



Siting Options for a Linear Collider at Fermilab

Pushpa Bhat

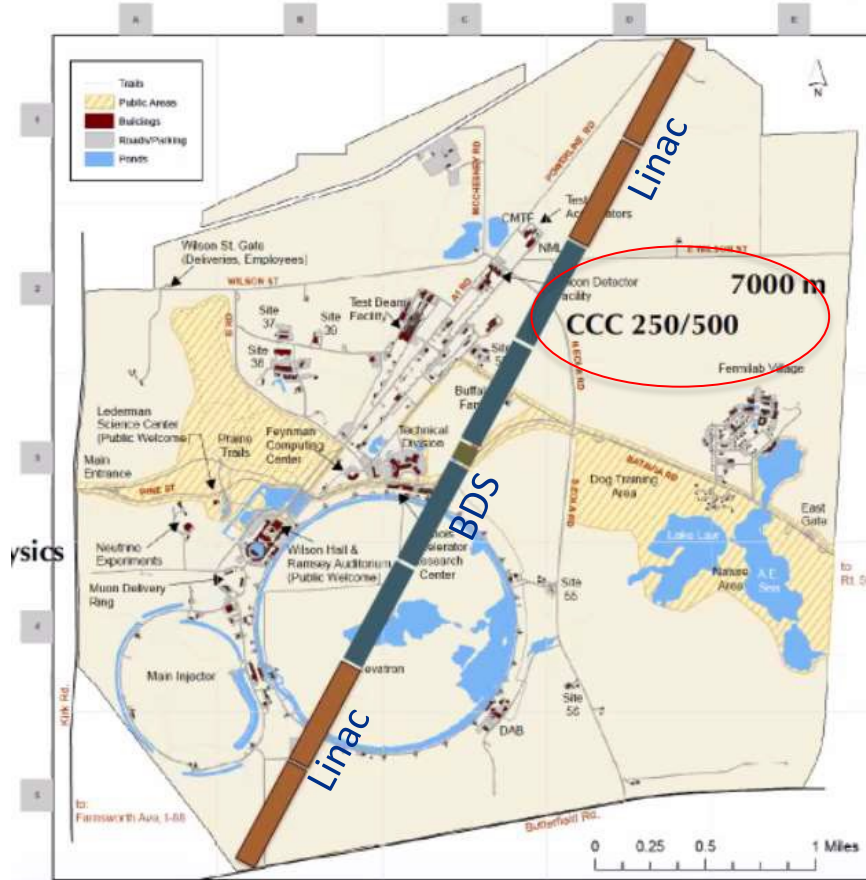
Fermilab Future Colliders Group

**Future US Colliders Workshop, SLAC/Stanford
January 18-21, 2022**

Linear Collider Site Filler (~7 km)

Cool Cooper Cavity (C³) LC @ Fermilab

E. Nanni



FERMI NATIONAL ACCELERATOR LABORATORY
UNITED STATES DEPARTMENT OF ENERGY

**FERMILAB FUTURE COLLIDERS
SITE FILLER MAXIMUM LIMITS**

OCT. 2021



Report

of the

Fermilab Committee for Site Studies

SUBMITTED: JULY 1, 2001

with

Introduction by Michael Witherell, Fermilab Director

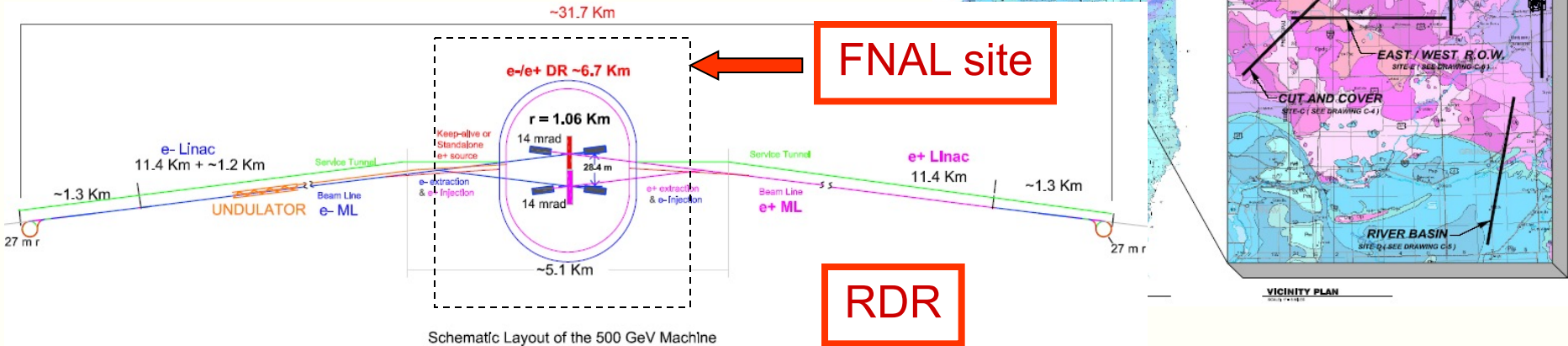
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R. Atkinson
T. Dombeck
B. Forter
B. Griffing
N. Holtkamp
L. Koskinen
C. Laughton
E. Malamud
P. Metelmann
R. Ortgiesen
G. Robertson
J. Sims
F. Ullrich

