

# Brooklyn Station Construction Open House

May 1, 2012



 **SOUNDTRANSIT**  
RIDE THE WAVE

# Tonight's Agenda

- 6:00 pm – Open House
- 6:30 pm – Presentation
  - **Introduction**
    - Ron Endlich, North Link Deputy Project Director
  - **Brooklyn Station Construction**
    - Tracy Reed, Station Project Manager
  - **Noise Variance**
    - Jeff Munnoch, Community Outreach Supervisor
  - **Next Steps**
  - **Questions and Answers-**
    - Ron Endlich, North Link Deputy Project Director
- 7:45 pm – Return to Open House
- 8:30 pm – Close



# Link Light Rail System

- 16 miles of light rail with 13 stations currently in service
- University Link under construction; opens 2016
- ST2 Plan funded extensions to Overlake, South King County, and Lynnwood
- 54 mile system



# North Link (University District to Northgate)

- 4.3-mile light rail extension
- Stations at Brooklyn, Roosevelt, and Northgate
- Completion: 2021
- 62,000 daily boardings added to system by 2030



# Facility Naming Criteria

Sound Transit facility names will:

- Reflect the nature of the environment
- Be brief and easy to read and remember
- Comply with Americans with Disabilities Act and be limited to 30 characters
- Avoid commercial references
- Avoid similar names or words in existing facility names

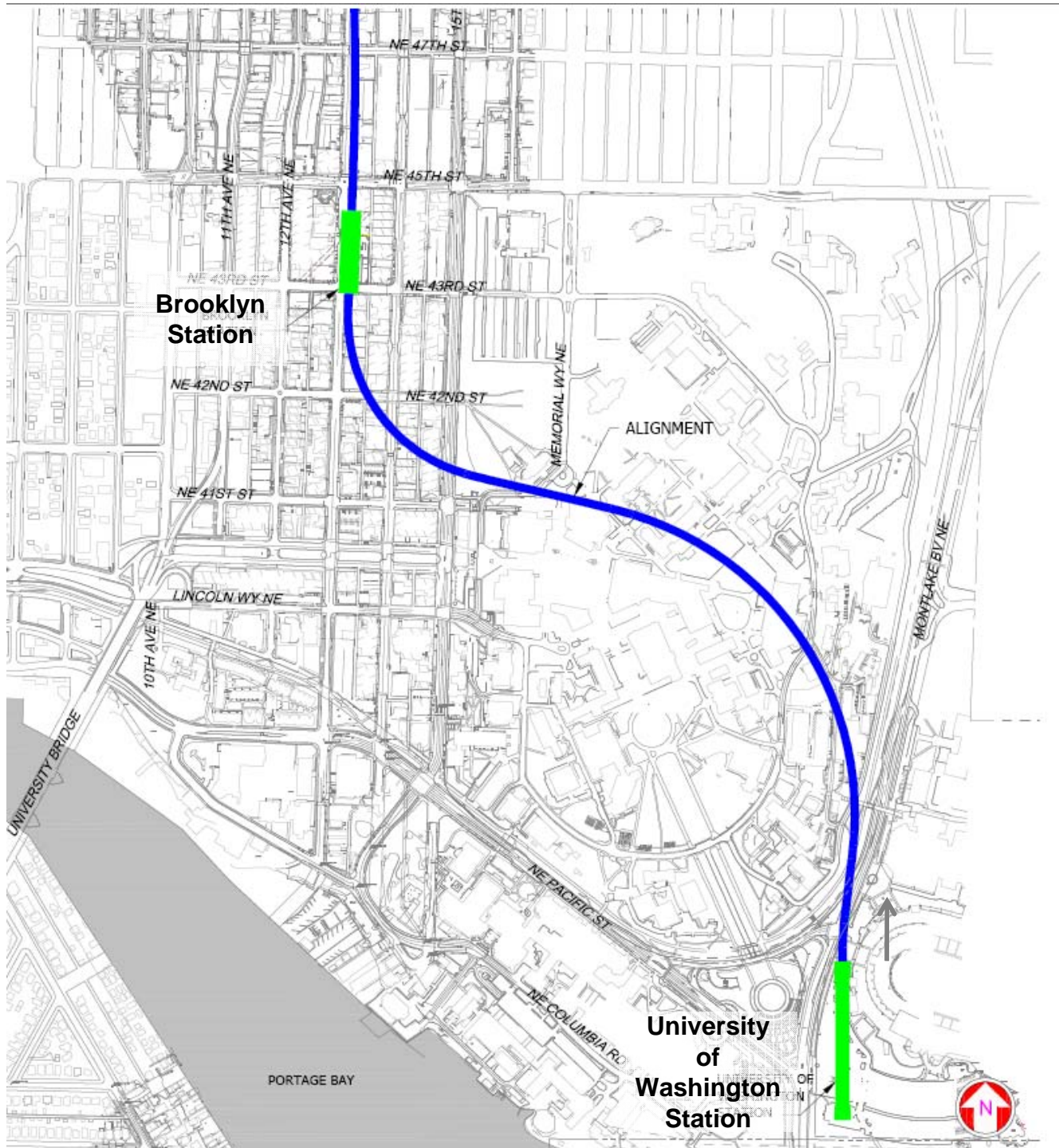
What do you think the station name should be? Please check a box.

