

# SHADOW STUDY REPORT

PROJECT:

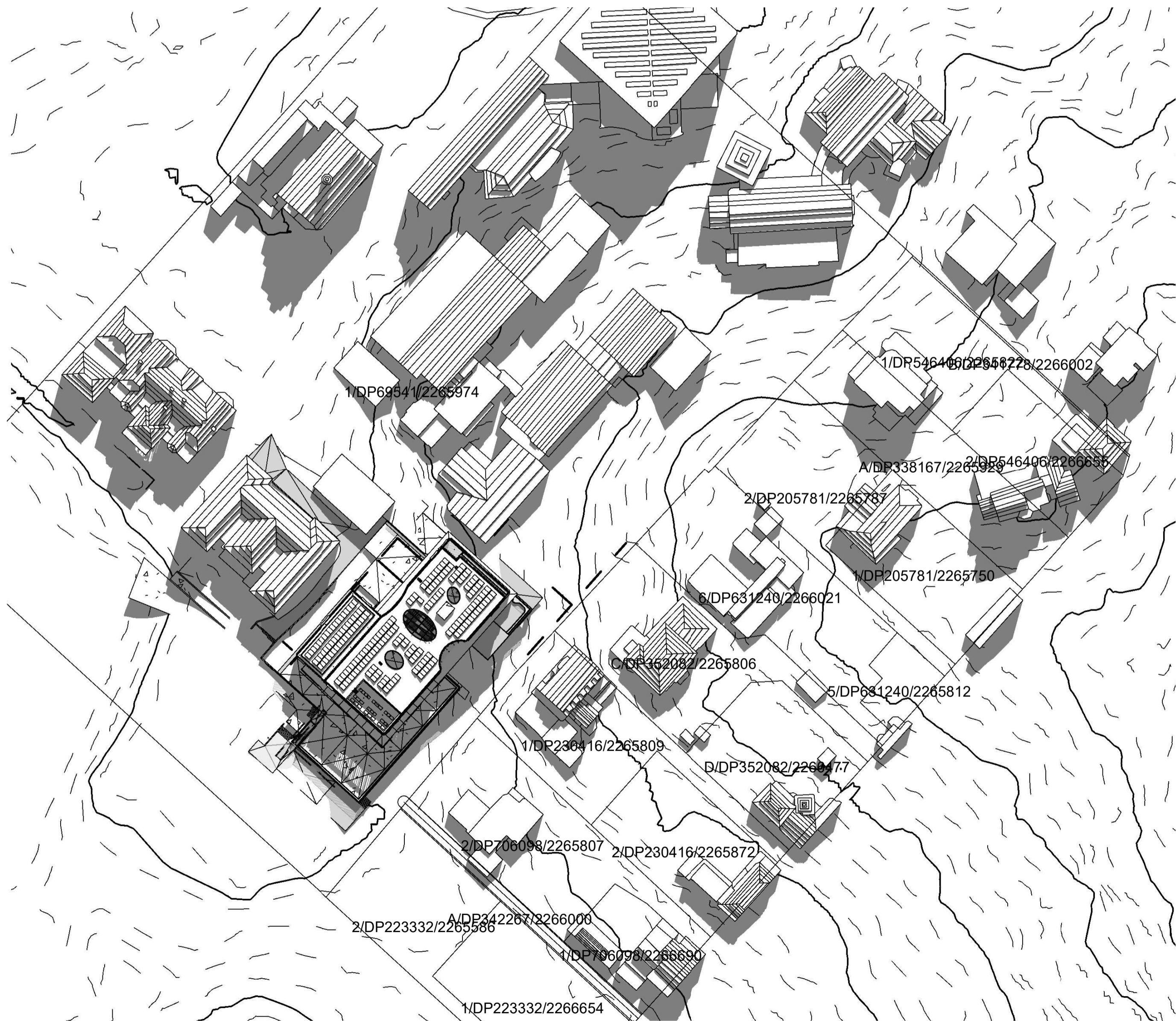
**PYMBLE LADIES' COLLEGE**

Grey House Precinct

CLIENT:

**NAHID MAHMUD**

Senior Planning Officer, New South Wales Government



PREPARED BY:

AP, LF

CHECKED BY:

Jamie Bonnefin

ISSUE:

FINAL

REVISION:

1

DATE:

13/10/22

## Introduction

The term Proposed Building in this report refers to the Grey House Precinct development at Pymble Ladies College.

This report is a peer review of the accuracy of shadow diagrams provided by the architects BVN. The report provides comparison images of the shadow diagrams created by BVN and mirroring diagrams created by Certified Energy. Any minor differences evident between shadows cast may be attributed to slightly inconsequential changes in terrain level modelling between consultants.

We find that the shadows provided by BVN are suitable and an appropriate representation of the shadows that would be cast by the proposed building at Pymble Ladies College.

## Disclaimer

This report is based on the information available on the supplied drawings and data available at the time of writing. All daylight data is geolocated to Pymble Ladies College, 20 Avon Rd, Pymble, NSW, 2073 for 2022. Daylight data may vary for other years.

Dimensions: The dimensions used in this report are scaled from the supplied project documents or stated otherwise. There may be some minor variation between the scaled dimensions, estimated dimensions and the actual dimensions on site.

## Referenced Documents

Architectural Plans and Data provided by Client –

Shadow Diagrams - Survey Plans - Pymble Ladies College by BVN - Revision

05/04/2022

Site Data –

Elevation Data of Sydney: Nearmap

Aerial Site Photography - Provided by SIX MAPS NSW

3D Contextual Model – URBANFINITY- Generated 13/07/2022



Jamie Bonnefin

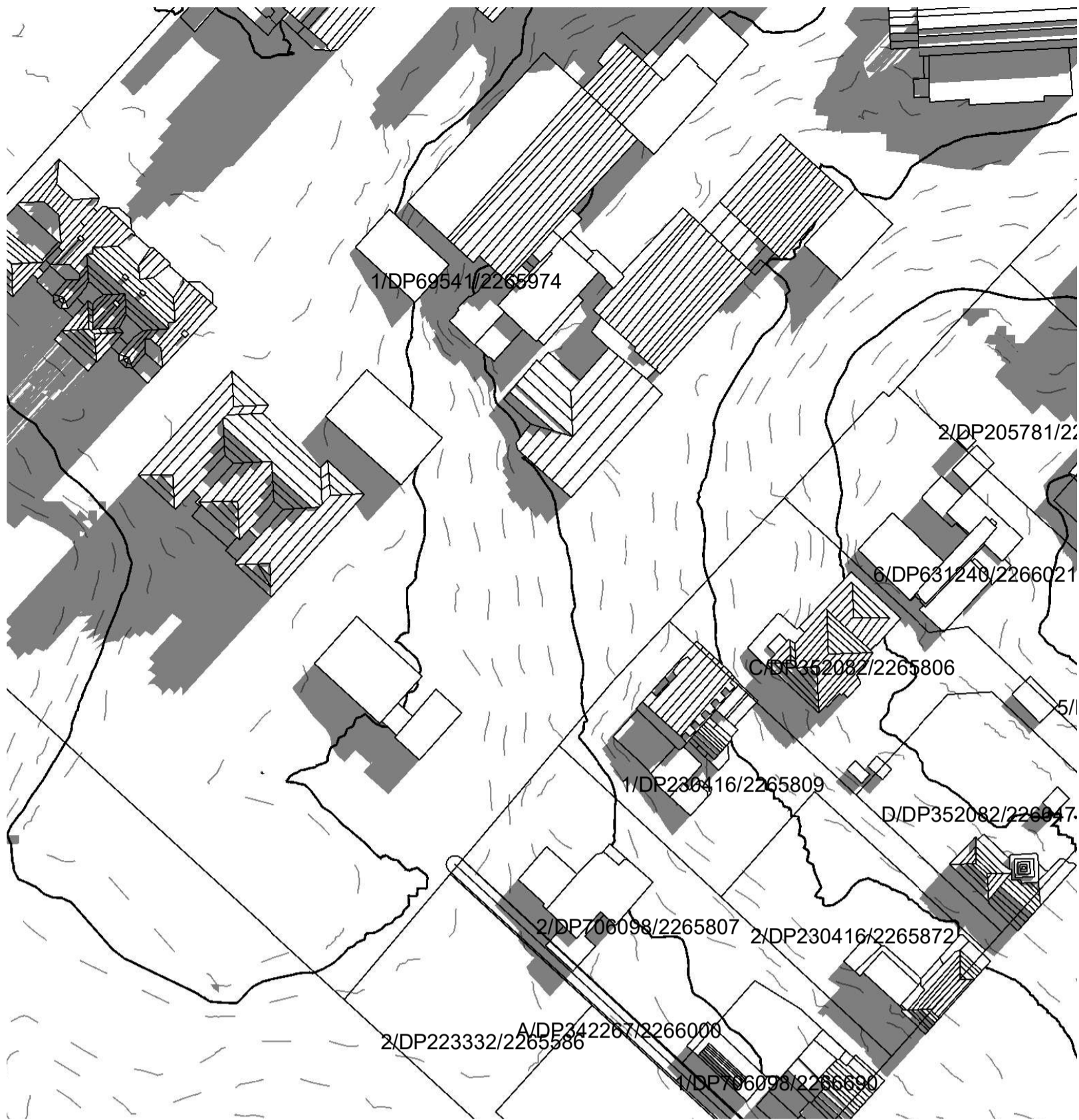
BSc(Architecture) M.Arch

Director

Certified Energy



1a. Existing Shadow\_21JUN\_9am  
Drawing by BVN

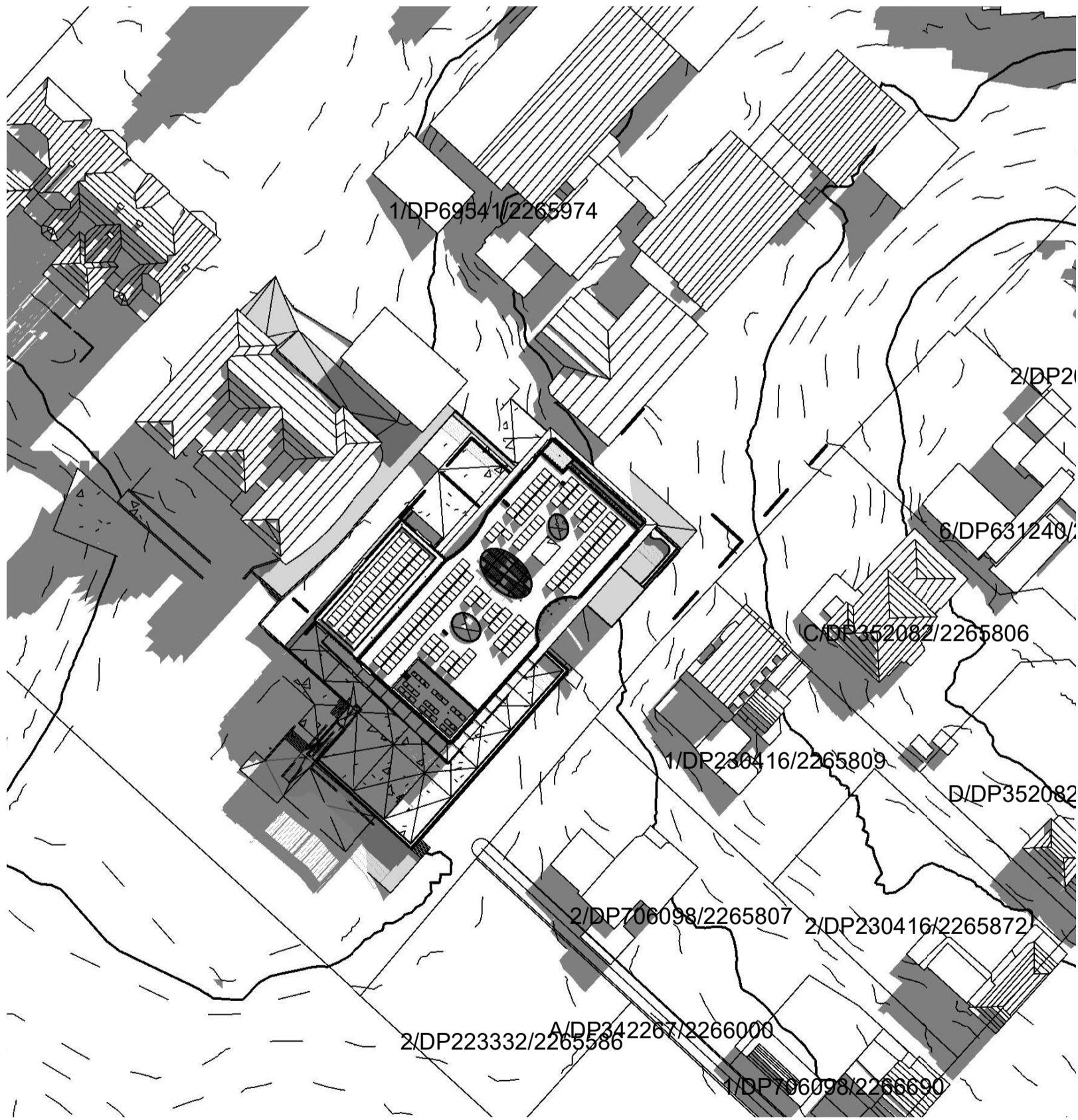


1b. Existing Shadow\_21JUN\_9am  
Drawing by Certified Energy

Existing Shadows diagrams produced at 9am on 21st June are generally consistant.



1c. Proposed Shadow\_21JUN\_9am  
Drawing by BVN

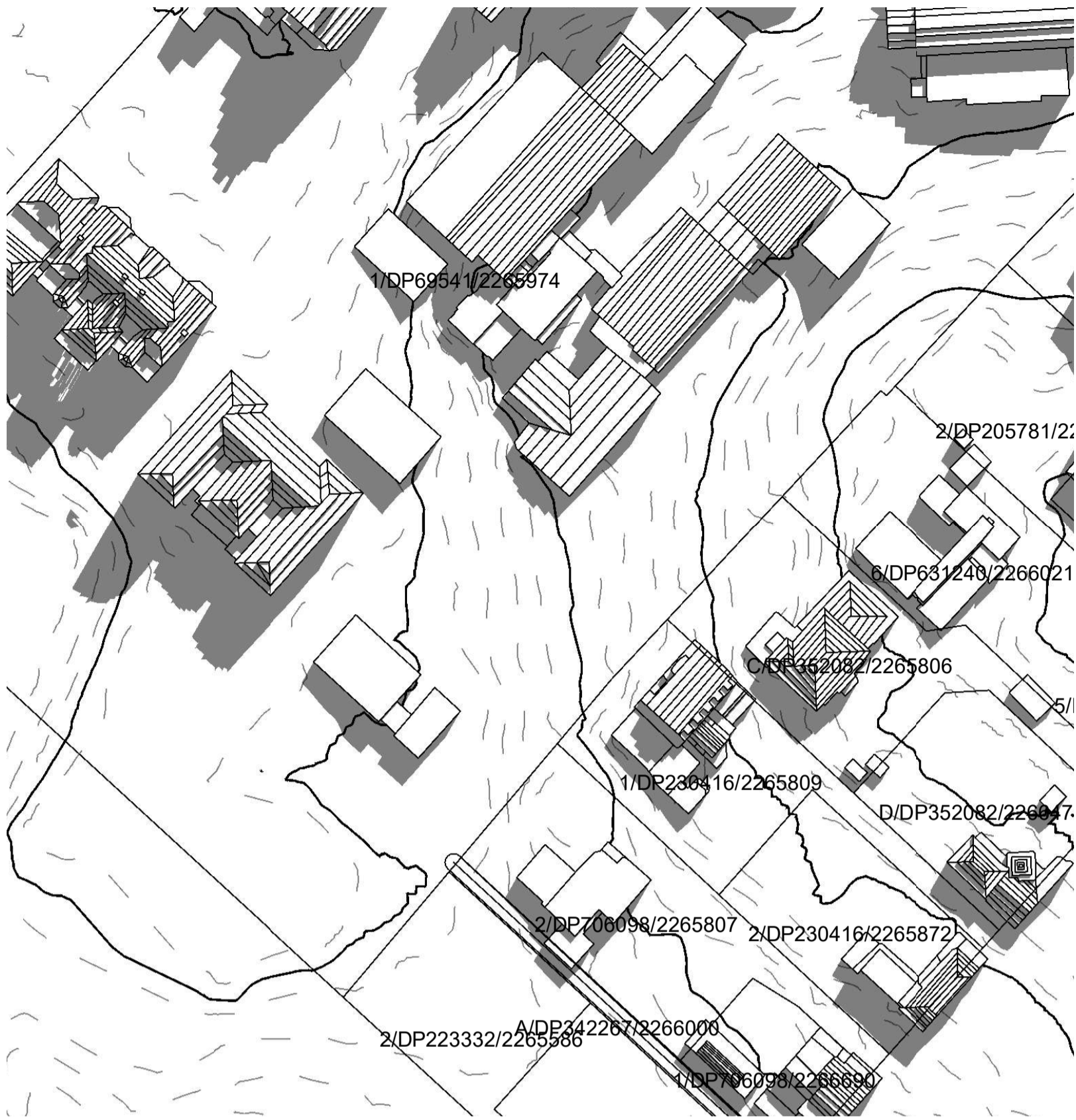


1d. Proposed Shadow\_21JUN\_9am  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 9am on 21st June are generally consistant.

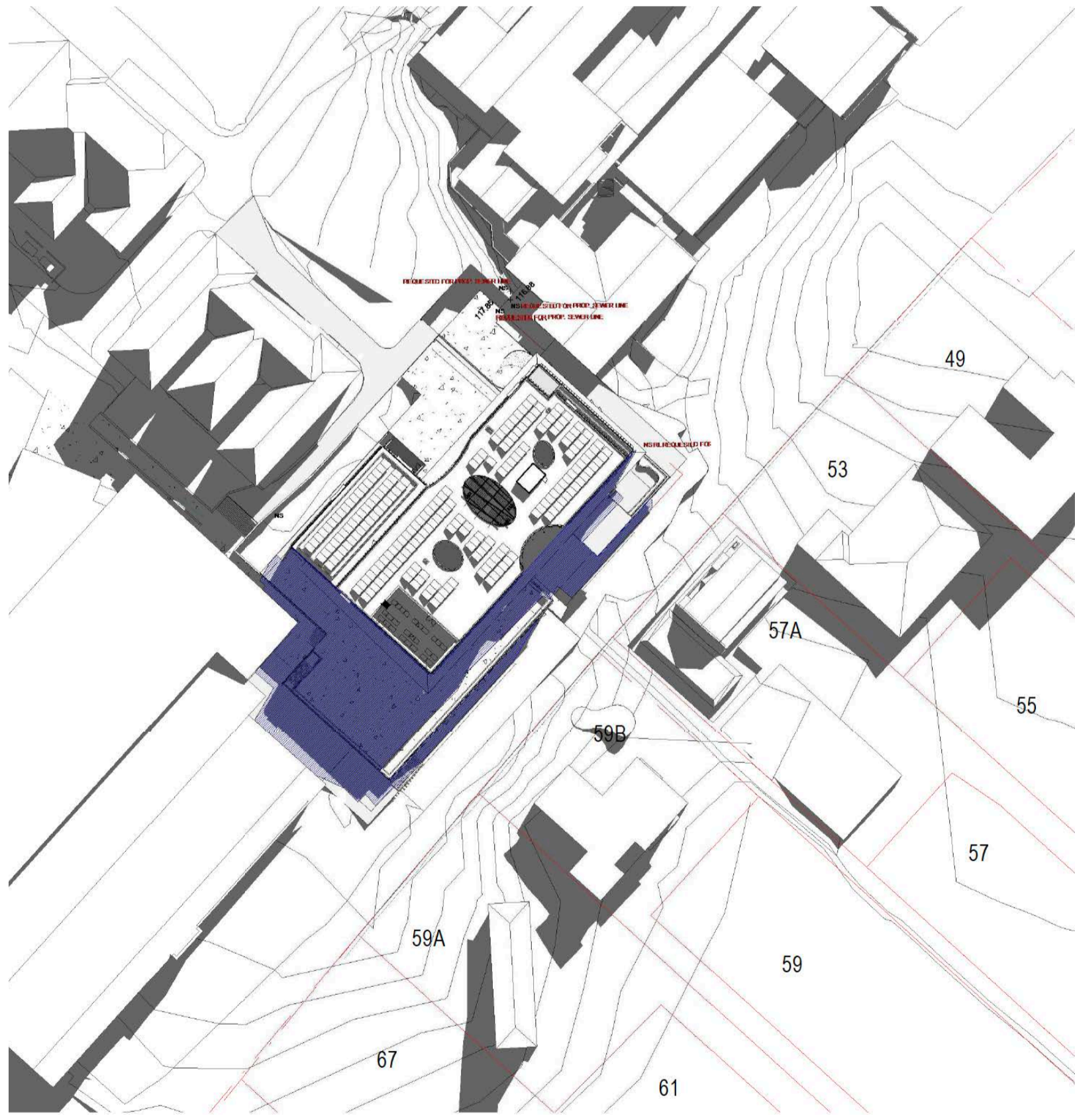


2a. Existing Shadow\_21JUN\_10am  
Drawing by BVN

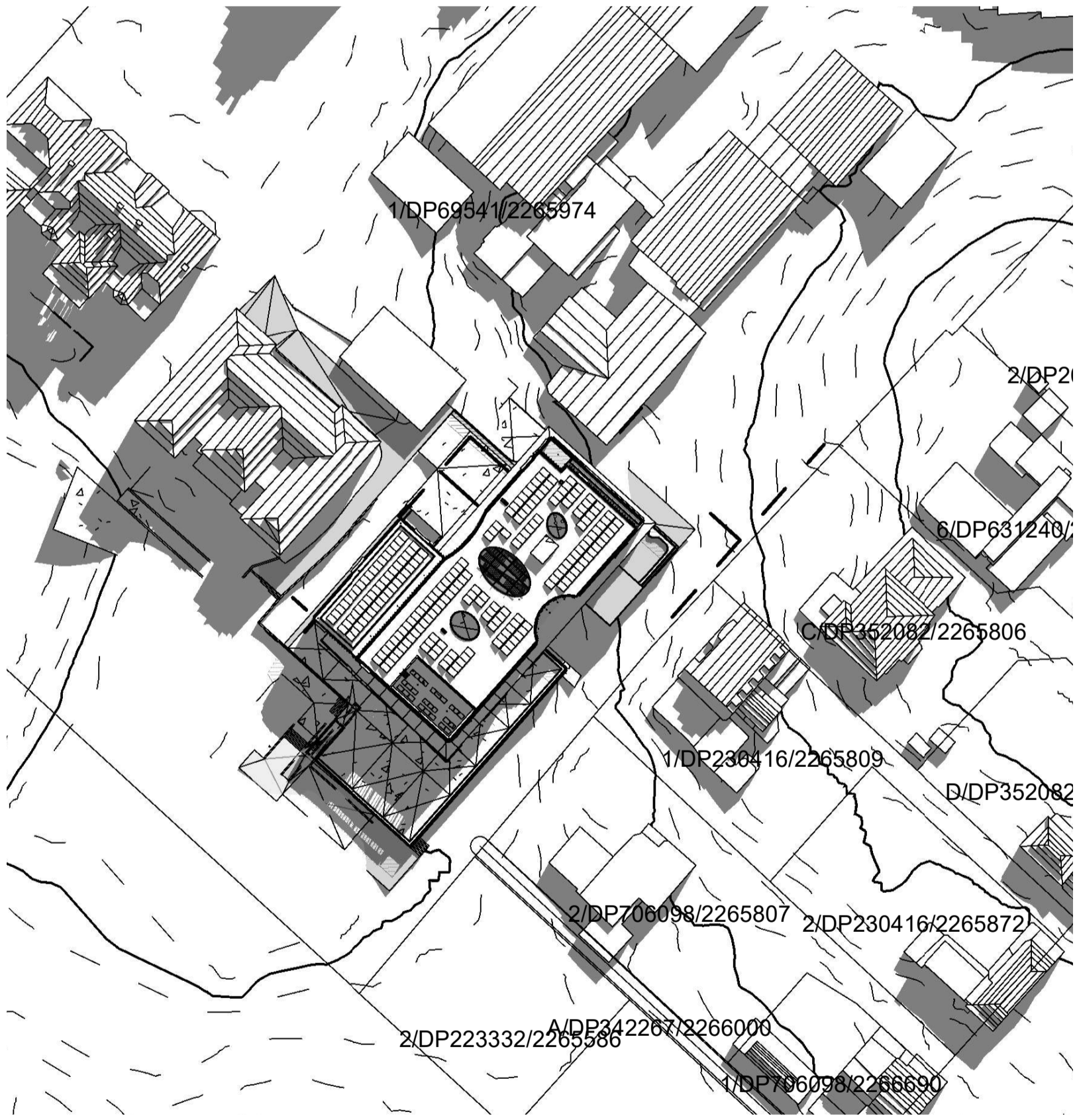


2b. Existing Shadow\_21JUN\_10am  
Drawing by Certified Energy

Existing Shadows diagrams produced at 10am on 21st June are generally consistant.



2c. Proposed Shadow\_21JUN\_10am  
Drawing by BVN

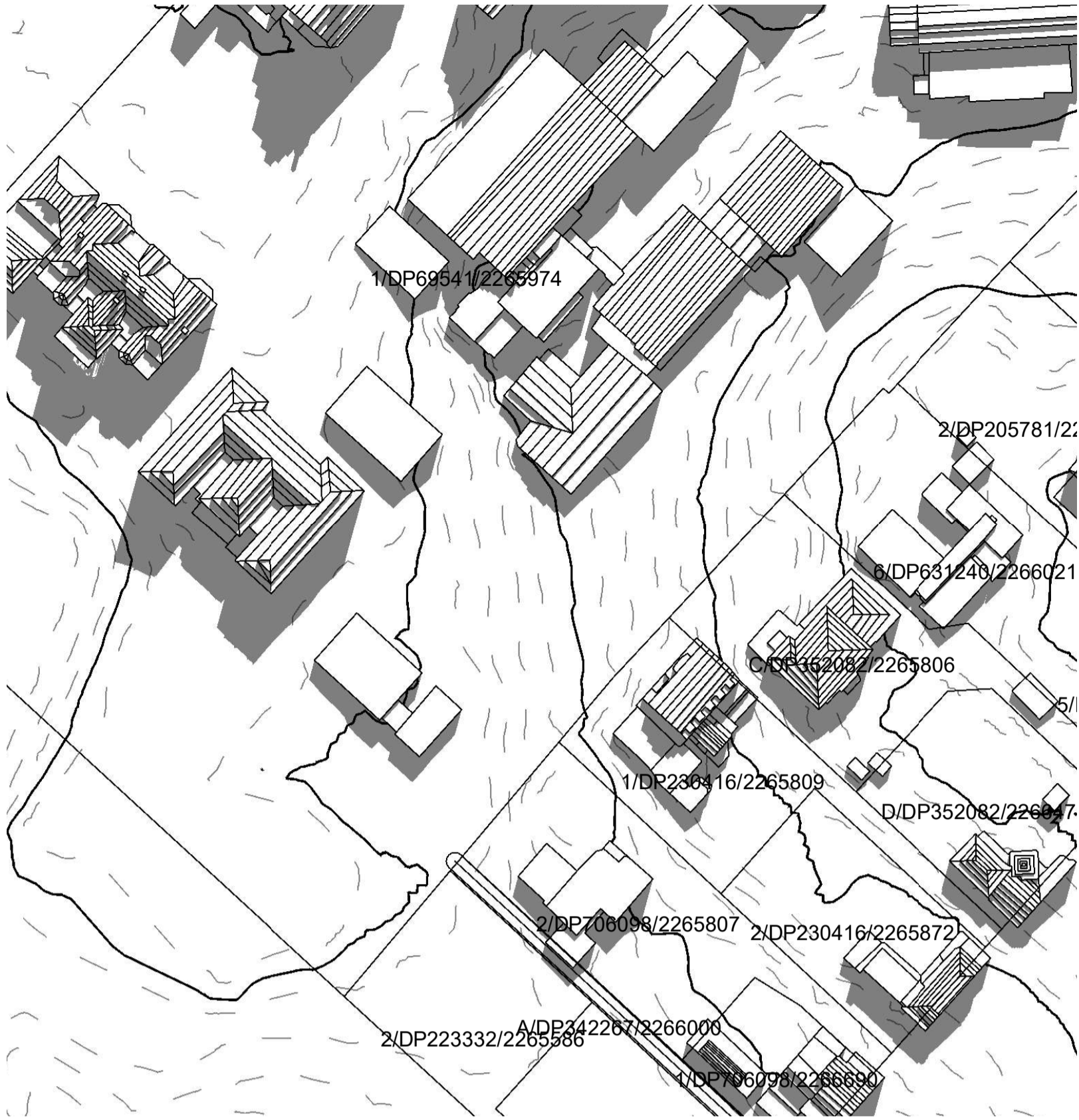


2d. Proposed Shadow\_21JUN\_10am  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 10am on 21st June are generally consistant.

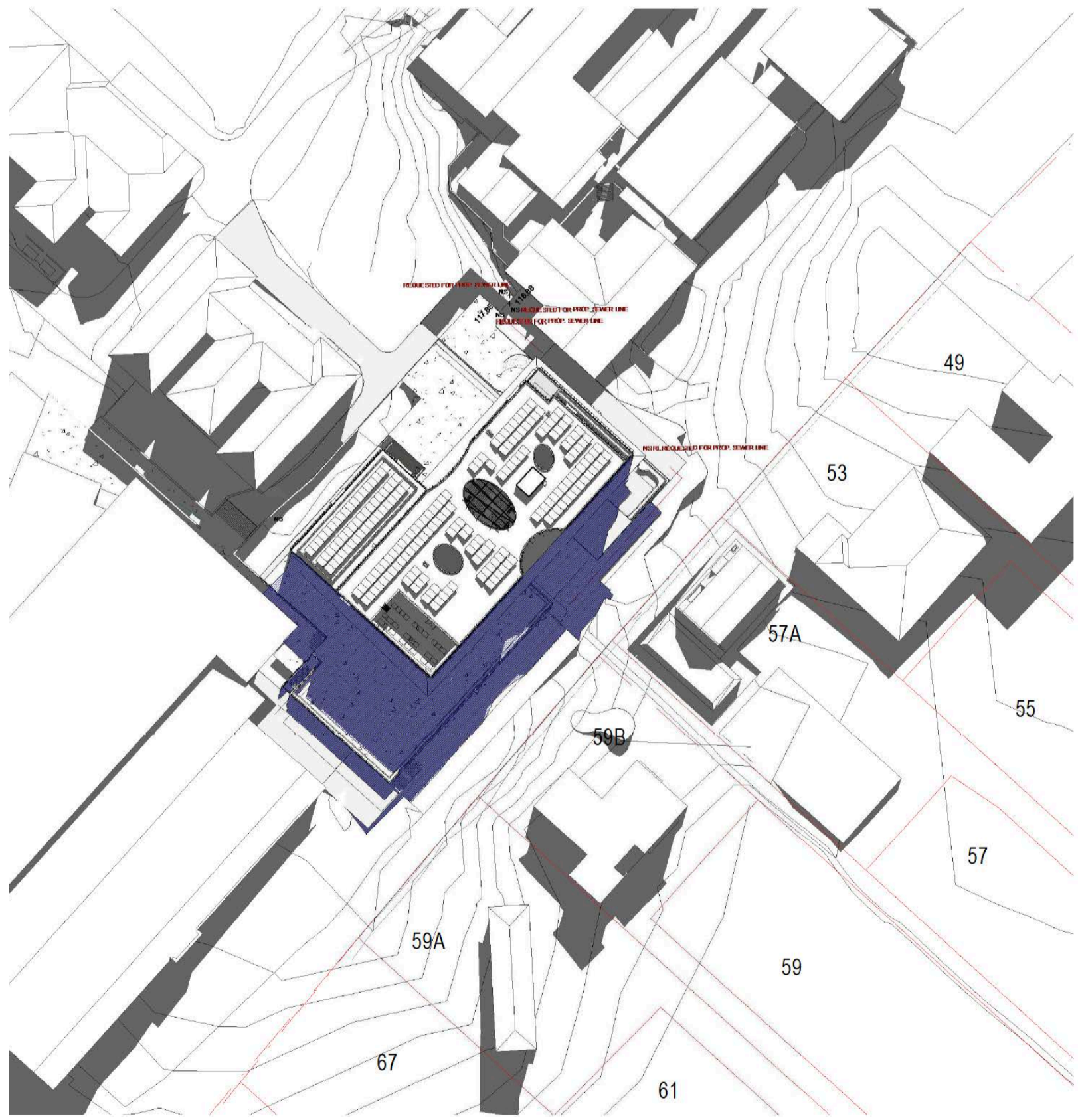


3a. Existing Shadow\_21JUN\_11am  
Drawing by BVN

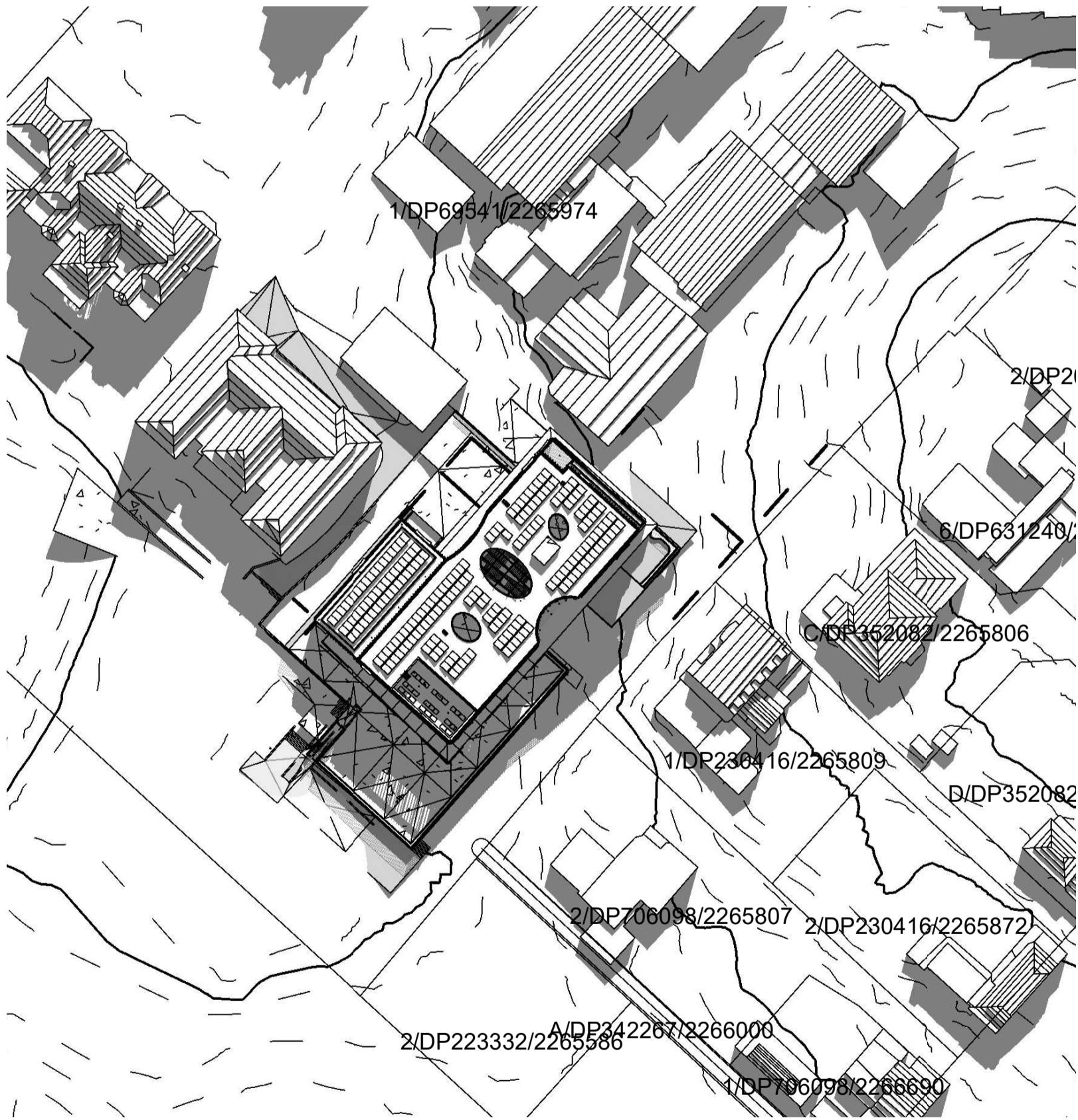


3b. Existing Shadow\_21JUN\_11am  
Drawing by Certified Energy

Existing Shadows diagrams produced at 11am on 21st June are generally consistant.



