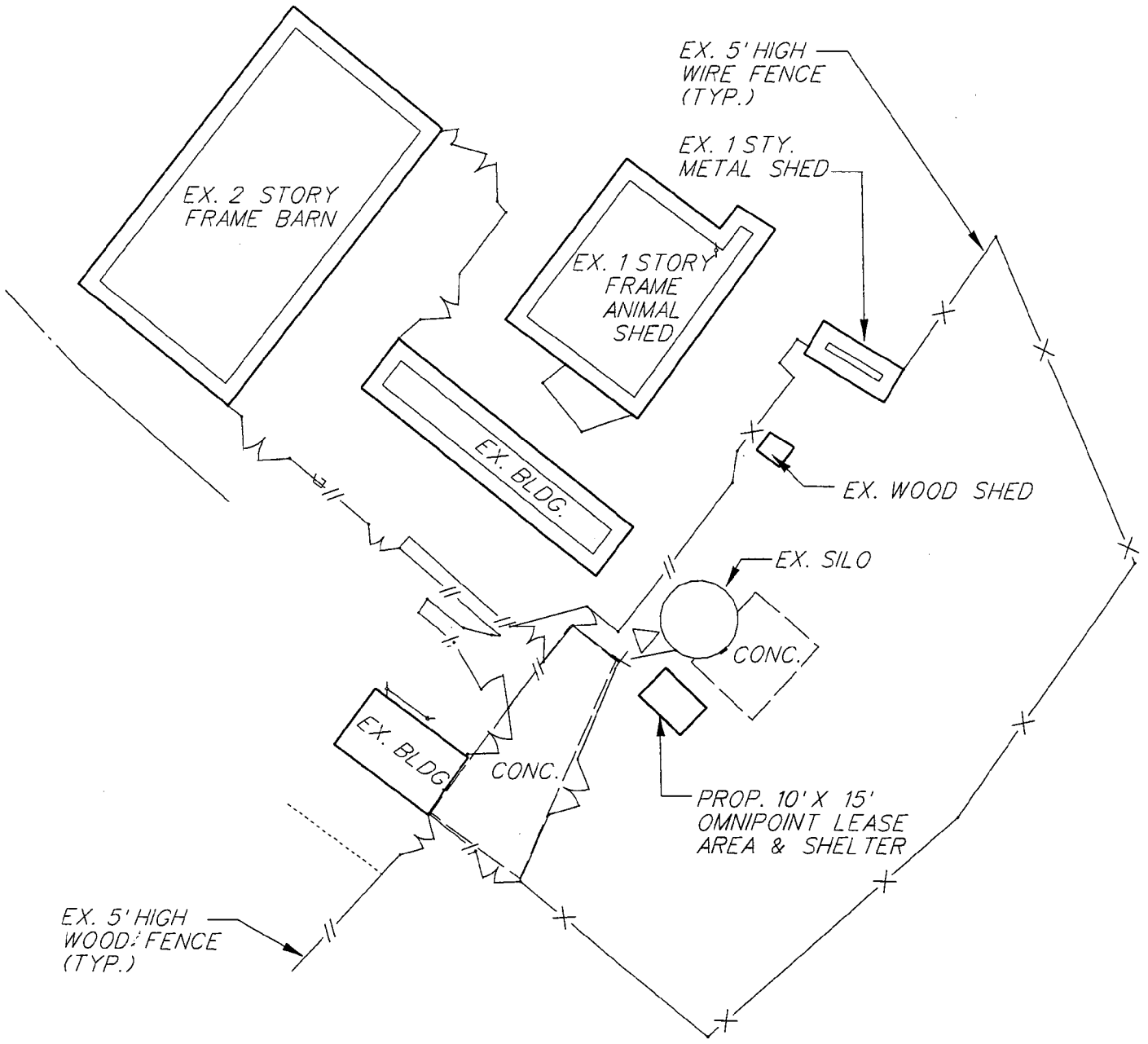
OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC
12050 BALTIMORE AVENUE
BELTSVILLE, MD 20705
(240) 264-8600 FAX: (240) 264-8610

PROJECT: **SITE WAN 162 B REDLAND– FRALEY FARM**
UNMANNED WIRELESS COMMUNICATION SITE
17800 BOWIE MILL ROAD
DERWOOD, MD 20855

EXHIBIT

DRAWN BY: ARS CHECKED BY: TA	DATE: 05-14-01
PROJECT NO.: 1600013-74	SCALE: 1" = 200'

CADD FILE: 1600013/74/ZONING/ PROPERTY SKETCH.DGN



SITE PLAN

SCALE: 1" = 40'