U-District Station

Brooklyn Station

NE 45<sup>th</sup> Street

Other (please specify): \_\_\_\_\_



# Tunnel Alignment

(From the University of Washington Station to the Brooklyn Station)



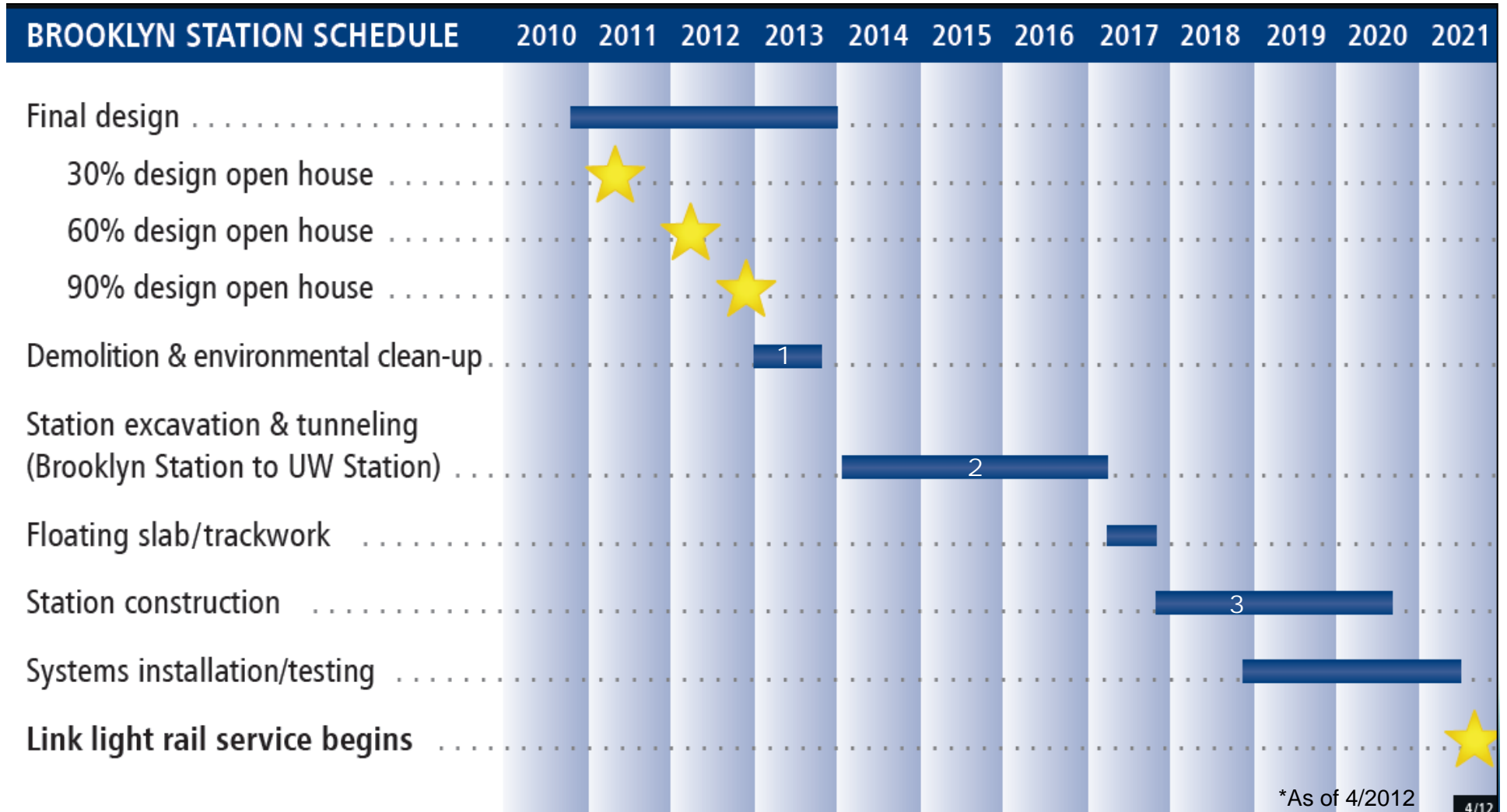
# Brooklyn Station

## Key Features:

- Station platform, 75-85 ft. underground
  - Elevators, escalators and stairs
  - Bicycle parking
  - 12,000 daily boardings (2030)
- Constrained construction site
- Staging use of Brooklyn Avenue and NE 43<sup>rd</sup> followed by restoration to City Green Street principles
- Designed to accommodate future building above station
- May 23<sup>rd</sup>: 60% Station design open house

