



FOR ZONING

PREPARED FOR: VERTEX TOWERS, LLC.



2 COMMERCIAL STREET
SHARON, MA 02067



45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845
TEL: (978) 557-5553



CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
3	06/27/23	ADDED PUC COMMENTS	GA
2	06/16/23	NEW TOWER LOCATION	GA
1	02/21/23	REV. TOWER HEIGHT & LOCATION	SLY
0	06/15/22	FOR ZONING	SLY

SITE NAME:
MANCHESTER CENTER

VT-VT-0056C

SITE ADDRESS:
410 HUNTER PARK ROAD
MANCHESTER, VT 05255

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

MANCHESTER CENTER

410 HUNTER PARK ROAD MANCHESTER, VT 05255



VICINITY MAP

SCALE: N.T.S.

DIRECTIONS TO SITE: FROM VERTEX TOWERS SHARON MA OFFICE, HEAD SOUTHEAST TOWARD COMMERCIAL ST., TURN RIGHT TOWARD COMMERCIAL ST., TURN RIGHT ONTO COMMERCIAL ST., TAKE I-95 N, MA-2 W, MA-140 N, HWY 12 N, ... AND VT-11 W TO HUNTER PARK RD IN MANCHESTER., TURN RIGHT ONTO US-1 N,USE THE RIGHT LANE TO MERGE ONTO I-95 N VIA THE RAMP TO BOSTON USE THE LEFT 2 LANES TO TAKE THE I-95 N EXIT TOWARD PORTSMOUTH NH MERGE ONTO I-95 W., TAKE EXIT 45B TO MERGE ONTO MA-2 W TOWARD ACTON/FITCHBURG., KEEP LEFT TO CONTINUE ON CONCORD TURNPIKE CONTINUE ONTO MA-2 W/CAMBRIDGE TURNPIKE., CONTINUE STRAIGHT ONTO MA-2 W., AT THE TRAFFIC CIRCLE, TAKE THE 4TH EXIT ONTO MA-111 N/MA-2 W., TAKE EXIT 90B TO MERGE ONTO MA-140 N TOWARD WINCHENDON., TURN RIGHT ONTO SCHOOL ST., TURN LEFT ONTO HWY 12 N., TURN LEFT ONTO STATE RTE 101 W/HWY 12 N., AT THE TRAFFIC CIRCLE, TAKE THE 2ND EXIT ONTO NH-10 N/HWY 12 N., TURN RIGHT ONTO NH-10 N/NH-9 E/HWY 12 N/RTE 12 KEEP LEFT TO CONTINUE ON HWY 12 N/RTE 12., TURN LEFT ONTO ARCH BRIDGE., TURN RIGHT ONTO ROCKINGHAM ST., SLIGHT RIGHT TO STAY ON ROCKINGHAM ST SLIGHT LEFT ONTO VT-103 N., TURN RIGHT ONTO TOLLGATE RD., CONTINUE ONTO BARNUMVILLE RD., SHARP RIGHT ONTO BEECH ST., BEECH ST TURNS LEFT AND BECOMES HIGH MEADOW WAY., TURN LEFT TO STAY ON HIGH MEADOW WAY., TURN LEFT ONTO MAIN ST/VERMONT RTE 7A S., DRIVE TO HUNTER PARK RD., TURN RIGHT ONTO HUNTER PARK RD., TURN LEFT TO STAY ON HUNTER PARK RD.,TURN LEFT TO STAY ON HUNTER PARK RD., DESTINATION WILL BE ON THE LEFT

PROJECT SUMMARY

PROJECT ENGINEER

TOWER ENGINEERING PROFESSIONALS
TEP NORTHEAST, POCO, LLC.
45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845
TEL: 1-(978)-557-5553

MEP ENGINEER

TOWER ENGINEERING PROFESSIONALS
TEP NORTHEAST, POCO, LLC.
45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845
A: TEL: 1-(978)-557-5553

SURVEYOR

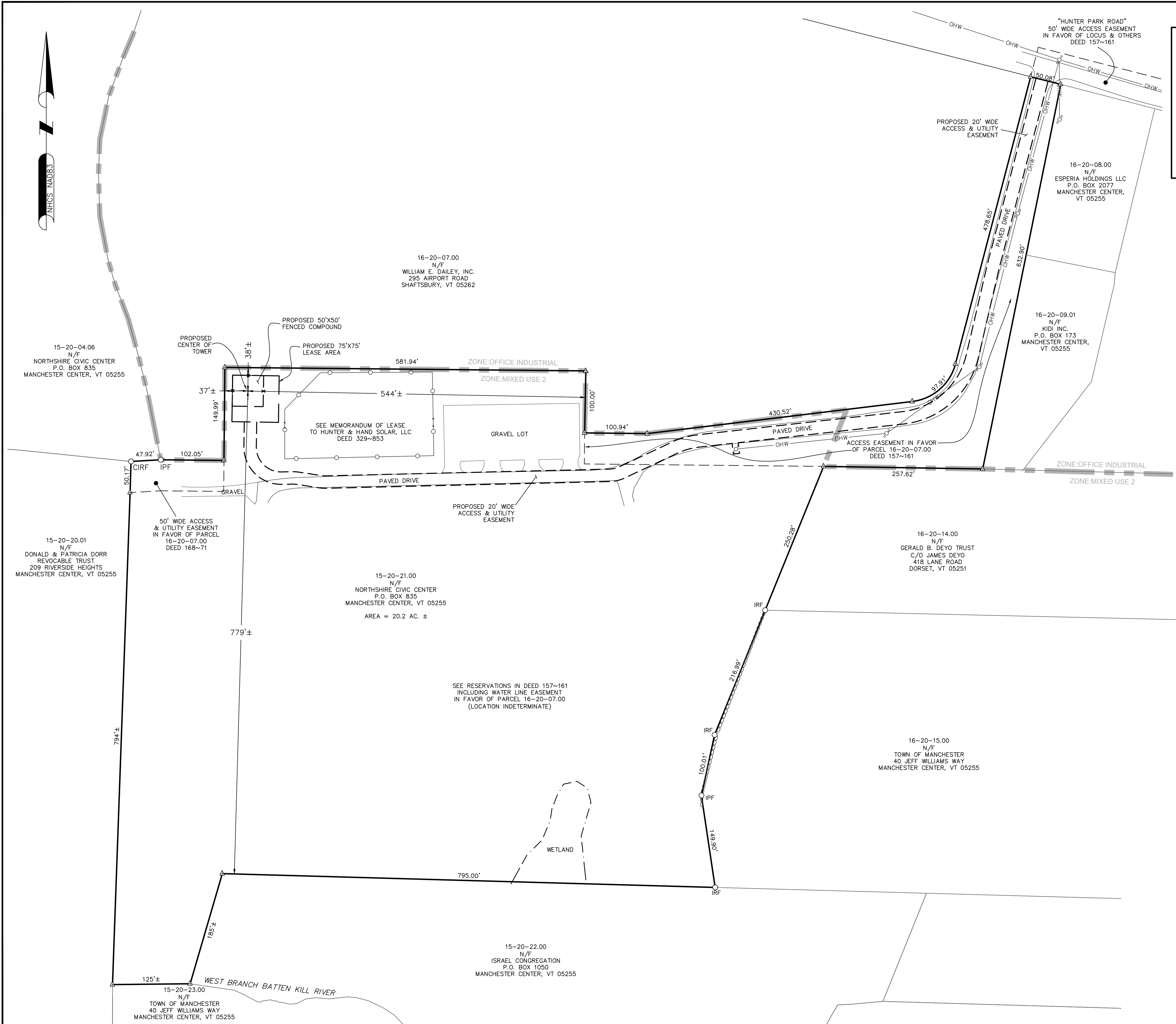
NORTHEAST SURVEY CONSULTANTS
116 PLEASANT ST., SUITE 302
EASTHAMPTON, MA 01027
TEL: 1-(413)-203-5144

PROJECT SUMMARY

SITE NAME: MANCHESTER CENTER
SITE ADDRESS: 410 HUNTER PARK ROAD
MANCHESTER, VT 05255
APPLICANT: VERTEX TOWERS, LLC.
2 COMMERCIAL STREET
SHARON, MA 02067
ZONING DISTRICT: MIXED USE 2 (MU2)
ZONING JURISDICTION: STATE OF VERMONT PUBLIC UTILITIES
COMMISSION (PUC)
BENNINGTON COUNTY
LATITUDE: N043° 11' 25.80" N 43.188803°
LONGITUDE: W073° 02' 57.37" W 73.047028°
PARCEL ID: 15-20-21.00
PROPERTY OWNER: NORTHSHIRE CIVIC CENTER
P.O. BOX 835
MANCHESTER CENTER, VT 05255

SHEET INDEX

SHEET NO.	DESCRIPTION
T-1	TITLE SHEET
C-1	ABUTTERS PLAN
C-2	EXISTING CONDITIONS PLAN
C-3	SITE PLAN
C-4	GRADING AND EROSION CONTROL PLAN
C-5	SITE PROFILE AND PLAN
A-1	COMPOUND PLAN
A-2	ELEVATION
A-3	DETAILS
A-4	EROSION CONTROL NOTES AND DETAILS
A-5	EPSC LOW RISK HANDBOOK
A-6	EPSC LOW RISK HANDBOOK
A-7	EPSC LOW RISK HANDBOOK



LEGEND

- PROPERTY LINE - SUBJECT PARCEL
- ABUTTERS PROPERTY LINE
- EASEMENT LINE
- STONEWALL
- OHW
- OVERHEAD WIRE LINE
- ZONING LINE
- IRON PIPE OR ROD FOUND
- CALCULATED POINT
- TOWER CONTROL POINT
- UTILITY POLE