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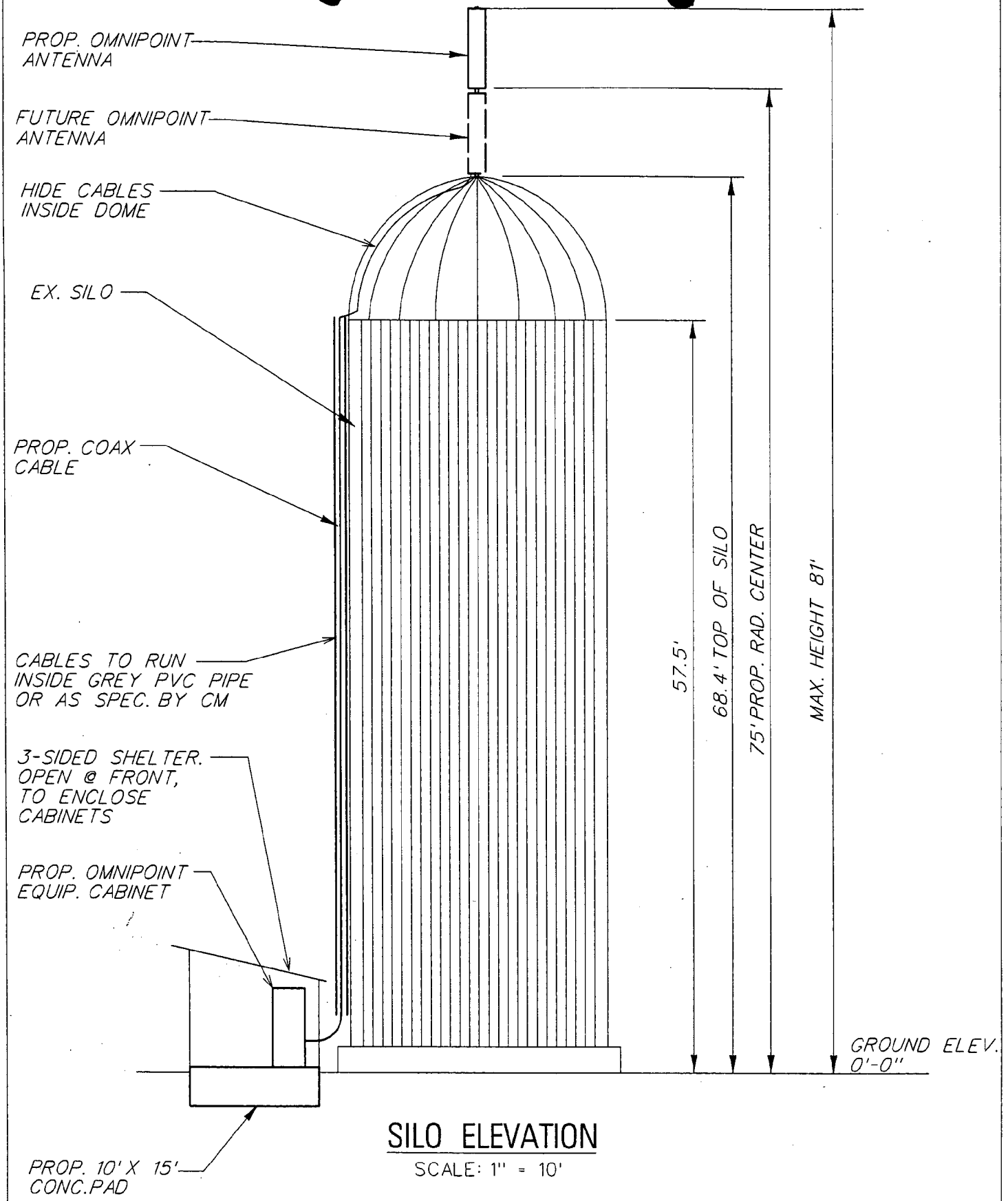

SILO ELEVATION

SCALE: 1" = 10'

