

pg 1 of 2 **NEPA PLANNING FORM # 1287** (by ES&H)

**Applicability:** this form shall be prepared as early as possible for each new or continuing activity at PPPL.

Physical implementation of PPPL activities shall not proceed prior to NEPA certification of this form.

**Originator:** JOSEPH CARSON **WP/Project #:** 1850 ~~1200~~ 2501

**Project/Organization:** NCSX BEAMS **Total Estimated Cost:** 2601k

**Title of Activity/Change:** NCSX BEAMLINE EVALUATION

**Description of Activity:** [include physical description of activity, purpose, location, changes to any operating parameters or approved environmentally related limits, potential or actual ES&H impacts, as applicable. Attach additional sheets if needed] Circle one of these choices:

ATTACH AND OPERATE AN APPROPRIATE VACUUM PUMPING SYSTEM TO THE NCSX BEAMLINES FOR EVALUATION AND LEAK CHECKING. THIS ACTIVITY IS TO BE PERFORMED AT "C" SITE IN THE ESAT BLDG. ONGOING TASK AS PART OF NCSX NBI PROJECT.

GENERIC UNIQUE

**ES&H Considerations:** Will the change/activity, either individually or cumulatively with other known activities, result in changes and/or disturbances to the following entities (see Attachment 2 for directions on answering) \*

	YES	NO		YES	NO
1: Air Emissions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13: Sewage System	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2: Liquid Effluent	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14: Water Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3: Domestic Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15: Pesticide Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4: Radioactive Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>	16: Chemical Use/Storage	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5: Hazardous Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>	17: Petroleum Use/Storage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6: Mixed Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>	18: Radiation Exposure	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7: Asbestos Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>	19: Impacts to Workers	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8: Wetlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	20: Noise Levels	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9: Floodplains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	21: Pollution Prevention Applies	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10: Indoor/Outdoor Clearing or Excavation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	22: Stored Energy	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11: Soil Movement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	23: Fire Safety Issues	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12: PPPL Water Systems	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24: Electrical/RF/Lasers	<input checked="" type="checkbox"/>	<input type="checkbox"/>

\* Provide any necessary explanations on a separate sheet attached to this form

The undersigned have reviewed the description and assessment of ES&H considerations and state that they are accurate and complete.

Work will not proceed until NEPA certified form (page 2) is received by cognizant person.

**COG PERSON/ATI:** Joe Carson **DATE:** 1/22/03

**DIV HEAD/RLM:** DRS 1/22/03 / [Signature] **DATE:** 1/22/03

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NEPA PLANNING FORM # 1287

NEPA Evaluation: (attach "Environmental Evaluation for PPPL Change Proposal" and "Environmental Evaluation Notification Form")

Covered by an existing DOE approved categorical exclusion? YES NO

\_\_\_\_

If yes, specify \_\_\_\_\_

Approval for categorical exclusion required from DOE ?

\_\_\_\_

DOE approval: \_\_\_\_\_ Date: \_\_\_\_\_

Other NEPA documentation required ?

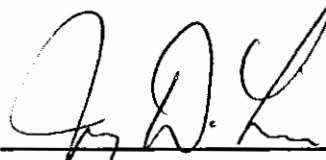
\_\_\_\_\_

If yes, specify

Covered under NCSX EA (DOE EA/1437);  
FONS 1 issued 10/25/02

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NEPA Review for this Activity has been Completed :

  
\_\_\_\_\_  
NEPA Compliance Manager (or designee)

1/27/03  
\_\_\_\_\_  
Date:

- JHA required.

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NEPA & SAFETY ANALYSIS REVIEW STATUS FORM

ACTIVITY: NCSX Beamline Evaluation

DATE RECEIVED & LOGGED IN: 1/23/03

READY FOR REVIEW:

NEPA PROCESS ON HOLD: \_\_\_\_\_

REASON

**SAFETY ANALYSIS REVIEW**

SAFETY ANALYSIS REVIEWER/DATE: J. Lin 1/24/03

SAFETY REVIEW/DOCUMENT. REQTS IHA required. Gases

should be vented to outside environment, away from people.