# Brooklyn Station Schedule

DRAFT





# Pre-Demolition Activity Salvage

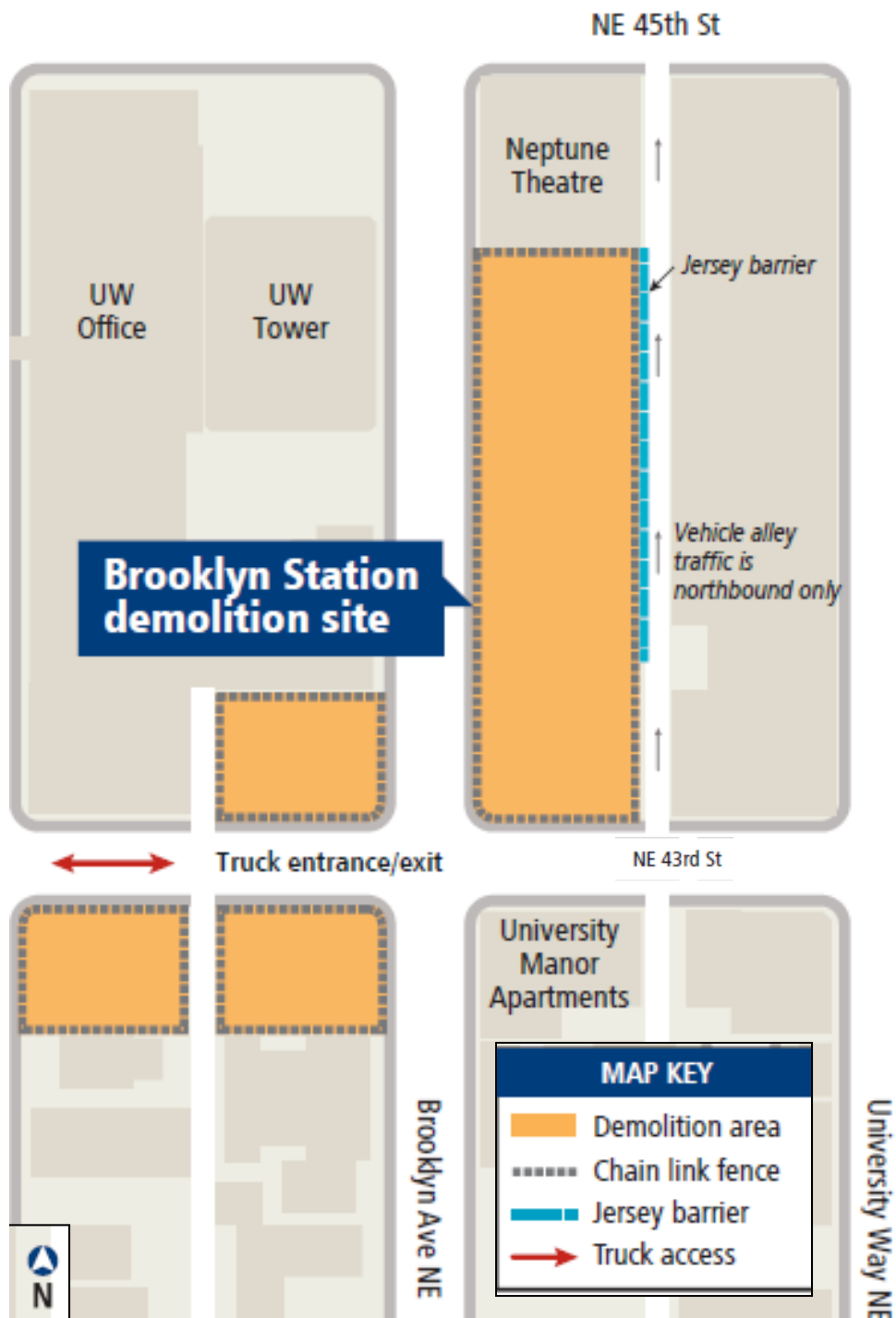


- Community Plant Salvage Event
- Building salvage
  - light and plumbing fixtures, doors, cabinets, carpet, hardware, etc.
- Recycle during demolition and construction
  - Minimum of 75% of demolished materials will be recycled



# 1. Site Demolition Contract

Early 2013 – Late 2013



- **Building demolition**
- Vegetation removal on private property
- Jersey barriers along alley
- Modifications to garbage, recycle, compost services

-Seattle Public Utilities will contact customers with information

# 1. Site Demolition Contract

Early 2013 – Late 2013

## Truck Haul Routes

(Subject to City of Seattle Approval)



# 1. Dust Control



- Watering during demo
- Covered loads
- Street sweeping
- Wheel washes



DURATION: 2014 - 2017



## 2. Station Excavation and Tunneling Contract

2014 - 2017

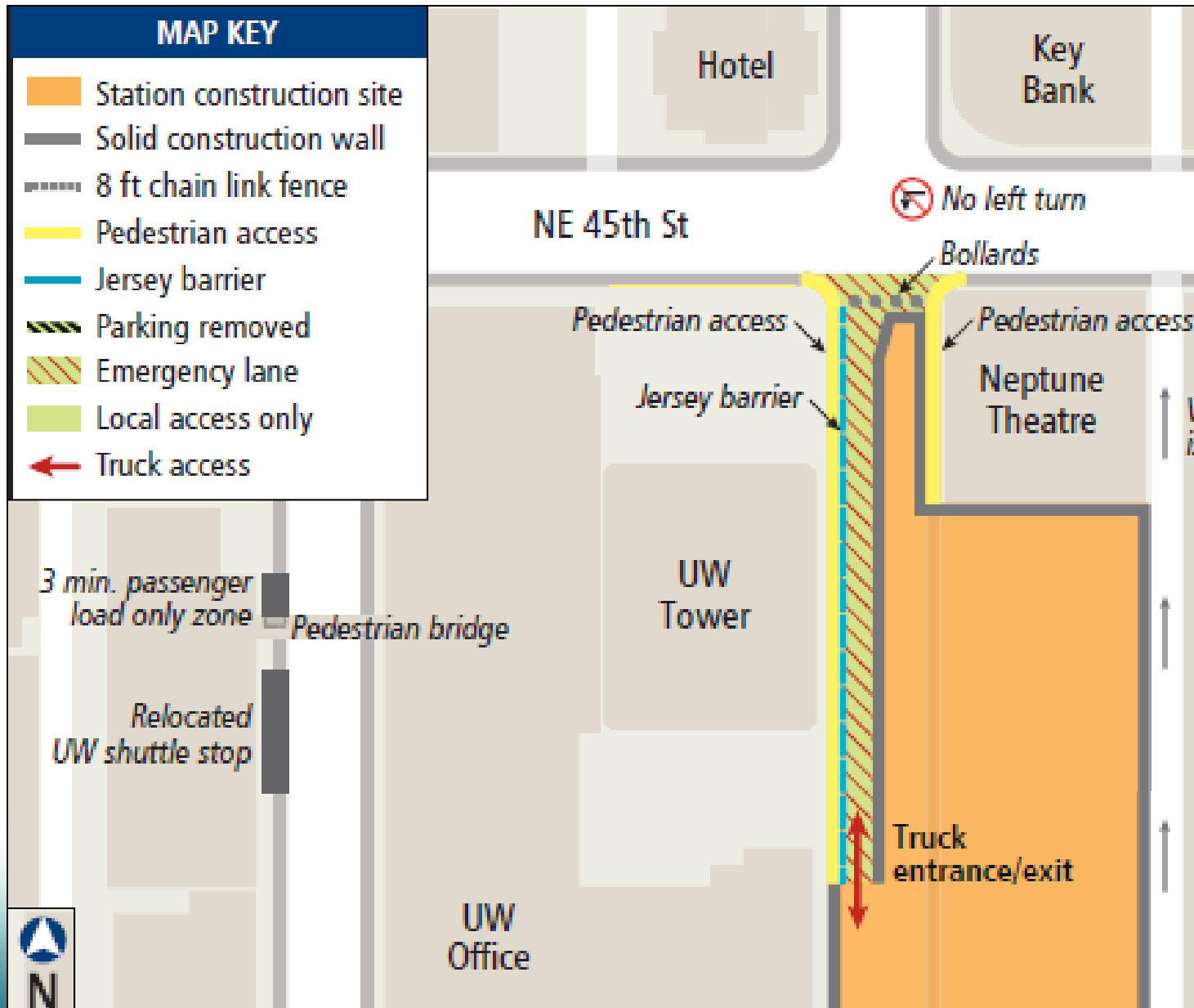
- Excavation of station
- Street tree removal
- Temporary support
- Tunnel construction
  - TBM launched from Roosevelt at NE 65<sup>th</sup> St.
  - inspection and ventilation support during drive to UW Station