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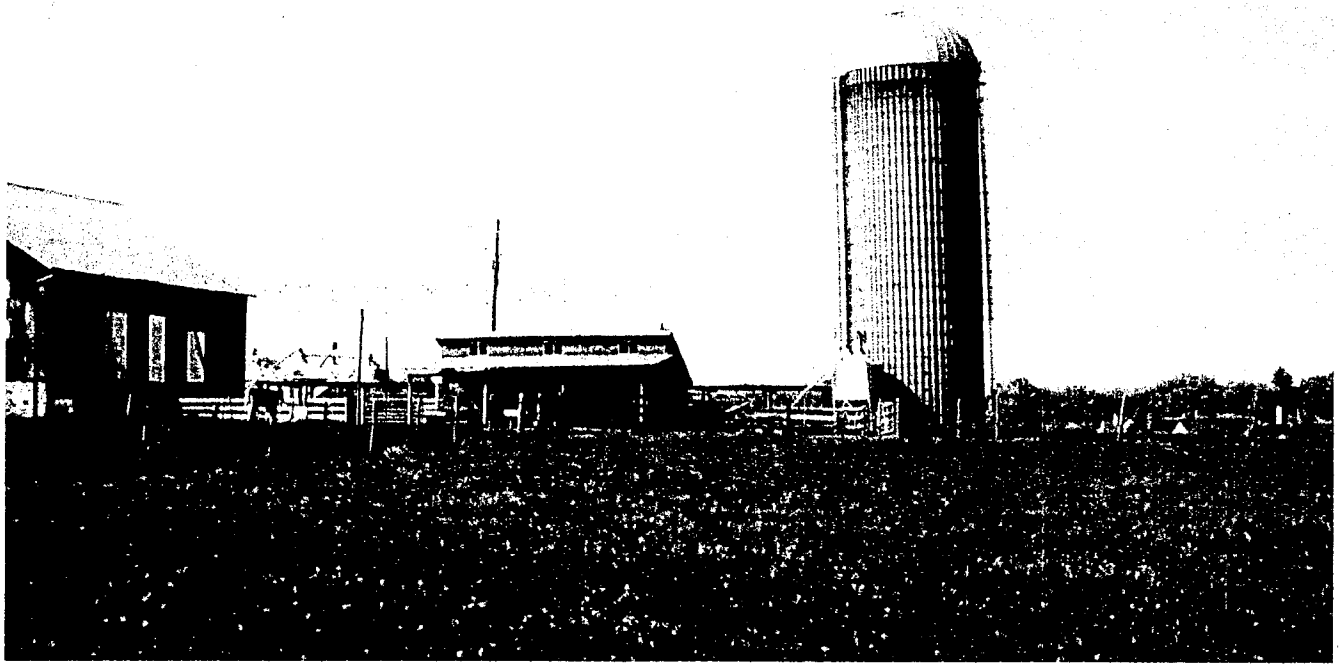
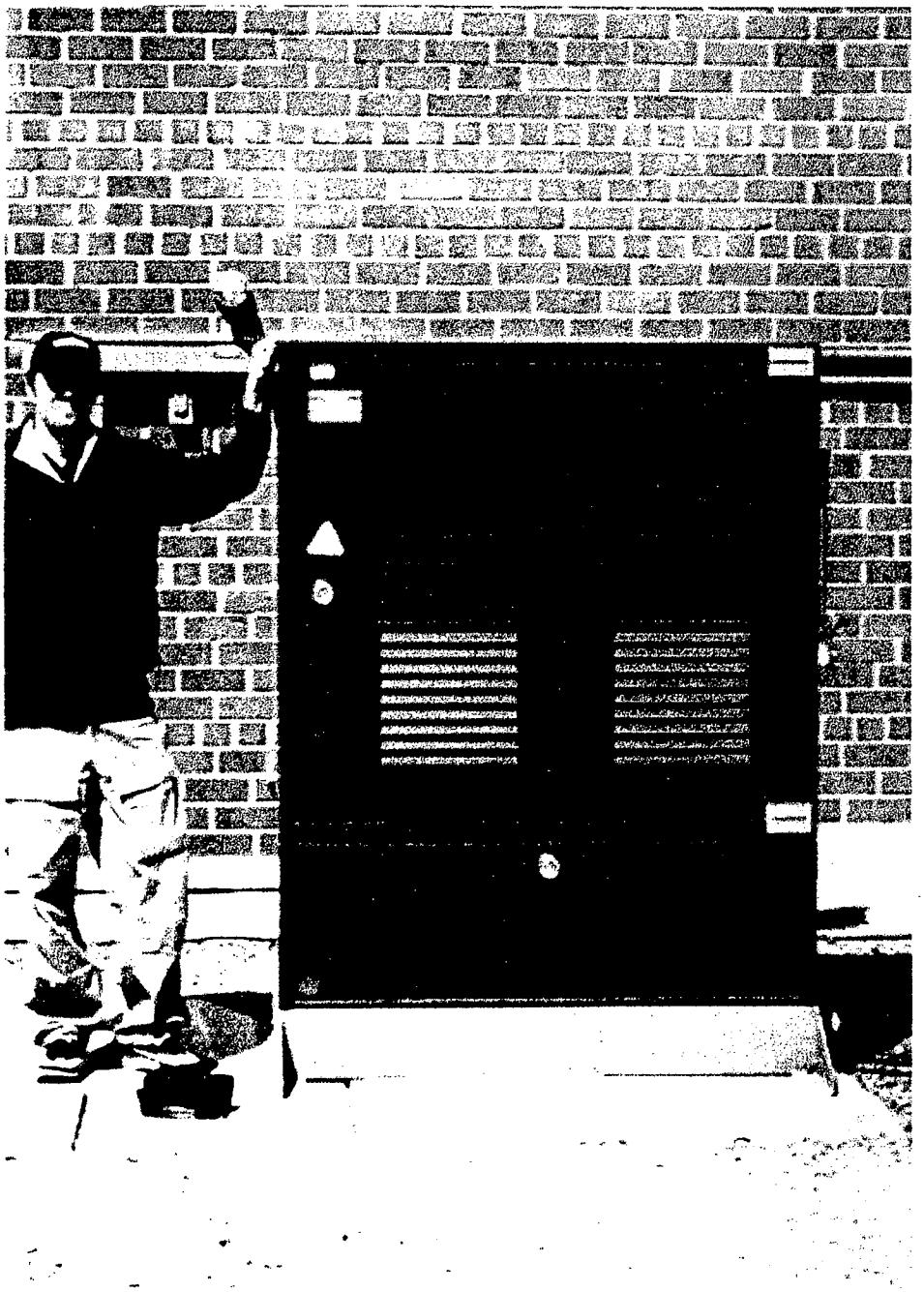


