

Action ID: SAW-2018-00197  
Applicant: City of Raleigh  
Project Name: E.M. Johnson Water  
Treatment Plant (WTP)  
Page 1 of 6

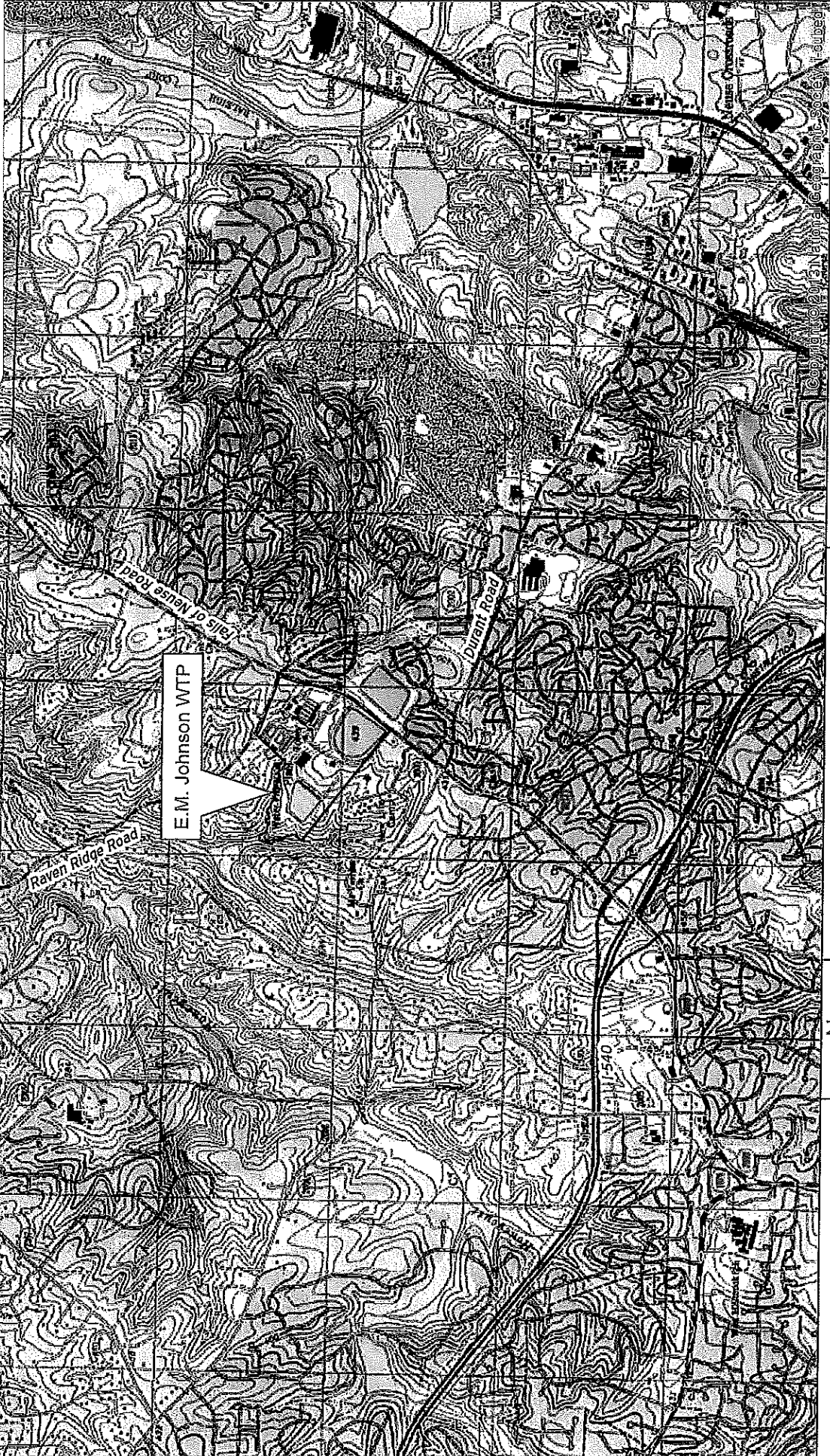
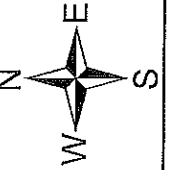