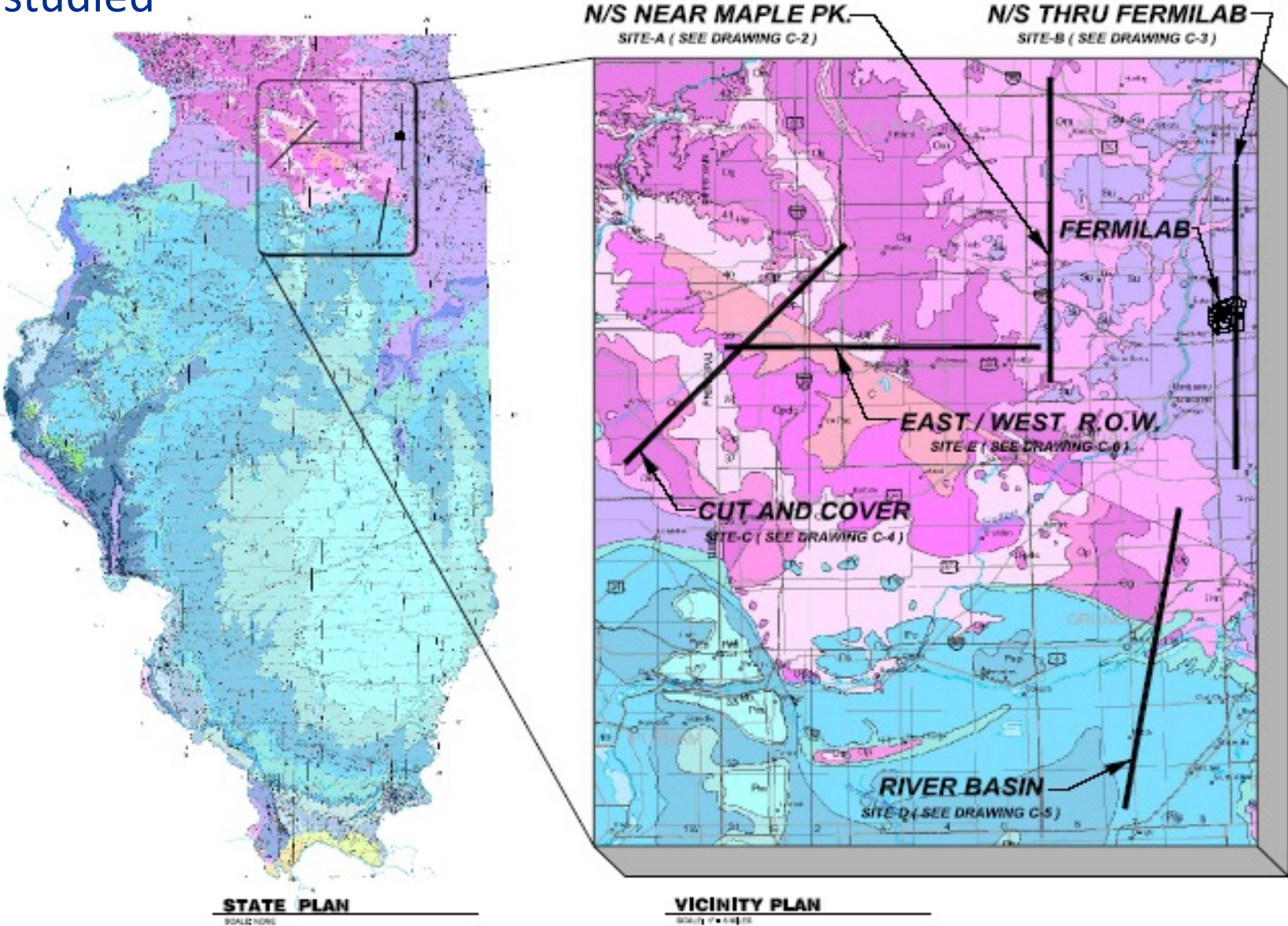
E. Crumpley
D. Finley
S. Geer
S. Holmes
J. Jackson
V. Kuchler
P. Limon
M. May
D. Nevin
M. Perricone
S. Thompson
A. Tollestrup