VIEW FROM ROAD



EQUIPMENT CABINENTS
TO BE HOUSED IN
LEAN-TO SHELTER

Mailing List of Property Owners as of 5/7/01

Property Owner

Kenneth Fraley
17800 Bowie Mill Rd.
Derwood, MD 20855

Owner's Agent

VoiceStream Wireless
12050 Baltimore Avenue
Beltsville, MD 20705

Adjoining and Confronting Property Owners

John Baun
18405 Azalea Dr.
Derwood, MD 20855

Barbara Hendry
18601 Muncaster Rd.
Derwood, MD 20855

Steven White
17801 Fraley Farm Rd.
Rockville, MD 20855

Patrick Seig
5612 Silo Hill Ct.
Rockville, MD 20855

James Dooley
5617 Silo Hill Ct.
Rockville, MD 20855

Samuel Yeh
17813 Fraley Farm Rd.
Derwood, MD 20855

Nakul Goyal
17815 Fraley Farm Rd.
Derwood, MD 20855

Arvind Sitapara
17817 Fraley Farm Rd.
Derwood, MD 20855

Jerel Zlotnick
17821 Fraley Farm Rd.
Derwood, MD 20855

Brian Gallant
5612 Silver Oak Ct.
Derwood, MD 20855
Myron Wolowitz
17705 Bowie Mill Rd.
Derwood, MD 20855

Louis Miller
17709 Bowie Mill Rd.
Derwood, MD 20855

David Moldover
17801 Bowie Mill Rd.
Derwood, MD 20855

David Healy
17805 Bowie Mill Rd.
Derwood, MD 20855

Bowie Mill Civic Assn.
c/o Thomas Welch
17500 Bowie Mill Rd.
Derwood, MD 20855

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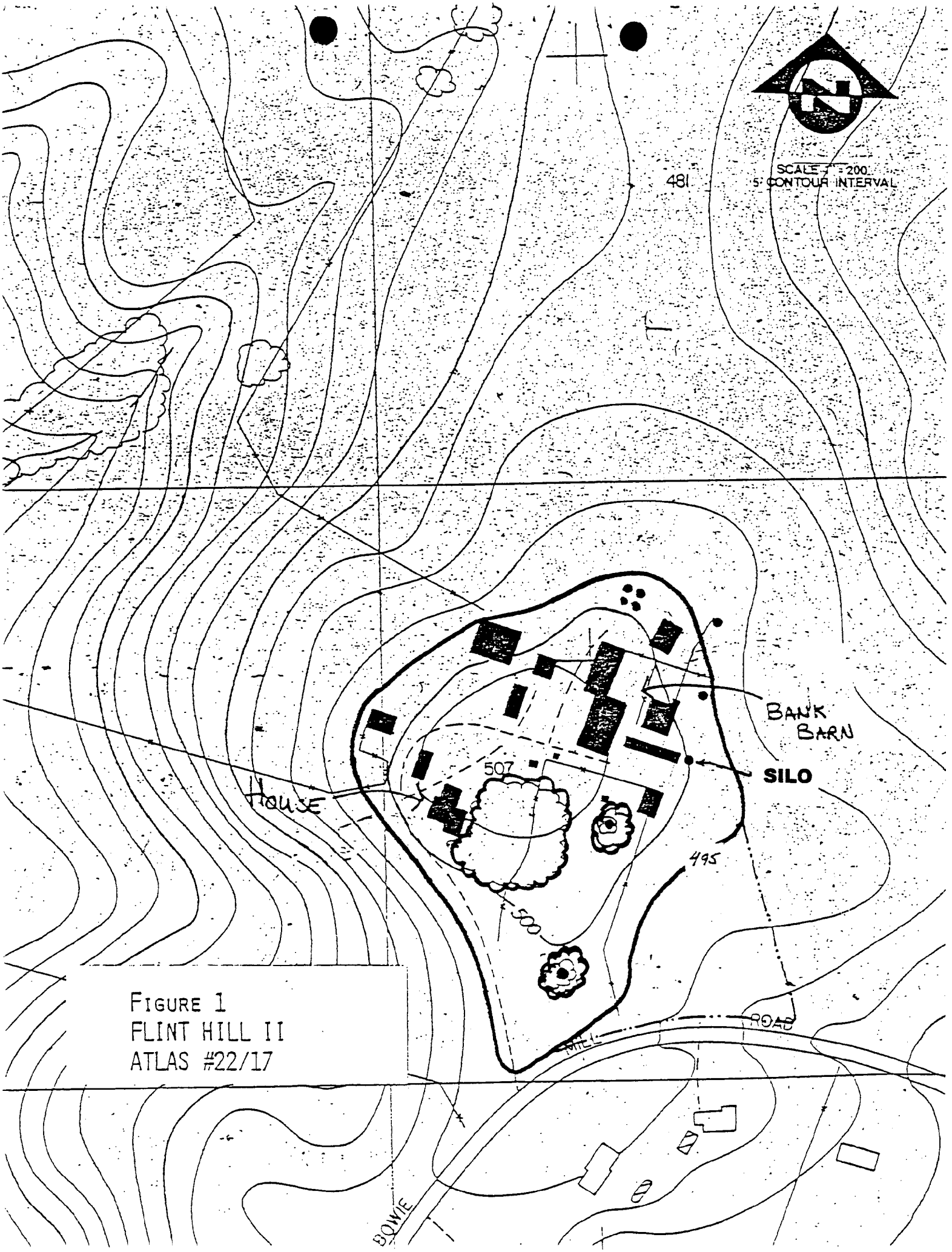