3c. Proposed Shadow\_21JUN\_11am  
Drawing by BVN

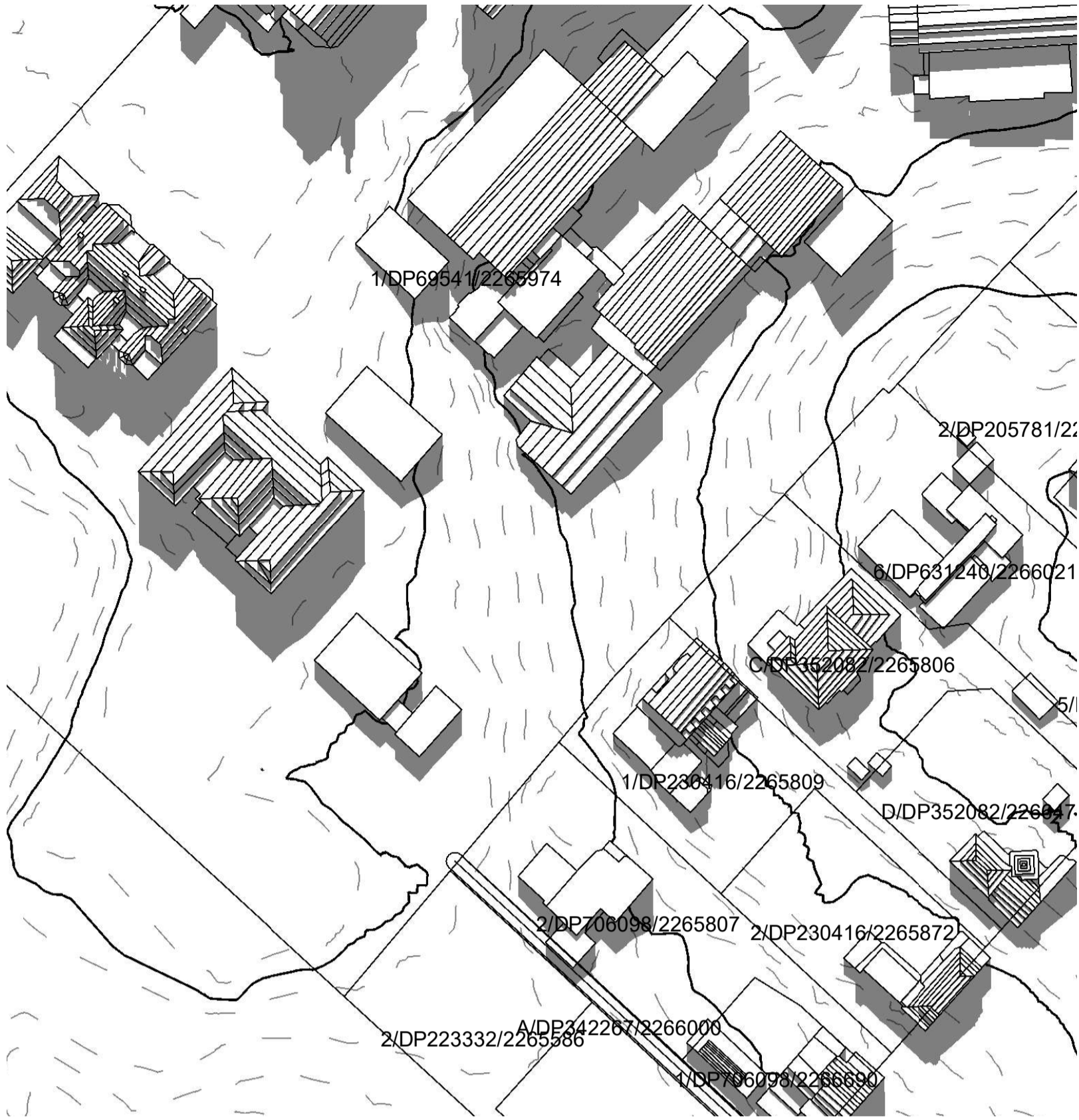


3d. Proposed Shadow\_21JUN\_11am  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 11am on 21st June are generally consistant.

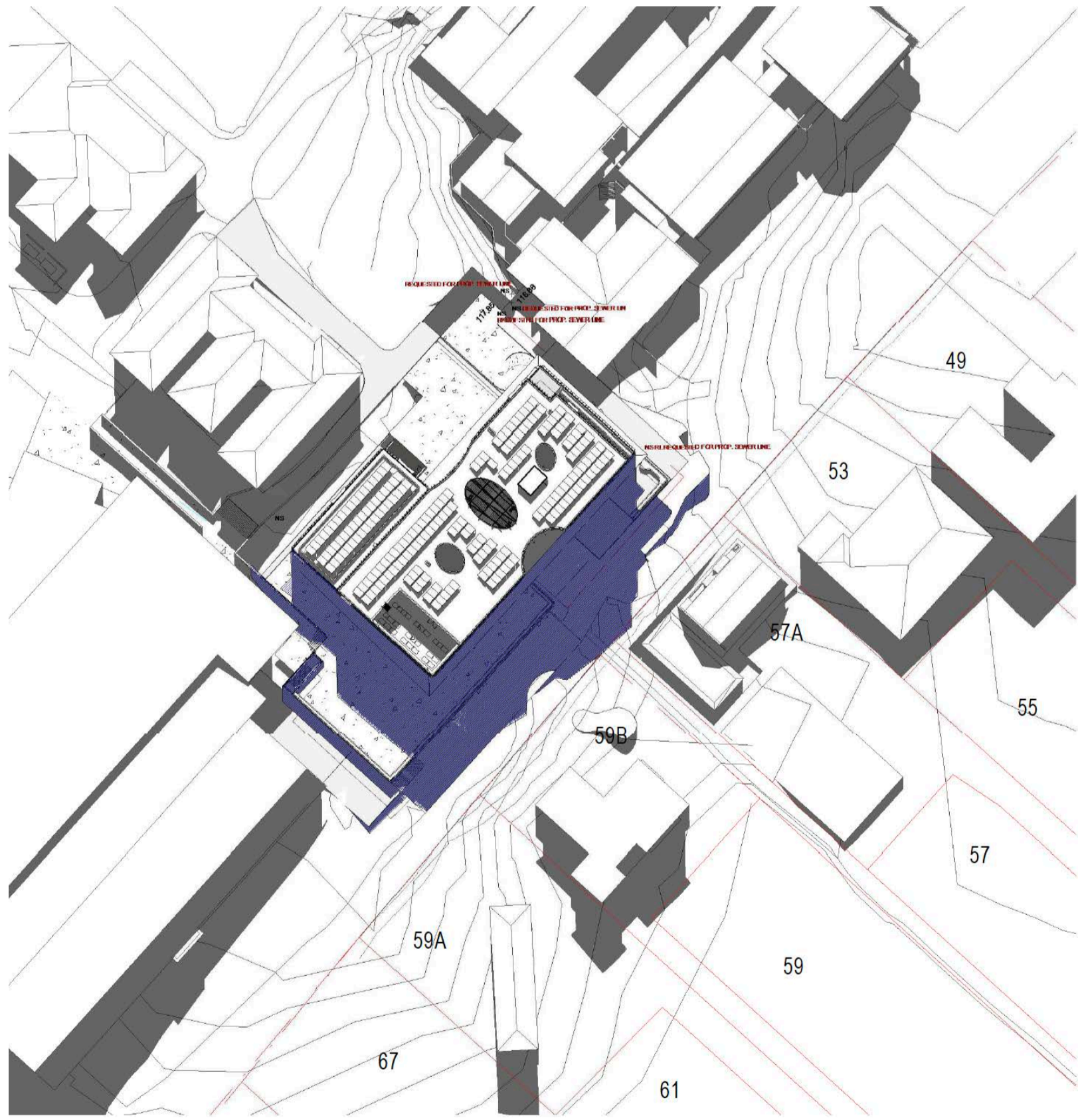


4a. Existing Shadow\_21JUN\_12pm  
Drawing by BVN

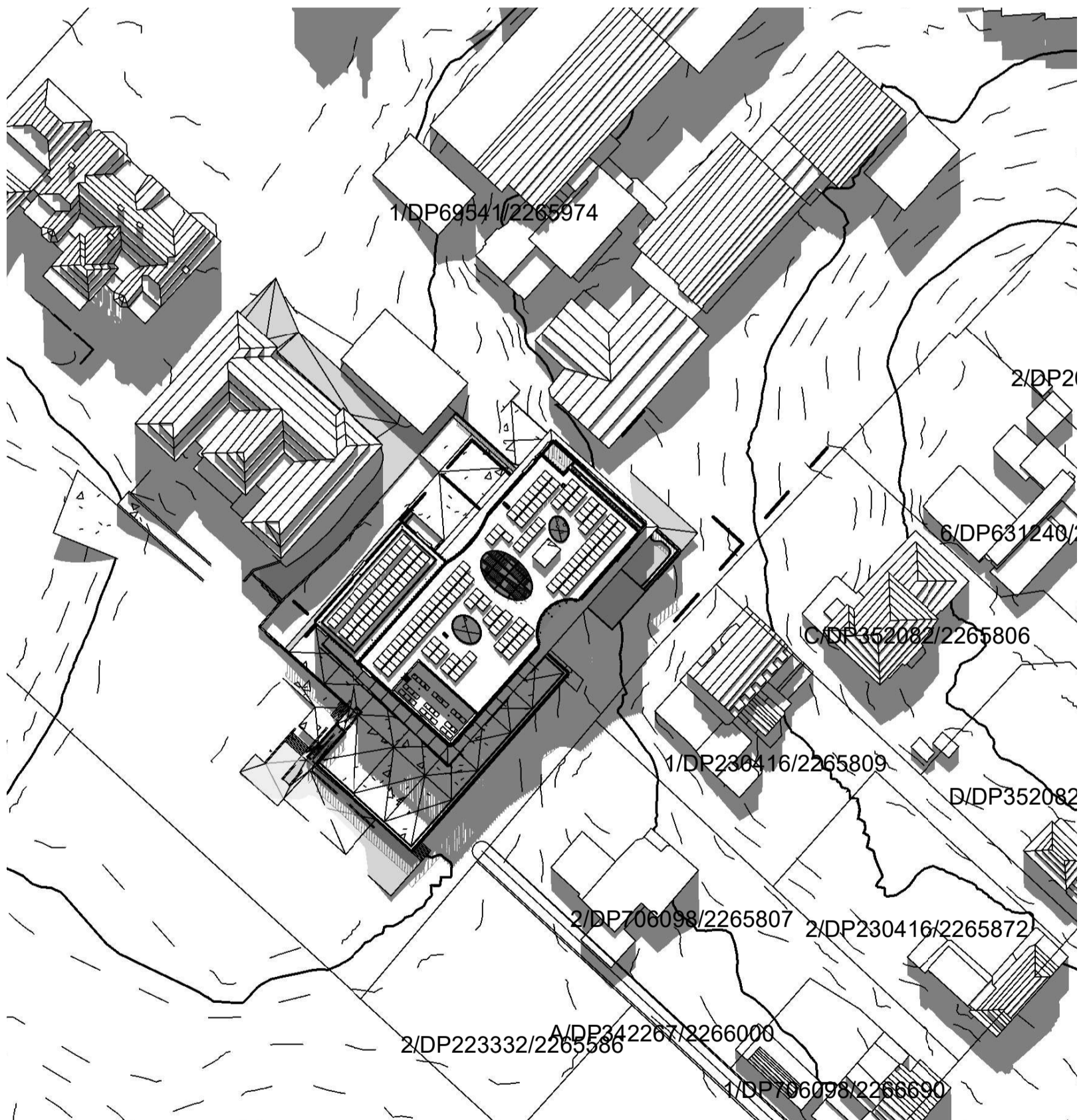


4b. Existing Shadow\_21JUN\_12pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 12pm on 21st June are generally consistant.

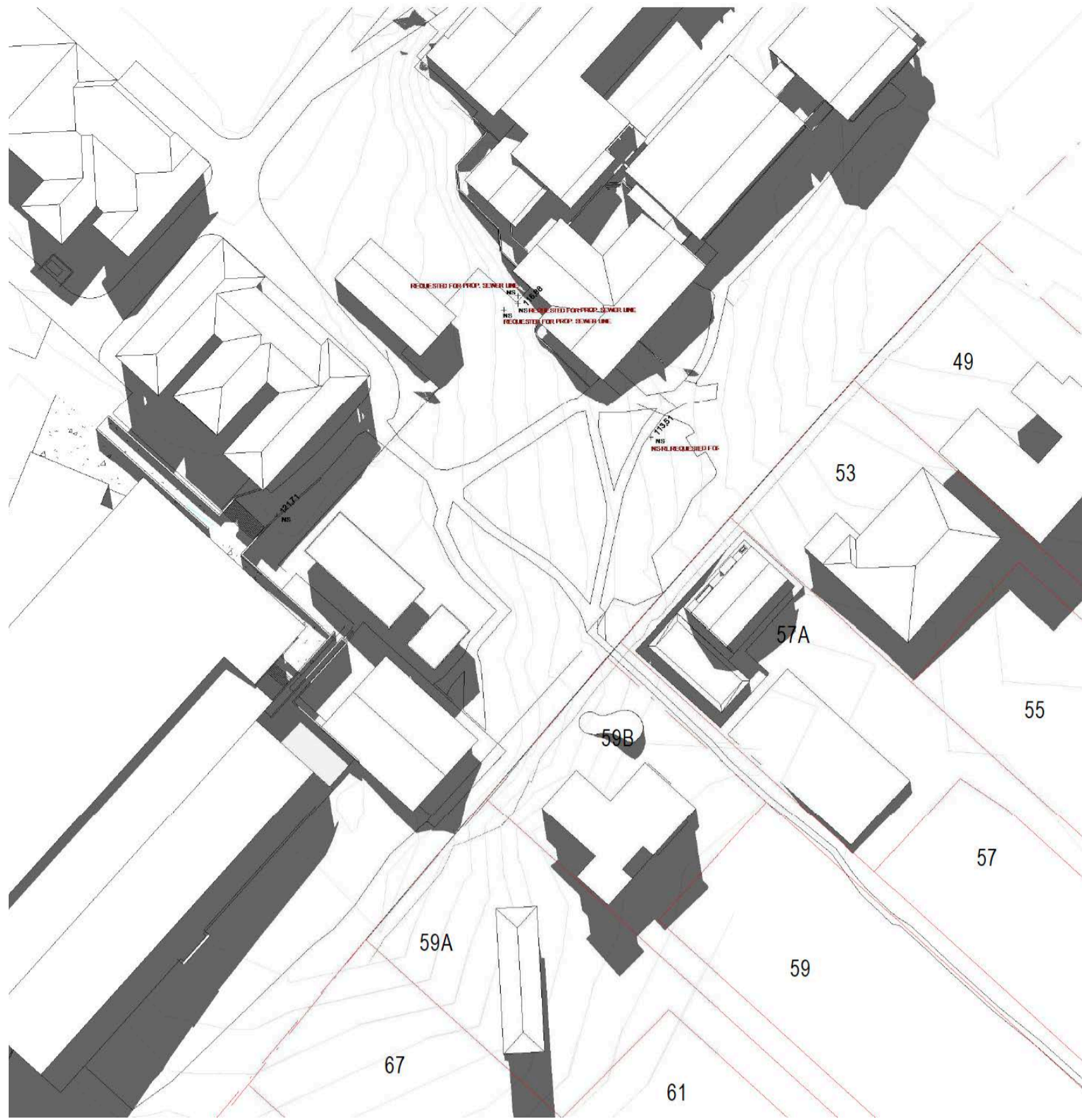


4c. Proposed Shadow\_21JUN\_12pm  
Drawing by BVN

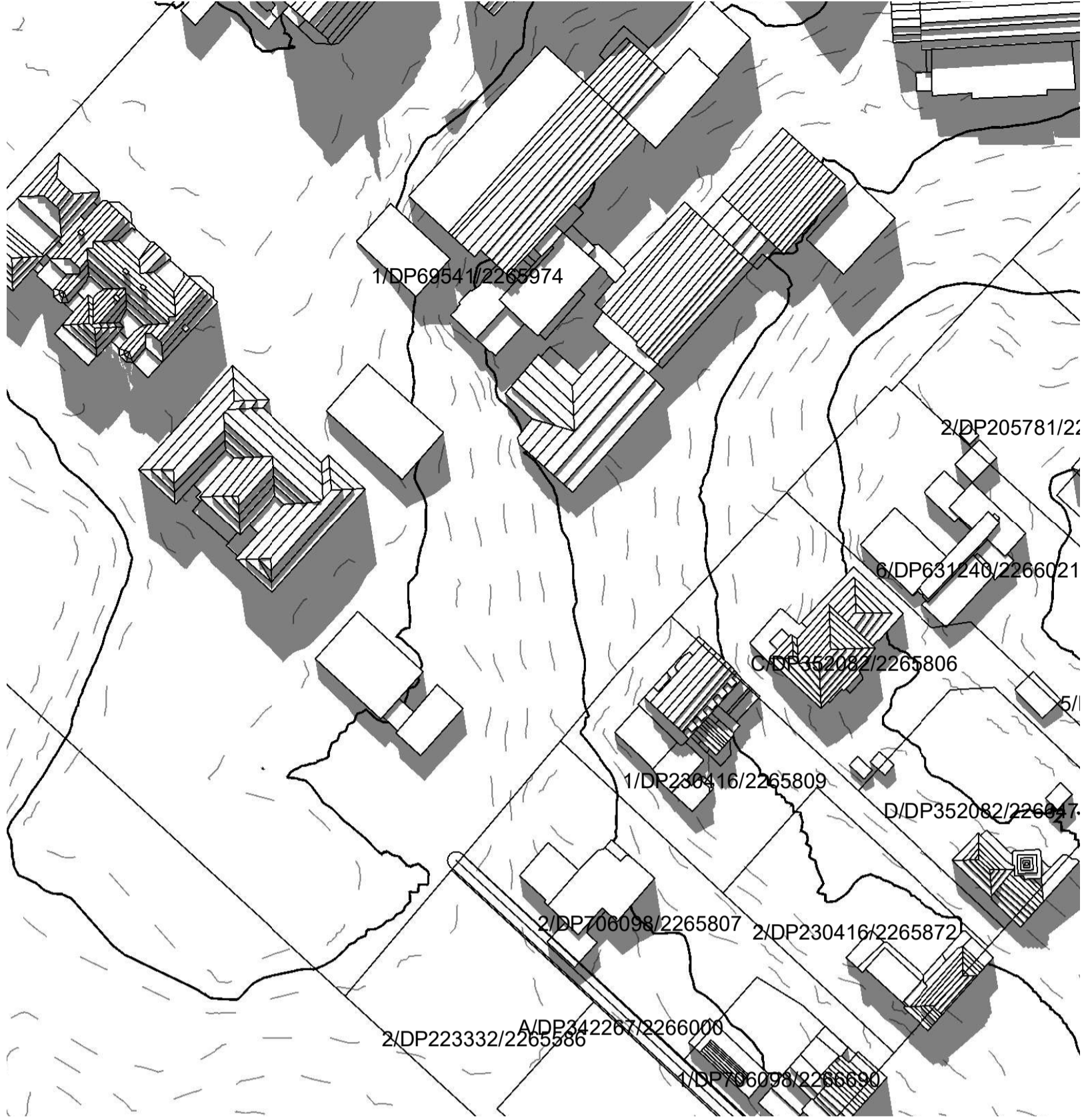


4d. Proposed Shadow\_21JUN\_12pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 12pm on 21st June are generally consistant.



5a. Existing Shadow\_21JUN\_12:30pm  
Drawing by BVN

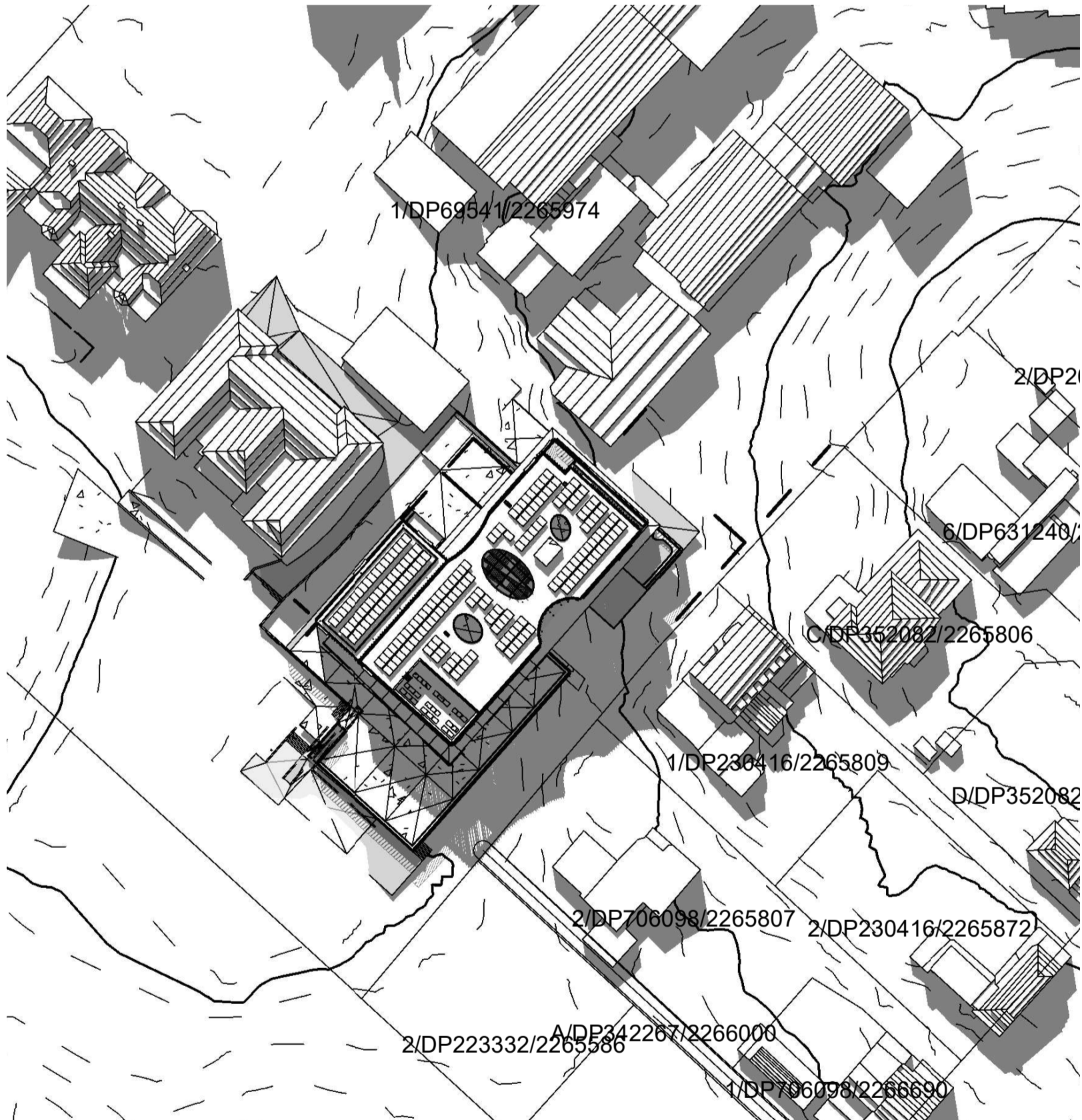


5b. Existing Shadow\_21JUN\_12:30pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 12:30pm on 21st June are generally consistant.



5c. Proposed Shadow\_21JUN\_12:30pm  
Drawing by BVN

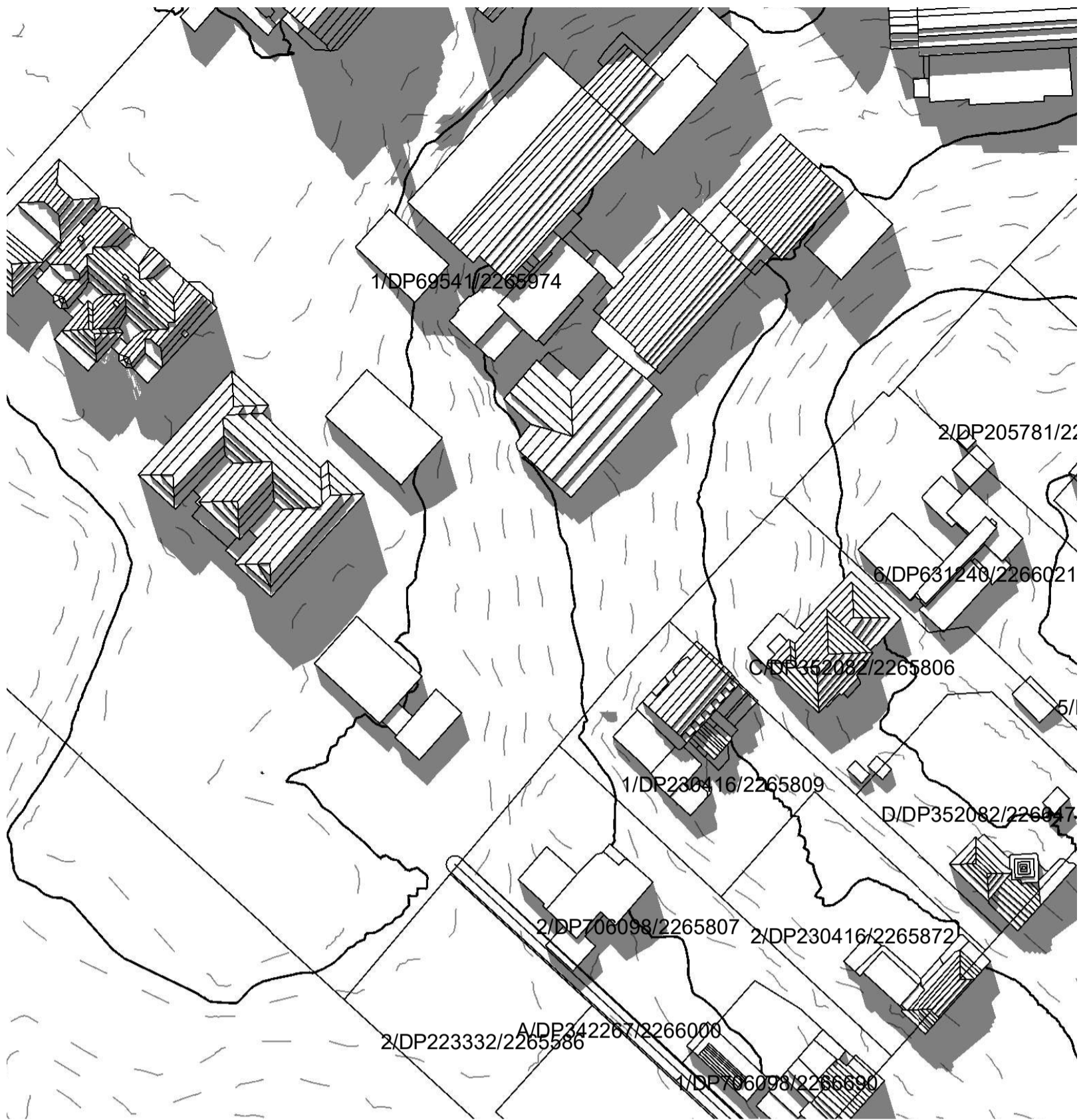


5d. Proposed Shadow\_21JUN\_12:30pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 12:30pm on 21st June are generally consistant.



6a. Existing Shadow\_21JUN\_1pm  
Drawing by BVN

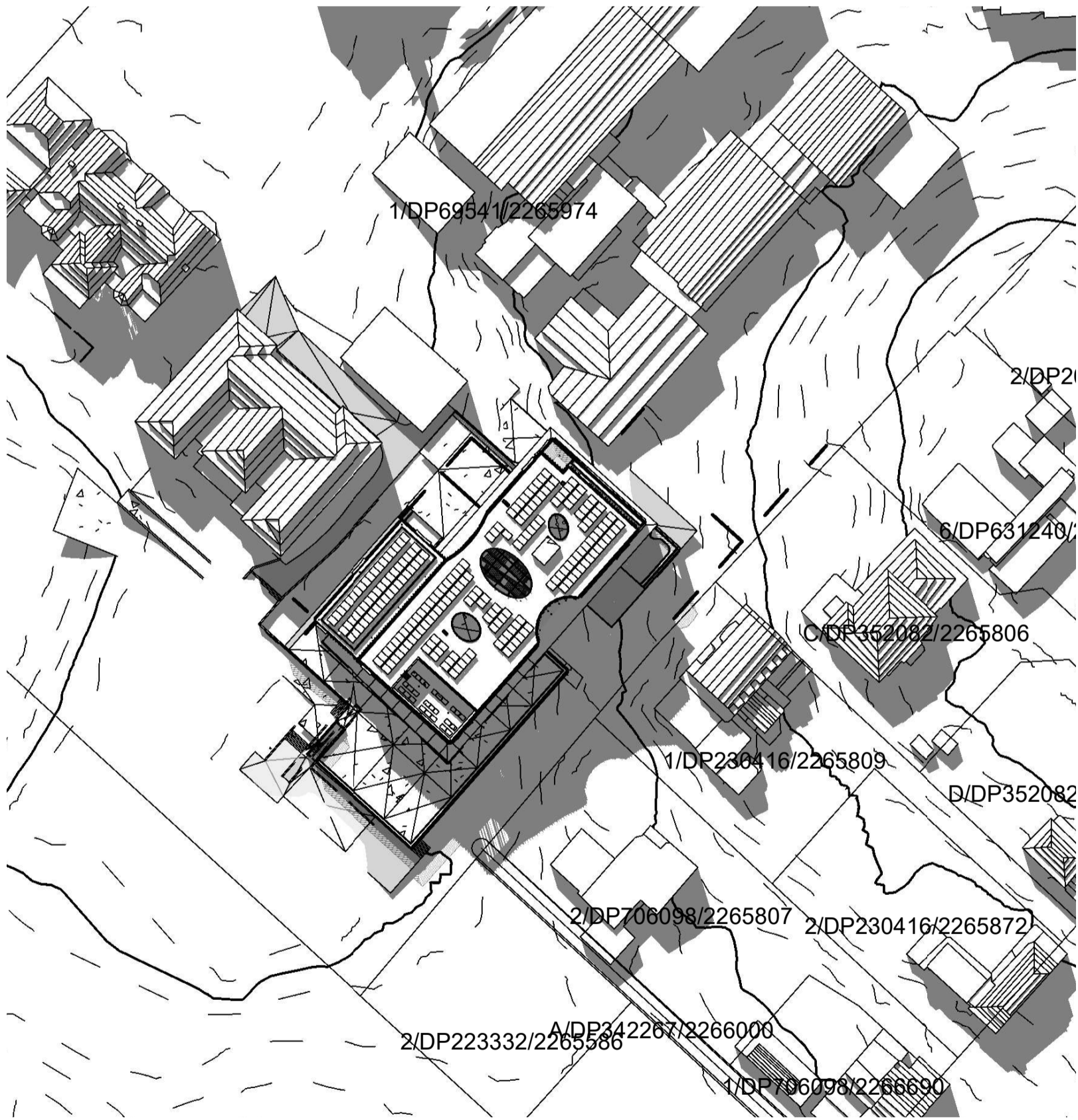


6b. Existing Shadow\_21JUN\_1pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 1pm on 21st June are generally consistant.



6c. Proposed Shadow\_21JUN\_1pm  
Drawing by BVN

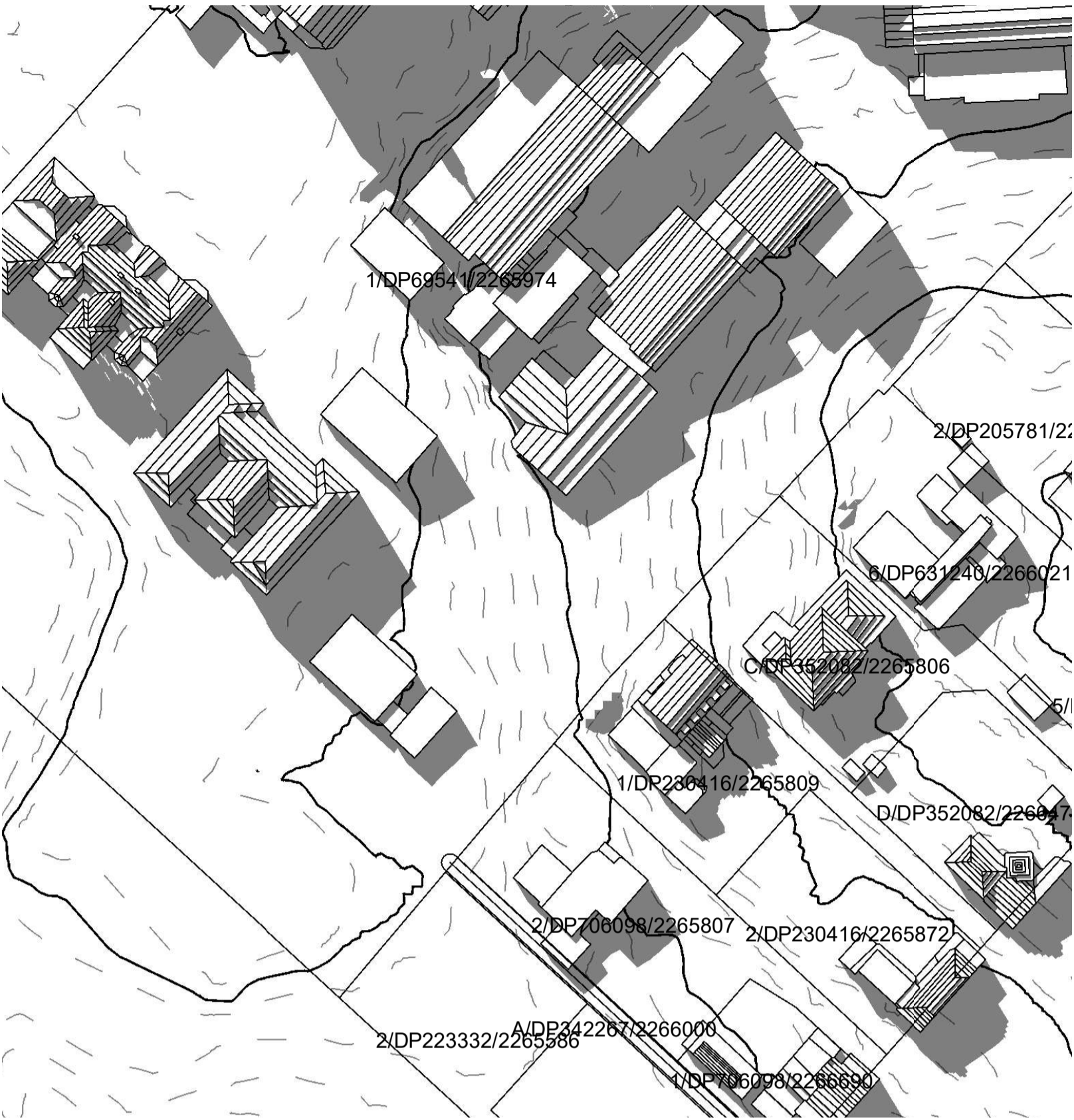


6d. Proposed Shadow\_21JUN\_1pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 1pm on 21st June are generally consistant.