## 2. Access Changes around the Construction Site

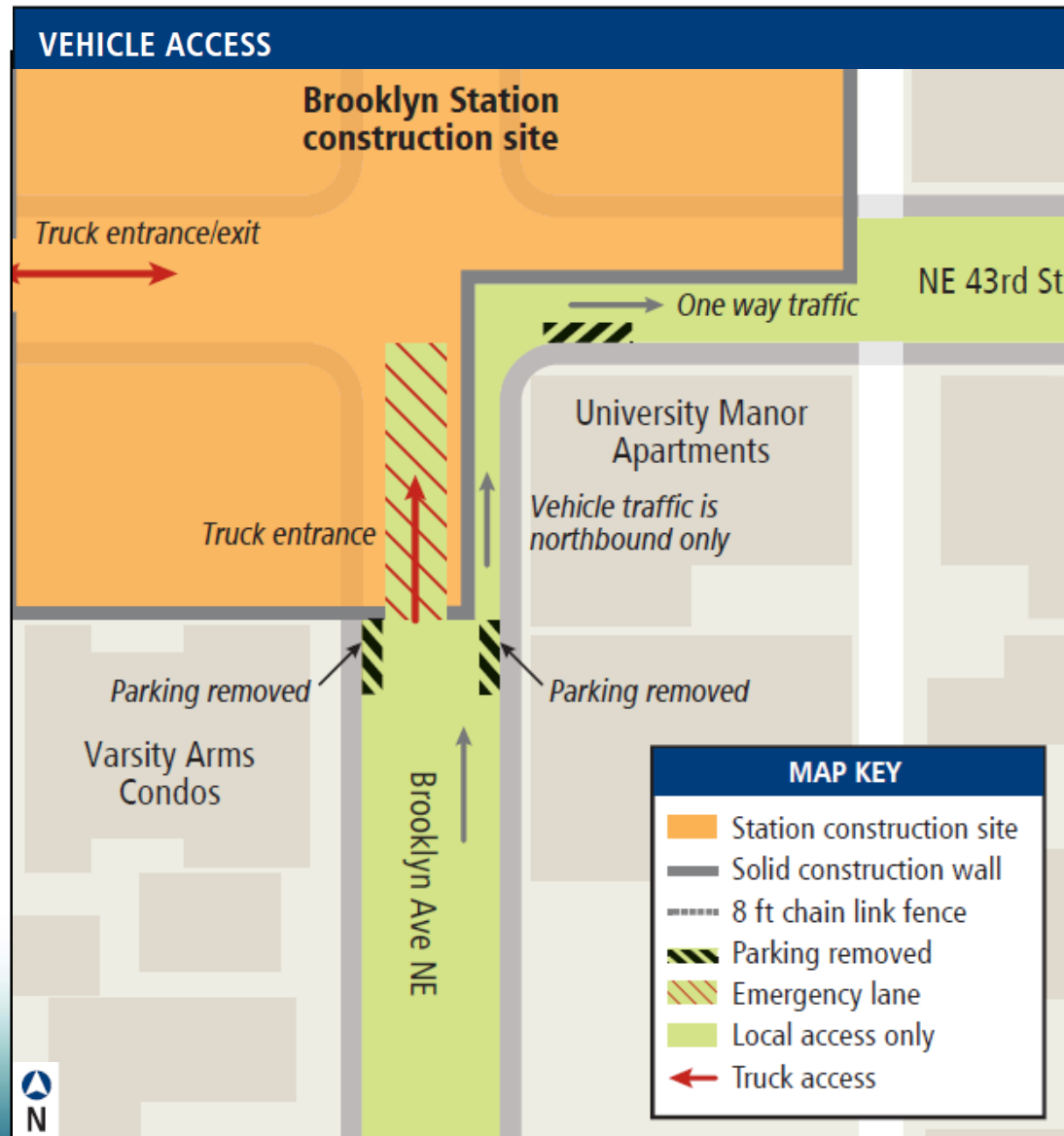


1. Pedestrian Access to the UW Tower
2. Short-term load zone and Relocated UW shuttle stop
3. Local access only, construction haul route
4. One-way vehicle access

