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PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF INSTALLING A NEW UNMANNED SHELTER ON A NEW CONCRETE PAD AT GRADE.

PROJECT INFORMATION

APPLICANT ADDRESS: BECTHEL ASSOCIATES PROFESSIONAL CORPORATION
100 PERIMETER PARK DRIVE, SUITE H
MORRISVILLE, NC 27560

PROJECT MANAGER: BETTY CHANG

ENGINEERING CONTACT: PAUL KOSKI

PERMITTING CONTACT: STEVE GRAHAM

JURISDICTION: DURHAM COUNTY, NC

LATITUDE: N 35.9797996 (WGS84)

LONGITUDE: W 78.8426302 (WGS84)

ASSIGNED ADDRESS: 3111 HURSEY STREET, DURHAM, NC 27703

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Fiber Project

SITE PLAN PERMIT SUBMITTAL SET

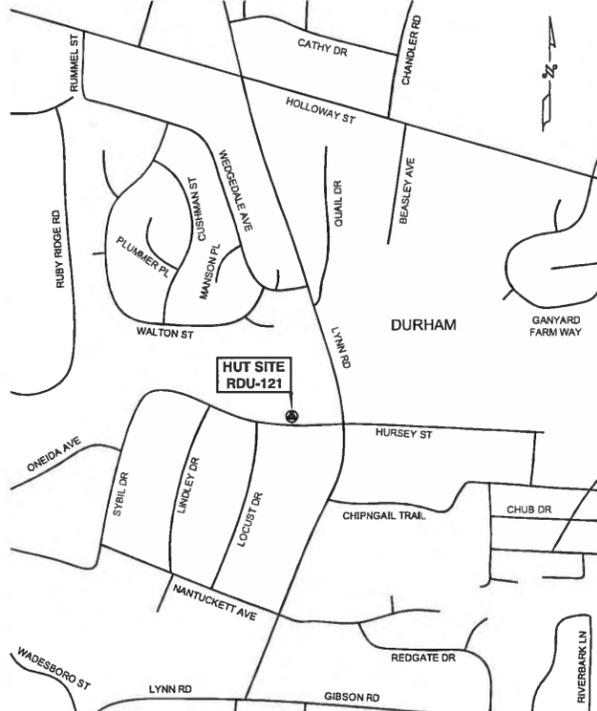
SITE NAME: BIRCHWOOD PARK

FIBER LAS ID NO.: RDU-121

FIBER HUT FACILITY DEPLOYMENT PROJECT

VICINITY MAP

DIRECTIONS: FROM BECTHEL OFFICE LOCATED AT 100 PERIMETER PARK DR, MORRISVILLE, NC 27560 DEPART PERIMETER PARK DR TOWARD AIRPORT BLVD. TURN RIGHT ONTO AIRPORT BLVD. TURN LEFT TO MERGE ONTO I-40 WEST. TAKE EXIT 281 FOR MIAMI BLVD. TURN RIGHT ONTO SOUTH MIAMI BLVD. SLIGHT LEFT ONTO US-70 WEST/SOUTH MIAMI BLVD. TURN RIGHT ONTO LYNN RD. TURN LEFT TO STAY ON LYNN RD. TURN LEFT ONTO HURSEY ST AND ARRIVE AT HUT LOCATION RDU-121 ON RIGHT 450' FROM INTERSECTION.



APPLICABLE BUILDING CODES AND STANDARDS

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE:
[INTERNATIONAL BUILDING CODE] IBC & IRC [STATE BUILDING CODE] - CURRENT VERSION

ELECTRICAL CODE:
[NATIONAL ELECTRICAL CODE] NEC NFPA 70
[FIRE/LIFE SAFETY CODE] NFPA-101 LIFE SAFETY CODE

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:
AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION ANSI-J-STD-607-A,
COMMERCIAL BUILDING GROUNDING (EARTHING) AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS
NECA/BICSI-607, TELECOMMUNICATIONS BONDING AND GROUNDING PLANNING AND INSTALLATION METHODS FOR COMMERCIAL BUILDINGS
TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM
IEEE 1100 RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT

IEEE C2 NATIONAL ELECTRIC SAFETY CODE, LATEST VERSION

TELCORDIA GR-1275, GENERAL INSTALLATION REQUIREMENTS

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

GENERATOR NOTE: PROPOSED PROJECT CONTAINS A CUMMINS G6HG 85 KW GENERATOR. GENERATOR WILL HAVE A NATURAL GAS CONNECTION AND NO FUEL STORAGE TANKS ARE PROPOSED. GENERATOR WILL BE APPROXIMATELY 3' FROM THE PROPOSED BUILDING.

PUBLIC WORKS CONDITIONS OF APPROVAL

N/A

CITY OF DURHAM PLANNING APPROVAL - CASE# D1500257

SPECIAL CONDITIONS OF APPROVAL

NCDOT DRIVEWAY PERMIT REQUIRED PRIOR TO CONSTRUCTION. CONTACT NCDOT AT 919-220-4750 FOR REQUIREMENTS.

100 FOOT WIDE UNDISTURBED STREAM BUFFER EACH SIDE OF STREAM, MEASURED FROM TOP OF BANK. NO CLEARING OR GRADING OTHER THAN SELECTIVE THINNING AND ORDINARY MAINTENANCE OF EXISTING VEGETATION PERMITTED.

ALL DEVELOPMENT WITHIN THE FLOODWAY AND FLOODWAY FRINGE, INCLUDING FILL, NEW CONSTRUCTION, SUBSTANTIAL IMPROVEMENTS, MANUFACTURED HOUSING, STORAGE OF MATERIALS AND STORAGE OF TOXIC OR FLAMMABLE SUBSTANCES, IS PROHIBITED EXCEPT AS PROVIDED BY APPLICABLE FLOOD HAZARD REGULATIONS.

STATE AND FEDERAL PERMIT AUTHORIZATION MAY BE REQUIRED FROM THE DEHR AND THE U.S. CORPS OF ENGINEERS PRIOR TO THE COMMENCEMENT OF ANY LAND DISTURBING ACTIVITIES IN OR NEAR A LAKE, STREAM, CREEK, TRIBUTARY OR ANY UNNAMED BODY OF WATER AND ITS ADJACENT WETLANDS.

SITE DATA TABLE

ZONING	084119615835
PIN	RS-B
OVERLAY DISTRICT	F/J-B
RIVER BASIN	NEUSE
WATERSHED	LITTLE LICK CREEK
CURRENT USE	CITY PARK
PROPOSED USE	CITY PARK & FIBER OPTIC ENCLOSURE
PARCEL ACREAGE	4.9 ACRES
EXISTING IMPERVIOUS AREA	0.10 AC. / 4,356 S.F. (2.0% TOTAL IMPERVIOUSNESS)
NEW IMPERVIOUS AREA	0.06 AC / 2450 S.F. (GRAVEL COMPOUND, HUT STRUCTURE, ASPHALT DRIVEWAY)
POST-CONSTRUCTION IMPERVIOUS AREA	0.16 AC / 6,806 S.F. (3.0% TOTAL IMPERVIOUSNESS)
PARKING DATA	0 SPACES REQUIRED (UNINHABITED BUILDING), 0 SPACES PROVIDED
BICYCLE PARKING DATA	0 SPACES REQUIRED, 0 SPACES PROVIDED
TOTAL DISTURBED AREA	0.13 AC. / 5,516 S.F.
BUILDING SQUARE FOOTAGE	360 SF
DEVELOPMENT TIER	SUBURBAN