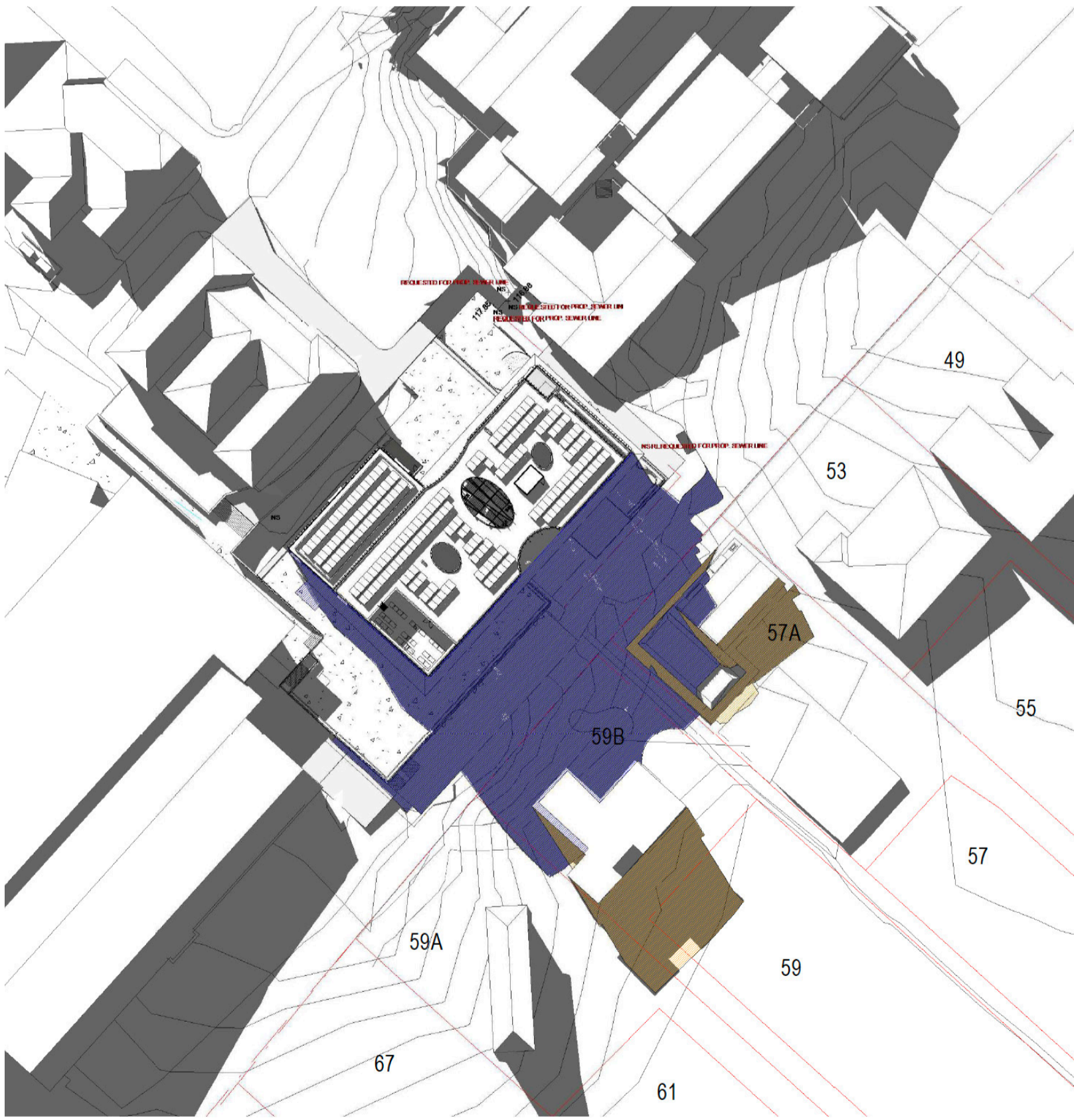


7a. Existing Shadow\_21JUN\_2pm  
Drawing by BVN

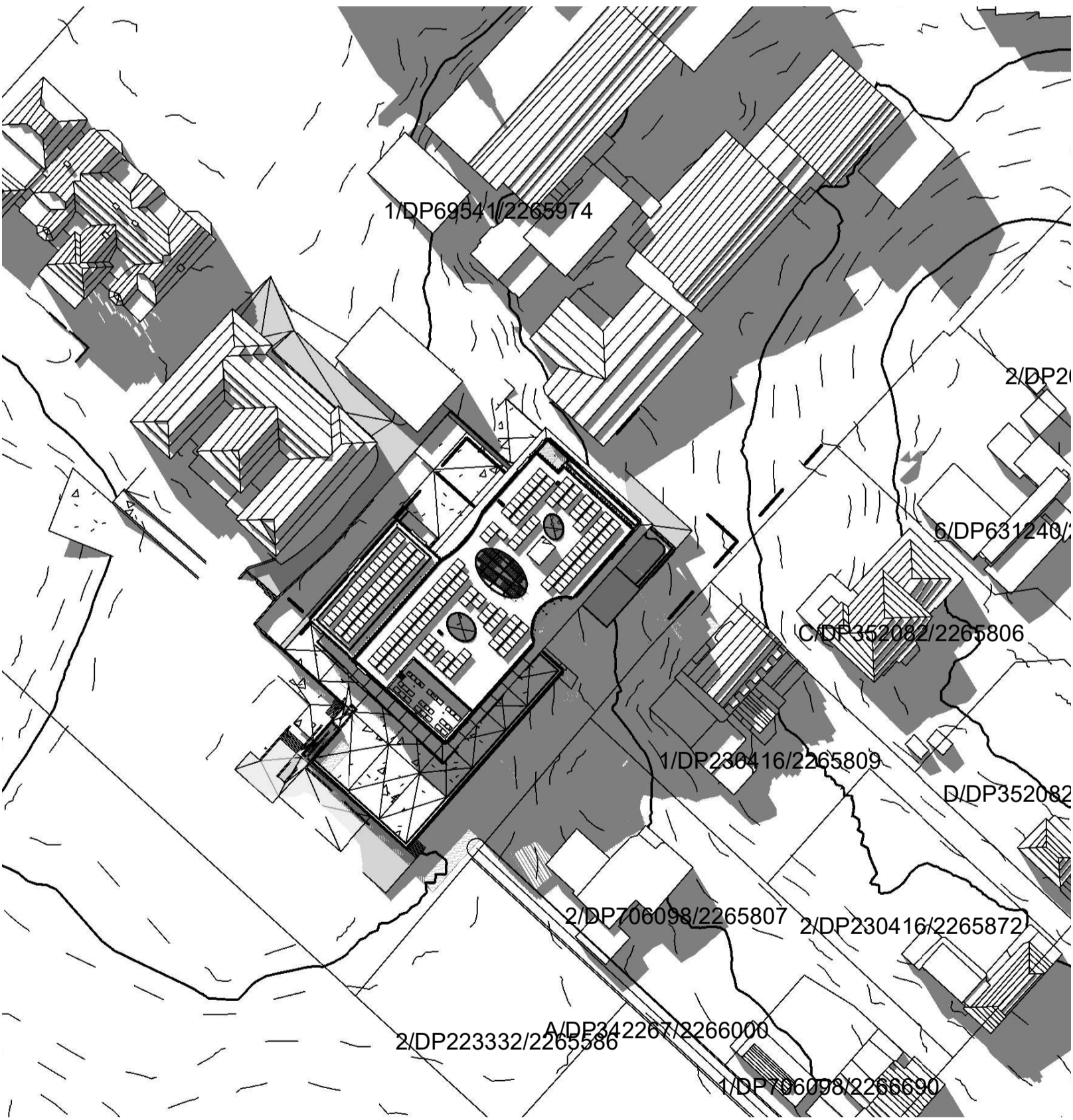


7b. Existing Shadow\_21JUN\_2pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 2pm on 21st June are generally consistant.

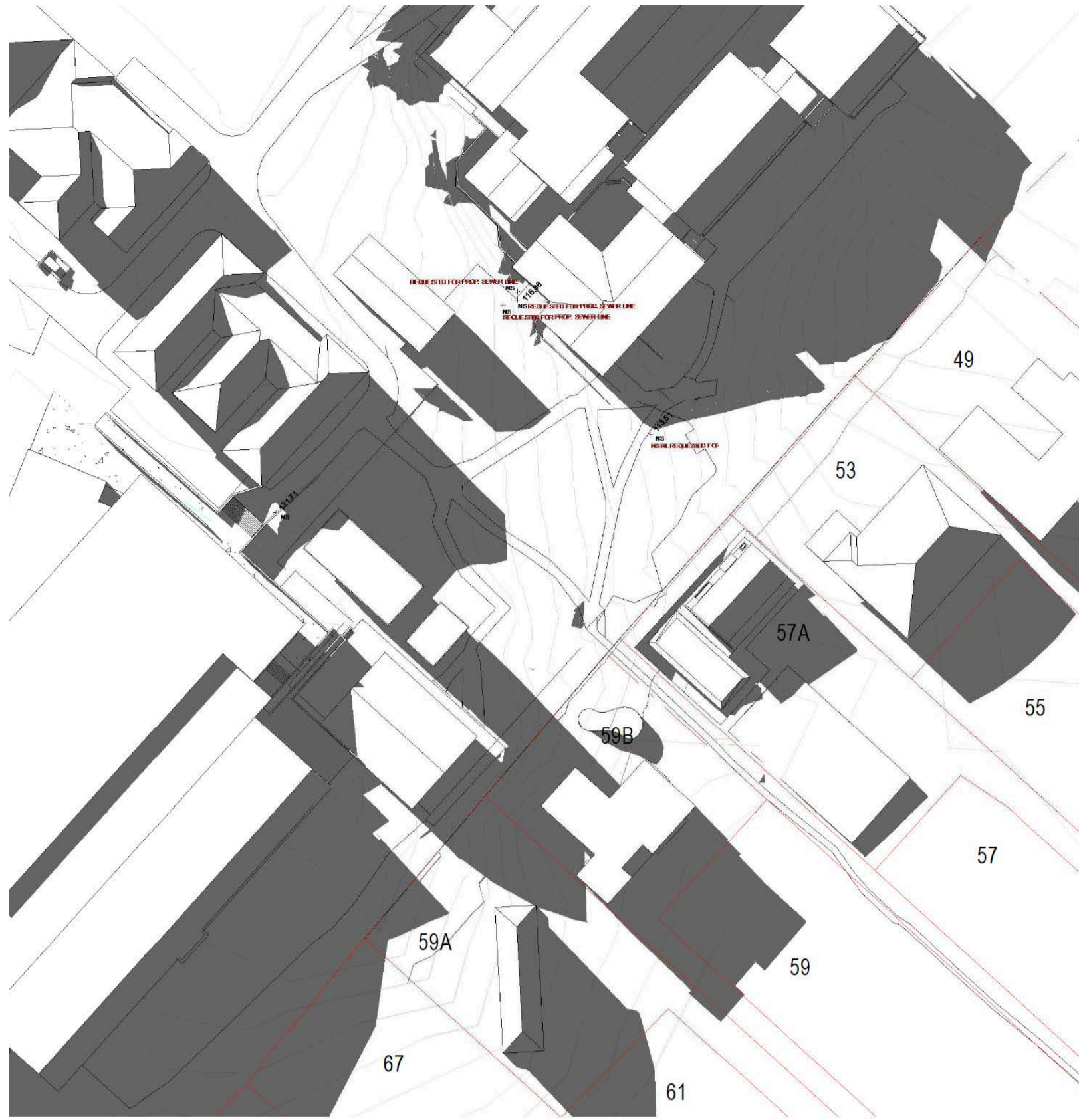


7c. Proposed Shadow\_21JUN\_2pm  
Drawing by BVN

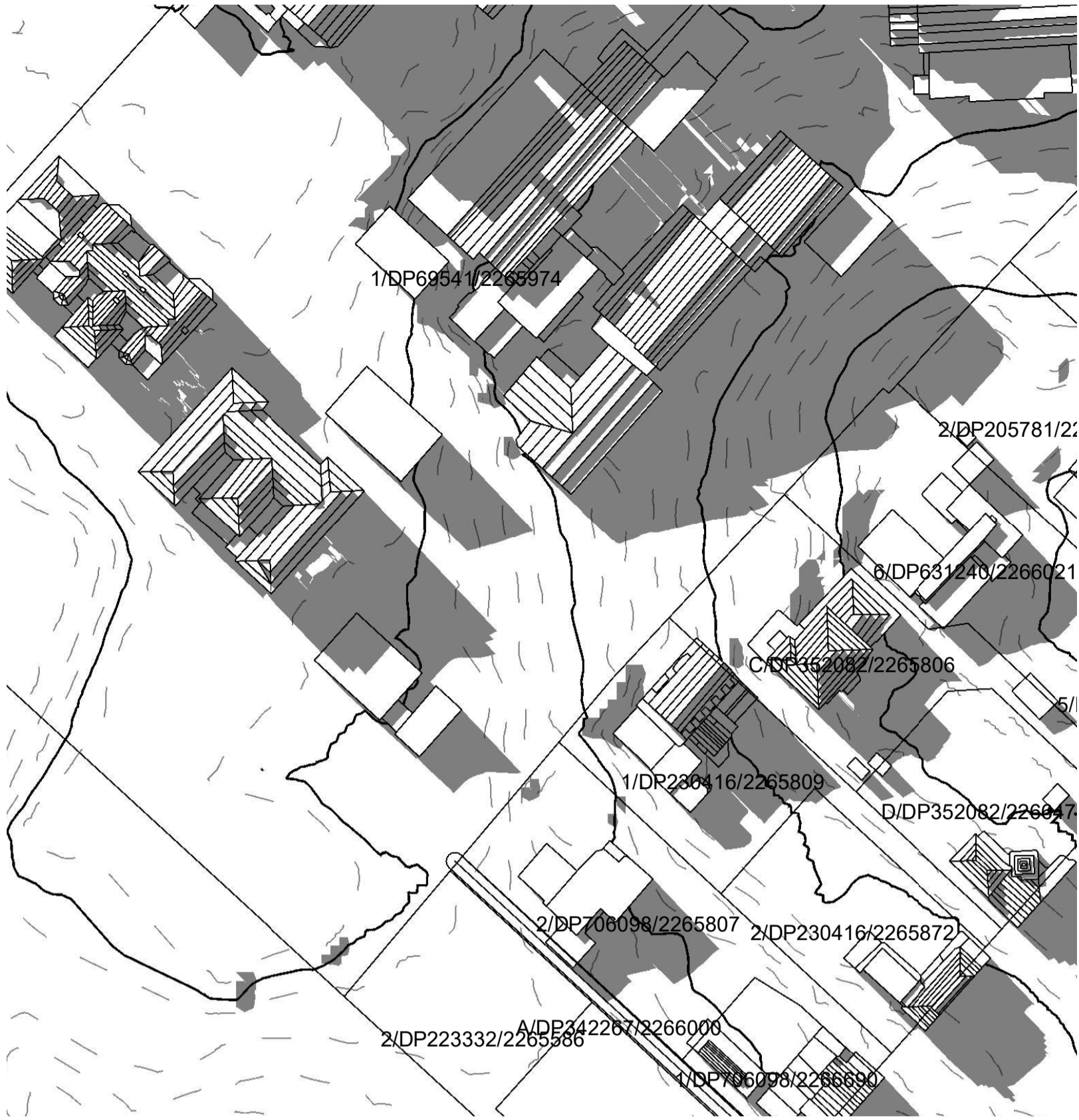


7d. Proposed Shadow\_21JUN\_2pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 2pm on 21st June are generally consistant.



8a. Existing Shadow\_21JUN\_3pm  
Drawing by BVN

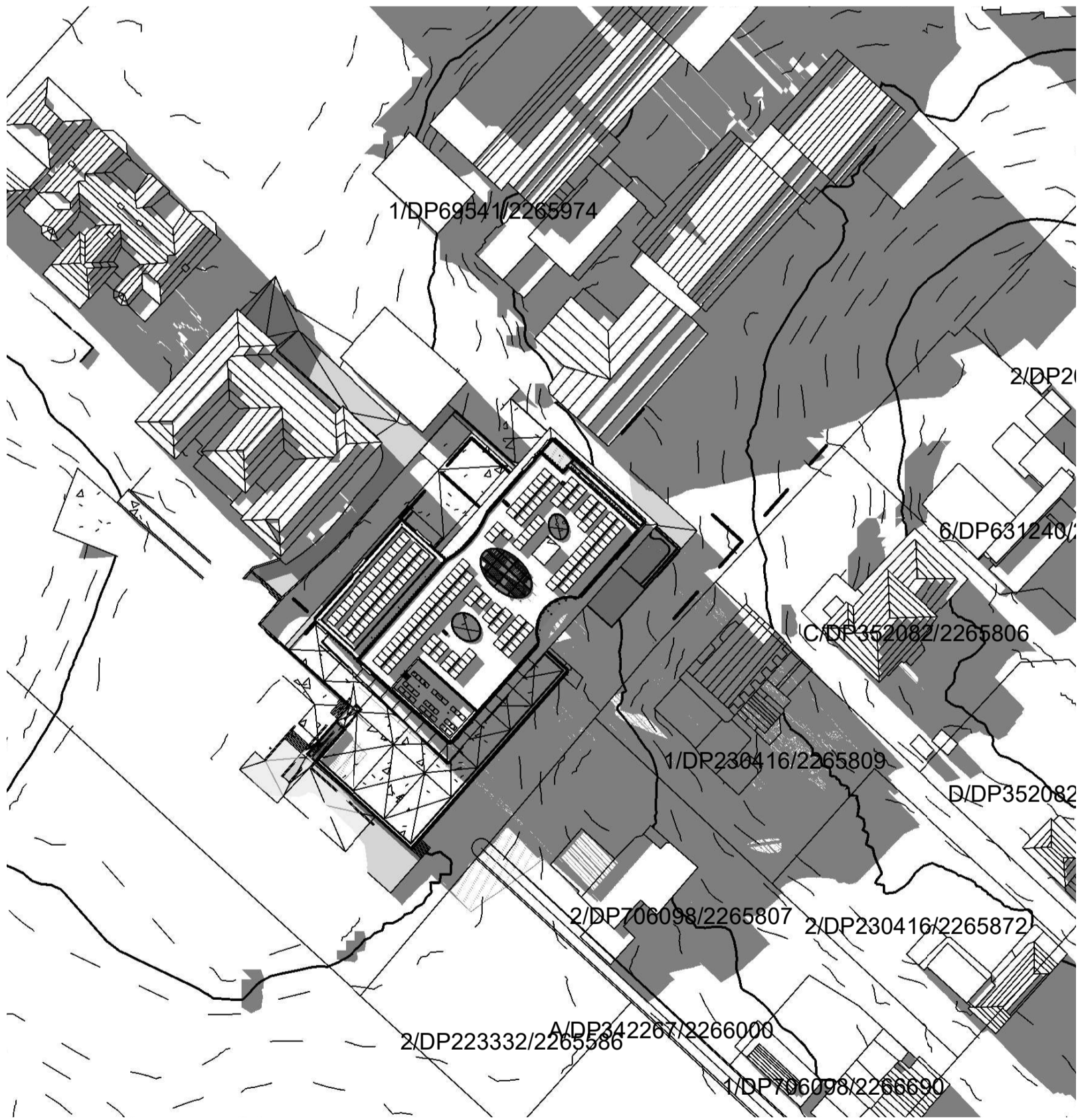


8b. Existing Shadow\_21JUN\_3pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 3pm on 21st June are generally consistant.

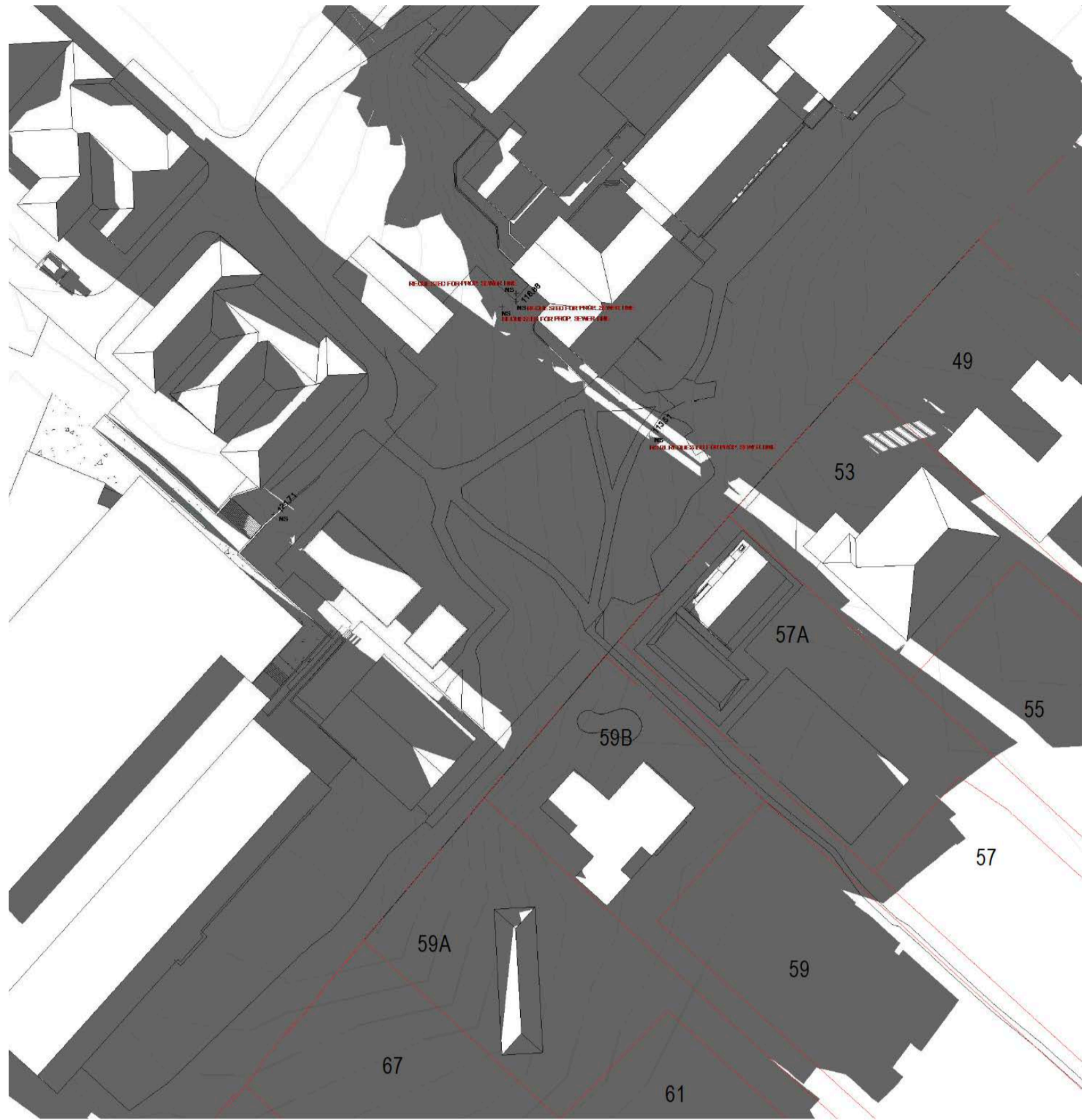


8c. Proposed Shadow\_21JUN\_3pm  
Drawing by BVN



8d. Proposed Shadow\_21JUN\_3pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 3pm on 21st June are generally consistant.

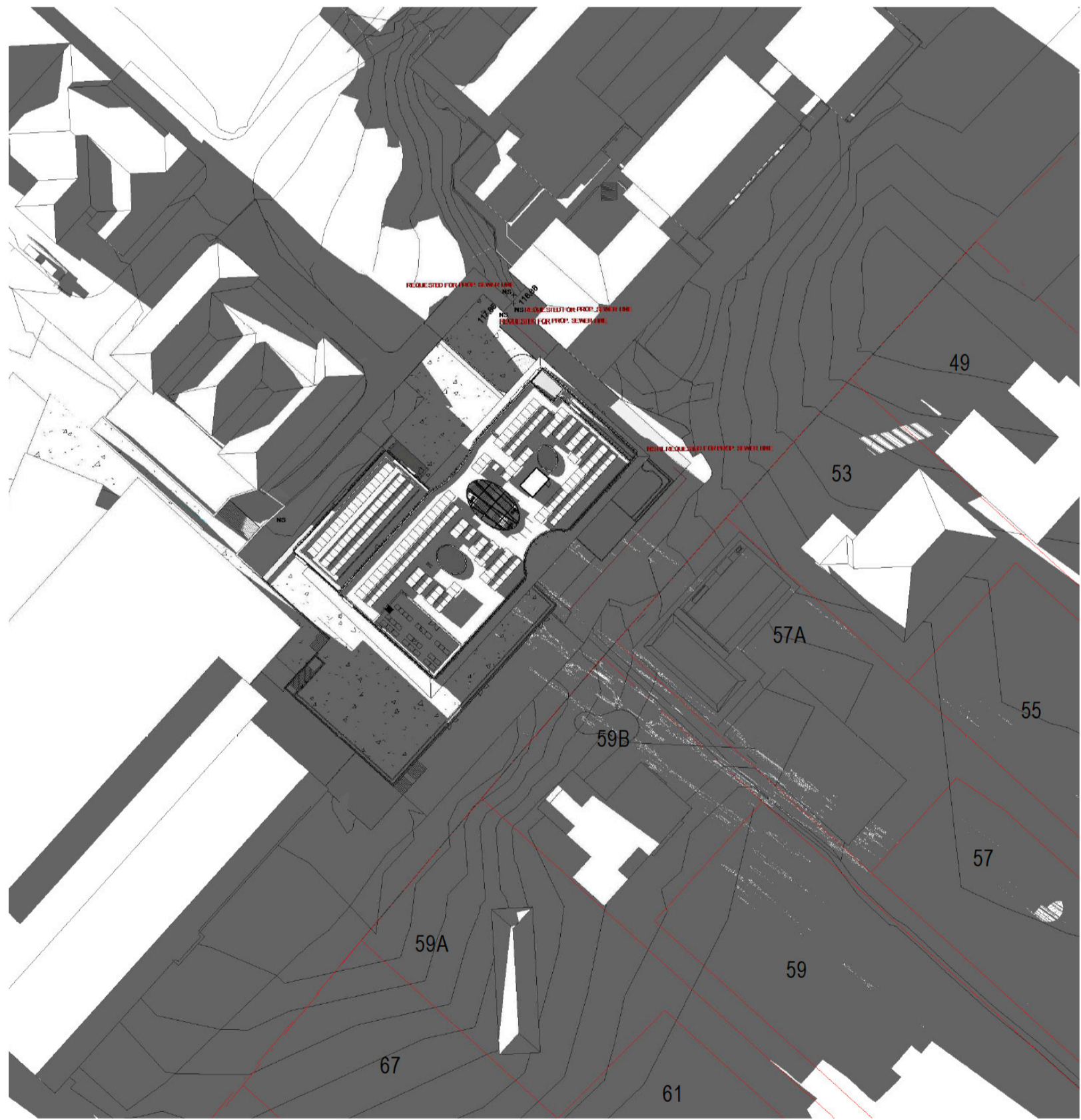


9a. Existing Shadow\_21JUN\_4pm  
Drawing by BVN



9b. Existing Shadow\_21JUN\_4pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 4pm on 21st June are generally consistant.



9c. Proposed Shadow\_21JUN\_4pm  
Drawing by BVN

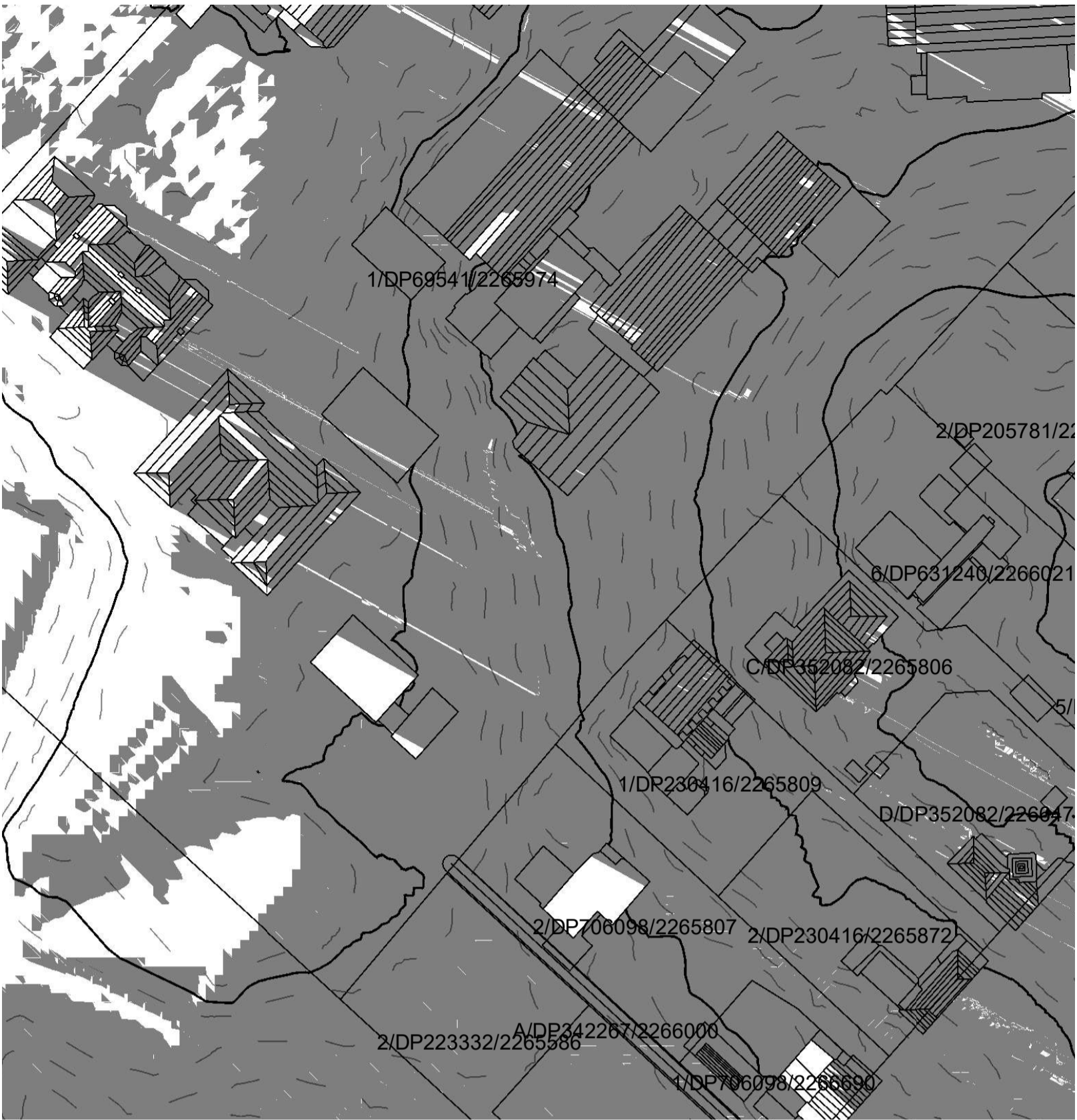


9d. Proposed Shadow\_21JUN\_4pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 4pm on 21st June are generally consistant.

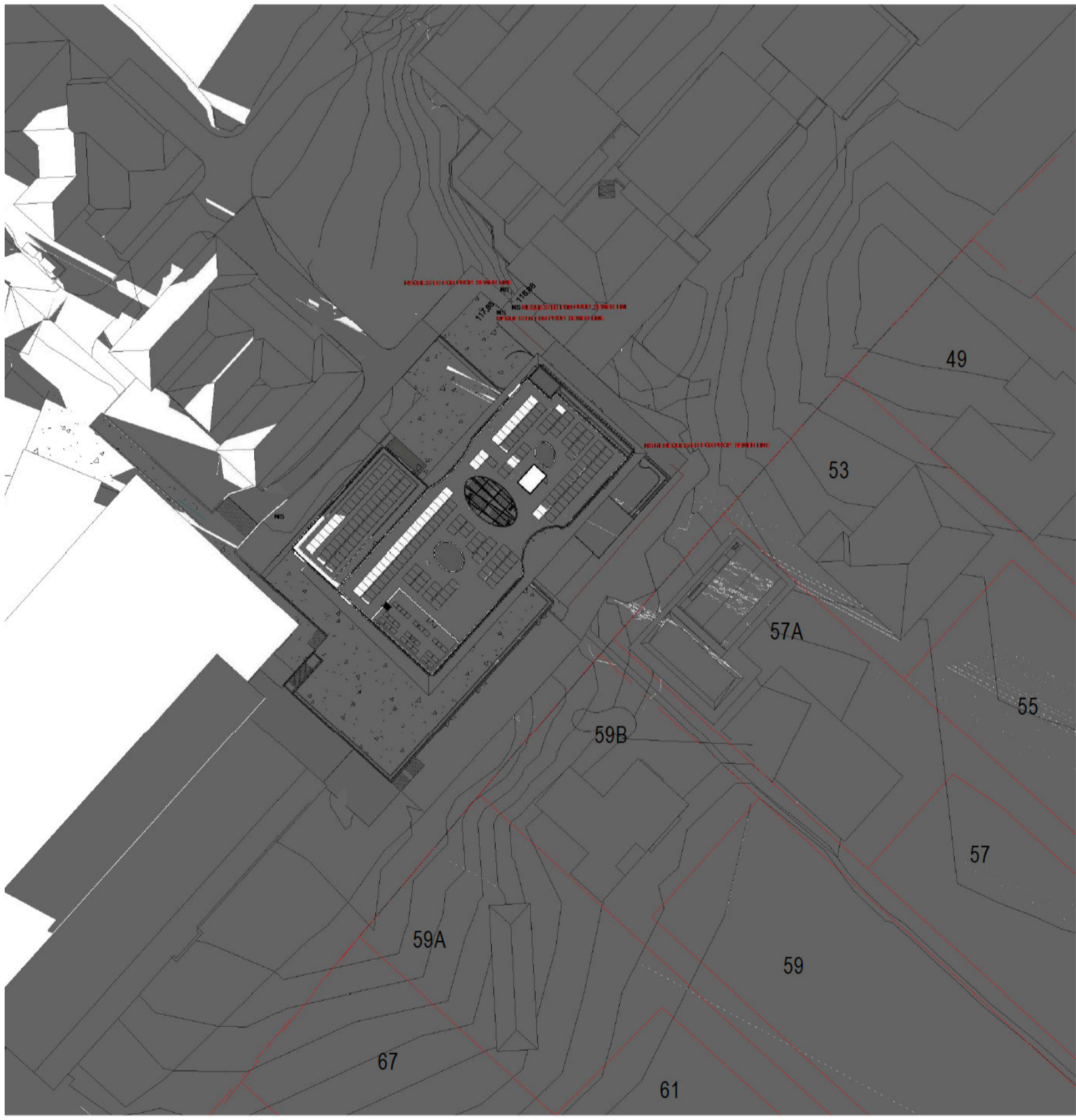


10a. Existing Shadow\_21JUN\_5pm  
Drawing by BVN

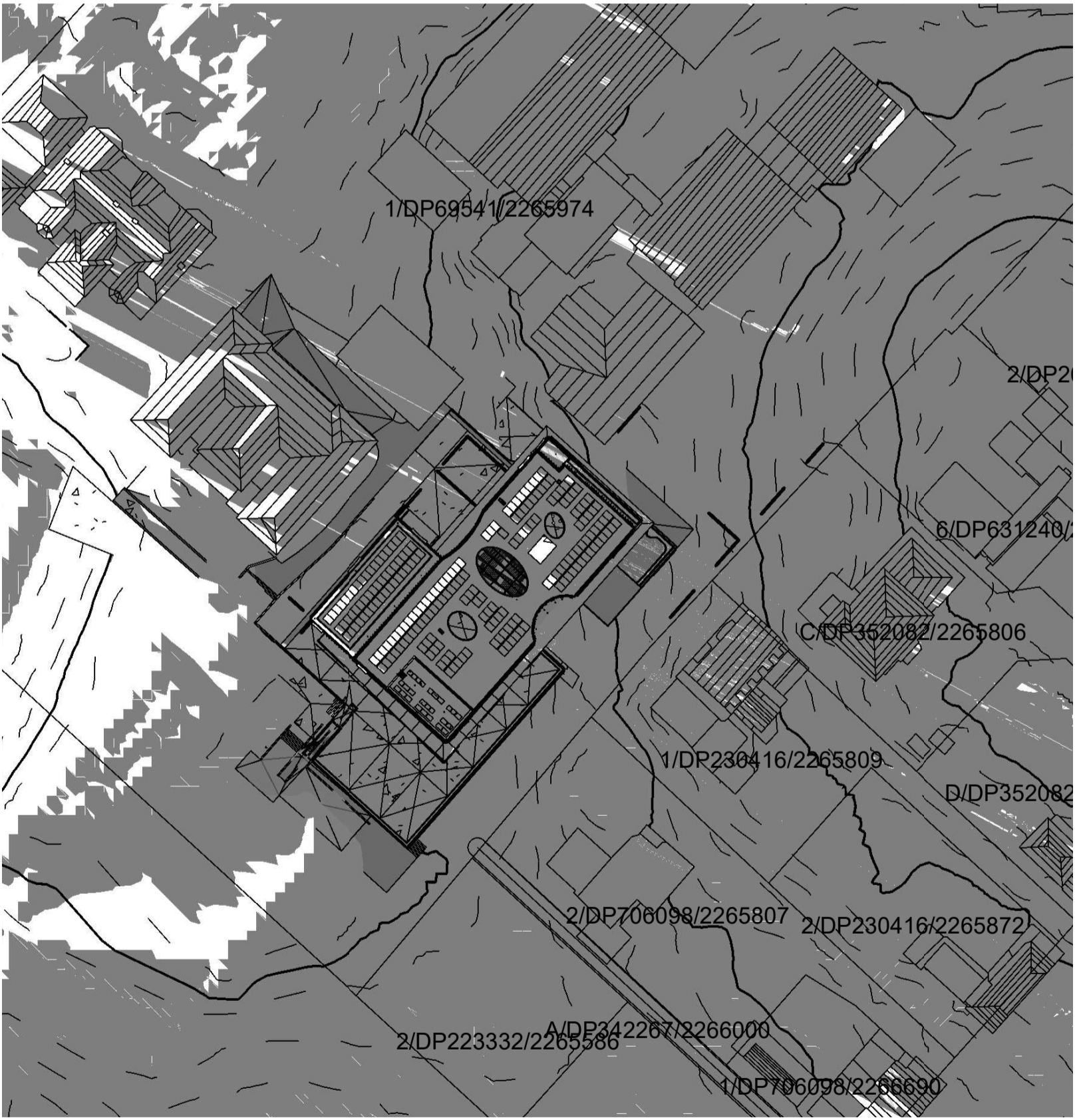


10b. Existing Shadow\_21JUN\_5pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 5pm on 21st June are generally consistant.