**REVIEW COMPLETE**

ENV EVALUATIONS COMPLETED AND SIGNED BY ENVIRONMENTAL ENGINEER OR ALTERNATE)

**NEPA FORMS READY TO BE SENT OUT**

(NEPA PLANNING FORM CERTIFIED BY NEPA COMPLIANCE MANAGER)

**NEPA FORMS SENT OUT**

- ONE COPY-ORIGINATOR
- ONE COPY-COGNIZANT PERSON
- ONE COPY-DIVISION HEAD
- ONE COPY-FACILITY MANAGER(S) FOR THE AREA(S) AFFECTED (Van Halbe)
- ONE COPY-INDUSTRIAL HYGIENIST
- ONE COPY-ER/WM DIVISION HEAD [IF HAZARDOUS OR RADIOACTIVE WASTES ARE INVOLVED]
- ONE COPY-ENVIRONMENTAL ENGINEER [IF AIR EMISSIONS ARE INVOLVED]
- ONE COPY-SITE PROTECTION DIVISION HEAD [IF HAZARDOUS MATERIALS ARE INVOLVED]
- ONE COPY-OPERATIONS CENTER [IF A D-SITE CHANGE IS INVOLVED]
- ONE COPY-SAFETY ANALYSIS REVIEWER (IF APPLICABLE)
- ONE COPY-OTHERS \_\_\_\_\_
- ORIGINAL-NEPA FILES)

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ENVIRONMENTAL EVALUATION FOR PPPL CHANGE PROPOSAL

NCSX BEAMLINE EVALUATION  
TITLE OF CHANGE OR PROJECT

J. CARSON  
COGNIZANT PERSON

-----  
PROJECT NUMBER

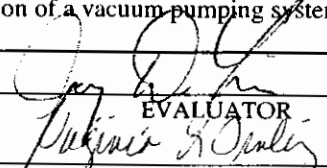
E v a l u a t i o n

ISSUE	APPLICABILITY		POTENTIAL IMPACT			ISSUE	APPLICABILITY		POTENTIAL IMPACT		
	A	NA	N	NAI	AI		A	NA	N	NAI	AI
CONSTRUCTION ACTIVITY						LAND USE CONSIDERATION					
DUST	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WETLANDS/ FLOODPLAINS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NOISE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CRITICAL HABITATS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ARCHAEOLOGICAL SITES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EFFLUENTS AND CONTAMINANTS						FACILITY CONSIDERATIONS					
SOLIDS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AESTHETICS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LIQUIDS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PUBLIC RELATIONS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GASES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	OTHER	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ENERGY EMISSIONS						CATEGORICAL EXCLUSION		YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
RADIATION	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Covered under NCSX EA (DOE/EA-1437); FONSI issued 10/25/02.					
OTHER	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
APPLICABILITY:		A- APPLICABLE, NA - NOT APPLICABLE									
POTENTIAL IMPACT:		N - NONE, NAI - NO ADVERSE IMPACT (POSSIBLE IMPACT BUT NOT EXPECTED TO BE HARMFUL), AI - ADVERSE IMPACT									

COMMENTS & CONCLUSIONS

ANY APPLICABLE ISSUE REQUIRES COMMENT STATEMENT - USE ADDITIONAL PAGES IF NECESSARY.

This activity will involve emissions of gaseous nitrogen from beamline purging, and possibly very small amounts of hydrocarbons from operation of a vacuum pumping system.

  
EVALUATOR

PPPL ENVIRONMENTAL ENGINEER (OR DESIGNEE)

1/23/03  
EVALUATION DATE  
1/27/03  
APPROVAL DATE

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ENVIRONMENTAL EVALUATION NOTIFICATION FORM

Grantee/Contractor Laboratory: Princeton University/Princeton Plasma Physics Laboratory (PPPL)
Project/Activity Title: NCSX Beamline Evaluation
CH NEPA Tracking No.: Type of Funding
B&R Code: Total Estimated Cost: \$260k

DOE Cognizant Secretarial Officer (CSO): Raymond L. Orbach

Contractor Project Manager: Signature:
Date:

Contractor NEPA Reviewer: Jerry D. Levine Signature:
Date: 1/24/03

I. Description of Proposed Action: A vacuum pumping system will be installed and operated on the former PBX-M neutral beamlines (NBLs), which are currently being stored in the ESAT Building Basement. The NBLs will be purged and pumped down with nitrogen gas to evaluate their status and for leak checking purposes. This gas will be vented to the outside via hose and pipe that will be run from the vacuum pump skid through an existing penetration that was previously used for venting the Liquid Metal Experiment ( a fan in this penetration that is no longer used will be removed). This work is being done to prepare these NBLs for future use on NCSX.