Figure 1: SITE LOCATION MAP

E.M. Johnson Water Treatment Plant  
Improvements and Expansion  
Raleigh, NC



SCALE  
0 0.25 0.5 1 Mile  
1 inch = 0.5 mile

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-  E.M. Johnson Parcel Boundary
-  Streams
-  NWI Wetland - PUBHh
-  NWI Wetland - PUBKr
-  FEMA Special Flood Hazard Area

Stream within Project Area

RAVEN RIDGE ROAD

Unnamed Tributary at Camp New Life

DURANT ROAD

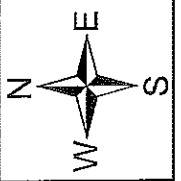
RAVEN RIDGE ROAD

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus, USDA, USGS, AeroGRID, IGN, GE, swisstopo, and the GIS User Community

SCALE



1 inch = 1,000 feet



# Hazen

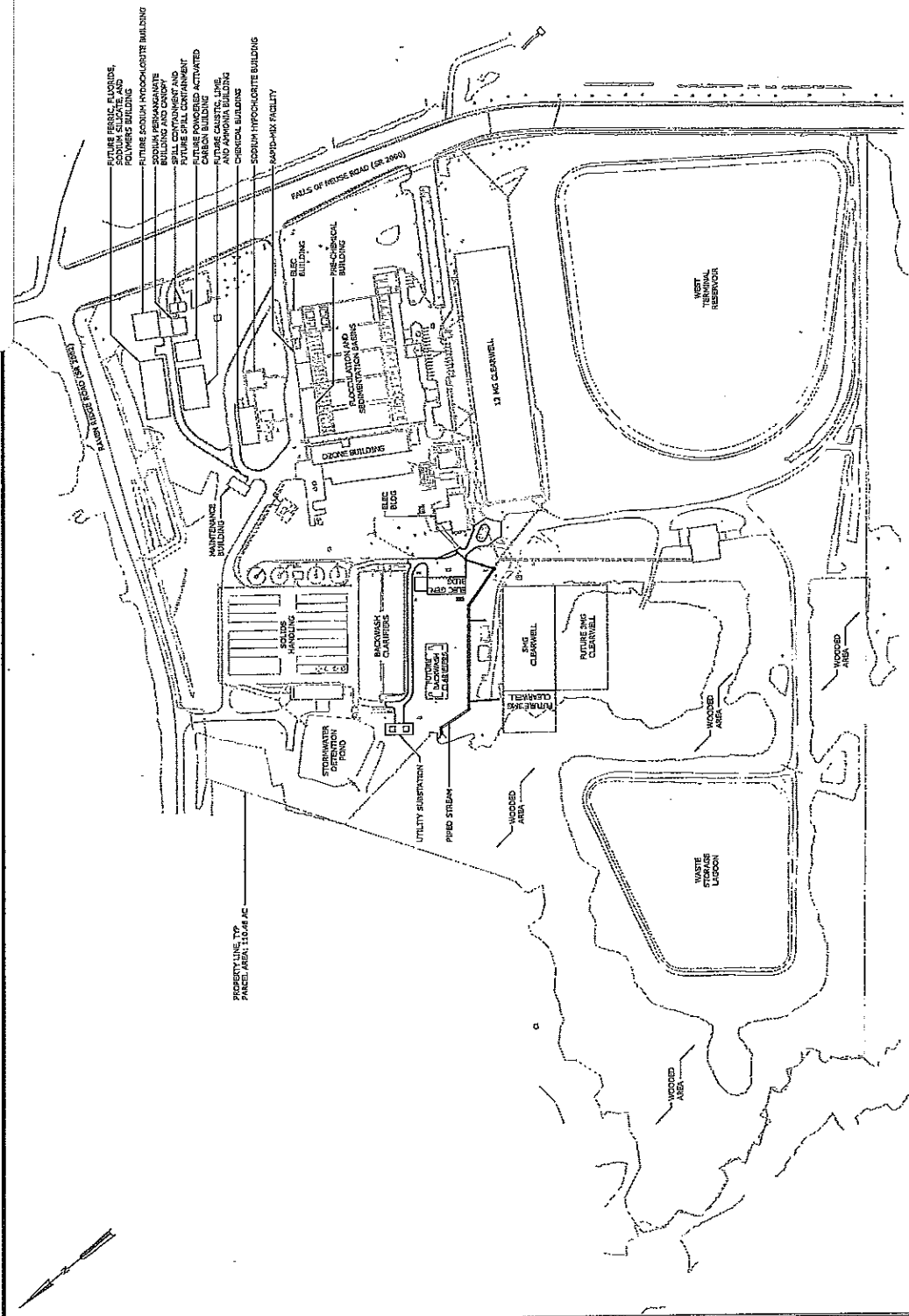
Figure 2: SITE MAP

E.M. Johnson Water Treatment Plant  
 Improvements and Expansion  
 Raleigh, NC



NOTES:

1. DELINEATION OF WATERSHEDS OF THE SITE WAS PROVIDED BY HAZEN SCIENTISTS ON DECEMBER 15, 2017. WATERSHEDS ARE SHOWN IN BROWN AND BUFFER ZONES AND IMPACT AREAS SHOWN IN PINK.
2. DETAILED AND PROPOSED CONSTRUCTION, HAZEN BUFFER ZONES, AND IMPACT AREAS SHOWN ON SHEET.



PLAN  
 SCALE: 1" = 150'