10c. Proposed Shadow\_21JUN\_5pm  
Drawing by BVN

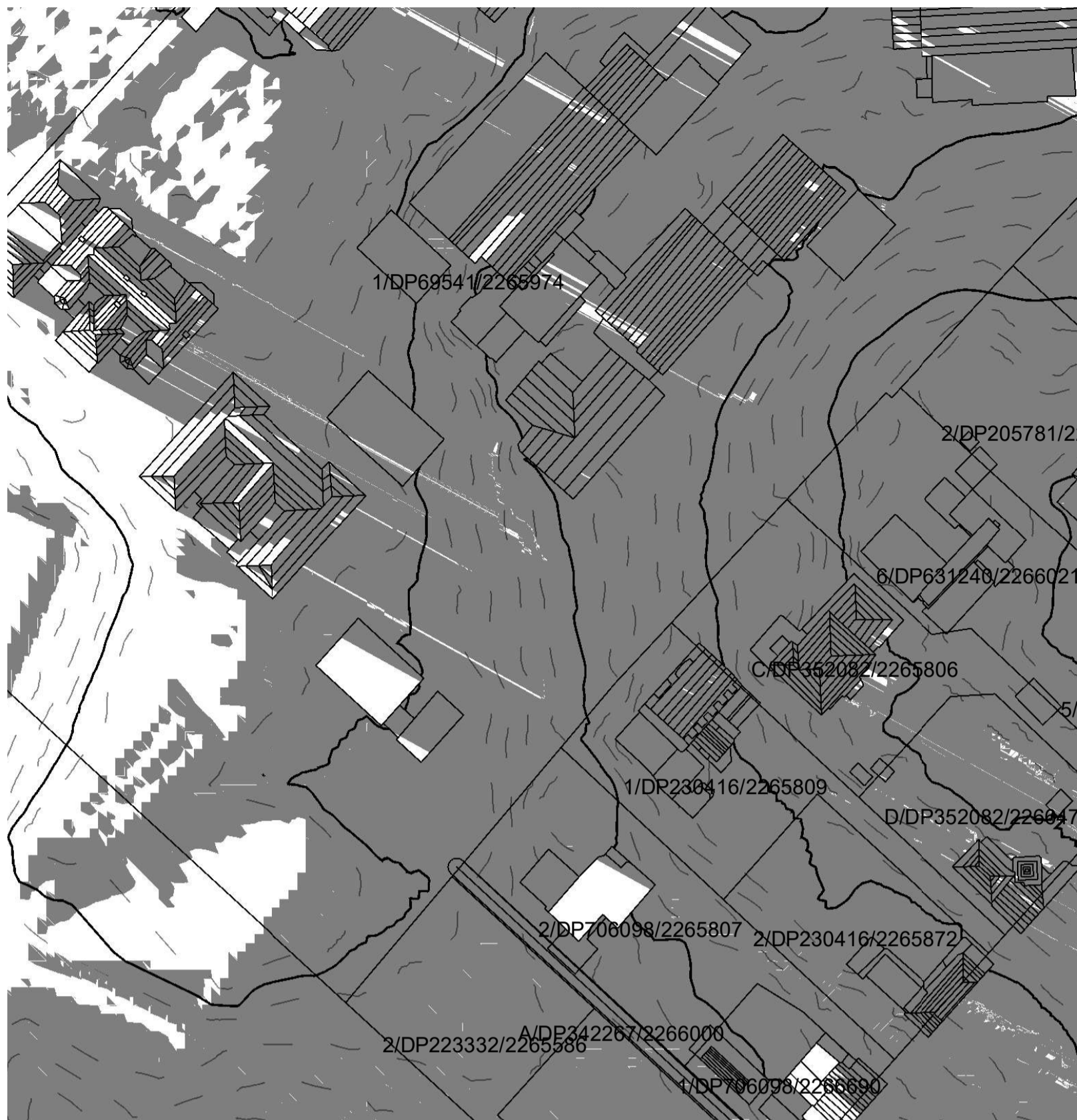


10d. Proposed Shadow\_21JUN\_5pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 5pm on 21st June are generally consistant.

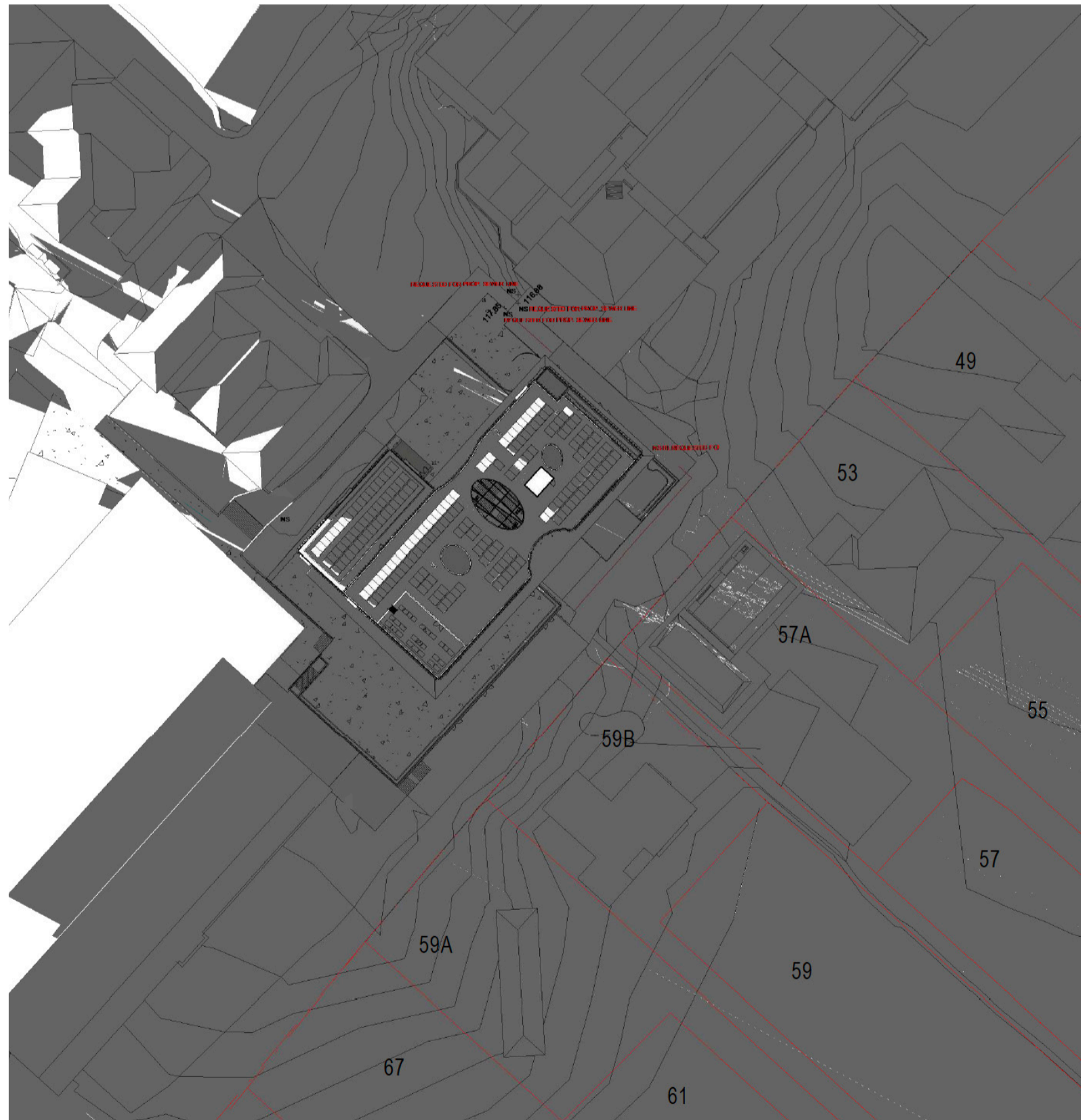


11a. Existing Shadow\_21JUN\_6pm  
Drawing by BVN

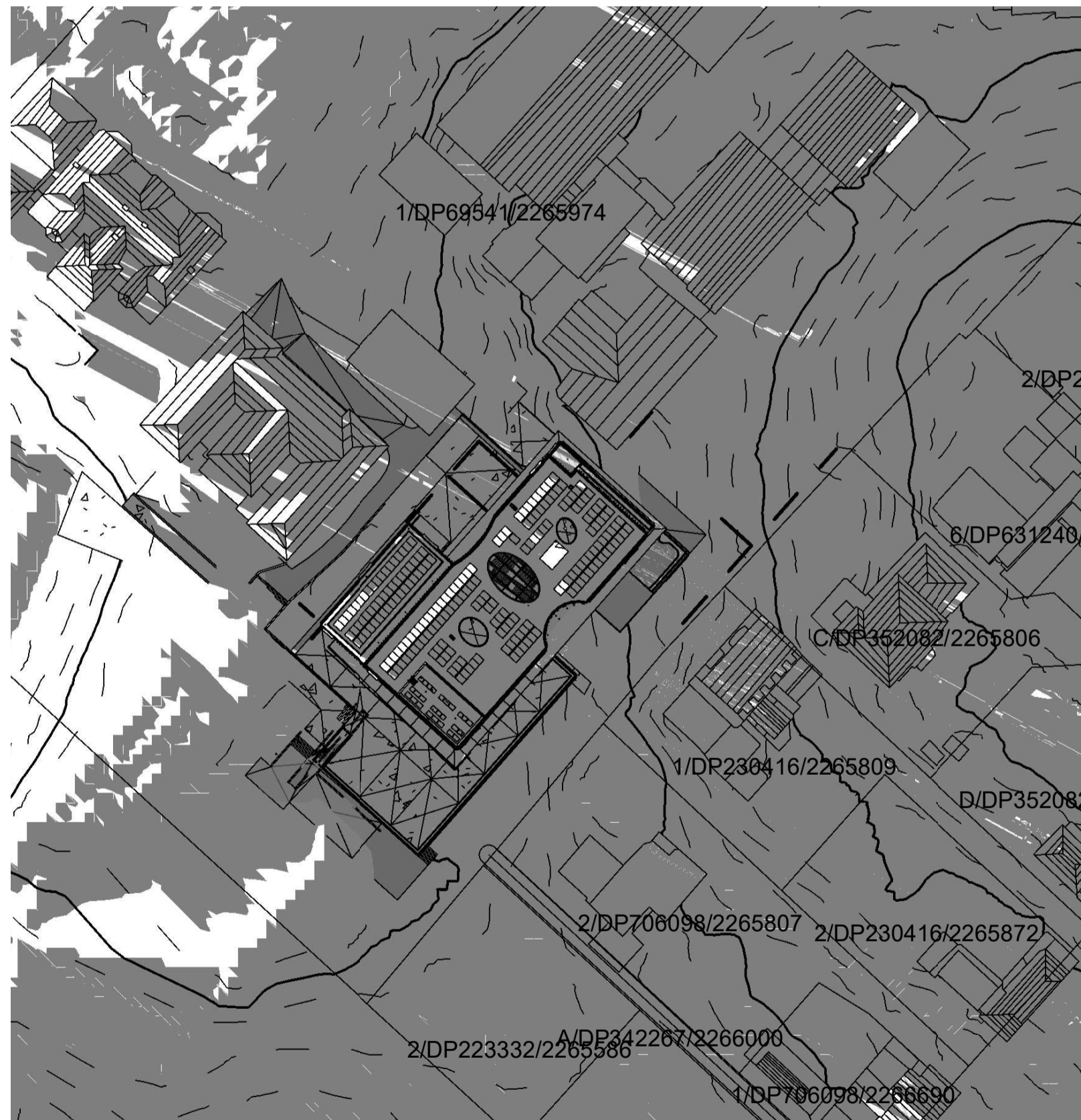


11b. Existing Shadow\_21JUN\_6pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 6pm on 21st June are generally consistent.



11c. Proposed Shadow\_21JUN\_6pm  
Drawing by BVN



11d. Proposed Shadow\_21JUN\_6pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 6pm on 21st June are generally consistent.



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**AERIAL SHADOW DIAGRAMS 21 JUNE**

13/10/2022

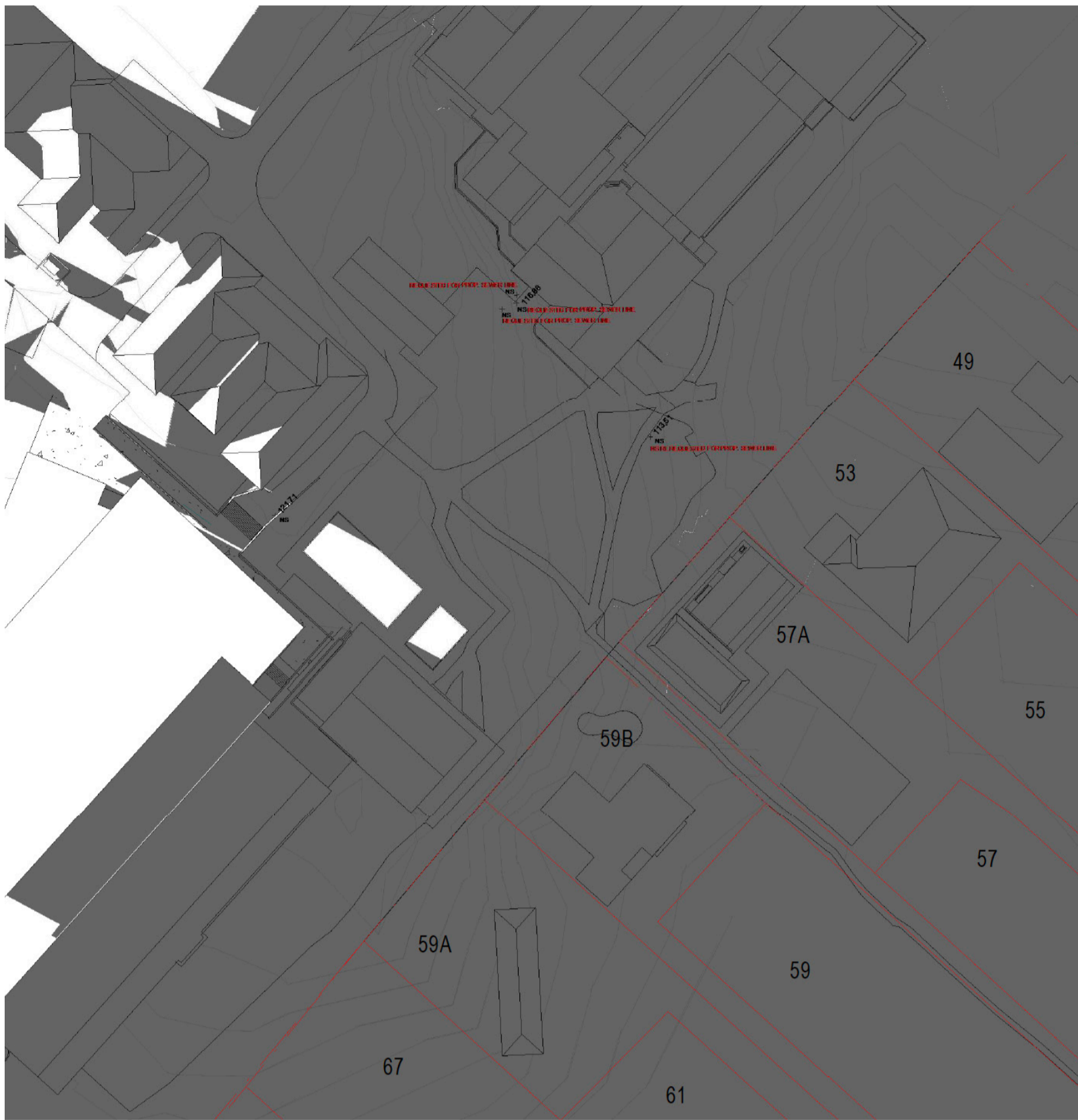
**Scale:**

For Reference Only

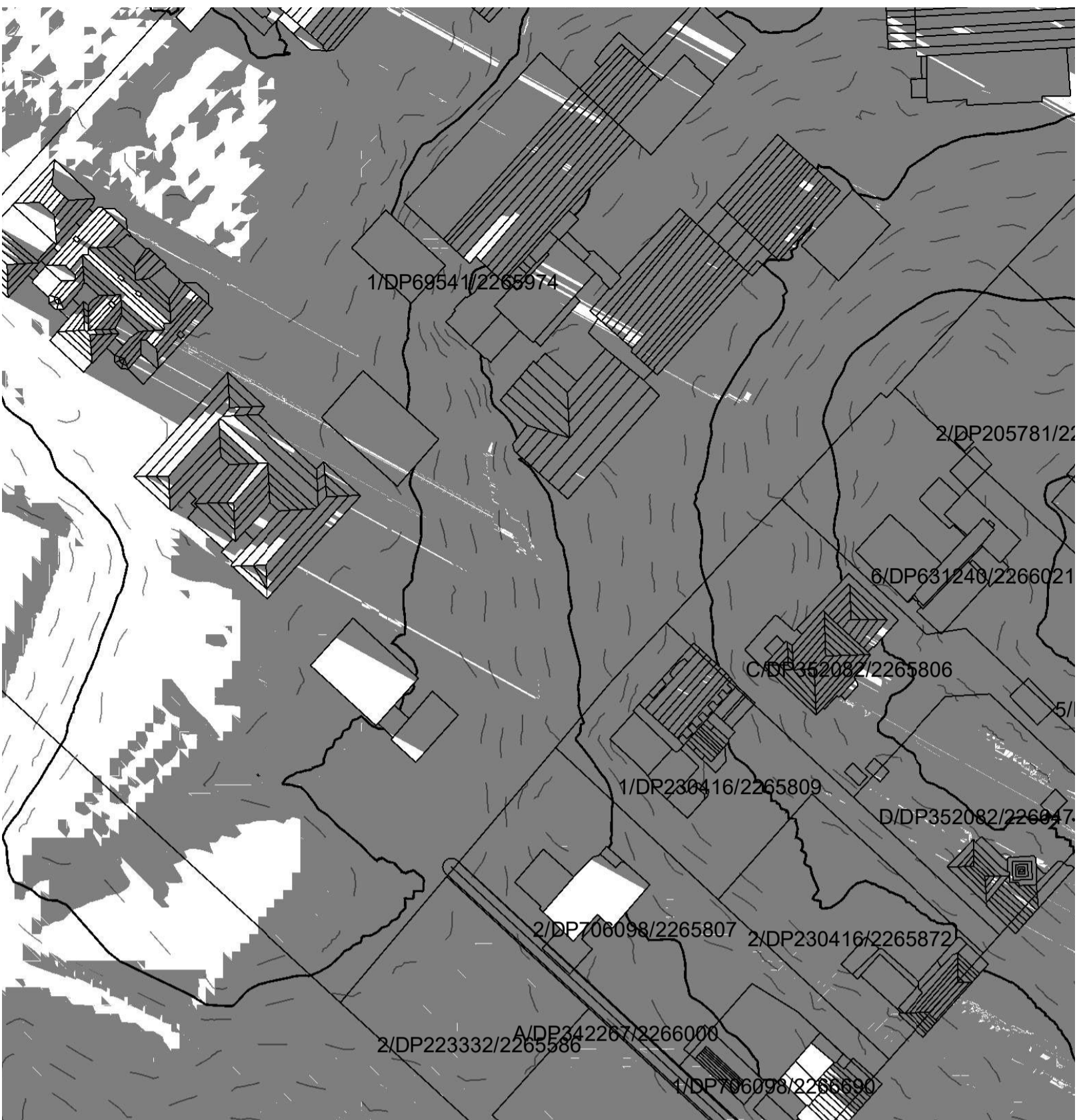
**COMMENTS**

**TECHNICIAN**

AP, LF  
**QA**  
JB

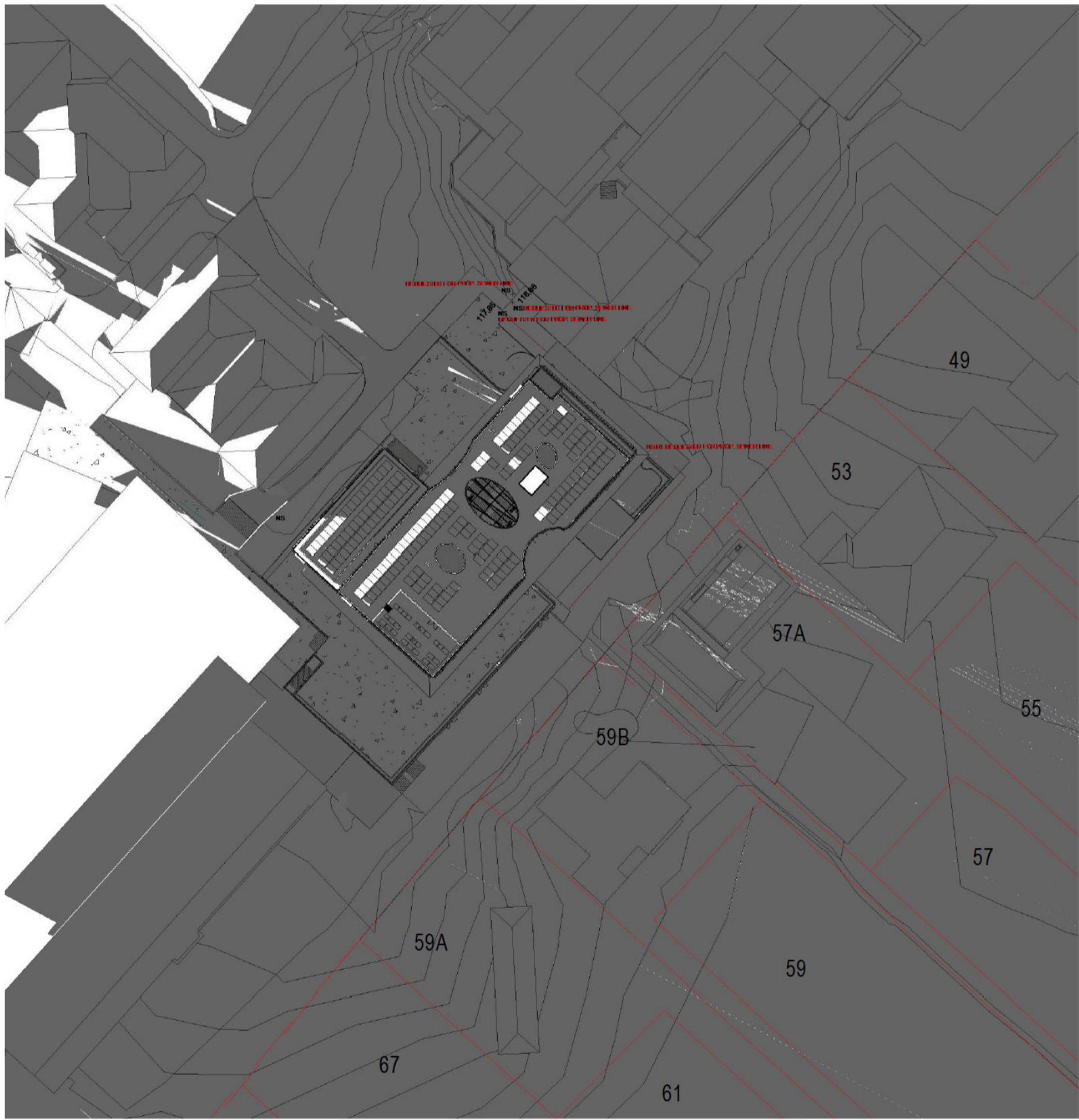


12a. Existing Shadow\_21JUN\_7pm  
Drawing by BVN

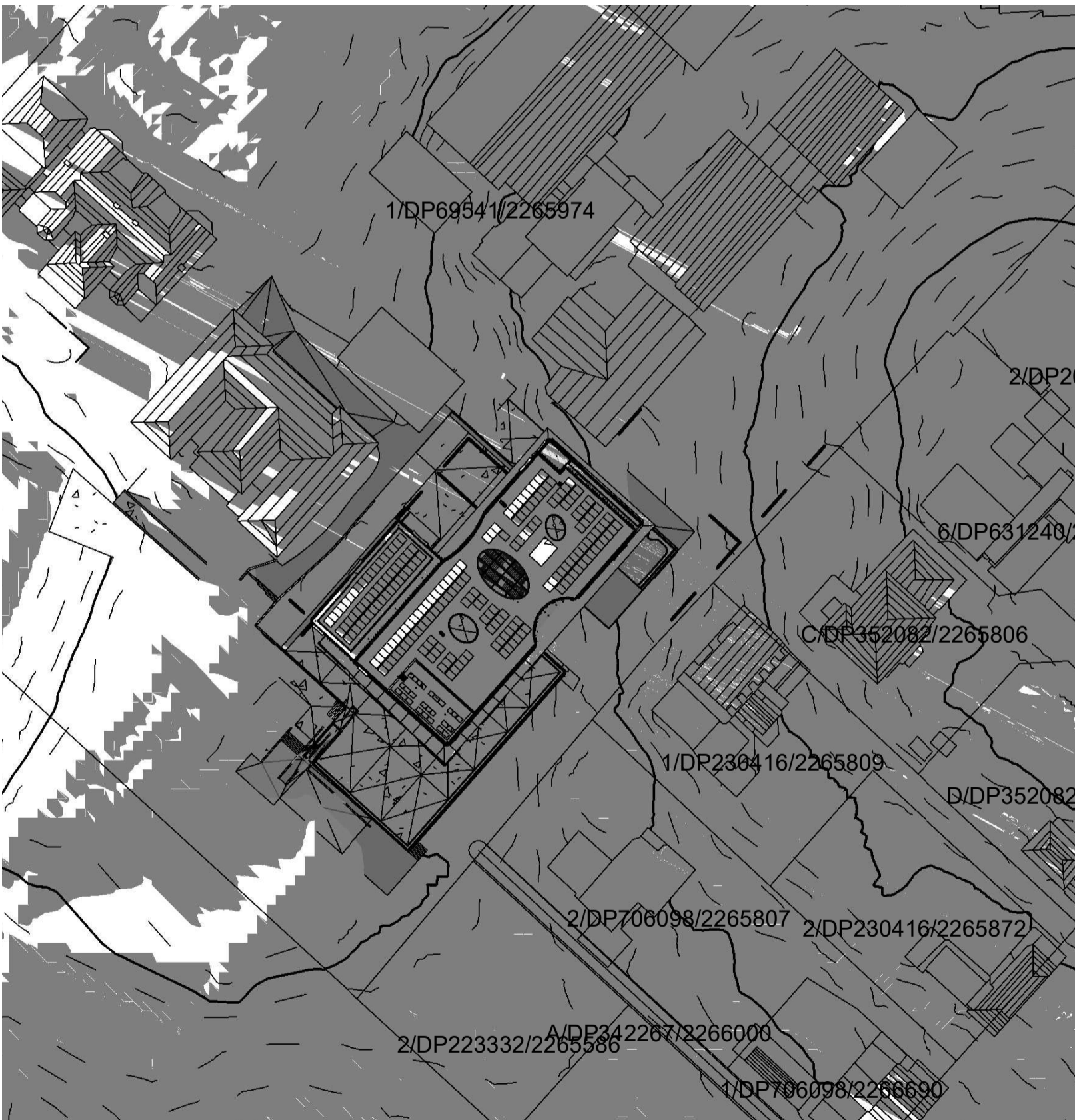


12b. Existing Shadow\_21JUN\_7pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 7pm on 21st June are generally consistant.



12c. Proposed Shadow\_21JUN\_7pm  
Drawing by BVN

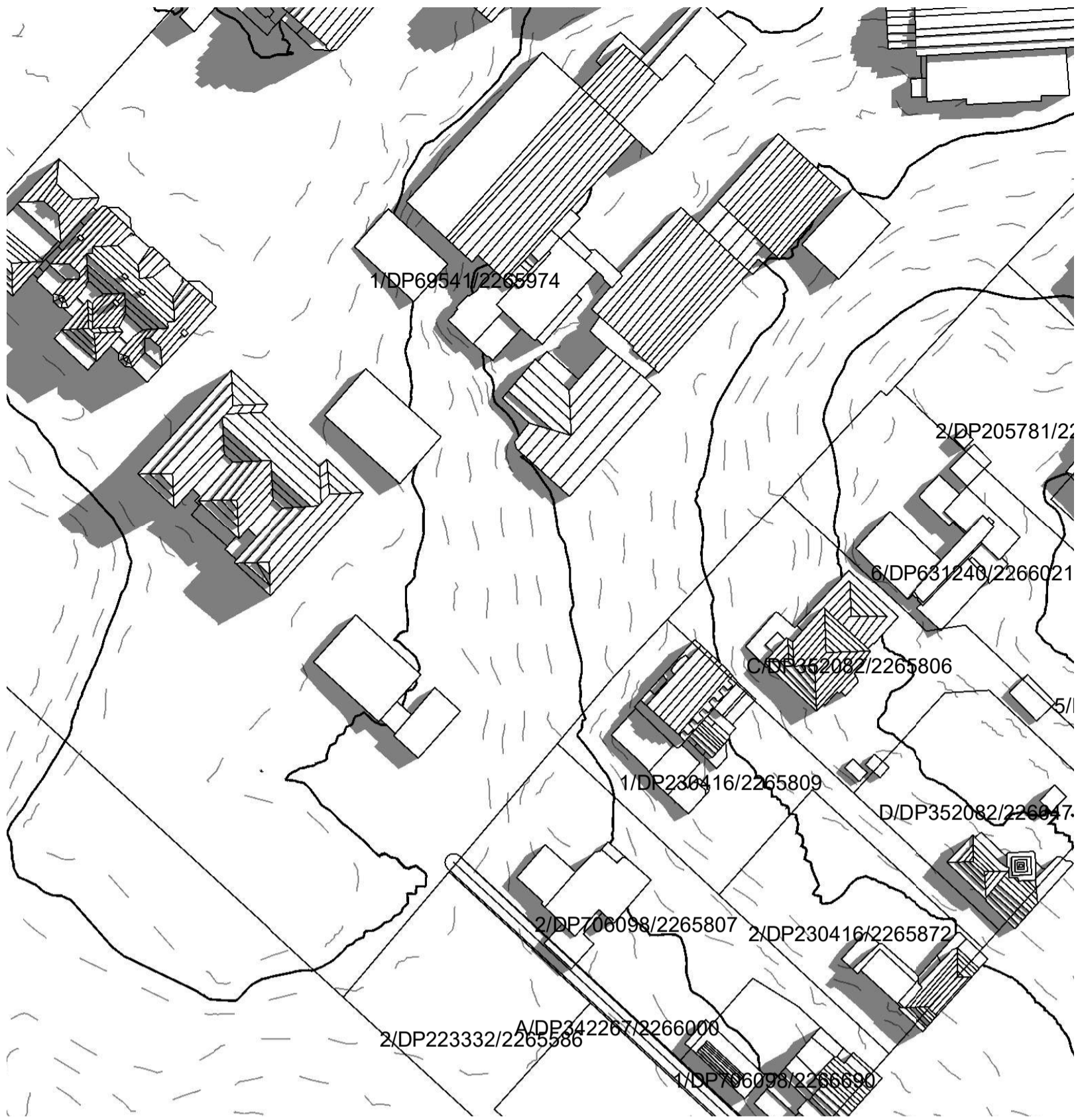


12d. Proposed Shadow\_21JUN\_7pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 7pm on 21st June are generally consistant.

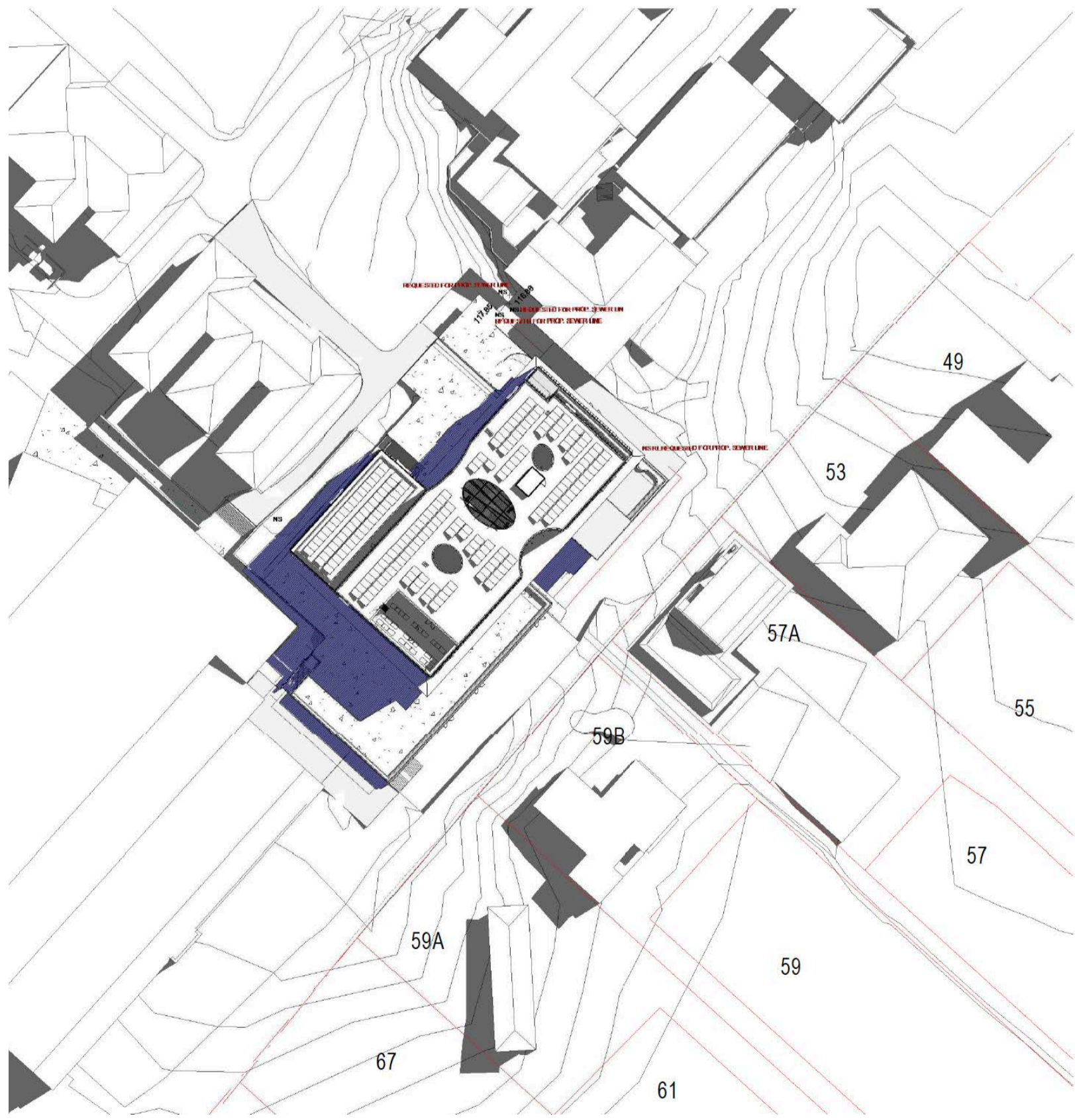


13a. Existing Shadow\_23SEP/21MAR\_9am  
Drawing by BVN

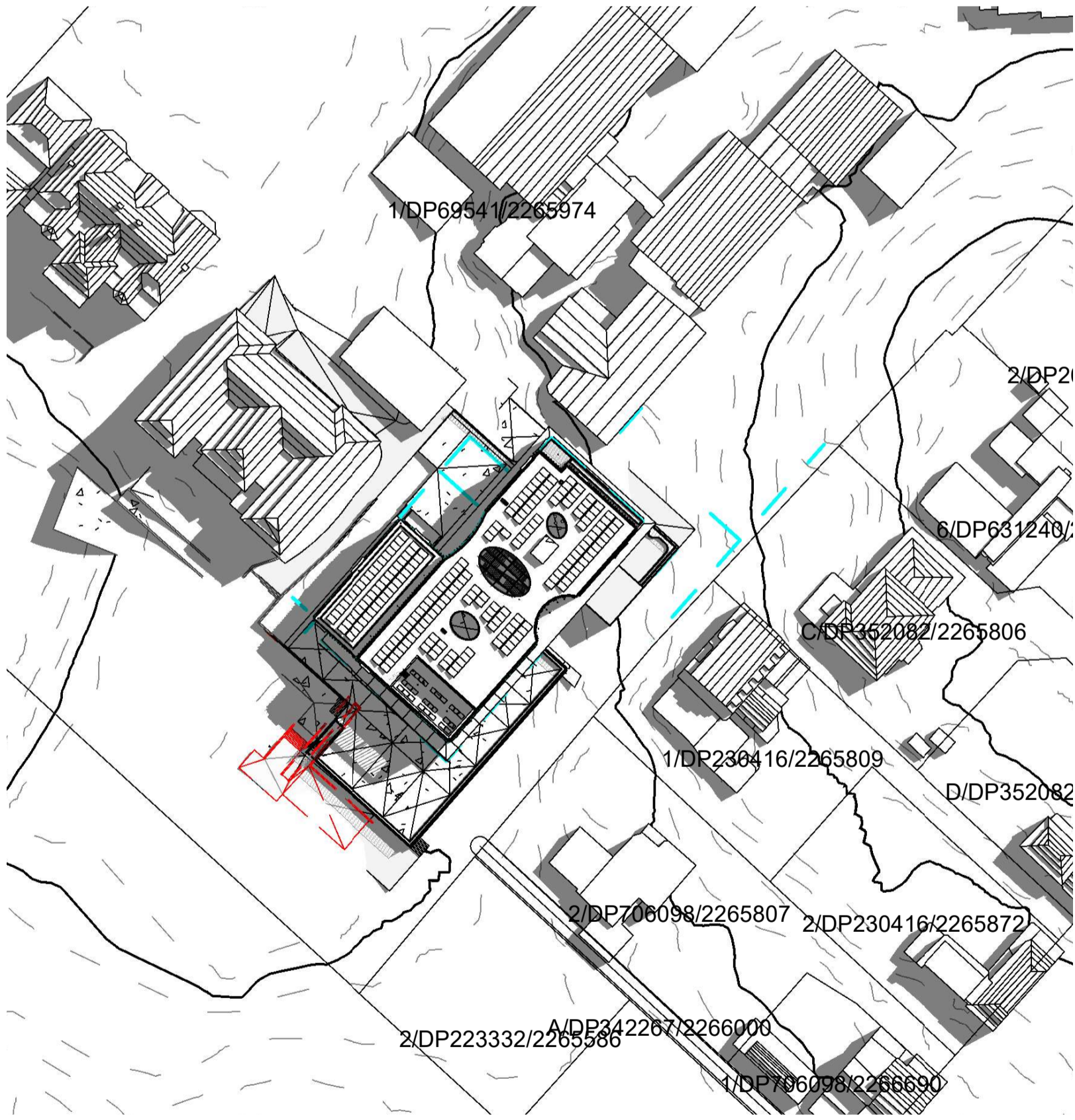


13b. Existing Shadow\_23SEP/21MAR\_9am  
Drawing by Certified Energy

Existing Shadows diagrams produced at 9am on 23rd Sep/ 21st Mar are generally consistent.