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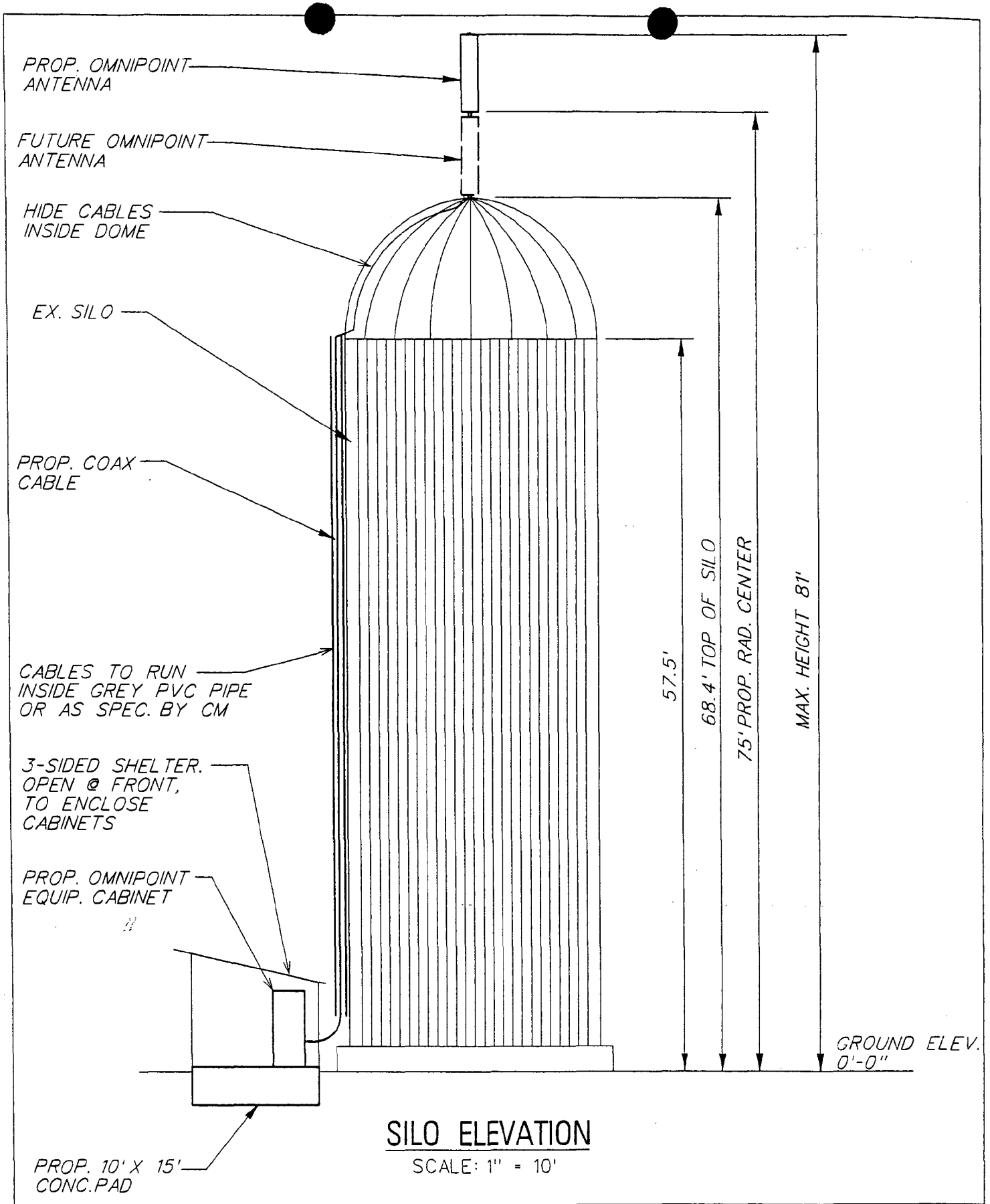