DATE:	JANUARY 2018
Hazen No.:	32289-007
CONTRACT NO.:	1
DRAWING NUMBER:	SP4

STREAM PERMITTING  
 CIVIL  
 OVERALL PROPOSED SITE PLAN

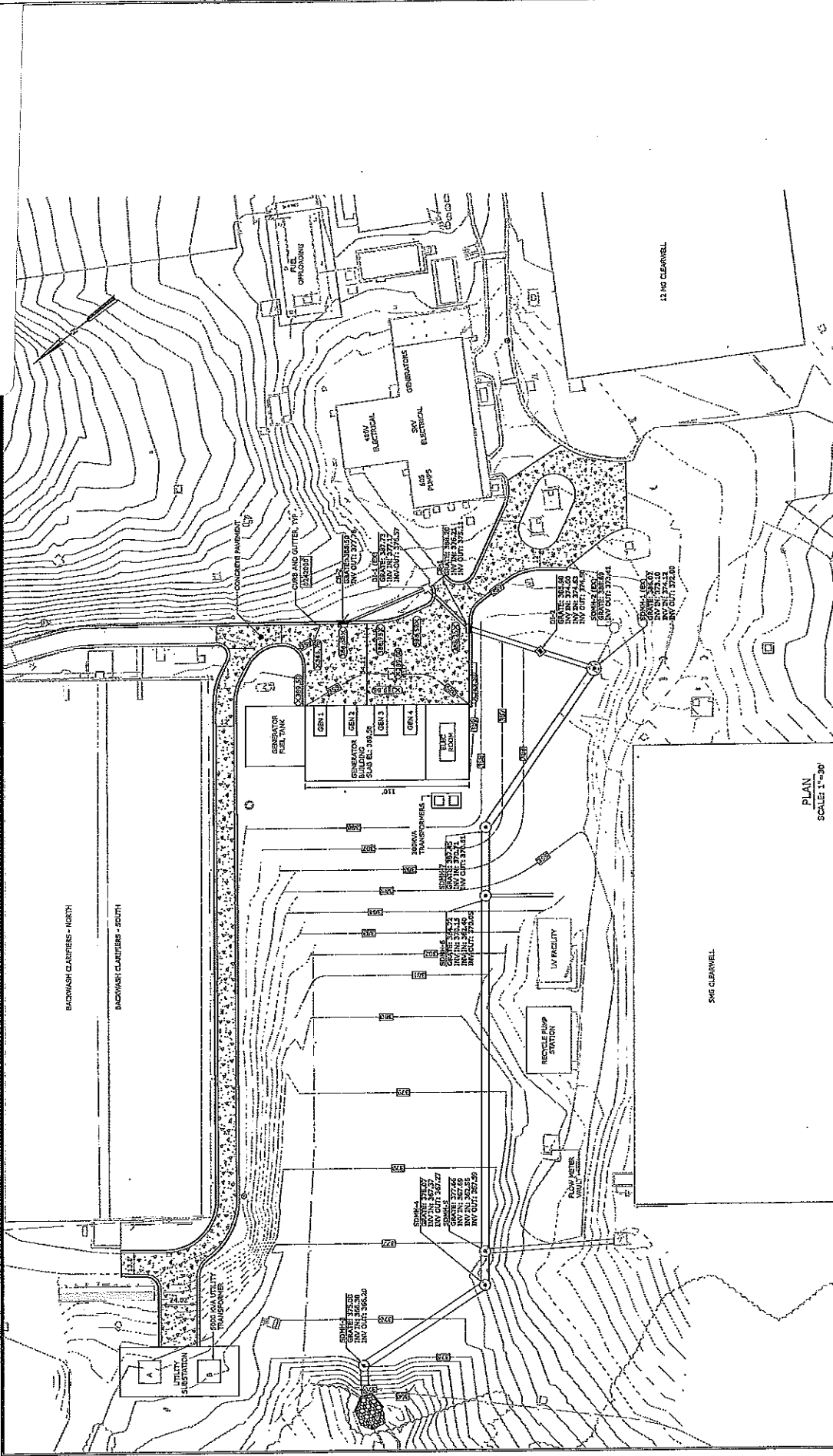


CITY OF RALEIGH,  
 NORTH CAROLINA  
 E.M. JOHNSON WTP  
 IMPROVEMENTS AND  
 EXPANSION

**Hazen**  
 HAZEN AND SAWYER, INC. P.C.  
 401 WILSON, NORTH CAROLINA 27615  
 LICENSE NO. 1-C-0381

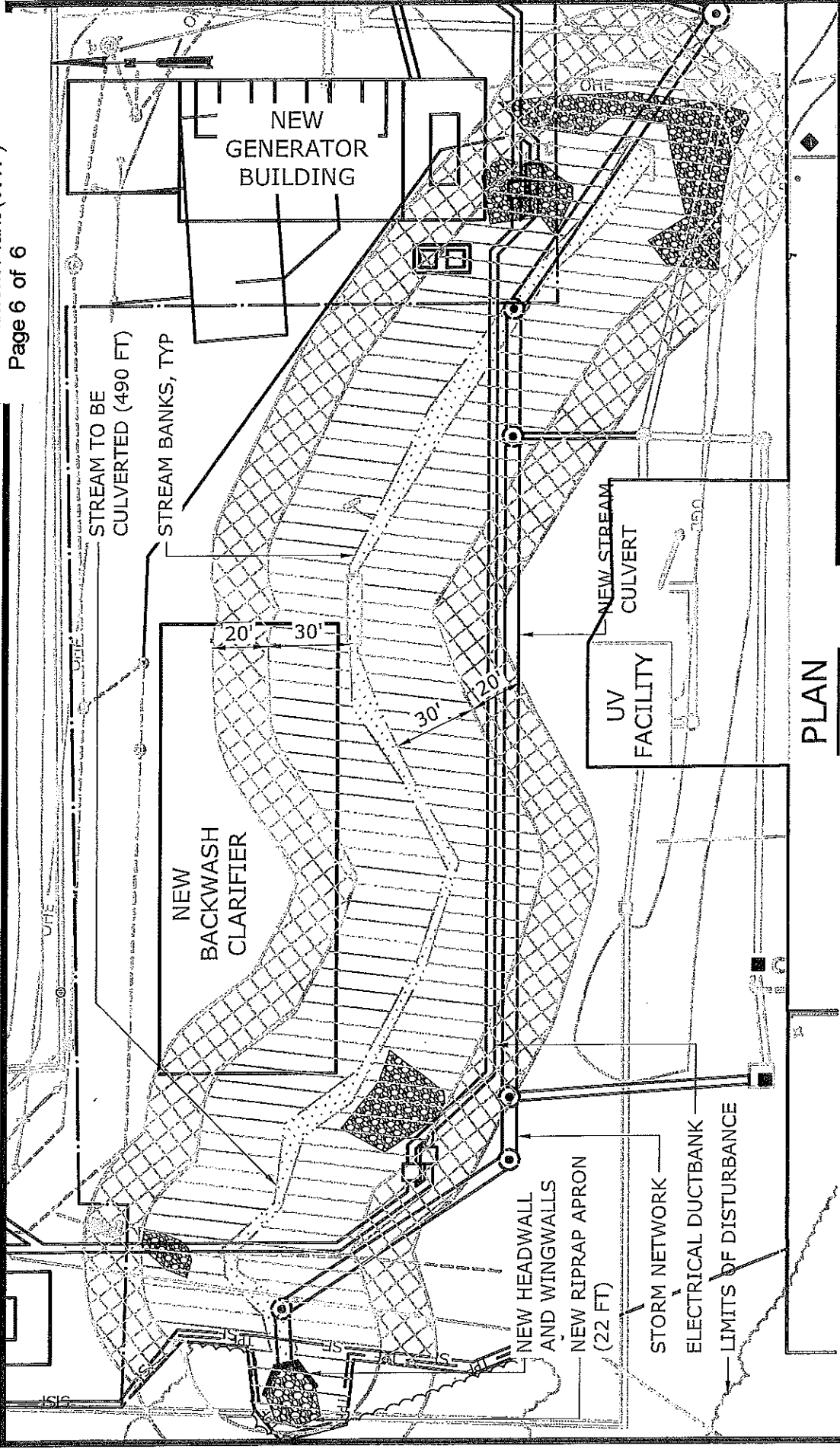
PRELIMINARY DRAWING - FOR  
 REVIEW PURPOSES ONLY - NOT  
 RELEASED FOR CONSTRUCTION