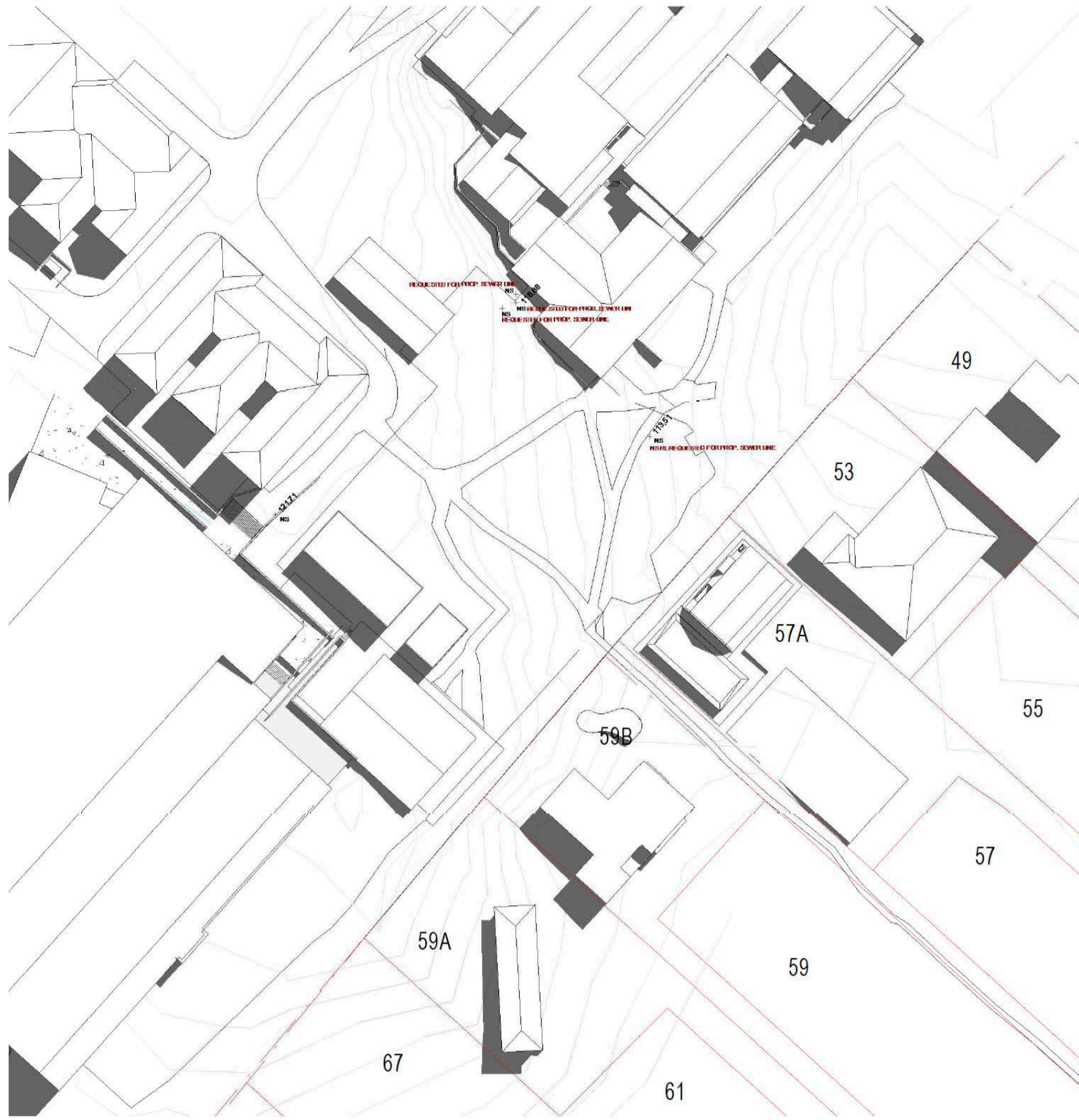


13c. Proposed Shadow\_23SEP/21MAR\_9am  
Drawing by BVN

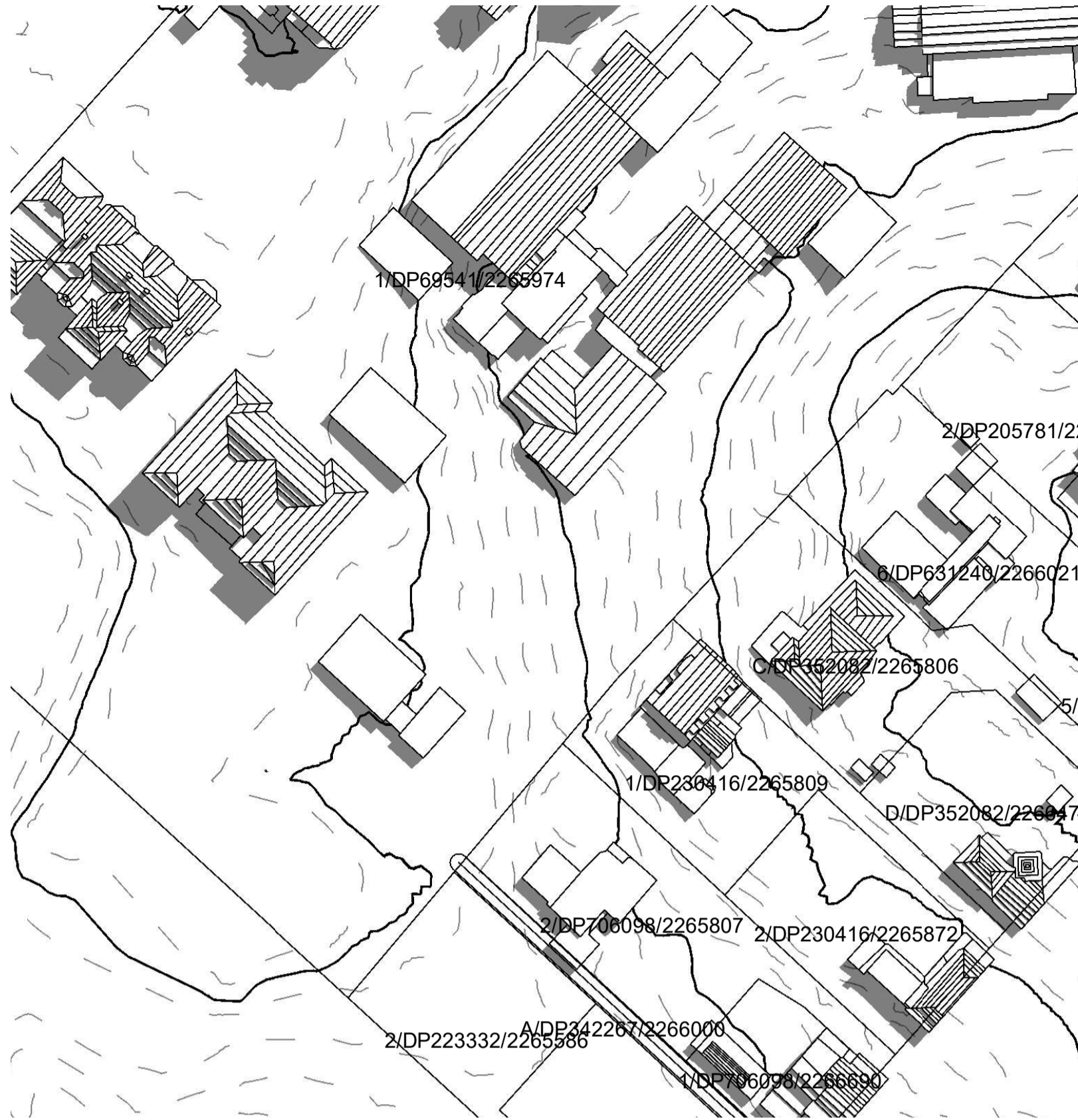


13d. Proposed Shadow\_23SEP/21MAR\_9am  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 9am on 23rd Sep/ 21st Mar are generally consistent.

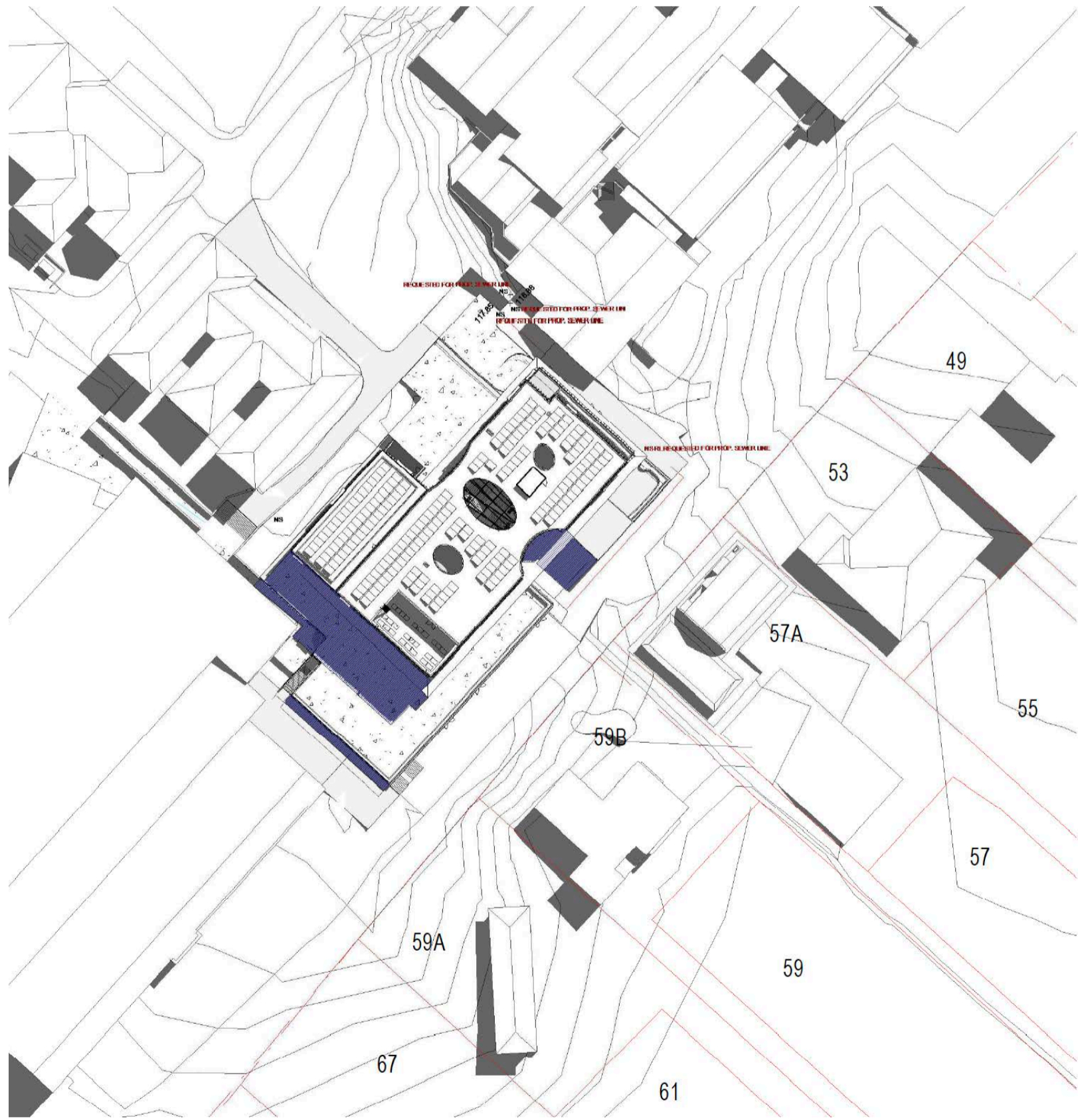


14a. Existing Shadow\_23SEP/21MAR\_10am  
Drawing by BVN

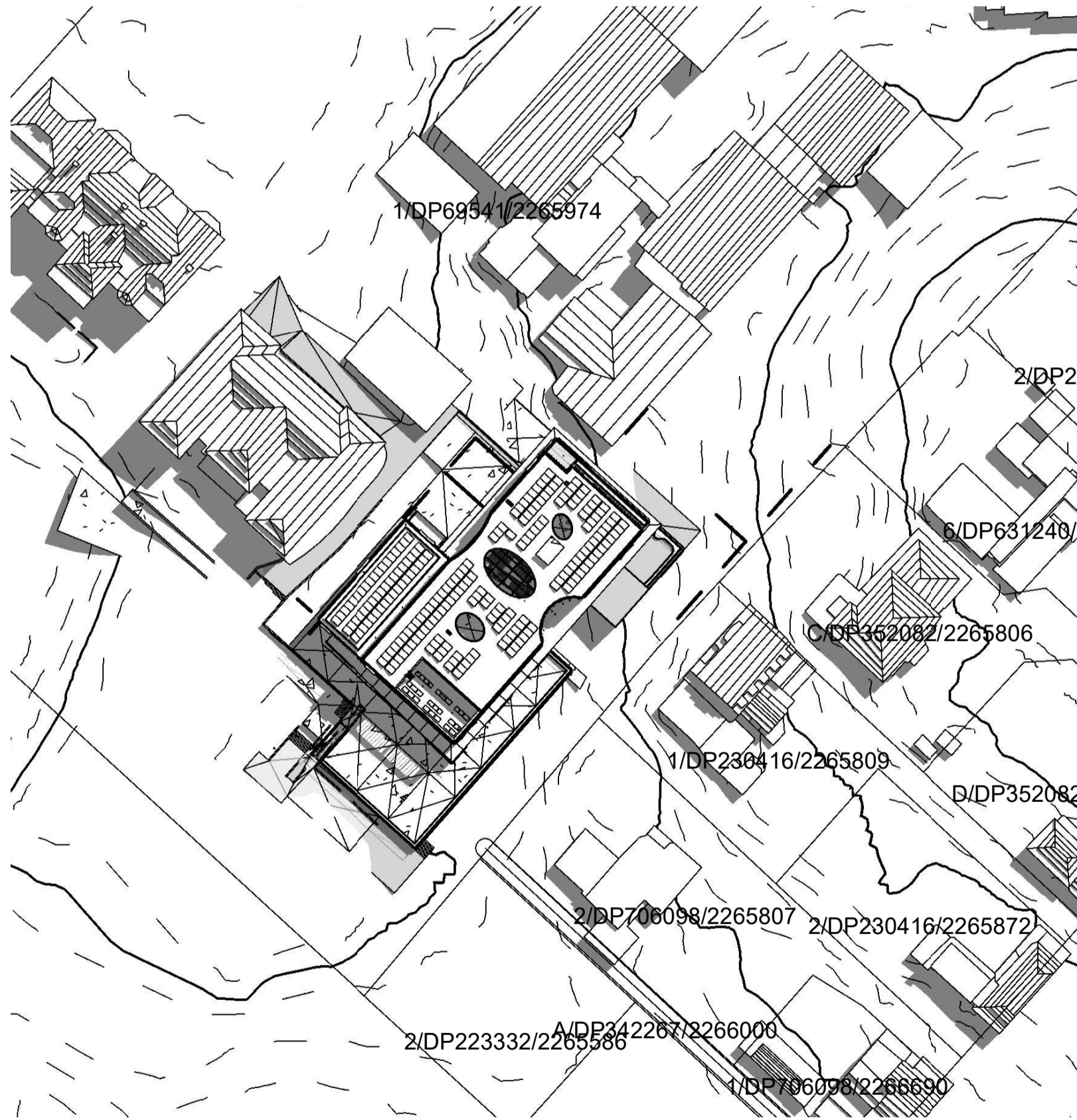


14b. Existing Shadow\_23SEP/21MAR\_10am  
Drawing by Certified Energy

Existing Shadows diagrams produced at 10am on 23rd Sep/ 21st Mar are generally consistent.



14c. Proposed Shadow\_23SEP/21MAR\_10am  
Drawing by BVN



14d. Proposed Shadow\_23SEP/21MAR\_10am  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 10am on 23rd Sep/ 21st Mar are generally consistent.



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# AERIAL SHADOW DIAGRAMS 23 SEPTEMBER/ 21 MARCH

13/10/2022

Scale:

For Reference Only

COMMENTS

TECHNICIAN

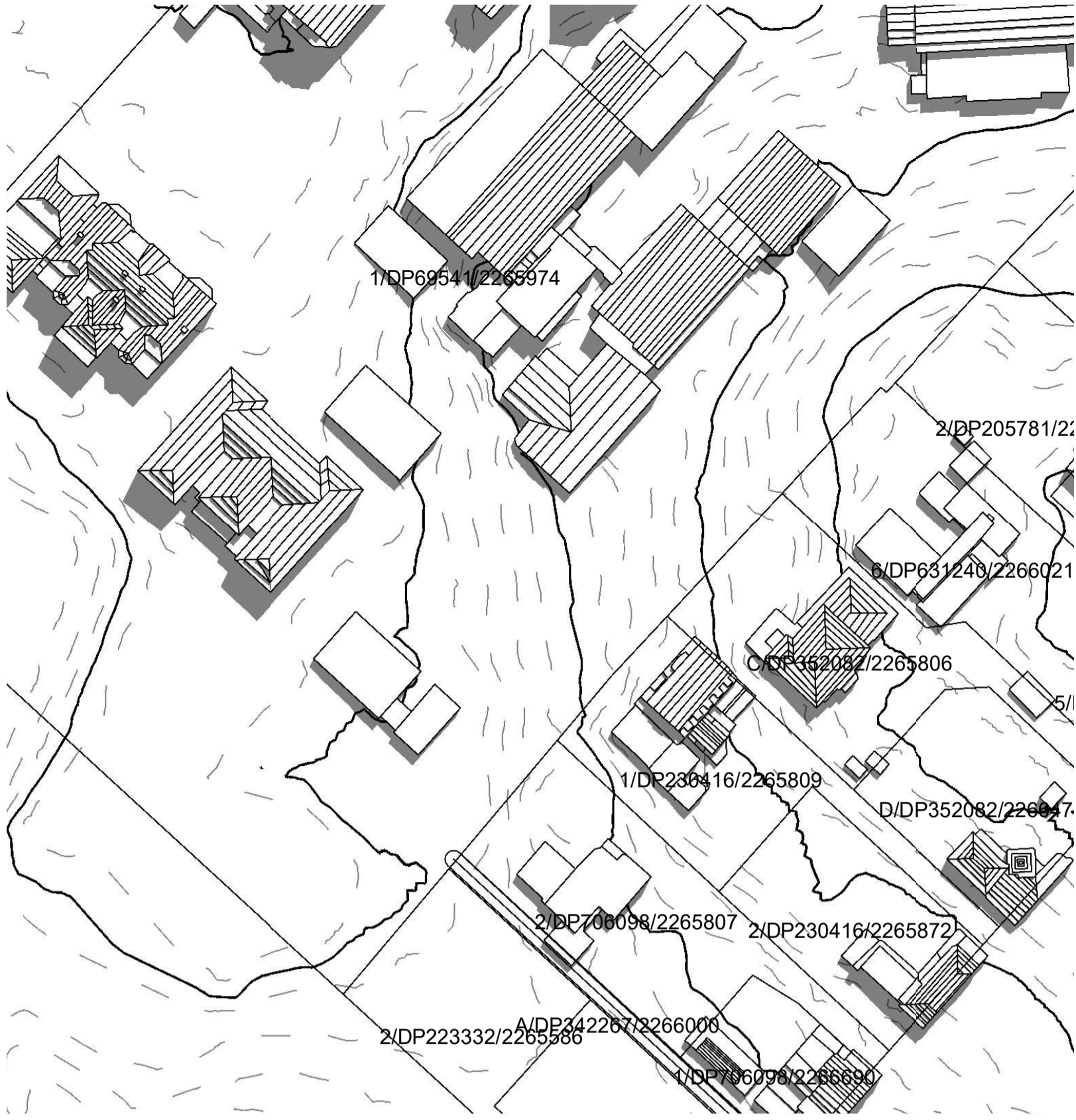
AP, LF

QA

JB

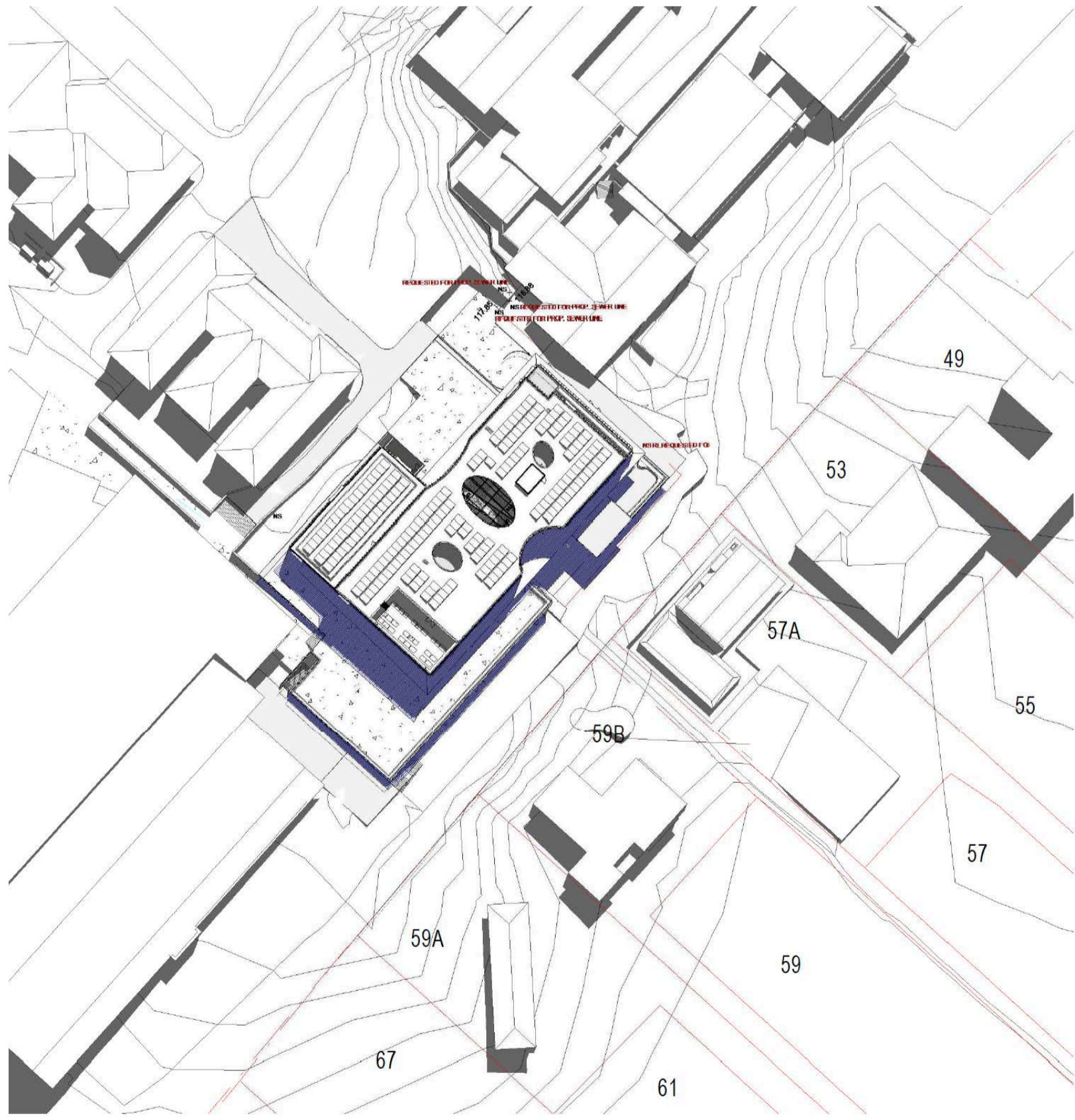


15a. Existing Shadow\_23SEP/21MAR\_11am  
Drawing by BVN

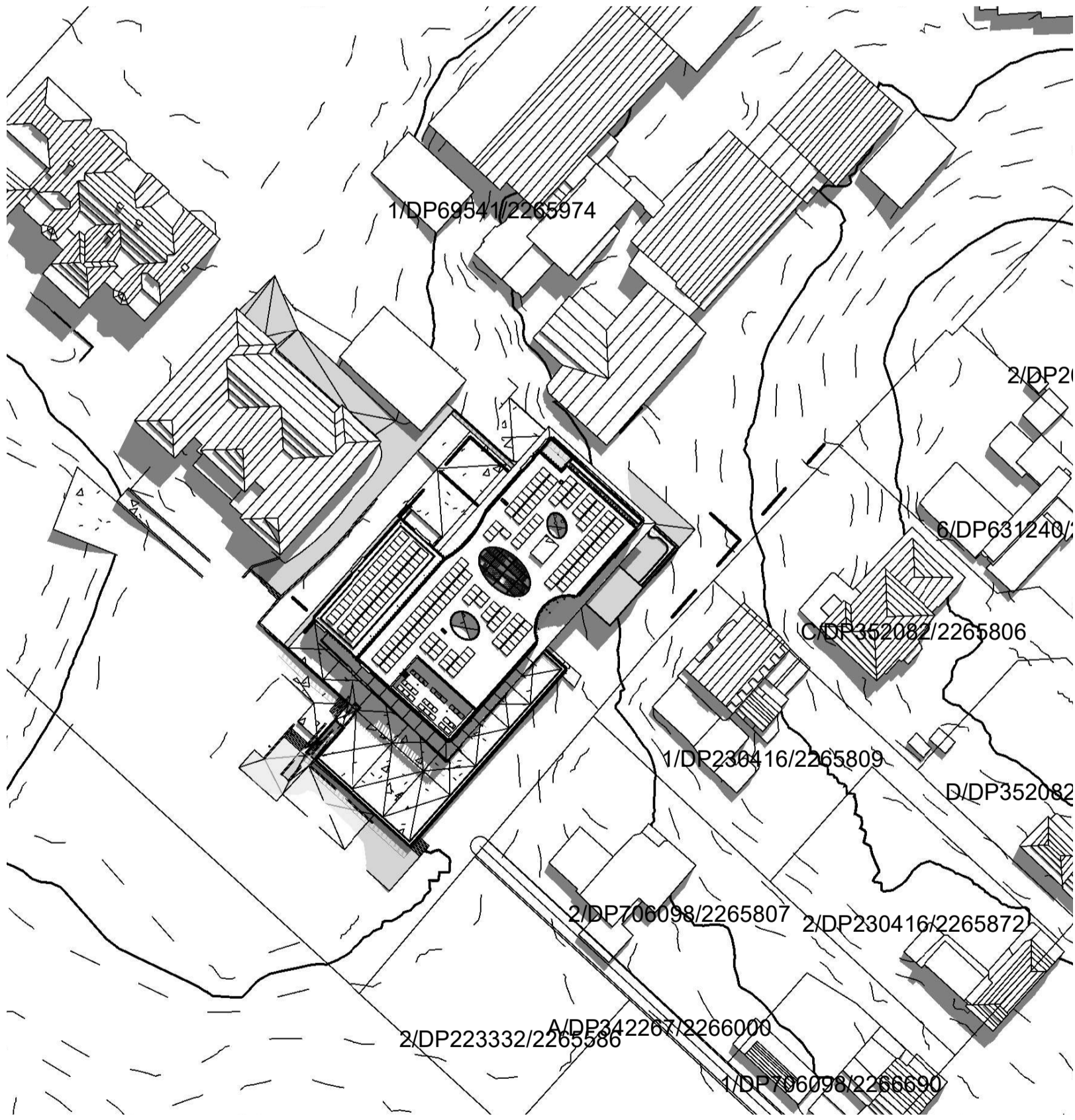


15b. Existing Shadow\_23SEP/21MAR\_11am  
Drawing by Certified Energy

Existing Shadows diagrams produced at 11am on 23rd  
Sep/ 21st Mar are generally consistent.



15c. Proposed Shadow\_23SEP/21MAR\_11am  
Drawing by BVN



15d. Proposed Shadow\_23SEP/21MAR\_11am  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 11am on 23rd  
Sep/ 21st Mar are generally consistent.



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# AERIAL SHADOW DIAGRAMS 23 SEPTEMBER/ 21 MARCH

13/10/2022

Scale:

For Reference Only

COMMENTS

TECHNICIAN

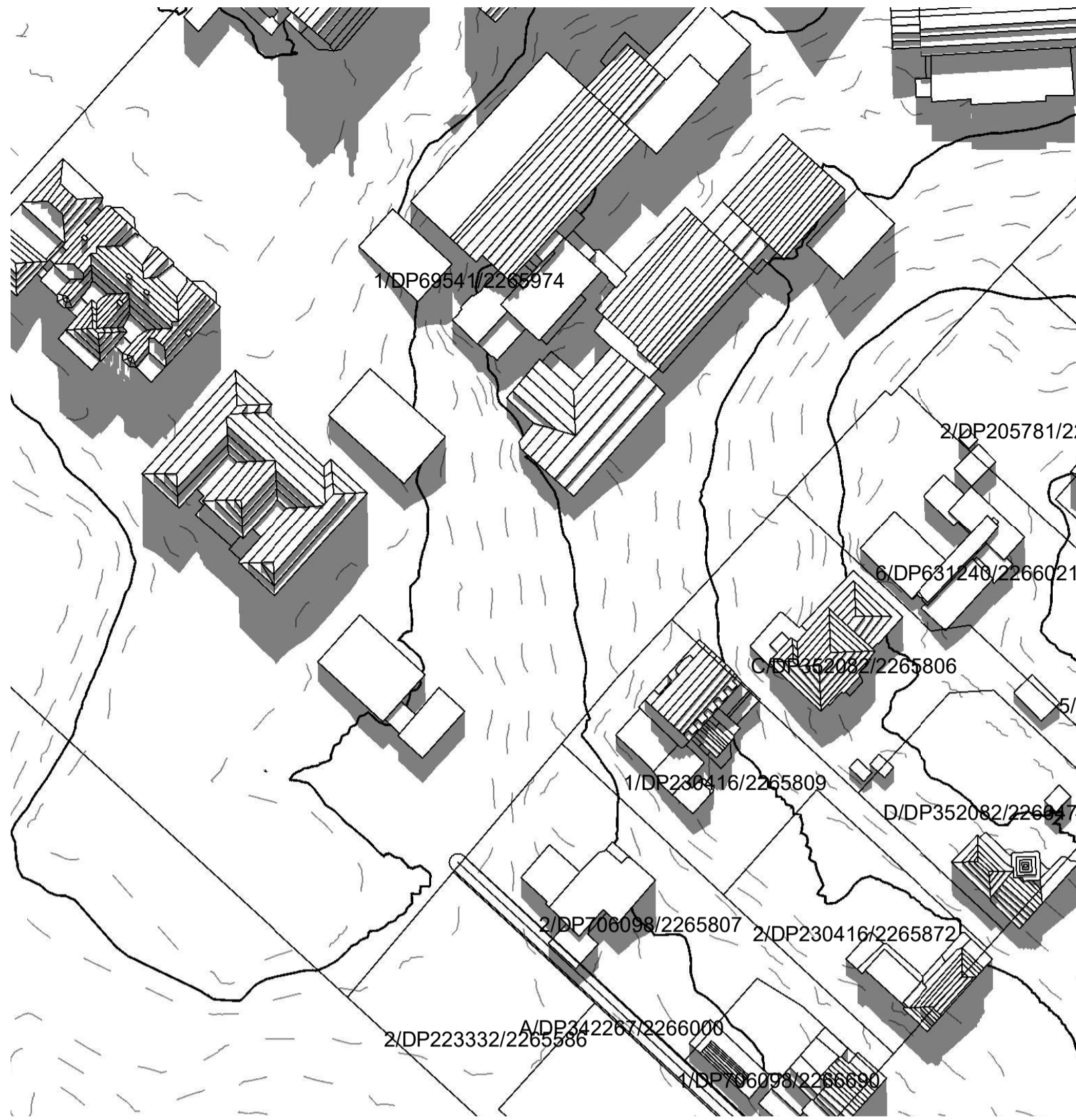
AP, LF

QA

JB

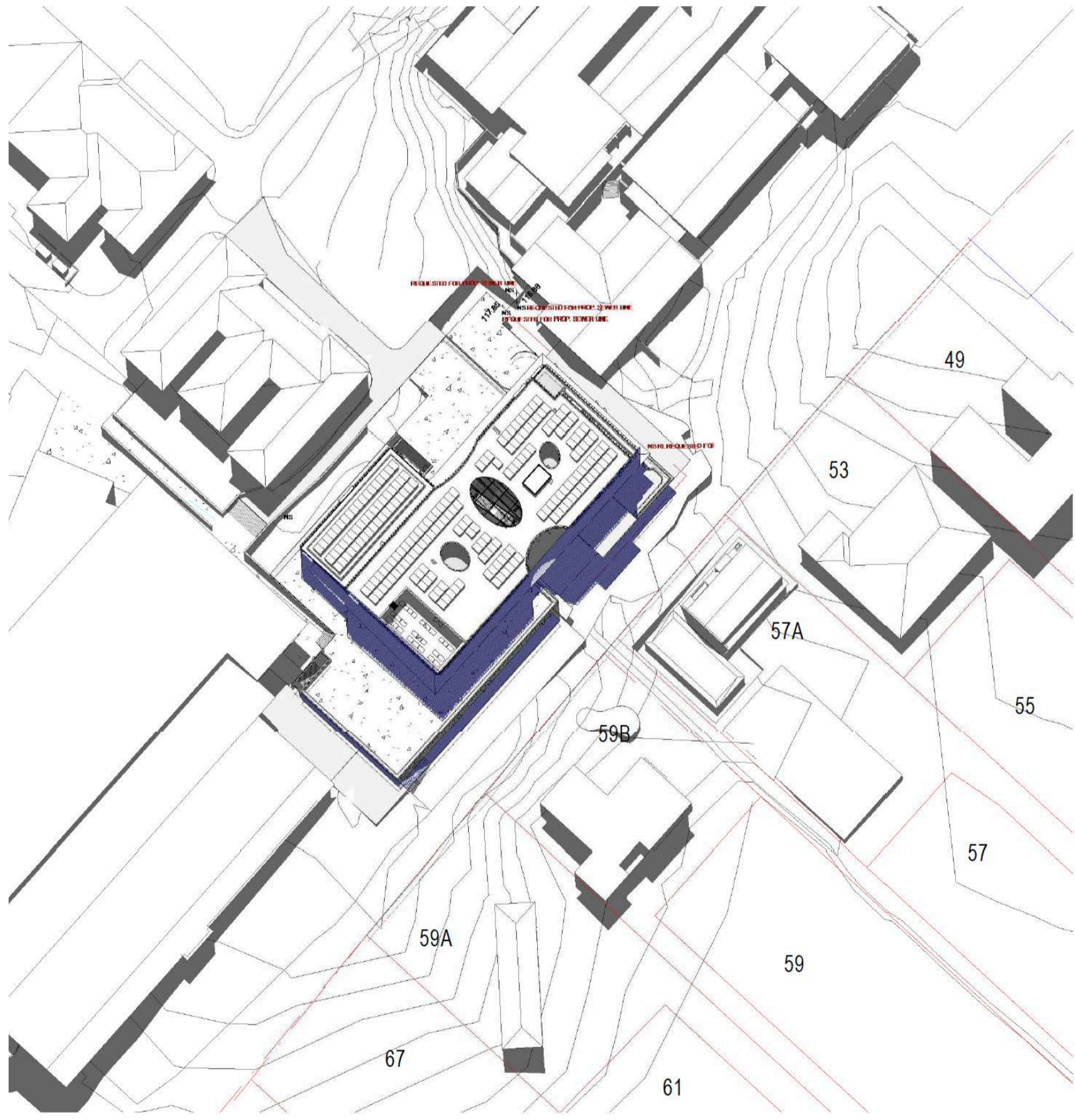


16a. Existing Shadow\_23SEP/21MAR\_12pm  
Drawing by BVN



16b. Existing Shadow\_23SEP/21MAR\_12pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 12pm on 23rd Sep/ 21st Mar are generally consistent.