## 2. Preliminary Design - Access at NE 45<sup>th</sup> Street



## 2. Preliminary Design for Vehicle Access adjacent to the U-Manor

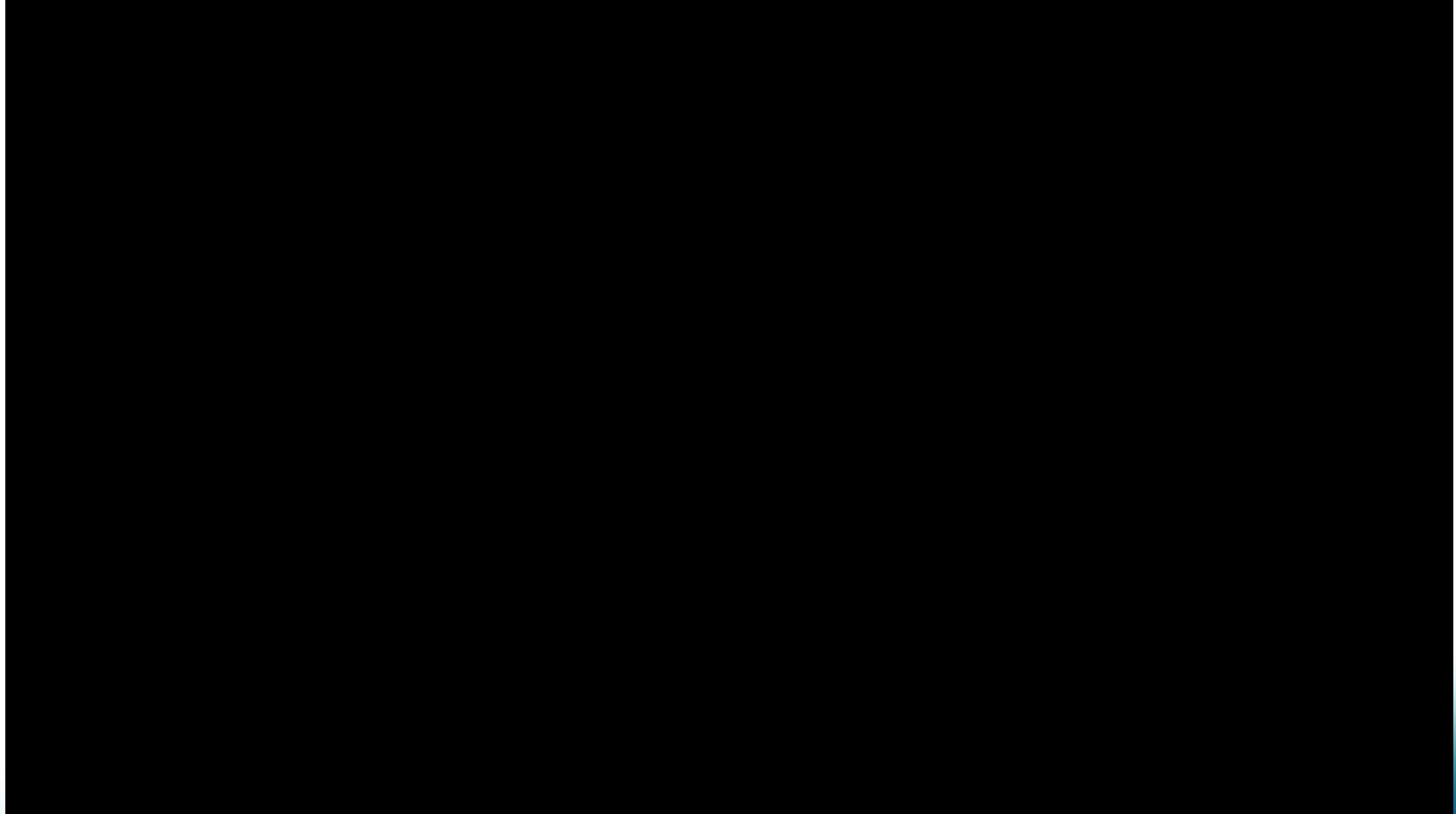




# 2. Preliminary Design for Pedestrian Access, NE 43rd Street



## 2. Tunneling and Excavation Animation



# 2. Station Excavation Contract

## Truck Haul Routes (2014 – 2017)

(Subject to City of Seattle Approval)



## 2. Contractor Parking



- Construction workers not allowed to park on city streets
- Contractor responsible for determining parking arrangements
- Sound Transit has identified several potential parking lots, that could accommodate workers
- ST Property located at Roosevelt Way and NE 45<sup>th</sup> Street, offered for use during construction

## 2. Typical Construction Activities



# Noise Variance



- ST seeking Major Public Project Construction Noise Variance from City of Seattle
- Noise variance establishes noise limits for contractor work between 10pm - 7am weekdays, 10pm - 9am weekends, holidays
- Daytime construction activities will comply with City's construction noise limits

# Why Work at Night?



- Anticipate up to three years of nighttime construction activity
- Certain activities are required for tunnel worker safety
- Maximizes project safety, efficiency, duration and cost savings
- Tunnel spoils (dirt) will be removed from Roosevelt Station site