- SITE SPECIFIC NOTES:**
- FIELD SURVEY DATE: 5-3-2022 & 5-11-2022
 - HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)
 - VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
 - OWNER: NORTHSHIRE CIVIC CENTER
P.O. BOX 835
MANCHESTER CENTER, VT 05255
 - SITE NAME: MANCHESTER CENTER
VT-VT 0056C
 - SITE ADDRESS: 410 HUNTER PARK ROAD
MANCHESTER, VT 05255
 - APPLICANT: VERTEX TOWERS, LLC
2 COMMERCIAL STREET
SHARON, MA 02067
 - JURISDICTION: STATE OF VERMONT PUBLIC UTILITIES COMMISSION (PUC)
 - TAX ID: 15-20-21.00
 - DEED REFERENCE: BOOK 168 PAGE 68
 - PLAN REFERENCE: MAP 1-17A
 - THE HORIZONTAL DATUM AND VERTICAL DATUM WERE DERIVED FROM AN RTK GPS SURVEY.
 - ALL UNDERGROUND UTILITY INFORMATION PRESENTED HEREON WAS DETERMINED FROM SURFACE EVIDENCE ONLY. ALL UNDERGROUND UTILITIES SHOULD BE LOCATED IN THE FIELD PRIOR TO COMMENCEMENT OF ALL SITE WORK. CALL DIGSAFE 1-800-322-4844. A MINIMUM OF 72 HOURS PRIOR TO PLANNED ACTIVITY.
 - ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY MAPS, THE LOCUS PROPERTY IS LOCATED IN AREAS DESIGNATED AS ZONE X (UNSHADED, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN). COMMUNITY PANEL NO. 50003C 0183 D EFFECTIVE DATE: 12/02/2015.
 - FIELD SURVEY BY EDM TOTAL STATION & RTK GPS. CONTOURS SHOWN ARE TAKEN FROM LIDAR AND ARE NOT THE RESULT OF AN ON-THE-GROUND FIELD SURVEY.
 - THIS IS NOT A BOUNDARY SURVEY.
 - ALL PROPERTY LINES SHOWN ARE FROM FIELD EVIDENCE, DEEDS & PLANS OF RECORD AND GIS DATA AND ARE APPROXIMATE ONLY.
 - WETLANDS WERE REVIEWED BY ARROWWOOD ENVIRONMENTAL. WETLANDS SHOWN HEREON WERE PLACED APPROXIMATELY.

ABUTTERS PLAN
22x34 SCALE: 1"=80'-0"
11x17 SCALE: 1"=160'-0"

GRAPHIC SCALE
80 40 0 80 160 FEET

PREPARED FOR: VERTEX TOWERS, LLC.

Vertex Towers
2 COMMERCIAL STREET
SHARON, MA 02067

TEP NORTH
TEP OPCO, LLC.
45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845
TEL: (978) 557-5553

NORTHEAST SURVEY CONSULTANTS
3 Ferry Street
Studio 1 East
Easthampton, MA 01027
(413) 203-5144
northeastsurvey.com

STATE OF VERMONT
ETHAN GILMOUR
No. 024.
0127787
ETHAN GILMOUR VT LLS 024-0127787

CHECKED BY: BCF

APPROVED BY: EG

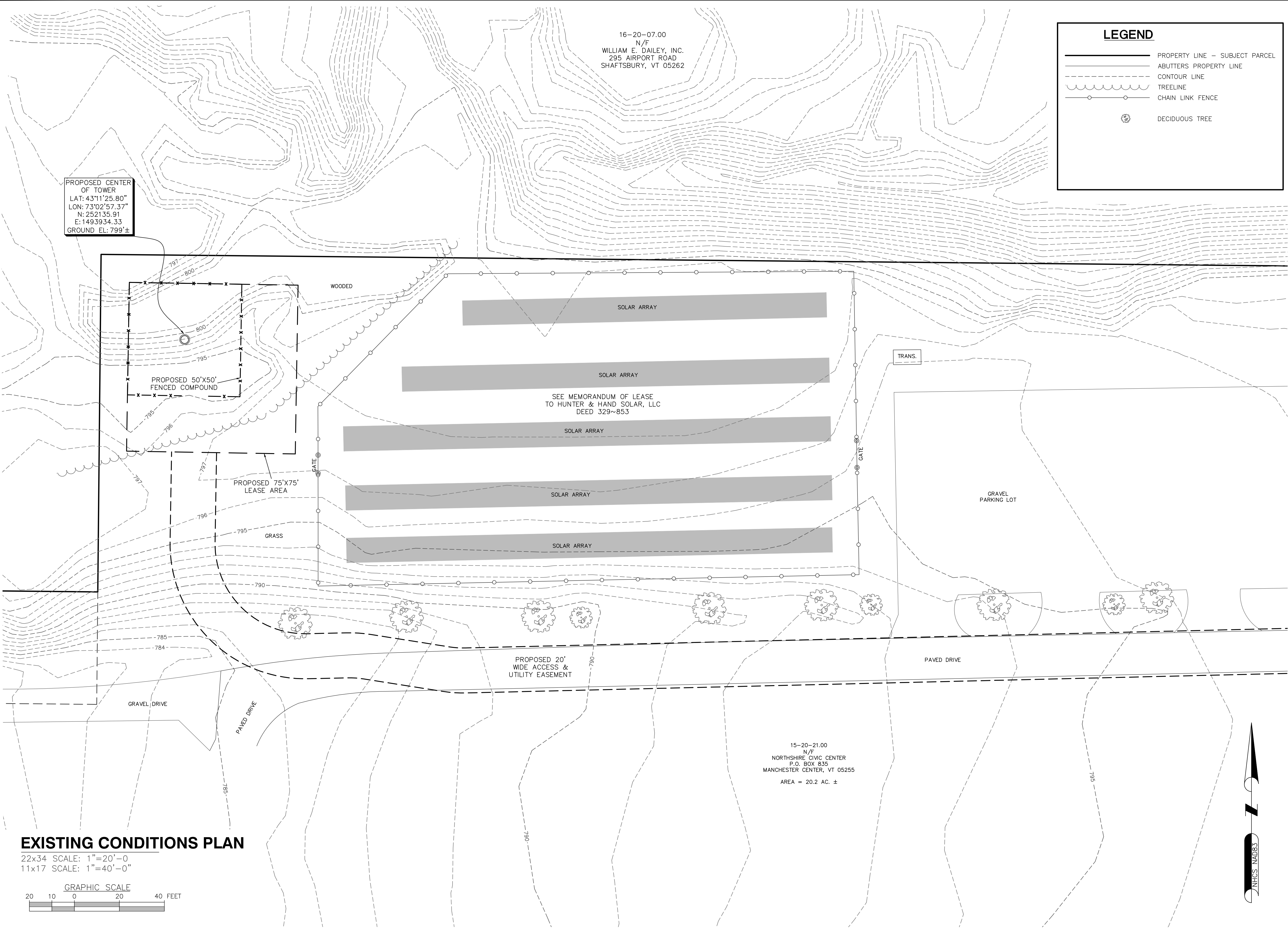
SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
0	6/27/23	ISSUED FOR REVIEW	BCF

SITE NAME:
MANCHESTER CENTER
VT-VT-0056C

SITE ADDRESS:
410 HUNTER PARK ROAD
MANCHESTER, VT 05255

SHEET TITLE
ABUTTERS PLAN

SHEET NUMBER
C-1



PREPARED FOR: VERTEX TOWERS, LLC.

2 COMMERCIAL STREET
SHARON, MA 02067

TEP
NORTHEAST
TEP OPCO, LLC.

45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845
TEL: (978) 557-5553

NORTHEAST SURVEY
CONSULTANTS

3 Ferry Street
Studio 1 East
Easthampton, MA 01027
(413) 203-5144
northeastsurvey.com

ETHAN GILMOUR
No. 024.
0127787

ETHAN GILMOUR VT LLS 024-0127787

CHECKED BY: BCF

APPROVED BY: EG

SUBMITTALS

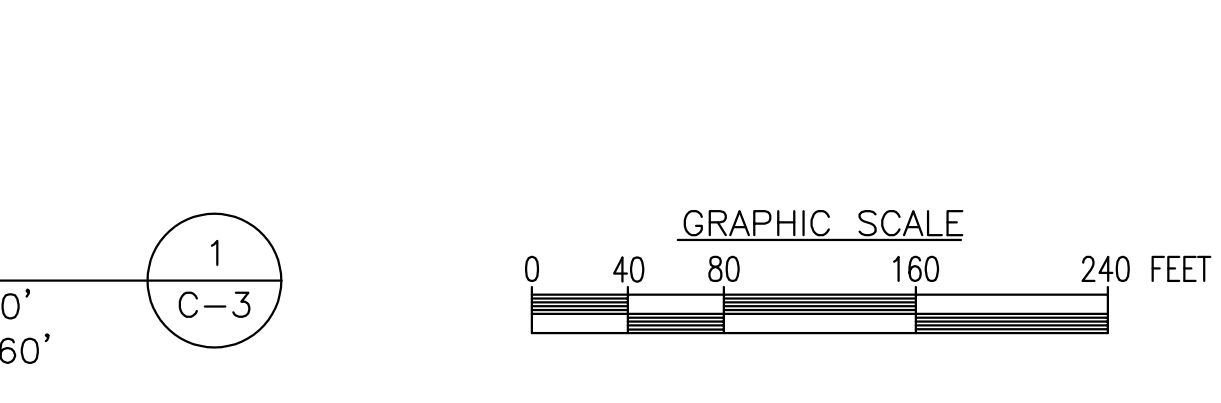
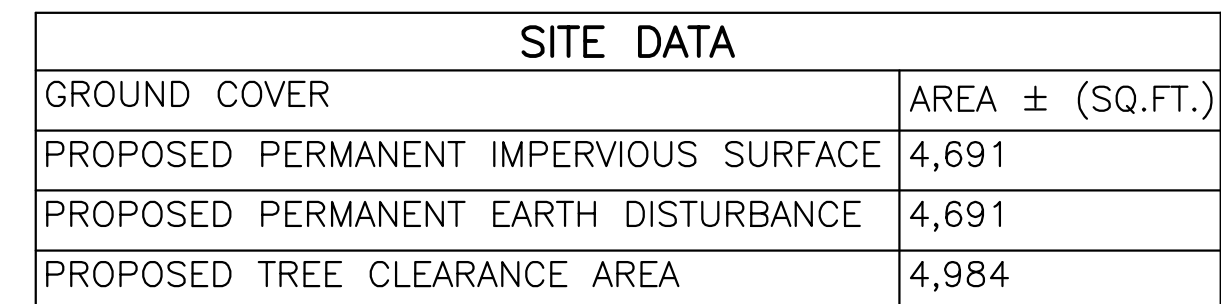
REV.	DATE	DESCRIPTION	BY
0	6/27/23	ISSUED FOR REVIEW	BCF

SITE NAME:
MANCHESTER CENTER
VT-VT-0056C

SITE ADDRESS:
410 HUNTER PARK ROAD
MANCHESTER, VT 05255

SHEET TITLE
EXISTING CONDITIONS

SHEET NUMBER
C-2



FOR ZONING

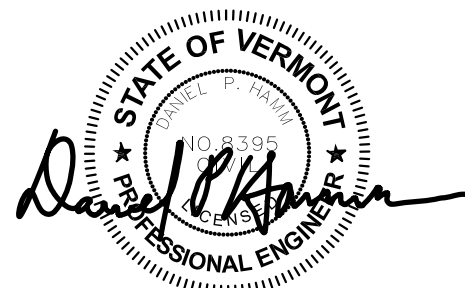
PREPARED FOR: VERTEX TOWERS, LLC.