16c. Proposed Shadow\_23SEP/21MAR\_12pm  
Drawing by BVN



16d. Proposed Shadow\_23SEP/21MAR\_12pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 12pm on 23rd Sep/ 21st Mar are generally consistent.



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AERIAL SHADOW DIAGRAMS 23 SEPTEMBER/ 21 MARCH

13/10/2022

Scale:

For Reference Only

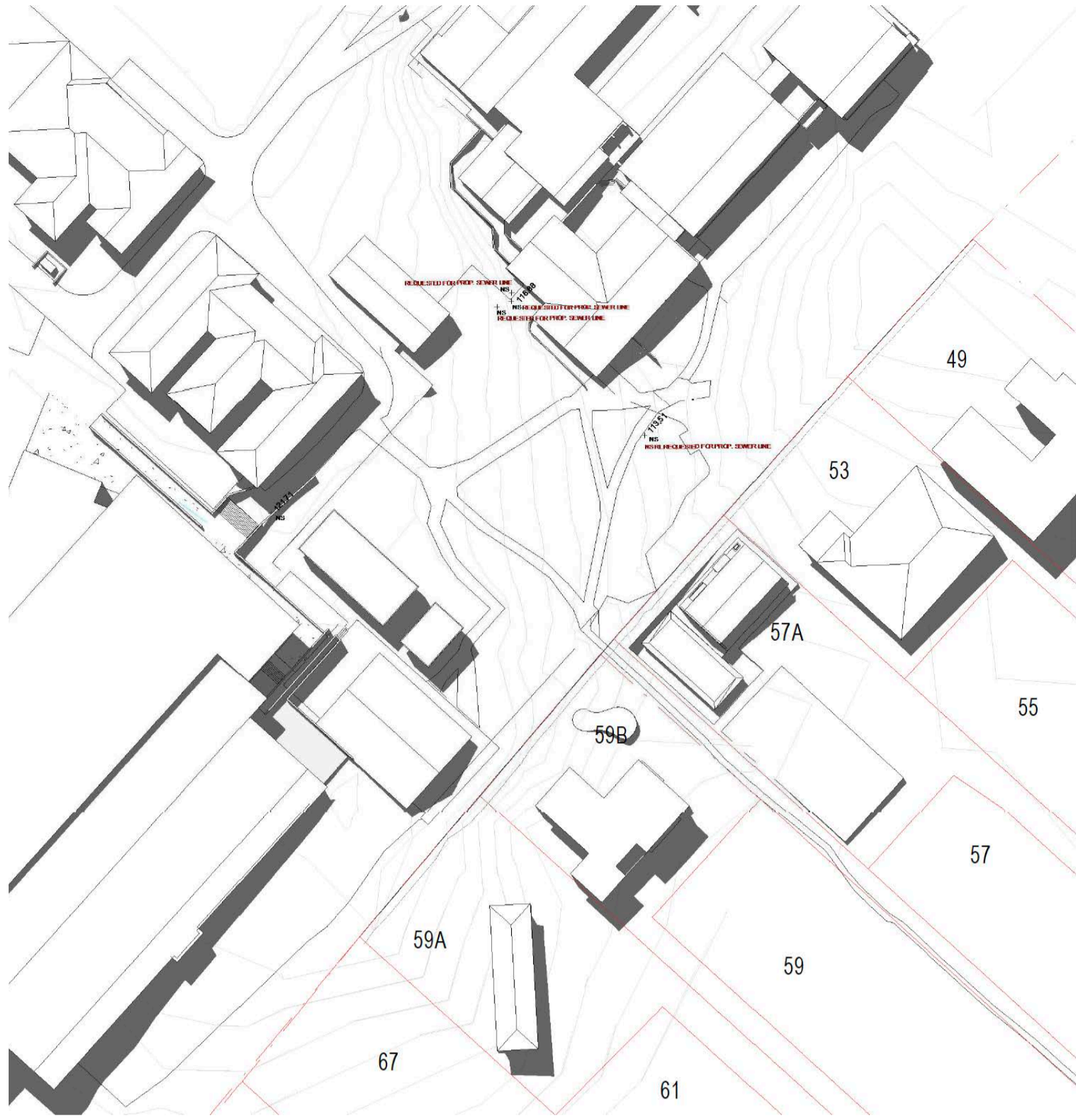
COMMENTS

TECHNICIAN

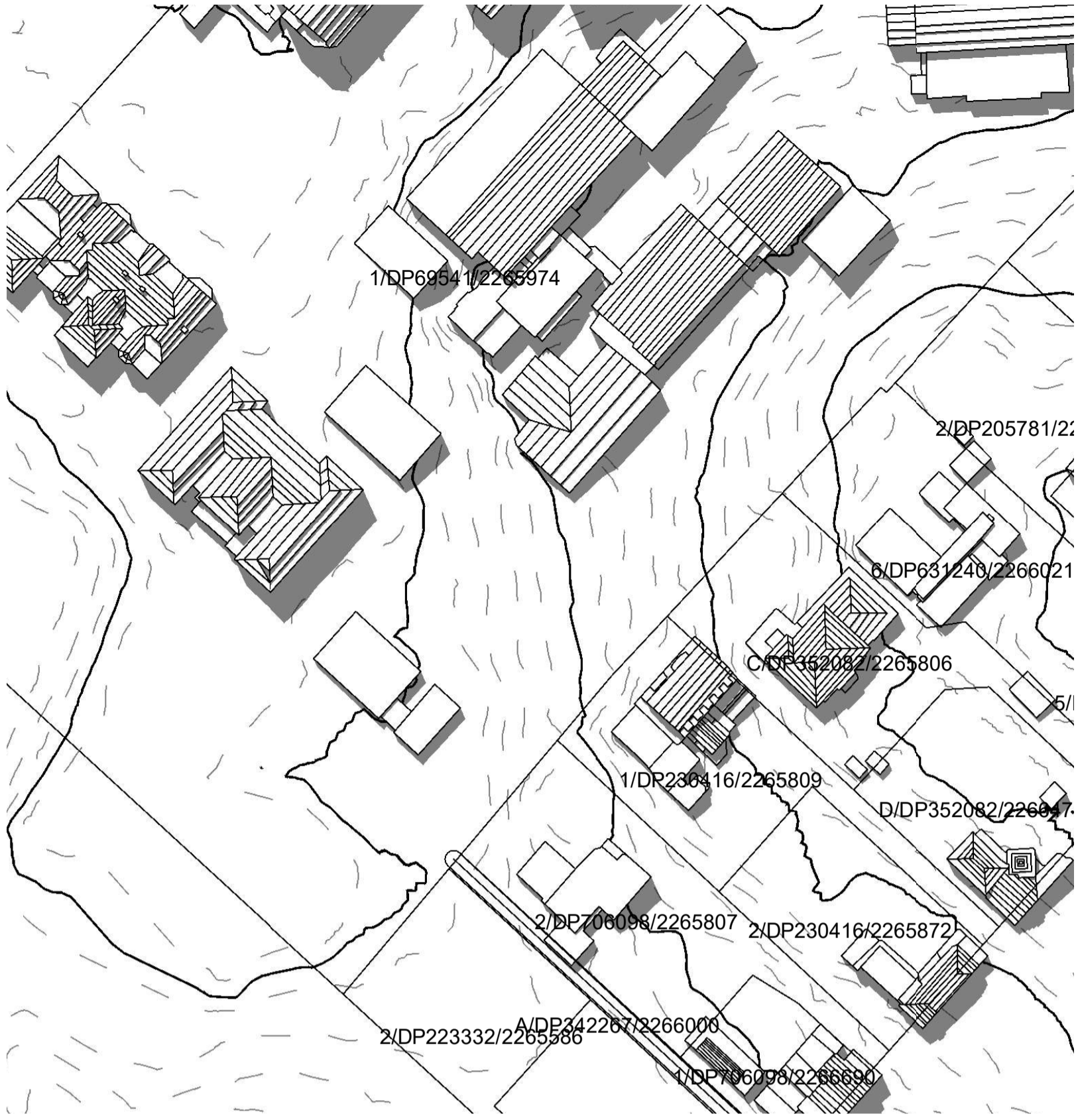
AP, LF

QA

JB

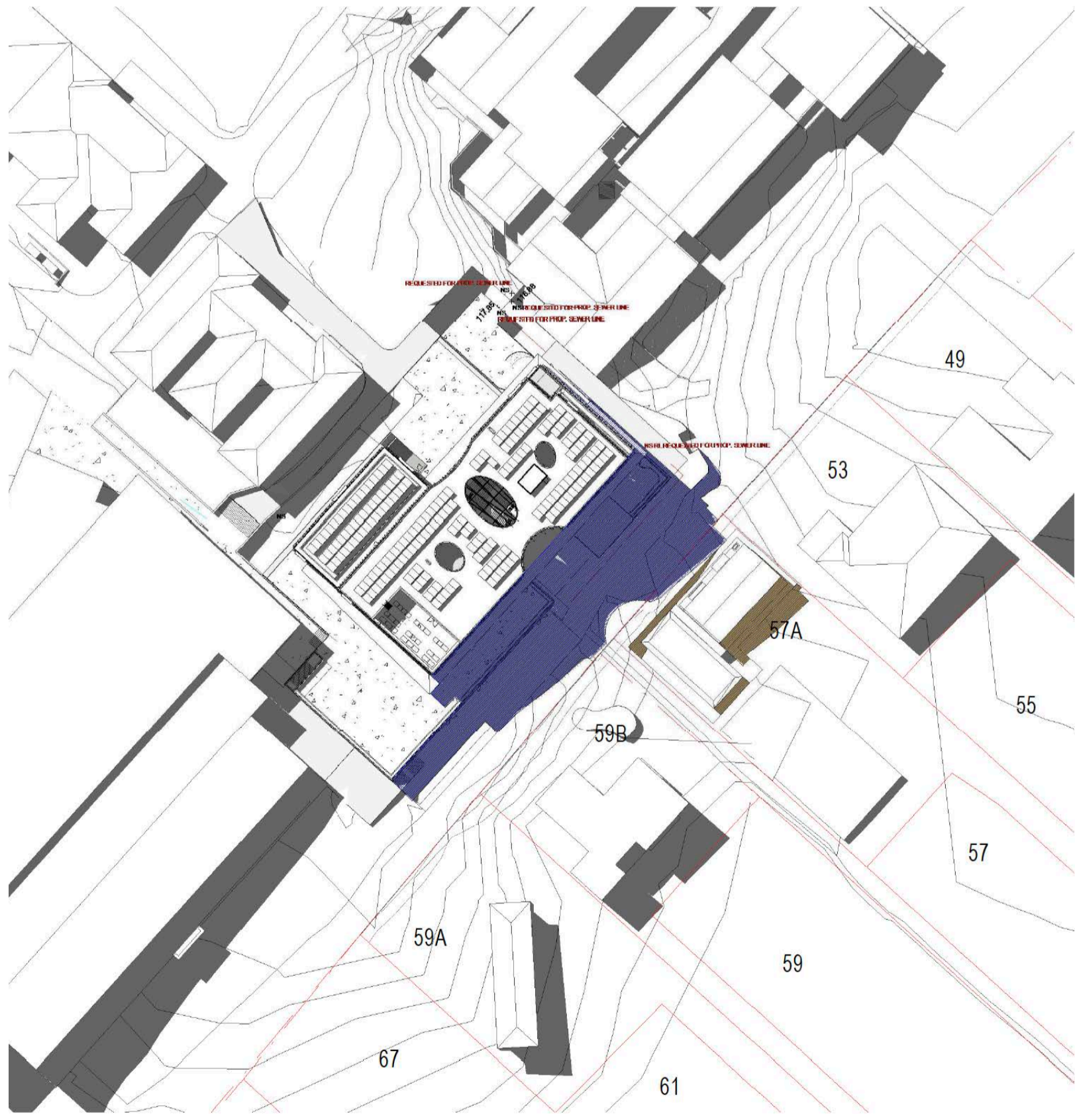


17a. Existing Shadow\_23SEP/21MAR\_1pm  
Drawing by BVN

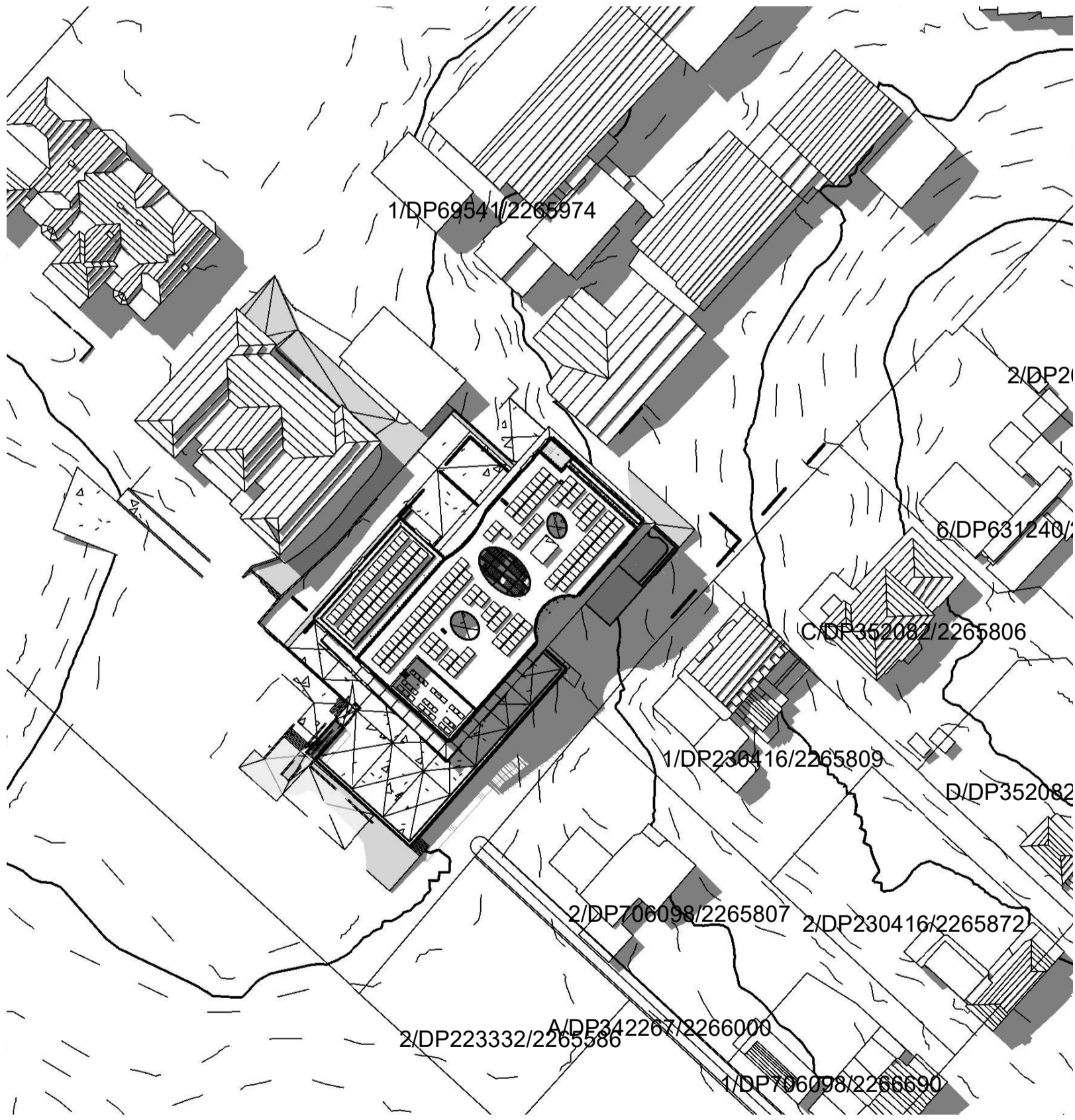


17b. Existing Shadow\_23SEP/21MAR\_1pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 1pm on 23rd Sep/ 21st Mar are generally consistent.

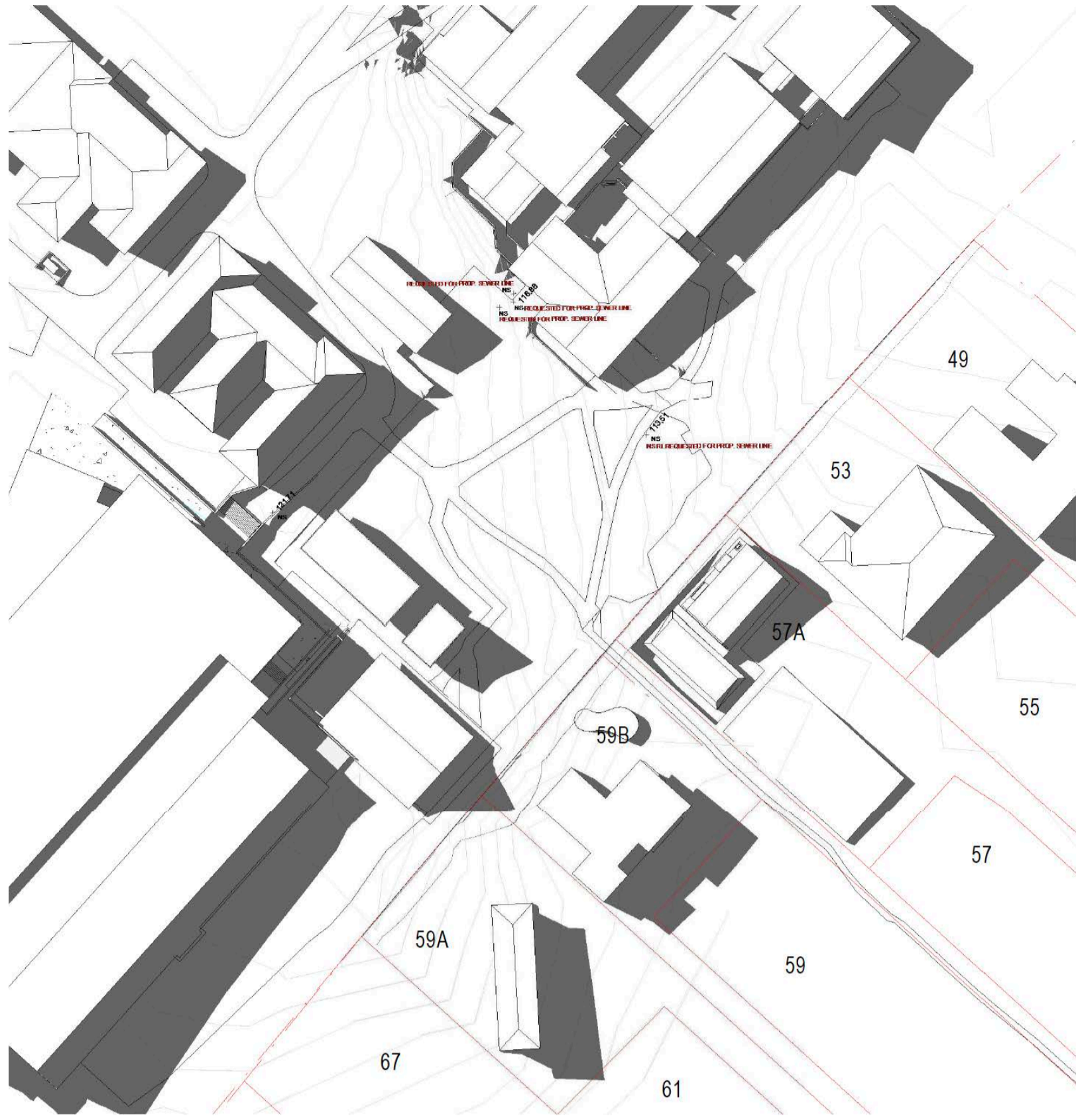


17c. Proposed Shadow\_23SEP/21MAR\_2pm  
Drawing by BVN

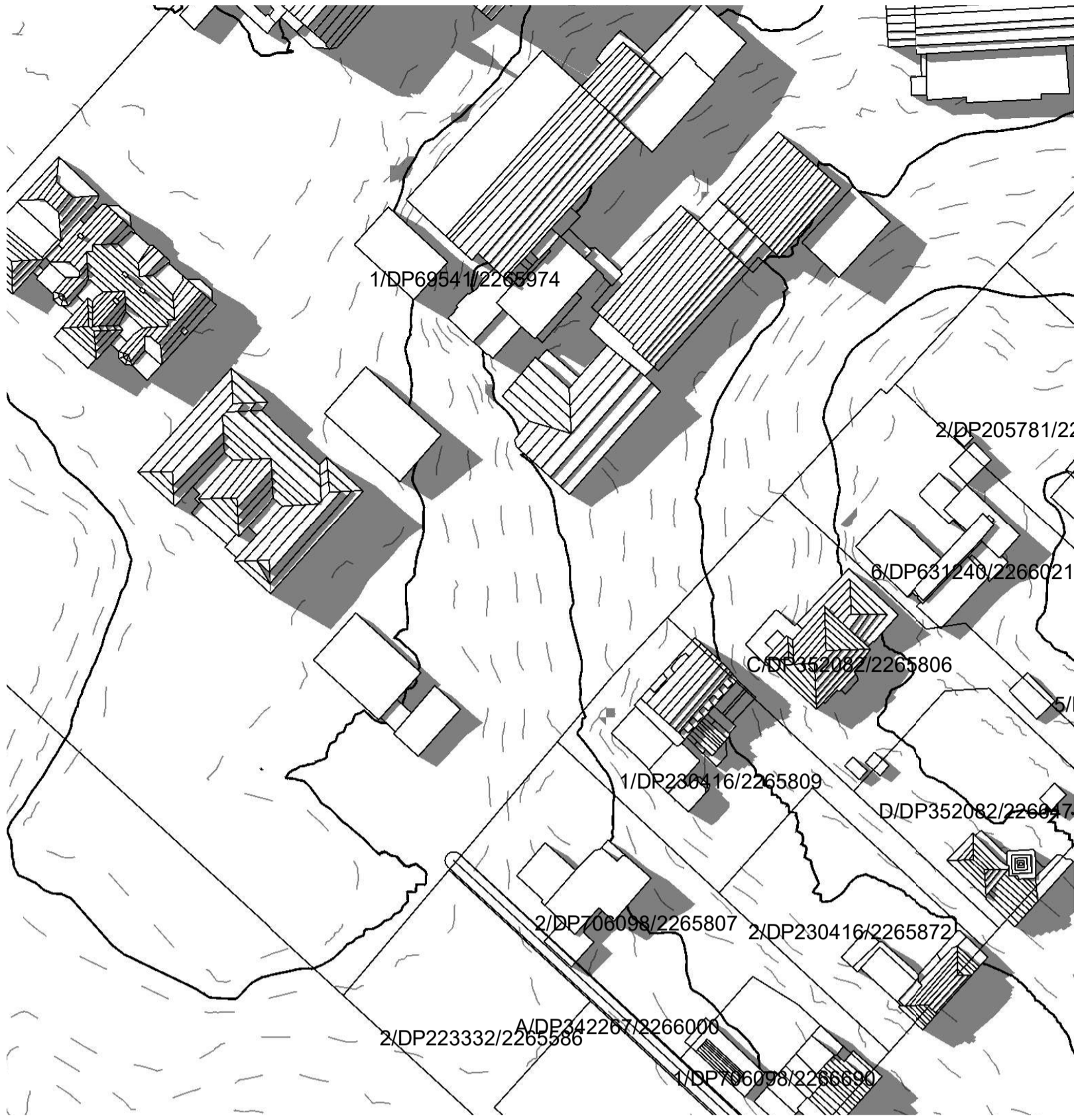


17d. Proposed Shadow\_23SEP/21MAR\_2pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 2pm on 23rd Sep/ 21st Mar are generally consistent.

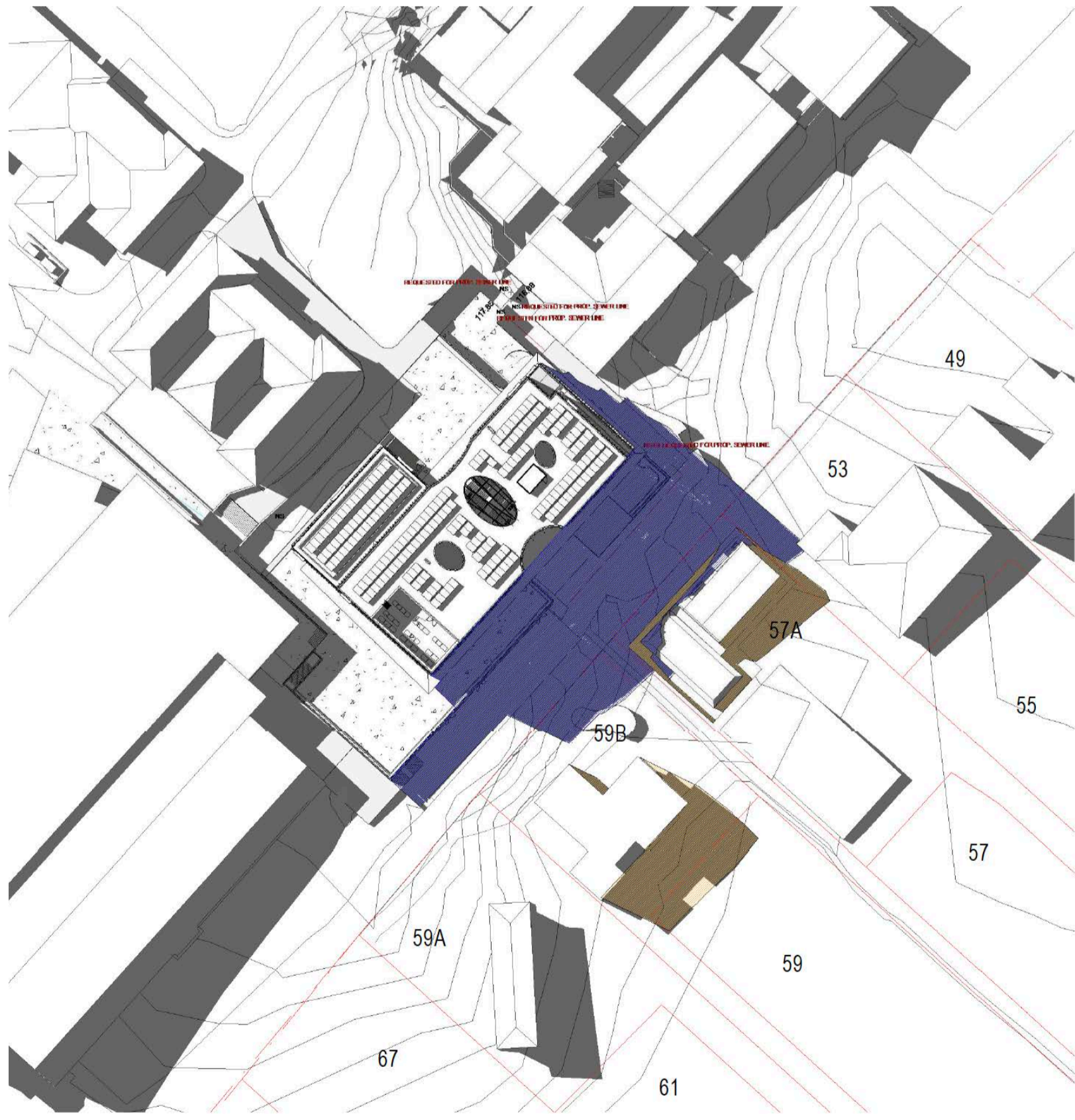


18a. Existing Shadow\_23SEP/21MAR\_3pm  
Drawing by BVN

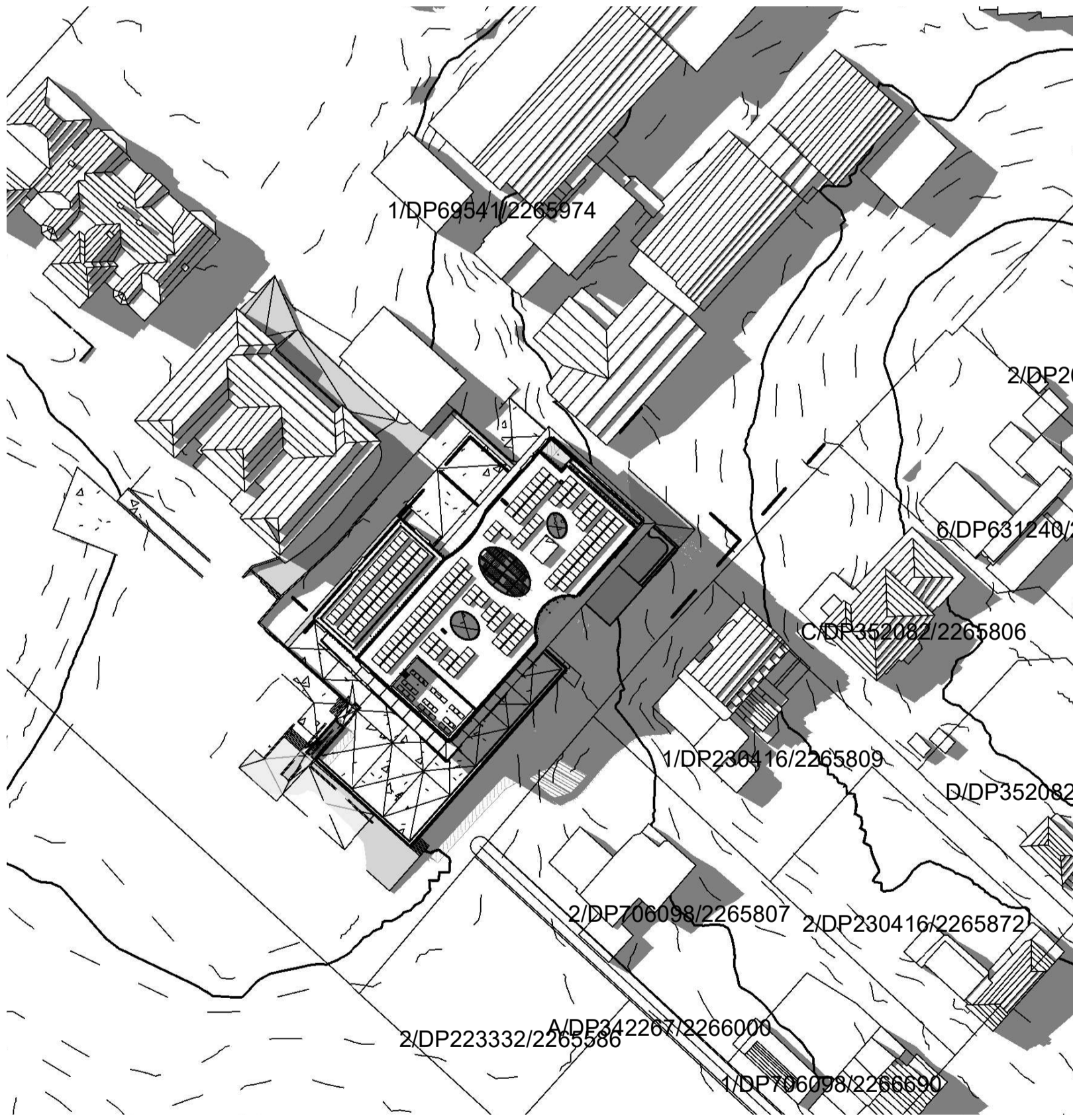


18b. Existing Shadow\_23SEP/21MAR\_3pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 3pm on 23rd Sep/ 21st Mar are generally consistent.

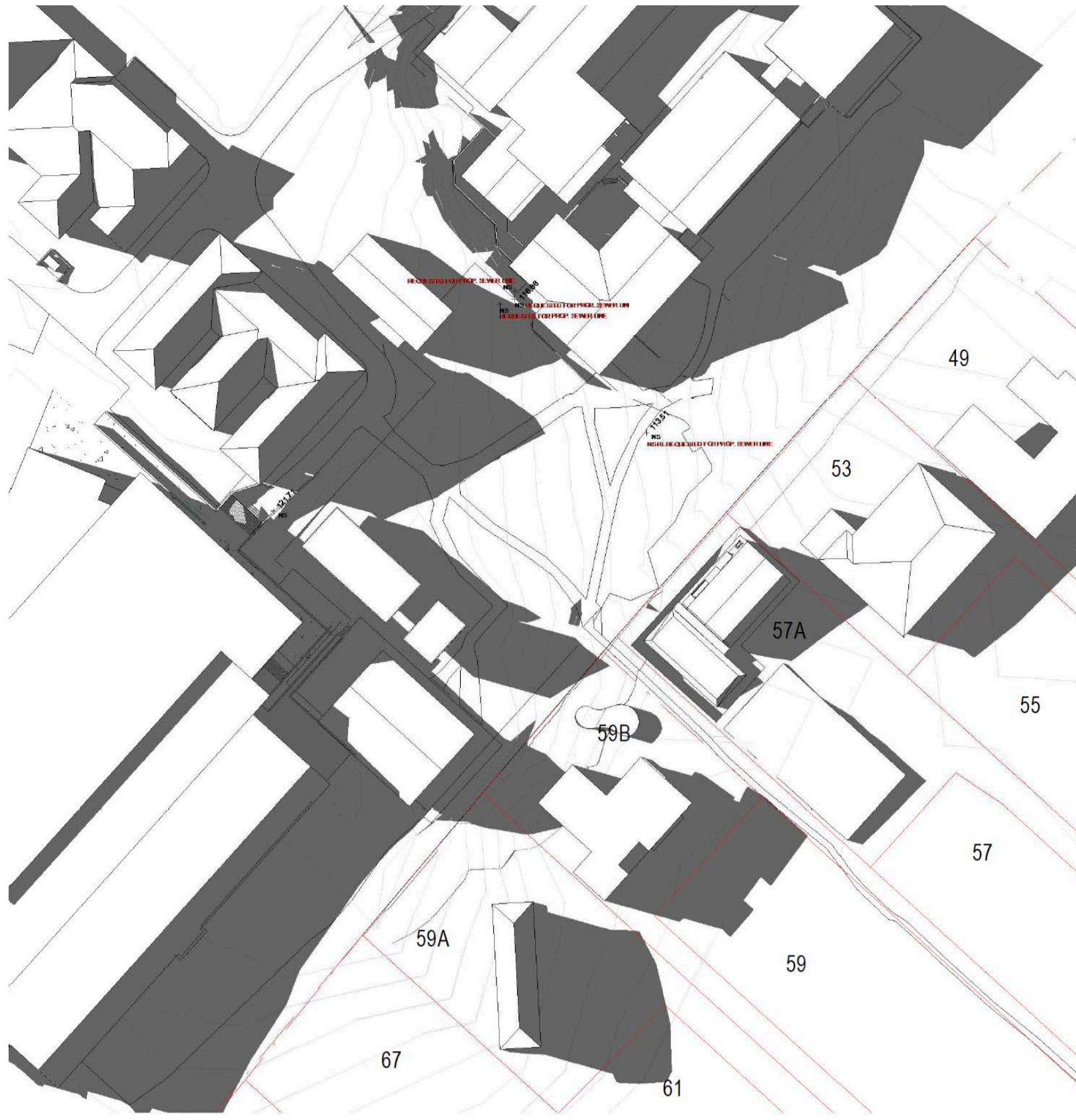


18c. Proposed Shadow\_23SEP/21MAR\_3pm  
Drawing by BVN

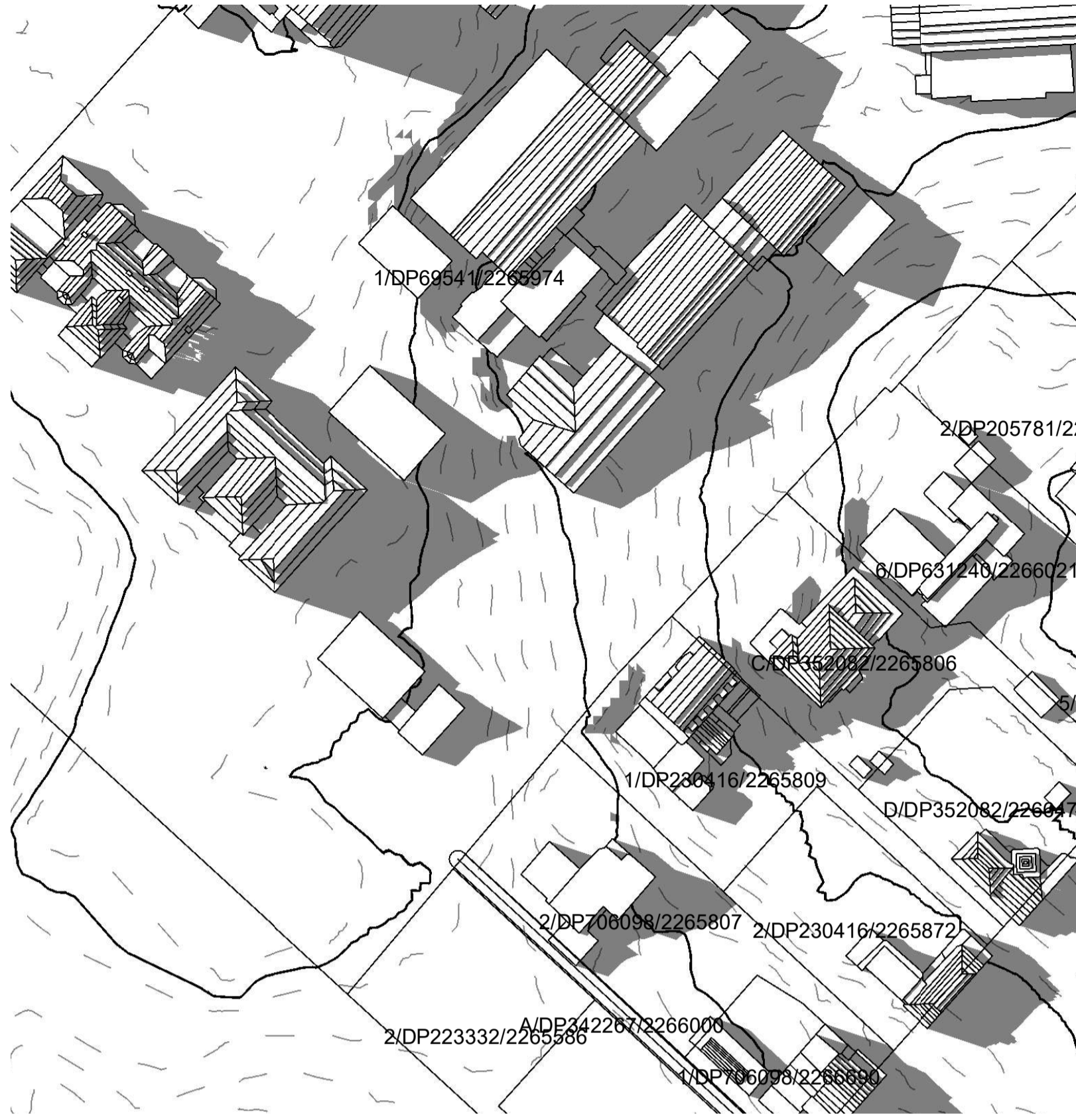


18d. Proposed Shadow\_23SEP/21MAR\_3pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 3pm on 23rd Sep/ 21st Mar are generally consistent.