GENERAL CONDITIONS OF APPROVAL

- PROVIDE TWO (2) SETS OF APPROVED SITE PLAN DOCUMENTS TO ENGINEERING INSPECTIONS, 3RD FLOOR, 101 CITY HALL PLAZA, DURHAM, NC 27701 AT LEAST 5 DAYS PRIOR TO BEGINNING CONSTRUCTION AND CONTACT ENGINEERING INSPECTIONS AT 560-4326 AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- OWNER/DEVELOPER SHALL NOTIFY THE DURHAM CITY-COUNTY PLANNING DEPARTMENT SITE COMPLIANCE STAFF AT THE COMPLETION OF CONSTRUCTION AND LANDSCAPING TO REQUEST AN INSPECTION PRIOR TO USE OF THE FACILITY.
- PINE STRAW SHALL NOT BE USED AS MULCH OR GROUND COVER WITHIN TEN FEET OF ANY STRUCTURE CONSISTING OF EXTERIOR COMBUSTIBLE CONSTRUCTION AS SPECIFIED BY DURHAM CITY CODE SECTION 45-57.
- ALL LANDSCAPING MUST BE IN PLACE PRIOR TO REQUEST FOR A CERTIFICATE OF COMPLIANCE. CONTACT DURHAM CITY-COUNTY PLANNING DEPARTMENT SITE COMPLIANCE STAFF FOR INSPECTION.
- EACH LANDSCAPING COMPLIANCE INSPECTION AFTER THE INITIAL INSPECTION WILL INCUR A RE-INSPECTION FEE. PAYMENT MUST BE RECEIVED BY THE DURHAM CITY-COUNTY PLANNING DEPARTMENT PRIOR TO RE-INSPECTION.
- TREE PROTECTION FENCING MUST BE IN PLACE PRIOR TO ANY DEMOLITION, LAND DISTURBANCE, OR ISSUANCE OF A GRADING PERMIT AND SHALL INCLUDE WARNING SIGNS POSTED IN BOTH ENGLISH AND SPANISH, AS FOLLOWS: "NO TRESPASSING/TREE PROTECTION AREAS/PROHIBIDO ENTRAR/ZONA PROTECTORA PARA LOS ARBOLES."
- ROOT PROTECTION ZONE EQUALS ONE FOOT OF RADIUS, WHICHEVER IS GREATER. NO DISTURBANCE ALLOWED WITHIN THIS AREA. AREA MUST BE PROTECTED WITH BOTH TREE PROTECTION FENCING AND WARNING SIGNS.
- AT THE START OF GRADING INVOLVING THE LOWERING OF EXISTING GRADE AROUND A TREE OR STRIPPING OF TOPSOIL, A CLEAN SHARP VERTICAL CUT SHALL BE MADE AT THE EDGE OF THE TREE SAVE AREA PRIOR TO OR AT THE SAME TIME AS SILT FENCE AND OTHER EROSION CONTROL MEASURES ARE INSTALLED. THE TREE PROTECTION FENCING SHALL BE INSTALLED ON THE SIDE OF THE CUT FARTHEST AWAY FROM THE TREE TRUNK AND SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION IN THE VICINITY OF THE TREE IS COMPLETE. NO STORAGE OF MATERIALS, FILL, OR EQUIPMENT AND NO TRESPASSING SHALL BE ALLOWED WITHIN THE BOUNDARY OF THE PROTECTED AREA.
- COUNTY SOIL AND EROSION CONTROL:
 - A. IF AN OFFSITE SOIL SPOIL OR BORROW SITE IS UTILIZED, THEN THE DISTURBED AREA FOR THE SPOIL/BORROW SITE MUST BE INCLUDED IN THE LAND-DISTURBANCE PLAN AND PERMIT UNLESS THE SPOIL/BORROW SITE ALREADY HAS A LAND-DISTURBANCE PERMIT.
 - B. A TREE PROTECTION INSPECTION IS REQUIRED PRIOR TO ISSUANCE OF EROSION CONTROL PERMIT
 - C. IF MORE THAN 5 ACRES IS DISTURBED, A SURETY WILL BE REQUIRED.
- A CITY OF DURHAM DRIVEWAY PERMIT IS REQUIRED PRIOR TO ANY DRIVEWAY CONSTRUCTION ON PUBLIC RIGHT-OF-WAY. SUBMIT PLANS FOR DRIVEWAY PERMIT APPROVAL TO THE CITY ENGINEERING DEVELOPMENT REVIEW. AFTER OBTAINING THE PERMIT, PLEASE CALL CITY OF DURHAM ENGINEERING INSPECTION OFFICE AT 560-4326 PRIOR TO START OF CONSTRUCTION.