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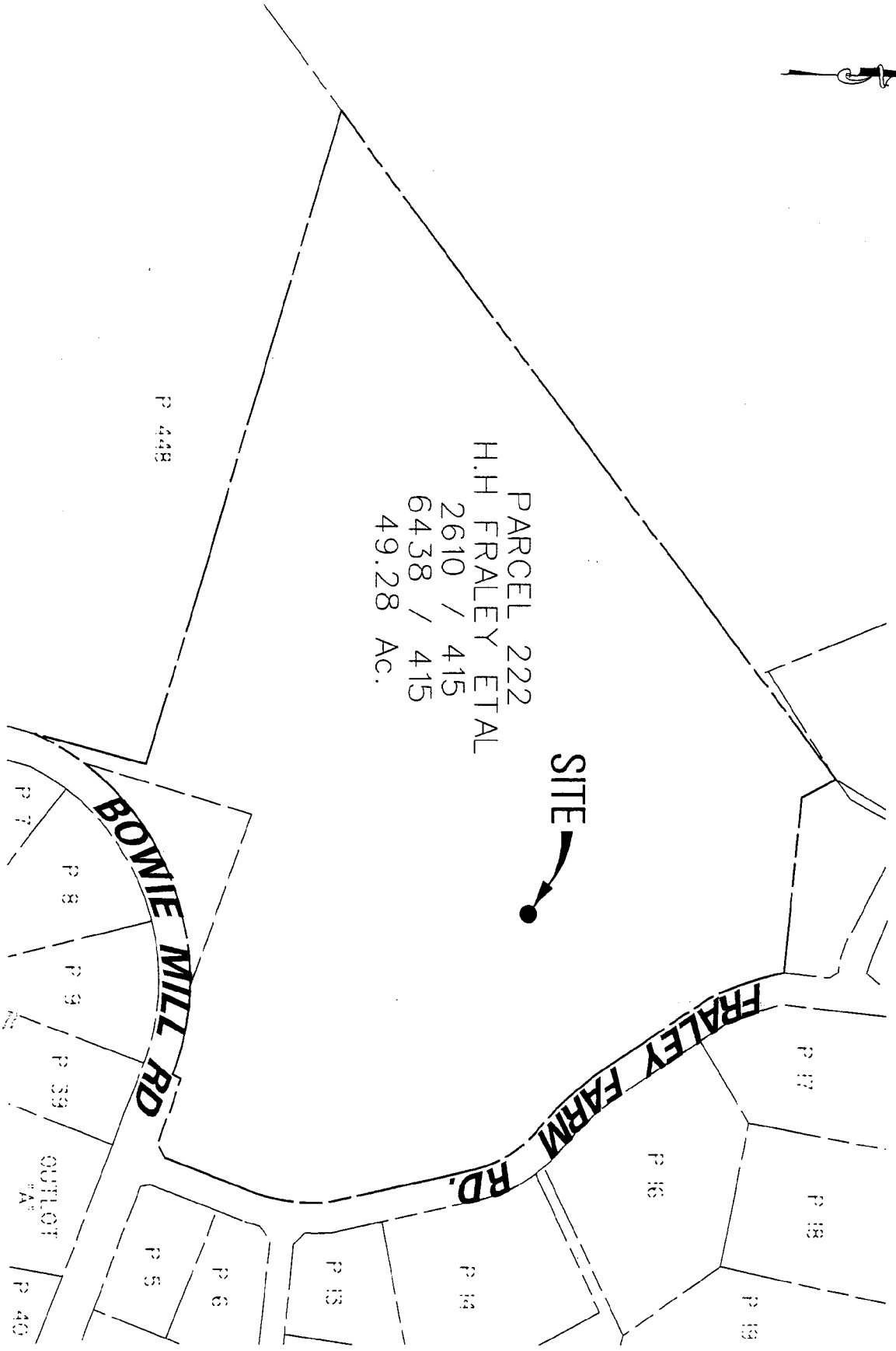