II. Description of Affected Environment: Work will take place in the C-Site ESAT Building Basement (see attached figure and map).

III. Potential Environmental Effects: (Attach explanation for each "yes" response, and "no" responses if additional information is available and could be significant in the decision making process.)

A. Sensitive Resources: Will the proposed action result in changes and/or disturbances to any of the following resources?

Table with 12 rows of resource types and a 'Yes/No' column. Resources include Threatened/Endangered Species, Wetlands, Archaeological/Historic Resources, etc.

**B. Regulated Substances/Activities: Will the proposed action involve any of the following regulated substances or activities?**

	<u>Yes/No</u>
13. Clearing or Excavation (indicate if greater than 5 acres)	13. No
14. Dredge or Fill (under Clean Water Act section 404; indicate if greater than 10 acres)	14. No
15. Noise (in excess of regulations)	15. No
16. Asbestos Removal	16. No
17. PCBs	17. No
18. Import, Manufacture or Processing of Toxic Substances	18. No
19. Chemical Storage/Use <i>Nitrogen gas will be used to vent and leak check the NBLs.</i>	19. Yes
20. Pesticide Use	20. No
21. Hazardous, Toxic, or Criteria Pollutant Air Emissions	21. No
22. Liquid Effluent	22. No
23. Underground Injection	23. No
24. Hazardous Waste	24. No
25. Underground Storage Tanks	25. No
26. Radioactive (AEA) Mixed Waste	26. No
27. Radioactive Waste	27. No
28. Radiation Exposures	28. No

**C. Other Relevant Disclosures. Will the proposed action involve the following?**

	<u>Yes/No</u>
29. A threatened violation of ES&H regulations/permit requirements <i>Work will be conducted in accordance with a JHA. Nitrogen venting will be to the outside by the same pathway that had been used for previous experiments in the ESAT Basement.</i>	29. No
30. Siting/Construction/Major Modification of Waste Recovery, or TSD Facilities	30. No
31. Disturbance of Pre-existing Contamination	31. No
32. New or Modified Federal/State Permits	32. No
33. Public controversy	33. No
34. Action/involvement of Another Federal Agency (e.g. license, funding, approval)	34. No
35. Action of a State Agency in a State with NEPA-type law. (Does the State Environmental Quality Review Act Apply?)	35. No
36. Public Utilities/Services	36. No
37. Depletion of a Non-Renewable Resource	37. No

IV. **Section D Determination:** Is the project/activity appropriate for a determination by the OM under Subpart D of the DOE NEPA Regulations for compliance with NEPA?