2 COMMERCIAL STREET
SHARON, MA 02067



45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845
TEL: (978) 557-5553



CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
3	06/27/23	ADDED PUC COMMENTS	GA
2	06/16/23	NEW TOWER LOCATION	GA
1	02/21/23	REV. TOWER HEIGHT & LOCATION	SLY
0	06/15/22	FOR ZONING	SLY

SITE NAME:
MANCHESTER CENTER

VT-VT-0056C

SITE ADDRESS:
410 HUNTER PARK ROAD
MANCHESTER, VT 05255

SHEET TITLE

SITE PLAN

SHEET NUMBER

C-3

LEGEND

PROPERTY LINE - SUBJECT PARCEL

ABUTTERS PROPERTY LINE

EXISTING CONTOUR LINE

EXISTING TREE LINE

BARBED WIRE FENCE REMAINS

OVERHEAD WIRE (TRANSMISSION LINE)

EXISTING CHAIN LINK FENCE

EXISTING UNDERGROUND SEWER LINE

DELINEATED WETLAND LINE

EXISTING BUILDING

PROPOSED EQUIPMENT CONCRETE PAD

CATCH BASIN

CONIFEROUS TREE

DECIDUOUS TREE

EXISTING GROUND WELL

EXISTING SEWER MANHOLE

STONEWALL

WELL

UTILITY POLE

PROPOSED UTILITY POLE

PROPOSED LIMIT OF TREE CLEARANCE

PROPOSED CONTOUR LINE

PROPOSED CONSTRUCTION SILT SOCK

LIMIT OF DISTURBANCE

PROPOSED TOWER

FOR ZONING

PREPARED FOR: VERTEX TOWERS, LLC.

Vertex Towers

2 COMMERCIAL STREET
SHARON, MA 02067

TEP

NORTHEAST

TEP OPCO, LLC.

45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845
TEL: (978) 557-5553

STATE OF VERMONT
Professional Engineer
Daniel J. Kahan

CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
3	06/27/23	ADDED PUC COMMENTS	GA
2	06/16/23	NEW TOWER LOCATION	GA
1	02/21/23	REV. TOWER HEIGHT & LOCATION	SLY
0	06/15/22	FOR ZONING	SLY

SITE NAME:
MANCHESTER CENTER
VT-VT-0056C

SITE ADDRESS:
410 HUNTER PARK ROAD
MANCHESTER, VT 05255

SHEET TITLE
GRADING AND EROSION
CONTROL PLAN

SHEET NUMBER
C-4

PROPOSED 50'x50' FENCED COMPOUND

PROPOSED 75'x75' LEASE AREA

PROPOSED MONOPOLE

PROPOSED TREE LINE CLEARANCE

PROPOSED 20' WIDE ACCESS & UTILITY EASEMENT

PROPOSED 12FT WIDE GRAVEL DRIVEWAY

PROPOSED CONSTRUCTION EROSION CONTROL SILT SOCK

ALL EXISTING GRASS OR GRAVEL AREAS TO BE LOAMED AND SEED

PROPOSED EROSION CONTROL BLANKET: NAG S150 OR APPROVED EQUAL (TYP.)

PROPOSED POWER & TELCO SERVICE ROUTED UNDERGROUND FROM EXISTING UTILITY POLE TO EQUIPMENT COMPOUND

EDGE OF GRAVEL

EDGE OF PAVEMENT 0+00

GRAVEL DRIVE

13'37'

MAGNETIC NORTH

TRUE NORTH

1086

1000

799.05

799.98

799.02

798.03

798.96

799

798

797

796

794

793

792

791

789

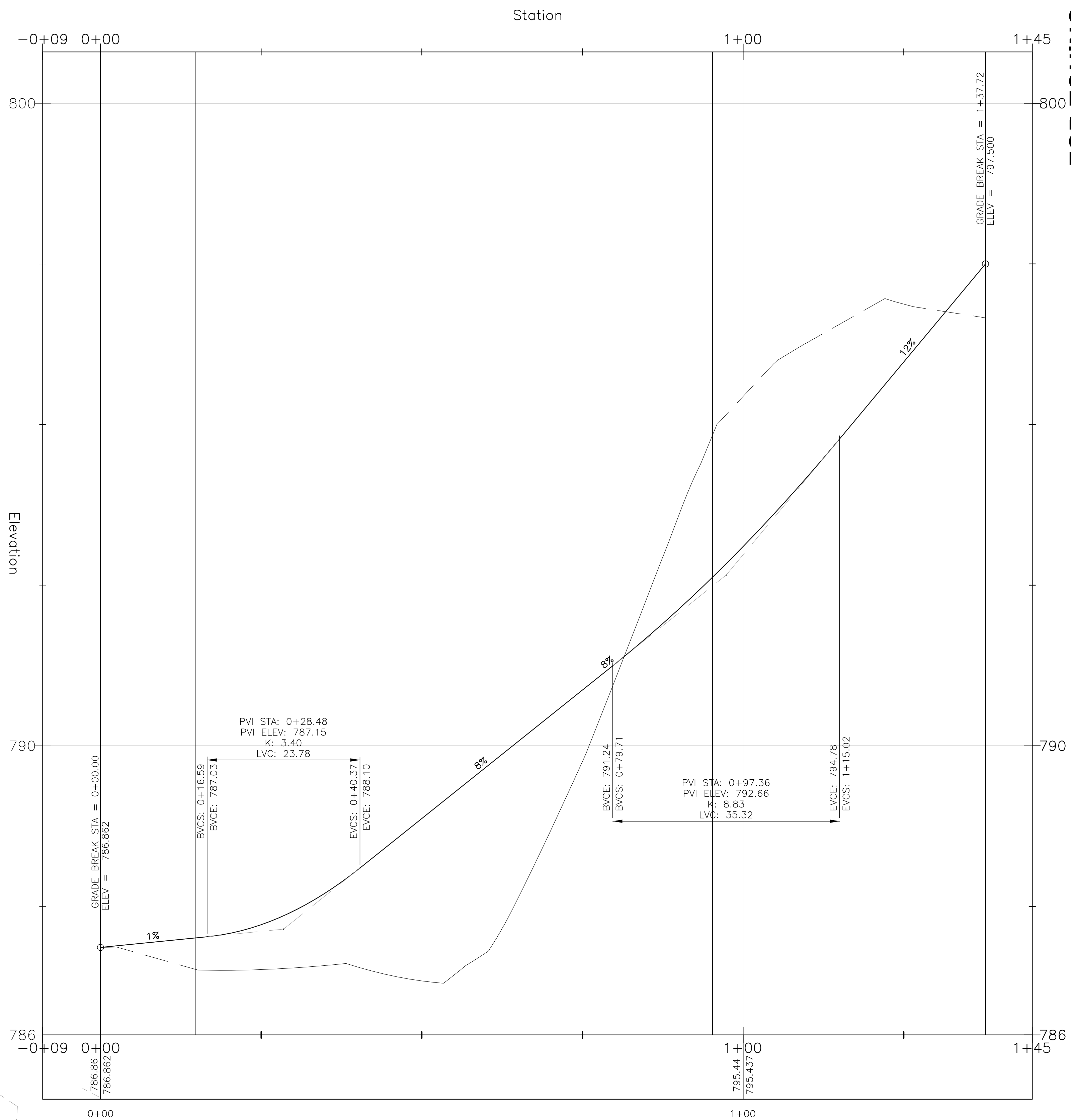
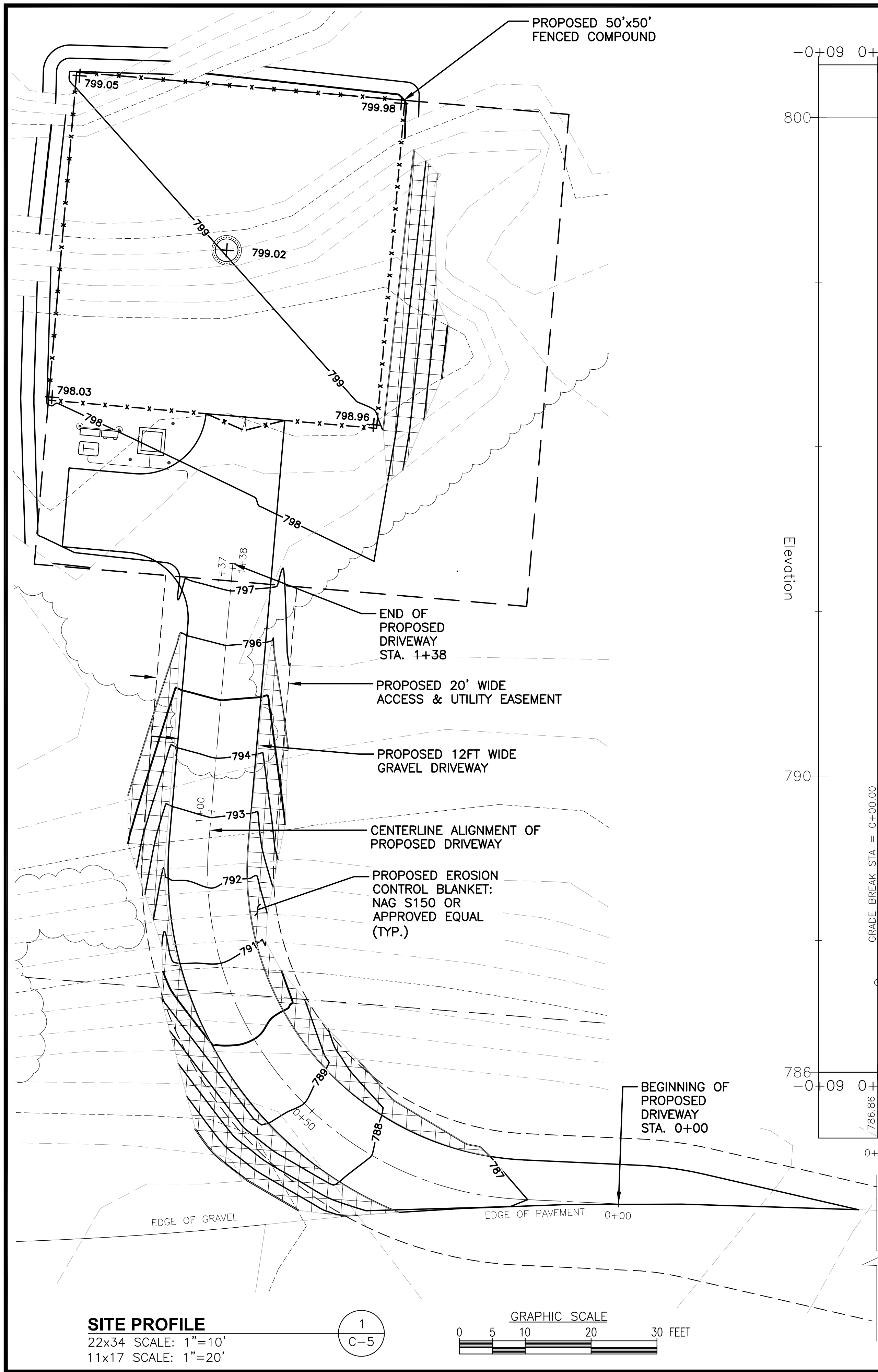
788