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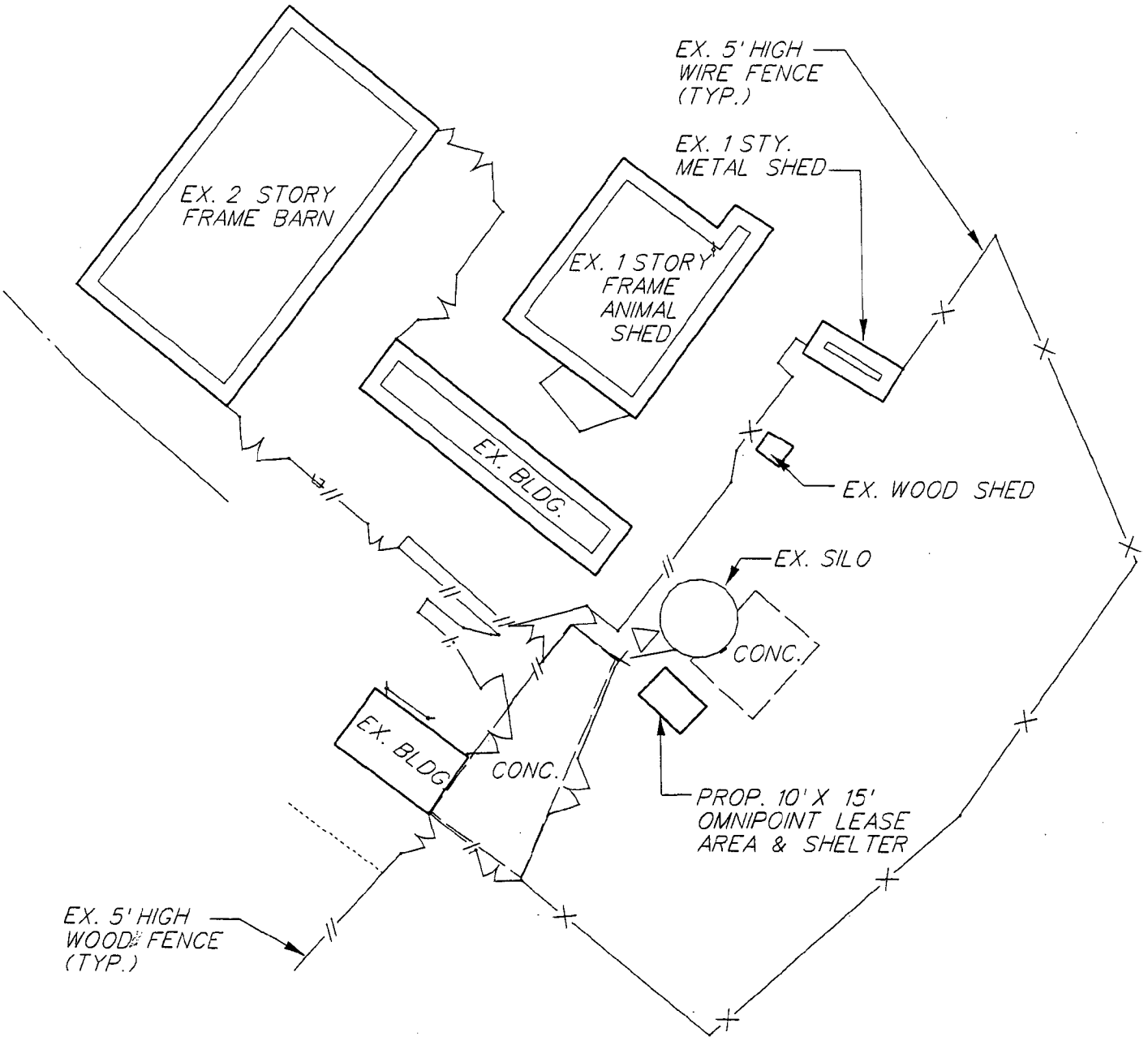