# What Goes on at Night?



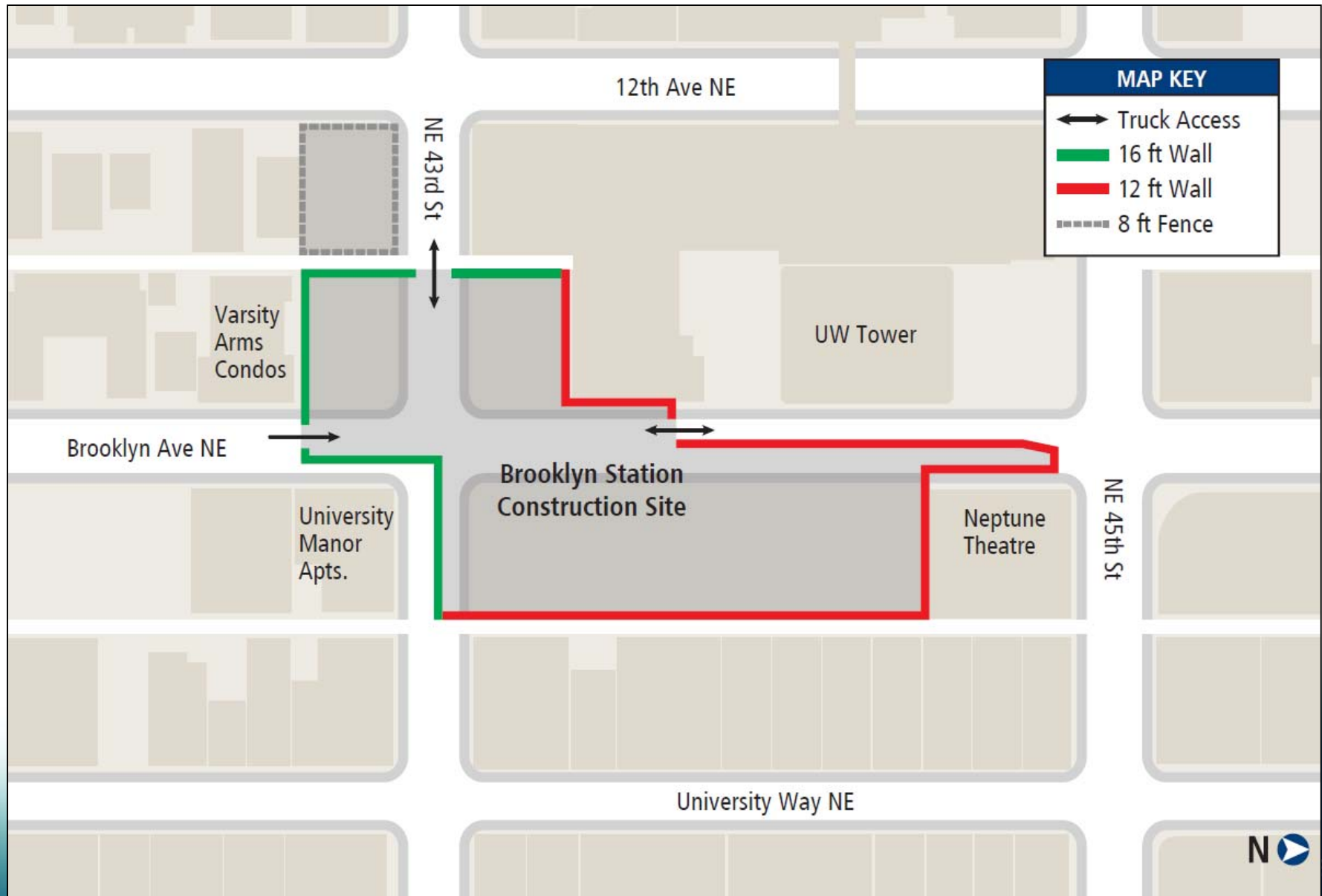
- Tunnel ventilation fans, pumps, air compressors
- Generator
- Concrete pours
- Vehicles
  - hauling and delivery trucks
  - Tunnel muck trains
  - loaders, excavators
- No high impact equipment (jackhammers, concrete saws, etc.)