787

0+50

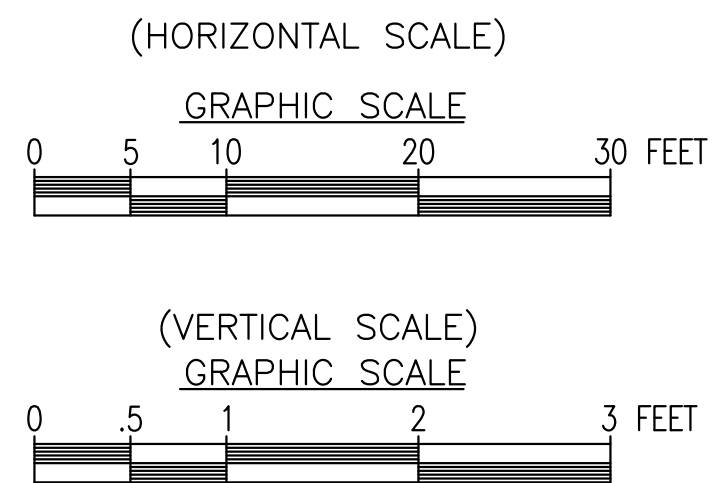
0+00

GRADING AND EROSION CONTROL PLAN 1
22x34 SCALE: 1"=10'
11x17 SCALE: 1"=20'
C-4



SITE PROFILE
22x34 SCALE: 1"=10' (HORIZONTAL)
11x17 SCALE: 1"=20' (HORIZONTAL)

SITE PROFILE
22x34 SCALE: 1"=1'-0" (VERTICAL)
11x17 SCALE: 1/2"=1'-0" (VERTICAL)



FOR ZONING

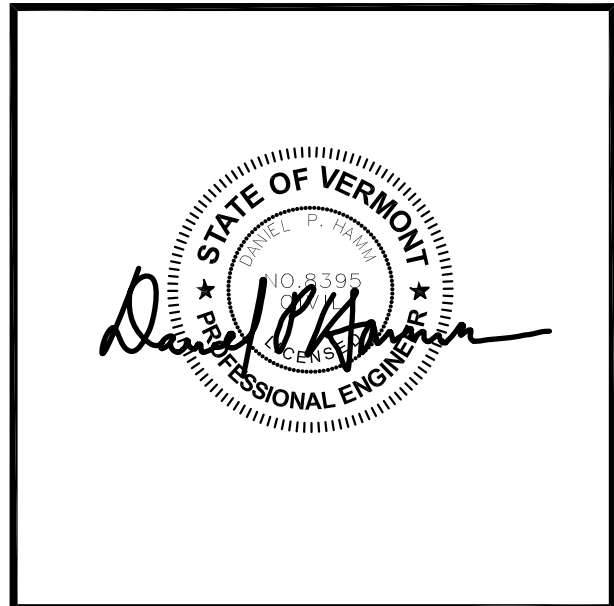
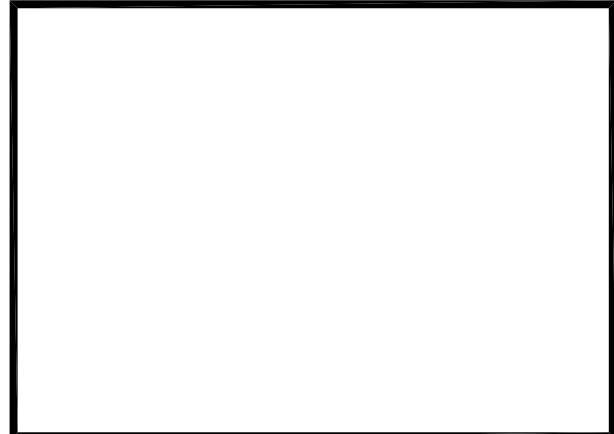
PREPARED FOR: VERTEX TOWERS, LLC.

Vertex Towers

2 COMMERCIAL STREET
SHARON, MA 02067

TEP
NORTHEAST
TEP OPCO, LLC.

45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845
TEL: (978) 557-5553



CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
3	06/27/23	ADDED PUC COMMENTS	GA
2	06/16/23	NEW TOWER LOCATION	GA
1	02/21/23	REV. TOWER HEIGHT & LOCATION	SLY
0	06/15/22	FOR ZONING	SLY

SITE NAME:
MANCHESTER CENTER

VT-VT-0056C

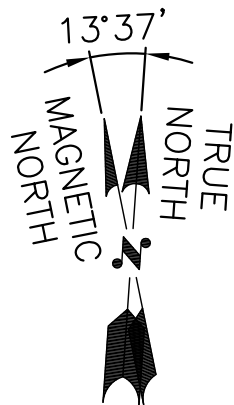
SITE ADDRESS:
410 HUNTER PARK ROAD
MANCHESTER, VT 05255

SHEET TITLE
**SITE PROFILE
AND PLAN**

SHEET NUMBER
C-5

LEGEND

	PROPERTY LINE - SUBJECT PARCEL
	ABUTTERS PROPERTY LINE
	EXISTING CONTOUR LINE
	TREE LINE
	BARBED WIRE FENCE REMAINS
	OVERHEAD WIRE (TRANSMISSION LINE)
	EXISTING CHAIN LINK FENCE
	EXISTING UNDERGROUND SEWER LINE
	DELINEATED WETLAND LINE
	EXISTING BUILDING
	PROPOSED EQUIPMENT CONCRETE PAD
	CATCH BASIN
	CONIFEROUS TREE
	DECIDUOUS TREE
	EXISTING GROUND WELL
	EXISTING SEWER MANHOLE
	STONEWALL
	WELL
	UTILITY POLE
	PROPOSED CONTOUR LINE
	PROPOSED CONSTRUCTION SILT SOCK
	PROPOSED TOWER



A-1

FOR ZONING

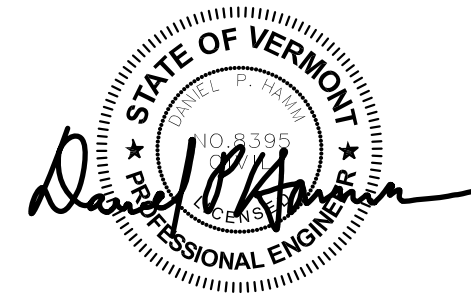
PREPARED FOR: VERTEX TOWERS, LLC.

**Vertex
Towers**

2 COMMERCIAL STREET
SHARON, MA 02067

**TEP
NORTHEAST**
TEP OPCO, LLC.

45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845
TEL: (978) 557-5553



CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
3	06/27/23	ADDED PUC COMMENTS	GA
2	06/16/23	NEW TOWER LOCATION	GA
1	02/21/23	REV. TOWER HEIGHT & LOCATION	SLY
0	06/15/22	FOR ZONING	SLY

SITE NAME:

MANCHESTER CENTER

VT-VT-0056C

SITE ADDRESS:

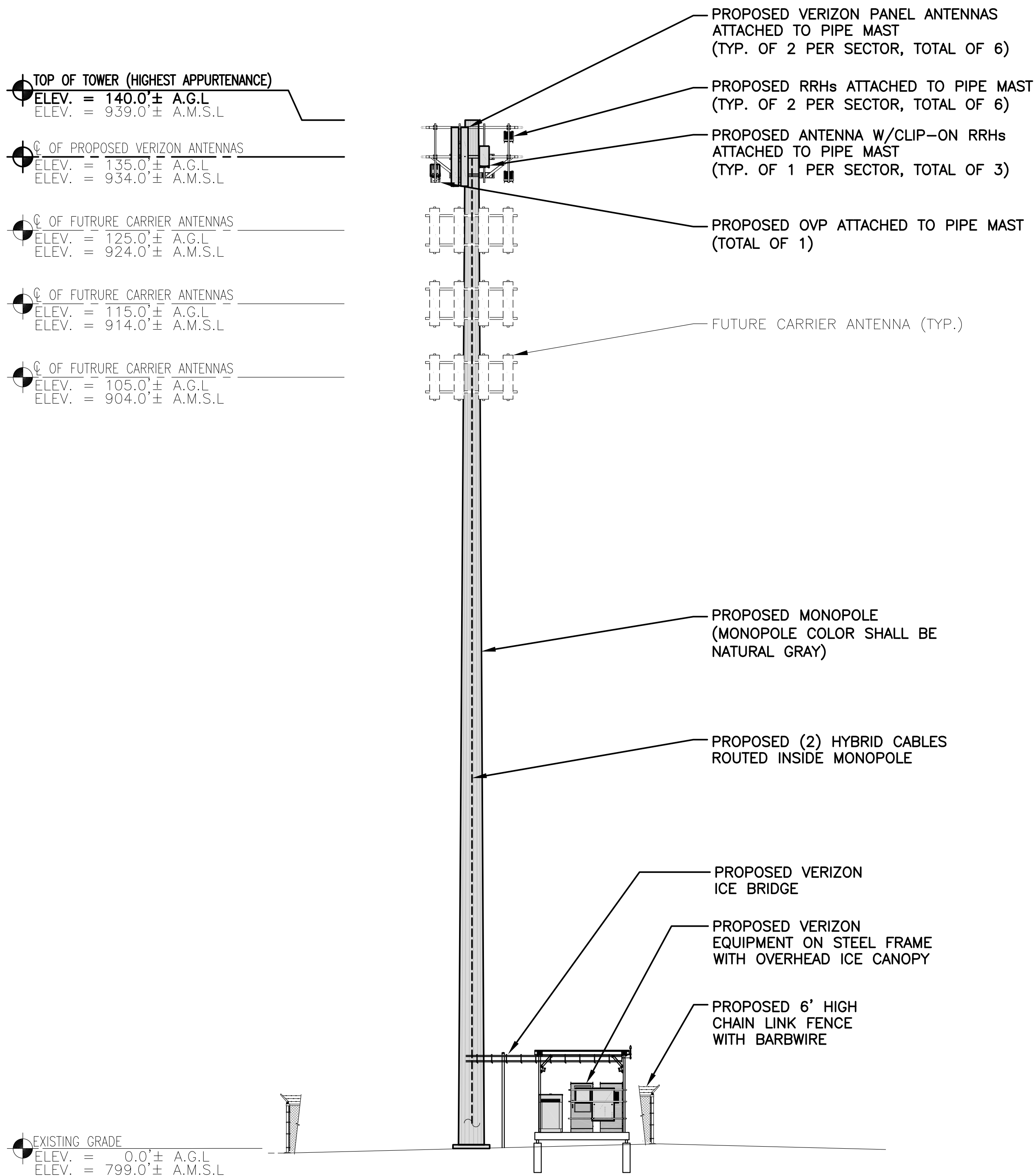
410 HUNTER PARK ROAD
MANCHESTER, VT 05255

SHEET TITLE

ELEVATION

SHEET NUMBER

A-2



ELEVATION

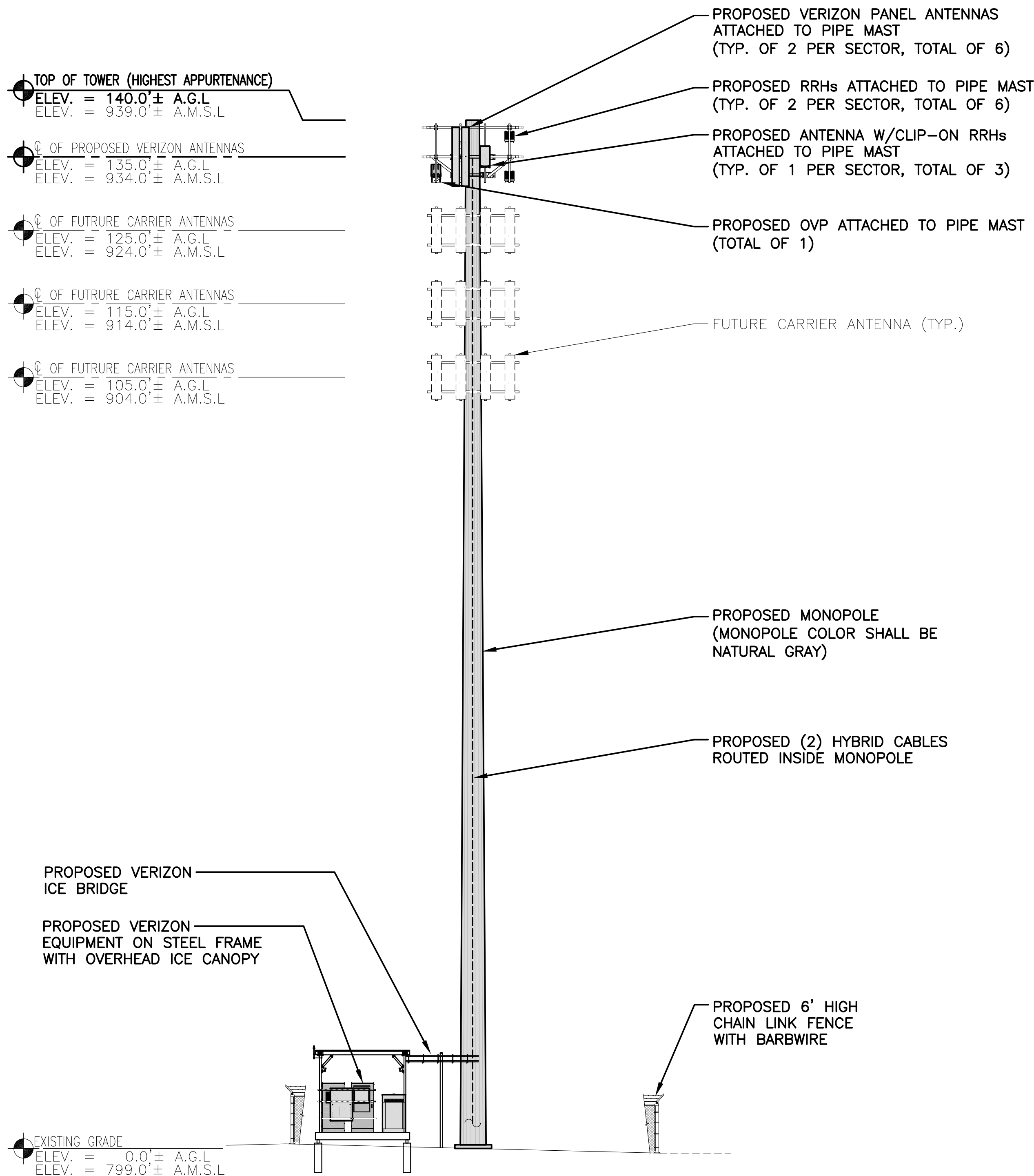
22x34 SCALE: 3/32"=1'-0"
11x17 SCALE: 3/64"=1'-0"

1
A-2



TOWER NOTES:

- 1.) TOWER ELEVATION IS SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL REFER TO TOWER MANUFACTURER DRAWINGS FOR COMPLETE INSTALLATION AND BILL OF MATERIAL INFORMATION.
- 2.) TOWER MINIMUM DESIGN SPECIFICATIONS SHALL BE IN ACCORDANCE WITH ANSI/TIA/EIA 222-H "STRUCTURAL STANDARDS FOR SUPPORTING STRUCTURES AND ANTENNAS, REVISION H" AND GOVERNING FEDERAL, STATE, AND LOCAL CODE REQUIREMENTS
- 3.) TOWER MANUFACTURER SHALL BE RESPONSIBLE FOR DESIGN AND STRUCTURAL COMPONENTS OF THE TOWER.
- 4.) FINAL UTILITY CONNECTIONS SHALL BE COORDINATED WITH THE LOCAL UTILITIES.



ELEVATION

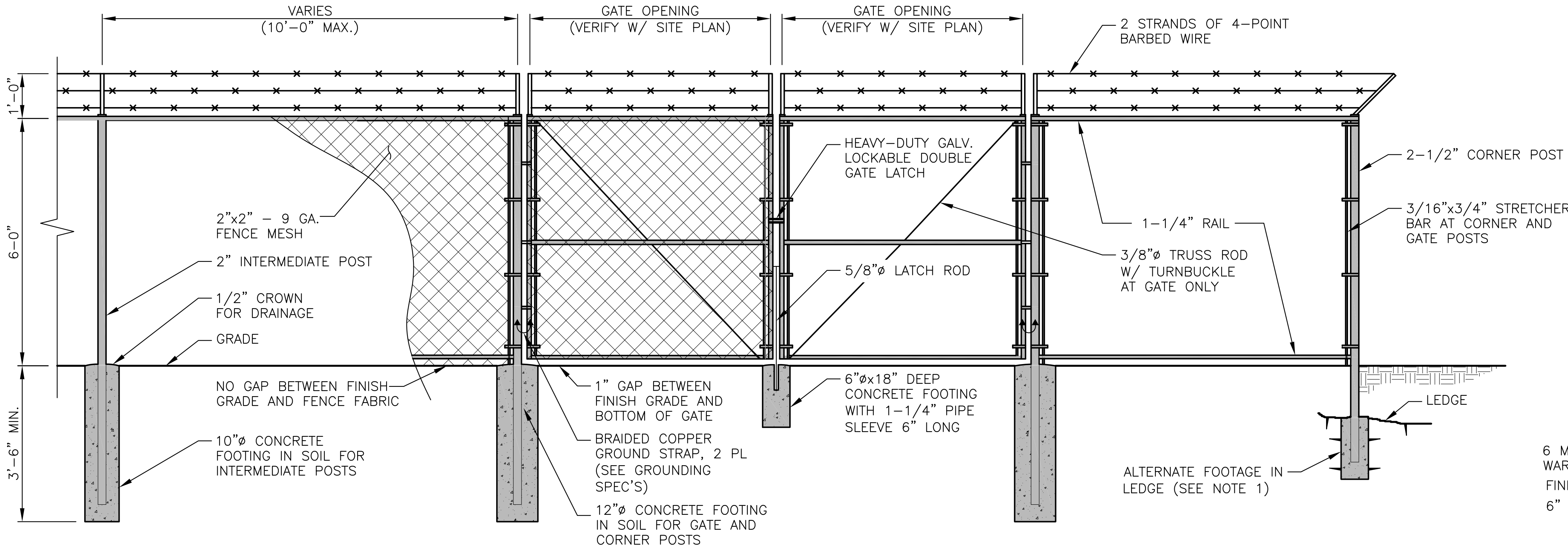
22x34 SCALE: 3/32"=1'-0"
11x17 SCALE: 3/64"=1'-0"

2
A-2



FENCE NOTES

1. ALTERNATE FOOTINGS FOR ALL FENCE POSTS IN LEDGE: IF LEDGE IS ENCOUNTERED AT GRADE, OR AT A DEPTH SHALLOWER THAN 3'-6", CORE DRILL AN 8" DIA HOLE 18" INTO THE LEDGE. CENTER POST IN THE HOLE AND FILL WITH CONCRETE OR GROUT. IF LEDGE IS BELOW FINISH GRADE, COAT BACKFILLED SECTION OF POST WITH COAL TAR, AND BACKFILL WITH WELL-DRAINING GRAVEL.
2. ATTACH EACH GATE WITH 1-1/2 PAIR OF NON-LIFT-OFF TYPE, MALLEABLE IRON OR FORGING, PIN-TYPE HINGES. ASSEMBLIES SHALL ALLOW FOR 180° OF GATE TRAVEL.



