For those who were not able to attend the November 10th Neighborhood Meeting, the following notes from the conversation may be helpful:

1. Ron McCoy advised that the information in the slide presentation at the 11/10/2020 neighborhood meeting was the same information presented previously to the Site Plan Review Advisory Board on 10/14/2020.

2. It was noted that the sound levels from the acoustical report included on slides 15 and 16 were “worst case” projections based on all equipment operating at simultaneously. It was noted that only two of the four heat pump chillers in the TGER facility would be part of the initial installation, and that the third chiller was not expected to be needed (and installed) until the late 2020’s and the fourth chiller not needed (and installed) until the mid-2030’s.
   a. The project team is gathering information to show the sound levels for the plant on “day one” when only two of the four heat pump chillers are on site and functioning.

3. Neighbors suggested that the map on slide 16 be adjusted to include Ivy Lane/Western Way and Hartley Avenue to Harrison Street.
   a. The project team is revising this slide and we will incorporate in the Planning Board presentation.
2026 Campus Plan Principles

1. Provide an integrated environment for teaching, living, learning and research

2. Enhance the campus’s distinctive sense of place

3. Foster a setting that is welcoming and supportive and encourages positive interaction and exchange

4. Create a climate that encourages thoughtful and creative approaches to sustainability

5. Serve communities that extend beyond the campus
Existing Condition
Athletics Operations
Existing Facility on Lot 21
East Campus Overview
Moving Toward Carbon Neutrality

**Anticipated CO2e Reduction Strategies**

**2026 Target**
Reduce campus greenhouse gas emissions to 73,000 metric tons CO2e irrespective of growth and without the purchase of market offsets.

**2046 Target**
Net zero campus greenhouse gas emissions per year.
What Is TIGER?

Princeton University is advancing the use of geo-exchange technology to enable the phase-out of nonrenewable energy sources, including natural gas used today to produce steam heat. TIGER (Thermally Integrated Geo-Exchange Resource) is the first step in this process.

**TIGER will:**
+ Be fully connected to a campus network providing hot and chilled water to all buildings
+ Connect to a network of Geoexchange bores
+ Include heat recovery systems and thermal storage
+ Serve and signal Princeton’s commitment to sustainability

**TIGER will not:**
- Use geothermal energy
- Operate as a “power plant”
- Utilize fossil fuels
Moving Toward Carbon Neutrality
Geoexchange Borefields under Construction

715 (+/-) geoexchange bores

to be installed in the near term to support the TIGER facility and the campus goals of Carbon Neutrality

Bores will be located under the new parking garage, the new soccer stadium, as well as under the TIGER/Athletics Operations Facility.
The TIGER building will house heat pump equipment and related systems. A heat pump is a system used to move heat from one system to another and has proved to be one of the most efficient ways to provide heating and cooling to Princeton’s buildings. To further improve sustainability, two thermal energy storage (TES) tanks will be installed on site to store water produced to heat and cool campus.
TIGER & Athletics Operations
Sections

SITE SECTION - NS
1" = 50'-0"

SITE SECTION - EW
1" = 50'-0"
TIGER & Athletics Operations Access

Pedestrian Access

Vehicular Access
**TIGER Noise Levels**

Existing Site Ambient Noise Levels (no activity, 12:30 – 4:00pm):
**45 – 50 dBA**

Existing Site Ambient Noise Levels (discrete events – i.e. cars):
**60 – 65 dBA**

New Jersey Noise Code:
7:00am – 10:00pm: **max 65 dBA**
10:00pm – 7:00am: **max 50 dBA**

Predicted Noise Levels from TIGER:
Location 1: **50 - 55 dBA**
Location 2: **45 - 50 dBA**
Location 3: **40 - 45 dBA**
Location 4: **35 - 40 dBA**
Location 5: **25 - 30 dBA**

In areas where mechanical equipment noise is below ambient noise, ambient noise levels will dominate in this location (Location 5).
Sound Levels

**Green Values:** Ambient Sound Levels

**Blue Values:** Predicted Sound Levels from all Equipment Operating Simultaneously
Stormwater Design

- Bioretention
- Subsurface Storage
- Stone Trench
Planting Plan

- **Existing Trees**
- **Proposed Trees**
- **Stormwater Mix**
- **Shrub & Groundcover**
- **Application Limit of Work**
Planting Palette

TREES

SHRUBS

GRASSES/
PERENNIALS
Planting and Utilities

- **Existing Trees**
- **Proposed Trees**
- **Below Grade Utilities**
TIGER & Athletics Operations Looking South along FitzRandolph Rd
TIGER & TES Tanks from FitzRandolph Rd - Current Design
TES Tanks Material