SITE PLAN

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FAX TRANSMISSION

Columbia Telecommunications Corporation

5550 Sterrett Place, Suite 200
Columbia, Maryland 21044
Voice: (410) 964-5700
Fax: (410) 964-6478

To:	Fax:
Jack Andrews, THINC for Nextel	301-625-5871
Kwasi Bosompem, WFI for Verizon	410-309-0573
Richard Carr, Columbia Wireless for Fuzion Wireless	301-571-4389
Ed Donohue, Cole,Raywid,Braverman/AT&T	202-452-0067
Don Collison, PEPCO	202-388-2648
M.G. Diamond, Abrams, West - Verizon	301-951-1543
Jim Golden, Verizon	301-512-2186
Chrystal Haag, airBand	469-791-0234
Lee Jarmon, Nextel	410-953-7406
Martin Klauber, People's Counsel	240-777-9705
Diane Lattin, WFI for US Wireless	703-563-7200
Jody Kline, Miller, Miller & Canby for Nextel	301-762-6044
Peter Meyers, Metricom	703-269-1501
Jim Michal, Jackson & Campbell - CellOne/Sprint	202-457-1678
Carolyn Mitchell, Cingular	410-712-7827
Pamela Peckham, Bechtel	301-937-4862
Maureen Smith, VoiceStream	240-264-8610
Robert Posilkin, Crown Castle	301-931-2324
Tom King, Darnestown Civic Association	301-417-9049

From: Bob Hunnicutt Date: June 6, 2001

Pages: 3, including this cover sheet

Subject: Action Notification for June 5, 2001 TTFCG meeting

Please contact 410-964-5700 as soon as possible if transmission is not complete.

DEPARTMENT OF INFORMATION SYSTEMS AND TELECOMMUNICATIONS

Douglas M. Duncan
County Executive

MEMORANDUM

Donald V. Evans
Director

June 6, 2001

TO: Distribution

FROM: Robert P. Hunnicutt, Tower Coordinator
Telecommunications Transmission Facility Coordinating Group (TTFCG)

SUBJECT: Notification of Action

At its meeting of June 5, 2001 the Montgomery County TTFCG recommended the following applications:

- Nextel Communications application to attach antennas in the bell tower at the 43' level of a 53' Our Lady of Mercy church building to be constructed at 9200 Kentsdale Drive in Potomac (Application #200012-03).

- Sprint PCS application to attach antennas at the 140' level of the 204' WSSC Colesville water tank located at 2201 Industrial Parkway in Silver Spring (Application #200104-19).

- Nextel Communications application to sled mount antennas on the roof at the 100' level of an existing 96' Columbia Towers building located at 12001 Old Columbia Pike in Silver Spring (Application #200104-22).

- VoiceStream Wireless application to attach antennas at the 181' level of an existing 204' monopole at the Damascus VFD #13 located at 10211 Lewis Drive in Damascus (Application #200104-23).

- Nextel Communications application to attach antennas at the 110' level of an existing 150' monopole at Sherwood High School located at 300 Olney-Sandy Spring Road in Sandy Spring (Application #200105-07).

- VoiceStream Wireless application to replace 6 existing 54" antennas with 6 new 72" antennas on the penthouse walls at the 144' level of an existing 129' Park Montgomery Apartment building located at 8860 Piney Branch Road in Silver Spring (Application #200105-08).

- Sprint PCS application to construct a new 125' monopole/lightpole and place antennas at the 120' level at North Bethesda Middle School located at 8935 Bradmoor Drive in Bethesda (Application #200105-14)

- Montgomery County application to attach antennas to the roof wall at the 118' level of the 111' Hyatt Regency Bethesda building located at 1 Bethesda Metro Center in Bethesda (Application #200105-15).

Recommendation conditioned on obtaining any modifications to the Special Exception as may be required.

- Sprint PCS application to attach antennas at the 155' level of a 188' monopole at the McDonnell property located at 20315 Georgia Avenue in Brookeville (Application #200104-20).

Recommendation conditioned on obtaining any modifications to the Special Exception as may be required to increase the ground space for the equipment shed and for tree branches.

- Nextel Communications application to attach antennas at the 77' level of an existing 120' tree monopole at the Baptist Home for Children located at 6301 Greentree Road in Bethesda (Application #200104-21).

Recommendation conditioned on approval by the Historical Preservation Society and the Department of Permitting Services, and the Zoning Department.

- VoiceStream Wireless application to attach antennas at the 75' & 78' level on the top of an existing farm silo at Fraley Farm located at 17800 Bowie Mill Road in Derwood (Application #200105-10).

Recommendation conditioned on Nextel providing the Department of Permitting Services with a structural analysis that verifies attachment may be safely accomplished and providing a copy to the TTFCG prior to construction, and compliance with Section 59.A.14 of the zoning regulations regarding the location of the equipment shed.

- Nextel Communications application to attach antennas to the top of the chimney at the 52' level of the Chevy Chase Methodist Church located at 7001 Connecticut Avenue in Chevy Chase (Application #200105-11).

Recommendation conditioned on Sprint providing the Department of Permitting Services with a structural analysis that verifies attachment may be safely accomplished and providing a copy to the TTFCG prior to construction.

- Sprint PCS application to attach antennas at the 180' level of an existing 230' lattice tower on the Benmar Property located at 18500 Elmer School Road in Poolesville (Application #200105-12).