- **Goal: Determine the best possible site for an ILC in Illinois**
- **With the GDE we are developing the ILC Civil Design**
 - Tunnel Design (diameter, # shafts, laser-straight vs curved, cost)
- **Site specific machine and Civil design will start in FY07**
 - Geological, environmental, community impact studies

Slide from Bob Kephart's talk
Fermilab AAC 2006



Sites studied



Overall Plan for the ILC at Fermilab site

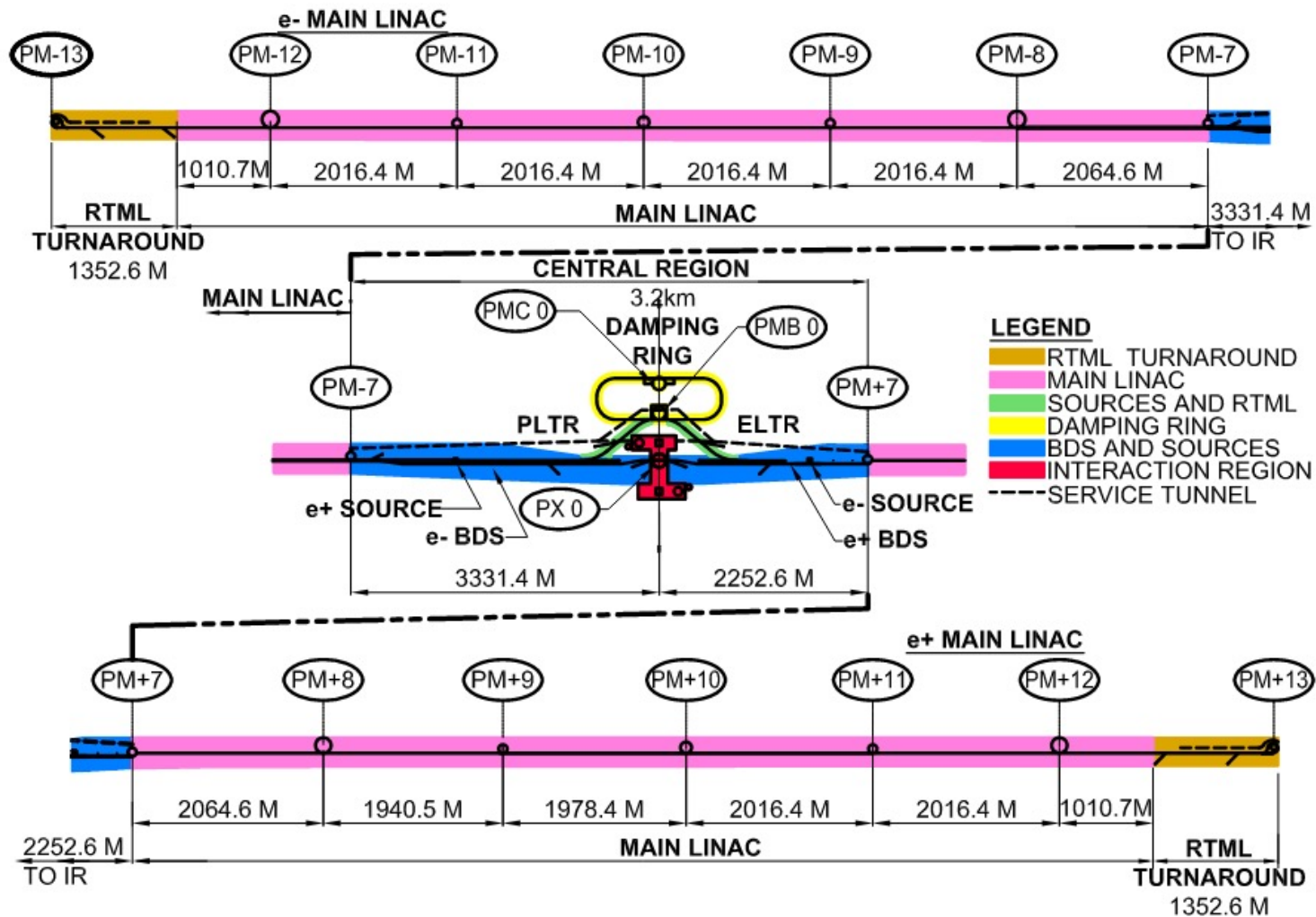
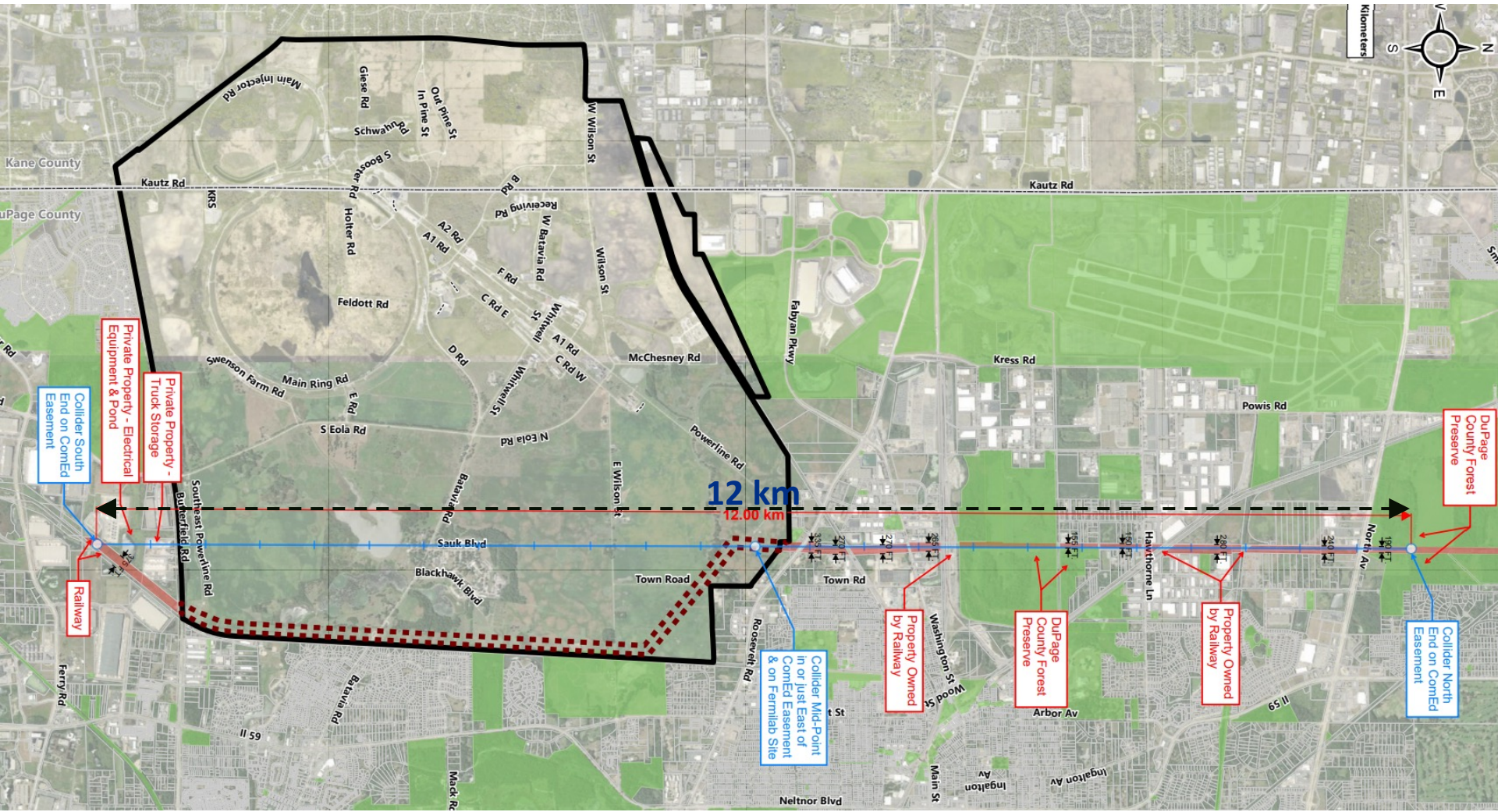


Figure 11.29. Americas tunnel layout. The colors reflect the Accelerator sections locations.

Proposed Option (Jan. 2022)



Kephart, AAC 2006