# 2. and 3. Construction Wall

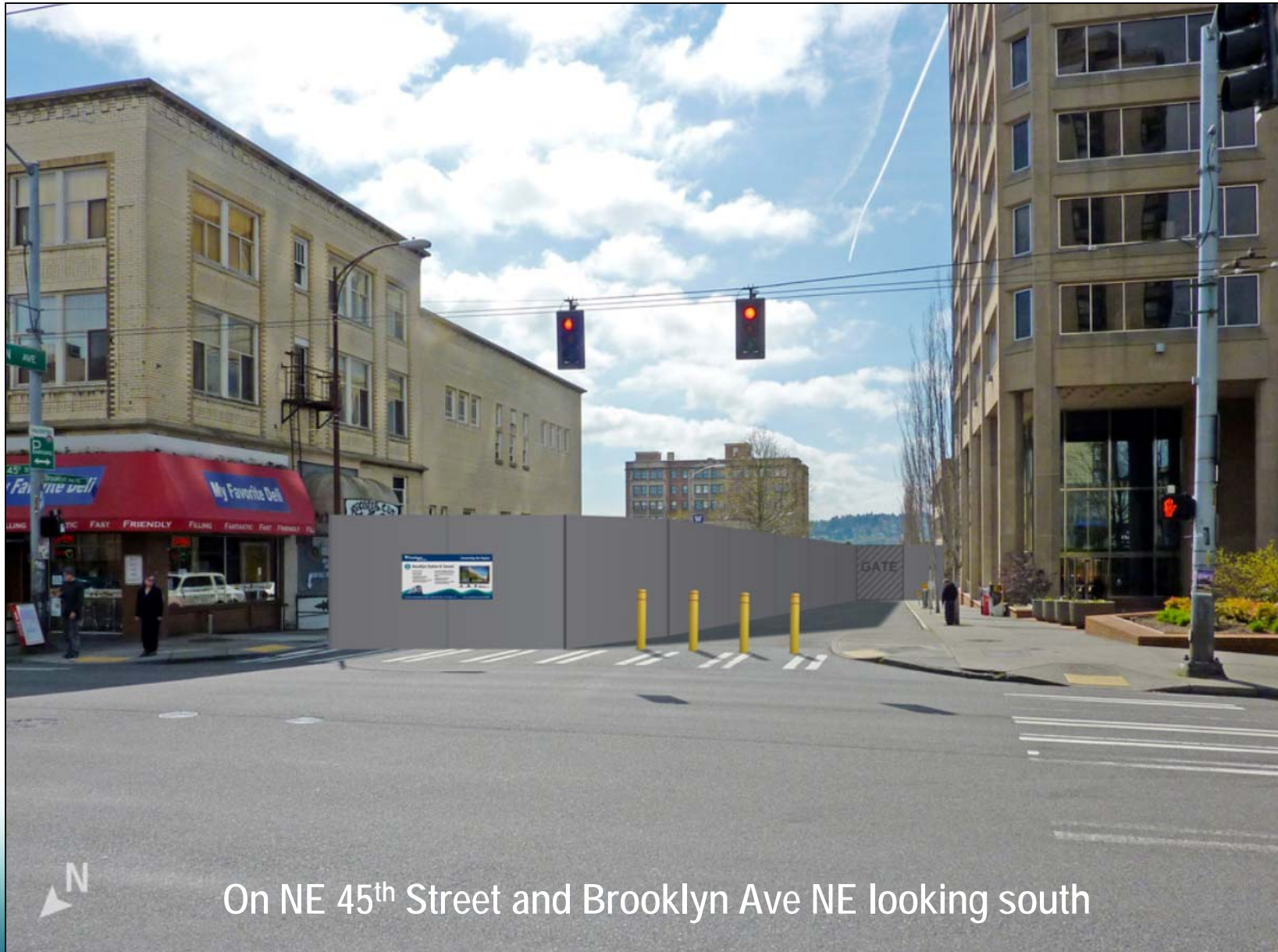
2014-2020



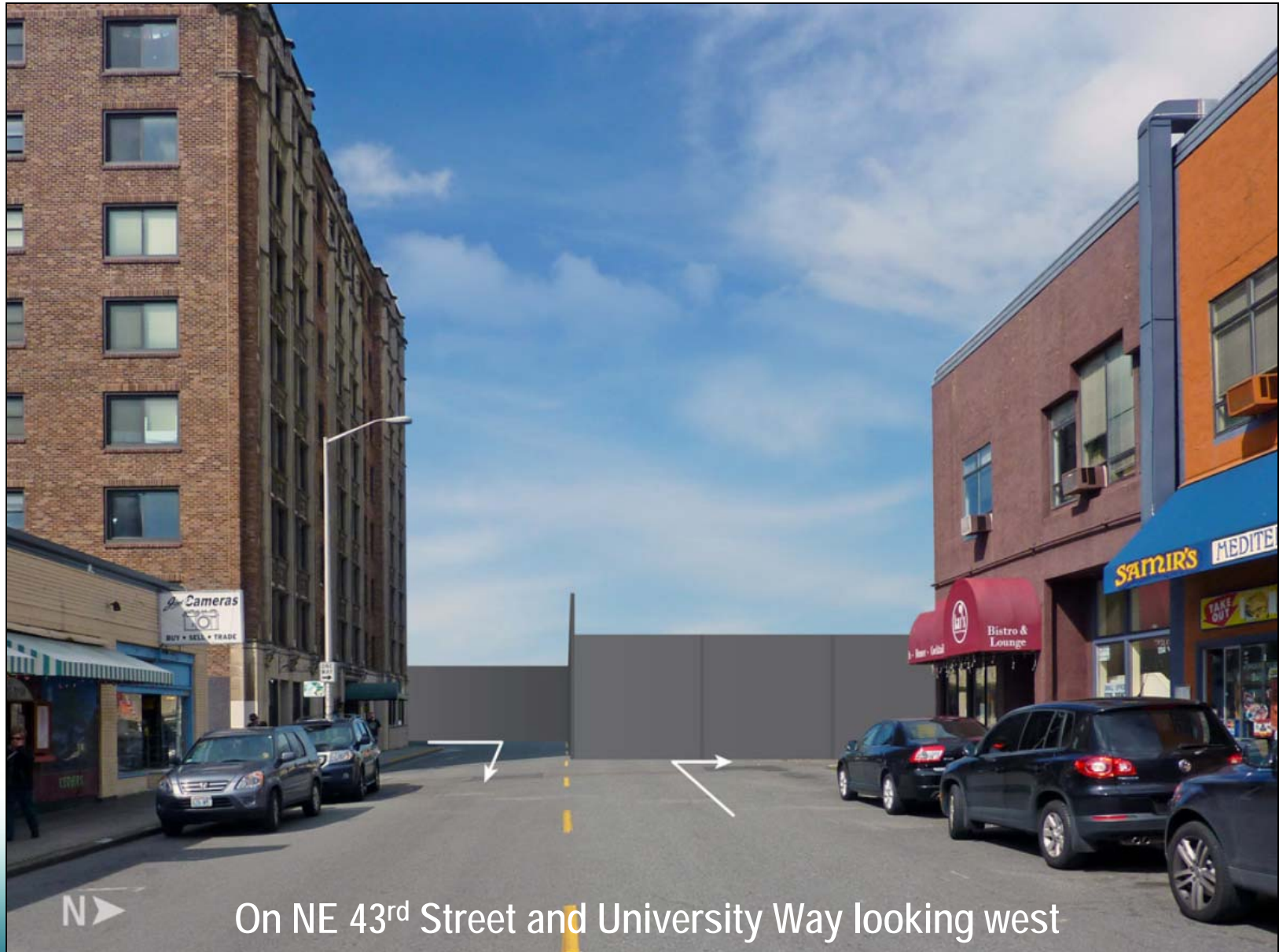
## 2. and 3. Construction Wall Photo Simulations



## 2. and 3. Construction Wall Photo Simulations



## 2. and 3. Construction Wall Photo Simulations



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On NE 43<sup>rd</sup> Street and University Way looking west

AVE

## 2. and 3. Construction Wall Photo Simulations



# Noise Mitigation



- Solid plywood construction wall
- Stationary equipment (compressors, generators) enclosed in noise reducing material
- Nighttime Truck Operations
  - No tonal alarms
  - Engine idle limit of 5 minutes
  - No compression brakes
- Monitoring