CHAINLINK FENCE DETAIL
SCALE: N.T.S

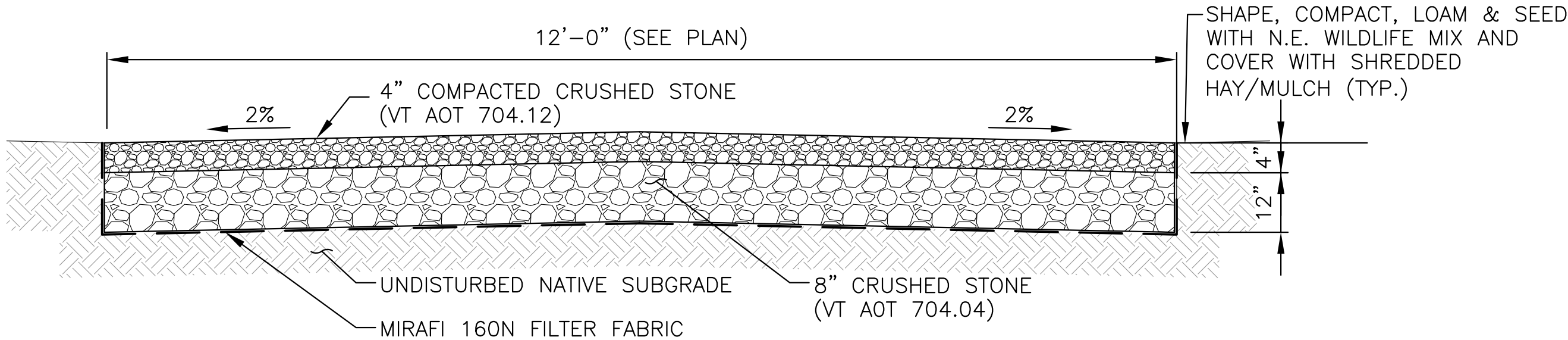
1
A-3

TABLE 704.12

SIEVE DESIGNATION	PERCENTAGE BY WEIGHT PASSING SQUARE MESH SIEVES
1-1/2 INCH	100%
1 INCH	90-TO-100%
No. 4	45-TO-65%
No. 100	0-TO-15%
No. 200	0-TO-12%