Dewberry Engineers Inc.



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5275 WESTVIEW DRIVE
FREDERICK, MD, 21703
PHONE: (301) 228-6000

FIBER HUT ID #: RDU121
3111 HURSEY ST.
DURHAM, NC 27703

Fiber Project

NO.	DATE	REVISIONS	BY	CHK	SUPV	APP'D
1	02-08-16	RESUBMITTAL TO CITY	JSH	SRN	LWM	LWM
0	09-11-15	FOR SUBMITTAL	JSH	JTL	LWM	LWM

SCALE: AS SHOWN

DESIGNED BY: JJB

DRAWN BY: DJL

DRAFT FOR
BECTHEL REVIEW

NOT FOR CONSTRUCTION

Fiber Project

TITLE SHEET

DRAWING NUMBER	SHEET NO.	REV
25927-210	H0121-00000-ZN-70001	01
		1

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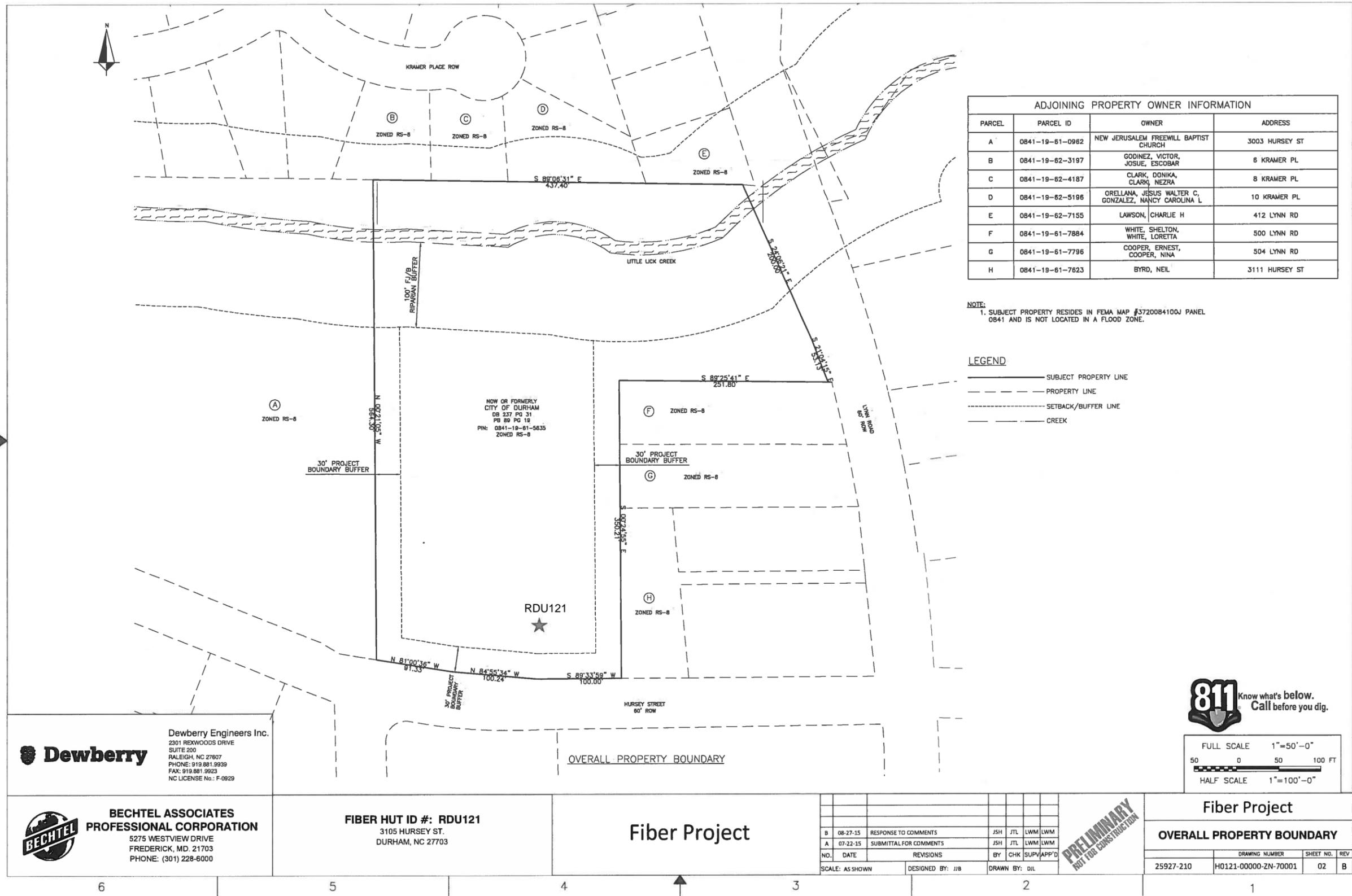
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FIBER HUT ID #: RDU121
 3105 HURSEY ST.
 DURHAM, NC 27703