N/A

A. **DOE-CH NEPA Coordinator Review:** N/A

DOE-CH NEPA Coordinator Reviewer: Allen Wrigley

Signature: N/A Date: \_\_\_\_\_

B. **DOE CH NCO NEPA Review:** N/A

NCO Concurrence with Proposed Class of Action Recommended

CX EA EIS

Category

DOE CH NCO Reviewer: Peter R. Siebach

Signature: N/A Date: \_\_\_\_\_

**DOE Recommendation Approvals:**

CH PG: Jerry W. Faul Signature: \_\_\_\_\_ N/A

Date: \_\_\_\_\_

CH NCO: Peter R. Siebach Signature: \_\_\_\_\_ N/A

Date: \_\_\_\_\_

CH GLD: Irene P. Atney Signature: \_\_\_\_\_ N/A

Date: \_\_\_\_\_

CH ESHD: Justin T. Zamirowski Signature: \_\_\_\_\_ N/A

Date: \_\_\_\_\_

CH AMST: John P. Kennedy Signature: \_\_\_\_\_ N/A

Date: \_\_\_\_\_

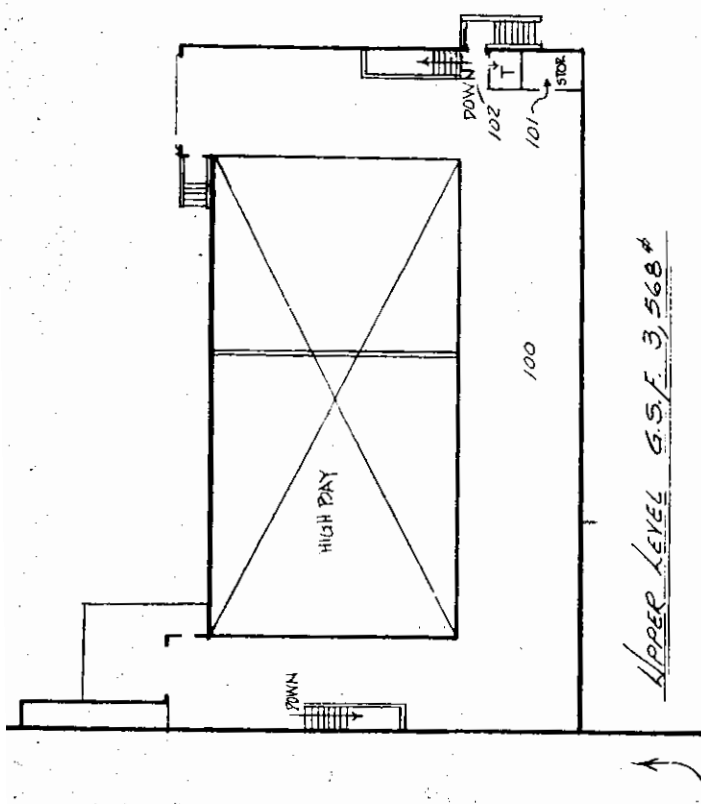
Office Manager Subpart D CX Determination and Approval:

**The preceding pages are a record of documentation required under DOE Final NEPA Regulation, 10 CFR Part 1021.410, and SEN-15-90 to establish that an action may be categorically excluded from further NEPA review. I have determined that the proposed action meets the requirements for the Categorical Exclusion referenced above. Therefore, by my signature below, I have determined that the proposed action may be categorically excluded from further NEPA review and documentation.**

CH Office Mgr: Marvin E. Gunn      Signature: N/A

Date: \_\_\_\_\_

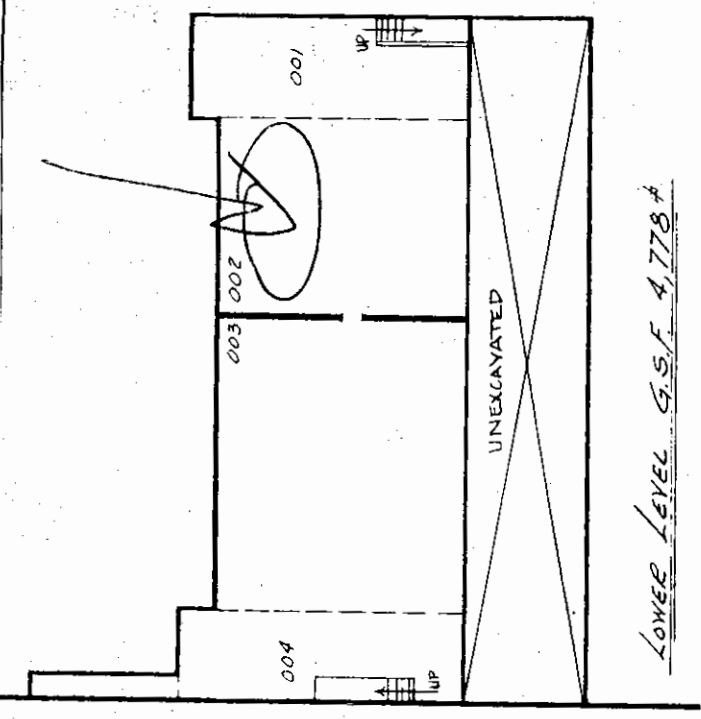




UPPER LEVEL G.S.F. 3,568 #

MG BLDG  
FIRST FLOOR

MG BLDG  
BASEMENT



LOWER LEVEL G.S.F. 4,778 #

BLDG. C 50

NO.	REVISION	ZONE
BY	CHKD.	APPD.
DATE		

ENG. <i>A. De Santis</i>
DRAWN: <i>PLR</i>
CHKD:
APPD:
SCALE: 1" = 20'-0"
WORK ORDER NO.
FRACTIONS: 1
DECIMALS: 2
ANGULAR: 2