DESIGNED BY:	B. R. DEK
DRAWN BY:	C. WILSON
CHECKED BY:	C. WILSON
DATE:	1/11/18
ISSUED FOR:	PERMITS
DATE:	
ISSUED FOR:	



DATE: FEBRUARY 2018	PROJECT: NEW GENERATOR FACILITY
DRAWING NO.: 32283-007	CITY OF RALEIGH, NORTH CAROLINA
CONTRACT NO.: 1	E.M. JOHNSON WTP 605' ELEVATION ZONE WATER PLANT PUMP STATION IMPROVEMENTS
DRAWING NUMBER: C8	NEW GENERATOR FACILITY CIVIL GRADING, DRAINAGE, AND PAVING PLAN
 HAZEN AND SAWYER 4815 WILSON ROAD RALEIGH, NORTH CAROLINA 27607 LICENSE NO. 7-C-0081	
	
PRELIMINARY DRAWING - FOR REVIEW PURPOSES ONLY - NOT RELEASED FOR CONSTRUCTION	
DESIGNED BY: C. WILSON	PROJECT ENGINEER: B. PICKETT
DRAWN BY: C. WILSON	CHECKED BY: M. SANTOWASSO
IF THIS BAR DOES NOT FIT TO FULL SCALE	
DATE: _____	BY: _____

FIGURE 1



PLAN

SCALE: 1" = 50'



SCALE: 1" = 50'

STREAM IMPACT (FT)	ZONE 1 BUFFER IMPACTS (SF)	ZONE 2 BUFFER IMPACTS (SF)
536	32,413	22,635



CITY OF RALEIGH  
 E. M. JOHNSON WTP

ELECTRICAL GENERATOR UPGRADE  
 STREAM IMPACTS