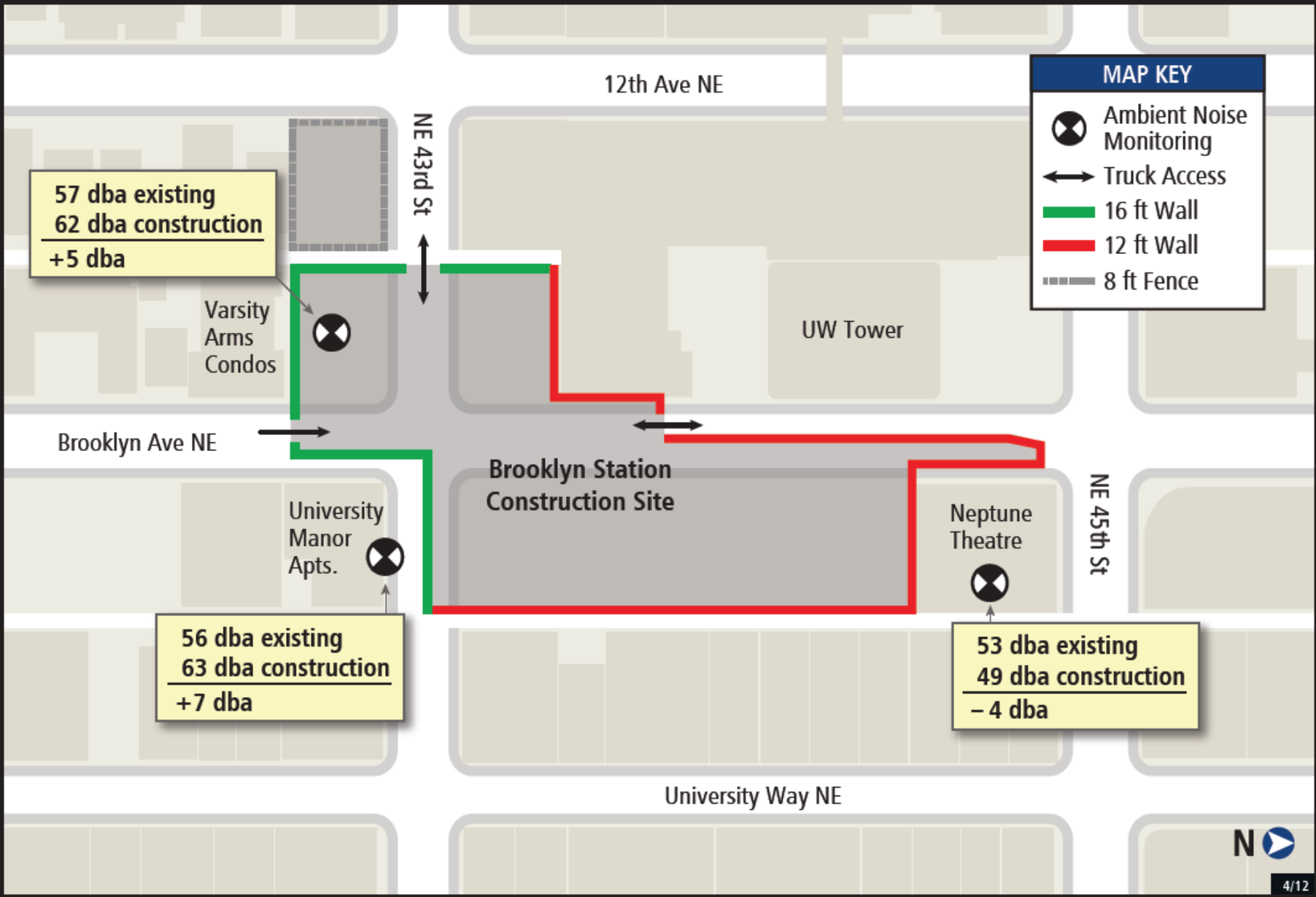
# Level of Common Sounds

Sound	Sound Level <sup>1</sup>	Approximate Relative Loudness <sup>2</sup>
Jet Plane @ 100'	130	128
Rock Music with Amplifier	120	64
Thunder, Danger of Permanent Hearing Loss	110	32
Boiler Shop, Power Mower	100	16
Orchestral Crescendo at 25 feet	90	8
Busy Street	80	4
Interior of Department Store	70	2
Ordinary Conversation @ 3'	60	1
Quiet Car at Low Speed	50	1/2
Average Office	40	1/4
City Residence, Interior	30	1/8
Quiet Country Residence, Interior	20	1/32
Rustle of Leaves	10	1/64
Threshold of Hearing	0	1/128

Existing nighttime noise at U-Manor (56) and adjacent to Varsity Arms Condos (57)

Existing nighttime noise at Neptune Theatre (53)

# Nighttime Noise Predictions





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Predicted Construction noise at U-Manor (63) and adjacent to Varsity Arms Condos (62)

Predicted Construction noise at Neptune Theatre (49)



# Monitoring and Responding to Complaints



- Continuous sound monitoring stations
- 24 hour Construction Hotline: 1-888-298-2395
- Independent response by City Noise Abatement Specialist
- City, ST and contractor will investigate, determine how to prevent future incidents, and respond back to caller
- City review after 1 year

# Noise Variance Next Steps



- Receive comments and questions tonight; incorporate feedback into variance application
- City of Seattle (DPD) will hold a public meeting to receive comments this summer
- City will decide whether to approve a noise variance within 60 days after public meeting is held



- Contractor will prepare a detailed noise management plan
- Follow-up info at meeting(s) later this year
- Major Public Project Construction Variance (MPPCV) needed by 2015

## 2. and 3. Exterior Construction Wall Lighting



- Construction lighting
  - inside construction walls
  - fixtures shrouded, directing light downward
- Security lighting
  - exterior lighting on construction walls
  - Balance illumination for security while minimizing stray lighting

# 3. Station Construction Contract

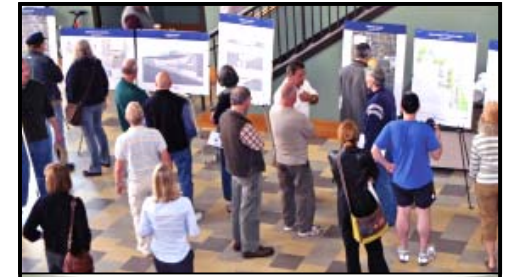
2017-2020



- Build station entrances
- Permanent structures
- Street restoration

# Next Steps

- Brooklyn Station 60% design open house – May 23, 2012
- Station Art
- Station name selection
- Demolition at Brooklyn Station – Early 2013



# Questions?



# Get Involved

## in North Link Final Design

### Learn About Your Neighborhood Station

#### At Final Design Open Houses you can:

- Learn about your station's design and look, including amenities such as bicycle facilities and pedestrian and bus connections
- Preview your station's artwork
- Learn about redevelopment opportunities adjacent to the station

#### Stay Informed

- Request a briefing for your organization by contacting Wilbert Santos, Community Outreach Coordinator, at (206) 370-5516 or [northlink@soundtransit.org](mailto:northlink@soundtransit.org)
- Visit Sound Transit's Web site at [www.soundtransit.org/northlink](http://www.soundtransit.org/northlink)
- Sign up for e-mail alerts at [www.soundtransit.org](http://www.soundtransit.org)
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