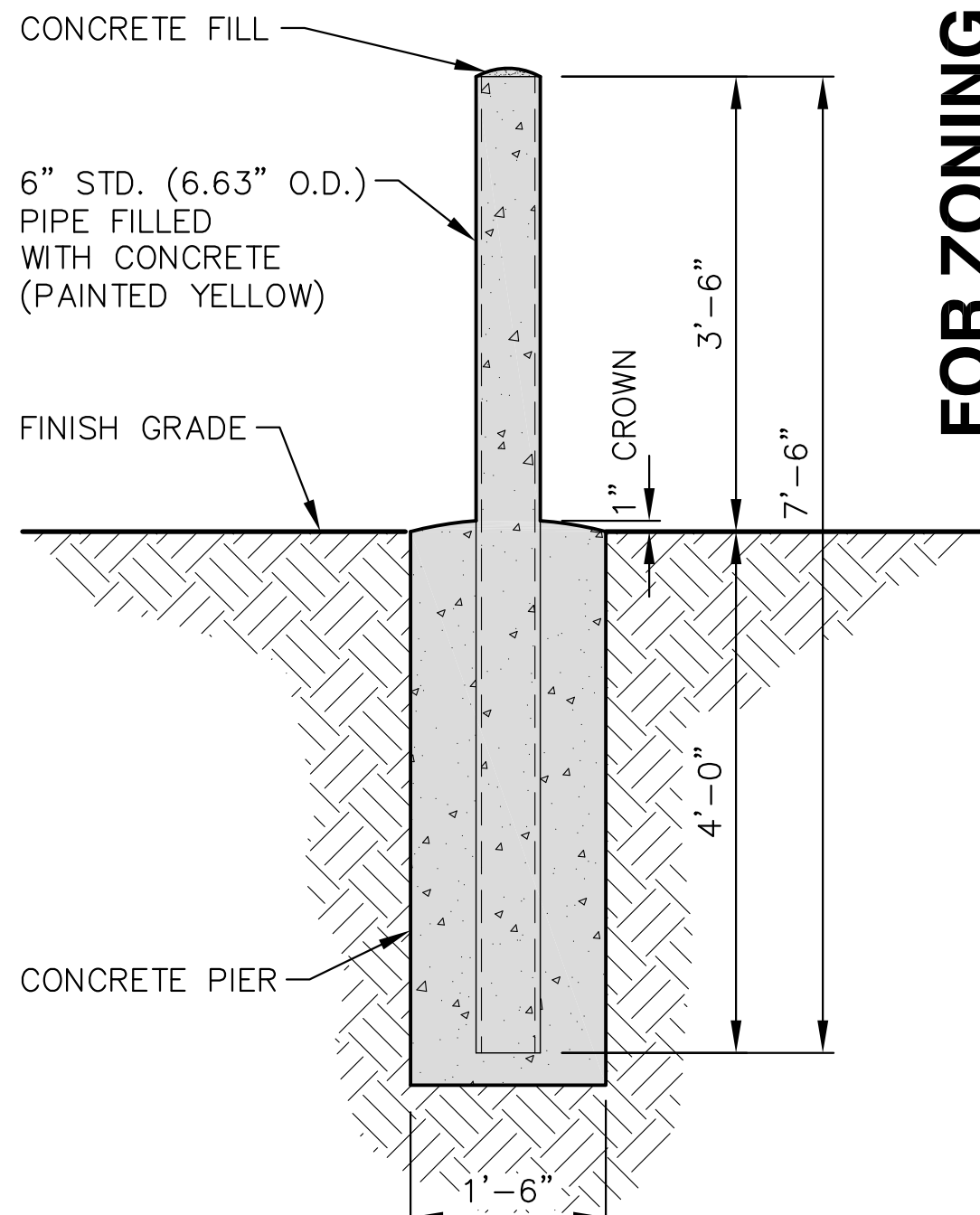
TABLE 704.04

SIEVE DESIGNATION	PERCENTAGE BY WEIGHT PASSING SQUARE MESH SIEVES
No. 4	20-TO-60%
No. 100	0-TO-12%
No. 200	0-TO-6%



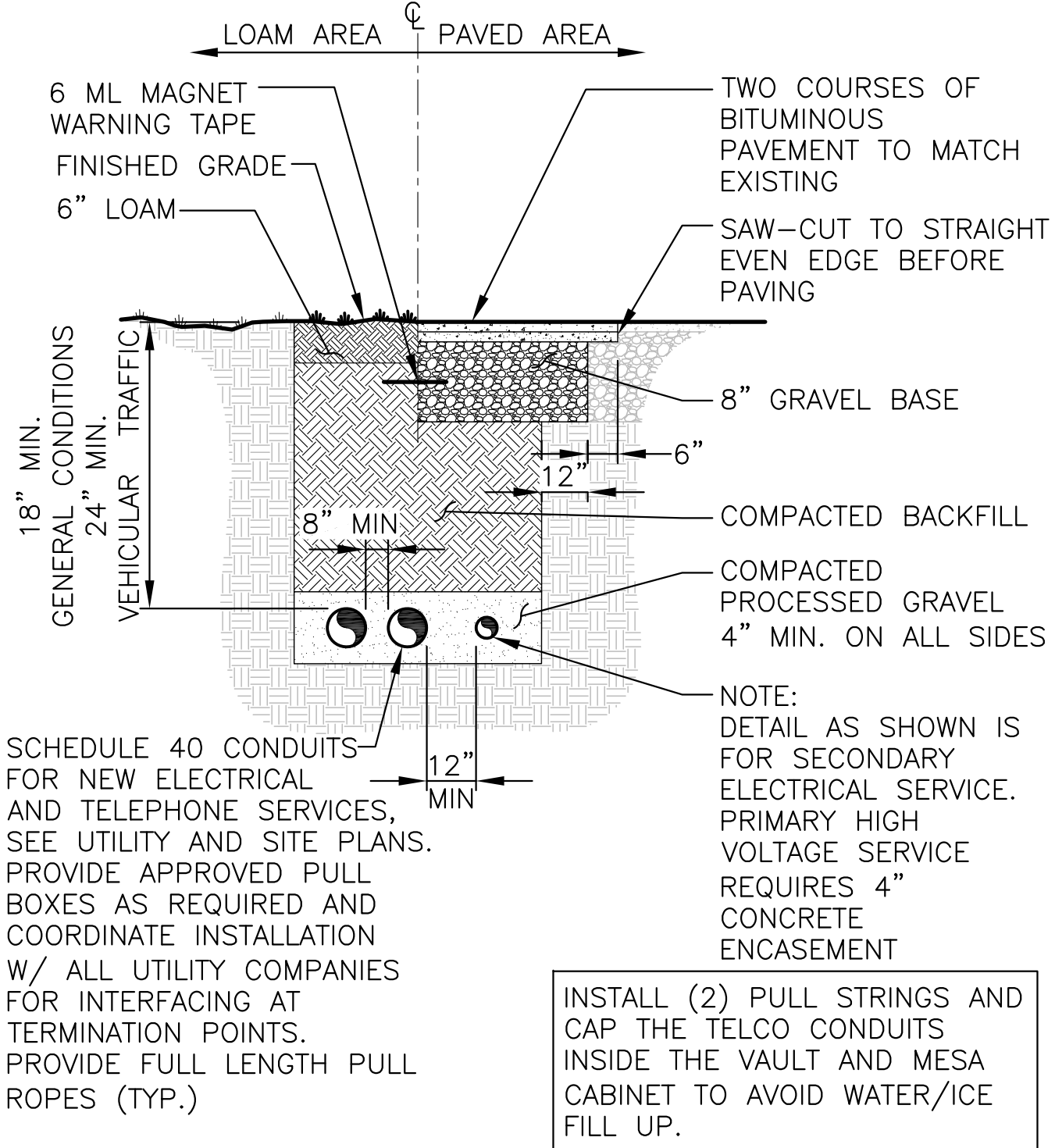
GRAVEL ACCESS DRIVE
SCALE: N.T.S

3
A-3



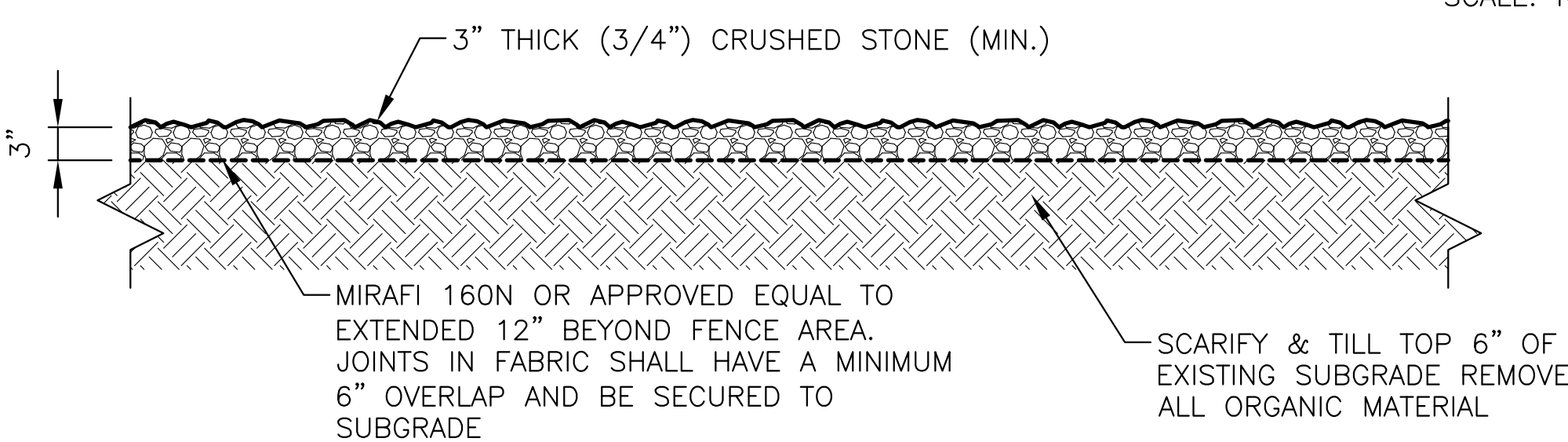
CONCRETE FILLED BOLLARD
22x34 SCALE: N.T.S

2
A-3



BURIED CONDUIT DETAIL
SCALE: N.T.S

5
A-3



COMPOUND COVERING DETAIL
SCALE: N.T.S

4
A-3

FOR ZONING

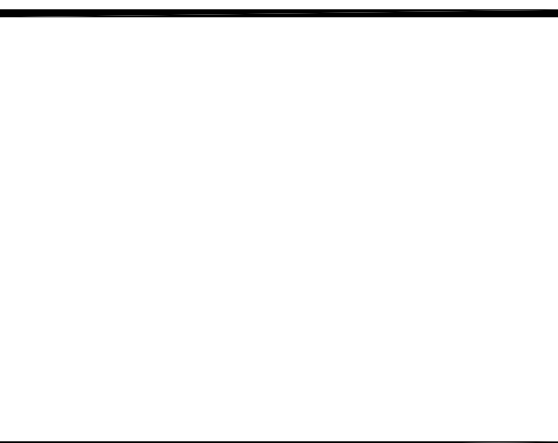
PREPARED FOR: VERTEX TOWERS, LLC.

Vertex Towers

2 COMMERCIAL STREET
SHARON, MA 02067

TEP
NORTHEAST
TEP OPCO, LLC.

45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845
TEL: (978) 557-5553



CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
3	06/27/23	ADDED PUC COMMENTS	GA
2	06/16/23	NEW TOWER LOCATION	GA
1	02/21/23	REV. TOWER HEIGHT & LOCATION	SLY
0	06/15/22	FOR ZONING	SLY

SITE NAME:

MANCHESTER CENTER

VT-VT-0056C

SITE ADDRESS:

410 HUNTER PARK ROAD
MANCHESTER, VT 05255

SHEET TITLE

DETAILS

SHEET NUMBER

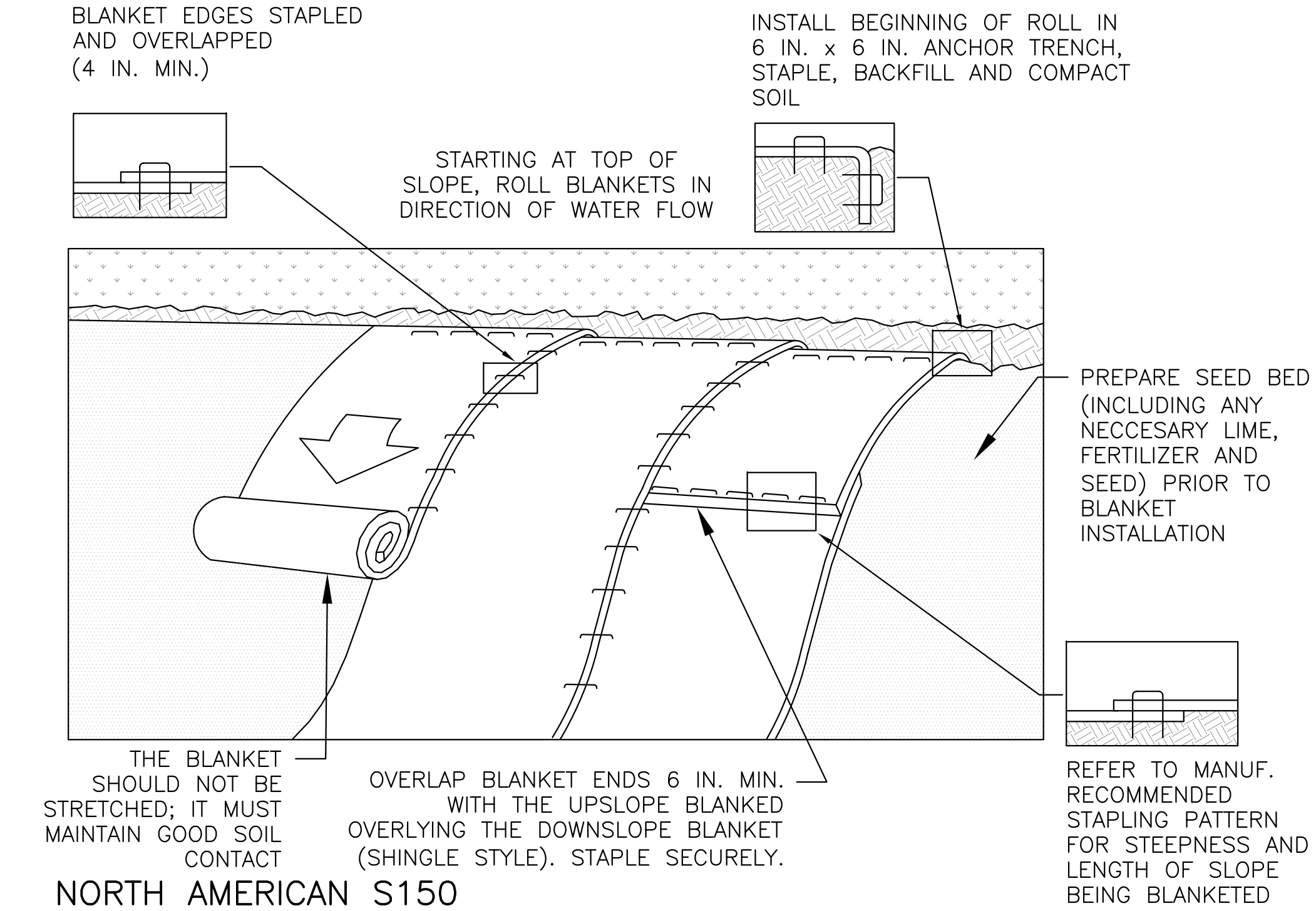
A-3

SEQUENCE OF CONSTRUCTION

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPS), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECPS IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECPS EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECPS WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL AND FOLD THE REMAINING 12" PORTION OF RECPS BACK OVER THE SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECPS.
3. ROLL THE RECPS DOWN HORIZONTALLY ACROSS THE SLOPE. RECPS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. THE EDGES OF PARALLEL RECPS MUST BE STAPLED WITH APPROXIMATELY 2" – 5" OVERLAP DEPENDING ON THE RECPS TYPE.
5. CONSECUTIVE RECPS SPICED DOWN THE SLOPE MUST BE END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECPS WIDTH.

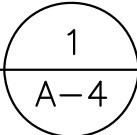
NOTES:

1. PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.
2. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLOUDS, STICKS, AND GRASS.
3. BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.
4. THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
5. BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.