Fiber Project

NO.	DATE	REVISIONS	BY	CHK	SUPV	APP'D
B	08-27-15	RESPONSE TO COMMENTS	JSH	JTL	LWM	LWM
A	07-22-15	SUBMITTAL FOR COMMENTS	JSH	JTL	LWM	LWM

SCALE: AS SHOWN DESIGNED BY: JJB DRAWN BY: DJL

PRELIMINARY
 NOT FOR CONSTRUCTION

Fiber Project			
OVERALL PROPERTY BOUNDARY			
DRAWING NUMBER	SHEET NO.	REV	
25927-210	H0121-00000-ZN-70001	02	B



Proposed Compound:
32'x50' License Area
1600 sq ft

Generator

Parking

Proposed Access Corridor
12' x 62'9"
753 sq ft

Proposed Fiber & Telco Corridor
15 ft wide

Hursey Street
(gravel)

+/- 75 ft.

NOW OR FORMERLY
CITY OF DURHAM
DB 237 PG 31
PB 89 PG 19
PIN: 0841-19-61-5835

Hut

(4) Underground Vaults

Proposed Fiber Corridor
10 ft wide

ZONING TABLE

PROPERTY OWNER	CITY OF DURHAM
ACREAGE	4.90 AC.
COUNTY ID NUMBER	PIN: 0841-19-61-5835
SETBACKS	FRONT: 30 FT SIDE: 10 FT REAR: 25 FT
ZONING	RESIDENTIAL SUBURBAN-8 (RS-8)
CURRENT USE	WILD/PARKS & REC (CITY)
PROPOSED USE	WILD/PARKS & REC (CITY), LANDSCAPED UTILITY ENCLOSURE
PROPOSED BUILDING SQUARE FOOTAGE	360 SF
NUMBER OF PARKING SPACES	1 REQUIRED 1 PROVIDED (IN DRIVEWAY)
NUMBER OF BICYCLE PARKING SPACES	2 REQUIRED 2 PROVIDED
EXISTING IMPERVIOUS	0 SF = 0.00 AC.
PROPOSED IMPERVIOUS	2222 SF = 0.05 AC.

D

C

B

A



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PROFESSIONAL CORPORATION**
5275 WESTVIEW DRIVE
FREDERICK, MD. 21703
PHONE: (301) 228-6000

FIBER HUT ID #: RDU121
3105 HURSEY ST.
DURHAM, NC 27703

Fiber Project

**Hut Compound: 1600 sq ft
Access Corridor: 753 sq ft**

Total: 2353 sq ft

6

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1