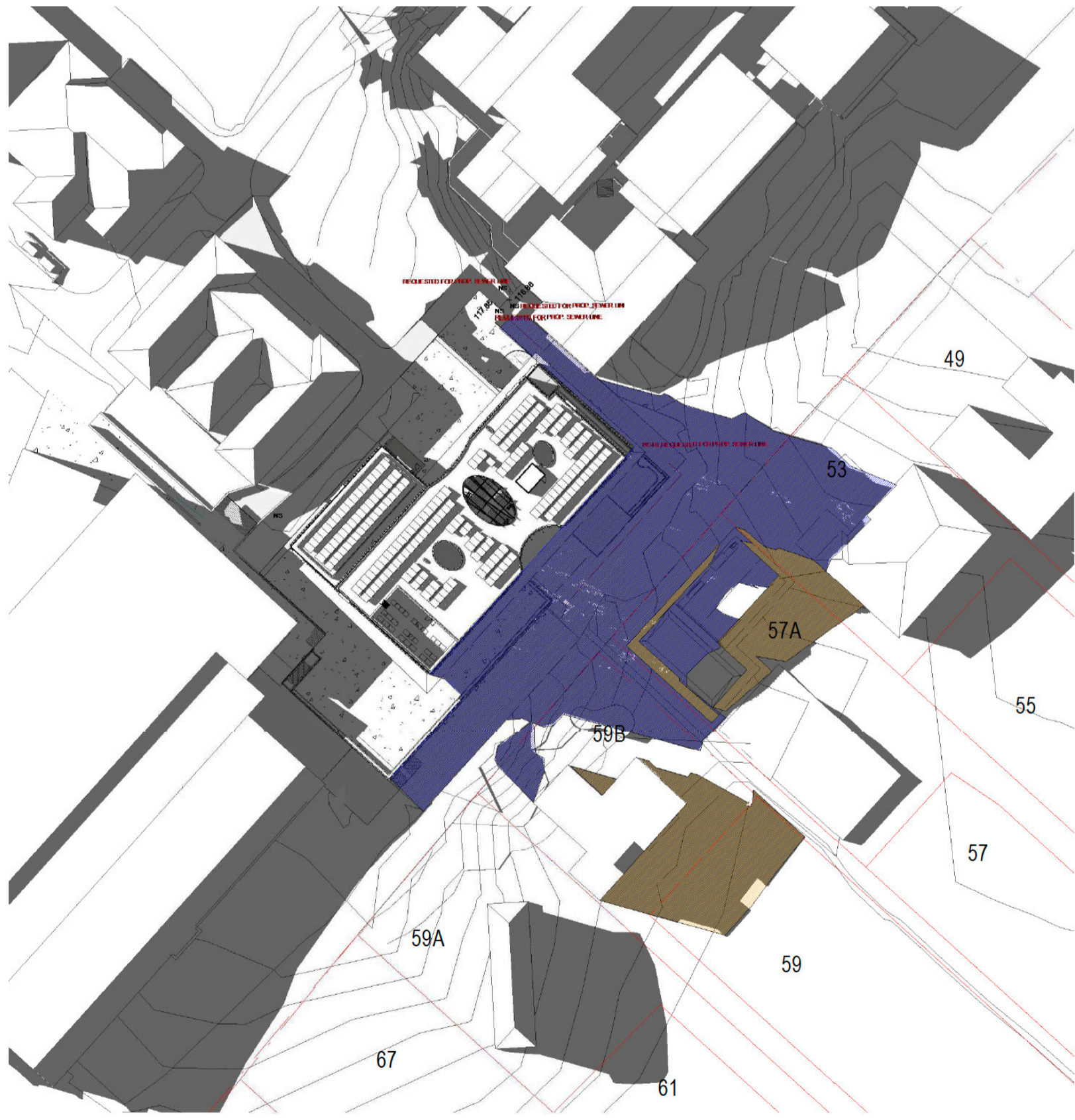


19a. Existing Shadow\_23SEP/21MAR\_4pm  
Drawing by BVN

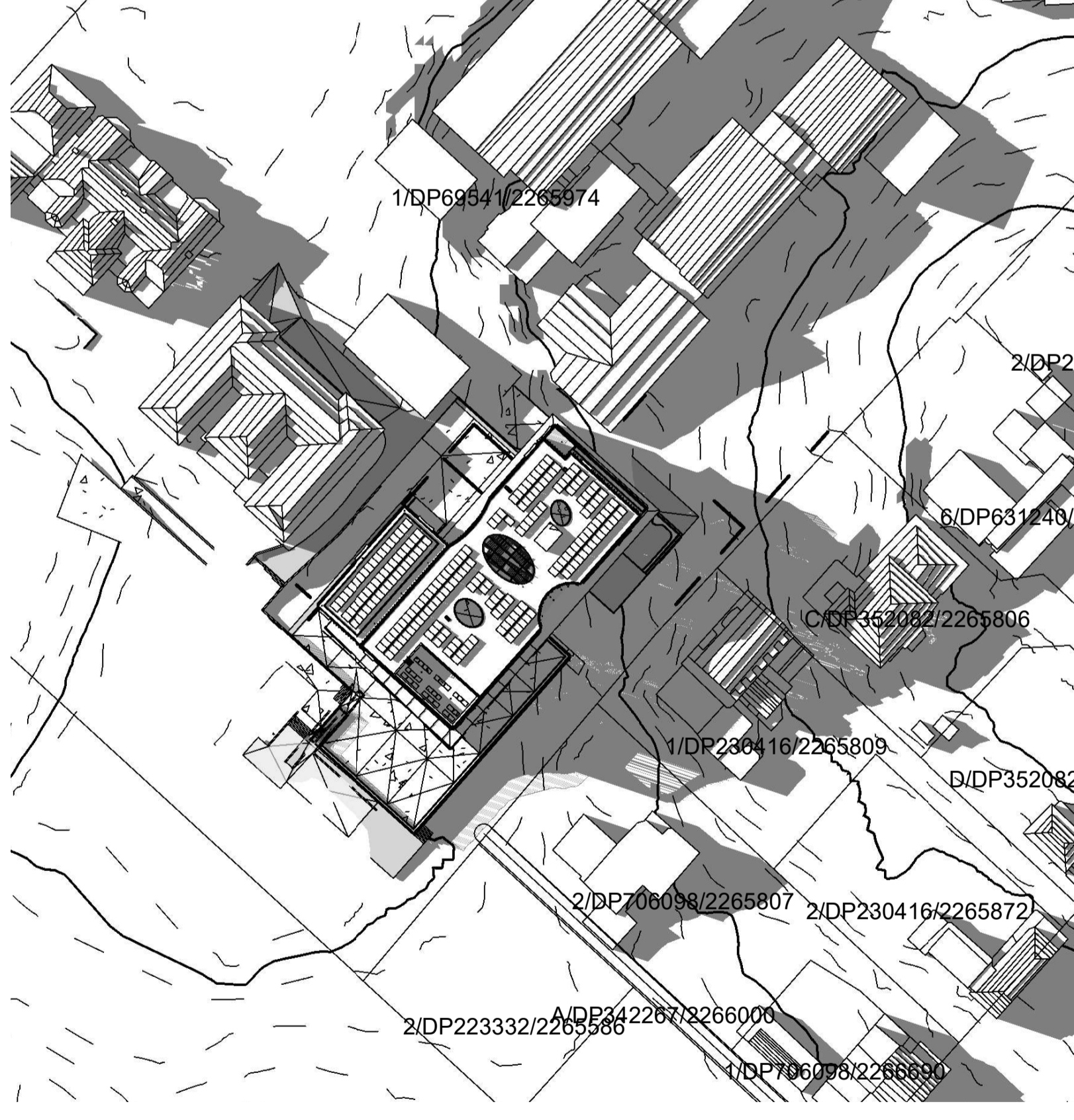


19b. Existing Shadow\_23SEP/21MAR\_4pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 4pm on 23rd  
Sep/ 21st Mar are generally consistent.



19c. Proposed Shadow\_23SEP/21MAR\_4pm  
Drawing by BVN



19d. Proposed Shadow\_23SEP/21MAR\_4pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 4pm on 23rd  
Sep/ 21st Mar are generally consistent.



CERTIFIED  
ENERGY

# AERIAL SHADOW DIAGRAMS 23 SEPTEMBER/ 21 MARCH

13/10/2022

Scale:

For Reference Only

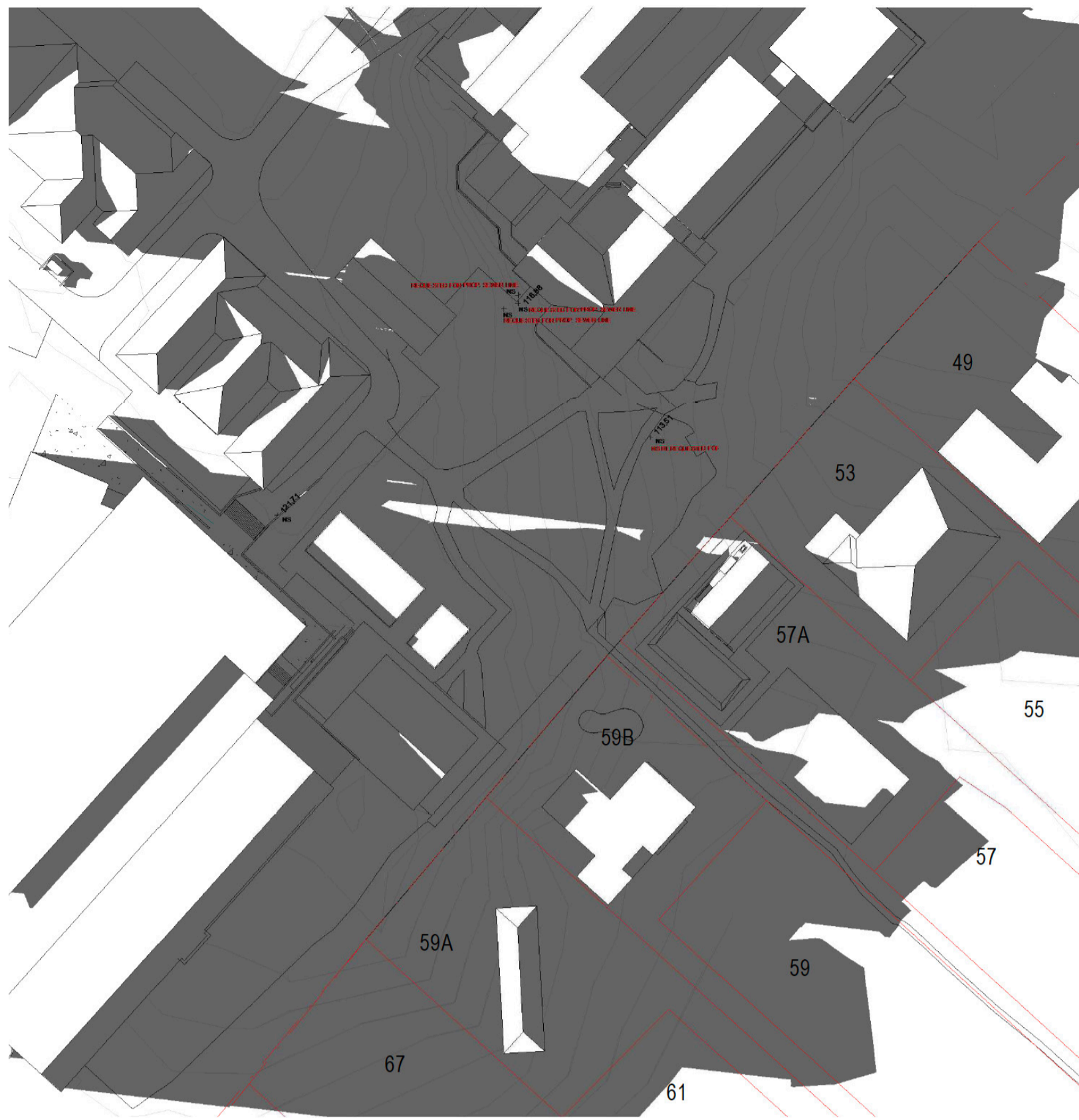
COMMENTS

TECHNICIAN

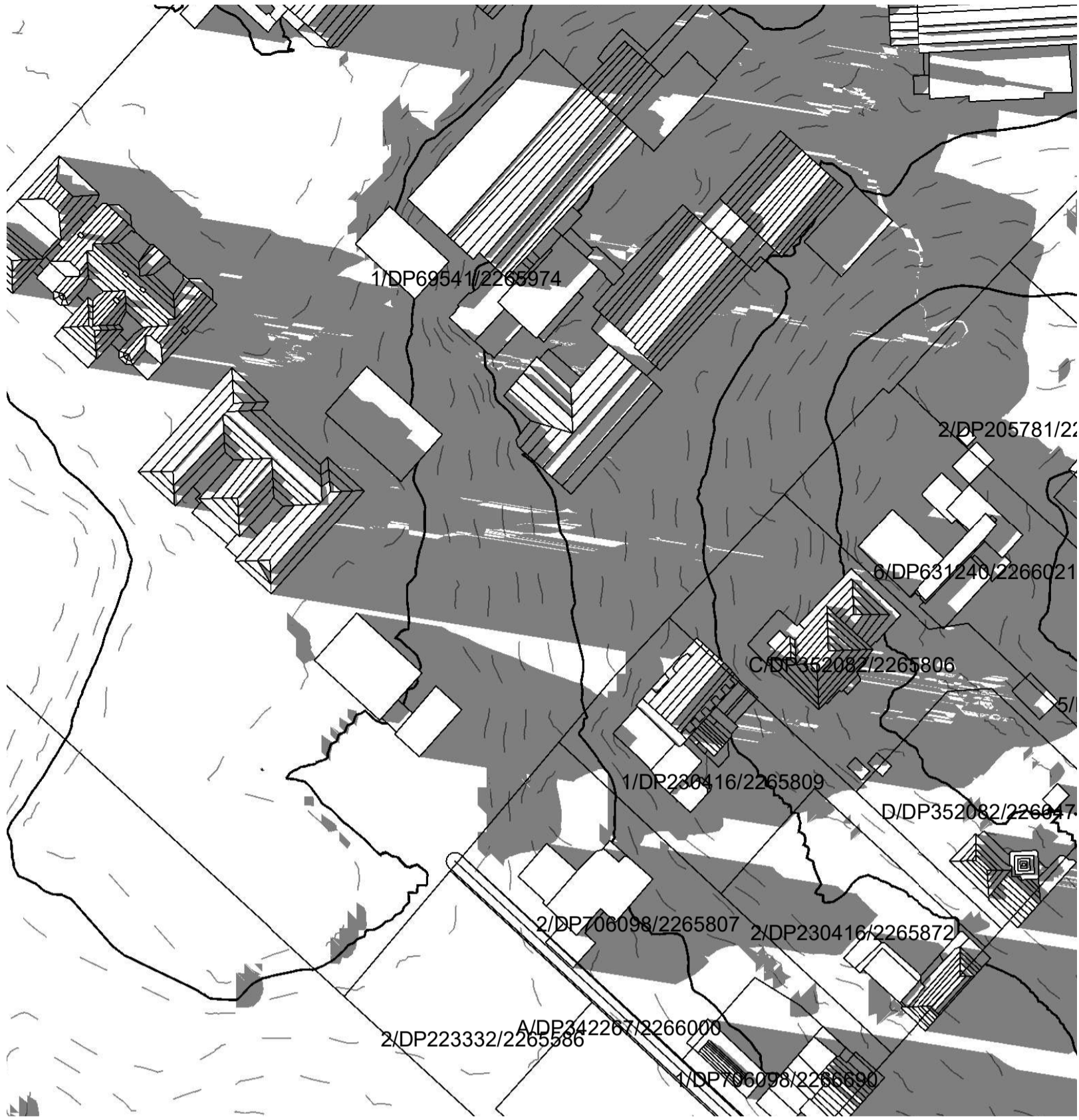
AP, LF

QA

JB

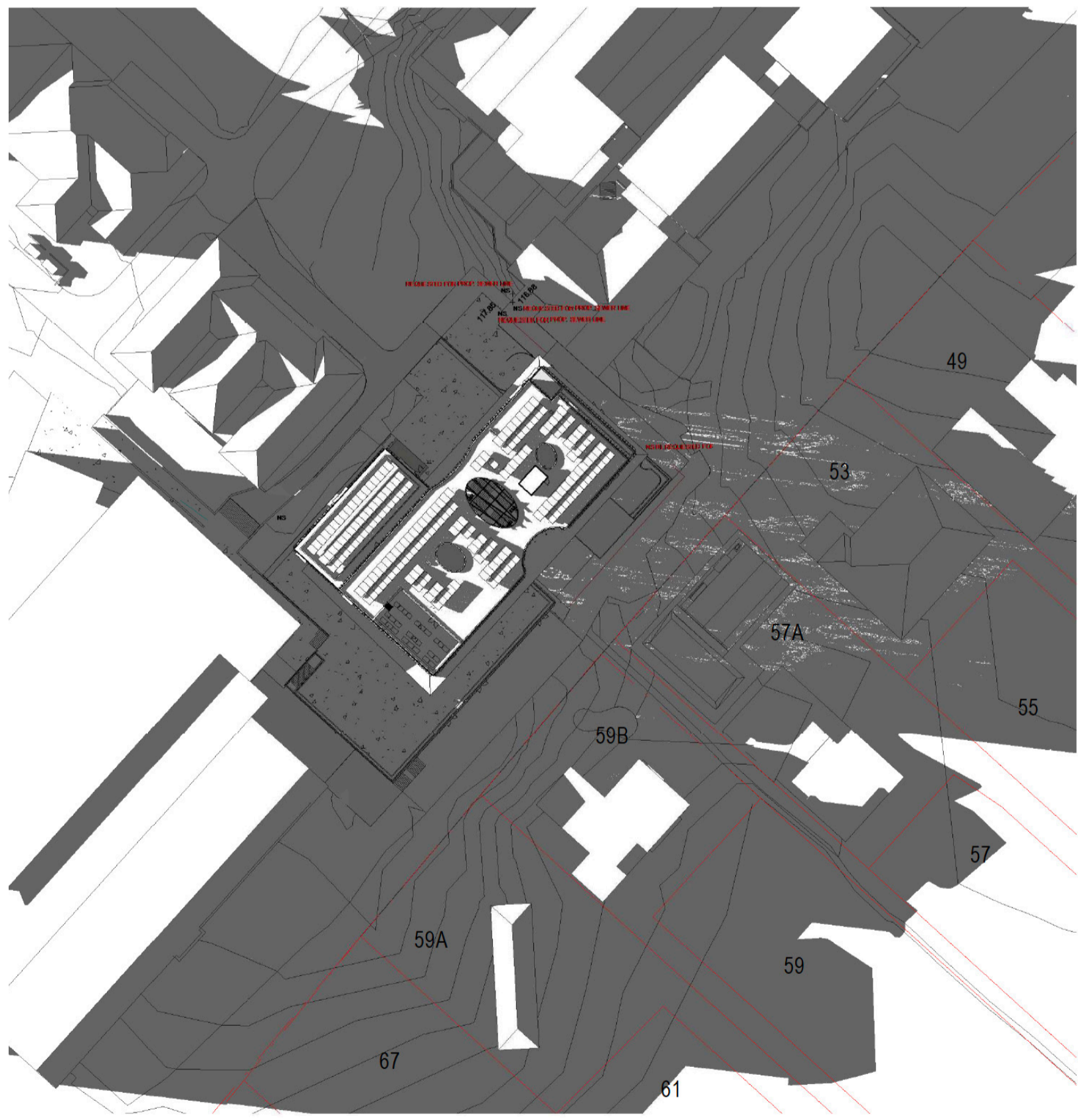


20a. Existing Shadow\_23SEP/21MAR\_5pm  
Drawing by BVN



20b. Existing Shadow\_23SEP/21MAR\_5pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 5pm on 23rd Sep/ 21st Mar are generally consistent.

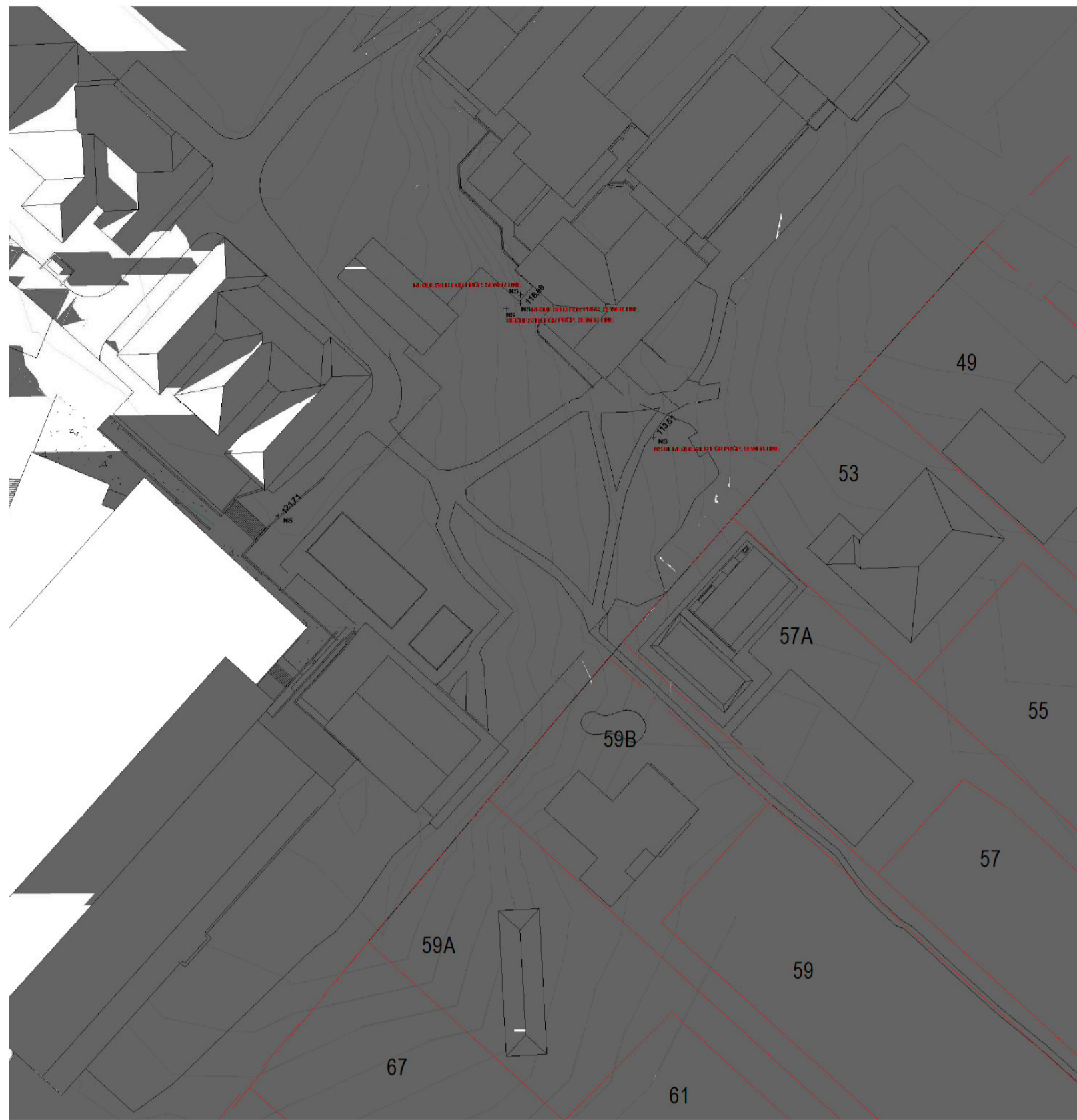


20c. Proposed Shadow\_23SEP/21MAR\_5pm  
Drawing by BVN

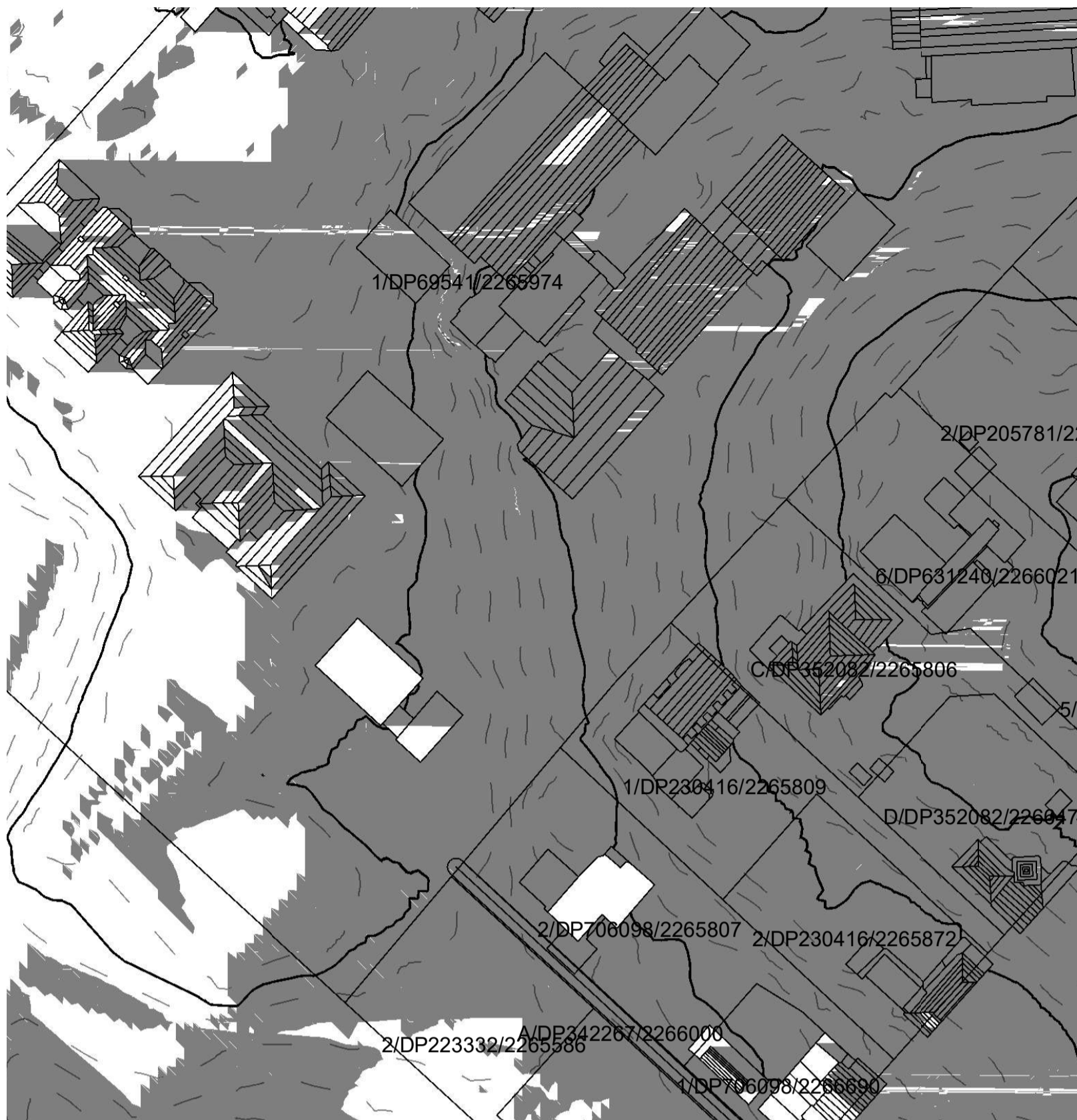


20d. Proposed Shadow\_23SEP/21MAR\_5pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 5pm on 23rd Sep/ 21st Mar are generally consistent.

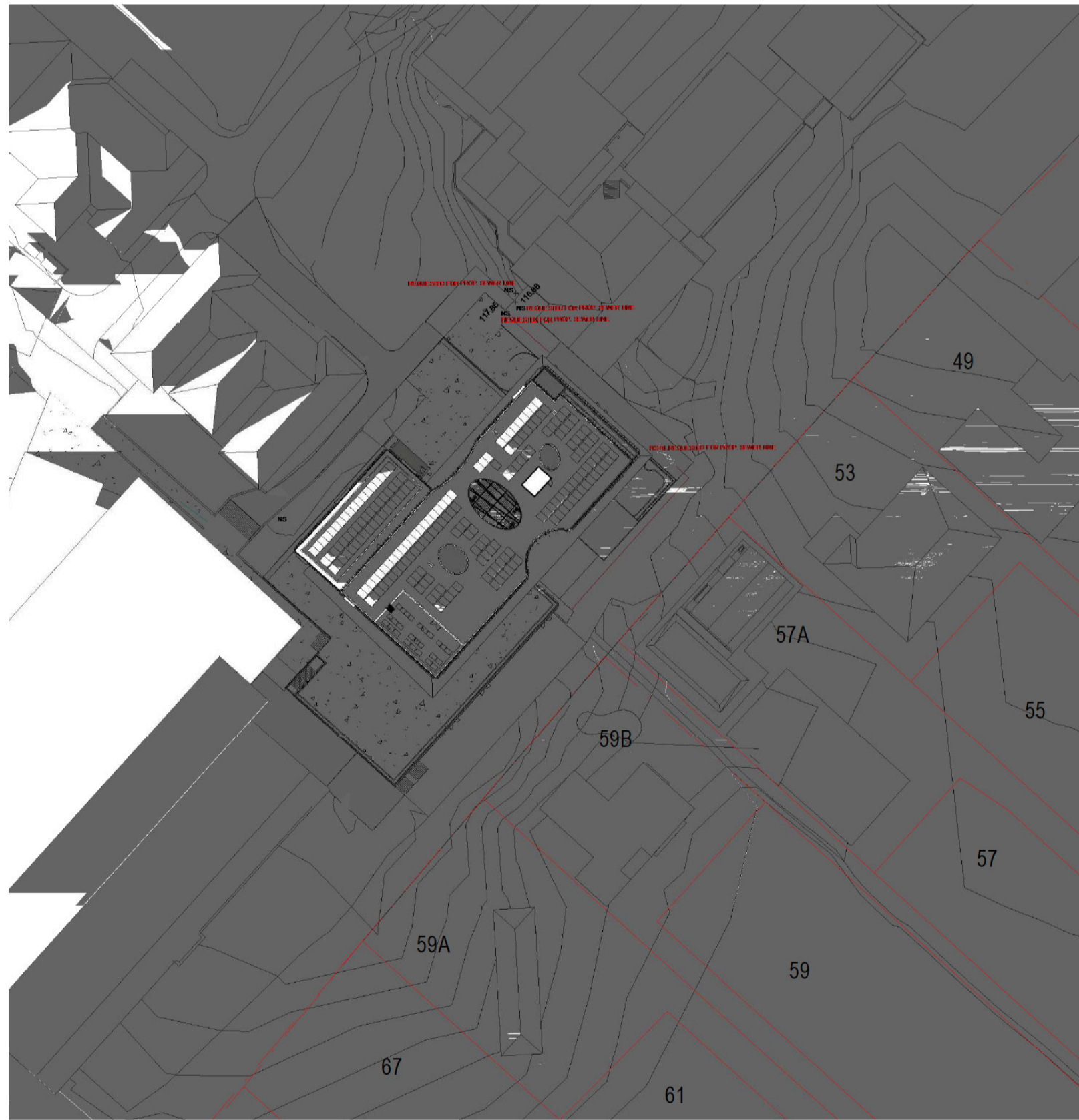


21a. Existing Shadow\_23SEP/21MAR\_6pm  
Drawing by BVN

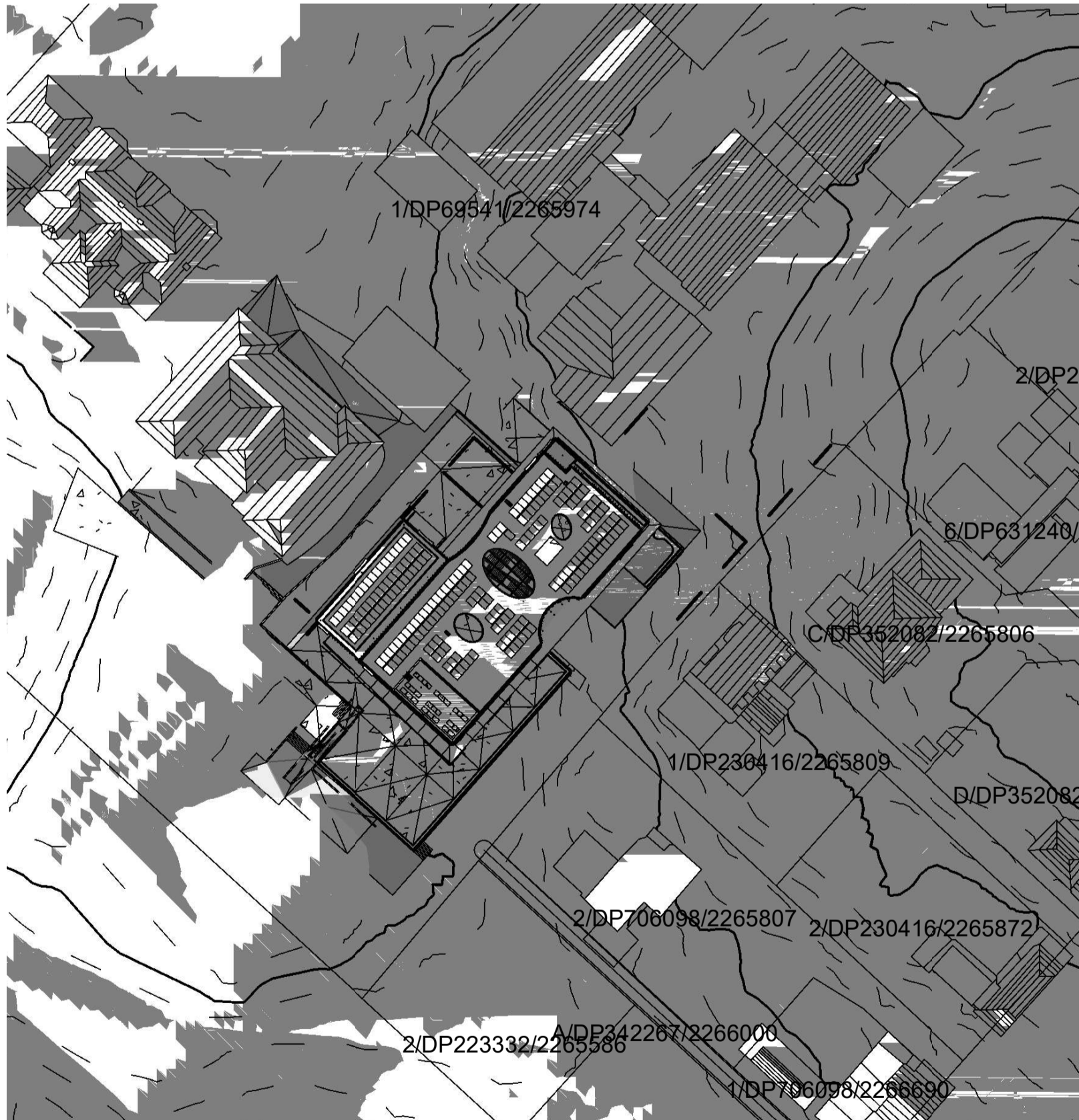


21b. Existing Shadow\_23SEP/21MAR\_6pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 6pm on 23rd Sep/ 21st Mar are generally consistent.