EROSION CONTROL BLANKET

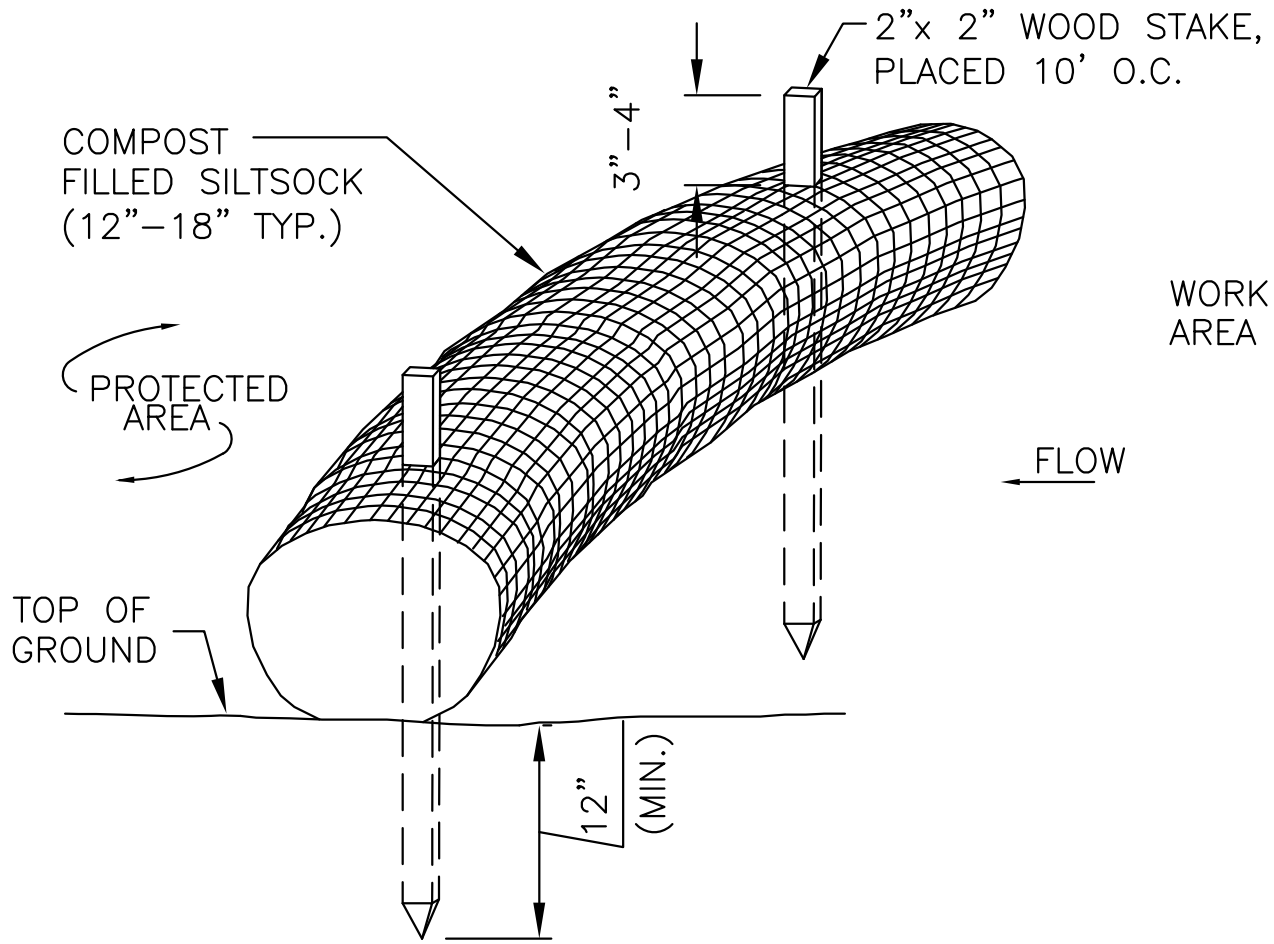
SCALE: N.T.S



GENERAL CONSTRUCTION SEQUENCE:

THIS IS A GENERAL CONSTRUCTION SEQUENCE OUTLINE SOME ITEMS OF WHICH MAY NOT APPLY TO PARTICULAR SITES.

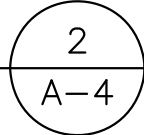
- 1) CLEAR AND GRUB AREAS OF PROPOSED CONSTRUCTION.
- 2) INSTALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES AS REQUIRED.



1. SILT SOCK SHALL BE FILTREXX SILT SOXX, OR APPROVED EQUAL.
2. COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
3. SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
4. SEE SPECIFICATIONS FOR SOCK SIZE, AND COMPOST FILL, REQUIREMENTS.

SILT SOCK DETAIL

SCALE: N.T.S



- 3) REMOVE AND STOCKPILE TOPSOIL. STOCKPILE SHALL BE SEEDED TO PREVENT EROSION.
- 4) CONSTRUCT CLOSED DRAINAGE SYSTEM. PROTECT CULVERT INLETS AND CATCH BASINS WITH SEDIMENTATION BARRIERS.
- 5) CONSTRUCT ROADWAYS AND PERFORM SITE GRADING, PLACING HAY BALES AND SILTATION FENCES AS REQUIRED TO CONTROL SOIL EROSION.
- 6) INSTALL UNDERGROUND UTILITIES.
- 7) BEGIN TEMPORARY AND PERMANENT SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED OR MULCHED IMMEDIATELY AFTER THEIR CONSTRUCTION. NO AREA SHALL BE LEFT UNSTABILIZED FOR A TIME PERIOD OF MORE THAN 30 DAYS.
- 8) DAILY, OR AS REQUIRED, CONSTRUCT, INSPECT, AND IF NECESSARY, RECONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES AND SEDIMENT TRAPS INCLUDING MULCHING AND SEEDING.
- 9) BEGIN EXCAVATION FOR AND CONSTRUCTION OF TOWERS AND PLATFORMS.
- 10) FINISH PAVING ALL ROADWAYS, DRIVES, AND PARKING AREAS.
- 11) COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- 12) NO STORM WATER FLOW SHALL BE DIVERTED TO ANY WETLANDS UNTIL A HEALTHY STAND OF GRASS HAS BEEN ESTABLISHED IN REGRADED AREAS.
- 13) AFTER GRASS HAS BEEN FULLY GERMINATED IN ALL SEEDED AREAS, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

EROSION CONTROL MEASURES:

- 1) DISTURBED AREAS SHALL BE KEPT TO THE MINIMUM AREA NECESSARY TO CONSTRUCT THE ROADWAYS AND ASSOCIATED DRAINAGE FACILITIES.
- 2) HAY BALE BARRIERS AND SEDIMENT TRAPS SHALL BE INSTALLED AS REQUIRED. BARRIERS AND TRAPS ARE TO BE MAINTAINED AND CLEANED UNTIL ALL SLOPES HAVE A HEALTHY STAND OF GRASS.
- 3) BALED HAY AND MULCH SHALL BE MOWINGS OF ACCEPTABLE HERBACEOUS GROWTH, FREE FROM NOXIOUS WEEDS OR WOODY STEMS, AND SHALL BE DRY. NO SALT HAY SHALL BE USED.
- 4) FILL MATERIAL SHALL BE FREE FROM STUMPS, WOOD, ROOTS, ETC.
- 5) STOCKPILED MATERIALS SHALL BE PLACED IN AREAS SHOWN ON THE PLANS. STOCKPILES SHALL BE PROTECTED BY SILTATION FENCE AND SEEDED TO PREVENT EROSION. THESE MEASURES SHALL REMAIN UNTIL ALL MATERIAL HAS BEEN PLACED OR DISPOSED OFF SITE.
- 6) ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED. A MINIMUM OF 4 INCHES OF LOAM SHALL BE INSTALLED WITH NOT LESS THAN ONE POUND OF SEED PER 50 SQUARE YARDS OF AREA.
- 7) APPLICATION OF GRASS SEED, FERTILIZERS AND MULCH SHALL BE ACCOMPLISHED BY BROADCAST SEEDING OR HYDROSEEDING AT THE RATES OUTLINED BELOW:

LIMESTONE:75-100 LBS./1,000 SQUARE FEET.
FERTILIZER:RATE RECOMMENDED BY MANUFACTURER.
MULCH: HAY MULCH APPROXIMATELY 3 TONS/ACRE UNLESS EROSION CONTROL MATTING IS USED.

SEED MIX (SLOPES LESS THAN 4:1)	LBS./ACRE
CREEPING RED FESCUE	20
TALL FESCUE	20
REDTOP	2
	42

SLOPE MIX (SLOPES GREATER THAN 4:1)	LBS./ACRE
CREEPING RED FESCUE	20
TALL FESCUE	20
BIRDSFOOT TREEFOIL	8
	48

TREATMENT SWALE PLANTING SPECIFICATIONS

TALL FESCUE	20 LBS/ACRE	OR	0.45 LBS/10,000 SF
CREEPING RED FESCUE	20 LBS/ACRE	OR	0.45 LBS/10,000 SF
BIRDSFOOT TREFOIL	8 LBS/ACRE	OR	0.20 LBS/10,000 SF

LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT TIME OF SEEDING AND INCORPORATED INTO THE SOIL. THE FOLLOWING RATES ARE RECOMMENDED:

AGRICULTURAL LIMESTONE	2 TONS/ACRE	OR	100 LBS/1,000 SF
NITROGEN (N)	50 LBS/ACRE	OR	1.1 LBS/10,000 SF
PHOSPHATE (P205)	100 LBS/ACRE	OR	2.2 LBS/10,000 SF
POTASH (K20)	100 LBS/ACRE	OR	2.2 LBS/10,000 SF
(THIS IS EQUIVALENT TO 500 LBS/ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS/ACRE OF 5-10-10).			

- 8) AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED.
- 9) PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
- 10) ALL CATCH BASIN INLETS WILL BE PROTECTED WITH LOW POINT SEDIMENTATION BARRIER.
- 11) ALL STORM DRAINAGE OUTLETS WILL BE STABILIZE AND CLEANED AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
- 12) ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTER AREA.
- 13) NO DISCHARGE SHALL BE DIRECTED TOWARDS ANY PROPOSED DITCHES, SWALES, OR PONDS UNTIL THEY HAVE BEEN PROPERLY STABILIZED.

FOR ZONING

PREPARED FOR: VERTEX TOWERS, LLC.



2 COMMERCIAL STREET
SHARON, MA 02067



TEP OPCO, LLC.
45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845
TEL: (978) 557-5553



CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
3	06/27/23	ADDED PUC COMMENTS	GA
2	06/16/23	NEW TOWER LOCATION	GA
1	02/21/23	REV. TOWER HEIGHT & LOCATION	SLY
0	06/15/22	FOR ZONING	SLY

SITE NAME:

MANCHESTER CENTER

VT-VT-0056C

SITE ADDRESS:

410 HUNTER PARK ROAD
MANCHESTER, VT 05255

SHEET TITLE

EROSION CONTROL
NOTES AND DETAILS

SHEET NUMBER

A-4

A-5