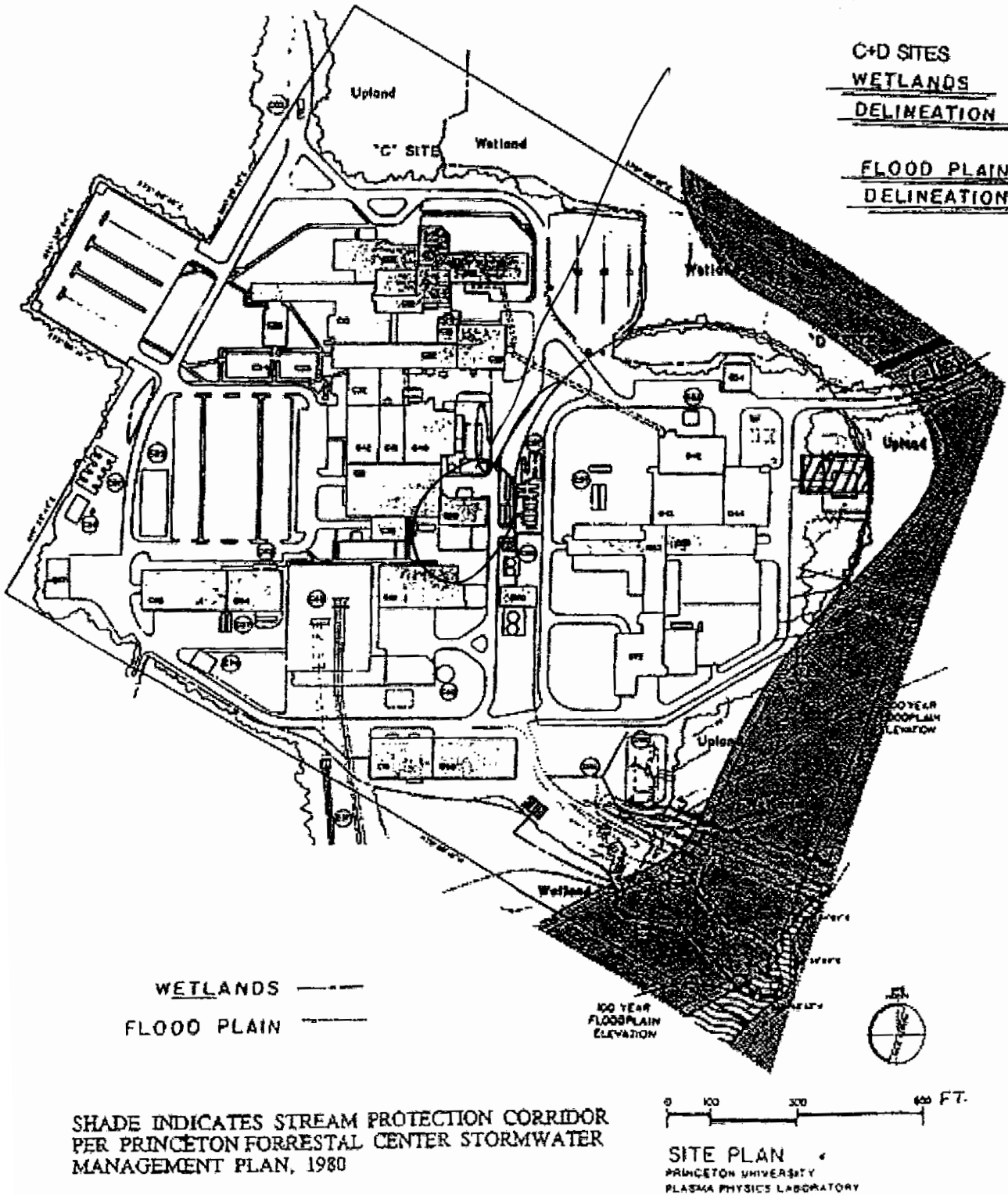
PRINCETON UNIVERSITY PLASMA PHYSICS LABORATORY JAMES FORRESTAL RESEARCH CENTER P.O. BOX 481 PRINCETON, N.J.
TITLE: SYSTEM TEST BLDG.
ASSY:
MACH:
DWG NO. AD-300
SHEET 24

1 2 3 4 5 6 7

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<b>PPPL</b>	PRINCETON PLASMA PHYSICS LABORATORY	<b>PROCEDURE</b>	No. ESH-014 Rev 4 Attachment 4
Map (Floodplains and Wetlands)			page 1 of 1



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 The official document is at [http://www.pppl.gov/eshis/PPPL\\_docs.shtml](http://www.pppl.gov/eshis/PPPL_docs.shtml)  
 The ES&H and Infrastructure Support Department maintains the signed original.