21c. Proposed Shadow\_23SEP/21MAR\_6pm  
Drawing by BVN

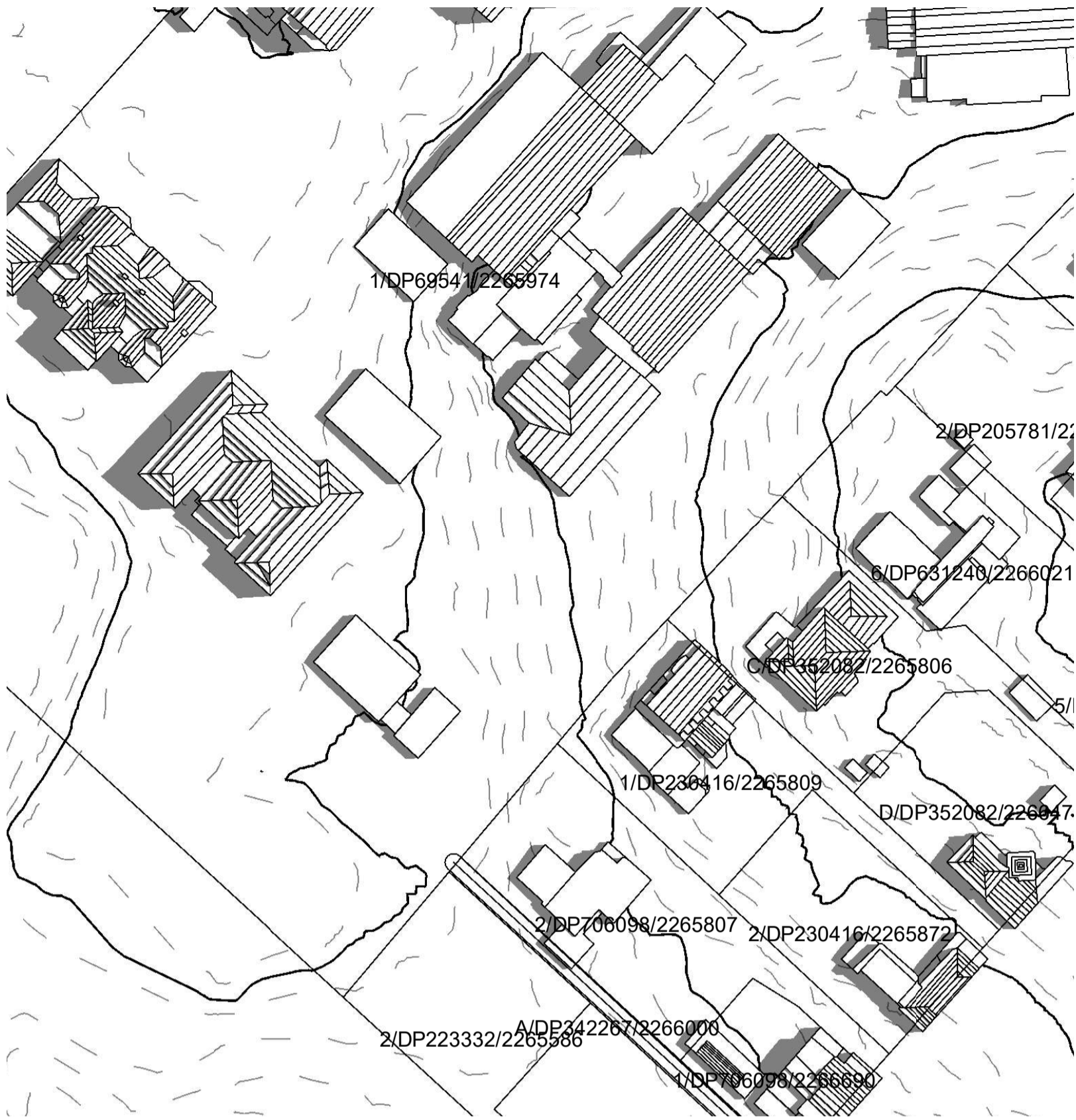


21d. Proposed Shadow\_23SEP/21MAR\_6pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 6pm on 23rd Sep/ 21st Mar are generally consistent.

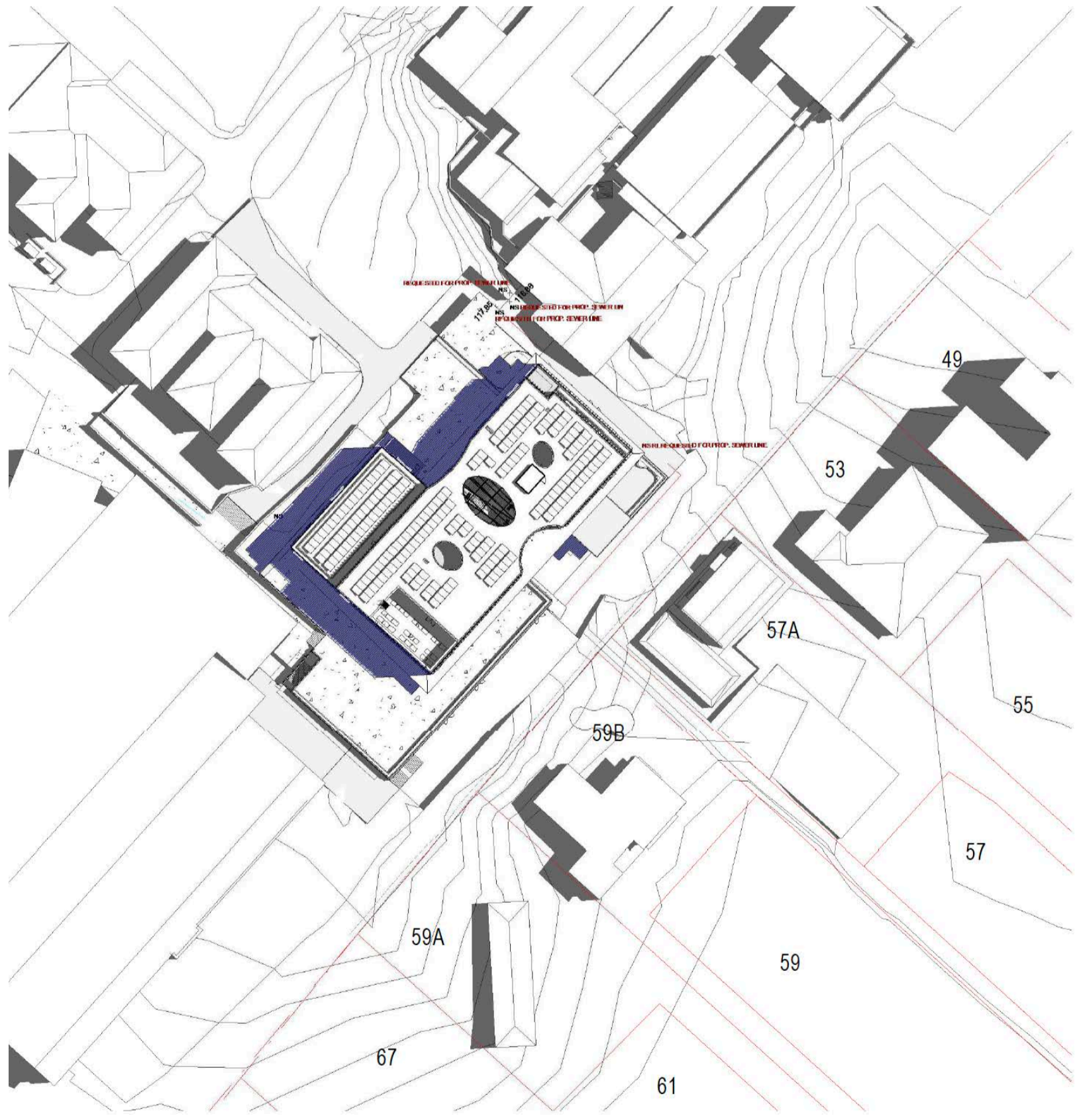


22a. Existing Shadow\_22DEC\_9am  
Drawing by BVN

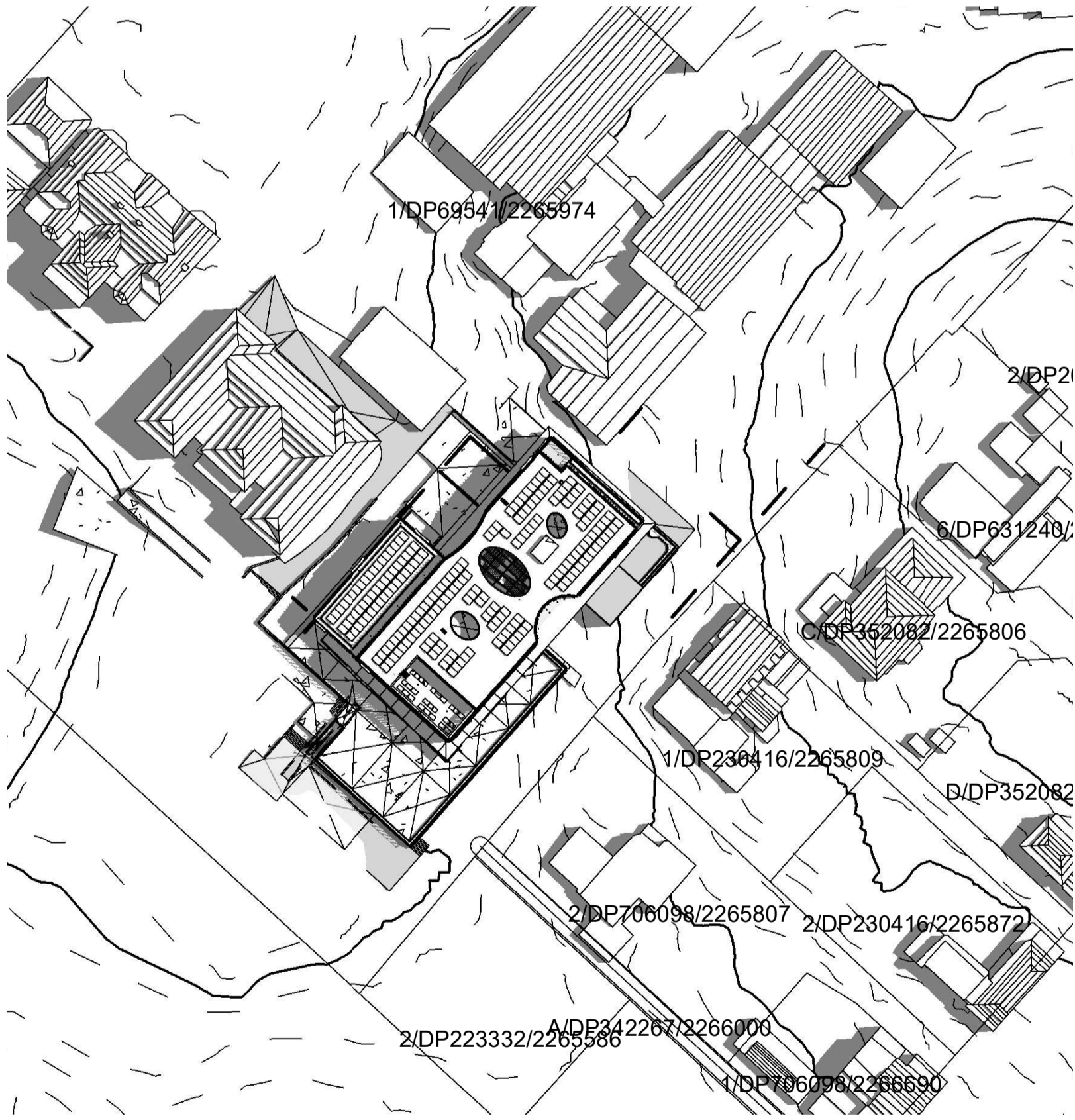


22b. Existing Shadow\_22DEC\_9am  
Drawing by Certified Energy

Existing Shadows diagrams produced at 9am on 22nd December are generally consistant.

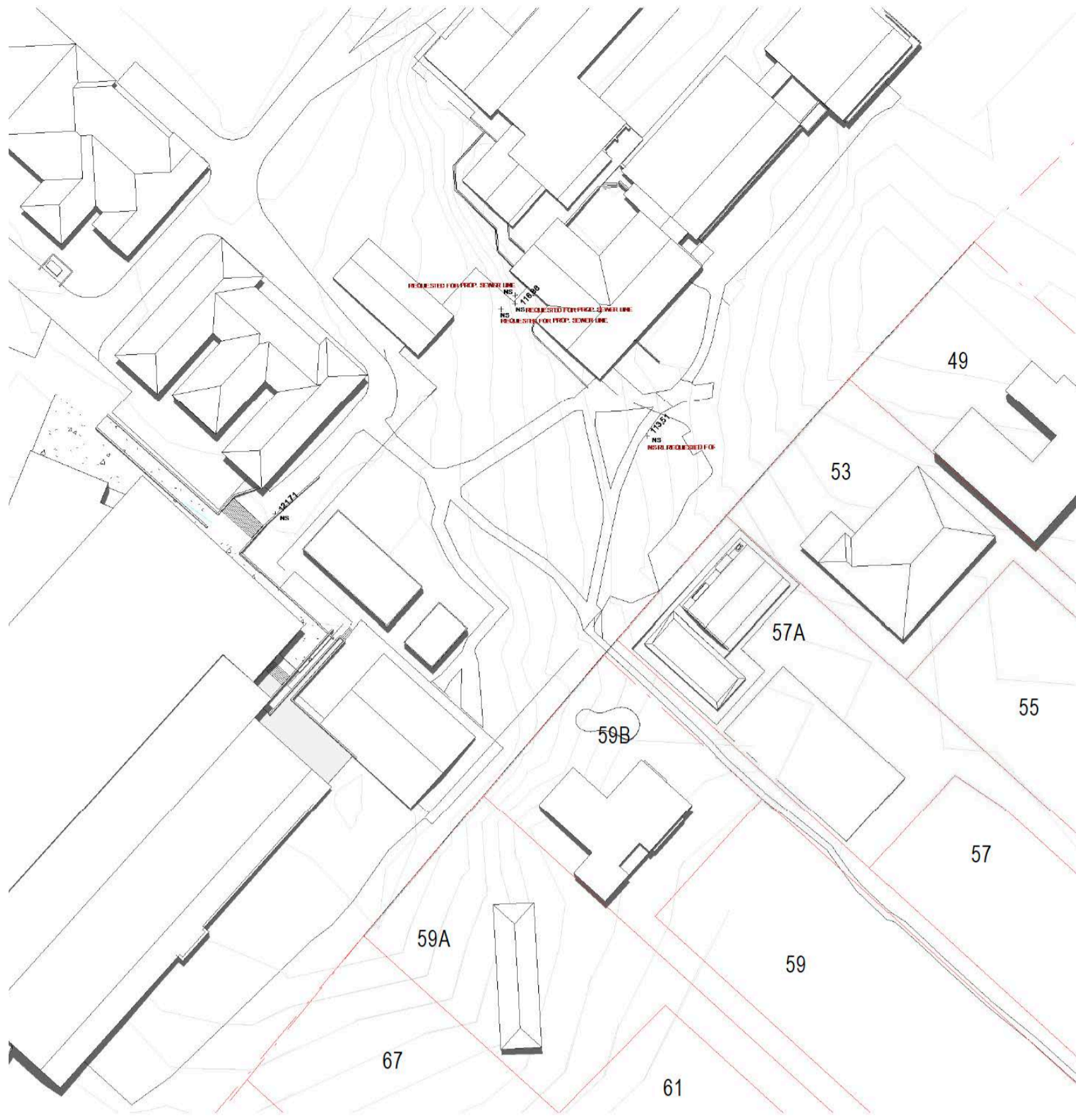


22c. Proposed Shadow\_22DEC\_9am  
Drawing by BVN

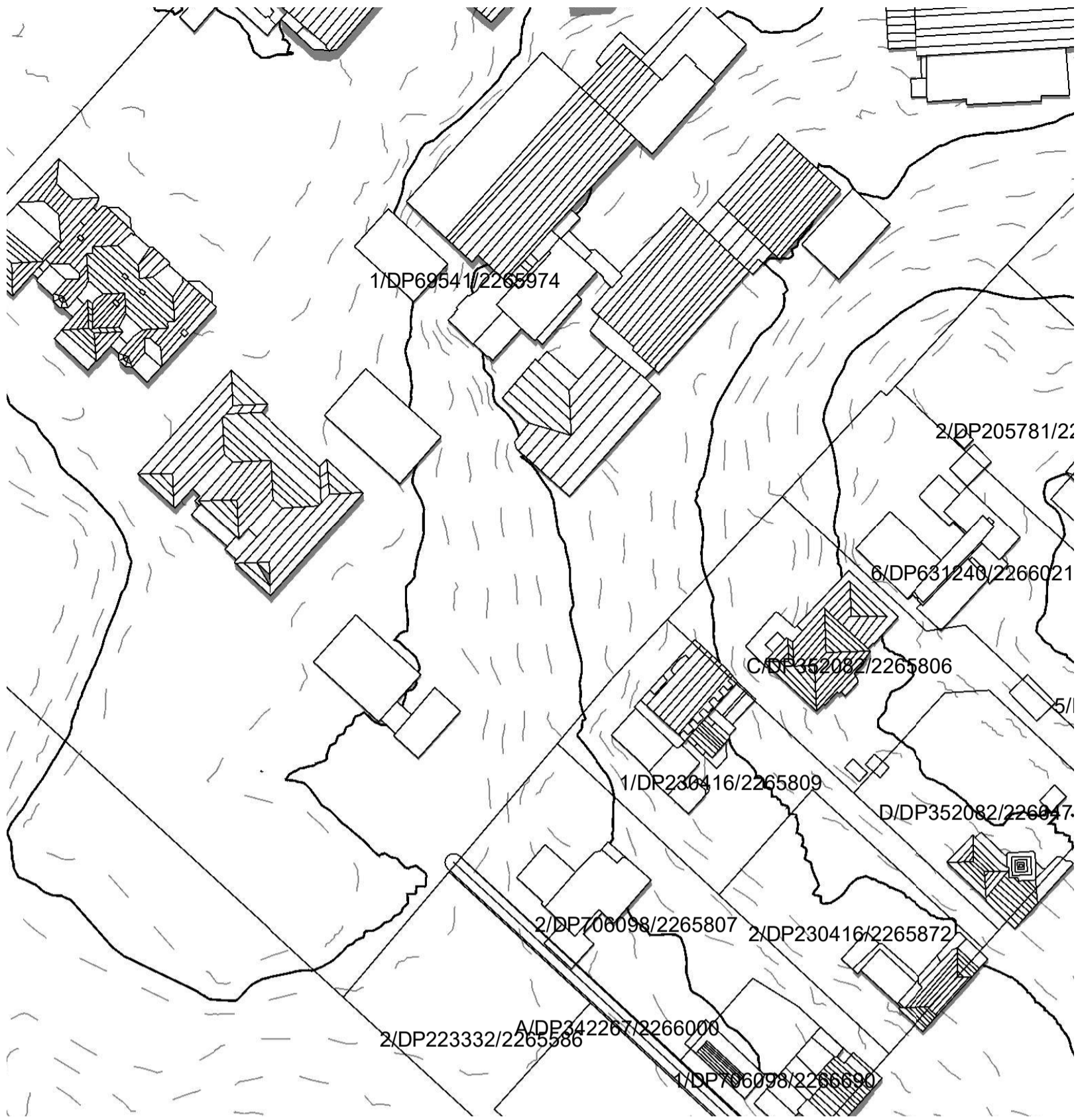


22d. Proposed Shadow\_22DEC\_9am  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 9am on 22nd December are generally consistant.

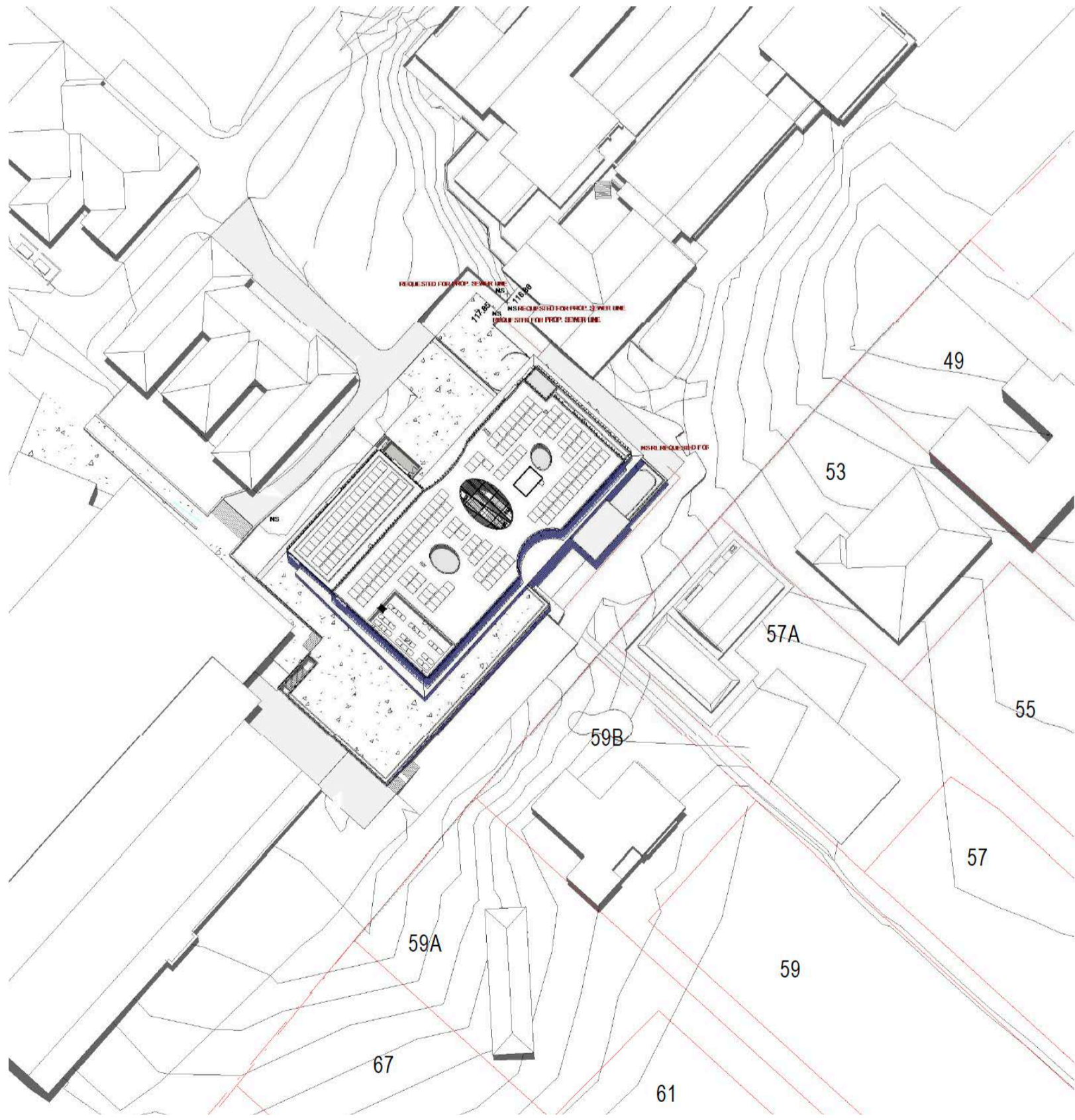


23a. Existing Shadow\_22DEC\_12pm  
Drawing by BVN

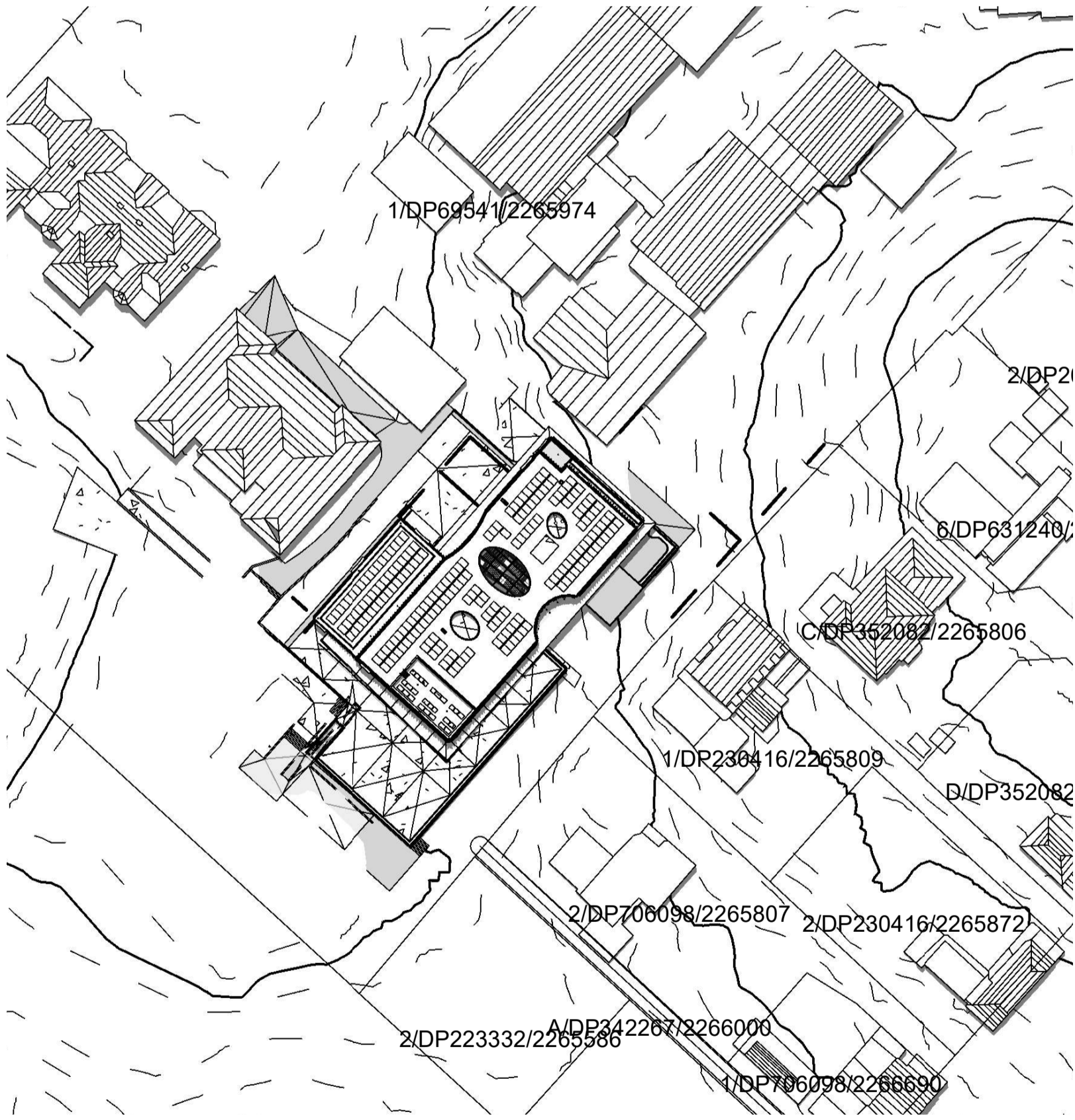


23b. Existing Shadow\_22DEC\_12pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 12pm on 22nd December are generally consistant.



23c. Proposed Shadow\_22DEC\_12pm  
Drawing by BVN

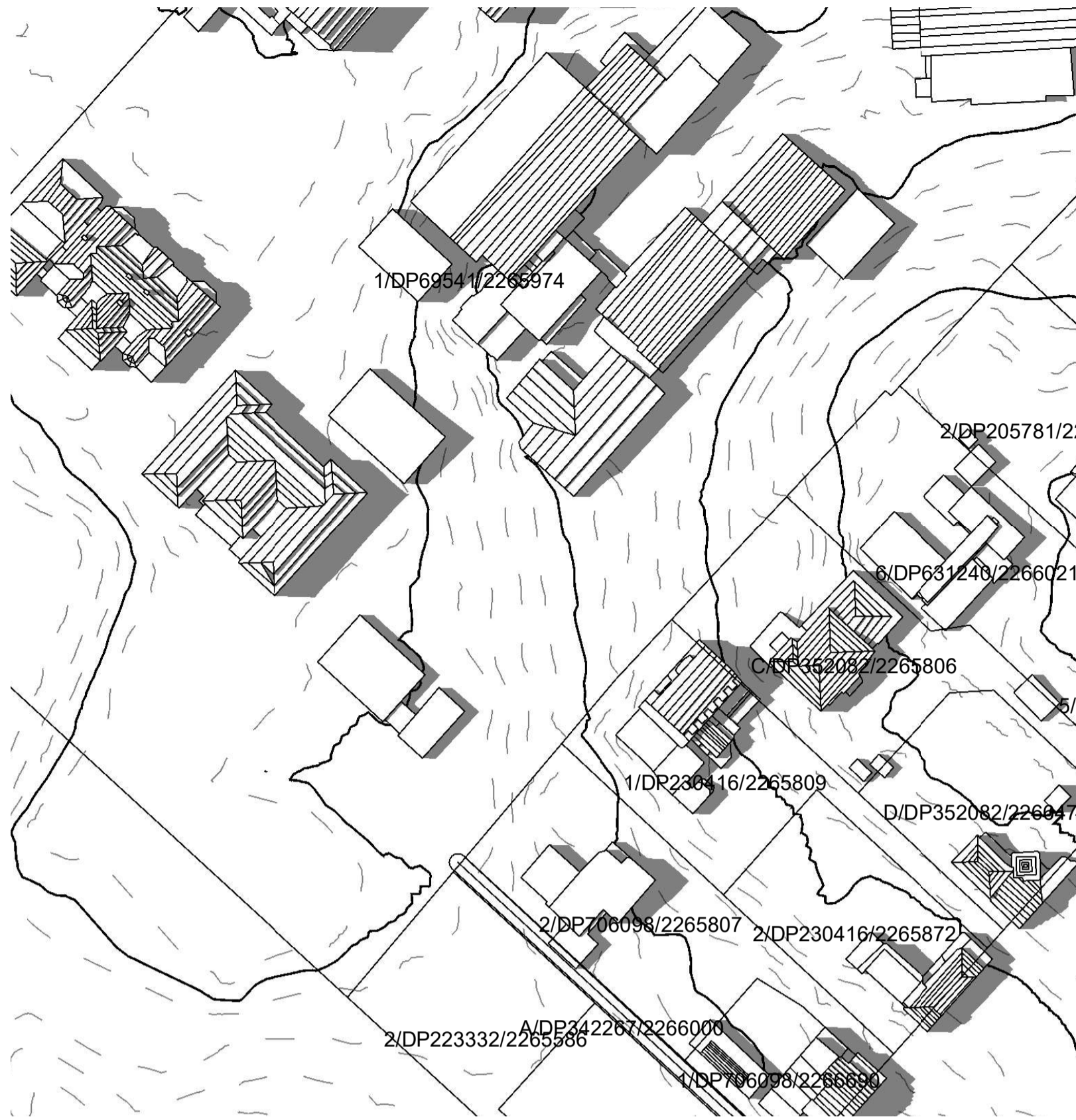


23d. Proposed Shadow\_22DEC\_12pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 12pm on 22nd December are generally consistant.



24a. Existing Shadow\_22DEC\_3pm  
Drawing by BVN

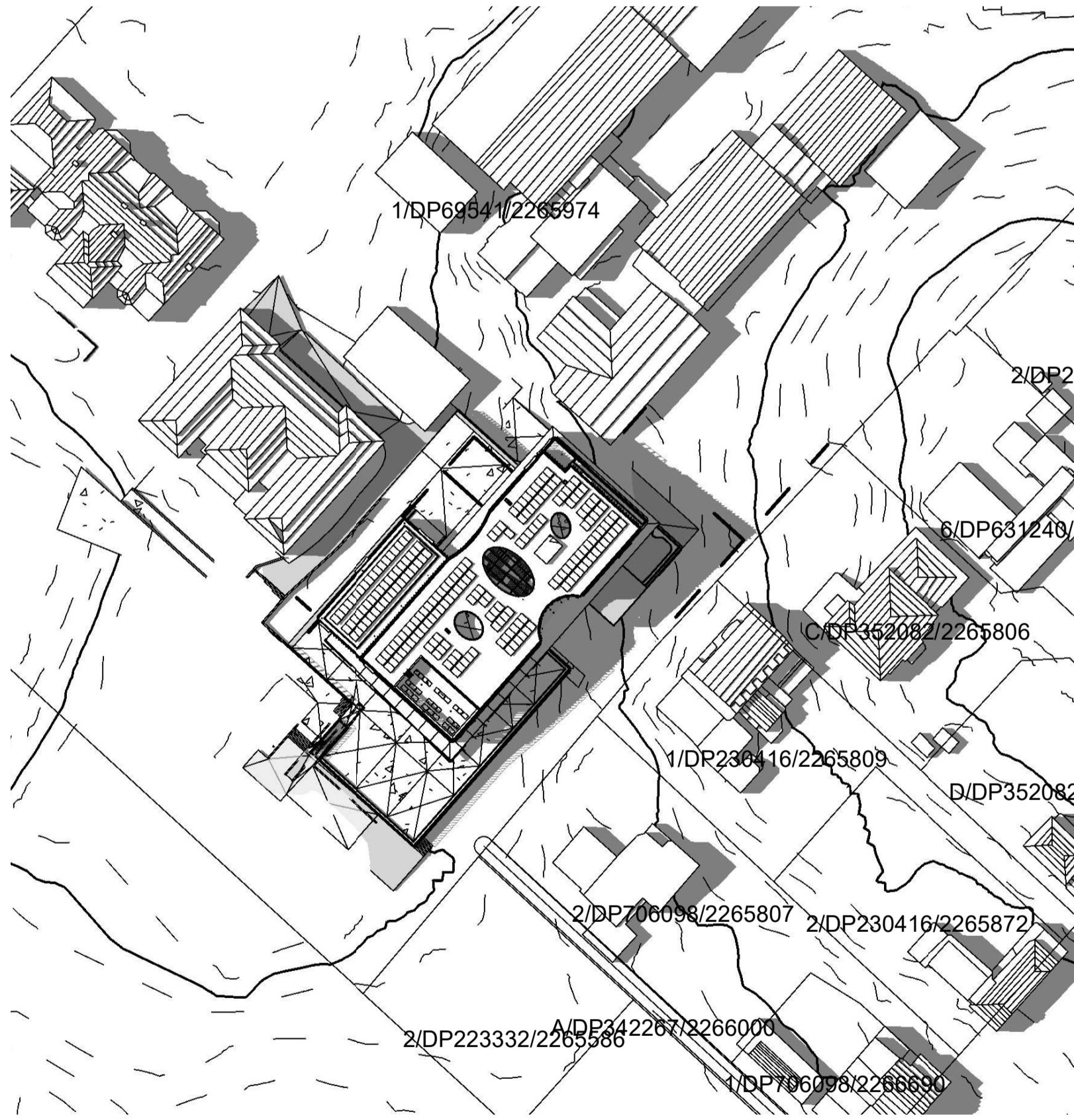


24b. Existing Shadow\_22DEC\_3pm  
Drawing by Certified Energy

Existing Shadows diagrams produced at 3pm on 22nd December are generally consistant.



24c. Proposed Shadow\_22DEC\_3pm  
Drawing by BVN



24d. Proposed Shadow\_22DEC\_3pm  
Drawing by Certified Energy

Proposed Shadows diagrams produced at 3pm on 22nd December are generally consistant.